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Final Report

DEGRADATION BY THE ATMOSPHERE OF MICROWAVE RADIOMETRIC OBSERVATIONS FROM SPACE - 0.5 TO 20 GHz

Volume II

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Issued: 30 April 1970

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by Ronald A. Porter
Norman E. Gaut
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Volume II of 2 Volumes

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179 Fifth Street,
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OF

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SEA WATER

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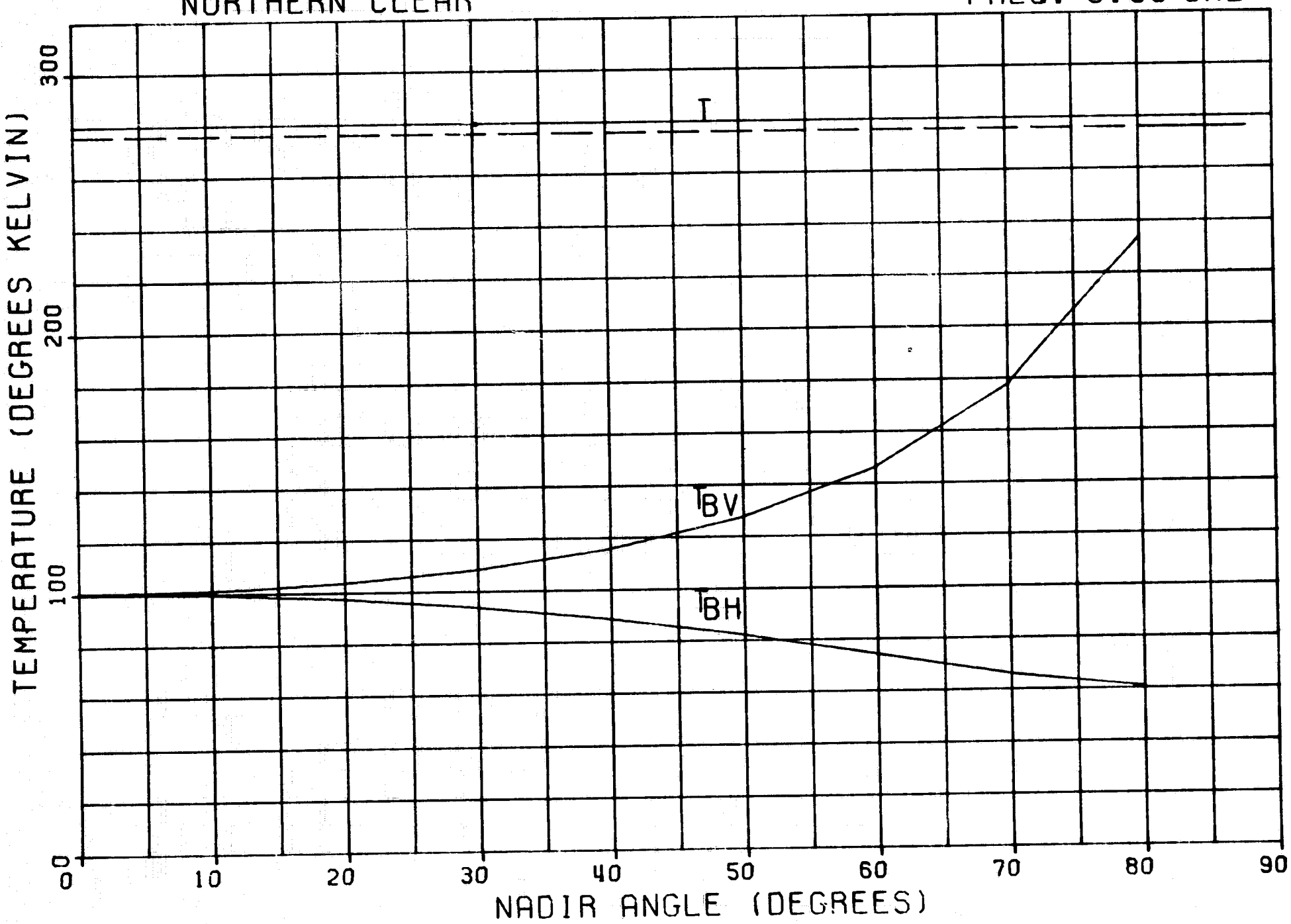

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
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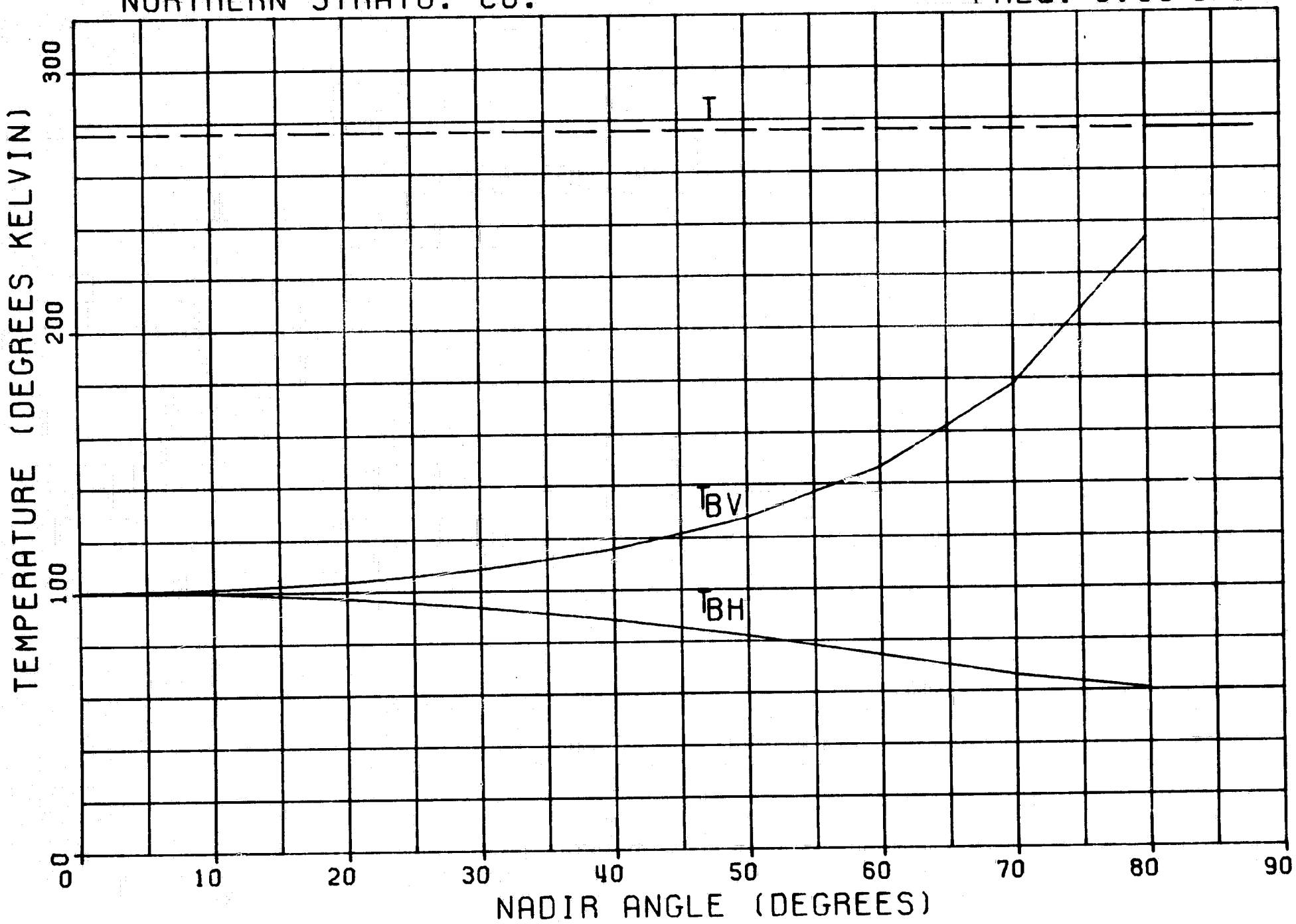
FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
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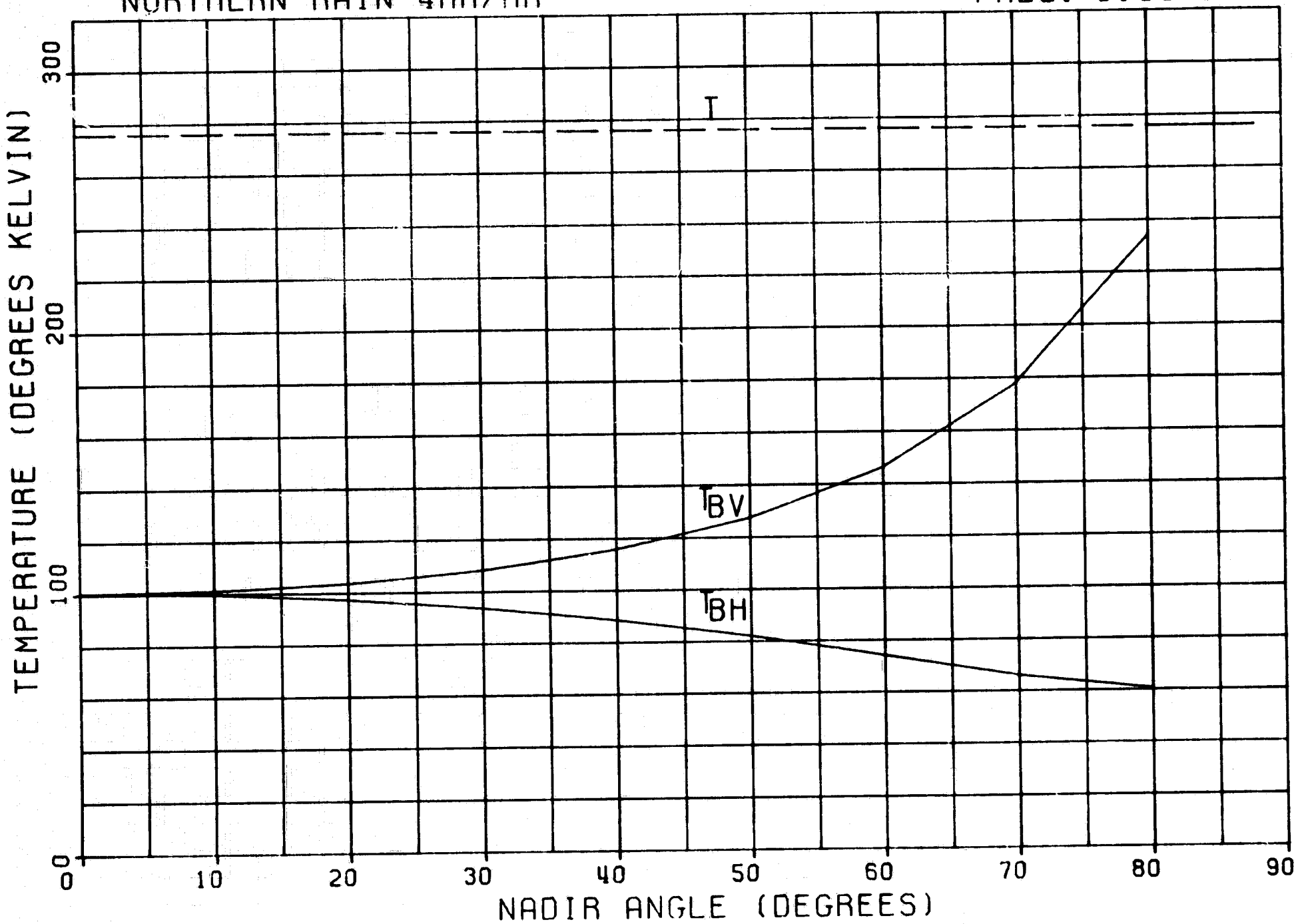

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 107MM/HR

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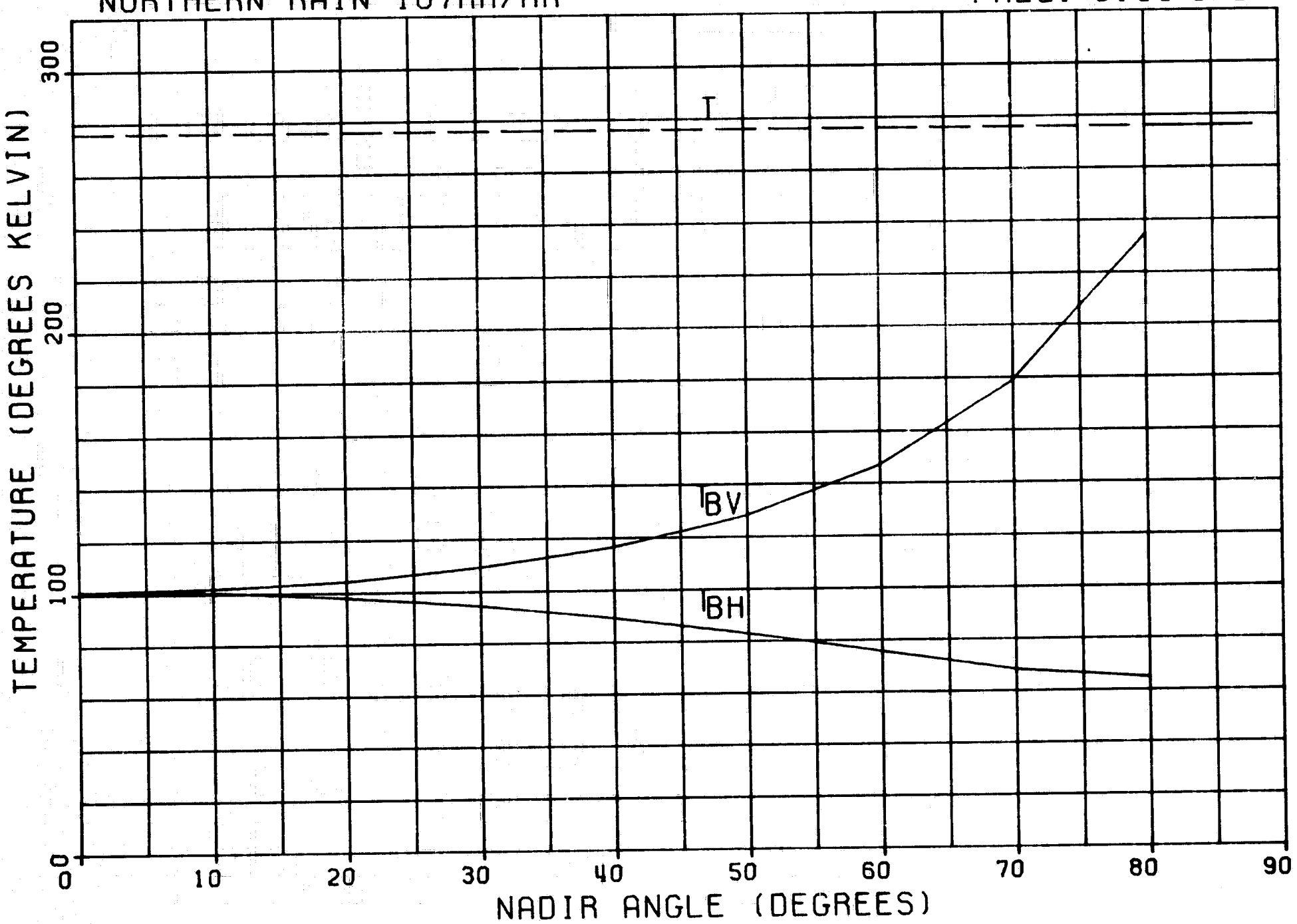

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
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MID-LATITUDE CLEAR

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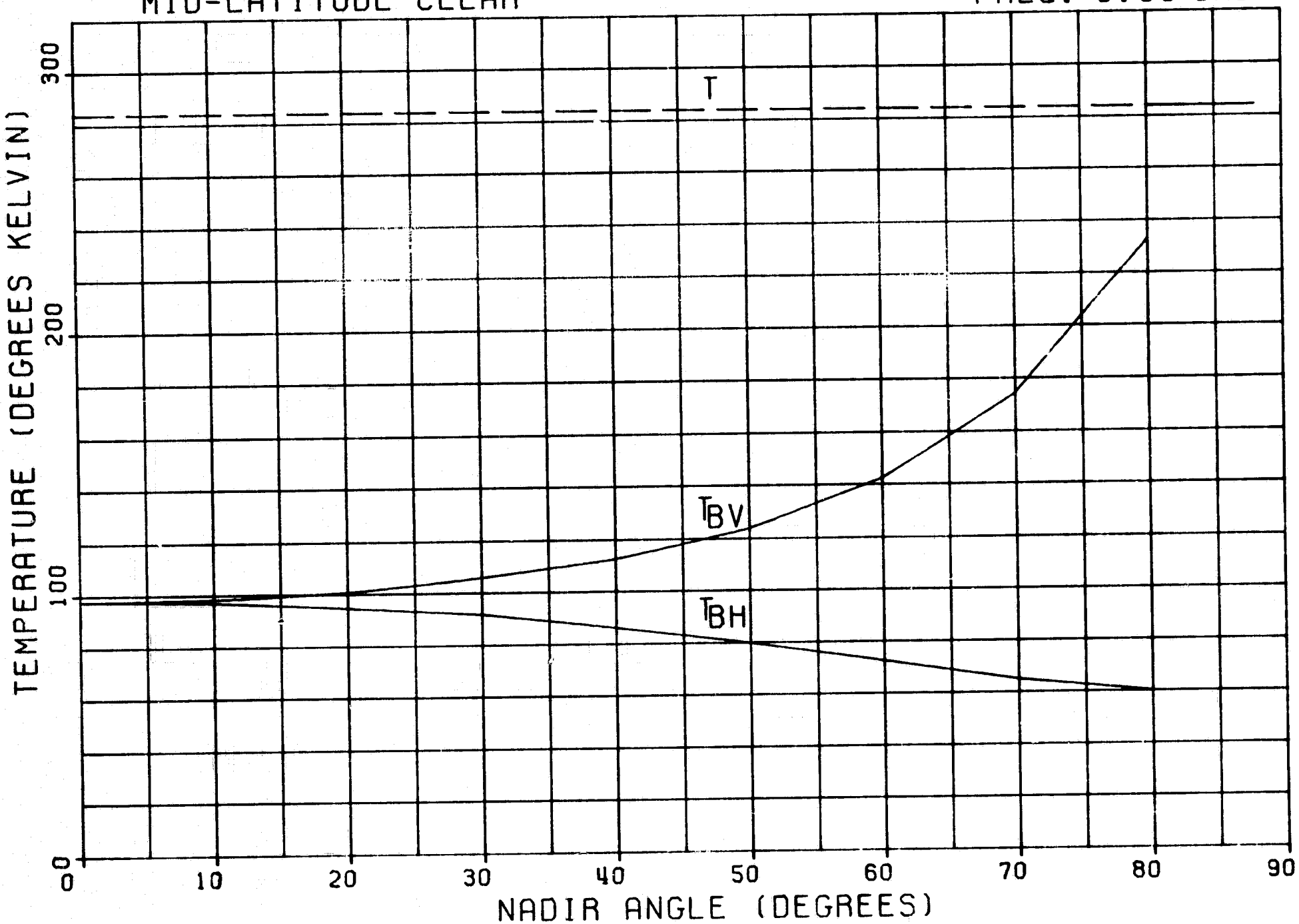
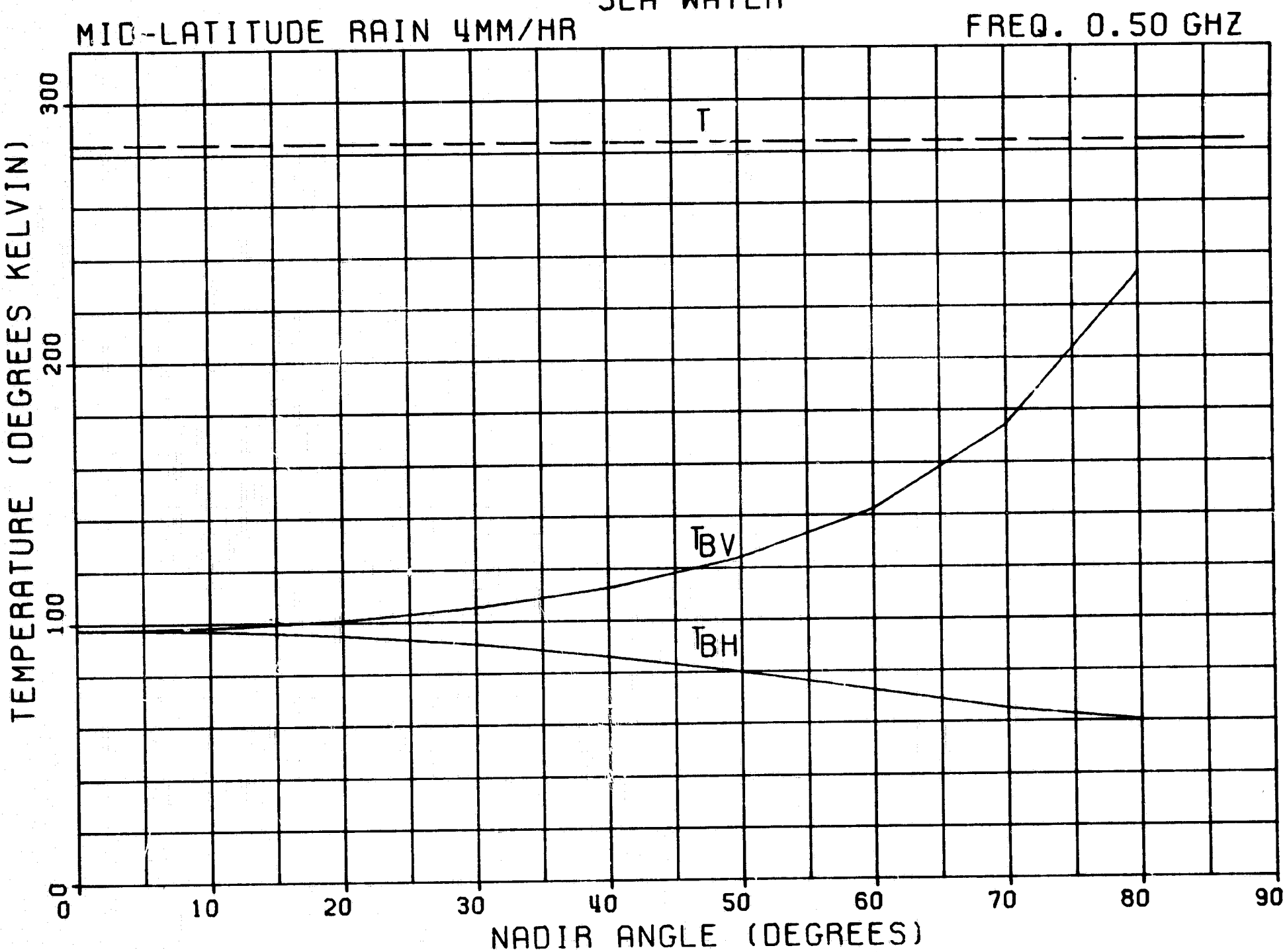


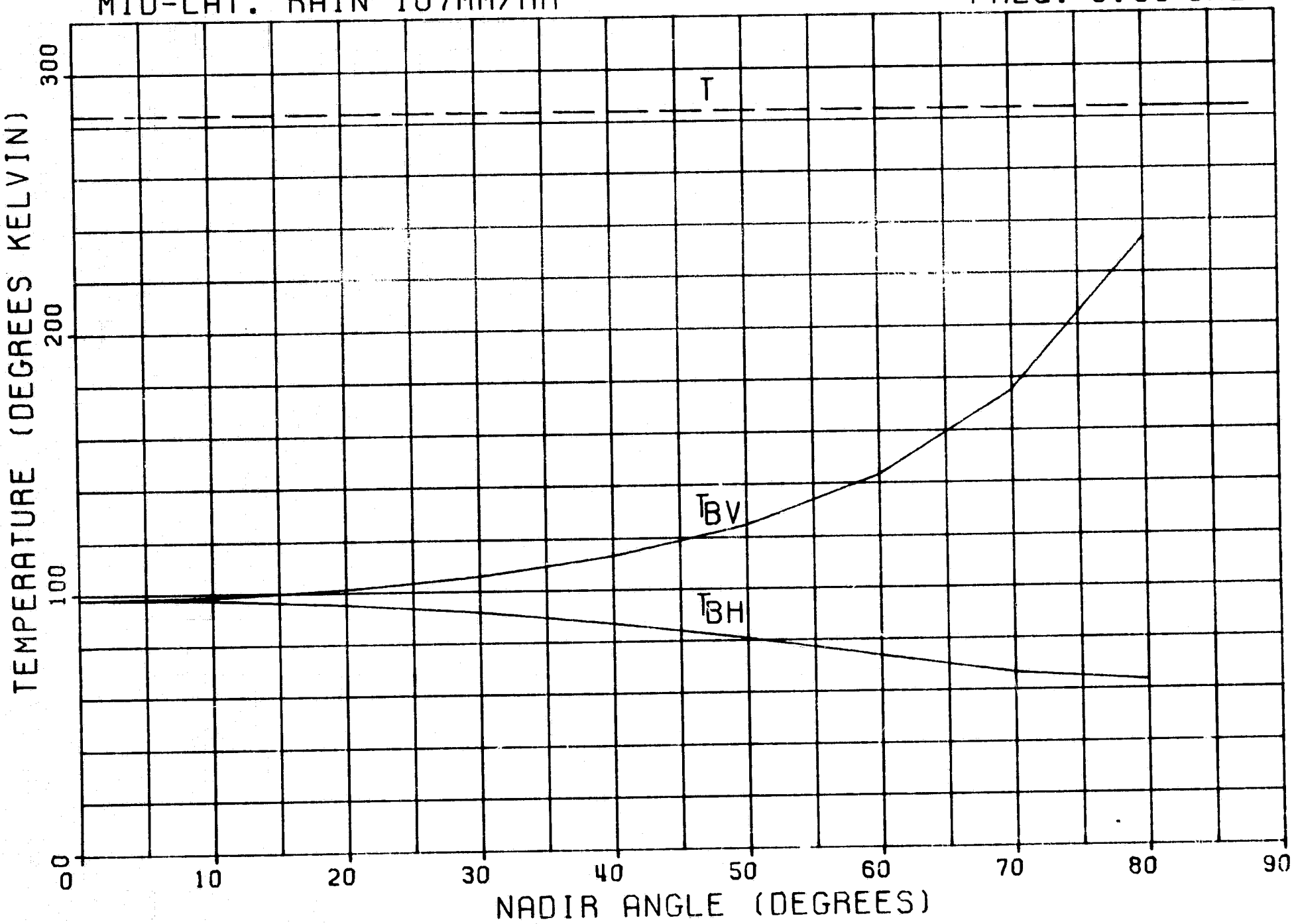
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LAT. RAIN 107MM/HR

FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

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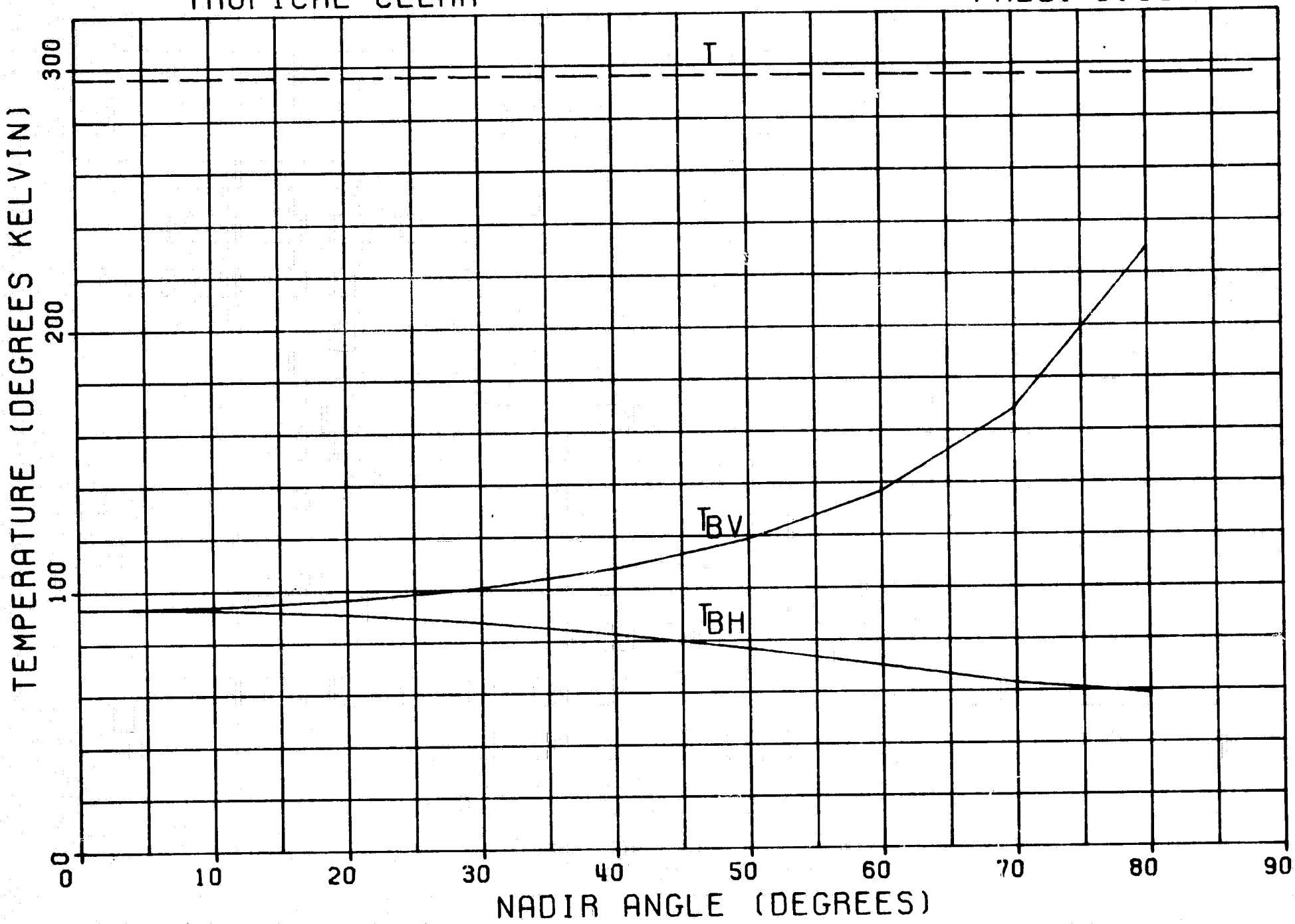
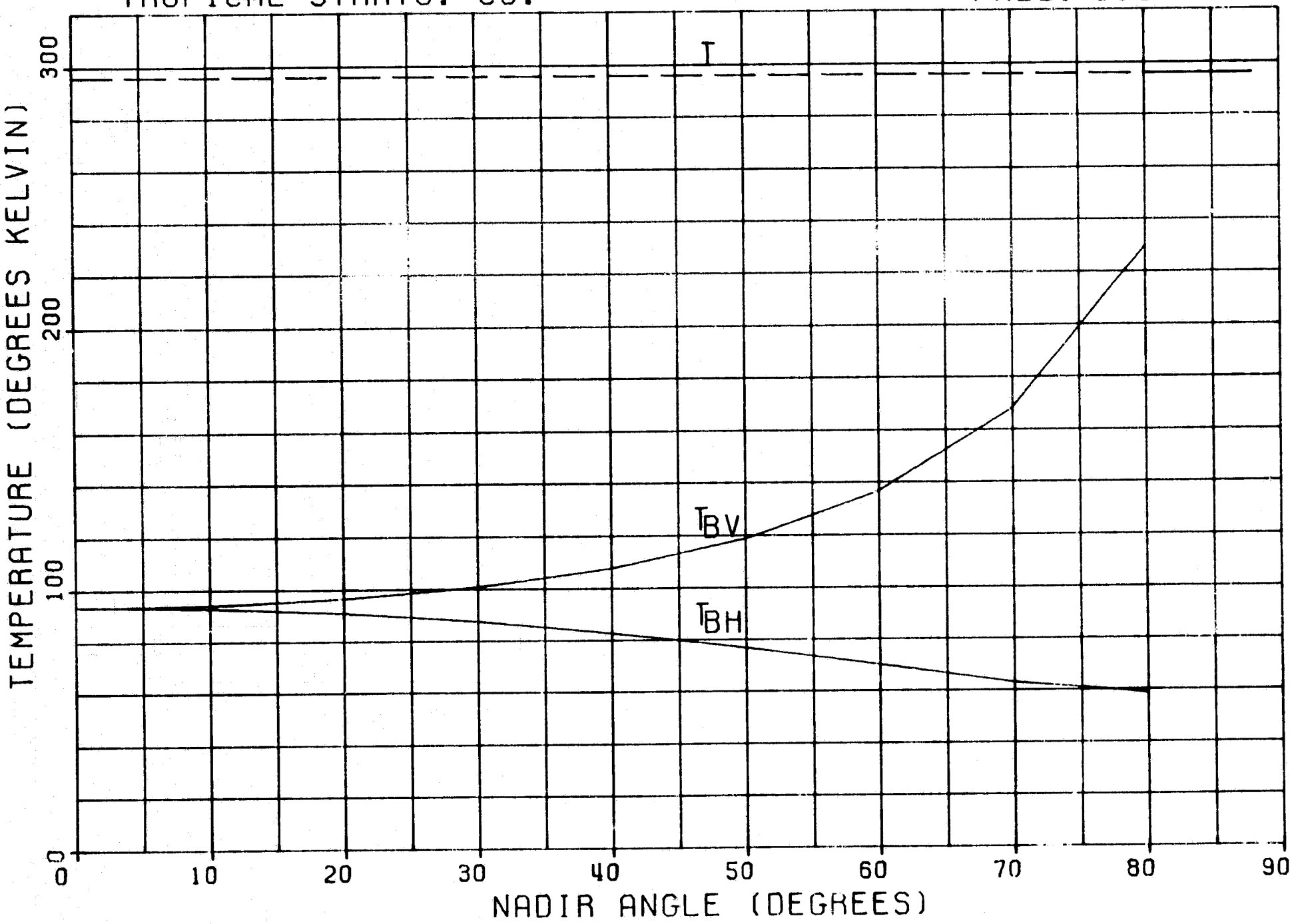
FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL STRATO. CU.

