April, 1975

DMS-DR-2136
NASA CR-141,514

RESULTS OF HEAT TRANSFER TESTS OF AN 0.0175-SCALE SPACE SHUTTLE VEHICLE MODEL 22 OTS IN THE NASA-AMES 3.5-FOOT HYPERSONIC WIND TUNNEL (IH3)

VOLUME I

By

Thomas F. Foster, Rockwell International
William K. Lockman, NASA Ames Research Center

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	ARC 3.5-178
NASA Series Number:	IH3
Model Number:	22 OTS
Test Dates:	October 31 to November 9, 1973

FACILITY COORDINATOR:

Joe Marvin
Ames Research Center
Mail Stop 229-1
Moffett Field, California 94035

Phone: (415) 965-6118

PROJECT ENGINEERS:

T. F. Foster
W. H. Dye
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Code AC07
Downey, California 90241

Phone: (213) 922-2849

W. K. Lockman
H. L. Seegmiller
NASA-Ames Research Center
Mail Stop 229-1
Moffett Field, California 94035

Phone: (415) 965-6255

DATA MANAGEMENT SERVICES:

Prepared by: Liaison--D. A. Sarver, T. L. Mulkey
Operations--B. J. Burst

Reviewed by: J. L. Glynn

Approved: _____
N. D. Kemp, Manager
Data Management Services

Concurrence: _____
J. G. Swider, Manager
Flight Technology Branch

Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF HEAT TRANSFER TESTS OF AN 0.0175-SCALE SPACE SHUTTLE VEHICLE MODEL 22 OTS IN THE NASA-AMES 3.5-FOOT HYPERSONIC WIND TUNNEL (IH3)

By

Thomas F. Foster, Rockwell International Space Division
William K. Lockman, NASA-Ames Research Center

ABSTRACT

Heat-transfer data for the 0.0175-scale Space Shuttle Vehicle 3 are presented in this data report. Interference heating effects were investigated by a model build-up technique of Orbiter alone, tank alone, second, and first stage configurations.

The test program was conducted in the NASA-Ames 3.5-Foot Hypersonic Wind Tunnel at Mach 5.3 for nominal free-stream Reynolds number per foot values of 1.5×10^6 and 5.0×10^6.

This report is presented in four volumes. The contents of the volumes are as follows:

VOLUME I	PLOTTED EXTERNAL TANK DATA
VOLUME II	PLOTTED SRB DATA
VOLUME III	PLOTTED ORBITER DATA
VOLUME IV	TABULATED SOURCE DATA

(THIS PAGE INTENTIONALLY LEFT BLANK)

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	3
INDEX OF DATA FIGURES	4
INTRODUCTION	9
NOMENCLATURE	10
REMARKS	14
CONFIGURATIONS INVESTIGATED	15
TEST FACILITY DESCRIPTION	16
TEST PROCEDURES	17
DATA REDUCTION	18
REFERENCES	21
TABLES	
I. TEST CONDITIONS	22
II. RUN NUMBER/DATA SET COLLATION SUMMARY	23
III. COMPONENT DIMENSIONAL DATA	25
IV. ORBITER THERMOCOUPLE LOCATIONS	35
V. ORBITER LEFT MAIN NOZZLE THERMOCOUPLE LOCATIONS	45
VI. SOLID ROCKET BOOSTER THERMOCOUPLE LOCATIONS	46
VII. EXTERNAL TANK LOCATIONS	49
VIII. THERMOCOUPLE HOOKUP SCHEDULE	54
IX. RUN NUMBER/TUNNEL CONDITION SUMMARY	67

TABLE OF CONTENTS (Concluded)

	Page
FIGURES	
MODEL	69
DATA	79
EXTERNAL TANK	
SRB (SEE VOL. II)	
ORBITER (SEE VOL. III)	
APPENDIX	
TABULATED SOURCE DATA (SEE VOL. IV)	

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	Model instrumentation reference system.	69
2.	Model instrumentation.	
	a. Assumed Plotted Wing Leading-Edge Clusters B & C T/C Locations, (Used for Plotted and Tabulated Data Presentations)	70
	b. Actual Wing Leading-Edge Clusters B & C T/C Locations and Skin Thickness (Post-Test Dimensional Check)	71
	c. External Tank T/C Locations-Side Views	72
	d. External Tank T/C Locations (Locations Around Plumbing Lines) Top View	73
	e. SRB Nozzle Skirt T/C Instrumentation	74
3.	Model photographs.	
	a. Mated Launch Configuration Installation	75
	b. Orbiter Installation	76
	c. Mated Configuration Boundary Layer Trips	77
	d. SRB Boundary Layer Trips	78

INDEX OF DATA FIGURES

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
VOLUME I			
Fig. 4 - External Tank - Tank Alone (Undisturbed)	A, B	HAW/HT, RN/L	1-228
Fig. 5 - External Tank - Integrated Vehicle (Interference)	A, B	HAW/HT, RN/L ALPHA, BETA	229-601
Fig. 6 - External Tank - Interference to Undisturbed Ratio	C, D	RN/L, CONFIG.	602-658
VOLUME II			
Fig. 7 - Solid Rocket Booster - SRB Alone (Undisturbed)	A, B	HAW/HT, RN/L	659-838
Fig. 8 - Solid Rocket Booster - Integrated Vehicle (Interference)	A, B	HAW/HT, RN/L ALPHA, BETA	839-1050
Fig. 9 - Solid Rocket Booster - Interference to Undisturbed Ratio	C, D	RN/L, CONFIG.	1051-1086
VOLUME III			
Fig. 10 - Orbiter Bottom C_L - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1087-1090
Fig. 11 - Orbiter Bottom C_L - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1091-1097
Fig. 12 - Orbiter Bottom C_L - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1098-1098

INDEX OF DATA FIGURES (Continued)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Fig. 13 - Orbiter Top C_L - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1099-1102
Fig. 14 - Orbiter Top C_L - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1103-1109
Fig. 15 - Orbiter Top C_L - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1110-1110
Fig. 16 - Orbiter Bottom Surface - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1111-1114
Fig. 17 - Orbiter Bottom Surface - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1115-1121
Fig. 18 - Orbiter Bottom Surface - Interference to Undisturbed Ratio	C	RN/L CONFIG.	1122-1122
Fig. 19 - Orbiter Side - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1123-1134
Fig. 20 - Orbiter Side - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1135-1154
Fig. 21 - Orbiter Side - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1155-1157
Fig. 22 - Wing Upper Surface - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1158-1161
Fig. 23 - Wing Upper Surface - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1162-1168

INDEX OF DATA FIGURES (Continued)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Fig. 24 - Wing Upper Surface - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1169-1169
Fig. 25 - Wing Bottom - Orbiter Alone (Undisturbed)	E, F	HAW/HT, RN/L	1170-1301
Fig. 26 - Wing Bottom - Integrated Vehicle (Interference)	E, F	HAW/HT, RN/L ALPHA, BETA	1302-1476
Fig. 27 - Wing Bottom - Interference to Undisturbed Ratio	G, H	RN/L, CONFIG.	1477-1509
Fig. 28 - Clusters B and C - Orbiter Alone (Undisturbed)	I	HAW/HT, RN/L	1510-1517
Fig. 29 - Clusters B and C - Integrated Vehicle (Interference)	I	HAW/HT, RN/L ALPHA, BETA	1518-1529
Fig. 30 - Clusters B and C - Interference to Undisturbed Ratio	J	RN/L, CONFIG.	1530-1531
Fig. 31 - Wing Top - Orbiter Alone (Undisturbed)	E, F	HAW/HT, RN/L	1532-1567
Fig. 32 - Wing Top - Integrated Vehicle (Interference)	E, F	HAW/HT, RN/L ALPHA, BETA	1568-1630
Fig. 33 - Wing Top - Interference to Undisturbed Ratio	G, H	RN/L, CONFIG.	1631-1639
Fig. 34 - OMS Bottom Crease - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1640-1643
Fig. 35 - OMS Bottom Crease - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1644-1650

INDEX OF DATA FIGURES (Continued)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Fig. 36 - OMS Bottom Crease - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1651-1651
Fig. 37 - OMS Side Surface - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1652-1655
Fig. 38 - OMS Side Surface - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1656-1662
Fig. 39 - OMS Side Surface - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1663-1663
Fig. 40 - OMS Top Surface - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1664-1667
Fig. 41 - OMS Top Surface - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1668-1674
Fig. 42 - OMS Top Surface - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1675-1675
Fig. 43 - OMS WL 474 - Orbiter Alone (Undisturbed)	A	HAW/HT, RN/L	1676-1679
Fig. 44 - OMS WL 474 - Integrated Vehicle (Interference)	A	HAW/HT, RN/L ALPHA, BETA	1680-1686
Fig. 45 - OMS WL 474 - Interference to Undisturbed Ratio	C	RN/L, CONFIG.	1687-1687
Fig. 46 - Orbiter Fuselage - Orbiter Alone (Undisturbed)	B	HAW/HT, RN/L	1688-1731
Fig. 47 - Orbiter Fuselage - Integrated Vehicle (Interference)	B	HAW/HT, RN/L ALPHA, BETA	1732-1807

INDEX OF DATA FIGURES (Concluded)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Fig. 48 - Orbiter Fuselage - Interference to Undisturbed Ratio	D	RN/L, CONFIG.	1808-1818
Fig. 49 - Leading Edge Rolled Down 30° - Orbiter Alone (Undisturbed)	F	HAW/HT, RN/L	1819-1822
Fig. 50 - Leading Edge Rolled Down 30° - Integrated Vehicle (Interference)	F	HAW/HT, RN/L ALPHA, BETA	1823-1827
Fig. 51 - Leading Edge Rolled Down 30° - Interference to Undisturbed Ratio	H	RN/L, CONFIG.	1828-1828
Fig. 52 - Vertical - Orbiter Alone (Undisturbed)	E, K	HAW/HT, RN/L	1829-1872
Fig. 53 - Vertical - Integrated Vehicle (Interference)	E, K	HAW/HT, RN/L ALPHA, BETA	1873-1945
Fig. 54 - Vertical - Interference to Undisturbed Ratio	H, L	CONFIG, RN/L	1946-1956

COEFFICIENT SCHEDULES:

(A): H/HREF vs. X/L

(B): H/HREF vs. PHI

(C): HI/HU vs. X/L

(D): HI/HU vs. PHI

(E): H/HREF vs. X/C

(F): H/HREF vs. 2Y/B

(G): HI/HU vs. X/C

(H): HI/HU vs. 2Y/B

(I): H/HREF vs. S

(J): HI/HU vs. S

(K): H/HREF vs. Z/BV

(L): HI/HU vs. Z/BV

INTRODUCTION

The experimental investigation documented in this report was performed to obtain aerodynamic heat-transfer rate data on the space shuttle vehicle 3 first and second stage configurations. A component build-up of orbiter alone, tank alone, orbiter plus tank, and fully mated launch configuration was utilized to investigate component interference effects.

The test program was conducted in the NASA-Ames 3.5-Foot Hypersonic Wind Tunnel at Mach 5.3 and nominal free-stream Reynolds number per foot values of 1.5×10^6 and 5.0×10^6. The model angles of attack were 0°, -3°, -5° and 20° (SRB alone) and angles of yaw were 0° and -5°.

NOMENCLATURE

Symbol	Plot Symbol	Definition
b		thickness of model skin
B		span length
C		specific heat of model skin material or OMS crease
c		chord length
C_0, C_1, C_2		constants in curve fit for C over model wall temperature range
c_p		specific heat of air stream (perfect gas value)
CHAN	CHAN	recording-system channel
H_{aw}	HAW	adiabatic wall enthalpy
H_t	HT	free-stream total enthalpy
	HO	average of free-stream total enthalpy values of all tunnel runs incorporated into an aero dataset
H_w	HW	enthalpy based on model wall temperature for given T/C location
h	H	heat-transfer coefficient at model wall for given T/C location
h_{ref}	HREF	stagnation-point heat-transfer coefficient for reference sphere
h/h_{ref}	H/HREF	ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for H_{aw}/H_t = X.XXX
	HI/HU	interference to undisturbed heat transfer coefficient ratio
IML		inner module line
L	Length	model reference length

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
M_∞	MACH	free-stream Mach number
P_t	PT	free-stream total pressure
	PO	average of free-stream total pressure values of all tunnel runs incorporated into an aero dataset
$\dot{q}$	Q	heat-transfer rate at model wall for given T/C location
$\dot{q}_S$	QS	stagnation-point heat-transfer rate for reference sphere at initial time
R_S	RS	reference sphere radius at model scale equivalent to 0.305 m (1 ft) for full-scale vehicle
Re_∞/ft		free-stream Reynolds number per foot
	RN/L	average of free-stream Reynolds number values (per foot) of all tunnel runs incorporated into an aero dataset
Re_∞, L		free-stream Reynolds number based on model reference length, L
	S	assumed chordwise location (for Clusters Band C) - see Figure 2
St	ST	Stanton number based on free-stream flow conditions and the model heat-transfer coefficient for H_{aw}/H_t = X.XXX
T		temperature
T_t	TT	free-stream total temperature
	TO	average of free-stream total temperature values of all tunnel runs incorporated into an aero dataset

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
T_W	TW	model wall temperature for given T/C location
T/C	T/C	thermocouple
t		time
t_i	TIME	initial time (before model insertion into flow) extrapolated from $f(T_W)$ vs time
u,V		velocity
W		density of model skin material
X		axial distance measured from nose
	X/C	chordwise location, fraction of local chord
	X/L	longitudinal location, fraction of body length
Y		spanwise distance from centerline
	2Y/B	spanwise location, fraction of semi-span
Z		water plane distance
	Z/BV	spanwise location on vertical tail, fraction of exposed span
θ		tank radial position measured clockwise looking forward, 0 degrees at bottom centerline
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
μ		viscosity of air
ρ		density of air
ϕ		Orbiter radial position measured clockwise looking forward. 0 degrees at bottom centerline

NOMENCLATURE (Concluded)

Symbol	Plot Symbol	Definition
ψ		SRB radial position measured clockwise looking forward. 0 degrees at bottom centerline

SUBSCRIPTS

aw	adiabatic wall
i	initial value before model insertion into tunnel flow
0	Orbiter
PG	perfect gas (calorically and thermally perfect gas)
s	reference sphere
S	SRB
t	free-stream total condition
T	tank
V	vertical tail
w	wall
∞	free-stream

REMARKS

Tunnel blockage was suspected during the first stage (mated) $\alpha = -5°$ runs, but could not be confirmed due to inconclusive shadowgraph data. Therefore, additional data were taken at $\alpha = -3°$. Both $\alpha = -3°$ and $-5°$ data are presented in this report; however, the $\alpha = -5°$ data are questionable.

Near the end of the test program the number of test runs used to obtain a complete mapping of the mated-vehicle heating rates was reduced from seven to five to conserve test time. The data acquisition capacity is 75 thermocouple channels per run. This reduced the number of recorded thermocouples from 525 to 375 for these runs (runs with T/C hook-up numbers 12 and 13).

A post-test analysis and dimensional check of the model were performed on the orbiter to investigate suspected incorrect data from wing leading edge clusters B and C. As a result of this investigation, the thermocouple locations and skin thicknesses presented in Table IV and figure 2a were found to be incorrect for clusters B and C. Figure 2b presents the correct locations and thicknesses. The data presented in the plots and tabulated listings reflect the pretest locations and skin thicknesses and should be scaled accordingly. Data reports for other tests of this model are also in error due to the clusters on the wing leading edge. These test data should be corrected for the test data publications of tests OH4B, IH2O, and OH6.

CONFIGURATIONS INVESTIGATED

The 22-OTS model is a 0.0175-scale replica of the vehicle three configuration Rockwell International Space Shuttle orbiter, tank, and solid rocket boosters. The model is a thin-skin thermocouple model instrumented with 527 30-gauge iron-constantan thermocouples. The structural areas of the model were constructed of 15-5PH stainless steel with instrumented areas of 15-5PH and 17-7PH stainless steel.

Provisions have been made to test elevon deflections of -40°, 0°, +5, and +10°; body flap deflections of 0° and +10°; and rudder flare of 0° and 40°. For this ascent test, all control surfaces were tested at 0° deflection.

The configurations tested are described below with the component definitions given in table III.

Symbol		
ORB	$B_{17}\ C_7\ M_4\ F_5\ W_{103}\ E_{22}\ V_7\ R_5$	Orbiter
ET	T_{10}	external tank
SRB	S_8	solid rocket booster
OTS	$B_{17}\ C_7\ M_4\ F_5\ W_{103}\ E_{22}\ V_7\ R_5\ T_{10}\ S_8$	mated vehicle
TRIPS		.050" steel spheres spot welded to .005" shim stock band 1/4 inch wide. Centerline displacement between trips was 3 diameters

TEST FACILITY DESCRIPTION

The NASA-Ames 3.5-Foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures to 1800 psia and temperatures to 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft^3 vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed within a chamber approximately 12-feet in diameter and 40-feet in length, arranged transversally to the flow direction.

A model support system is provided that can pitch models through an angle-of-attack range of -20 to +20 degrees, in a vertical plane, about a fixed point of rotation on the tunnel centerline. This rotation point is adjustable from 1 to 5 feet from the nozzle exit plane. The model normally is out of the test stream (strut centerline 37-inches from tunnel centerline) until the tunnel test conditions are established after which it is inserted. Insertion time is adjustable to as little as 1/2 second and models may be inserted at any strut angle.

A high-speed, analog-to-digital data acquistion system is used to record test data on magnetic tape. The present system is equipped to measure and record the outputs from 80 transducers in addition to 20 channels of tunnel parameters.

TEST PROCEDURES

The data acquisition capability was 75 recorded thermocouples per run. Since there were 525 T/C's selected for mated launch-configuration testing, seven runs were necessary for a complete mated heating distribution. Cannon plugs with 15 thermocouples for full data acquisition capability were used at the model. A five plug junction (connector) box was constructed to mate the model plugs to the facility's 150°F reference box terminal posts. Most model changes were, therefore, simple plug changes between runs.

Due to the complexity of the mated configuration sting arrangement, oil-flow visualization techniques were employed to confirm that there were no sting-interference effects.

Shadowgraphs were taken for each run. Sting-effect shadowgraphs were also obtained for selected runs.

DATA REDUCTION

All test data were reduced at the NASA/Ames Research Center using the data reduction techniques outlined below. The thermocouple data were reduced using the one-dimensional, thin-wall equation:

$$\dot{q} = WCb \frac{dT_w}{dt} = h (H_{aw} - H_w) \equiv hH_t \left(\frac{H_{aw}}{H_t} - \frac{H_w}{H_t} \right) \quad (1)$$

which neglects heat-conduction losses.

Assuming that W and h are constant and

$$C = C_0 + C_1 T_w + C_2 T_w^2 \text{ for } T_w \text{ ranges} \quad (2)$$

the integration of equation (1) for $t = t_i$ to t and $T_w = T_{w_i}$ to T_w yields the linear equation:

$$f(T_w) = - \ell n \left(\frac{T'_{aw} - T_w}{T'_{aw} - T_{w_i}} \right) - \left[\frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}} \left(T'_{aw} + \frac{T_w + T_{w_i}}{2} \right) \right]$$

$$(T_w - T_{w_i}) = \frac{hc_p}{WC'_{aw}b} (t - t_i) \quad (3)$$

where it is defined that:

$$T'_{aw} \equiv \frac{H_{aw}}{c_p} = \frac{H_{aw}}{H_t} \frac{H_t}{c_p} \geq (T_{aw})_{PG} \quad (4)$$

$$C'_{aw} \equiv C_0 + C_1 T'_{aw} + C_2 T'_{aw\,2} \quad (5)$$

$\neq$ specific heat at adiabatic wall temperature

The form of Eq (3) is $f(T_w) = mt + b$ where m is the slope and b is the intercept for a straight line if heat-conduction errors are negligible. Thus, deviations from a straight line can indicate heat-conduction effects.

The slope, m, of $f(T_w)$ vs t from Eq (3) is computed by a least-squares, straight-line fit over a finite time interval (approx. 1 sec.) beginning when the model reaches uniform tunnel flow. The value of the heat-transfer coefficient, h, is then determined from:

$$h = \frac{WC'_{aw}b}{c_p} m \tag{6}$$

Using this value of h, the heat-transfer rate is evaluated at the initial time, t_i, when the model is isothermal at the initial wall enthalpy, H_{wi}

$$\dot{q} = \dot{q}_i = h\,(H_{aw} - H_{w_i}) \equiv hH_t \left(\frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t}\right) \tag{7}$$

where H_{aw}/H_t is the same value used to evaluate h. The resultant value of $\dot{q}$ is independent of the value of H_{aw}/H_t used for both the h and $\dot{q}$ evaluations.

The reference sphere heating is also evaluated at the initial wall enthalpy by the method of Fay and Riddell (ref. 2):

$$\dot{q}_s = h_{ref}\,(H_t - H_{w_i}) \equiv h_s\,H_t \left(1.0 - \frac{H_{w_i}}{H_t}\right) \tag{8}$$

The model-to-sphere ratio of heat-transfer coefficients is then determined from Eqs. (7) and (8) as

$$\frac{h}{h_{ref}} = \frac{\dot{q}_i}{\dot{q}_s}\left[\frac{1.0 - H_{w_i}/H_t}{H_{aw}/H_t - H_{w_i}/H_t}\right] \tag{9}$$

where $\dot{q}_i$ is constant for all values of H_{aw}/H_t.

To determine h/h_{ref} for various values of H_{aw}/H_t, the particular value of H_{aw}/H_t is substituted into Eq. (9).

The Stanton number is defined as

$$St \equiv \frac{h}{\rho u} = \frac{\dot{q}_i}{\rho u(H_{aw} - H_{w_i})} \tag{10}$$

where for free-stream conditions, $\rho u = \rho_\infty V_\infty$.

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 (ref. 3) for calorically imperfect thermally perfect air. Keyes' equation for viscosity (see ref. 4) was also used for the sphere heating and Reynolds number computations:

$$\mu = \frac{0.0232 \times 10^{-6} T^{0.5}}{1 + \frac{220}{T} \times 10^{-9/T}} \tag{11}$$

where the units for T and μ are °R and lb-sec/ft, respectively.

REFERENCES

1. Foster, J. F.: Pre Test Information for Testing of the 22-OTS 0.017-scale Thinskin Thermocouple Model in the Ames Research Center 3.5-Ft Hypersonic Wind Tunnel, October 1, 1973 Rockwell International Report No. SD73-SH-0259.

2. Fay, J. A.; and Riddell, F. R.: Theory of Stagnation Point Heat Transfer in Dissociated Air. J. Aeron. Sci;, Vol. 25, No. 1, Feb. 1958, pp. 73-85.

3. Ames Research Staff: Equations, Tables, and Charts for Compressible Flow. NACA Rept. 1135, 1953.

4. Bertram, Mitchel H.: Comment on "Viscosity of Air." J. Spacecraft Rockets, Vol. 4, No. 2, Feb. 1967, pp. 287-288.

TABLE I.

TEST : IH3 (ARC 3.5 #178)

NOMINAL
TEST CONDITIONS

DATE : 11/9/73

MACH NUMBER	REYNOLDS NUMBER (per ft)	TOTAL PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Rankine)
5.3	1.5×10^6	120	1300
5.3	5.0×10^6	405	1300

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS: Thermocouple Test

TABLE II.

TEST: ARC 3.5 178 - IH3 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: November, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES RN/L				NO. OF RUNS	THERMOCOUPLE SCHEDULE (T/C), X (SEE TABLE VIII) X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	TEST RUN NUMBERS
*REI( )**01	ØTS	0	0	1.5					9	3	10	5	11	7	8				
02	ØTS	0	0	5.0					18	17	16	15	12	14	13				
03	ØTS TRIPS	0	0	1.5					19	20	21	22	23	24	25				
04	ØTS TRIPS	0	0	5.0					32	31	30	29	28	27	26				
05	ØTS	0	-5	5.0					39	38	37	36	35	34	33				
06	ØRB	0	0	1.5					40	41	42	43							
07	ØRB	0	0	5.0					47	46	45	44							
08	ØRB TRIPS	0	0	1.5					48	49	50	51							
09	ØRB TRIPS	0	0	5.0					55	54	53	52							
10	ET	0	0	1.5												56	57		
11	ET	0	0	5.0												59	58		
12	ET TRIPS	0	0	5.0												60	61		
13	ET TRIPS	0	0	1.5												63	62		
14	SRB	0	0	1.5														64	
15	SRB	0	0	5.0														65	
16	SRB	20	0	5.0														66	
17	SRB TRIPS	0	0	1.5														68	
18	SRB TRIPS	0	0	5.0														69	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

H/H REF | MACH | H AW/H T

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

* REI --- DATASETS, HAW/HT = 1.0
AEI --- DATASETS, HAW/HT = .9
BEI --- DATASETS, HAW/HT = .85

** See Page 24 for Key to 4th character of DATASET NAME.

TABLE II. (Concluded)

TEST: ARC 3.5 178 - IH3 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: November, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION				NO. OF RUNS	THERMOCOUPLE SCHEDULE (T/C), X (SEE TABLE VIII) X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_{11}	X_{12}	X_{13}
*REI(**)19	ØTS	-5	0	5.0					70		71	72	73					
REI( )20	ØTS	-3	0	5.0					74						78	79	76	77

KEY TO 4TH CHARACTER OF DATASET NAME

4th Character	Location of Thermocouple	4th Character	Location of Thermocouple
S	SRB	H	Clusters B & C (Wing Leading Edge)
N	SRB Separation Nozzle	I	Wing Top
T	External Tank	J	OMS Bottom Crease
B	Orbiter - Bottom C_L	K	OMS Side Surface
A	Orbiter - Top C_L	L	OMS Top Surface
C	Windows	M	OMS WL 474
D	Orbiter Bottom Surface	Q	Leading Edge Rolled Down 30°
E	Orbiter Side	P	Orbiter Fuselage
F	Wing Upper Crease	V	Vertical Tail
G	Wing Bottom	X	Solid Booster (overlaps with "S" data but has thermocouple schedule needed for comparison with undisturbed data to compute HI/HU)

1 7 13 19 25 31 37 43 49 55 61 67 75 76

H,/HREF | MACH | HAW/HT

COEFFICENTS | IDVAR (1) | IDVAR (2) | NDV

α OR β SCHEDULES

NASA-MSFC-MAF

TABLE III. - COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: BODY - B_{17}

GENERAL DESCRIPTION: Fuselage, 3 configuration, lightweight orbiter per Rockwell lines drawing No. VL70-000139

MODEL SCALE: 0.0175

DRAWING NO.: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	1290.3	22.58025
Max. width - In.	267.6	4.6830
Max.depth - In.	244.5	4.27875
Fineness Ratio	4.82175	4.82175
Area - ft^2		
Max. Cross-sectional	386.67	0.11842
Planform		
Wetted		
Base		

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: CANOPY - C7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Insufficient information to complete dimensional data at this time.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (X_o = 433 to X_o = 670) - in FS	237	4.148
Max. Width		
Max. Depth (Z_o = to Z_o = 501) in FS		
Fineness ratio		
Area - ft^2		
Max. Cross-sectional		
Planform		
Wetted		
Base		

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON- E_{22}

GENERAL DESCRIPTION: 3 configuration per W_{103} Rockwell Lines Drawing VL70-000139 data for (1) of (2) sides.

SCALE MODEL: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area - ft^2	205.52	0.06294
Span (equivalent) - In.	353.34	6.18345
Inb'd equivalent chord	114.78	2.00865
Outb'd equivalent chord	55.00	0.96250
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	.208	.208
At outb'd equiv. chord	.400	.400
Sweep-back angles, degrees		
Leading edge	0.00	0.00
Trailing edge	- 10.24	- 10.24
Hingeline	0.00	0.00
Area Moment (Normal to hingeline) - ft^3 (Product of Area Moment)	1548.07	0.00829

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BODY FLAP - F_5

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	84.70	1.48225
Max. width - In.	267.6	4.6830
Max. Depth		
Fineness Ratio		
Area - ft^2		
Max Cross-sectional		
Planform	142.5195	0.04365
Wetted		
Base	38.0958	0.01167

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS POD - M_4

GENERAL DESCRIPTION: Orbital maneuvering system pods located on the orbiter aft fuselage.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	346.0	6.0550
Max. Width - In.	108.0	1.890
Max. Depth - In.	113.0	113.0
Fineness Ratio		
Area - ft^2		
Max cross sectional		
Planform		
Wetted		
Base		

℄ of OMS Pod

WP = 463.9 In. FS; WP 400 + 63.9 = 463.9

BP = 80.0 In. FS

LENGTH: 1214.0 to 1560.0 = 346.0 In. FS

NOTE: M_4 is identical to M_3 of 2A configuration, except intersection to body.

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R_5

GENERAL DESCRIPTION: 2A, 3 and 3A configuration per Rockwell Lines Drawing VL70-000095

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area - ft^2	106.38	0.03258
Span (equivalent) - in.	201.0	3.5175
Inb'd equivalent chord	91.585	1.60274
Outb'd equivalent chord	50.833	0.88958
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	0.400	0.400
At outb'd equiv. chord	0.400	0.400
Sweep-back angles, degrees		
Leading edge	34.83	34.83
Trailing edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (normal to hingeline) - ft^3 Product of area and mean chord	526.13	0.00282

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S_8

GENERAL DESCRIPTION: Booster solid rocket, 3 configuration, body of revolution, data for (1) of (2) sides per Rockwell Lines drawing VL77-000036 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL77-000036

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (Includes nozzle) - In.	1741.0	30.468
Max. Width (Tank dia.) - In.	142.0	2.485
Max. Depth (Aft shroud) - In.	205.0	3.588
Fineness Ratio	8.49268	8.49268
Area - ft^2		
Max. Cross-sectional	229.21	4.011
Planform		
Wetted		
Base		
WP of BSRM Centerline (Z_T) - In.	400.0	7.00
FS of BSRM Nose (X_T) - In.	200.0	3.50

TABLE III. - **COMPONENT DIMENSIONAL DATA** - Continued.

MODEL COMPONENT: EXTERNAL TANK - T_{10}

GENERAL DESCRIPTION: External Oxygen-hydrogen tank, 3 configuration, per Rockwell Lines drawing VL78-000041 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL78-000041

DIMENSIONS:	**FULL SCALE**	**MODEL SCALE**
Length - In. (Nose @ X_T = 309)	1865	32.63750
Max. width (Dia) - In.	324	5.670
Max. depth	--	--
Fineness Ratio	5.75617	5.75617
Area - ft^2		
Max. Cross-Sectional	572.555	0.17534
Planform		
Wetted		
Base		
WP of Tank Centerline (X_T) In.	400.0	7.00

TABLE III. - COMPONENT DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL, V_7 (Lightweight Orbiter Configuration)

GENERAL DESCRIPTION: Centerline vertical tail, double-wedge airfoil with rounded leading edge.

NOTE: Same as V_5 but with manipulator housing removed.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - ft^2	425.92	0.13044
Planform		
Span (Theo) - In.	315.72	5.52510
Aspect ratio	1.675	1.675
Rate of taper	0.507	0.507
Taper ratio	0.404	0.404
Sweep-back angles, degrees		
Leading edge	45.000	45.000
Trailing edge	26.249	26.249
0.25 Element line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.69875
Tip (Theo) WP	108.47	1.89822
MAC	199.81	3.49667
Fus. Sta. of .25 MAC	1463.50	25.61125
W.P. of .25 MAC	635.522	11.12164
B.L. of .25 MAC	0.00	0.00
Airfoil section:		
Leading wedge anble - deg.	10.000	10.000
Trailing wedge angle - deg.	14.920	14.920
Leading edge radius	2.0	0.0350
Void area - FT^2	13.17	0.00403
Blanketed area	0.00	0.00

TABLE III. -- COMPONENT DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W 103

GENERAL DESCRIPTION: Configuration 3 Orbiter per Lines VL70-000139.

NOTE: Same planform as W87, except dihedral at TE

Scale Model = 0.0175

TEST NO.

DWG. NO. VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2	2690.00	0.82381
Planform		
Span (Theo In.	936.68	16.39190
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees (@ TE of Elevon)	3.500	3.500
Incidence Angle, degrees	3.000	3.000
Aerodynamic Twist, degrees	+3.000	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.24	12.06170
Tip, (Theo) B.P.	137.85	2.41238
MAC	474.81	8.30918
Fus. Sta. of .25 MAC	1136.89	19.89558
W.P. of .25 MAC	299.20	5.2360
B.L. of .25 MAC	182.13	3.18728
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.53664
Span, (Theo) In. BP108	720.68	12.61190
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	9.8420
Tip 1.00 $\frac{b}{2}$	137.85	2.41238
MAC	393.03	6.87802
Fus. Sta. of .25 MAC	1185.31	20.74292
W.P. of .25 MAC	300.20	5.25350
B.L. of .25 MAC	251.76	2.51580
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.10	0.10
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	120.33	0.03685
Leading Edge Intersects Fus M. L. @ Sta	560.0	9.800
Leading Edge Intersects Wing @ Sta	1035.0	18.11250

Table IV. Orbiter T/C Locations
Model 22-OTS

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE x FROM NOSE	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
1	0	238.00	0	--	0	0	--	0	.034	BOTTOM ℄
2	.005	244.45	↑	↑	.113	↑	↑	↑	.035	↑
3	.010	250.90			.226				.035	
4	.020	263.81			.452				.032	
5	.030	276.71			.677				.033	
6	.040	289.61			.903				.034	
7	.050	302.52			1.129				.033	
8	.060	315.42			1.355				.032	
9	.070	328.32			1.581				.034	
10	.080	341.22			1.806				.035	
11	.090	354.13			2.032				.035	↓
12	.100	367.03			2.258				.034	BOTTOM ℄
13									—	OPEN
14	.120	392.84			2.710				.035	BOTTOM ℄
15	.130	405.74			2.935				.035	↑
16	.140	418.64			3.161				.035	
17	.150	431.54			3.387				.034	
18	.160	444.45			3.613				.035	
19	.170	457.35			3.839				.035	
20	.180	470.25			4.064				.035	
21	.190	483.16			4.290				.035	
22	.200	496.06			4.516				.031	
23	.225	528.32			5.081				.031	
24	.250	560.58			5.645				.033	
25	.275	592.83			6.210				.033	
26	.300	625.09			6.774				.032	
27	.325	657.35			7.339				.033	
28	.350	689.60			7.903				.020	
29	.375	721.86			8.468				.028	
30	.400	754.12			9.032				.033	
31	.425	786.38	↓	↓	9.597	↓	↓	↓	.035	↓
32	.450	818.64	0	--	10.161	0	--	0	.034	BOTTOM ℄

Table IV (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE (x FROM NOSE)	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
33	.475	850.89	0	--	10.726	0	--	0	.030	BOTTOM ℄
34	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
35	.525	915.41			11.855				.032	
36	.550	947.66			12.419				.031	
37	.575	979.92			12.984				.029	
38	.600	1012.18			13.548				.028	
39	.625	1044.44			14.113				.028	
40	.650	1076.70			14.677				.033	
41	.675	1108.95			15.242				.035	
42	.700	1141.21			15.806				.034	
43	.725	1173.47			16.371				.035	
44	.750	1205.72			16.935				.035	
45	.775	1237.98			17.500				.034	
46	.800	1270.24			18.064				.035	
47	.825	1302.50			18.624				.035	
48	.850	1334.76			19.193				.033	
49	.875	1367.01			19.758				.033	
50	.900	1399.27			20.322				.034	
51	.925	1431.53			20.887				.035	
52	.950	1463.78			21.451				.032	↓
53	.975	1496.04			22.016				.032	BOTTOM ℄
54	1.000	1528.31			22.580				.029	$\frac{x}{L}$=1.008@δ_{BF} =10° .033
55	1.013	1541.56			22.812				.032	δ_{BF} 10° ONLY ↑
56	1.025	1560.56			23.145				.032	BF
57	1.038	1574.30			23.385			↓	.032	δ_{BF} 10° ONLY ↓
58	1.050	1592.82			23.709			0	.030	.032
59	.010	250.90			.226			180	.035	TOP ℄
60	.025	270.26			.565			↑	.035	↑
61	.050	302.52			1.129				.035	
62	.075	334.77			1.694				.033	
63	.100	367.03	↓	↓	2.258	↓	↓	↓	.033	↓
64	.125	399.29	0	--	2.823	0	--	180	.031	TOP ℄

Table IV (Cont'd) Orbiter

T/C NO.	x/L	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE x FROM NOSE	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
65	.150	431.54	0	--	3.387	0	--	180	.026	TOP ℄
66	.160	444.45	↑	↑	3.613	↑	↑	↑	.031	↑
67	.170	457.35			3.839				.031	
68	.180	470.25			4.064				.030	
69	.200	496.06			4.516				.033	
70	.250	560.58			5.645				.030	
71	.300	625.09			6.774				.030	
72	.400	754.12			9.032				.030	
73	.500	883.15			11.290				.030	
74	.600	1012.18			13.548				.031	
75	.700	1141.21	↓	↓	15.806	↓	↓	↓	.032	↓
76	.800	1270.24	0	--	18.064	0	--	180	.030	TOP ℄
77			29.60	478.00	WINDOW #1	0.518	8.365	--	.035	TOP LEFT
78			12.80	478.00	WINDOW #1	0.224	8.365	--	.035	TOP RIGHT
79			21.20	464.97	↑	0.371	8.137	↑	.033	CENTER
80			34.40	452.00	↓	0.602	7.910		.035	BOTTOM LEFT
81			6.00	452.00	WINDOW #1	0.105	7.910		.034	BOTTOM RIGHT
82			43.20	478.00	WINDOW #2	0.756	8.365		.035	TOP LEFT
83			34.80	478.00	WINDOW #2	0.609	8.365		.035	TOP RIGHT
84			44.80	464.97	↑	0.784	8.137		.035	CENTER
85			59.20	452.00	↓	1.036	7.910	↓	.035	BOTTOM LEFT
86			40.40	452.00	WINDOW #2	0.707	7.910	--	.035	BOTTOM RIGHT
87			62.40	464.97	WINDOW #3	1.092	8.137	140	.032	CENTER
88	.100	367.03	20.00	—	2.258	0.350	--	10	.035	FUSELAGE BOTTOM SURFACE
89	.150	431.54	24.00	--	3.387	0.420	--	10	.035	↑
90	.050	302.52	25.00	↑	1.129	0.438	--	14	.033	
91	.200	496.06	25.00		4.516	0.438	↑	11.5	.031	
92	.300	625.09	25.00		6.774	0.438		12	.033	
93	.200	496.06	50.00		4.516	0.875		24	.034	
94	.300	625.09	50.00		6.774	0.875		23	.036	
95	.400	754.12	50.00	↓	9.032	0.875	↓	21.5	.026	↓
96	.500	883.15	50.00	--	11.290	0.875	--	21.5	.026	FUSELAGE BOTTOM SURFACE

Table IV (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICK-NESS	REMARKS
		x_o	y	z	x FROM NOSE	y	z			
97	.600	1012.18	50.00		13.548	0.875		21.5	.021	FUSELAGE SIDE
98	.700	1141.21	50.00		15.806	0.875		↕	.033	
99	.800	1270.24	50.00		18.064	0.875		↕	.033	
100	.900	1399.27	50.00		20.322	0.875		21.5	.034	FUSELAGE SIDE
101	1.000	1528.30	100.00		22.580	1.75		39	.031	BODY FLAP 10° = .034
102	1.050	1592.82	100.00		23.704	1.75		39	.028	BODY FLAP 18° = .033
103	.100	367.03	39.20		2.258	0.686		20	.033	FUSELAGE SIDE
104	.150	431.54	40.80		3.387	0.714		20	.031	↑
105	.050	302.52		303.60	1.129	--	5.313	22	.031	C.C.L. TANGENT
106	.100	367.03	52.00	--	2.258	0.910		24.5	.033	↕
107	.150	431.54	62.00	--	3.387	1.085	--	25.5	.031	↕
108	.200	496.06	65.60	287.20	4.516	1.148	5.026	31.5	.035	C.C.L. TANGENT
109	.300	625.09	74.46	--	6.774	1.303		34	.033	
110	.200	496.06	75.60	292.00	4.516	1.323	5.110	35	.030	
111	.150	431.54	79.20	304.80	3.387	1.386	5.334	40	.030	
112	.200	496.06	85.20	298.80	4.516	1.491	5.229	40	.034	
113	.300	625.09	91.43		6.774	1.600		40	.026	
114	.300	625.09	102.86		6.774	1.800		45	.023	
115	.050	302.52		325.60	1.129		5.698	35	.030	M.H.B. TANGENT
116	.100	367.03		317.60	2.258		5.558	39	.030	M.H.B. TANGENT
117	.150	431.54	83.60	314.4	3.387	1.463	5.502	45.5	.030	M.H.B. TANGENT
118	.200	496.06		320.00	4.516		5.600	51	.030	
119	.300	625.09		330.00	6.774		5.775	57.5	.021	
120	.300	625.09		340.00	6.774		5.950	61	.027	
121	.076	336.51		350.00	1.724		6.125	--	.030	RCS CENTER
122	.300	625.09		350.00	6.774		6.125	65	.026	
123	.800	1270.24		350.00	18.064		6.125	65	.017	
124	.900	1399.27		350.00	20.322		6.125	65	.033	
125	.975	1496.04		350.00	22.016		6.125	68	.034	
126	.975	1496.04		300.00	22.016		5.250	52.5	.032	
127	.050	302.52		342.40	1.129		5.992	..? 5	.030	↓ TANGENT (UPPER)

Table IV (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE x FROM NOSE	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
128	.200	496.06	--	360.00	4.516	--	6.300	67.5	.026	FUSELAGE SIDE
129	.300	625.09	--	360.00	6.774		6.300	70	.023	
130	.600	1012.18		375.14	13.548		6.565	77	.031	
131	.050	302.52		378.40	1.129		6.622	60	.035	45° TANGENT
132	.100	367.03		410.00	2.258		7.175	119	.034	
133	.200	496.06		410.00	4.516		7.175	96.5	.028	
134	.300	625.09		430.00	6.774		7.525	106	.032	FUSELAGE SIDE
135	.400	754.12		430.00	9.032			105	.033	UPPER BODY
136	.500	883.15		430.00	11.290				.032	
137	.600	1012.18		430.00	13.548				.032	
138	.700	1141.21		430.00	15.806				.032	
139	.800	1270.24		430.00	18.064		7.525		.032	
140	.900	1399.27		370.00	20.322		6.475		.033	
141	.300	625.09		478.80	6.774		8.379	135	.031	
142	.400	754.12			9.032			135	.030	
143	.500	883.15			11.290			135	.033	
144	.600	1012.18			13.548			135	.033	
145	.700	1141.21			15.806			135	.032	
146	.600	1012.18		445.0	13.548		7.788	113	.032	
147	.600	1012.18		440.0	13.548		7.70	112	.032	
148	.750	1205.73		450.00	15.806		7.875	116	.032	
149	.750	1502.73		490.00	15.806		8.575	149	.034	UPPER BODY
150	.400	754.12			9.032			59.5	.031	WING UPPER CREASE
151	.500	883.15			11.290			63	.012	
152	.600	1012.18			13.548			65.5	.030	
153	.700	1141.21			15.806			64	.030	
154	.900	1399.27		332.0	20.322			--	.034	WING UPPER CREASE

Table IV (Continued) Orbiter

T/C NO.	2y/b	x/c	FULL SCALE x_o	FULL SCALE y	MODEL SCALE x_o	MODEL SCALE y	SKIN THICK-NESS	REMARKS
155	.250	.025	640.650	117.085	7.043	2.049	.031	WING BOTTOM
156	↑	.153	754.120	↑	9.030	↑	.035	SURFACE
157		.299	883.150		11.288		.028	↑
158		.444	1012.180		13.545		.023	
159		.590	1141.200		15.802		.034	
160	↓	.736	1270.230	↓	18.060	↓	.034	
161	.250	.900	1415.900	117.085	20.613	2.049	.034	
162	.301		754.000		9.030		.023	30° ROLL DOWN
163	.348		883.000		11.288		.028	30° ROLL DOWN
164	.400	.025	1002.063	187.336	13.364	3.278	.035	
165	↑	.100	1039.750	↑	14.031	↑	.034	
166		.200	1090.000		14.900		.034	
167		.302	1141.210		15.802		.035	
168		.559	1270.230		18.060		.032	
169	↓	.700	1341.250	↓	19.307	↓	.032	
170	.400	.900	1441.750	187.336	21.065	3.278	.032	ELEVON
171	.500		1067.470	234.170	14.516	4.098	.033	30° ROLL DOWN
172	↑	.025	1077.913	↑	14.696	↑	.035	
173		.177	1141.210		15.802		.030	
174		.300	1192.450		16.706		.031	
175		.487	1270.230		18.060		.034	
176		.600	1317.428		18.895		.034	
177		.700	1359.028	↓	19.618	↓	.033	
178	↓	.900	1442.350	234.170	21.075	4.098	.033	ELEVON
179	.600	.100	1152.000	281.004	15.995	4.918	.033	
180	↑	.200	1188.00	↑	16.625	↑	.031	
181		.300	1224.000		17.255		.026	
182		.428	1270.230		18.064		.026	↓
183	↓	.600	1332.000	↓	19.145	↓	.027	WING BOTTOM
184	.600	.700	1368.000	281.004	19.775	4.918	.024	SURFACE

Table IV (Continued) Orbiter

T/C NO.	2y/b	x/c	FULL SCALE x_o	FULL SCALE y	MODEL SCALE x (FROM NOSE)	MODEL SCALE y	SKIN THICKNESS	REMARKS
185	.600	.800	1404.000	281.004	20.404	4.918	.035	WING BOTTOM SURFACE
186	.600	.850	1422.000	↕	20.720	.	.033	ELEVON
187	.600	.90	1440.000	281.004	21.034	.	.034	
188	.750		1186.5	351.255	16.599	6.147	.035	L.E. ROLLED
189	↑	.025	1193.428	↑	16.720	↑	.035	DOWN 30°
190		.100	1214.228		17.084		.032	
191		.303	1270.230		18.064		.032	
192		.500	1325.028		19.023		.032	
193		.700	1380.400		19.992		.027	
194		.800	1408.100		20.476		.031	
195	↓	.850	1422.000	↓	20.719	↓	.035	
196	.750	.900	1435.800	351.255	20.962	6.147	.035	
197	.850	.100	1255.200	398.089	17.801	6.967	.031	
198	.850	.300	1299.600	398.089	18.578	6.967	.034	
199	.850	.500	1344.000	398.089	19.355	6.967	.032	
200	.900	.60	1373.028	421.506	19.863	7.376	.024	
201	.900	.30	1314.743	421.506	18.846	7.376	.030	
202	.950			444.857		7.785	.035	L.E. ROLLED 30°
203	↑	.050	1295.925	↑	18.514	↑	.035	
204		.100	1303.828		18.652		.035	
205		.300	1335.543		19.207		.024	
206		.500	1367.257		19.762		.022	
207	↓	.700	1398.950		20.316		.035	
208	.950	.900	1430.650	↓	20.870	7.785	.030	
209	.966	0.00	1307.000	452.416	18.708	7.917	.032	L.E.
210	.993	0.00	1398.950	464.914	20.316	8.136	.031	L.E.
211	.600			281.004		4.918	.035	CLUSTER B
212	↕			↕		↕	.035	↕
213	↕			↕		↕	.035	↕
214	.600			281.004		4.918	.035	WING BOTTOM SURFACE

Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICK-NESS	REMARKS
			x_o	y	x (FROM NOSE)	y		
215	.600			281.004		4.918	.035	CLUSTER B SEE FIG. 2
216	.600			281.004		4.918	.035	
217	.600			281.004		4.918	.035	
218	.850			398.089		6.967	.020	CLUSTER C SEE FIG. 2
219	↑			↑		↑	.020	
220							.020	
221							.020	
222							.020	
223	↓			↓		↓	.020	
224	.850			398.089		6.967	.020	
225	.400	.050	1015.114	187.336	13.599	3.278	.025	WING TOP SURFACE
226	↕	.200	1090.428	↕	14.918	↕	.024	
227	↓	.600	1291.171	↓		↓	.033	
228	.400	.950	1466.875	187.336		3.278	.031	ELEVON
229	.600	.050	1134.886	281.004	15.696	4.918	.032	
230	.600	.200	1188.657	↕	16.637	↕	.031	
231	.600	.600	1332.028		19.146		.031	
232	↕	.800	1404.000		20.404		.032	ELEVON
233	↓	.900	1440.000	↓	21.034	↓	.034	↕
234	.600	.950	1458.000	281.004	21.349	4.918	.033	↓
235	.800	.050	1223.057	374.672	17.239	6.557	.033	
236	↑	.200	1260.257	↑	17.889	↑	.033	
237	↕	.600	1359.514	↕	19.627	↕	.032	
238		.800	1408.780		20.488		.030	ELEVON
239	↓	.900	1433.690	↓	20.924	↓	.030	ELEVON
240	.800	.950	1446.145	374.672	21.192	6.557	.030	ELEVON

Table IV (Continued)

Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			ϕ	SKIN THICK-NESS	REMARKS
		x_o	y	z	x (FROM NOSE)	y	z			
241	.829	1307			18.715				.026	BOTTOM CREASE OF OMS
242	.900	1399.27			20.318				.035	BOTTOM CREASE OF OMS
243	.975	1496.04			22.011				.030	BOTTOM CREASE OF OMS
244	1.000	1528.3			22.575				.034	BOTTOM OF RCS
245	1.014	1547.0			22.902				.035	BOTTOM OF RCS
246	.780	1245	95.0	474.0	17.608	1.662	8.295	127.9	.032	OMS PODS
247	.805	1276	112.9	474.0	18.173	1.976	8.295	123.8	.031	
248	.829	1307	124.5	474.0	18.715	2.179	8.295	120.8	.031	
249	.862	1350	132.6		19.460	2.320	8.295	119.1	.035	
250	.963	1480	142.5		21.740	2.494	8.295	117.5	.028	
251	1.000	1528.3	142.5		22.575	2.494	8.295	117.5	.033	
252	1.014	1547.0		474.0	22.902		8.295		.033	
253	.805	1276	105.5	488	18.173	1.846	8.540	129.5	.032	
254	.829	1307	117.0	498.7	18.715	2.048	8.727	130.0	.033	
255	.862	1350	126.5	506	19.460	2.214	8.855	130.0	.031	
256	.963	1480	134.5	513	21.740	2.354	8.978	130.0	.028	
257	1.000	1528.3		500	22.575		8.750		.031	
258	1.014	1547.0		500	22.902		8.750		.032	
259	.805	1276	95.0	494.3	18.173	1.662	8.650	135.0	.033	
260	.829	1307	95.0	511.0	18.715	1.662	8.942	139.0	.034	
261	.862	1350	95.0	521.0	19.460	1.662	9.118	142.1	.031	
262	.963	1480	95.0	530.0	21.740	1.662	9.275	144.0	.027	
263	.862	1350	65	517.5	19.460	1.138	9.056	151.2	.031	
264	.963	1480	65	527.0	21.740	1.138	9.222	153	.026	OMS PODS

Table IV (CONCLUDED) Orbiter

T/C NO.	$\frac{z}{b_v}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			x_o	z	x (FROM NOSE)	z		
265	.159	.100	1353.00	550.20	19.513	9.628	.030	VERTICAL TAIL
266	↑	.300	1401.51	550.20	20.361	9.628	.030	↑
267	↓	.700	1498.66	550.20	22.062	9.628	.028	
268	.299	0.00		594.40		10.402	.033	L.E.
269	↑	.100	1394.94	↑	20.246	↑	.031	
270		.300	1439.00		21.018		.031	
271		.500	1483.06		21.789		.031	
272	↓	.700	1527.11	↓	22.559	↓	.022	
273	.299	.900	1571.17	594.40	23.330	10.402	.022	
274	.532	0.00		667.96		11.689	.034	L.E.
275	↑	.100	1538.31	↑	22.755	↑	.031	
276		.300	1574.94		23.396		.032	
277		.500	1611.57		35.034		.032	
278	↓	.700	1648.14	↓	24.677	↓	.023	
279	.532	.900	1684.77	667.96	25.318	11.689	.026	
280	.765	0.00		741.53		12.977	.034	L.E.
281	.765	.100	1461.00	↑	21.403	↑	.031	
282	↑	.300	1490.14		21.912		.031	
283		.500	1519.29		22.423		.030	
284	↓	.700	1548.43	↓	22.933	↓	.024	
285	.765	.900	1577.57	741.53	23.442	12.977	.024	
286	.905	0.00		785.73		13.750	.033	L.E.
287	.905	.100	1576.49	785.73	23.424	13.750	.030	↓
288	.905	.500	1625.86	785.73	24.288	13.750	.030	VERTICAL TAIL

Table V Orbiter Left Main NOzzle T/C Locations
Model 22-OTS

T/C NO.	x FROM EXIT PLANE		ϕ_n CLOCKWISE LOOKING FORWARD	
	F.S.	M.S.	SKIN THICKNESS	0° BOTTOM ℄
301	5"	0.088	.031	0°
302	↓	↓	.031	25°
303			.031	45°
304			.031	65°
305			.031	90°
306			.031	135°
307	↓	↓	.031	315°
308	10"	0.175	.031	0°
309	↓	↓	.031	25°
310			.031	45°
311			.031	65°
312	↓	↓	.031	90°
313	15"	0.263	.031	0°
314	↓	↓	.031	45°
315	↓	↓	.031	90°
316	25"	0.438	.031	0°
317	↓	↓	.031	45°
318			.031	65°
319	↓	↓	.031	90°
320	45"	0.788	.031	45°
321			.032	BASE PLATE
322			.034	↓
323			.031	
324			.032	↓

Table VI Solid Rocket Booster T/C Locations
Model 22-0TS

T/C NO.	x_s FS	x^*_{ms}	$\frac{x}{L}$	Ψ	SKIN THICKNESS	REMARKS
701	200.000	0.000	0.000	90°	.022	NOSE
702	241.900	0.733	0.025	90°	.031	
703	283.800	1.467	0.050	90°	.031	
704	367.600	2.933	0.100	90°	.033	
705	870.400	11.732	0.400	90°	.029	
706	1373.200	20.531	0.700	90°	.030	
707	1507.280	22.877	0.780	90°	.030	
708	1540.800	23.464	0.800	90°	.029	
709	1708.400	26.397	0.900	90°	.031	
710	1758.680	27.277	0.930	90°	.034	
711	1859.240	29.037	0,990	90°	.036	
712	1373.200	20.531	0.700	135°	.030	
713	1708.400	26.397	0.900	135°	.030	
714	1758.680	27.277	0.930	135°	.034	
715	1859.240	29.037	0.990	135°	.035	
716	283.800	1.467	0.050	180°	.032	
717	367.600	2.933	0.100	180°	.034	
718	535.200	5.866	0.200	180°	.030	
719	870.400	11.732	0.400	180°	.030	
720	1038.000	14.665	0.500	180°	.029	
721	1205.600	17.598	0.600	180°	.030	
722	1289.400	19.065	0.650	180°	.030	
723	1373.200	20.531	0.700	180°	.029	
724	1457.000	21.998	0.750	180°	.029	
725	1507.280	22.877	0.780	180°	.030	
726	1540.800	23.464	0.800	180°	.028	
727	1624.600	24.931	0.850	180°	.028	
728	1708.400	26.397	0.900	180°	.028	
729	1758.680	27.277	0.930	180°	.032	SKIRT
730	1808.960	28.157	0.960	180°	.034	SKIRT
731	1859.240	29.037	0.990	180°	.034	SKIRT
732	1715.000	26.514	0.904	210°	.028	SEPARATION
733	1738.000	26.984	0.918	210°	.030	NOZZLES 15-5PH

*MEASURED FROM NOSE

Table VI (Continued)
(Solid Rocket Booster)

T/C NO.	x_s FS	x^*_{ms}	$\frac{x}{L}$	ψ	SKIN THICKNESS	REMARKS
734	1750.000	27.130	0.925	210^0	.032	SEPARATION NOZZLES
735	1792.200	27.864	0.950	210^0	.033	15-5PH
736	1825.720	28.450	0.970	210^0	.032	
737	1750.300	27.130	0.925	$\approx 215^0$	.032	
738	1775.440	27.570	0.940	$\approx 215^0$	.032	
739	1808.960	28.157	0.960	$\approx 215^0$	.033	
740	325.700	2.200	0.075	225^0	.035	
741	367.600	2.933	0.100	225^0	.034	
742	451.400	4.400	0.150	225^0	.032	
743	535.200	5.866	0.200	225^0	.030	
744	702.800	8.799	0.300	225^0	.028	
745	870.400	11.732	0.400	225^0	.030	
746	1038.000	14.665	0.500	225^0	.030	
747	1205.600	17.598	0.600	225^0	.030	
748	1373.200	20.531	0.700	225^0	.030	
749	1507.280	22.877	0.780	225^0	.030	
750	1540.800	23.464	0.800	225^0	.029	
751	1624.600	24.931	0.850	225^0	.029	
752	1708.400	26.397	0.900	225^0	.027	
753	1758.680	27.277	0.930	225^0	.031	SKIRT
754	1808.960	28.157	0.960	225^0	.032	
755	1859.240	29.037	0.990	225^0	.032	
756	1758.68	27.277	0.930	240^0	.030	
757	1808.960	28.157	0.960	240^0	.031	
758	1859.240	29.037	0.990	240^0	.032	
759	702.800	8.799	0.300	247.5^0	.028	
760	870.400	11.732	0.400	247.5^0	.030	
761	1038.000	14.665	0.500	247.5^0	.030	
762	1205.600	17.598	0.600	247.5^0	.030	
763	1289.400	19.065	0.650	247.5^0	.031	
764	1373.200	20.531	0.700	247.5^0	.030	
765	1457.000	21.998	0.750	247.5^0	.031	
766	392.740	3.373	0.115	260^0	.032	

*MEASURED FROM NOSE

Table VI (Concluded)

(Solid Rocket Booster)

T/C NO.	x_s FS	x^*_{ms}	$\frac{x}{L}$	ϕ	SKIN THICKNESS	REMARKS
767	203.816	0.067	0.002	270°	.035	ON 45° RAY FROM NOSE RADIUS
768	241.900	0.733	0.025	270°	.033	
769	283.800	1.467	0.050	270°	.033	
770	325.700	2.200	0.075	270°	.036	
771	367.600	2.933	0.100	270°	.036	
772	384.360	3.226	0.110	270°	.036	
773	417.880	3.813	0.130	270°	.032	
774	451.400	4.400	0.150	270°	.032	
775	535.200	5.866	0.200	270°	.030	
776	619.000	7.333	0.250	270°	.030	
777	702.800	8.799	0.300	270°	.028	
778	870.400	11.732	0.400	270°	.029	
779	1038.000	14.665	0.500	270°	.030	
780	1205.600	17.598	0.600	270°	.031	
781	1289.400	19.065	0.650	270°	.031	
782	1373.200	20.531	0.700	270°	.030	
783	1457.000	21.998	0.750	270°	.030	
784	1507.280	22.877	0.780	270°	.030	
785	1540.800	23.464	0.800	270°	.030	
786	1624.600	24.931	0.850	270°	.030	
787	1708.400	26.397	0.900	270°	.027	
788	1758.680	27.277	0.930	270°	.029	SKIRT
789	1808.960	28.157	0.960	270°	.032	↓
790	1859.240	29.037	0.990	270°	.032	↓
791	702.800	8.799	0.300	315°	.029	
792	1038.000	14.665	0.500	315°	.030	
793	1373.000	20.531	0.700	315°	.029	
794	1507.280	22.877	0.780	315°	.028	
795	1540.800	23.464	0.800	315°	.028	
796	1708.400	26.397	0.900	315°	.028	
797	1758.680	27.277	0.930	315°	.030	
798	1859.240	29.037	0 990	315°	.032	

*MEASURED FROM NOSE

Table VII External Tank Locations

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
501	383.60	1.306	.040	0°	.034	NOSE
502	458.20	2.6110	.080	↑	.034	NOSE
503	588.75	4.896	.150	↕	.035	NOSE
504	1055.00	13.055	.400	↕	.035	
505	1428.00	19.582	.600	↓	.034	
506	1801.00	26.110	.800	0°	.035	
507	1055.00	13.055	.400	45°	.035	
508	1241.50	16.319	.500	↑	.035	
509	1428.00	19.582	.600	↕	.034	
510	1614.50	22.846	.700	↕	.034	
511	1801.00	26.110	.800	↓	.035	
512	1987.5	29.374	.900	45°	↕	
513	868.5	9.791	.300	67.5°	↕	
514	961.75	11.423	.350	↑	↓	
515	1055.00	13.055	.400	↕	.035	
516	1241.50	16.319	.500	↕	.034	
517	1428.00	19.582	.600	↕	↕	
518	1521.25	21.214	.650	↕	↕	
519	1614.50	22.846	.700	↕	.034	
520	1707.75	24.478	.750	↕	.035	
521	1801.00	26.110	.800	↓	↕	
522	1987.5	29.374	.900	67.5°	↕	
523	682.00	6.528	.200	90°	↕	
524	775.25	8.159	.250	↑	↕	
525	821.88	8.975	.275	↕	↕	
526	868.50	9.791	.300	↕	↕	
527	915.12	10.607	.325	↕	↓	
528	961.75	11.423	.350	↕	.035	
529	1055.00	13.055	.400	↕	.034	
530	1148.25	14.687	.450	↕	.035	
531	1241.5	16.319	.500	↕	.034	
532	1334.75	17.951	.550	↓	.035	
533	1428.00	19.582	.600	90°	.034	

*MEASURED FROM NOSE

Table VII(Continued)

(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
534	1521.25	21.214	.650	90°	.034	
535	1614.50	22.846	.700	↑	.034	
536	1707.75	24.478	.750	↕	.035	
537	1801.00	26.110	.800	↕	.035	
538	1894.25	27.742	.850	↓	.034	
539	1987.50	29.374	.900	90°		
540	821.88	8.975	.275	112.5°	.035	
541	868.50	9.791	.300	↑	↑	
542	915.12	10.607	.325	↕	↕	
543	961.75	11.423	.350	↕	↕	
544	1055.00	13.055	.400	↕	↓	
545	1148.25	14.687	.450	↕	.035	
546	1241.50	16.319	.500	↕	.034	
547	1334.75	17.951	.550	↕	.035	
548	1428.00	19.582	.600	↕	.034	
549	1521.25	21.214	.650	↕	.034	
550	1614.50	22.846	.700	↕	.034	
551	1707.75	24.478	.750	↕	.035	
552	1801.00	26.110	.800	↕	↕	
553	1894.25	27.742	.850	↓	↓	
554	1987.50	29.374	.900	112.5°	.035	
555	1847.62	26.926	.825	123°	.034	
556	1894.25	27.742	.850	↑	.035	
557	1940.88	28.558	.875	↕	.034	
558	1987.50	29.374	.900	↕	.035	
559	2034.12	30.190	.925	↓	.035	
560	2099.40	31.332	.960	123°	.034	
561	915.12	10.607	.325	135°	.035	
562	961.75	11.423	.350	↑	↕	
563	1008.38	12.239	.375	↕	↕	
564	1055.00	13.055	.400	↕	↓	
565	1148.25	14.687	.450	↕	.035	
566	1241.50	16.319	.500	↕	.034	
567	1334.75	17.951	.550	↕	.035	
568	1428.00	19.582	.600	↓	.034	
569	1521.25	21.214	.650	135°	.034	

*MEASURED FROM NOSE

Table VII (Continued)
(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
570	1614.50	22.846	.700	135°	.035	
571	1707.75	24.478	.750	↑	.034	
572	1801.00	26.110	.800		.035	
573	1894.25	27.742	.850		.034	
574	1987.50	29.374	.900	↓	.035	
575	2052.78	30.576	.935	135°		
576	1055.00	13.055	.400	151	.035	
577	1101.62	13.871	.425	157	↕	
578	1148.25	14.687	.450	↑	↕	
579	1194.88	15.503	.475		.035	
580	1241.50	16.319	.500		.034	
581	1334.75	17.951	.550		.035	
582	1428.00	19.582	.600		.034	
583	1521.25	21.214	.650		.034	
584	1614.50	22.846	.700		.035	
585	1707.75	24.478	.750		.035	
586	1801.00	26.110	.800		.035	
587	1894.25	27.742	.850	↓	.034	
588	1987.50	29.374	.900	157	.034	
589	1101.62	13.871	.425	161	.035	
590	1241.50	16.319	.500	165°	.034	
591	1614.50	22.846	.700	165°	.035	
592	1987.50	29.374	.900	165°	.034	
593	1055.00	13.055	.400	165°	.035	
594	309.00	0.000	0.000	180	.033	NOSE
595	318.32	0.163	.005	↑	.033	↓
596	327.65	0.326	.010		.034	
597	383.60	1.306	.040	↓	.033	
598	458.20	2.611	.080	180°	.035	

*MEASURED FROM NOSE

Table VII (CONTINUED
(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
599	588.75	4.896	.150	180°	.035	
600	682.00	6.528	.200	↑	.034	
601	775.25	8.159	.250		.035	
602	868.50	9.791	.300		↕	
603	961.75	11.423	.350		↕	
604	1008.38	12.239	.375		.035	
605	1055.00	13.055	.400		.034	
606	1101.62	13.871	.425		↕	
607	1148.25	14.687	.450		↕	
608	1194.88	15,503	.475		↕	
609	1241.50	16.319	.500		.034	
610	1288.12	17.135	.525		.035	
611	1334.75	17.951	.550		.035	
612	1381.38	18.767	.575		.034	
613	1428.00	19.582	.600		↕	
614	1474.62	20.398	.625		↕	
615	1521.25	21.214	.650		↕	
616	1567.88	22.030	.675		↕	
617	1614.50	22.846	.700		.034	
618	1707.75	24.478	.750		.035	
619	1801.00	26.110	.800		.035	
620	1894.25	27.742	.850		.035	
621	1987.5	29.374	.900		.034	
622	2056.50	30.581	.937	↓	.034	
623	2127.38	31.822	.975	180°	.034	
624	458.20	2.611	.080	194°	.035	
625	587.75	4.896	.150	196°	.035	
626	868.50	9.791	.300	196°	.035	

*MEASURED FROM NOSE

Table VII (Concluded)

(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
627	1241.50	16.319	.500	196°	.034	
628	1614.50	22.846	.700	196°	.034	
629	1987.50	29.374	.900	197°	.034	
630	588.75	4.896	.150	208°	.033	
631	1055.00	13.055	.400	↑	.034	
632	1428.00	19.582	.600	↕	.035	
633	1801.00	26.110	.800	↓	.035	
634	2056.50	30.581		208	.035	
635	1055.00	13.055	.400	216°	.034	
636	1241.50	16.319	.500	216°	.034	
637	1614.50	22.846	.700	216°	.034	
638	933.78	10.934	.335	222.5°	.036	
639	1055.00	13.055	.400	229°	.034	
640	1428.00	19.582	.600	229°	.035	
641	1801.00	26.110	.800	229°	.035	

*MEASURED FROM NOSE

TABLE VIII

Thermocouple Schedule No. X1

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
1	1	48	26	91	51
2	2	50	27	92	52
3	3	52	28	93	53
4	4	54	29	94	54
6	5	56	30	95	55
8	6	58	31	96	56
10	7	59	32	97	57
12	8	60	33	98	58
14	9	61	34	99	59
16	10	62	35	100	60
18	11	63	36	101	61
20	12	64	37	102	62
22	13	65	38	104	63
24	14	66	39	105	64
26	15	67	40	111	65
28	16	68	41	115	66
30	17	69	42	116	67
32	18	71	43	134	68
34	19	72	44	135	69
36	20	74	45	150	70
38	21	79	46	155	71
40	22	84	47	156	72
42	23	87	48	157	73
44	24	88	49	158	74
46	25	90	50	159	75

TABLE VIII

Thermocouple Schedule No. X2

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
160	1	187	26	214	51
161	2	188	27	215	52
162	3	189	28	216	53
163	4	190	29	218	54
164	5	191	30	219	55
165	6	192	31	220	56
166	7	193	32	221	57
167	8	196	33	222	58
168	9	197	34	229	59
169	10	198	35	230	60
170	11	199	36	232	61
171	12	200	37	234	62
172	13	201	38	246	63
173	14	202	39	247	64
174	15	203	40	274	65
175	16	204	41	275	66
176	17	205	42	276	67
177	18	206	43	277	68
178	19	207	44	278	69
179	20	208	45	279	70
180	21	209	46	280	71
181	22	210	47	281	72
182	23	211	48	282	73
183	24	212	49	283	74
184	25	213	50	284	75

TABLE VIII

Thermocouple Schedule No. X3

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
5	1	57	26	119	51
7	2	70	27	120	52
9	3	73	28	121	53
11	4	75	29	122	54
15	5	76	30	123	55
17	6	77	31	124	56
19	7	78	32	125	57
21	8	80	33	126	58
23	9	81	34	127	59
25	10	82	35	128	60
27	11	83	36	129	61
29	12	85	37	130	62
31	13	86	38	131	63
33	14	89	39	132	64
35	15	103	40	133	65
37	16	106	41	136	66
39	17	107	42	137	67
41	18	108	43	138	68
43	19	109	44	139	69
45	20	110	45	140	70
47	21	112	46	141	71
49	22	113	47	142	72
51	23	114	48	143	73
53	24	117	49	144	74
55	25	118	50	145	75

TABLE VIII

Thermocouple Schedule No. X4

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	501	61
195	12	252	37	502	62
217	13	253	38	503	63
223	14	254	39	504	64
224	15	255	40	505	65
225	16	256	41	506	66
226	17	257	42	507	67
227	18	258	43	508	68
228	19	259	44	509	69
231	20	260	45	510	70
233	21	261	46	511	71
235	22	262	47	512	72
236	23	263	48	513	73
237	24	264	49	514	74
238	25	265	50	515	75

TABLE VIII

Thermocouple Schedule No. X5

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
516	1	541	26	566	51
517	2	542	27	567	52
518	3	543	28	568	53
519	4	544	29	569	54
520	5	545	30	570	55
521	6	546	31	571	56
522	7	547	32	572	57
523	8	548	33	573	58
524	9	549	34	574	59
525	10	550	35	575	60
526	11	551	36	576	61
527	12	552	37	577	62
528	13	553	38	578	63
529	14	554	39	579	64
530	15	555	40	580	65
531	16	556	41	581	66
532	17	557	42	582	67
533	18	558	43	583	68
534	19	559	44	584	69
535	20	560	45	585	70
536	21	561	46	586	71
537	22	562	47	587	72
538	23	563	48	588	73
539	24	564	49	589	74
540	25	565	50	590	75

TABLE VIII

Thermocouple Schedule No. X6

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
591	1	616	26	752	51
592	2	617	27	759	52
593	3	618	28	792	53
594	4	619	29	636	54
595	5	620	30	637	55
596	6	621	31	638	56
597	7	622	32	639	57
598	8	623	33	640	58
599	9	624	34	641	59
600	10	625	35	Open	60
601	11	626	36	701	61
602	12	627	37	702	62
603	13	628	38	703	63
604	14	629	39	704	64
605	15	630	40	705	65
606	16	631	41	708	66
607	17	632	42	709	67
608	18	633	43	710	68
609	19	634	44	711	69
610	20	635	45	714	70
611	21	706	46	715	71
612	22	707	47	716	72
613	23	713	48	717	73
614	24	744	49	718	74
615	25	749	50	719	75

TABLE VIII

Thermocouple Schedule No. X7

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
720	1	753	26	784	51
721	2	754	27	785	52
722	3	755	28	787	53
723	4	756	29	788	54
724	5	757	30	789	55
725	6	758	31	790	56
726	7	760	32	791	57
728	8	762	33	793	58
729	9	766	34	797	59
730	10	767	35	798	60
731	11	768	36	712	61
732	12	769	37	727	62
733	13	770	38	746	63
734	14	771	39	748	64
735	15	772	40	750	65
736	16	773	41	751	66
737	17	774	42	761	67
738	18	775	43	763	68
739	19	776	44	764	69
740	20	777	45	765	70
741	21	778	46	780	71
742	22	779	47	786	72
743	23	781	48	794	73
745	24	782	49	795	74
747	25	783	50	796	75

TABLE VIII

Thermocouple Schedule No. X8

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
501	1	526	26	551	51
502	2	527	27	552	52
503	3	528	28	553	53
504	4	529	29	554	54
505	5	530	30	555	55
506	6	531	31	556	56
507	7	532	32	557	57
508	8	533	33	558	58
509	9	534	34	559	59
510	10	535	35	560	60
511	11	536	36	561	61
512	12	537	37	562	62
513	13	538	38	563	63
514	14	539	39	564	64
515	15	540	40	565	65
516	16	541	41	566	66
517	17	542	42	567	67
518	18	543	43	568	68
519	19	544	44	569	69
520	20	545	45	570	70
521	21	546	46	571	71
522	22	547	47	572	72
523	23	548	48	573	73
524	24	549	49	574	74
525	25	550	50	575	75

TABLE VIII

Thermocouple Schedule No. X9

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
576	1	601	26	626	51
577	2	602	27	627	52
578	3	603	28	628	53
579	4	604	29	629	54
580	5	605	30	630	55
581	6	606	31	631	56
582	7	607	32	632	57
583	8	608	33	633	58
584	9	609	34	634	59
585	10	610	35	635	60
586	11	611	36	636	61
587	12	612	37	637	62
588	13	613	38	638	63
589	14	614	39	639	64
590	15	615	40	640	65
591	16	616	41	641	66
592	17	617	42	Open	67
593	18	618	43	Open	68
594	19	619	44	Open	69
595	20	620	45	Open	70
596	21	621	46	Open	71
597	22	622	47	Open	72
598	23	623	48	Open	73
599	24	624	49	Open	74
600	25	625	50	Open	75

TABLE VIII

Thermocouple Schedule No. X10

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
701	1	731	26	768	51
702	2	732	27	769	52
703	3	733	28	770	53
704	4	734	29	771	54
705	5	735	30	772	55
708	6	736	31	773	56
709	7	737	32	774	57
710	8	738	33	775	58
711	9	739	34	776	59
714	10	740	35	777	60
715	11	741	36	778	61
716	12	742	37	779	62
717	13	743	38	781	63
718	14	745	39	782	64
719	15	747	40	783	65
720	16	753	41	784	66
721	17	754	42	785	67
722	18	755	43	787	68
723	19	756	44	788	69
724	20	757	45	789	70
725	21	758	46	790	71
726	22	760	47	791	72
728	23	762	48	793	73
729	24	766	49	797	74
730	25	767	50	798	75

TABLE VIII

Thermocouple Schedule No. X11

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
37	1	106	26	521	51
39	2	107	27	522	52
41	3	108	28	523	53
43	4	109	29	524	54
45	5	110	30	525	55
47	6	129	31	526	56
49	7	130	32	527	57
51	8	131	33	528	58
53	9	132	34	529	59
Open	10	133	35	530	60
Open	11	136	36	531	61
70	12	137	37	532	62
73	13	138	38	533	63
75	14	139	39	534	64
76	15	140	40	535	65
77	16	141	41	536	66
78	17	142	42	537	67
80	18	143	43	538	68
81	19	144	44	539	69
82	20	145	45	540	70
83	21	516	46	541	71
85	22	517	47	542	72
86	23	518	48	543	73
89	24	519	49	544	74
103	25	520	50	545	75

TABLE VIII

Thermocouple Schedule No. X12

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	701	61
195	12	252	37	702	62
217	13	253	38	703	63
223	14	254	39	704	64
224	15	255	40	705	65
225	16	256	41	708	66
226	17	257	42	709	67
227	18	258	43	710	68
228	19	259	44	711	69
231	20	260	45	714	70
233	21	261	46	715	71
235	22	262	47	716	72
236	23	263	48	717	73
237	24	264	49	718	74
238	25	265	50	719	75

TABLE VIII

Thermocouple Schedule No. X13

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
546	1	586	26	611	51
547	2	587	27	612	52
548	3	588	28	613	53
549	4	589	29	614	54
550	5	590	30	615	55
551	6	591	31	616	56
552	7	592	32	617	57
553	8	593	33	618	58
554	9	594	34	619	59
555	10	595	35	620	60
556	11	596	36	621	61
557	12	597	37	622	62
558	13	598	38	623	63
559	14	599	39	624	64
560	15	600	40	625	65
576	16	601	41	626	66
577	17	602	42	627	67
578	18	603	43	628	68
579	19	604	44	629	69
580	20	605	45	630	70
581	21	606	46	631	71
582	22	607	47	632	72
583	23	608	48	633	73
584	24	609	49	634	74
585	25	610	50	635	75

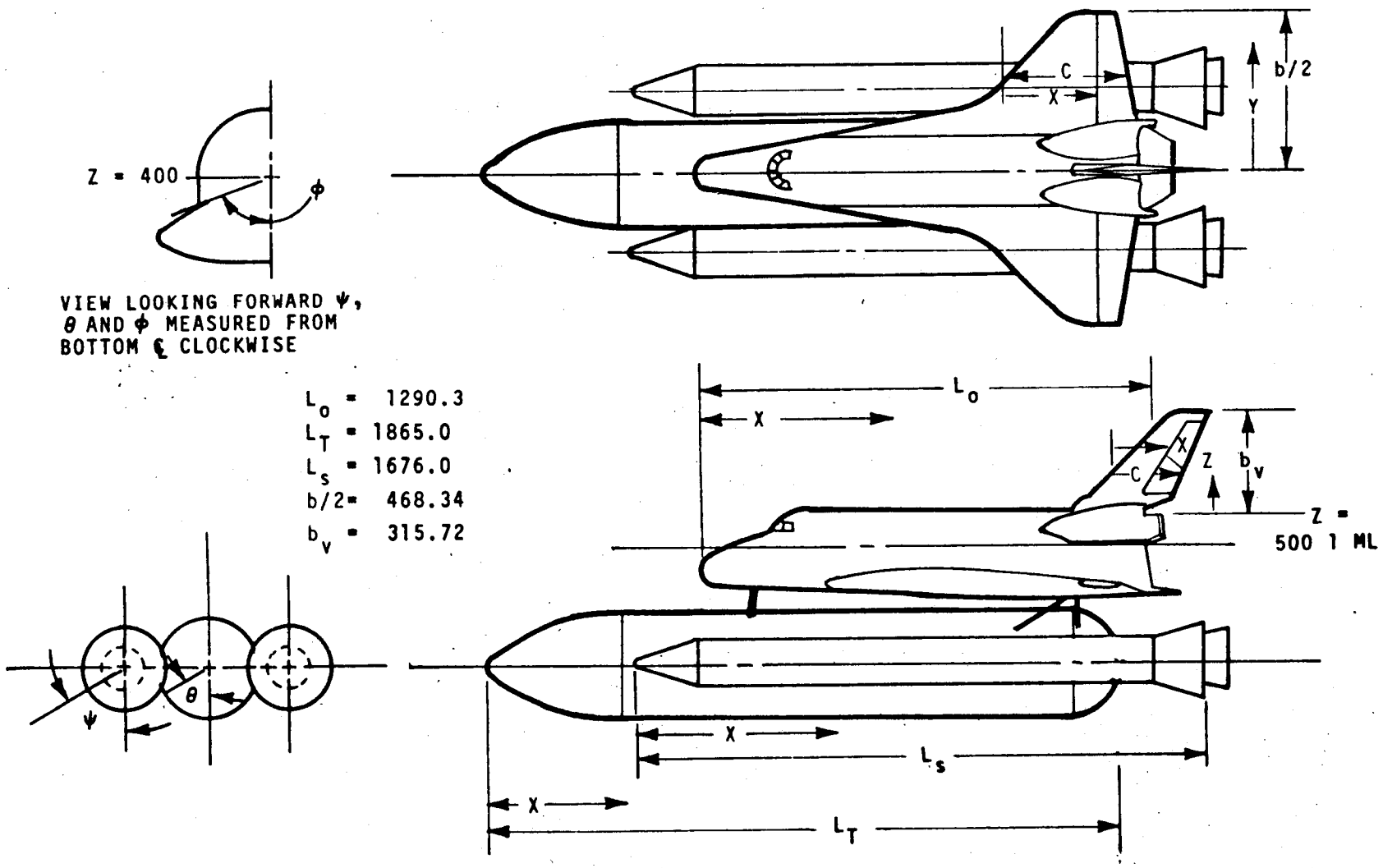
TABLE IX.
RUN NUMBER/TUNNEL CONDITION SUMMARY

Run #	Re_∞/ft x 10^6	PT (psi)	TT (°R)	HT (BTU/lb_m)
3	1.4909	165.58	1581.2	390.90
5	1.4111	141.88	1487.5	366.19
7	1.3945	119.68	1348.1	329.90
8	1.4341	120.04	1327.2	324.51
9	1.4762	122.81	1322.1	323.19
10	1.4540	118.76	1306.9	319.30
11	1.4993	121.26	1298.8	317.22
12	4.7266	405.72	1348.2	329.94
13	5.0370	405.98	1296.0	316.50
14	4.9672	403.68	1302.8	318.23
15	4.9723	405.35	1305.4	318.89
16	4.9533	406.35	1310.5	320.21
17	5.0060	405.69	1300.5	317.64
18	5.0979	404.88	1284.1	313.43
19	1.4998	122.63	1307.7	319.50
20	1.5374	121.33	1278.9	312.11
21	1.5232	122.04	1291.2	315.26
22	1.4696	122.08	1320.8	322.87
23	1.6062	119.90	1234.9	300.85
24	1.5275	122.10	1289.3	314.76
25	1.5757	119.48	1247.1	303.98
26	4.9504	405.67	1309.6	319.98
27	4.9770	406.03	1305.9	319.04
28	4.9574	405.59	1308.3	319.64
29	4.9770	406.32	1306.5	319.19
30	5.0055	406.22	1301.6	317.93
31	5.0063	406.42	1301.9	318.01
32	5.0389	406.71	1297.2	316.80
33	5.0961	405.17	1285.0	313.65
34	4.9856	405.20	1302.8	318.24
35	5.0750	405.72	1289.4	314.80
36	5.0306	406.14	1297.4	316.85
37	5.1486	401.85	1270.1	309.85
38	5.0550	406.03	1293.2	315.78
39	5.0452	406.22	1295.2	316.28
40	1.6365	130.40	1286.8	314.12

TABLE IX.
(Concluded)

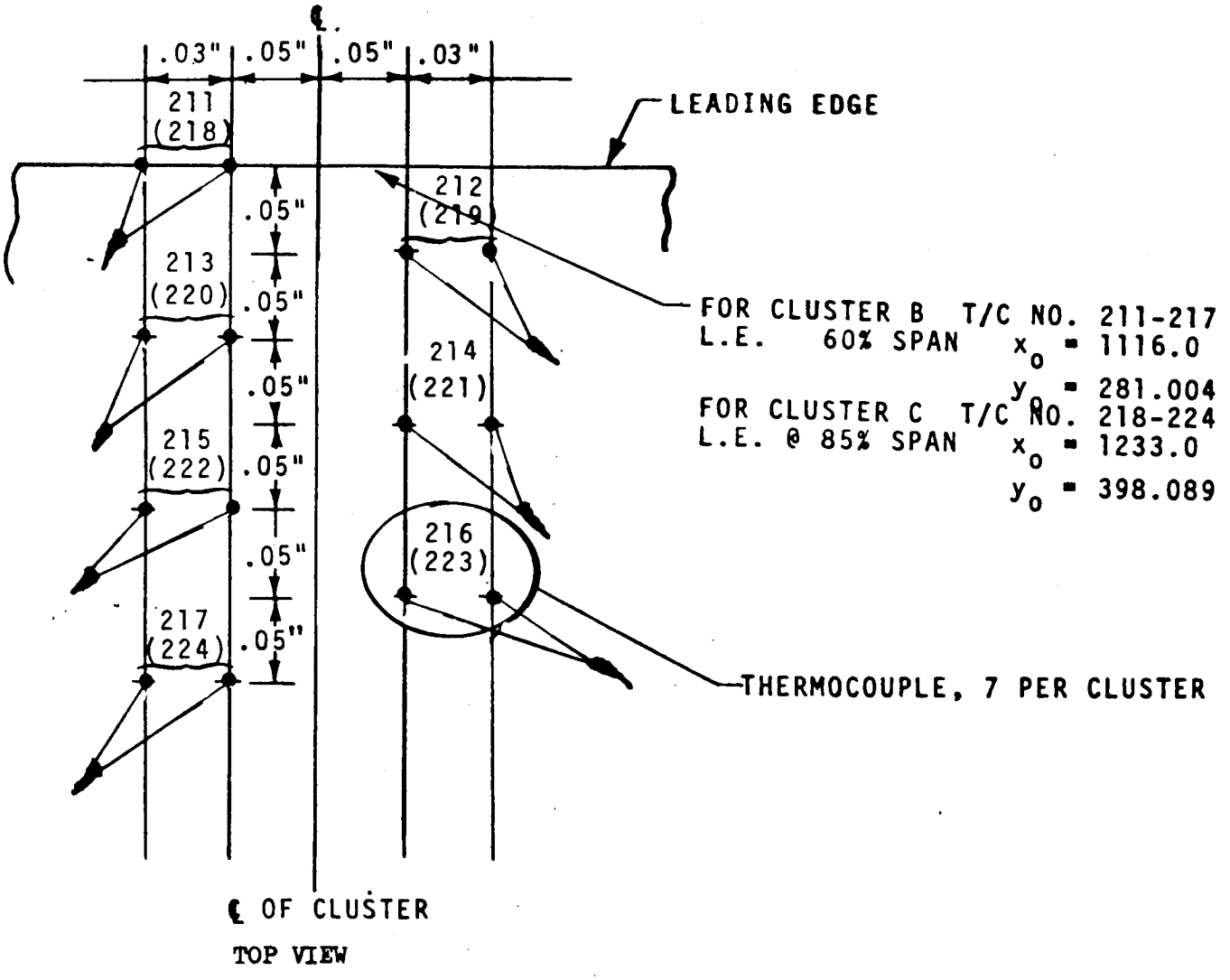
Run #	Re_∞/ft x 10^6	PT (psi)	TT (°R)	HT (BTU/lb_m)
41	1.5819	126.58	1290.2	314.99
42	1.5224	122.73	1296.2	316.55
43	1.5160	123.06	1301.8	317.99
44	5.1123	406.40	1284.8	313.62
45	5.0361	406.22	1296.7	316.66
46	5.0028	405.88	1301.4	317.87
47	5.3924	404.93	1239.5	302.03
48	1.5328	123.06	1292.8	315.67
49	1.5263	122.69	1293.9	315.94
50	1.4308	118.69	1319.7	322.57
51	1.4952	121.64	1303.6	318.44
52	5.0533	405.46	1292.4	315.56
53	5.0265	406.40	1298.6	317.15
54	5.1372	405.09	1278.3	311.95
55	4.9871	402.92	1298.0	317.00
56	1.5132	121.59	1293.6	315.86
57	1.5033	121.59	1298.9	317.23
58	5.0864	405.30	1286.8	314.12
59	5.0929	405.30	1285.7	313.85
60	5.0577	405.30	1291.3	315.29
61	5.0730	405.64	1289.6	314.84
62	1.5553	137.52	1373.4	336.46
63	1.5070	123.06	1306.7	319.24
64	1.5093	122.73	1303.3	318.37
65	5.0737	406.22	1290.6	315.10
66	5.1122	406.32	1284.7	313.59
68	1.4966	120.98	1298.4	317.12
69	5.2179	406.16	1268.0	309.30
70	4.9056	407.29	1320.4	322.76
71	5.0011	406.76	1303.5	318.40
72	4.9871	403.86	1299.9	317.49
73	5.0038	405.88	1301.2	317.83
74	5.0508	406.74	1295.3	316.32
76	5.0175	406.92	1301.1	317.80
77	5.0556	410.46	1302.0	318.02
78	5.0607	406.58	1293.4	315.83
79	4.9699	406.92	1308.9	319.81

INSTRUMENTATION LOCATION SYSTEM



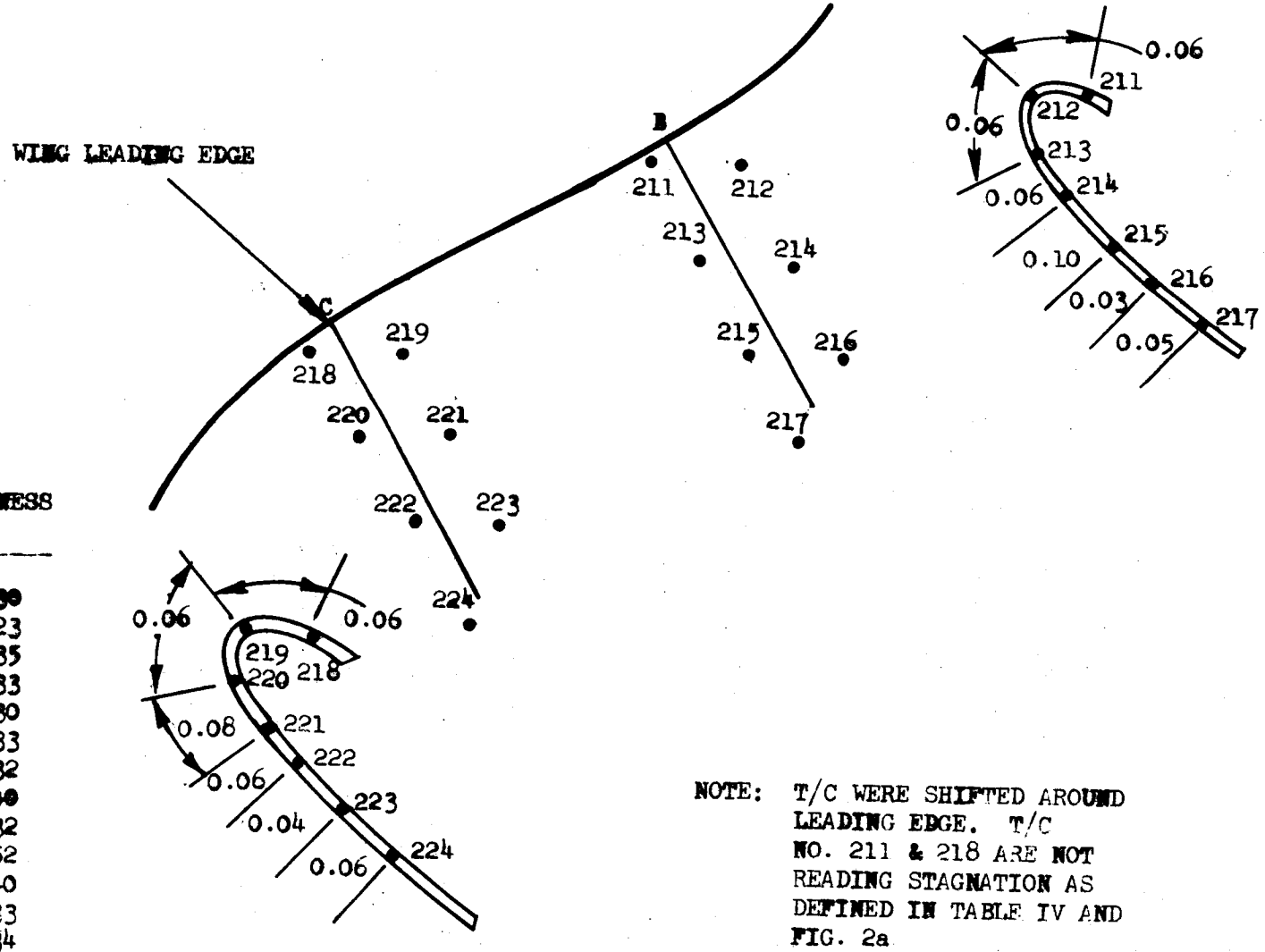
a. Model instrumentation reference system

Figure 1. - Concluded.



a. Assumed Plotted Wing Leading-Edge Clusters B & C T/C Locations, (Used for Plotted and Tabulated Data Presentations)

Figure 2. - Model instrumentation.

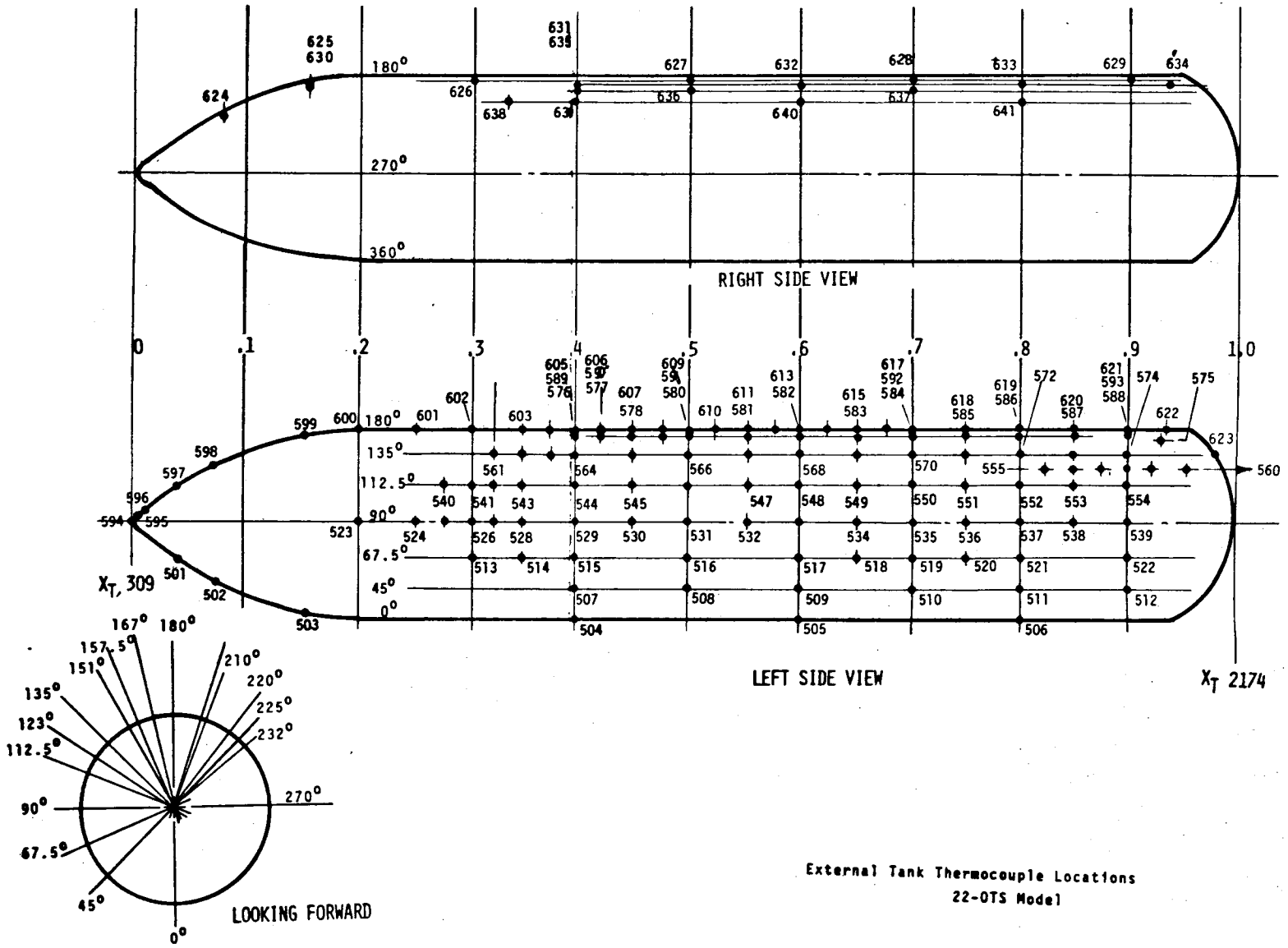


T/C No.	THICKNESS
211	0.030
212	0.023
213	0.035
214	0.033
215	0.030
216	0.033
217	0.032
218	0.040
219	0.032
220	0.052
221	0.040
222	0.033
223	0.034
224	0.032

NOTE: T/C WERE SHIFTED AROUND LEADING EDGE. T/C NO. 211 & 218 ARE NOT READING STAGNATION AS DEFINED IN TABLE IV AND FIG. 2a

b. Actual Wing Leading Edge Clusters B & C T/C Locations and Skin Thickness (post Test Dimensional Check)

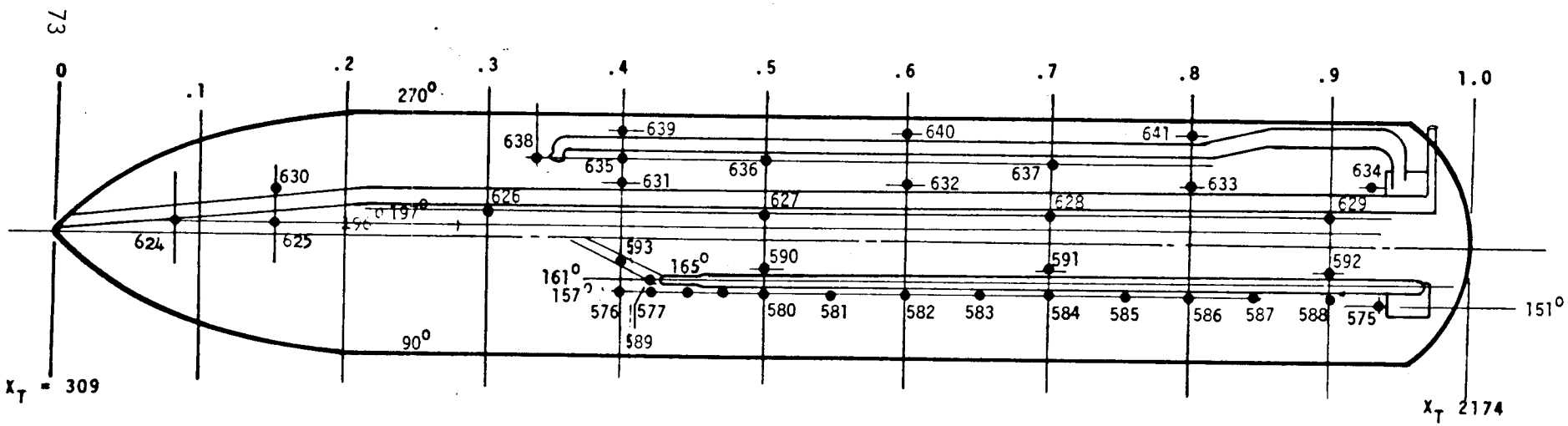
Figure 2. - Continued.



c. External Tank T/C Locations-Side Views

Figure 2. - Continued.

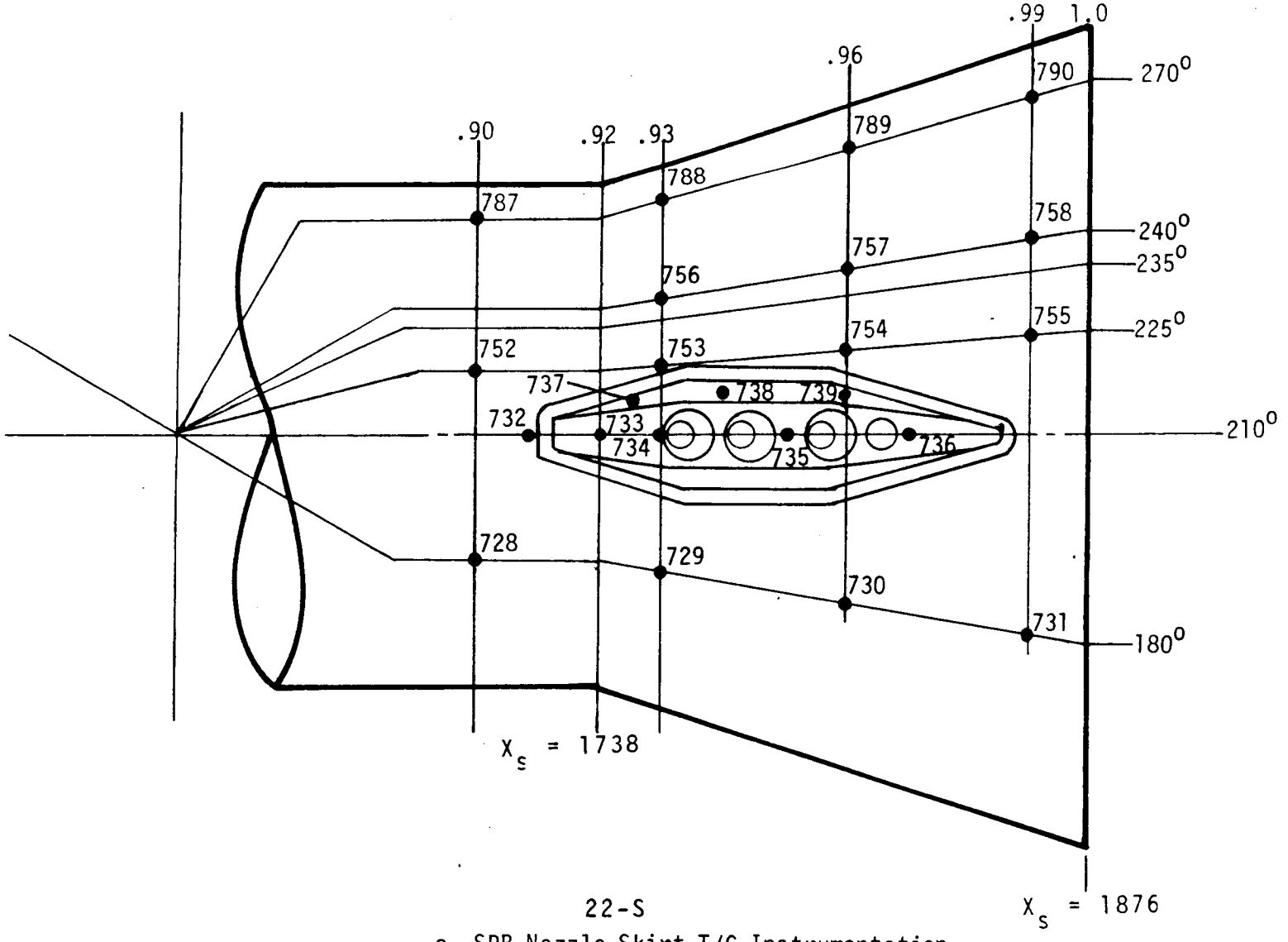
EXTERNAL TANK THERMOCOUPLE LOCATIONS
(LOCATIONS AROUND PLUMBING ONLY)
MODEL 22-OTS



TOP VIEW

d. External Tank T/C Locations (Locations Around Plumbing Lines) Top View

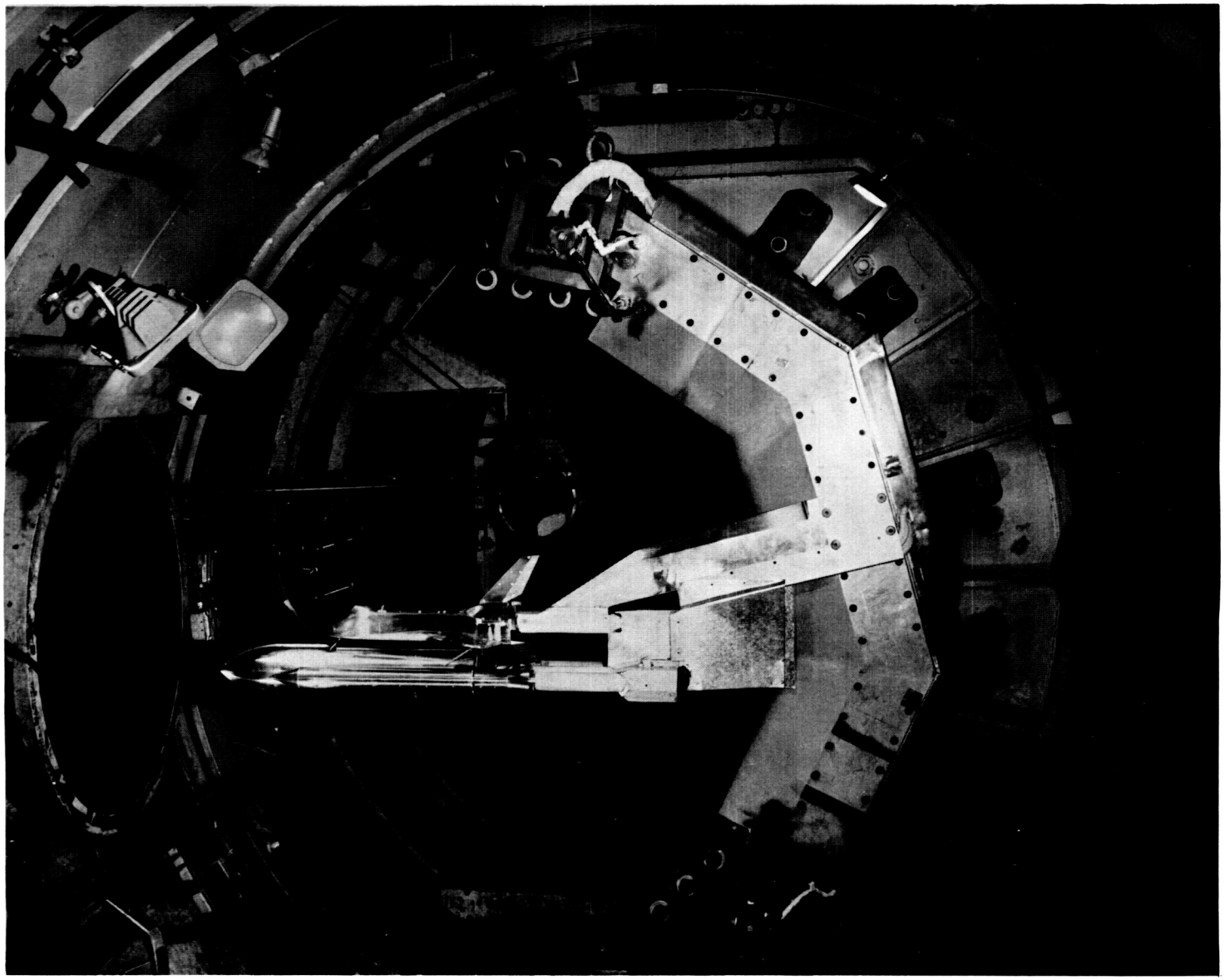
Figure 2. - Continued.



22-S

e. SRB Nozzle Skirt T/C Instrumentation

Figure 2. - Concluded.

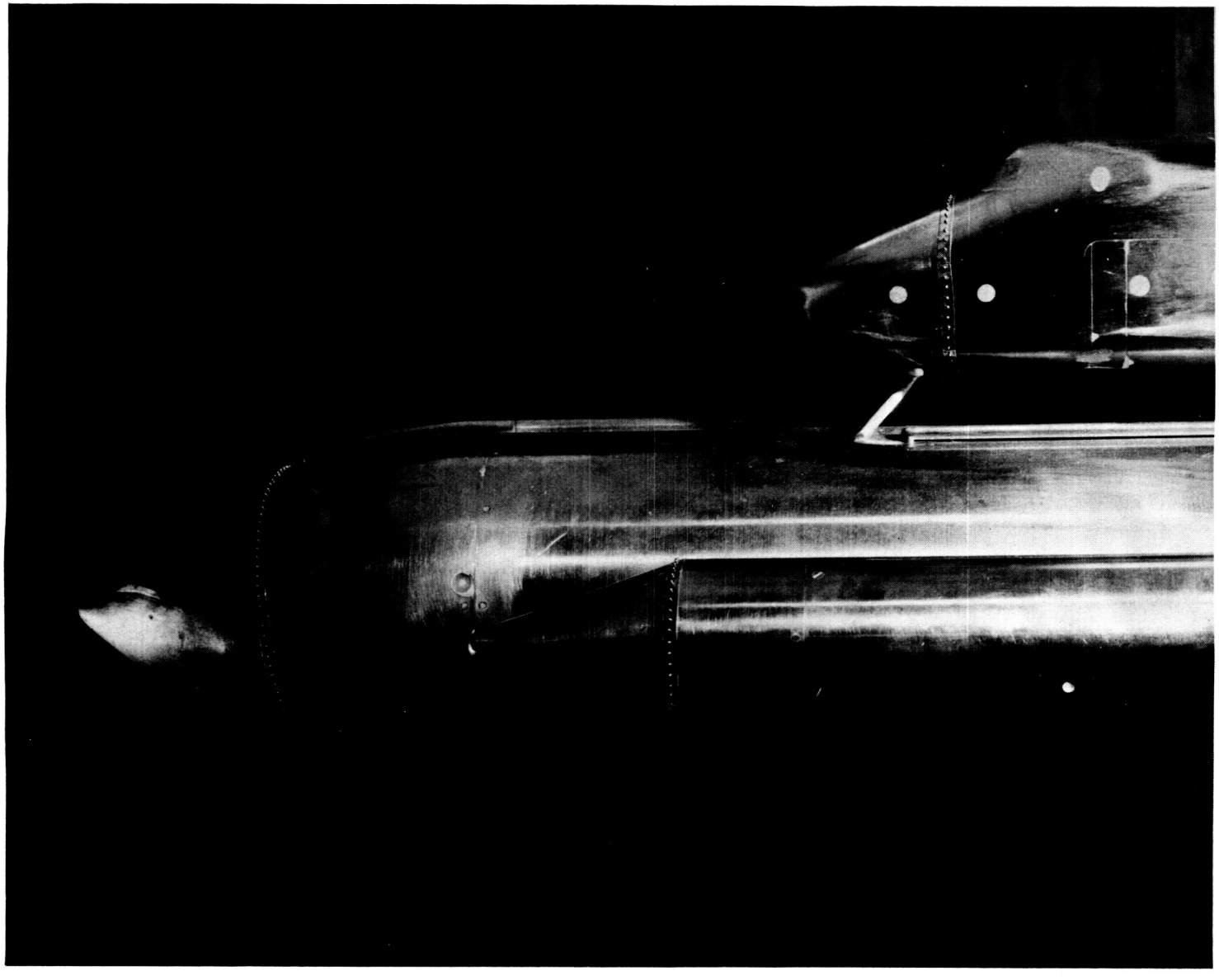


a. Mated Launch Configuration Installation

Figure 3. - Model photographs.

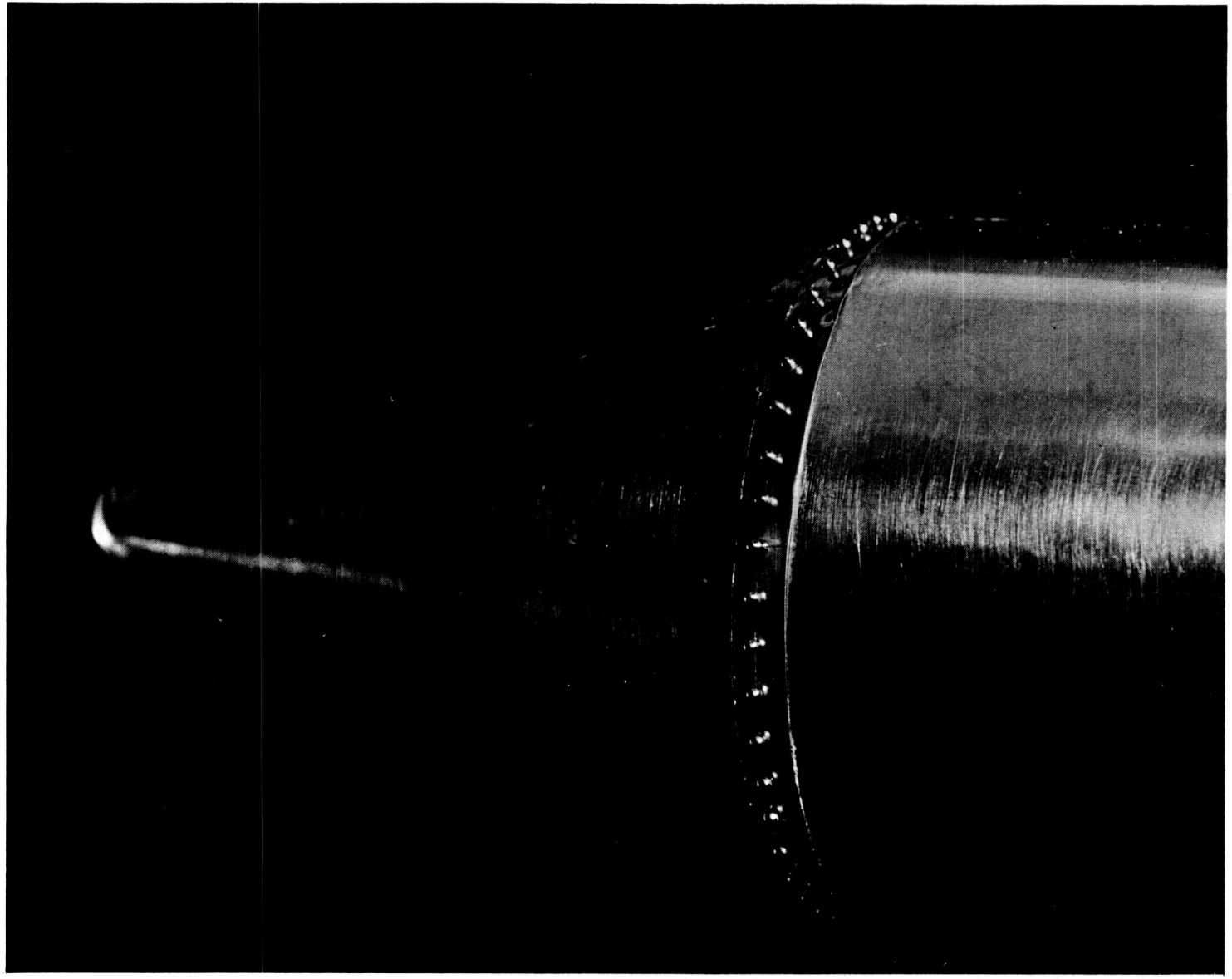
b. Orbiter Installation

Figure 3. - Continued.



c. Mated Configuration Boundary Layer Trips

Figure 3. - Continued.



d. SRB Boundary Layer Trips

Figure 3. - Concluded.

DATA FIGURES

EXTERNAL TANK DATA
SRB DATA (SEE VOLUME II)
ORBITER DATA (SEE VOLUME III)

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

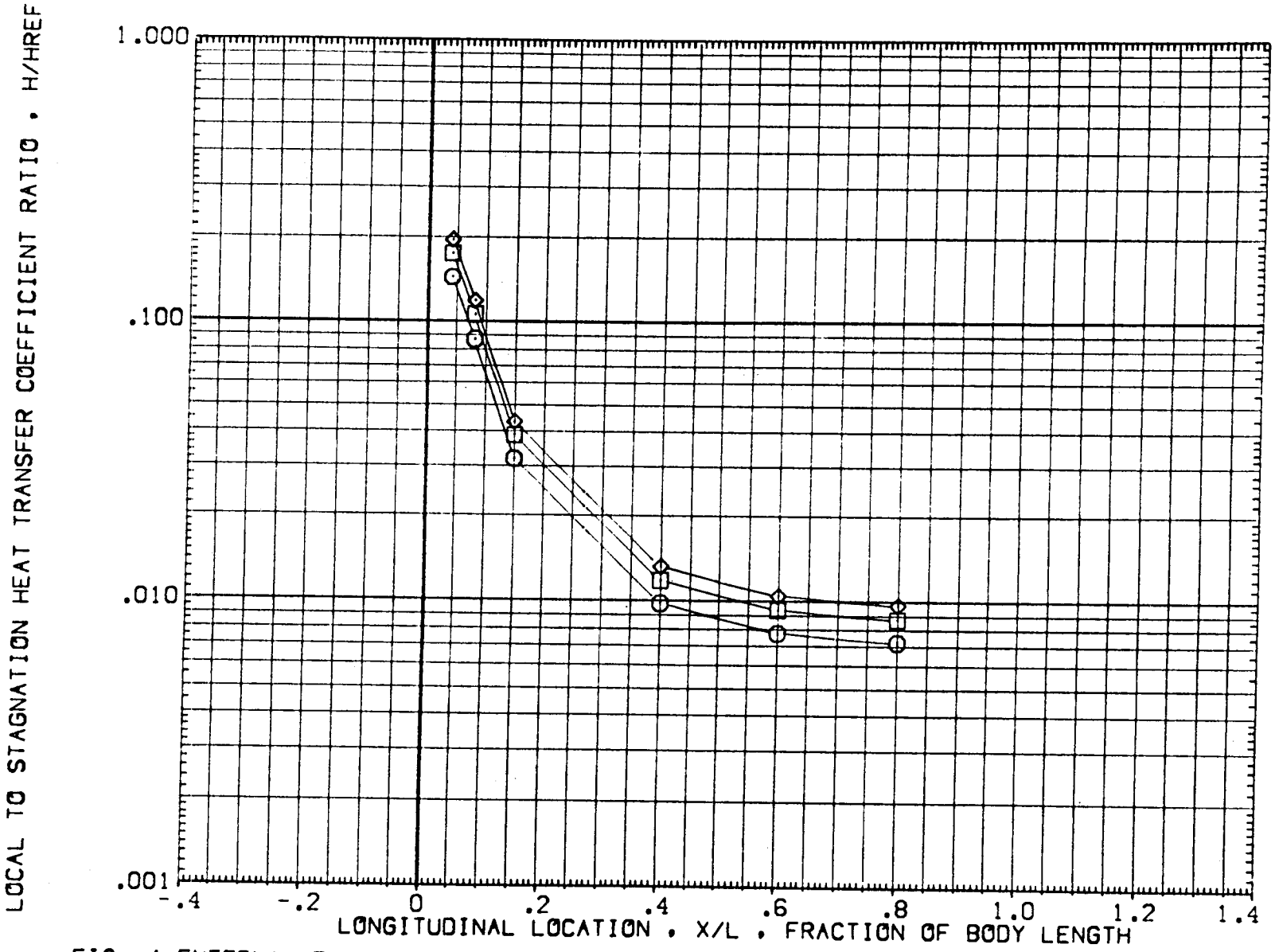


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

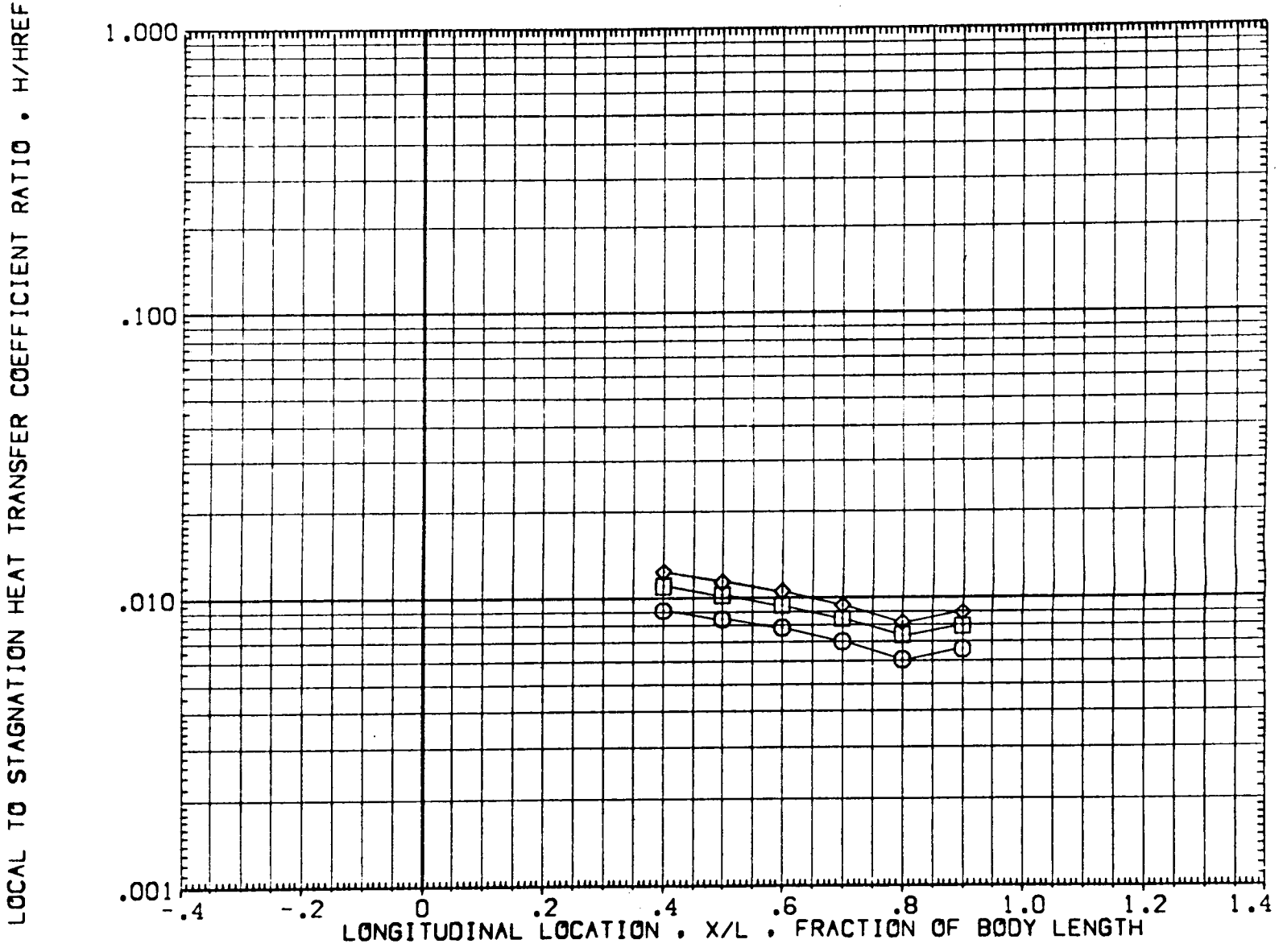


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

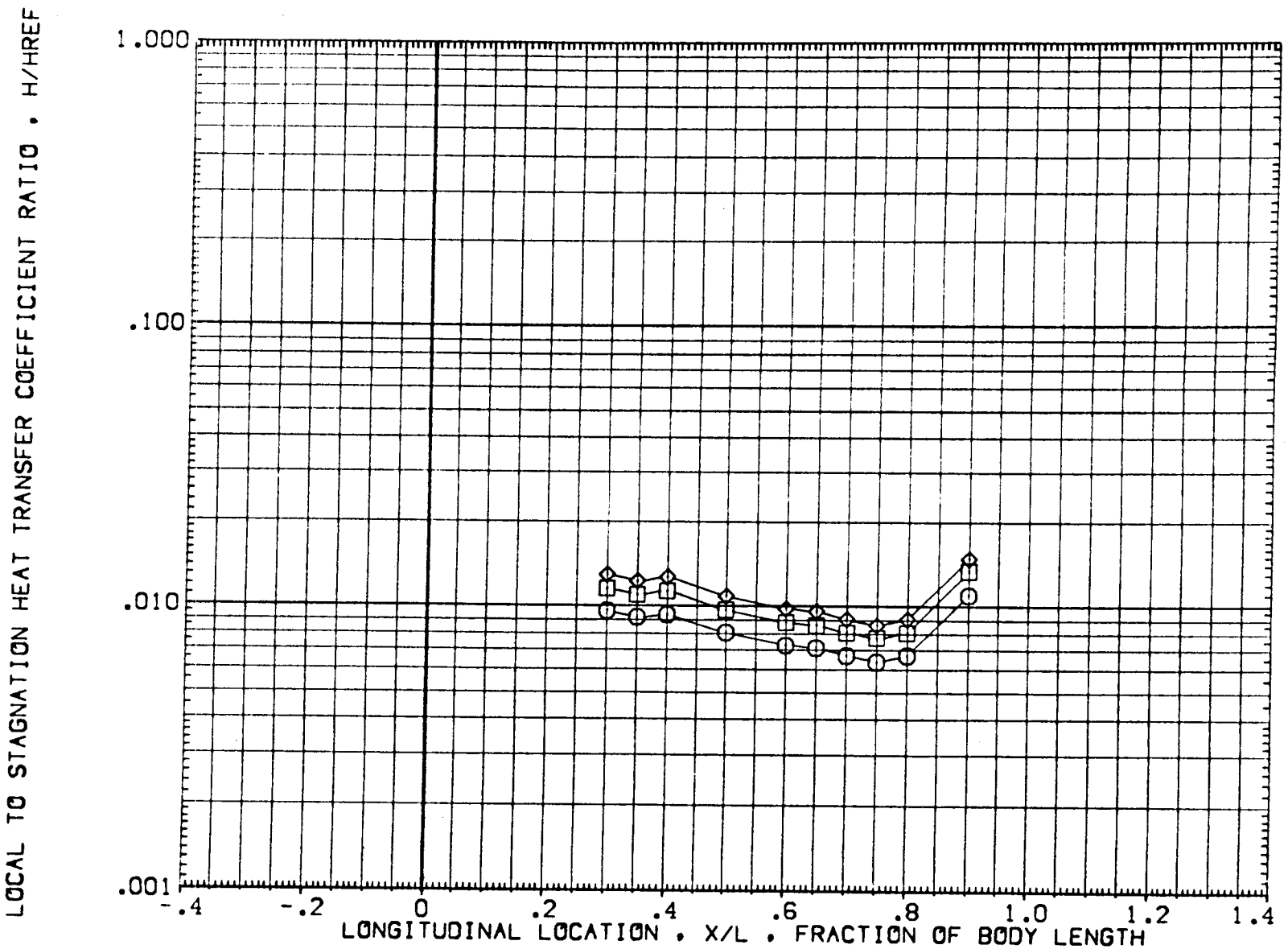


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

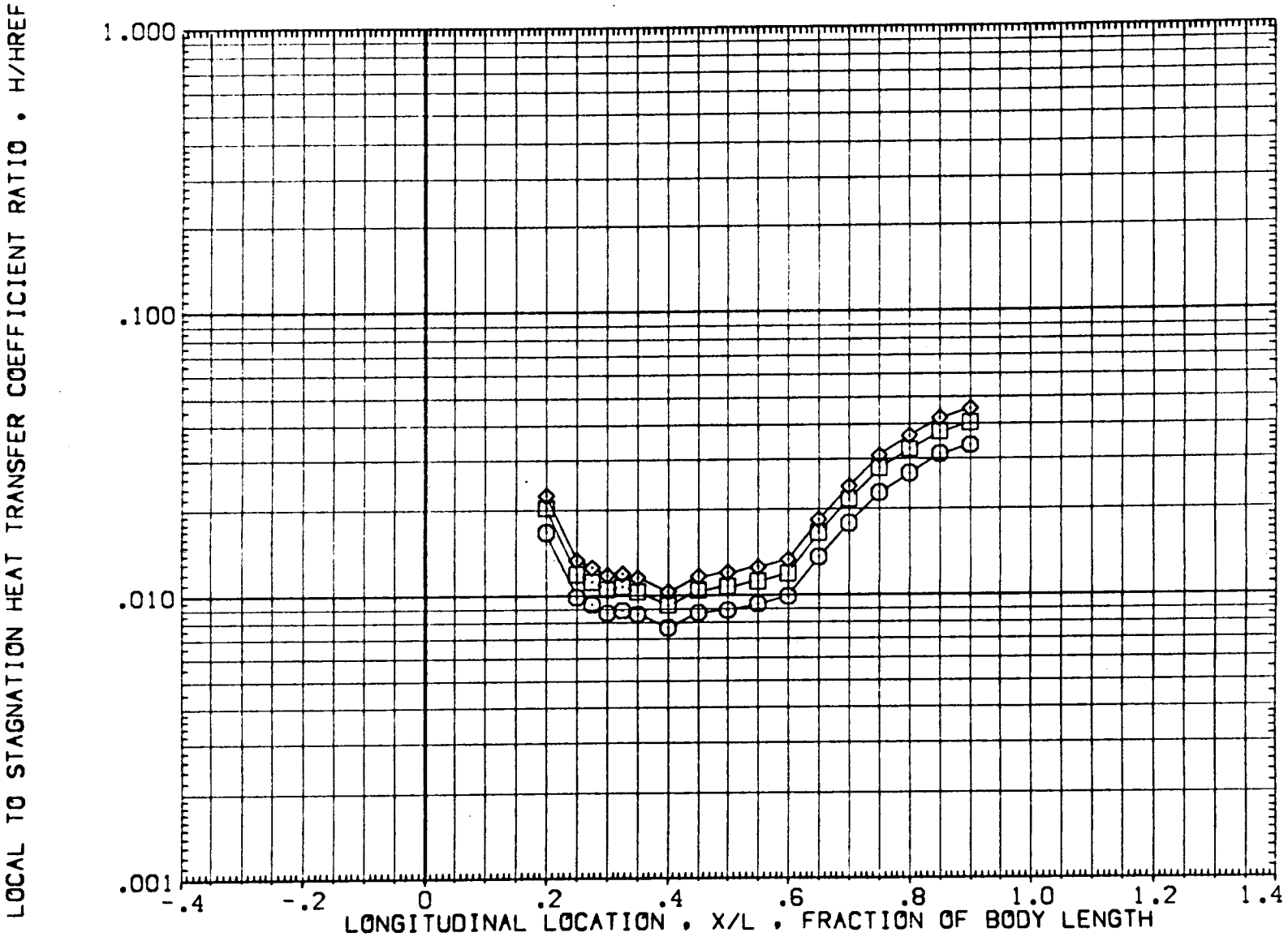


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

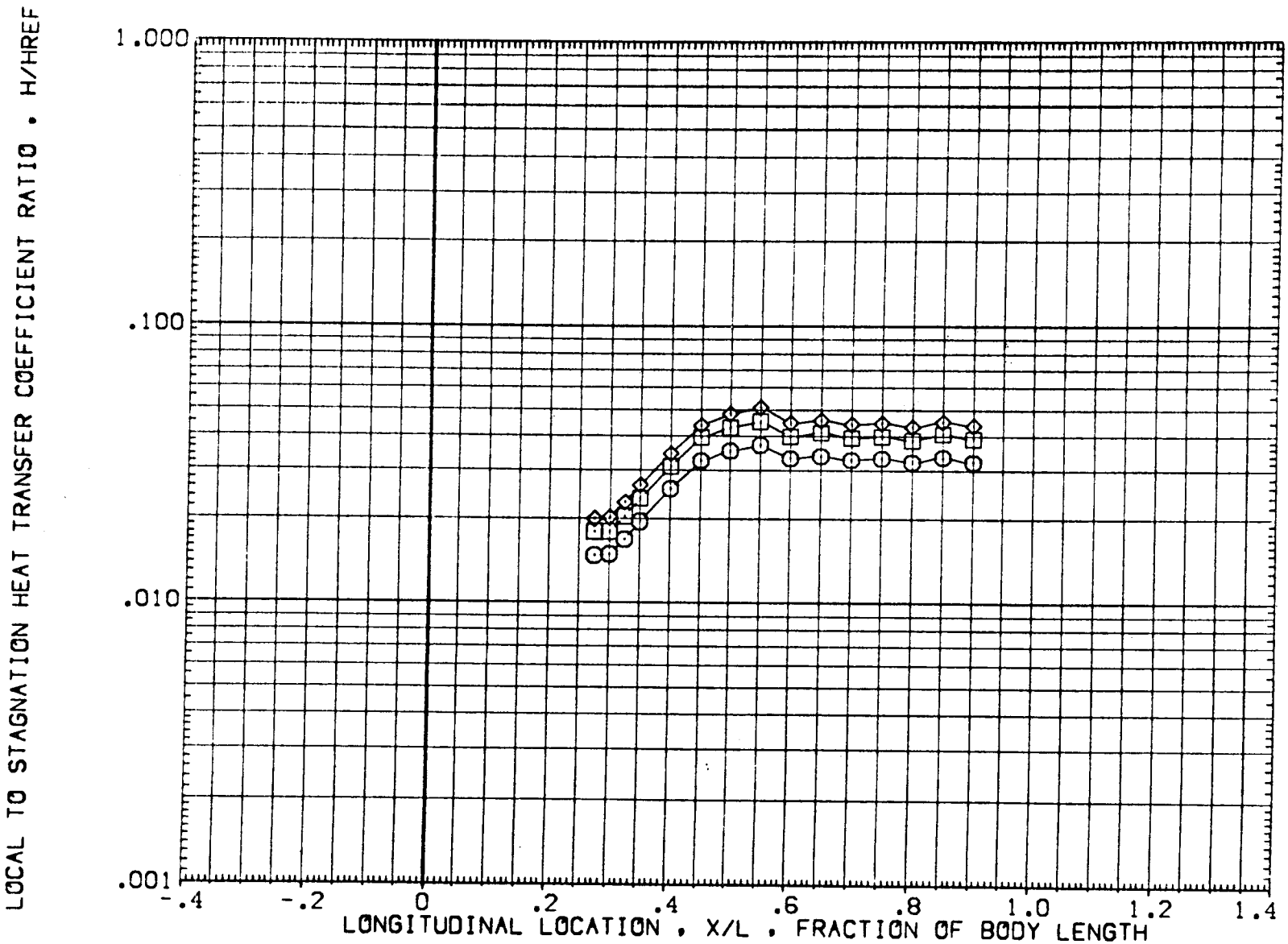


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

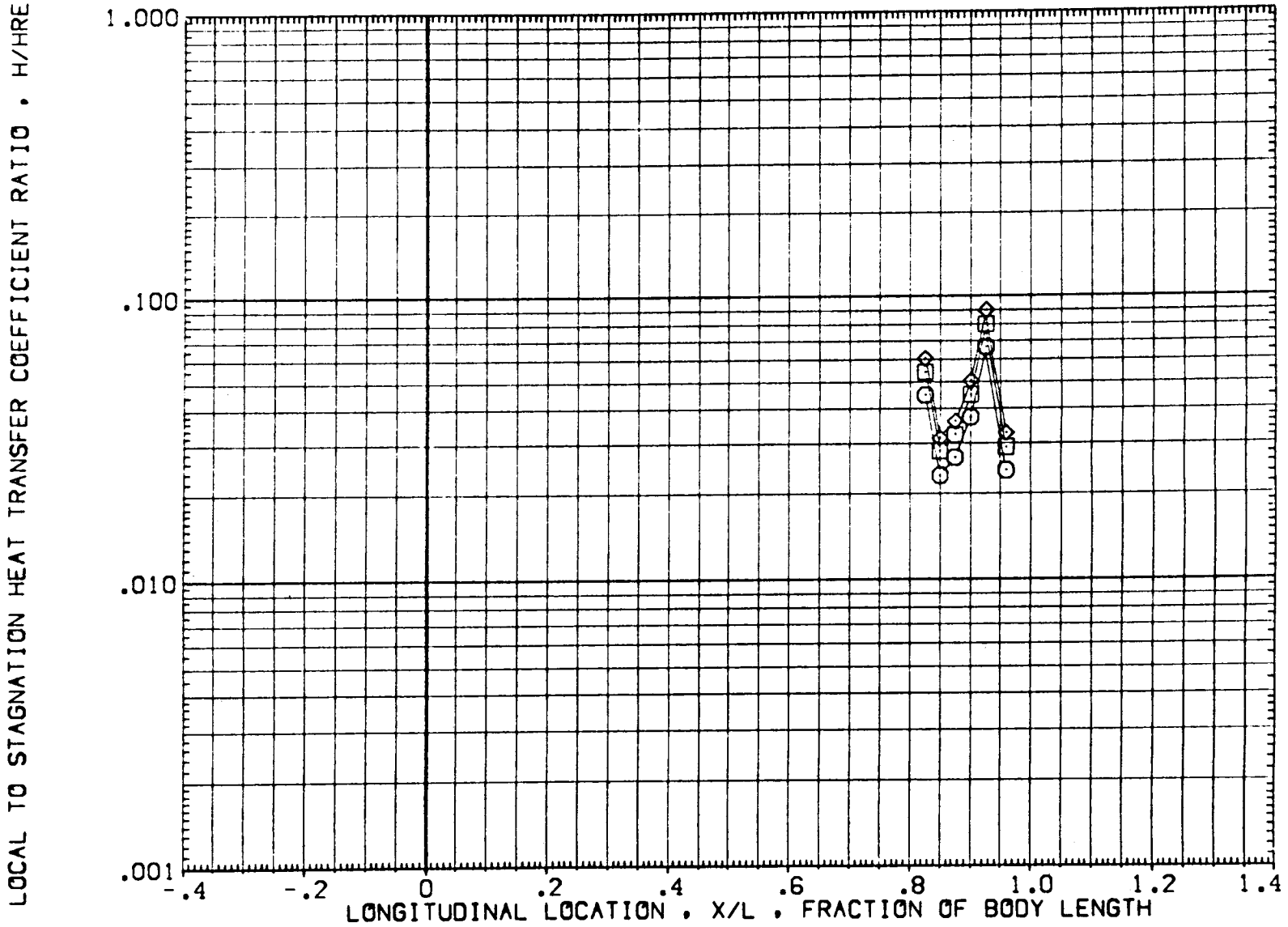


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

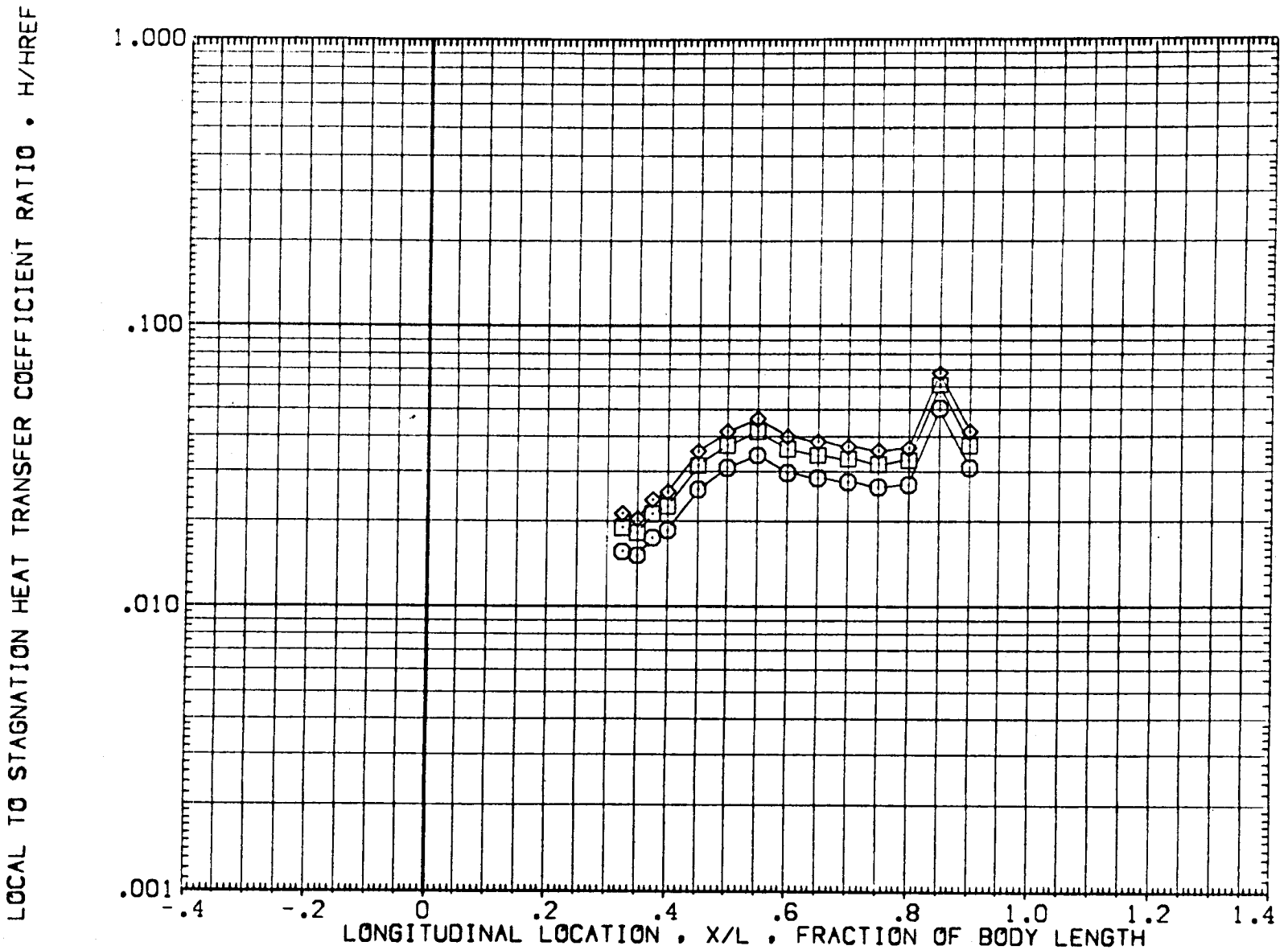


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

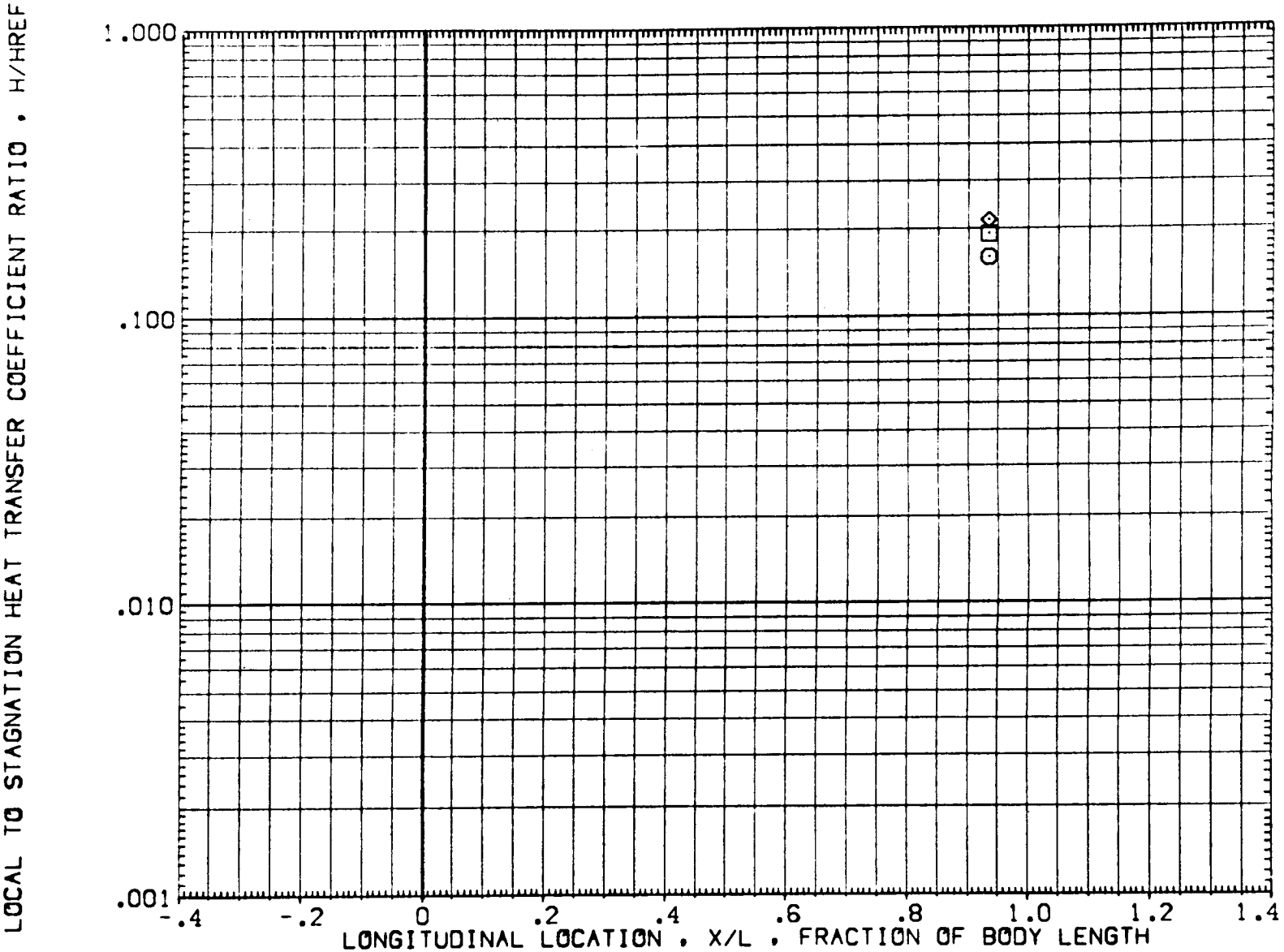


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

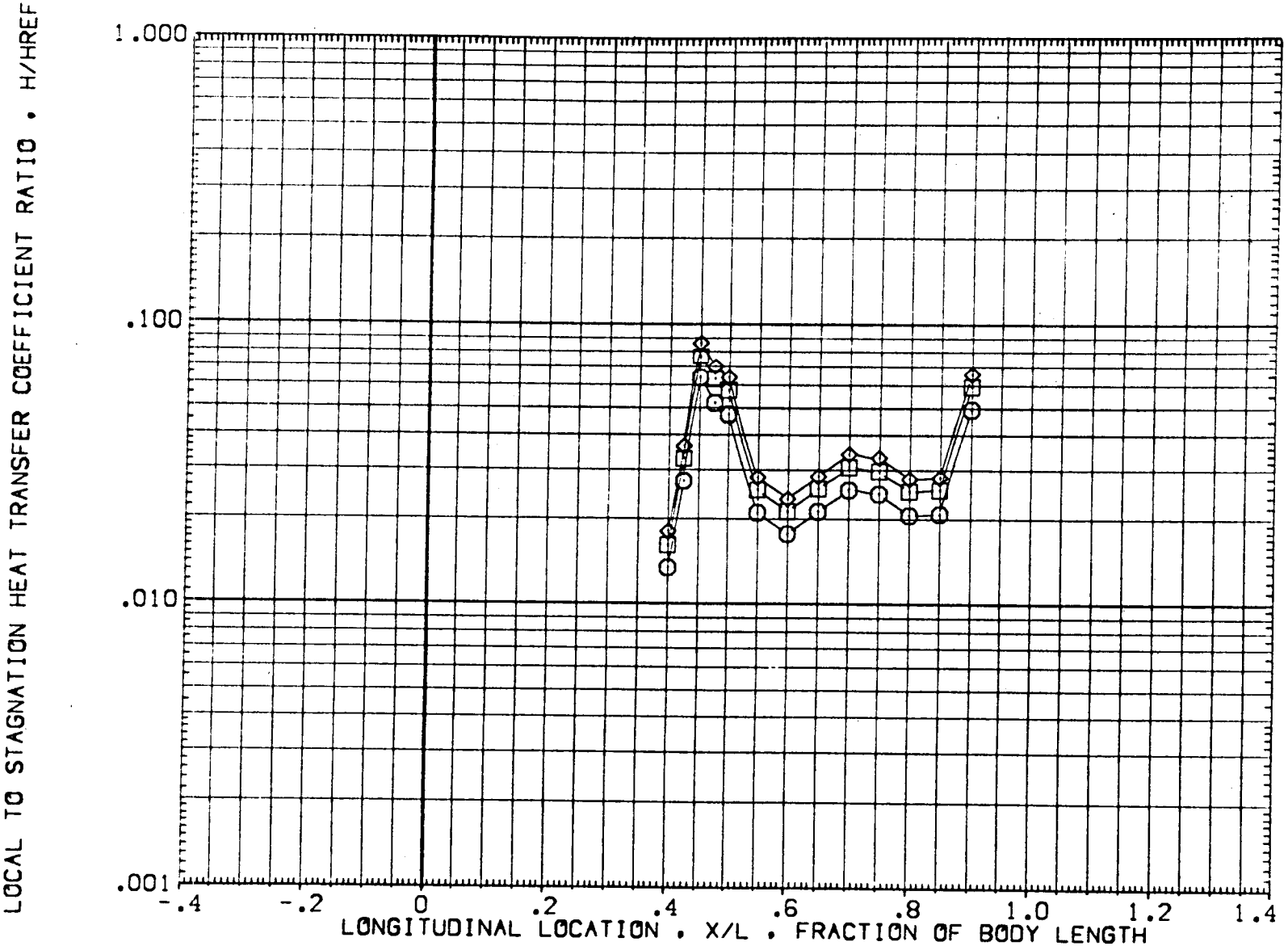


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

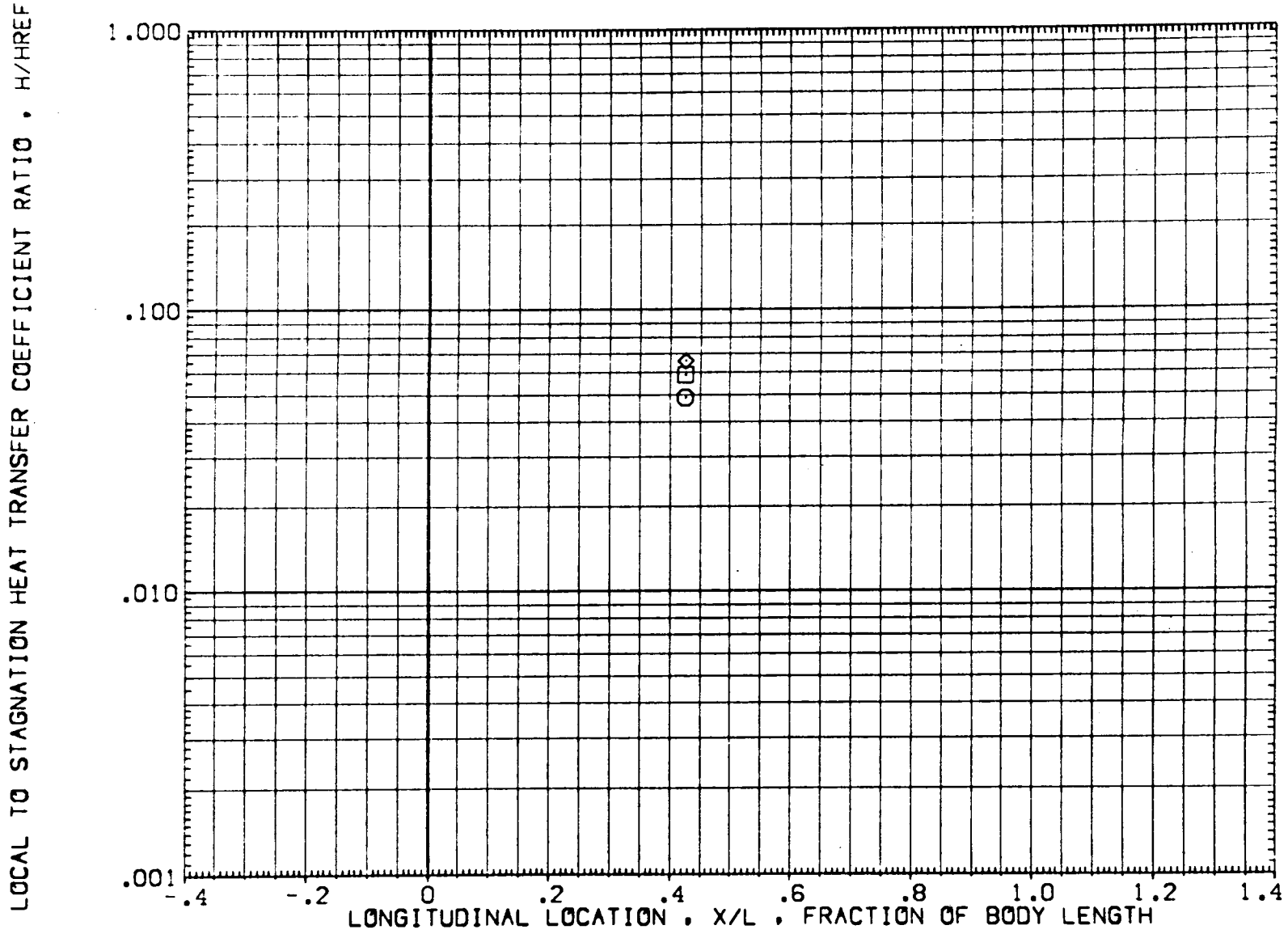


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	△	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

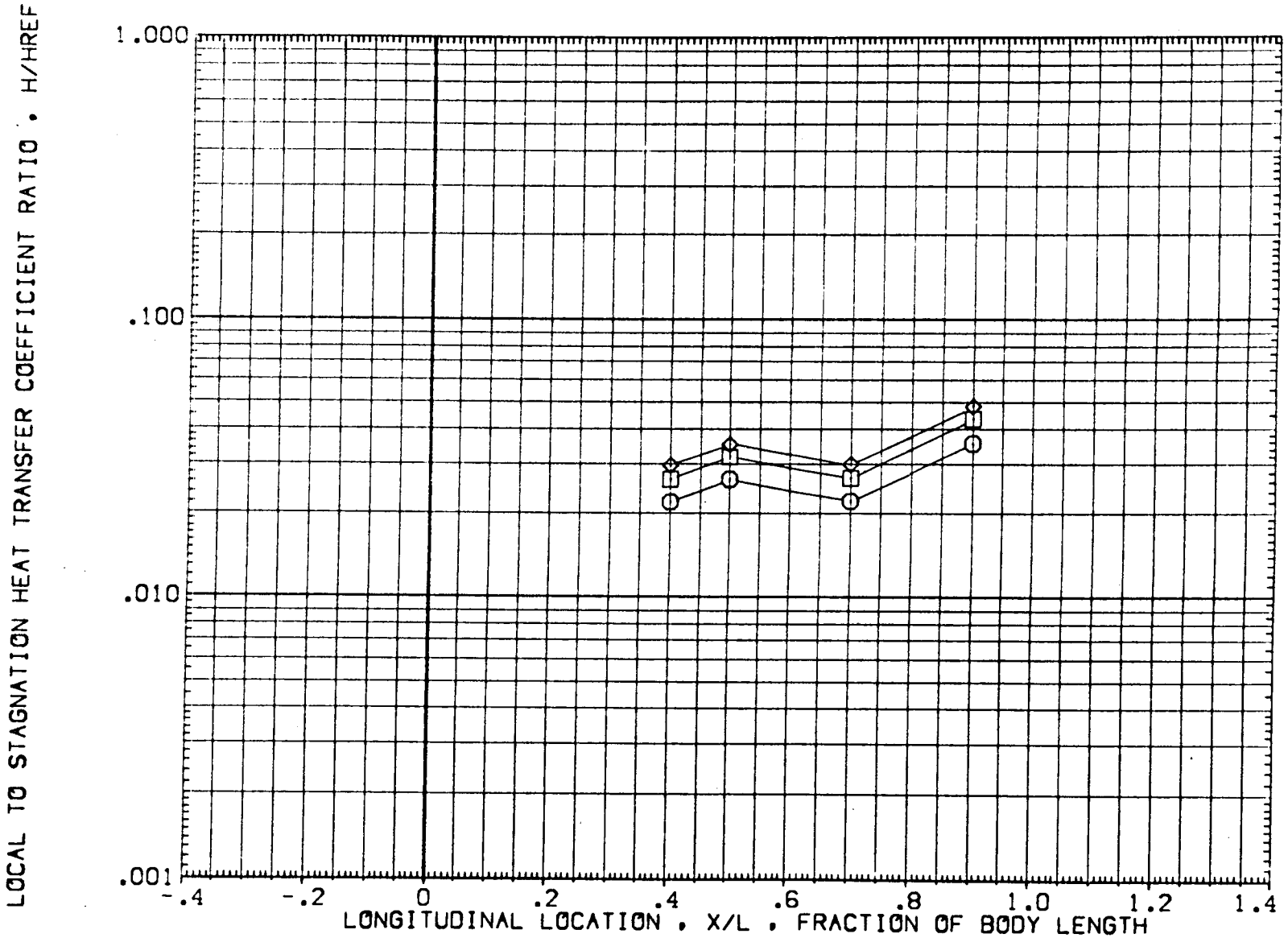


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

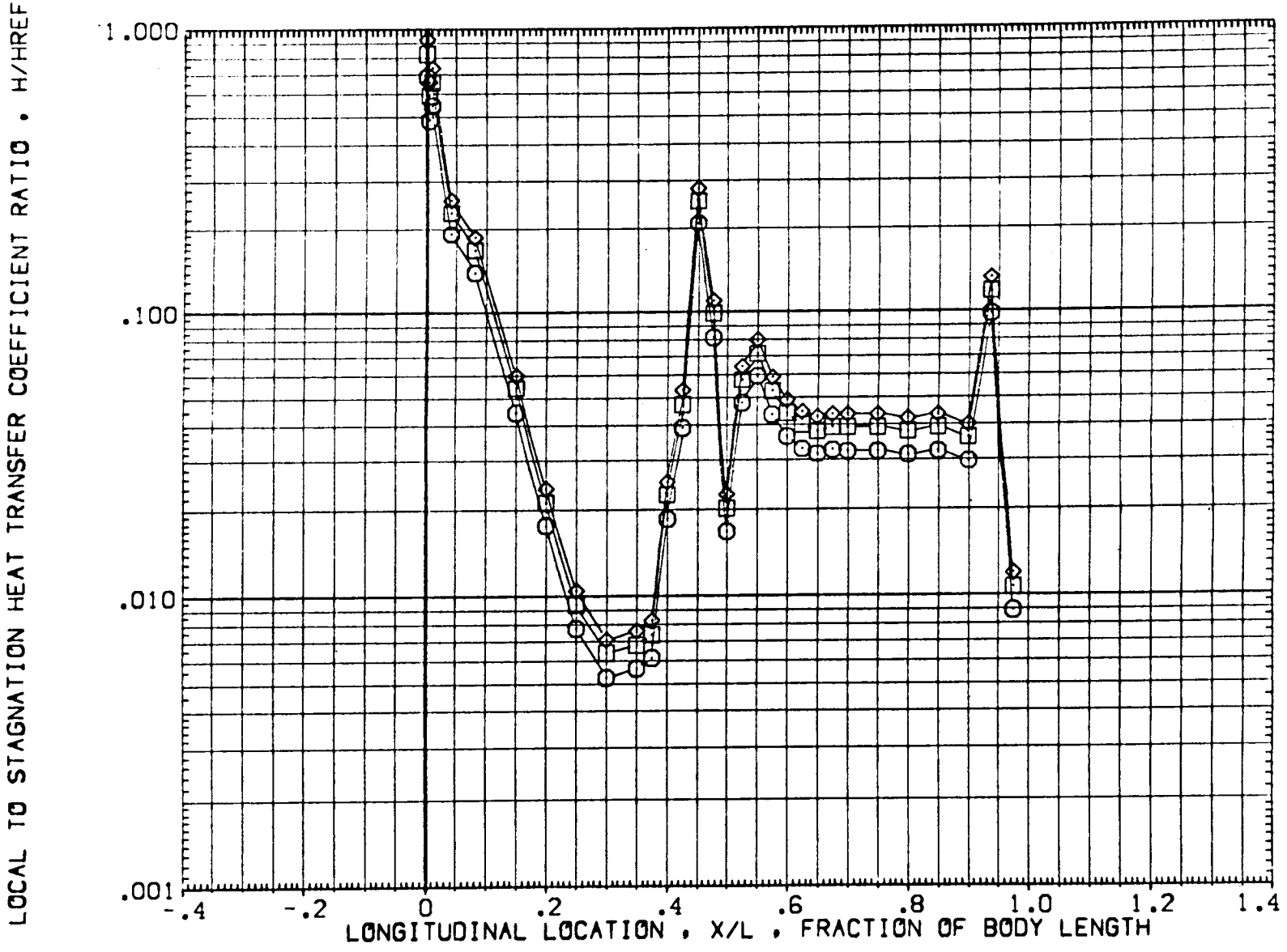


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

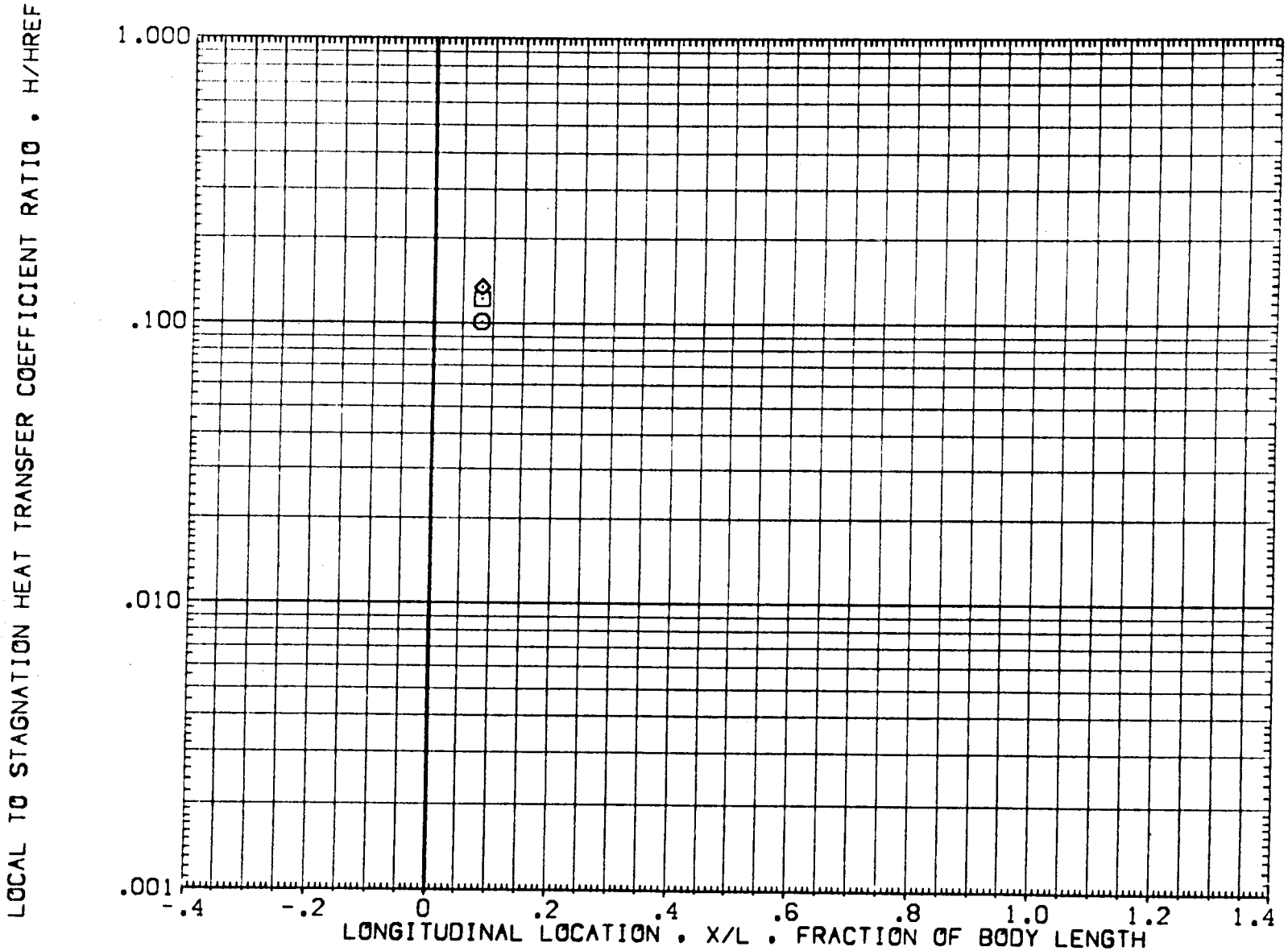


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

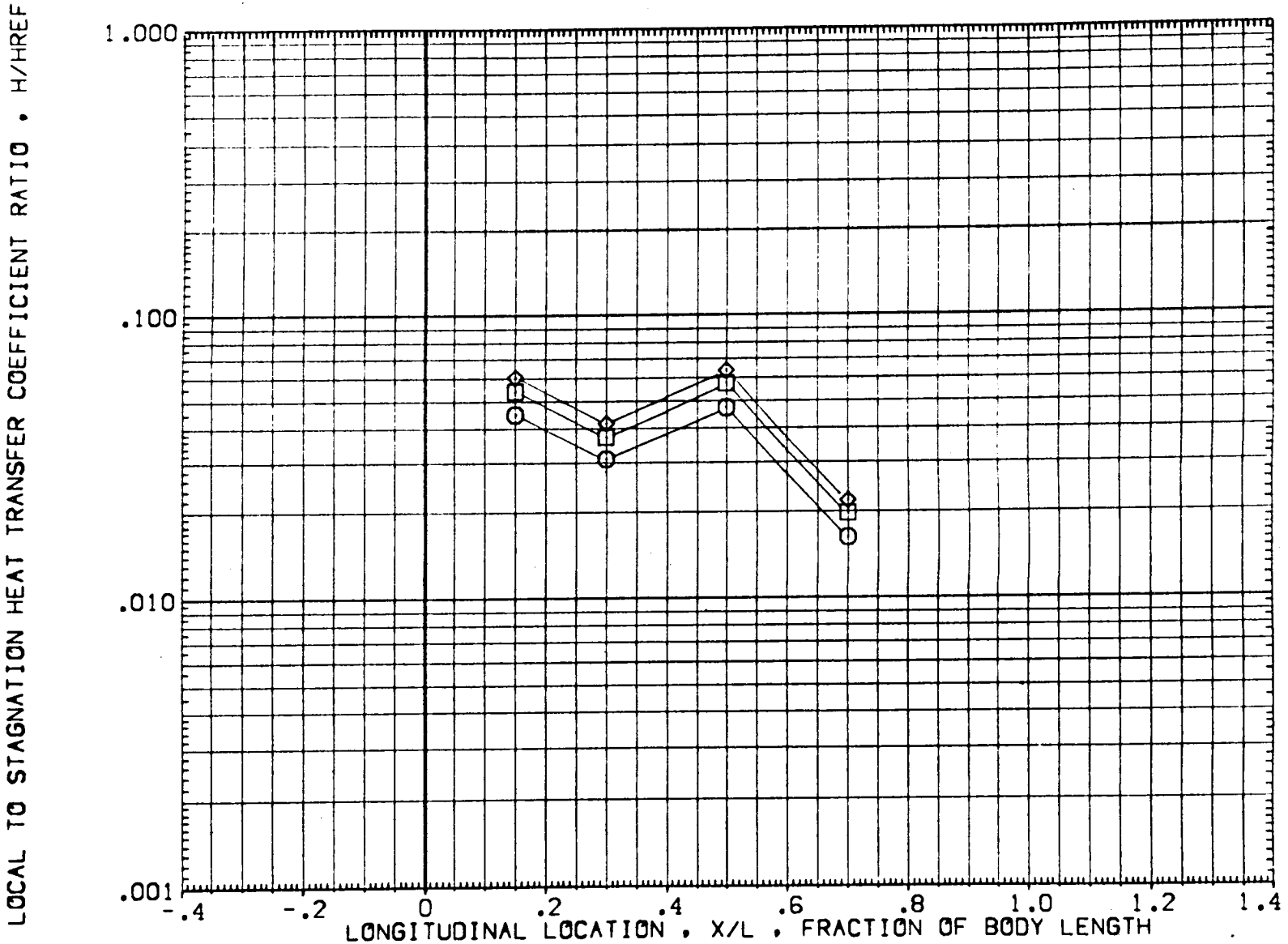


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	△	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

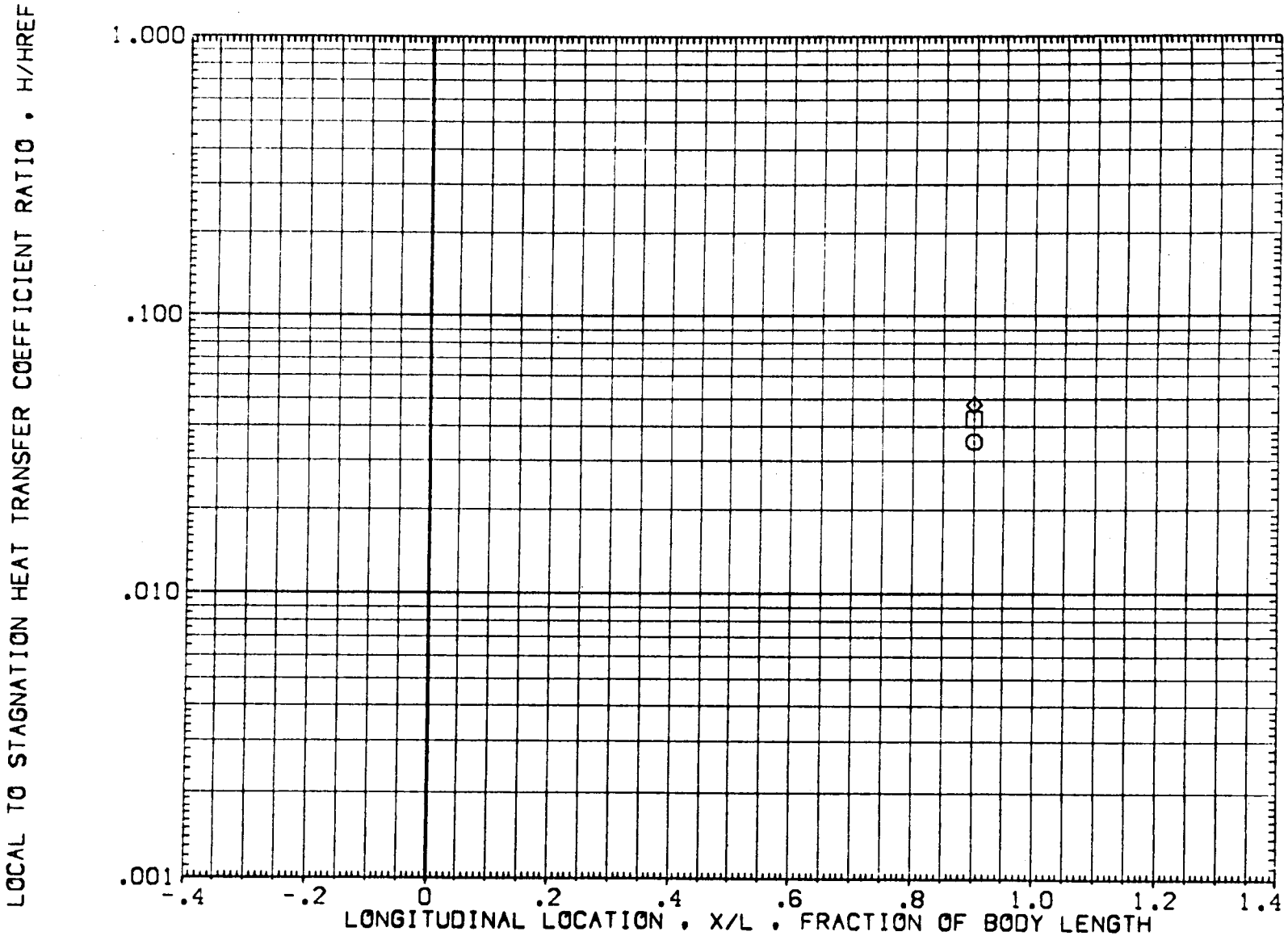


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	△	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

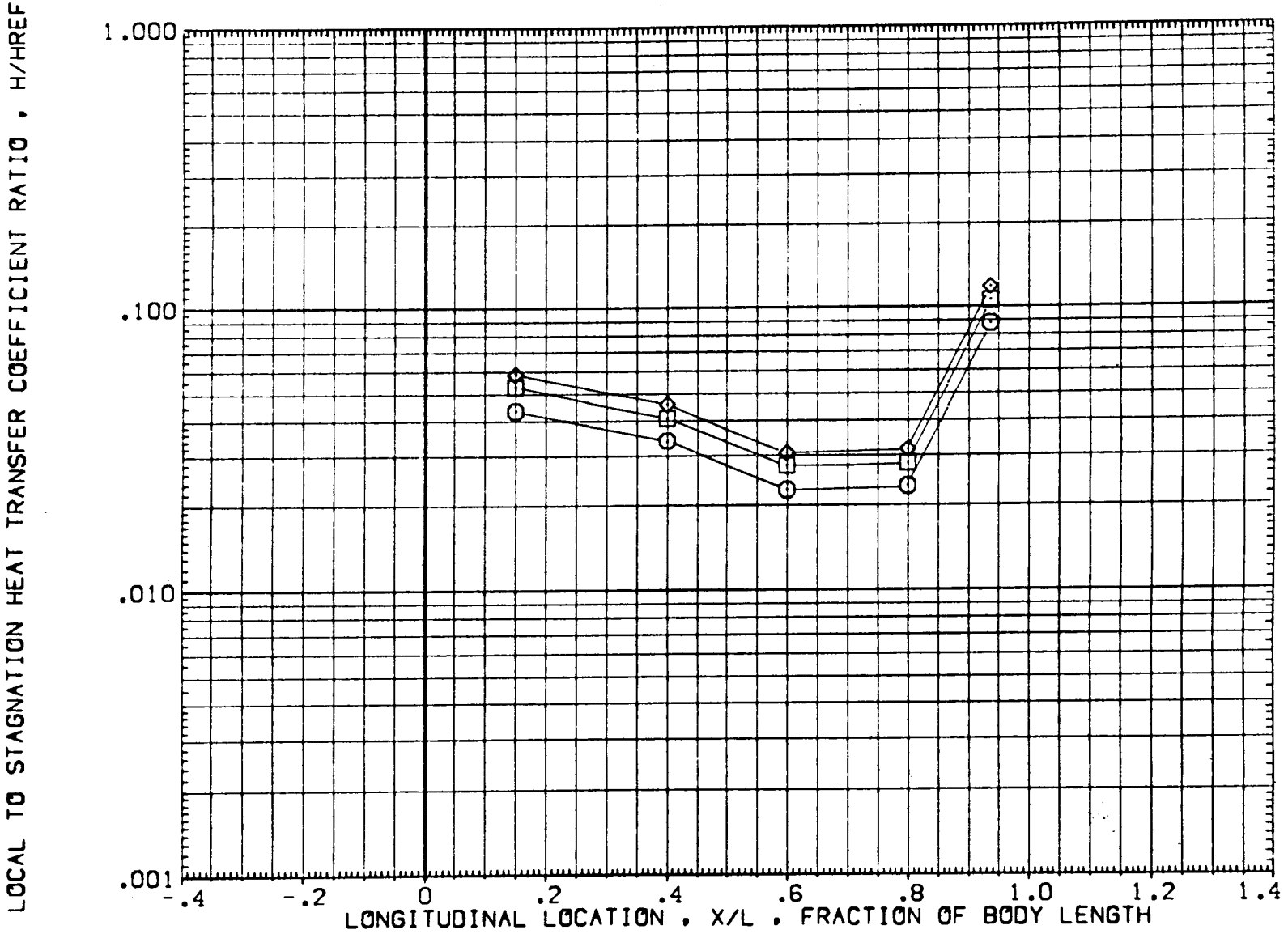


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

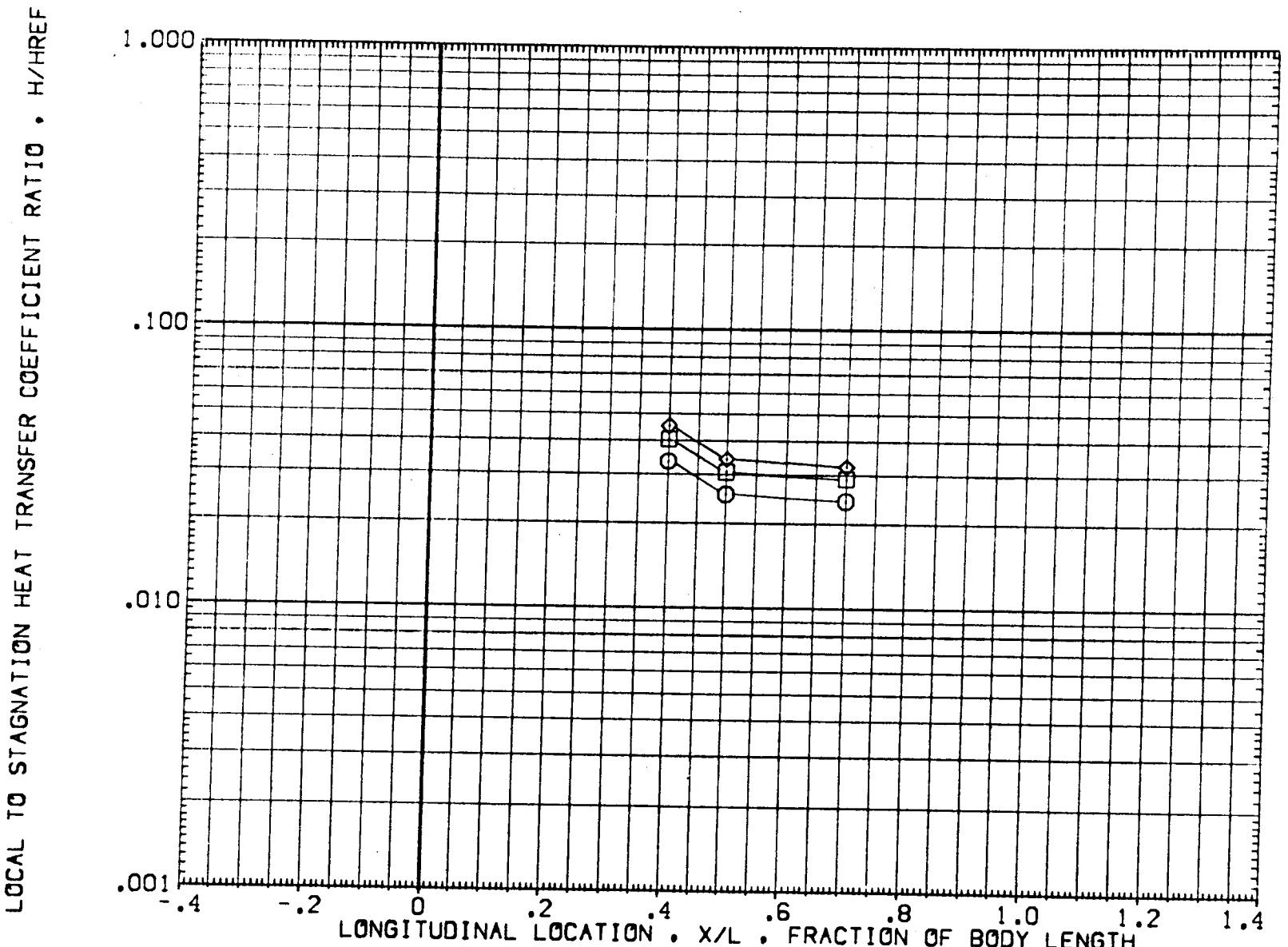


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 216.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

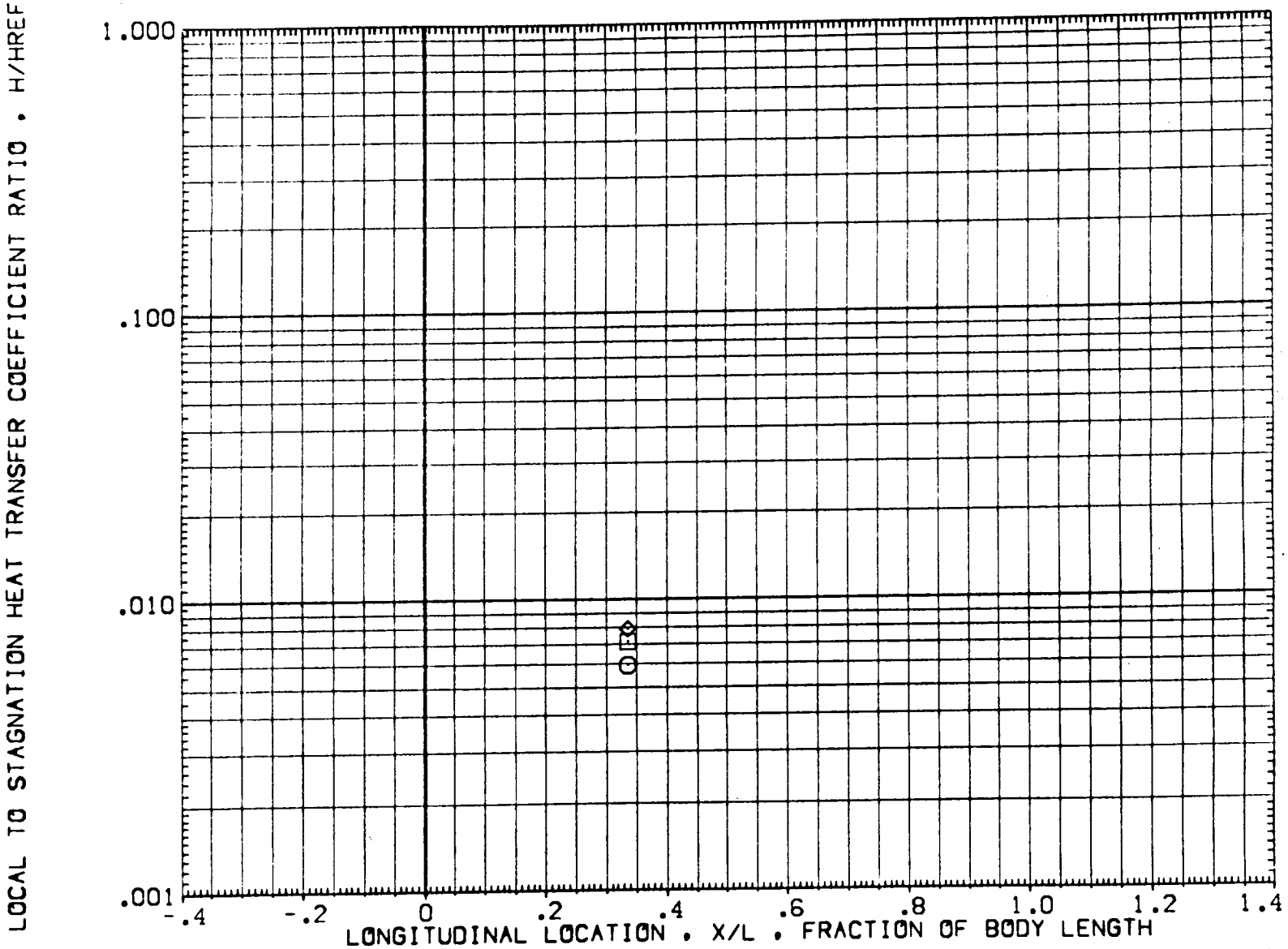


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

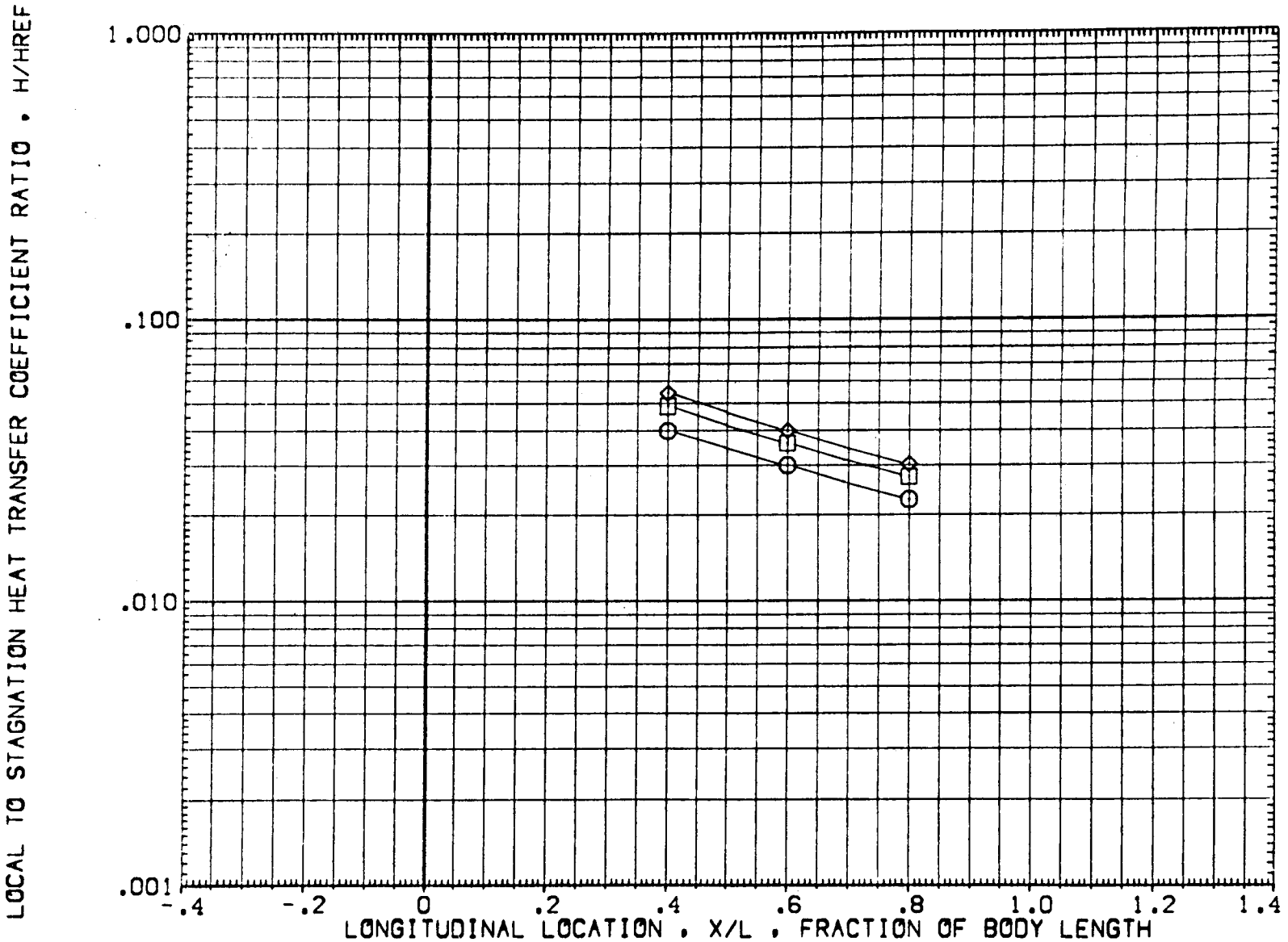


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 229.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

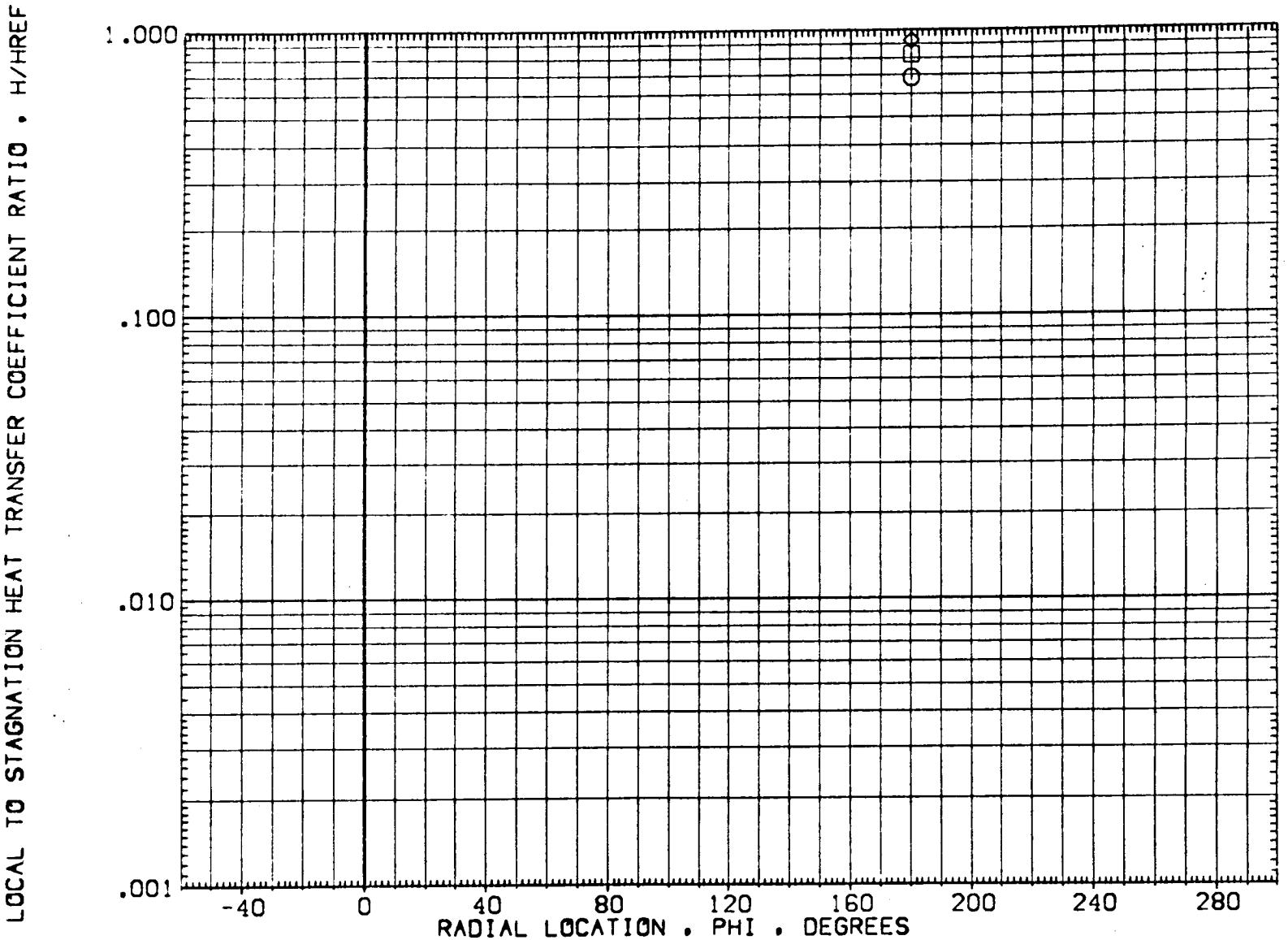


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

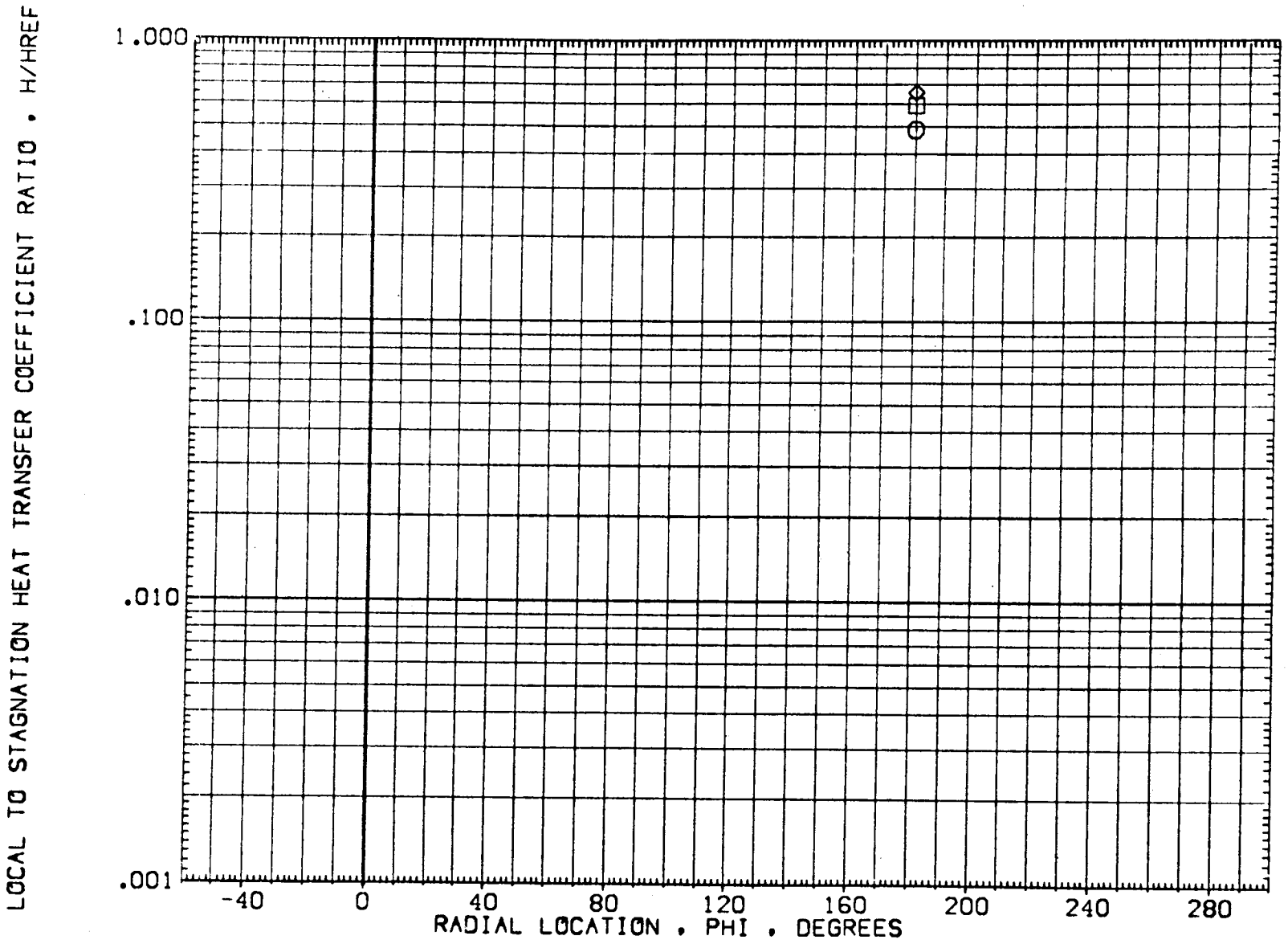


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BE|T10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

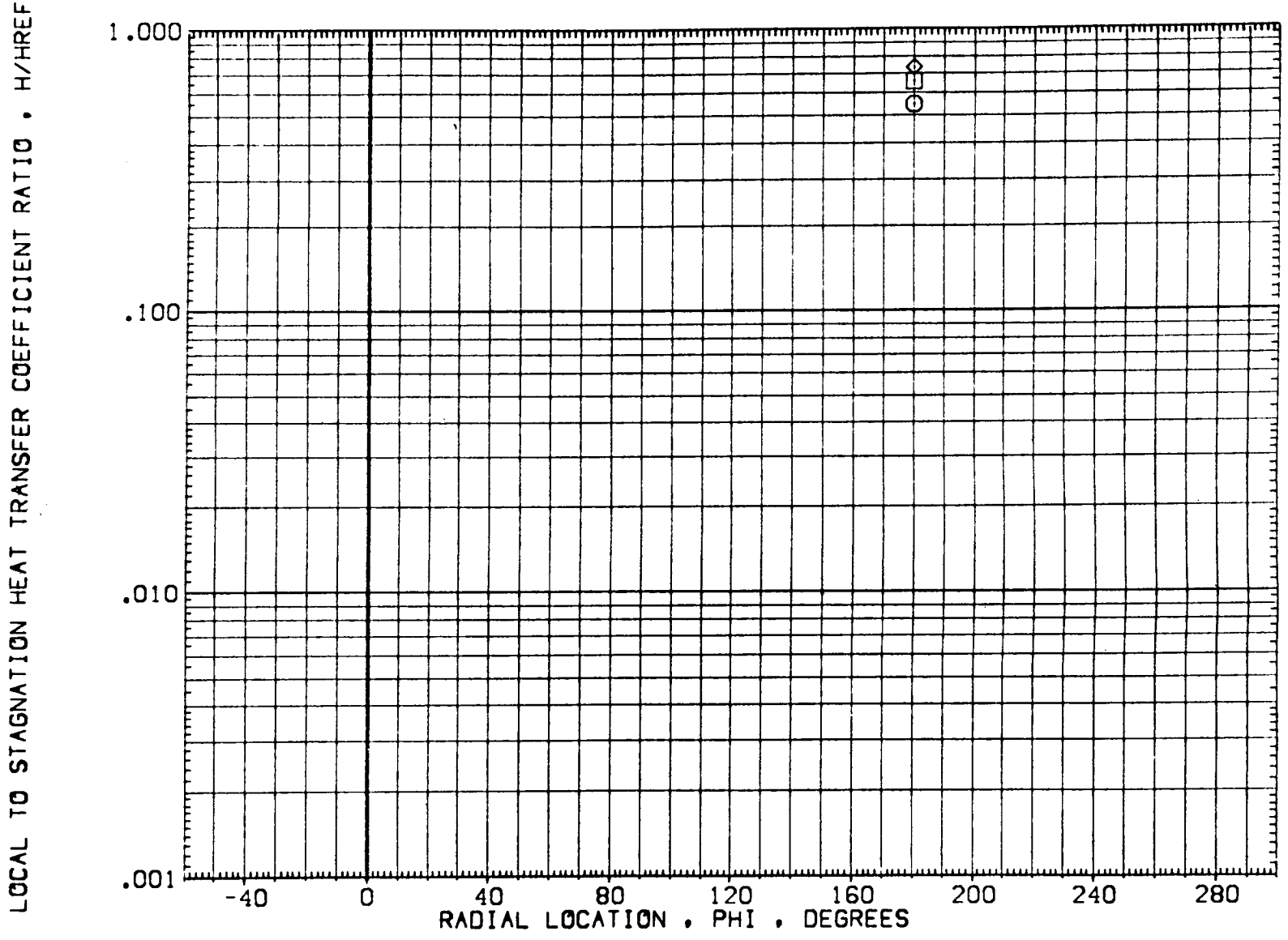


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

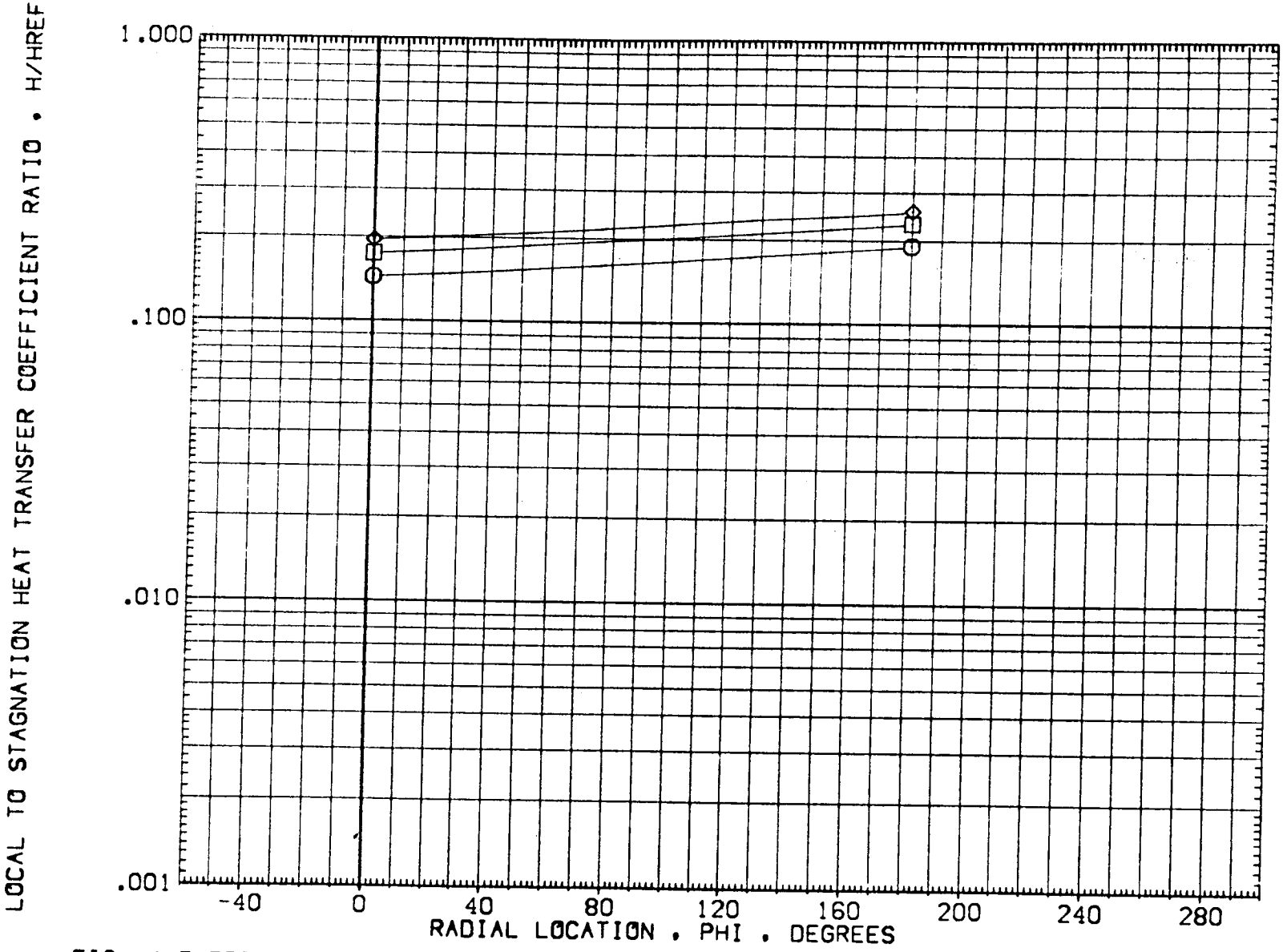


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

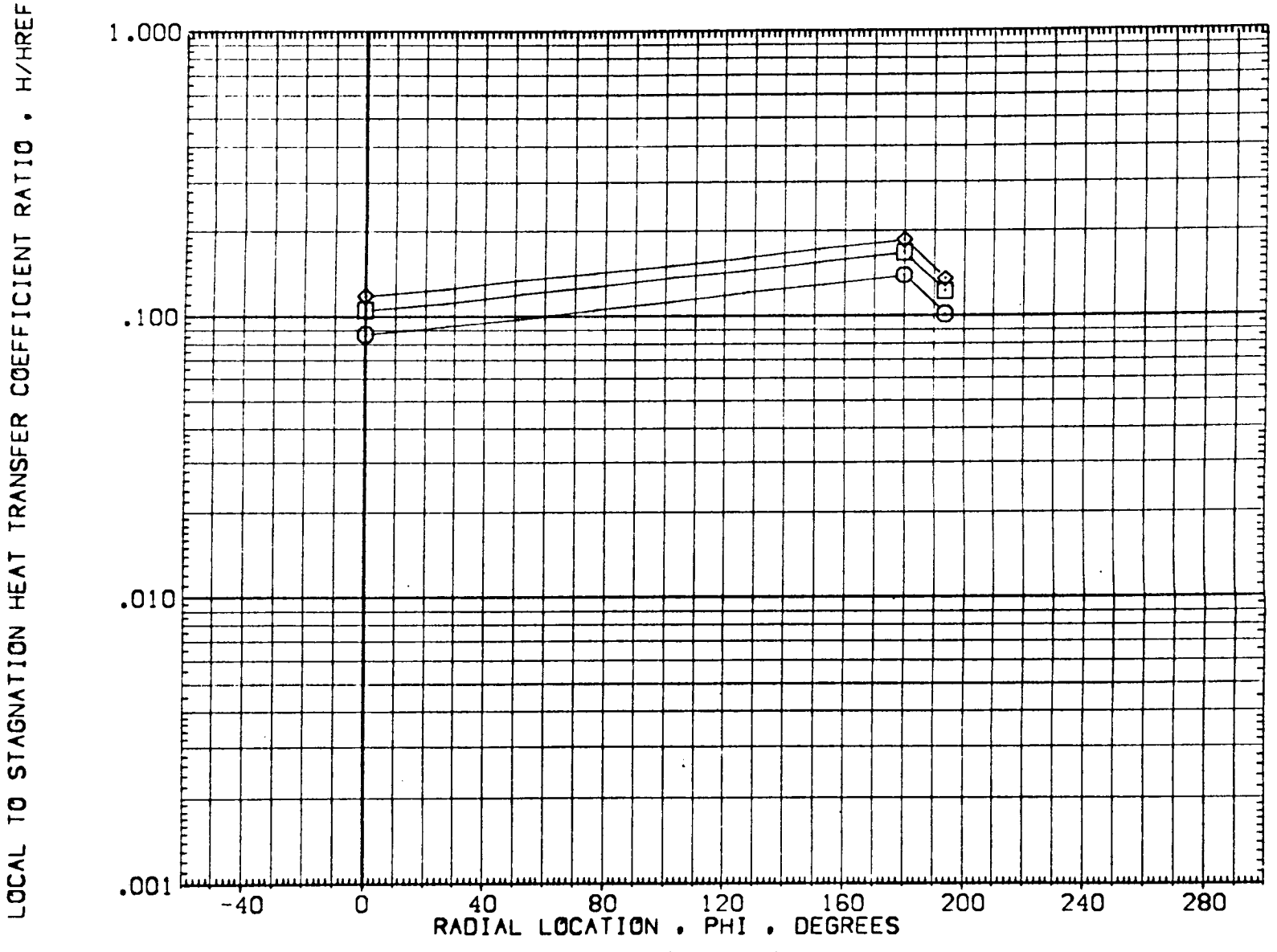


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

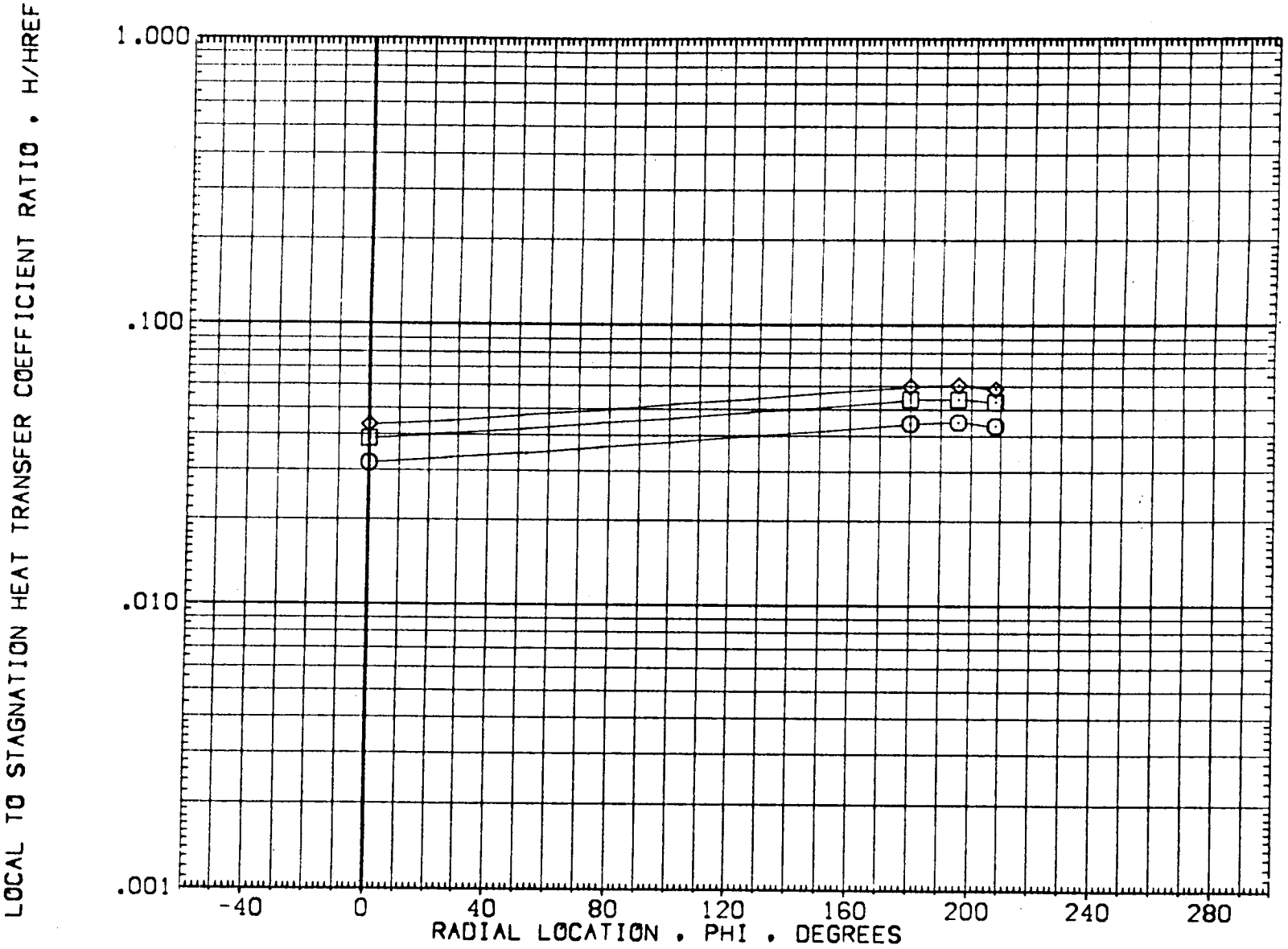


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

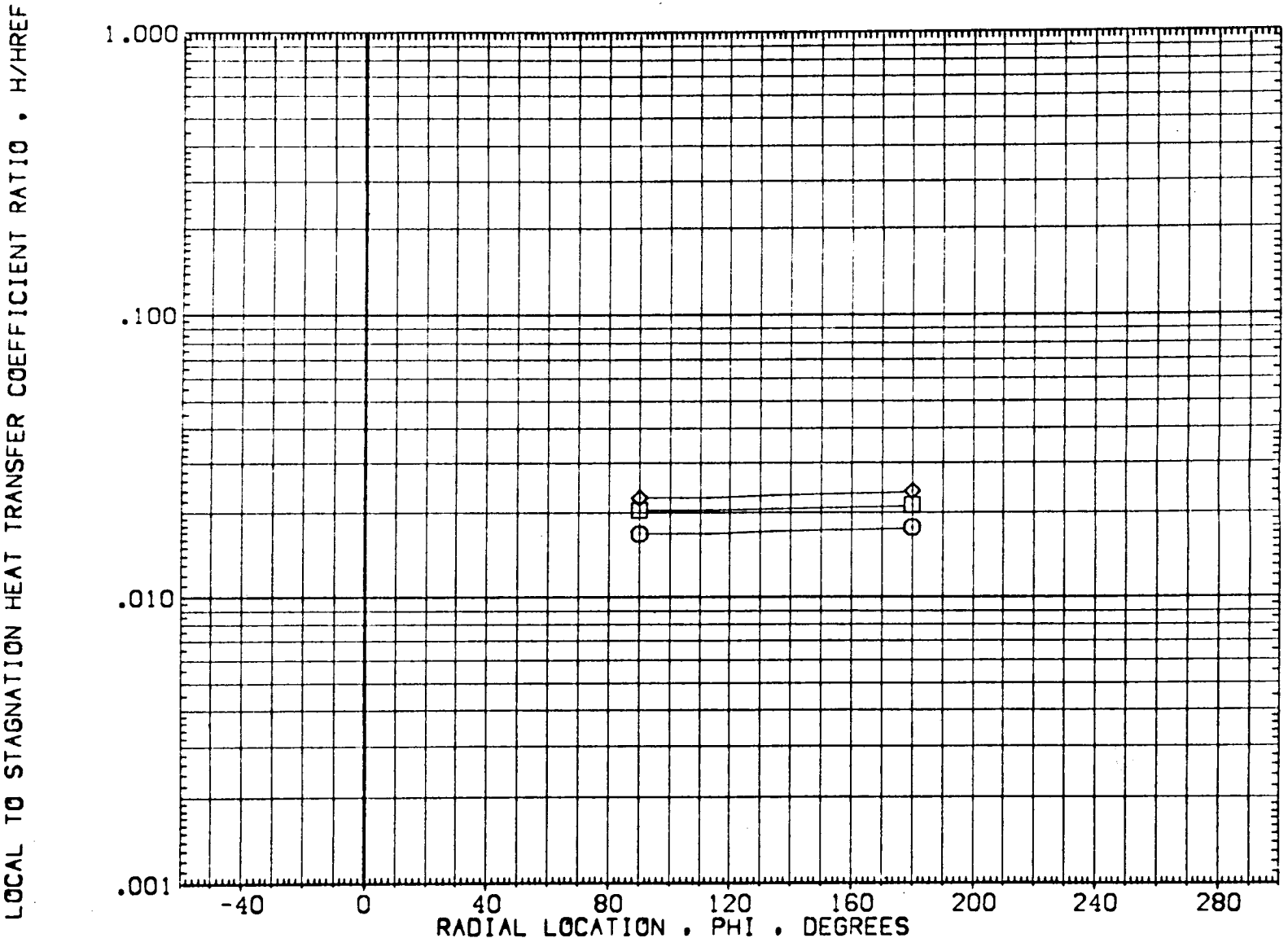


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

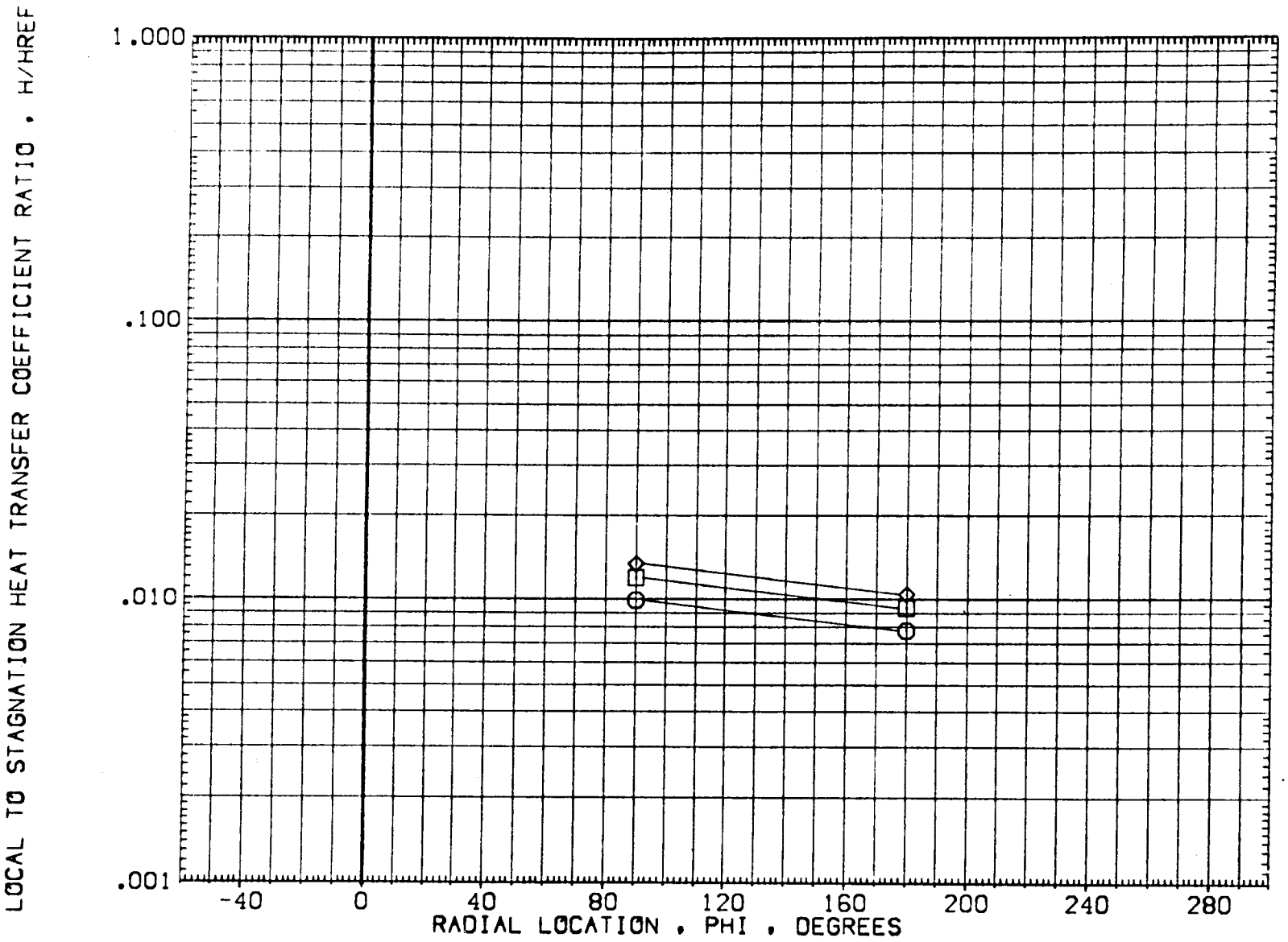


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

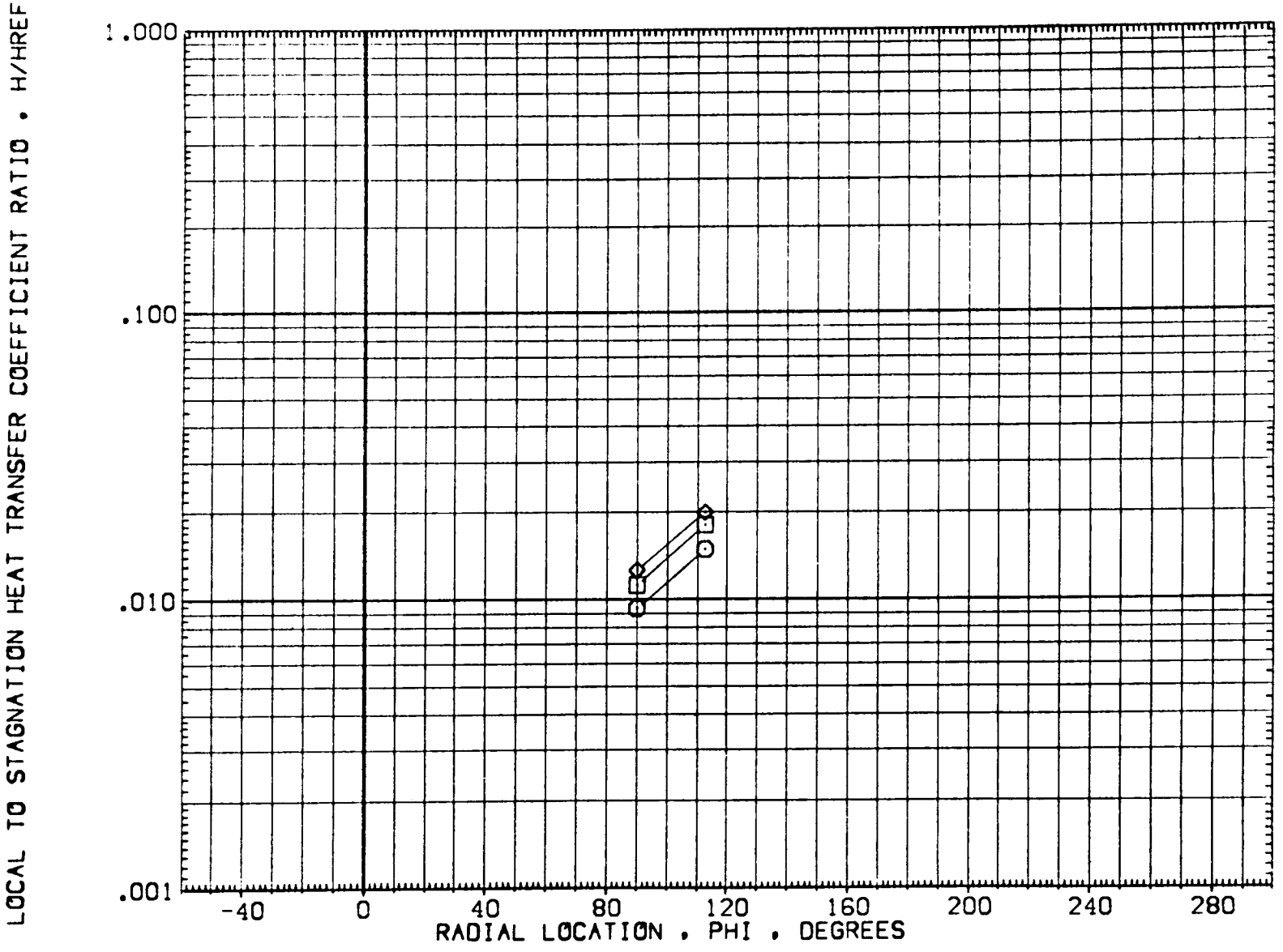


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

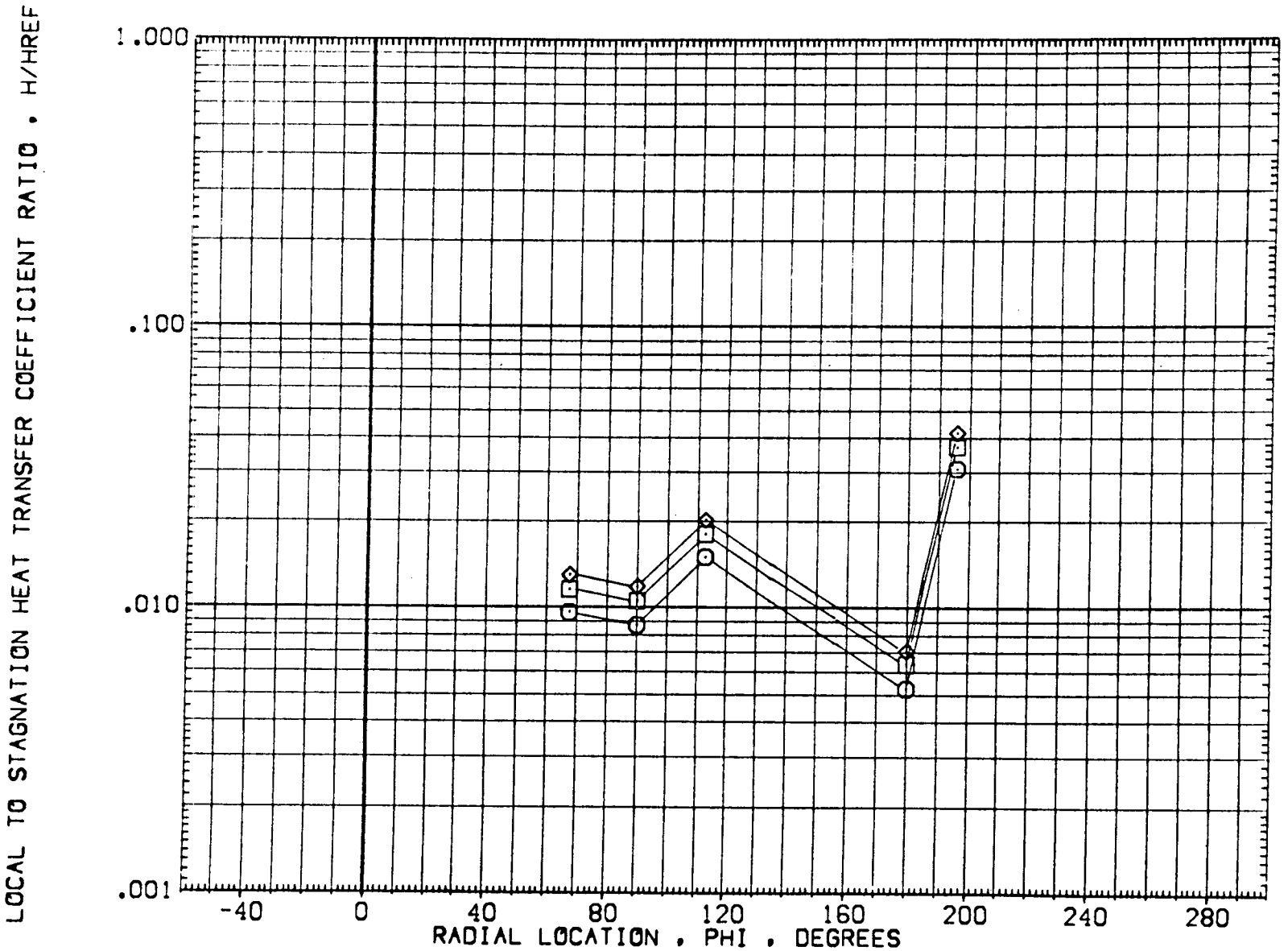


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITIO]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
[AEITIO]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
[BEITIO]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

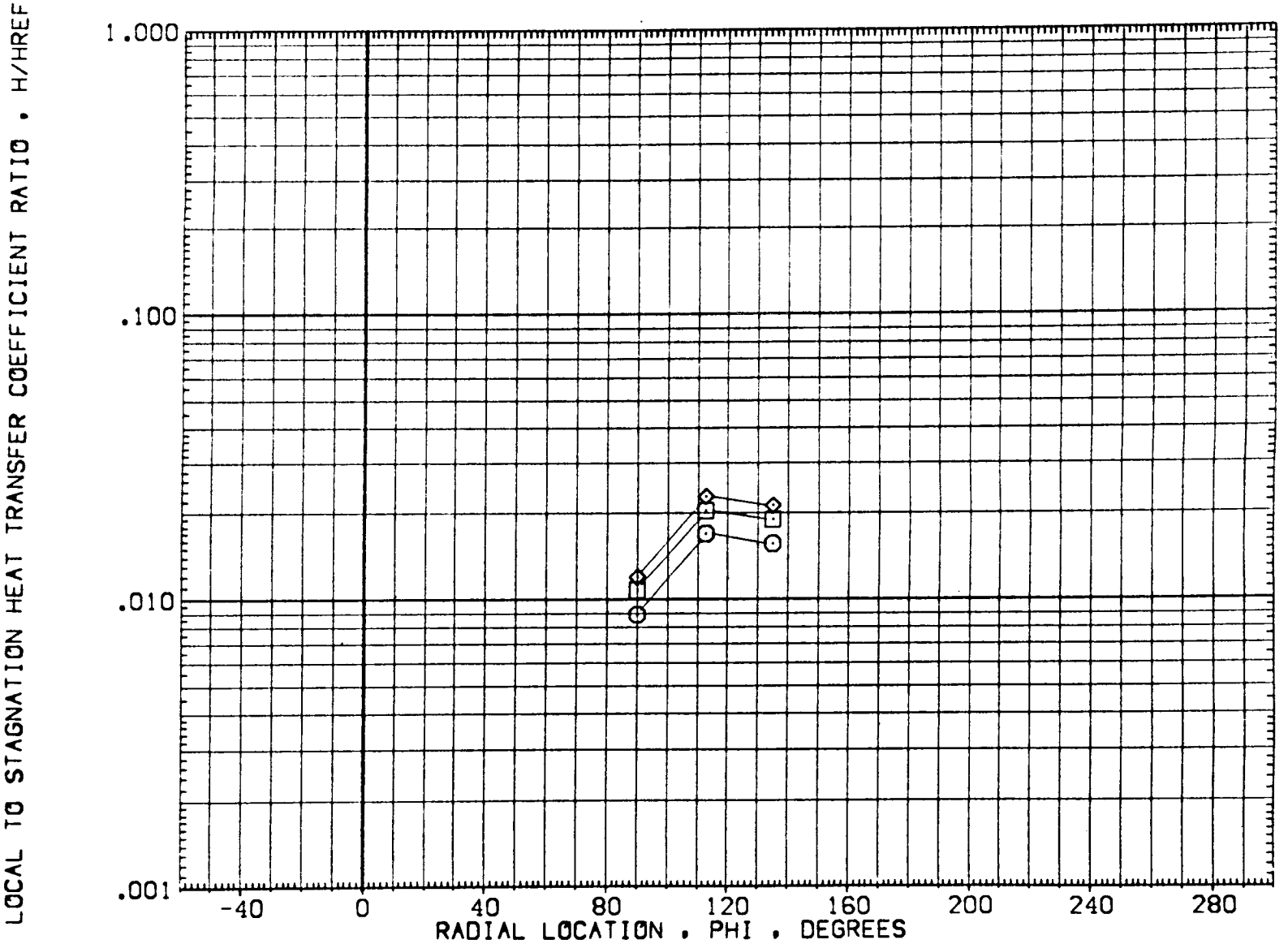


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

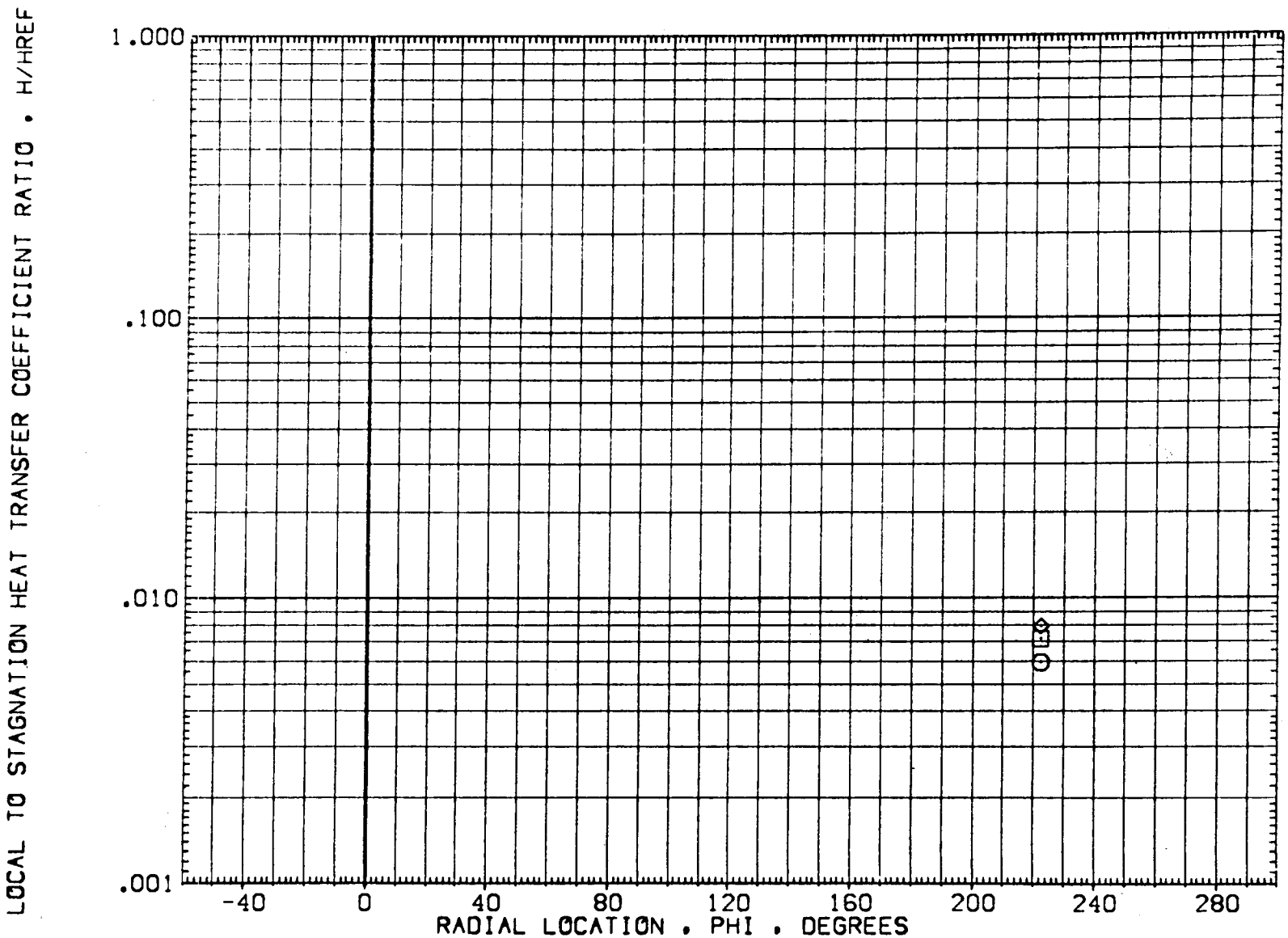


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

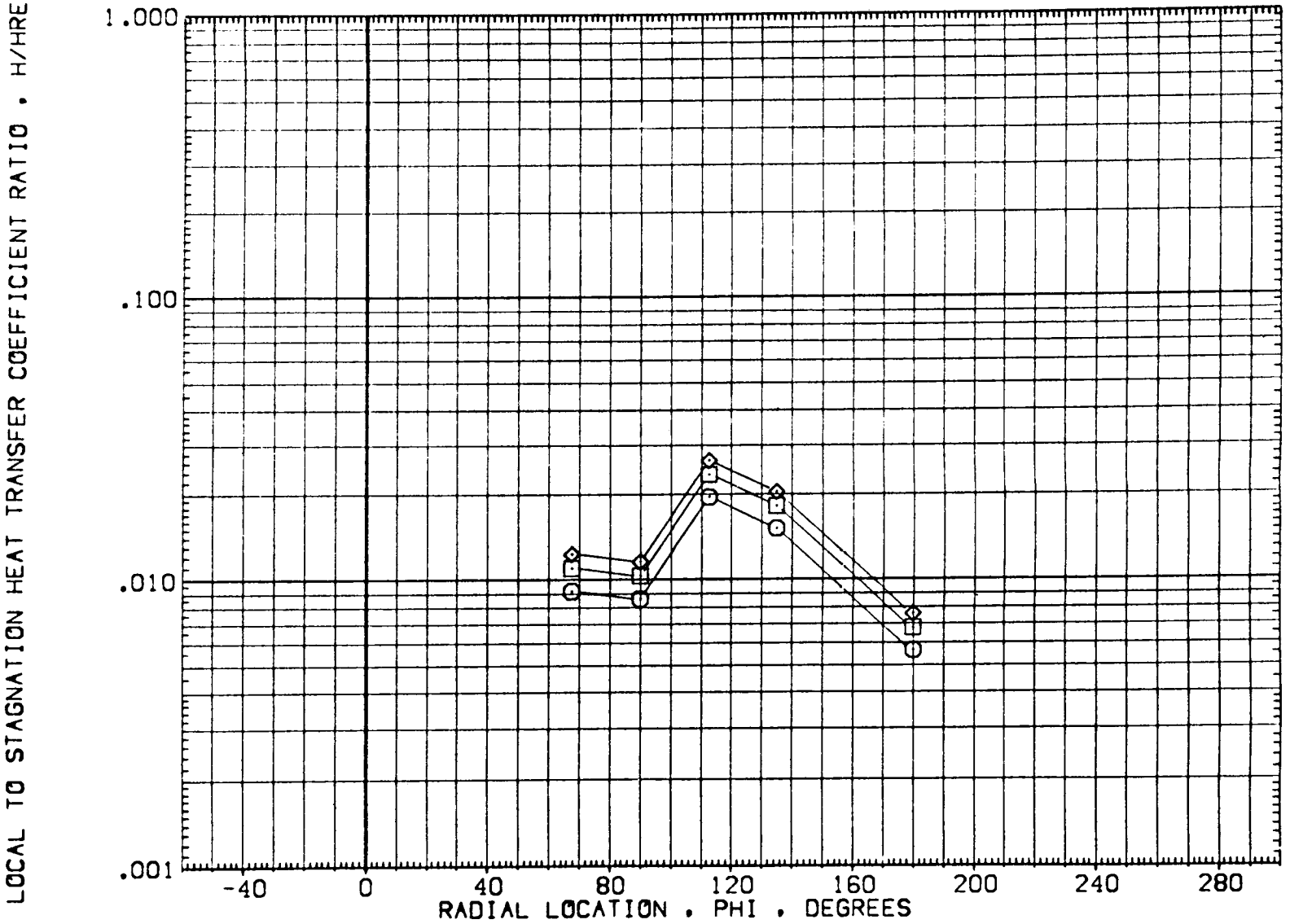


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

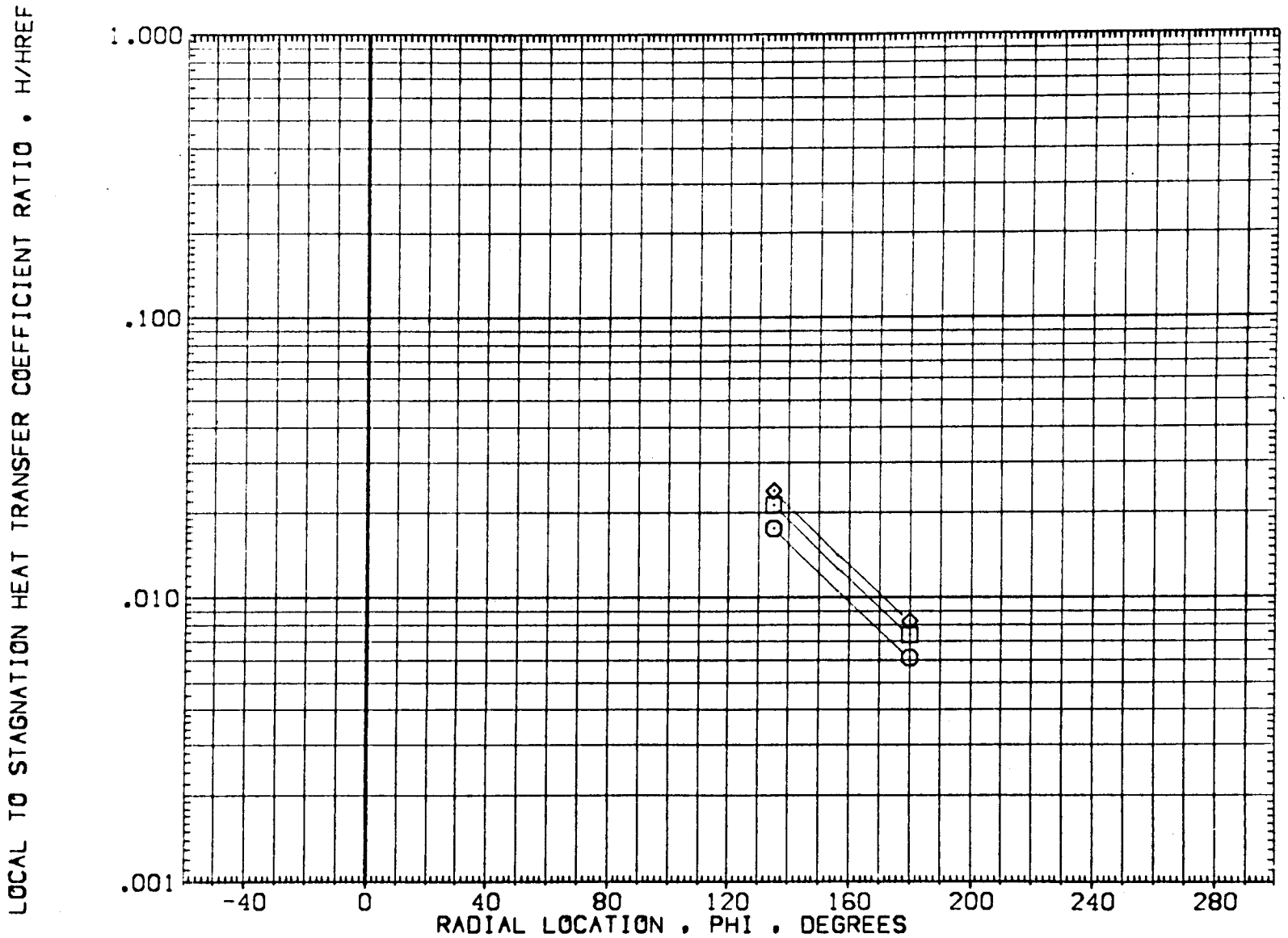


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE IT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AE IT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BE IT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

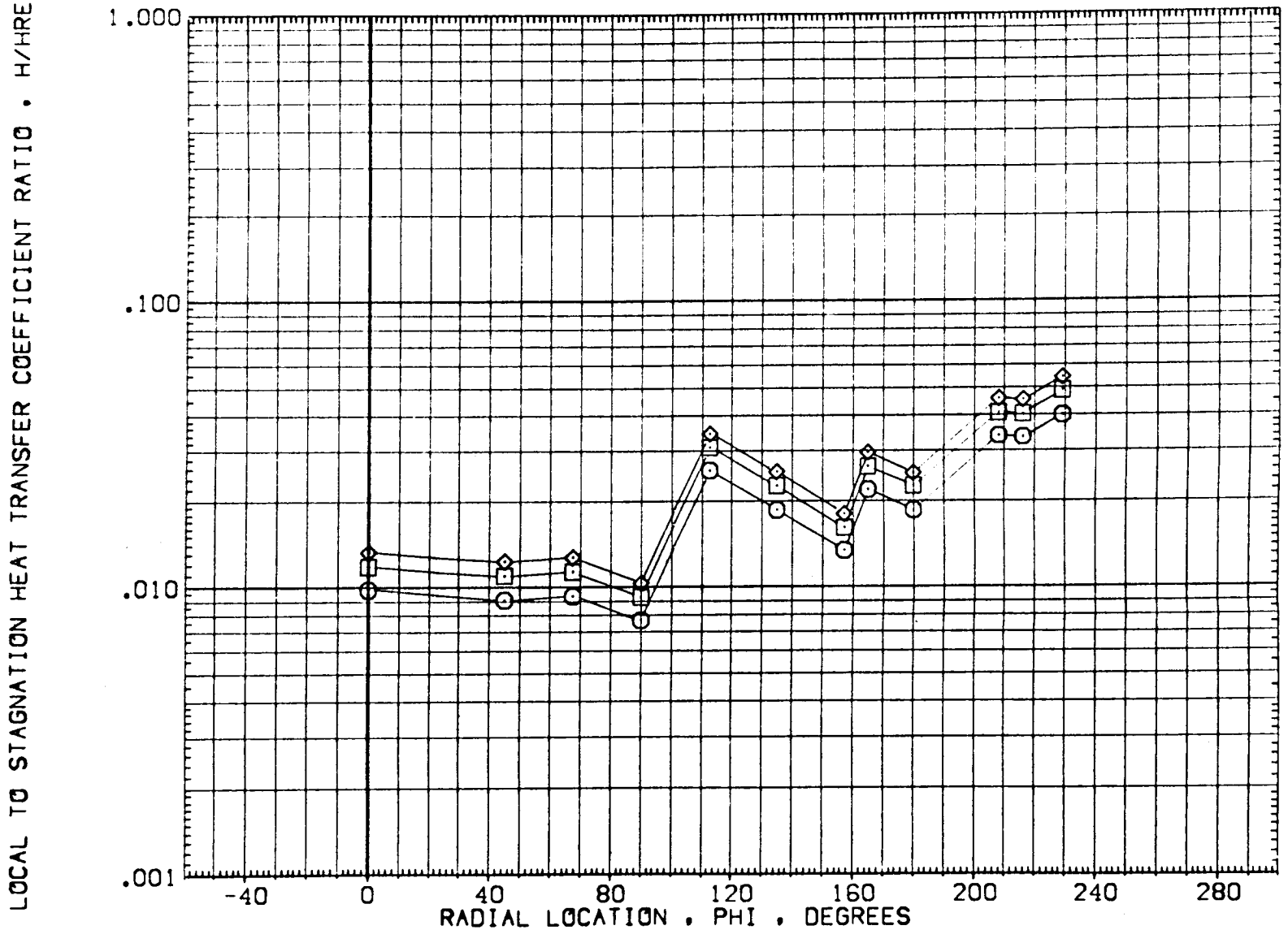


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

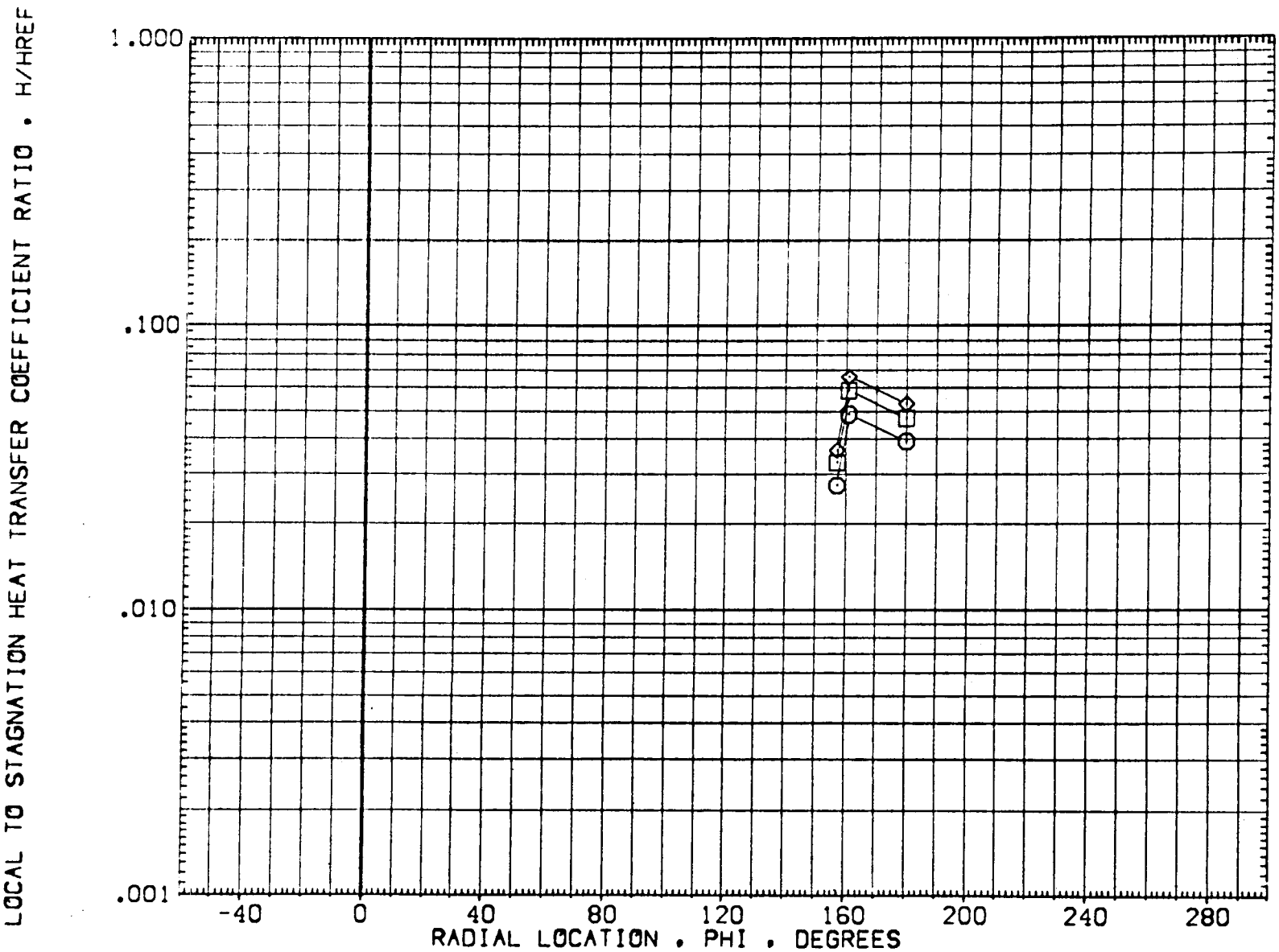


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

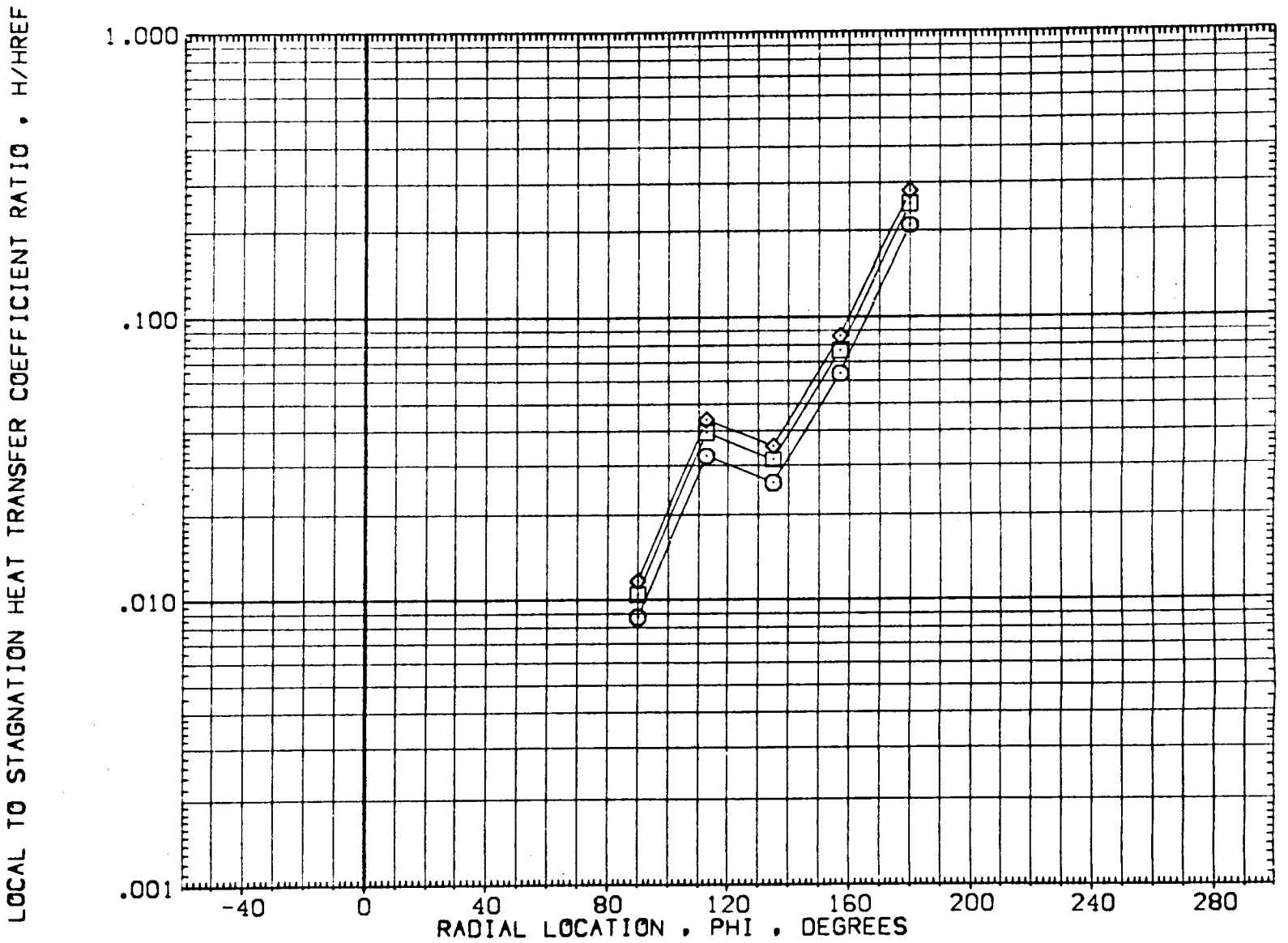


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

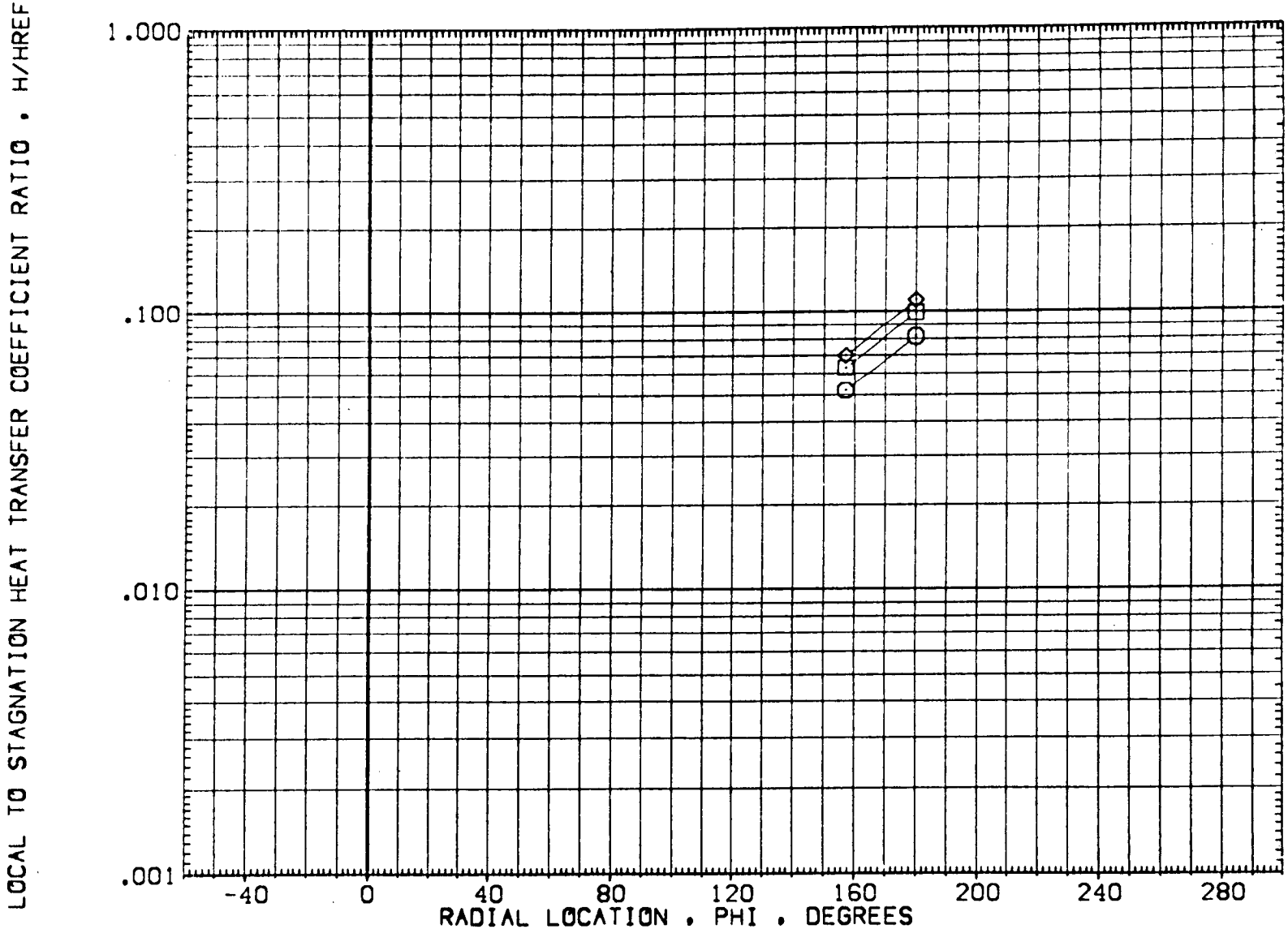


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

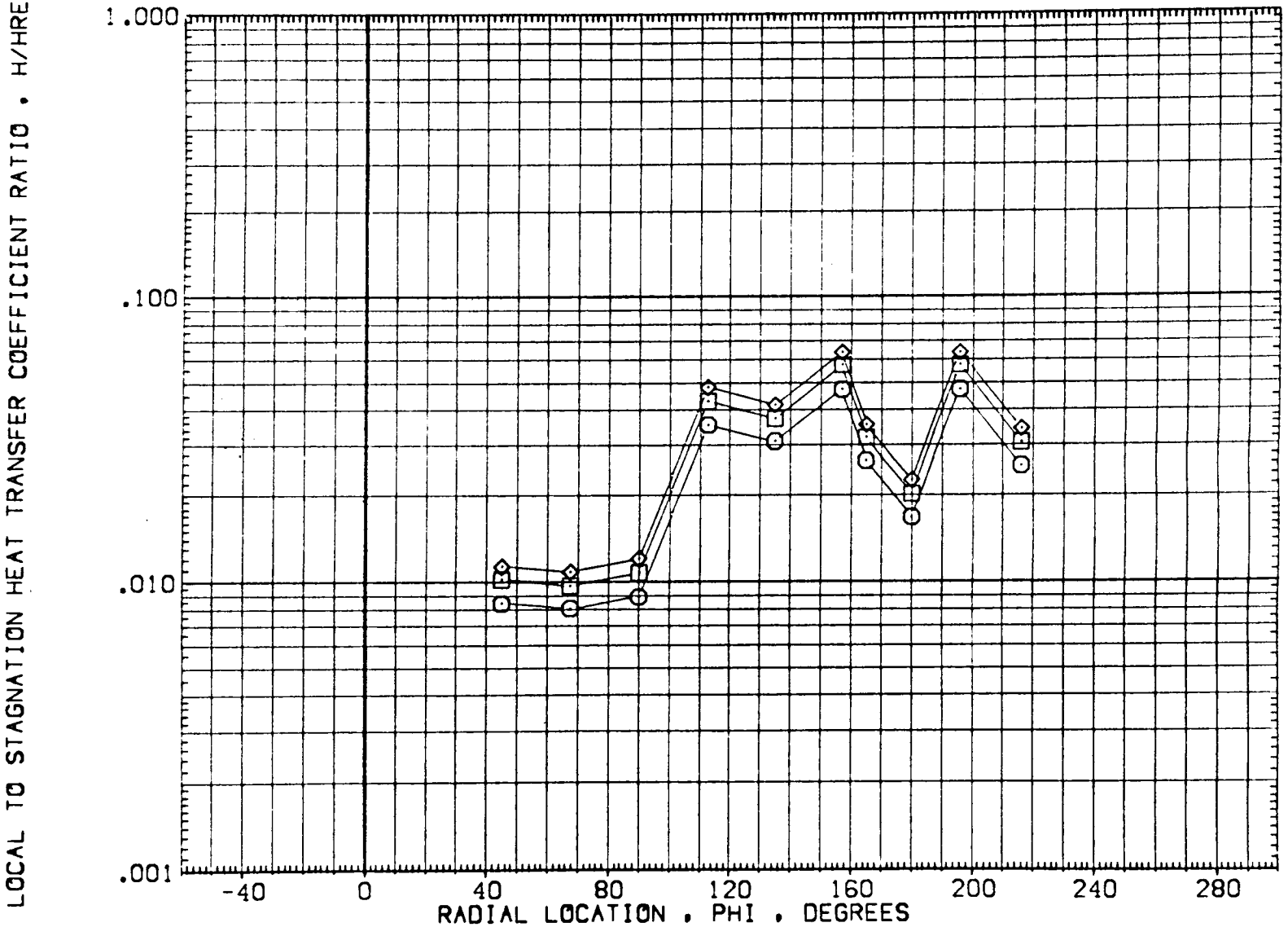


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

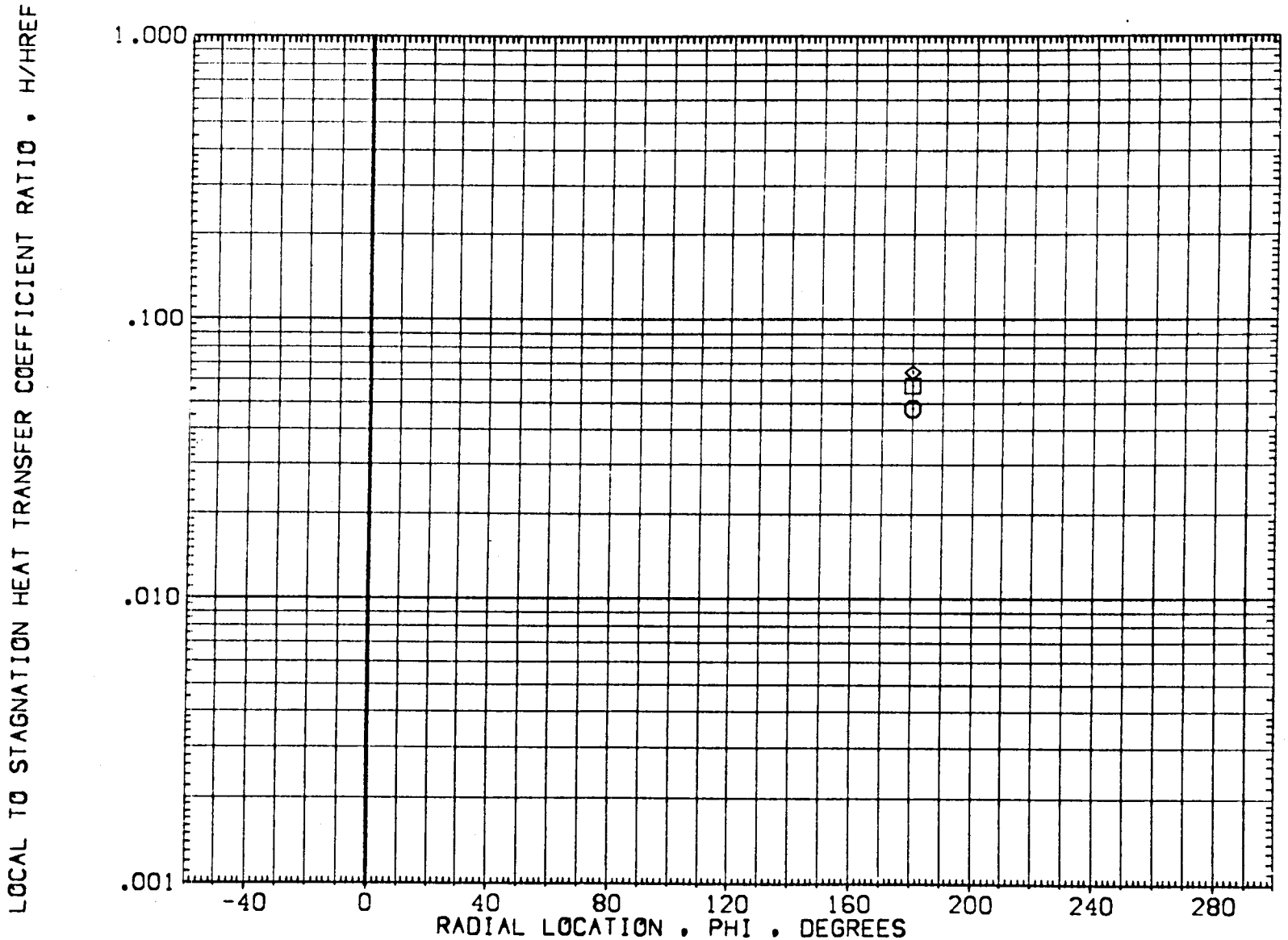


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

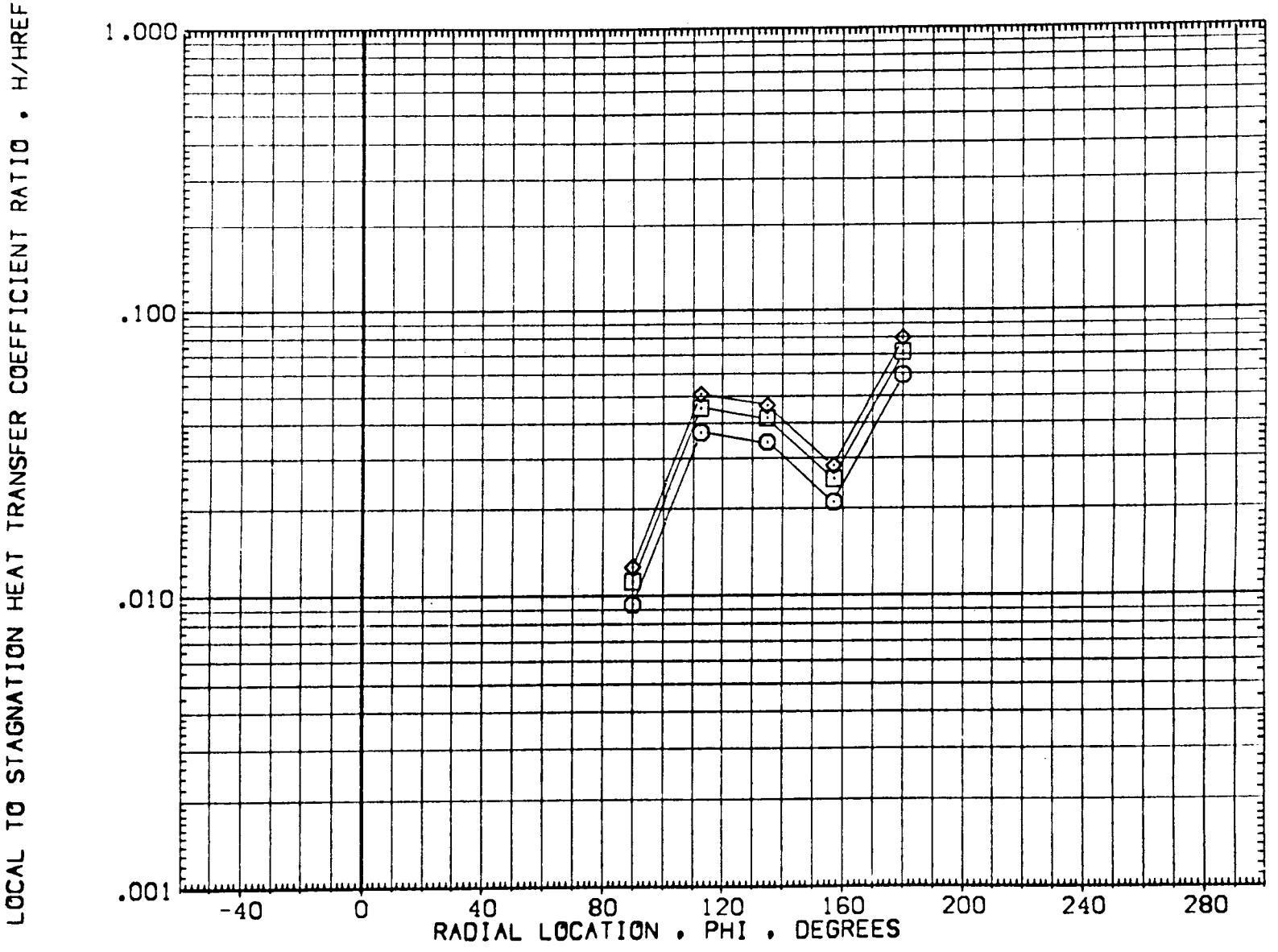


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .550

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

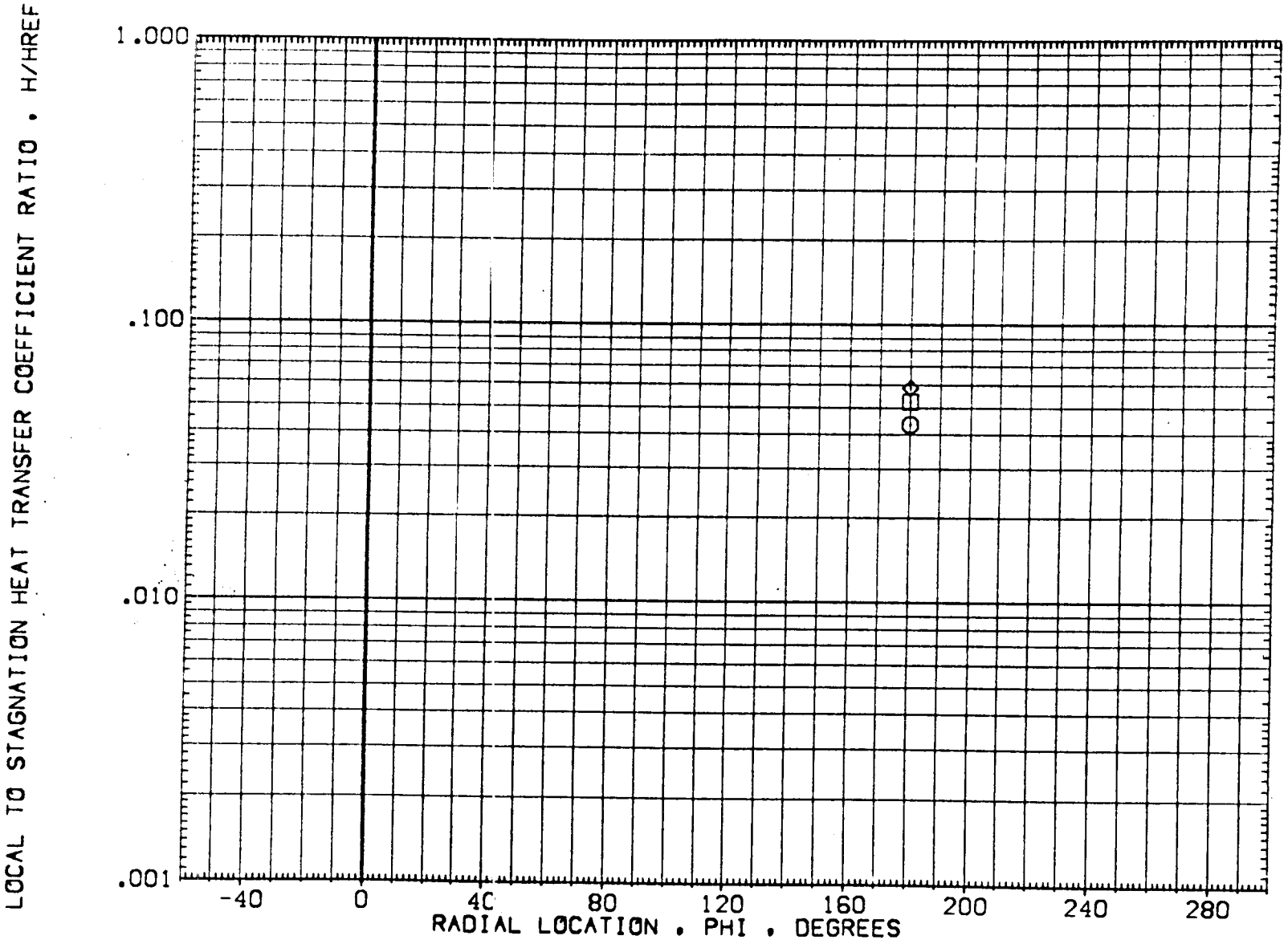


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	△	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

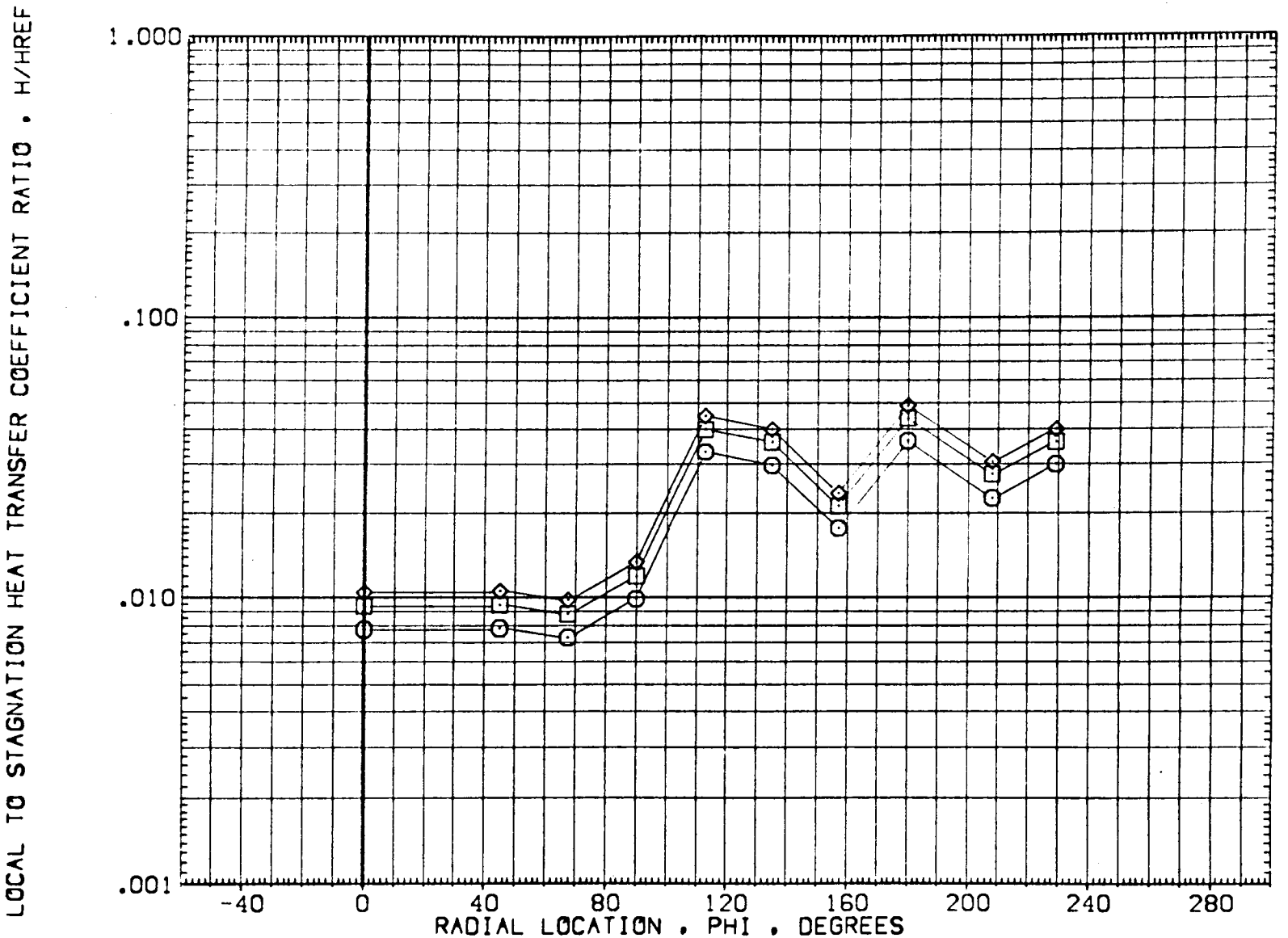


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

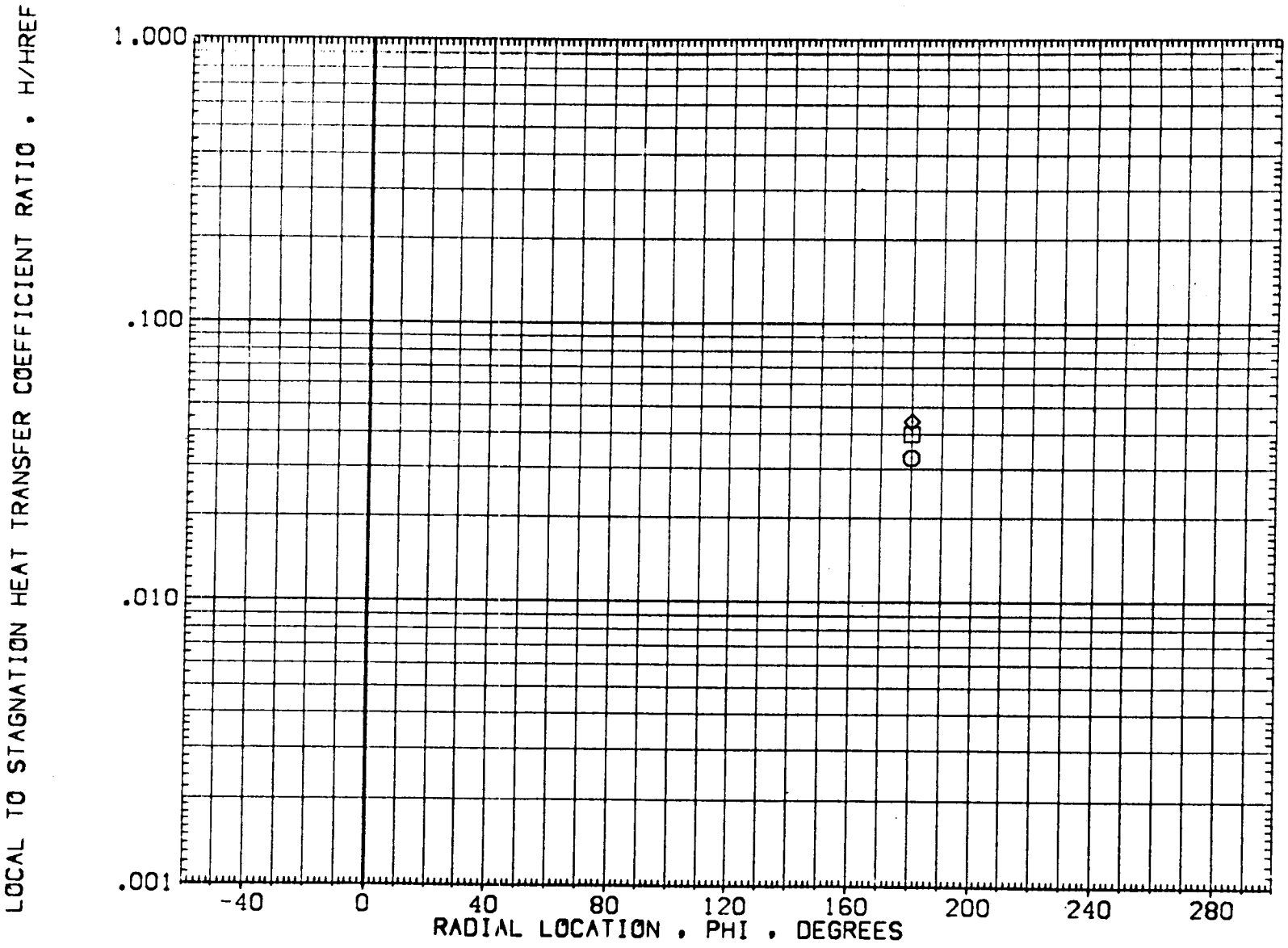


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

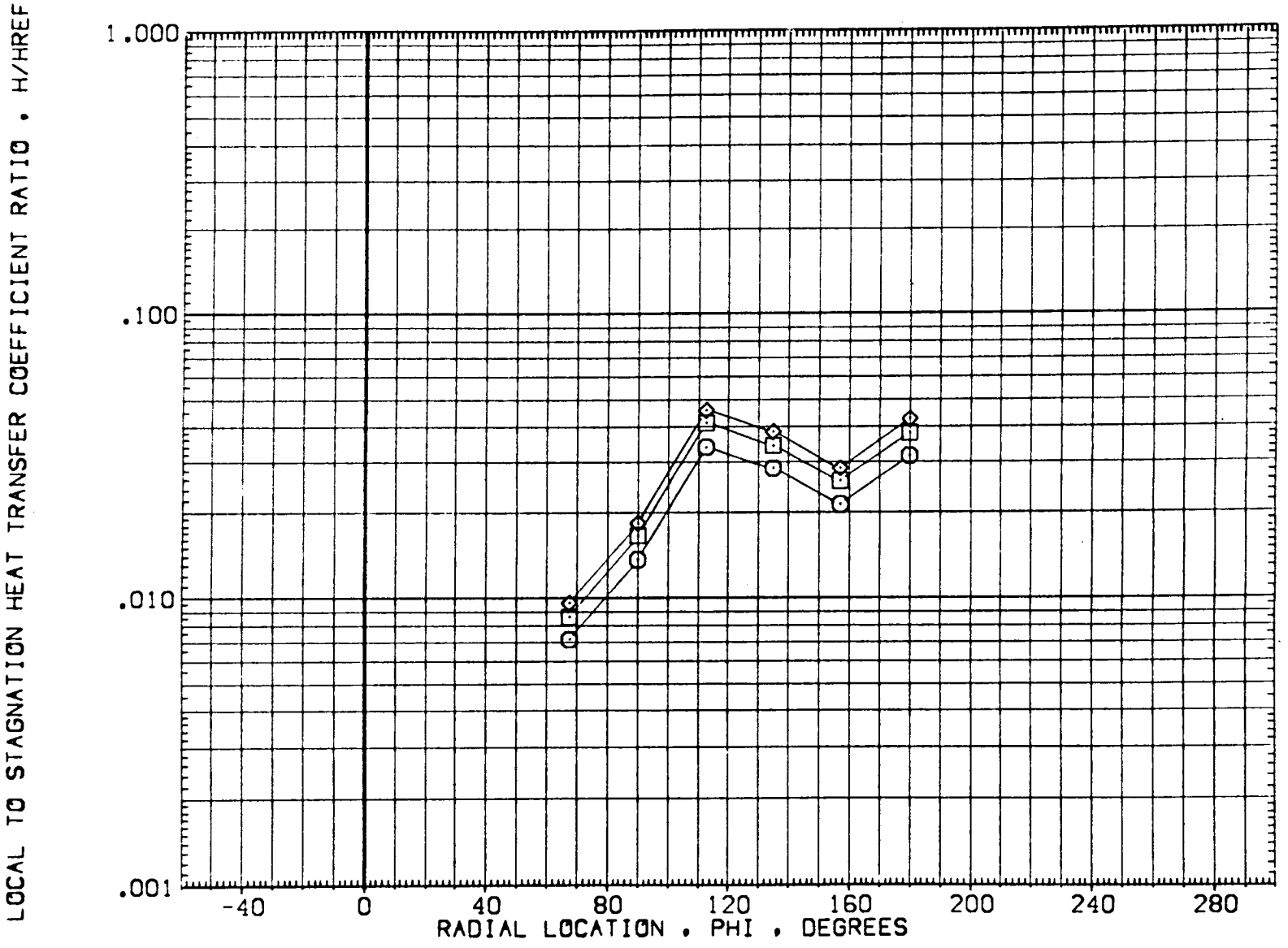


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

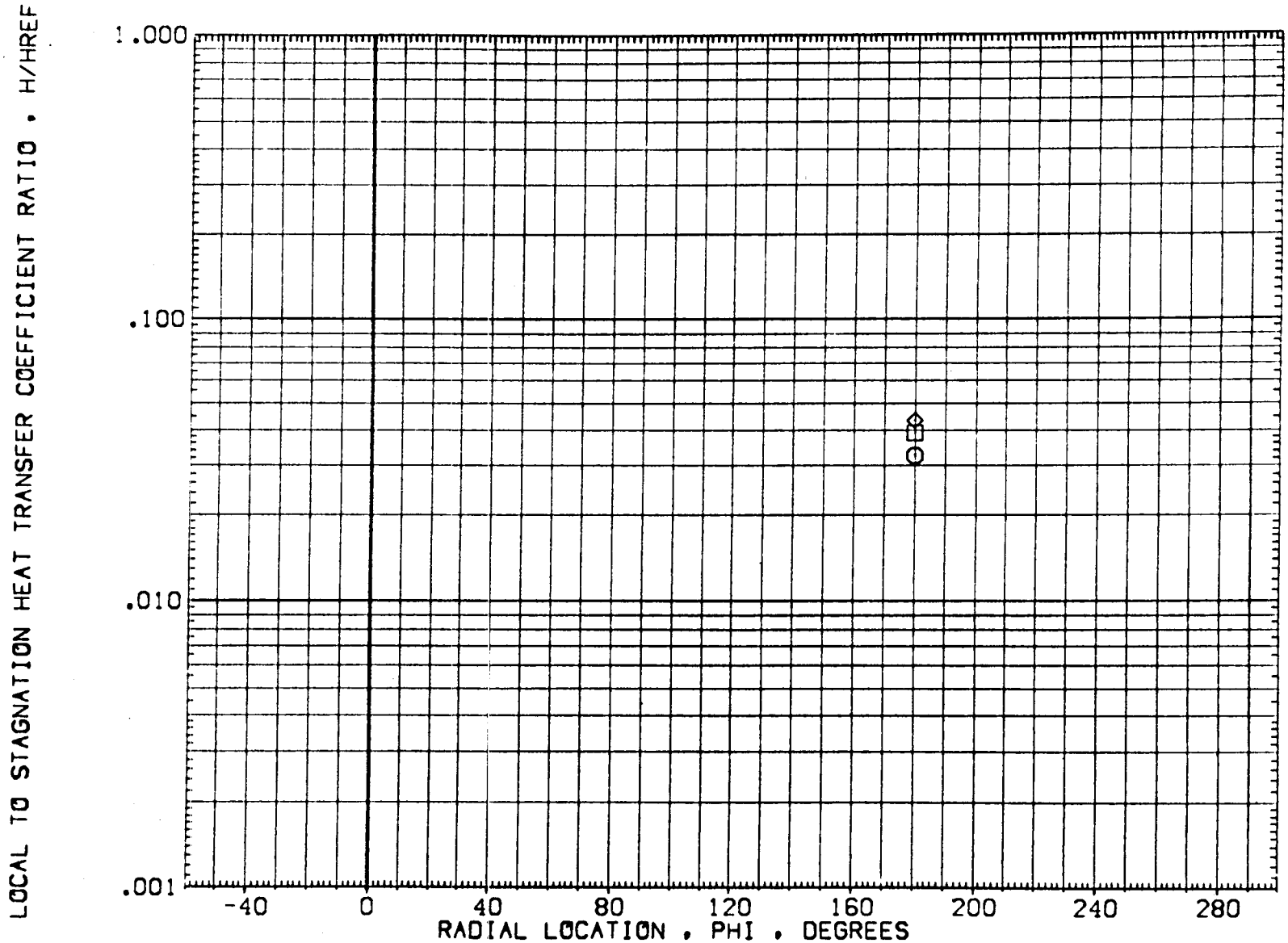


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	△	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

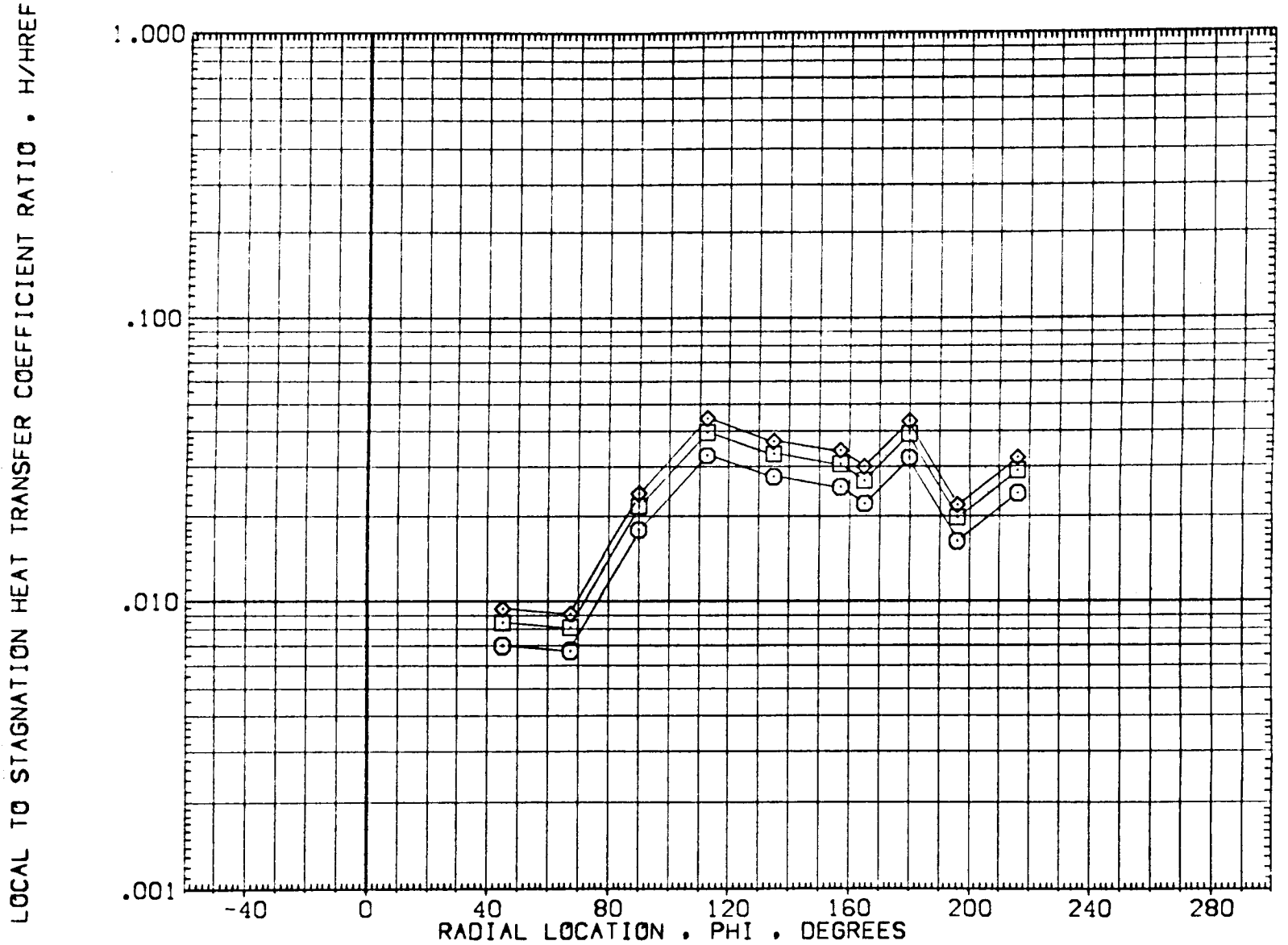


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

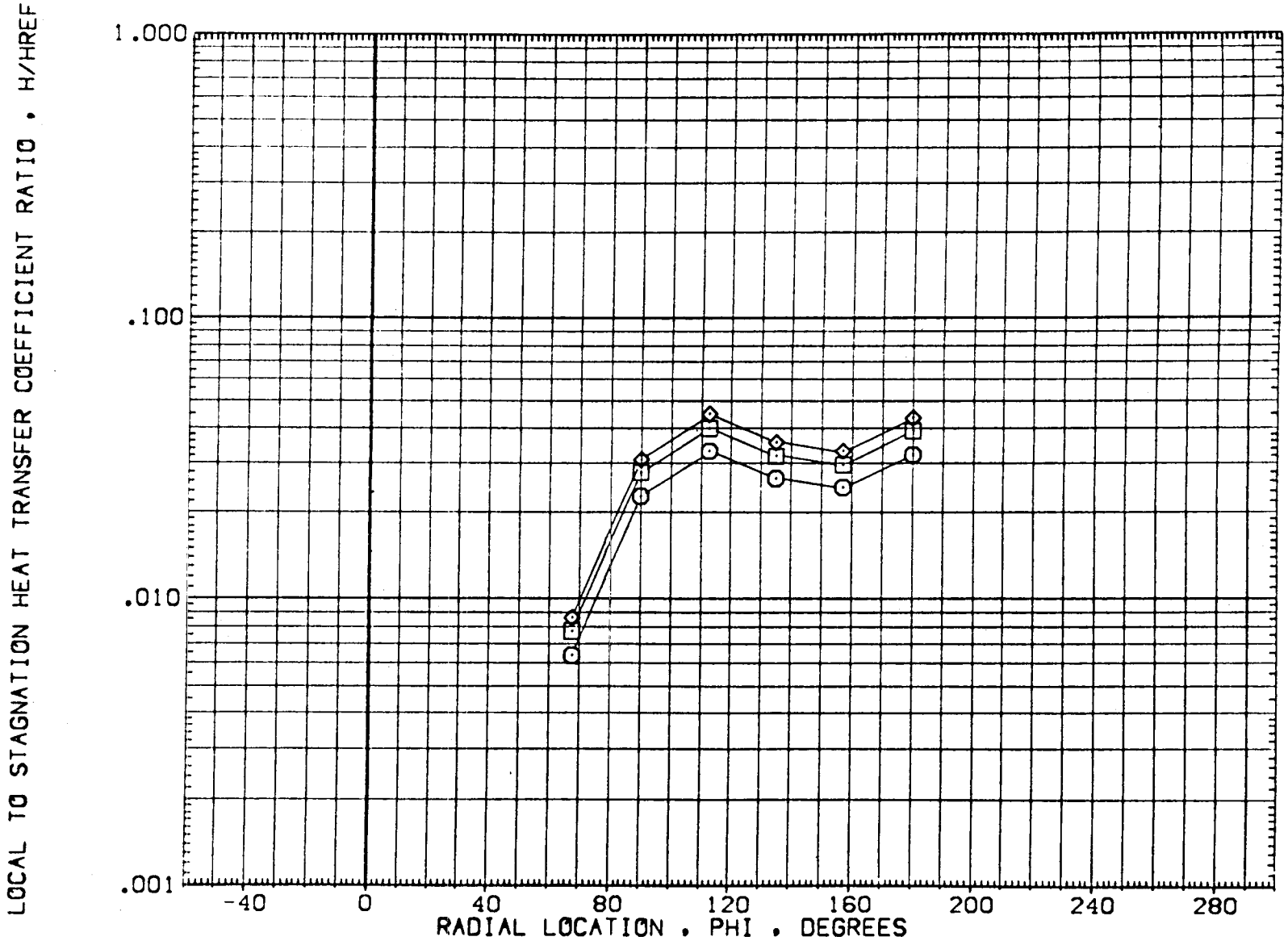


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

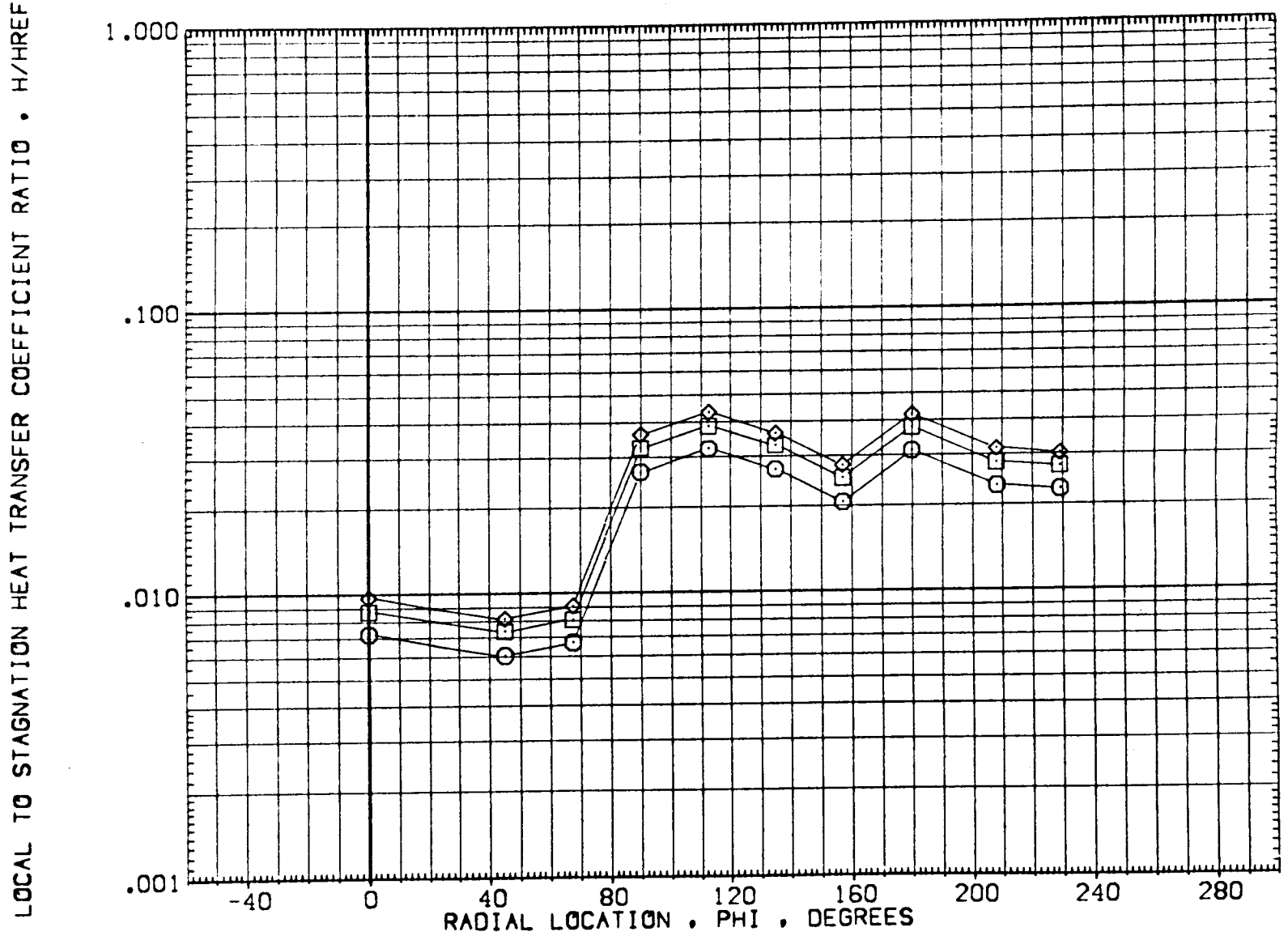


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

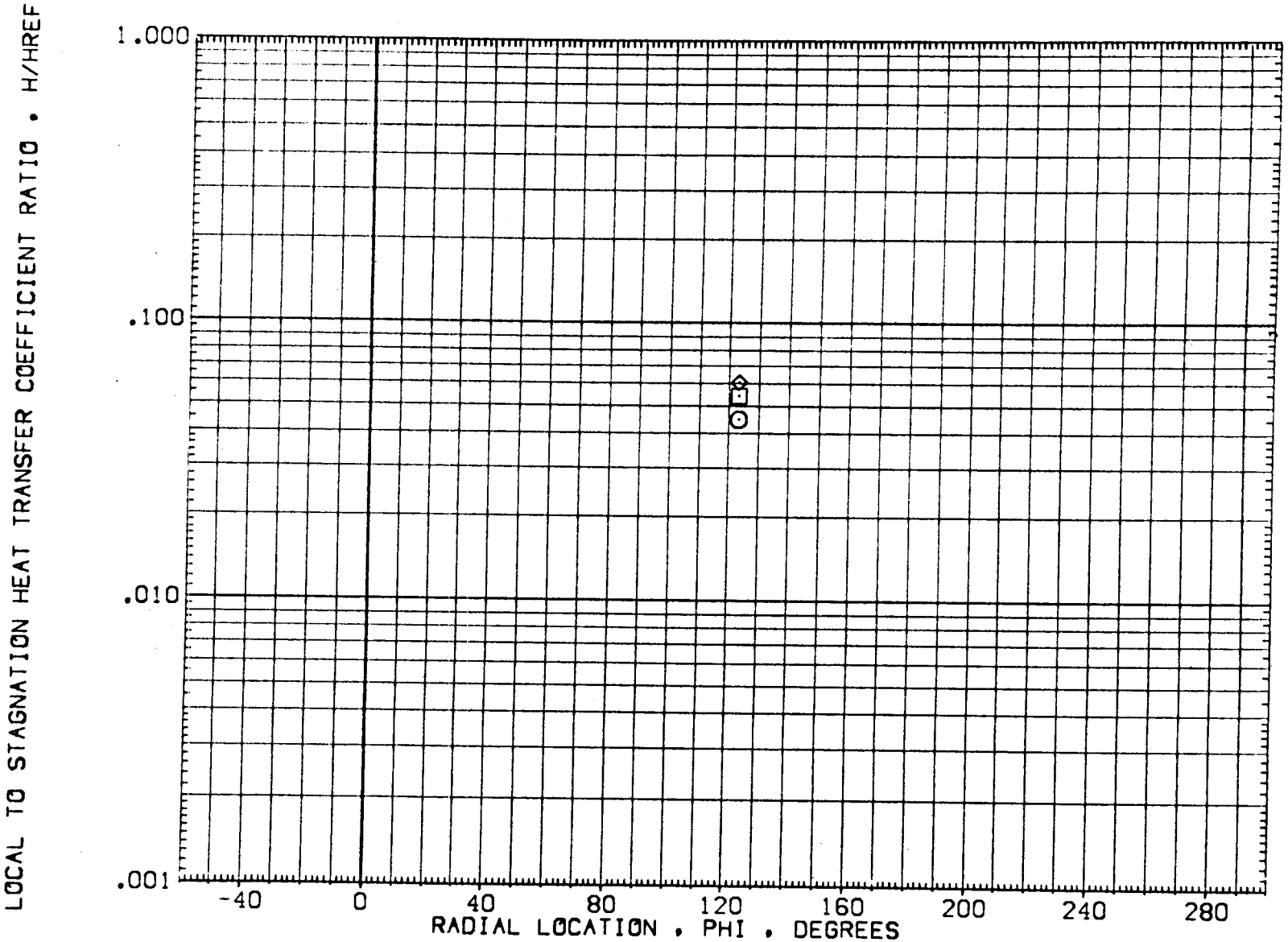


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

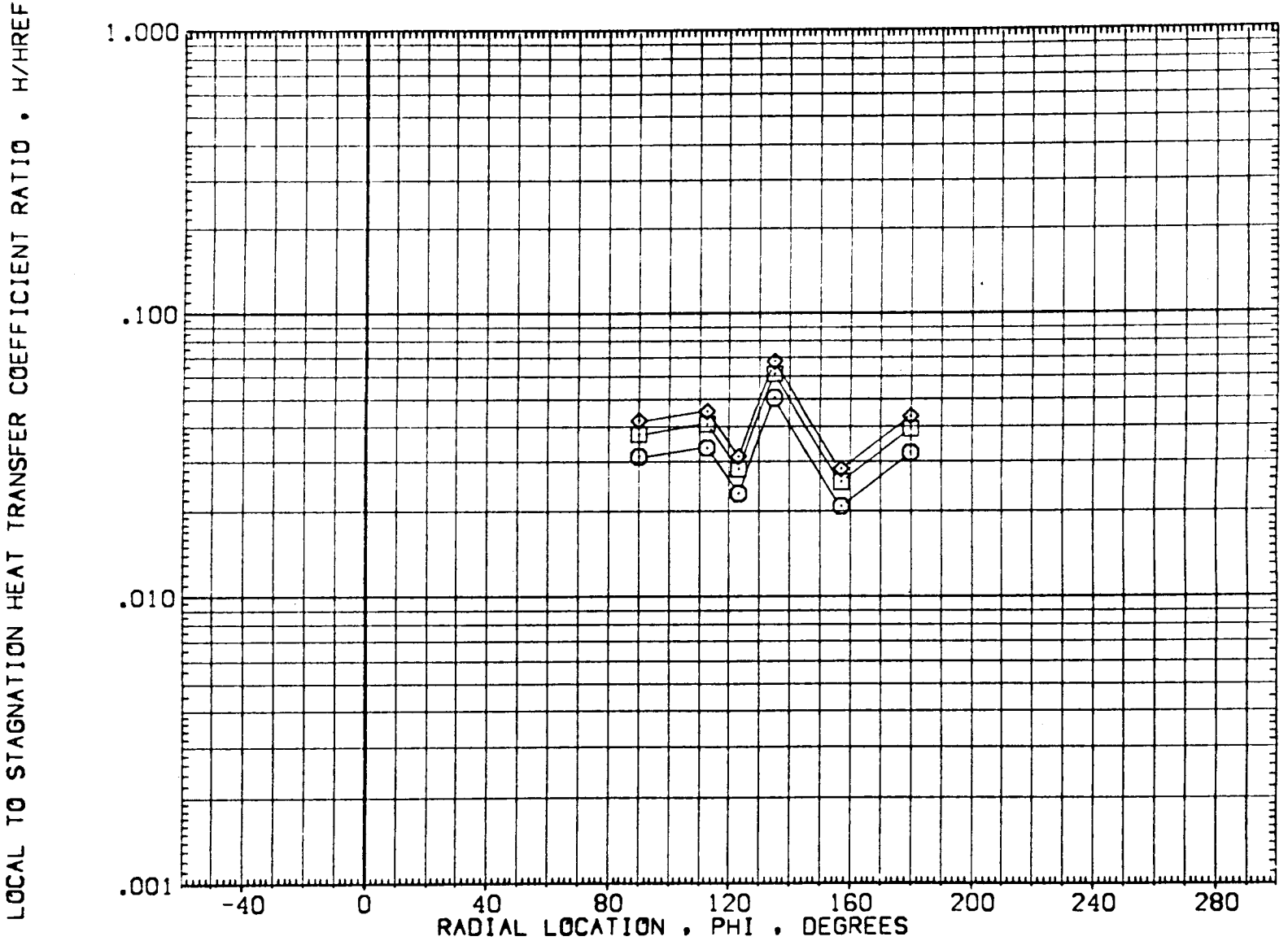


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

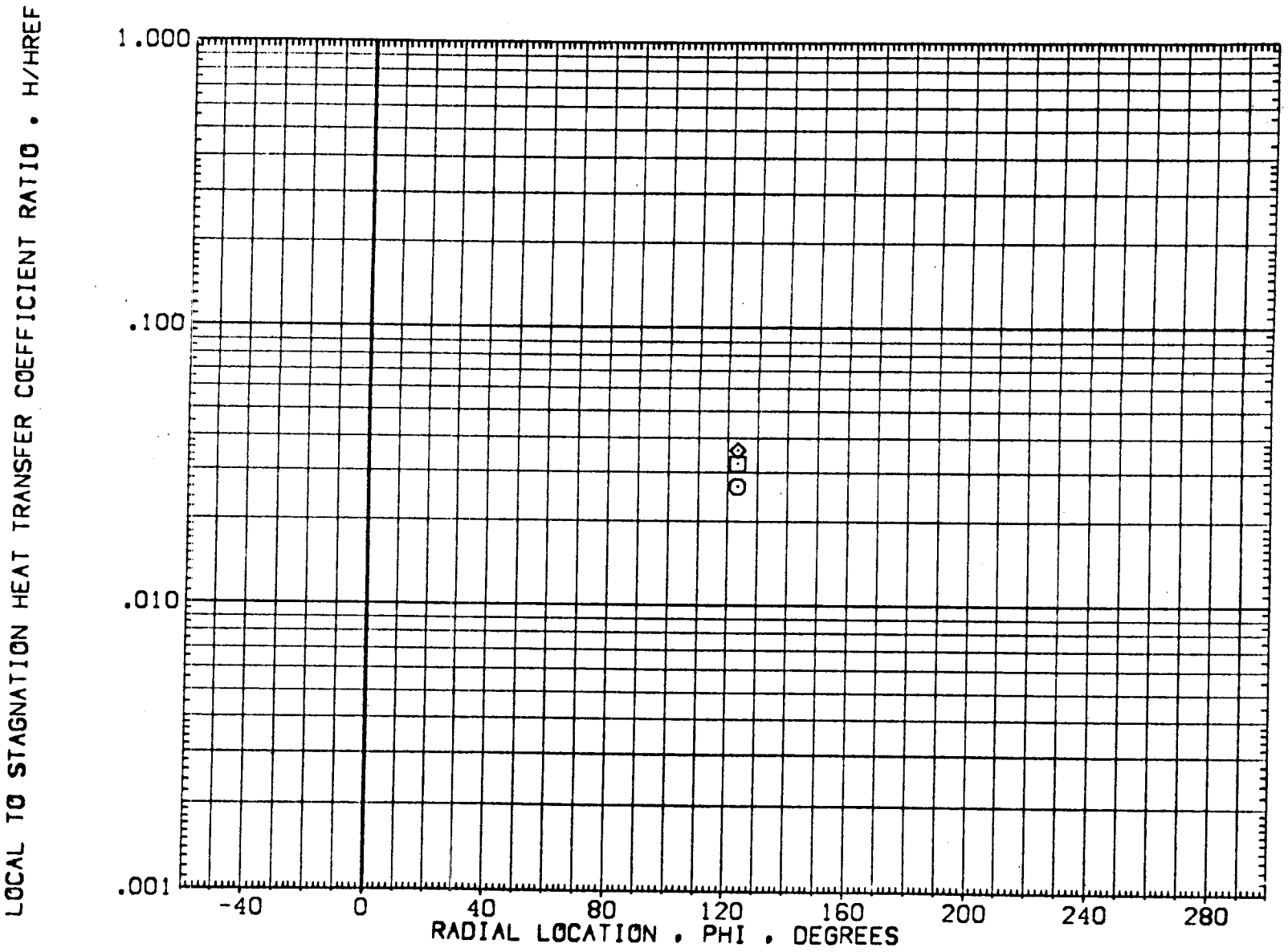


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT10)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT10)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT10)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

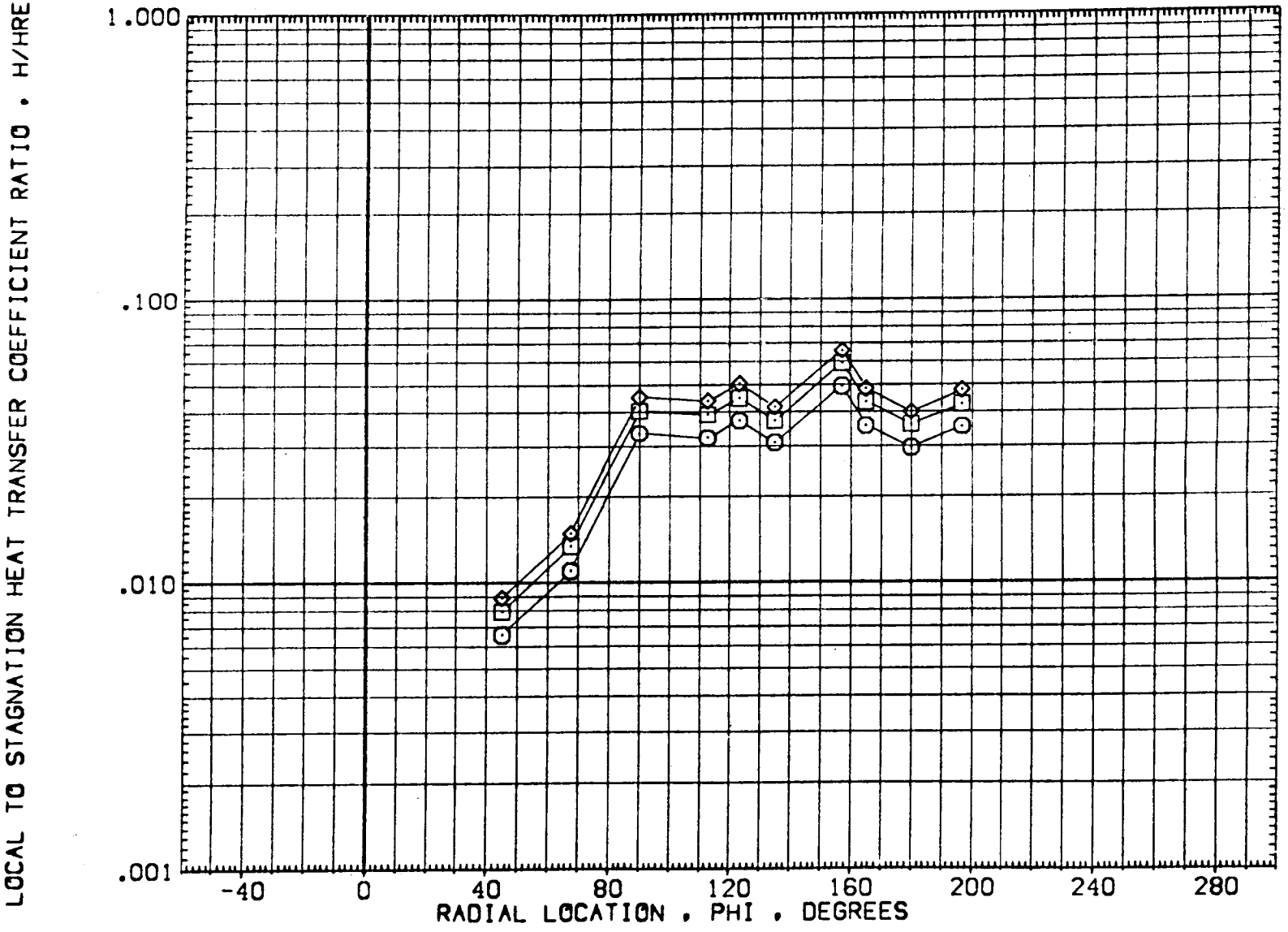


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

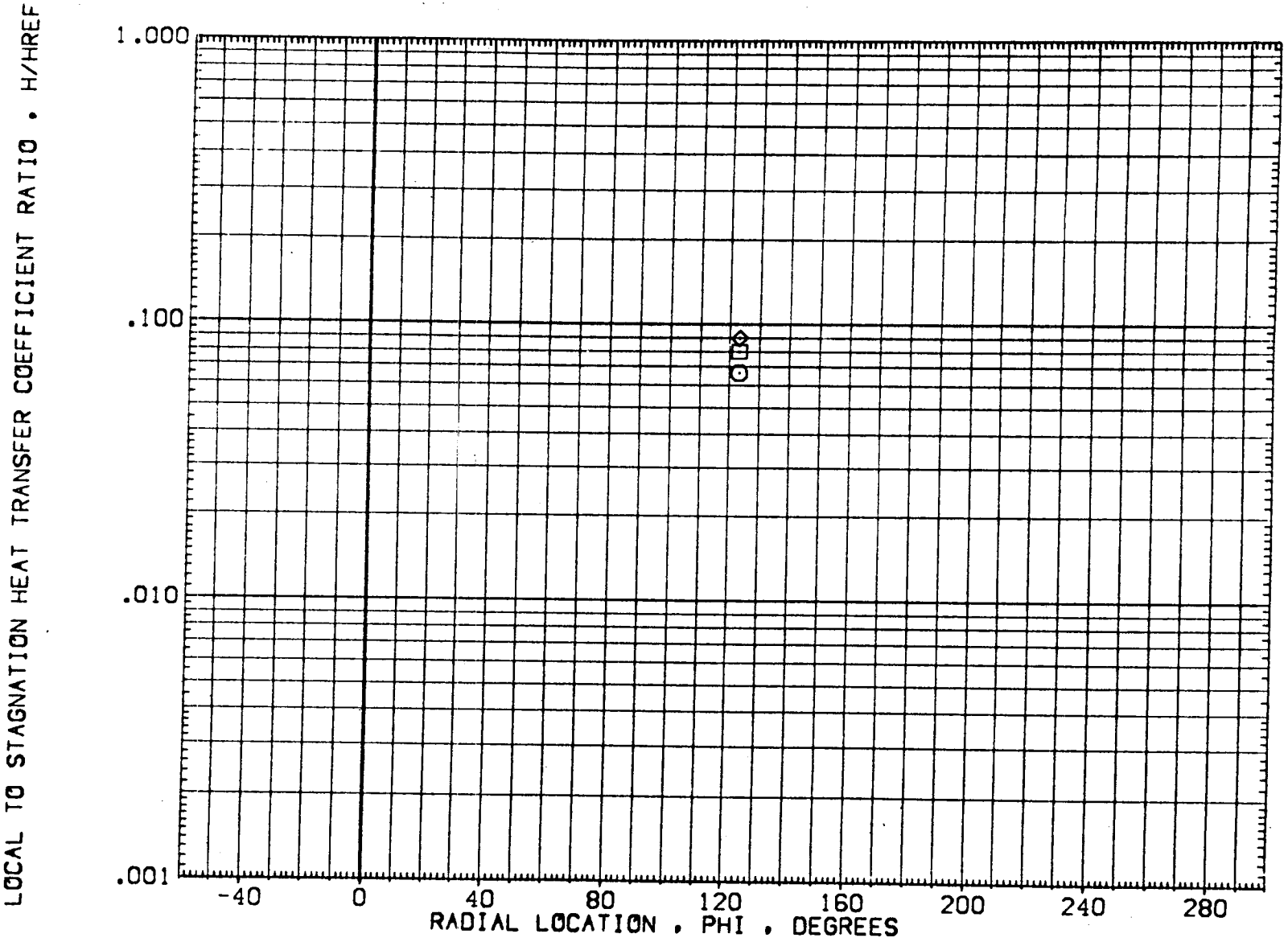


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

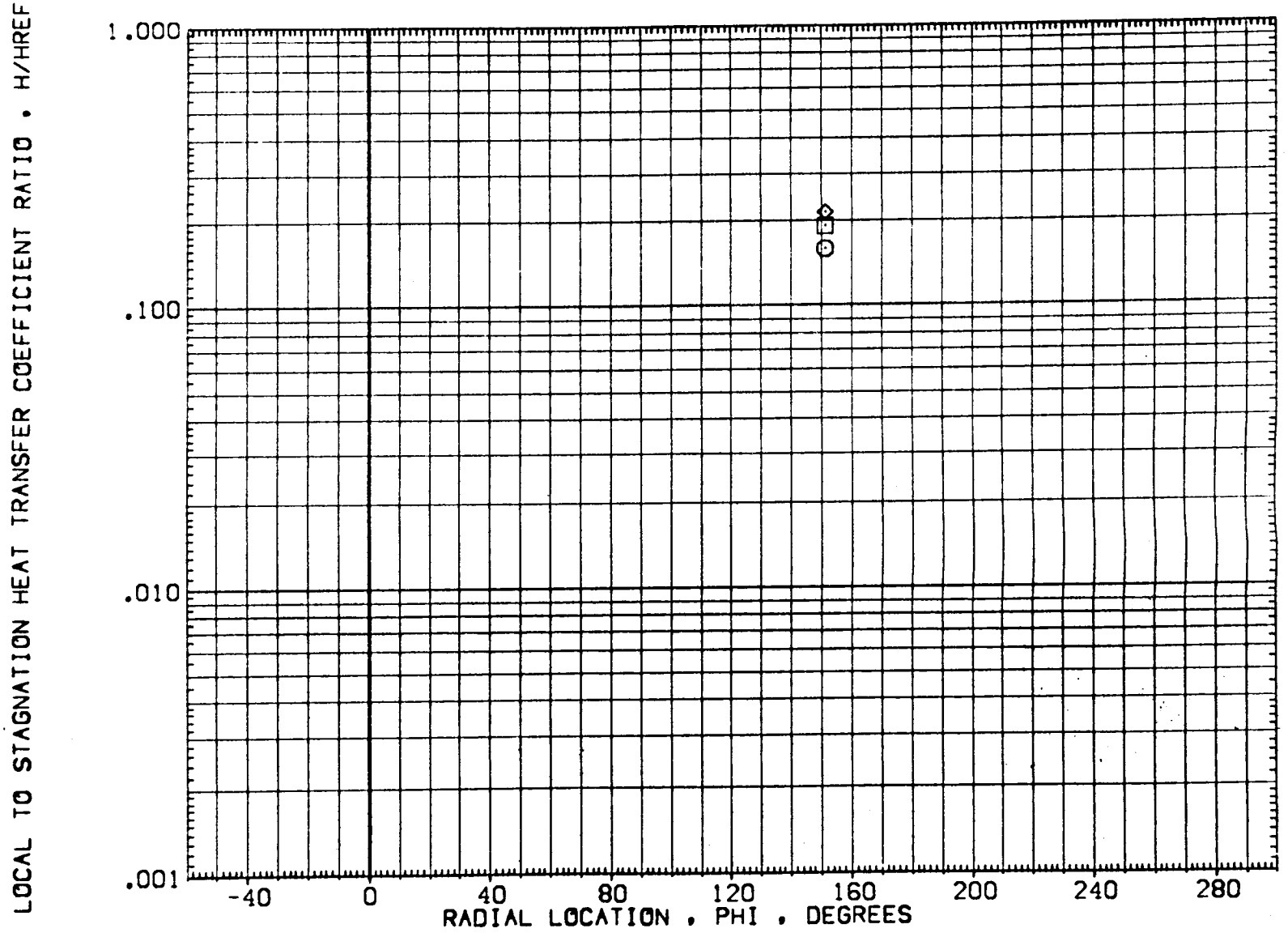


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

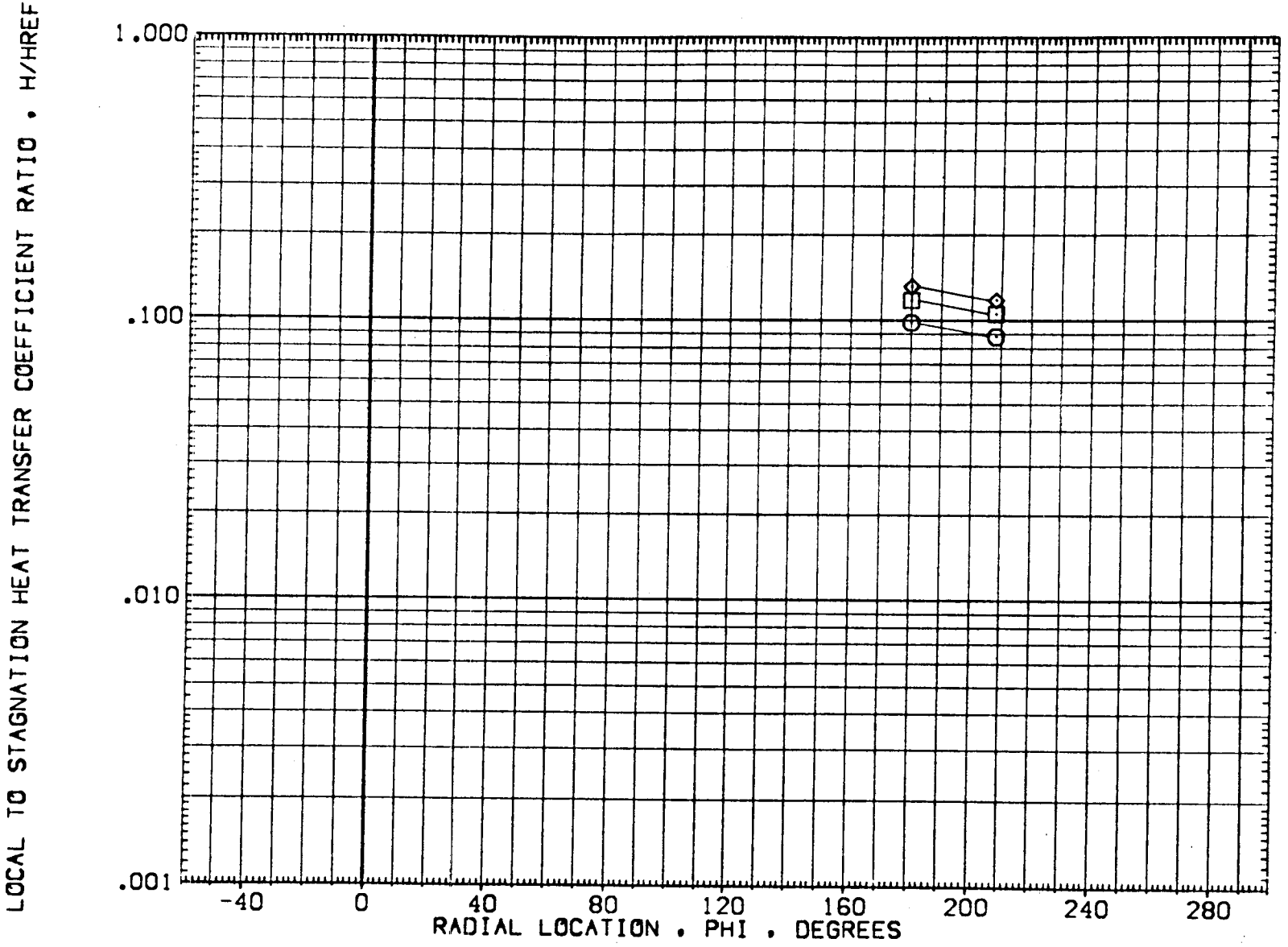


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

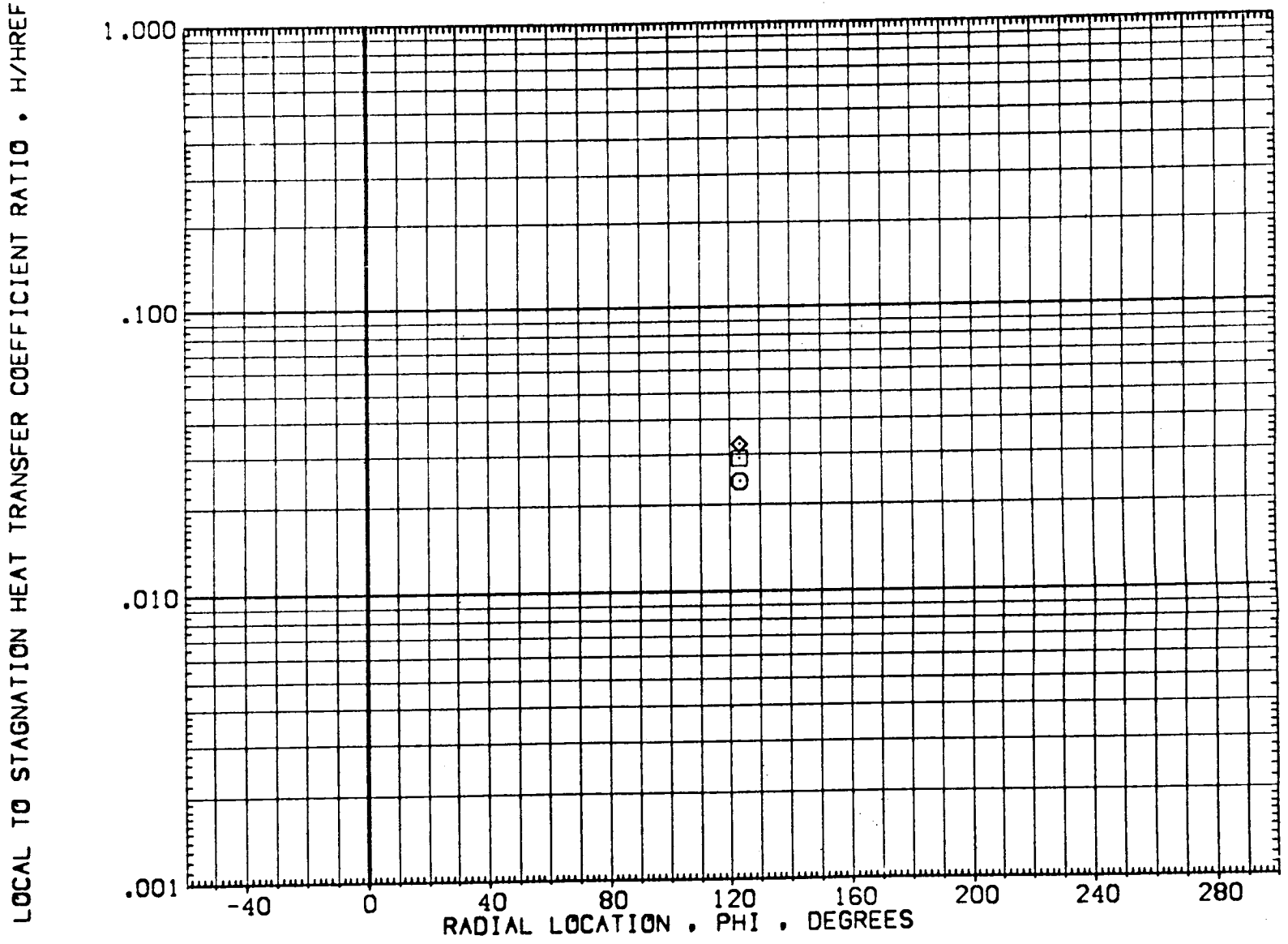


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITIO)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITIO)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.900
(BEITIO)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	1.500	.850

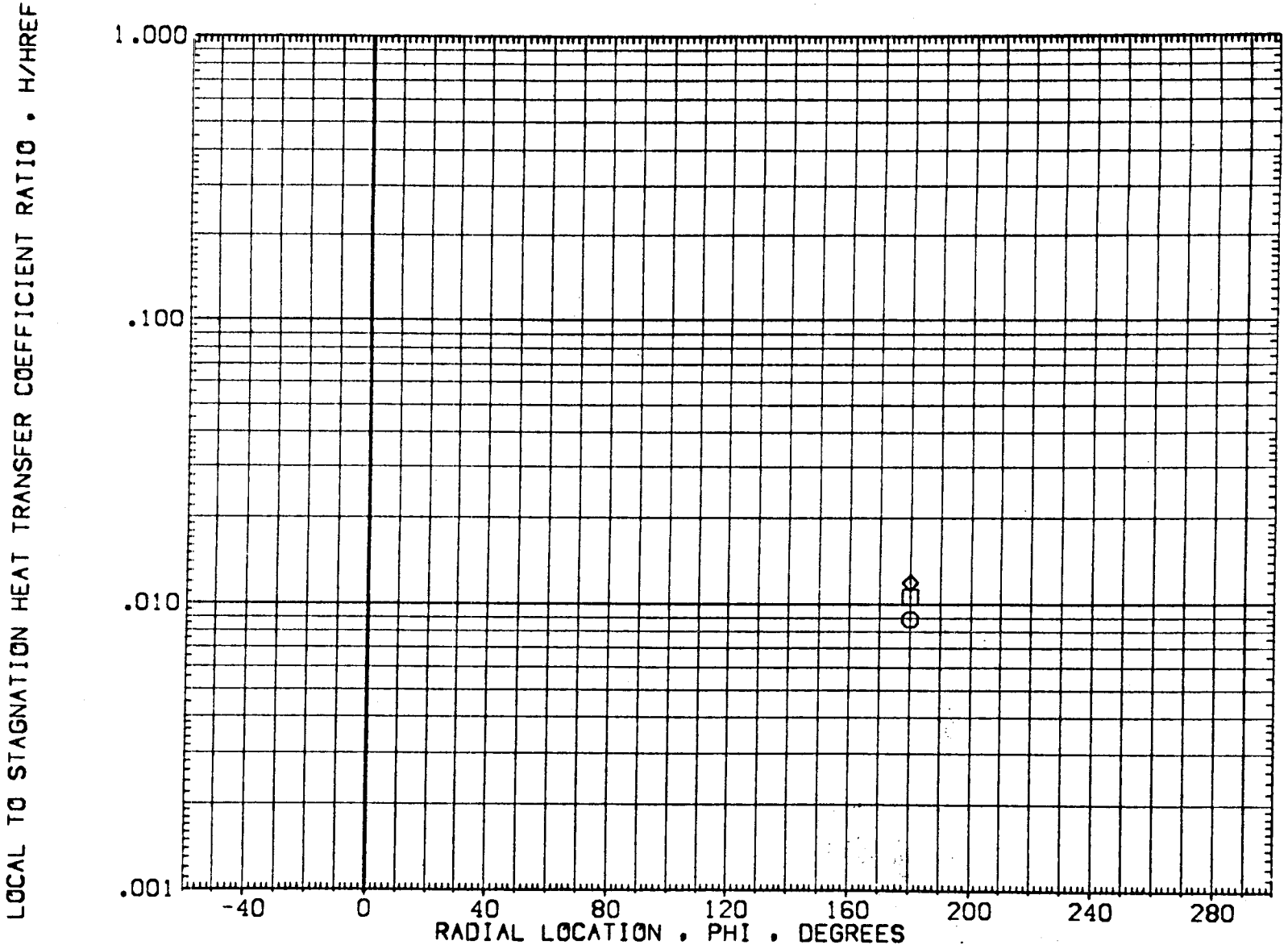


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITII]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITII]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITII]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

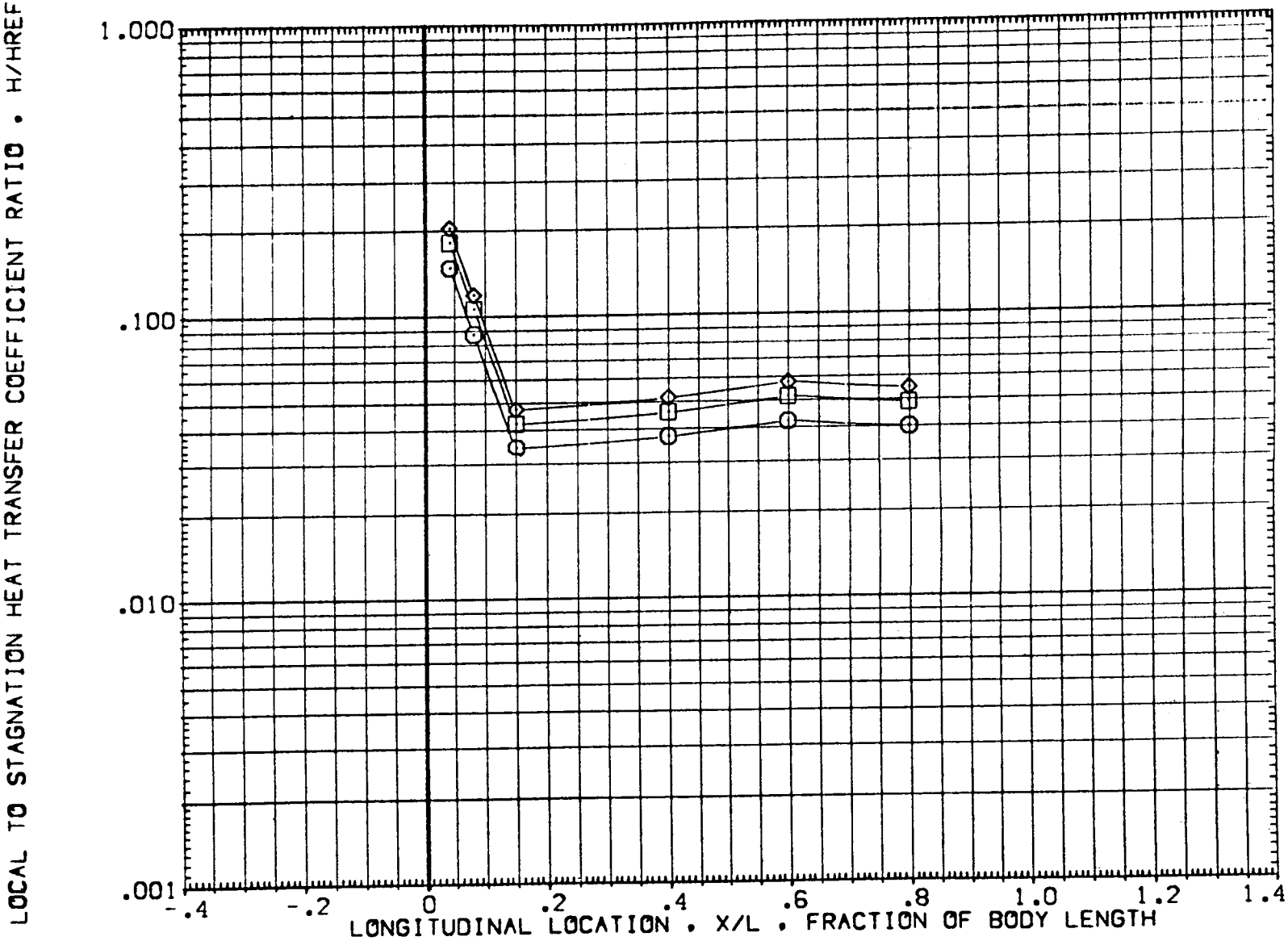


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

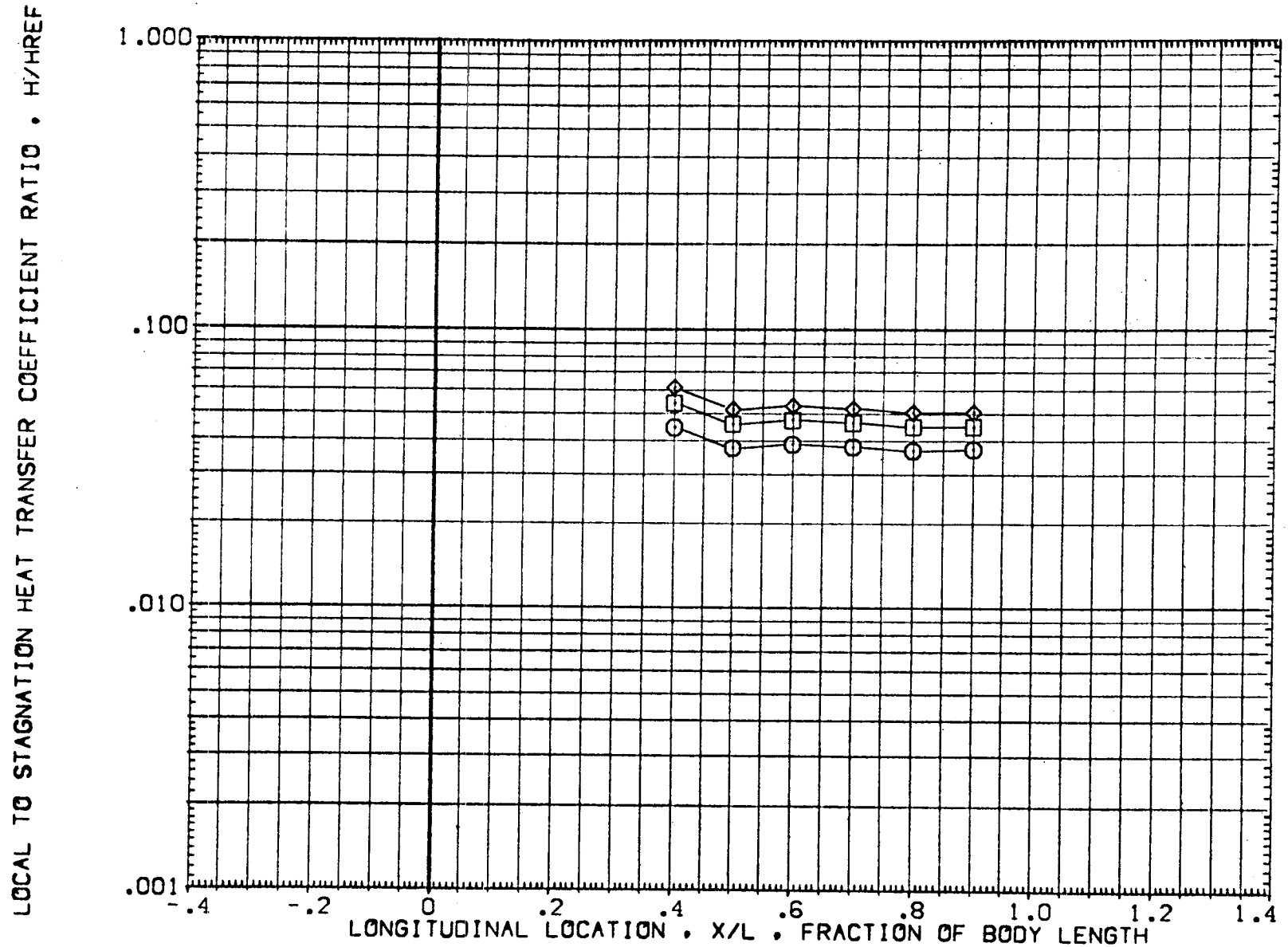


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T!!)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T!!)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T!!)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

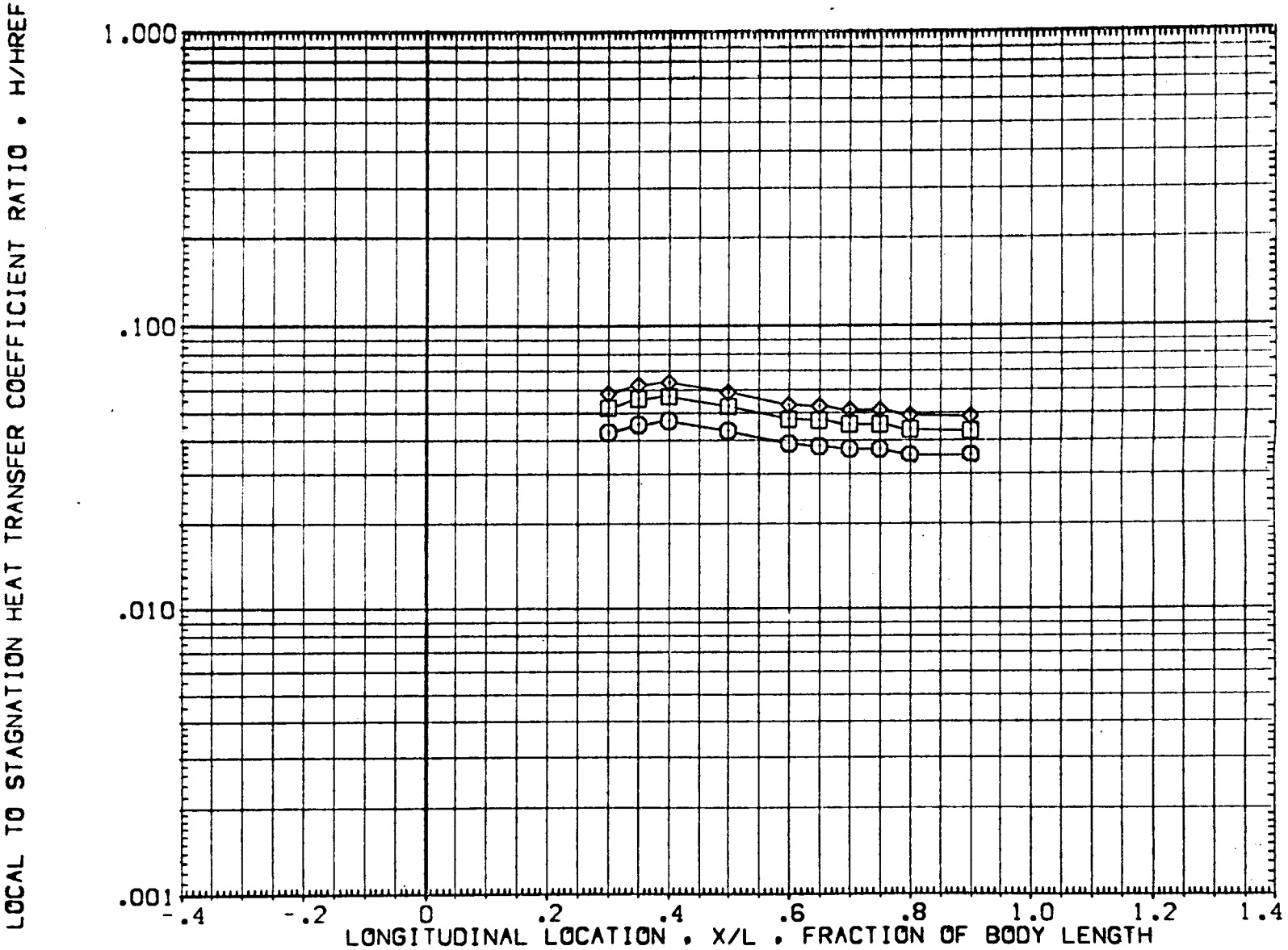


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

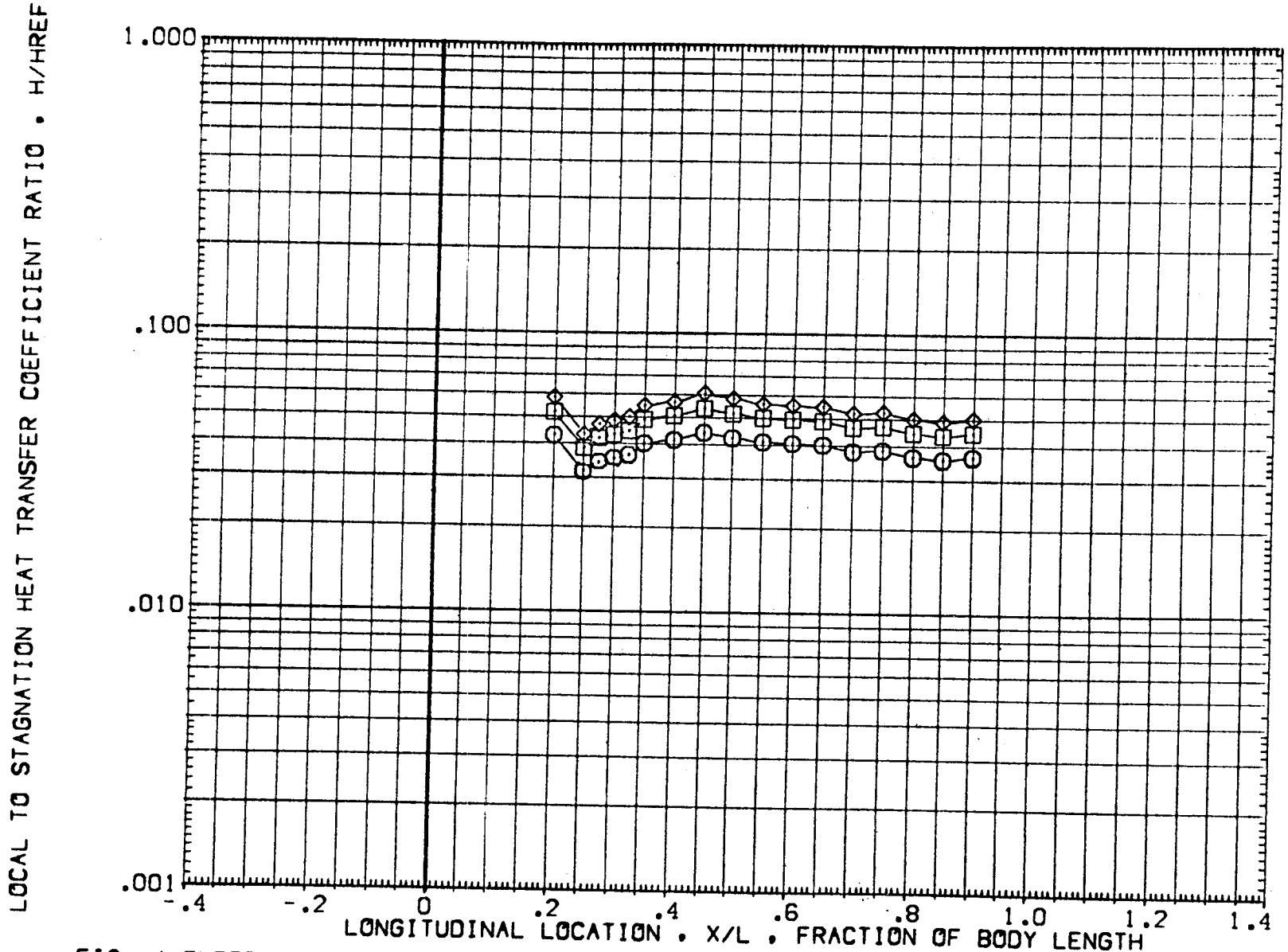


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

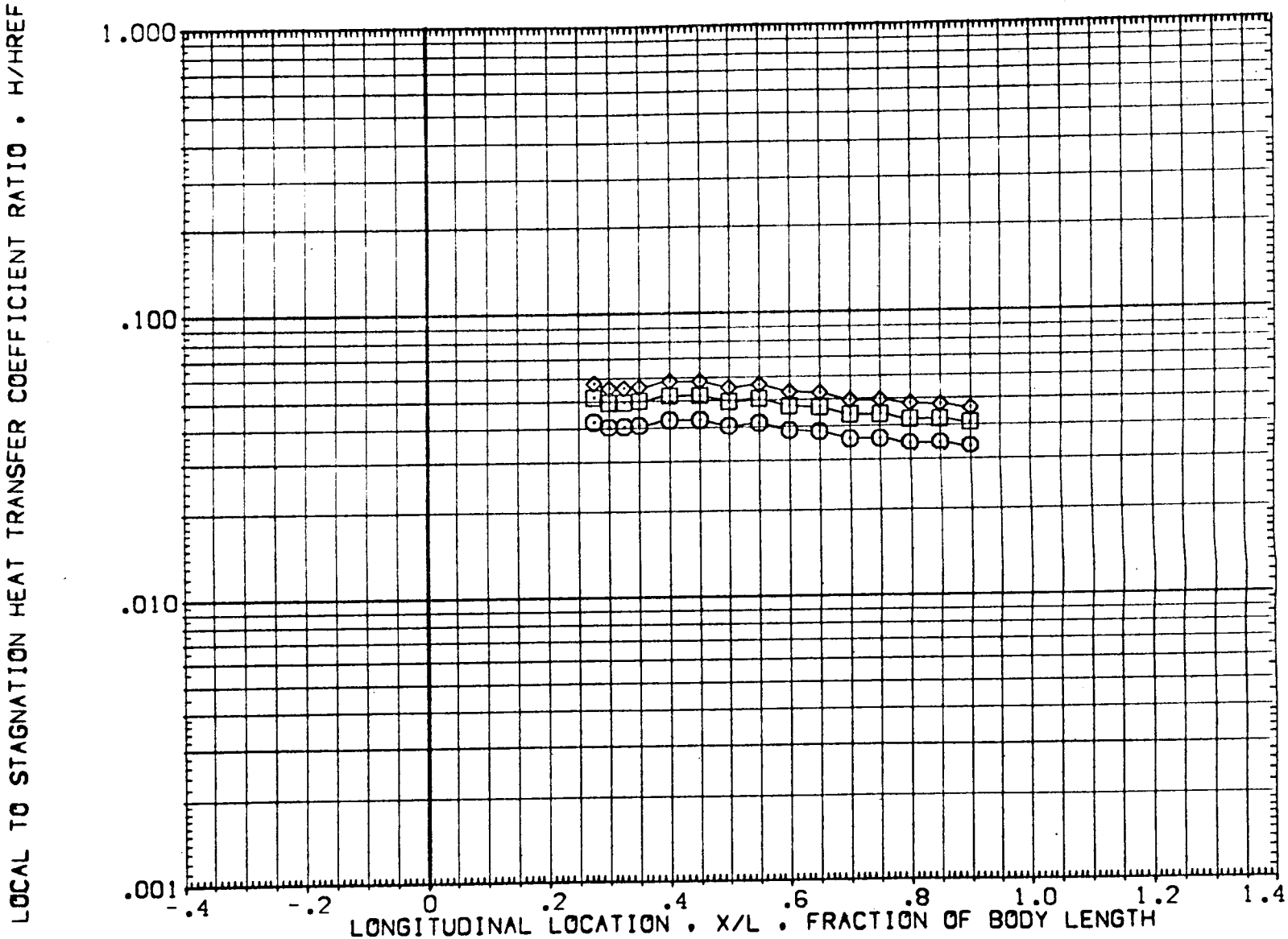


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

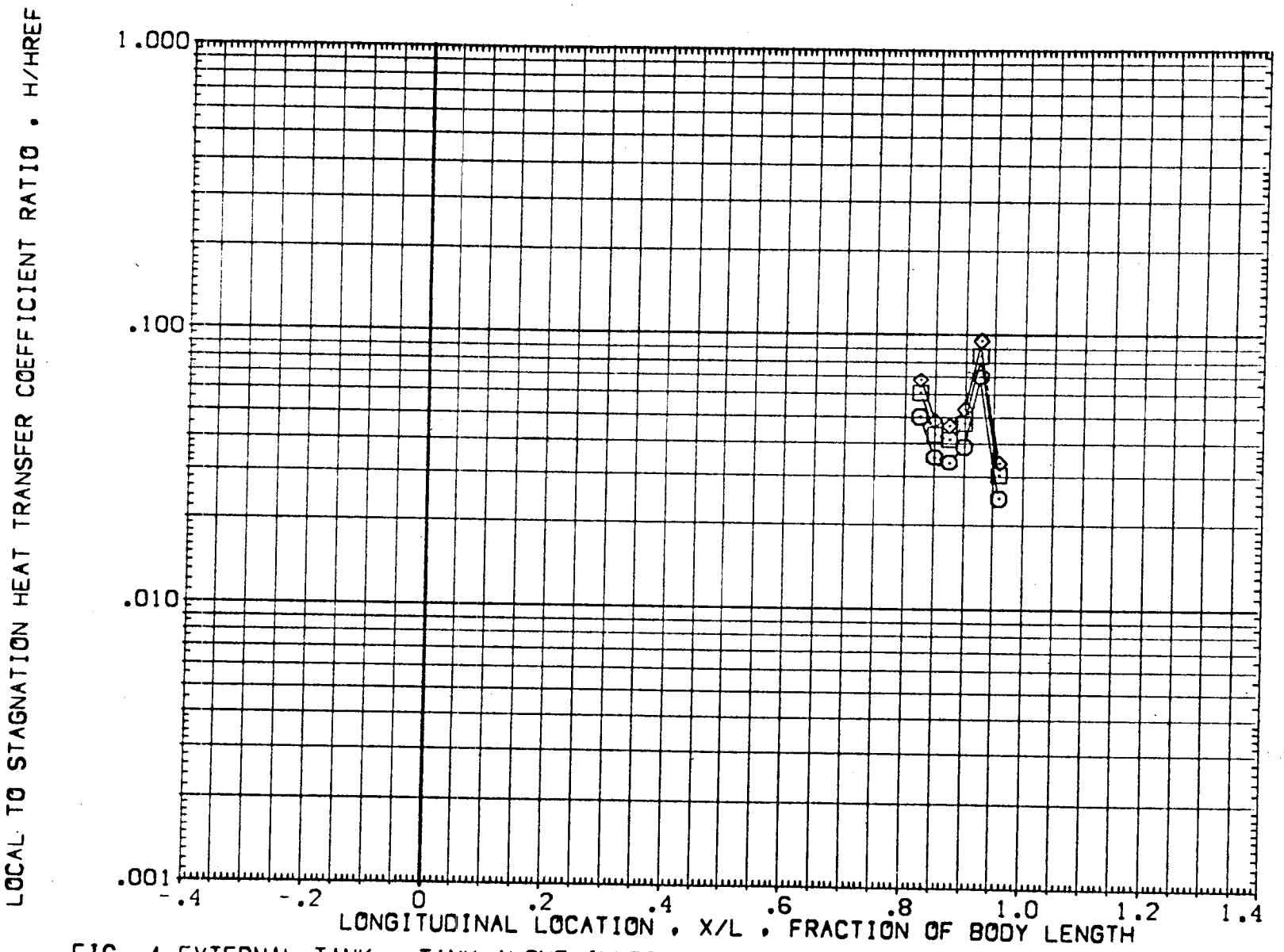


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

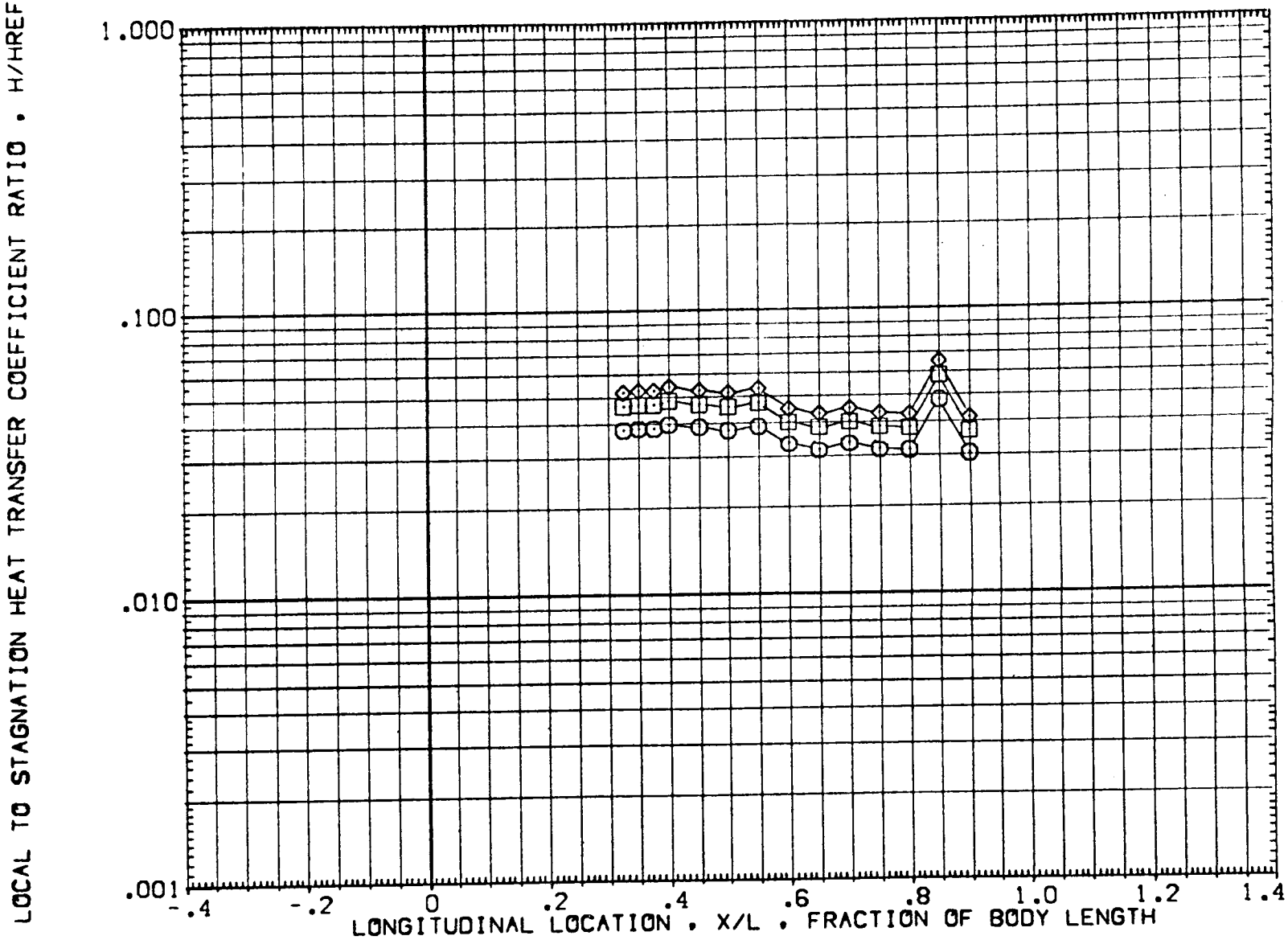


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

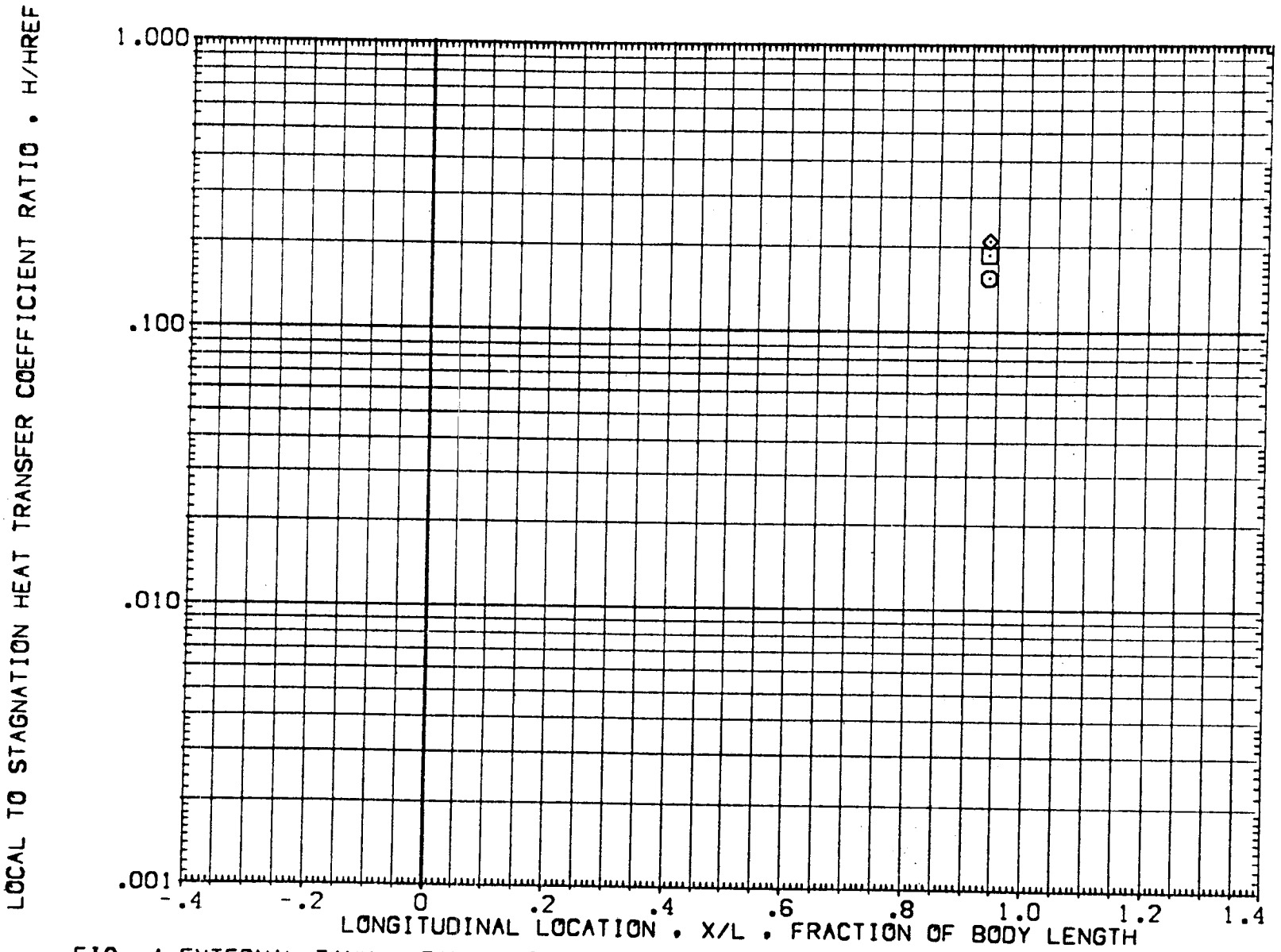


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1T11]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AE1T11]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BE1T11]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

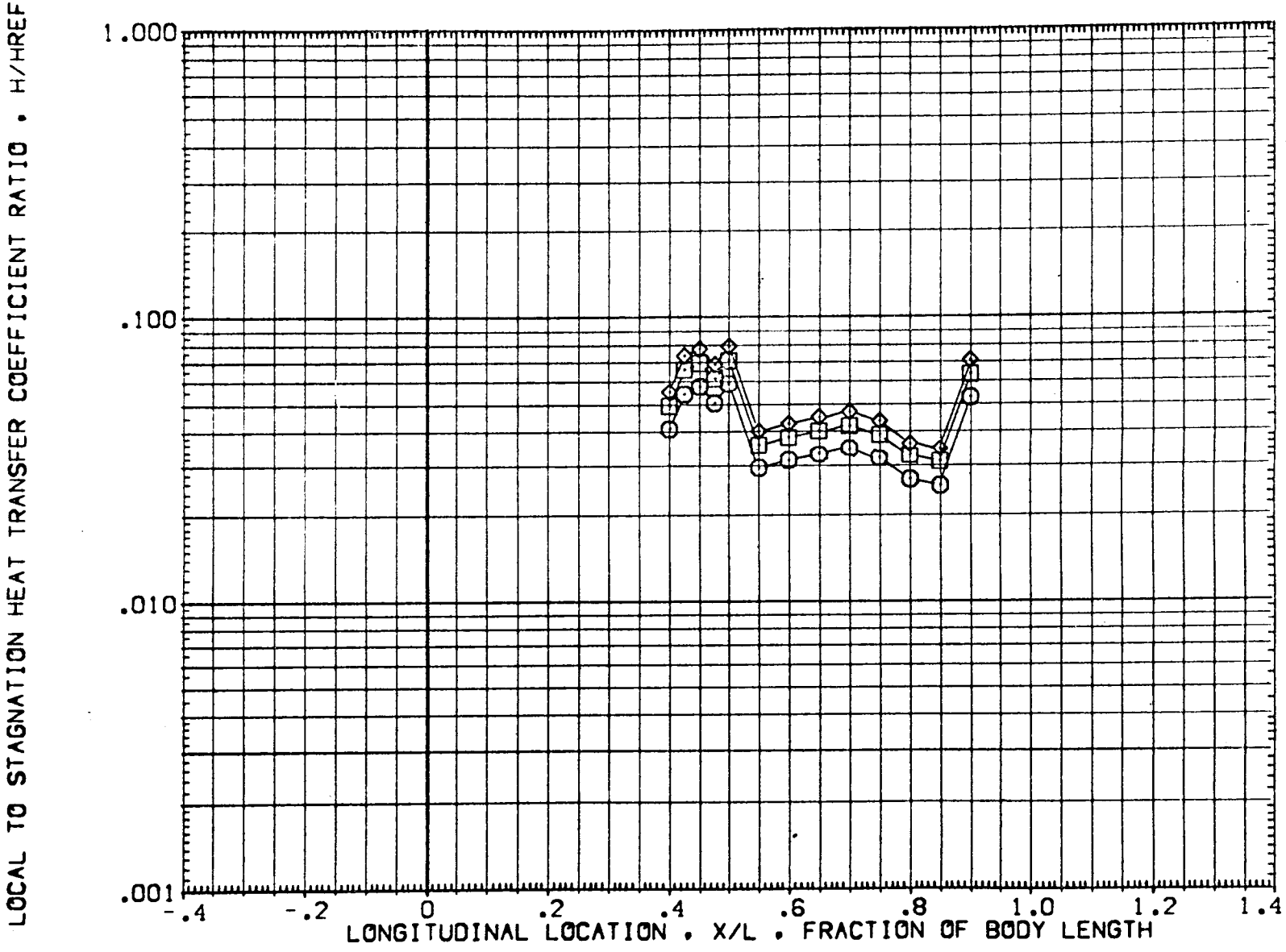


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

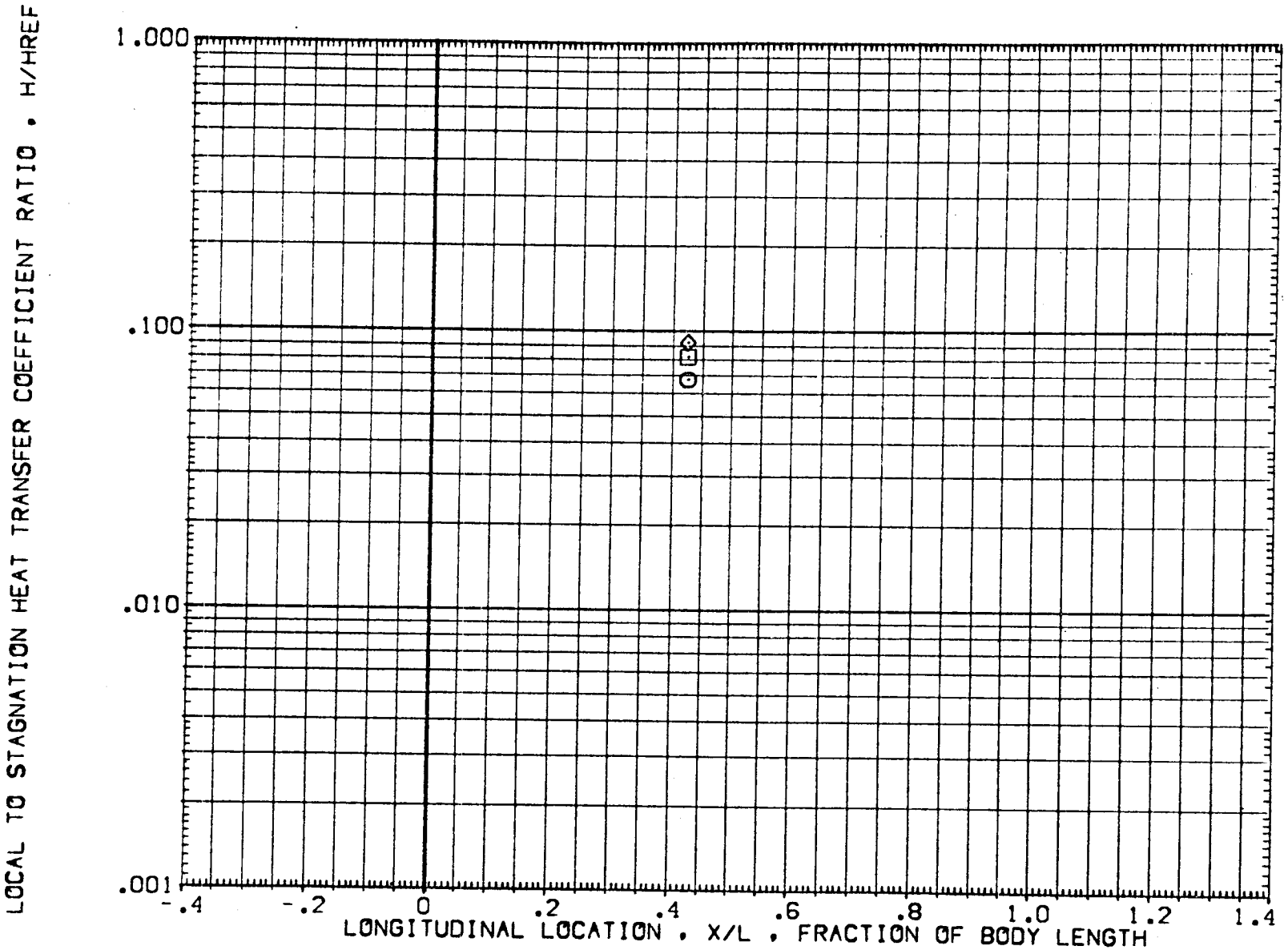


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

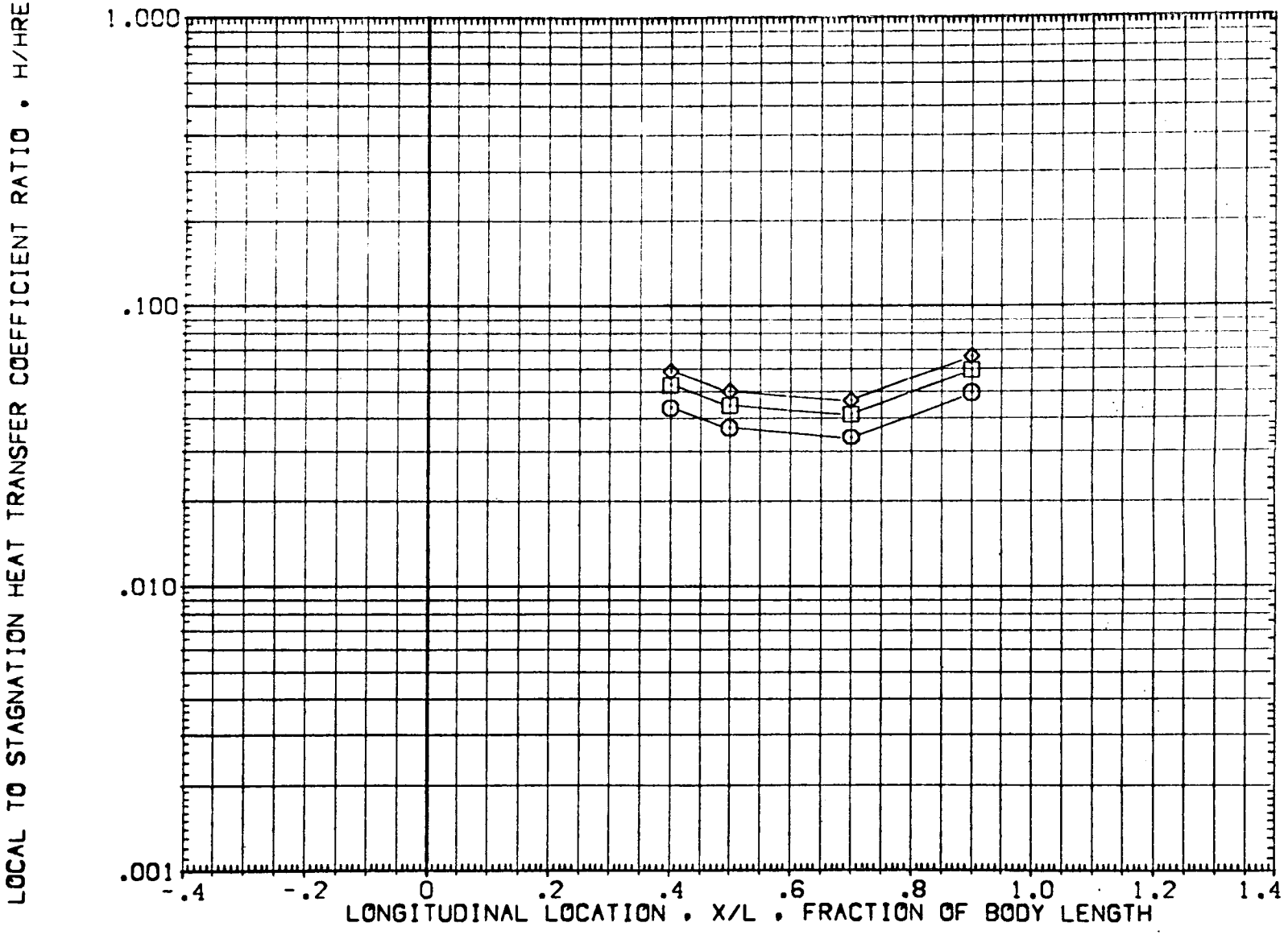


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

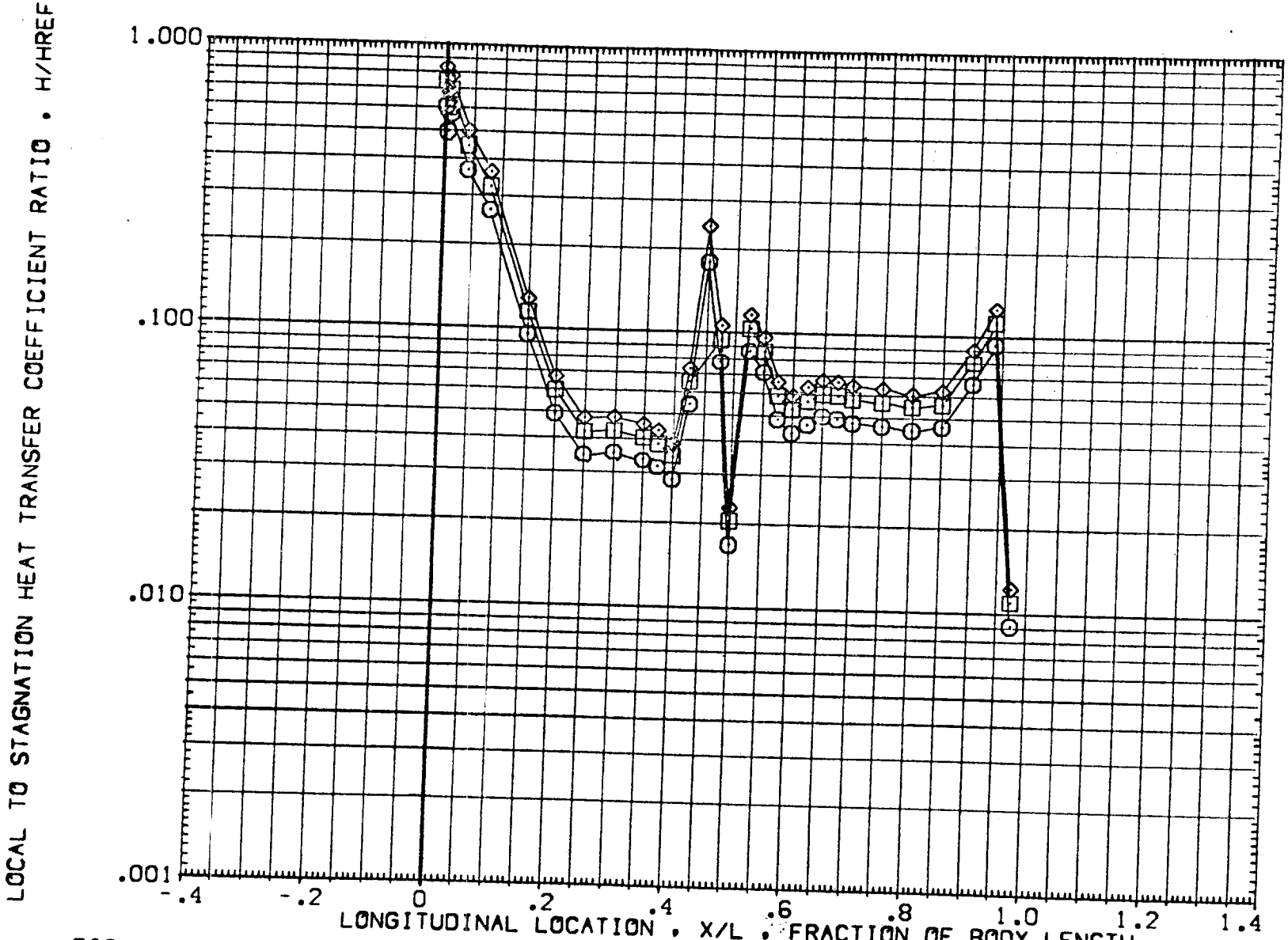


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

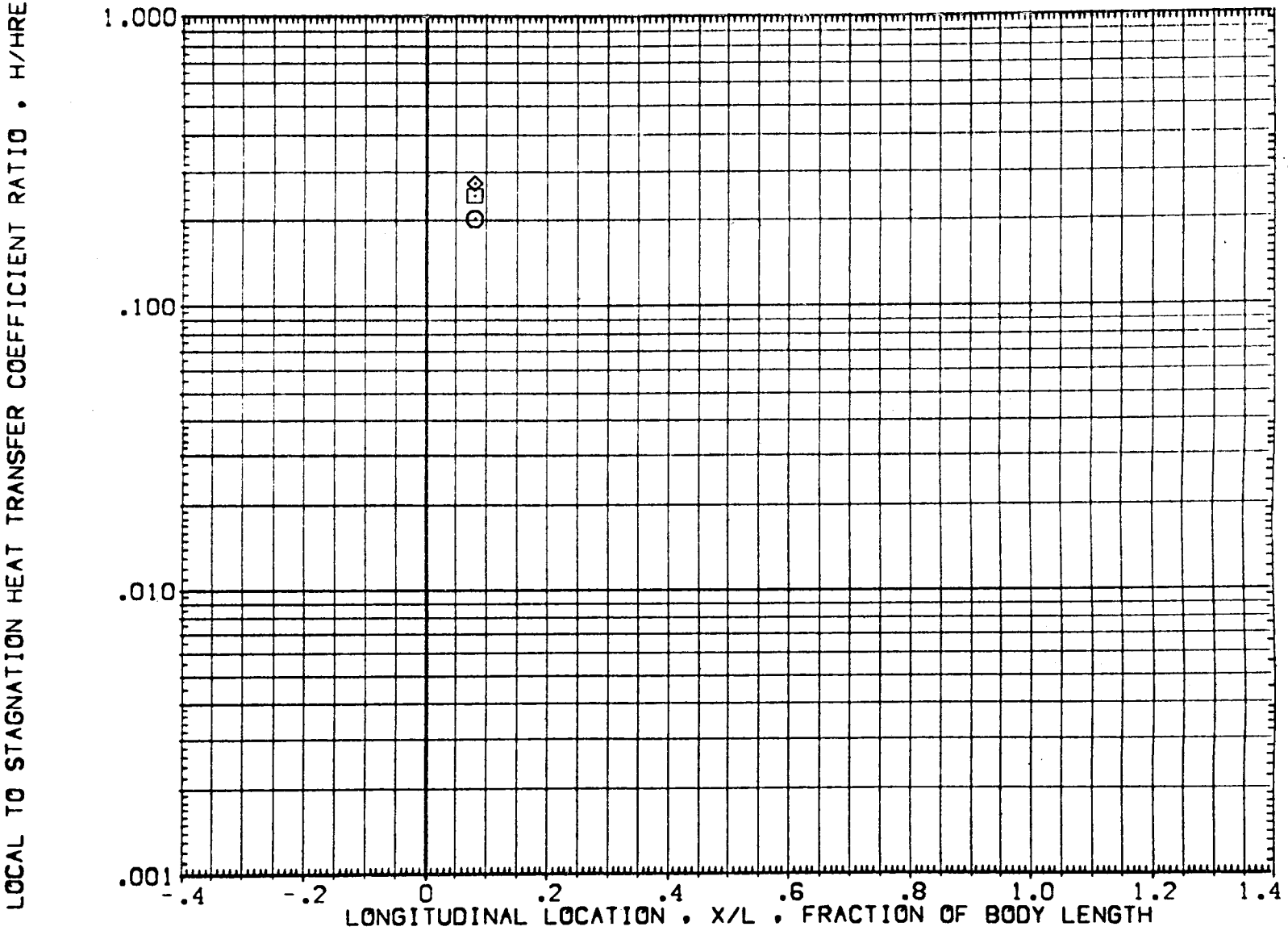


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

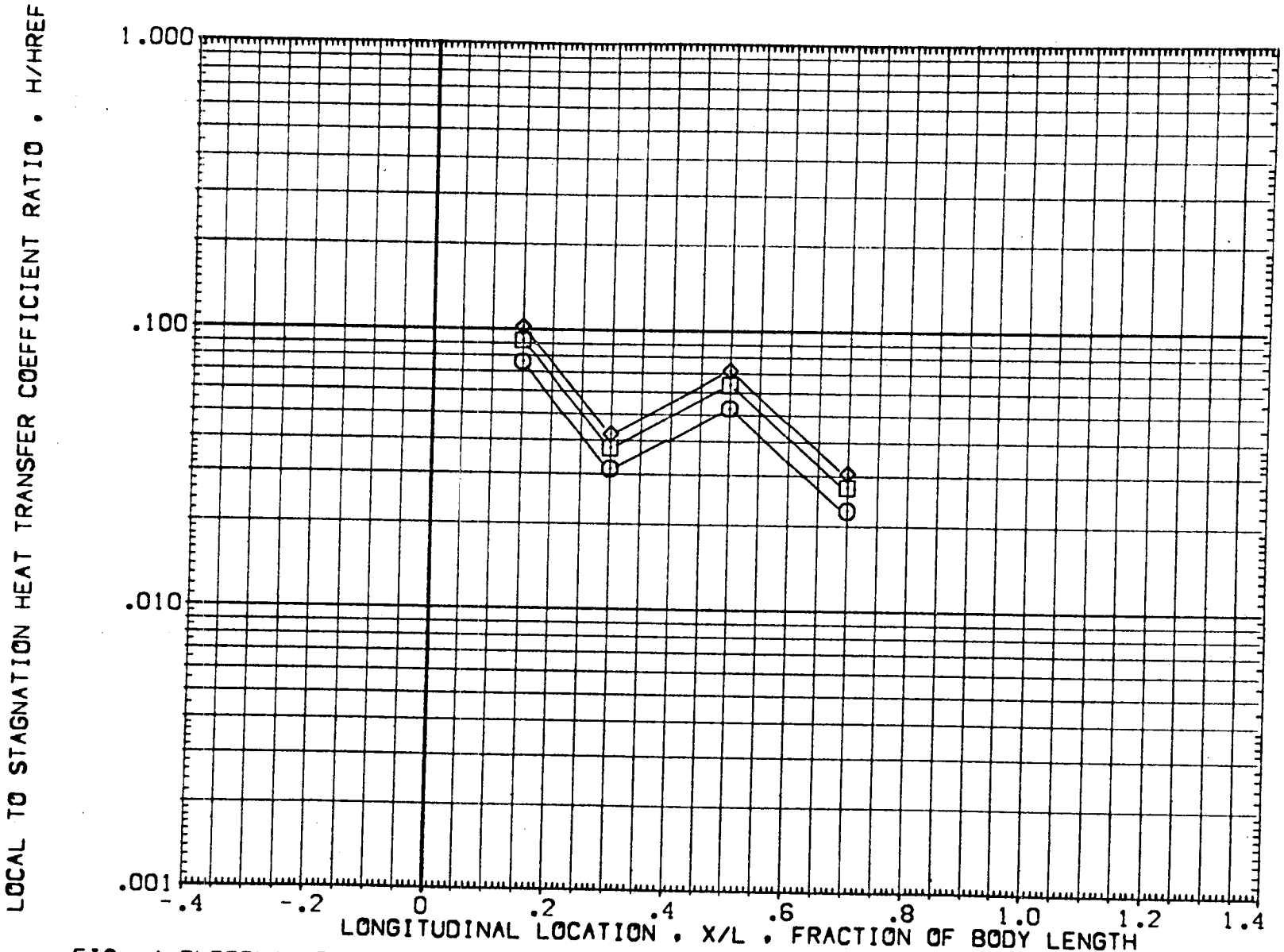


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	DATA NOT AVAILABLE		.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

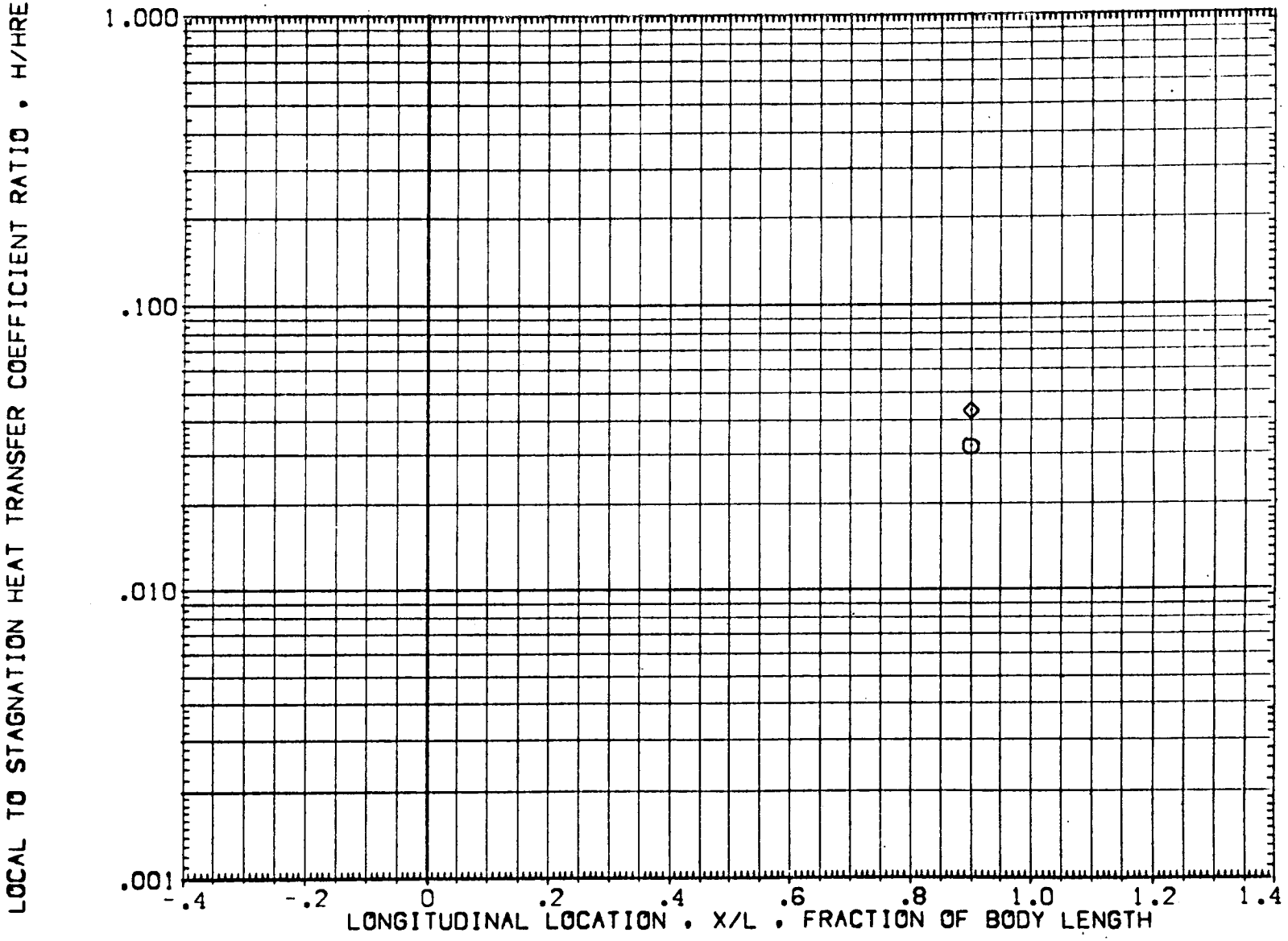


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

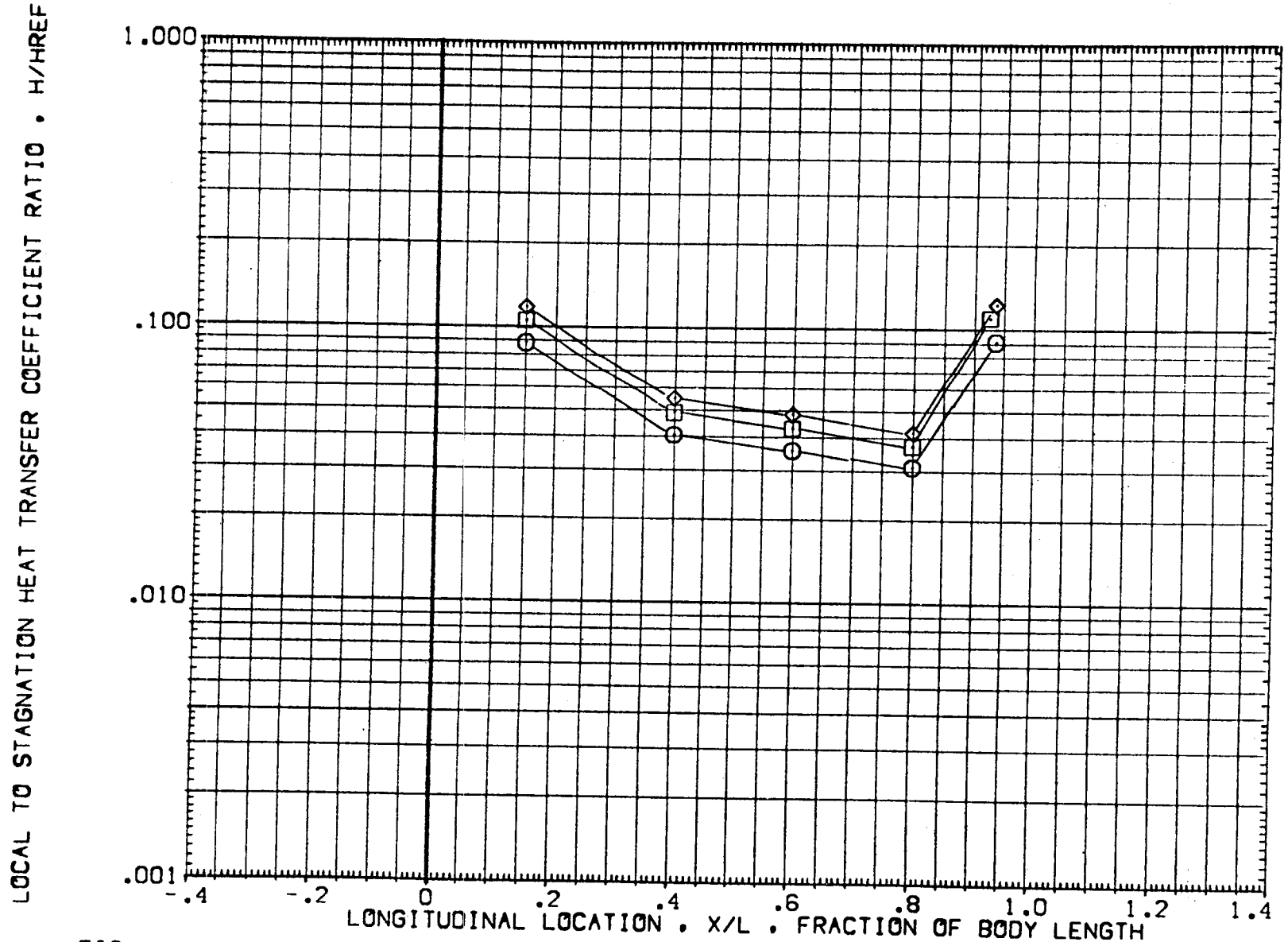


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

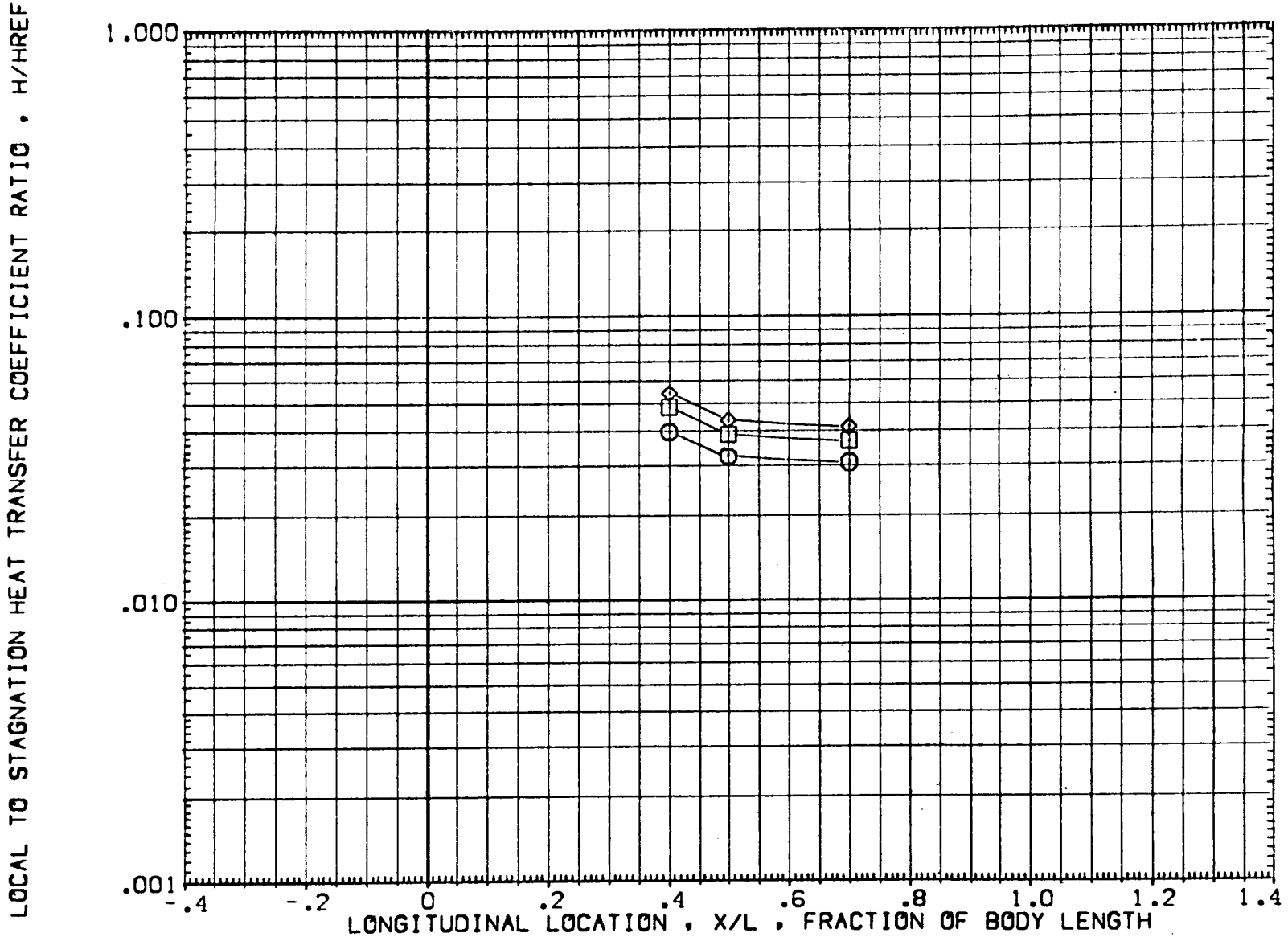


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

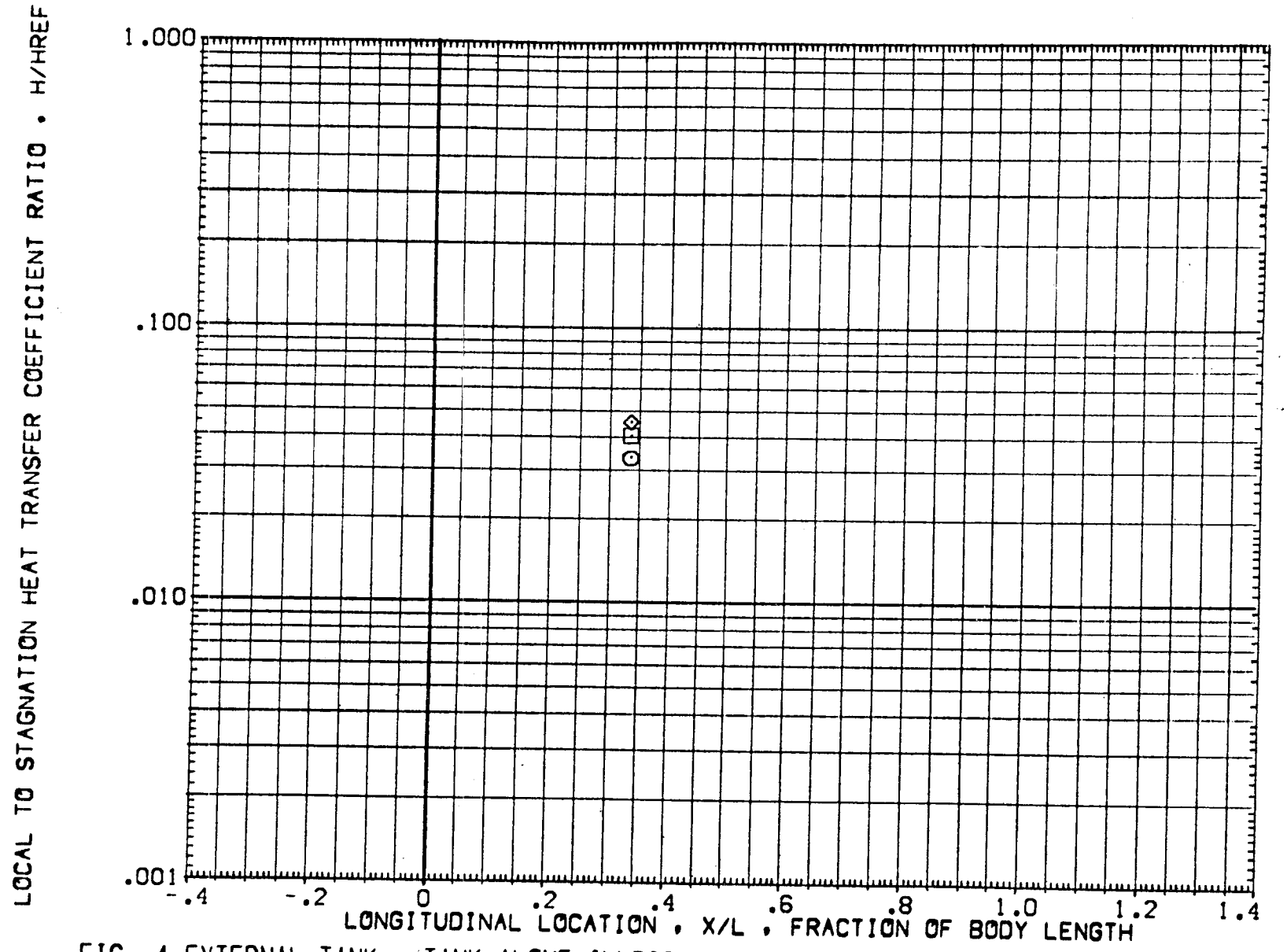


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITI]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITI]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITI]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

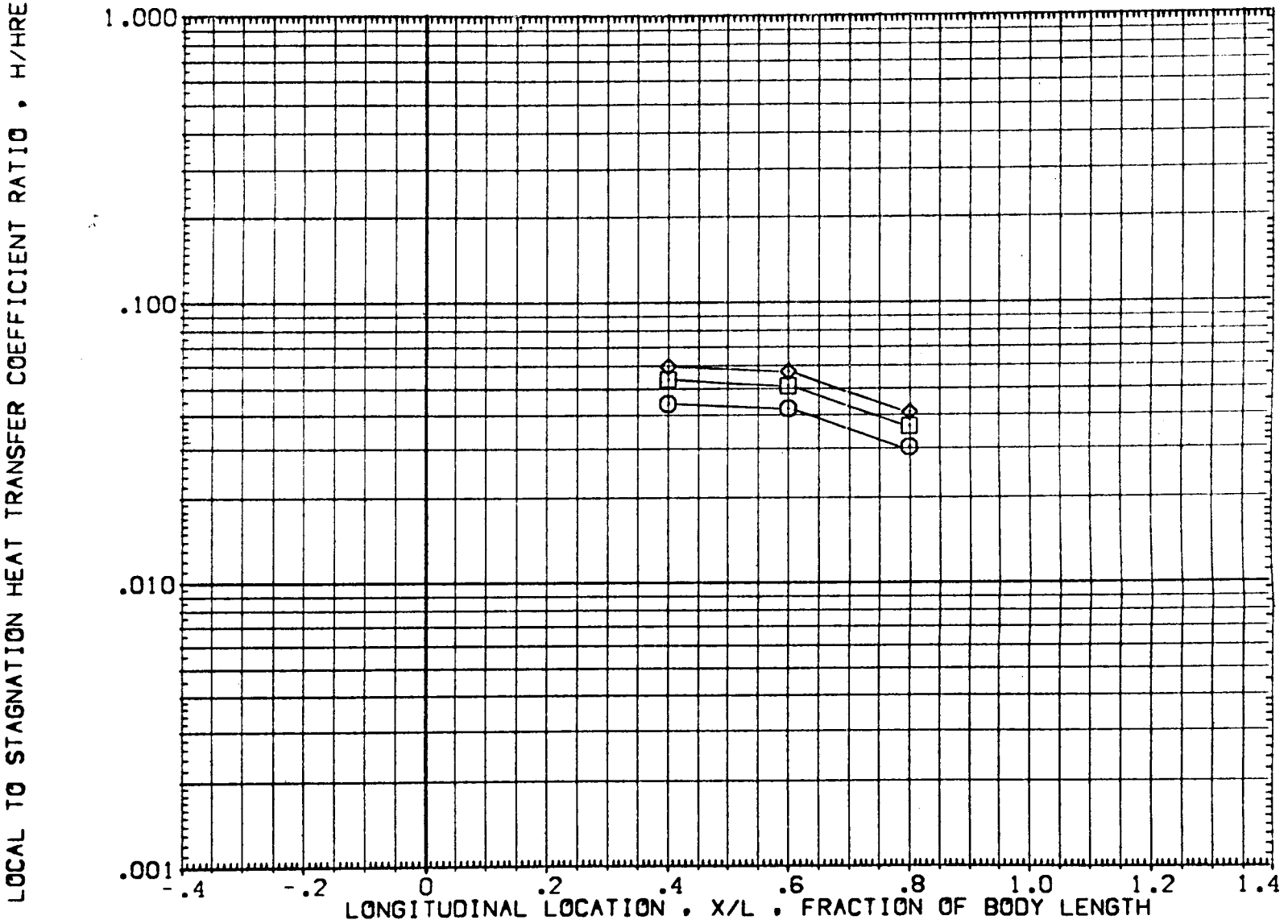


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T]I)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE[T]I)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE[T]I)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

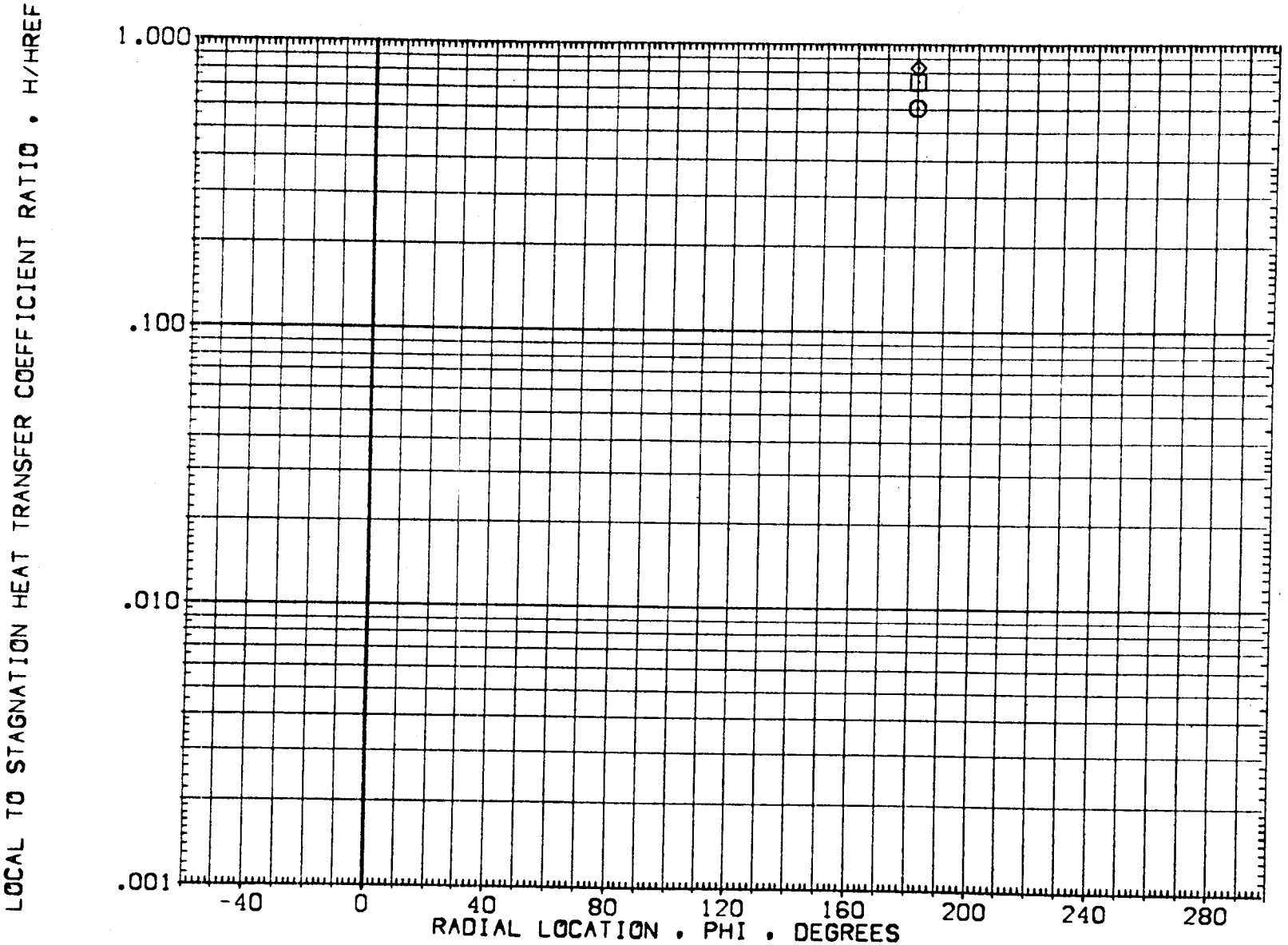


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

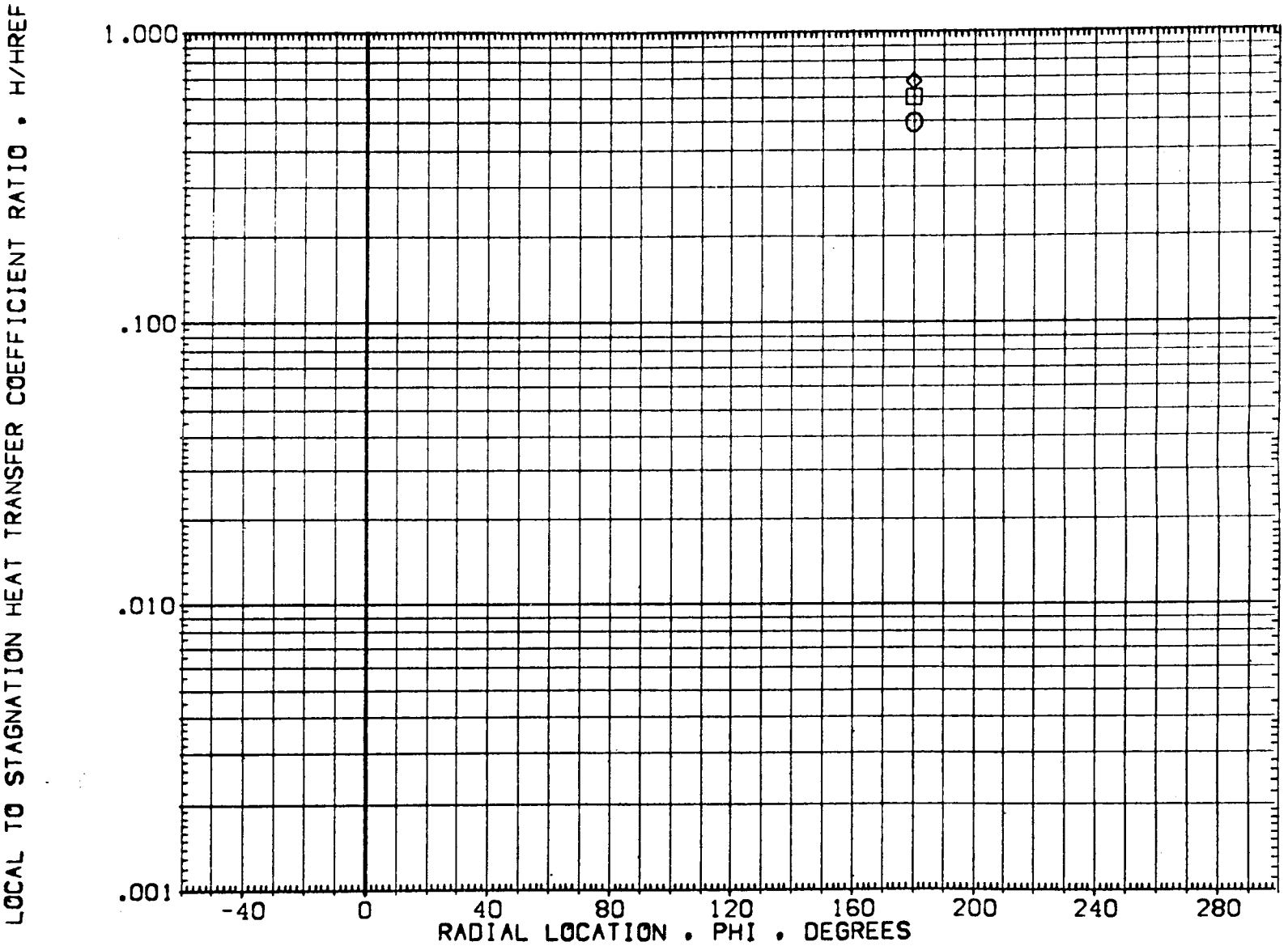


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .005

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE]T[1]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AE]T[1]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BE]T[1]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

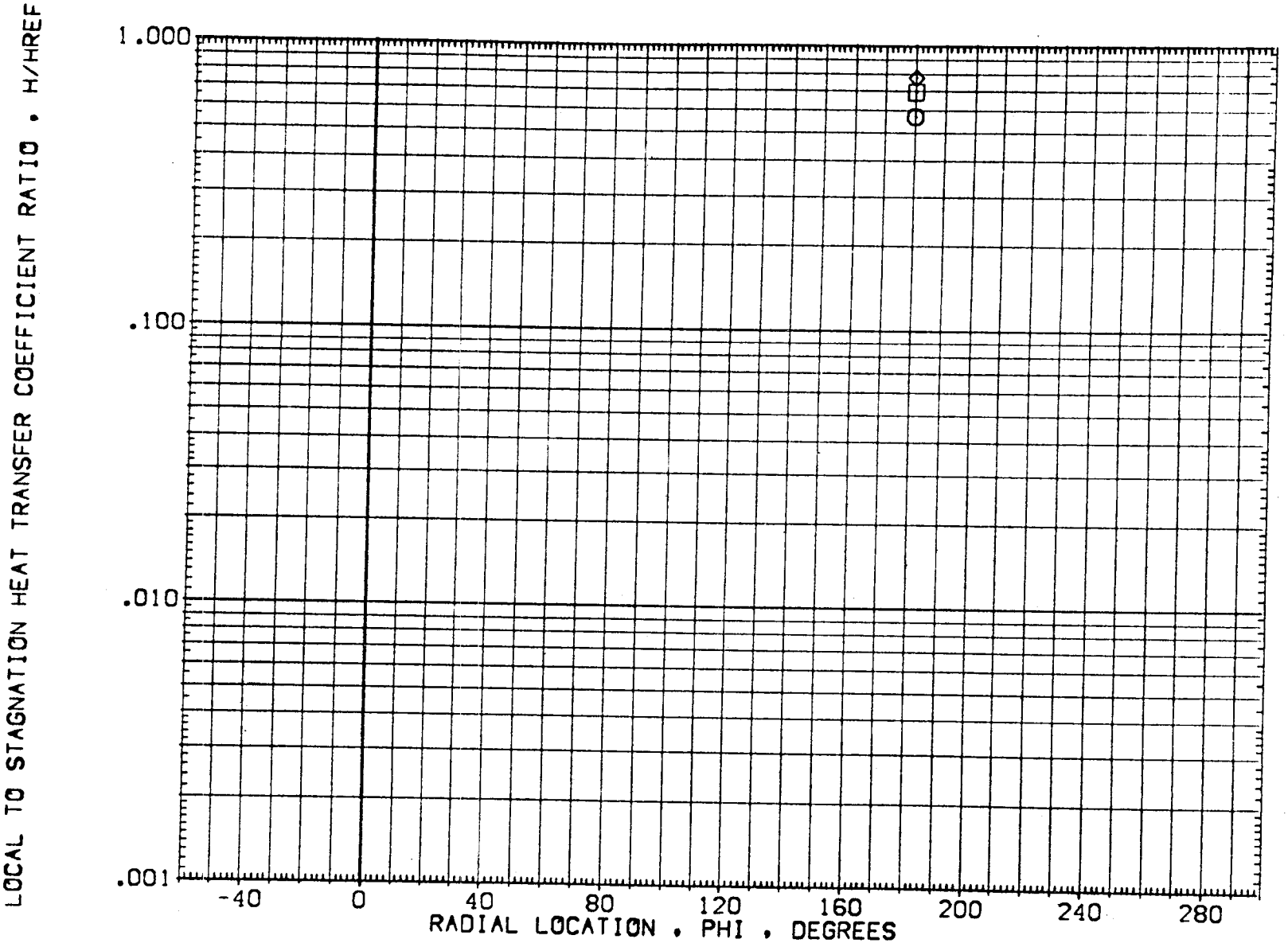


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

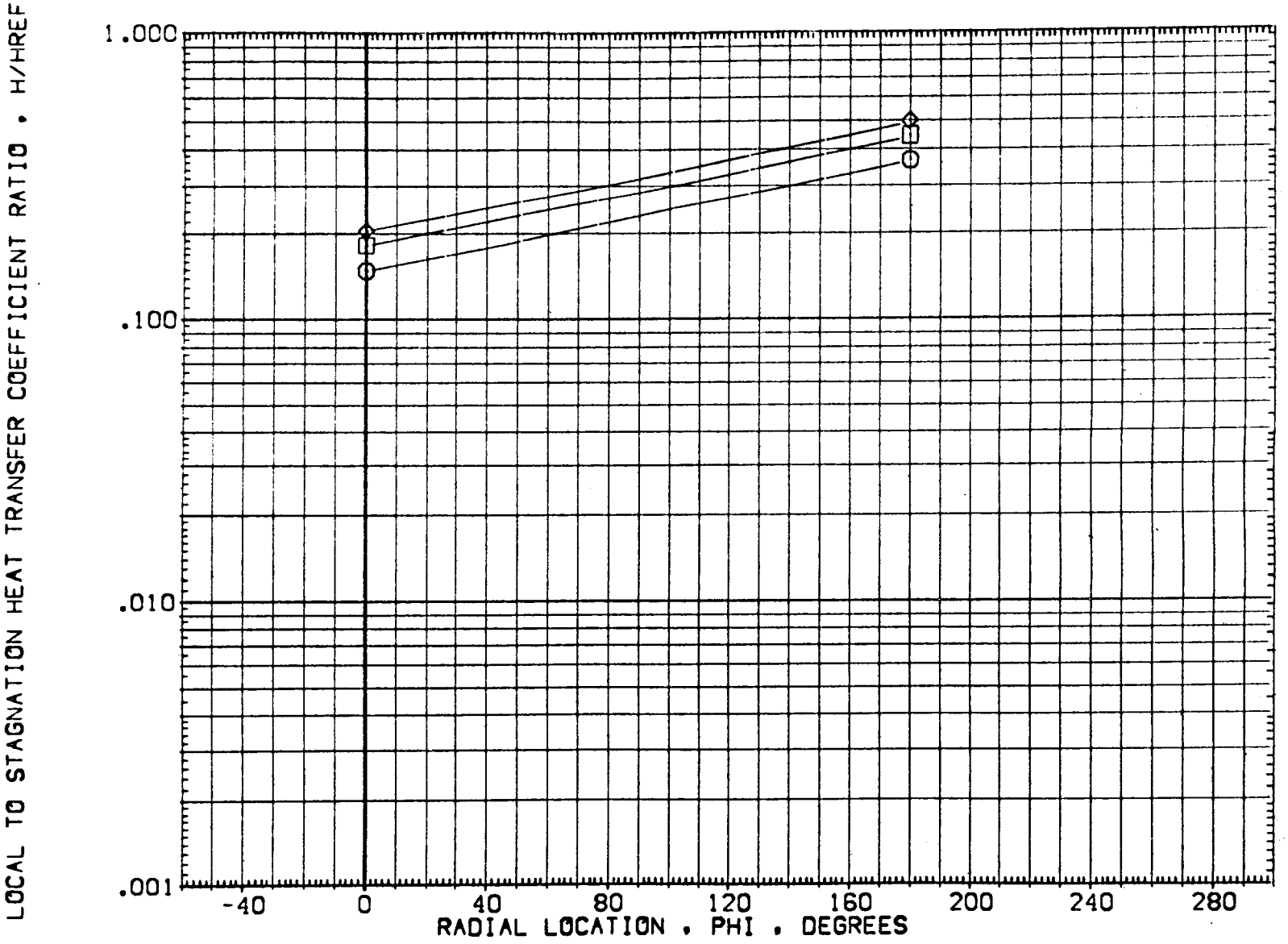


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

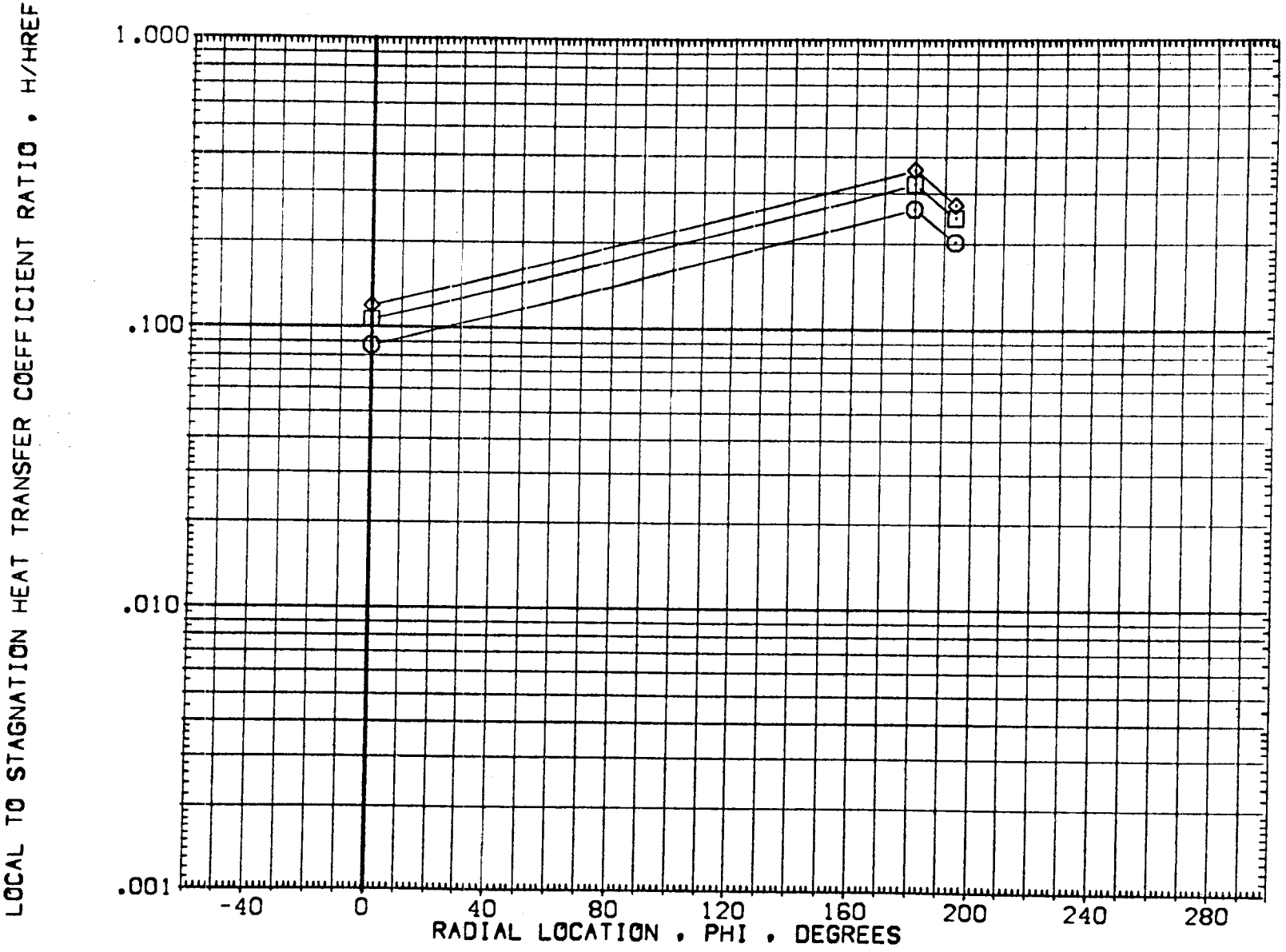


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

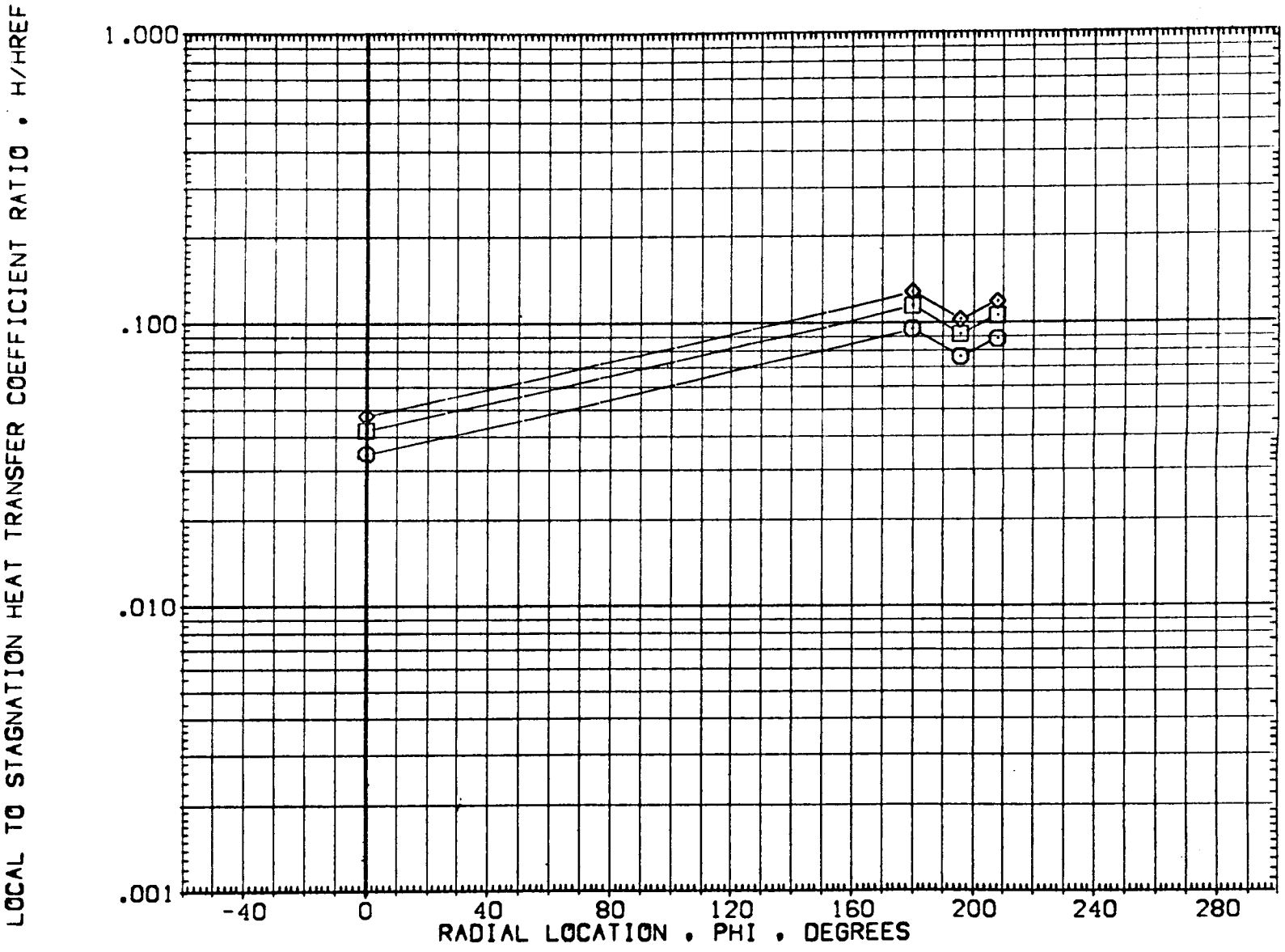


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

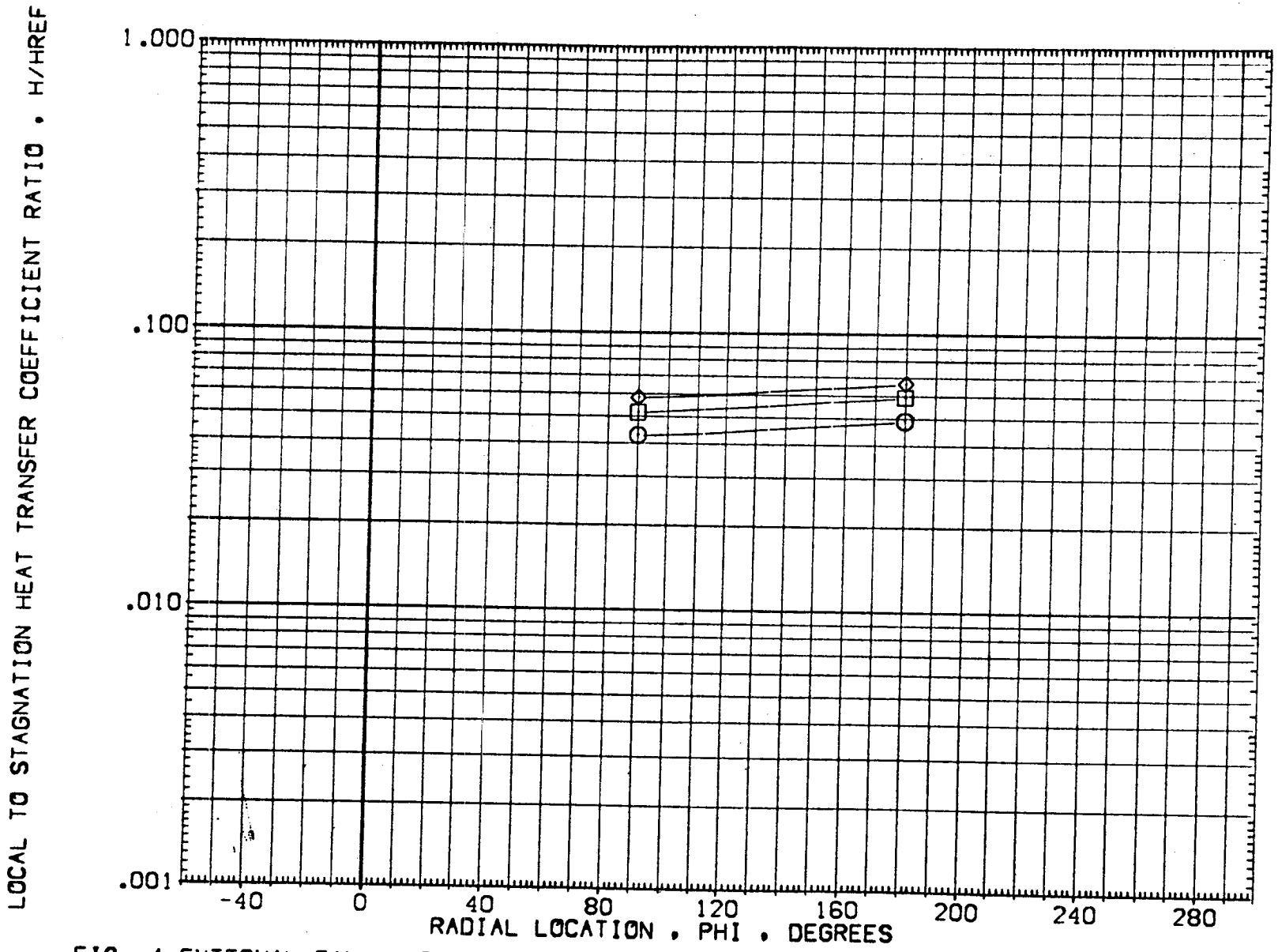


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

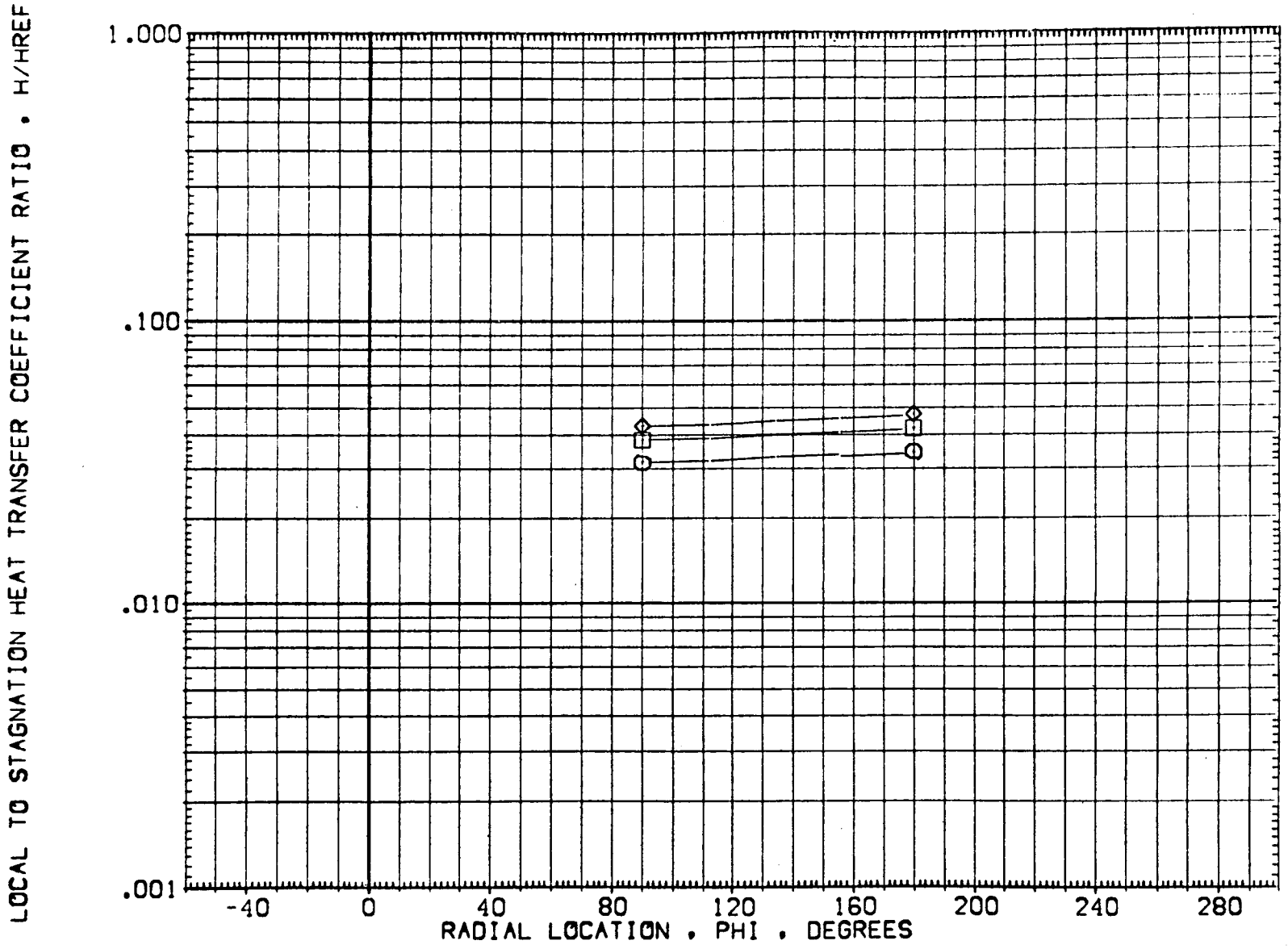


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L'	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

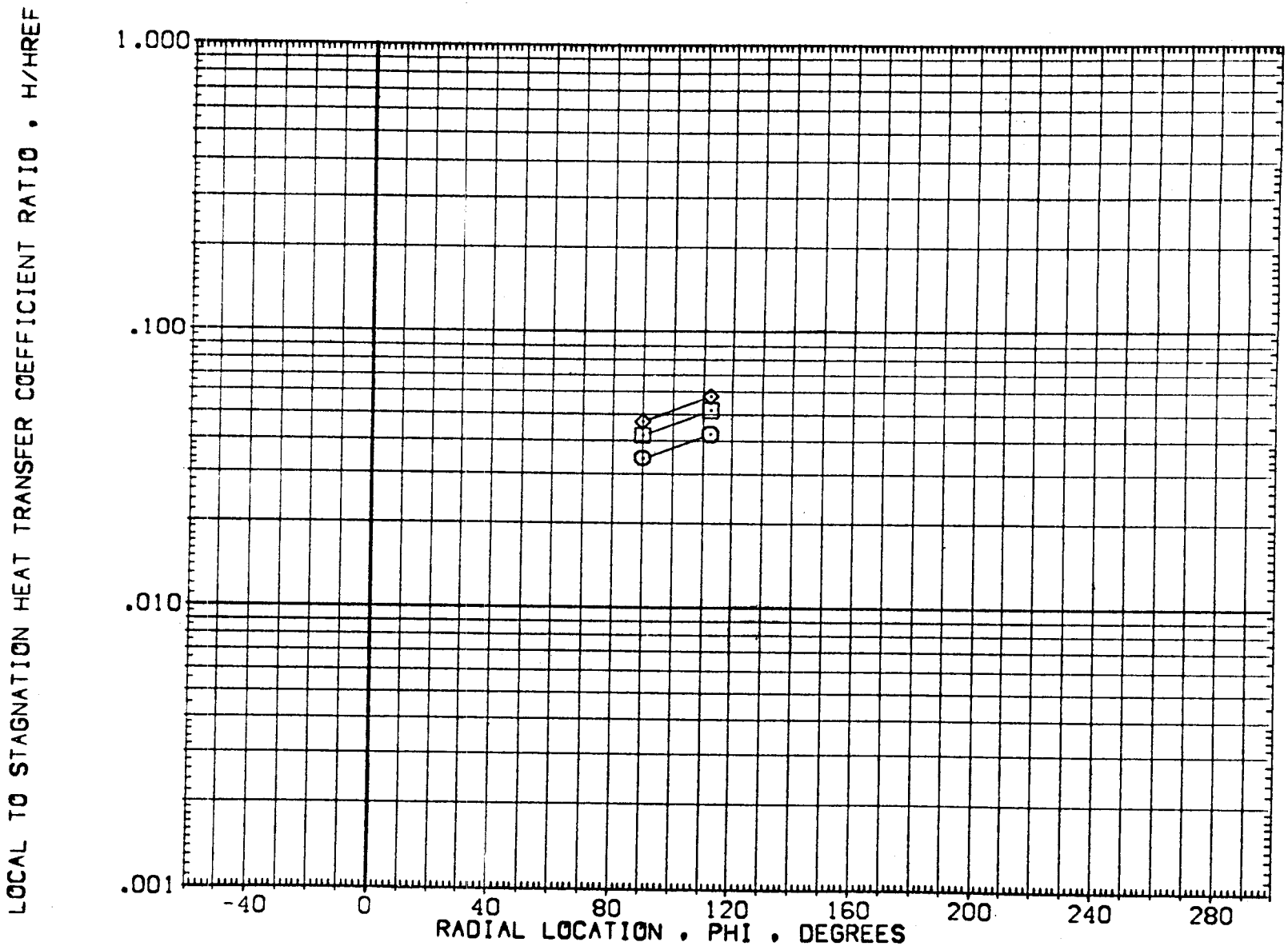


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

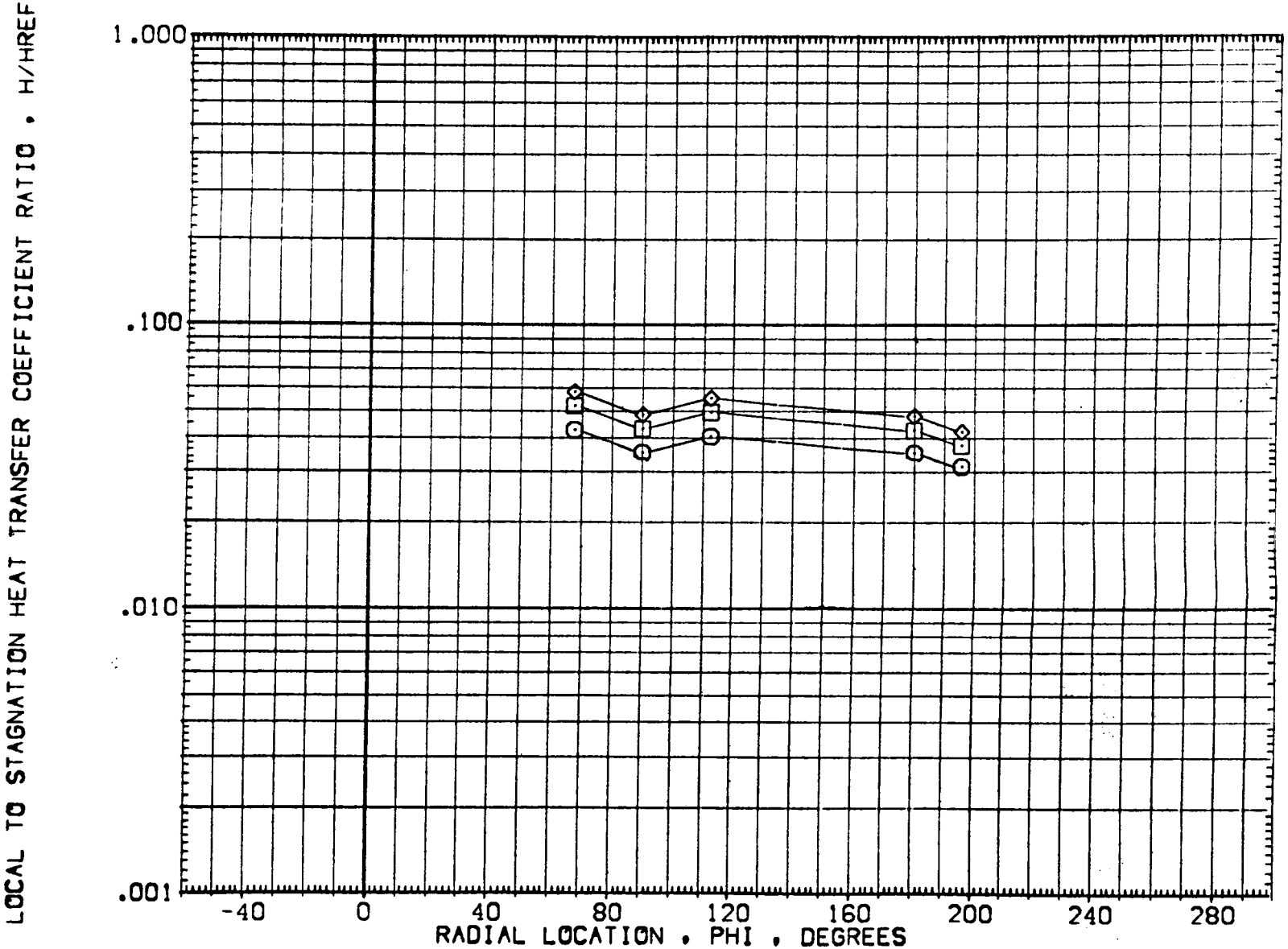


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITII]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITII]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITII]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

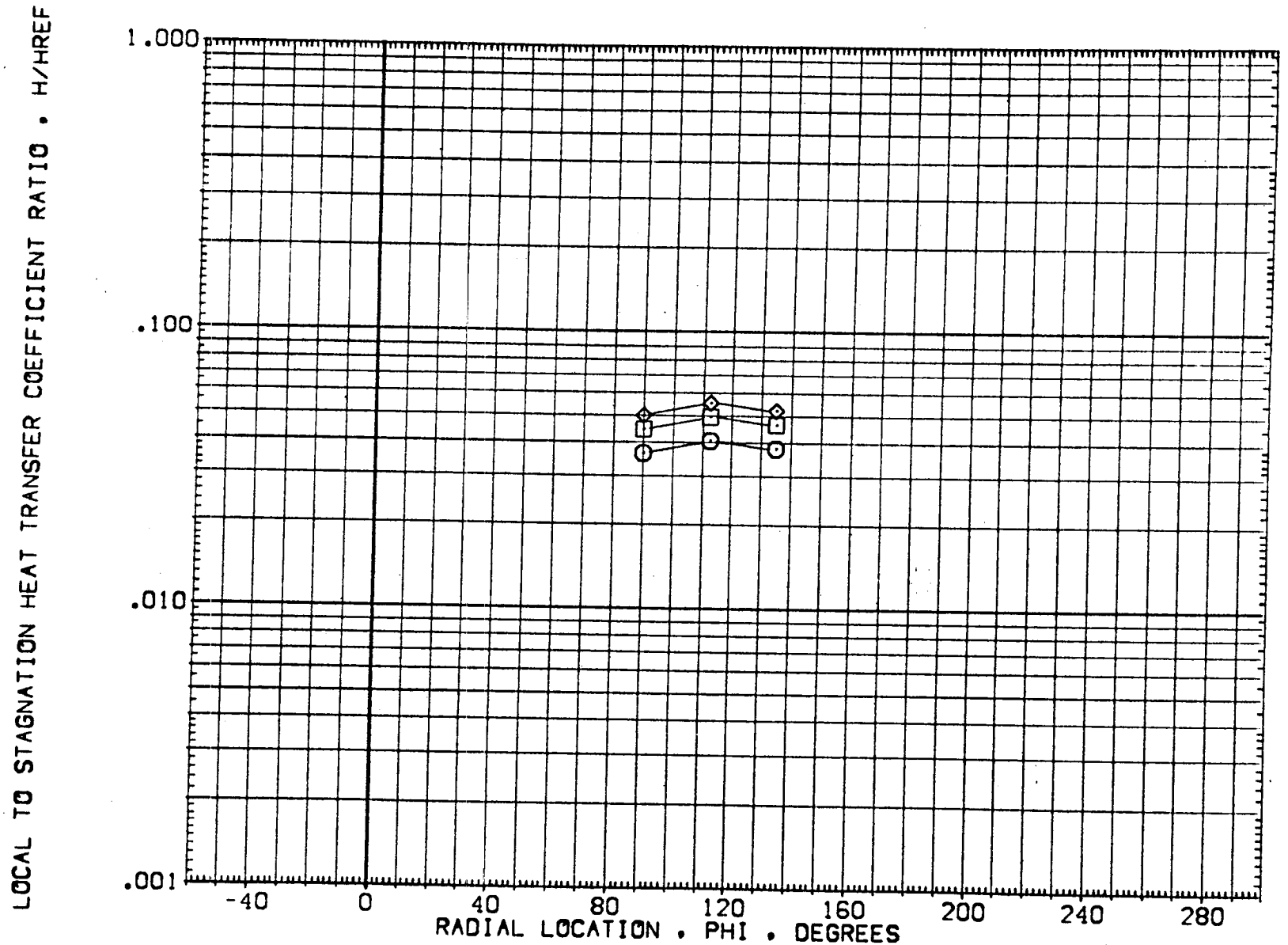


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

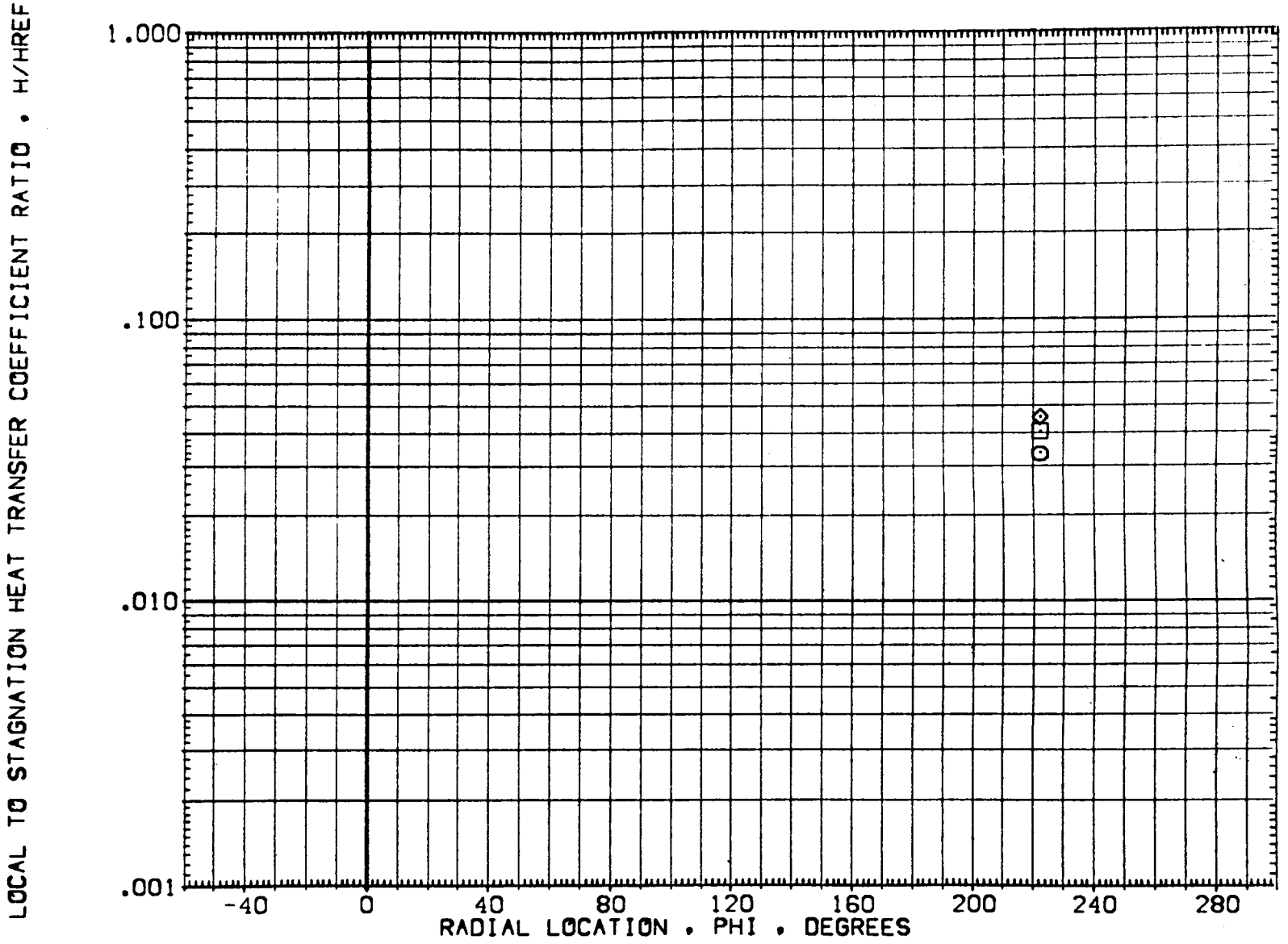


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

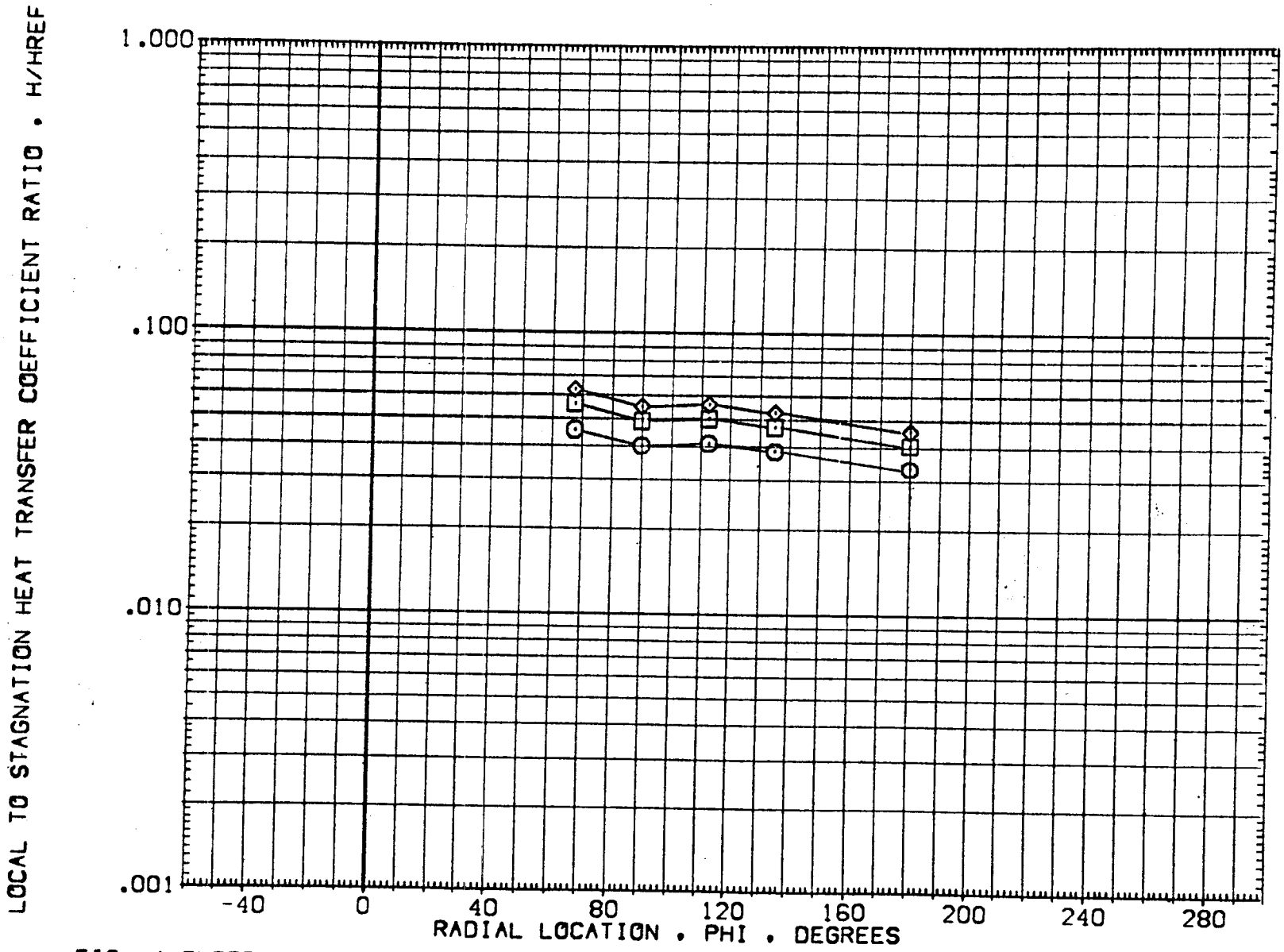


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

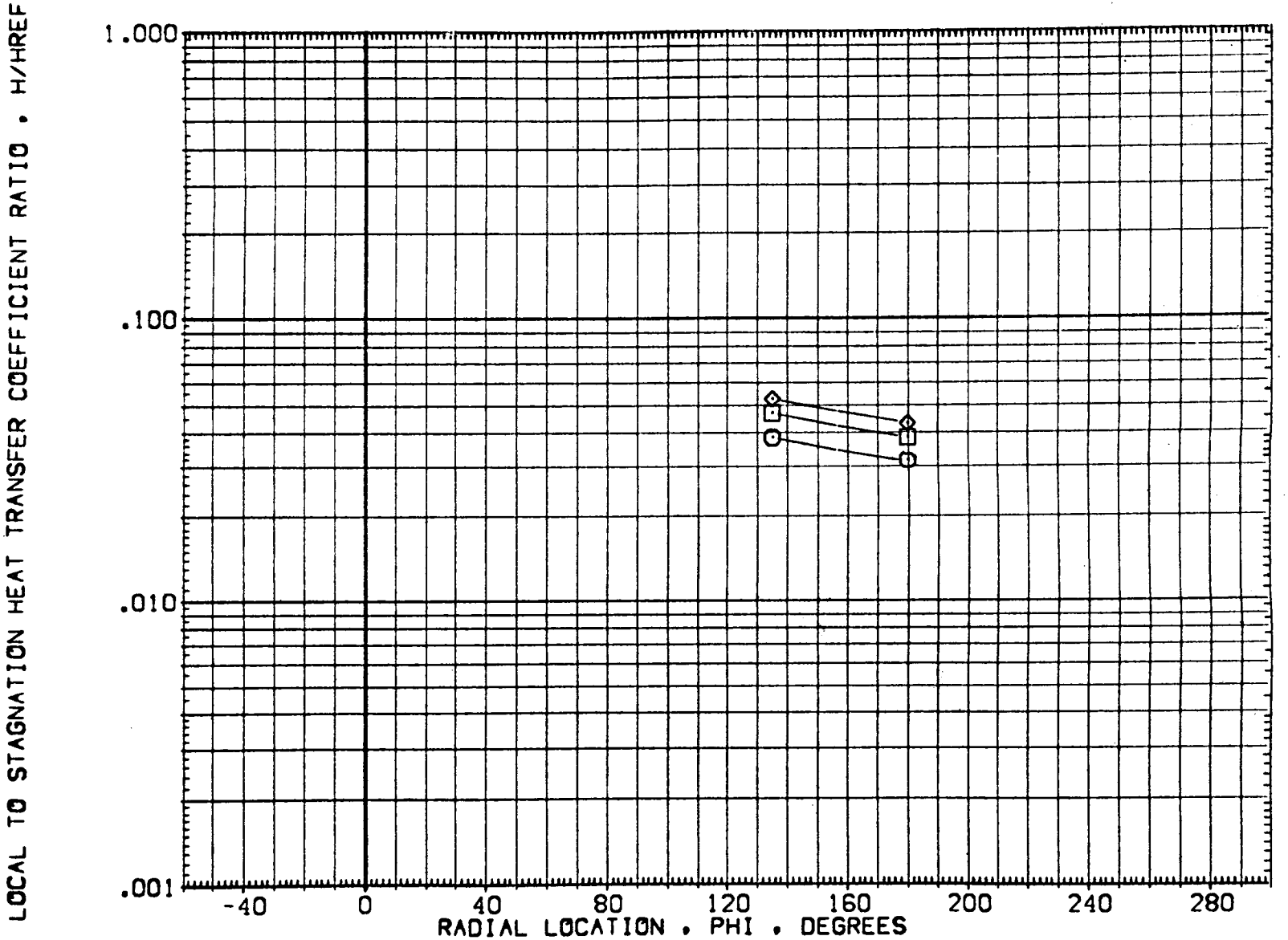


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .375

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITII]	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITII]	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITII]	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

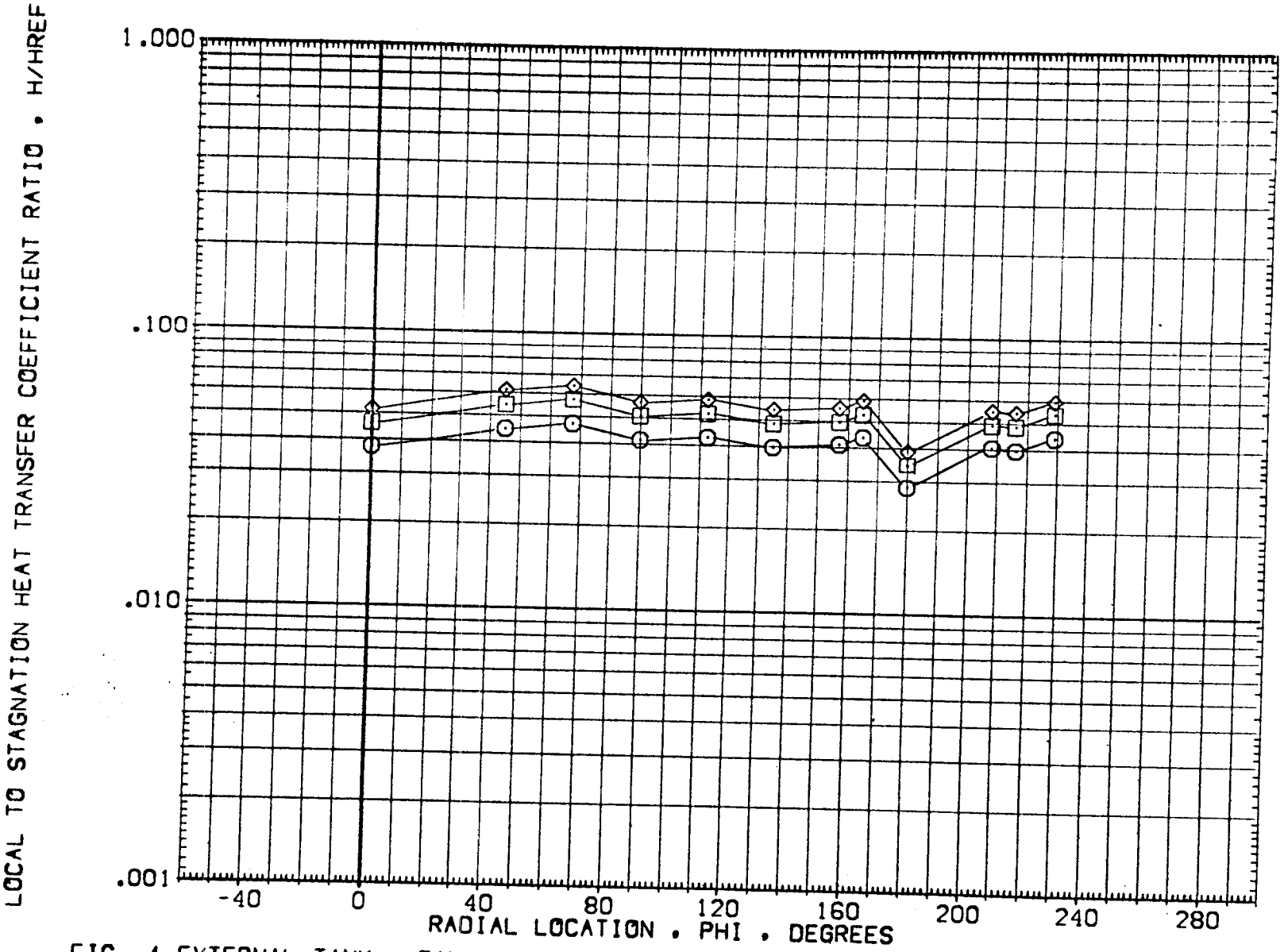


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11) ○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11) □	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11) ◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

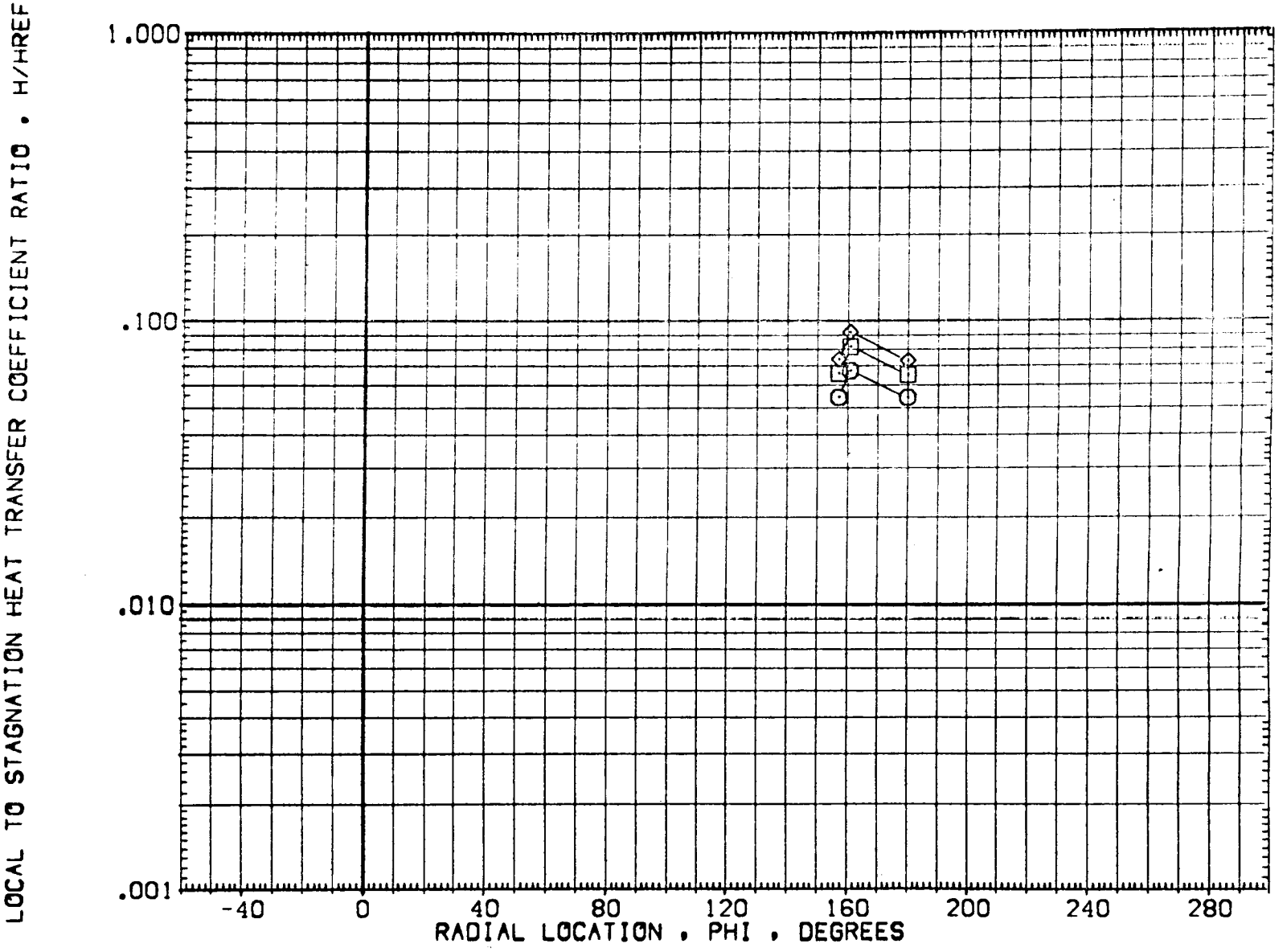


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .425

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT11)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE,IT11)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE,IT11)	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

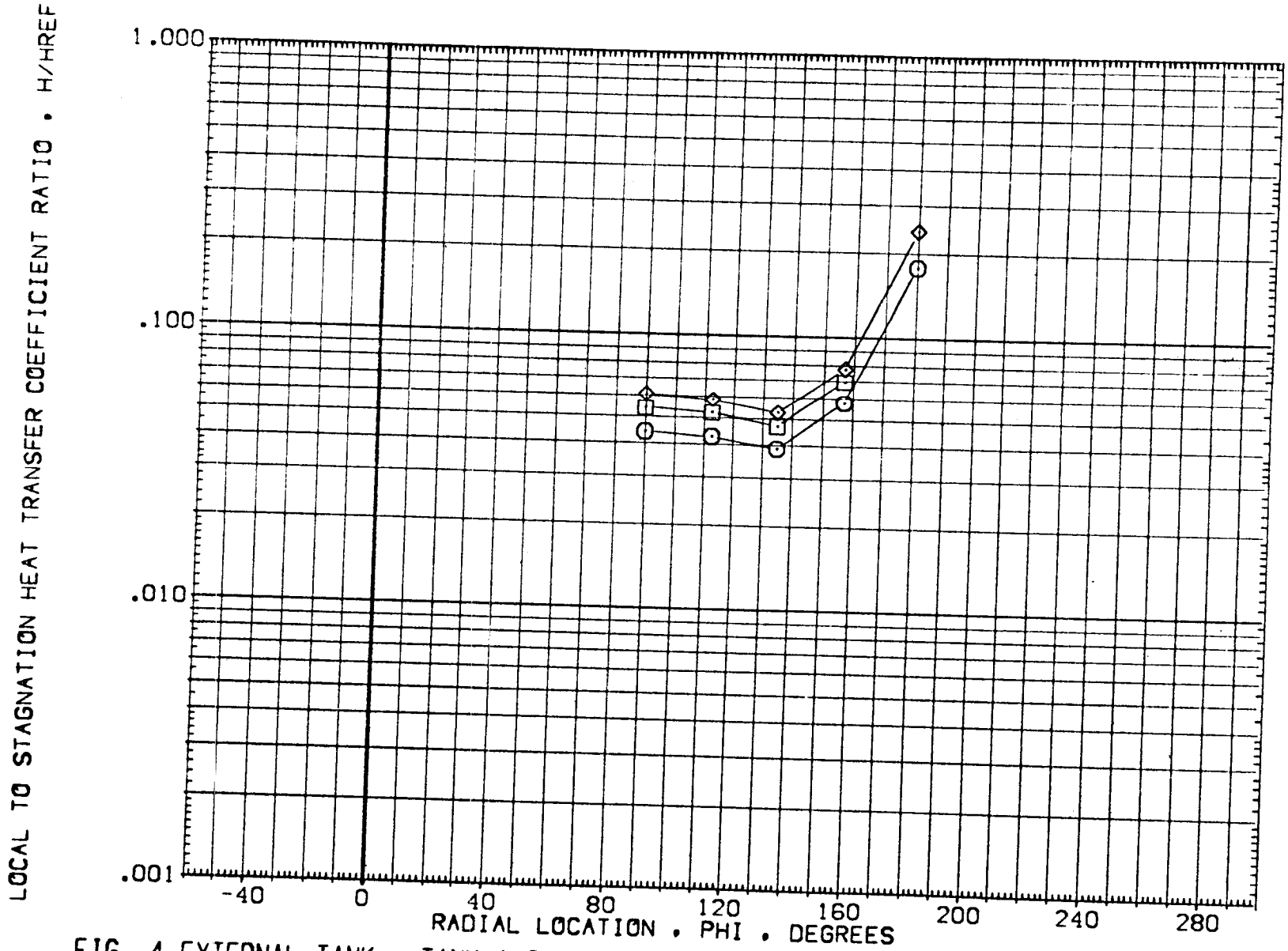


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T11]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE[T11]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE[T11]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

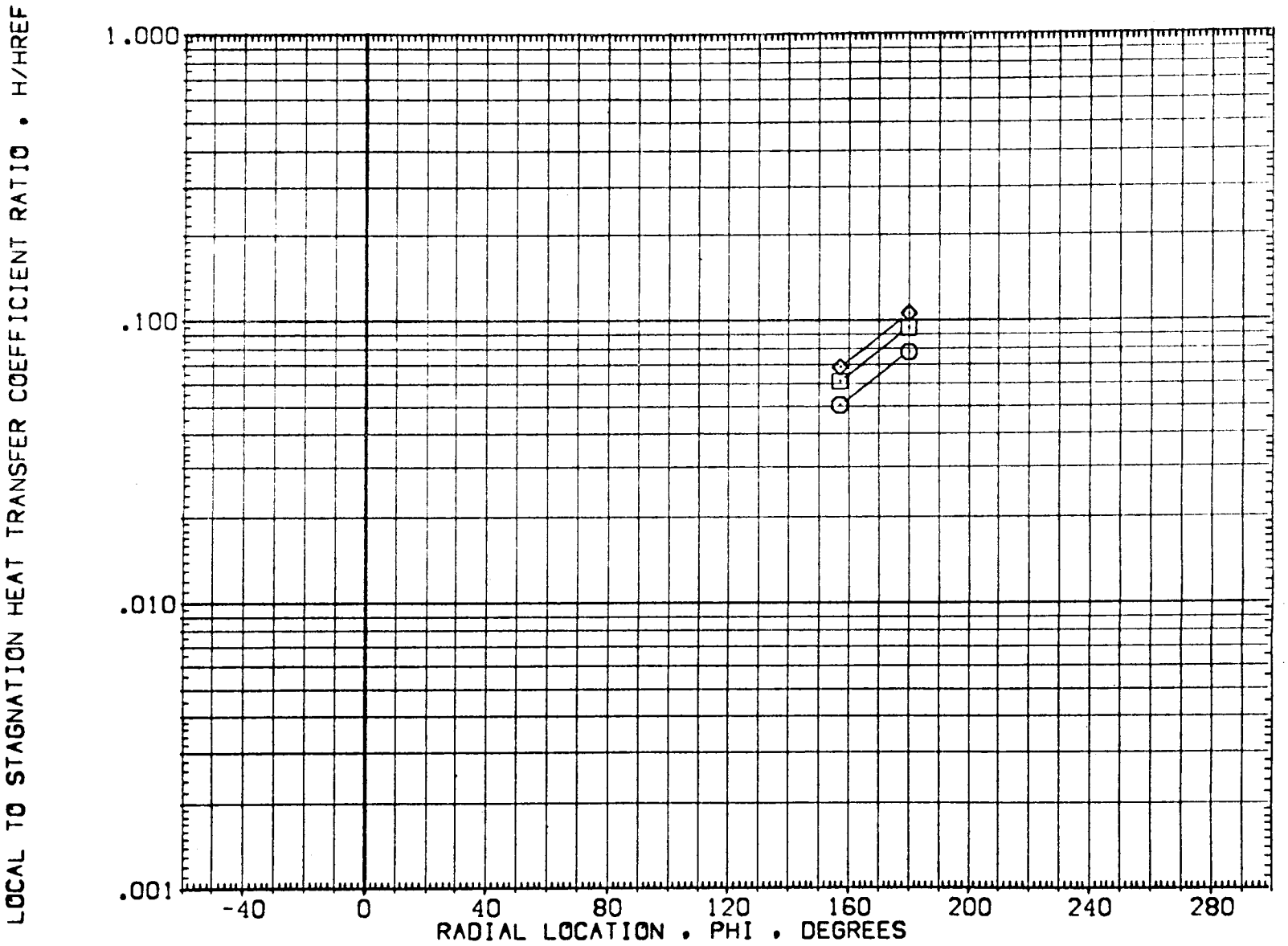


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .475

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T!!)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T!!)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T!!)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

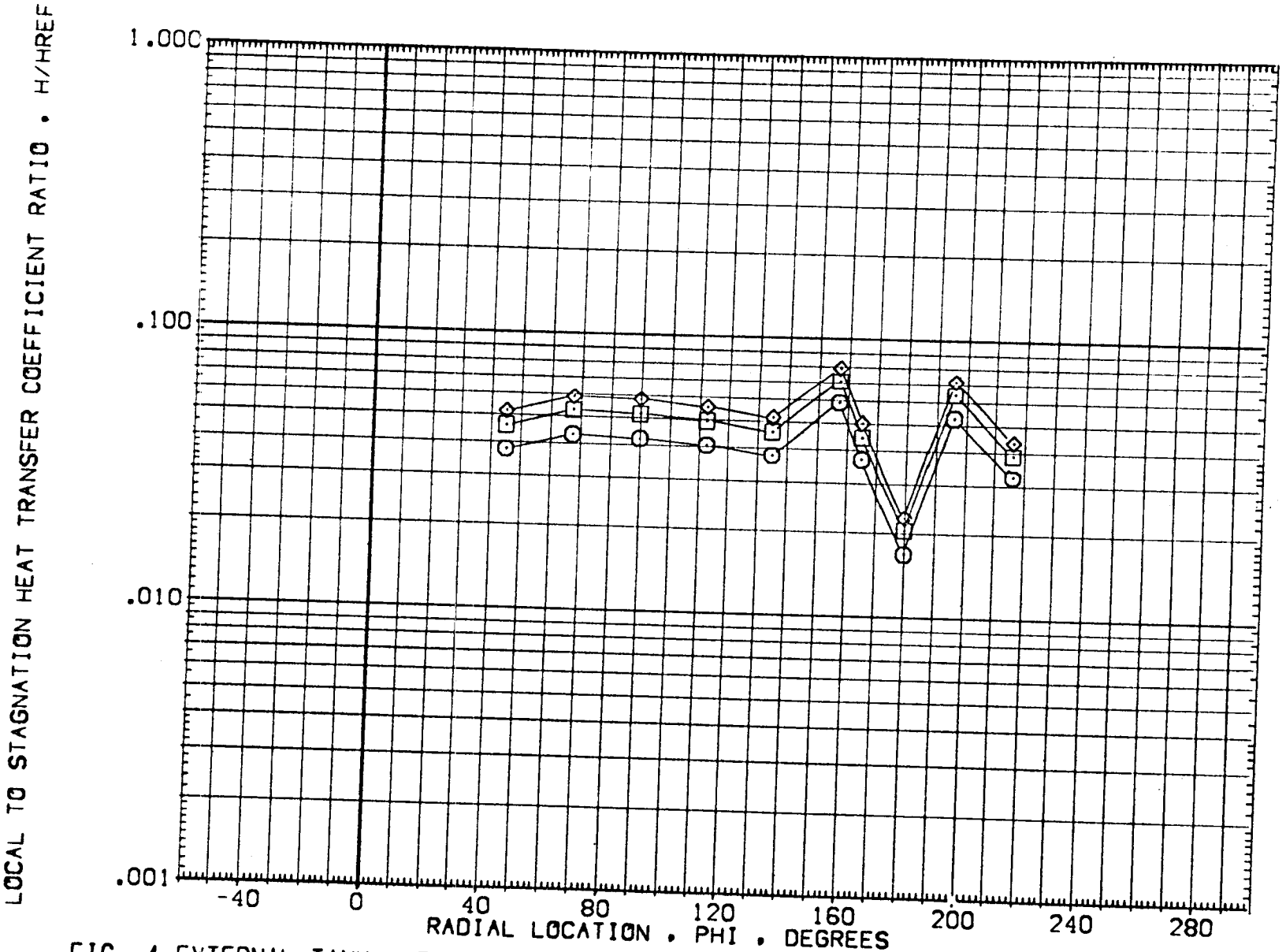


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

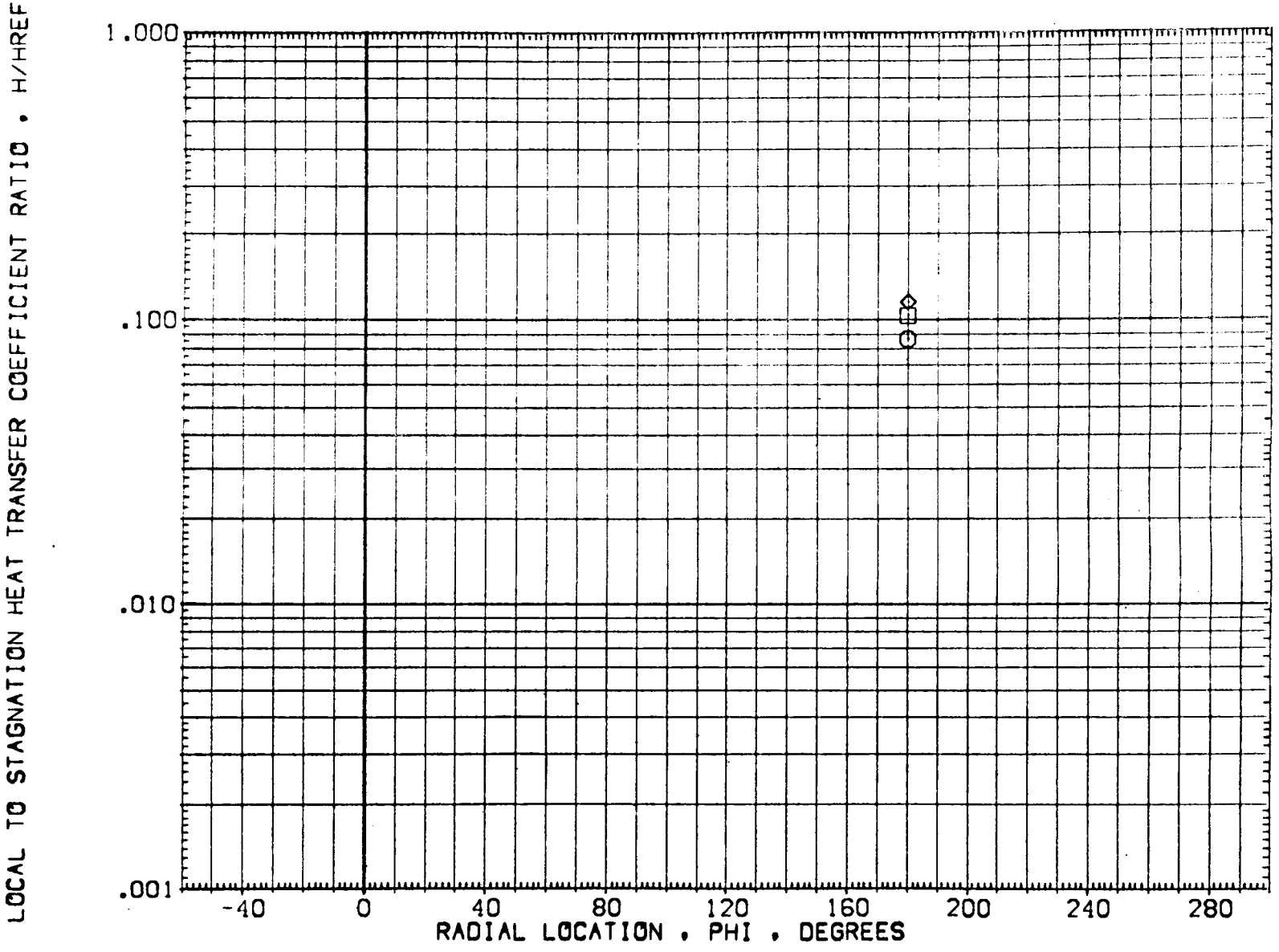


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

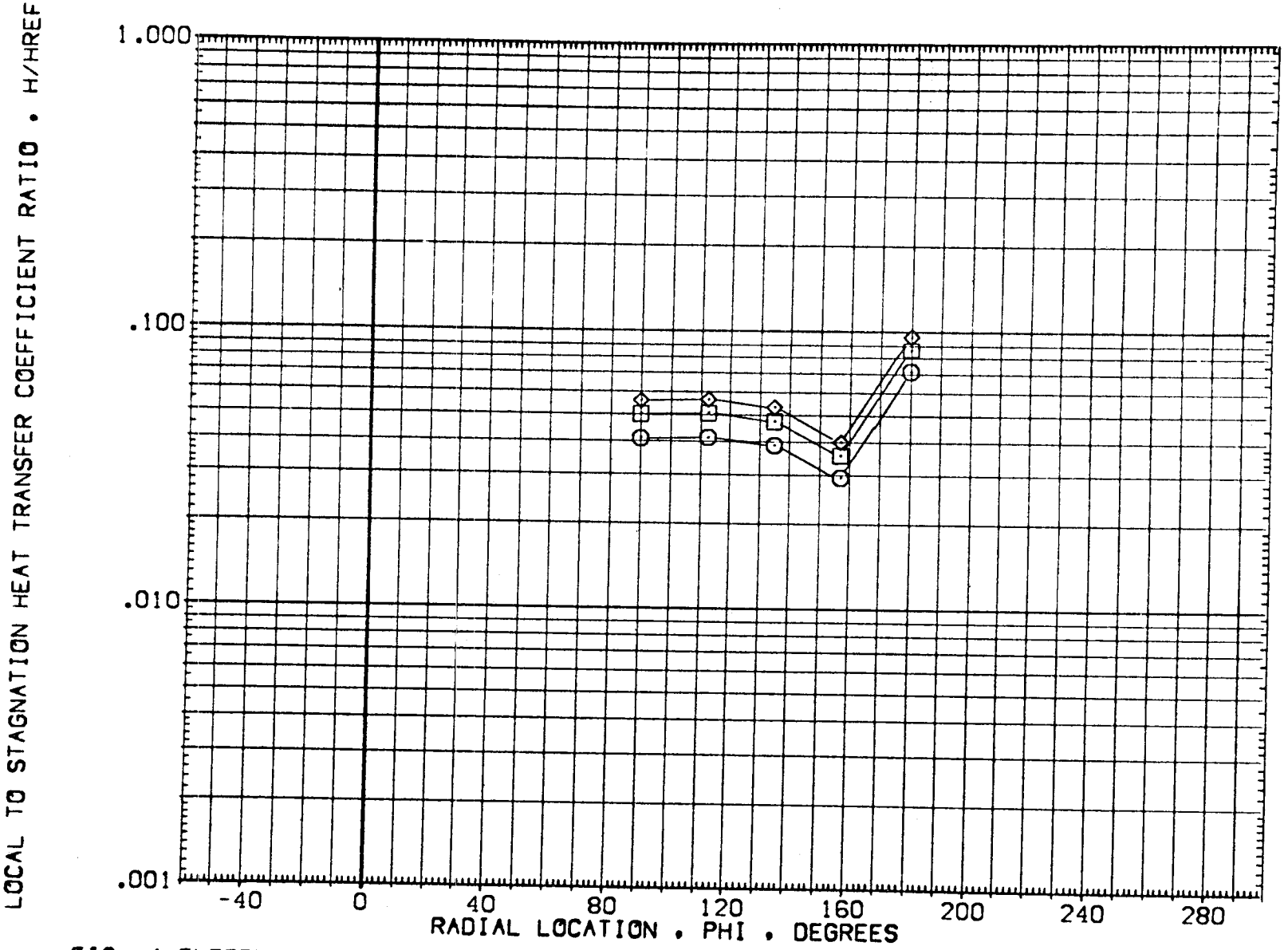


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T]1]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE[T]1]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE[T]1]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

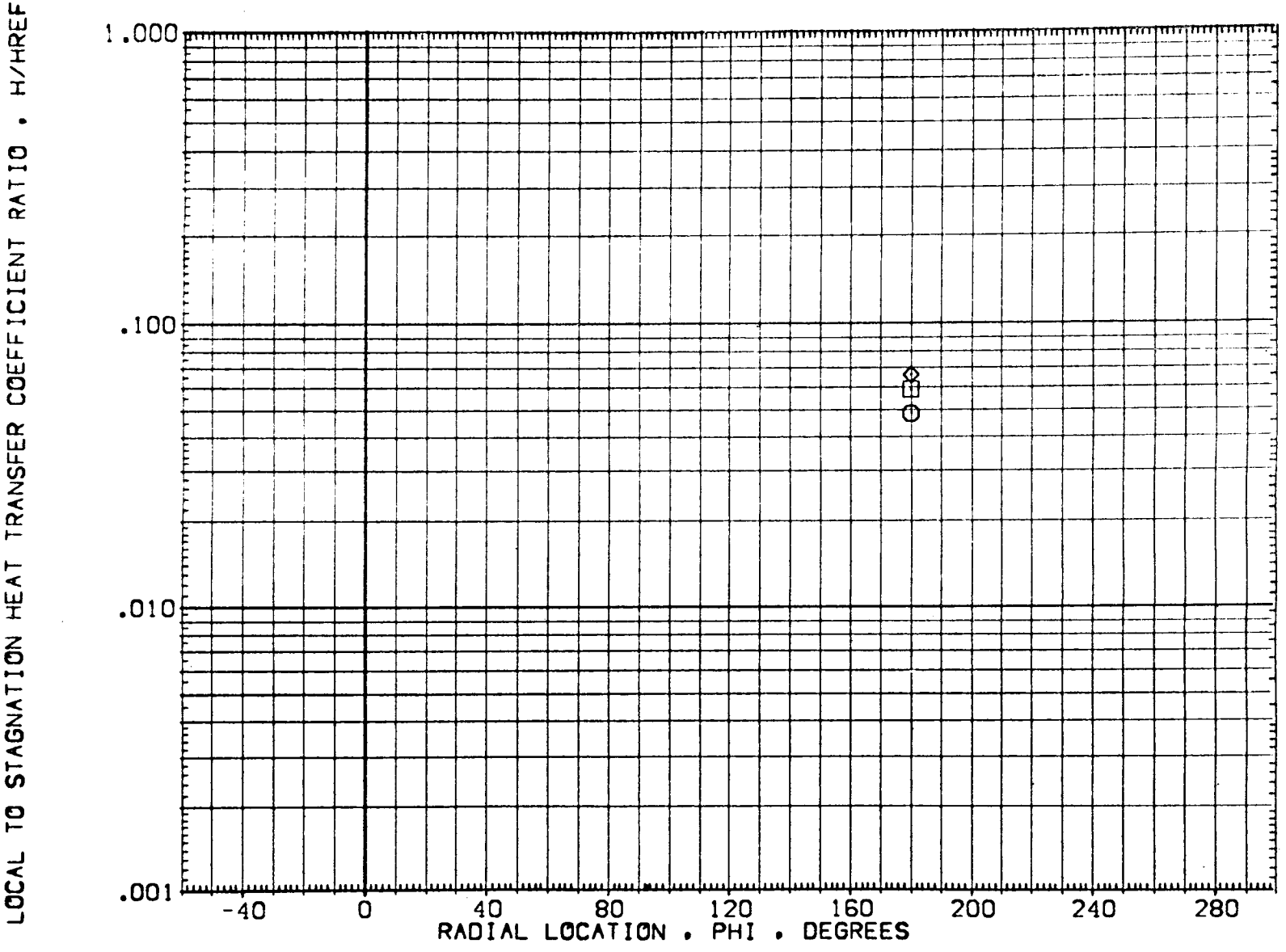


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

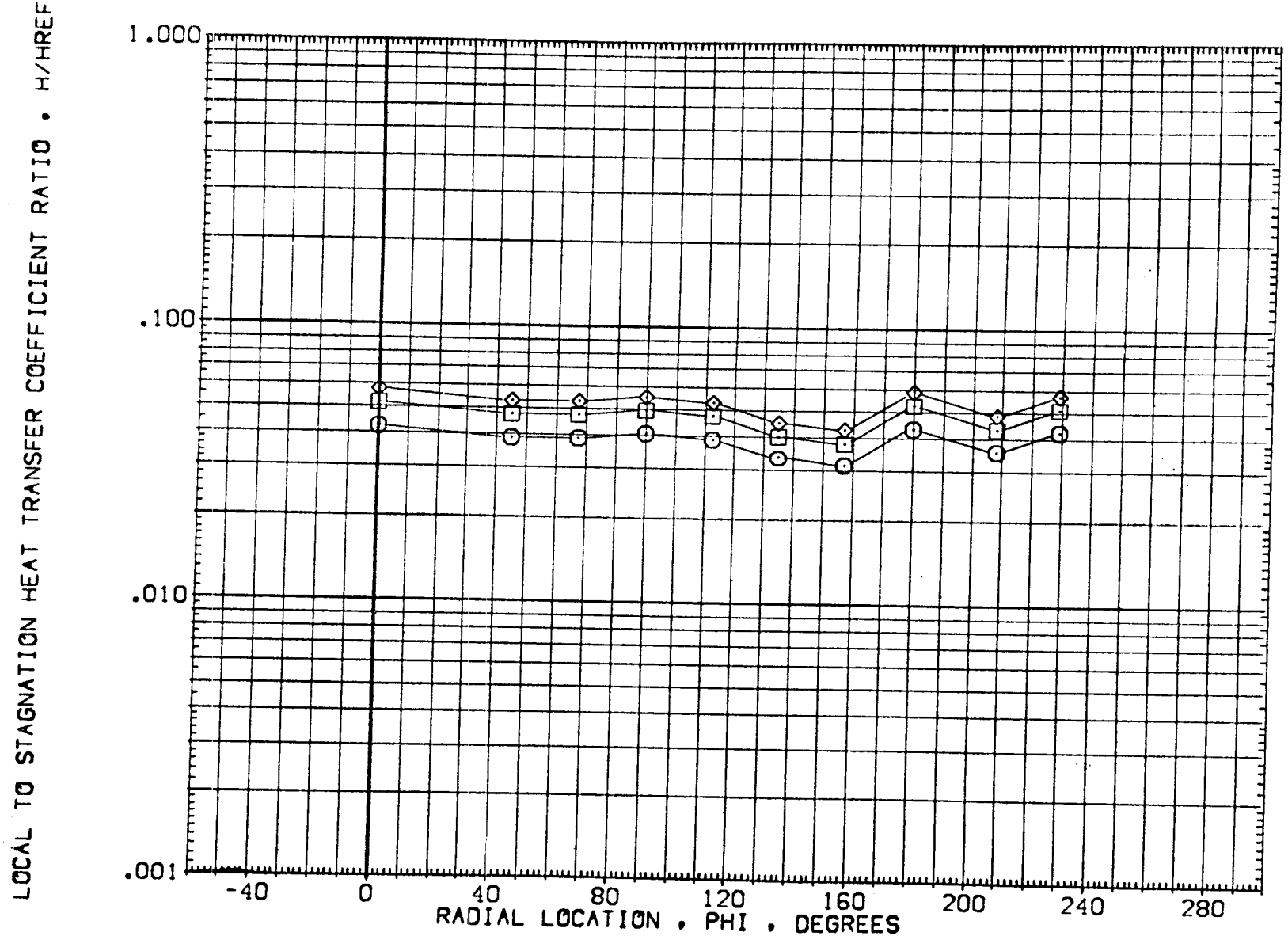


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

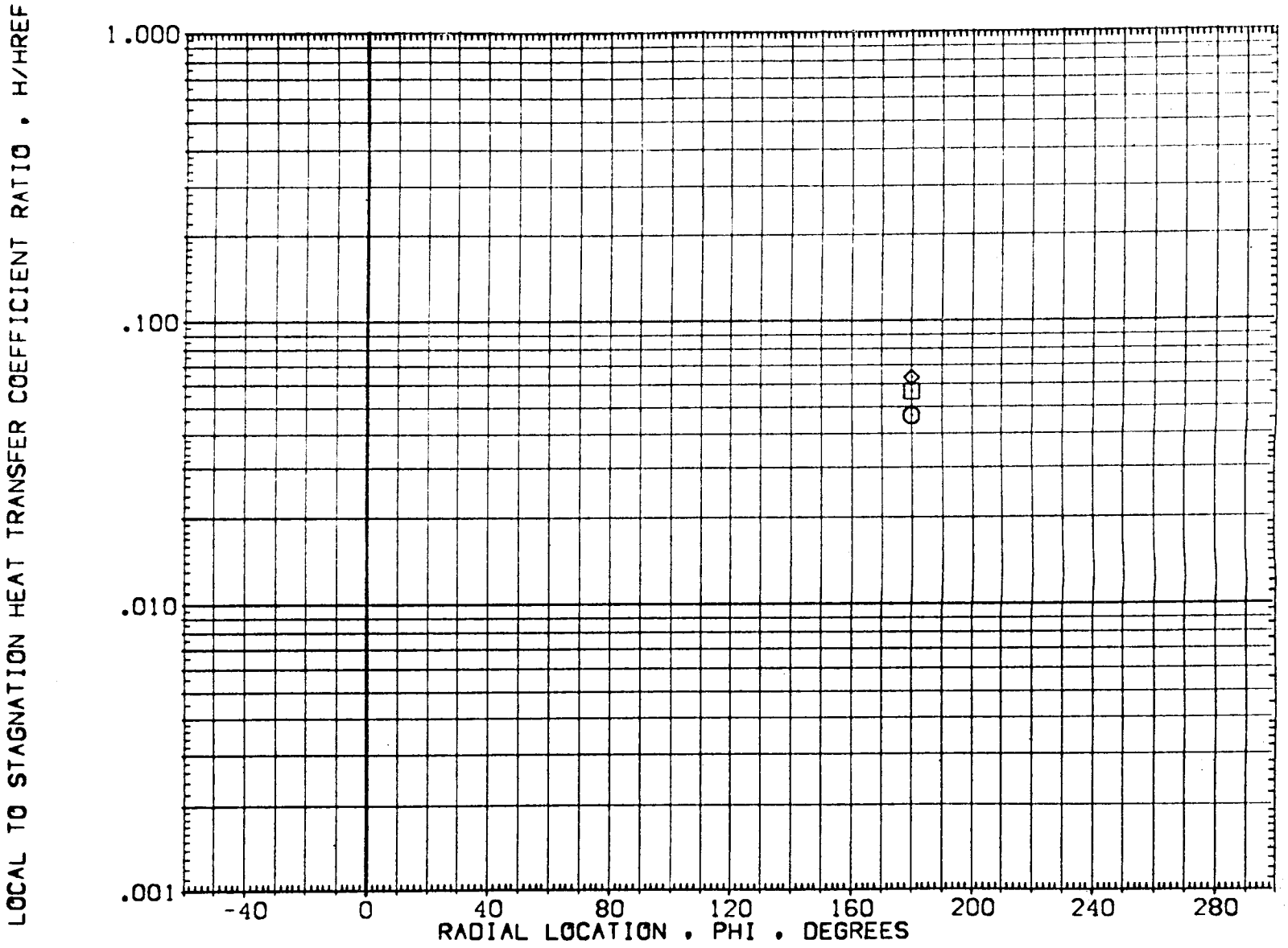


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

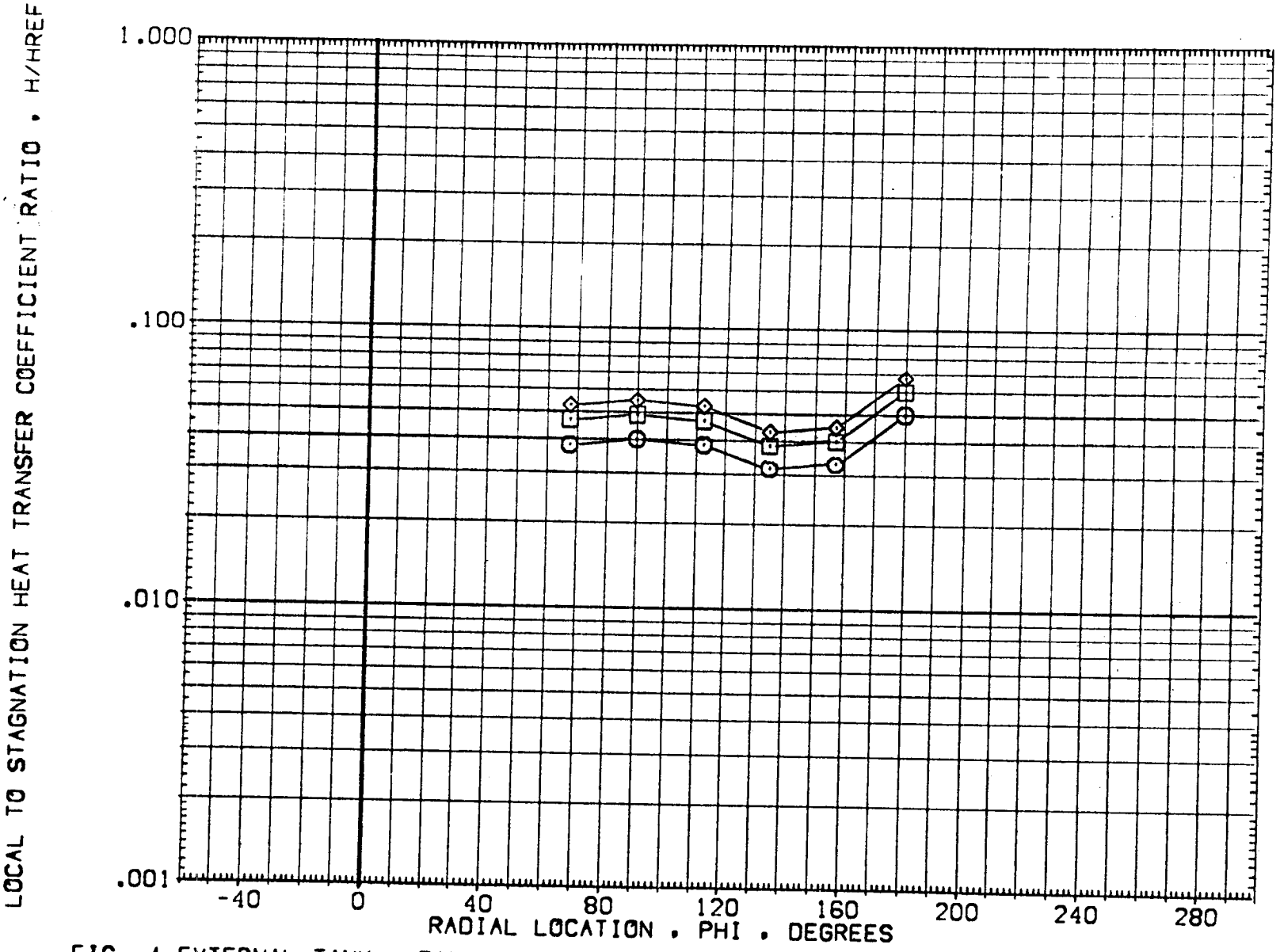


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

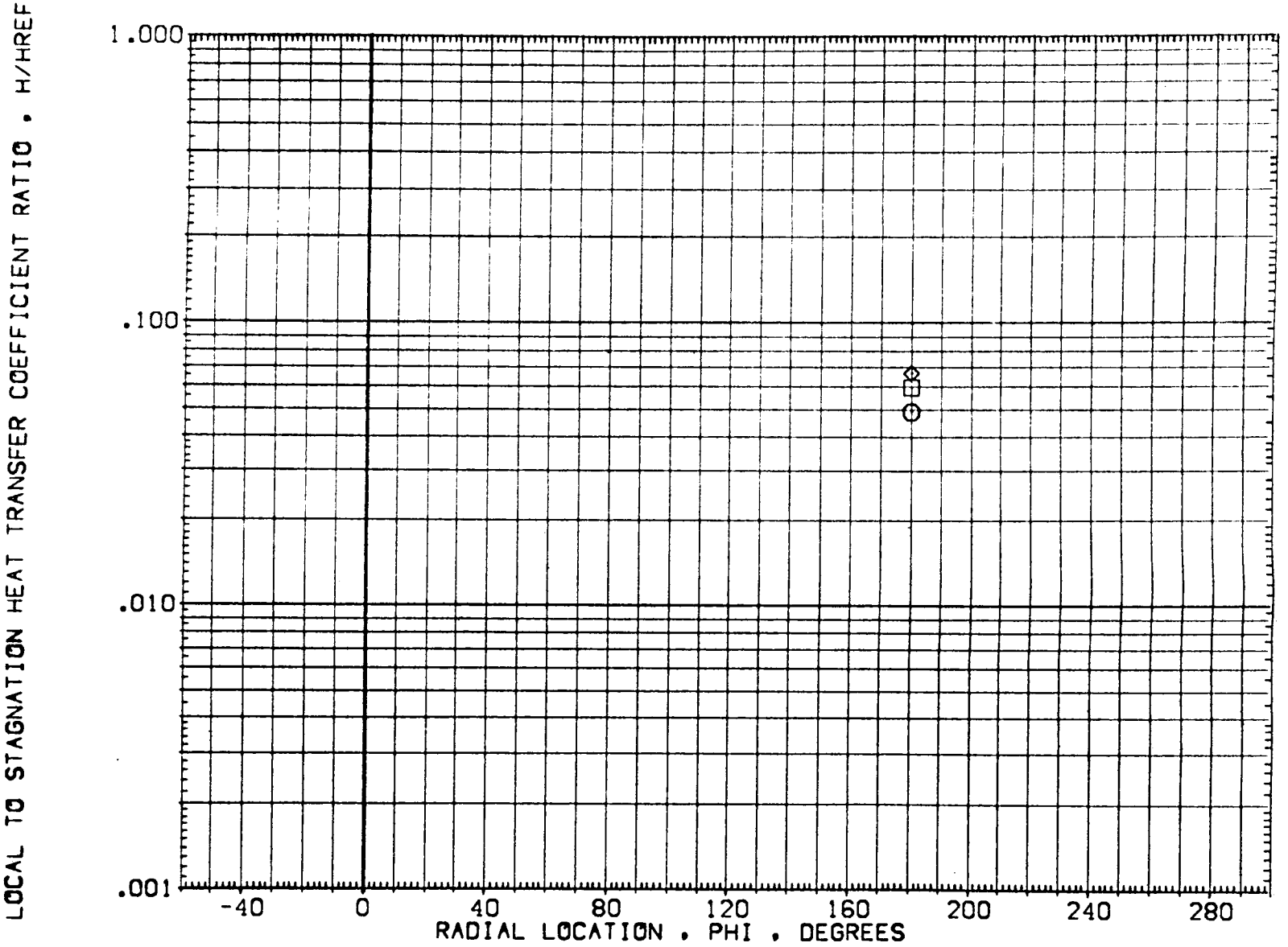


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .675

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITI1]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITI1]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITI1]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

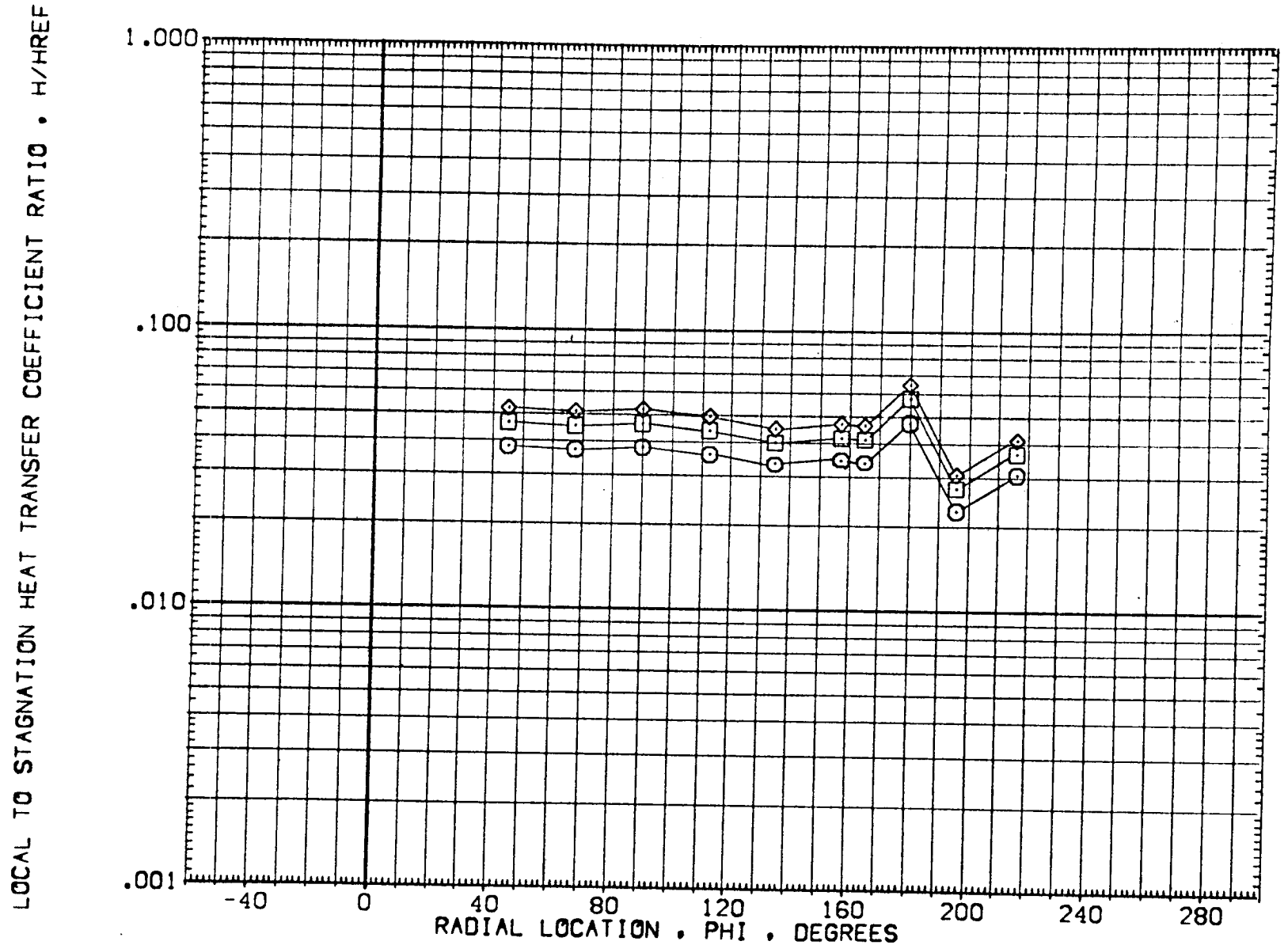


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

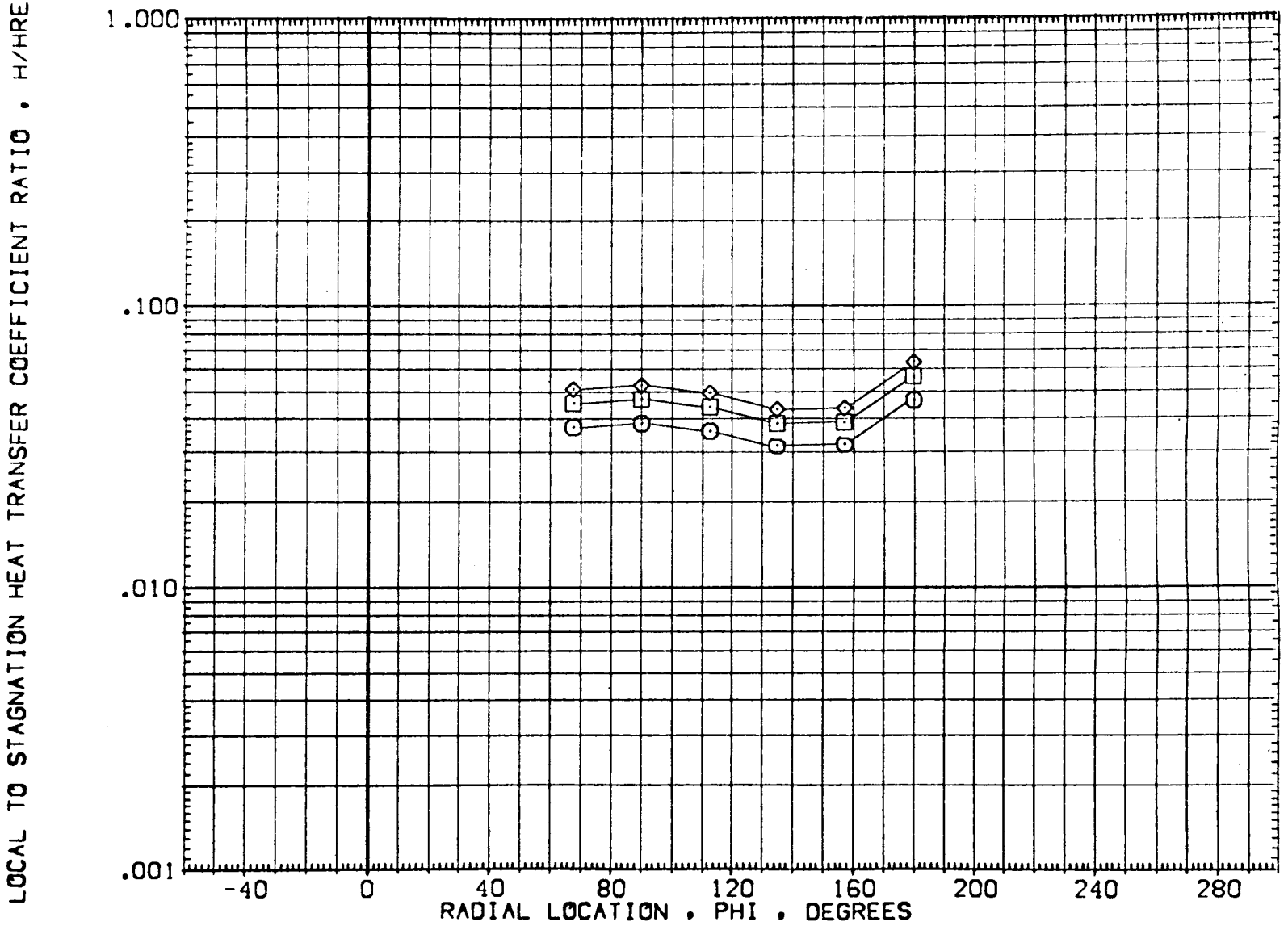


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .750

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITII]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITII]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITII]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

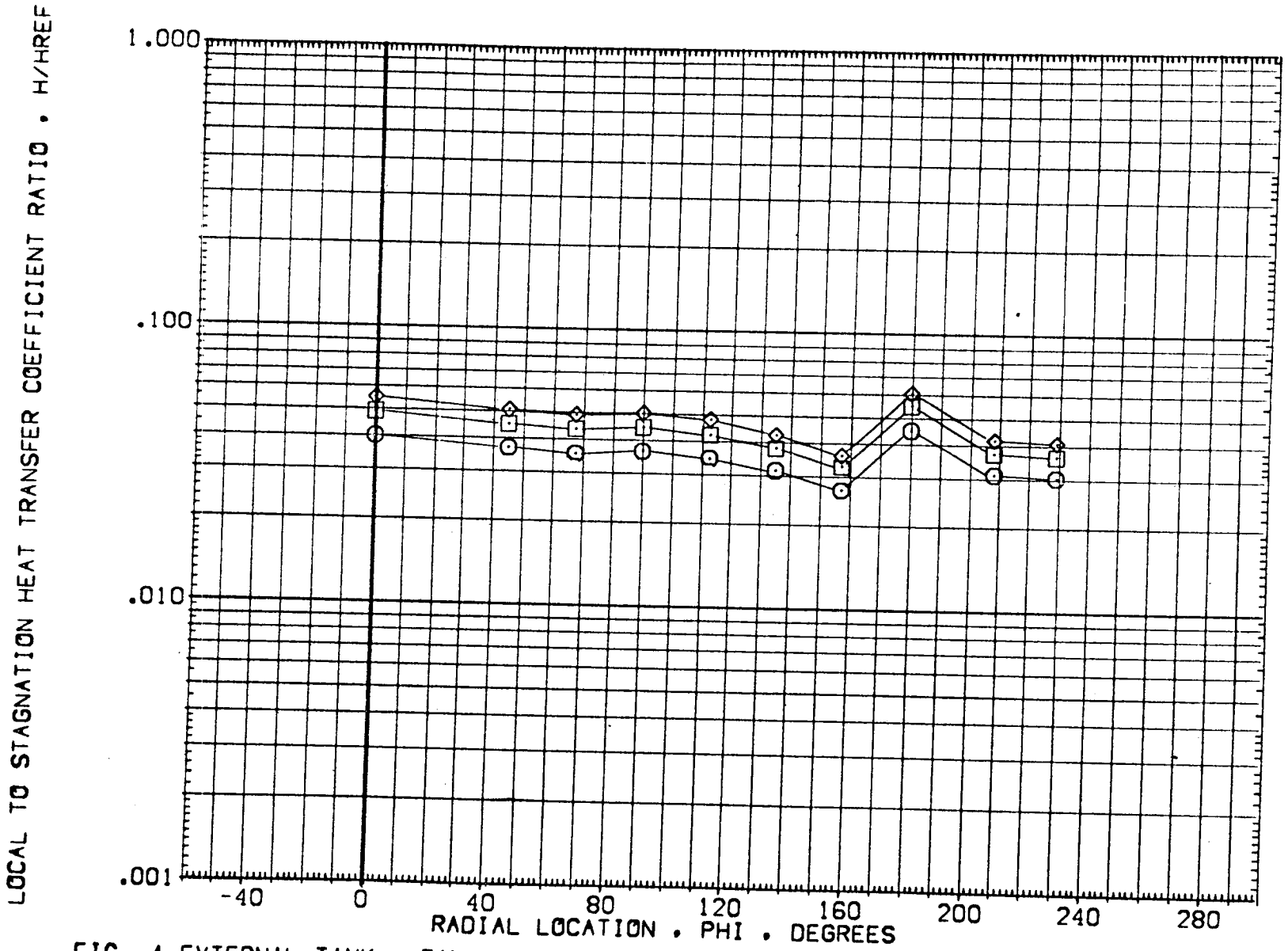


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T])	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE[T])	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE[T])	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

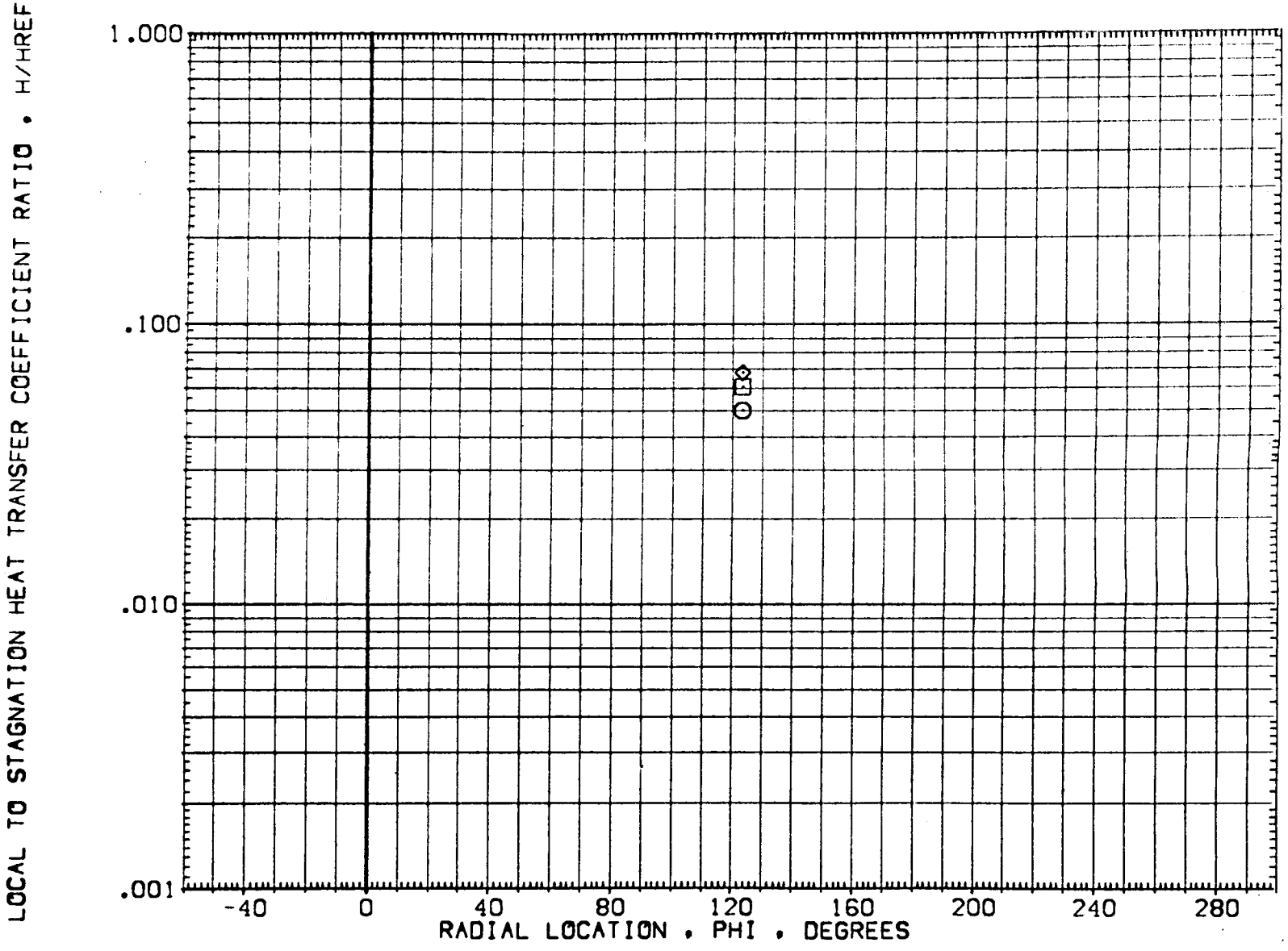


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T]I)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE[T]I)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE[T]I)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

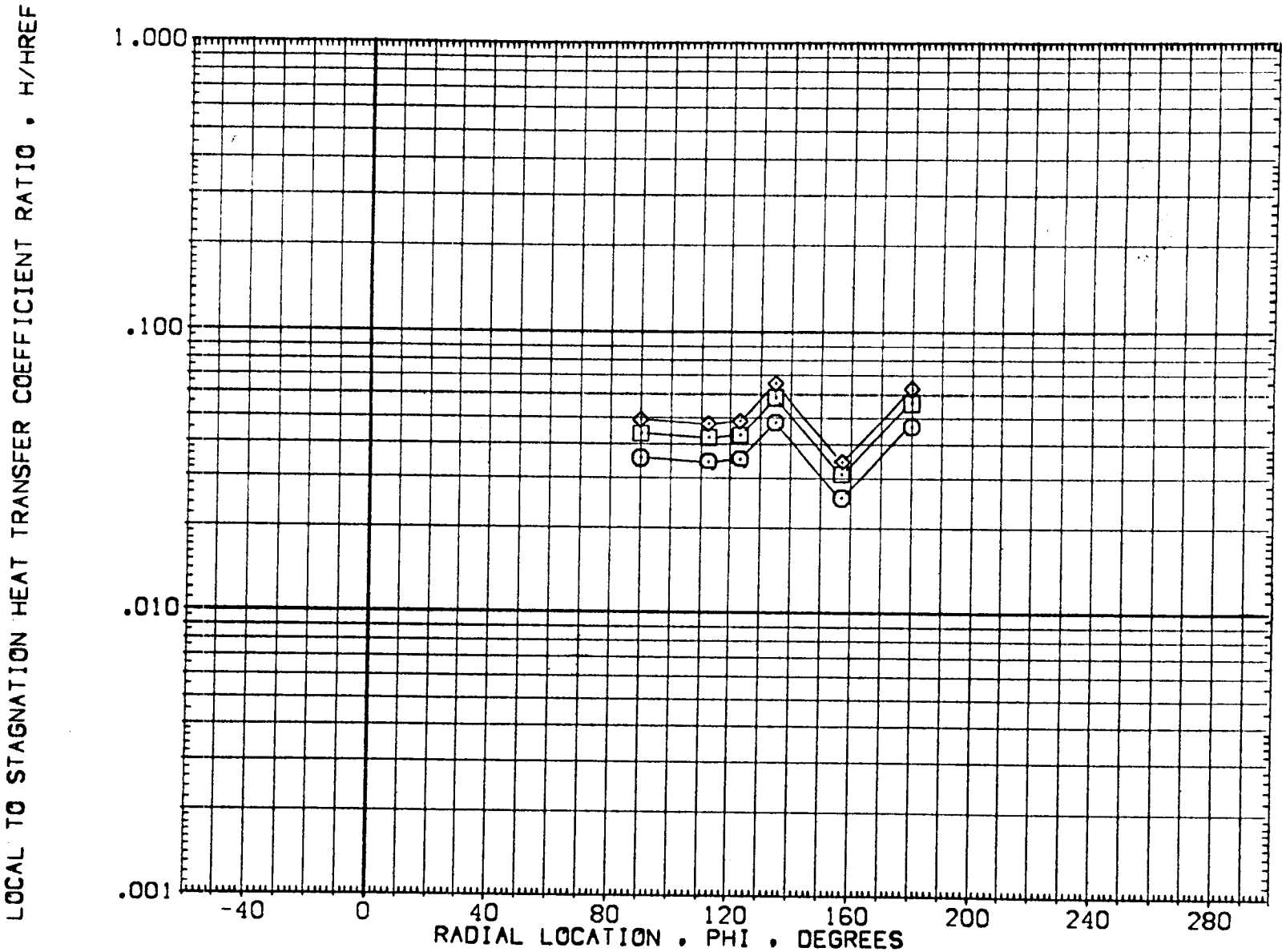


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITII)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITII)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BEITII)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

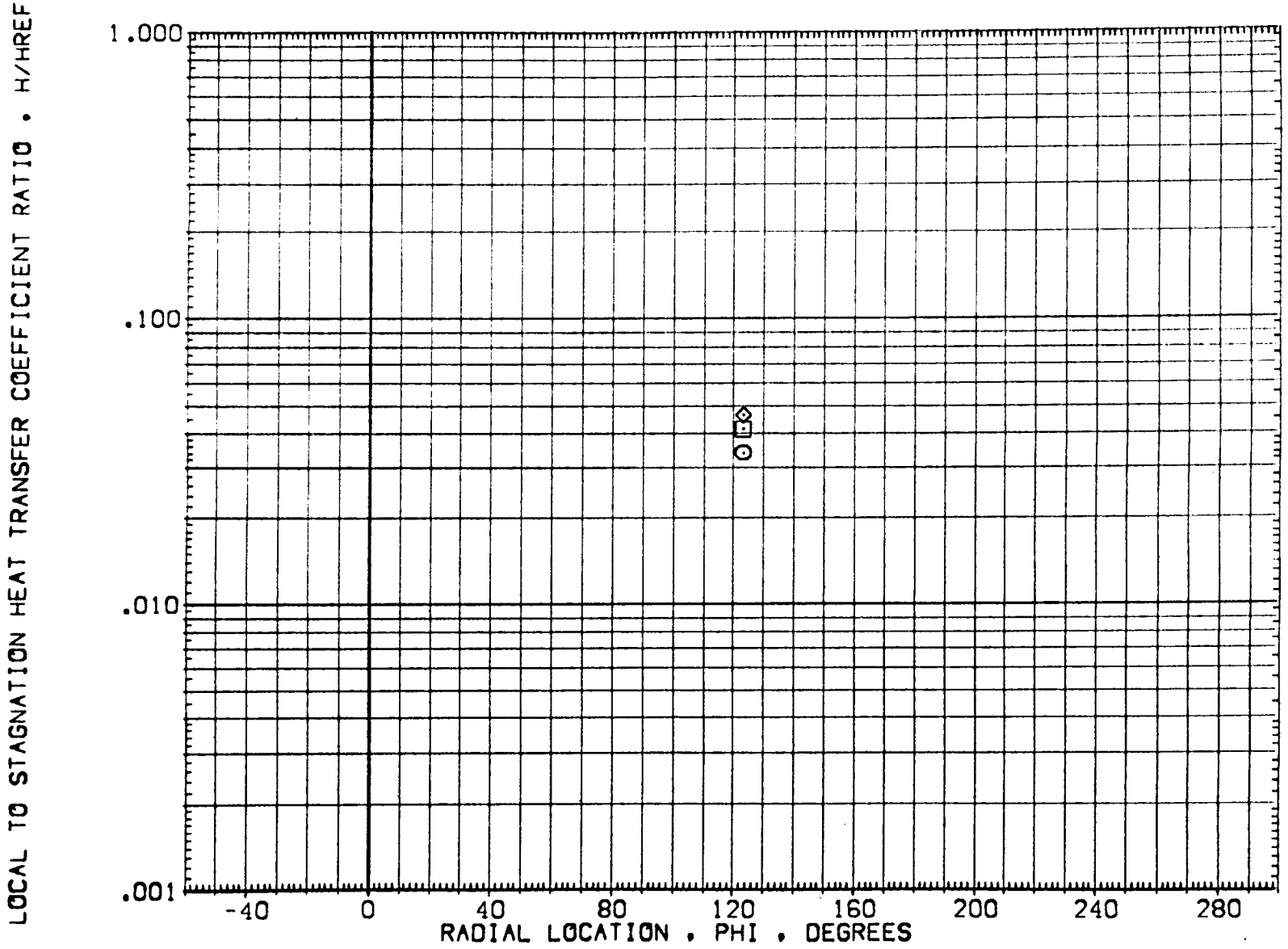


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE[111]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AE[T11]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BE[T11]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

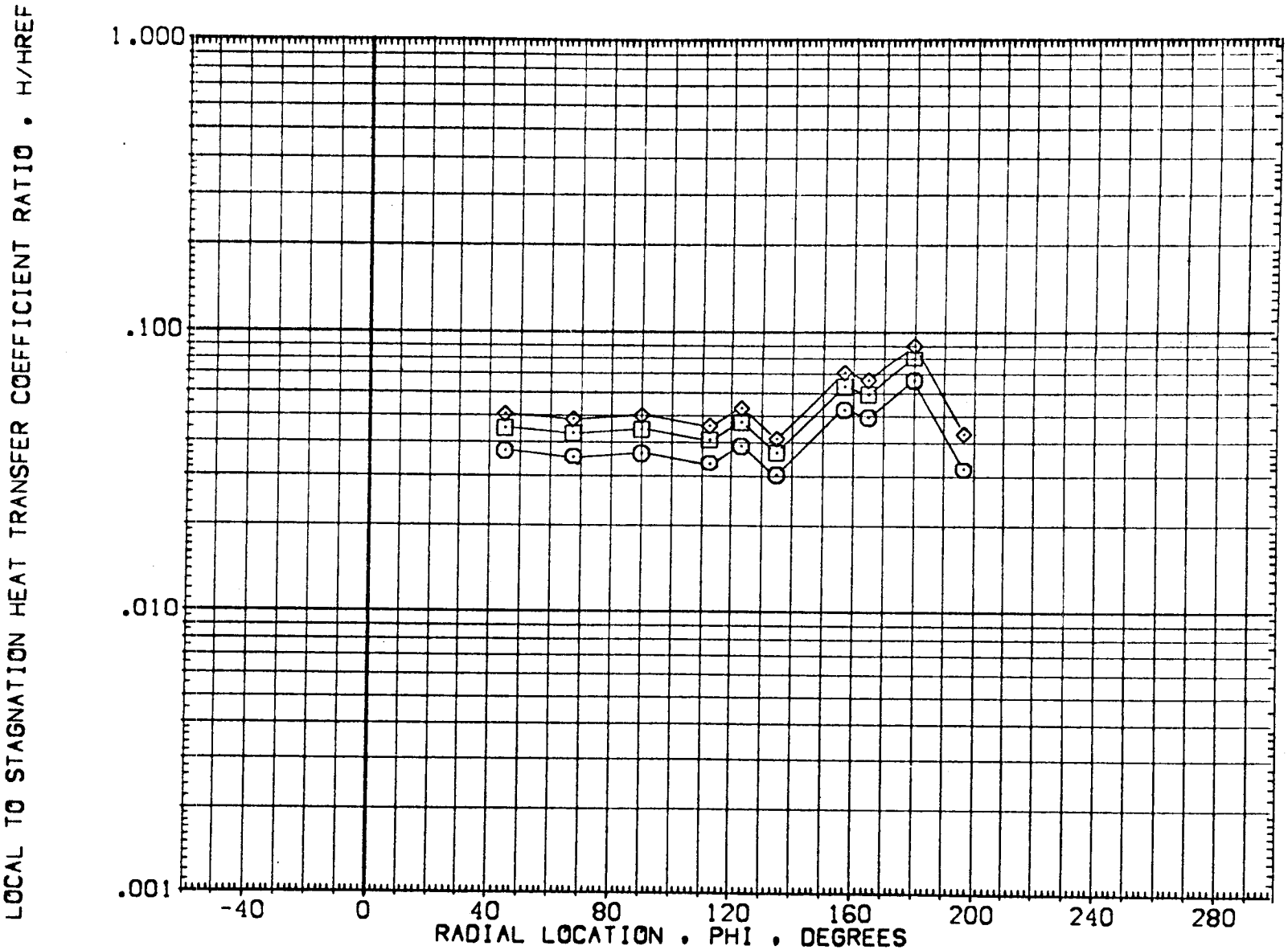


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITII]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AEITII]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BEITII]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

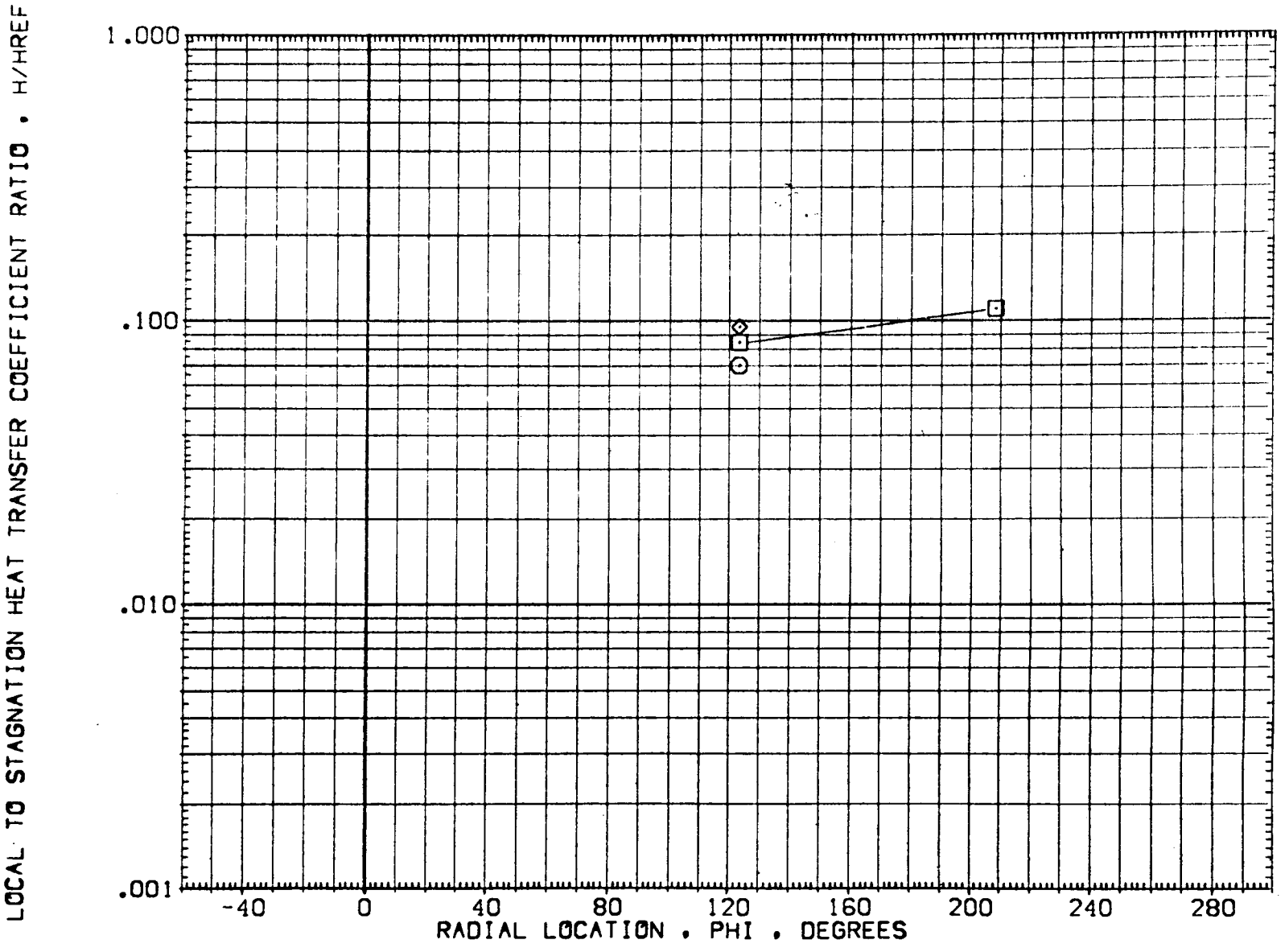


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .925

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1111] ○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AE1111] △	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BE1111] ◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

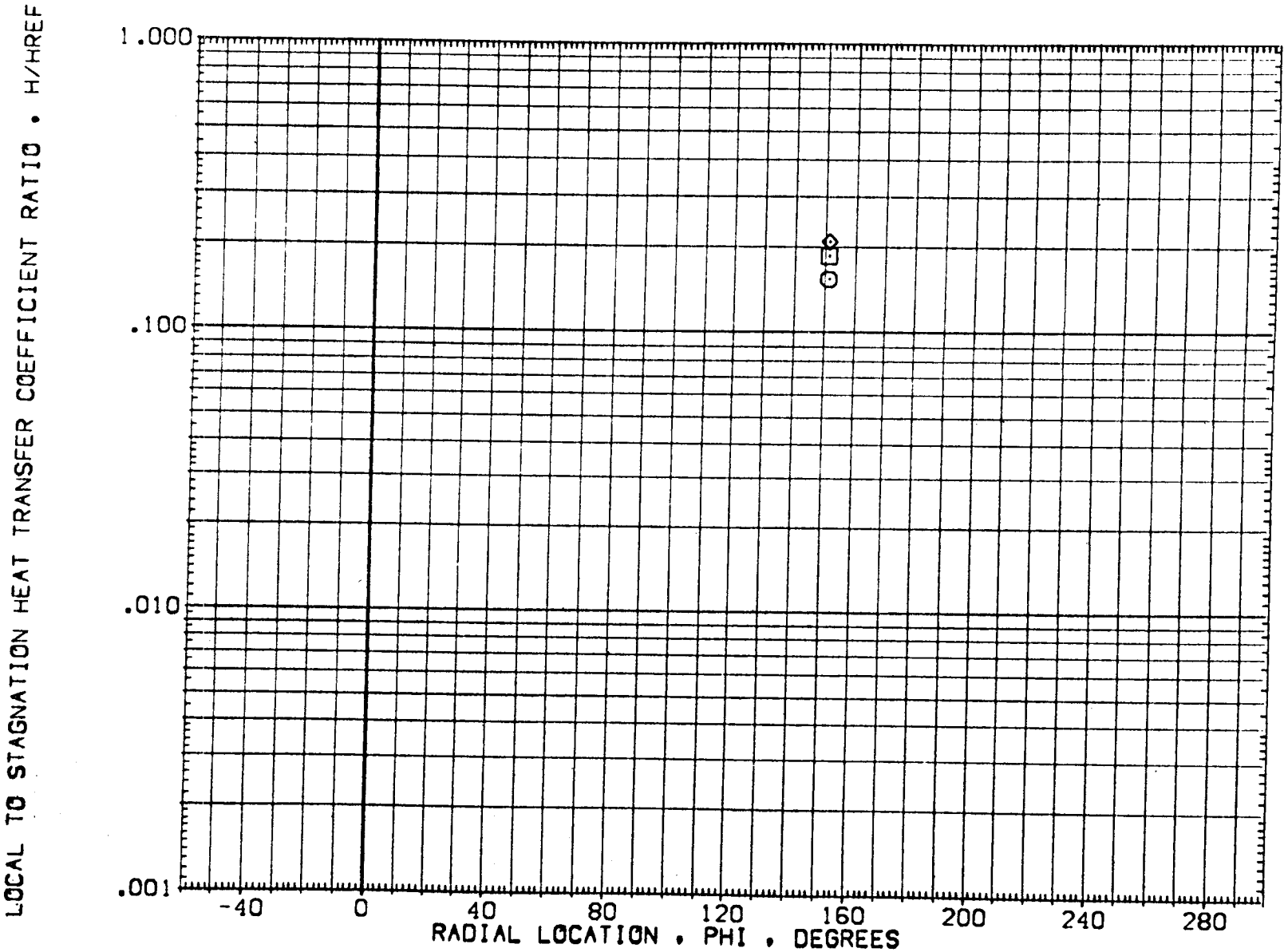


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1T11]	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
[AE1T11]	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
[BE1T11]	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

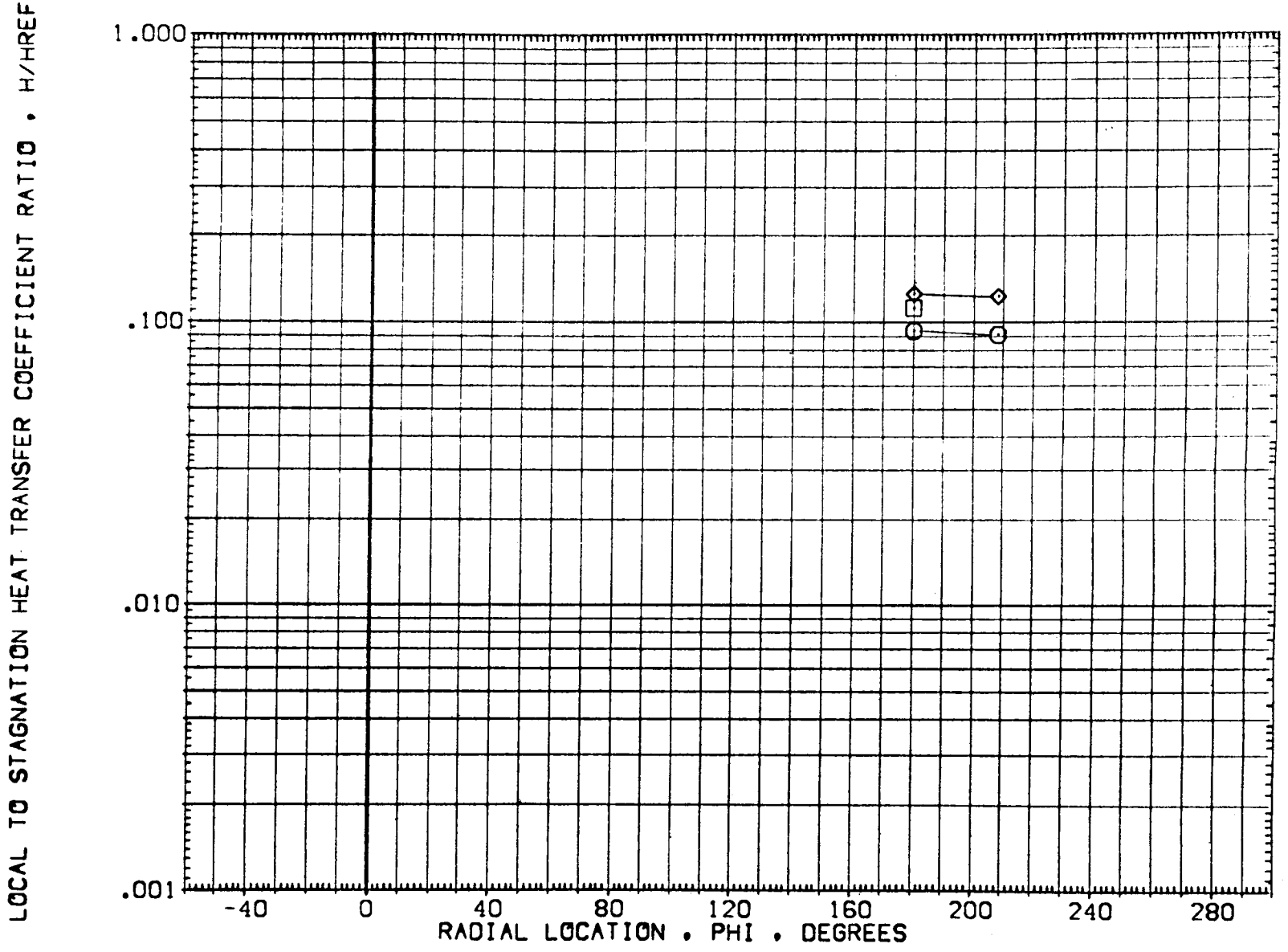


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1111)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1111)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1111)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

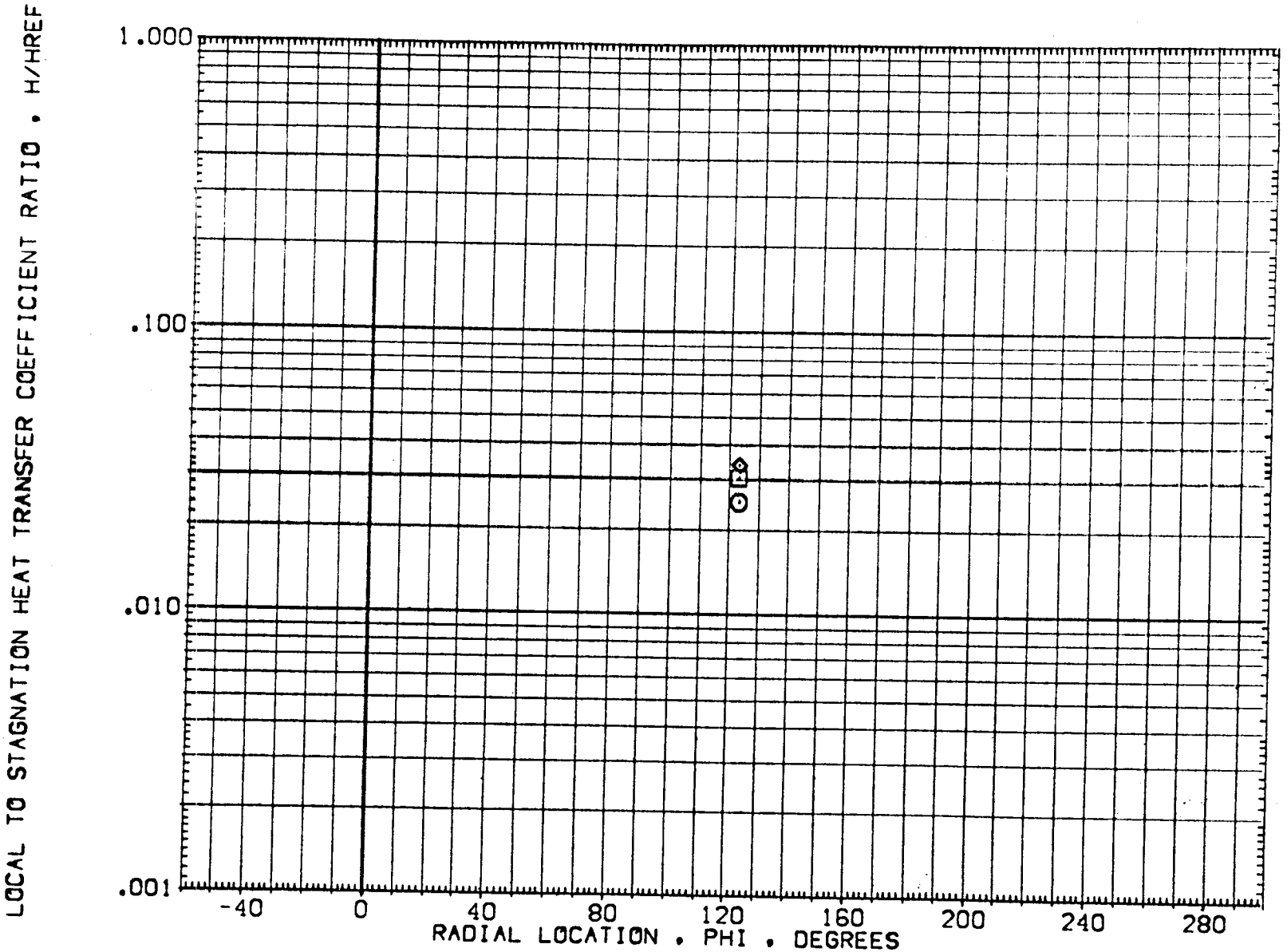


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T11)	○	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T11)	□	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T11)	◇	ARC 3.5-178 IH3 ET	EXTERNAL TANK	.000	.000	5.000	.850

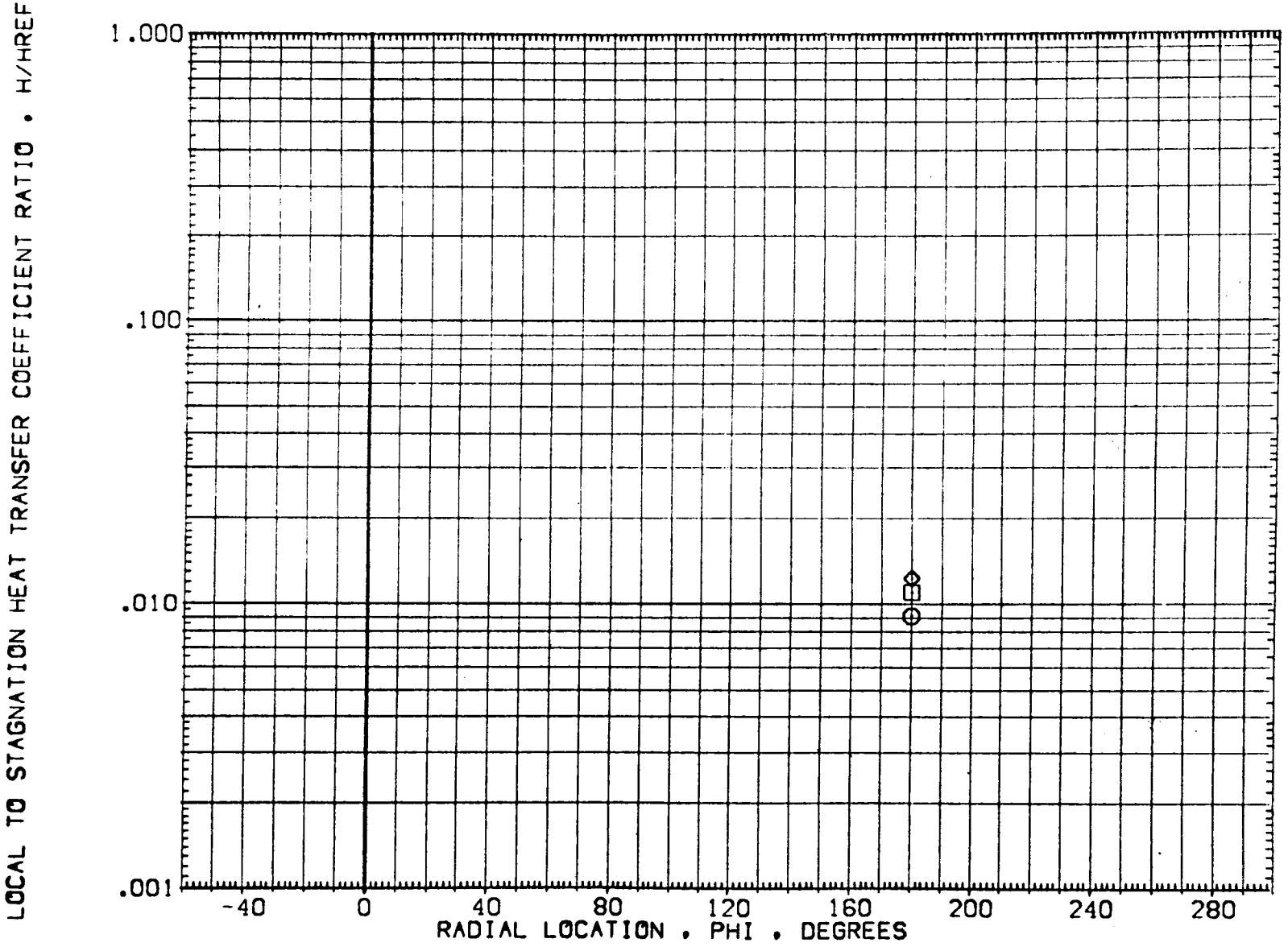


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

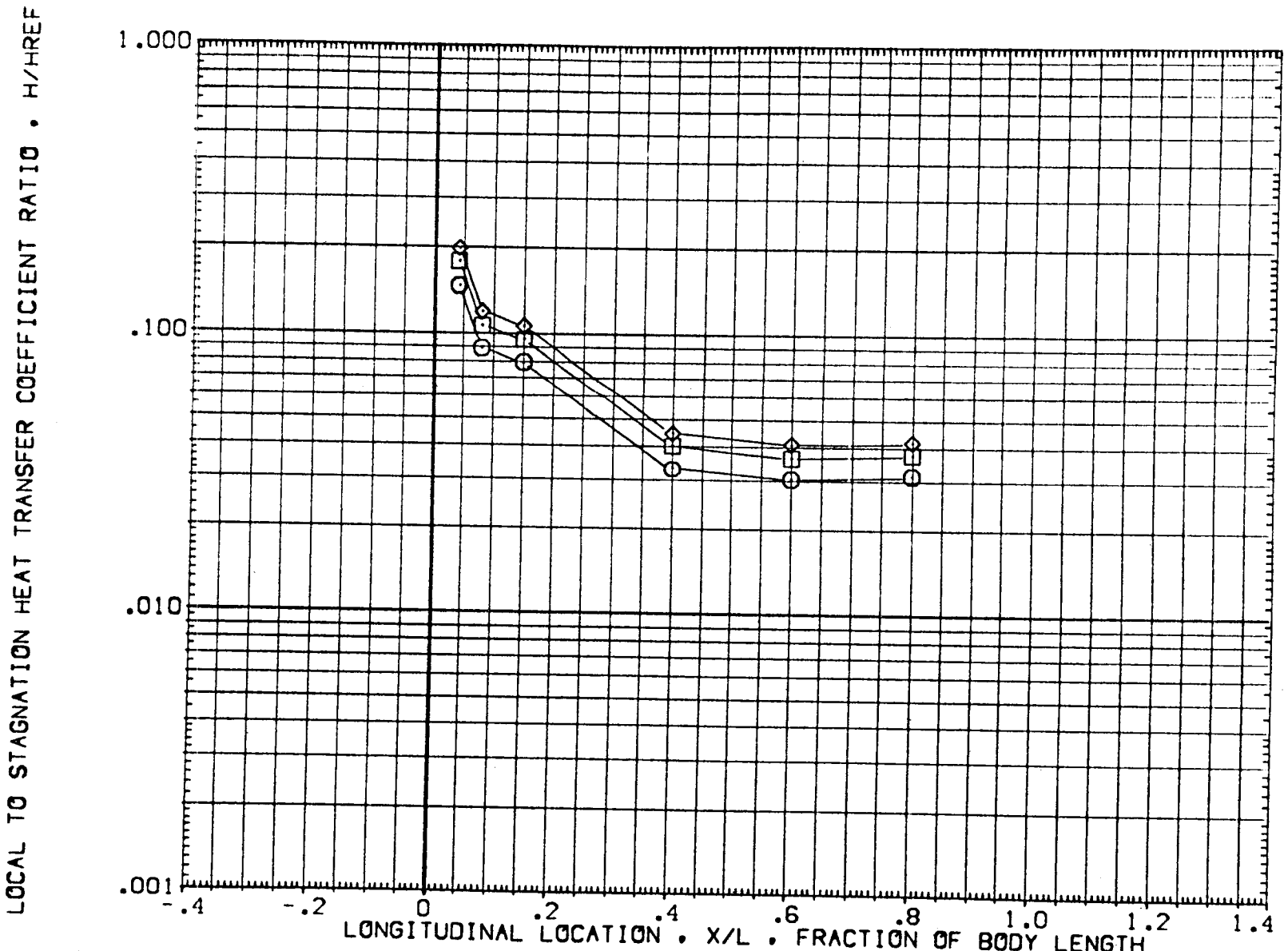


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

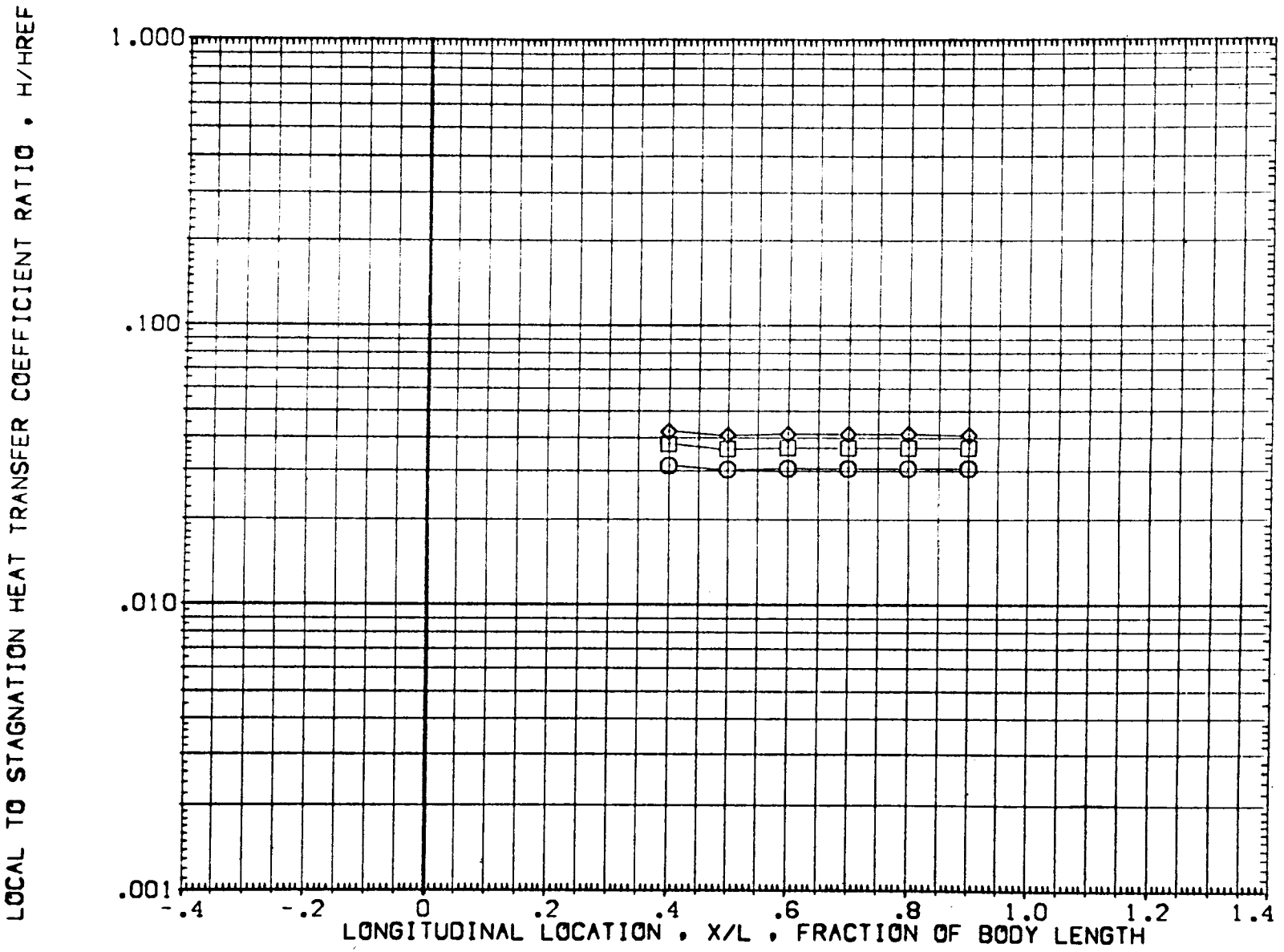


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

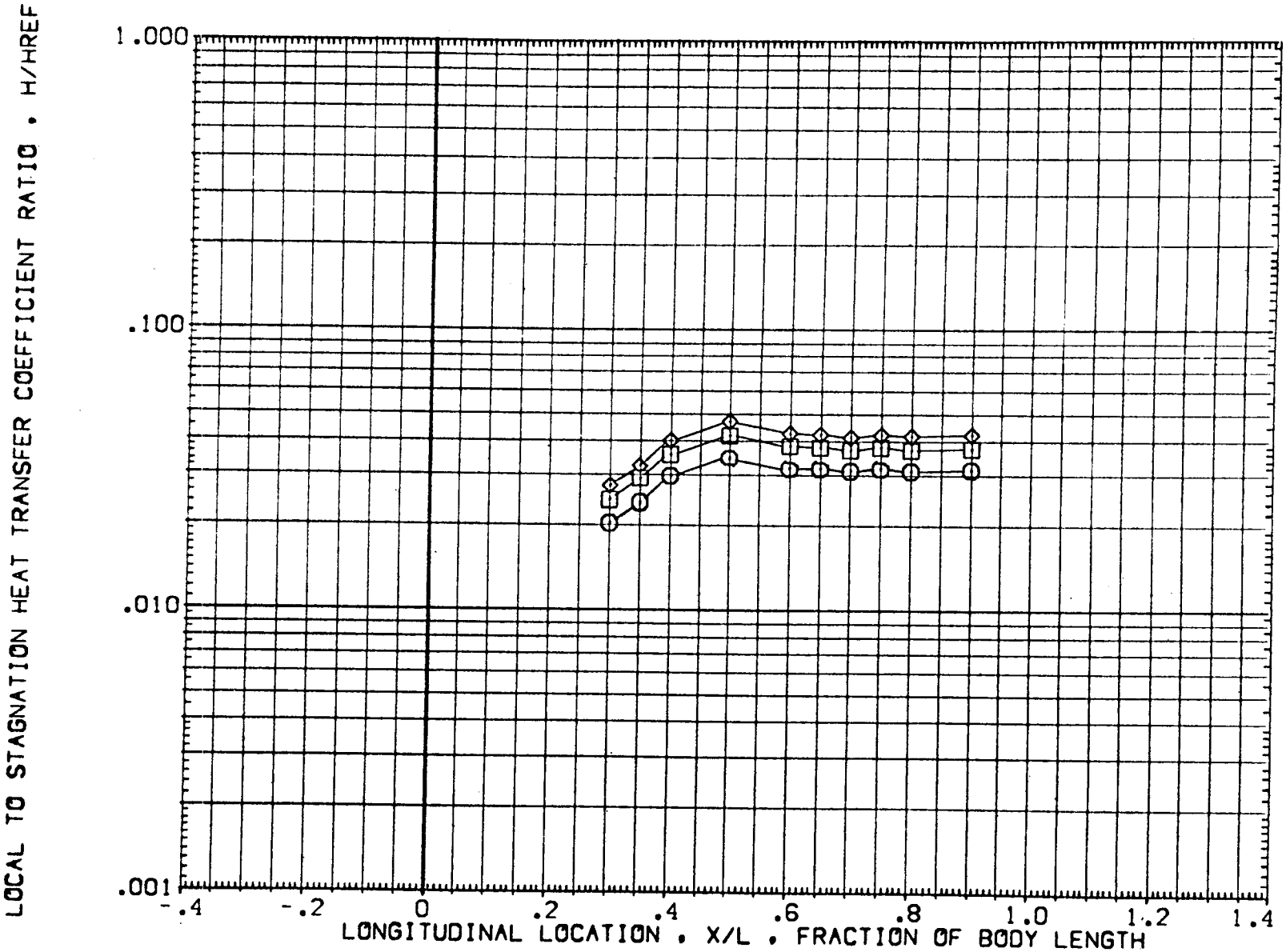


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

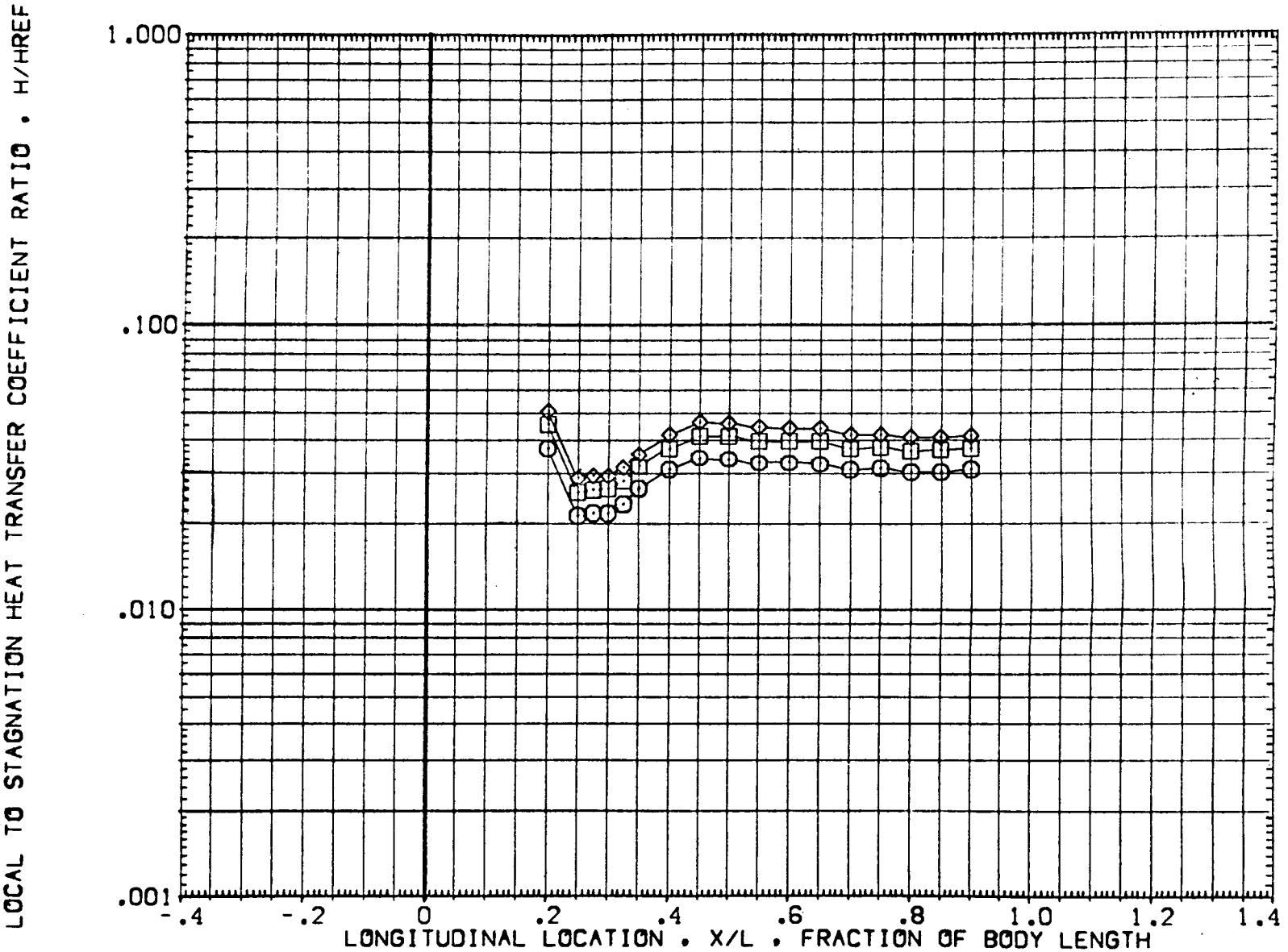


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 90.000

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

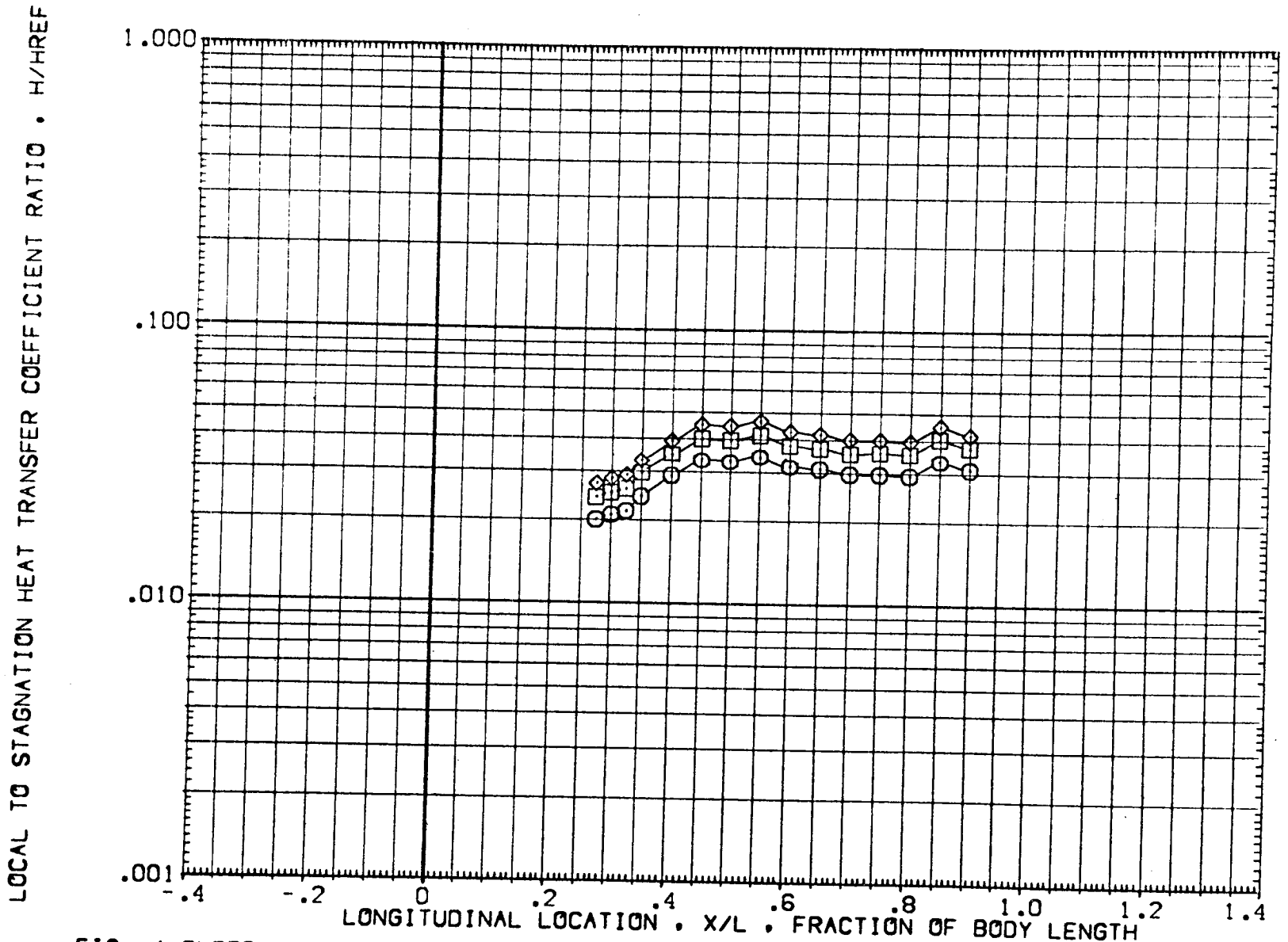


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1113)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1113)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

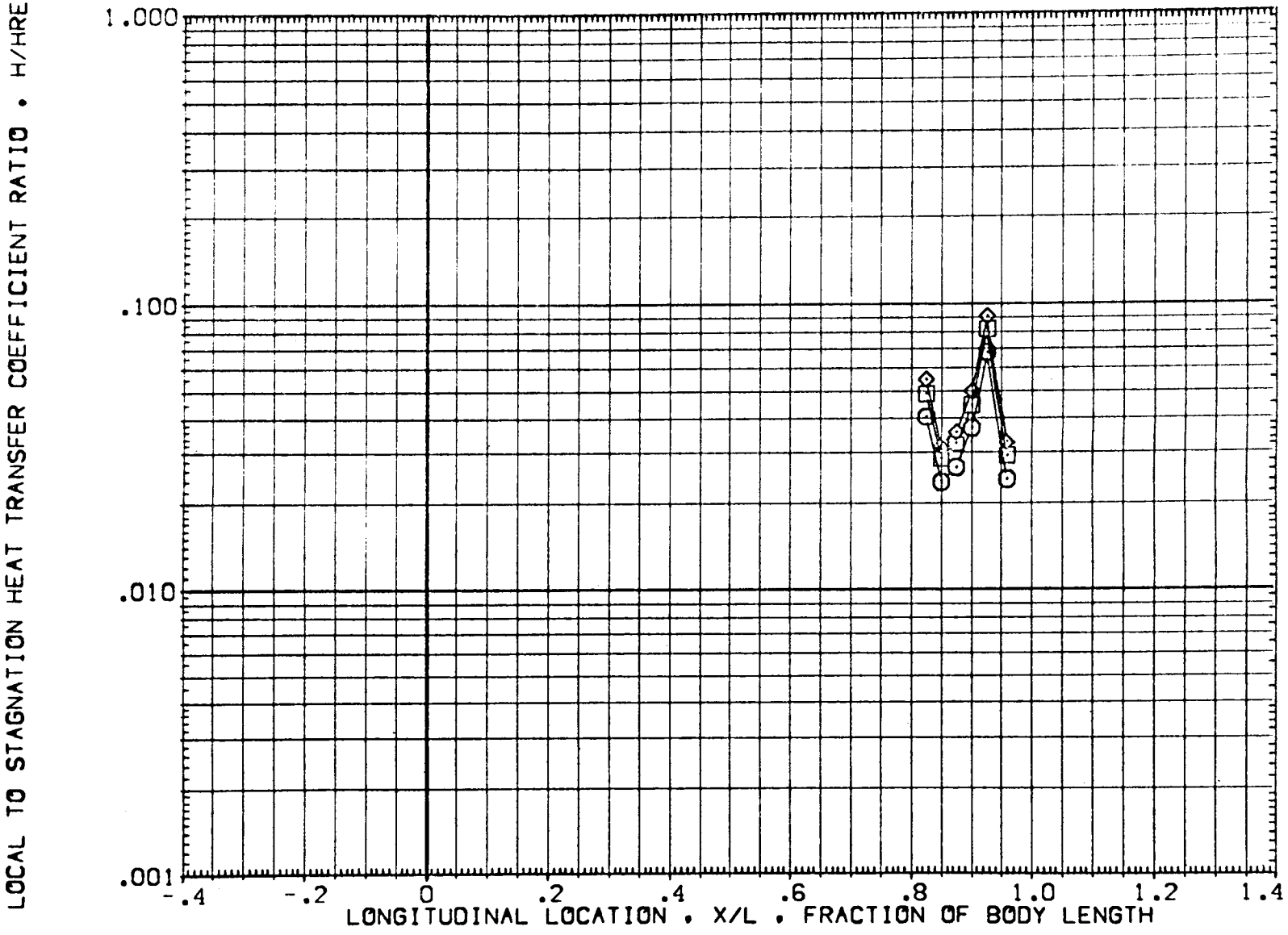


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

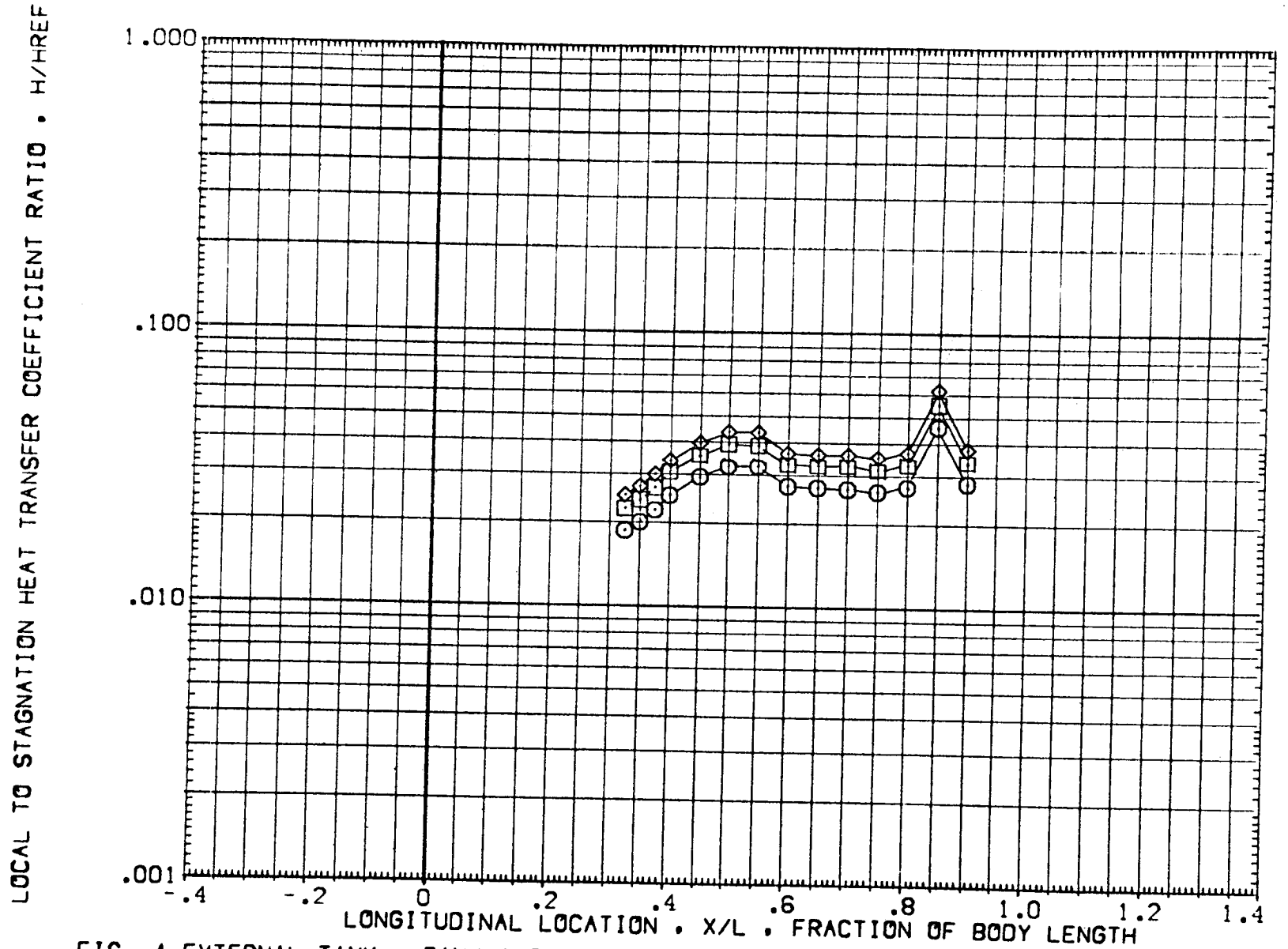


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

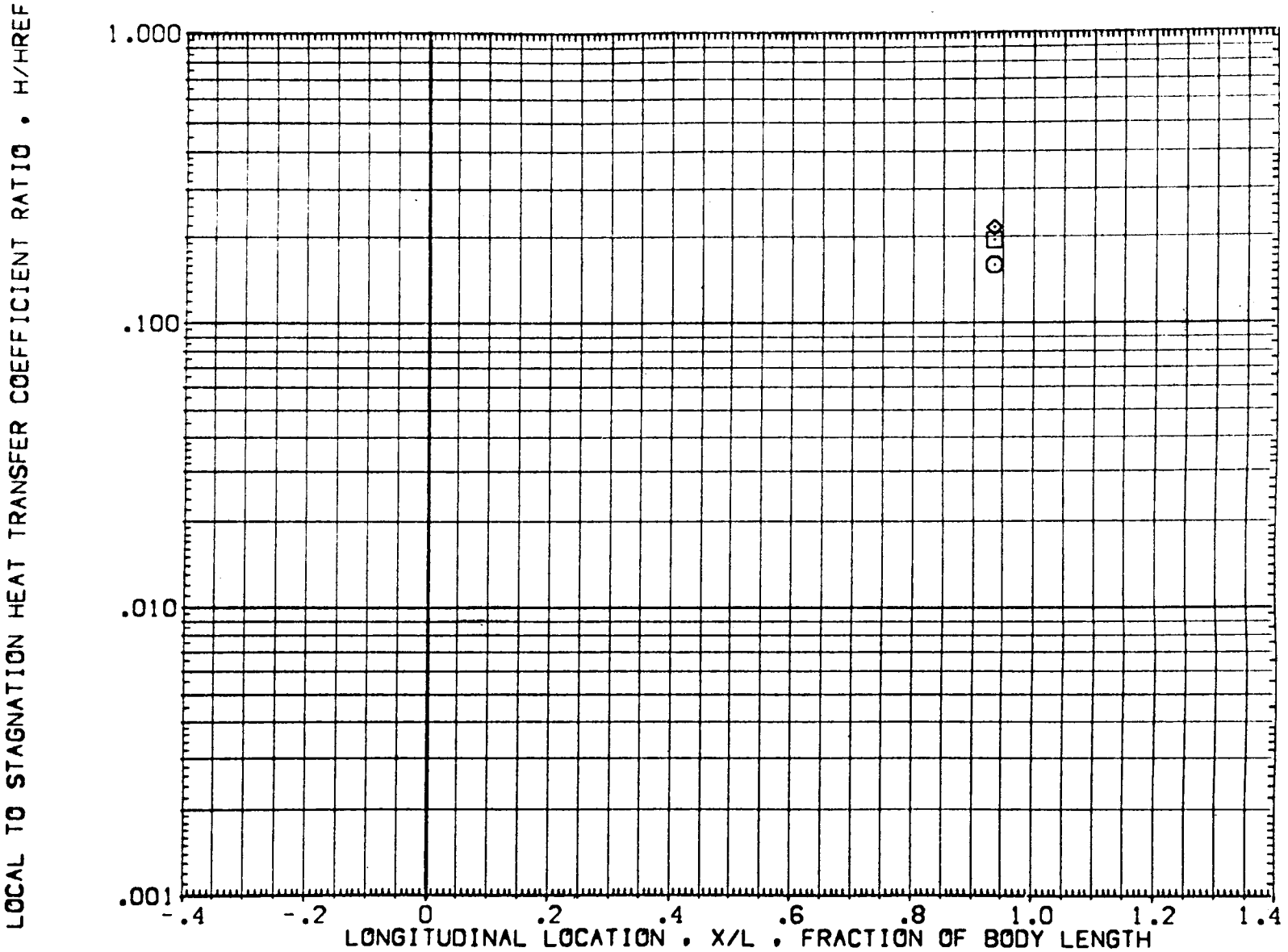


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

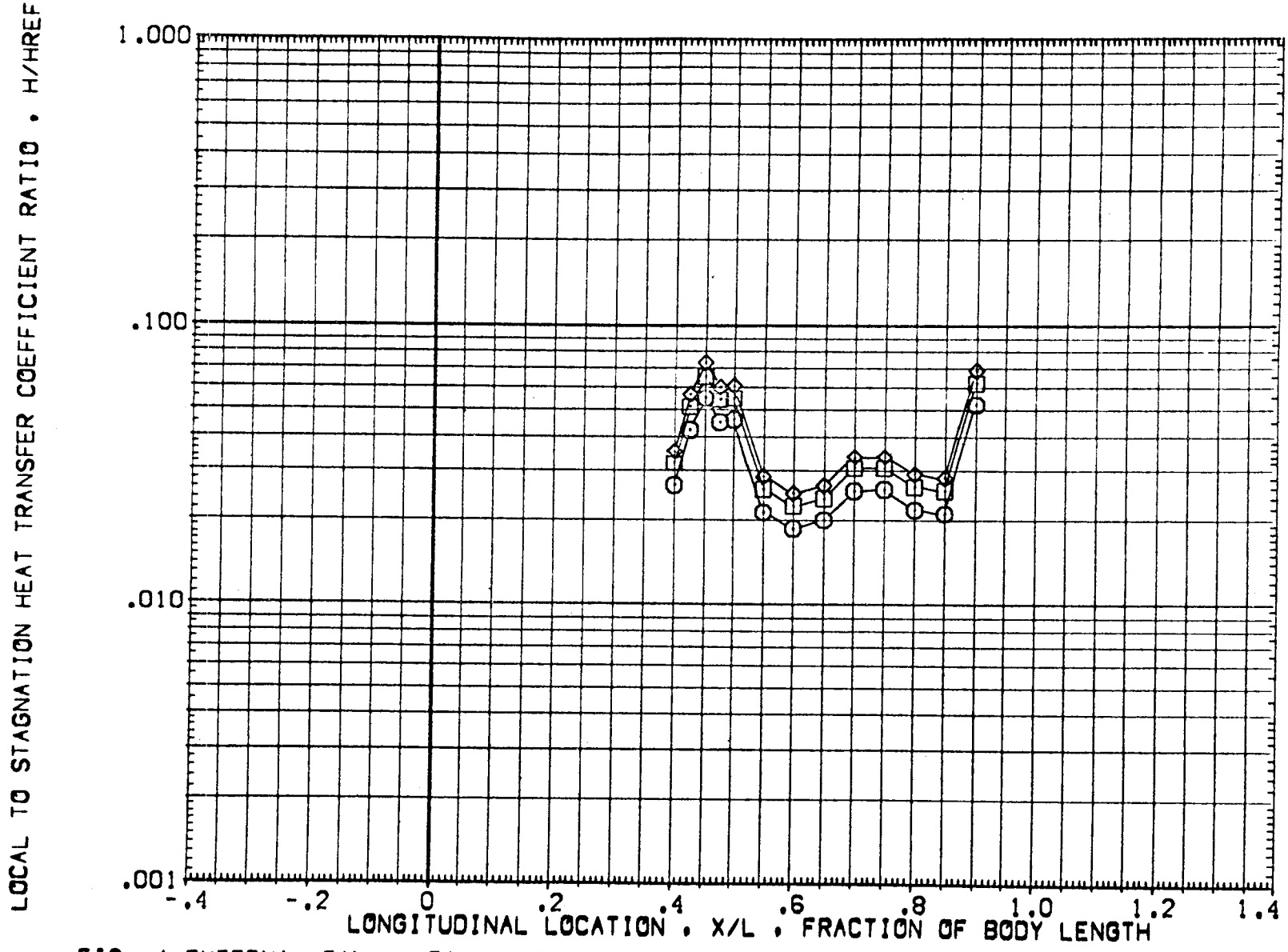


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

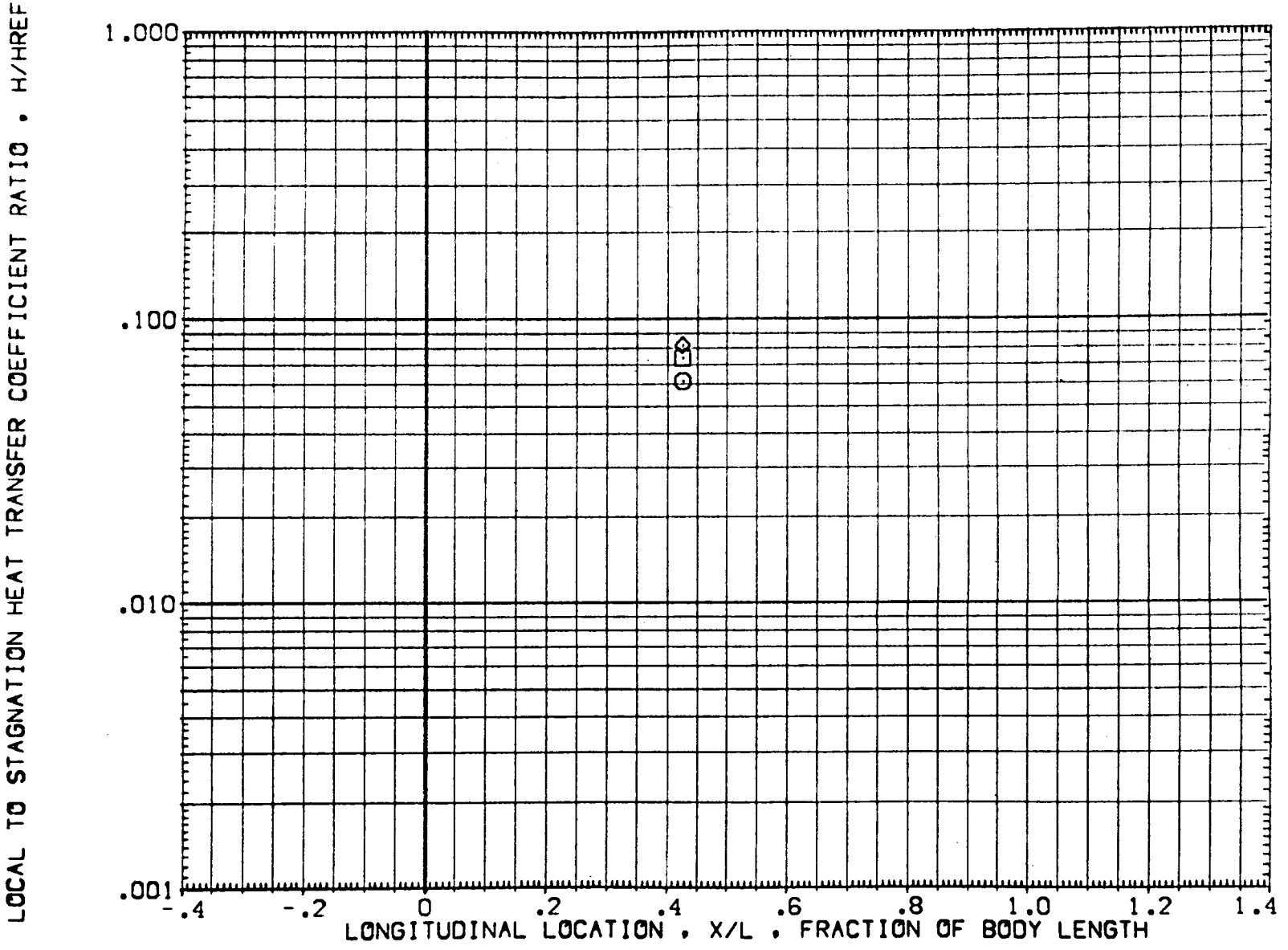


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

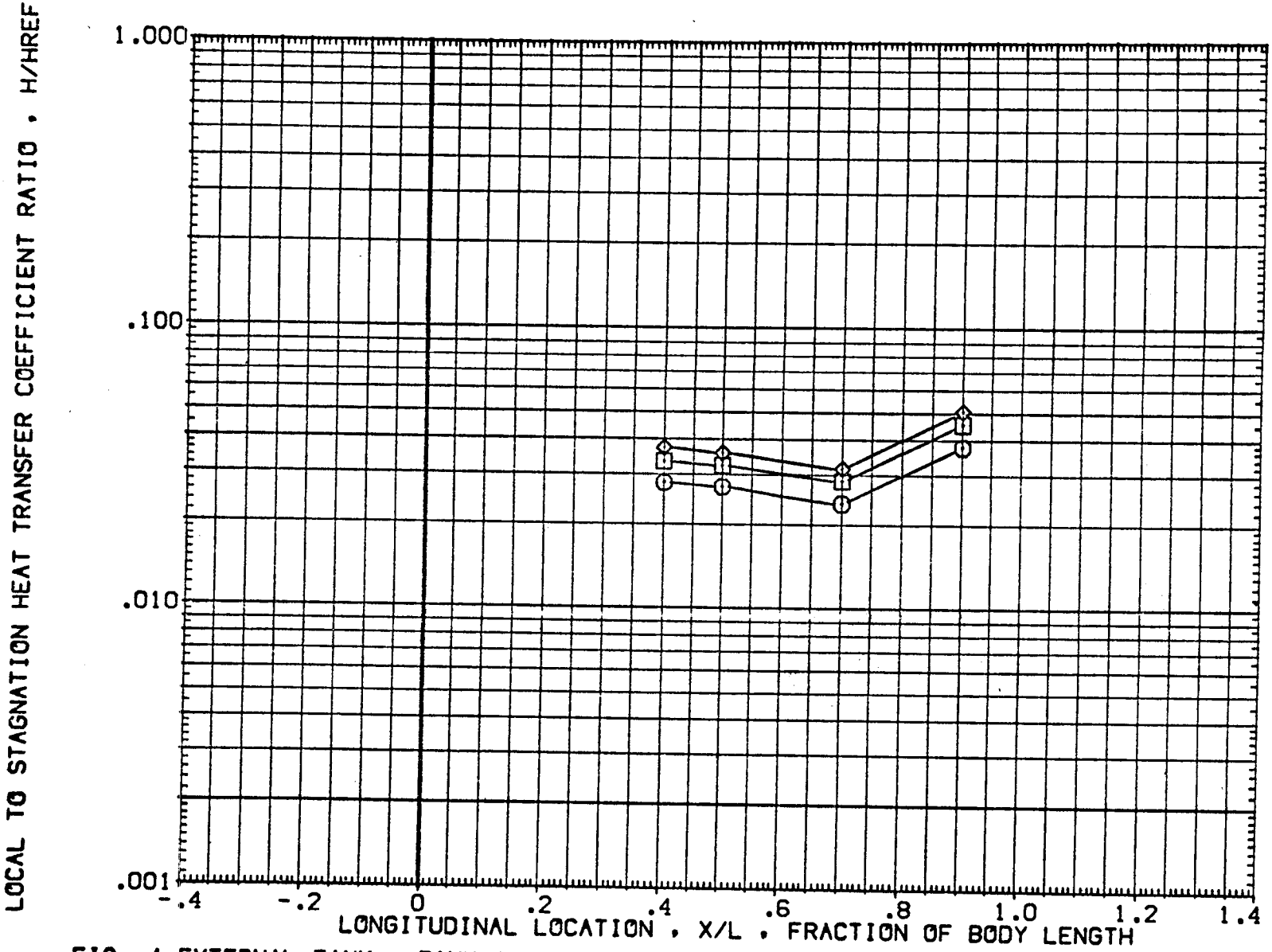


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

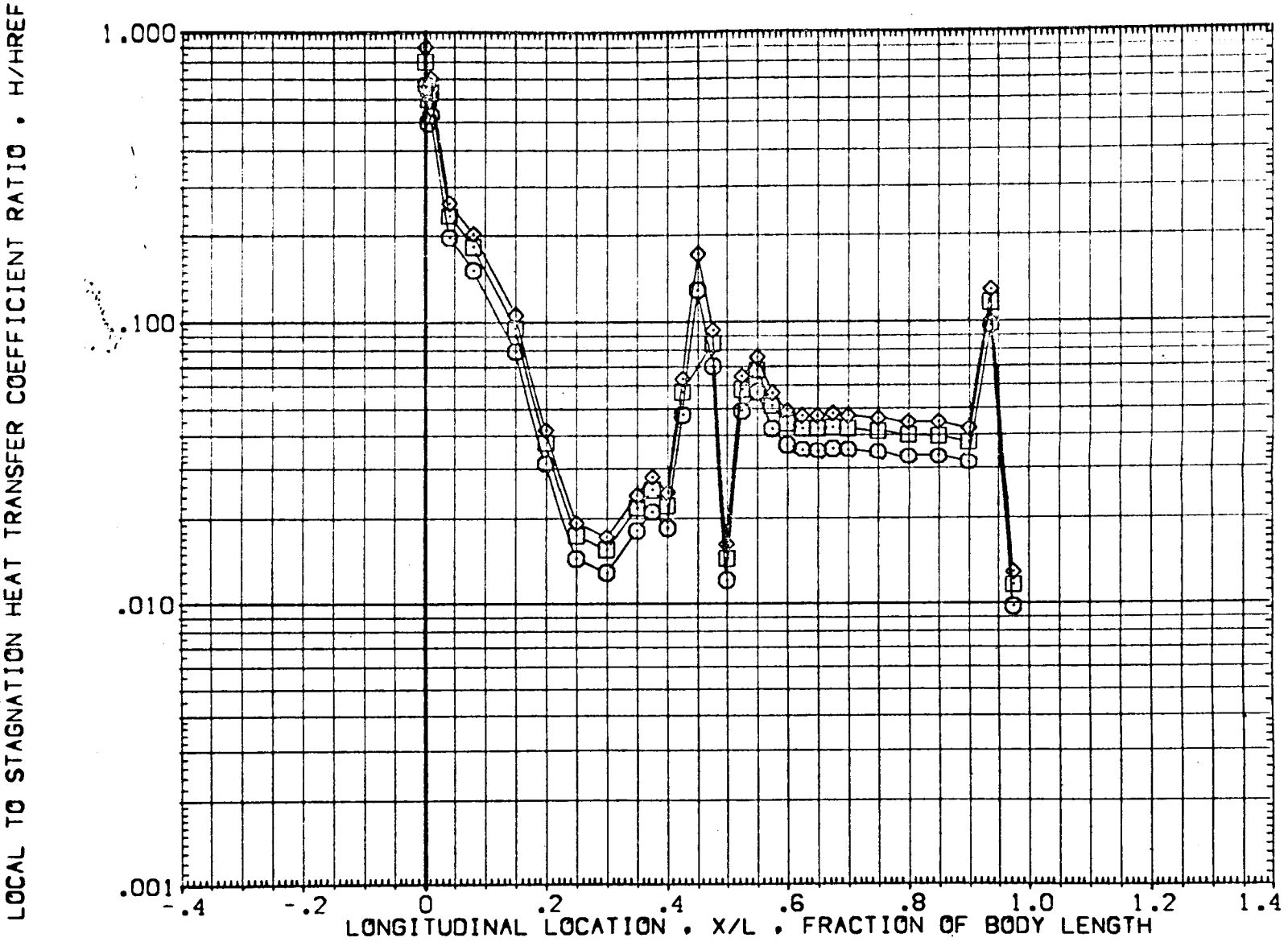


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT.
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

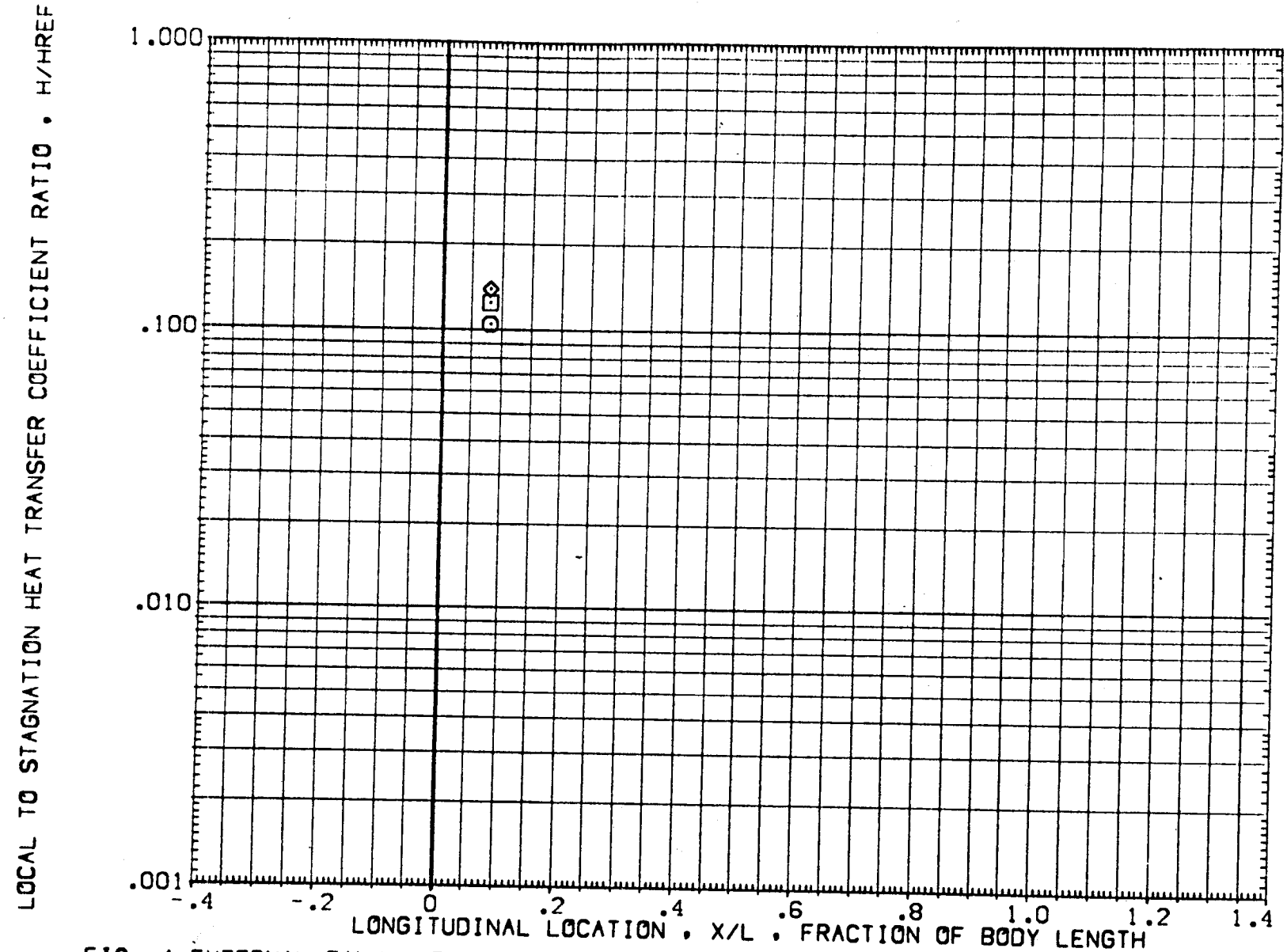


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

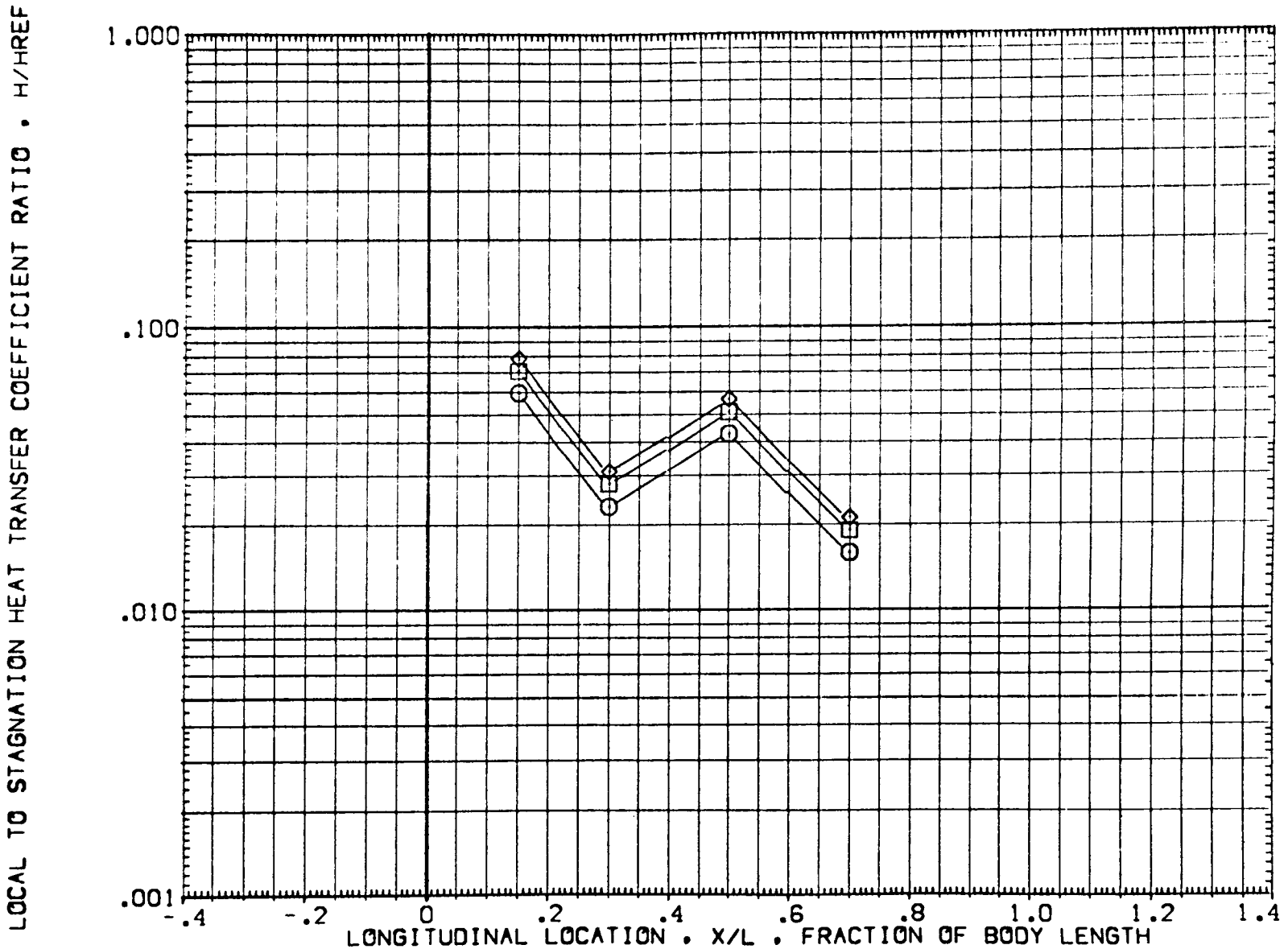


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	DATA NOT AVAILABLE		.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

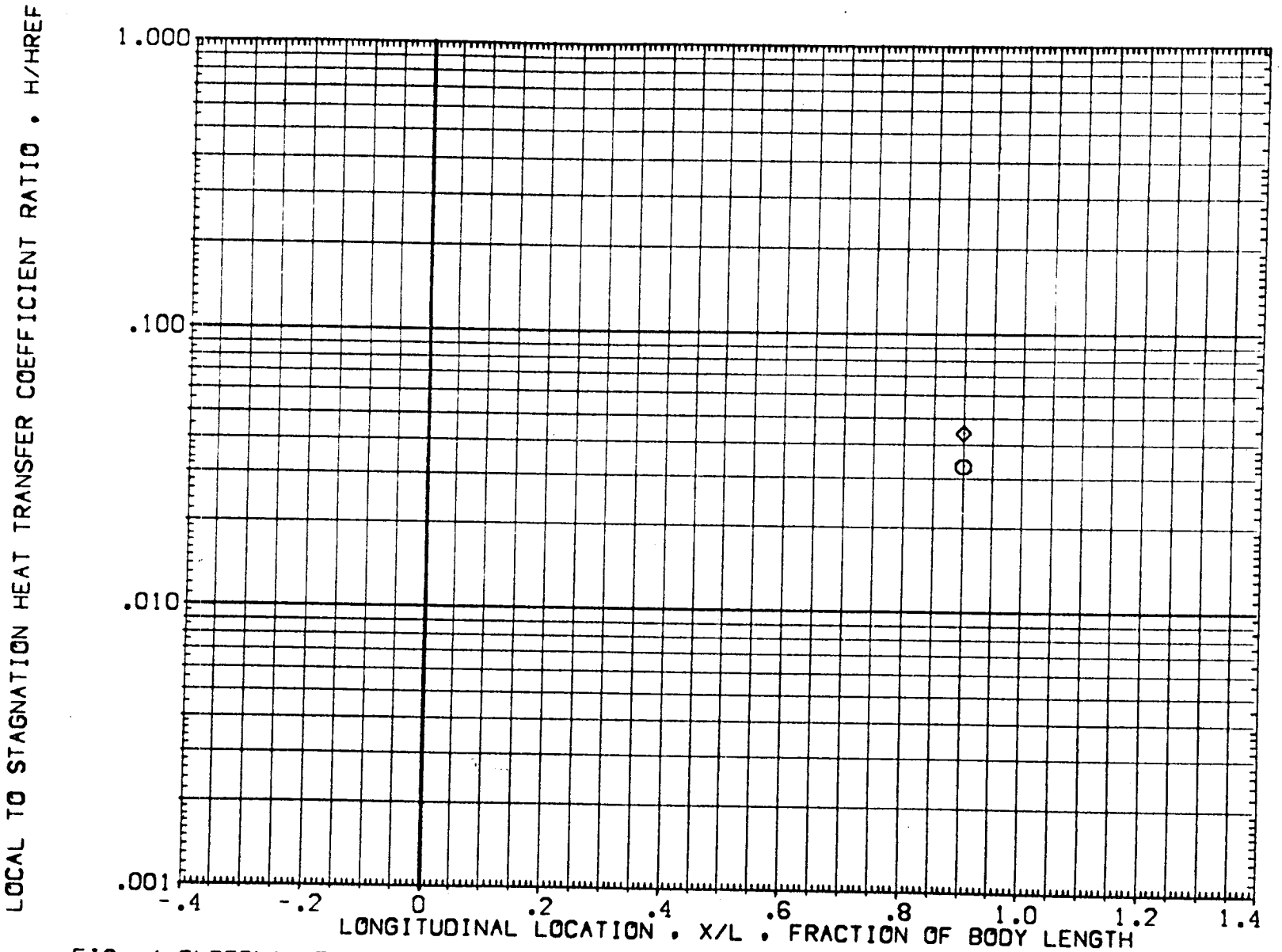


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE!T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

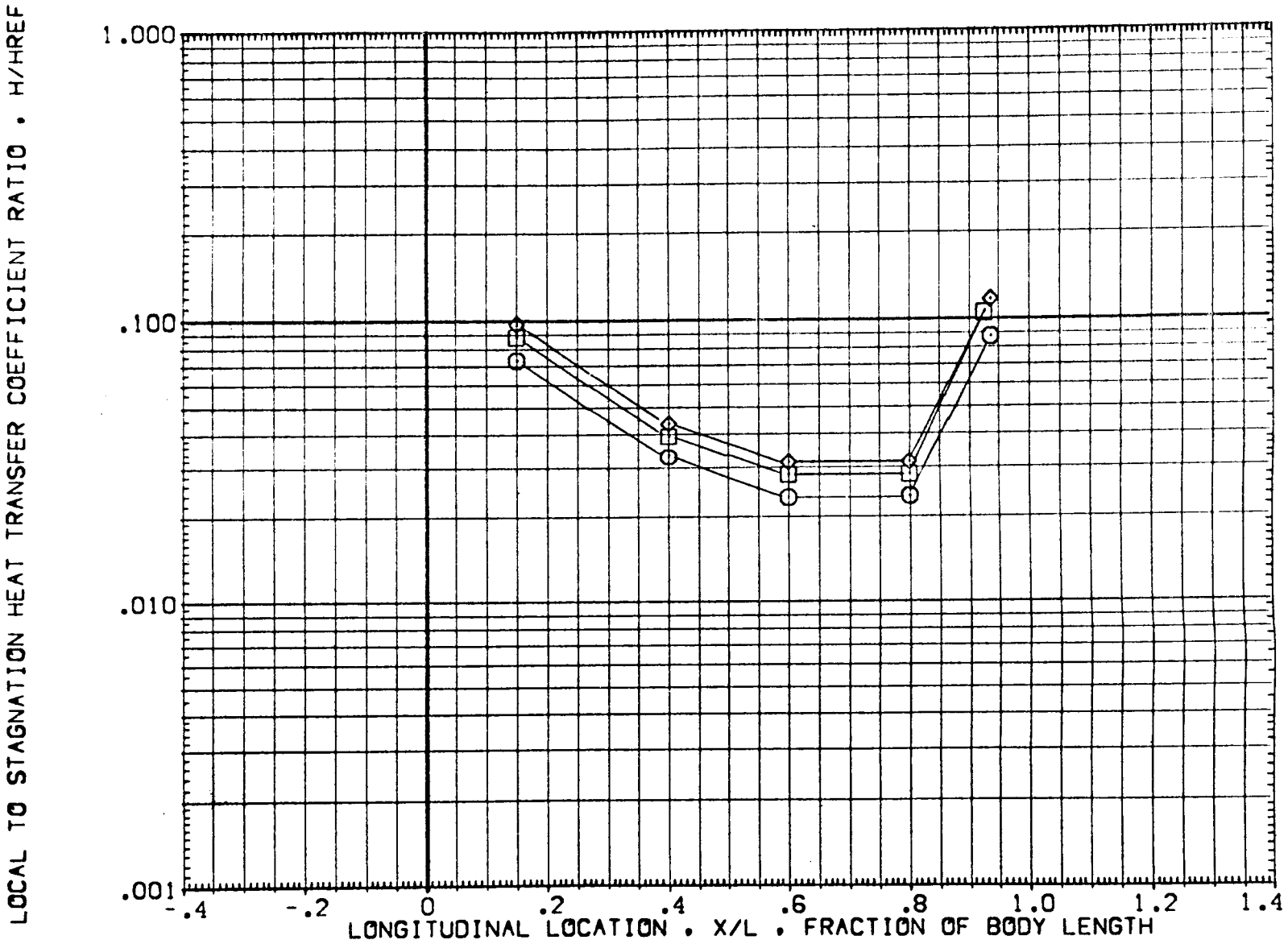


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE|T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

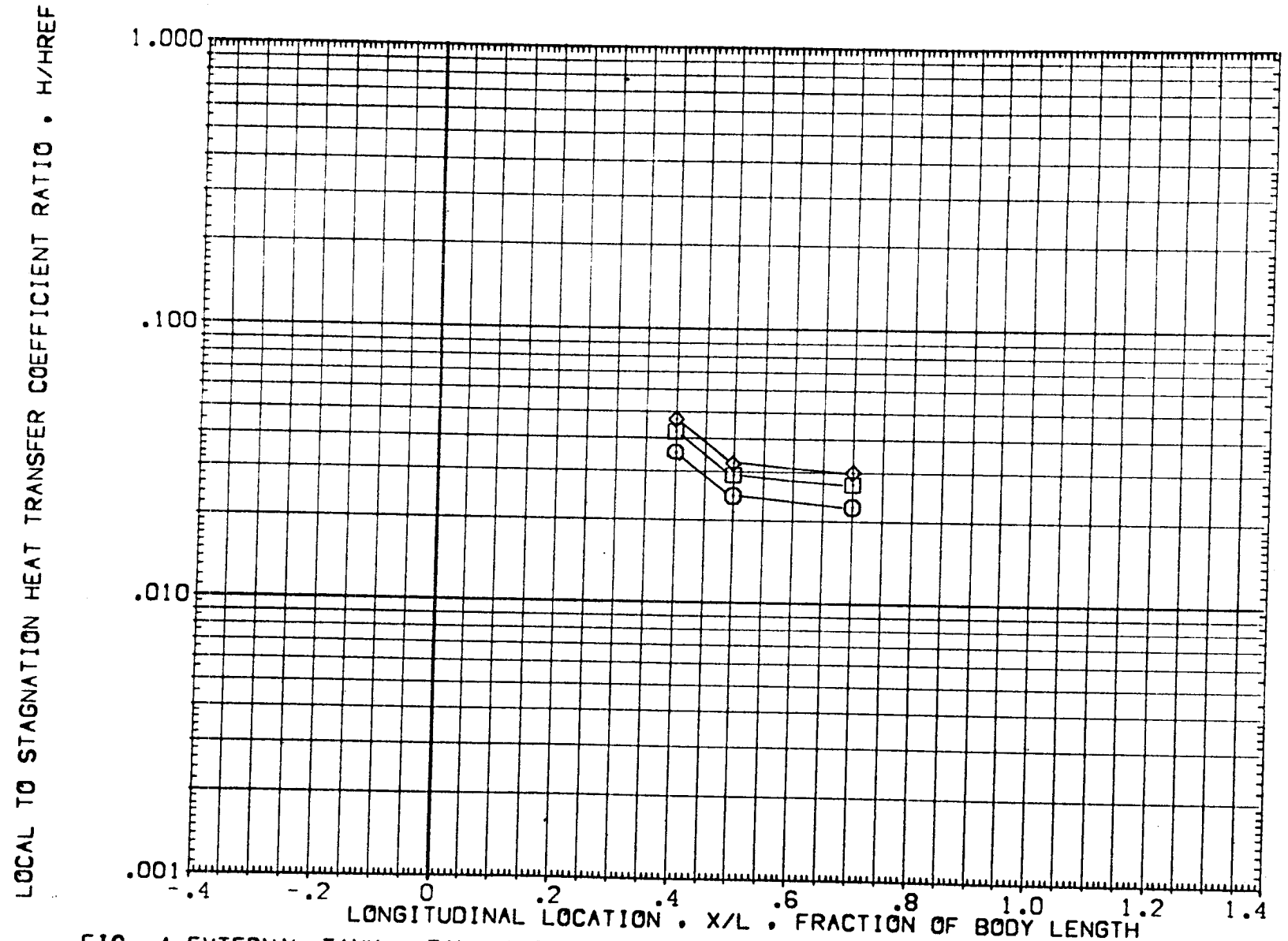


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

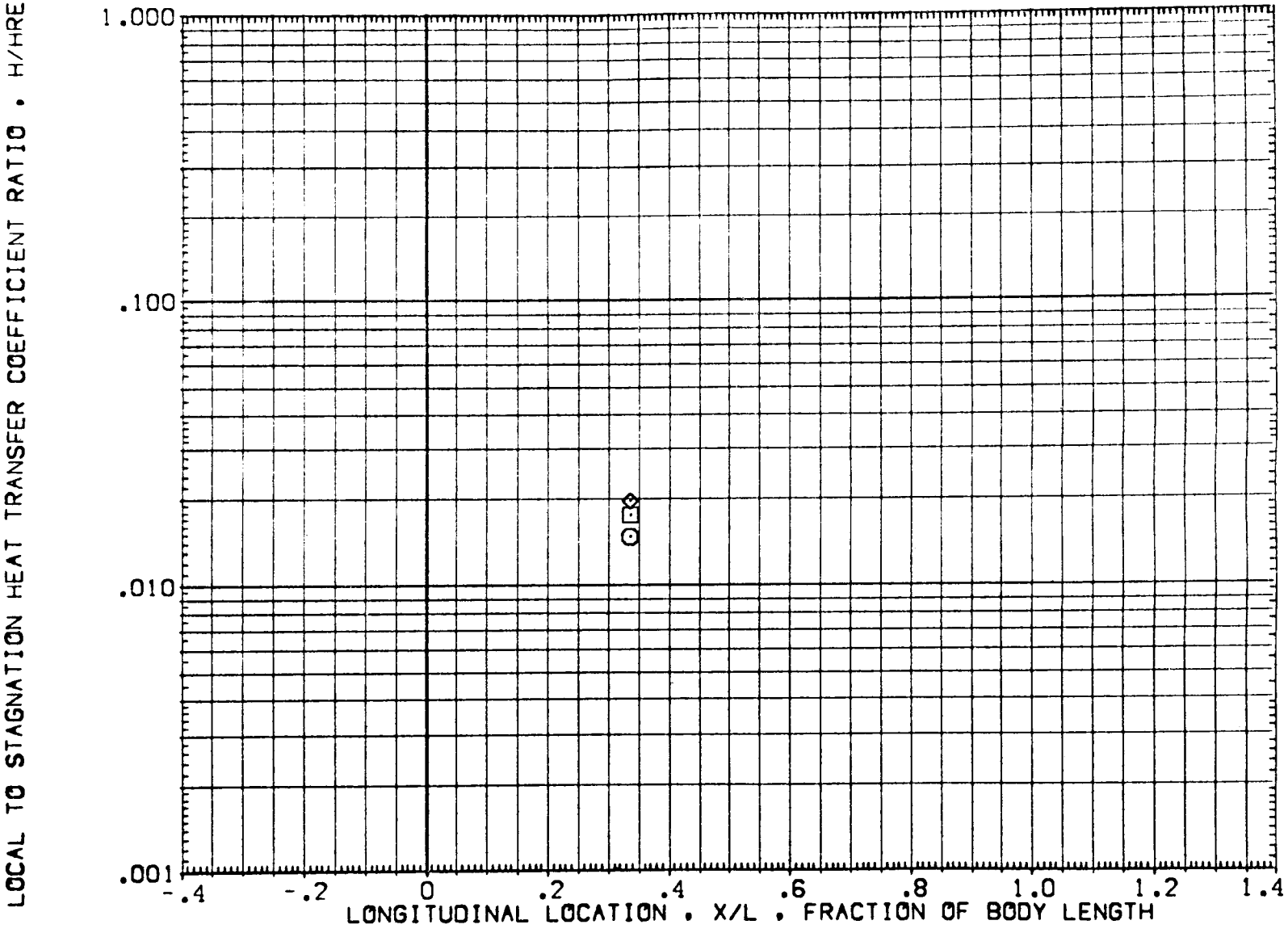


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE[T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE[T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

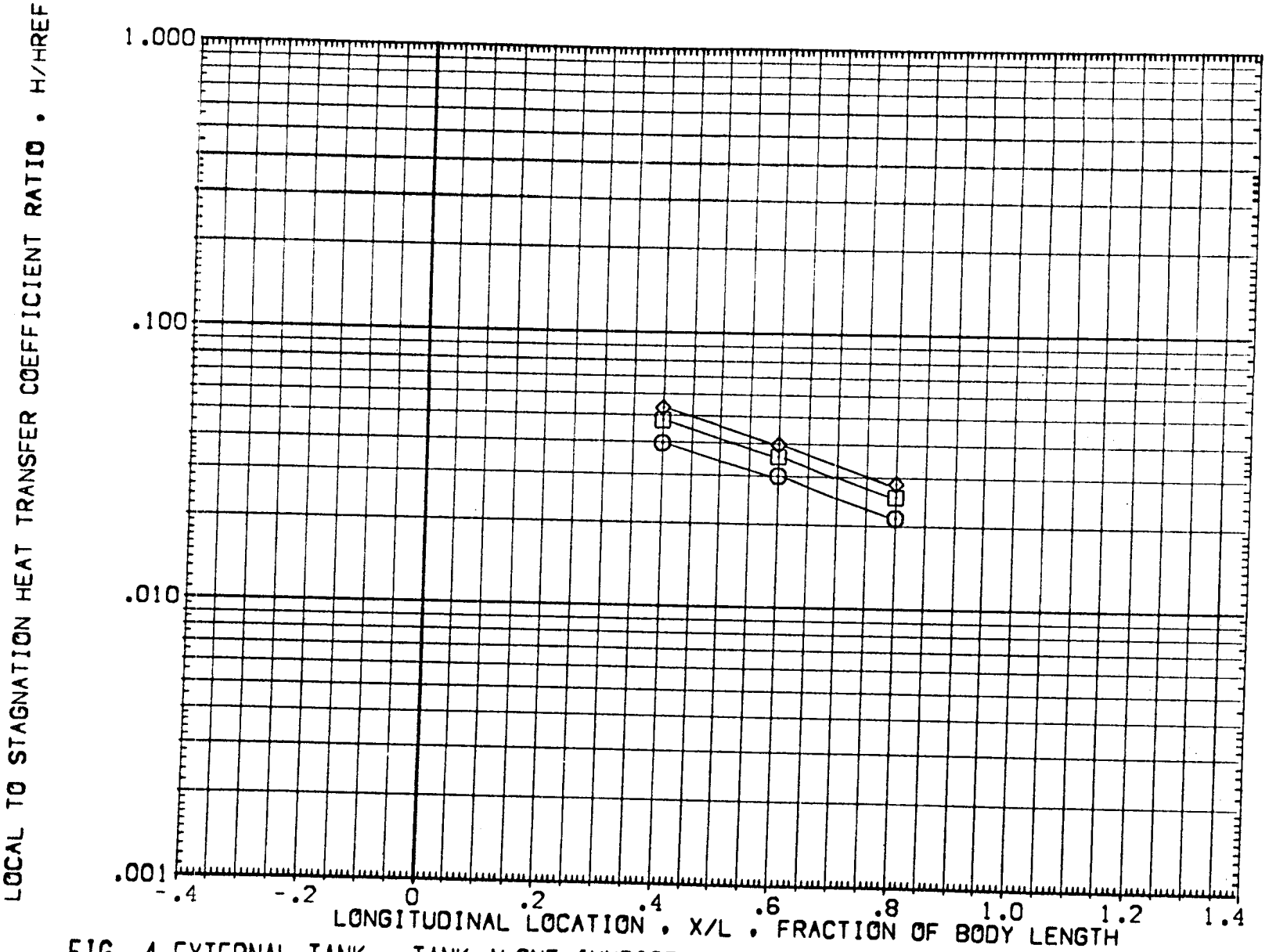


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

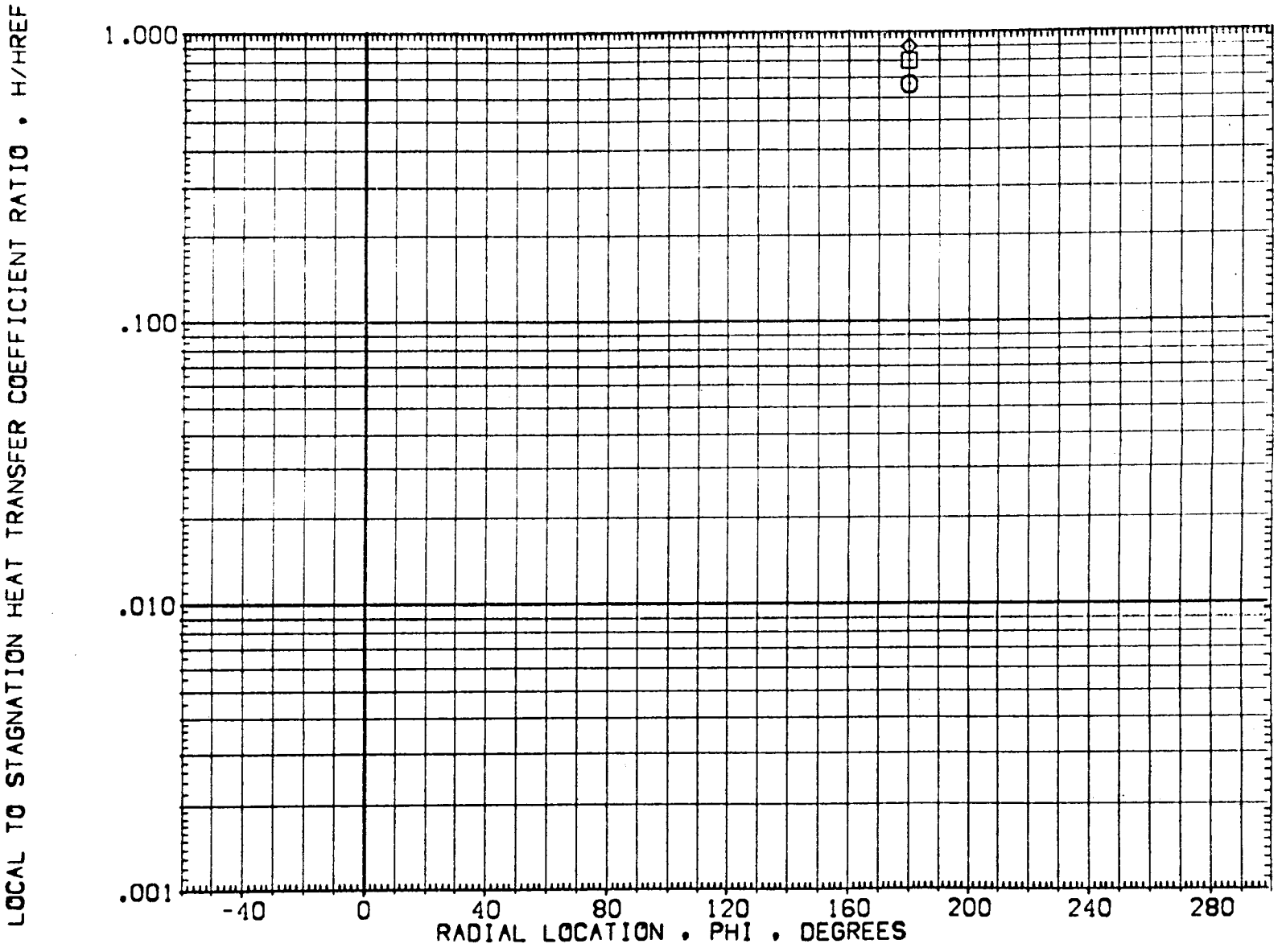


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

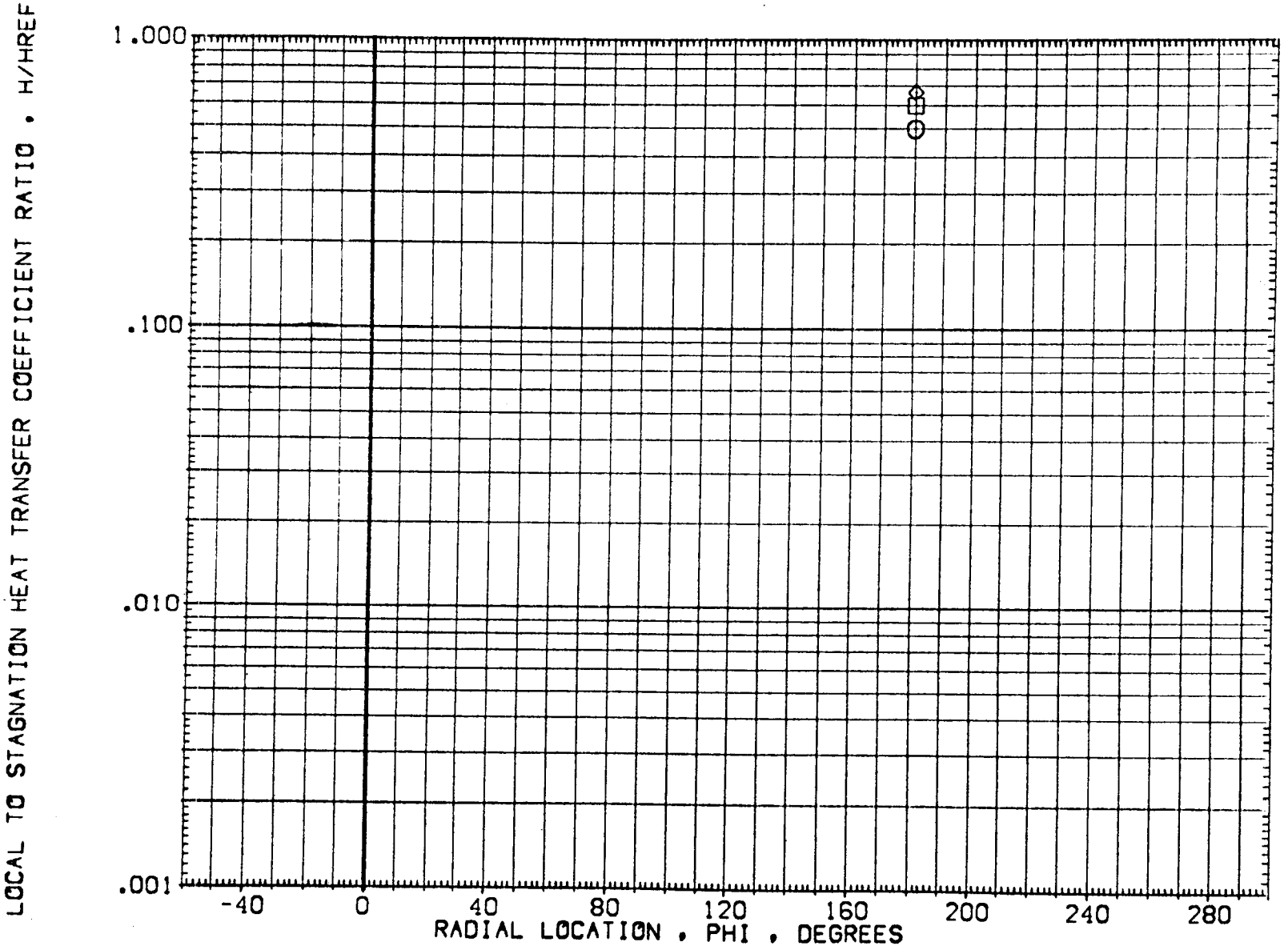


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

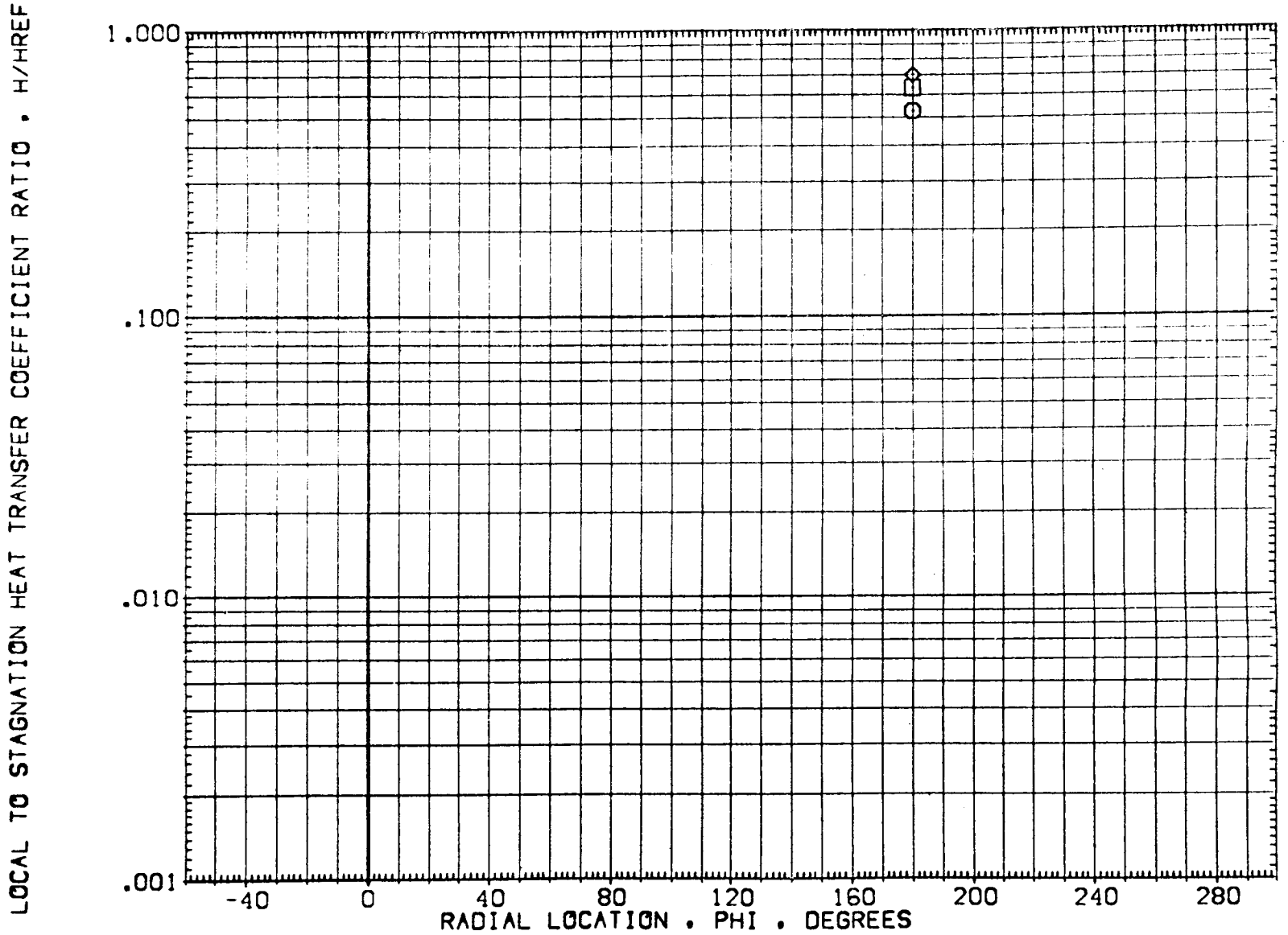


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE113)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE113)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

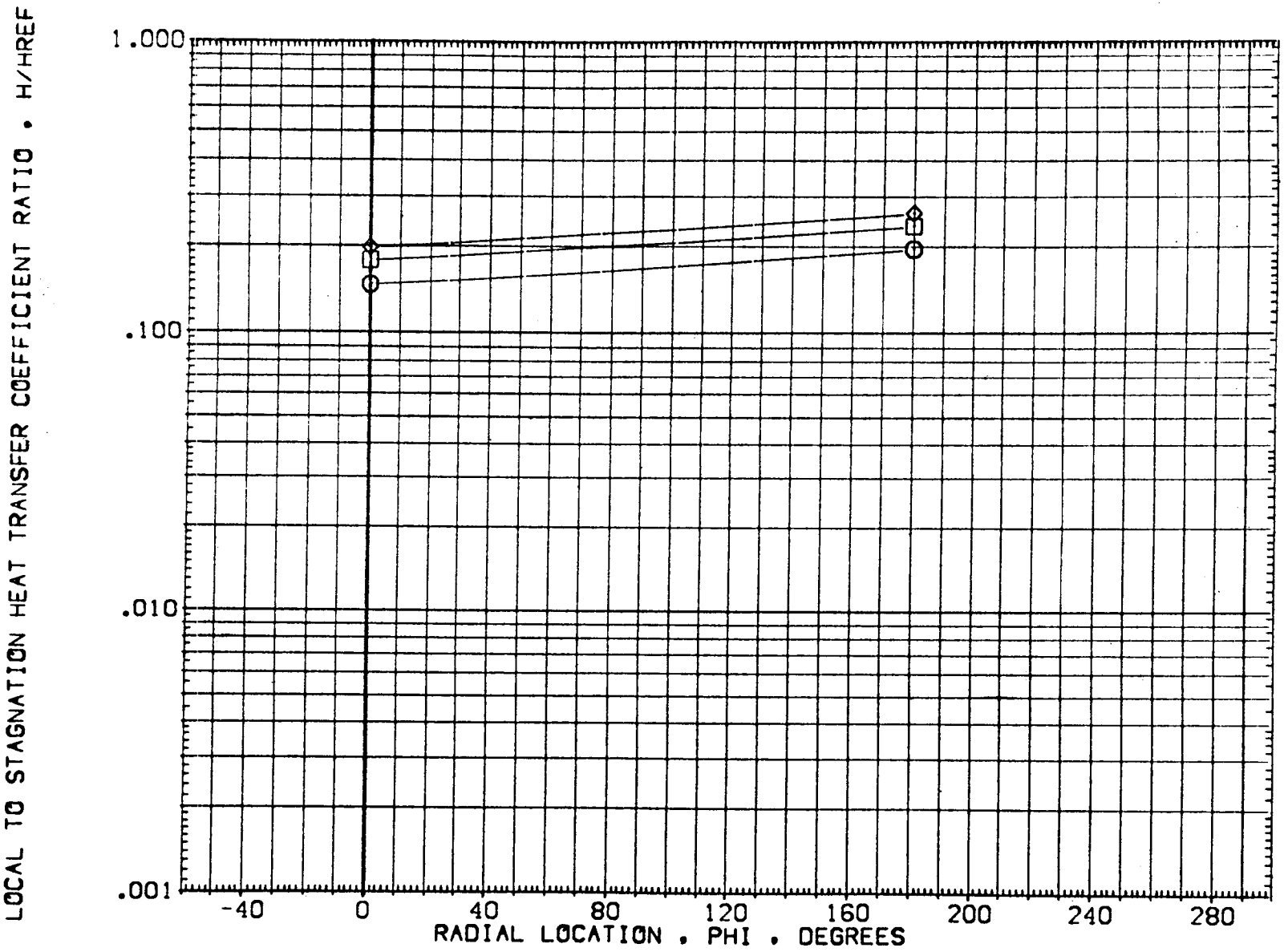


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE113)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE113)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

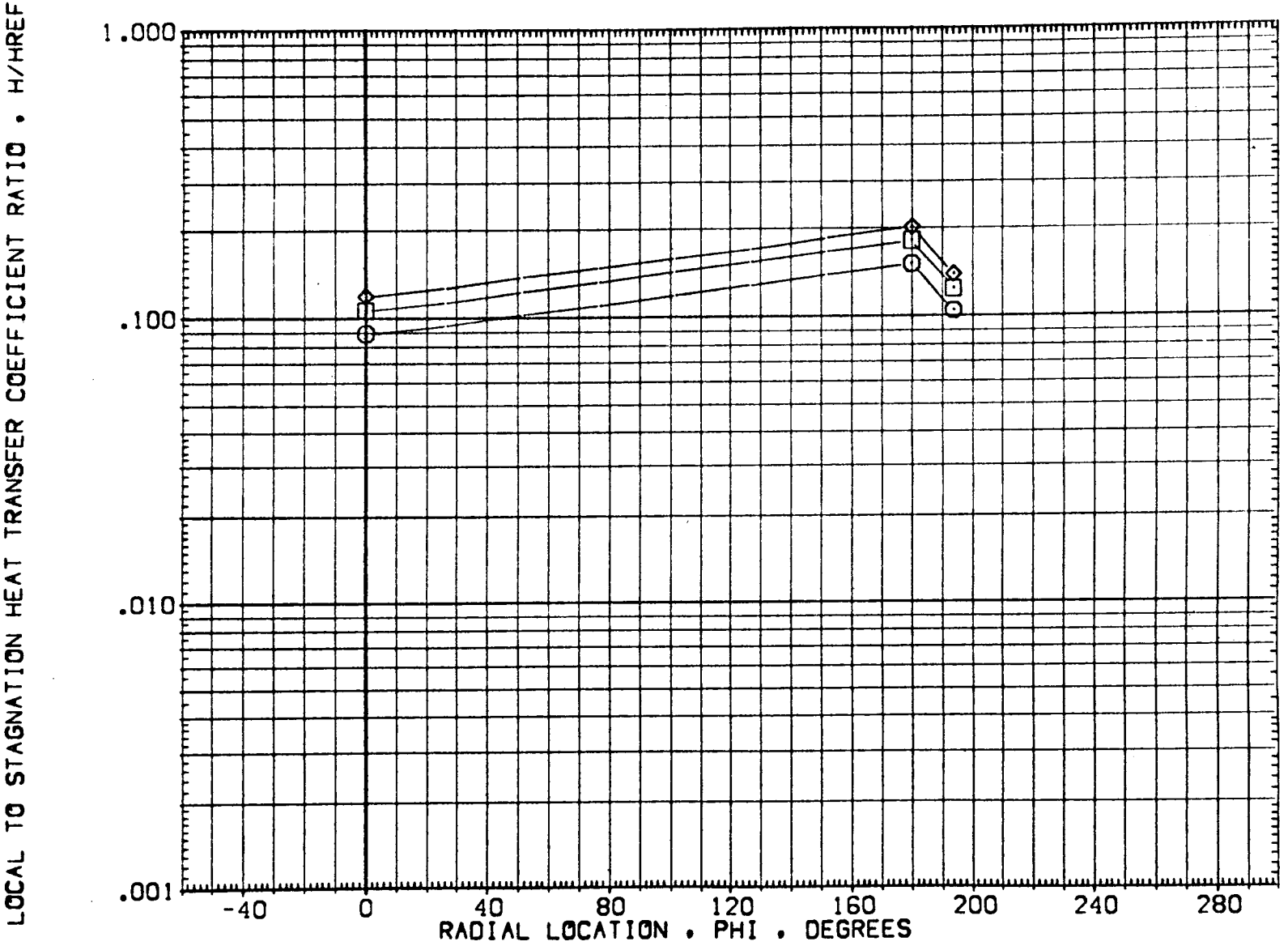


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

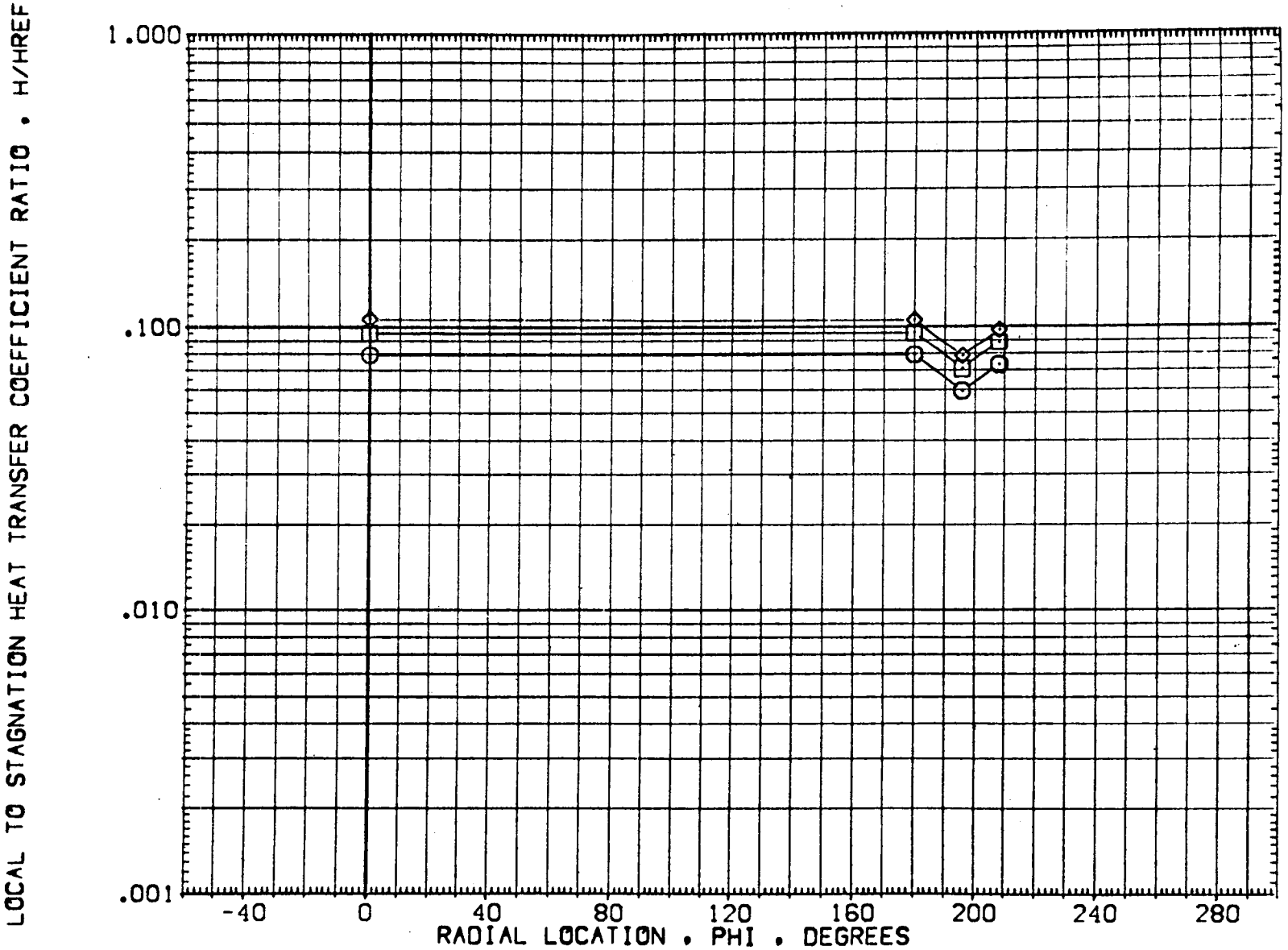


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

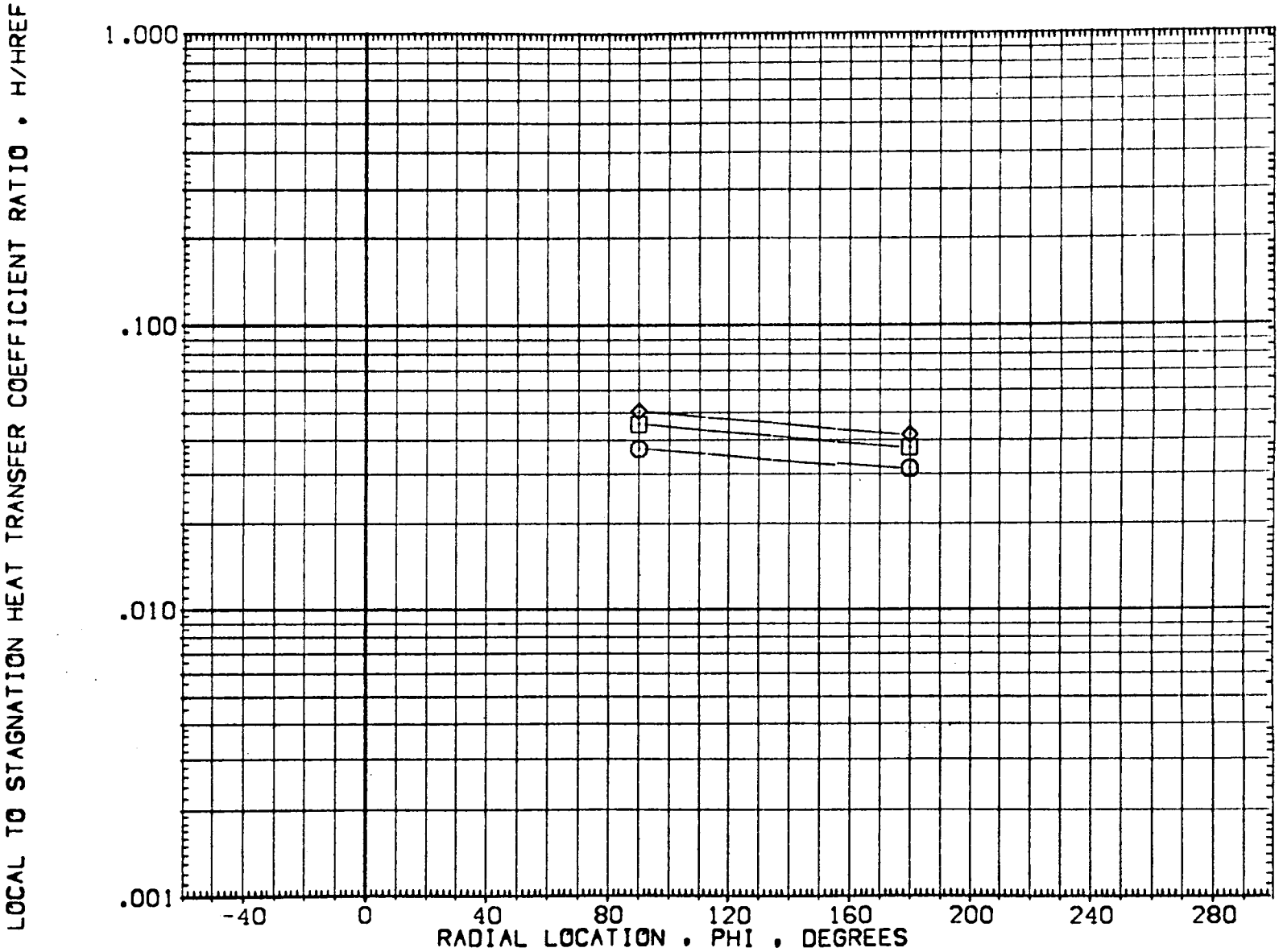


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

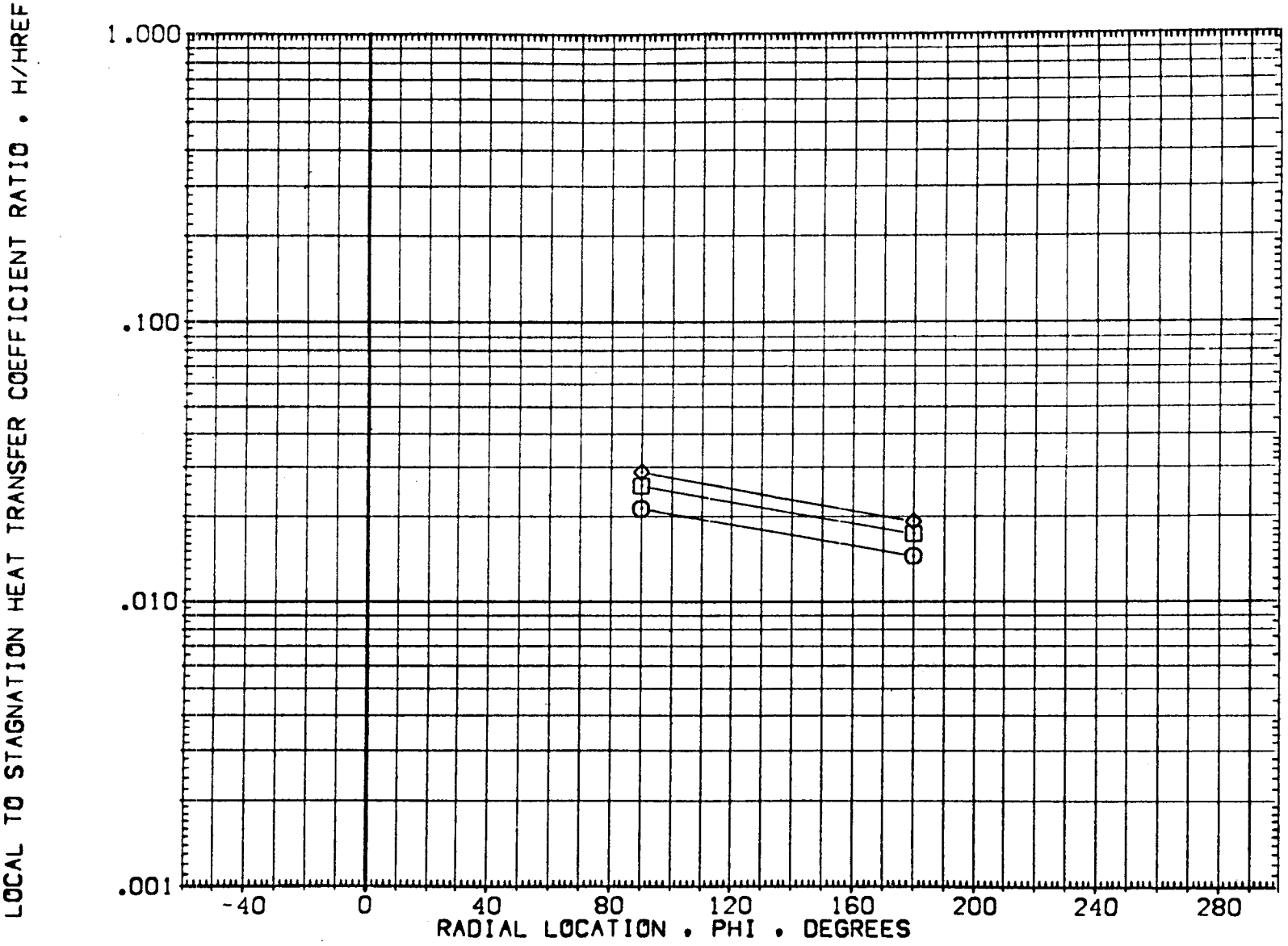


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

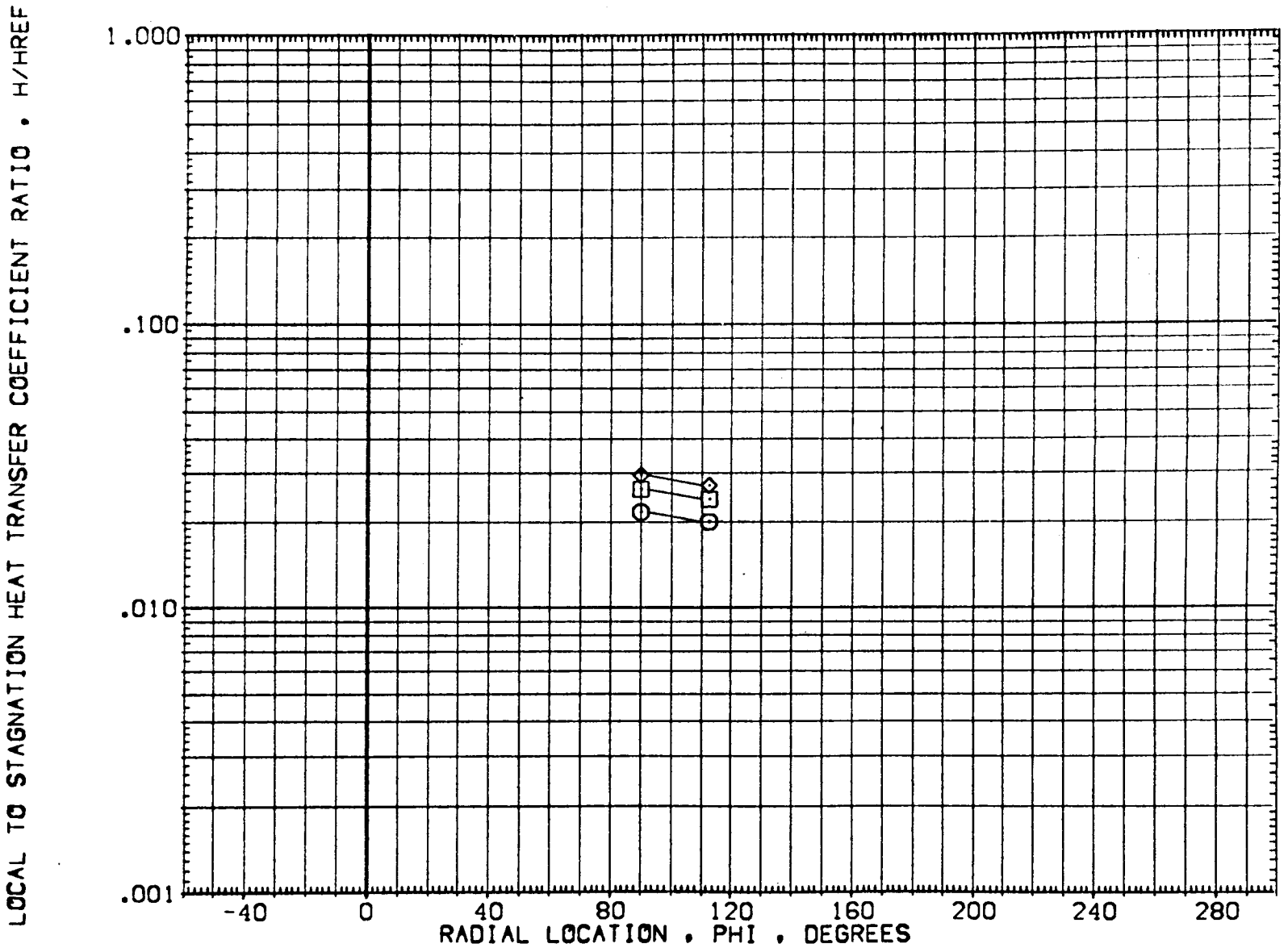


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1113)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1113)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