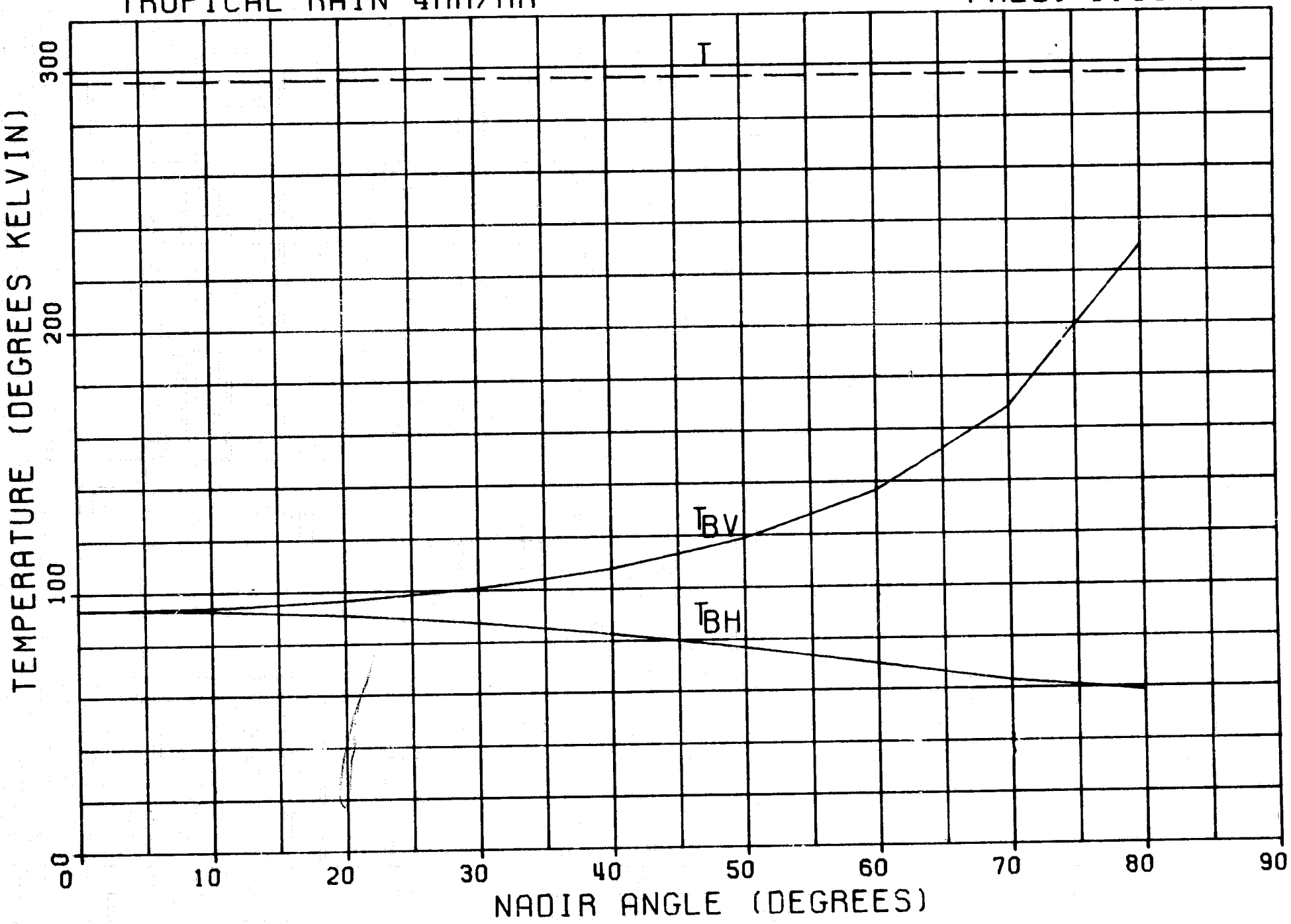
FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 4MM/HR

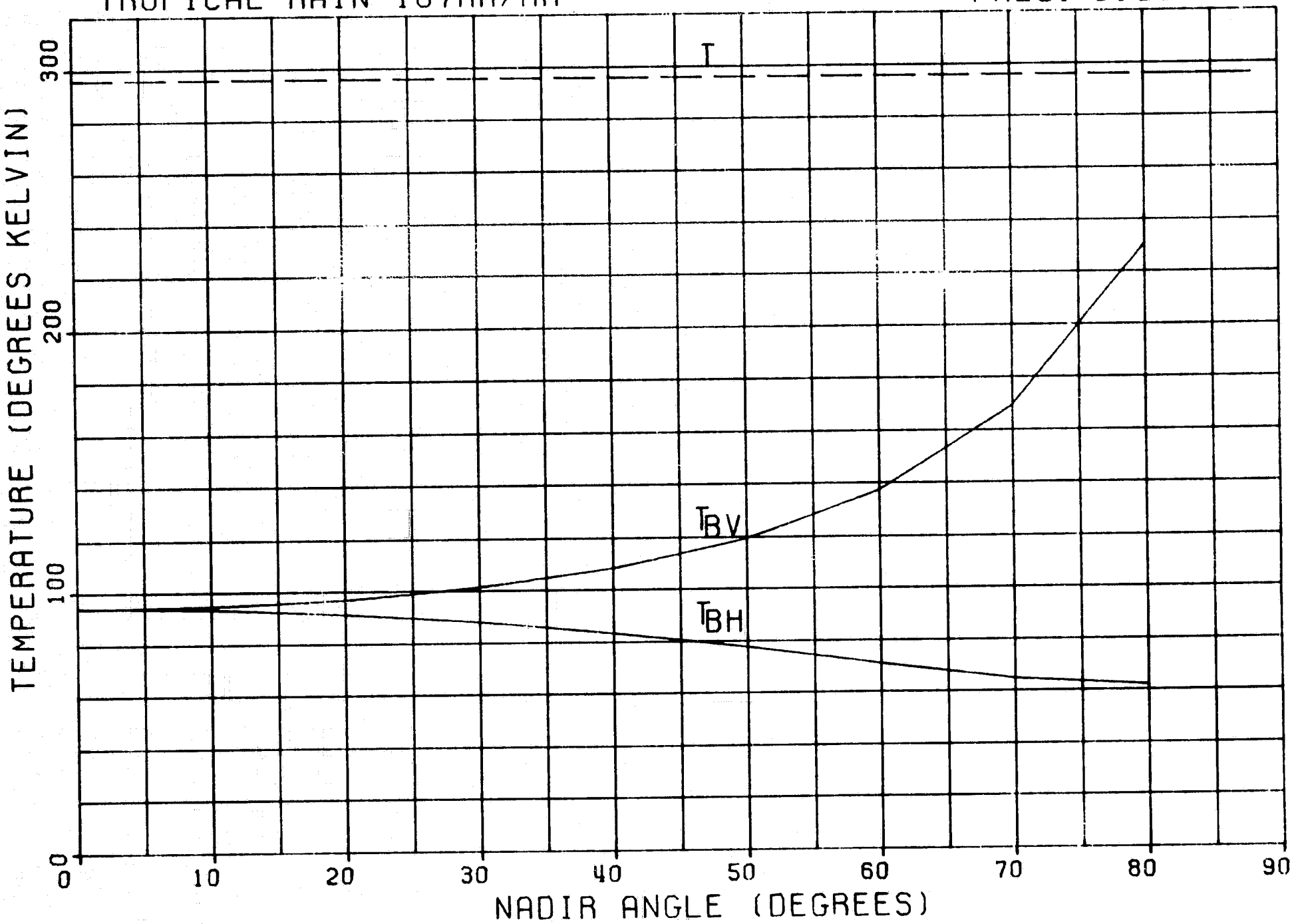
FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR

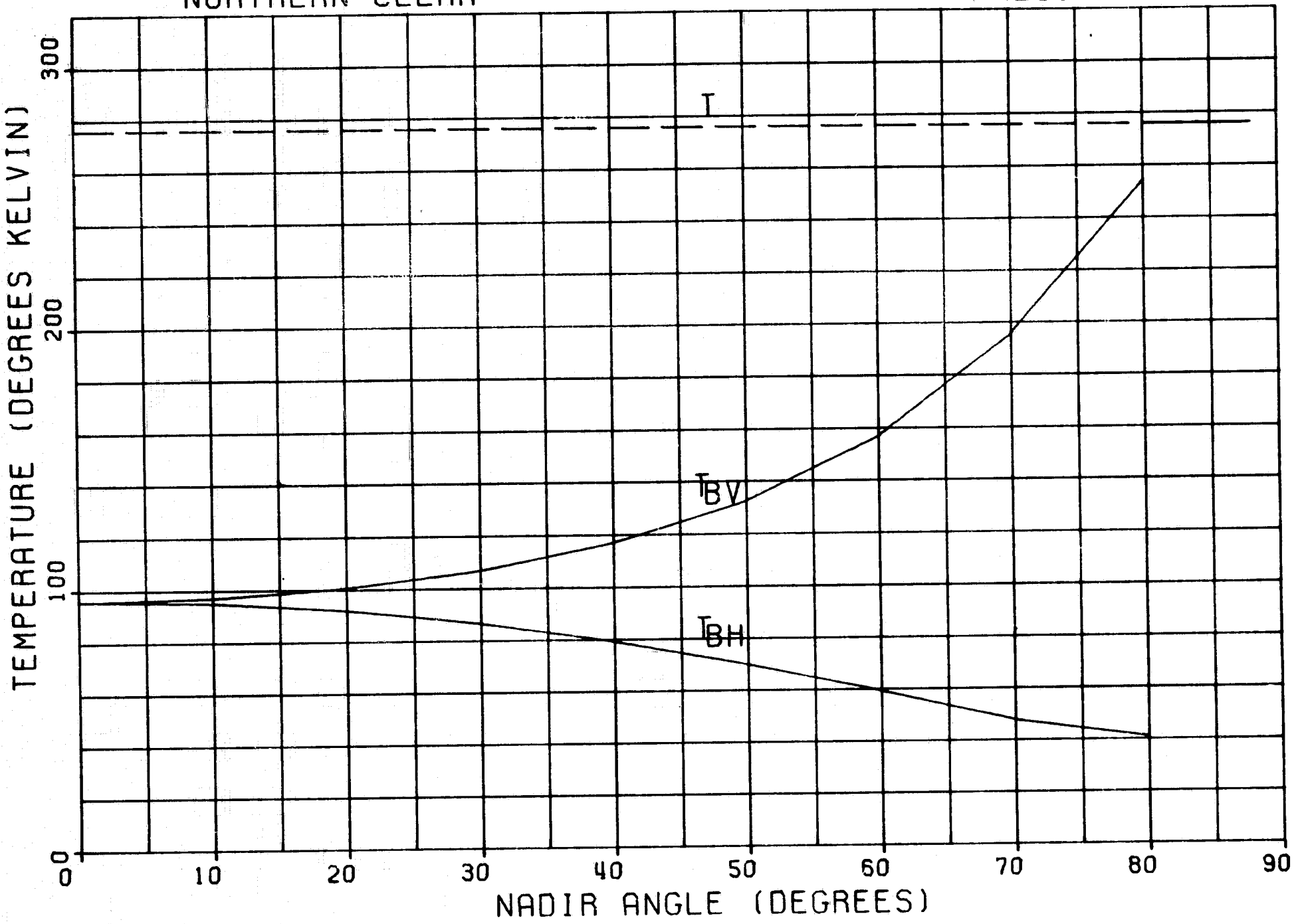
FREQ. 0.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN CLEAR

FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

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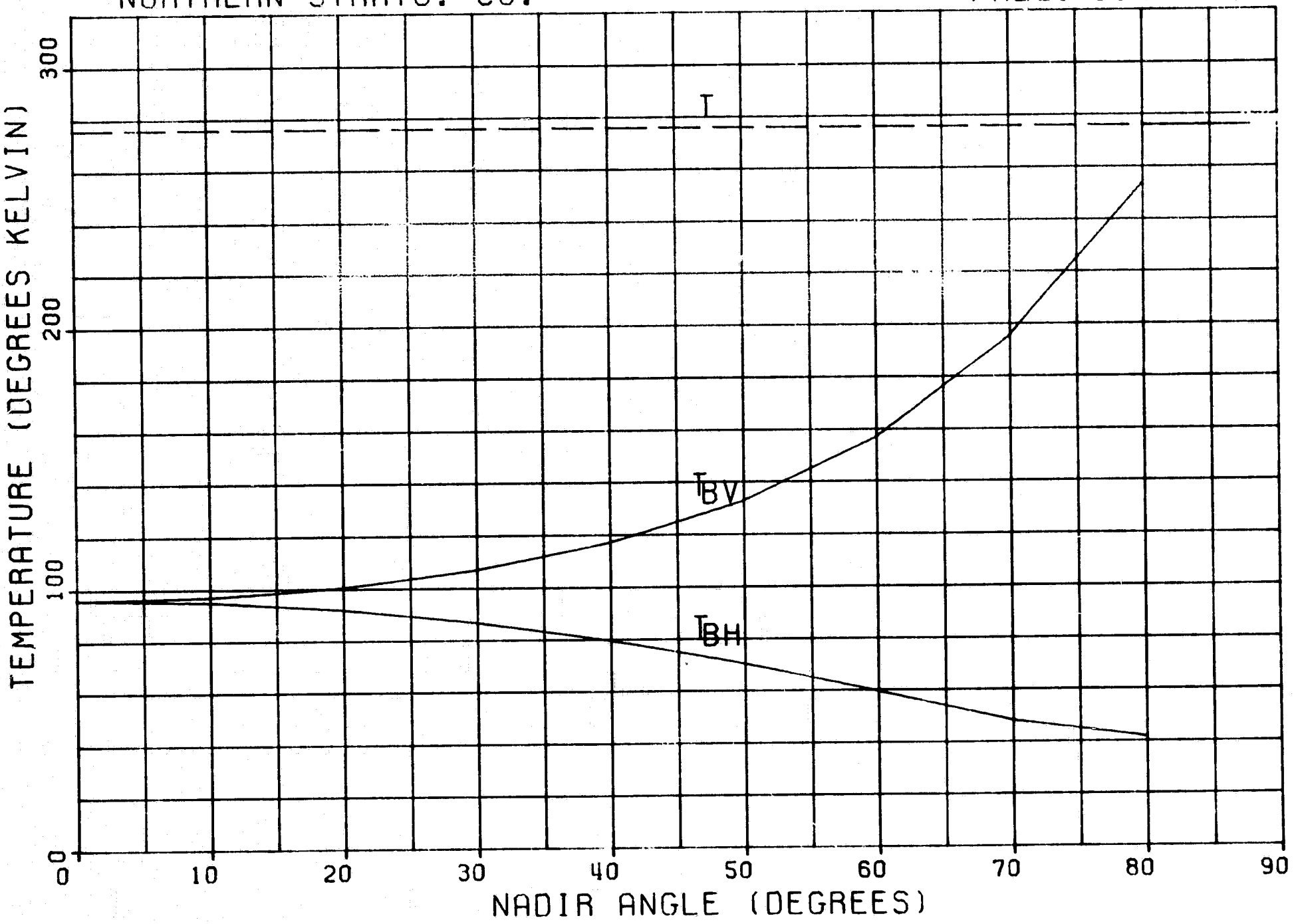
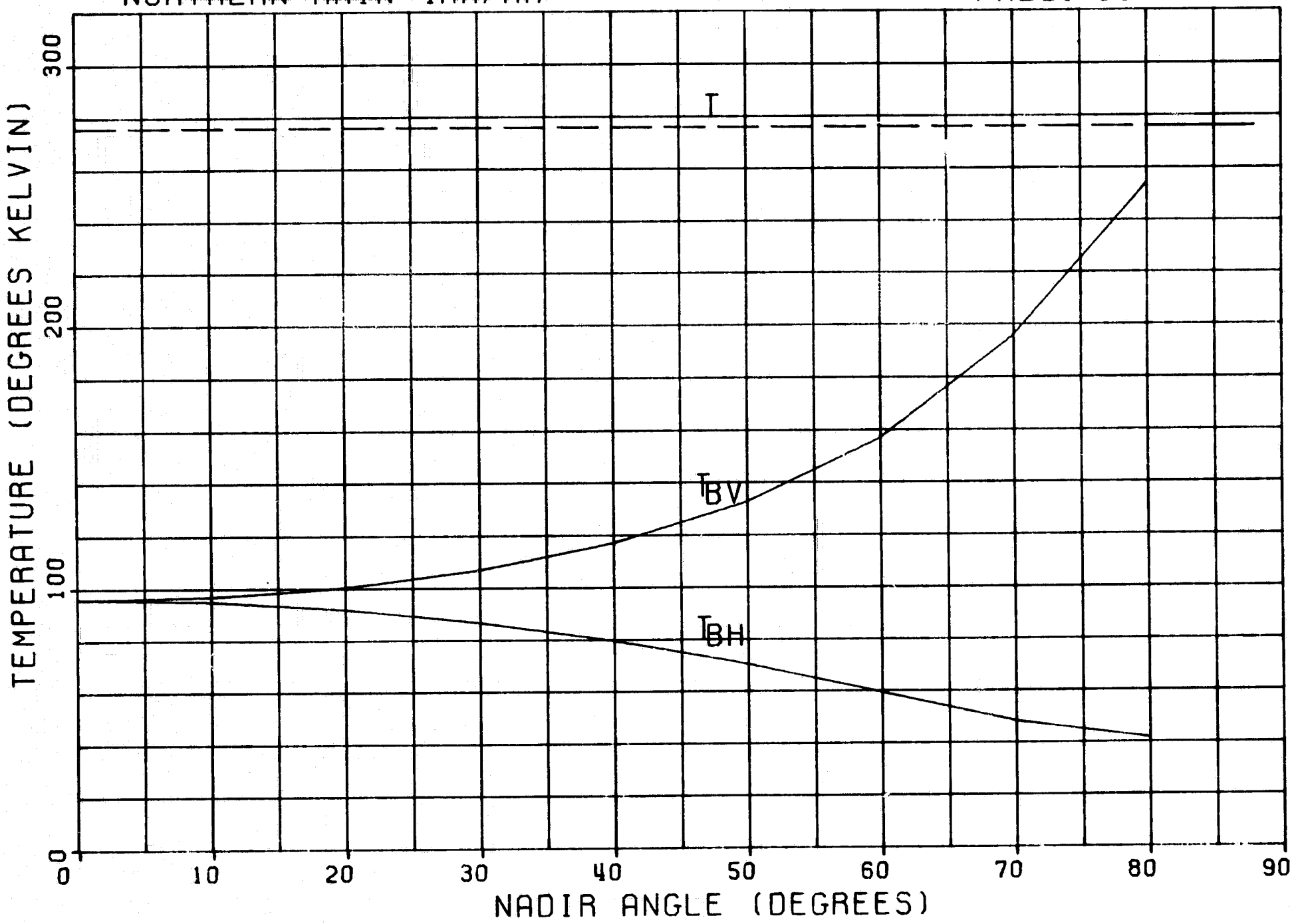
FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 4MM/HR

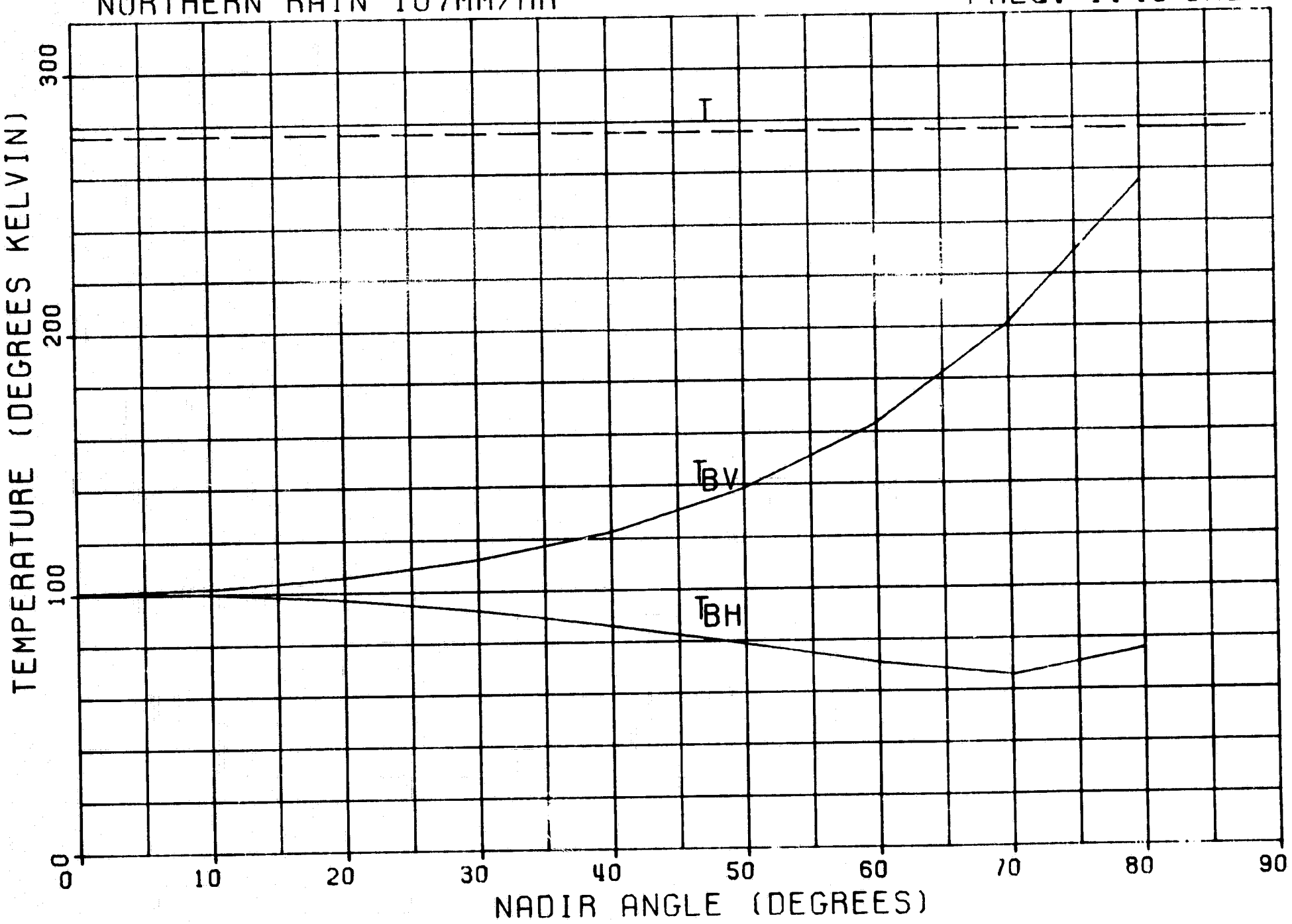
FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

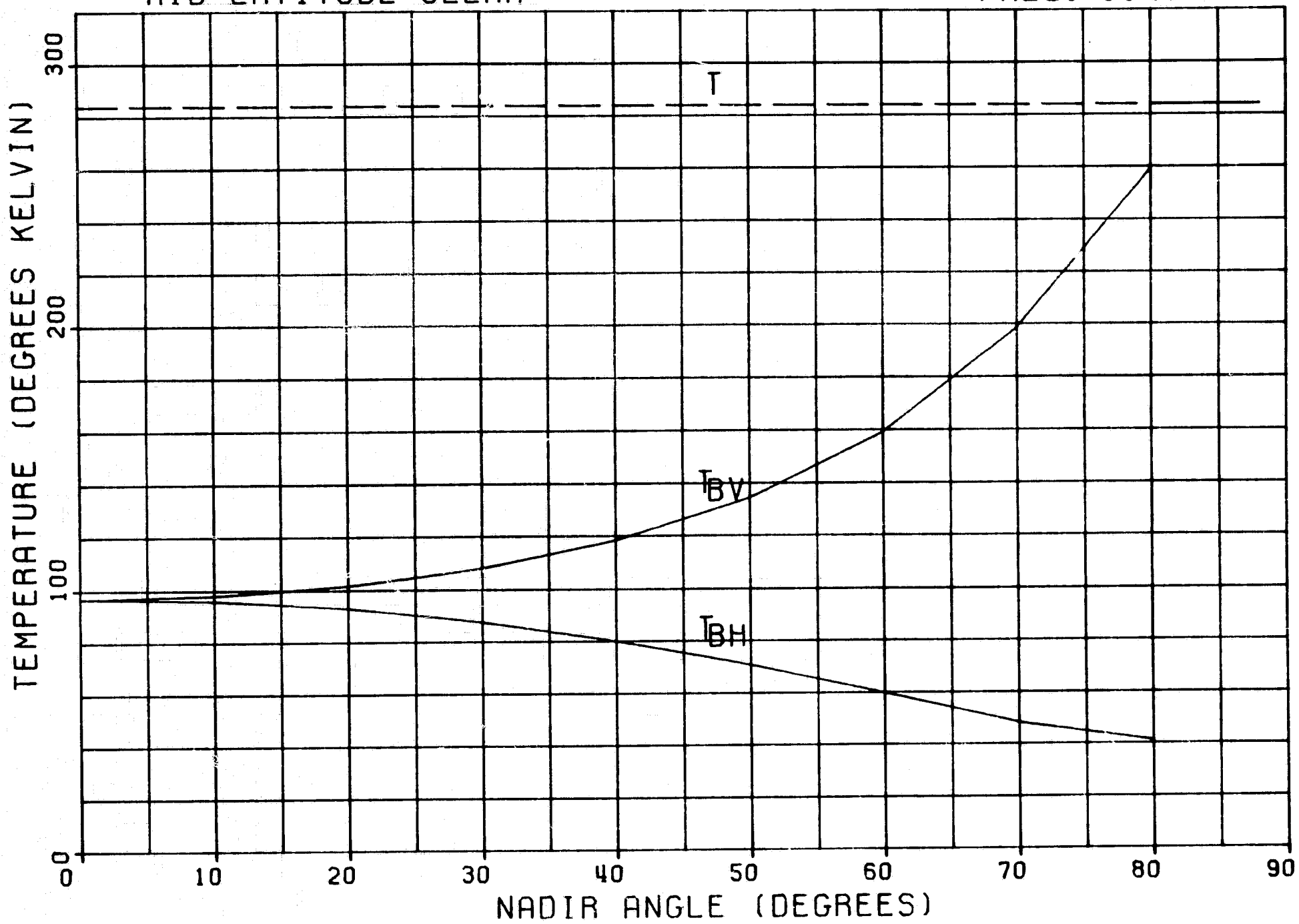
NORTHERN RAIN 107MM/HR

FREQ. 1.40 GHZ



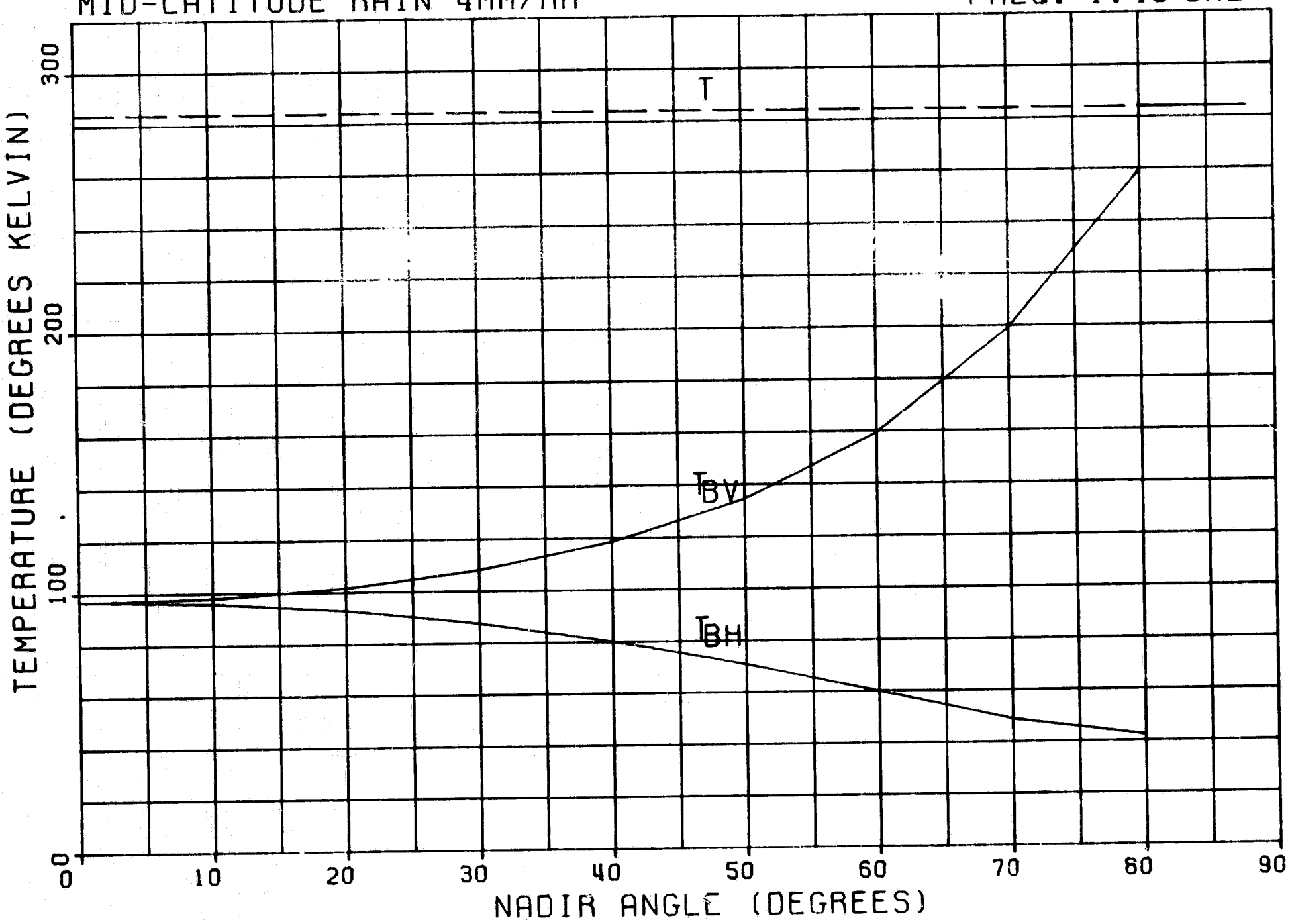
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE CLEAR FREQ. 1.40 GHZ



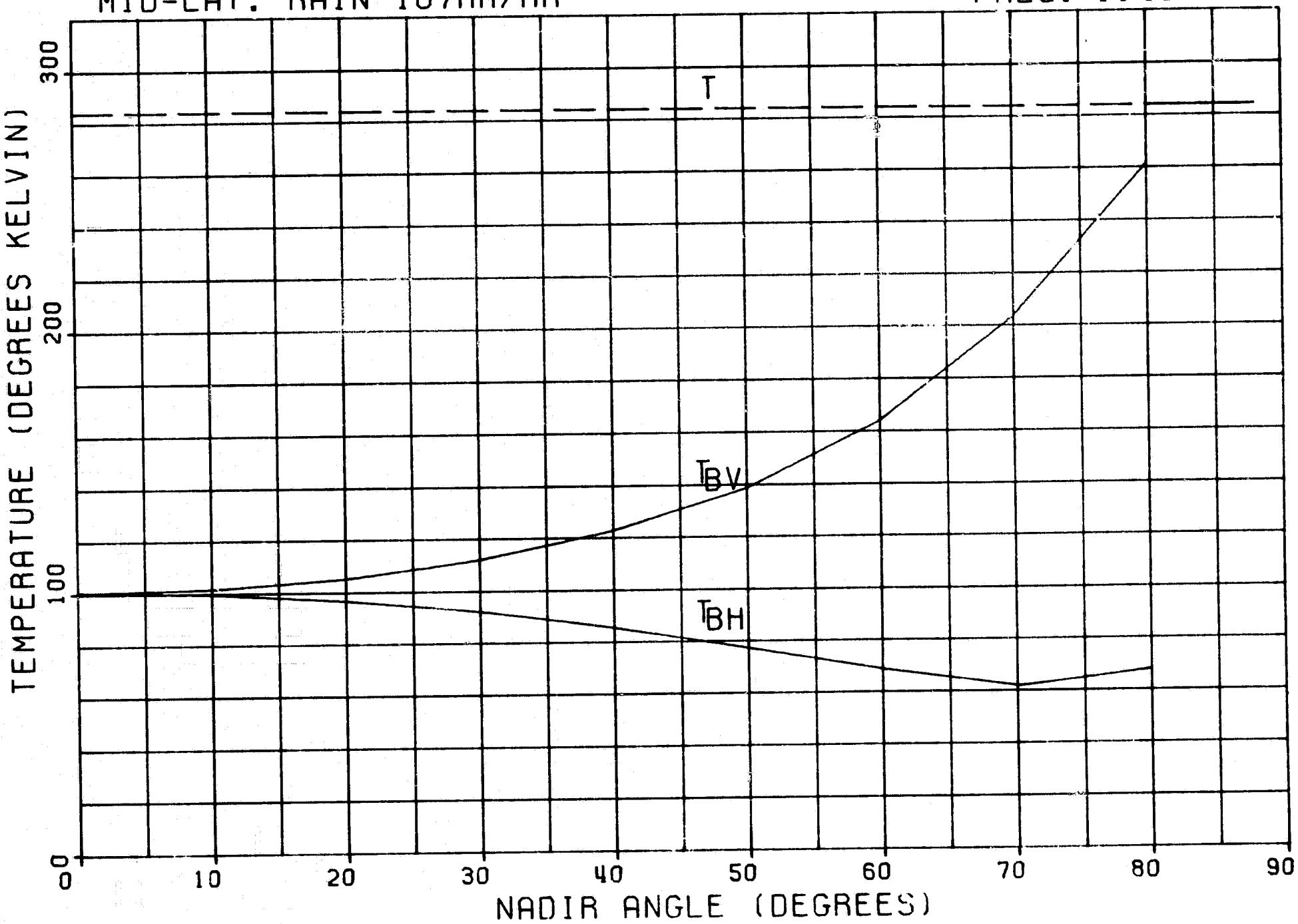
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE RAIN 4MM/HR FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

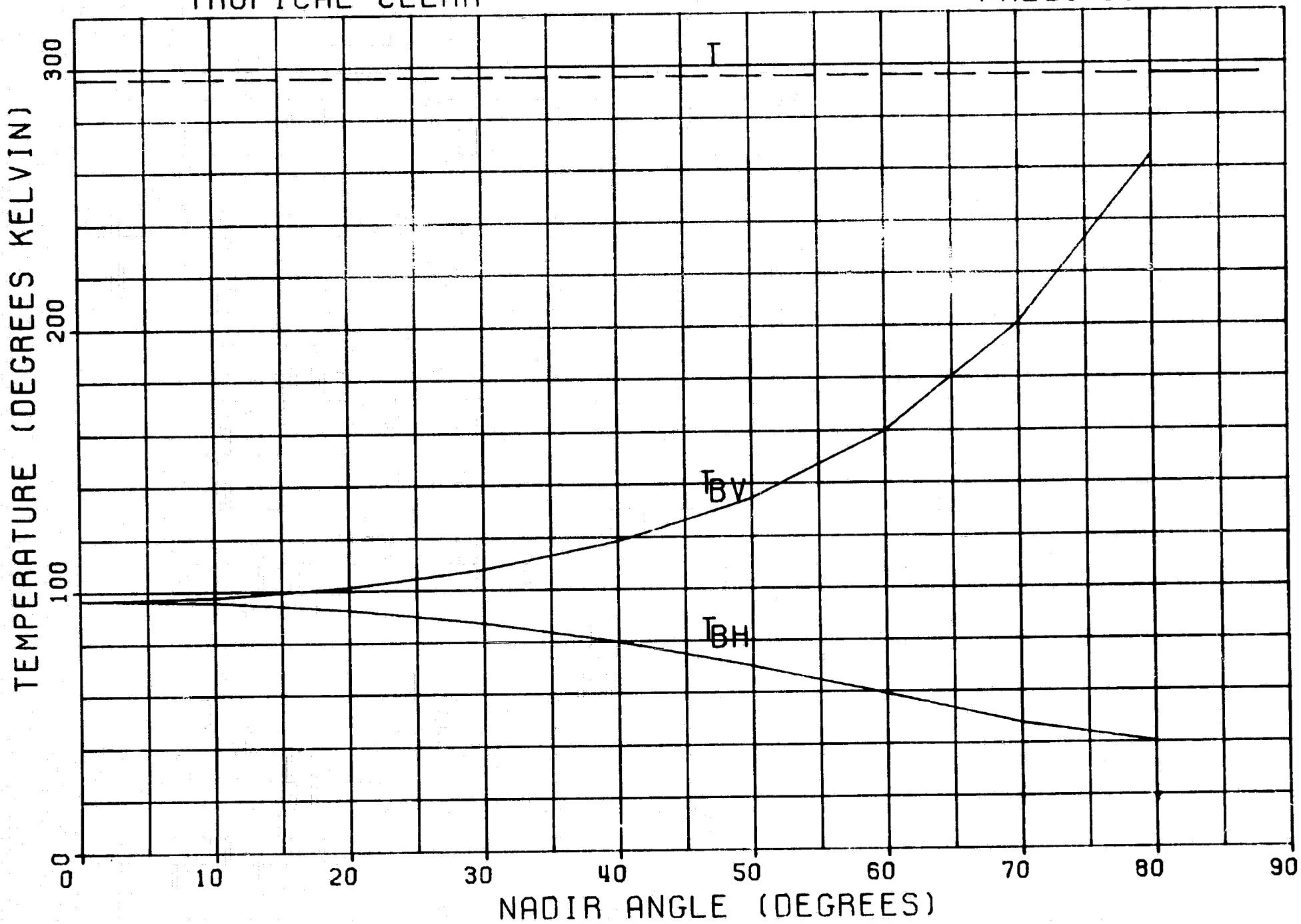
MID-LAT. RAIN 107MM/HR FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL CLEAR

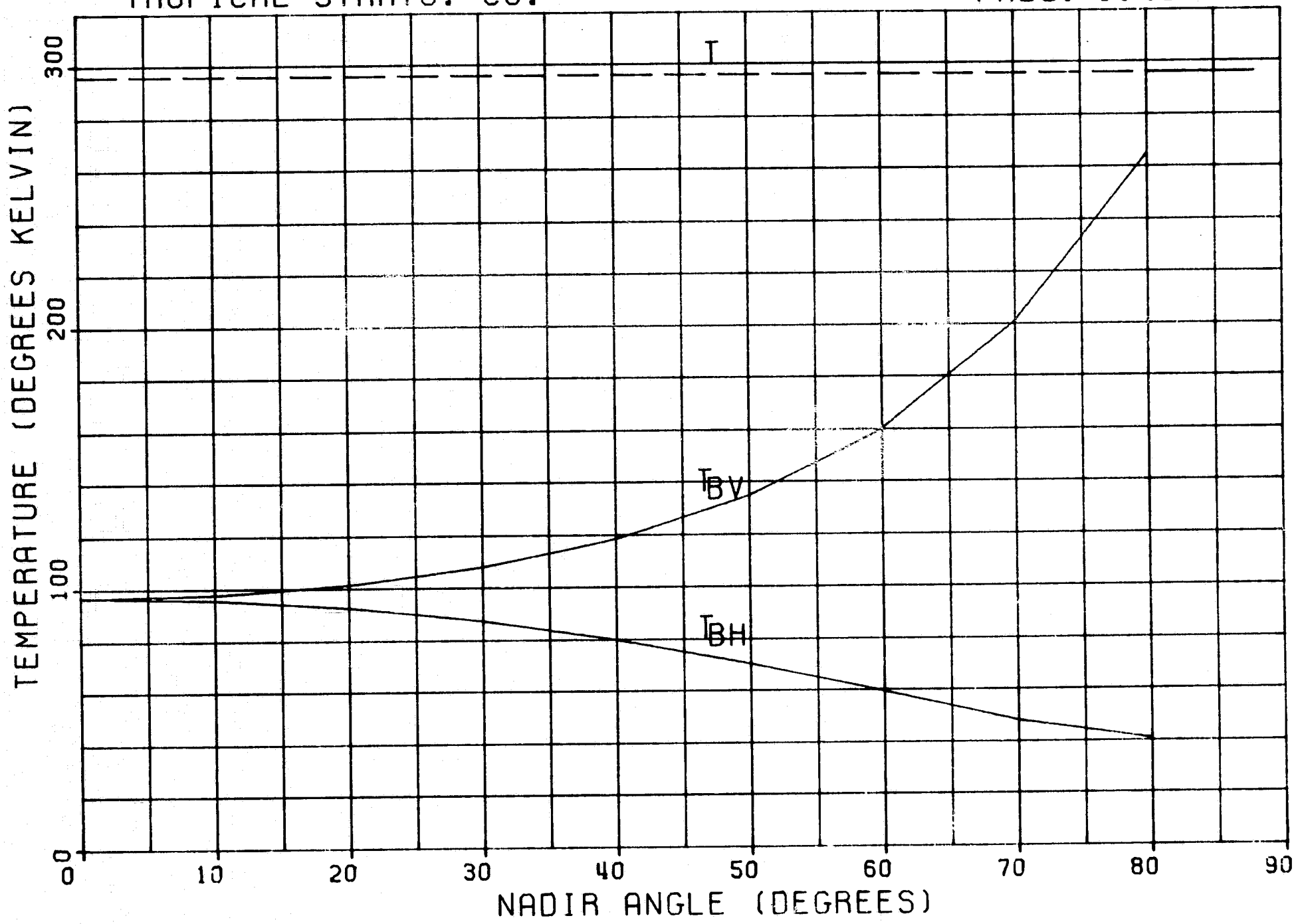
FREQ. 1.40 GHZ

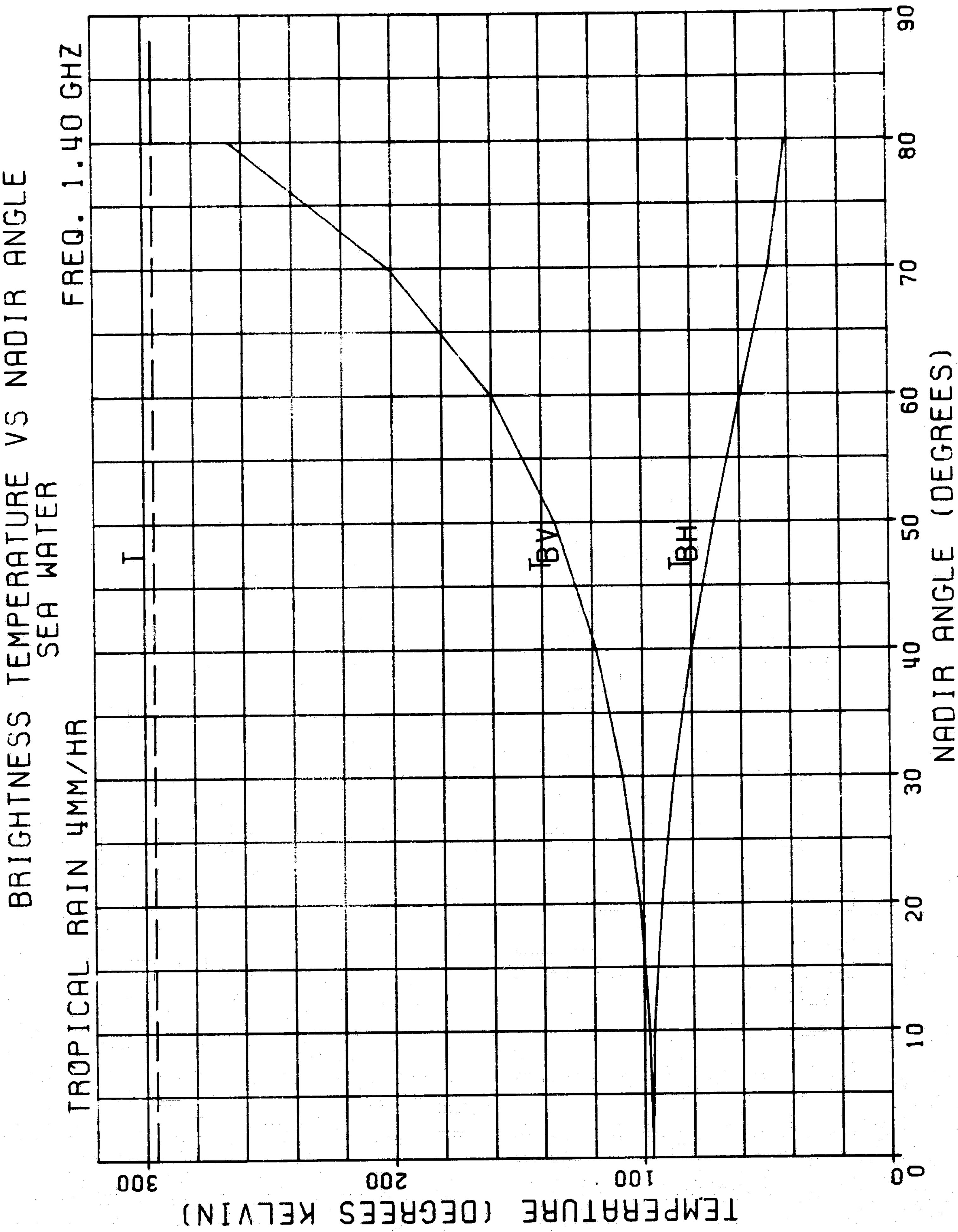


BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL STRATO. CU.