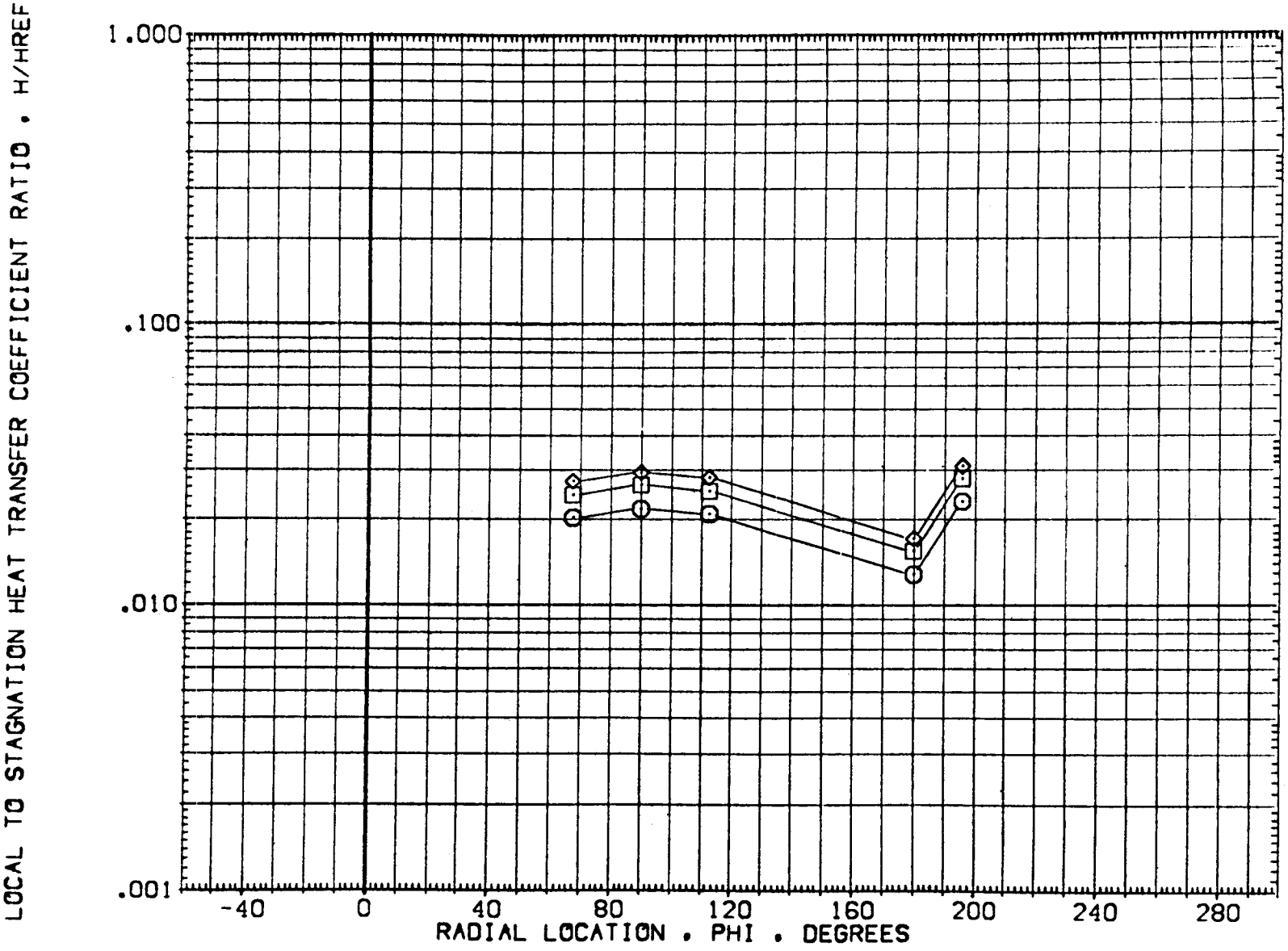


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

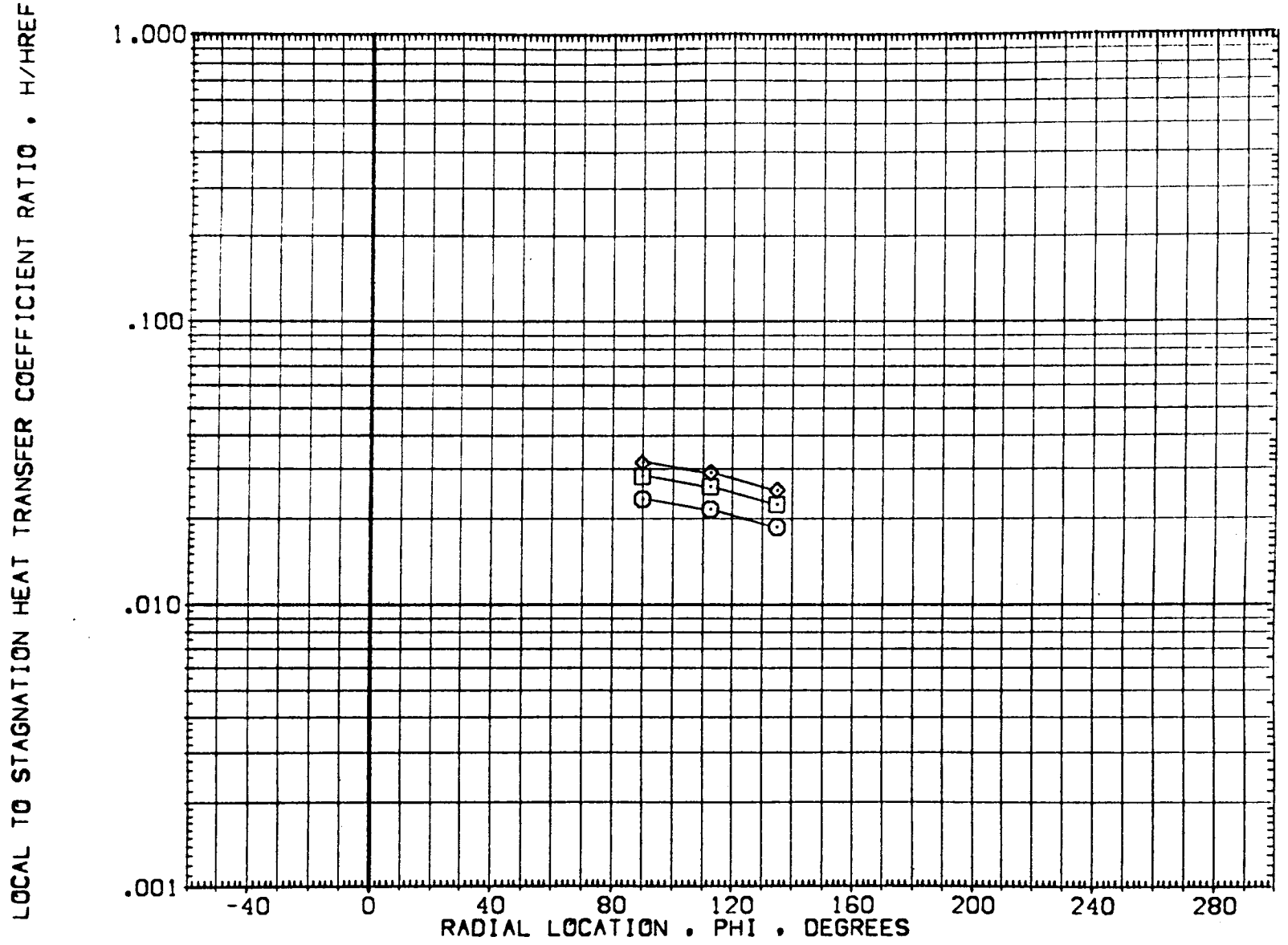


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

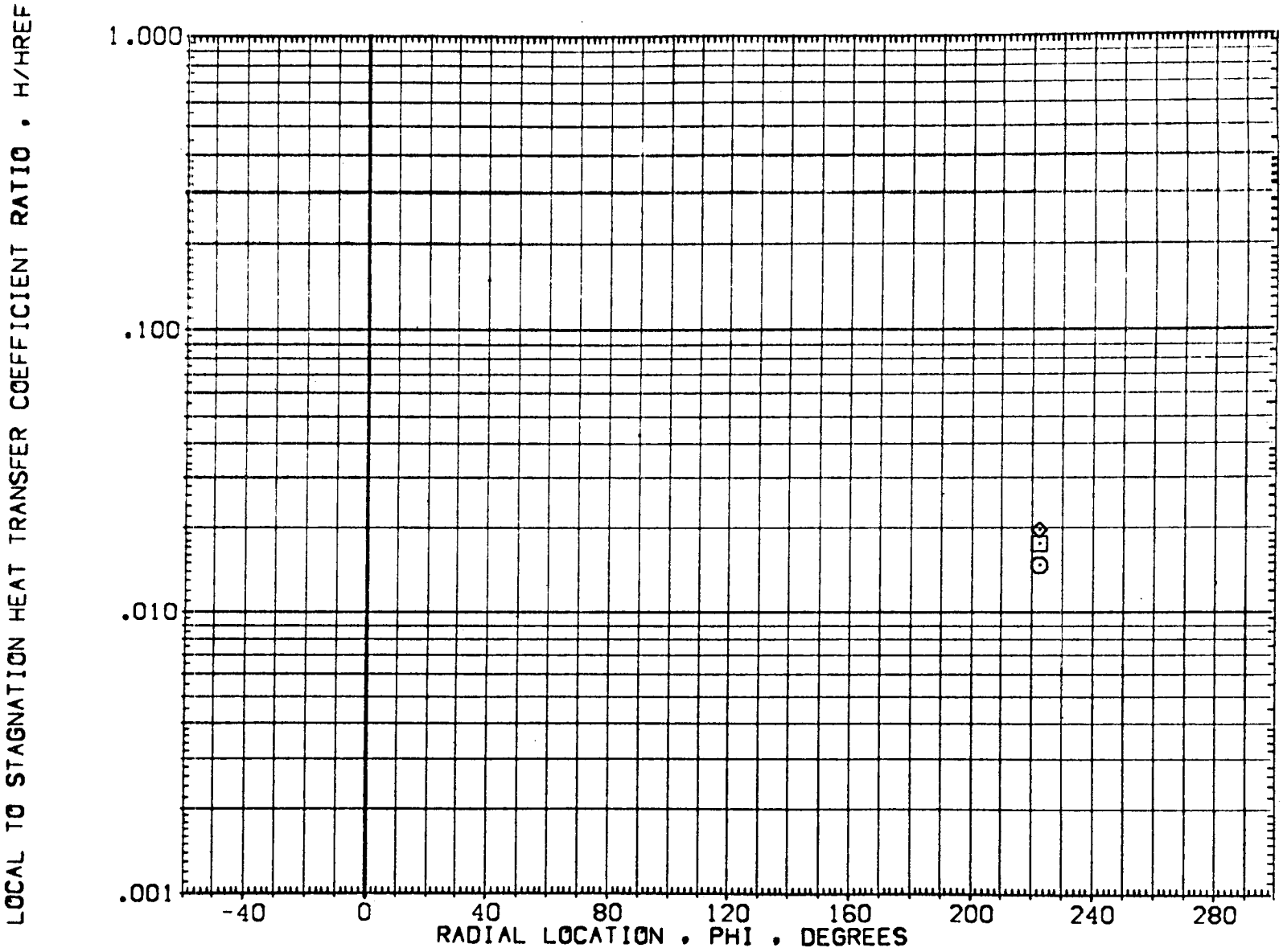


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

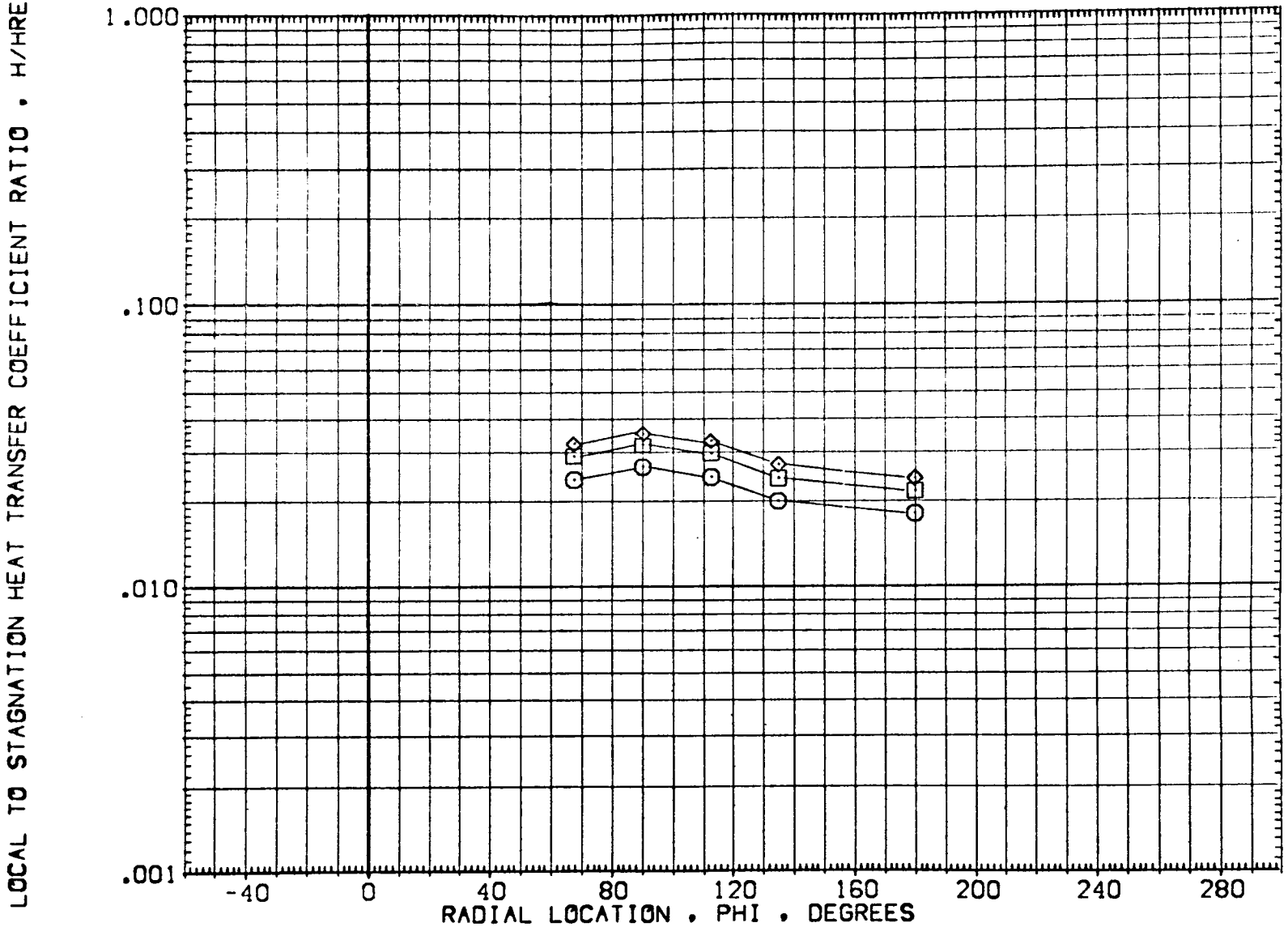


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

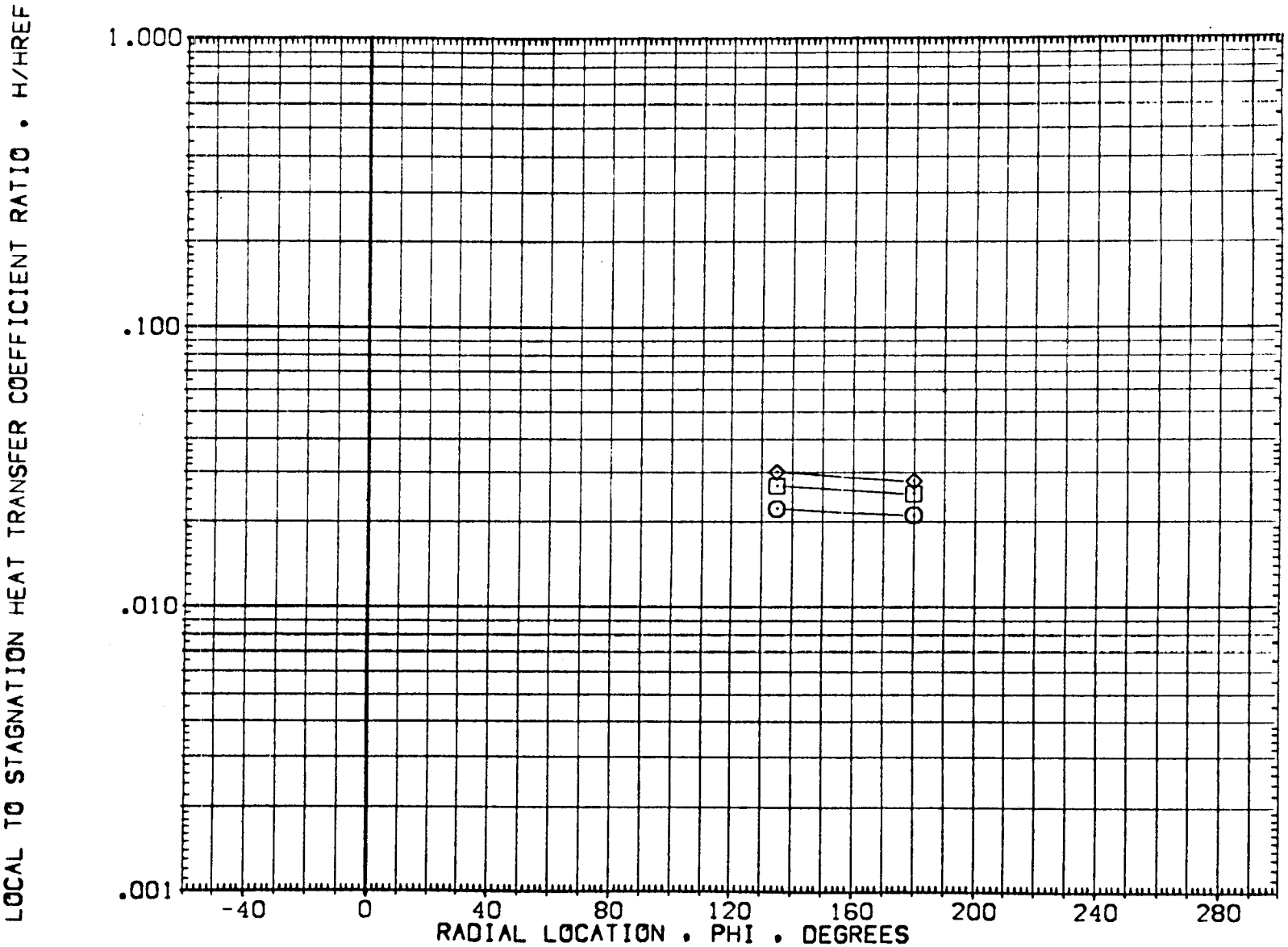


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

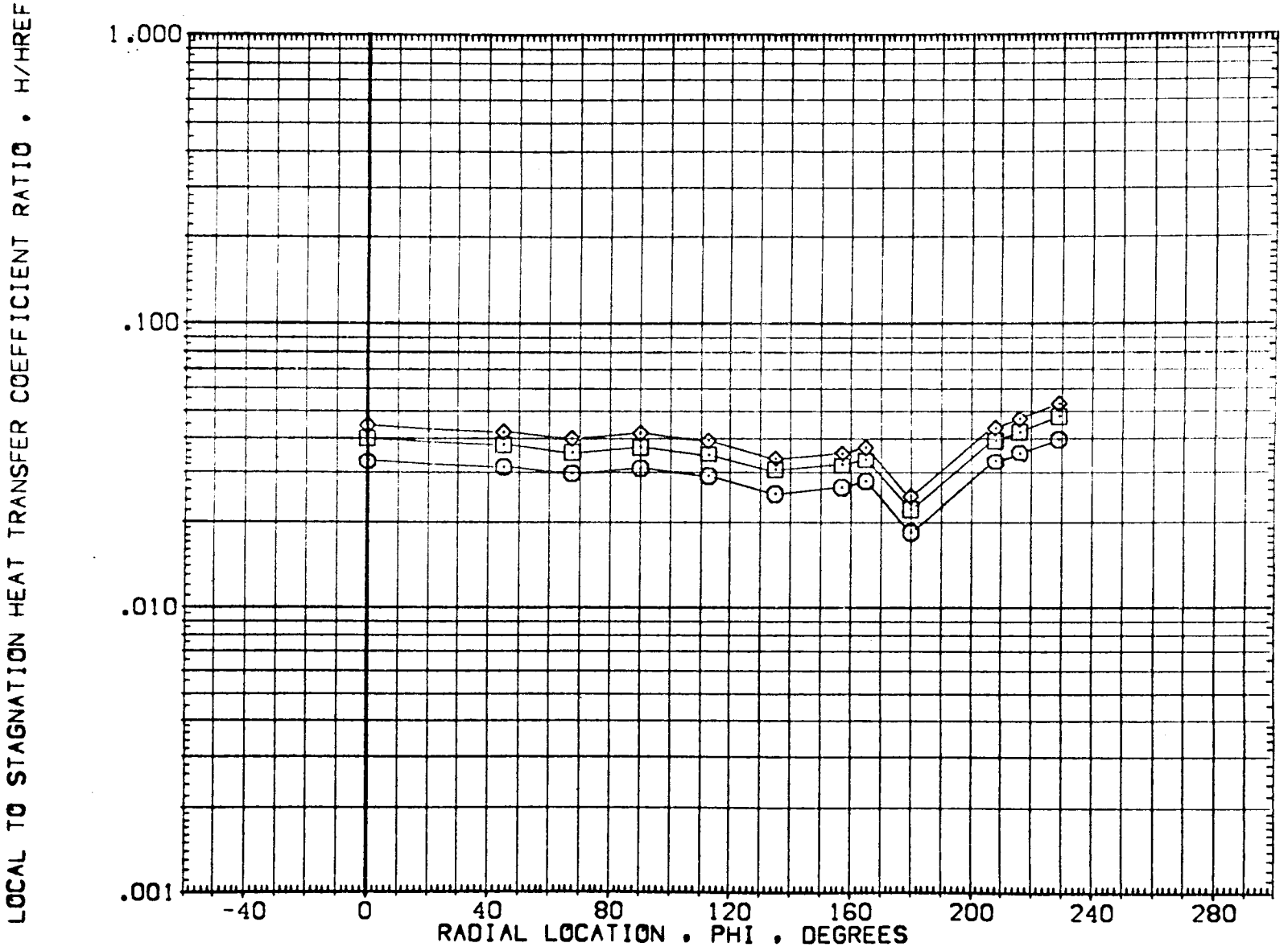


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

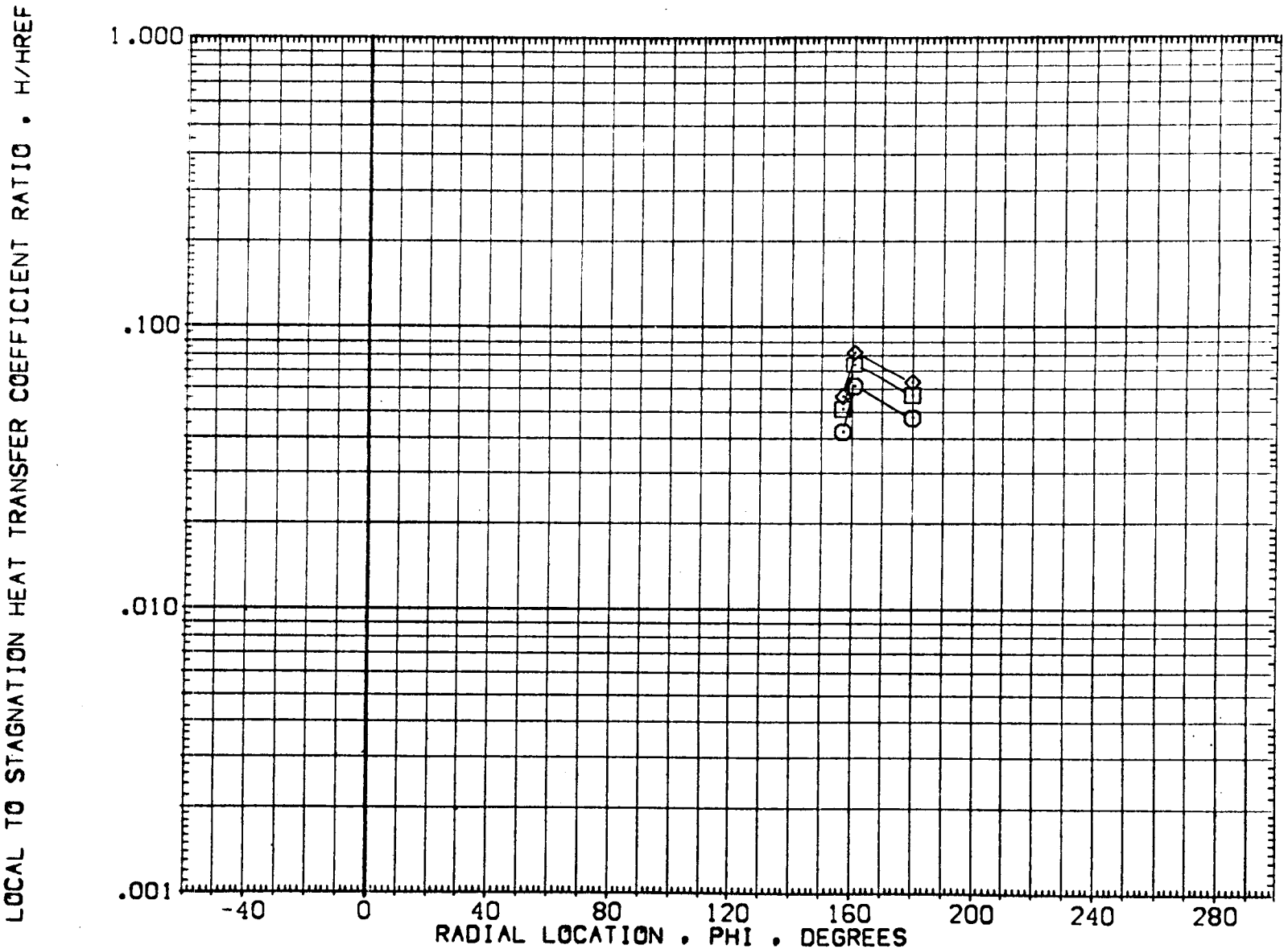


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T]3)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE[T]3)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE[T]3)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

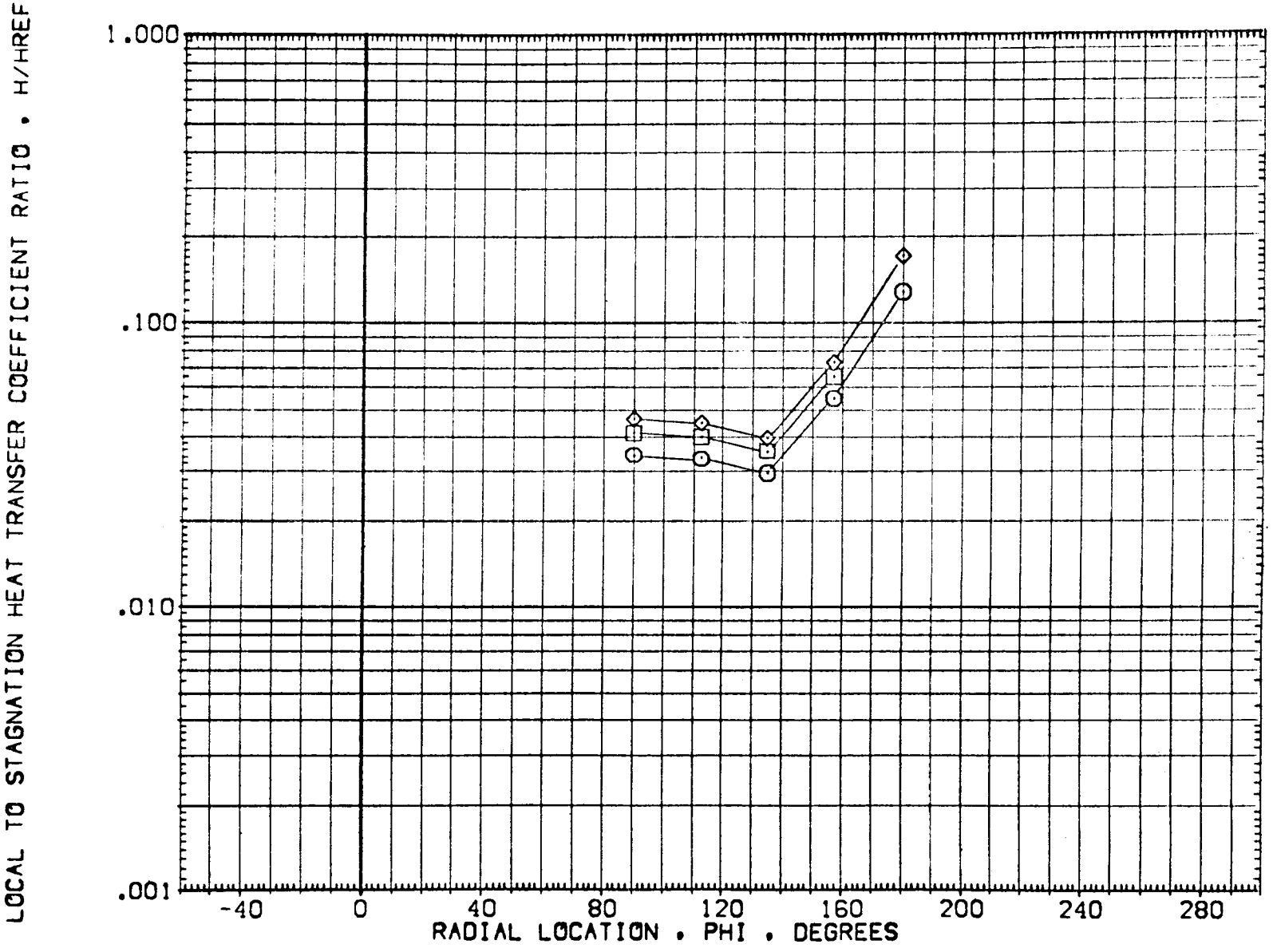


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

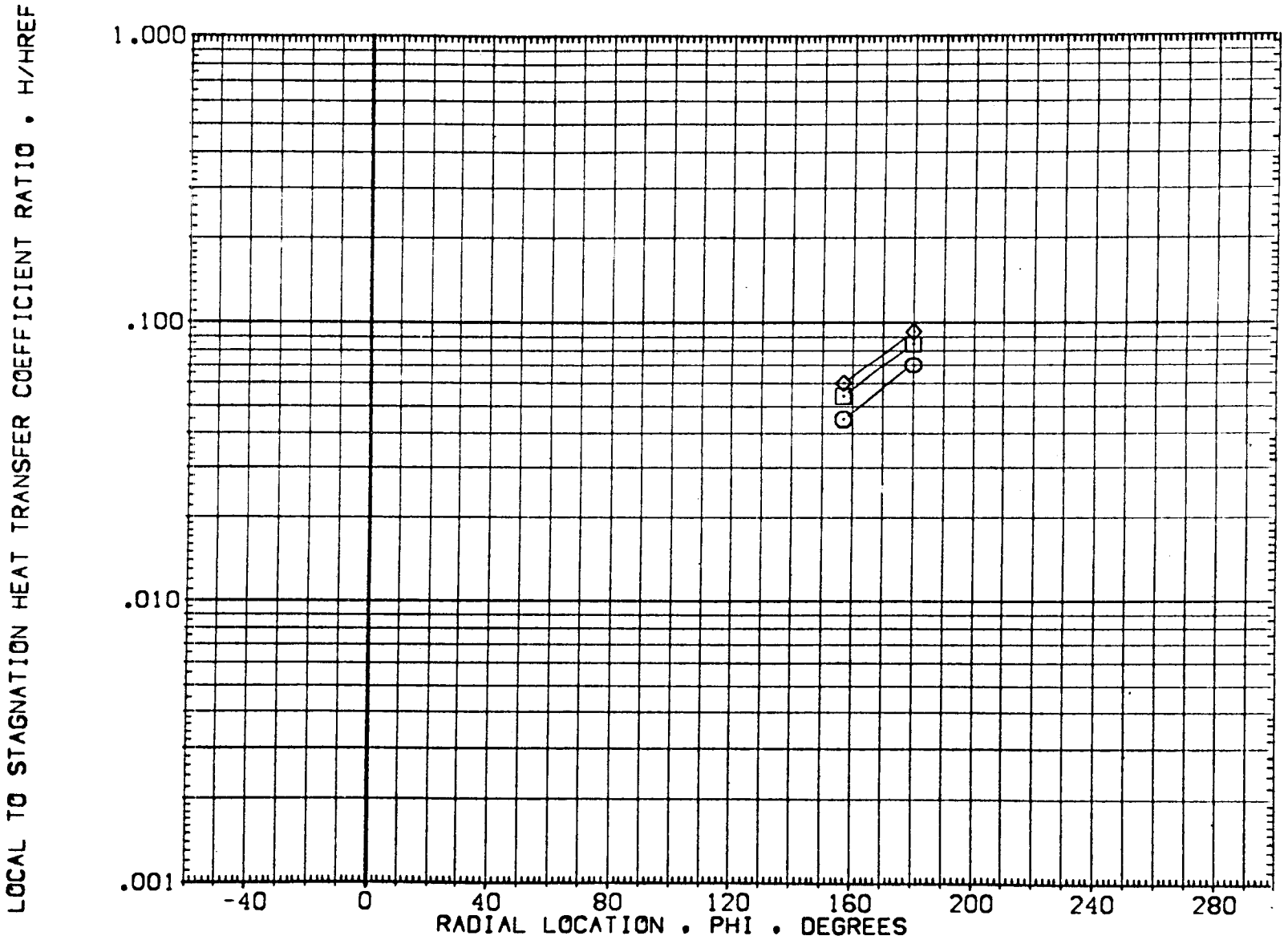


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

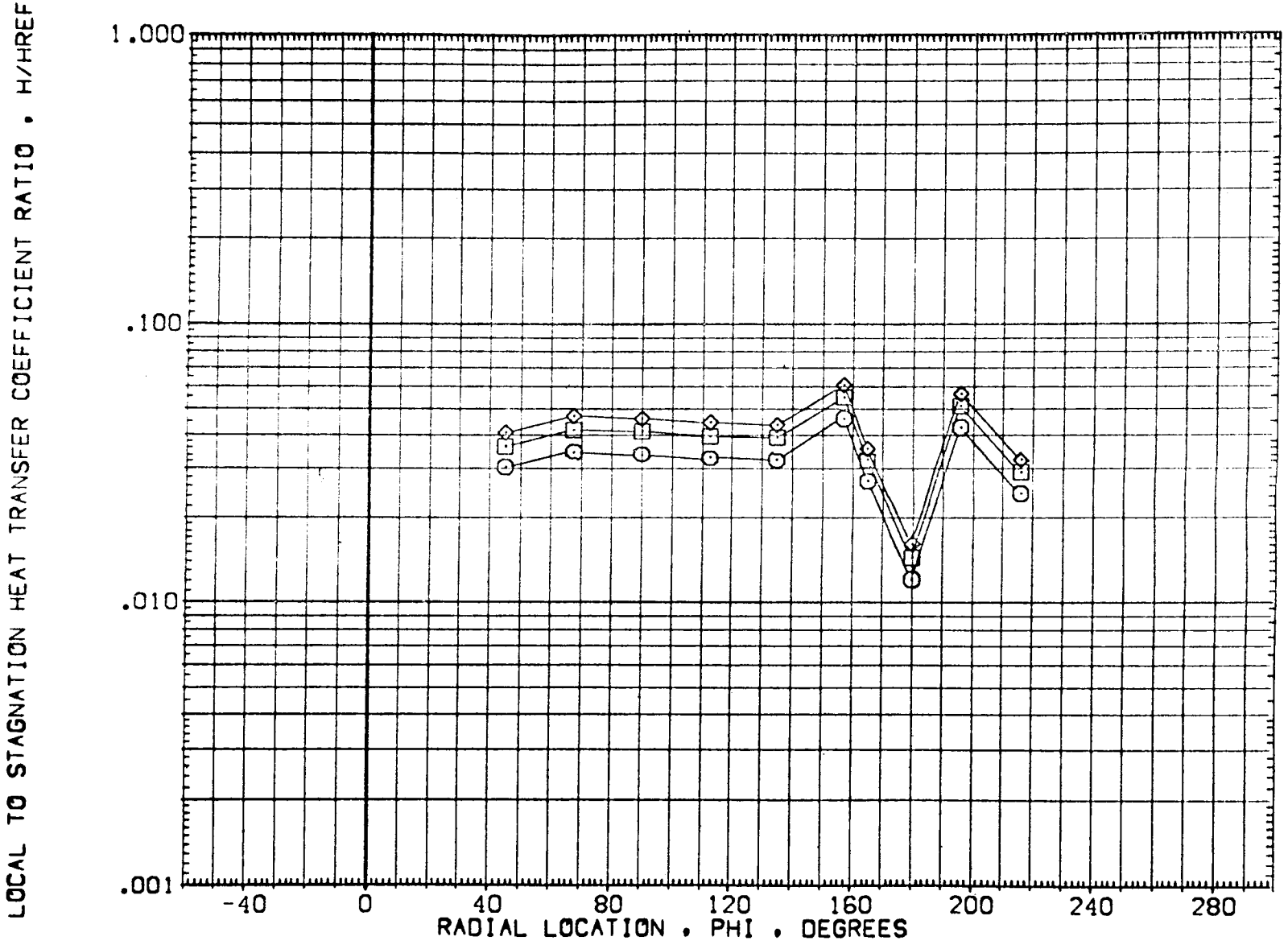


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

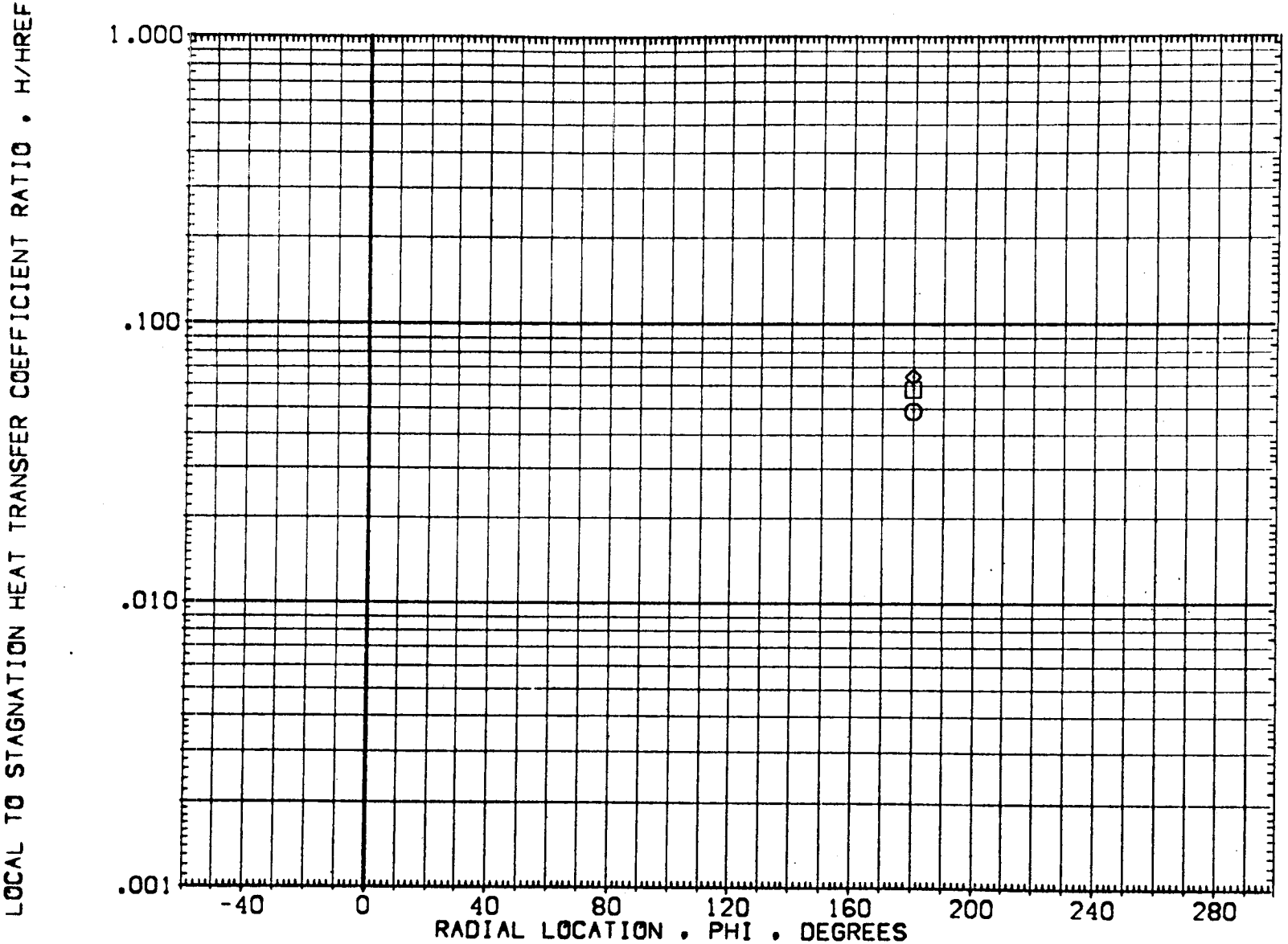


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

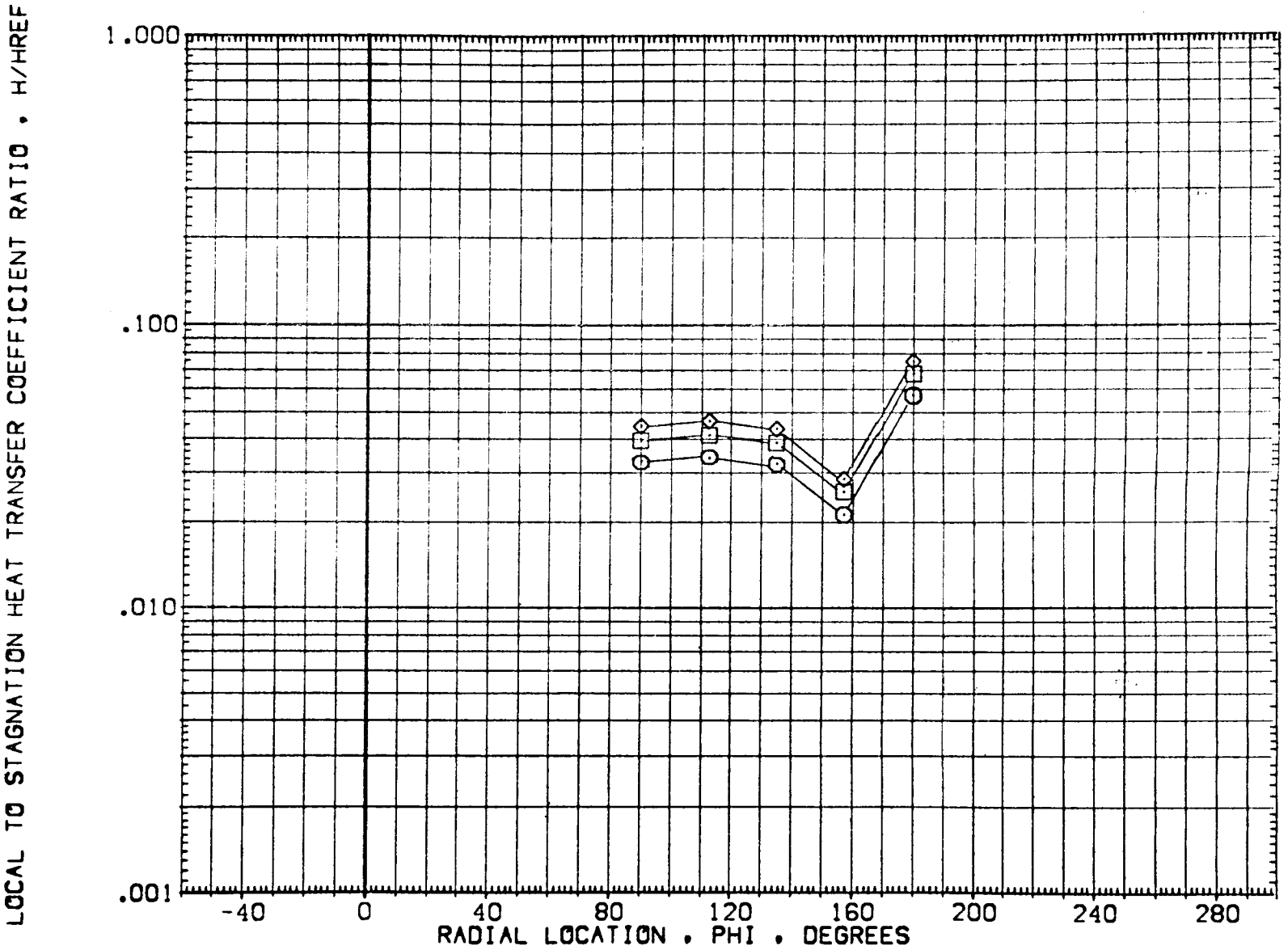


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

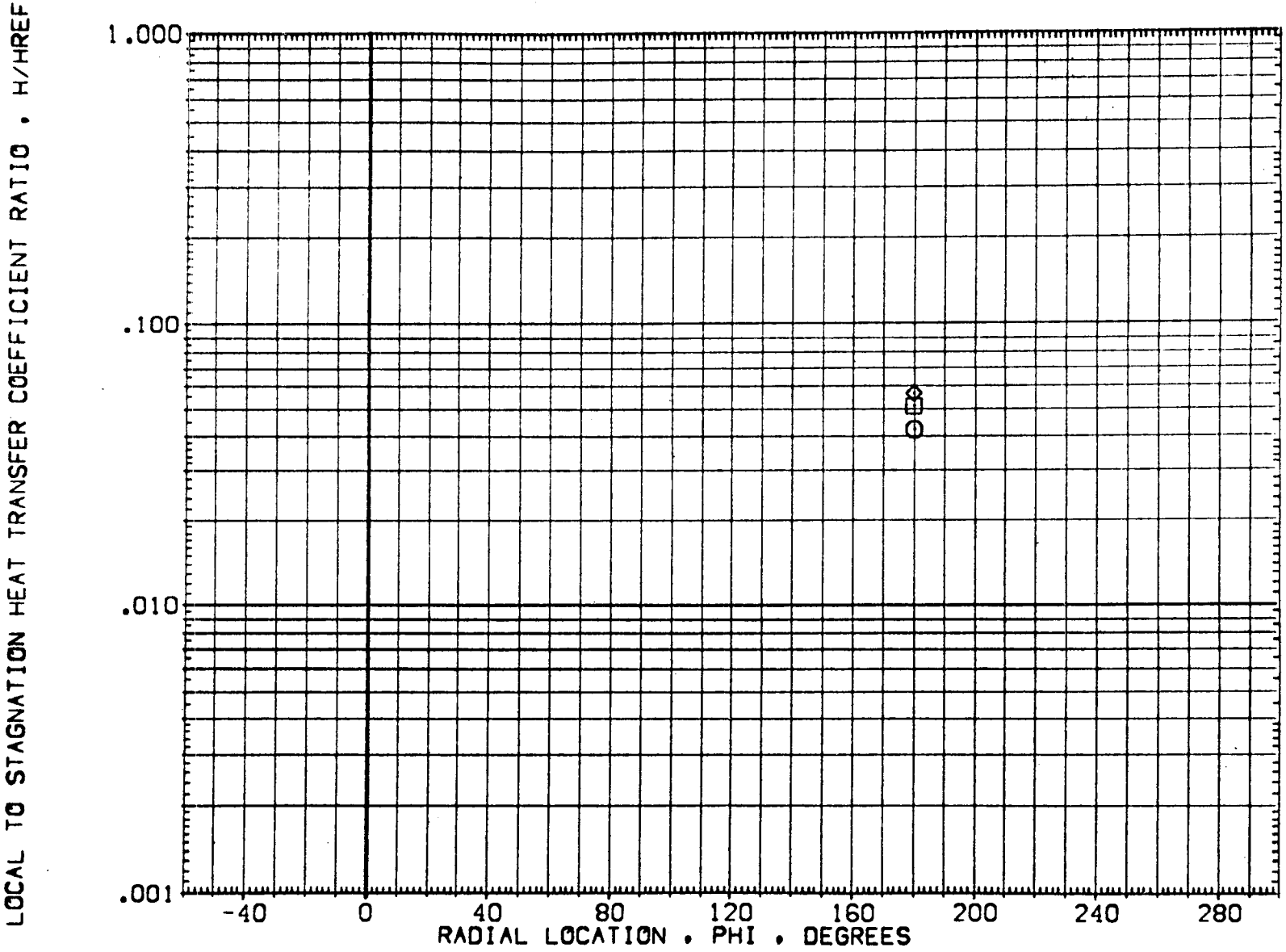


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

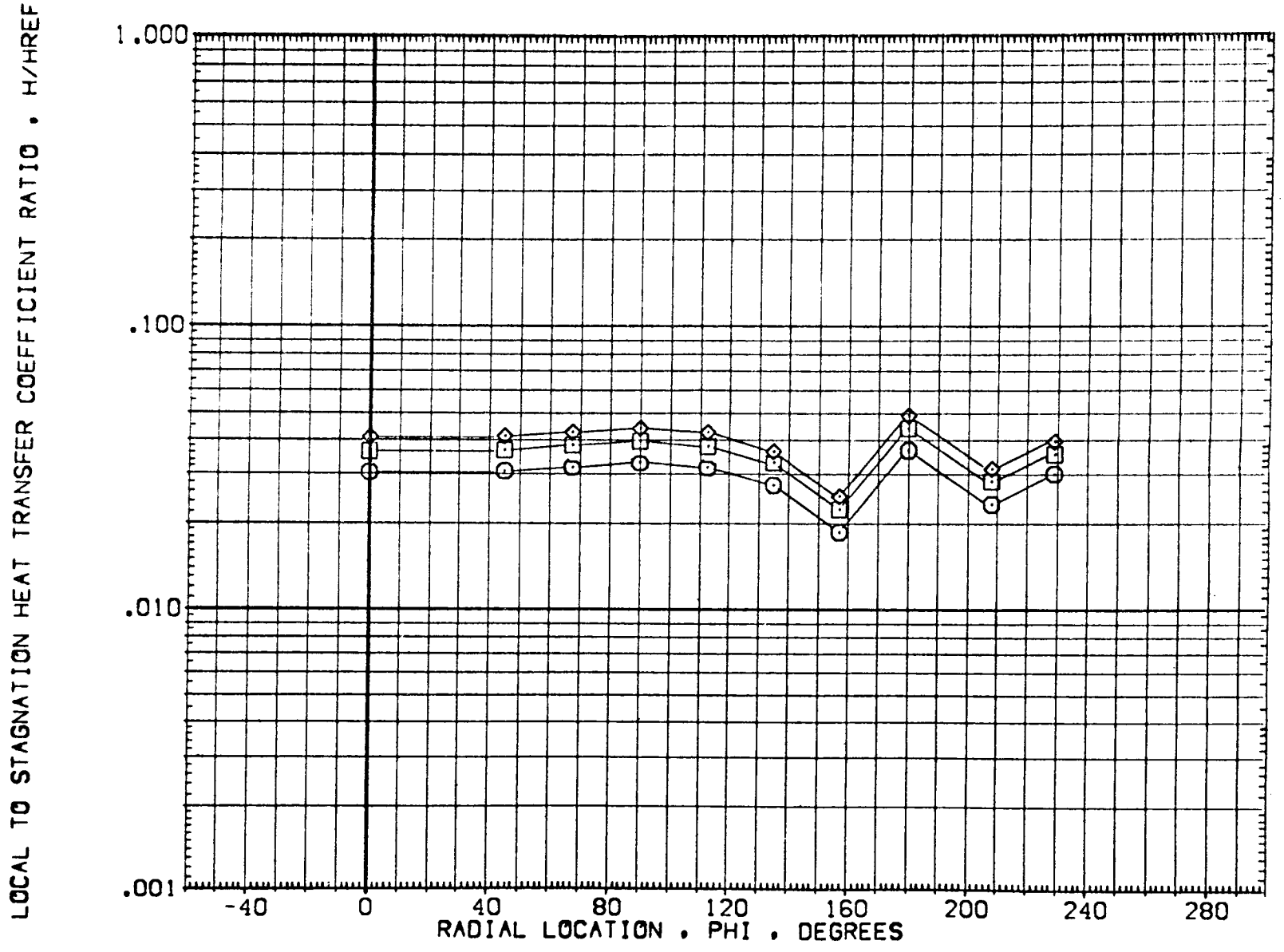


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REIT13]	○	ARC 3.5-178 IH3 ET [TRIPS]	EXTERNAL TANK	.000	.000	1.500	1.000
[AEIT13]	□	ARC 3.5-178 IH3 ET [TRIPS]	EXTERNAL TANK	.000	.000	1.500	.900
[BEIT13]	◇	ARC 3.5-178 IH3 ET [TRIPS]	EXTERNAL TANK	.000	.000	1.500	.850

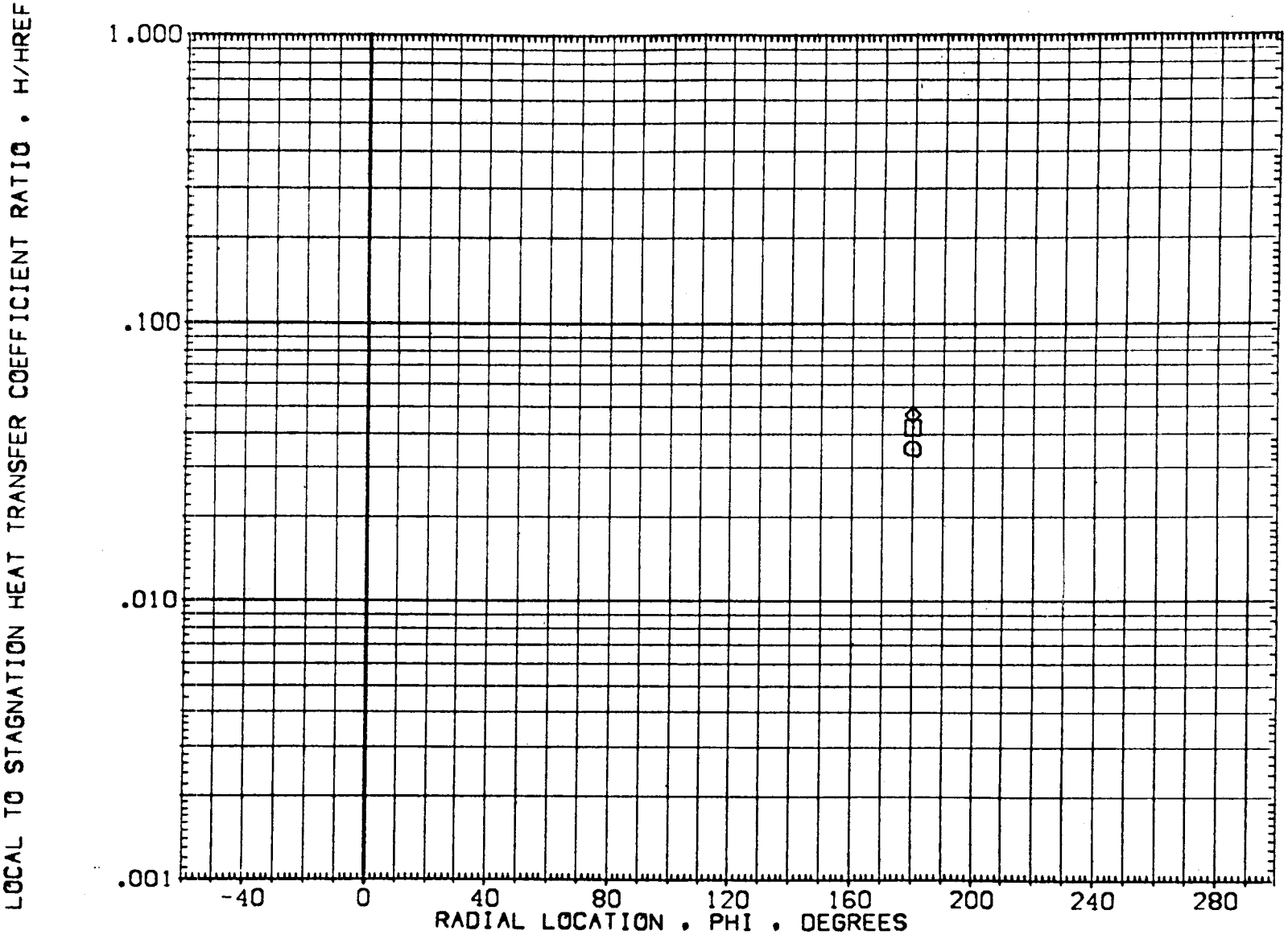


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

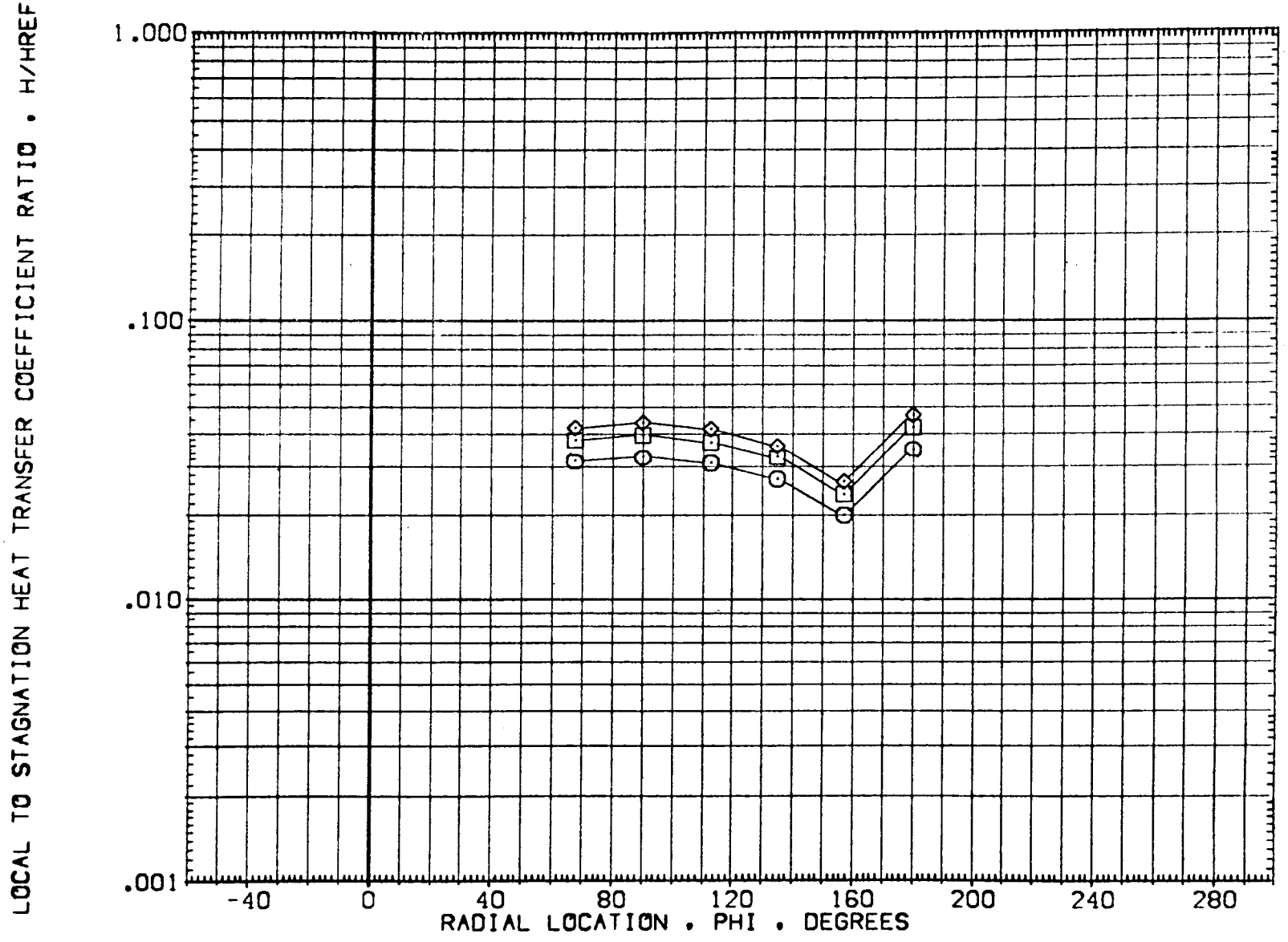


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

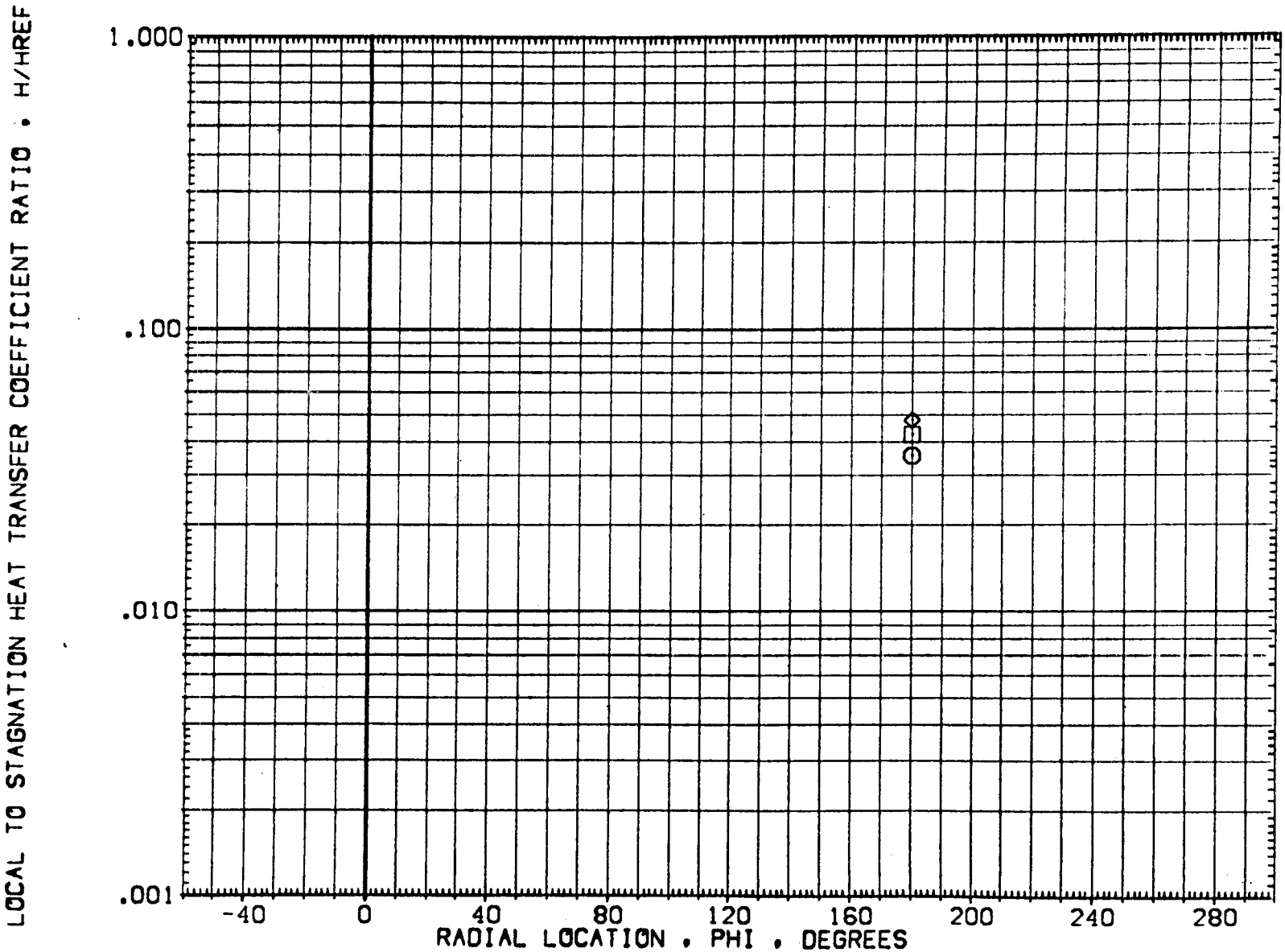


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

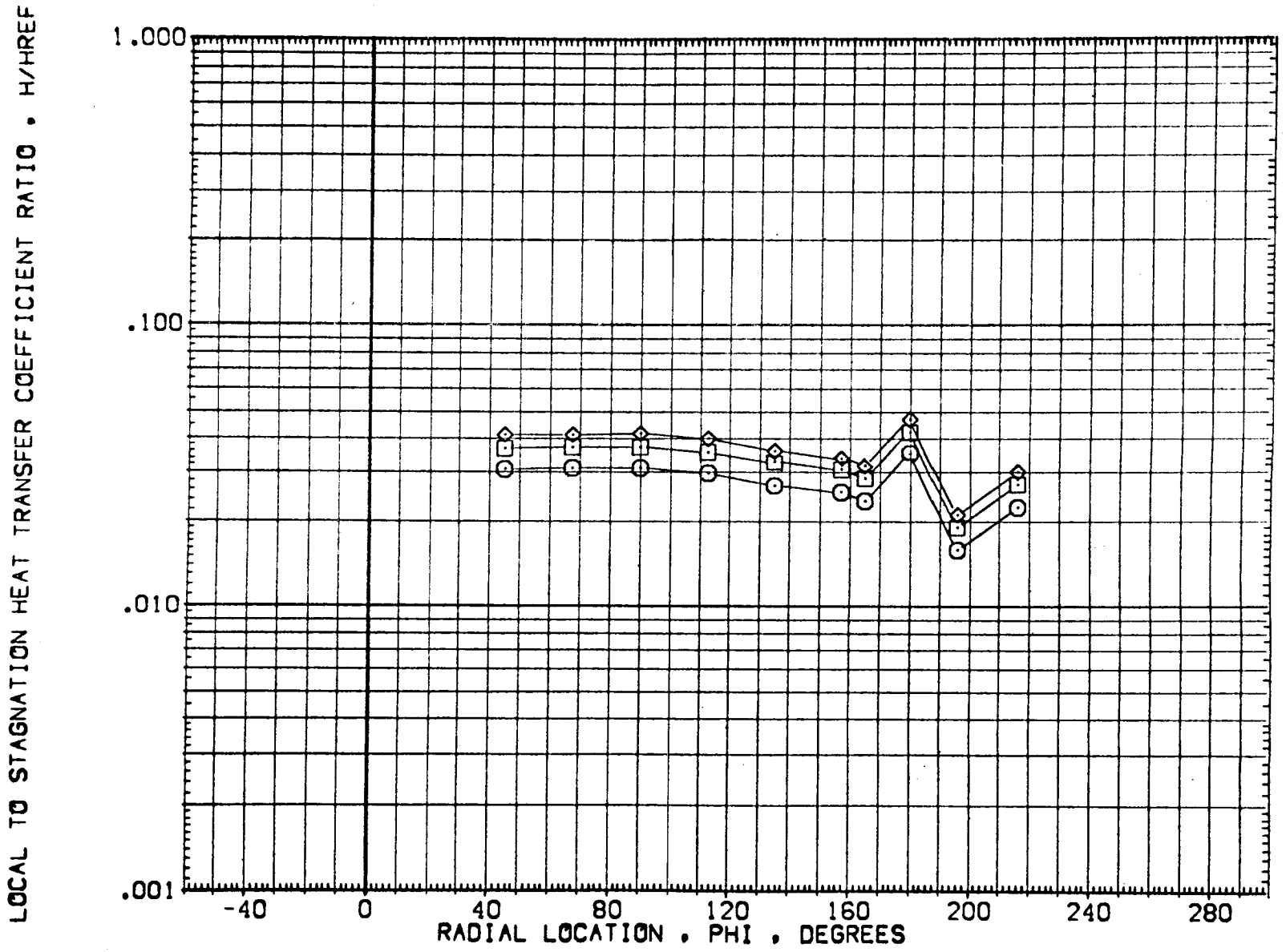


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE!T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

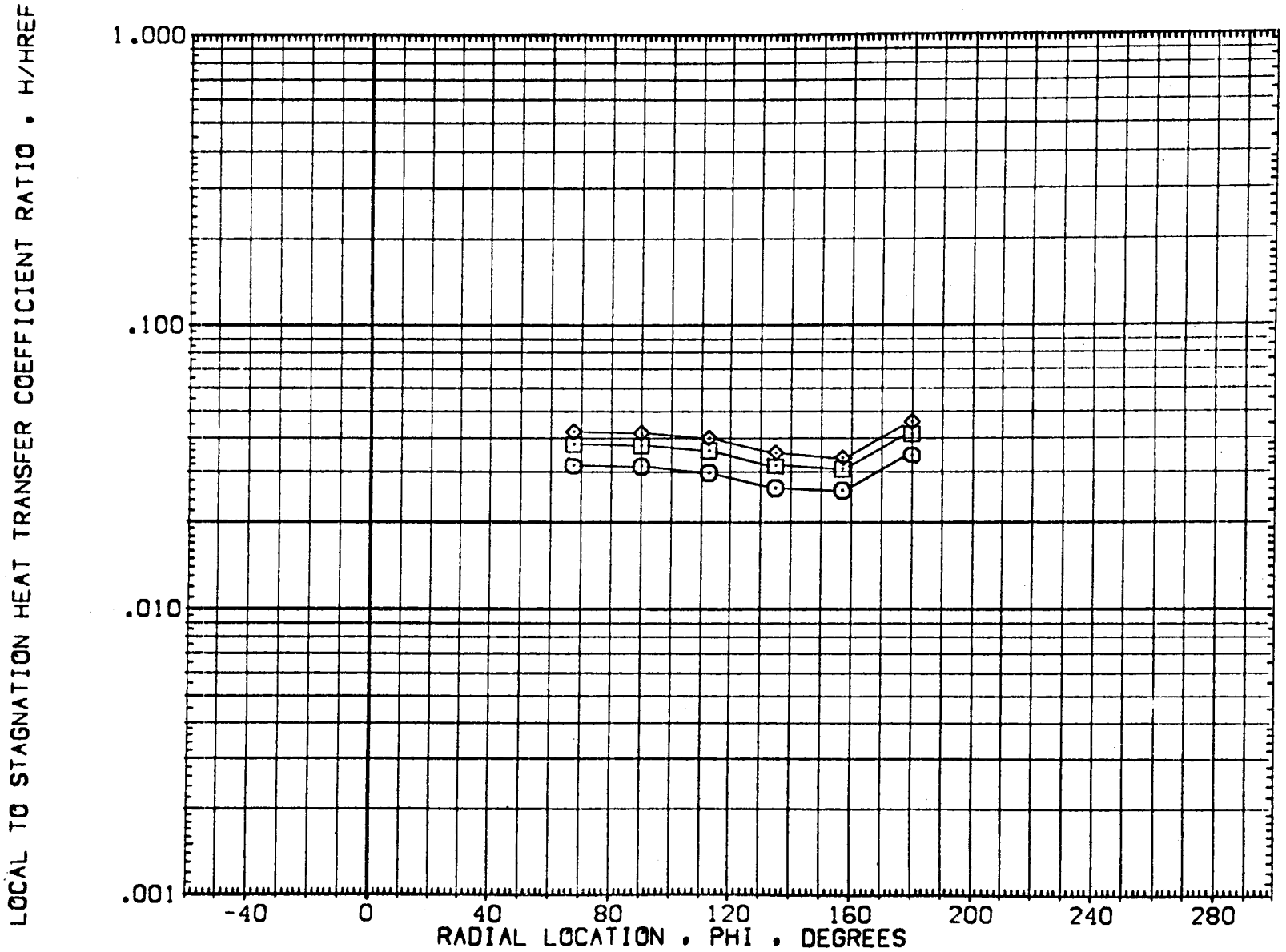


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

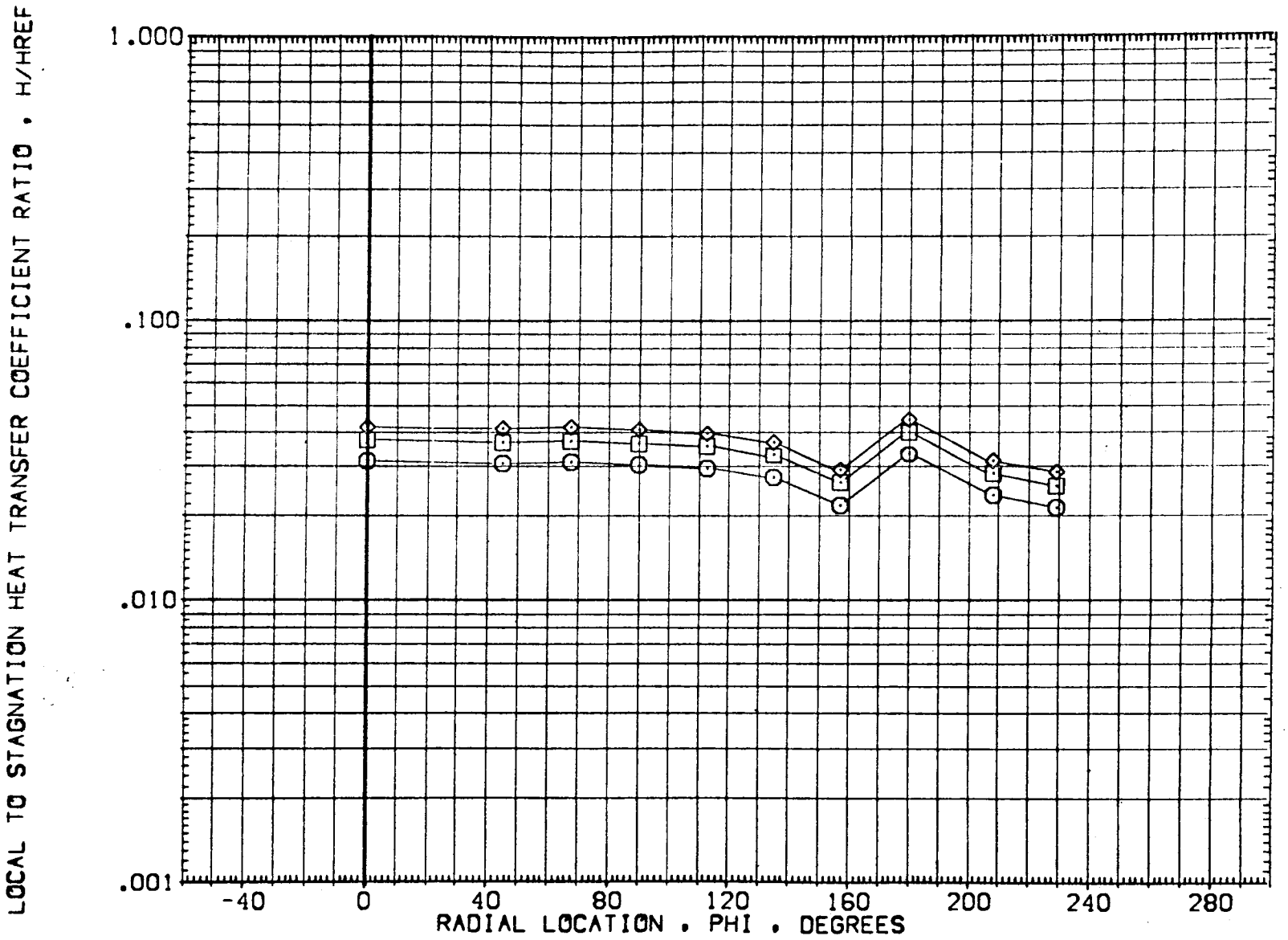


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1I13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1I13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

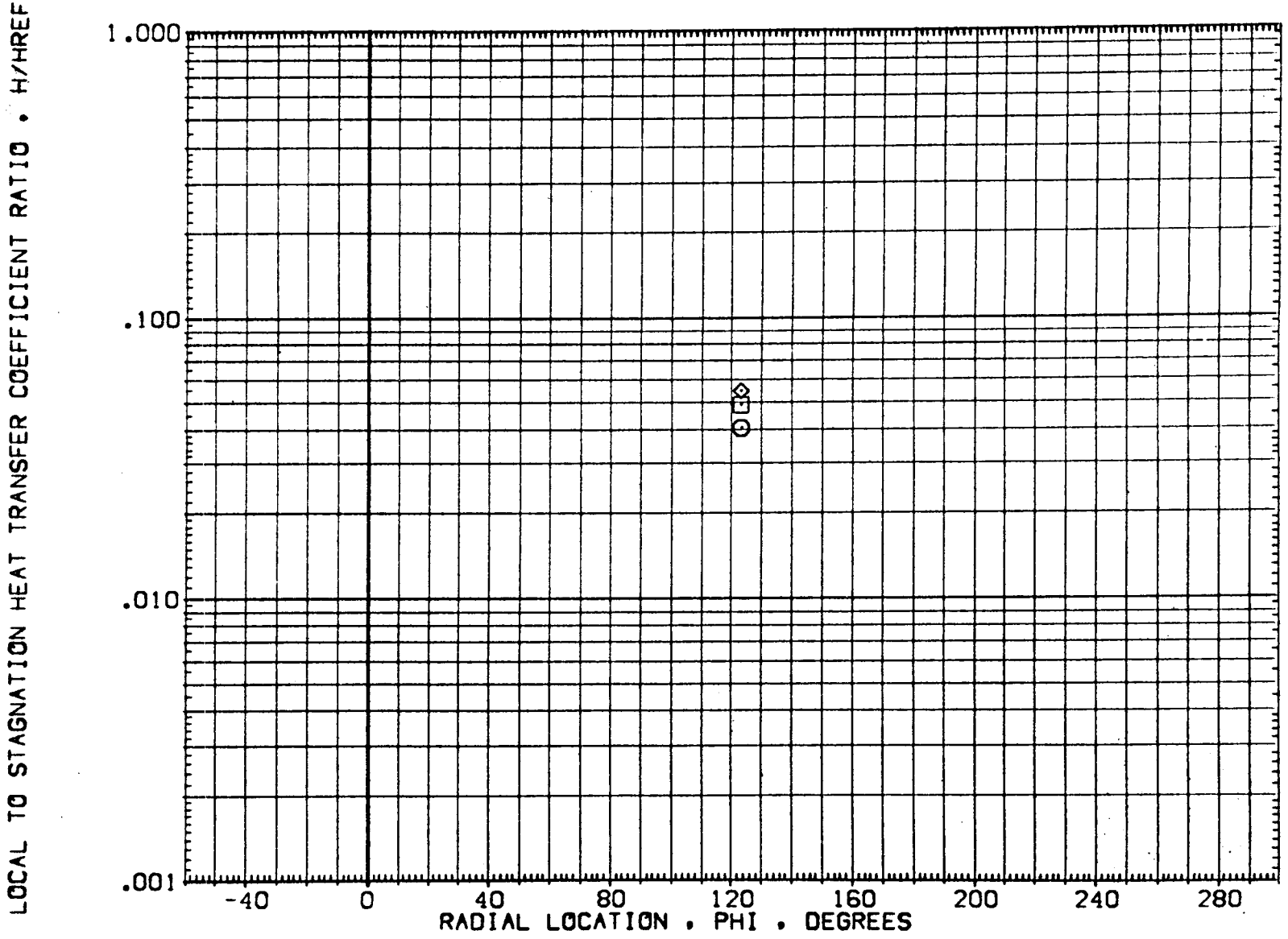


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

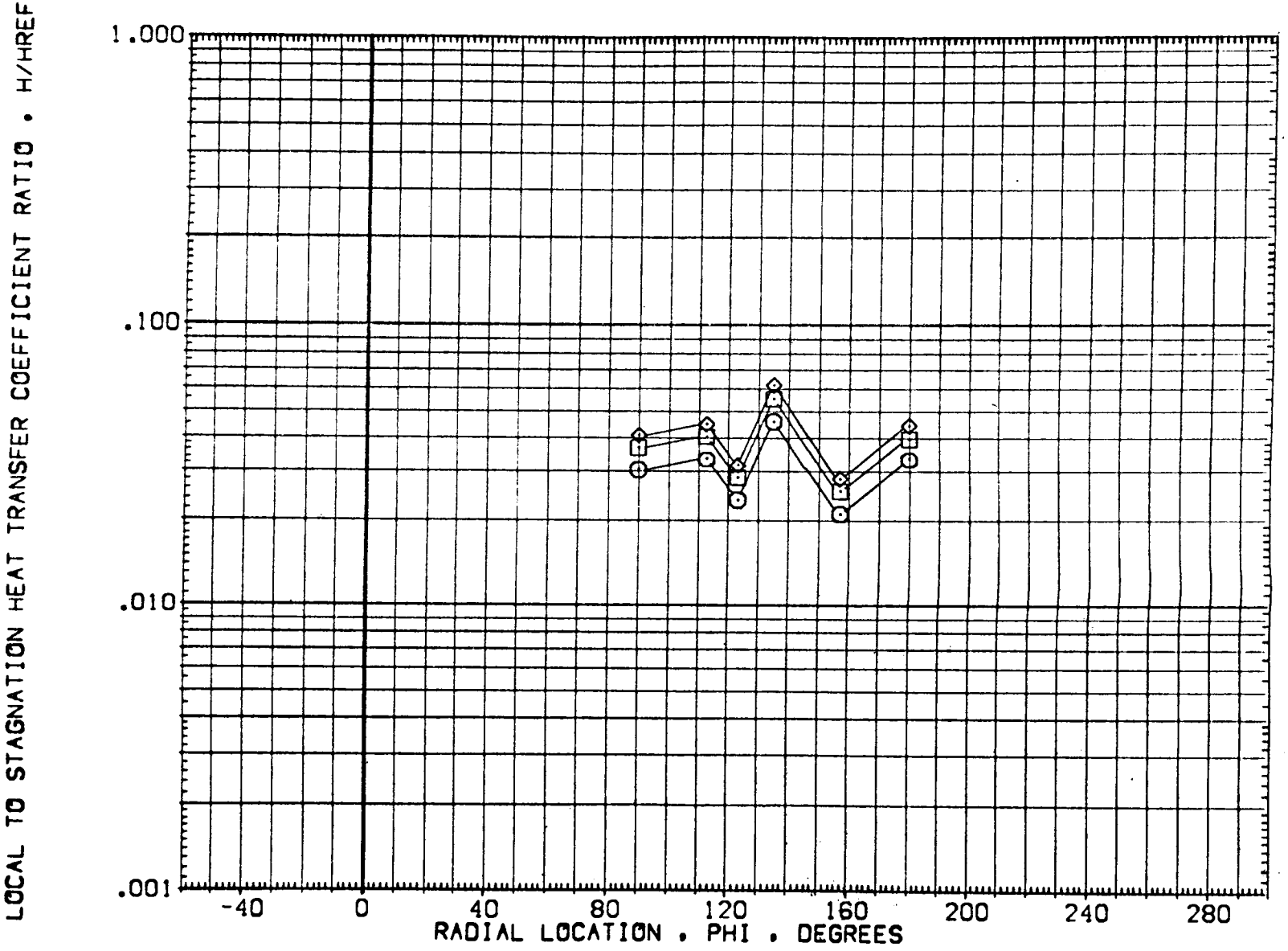


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(113)	○	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE(T(3)	□	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE(T(3)	◇	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

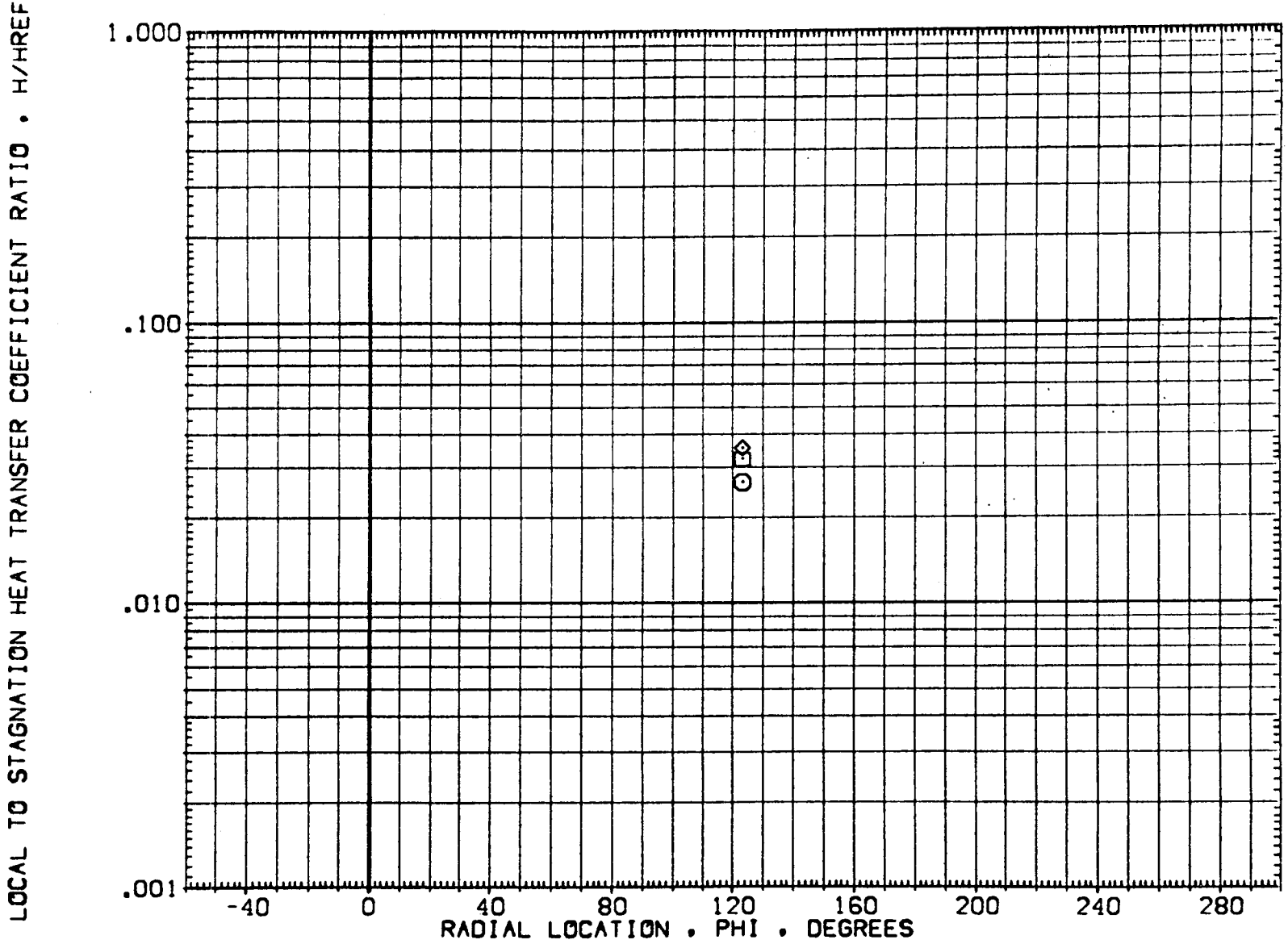


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

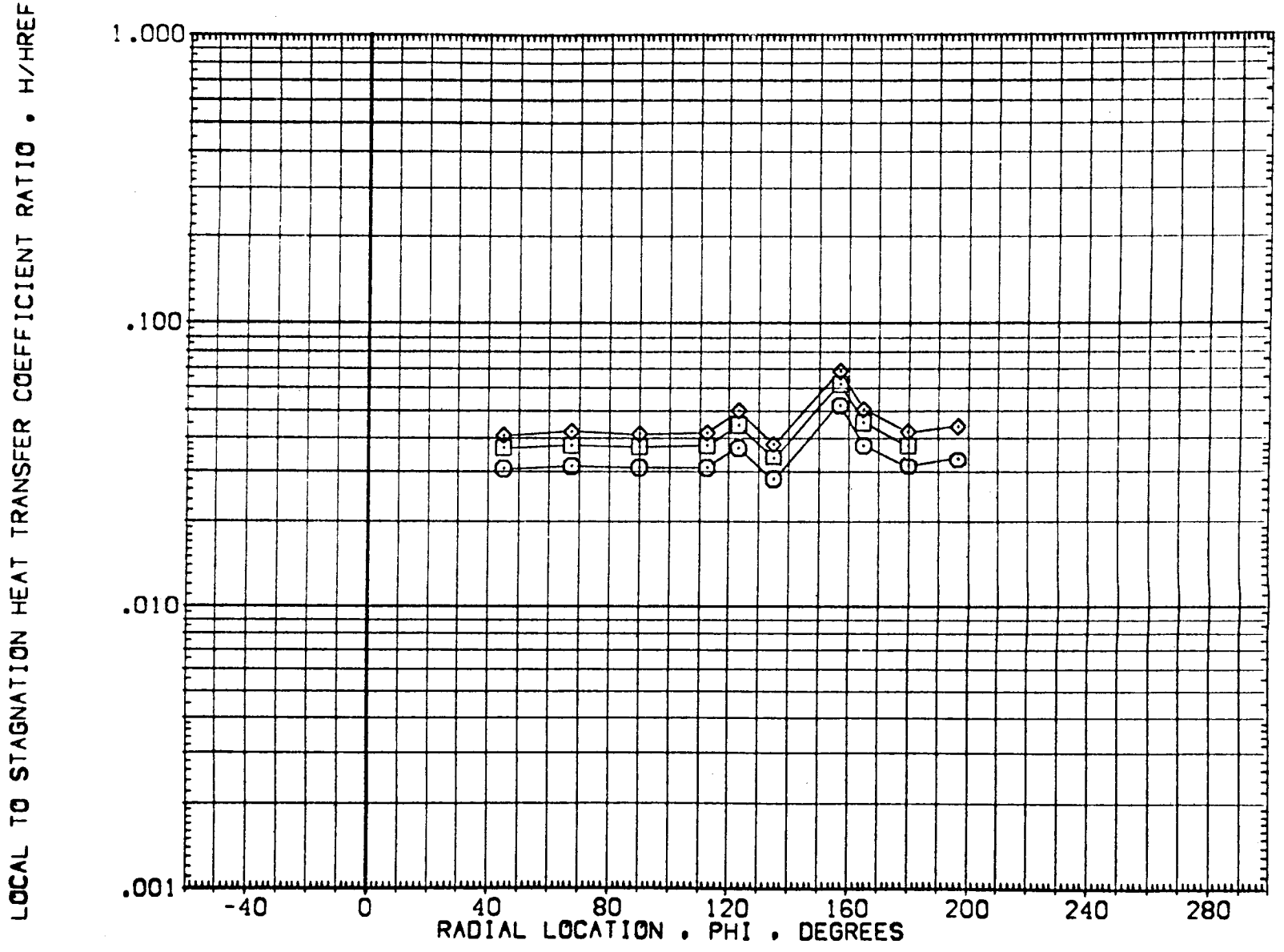


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1113)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

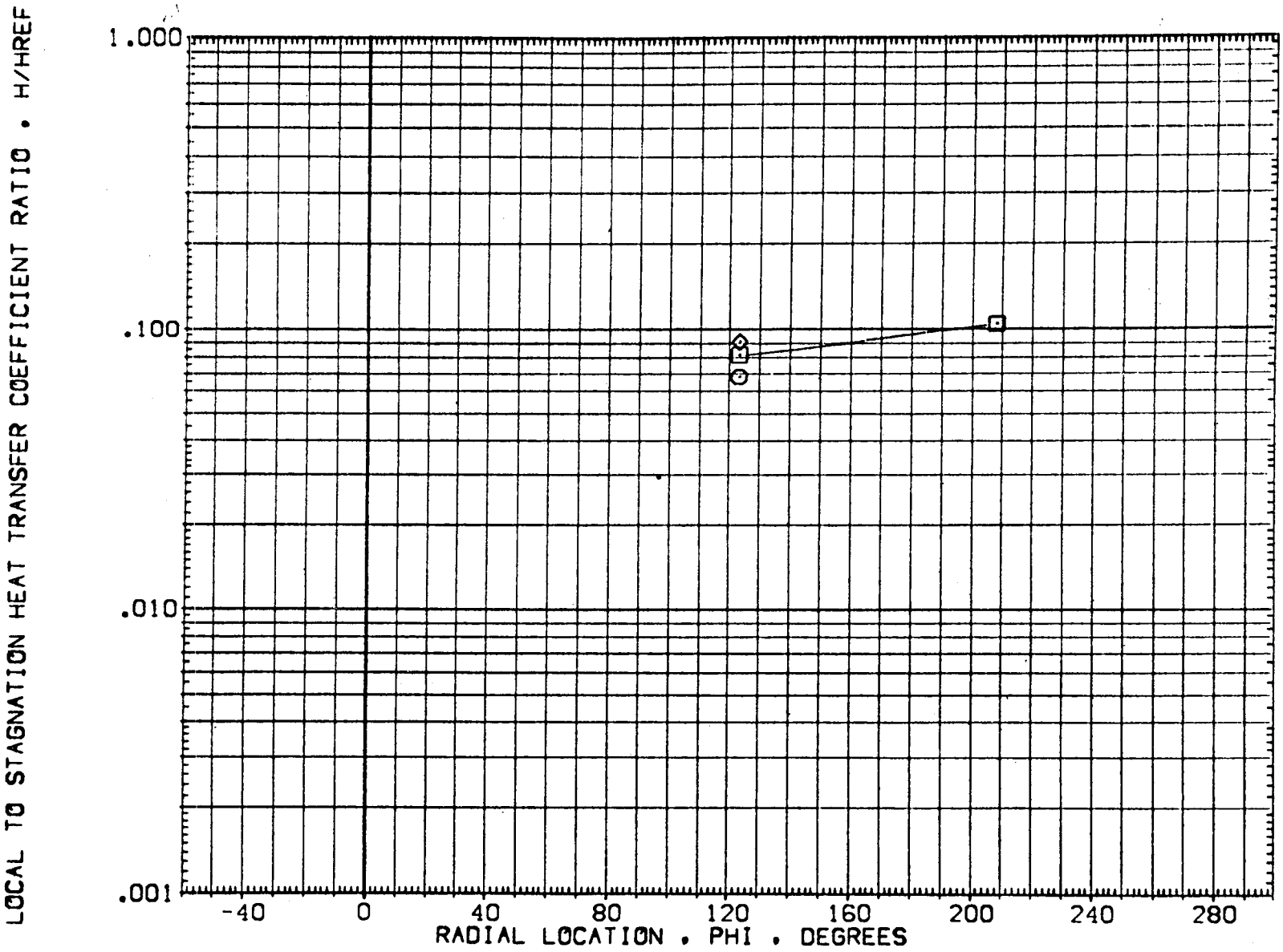


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE,IT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE,IT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

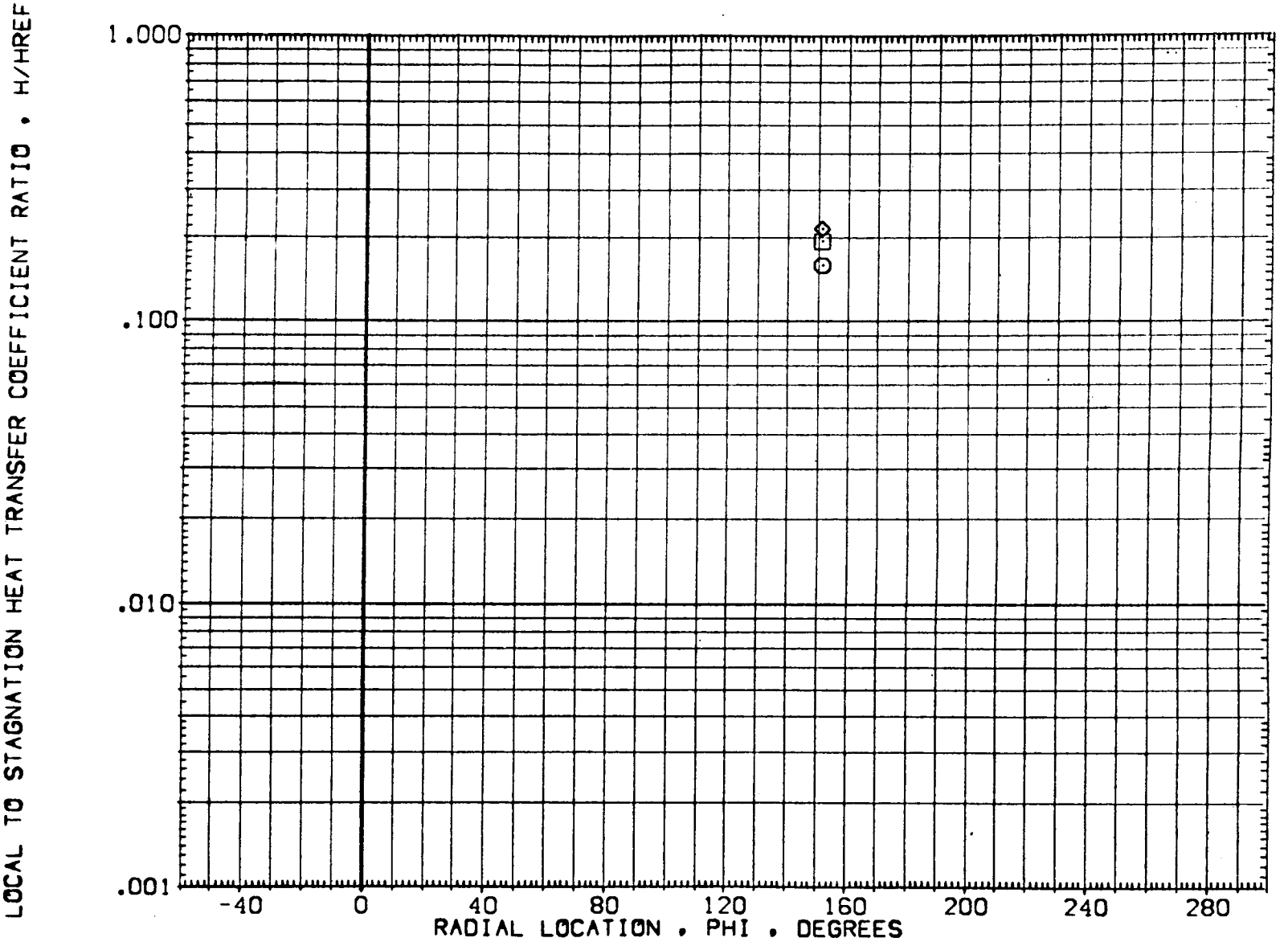


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

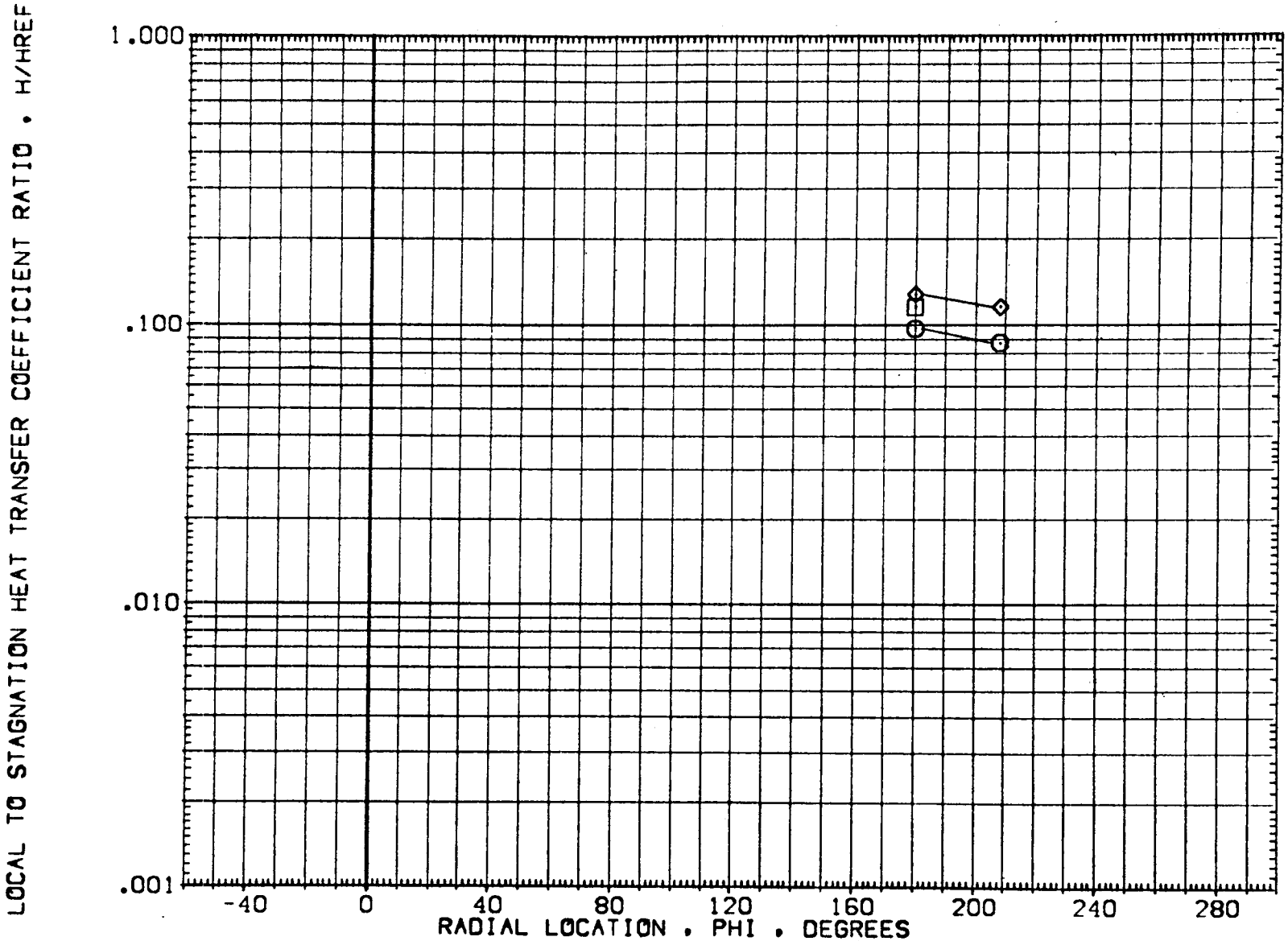


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE IT13]	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
[AE IT13]	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
[BE IT13]	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

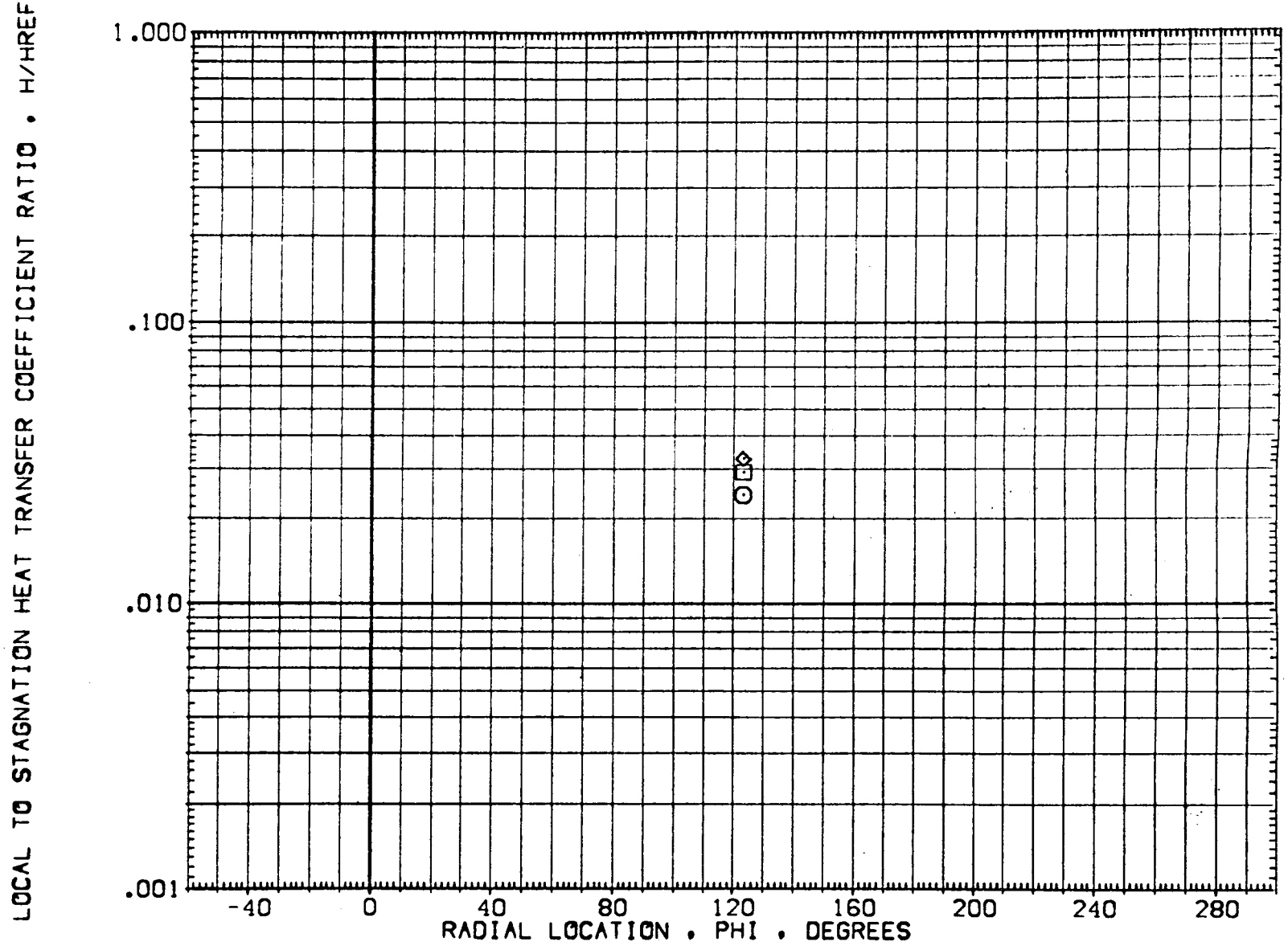


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT13)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT13)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(BEIT13)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.850

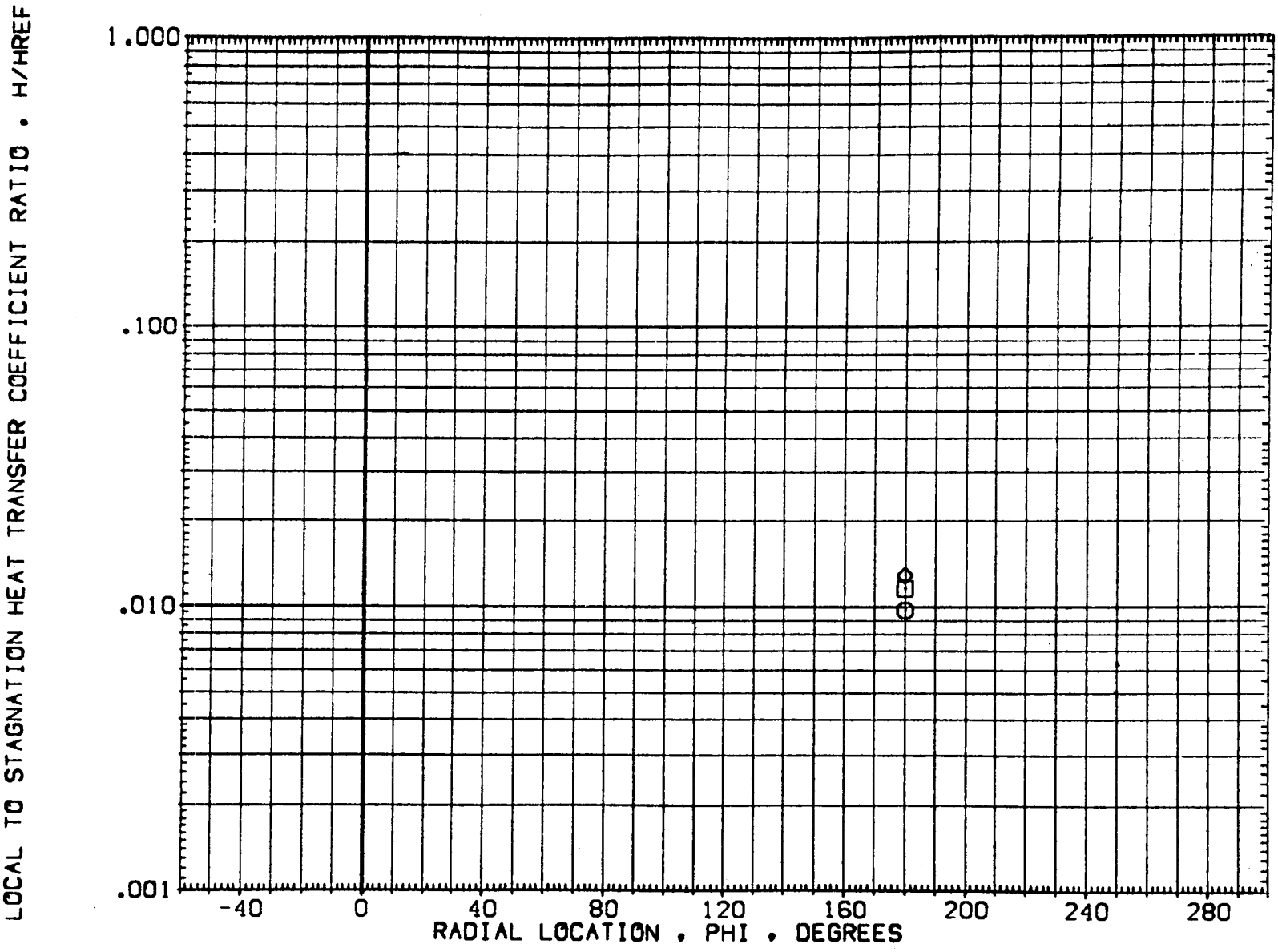


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T12)	○	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE(T12)	□	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE(T12)	◇	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

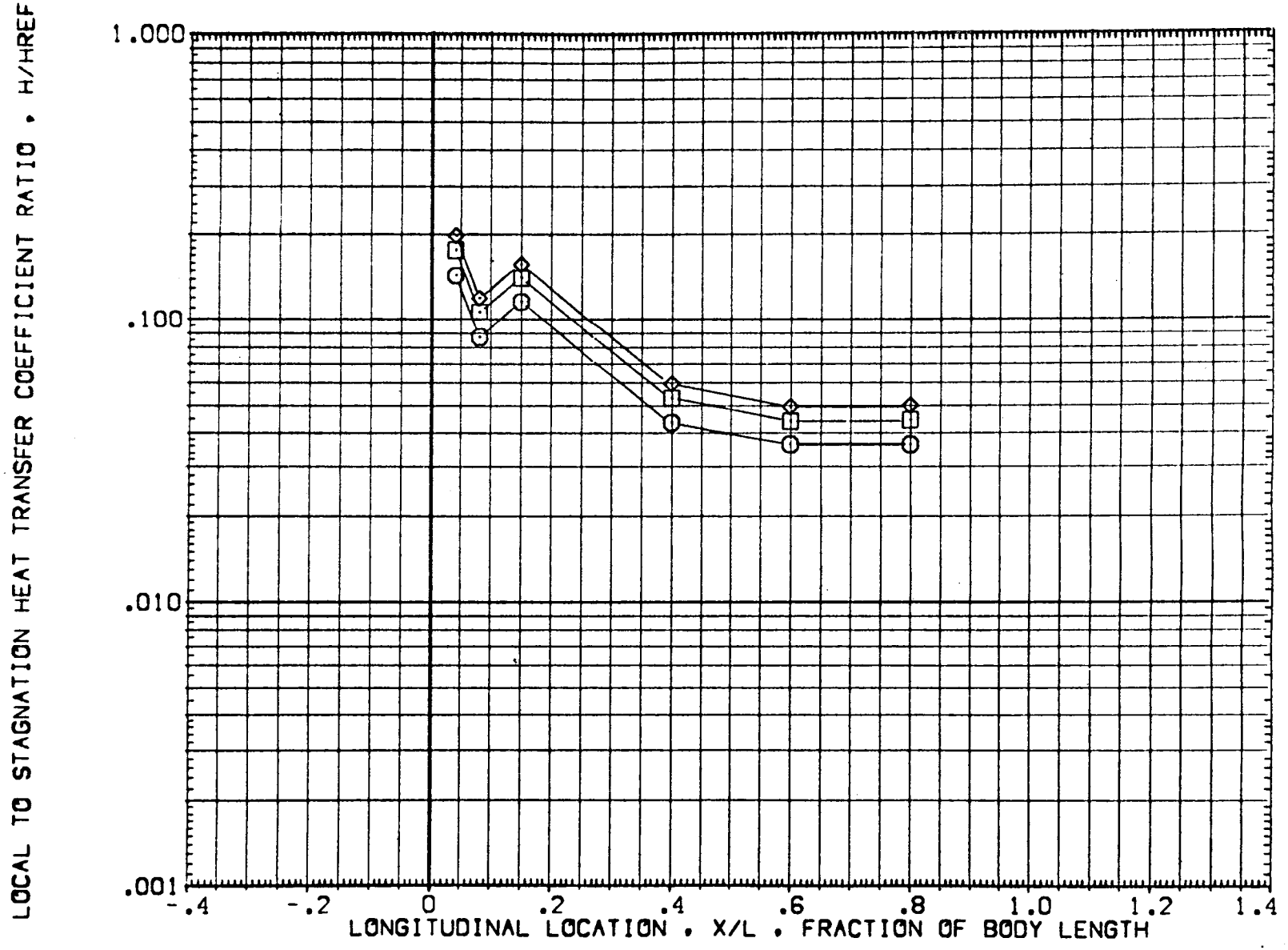


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1I12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1I12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

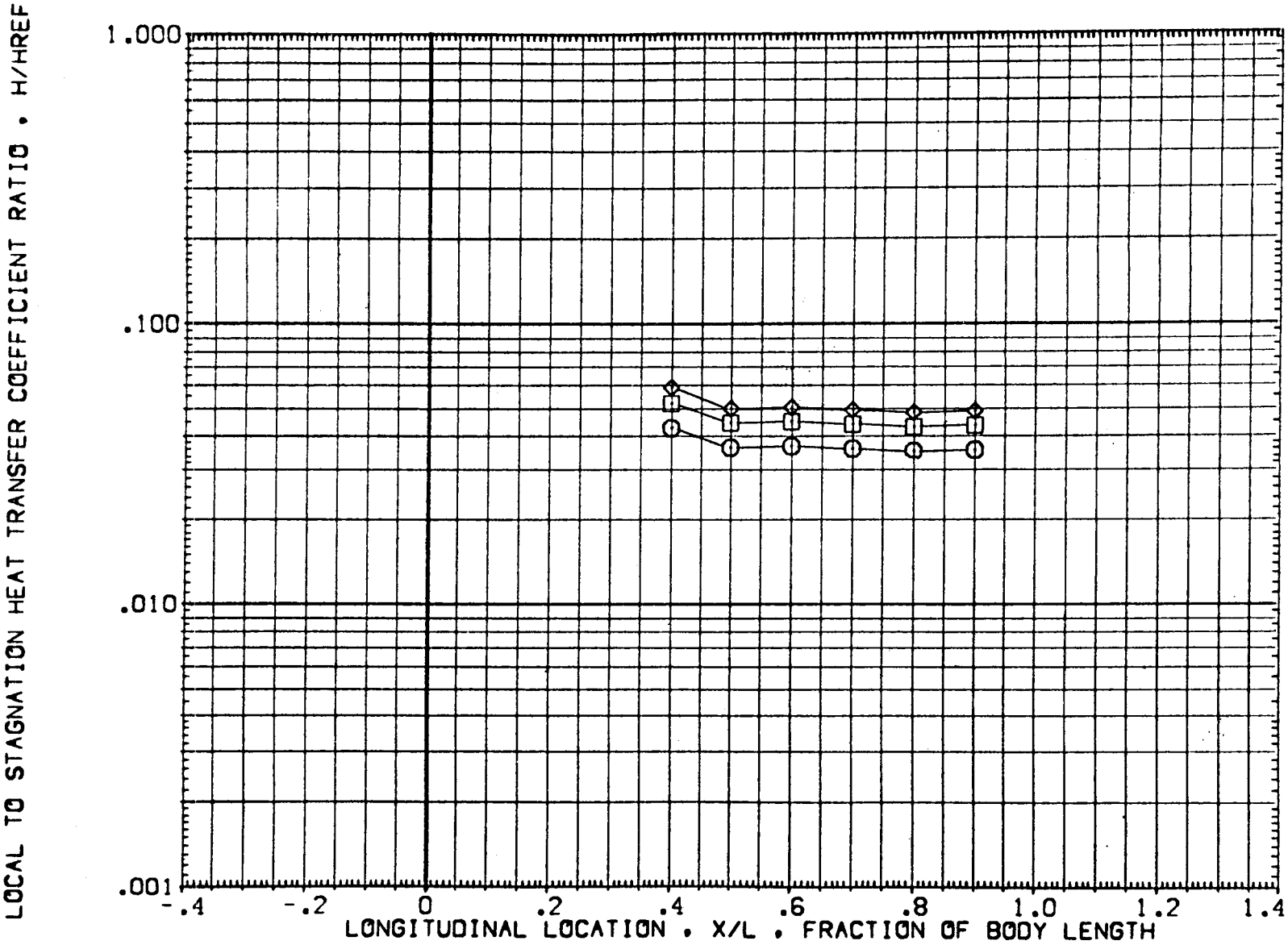


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1I12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1I12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

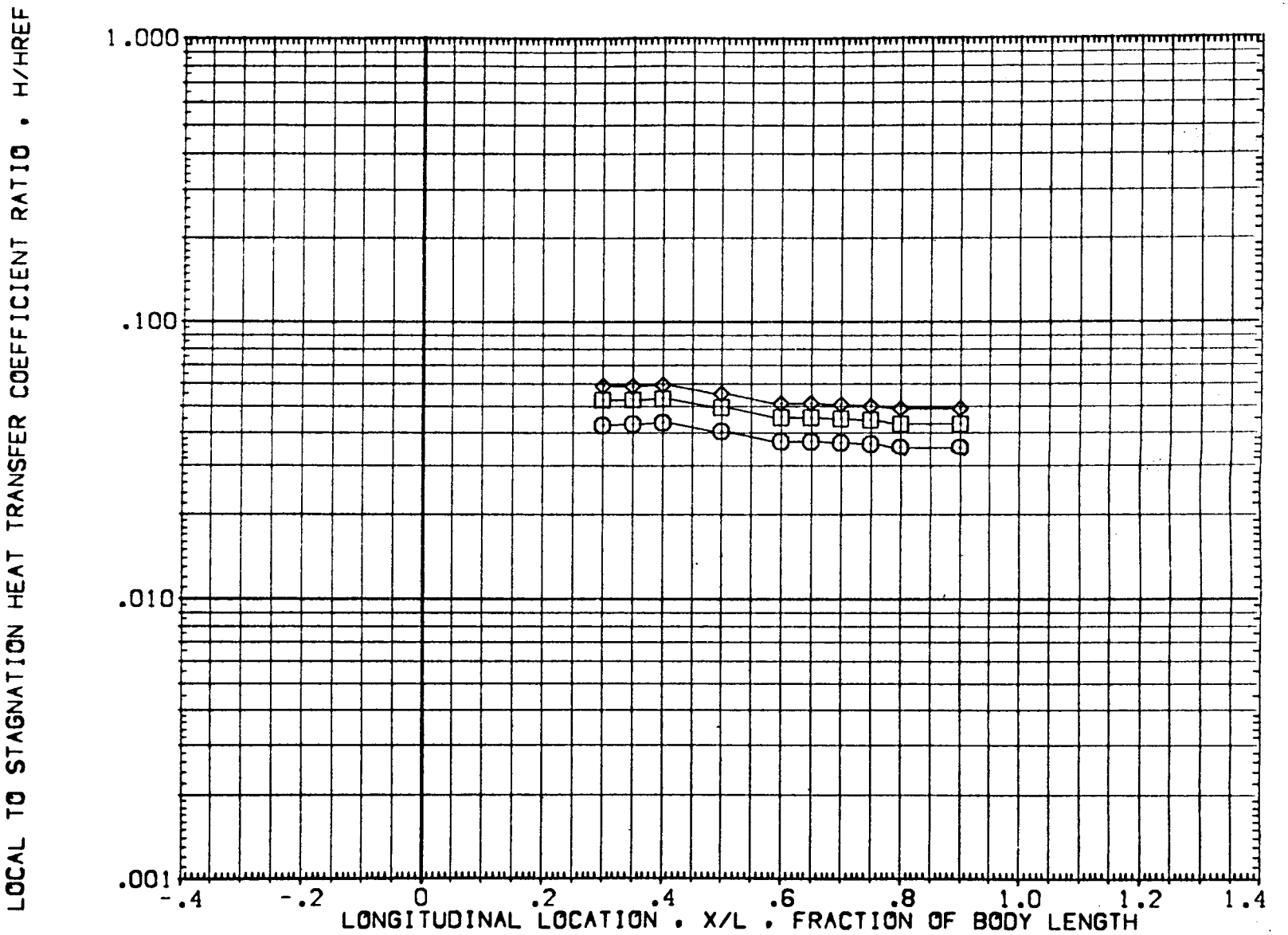


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

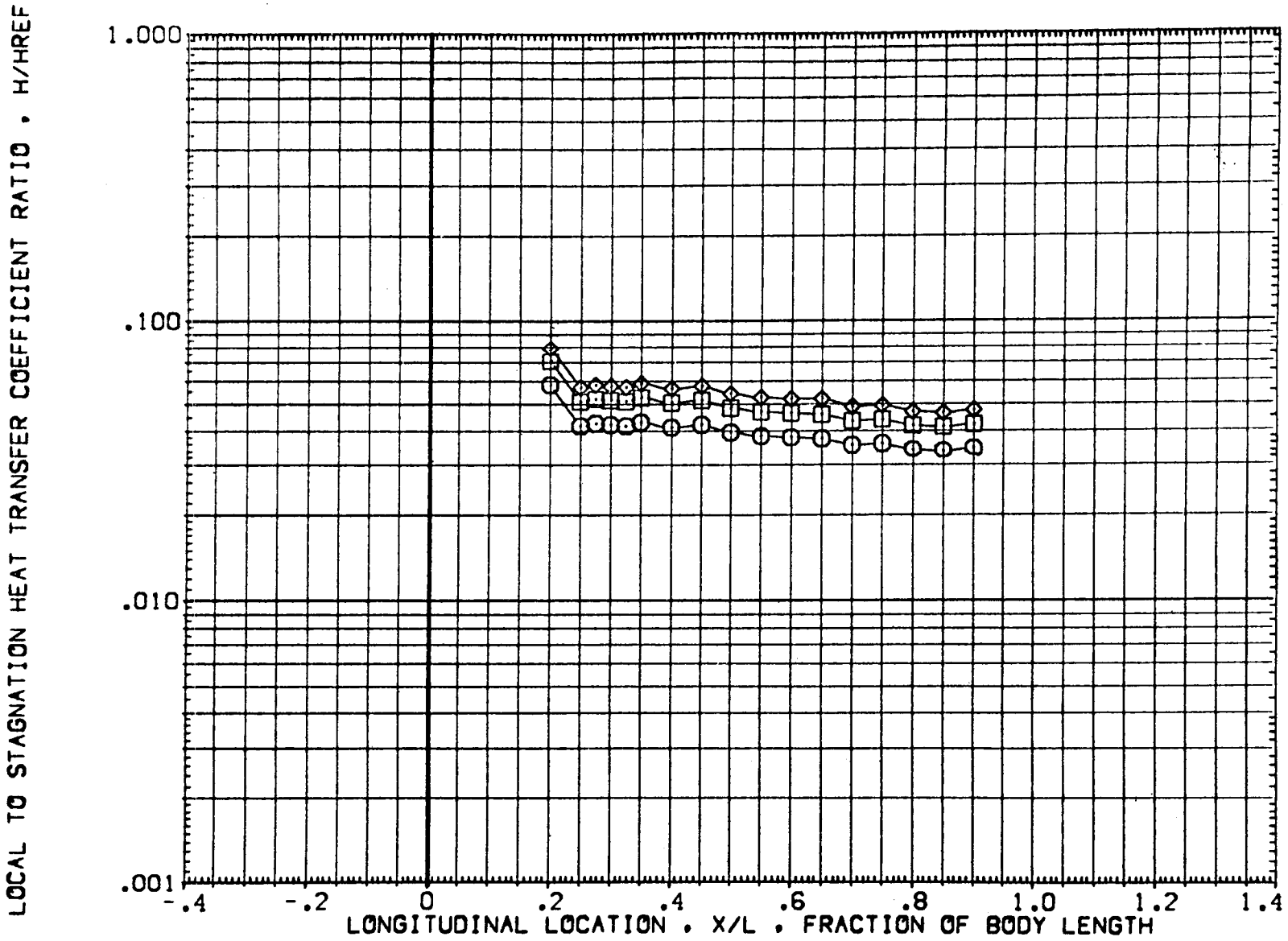


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE(T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE(T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

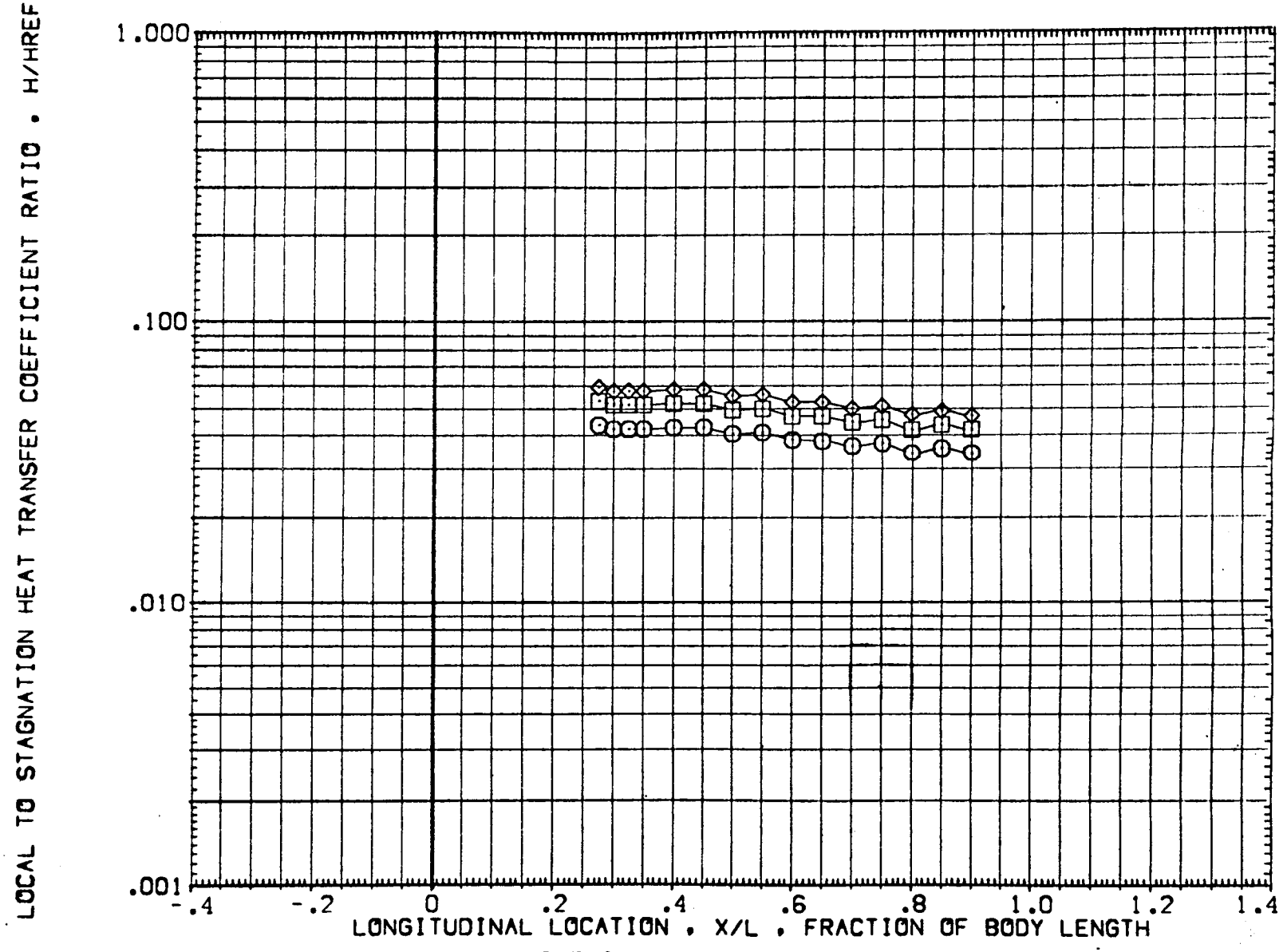


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|1|2)	○	ARC 3.5-178 |H3 ET (TR|PS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T|2)	□	ARC 3.5-178 |H3 ET (TR|PS)	EXTERNAL TANK	.000	.000	5.000	.800
(BE|T|2)	◇	ARC 3.5-178 |H3 ET (TR|PS)	EXTERNAL TANK	.000	.000	5.000	.850

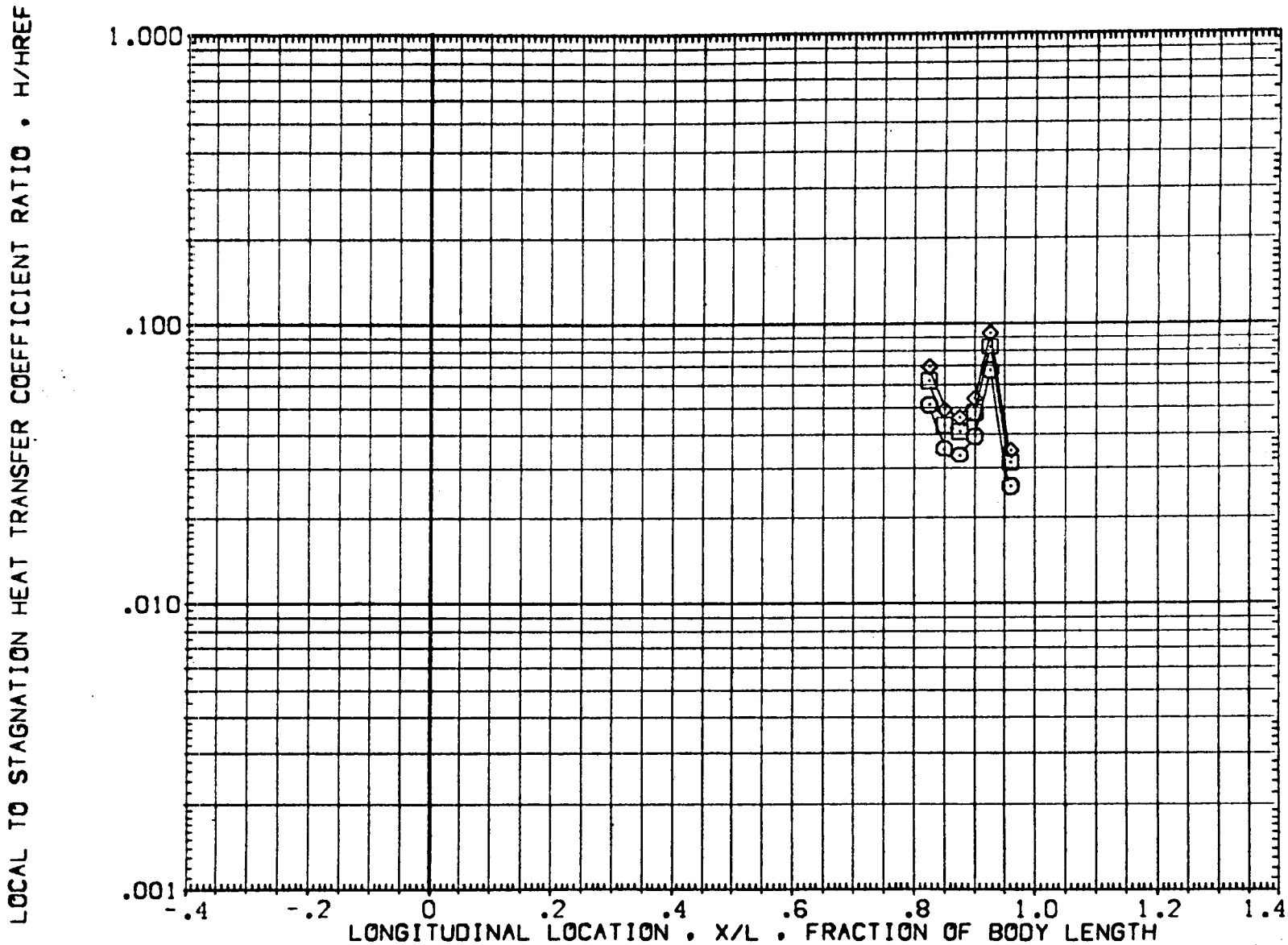


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

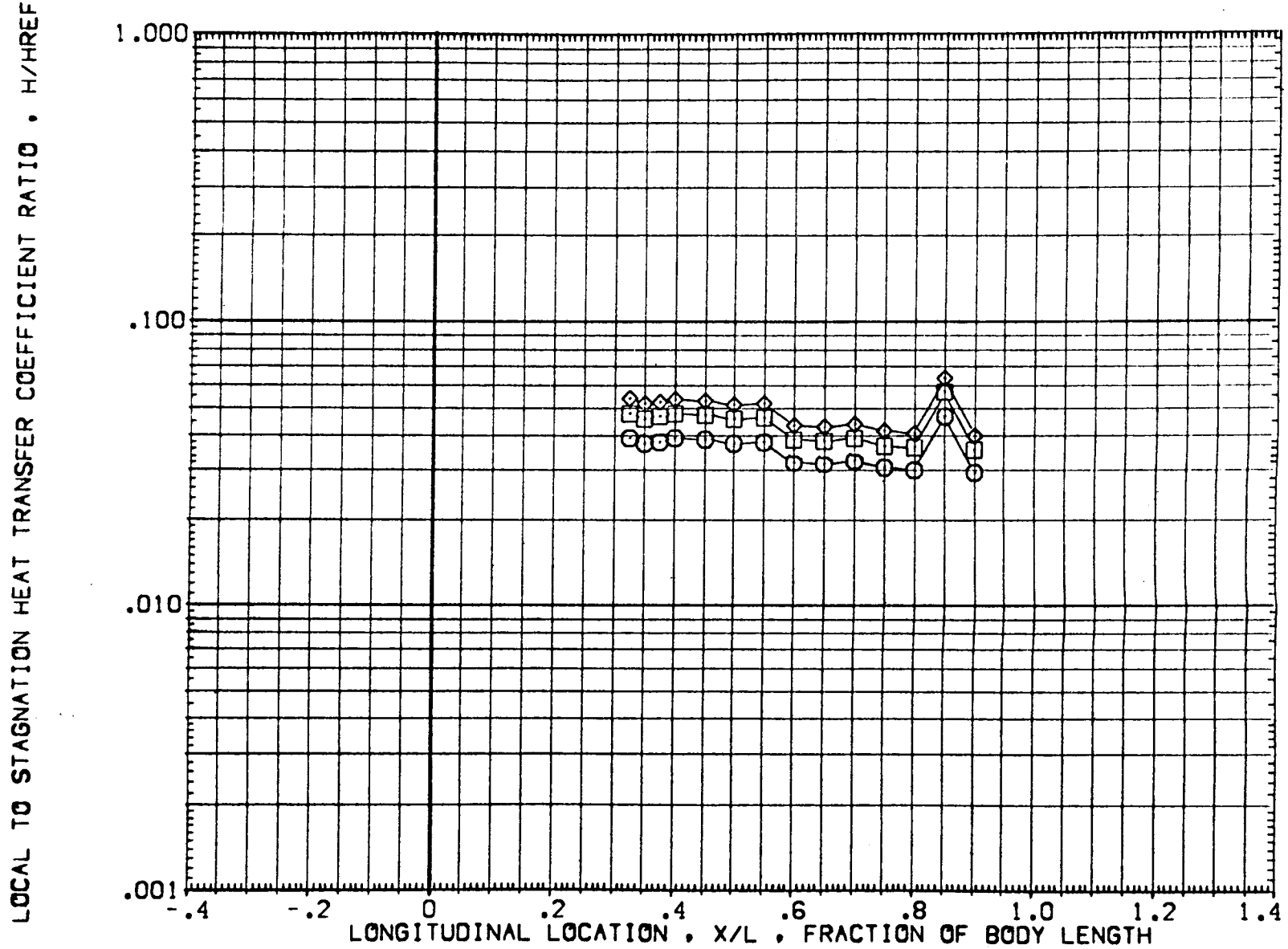


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(112)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE(T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE(T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

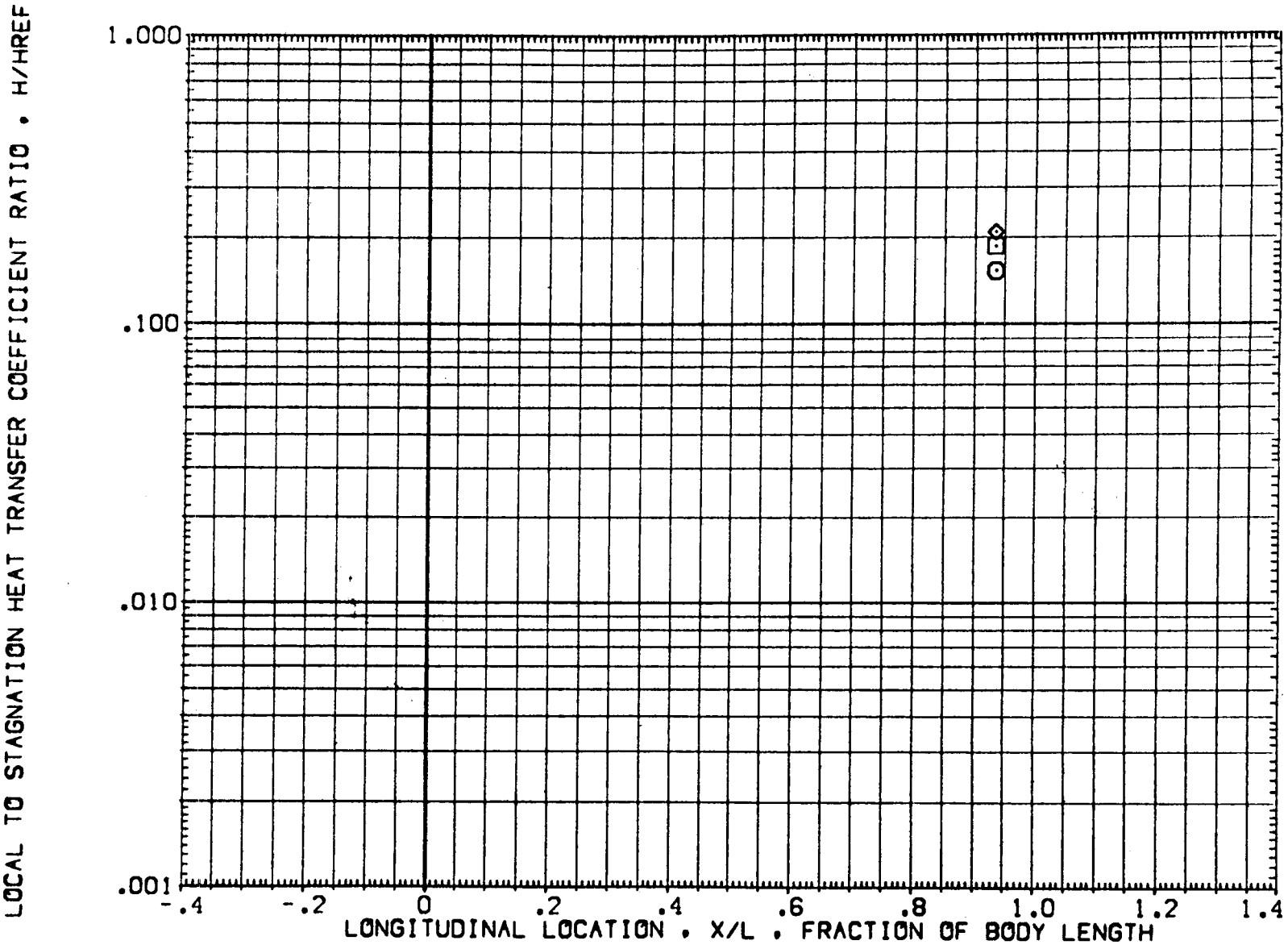


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

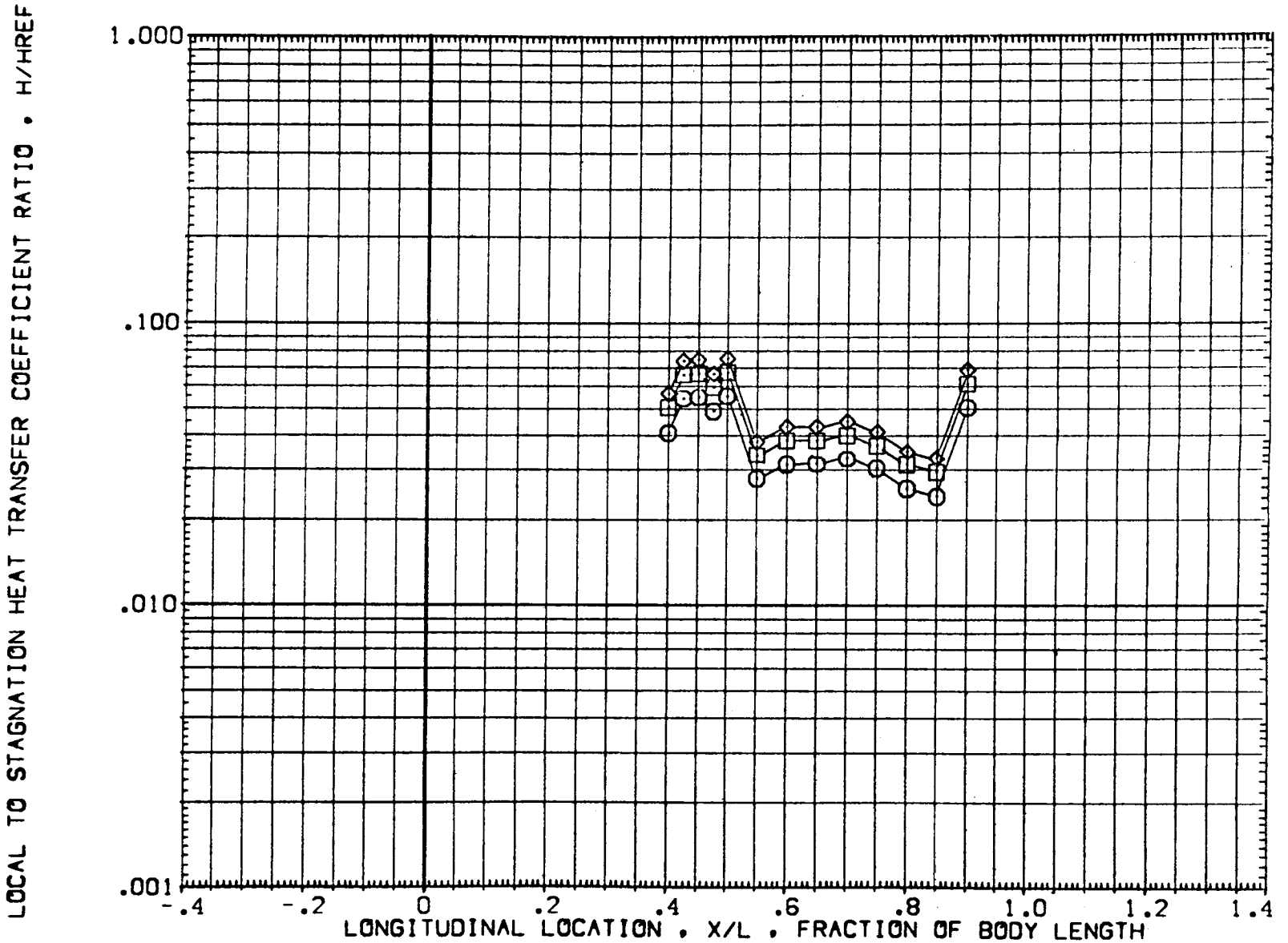


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1I12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1I12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

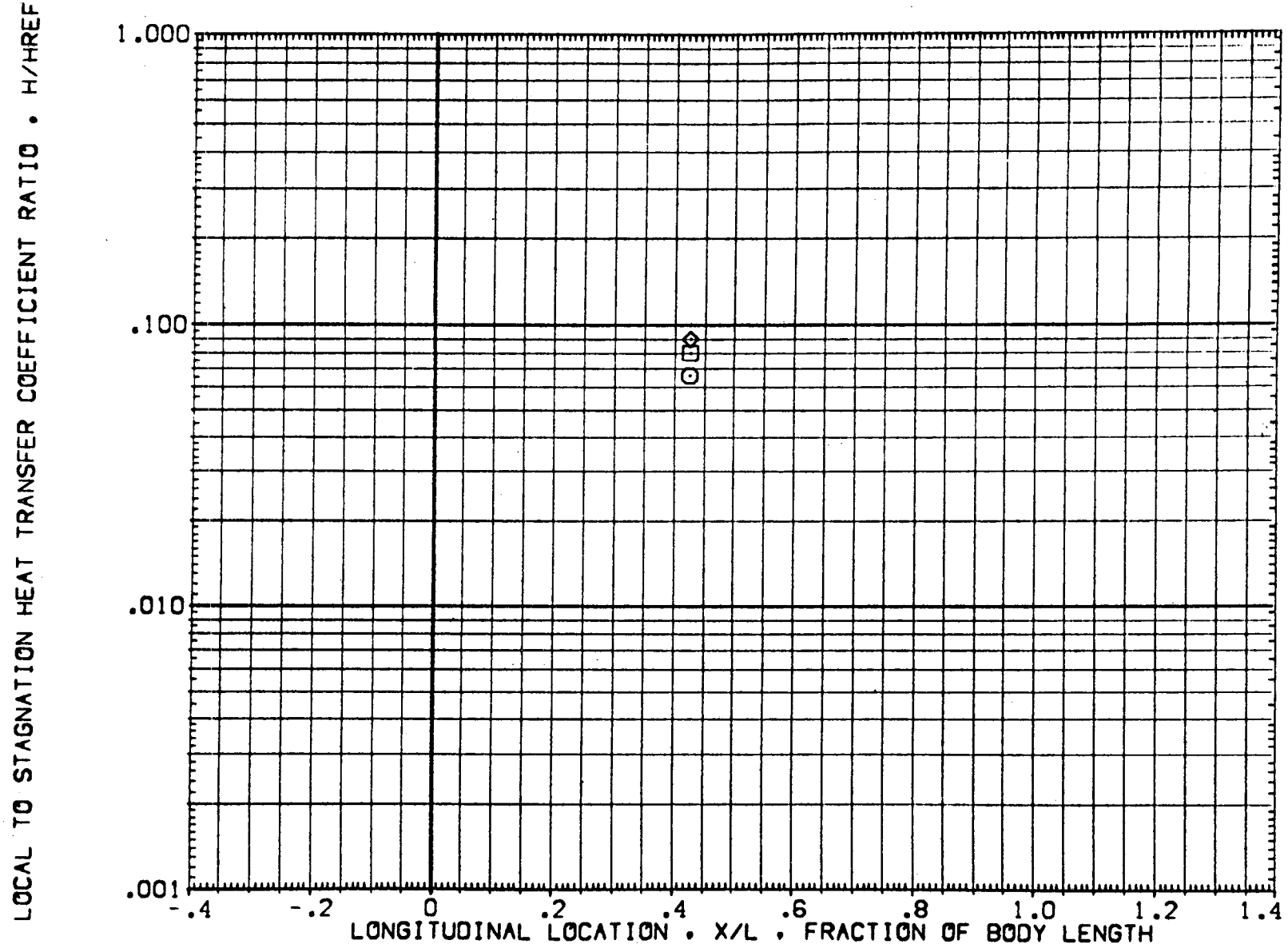


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1I12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1I12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

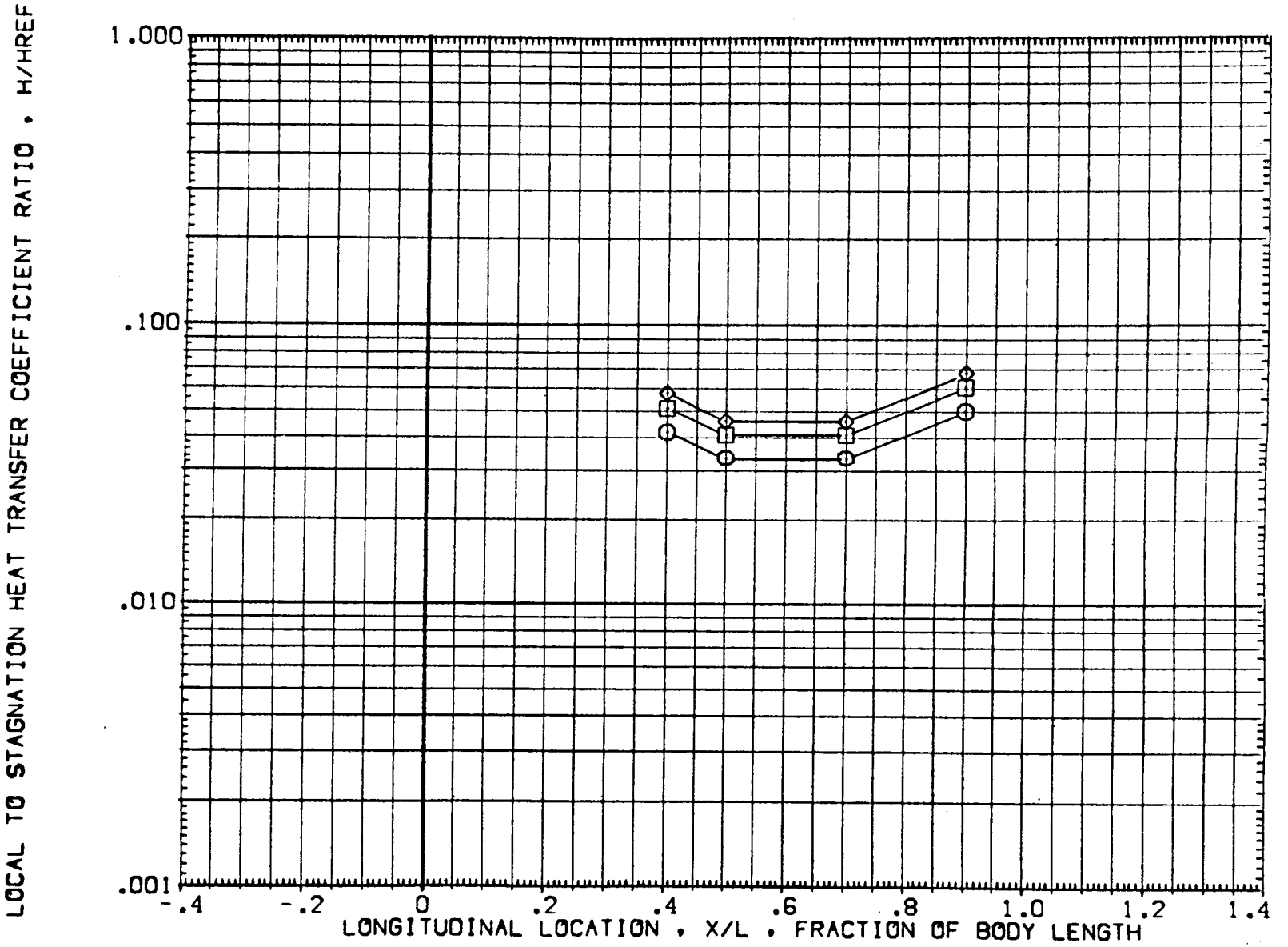


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

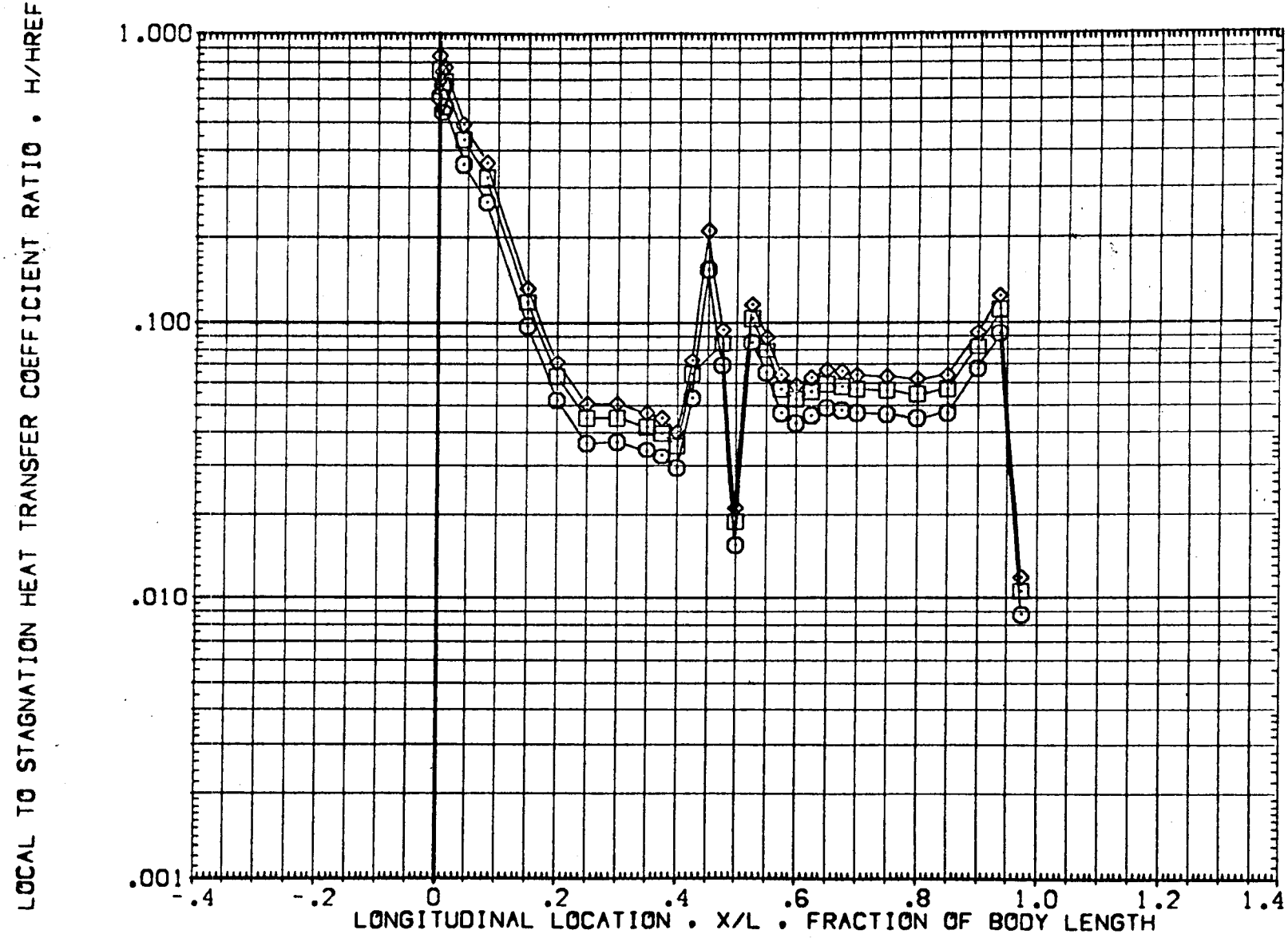


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1I12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1I12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

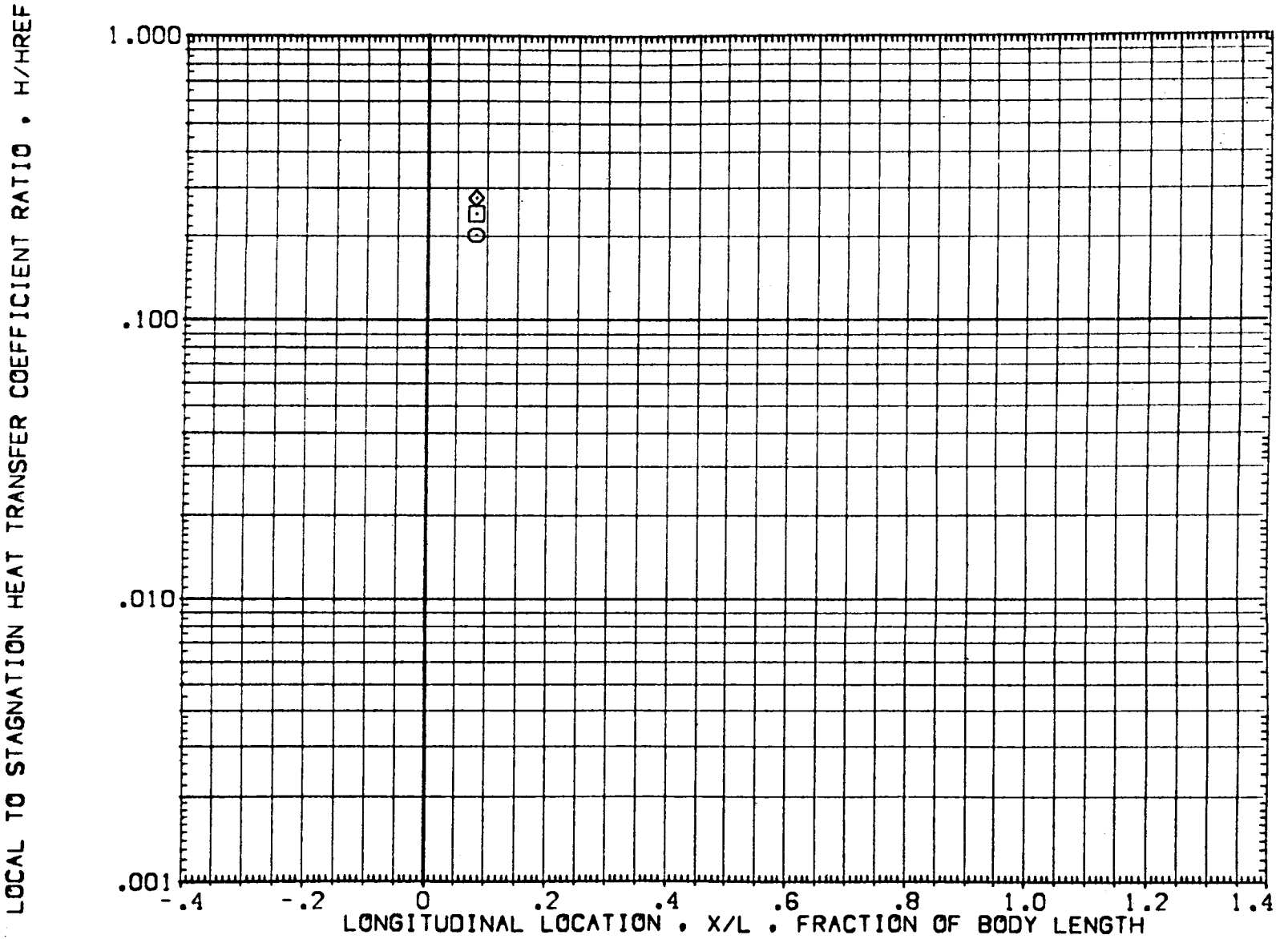


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

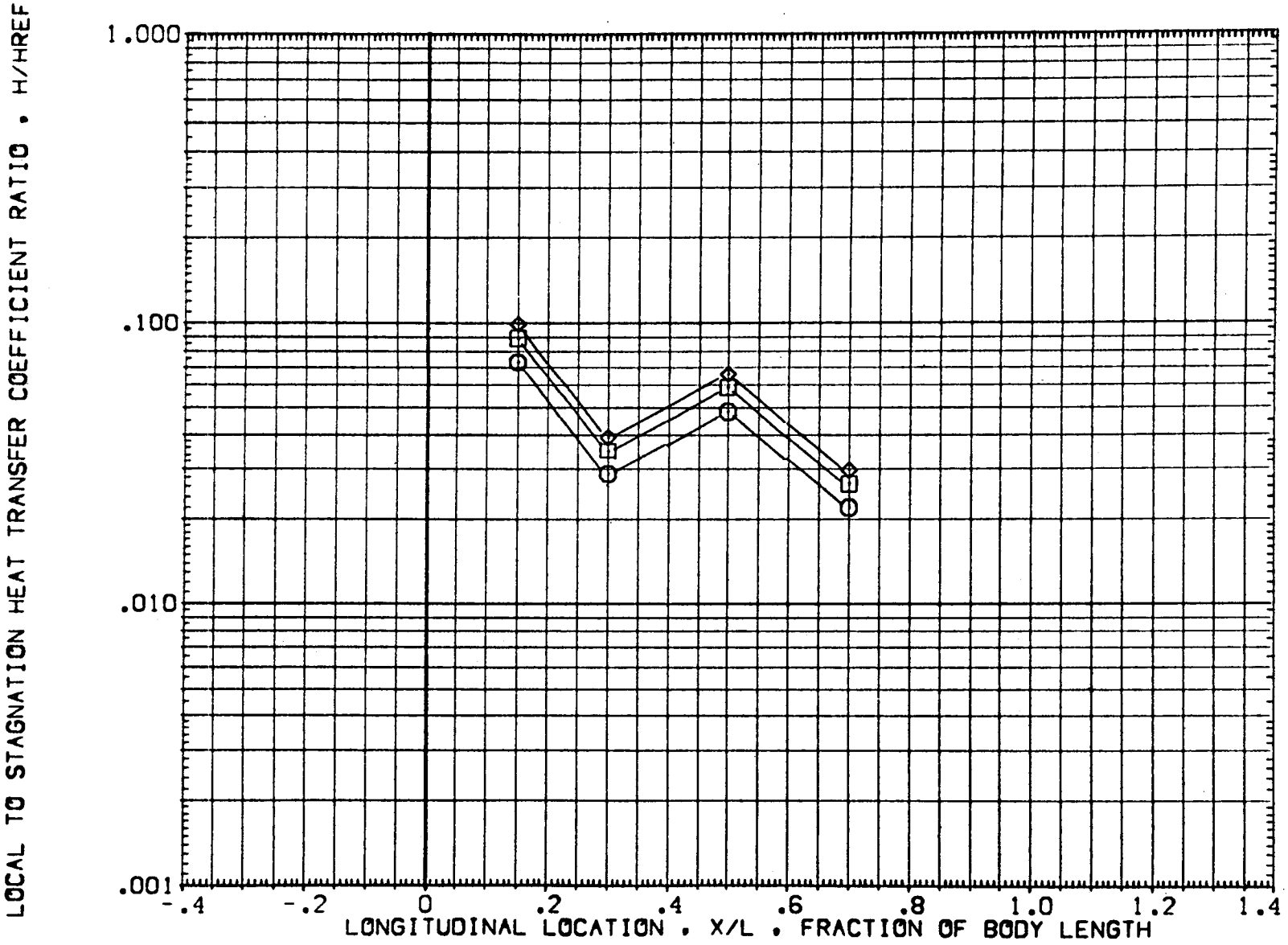


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	DATA NOT AVAILABLE		.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

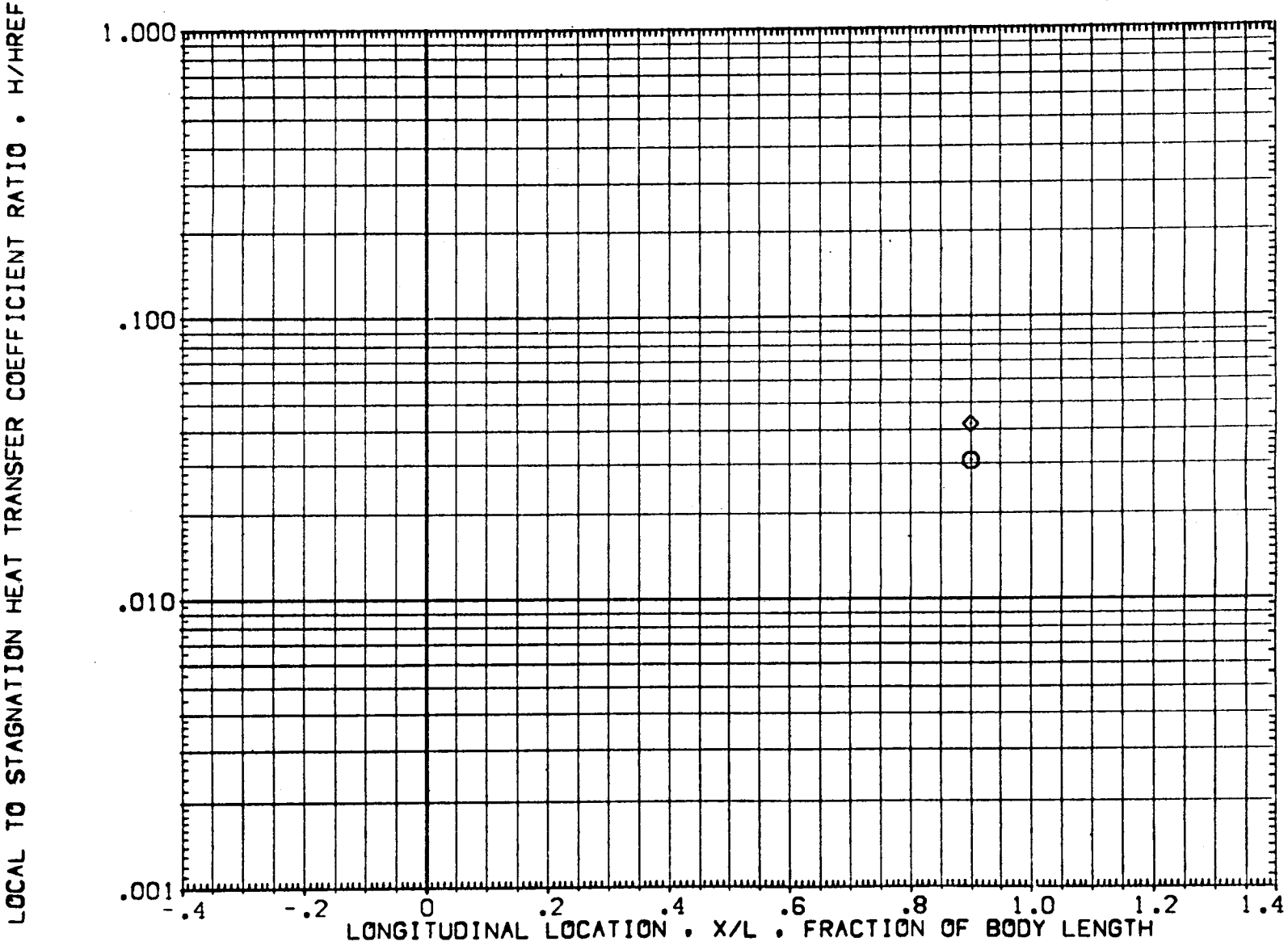


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE112)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE112)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE112)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

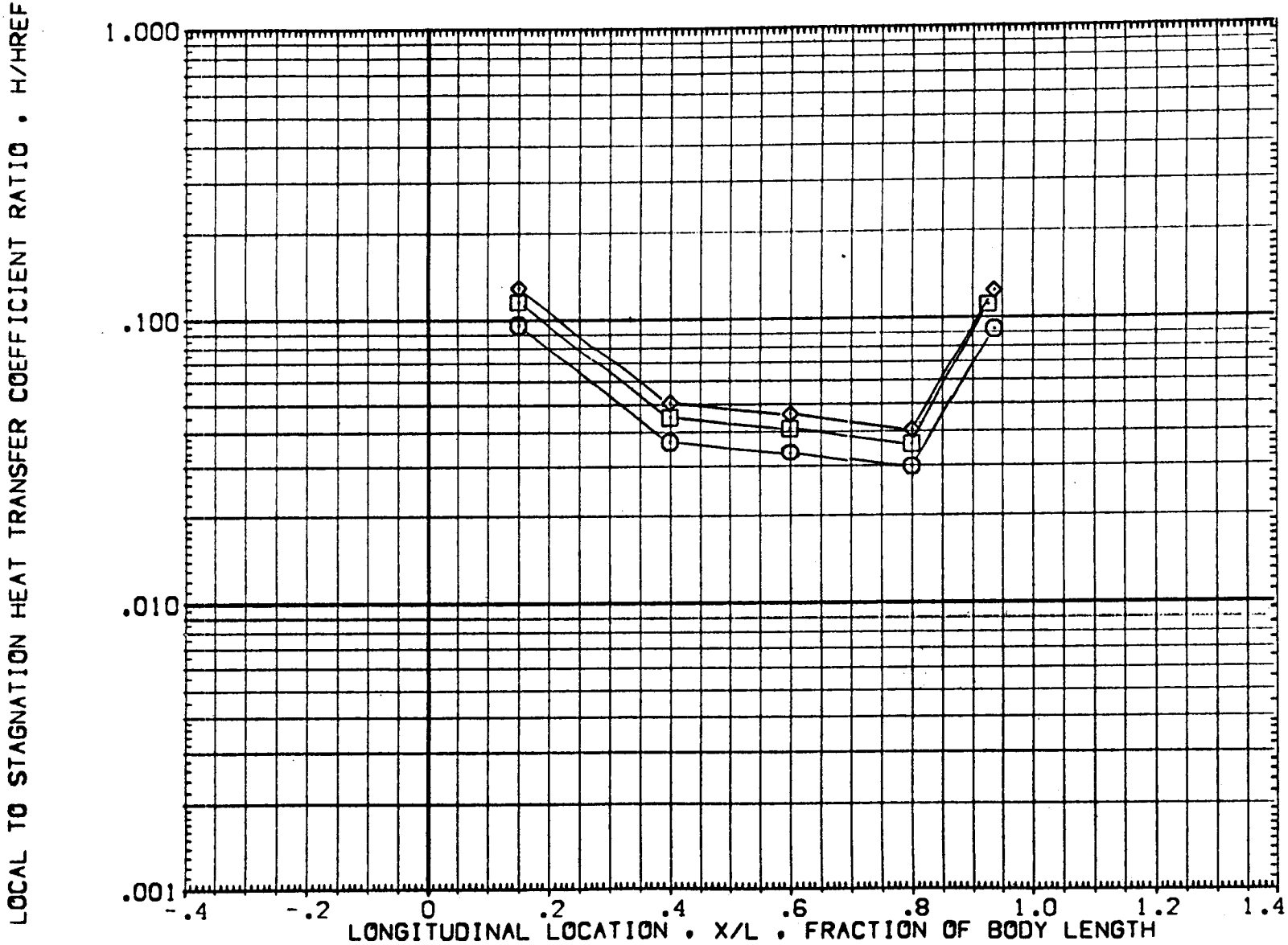


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE(T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE(T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

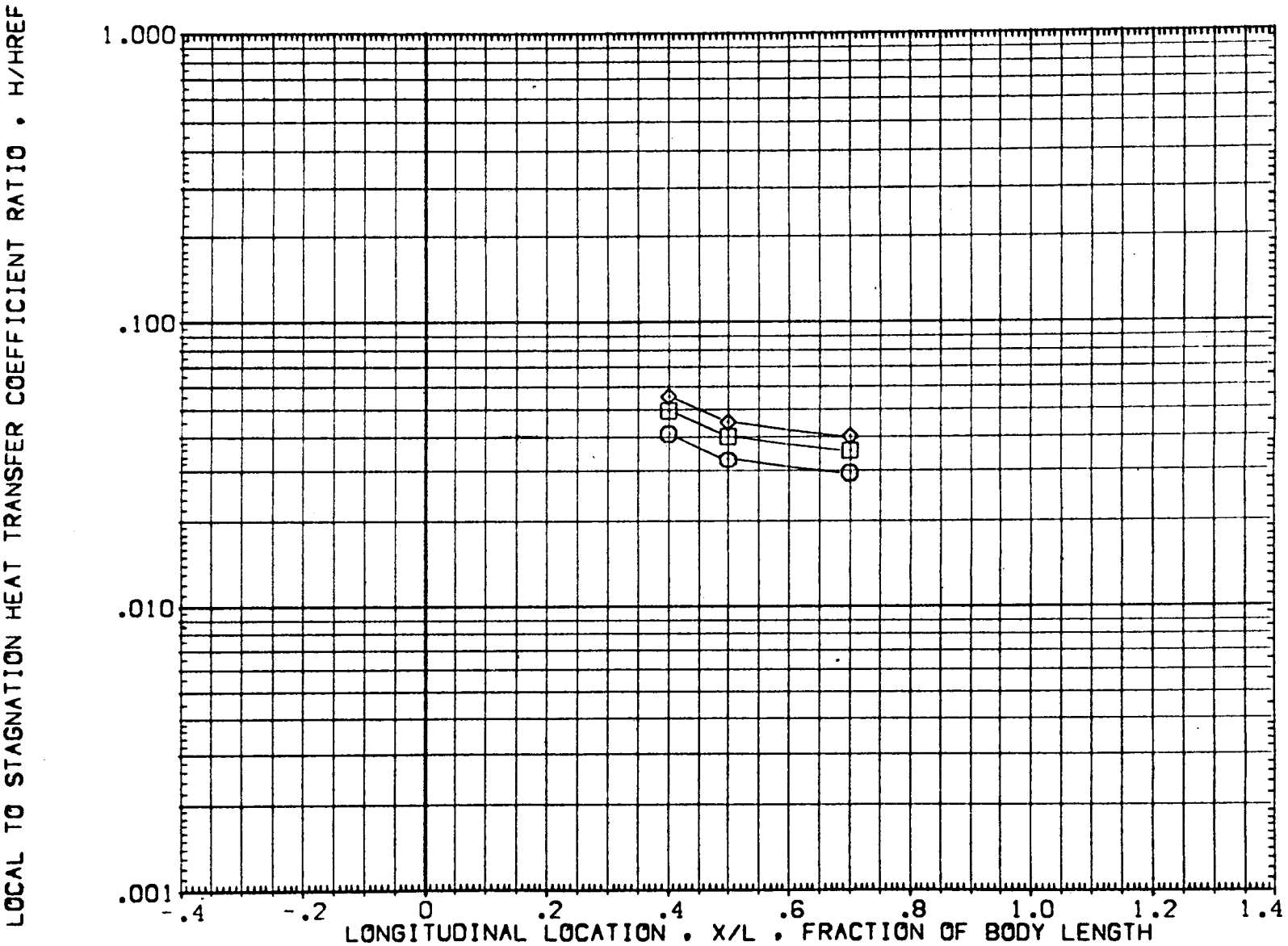


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

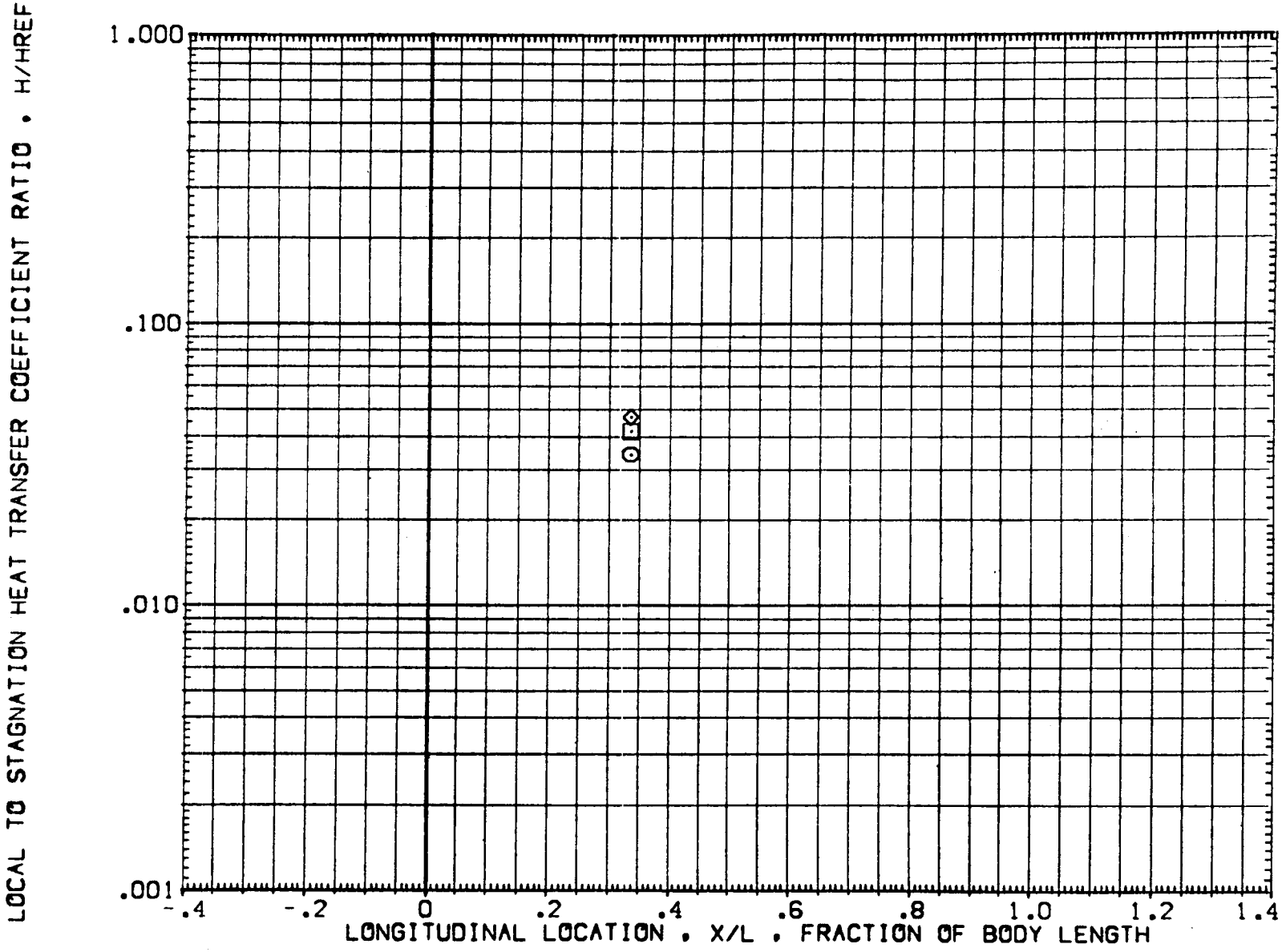


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

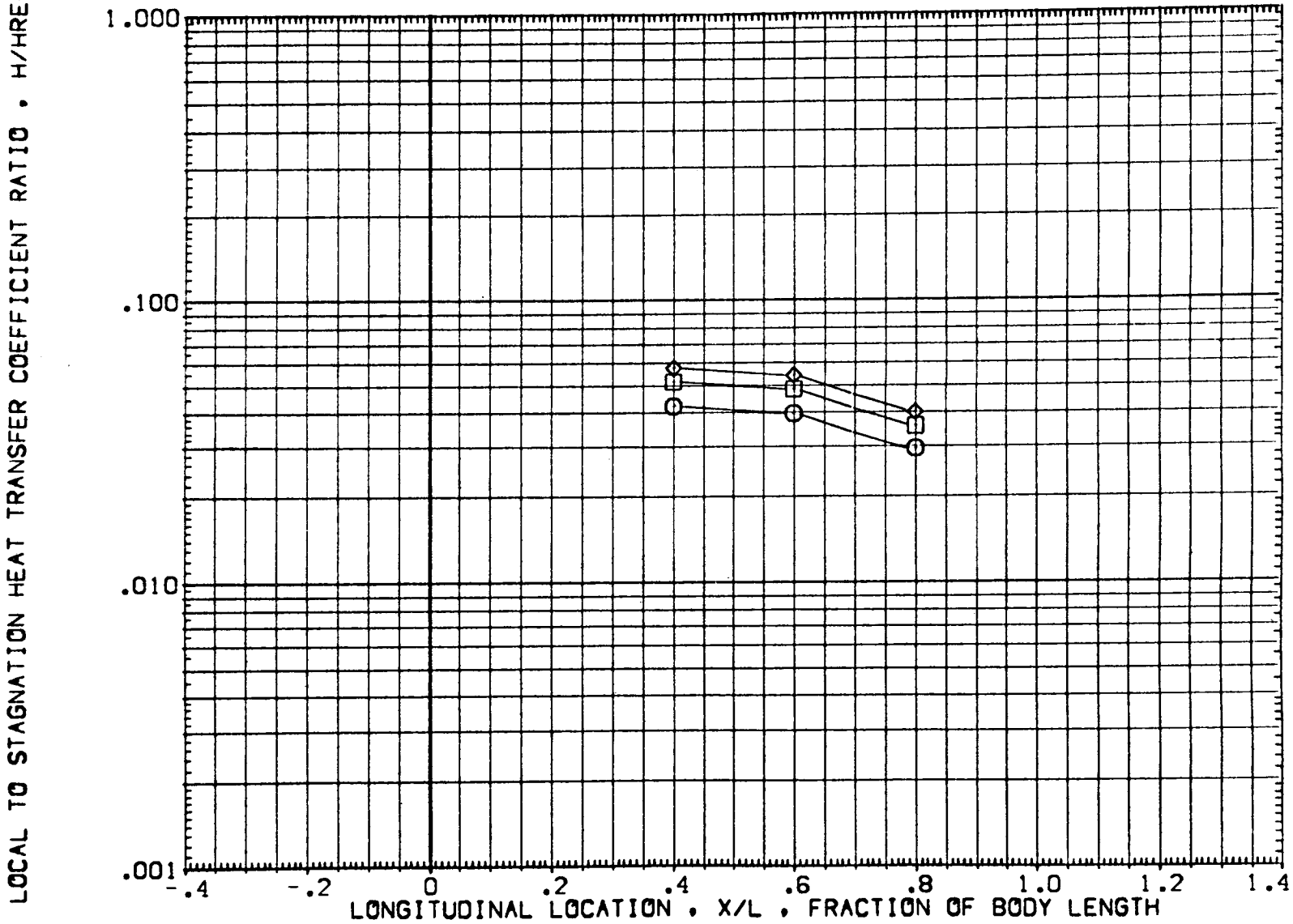


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE,T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE,T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

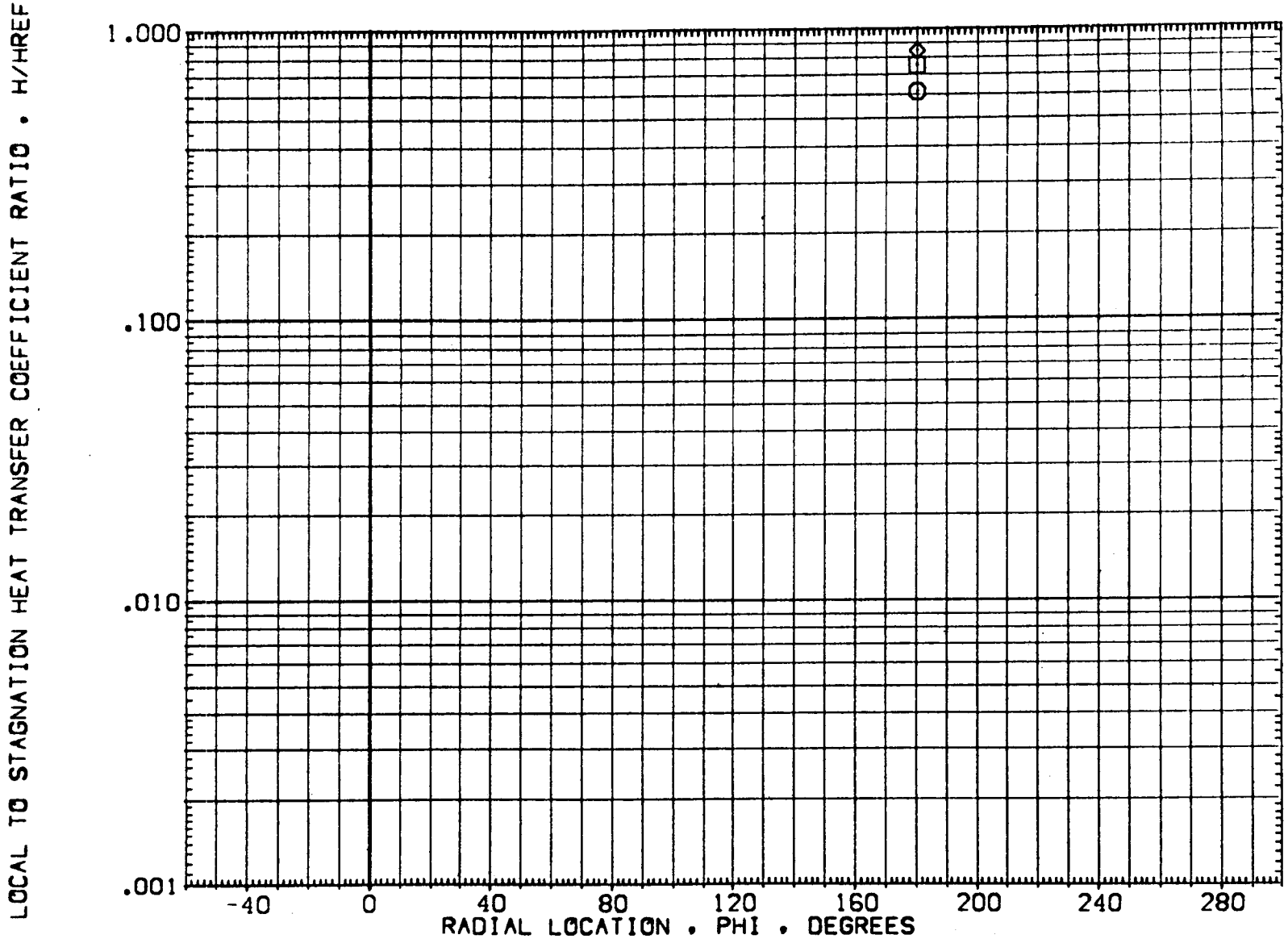


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|112)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|112)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|112)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

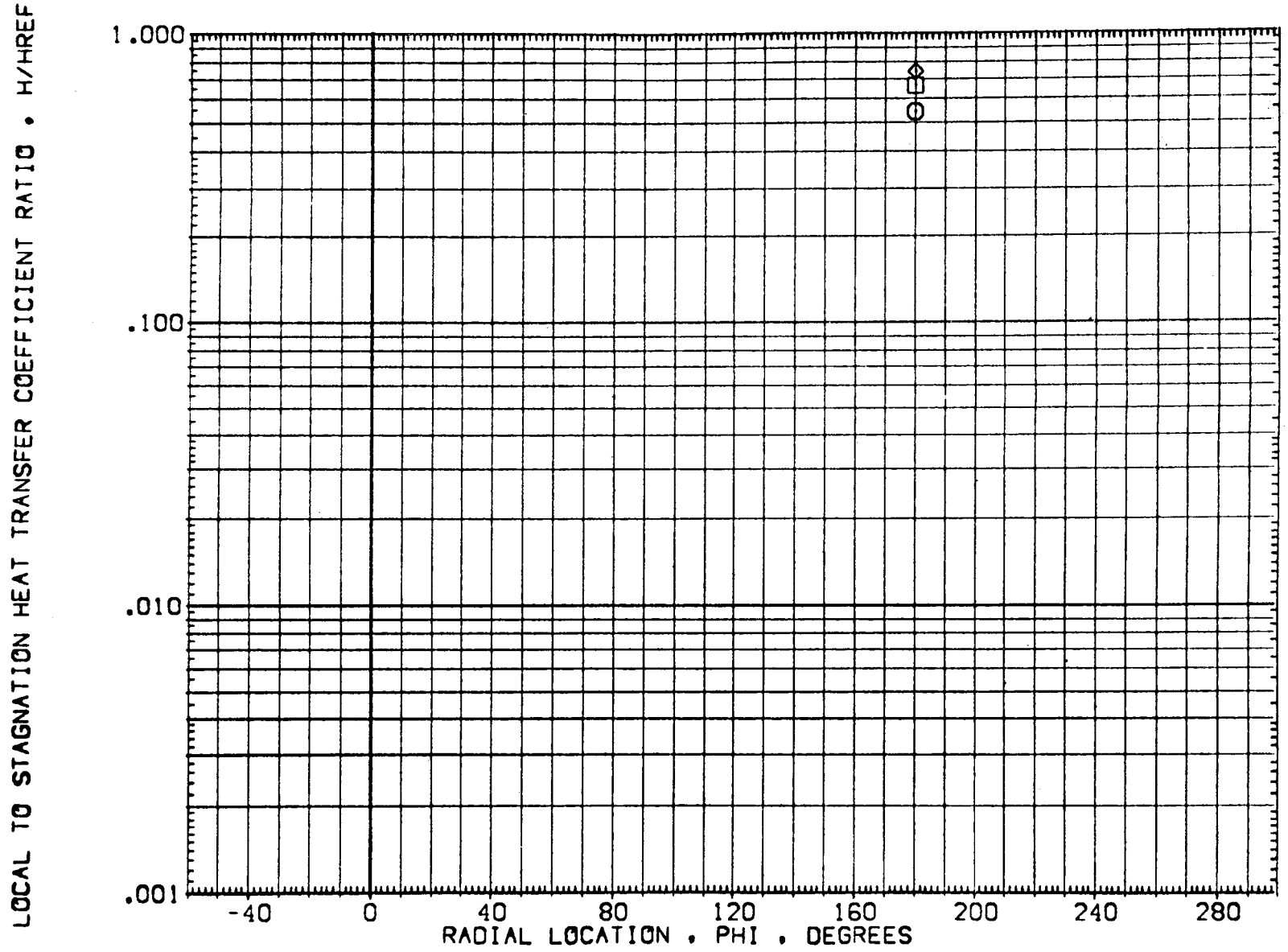


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE)T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE)T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE)T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

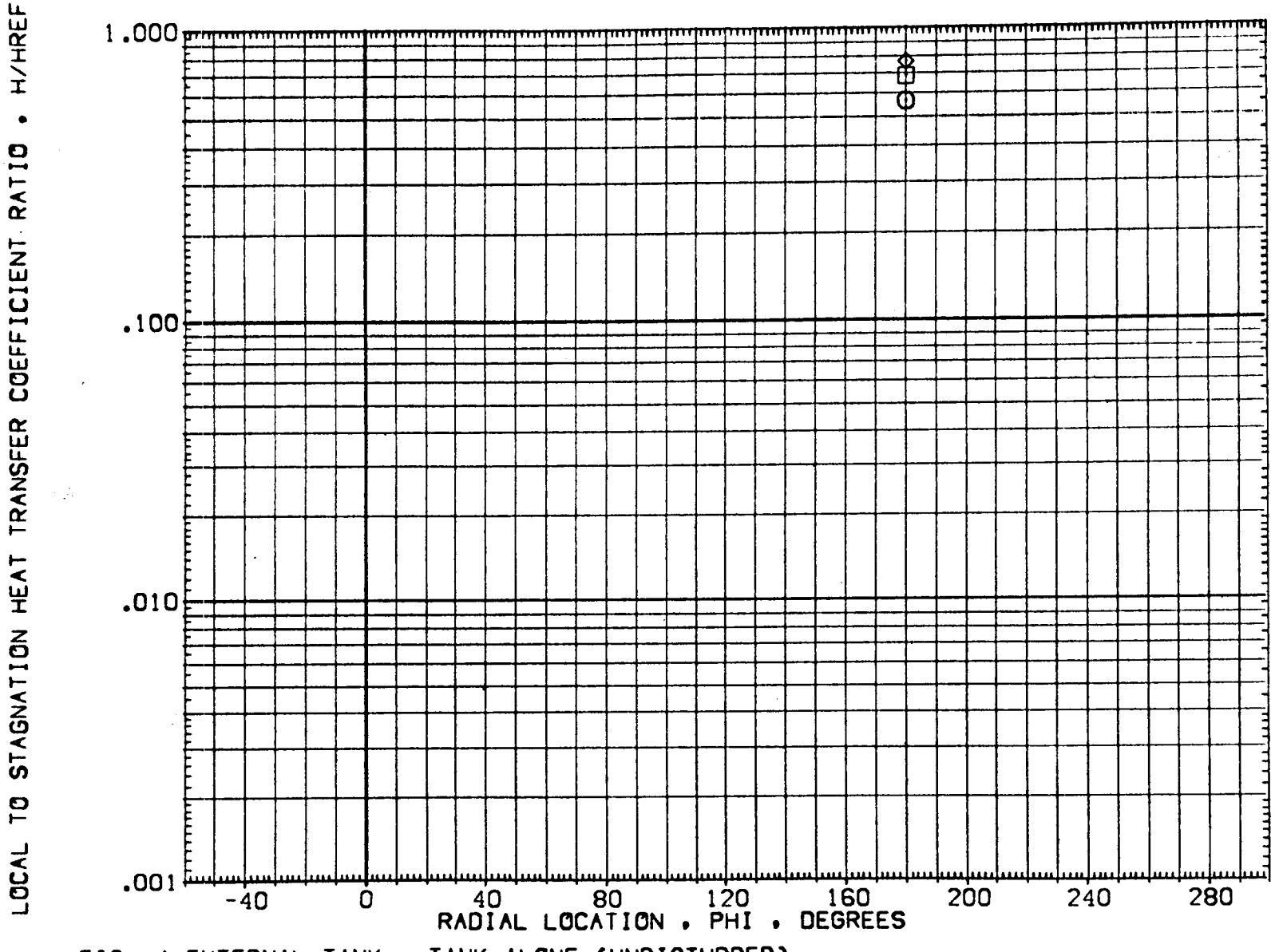


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REIT12]	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
[AEIT12]	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
[BEIT12]	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

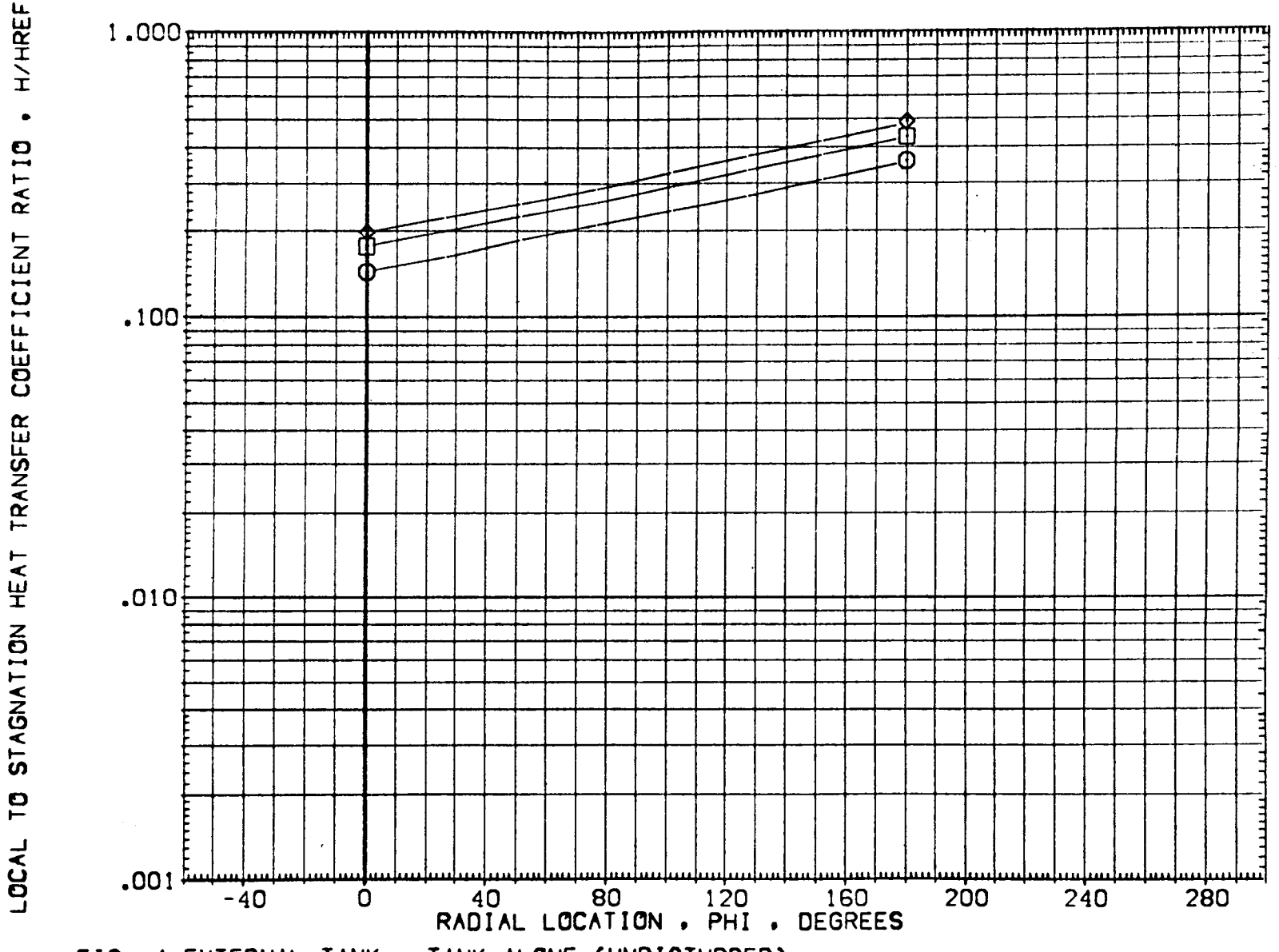


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

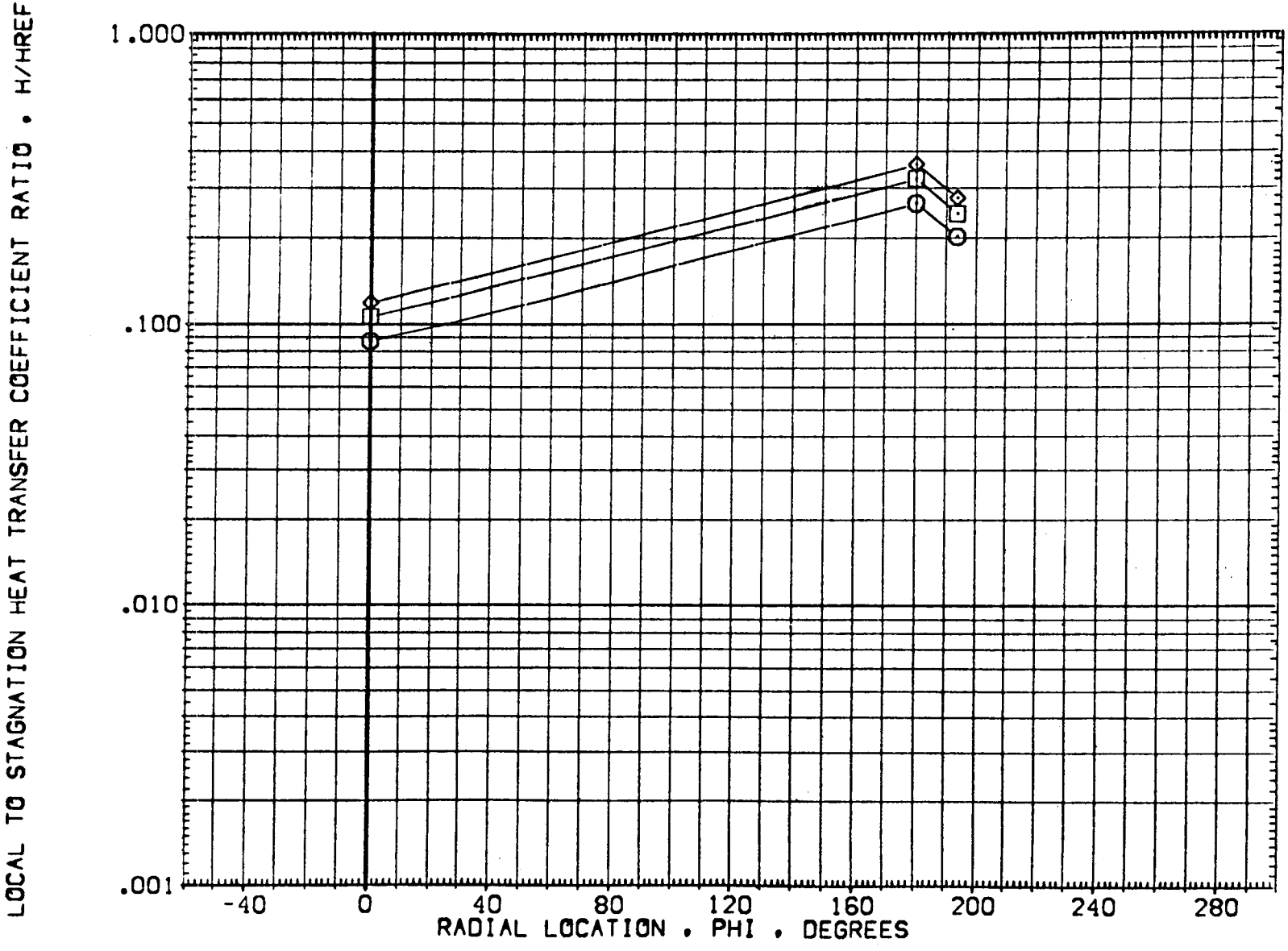


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

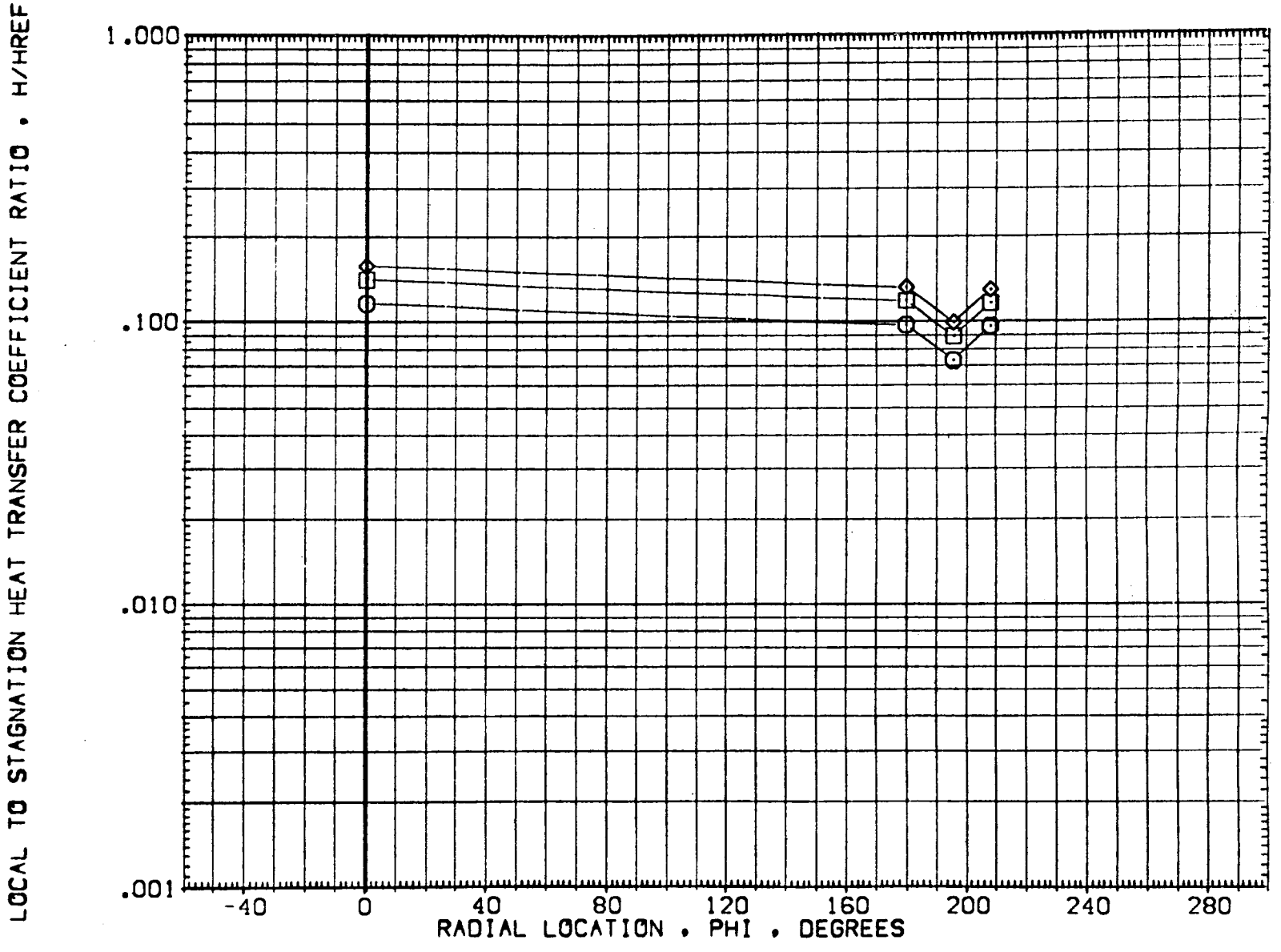


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

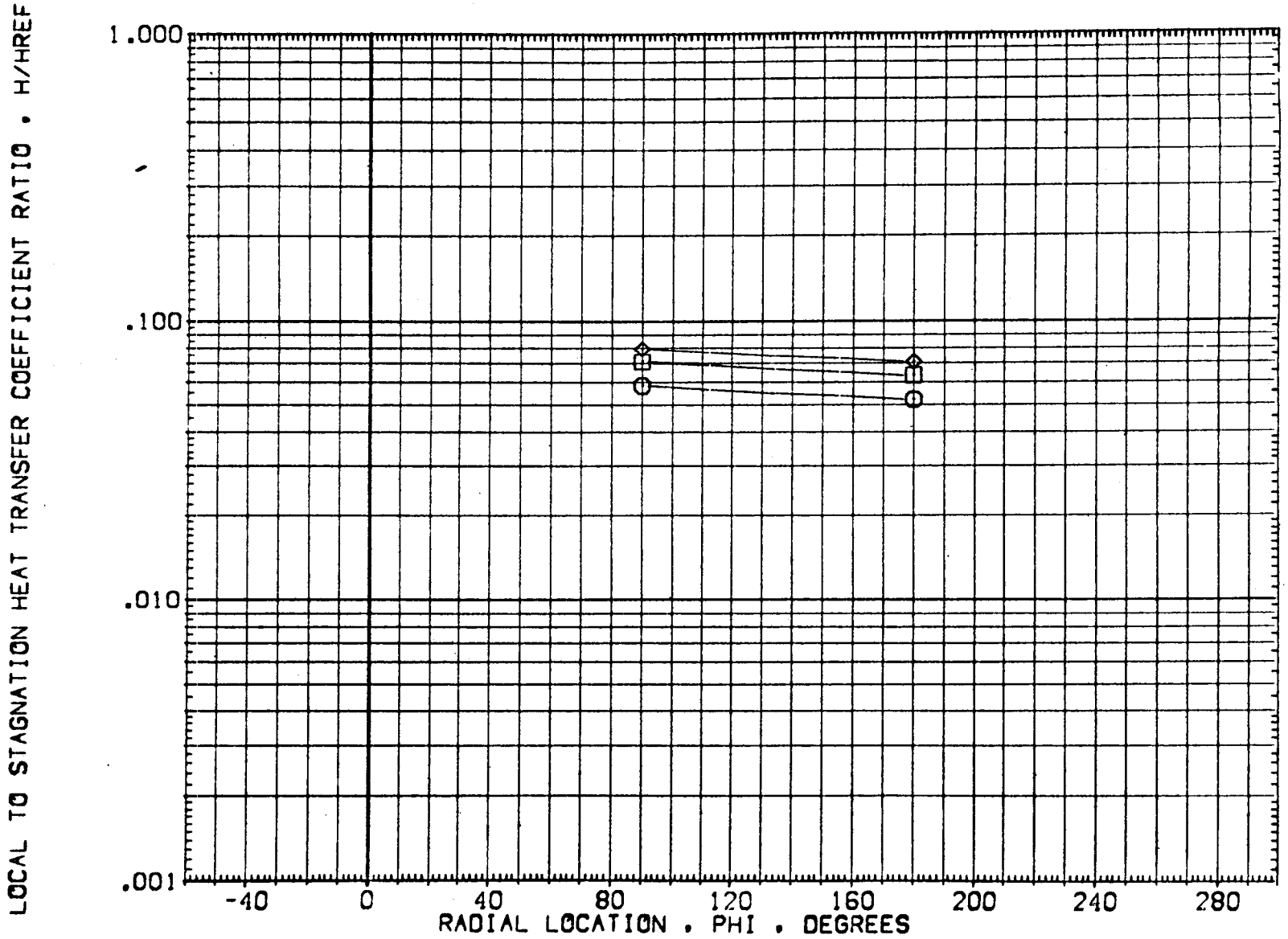


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE)T12)	○	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE)T12)	□	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE)T12)	◇	ARC 3.5-178 (H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

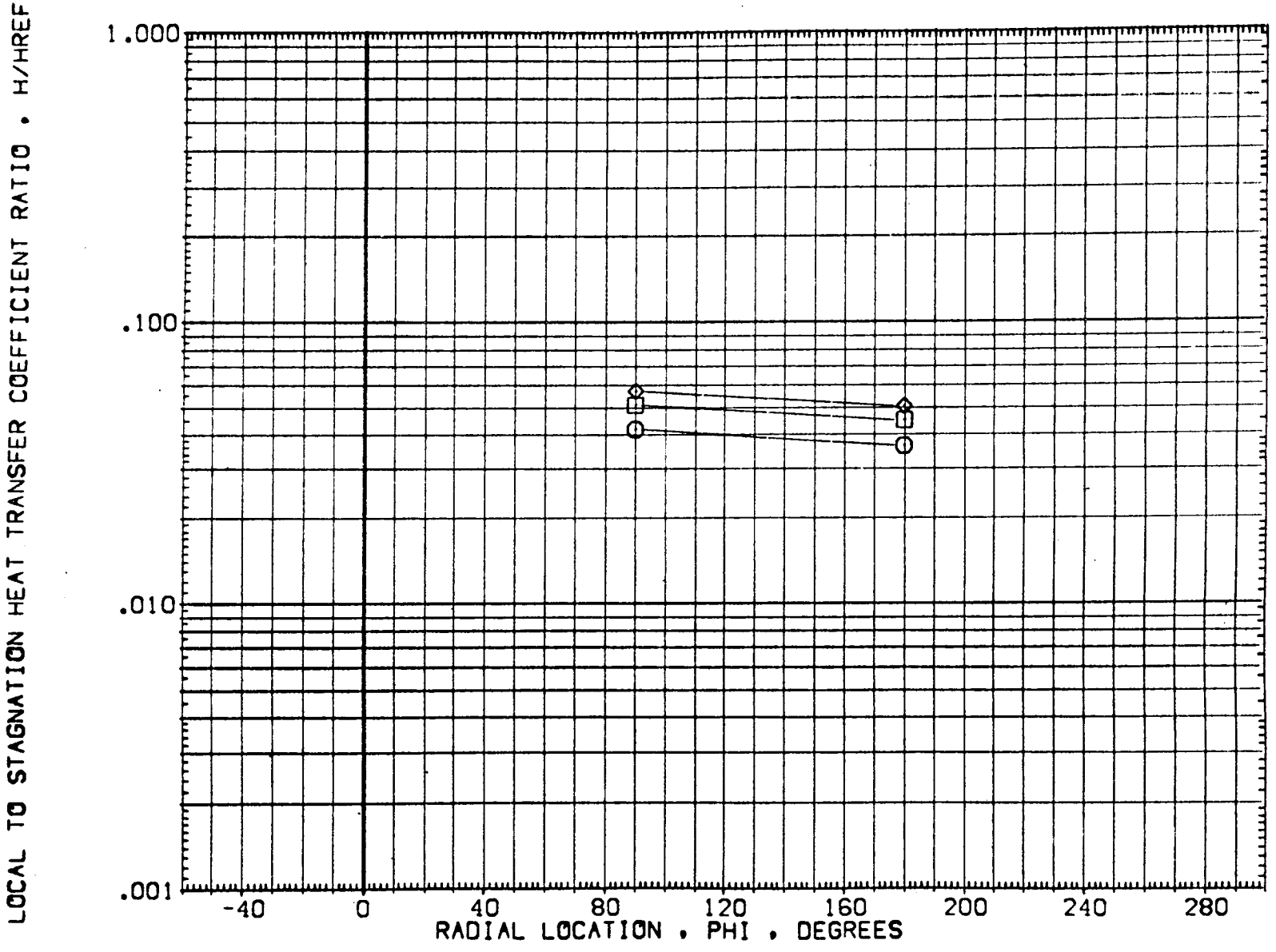


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

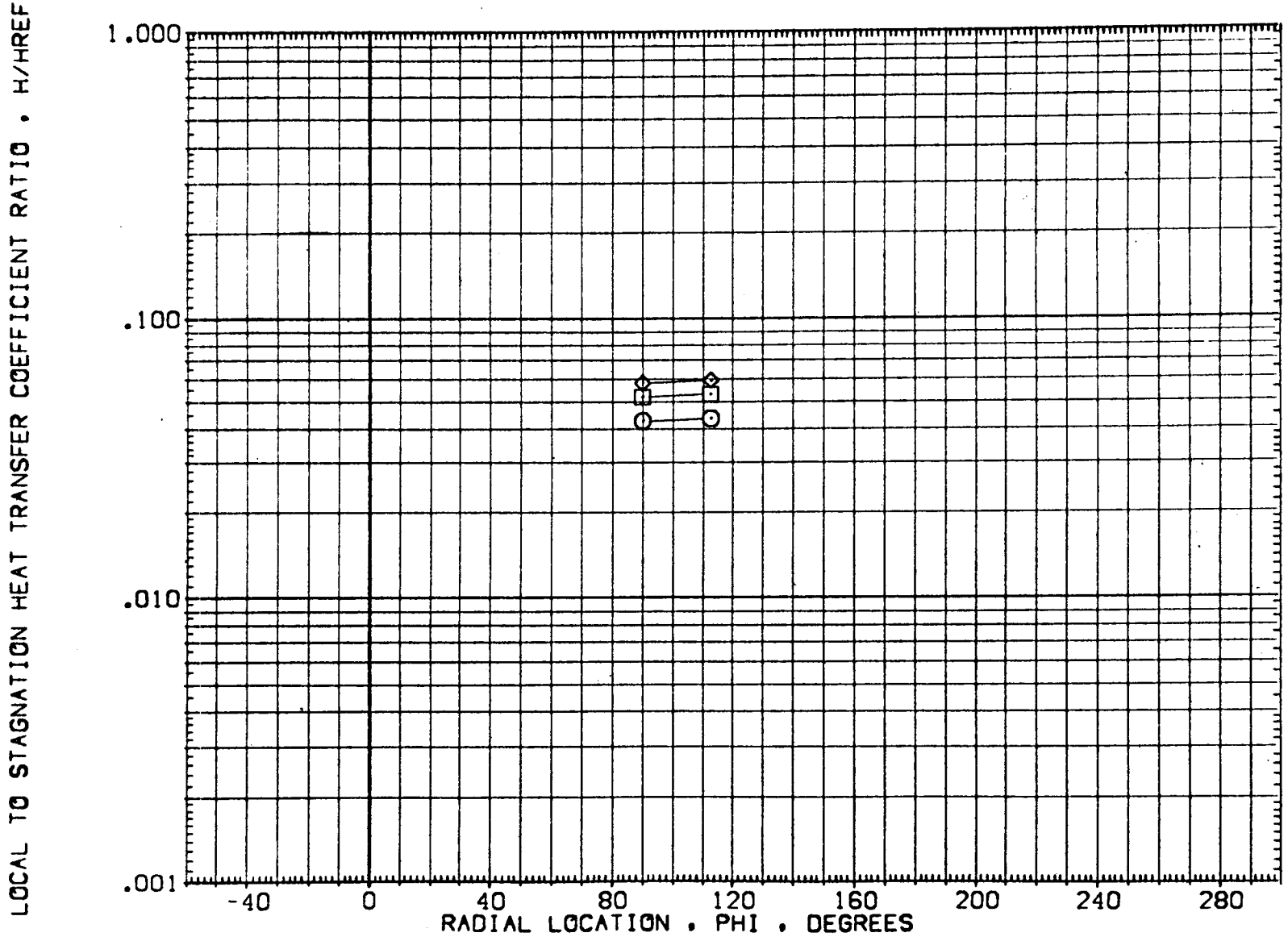


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE,T12)	▷	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE,T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

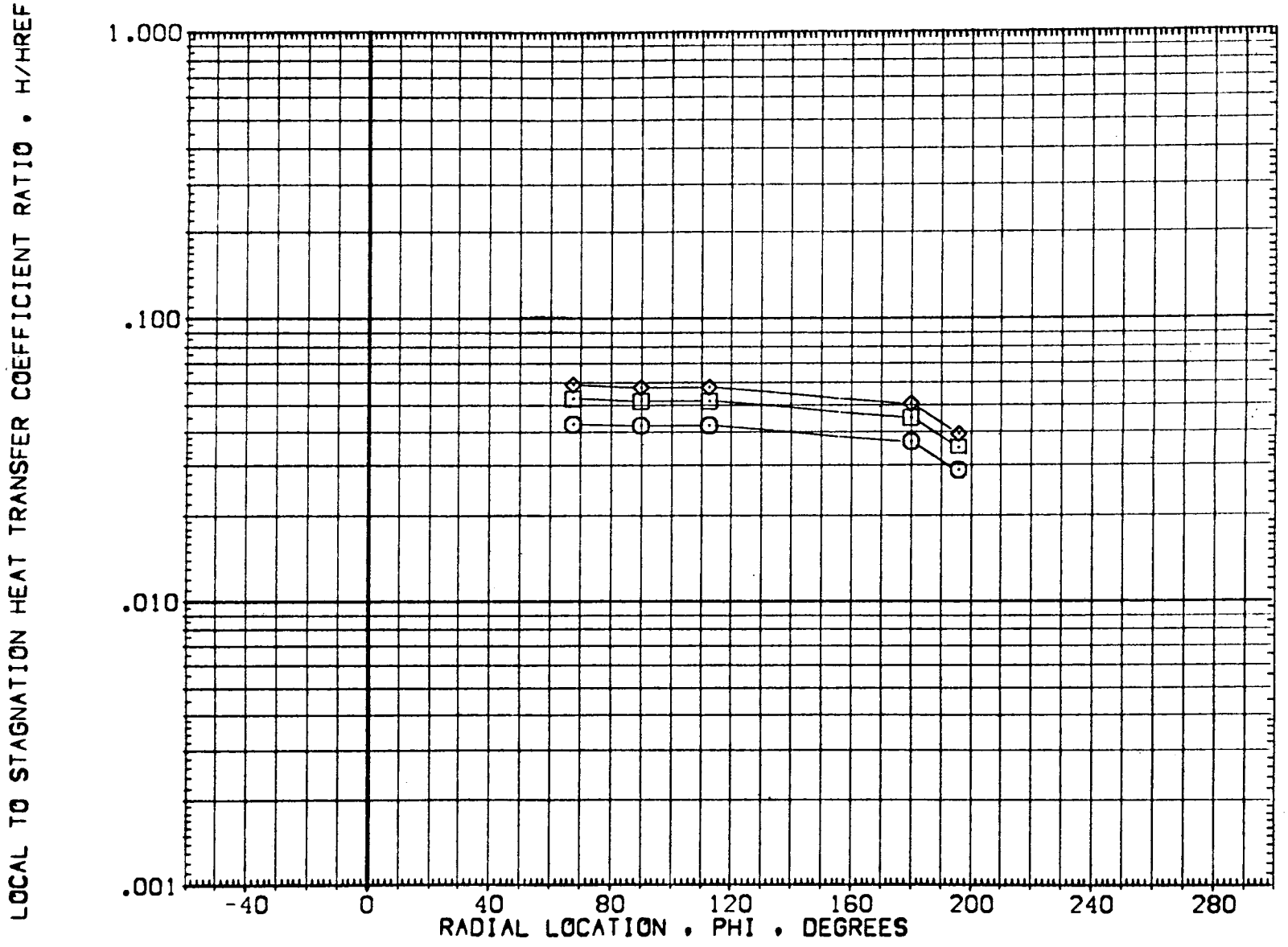


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

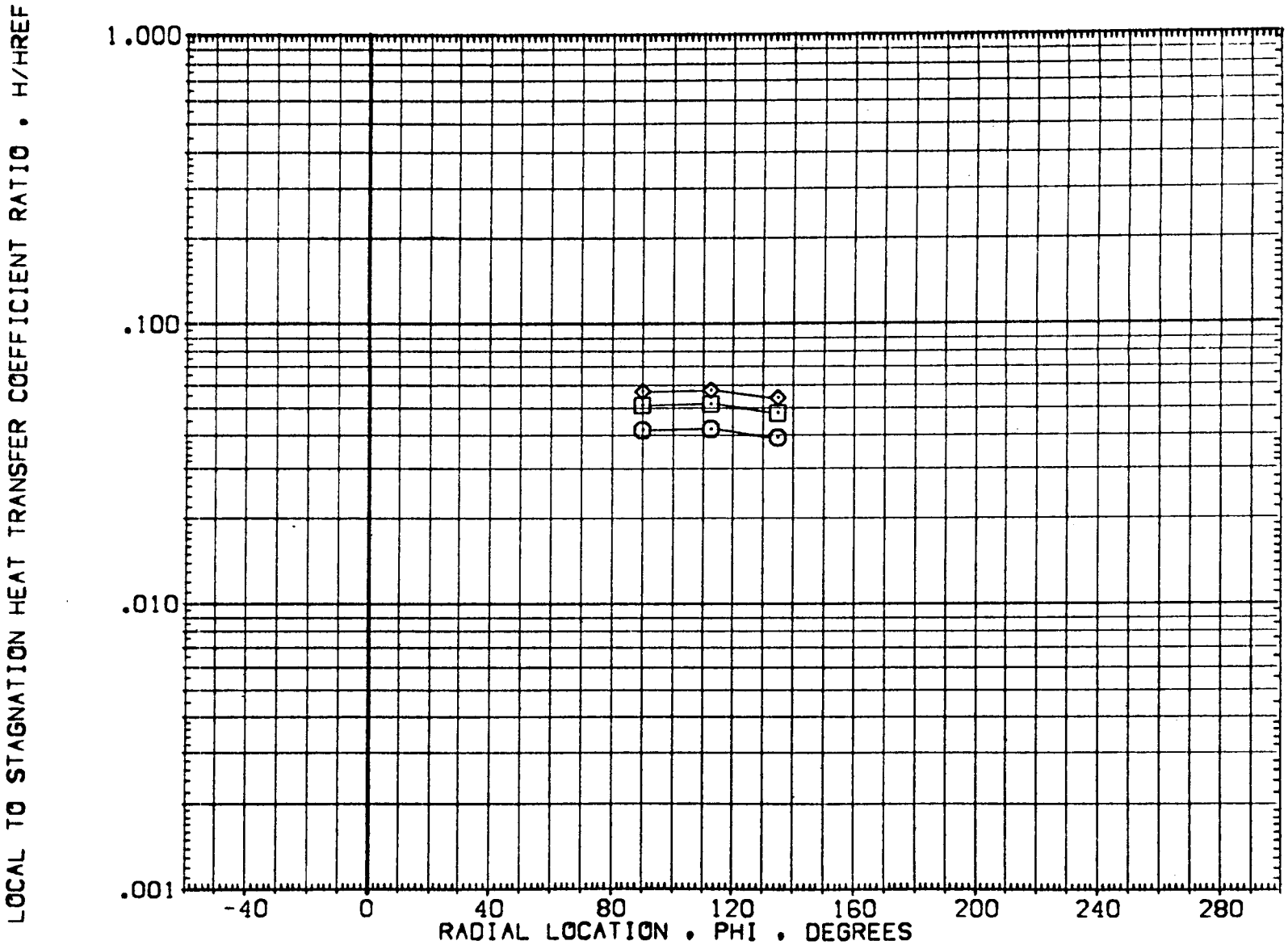


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

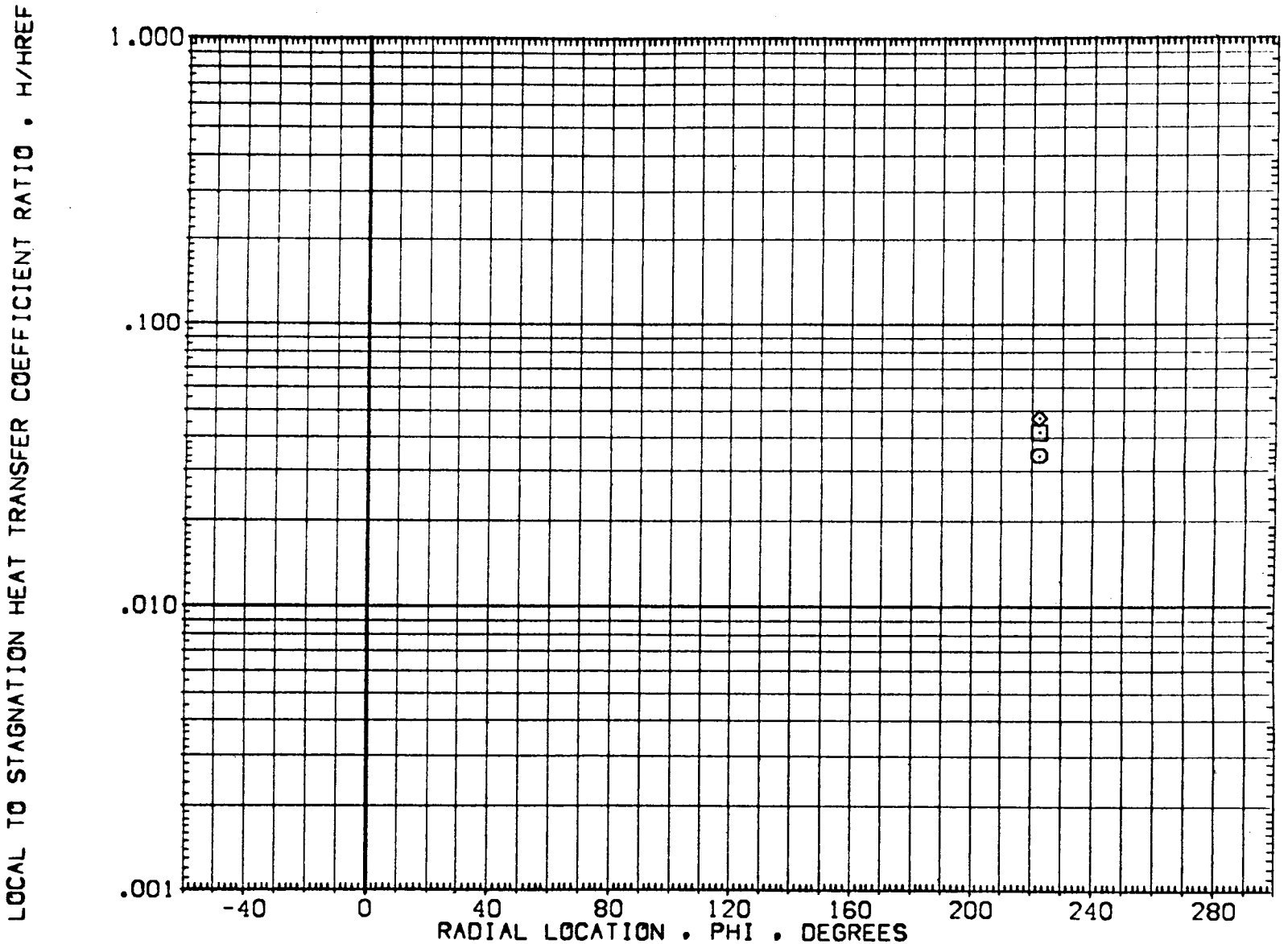


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

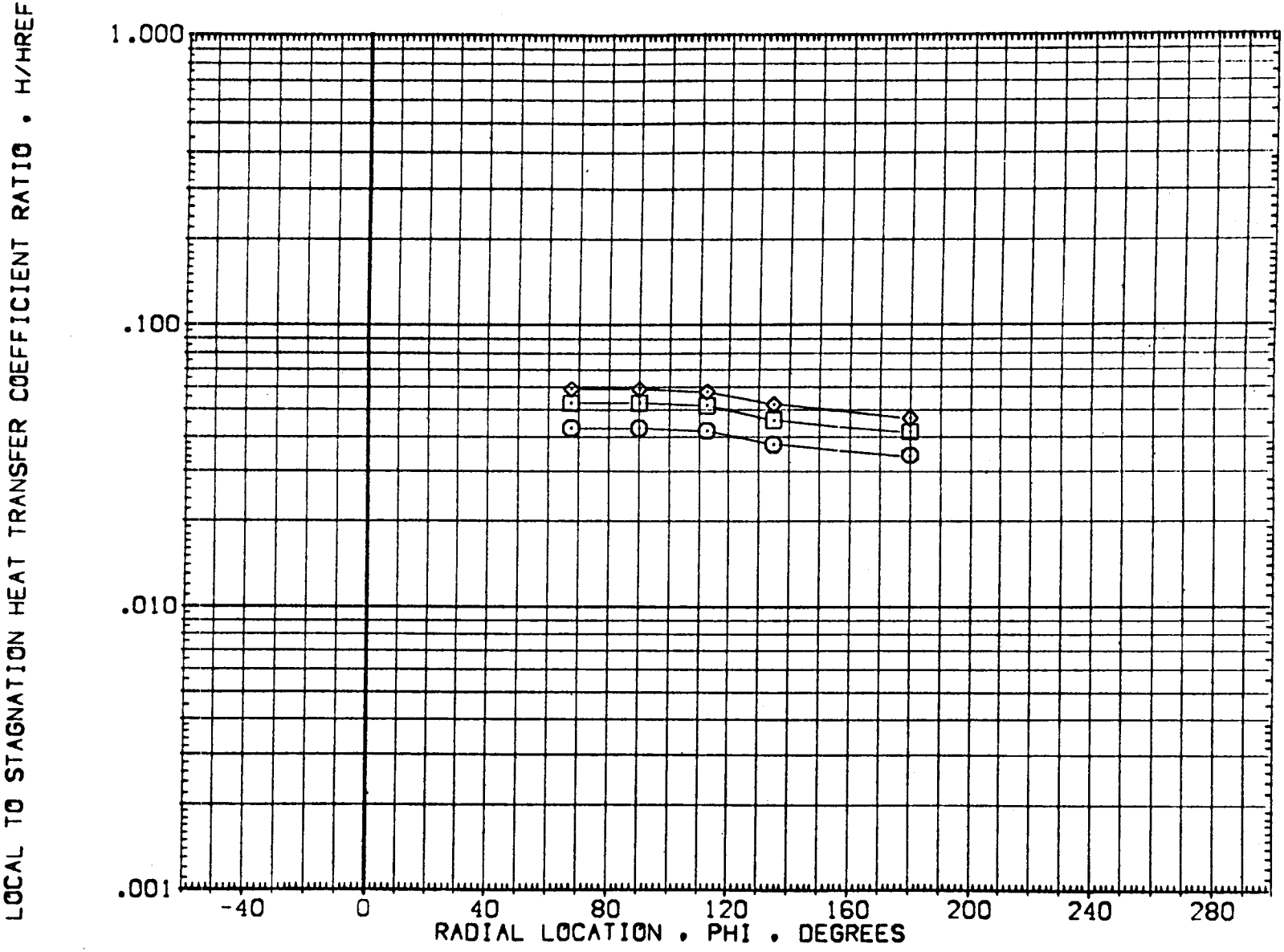


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

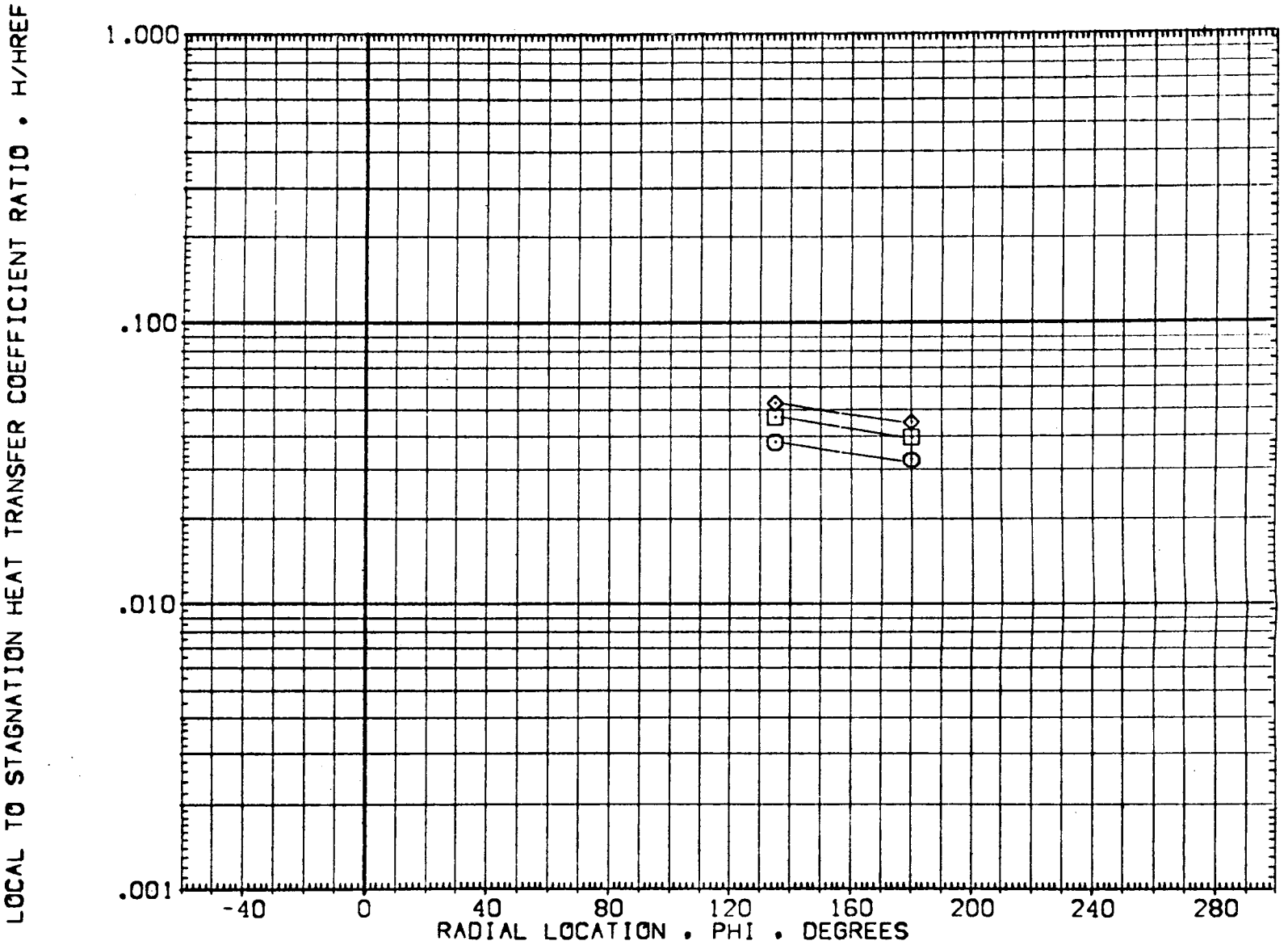


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

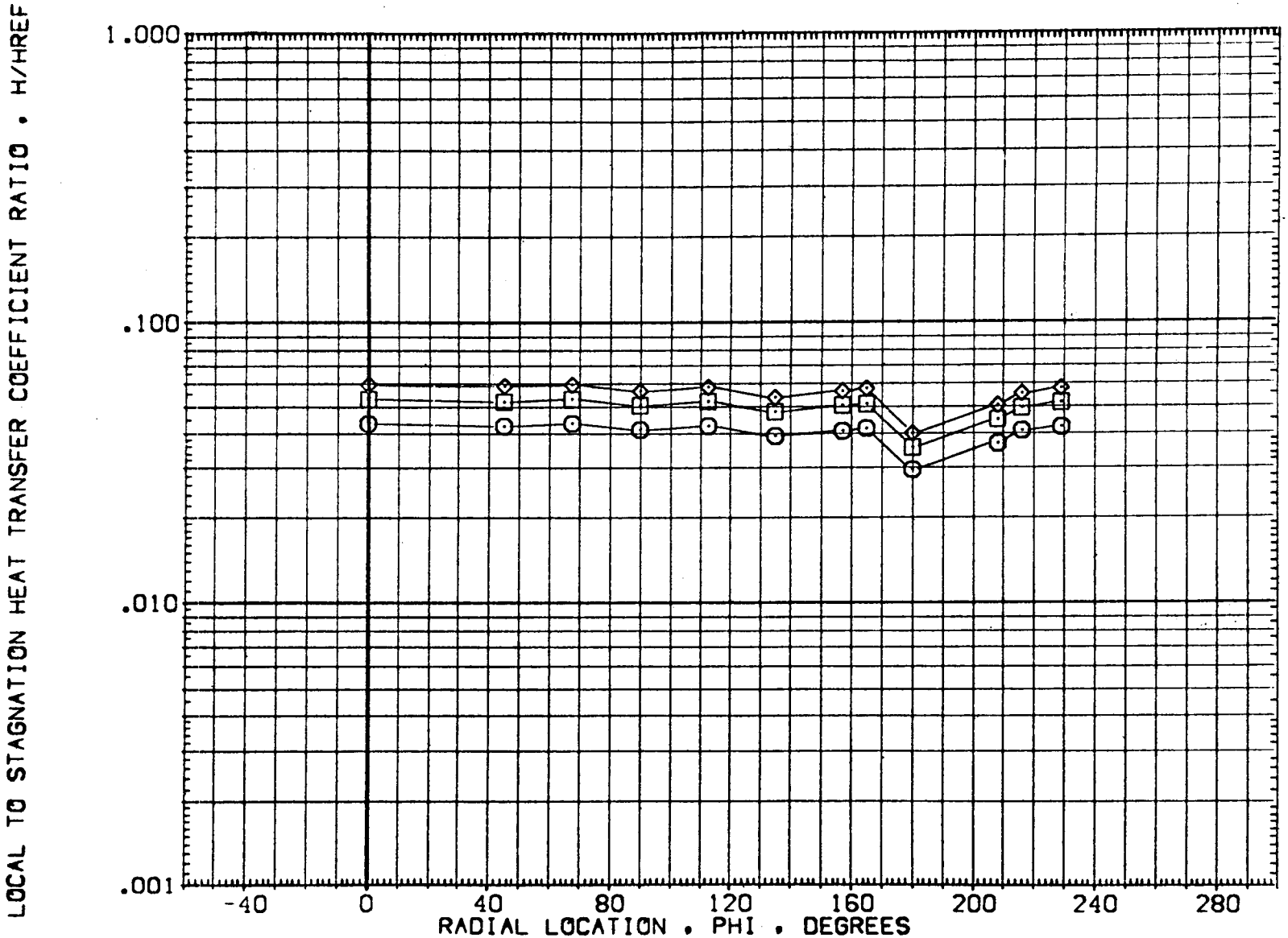


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

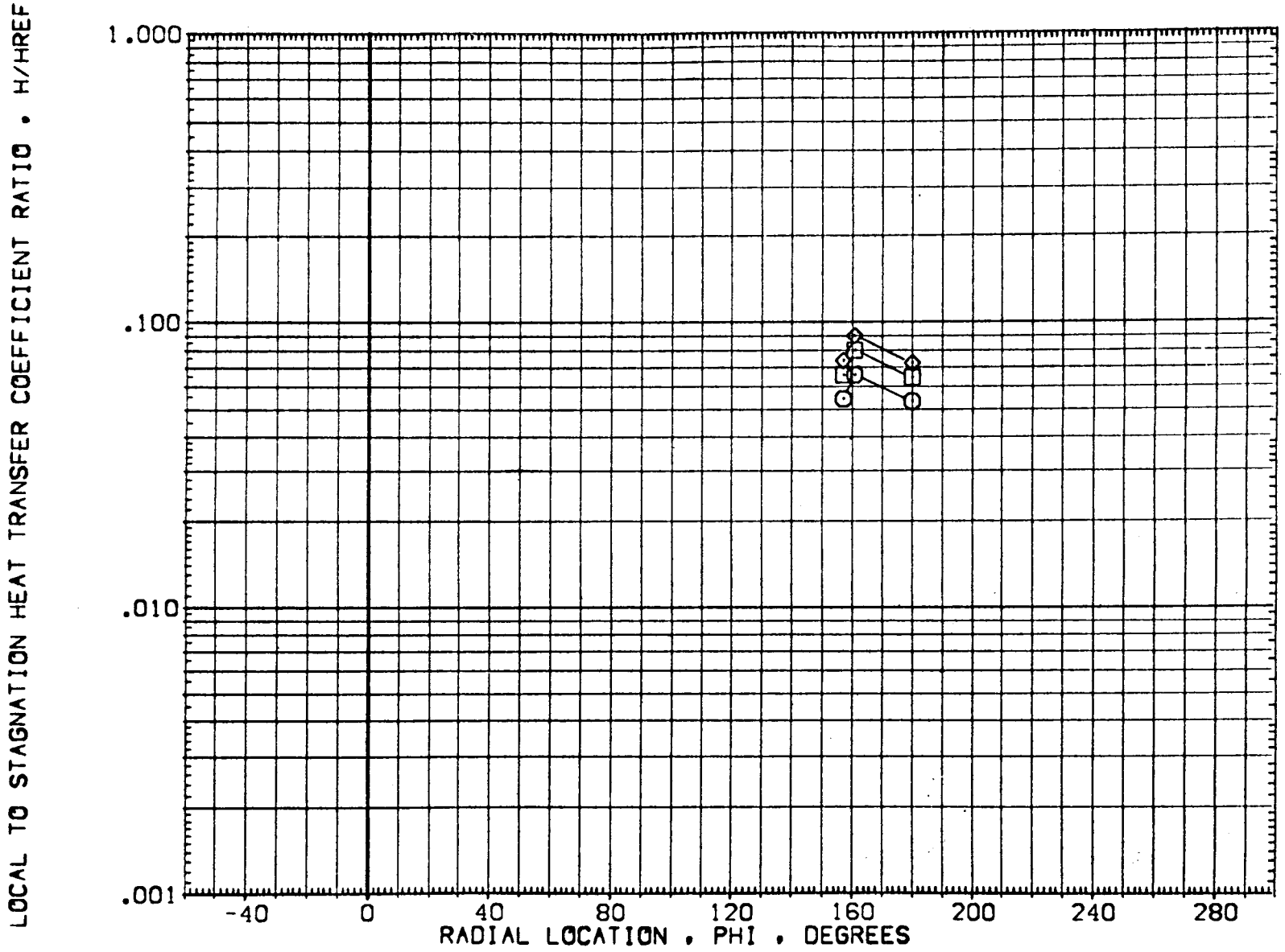


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

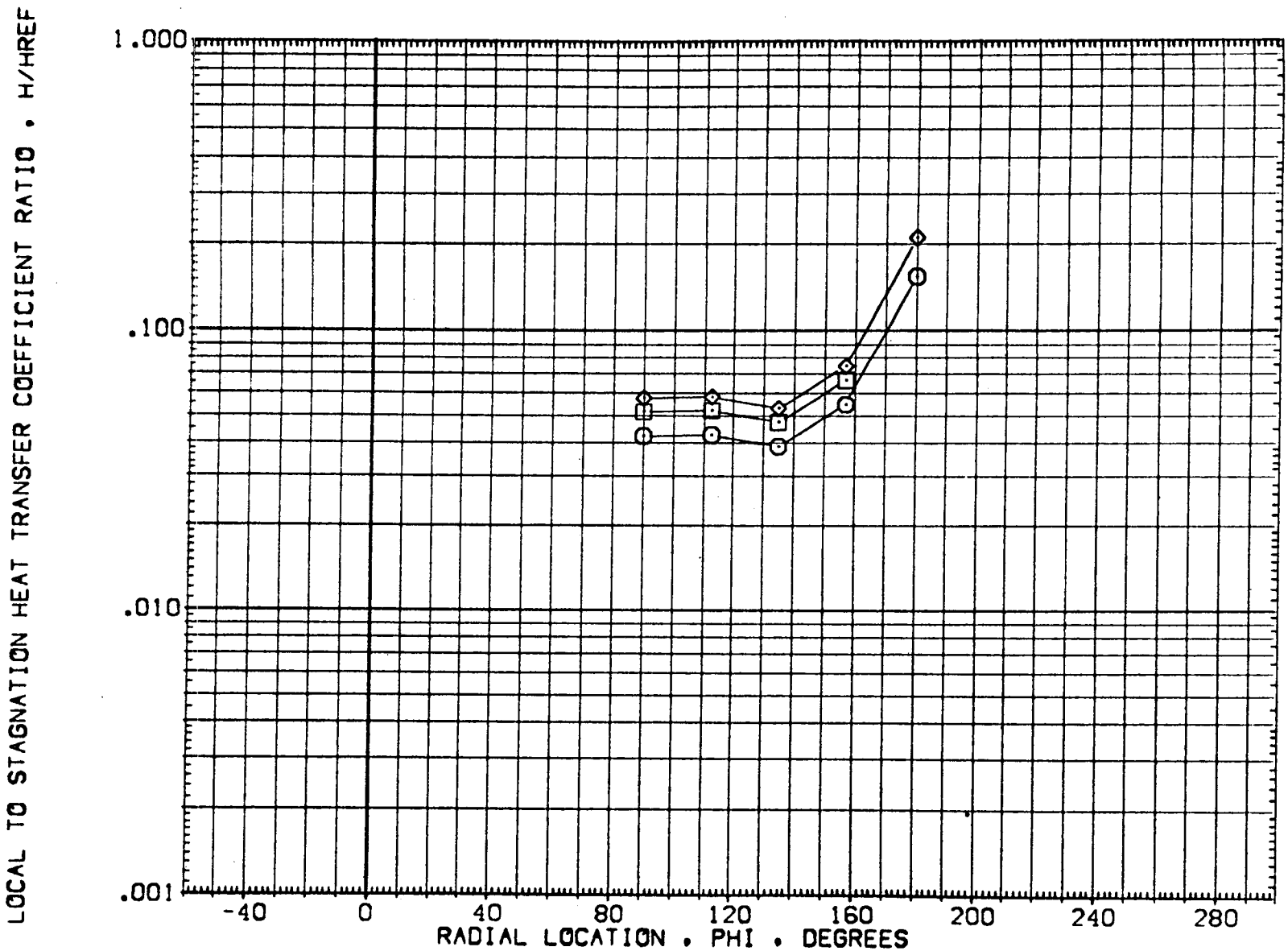


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

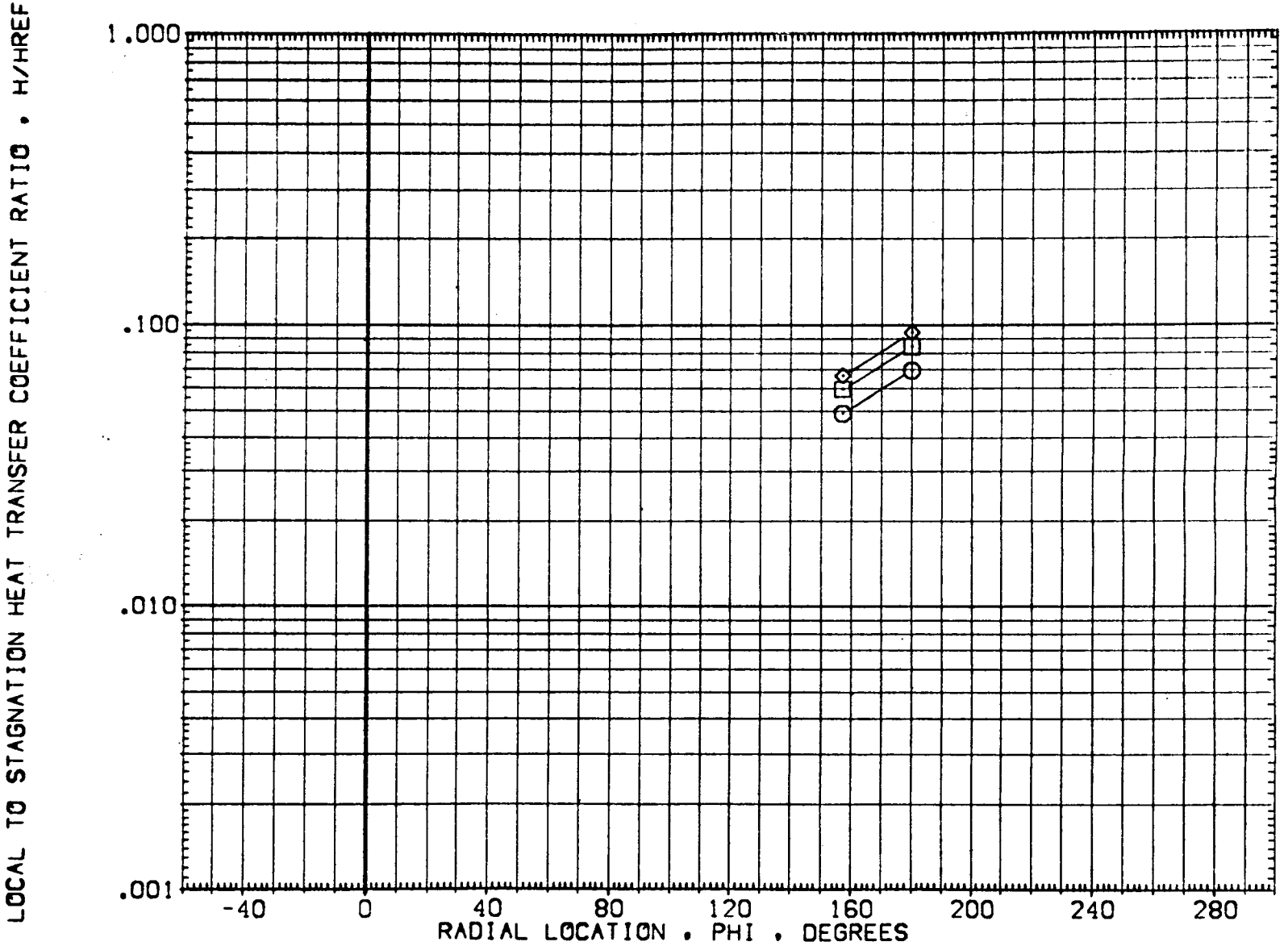


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

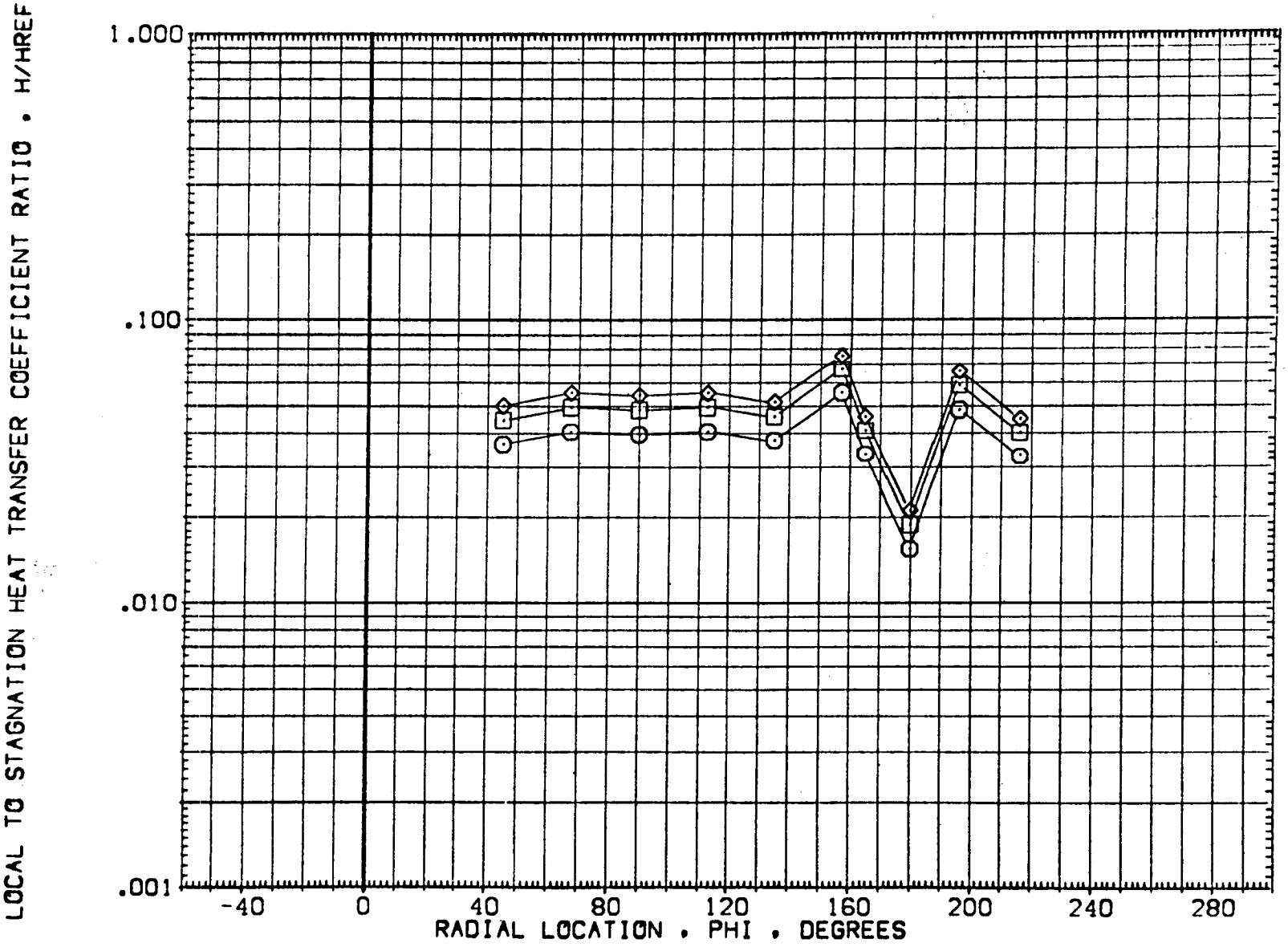


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

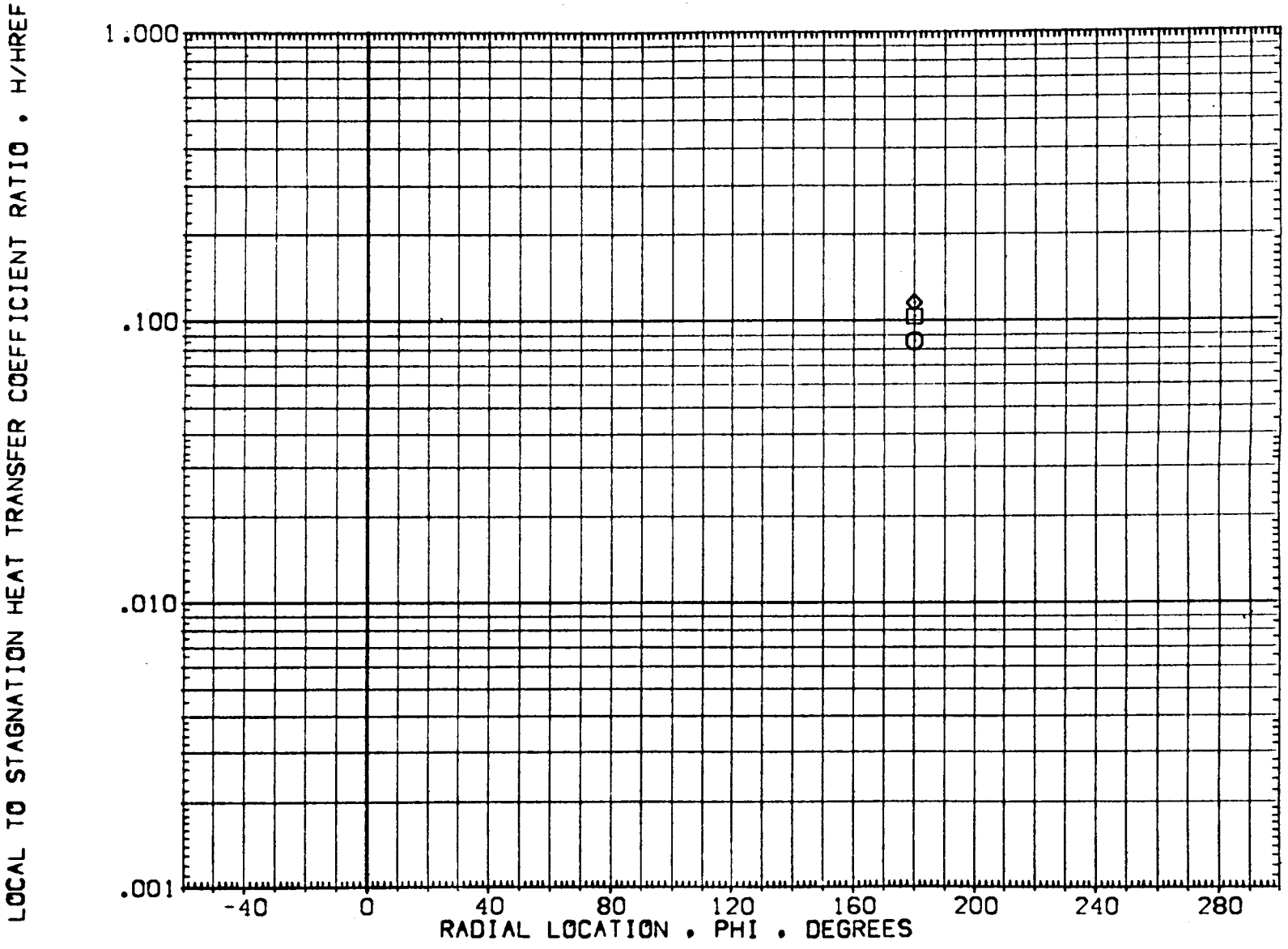


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REI112)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEI112)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEI112)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

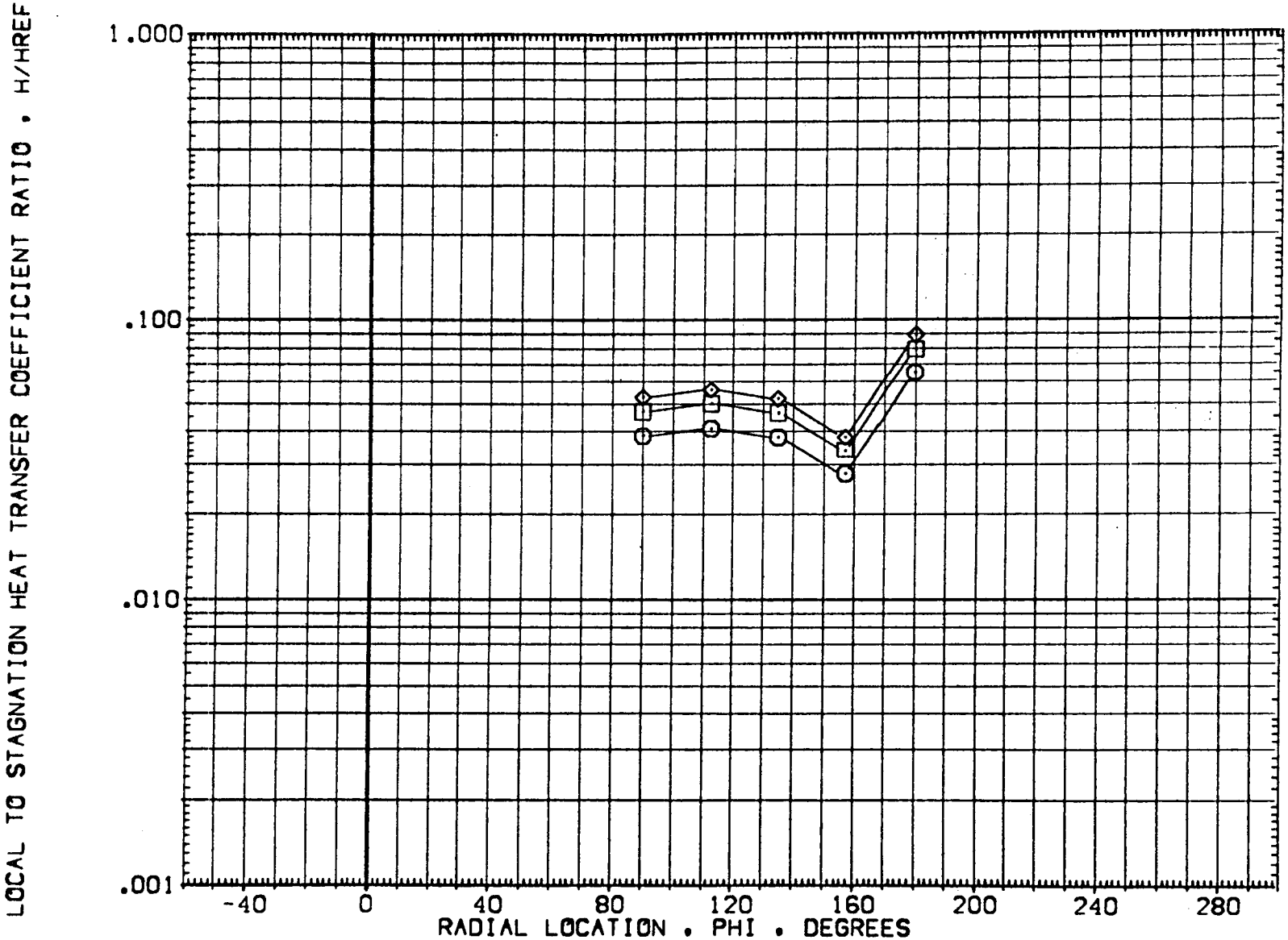


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

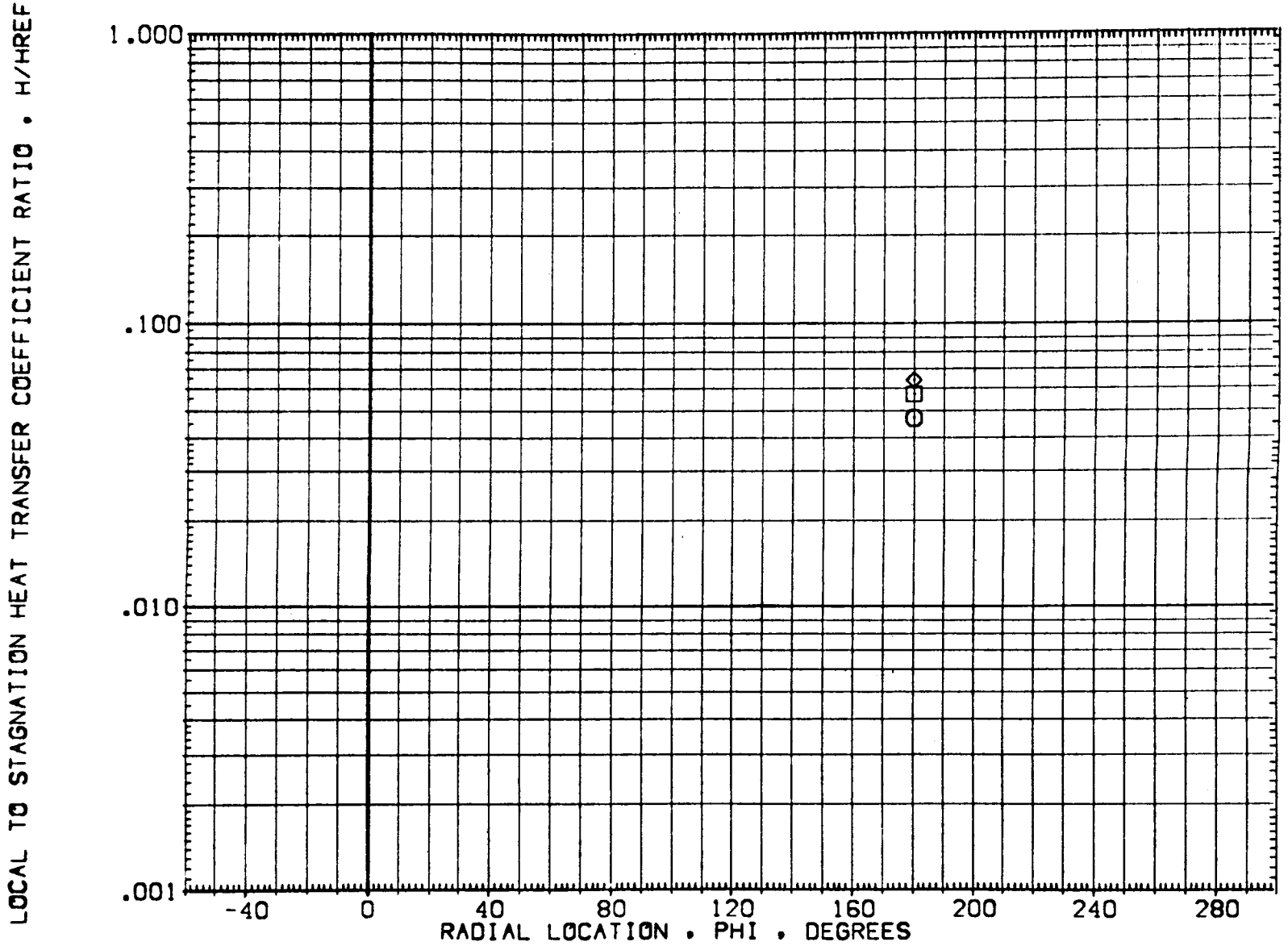


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

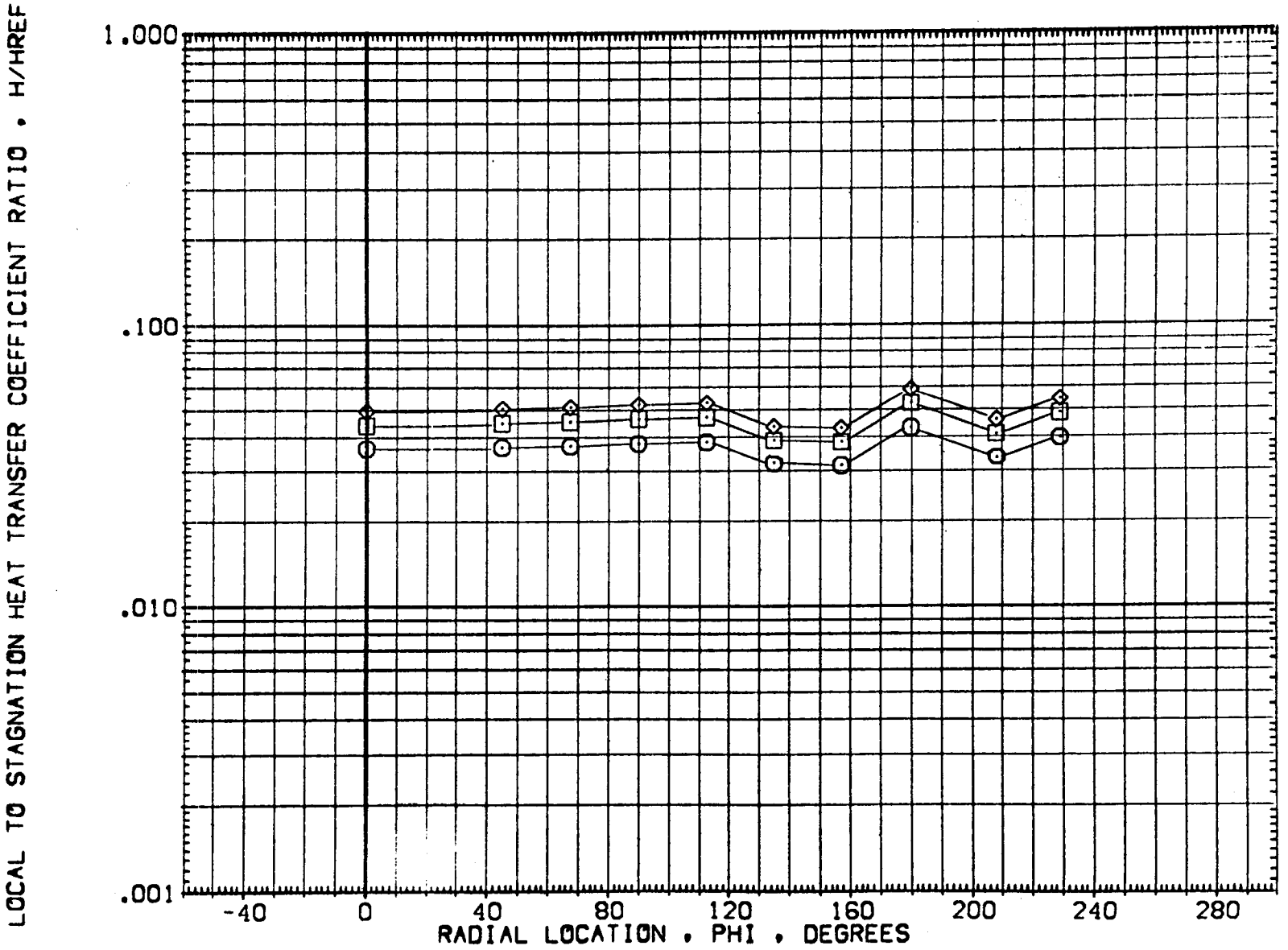


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE)T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE)T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE)T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

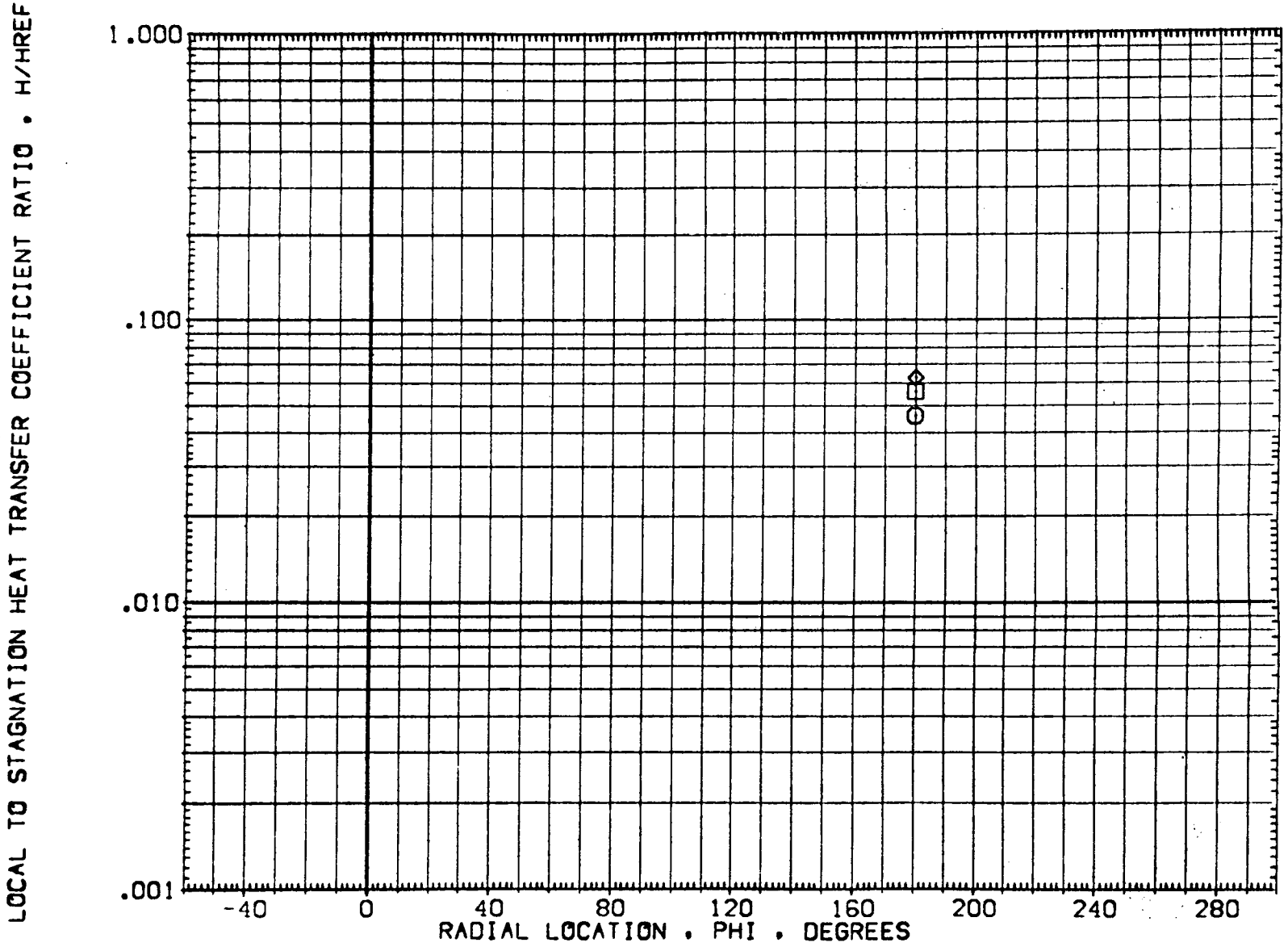


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1112)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1112)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1112)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

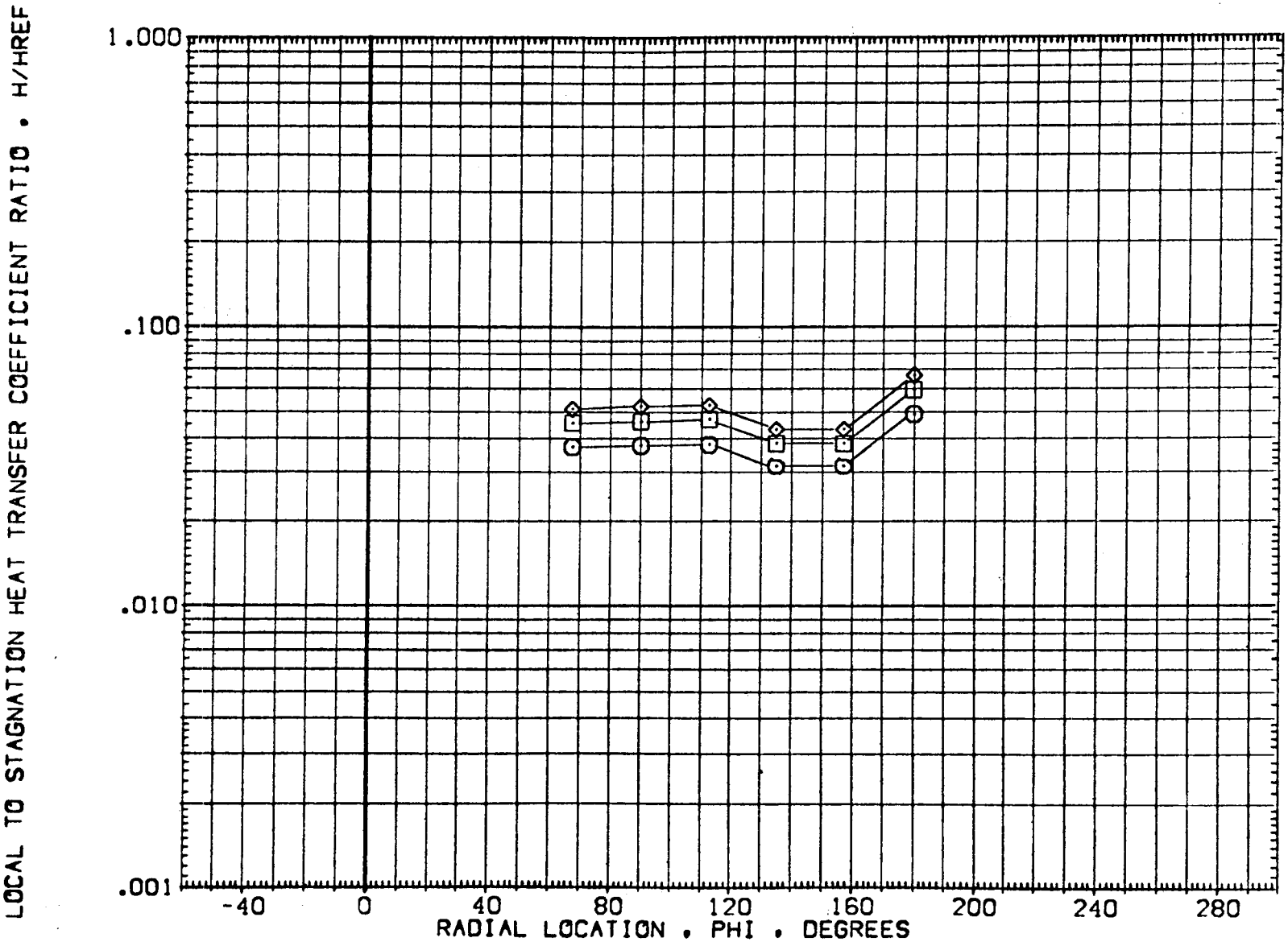


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

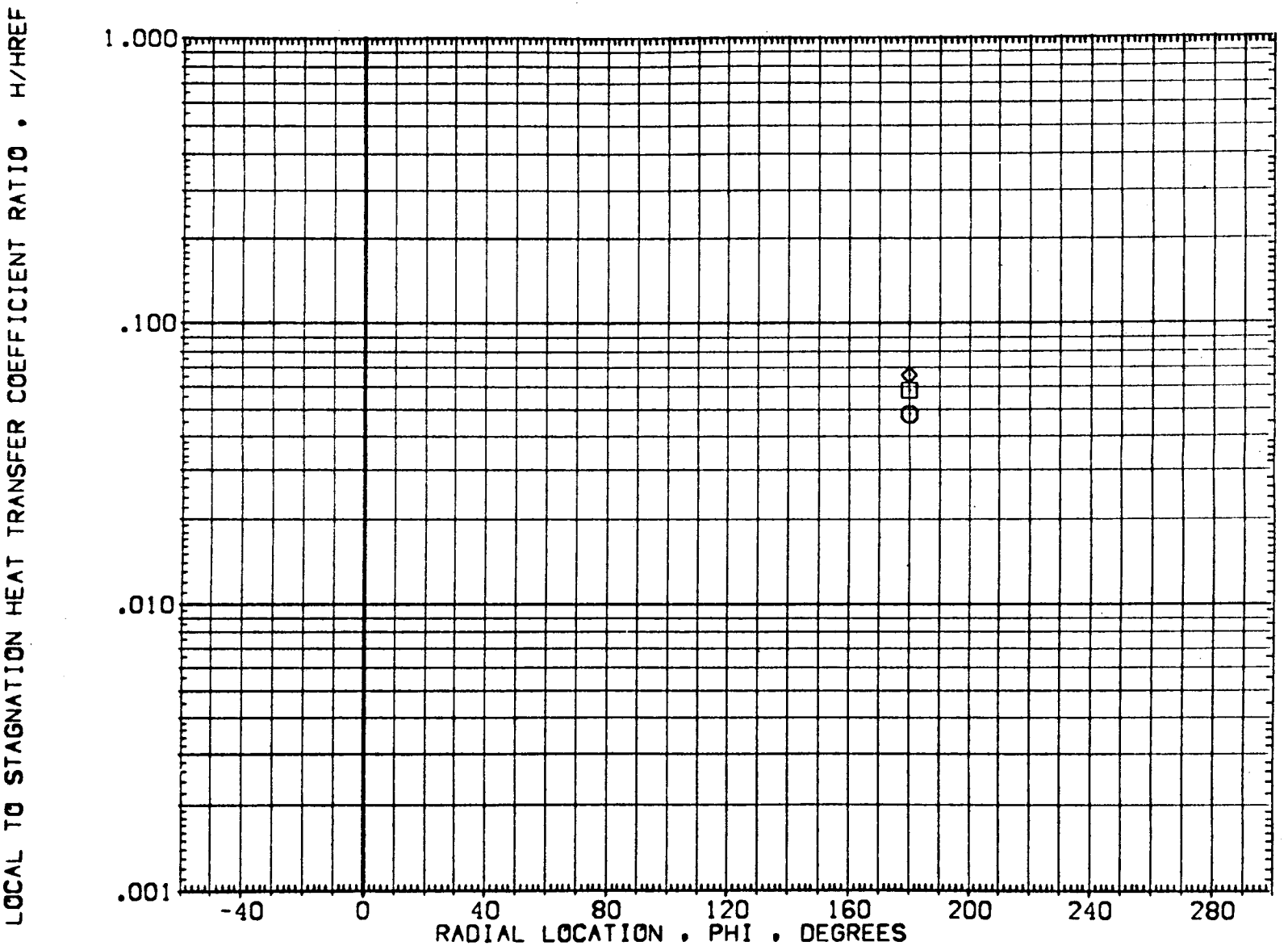


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

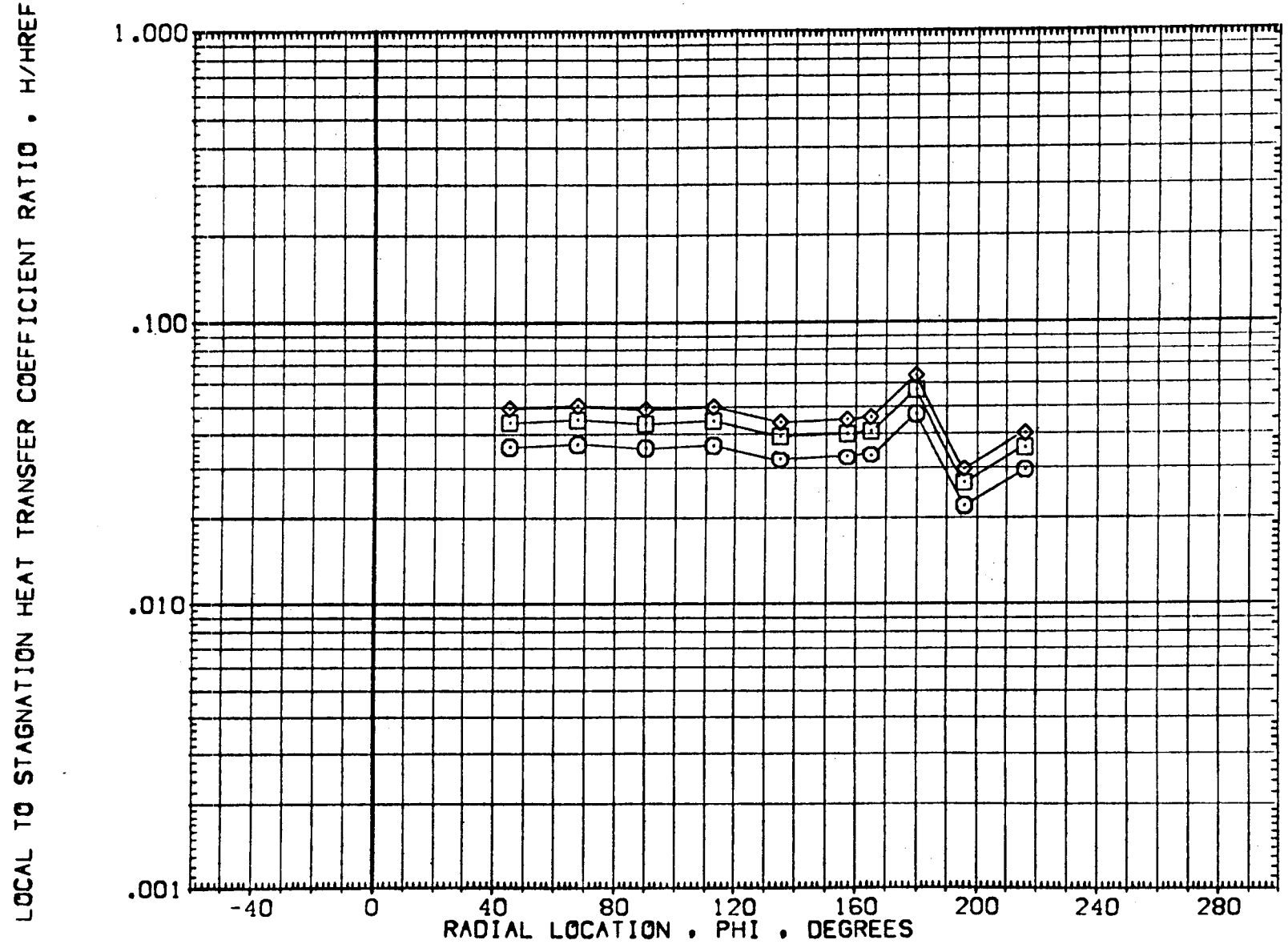


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

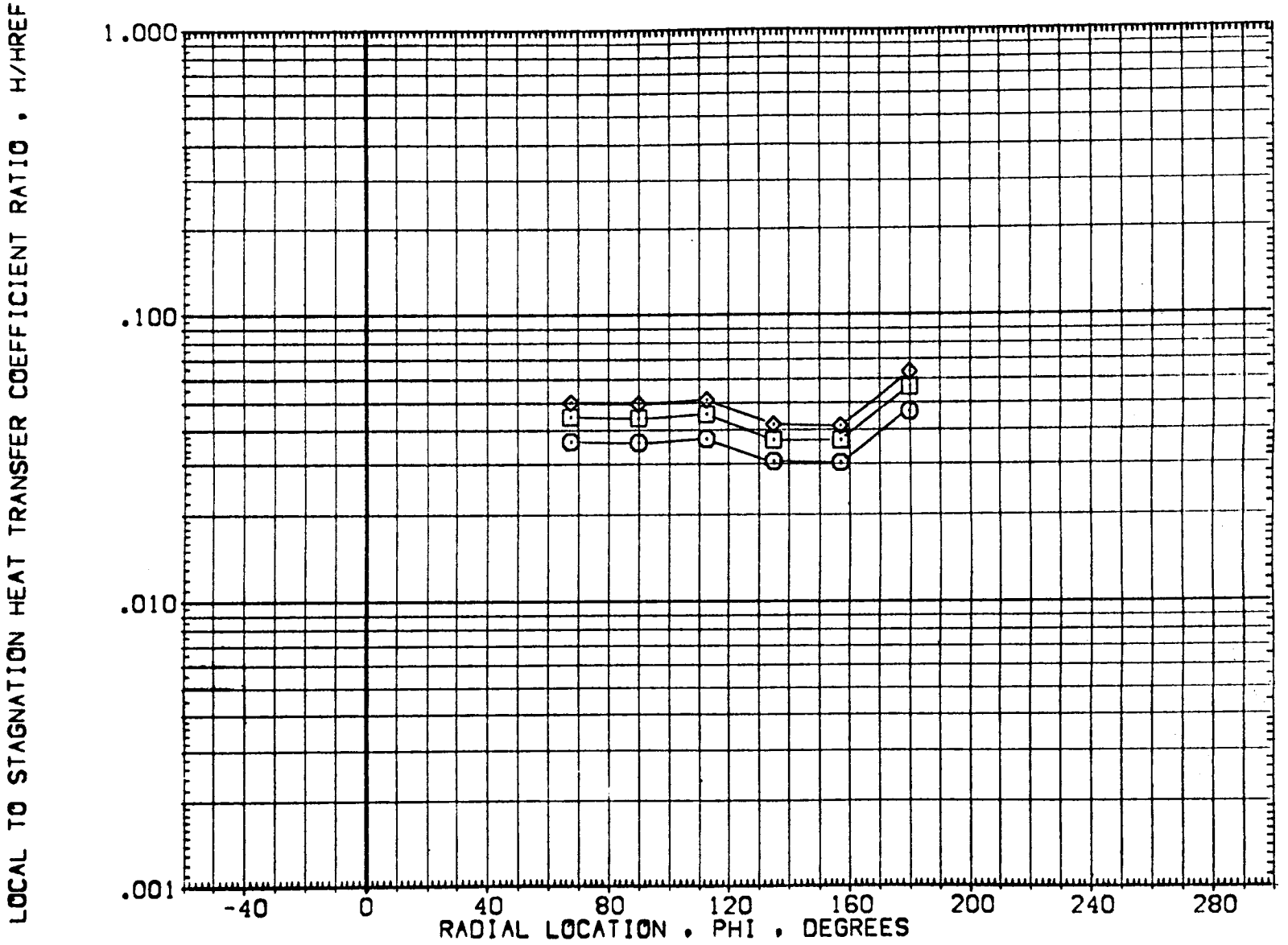


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

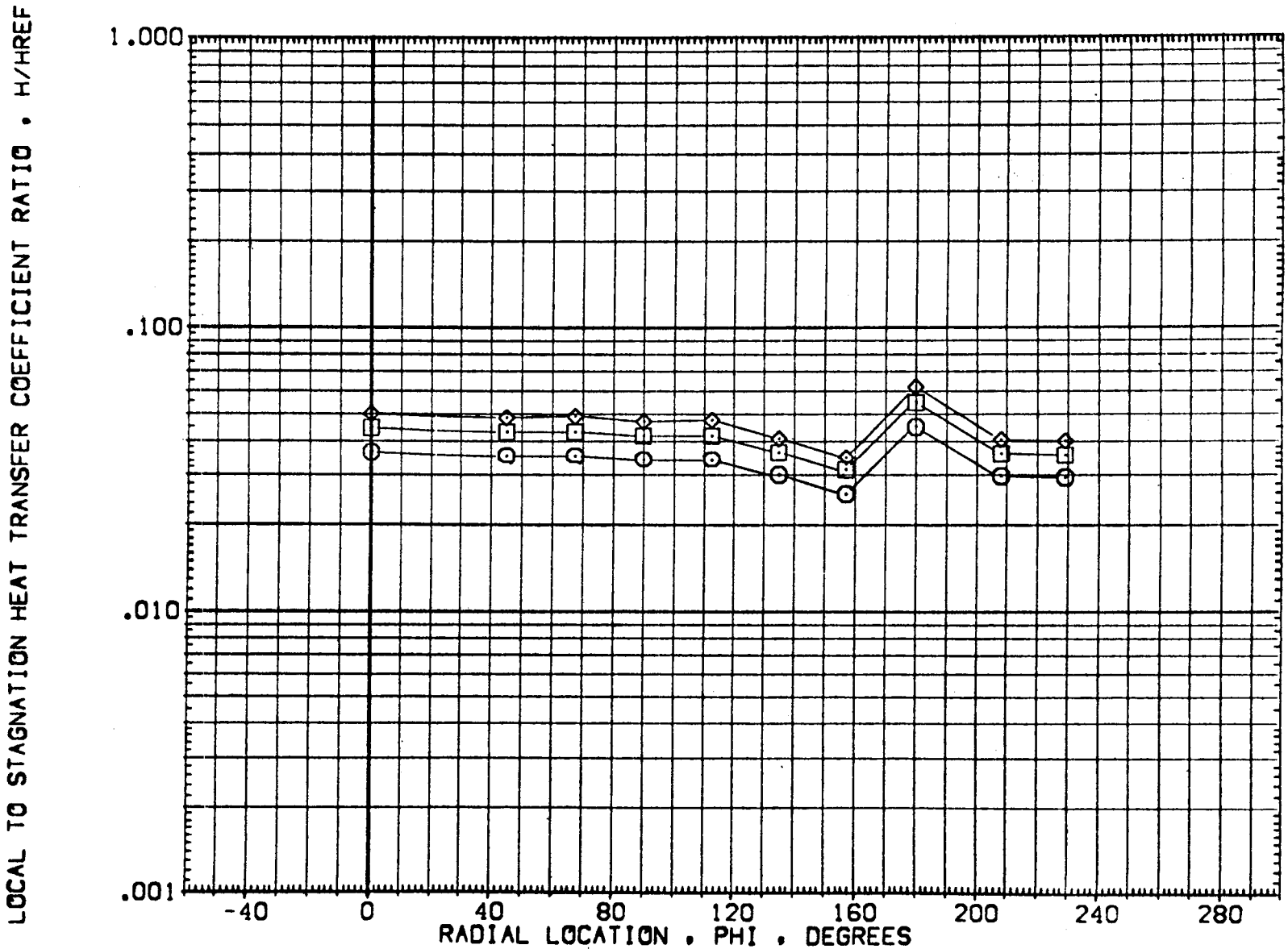


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 |H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 |H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 |H3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

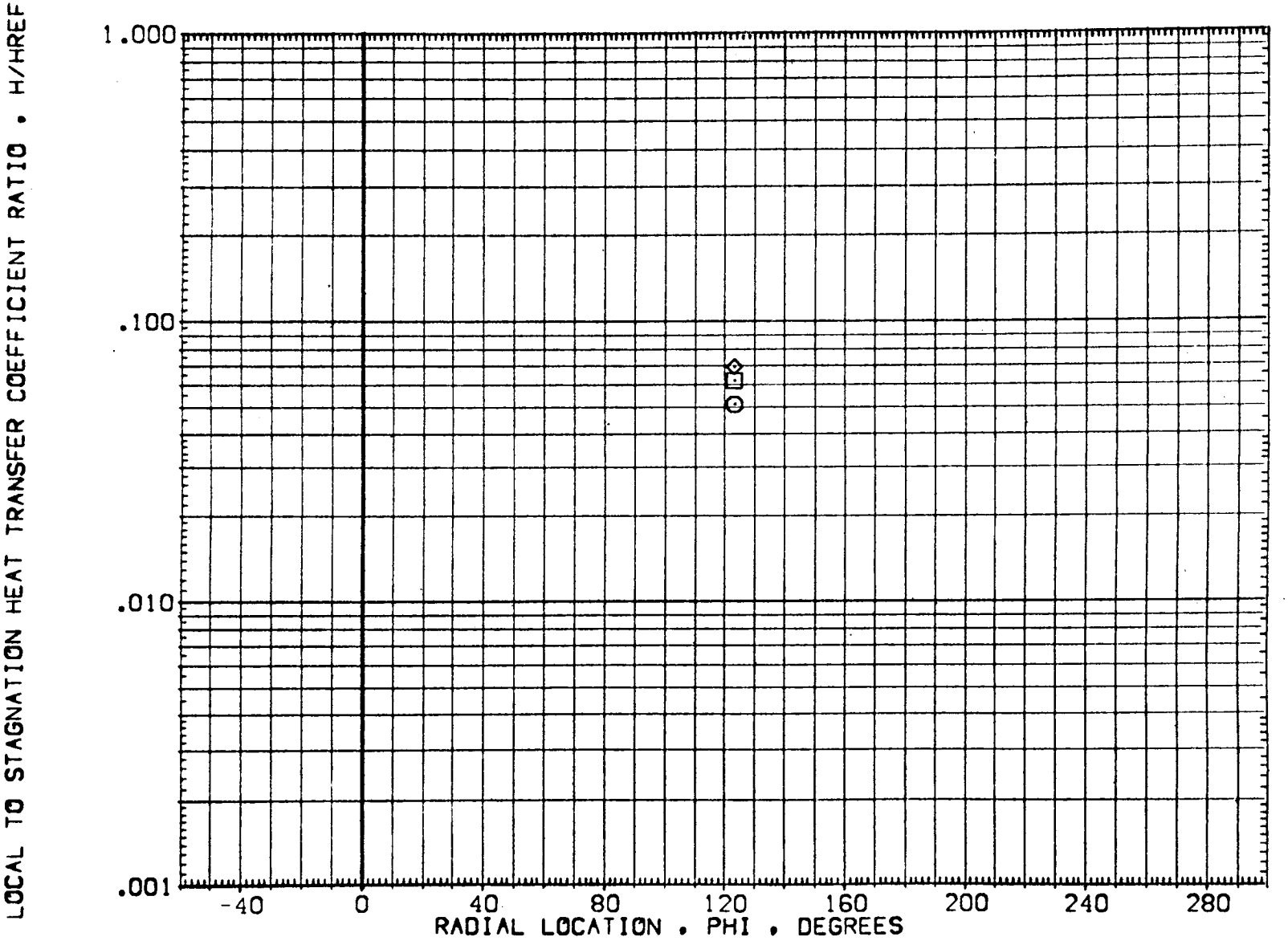


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

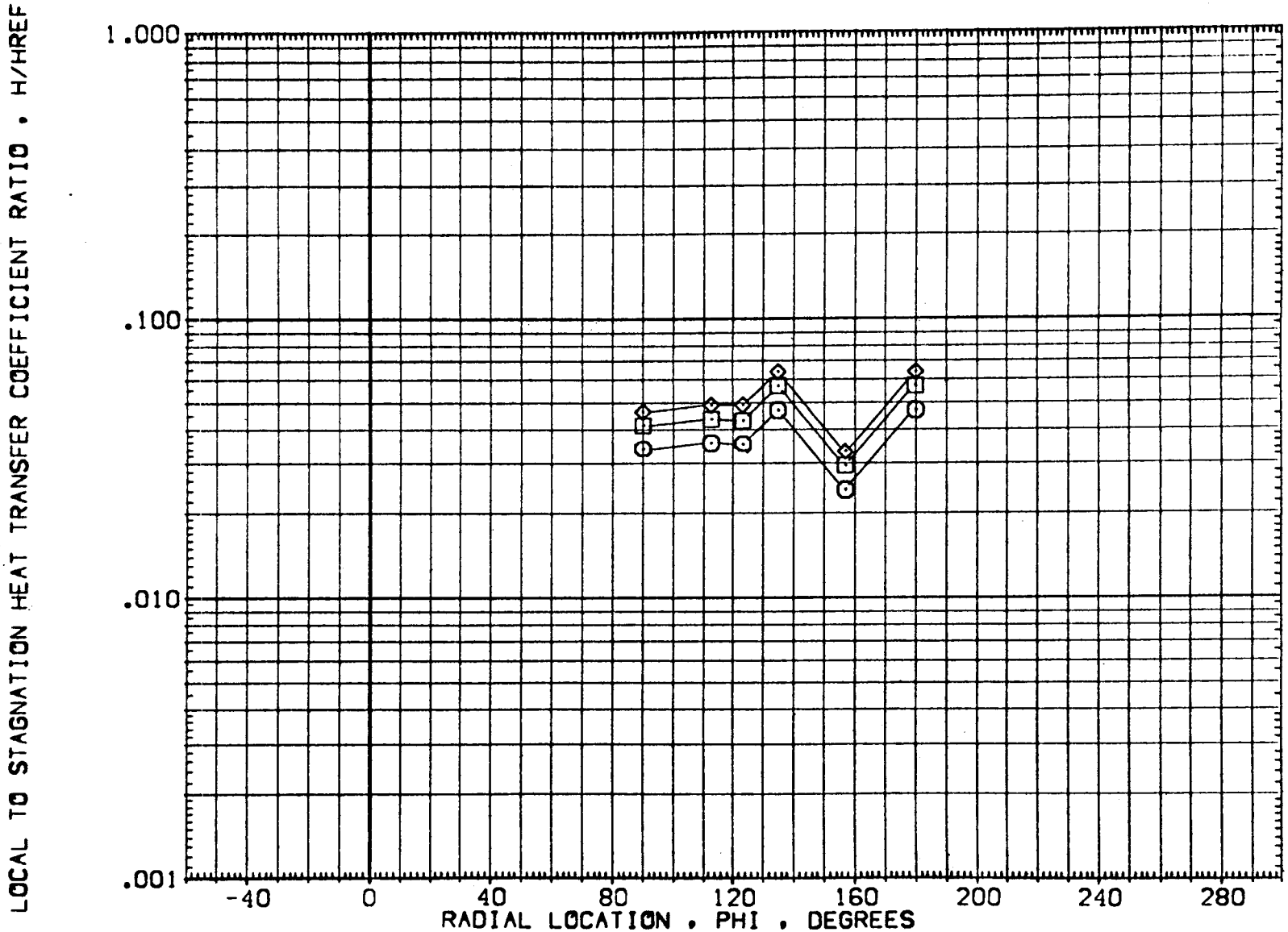


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

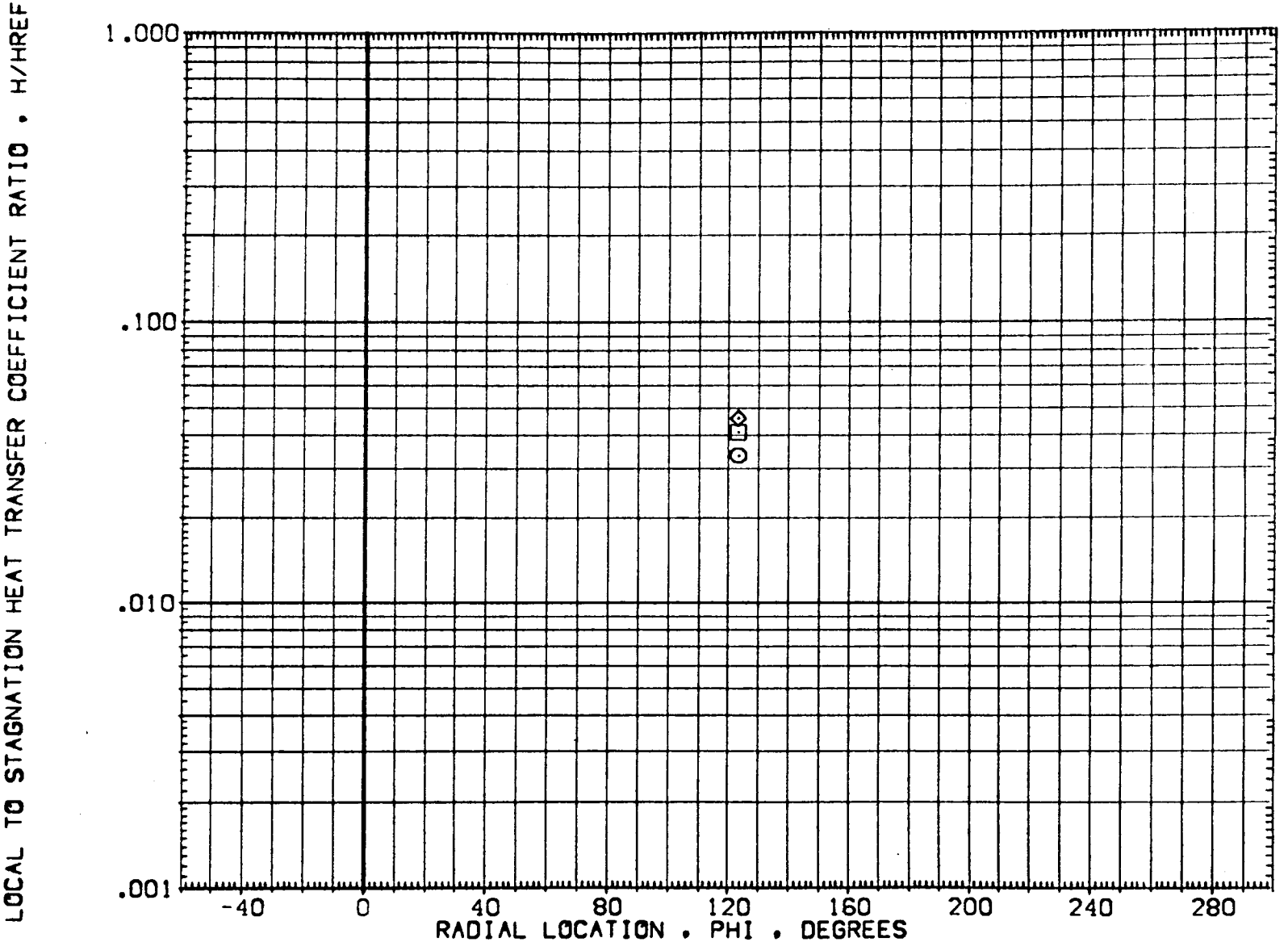


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

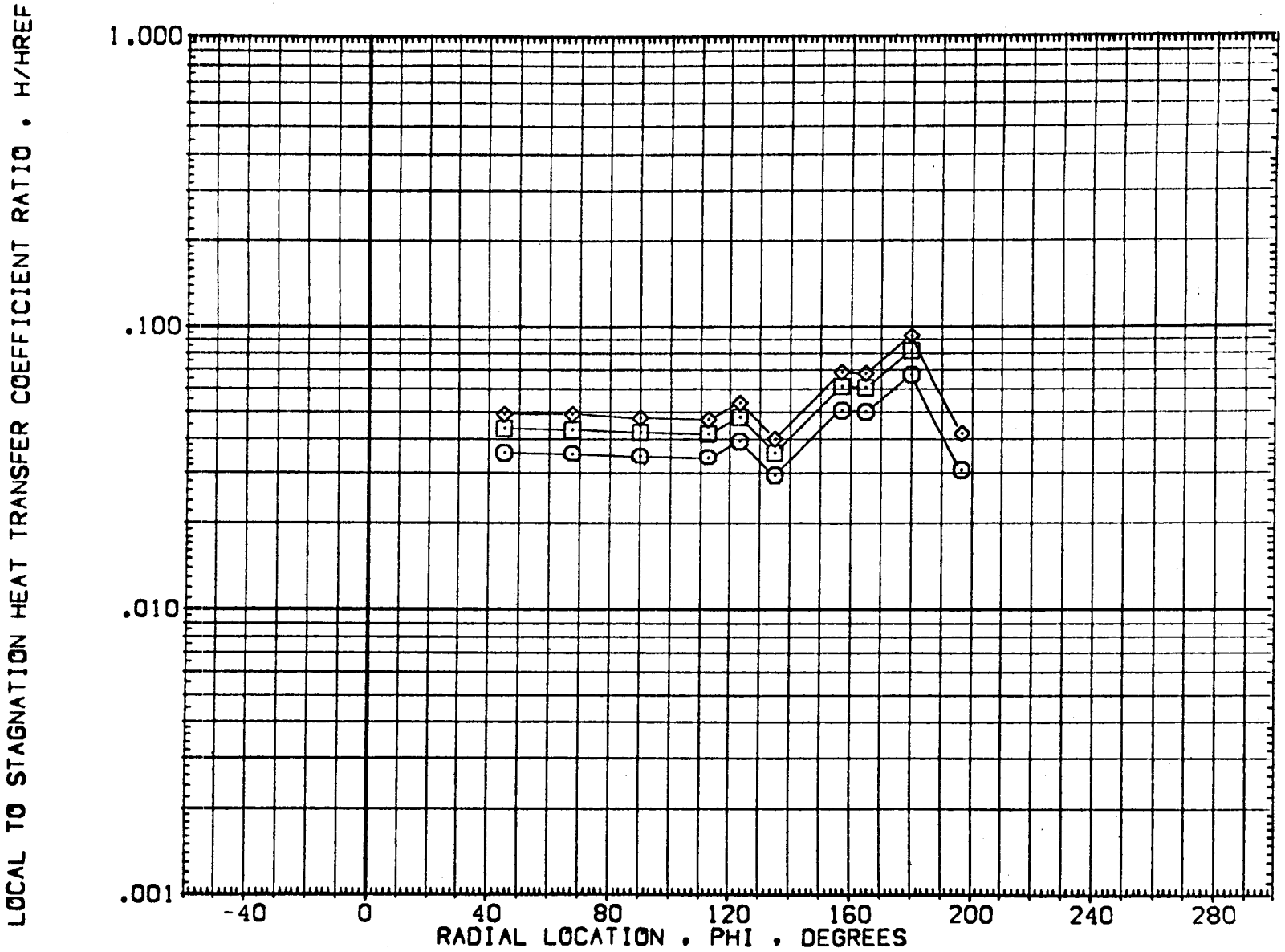


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

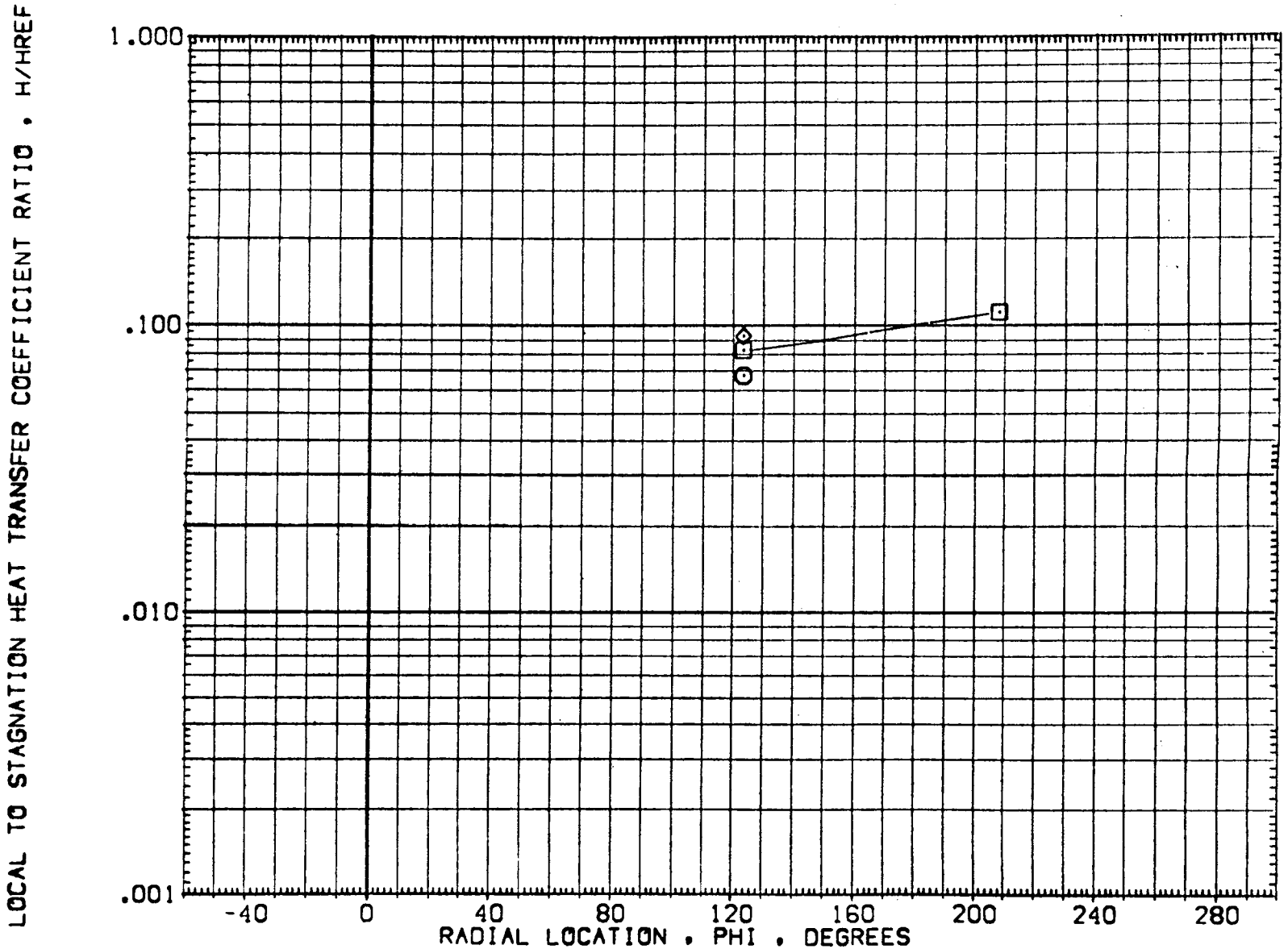


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

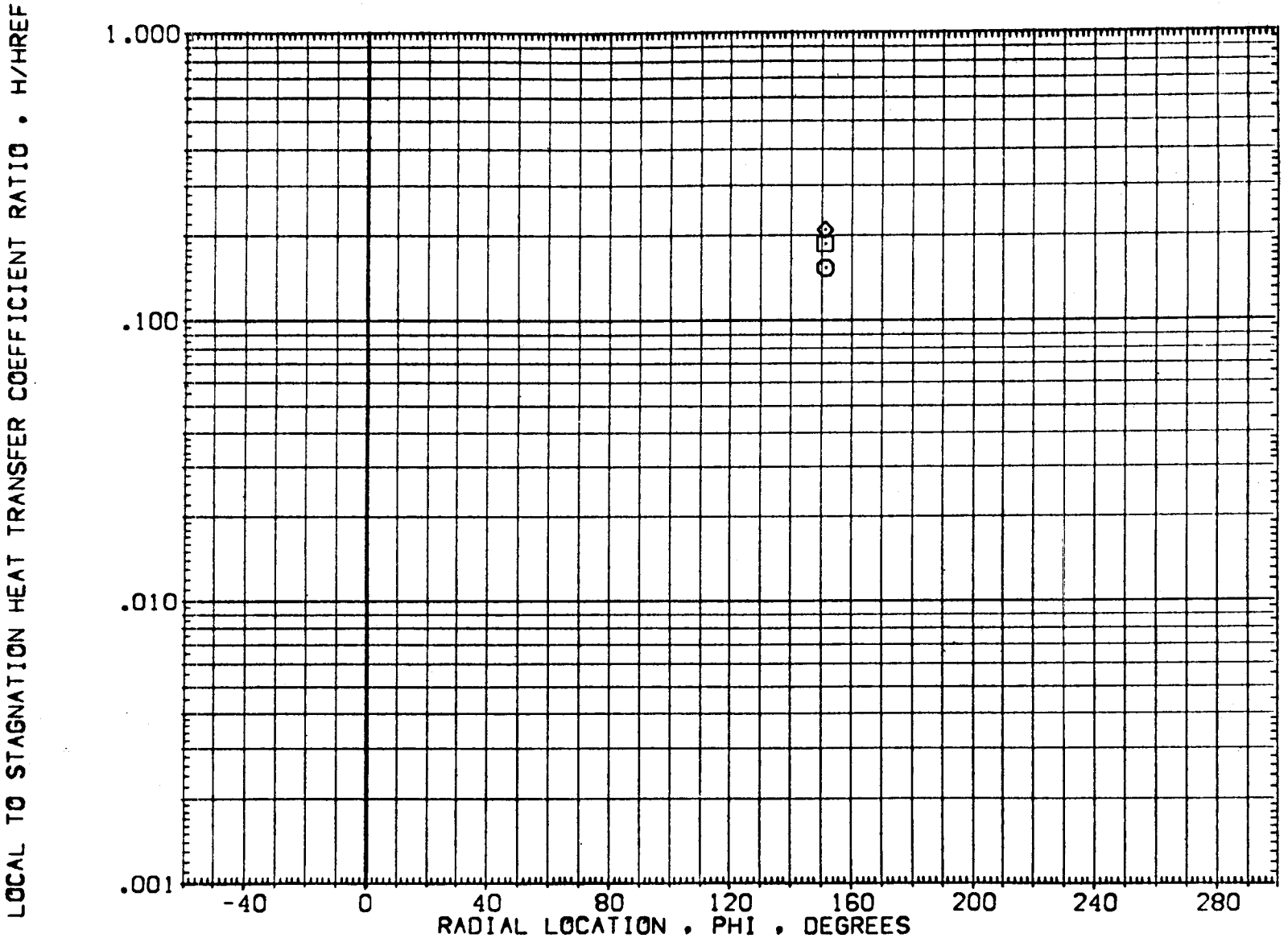


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	⊡	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

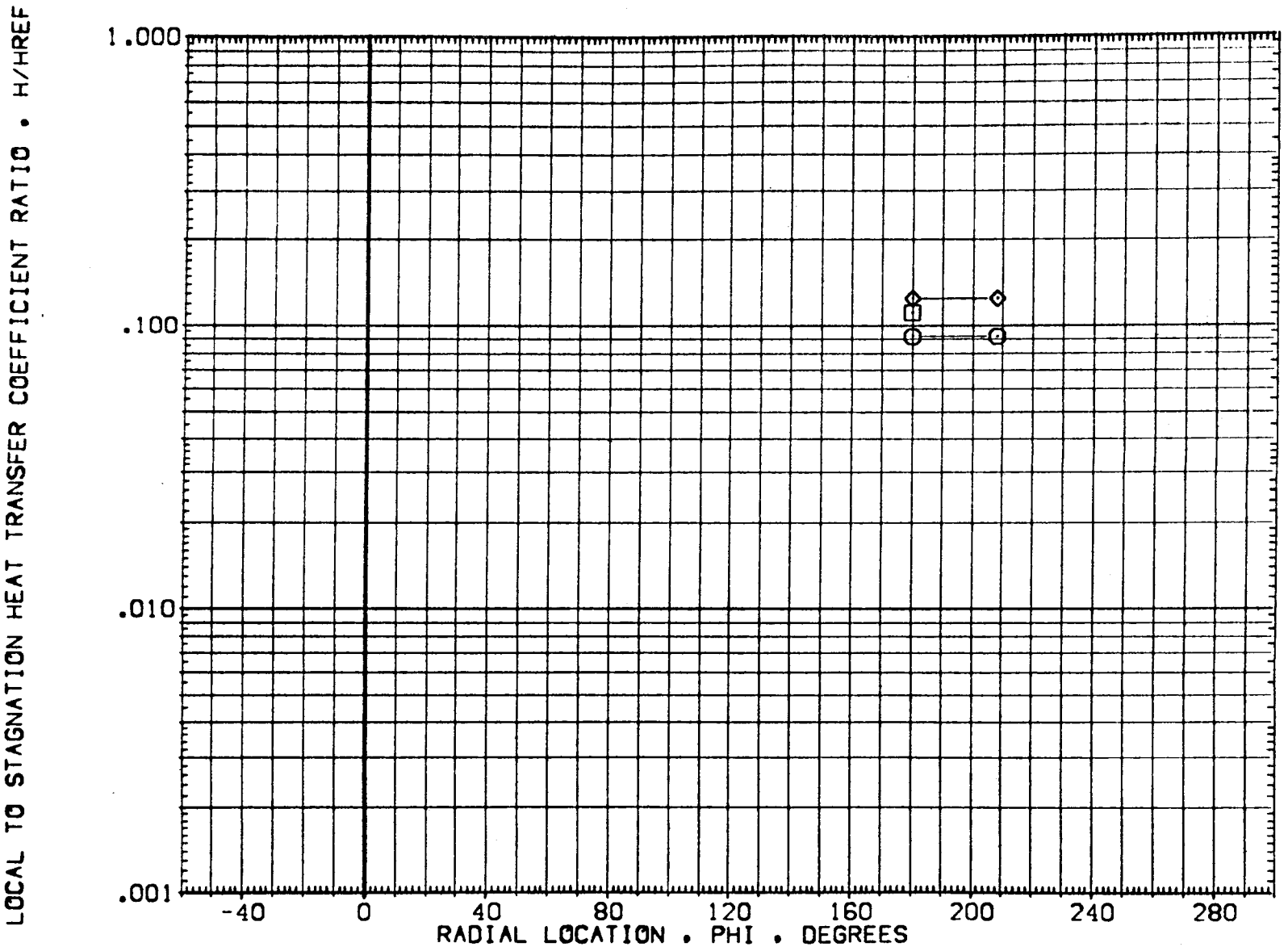


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

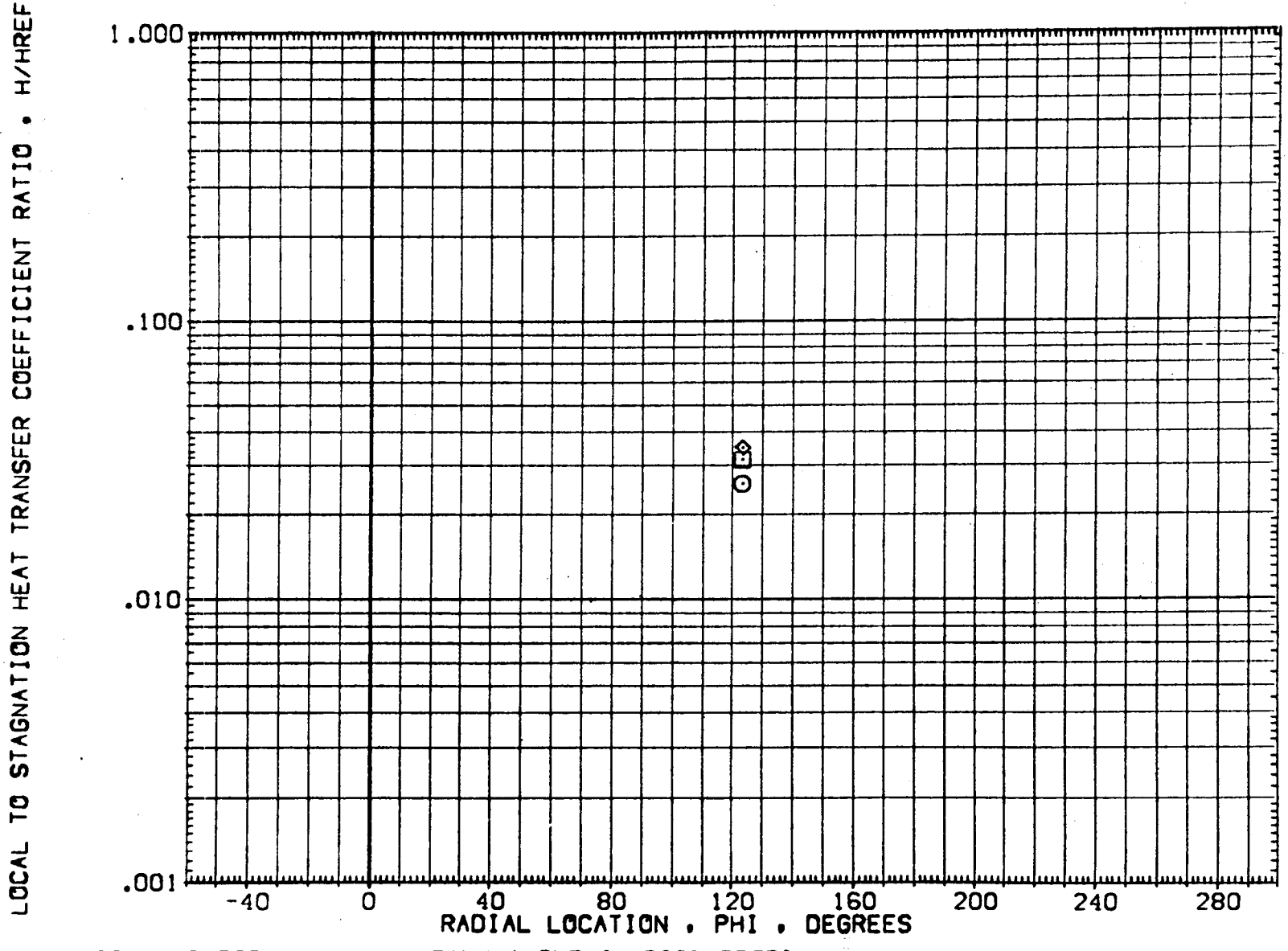


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T12)	○	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T12)	□	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T12)	◇	ARC 3.5-178 IH3 ET (TRIPS)	EXTERNAL TANK	.000	.000	5.000	.850

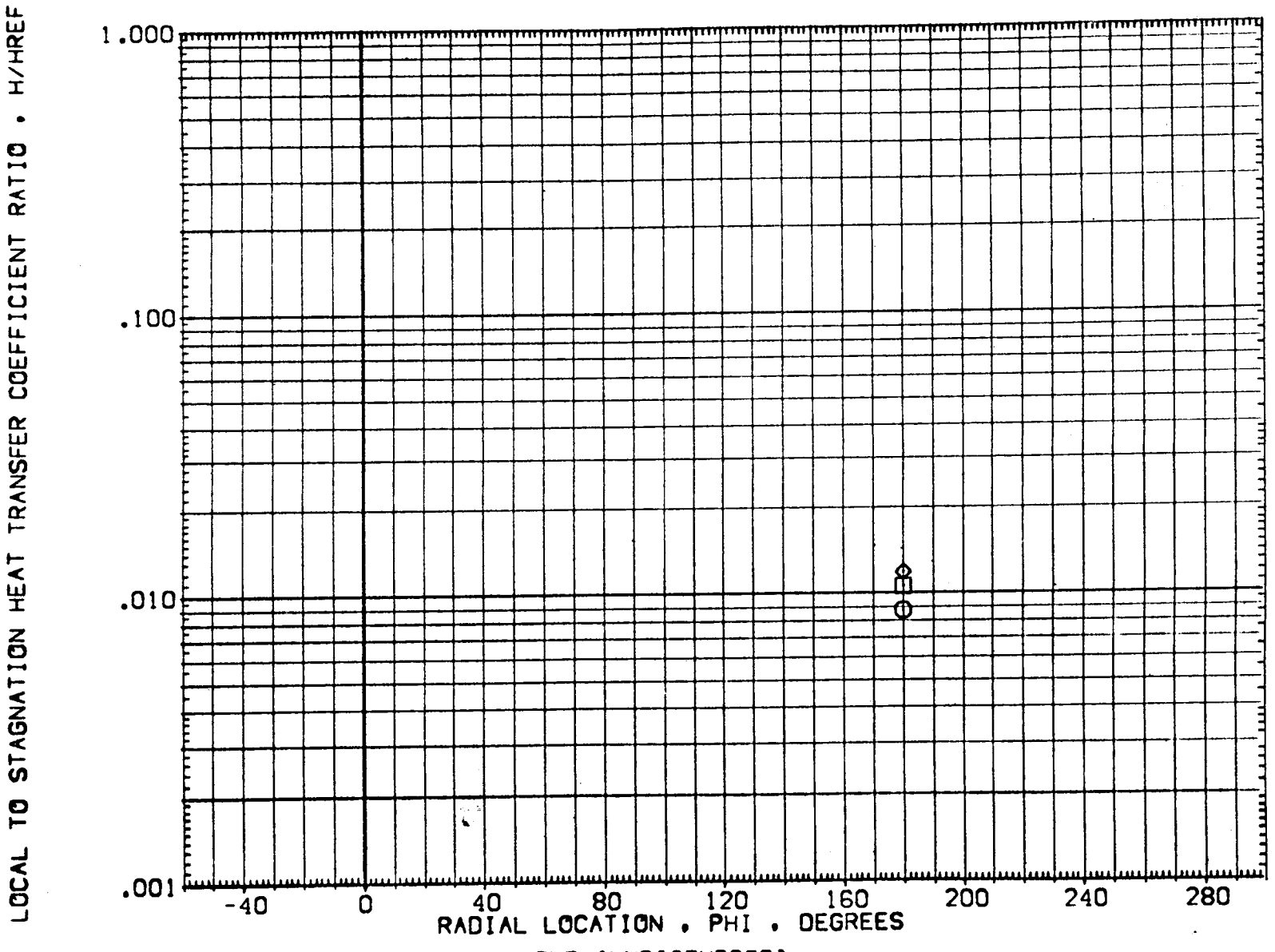


FIG. 4 EXTERNAL TANK - TANK ALONE (UNDISTURBED)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	◁□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

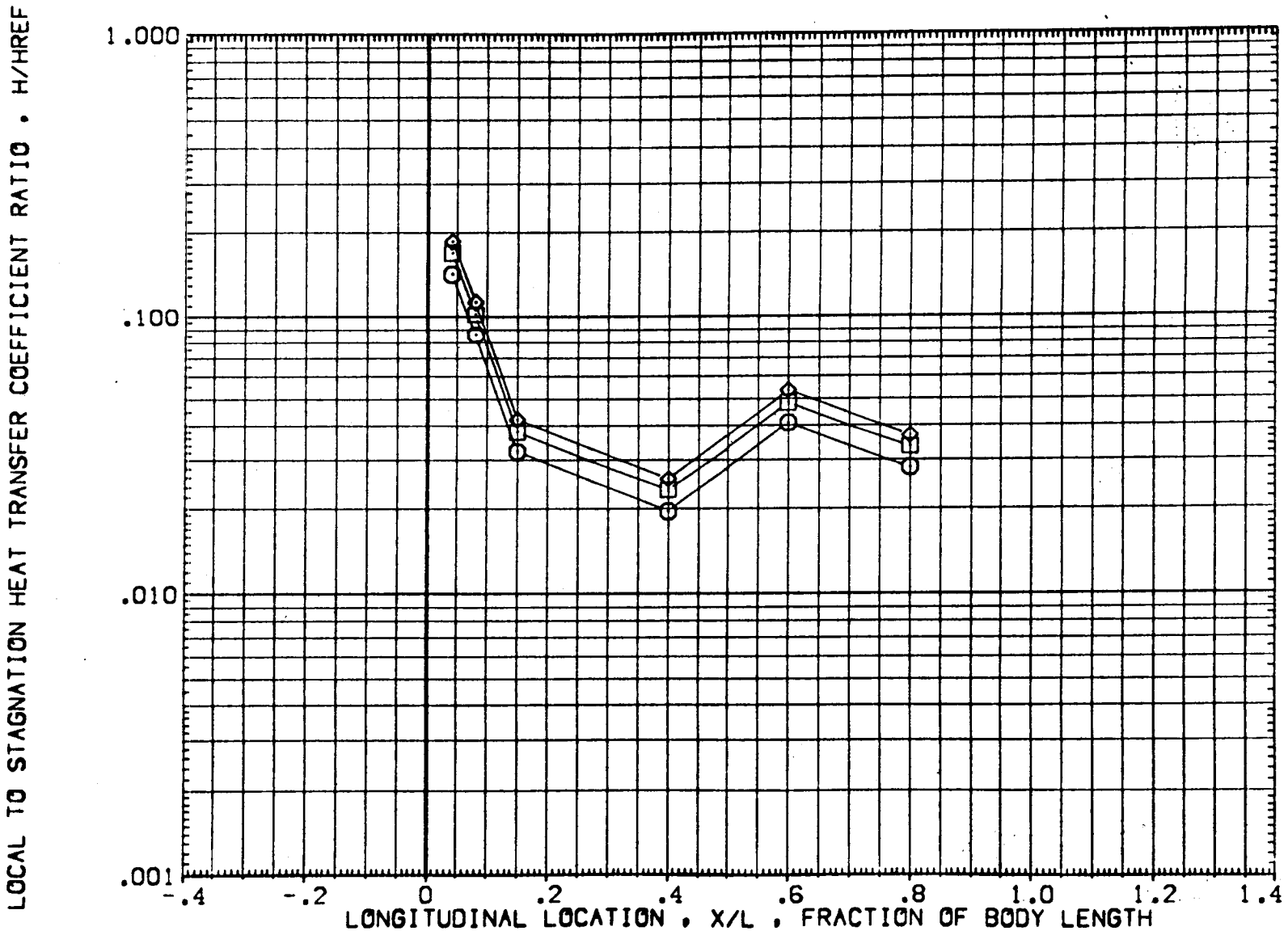


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

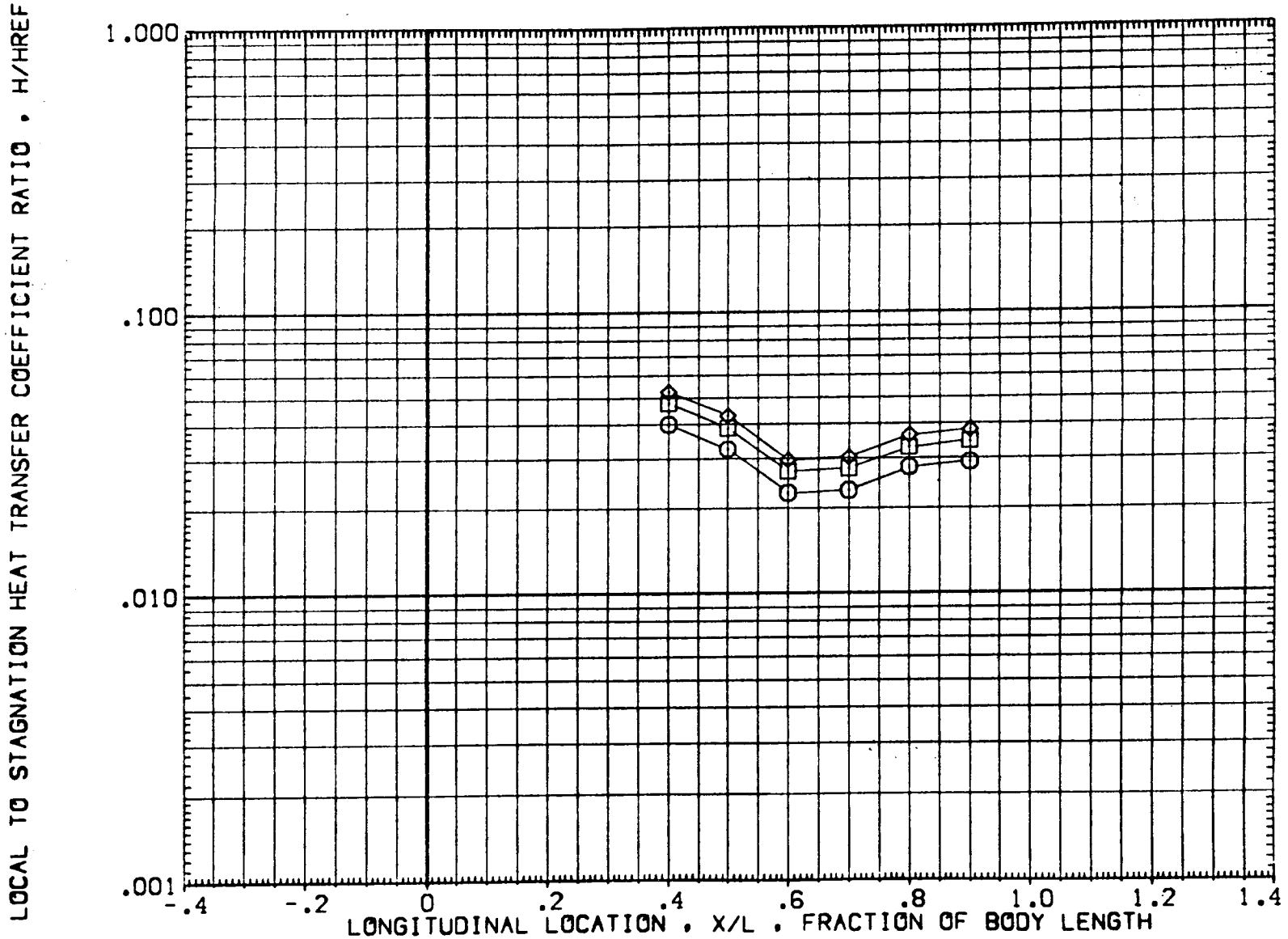


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

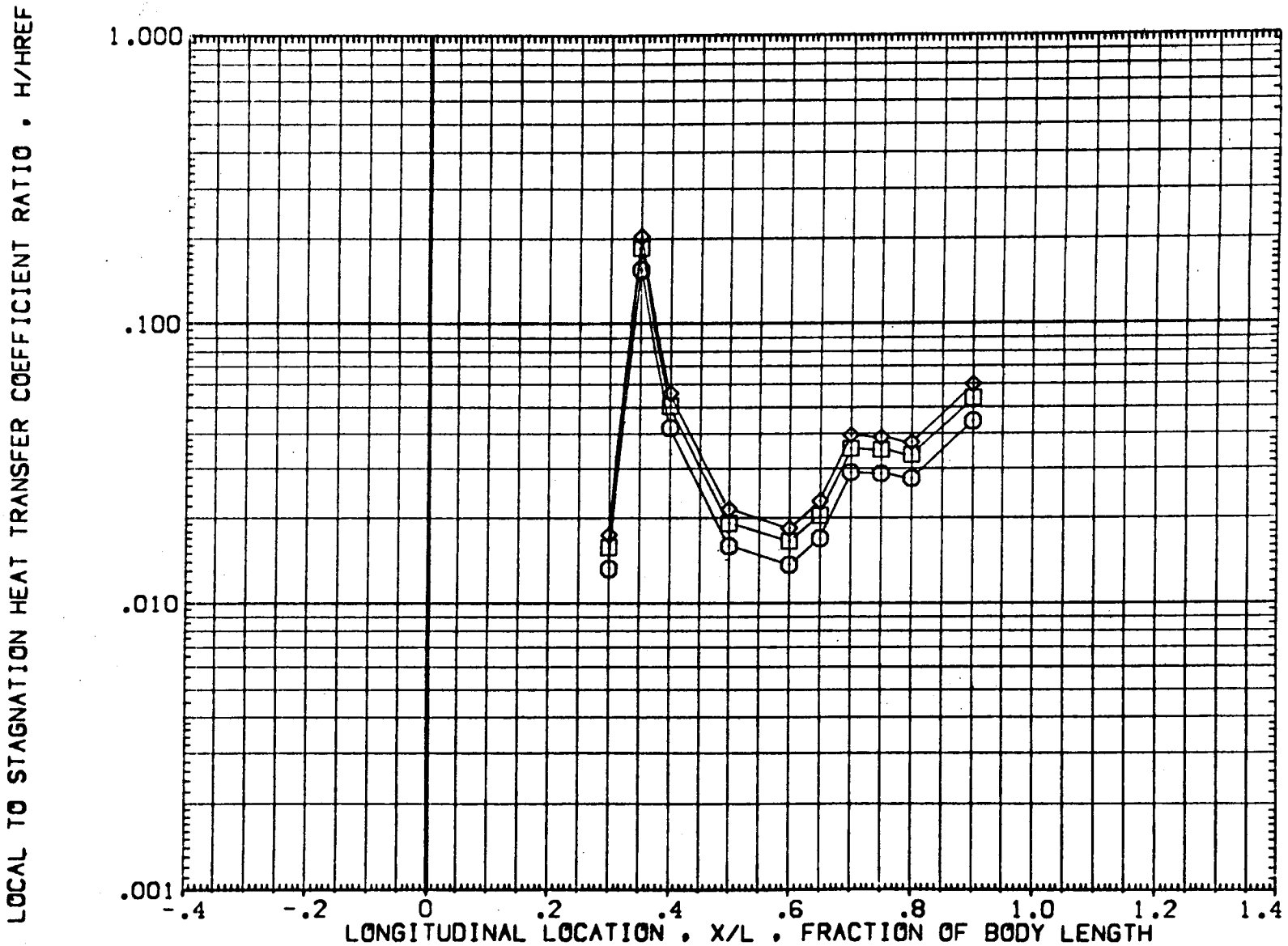


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

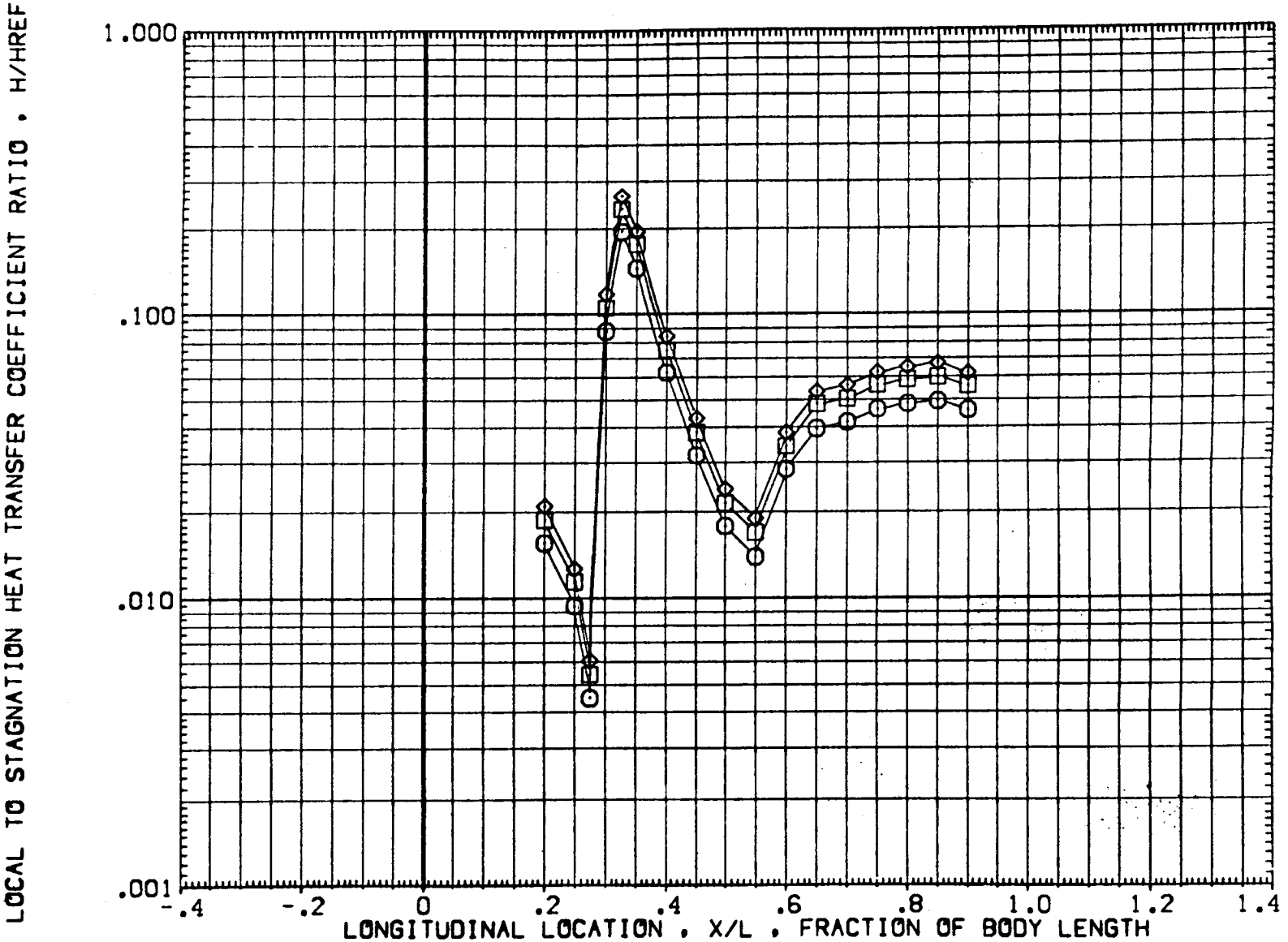


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

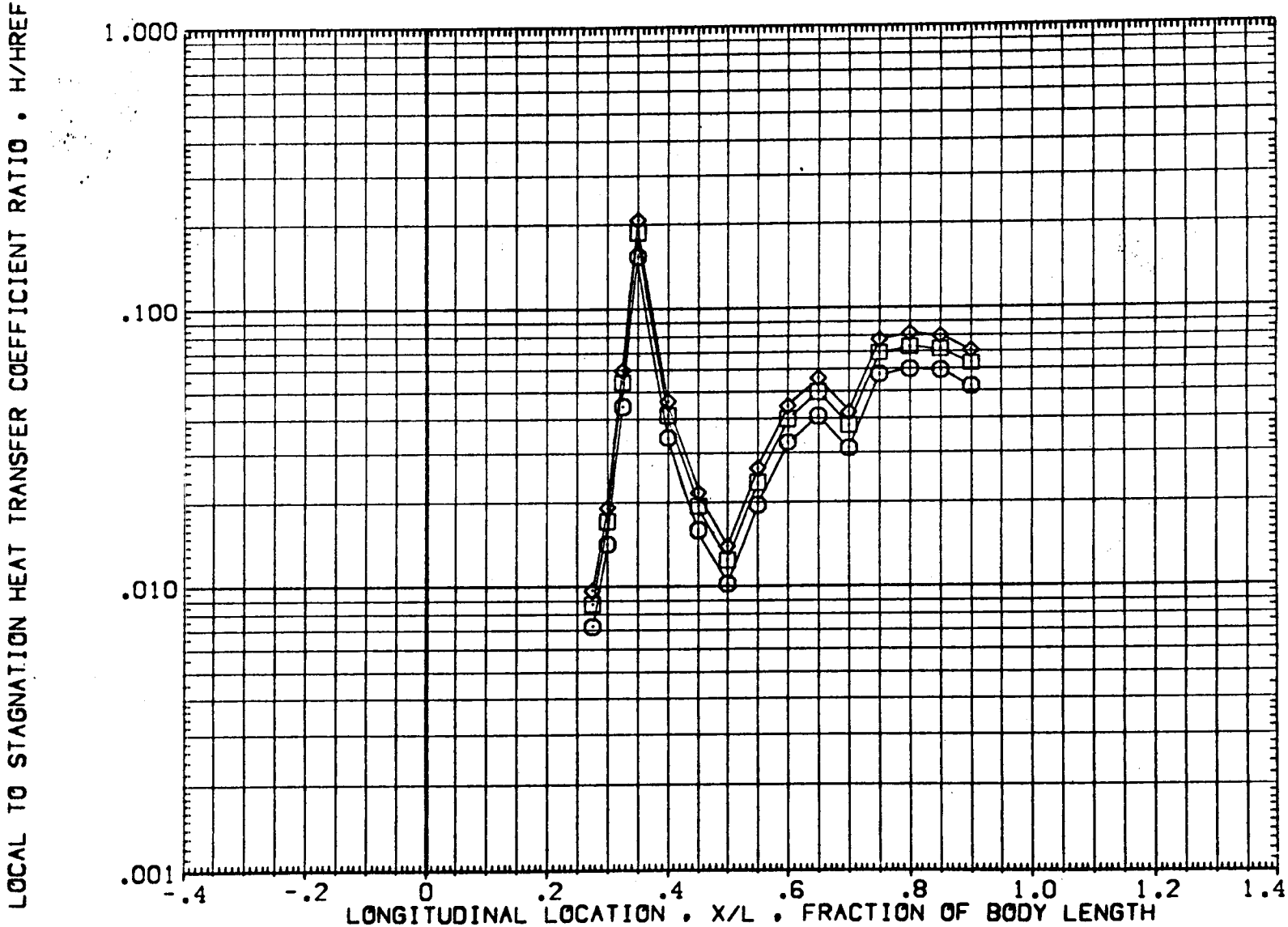


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

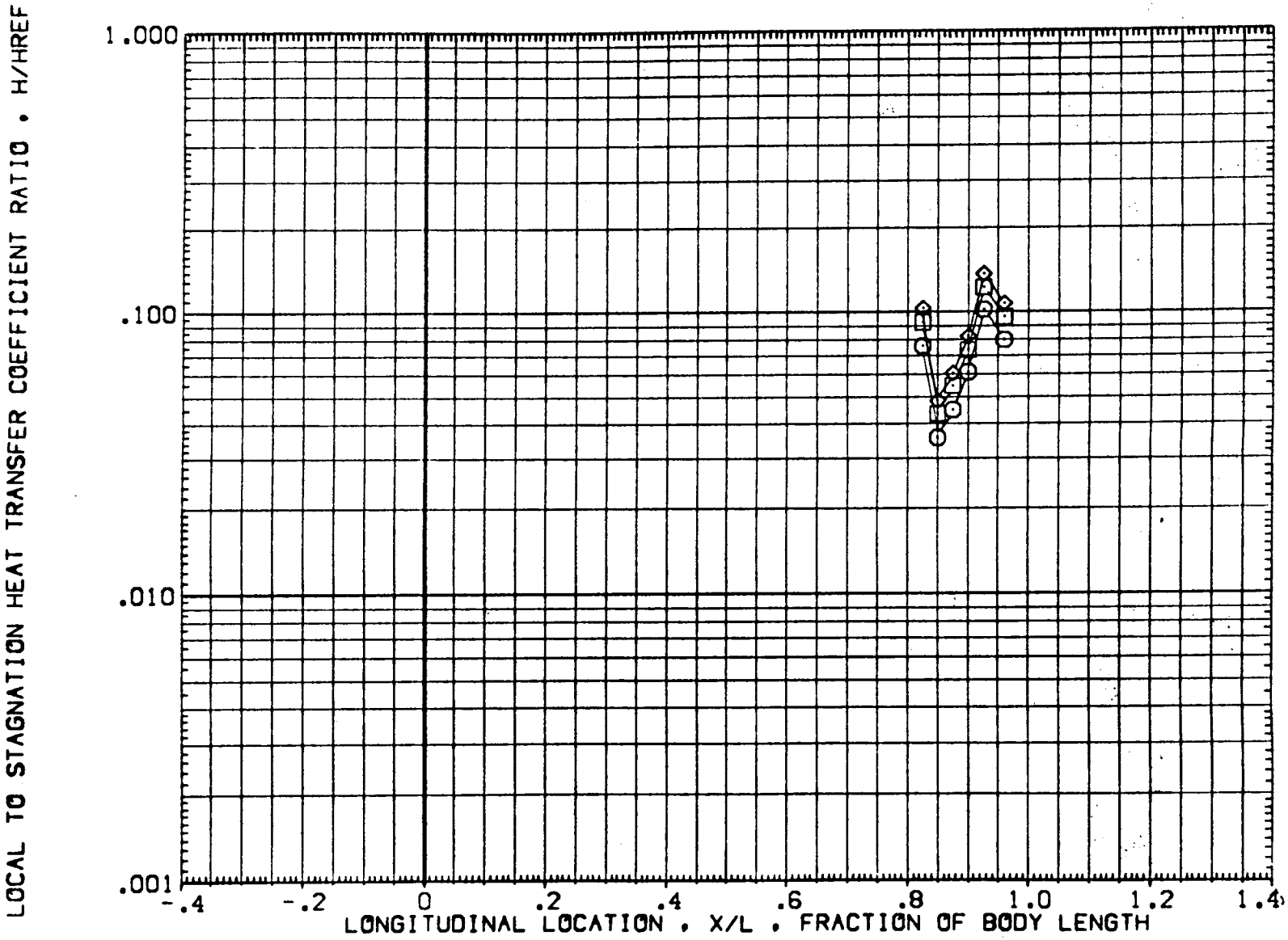


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

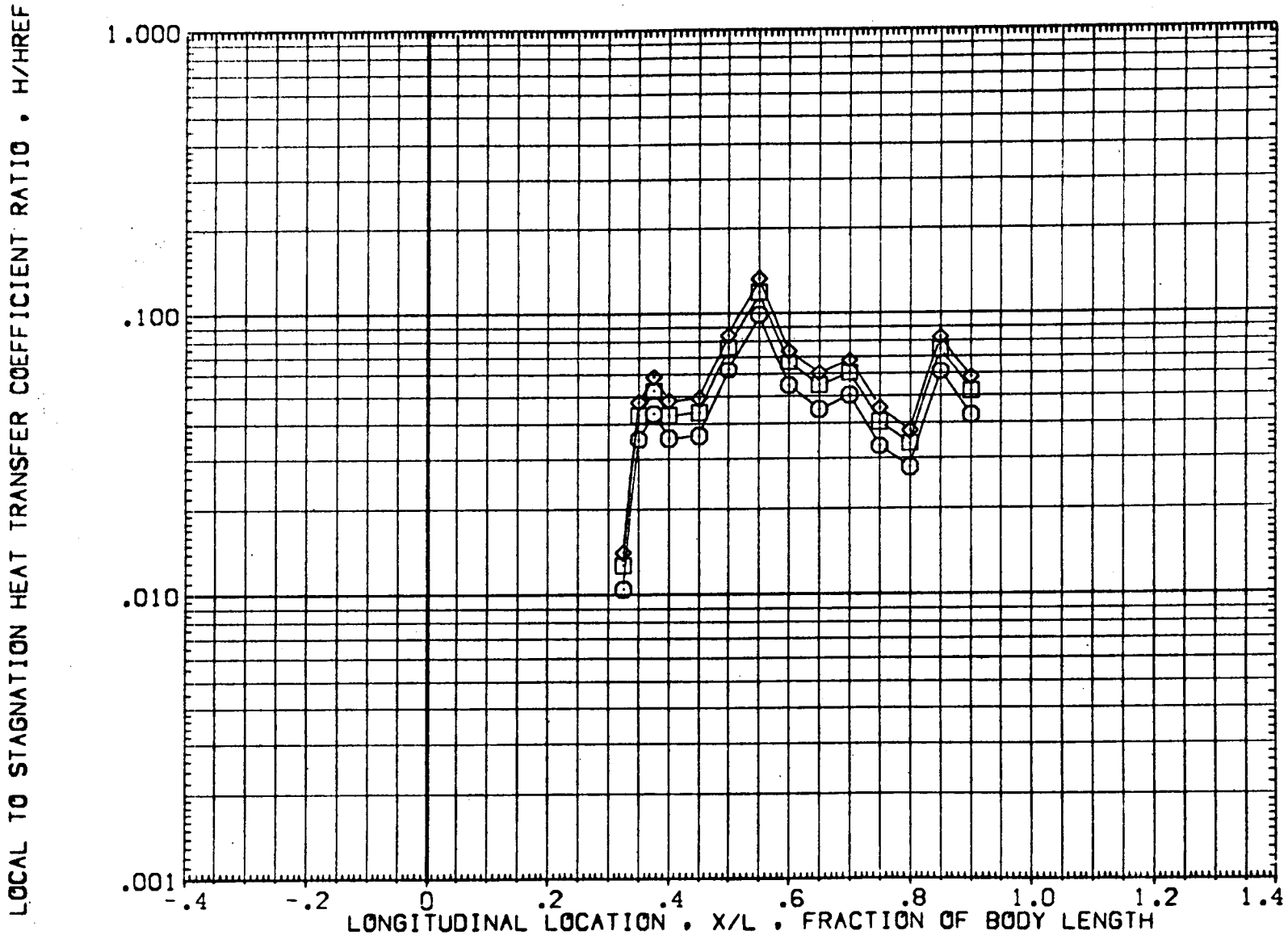


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

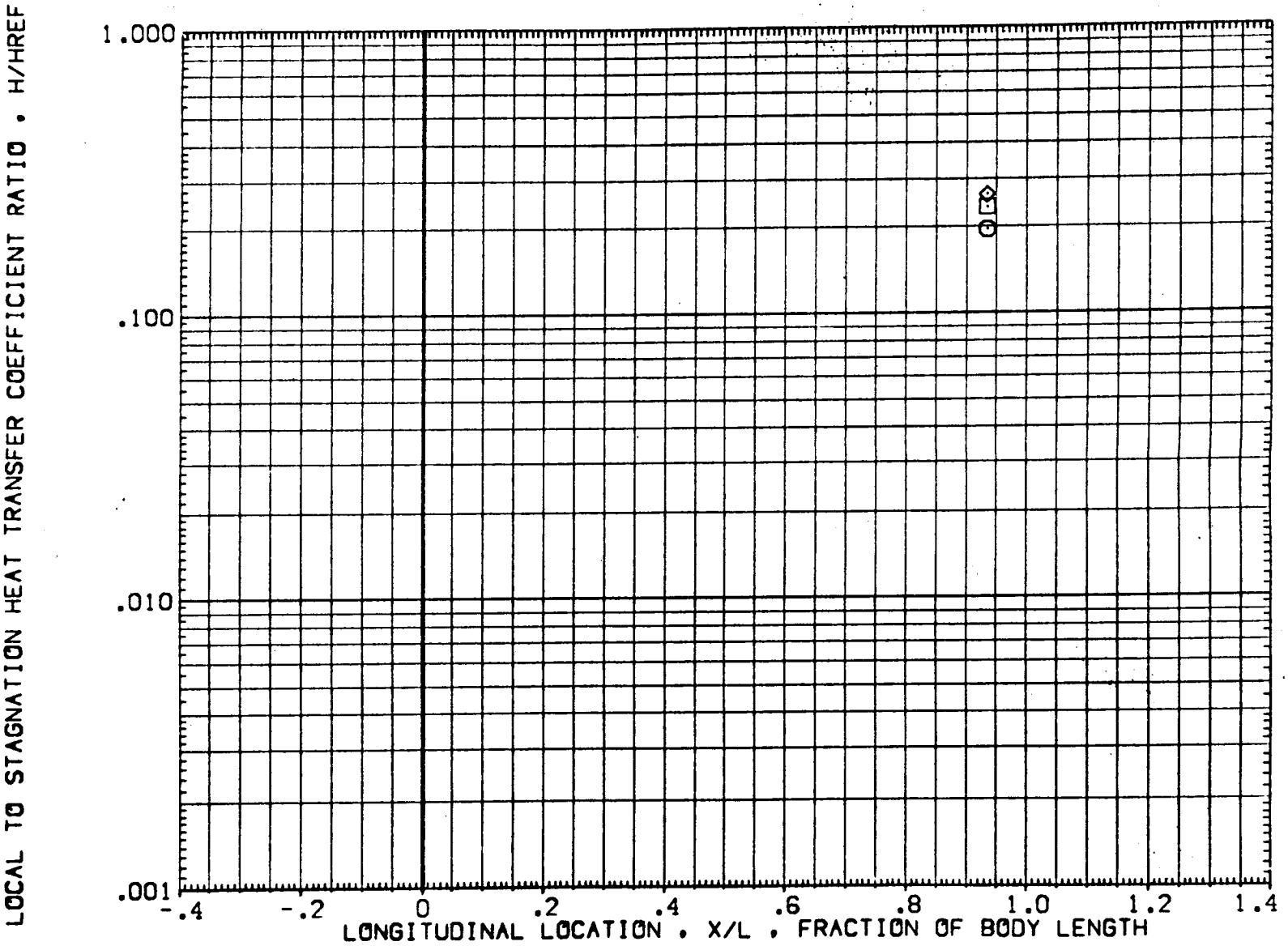


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

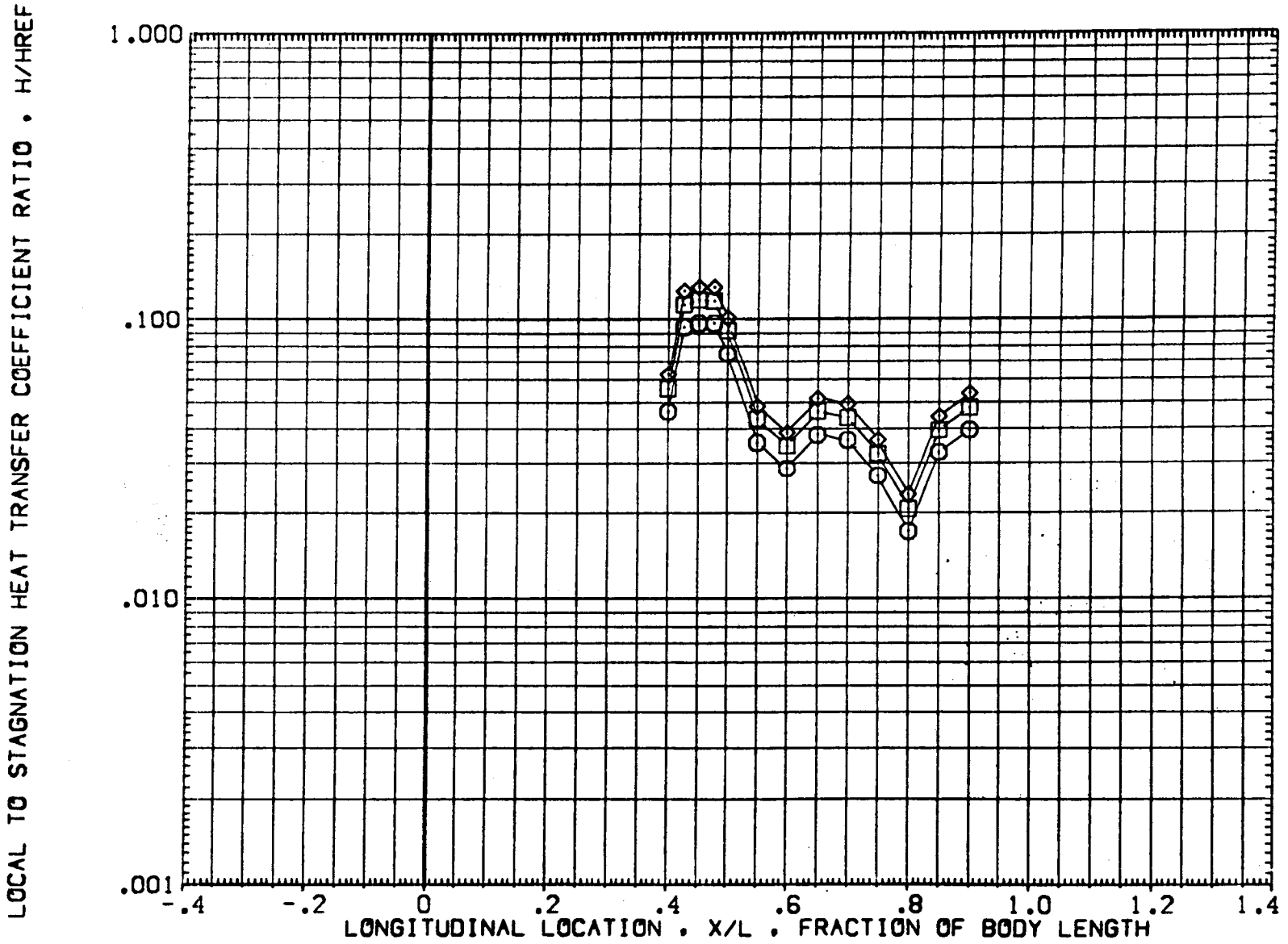


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

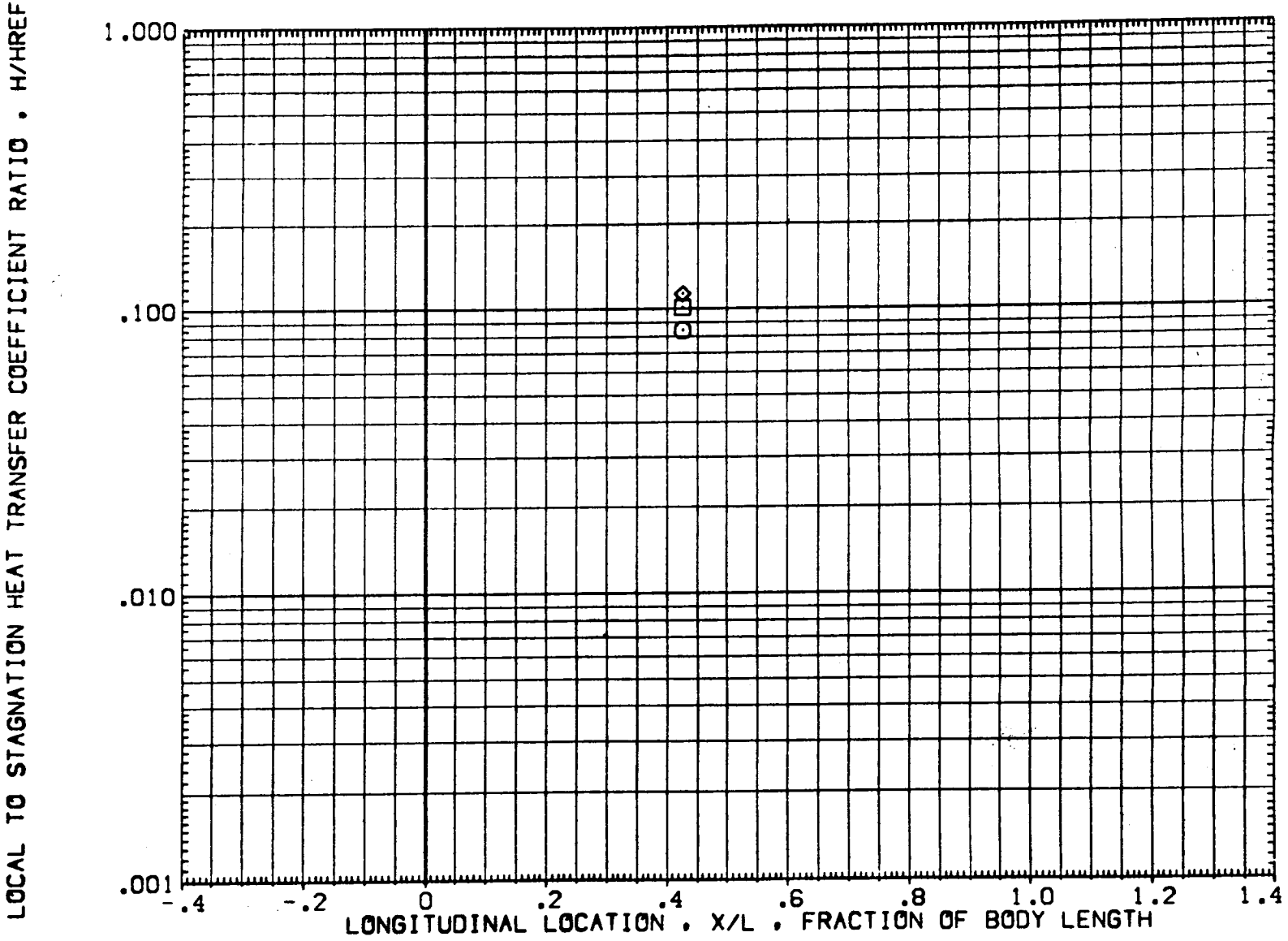


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

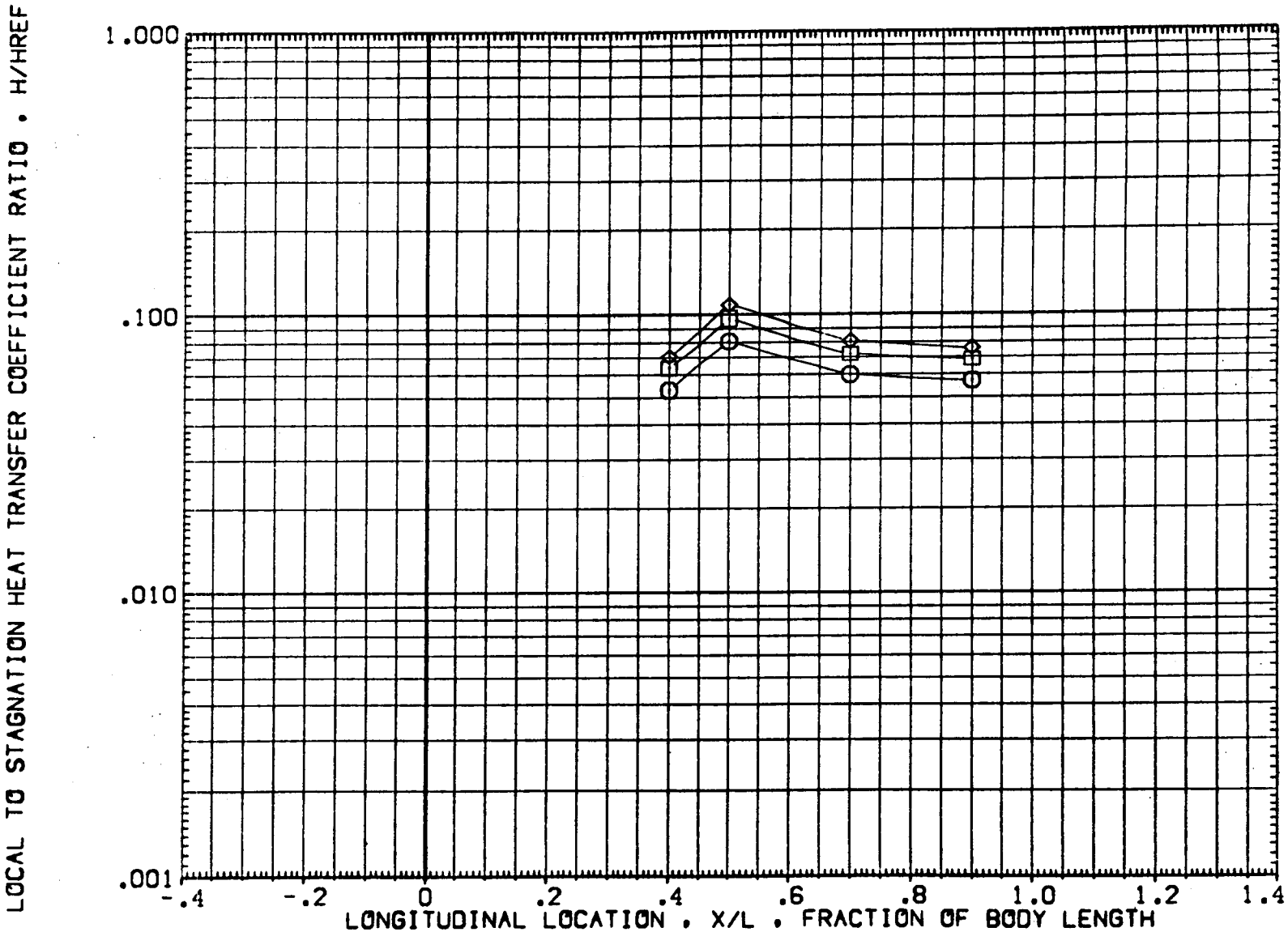


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|TO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|TO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE|TO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

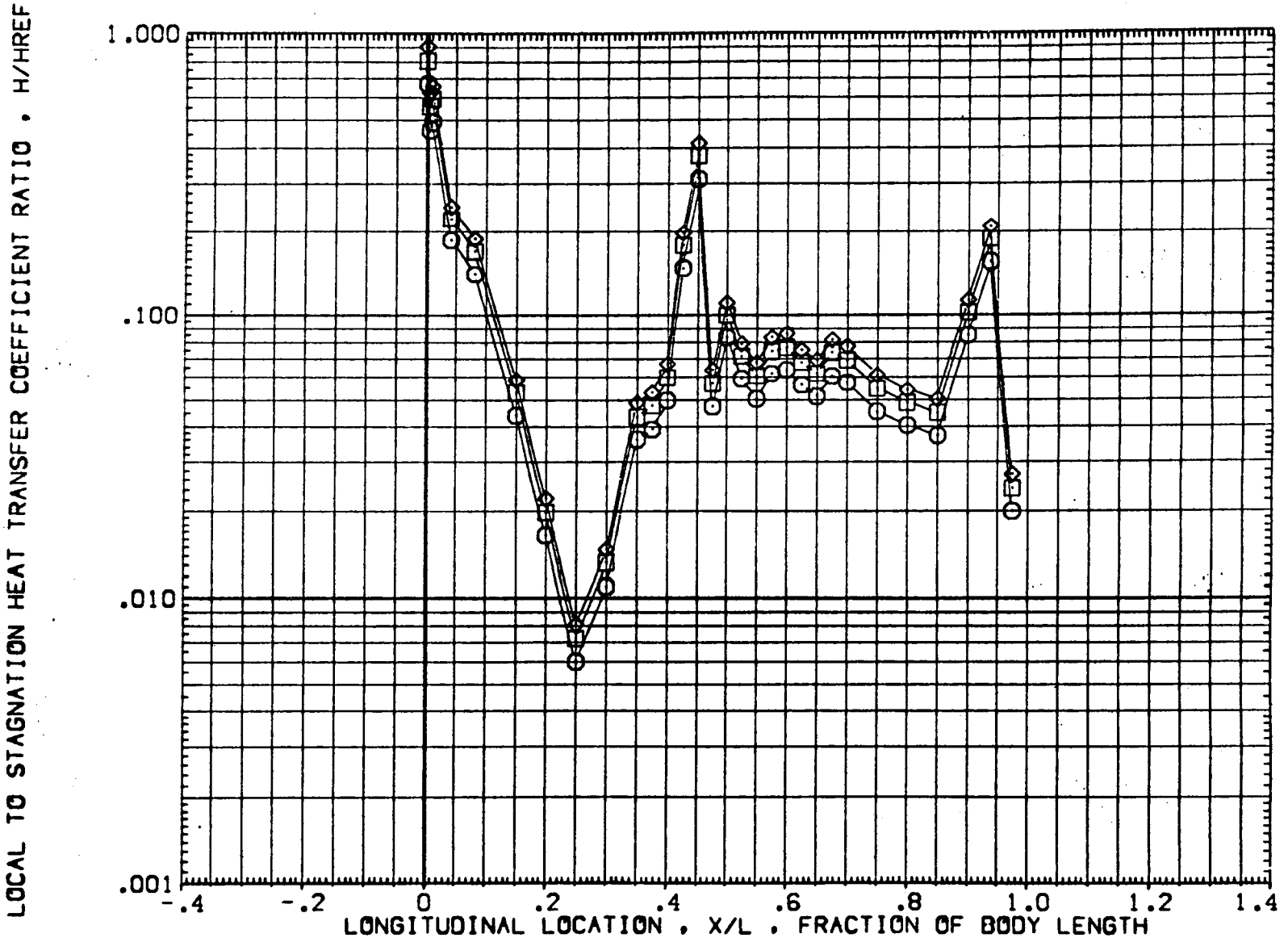


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

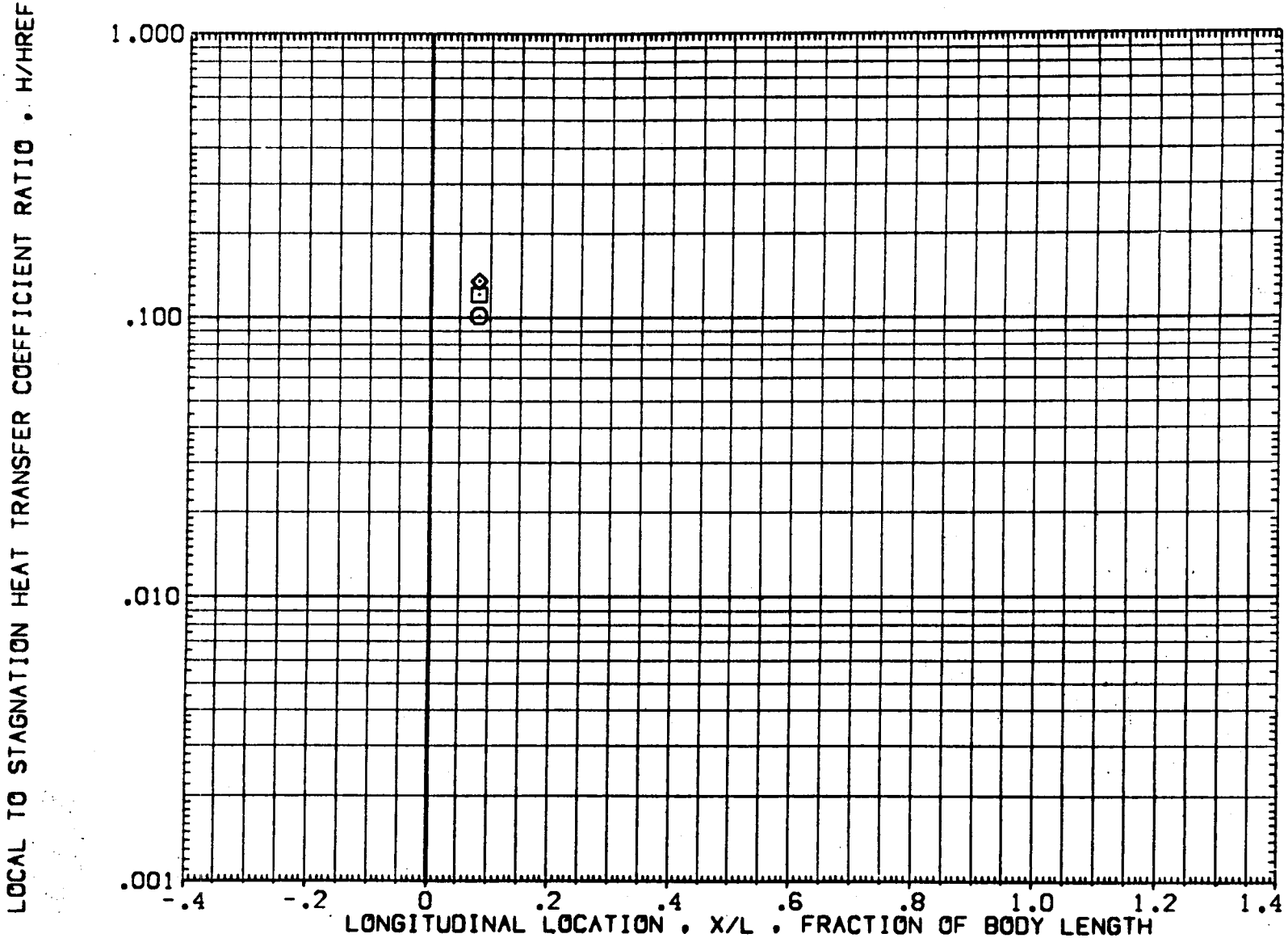


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

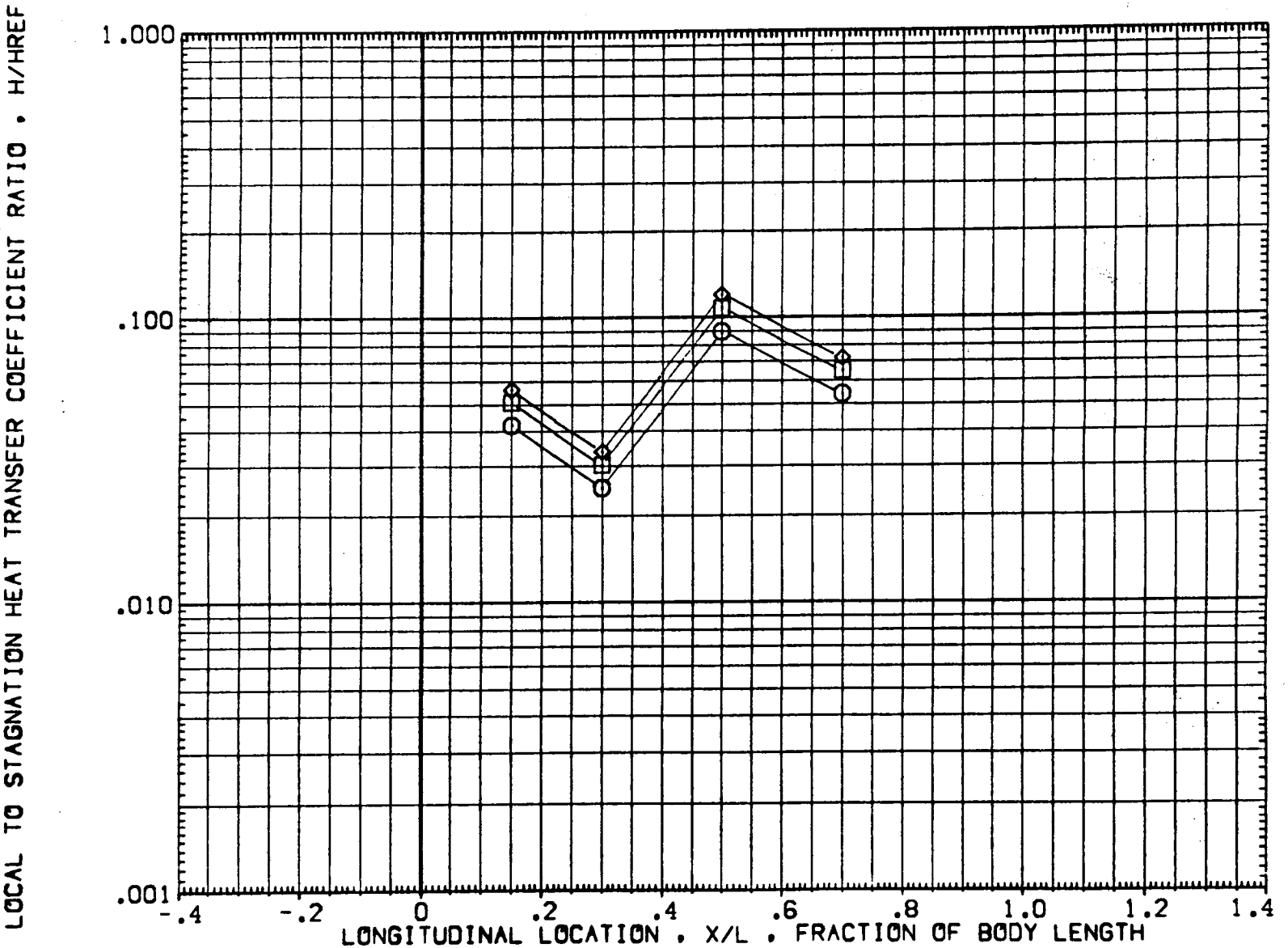


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

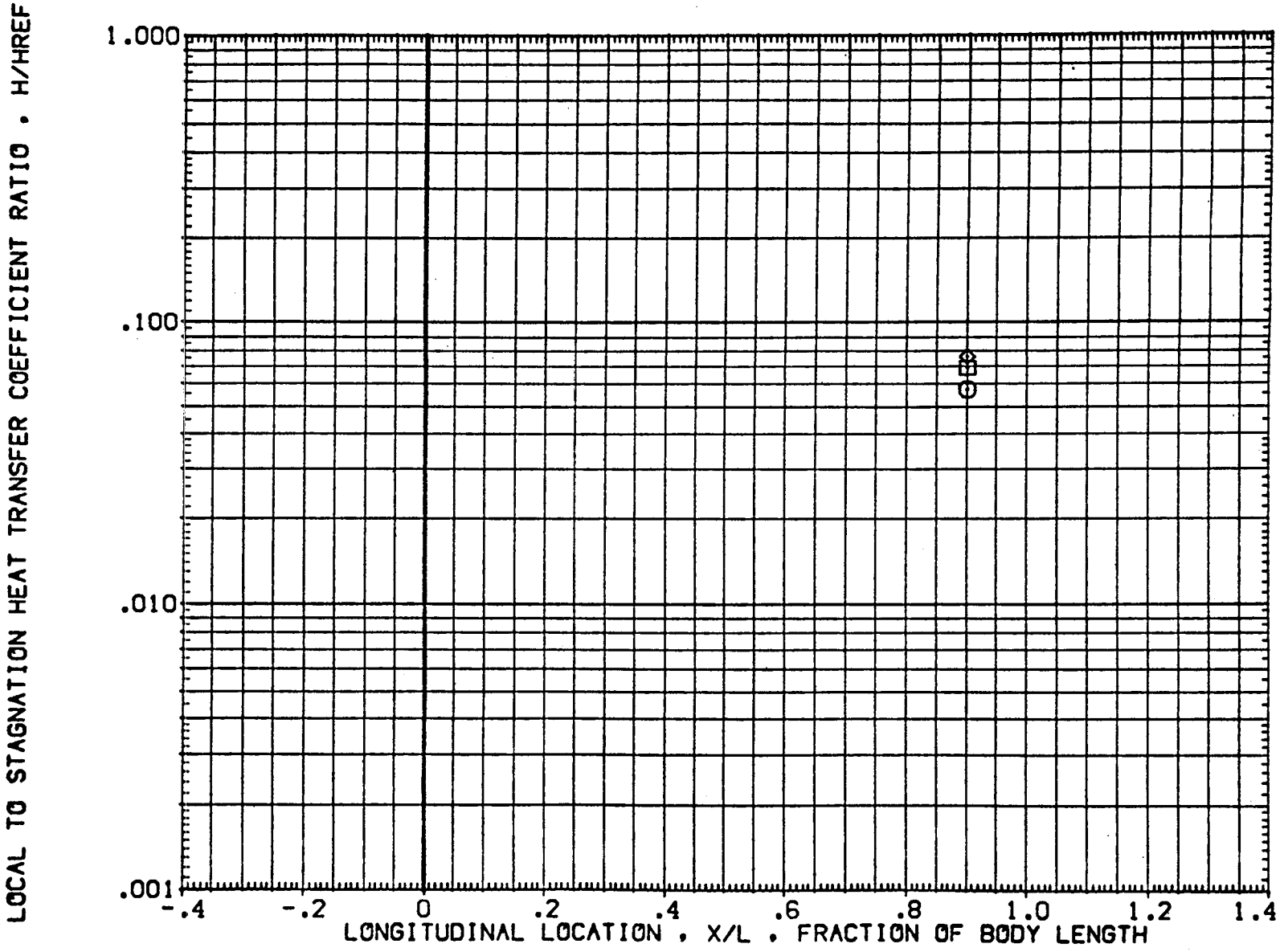


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	◁	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

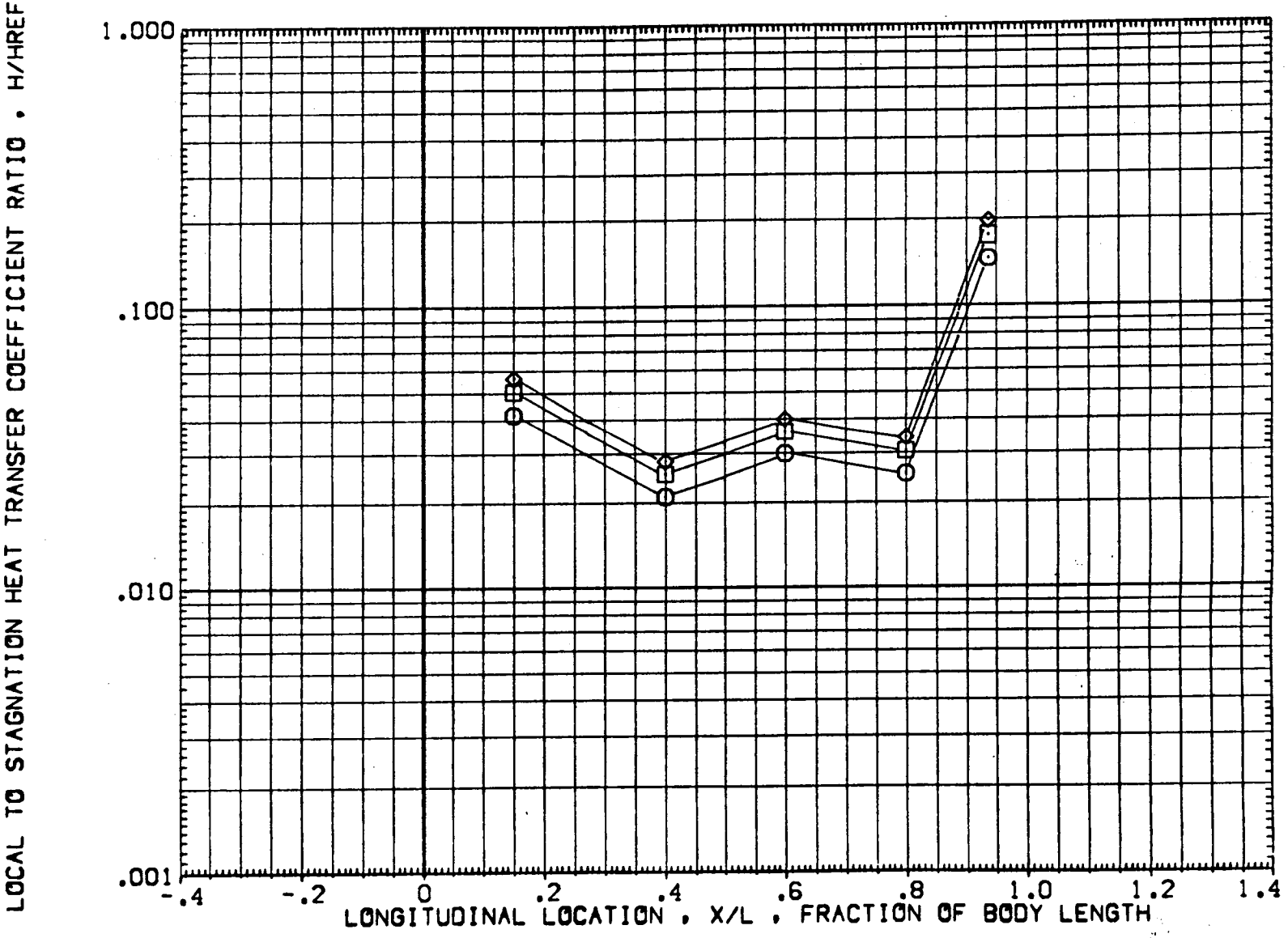


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	◁	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

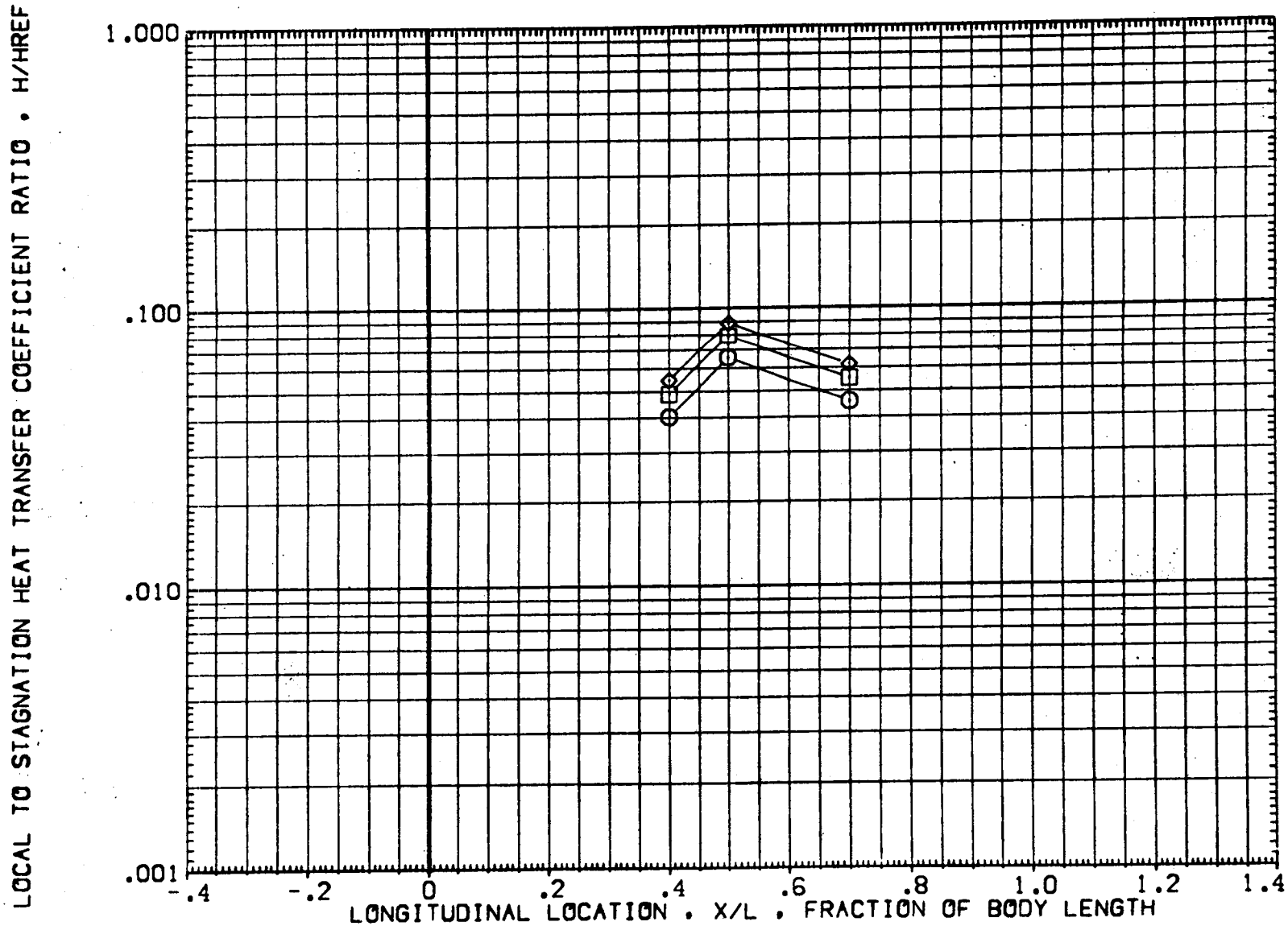


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

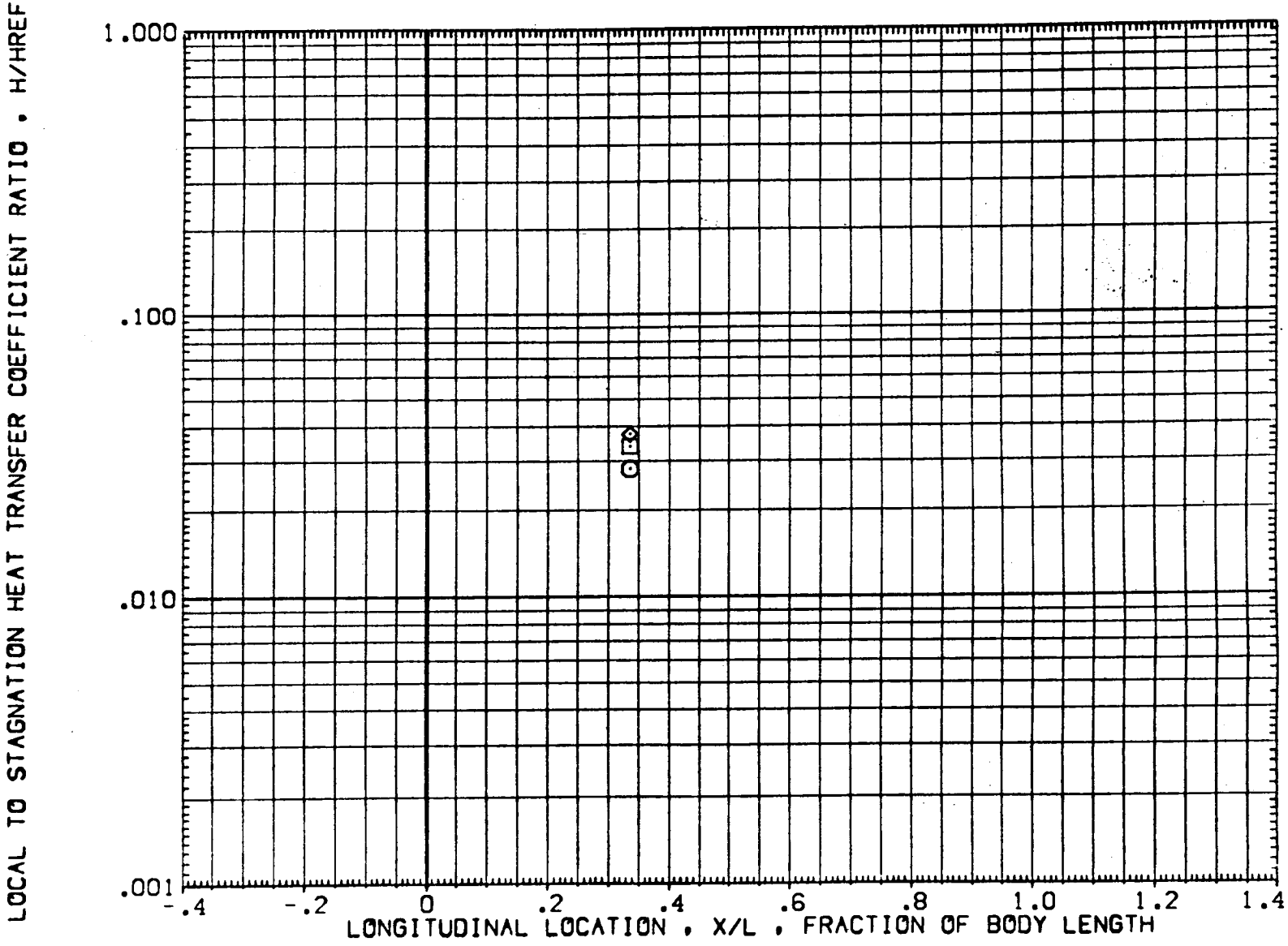


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

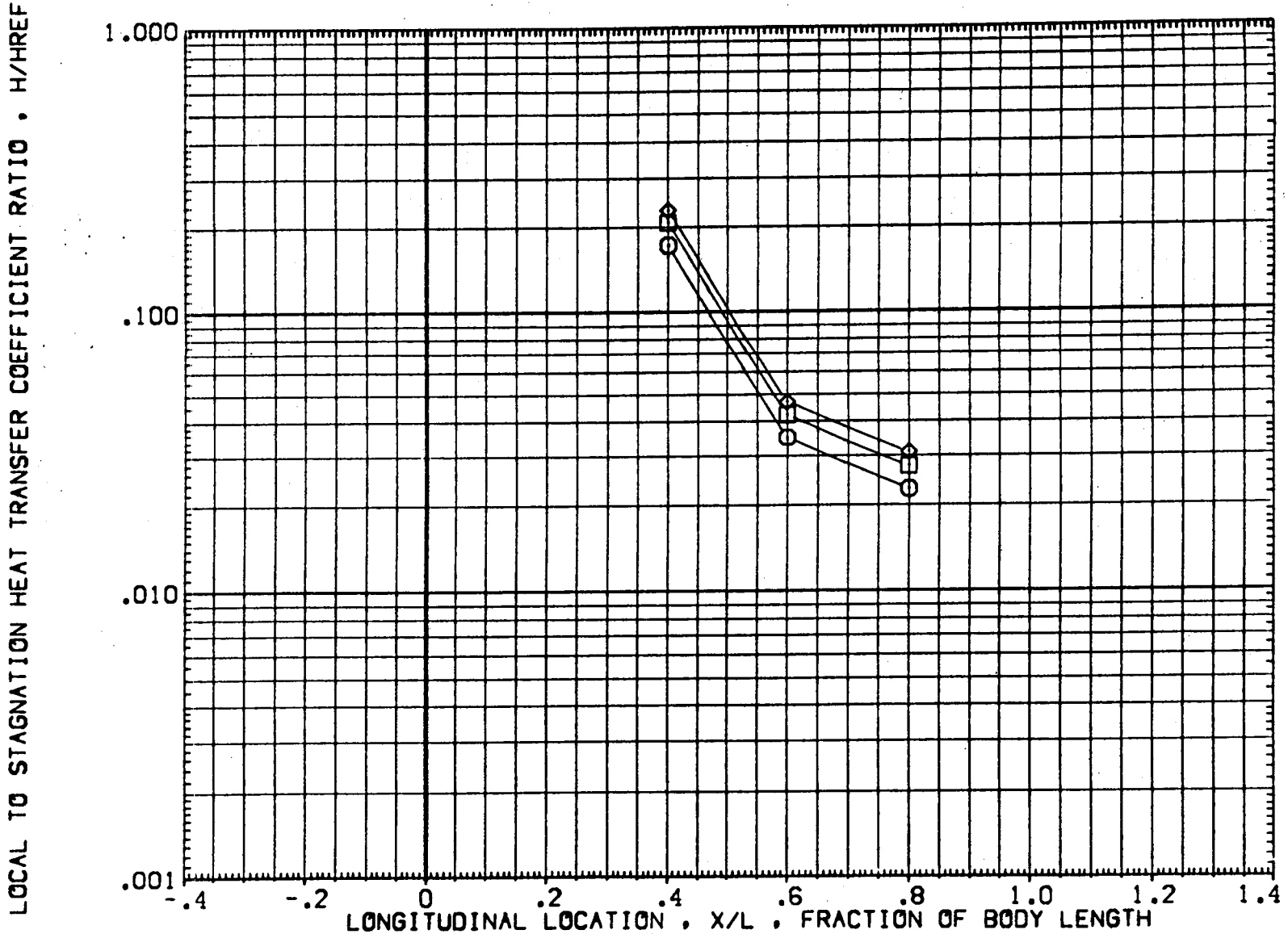


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE ITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE ITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE ITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

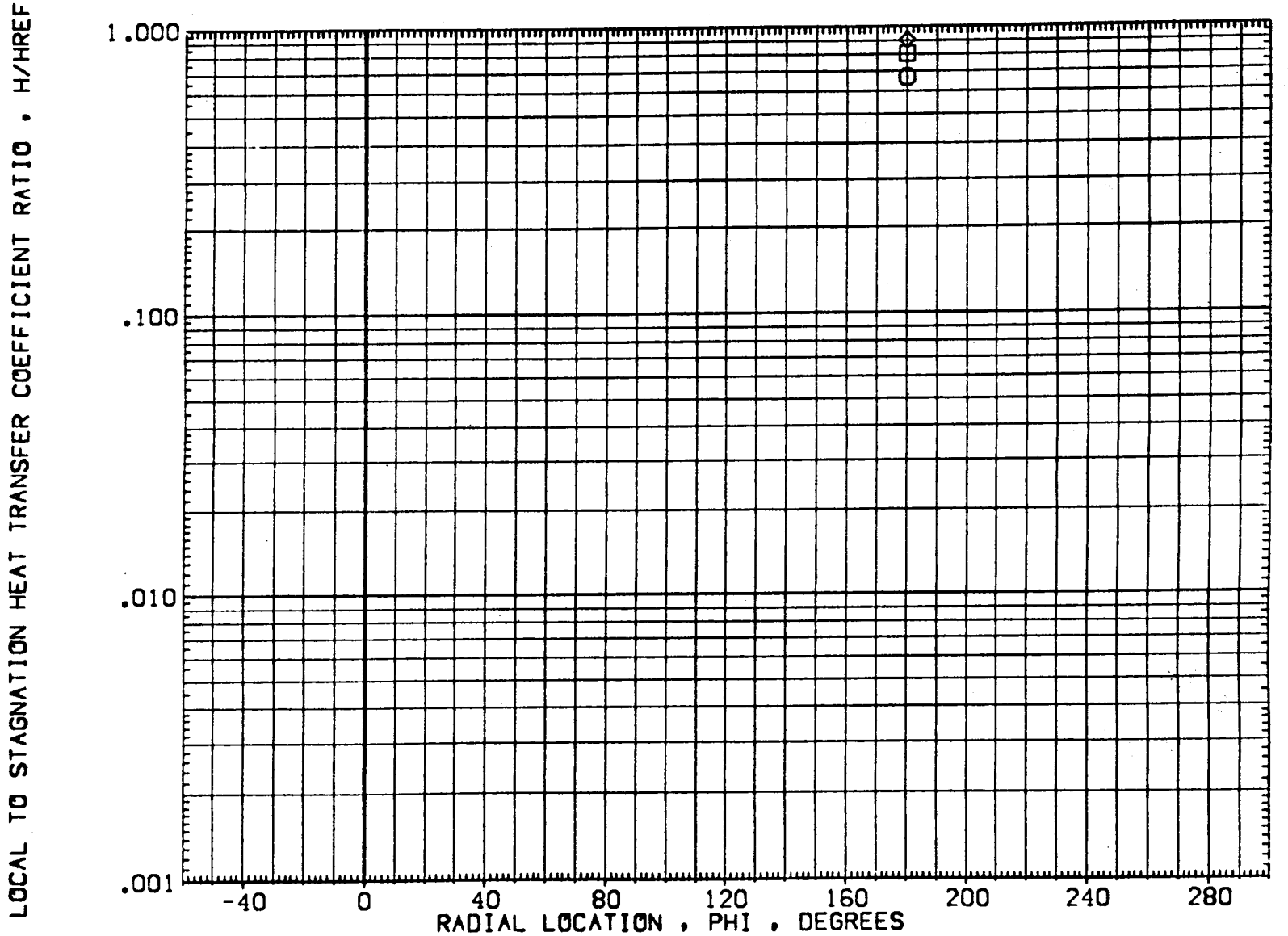


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

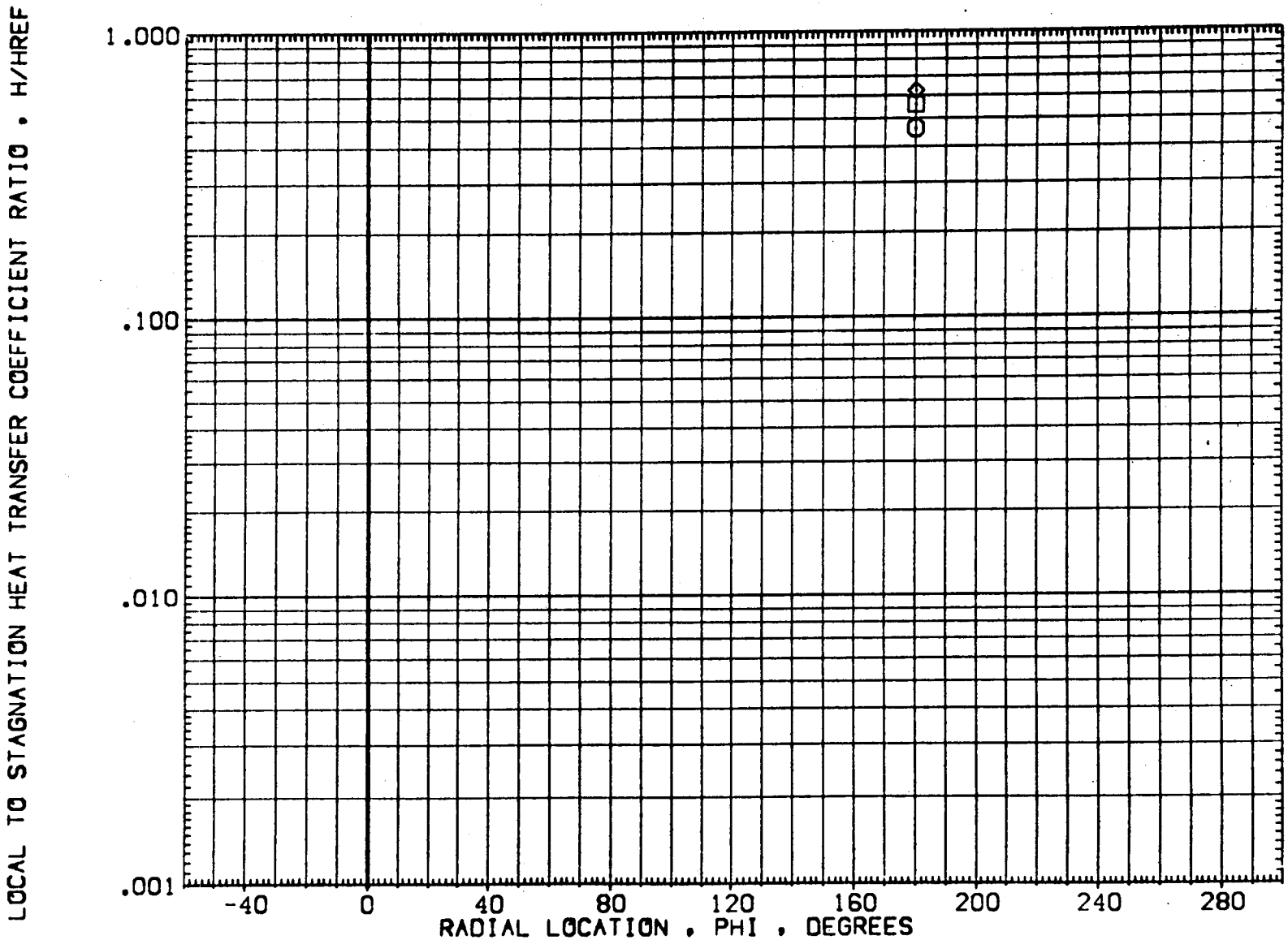


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(REITOI)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

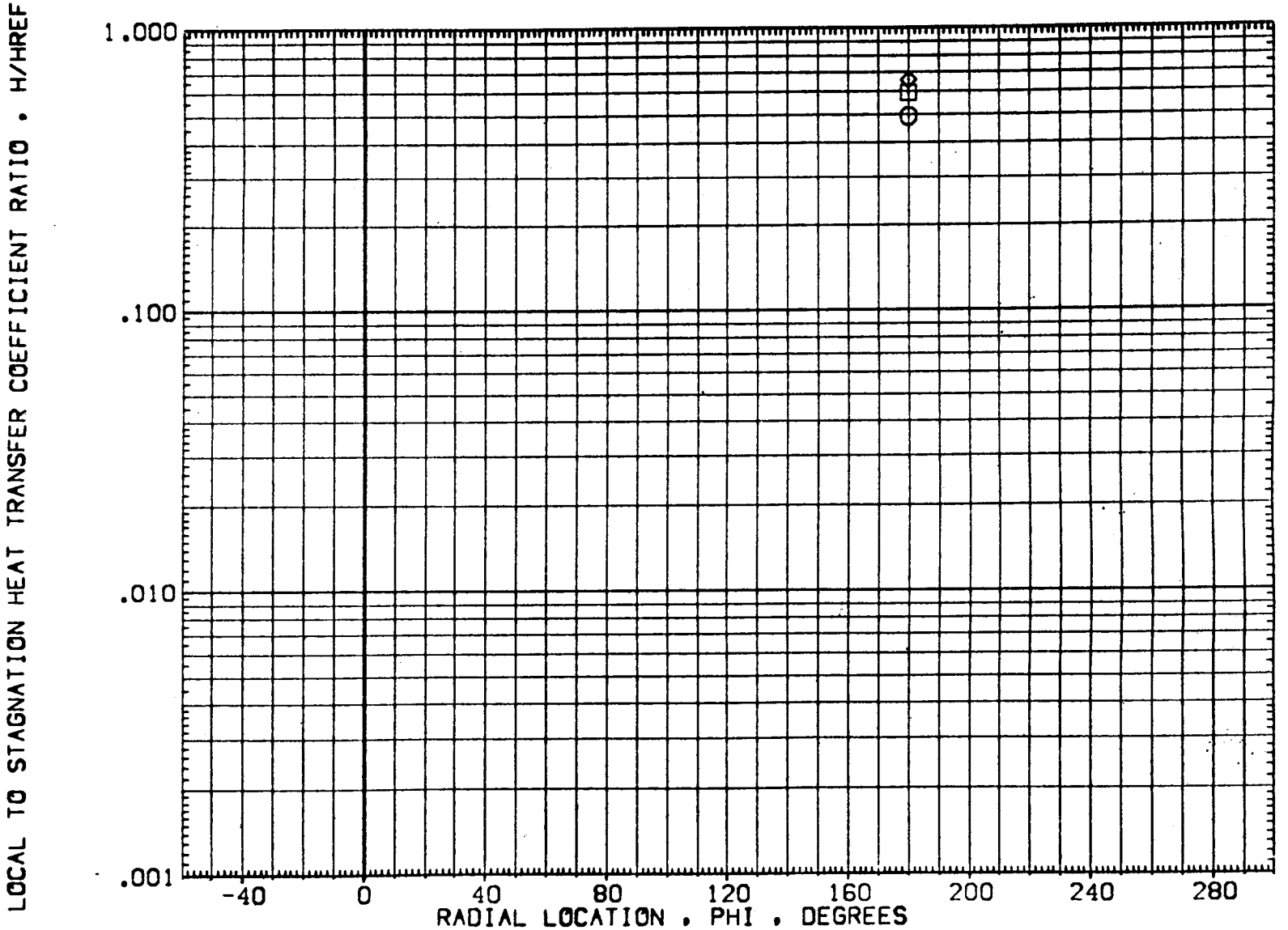


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

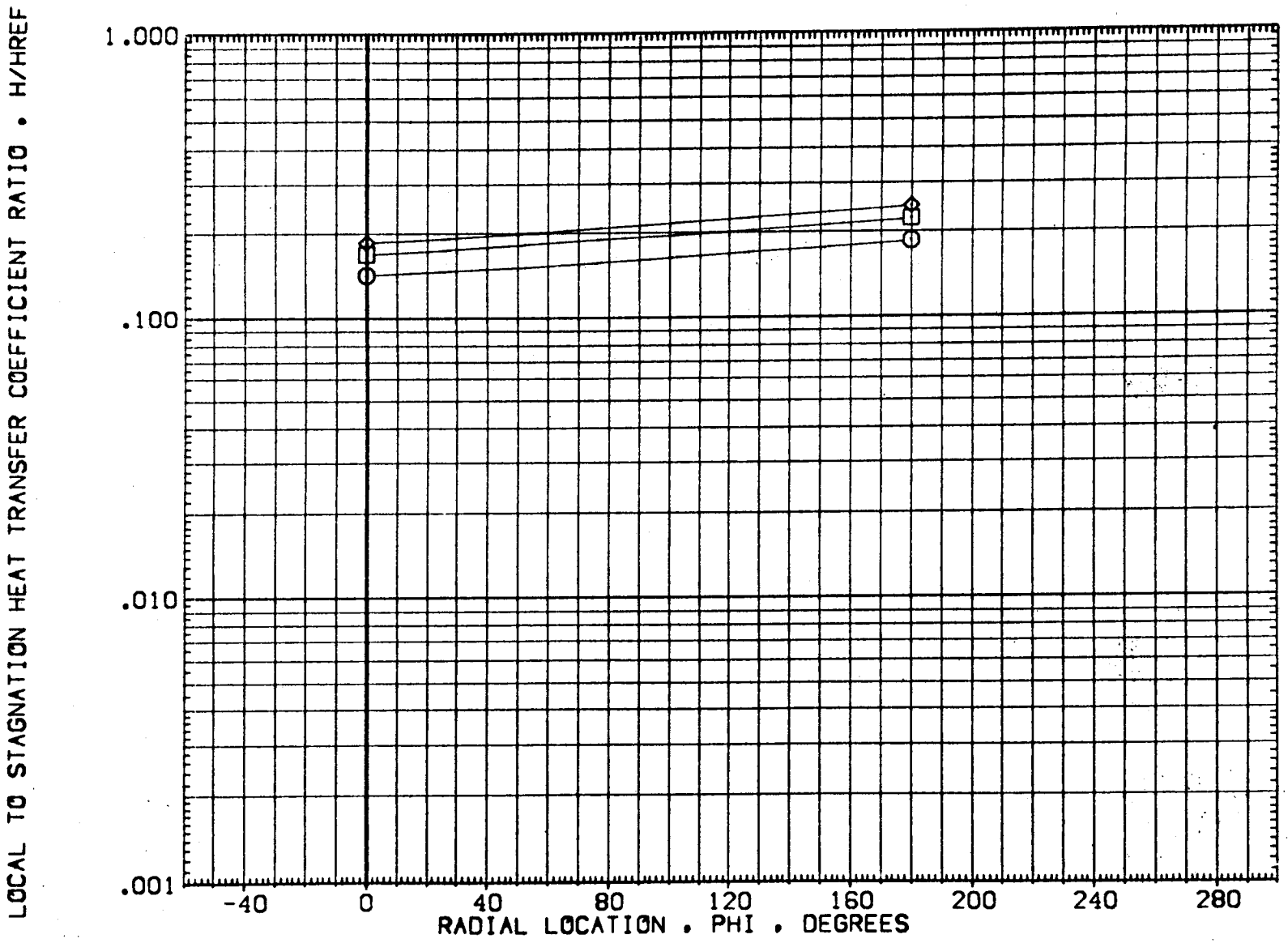


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

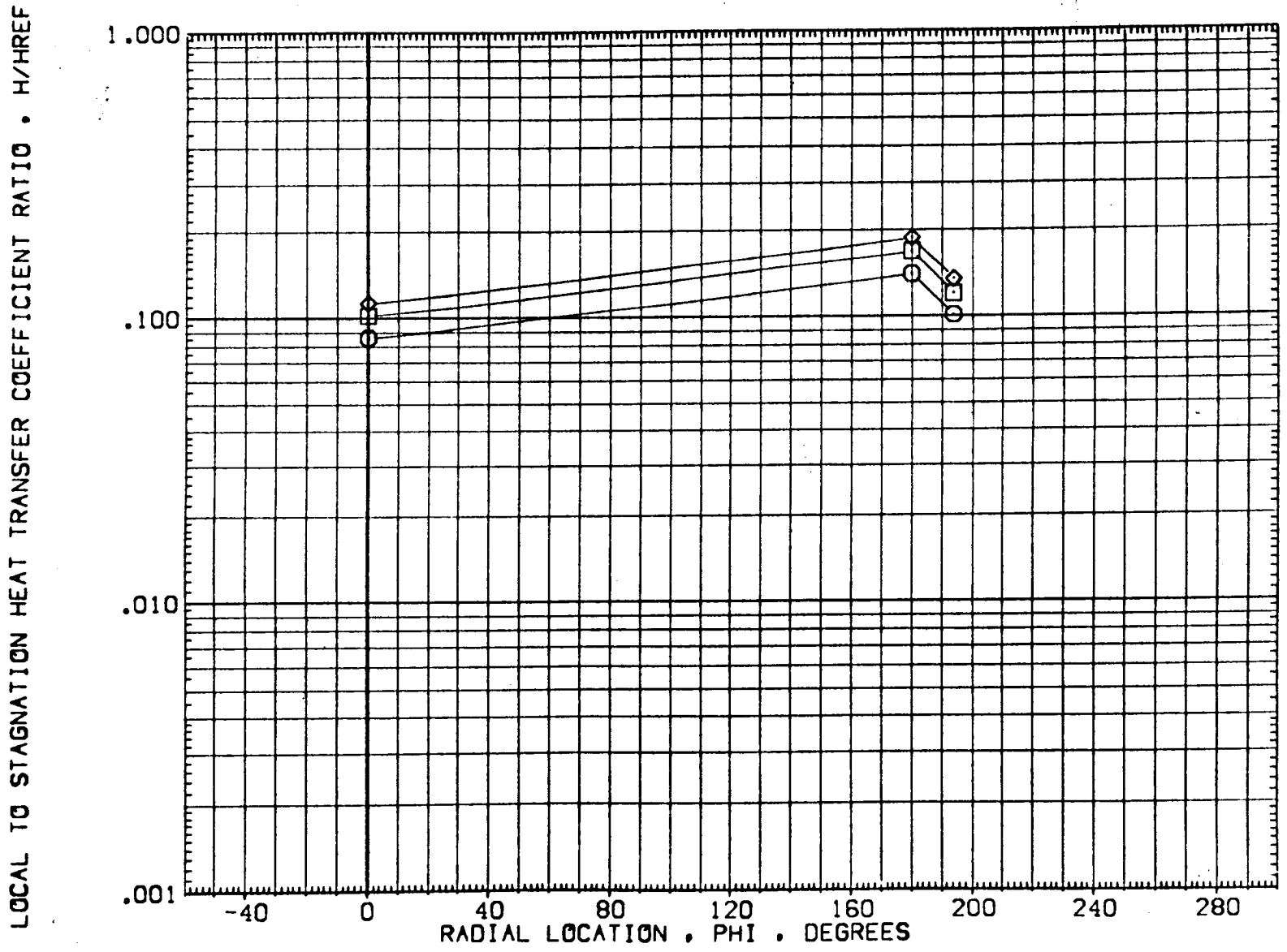


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	◁	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

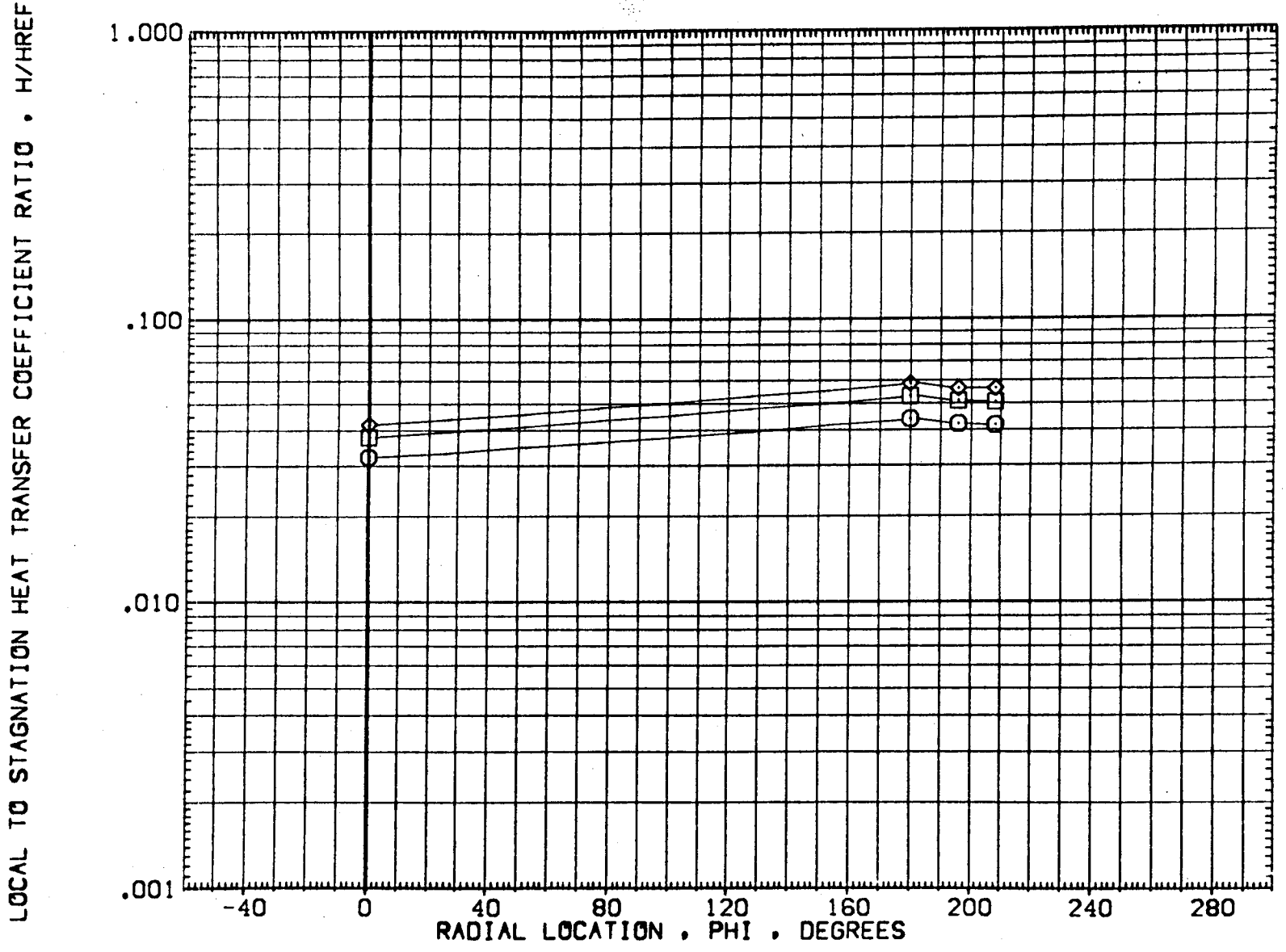


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!TO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE!TO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE!TO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

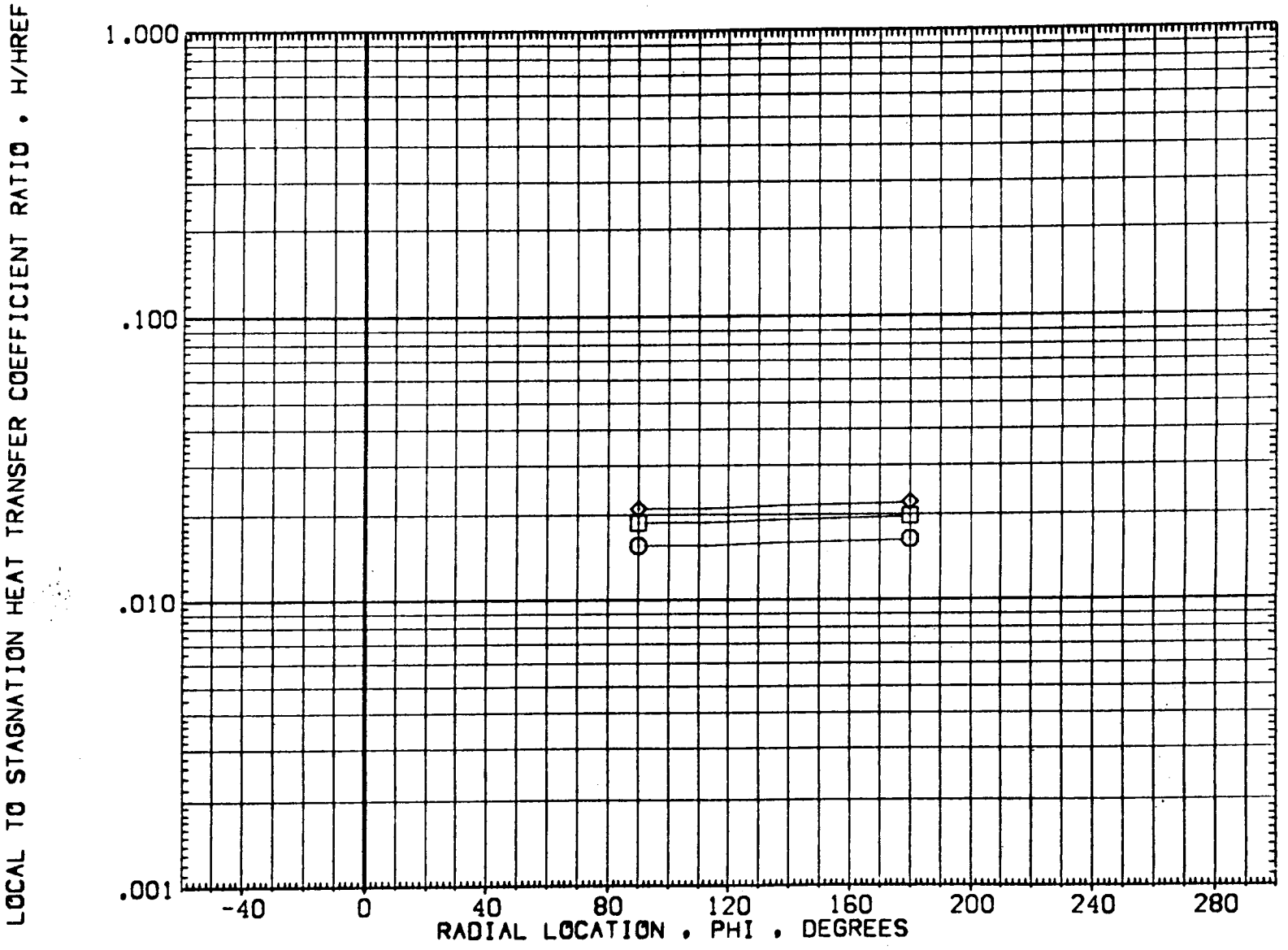


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	1.500	.850

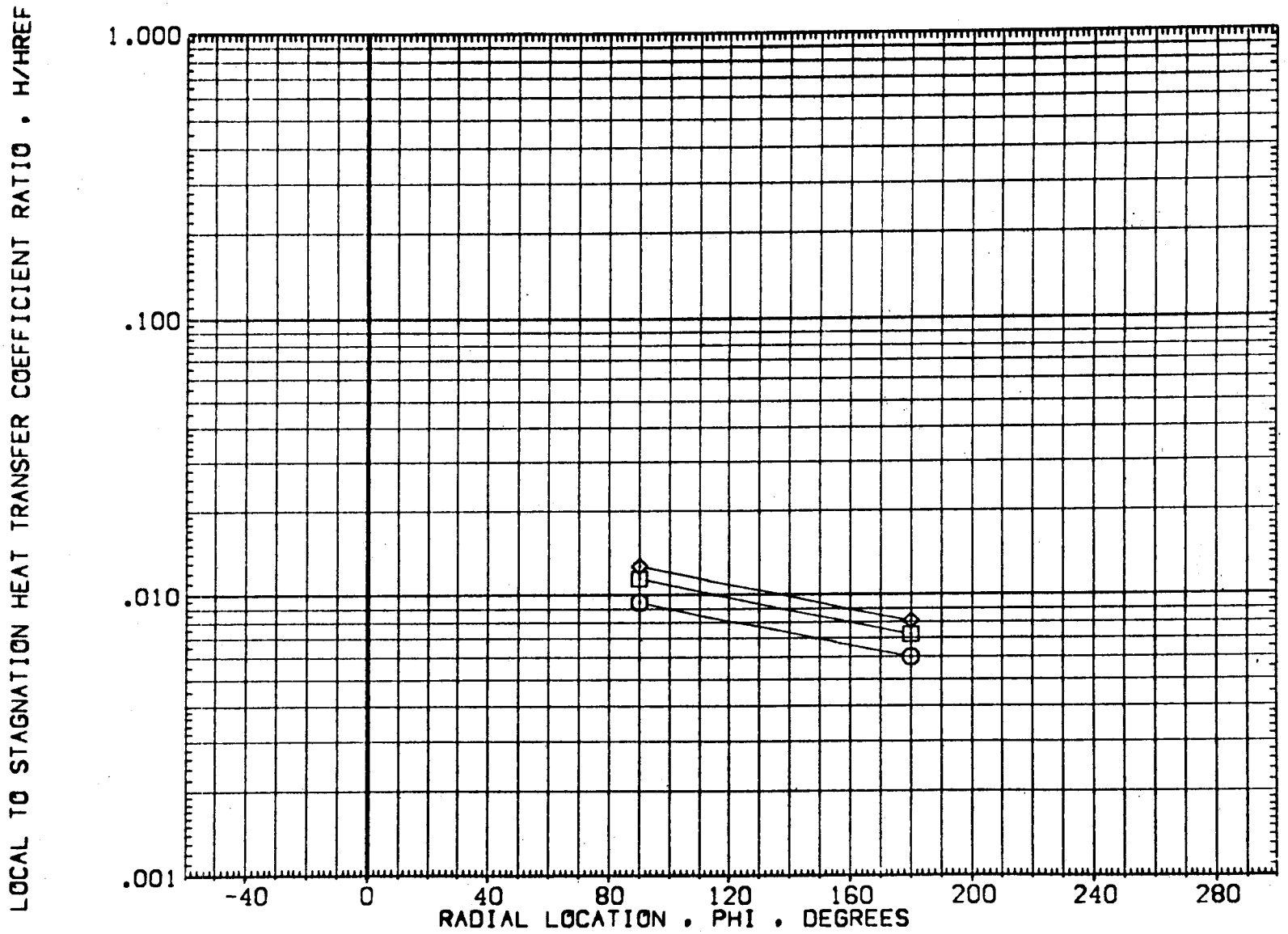


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|TOI)	□	ARC 3.5-178 |H3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|TOI)	◇□	ARC 3.5-178 |H3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE|TOI)	◇	ARC 3.5-178 |H3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

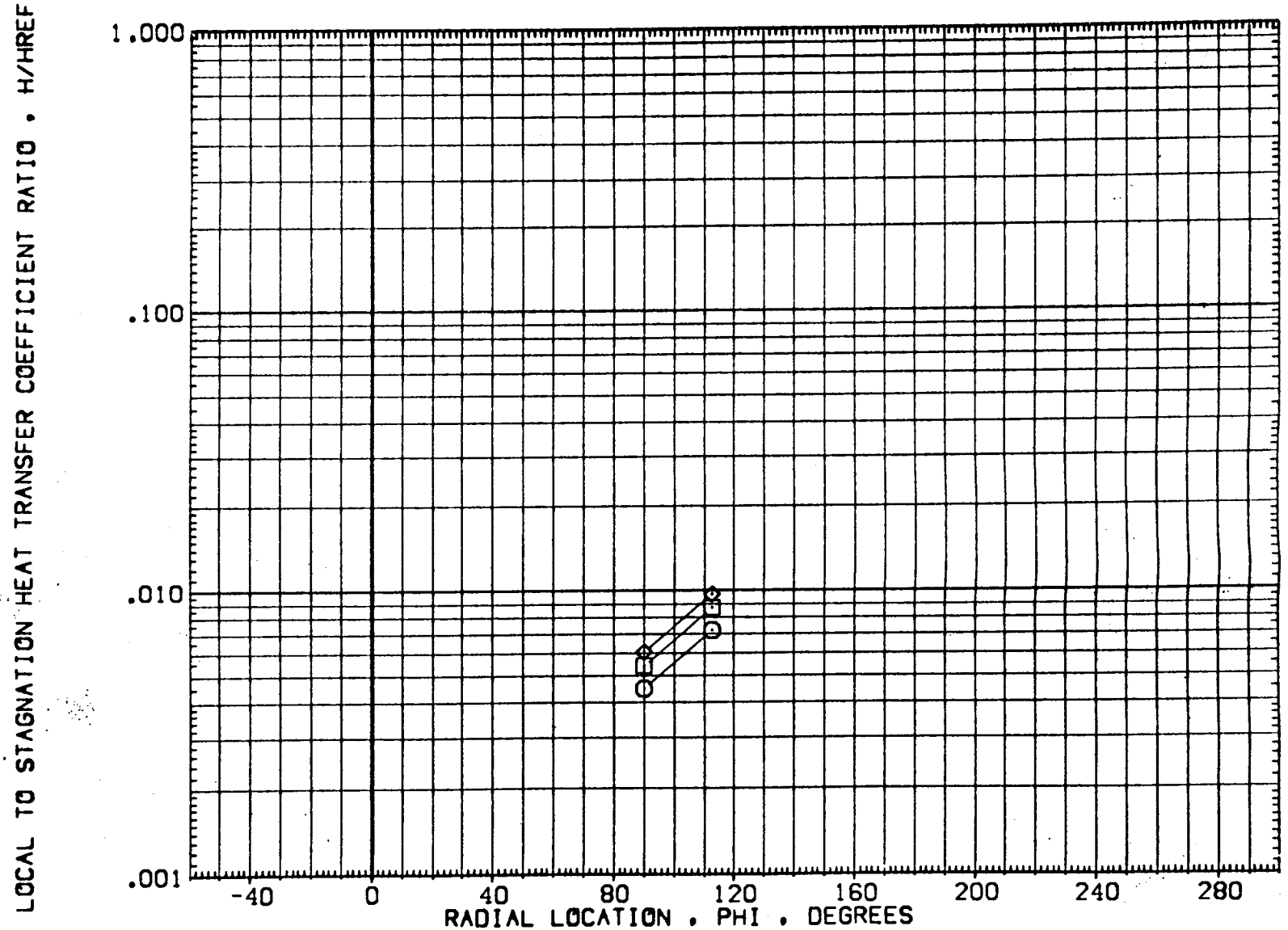


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

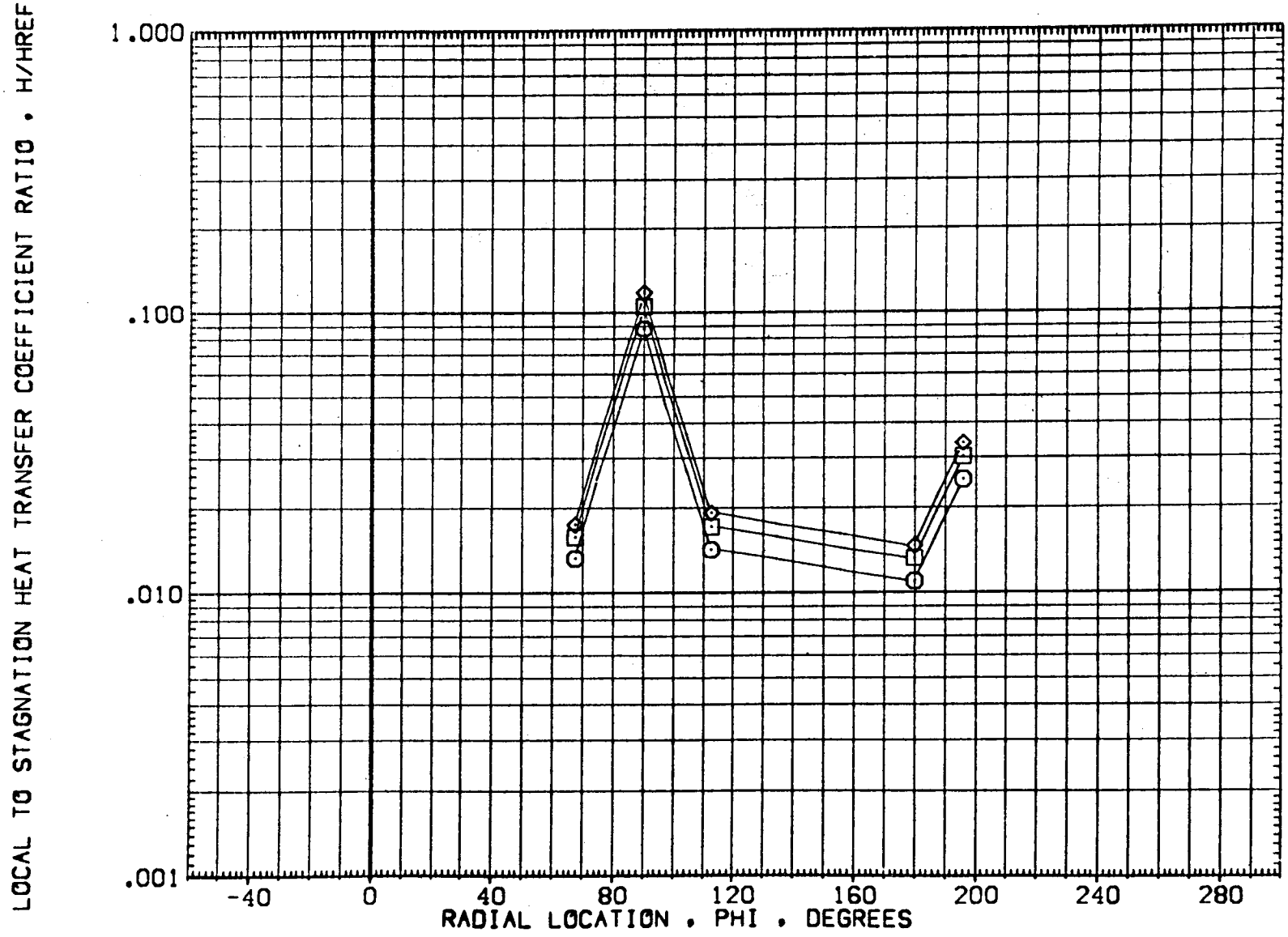


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

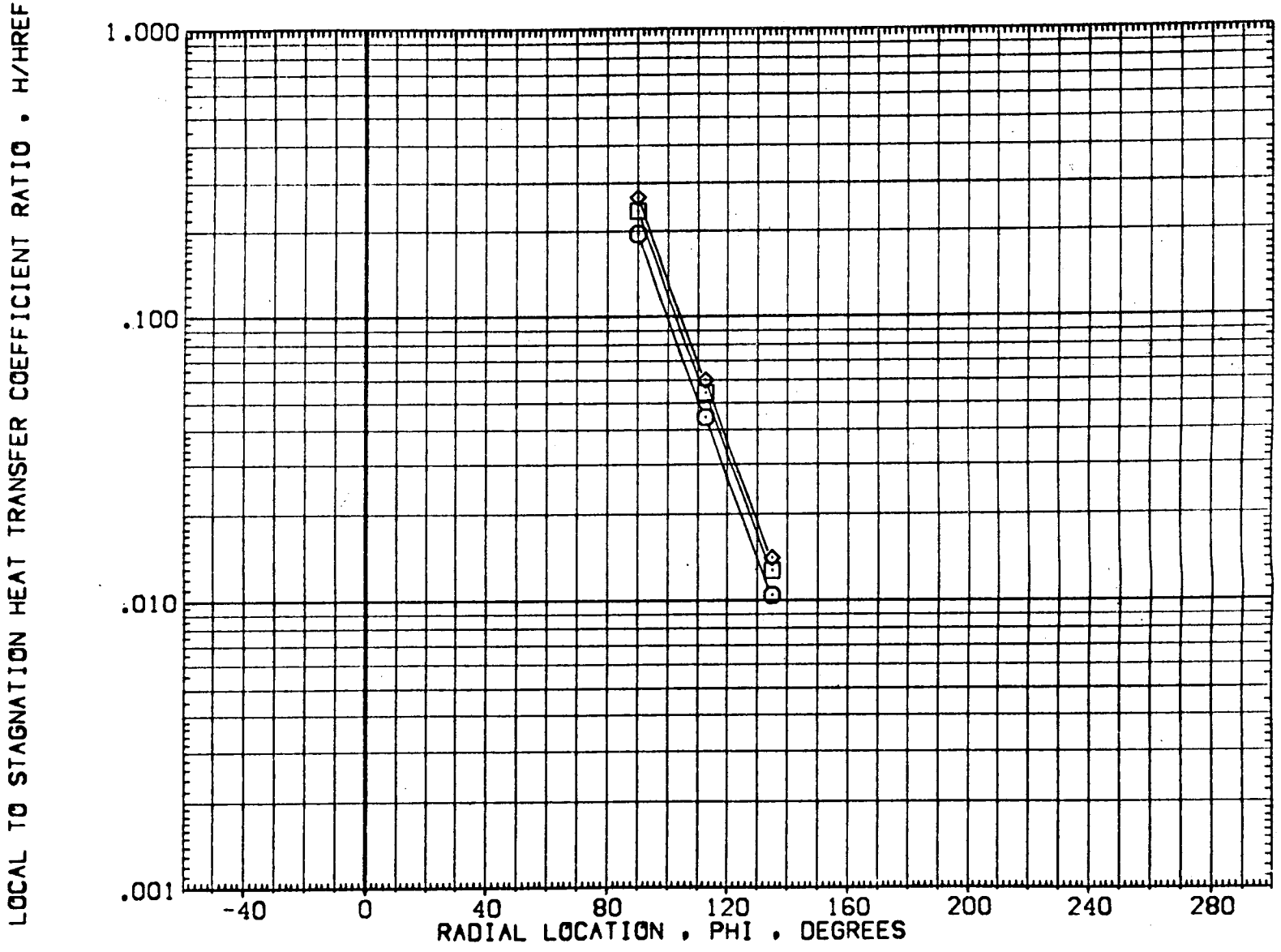


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|TOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|TOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE|TOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

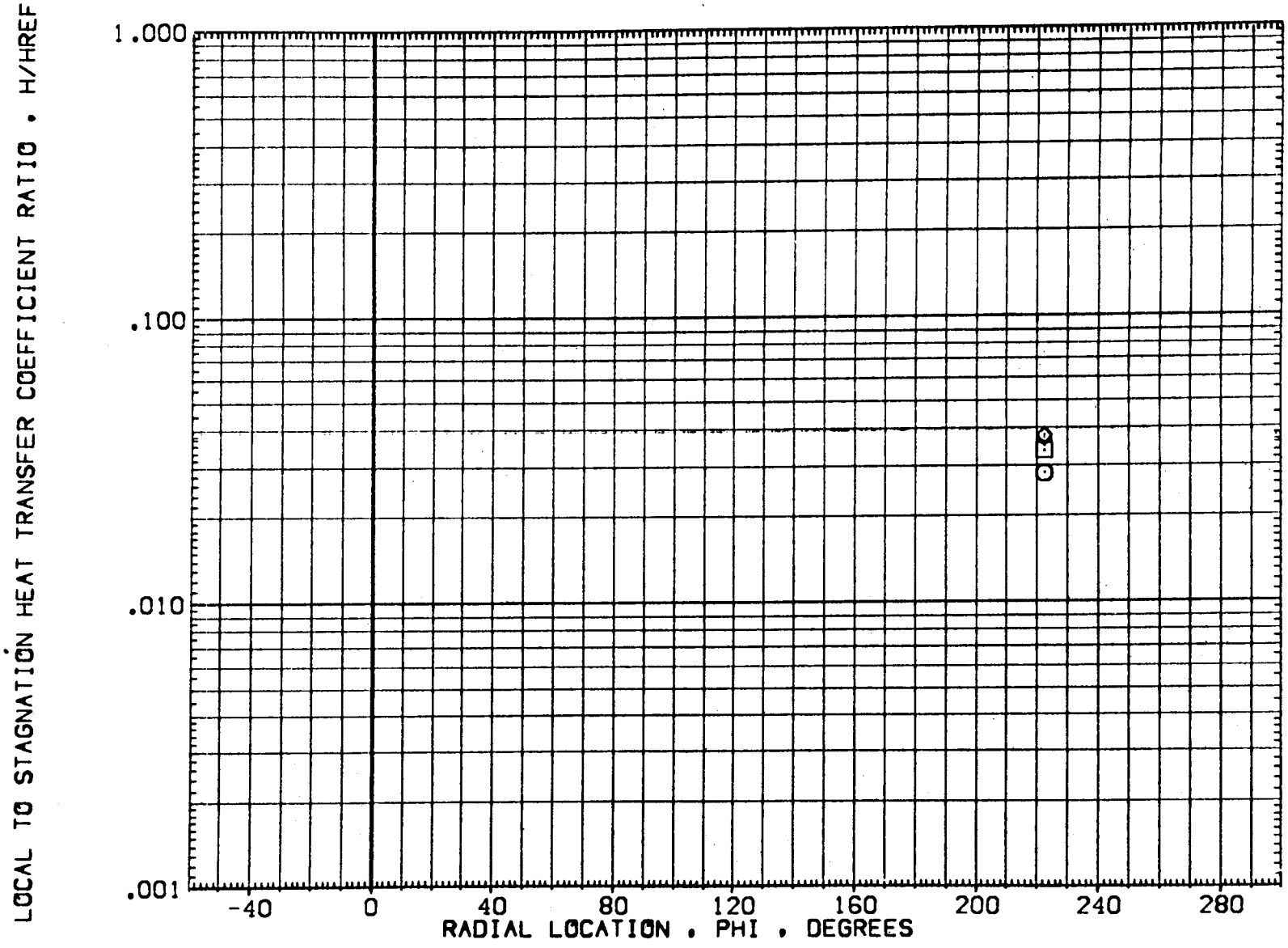


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	△	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

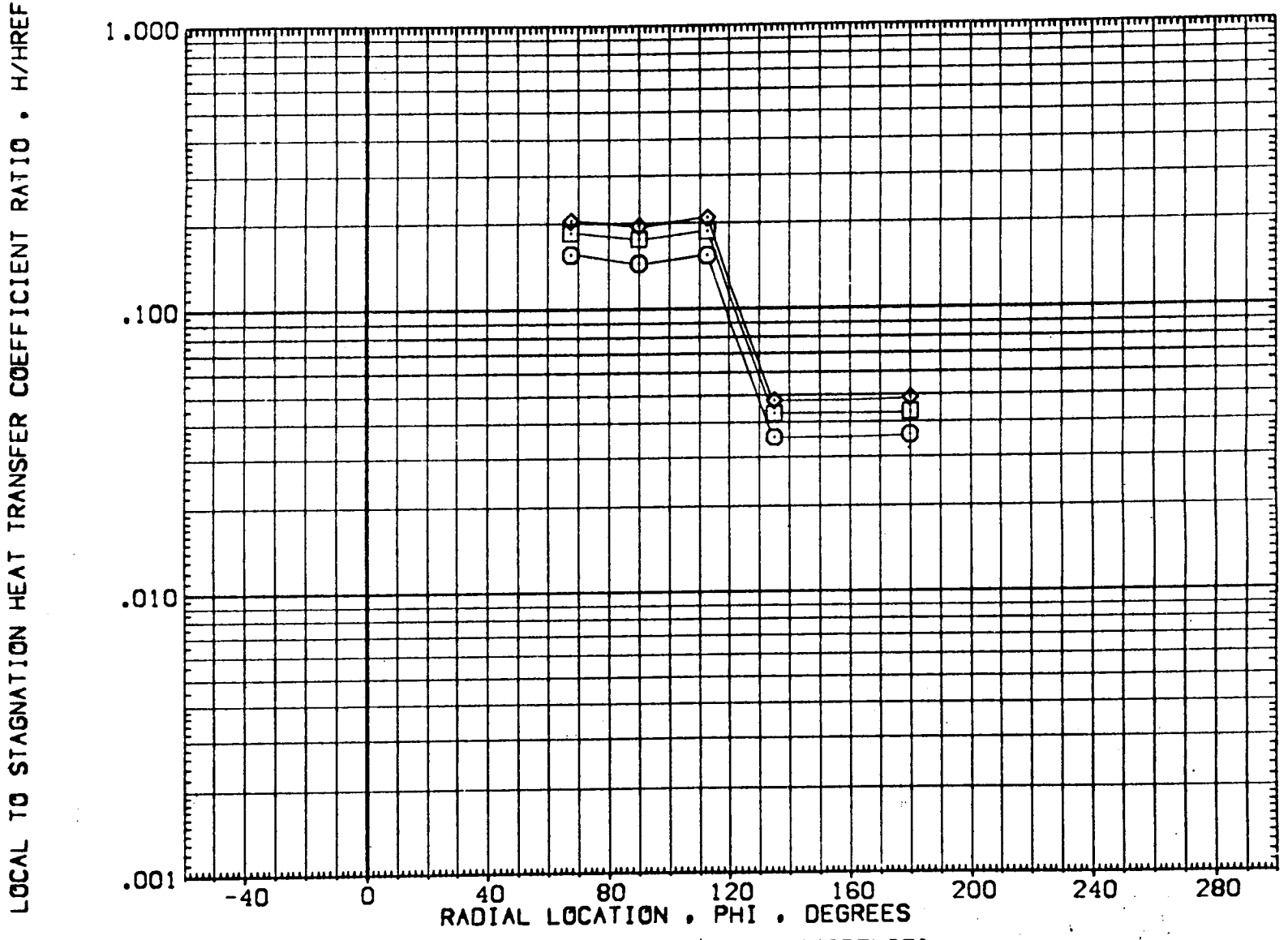


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	◁	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

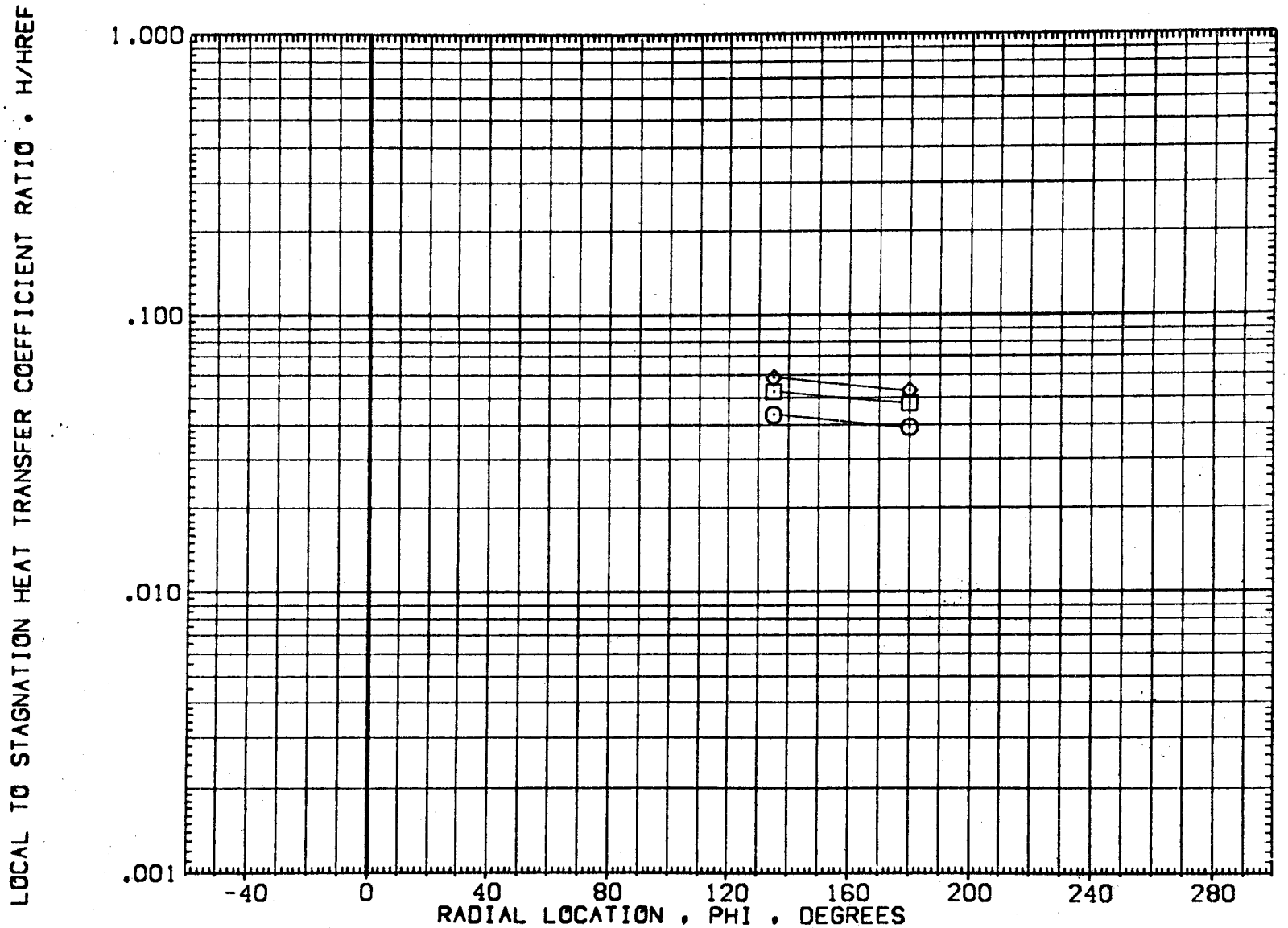


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

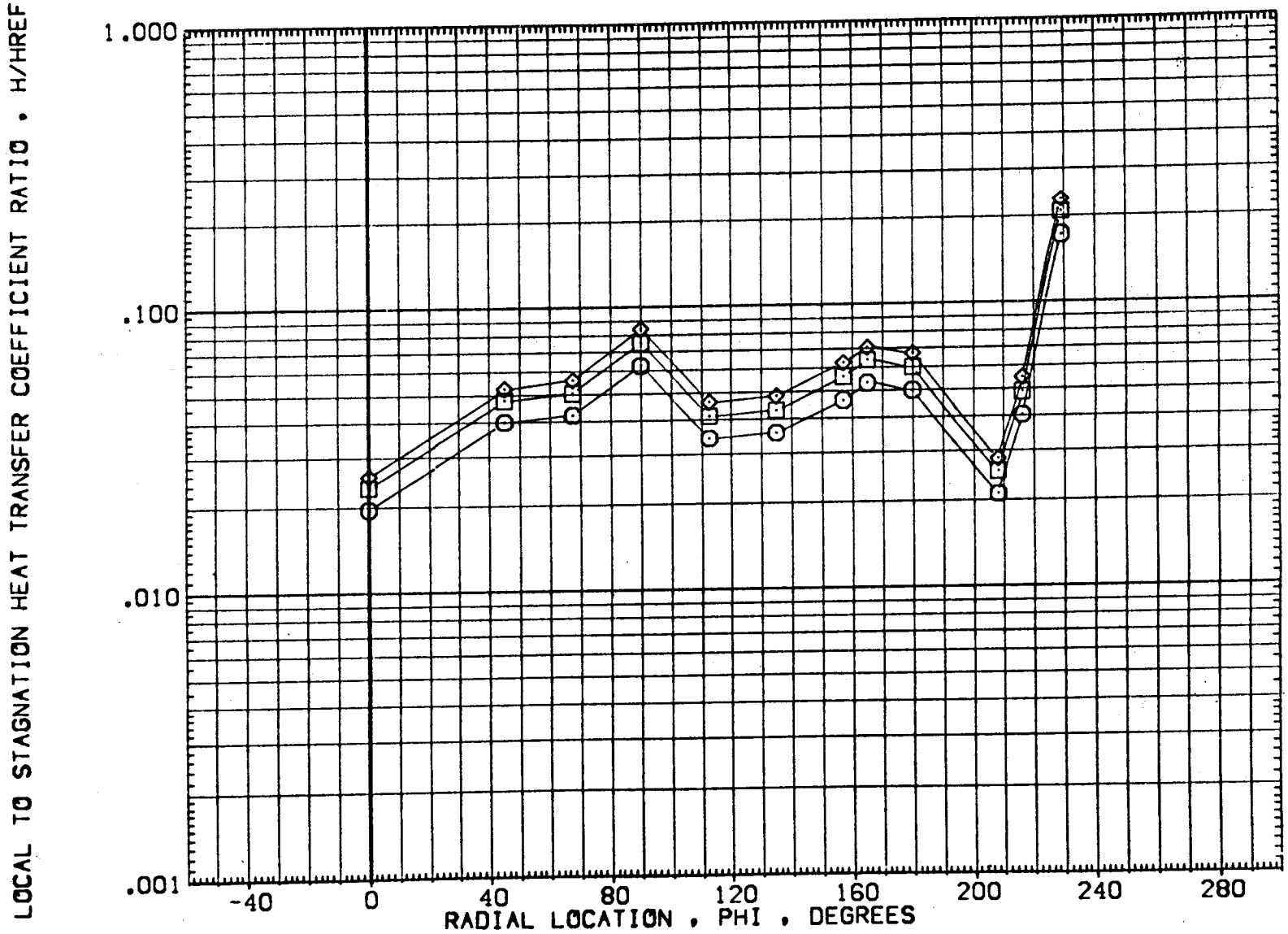


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

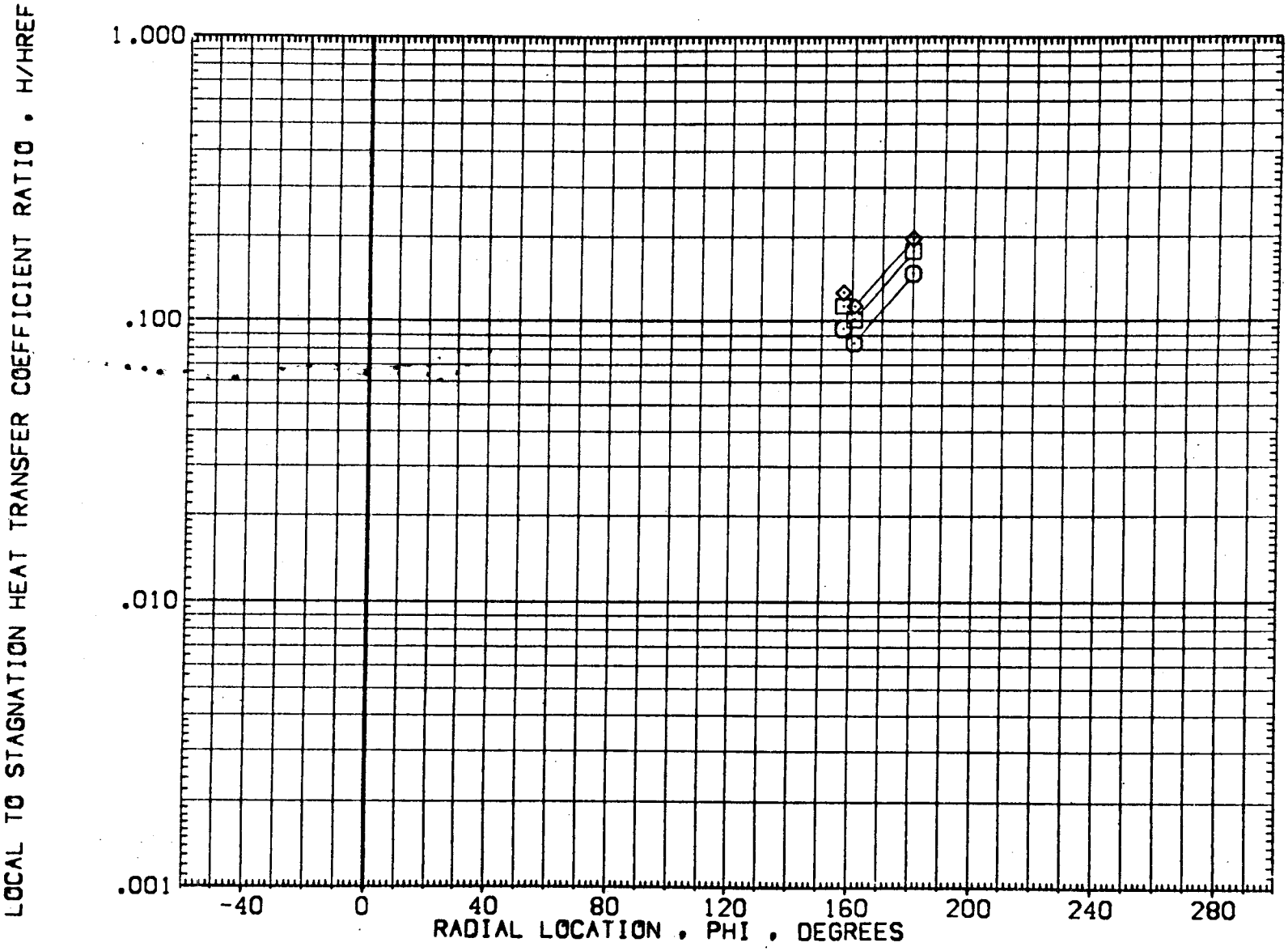


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|TOI)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|TOI)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE|TOI)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

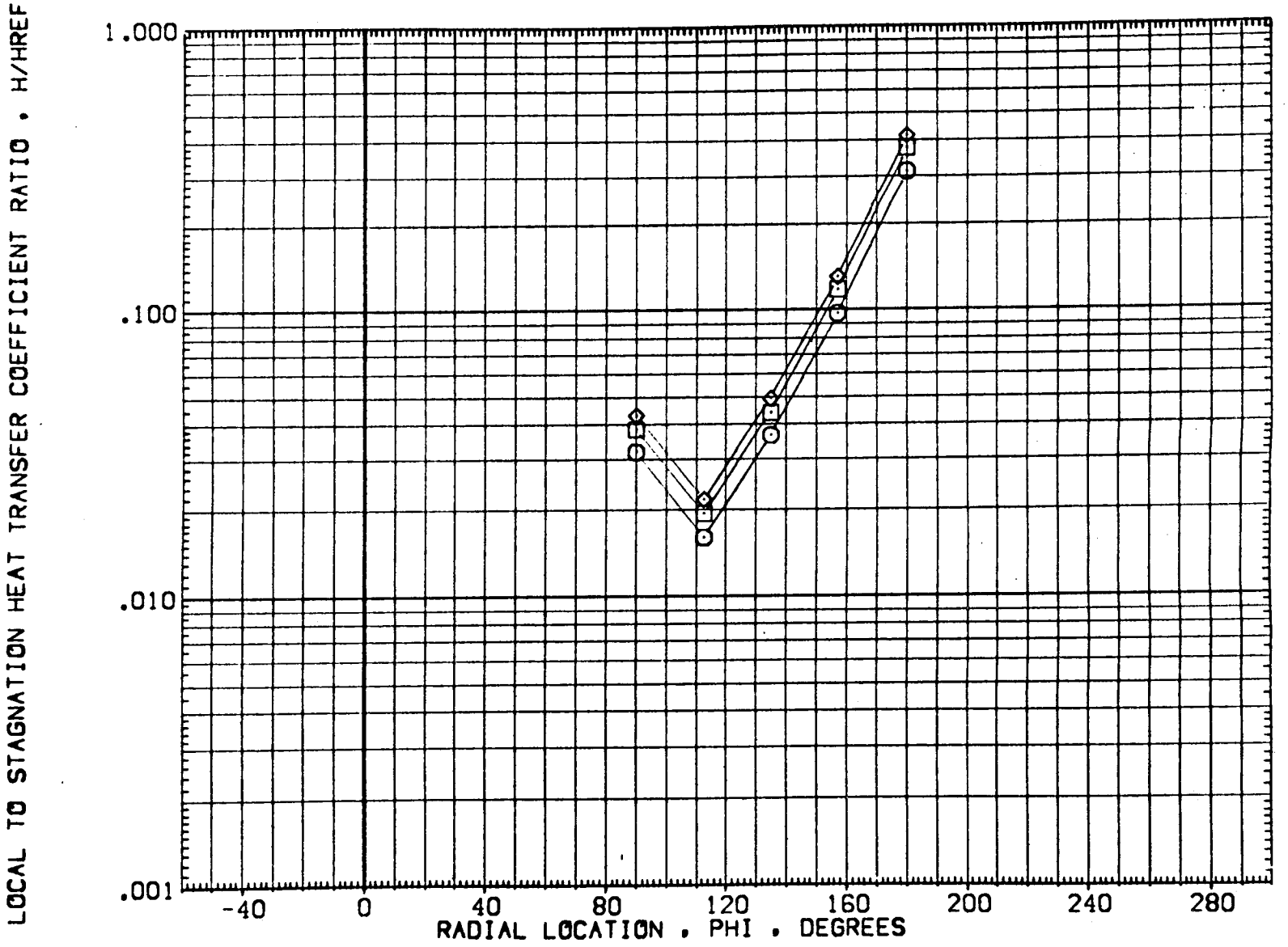


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

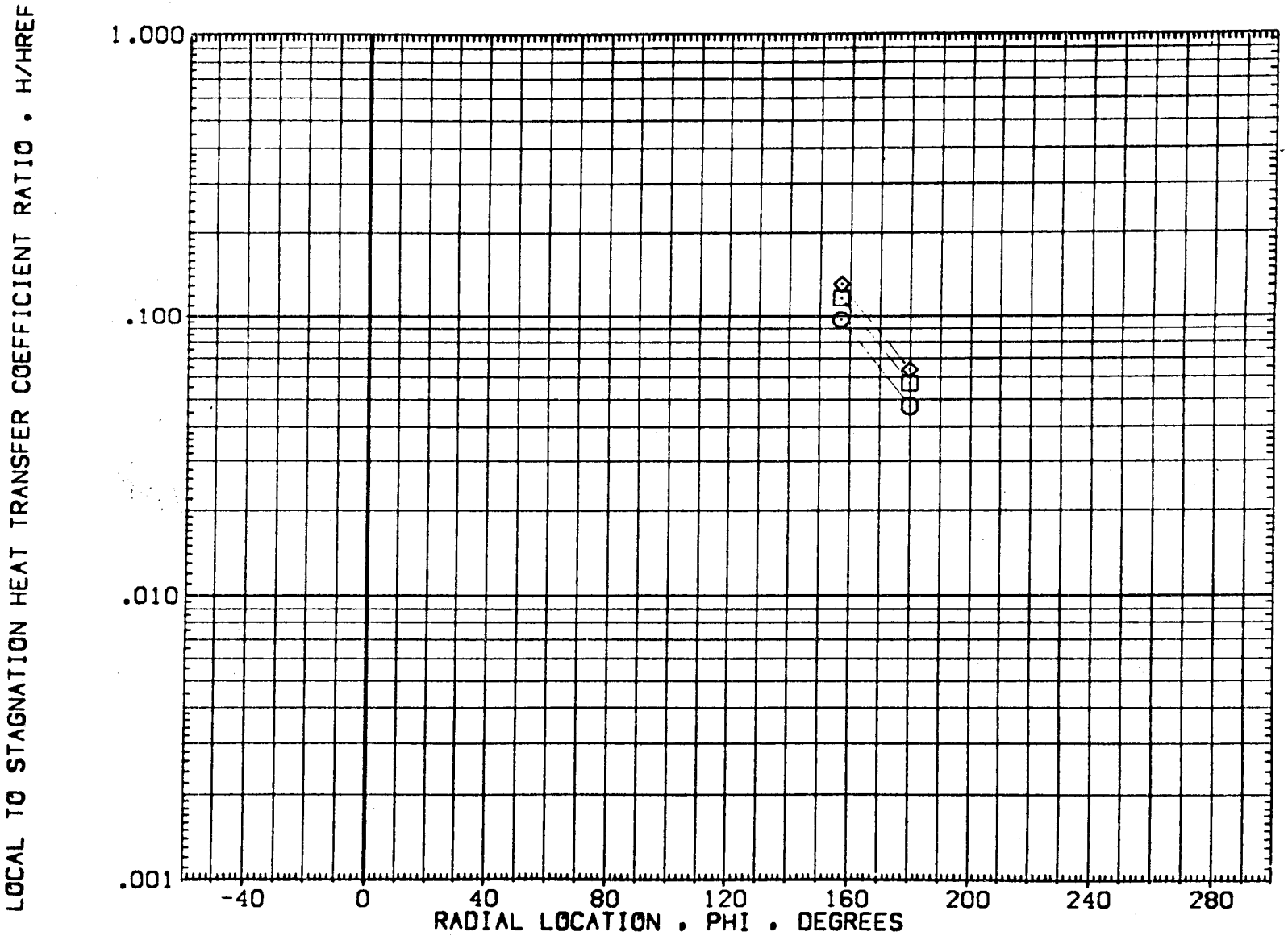


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1TO1)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1TO1)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1TO1)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

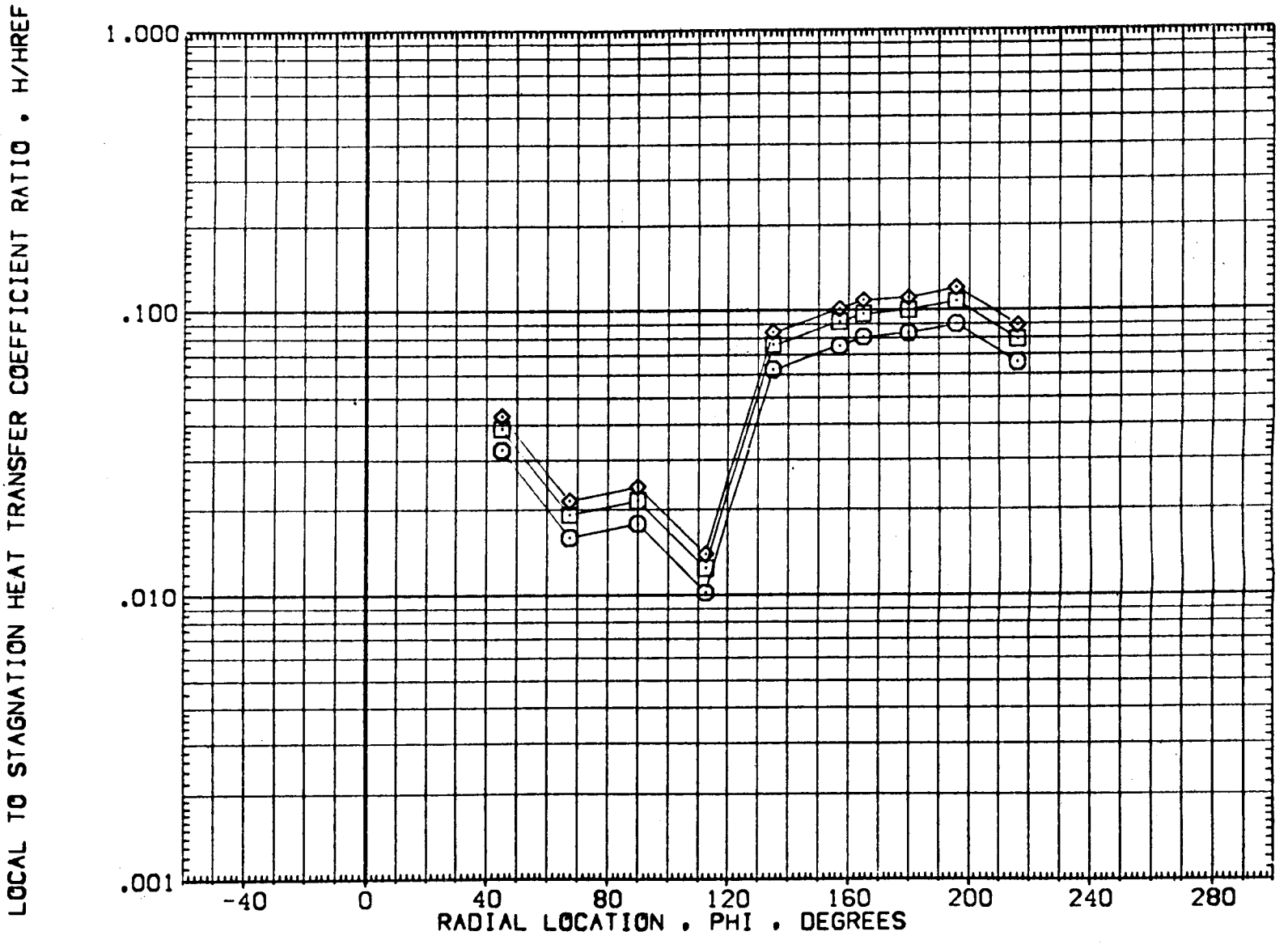


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

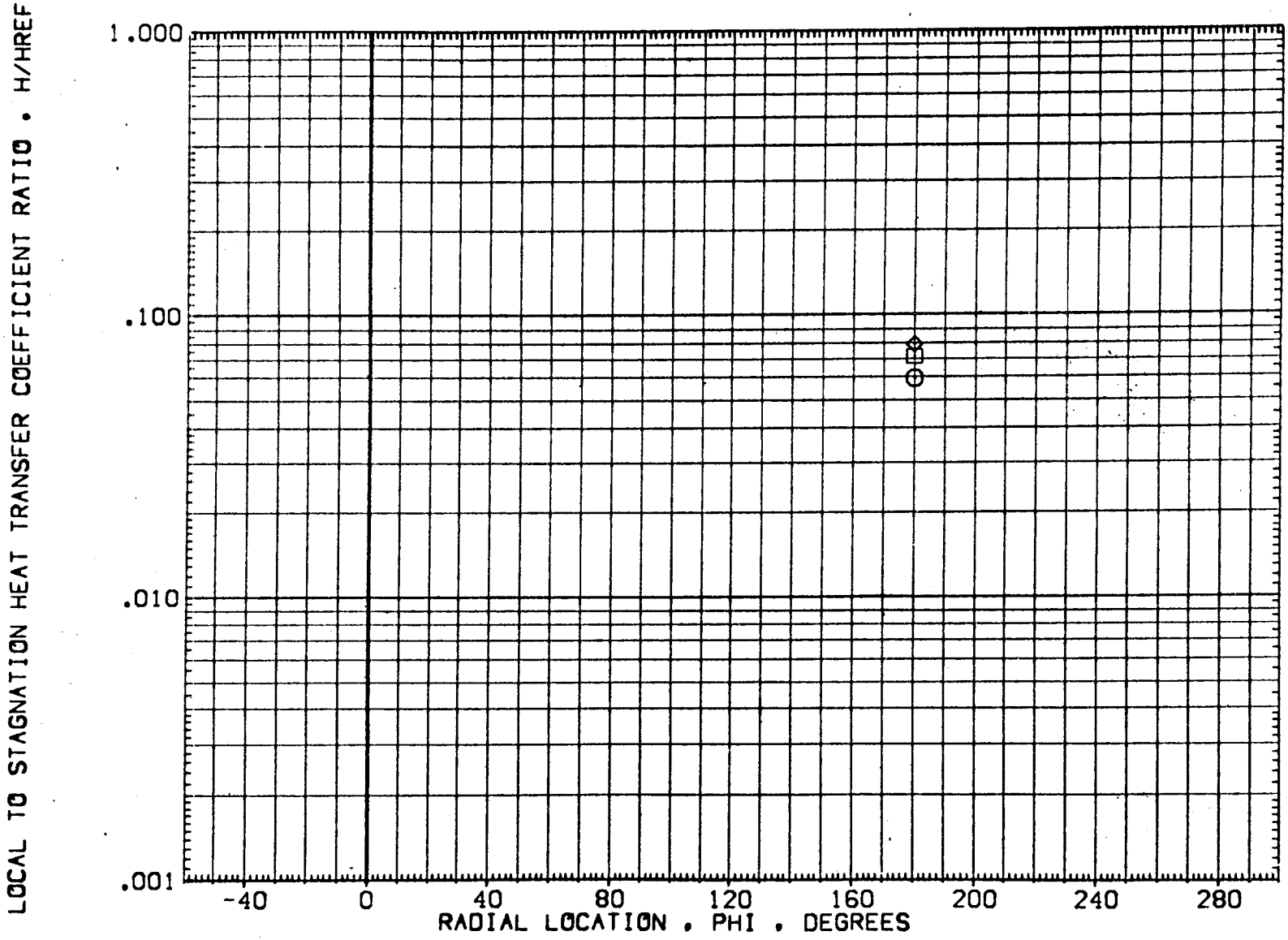


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(REITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

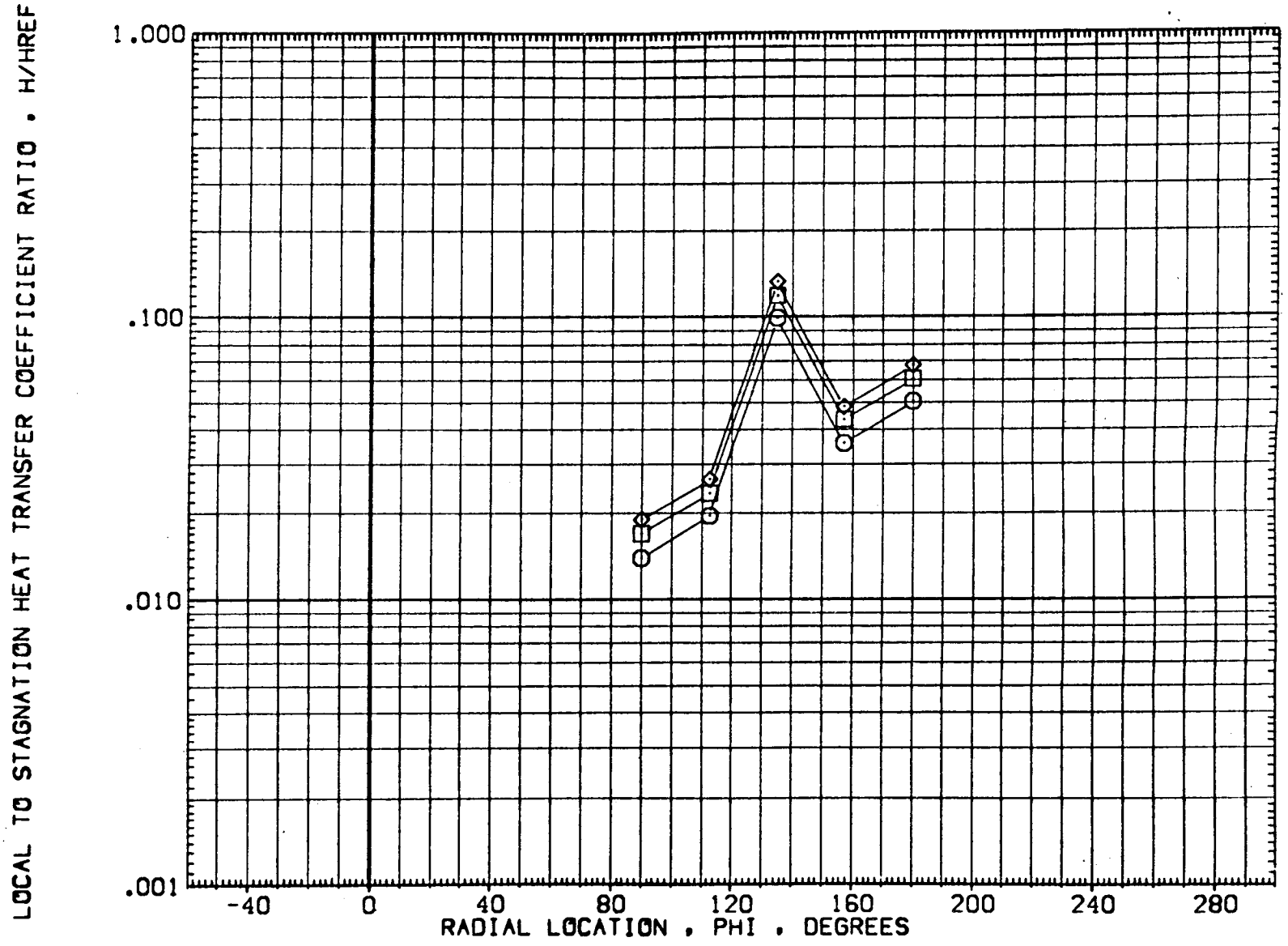


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

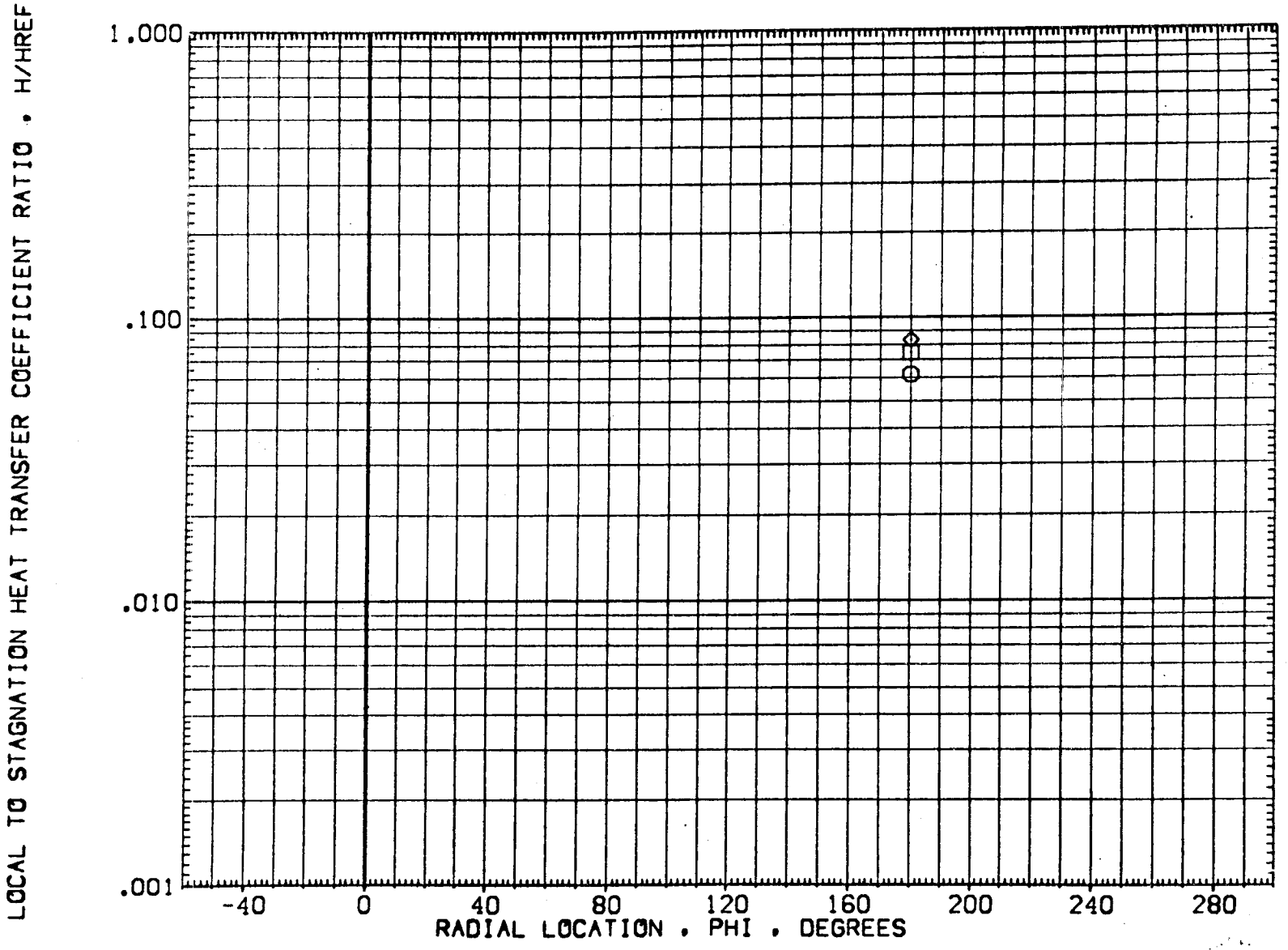


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

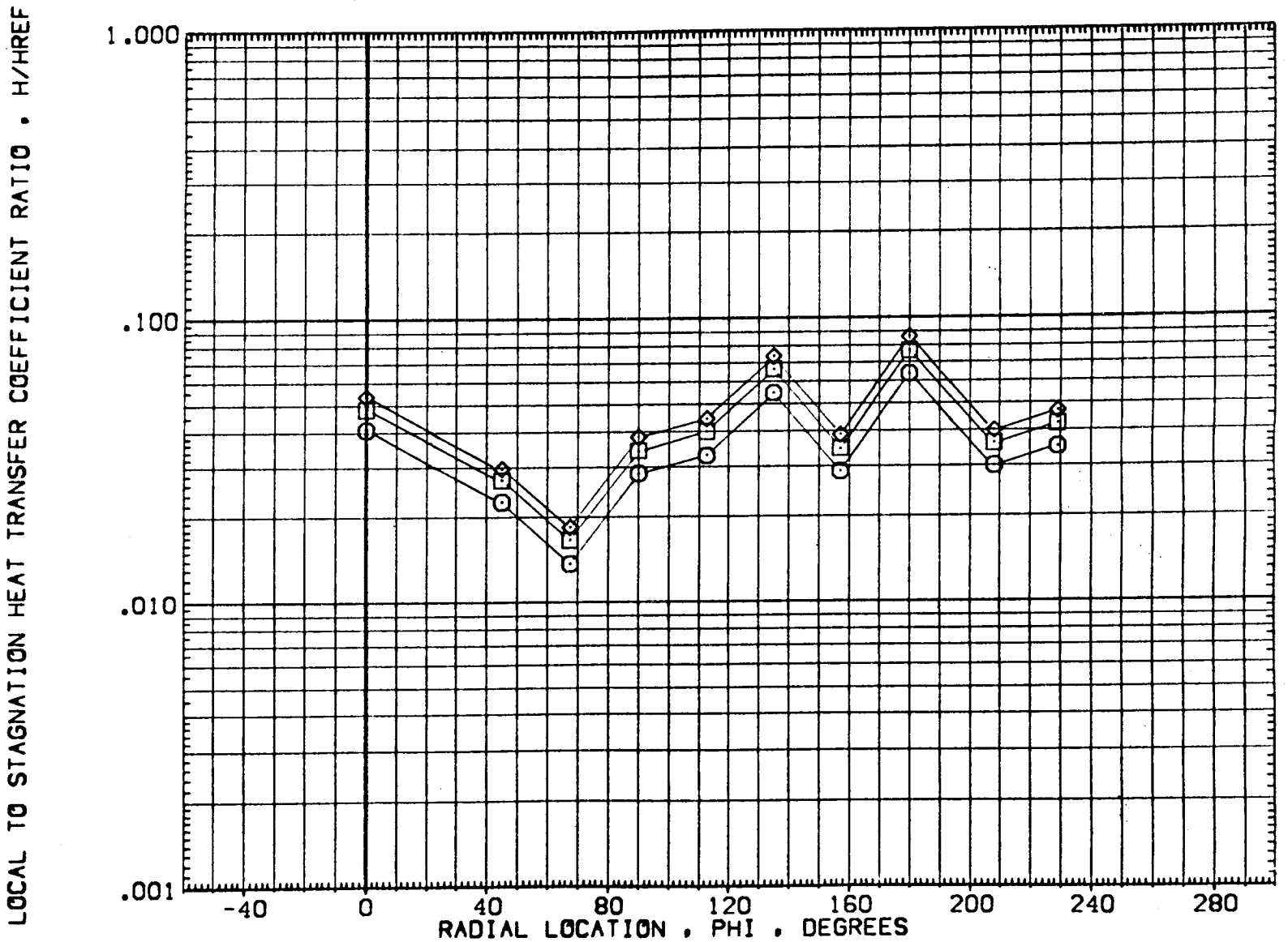


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	◁	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

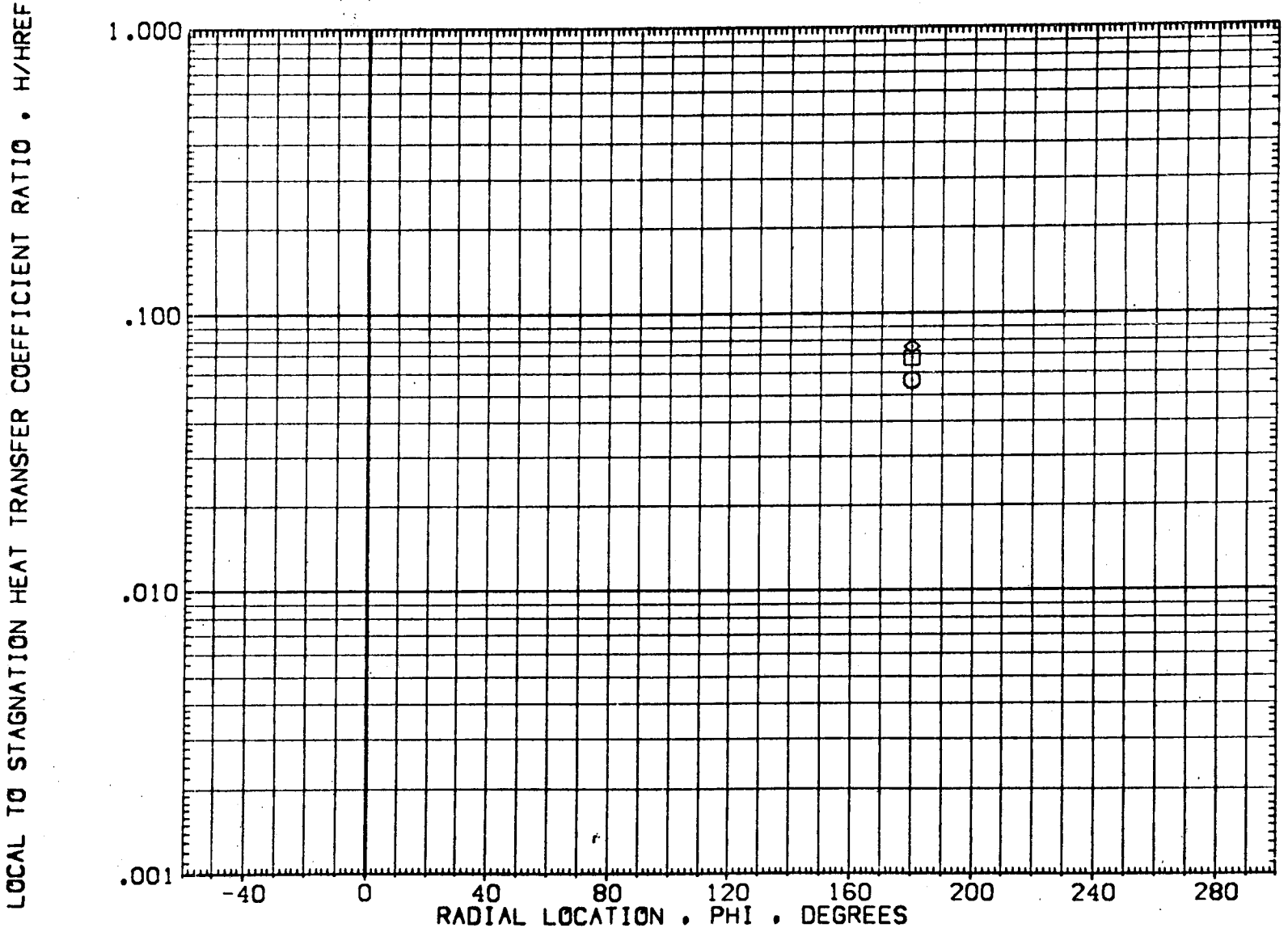


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!TO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE!TO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE!TO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

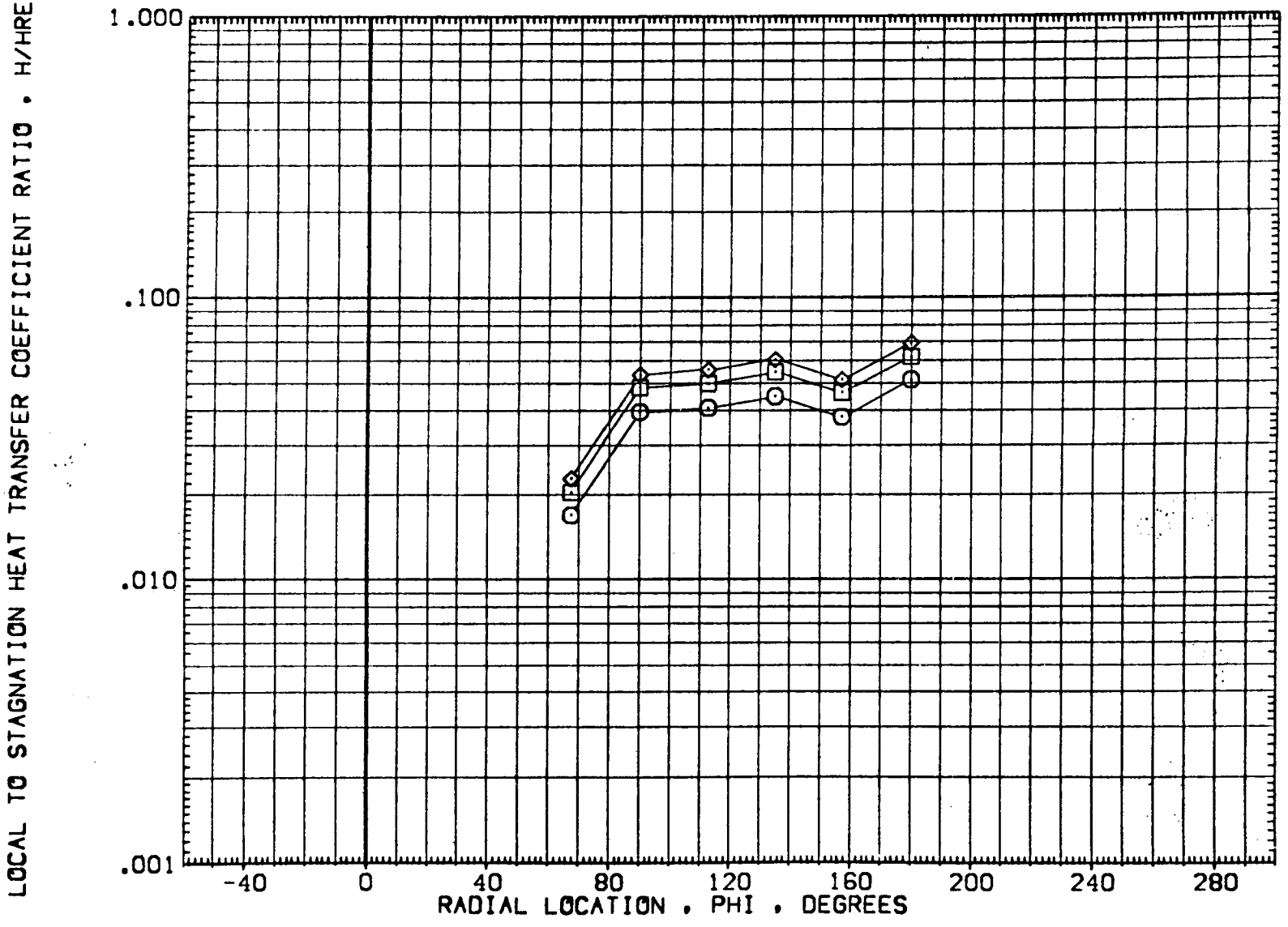


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE|TOI]	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
[AE|TOI]	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
[BE|TOI]	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

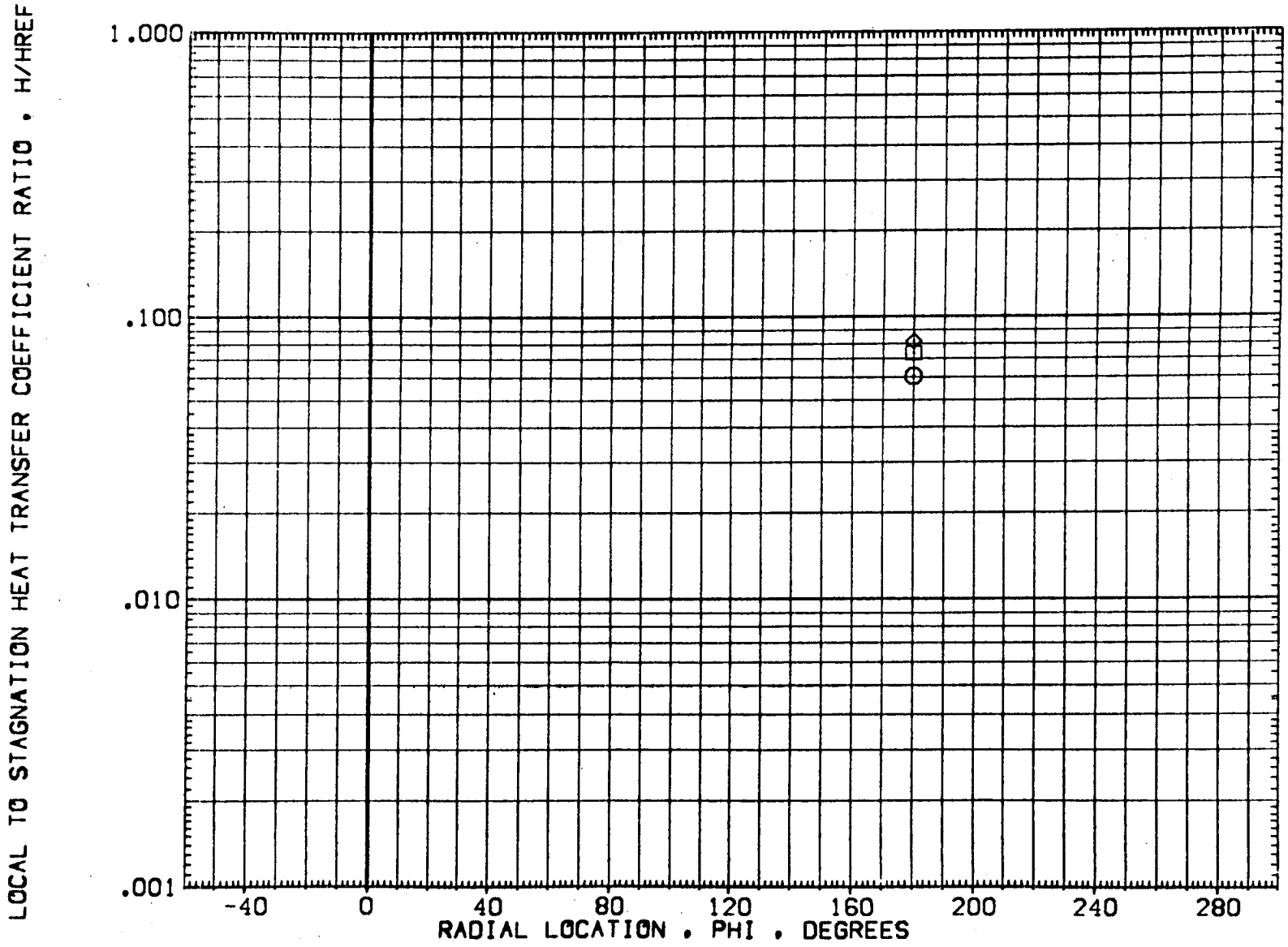


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

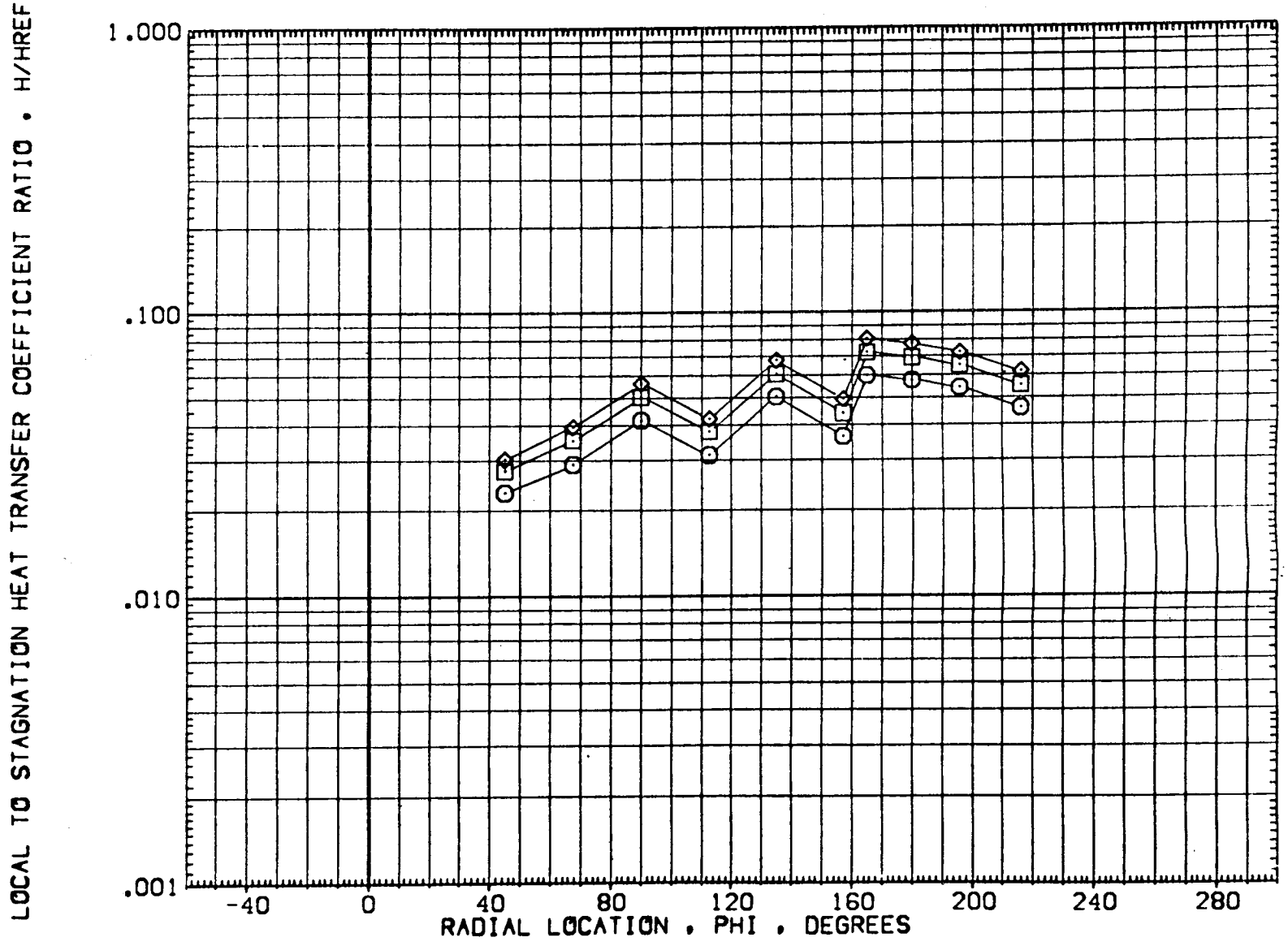


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

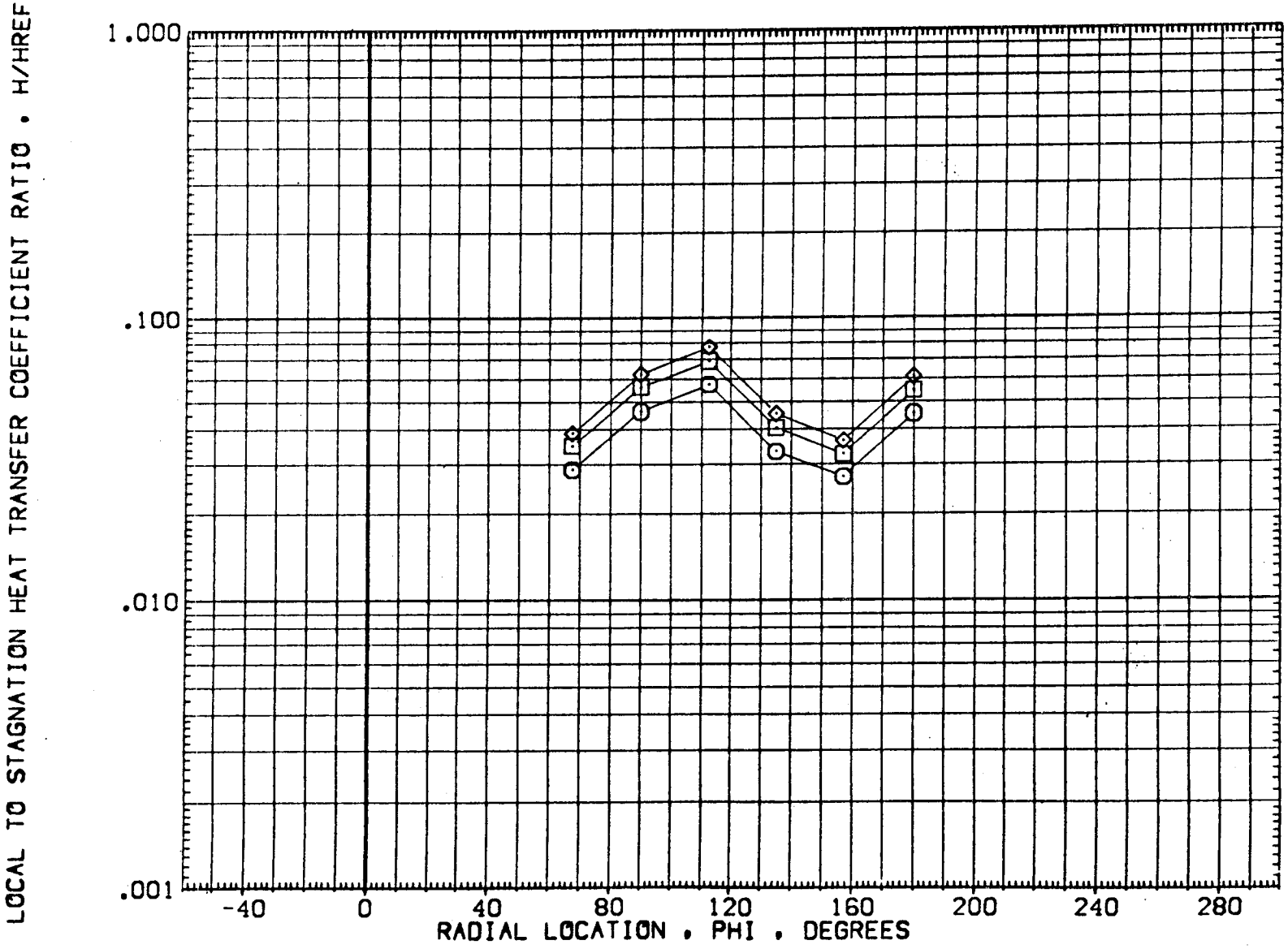


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1TO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1TO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1TO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

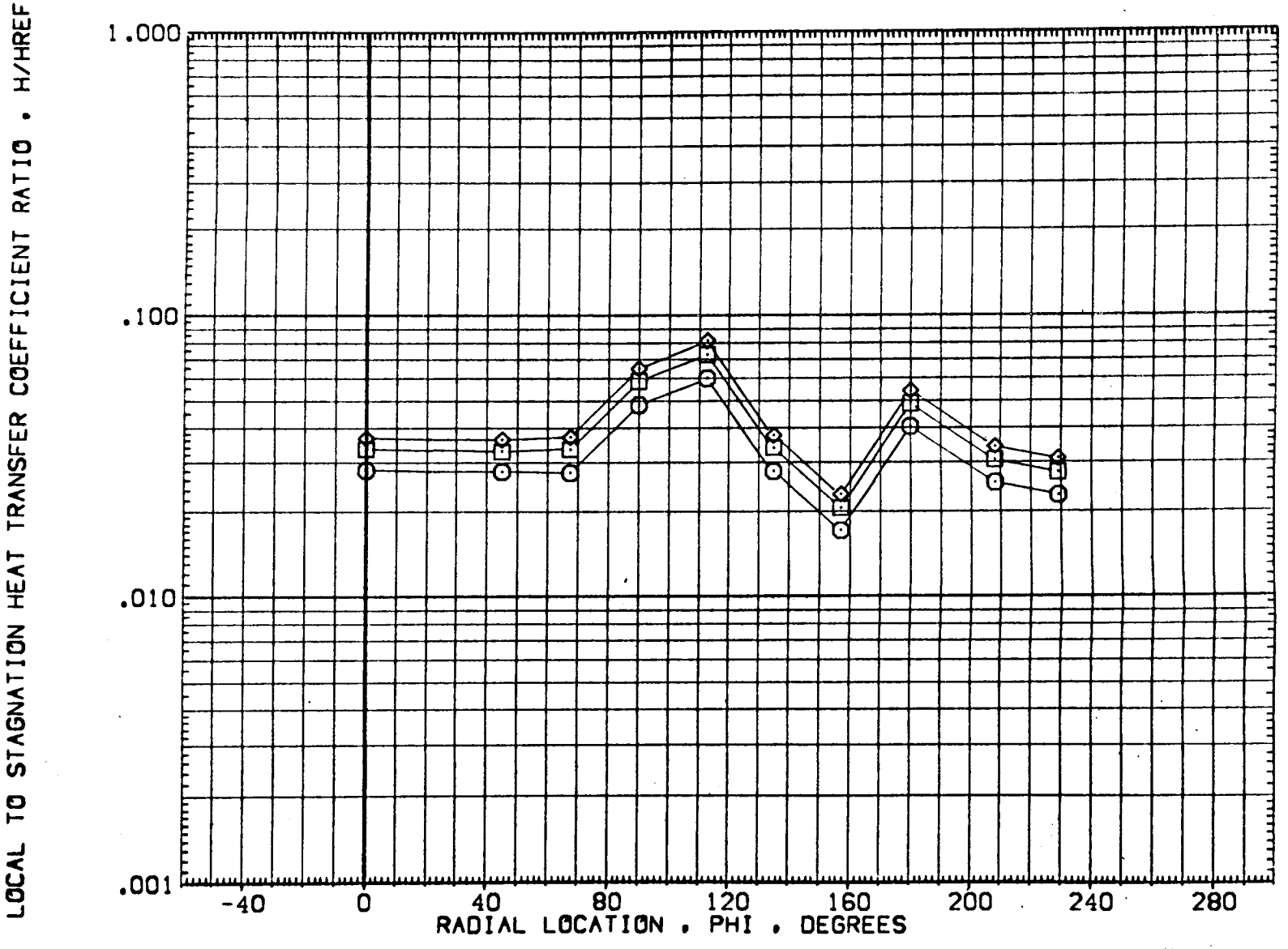


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1TO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1TO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1TO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

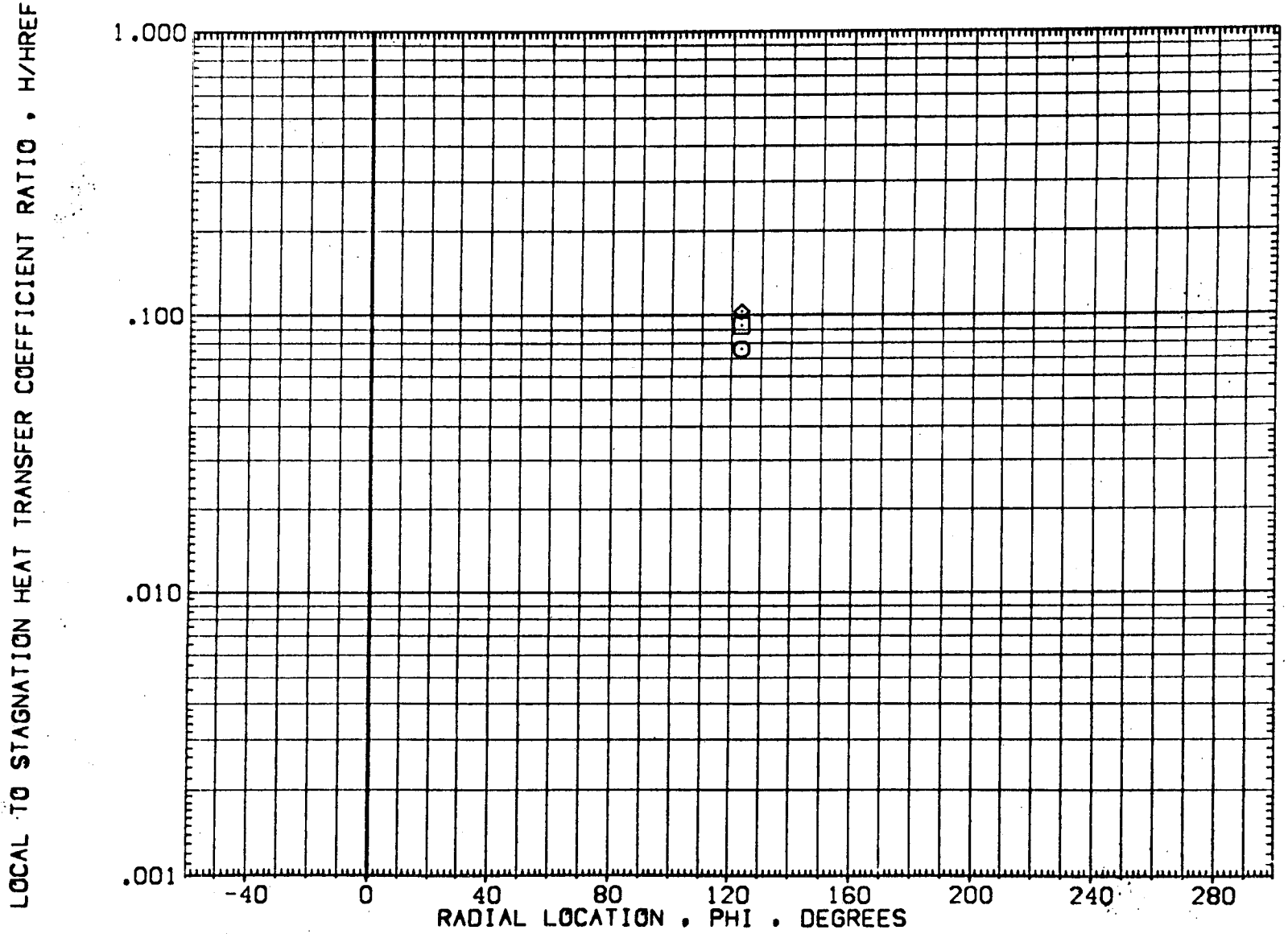


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

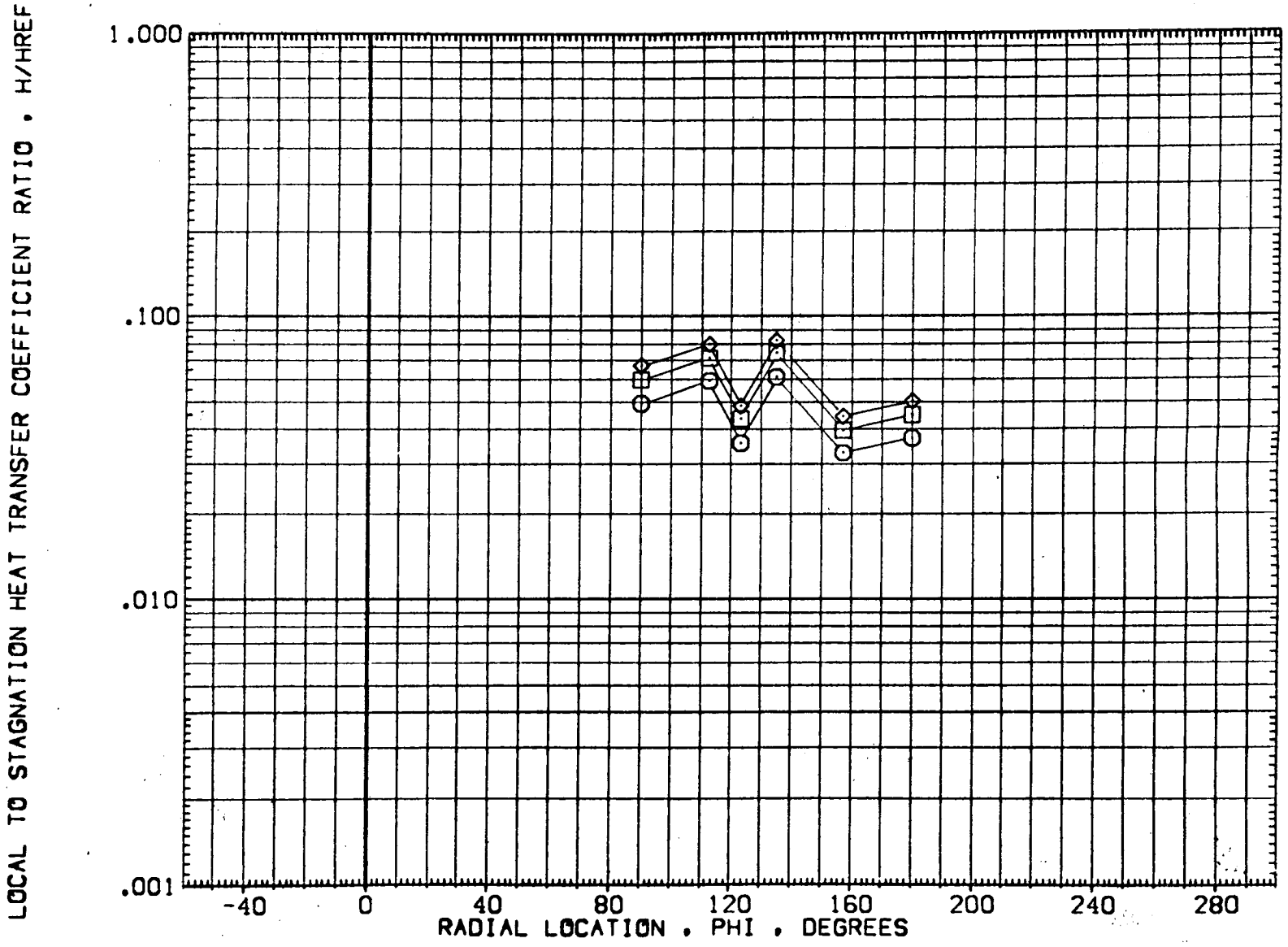


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO1)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITO1)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

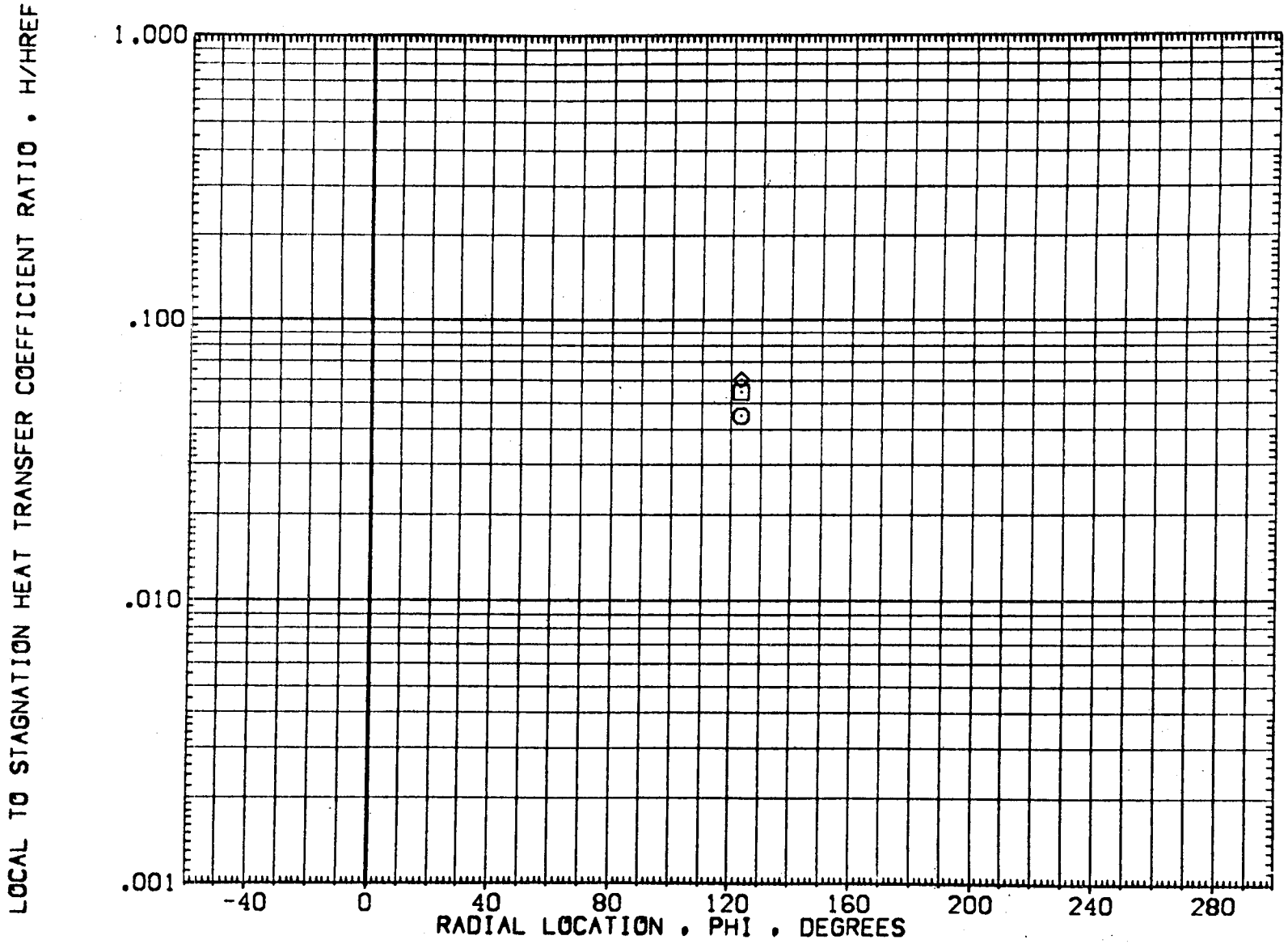


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE!TO1)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE!TO1)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE!TO1)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.850

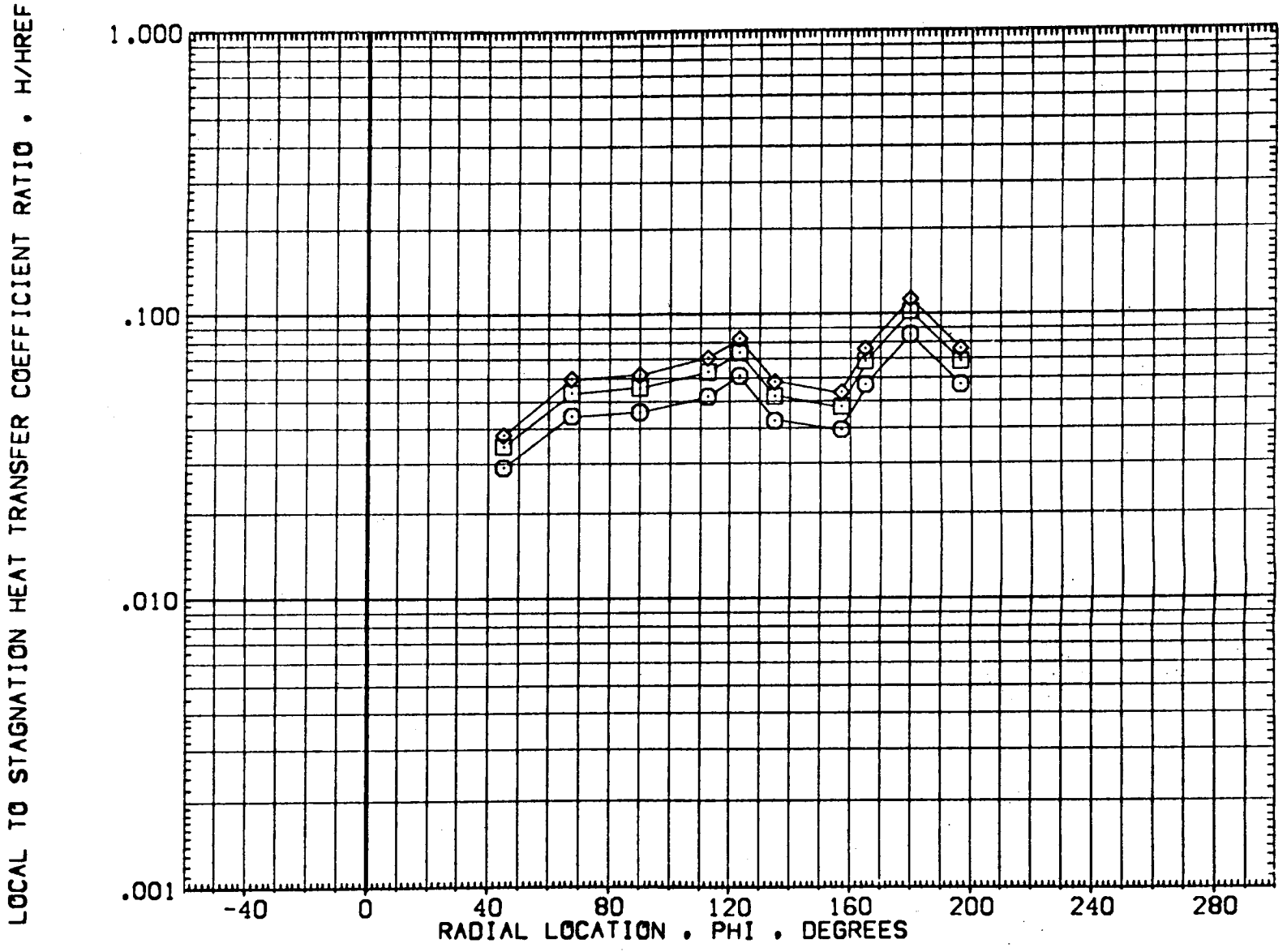


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AEITOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BEITOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

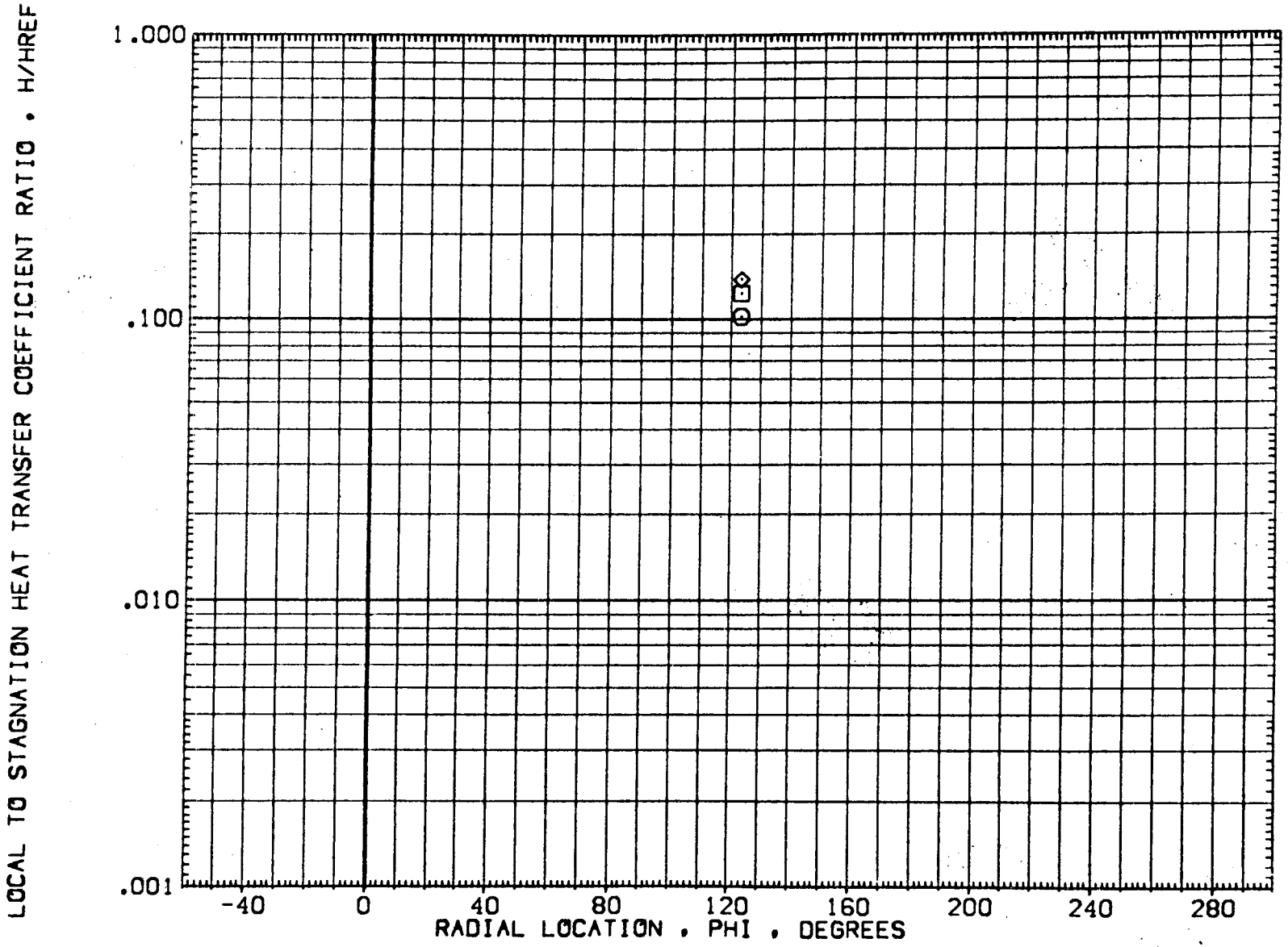


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,ITO)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE,ITO)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE,ITO)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

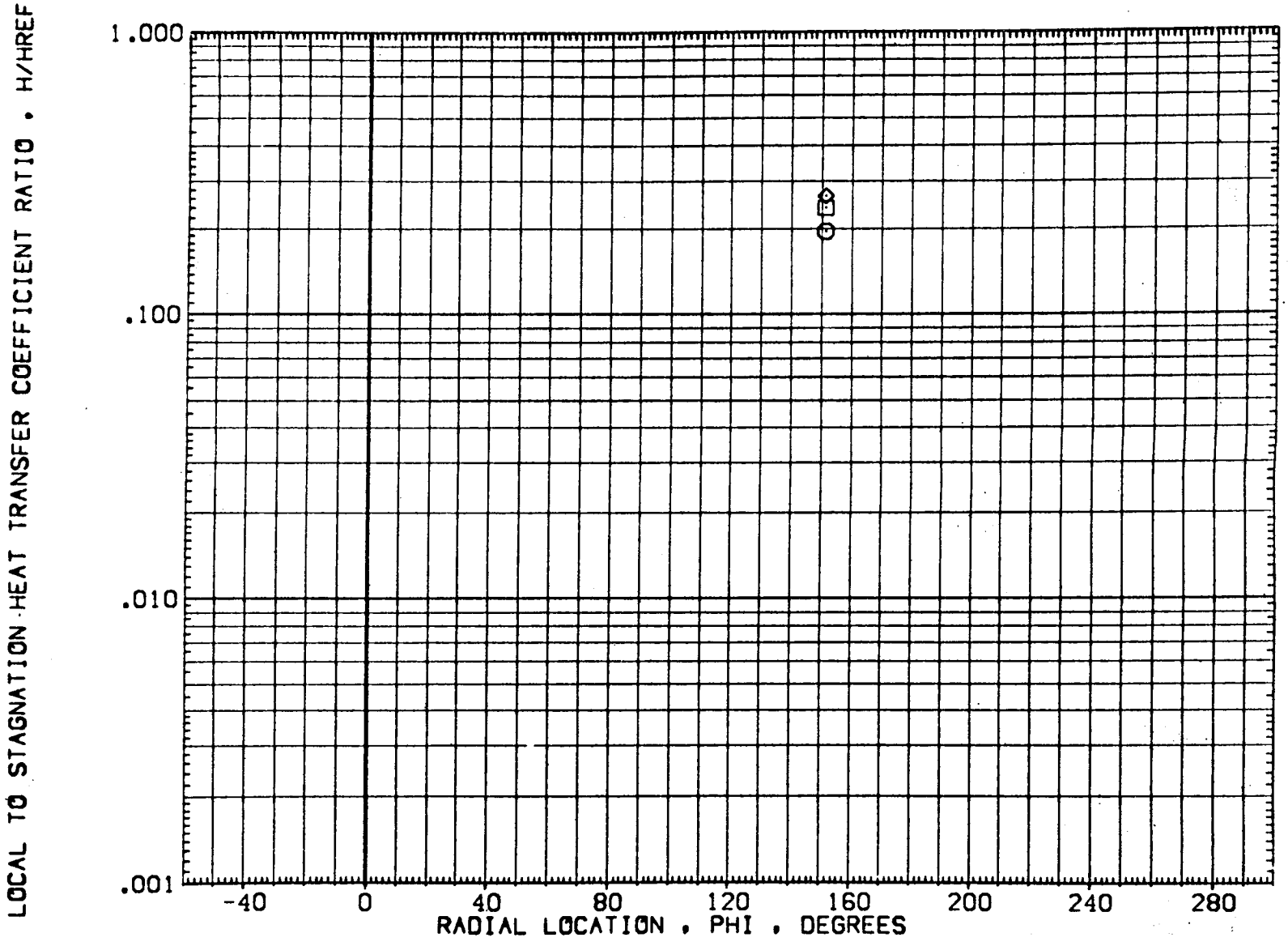


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T01)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T01)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1T01)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

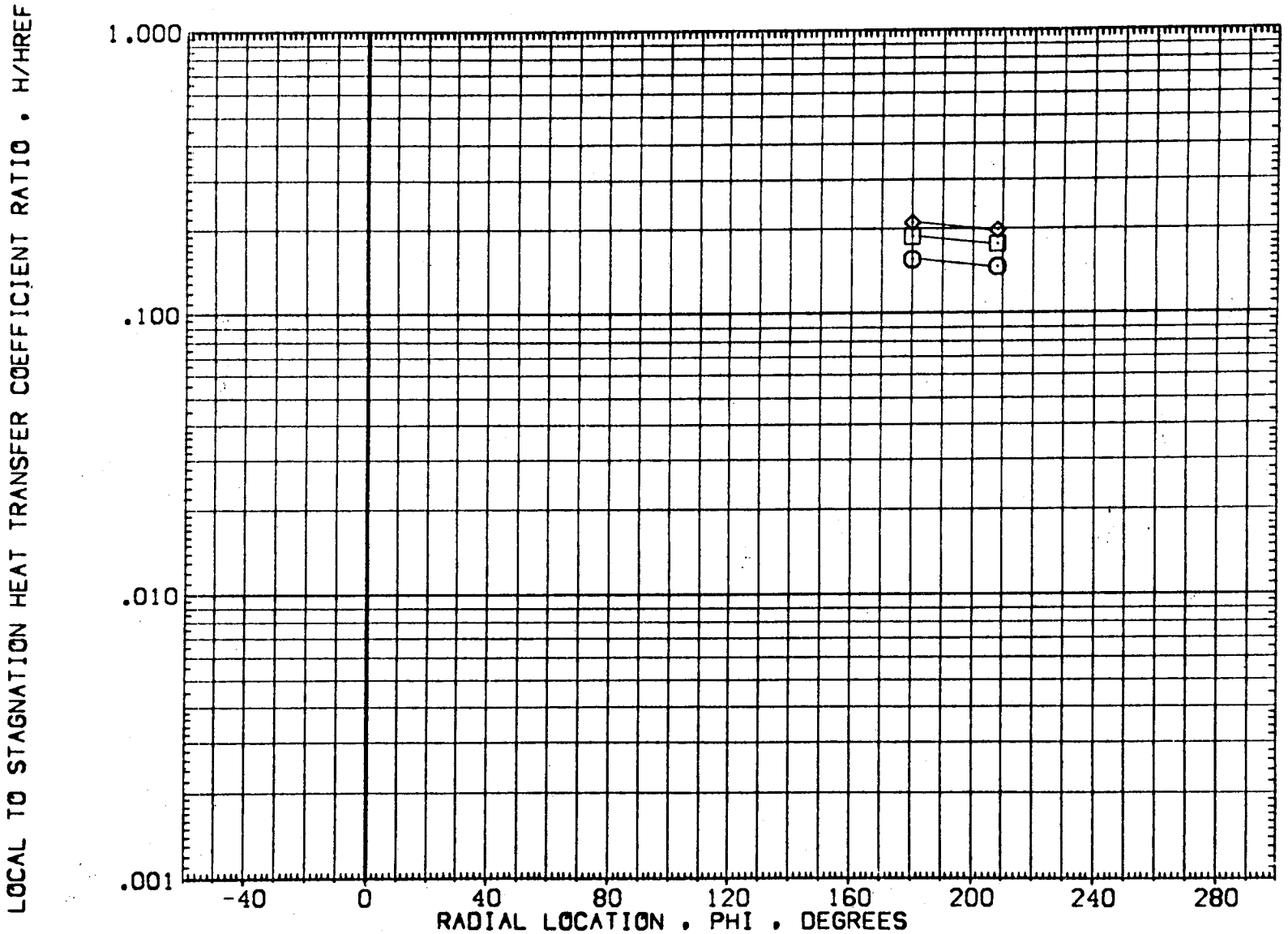


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1TO1)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE1TO1)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE1TO1)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.850

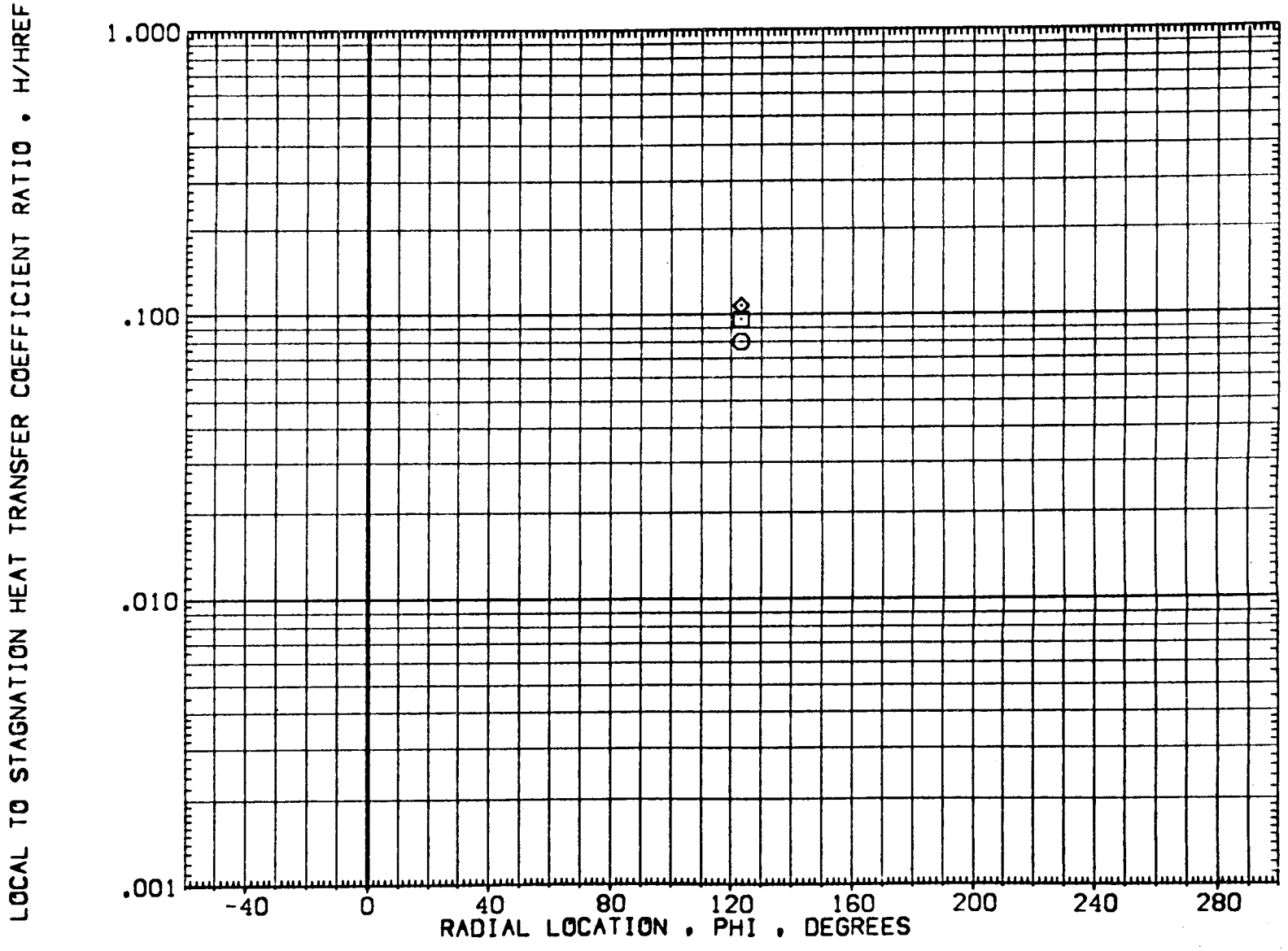


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|TOI)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	1.000
(AE|TOI)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(BE|TOI)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.850

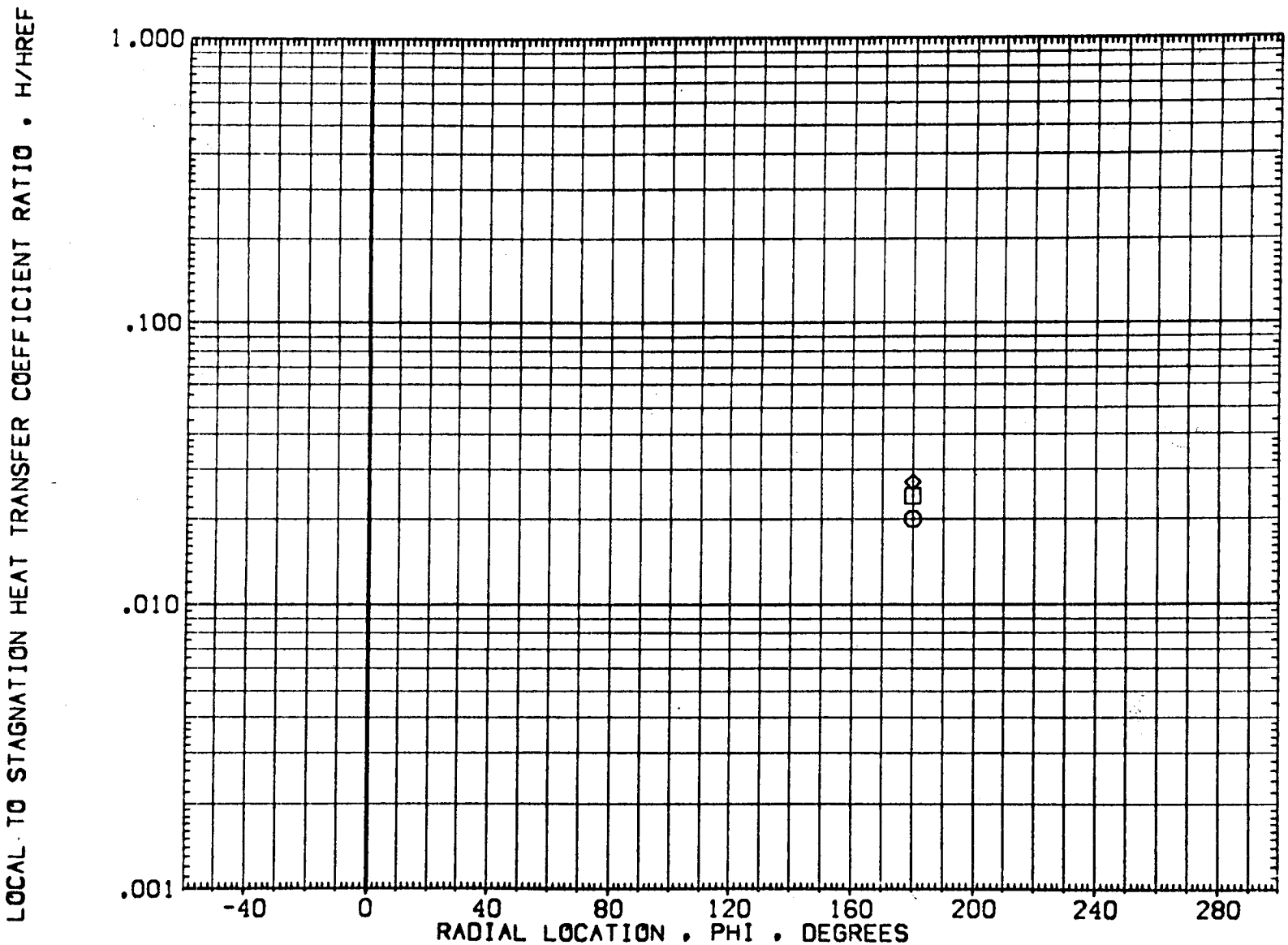


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

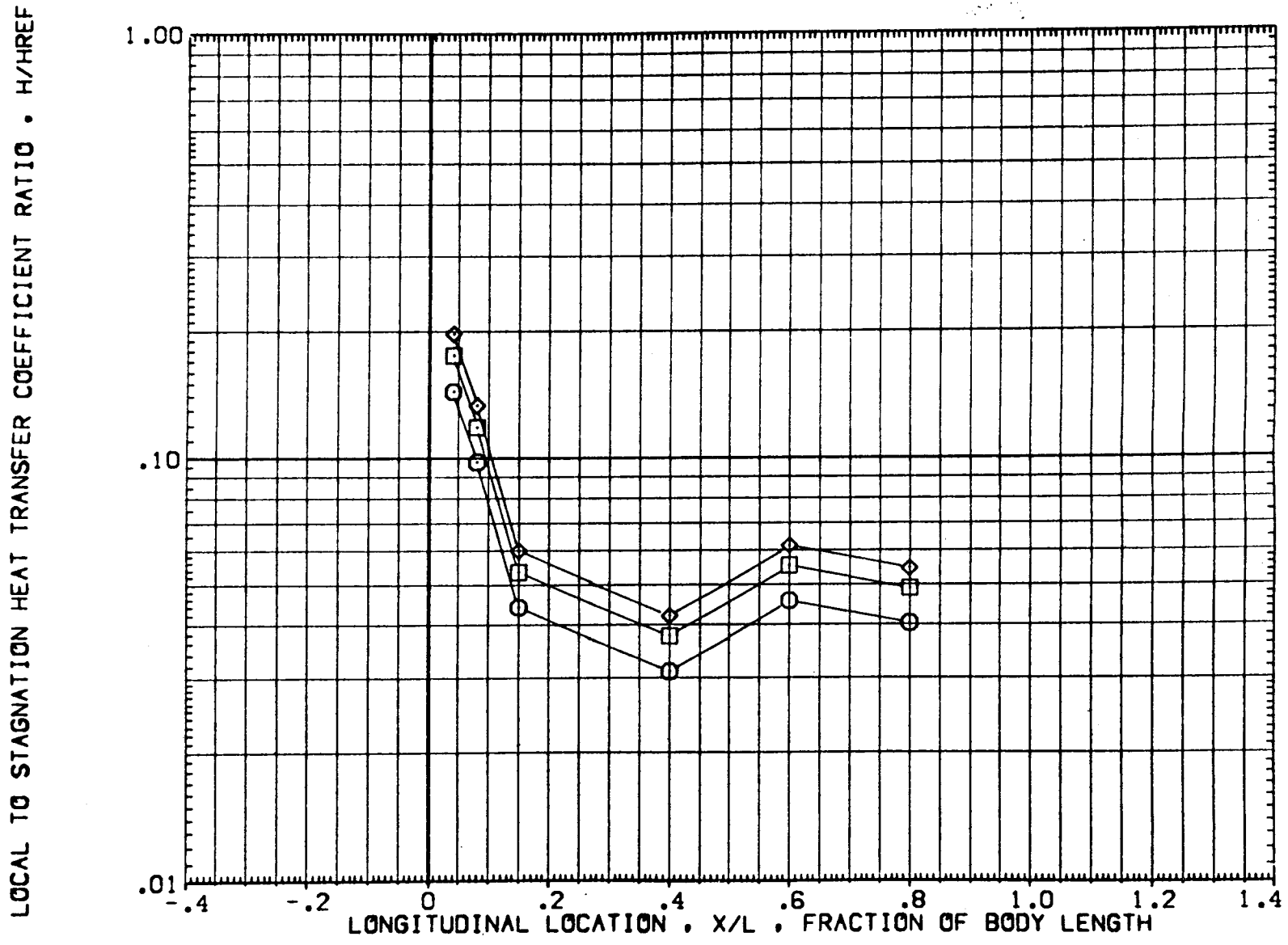


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

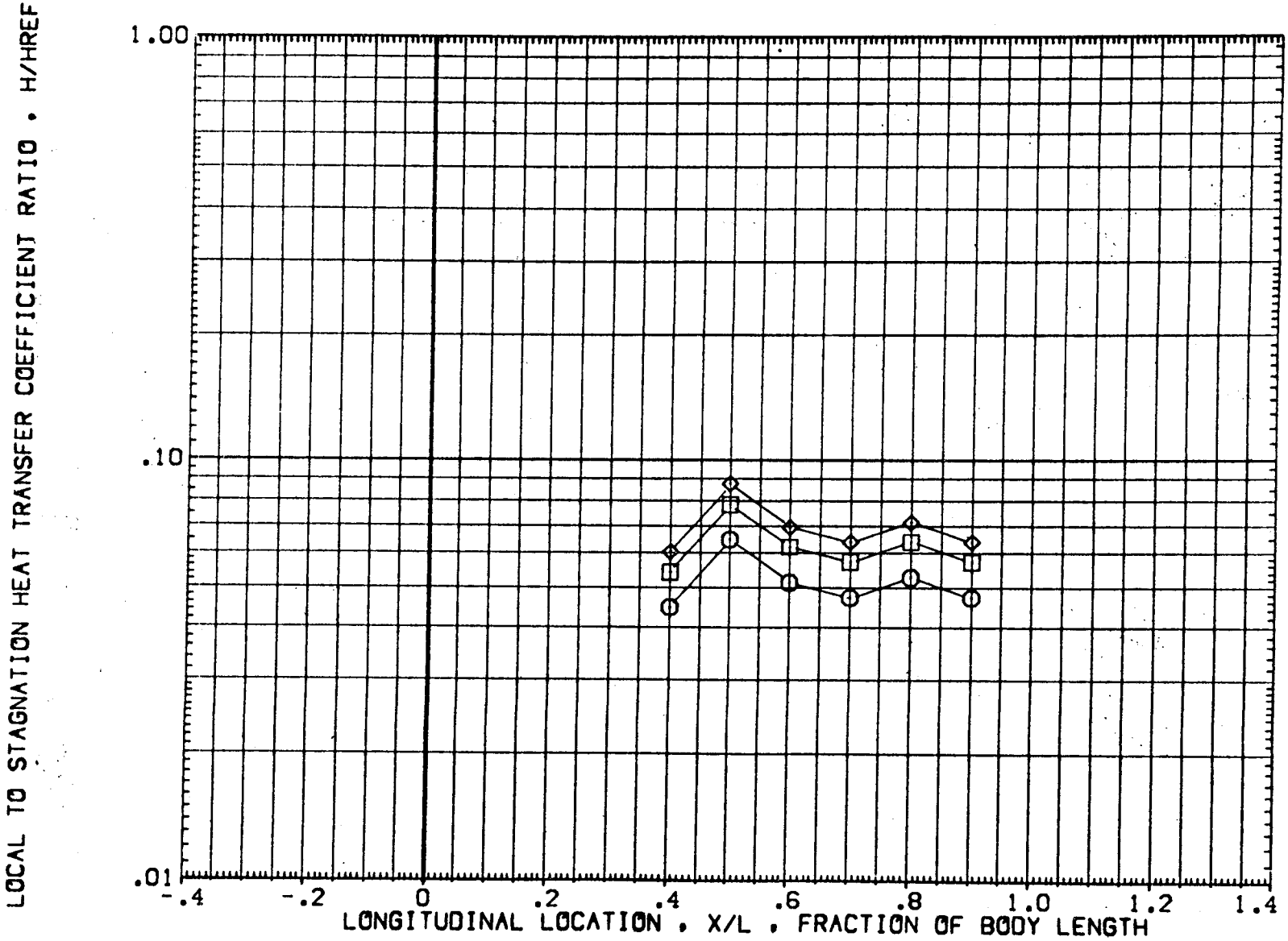


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

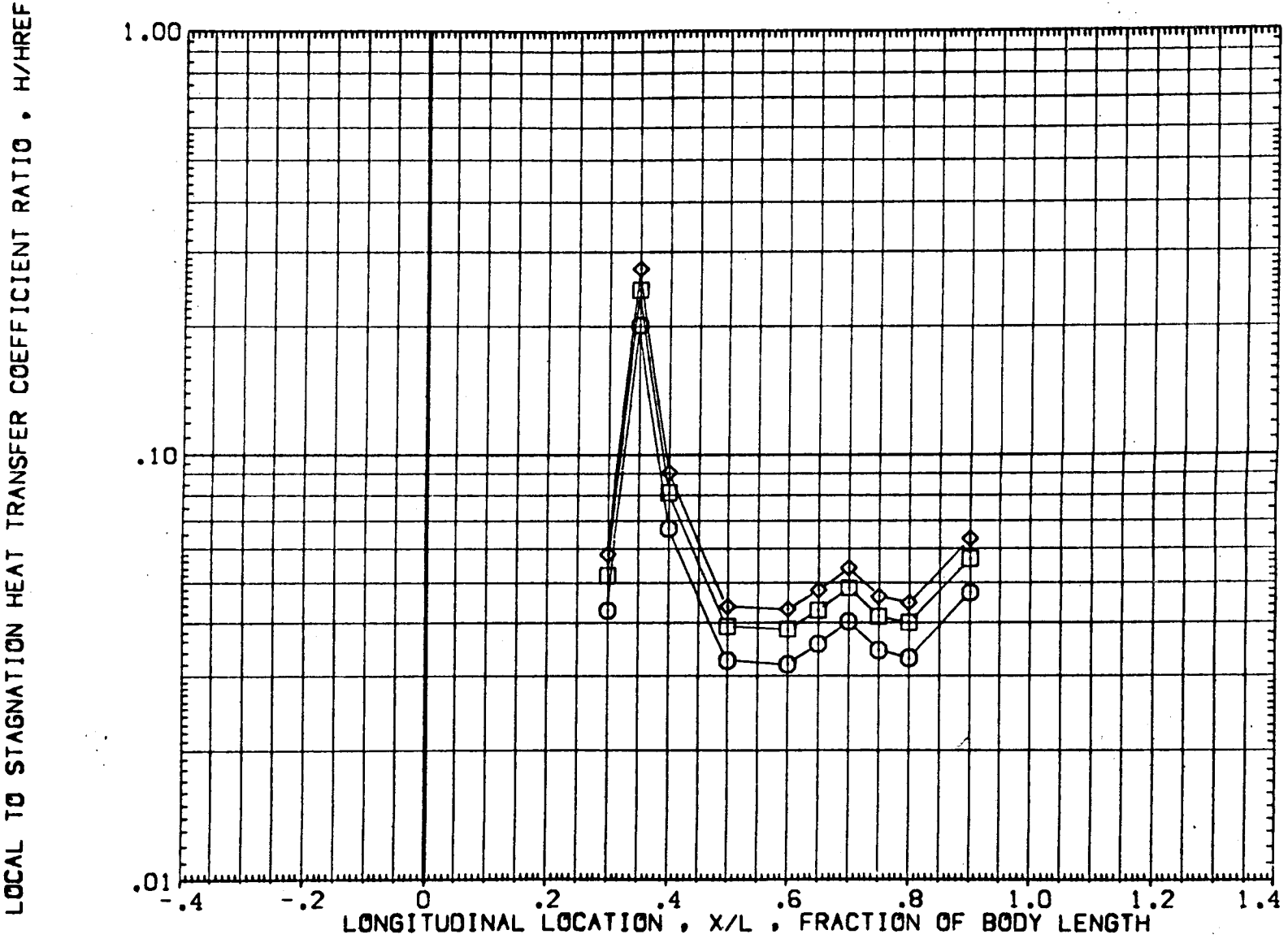


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

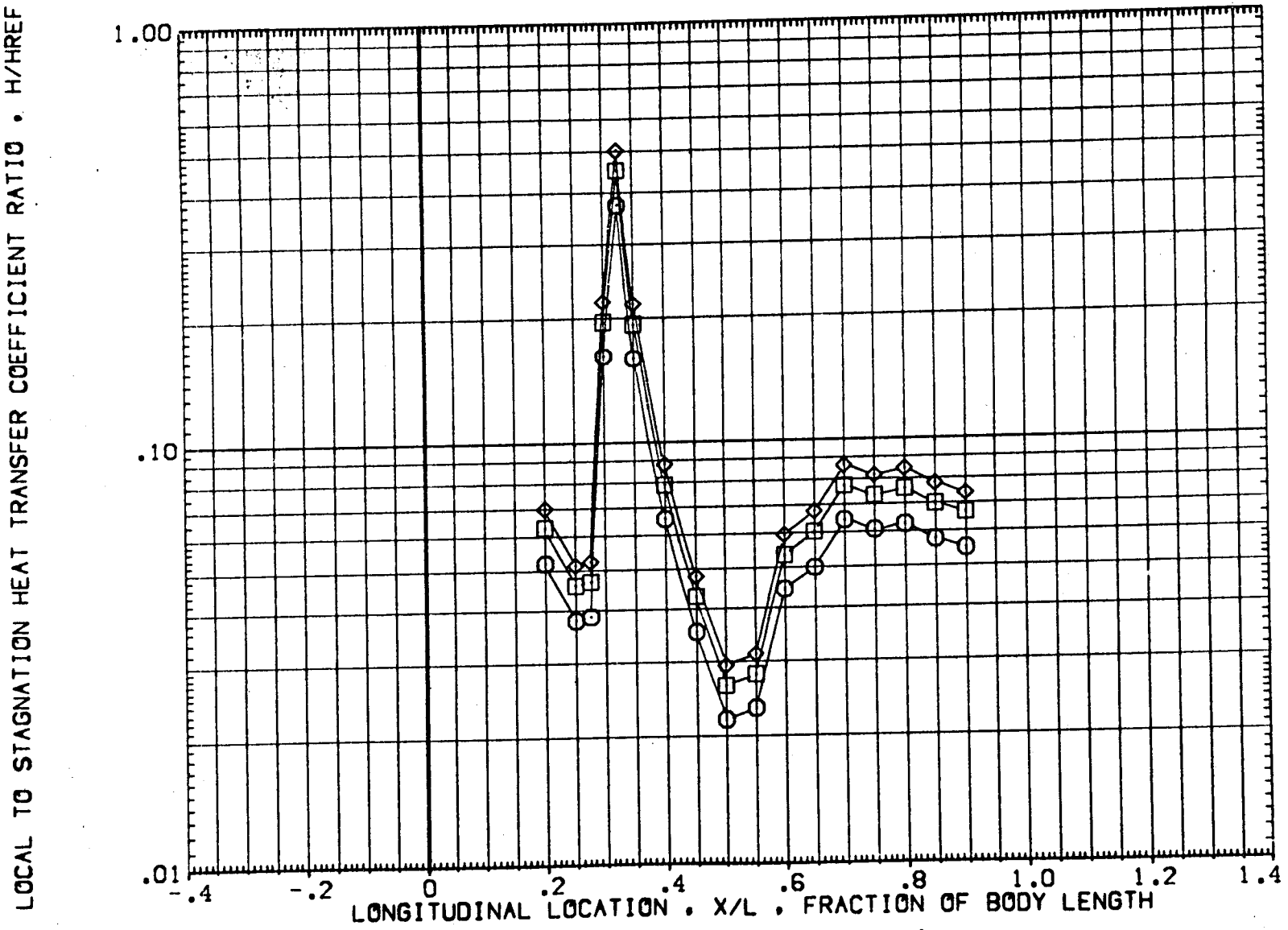


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

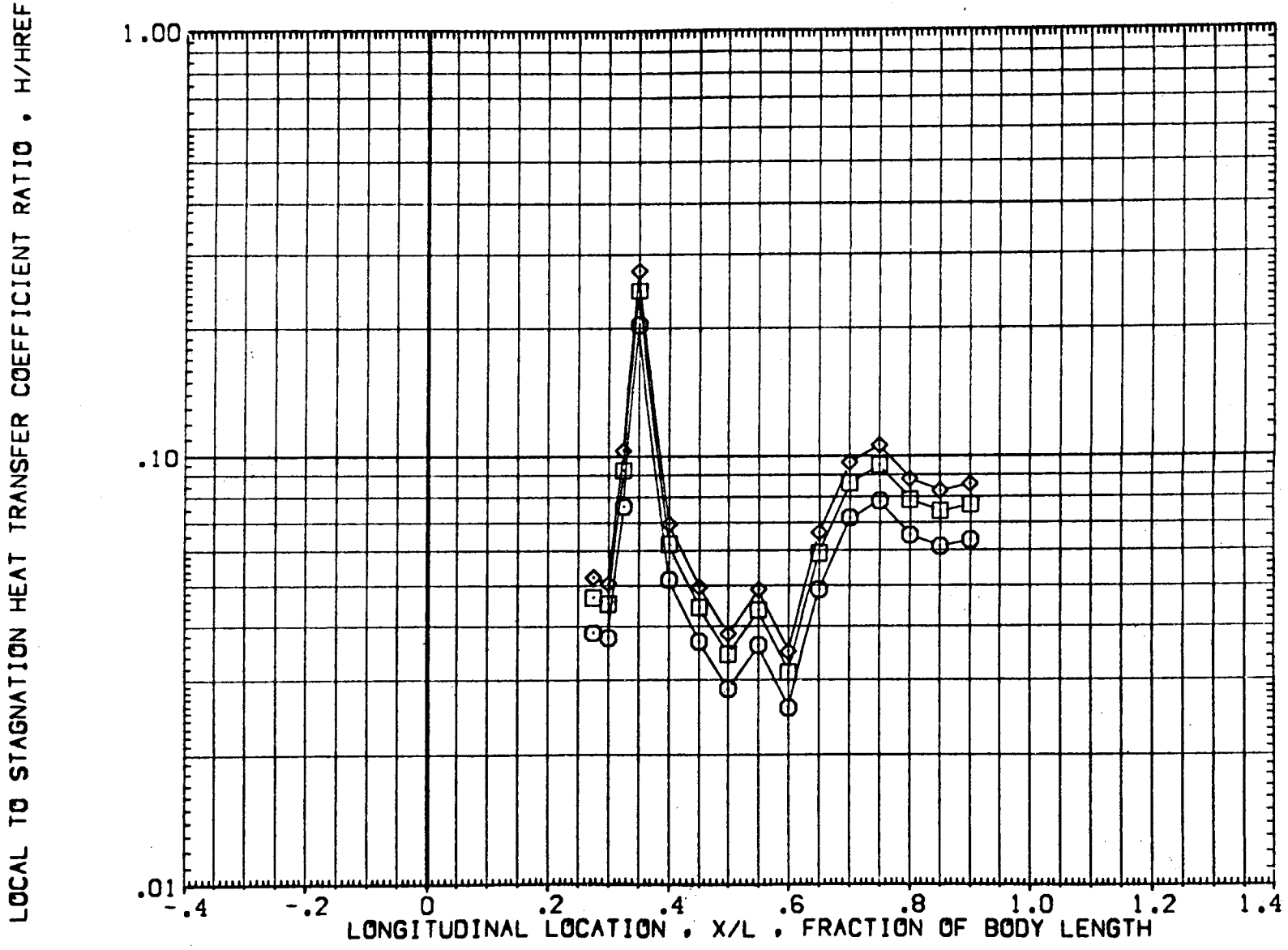


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

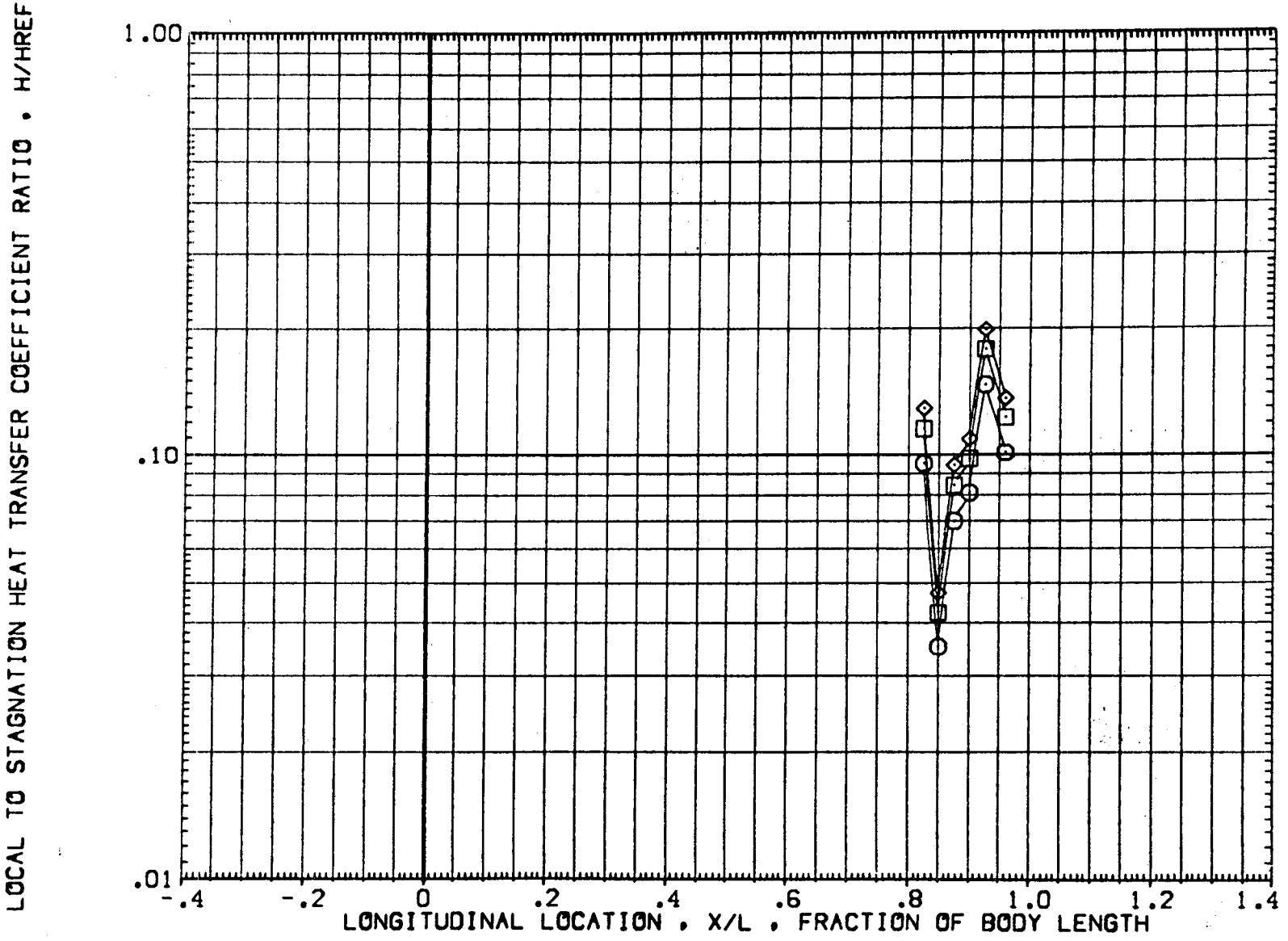


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

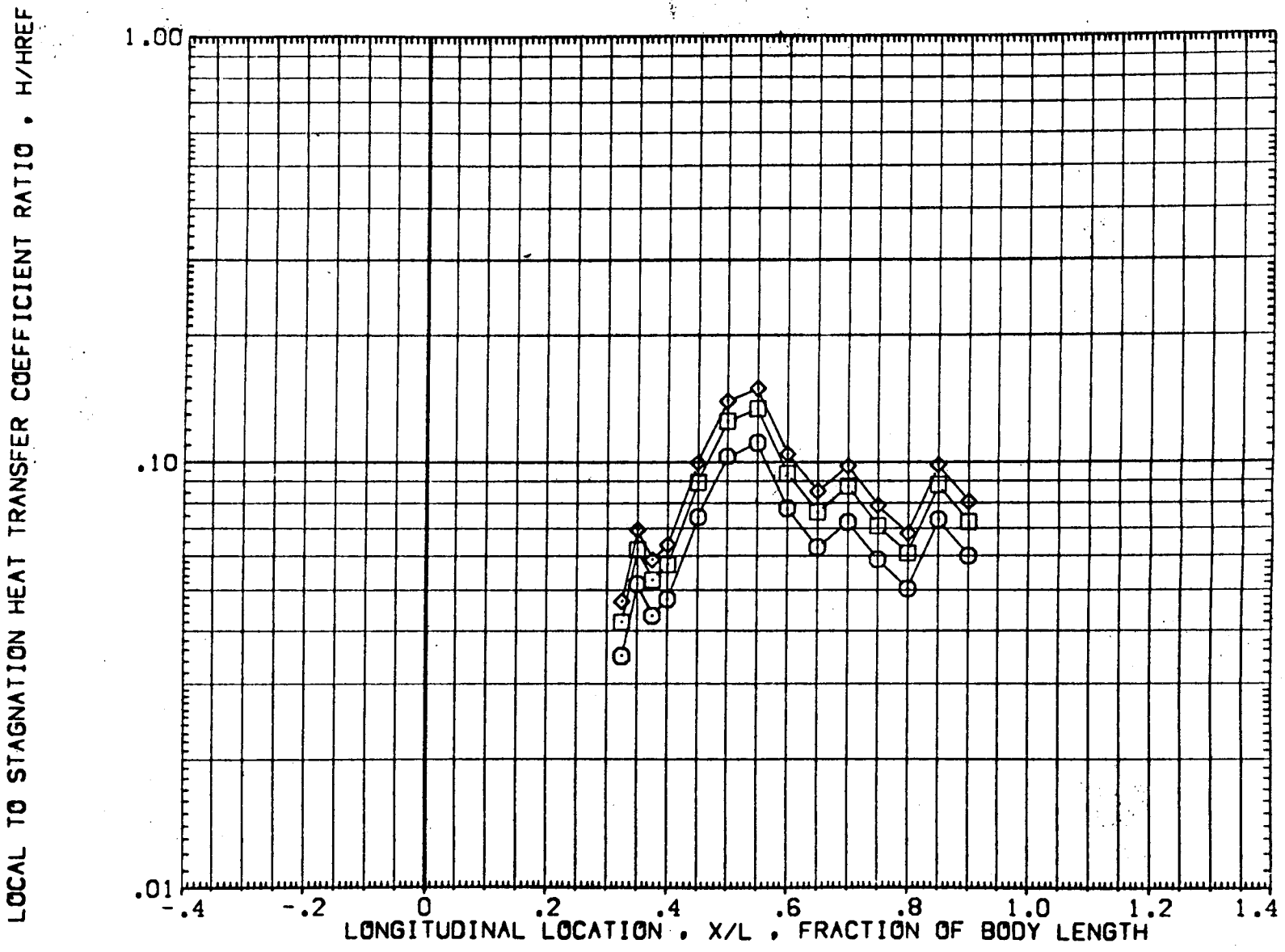


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-170 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-170 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-170 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

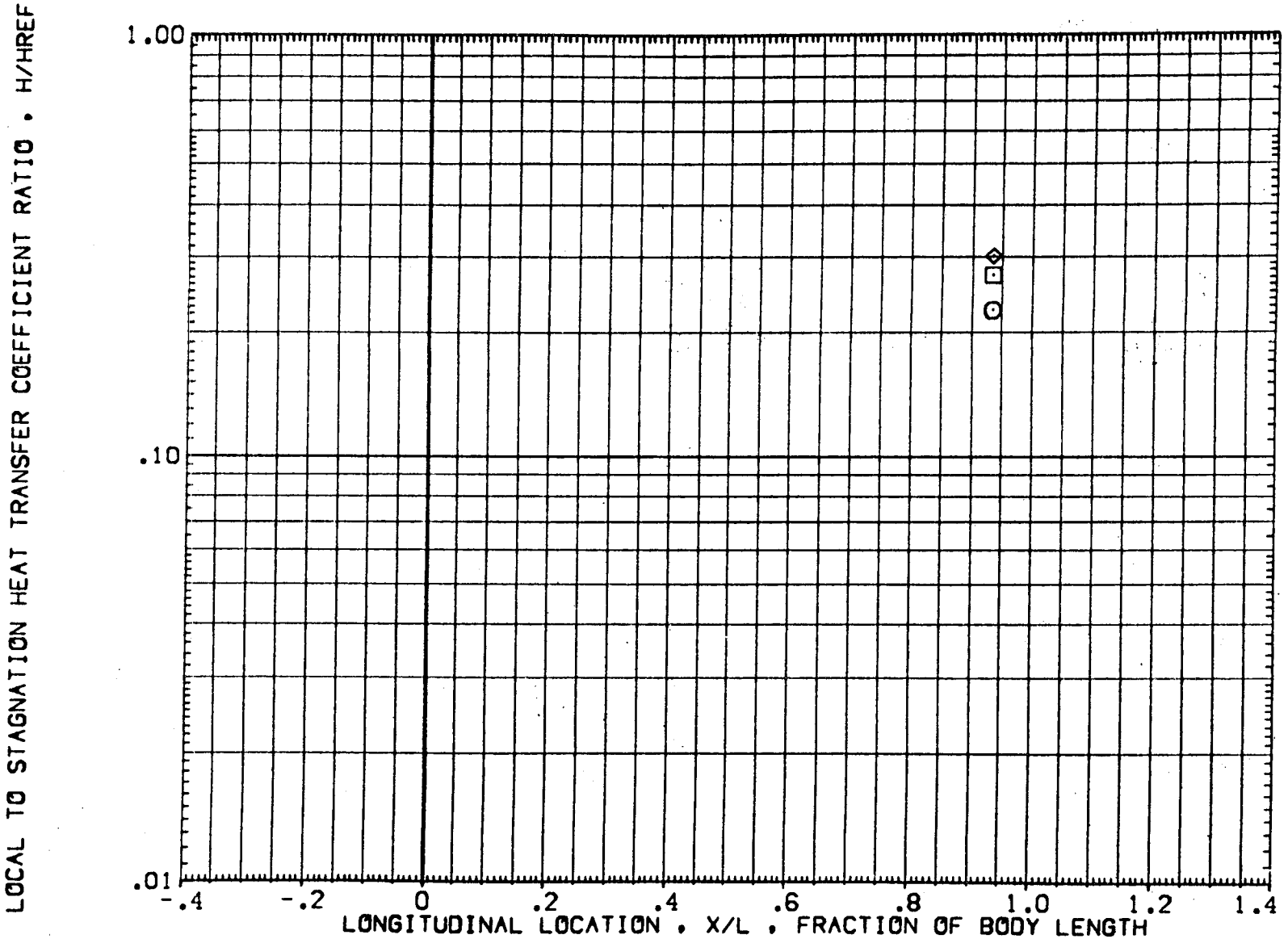


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

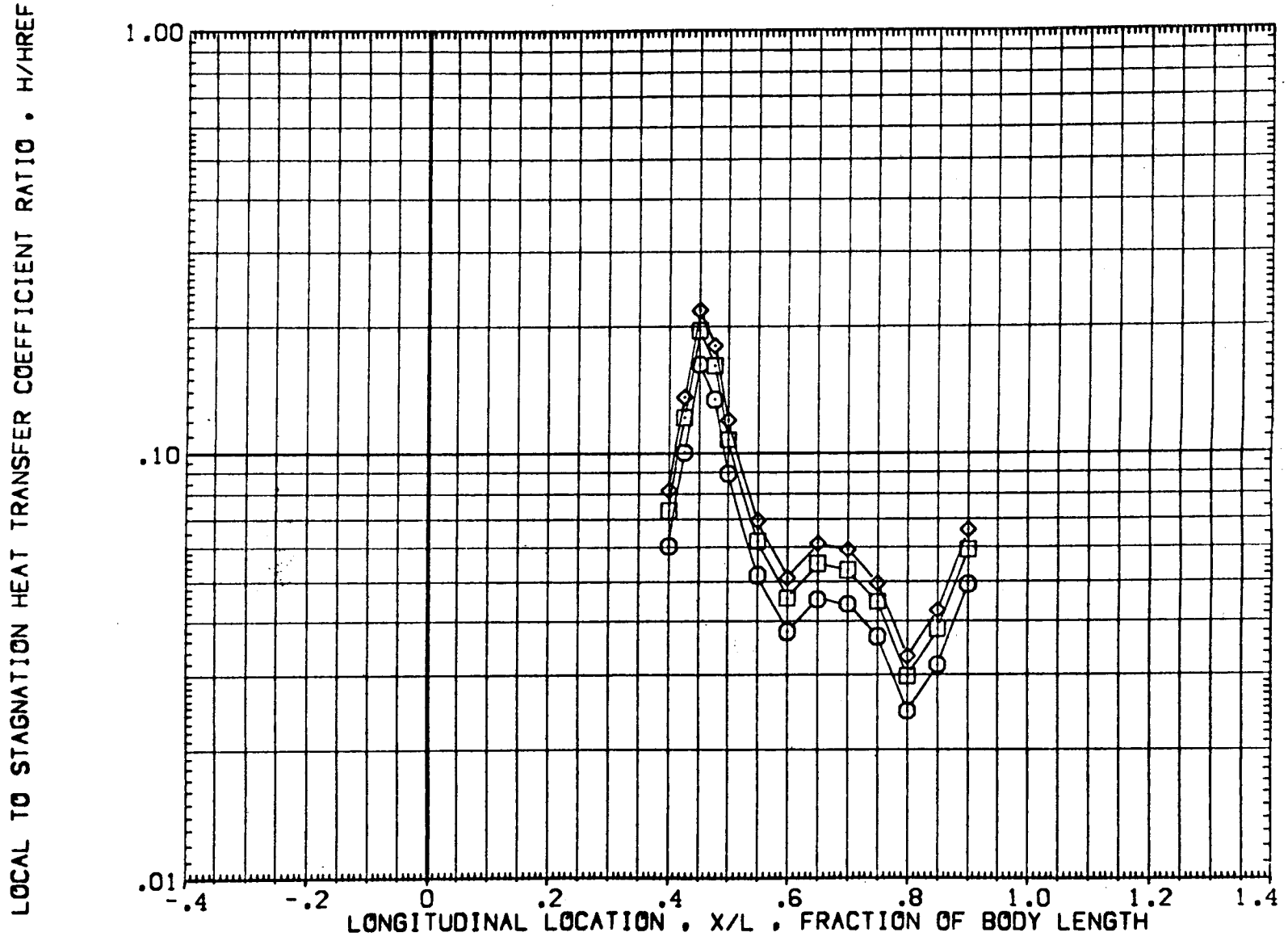


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

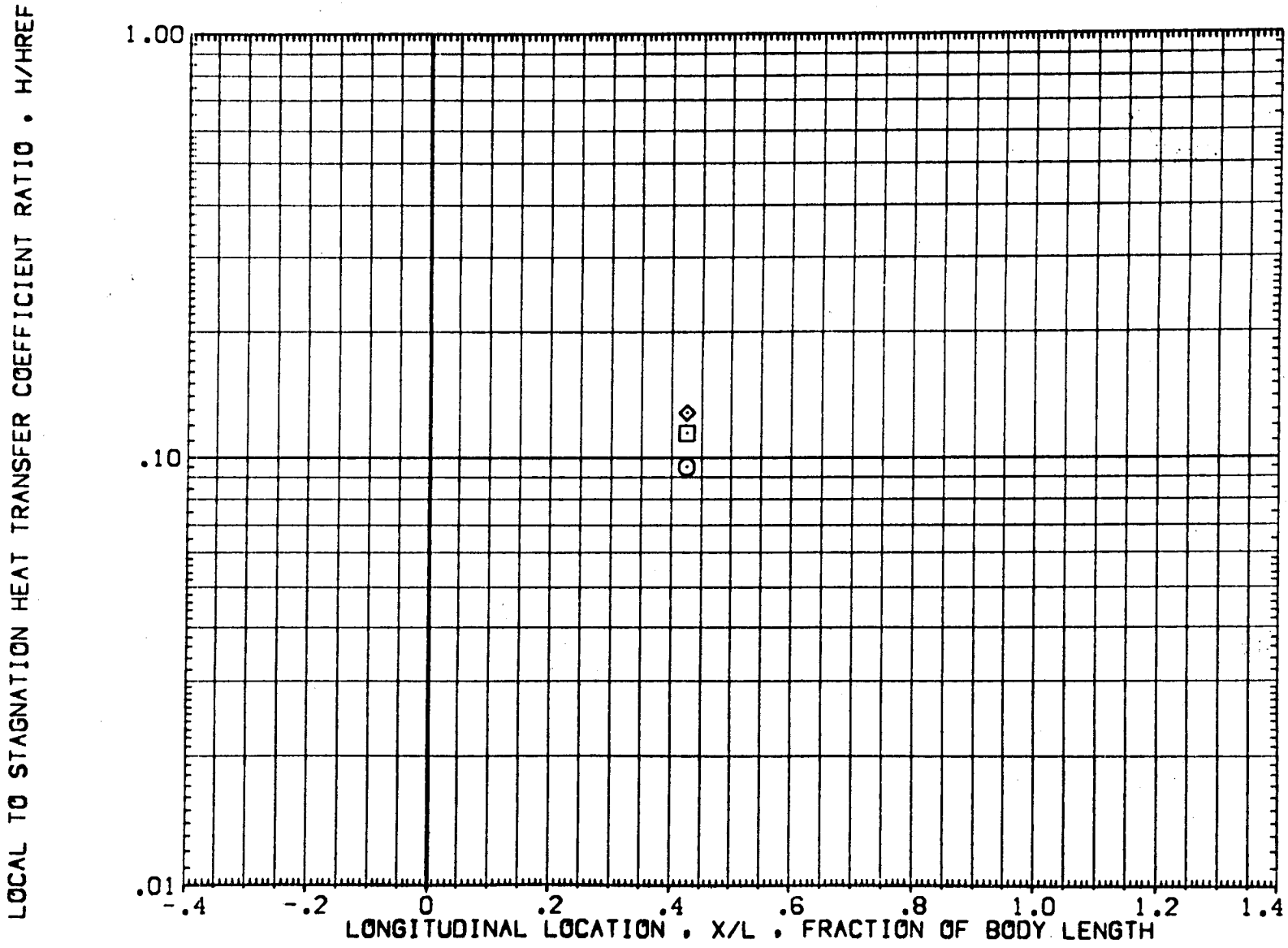


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

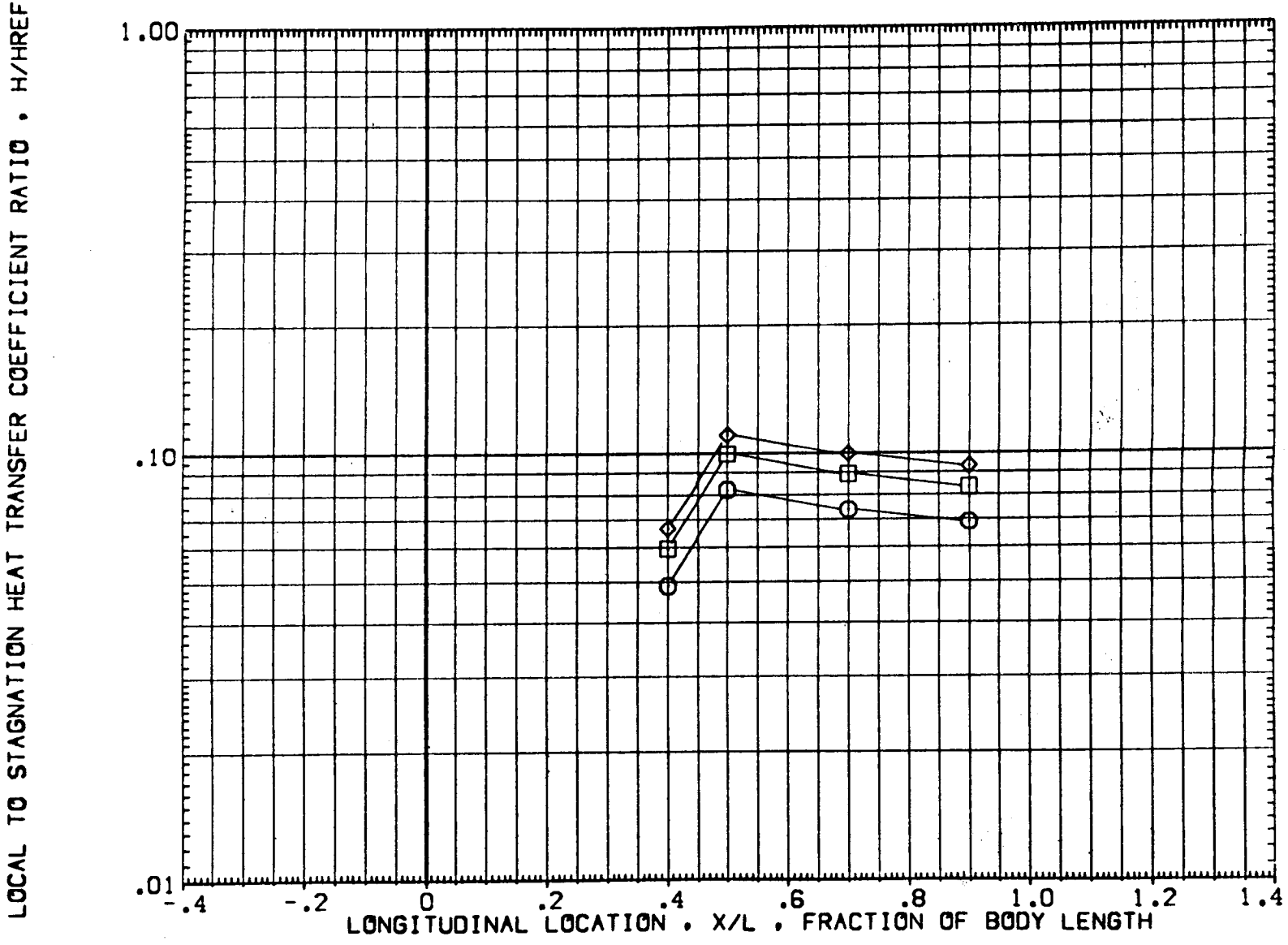


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

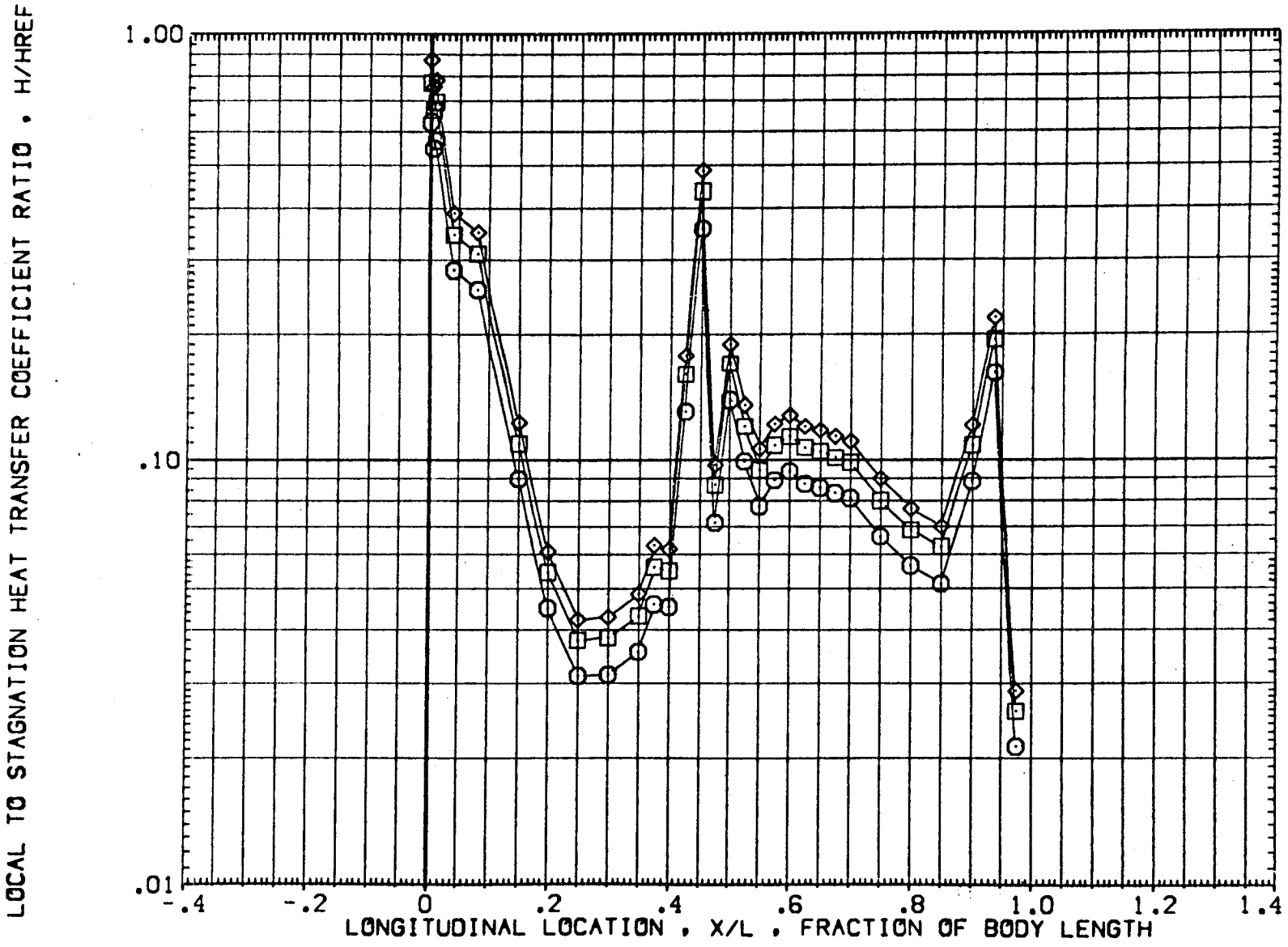


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

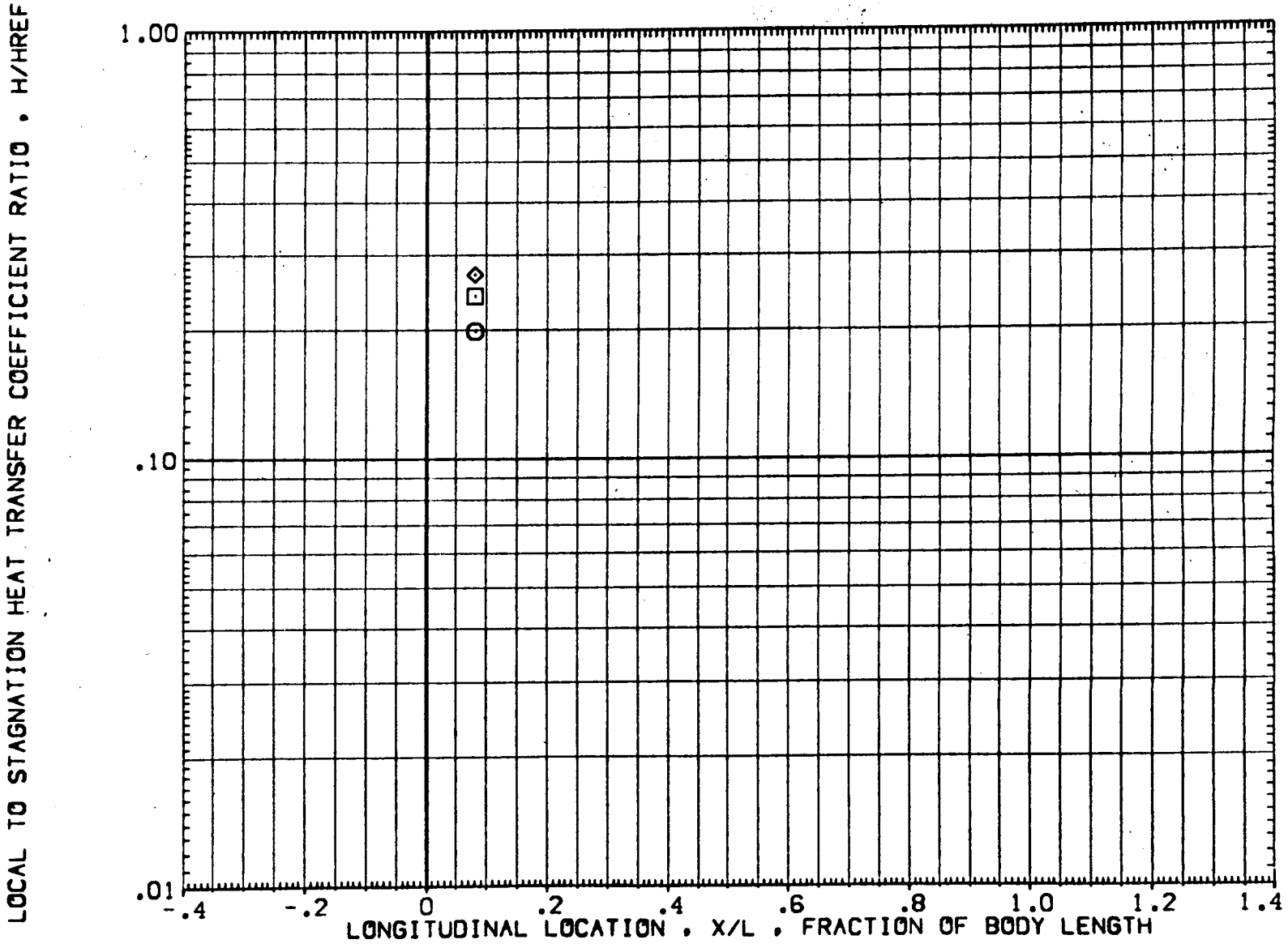


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

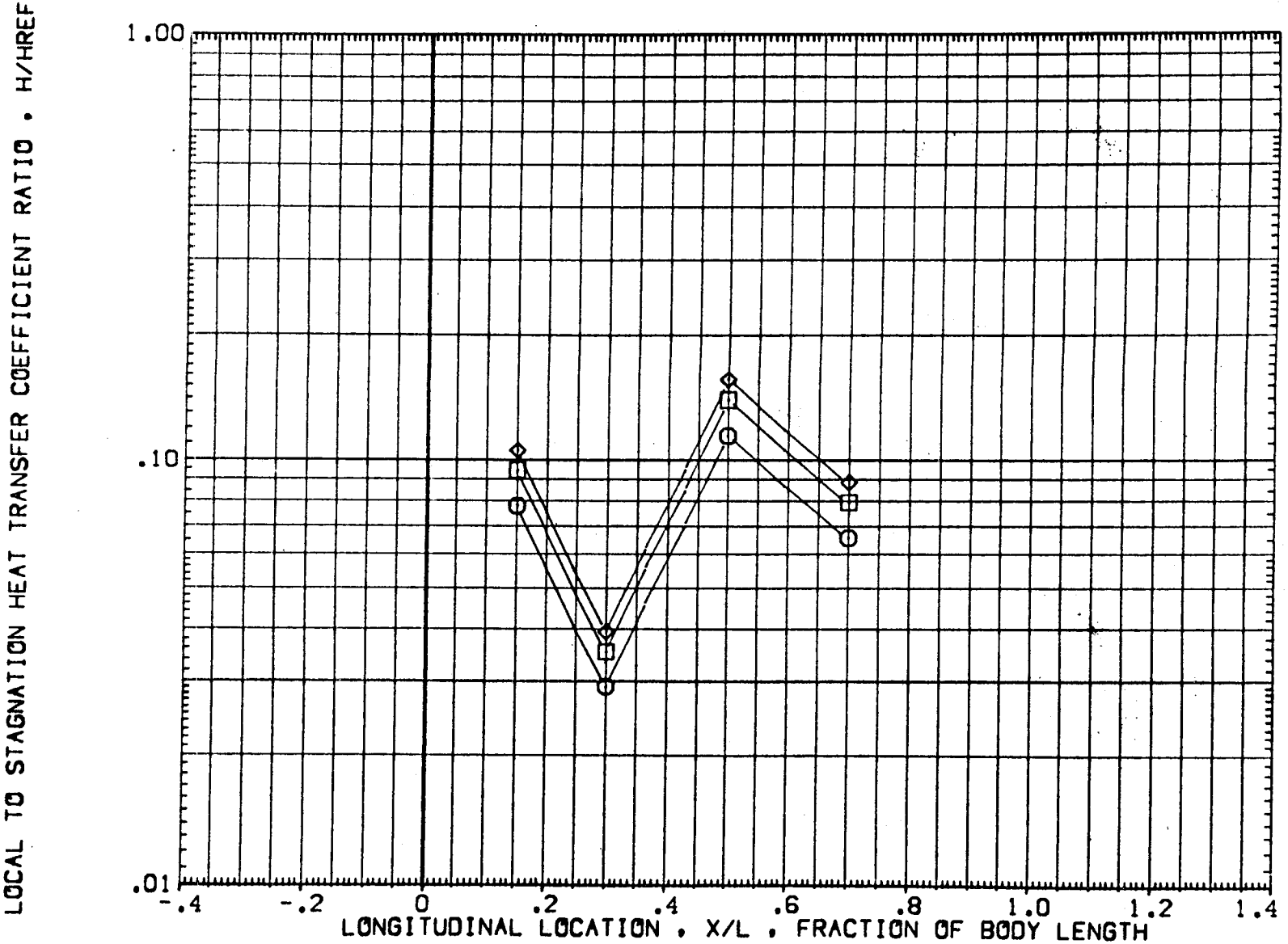


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	DATA NOT AVAILABLE		.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

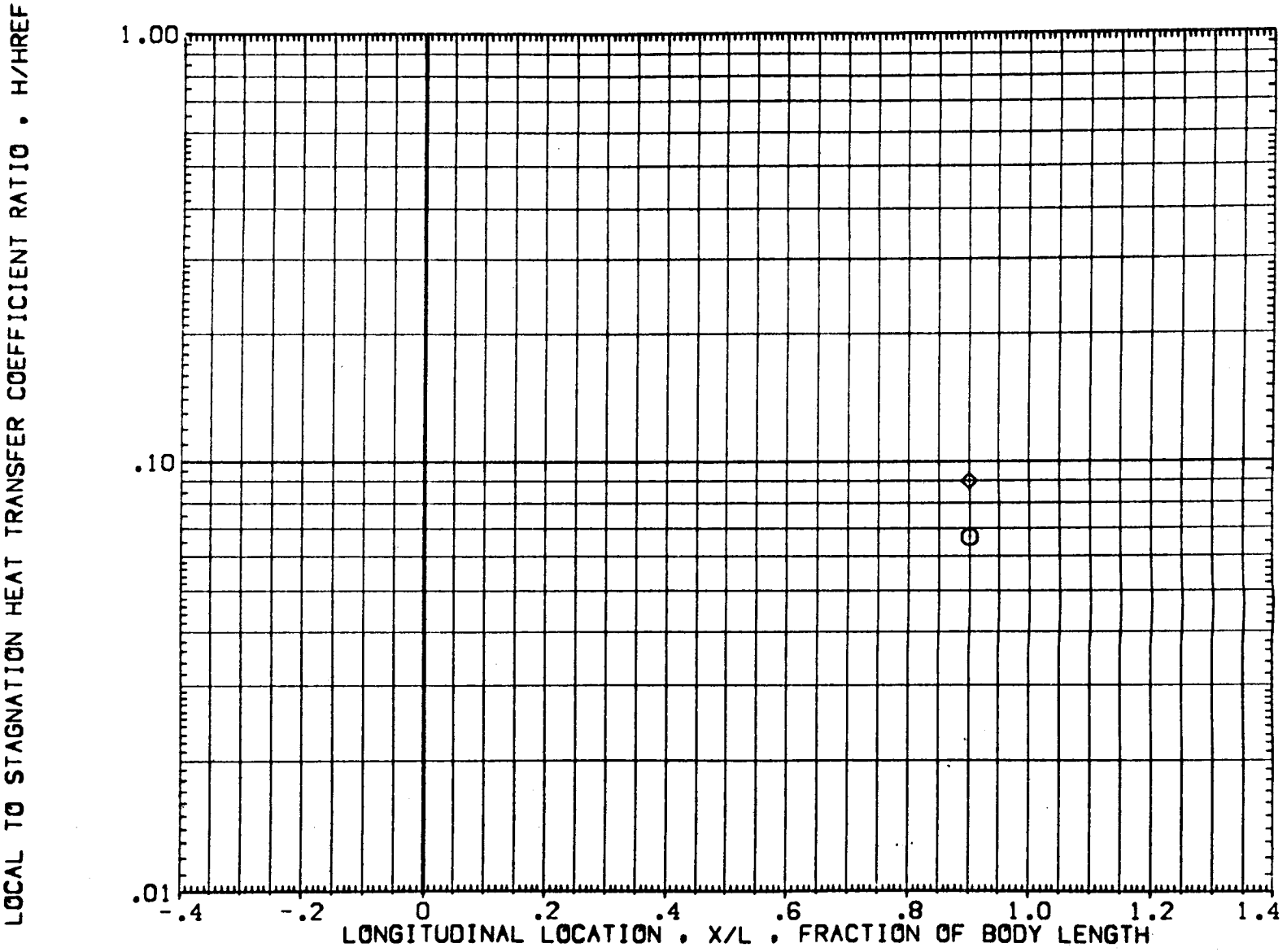


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

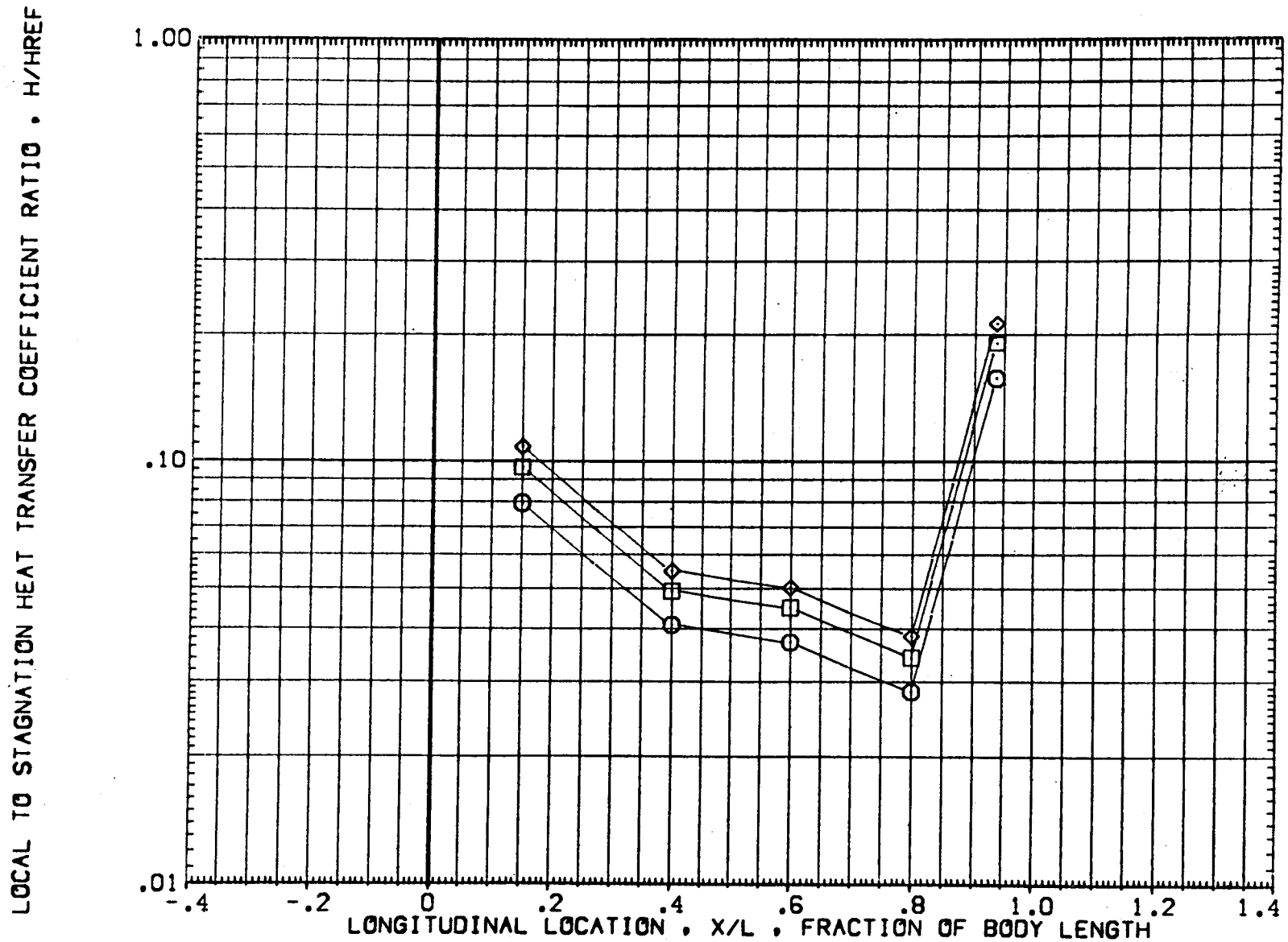


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

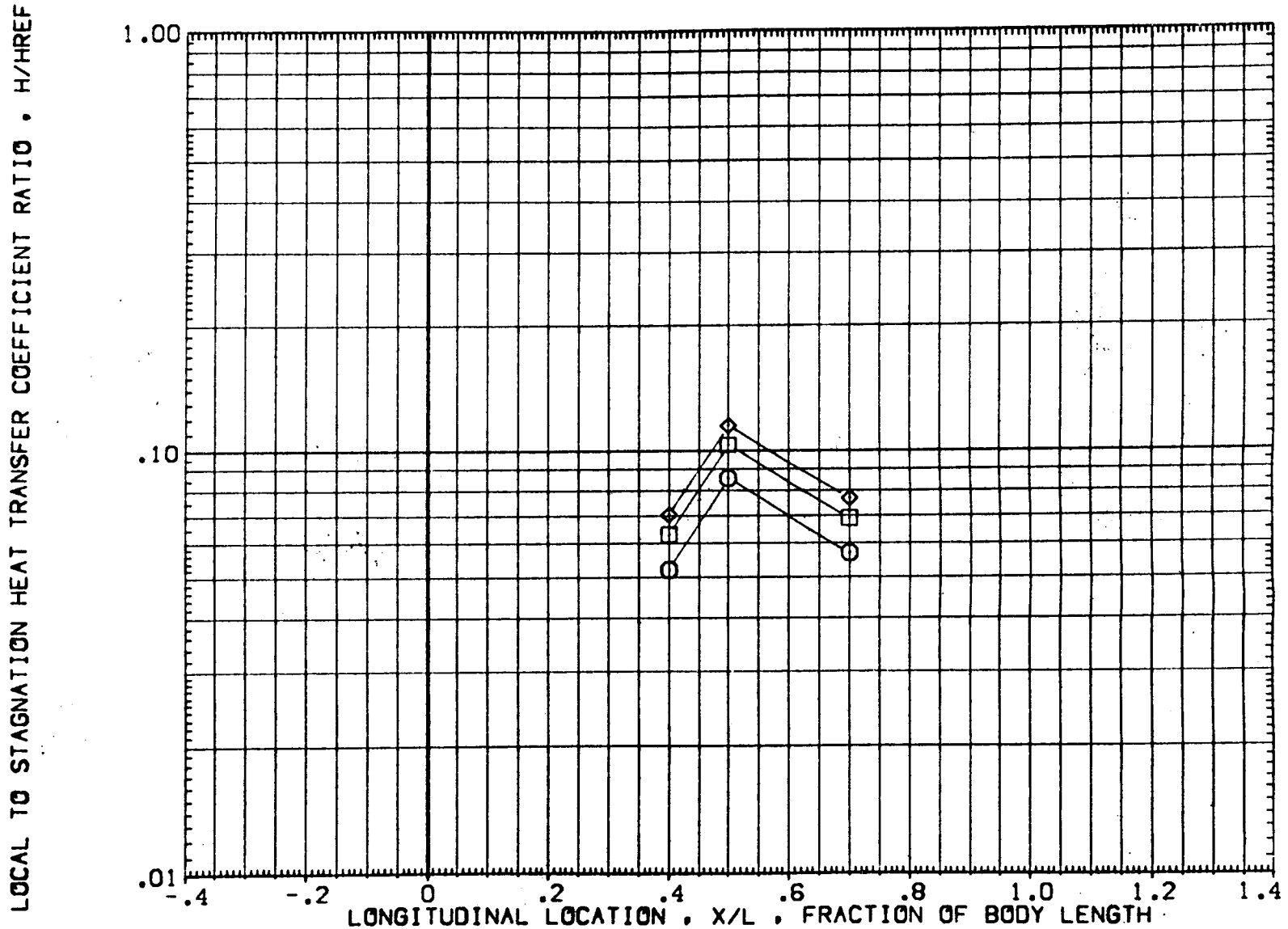


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

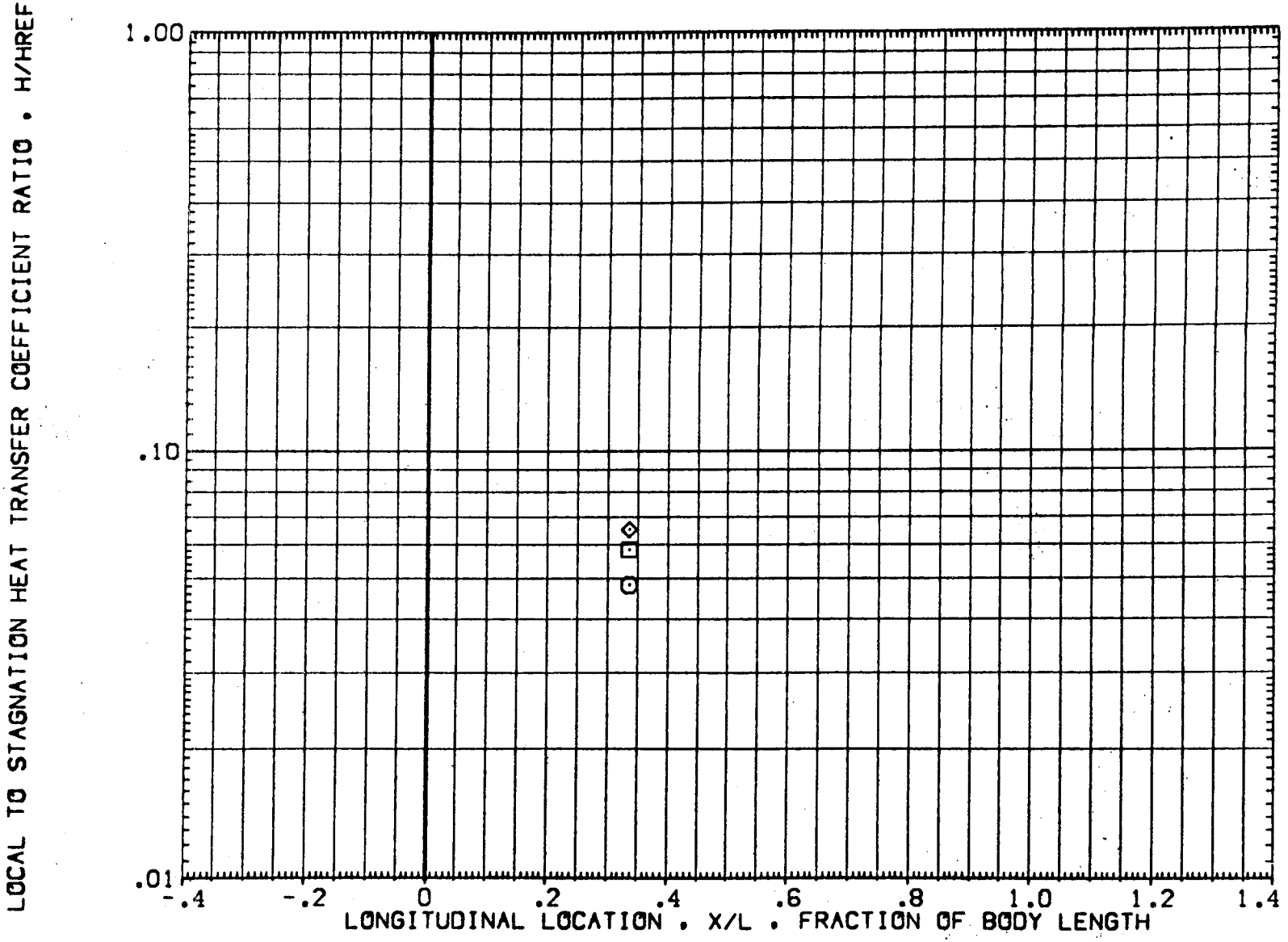


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(REITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

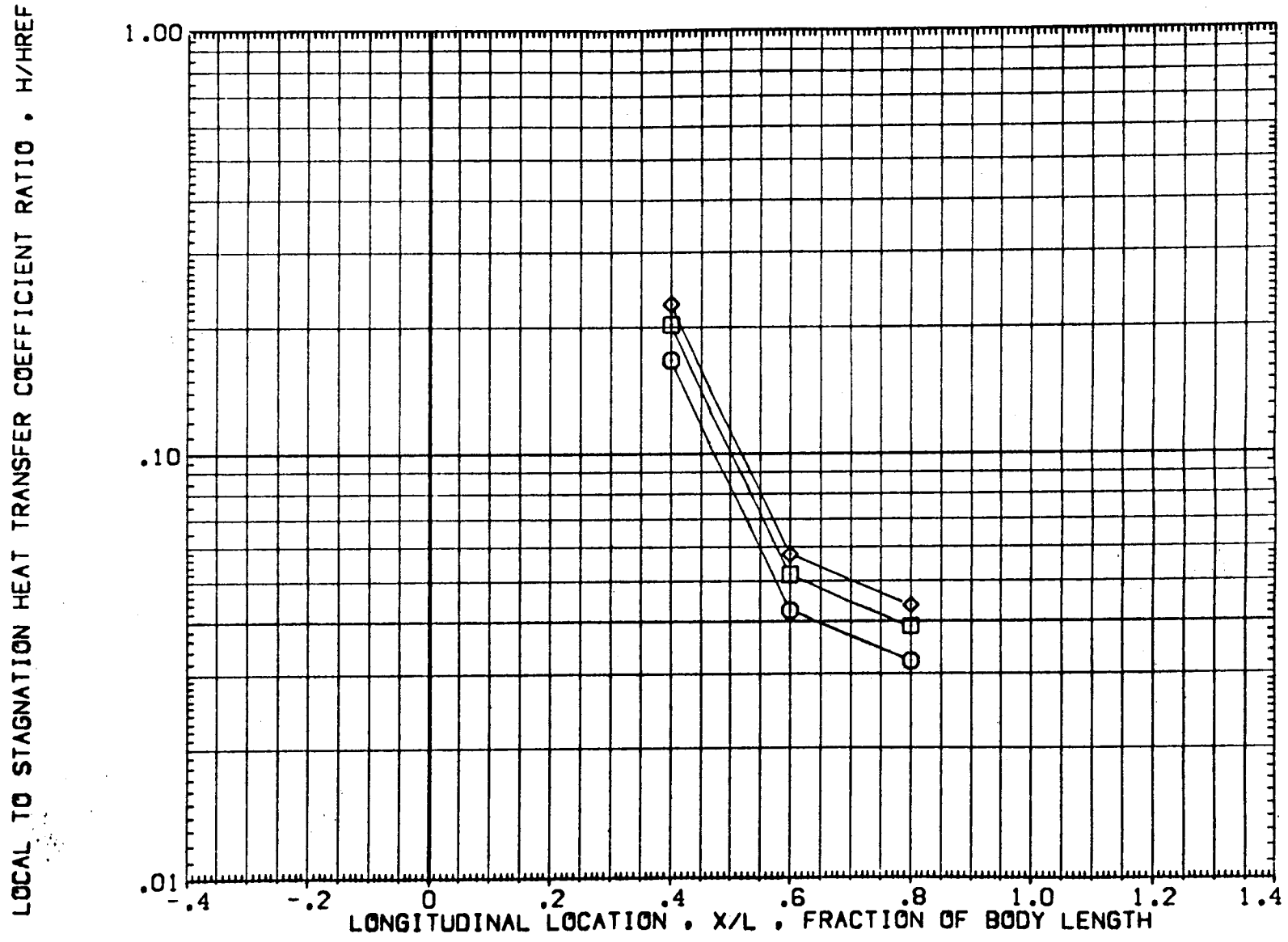


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

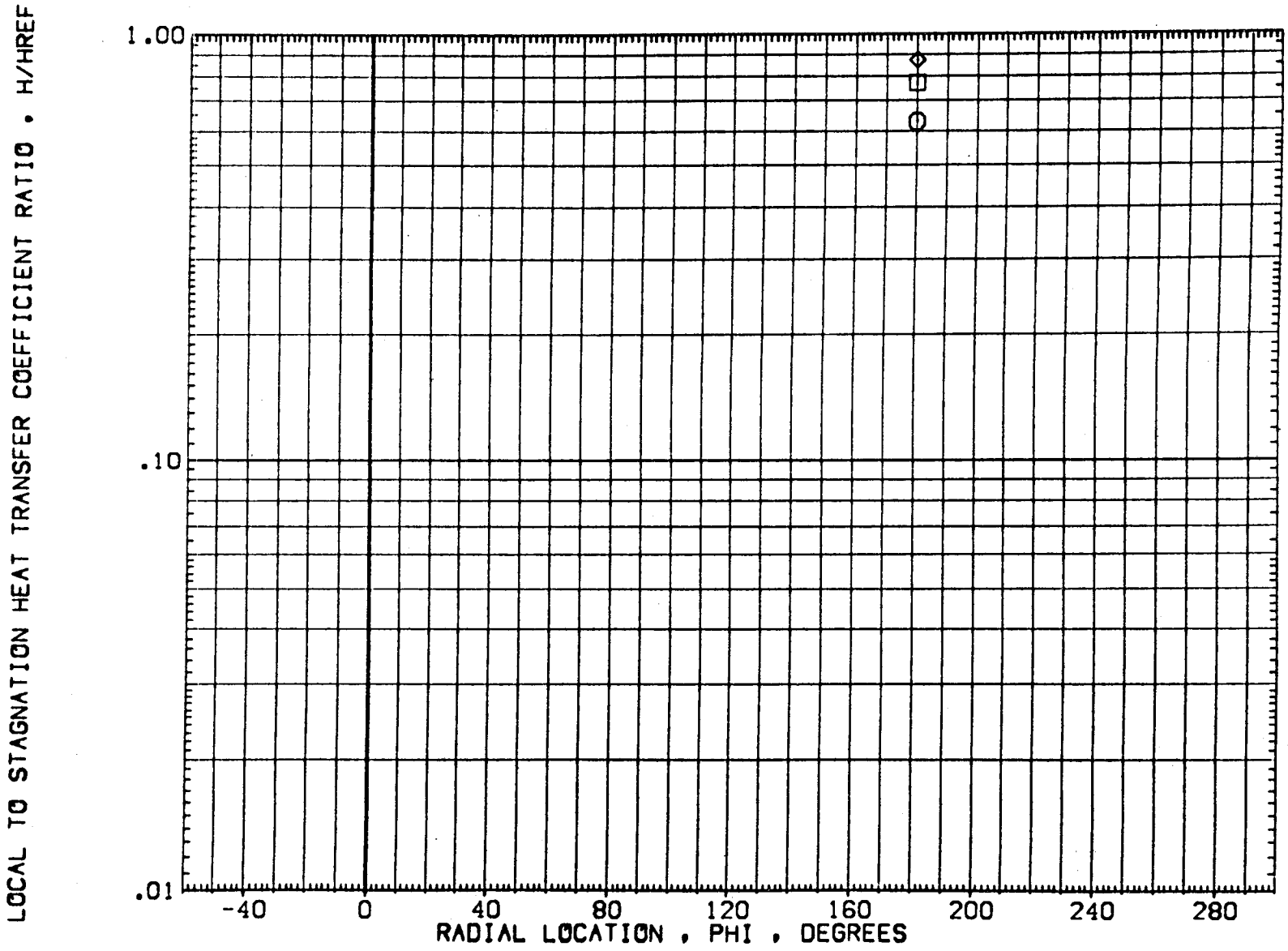


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

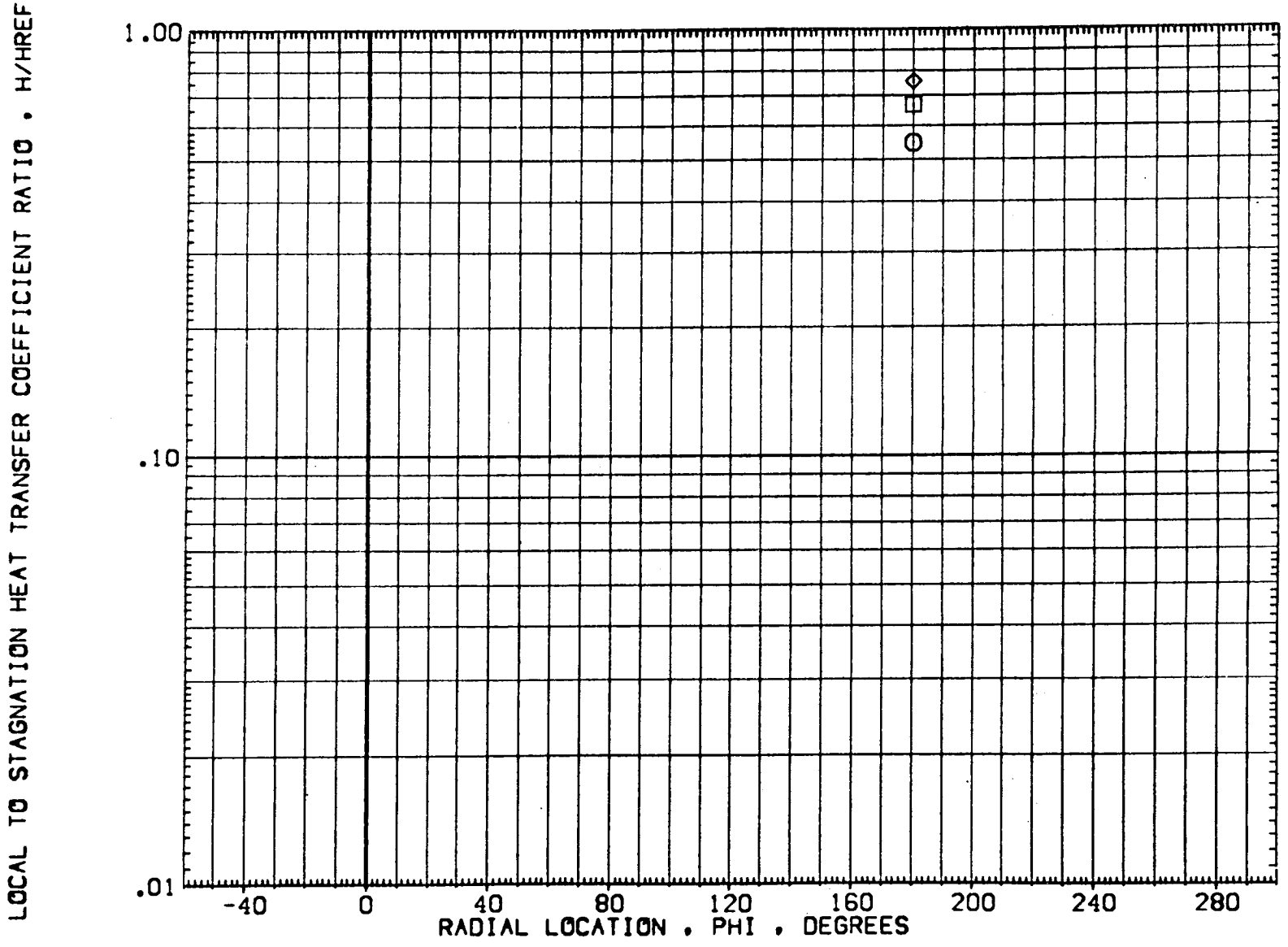


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

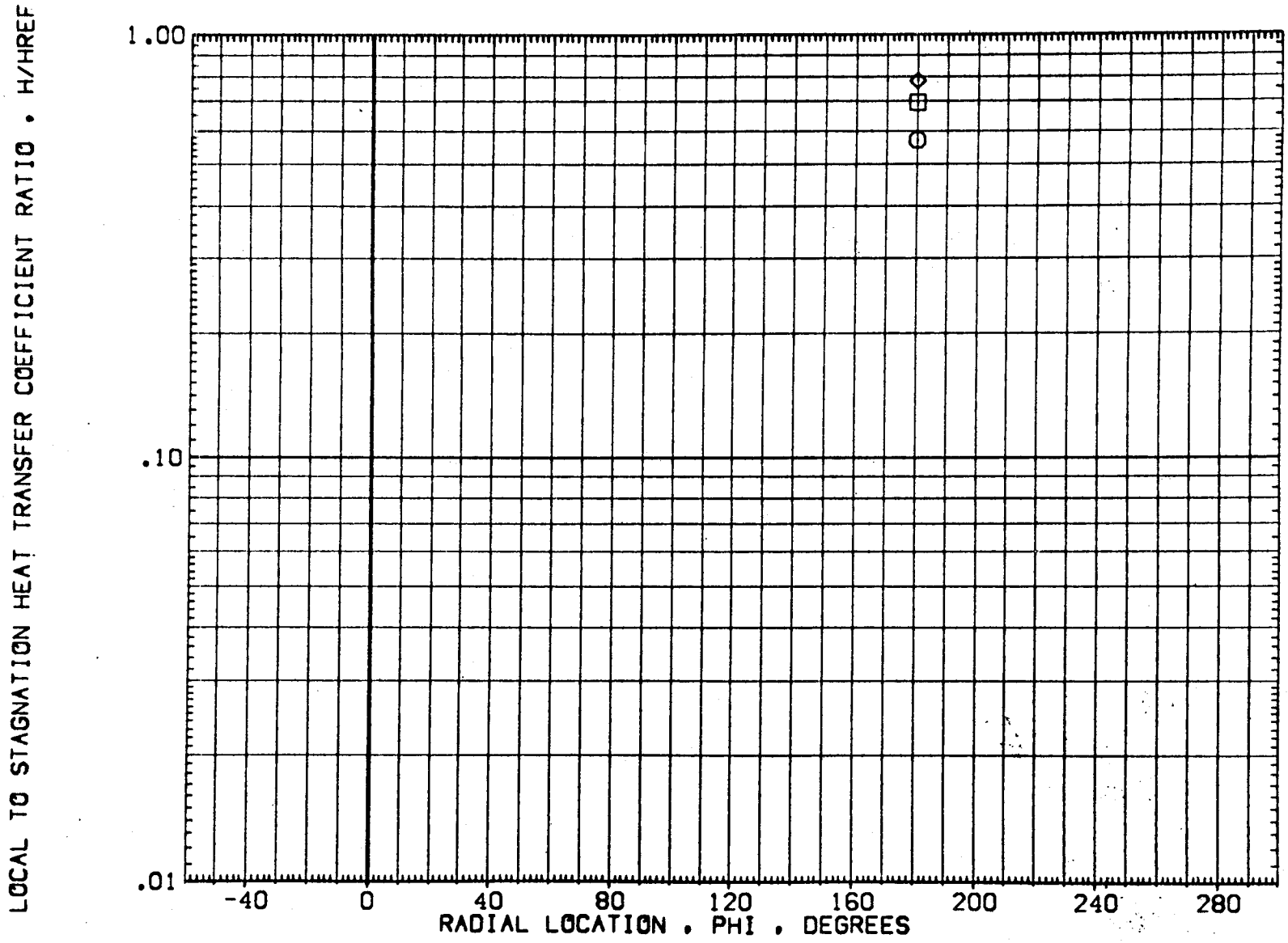


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

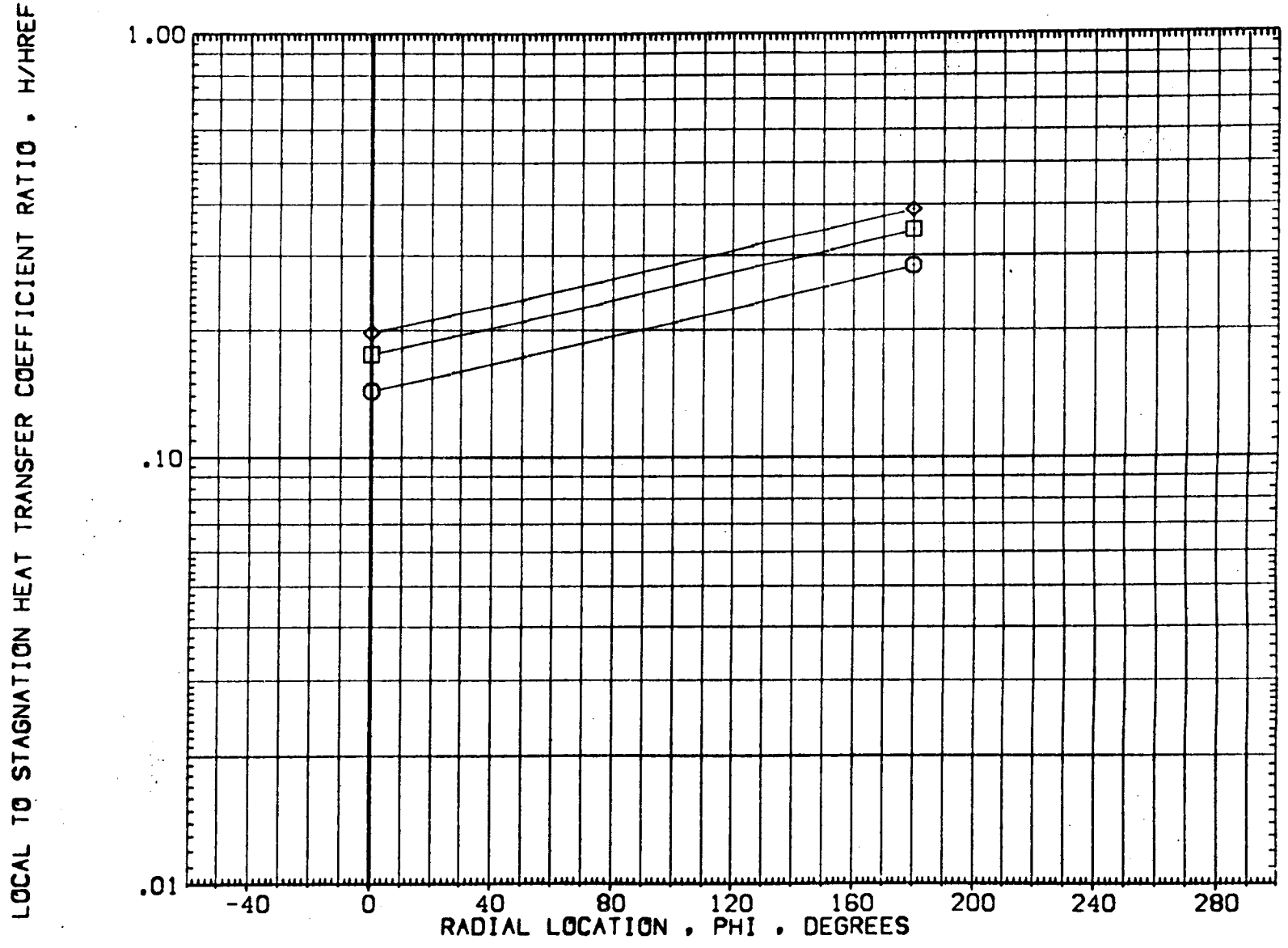


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

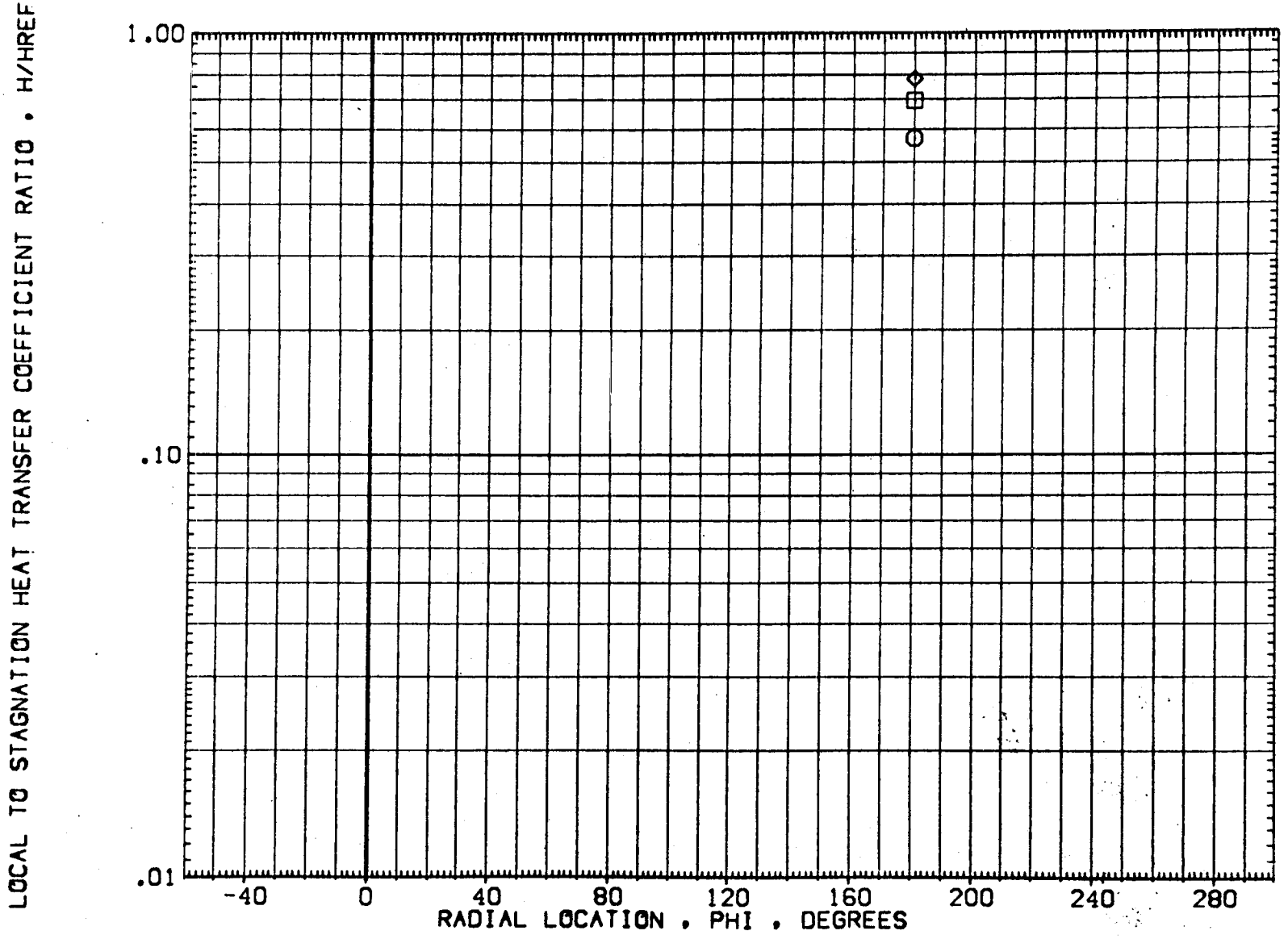


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

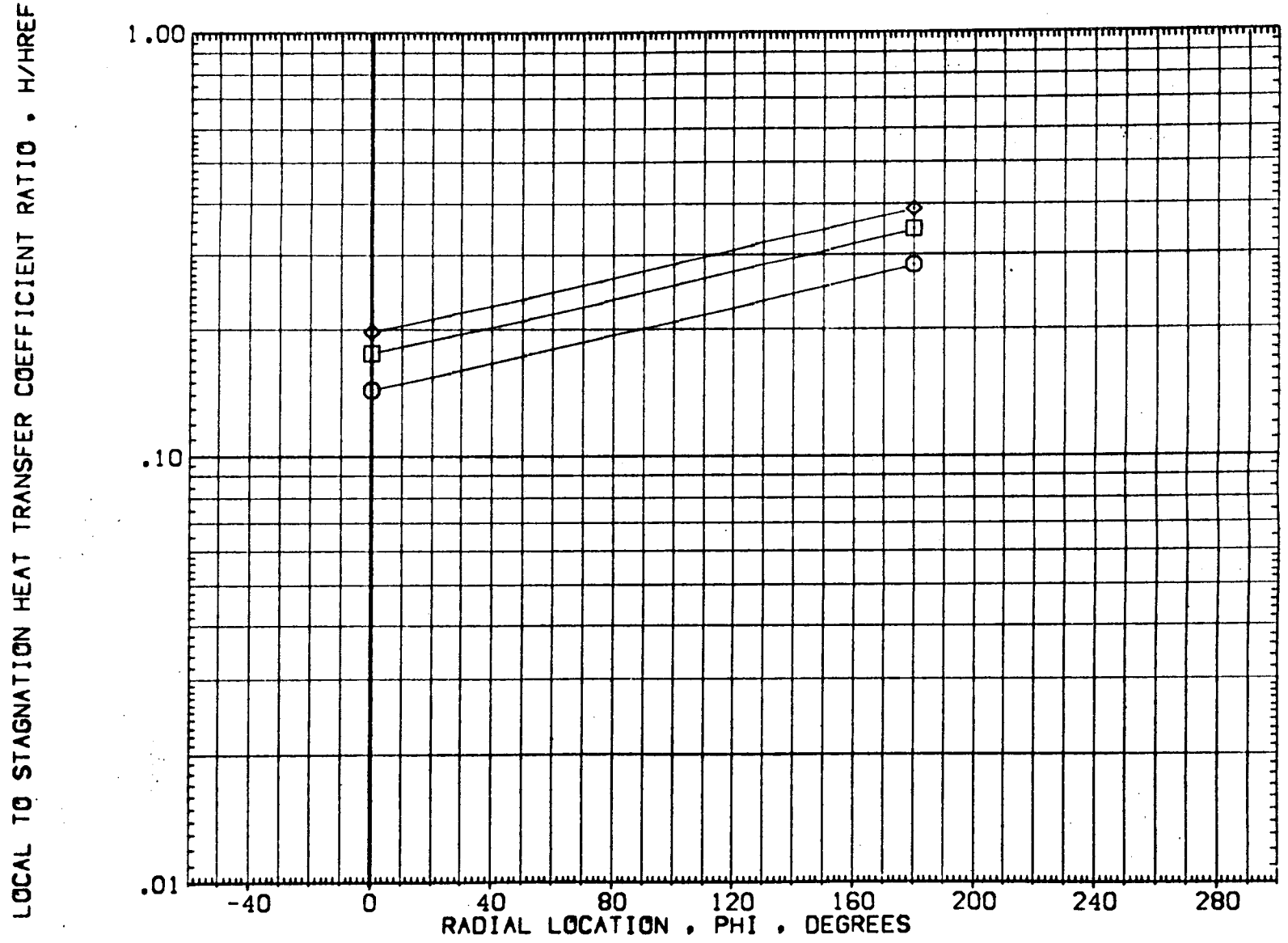


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

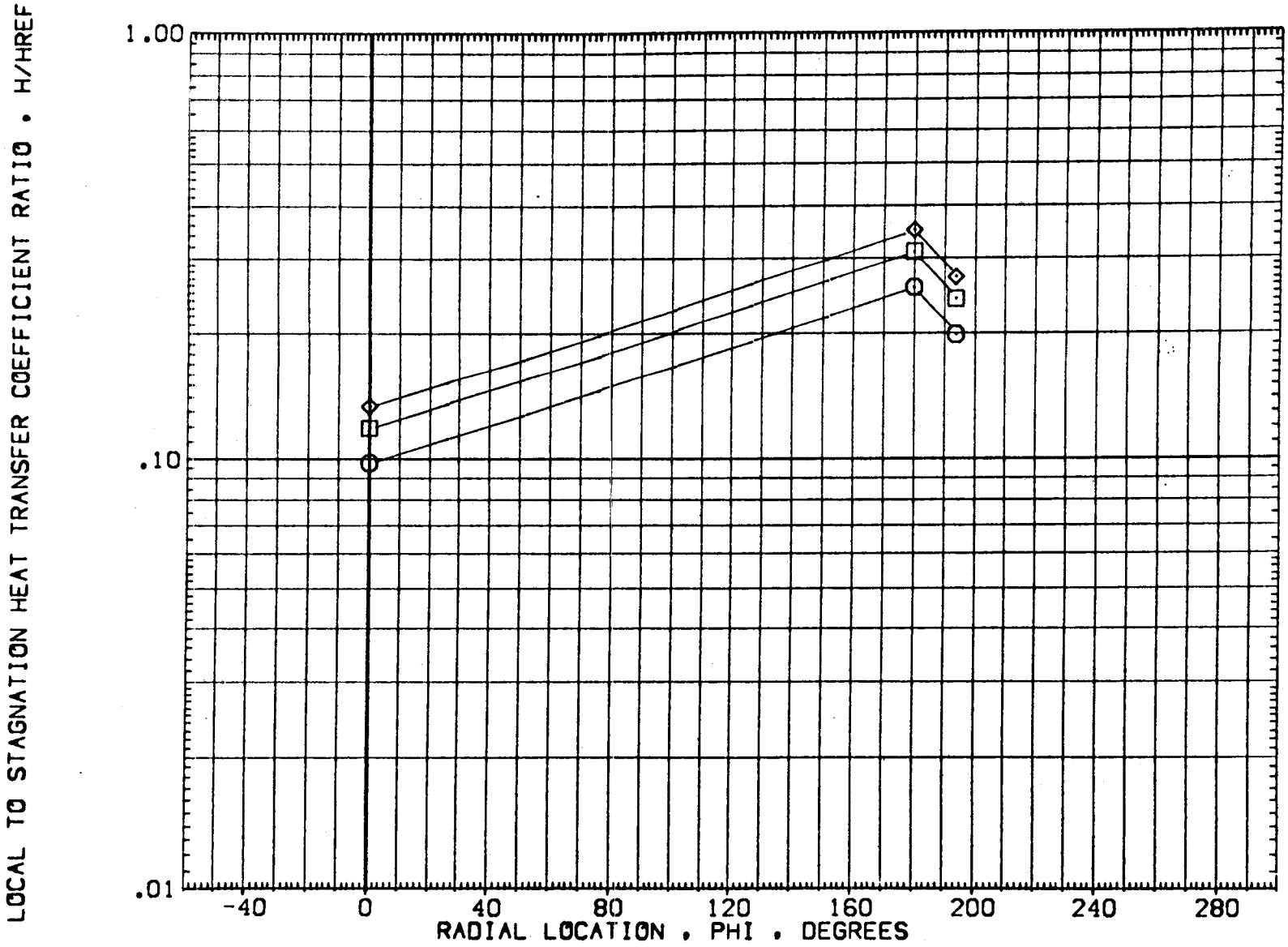


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

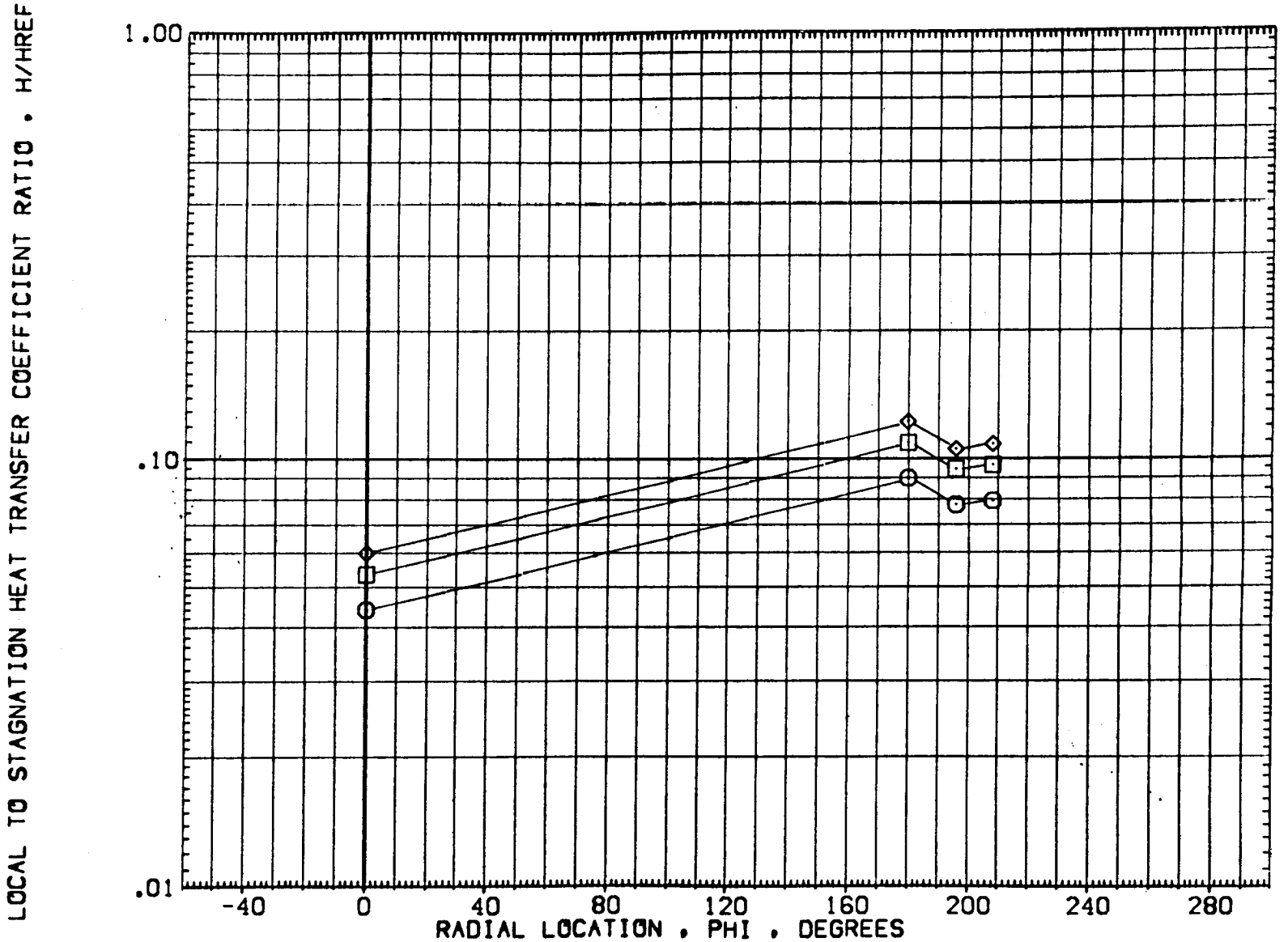


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

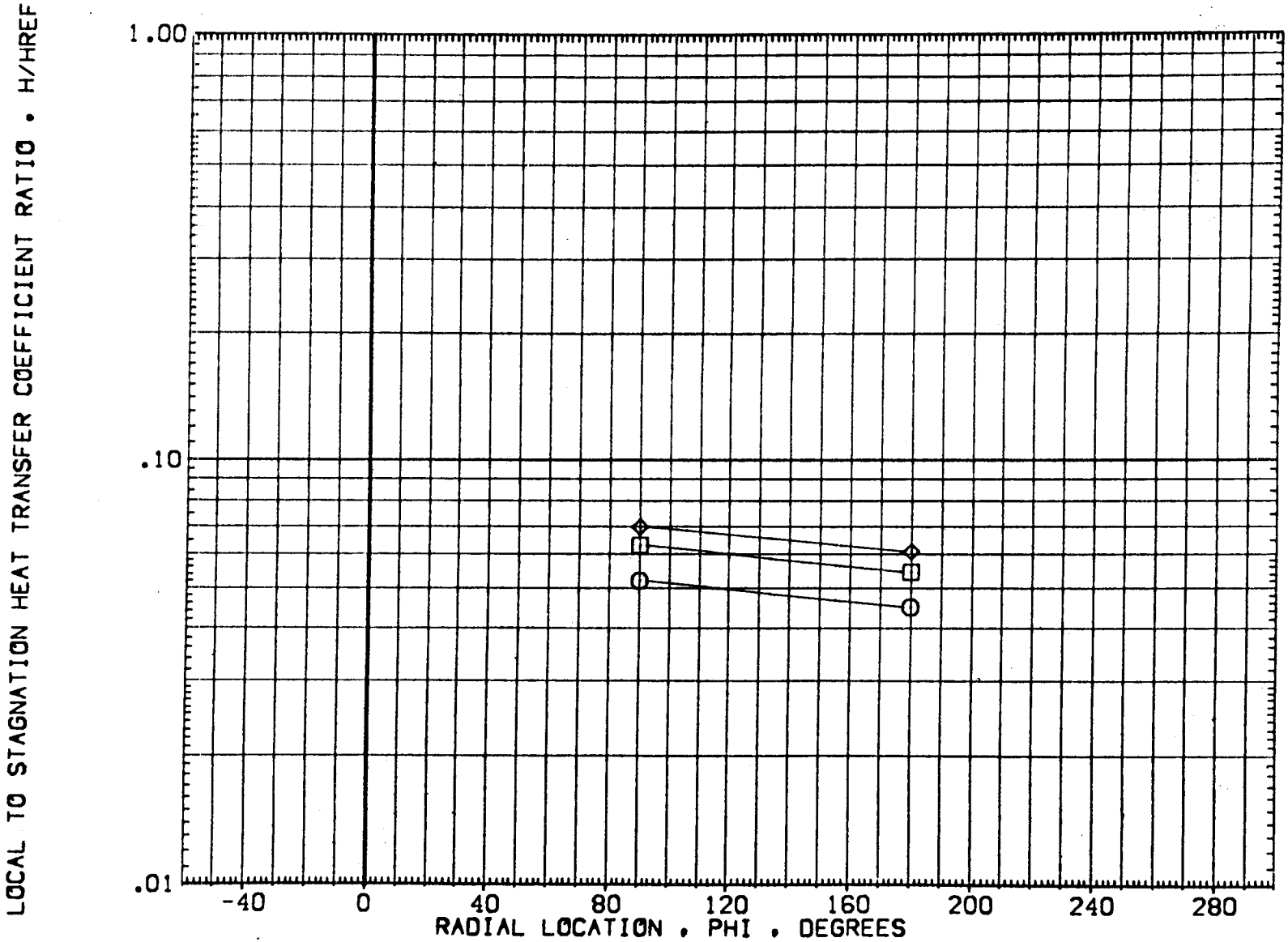


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	.HAV/HT
(RE|T02)	○	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

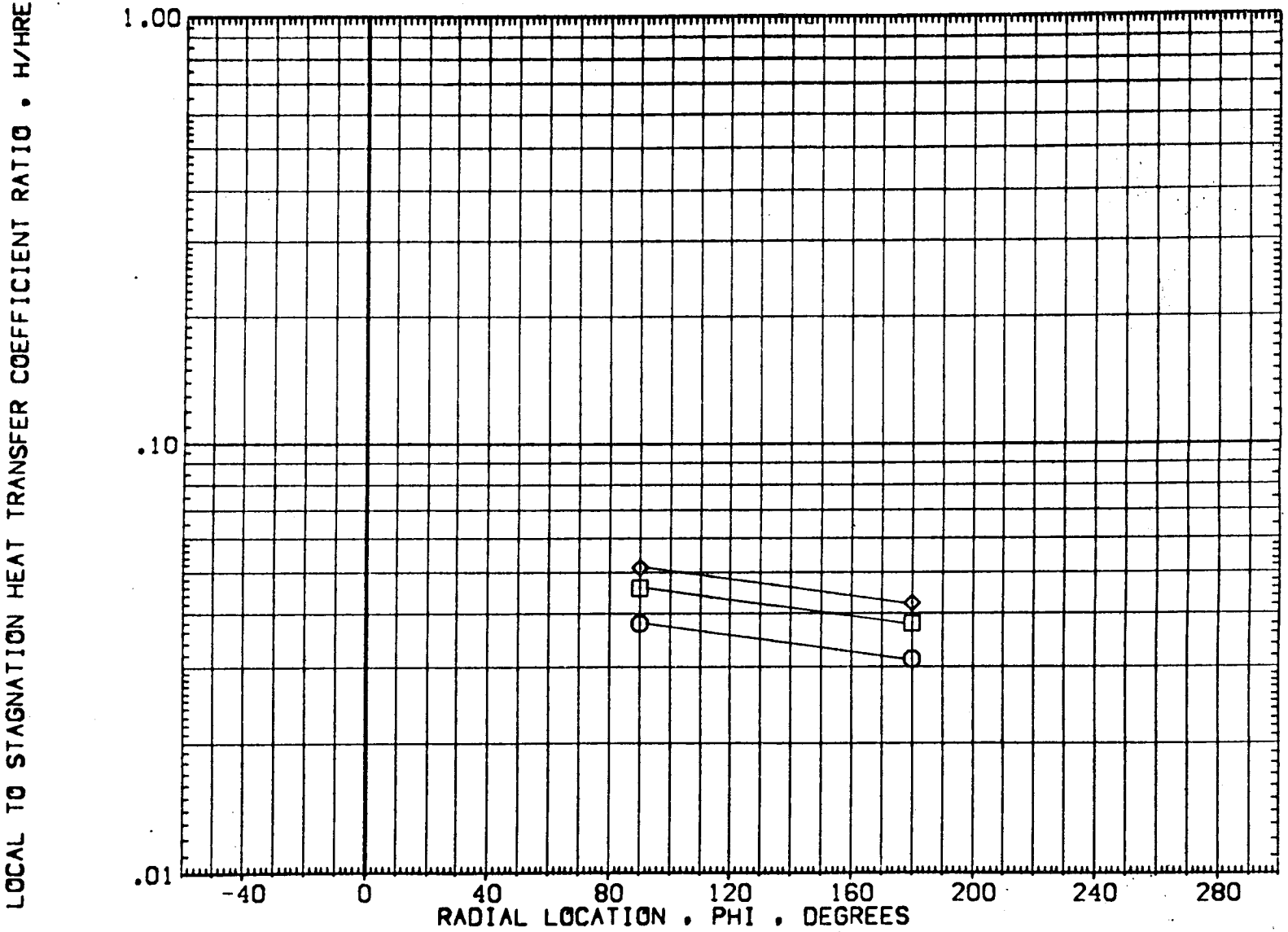


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	◁	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

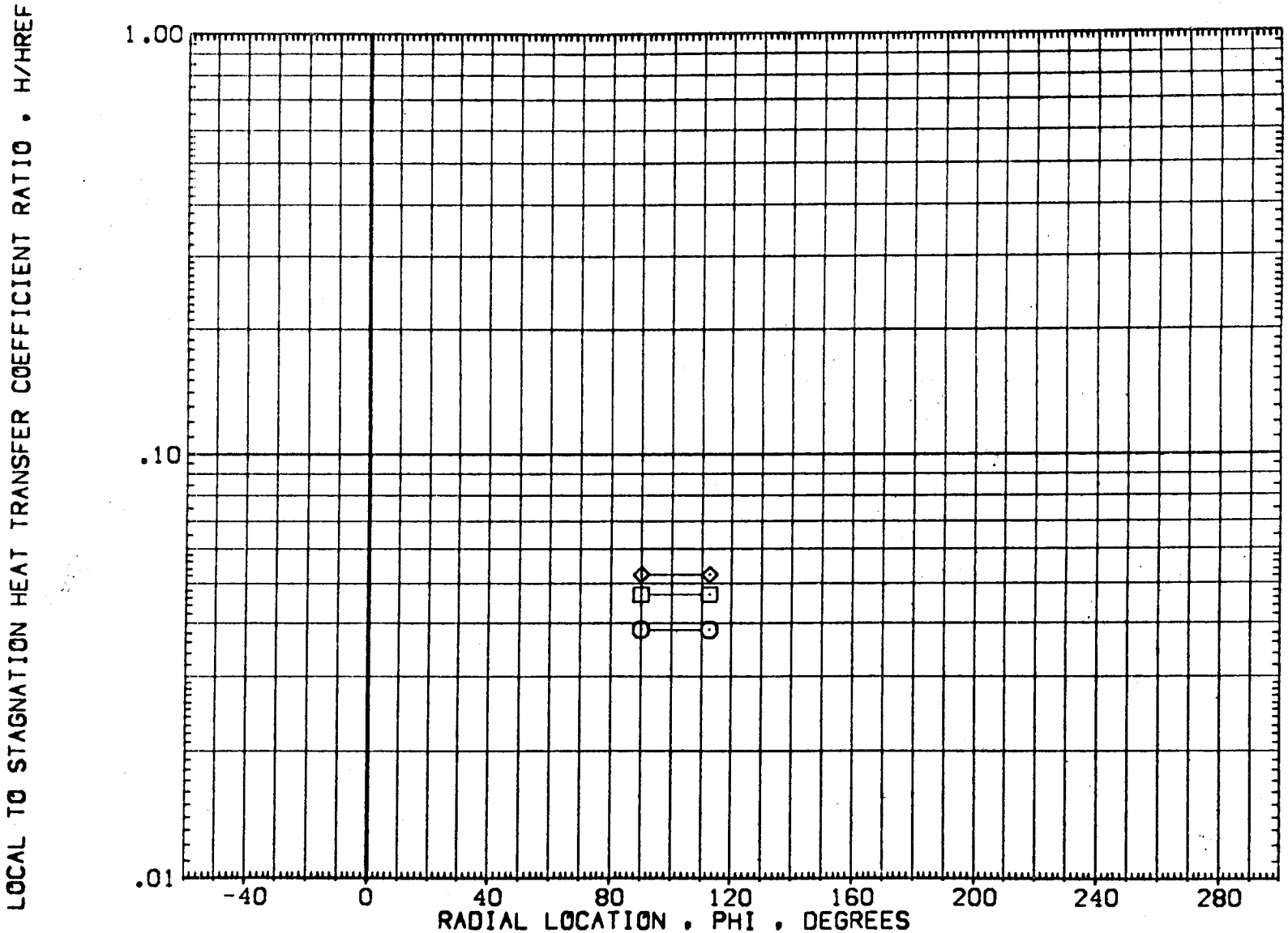


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	◇□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