FREQ. 1.40 GHZ



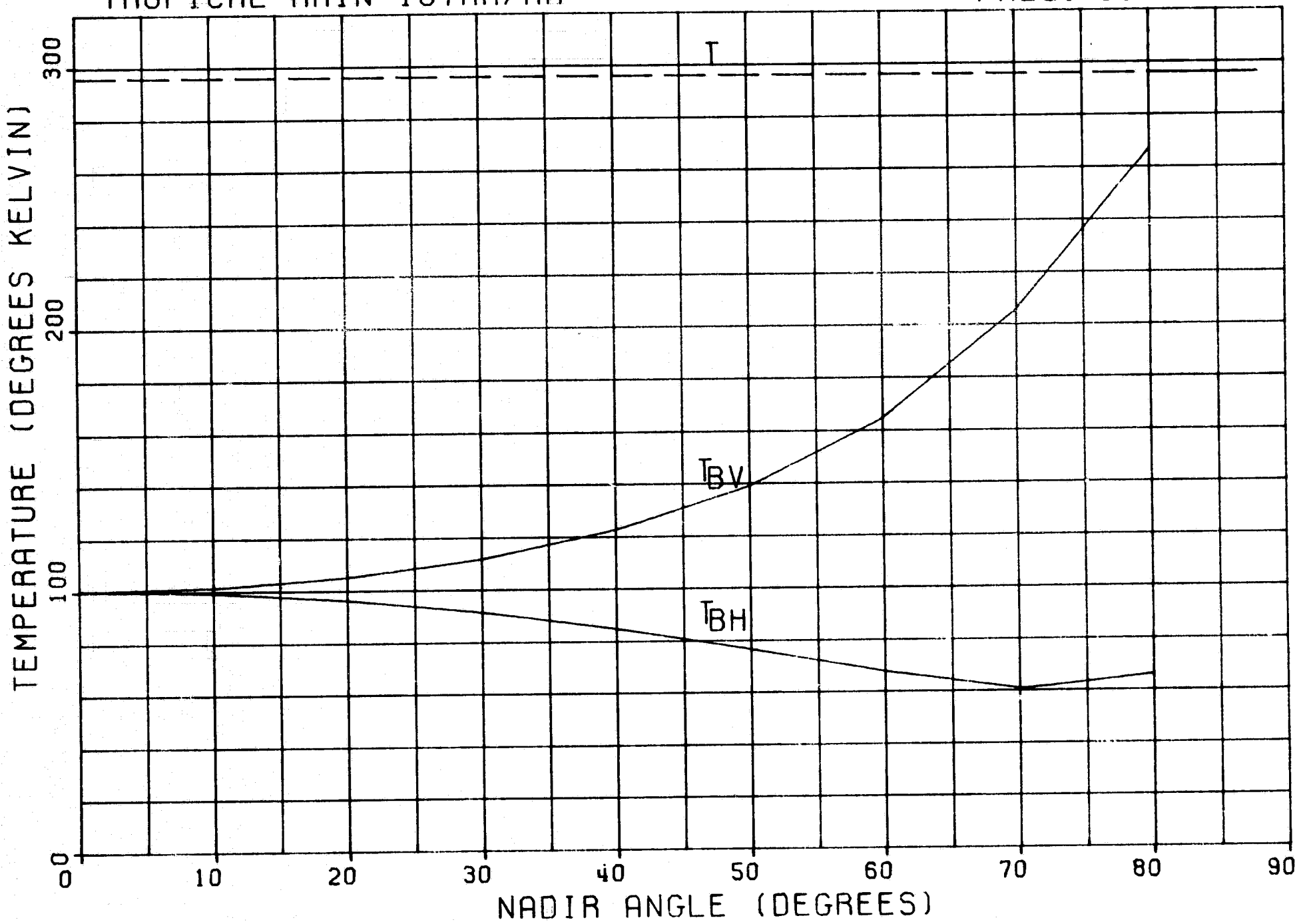


BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER
TROPICAL RAIN 4MM/HR
FREQ. 1.40 GHZ
T
TBV
TBH
NADIR ANGLE (DEGREES)
TEMPERATURE (DEGREES KELVIN)
0
10
20
30
40
50
60
70
80
90
100
200
300

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR

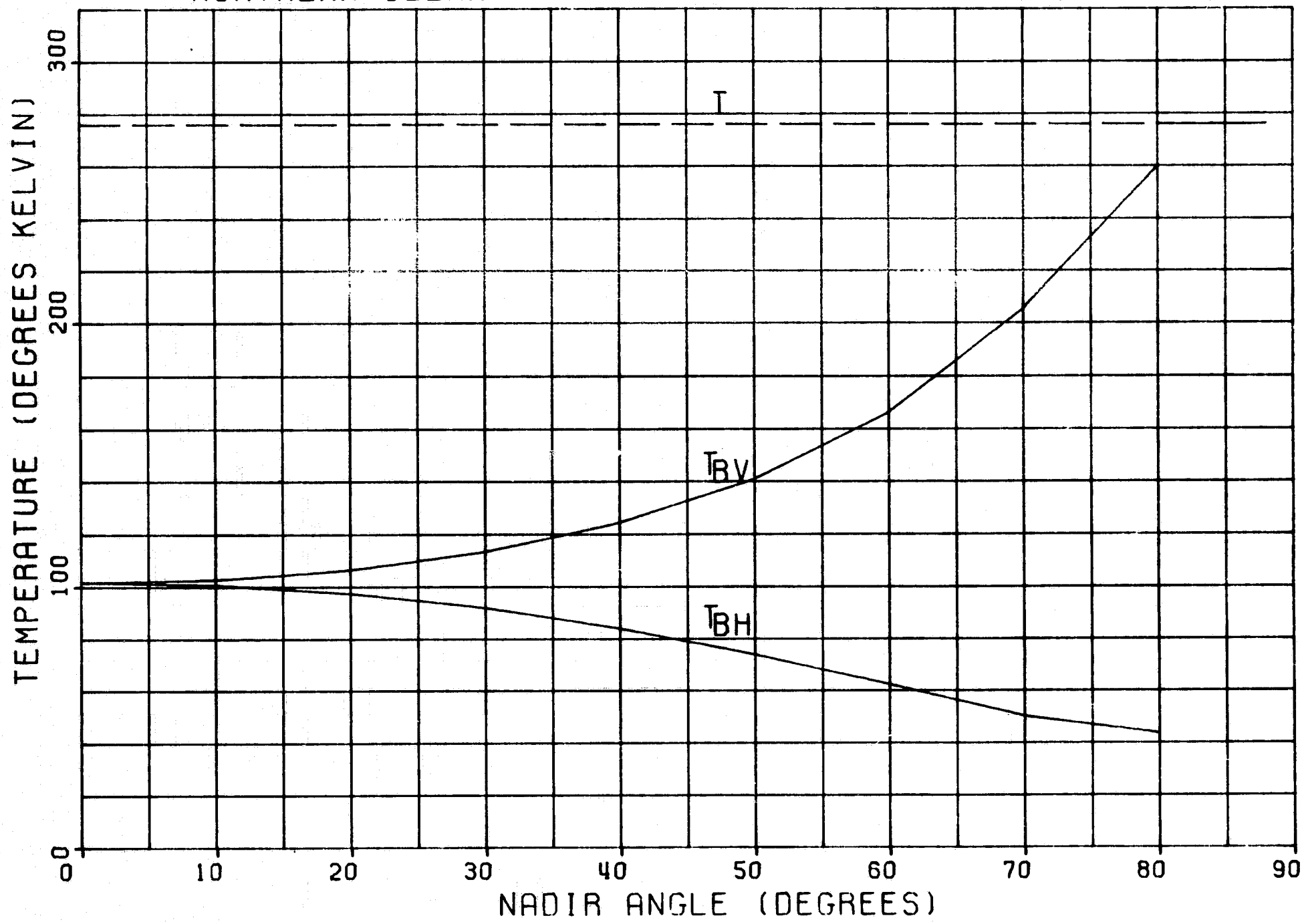
FREQ. 1.40 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN CLEAR

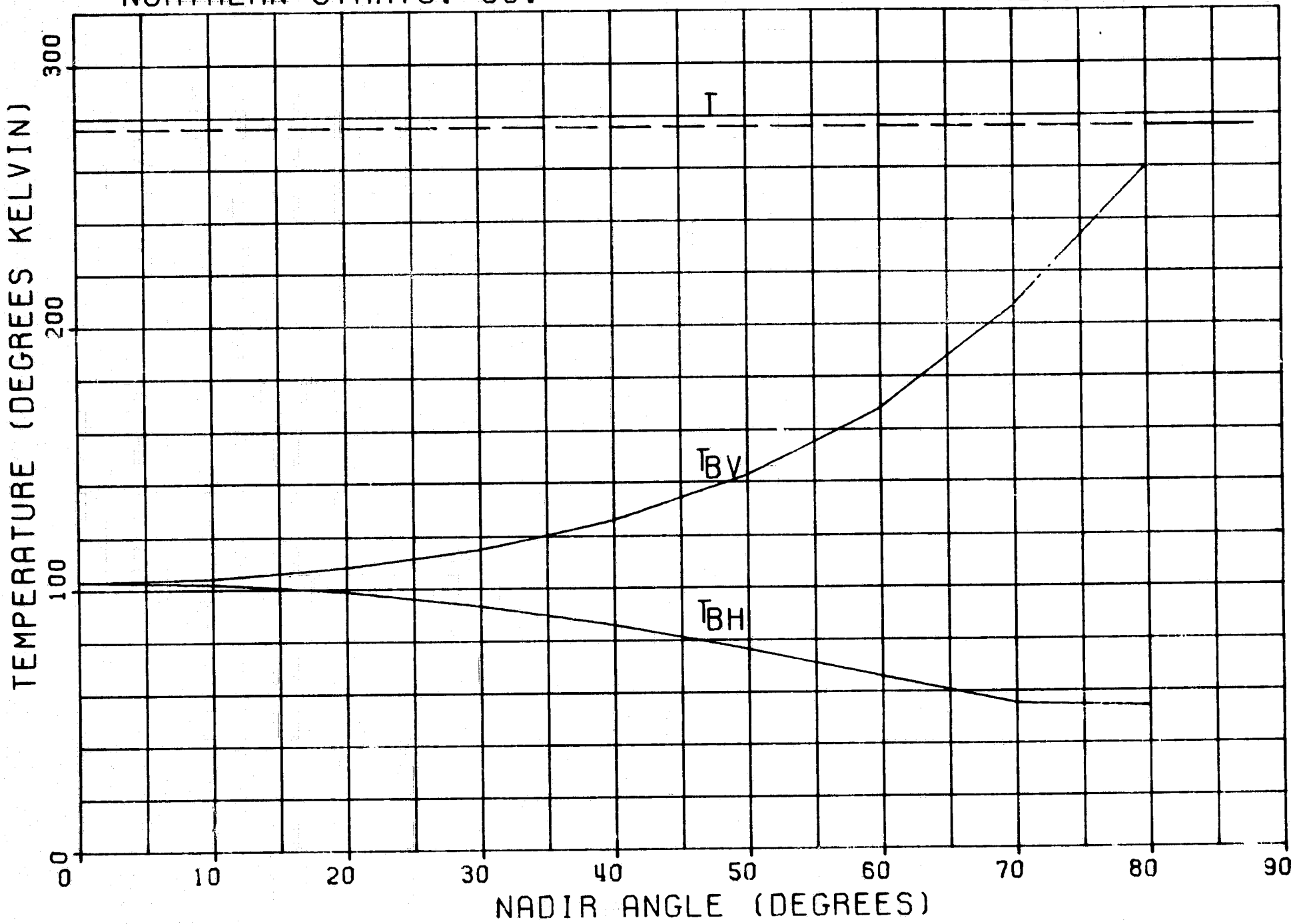
FREQ. 5.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN STRATO. CU.

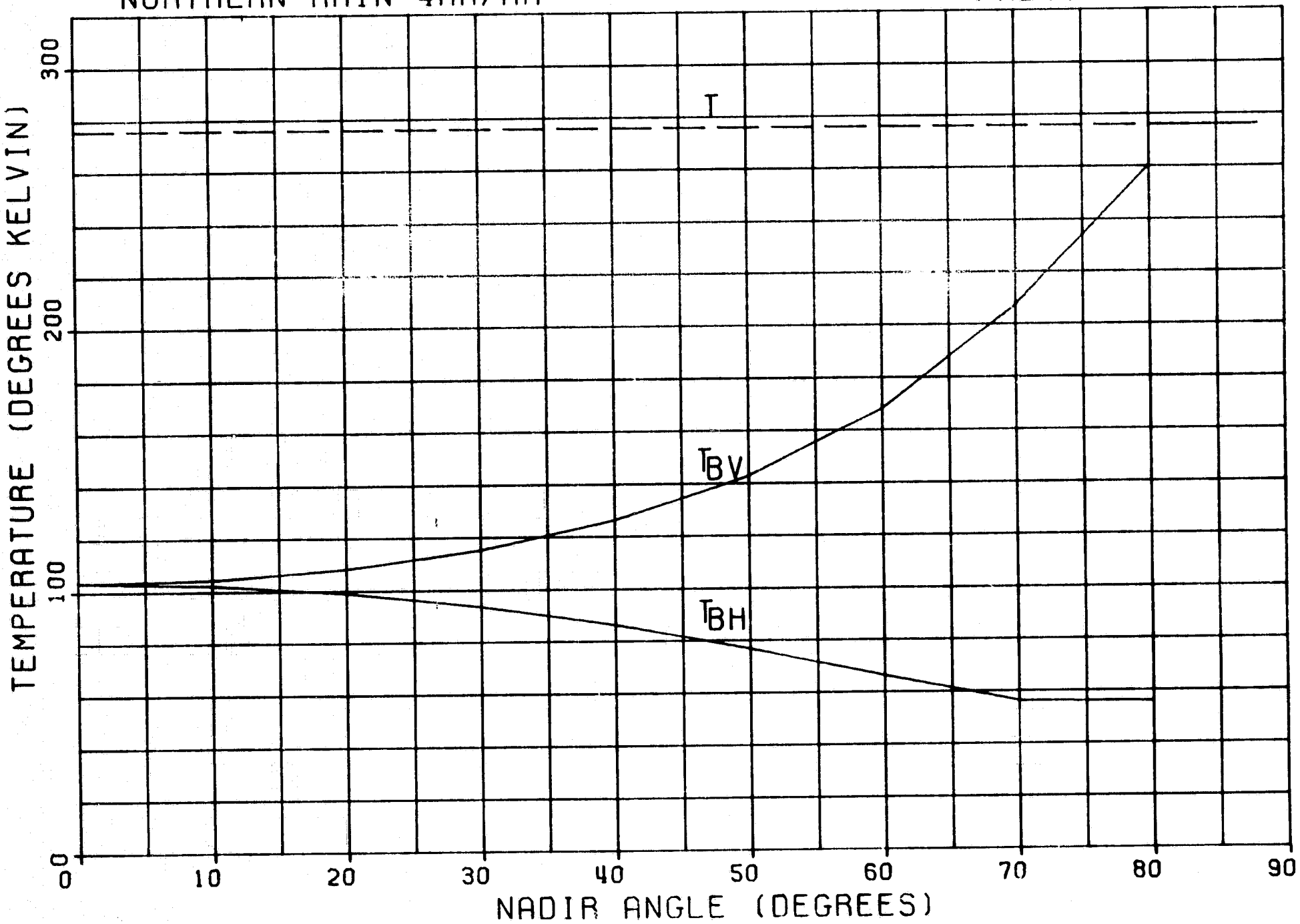
FREQ. 5.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 4MM/HR

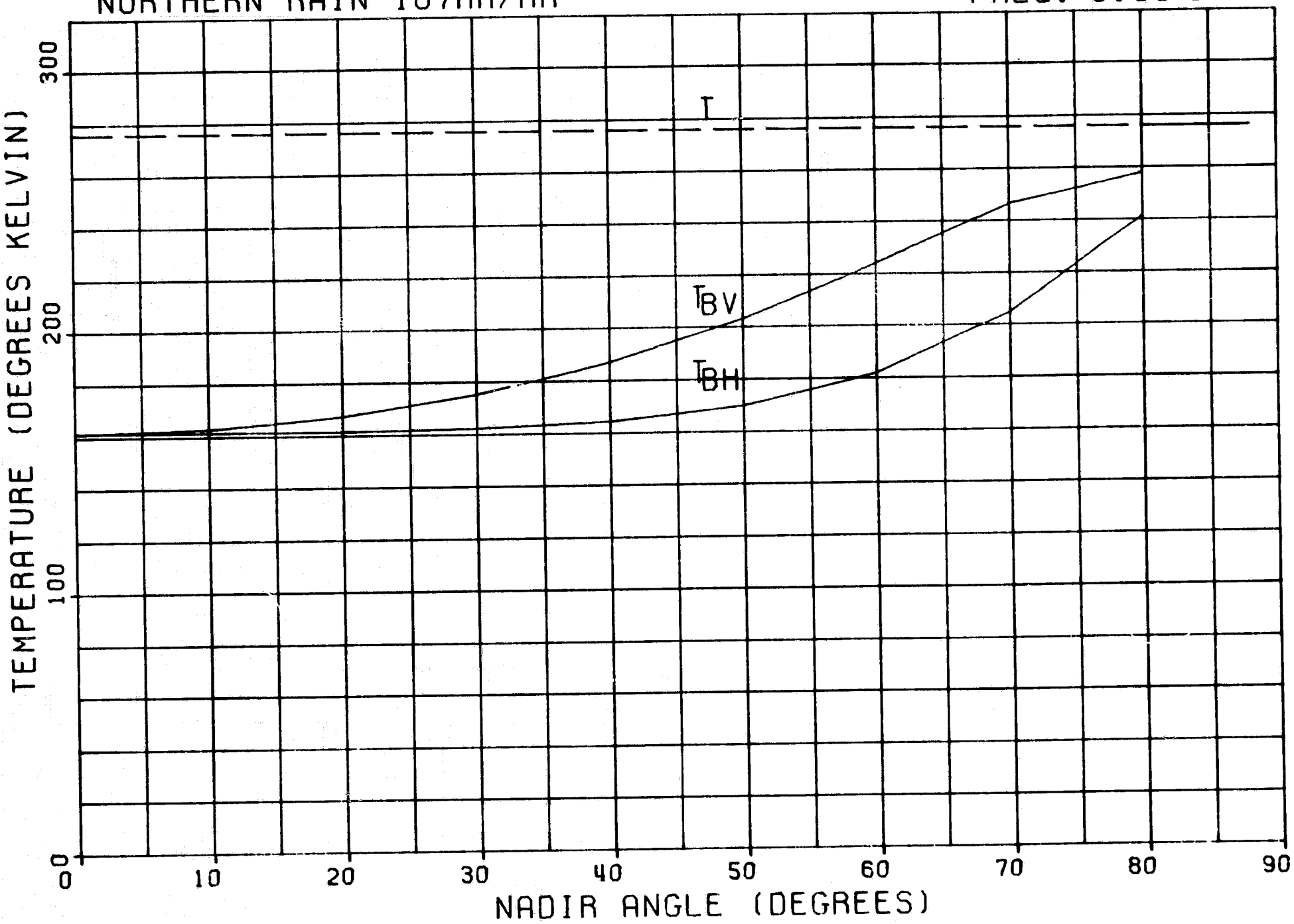
FREQ. 5.50 GHZ

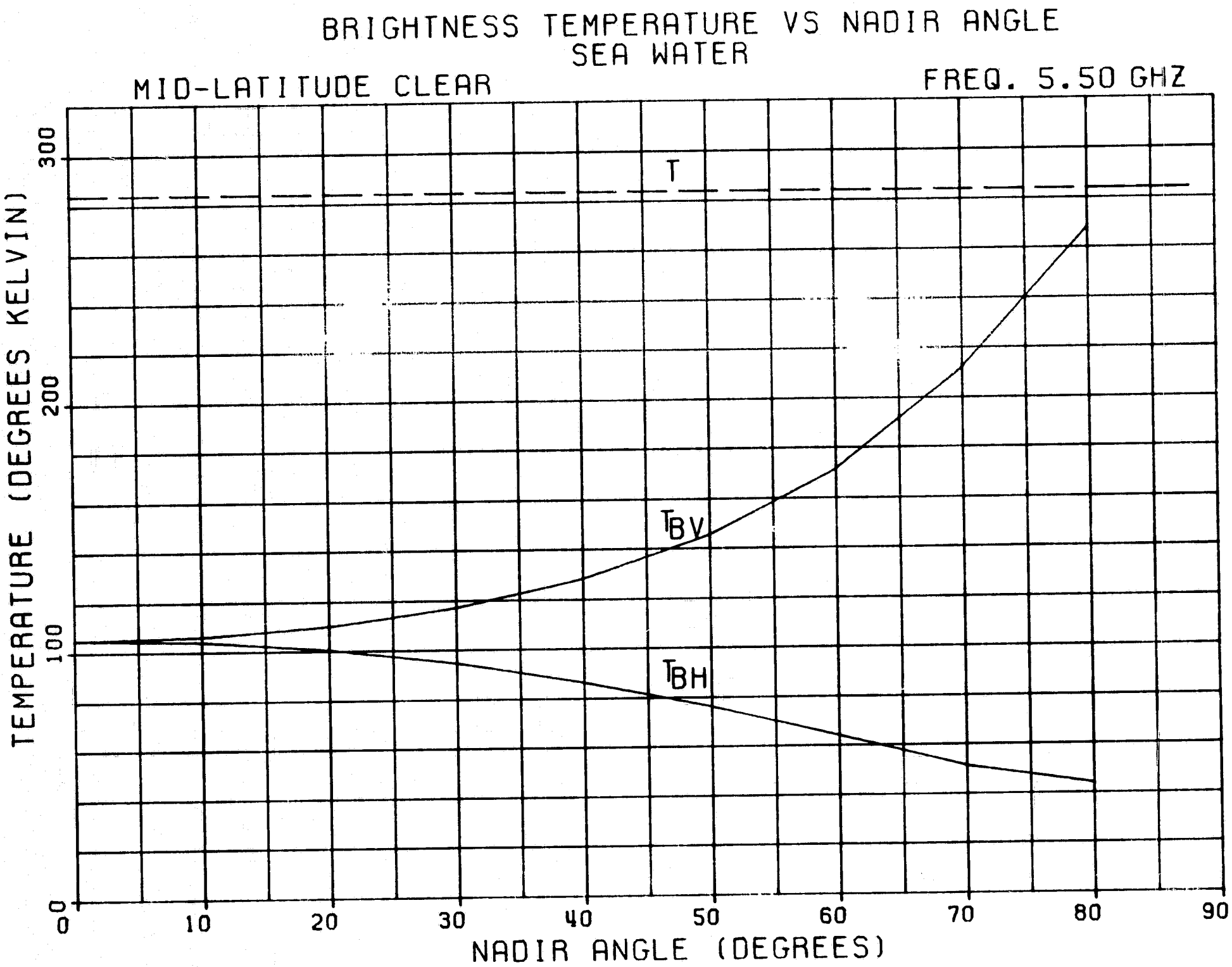


BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 107MM/HR

FREQ. 5.50 GHZ

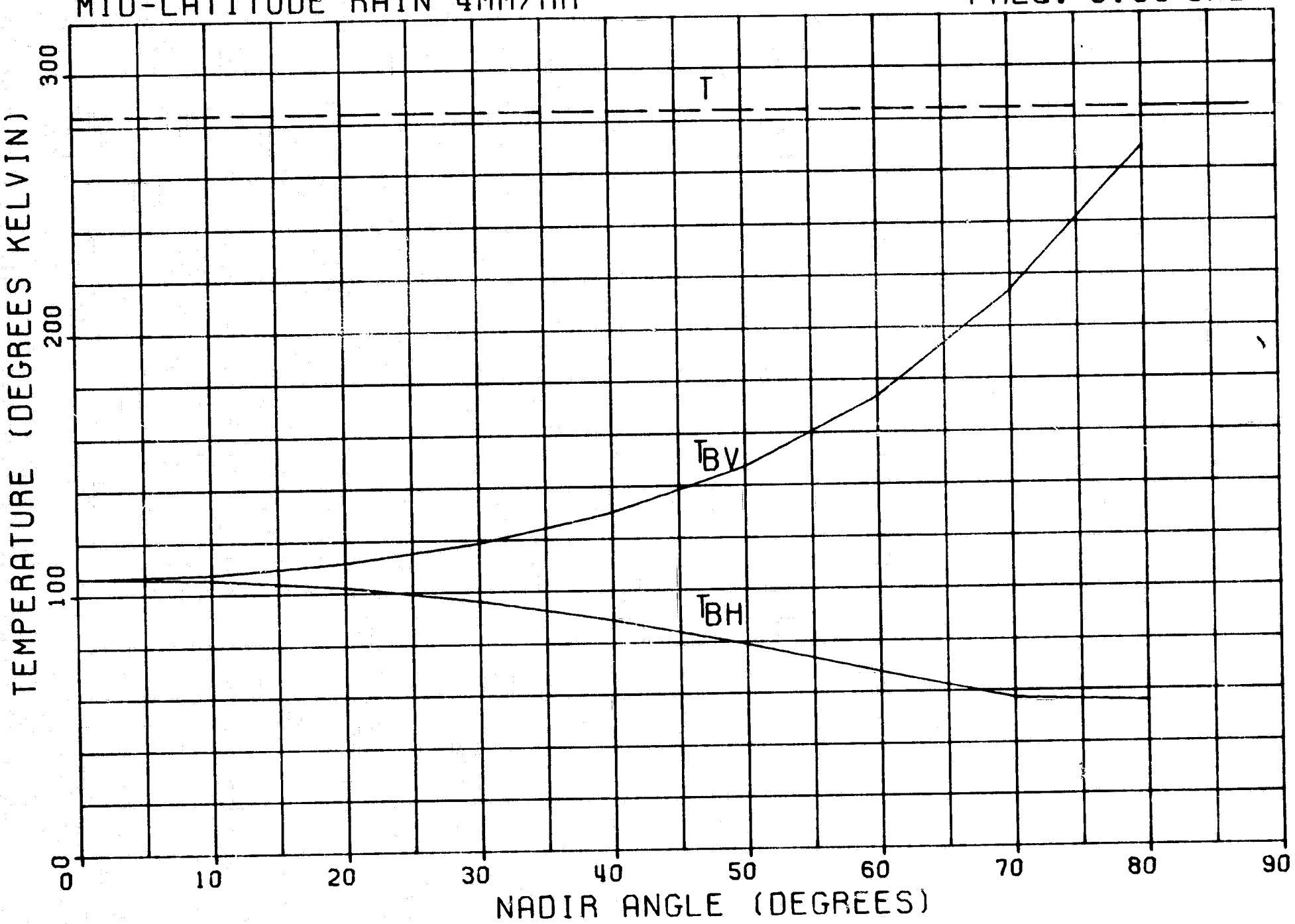


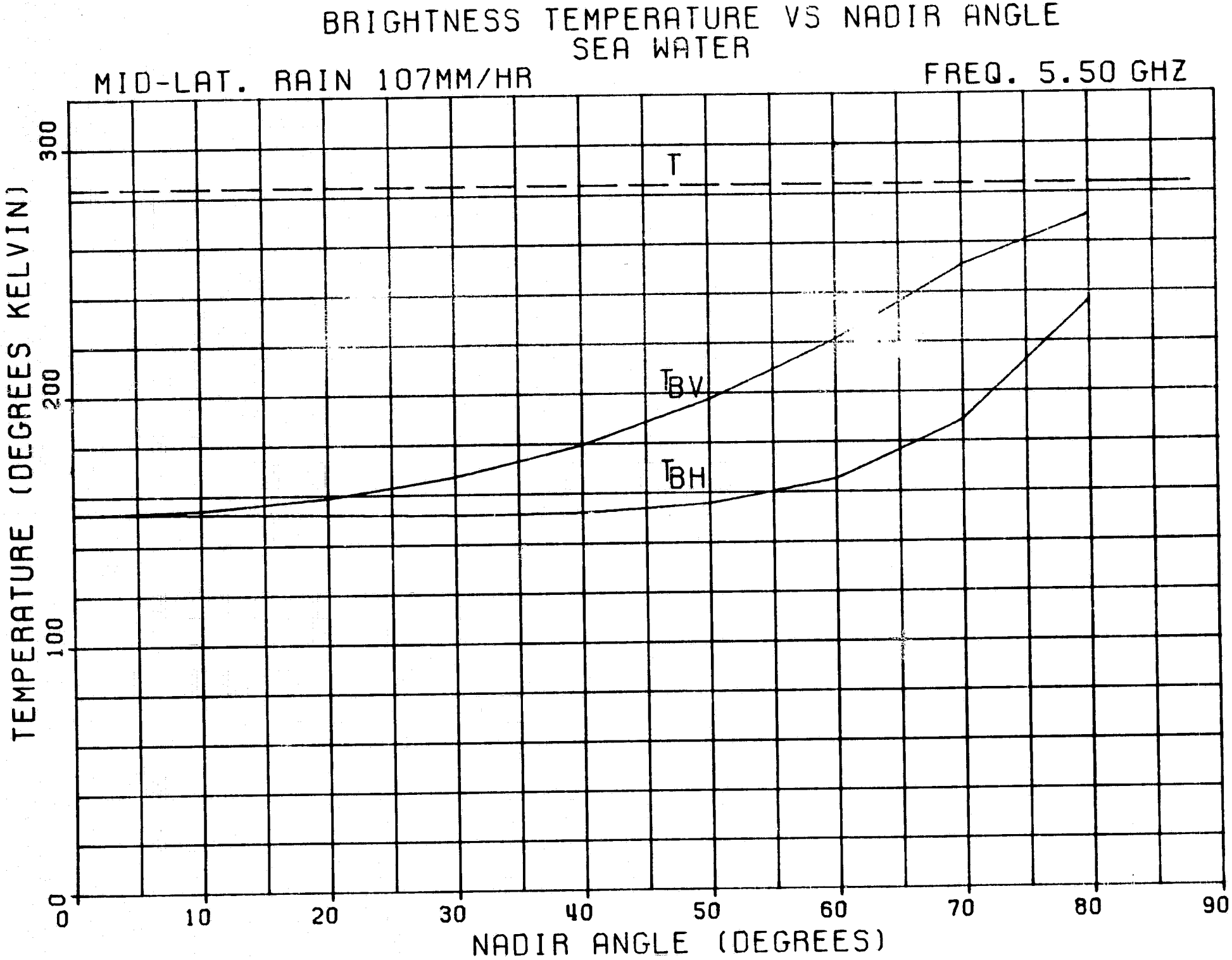

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER
MID-LATITUDE CLEAR
FREQ. 5.50 GHZ
T
T_{BV}
T_{BH}
TEMPERATURE (DEGREES KELVIN)
300
200
100
0
0
10
20
30
40
50
60
70
80
90
NADIR ANGLE (DEGREES)

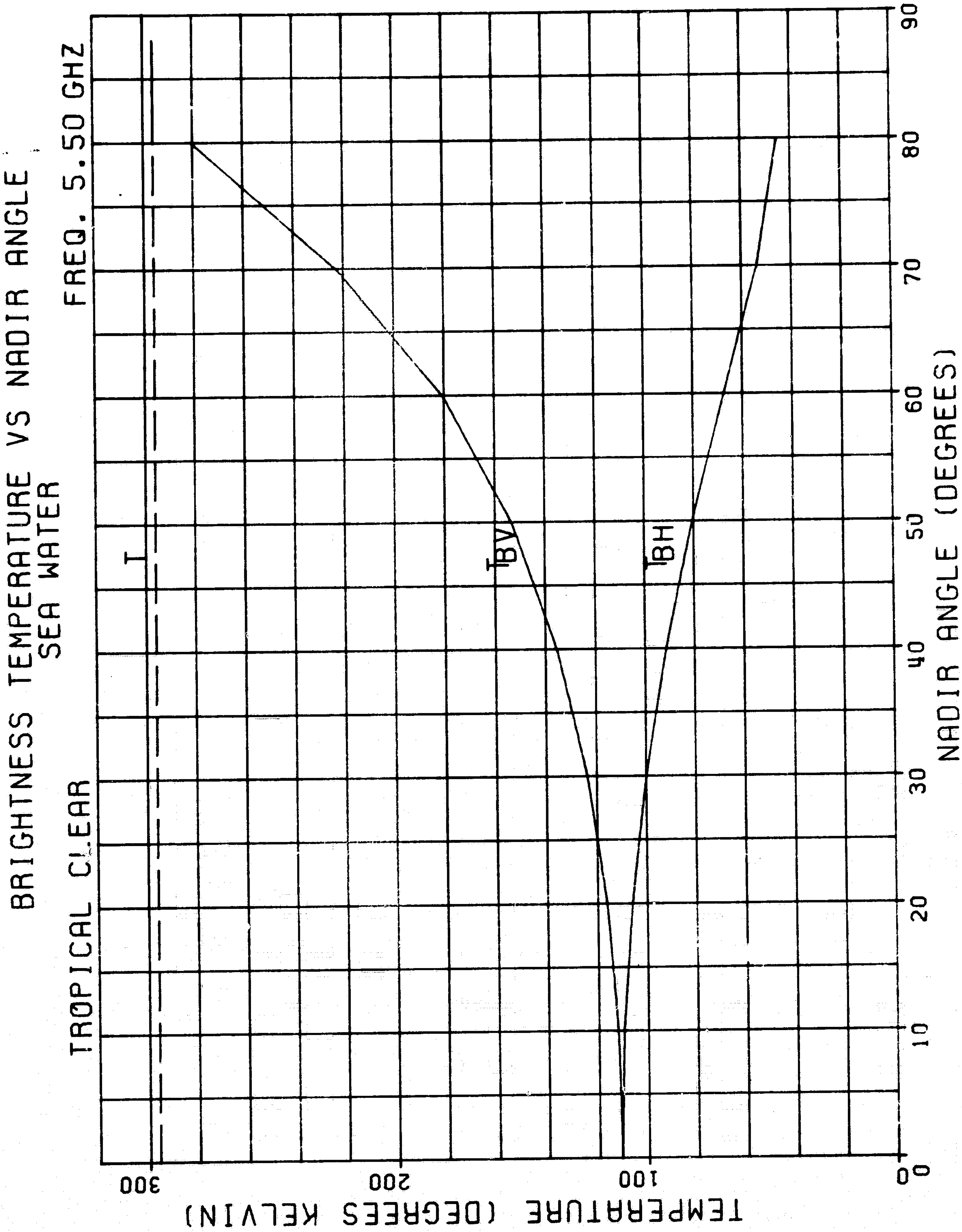
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE RAIN 4MM/HR

FREQ. 5.50 GHZ




BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER
MID-LAT. RAIN 107MM/HR
FREQ. 5.50 GHZ
T
T_{BV}
T_{BH}
TEMPERATURE (DEGREES KELVIN)
0
100
200
300
0
10
20
30
40
50
60
70
80
90
NADIR ANGLE (DEGREES)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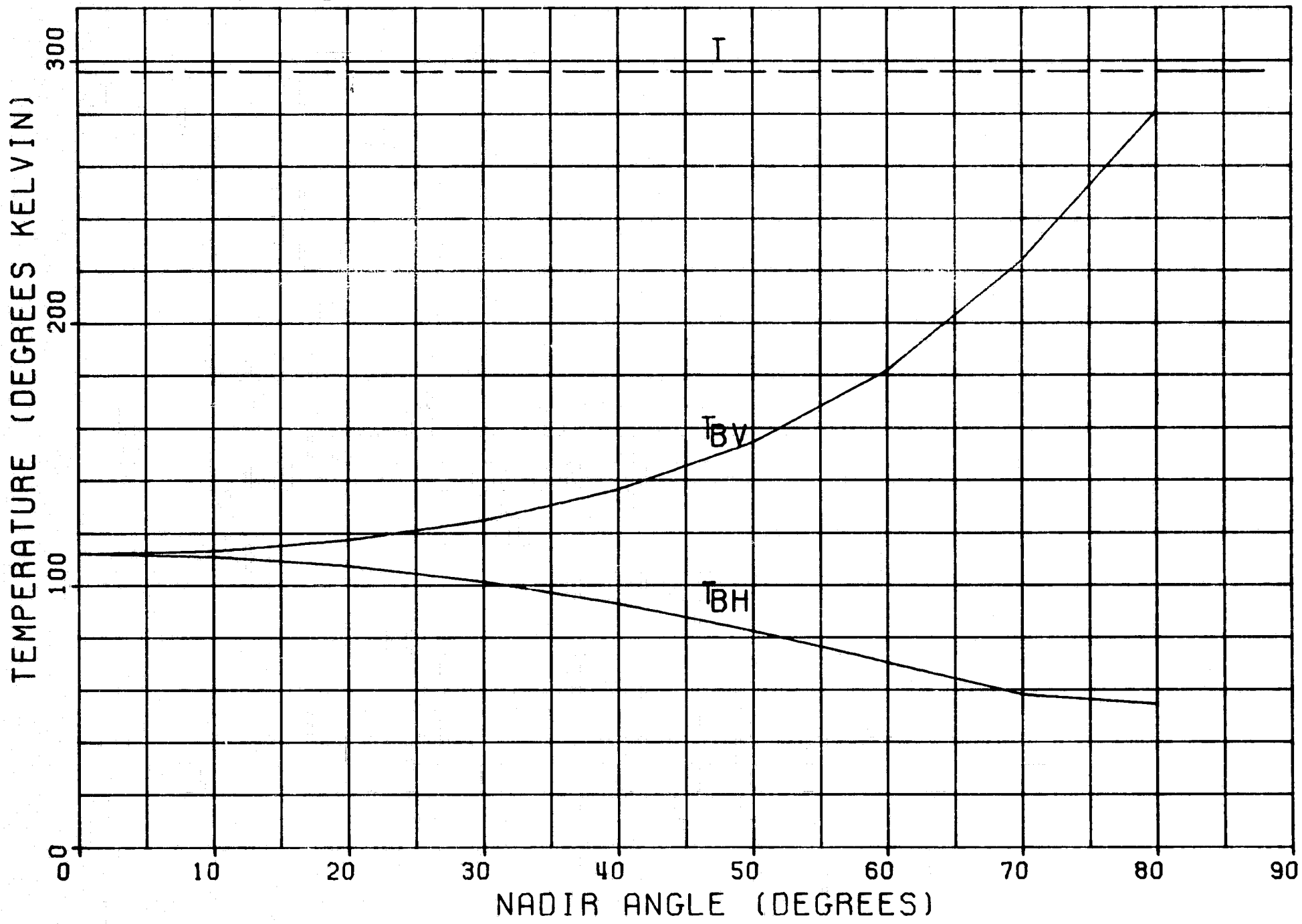
SEA WATER
TROPICAL CLEAR
FREQ. 5.50 GHZ
T
TBV
TBH
NADIR ANGLE (DEGREES)
TEMPERATURE (DEGREES KELVIN)
0
10
20
30
40
50
60
70
80
90
100
200
300

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL STRATO. CU.