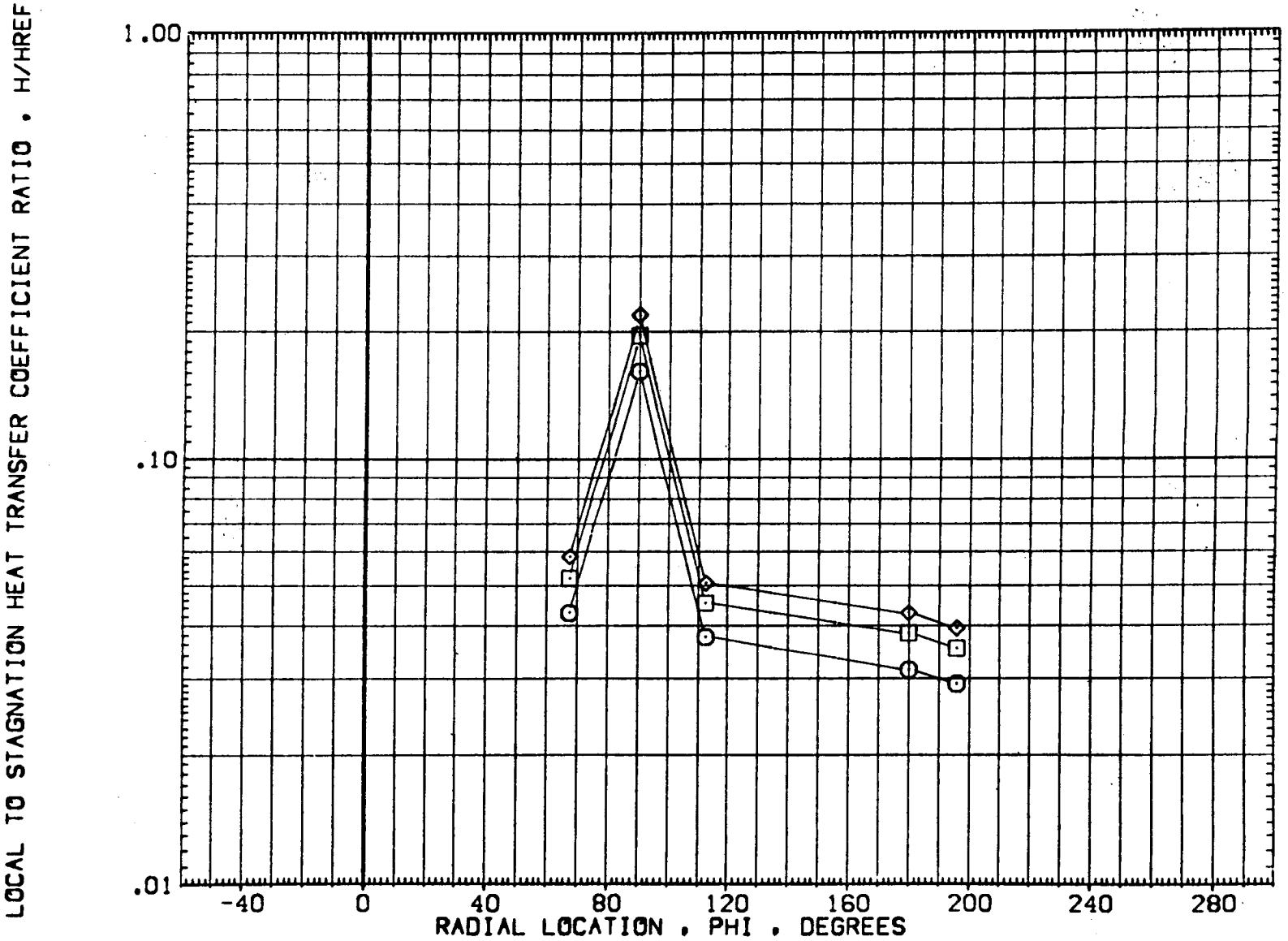


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

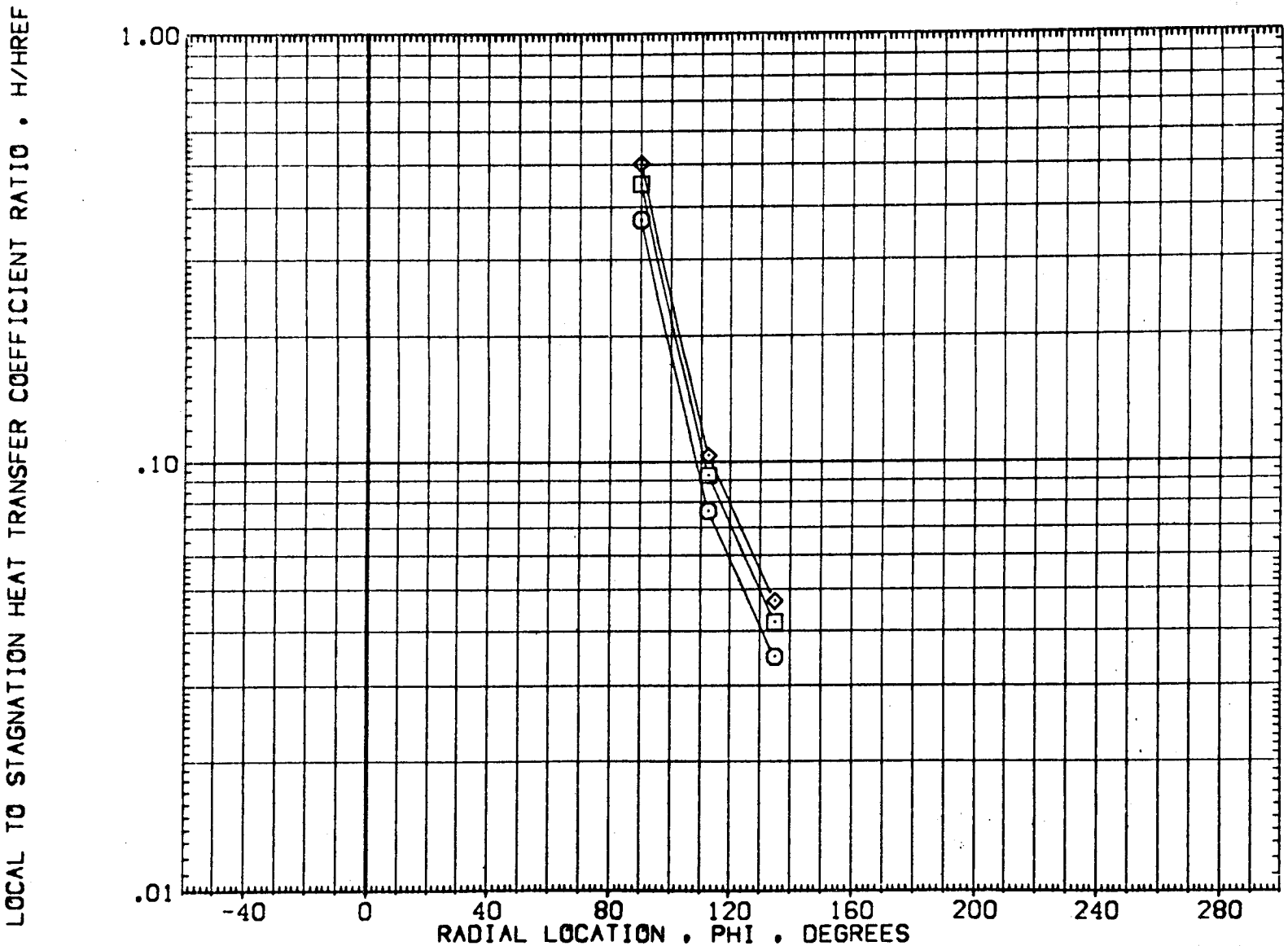


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

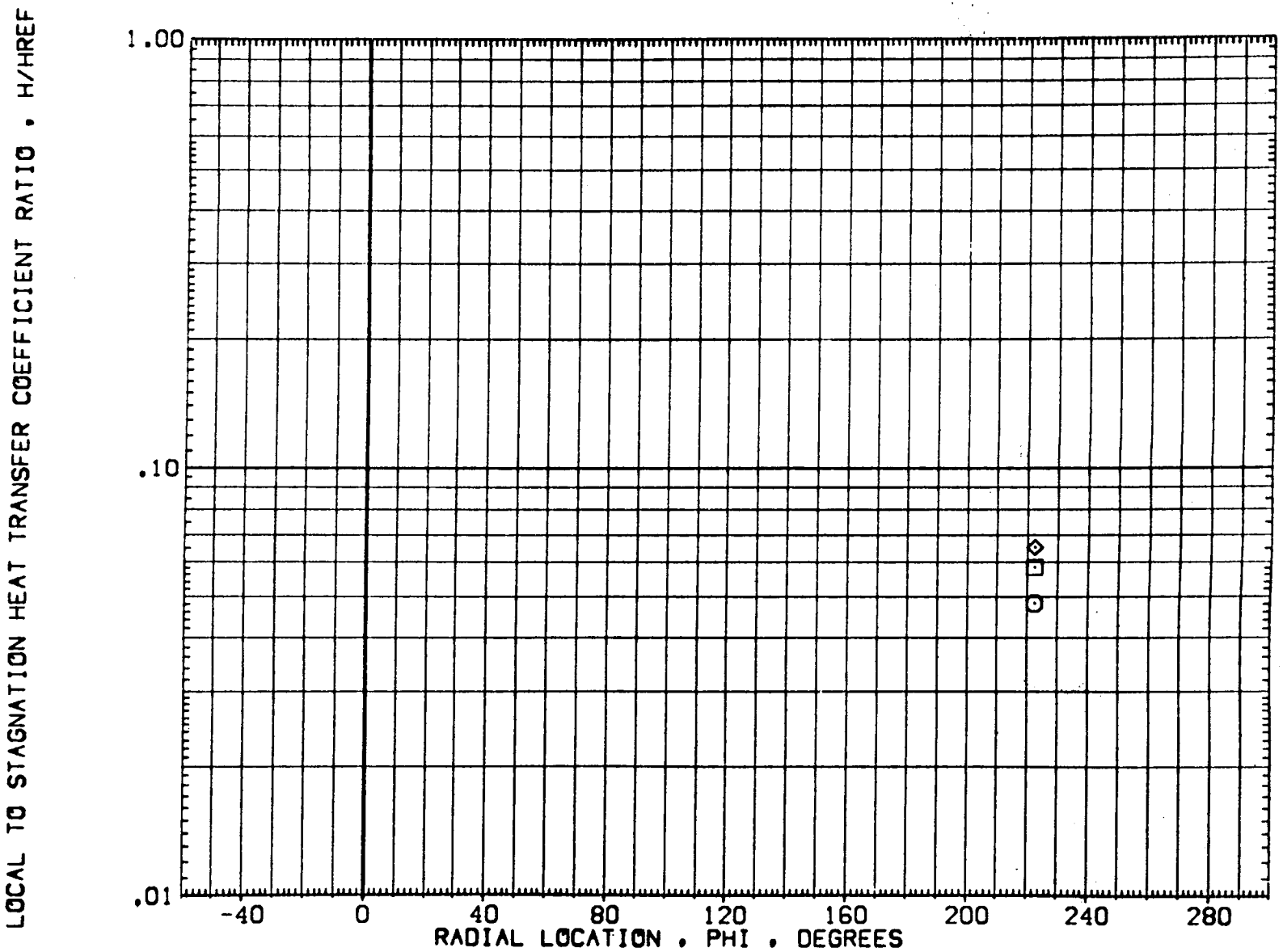


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

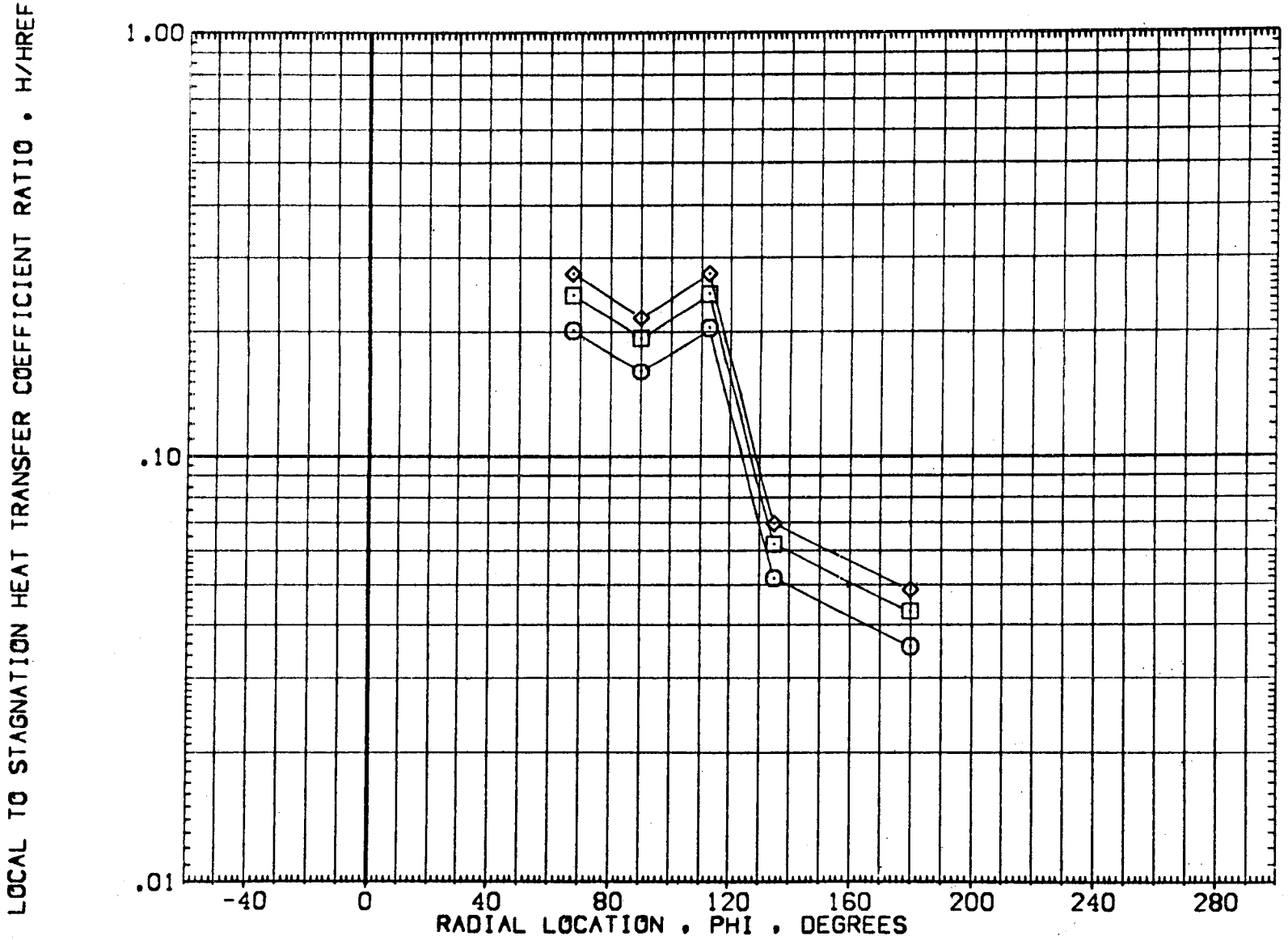


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

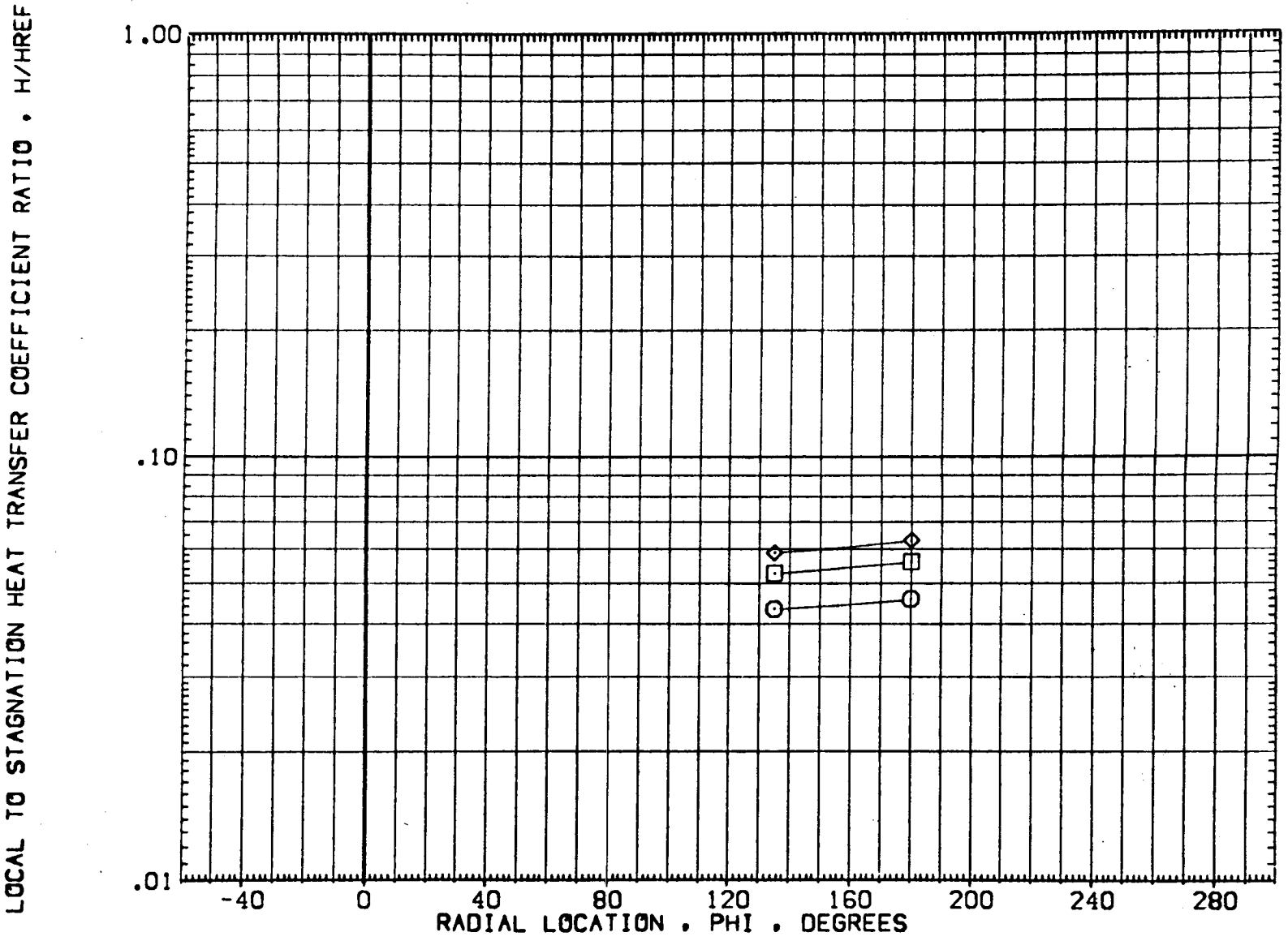


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

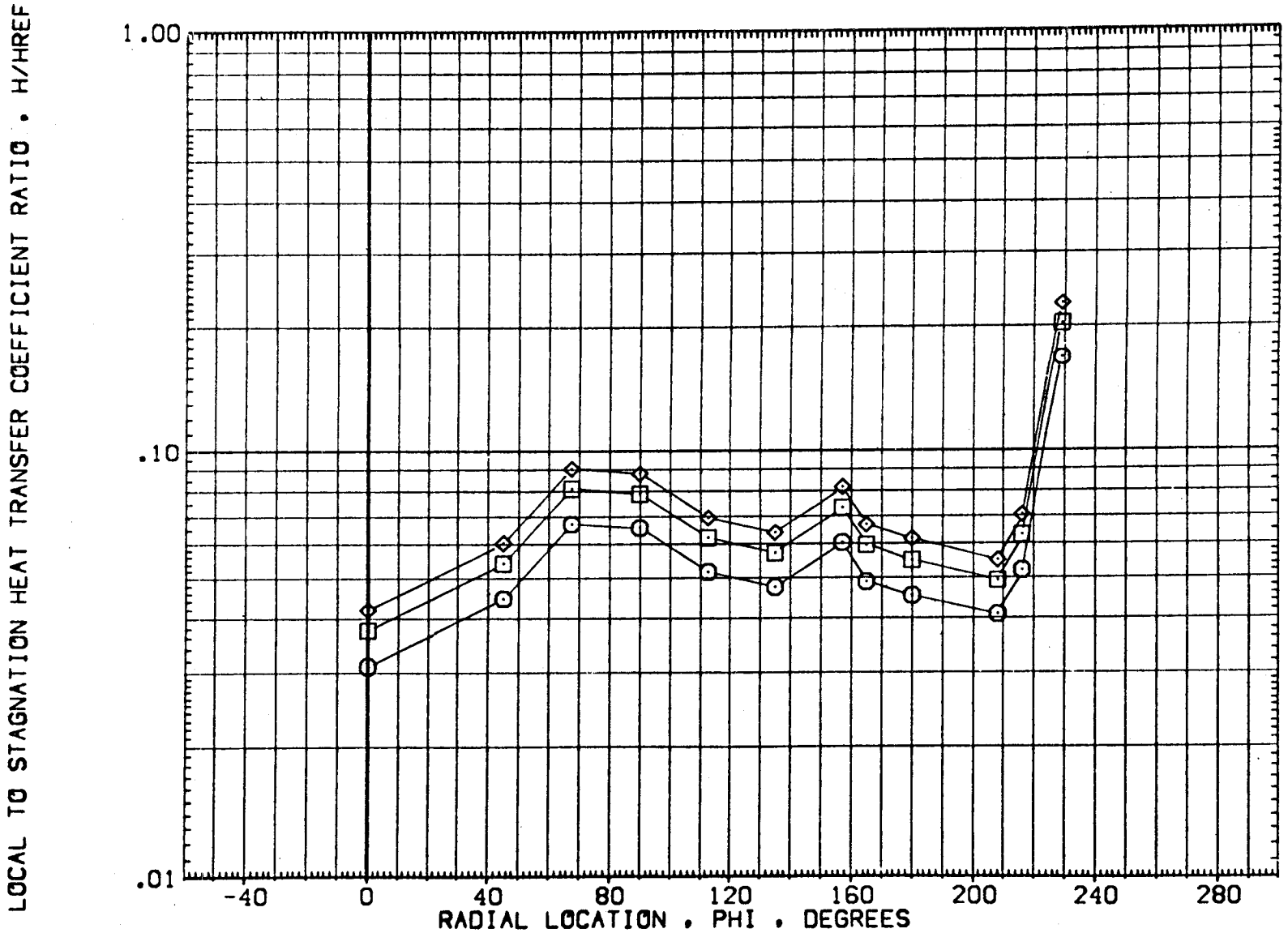


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

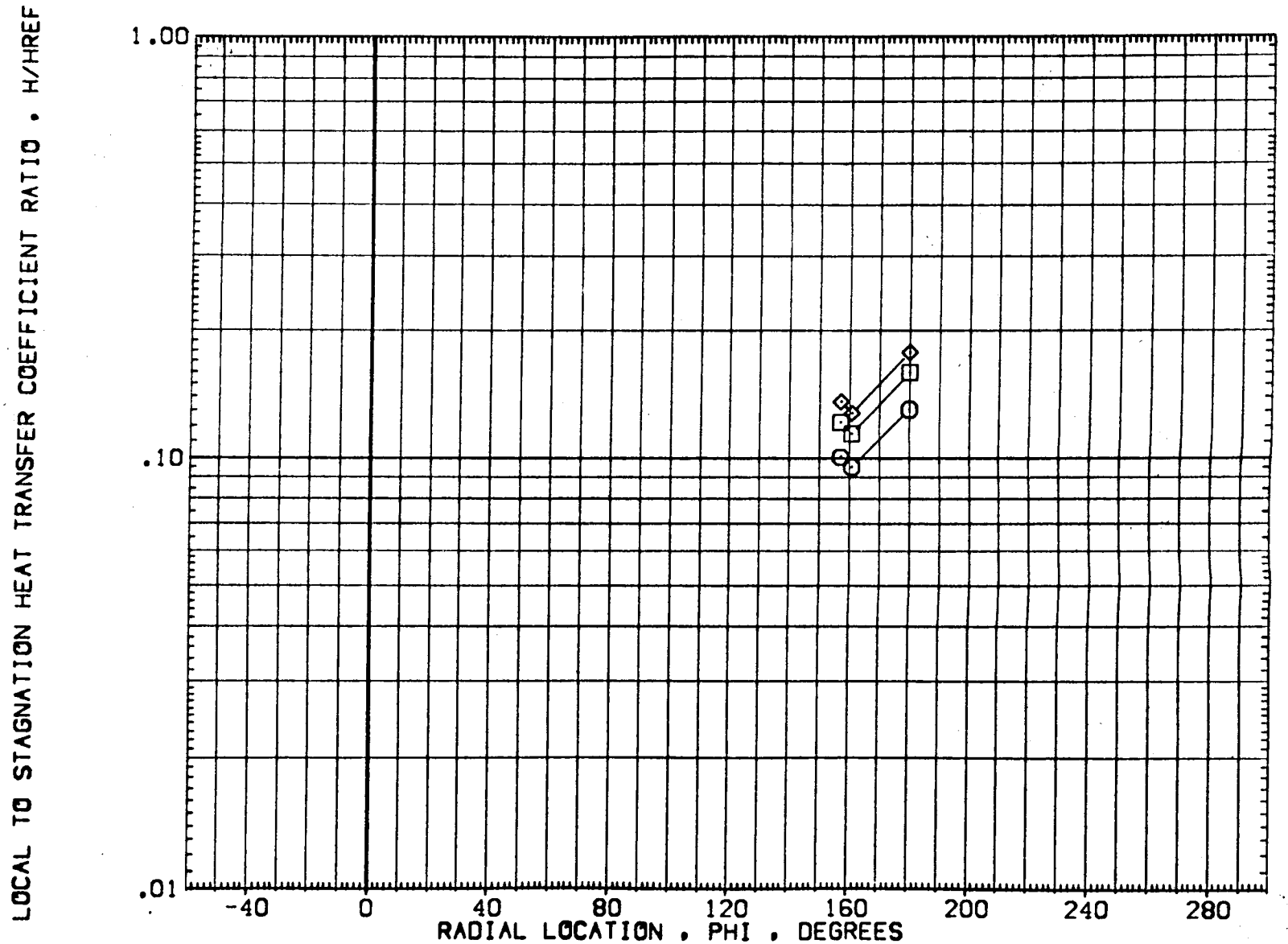


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

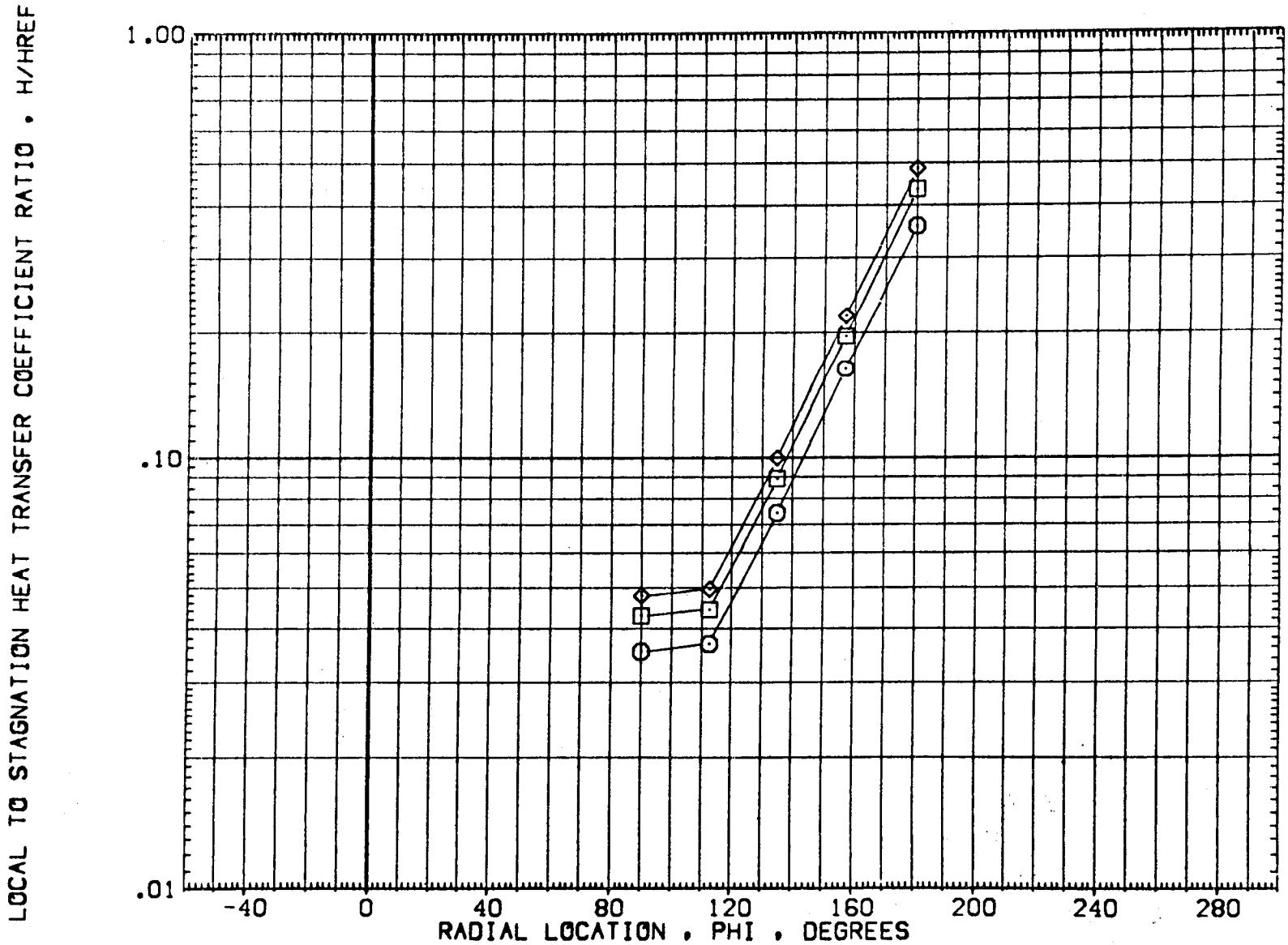


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

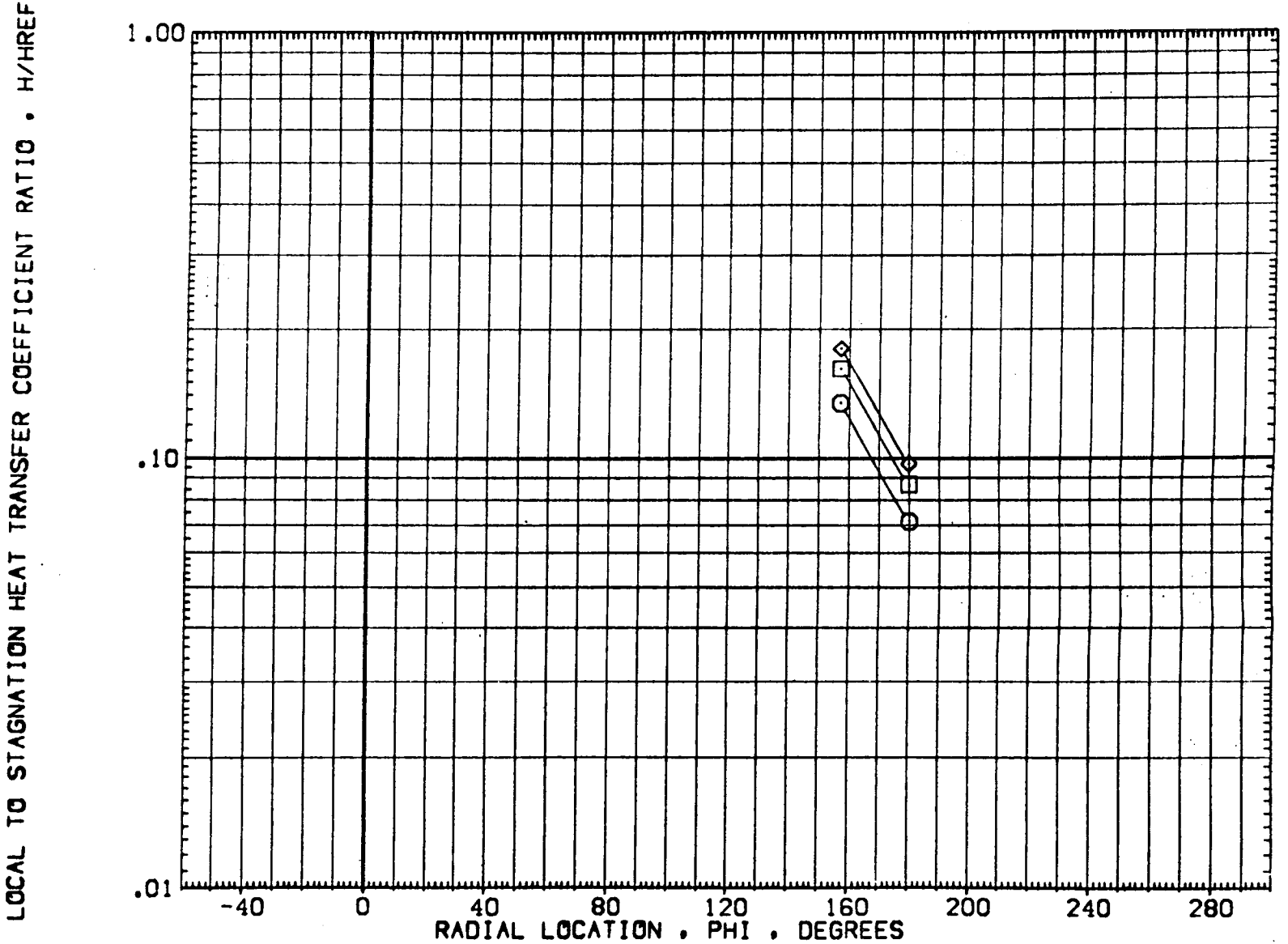


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

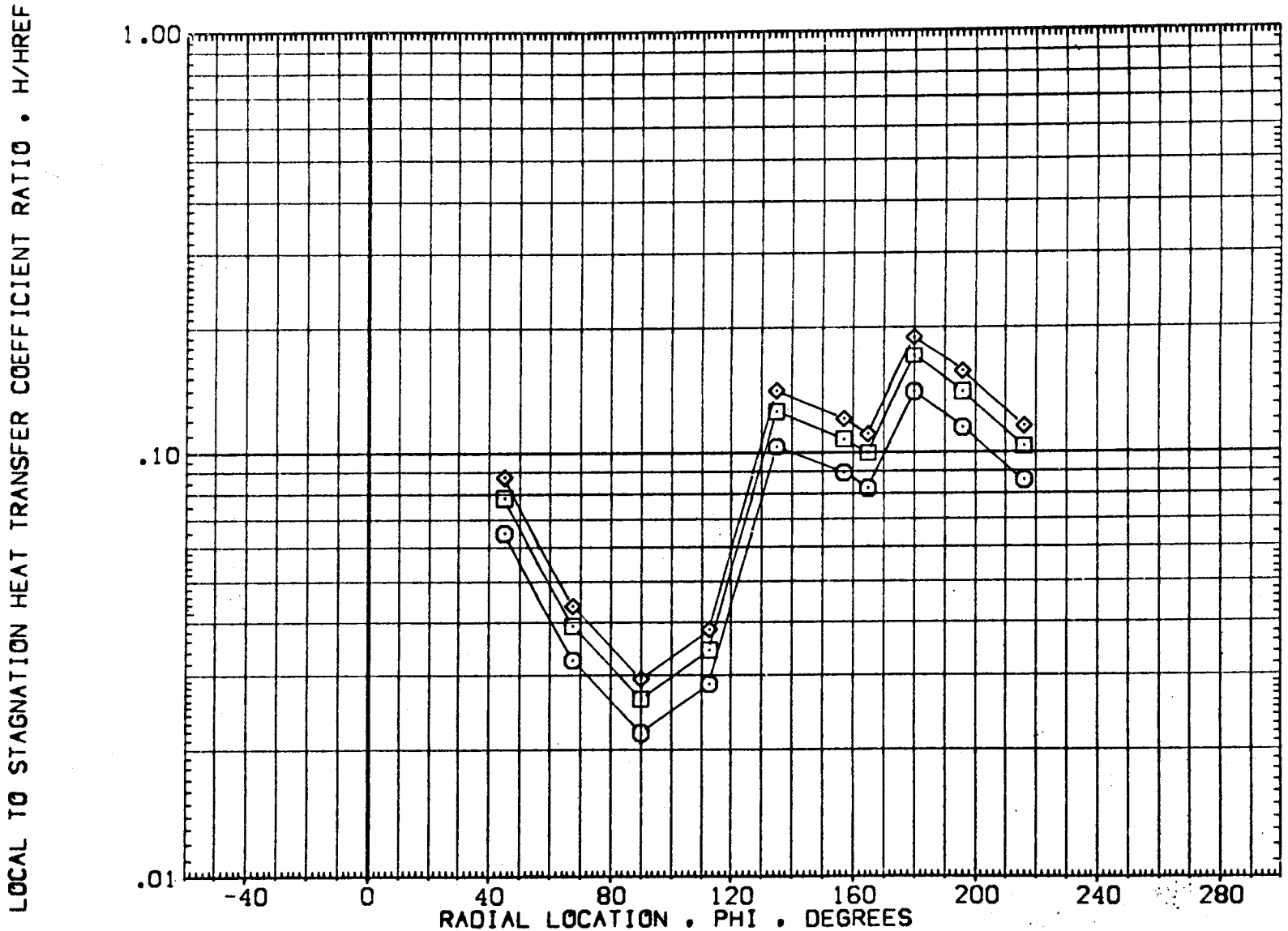


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	⊡	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

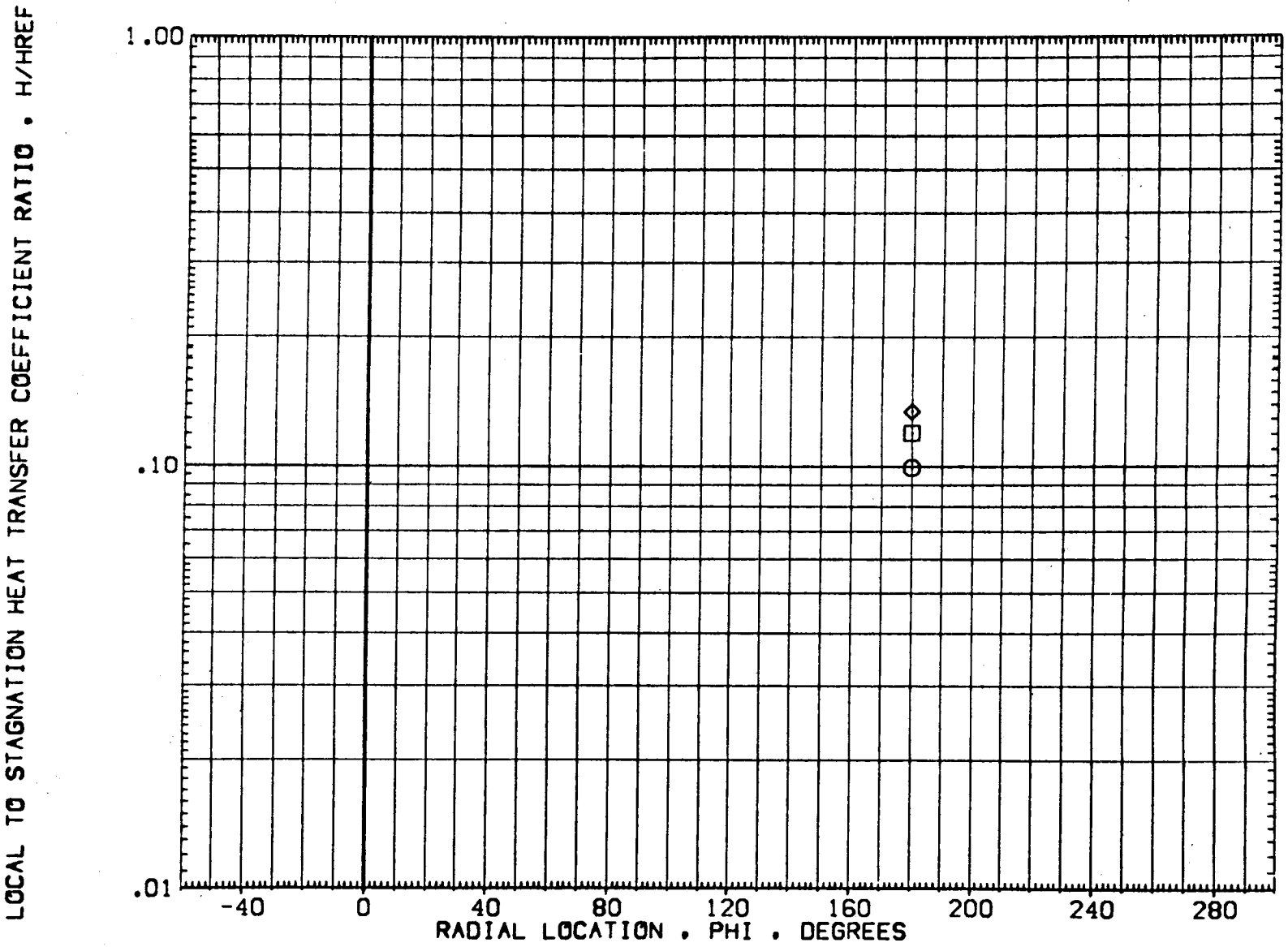


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

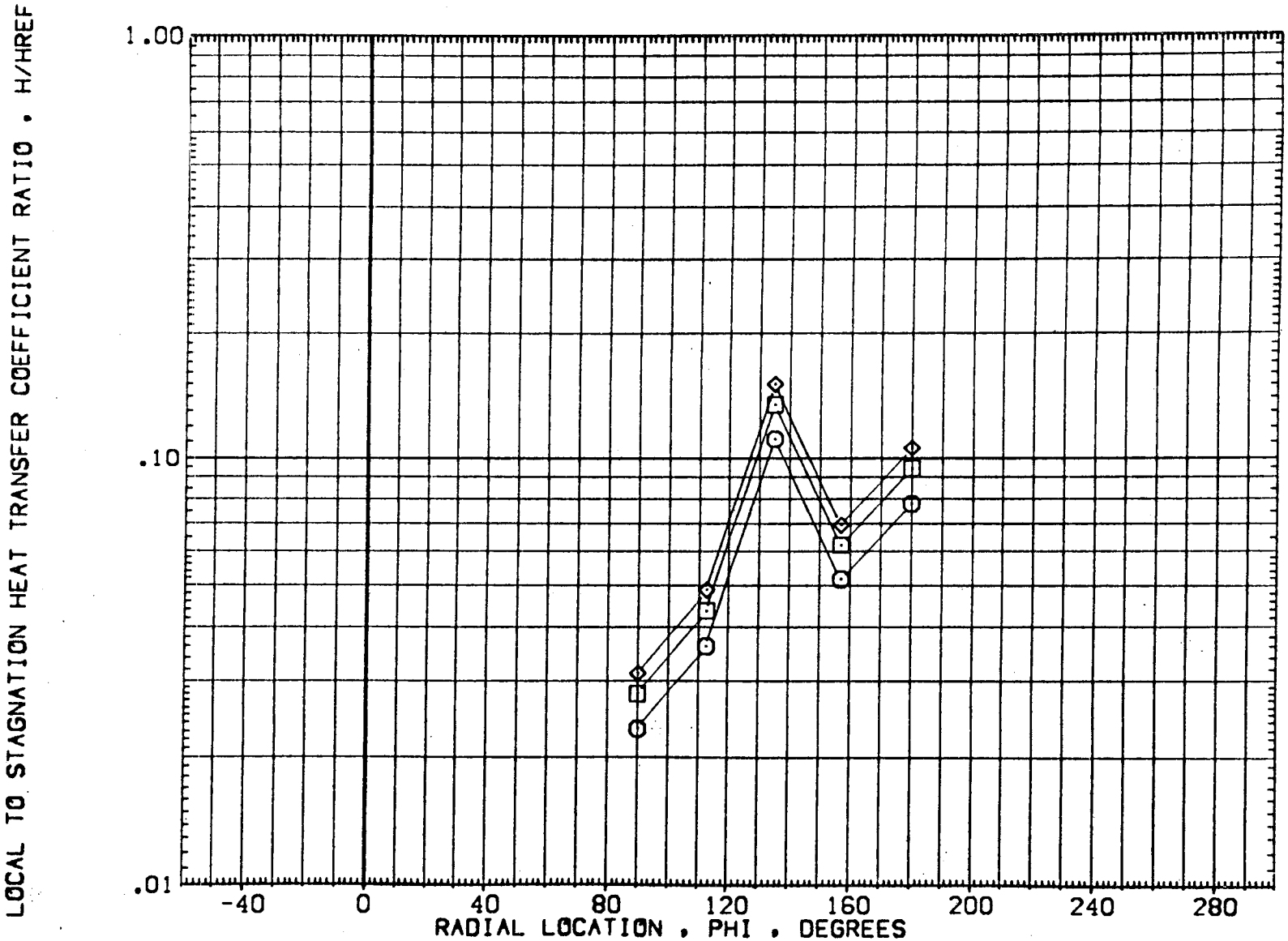


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	□	ARC 3.5-178 !H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	◁	ARC 3.5-178 !H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 !H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

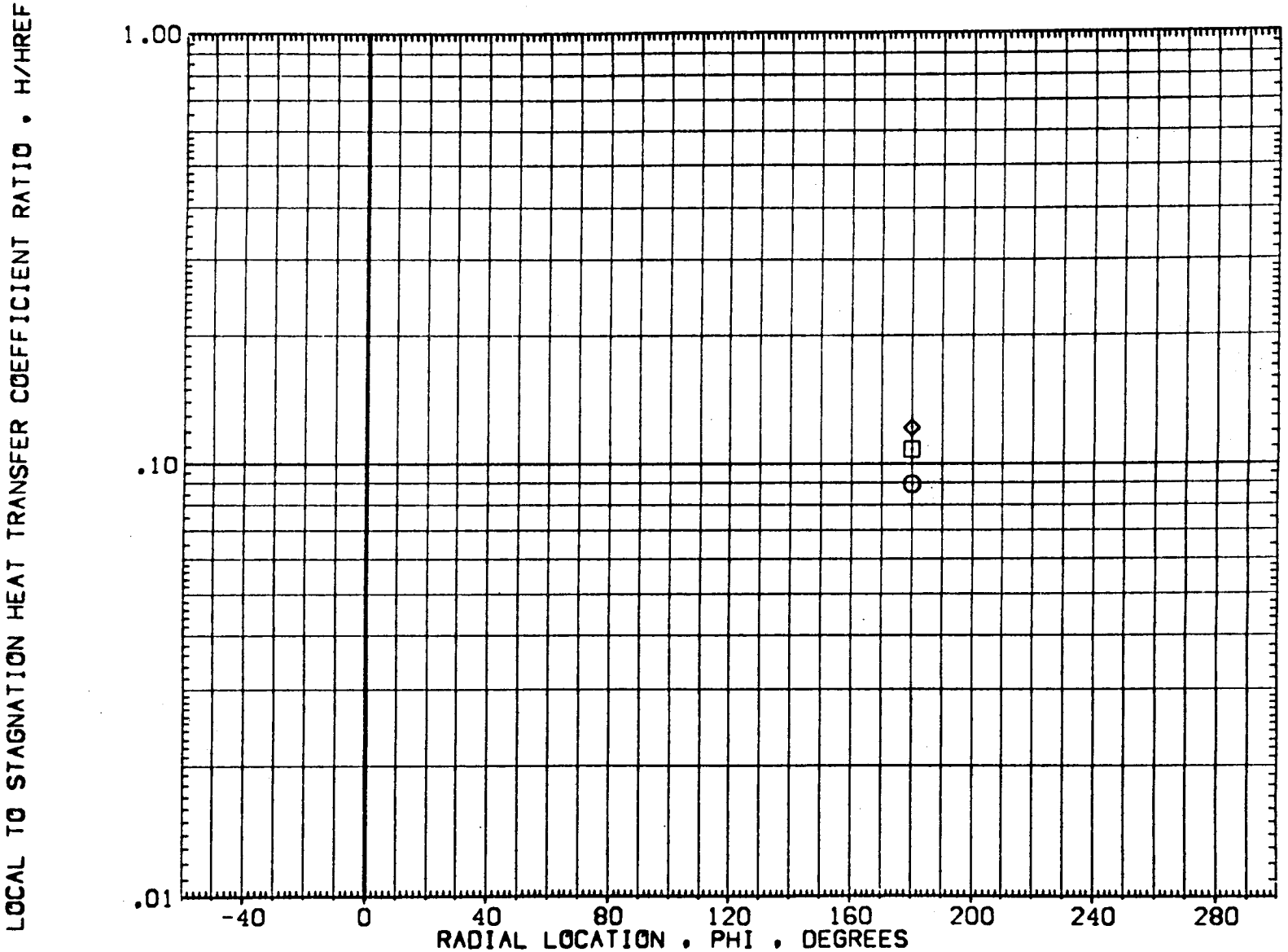


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO2)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEITO2)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

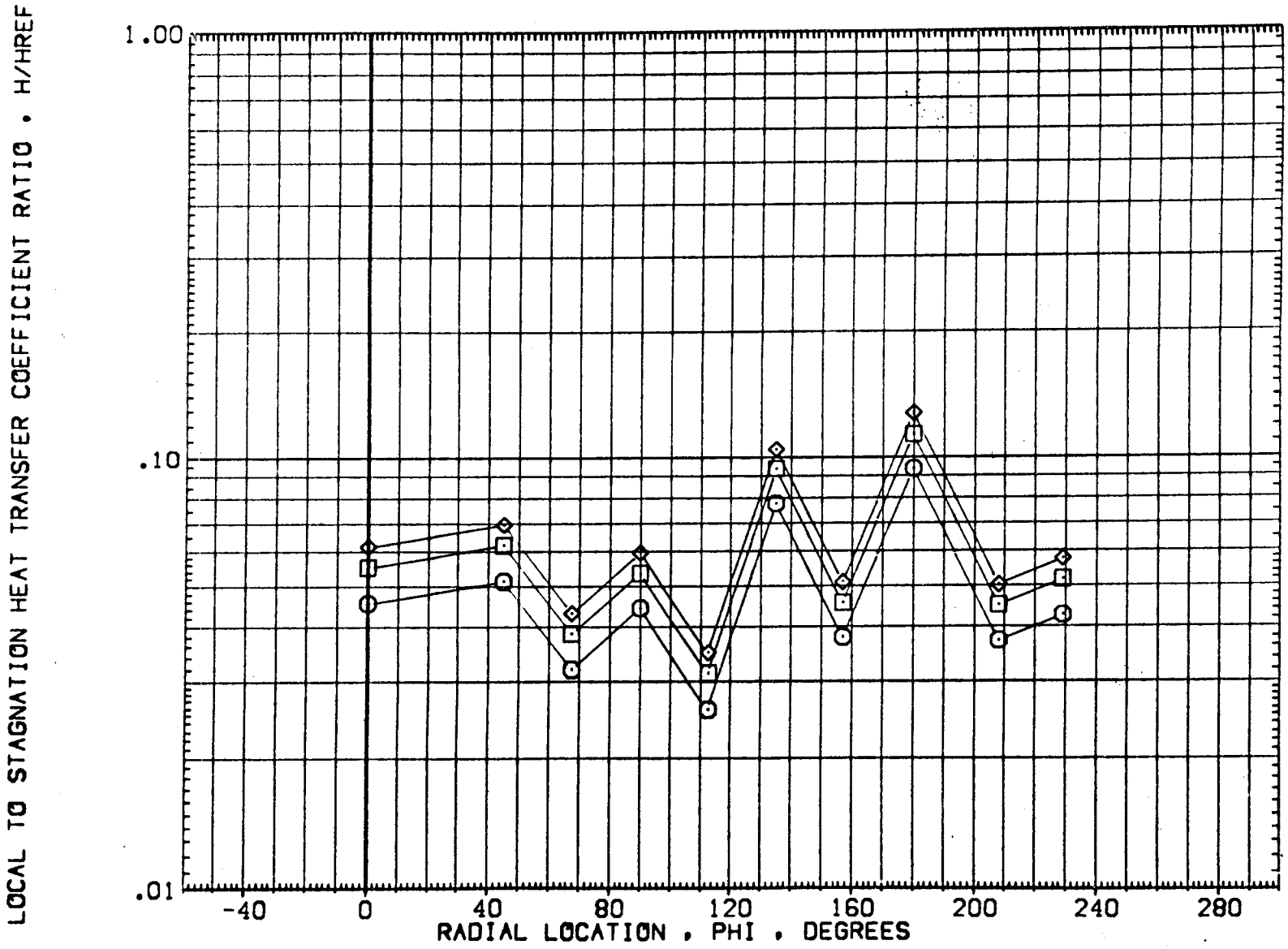


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

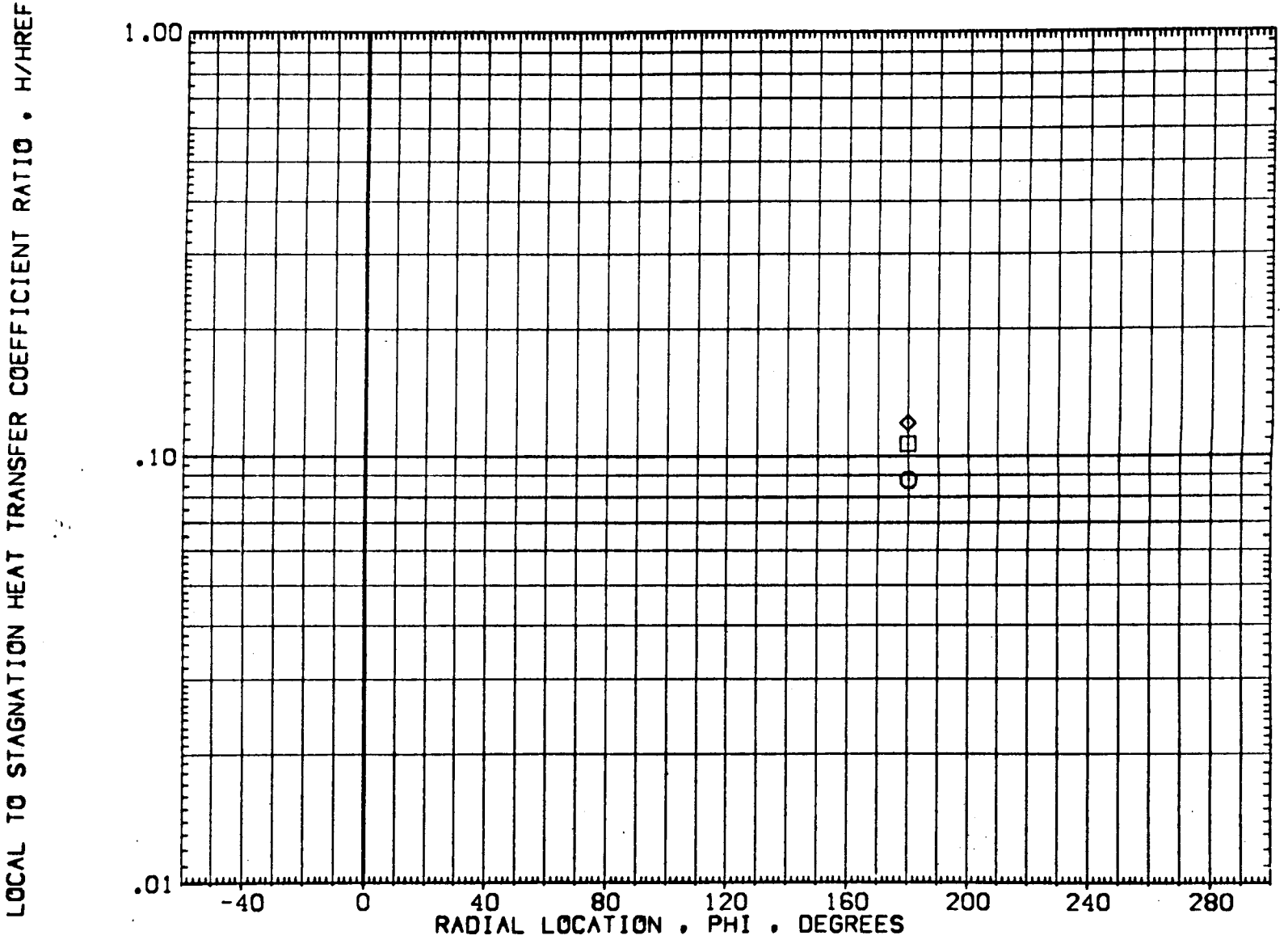


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

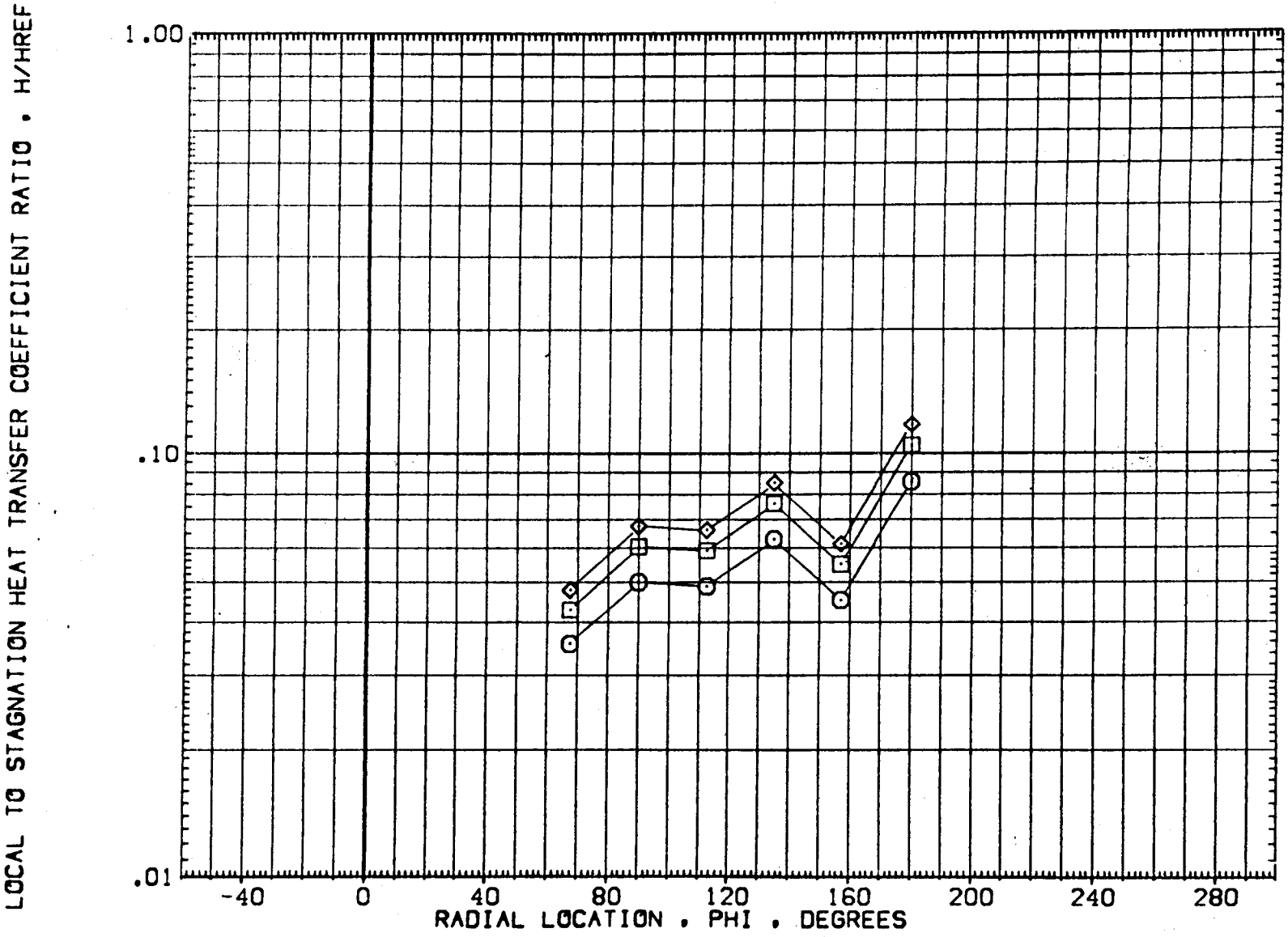


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

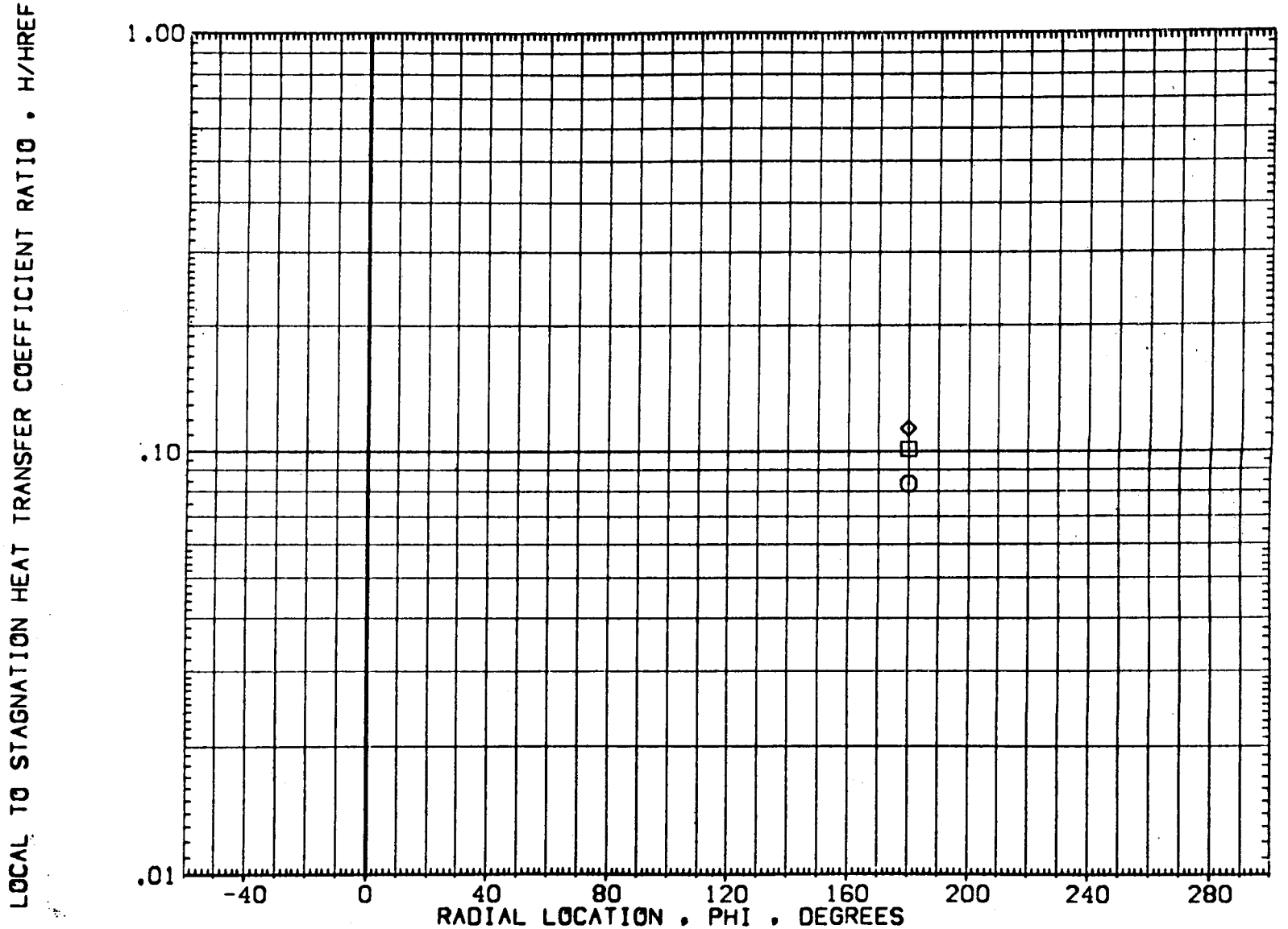


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

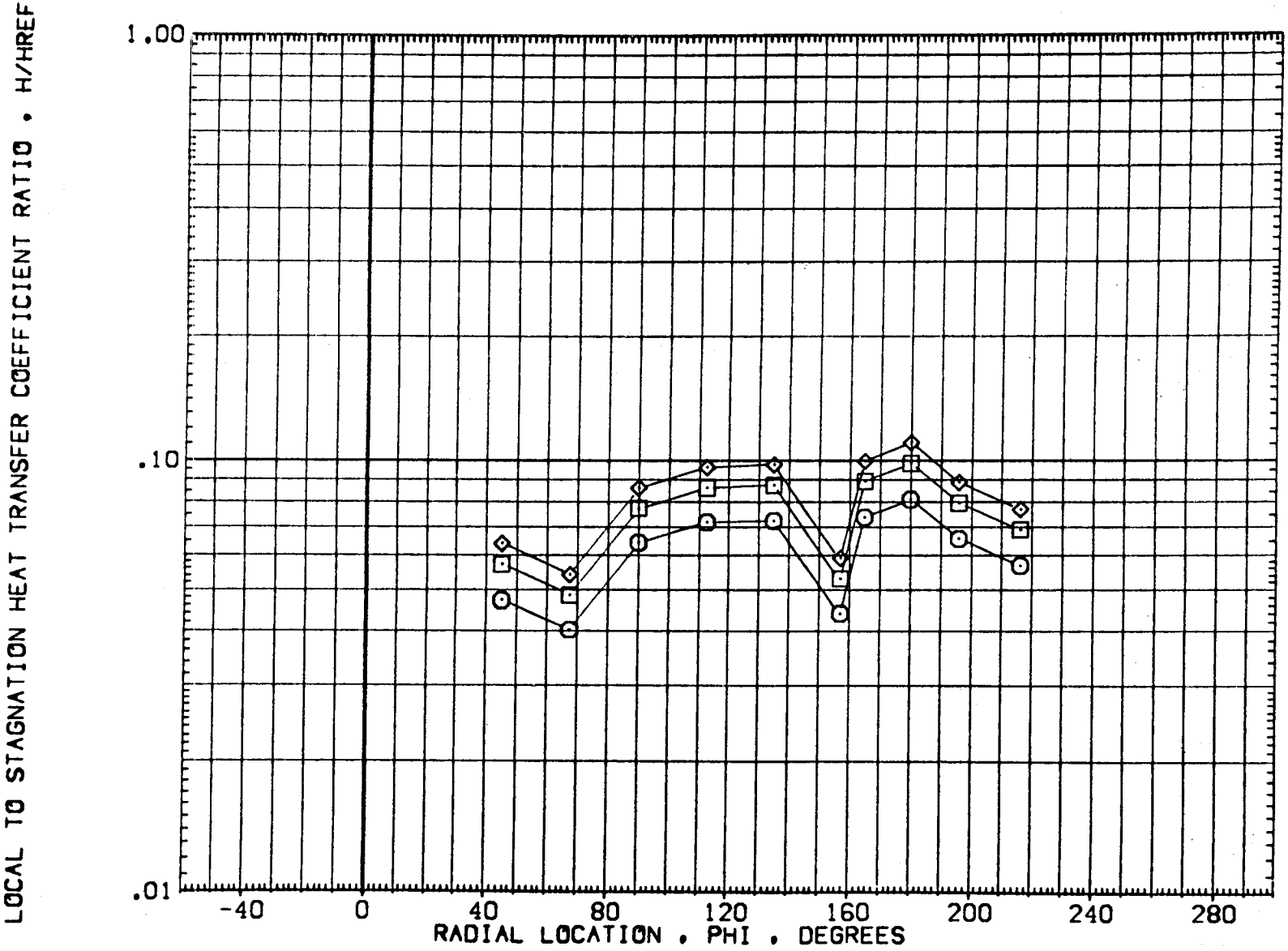


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	.000	.000	5.000	.850

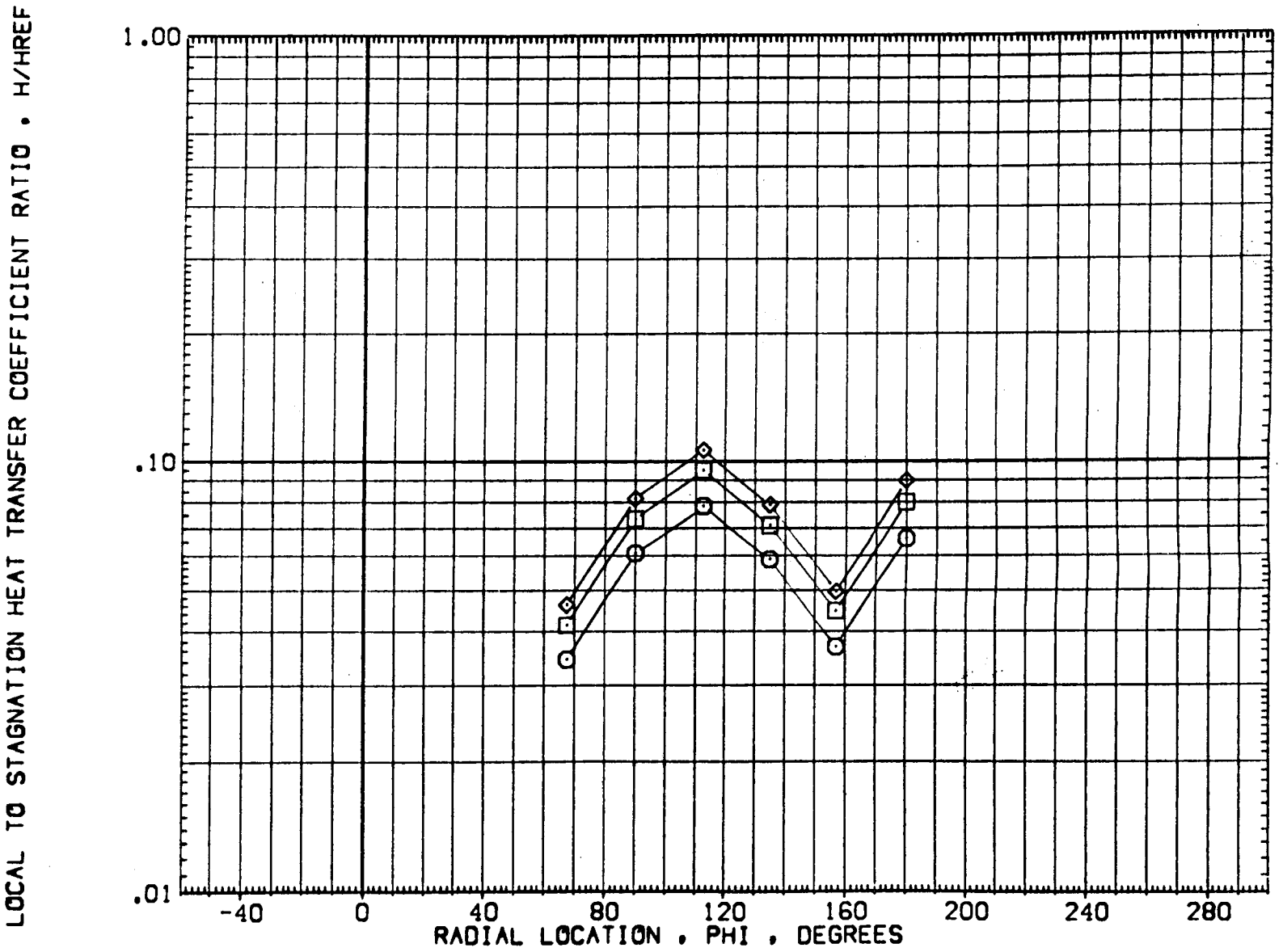


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

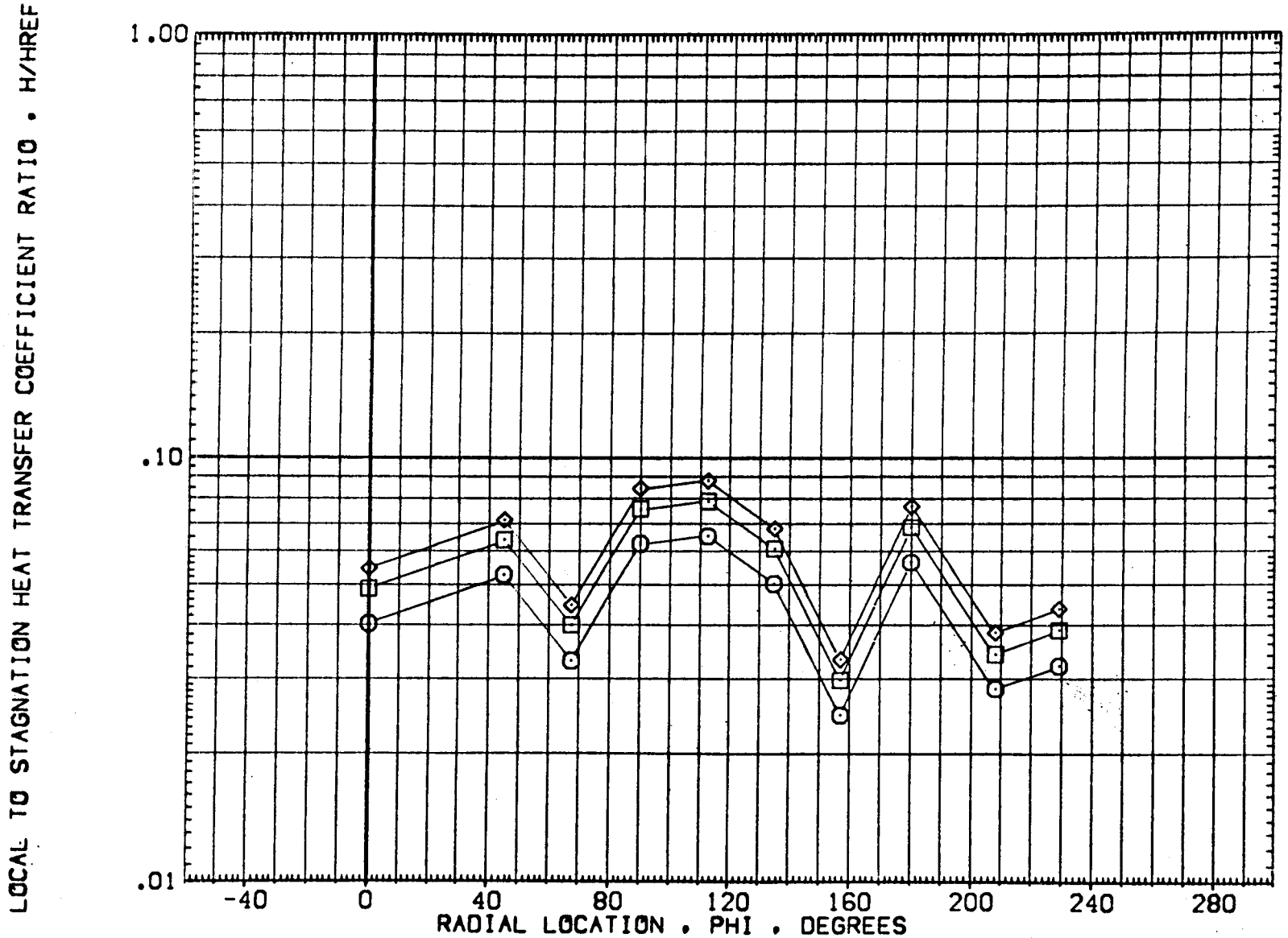


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

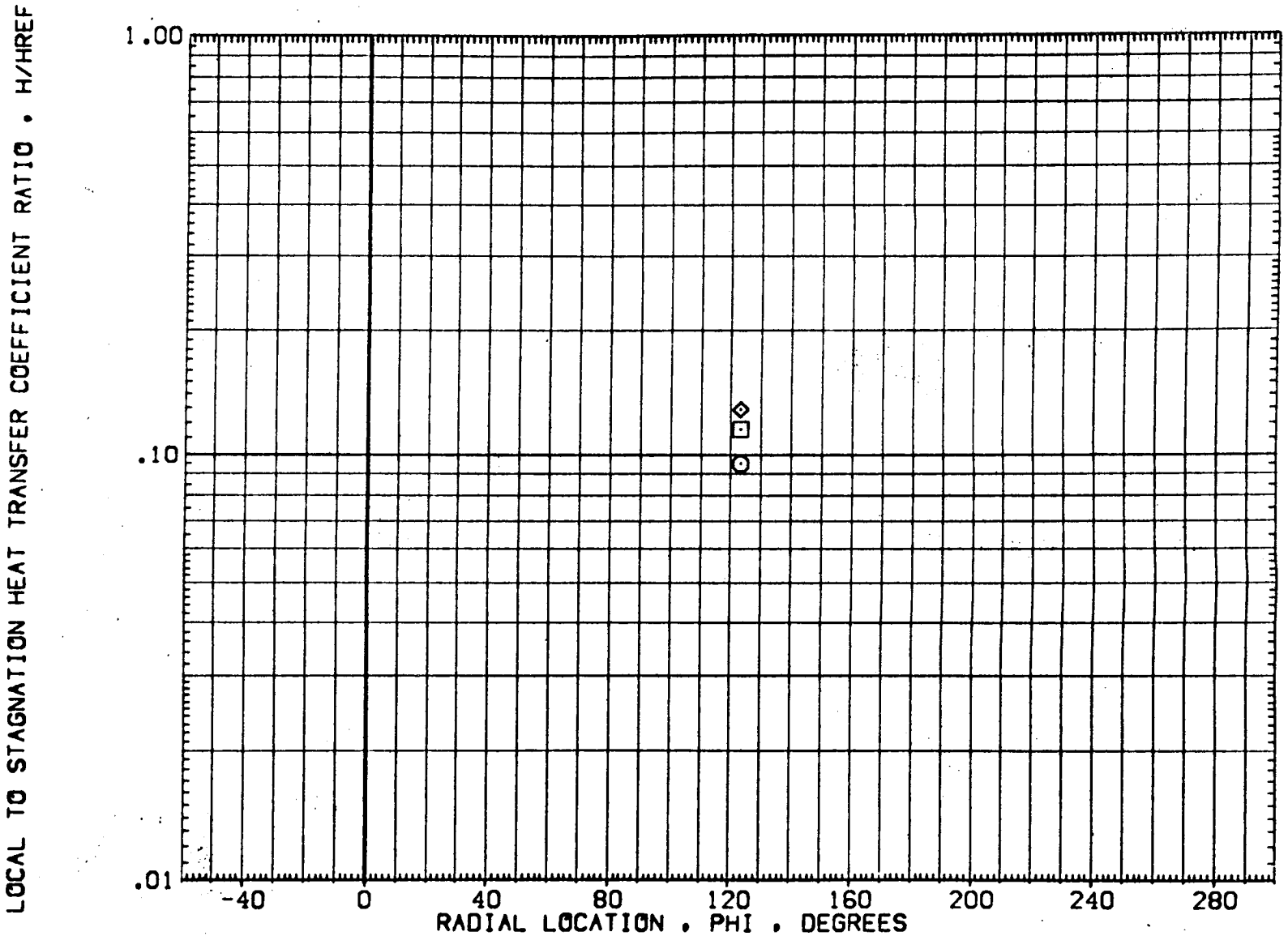


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE!T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

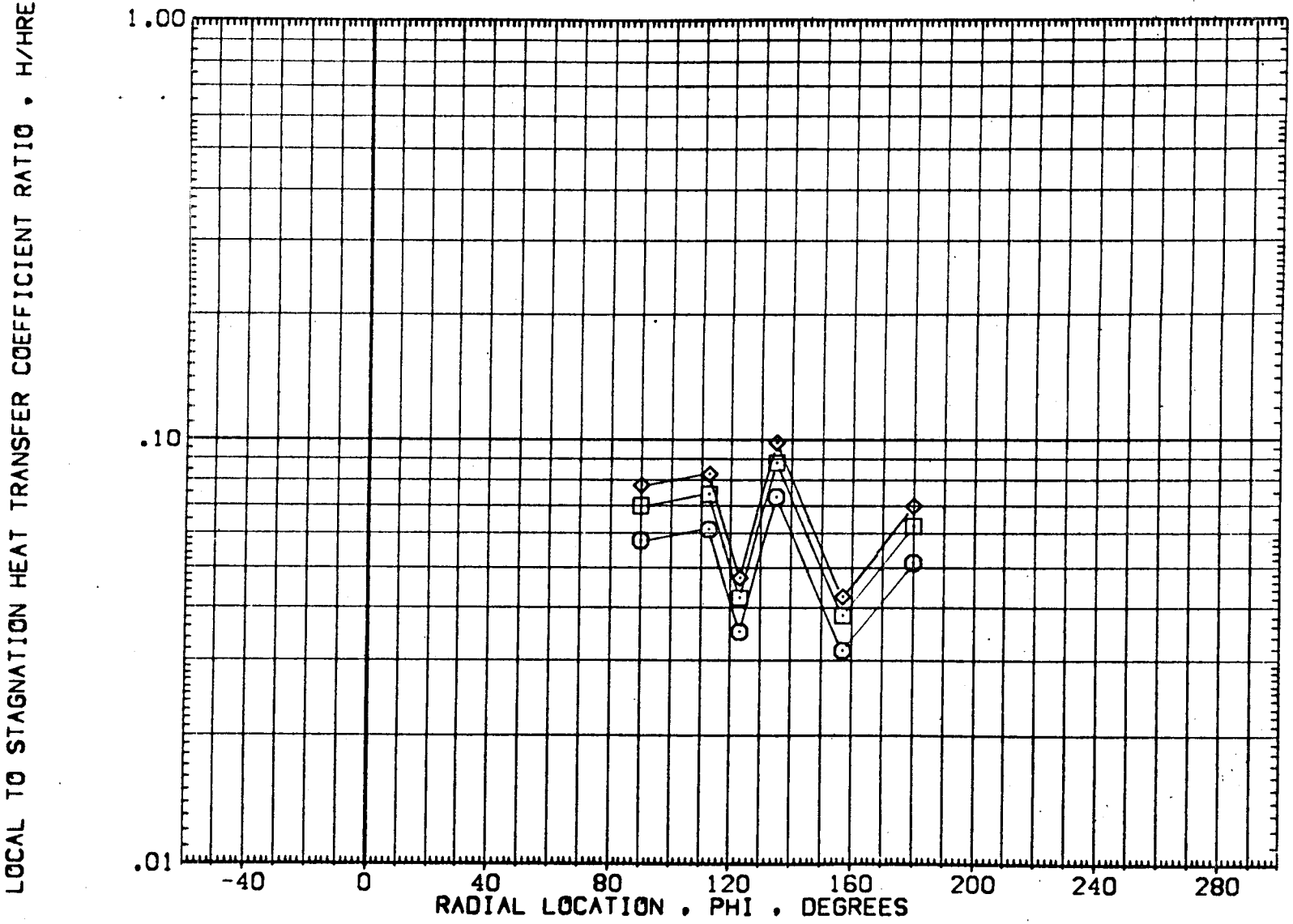


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE|T02)	○	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 B+T+S	EXTERNAL TANK	.000	.000	5.000	.850

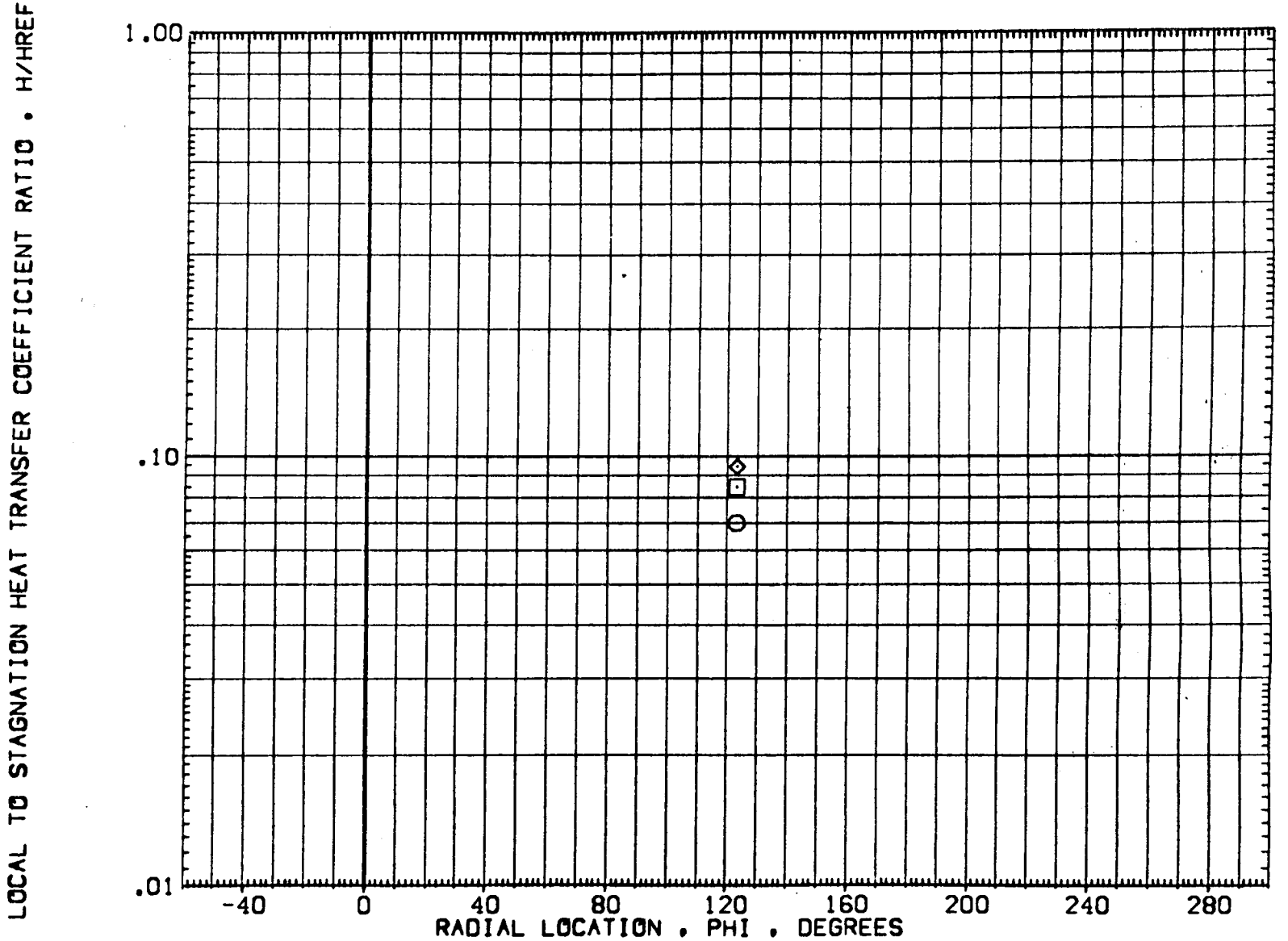


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

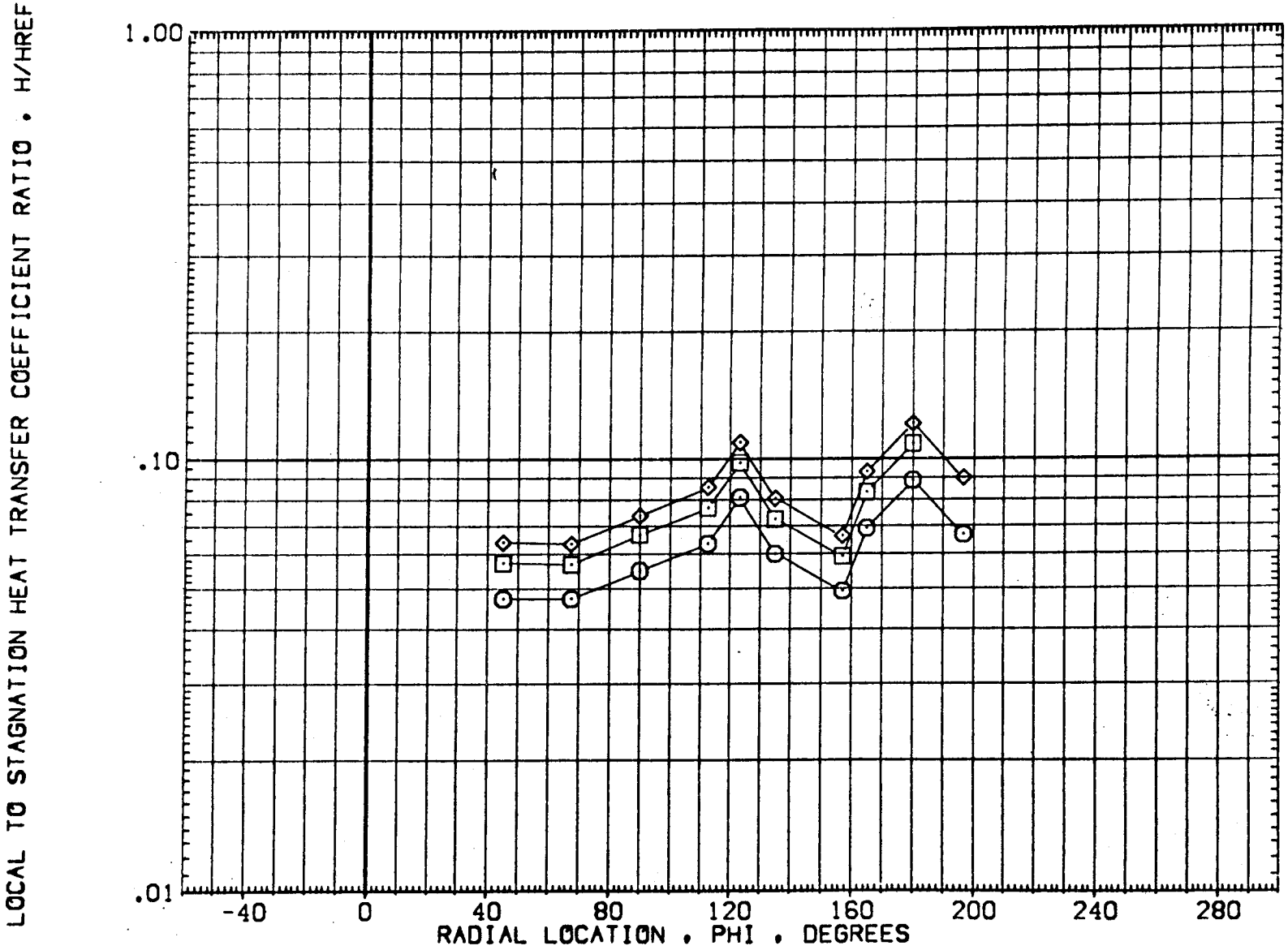


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BEIT02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

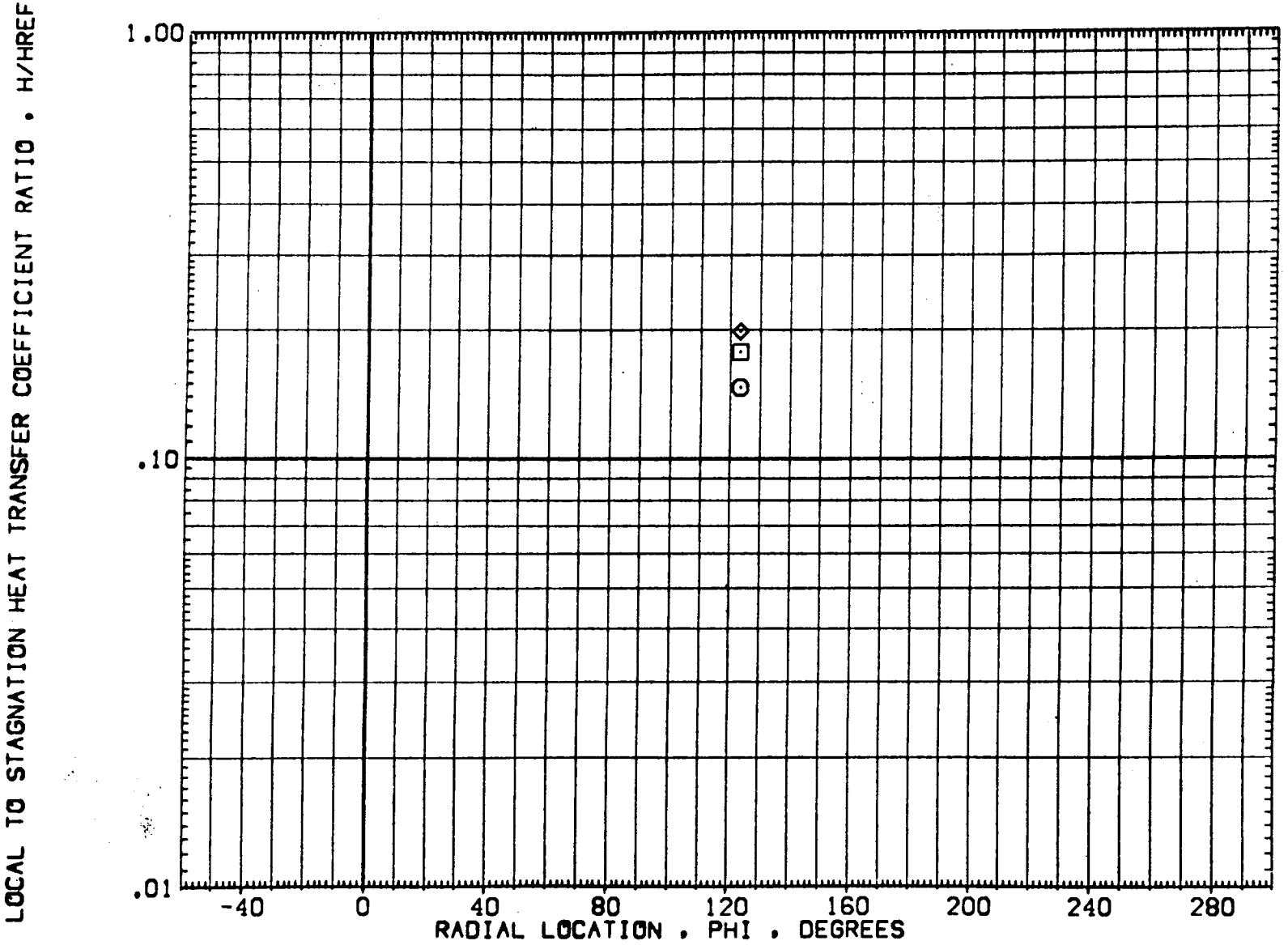


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-170 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-170 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-170 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

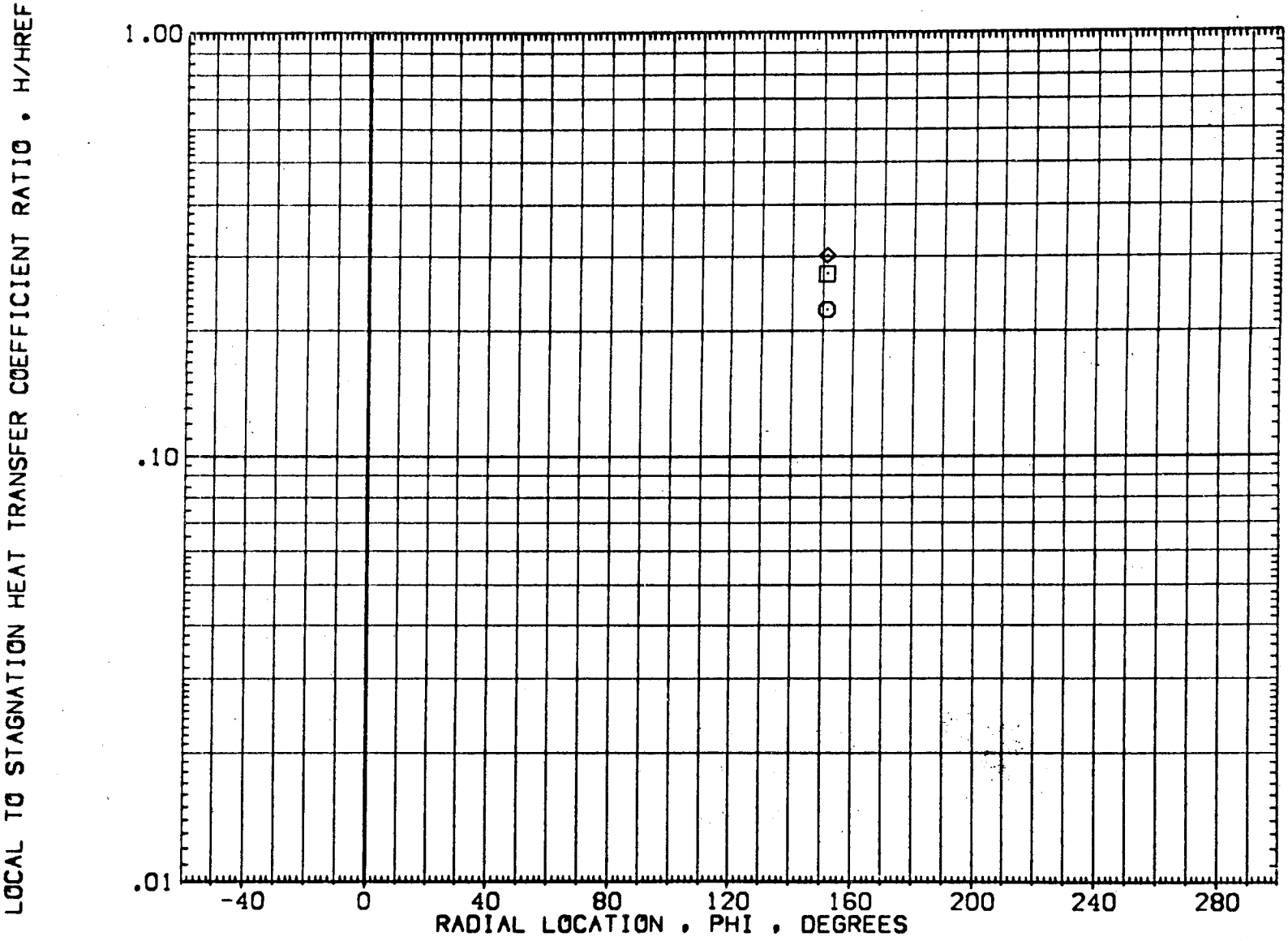


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T02)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T02)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE|T02)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

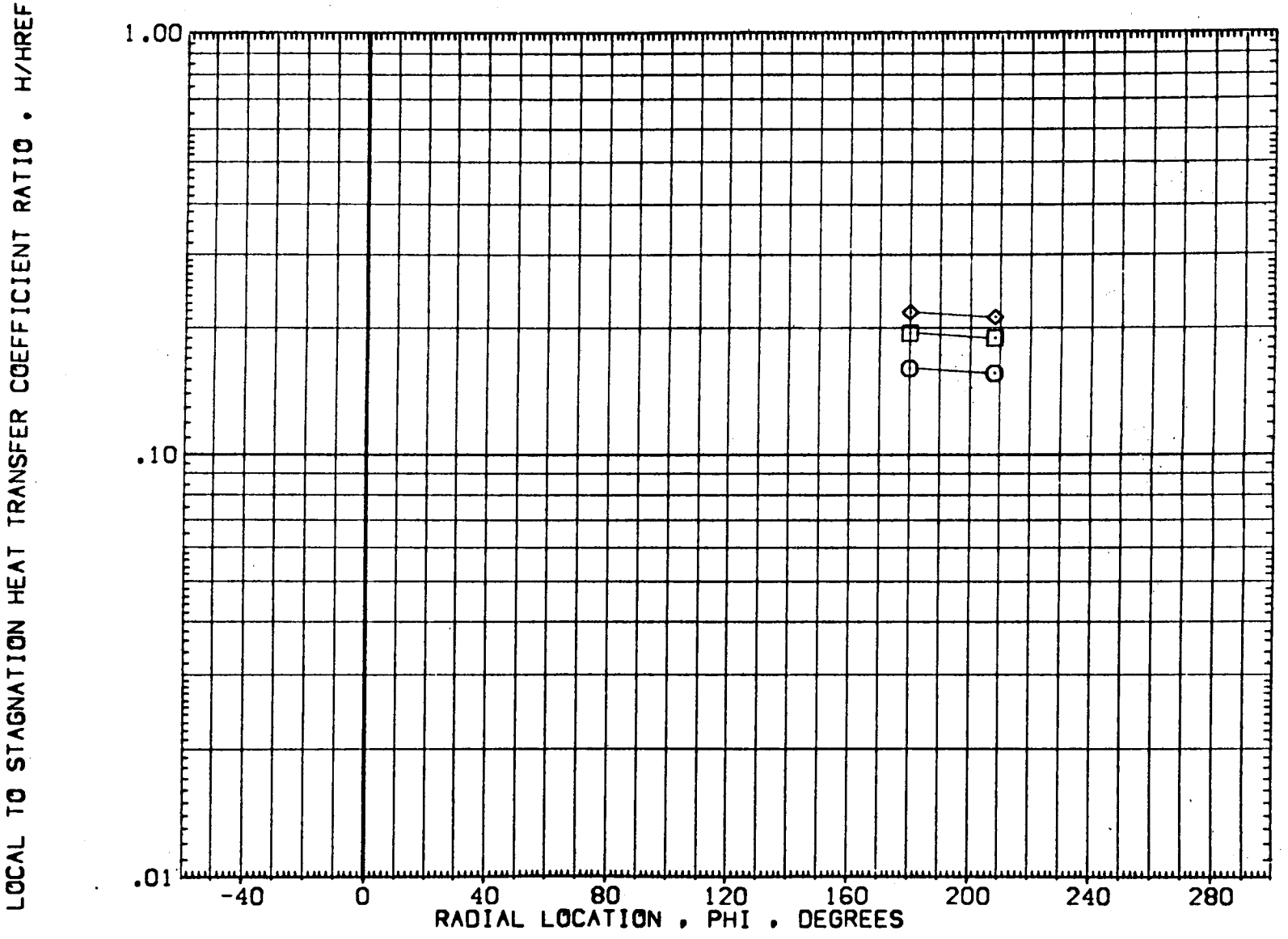


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	5.000	.850

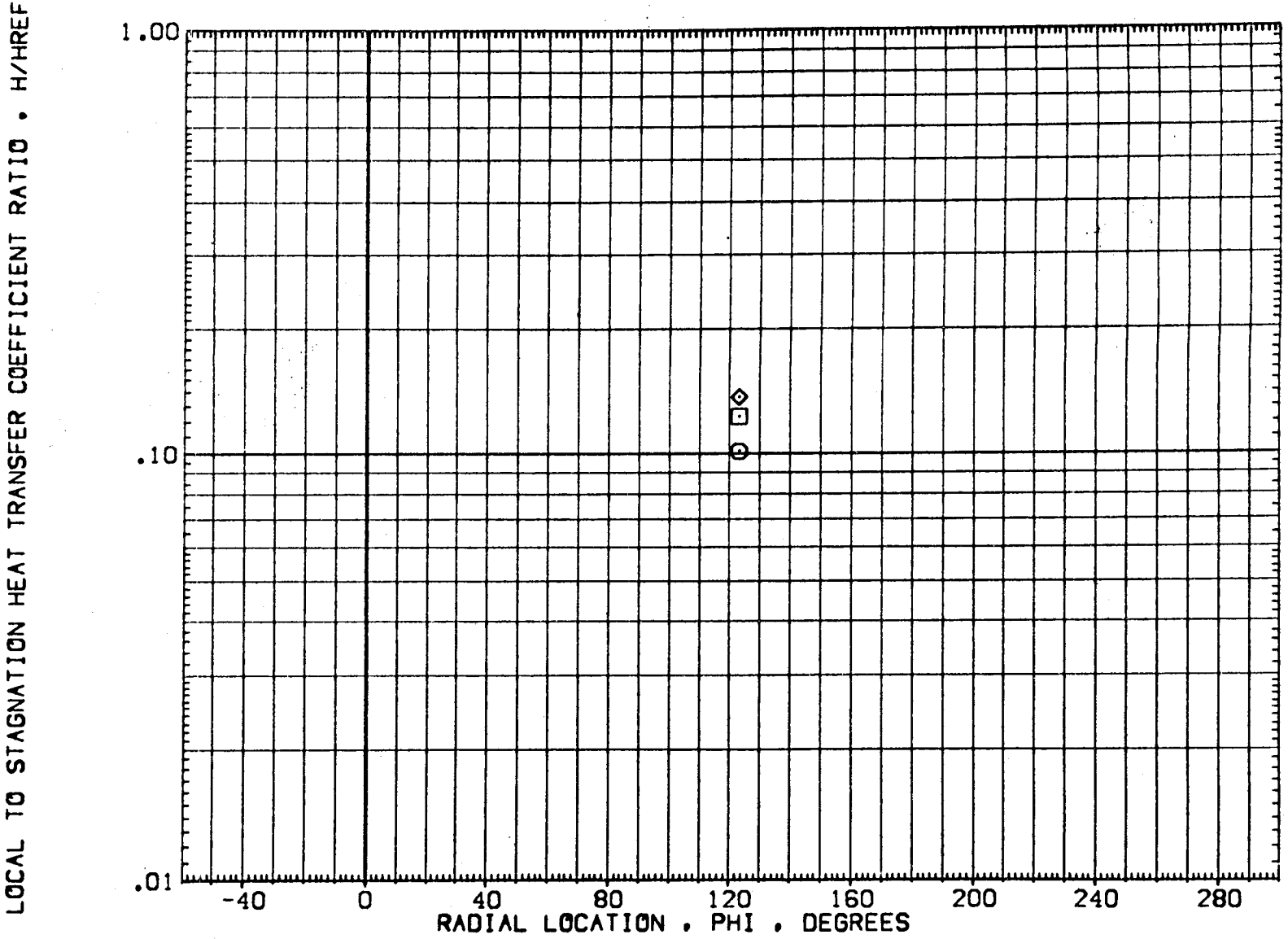


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T02)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T02)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.900
(BE1T02)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	5.000	.850

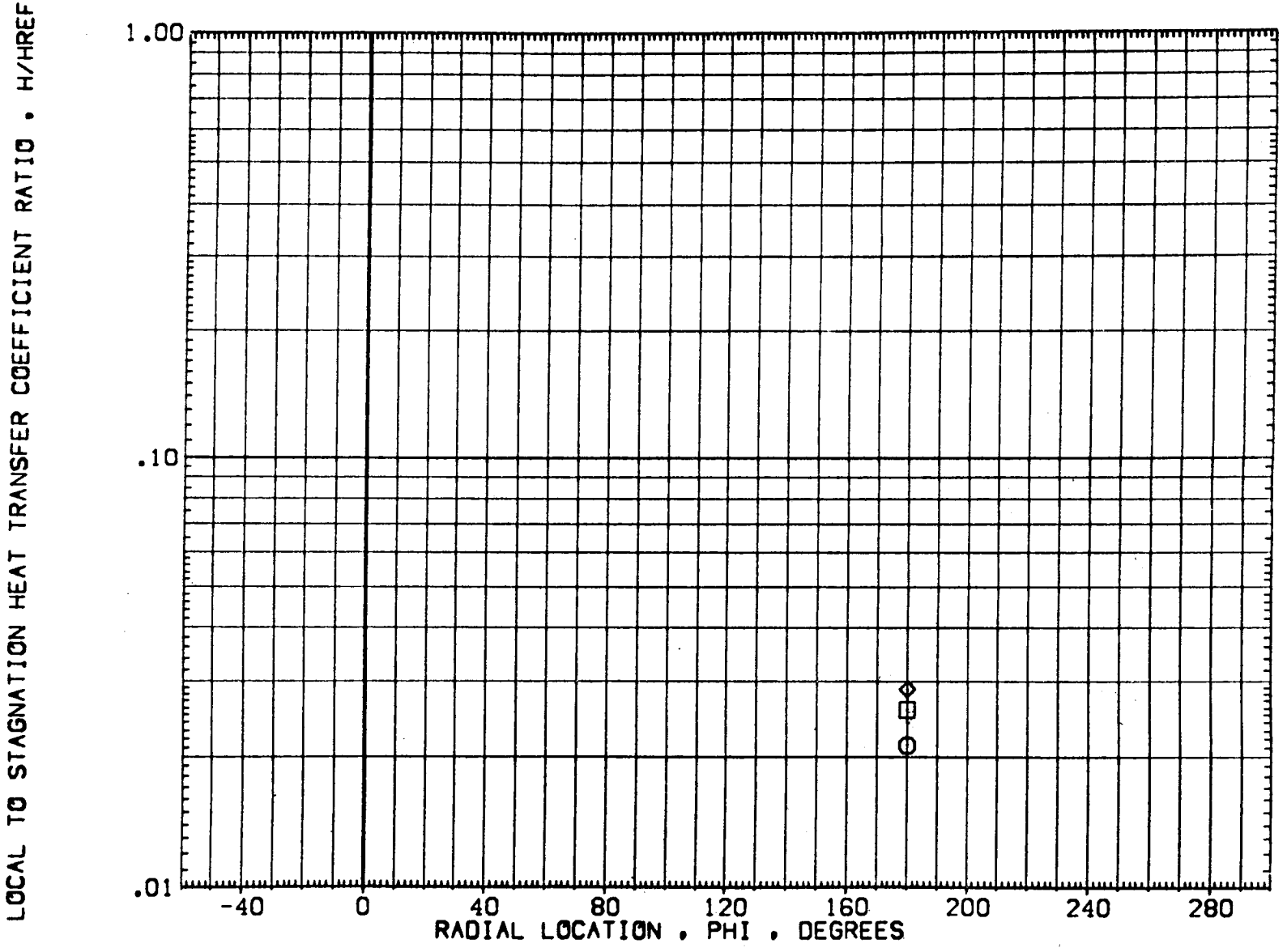


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REITO3)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AEITO3)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BEITO3)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

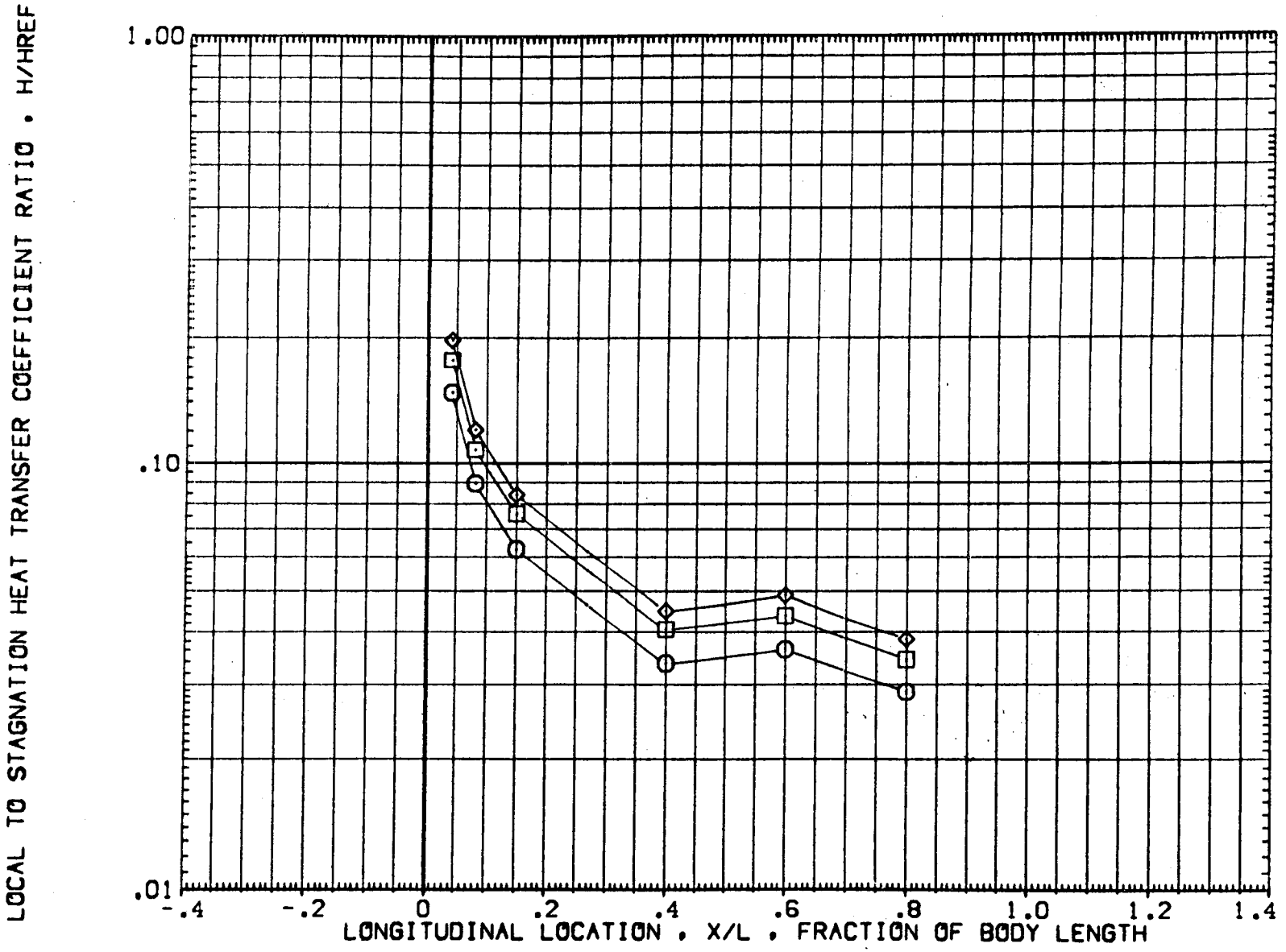


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	□	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	◇	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	○	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

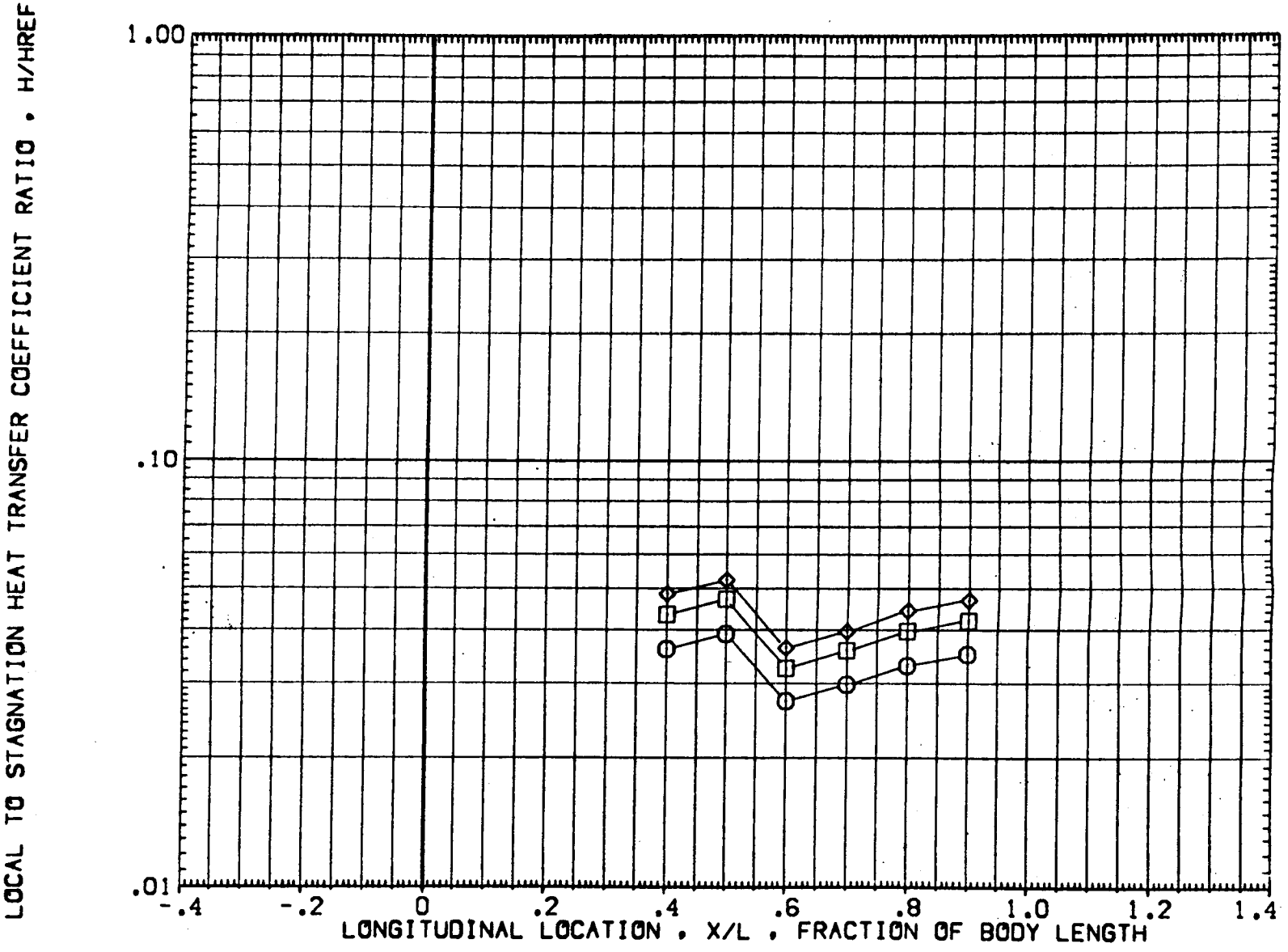


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

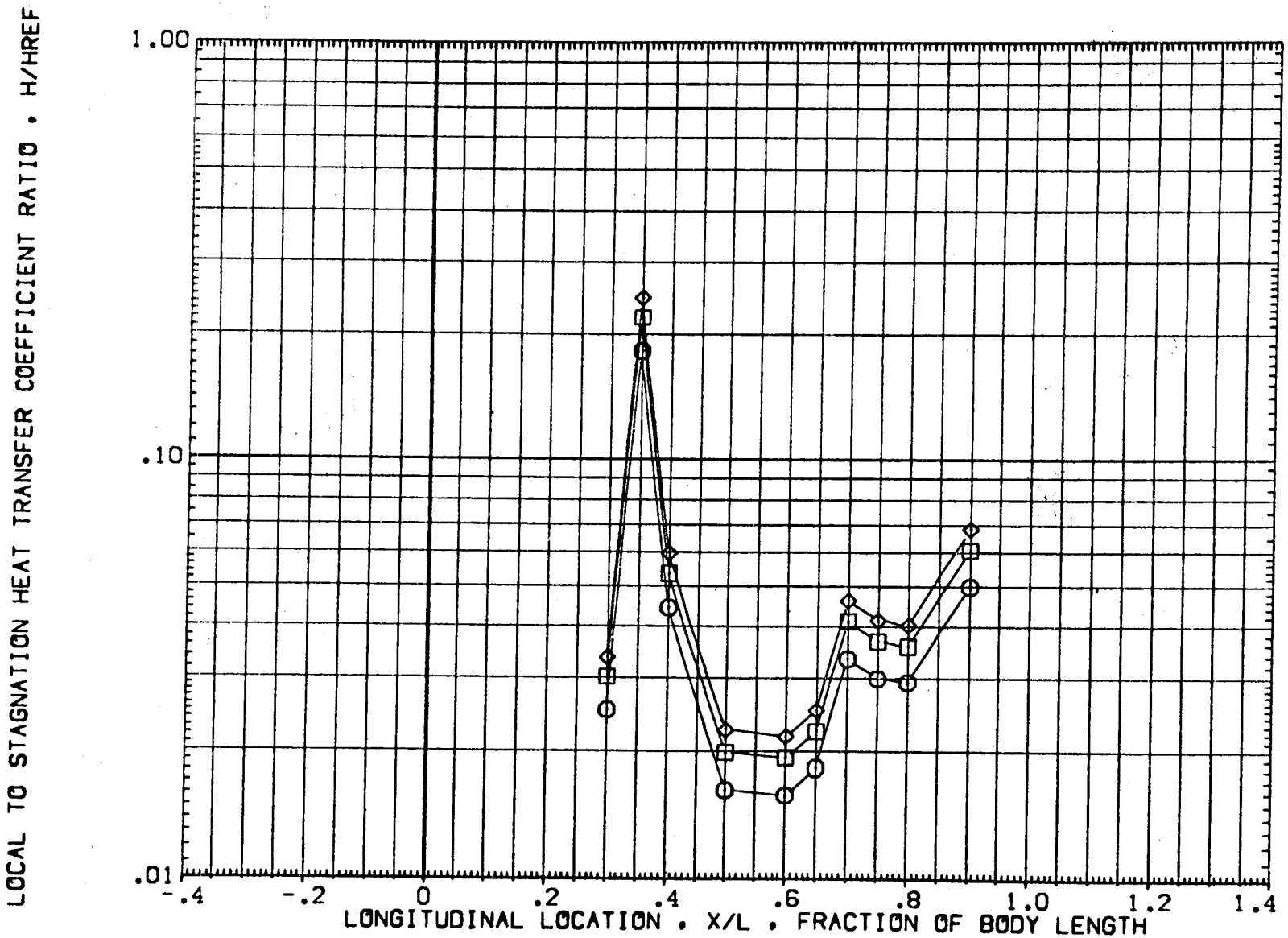


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE,T03)	○	ARC 3.5-178 H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE,T03)	□	ARC 3.5-178 H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE,T03)	◇	ARC 3.5-178 H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

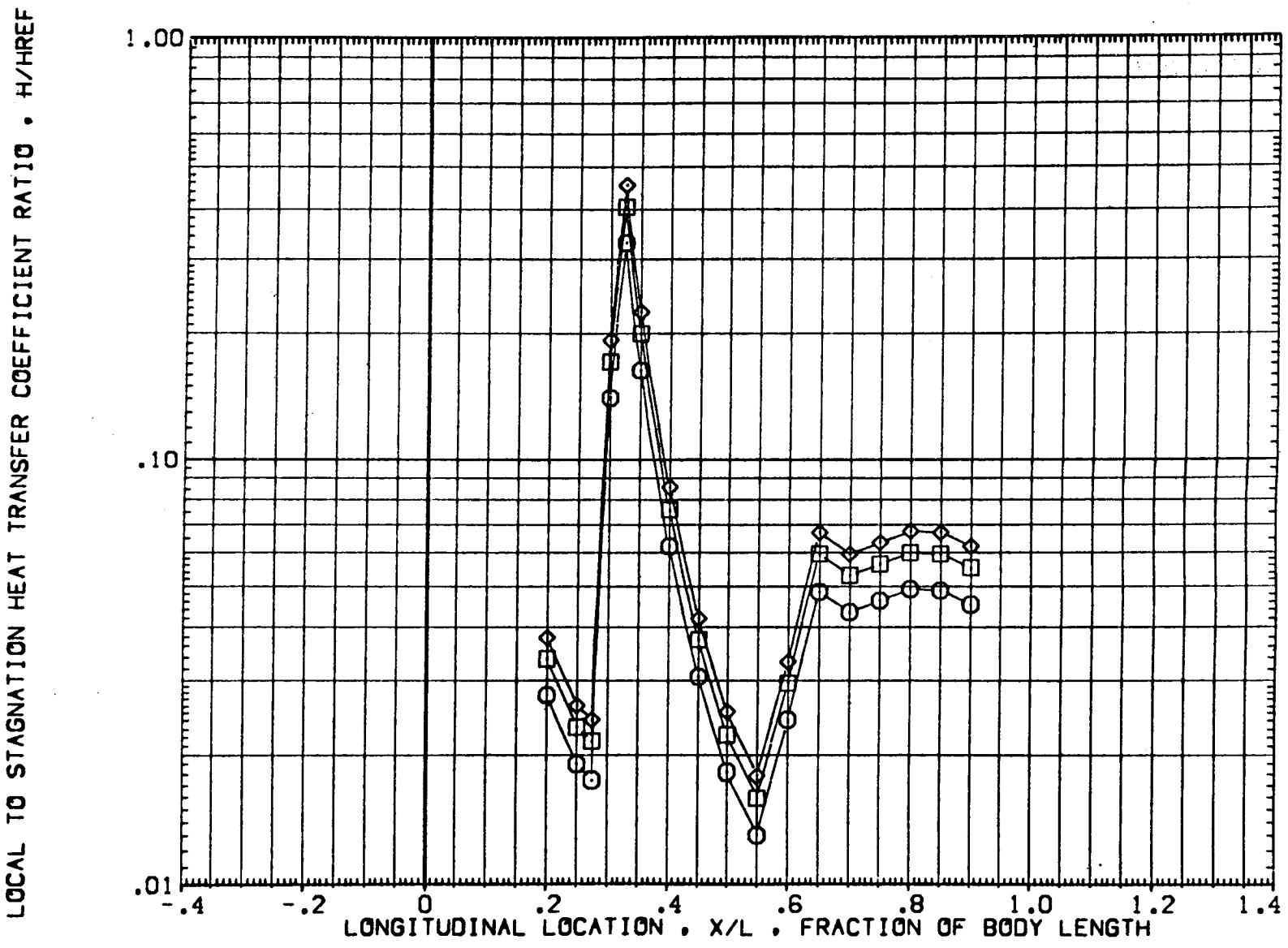


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

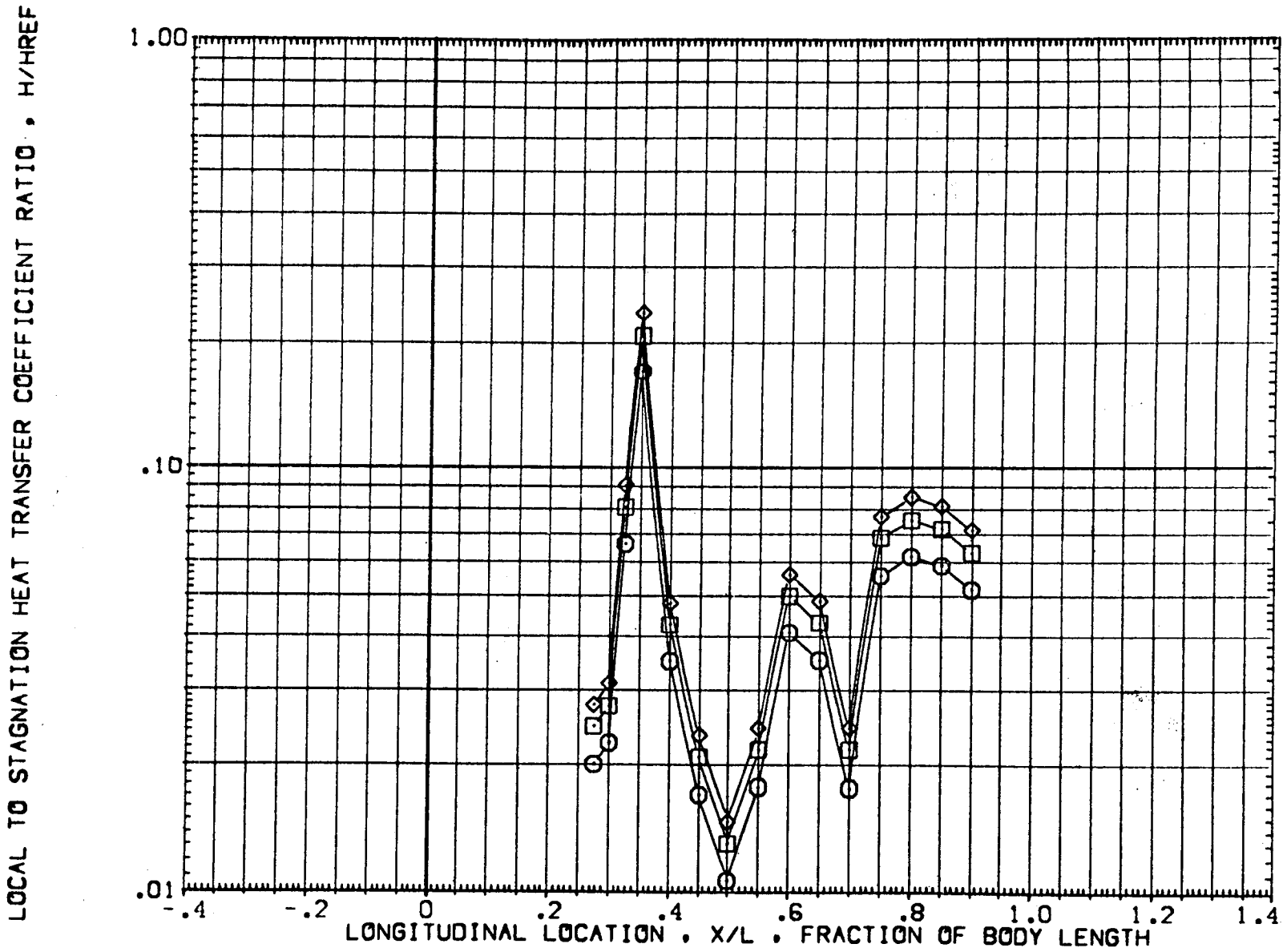


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
[RE]T03]	○	ARC 3.5-178 IH3 O+T+S [TRIPS] EXTERNAL TANK	.000	.000	1.500	1.000
[AE]T03]	□	ARC 3.5-178 IH3 O+T+S [TRIPS] EXTERNAL TANK	.000	.000	1.500	.900
[BE]T03]	◇	ARC 3.5-178 IH3 O+T+S [TRIPS] EXTERNAL TANK	.000	.000	1.500	.850

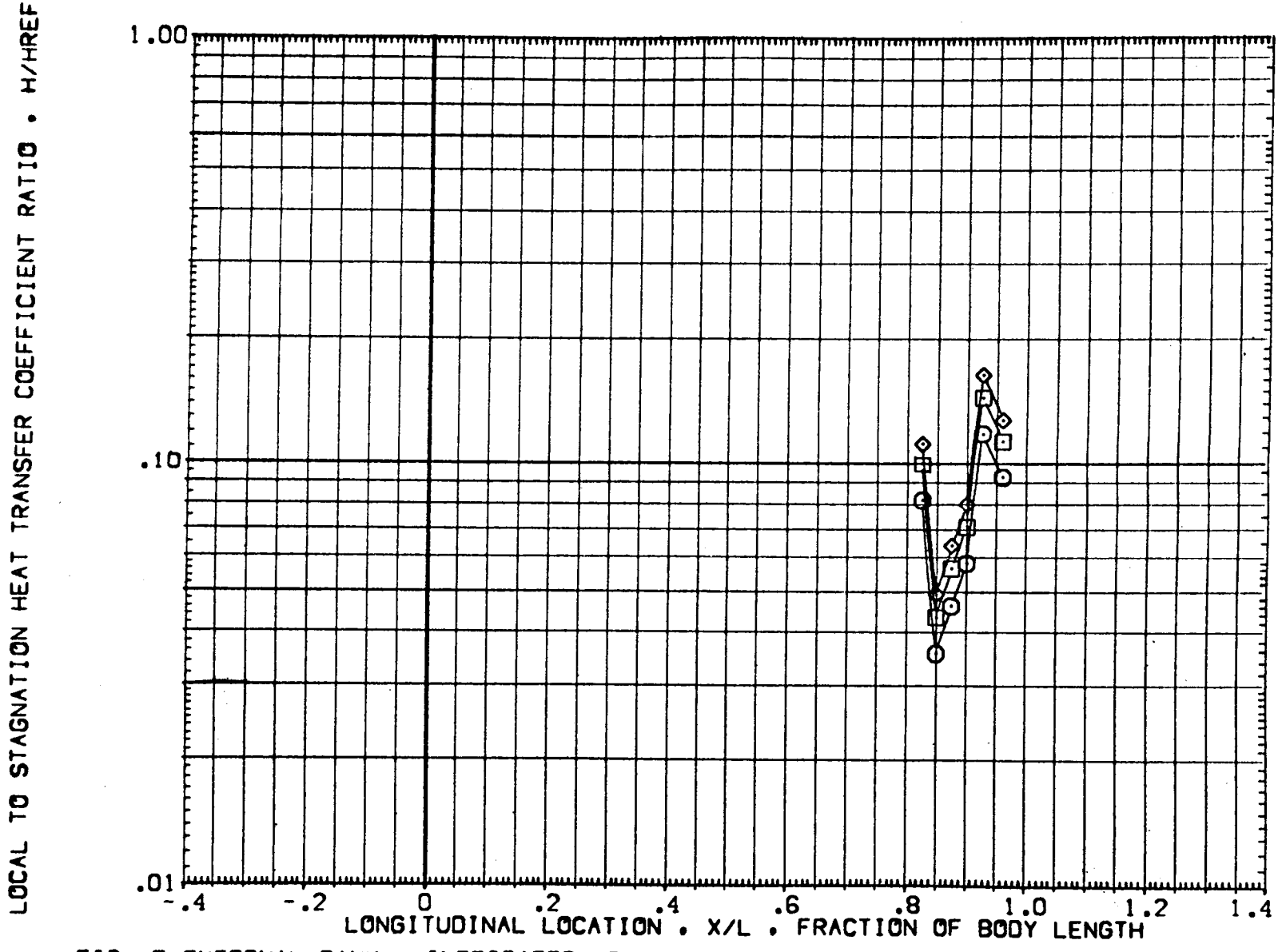


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

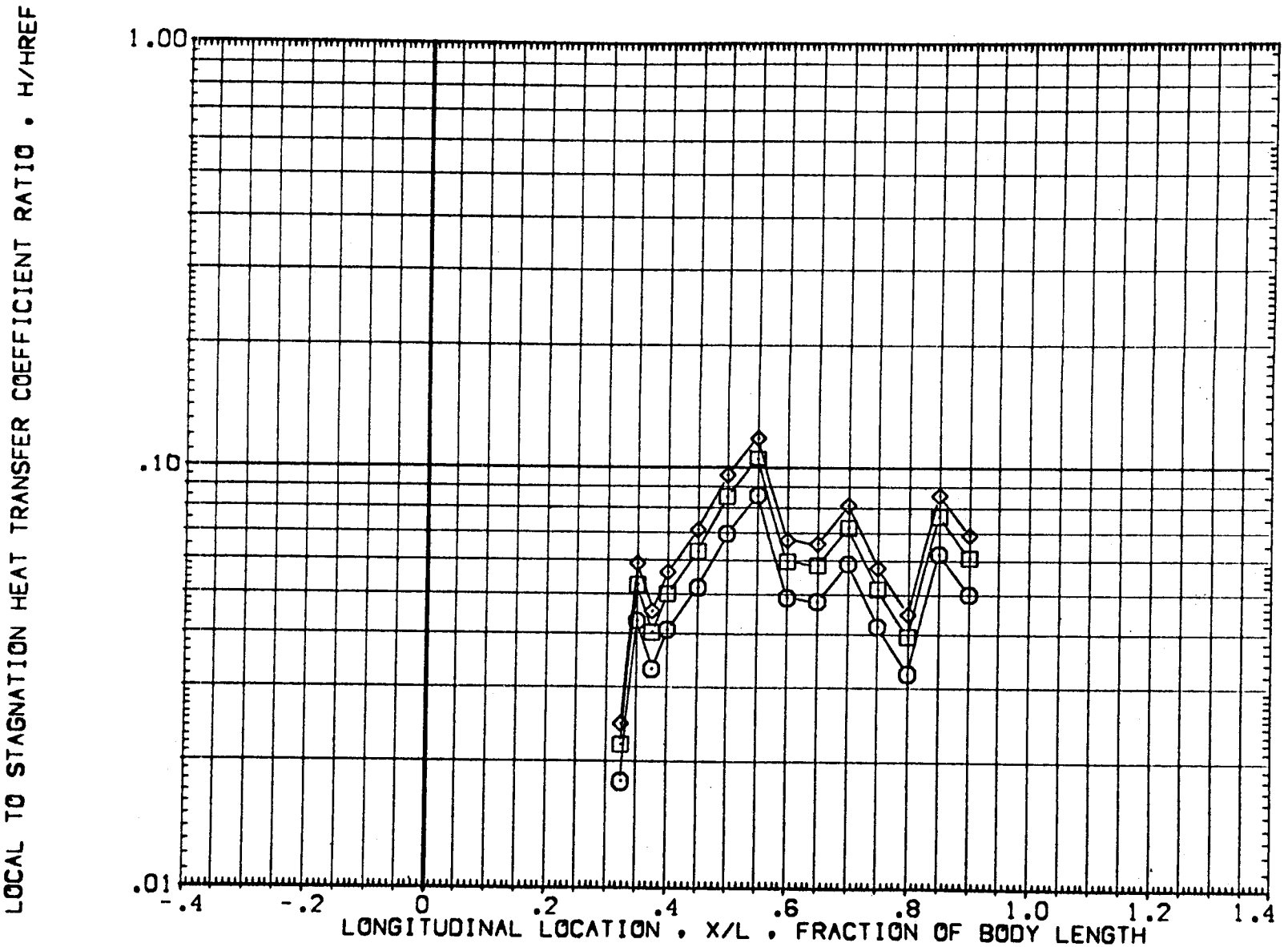


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE,T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE,T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE,T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

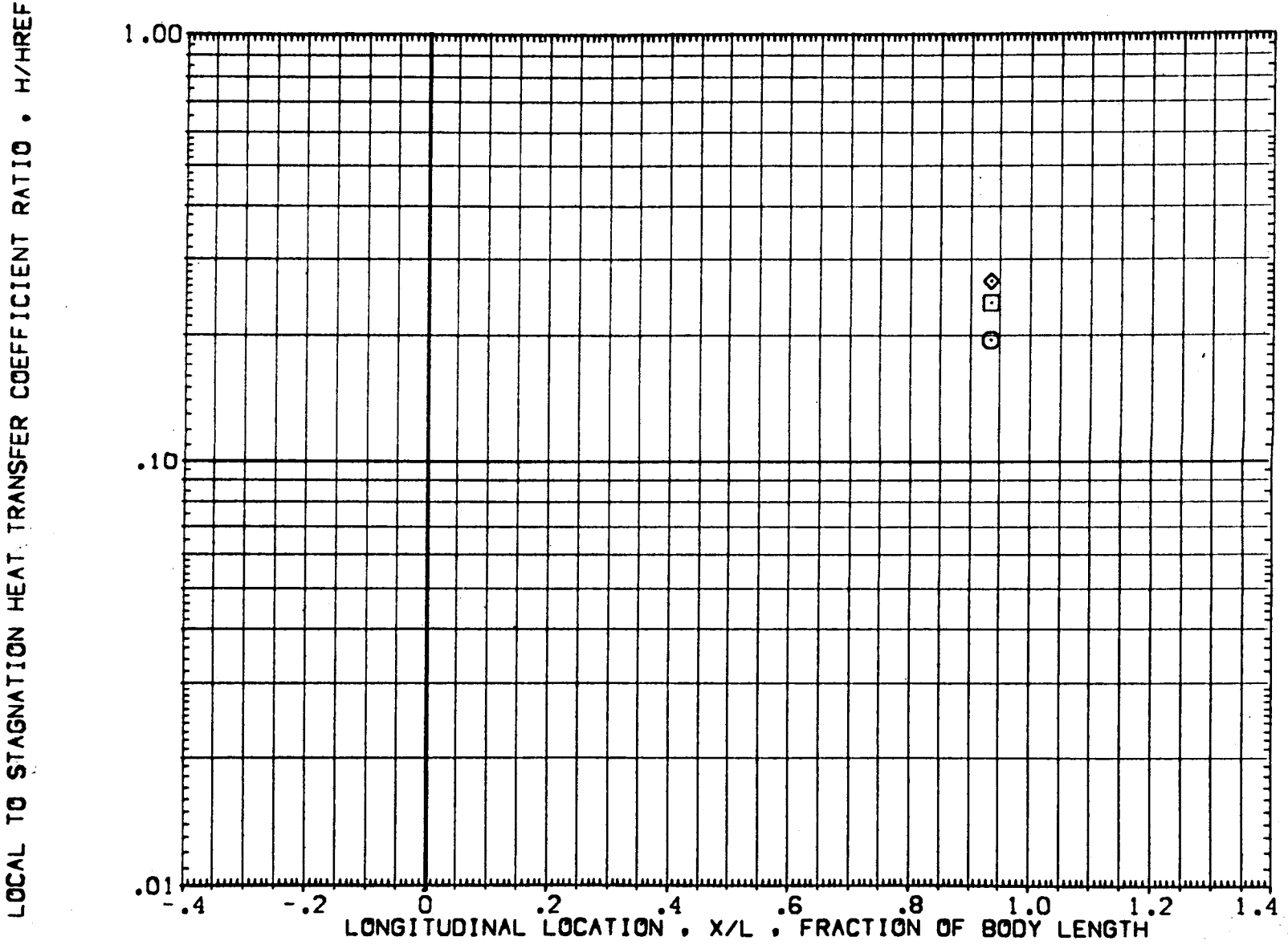


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

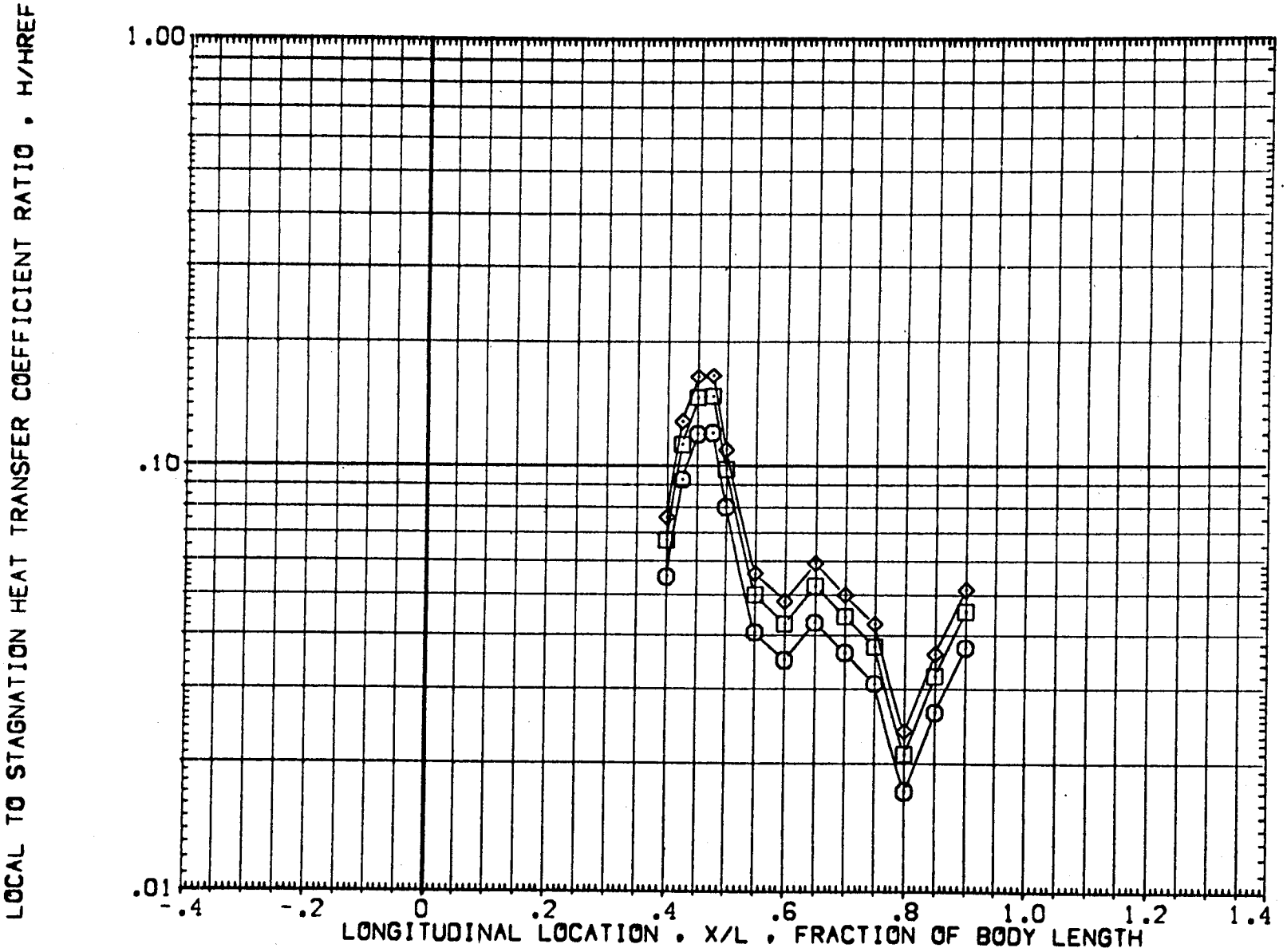


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

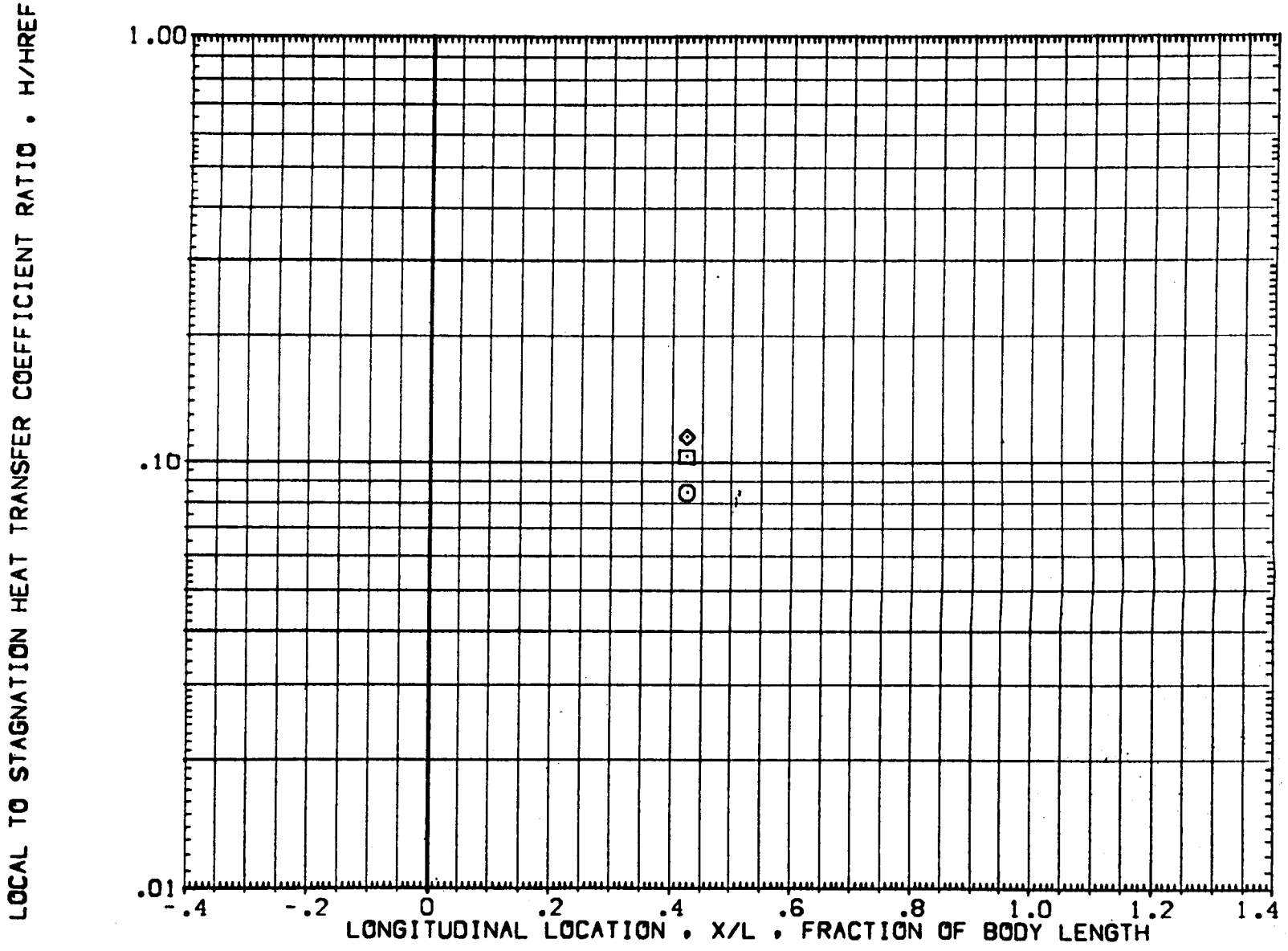


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BEIT03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

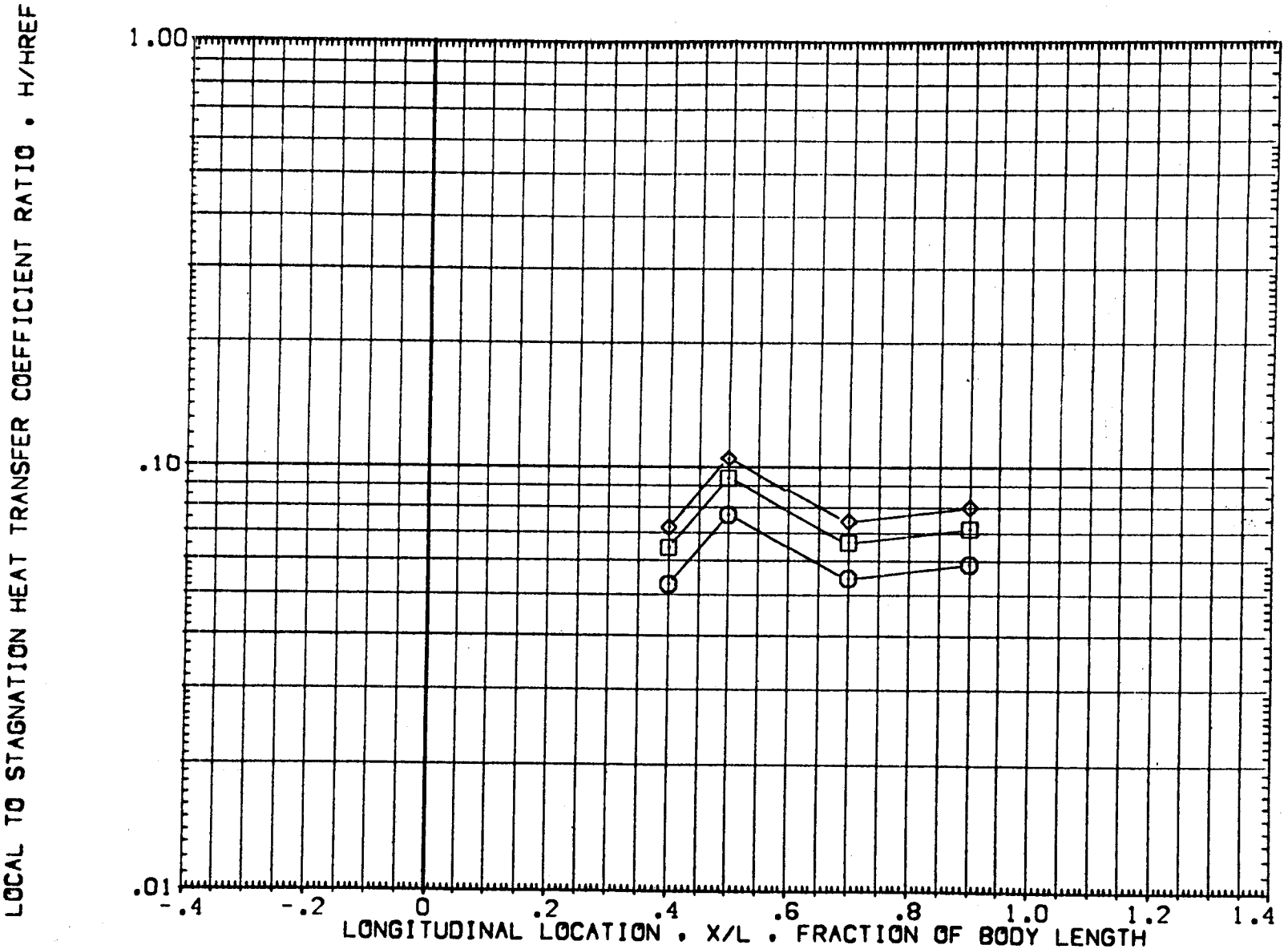


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

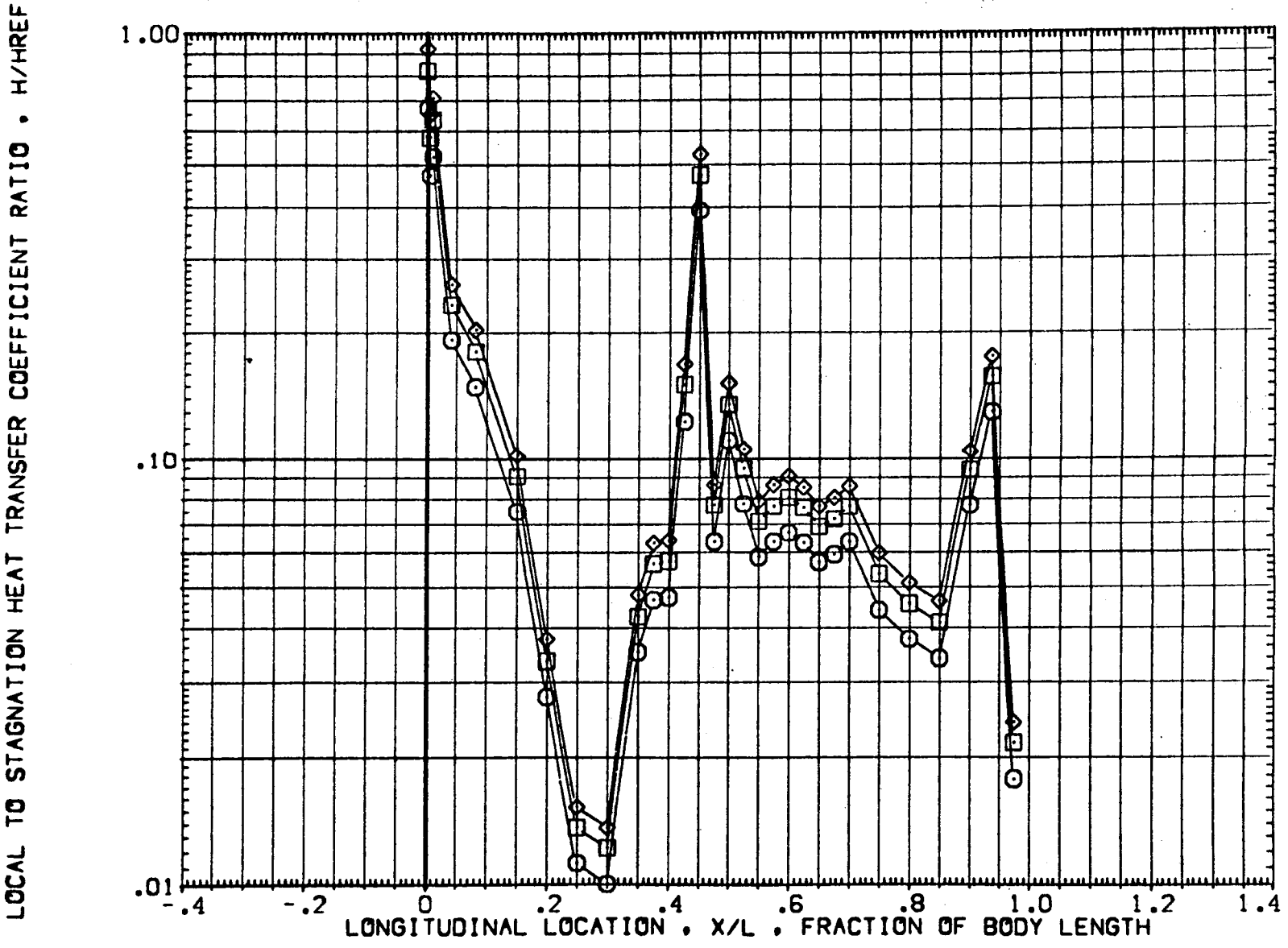


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE!T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

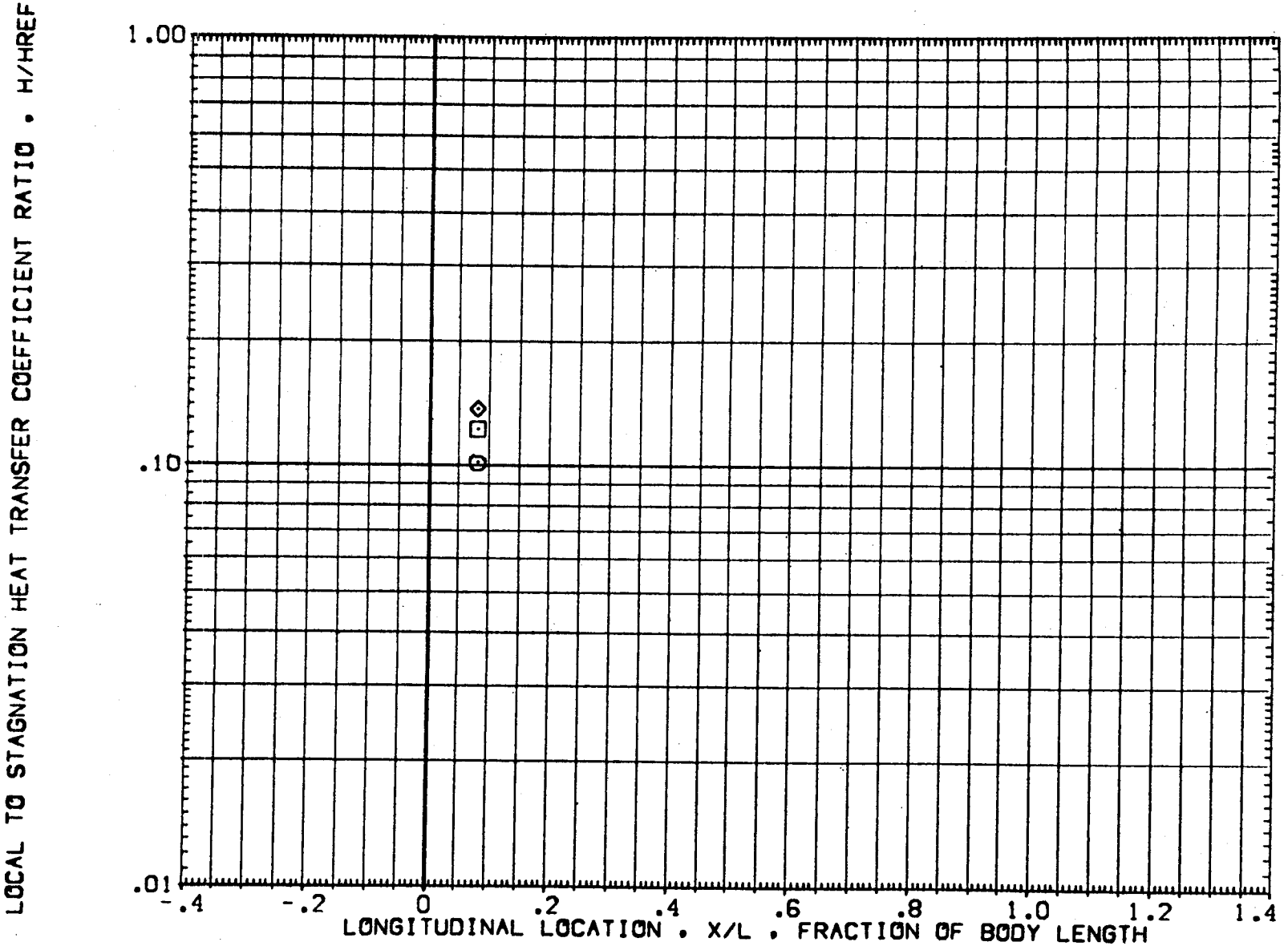


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

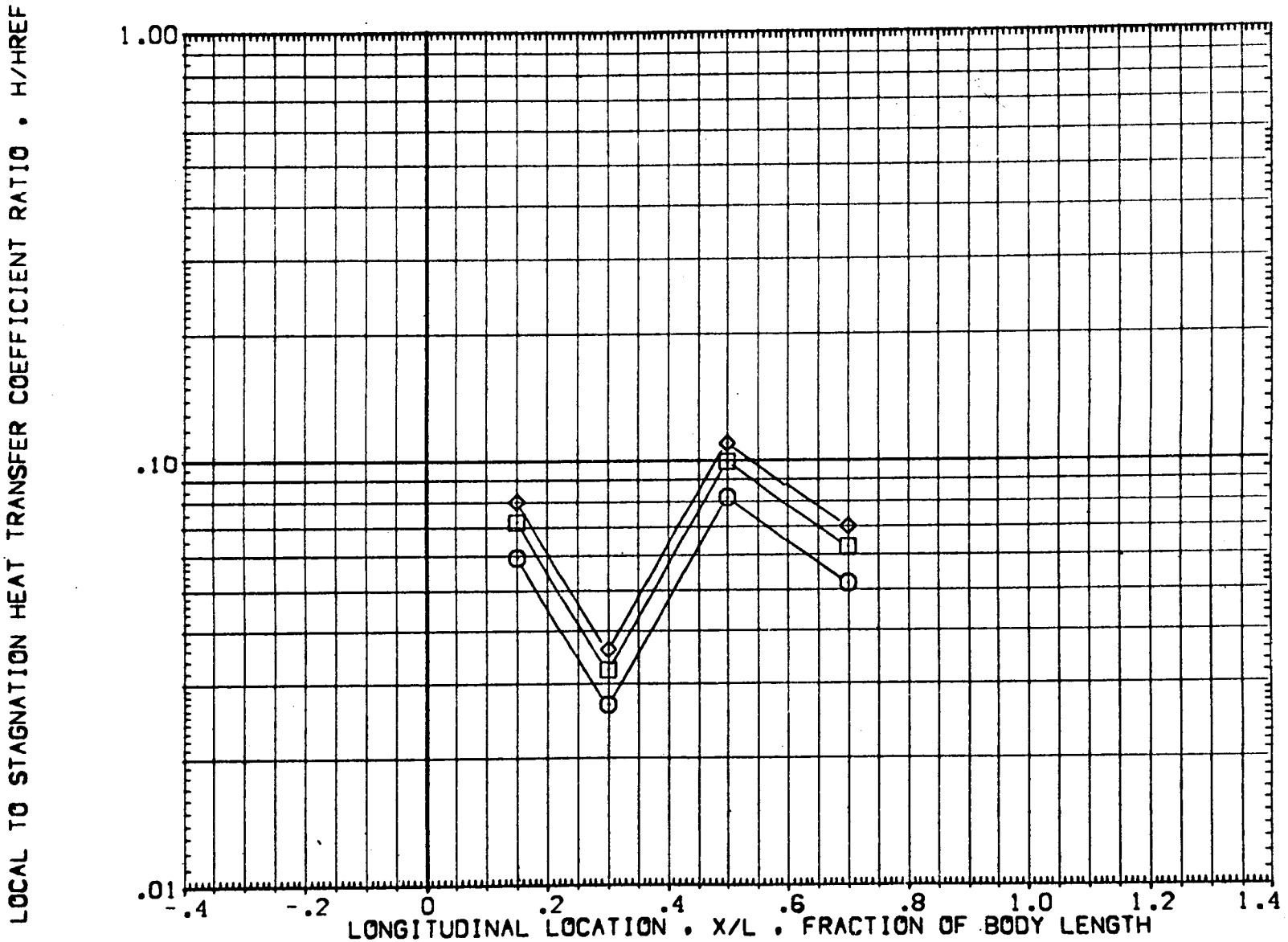


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	DATA NOT AVAILABLE	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

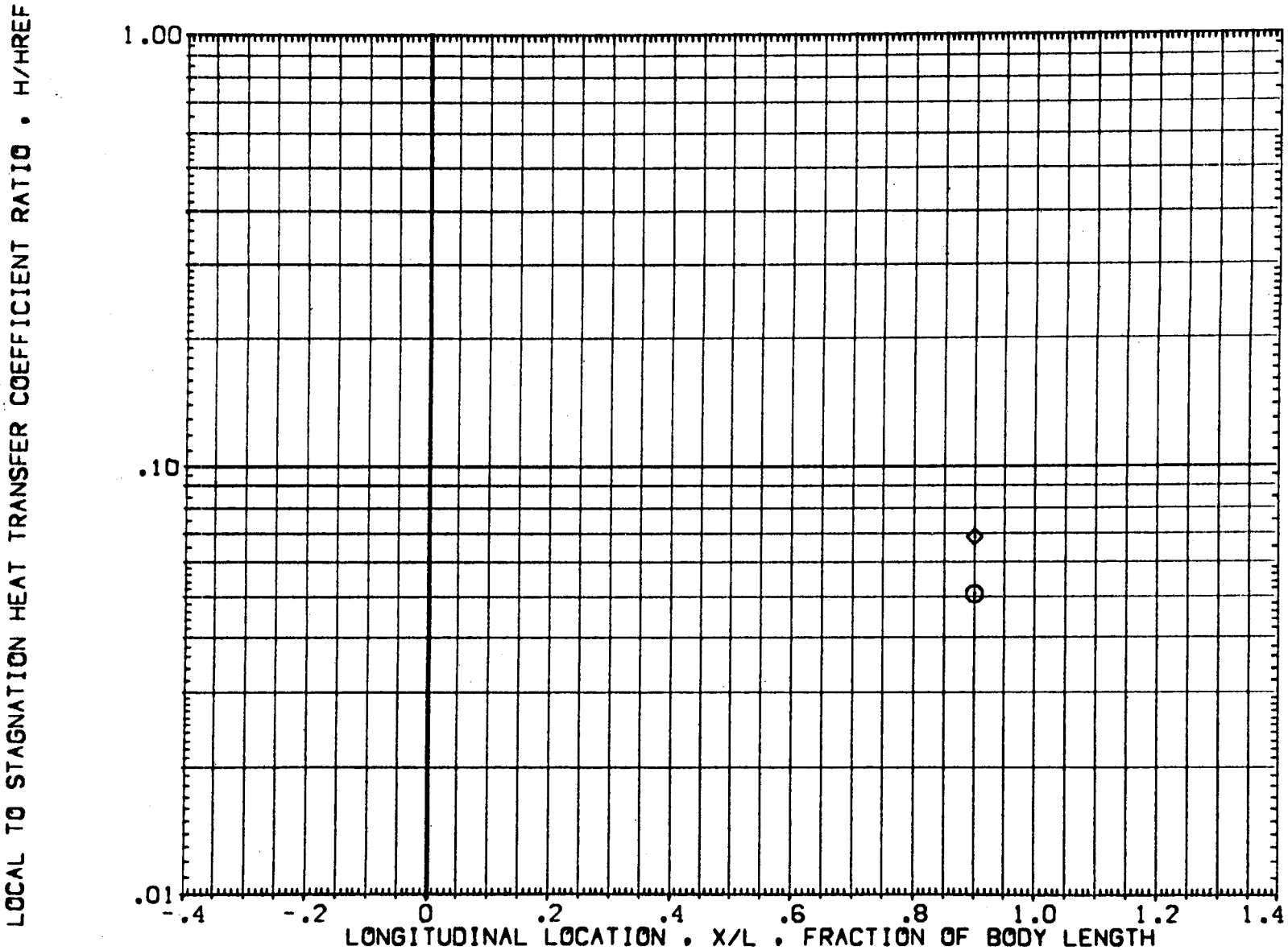


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE(103)	○	ARC 3.5-178 (H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE(103)	□	ARC 3.5-178 (H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE(103)	◇	ARC 3.5-178 (H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.650

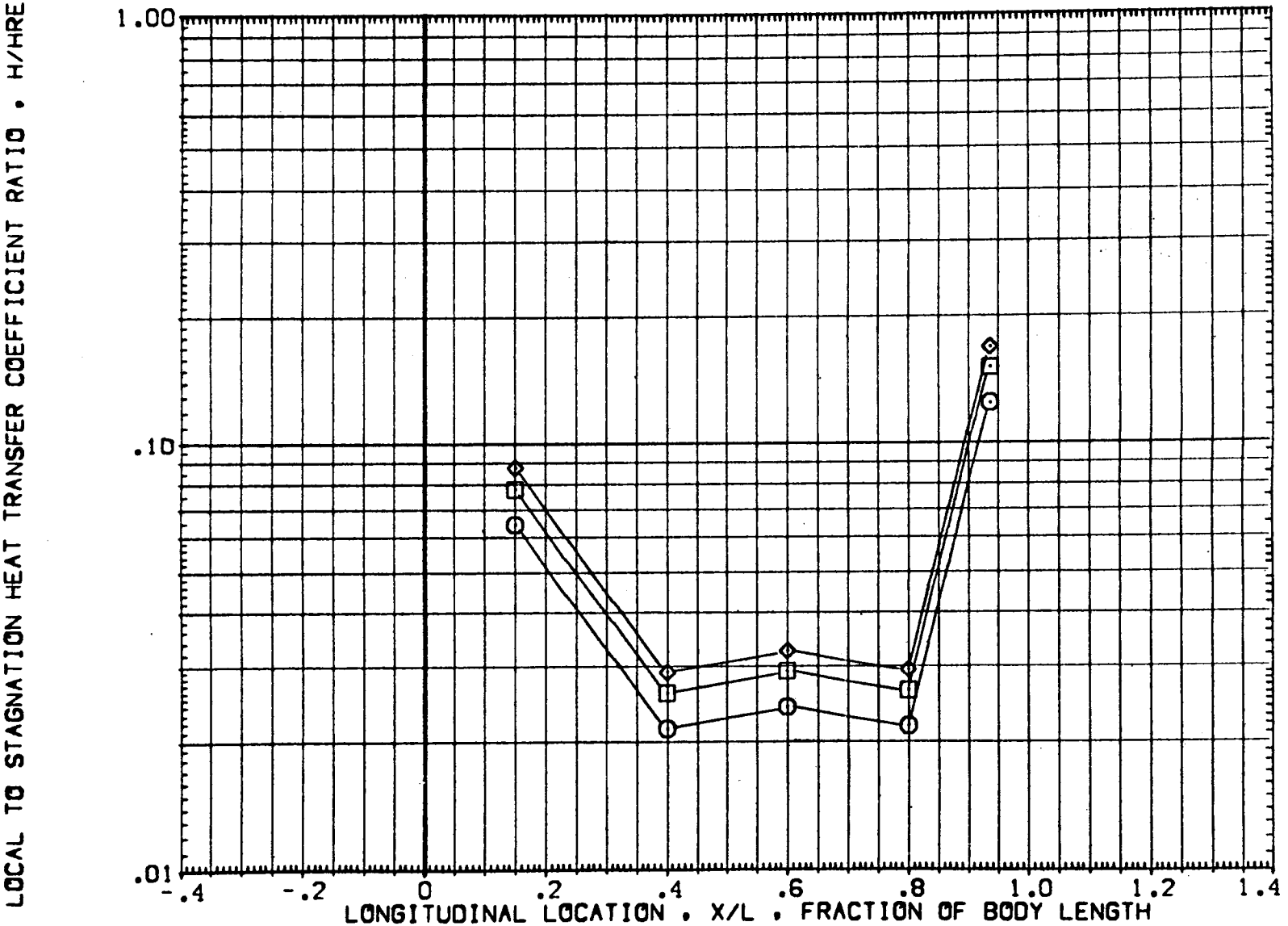


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

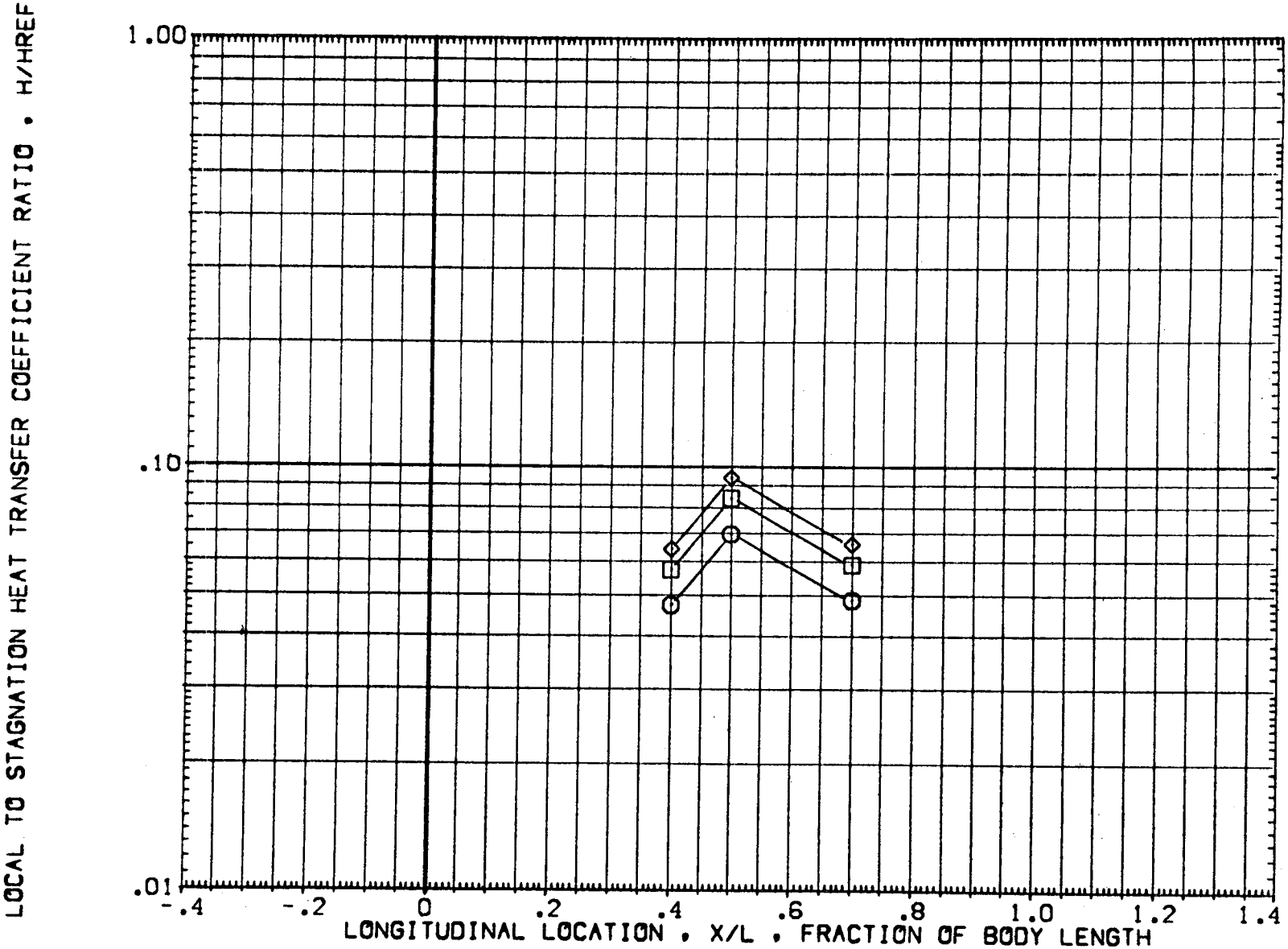


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	◁	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

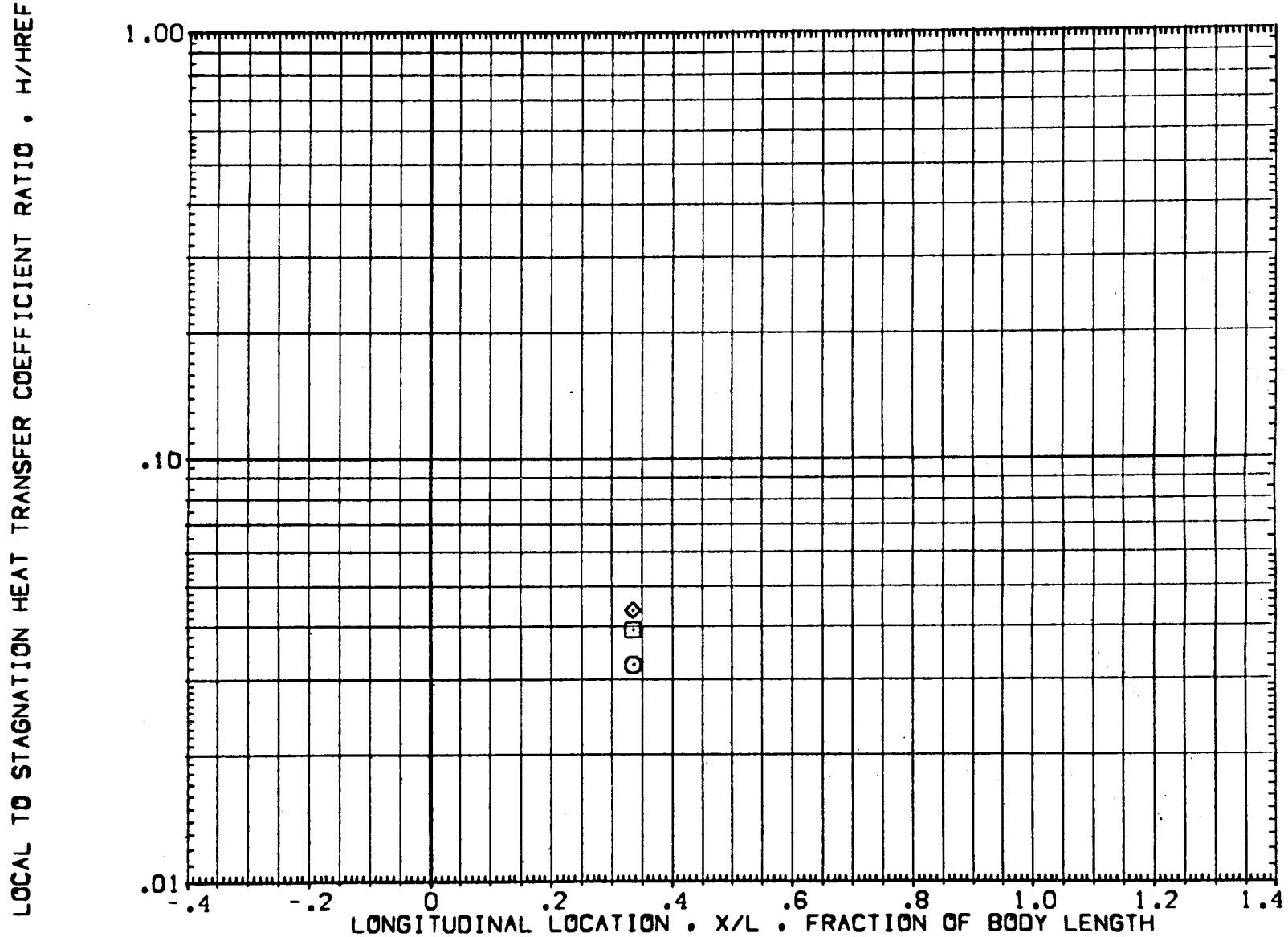


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

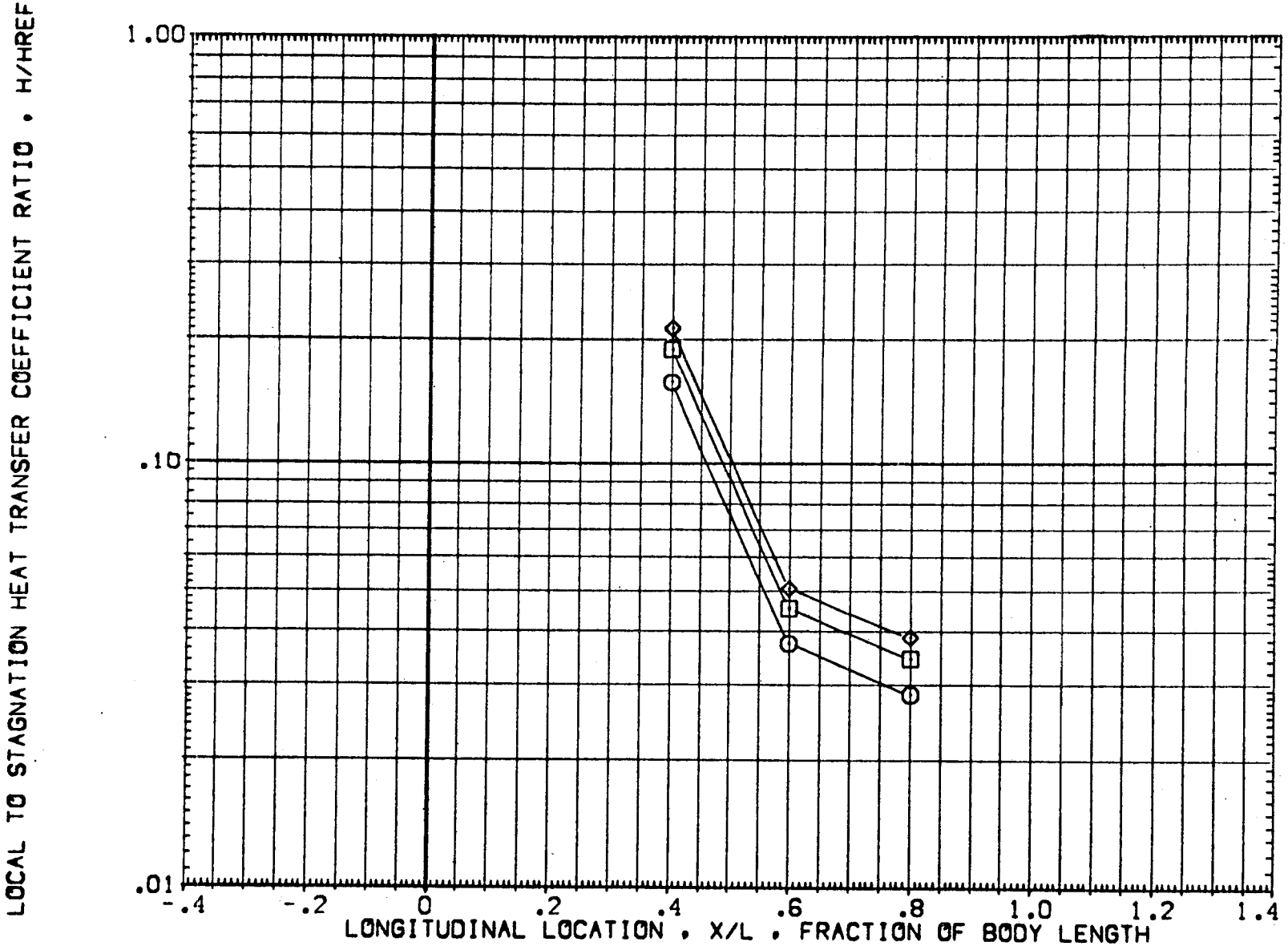


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

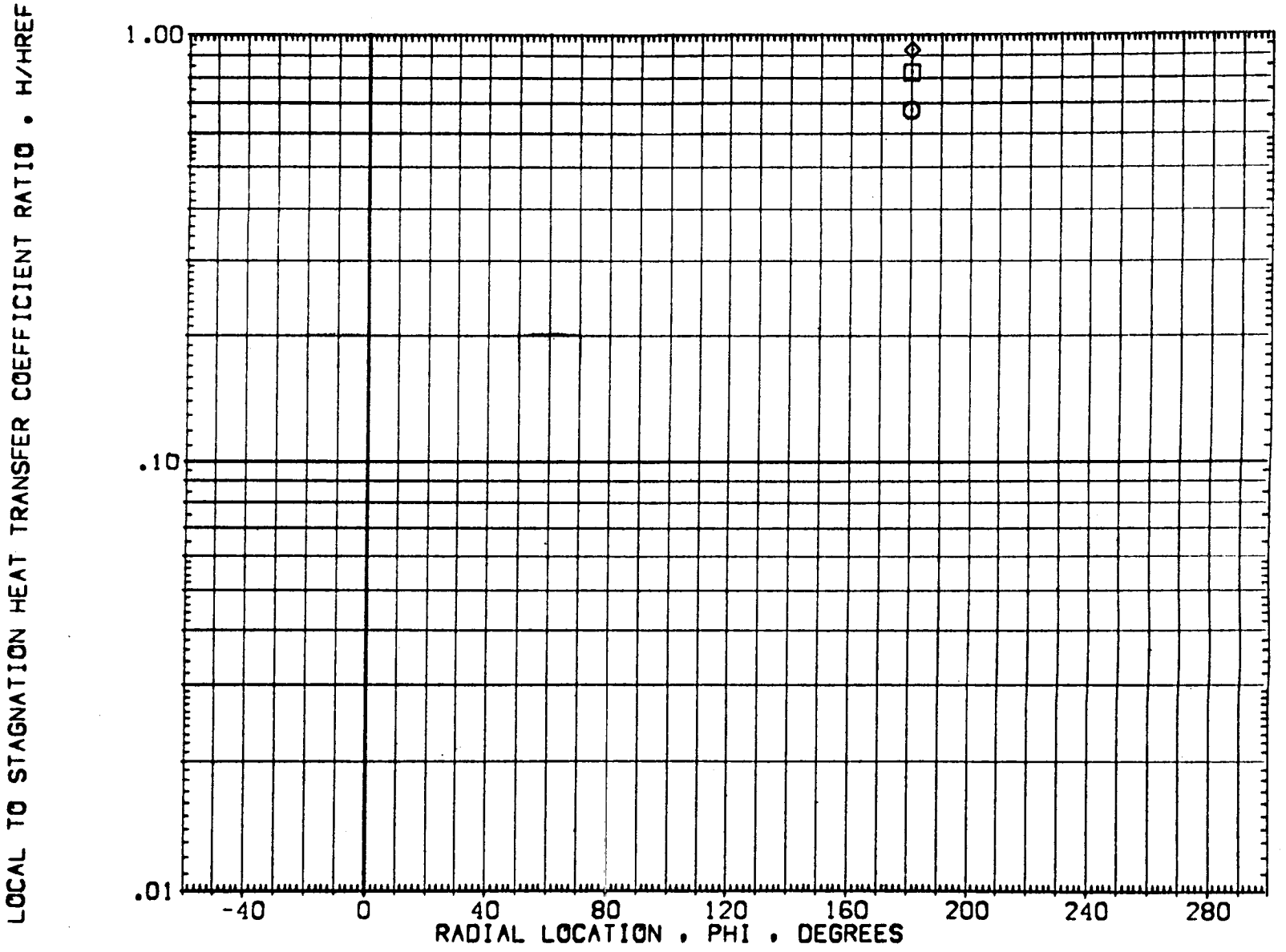


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

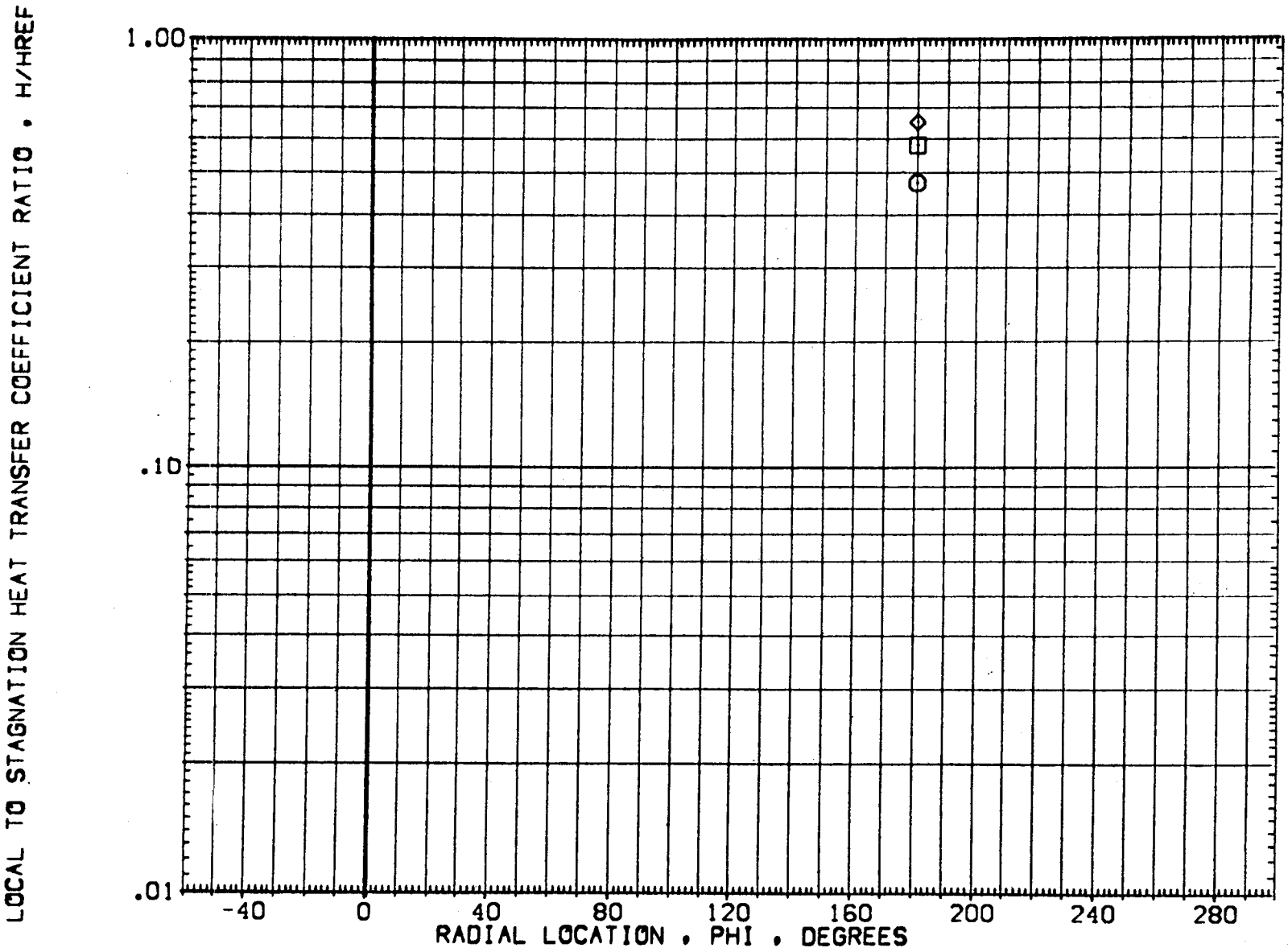


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BEIT03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

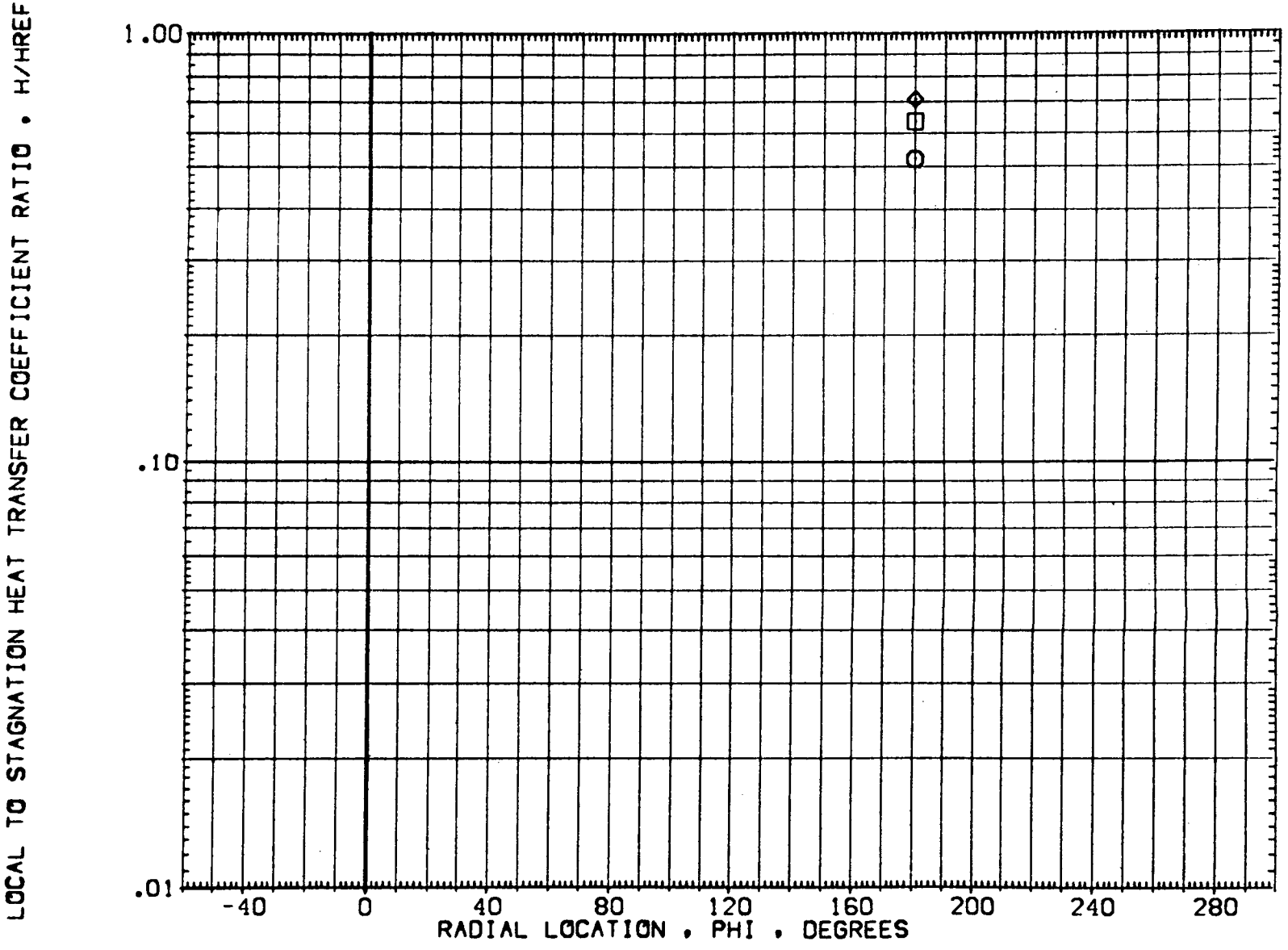


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

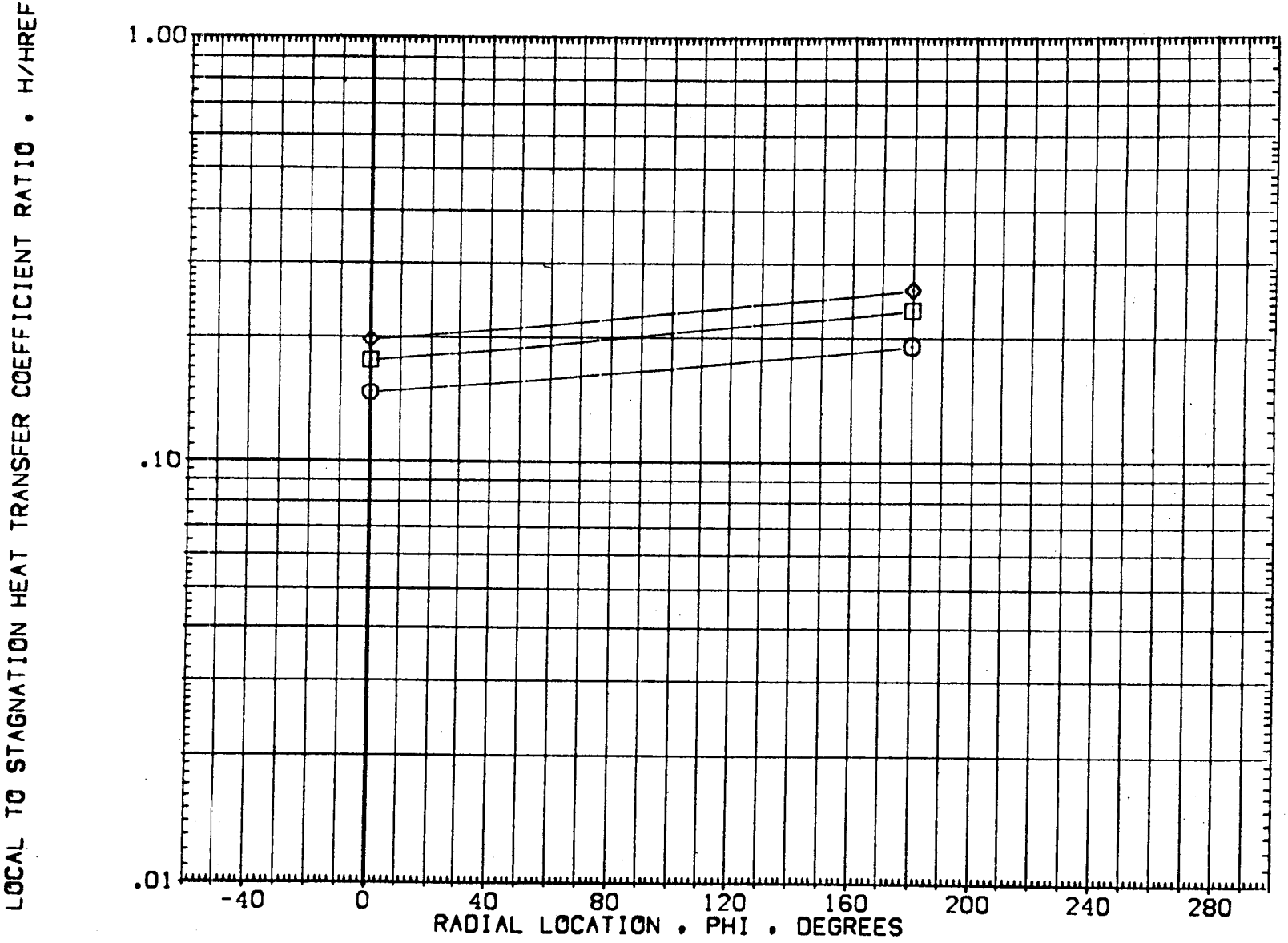


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

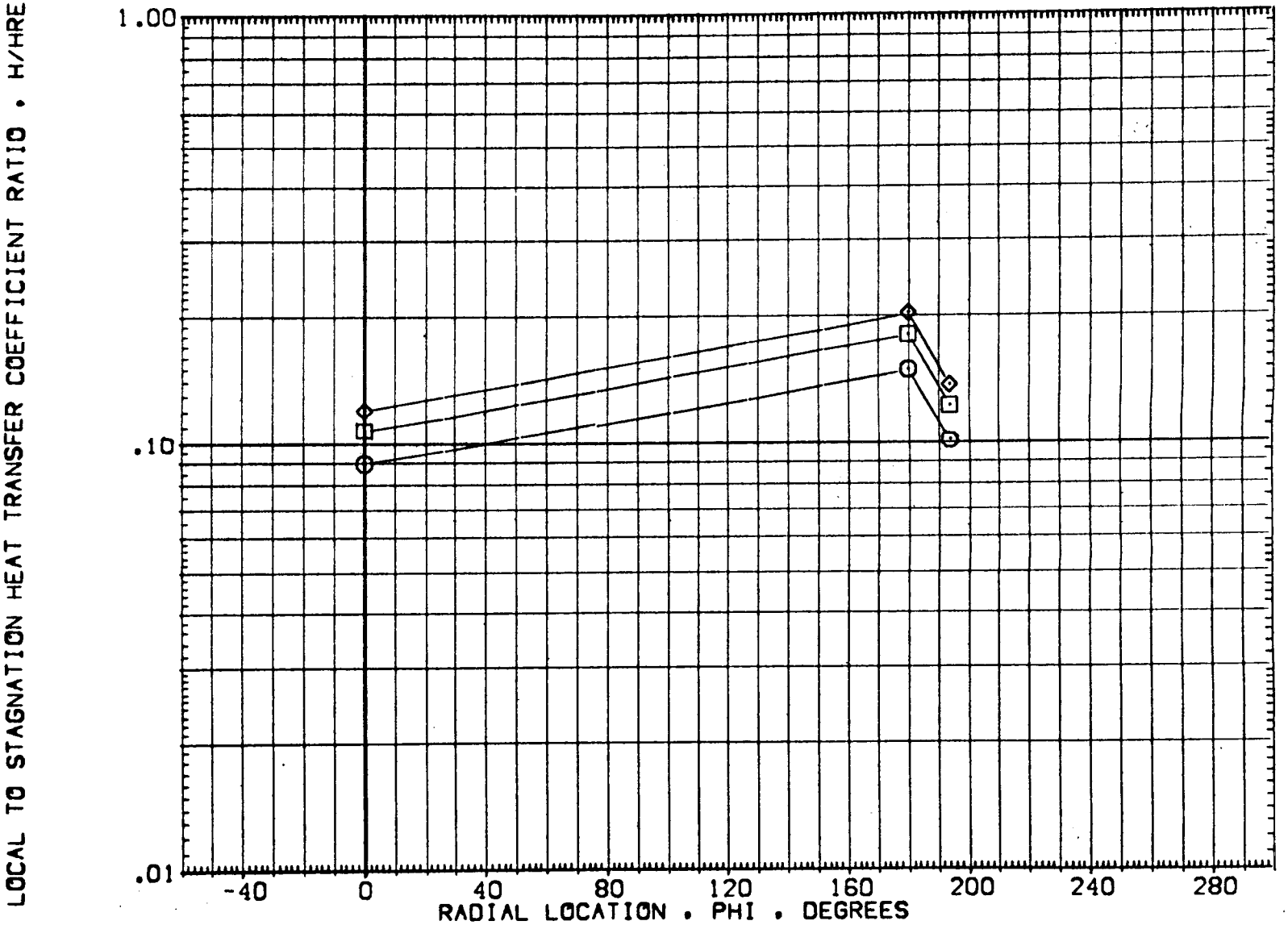


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

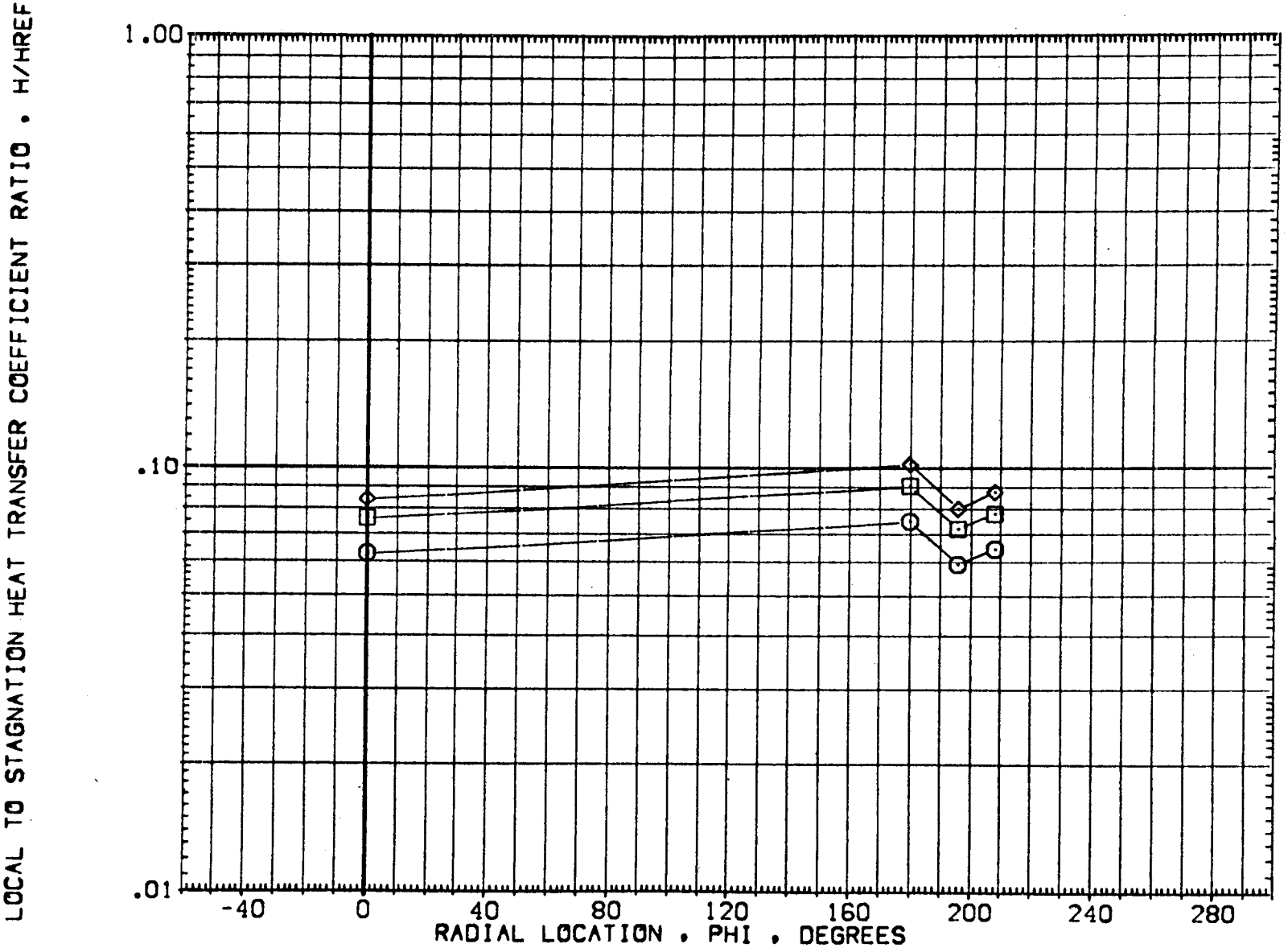


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

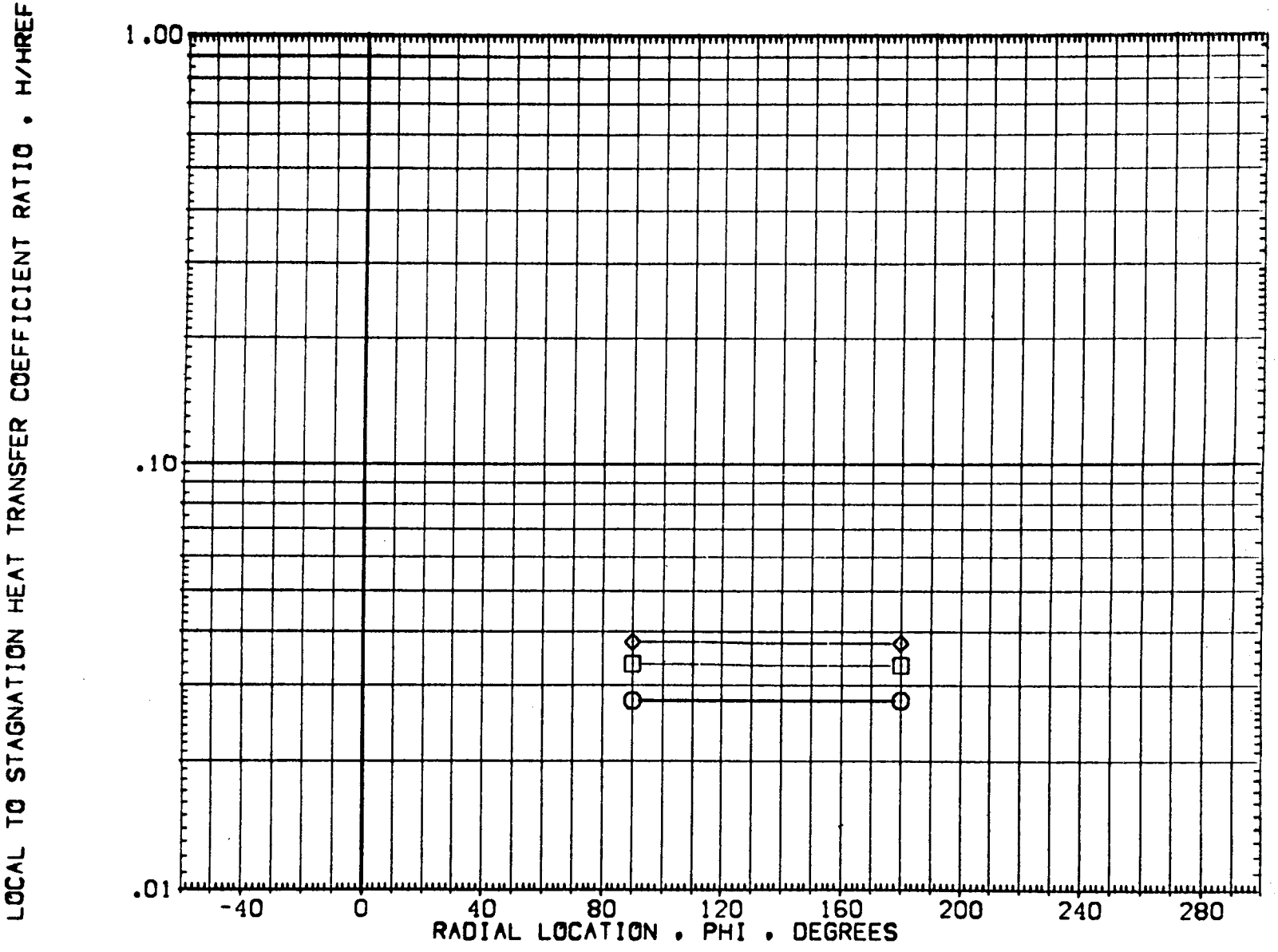


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

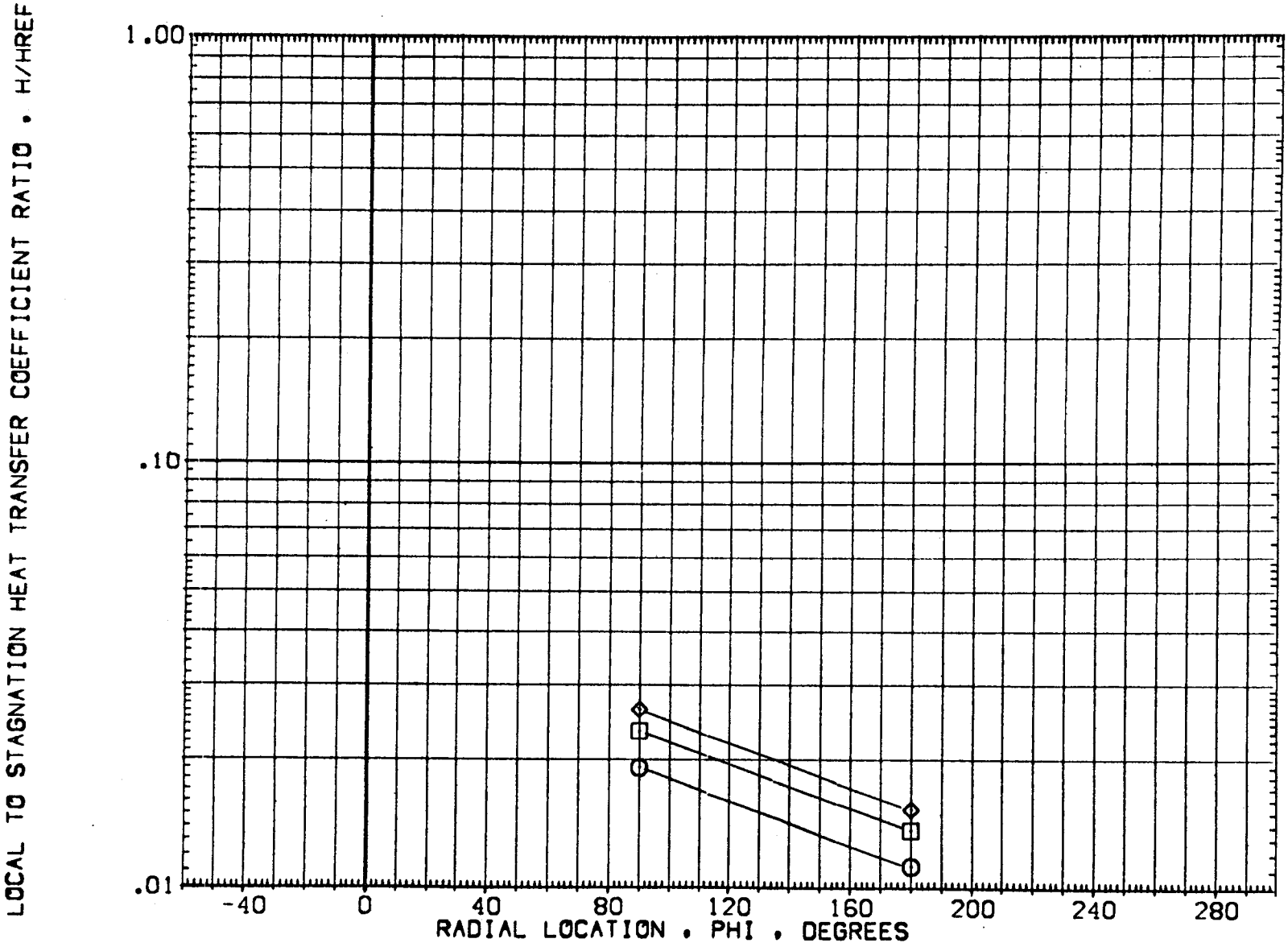


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

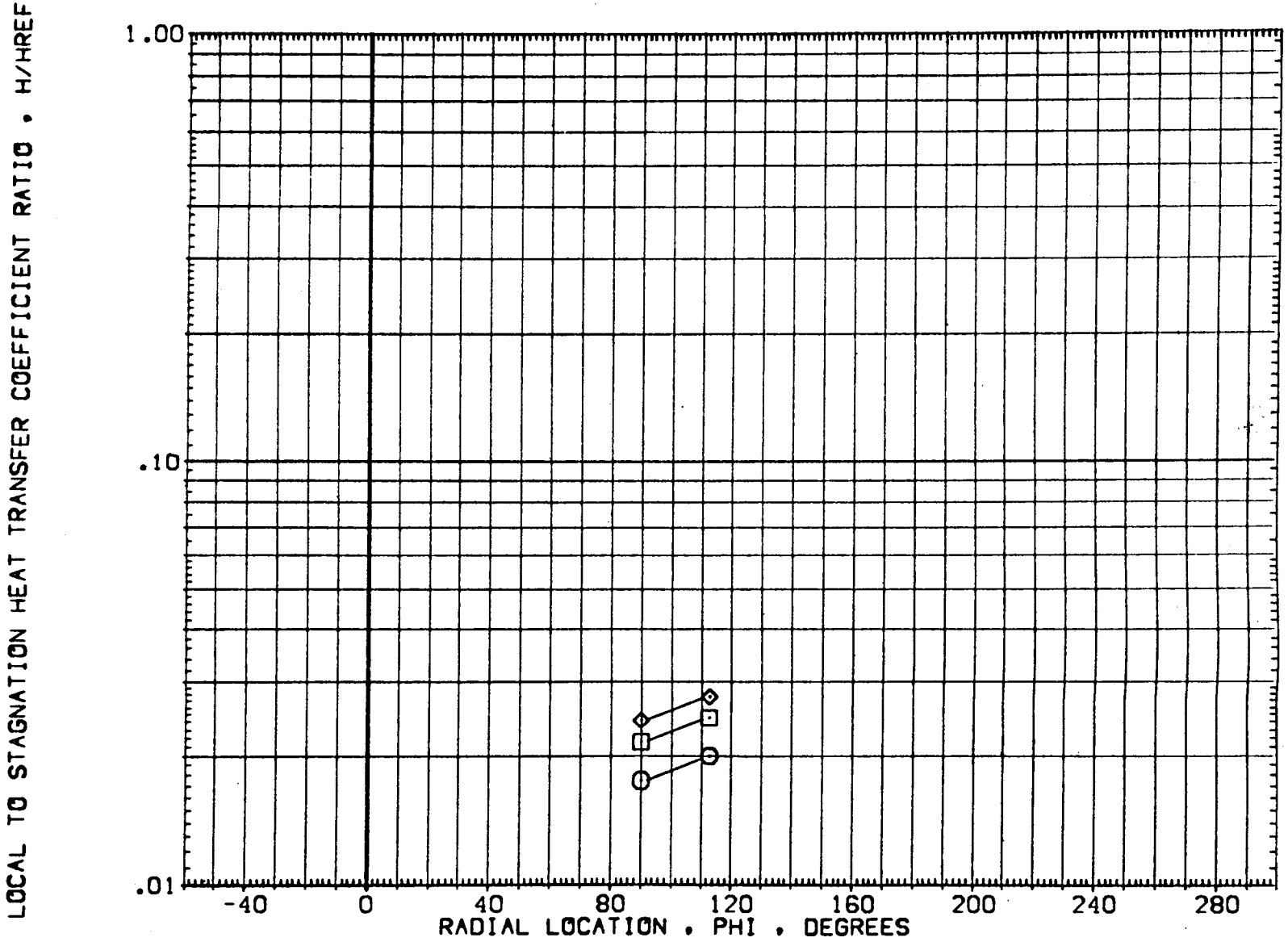


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 C+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 C+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 C+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

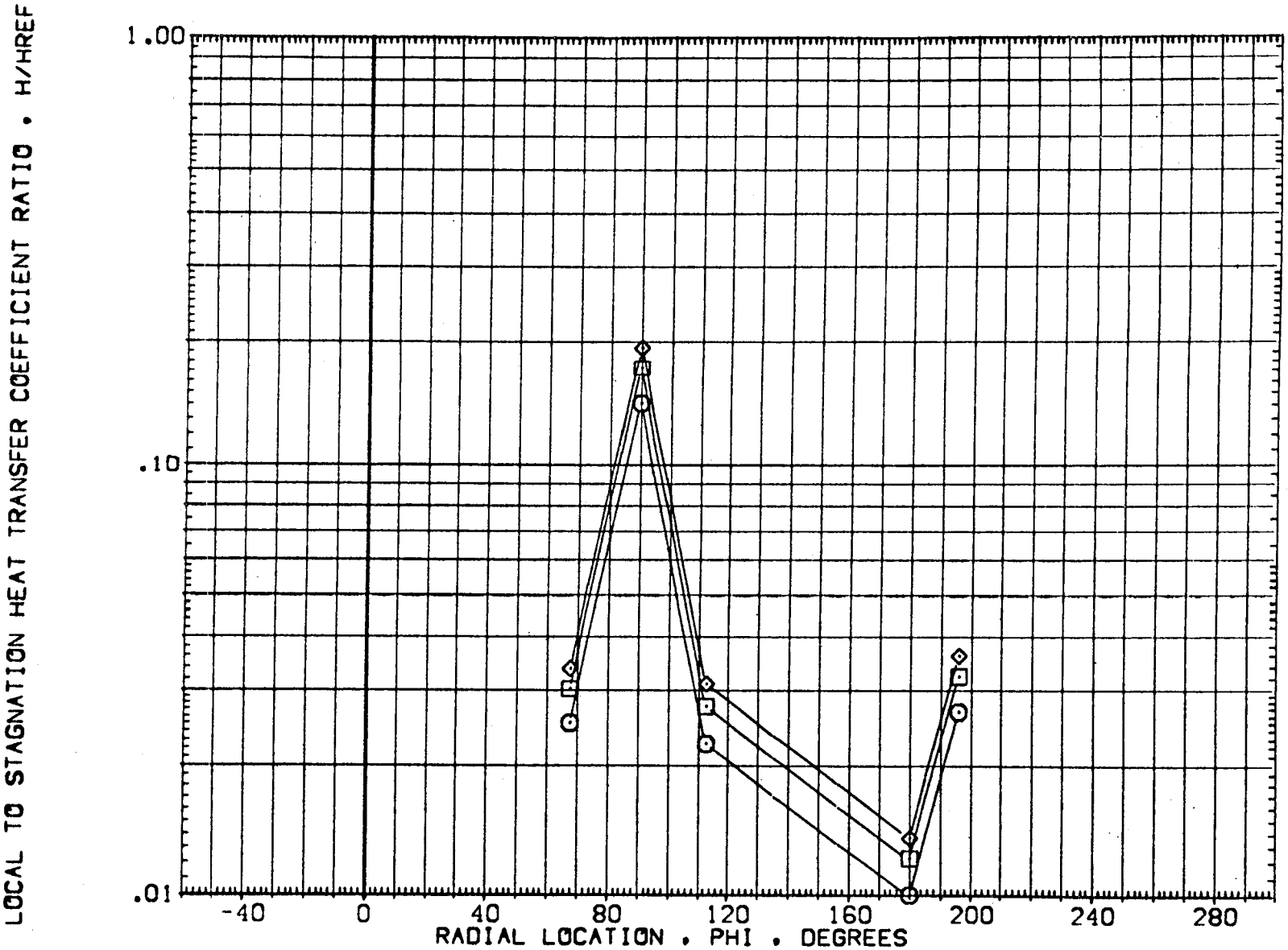


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE!T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

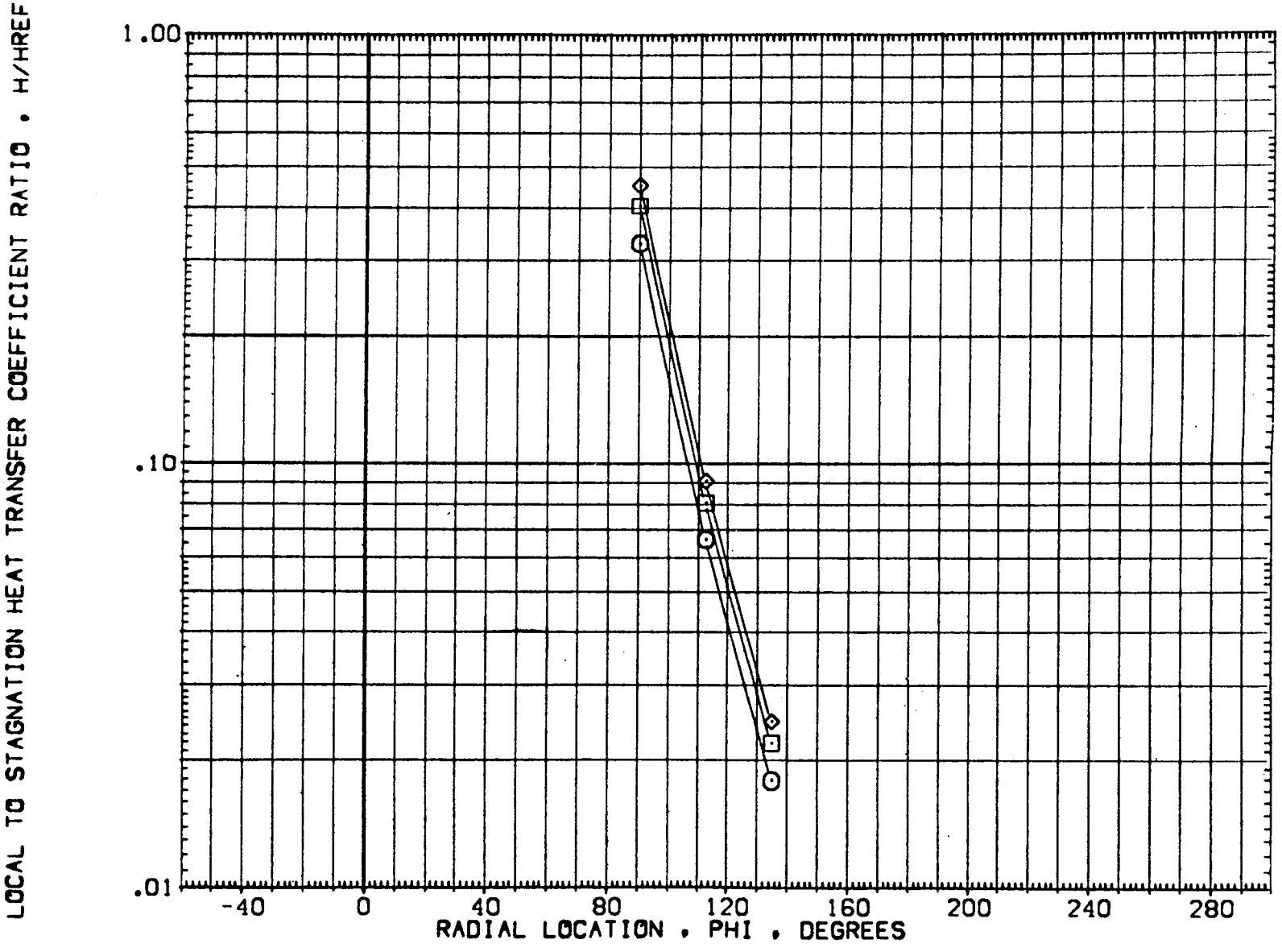


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

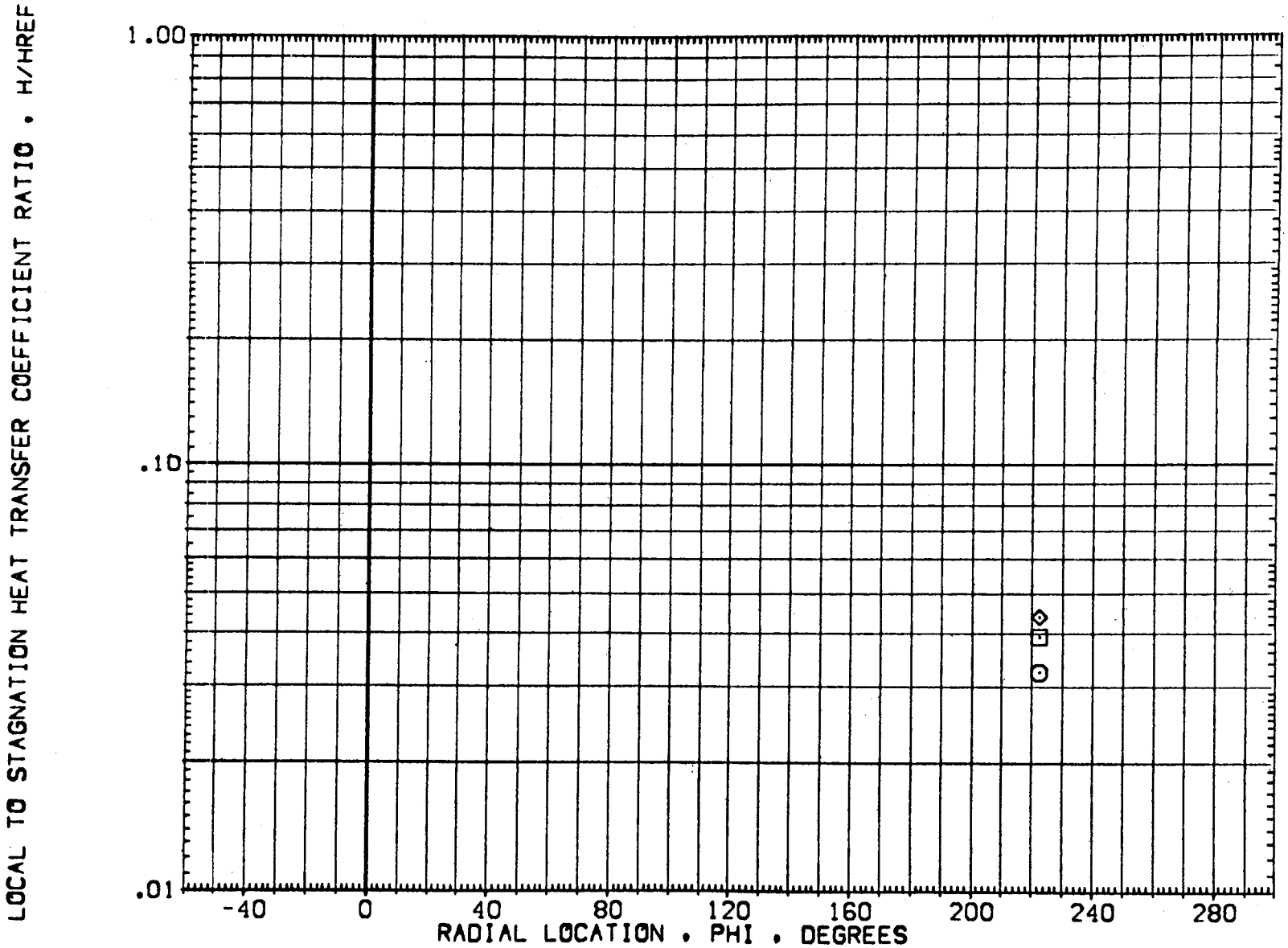


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE)T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE)T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE)T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

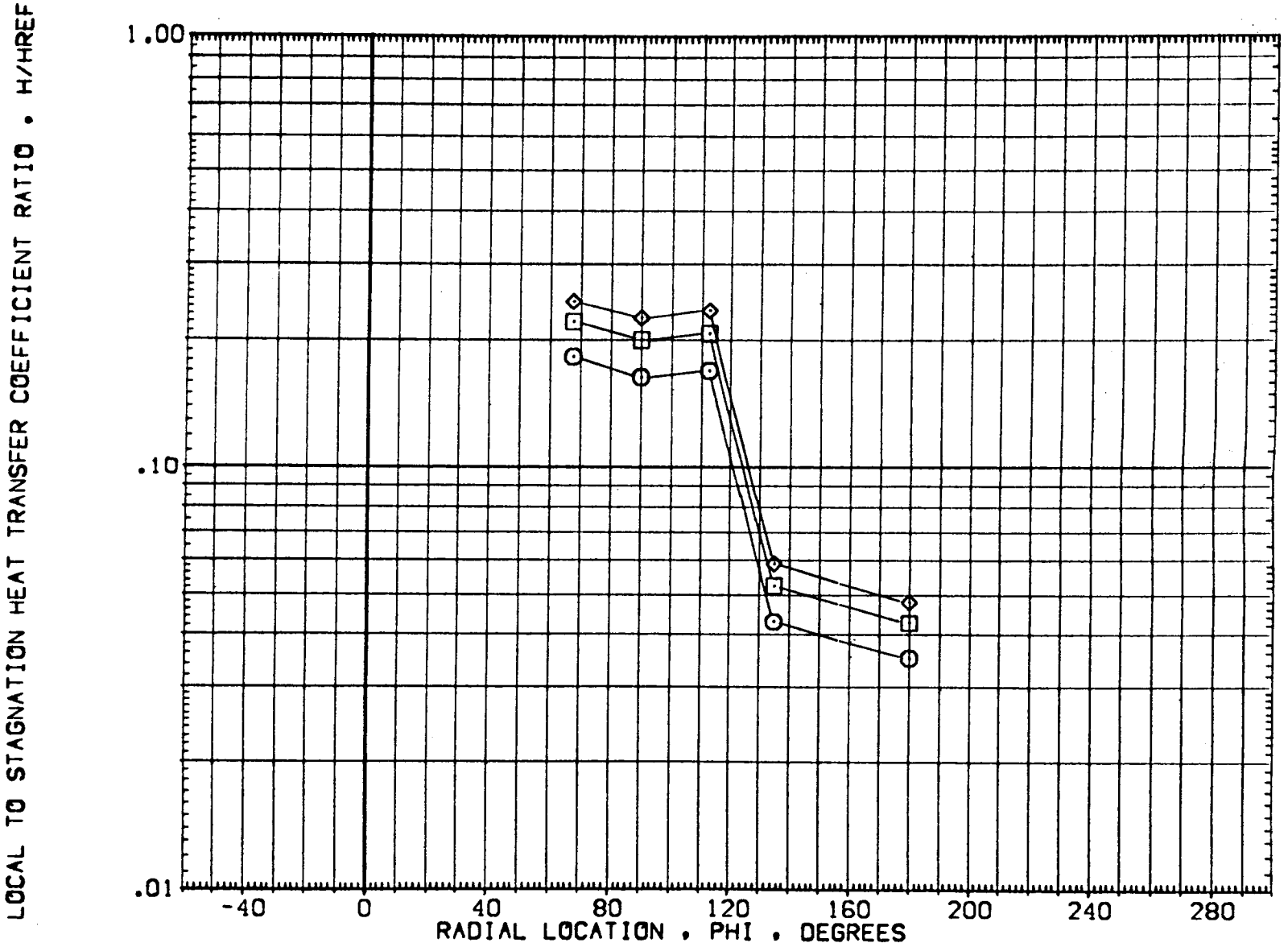


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

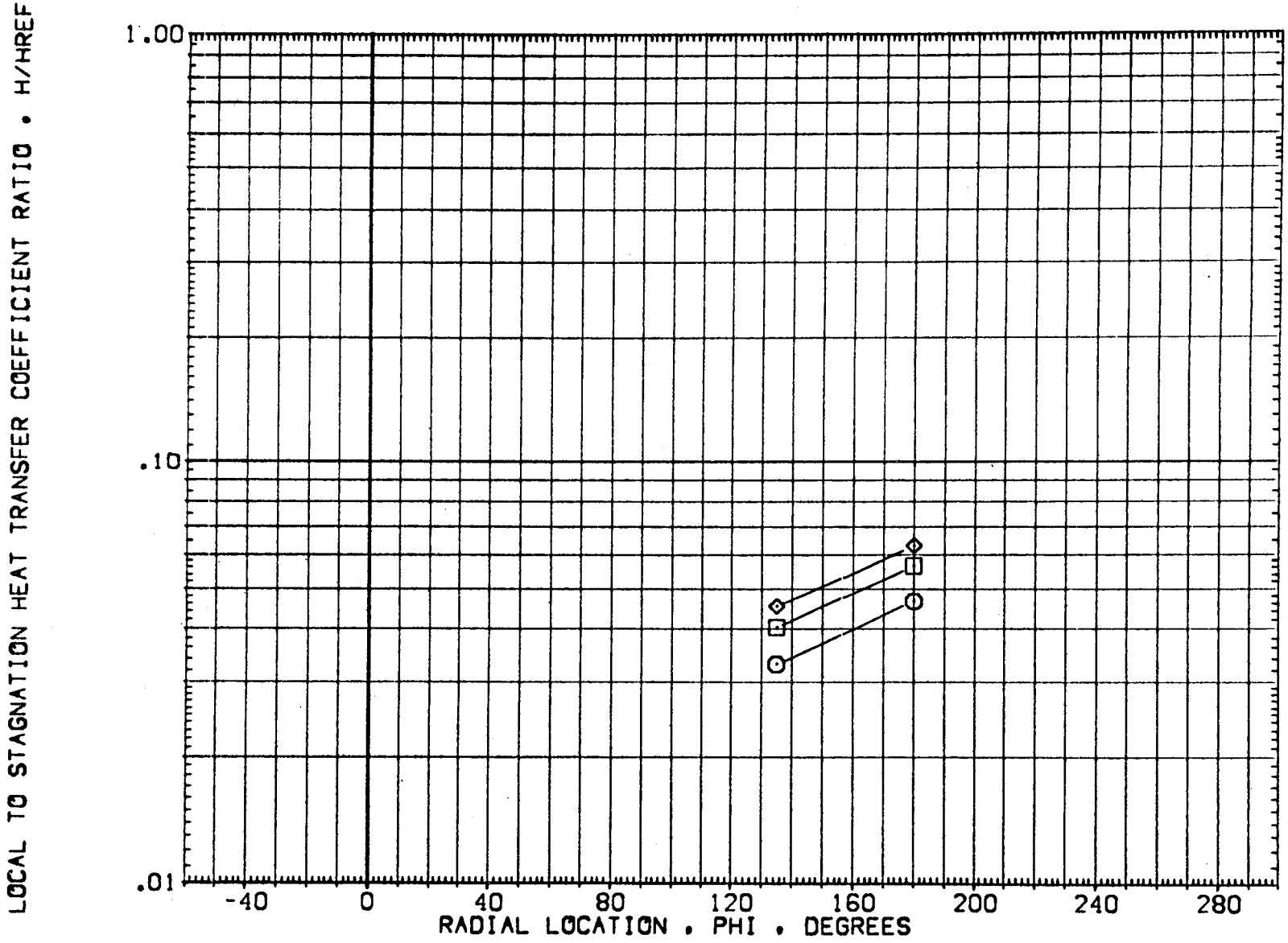


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 |H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 |H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 |H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

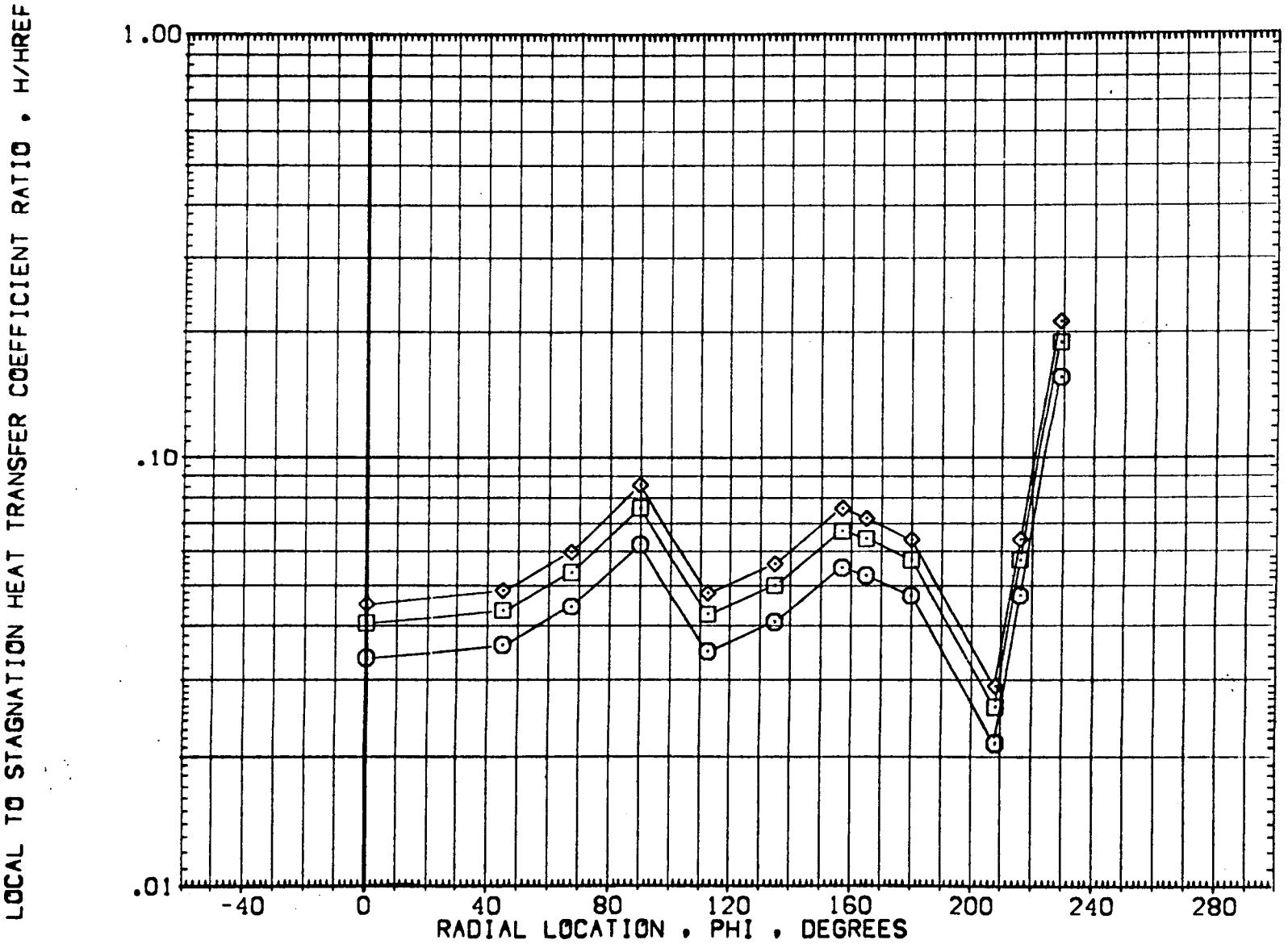


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

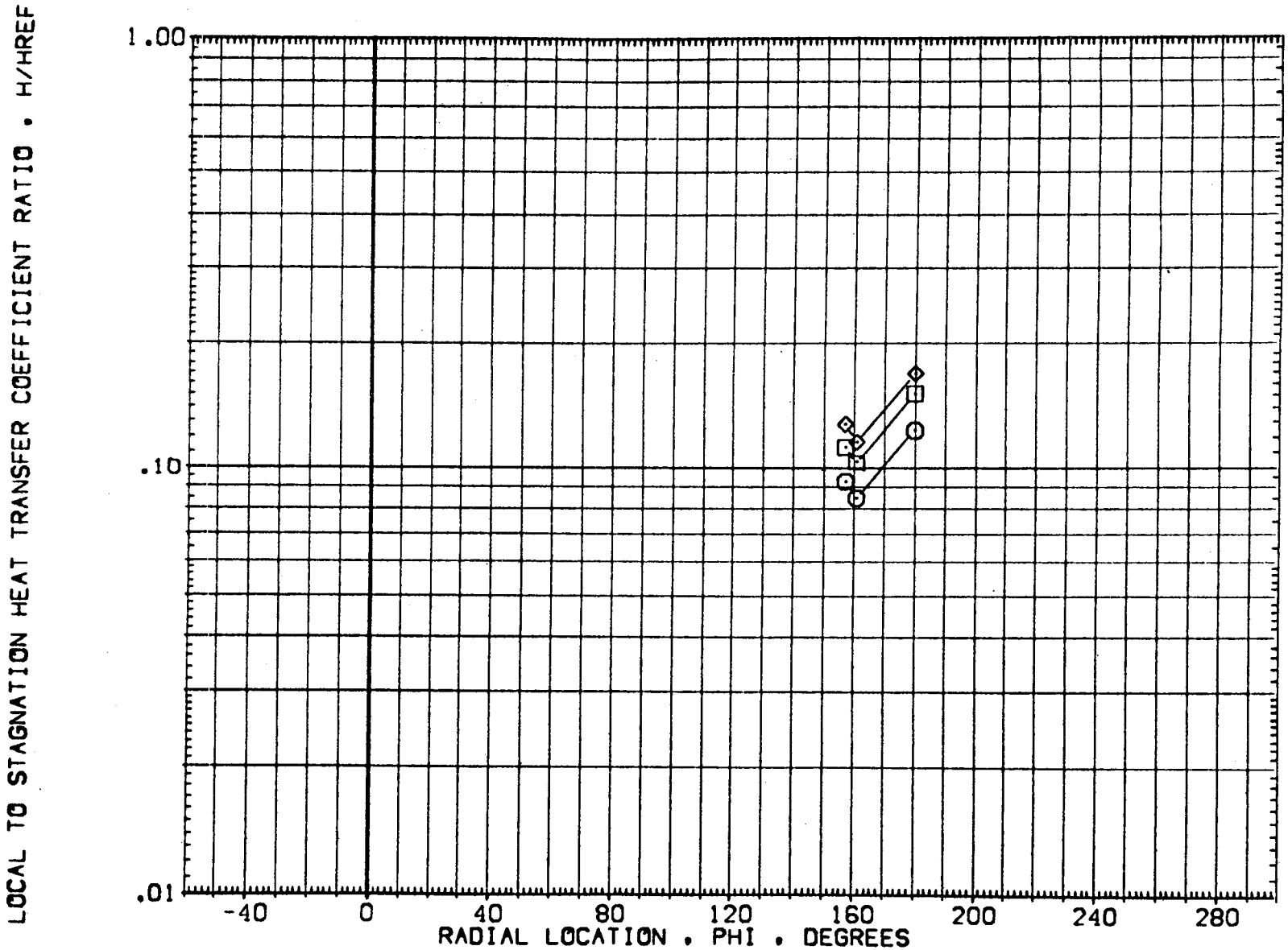


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE!T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

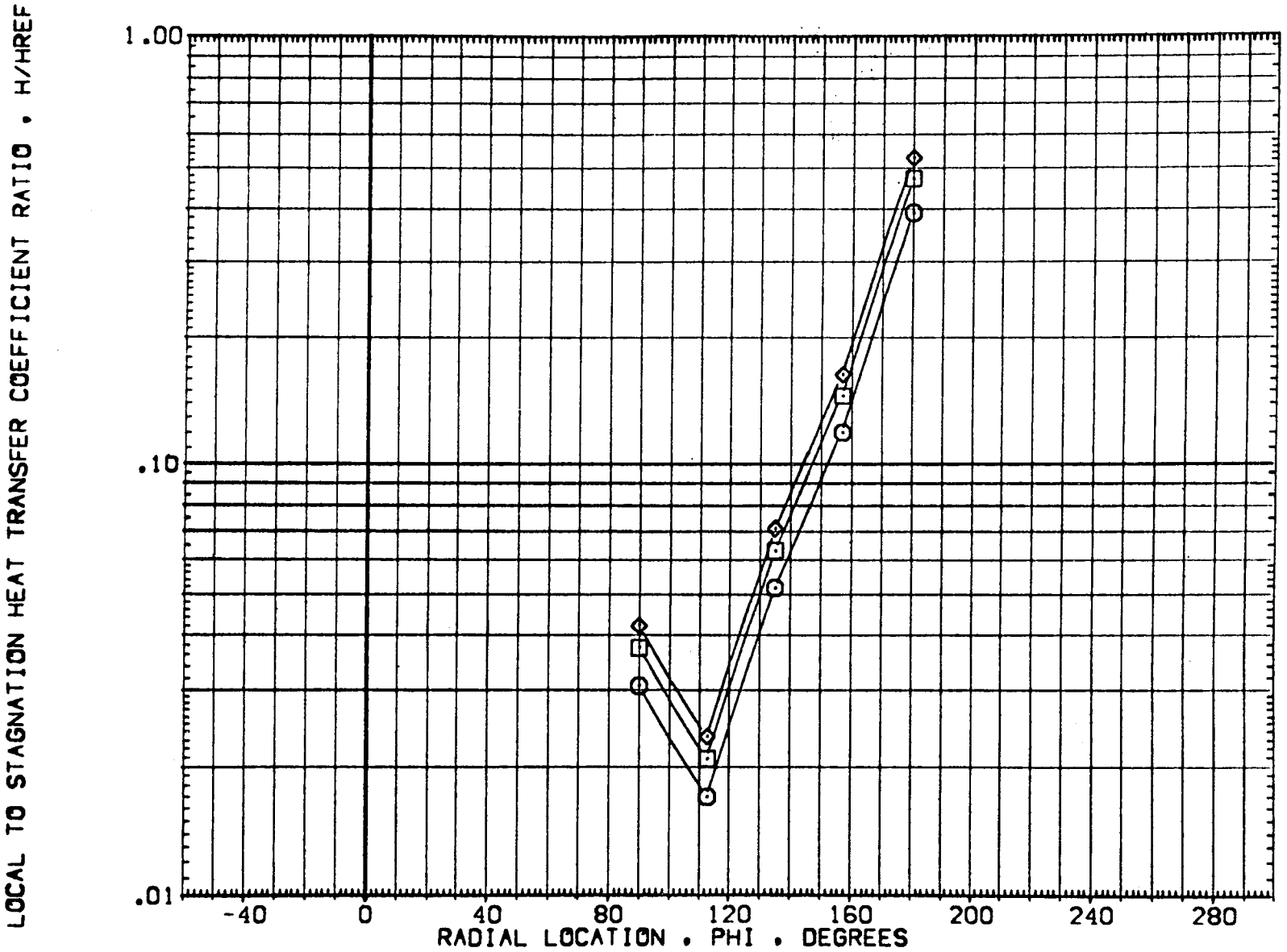


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

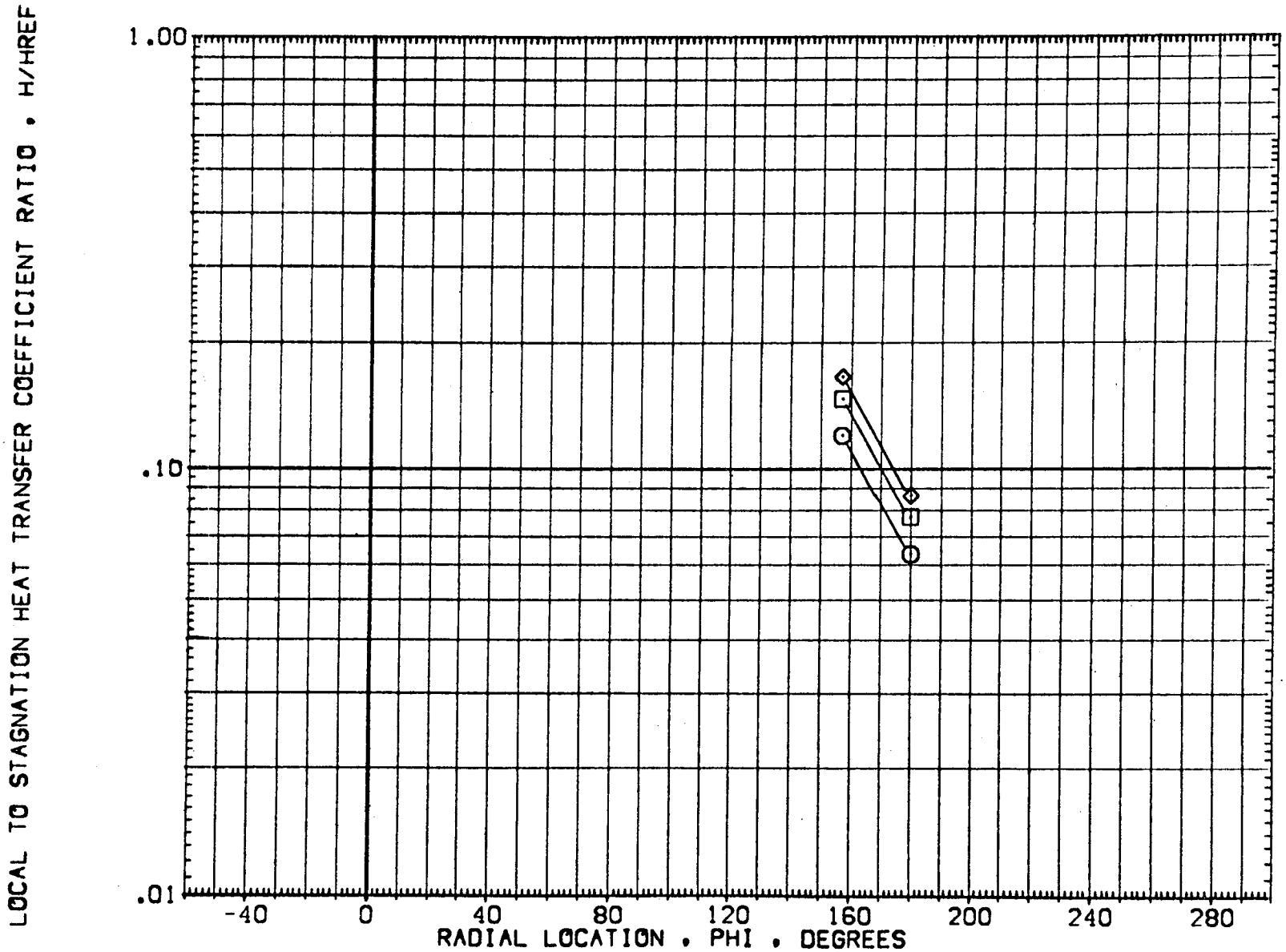


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE)T03)	○	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE)T03)	□	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE)T03)	◇	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

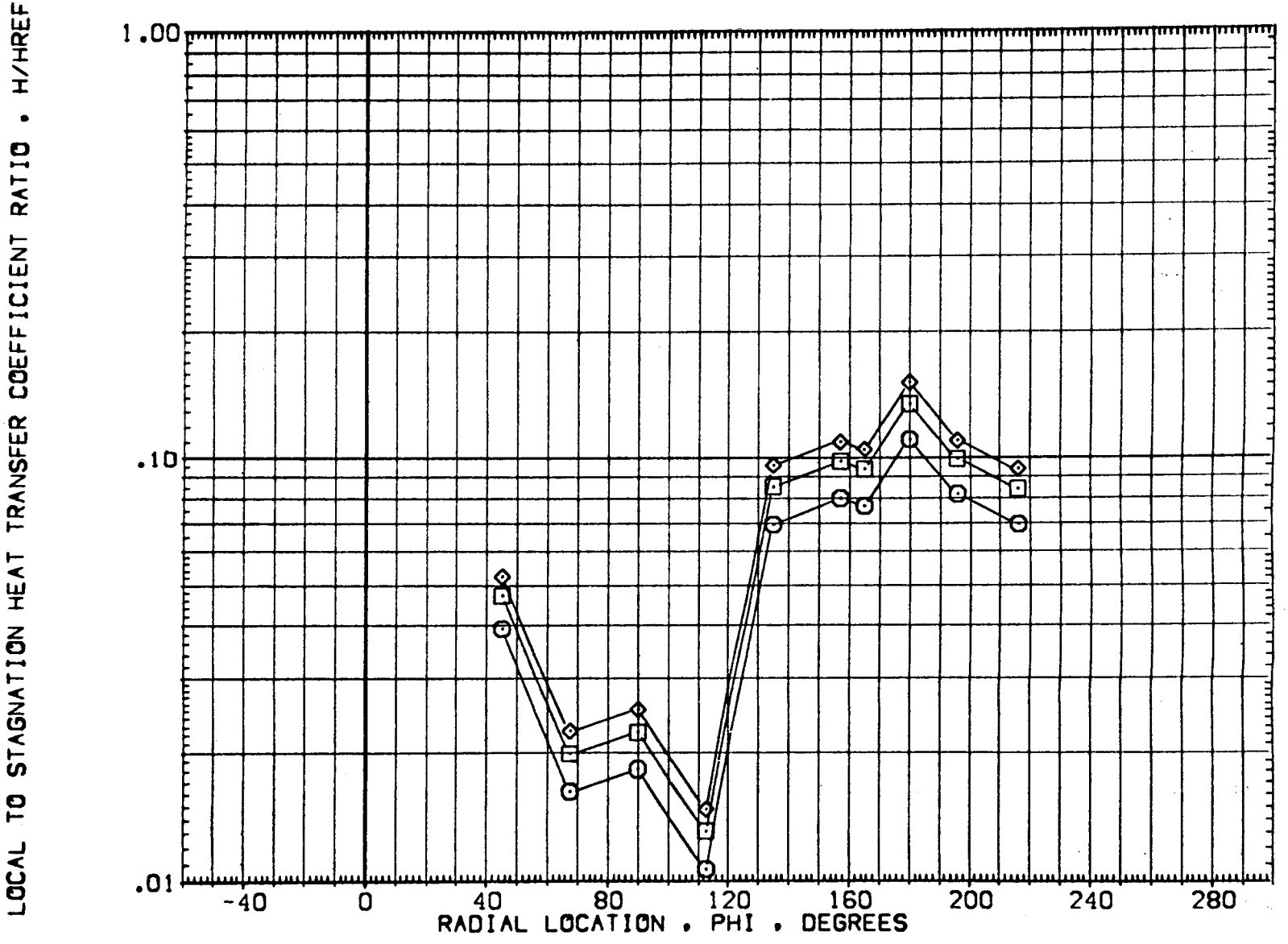


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

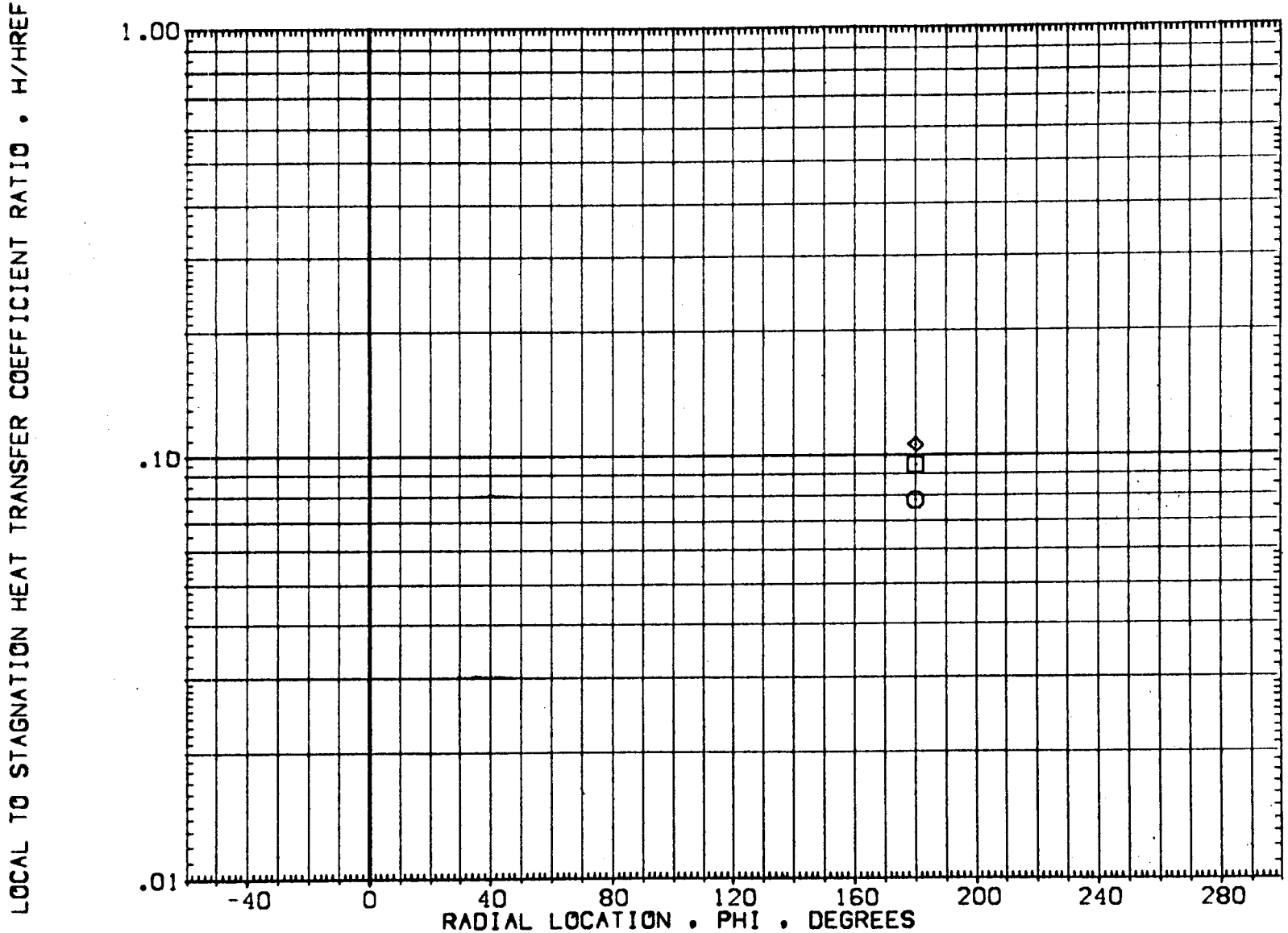


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1103)	▽	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1103)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

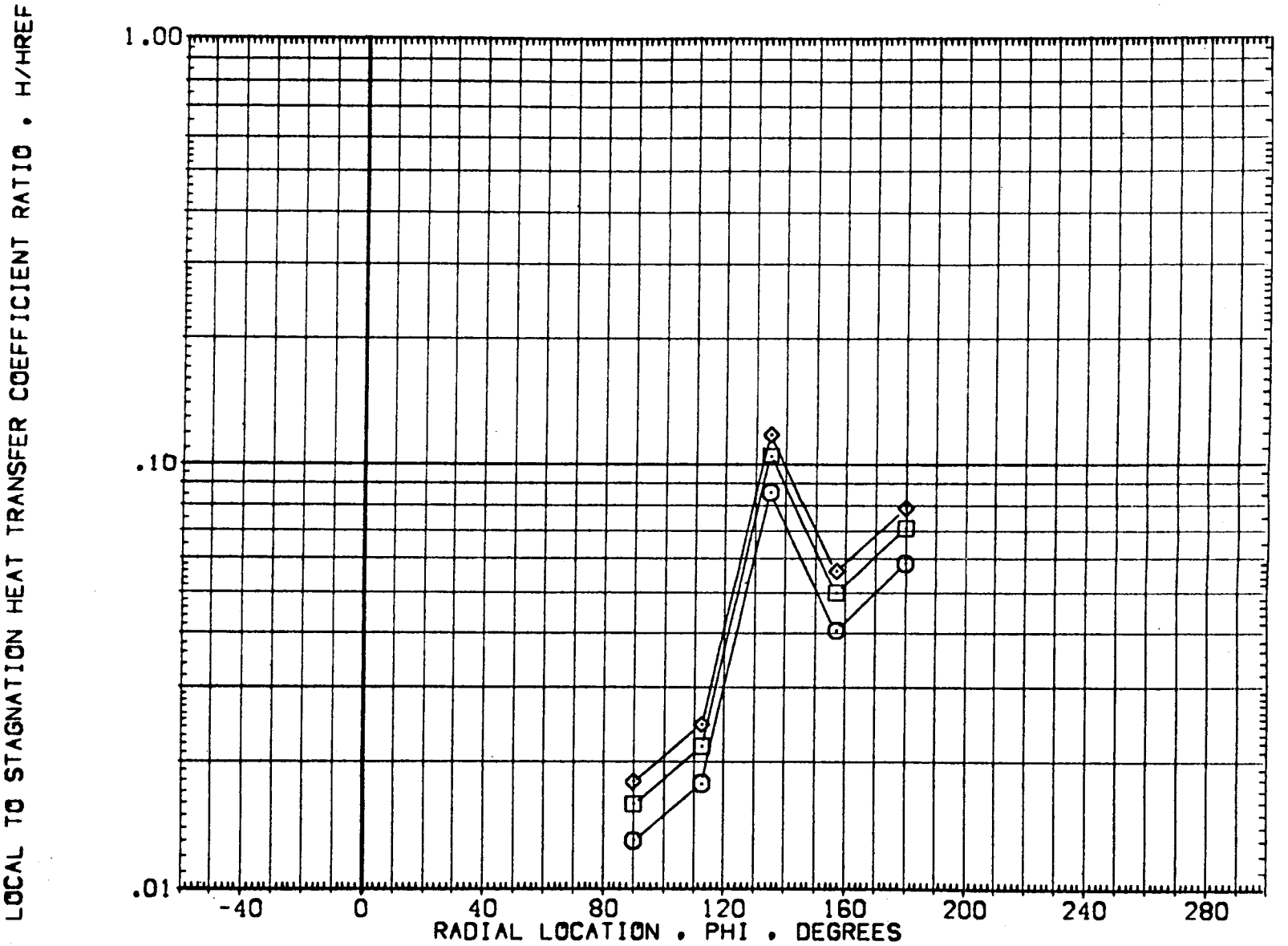


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

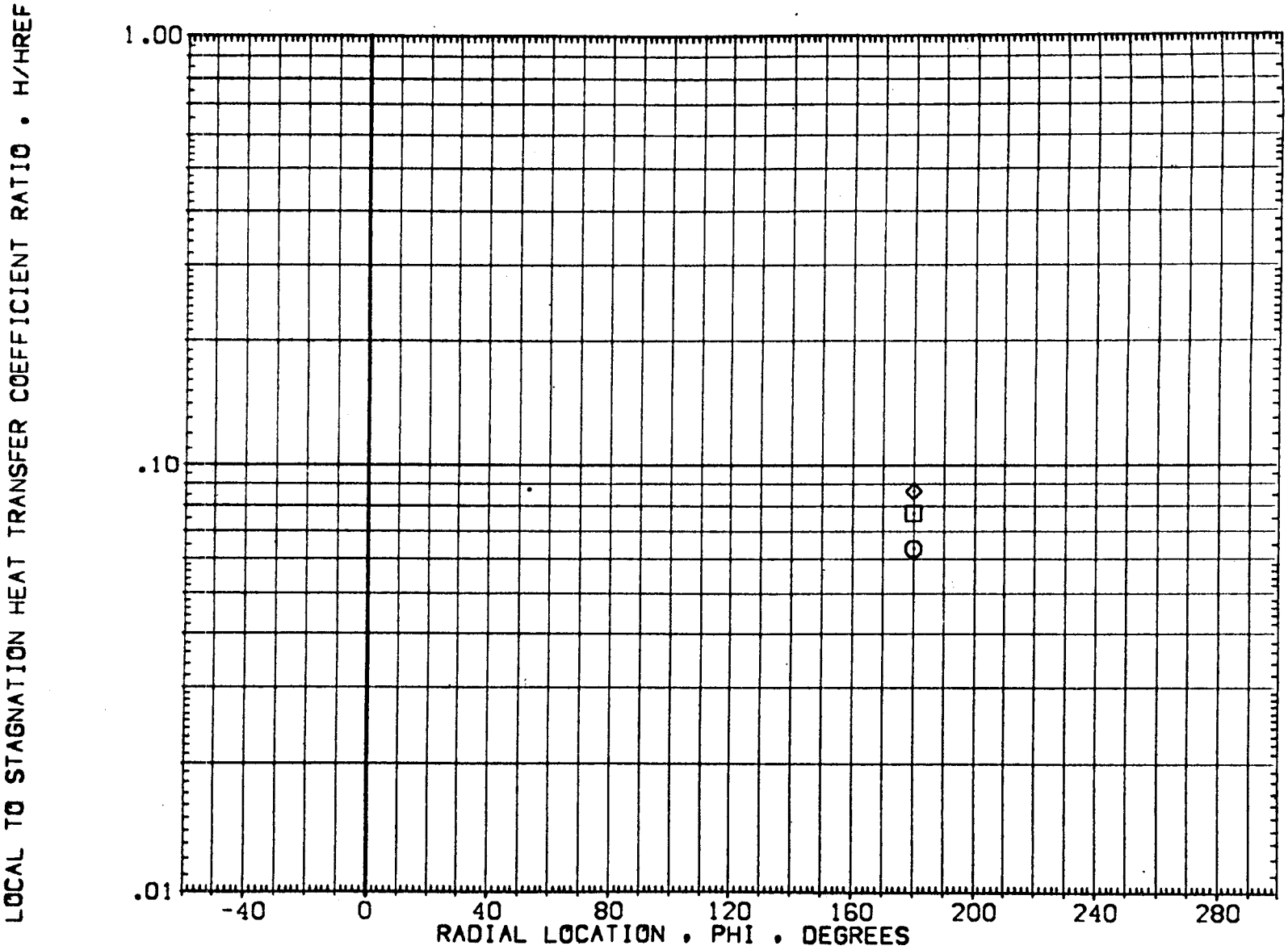


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

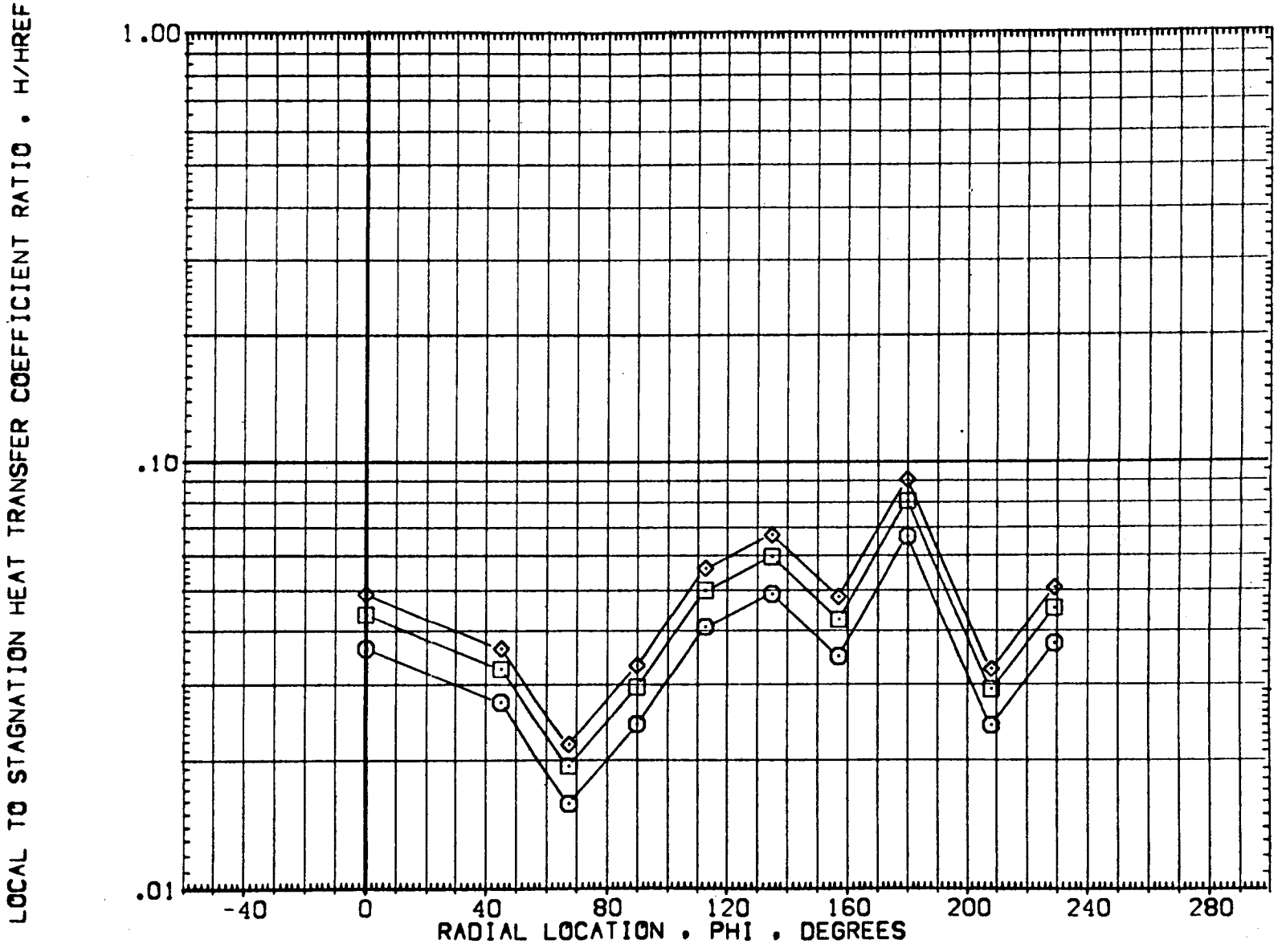


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

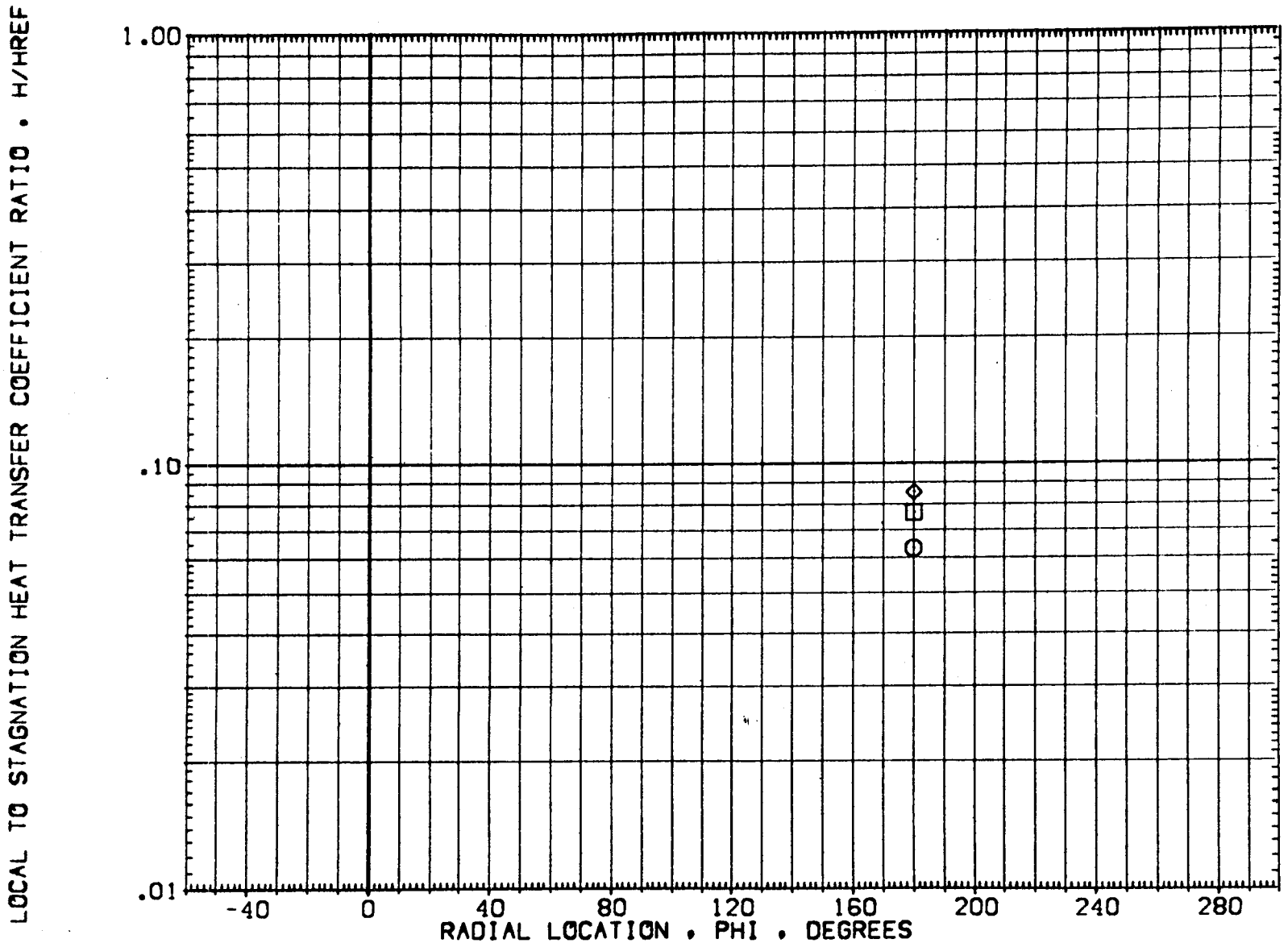


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

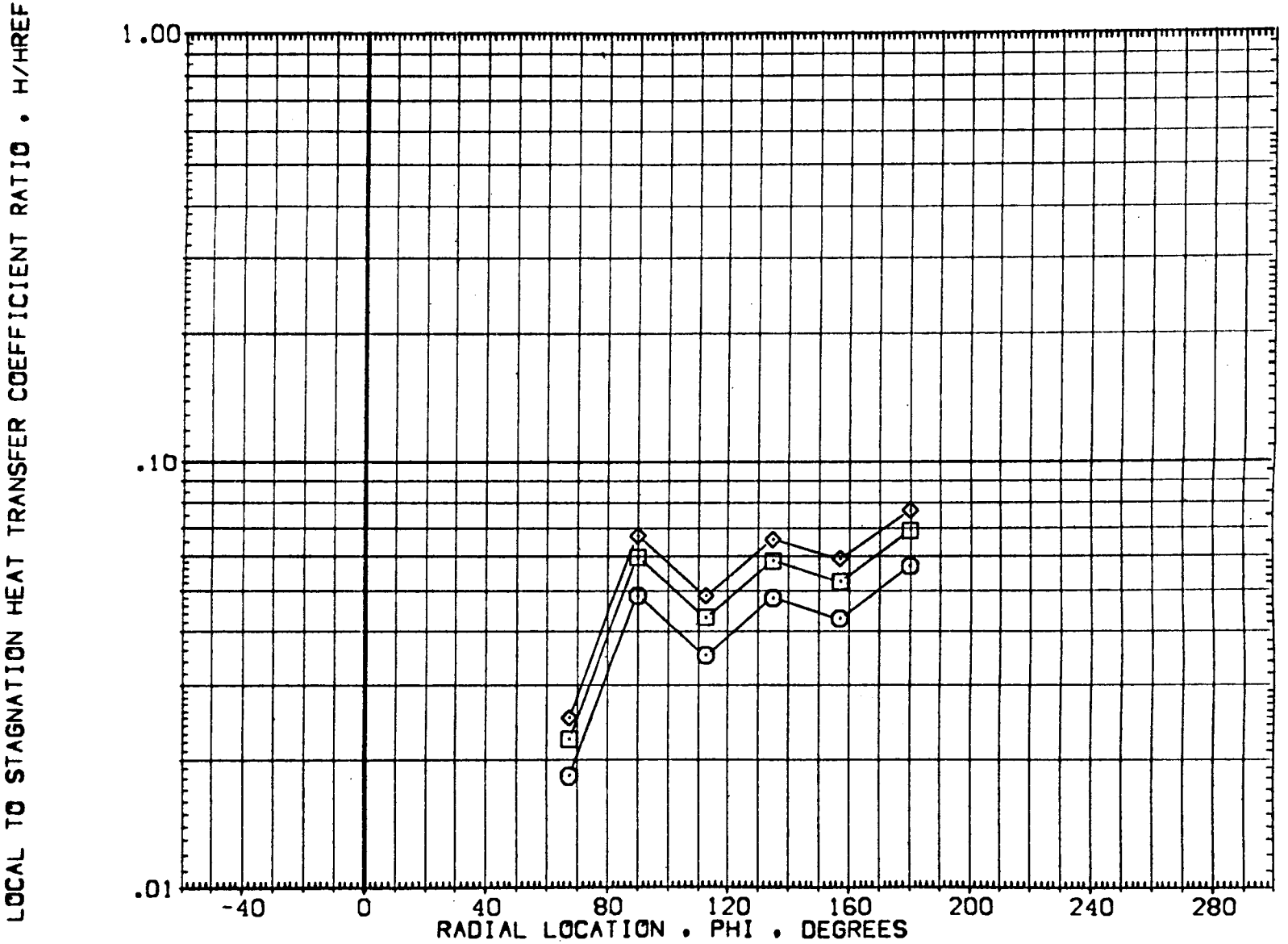


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

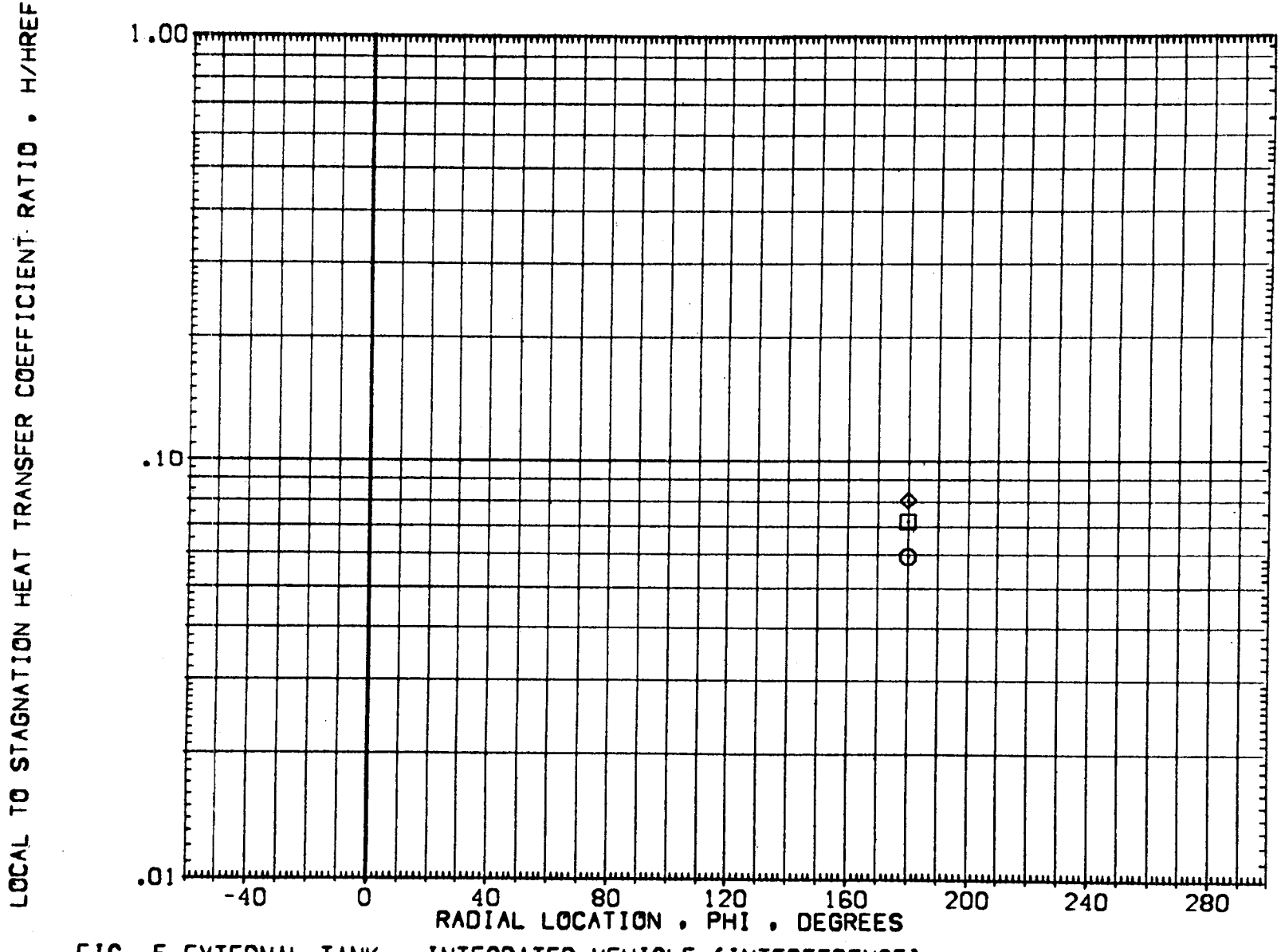


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

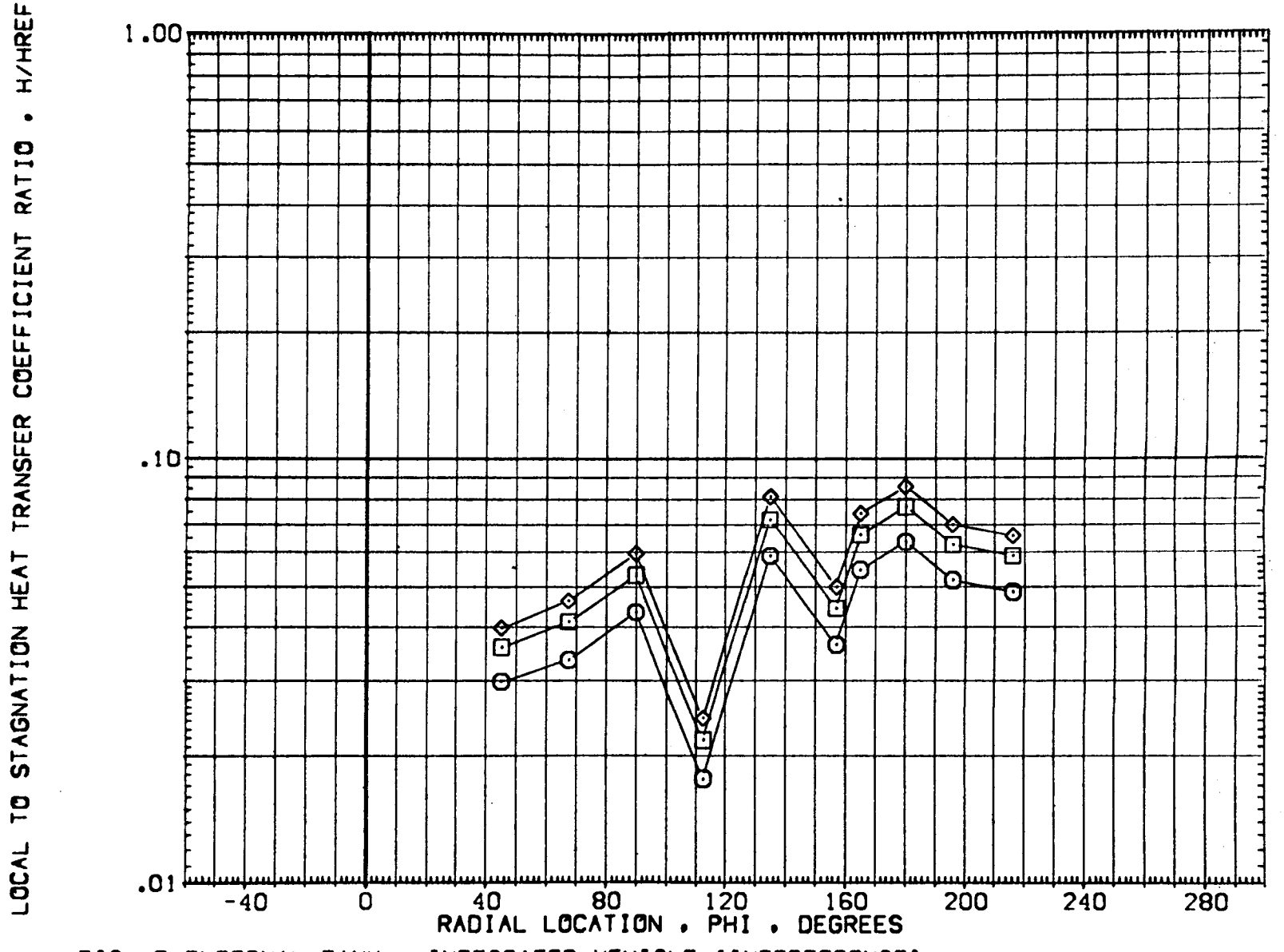


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

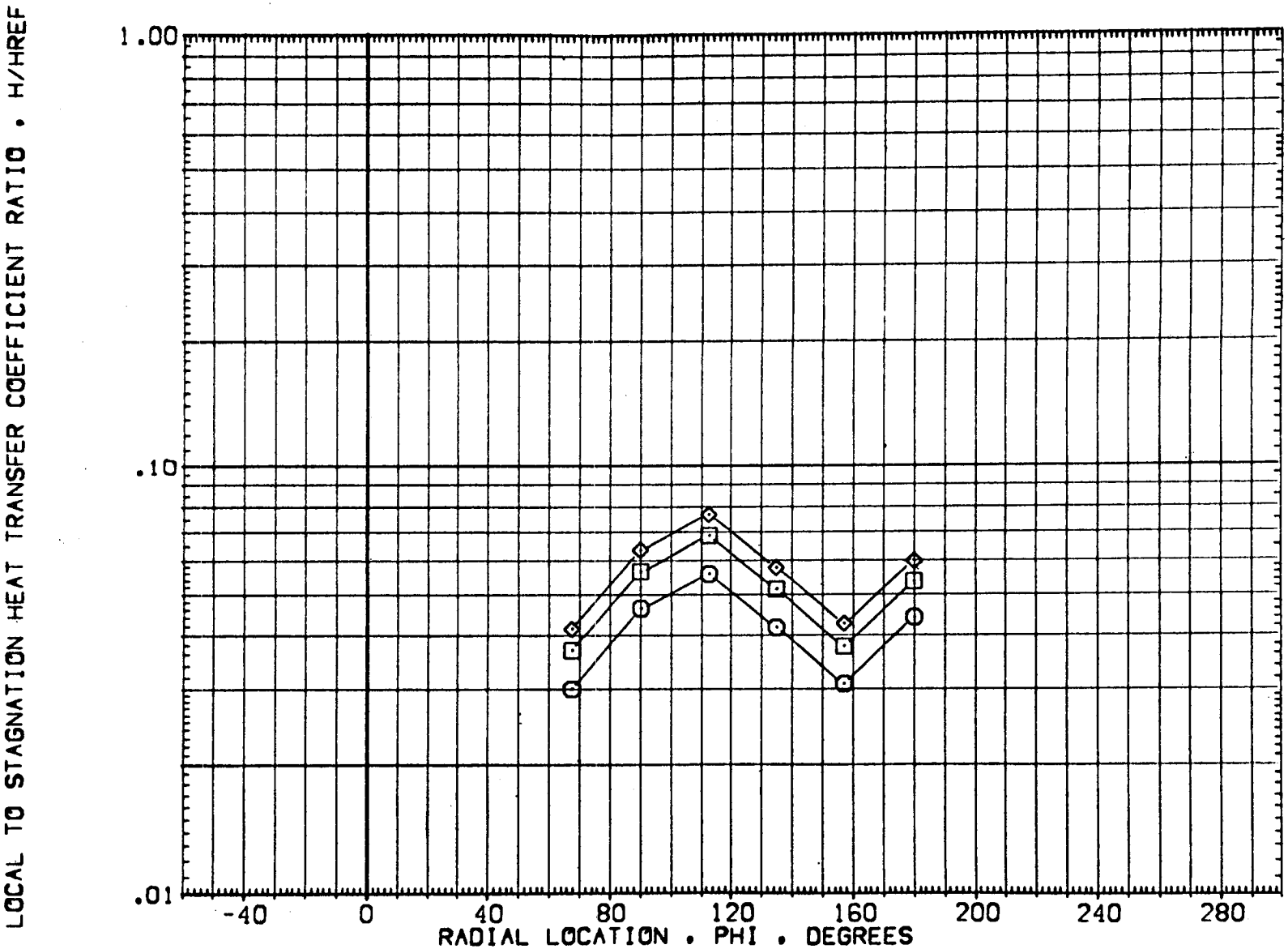


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	▽	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

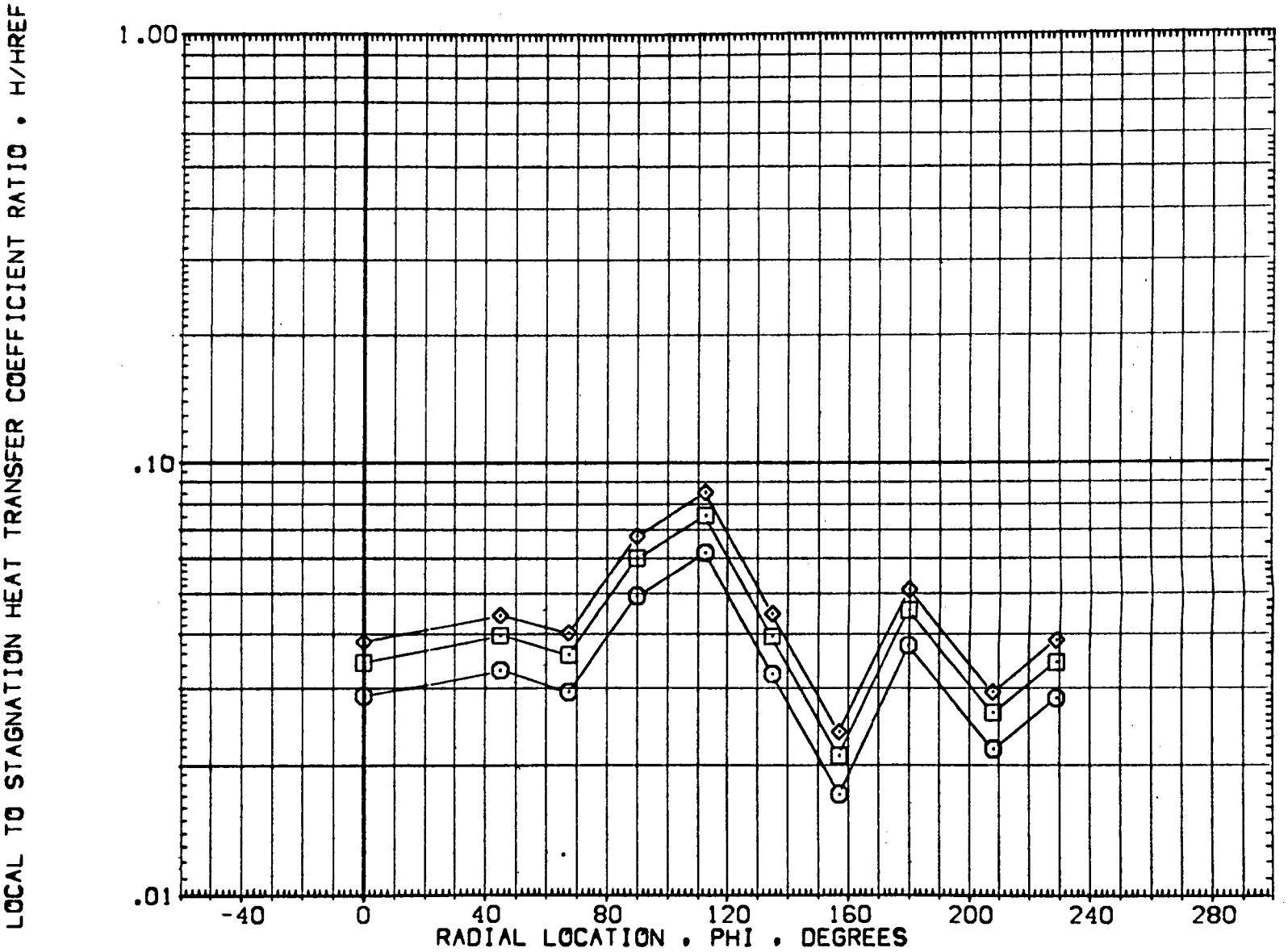


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

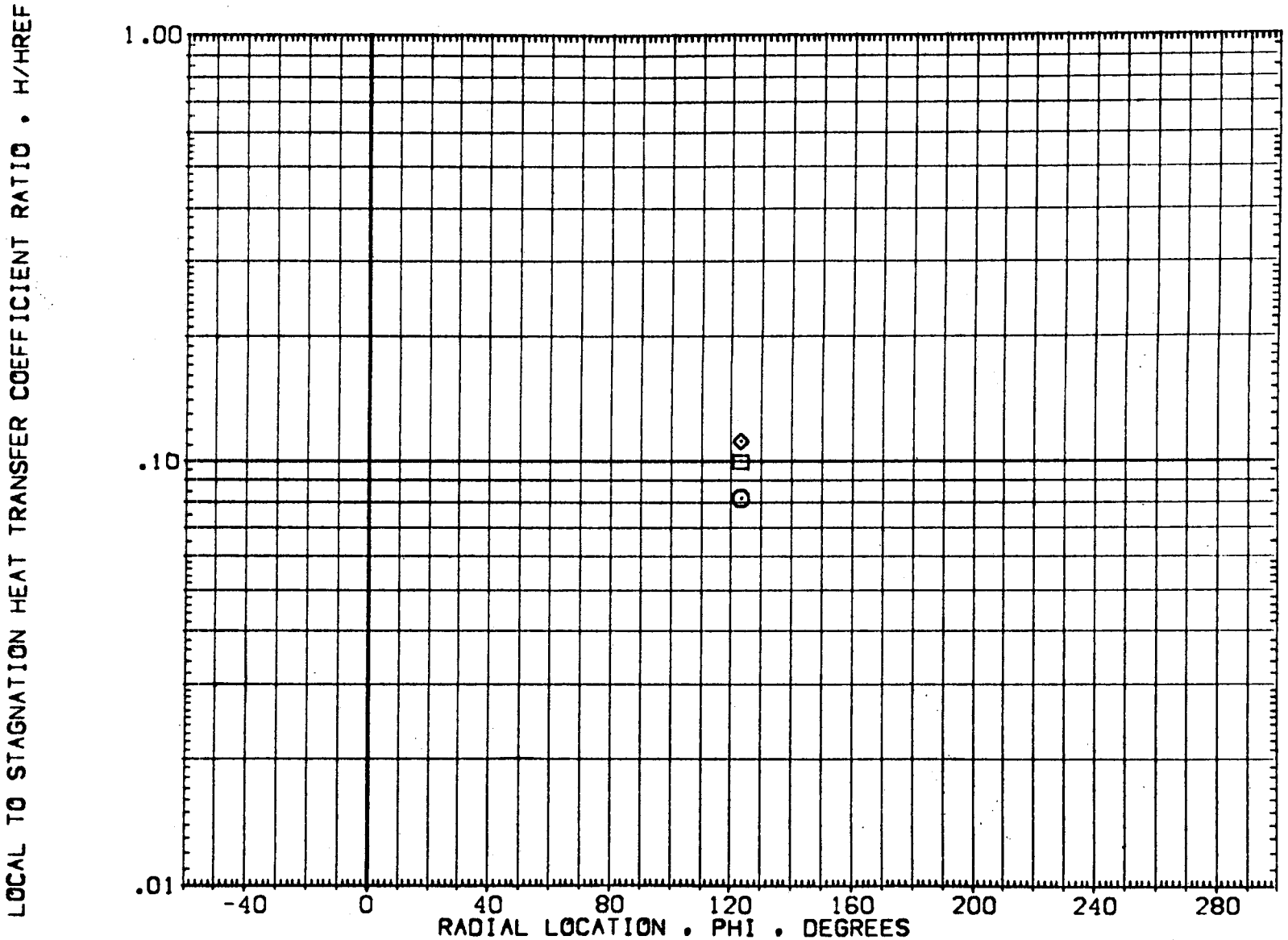


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AEIT03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BEIT03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

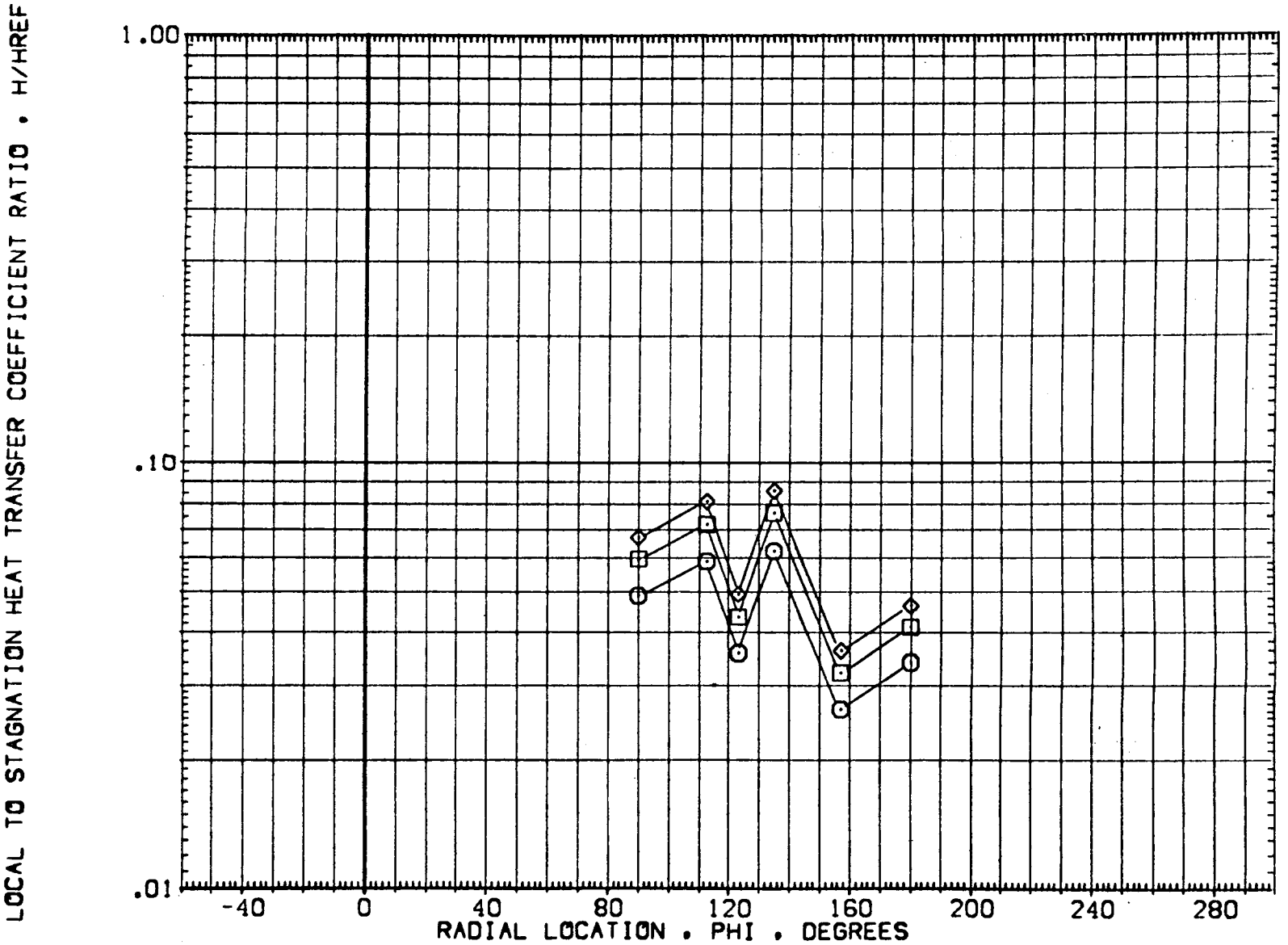


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

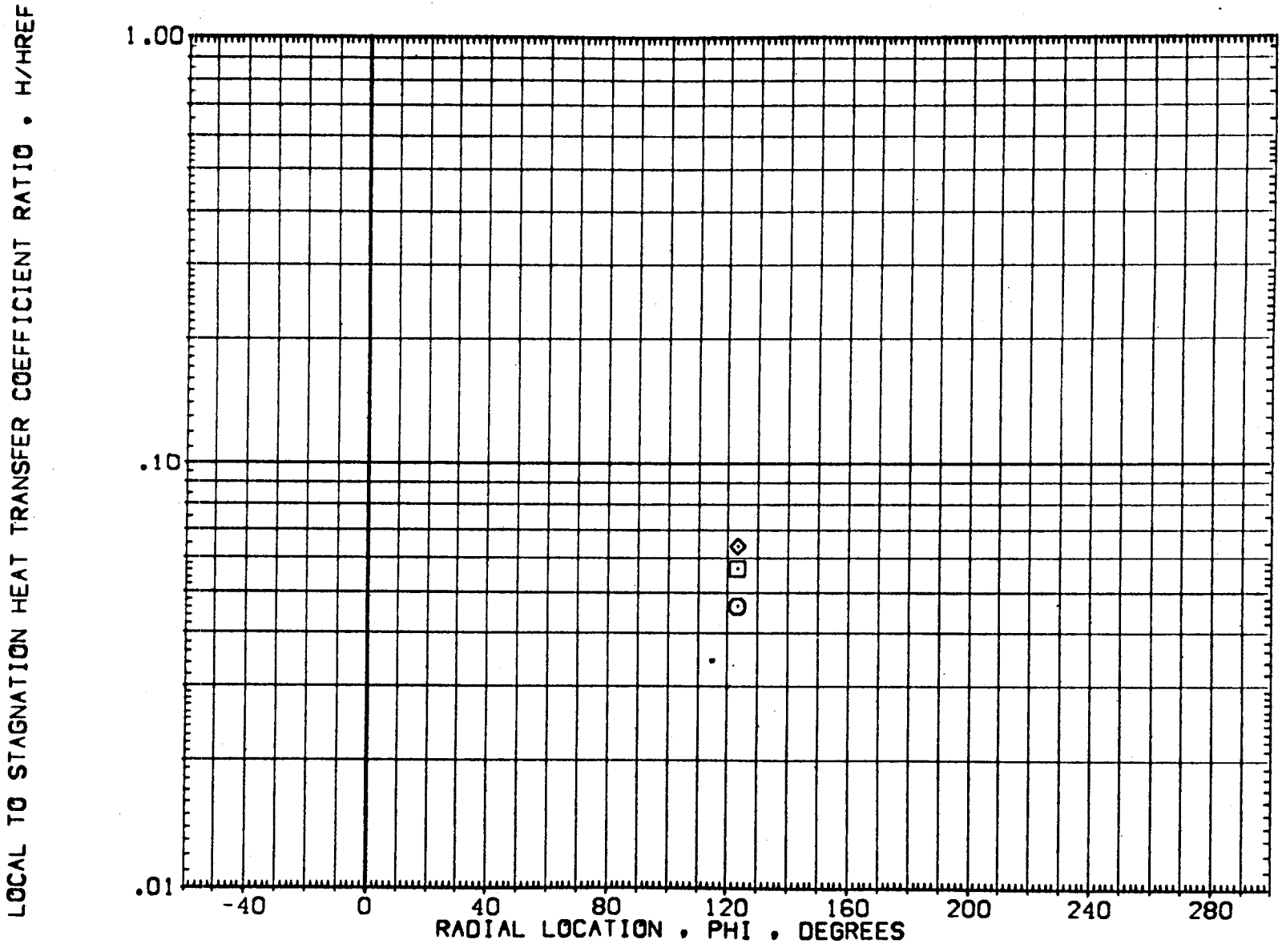


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE103)	□	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE103)	◇	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE103)	◇	ARC 3.5-178 (H3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

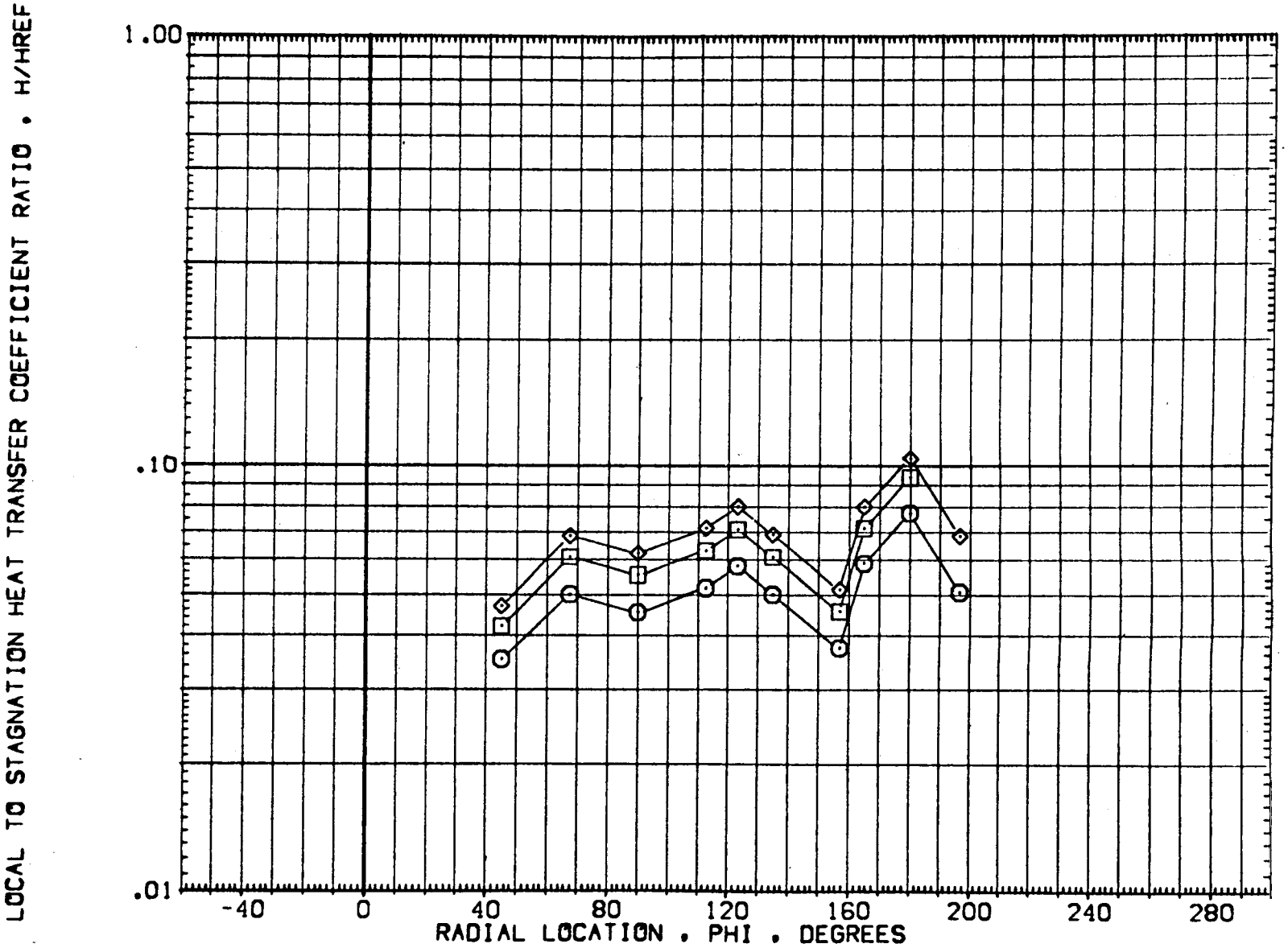


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE!T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE!T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

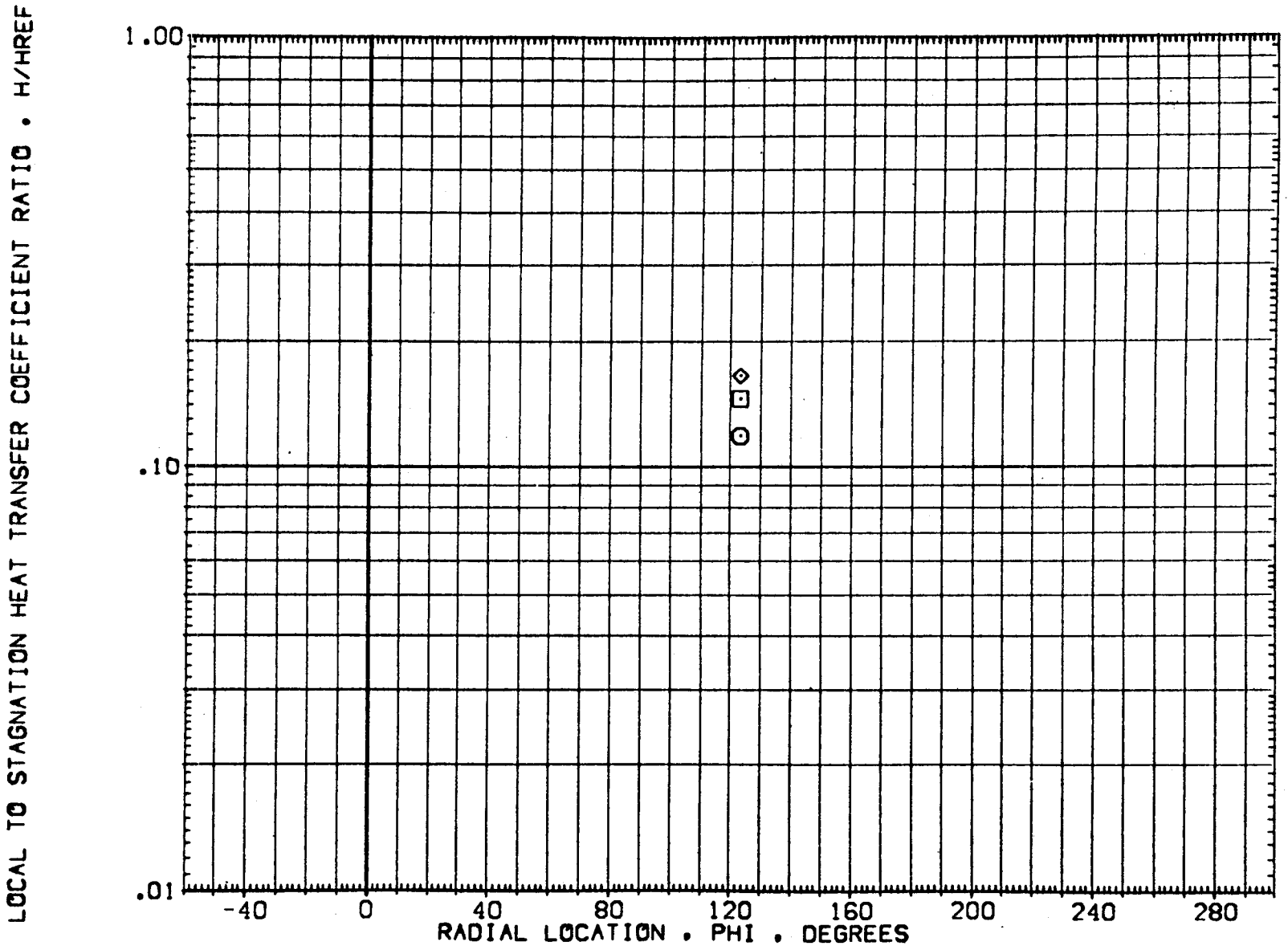


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1103)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

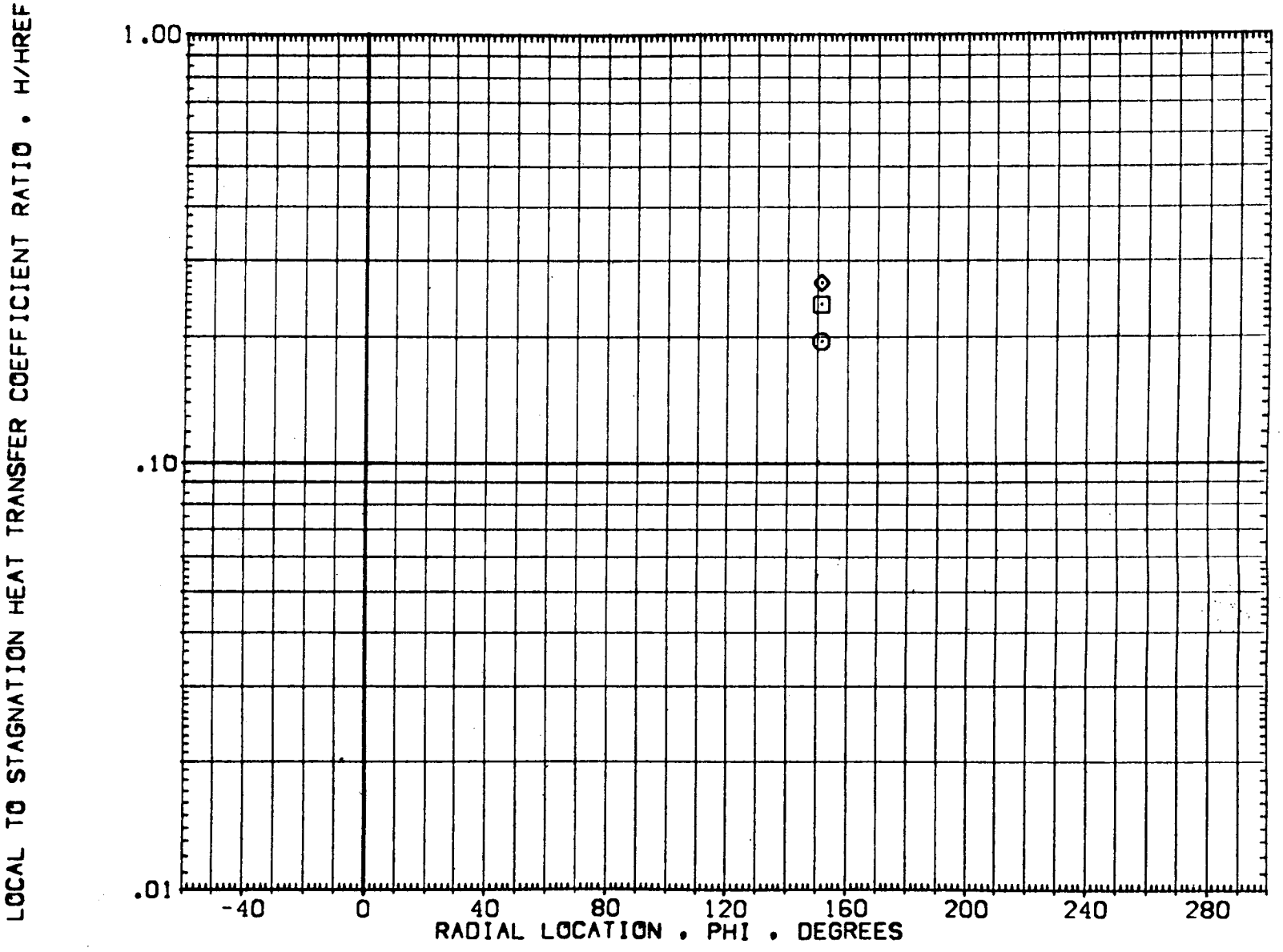


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T03)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE|T03)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE|T03)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

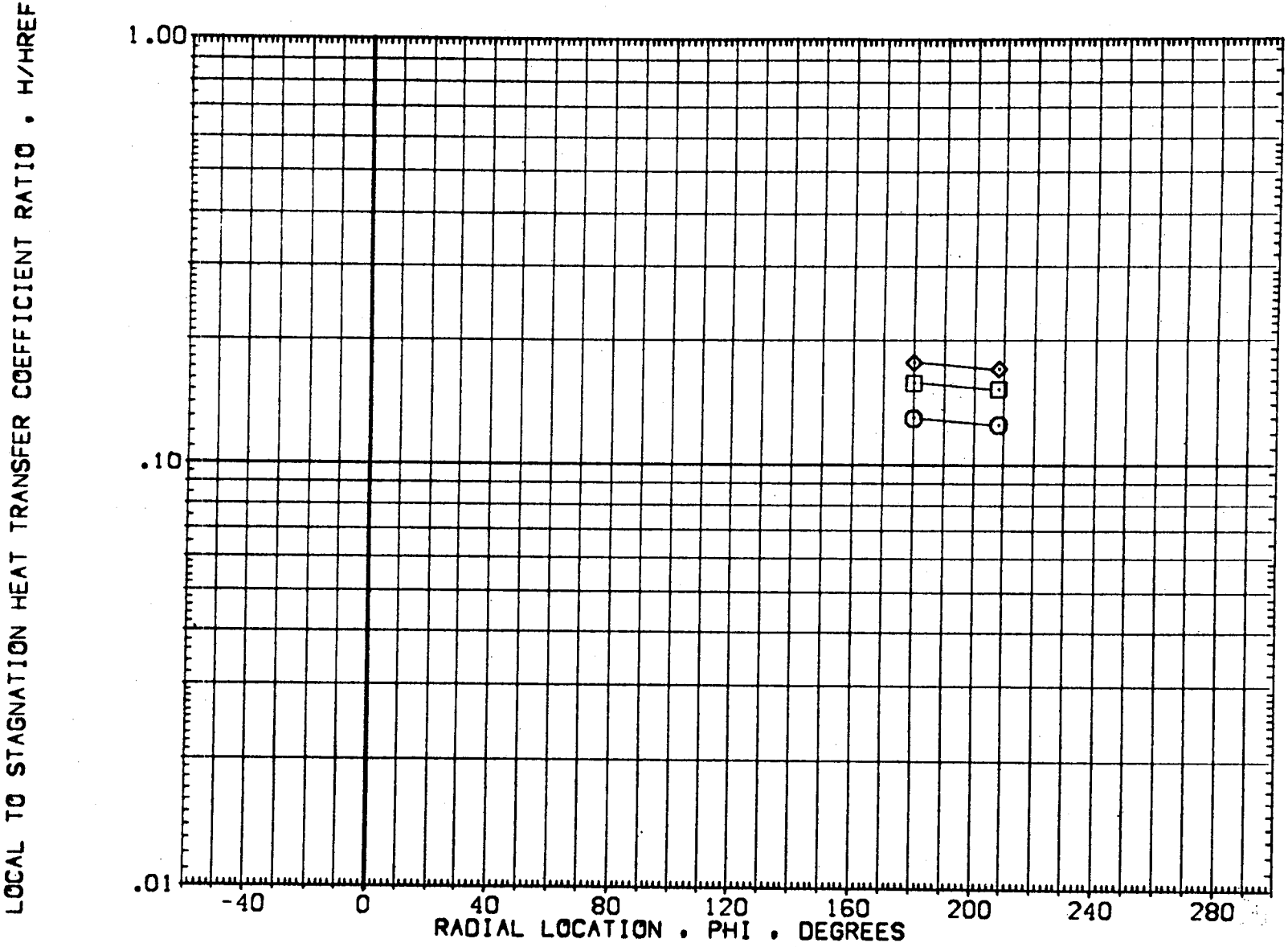


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T03)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE1T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE1T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

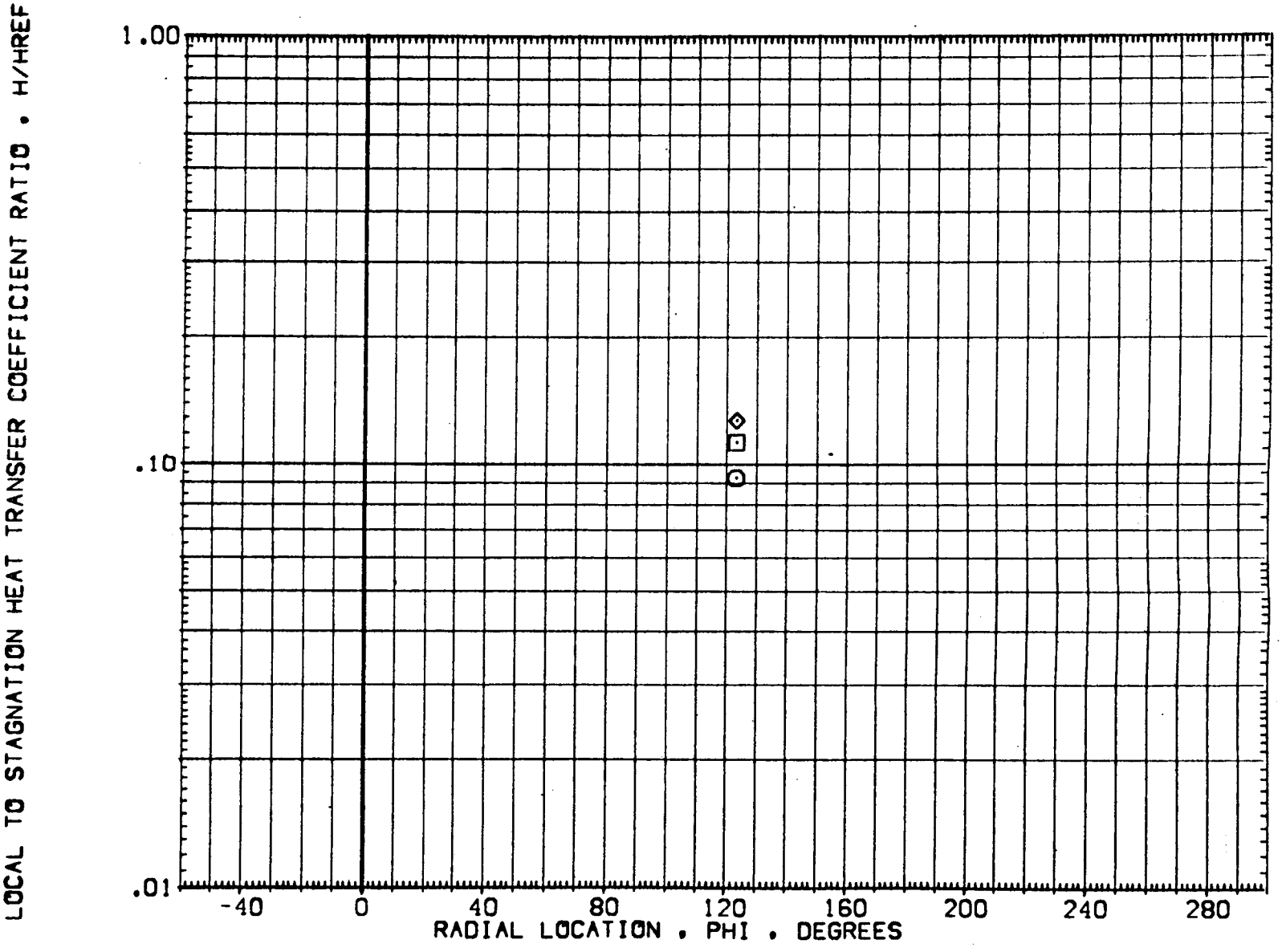


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE)T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	1.000
(AE)T03)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.900
(BE)T03)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	1.500	.850

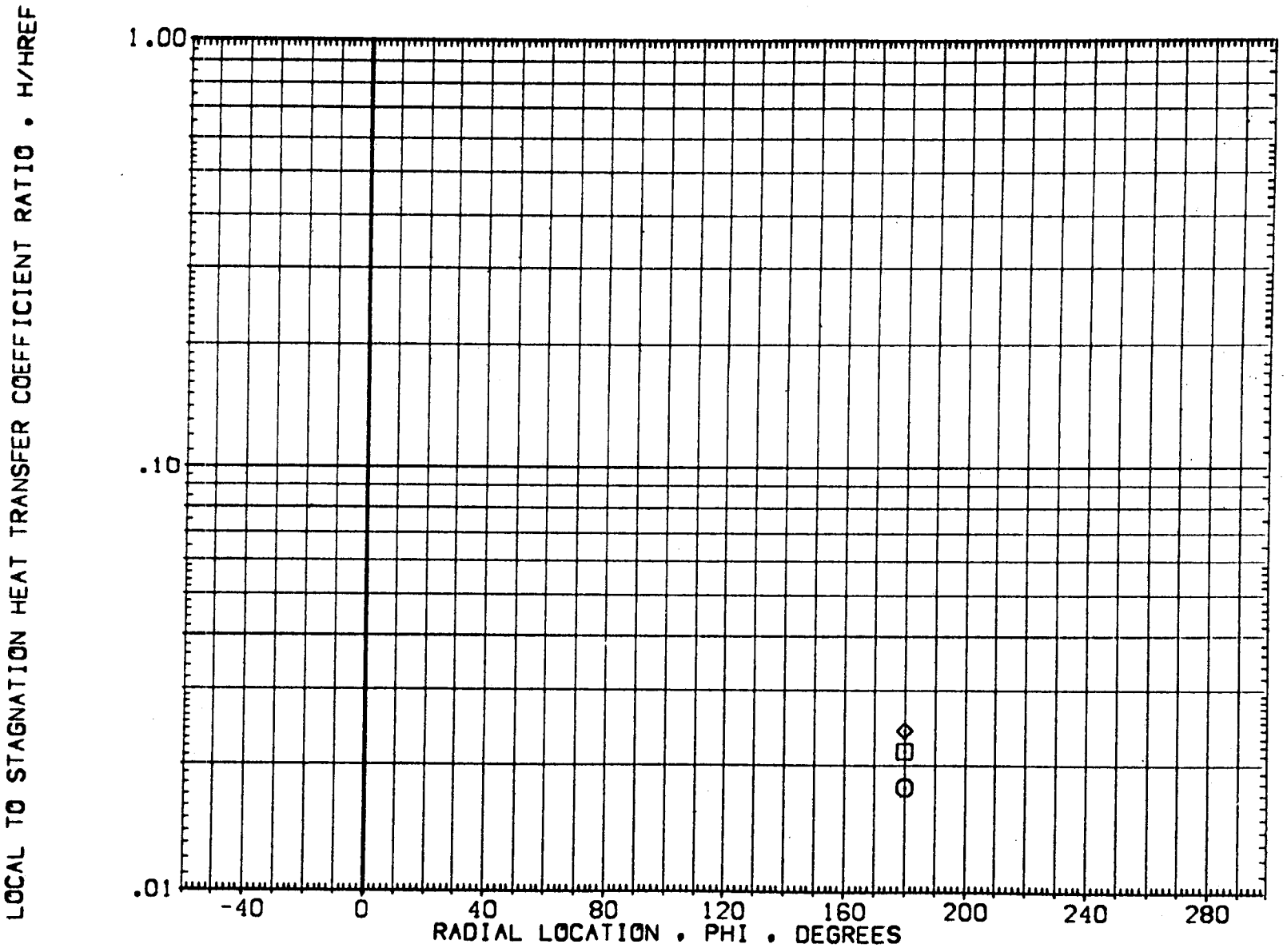


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
[RE1T04]	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
[AE1T04]	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
[BE1T04]	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

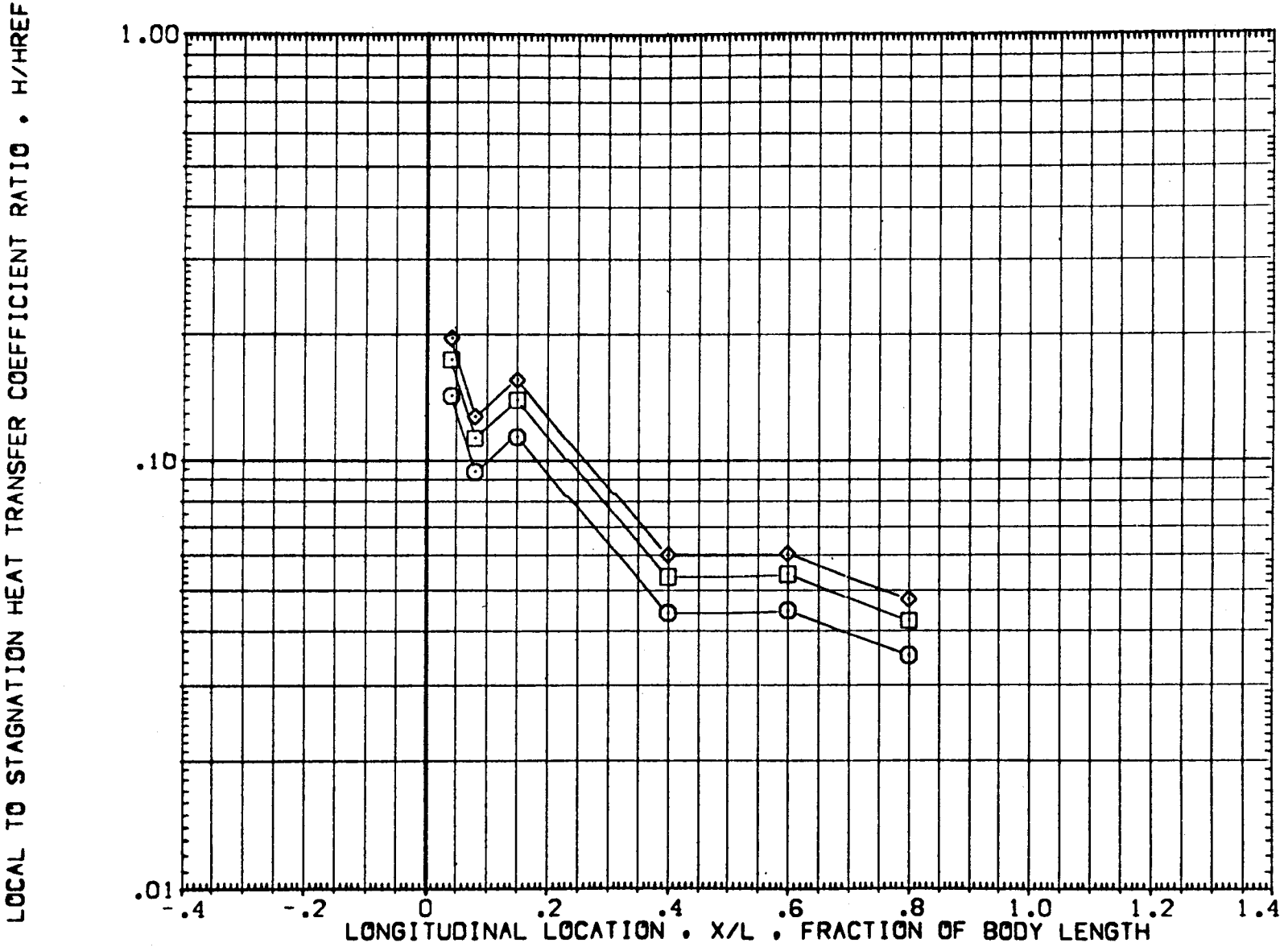


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

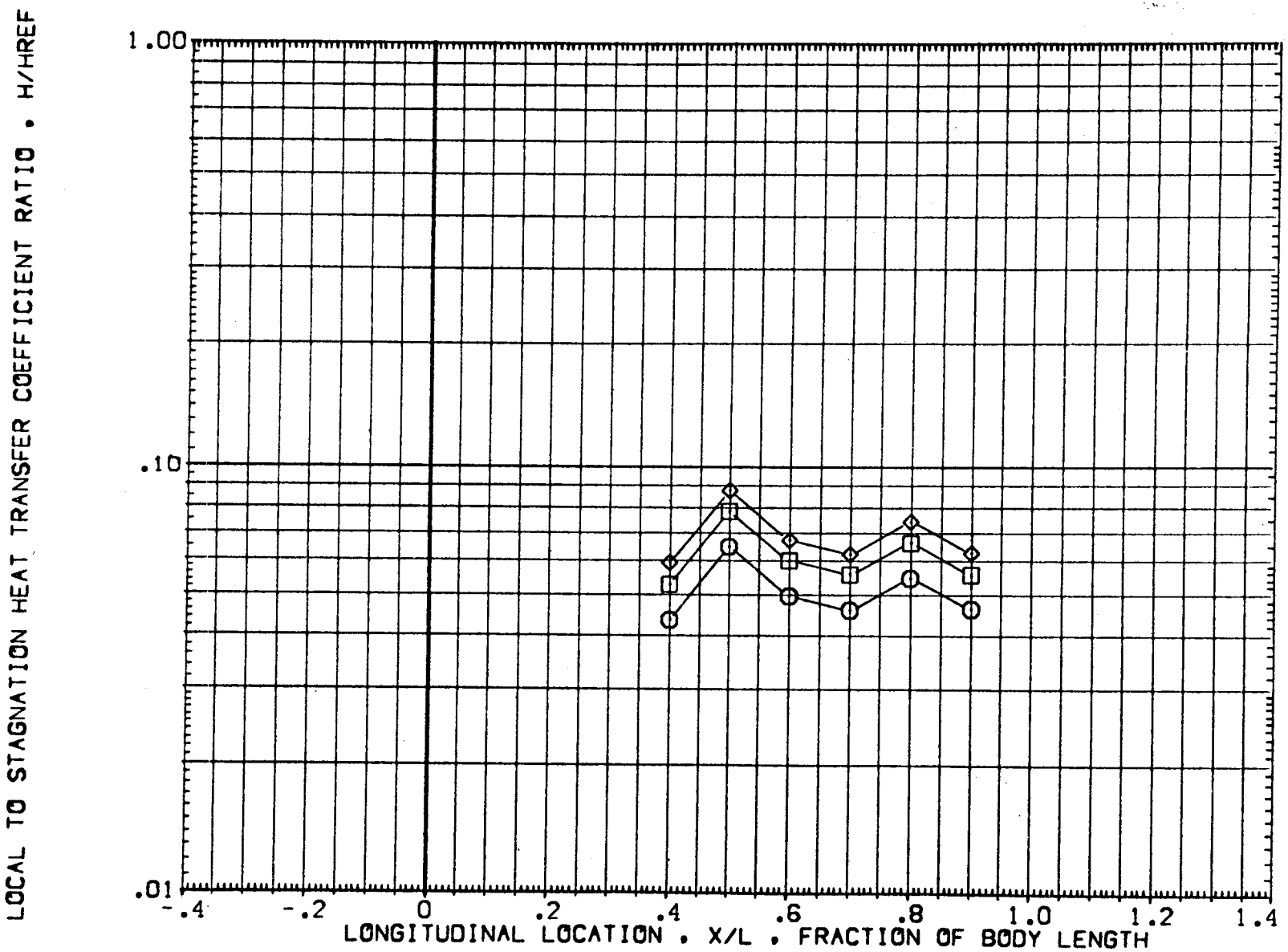


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

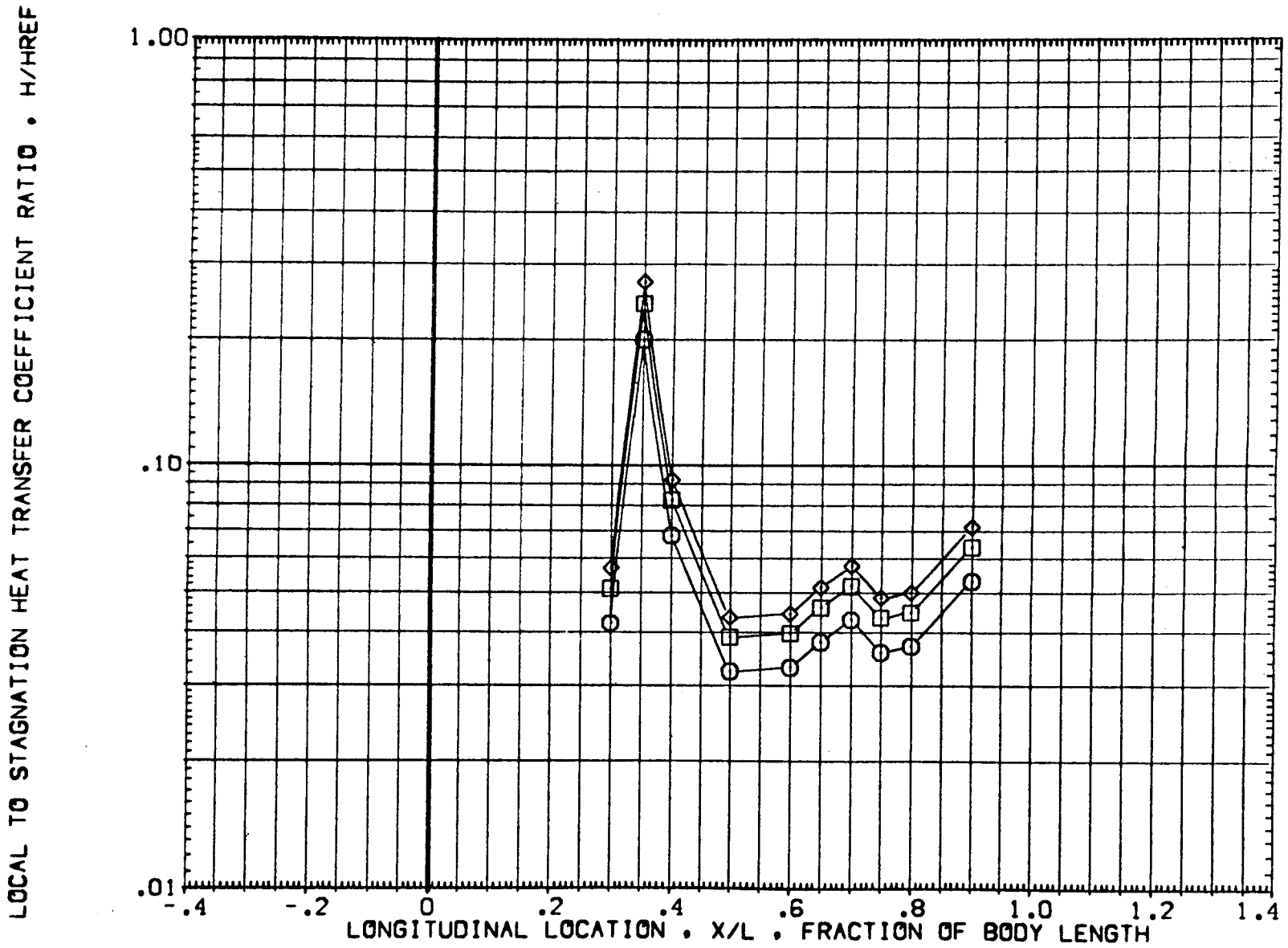


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REI104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEI104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEI104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

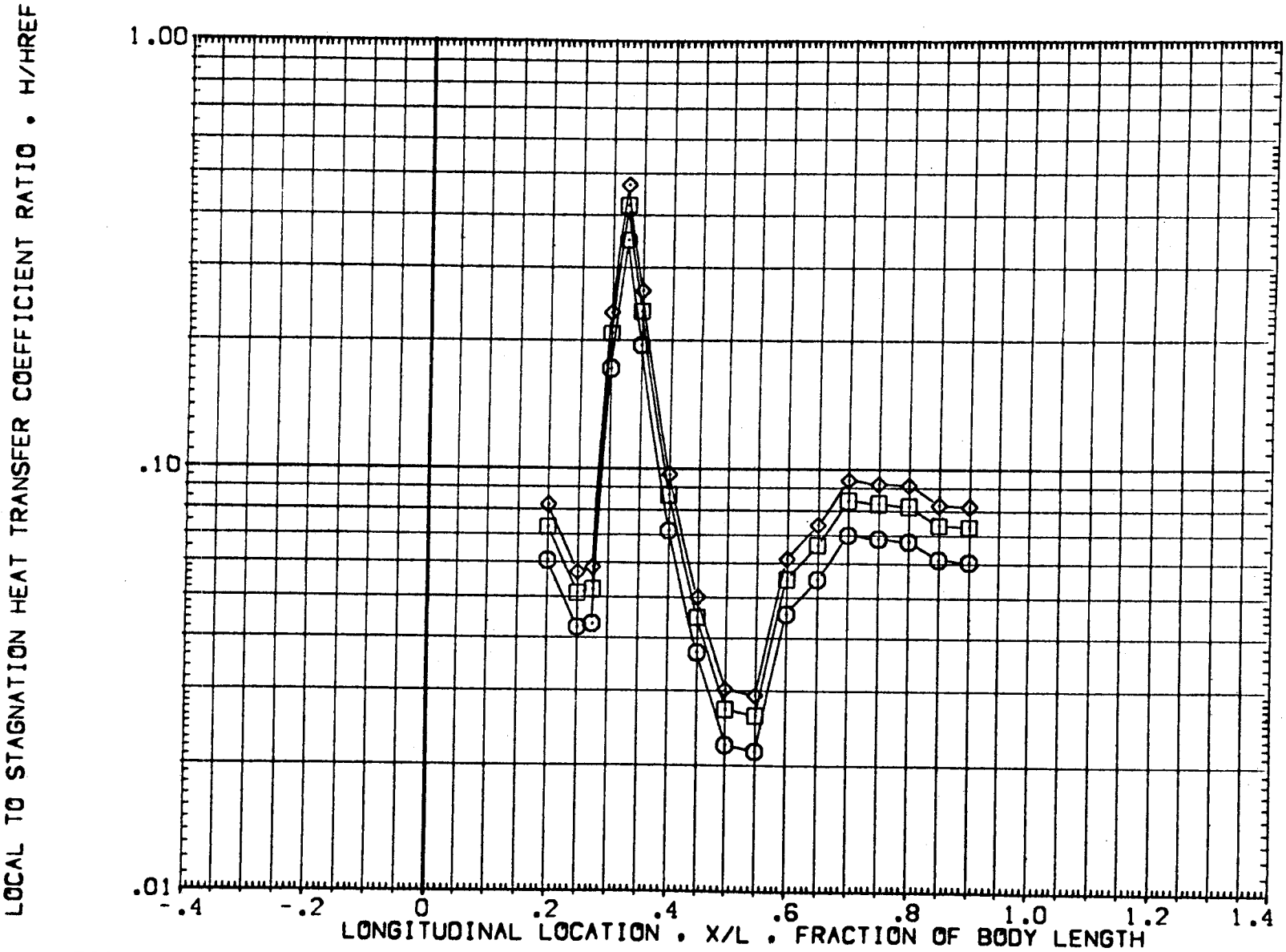


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

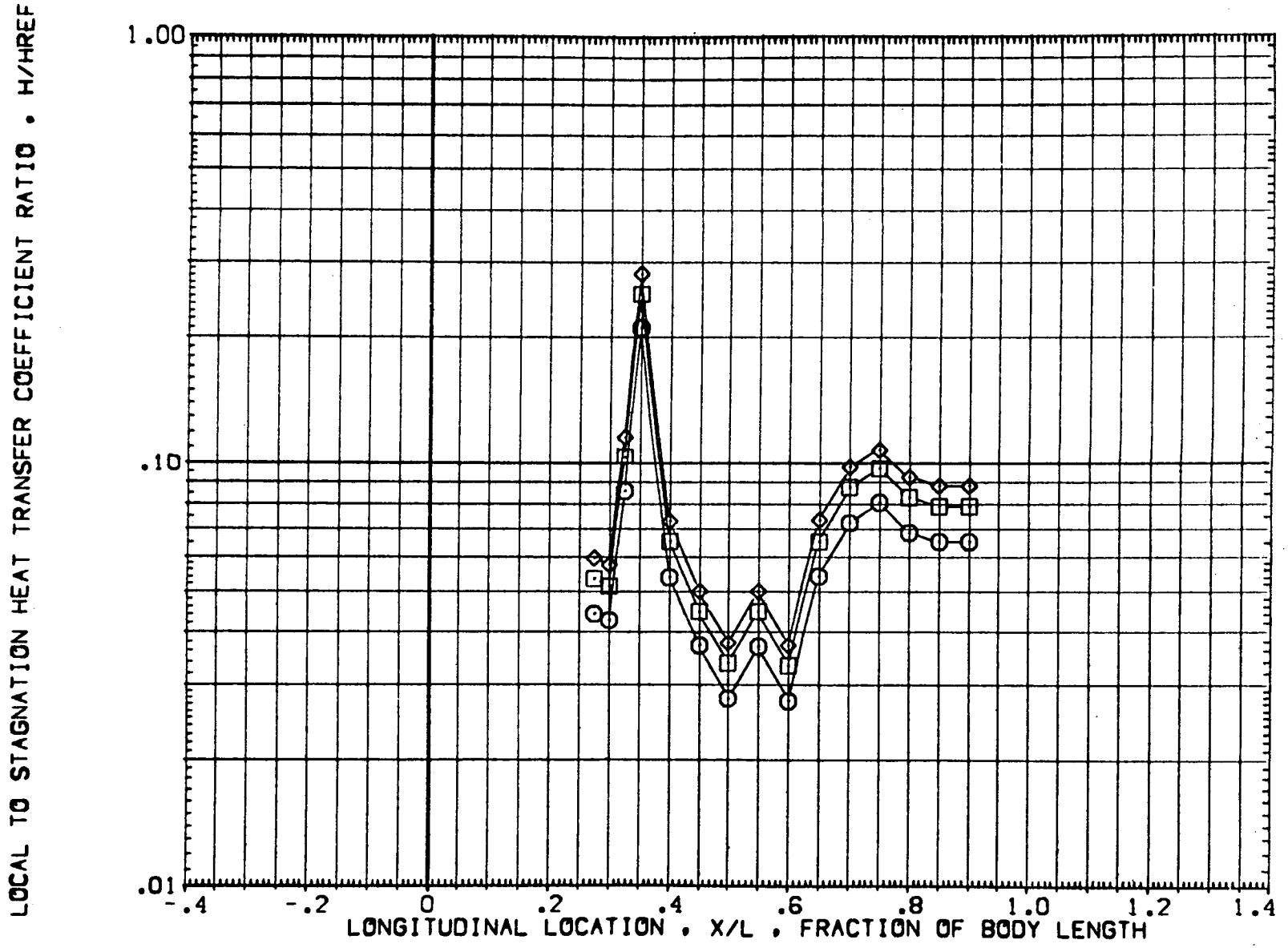


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

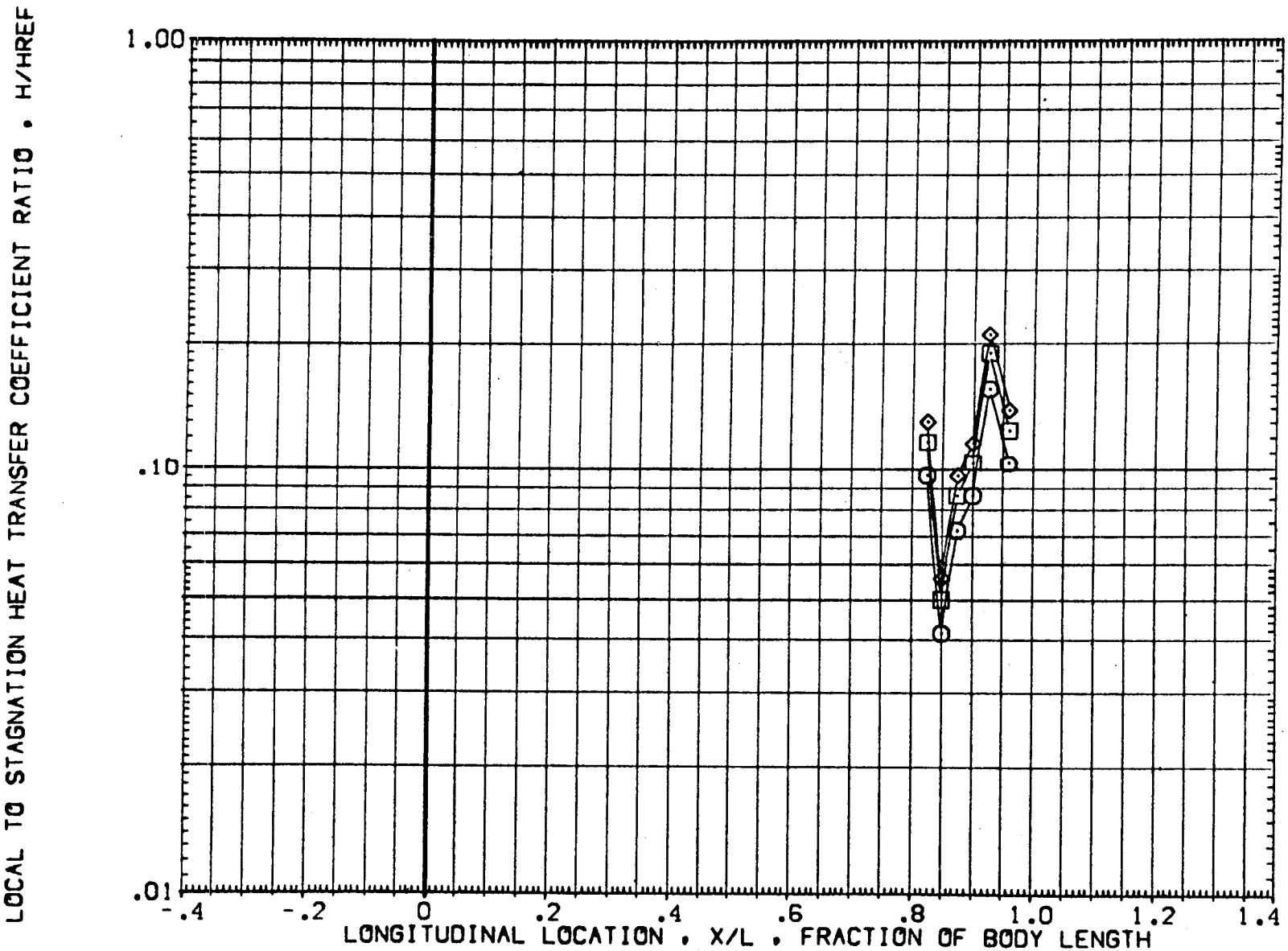


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

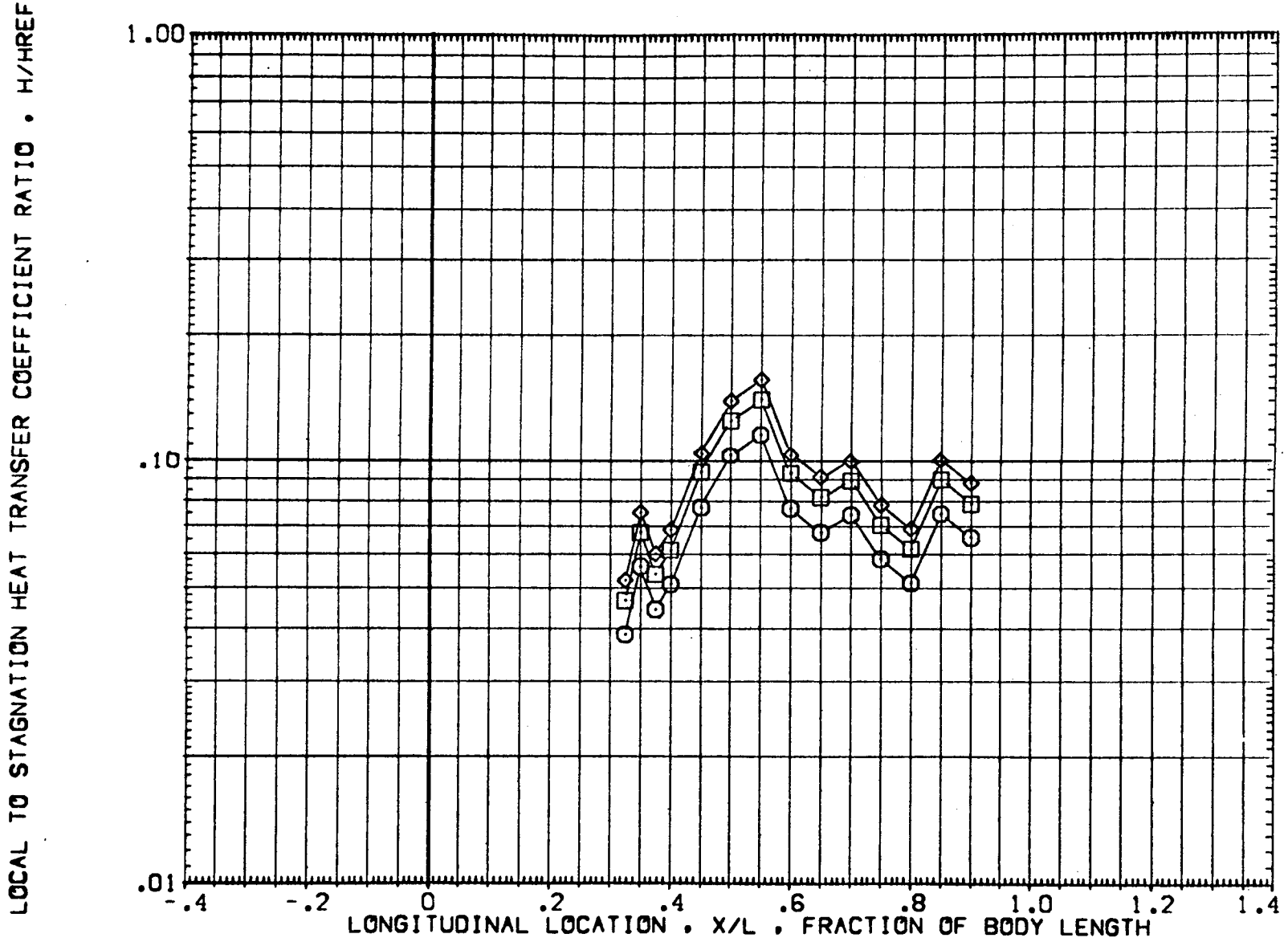


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE|T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

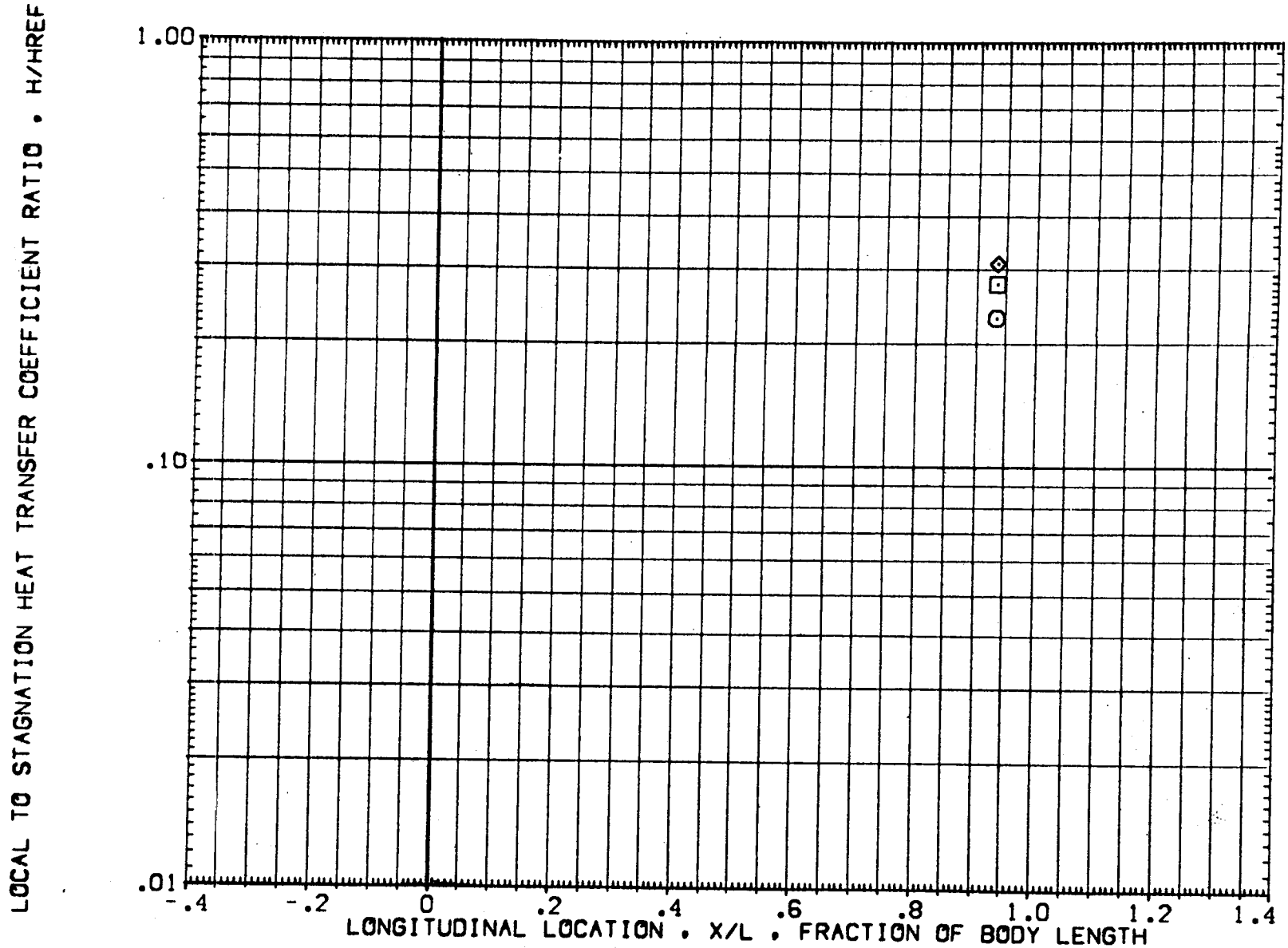


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

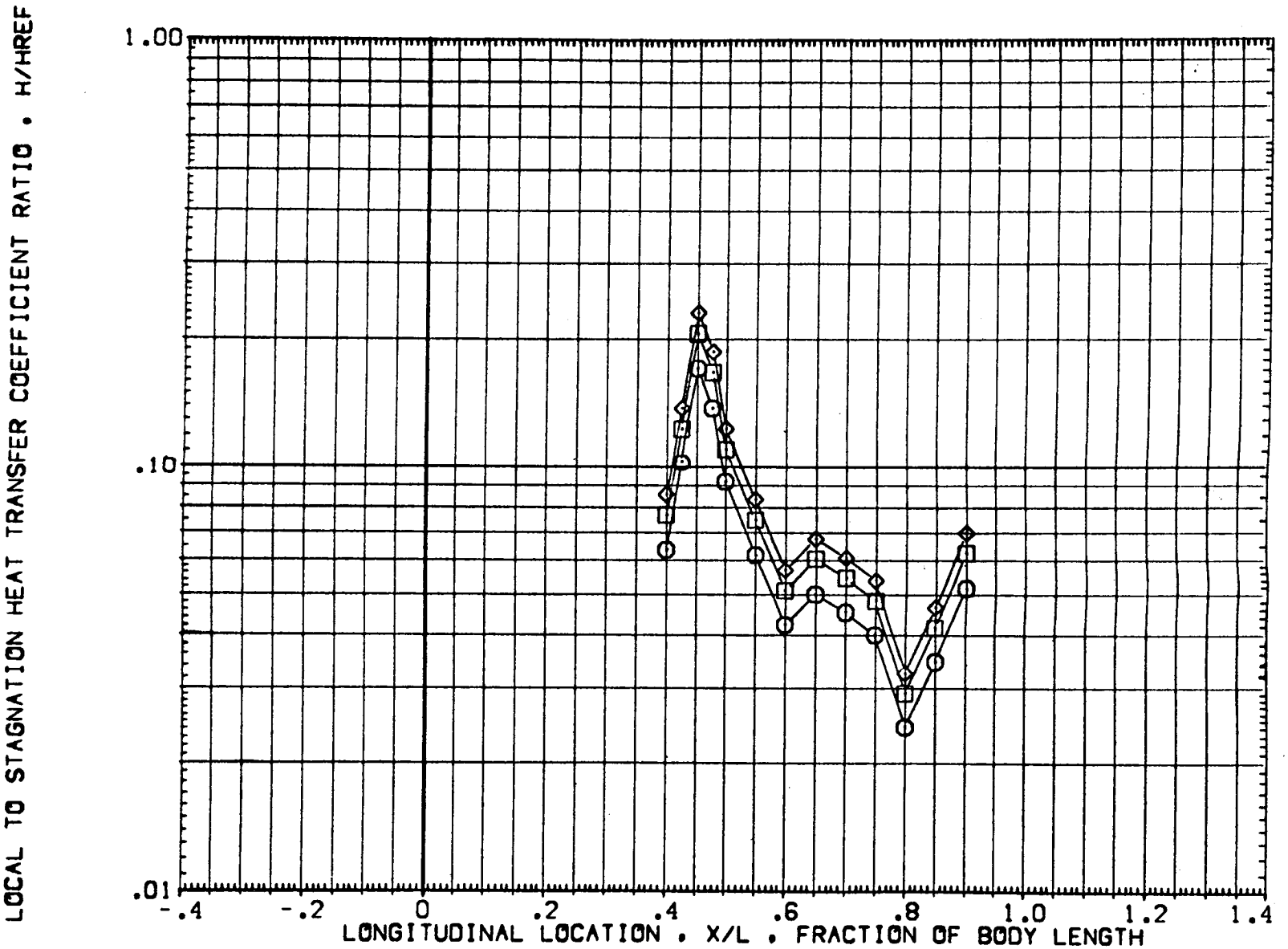


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

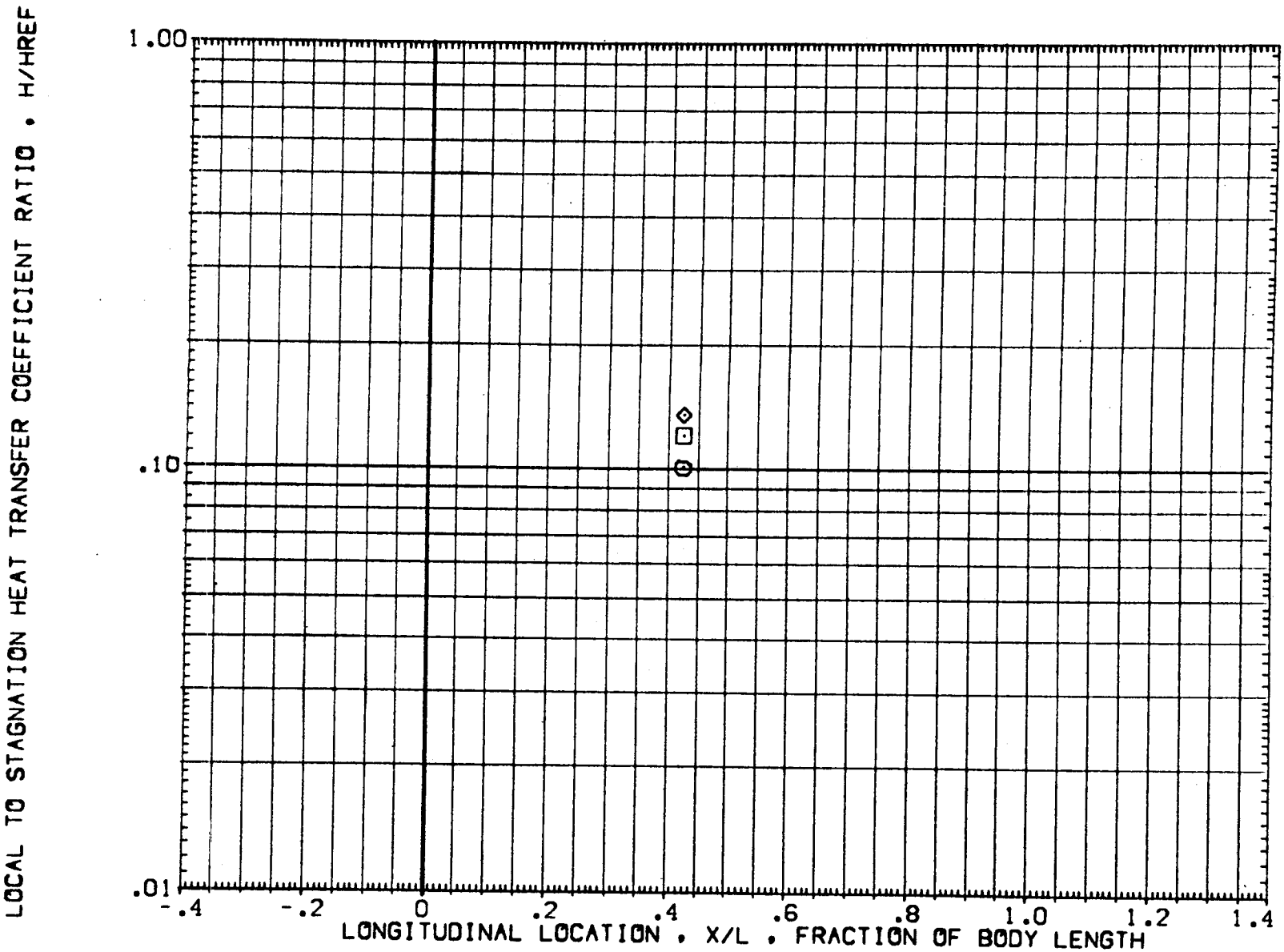


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

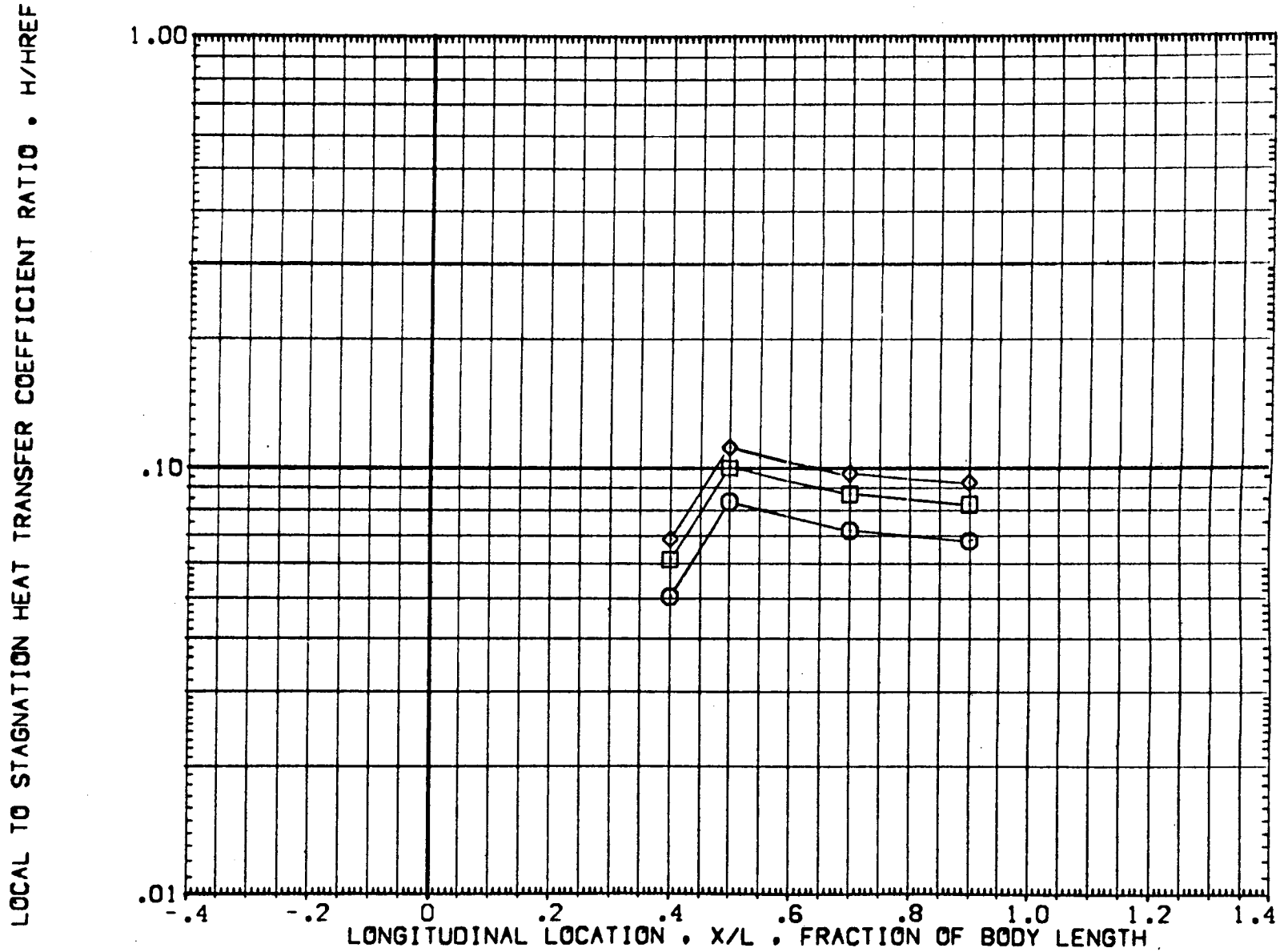


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

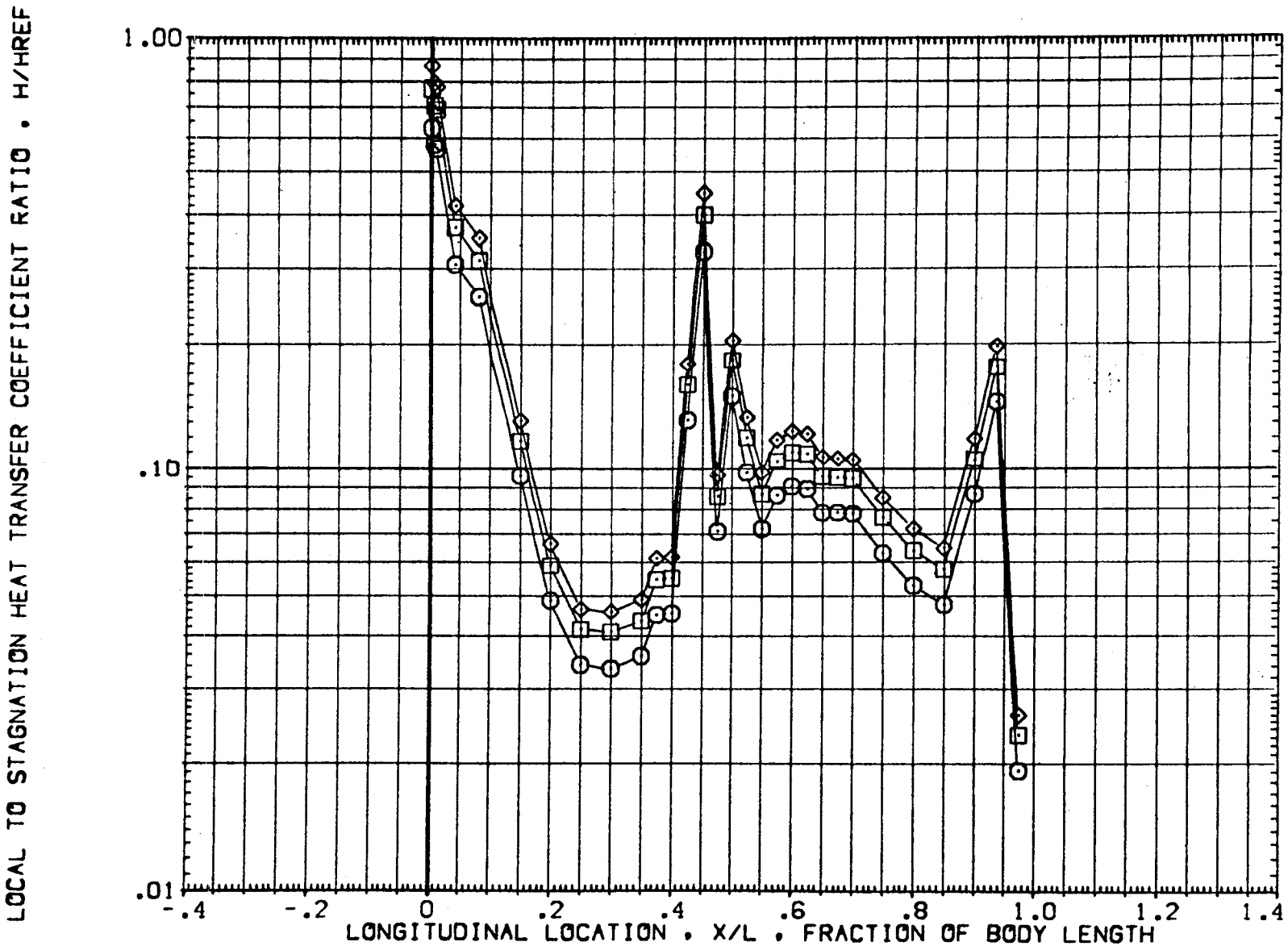


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

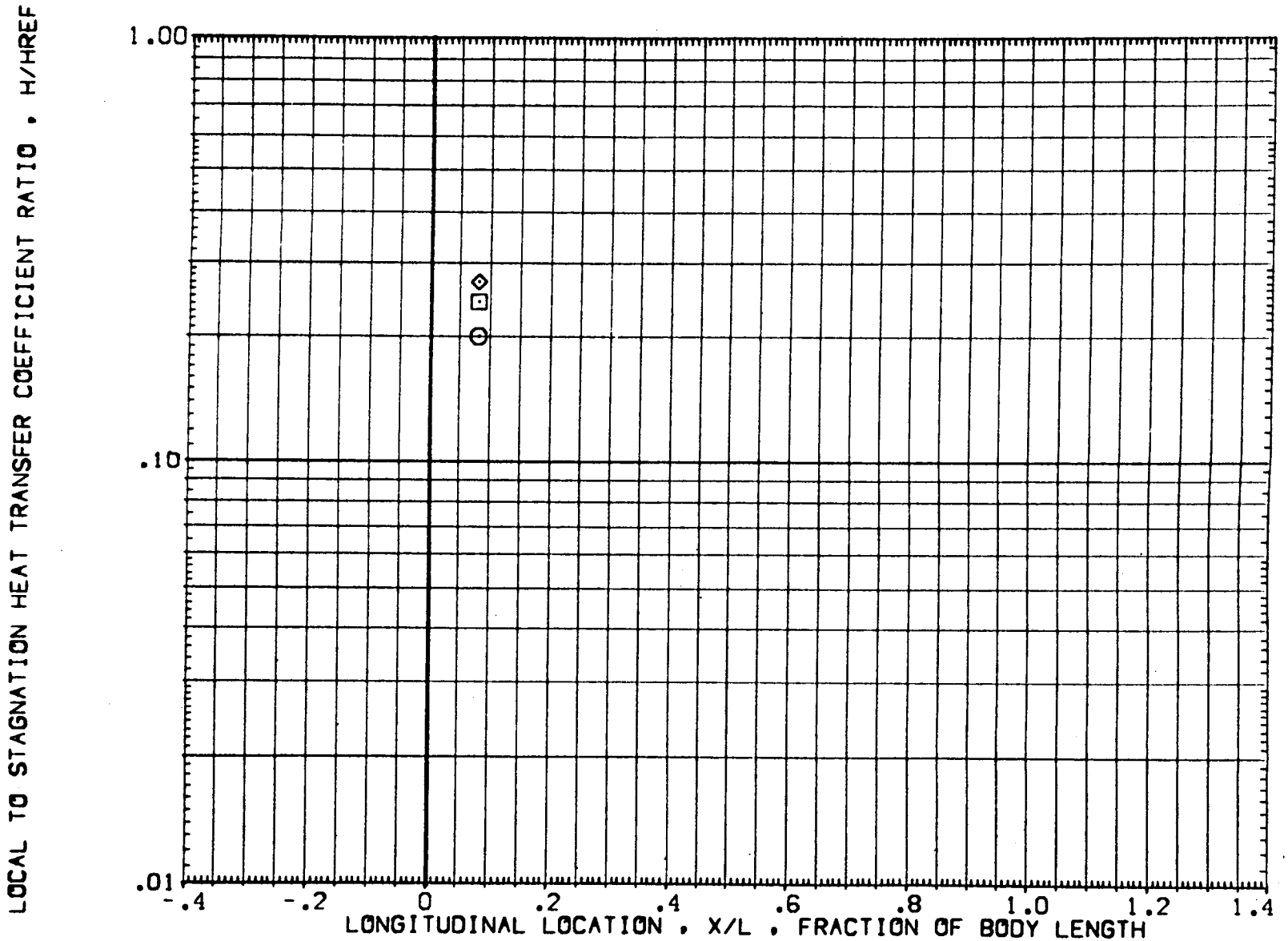


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE,T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE,T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE,T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

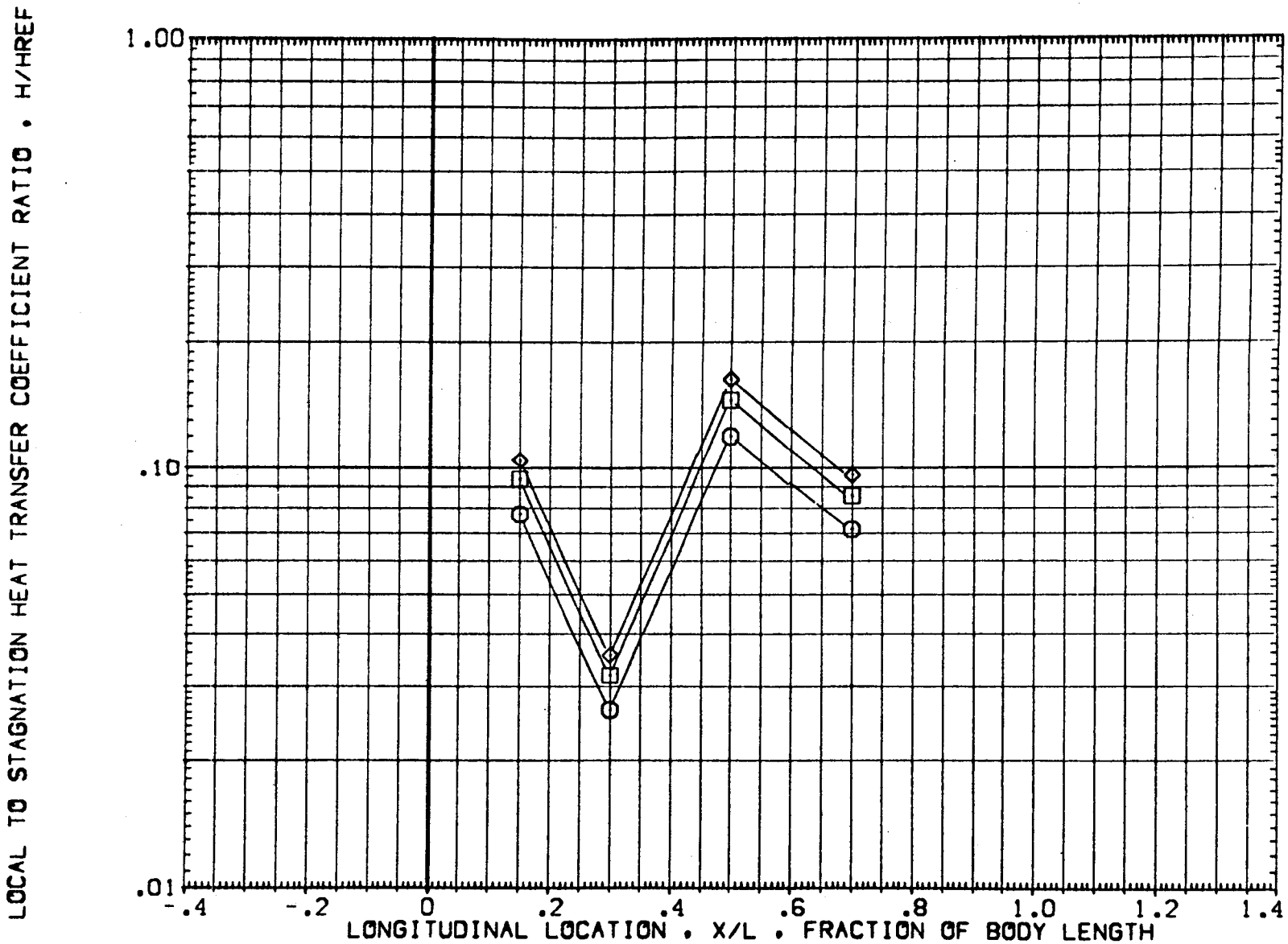


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	DATA NOT AVAILABLE	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

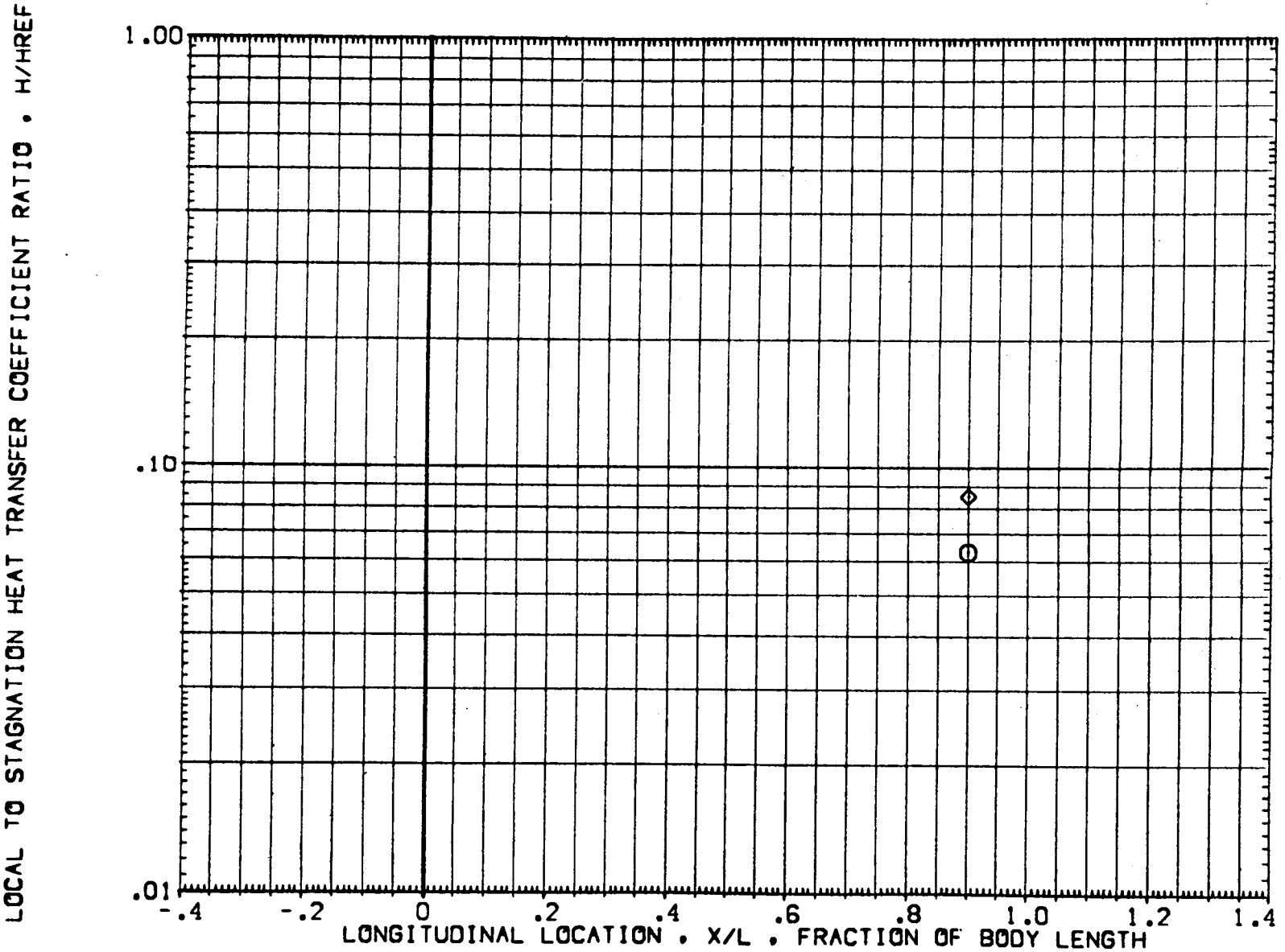


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

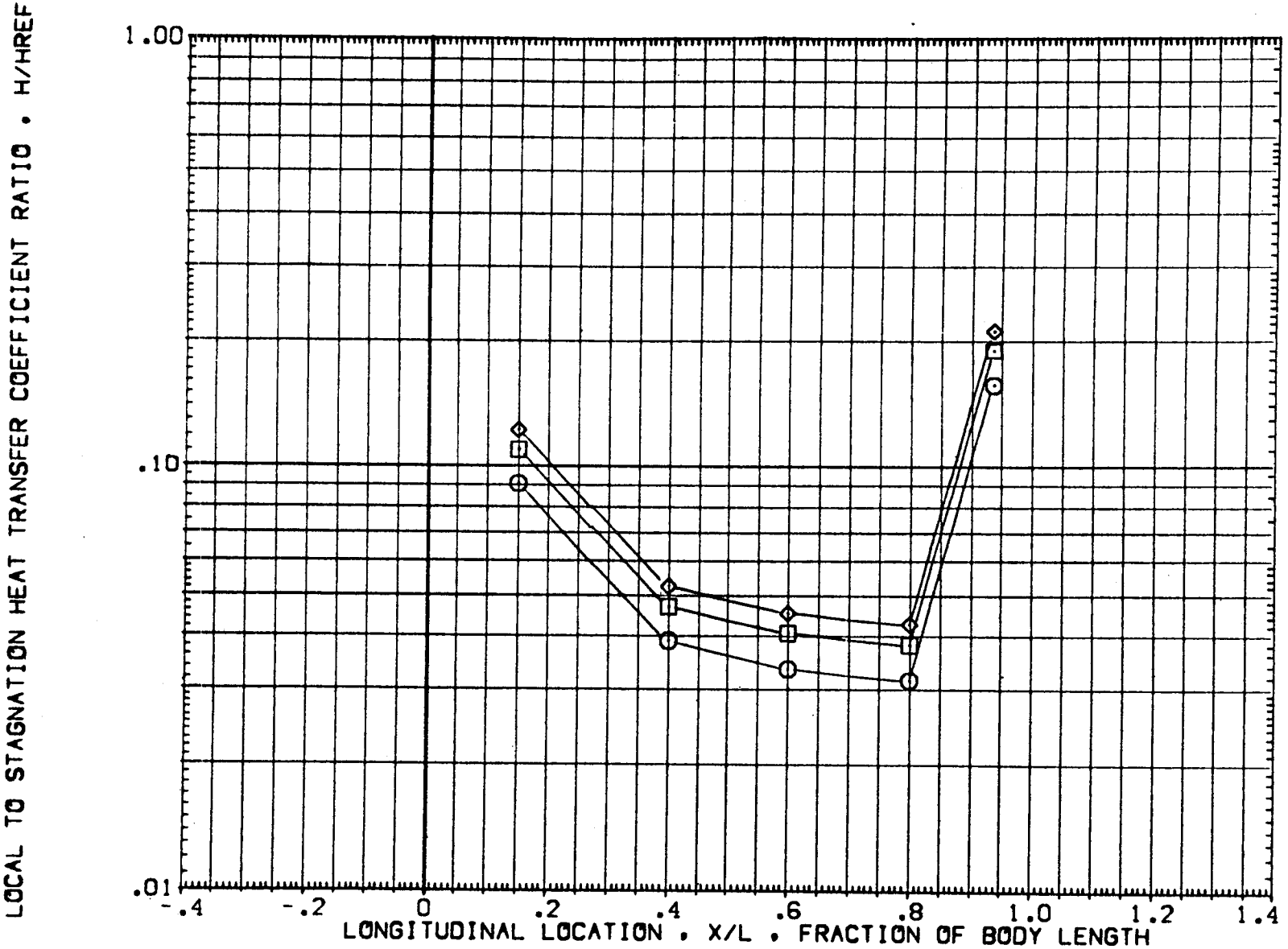


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

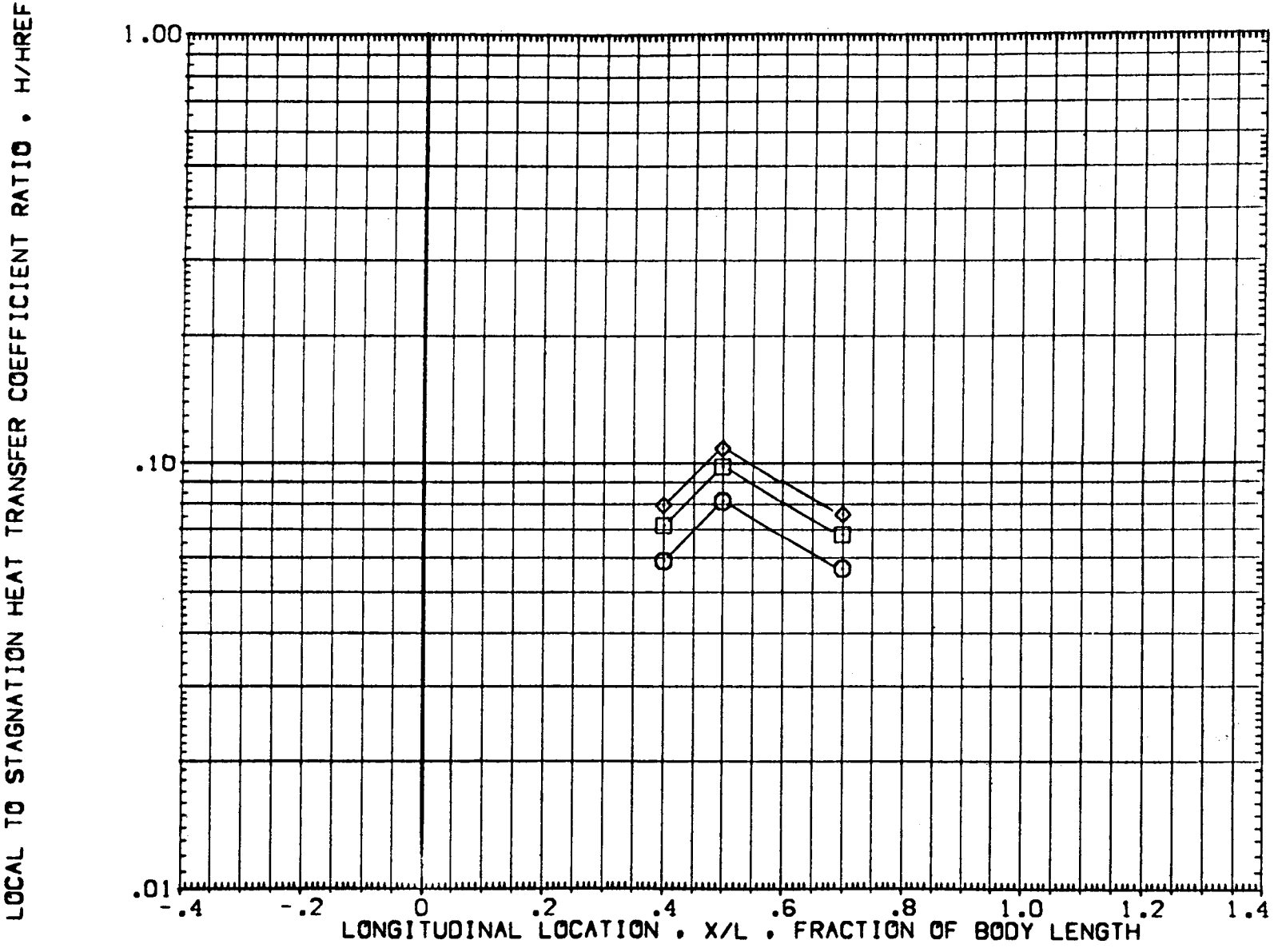


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

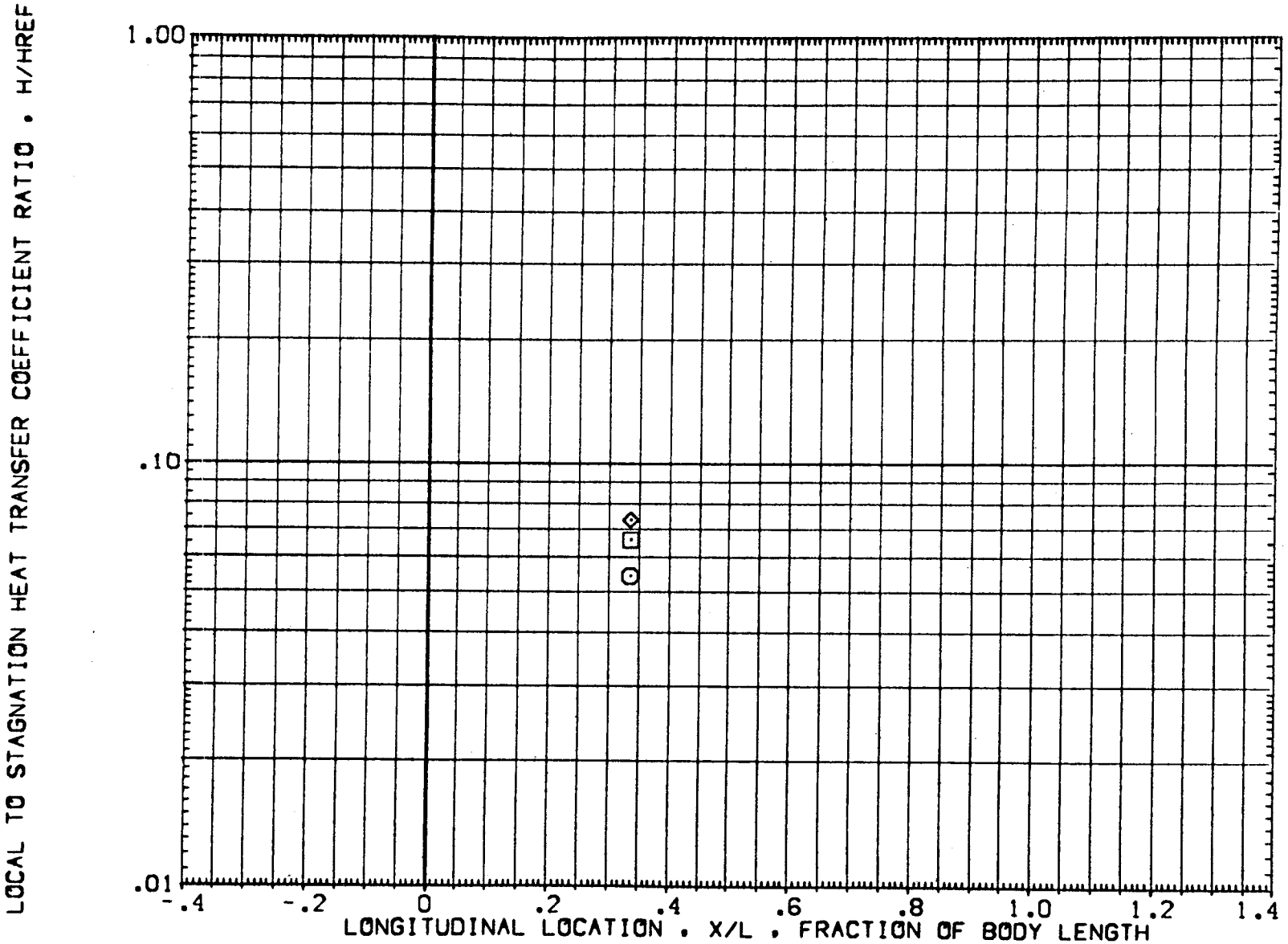


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE!T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

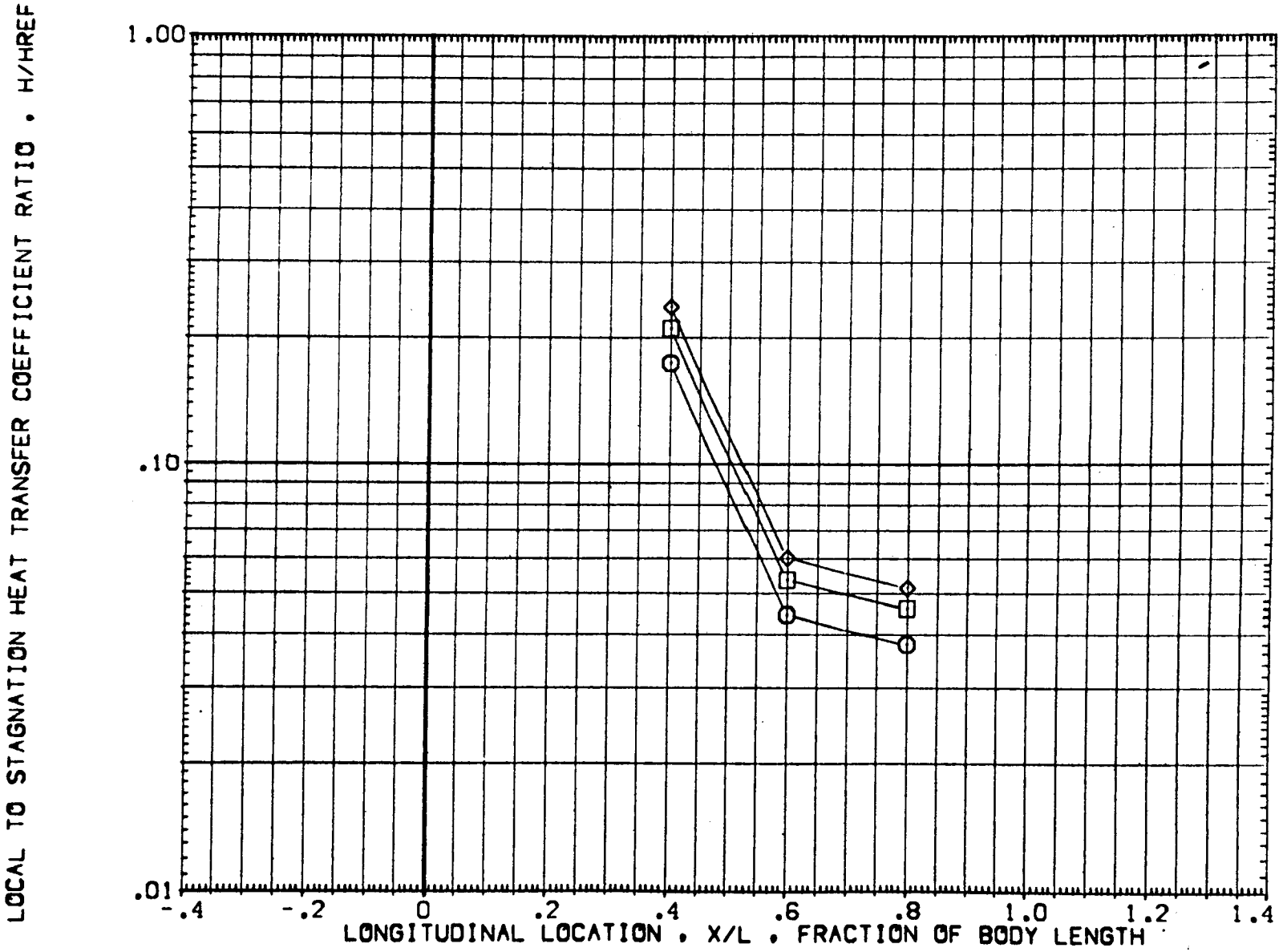


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

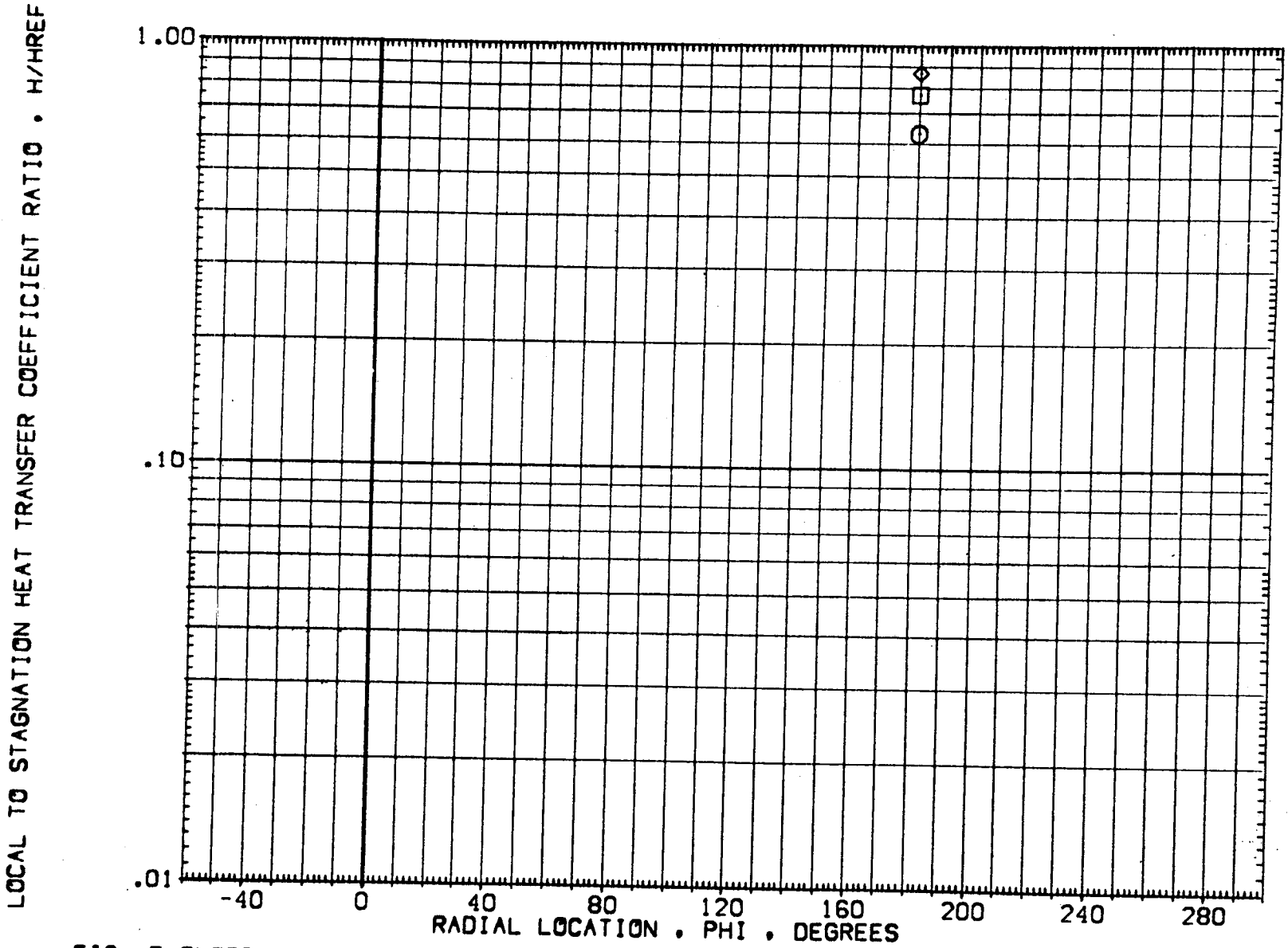


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE!T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE!T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE!T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

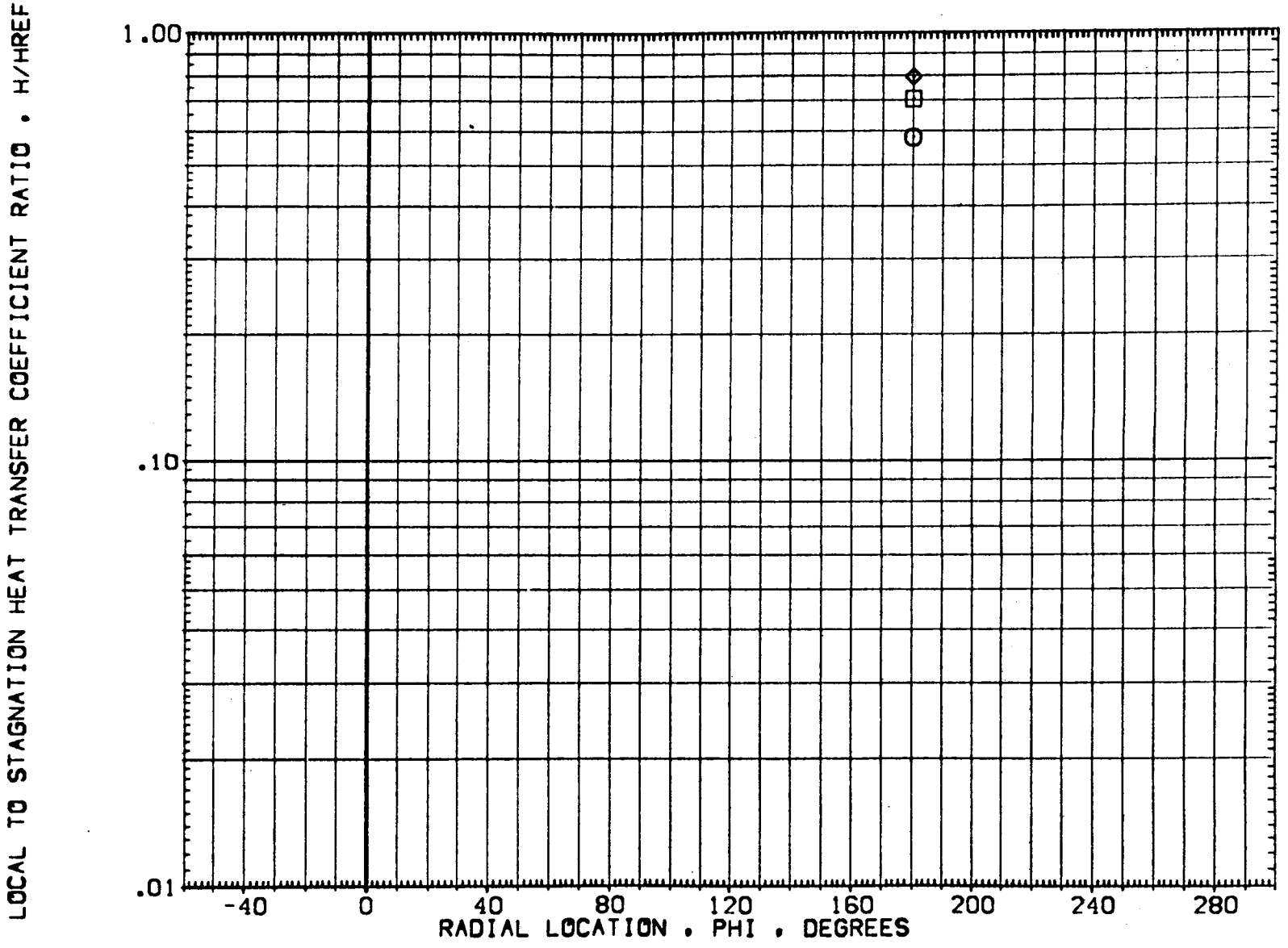


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|104)	○	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE|104)	□	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE|104)	◇	ARC 3.5-178 |H3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

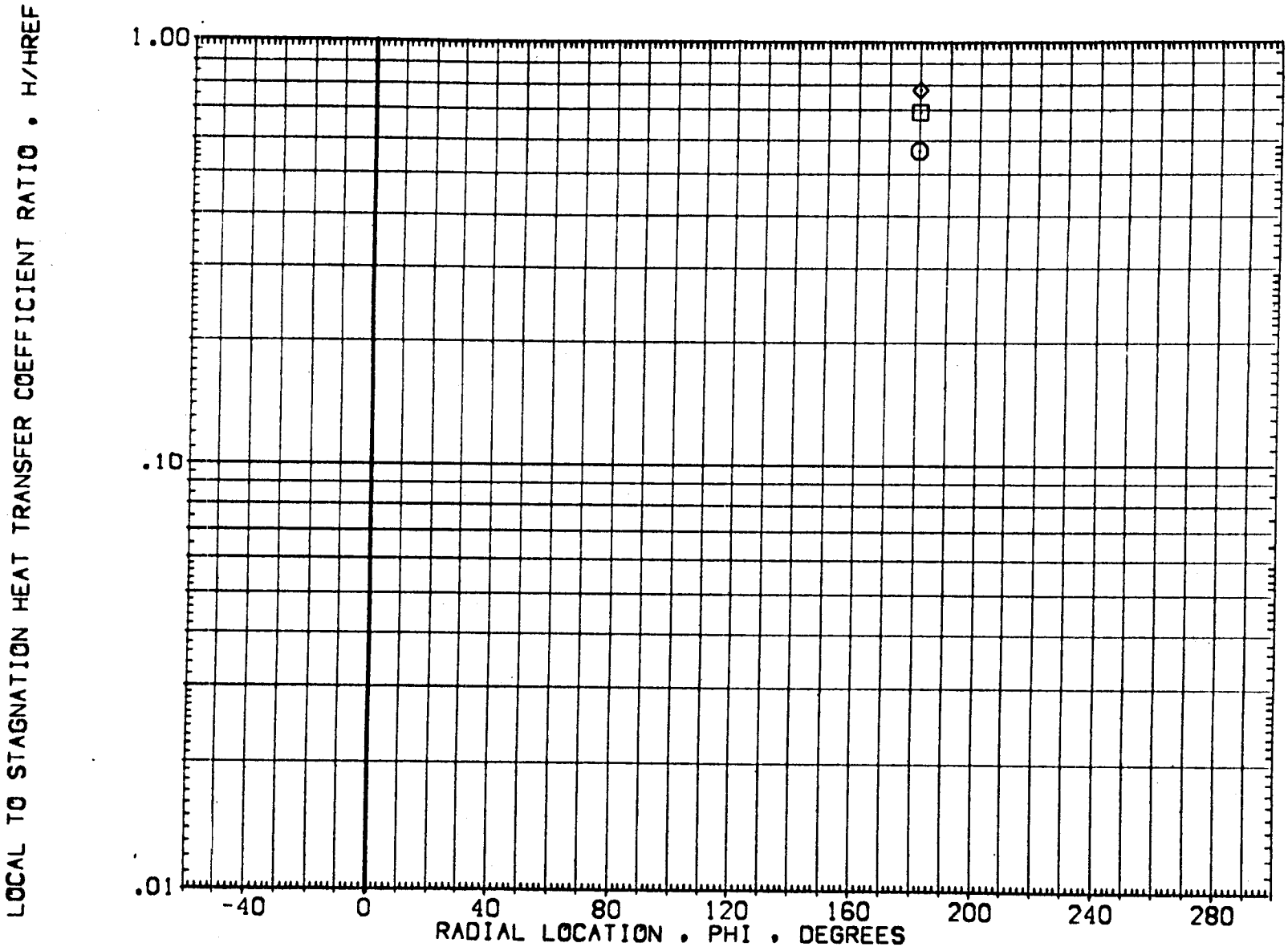


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

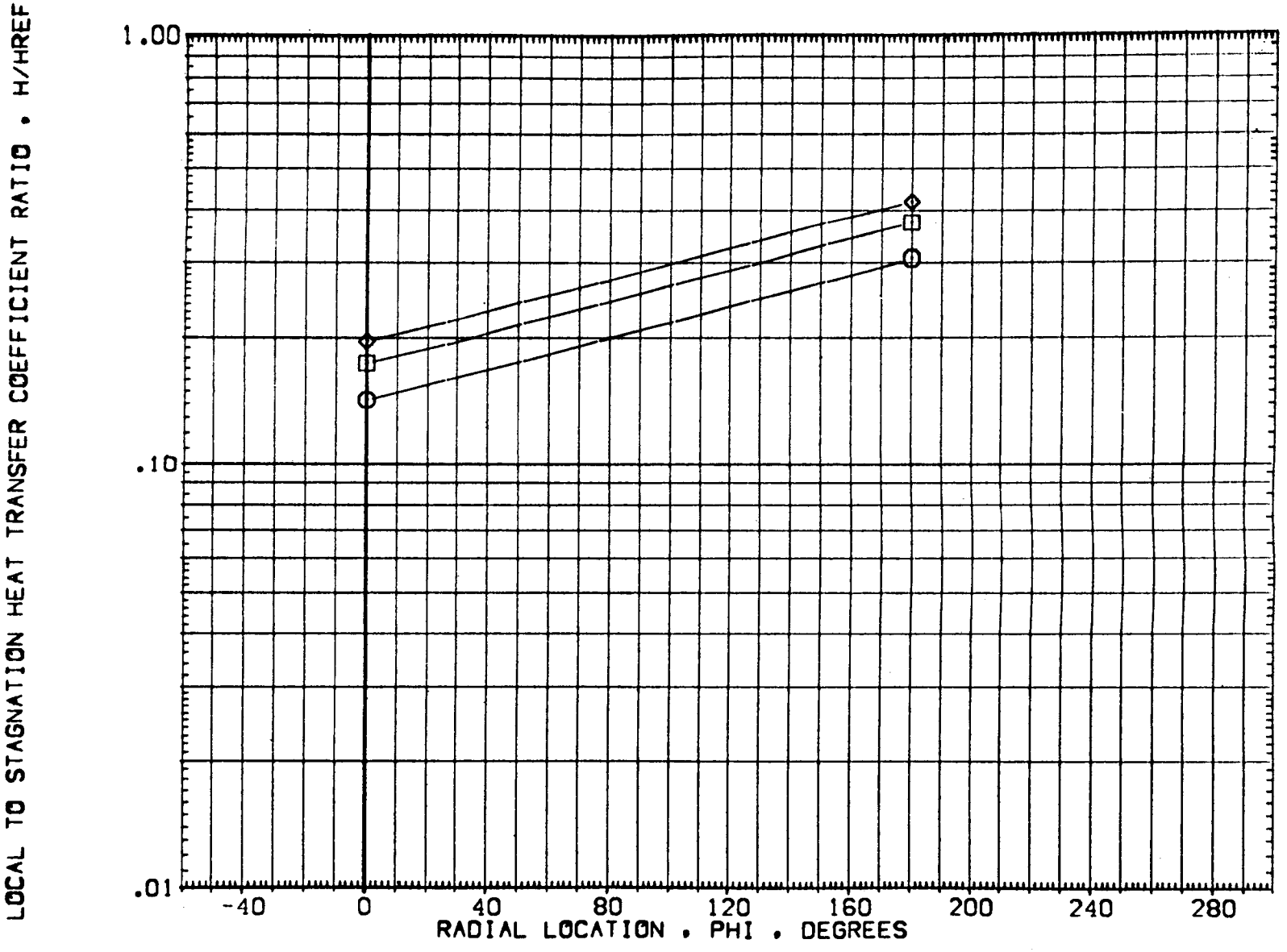


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEIT04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

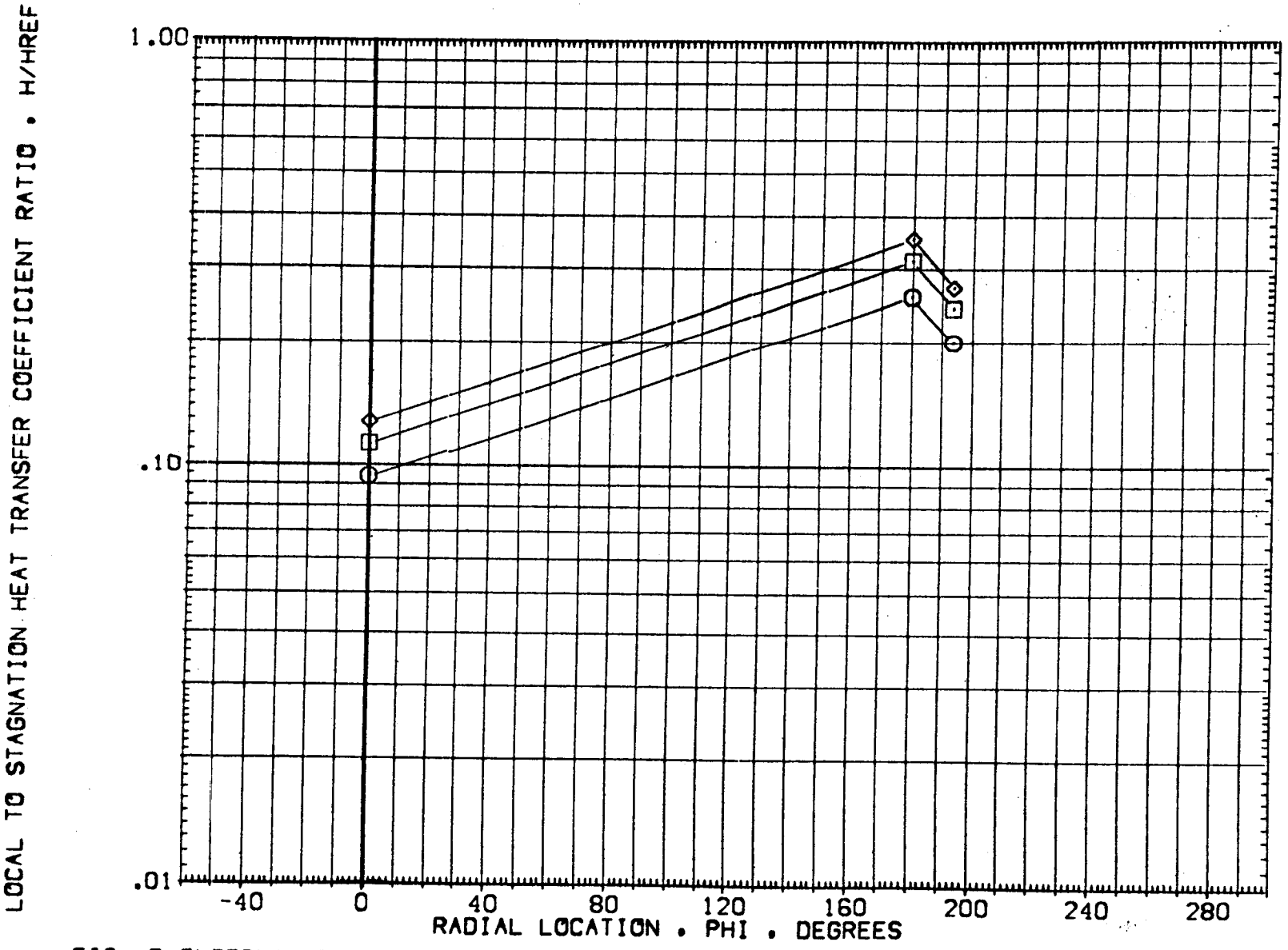


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

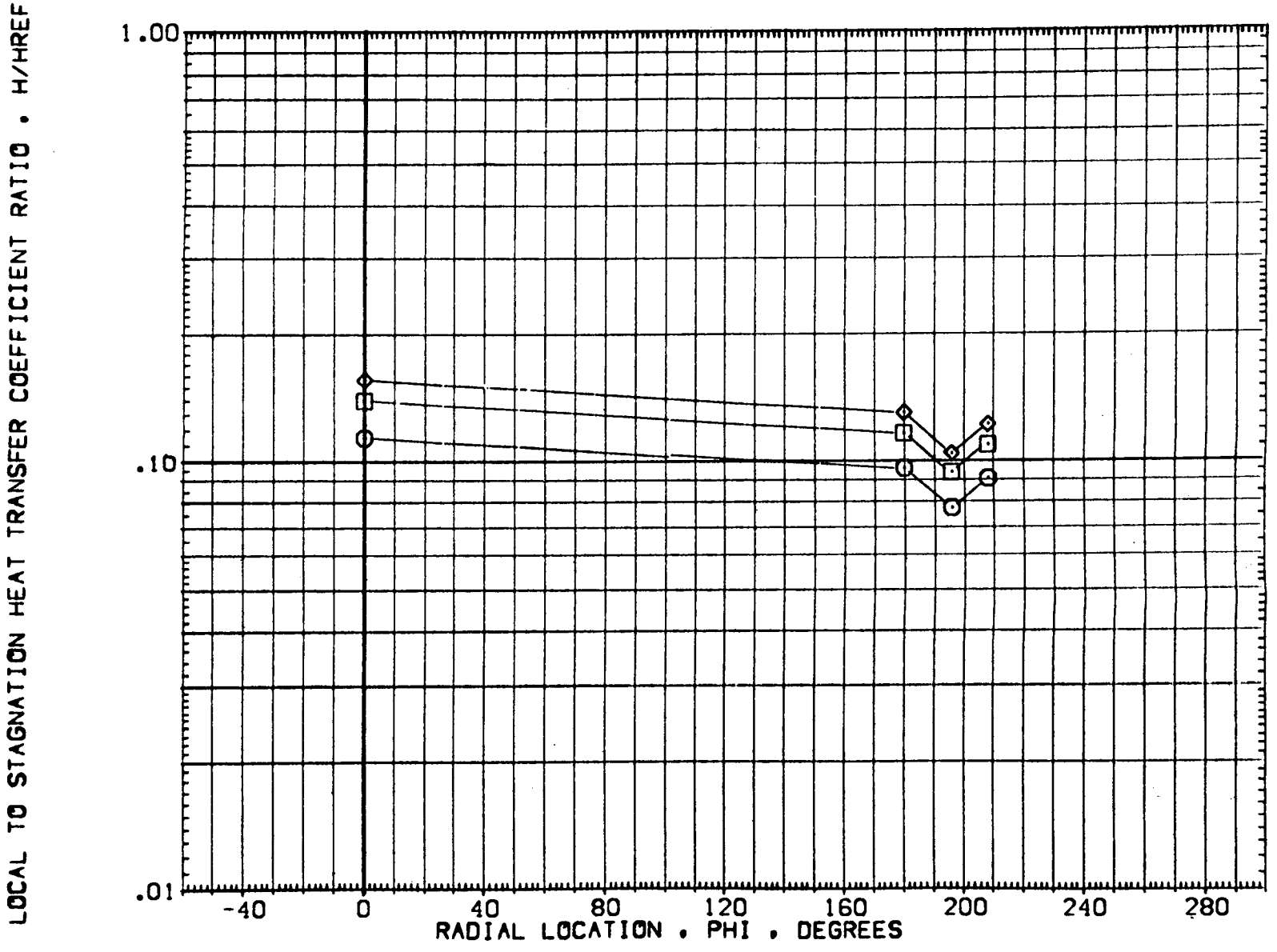


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE|T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

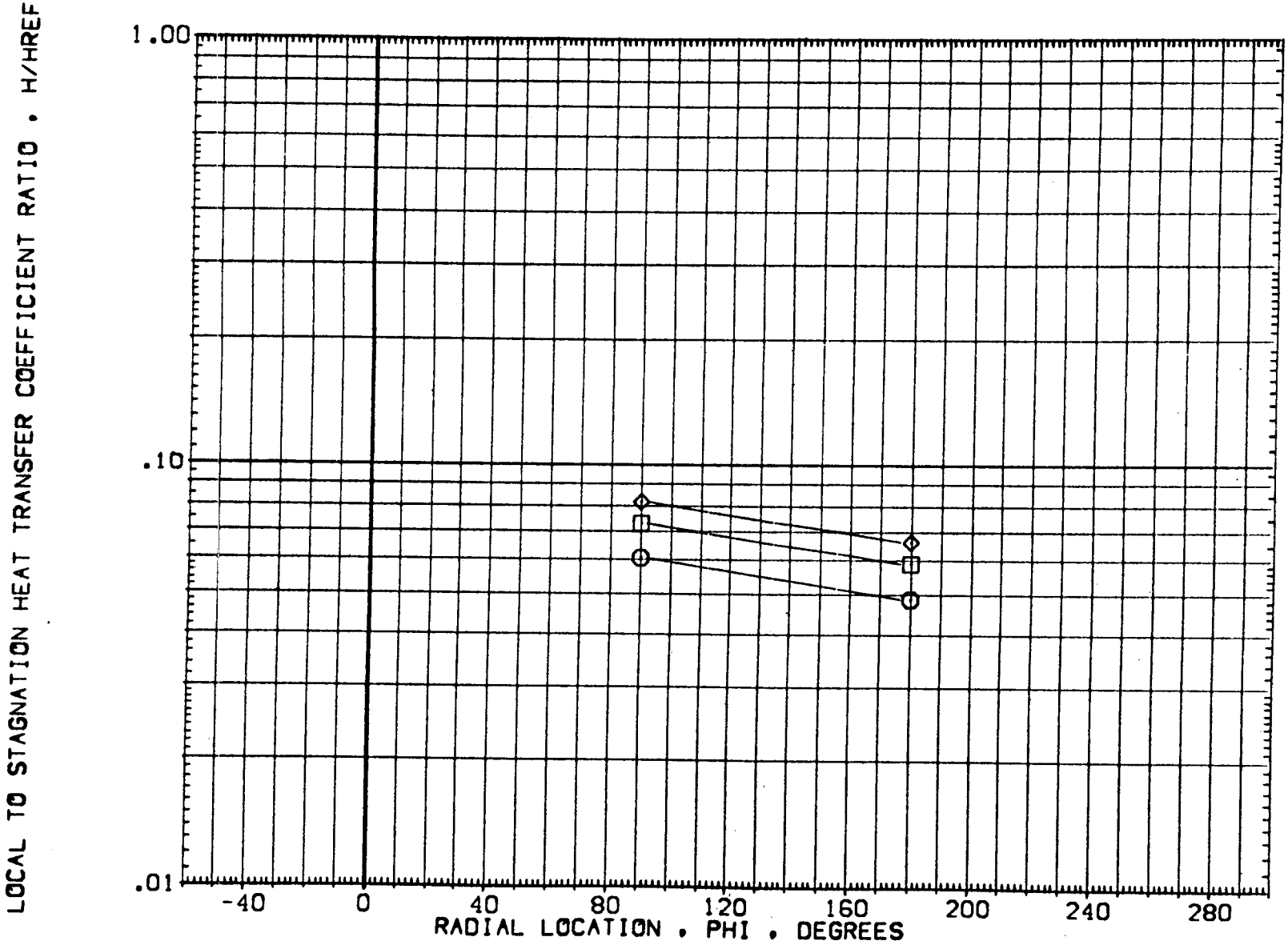


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE)T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE)T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE)T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

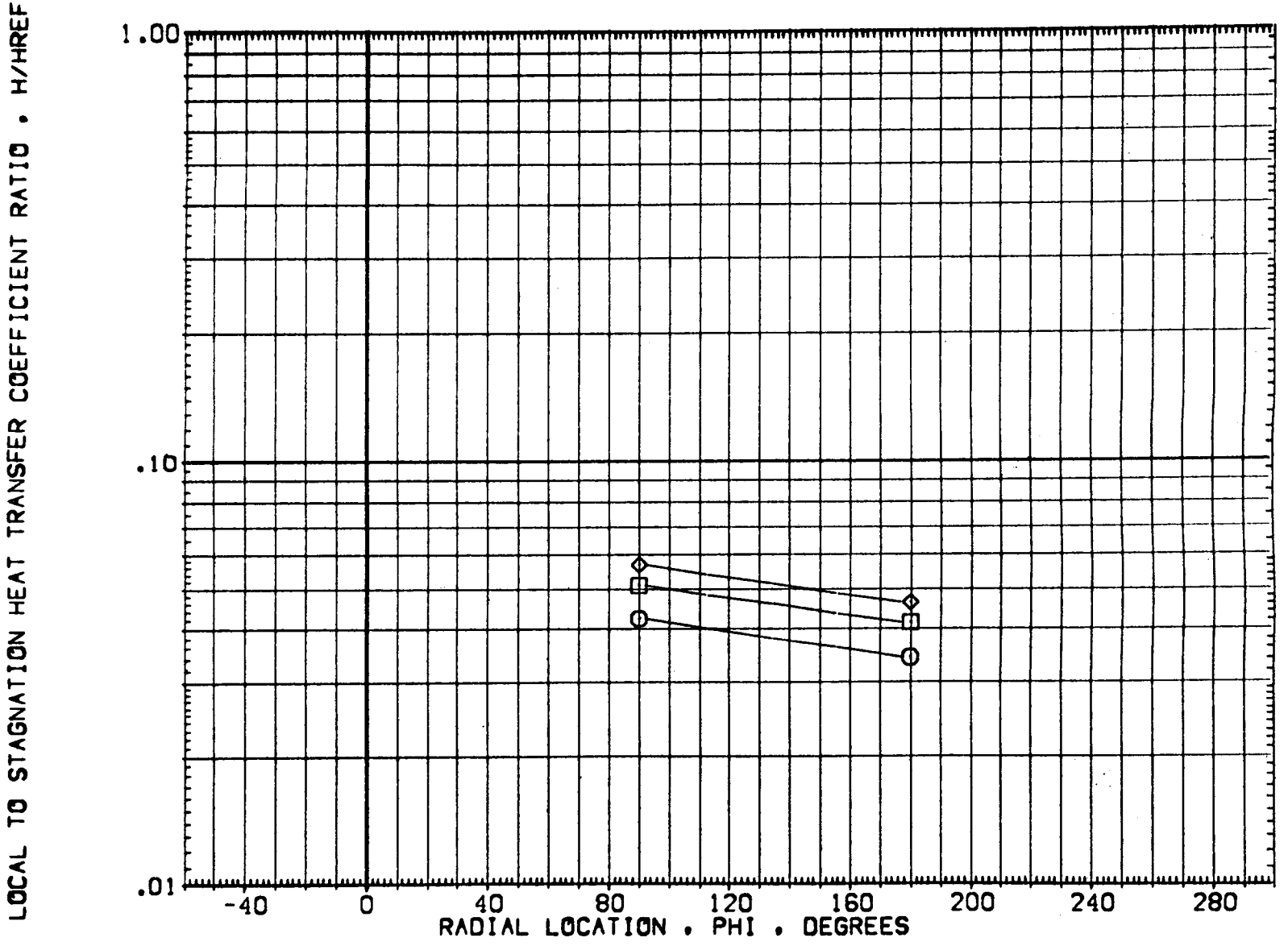


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

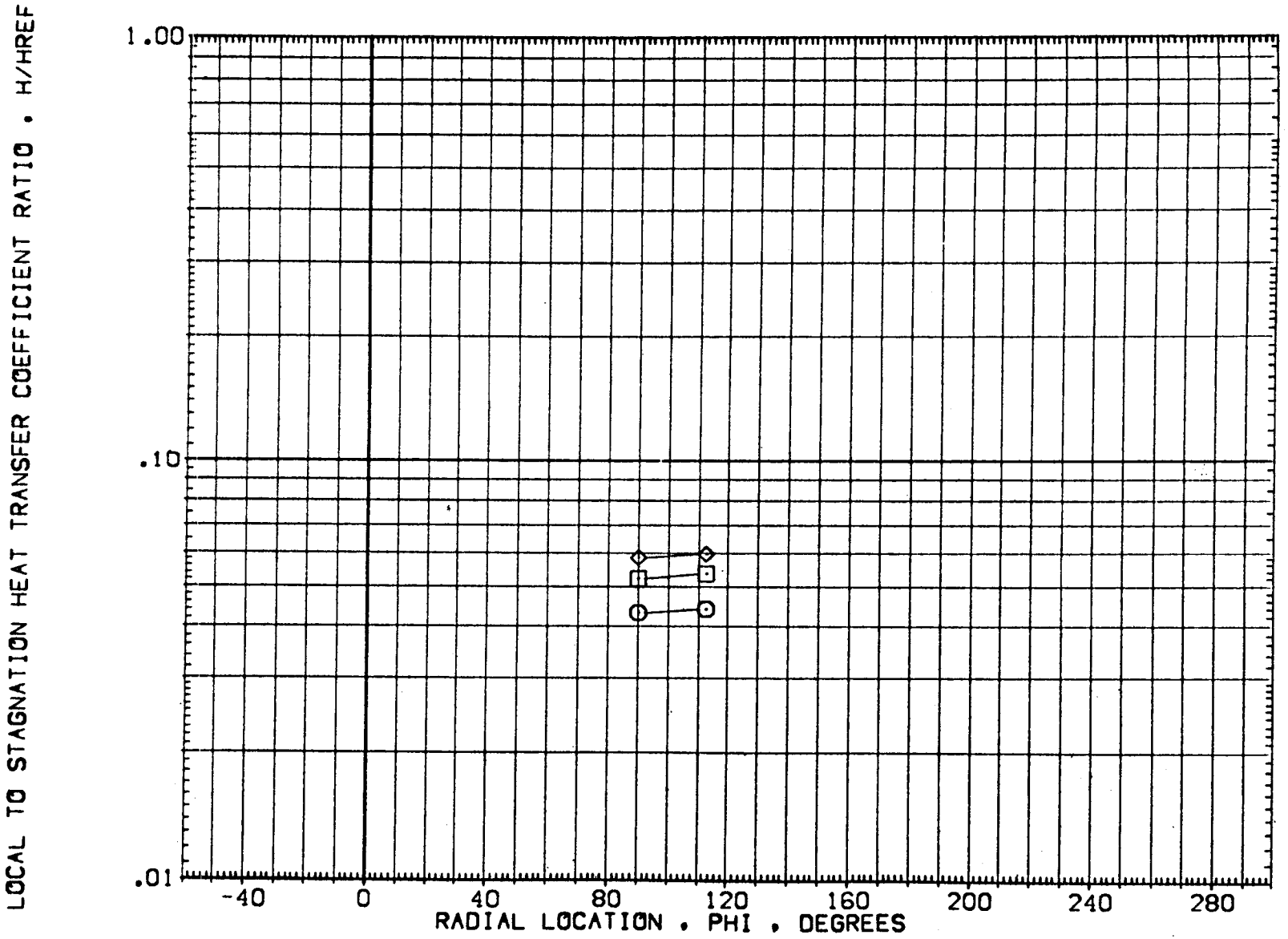


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

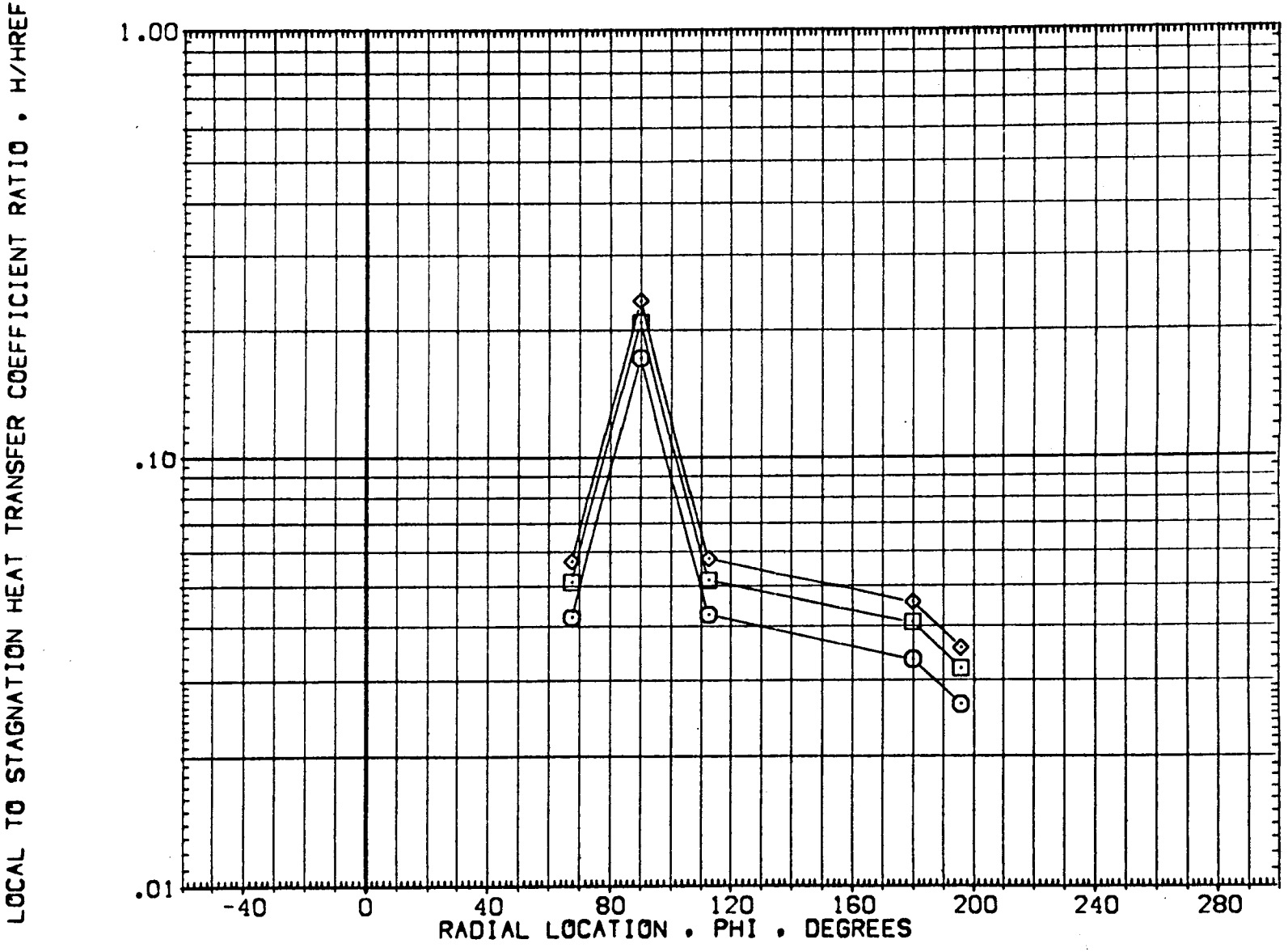


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

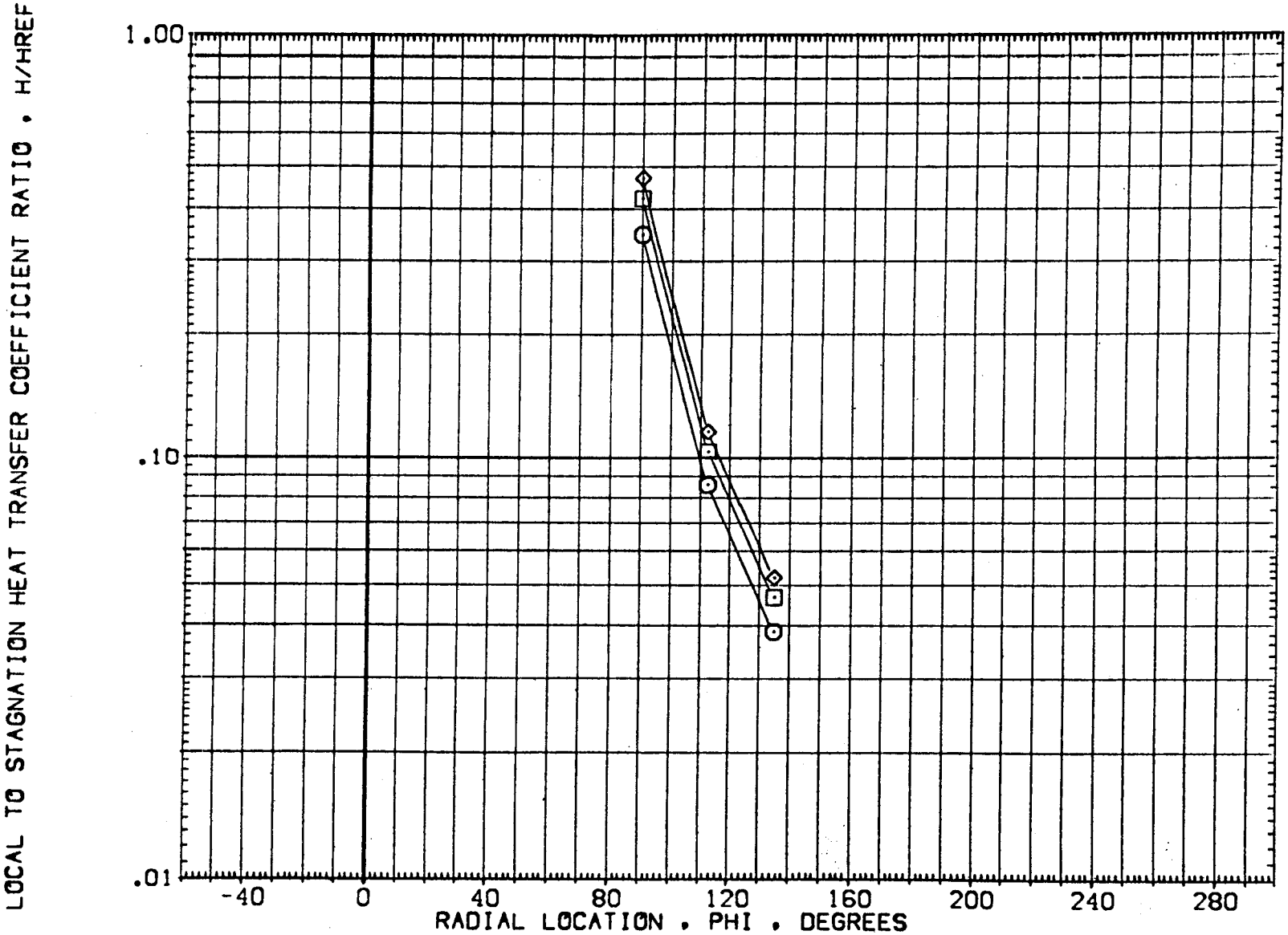


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE,IT04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE,IT04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE,IT04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

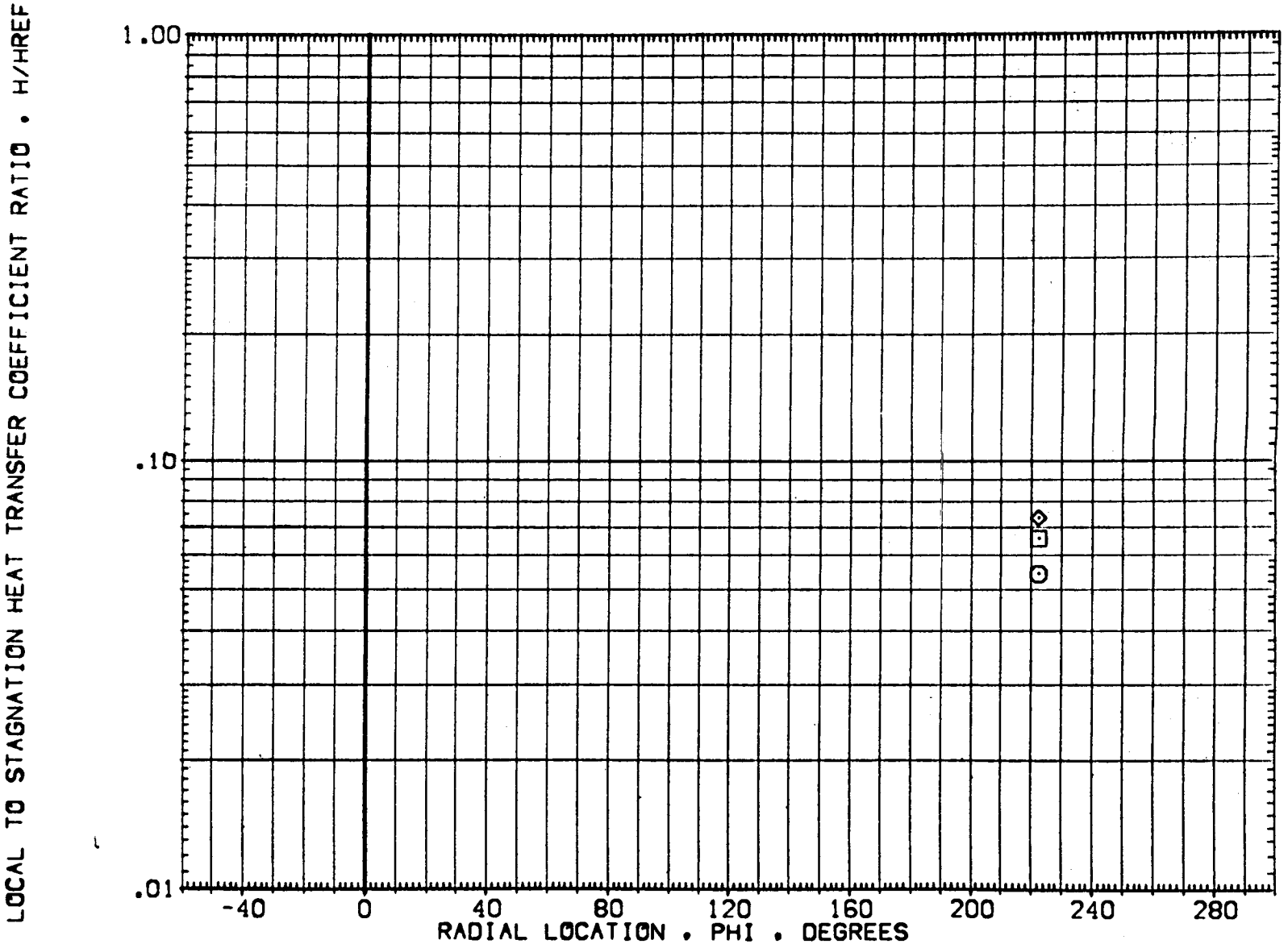


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REITO4)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEITO4)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEITO4)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

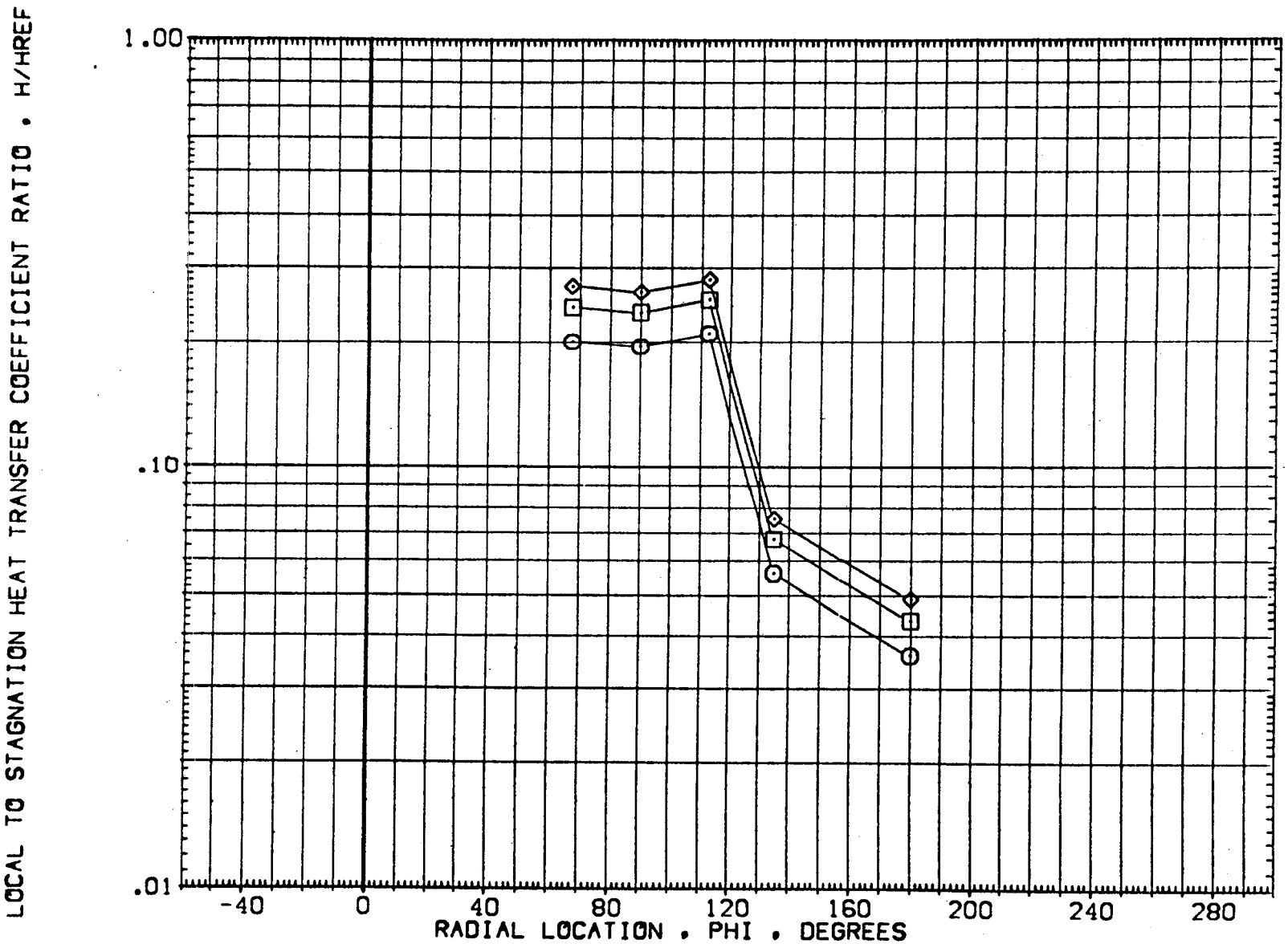


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

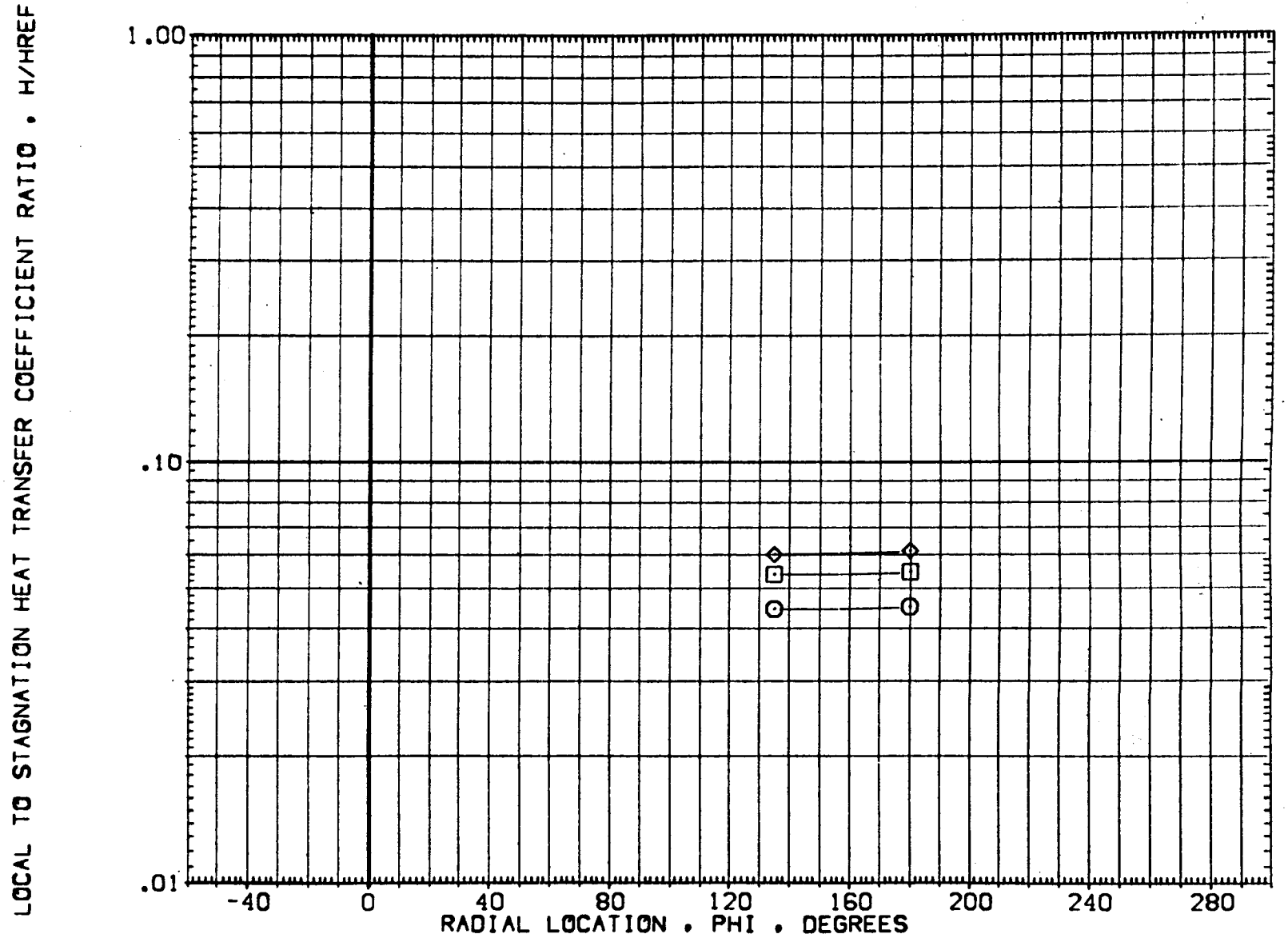


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

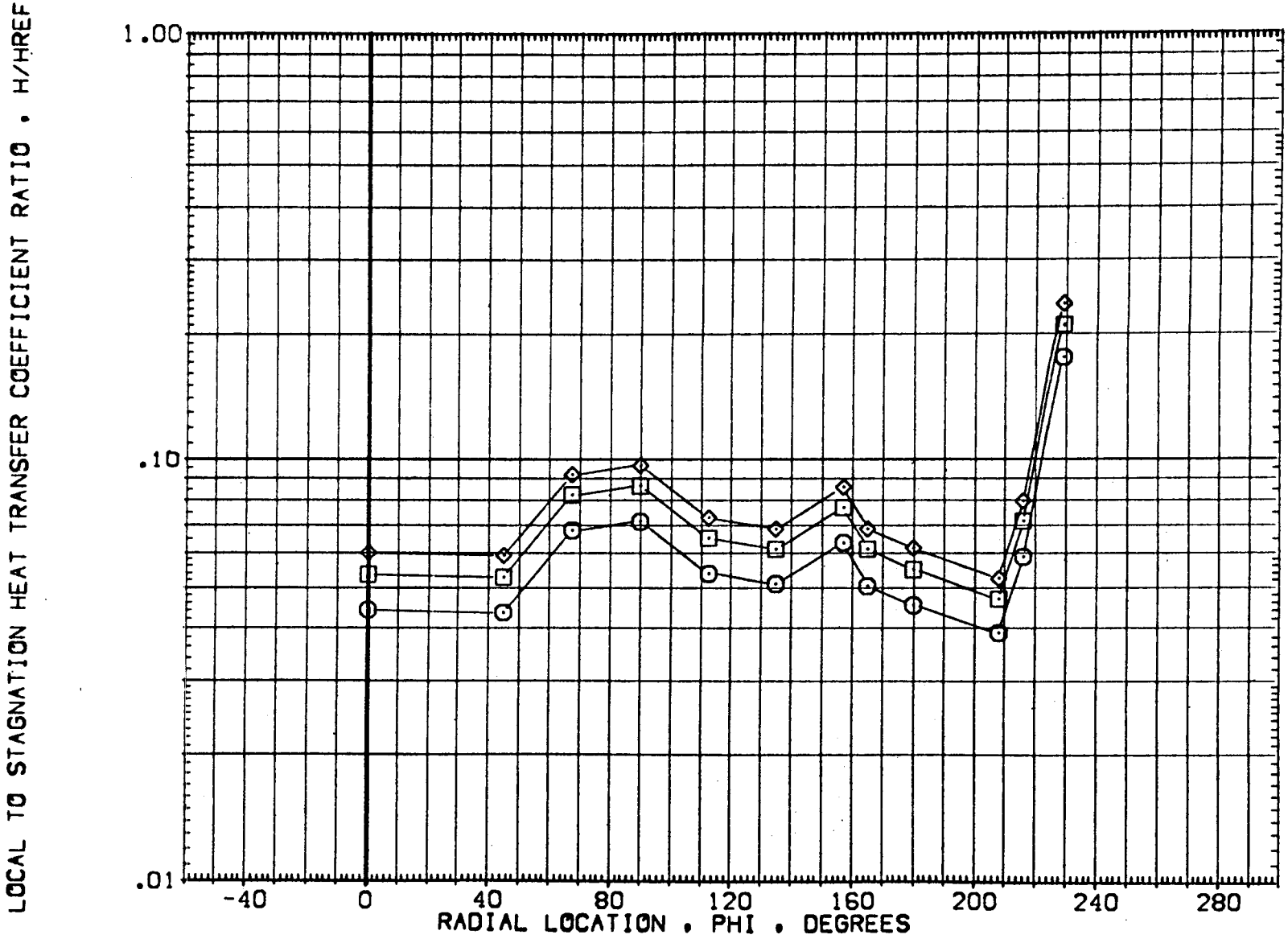


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REI104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEIT04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

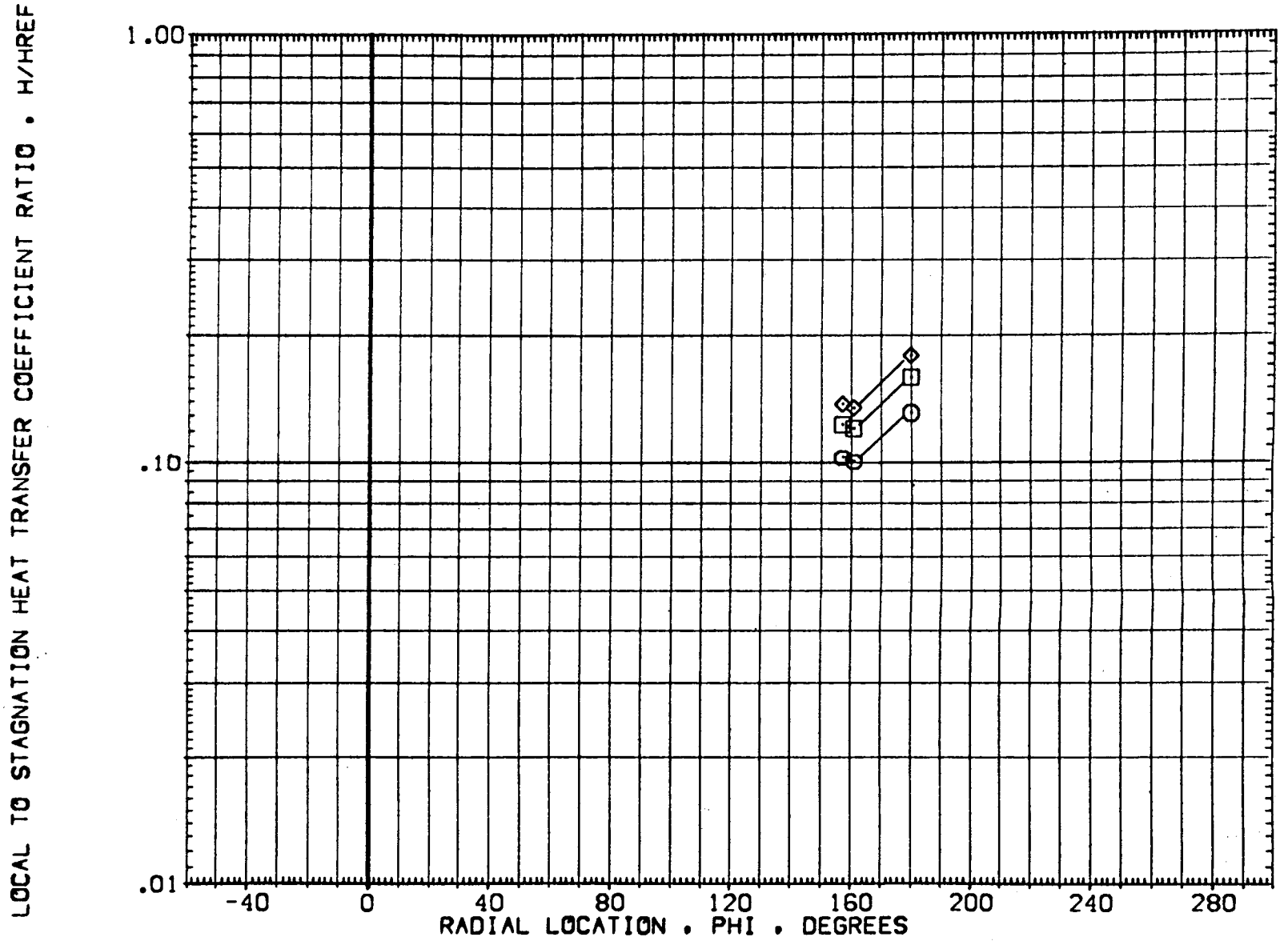


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

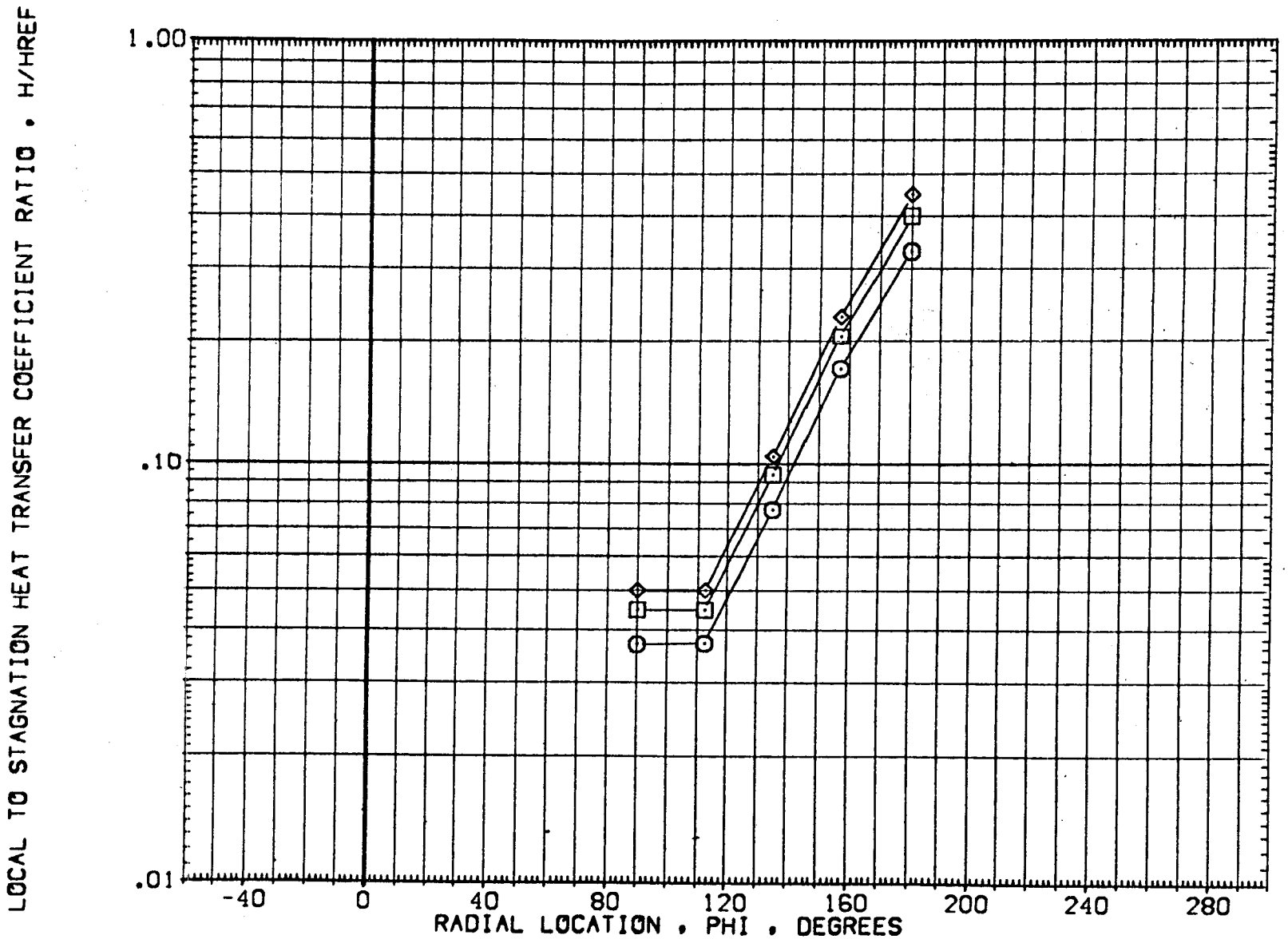


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

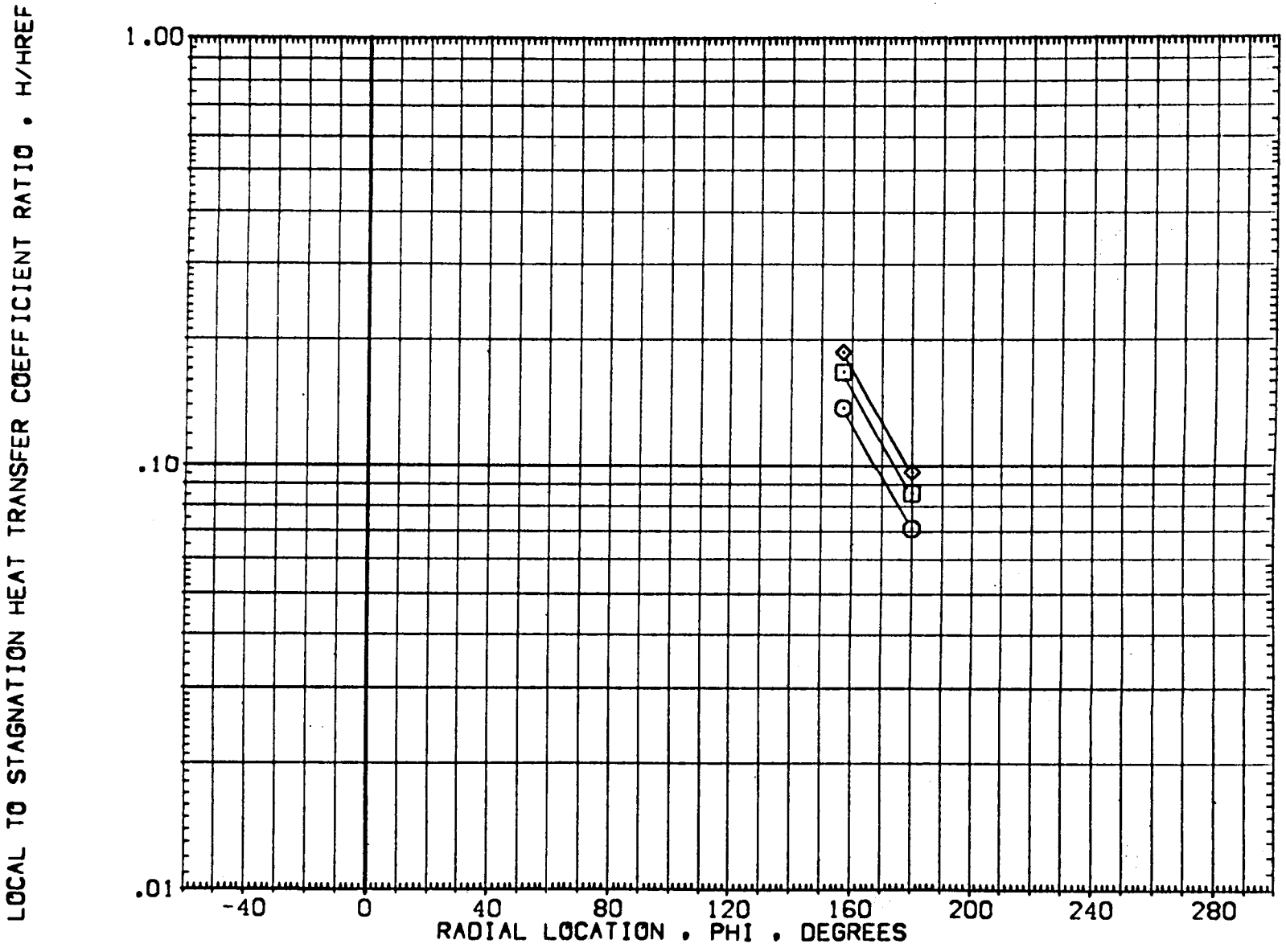


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

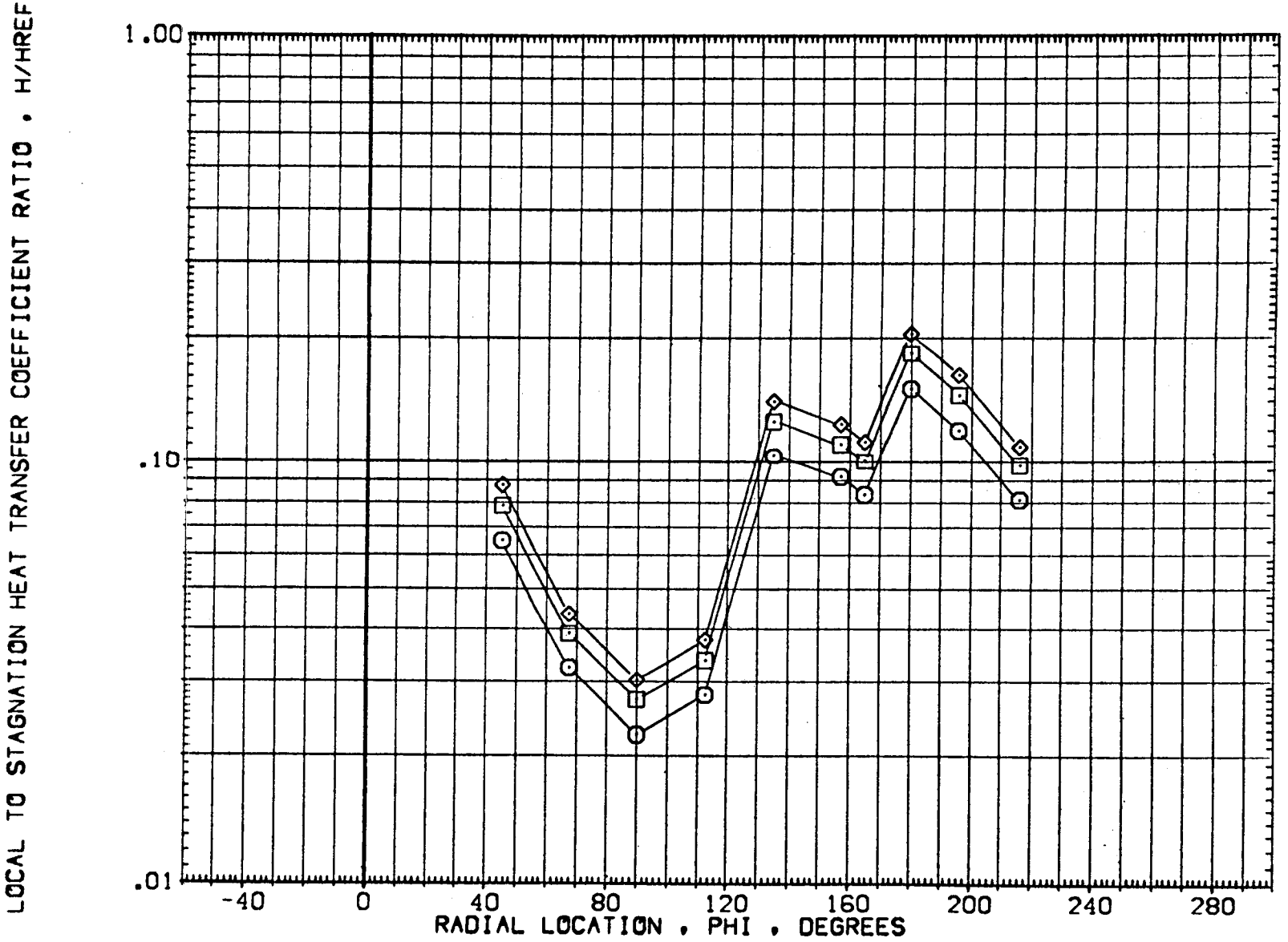


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

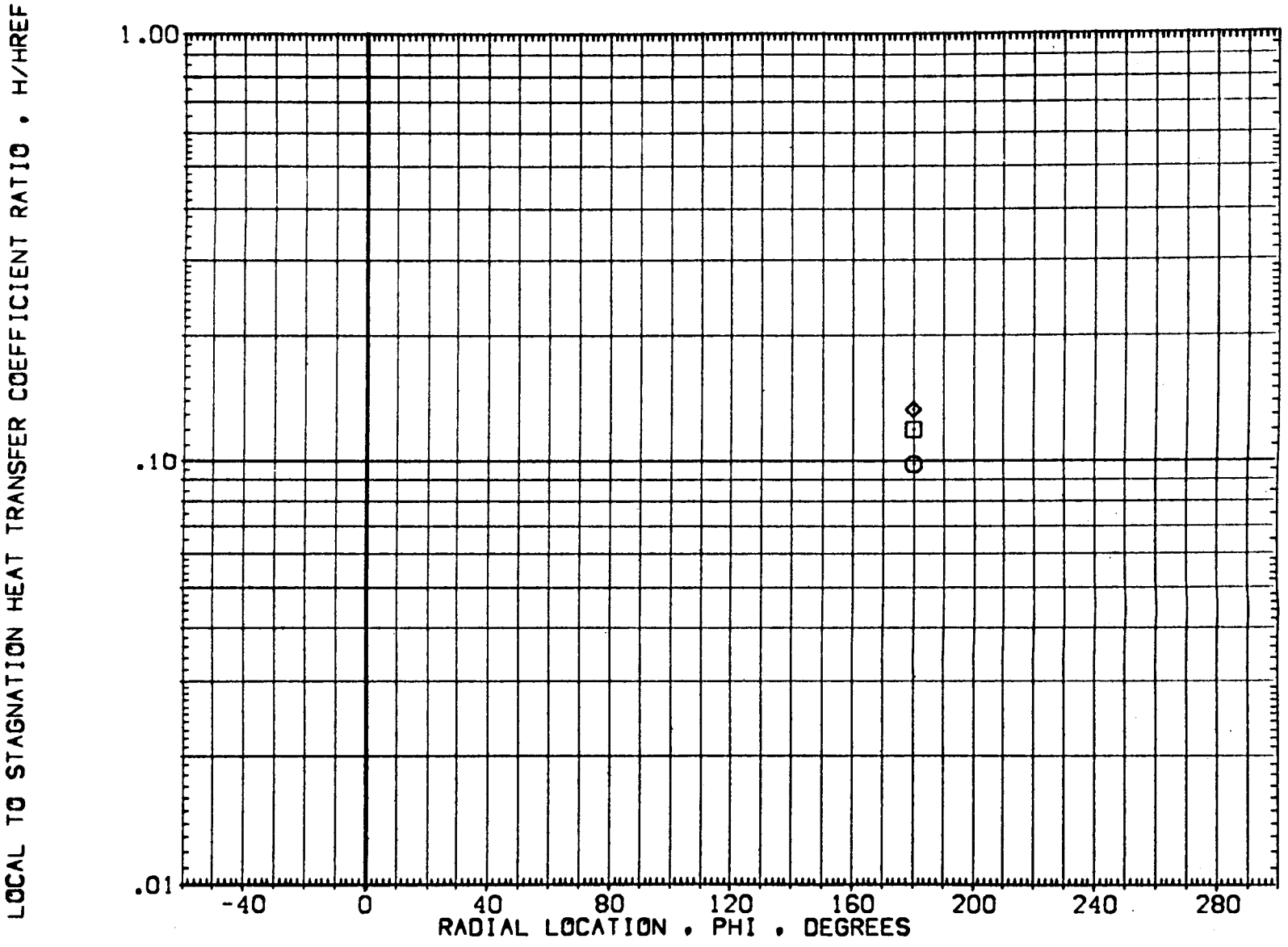


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE|T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE|T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

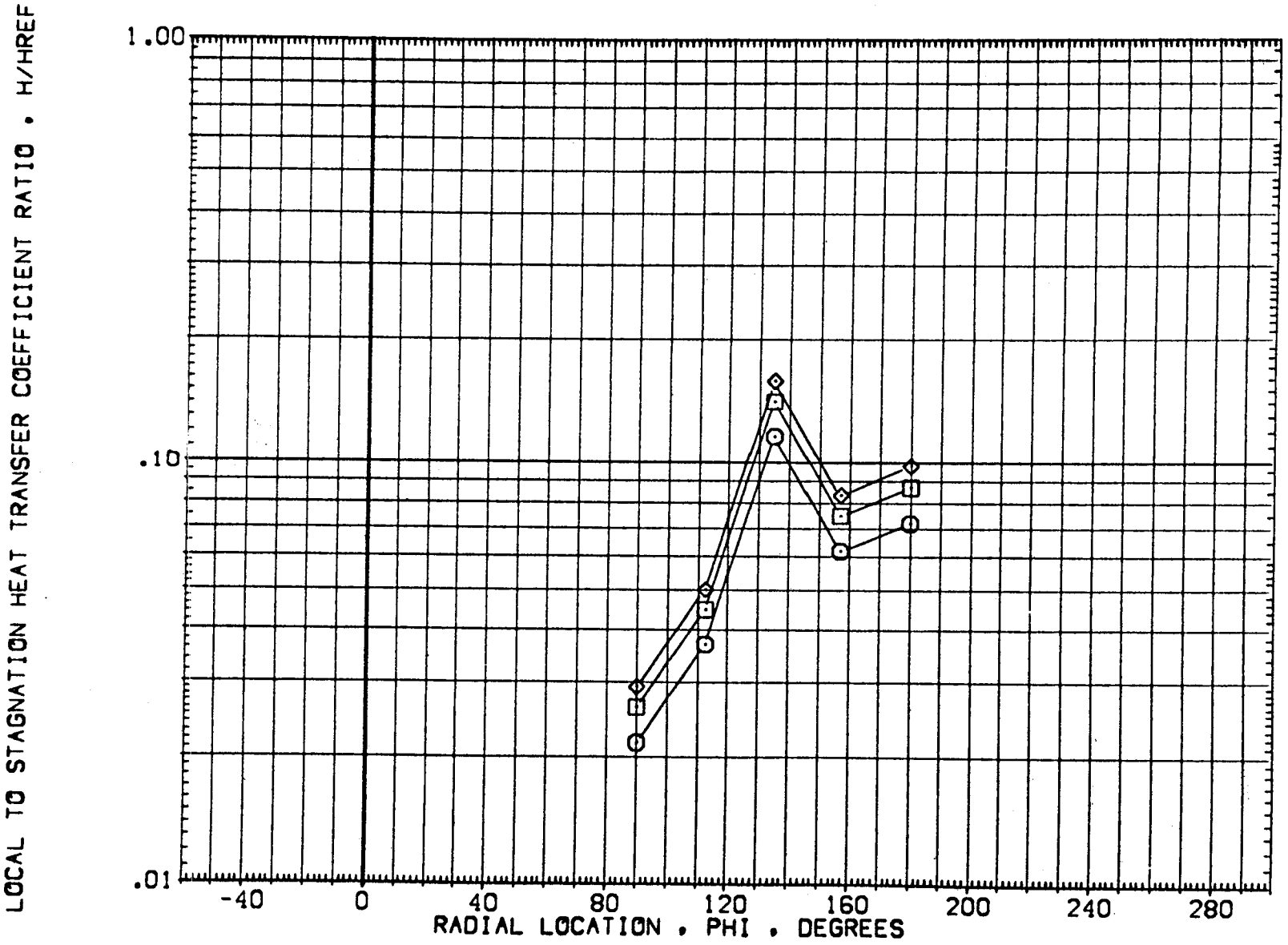


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

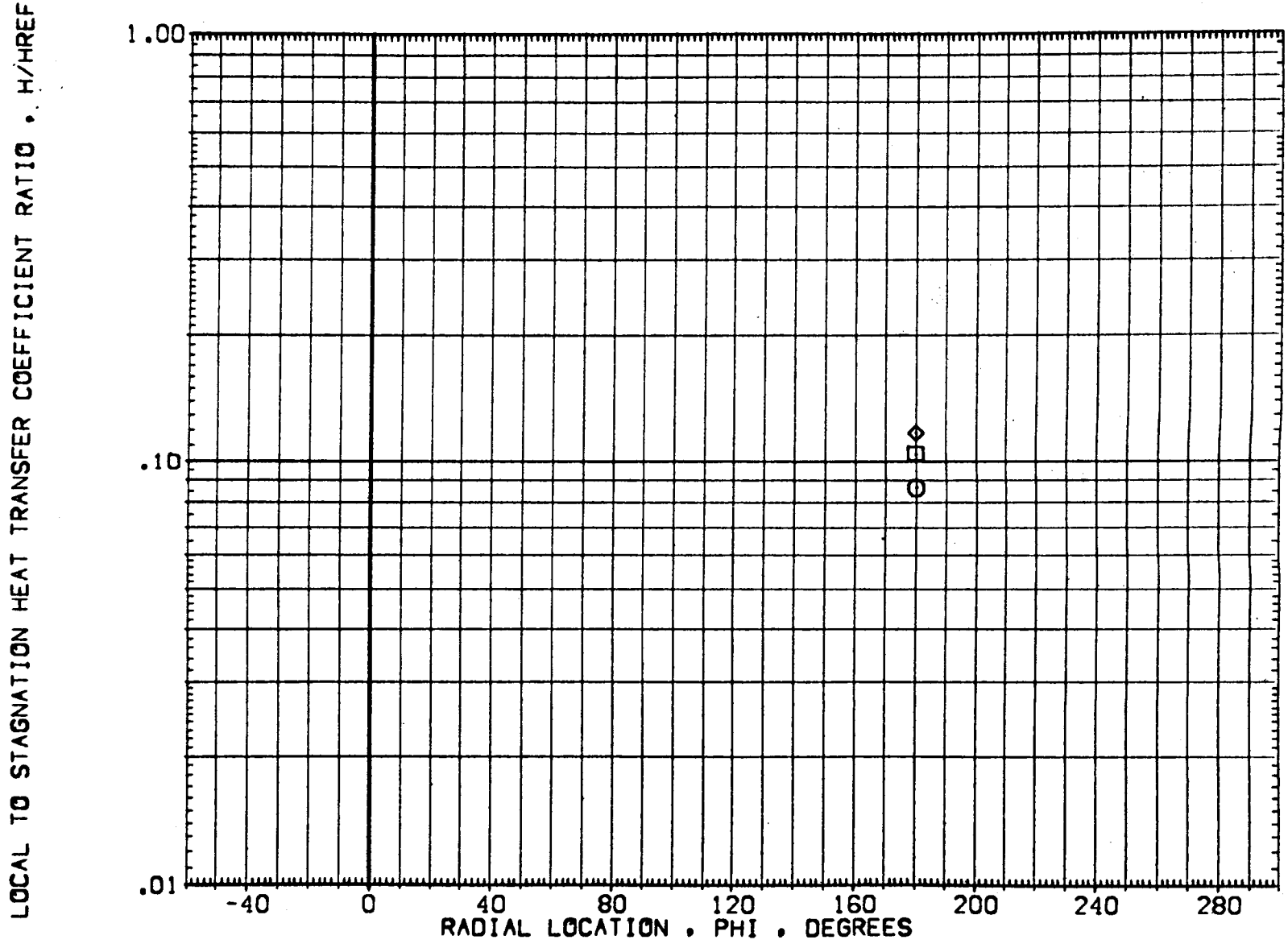


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEIT04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

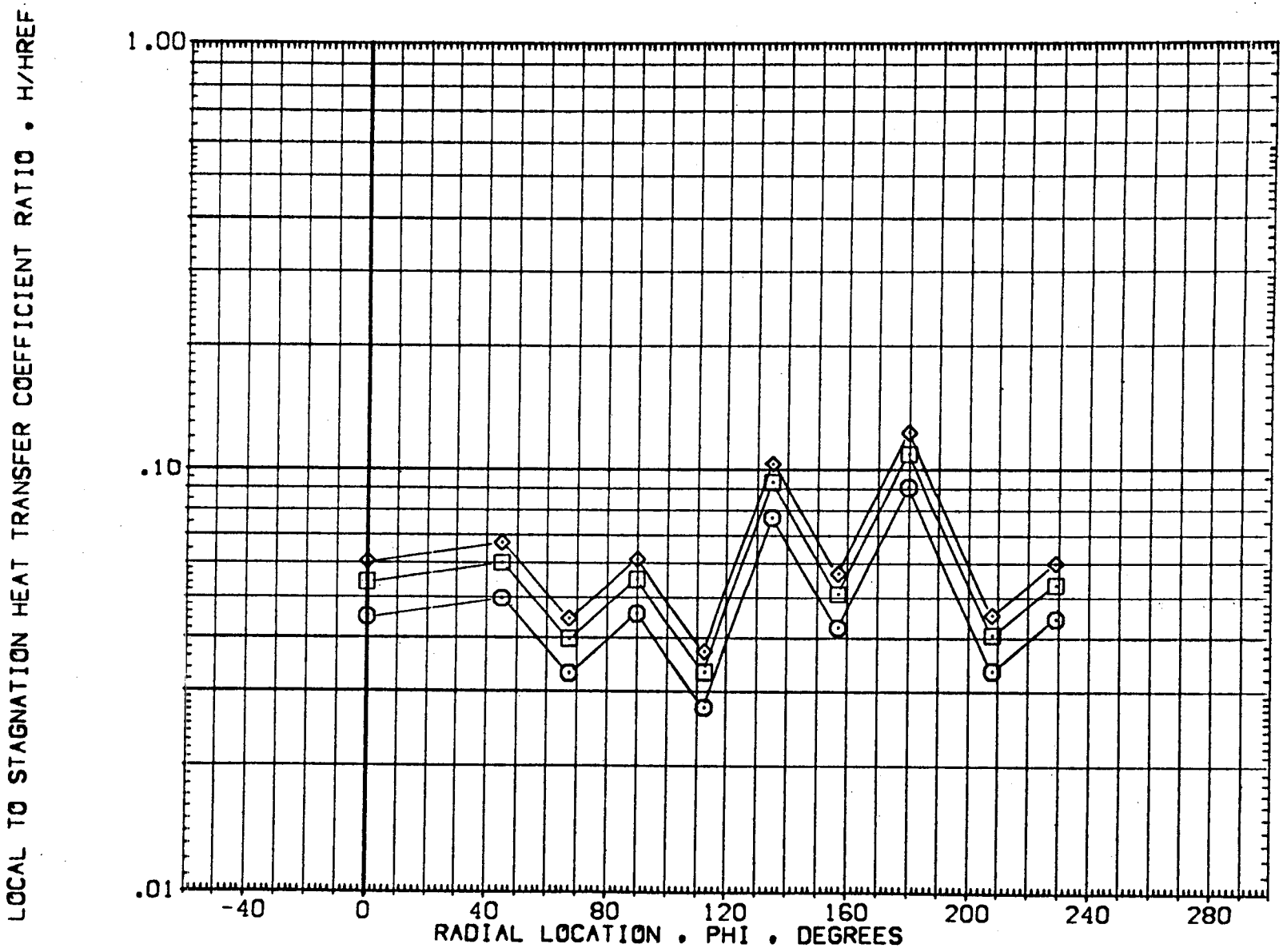


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEIT04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

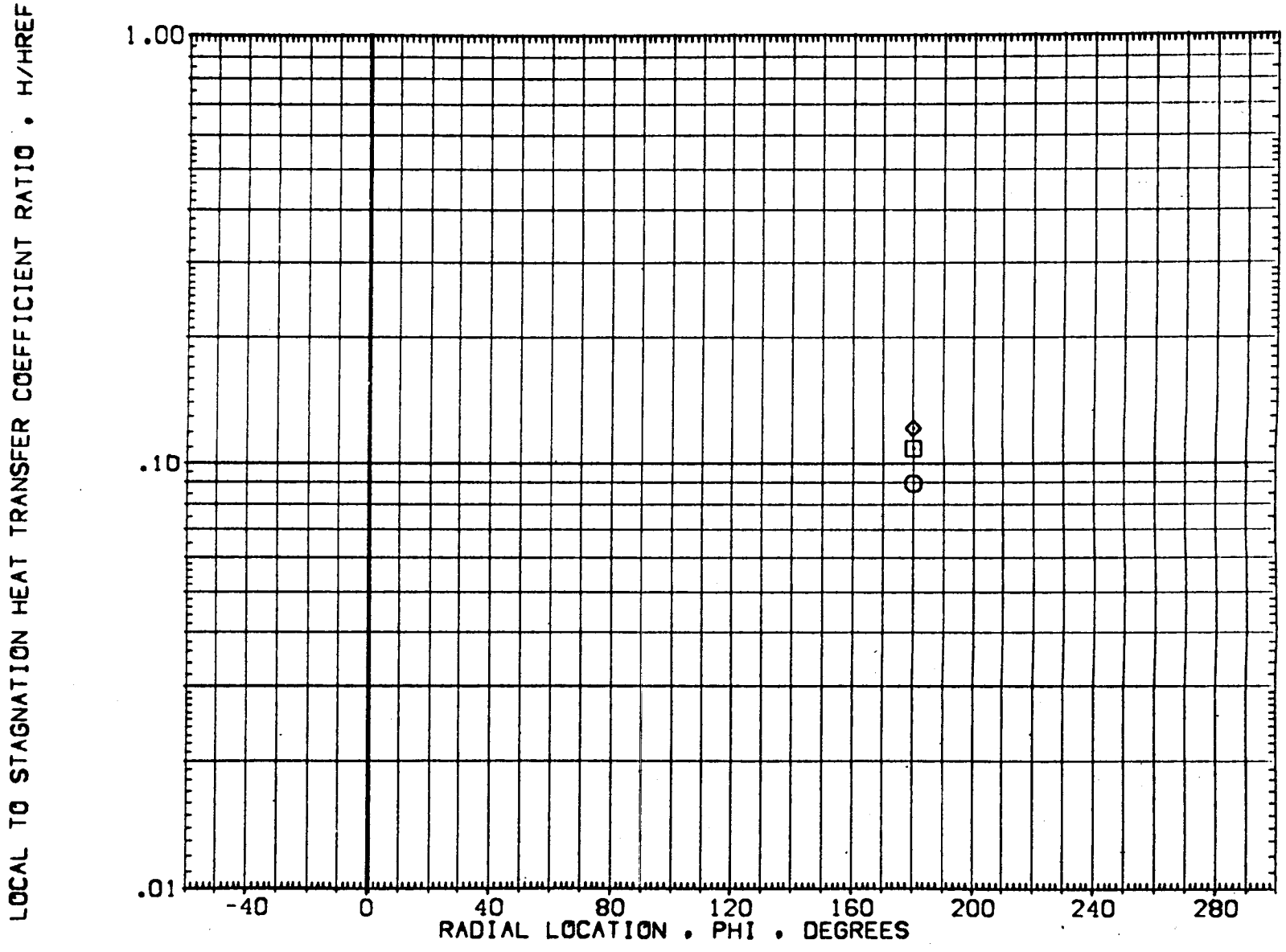


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE,T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE,T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE,T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

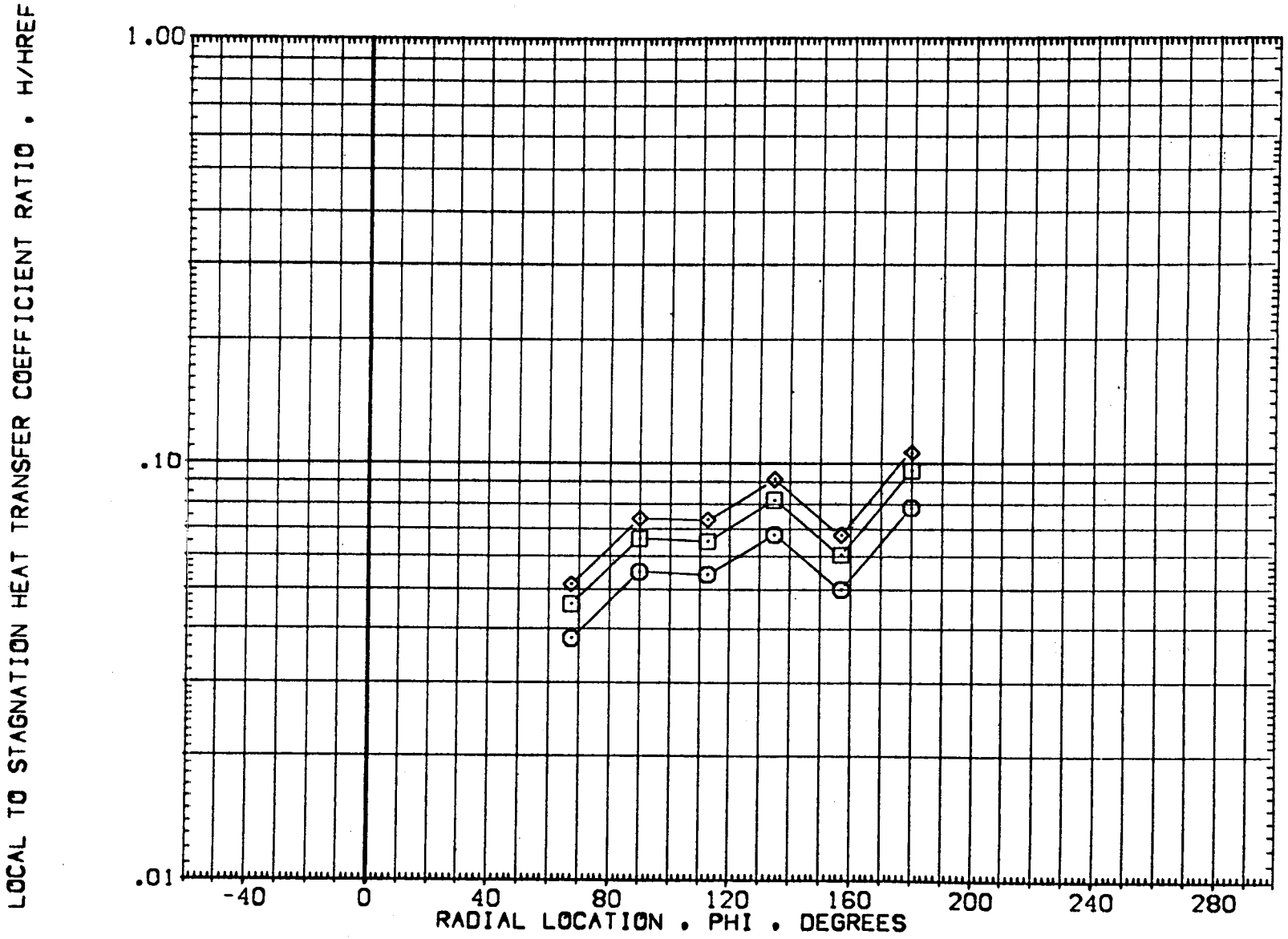


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

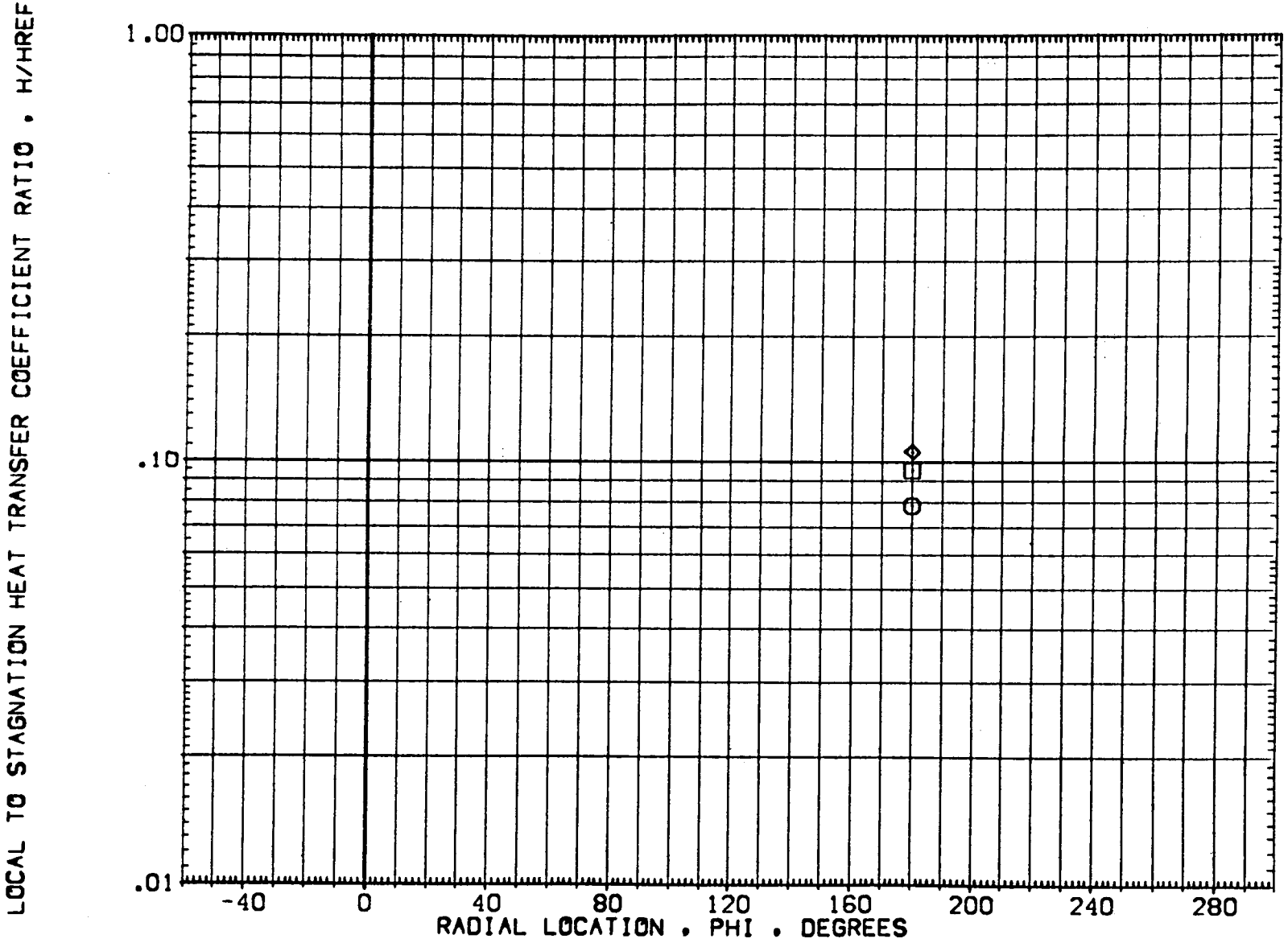


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	⊡	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

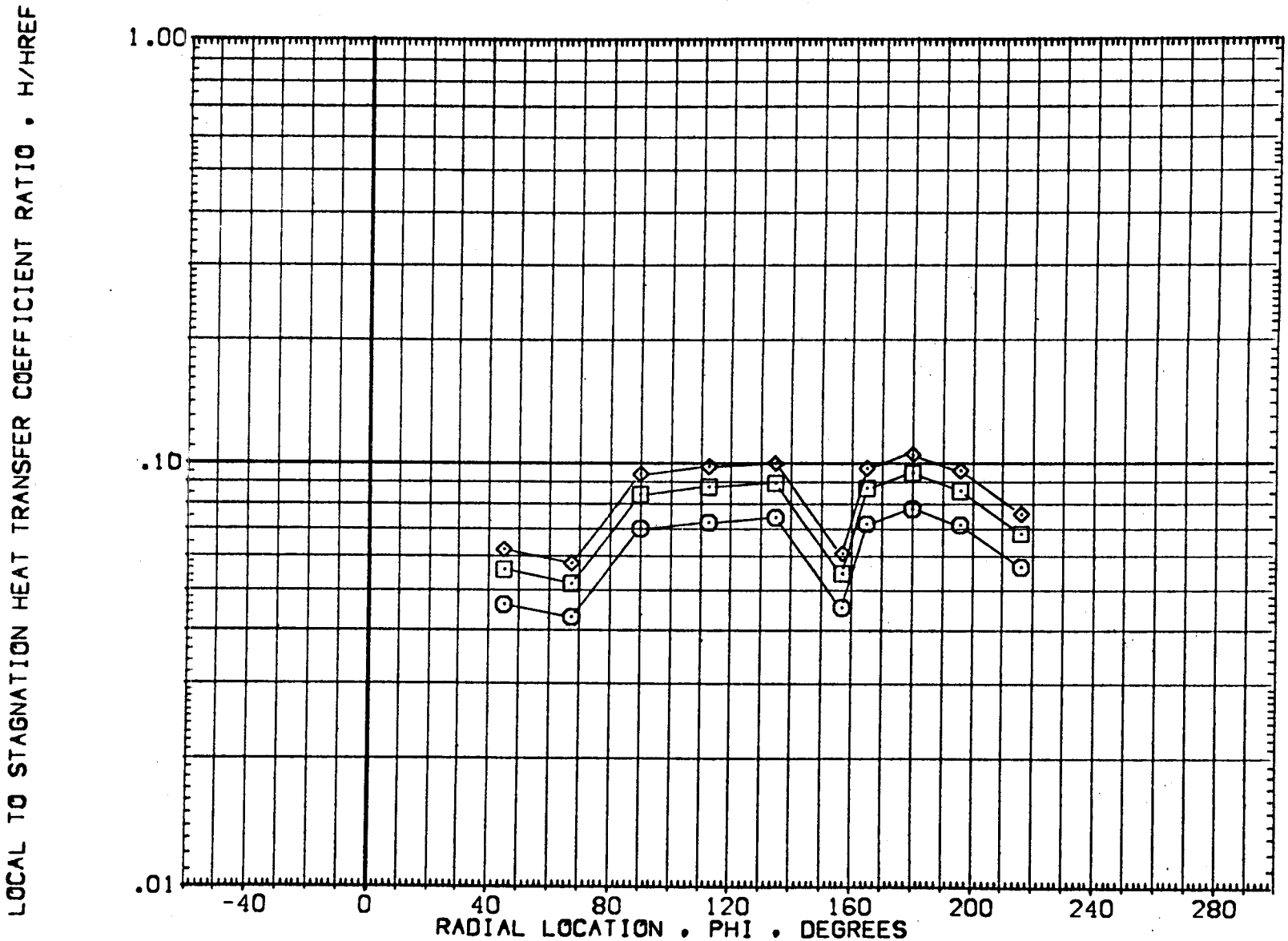


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

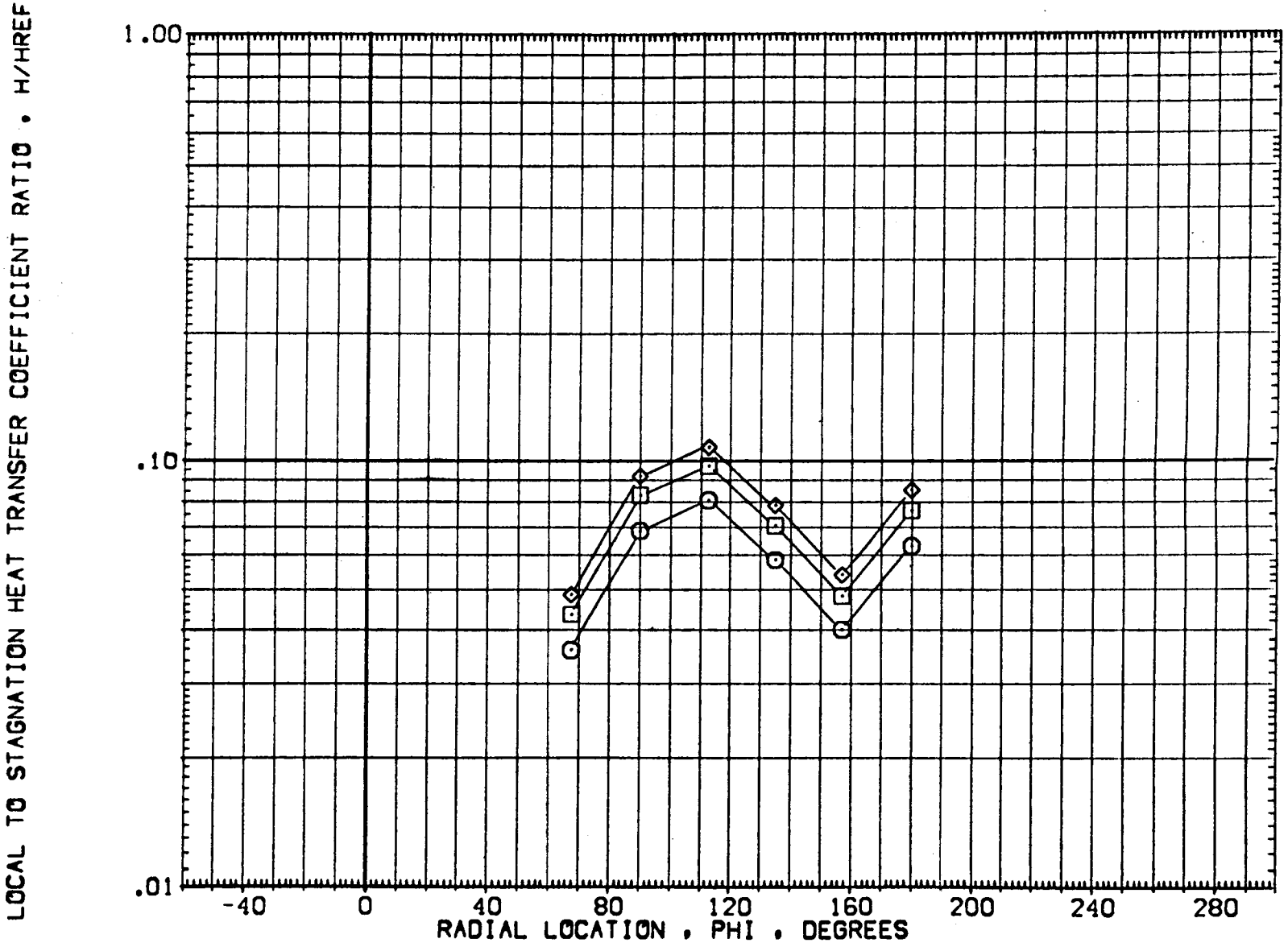


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

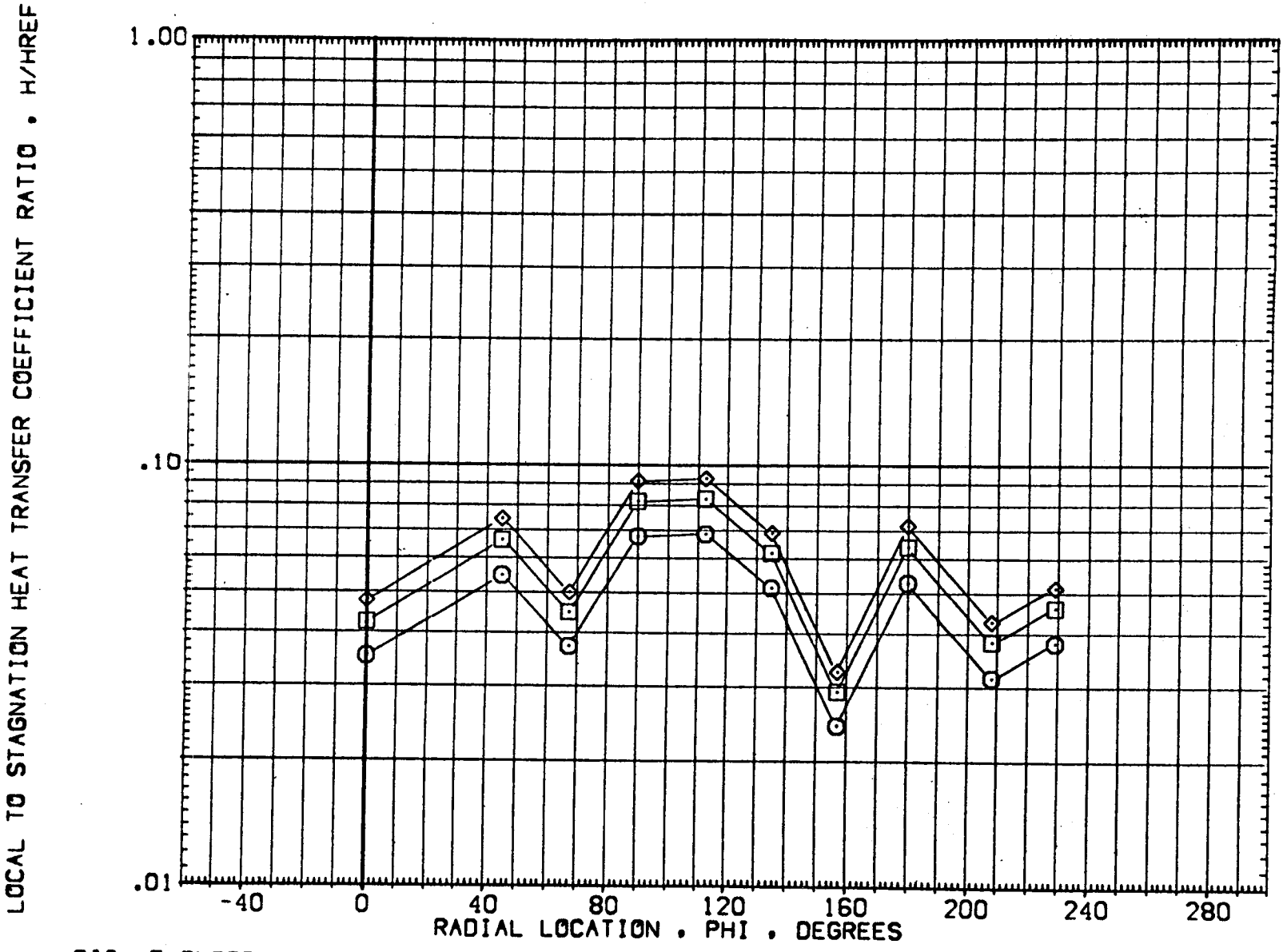


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE|104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE|104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE|104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

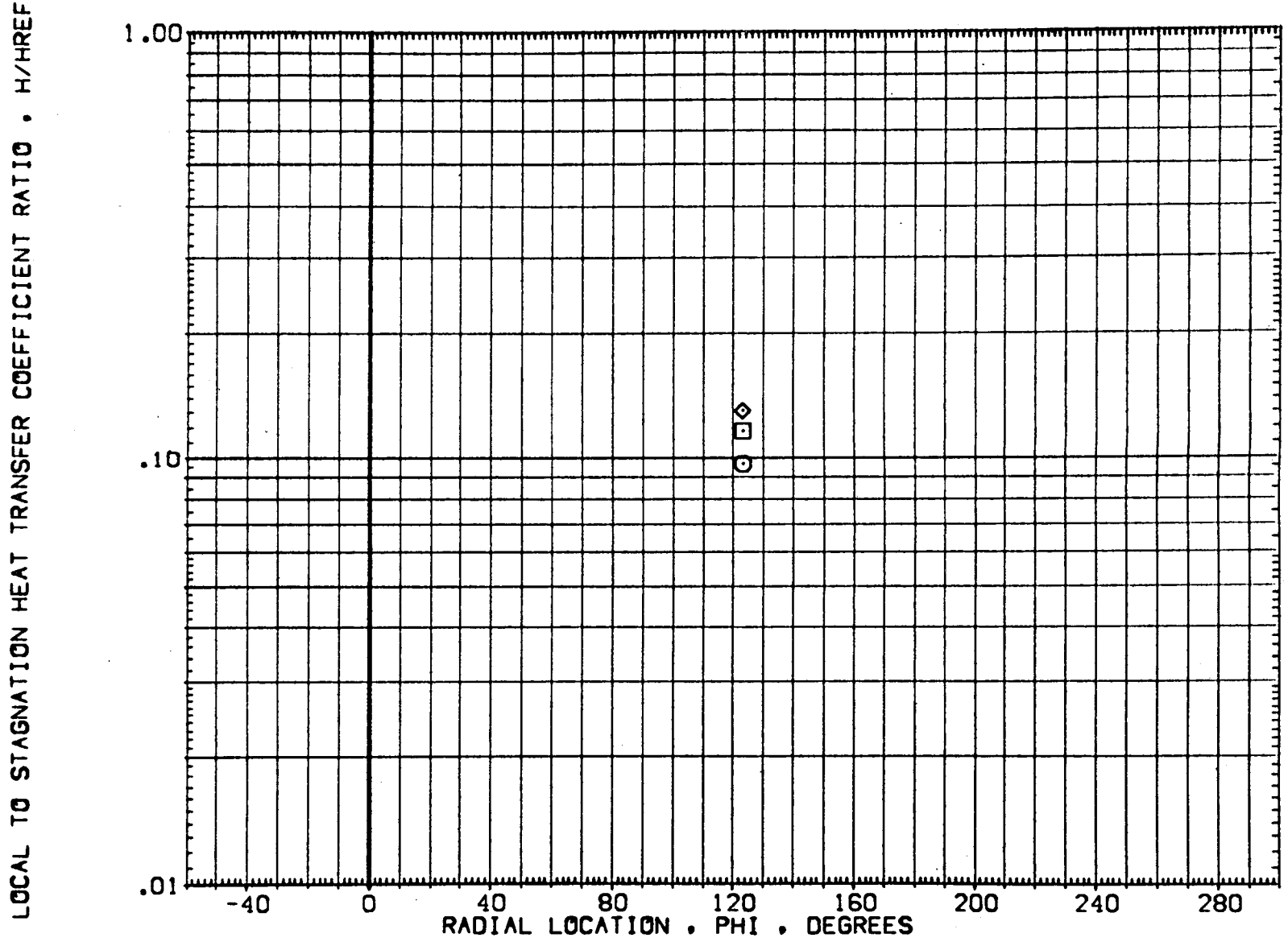


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

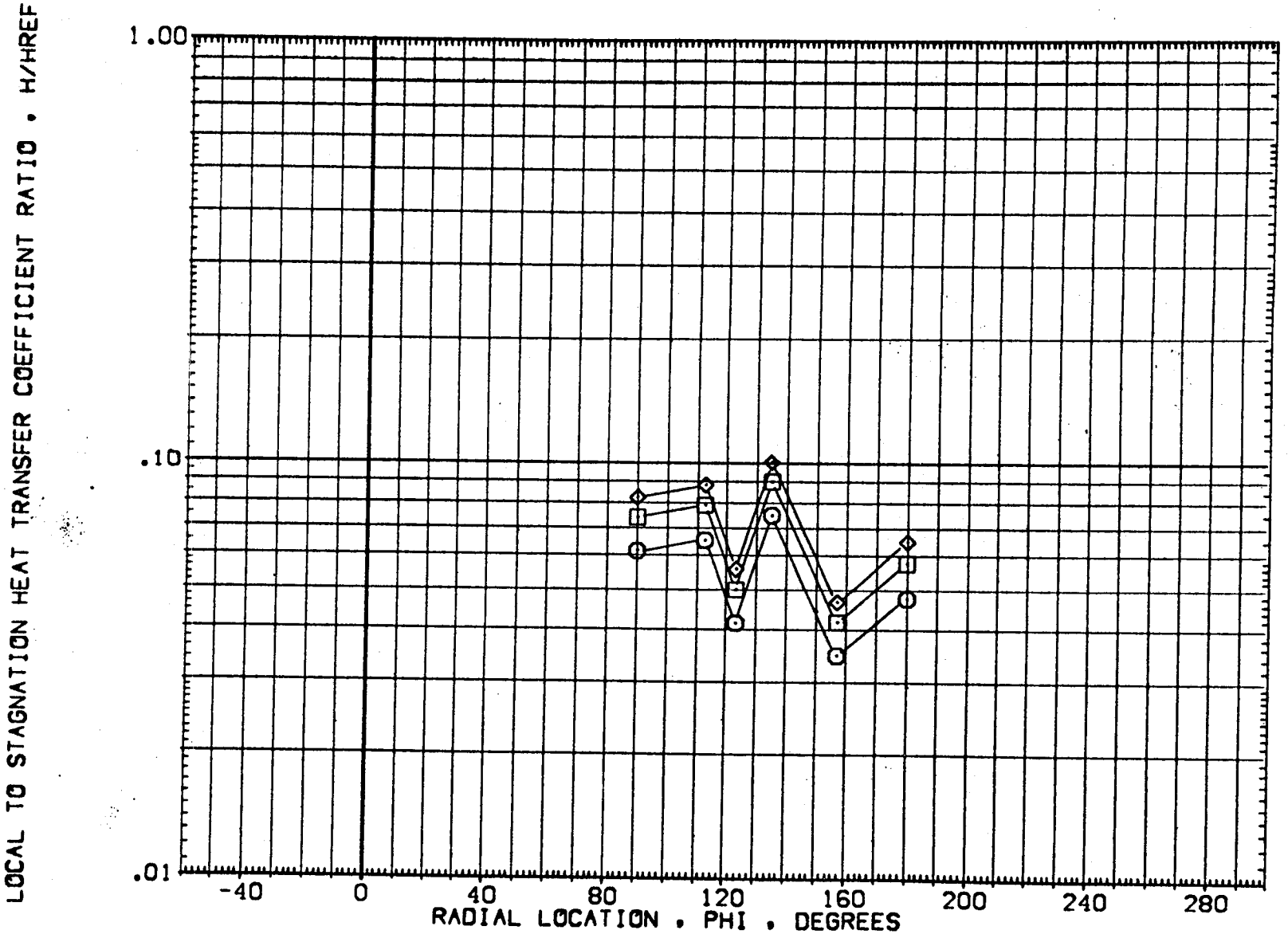


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(REIT04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AEIT04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BEIT04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

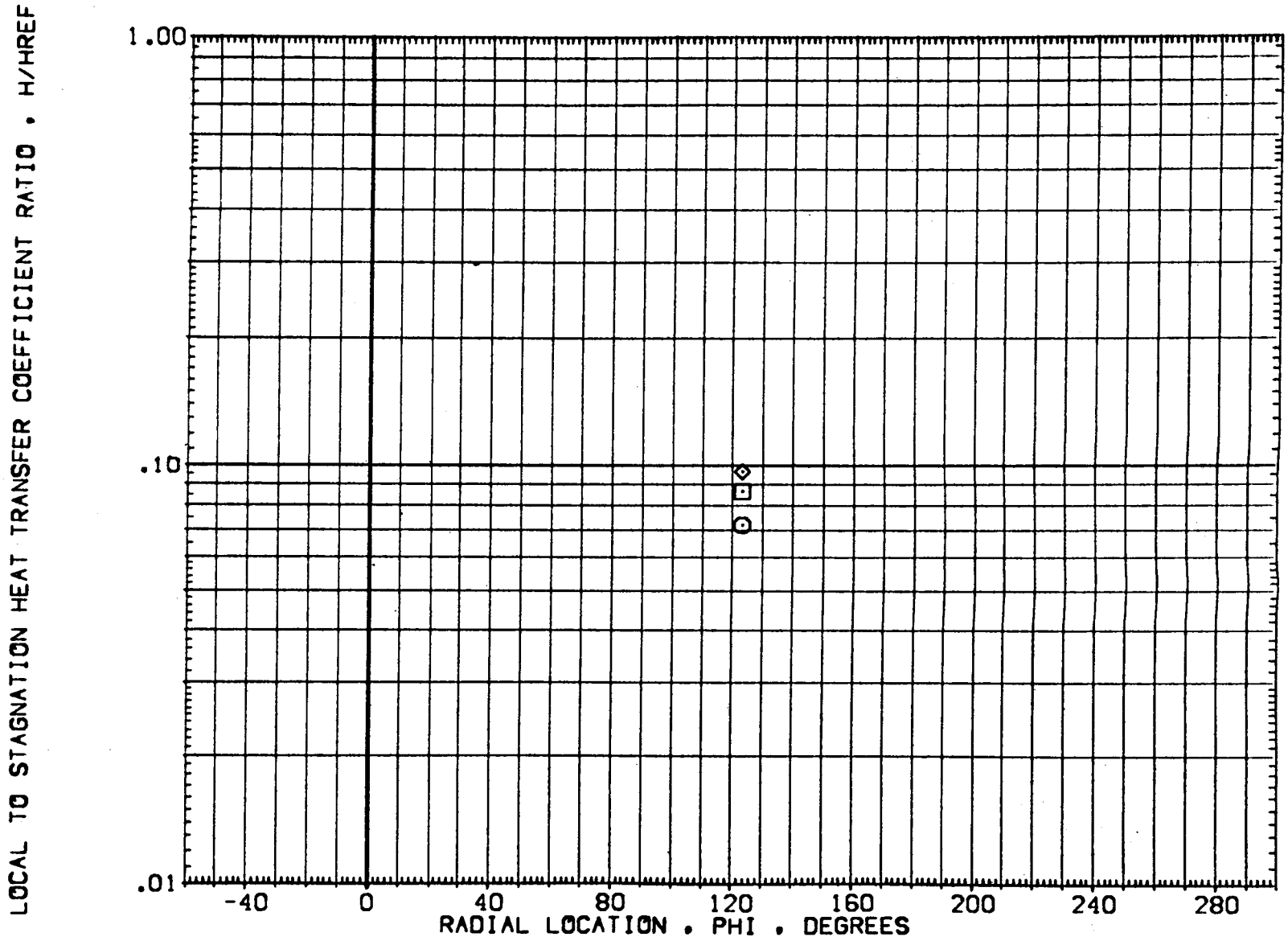


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

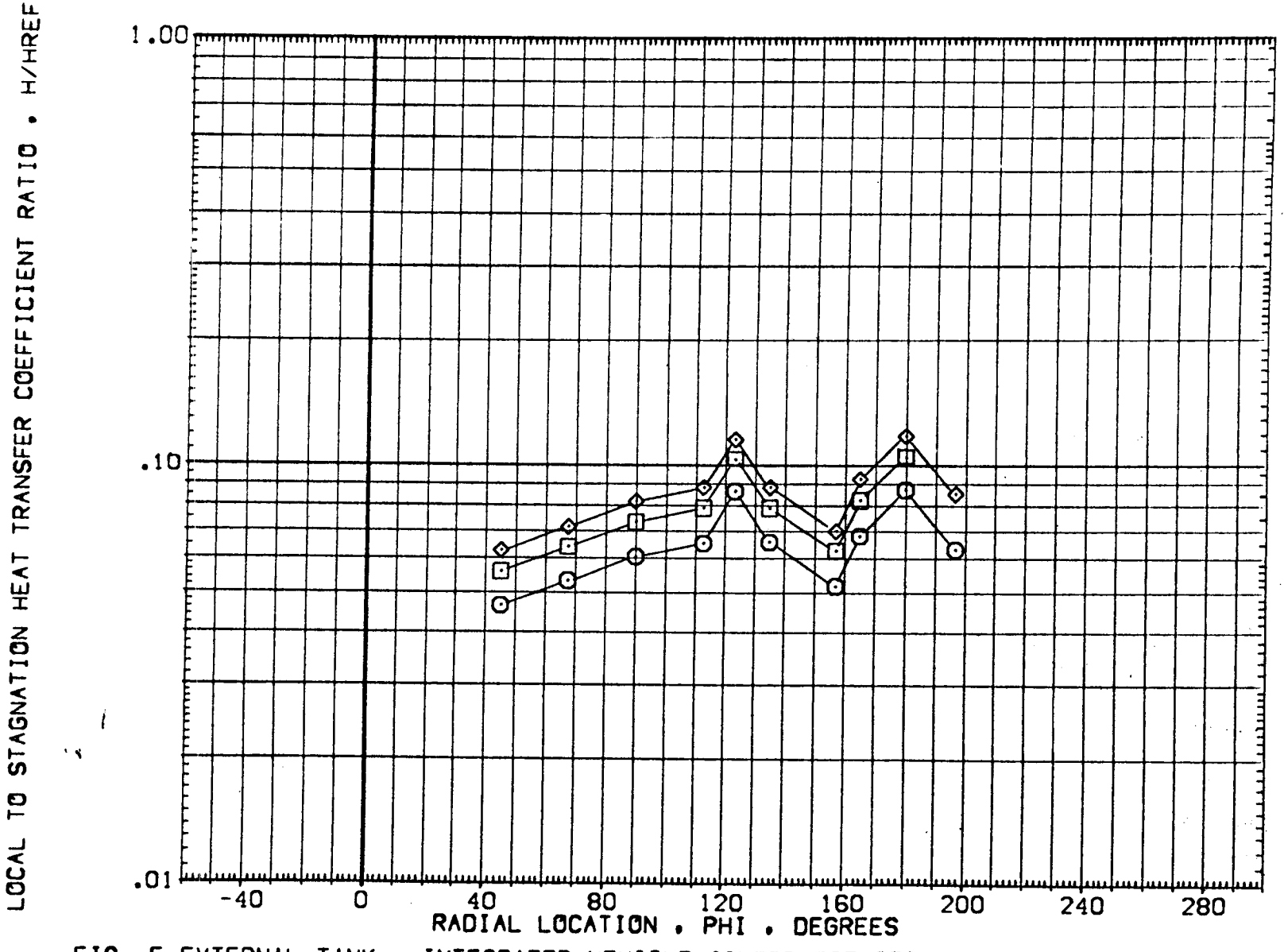


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

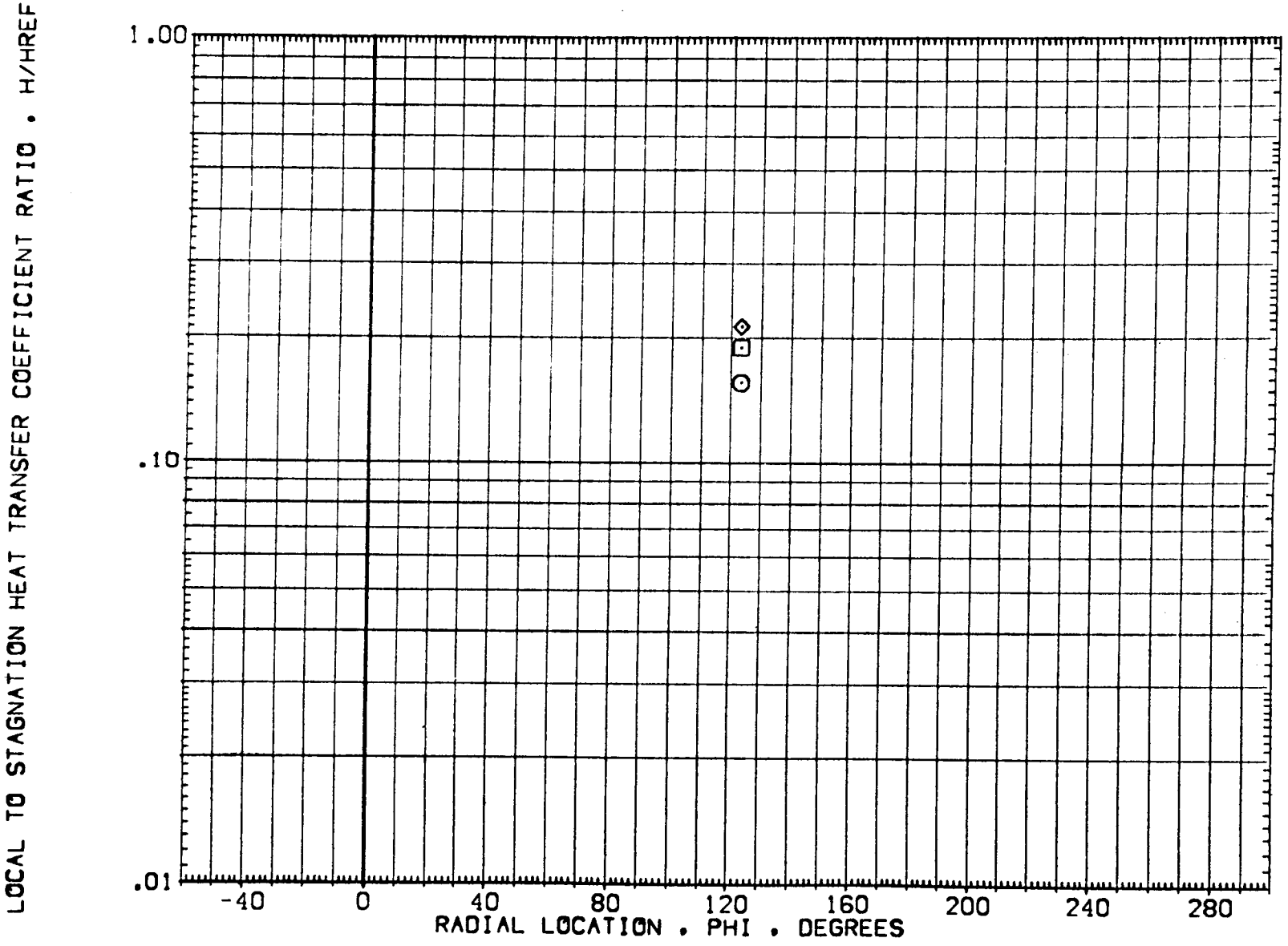


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

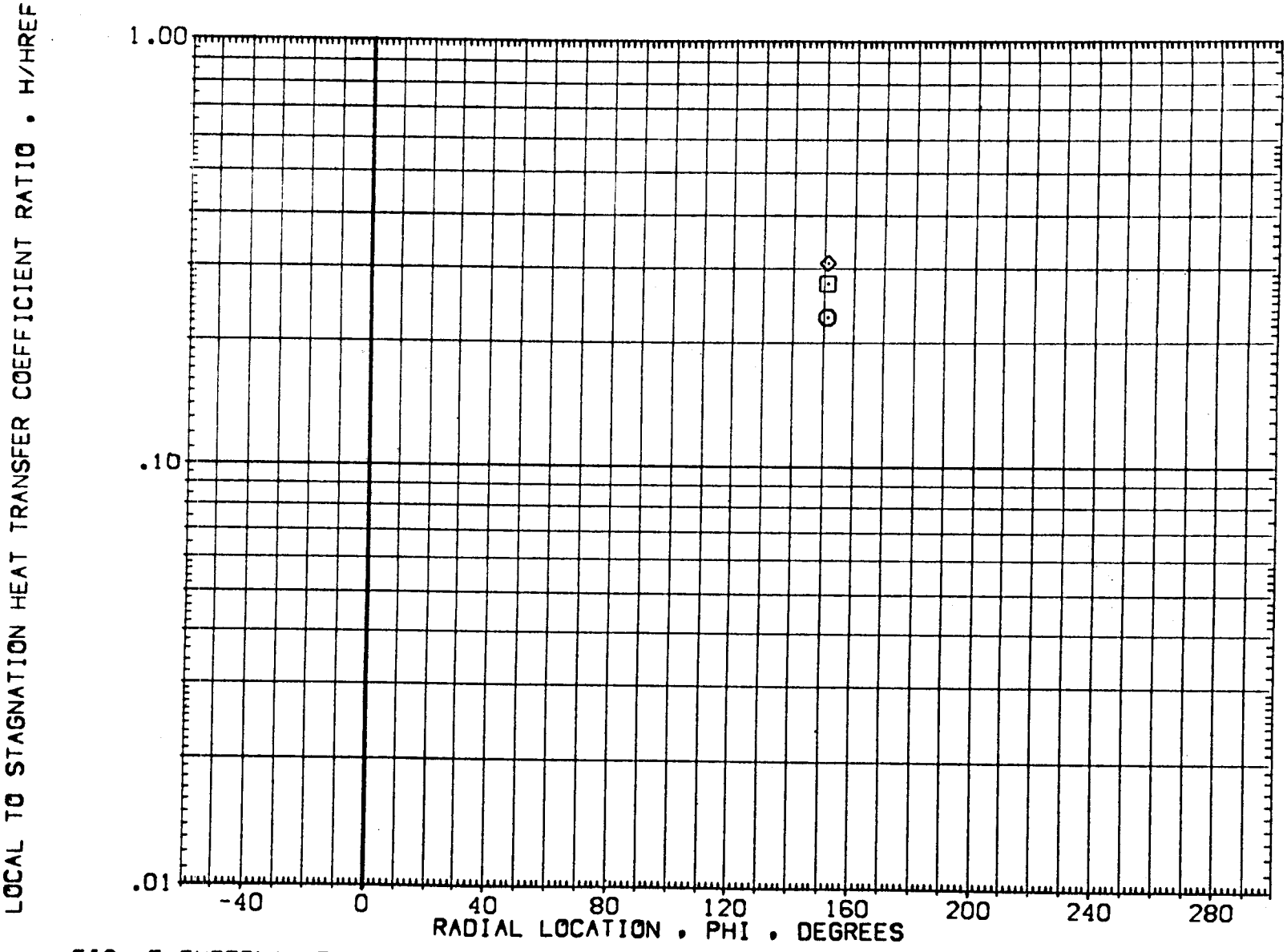


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1104)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1104)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

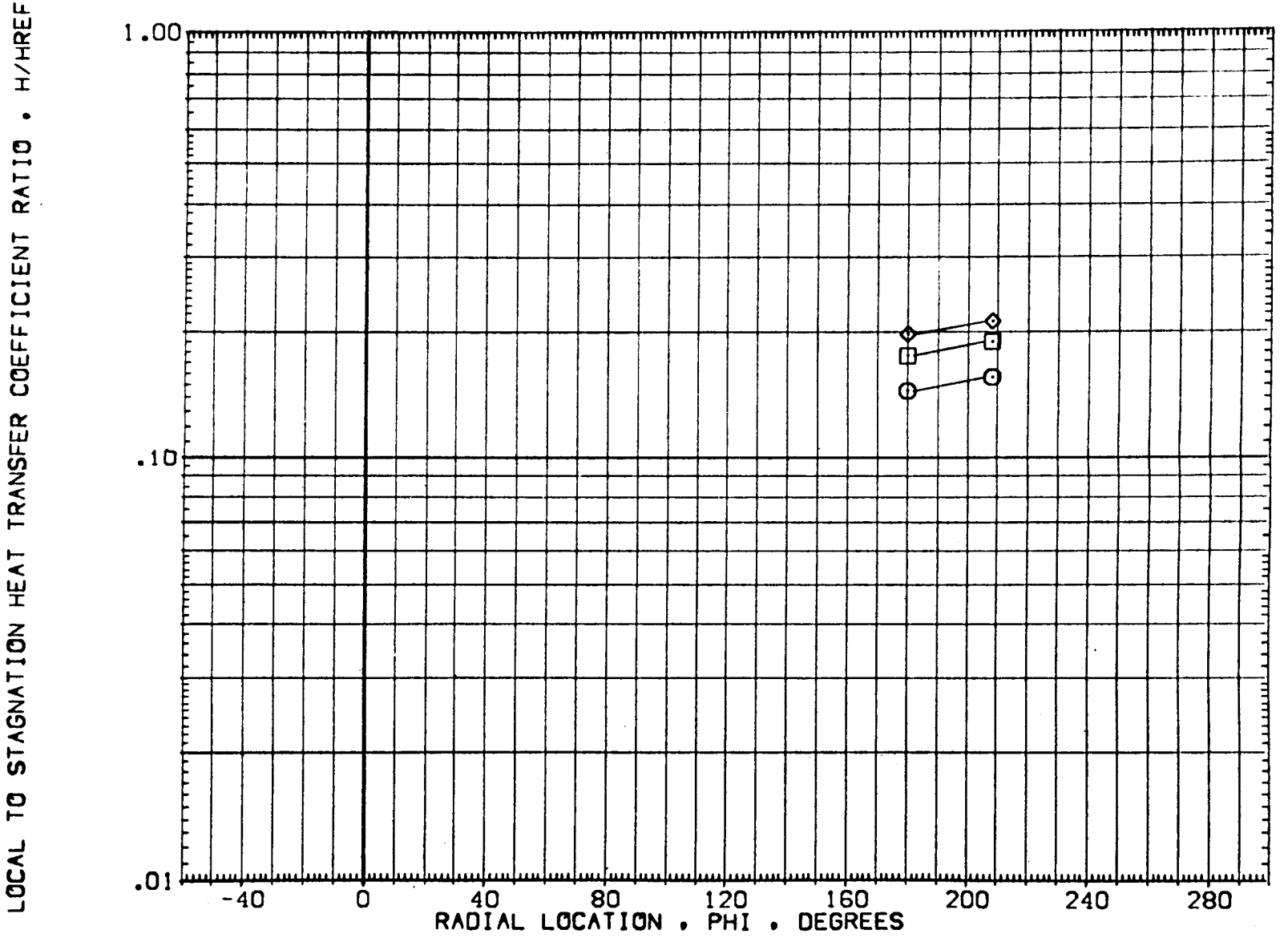


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1T04)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

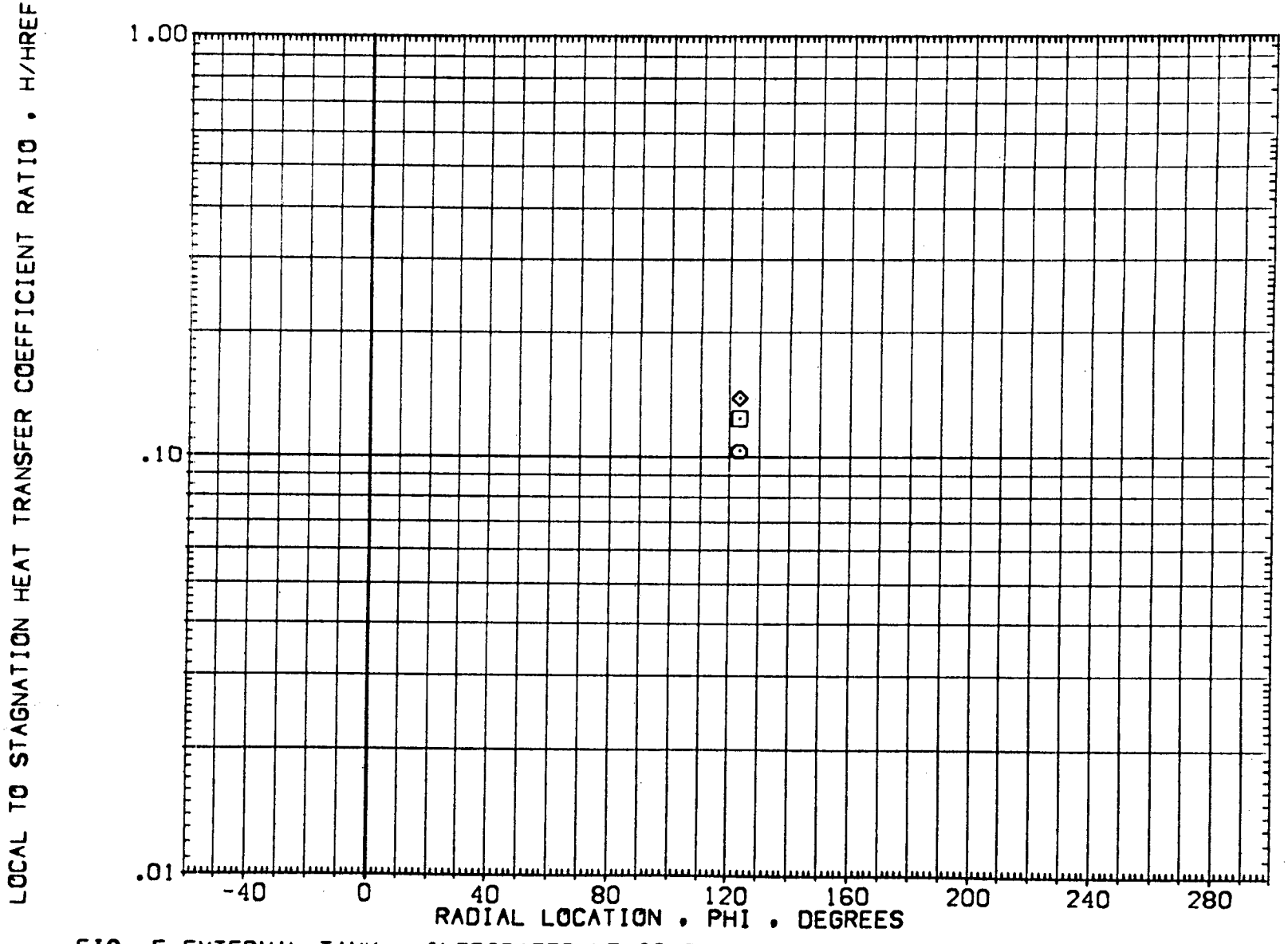


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	RN/L	HAW/HT
(RE1104)	○	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	1.000
(AE1T04)	□	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.900
(BE1T04)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS) EXTERNAL TANK	.000	.000	5.000	.850

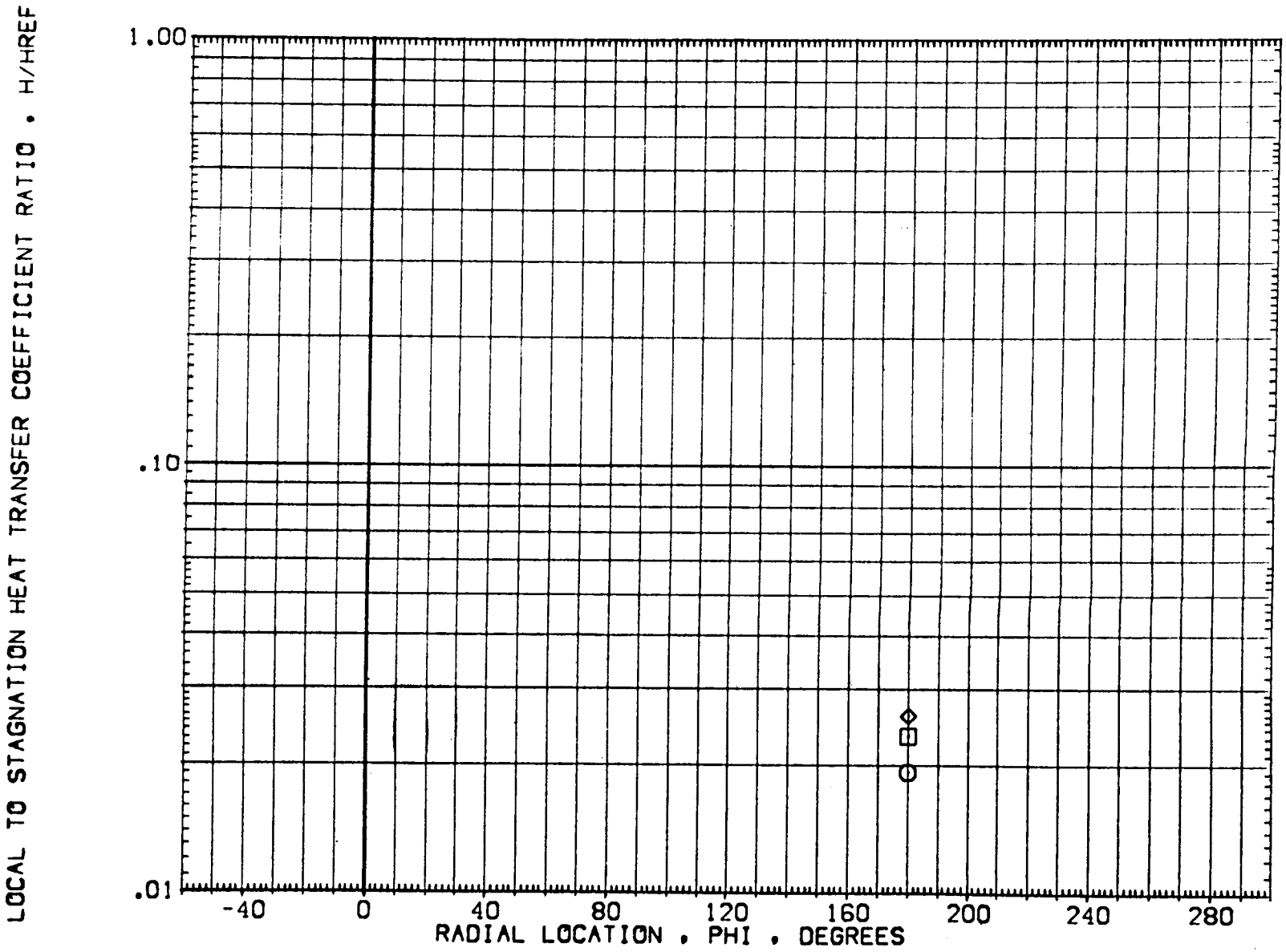


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

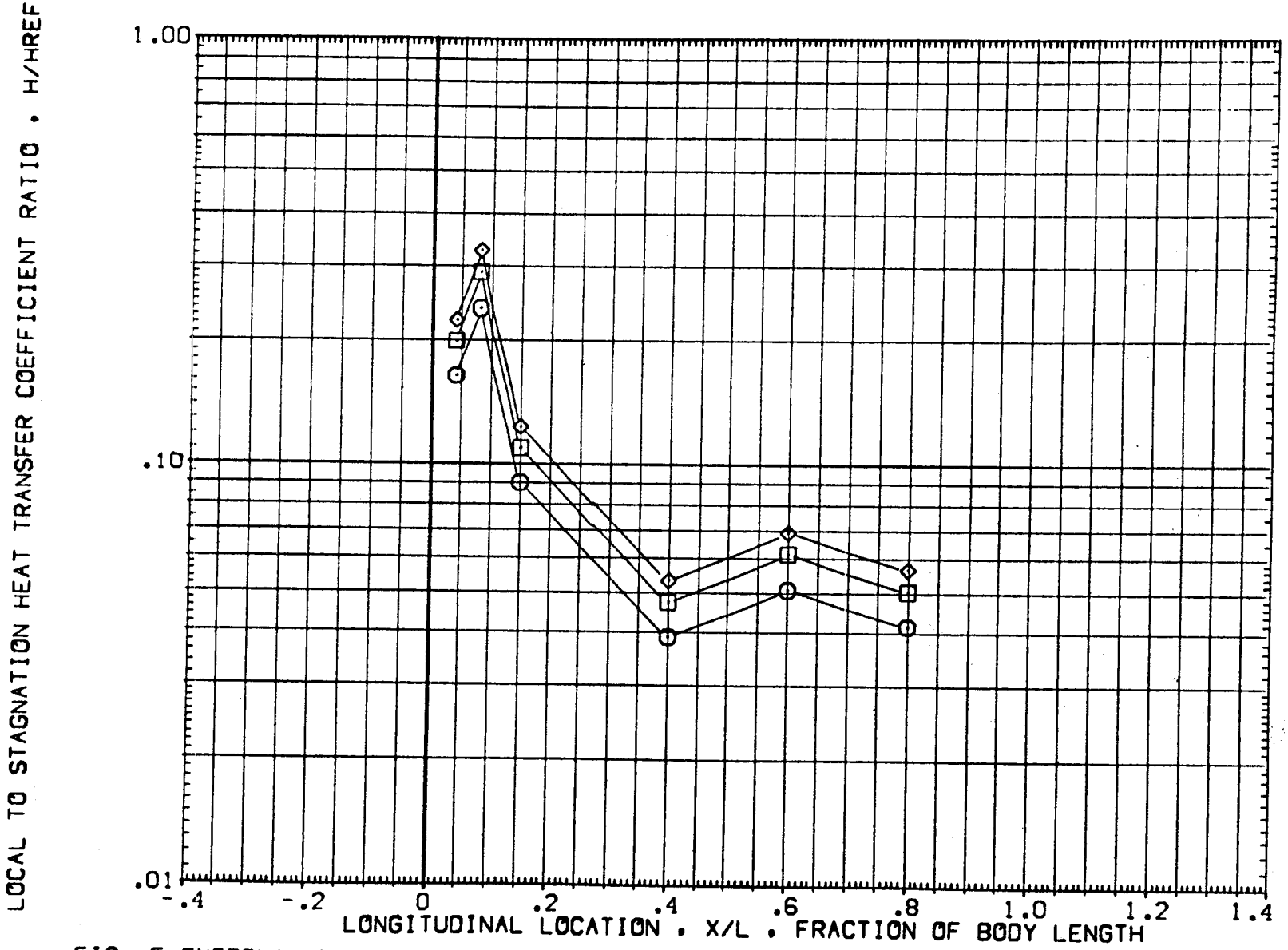


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO5)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITO5)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITO5)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

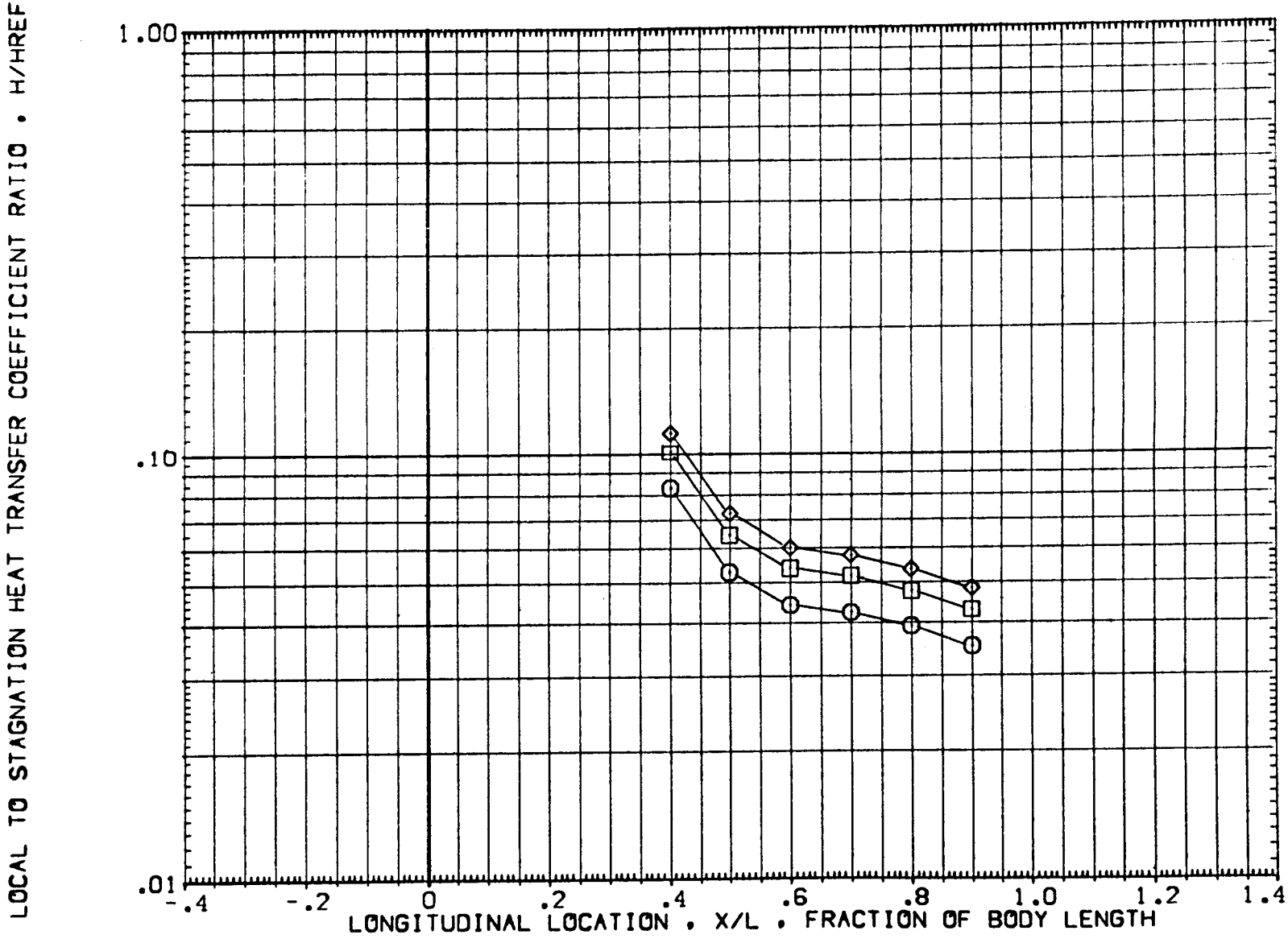


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

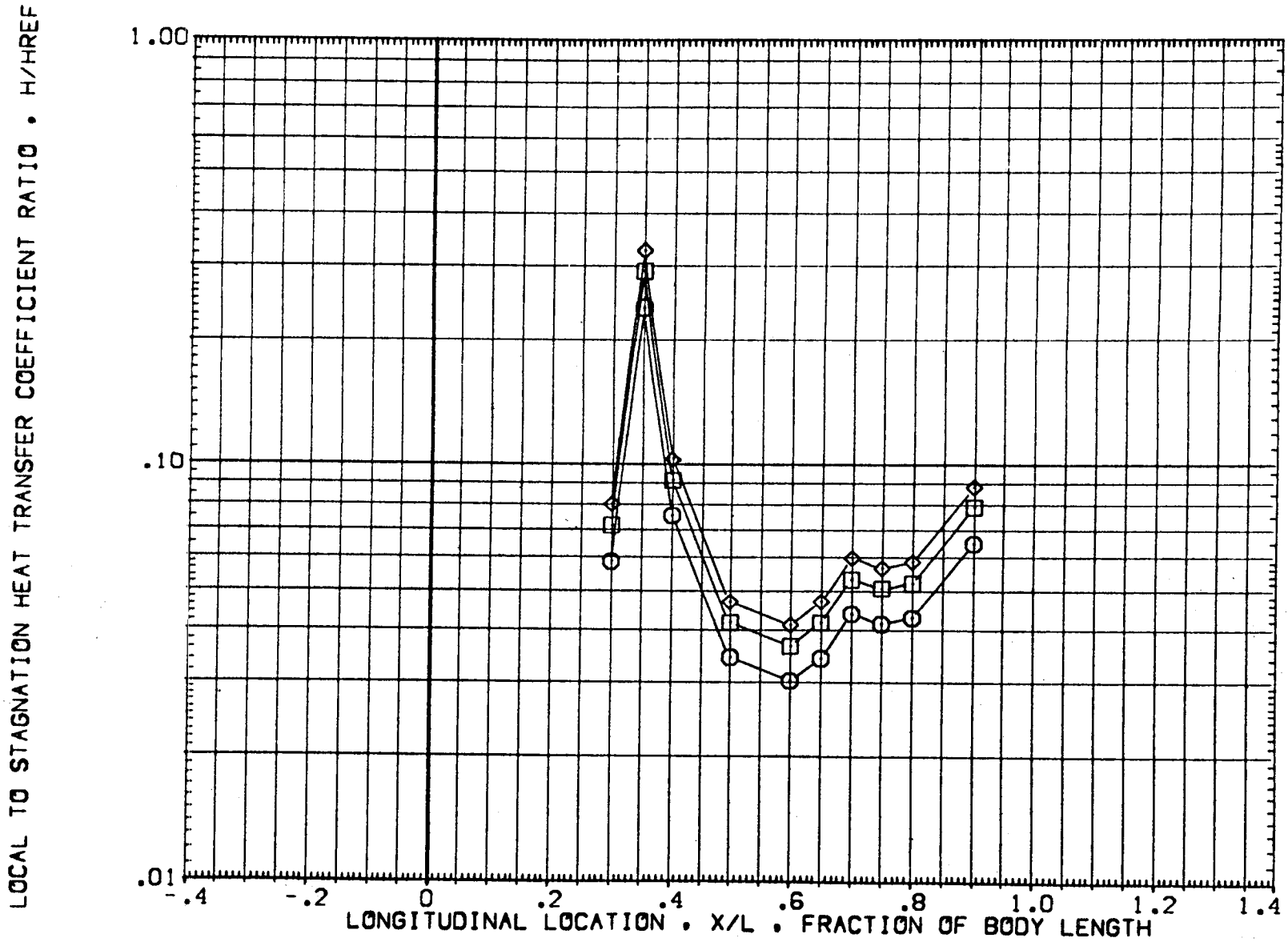


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

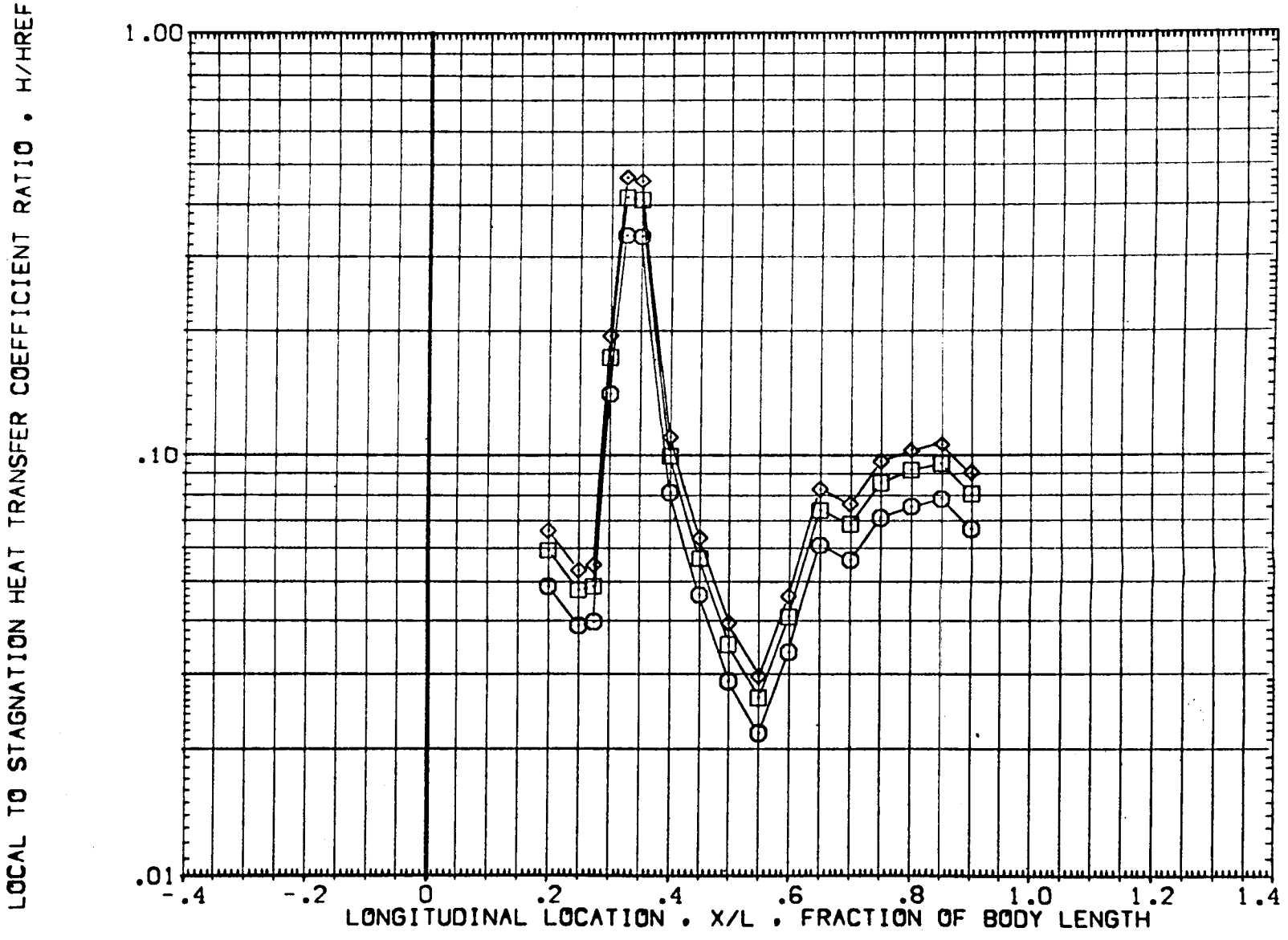


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	☐	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

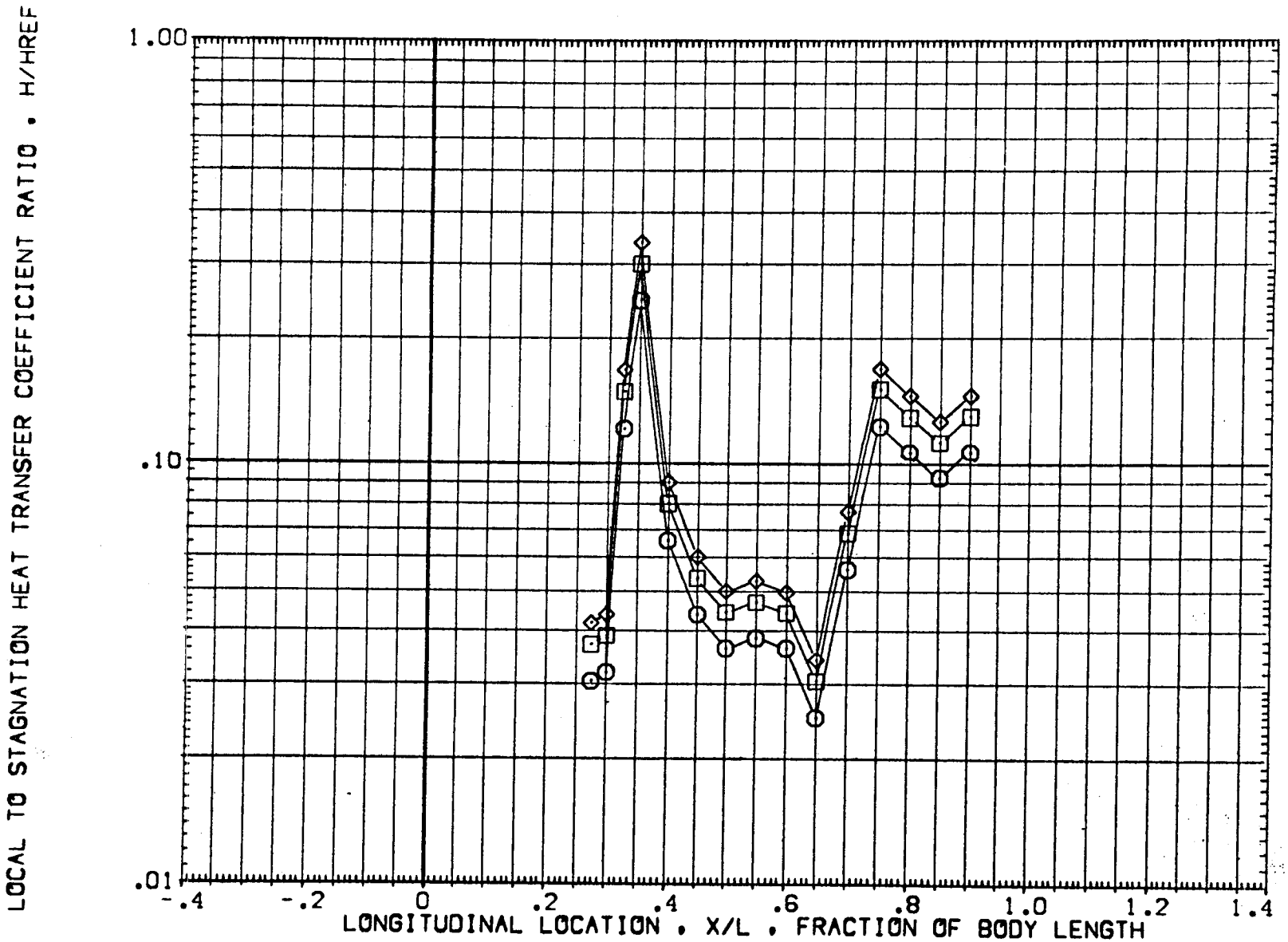


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

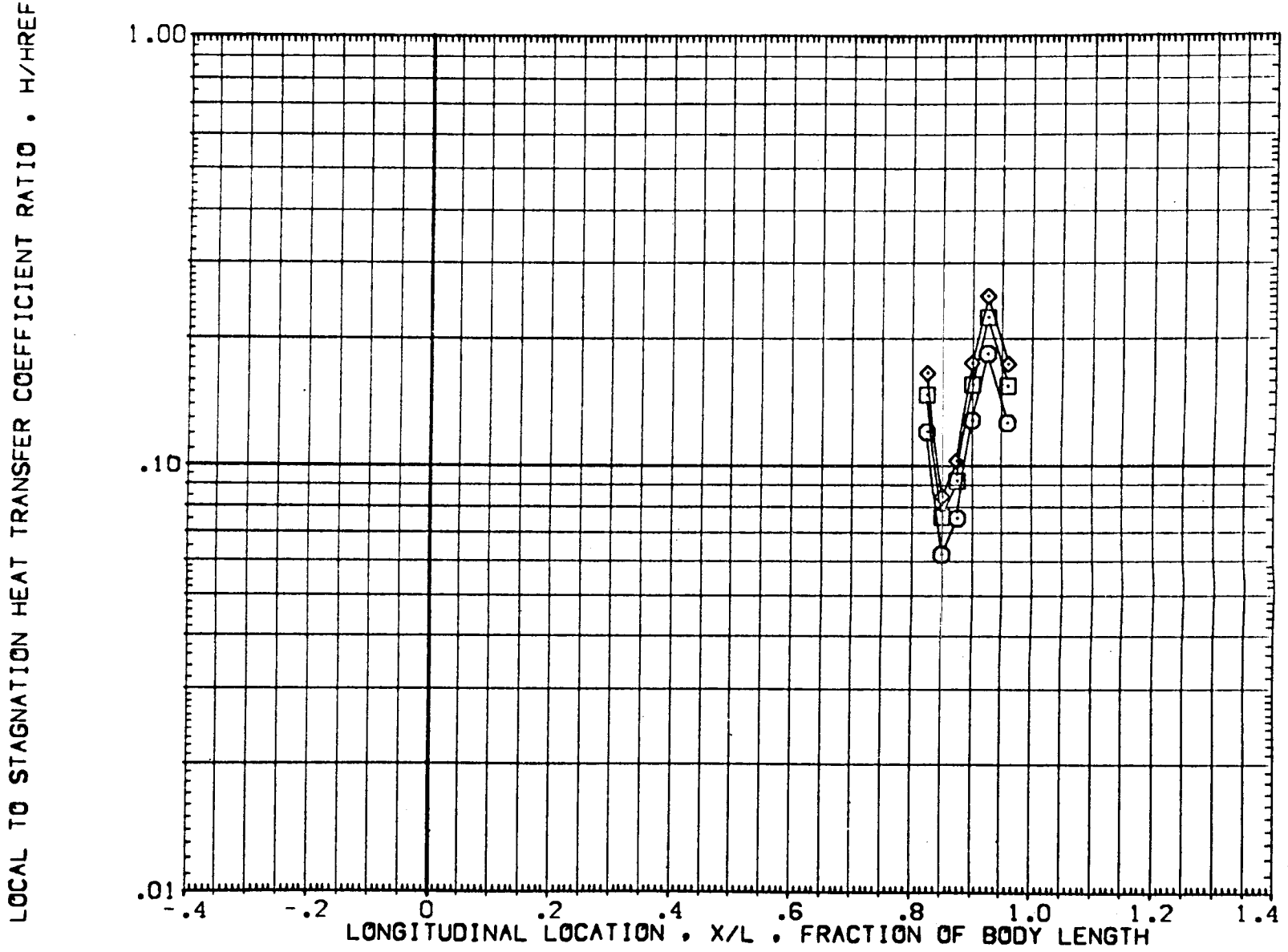


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1T05]	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE1T05]	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE1T05]	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

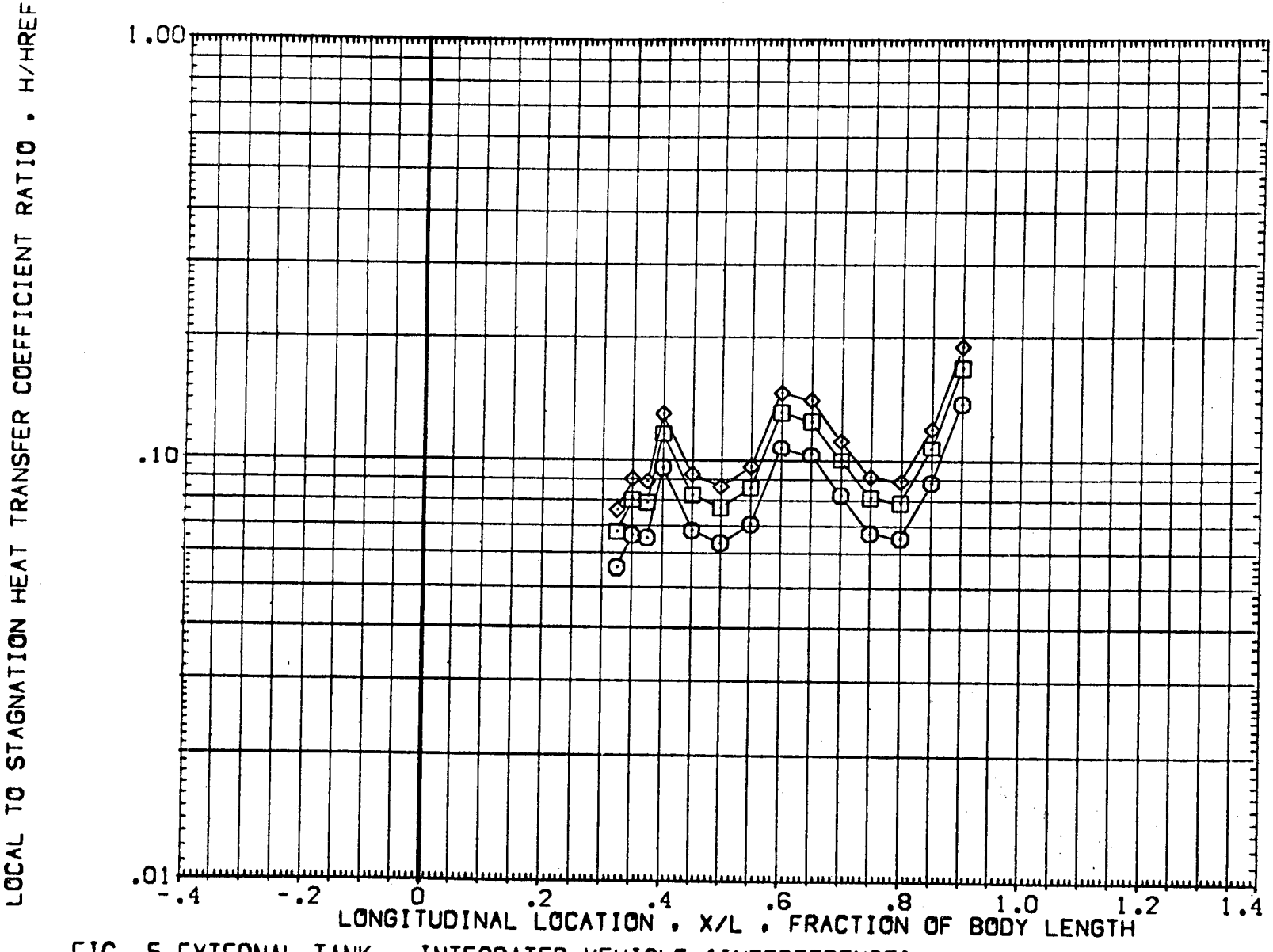


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

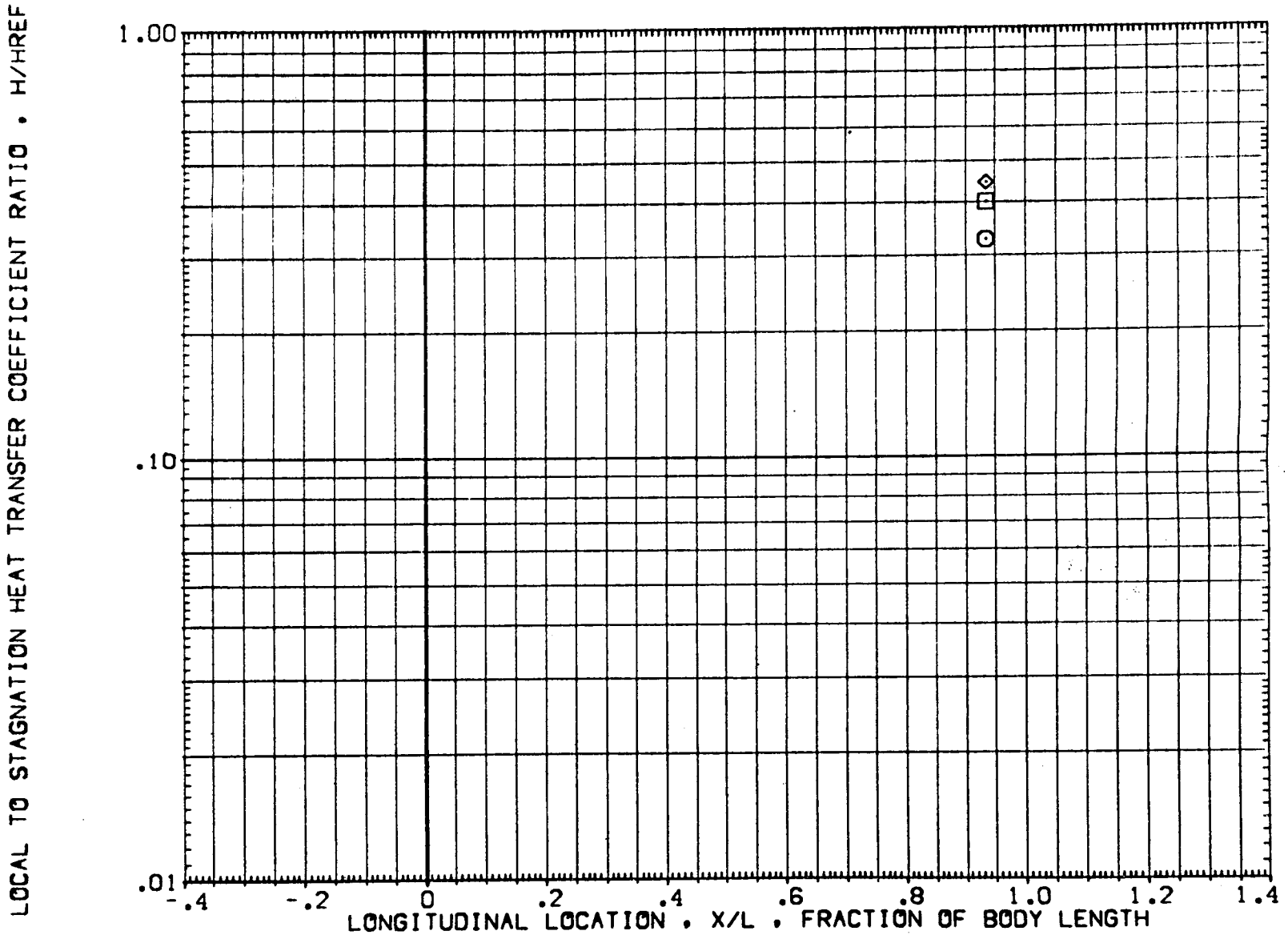


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

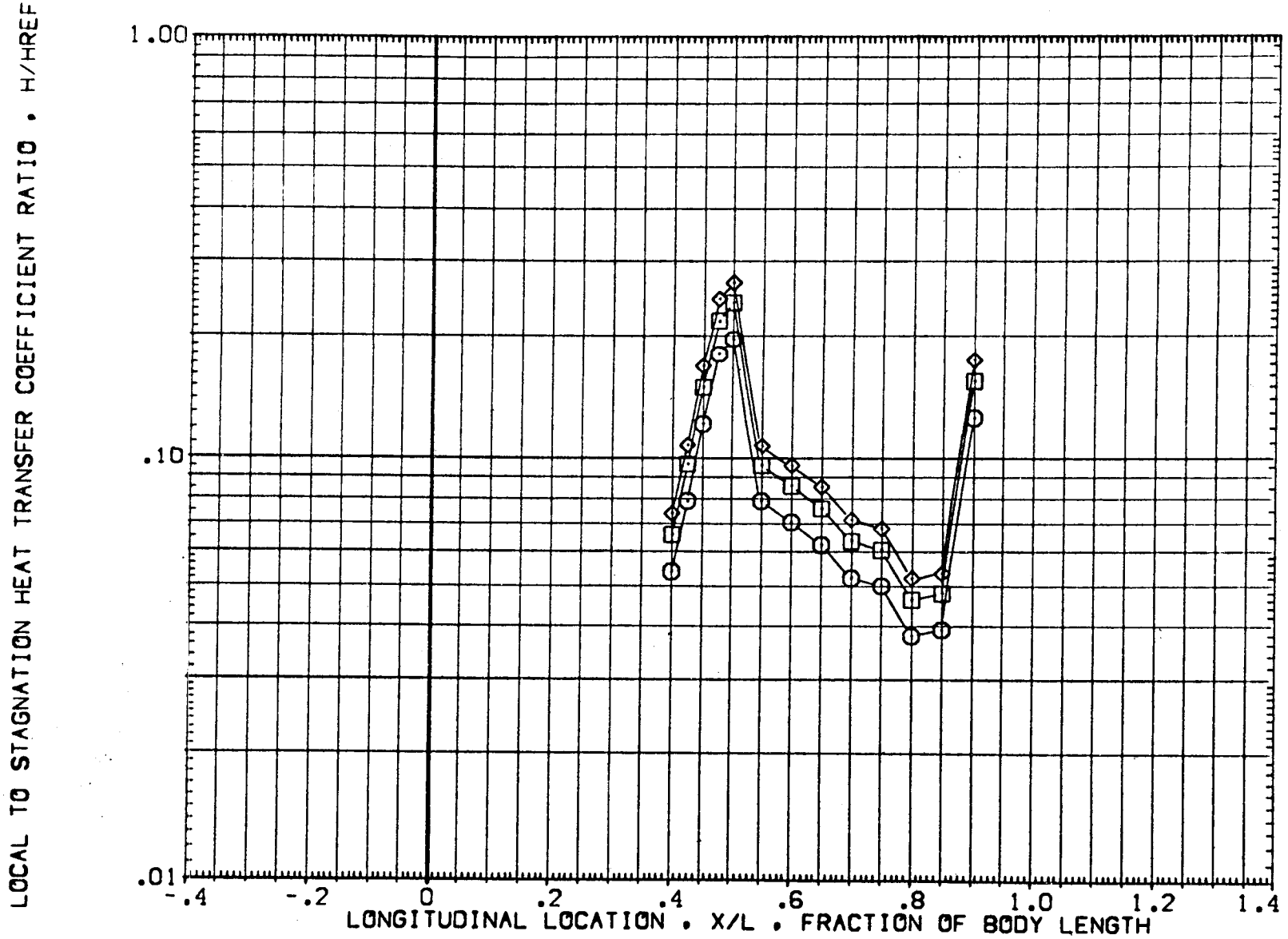


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITO5)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITO5)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITO5)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

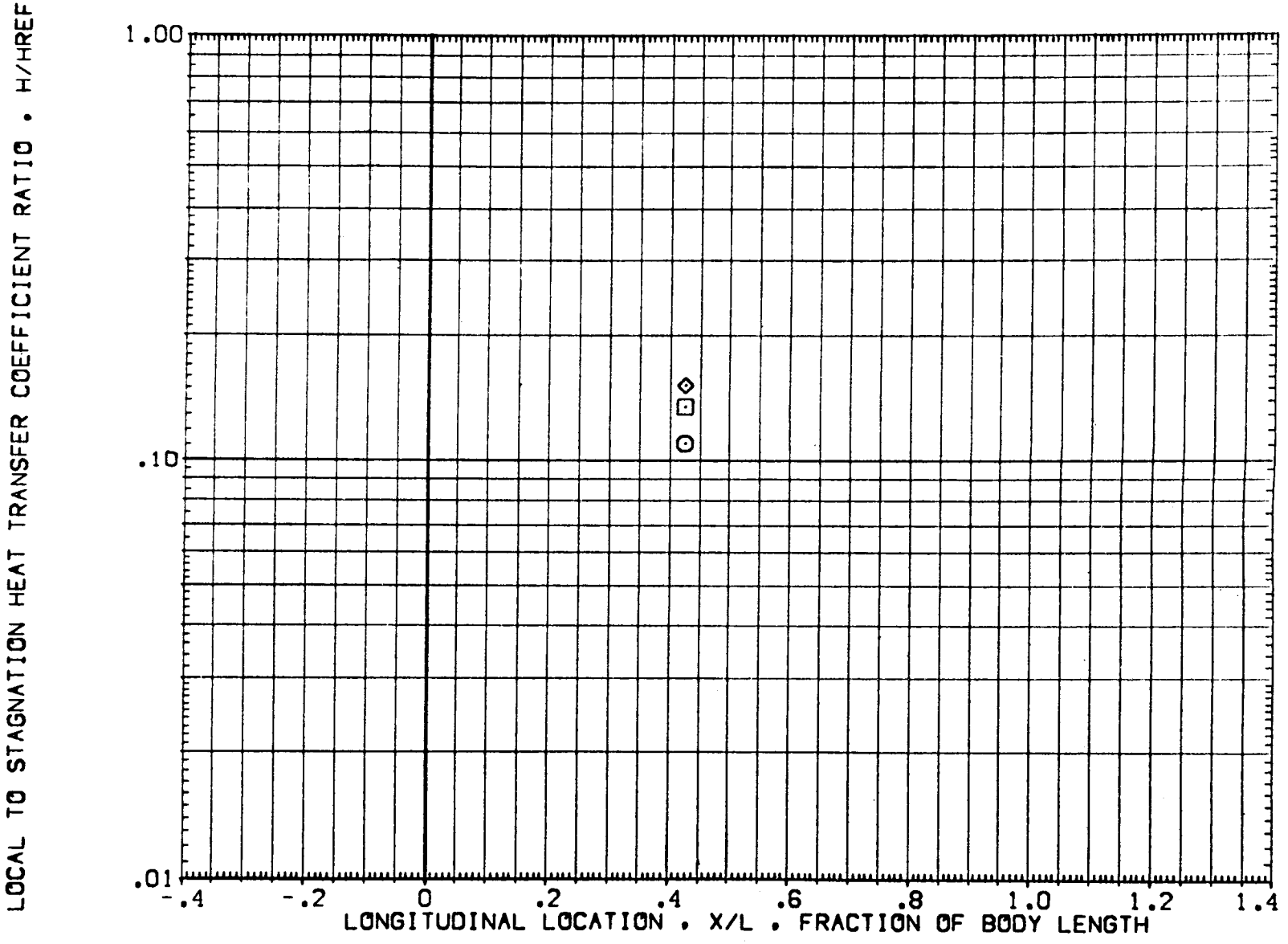


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

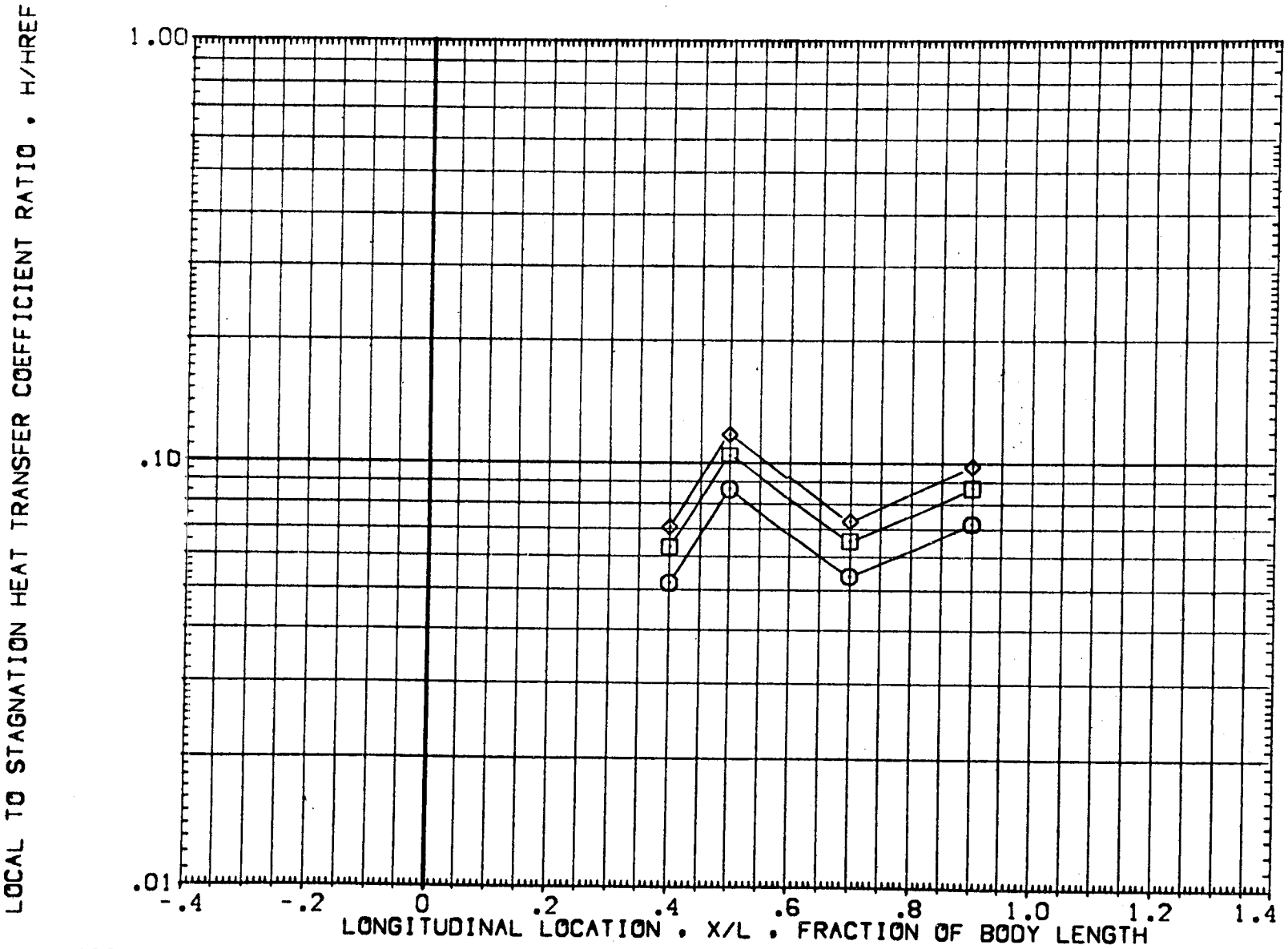


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

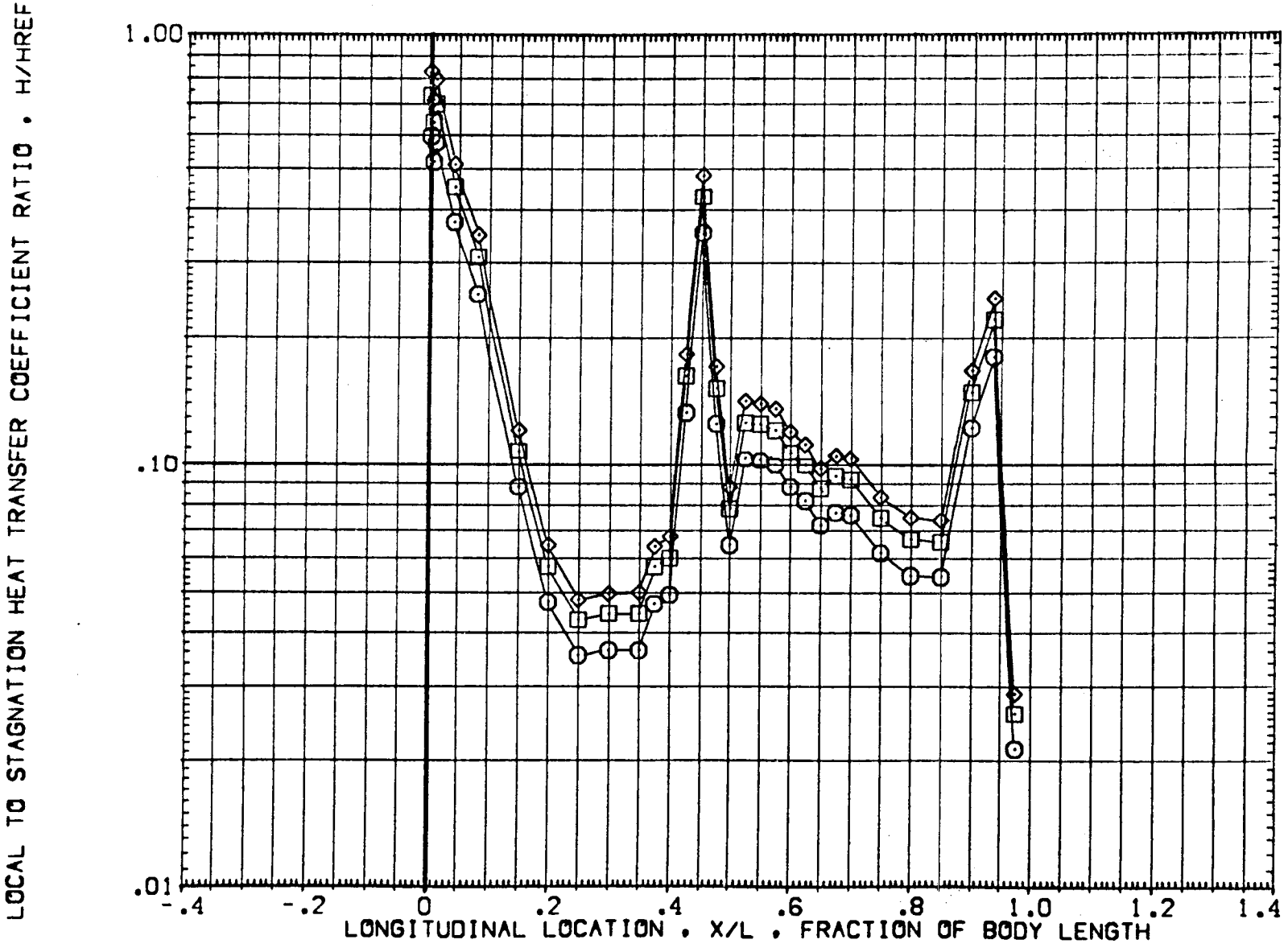


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

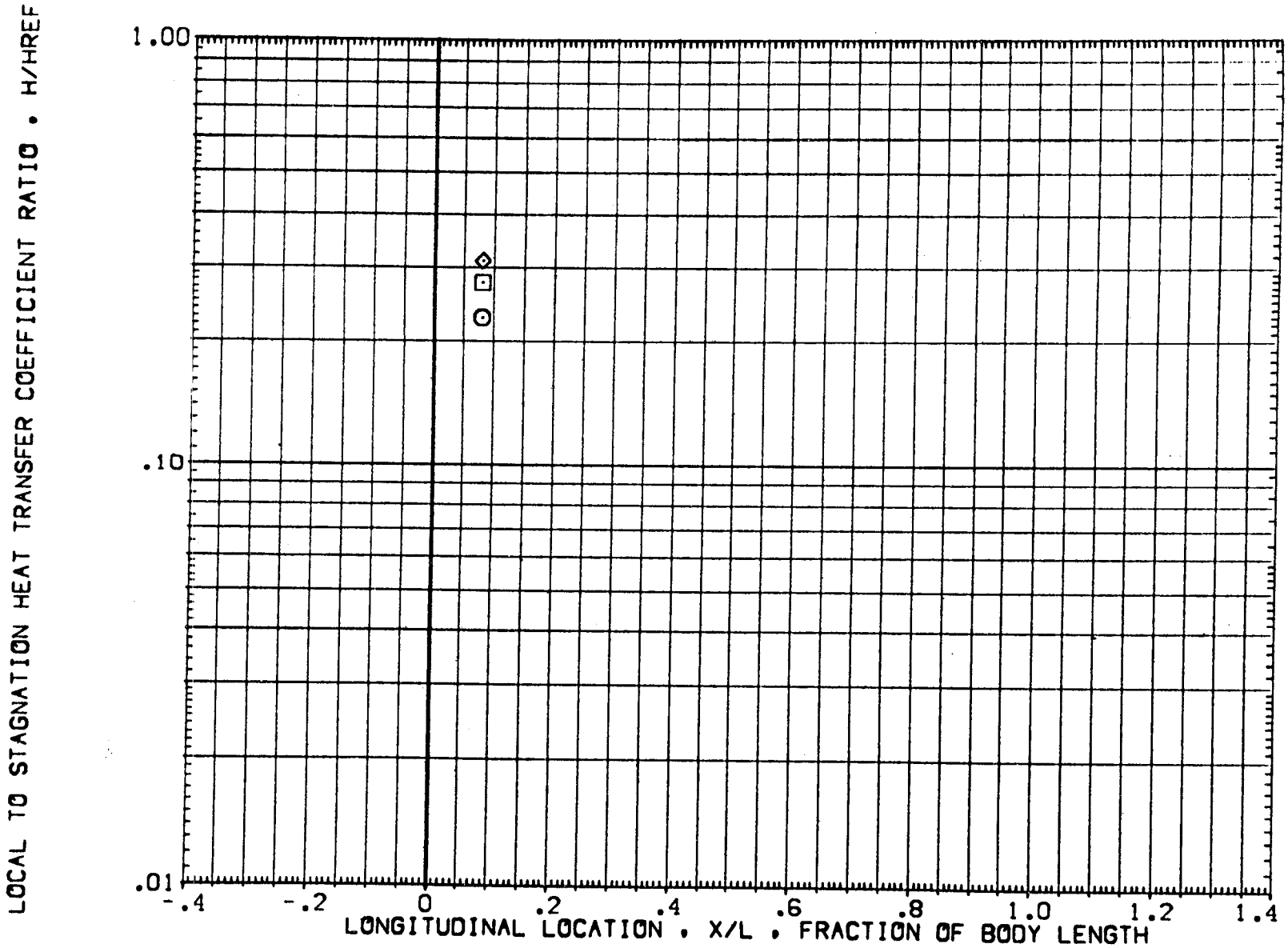


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

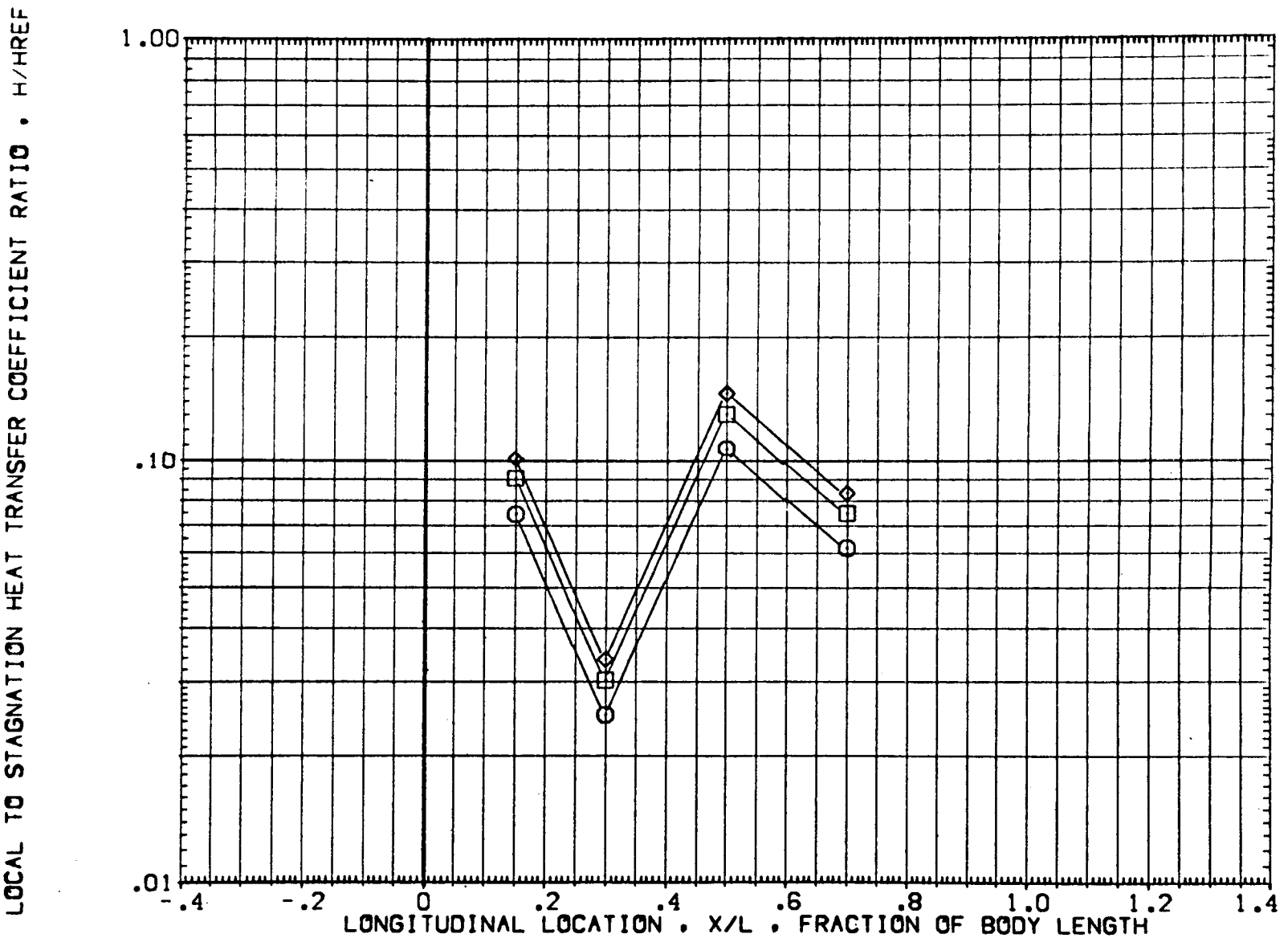


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

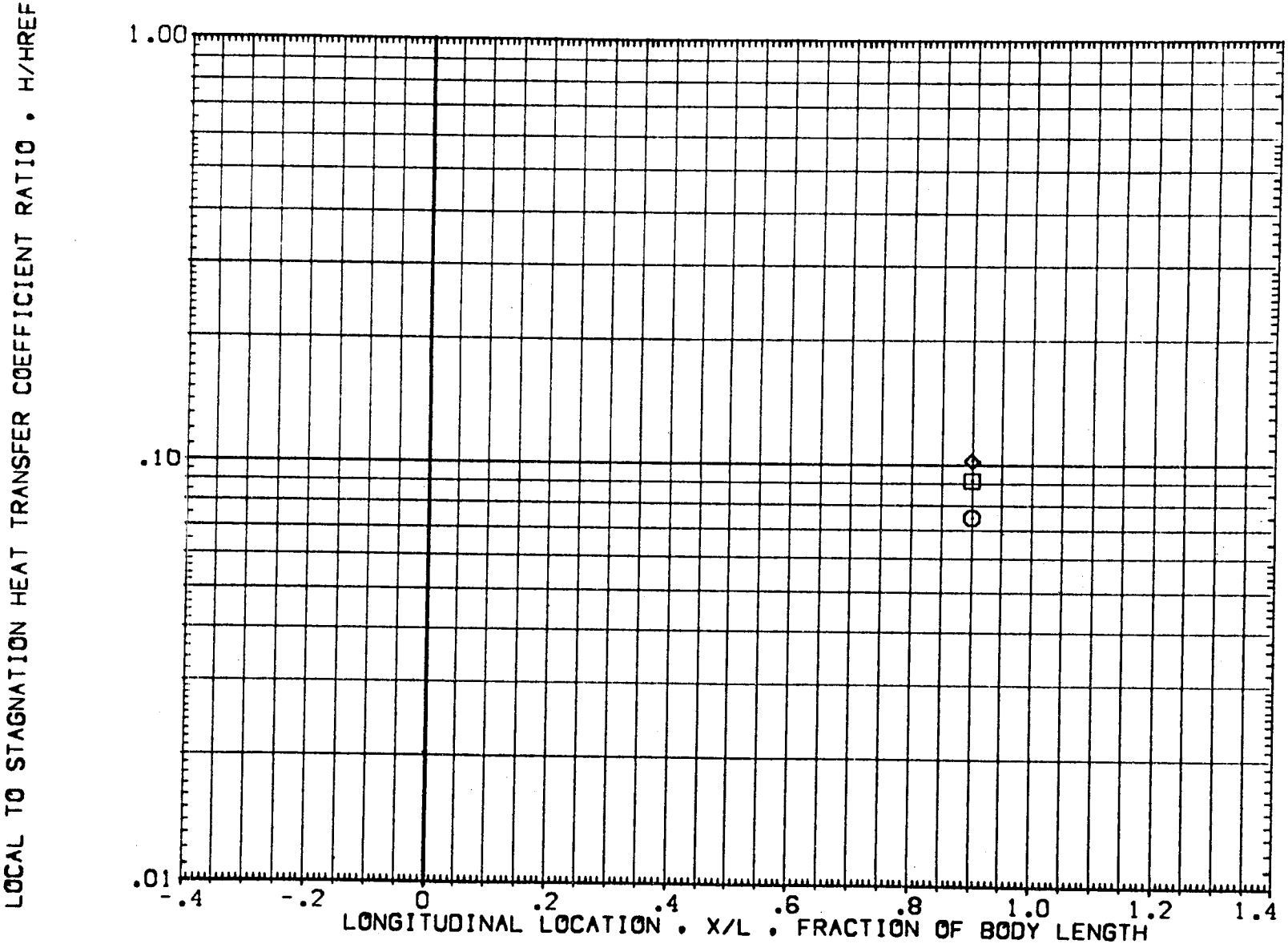


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

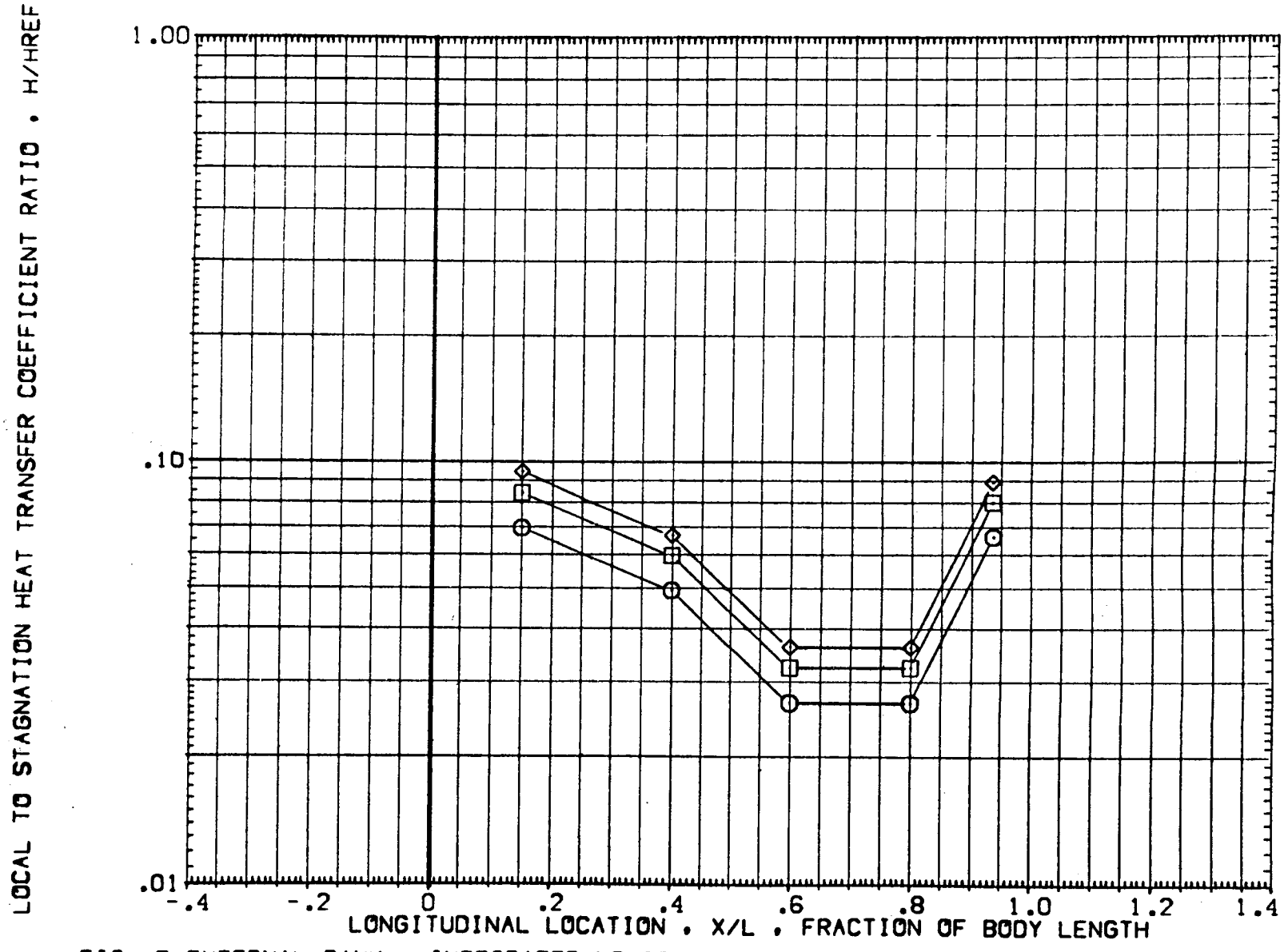


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

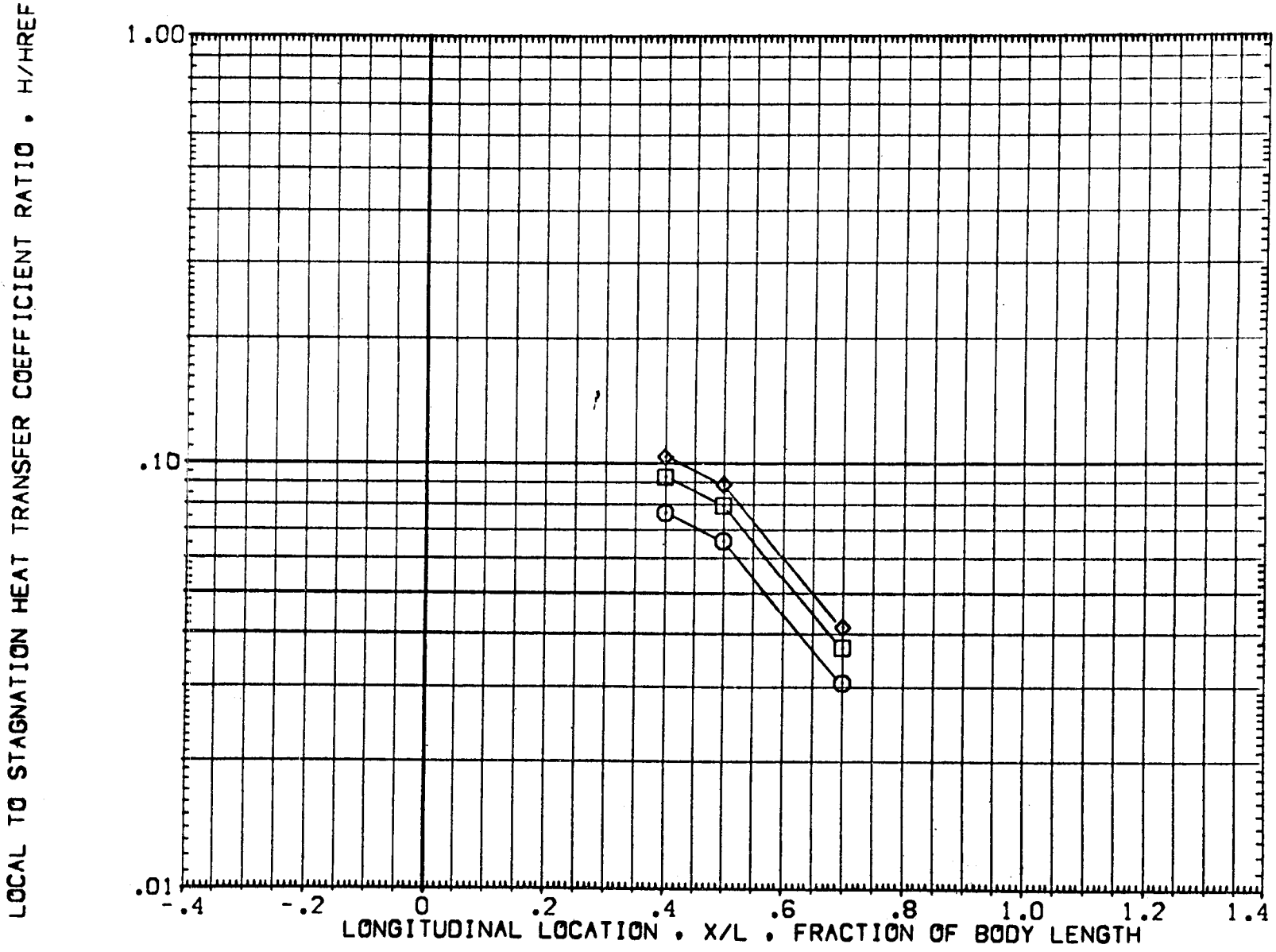


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

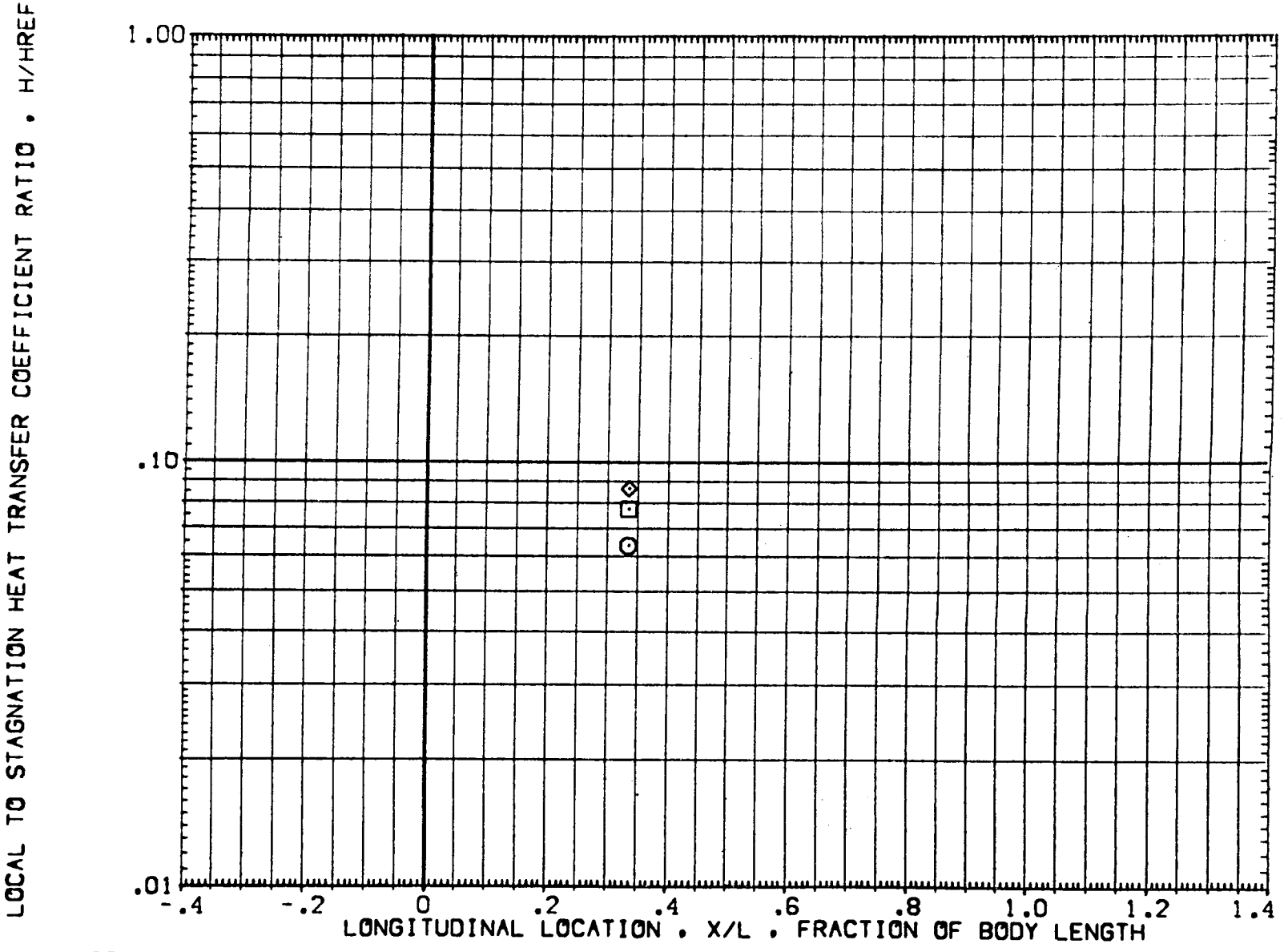


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

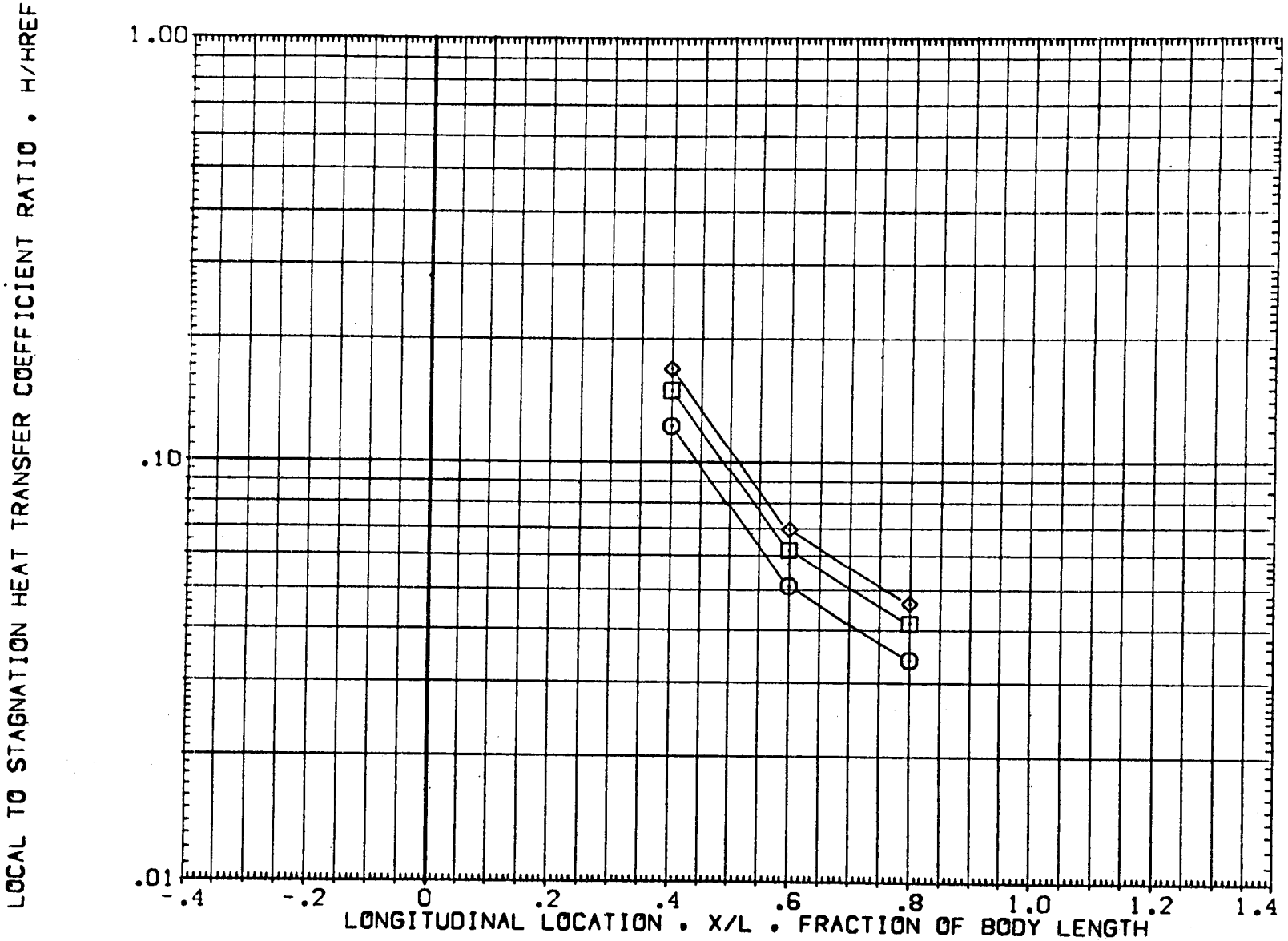


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

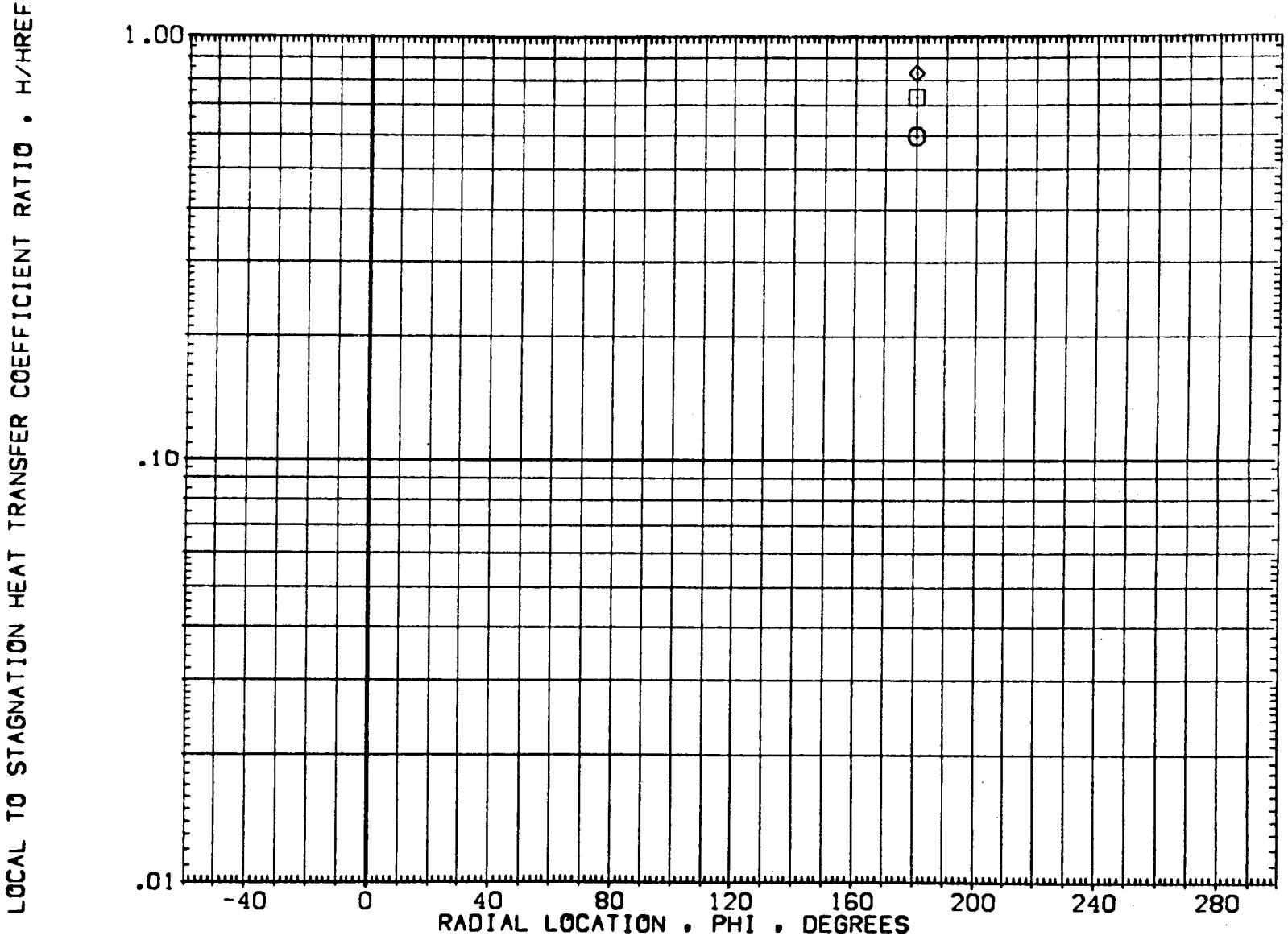


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

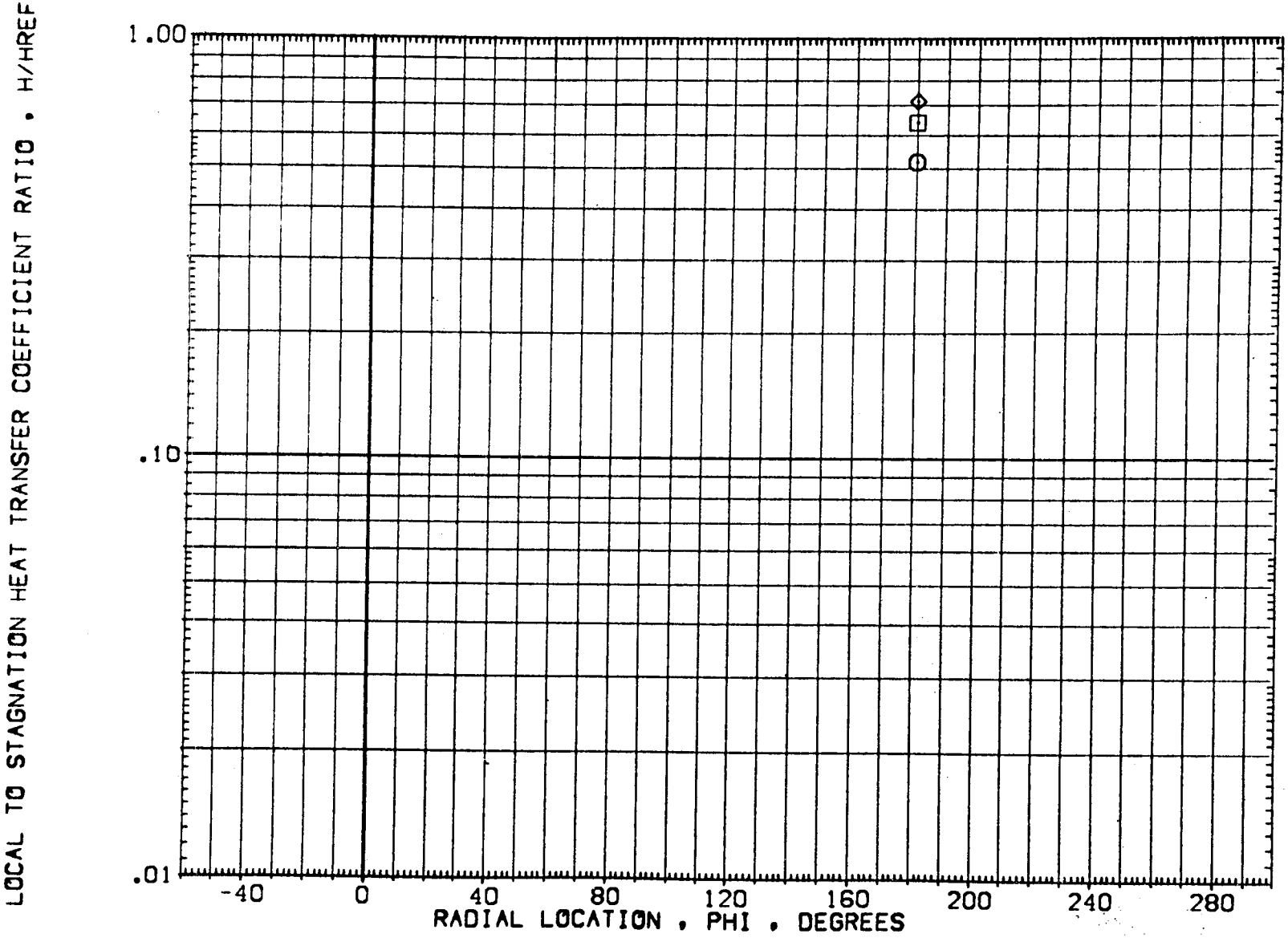


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

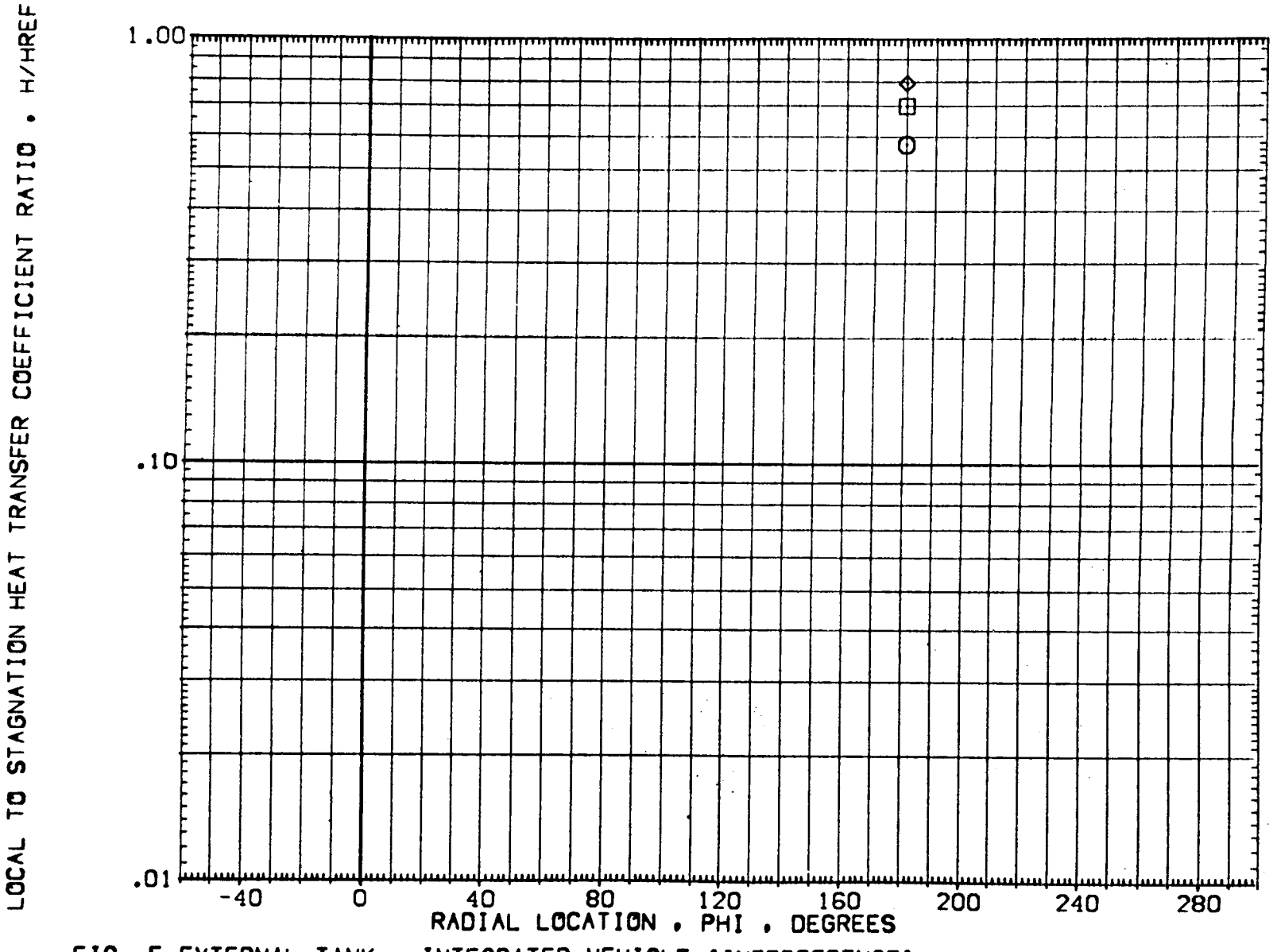


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

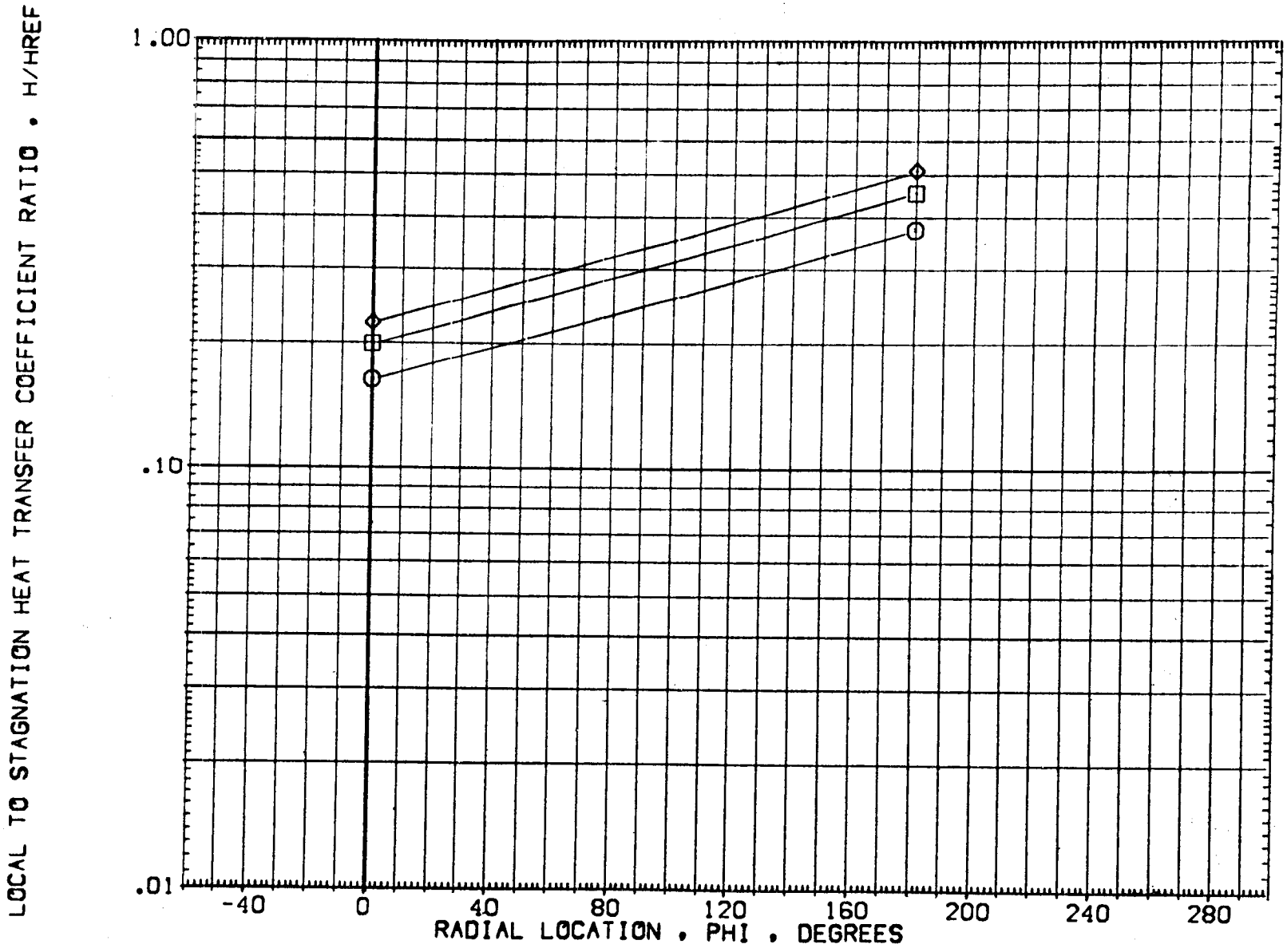


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

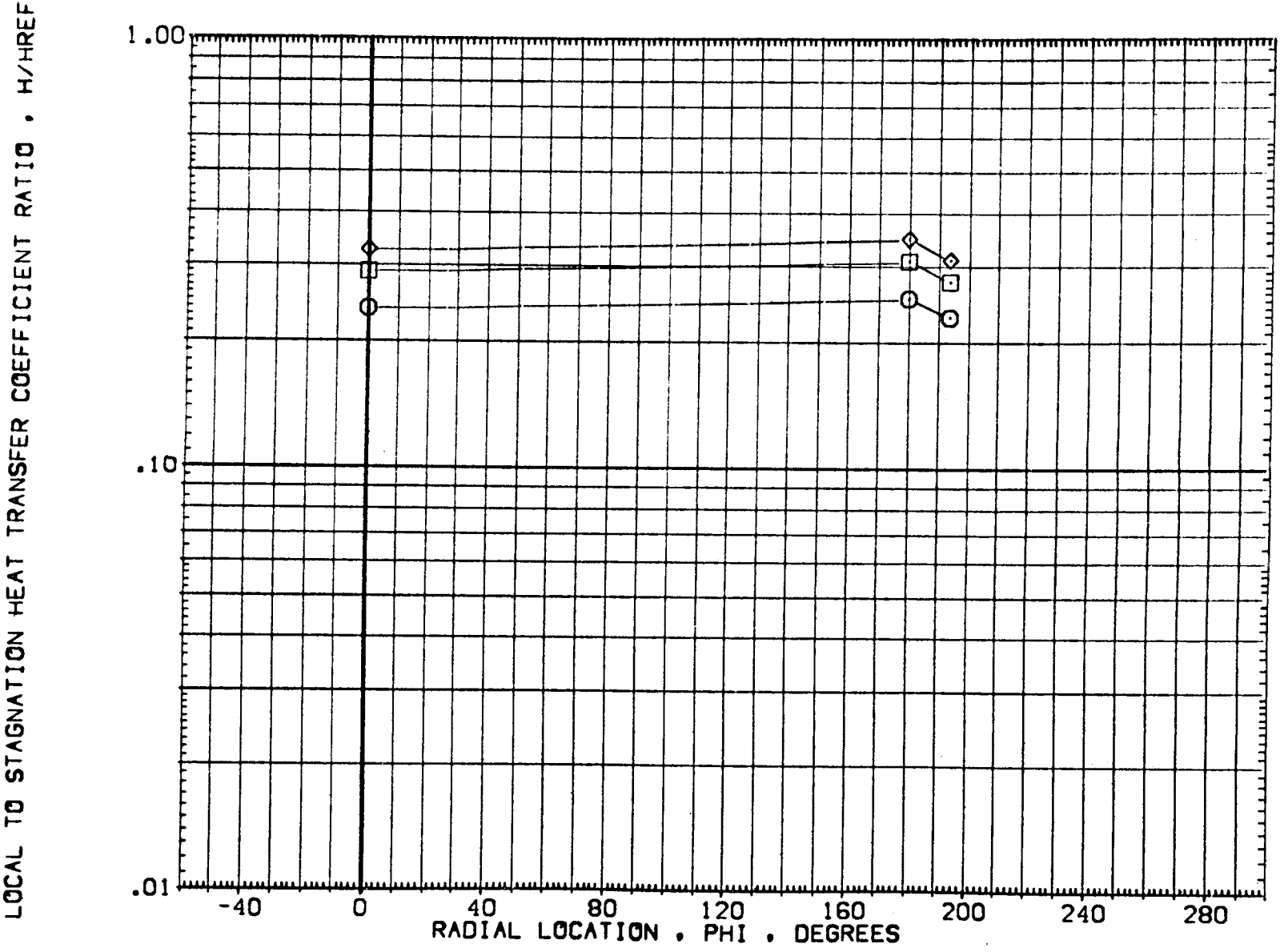


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

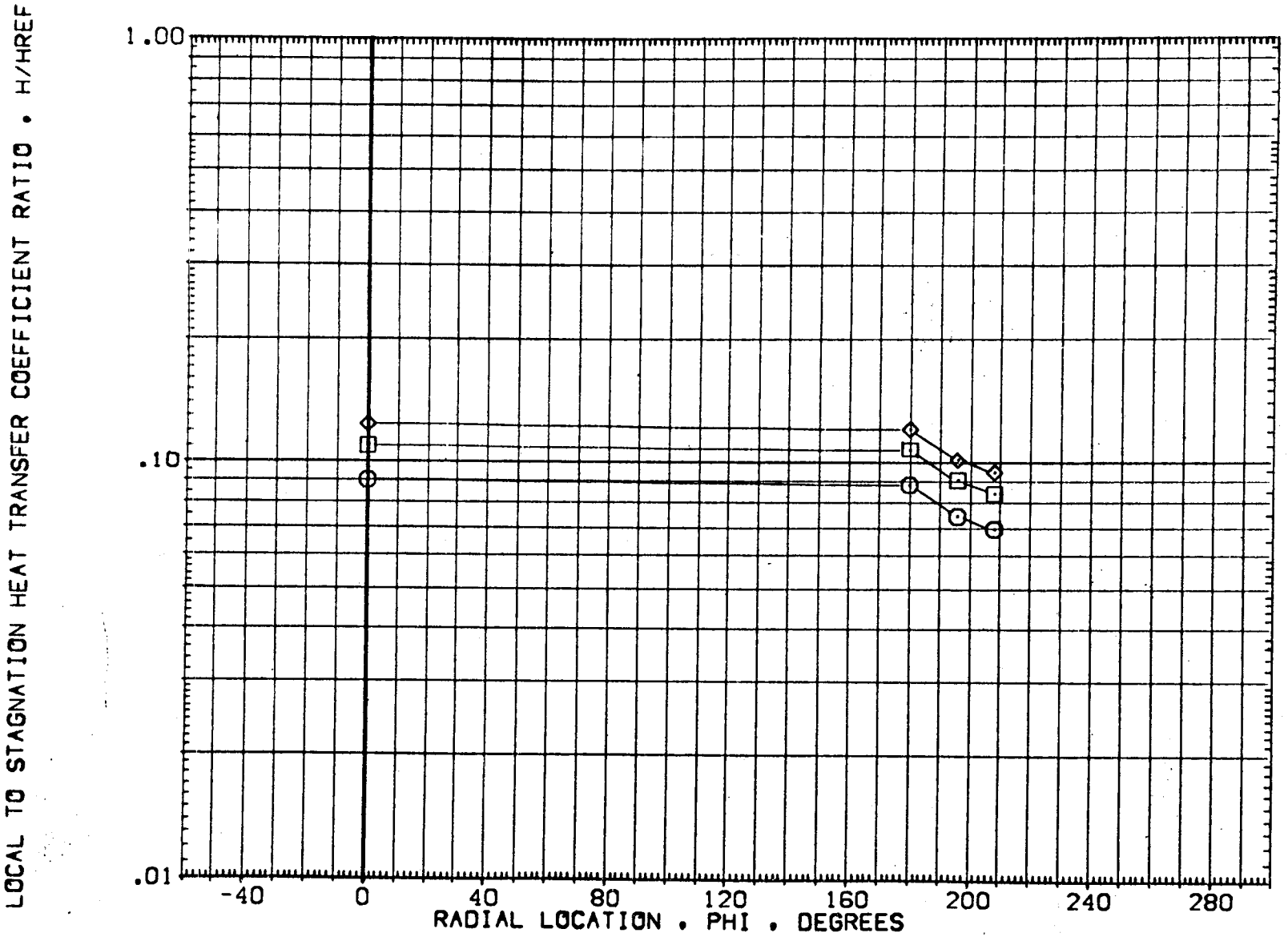


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!TOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE!TOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE!TOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