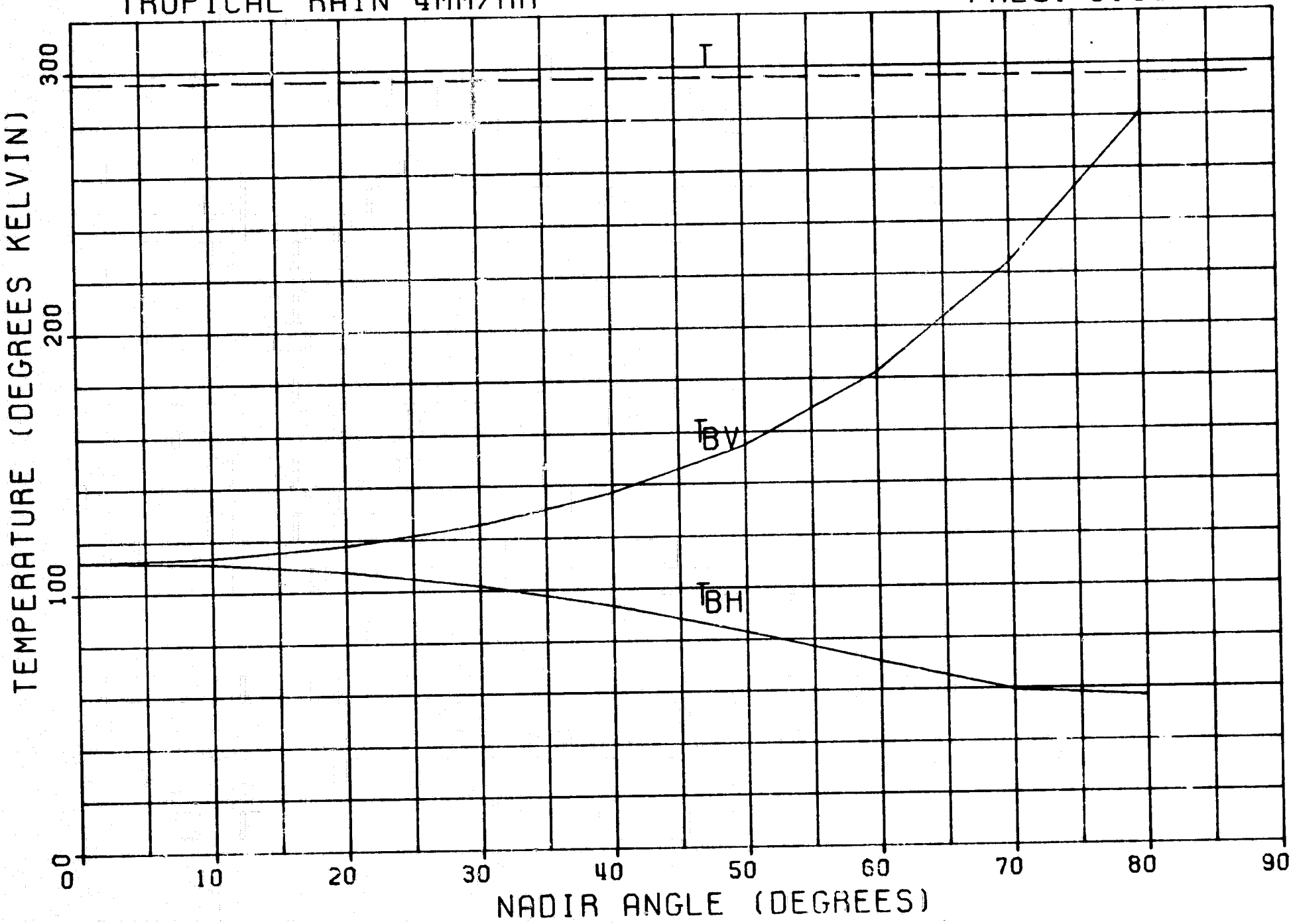
FREQ. 5.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 4MM/HR

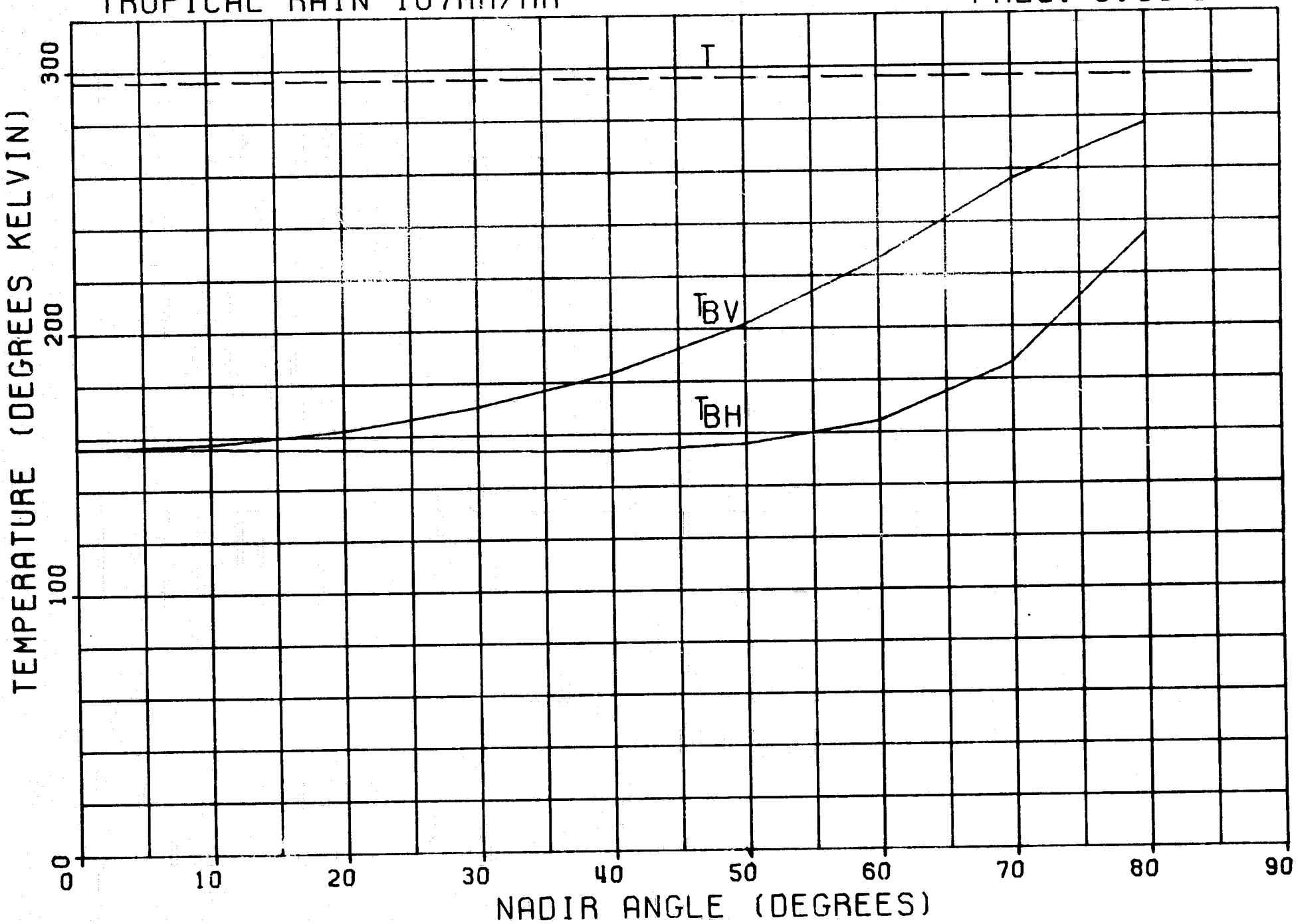
FREQ. 5.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR

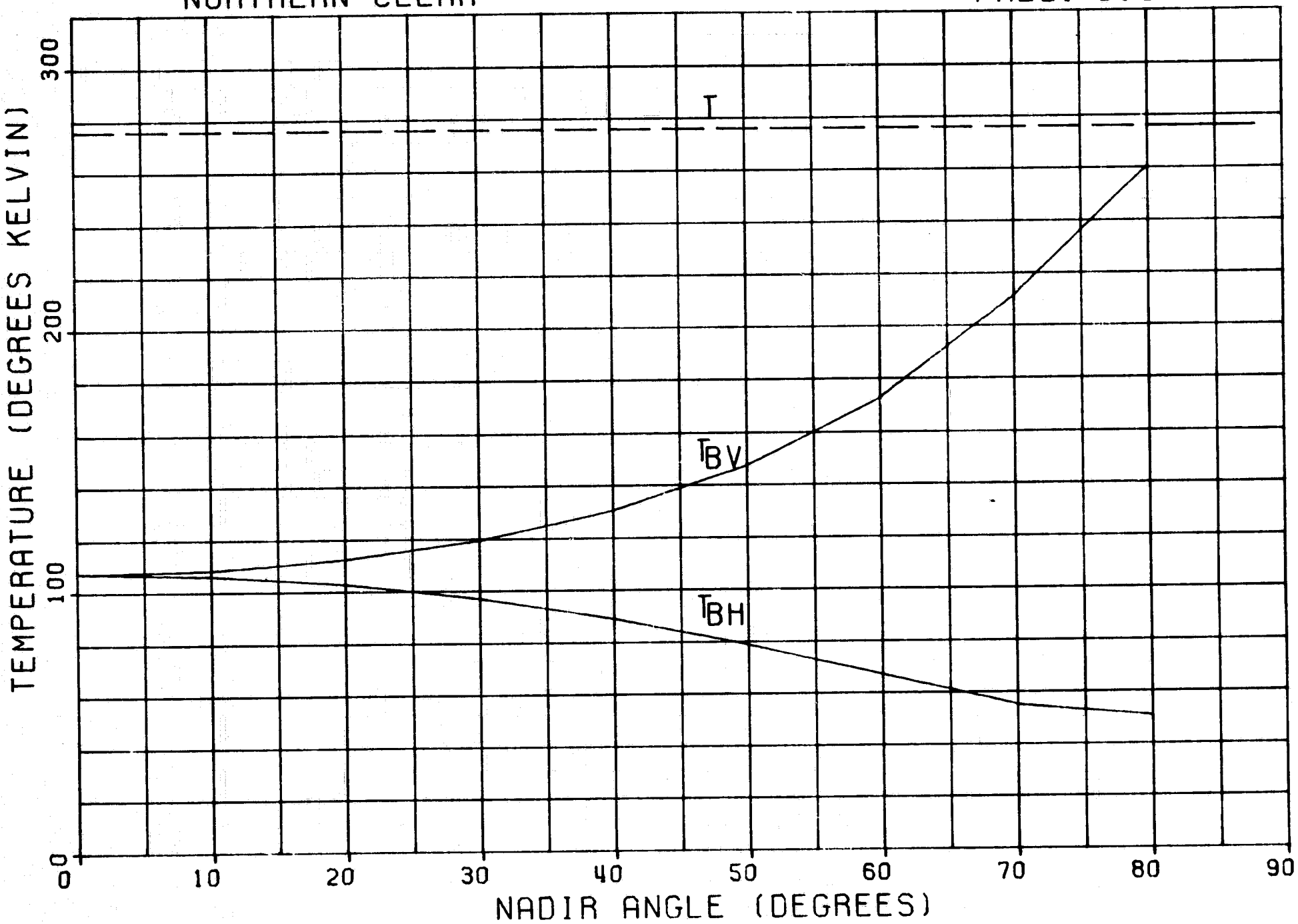
FREQ. 5.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN CLEAR

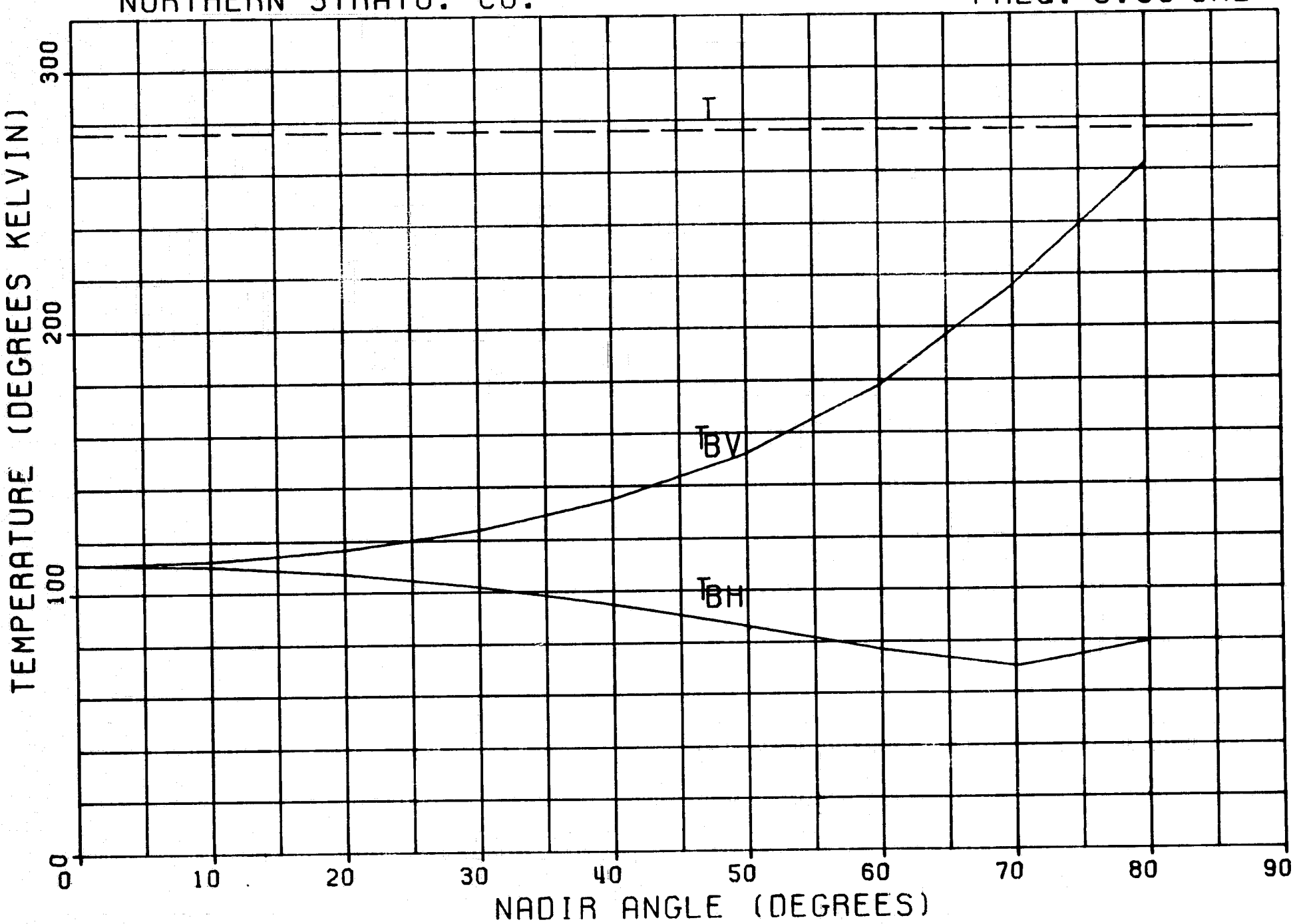
FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN STRATO. CU.

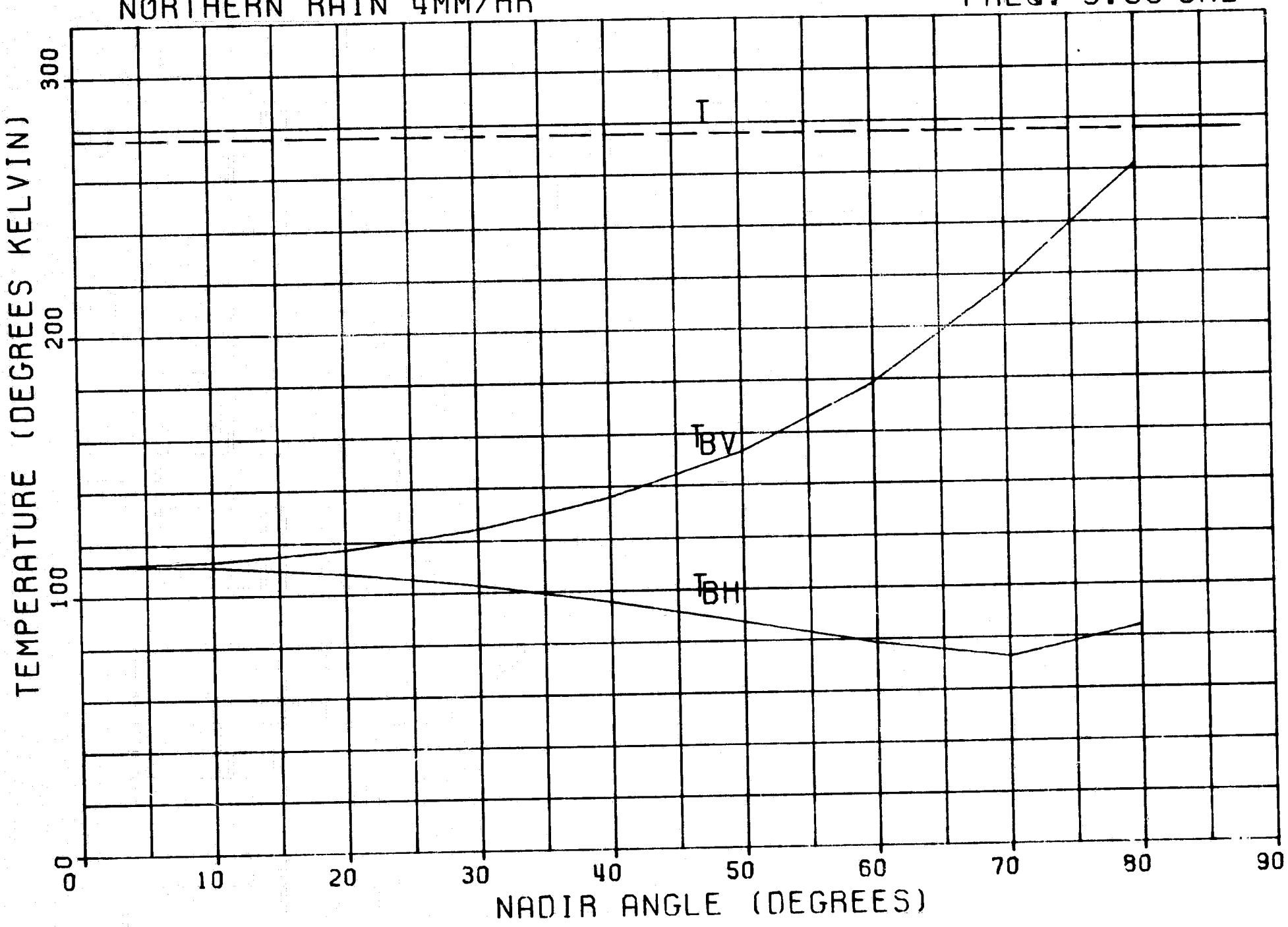
FREQ. 9.50 GHZ



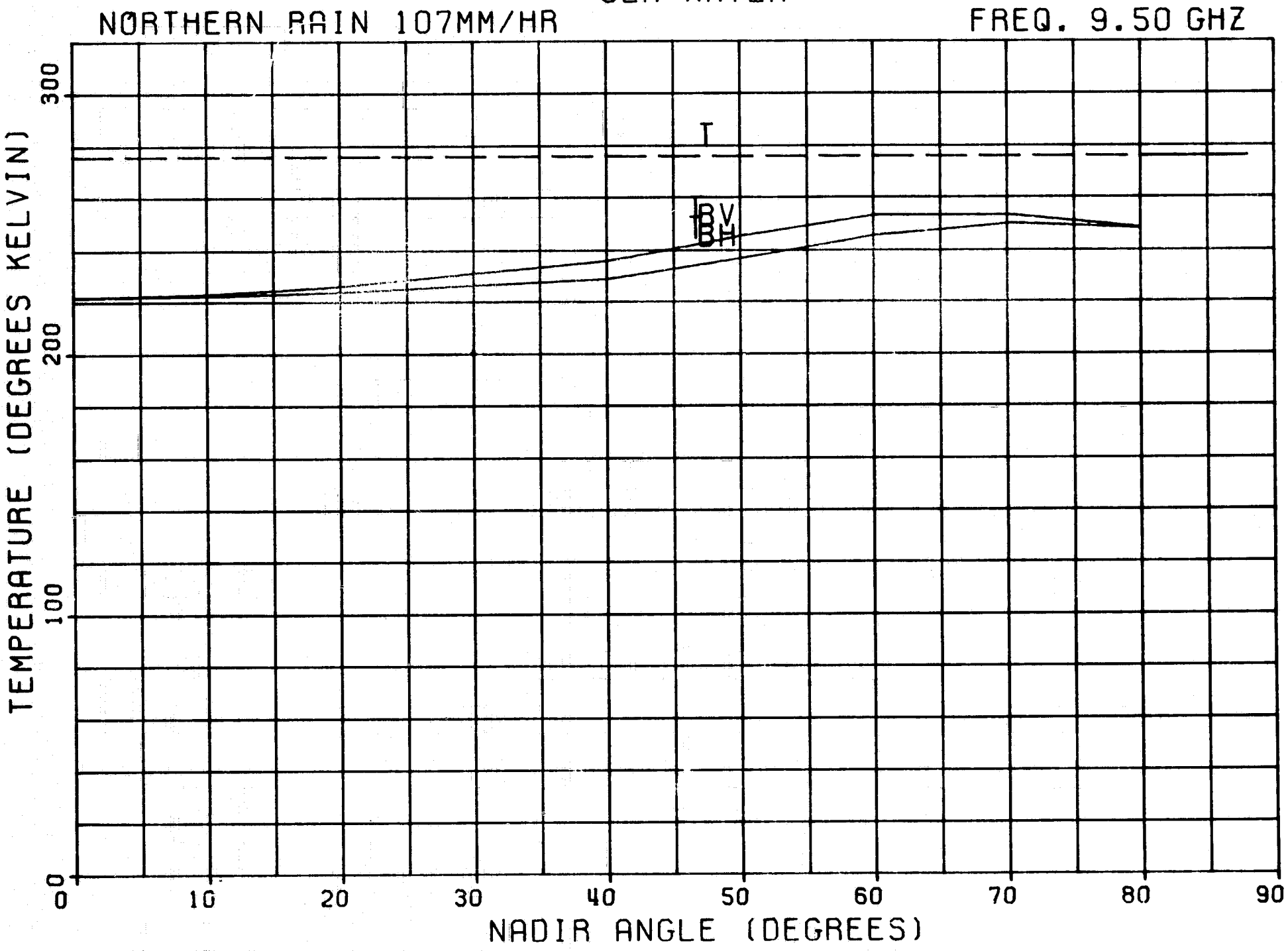
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 4MM/HR

FREQ. 9.50 GHZ



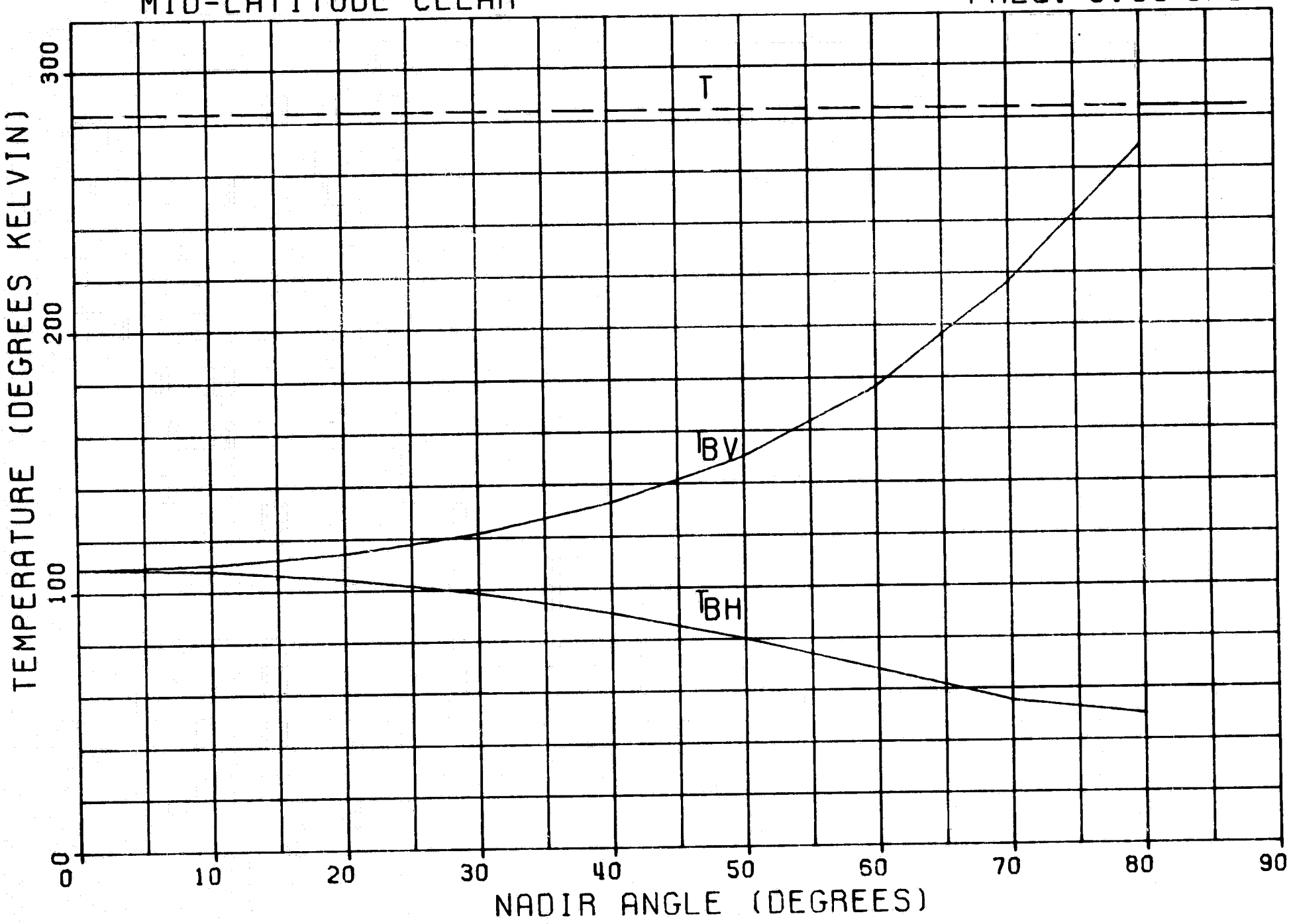
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

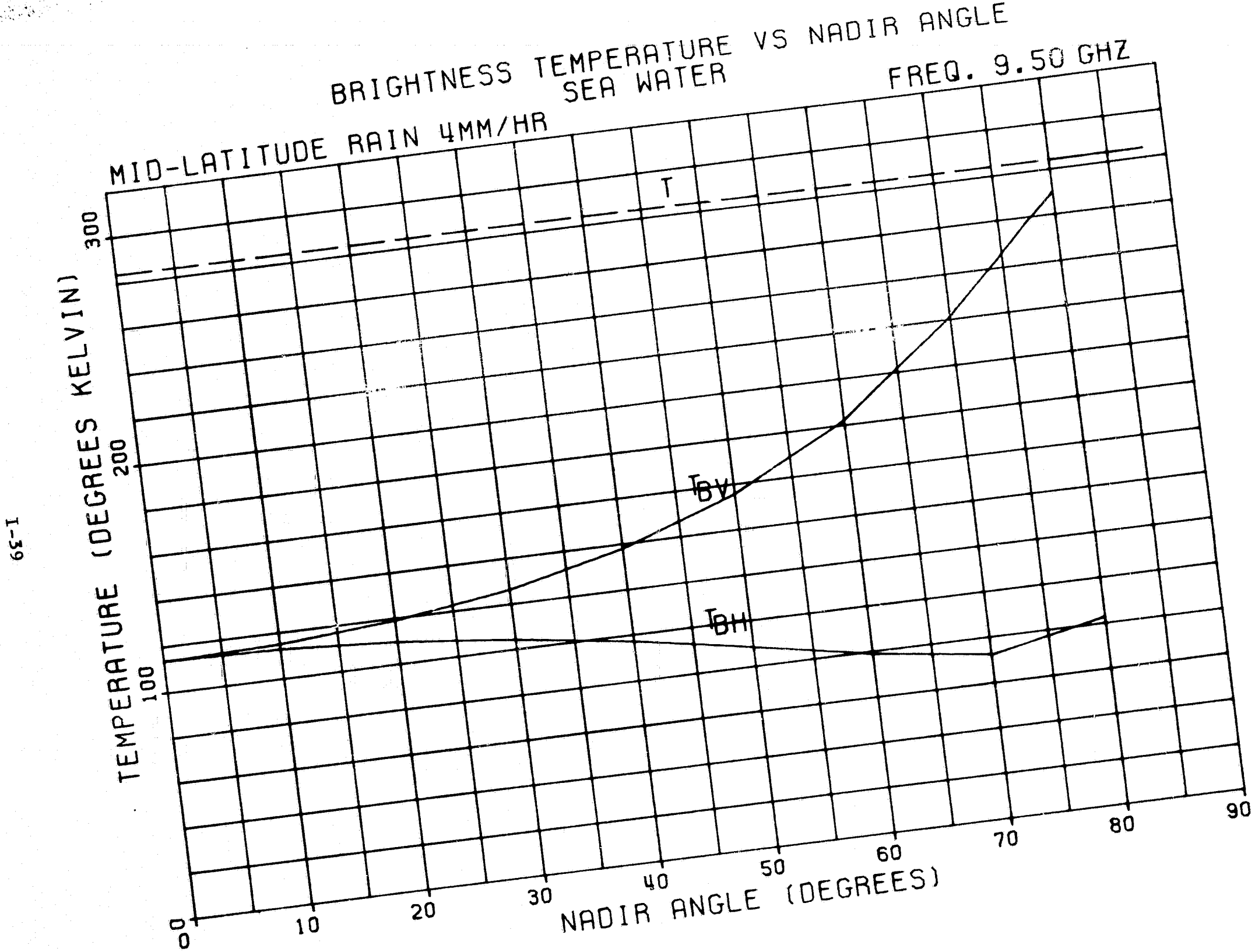


BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE CLEAR

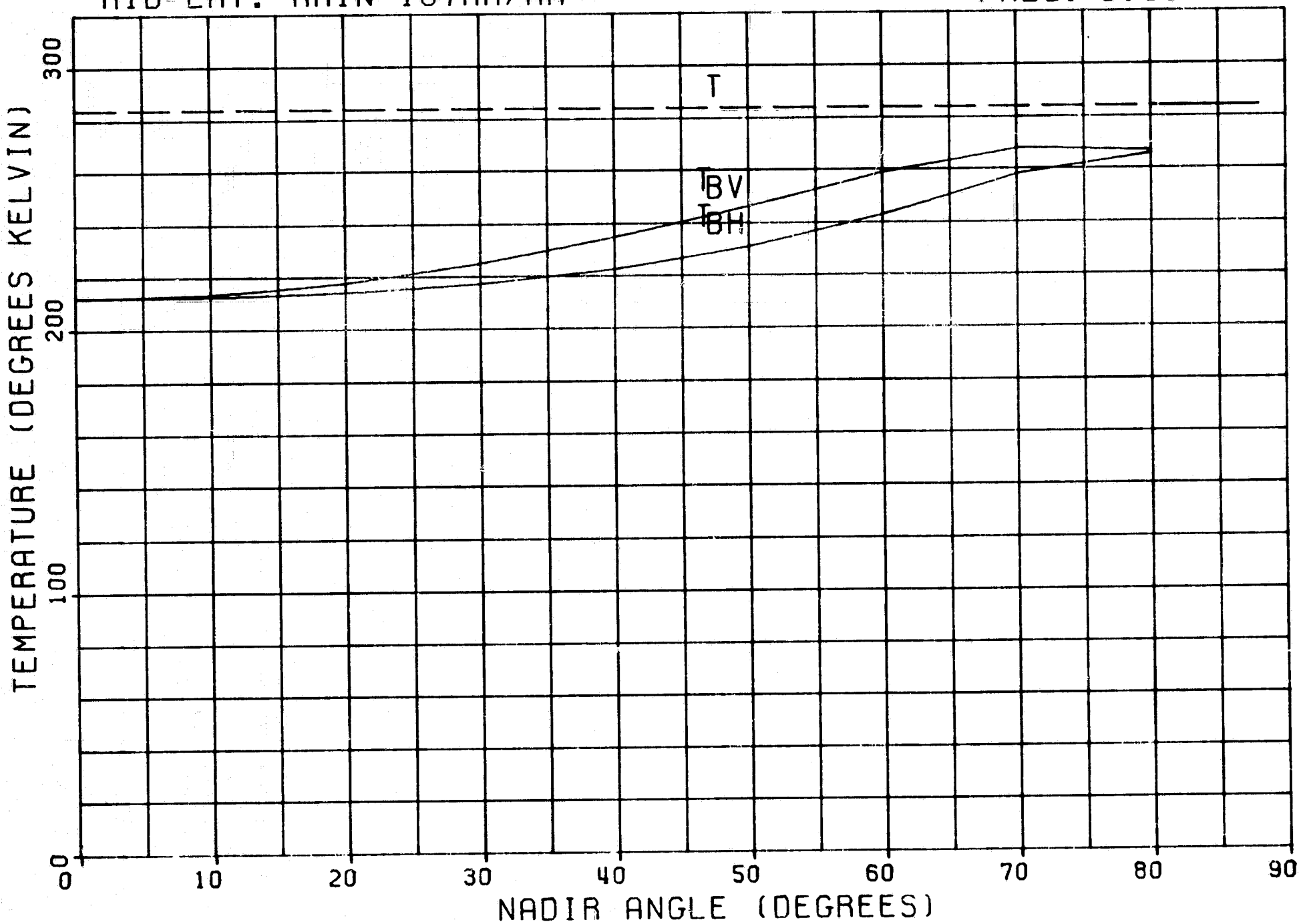
FREQ. 9.50 GHZ




BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER
FREQ. 9.50 GHZ
MID-LATITUDE RAIN 4MM/HR
T
T_{BV}
T_{BH}
TEMPERATURE (DEGREES KELVIN)
300
200
100
0
0
10
20
30
40
50
60
70
80
90
NADIR ANGLE (DEGREES)