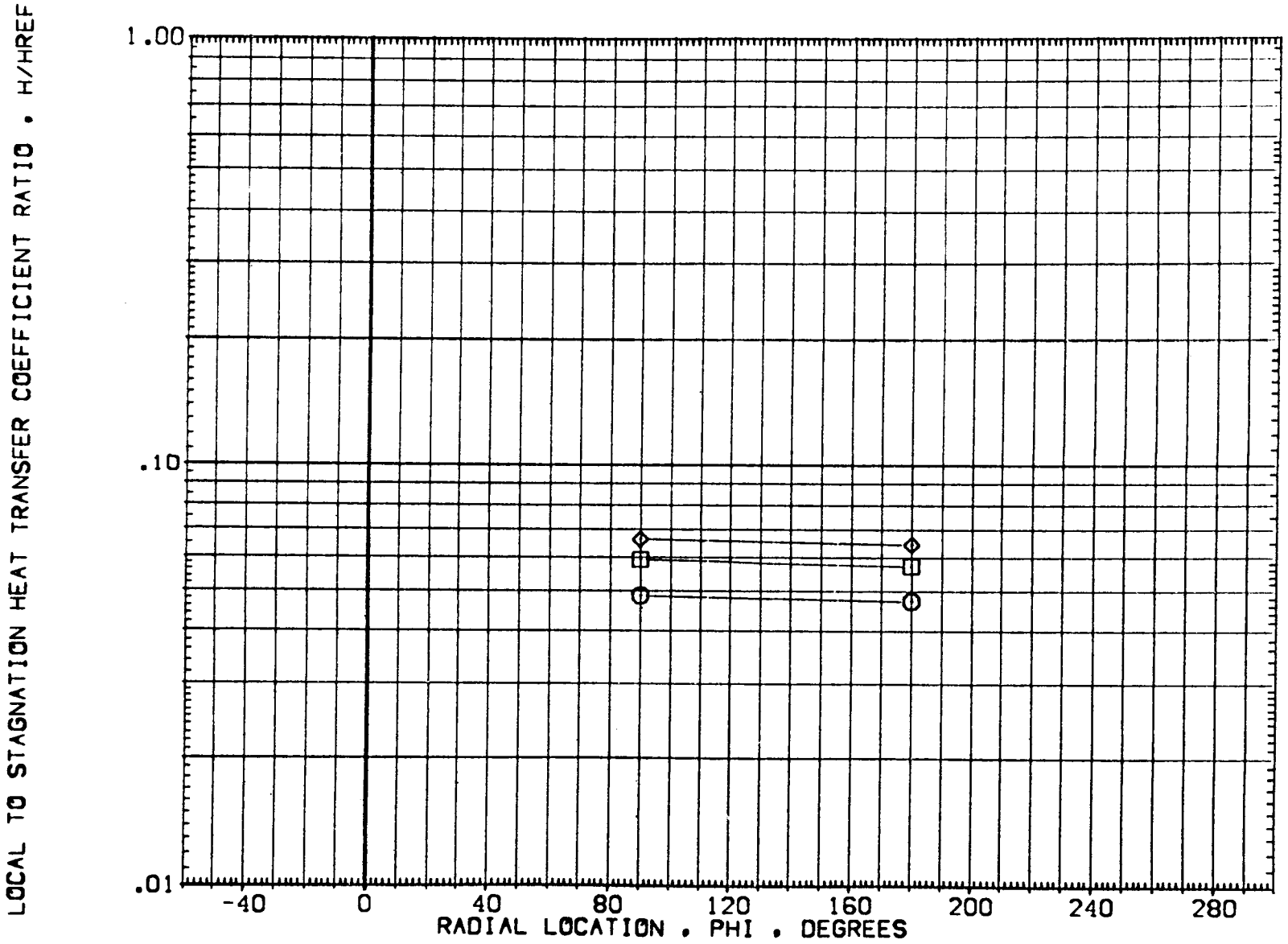


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

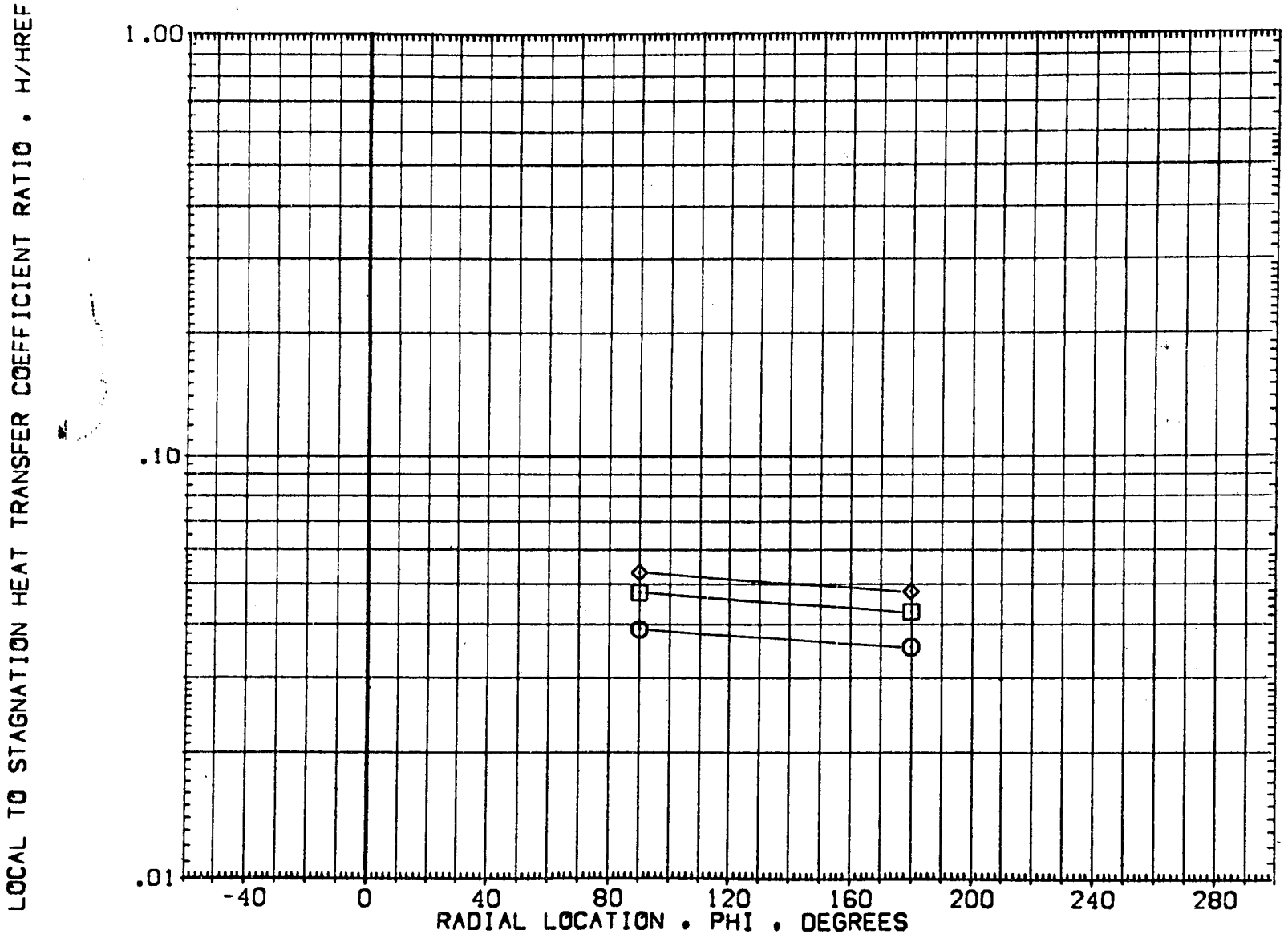


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

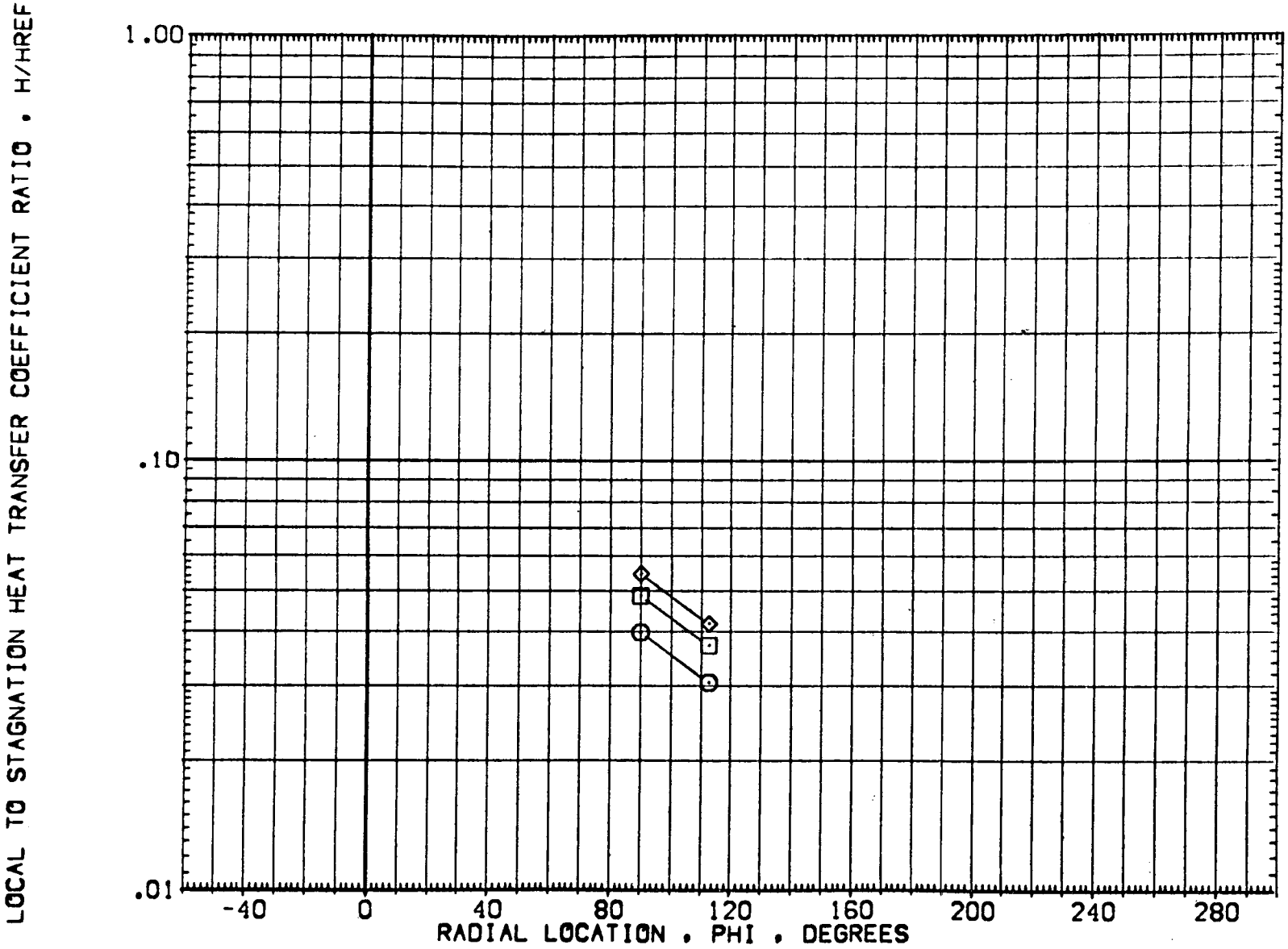


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

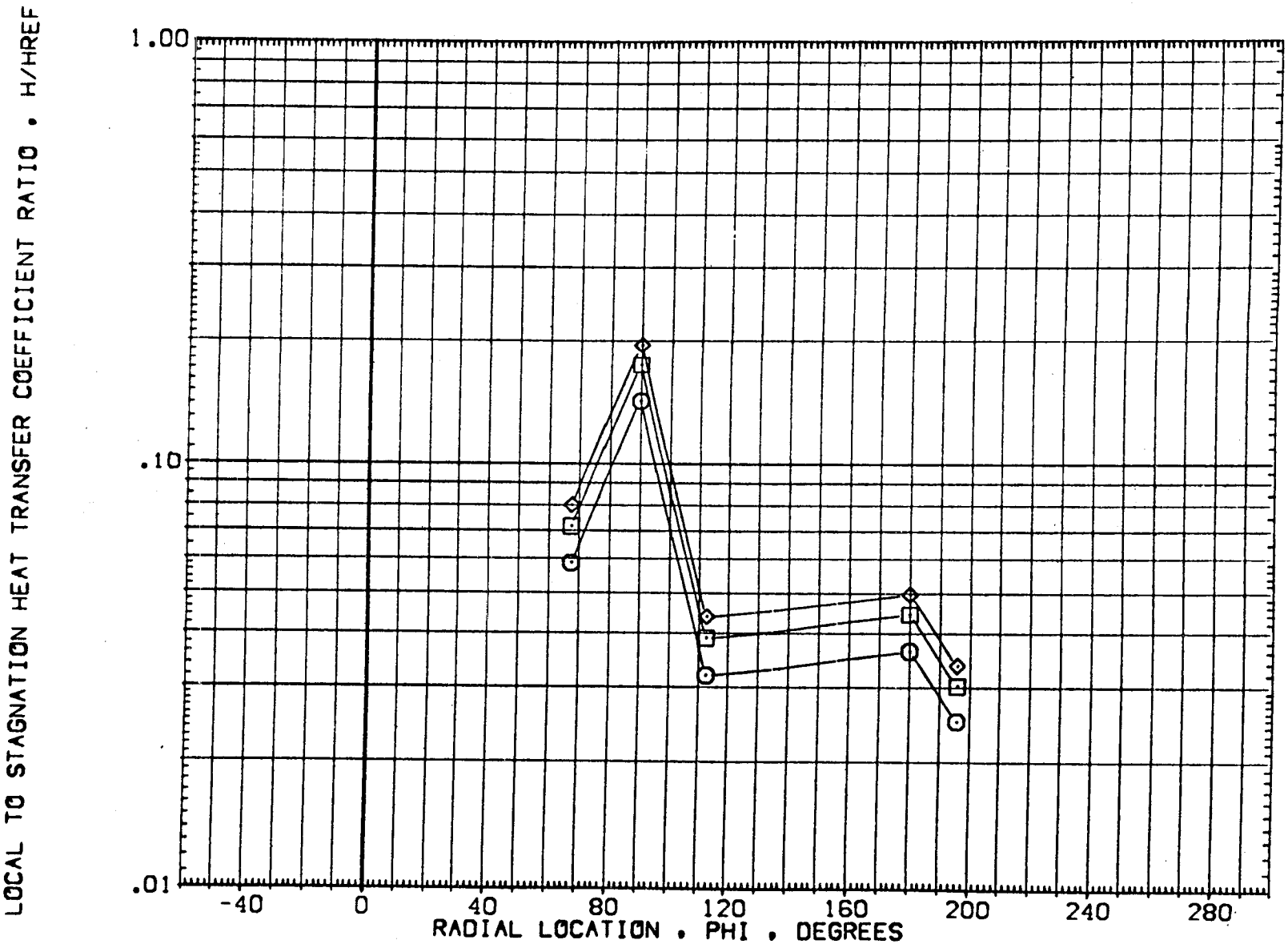


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

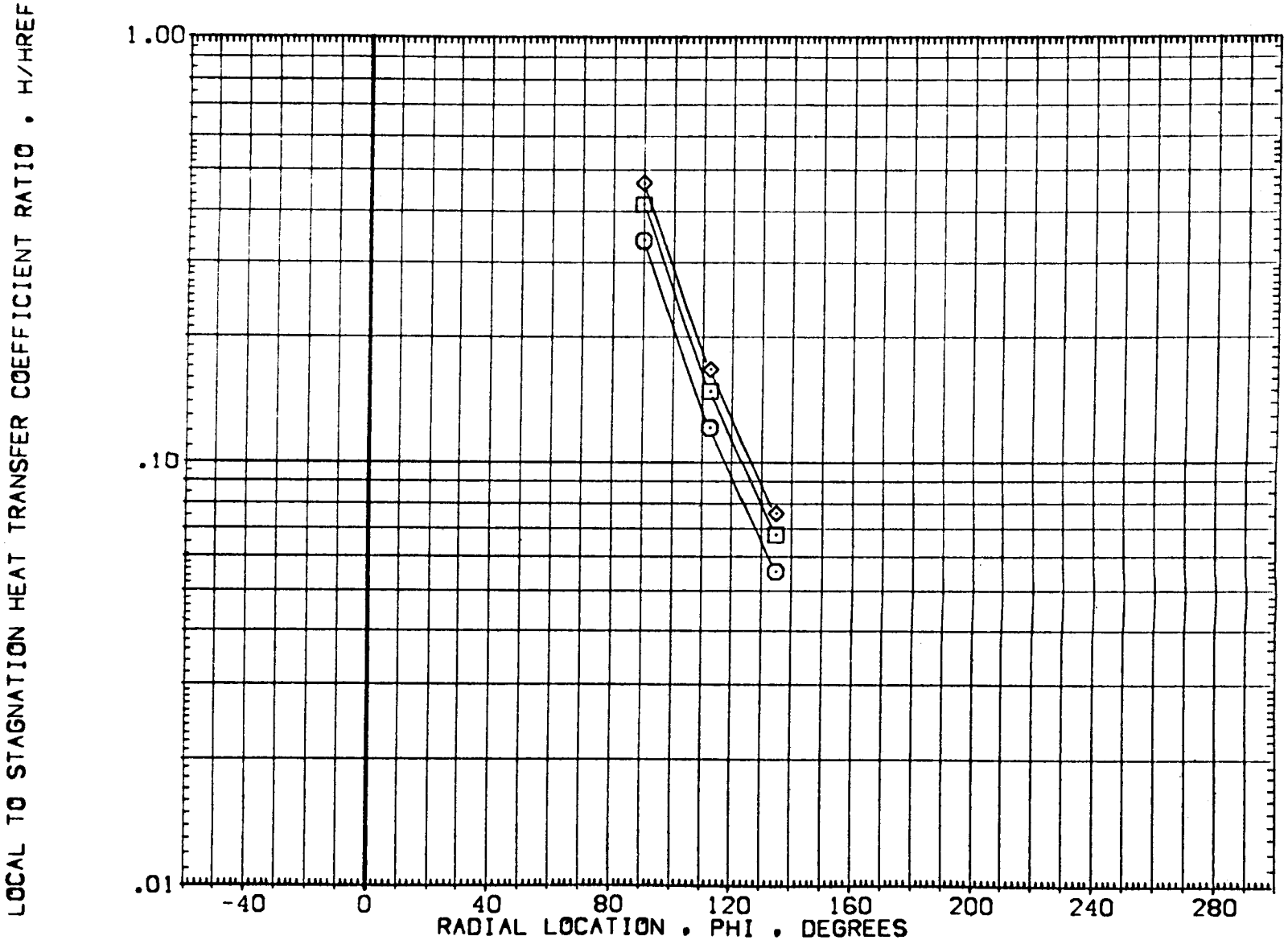


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

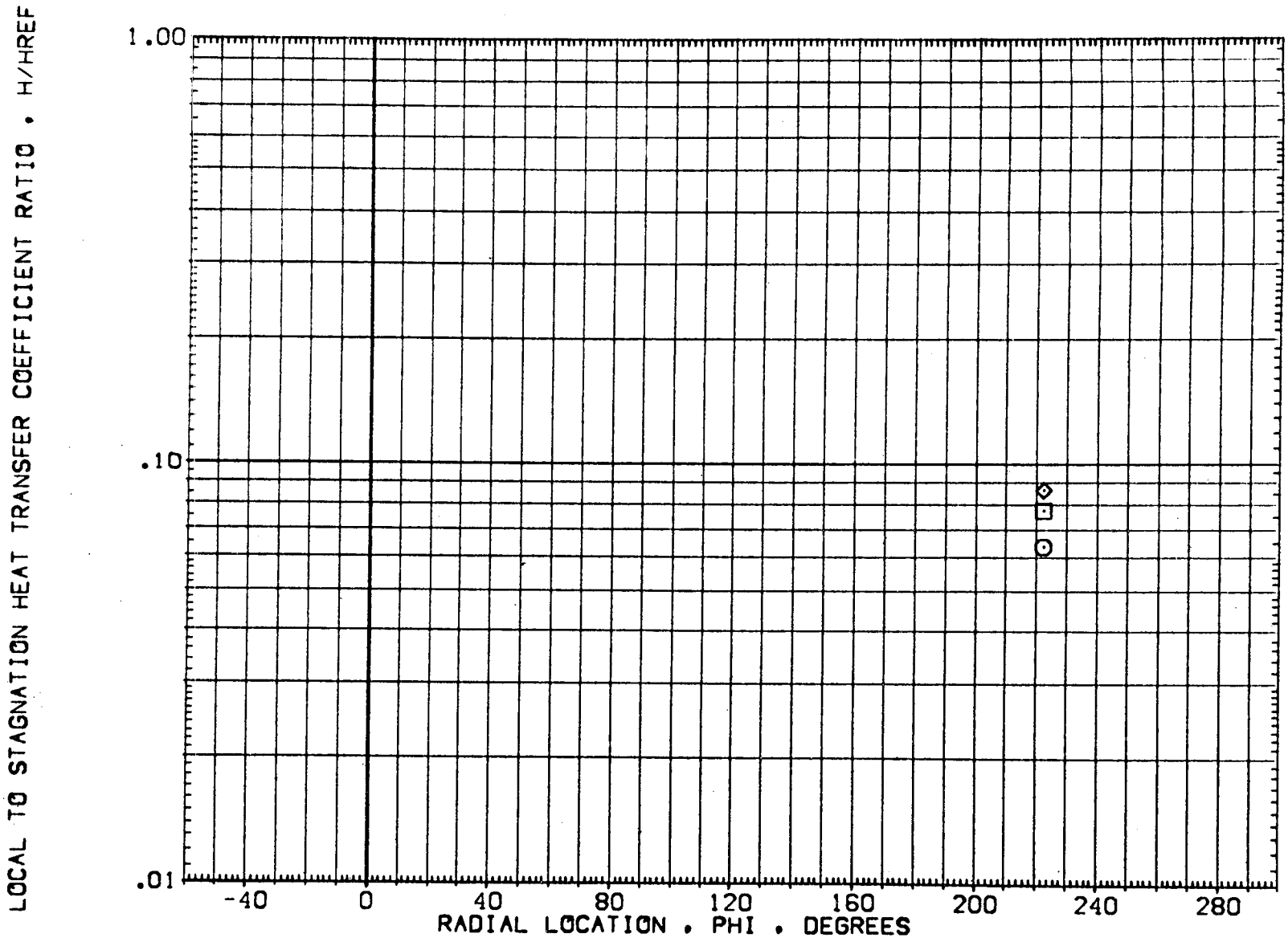


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

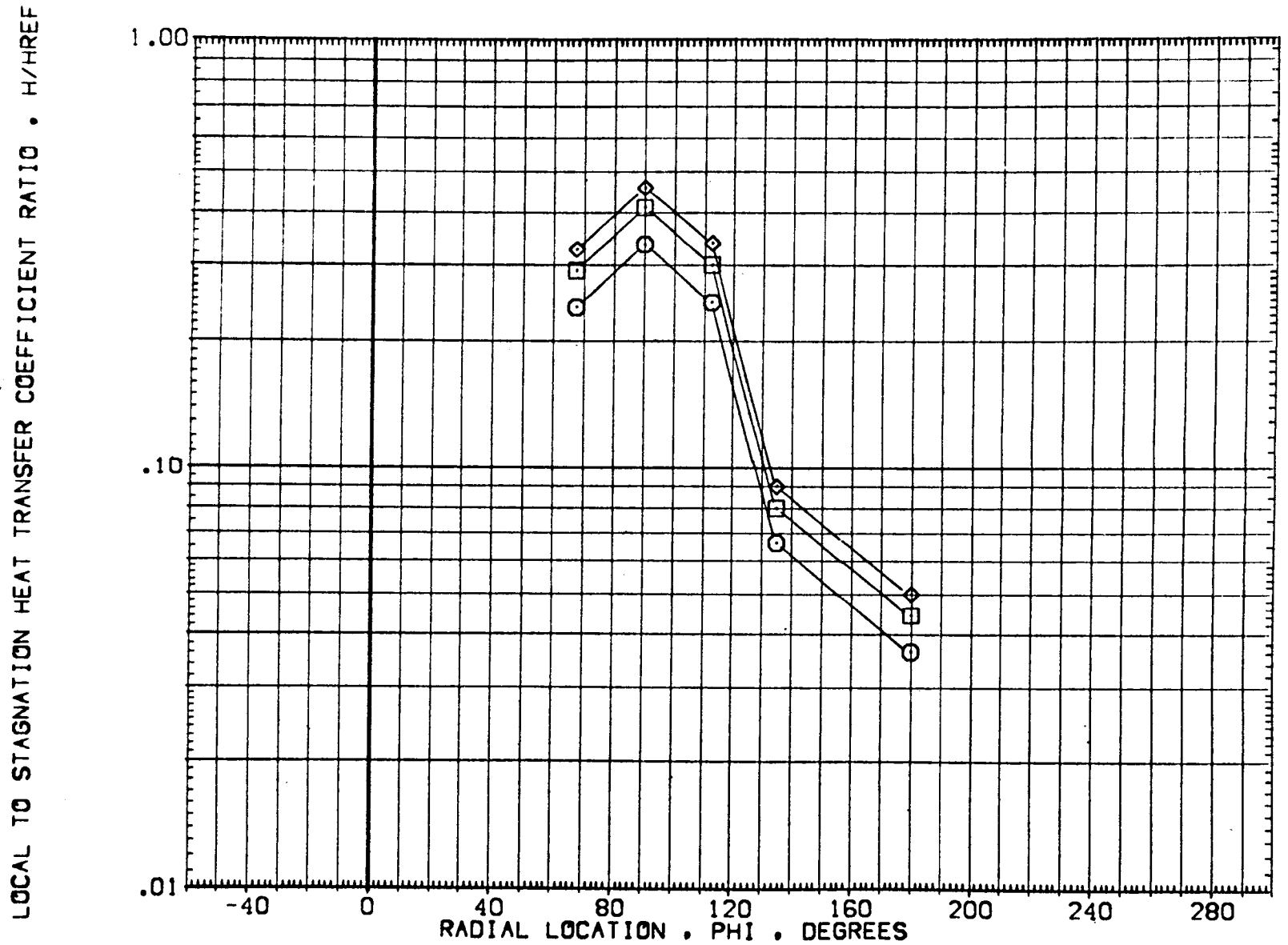


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

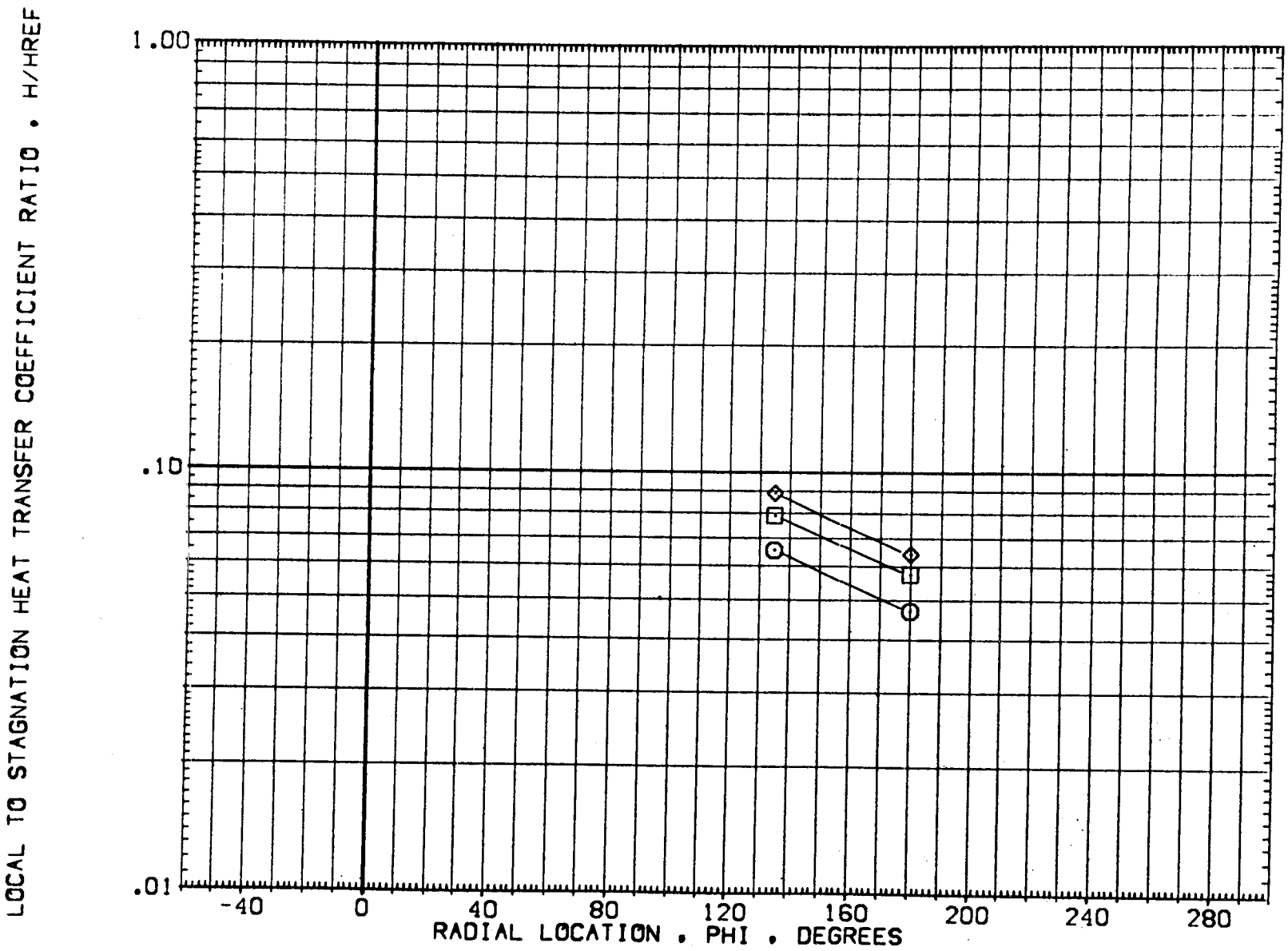


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

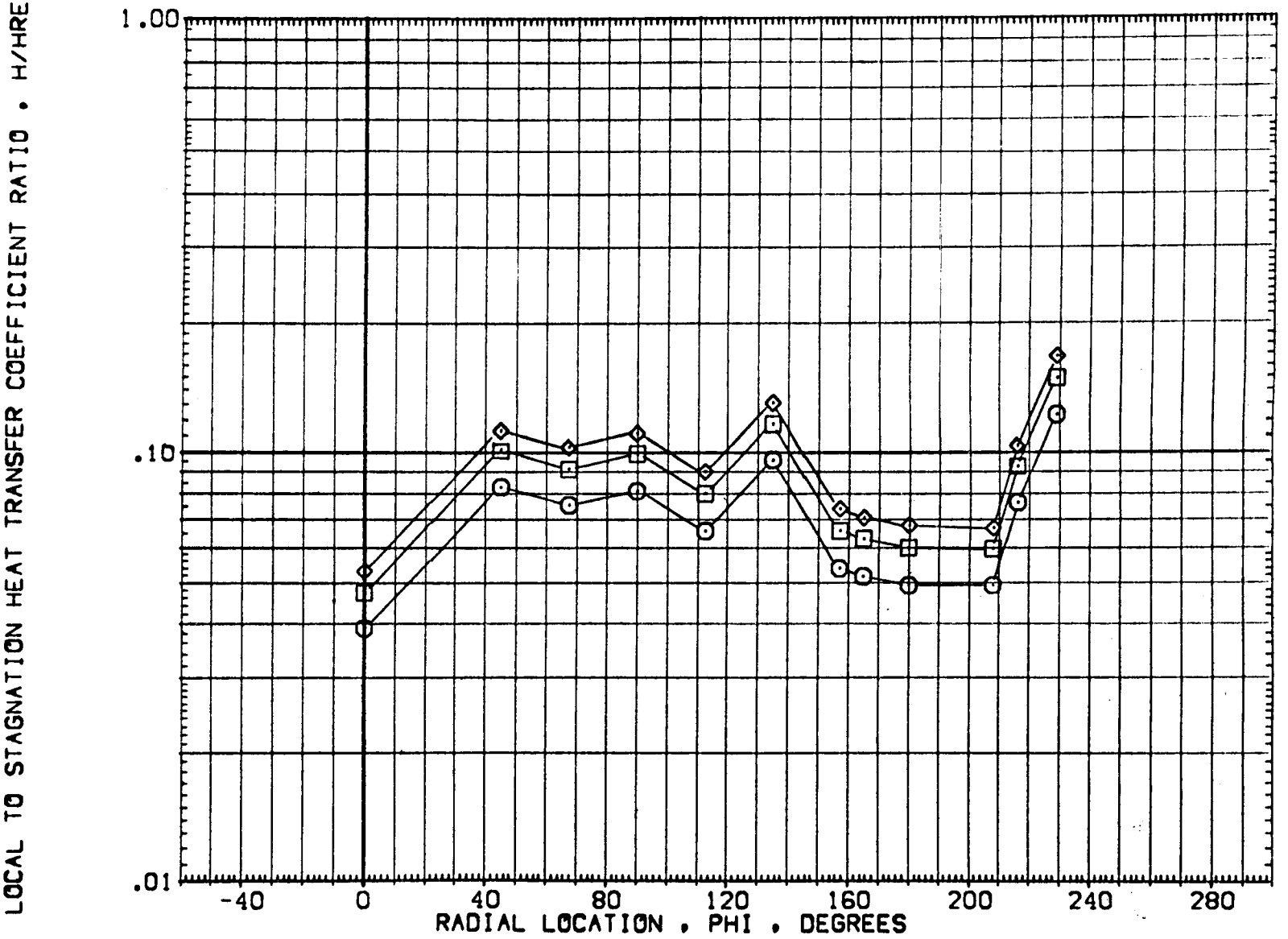


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!TOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE!TOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE!TOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

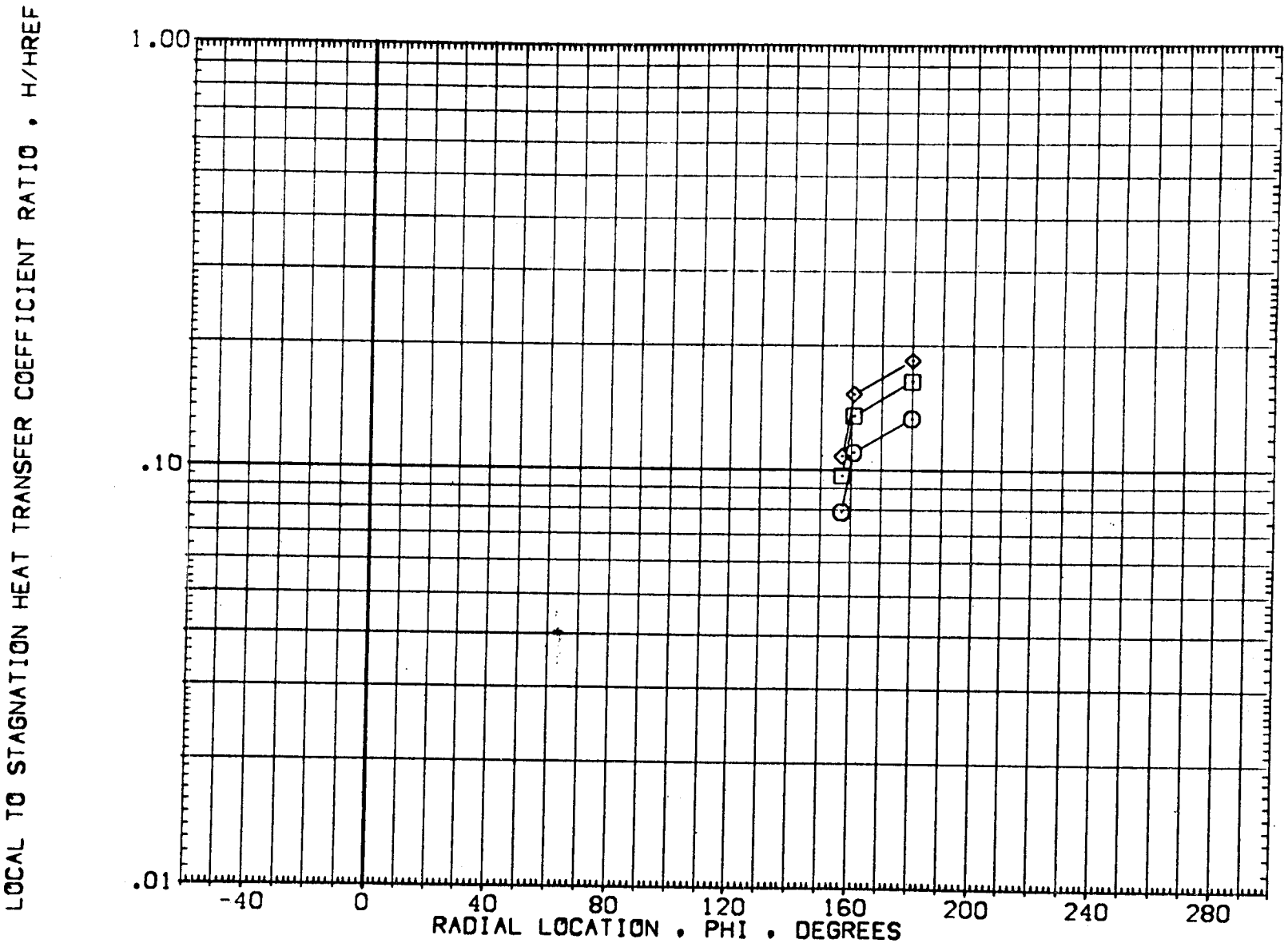


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

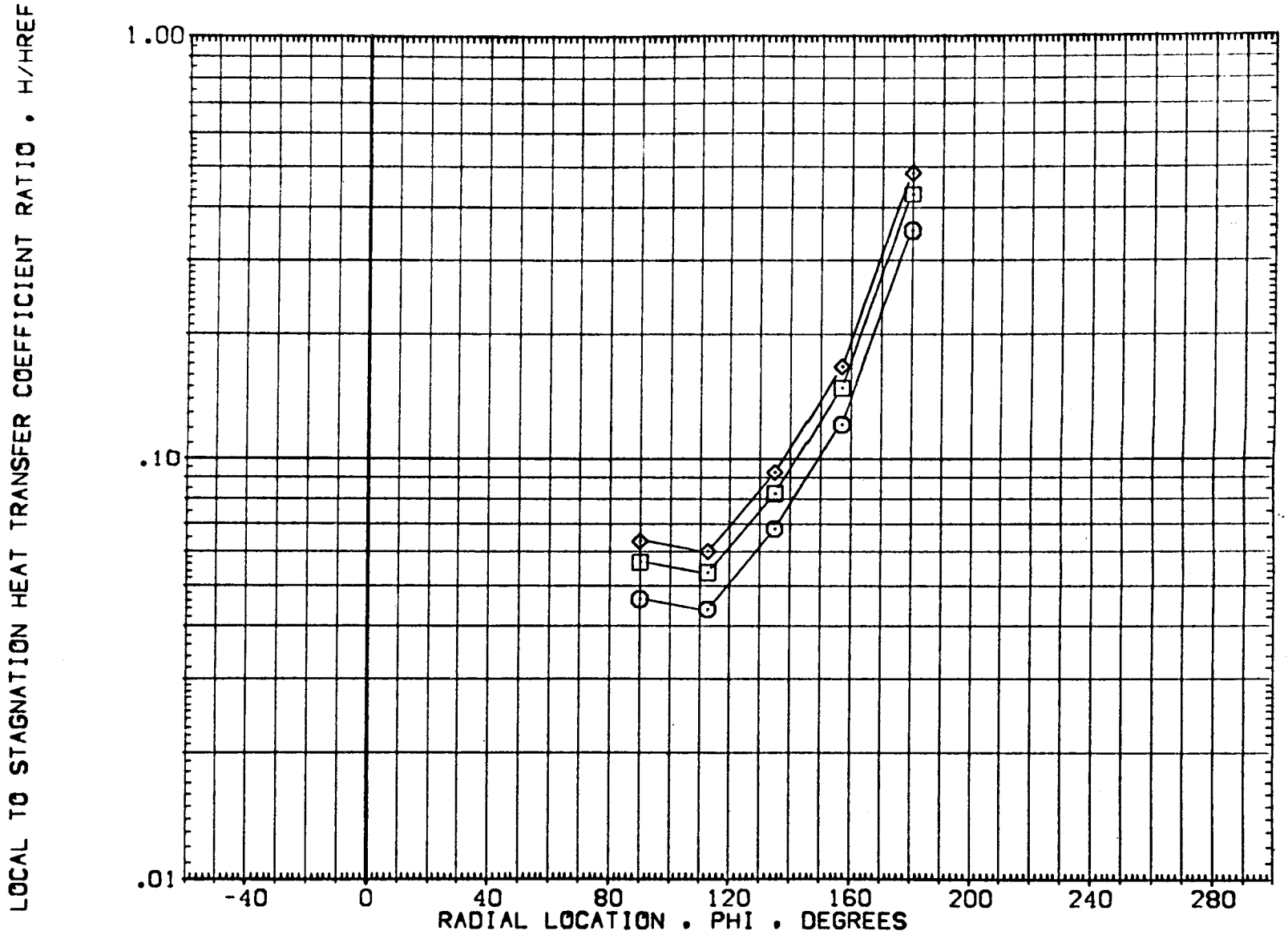


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1TOS] ○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE1TOS] □	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE1TOS] ◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

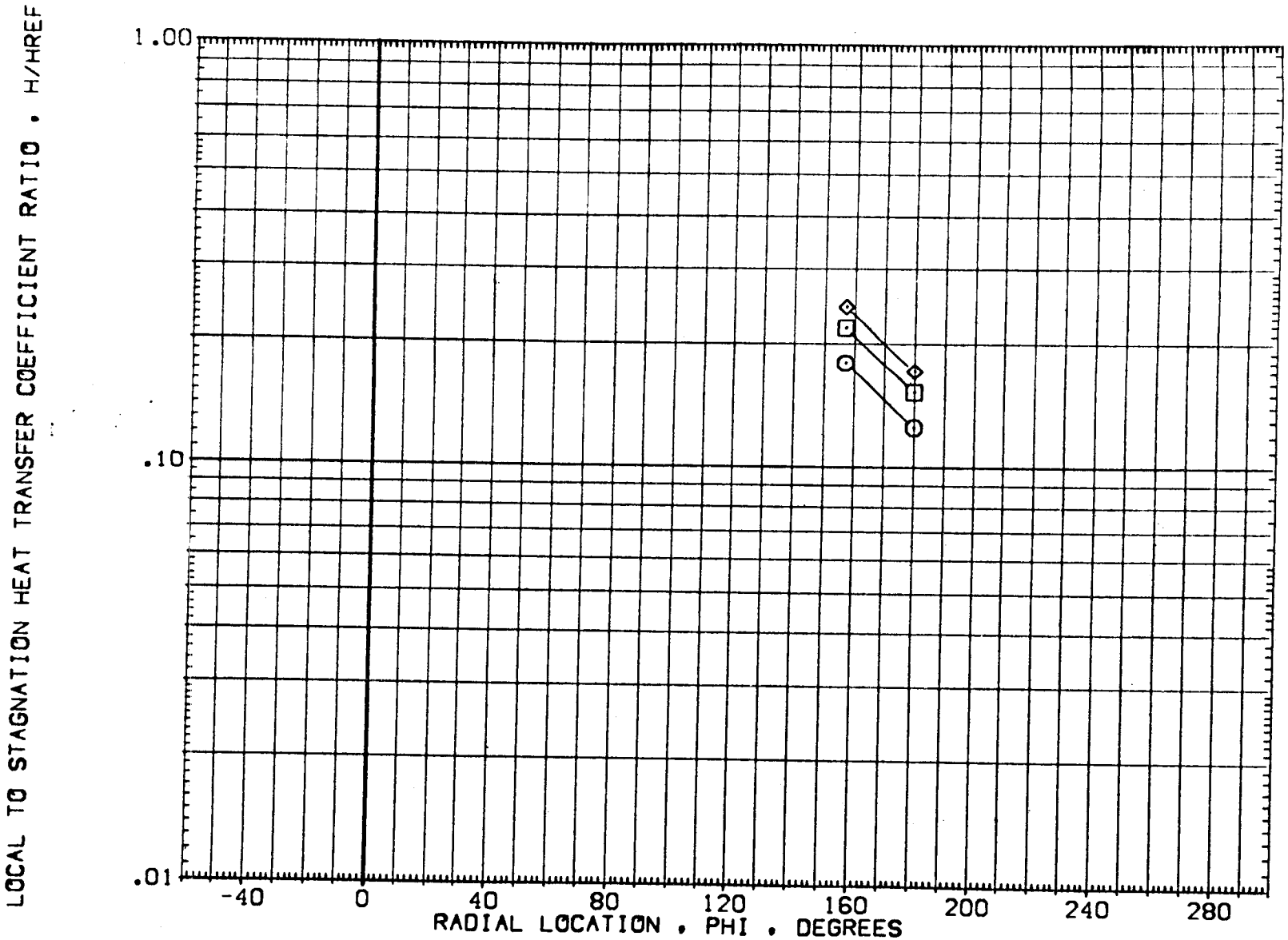


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1105]	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE1105]	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE1105]	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

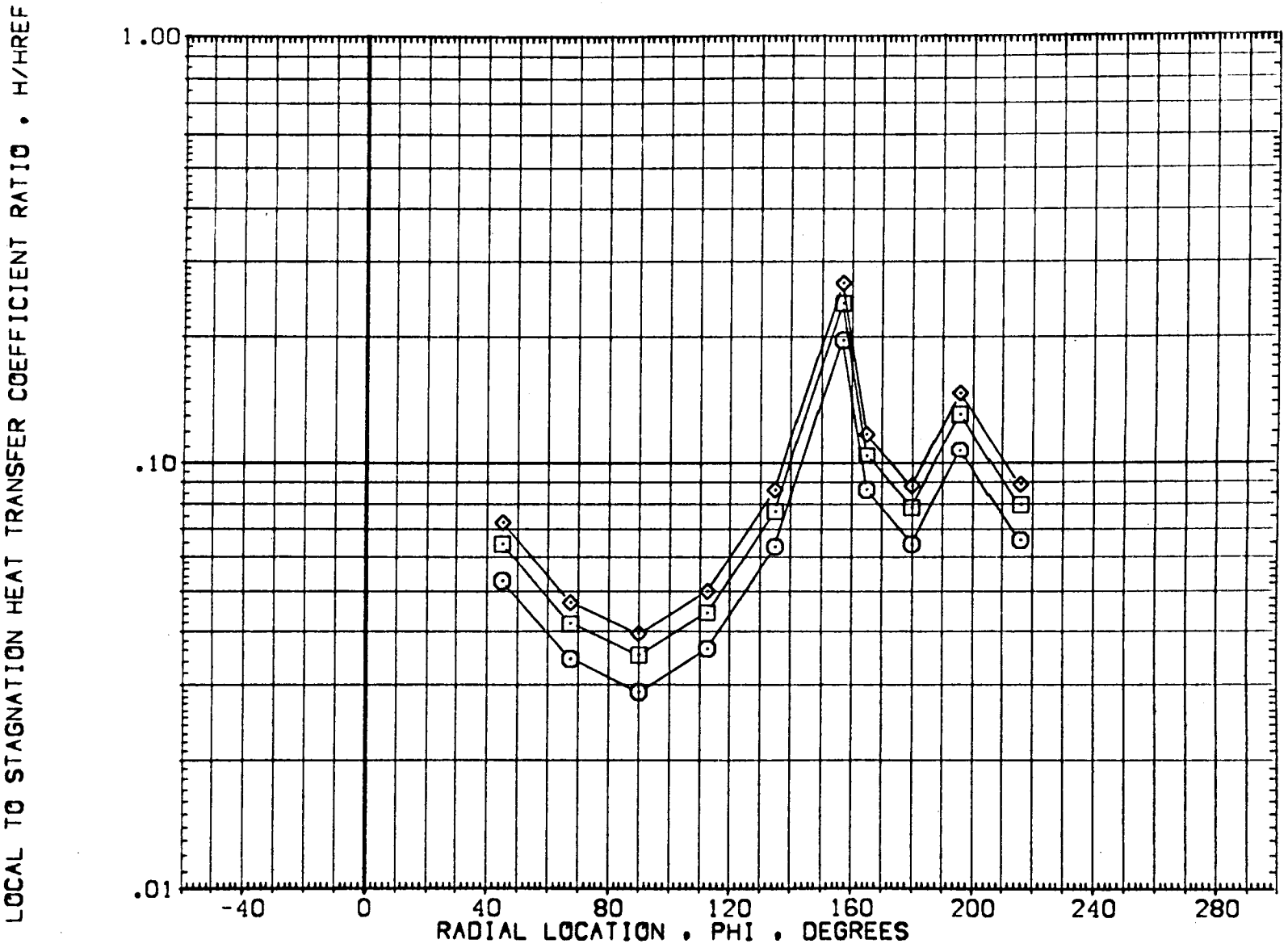


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

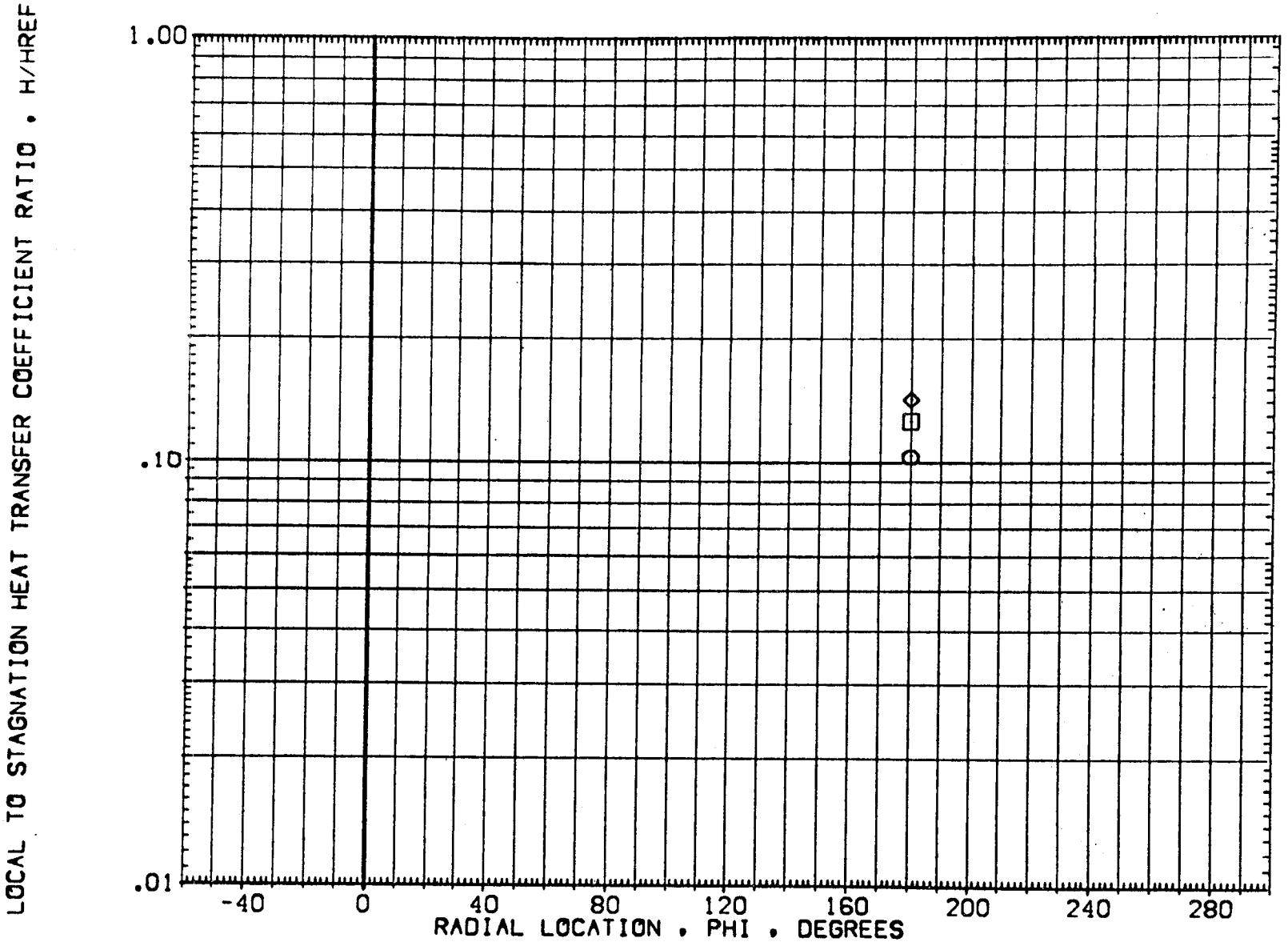


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1105]	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE1105]	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE1105]	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

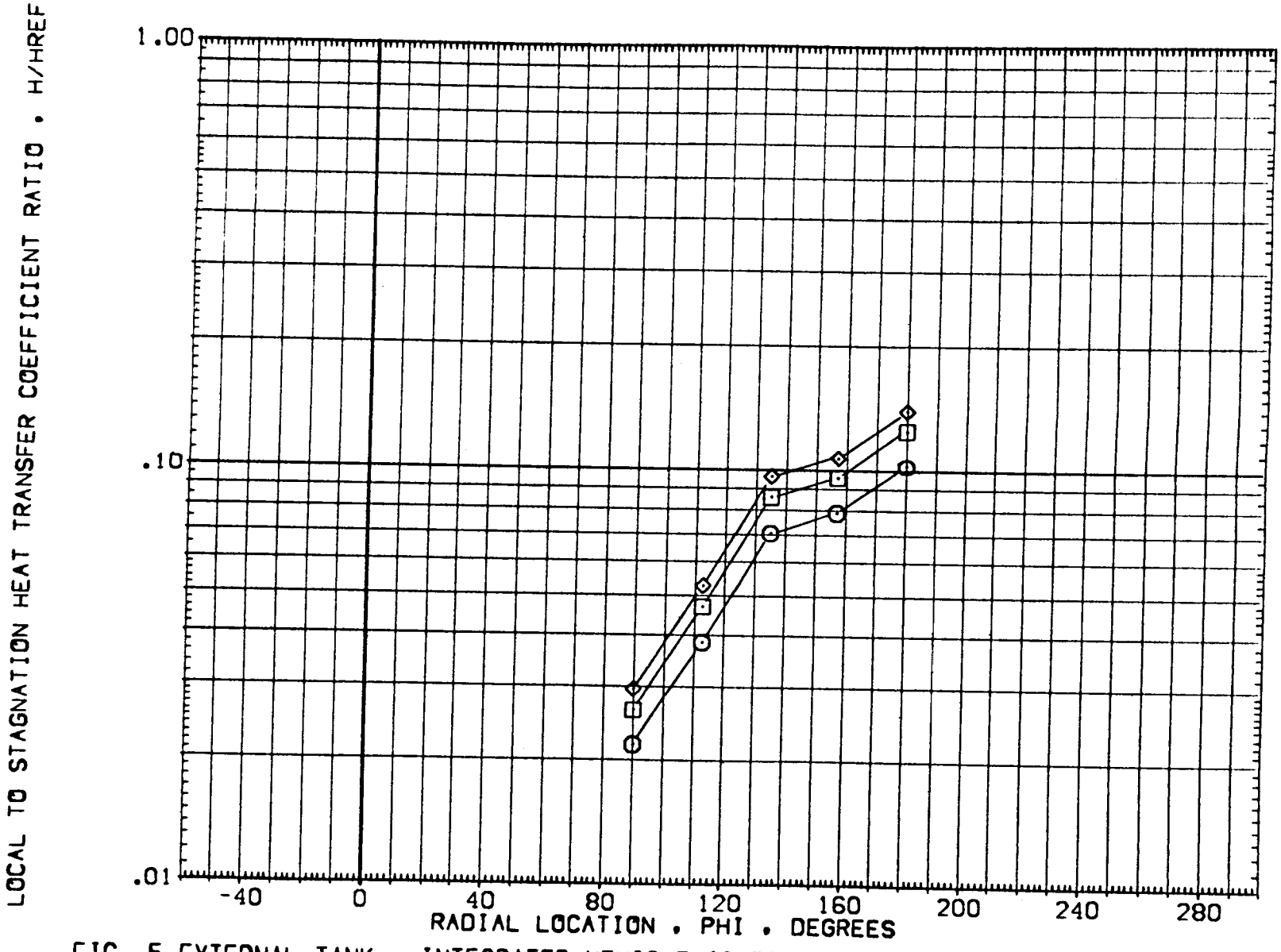


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

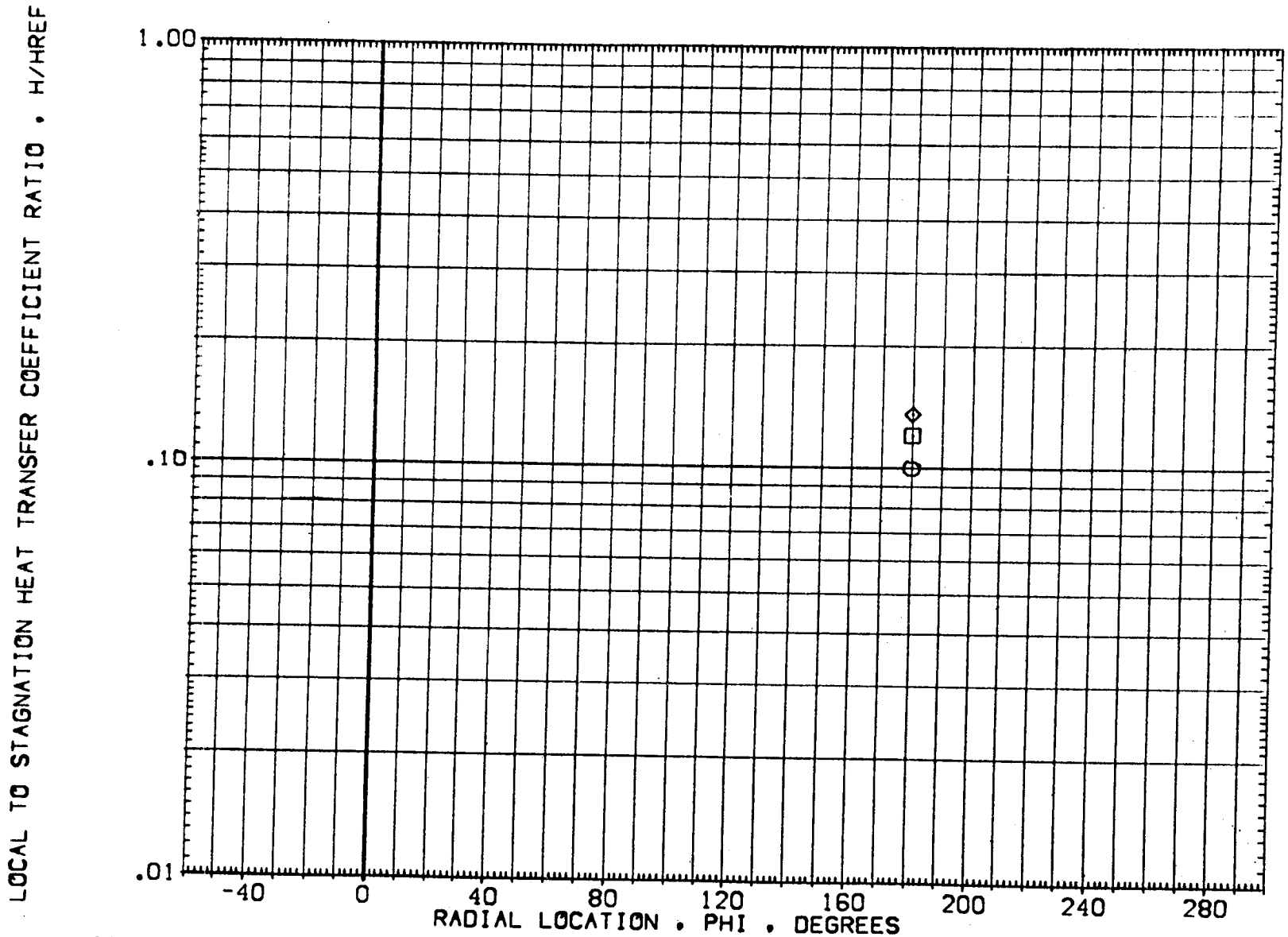


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REI105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEI105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEI105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

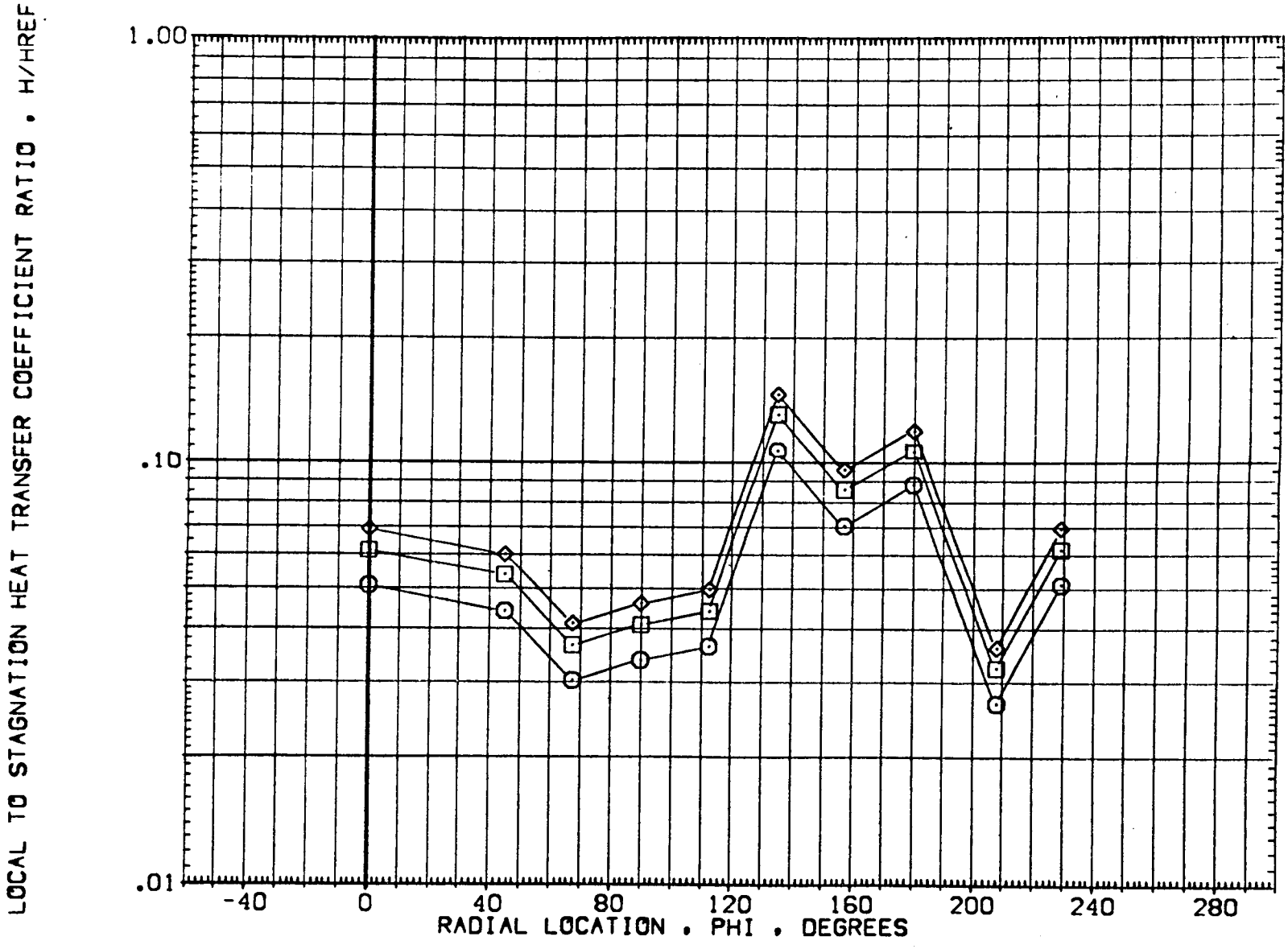


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T05)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE!T05)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE!T05)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

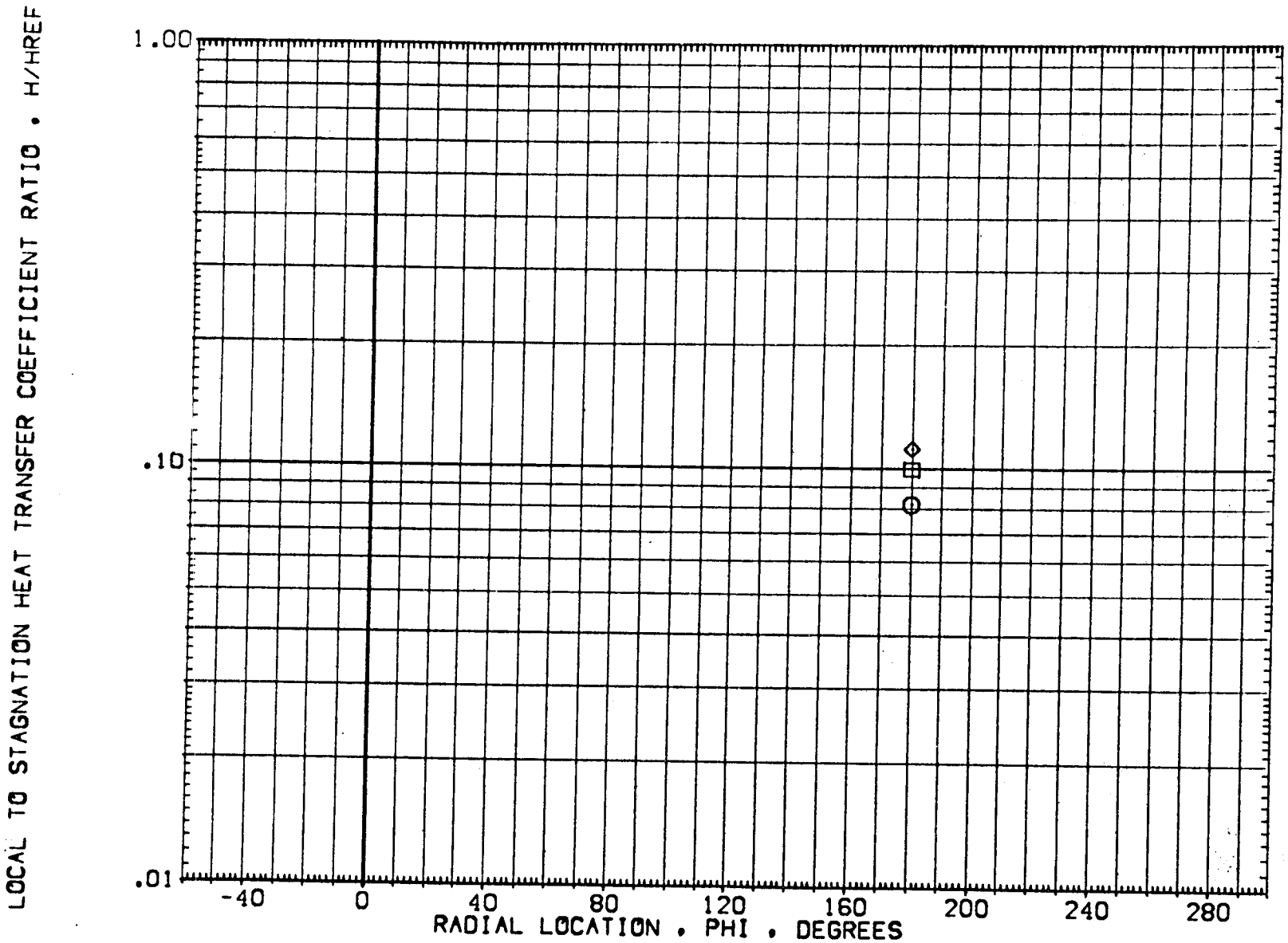


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

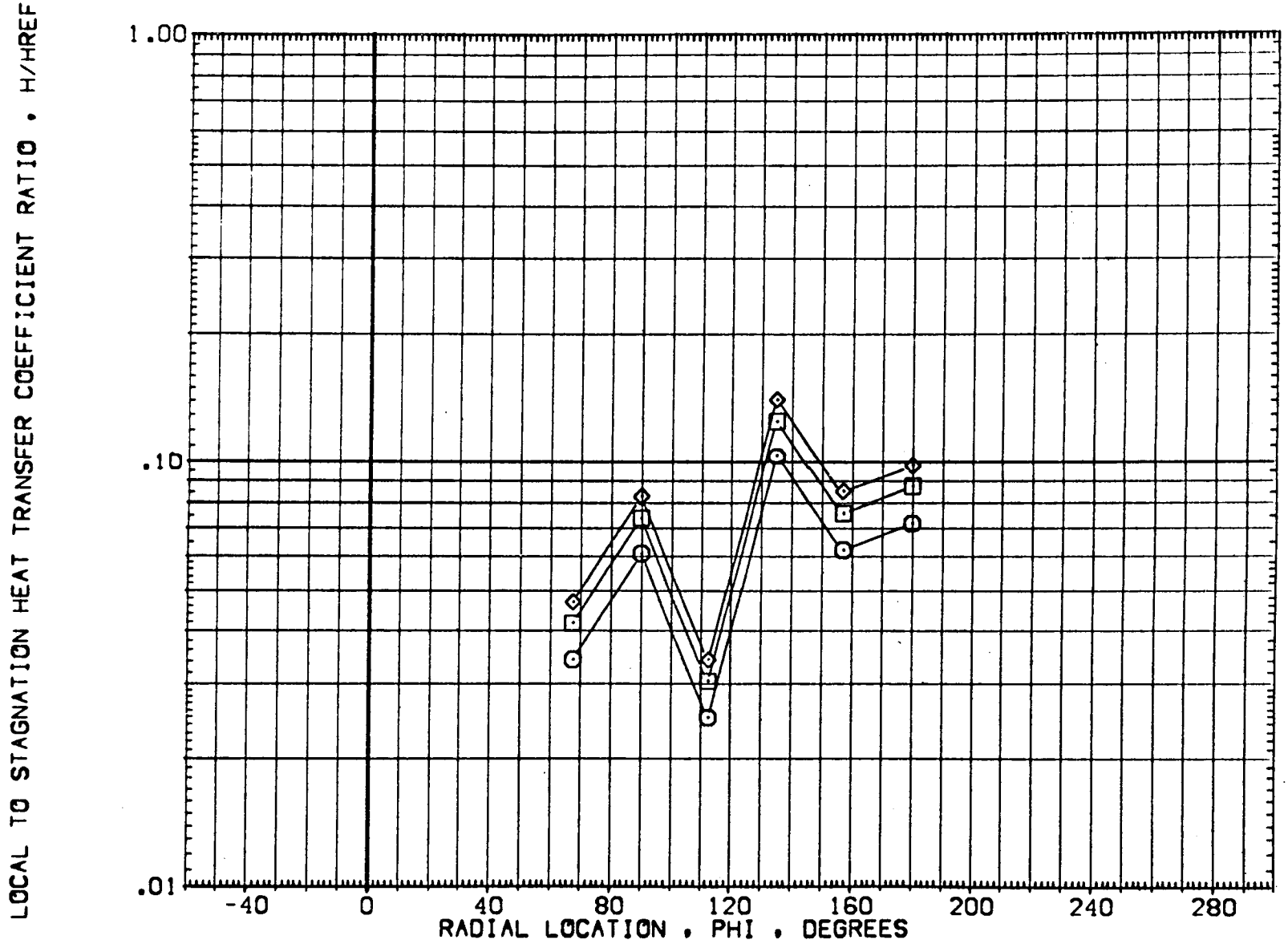


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

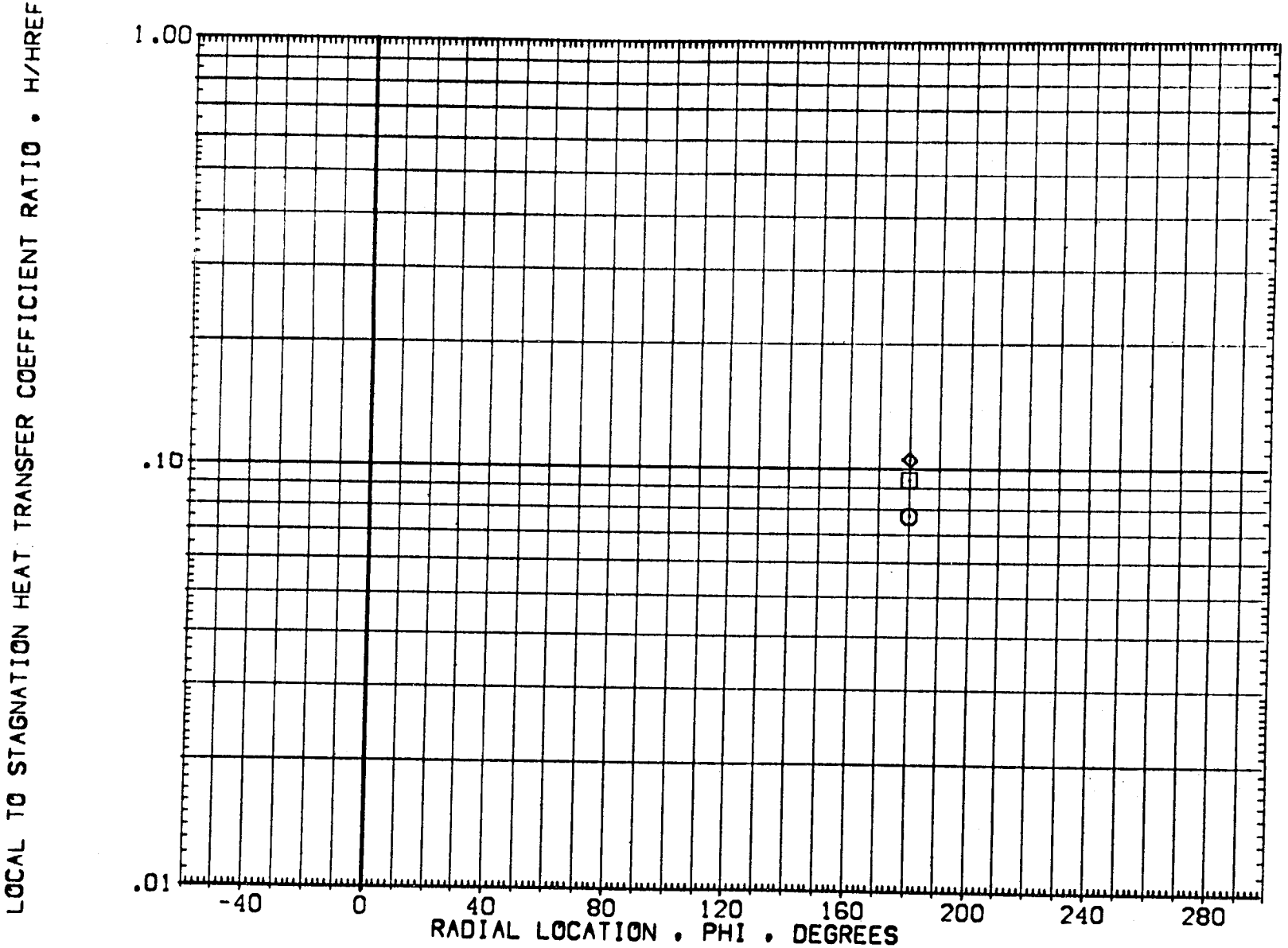


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE!105]	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE!105]	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE!105]	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

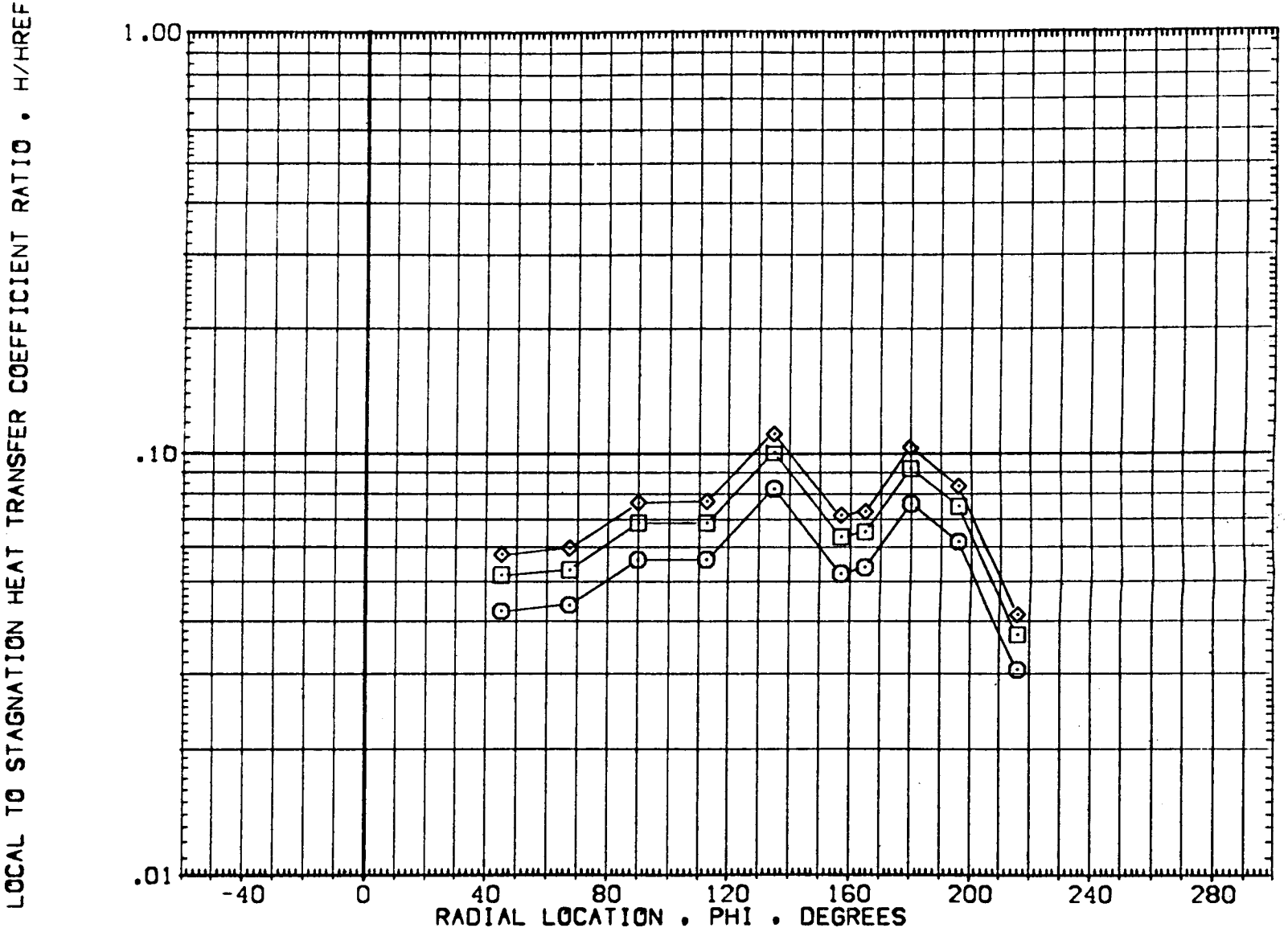


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

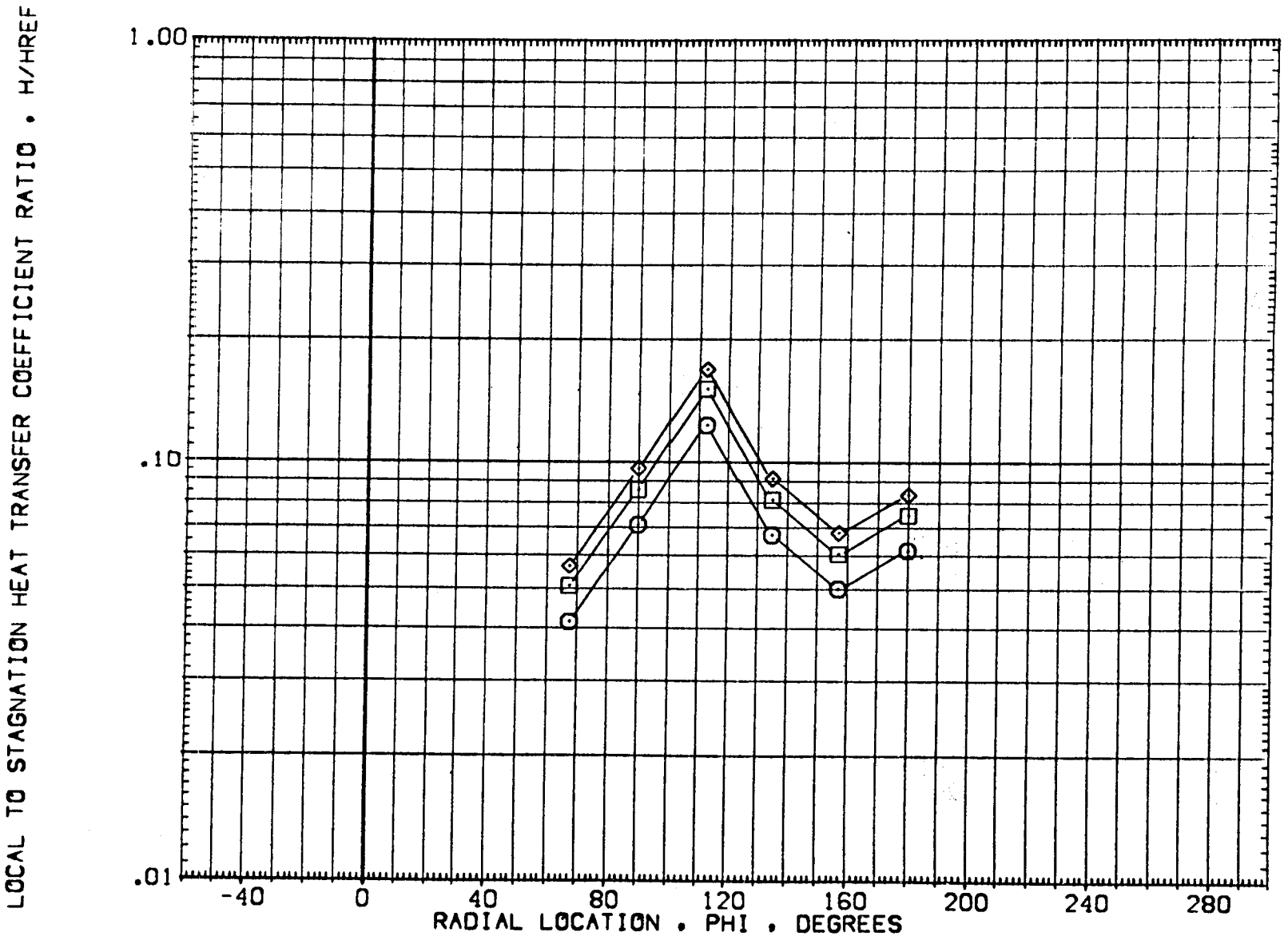


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

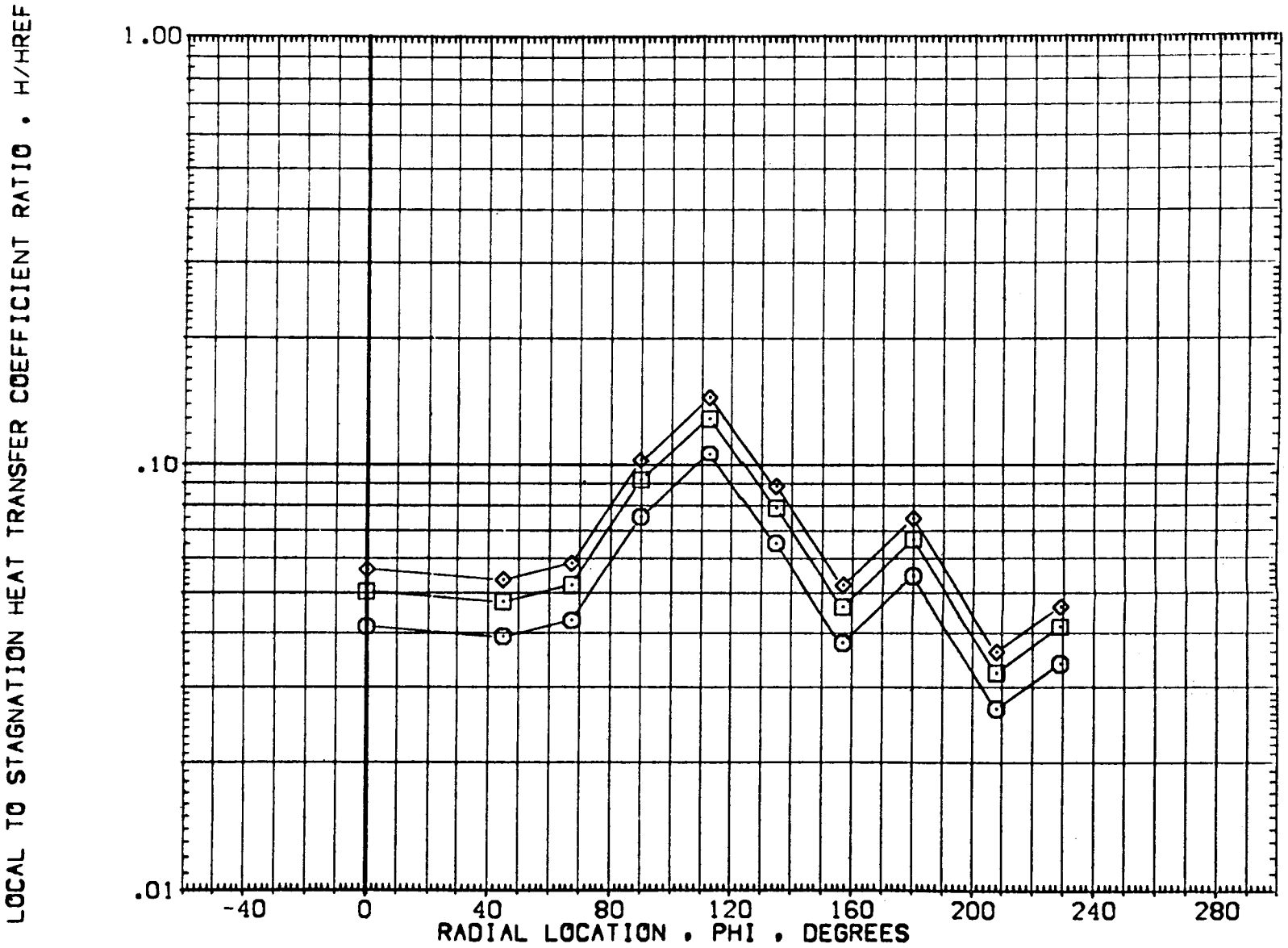


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE!TO5]	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AE!TO5]	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BE!TO5]	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

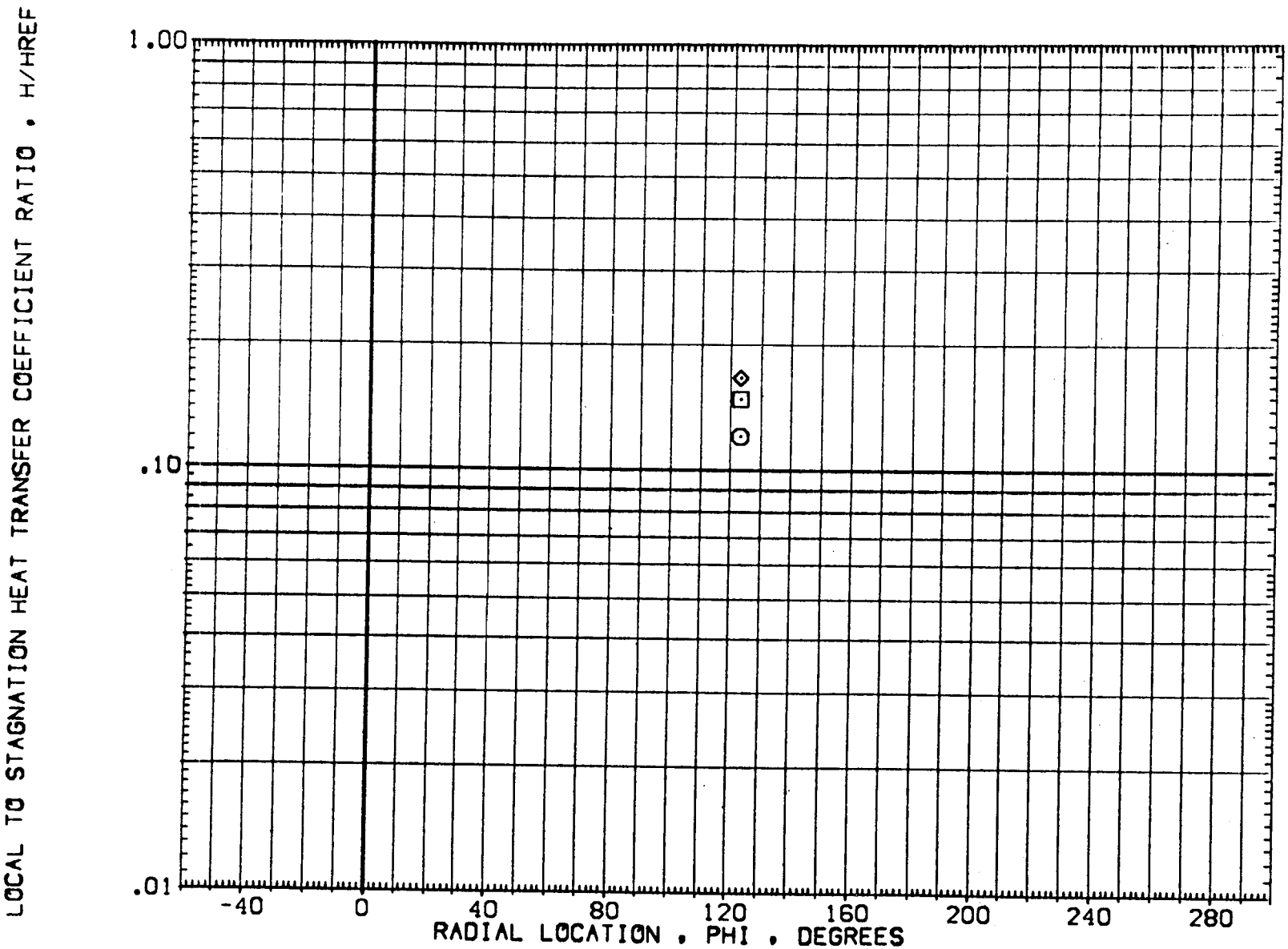


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

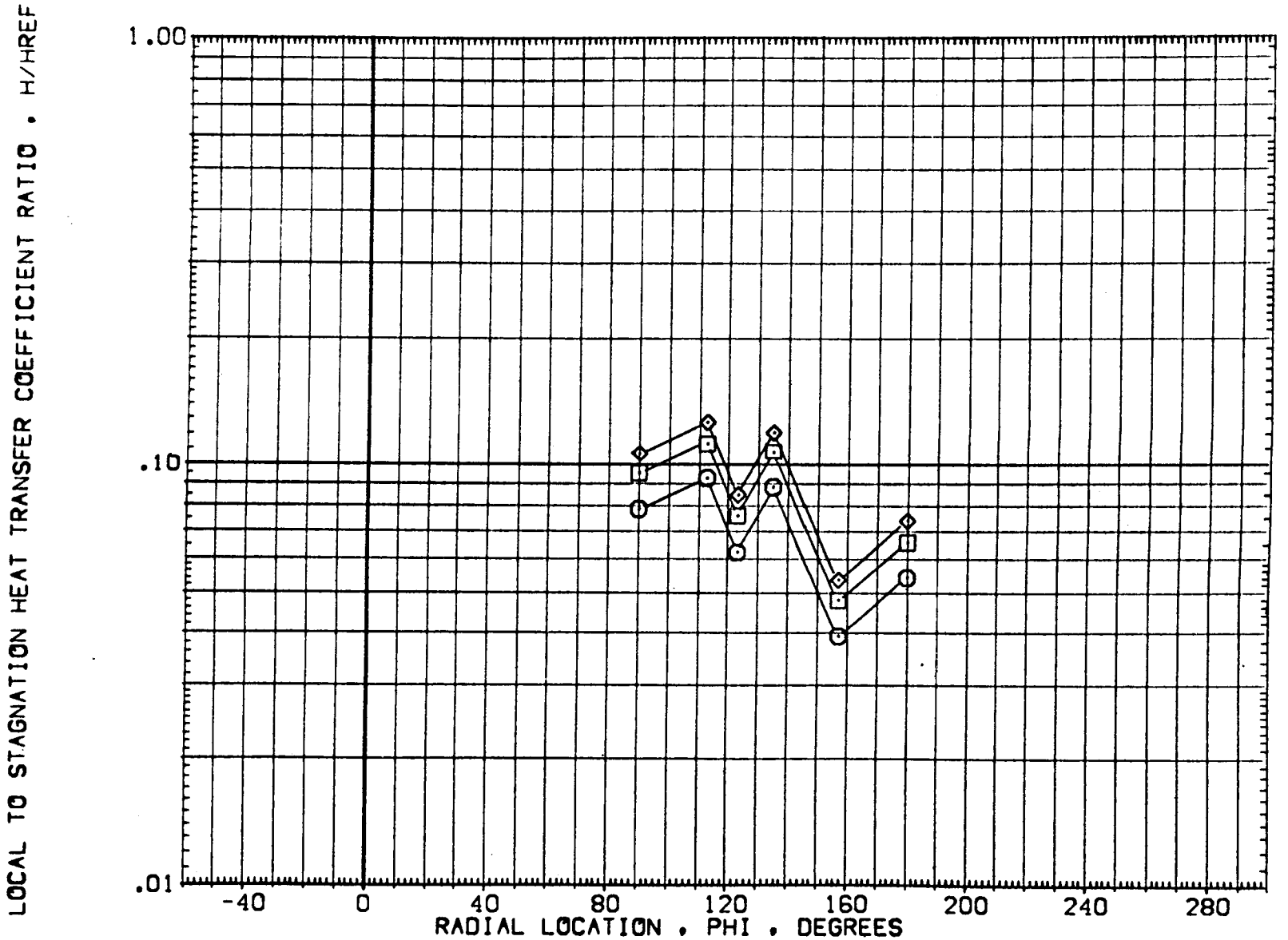


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T05)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1T05)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1T05)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

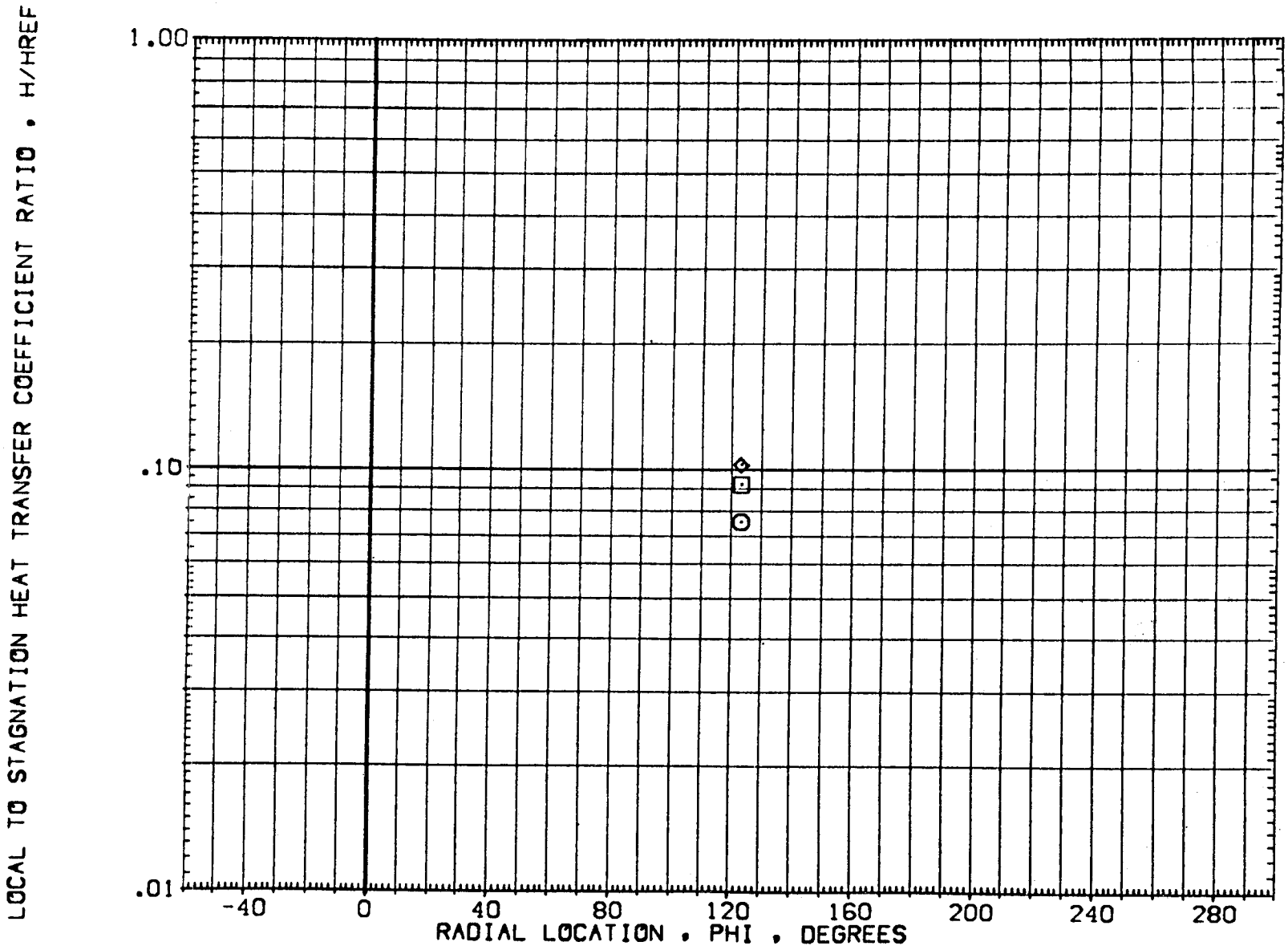


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[REITOS]	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
[AEITOS]	⊡	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
[BEITOS]	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

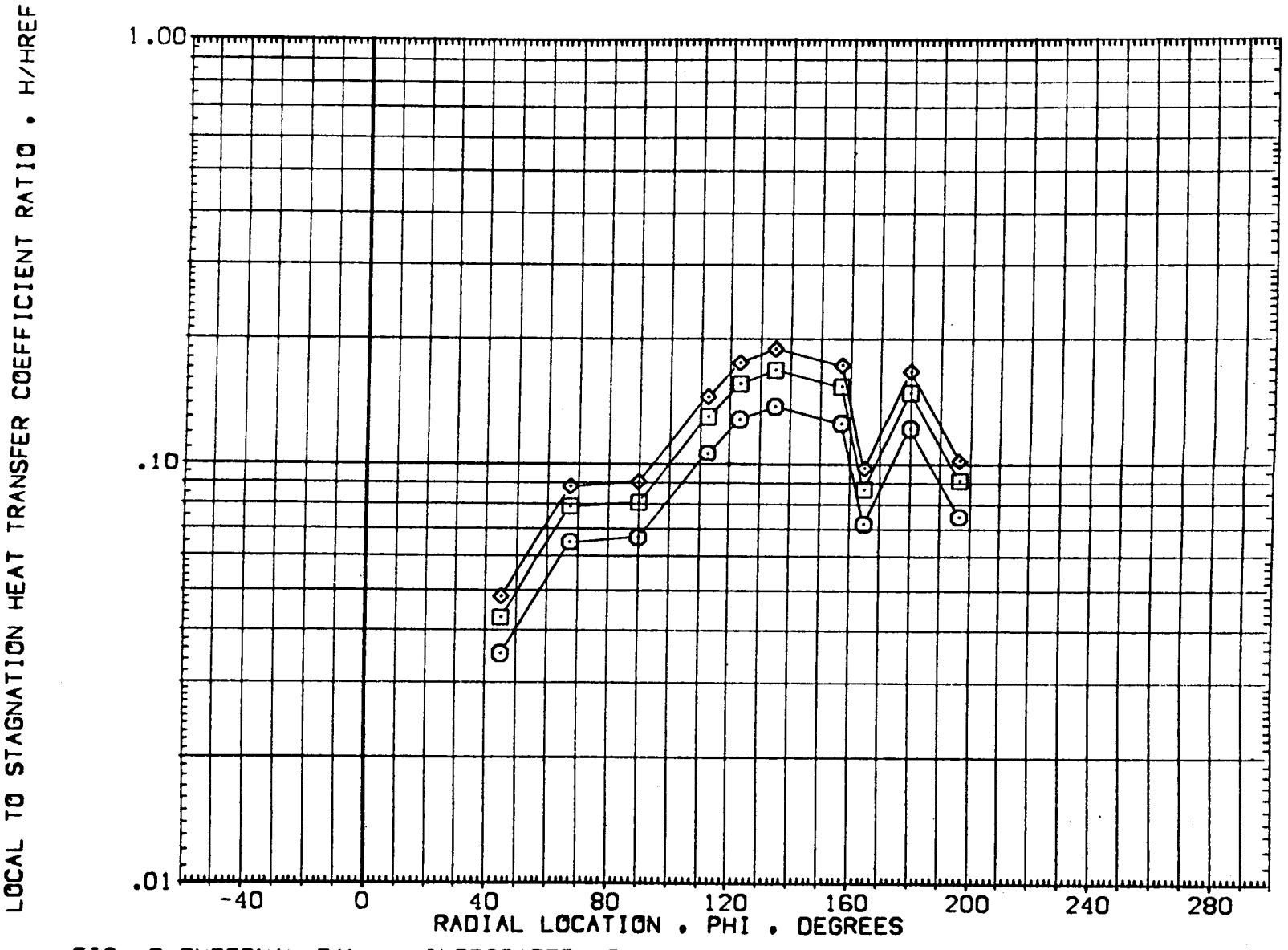


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

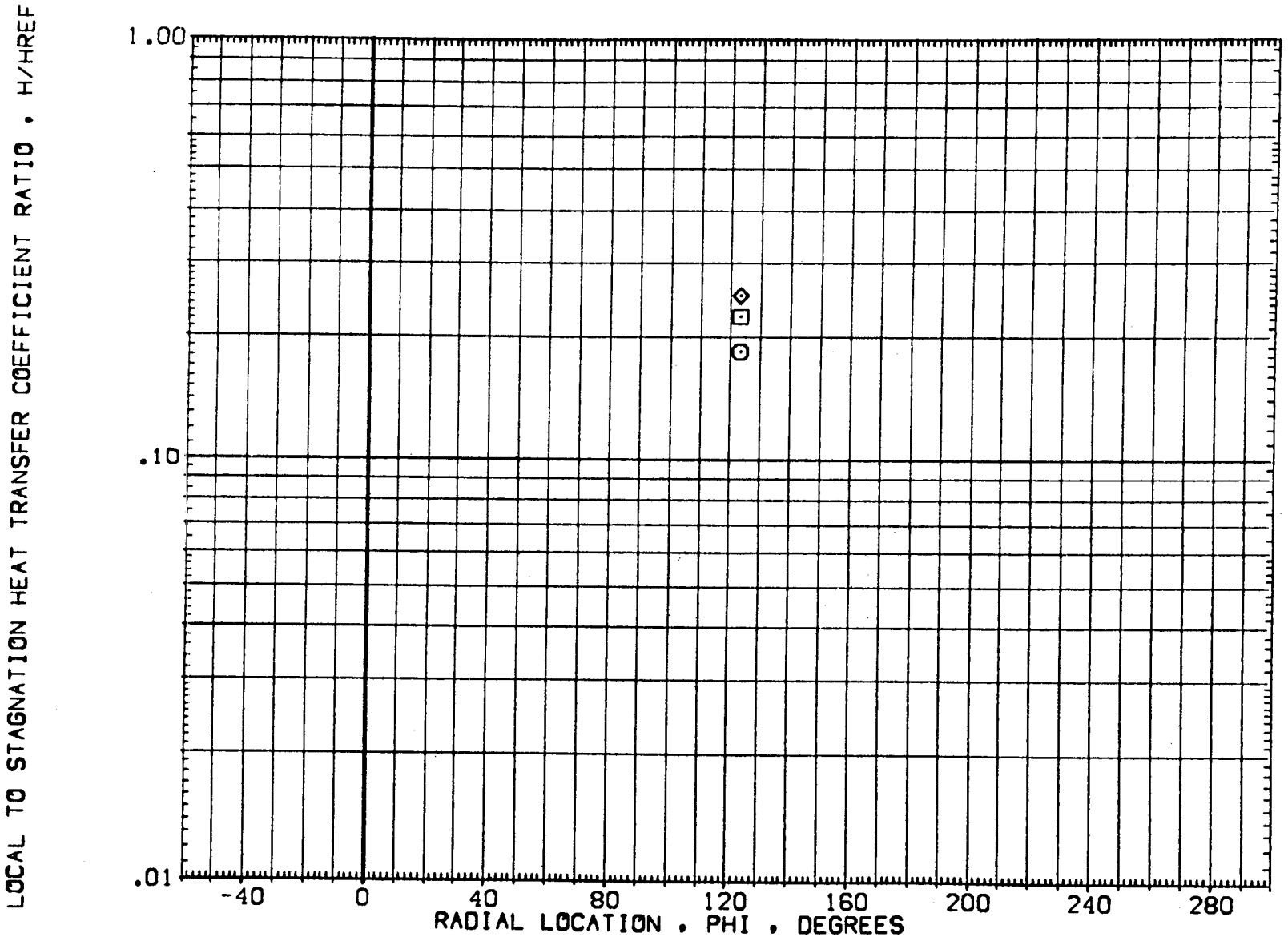


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

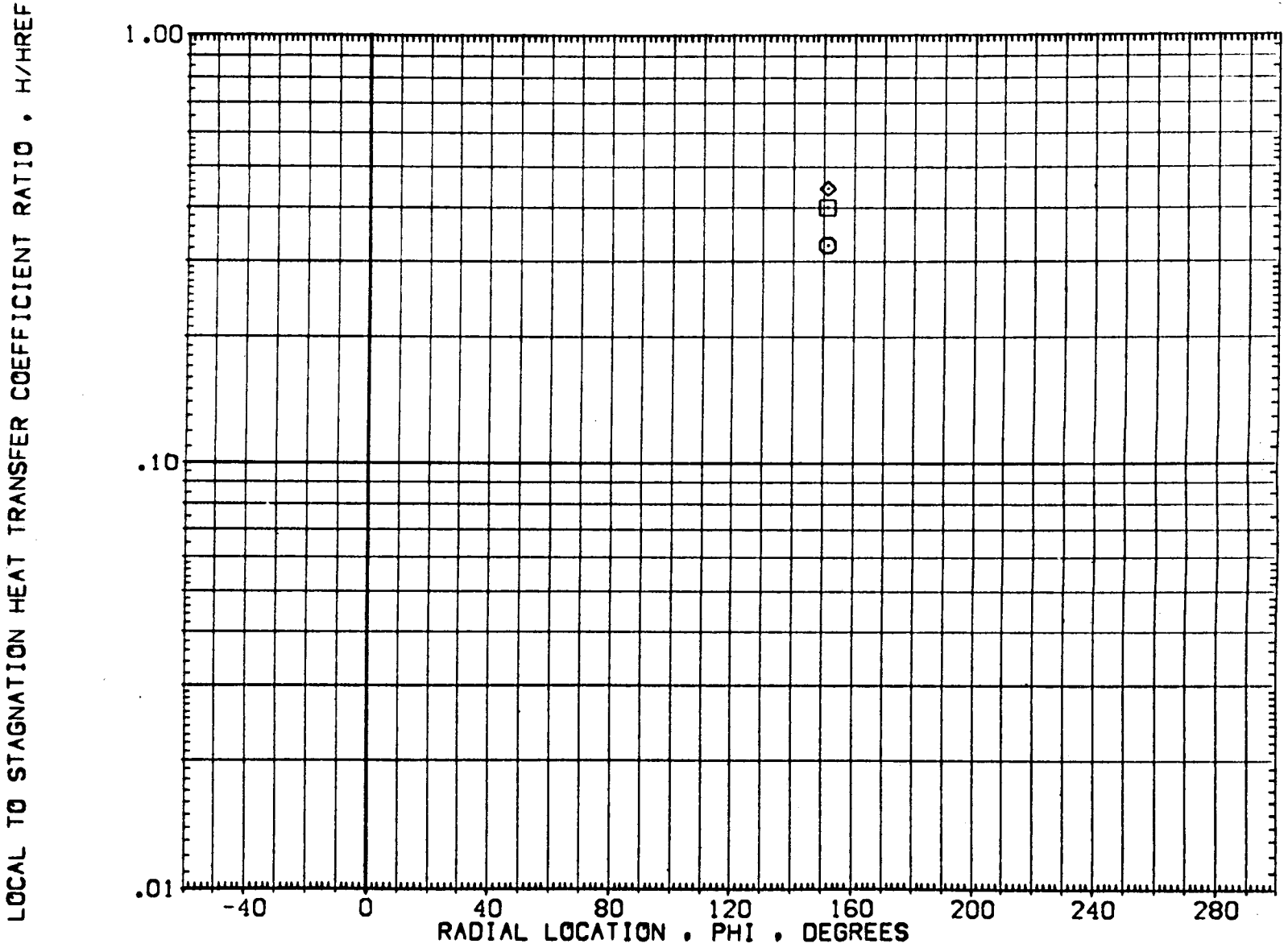


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REITOS)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AEITOS)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BEITOS)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

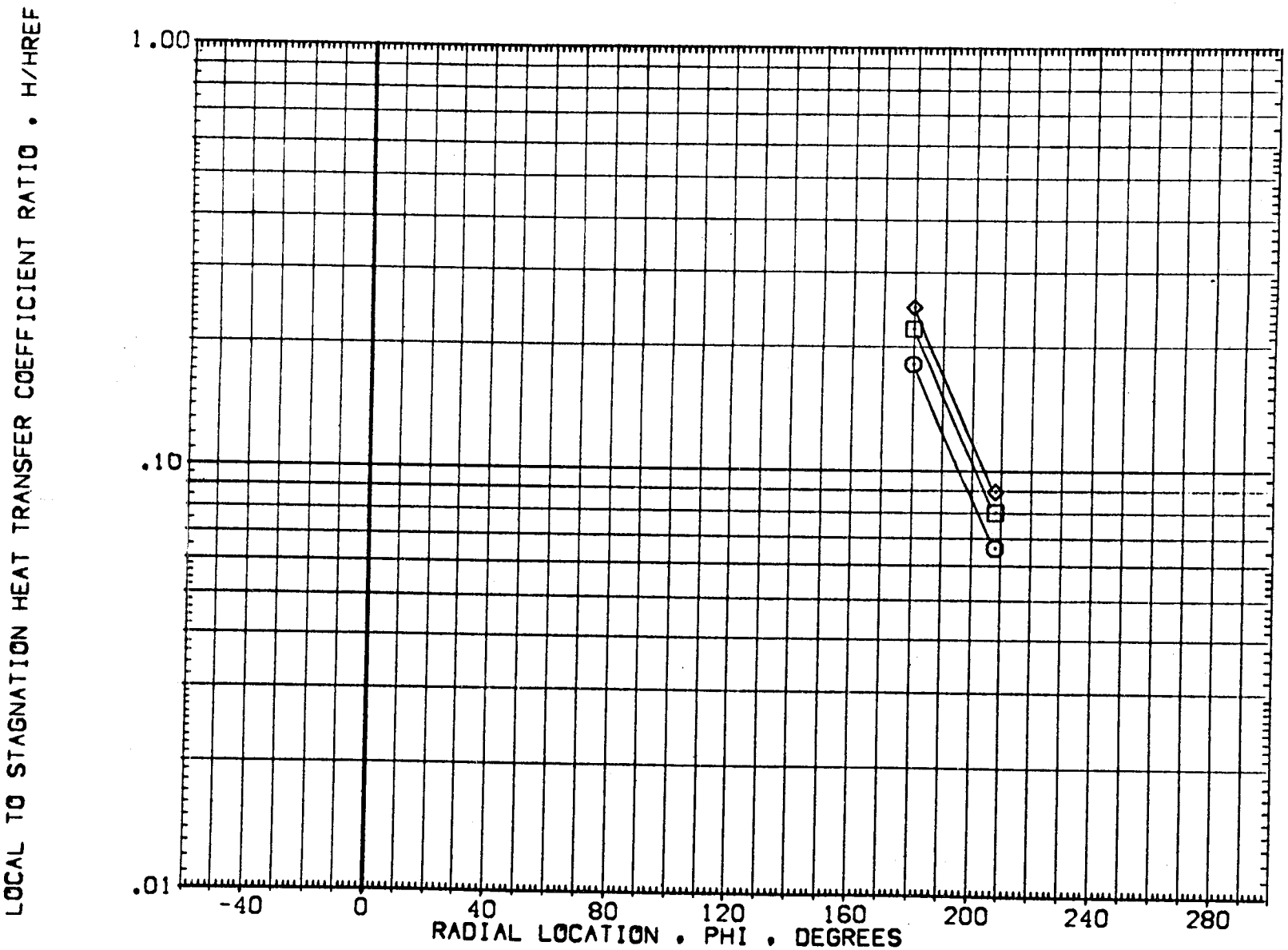


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

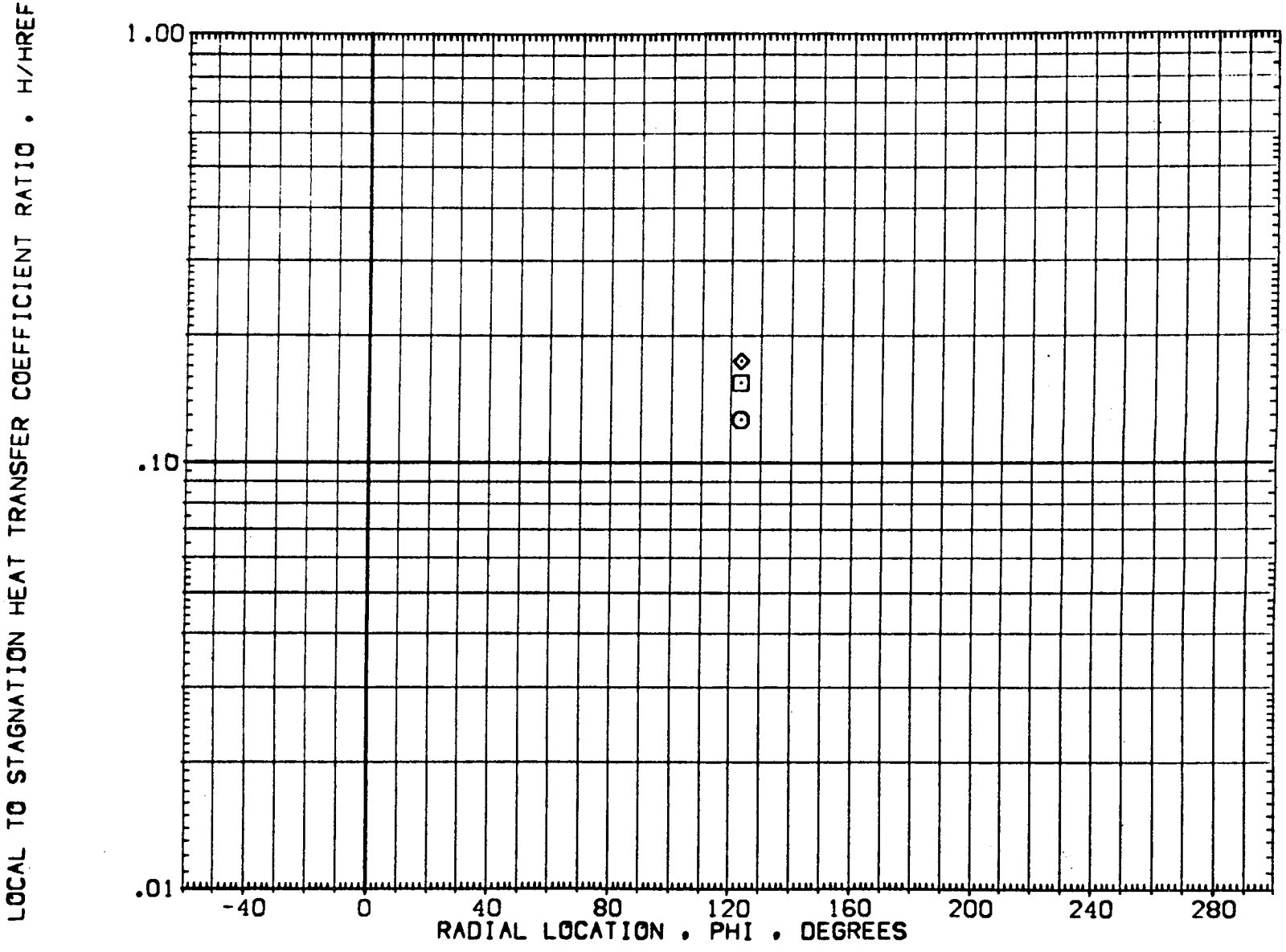


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1105)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	1.000
(AE1105)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.900
(BE1105)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	-5.000	5.000	.850

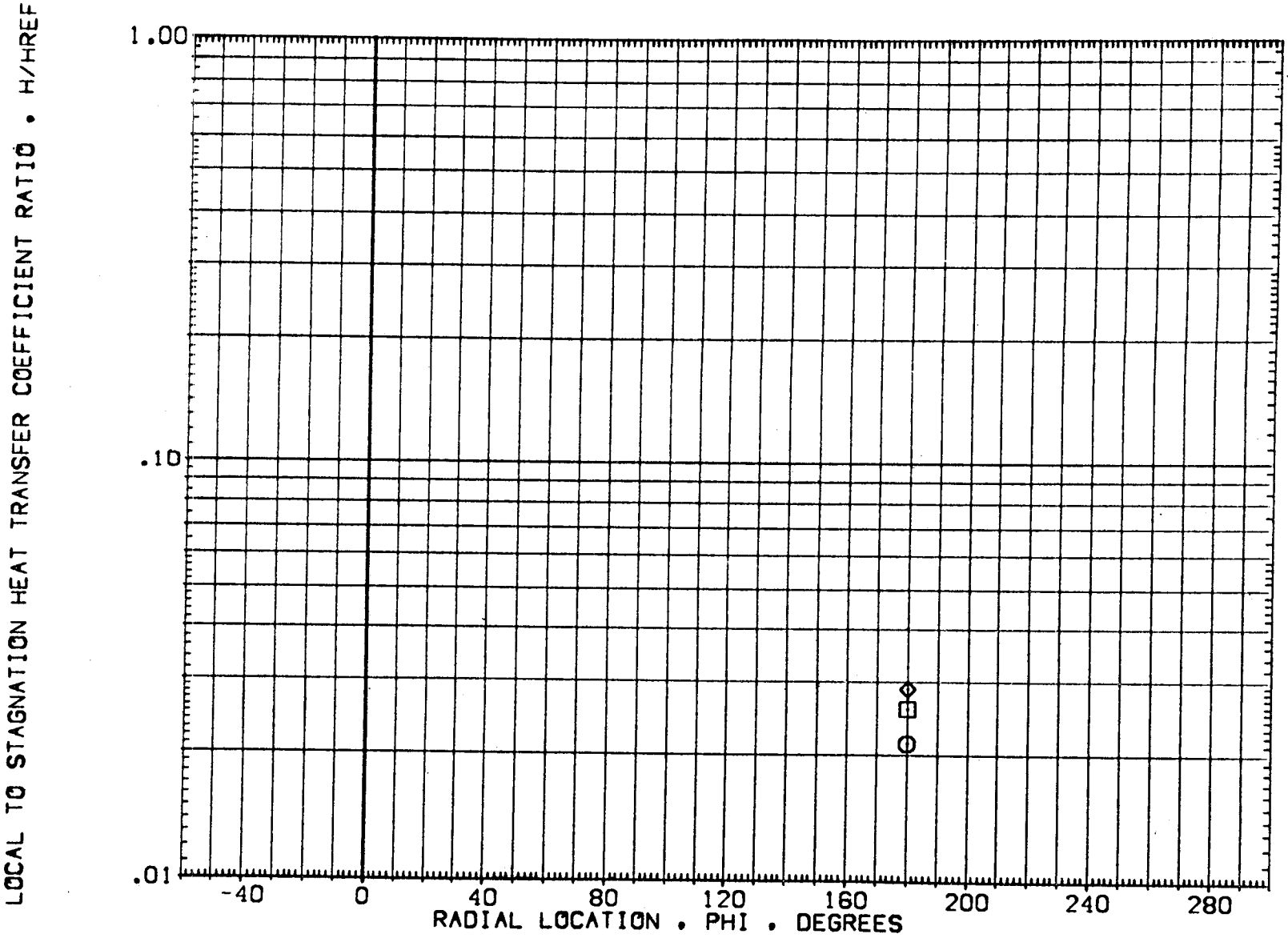


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE[T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE[T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

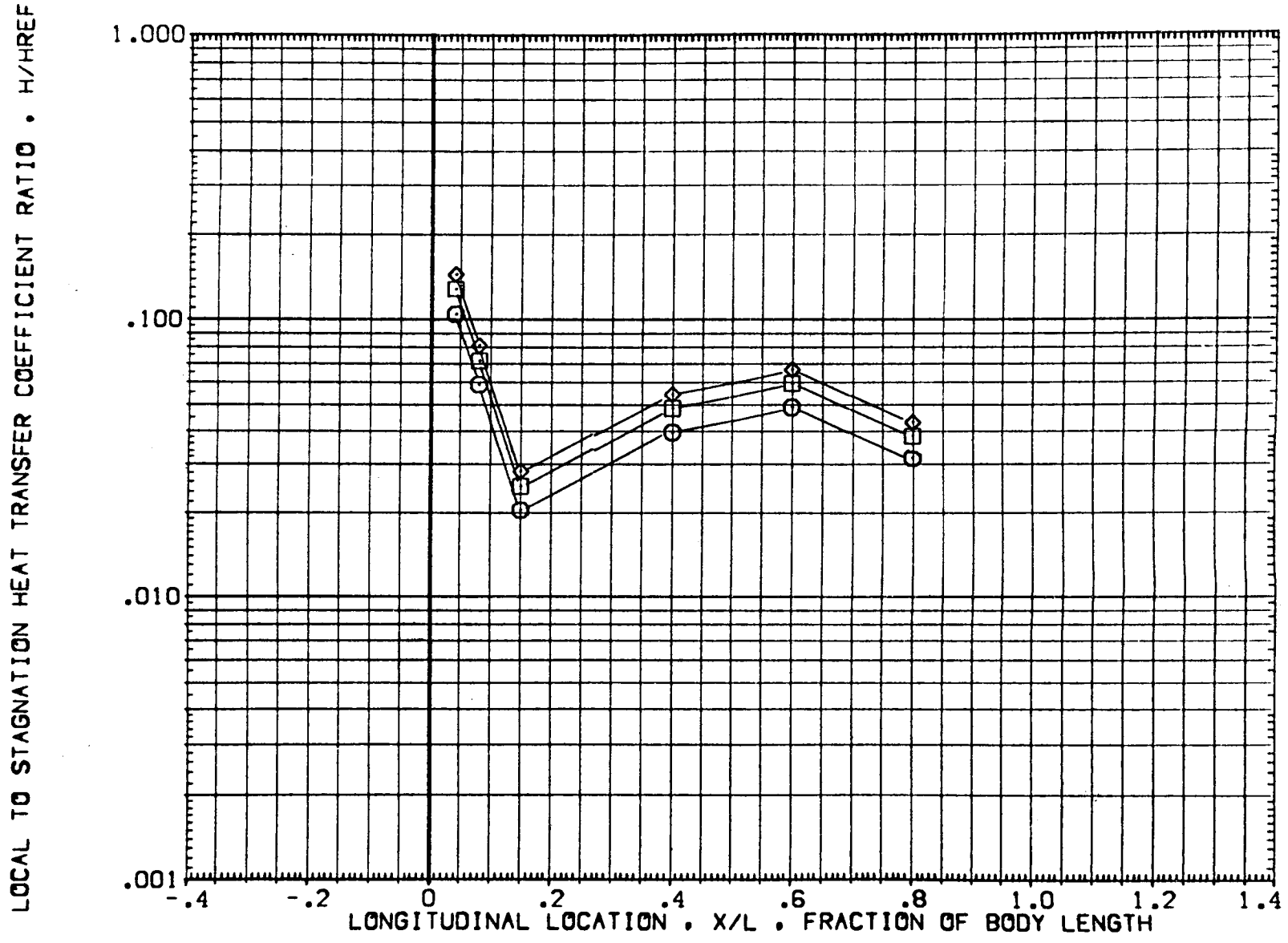


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE1T19]	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
[AE1T19]	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
[BE1T19]	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

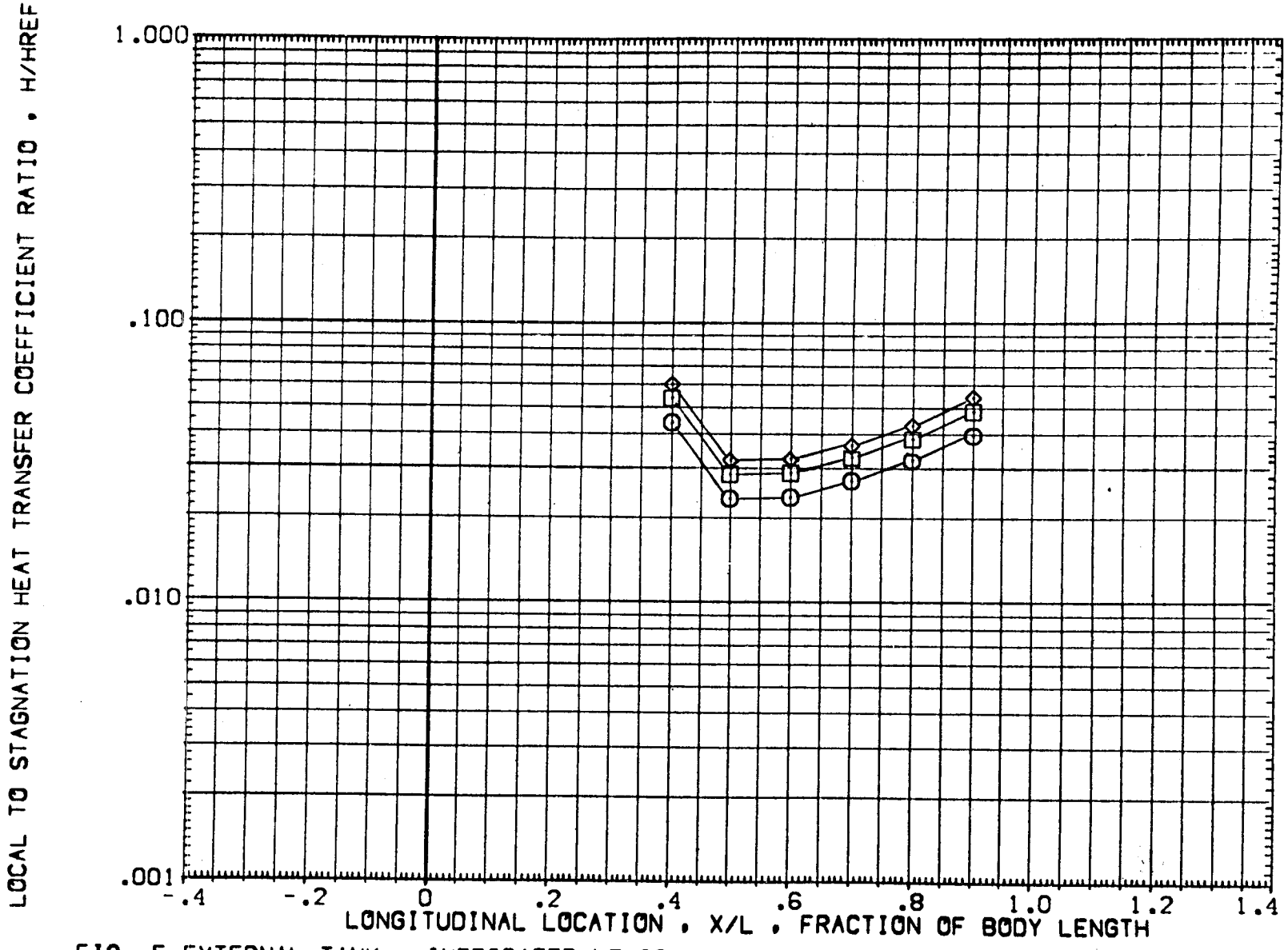


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE(T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE(T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

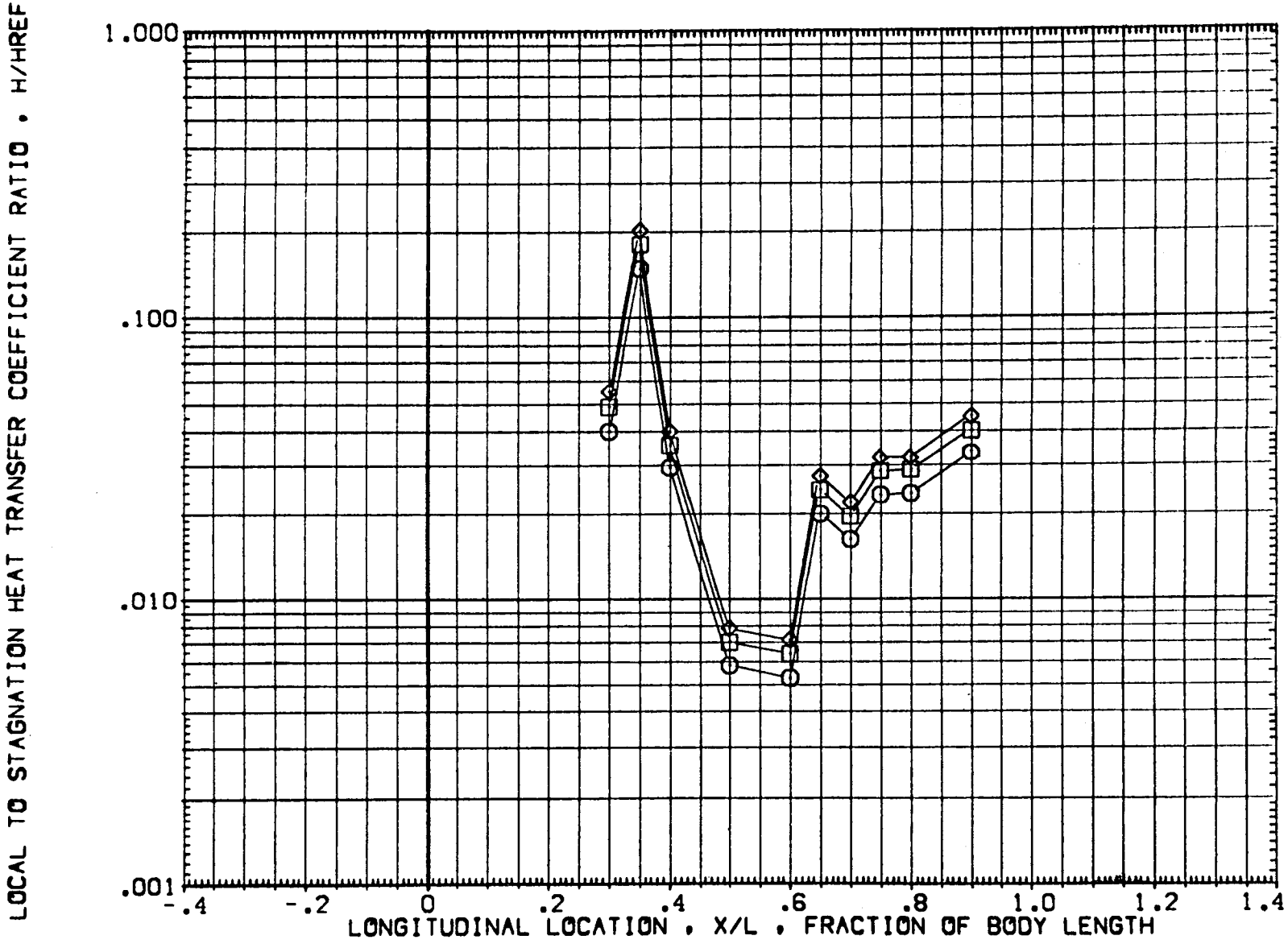


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1119)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

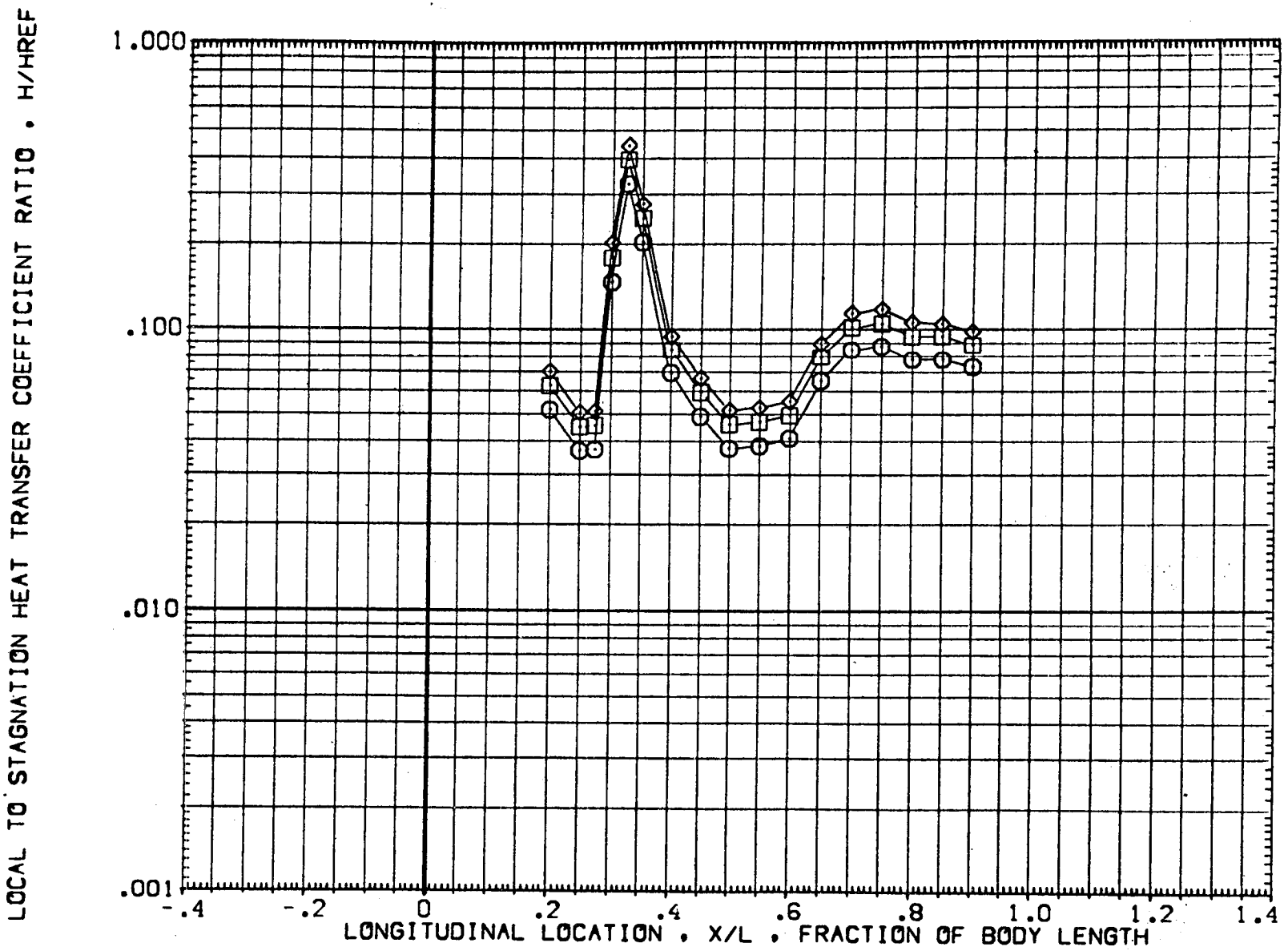


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE[T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE[T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

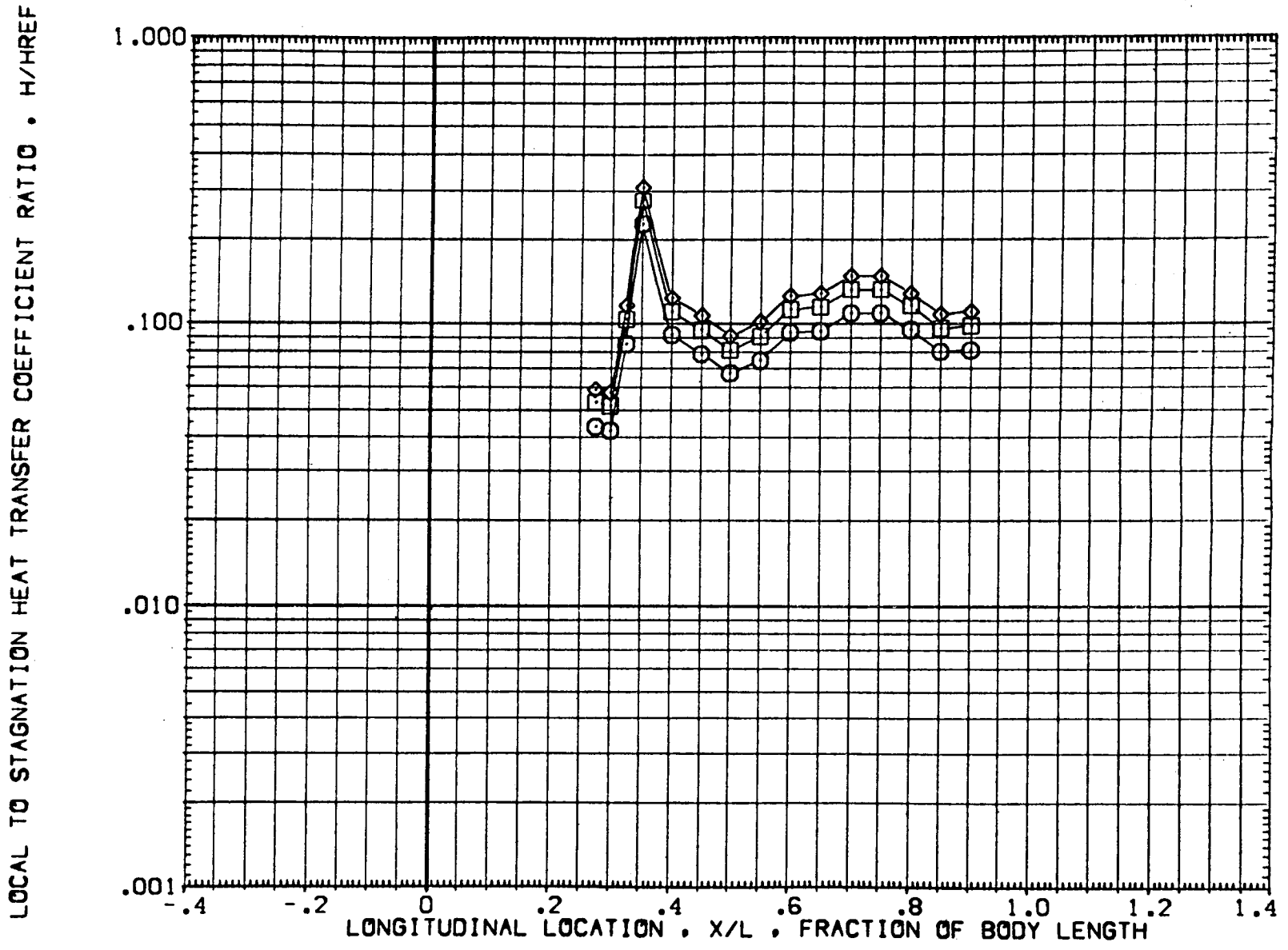


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AEIT19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BEIT19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

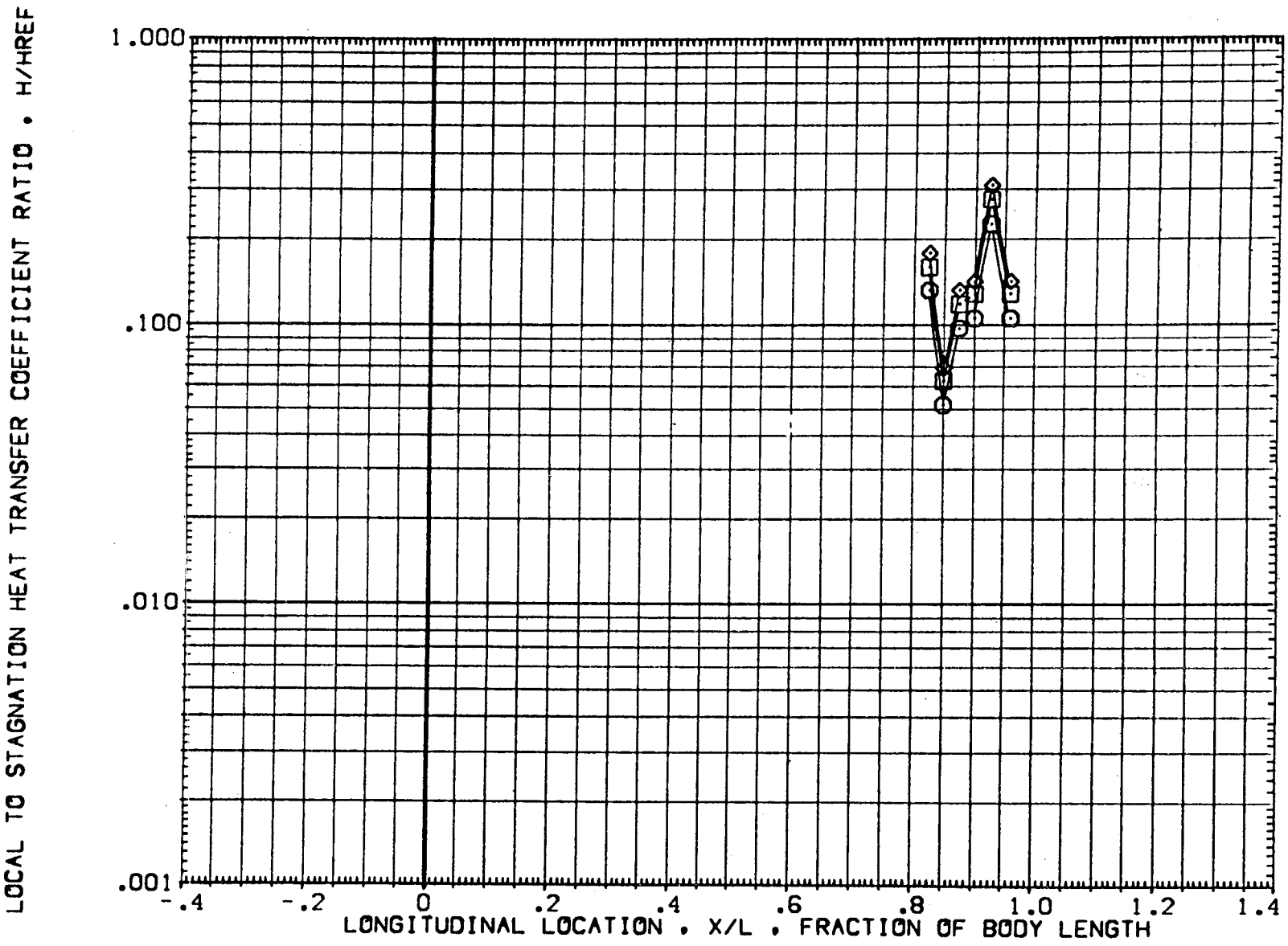


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE|T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE|T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

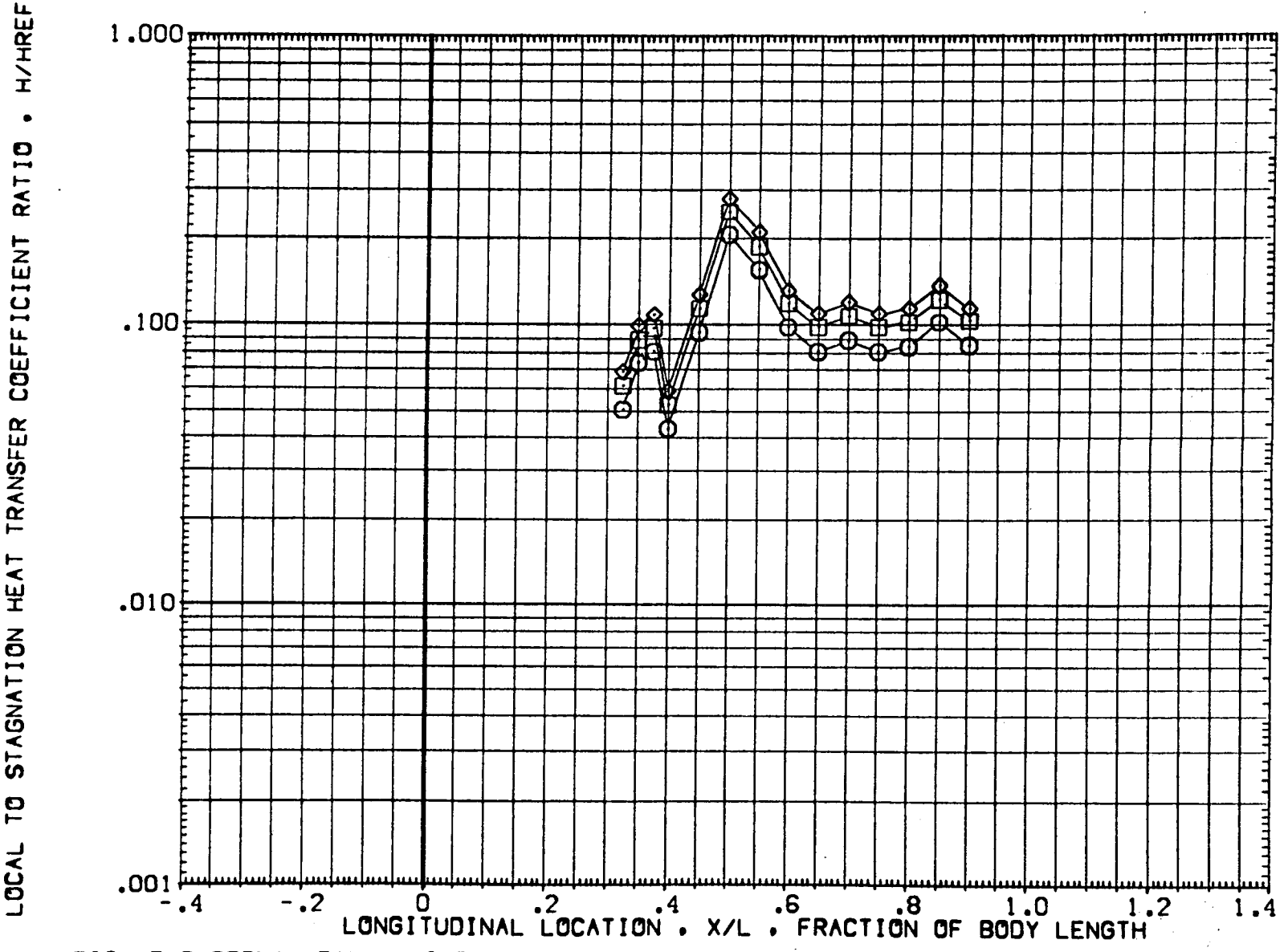


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE(T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE(T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE(T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

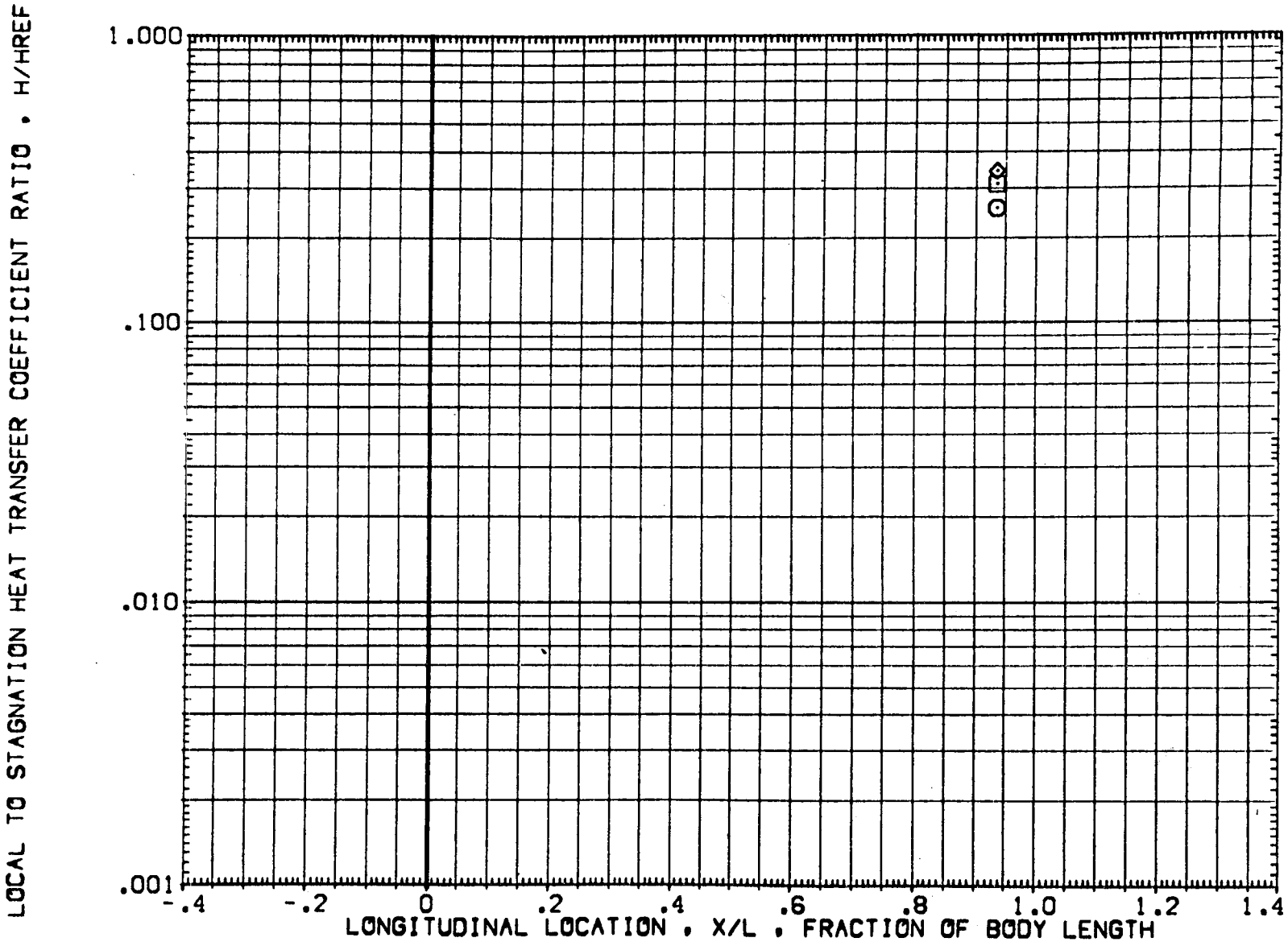


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

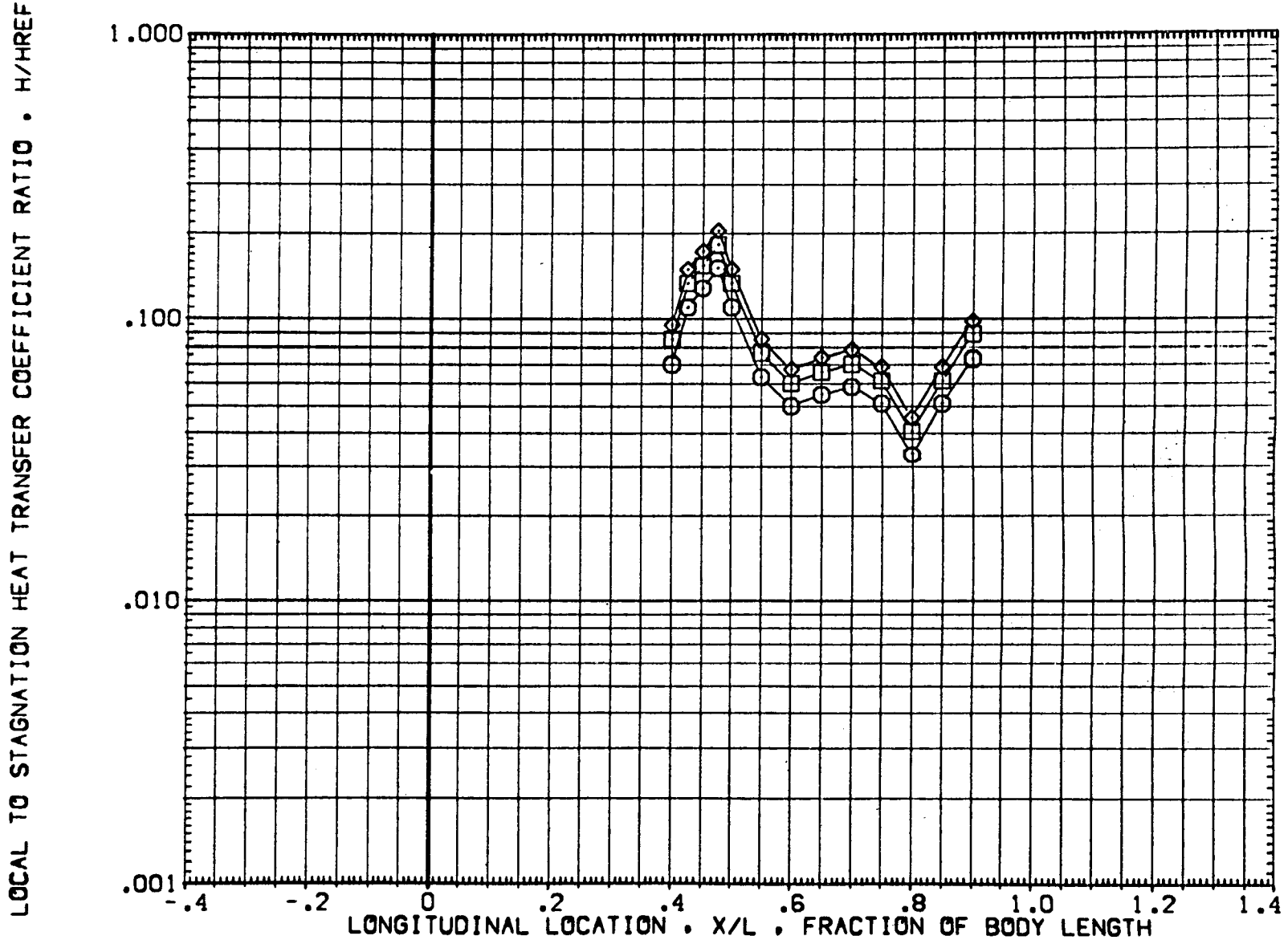


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AEIT19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BEIT19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

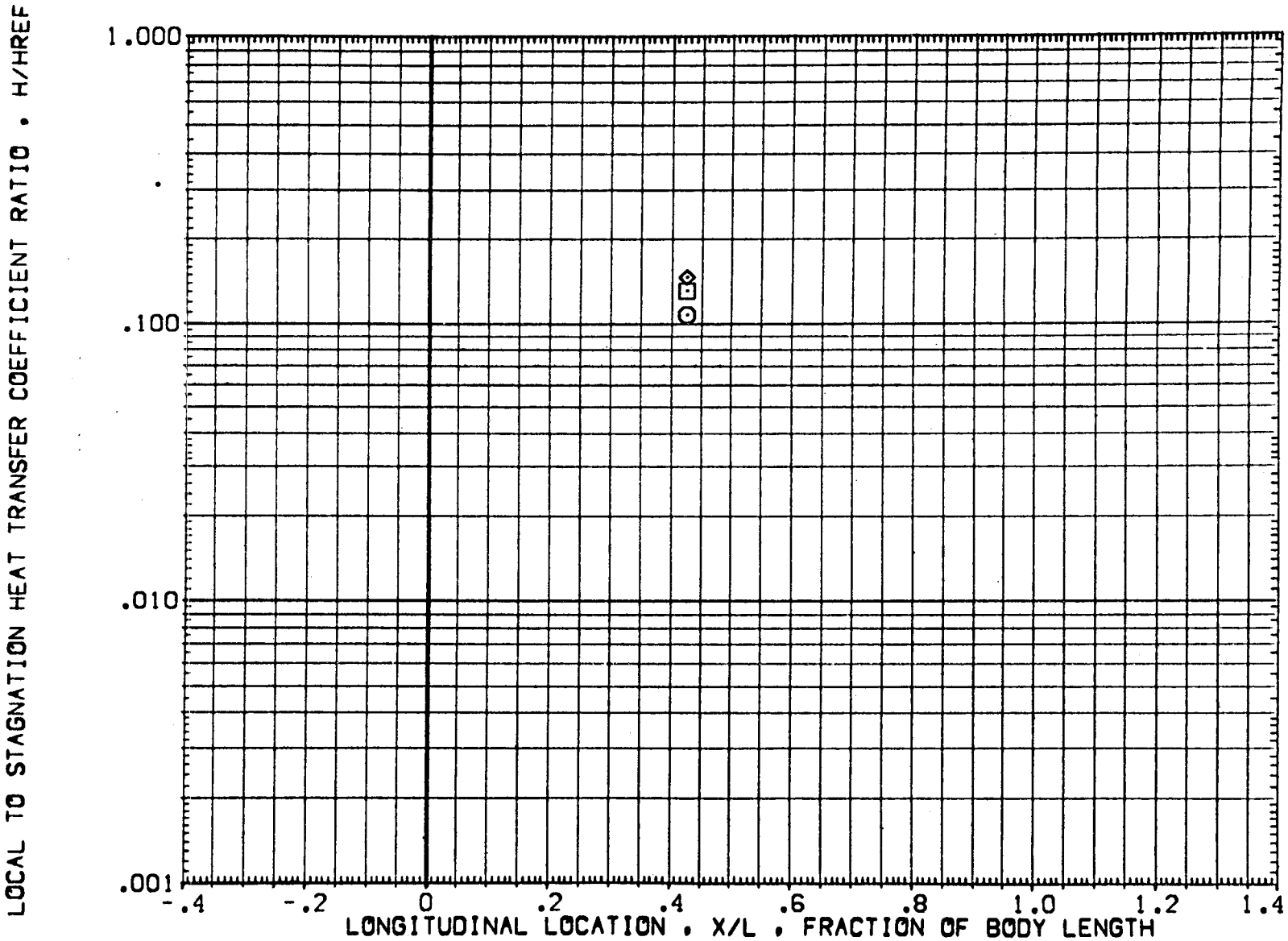


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1119)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

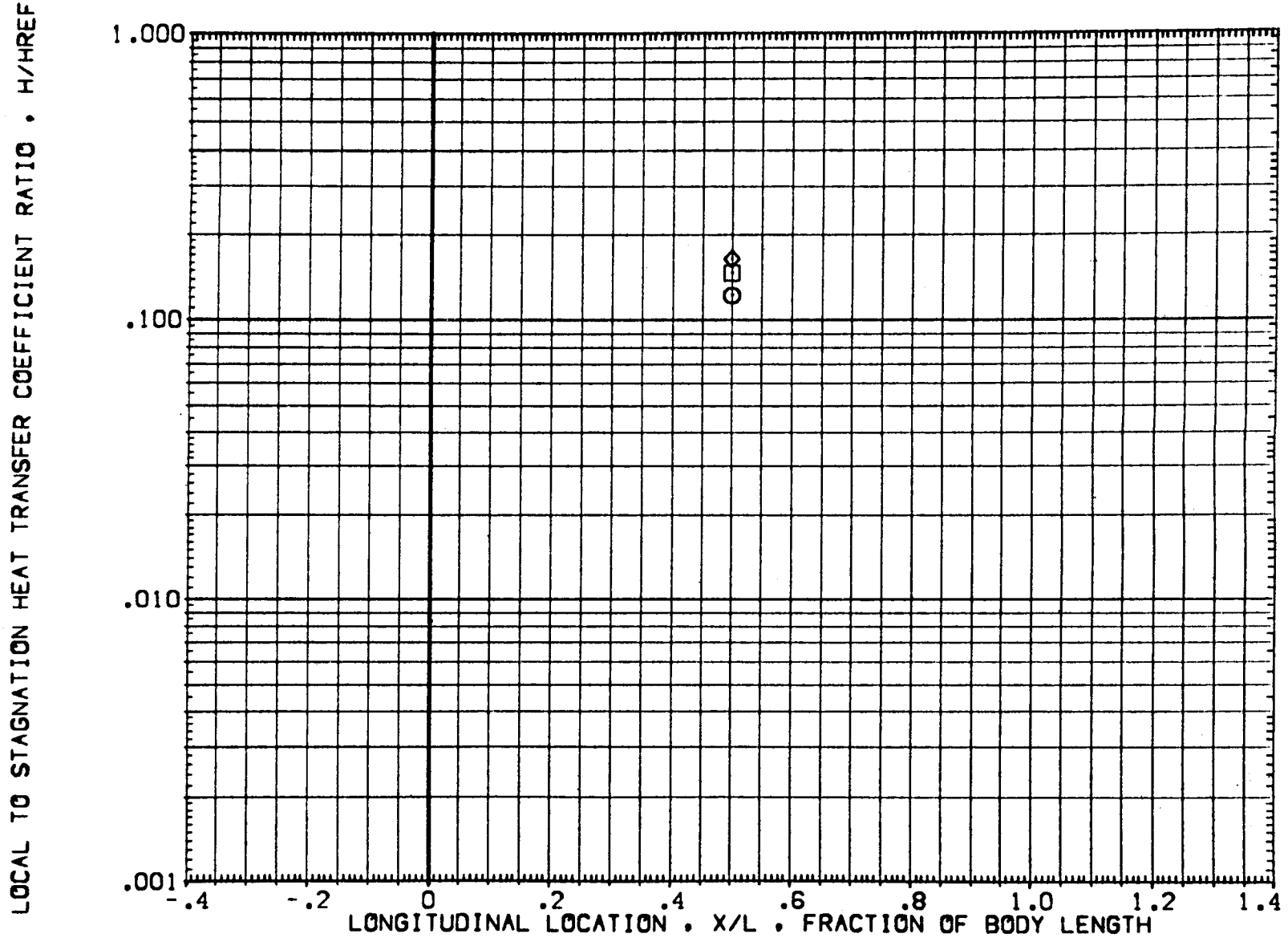


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

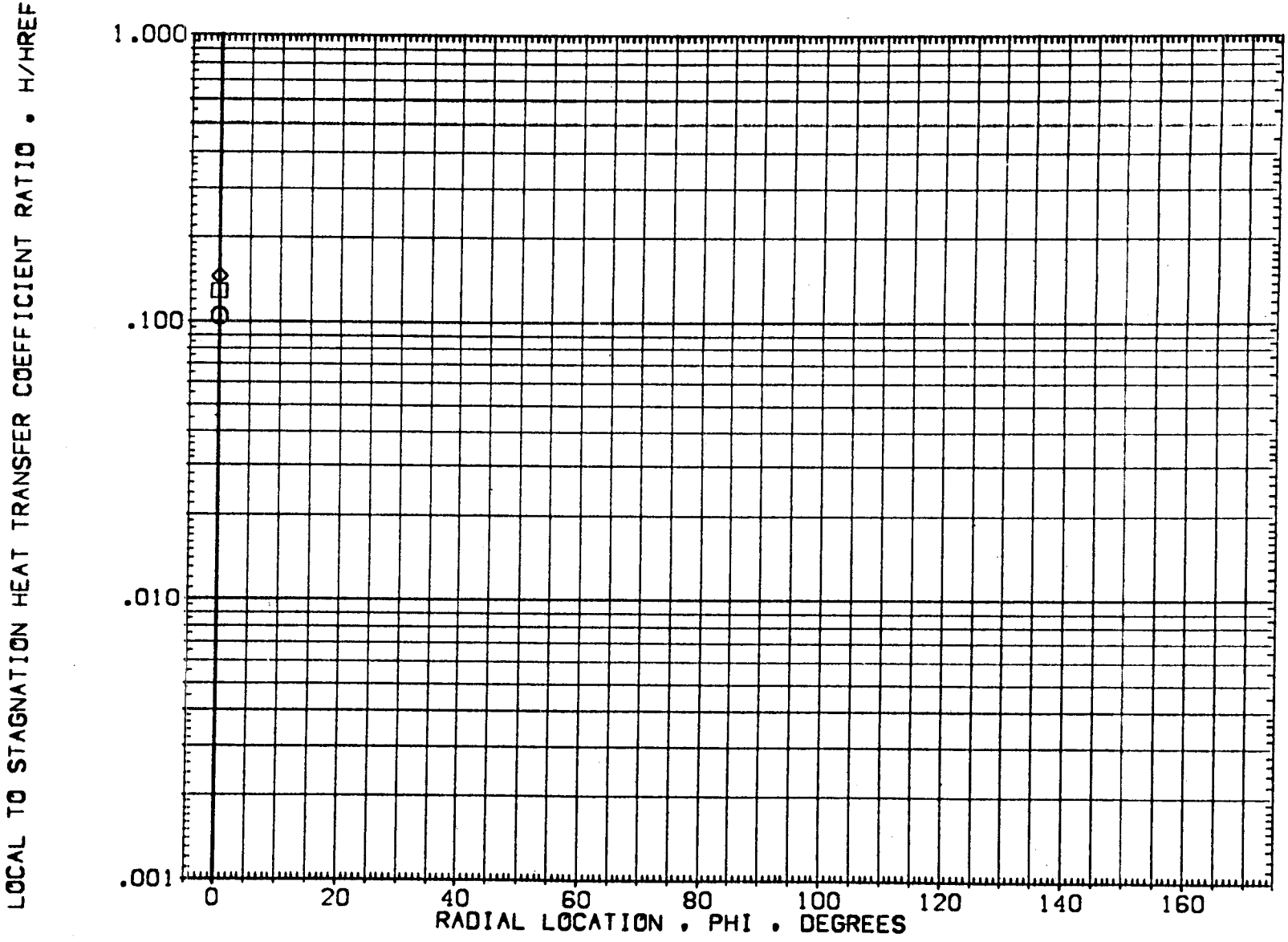


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AEIT19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BEIT19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

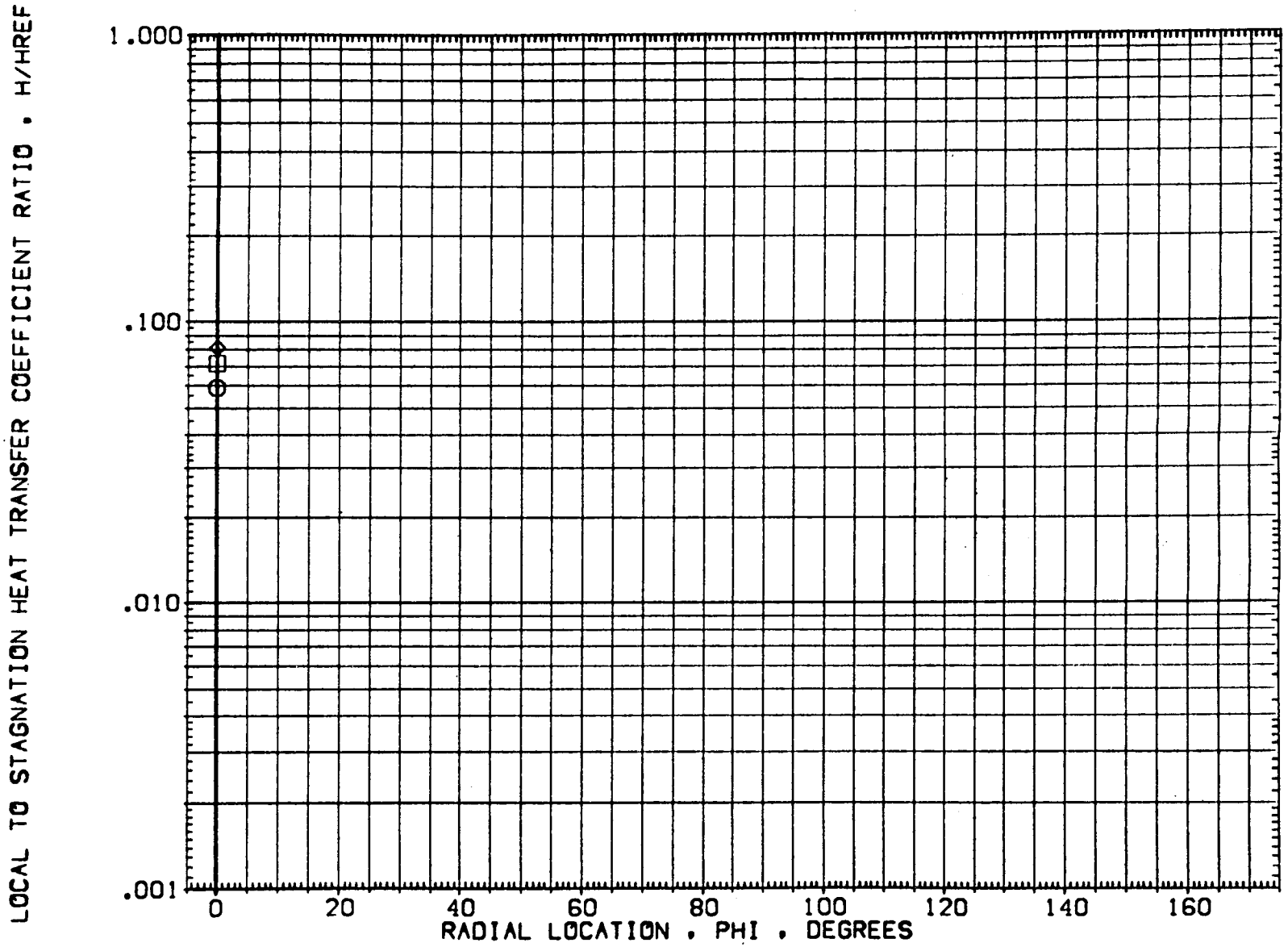


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE)T19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE)T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE)T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

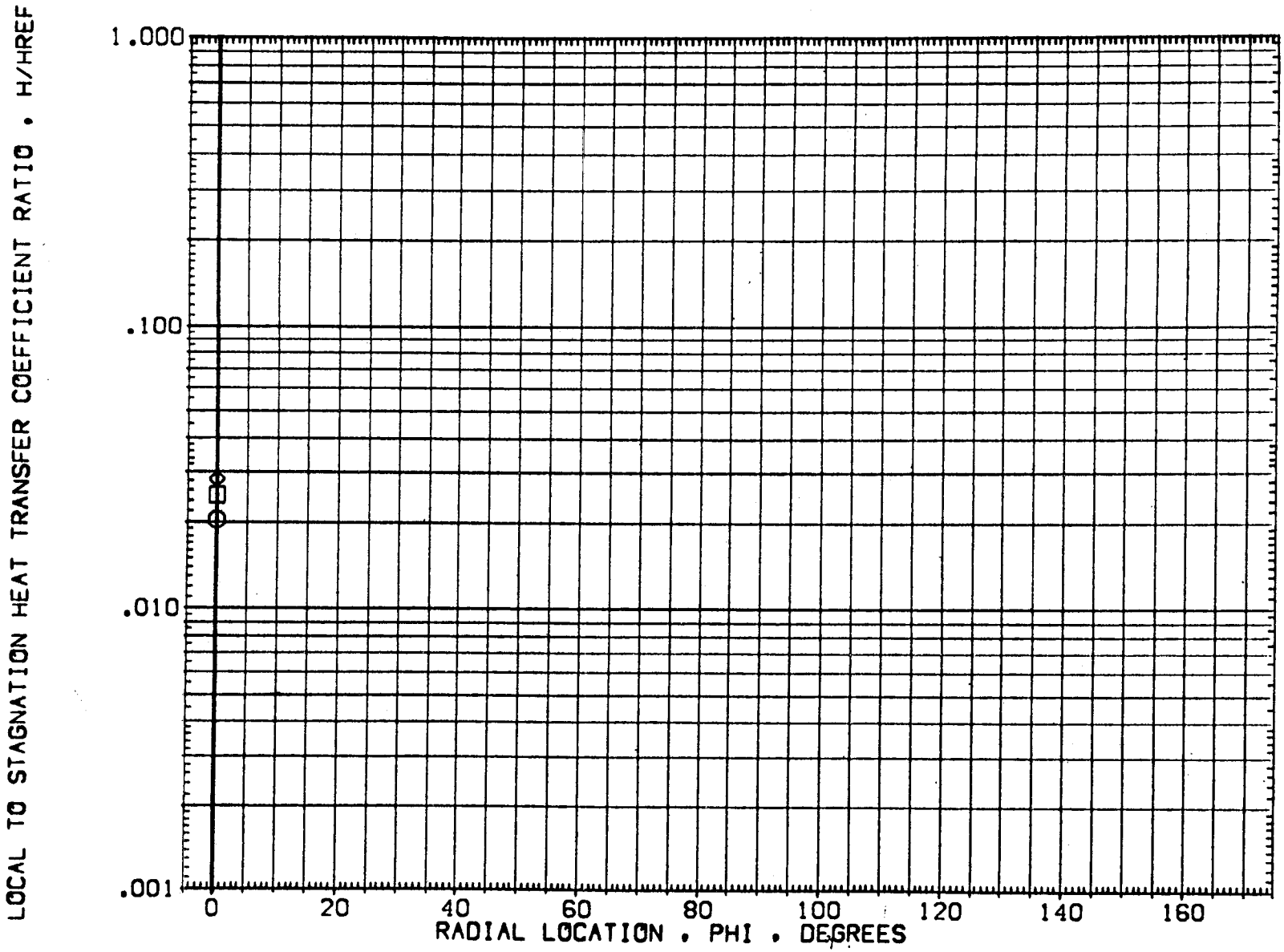


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1I19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1I19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1I19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

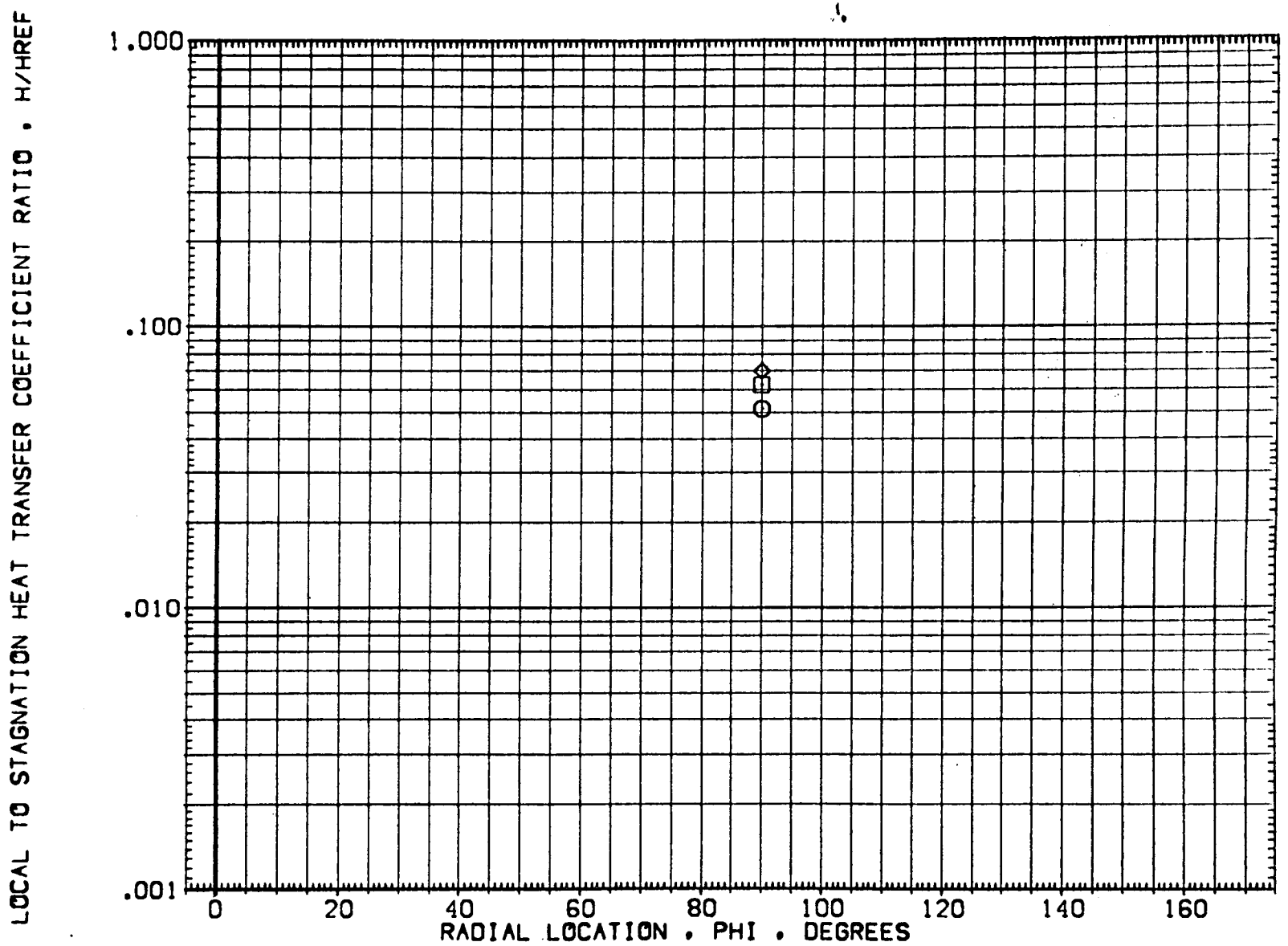


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AEIT19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BEIT19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

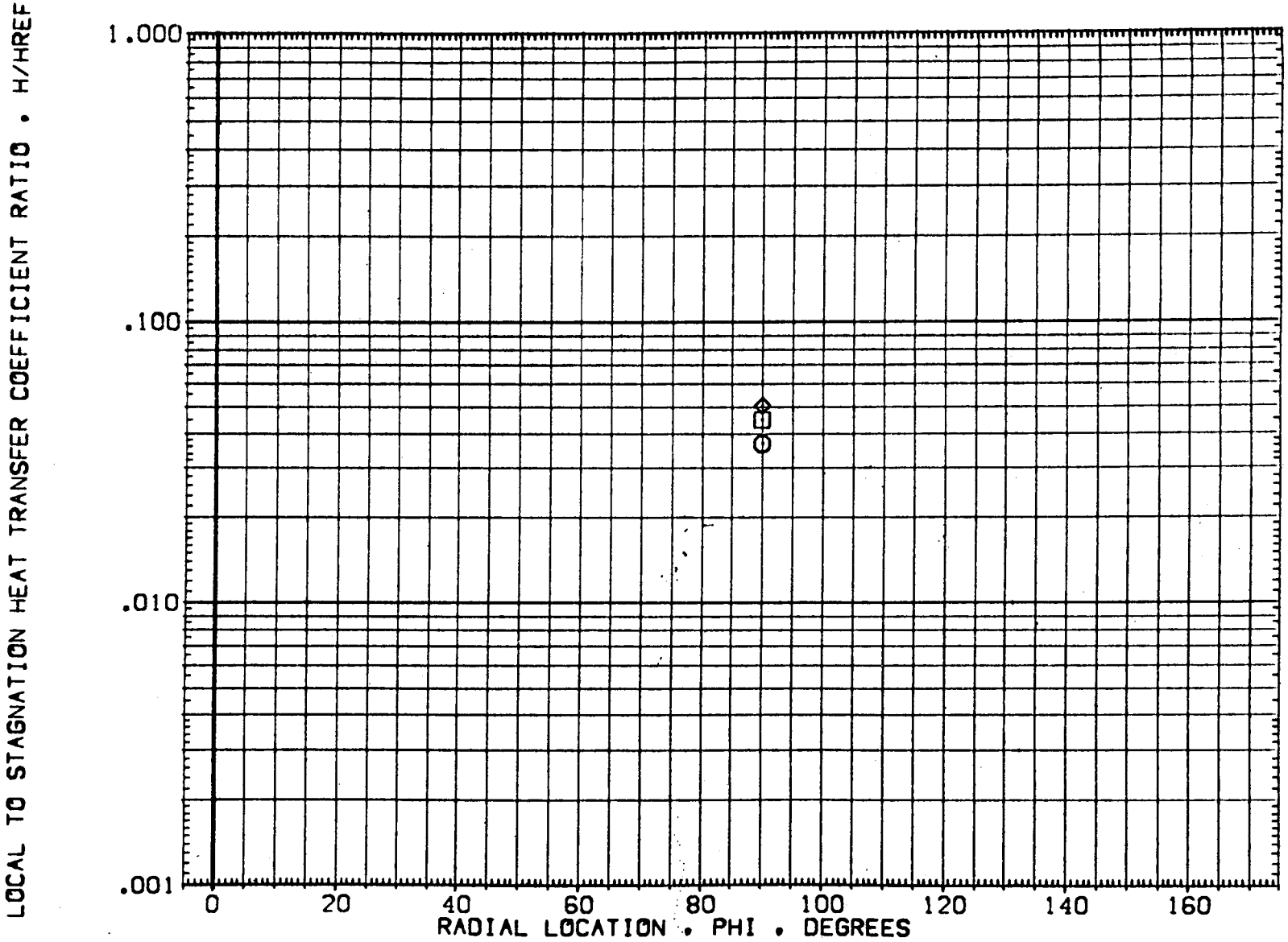


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE(T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE(T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

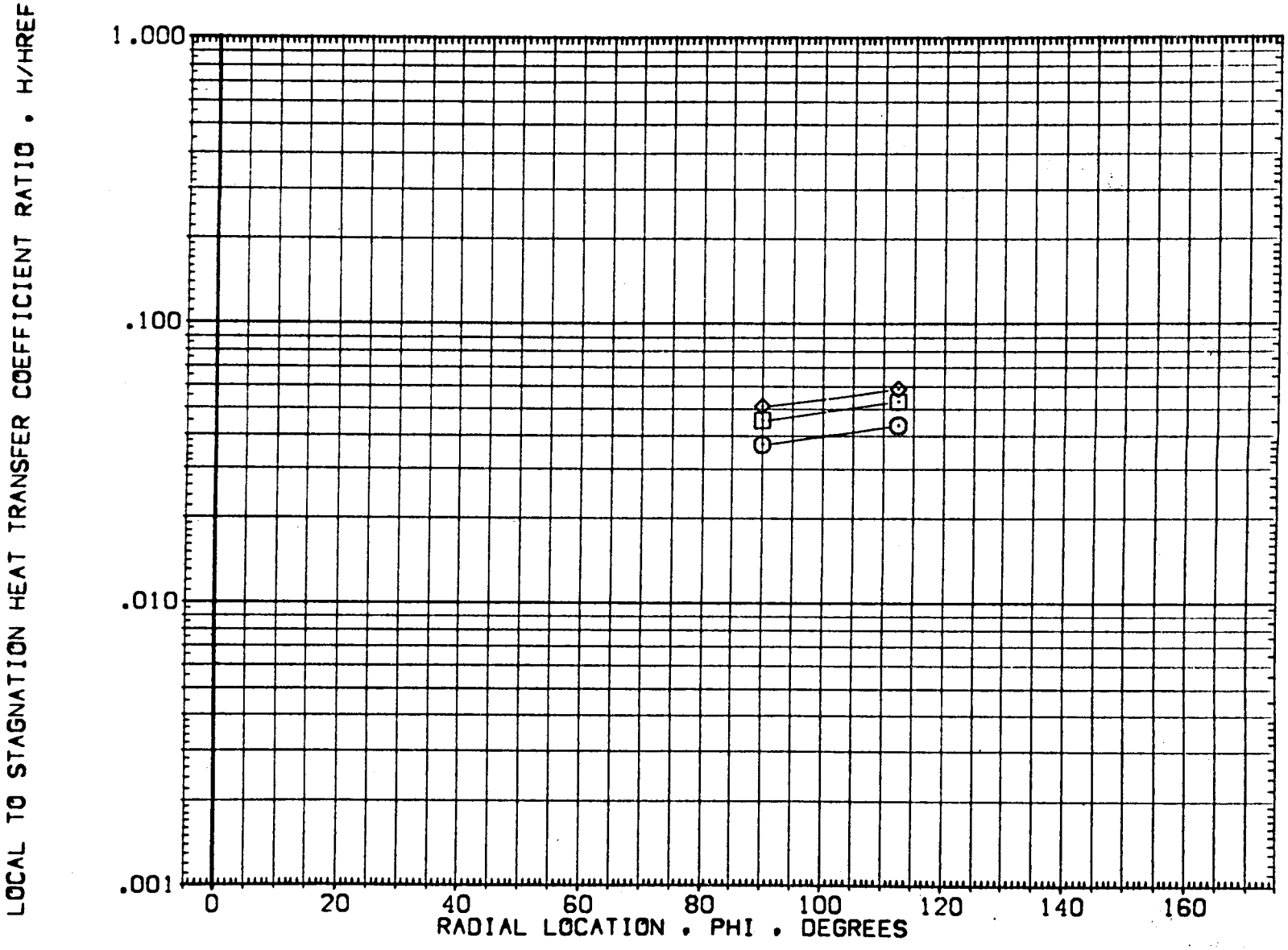


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE!T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE!T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

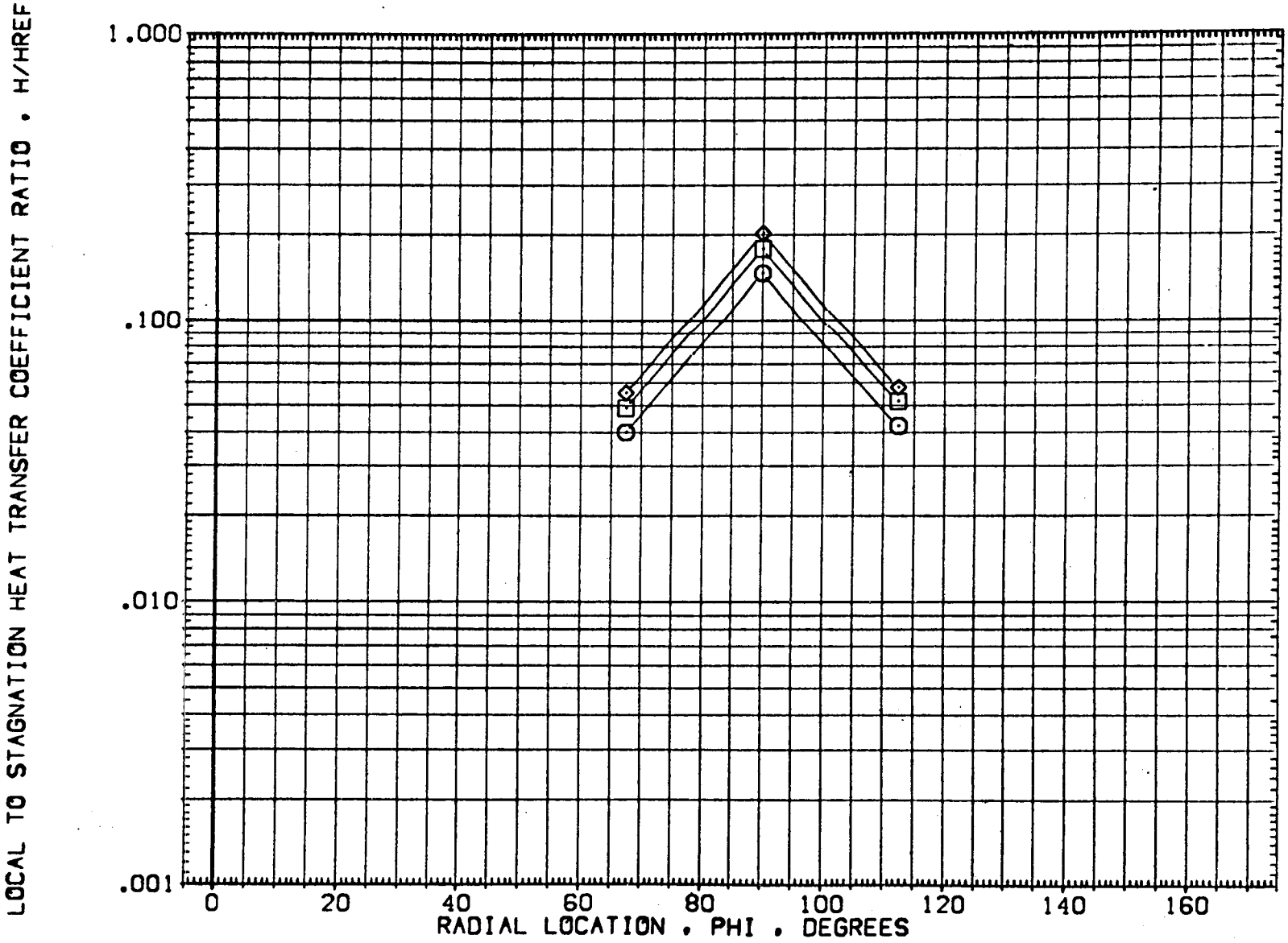


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1119)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

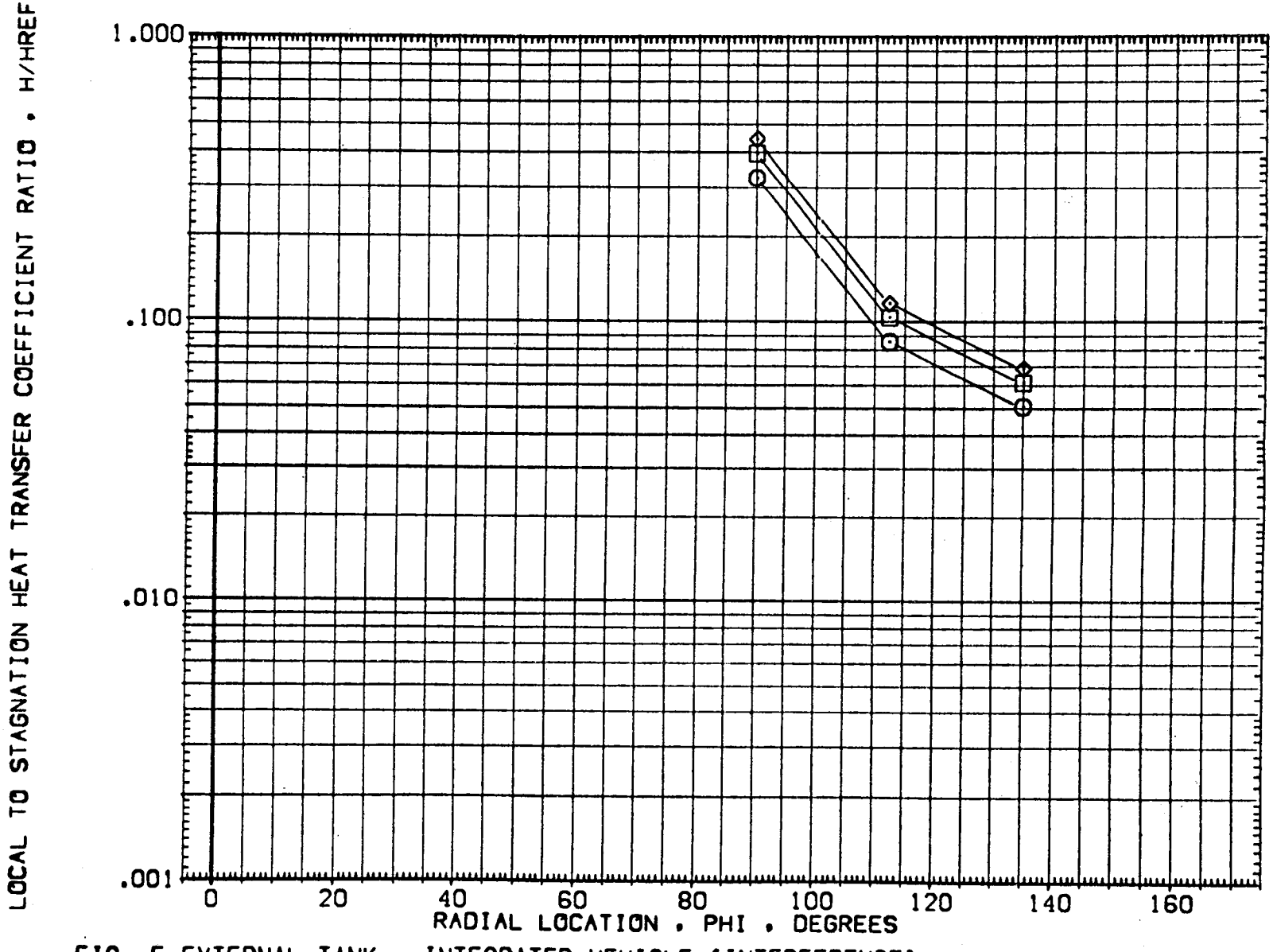


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

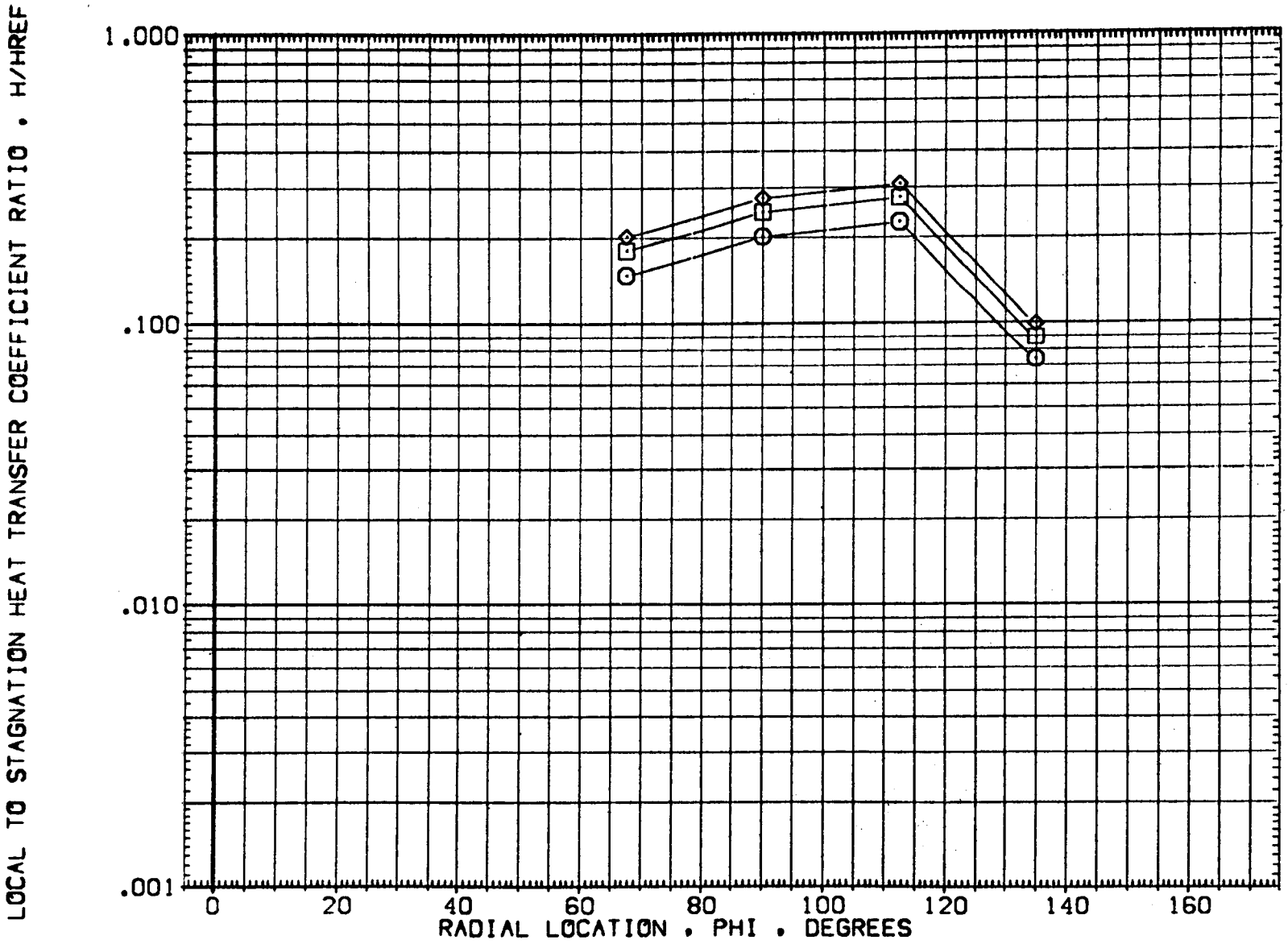


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
[RE]T19]	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
[AE]T19]	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
[BE]T19]	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

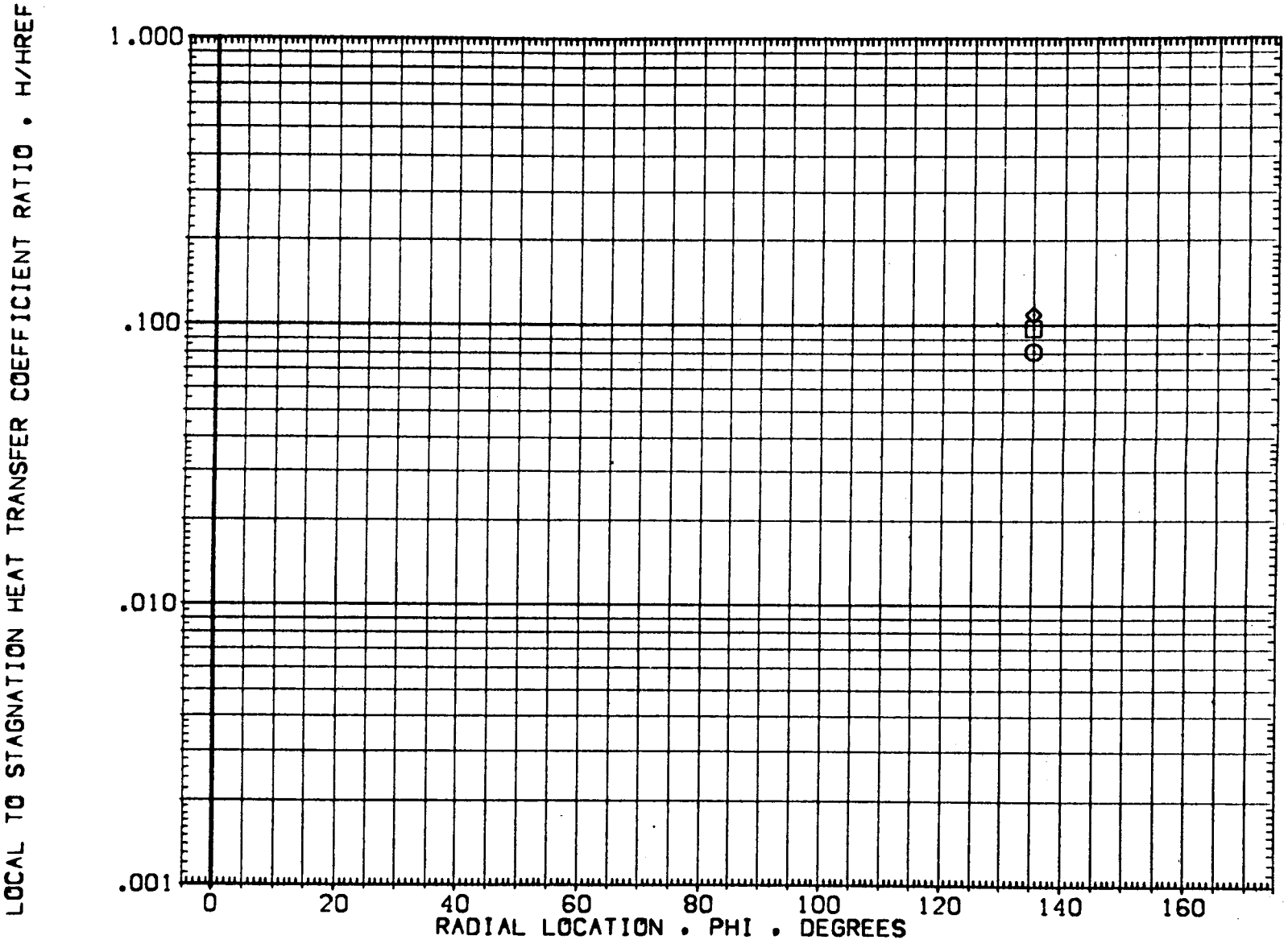


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

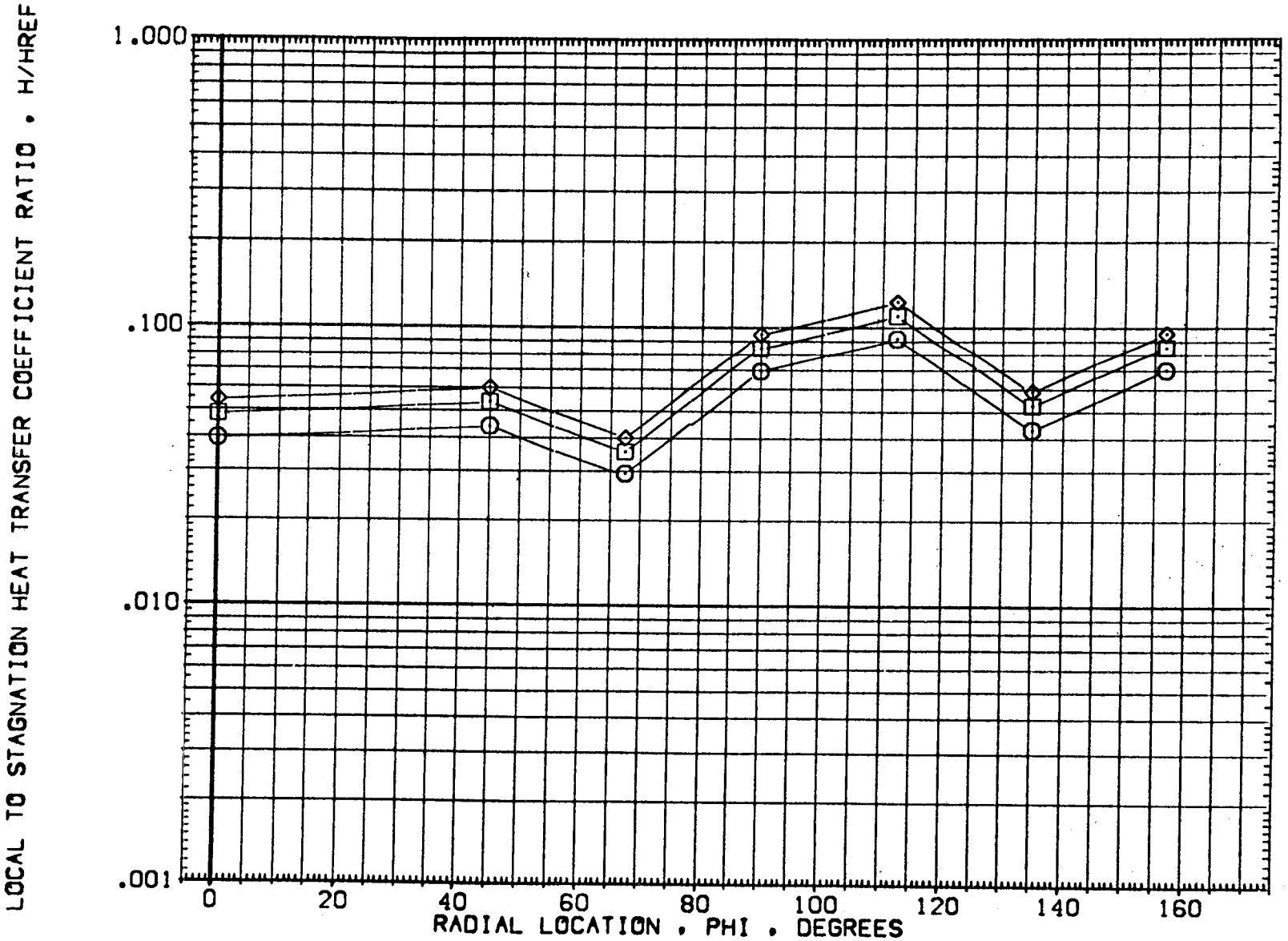


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE)T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE)T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE)T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

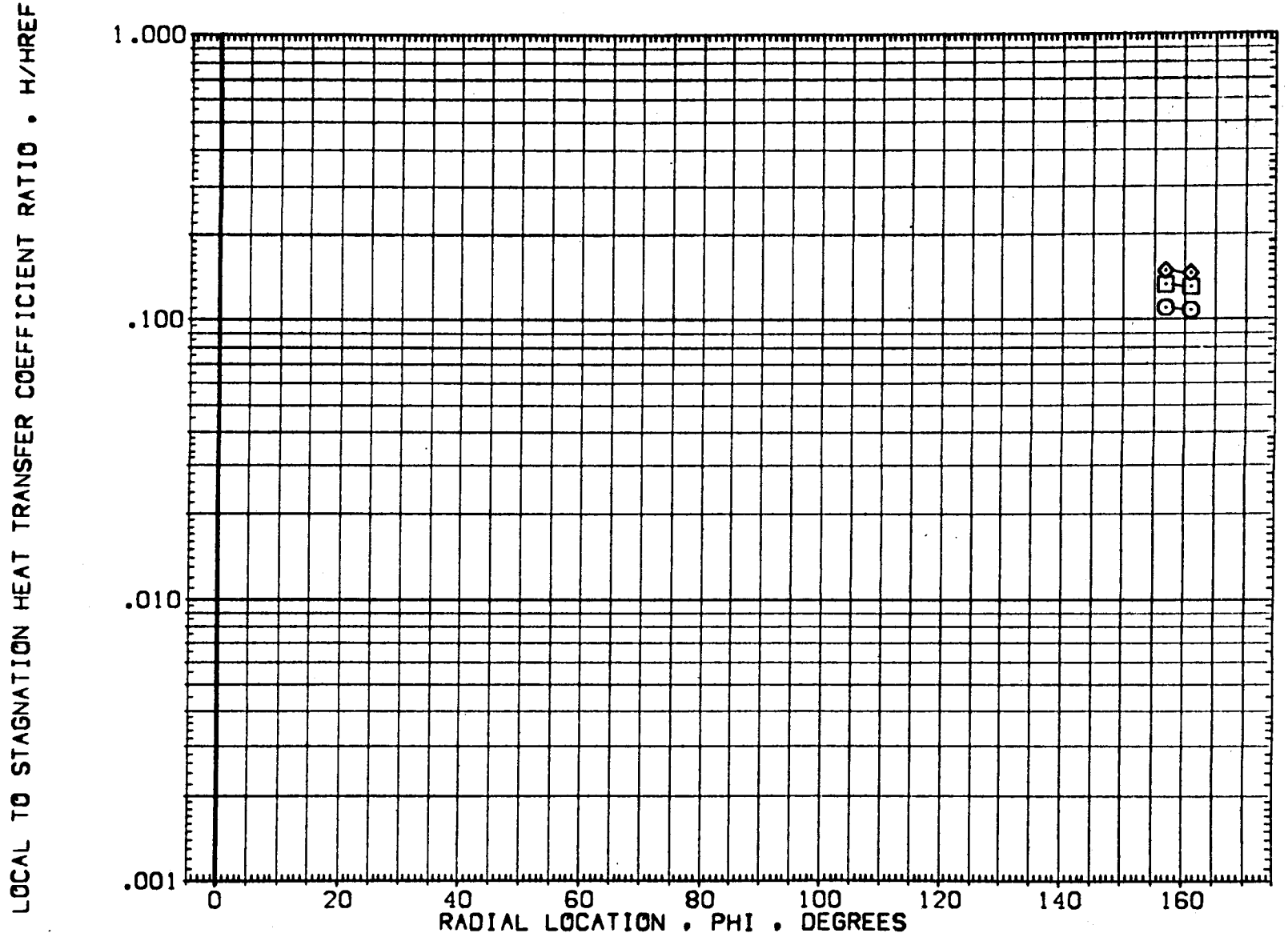


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

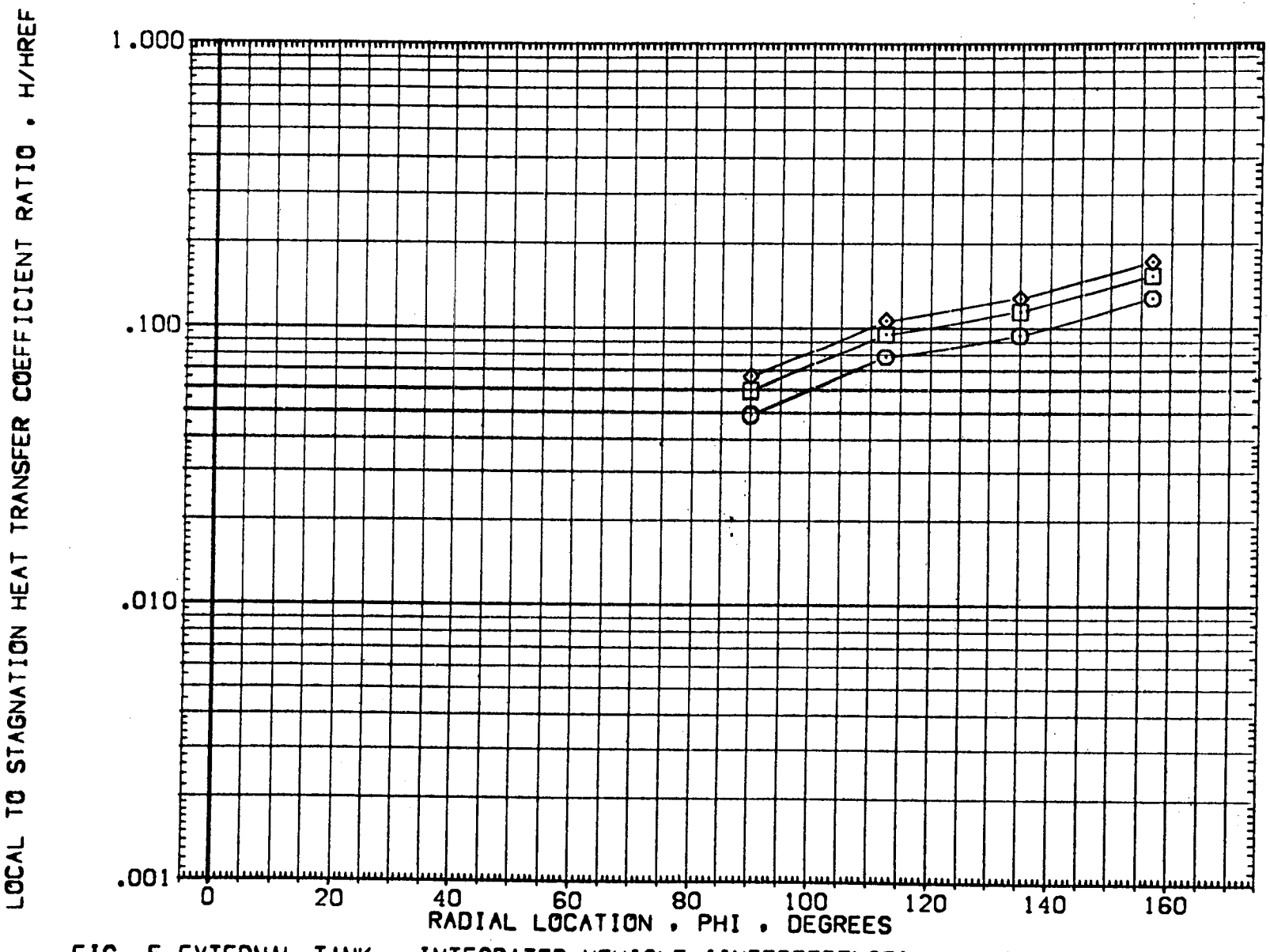


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE,IT19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE,IT19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

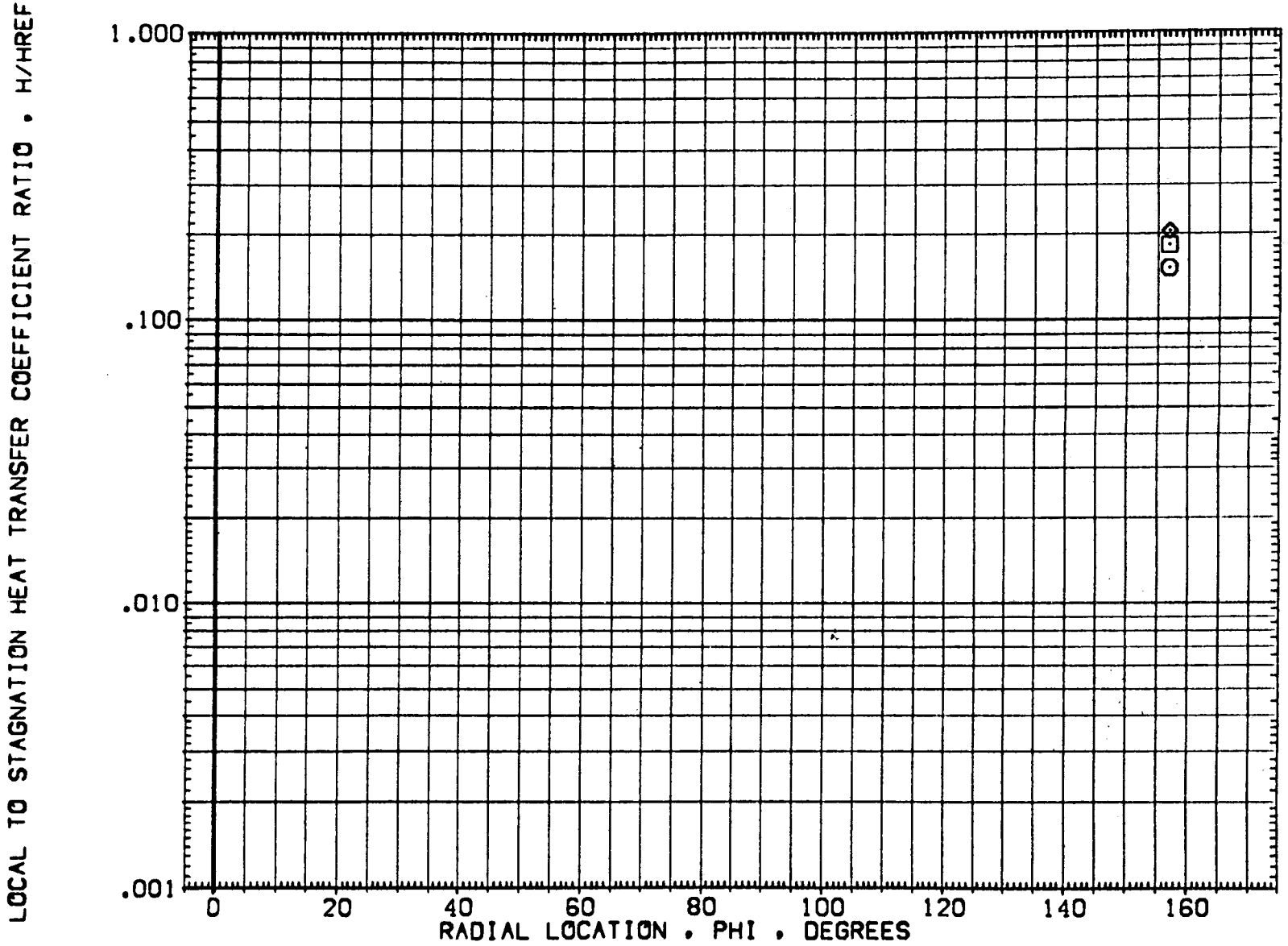


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(REIT19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AEIT19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BEIT19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

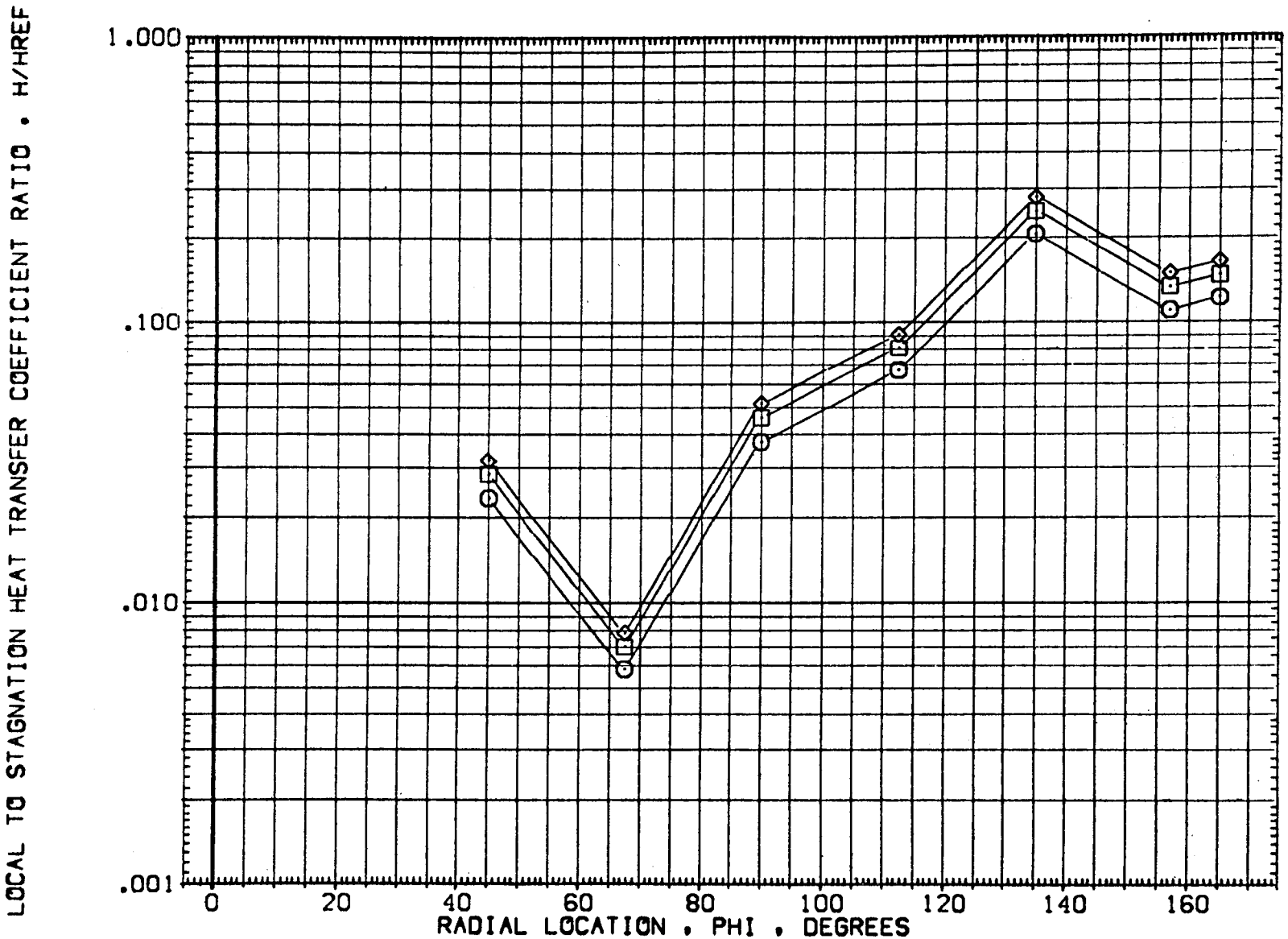


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

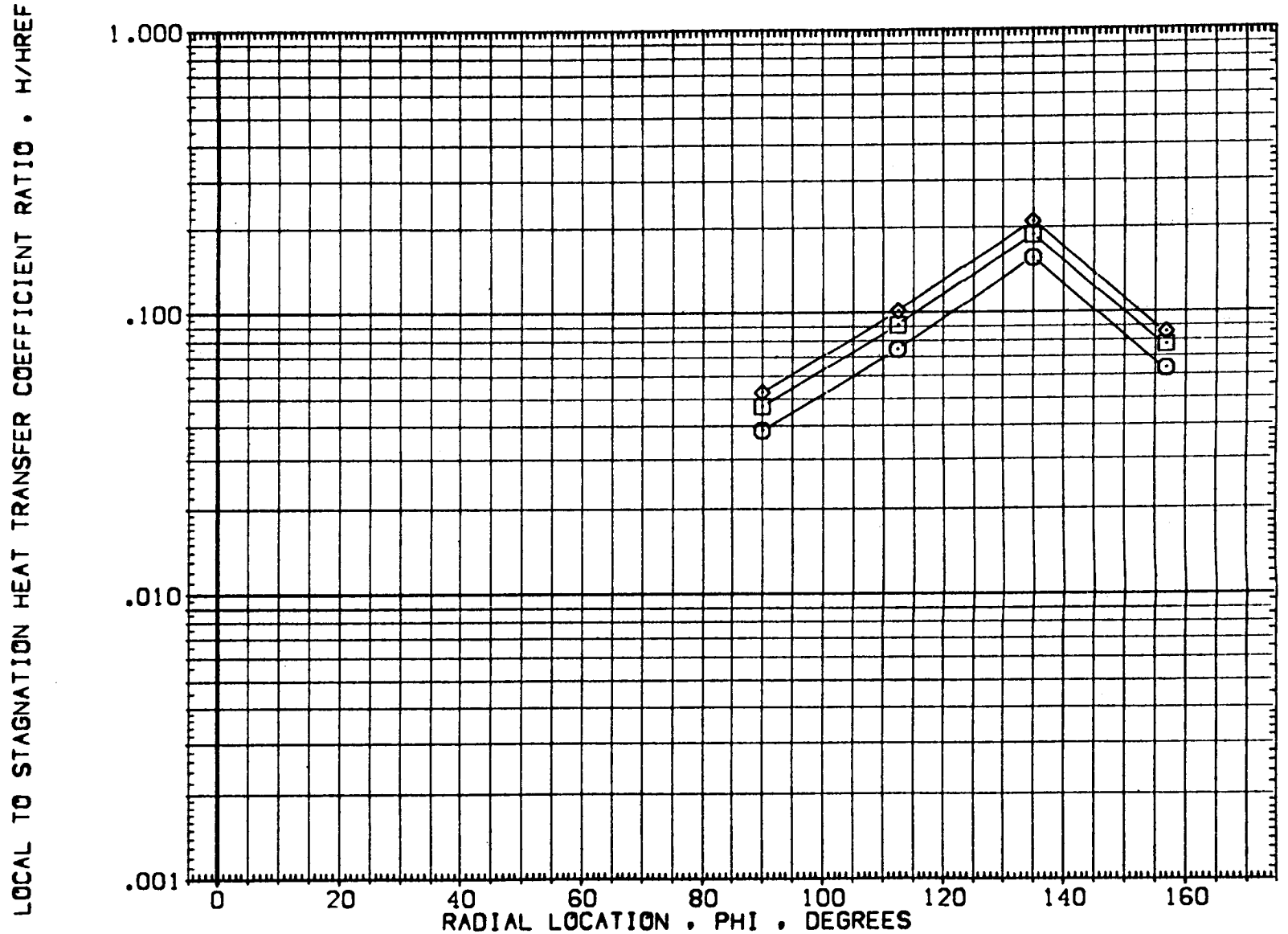


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T19)	○	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE!T19)	□	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE!T19)	◇	ARC 3.5-178 IH3 C+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

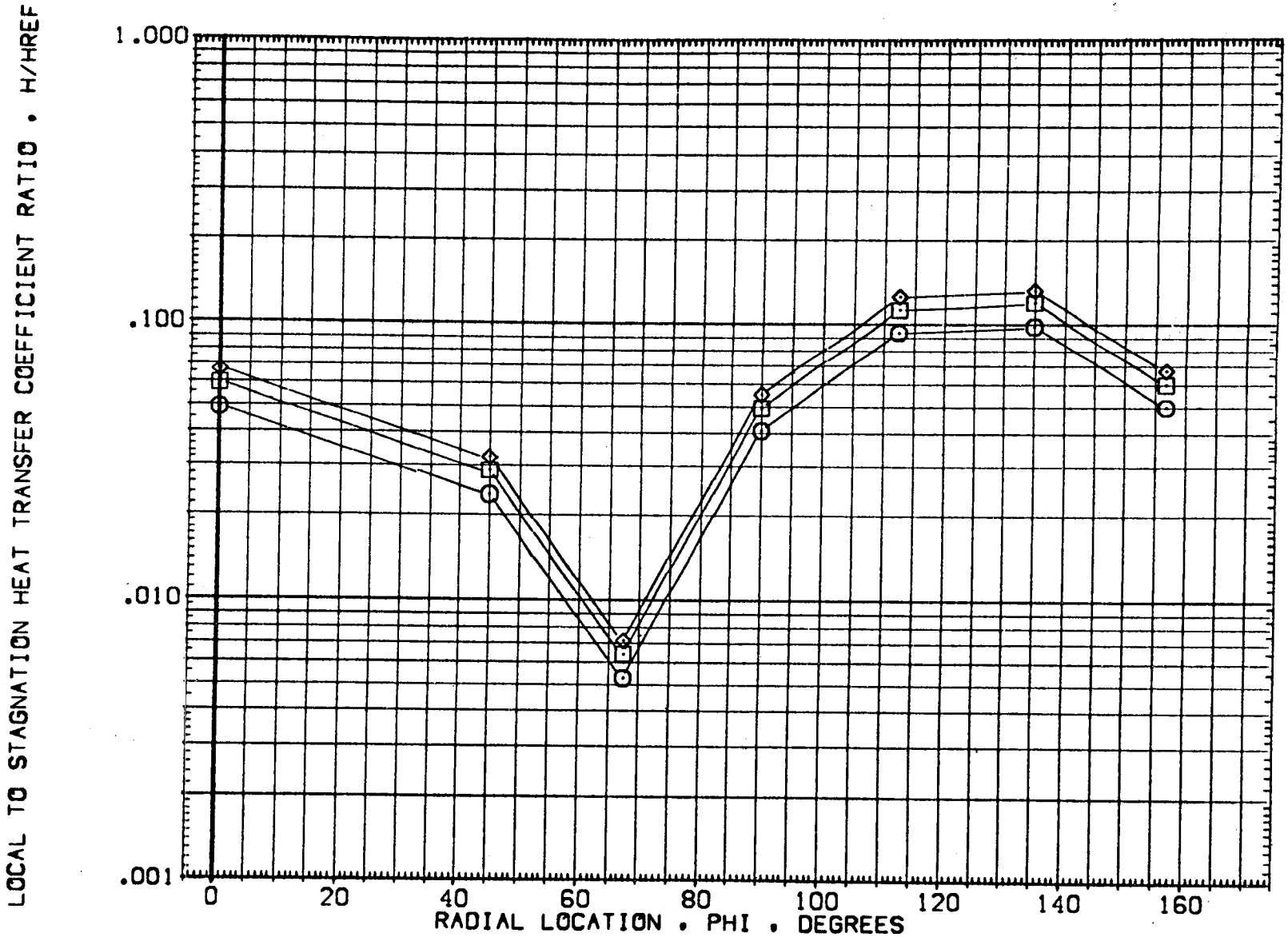


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T19)	○	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE!T19)	□	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE!T19)	◇	ARC 3.5-178 !H3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

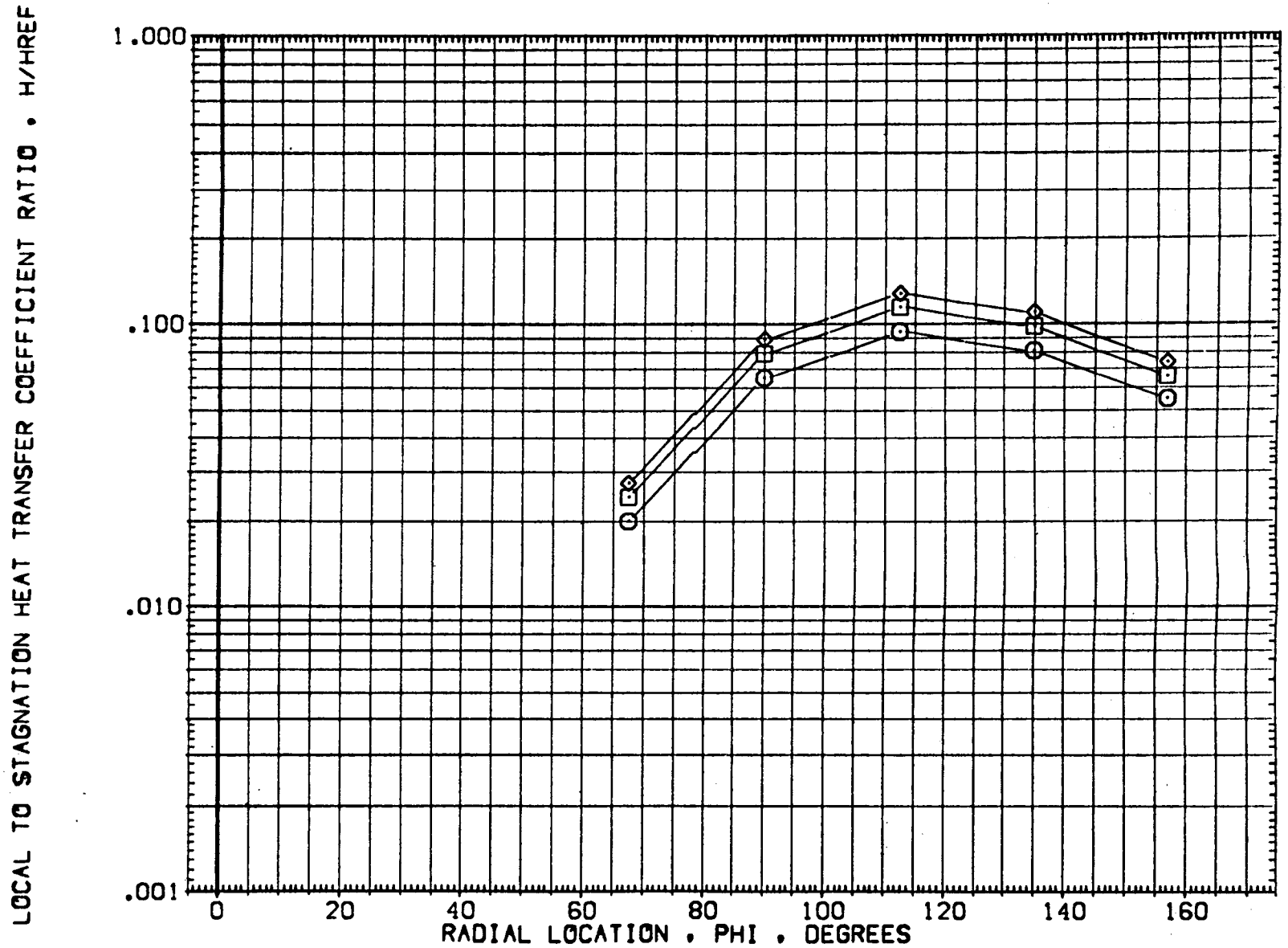


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	▽	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

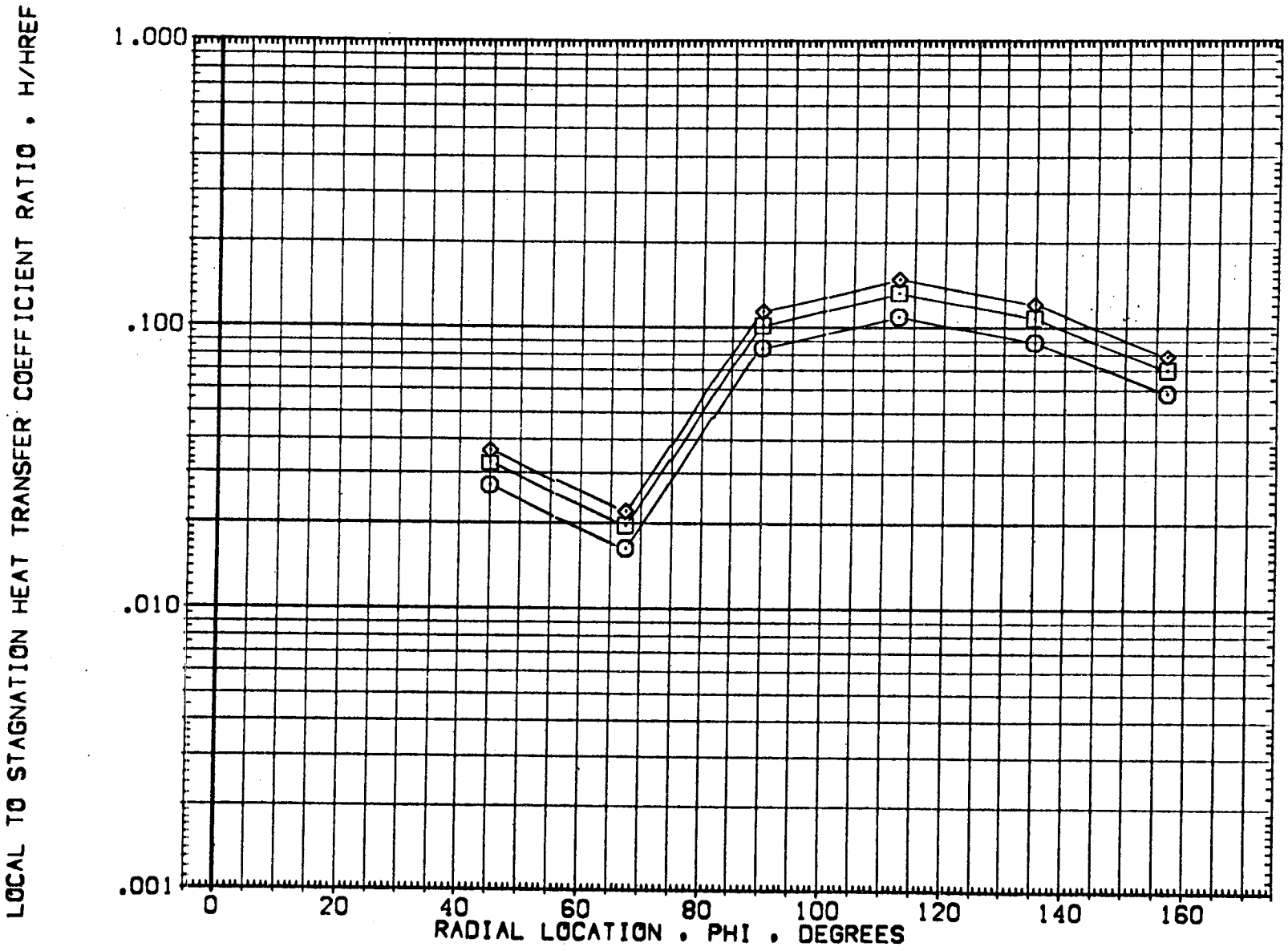


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

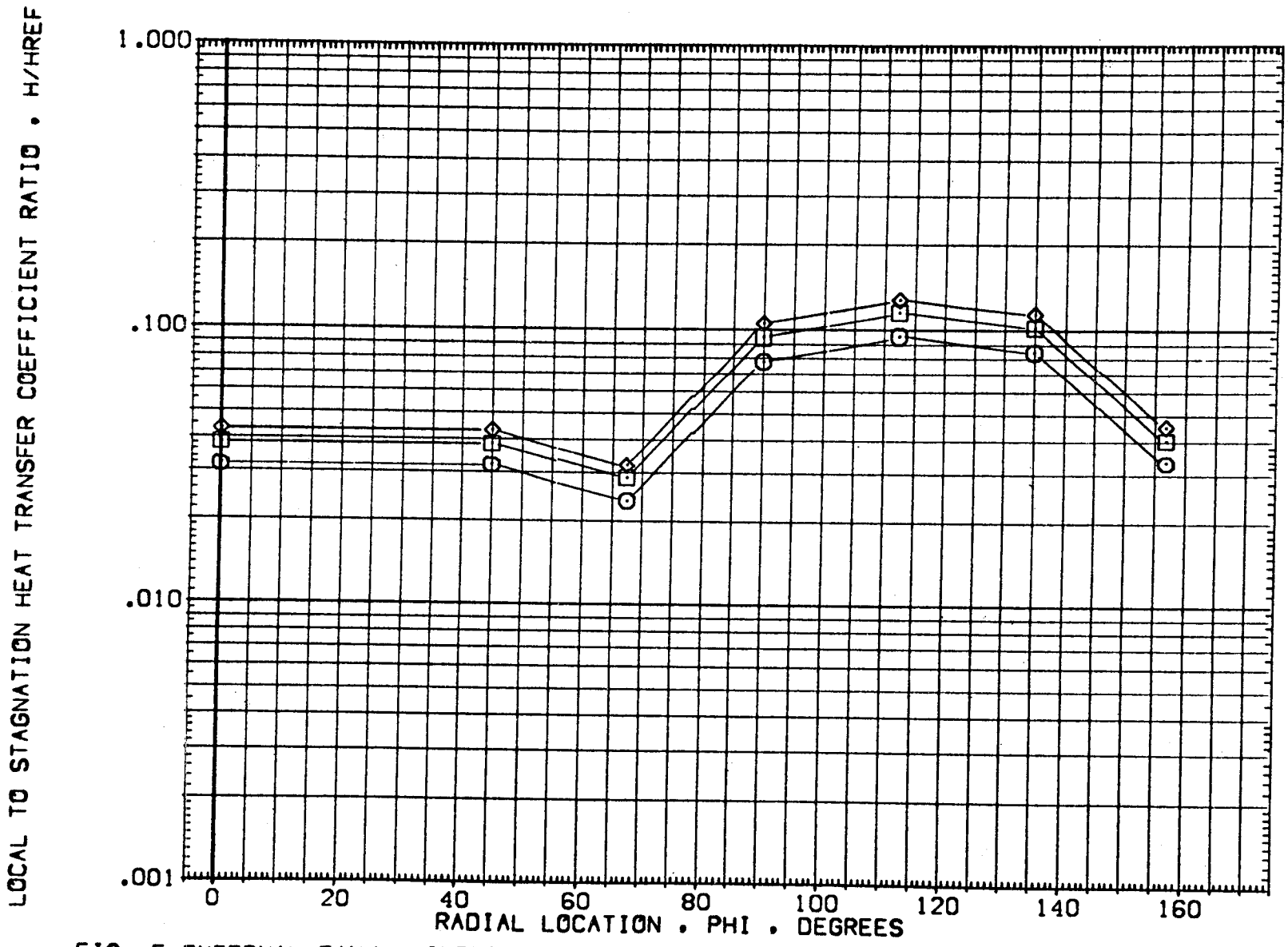


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1119)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

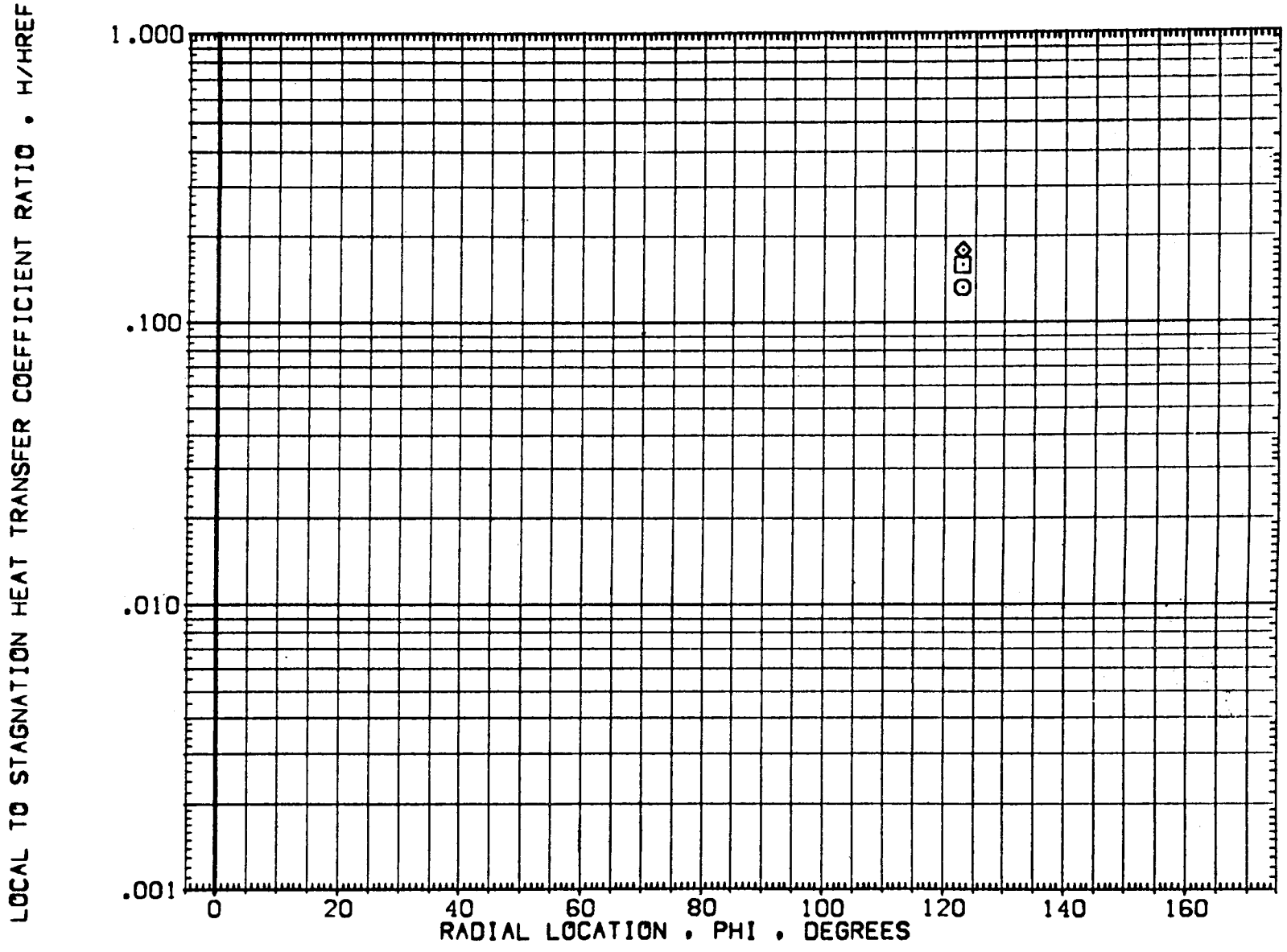


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T19)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE(T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE(T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

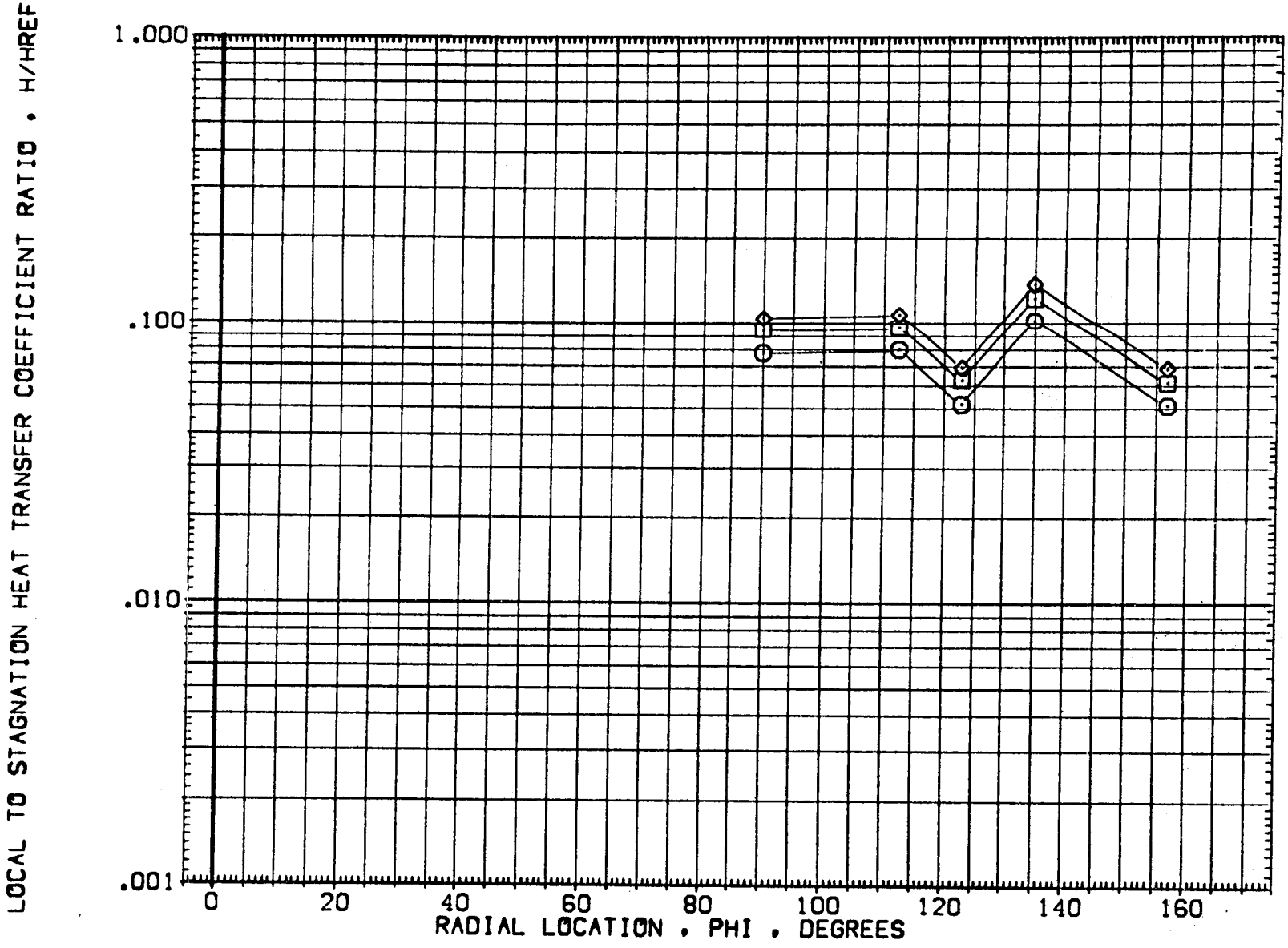


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1119)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

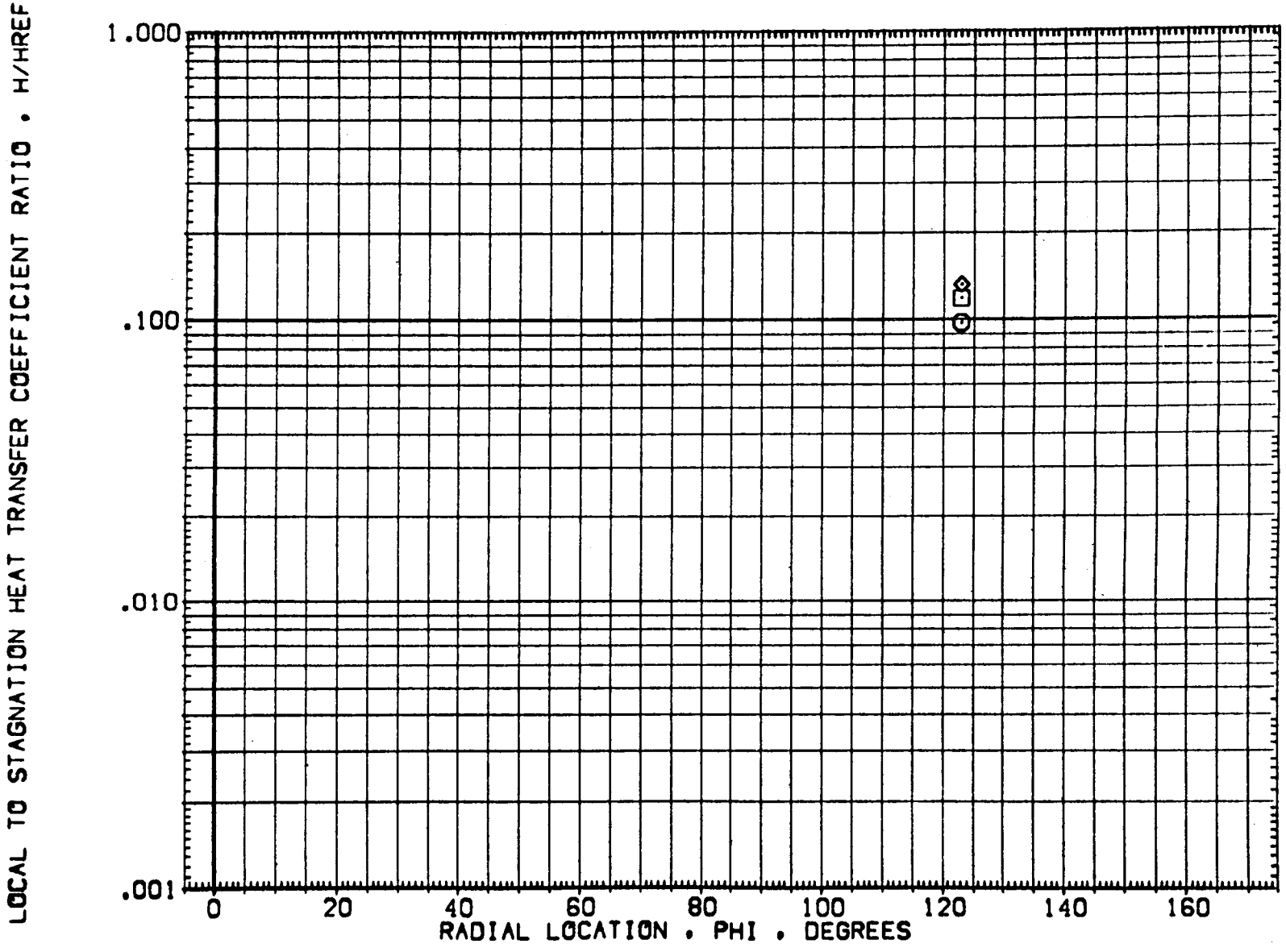


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE(T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE(T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE(T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

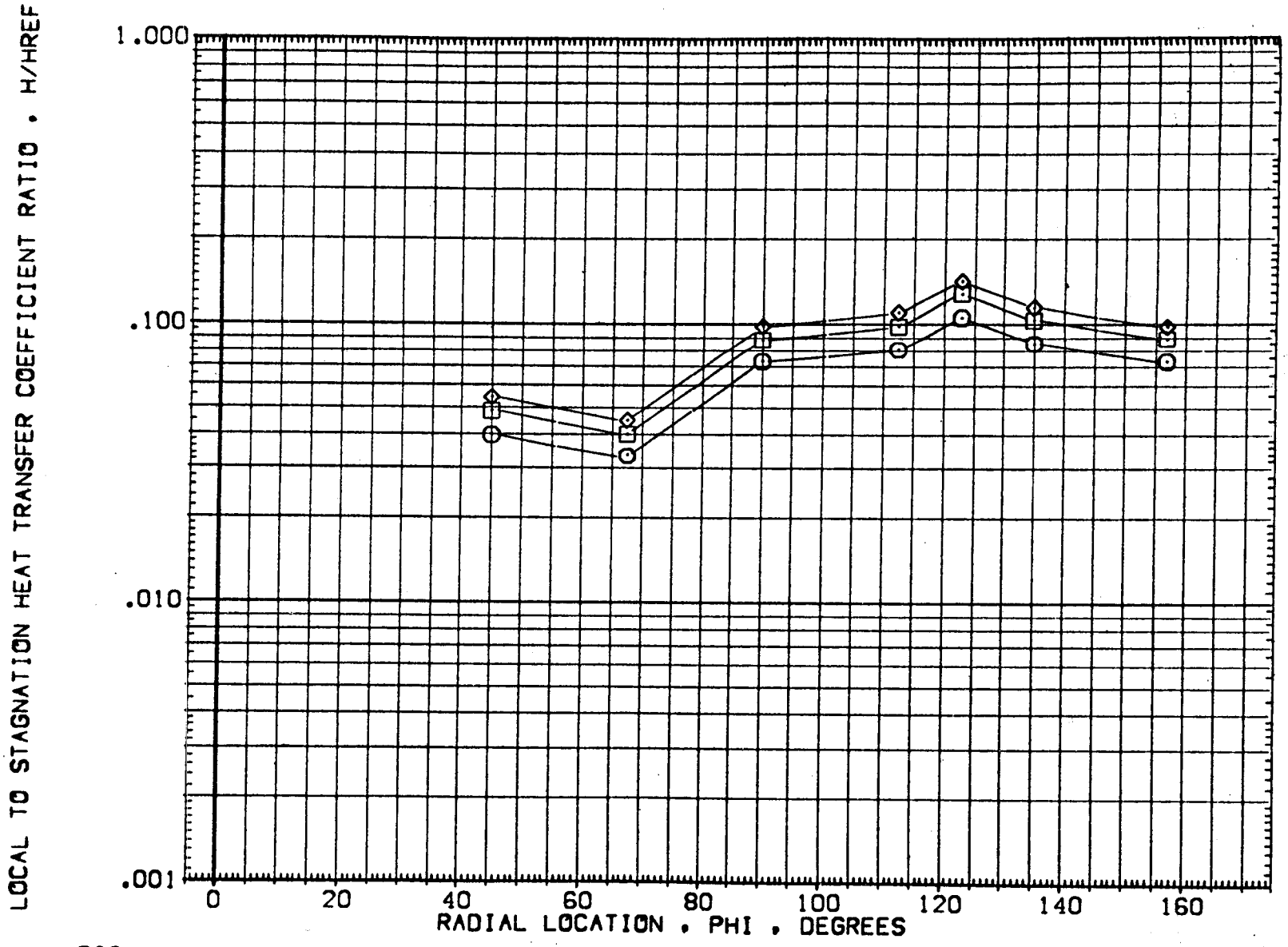


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

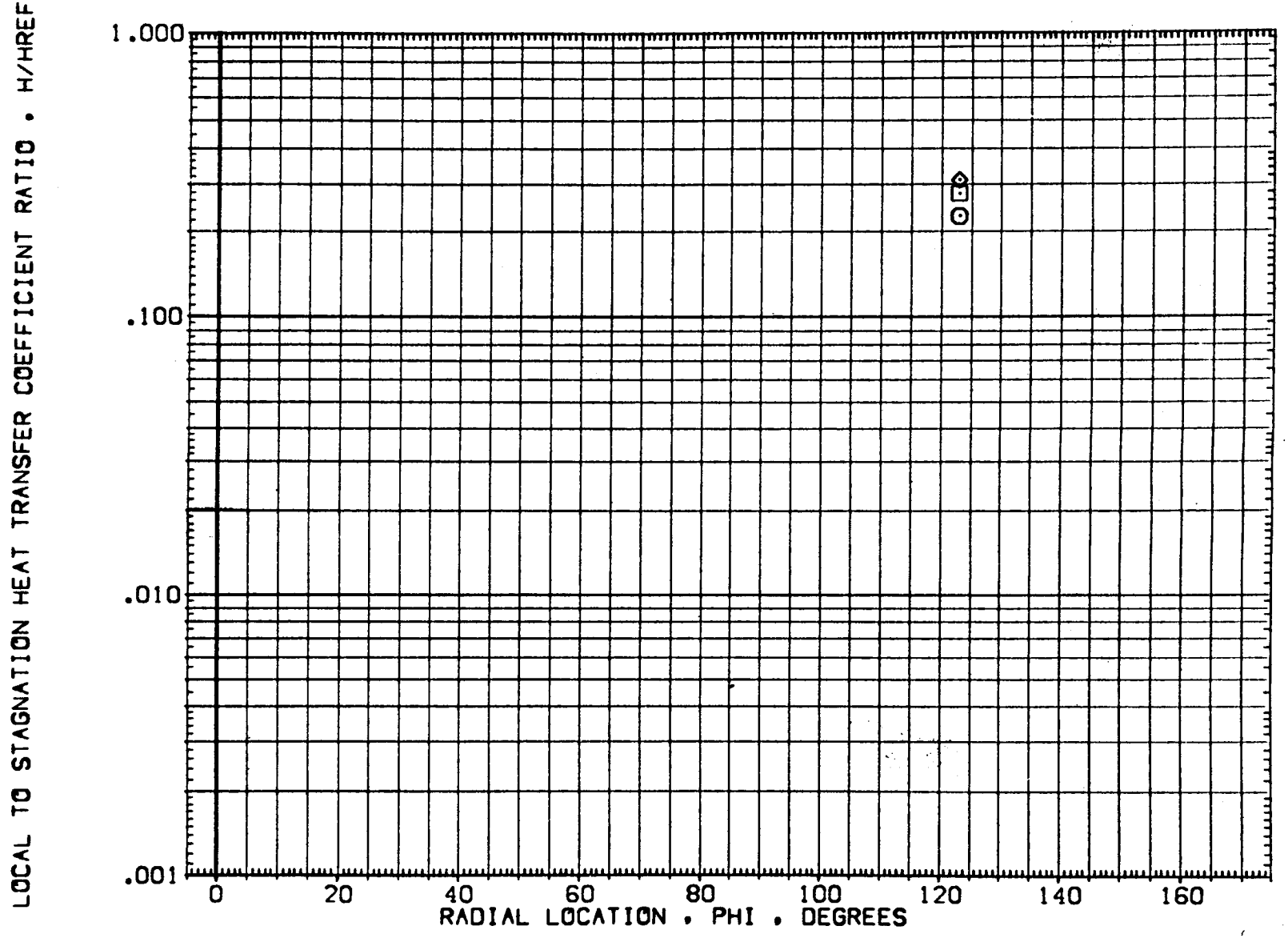


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE1T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE1T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

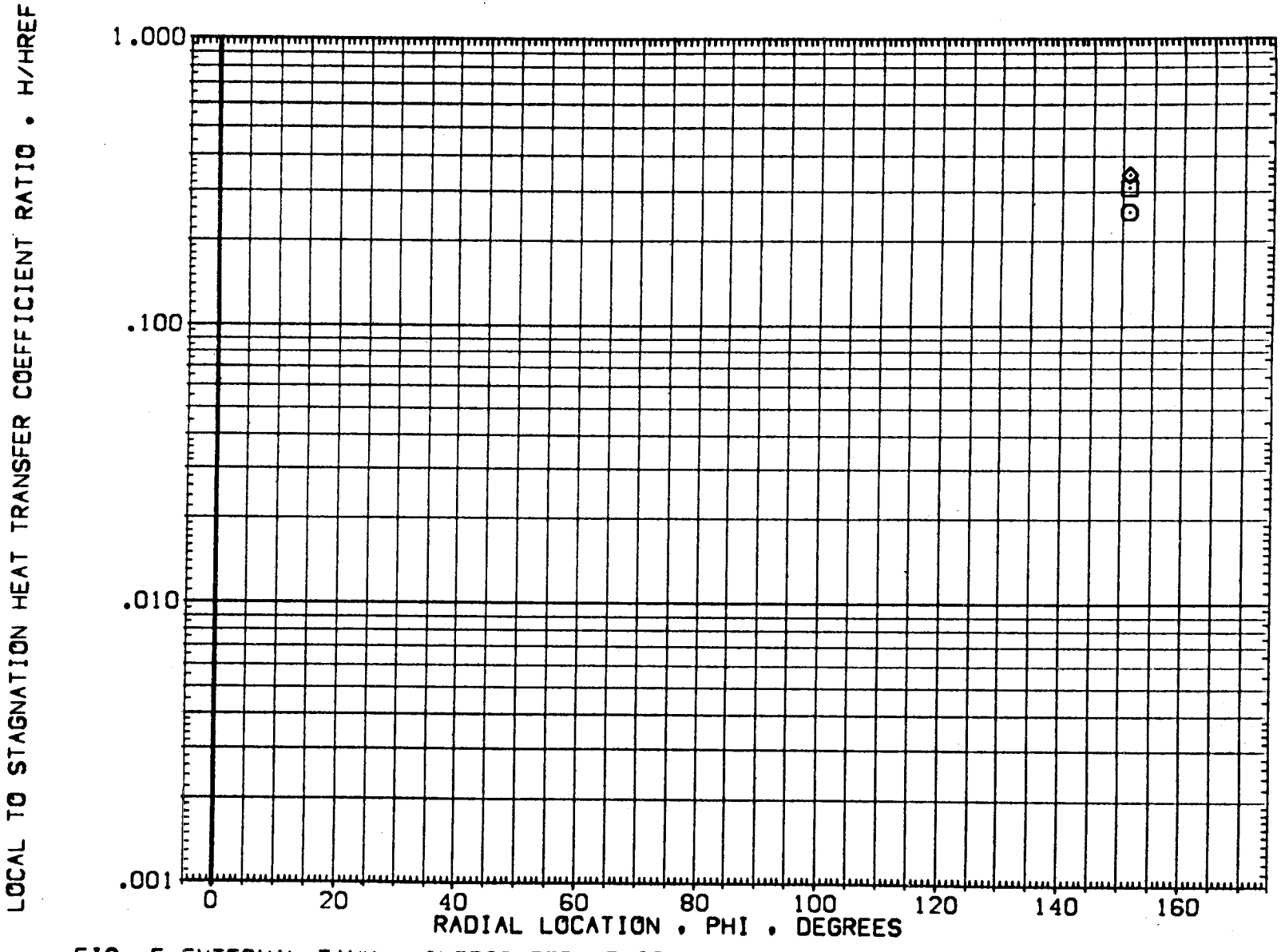


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .935

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE[T19)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	1.000
(AE[T19)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.900
(BE[T19)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-5.000	.000	5.000	.850

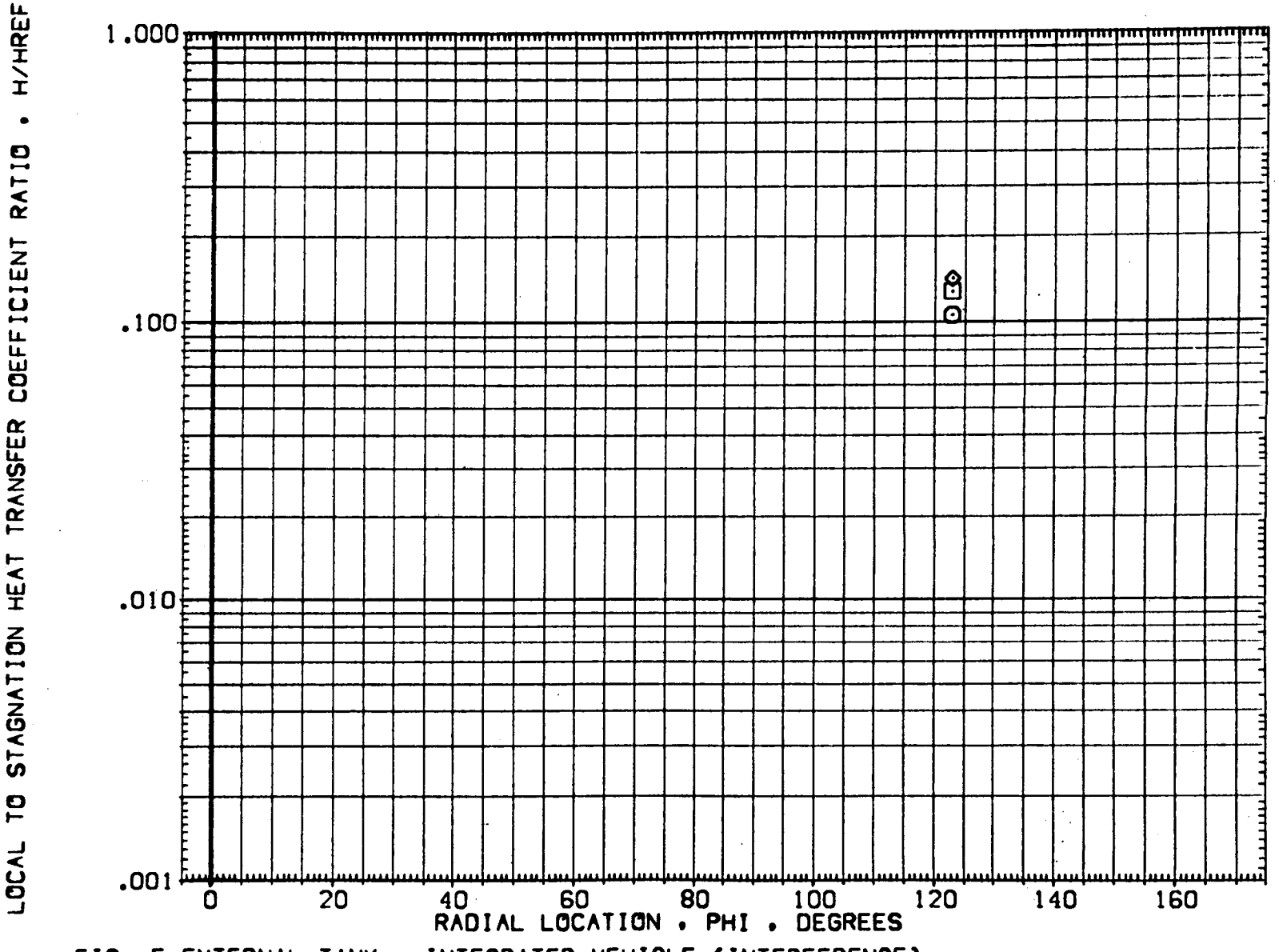


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

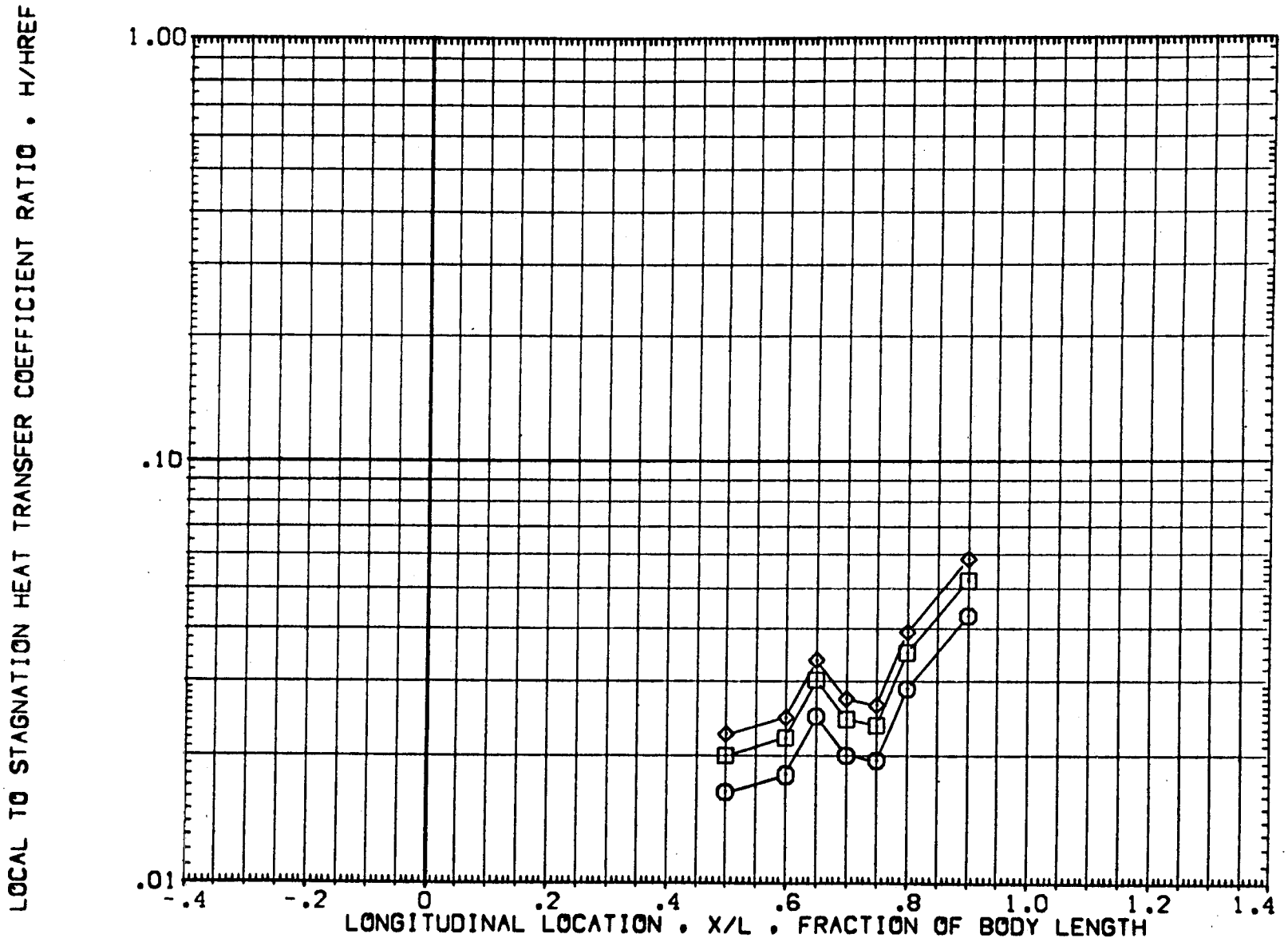


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

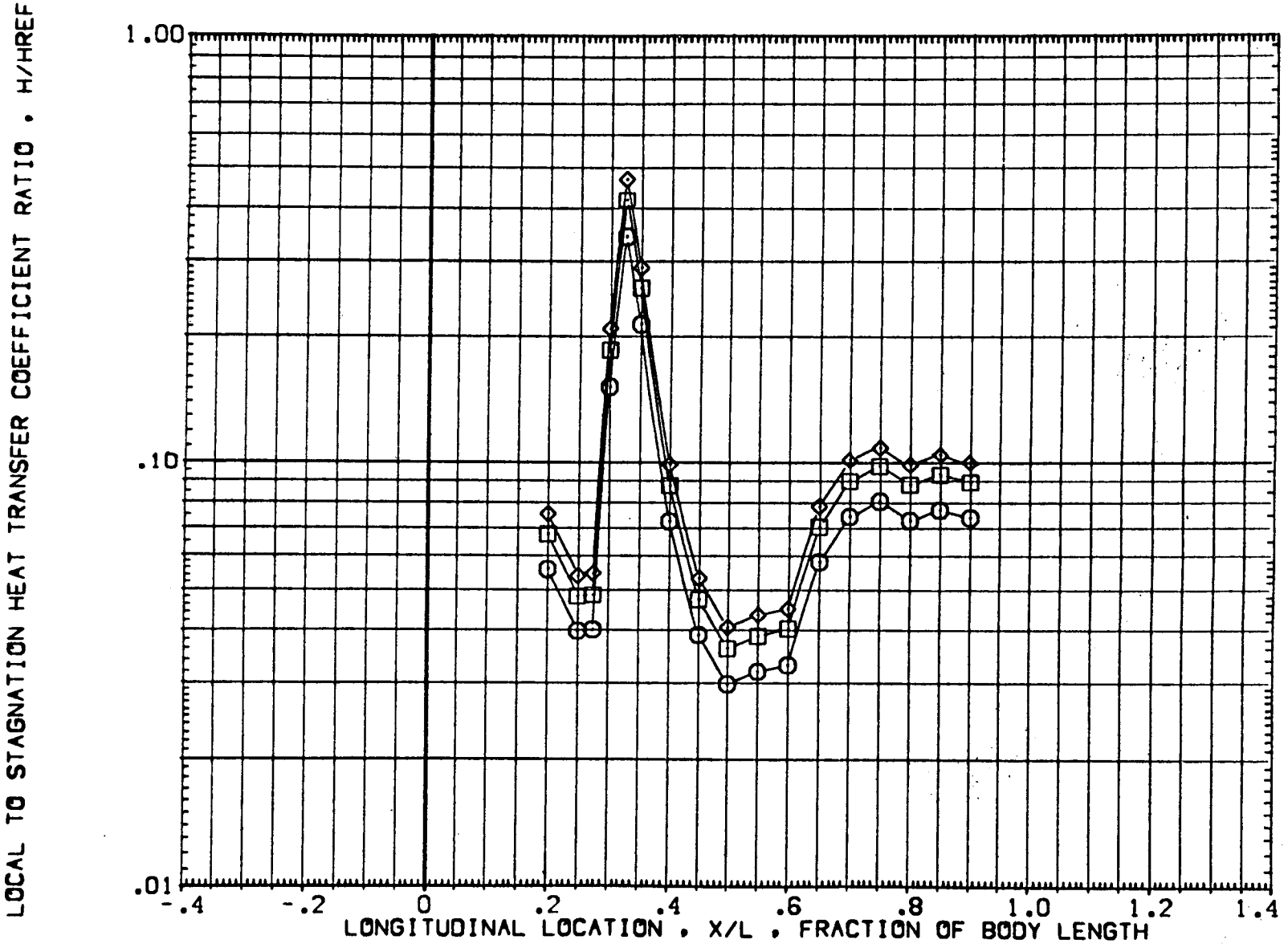


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 90.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

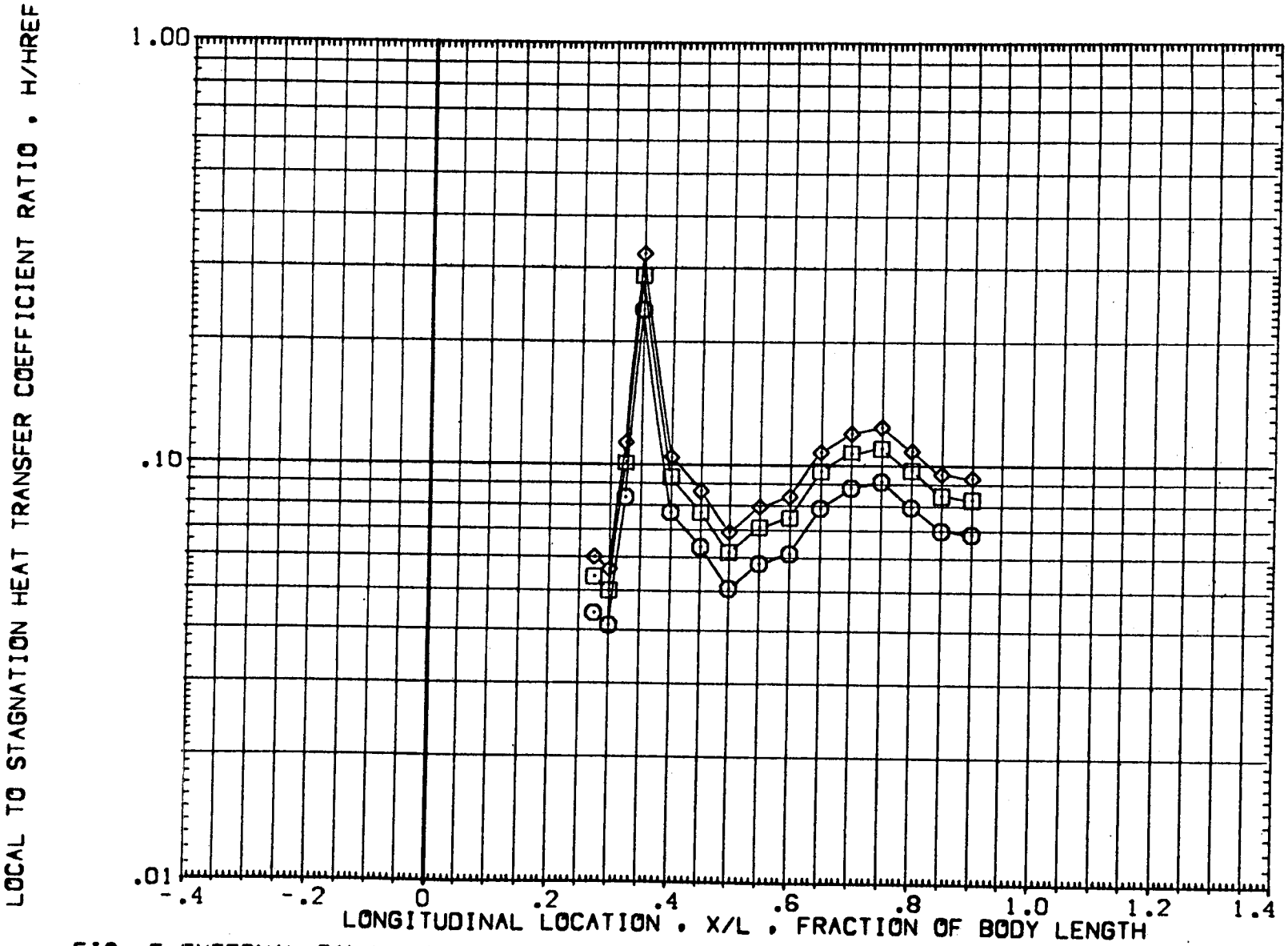


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

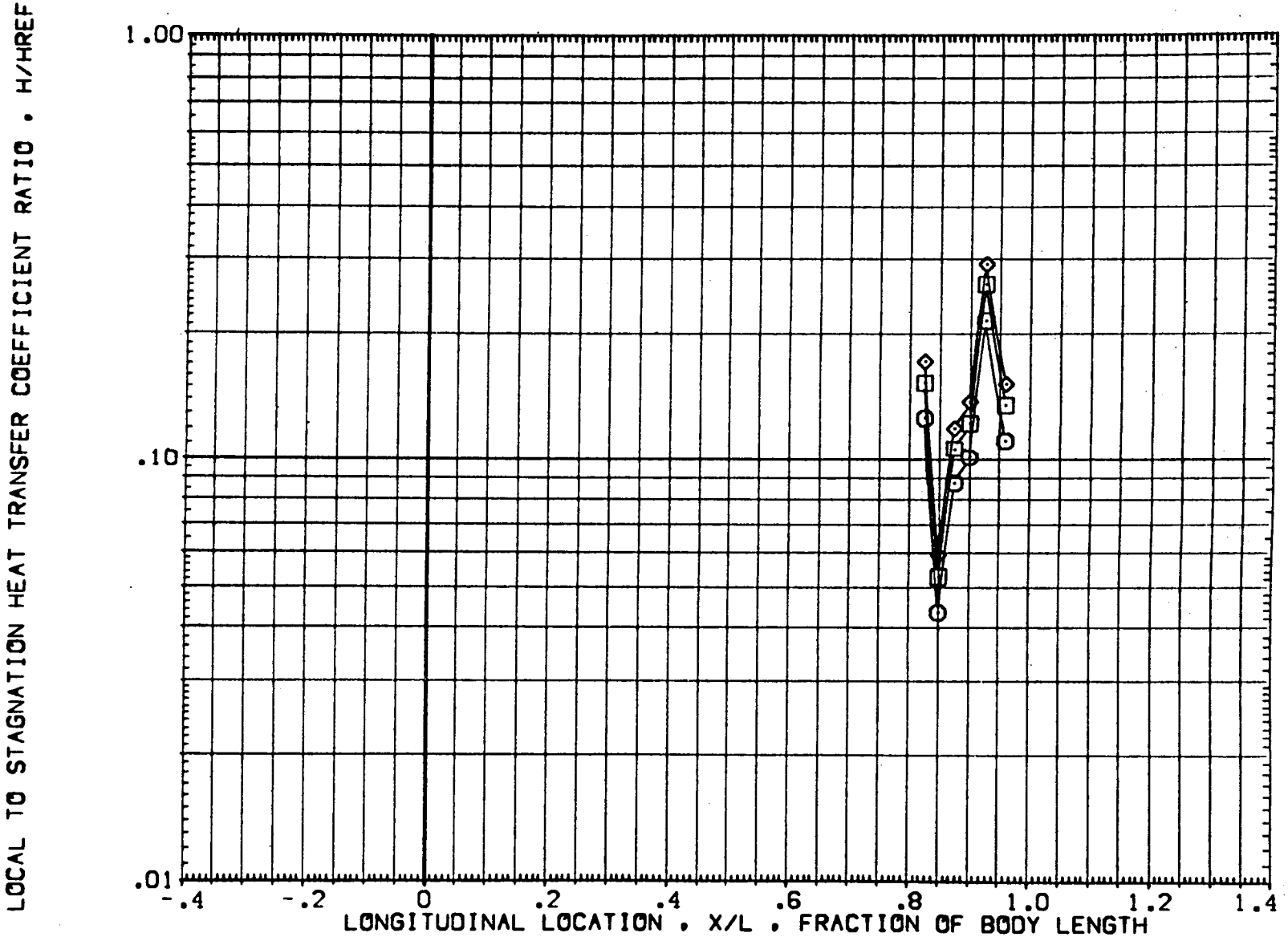


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

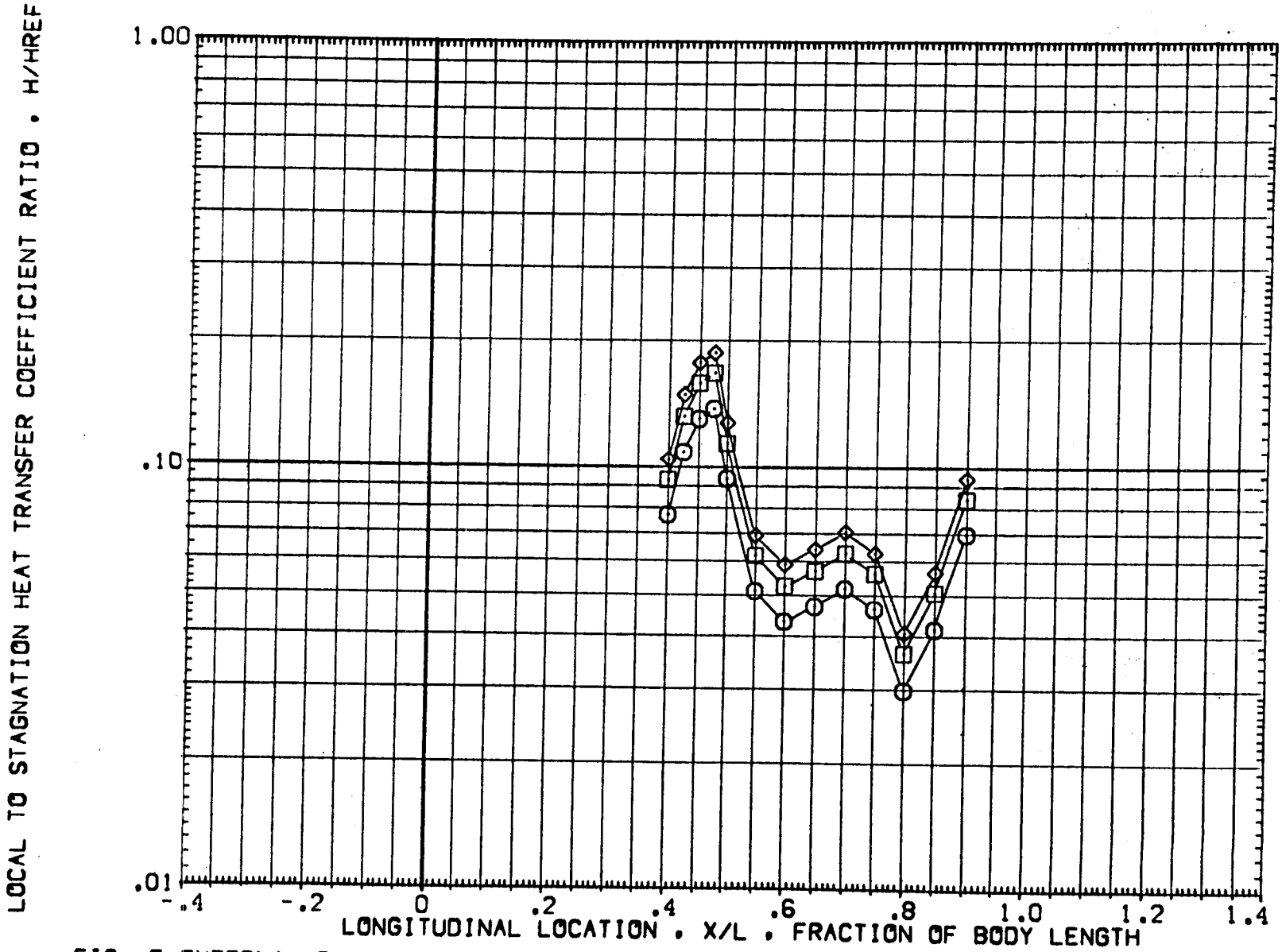


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

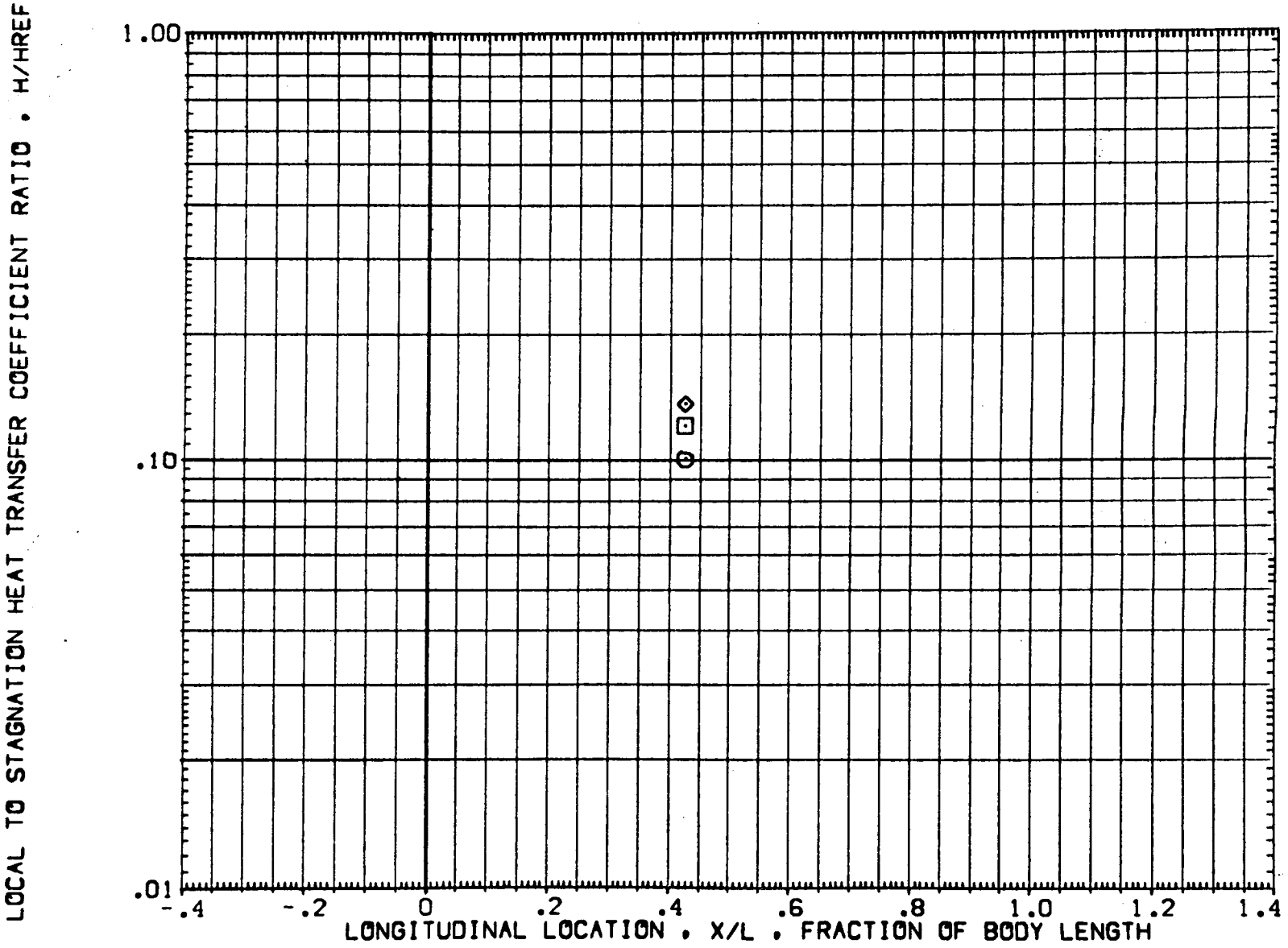


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1120)	▽□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1120)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

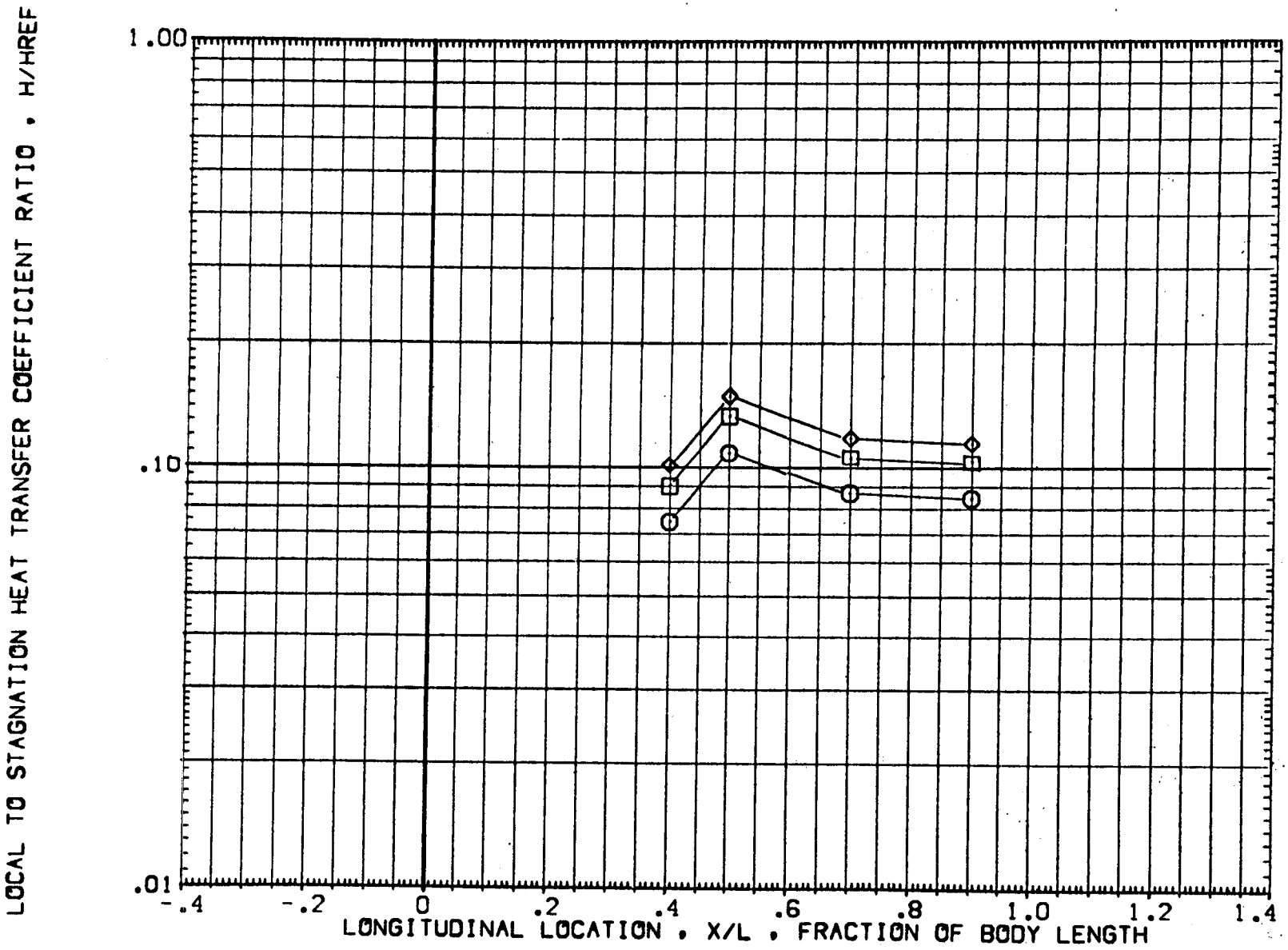


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 165.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.650

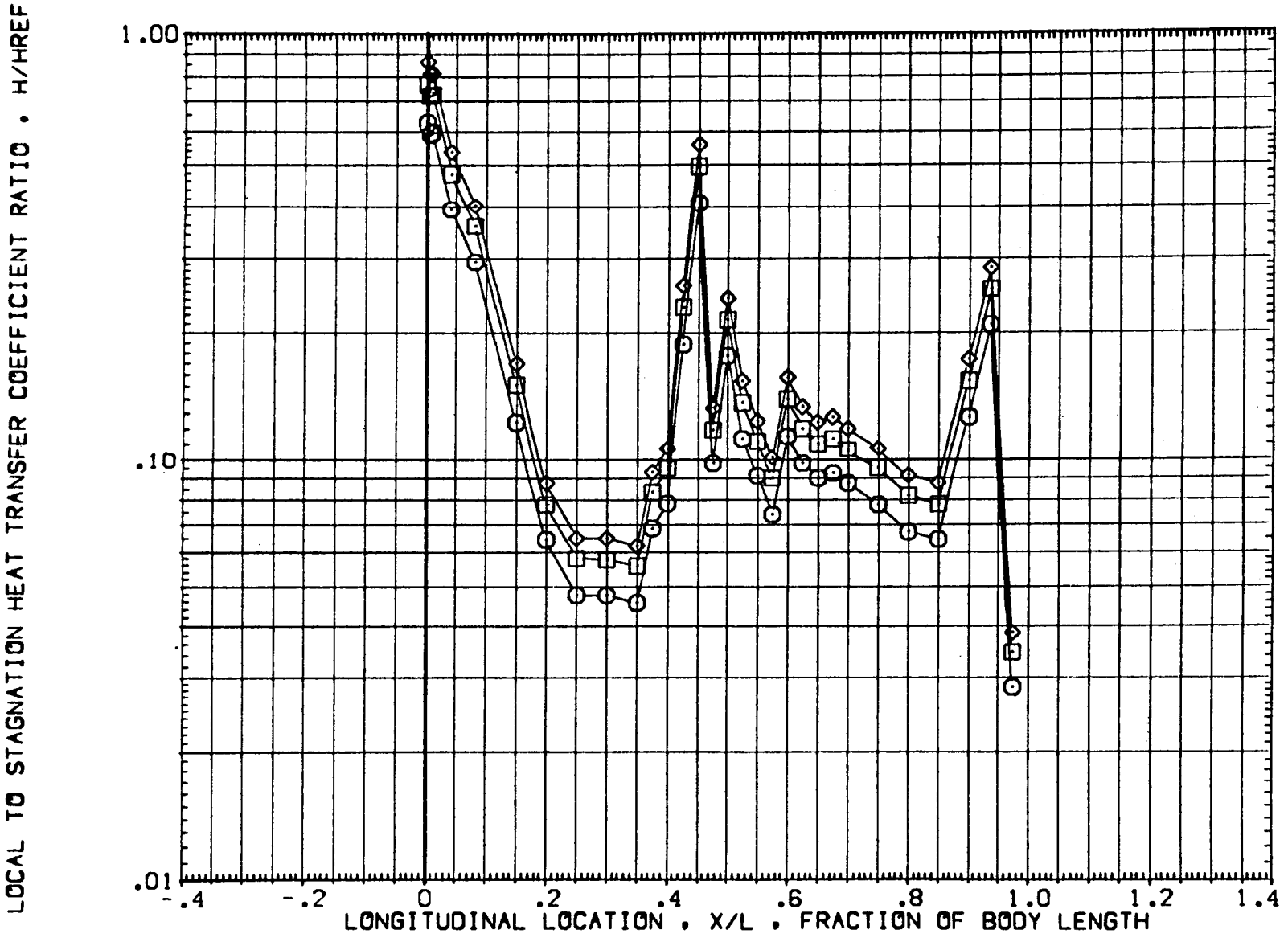


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

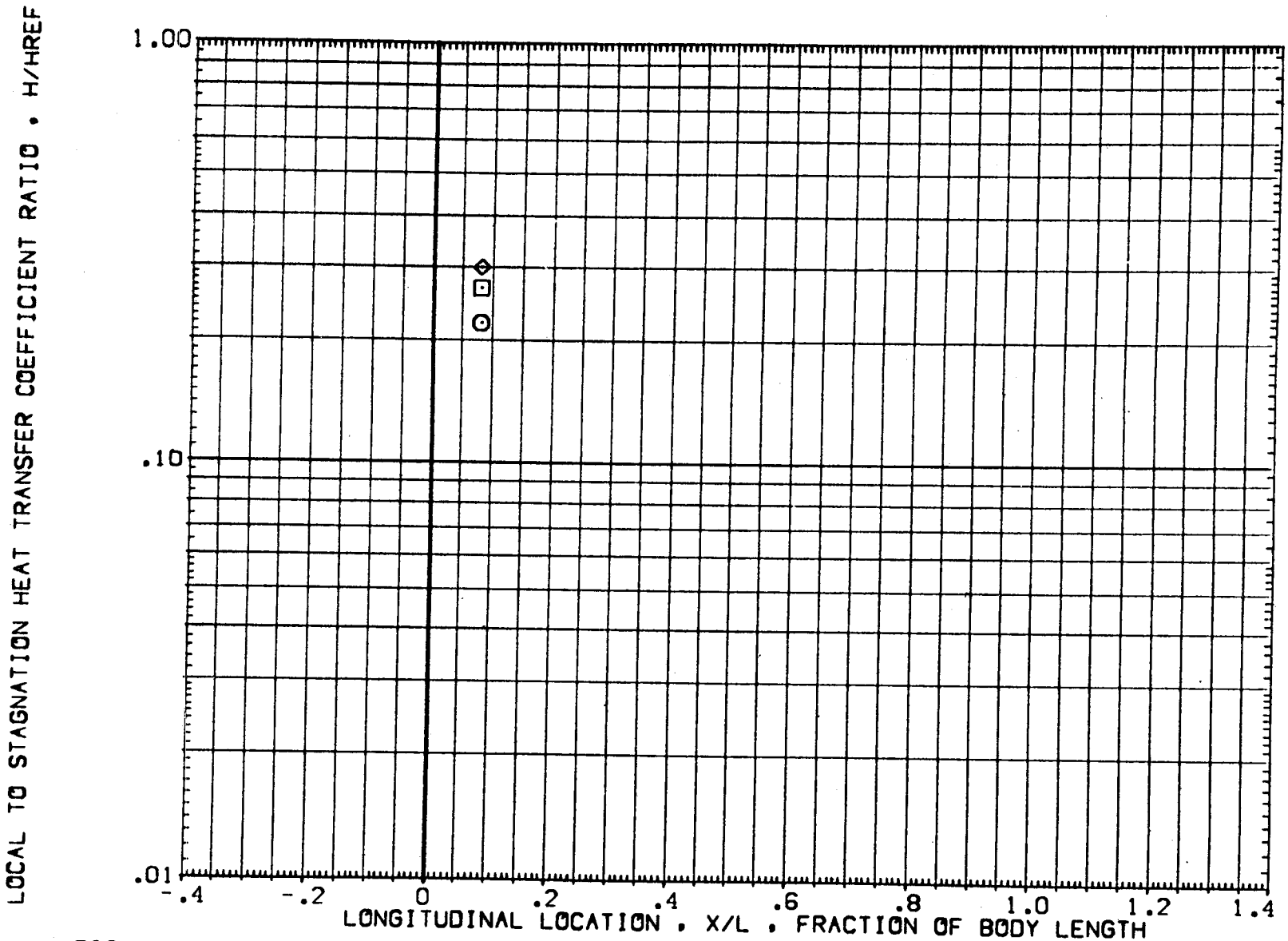


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

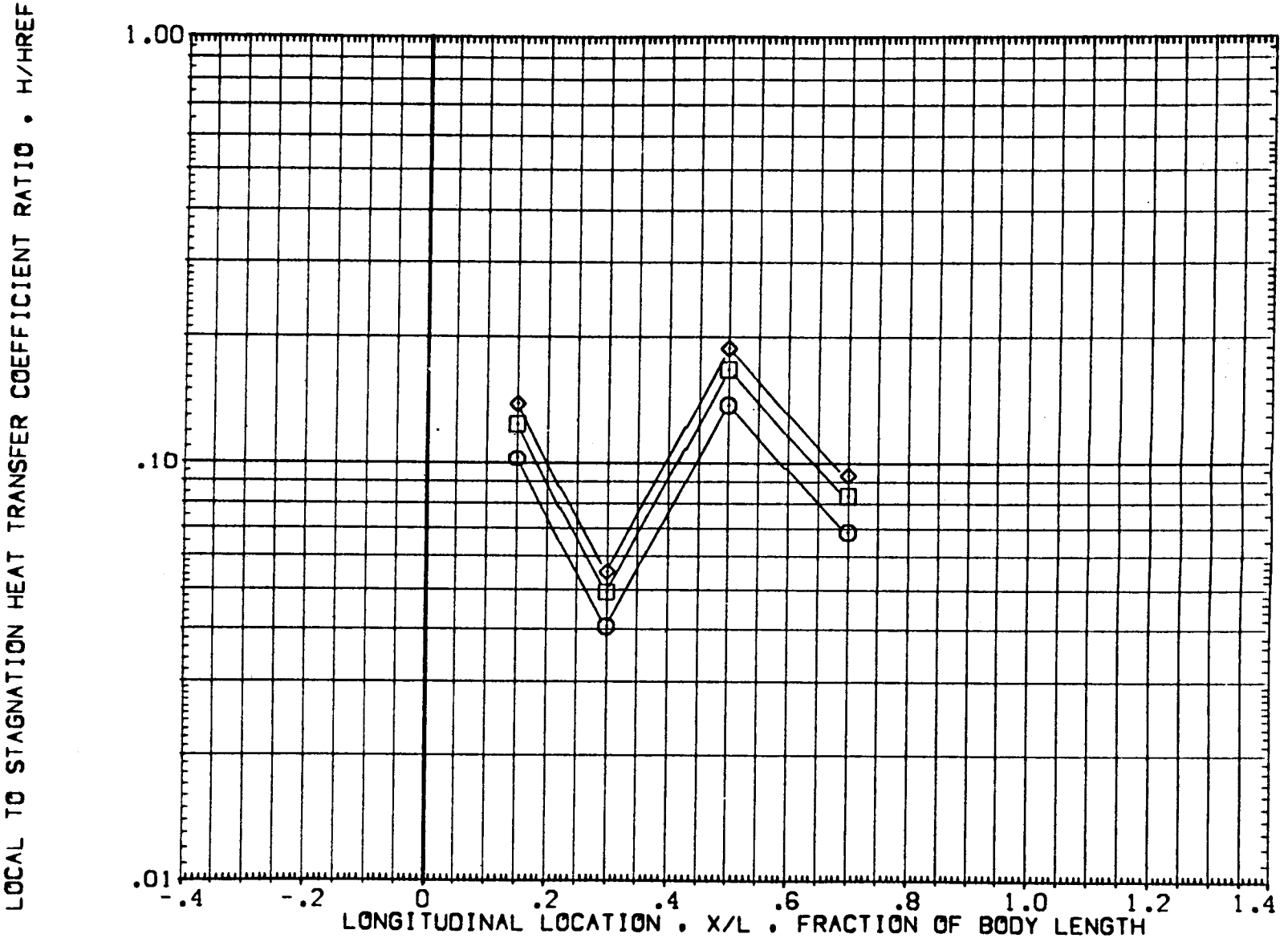


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

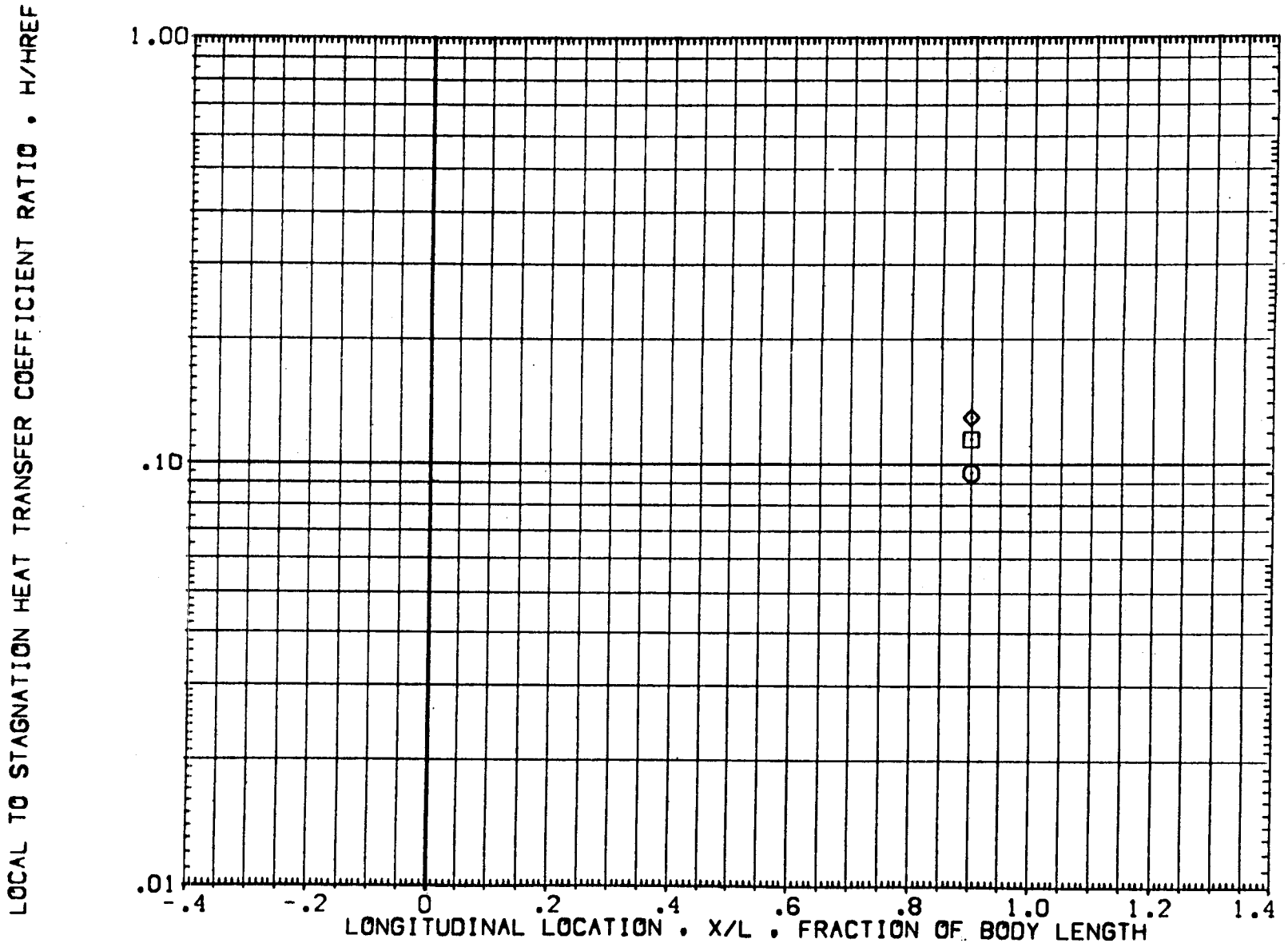


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 197.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

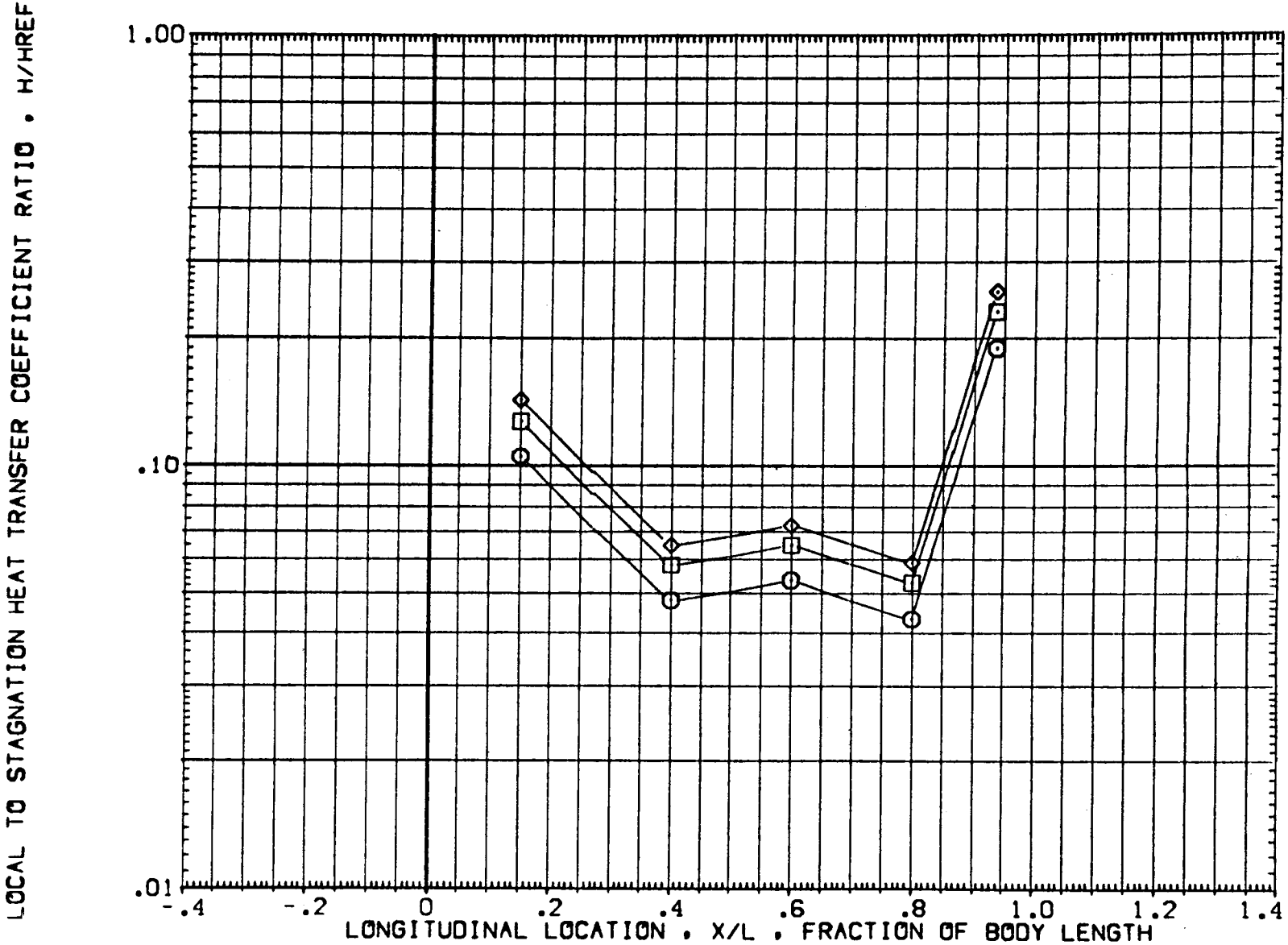


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1120)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1120)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

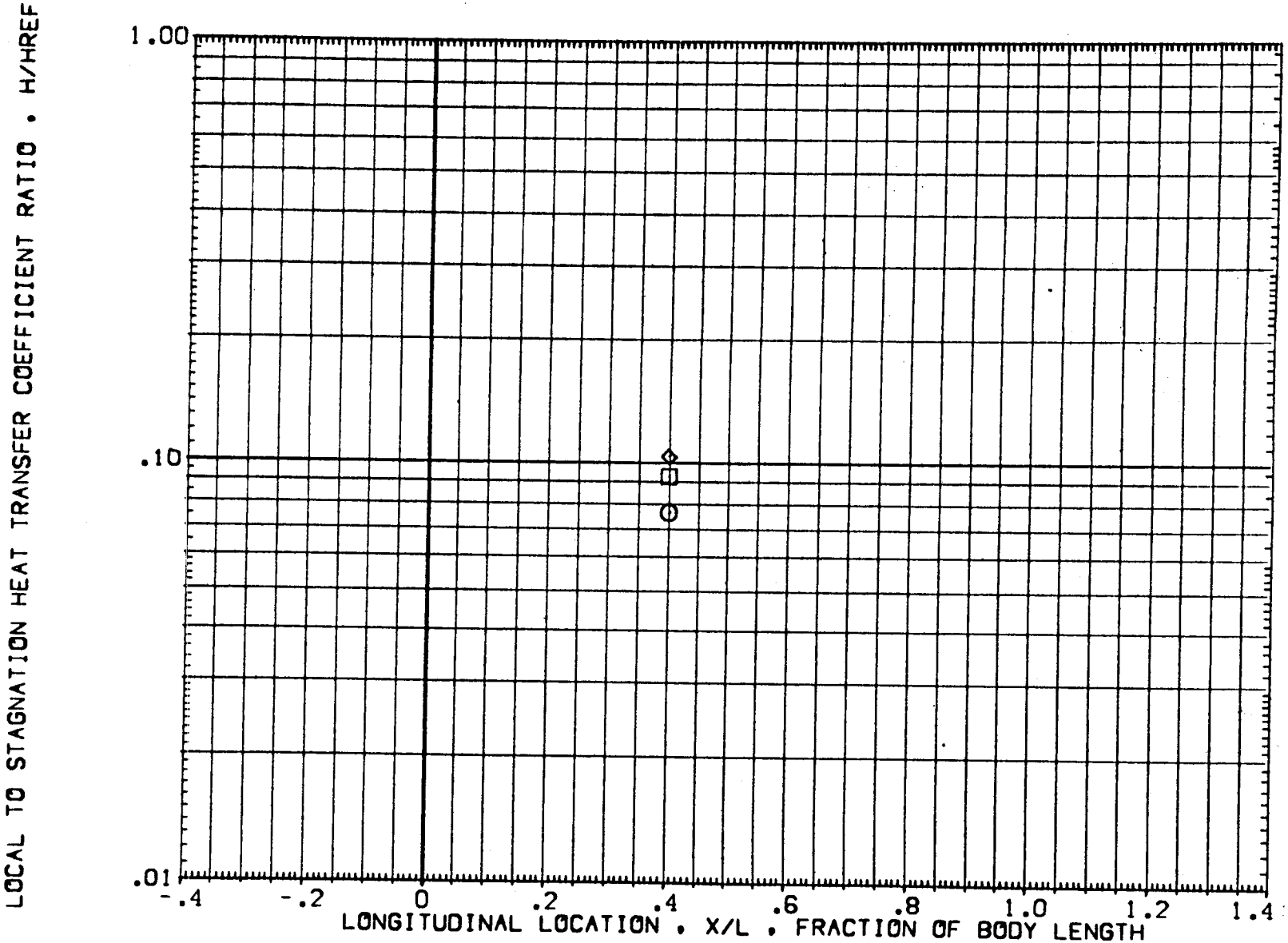


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 PHI = 216.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(RE|120)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|120)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|120)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

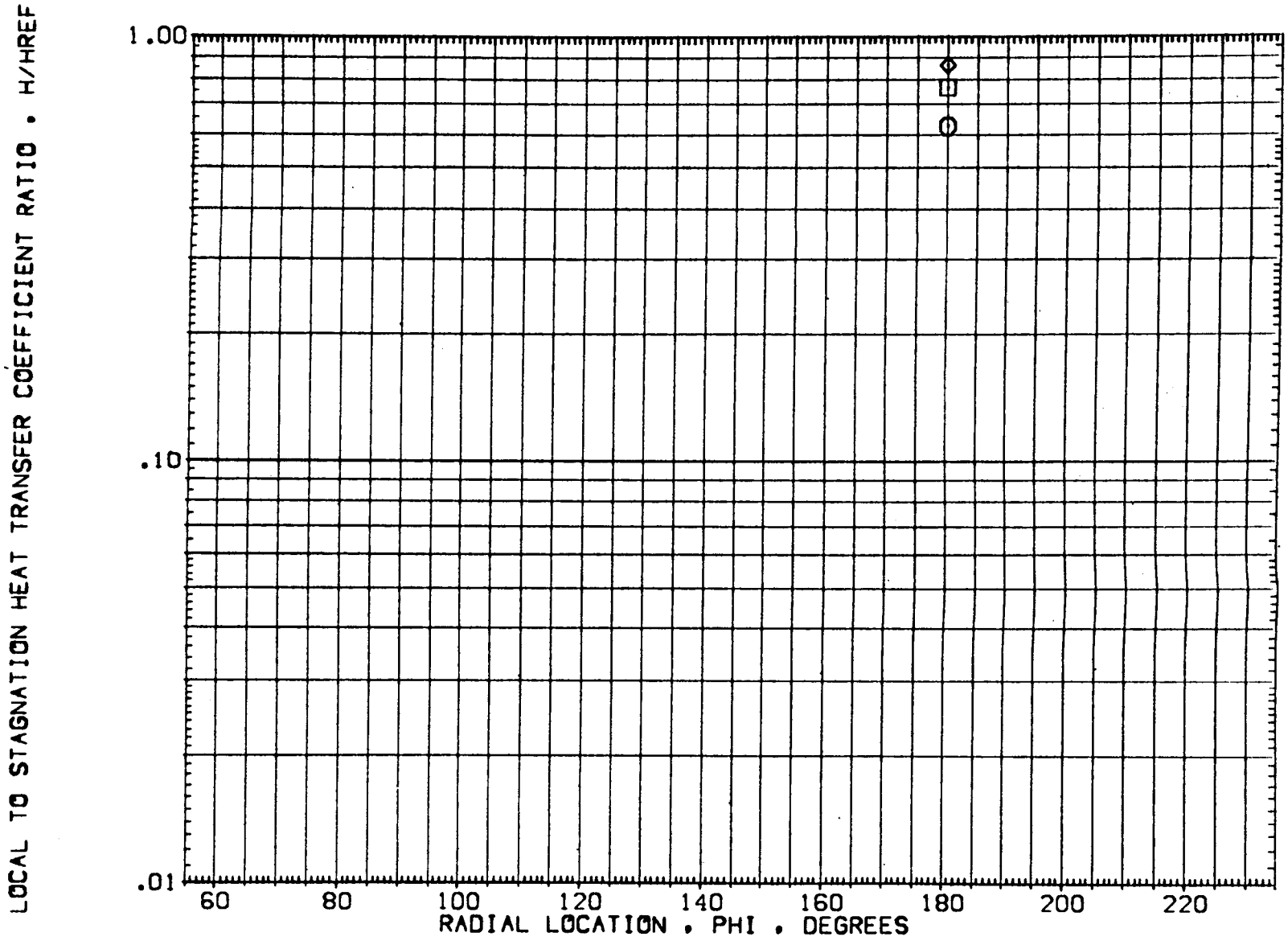


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	◇□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

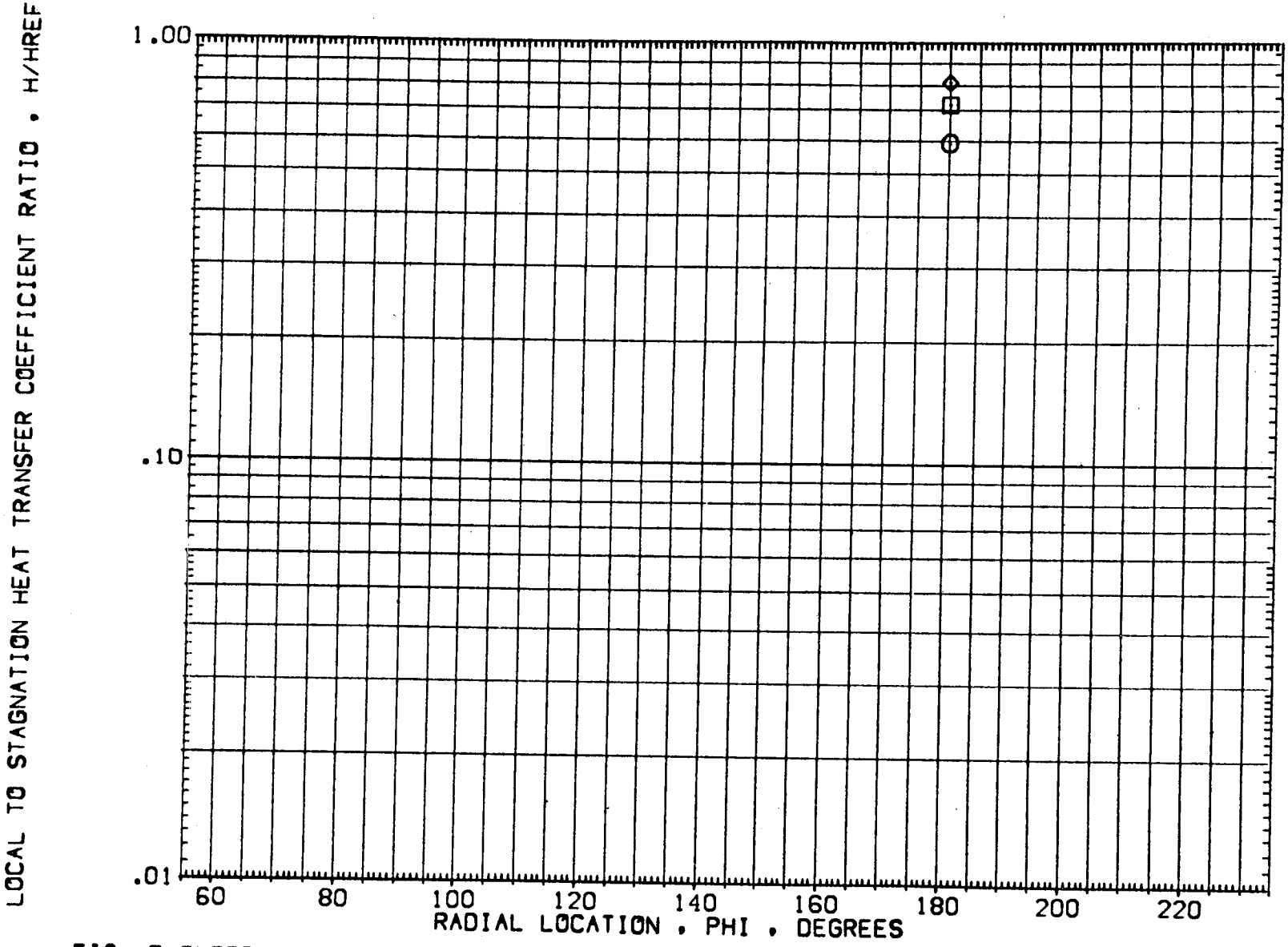


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE!T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE!T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

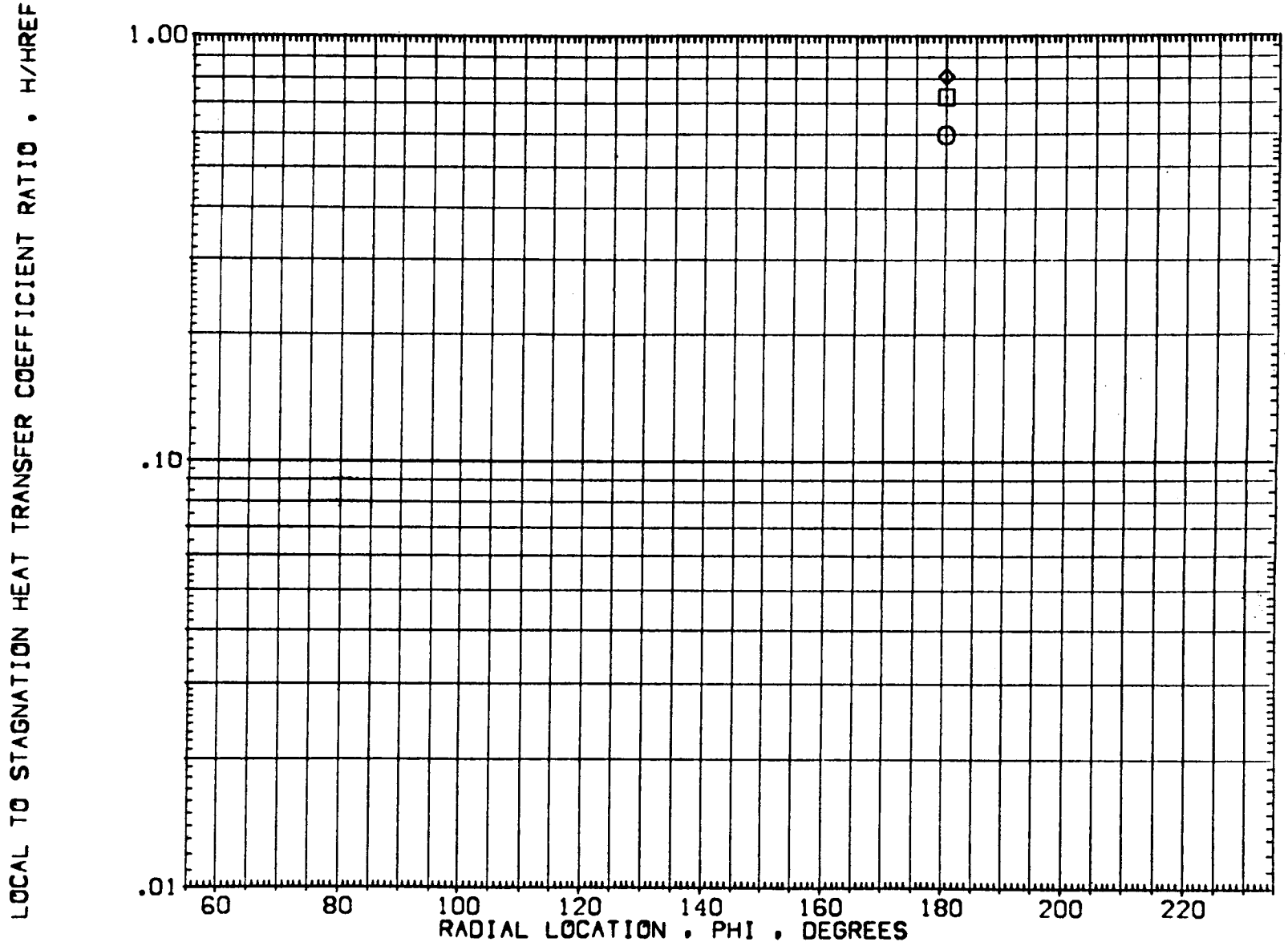


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

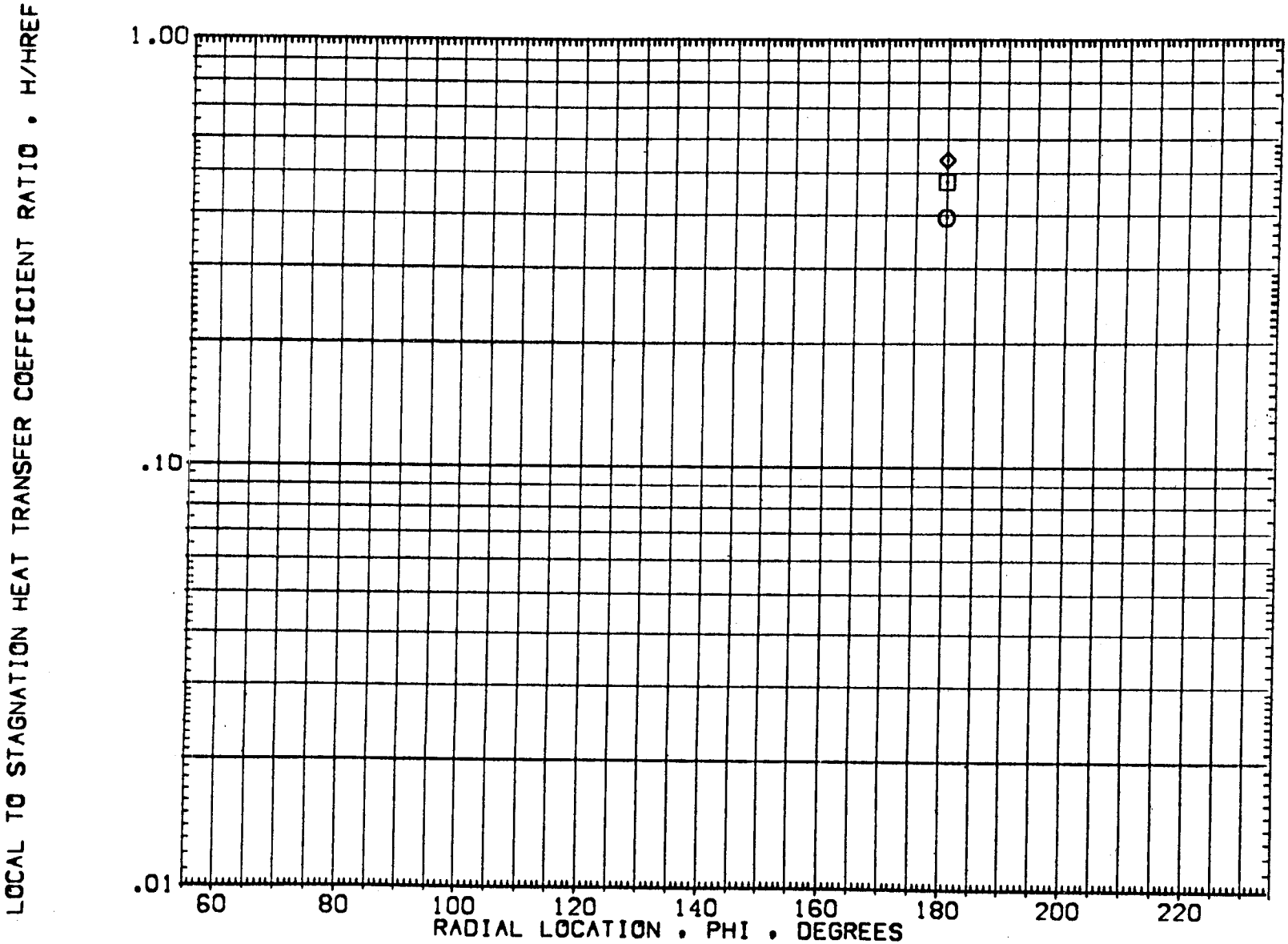


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!120)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE!T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE!T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

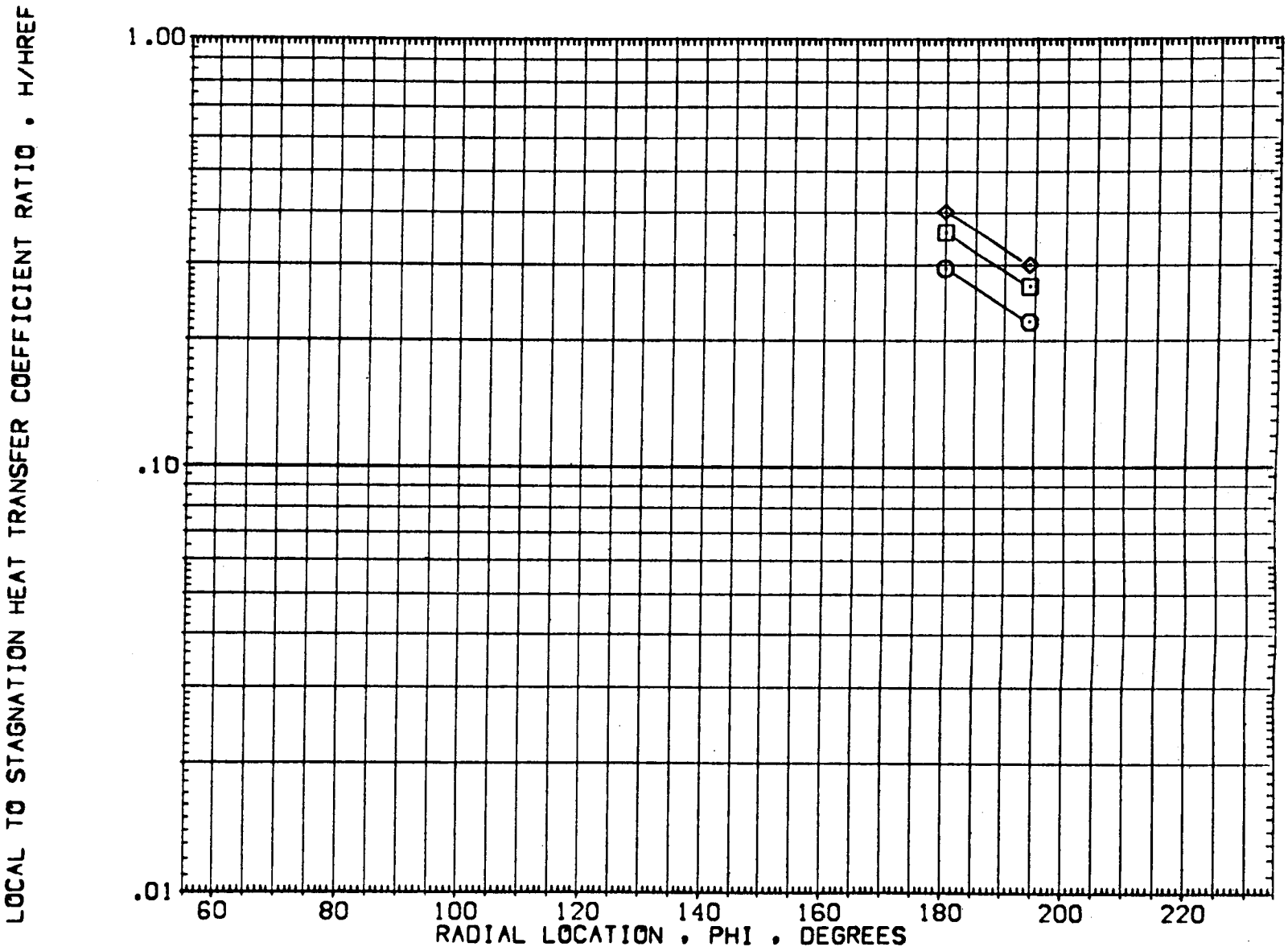


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE,T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE,T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

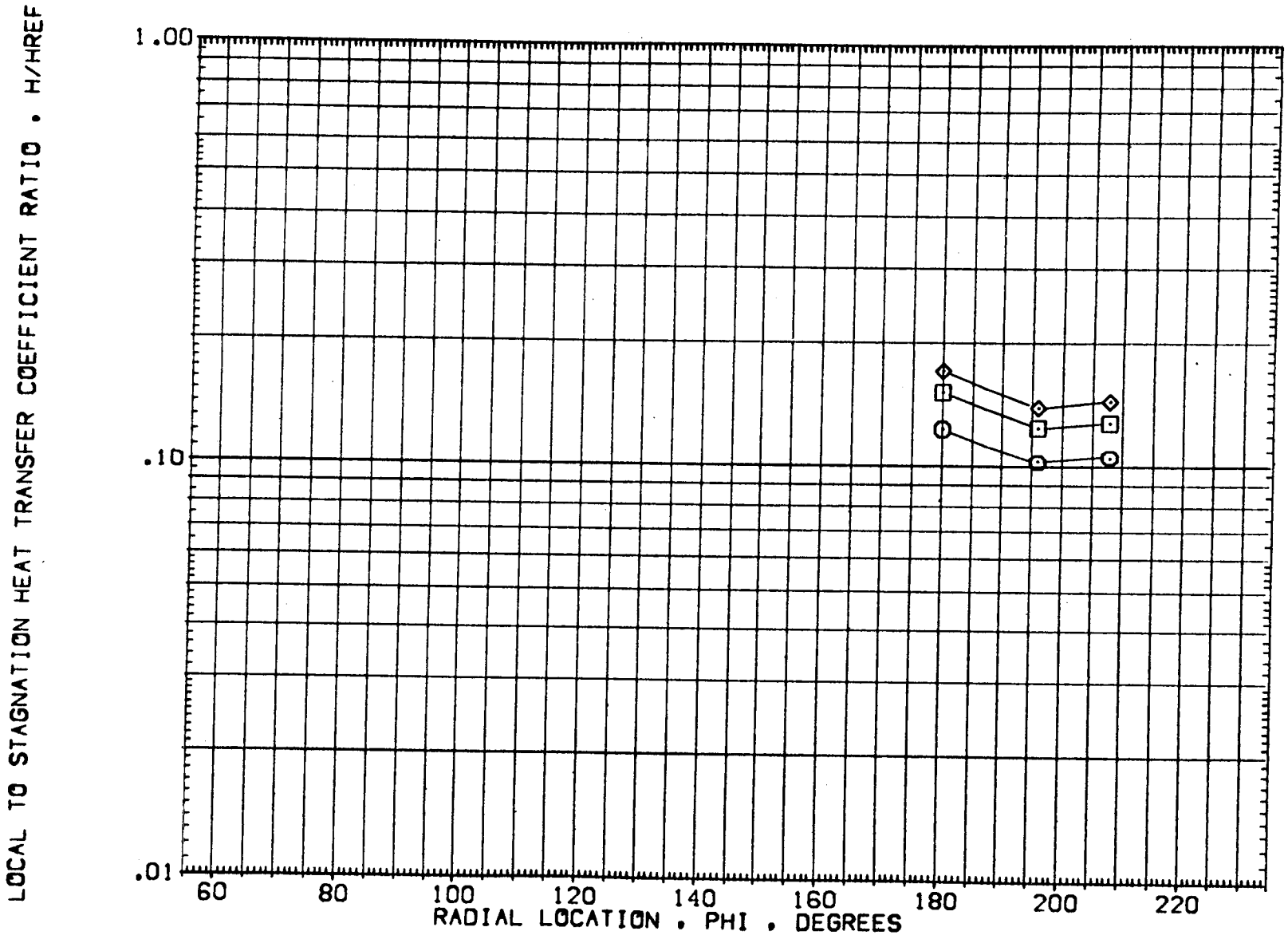


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .150

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE,IT20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE,IT20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

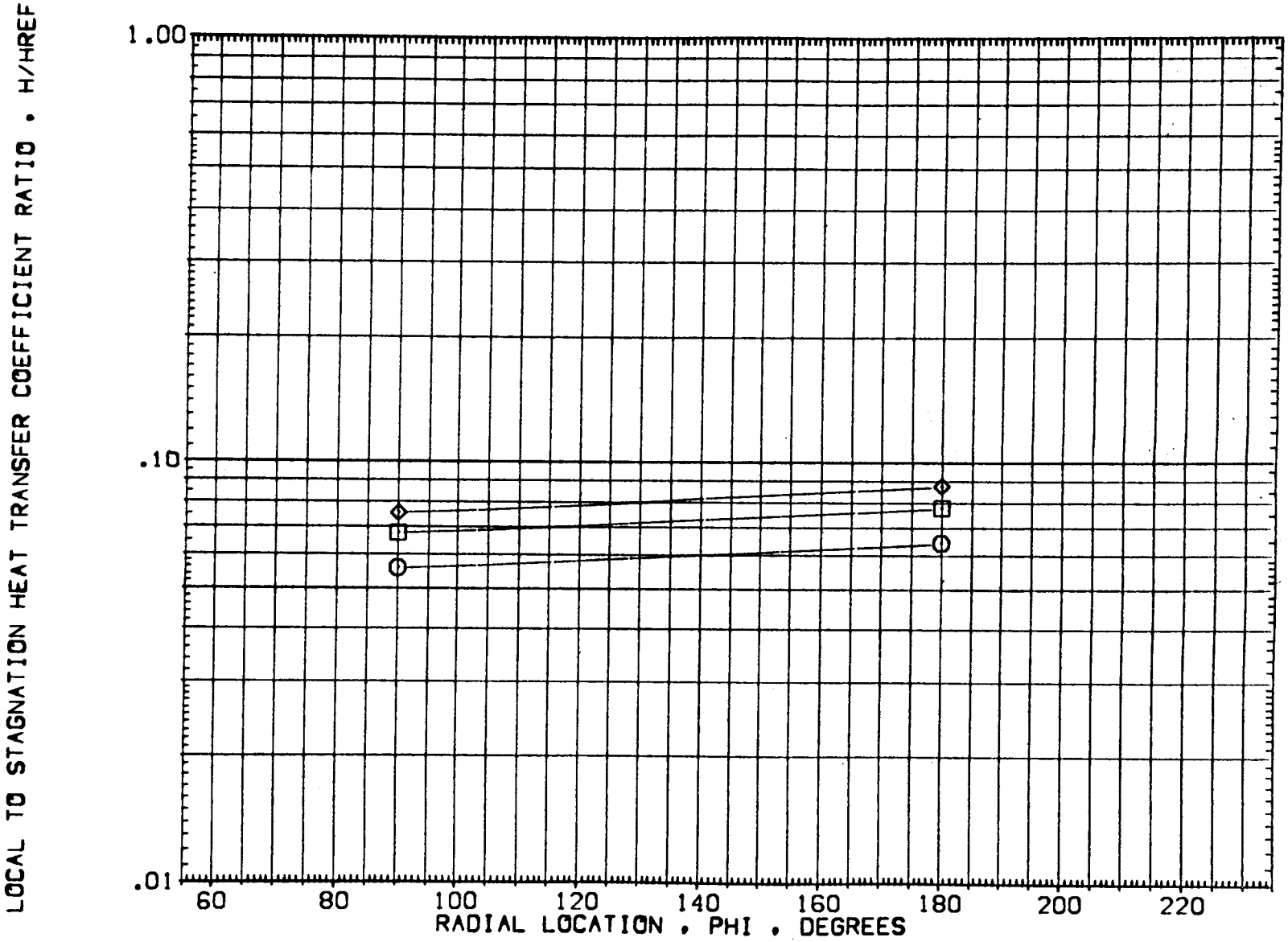


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE!T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE!T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