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

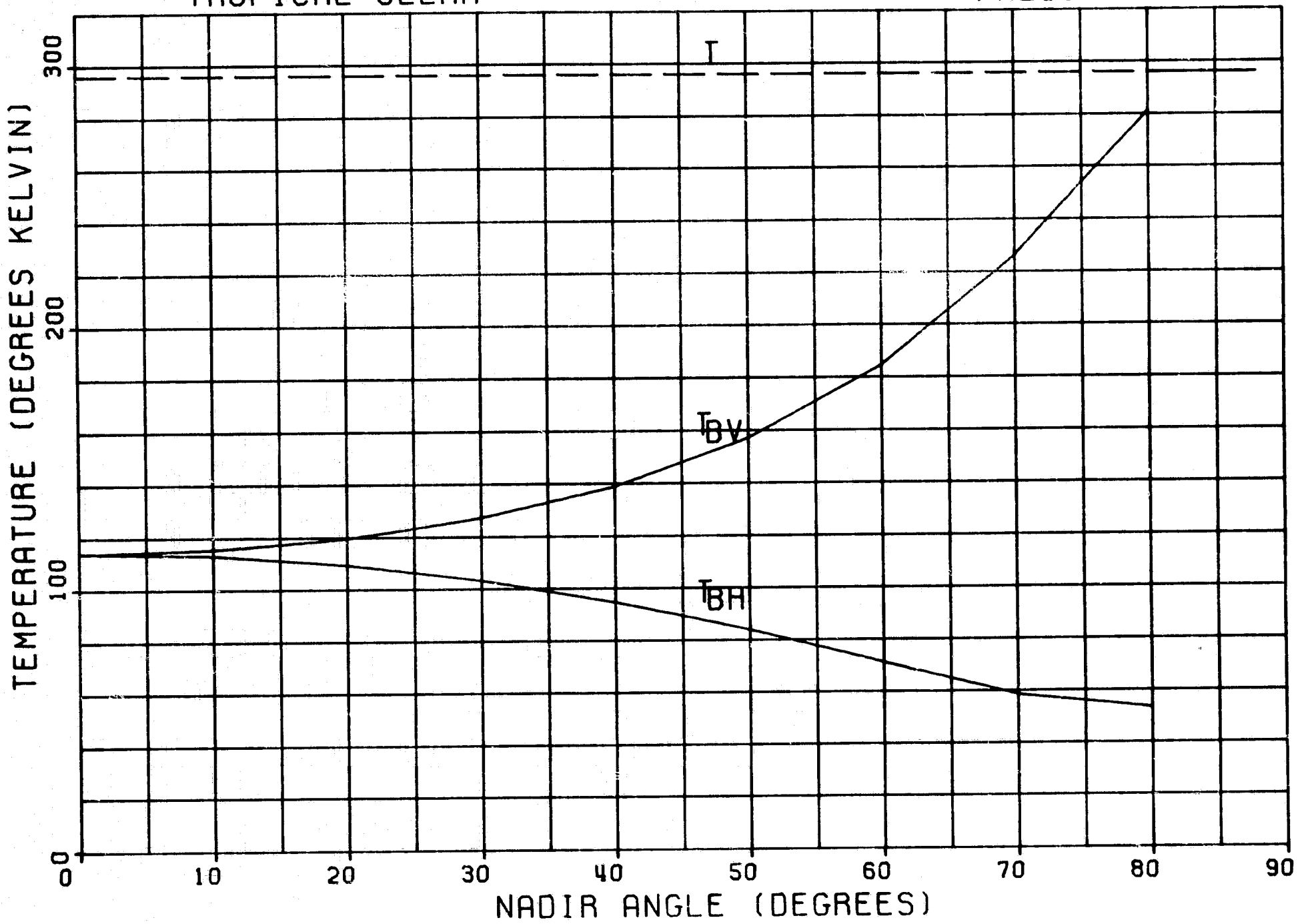
MID-LAT. RAIN 107MM/HR FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL CLEAR

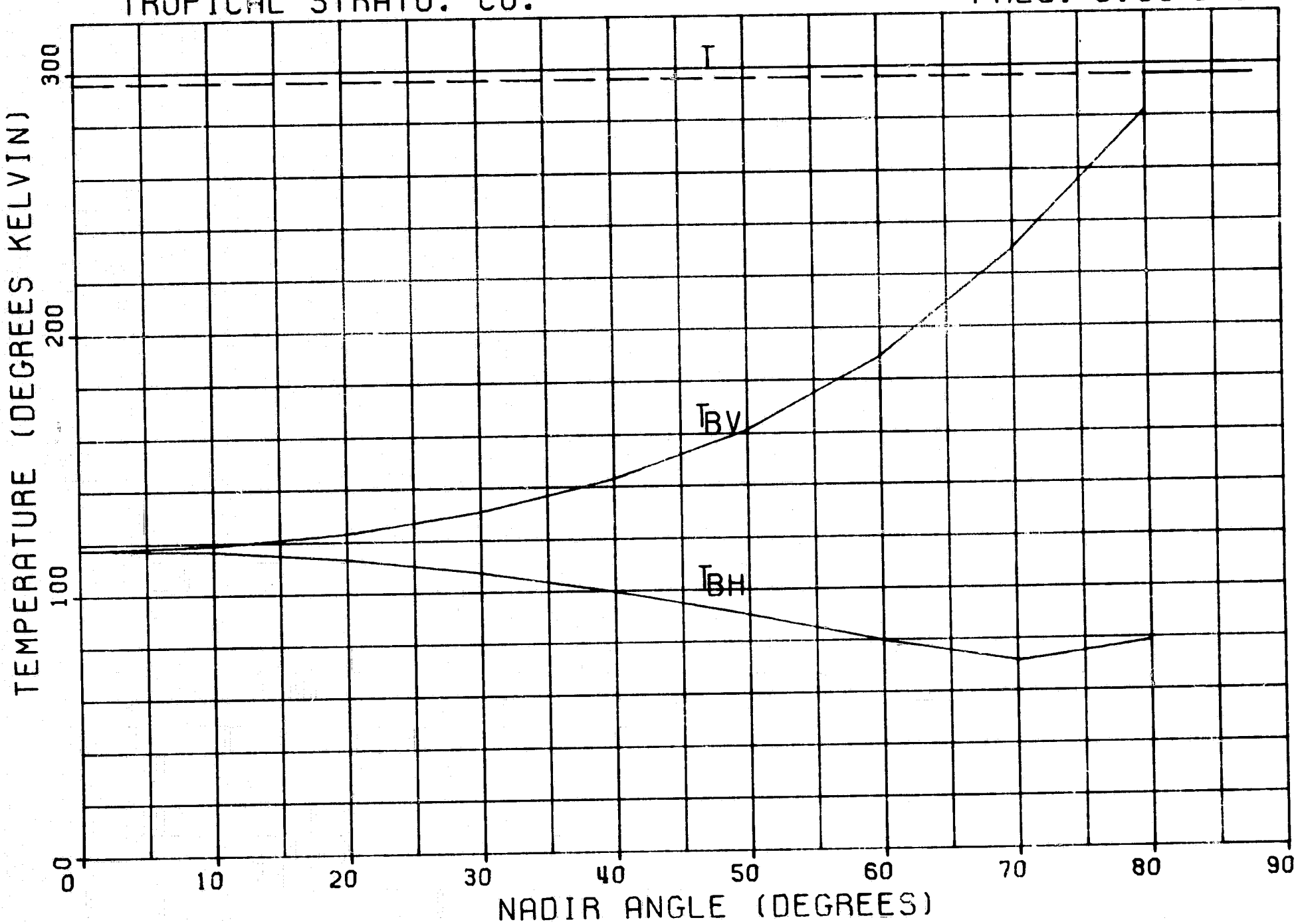
FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL STRATO. CU.

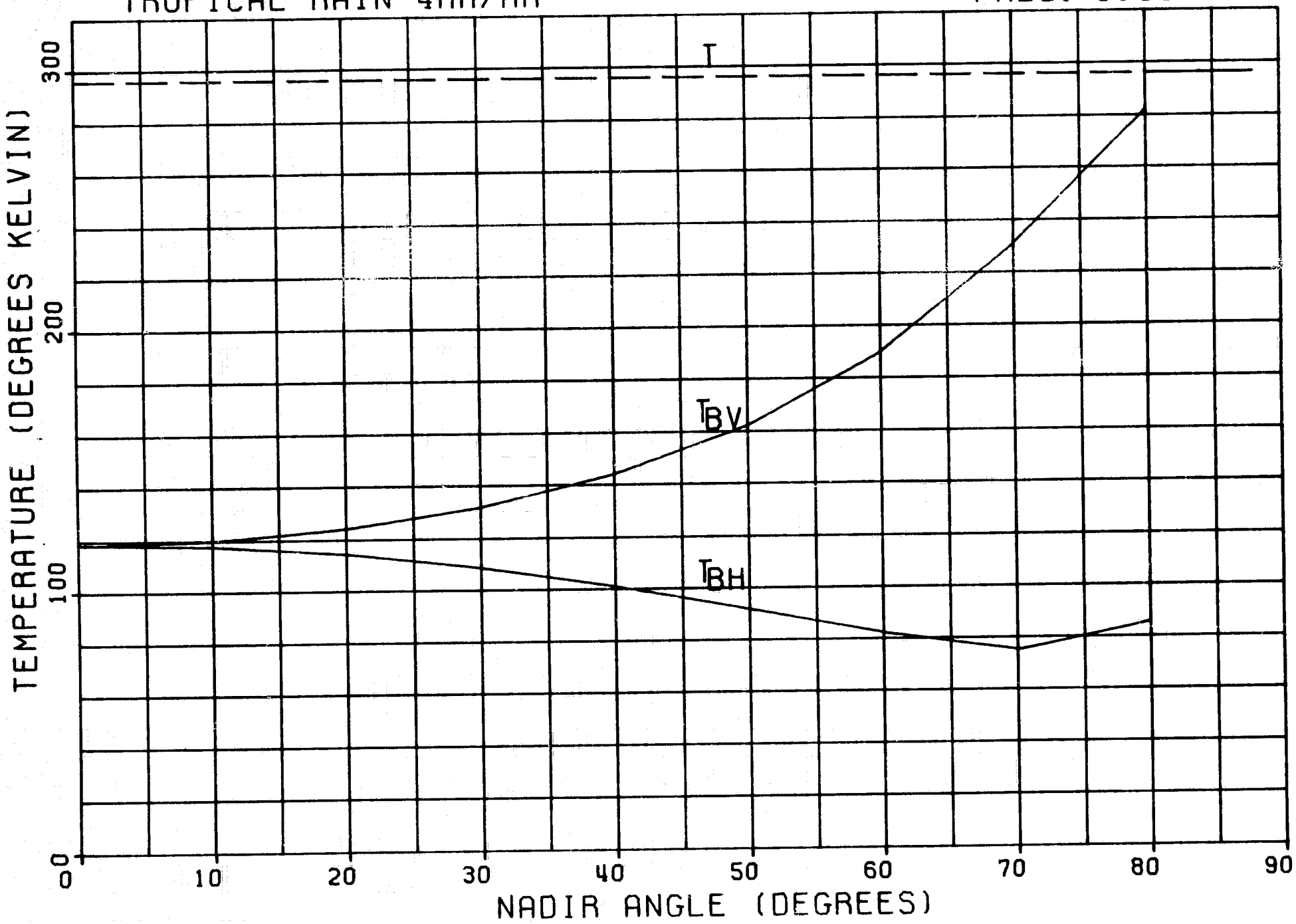
FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 4MM/HR

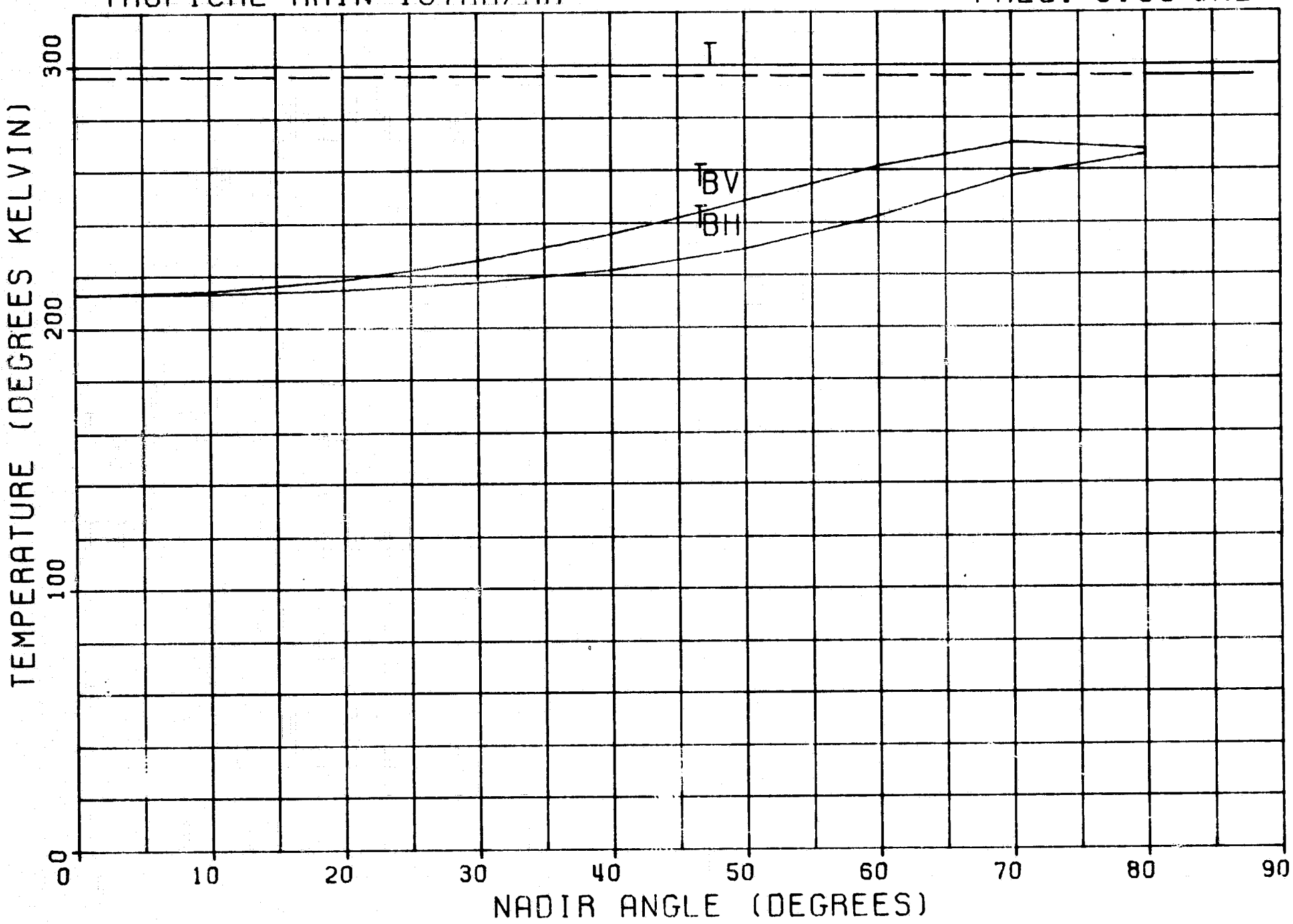
FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR

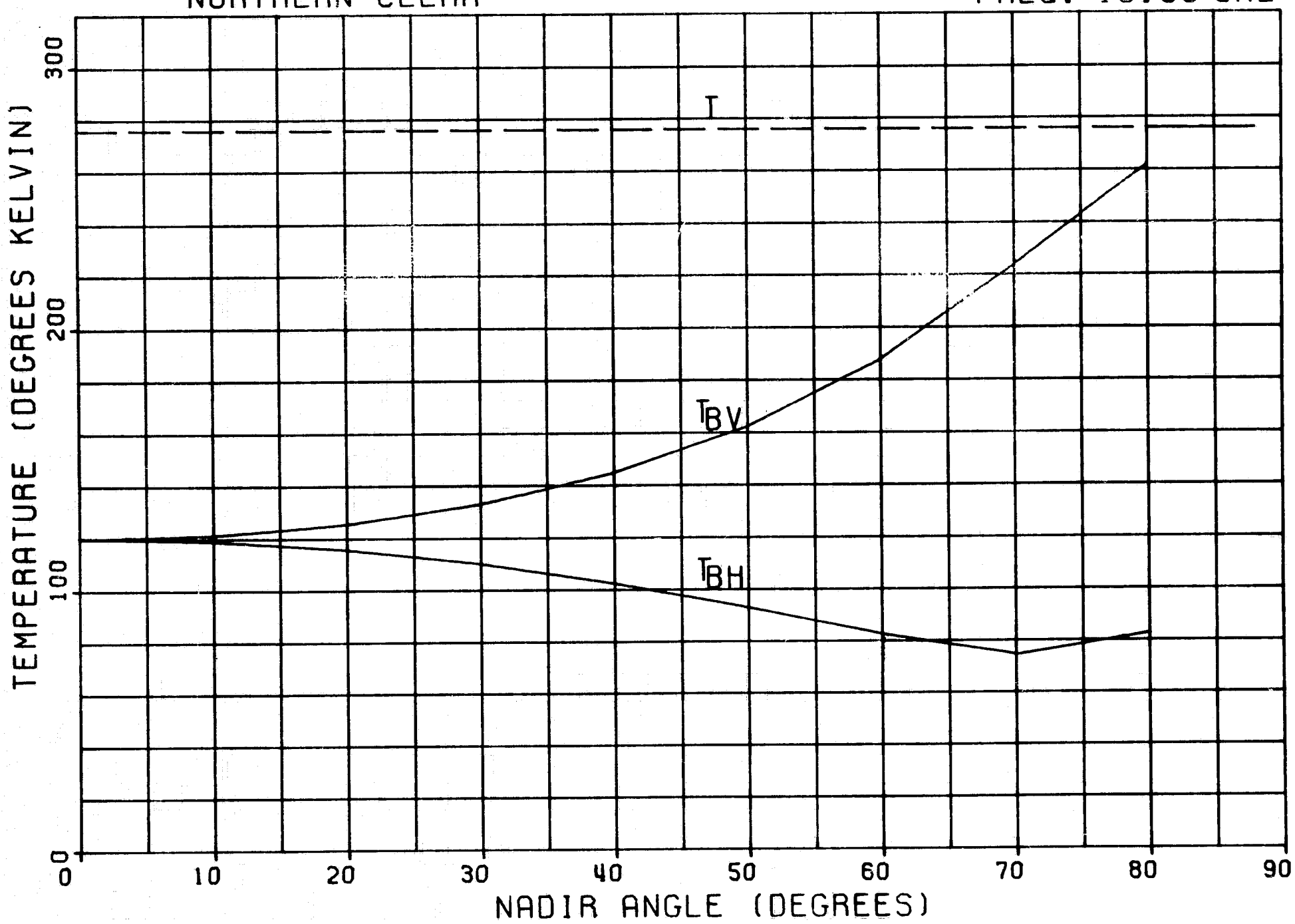
FREQ. 9.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN CLEAR

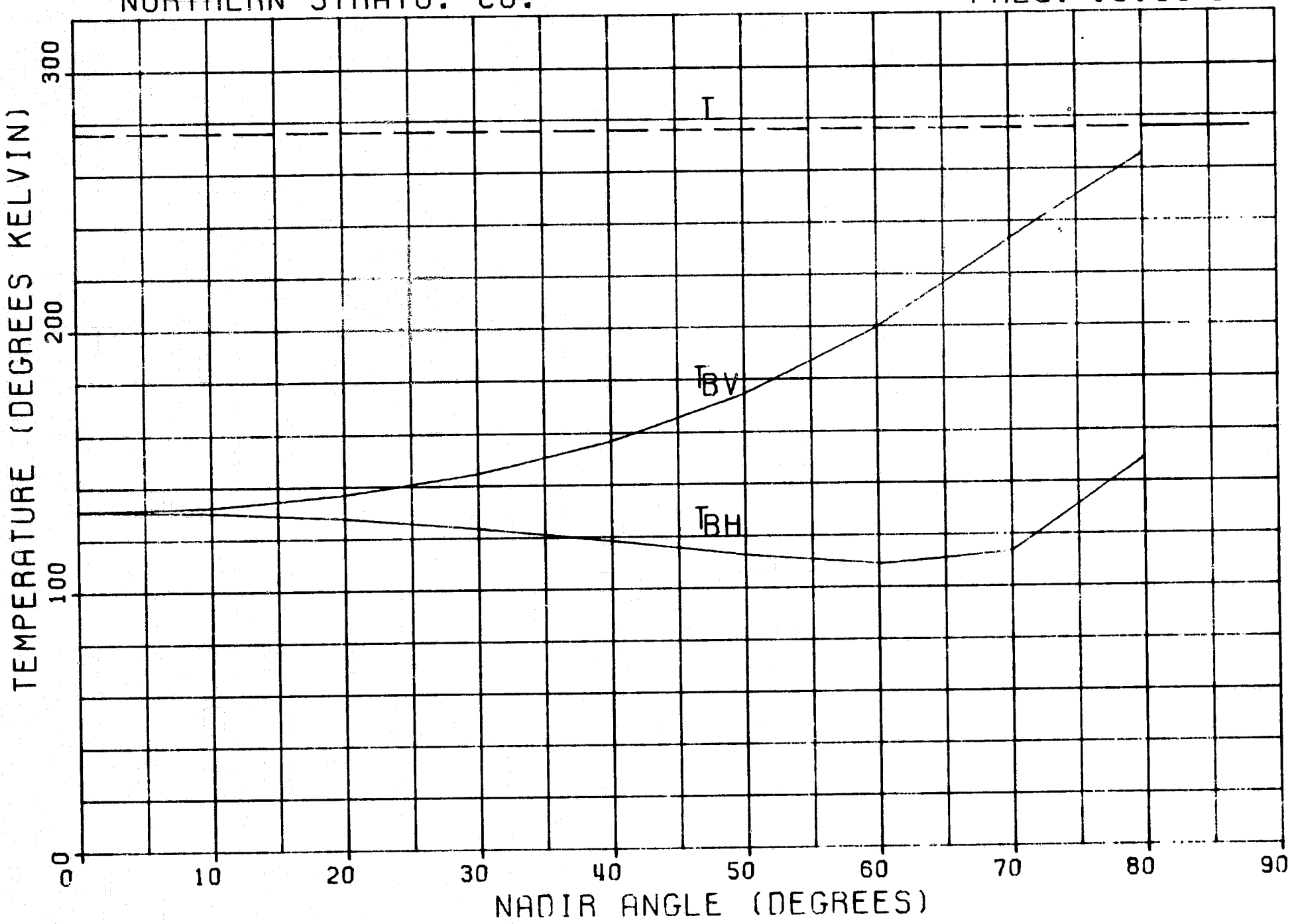
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN STRATO. CU.

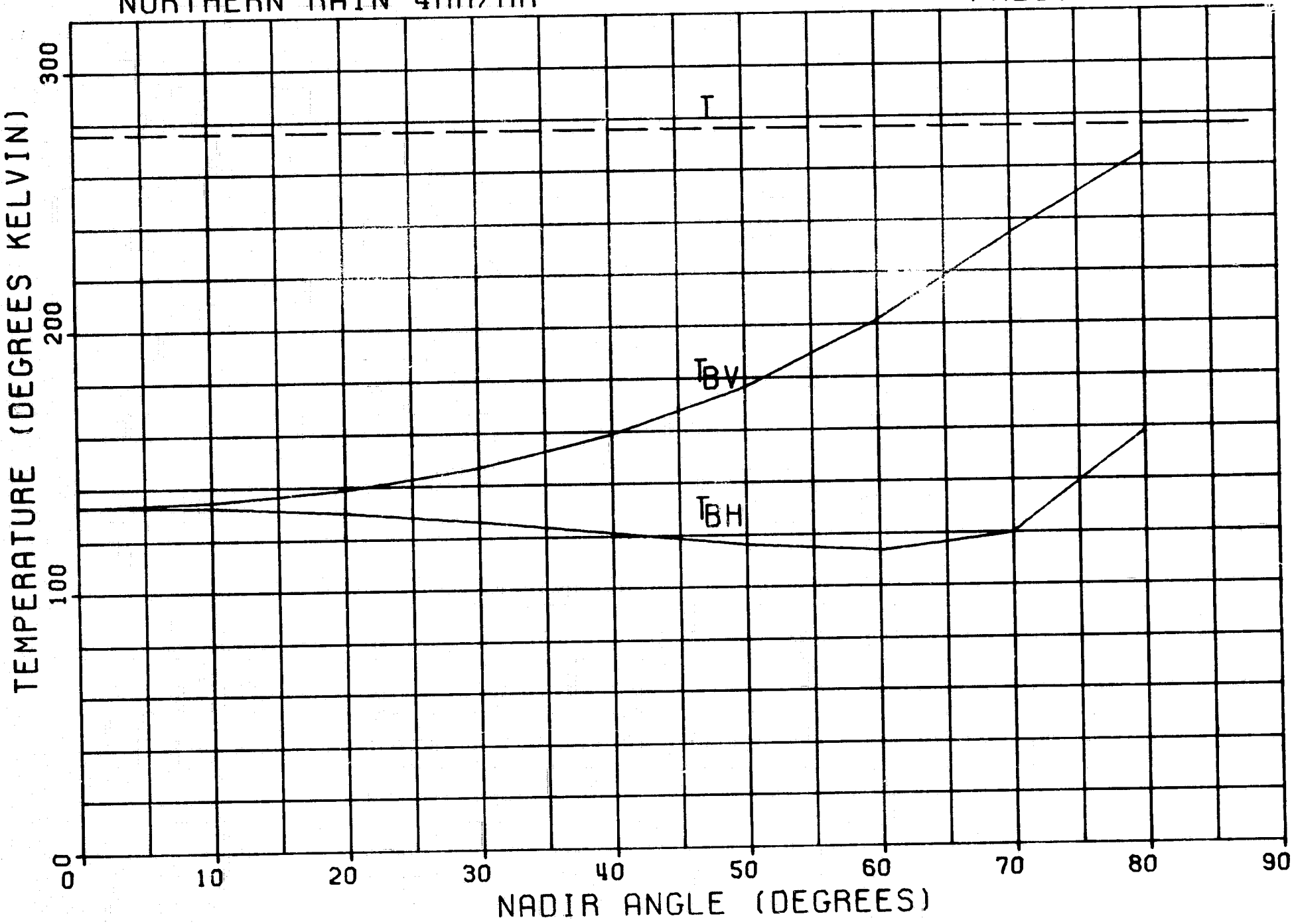
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 4MM/HR

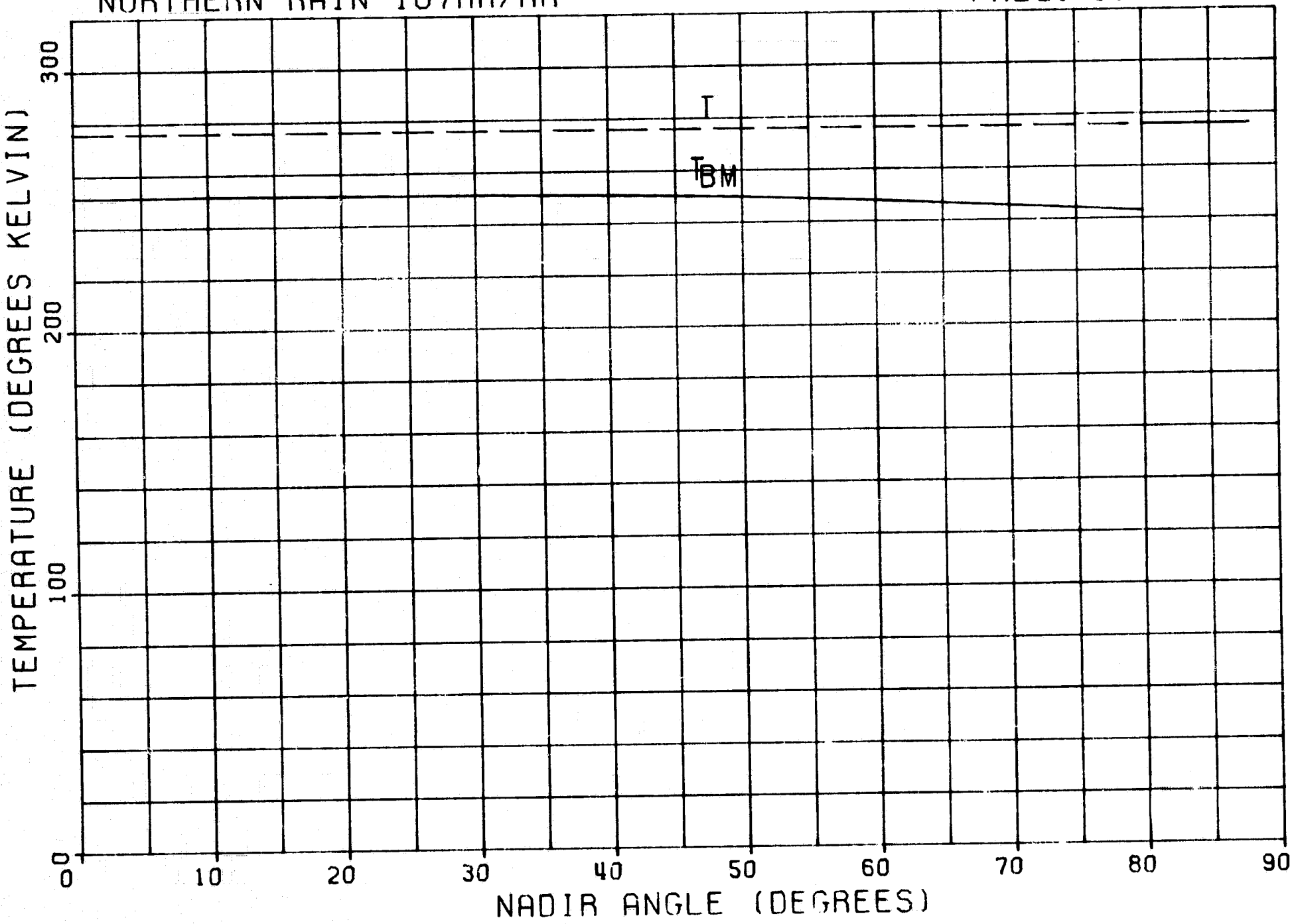
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 107MM/HR

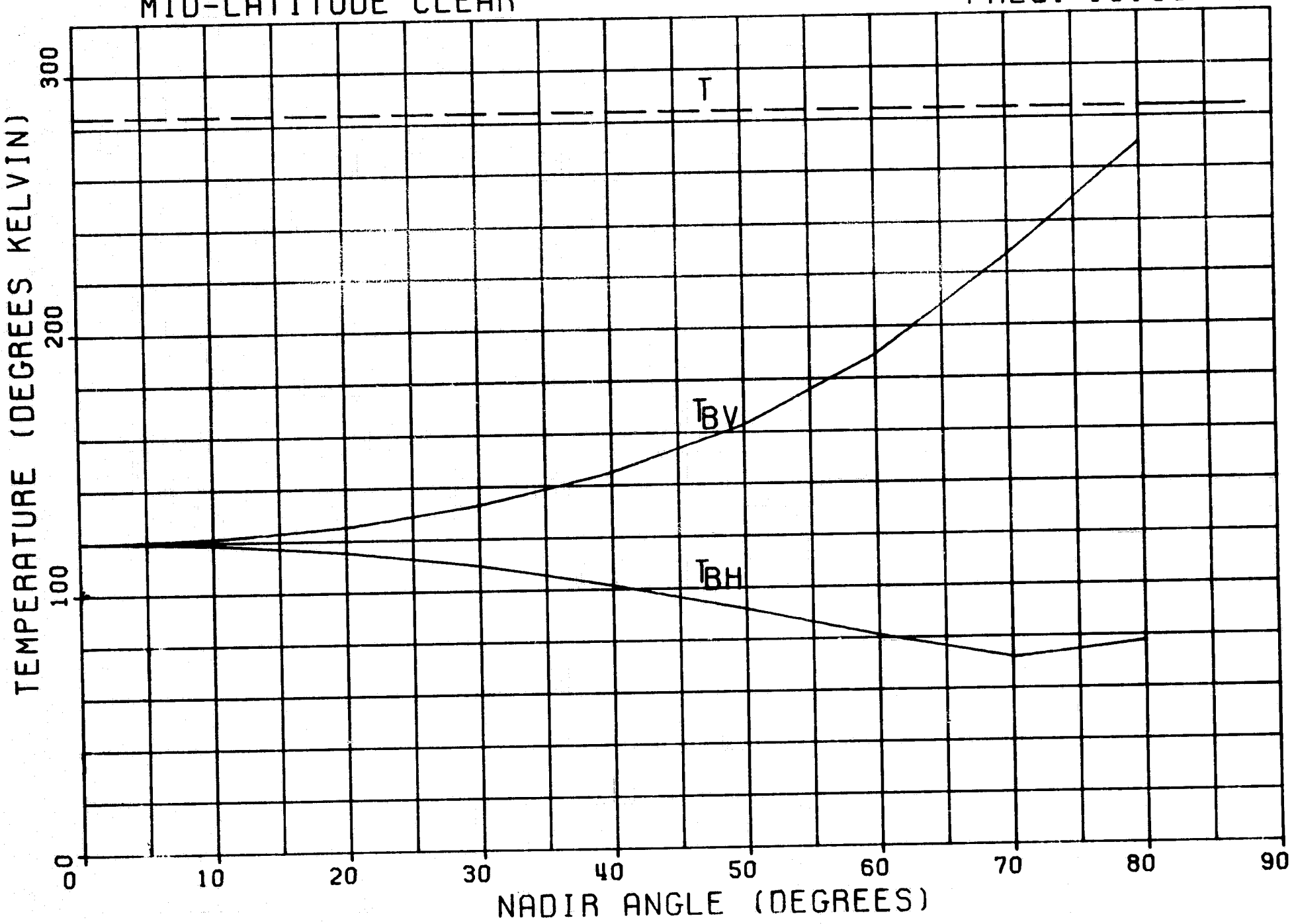
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

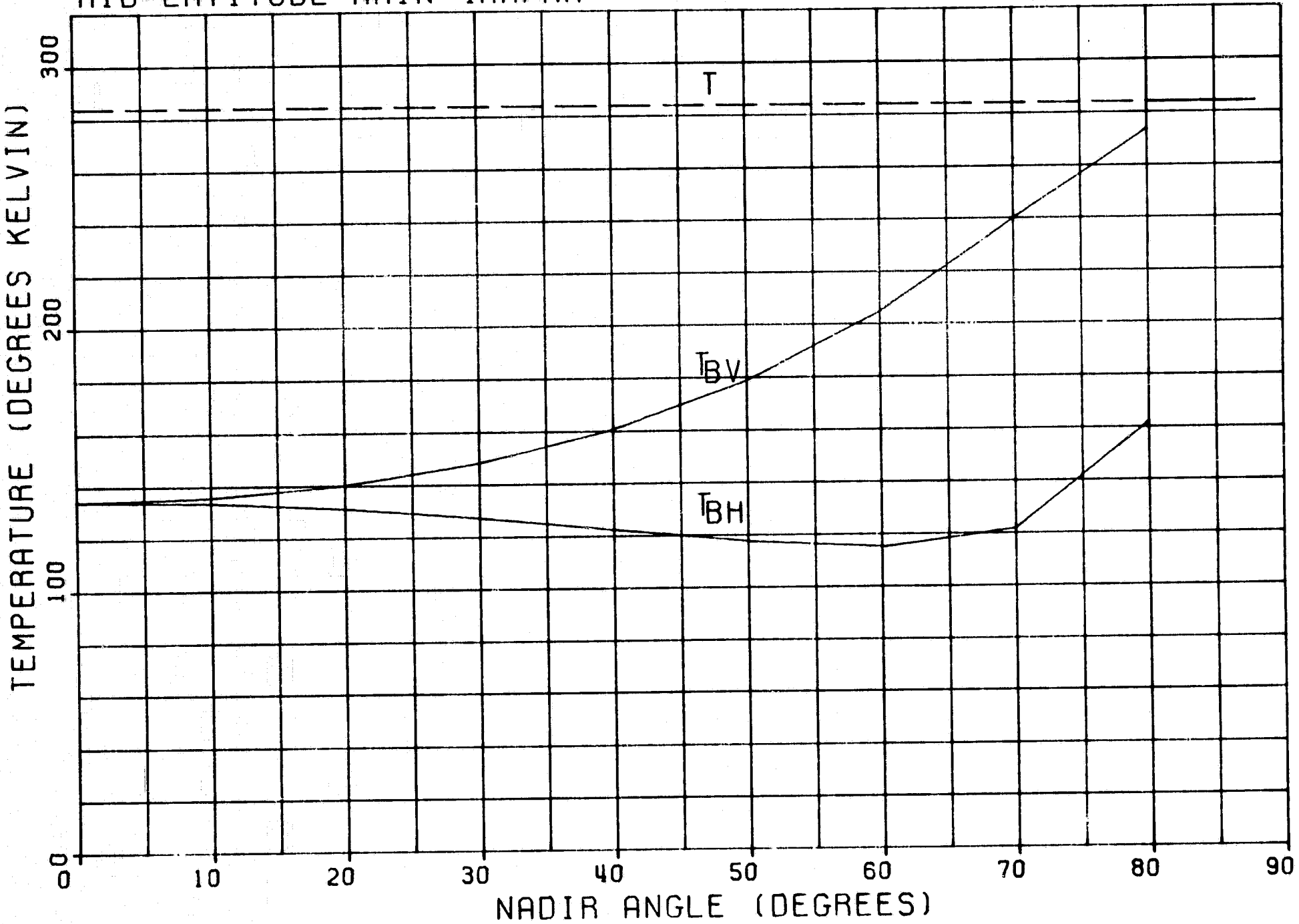
MID-LATITUDE CLEAR

FREQ. 16.50 GHZ



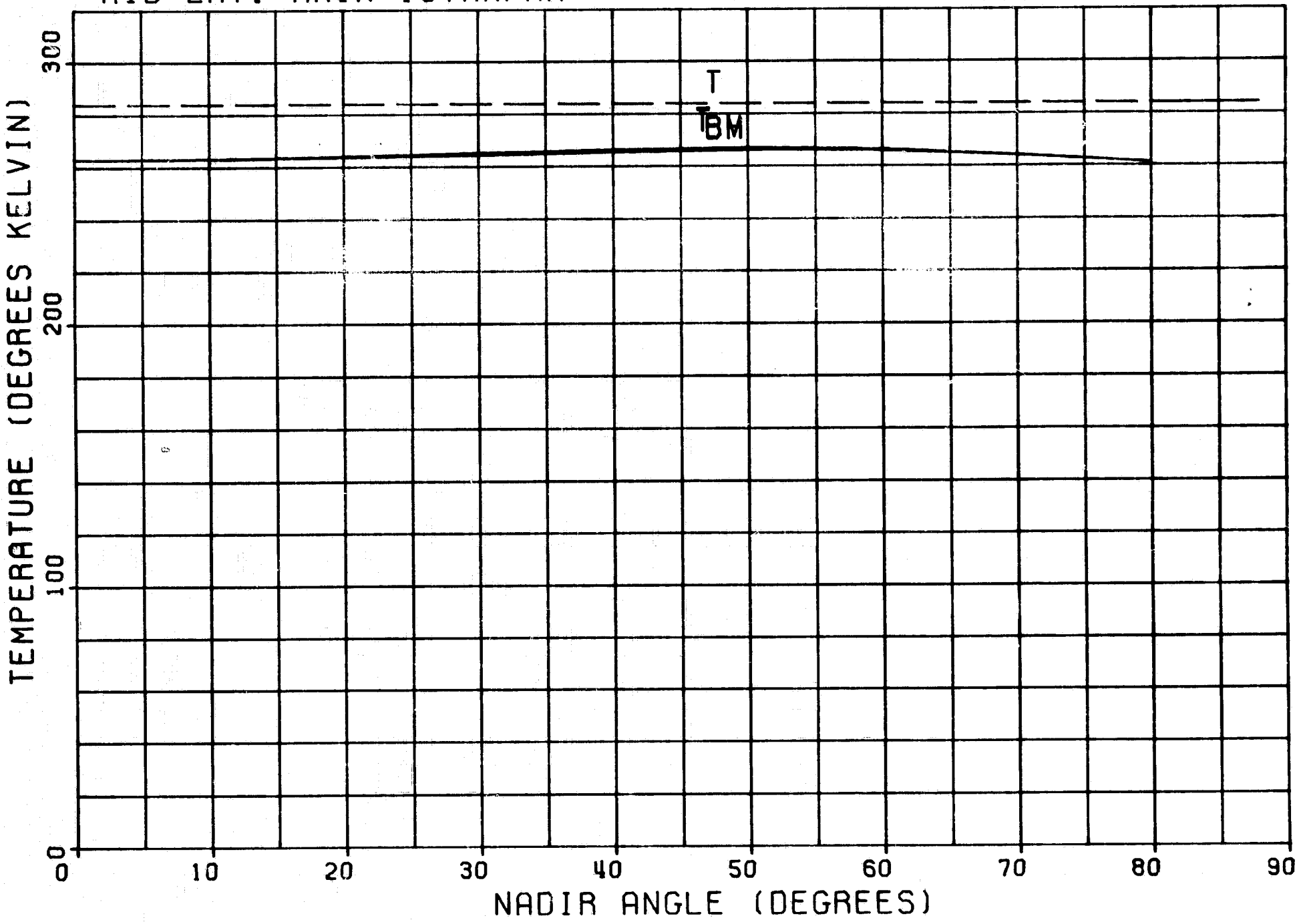
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE RAIN 4MM/HR FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

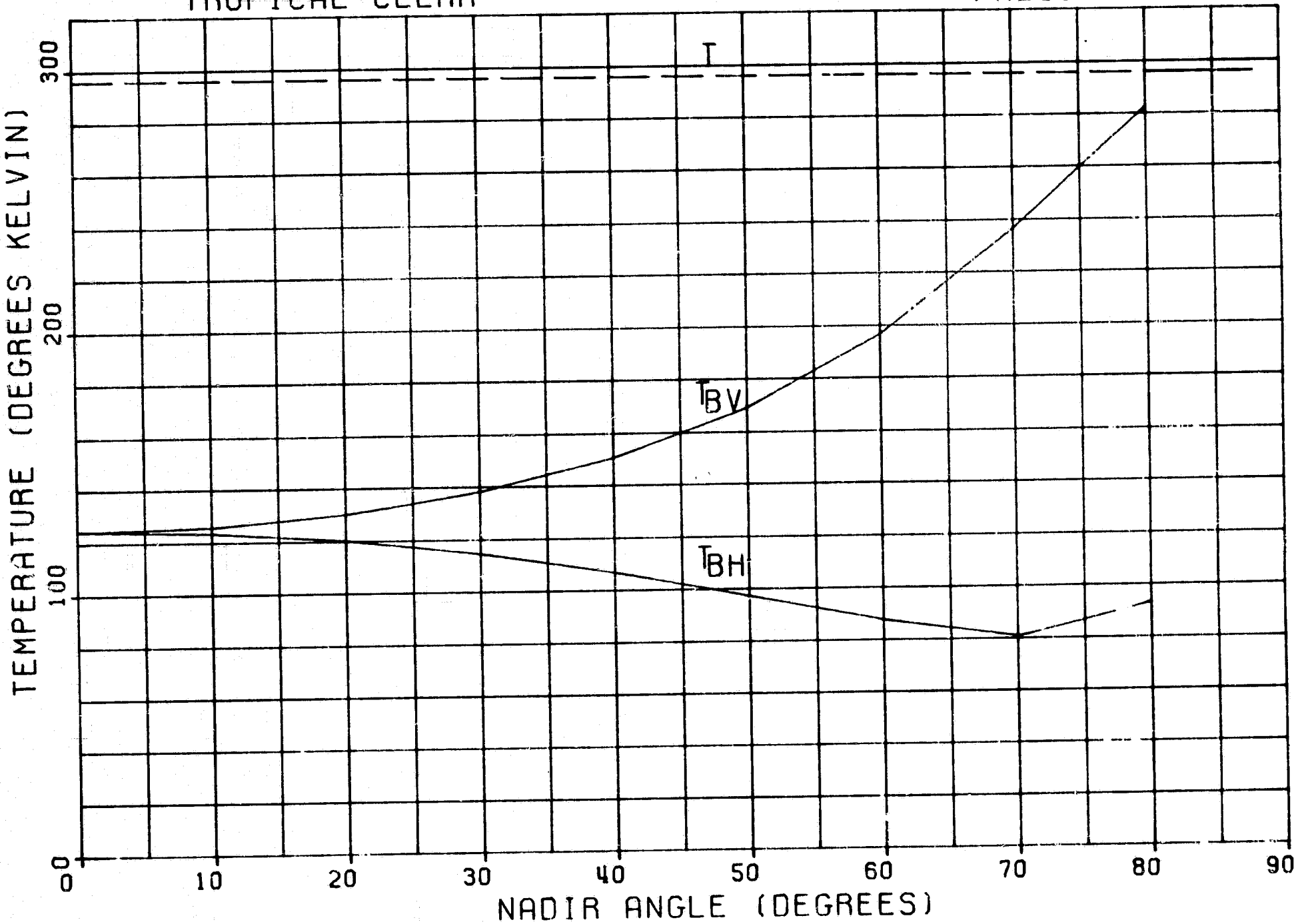
MID-LAT. RAIN 107MM/HR FREQ. 16.50 GHZ

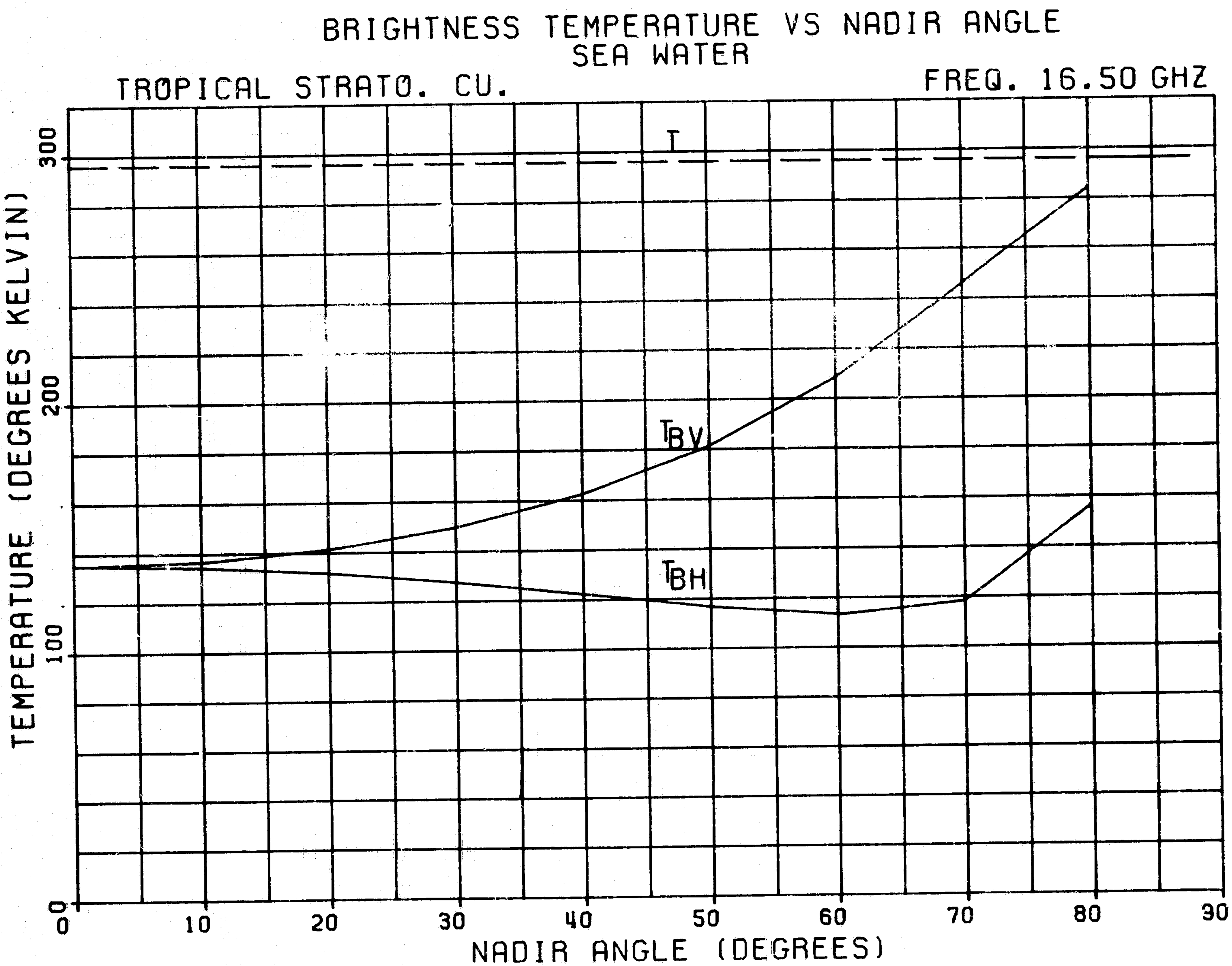


BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL CLEAR

FREQ. 16.50 GHZ

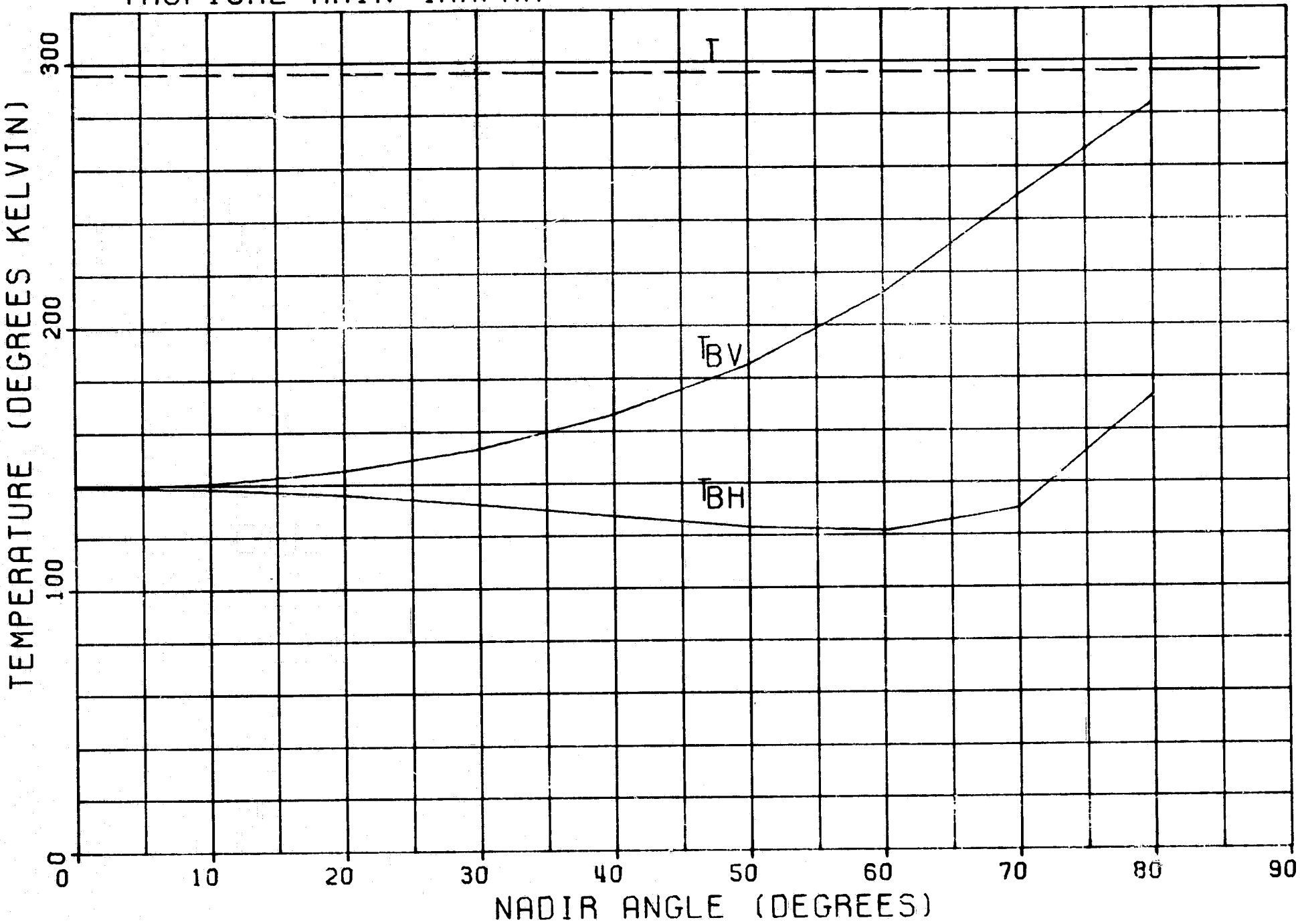



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER
TROPICAL STRATO. CU.
FREQ. 16.50 GHZ
T
T_{BV}
T_{BH}
TEMPERATURE (DEGREES KELVIN)
NADIR ANGLE (DEGREES)
0
100
200
300
0
10
20
30
40
50
60
70
80
90

BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 4MM/HR

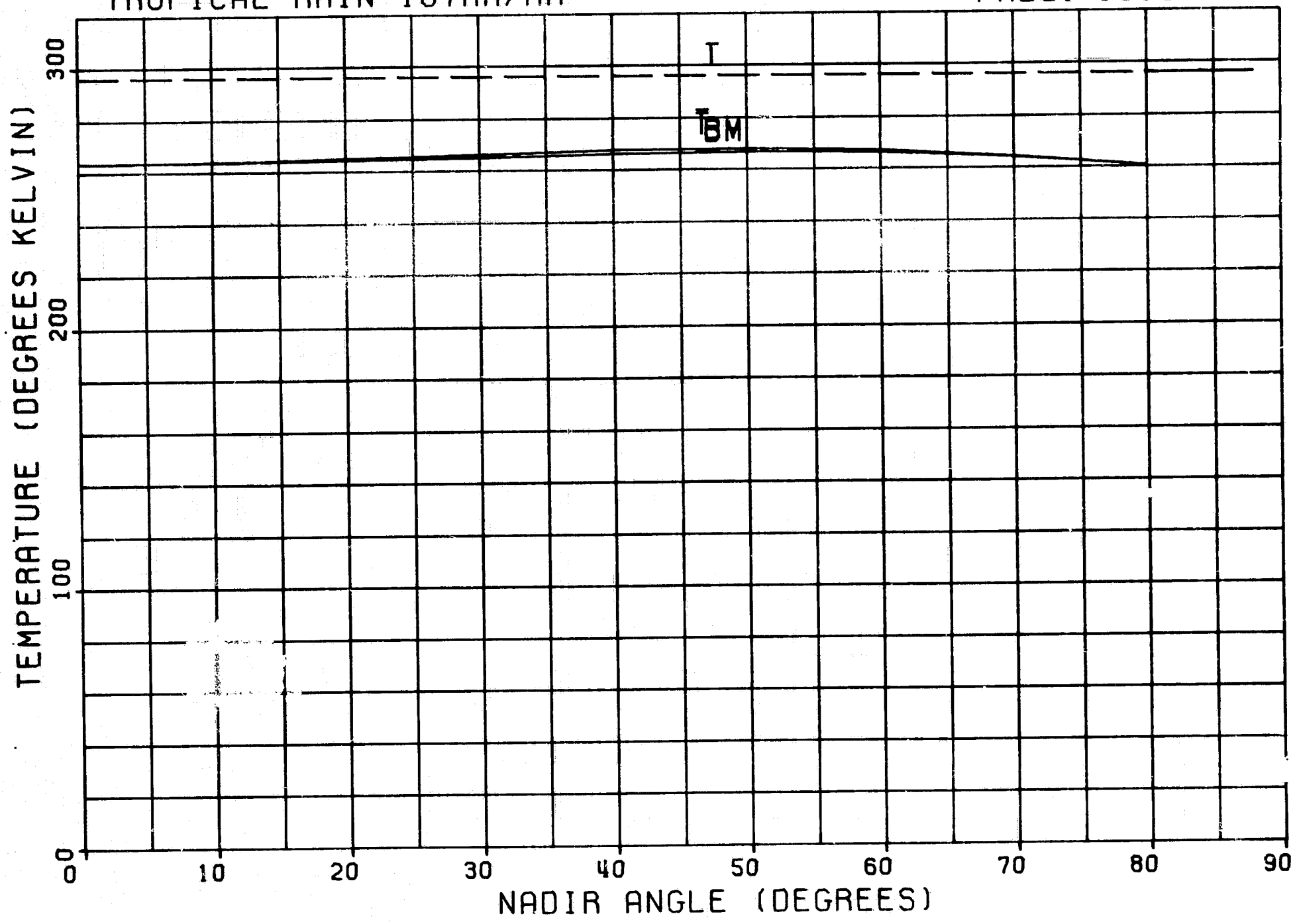
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR

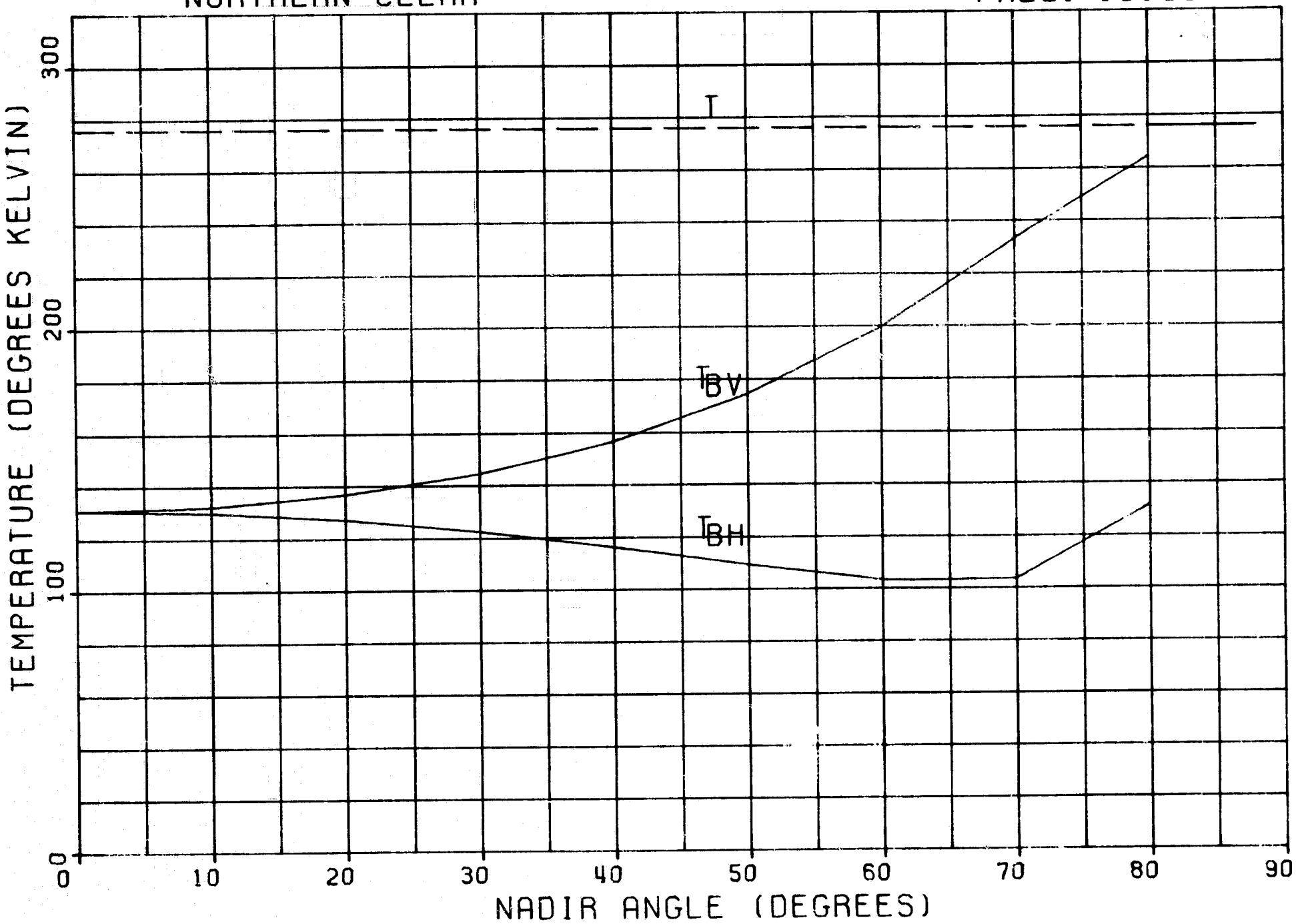
FREQ. 16.50 GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN CLEAR

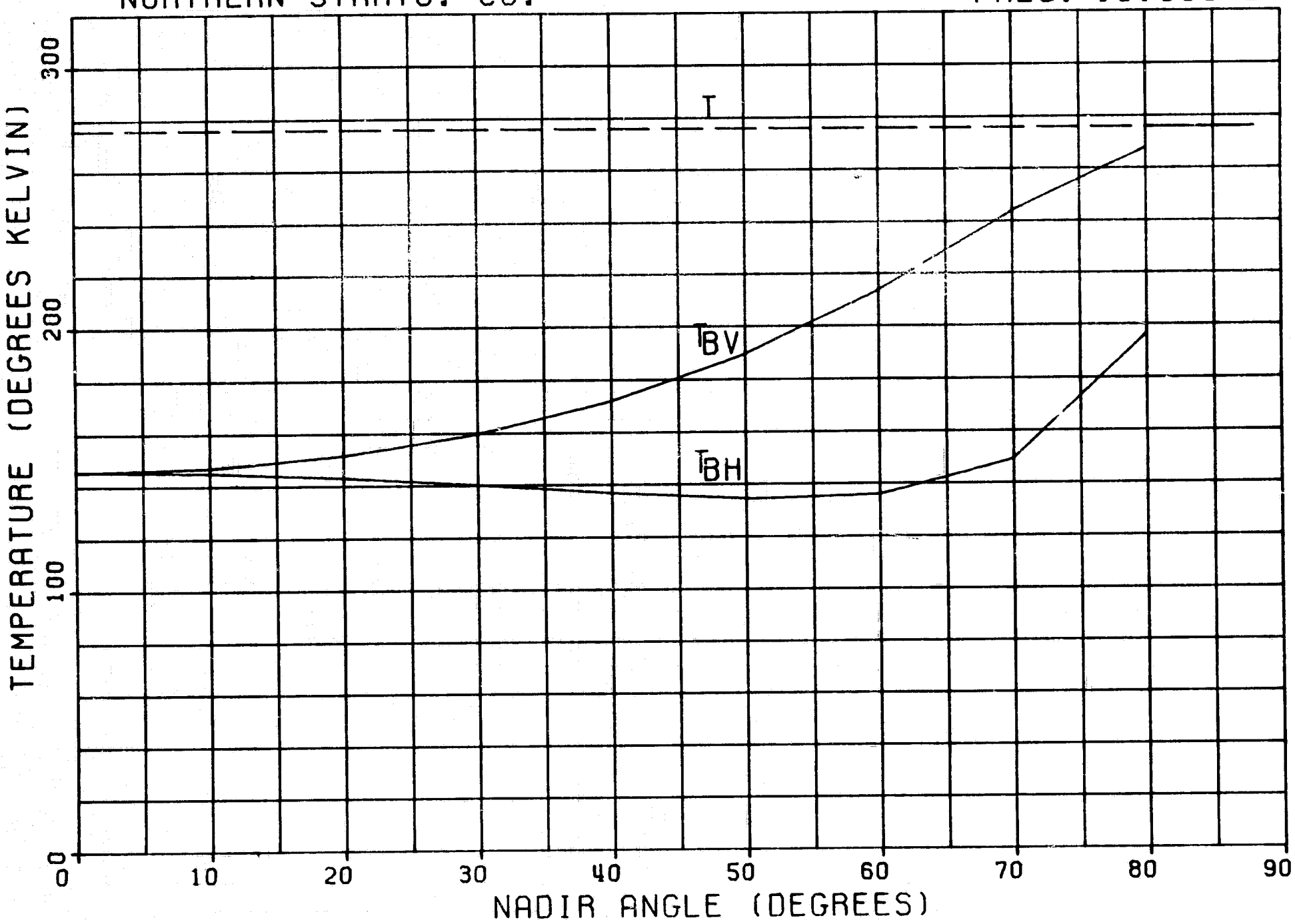
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN STRATO. CU.

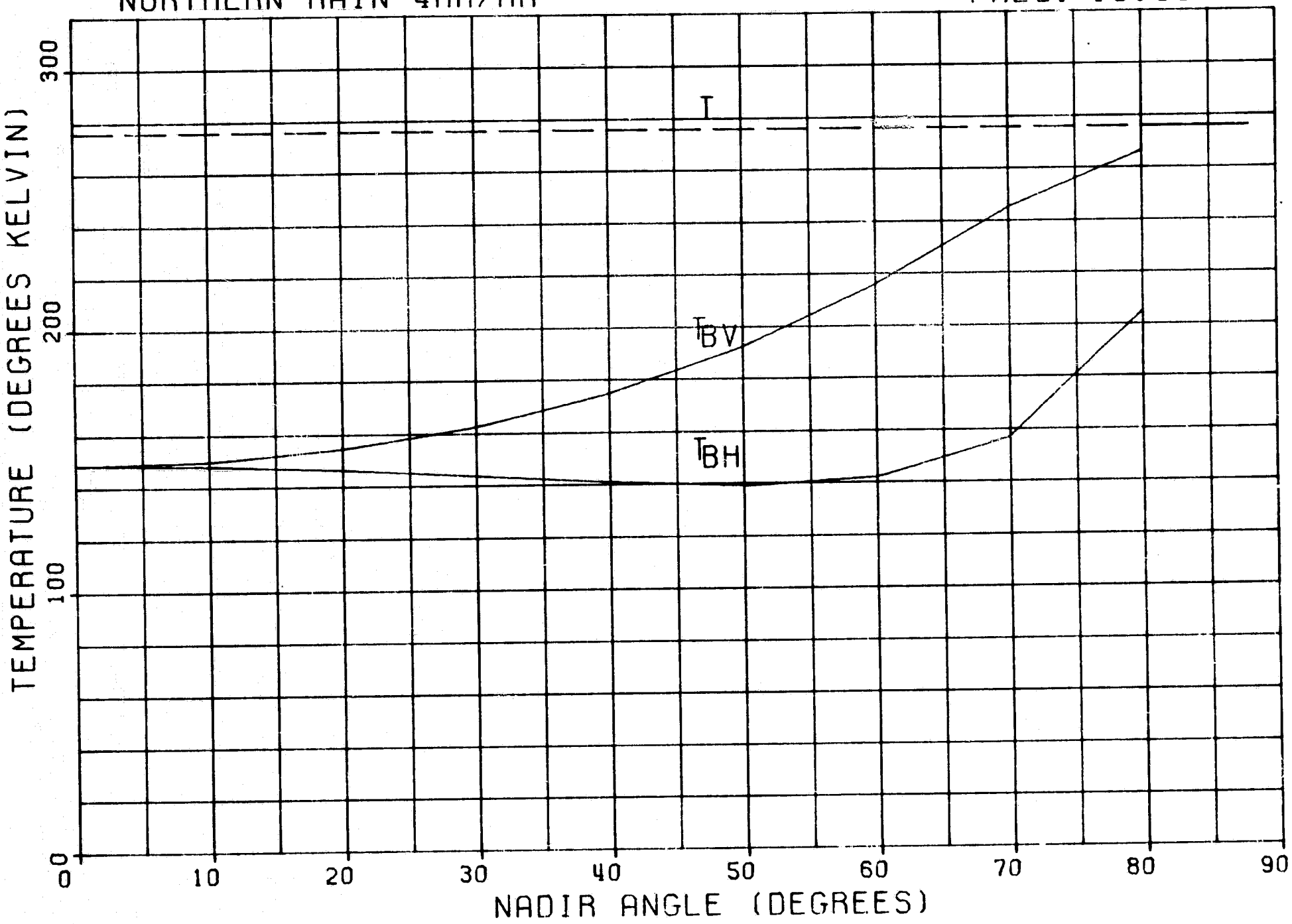
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 4MM/HR

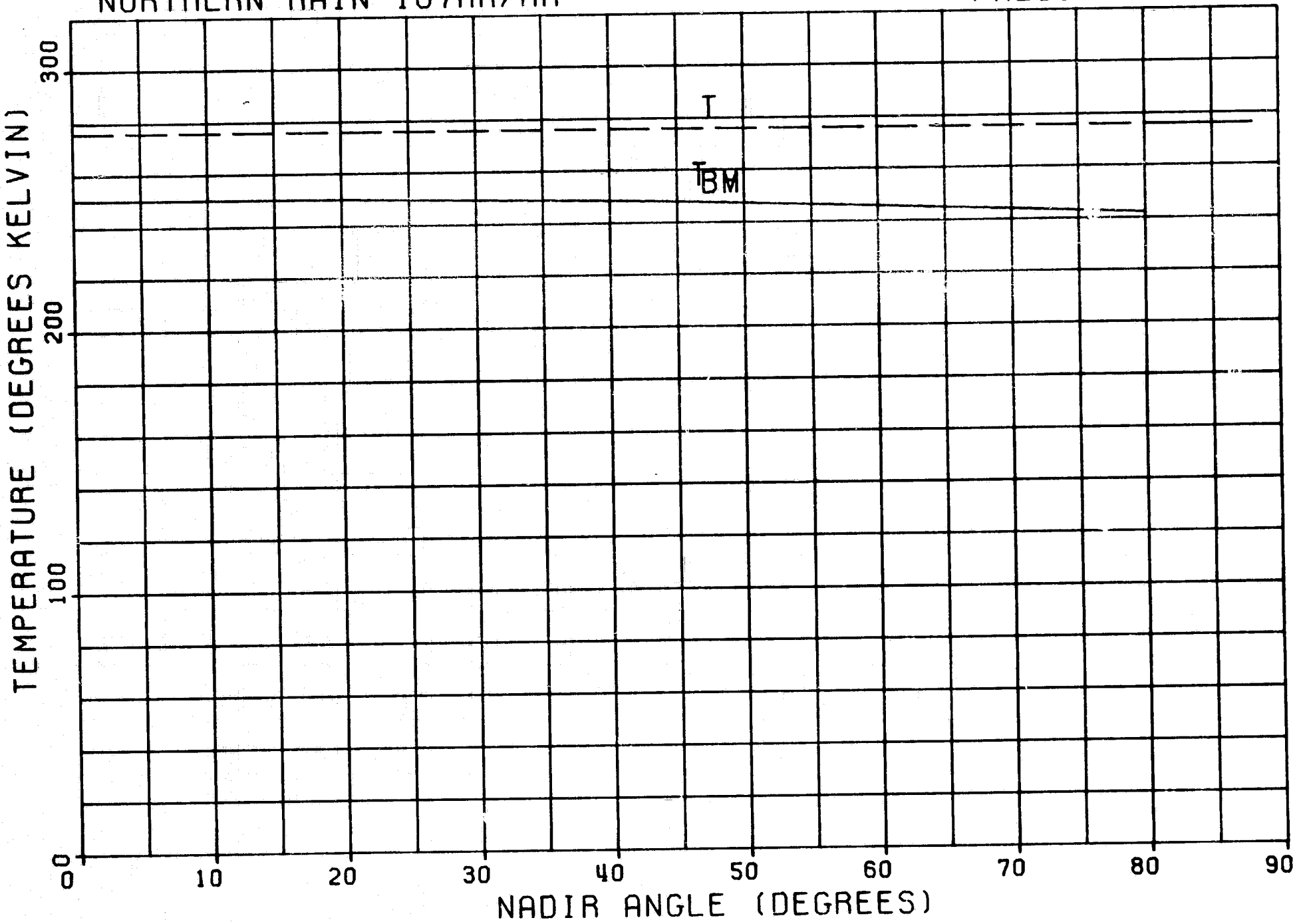
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