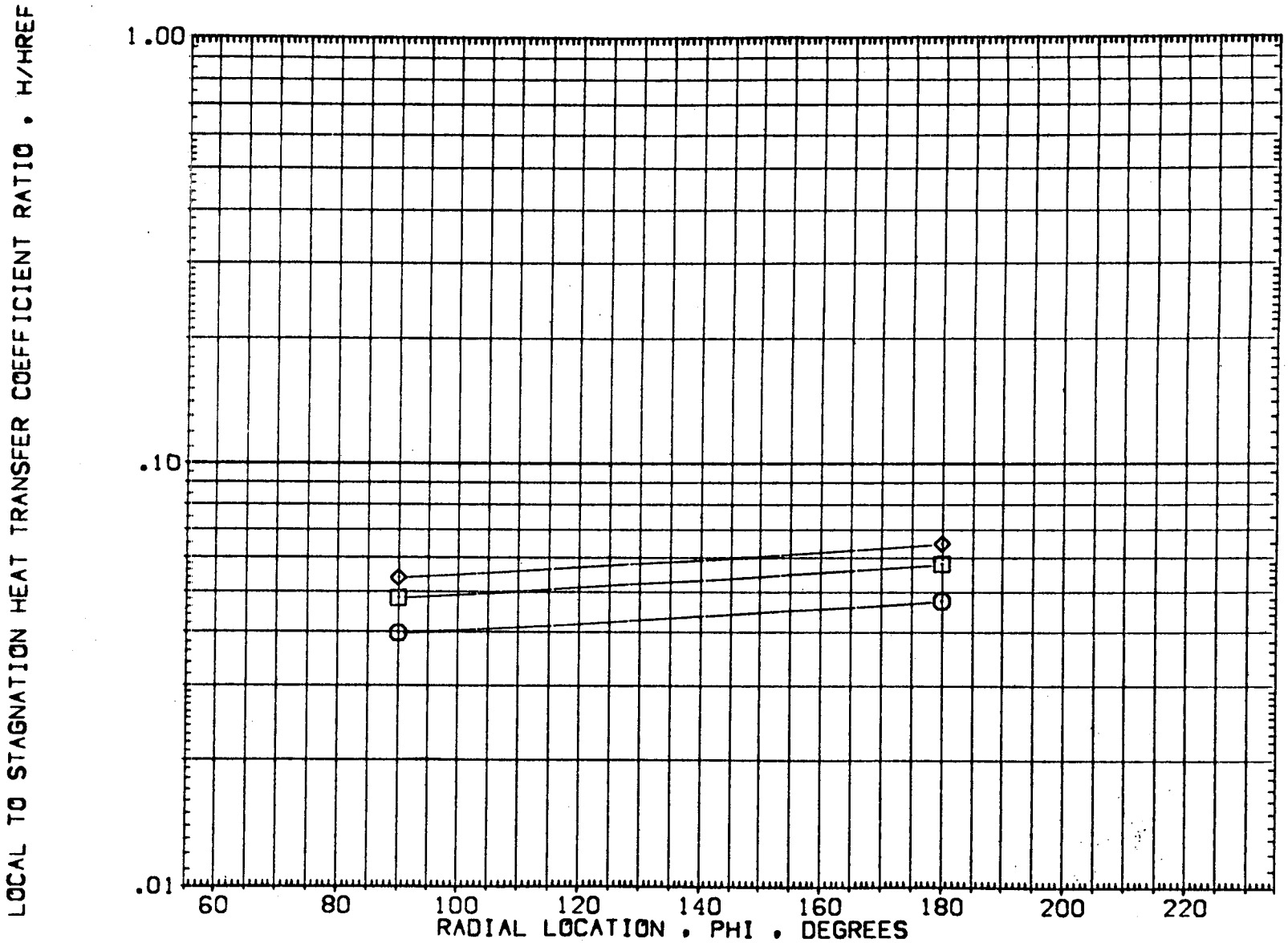


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

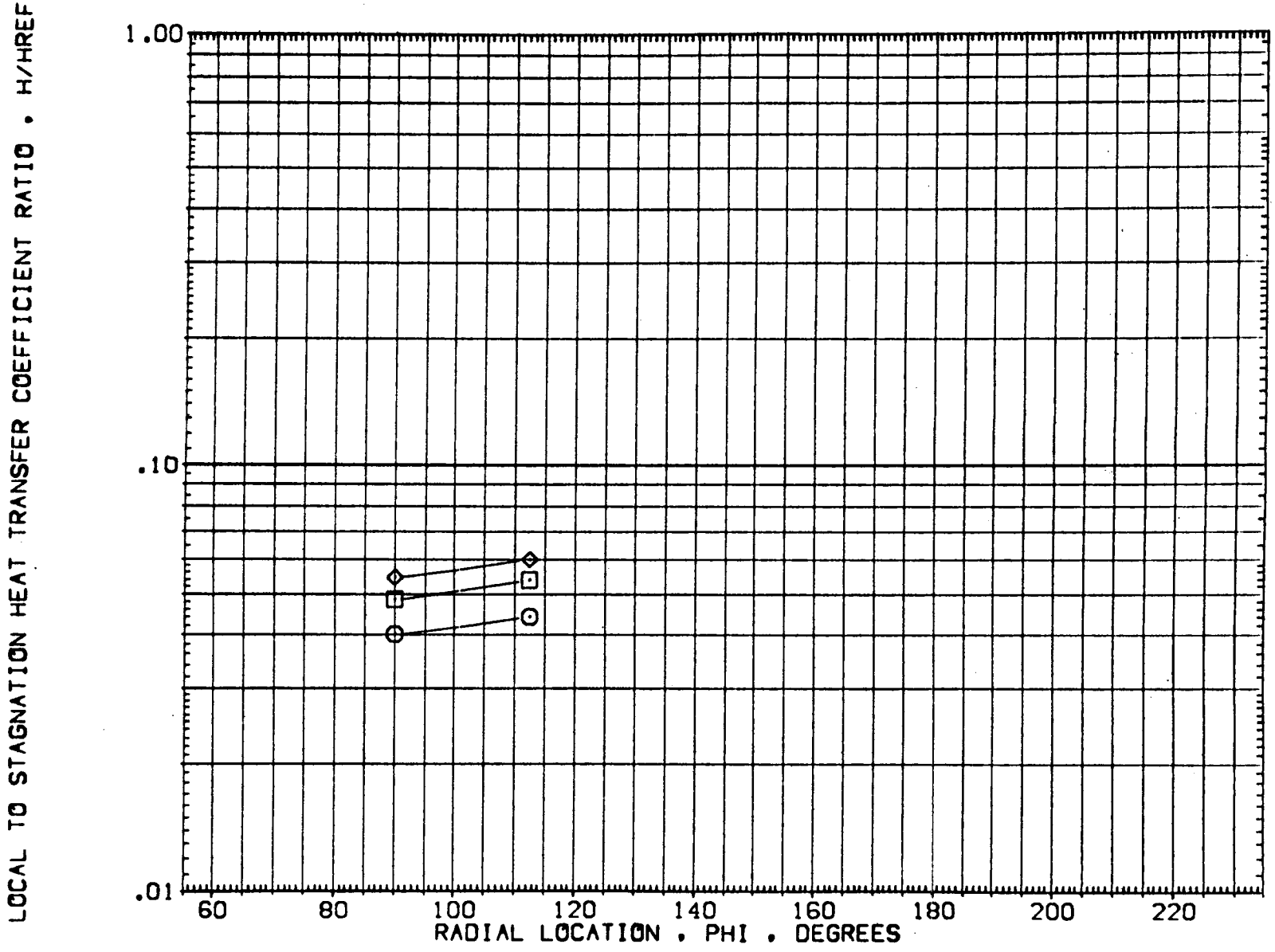


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .275

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

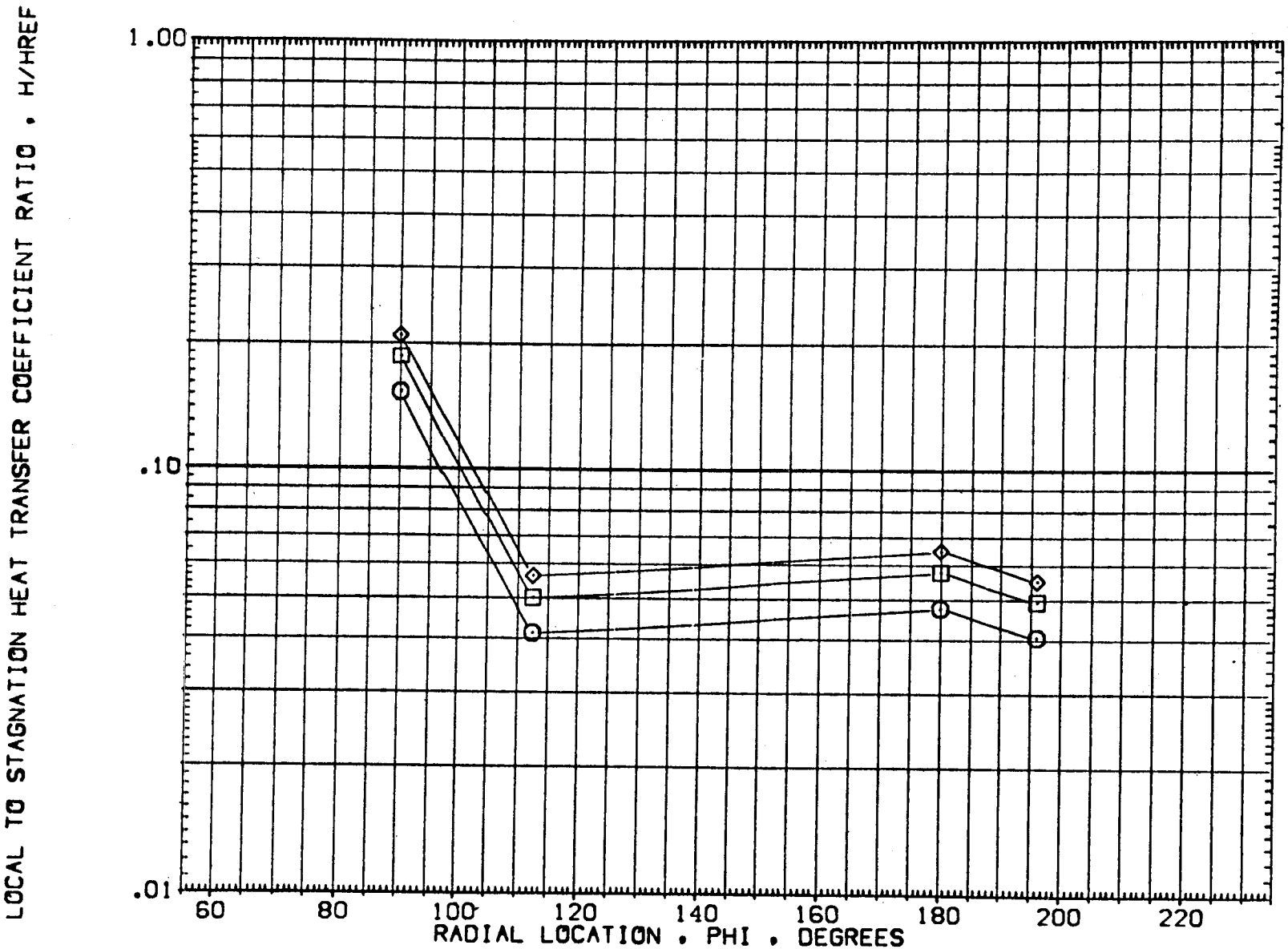


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .300

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

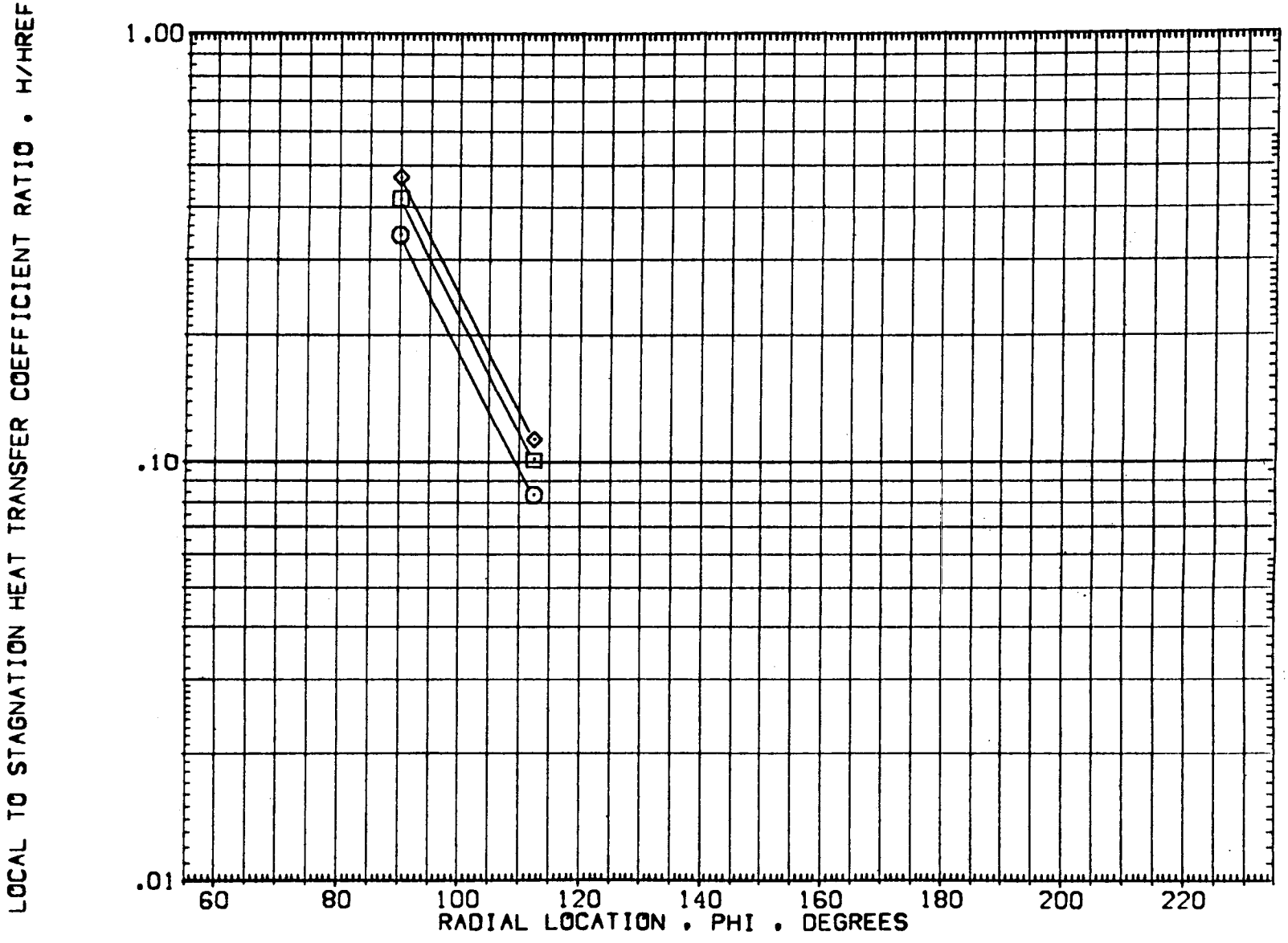


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

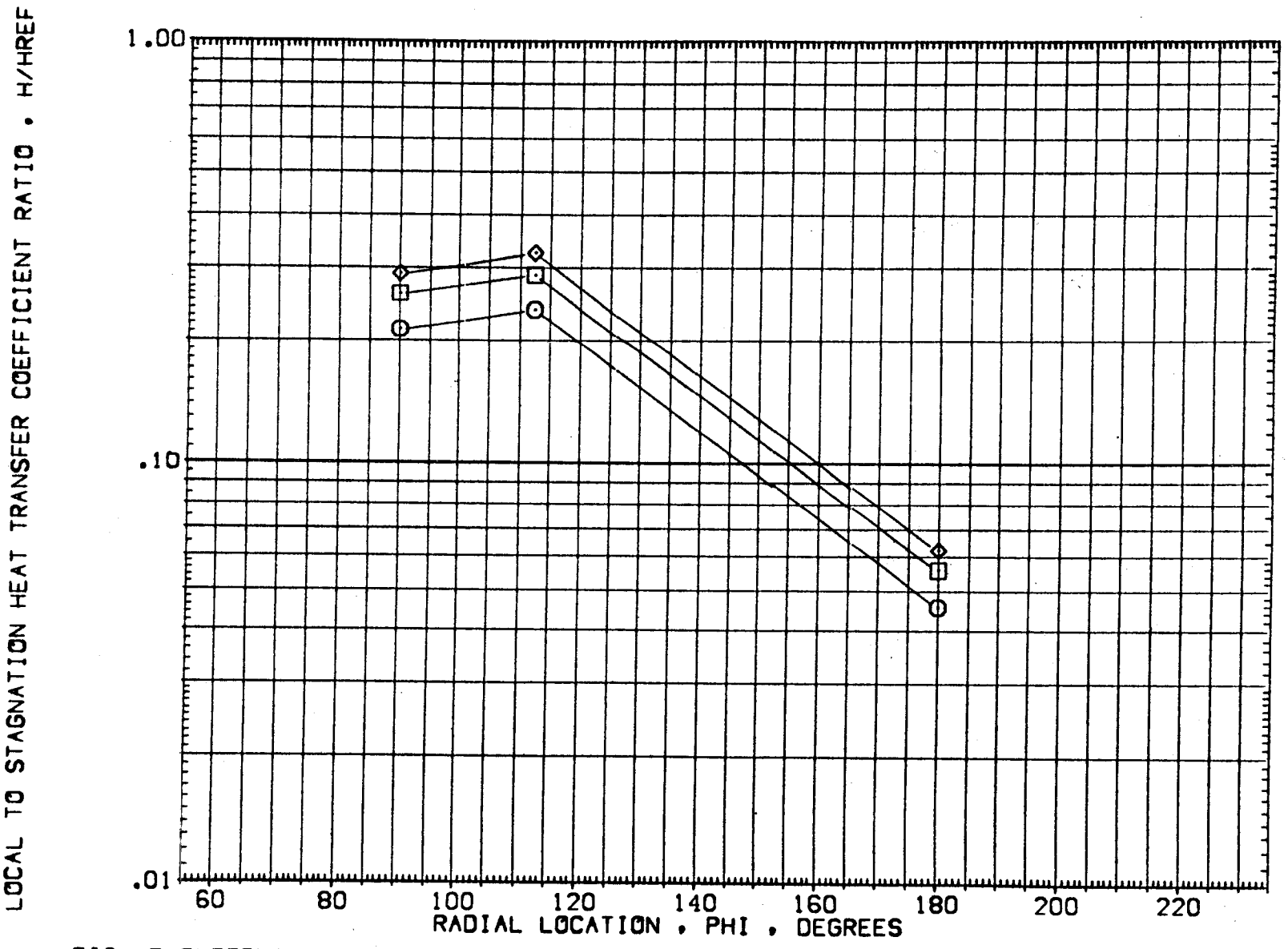


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.650

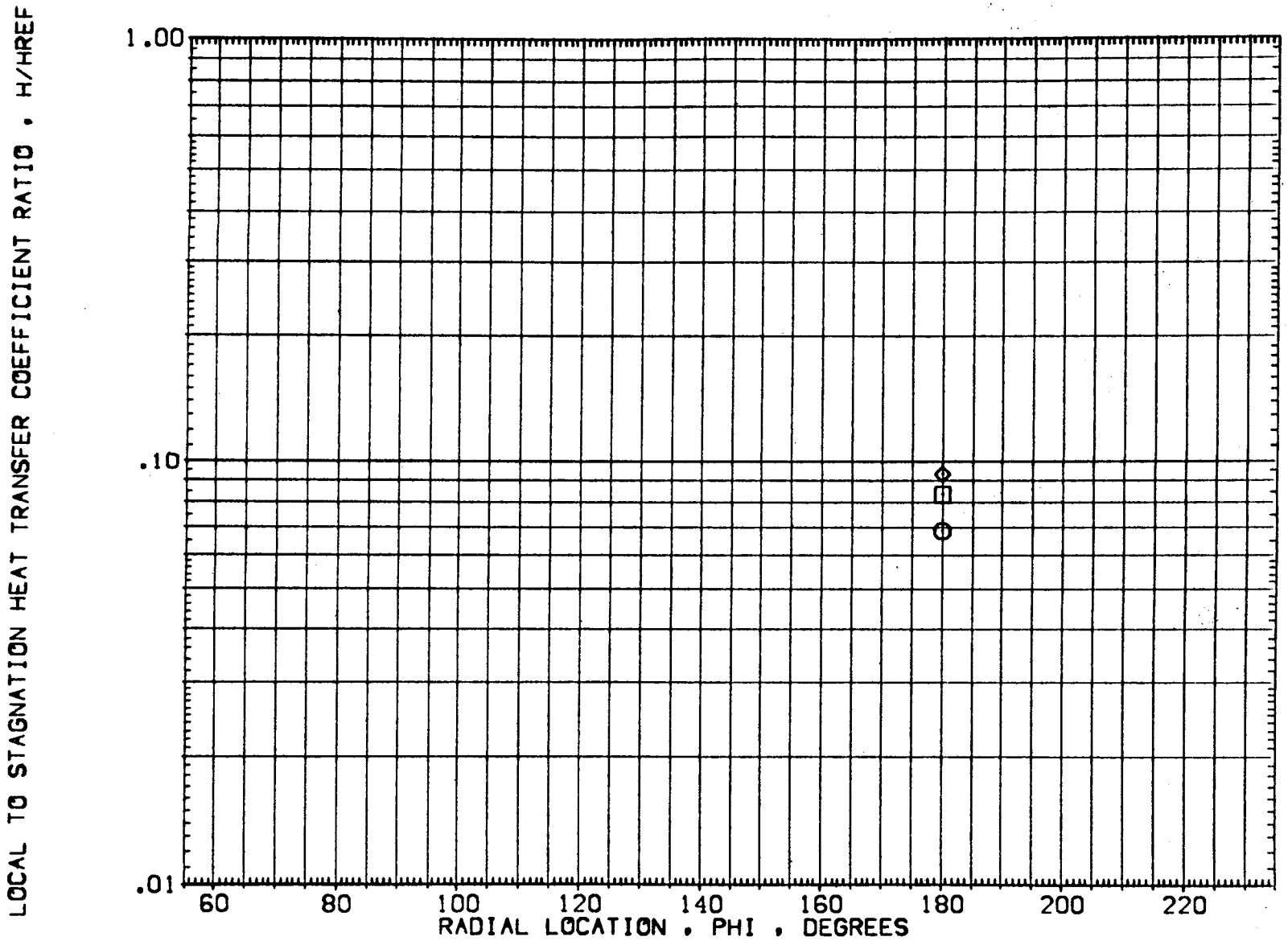


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

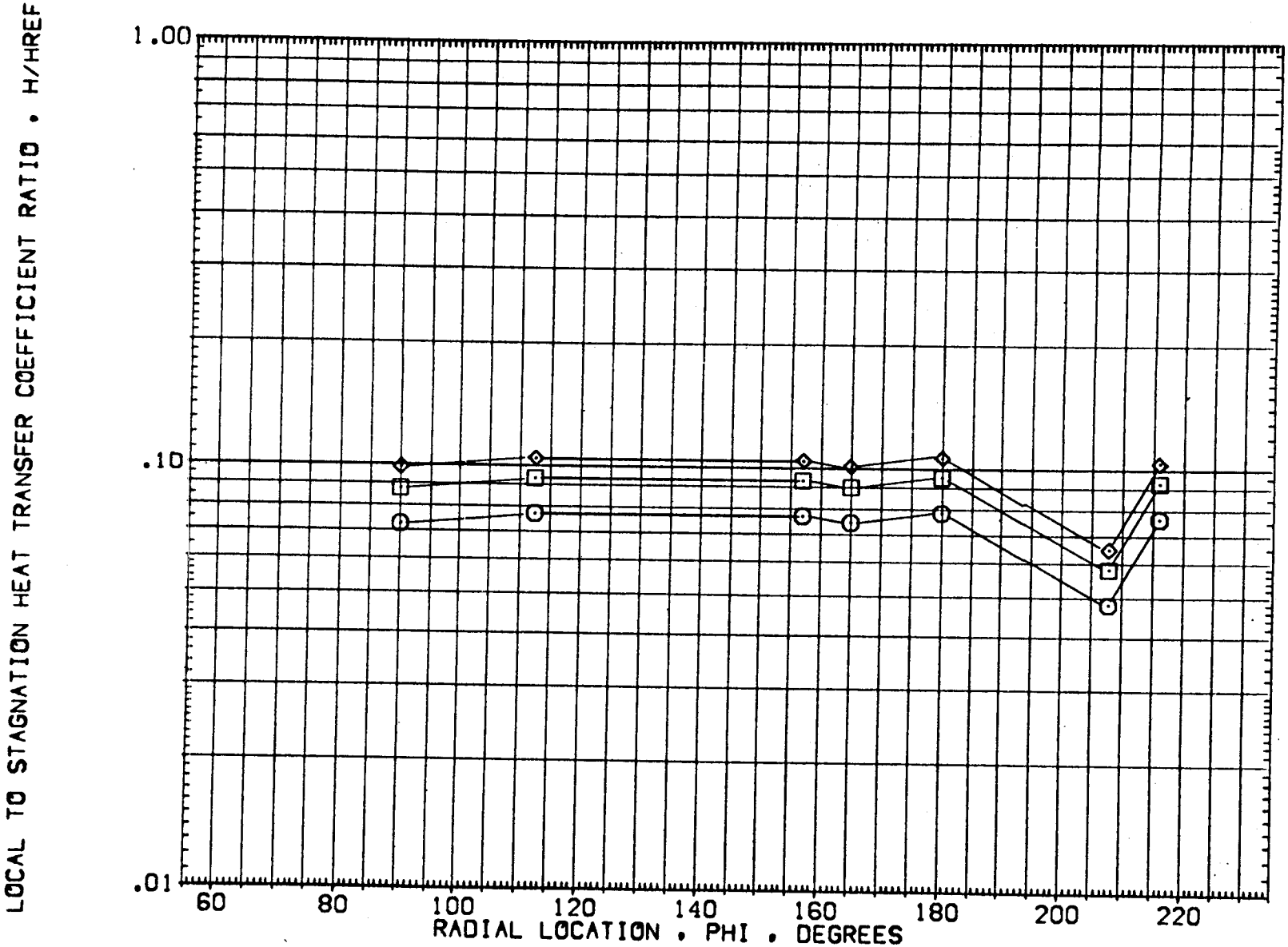


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE,IT20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE,IT20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

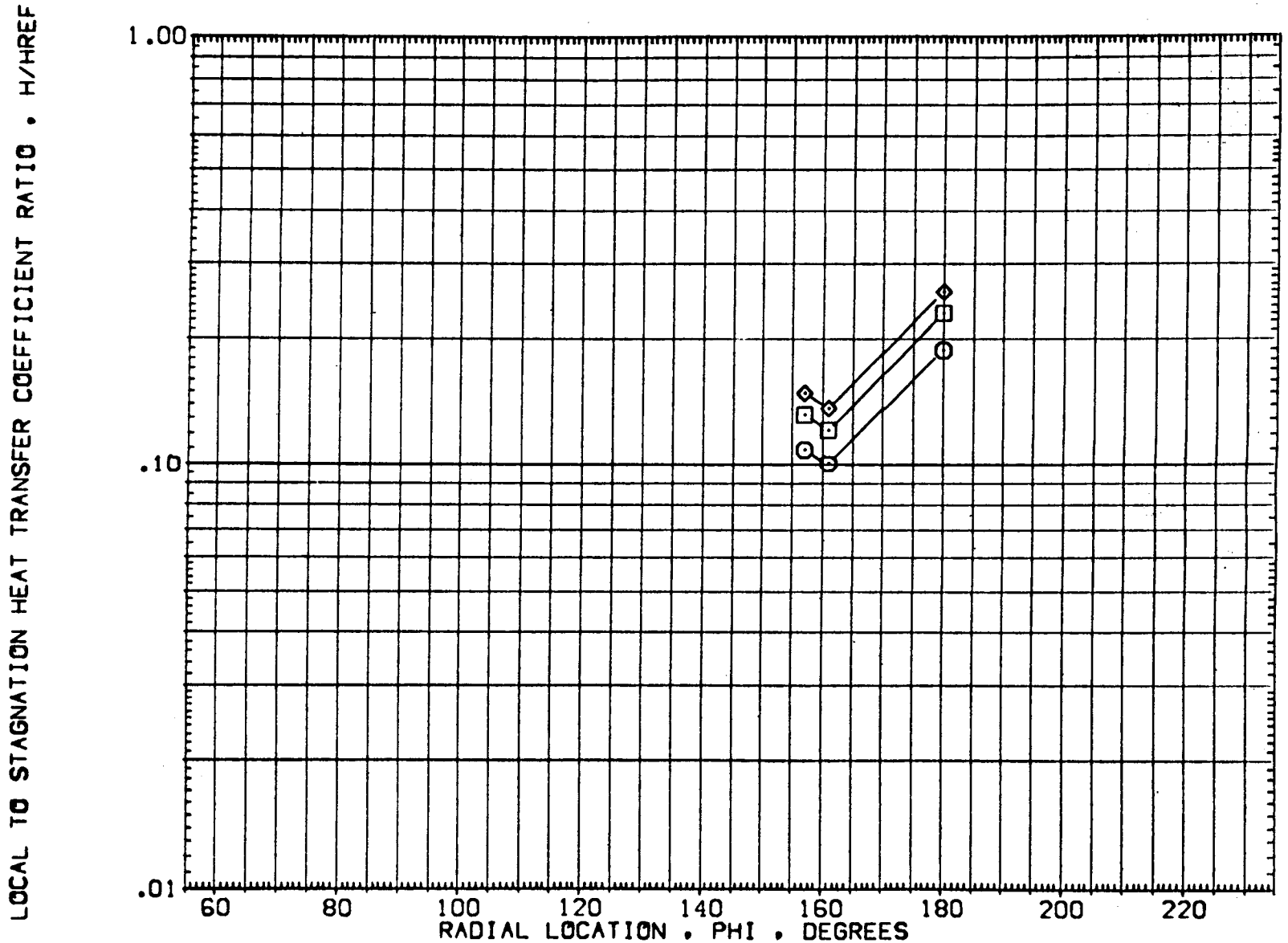


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .425

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

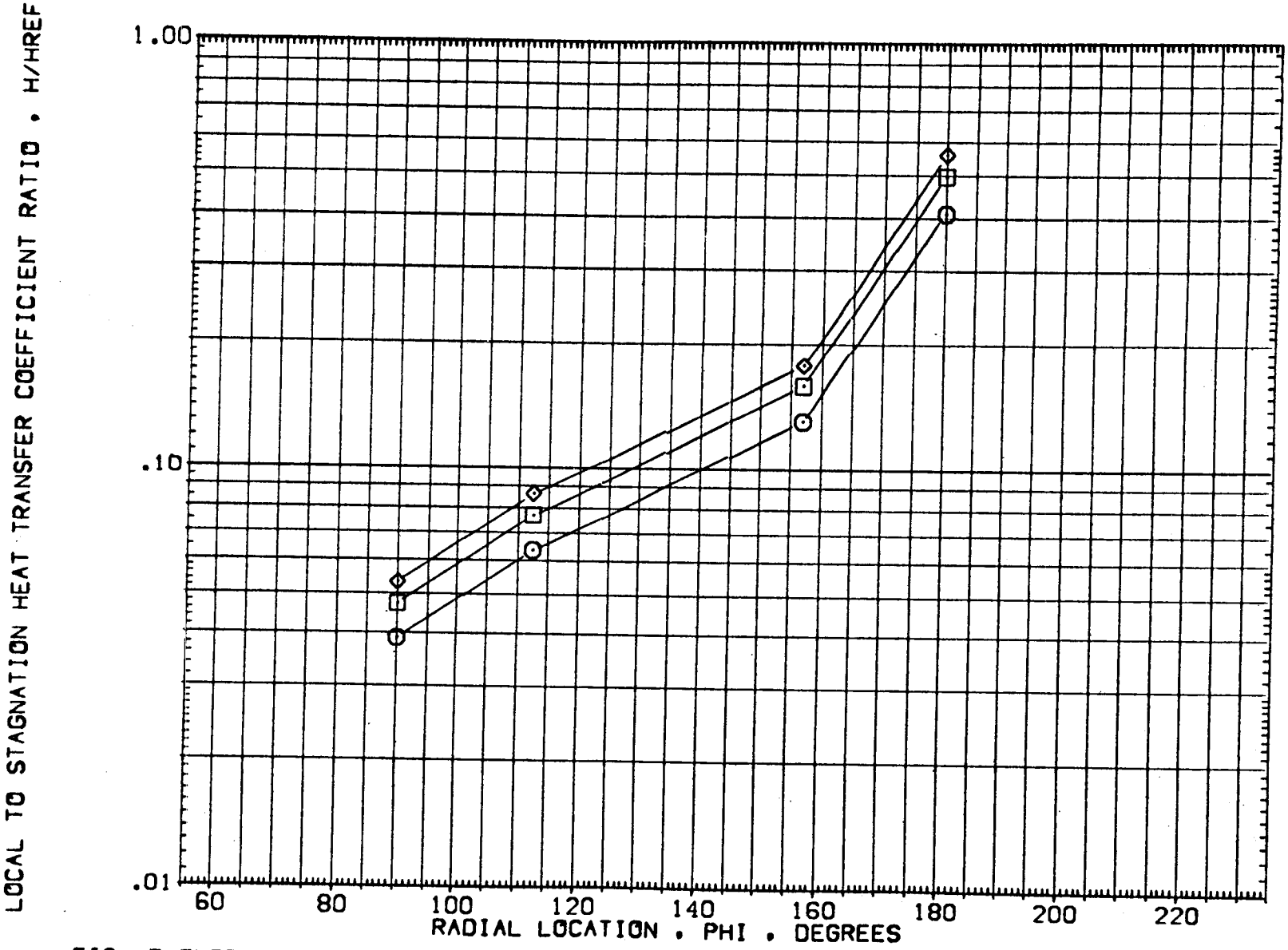


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1120)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1120)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

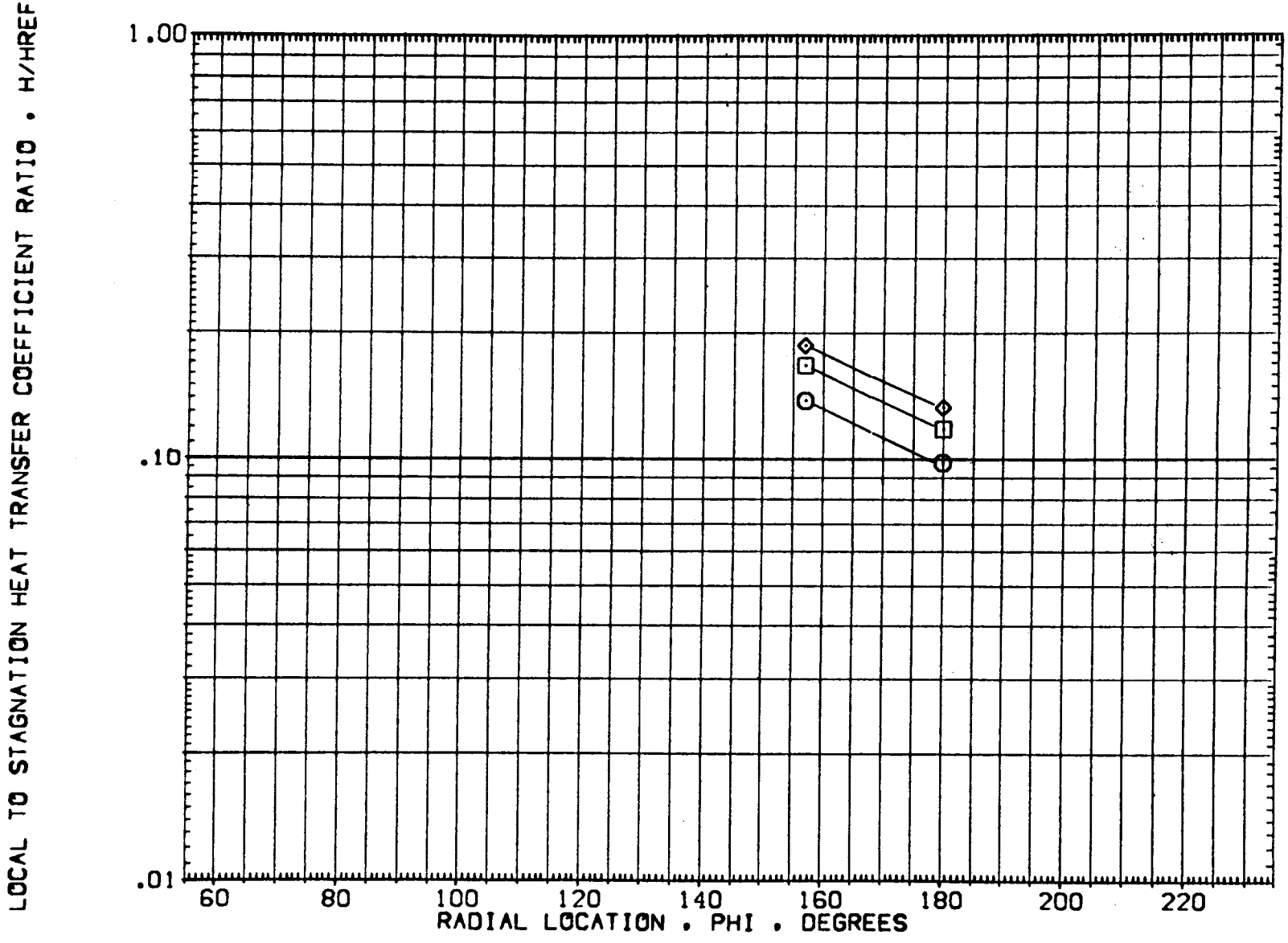


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .475

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|120)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

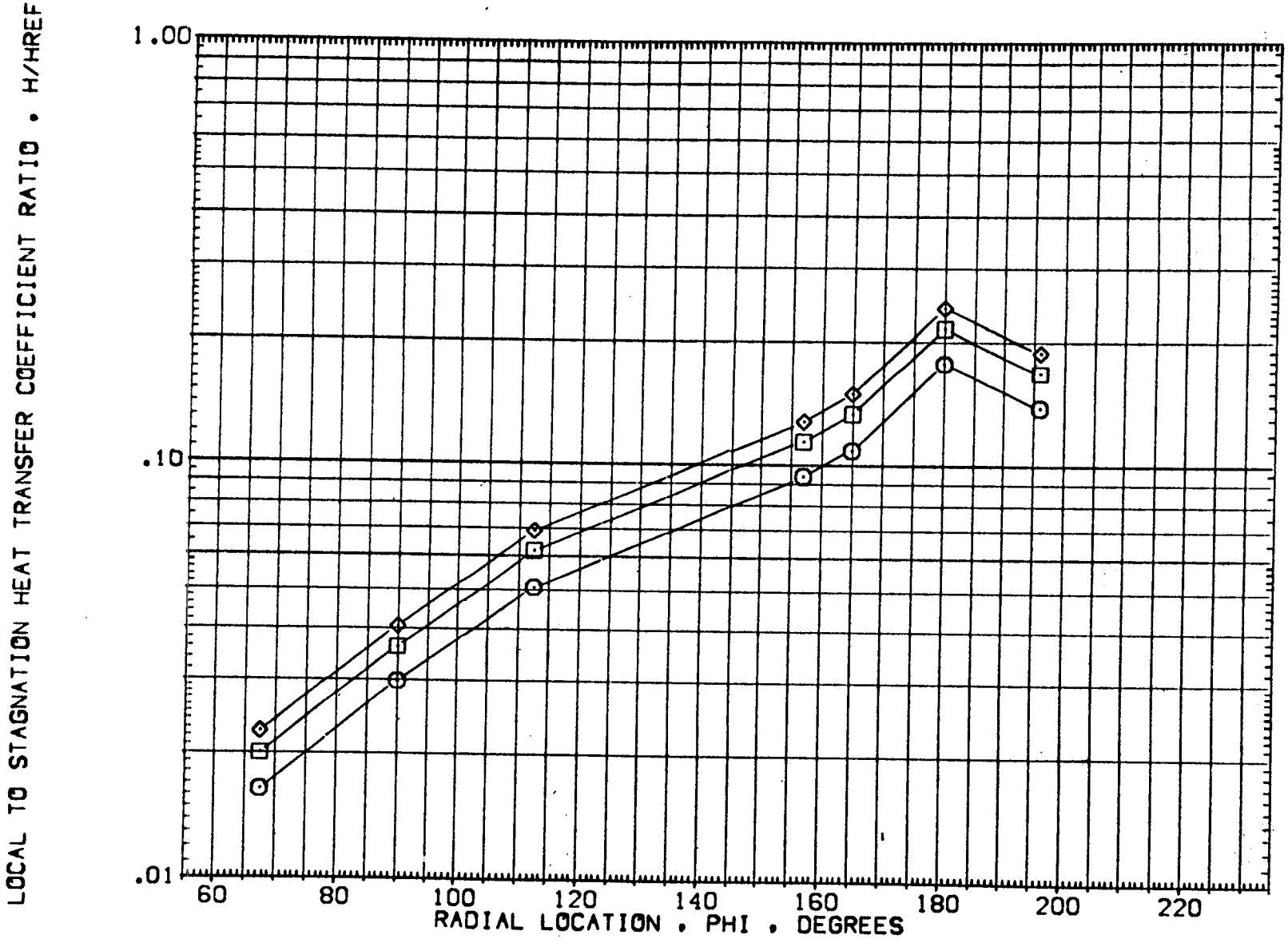


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

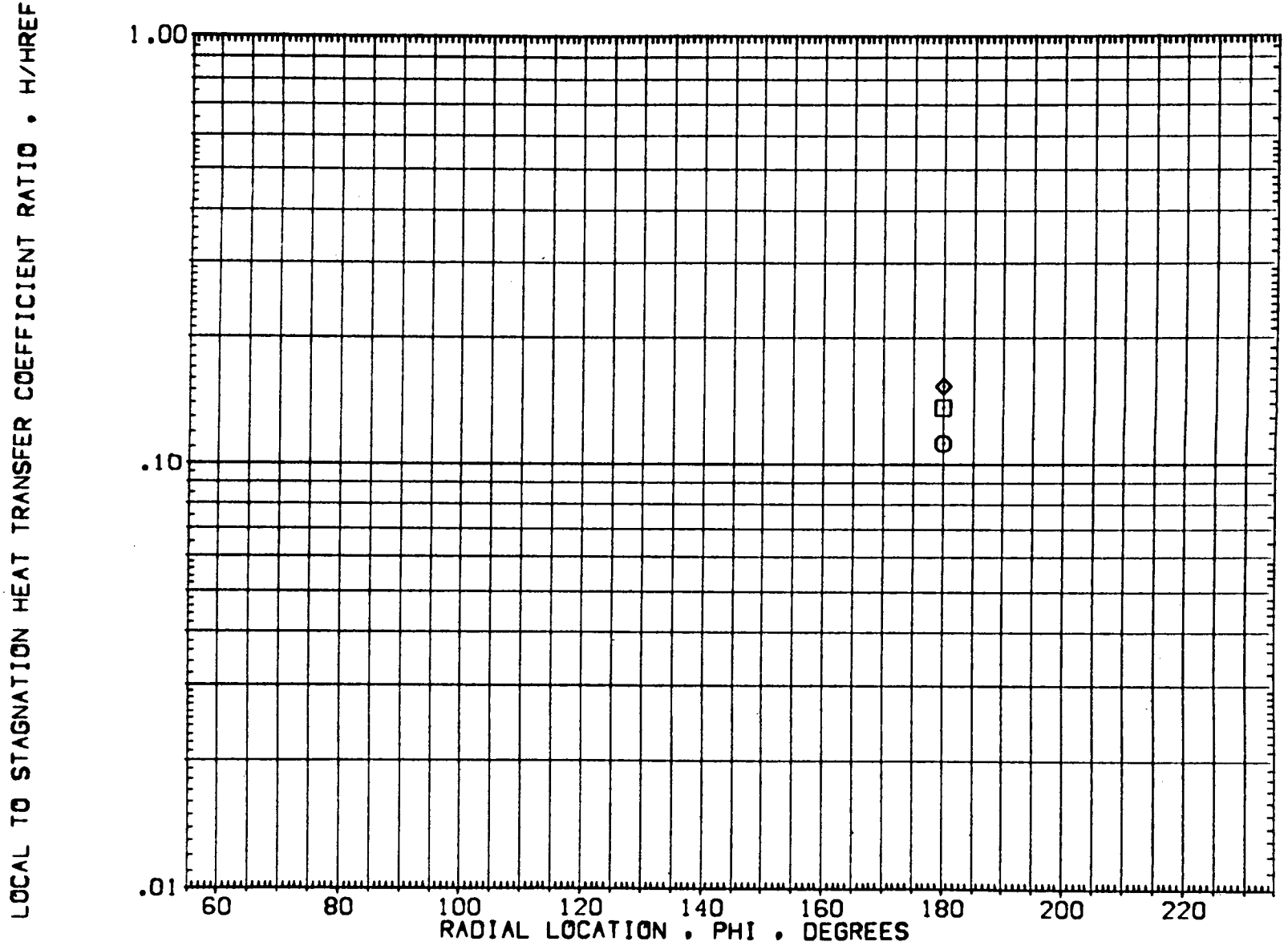


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

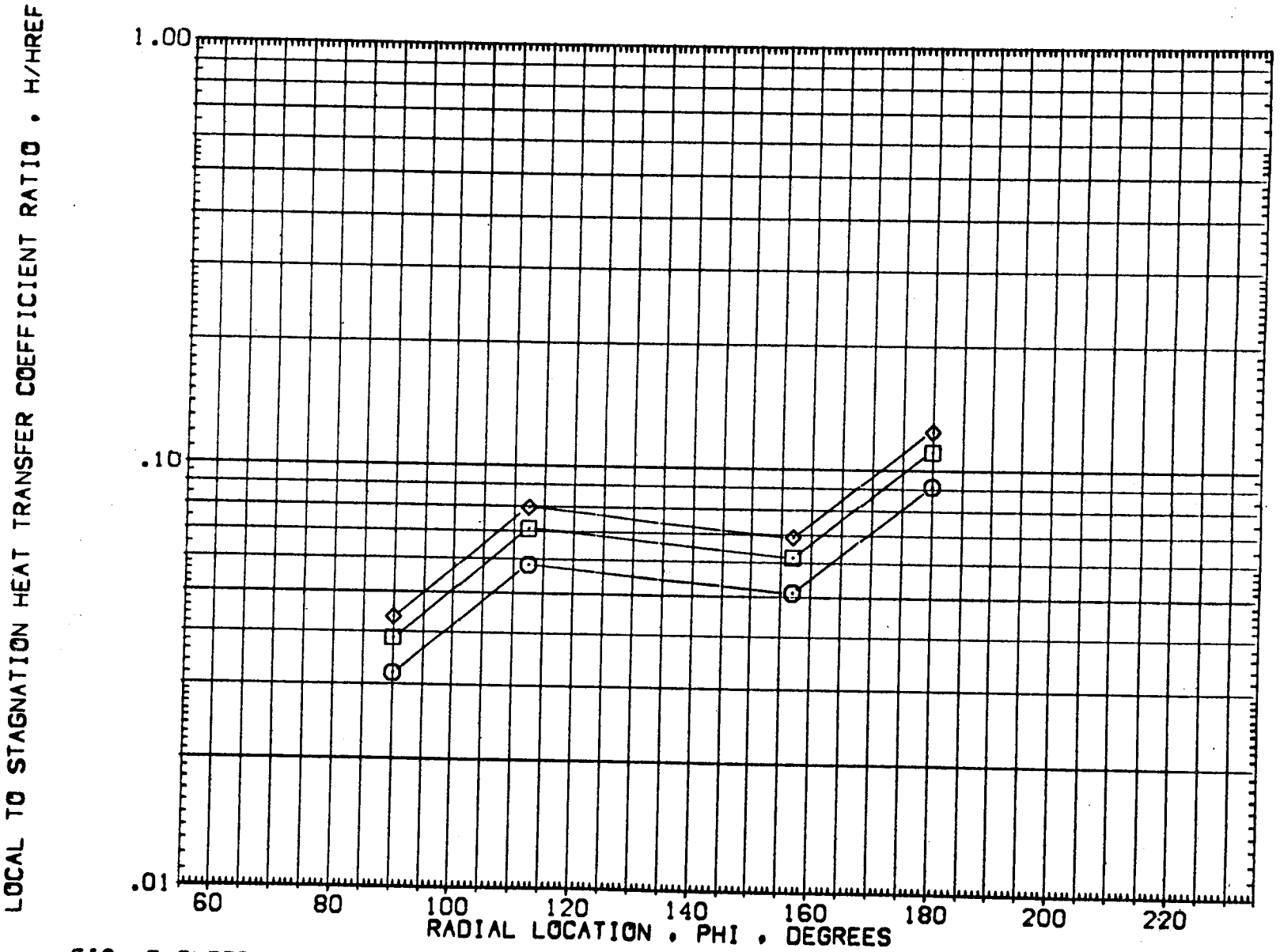


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

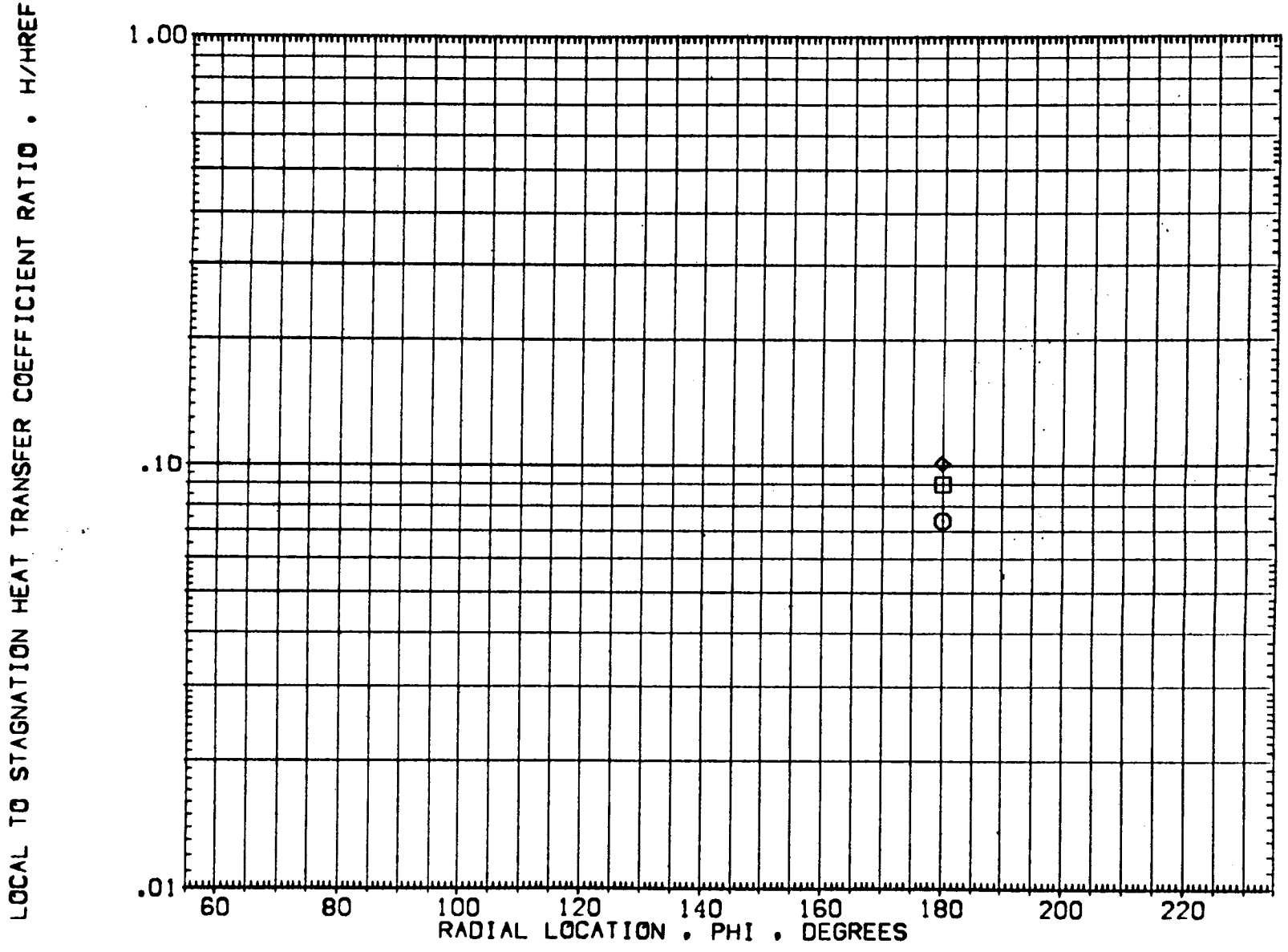


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .575

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20) ○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20) □	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20) ◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

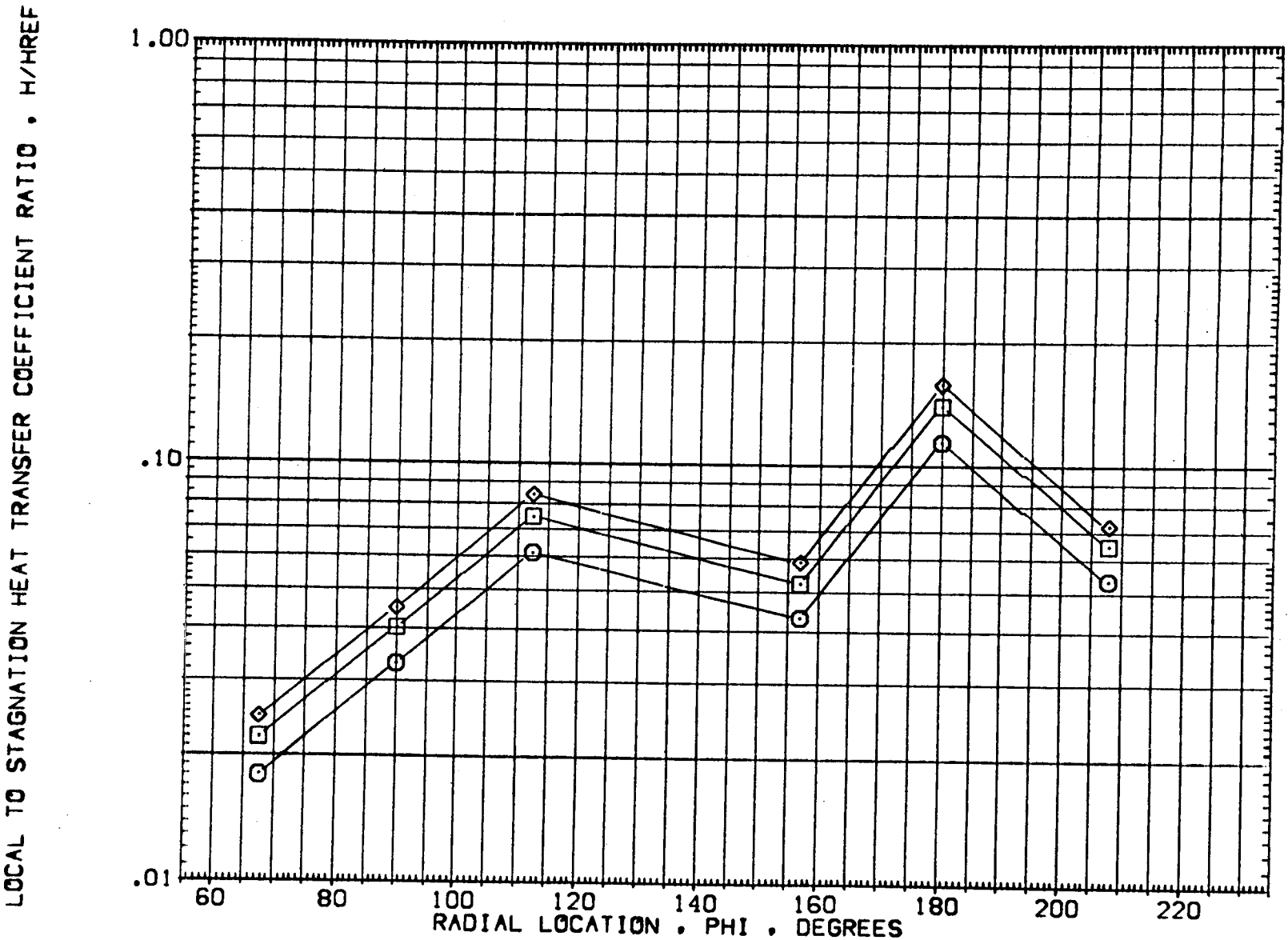


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE,IT20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE,IT20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

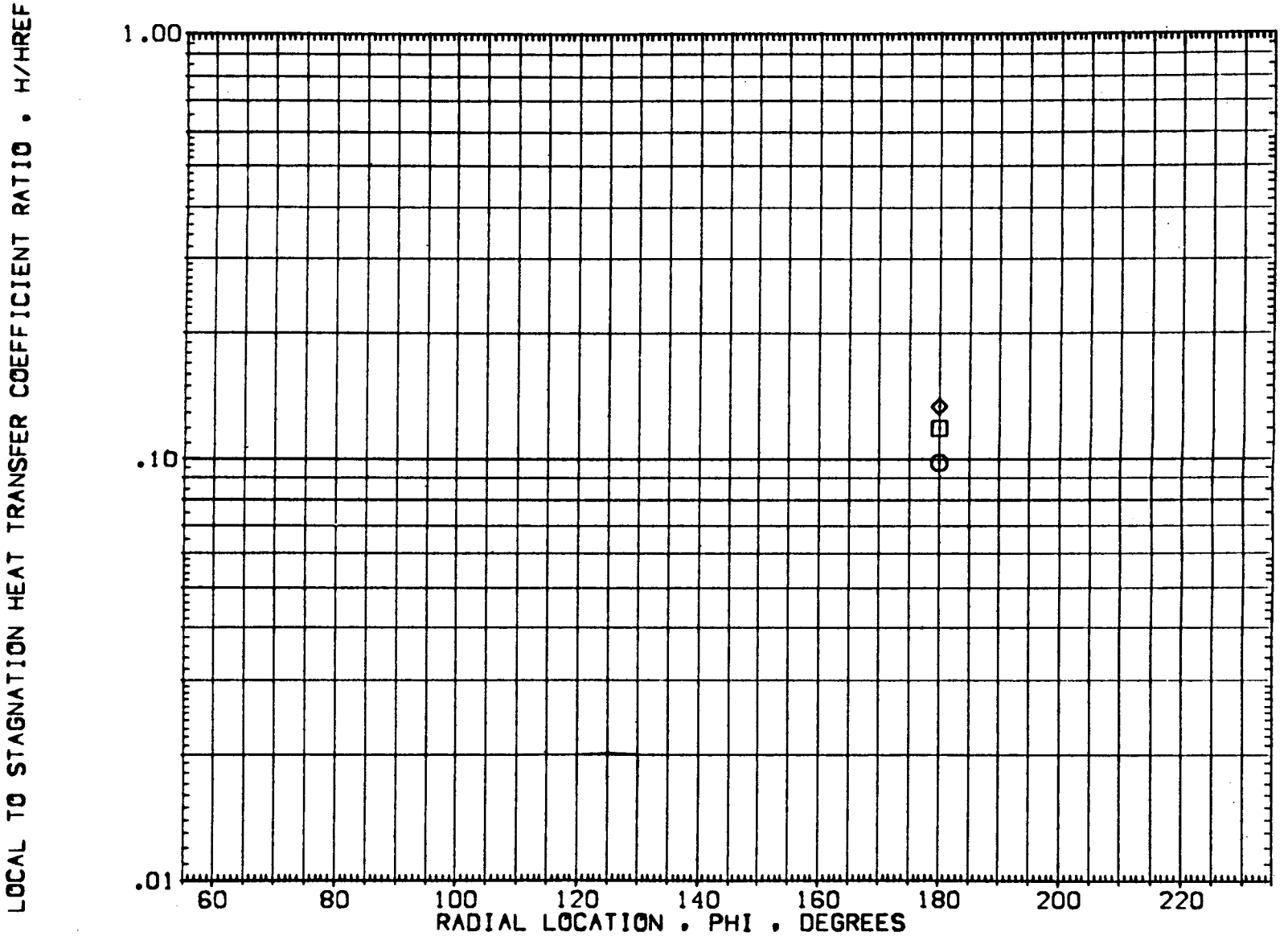


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .625

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

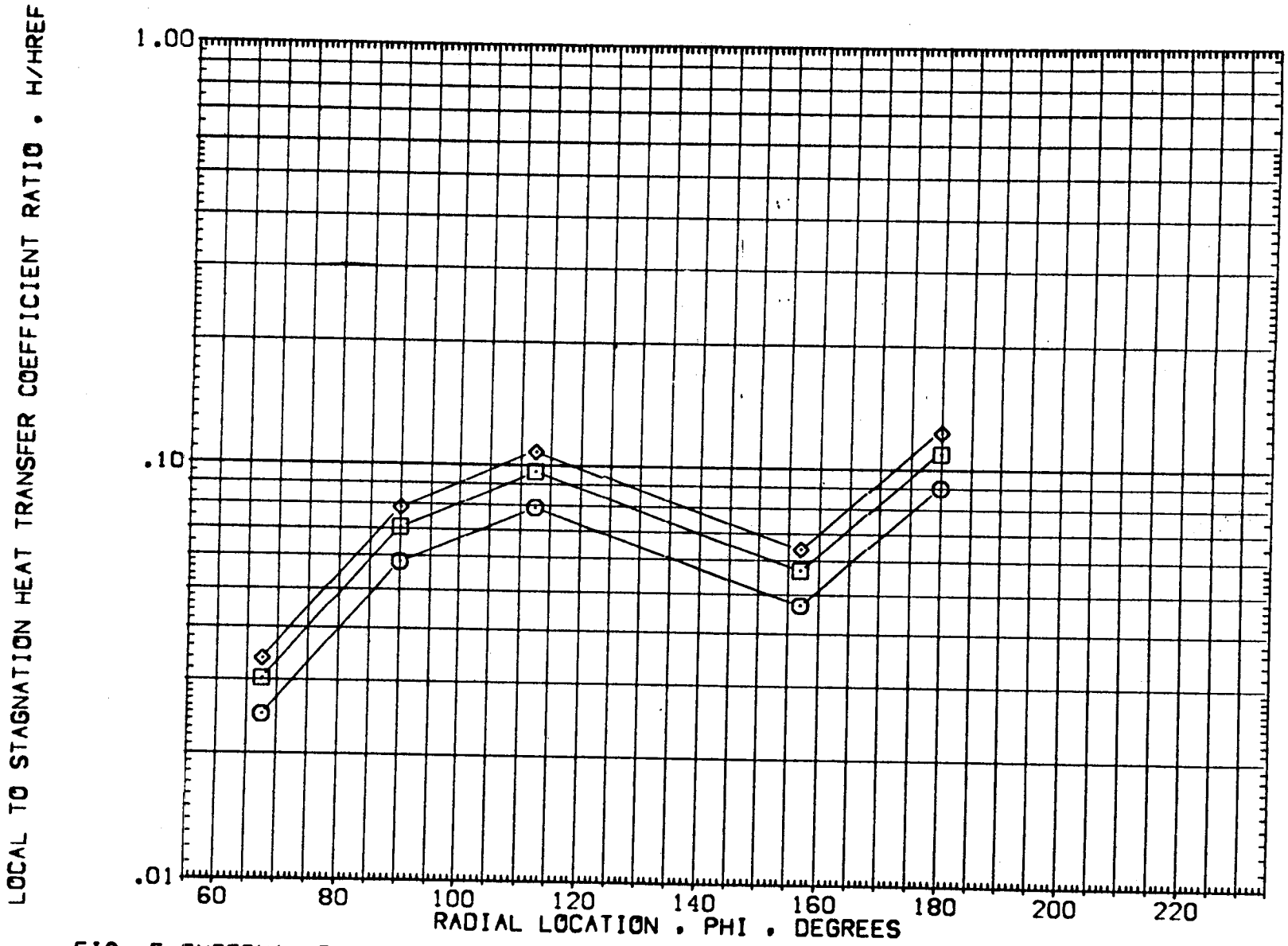


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE!T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE!T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

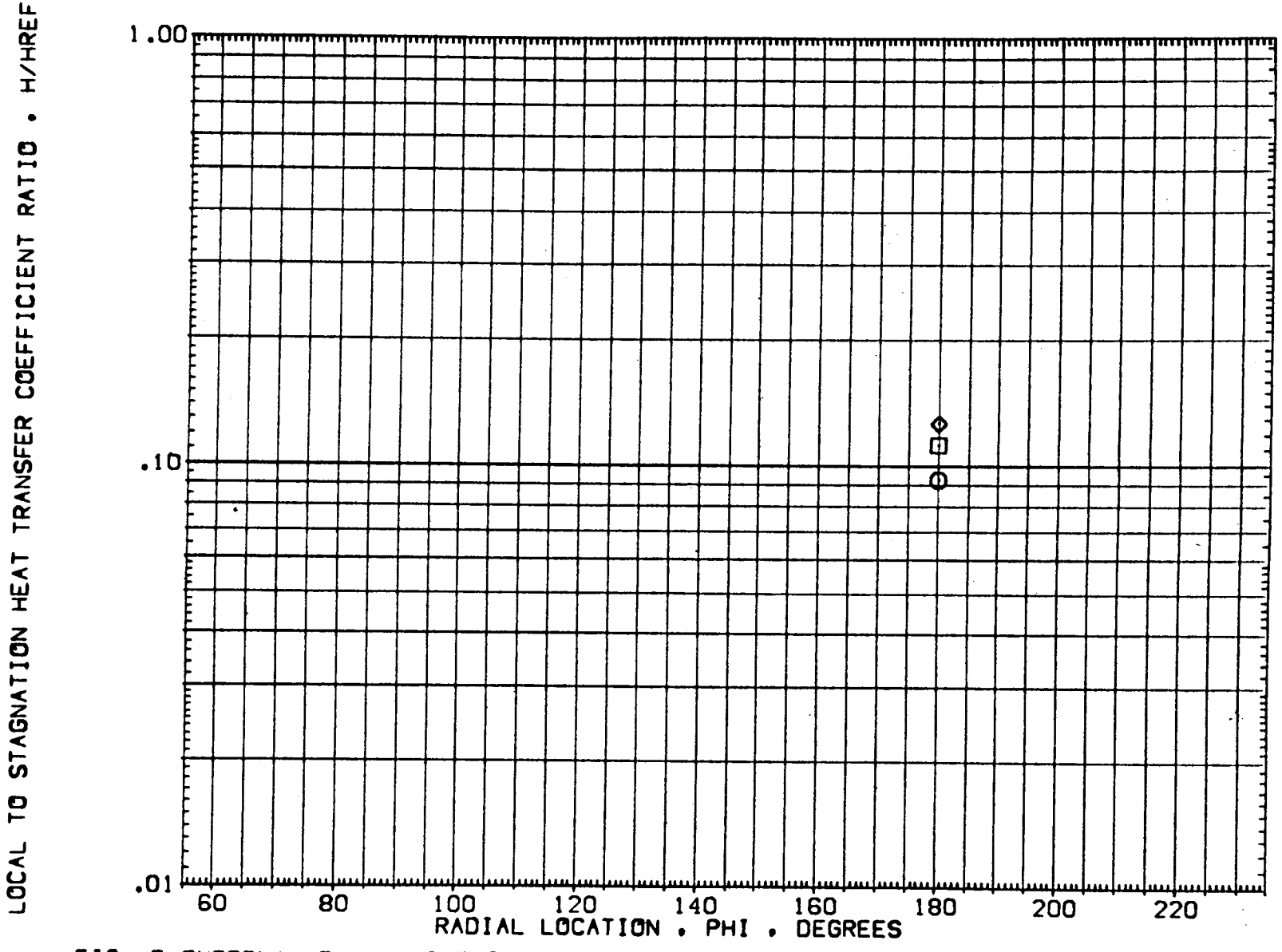


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1120)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

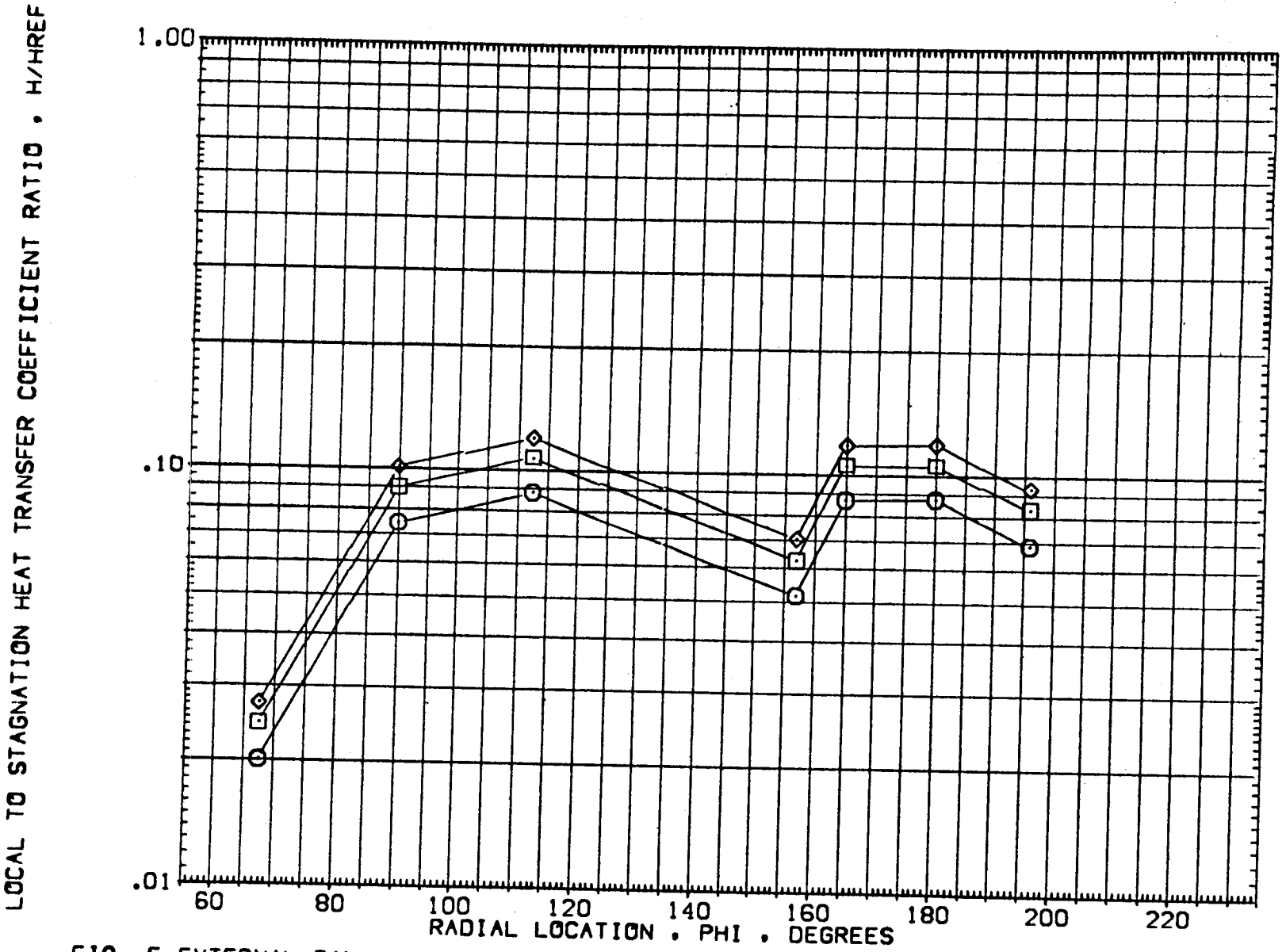


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .700

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

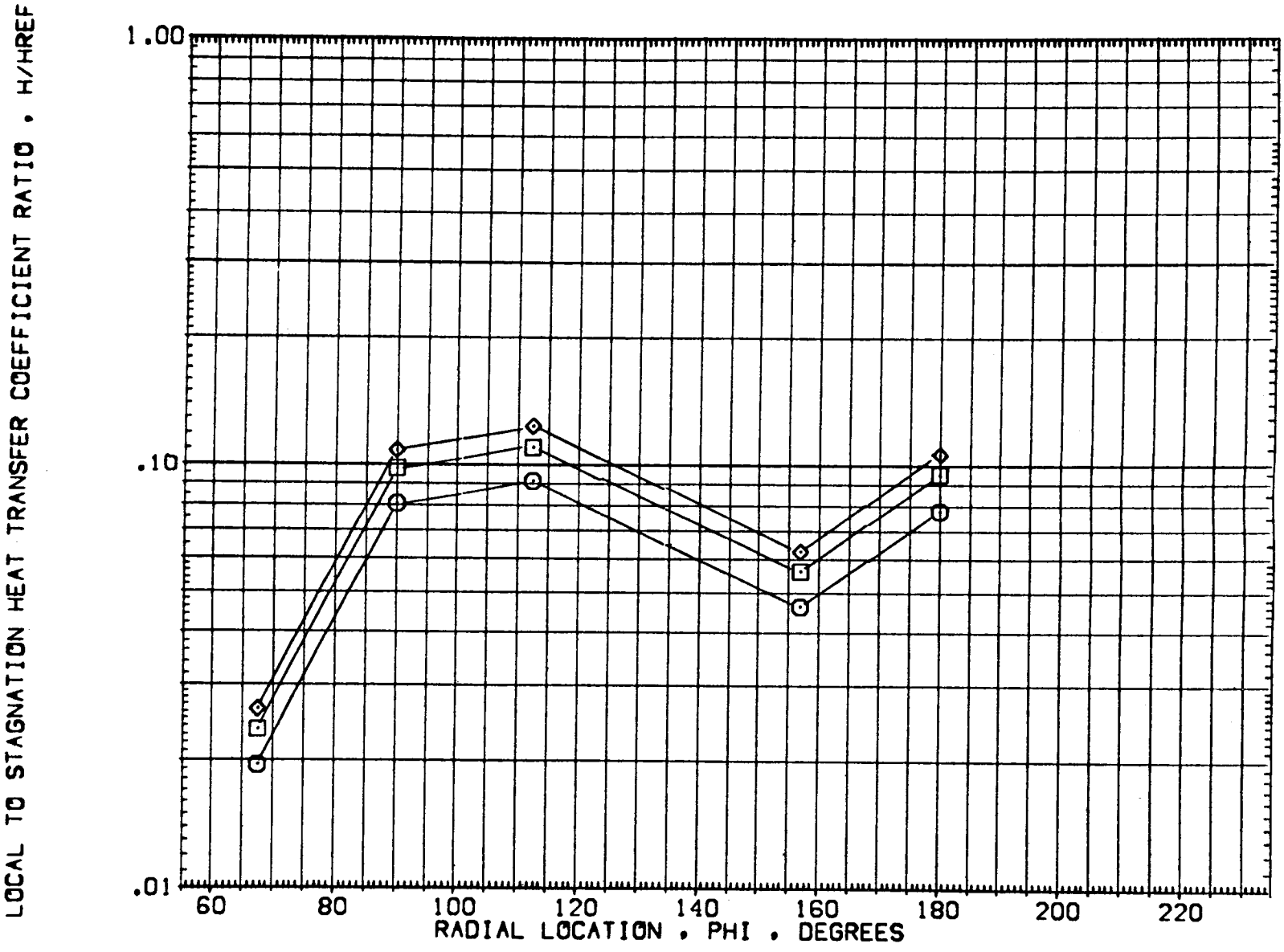


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .750

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

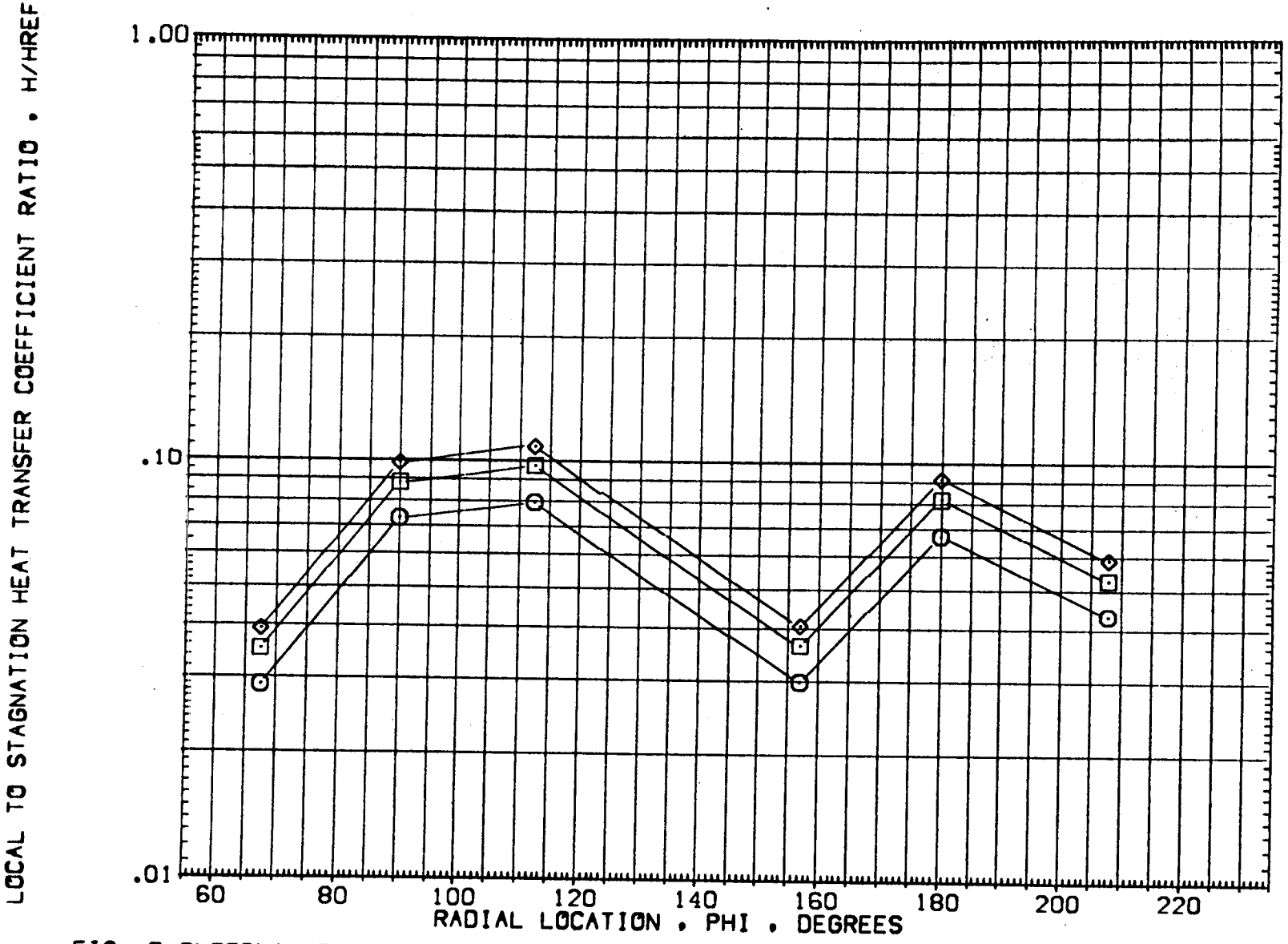


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

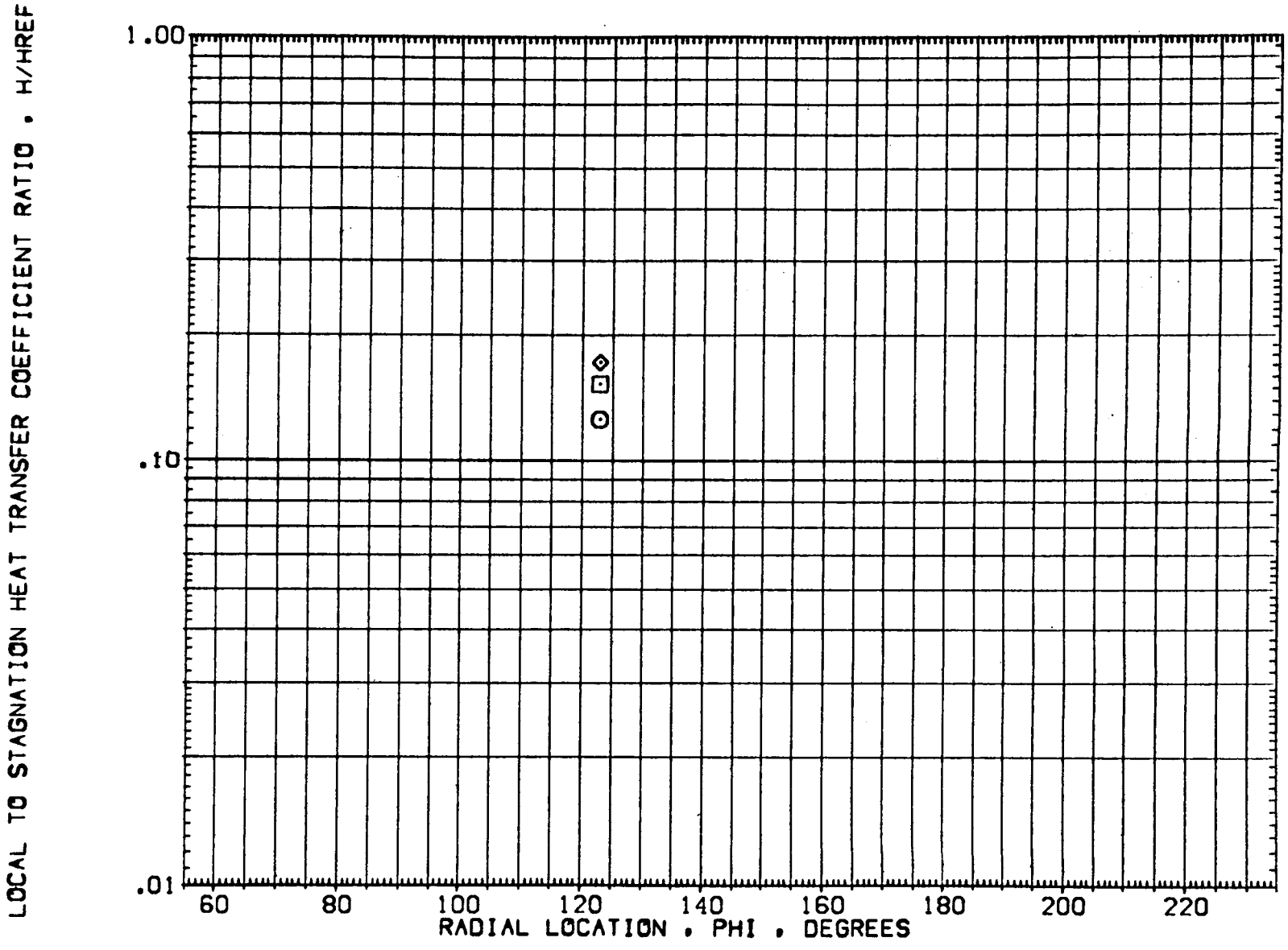


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE,IT20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE,IT20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE,IT20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

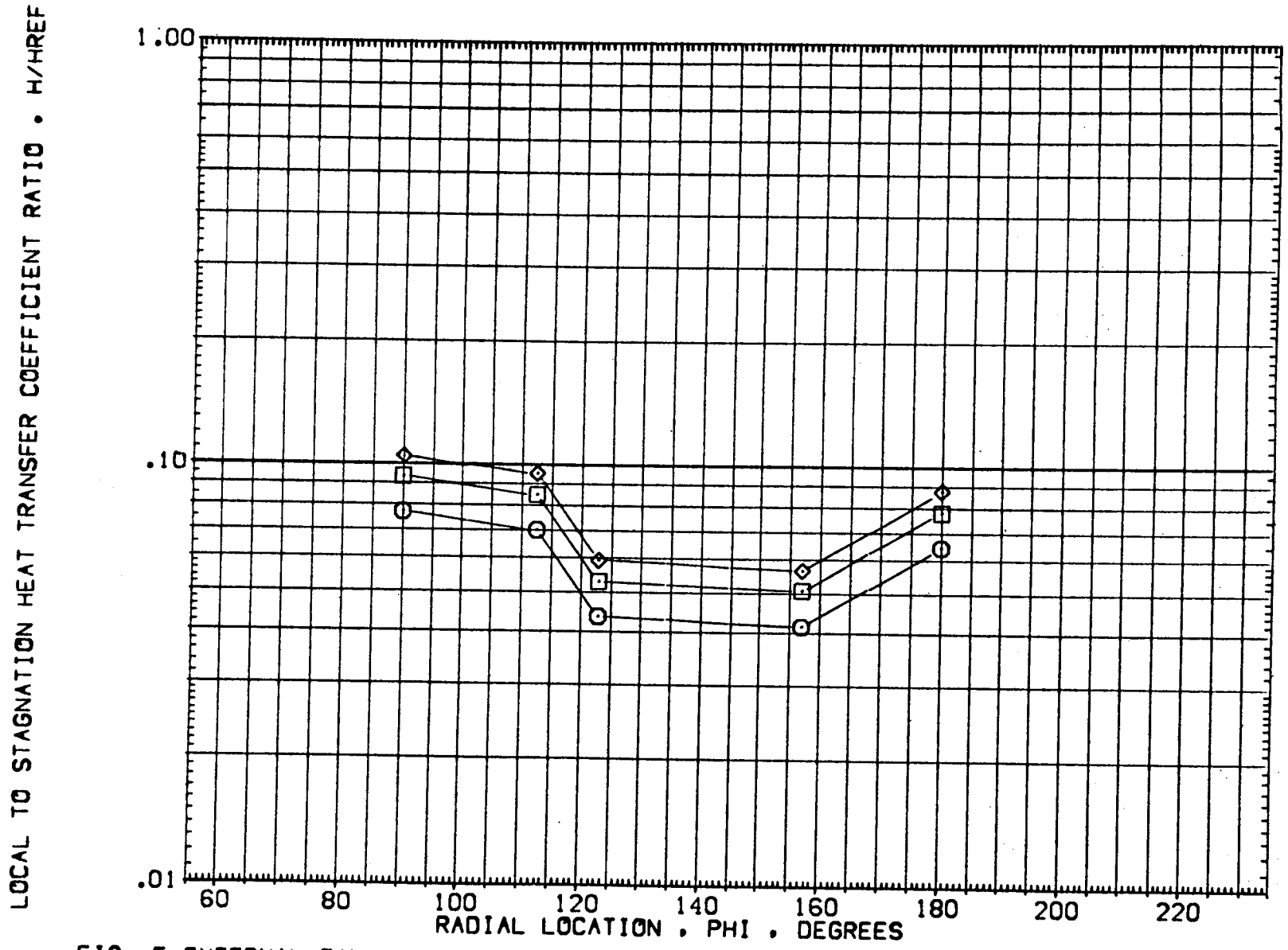


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE!T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE!T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE!T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

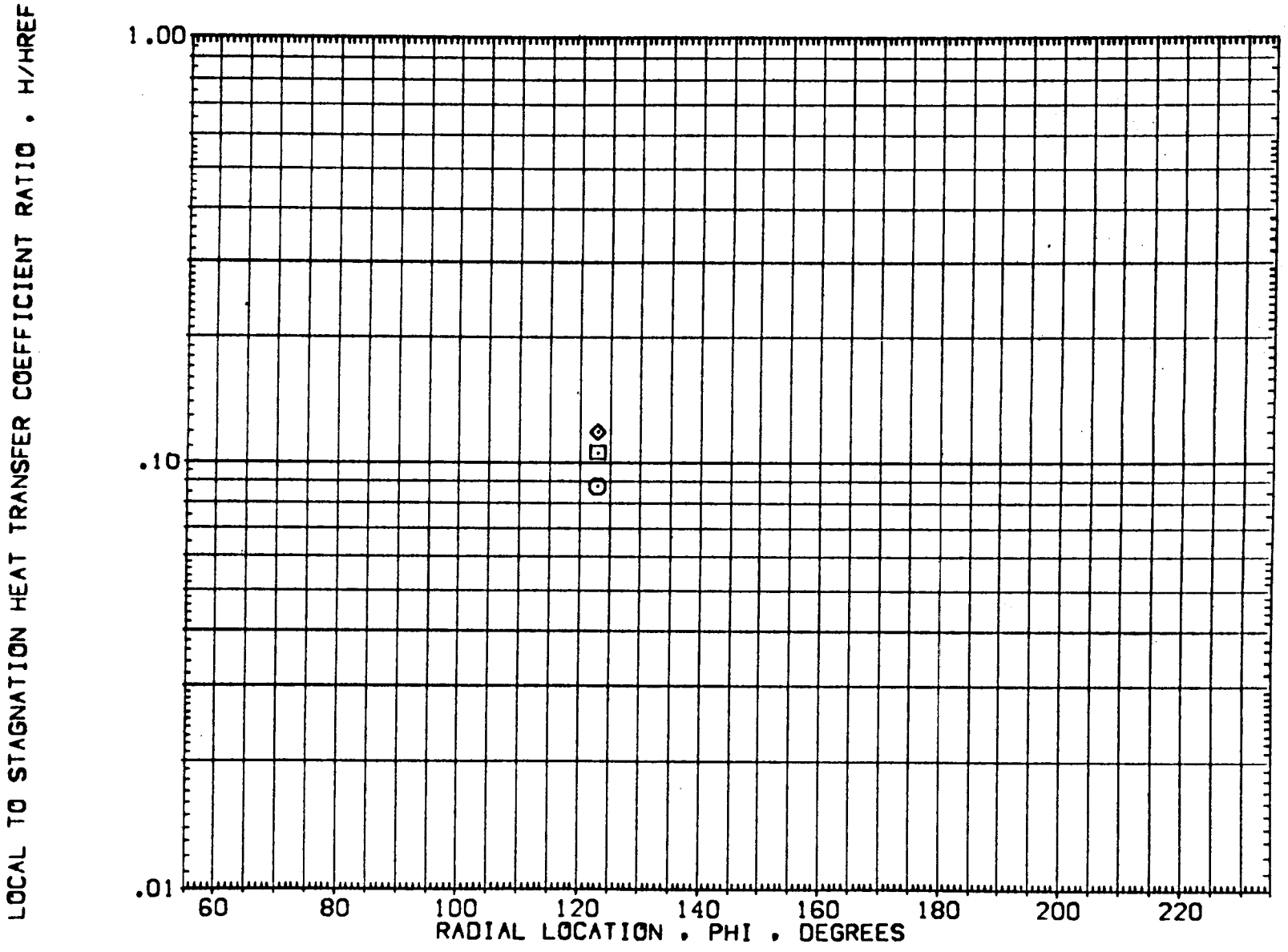


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .875

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

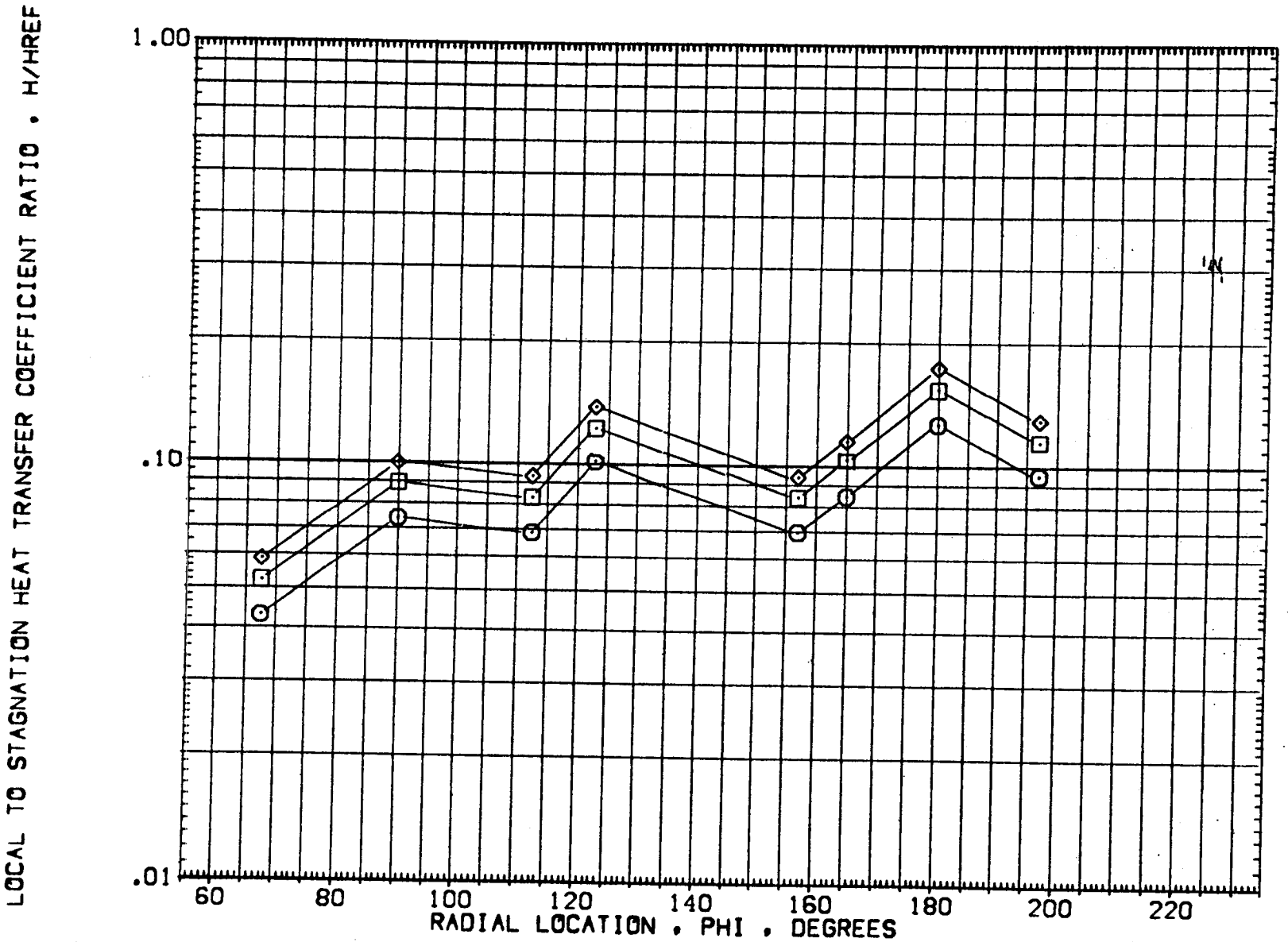


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|120)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

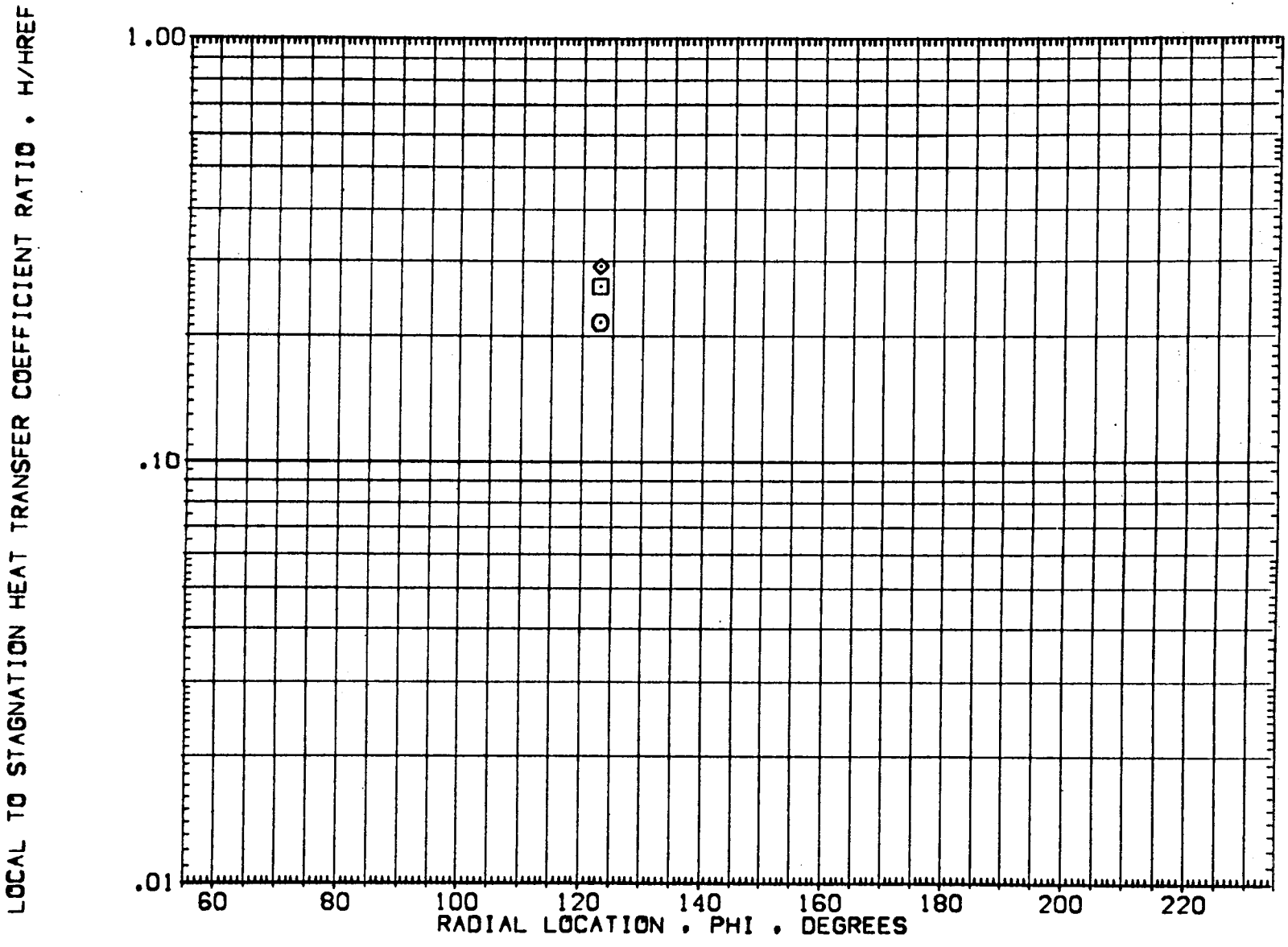


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE1T20)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE1T20)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE1T20)	◇	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

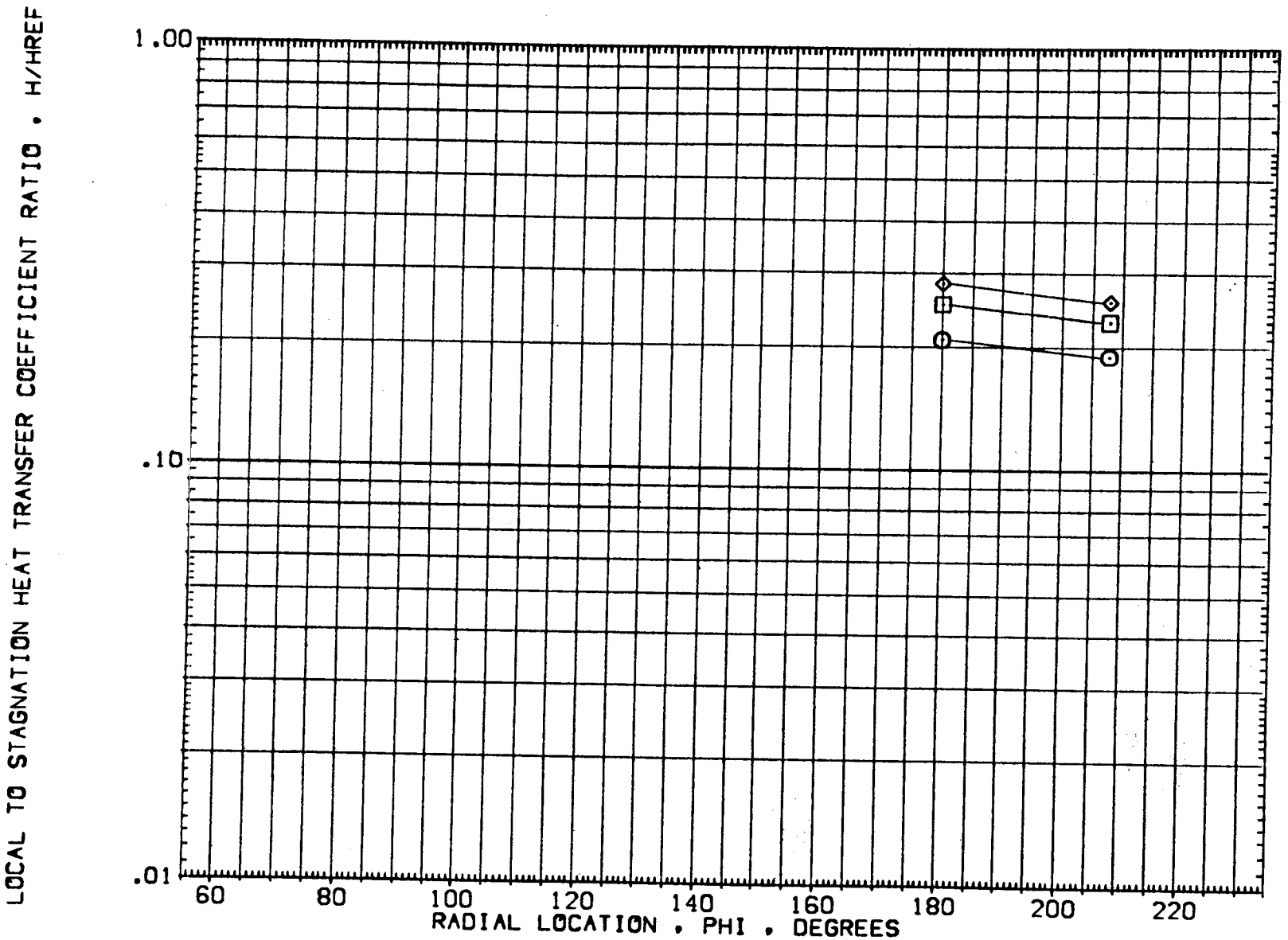


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 |H3 0+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

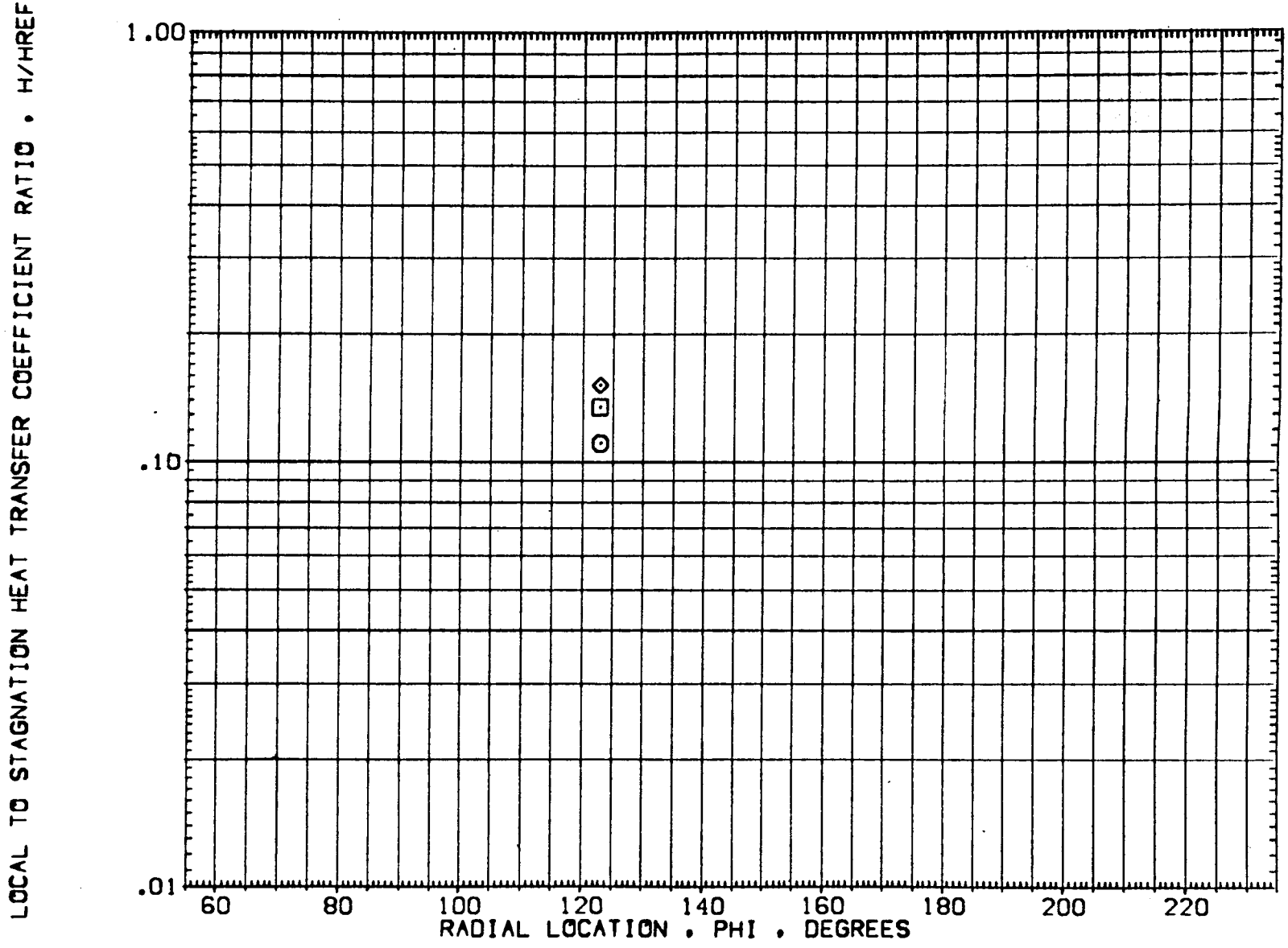


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(RE|T20)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	1.000
(AE|T20)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.900
(BE|T20)	◇	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	-3.000	.000	5.000	.850

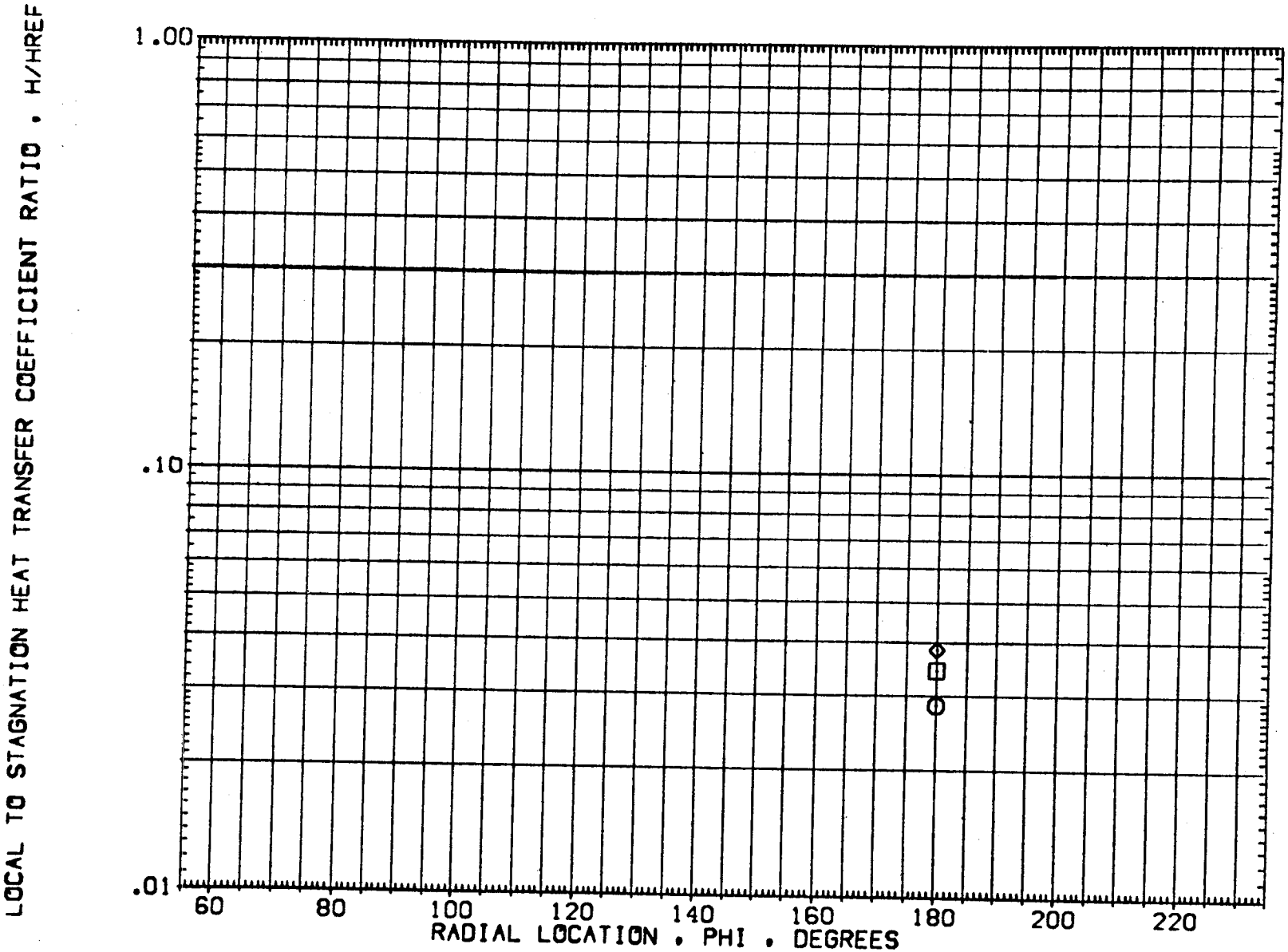


FIG. 5 EXTERNAL TANK - INTEGRATED VEHICLE (INTERFERENCE)

MACH = 5.300 X/L = .975

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	⊗	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

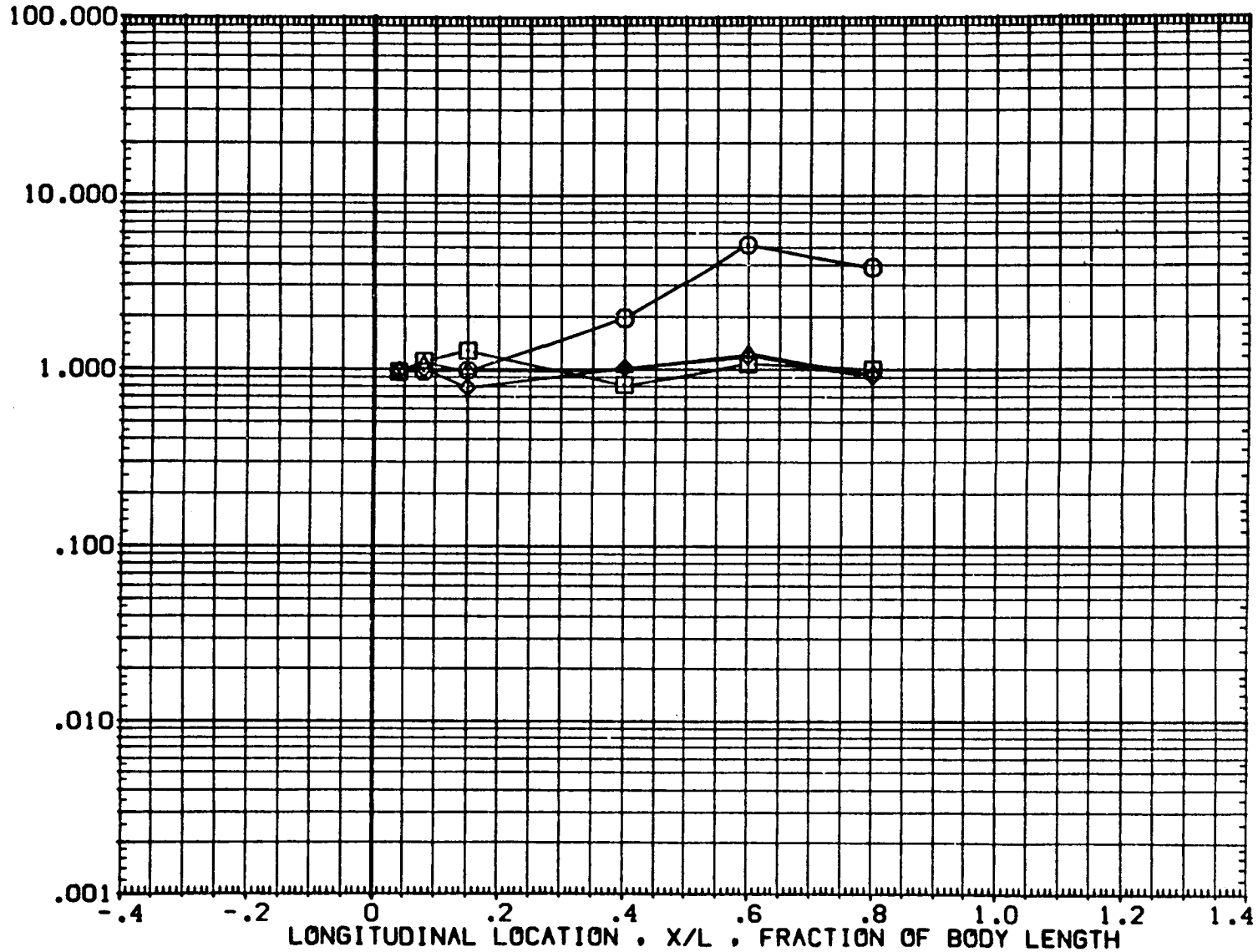


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = .000

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

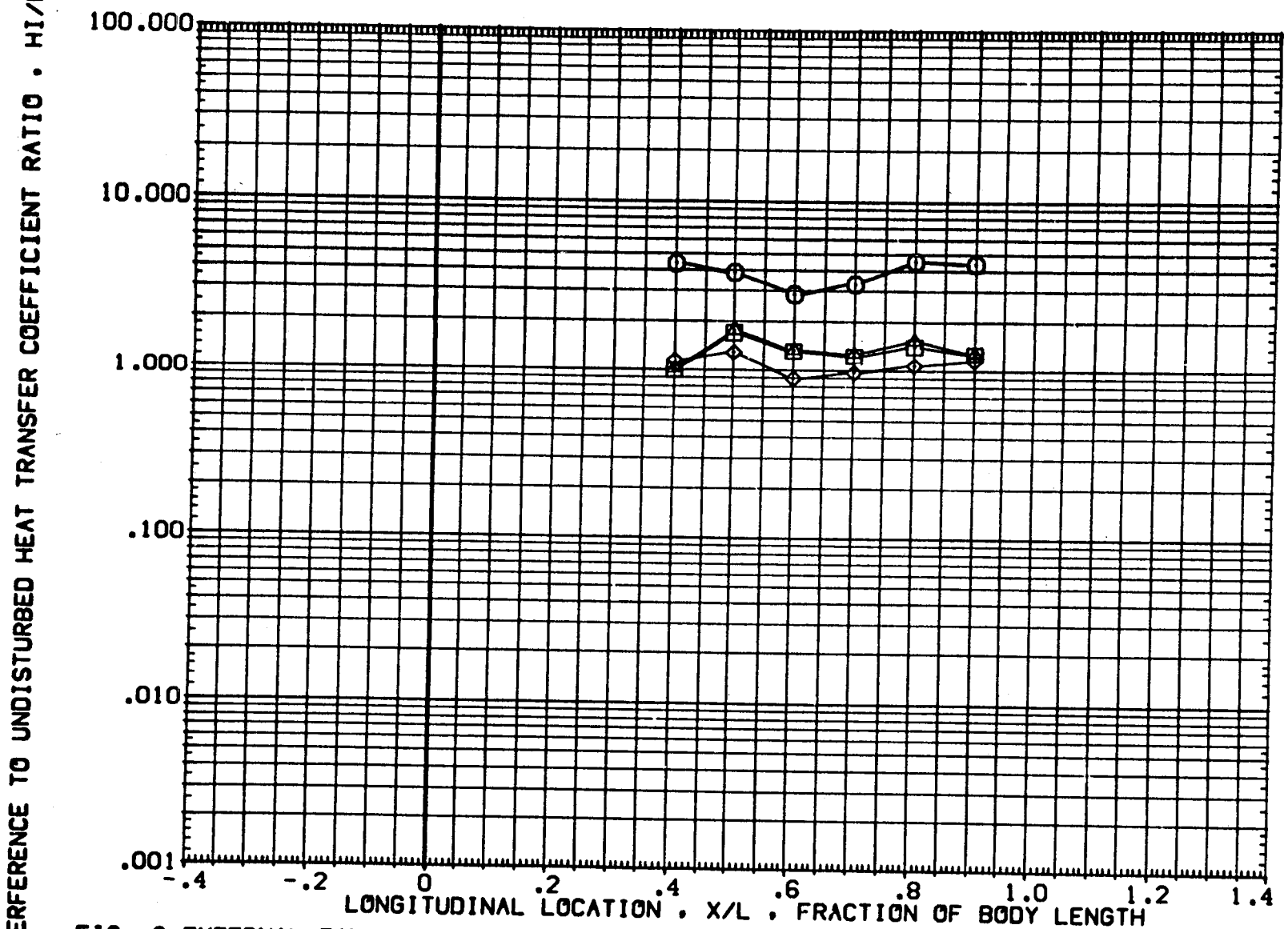


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 45.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	⊠	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

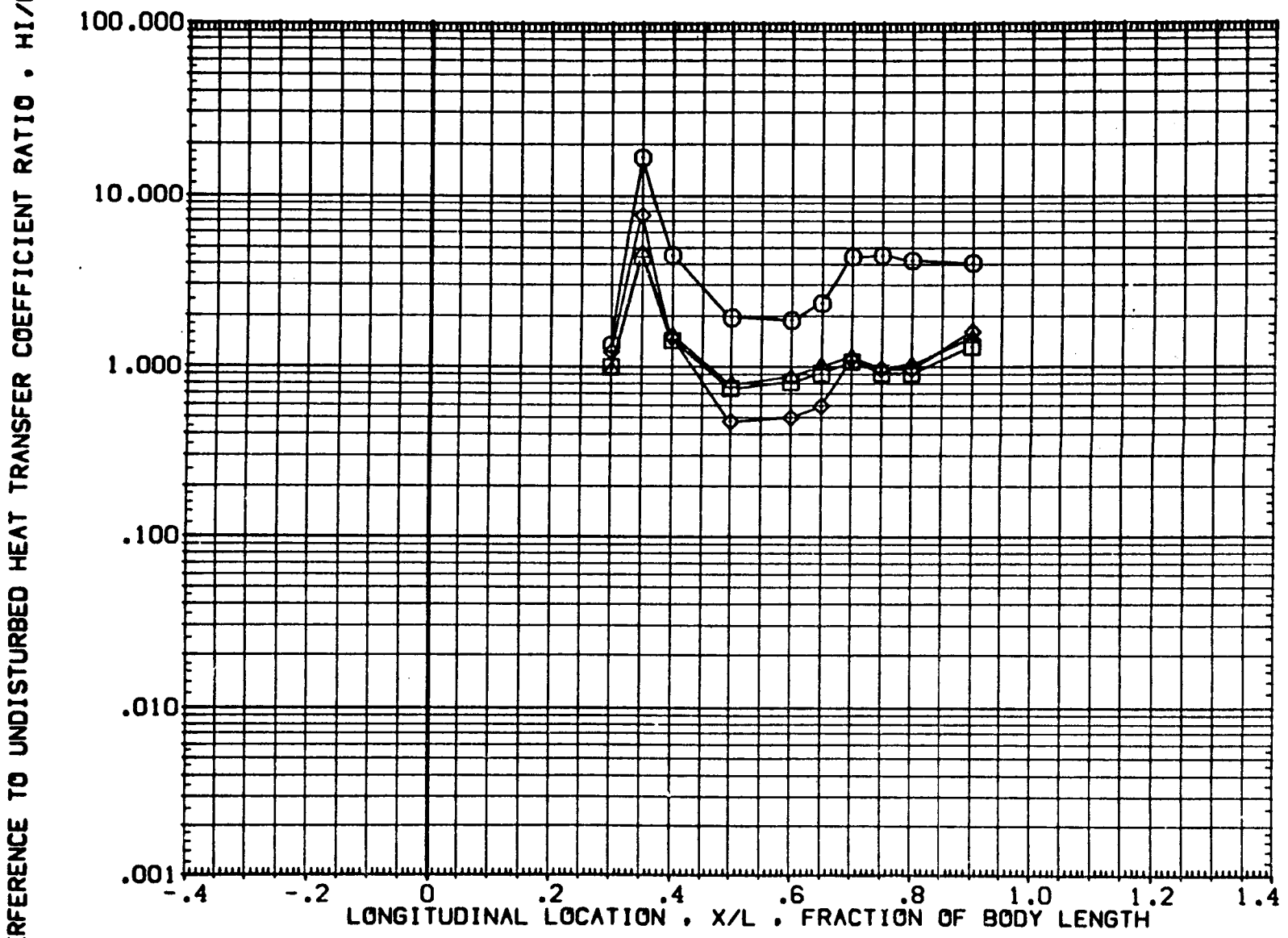


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 67.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

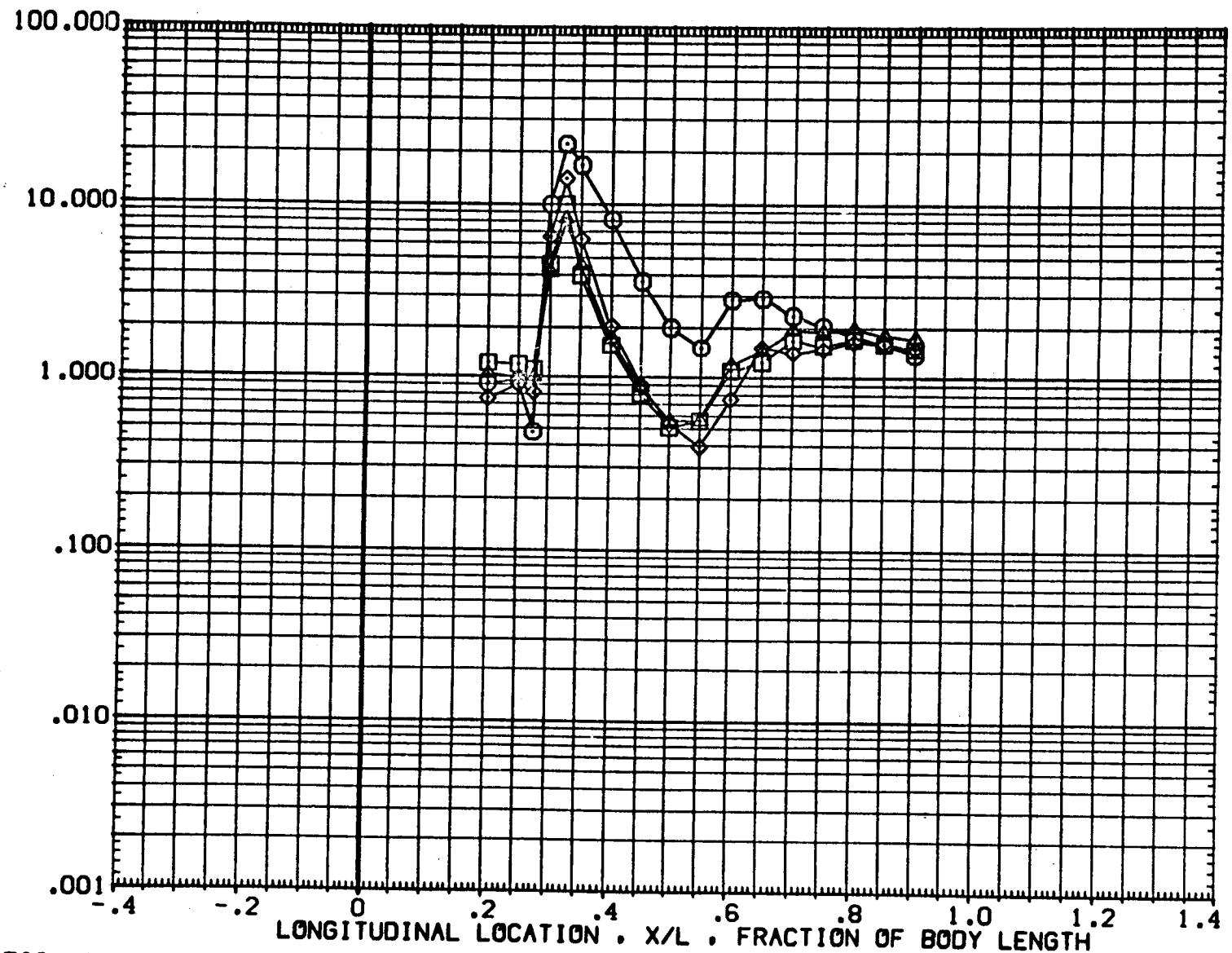


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 90.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

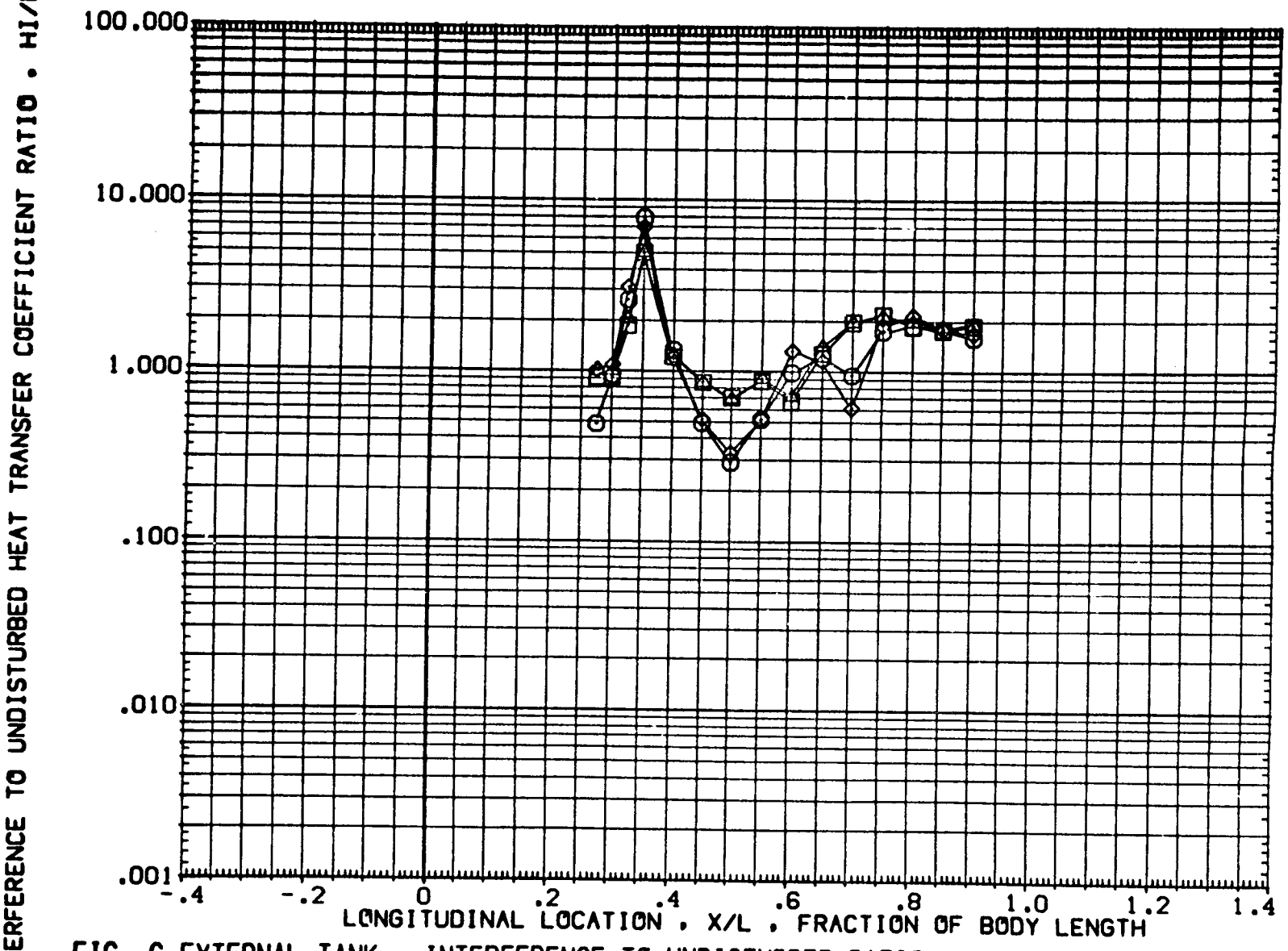


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 112.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

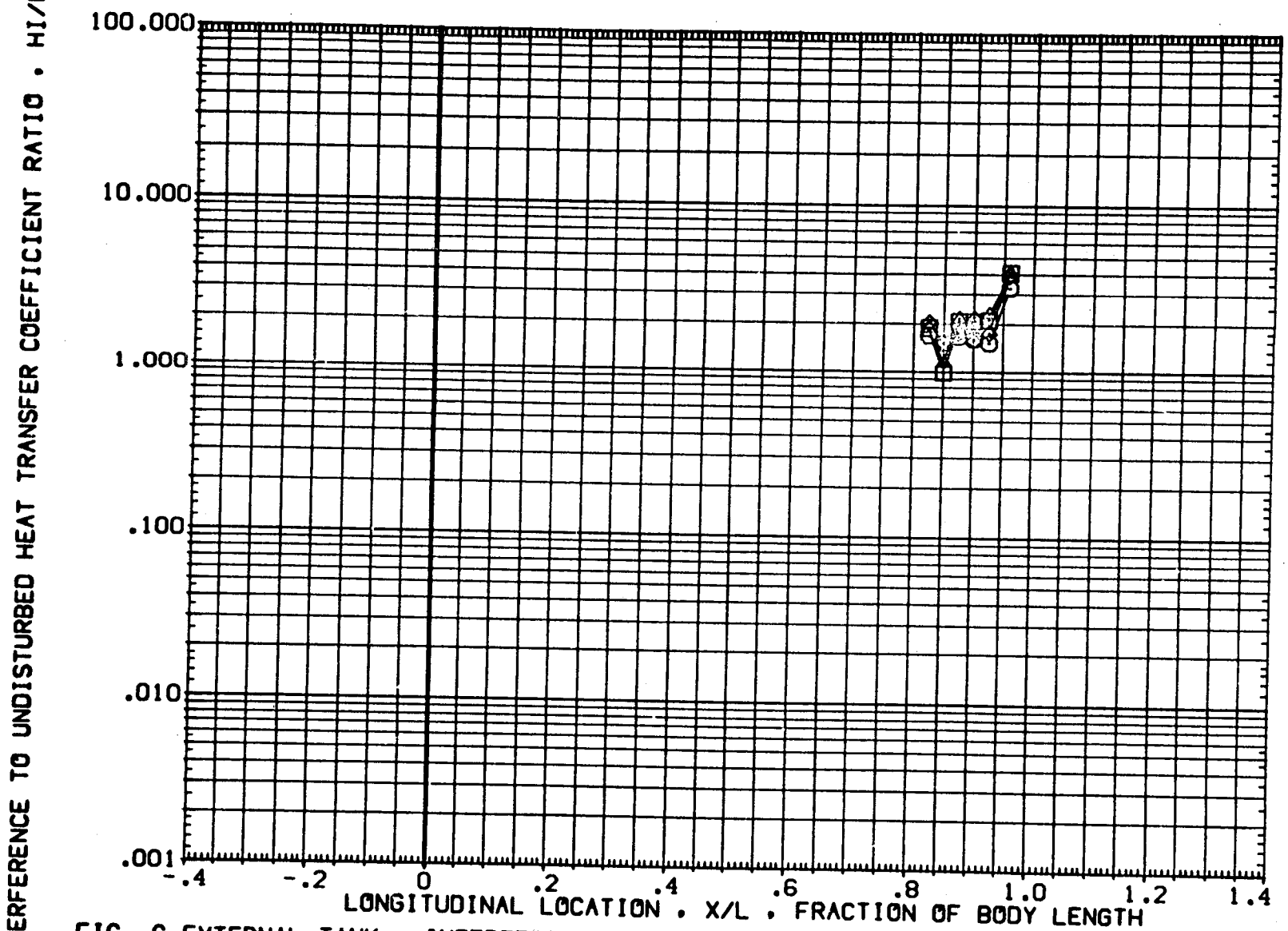


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 123.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

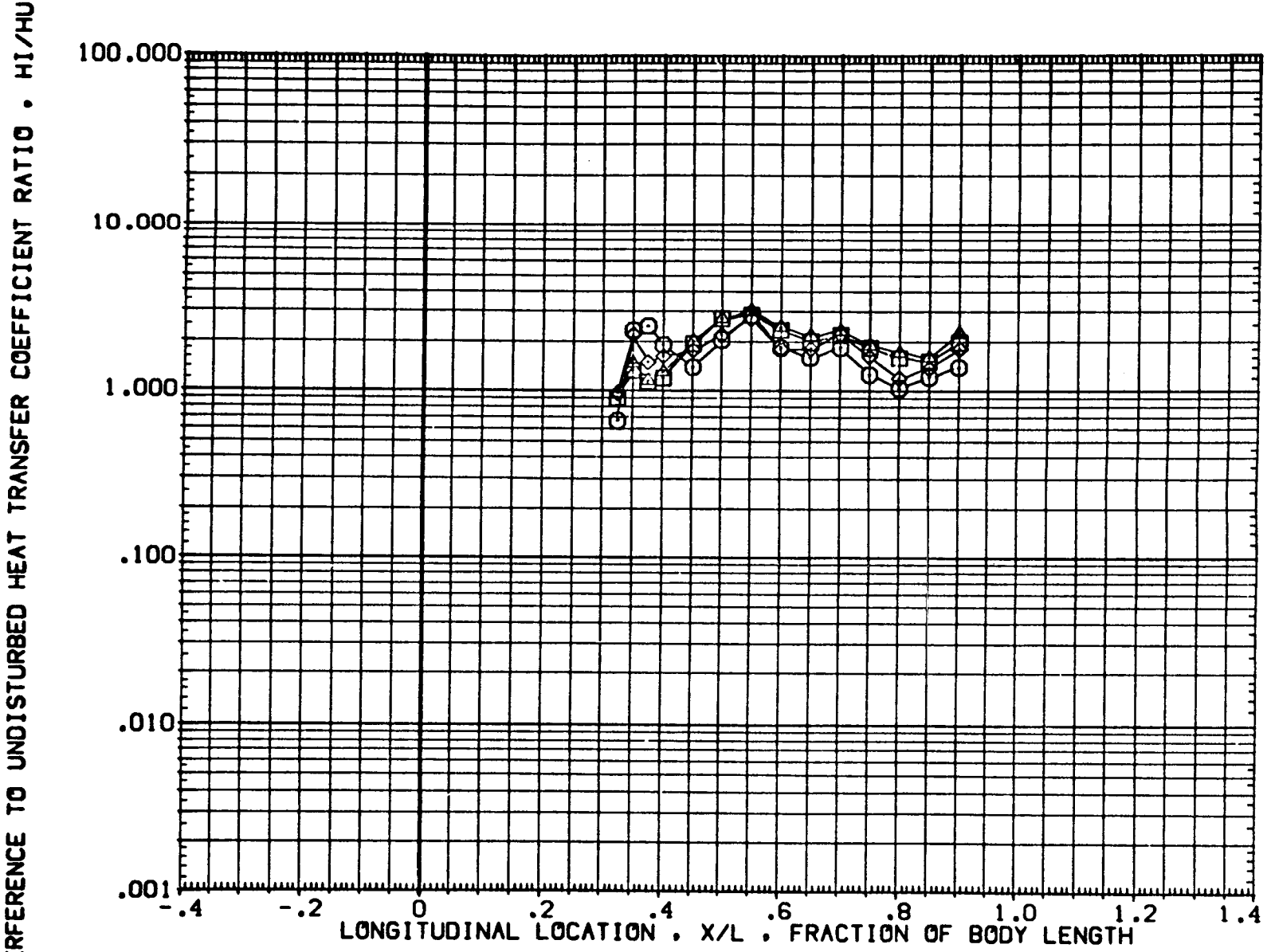


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 135.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	⊠	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

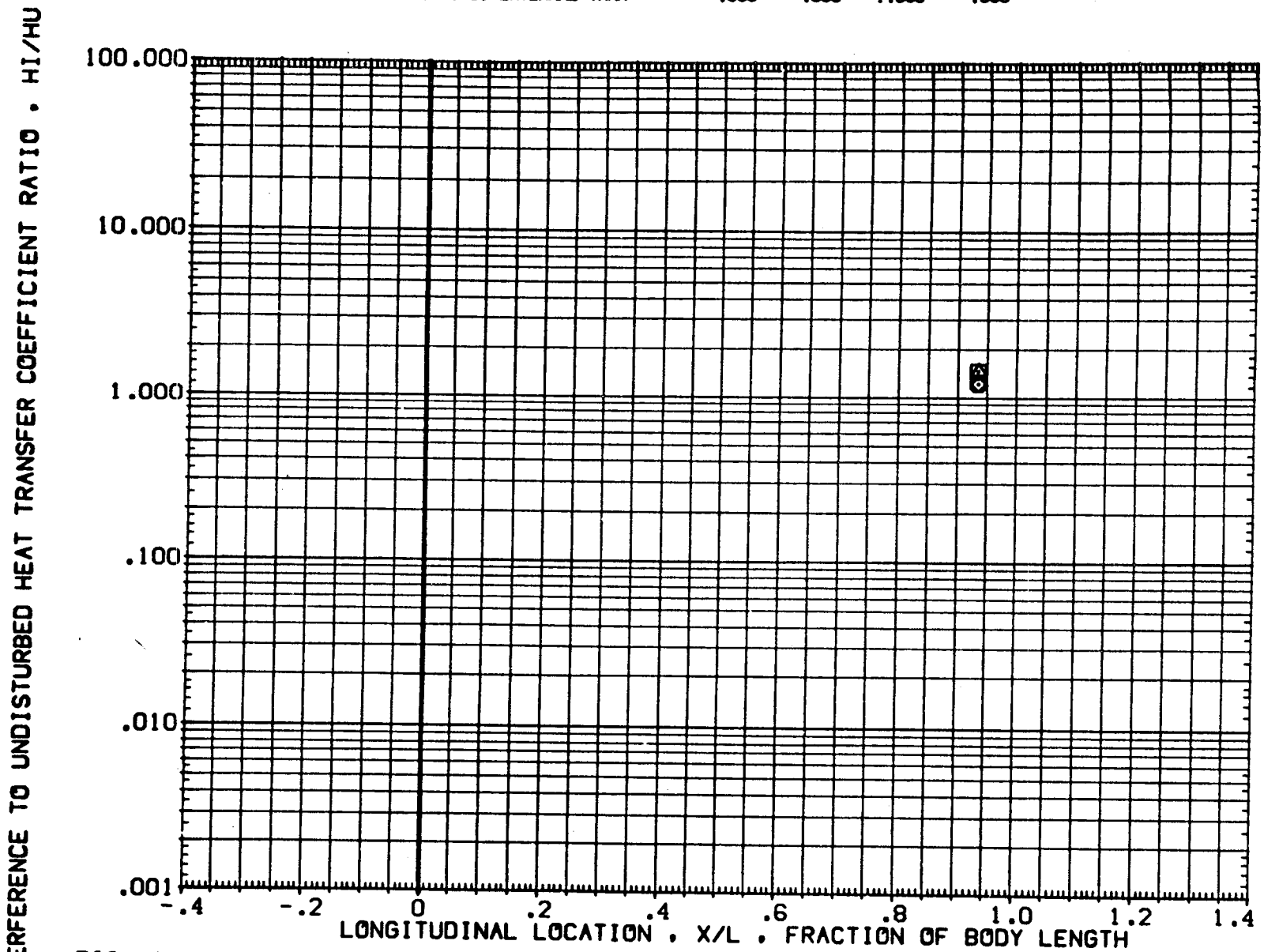


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 151.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

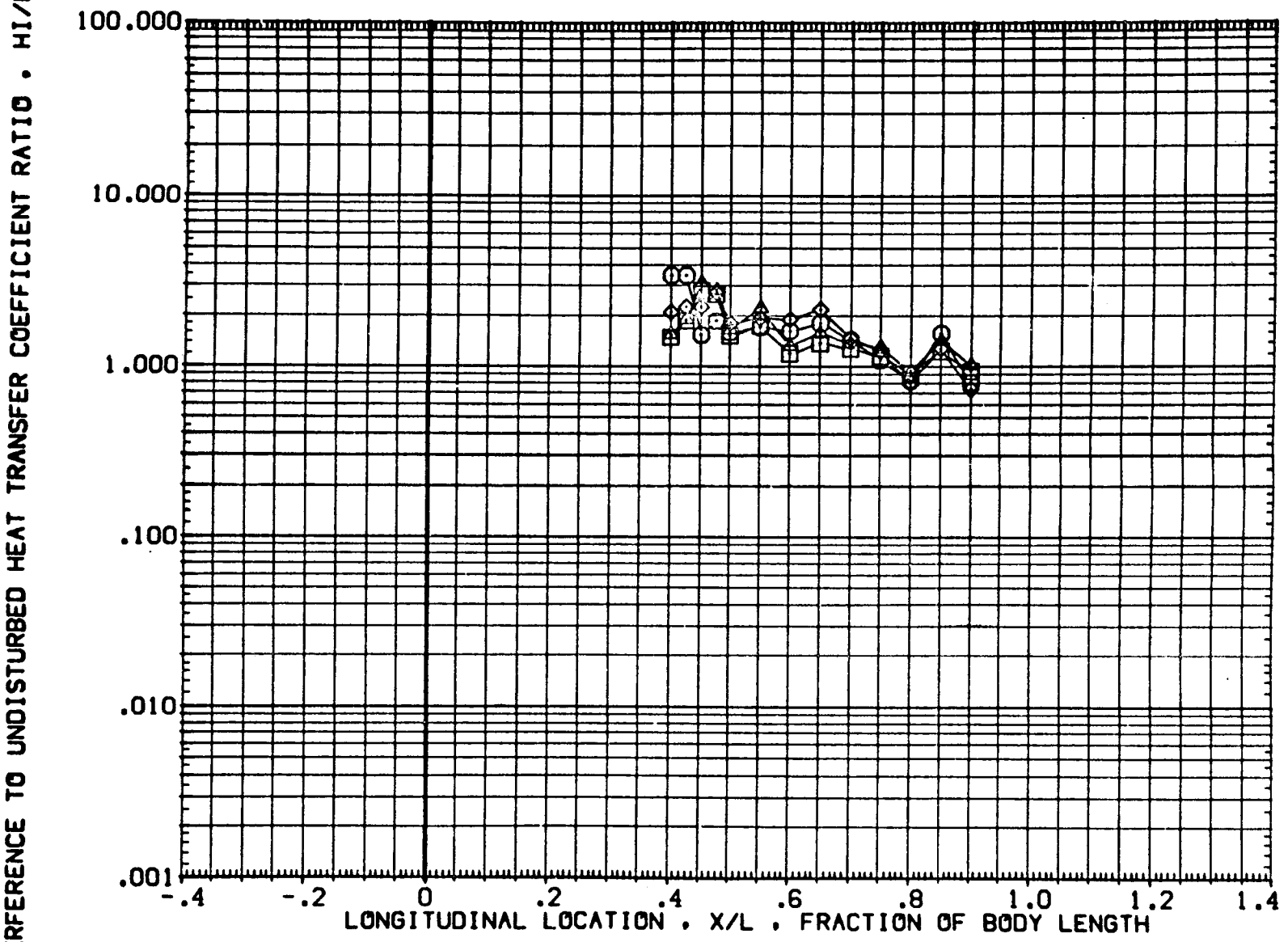


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 157.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE,IT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE,IT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE,IT13)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE,IT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

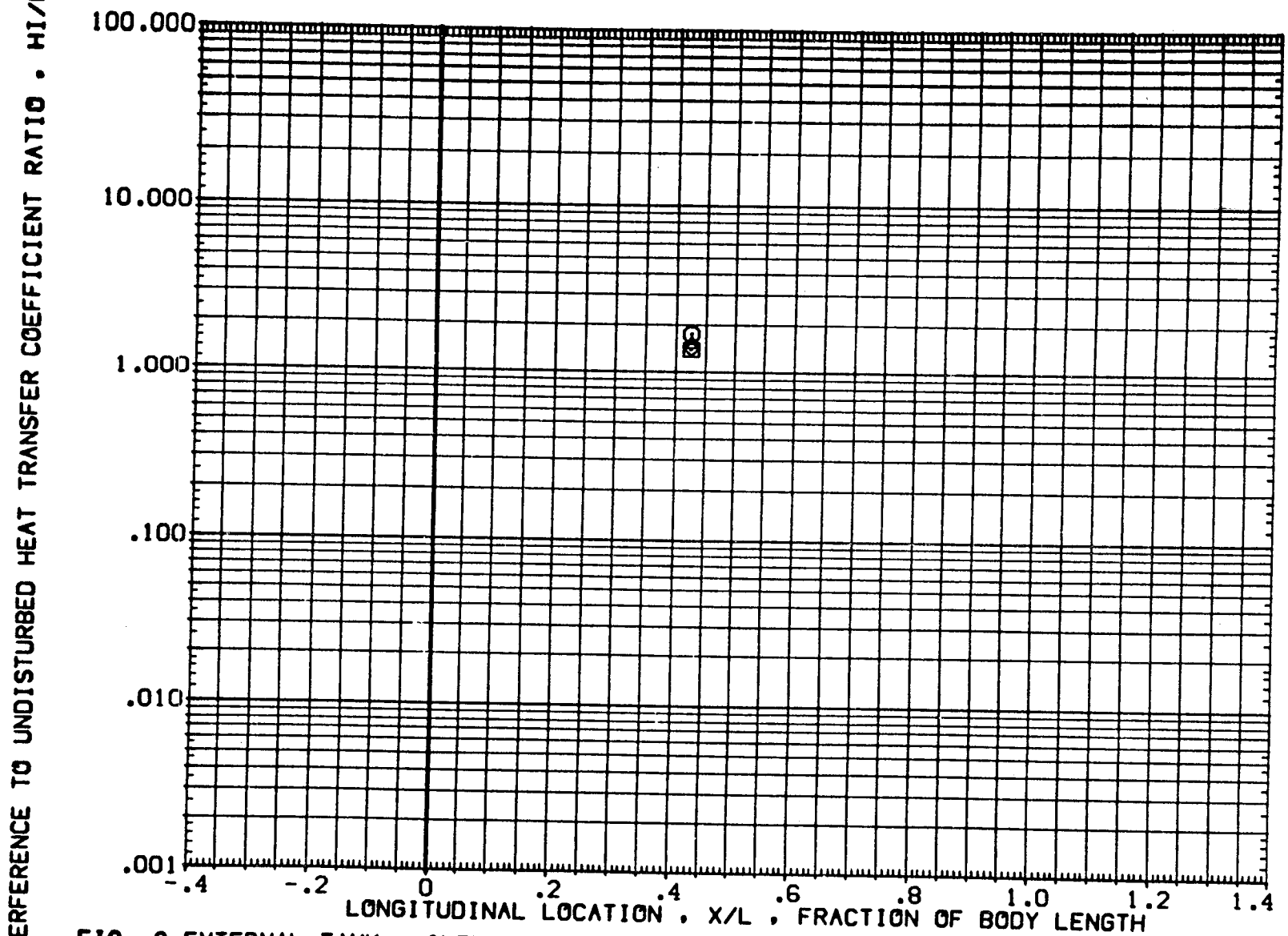


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 161.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

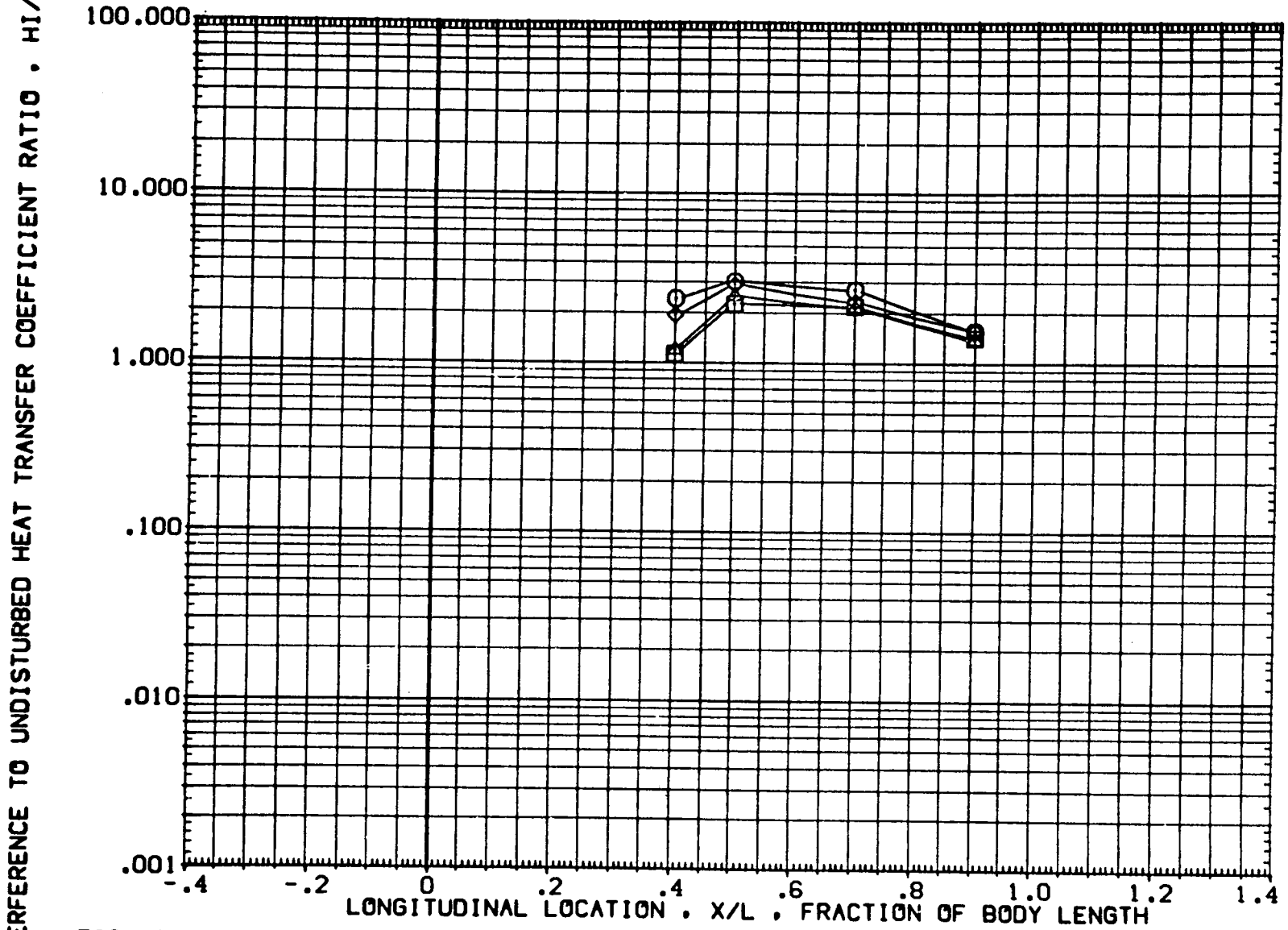


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 165.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

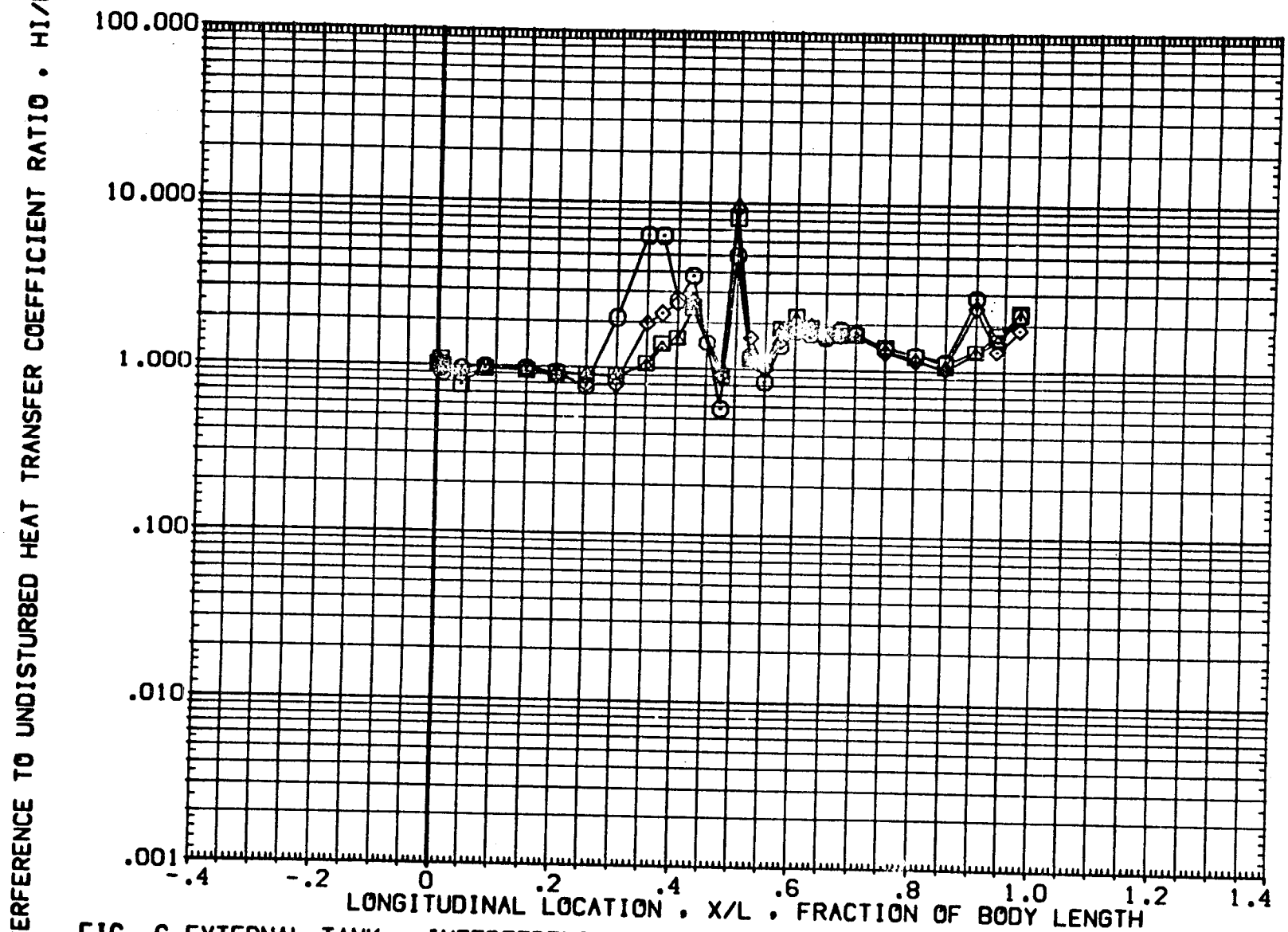


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 180.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE1T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	⧖	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

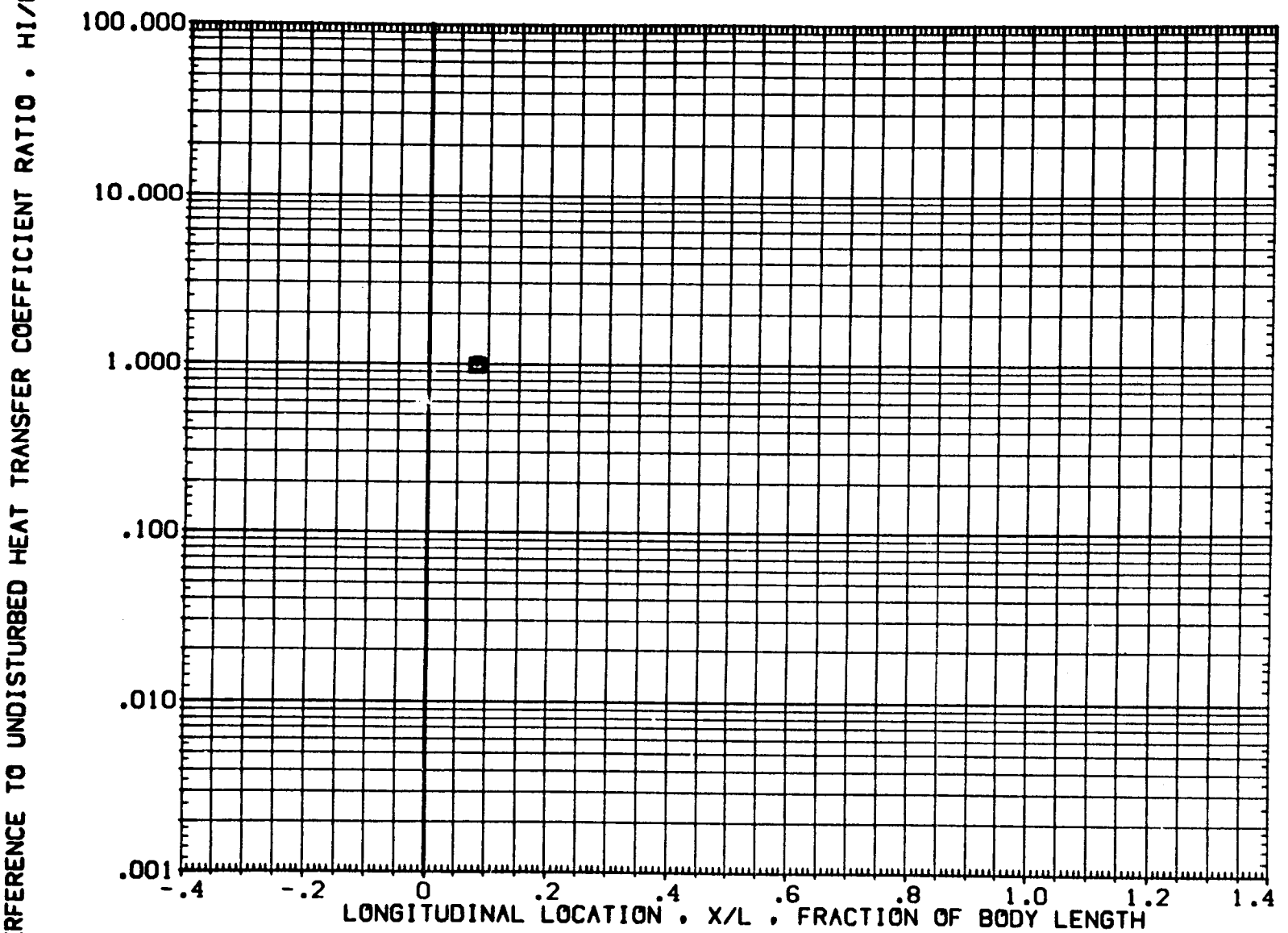


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 194.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

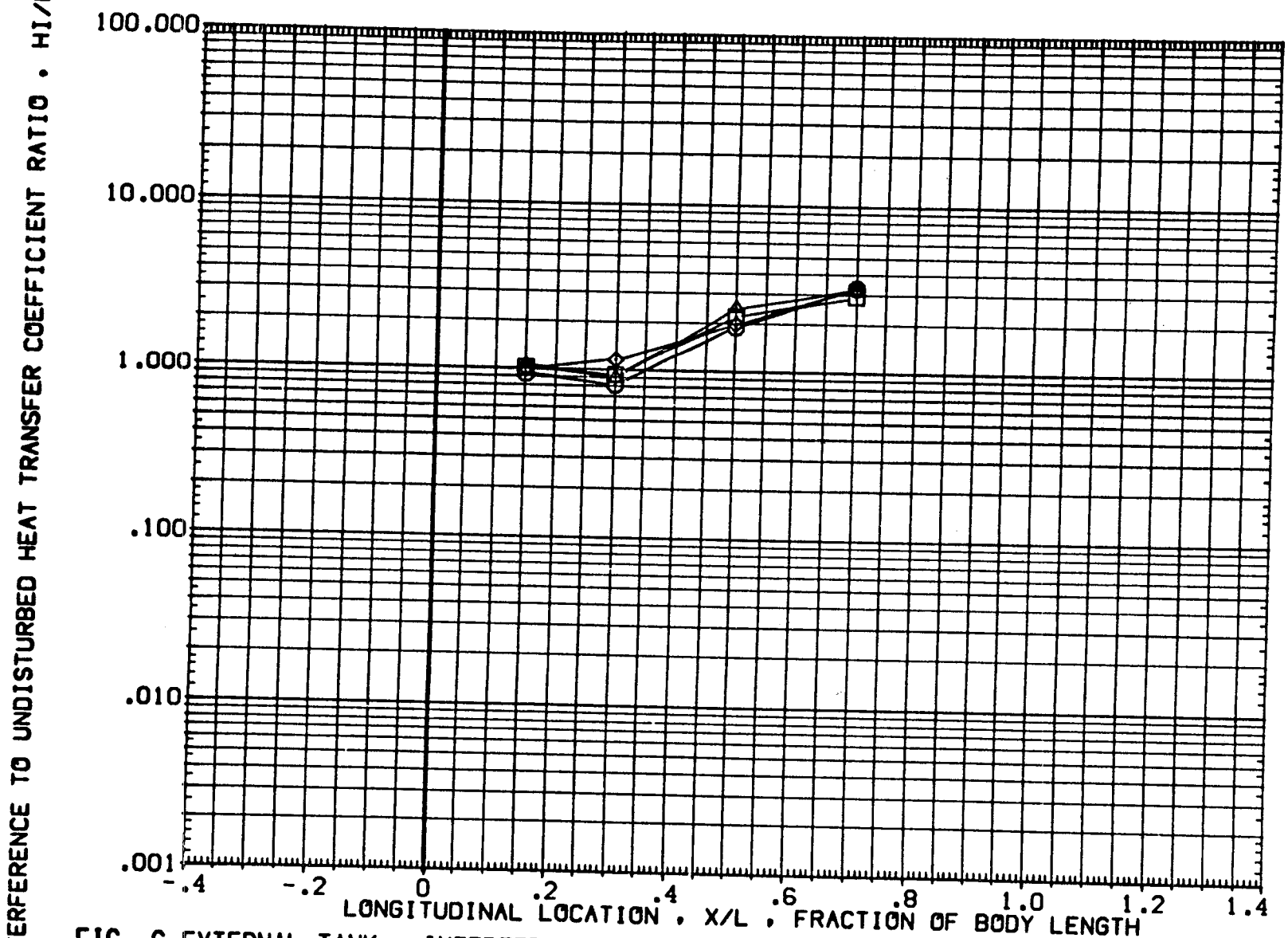


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 196.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	DATA NOT AVAILABLE		.000	.000	1.500	.900
(EE|T13)	◇	DATA NOT AVAILABLE		.000	.000	1.500	.900
(EE|T12)	△	DATA NOT AVAILABLE		.000	.000	1.500	.900

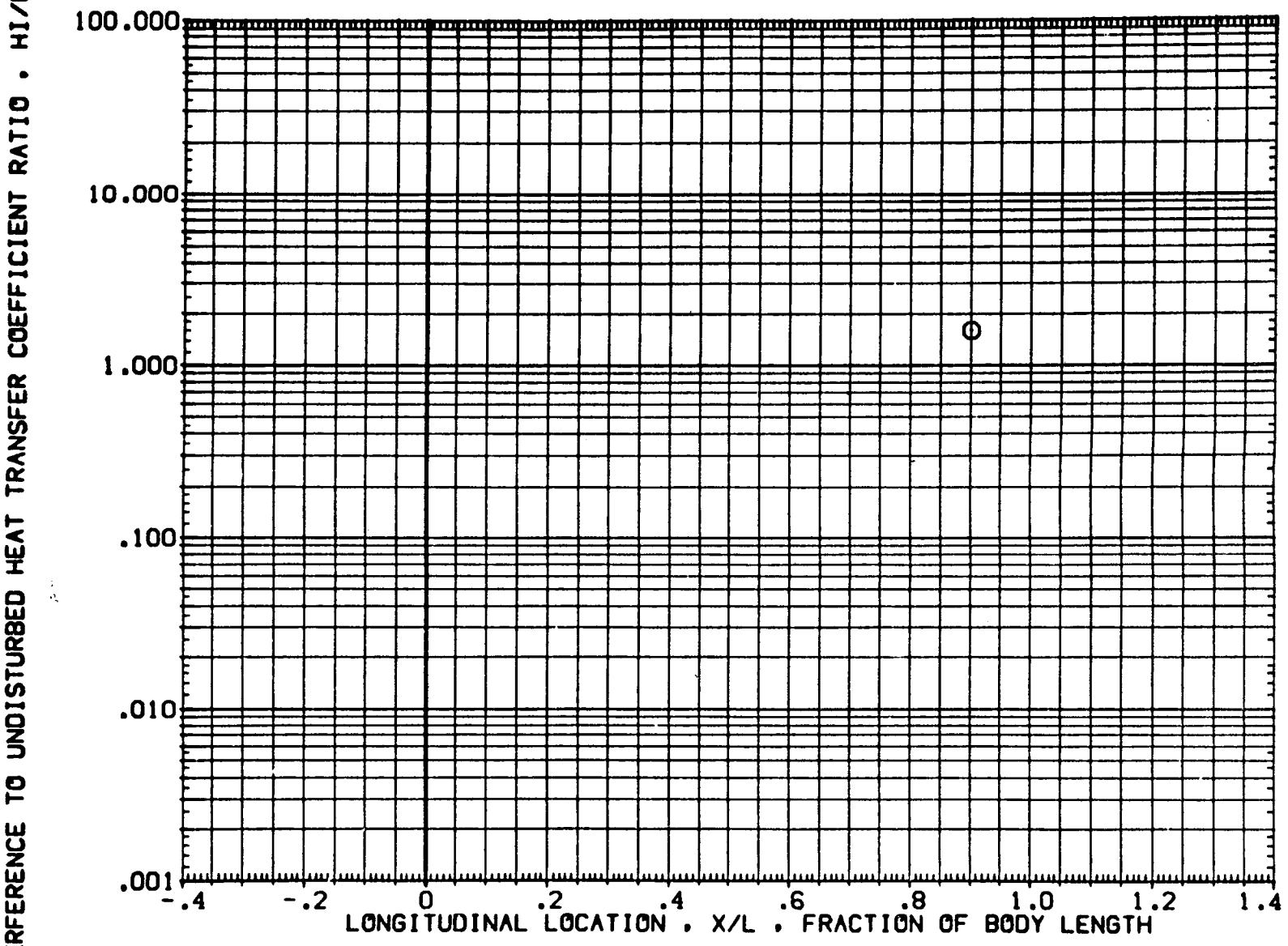


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 197.000

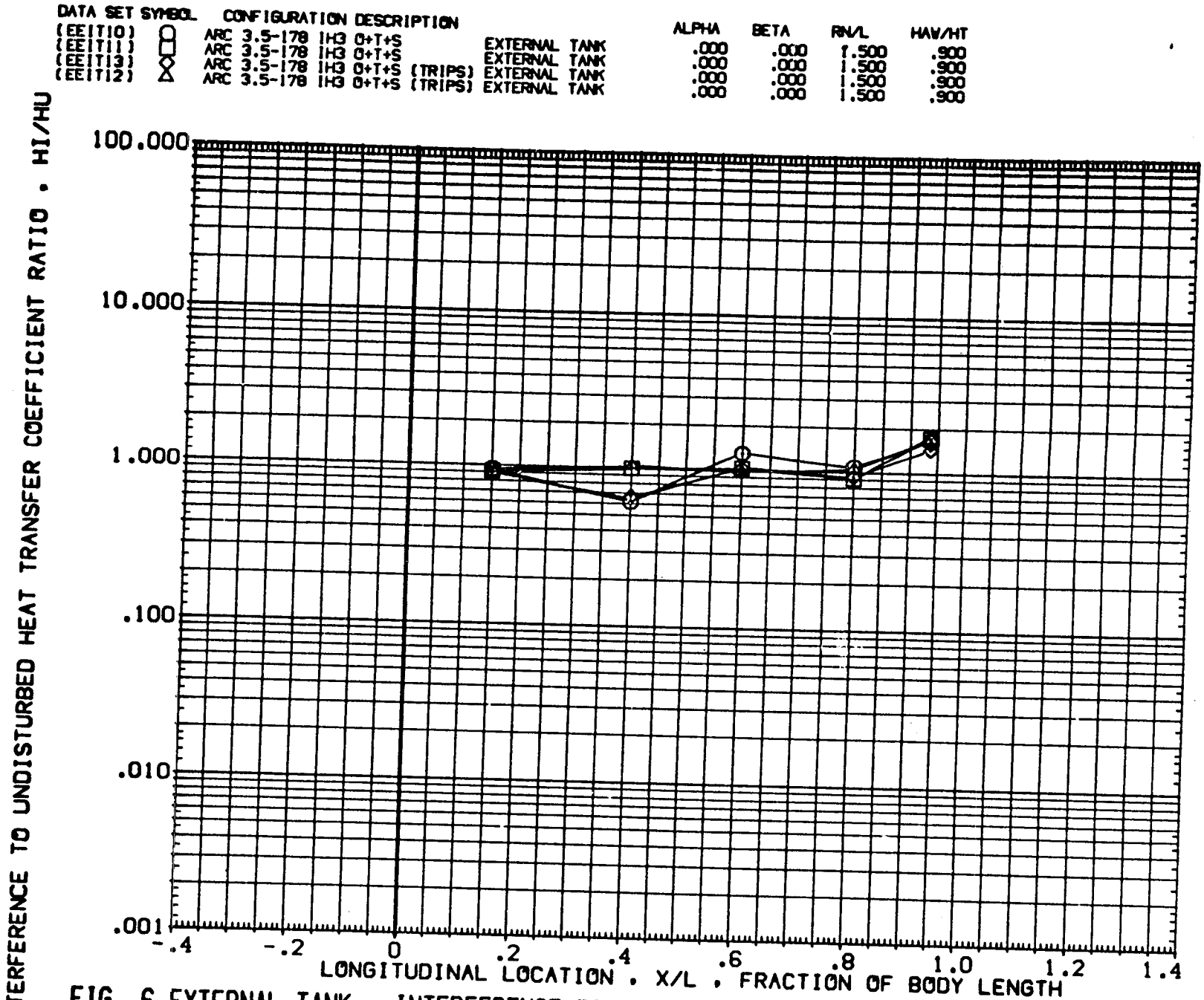


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 208.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	⊠	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

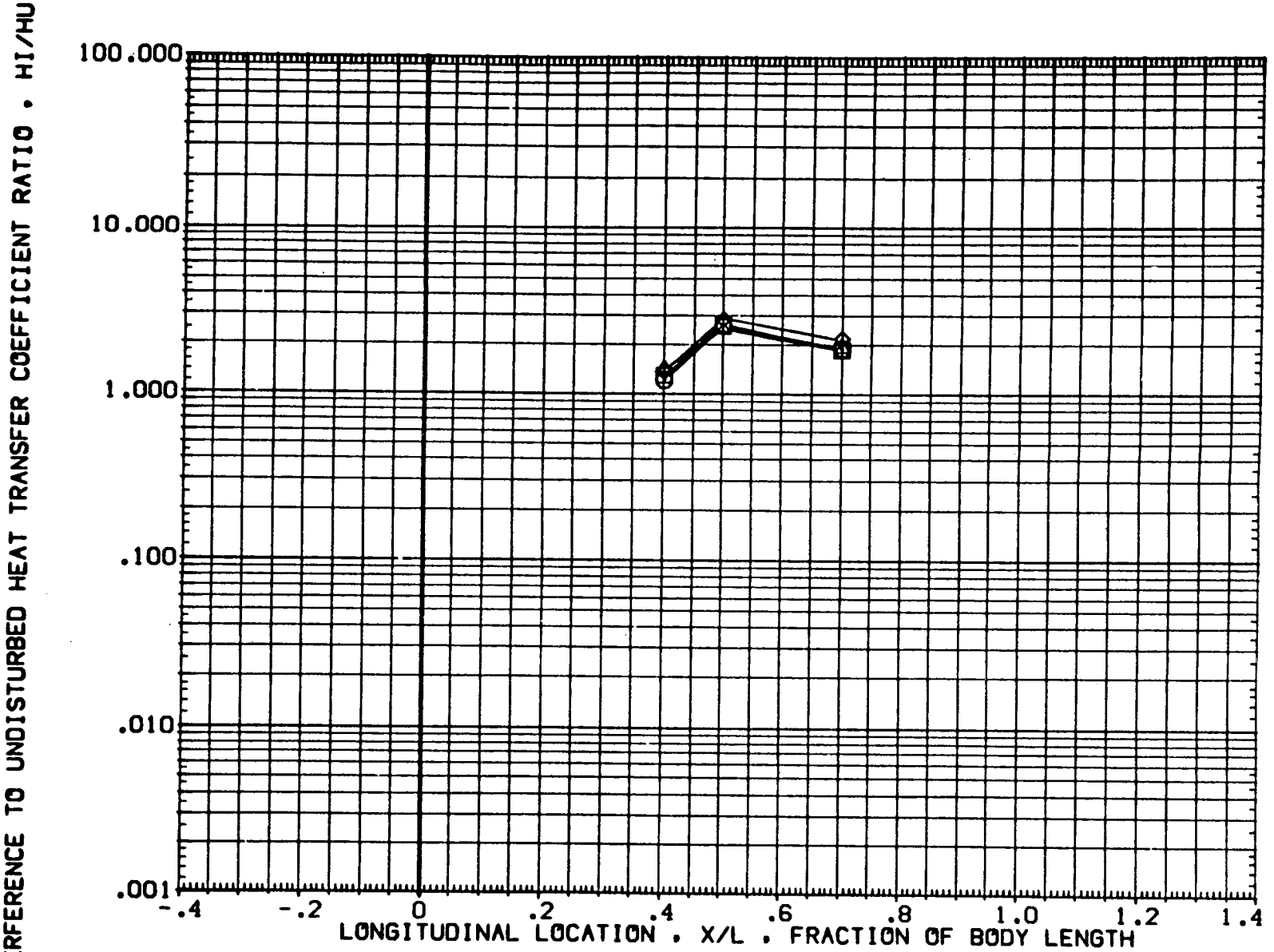


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 216.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

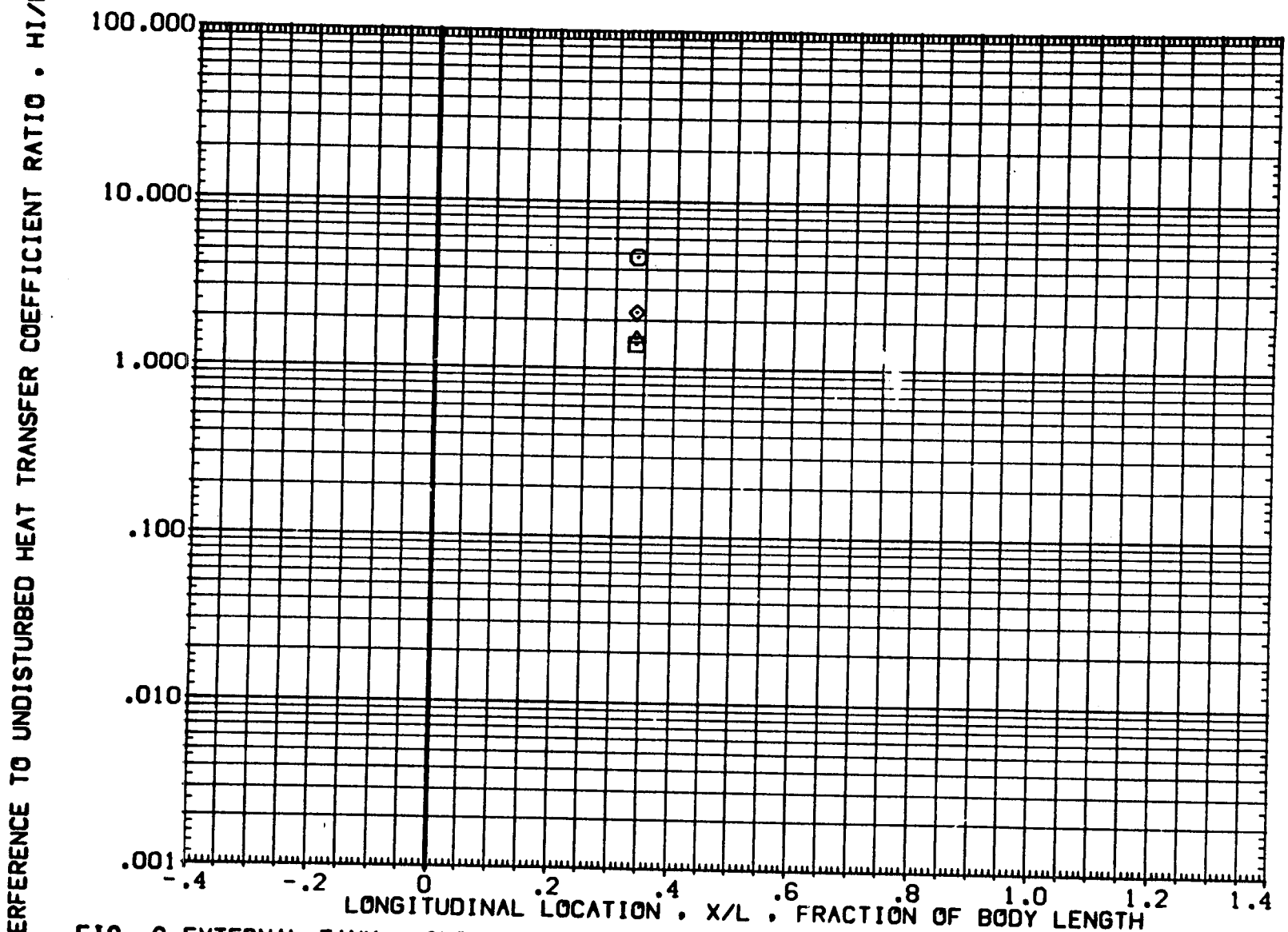


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 222.500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

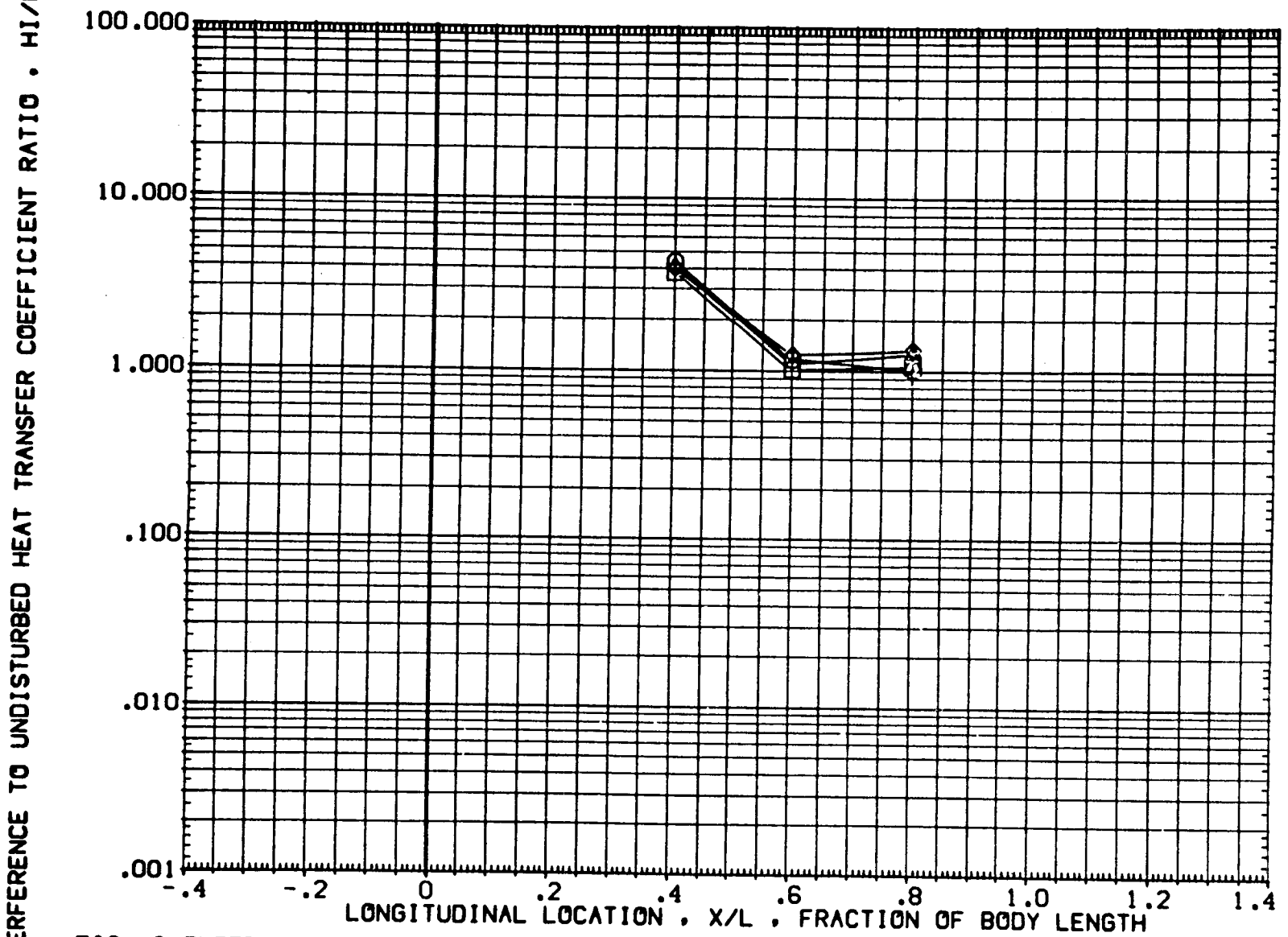


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 PHI = 229.000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

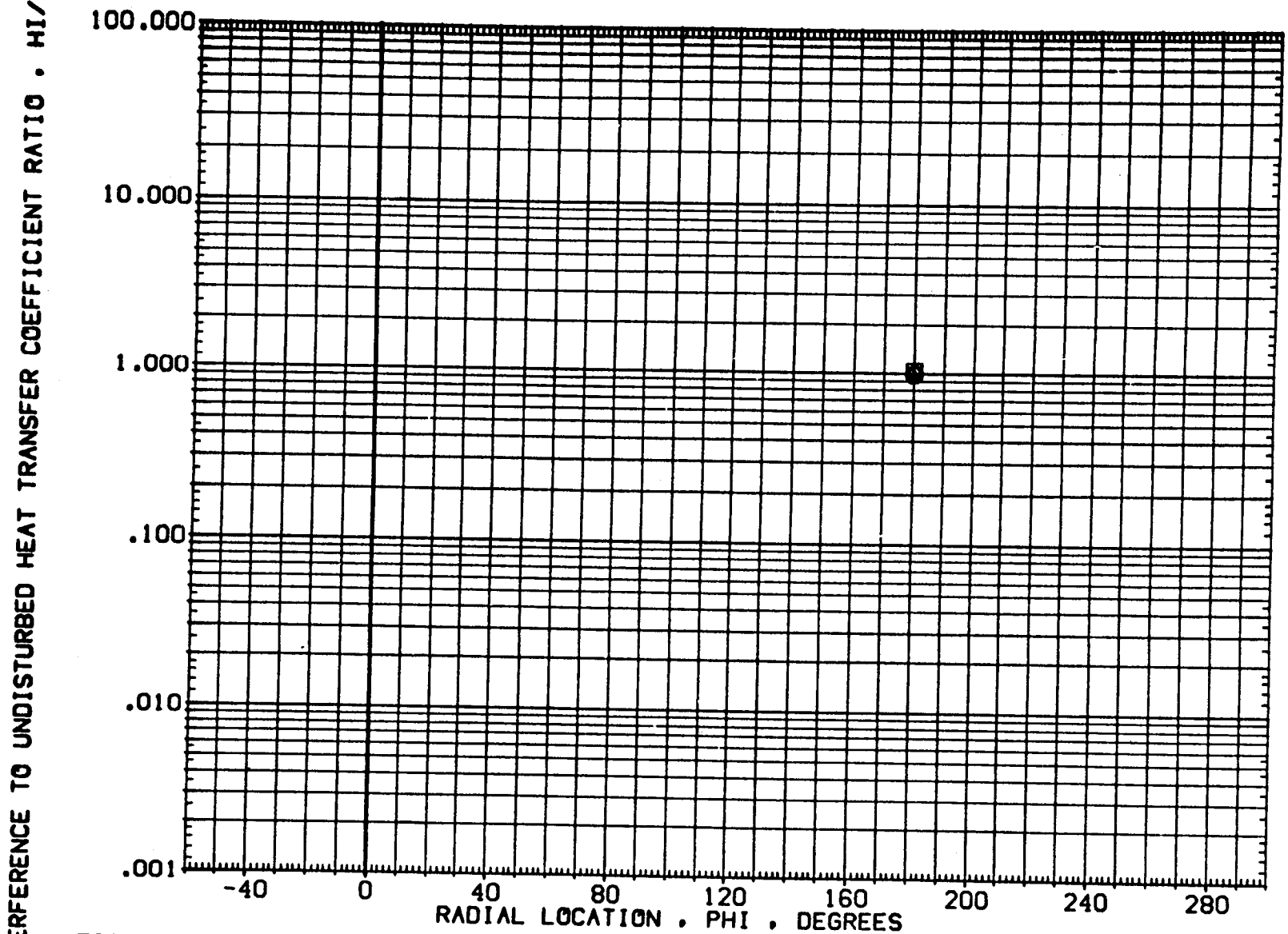


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .000

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEITI0)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

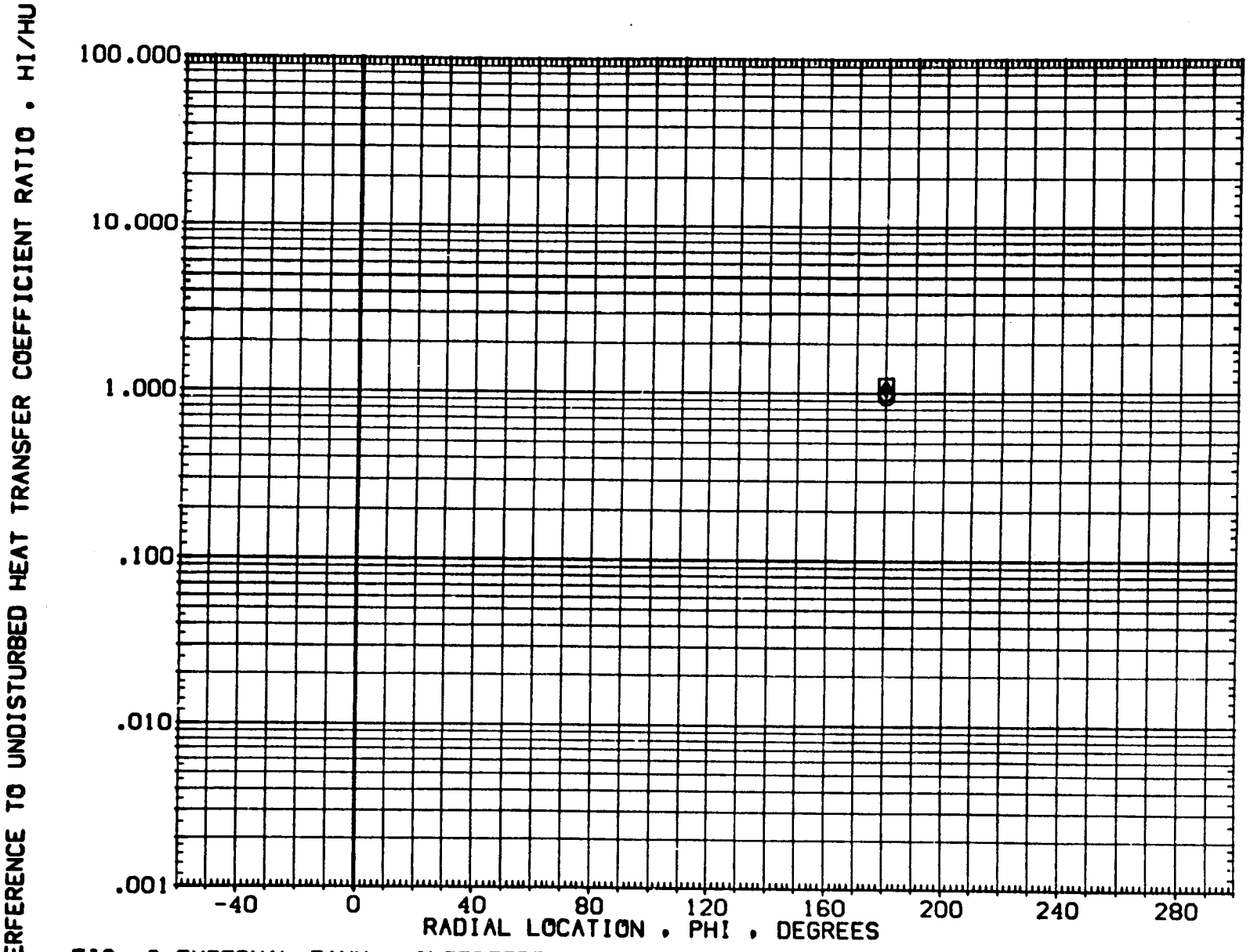


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .005

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEITI0)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

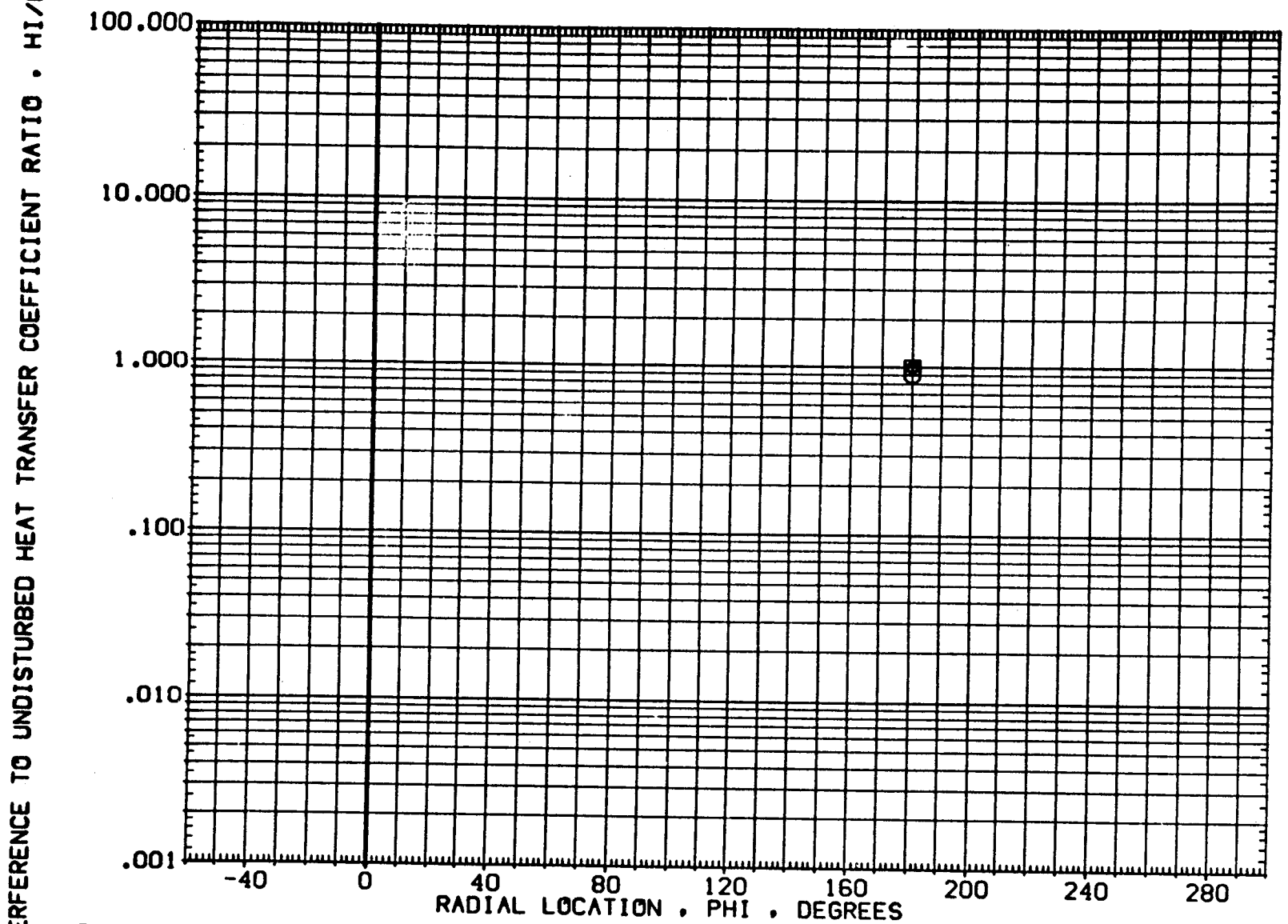


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .010

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEITI0)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

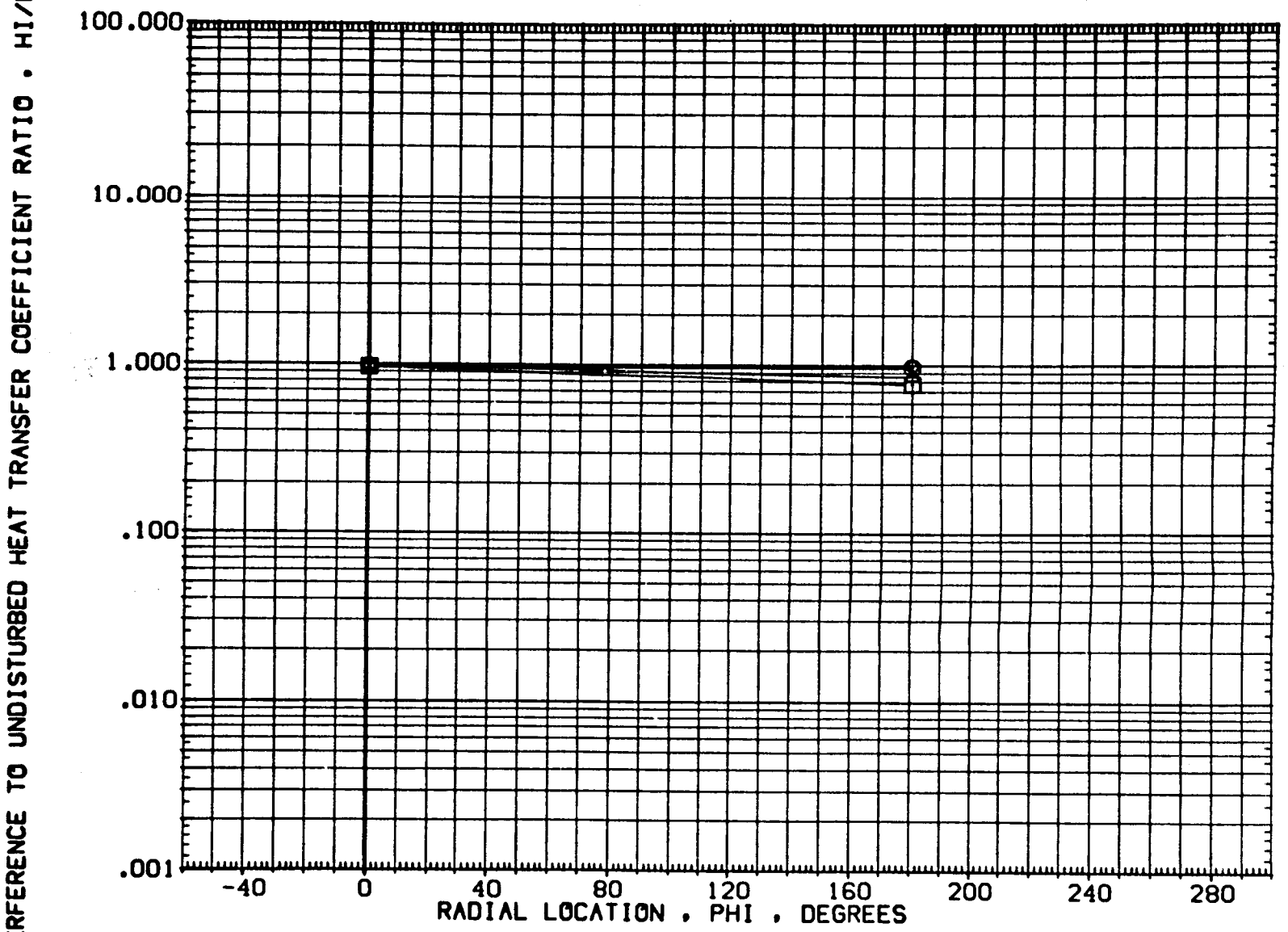


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .040

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE|T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

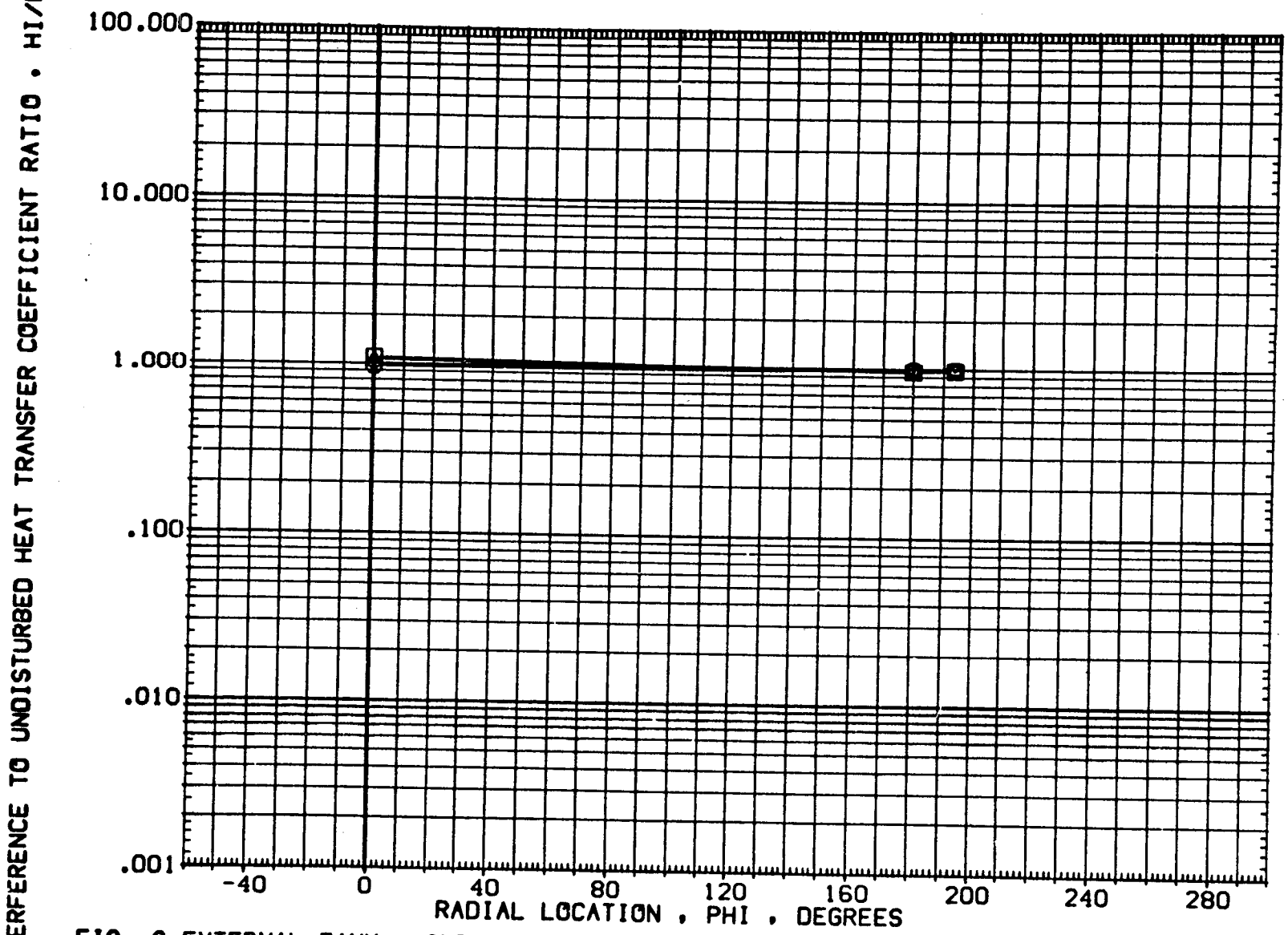


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .080

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

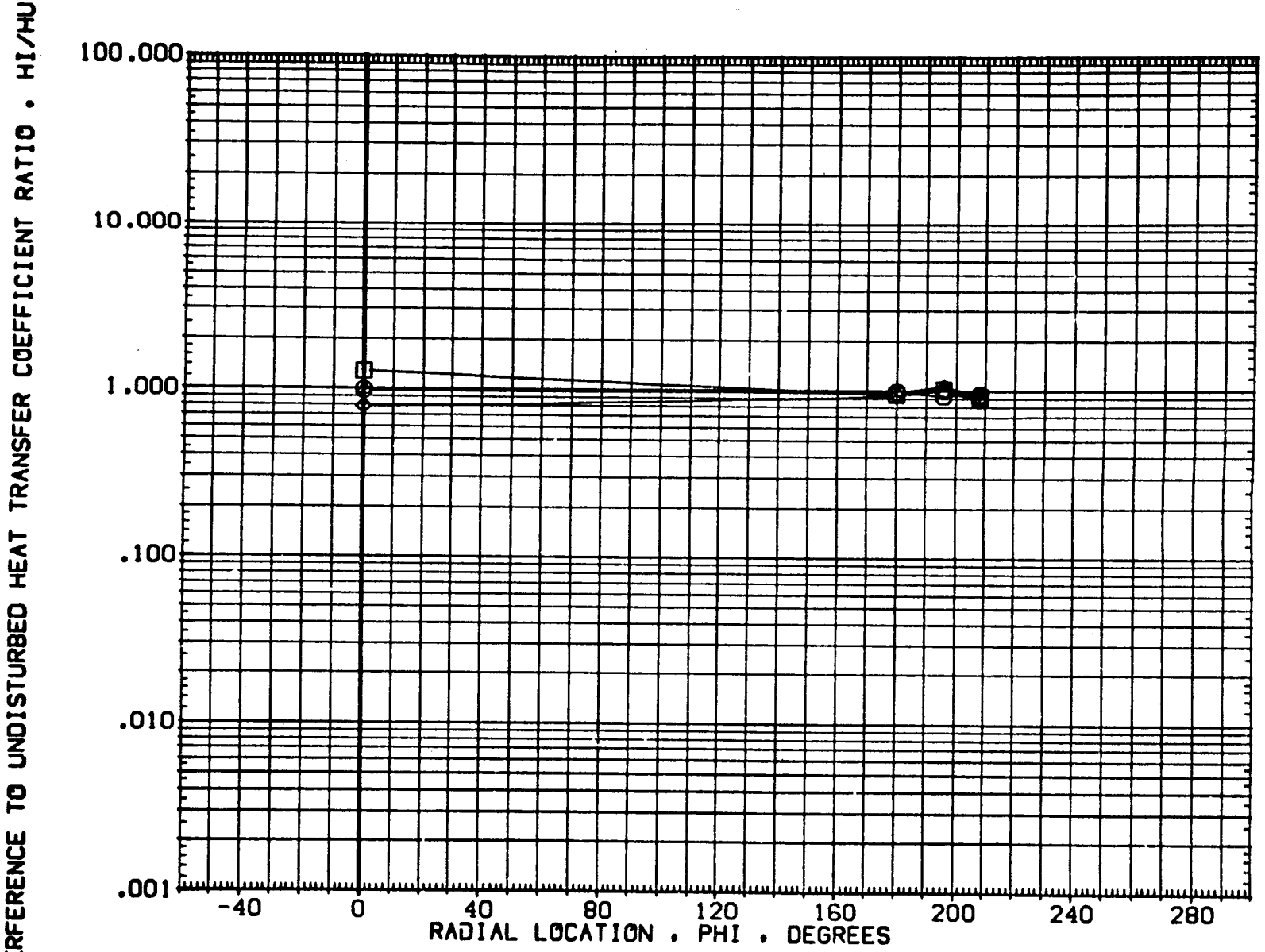


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .150

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE1T10)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

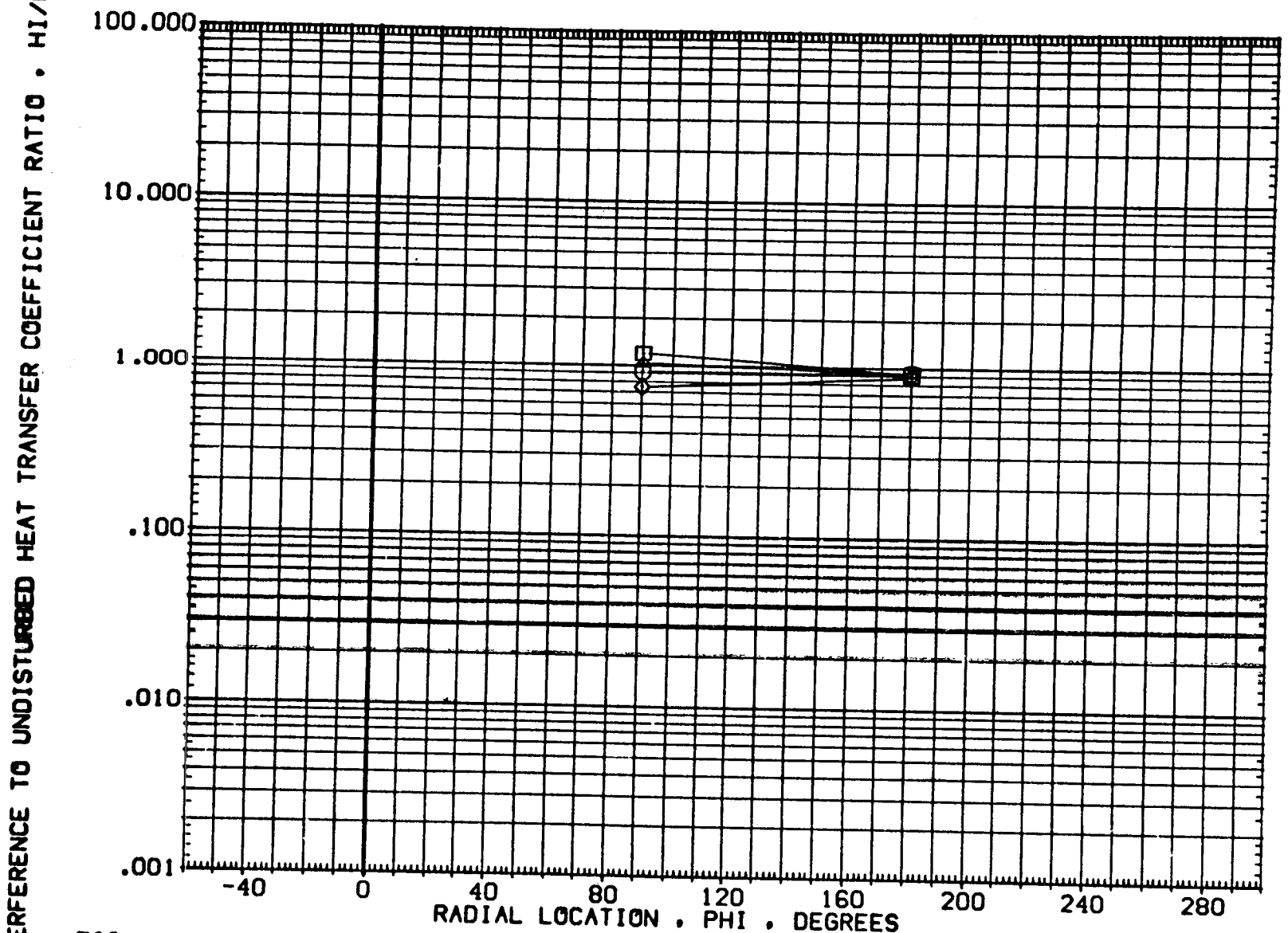


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .200

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

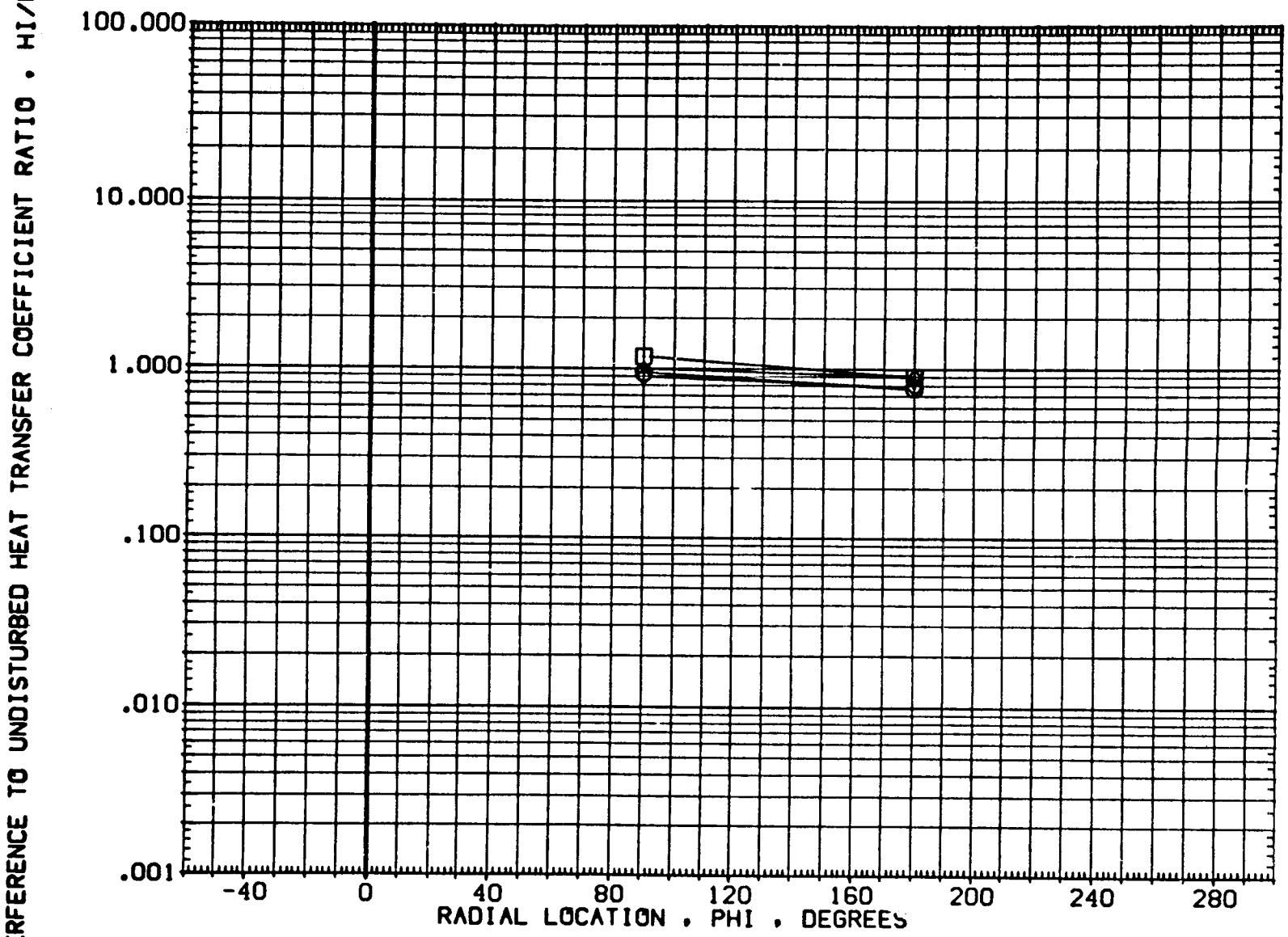


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .250

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEITI0)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

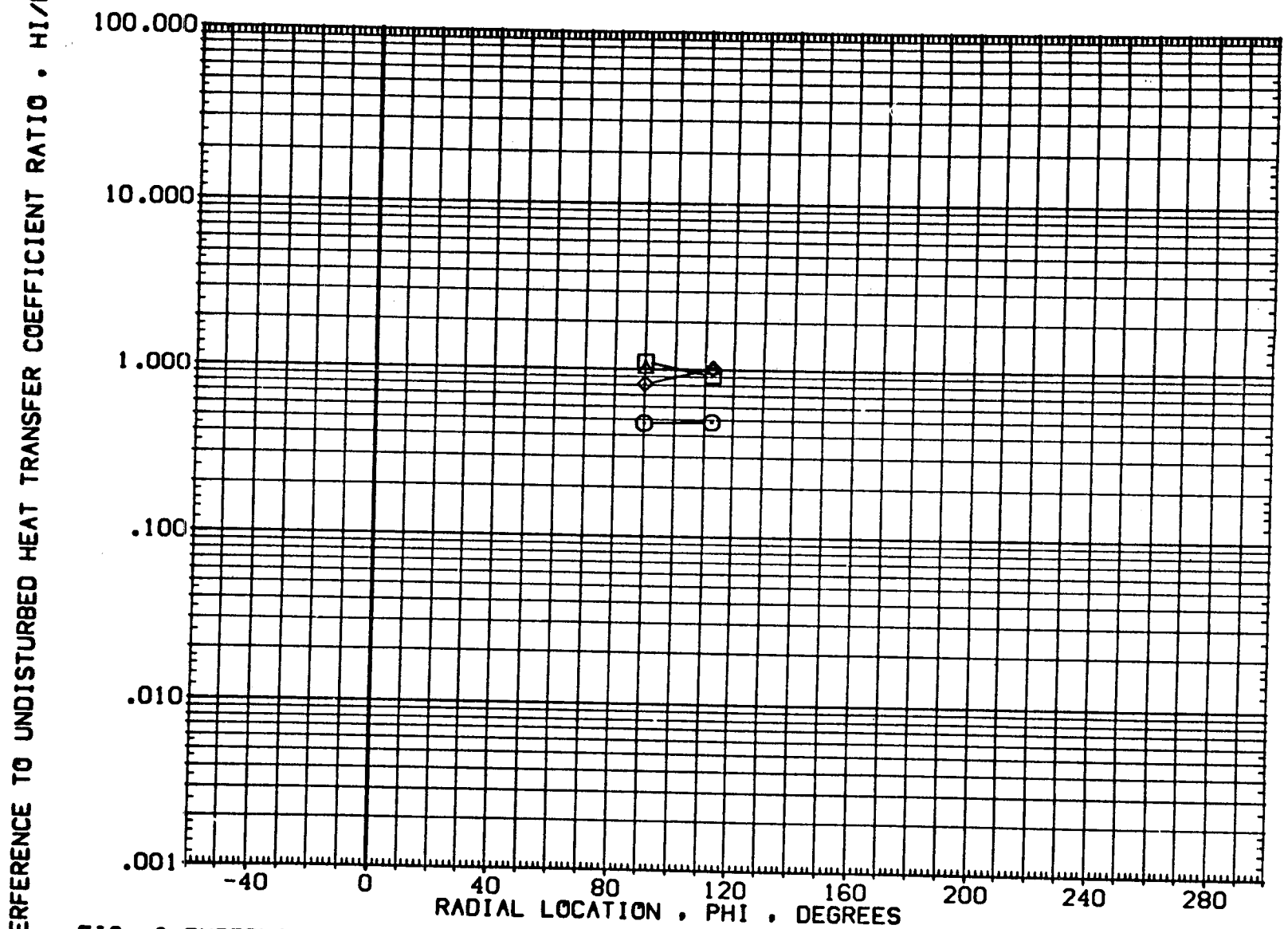


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .275

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

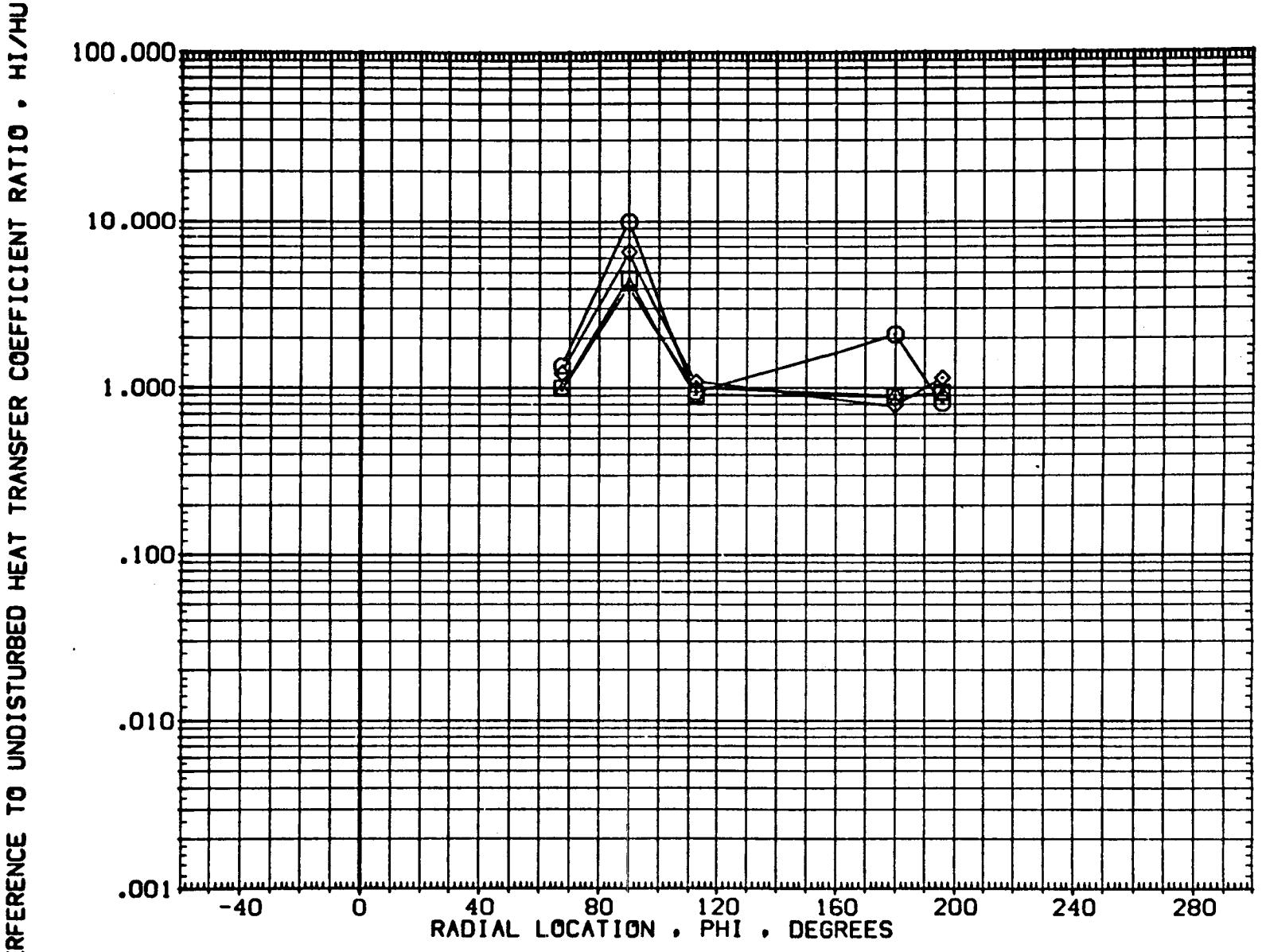


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .300

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

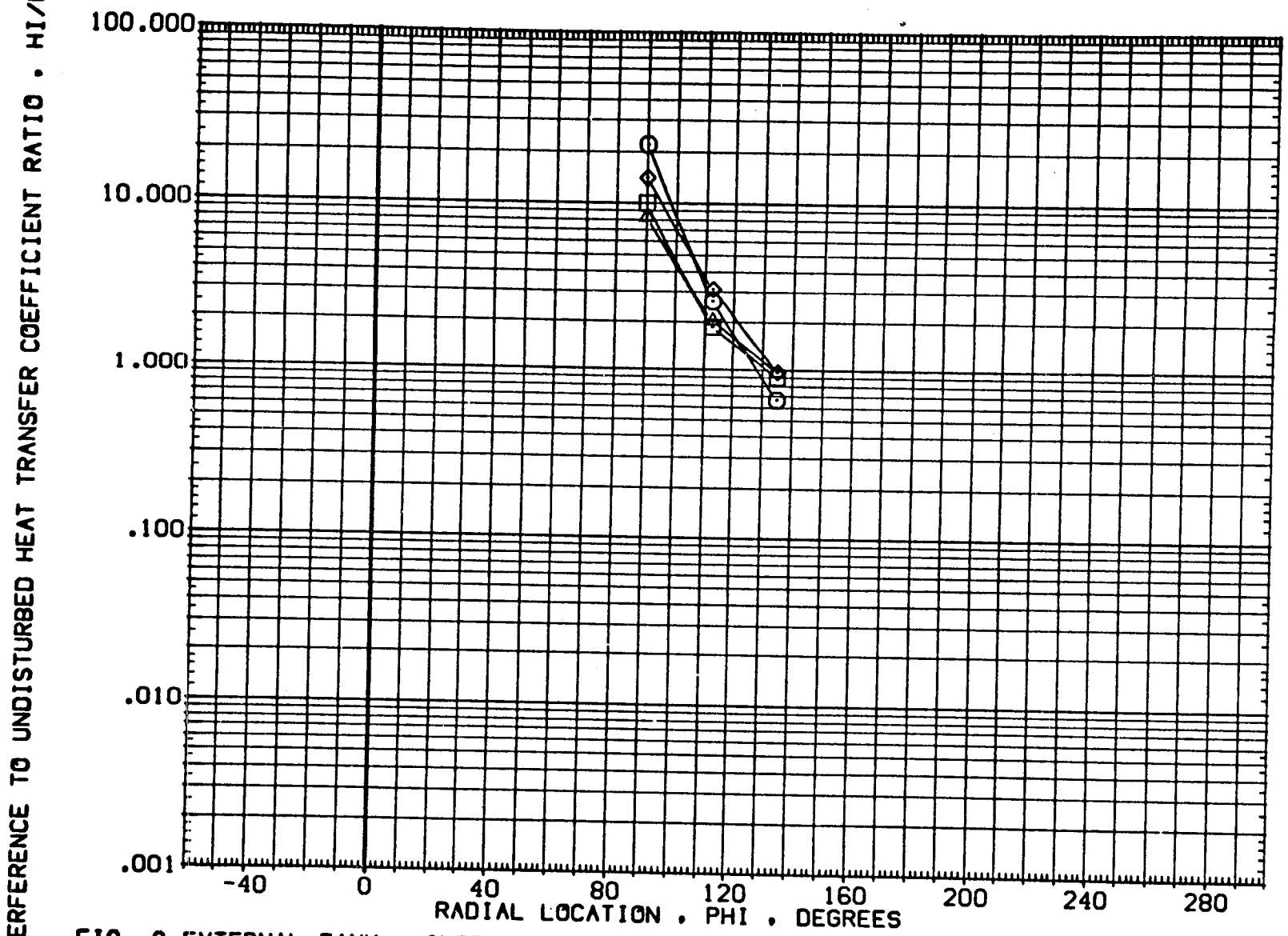


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .325

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE|T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

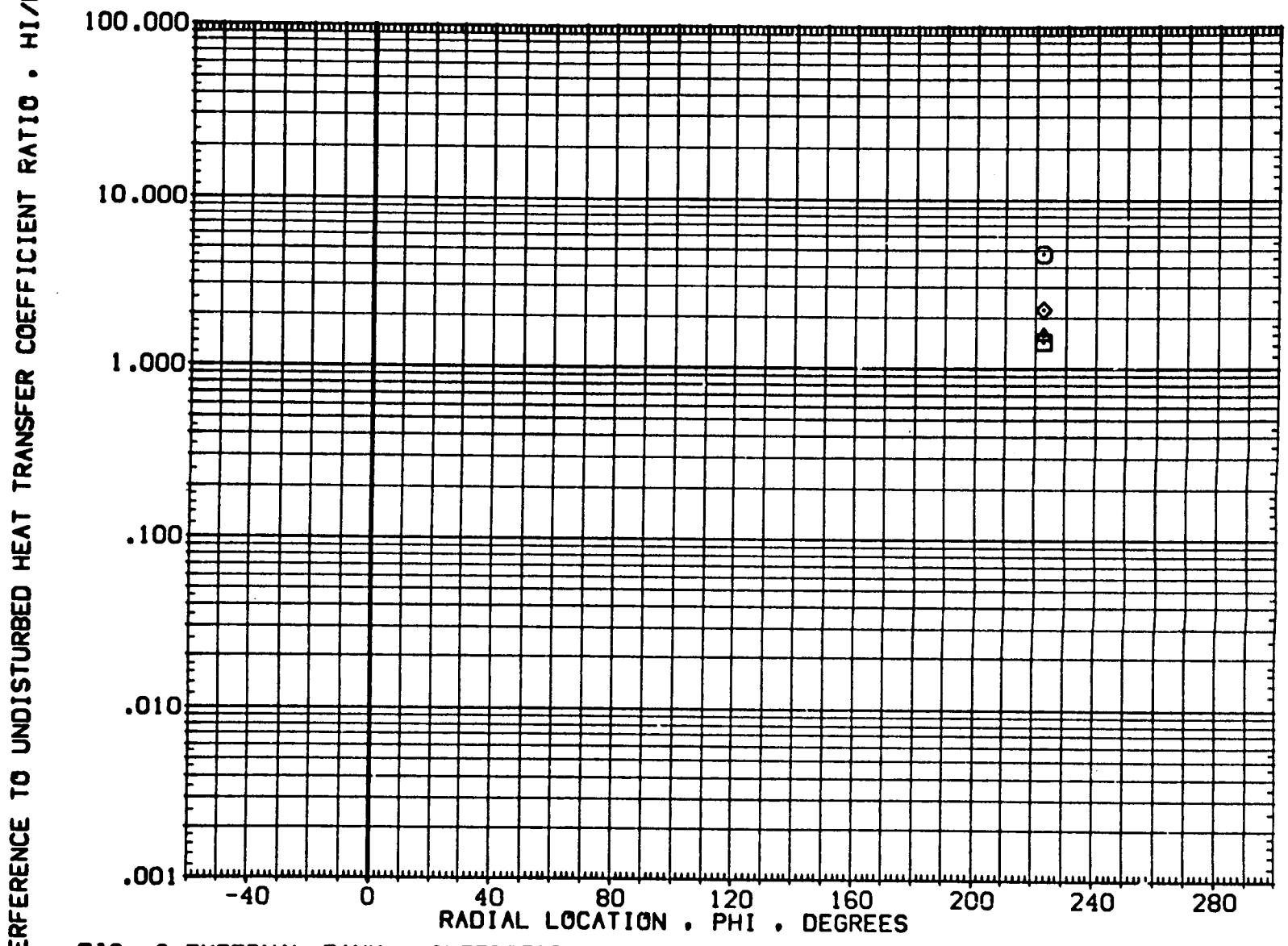


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .335

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE|T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	⊠	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

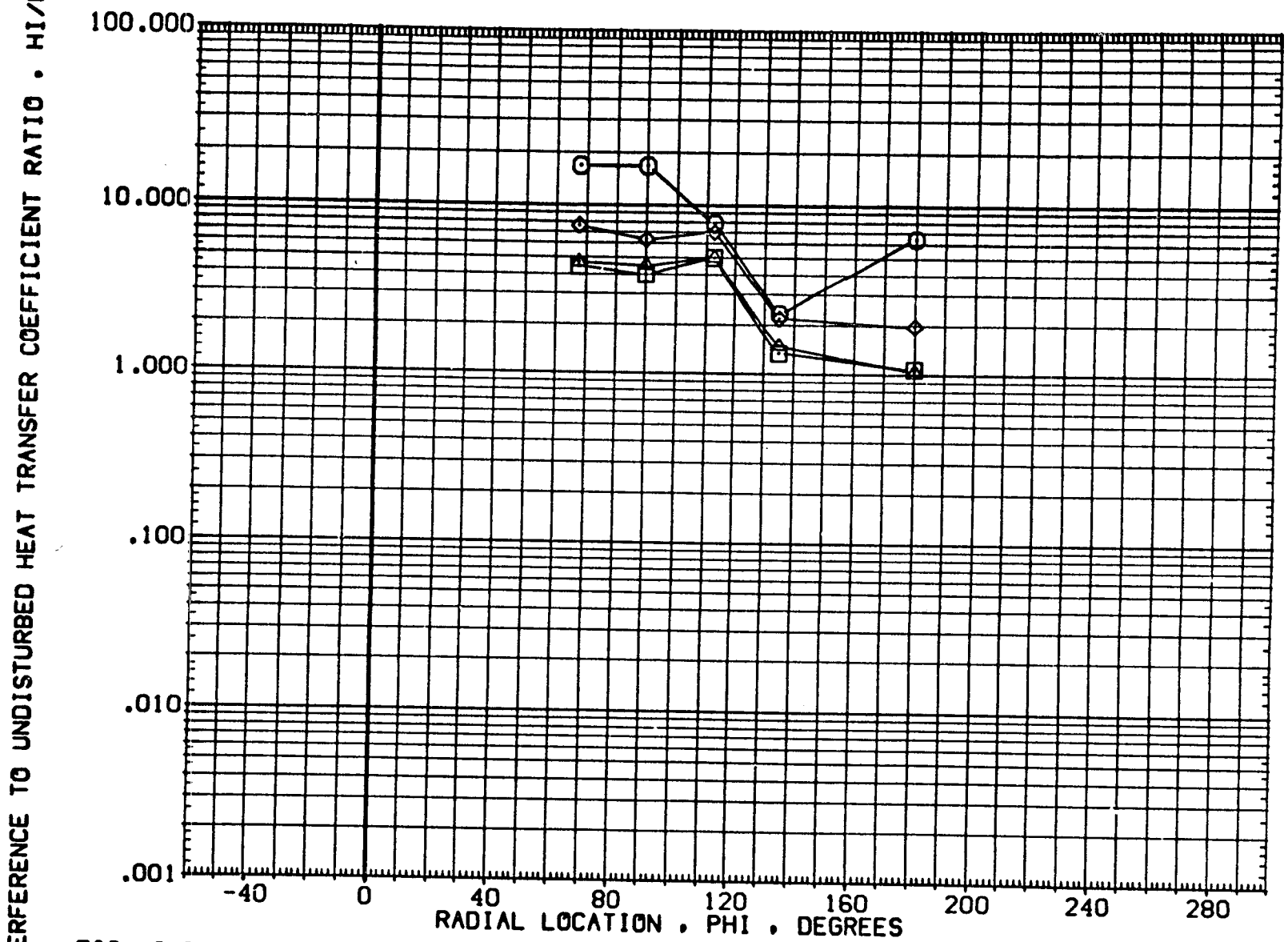


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .350

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE1T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

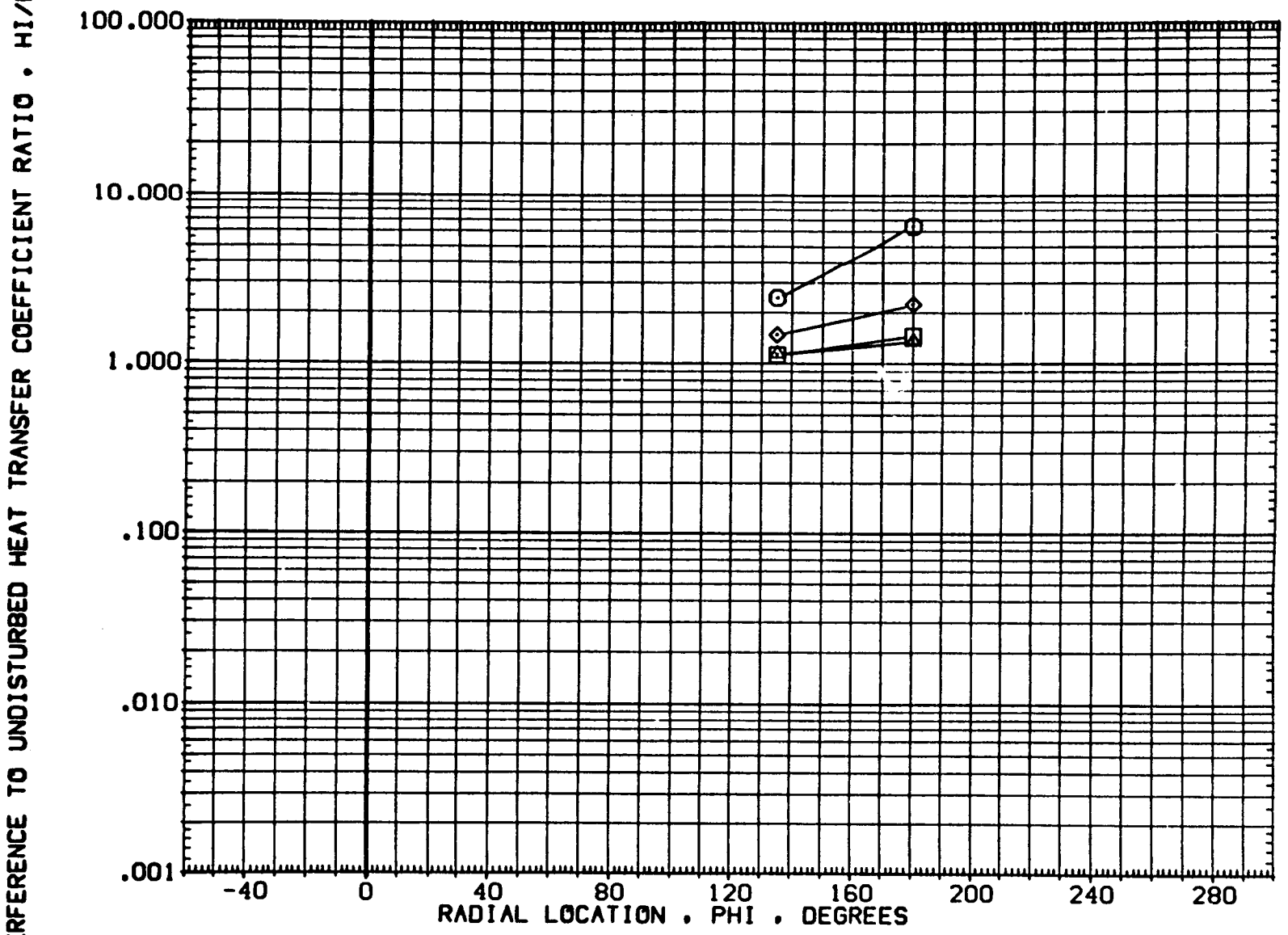


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .375

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	⋈	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

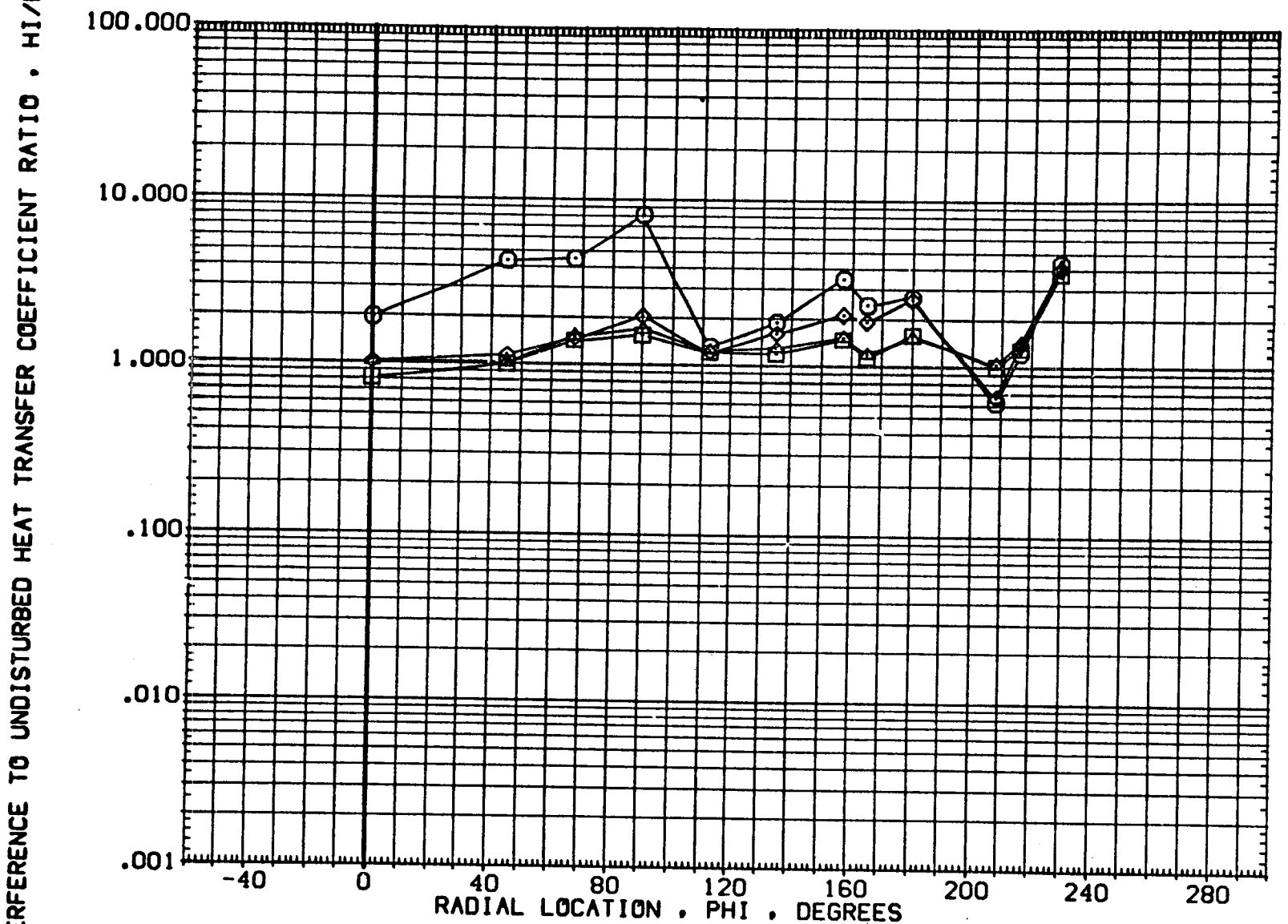


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE1T10)	▭	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	▭	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	⋈	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

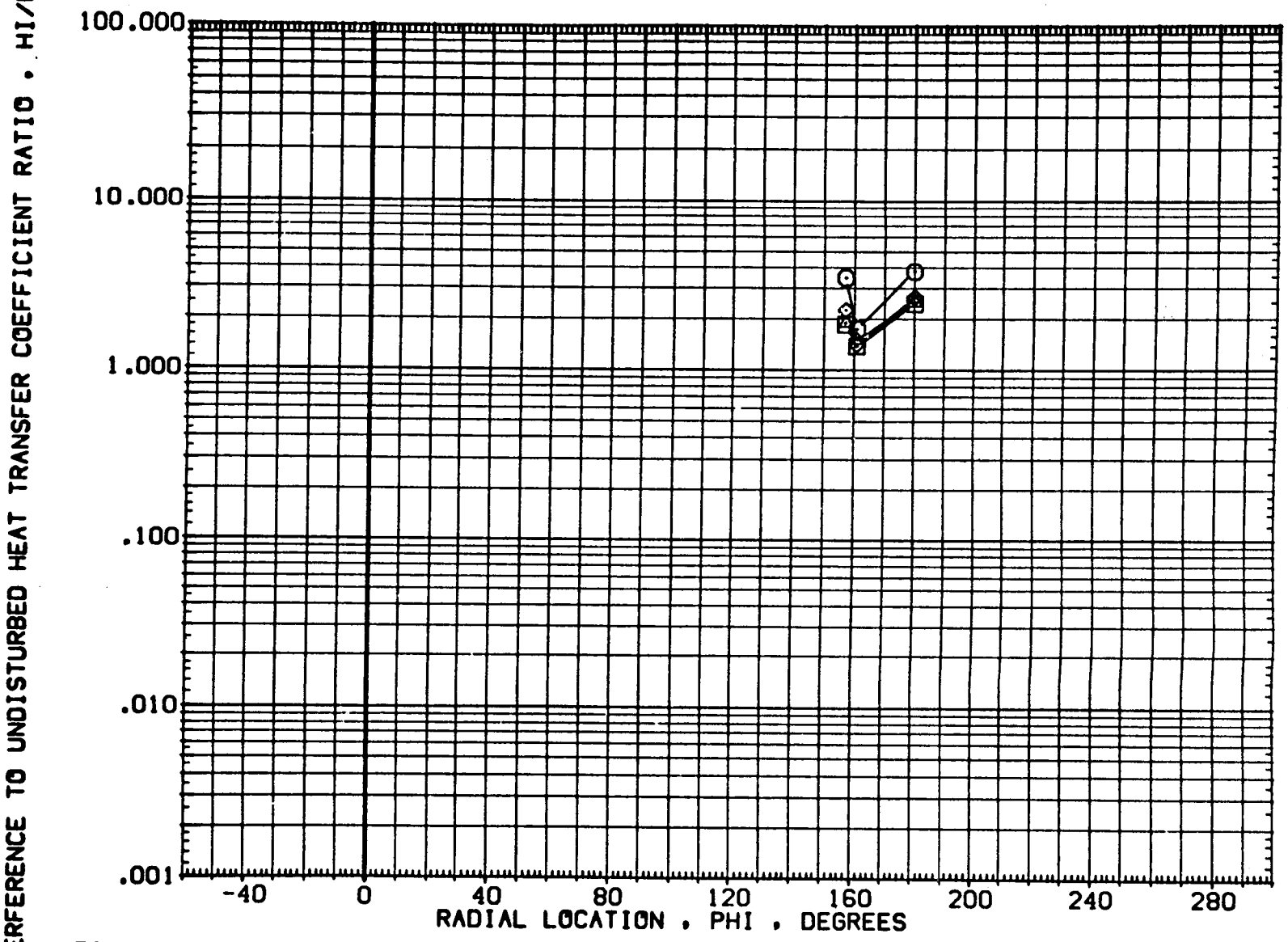


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .425

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

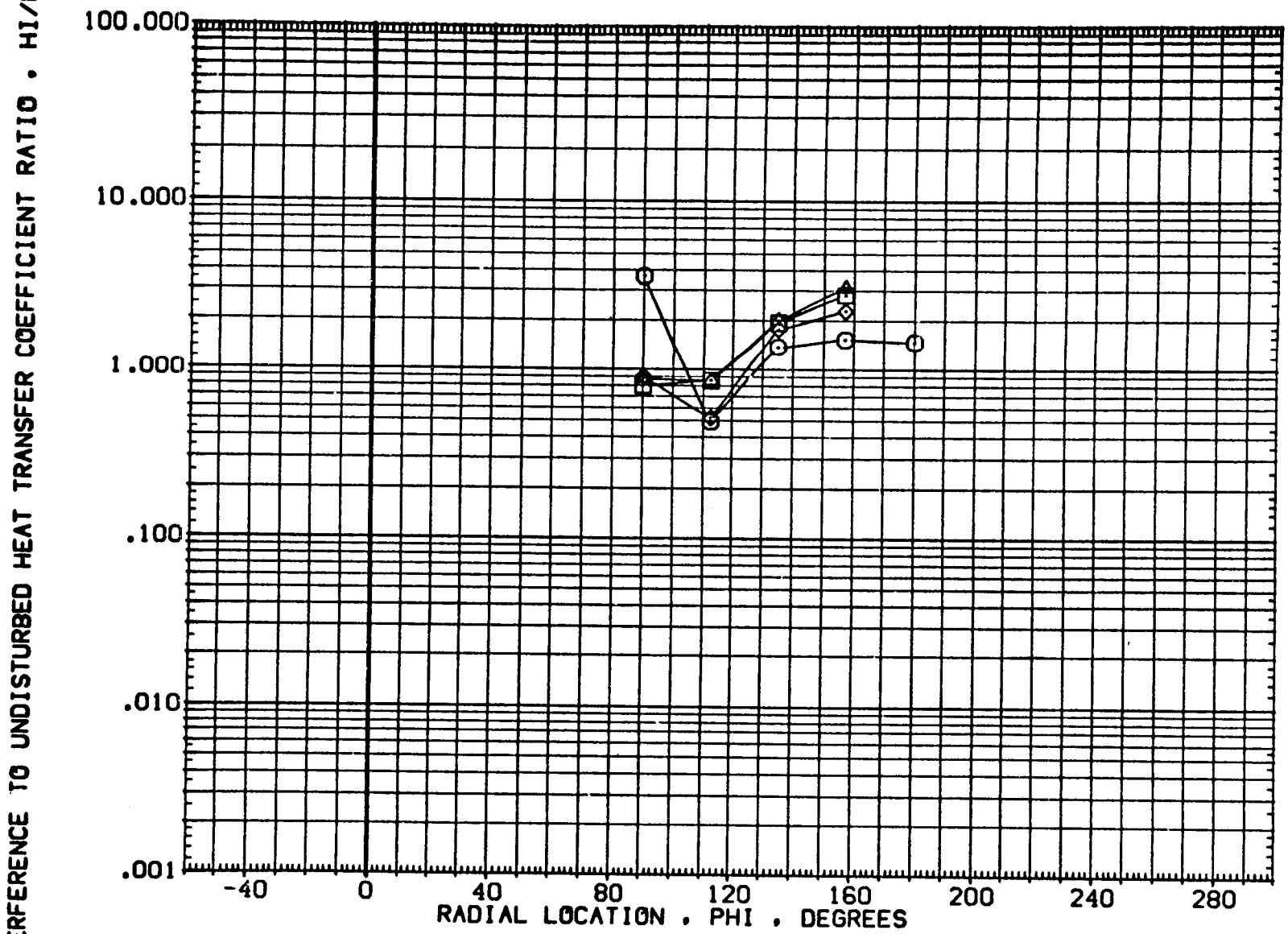


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .450

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE|T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

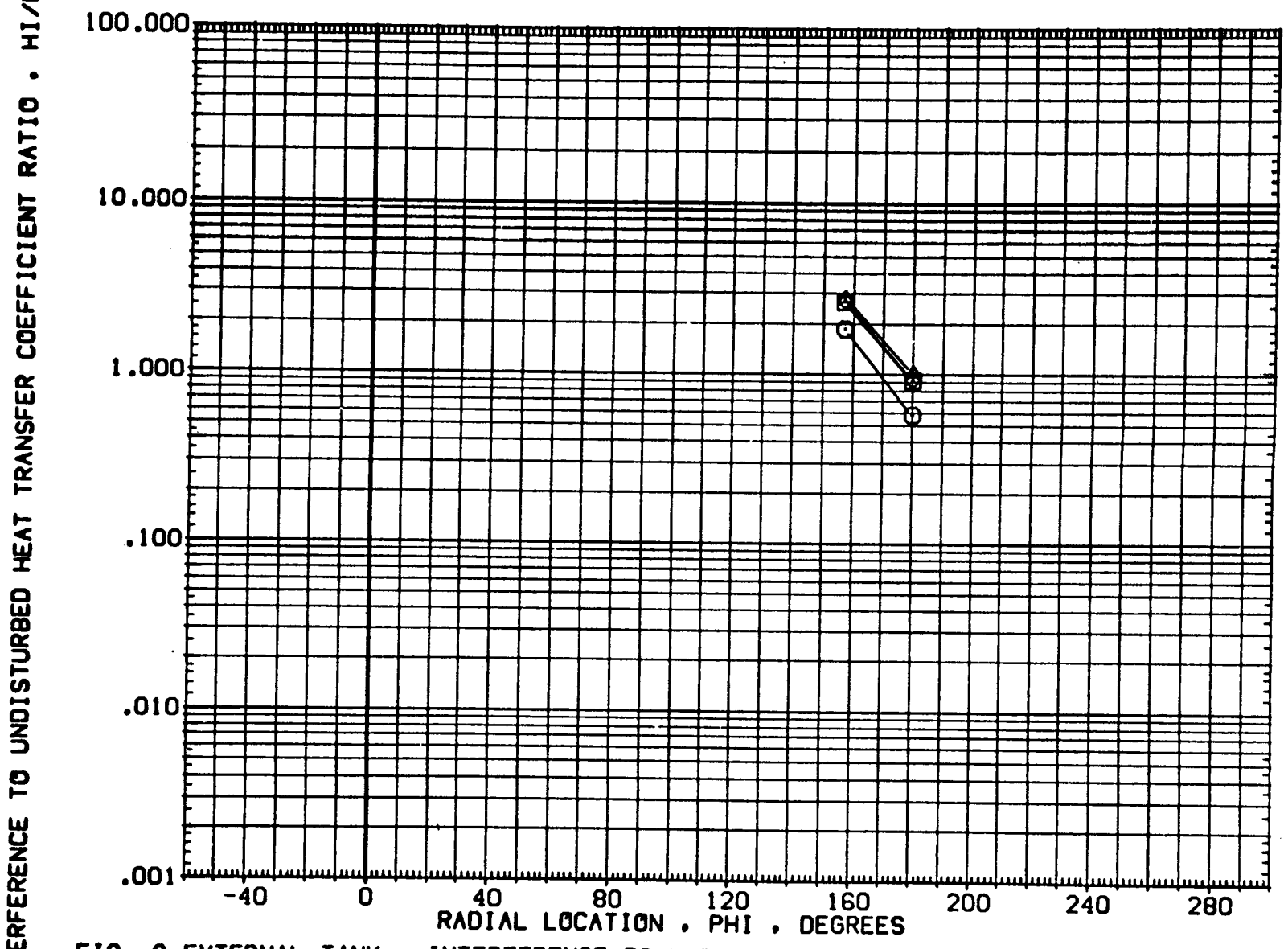


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .475

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEITI0)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

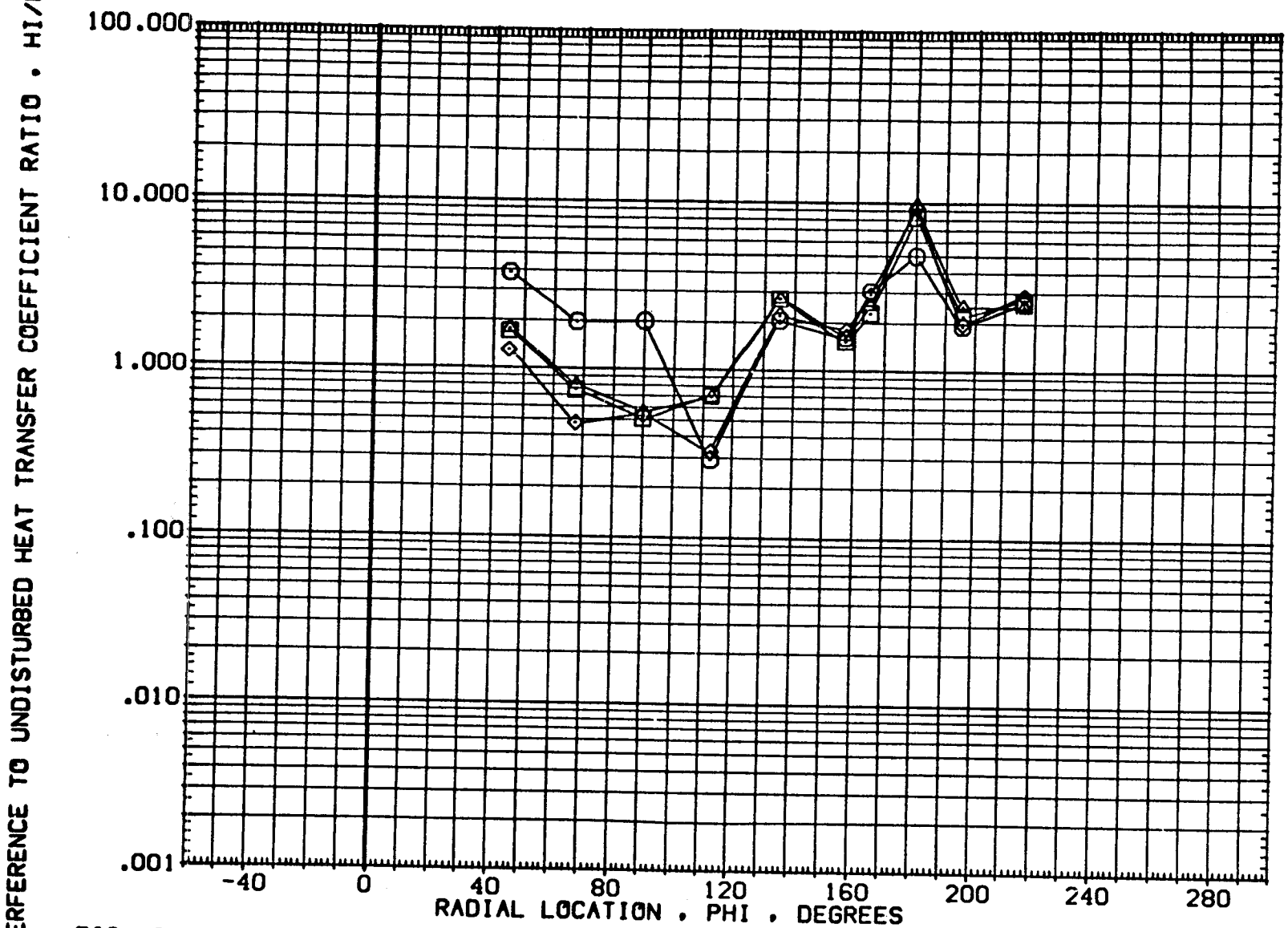


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .500

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE1T10)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

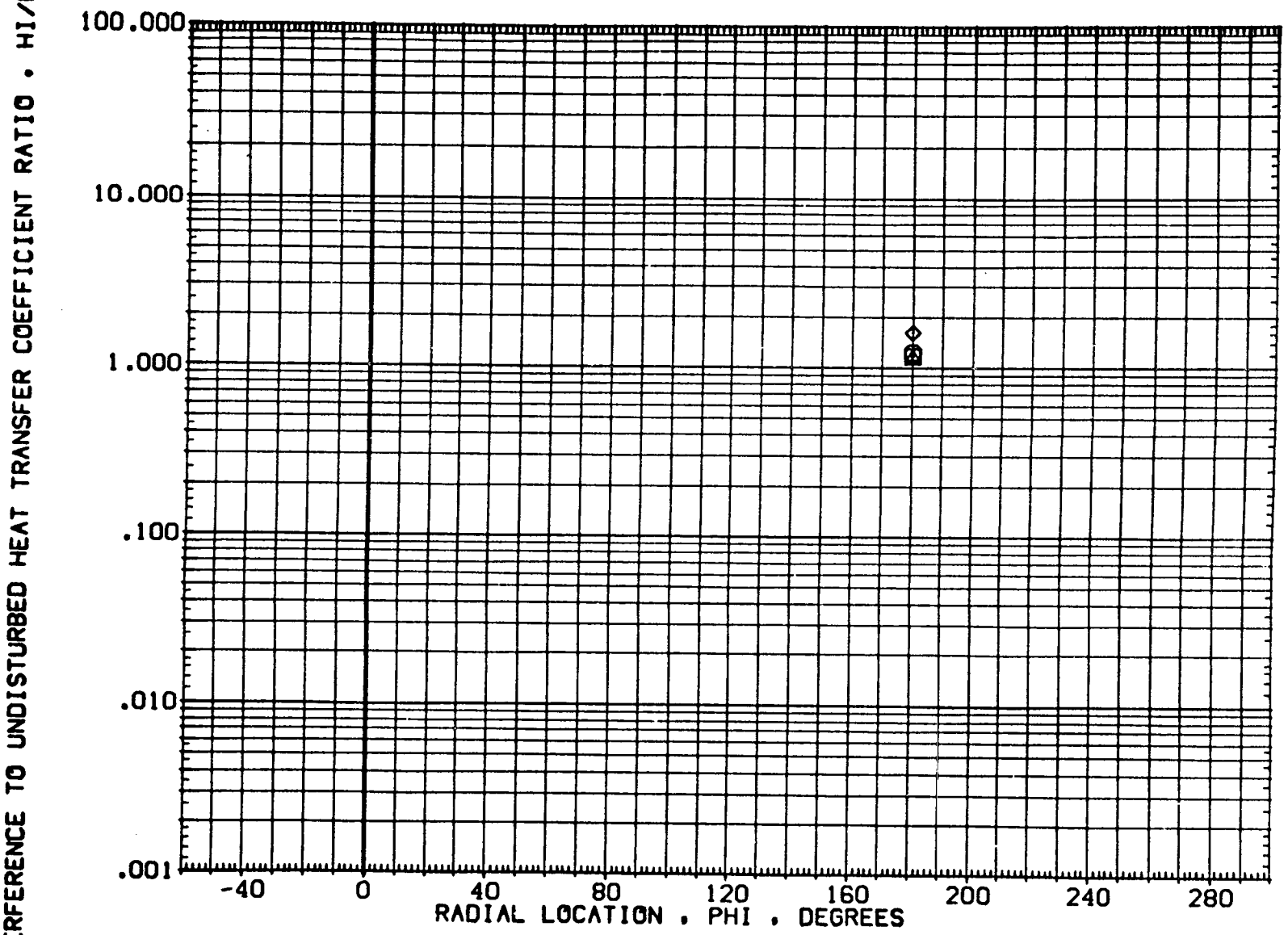


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .525

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

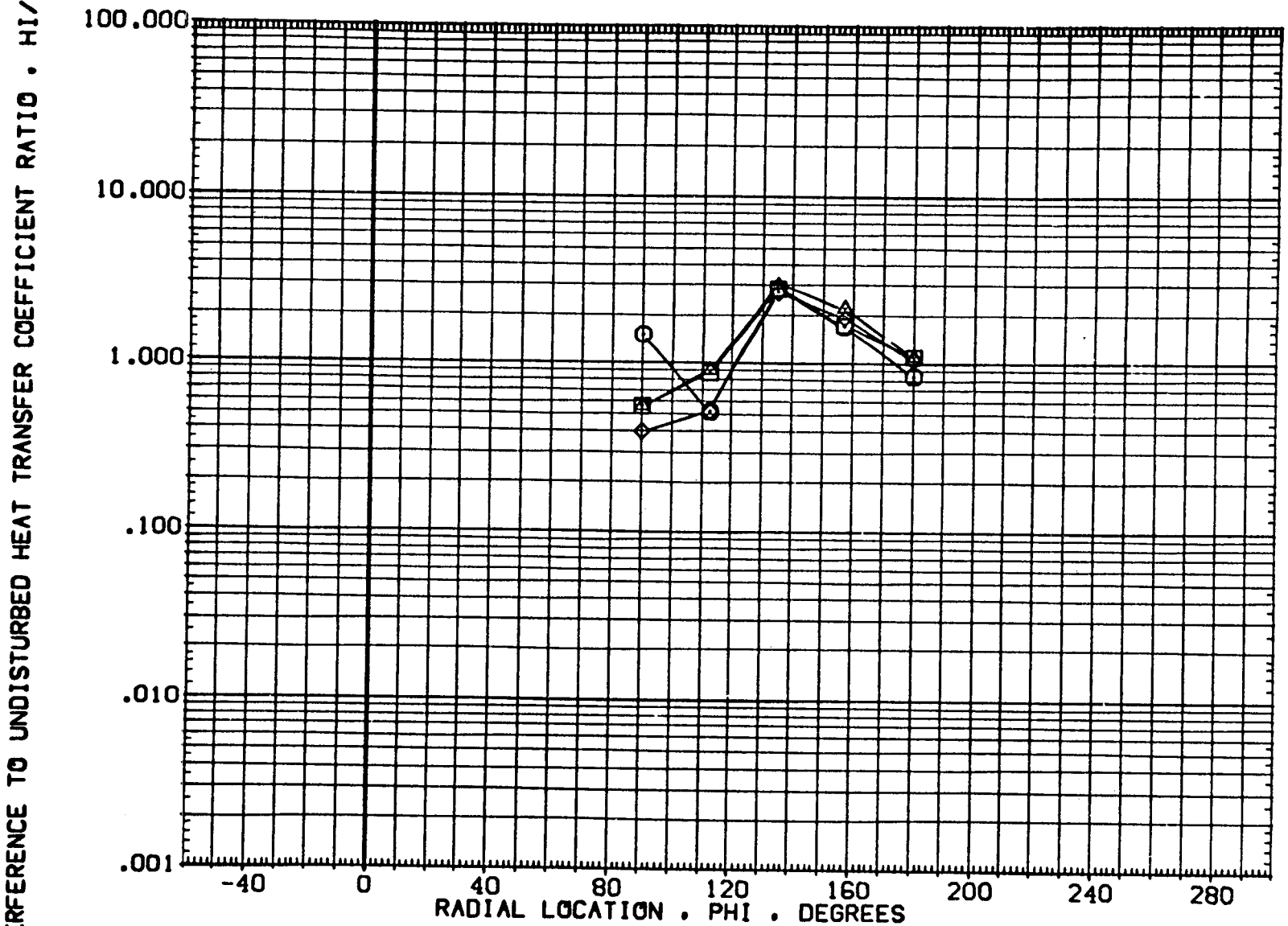


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .550

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	○	ARC 3.5-178 IHG 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IHG 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	◇	ARC 3.5-178 IHG 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IHG 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

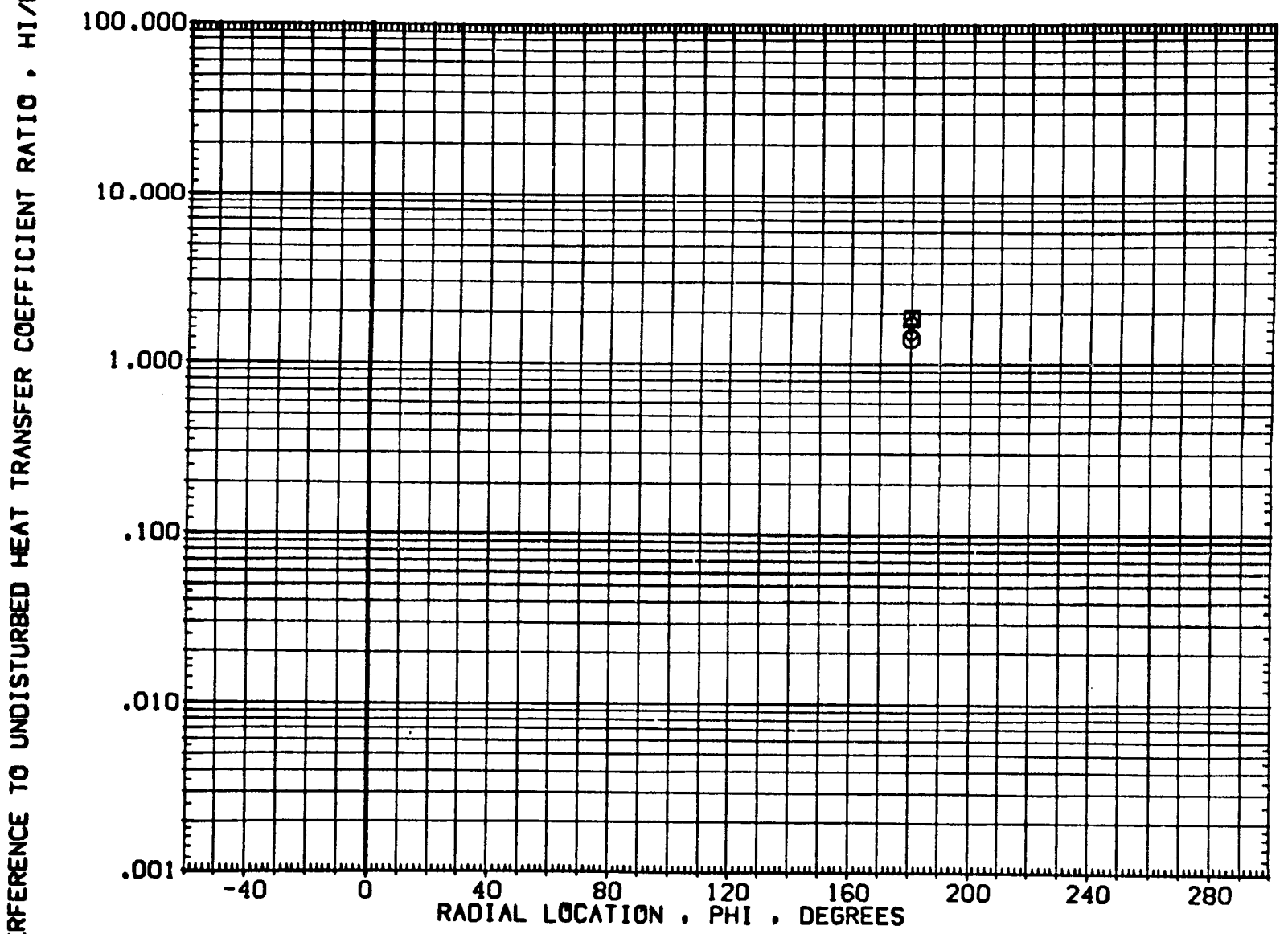


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .575

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE1T10)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

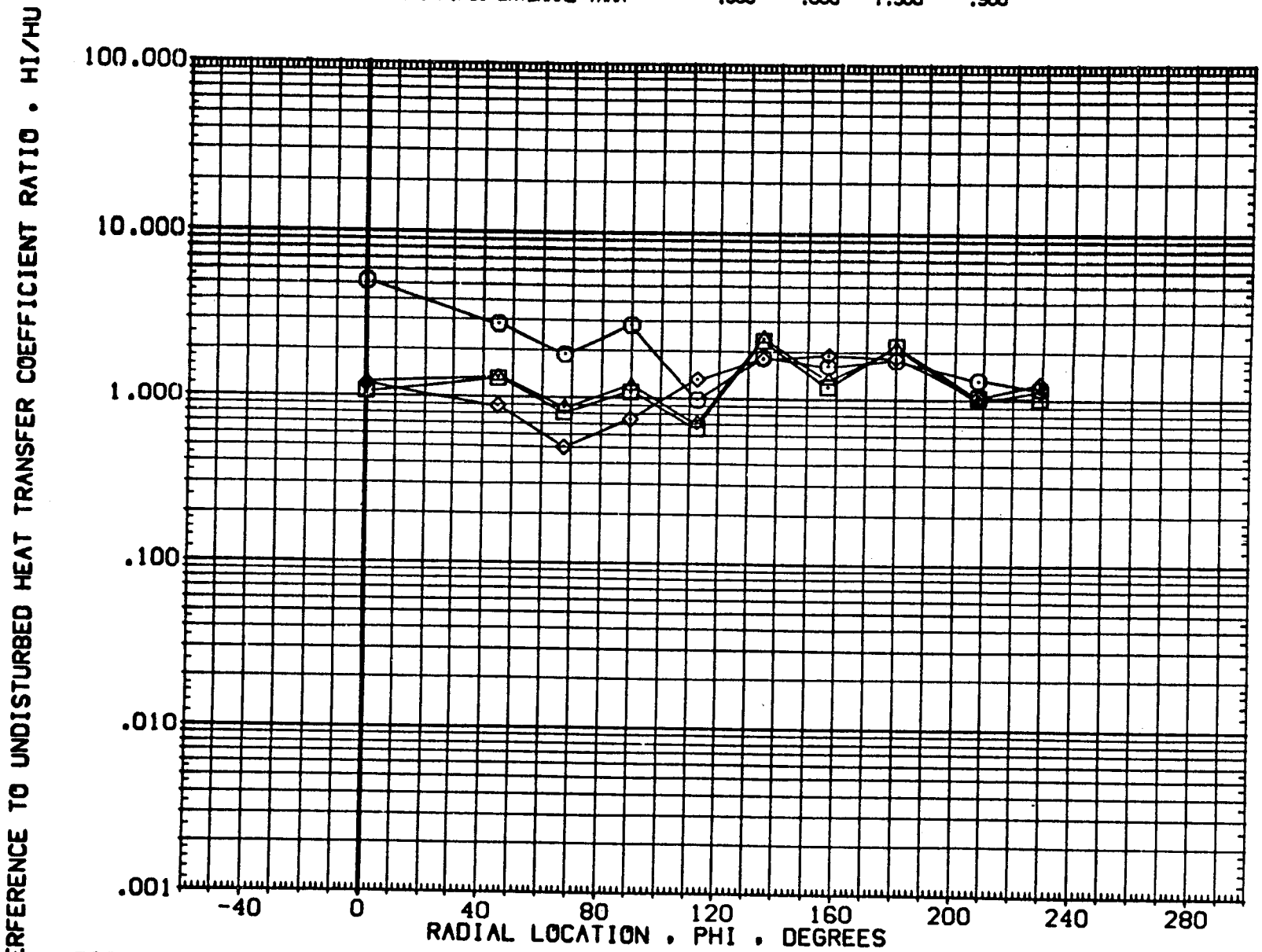


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .600

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE1T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	⧖	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

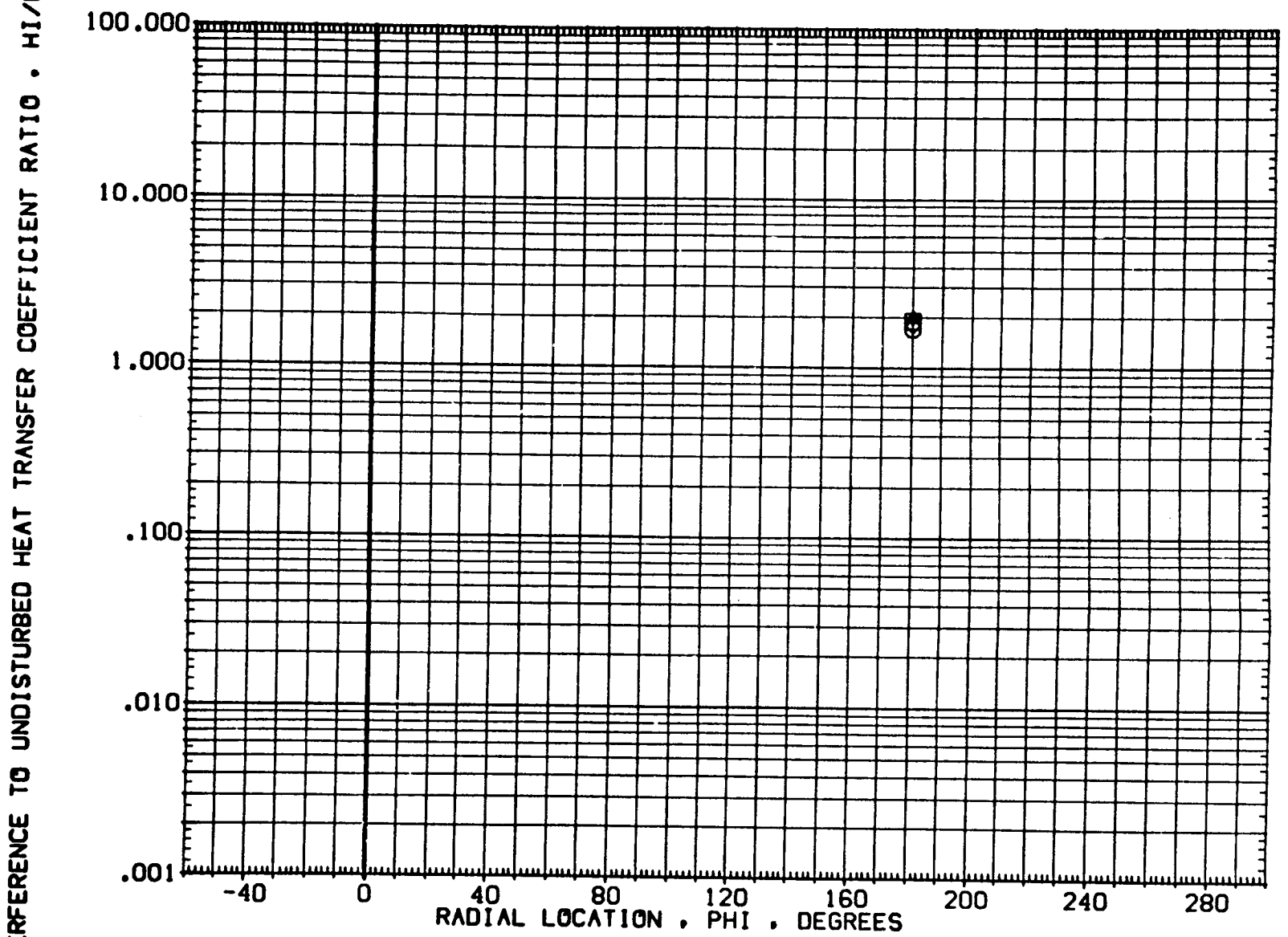


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .625

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10) ○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11) □	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13) ◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12) △	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

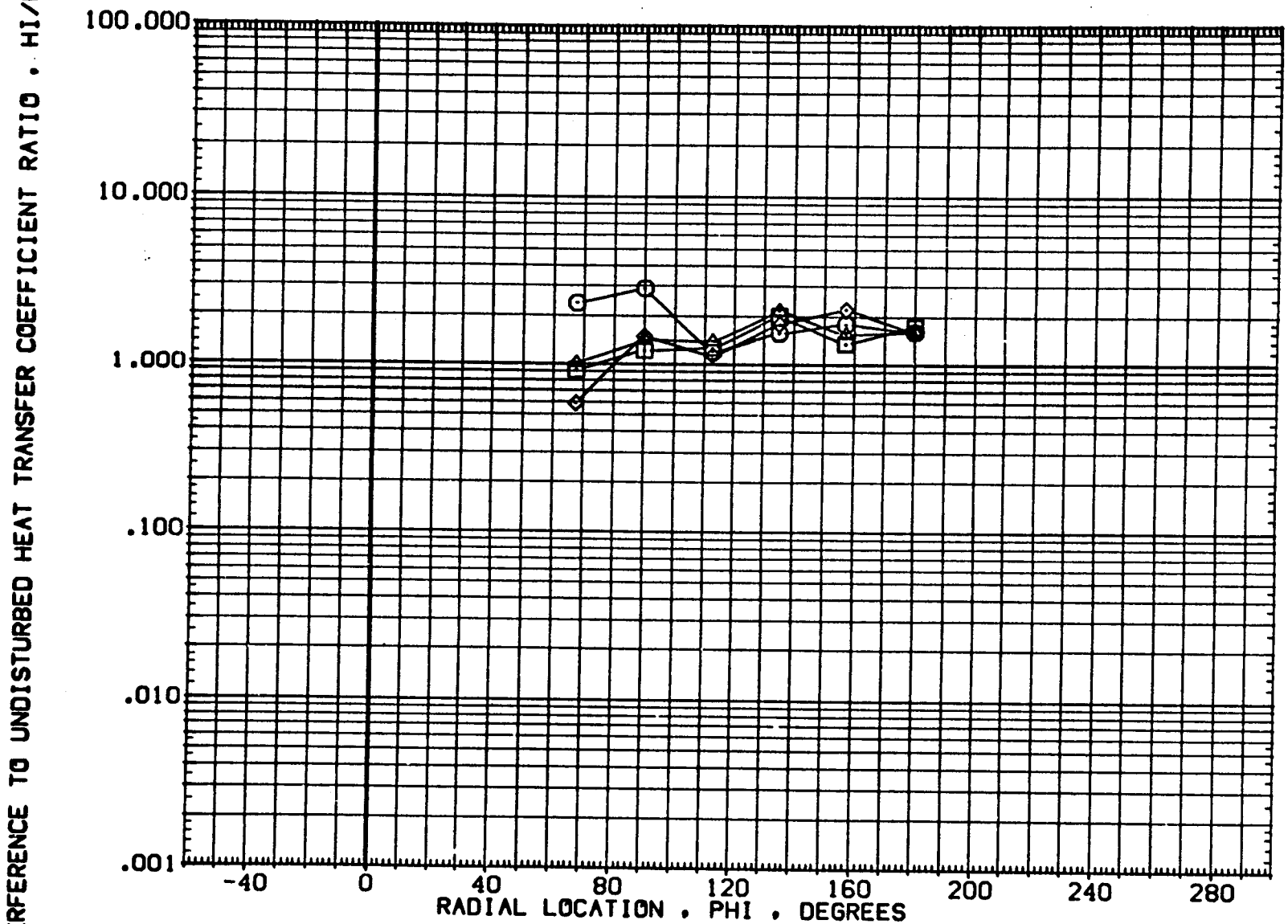


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .650

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE1T10)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

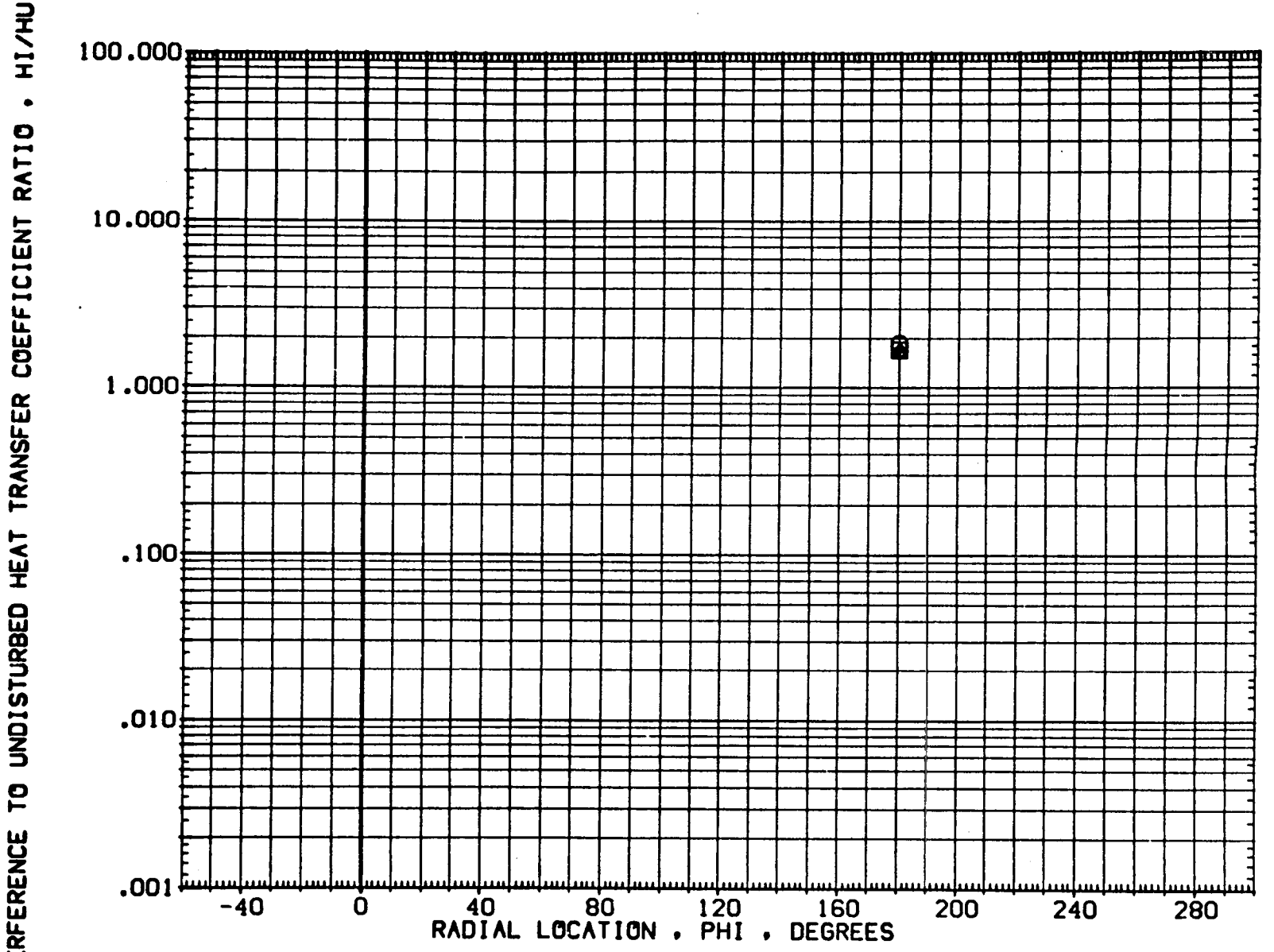


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .675

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEITI0)	○	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	□	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	◇	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	△	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

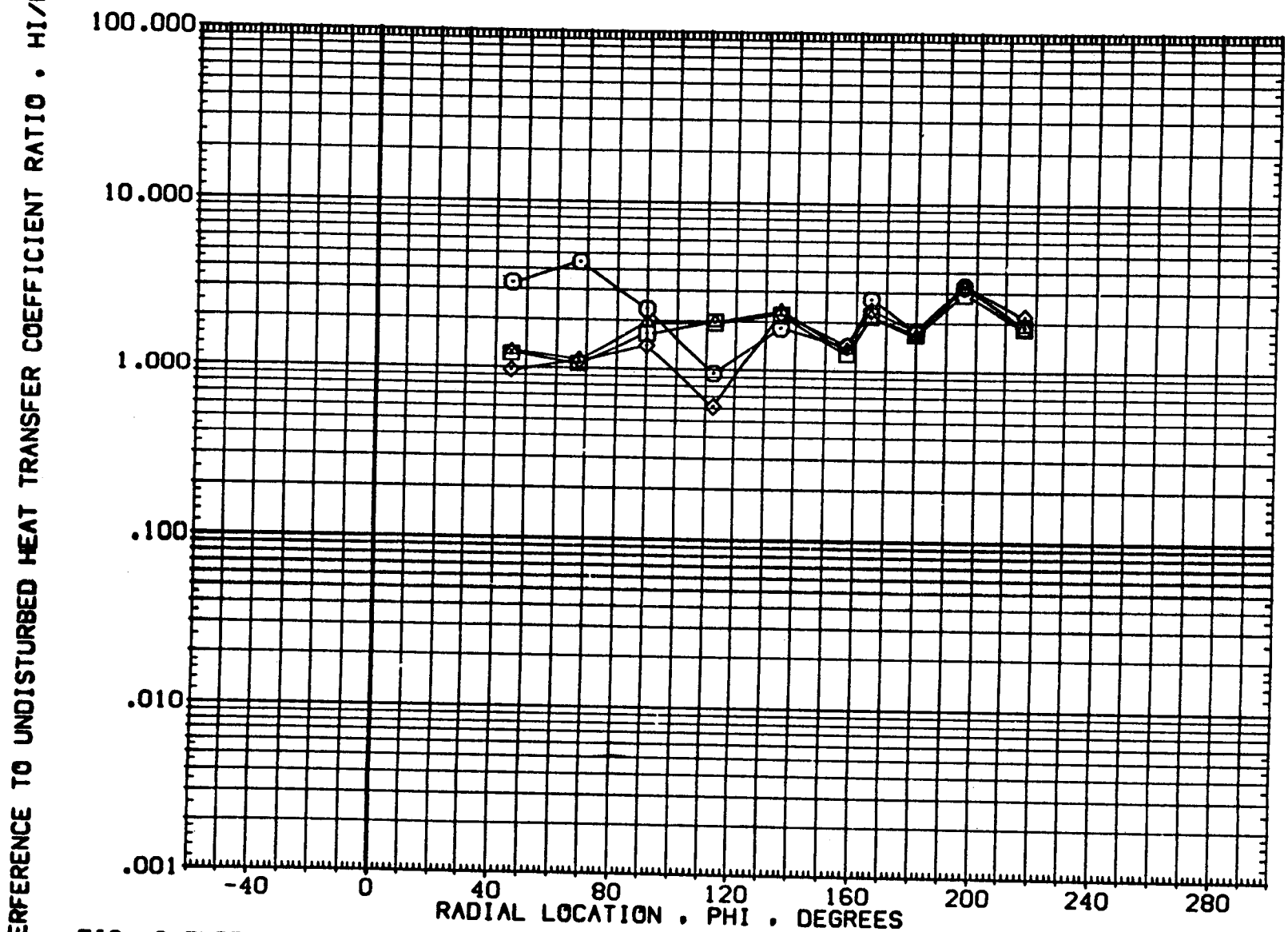


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .700

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

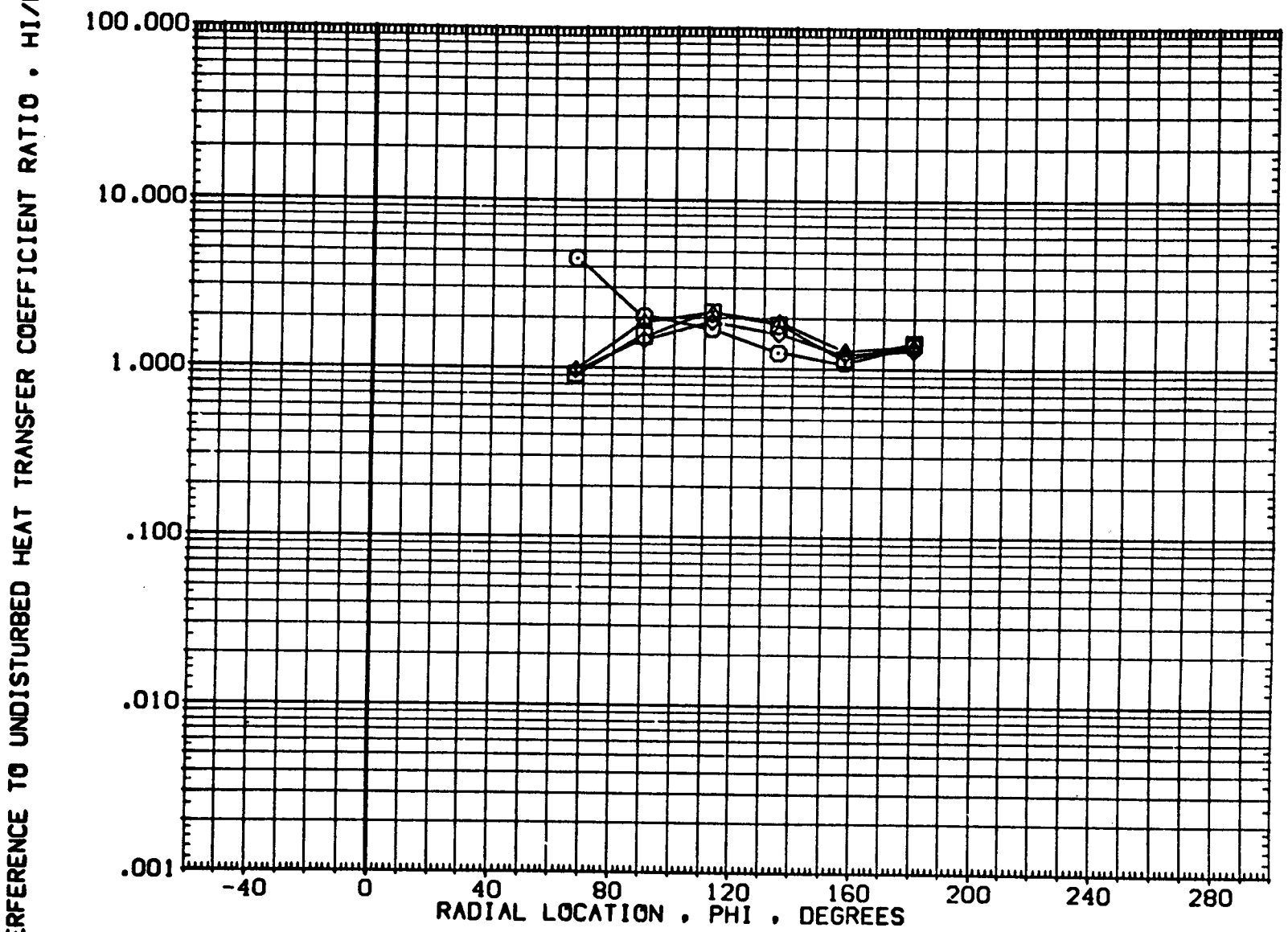


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .750

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EE|T10)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

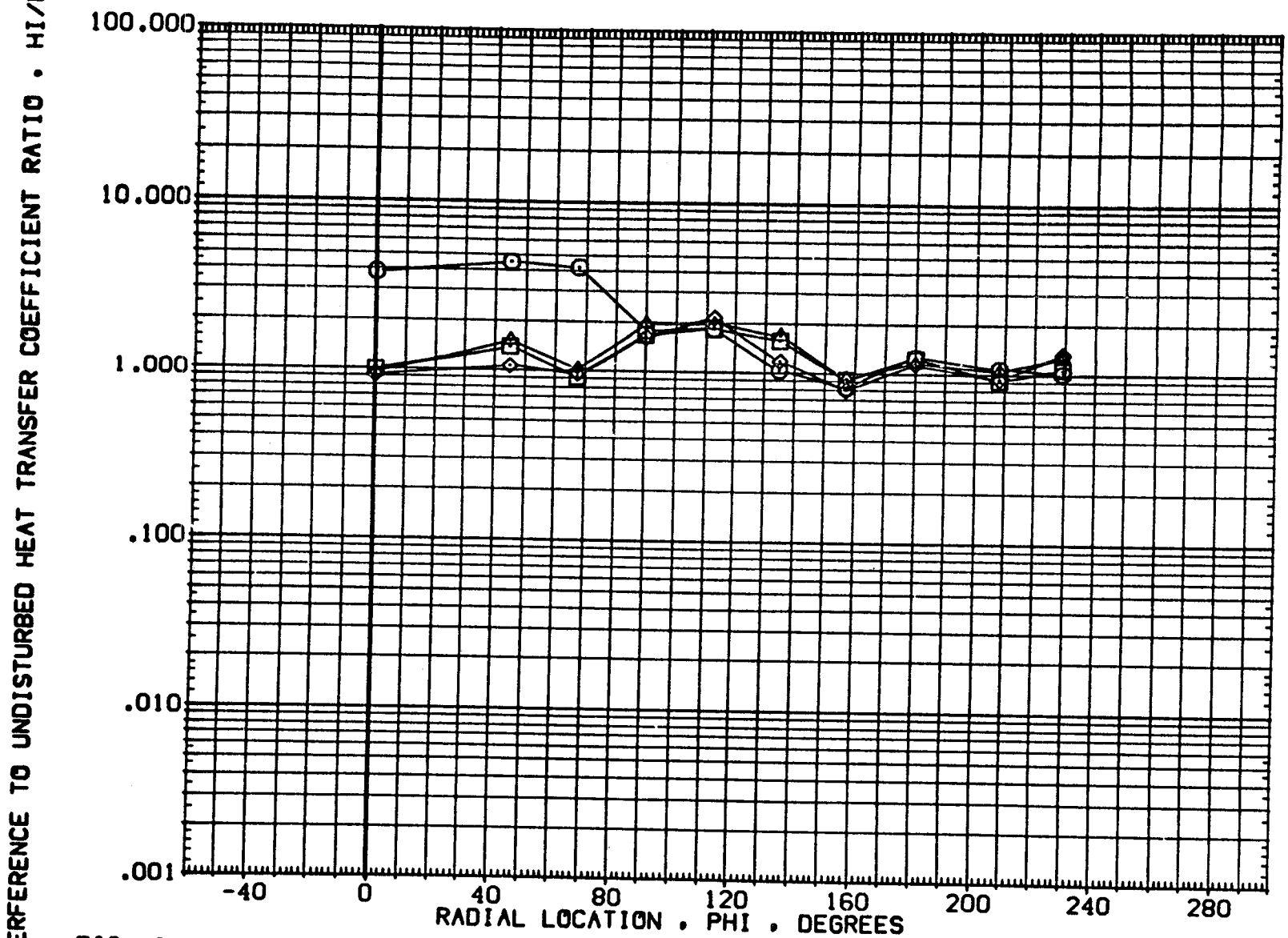


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .800

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

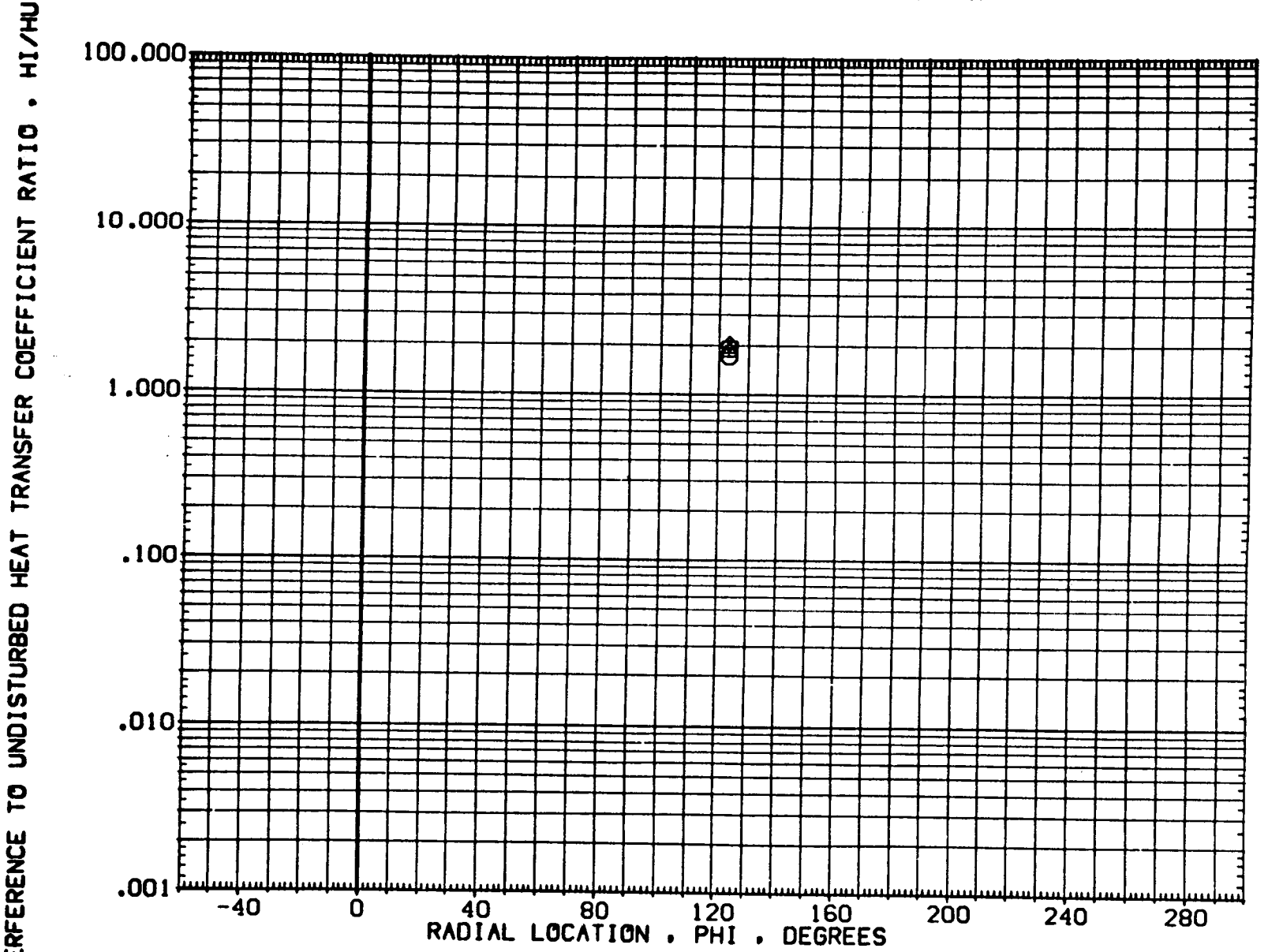


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .825

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	□	ARC 3.5-178 IHC B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	◇	ARC 3.5-178 IHC B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	⊠	ARC 3.5-178 IHC B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IHC B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

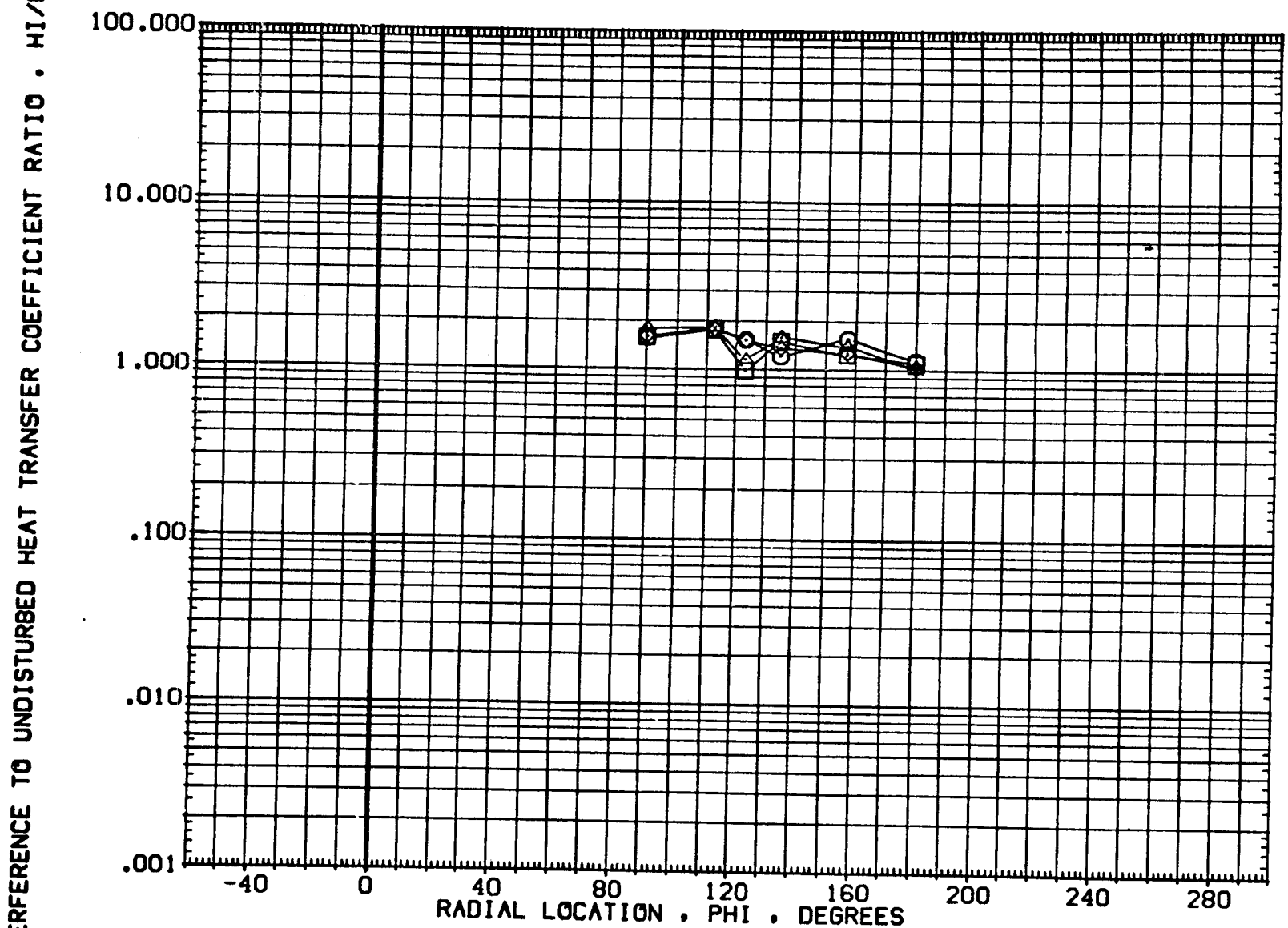


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .850

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 0+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 0+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

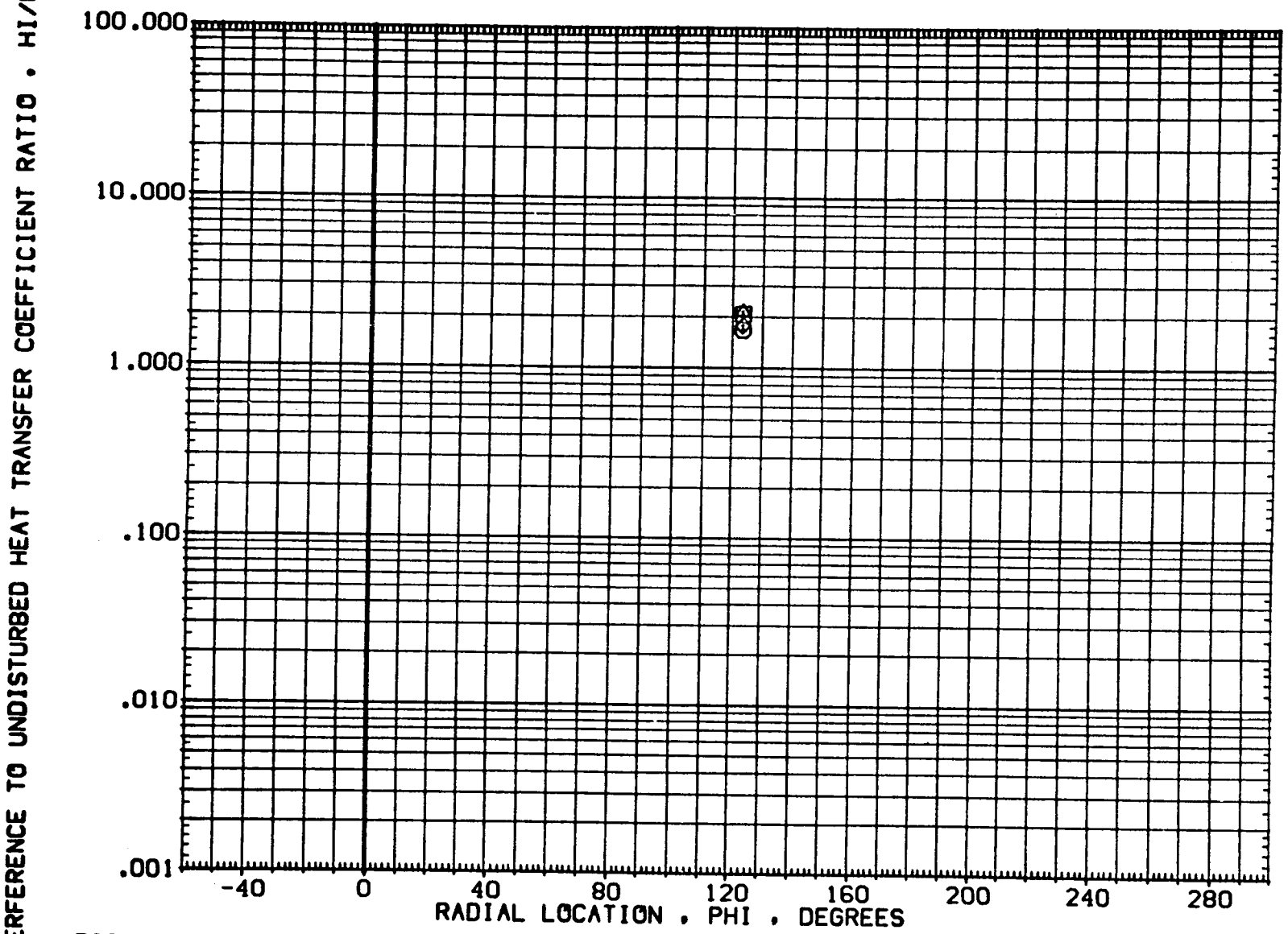


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .875

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEITI0)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI1)	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI3)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEITI2)	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

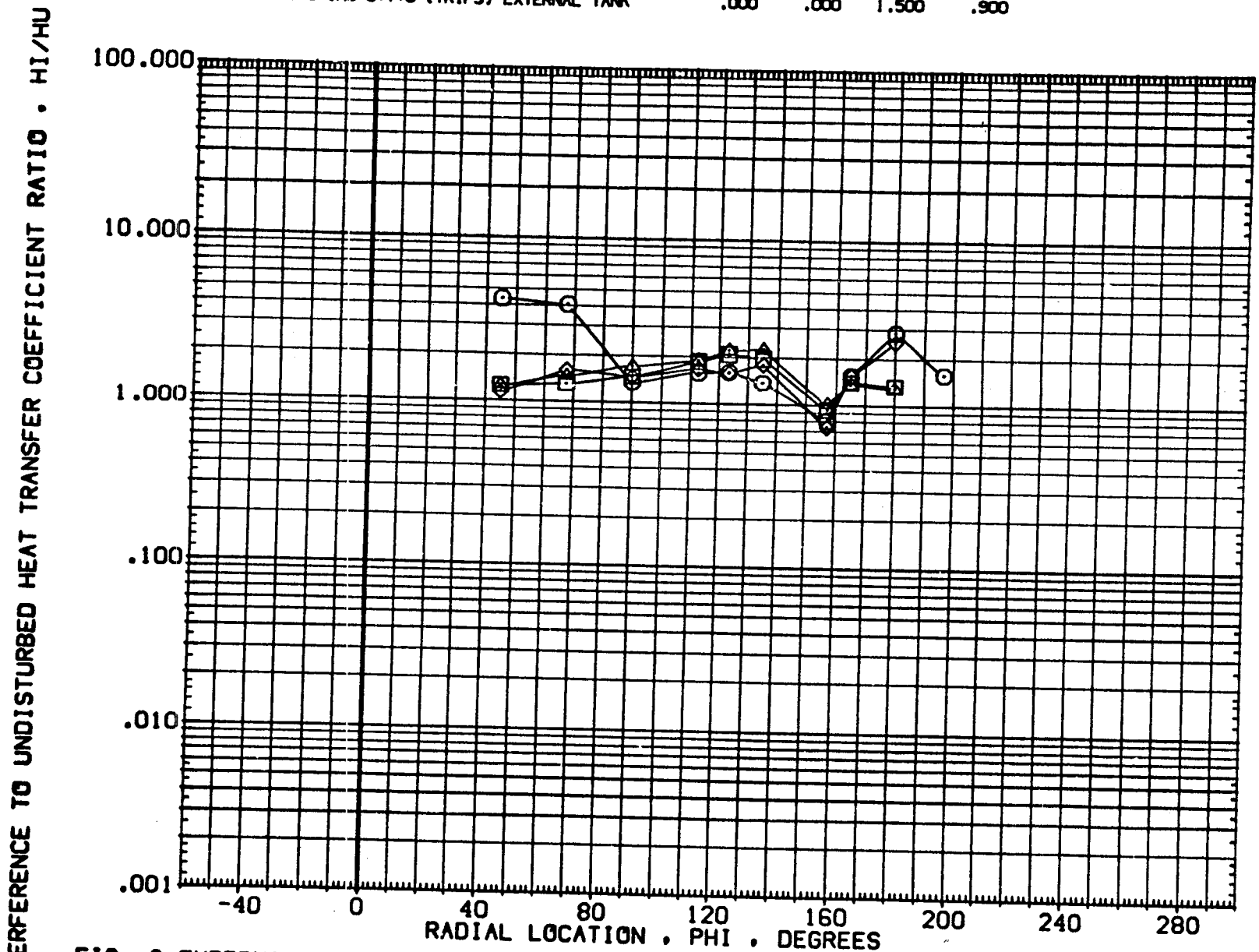


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .900

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE|T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T13)	⊠	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE|T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

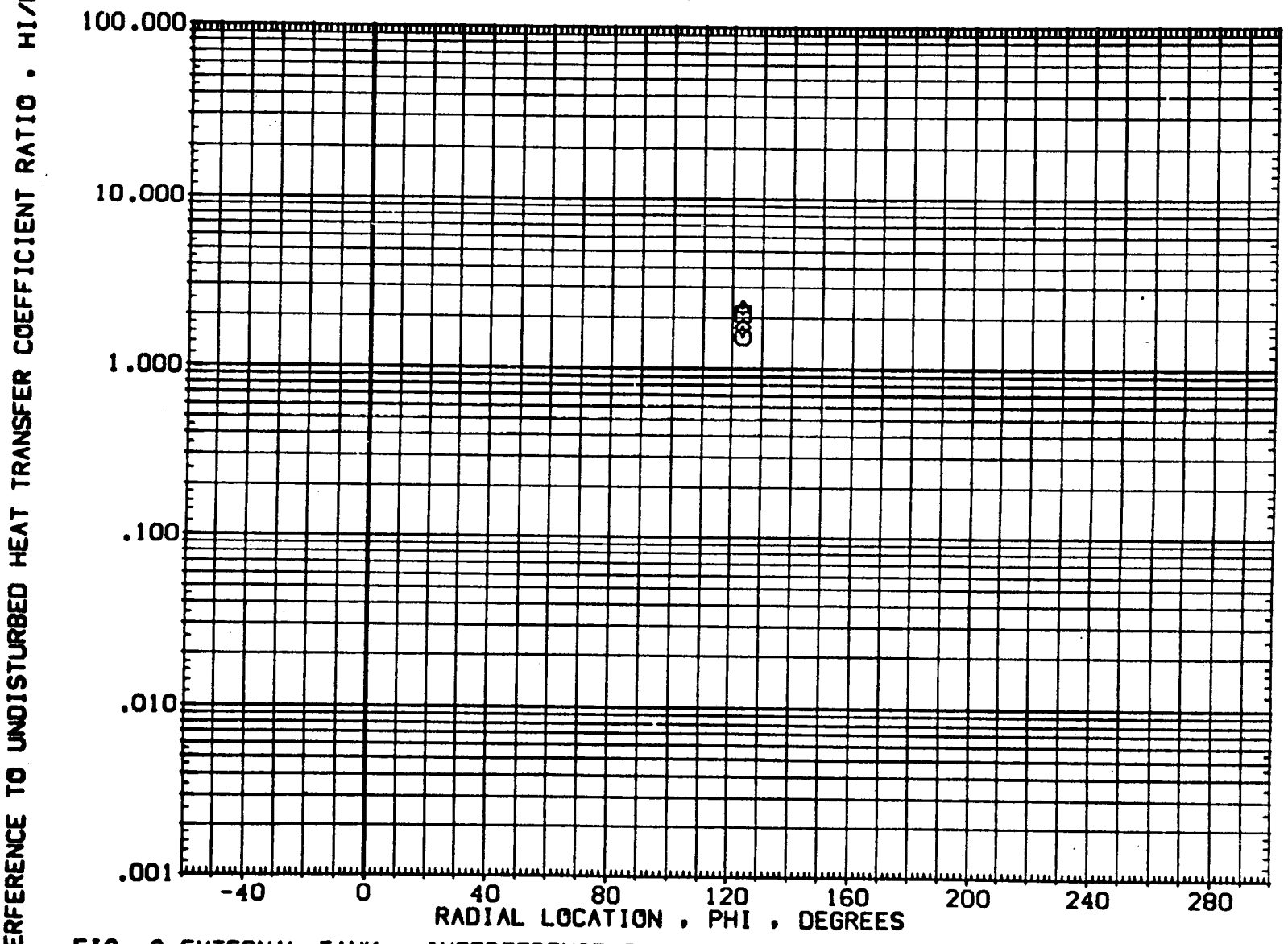


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .925

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAV/HT
(EEIT10)		ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)		ARC 3.5-178 IH3 B+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)		ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)		ARC 3.5-178 IH3 B+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

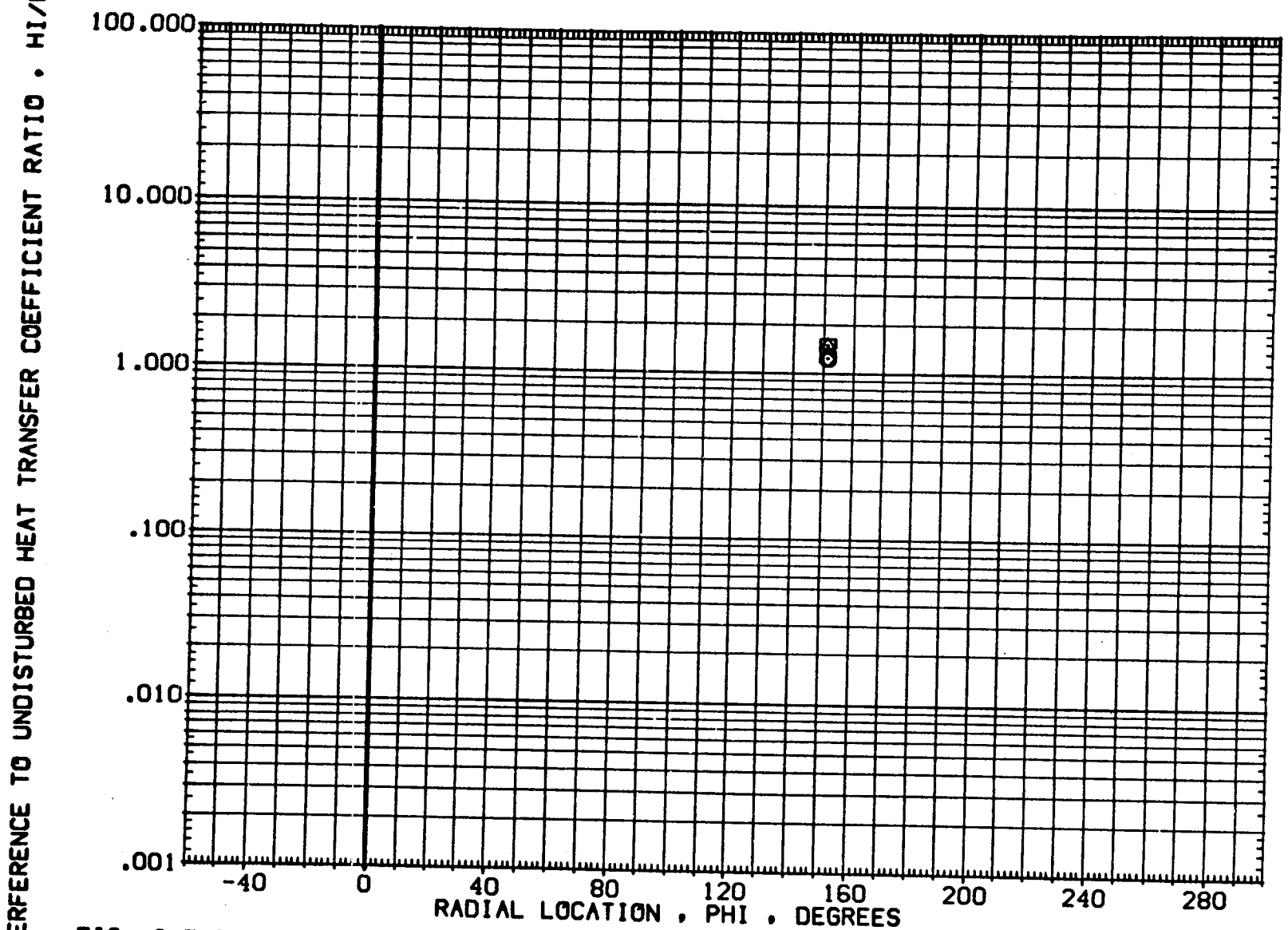


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .935

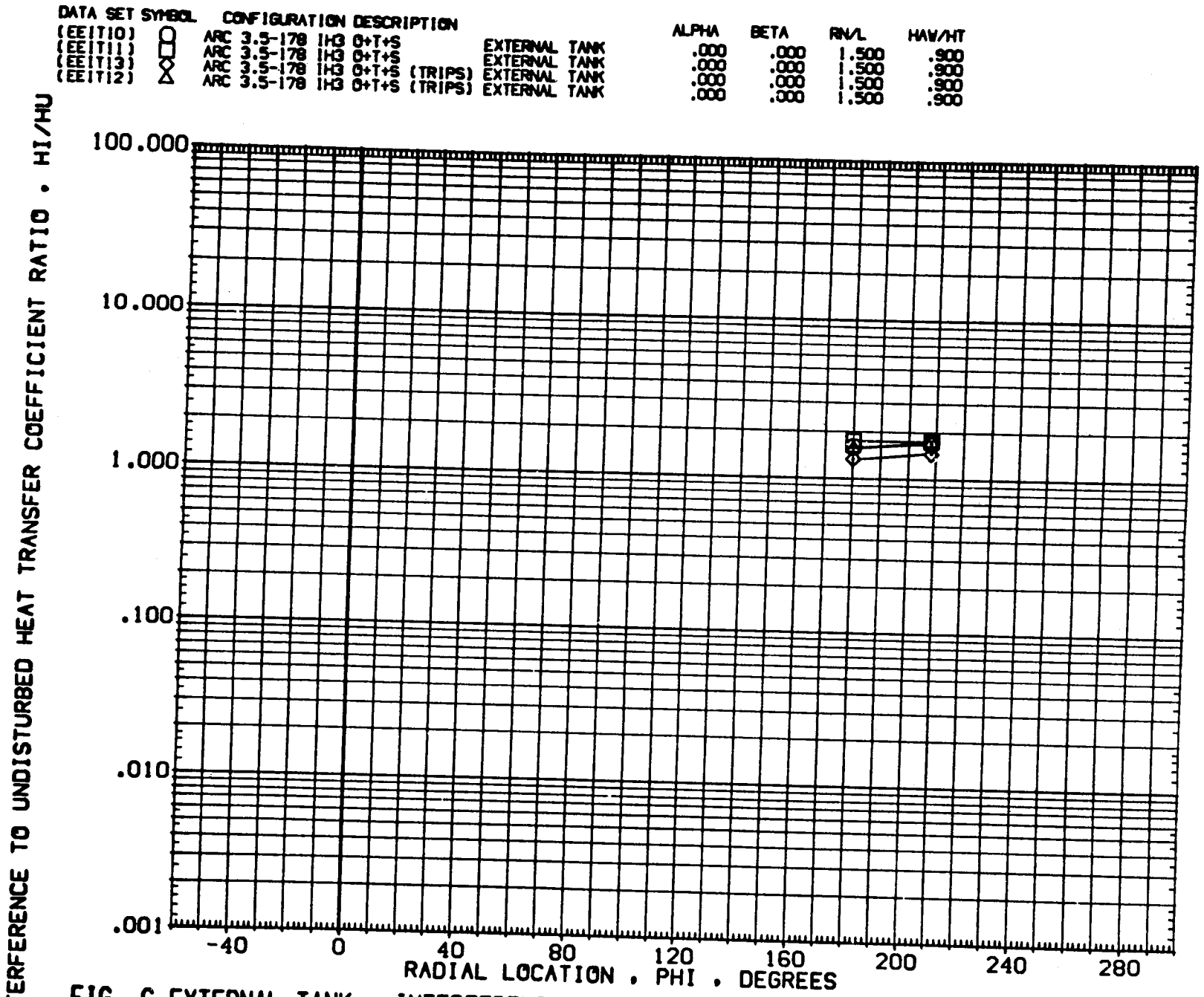


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .937

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EE1T10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EE1T12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

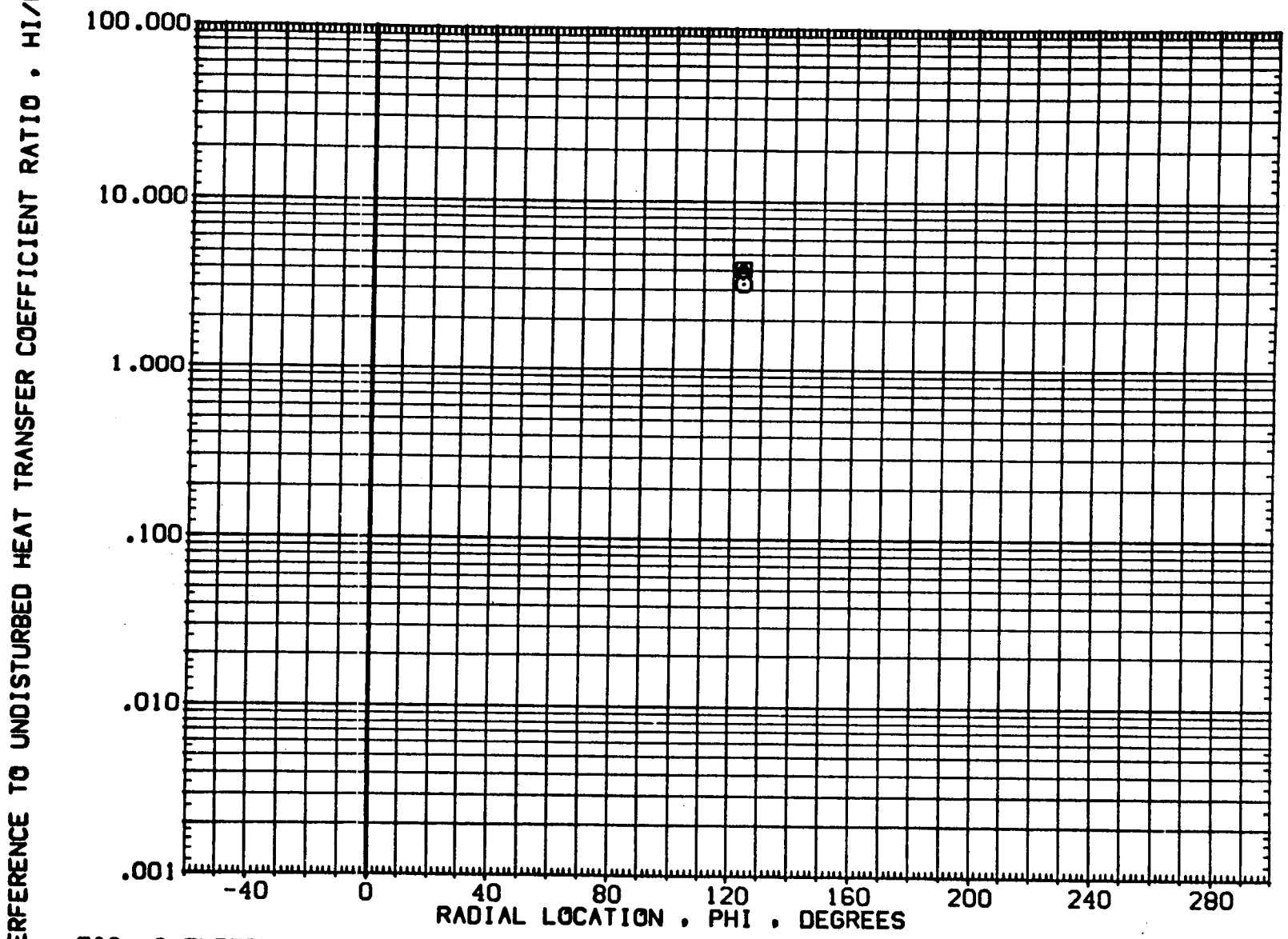


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .960

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/L	HAW/HT
(EEIT10)	○	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT11)	□	ARC 3.5-178 IH3 O+T+S	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT13)	◇	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900
(EEIT12)	△	ARC 3.5-178 IH3 O+T+S (TRIPS)	EXTERNAL TANK	.000	.000	1.500	.900

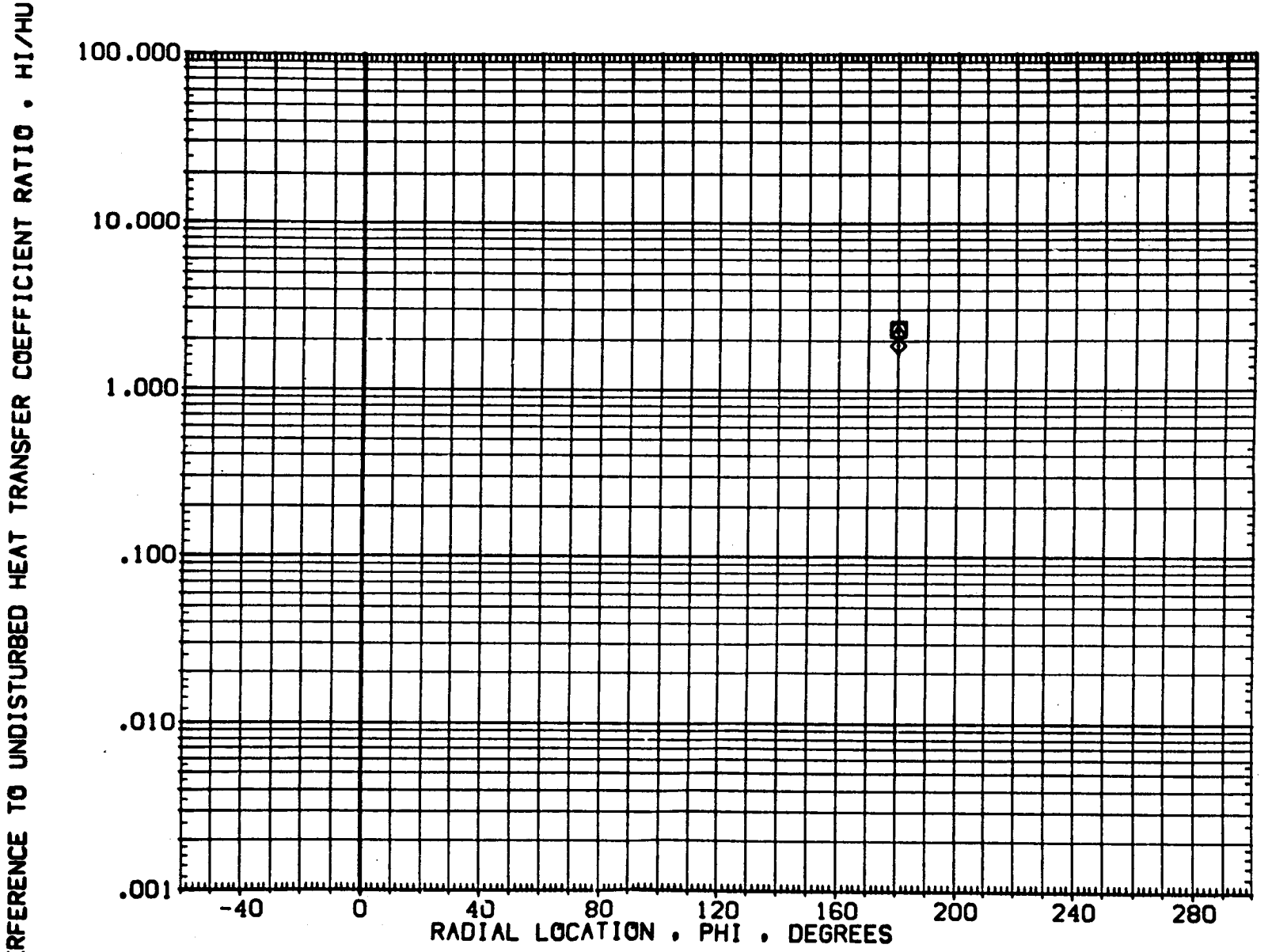


FIG. 6 EXTERNAL TANK - INTERFERENCE TO UNDISTURBED RATIO

MACH = 5.300 X/L = .975