NORTHERN RAIN 107MM/HR

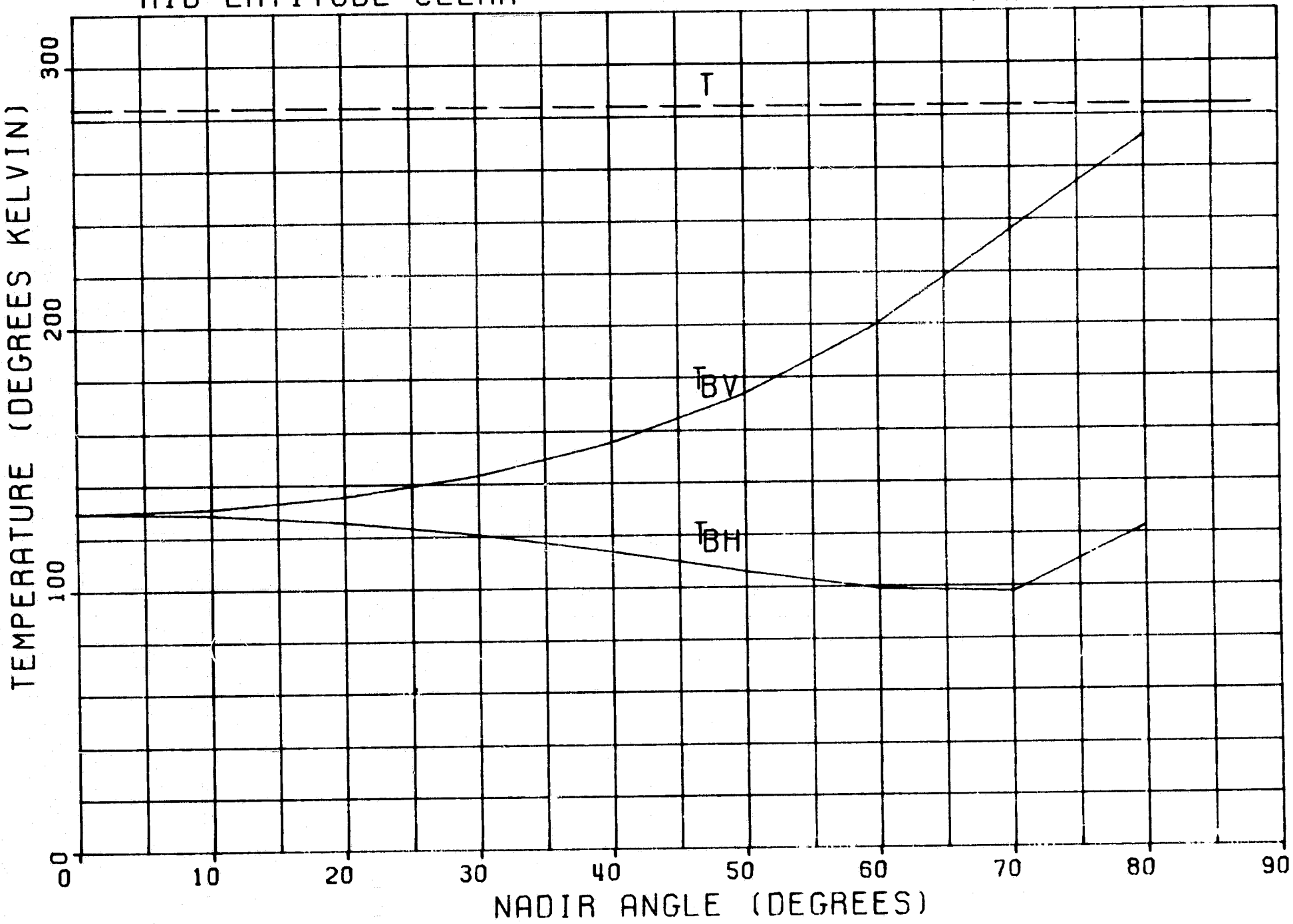
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

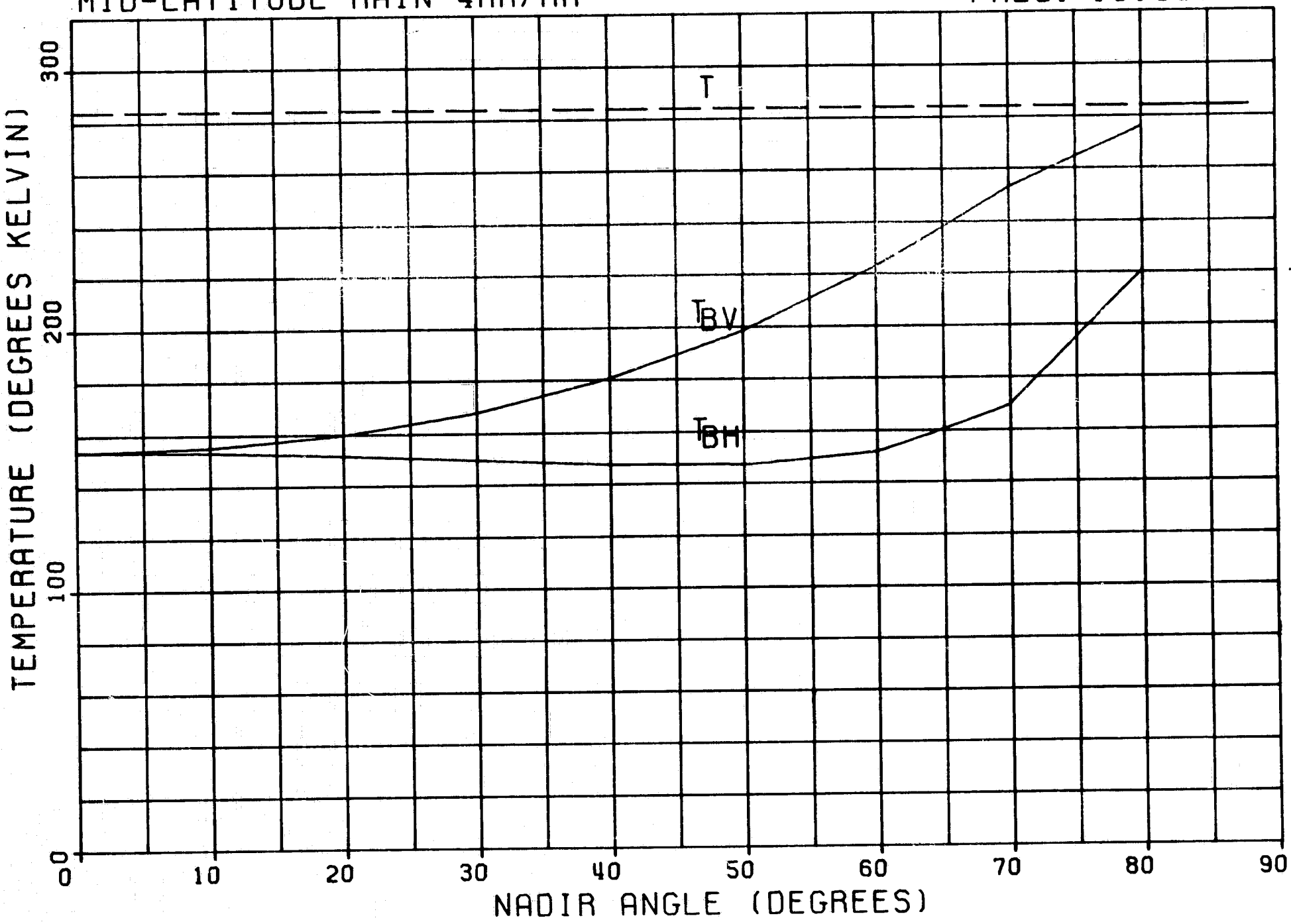
MID-LATITUDE CLEAR

FREQ. 19.35GHZ



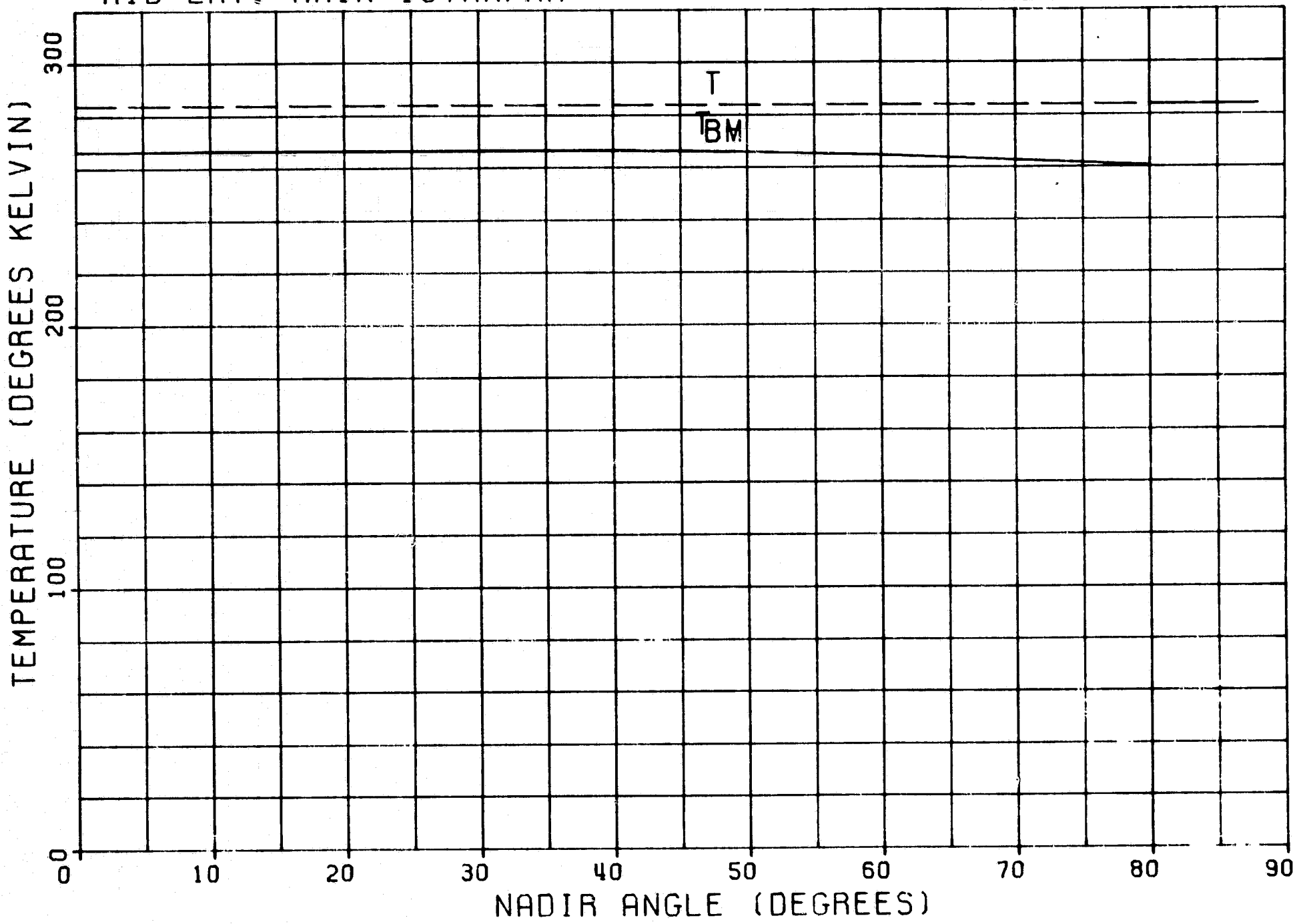
BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

MID-LATITUDE RAIN 4MM/HR FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

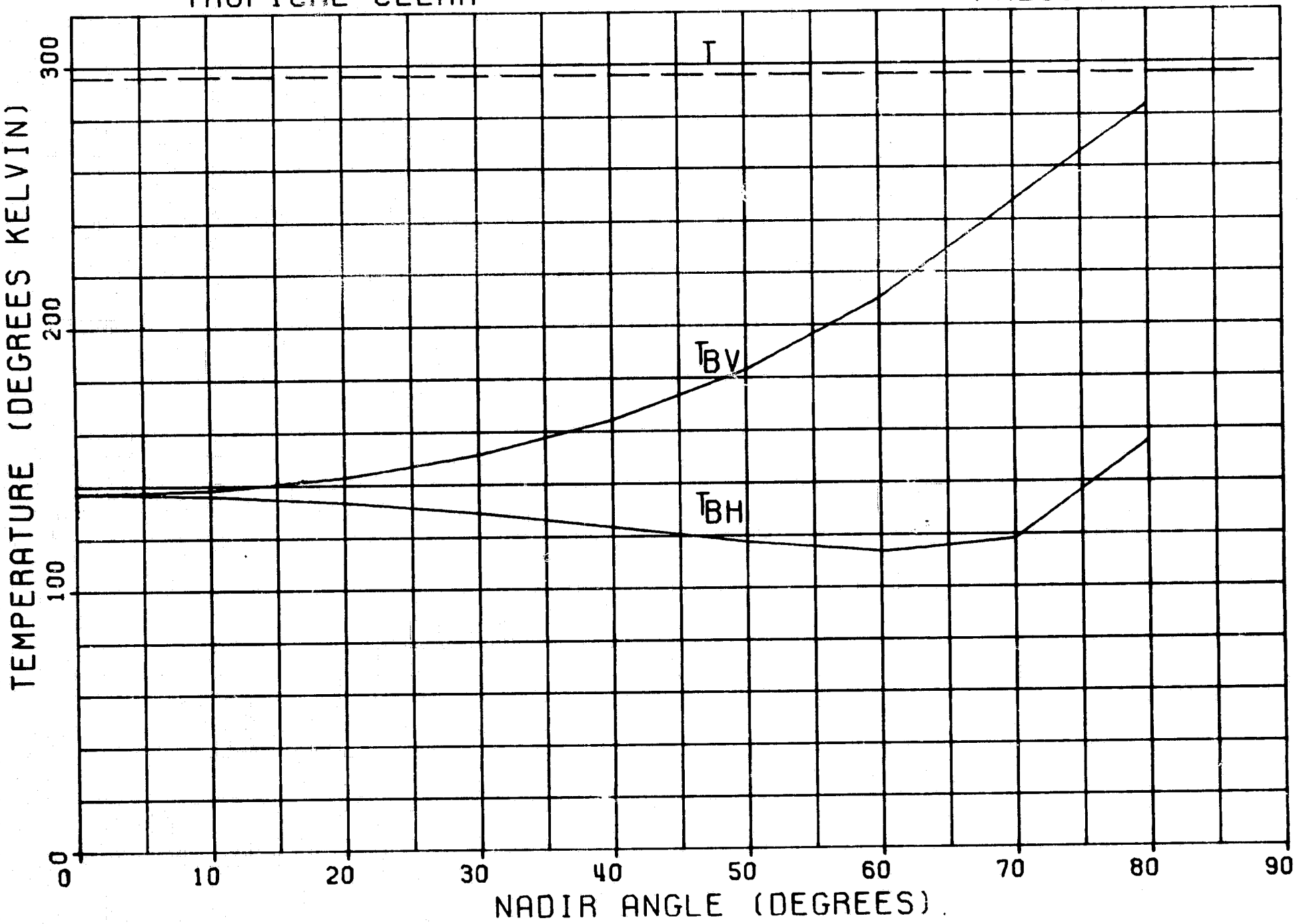
MID-LAT. RAIN 107MM/HR FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL CLEAR

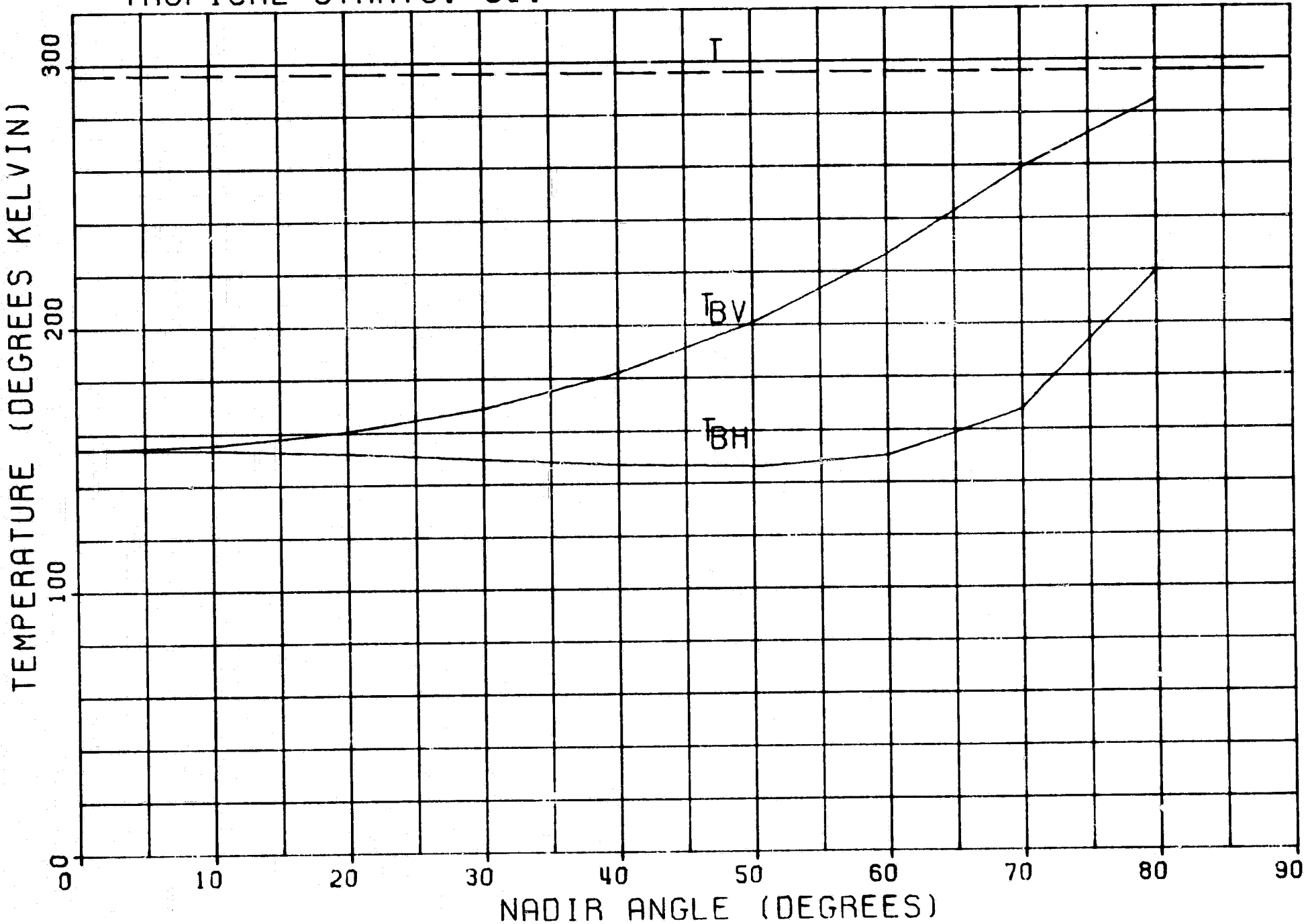
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL STRATO. CU.

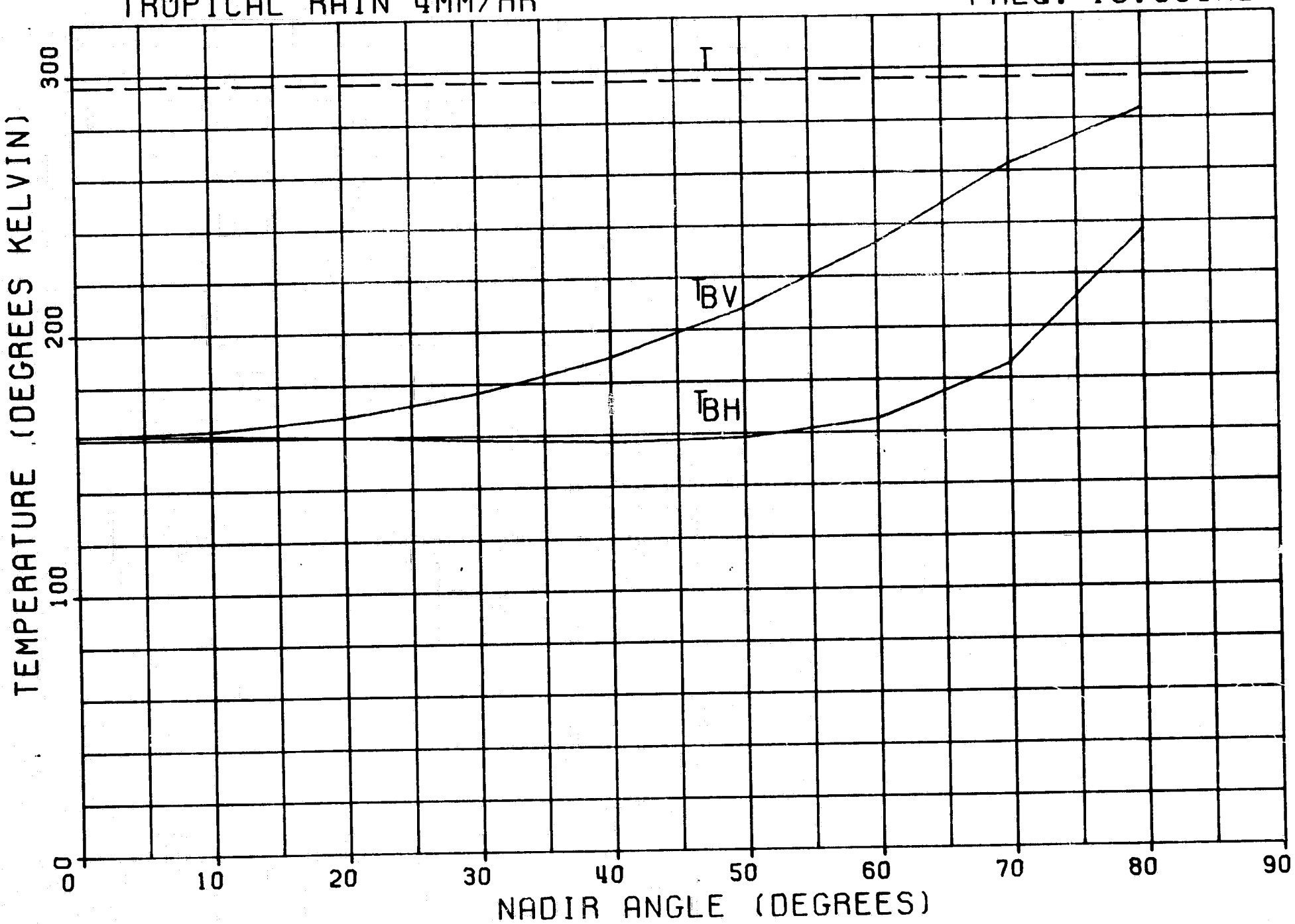
FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

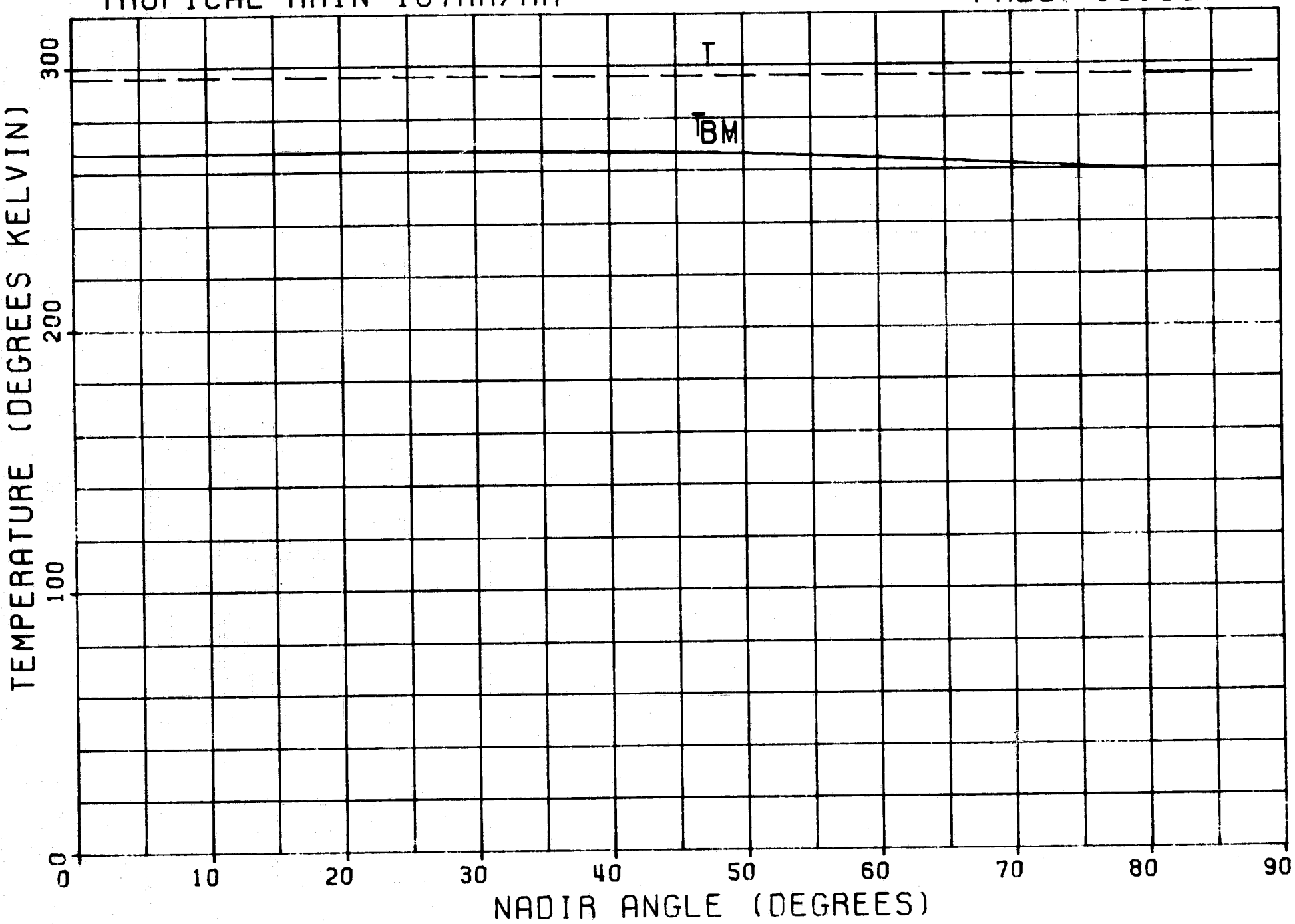
TROPICAL RAIN 4MM/HR

FREQ. 19.35GHZ



BRIGHTNESS TEMPERATURE VS NADIR ANGLE
SEA WATER

TROPICAL RAIN 107MM/HR FREQ. 19.35GHZ



PART II

BRIGHTNESS TEMPERATURES AND EMISSIVITIES OF SEA WATER

(Printouts)

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.9 IMAG= 117.7

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2566	100.4	0.2566	100.4
10	0.2533	99.7	0.2600	101.2
20	0.2432	97.4	0.2706	103.8
30	0.2265	93.6	0.2899	108.6
40	0.2032	88.4	0.3210	116.1
50	0.1736	81.9	0.3696	127.9
60	0.1378	74.1	0.4475	146.6
70	0.0965	65.9	0.5802	178.2
80	0.0502	60.6	0.8180	234.3

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.9 IMAG= 117.7

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2566	100.4	0.2566	100.4
10	0.2533	99.8	0.2600	101.4
20	0.2432	97.4	0.2706	103.8
30	0.2265	93.6	0.2899	108.6
40	0.2032	88.4	0.3210	116.1
50	0.1736	81.9	0.3696	127.9
60	0.1378	74.1	0.4475	146.6
70	0.0965	65.9	0.5802	178.2
80	0.0502	60.4	0.8180	234.4

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.9 IMAG= 117.7

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2566	100.4	0.2566	100.4
10	0.2533	99.8	0.2600	101.4
20	0.2432	97.4	0.2706	103.8
30	0.2265	93.6	0.2899	108.6
40	0.2032	88.4	0.3210	116.1
50	0.1736	81.9	0.3696	127.9
60	0.1378	74.1	0.4475	146.6
70	0.0965	65.9	0.5802	178.2
80	0.0502	60.4	0.8180	234.4

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.9 IMAG= 117.7

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2566	101.1	0.2566	101.1
10	0.2533	100.5	0.2600	102.1
20	0.2432	98.0	0.2706	104.5
30	0.2265	94.5	0.2899	109.4
40	0.2032	89.1	0.3210	116.7
50	0.1736	82.7	0.3696	128.5
60	0.1378	75.5	0.4475	147.4
70	0.0965	68.0	0.5802	179.2
80	0.0502	64.7	0.8180	234.9

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 76.1 IMAG= 142.6

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2364	97.7	0.2364	97.7
10	0.2333	97.0	0.2396	98.5
20	0.2239	94.6	0.2496	100.8
30	0.2083	91.6	0.2677	106.0
40	0.1867	86.0	0.2968	112.8
50	0.1592	79.7	0.3427	124.2
60	0.1262	72.4	0.4169	142.7
70	0.0881	64.8	0.5452	174.5
80	0.0458	59.9	0.7842	232.9

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 76.1 IMAG= 142.6

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2364	97.7	0.2364	97.7
10	0.2333	97.0	0.2396	98.5
20	0.2239	94.6	0.2496	100.8
30	0.2083	91.2	0.2677	105.6
40	0.1867	86.0	0.2968	112.8
50	0.1592	79.8	0.3427	124.3
60	0.1262	72.4	0.4169	142.7
70	0.0881	64.8	0.5452	174.5
80	0.0458	60.0	0.7842	233.0

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 76.1 IMAG= 142.6

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2364	97.7	0.2364	97.7
10	0.2333	97.0	0.2396	98.5
20	0.2239	94.8	0.2496	101.0
30	0.2083	91.2	0.2677	105.6
40	0.1867	86.0	0.2968	112.8
50	0.1592	79.8	0.3427	124.3
60	0.1262	72.4	0.4169	142.7
70	0.0881	64.8	0.5452	174.5
80	0.0458	60.1	0.7842	233.1

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 76.1 IMAG= 142.6

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2364	98.1	0.2364	98.1
10	0.2333	97.4	0.2396	98.9
20	0.2239	95.1	0.2496	101.4
30	0.2083	91.7	0.2677	106.1
40	0.1867	86.7	0.2968	113.4
50	0.1592	80.5	0.3427	124.9
60	0.1262	73.6	0.4169	143.6
70	0.0881	66.6	0.5452	175.4
80	0.0458	63.3	0.7842	233.8

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 184.0

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2094	93.5	0.2094	93.5
10	0.2065	92.7	0.2122	94.2
20	0.1981	90.7	0.2212	96.7
30	0.1841	87.3	0.2376	100.9
40	0.1647	82.5	0.2641	107.9
50	0.1401	76.7	0.3061	119.0
60	0.1108	69.9	0.3746	137.0
70	0.0772	62.9	0.4957	168.5
80	0.0400	58.6	0.7342	229.8

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 184.0

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2094	93.5	0.2094	93.5
10	0.2065	92.7	0.2122	94.2
20	0.1981	90.7	0.2212	96.7
30	0.1841	87.3	0.2376	100.9
40	0.1647	82.5	0.2641	107.9
50	0.1401	76.7	0.3061	119.0
60	0.1108	69.9	0.3746	137.0
70	0.0772	62.9	0.4957	168.5
80	0.0400	58.7	0.7342	229.9

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 184.0

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2094	93.5	0.2094	93.5
10	0.2065	92.7	0.2122	94.2
20	0.1981	90.7	0.2212	96.7
30	0.1841	87.3	0.2376	100.9
40	0.1647	82.5	0.2641	107.9
50	0.1401	76.7	0.3061	119.0
60	0.1108	69.9	0.3746	137.0
70	0.0772	62.9	0.4957	168.5
80	0.0400	58.7	0.7342	229.9

MATERIAL SEA WATER

FREQUENCY 0.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 184.0

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.2094	94.1	0.2094	94.1
10	0.2065	93.4	0.2122	94.8
20	0.1981	91.1	0.2212	97.0
30	0.1841	87.9	0.2376	101.5
40	0.1647	83.2	0.2641	108.5
50	0.1401	77.6	0.3061	119.7
60	0.1108	70.9	0.3746	137.6
70	0.0772	64.5	0.4957	169.4
80	0.0400	61.8	0.7342	230.6

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.2 IMAG= 50.1

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3292	95.8	0.3292	95.8
10	0.3251	95.0	0.3333	97.2
20	0.3129	91.9	0.3462	100.8
30	0.2924	86.4	0.3694	107.0
40	0.2636	79.2	0.4063	117.3
50	0.2265	69.8	0.4632	132.8
60	0.1811	59.1	0.5517	157.2
70	0.1278	47.7	0.6944	195.9
80	0.0671	40.9	0.9155	254.4

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.2 IMAG= 50.1

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3292	96.1	0.3292	96.1
10	0.3251	95.0	0.3333	97.2
20	0.3129	91.8	0.3462	100.7
30	0.2924	86.6	0.3694	107.2
40	0.2636	79.4	0.4063	117.5
50	0.2265	70.2	0.4632	133.1
60	0.1811	59.3	0.5517	157.3
70	0.1278	48.1	0.6944	195.9
80	0.0671	41.6	0.9155	254.3

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.2 IMAG= 50.1

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3292	96.1	0.3292	96.1
10	0.3251	95.0	0.3333	97.2
20	0.3129	91.8	0.3462	100.7
30	0.2924	86.6	0.3694	107.2
40	0.2636	79.4	0.4063	117.5
50	0.2265	70.2	0.4632	133.1
60	0.1811	59.3	0.5517	157.2
70	0.1278	48.2	0.6944	196.0
80	0.0671	41.6	0.9155	254.3

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 78.2 IMAG= 50.1

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3292	100.9	0.3292	100.9
10	0.3251	100.0	0.3333	102.1
20	0.3129	97.2	0.3462	105.8
30	0.2924	92.5	0.3694	112.5
40	0.2636	86.1	0.4063	122.8
50	0.2265	78.7	0.4632	138.9
60	0.1811	71.0	0.5517	163.5
70	0.1278	65.8	0.6944	201.6
90	0.0671	76.0	0.9155	256.0

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 75.4 IMAG= 57.3

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3232	96.8	0.3232	96.8
10	0.3192	95.9	0.3272	98.1
20	0.3071	92.7	0.3399	101.8
30	0.2869	87.2	0.3628	108.2
40	0.2585	79.9	0.3993	118.6
50	0.2220	70.6	0.4555	134.7
60	0.1774	59.6	0.5433	159.4
70	0.1251	48.0	0.6852	198.9
80	0.0656	41.1	0.9071	259.5

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 75.4 IMAG= 57.3

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3232	97.0	0.3232	97.0
10	0.3192	95.9	0.3272	98.1
20	0.3071	92.7	0.3399	101.8
30	0.2869	87.4	0.3628	108.3
40	0.2585	80.0	0.3993	118.7
50	0.2220	70.7	0.4555	134.7
60	0.1774	59.7	0.5433	159.4
70	0.1251	48.4	0.6852	199.1
80	0.0656	41.8	0.9071	259.4

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 75.4 IMAG= 57.3

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3232	97.0	0.3232	97.0
10	0.3192	95.9	0.3272	98.1
20	0.3071	92.7	0.3399	101.8
30	0.2869	87.4	0.3628	108.3
40	0.2585	80.0	0.3993	118.7
50	0.2220	70.7	0.4555	134.7
60	0.1774	59.7	0.5433	159.4
70	0.1251	48.6	0.6852	199.2
80	0.0656	42.0	0.9071	259.5

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 75.4 IMAG= 57.3

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3232	100.6	0.3232	100.6
10	0.3192	99.6	0.3272	101.8
20	0.3071	96.6	0.3399	105.5
30	0.2869	91.9	0.3628	112.3
40	0.2585	85.3	0.3993	122.9
50	0.2220	77.1	0.4555	139.1
60	0.1774	68.6	0.5433	164.2
70	0.1251	61.8	0.6852	203.7
80	0.0656	63.1	0.9071	261.5

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 70.1

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3095	96.7	0.3095	96.7
10	0.3056	95.7	0.3134	98.0
20	0.2939	92.4	0.3257	101.6
30	0.2744	87.0	0.3479	108.1
40	0.2470	79.5	0.3833	118.7
50	0.2119	70.0	0.4381	134.8
60	0.1691	59.0	0.5241	160.1
70	0.1190	47.5	0.6644	201.2
80	0.0623	40.1	0.8889	265.0

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 70.1

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3095	96.7	0.3095	96.7
10	0.3056	95.6	0.3134	97.9
20	0.2939	92.4	0.3257	101.6
30	0.2744	87.1	0.3479	108.2
40	0.2470	79.6	0.3833	118.8
50	0.2119	70.2	0.4381	135.0
60	0.1691	59.2	0.5241	160.2
70	0.1190	47.8	0.6644	201.2
80	0.0623	40.8	0.8889	265.2

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 70.1

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3095	96.7	0.3095	96.7
10	0.3056	95.8	0.3134	98.0
20	0.2939	92.4	0.3257	101.6
30	0.2744	87.1	0.3479	108.2
40	0.2470	79.6	0.3833	118.8
50	0.2119	70.2	0.4381	135.0
60	0.1691	59.2	0.5241	160.2
70	0.1190	47.8	0.6644	201.2
80	0.0623	40.9	0.8889	265.2

MATERIAL SEA WATER

FREQUENCY 1.40

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 71.9 IMAG= 70.1

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3095	100.3	0.3095	100.3
10	0.3056	99.3	0.3134	101.5
20	0.2939	96.3	0.3257	105.3
30	0.2744	91.3	0.3479	112.0
40	0.2470	84.7	0.3833	122.9
50	0.2119	76.5	0.4381	139.4
60	0.1691	67.7	0.5241	164.8
70	0.1190	60.7	0.6644	205.8
80	0.0623	66.1	0.8389	267.1

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 64.3 IMAG= 39.8

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3584	101.8	0.3584	101.8
10	0.3541	100.6	0.3628	103.0
20	0.3411	97.3	0.3764	106.8
30	0.3192	91.6	0.4009	113.7
40	0.2884	83.8	0.4398	124.7
50	0.2484	73.8	0.4992	141.2
60	0.1992	62.1	0.5905	166.5
70	0.1410	50.1	0.7336	205.7
80	0.0743	43.6	0.9387	260.2

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 64.3 IMAG= 39.8

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3584	103.2	0.3584	103.2
10	0.3541	102.0	0.3628	104.4
20	0.3411	98.8	0.3764	108.3
30	0.3192	93.3	0.4009	115.2
40	0.2884	85.8	0.4398	126.3
50	0.2484	76.2	0.4992	142.8
60	0.1992	65.5	0.5905	168.3
70	0.1410	55.2	0.7336	207.4
80	0.0743	54.1	0.9387	260.6

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 64.3 IMAG= 39.8

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3584	103.5	0.3584	103.5
10	0.3541	102.3	0.3628	104.8
20	0.3411	99.1	0.3764	108.6
30	0.3192	93.5	0.4009	115.4
40	0.2884	86.1	0.4398	126.5
50	0.2484	76.7	0.4992	143.1
60	0.1992	66.1	0.5905	168.5
70	0.1410	56.2	0.7336	207.5
80	0.0743	55.9	0.9387	260.7

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 64.3 IMAG= 39.8

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3584	161.5	0.3584	161.5
10	0.3541	161.5	0.3628	163.0
20	0.3411	161.5	0.3764	167.4
30	0.3192	162.3	0.4009	175.4
40	0.2884	164.5	0.4398	187.1
50	0.2484	170.1	0.4992	203.4
60	0.1992	182.1	0.5905	224.3
70	0.1410	205.0	0.7336	246.8
80	0.0743	241.6	0.9387	258.1

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 66.4 IMAG= 36.7

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3599	105.0	0.3599	105.0
10	0.3556	103.9	0.3643	106.4
20	0.3425	100.4	0.3779	110.2
30	0.3206	94.6	0.4026	117.4
40	0.2897	86.3	0.4415	128.5
50	0.2495	76.0	0.5011	145.7
60	0.2002	63.8	0.5926	171.8
70	0.1417	51.2	0.7360	212.2
80	0.0747	44.0	0.9416	268.4

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 66.4 IMAG= 36.7

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3599	106.2	0.3599	106.2
10	0.3556	105.2	0.3643	107.6
20	0.3425	101.6	0.3779	111.4
30	0.3206	96.0	0.4026	118.6
40	0.2897	88.2	0.4415	130.0
50	0.2495	78.3	0.5011	147.2
60	0.2002	66.9	0.5926	173.4
70	0.1417	56.1	0.7360	213.7
80	0.0747	53.6	0.9416	268.9

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 66.4 IMAG= 36.7

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3599	106.6	0.3599	106.6
10	0.3556	105.4	0.3643	107.8
20	0.3425	102.1	0.3779	111.9
30	0.3206	96.4	0.4026	119.0
40	0.2897	88.6	0.4415	130.4
50	0.2495	78.8	0.5011	147.5
60	0.2002	67.7	0.5926	173.7
70	0.1417	57.1	0.7360	214.0
80	0.0747	55.6	0.9416	269.0

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 66.4 IMAG= 36.7

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3599	152.8	0.3599	152.8
10	0.3556	152.5	0.3643	154.3
20	0.3425	152.0	0.3779	159.0
30	0.3206	151.6	0.4026	167.3
40	0.2897	152.2	0.4415	179.8
50	0.2495	155.6	0.5011	197.6
60	0.2002	165.3	0.5926	221.6
70	0.1417	188.7	0.7360	251.0
80	0.0747	236.5	0.9416	271.3

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 67.0 IMAG= 31.9

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3653	110.8	0.3653	110.8
10	0.3609	109.7	0.3697	112.3
20	0.3477	105.9	0.3835	116.4
30	0.3255	99.8	0.4083	123.9
40	0.2942	91.2	0.4477	135.7
50	0.2536	80.2	0.5077	153.7
60	0.2036	67.1	0.5996	180.8
70	0.1442	53.6	0.7434	223.1
80	0.0760	45.2	0.9473	280.7

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 67.0 IMAG= 31.9

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3653	112.1	0.3653	112.1
10	0.3609	110.8	0.3697	113.3
20	0.3477	107.3	0.3835	117.6
30	0.3255	101.3	0.4083	125.2
40	0.2942	92.8	0.4477	136.9
50	0.2536	82.2	0.5077	154.8
60	0.2036	70.1	0.5996	182.2
70	0.1442	58.1	0.7434	224.3
80	0.0760	54.3	0.9473	281.1

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 67.0 IMAG= 31.9

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3653	112.4	0.3653	112.4
10	0.3609	111.1	0.3697	113.7
20	0.3477	107.7	0.3835	118.0
30	0.3255	101.7	0.4083	125.5
40	0.2942	93.3	0.4477	137.3
50	0.2536	82.8	0.5077	155.3
60	0.2036	70.8	0.5996	182.5
70	0.1442	59.3	0.7434	224.5
80	0.0760	56.8	0.9473	281.2

MATERIAL SEA WATER

FREQUENCY 5.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 67.0 IMAG= 31.9

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3653	155.9	0.3653	155.9
10	0.3609	155.6	0.3697	157.5
20	0.3477	154.7	0.3835	162.3
30	0.3255	153.9	0.4083	170.8
40	0.2942	153.7	0.4477	183.6
50	0.2536	156.0	0.5077	201.8
60	0.2036	164.5	0.5996	226.5
70	0.1442	186.5	0.7434	256.6
80	0.0760	235.6	0.9473	277.7

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 47.2 IMAG= 42.0

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3760	107.3	0.3760	107.3
10	0.3715	106.1	0.3805	108.5
20	0.3580	102.7	0.3945	112.5
30	0.3354	96.9	0.4198	119.7
40	0.3033	88.8	0.4597	130.8
50	0.2617	78.8	0.5203	147.8
60	0.2102	66.8	0.6123	173.1
70	0.1491	55.0	0.7533	211.8
80	0.0787	50.6	0.9408	260.9

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 47.2 IMAG= 42.0

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3760	111.4	0.3760	111.4
10	0.3715	110.3	0.3805	112.7
20	0.3580	107.2	0.3945	116.8
30	0.3354	101.8	0.4198	124.0
40	0.3033	94.6	0.4597	135.3
50	0.2617	86.0	0.5203	152.5
60	0.2102	76.8	0.6123	178.1
70	0.1491	70.1	0.7533	216.1
80	0.0787	79.8	0.9408	262.6

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 47.2 IMAG= 42.0

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3760	112.0	0.3760	112.0
10	0.3715	111.0	0.3805	113.3
20	0.3580	107.8	0.3945	117.4
30	0.3354	102.7	0.4198	124.7
40	0.3033	95.7	0.4597	136.1
50	0.2617	87.2	0.5203	153.2
60	0.2102	78.4	0.6123	178.8
70	0.1491	72.6	0.7533	216.6
80	0.0787	84.4	0.9408	262.5

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 47.2 IMAG= 42.0

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3760	221.9	0.3760	221.9
10	0.3715	222.3	0.3805	223.0
20	0.3580	223.8	0.3945	226.1
30	0.3354	226.5	0.4198	231.3
40	0.3033	229.0	0.4597	236.1
50	0.2617	237.1	0.5203	245.7
60	0.2102	245.7	0.6123	253.2
70	0.1491	250.0	0.7533	253.3
80	0.0787	248.1	0.9408	248.3

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 52.6 IMAG= 40.6

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3724	109.1	0.3724	109.1
10	0.3679	108.0	0.3768	110.5
20	0.3545	104.3	0.3908	114.4
30	0.3320	98.5	0.4160	121.8
40	0.3003	90.2	0.4557	133.3
50	0.2589	79.8	0.5161	150.6
60	0.2080	67.7	0.6081	176.8
70	0.1474	55.3	0.7500	216.8
80	0.0778	49.8	0.9427	269.0

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 52.6 IMAG= 40.6

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3724	112.9	0.3724	112.9
10	0.3679	111.8	0.3768	114.3
20	0.3545	108.6	0.3908	118.4
30	0.3320	103.1	0.4160	125.8
40	0.3003	95.6	0.4557	137.4
50	0.2589	86.5	0.5161	154.9
60	0.2080	76.8	0.6081	181.3
70	0.1474	69.3	0.7500	220.7
80	0.0778	77.2	0.9427	270.5

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 52.6 IMAG= 40.6

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3724	113.8	0.3724	113.8
10	0.3679	112.7	0.3768	115.1
20	0.3545	109.4	0.3908	119.2
30	0.3320	104.0	0.4160	126.6
40	0.3003	96.8	0.4557	138.4
50	0.2589	88.0	0.5161	155.9
60	0.2080	78.8	0.6081	182.3
70	0.1474	72.3	0.7500	221.5
80	0.0778	82.9	0.9427	270.4

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY - REAL= 52.6 IMAG= 40.6

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3724	212.4	0.3724	212.4
10	0.3679	212.8	0.3768	213.7
20	0.3545	214.5	0.3908	218.1
30	0.3320	217.5	0.4160	225.1
40	0.3003	222.7	0.4557	234.9
50	0.2589	230.9	0.5161	246.6
60	0.2080	243.2	0.6081	259.0
70	0.1474	258.2	0.7500	267.9
80	0.0778	265.7	0.9427	266.7

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 57.8 IMAG= 36.2

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3732	114.1	0.3732	114.1
10	0.3687	113.0	0.3777	115.6
20	0.3553	109.3	0.3917	119.8
30	0.3328	103.1	0.4168	127.4
40	0.3010	94.4	0.4566	139.3
50	0.2596	83.7	0.5171	157.4
60	0.2085	71.1	0.6095	184.9
70	0.1479	58.3	0.7522	226.5
80	0.0780	53.3	0.9479	281.5

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 57.8 IMAG= 36.2

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3732	117.7	0.3732	117.7
10	0.3687	116.6	0.3777	119.1
20	0.3553	113.0	0.3917	123.3
30	0.3328	107.4	0.4168	131.1
40	0.3010	99.5	0.4566	143.1
50	0.2596	90.0	0.5171	161.5
60	0.2085	79.6	0.6095	188.9
70	0.1479	71.4	0.7522	230.0
80	0.0780	78.9	0.9479	282.2

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 57.8 IMAG= 36.2

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3732	118.6	0.3732	118.6
10	0.3687	117.5	0.3777	120.0
20	0.3553	114.1	0.3917	124.3
30	0.3328	108.6	0.4168	132.1
40	0.3010	100.9	0.4566	144.3
50	0.2596	91.6	0.5171	162.5
60	0.2085	82.0	0.6095	190.0
70	0.1479	75.1	0.7522	231.0
80	0.0780	85.6	0.9479	282.3

MATERIAL SEA WATER

FREQUENCY 9.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 57.8 IMAG= 36.2

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3732	212.9	0.3732	212.9
10	0.3687	213.2	0.3777	214.2
20	0.3553	214.7	0.3917	218.7
30	0.3328	217.5	0.4168	226.1
40	0.3010	222.1	0.4566	236.0
50	0.2596	230.2	0.5171	248.5
60	0.2085	242.6	0.6095	261.7
70	0.1479	257.9	0.7522	270.6
80	0.0780	266.1	0.9479	267.8

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.1 IMAG= 37.2

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4085	120.1	0.4085	120.1
10	0.4038	118.9	0.4133	121.4
20	0.3895	115.5	0.4281	125.6
30	0.3655	110.0	0.4547	133.3
40	0.3313	102.2	0.4962	145.1
50	0.2866	92.8	0.5585	162.6
60	0.2310	82.5	0.6510	188.1
70	0.1645	74.5	0.7862	224.1
90	0.0872	82.9	0.9390	262.2

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.1 IMAG= 37.2

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4085	131.2	0.4085	131.2
10	0.4038	130.2	0.4133	132.5
20	0.3895	127.8	0.4281	137.1
30	0.3655	123.5	0.4547	144.9
40	0.3313	118.2	0.4962	157.0
50	0.2866	112.6	0.5585	174.7
60	0.2310	109.0	0.6510	199.8
70	0.1645	113.6	0.7862	233.7
80	0.0872	149.4	0.9390	266.0

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.1 IMAG= 37.2

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4085	133.1	0.4085	133.1
10	0.4038	132.3	0.4133	134.6
20	0.3895	129.9	0.4281	139.1
30	0.3655	125.9	0.4547	146.9
40	0.3313	121.0	0.4962	159.1
50	0.2866	116.1	0.5585	176.7
60	0.2310	113.6	0.6510	201.7
70	0.1645	120.0	0.7862	234.9
80	0.0872	158.5	0.9390	265.1

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.1 IMAG= 37.2

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4085	251.5	0.4085	251.5
10	0.4038	251.7	0.4133	251.7
20	0.3895	251.4	0.4281	251.6
30	0.3655	251.2	0.4547	251.4
40	0.3313	250.6	0.4962	250.9
50	0.2866	249.5	0.5585	249.8
60	0.2310	247.8	0.6510	247.8
70	0.1645	245.3	0.7862	245.4
80	0.0872	242.8	0.9390	242.8

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 33.6 IMAG= 38.9

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3985	119.8	0.3985	119.8
10	0.3938	118.7	0.4032	121.3
20	0.3798	115.1	0.4178	125.5
30	0.3562	109.5	0.4439	133.2
40	0.3226	101.4	0.4850	145.1
50	0.2789	91.6	0.5469	163.0
60	0.2246	80.9	0.6394	189.4
70	0.1597	71.9	0.7769	227.4
80	0.0846	77.9	0.9416	270.3

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 33.6 IMAG= 38.9

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3985	131.2	0.3985	131.2
10	0.3938	130.3	0.4032	132.7
20	0.3798	127.6	0.4178	137.2
30	0.3562	123.4	0.4439	145.2
40	0.3226	117.8	0.4850	157.5
50	0.2789	112.0	0.5469	175.8
60	0.2246	108.0	0.6394	201.9
70	0.1597	112.0	0.7769	237.8
80	0.0846	147.3	0.9416	273.9

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 33.6 IMAG= 38.9

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3985	134.3	0.3985	134.3
10	0.3938	133.5	0.4032	135.8
20	0.3798	131.1	0.4178	140.4
30	0.3562	127.1	0.4439	148.4
40	0.3226	122.2	0.4850	160.9
50	0.2789	117.3	0.5469	179.0
60	0.2246	115.0	0.6394	204.9
70	0.1597	122.0	0.7769	240.1
80	0.0846	162.1	0.9416	273.9

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 33.6 IMAG= 38.9

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3985	262.9	0.3985	262.9
10	0.3938	263.1	0.4032	263.2
20	0.3798	263.7	0.4178	264.2
30	0.3562	264.5	0.4439	265.3
40	0.3226	265.5	0.4850	266.5
50	0.2789	266.2	0.5469	267.0
60	0.2246	265.8	0.6394	266.1
70	0.1597	263.8	0.7769	263.8
80	0.0846	261.0	0.9416	261.0

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 42.6 IMAG= 38.1

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3908	124.5	0.3908	124.5
10	0.3863	123.4	0.3955	126.0
20	0.3724	120.0	0.4099	130.5
30	0.3491	114.3	0.4358	138.4
40	0.3161	106.6	0.4765	150.9
50	0.2730	97.2	0.5381	169.5
60	0.2197	87.4	0.6308	197.0
70	0.1561	80.8	0.7708	236.8
80	0.0826	93.5	0.9479	282.6

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 42.6 IMAG= 38.1

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3908	135.5	0.3908	135.5
10	0.3863	134.5	0.3955	136.9
20	0.3724	131.8	0.4099	141.5
30	0.3491	127.5	0.4358	149.8
40	0.3161	122.2	0.4765	162.8
[illegible]	0.2730	116.5	0.5381	181.5
[illegible]	0.2197	113.2	0.6308	208.7
[illegible]	0.1561	118.4	0.7708	246.3
[illegible]	0.0826	156.6	0.9479	284.5

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 42.6 IMAG= 38.1

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3908	139.1	0.3908	139.1
10	0.3863	138.3	0.3955	140.7
20	0.3724	135.9	0.4099	145.4
30	0.3491	132.0	0.4358	153.6
40	0.3161	127.3	0.4765	166.6
50	0.2730	122.9	0.5381	185.4
60	0.2197	121.4	0.6308	212.3
70	0.1561	130.1	0.7708	249.0
80	0.0826	173.2	0.9479	284.0

MATERIAL SEA WATER

FREQUENCY 16.50

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 42.6 IMAG= 38.1

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3908	263.6	0.3908	263.6
10	0.3863	263.9	0.3955	264.0
20	0.3724	264.5	0.4099	265.1
30	0.3491	265.2	0.4358	266.3
40	0.3161	266.3	0.4765	267.7
50	0.2730	266.7	0.5381	267.9
60	0.2197	266.2	0.6308	266.9
70	0.1561	264.0	0.7708	264.1
30	0.0826	260.4	0.9479	260.4

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 23.6 IMAG= 34.5

WEATHER MODEL NORTHERN CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4217	131.1	0.4217	131.1
10	0.4169	130.1	0.4266	132.5
20	0.4023	127.2	0.4417	137.0
30	0.3777	122.4	0.4687	144.8
40	0.3427	116.1	0.5108	156.9
50	0.2968	109.1	0.5736	174.6
60	0.2396	103.1	0.6660	199.8
70	0.1709	103.5	0.7985	233.5
80	0.0908	132.0	0.9375	264.8

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 23.6 IMAG= 34.5

WEATHER MODEL NORTHERN STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4217	145.6	0.4217	145.6
10	0.4169	144.9	0.4266	147.1
20	0.4023	143.0	0.4417	151.7
30	0.3777	140.0	0.4687	159.8
40	0.3427	136.8	0.5108	172.2
50	0.2963	134.4	0.5736	189.9
60	0.2396	136.0	0.6660	213.9
70	0.1709	149.3	0.7985	244.1
80	0.0908	196.8	0.9375	268.1

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 23.6 IMAG= 34.5

WEATHER MODEL NORTHERN RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4217	148.5	0.4217	148.5
10	0.4169	147.9	0.4266	150.0
20	0.4023	146.2	0.4417	154.7
30	0.3777	143.5	0.4687	162.7
40	0.3427	140.8	0.5108	175.1
50	0.2968	139.2	0.5736	192.5
60	0.2396	142.2	0.6660	216.3
70	0.1709	157.2	0.7985	245.4
80	0.0908	205.1	0.9375	266.8

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 276.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 23.6 IMAG= 34.5

WEATHER MODEL NORTHERN RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4217	250.3	0.4217	250.3
10	0.4169	250.3	0.4266	250.3
20	0.4023	250.2	0.4417	250.2
30	0.3777	249.3	0.4687	249.4
40	0.3427	248.5	0.5108	248.6
50	0.2968	247.3	0.5736	247.3
60	0.2396	245.7	0.6660	245.7
70	0.1709	243.9	0.7985	243.9
80	0.0908	242.1	0.9375	242.1

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.7 IMAG= 36.8

WEATHER MODEL MID-LATITUDE CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	BRIGHTNESS TEMP.(DEG K)
0	0.4096	129.6	0.4096	129.6
10	0.4049	128.5	0.4144	131.0
20	0.3906	125.5	0.4292	135.5
30	0.3665	120.4	0.4558	143.4
40	0.3322	113.7	0.4974	155.8
50	0.2874	105.9	0.5598	173.8
60	0.2318	99.0	0.6524	200.1
70	0.1650	97.7	0.7878	236.3
80	0.0875	122.7	0.9408	272.4

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.7 IMAG= 36.8

WEATHER MODELMID-LATITUDE STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4096	147.1	0.4096	147.1
10	0.4049	146.3	0.4144	148.5
20	0.3906	144.5	0.4292	153.4
30	0.3665	141.5	0.4558	161.5
40	0.3322	138.4	0.4974	174.3
50	0.2874	136.4	0.5598	192.5
60	0.2318	138.5	0.6524	217.7
70	0.1650	152.7	0.7878	249.6
80	0.0875	202.2	0.9408	276.4

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.7 IMAG= 36.8

WEATHER MODELMID-LATITUDE RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4096	153.5	0.4096	153.5
10	0.4049	153.0	0.4144	155.1
20	0.3906	151.5	0.4292	159.8
30	0.3665	149.3	0.4558	168.2
40	0.3322	147.3	0.4974	180.9
50	0.2874	147.0	0.5598	198.9
60	0.2318	151.8	0.6524	223.3
70	0.1650	169.8	0.7878	253.3
80	0.0875	220.9	0.9408	276.4

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 284.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 28.7 IMAG= 36.8

WEATHER MODEL MID-LAT. RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.4096	266.3	0.4096	266.3
10	0.4049	266.5	0.4144	266.6
20	0.3906	266.4	0.4292	266.5
30	0.3665	266.4	0.4558	266.6
40	0.3322	266.2	0.4974	266.4
50	0.2874	265.6	0.5598	265.8
60	0.2318	264.3	0.6524	264.3
70	0.1650	262.4	0.7878	262.4
80	0.0875	260.2	0.9408	260.2

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 37.4 IMAG= 37.9

WEATHER MODEL TROPICAL CLEAR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3977	137.1	0.3977	137.1
10	0.3931	136.1	0.4024	138.5
20	0.3790	133.3	0.4170	143.2
30	0.3555	129.0	0.4431	151.6
40	0.3220	123.4	0.4842	164.5
50	0.2783	117.4	0.5461	183.3
60	0.2241	113.6	0.6389	210.3
70	0.1594	118.3	0.7775	247.5
80	0.0844	155.5	0.9465	284.0

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 37.4 IMAG= 37.9

WEATHER MODEL TROPICAL STRATO. CU. ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3977	154.0	0.3977	154.0
10	0.3931	153.5	0.4024	155.6
20	0.3790	151.8	0.4170	160.5
30	0.3555	149.4	0.4431	169.1
40	0.3220	147.0	0.4842	182.2
50	0.2783	146.2	0.5461	201.0
60	0.2241	150.4	0.6389	226.7
70	0.1594	167.8	0.7775	259.2
80	0.0844	219.8	0.9465	285.2

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 37.4 IMAG= 37.9

WEATHER MODEL TROPICAL RAIN 4MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL EMISSIVITY	POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3977	161.4	0.3977	161.4
10	0.3931	161.0	0.4024	163.1
20	0.3790	159.9	0.4170	168.1
30	0.3555	158.3	0.4431	176.7
40	0.3220	157.2	0.4842	189.7
50	0.2783	158.4	0.5461	208.4
60	0.2241	165.2	0.6389	233.1
70	0.1594	186.1	0.7775	263.2
80	0.0844	237.2	0.9465	283.9

MATERIAL SEA WATER

FREQUENCY 19.35

TEMPERATURE 296.0 DEGREES KELVIN

DIELECTRIC PERMITTIVITY REAL= 37.4 IMAG= 37.9

WEATHER MODEL TROPICAL RAIN 107MM/HR ATMOSPHERE

NADIR ANGLE (DEGREES)	HORIZONTAL POLARIZATION EMISSIVITY	HORIZONTAL POLARIZATION BRIGHTNESS TEMP.(DEG K)	VERTICAL POLARIZATION EMISSIVITY	VERTICAL POLARIZATION BRIGHTNESS TEMP.(DEG K)
0	0.3977	267.4	0.3977	267.4
10	0.3931	267.4	0.4024	267.5
20	0.3790	267.6	0.4170	267.8
30	0.3555	267.4	0.4431	267.8
40	0.3220	267.0	0.4842	267.3
50	0.2783	266.2	0.5461	266.5
60	0.2241	264.3	0.6389	264.4
70	0.1594	262.0	0.7775	262.0
80	0.0844	259.4	0.9465	259.4

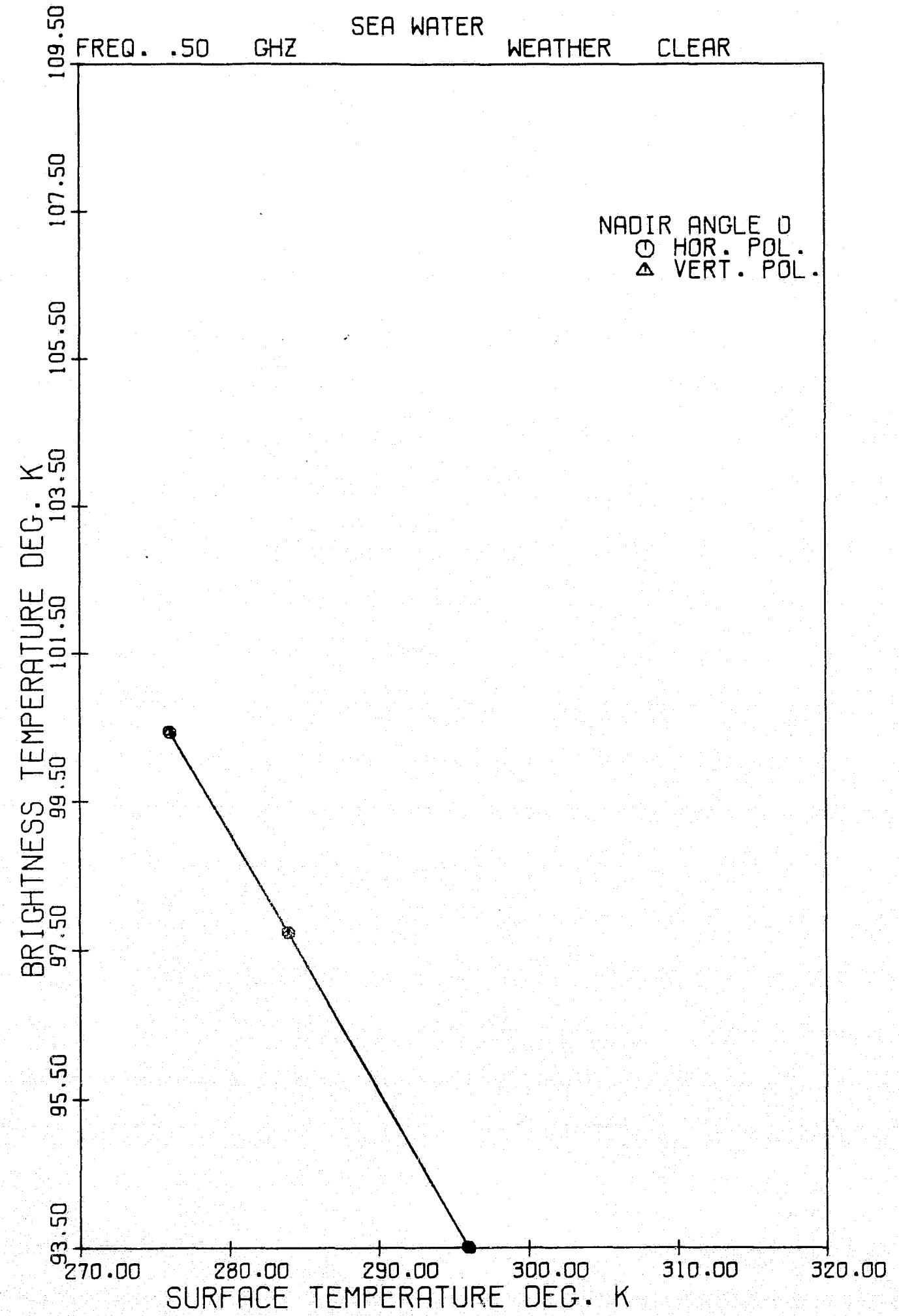
PART III

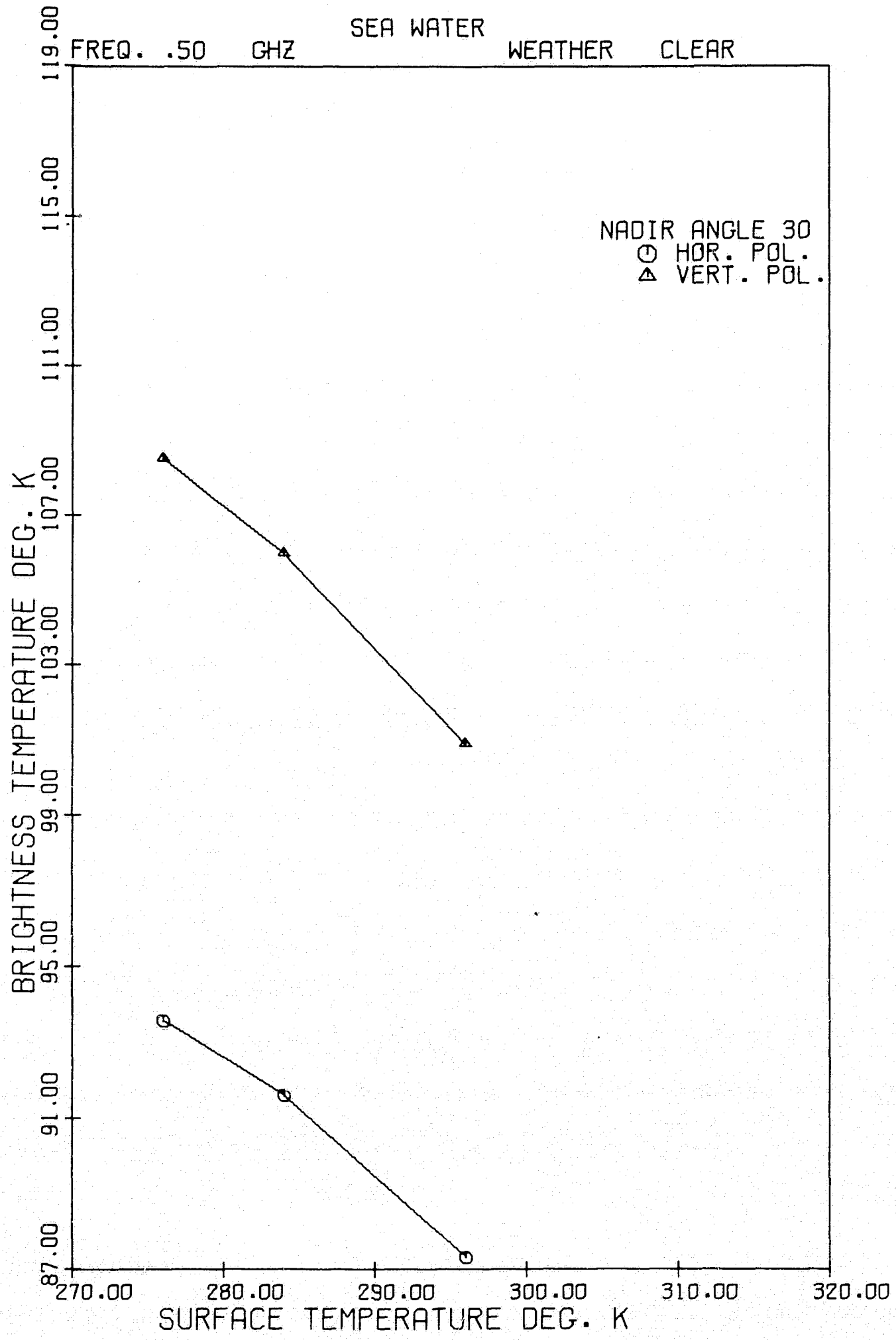
TEMPERATURE DEPENDENCE

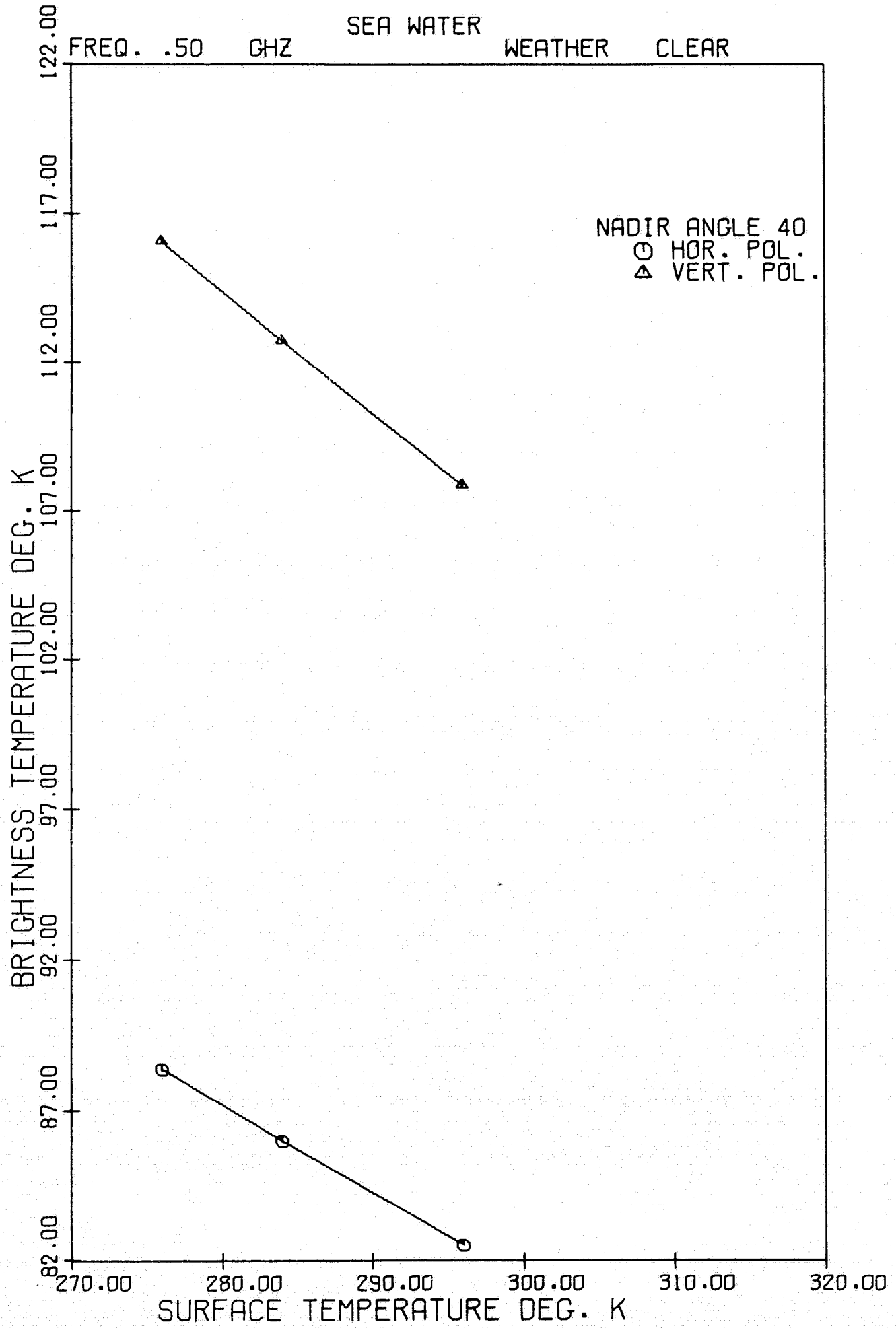
OF

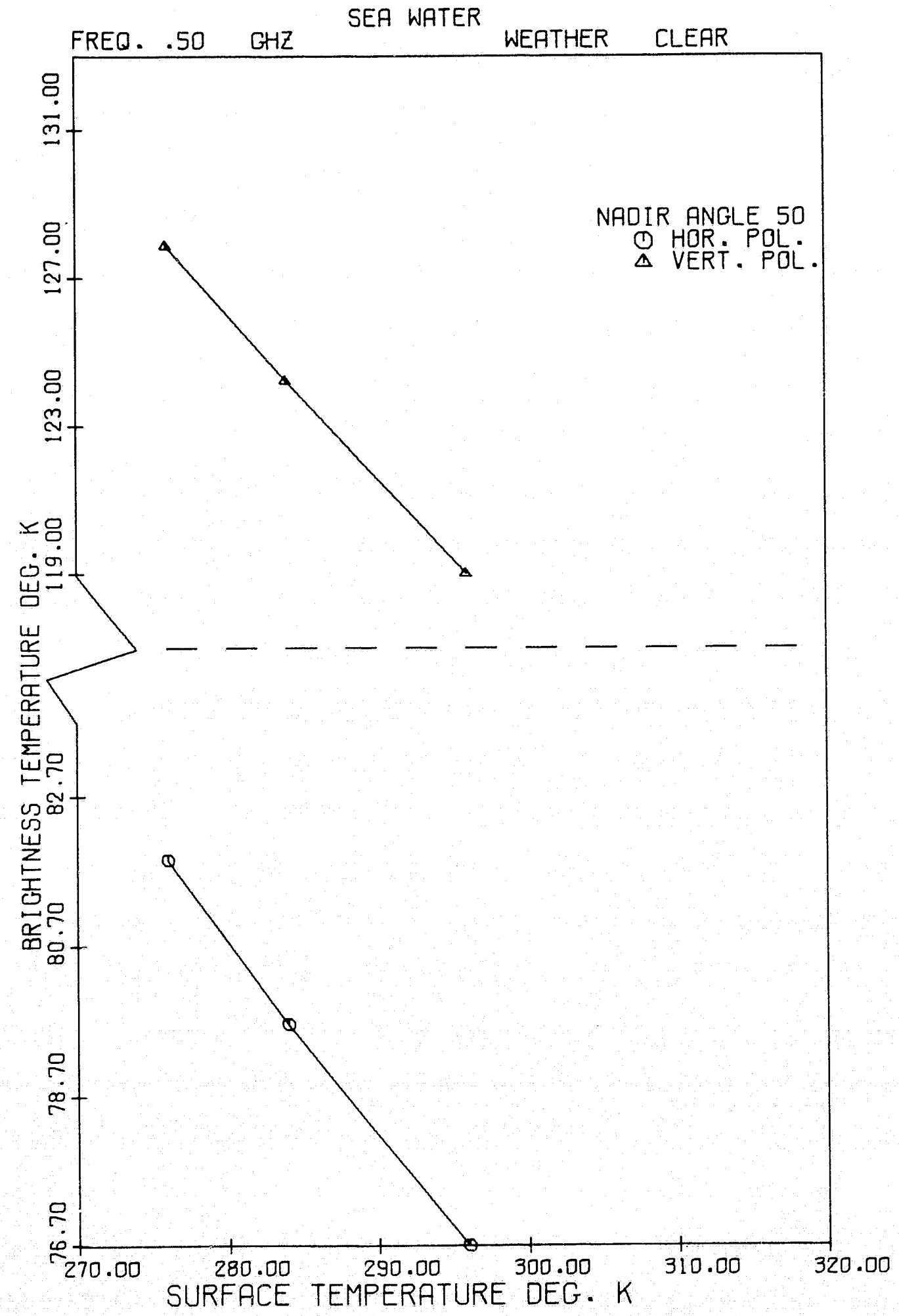
SEA WATER BRIGHTNESS TEMPERATURES

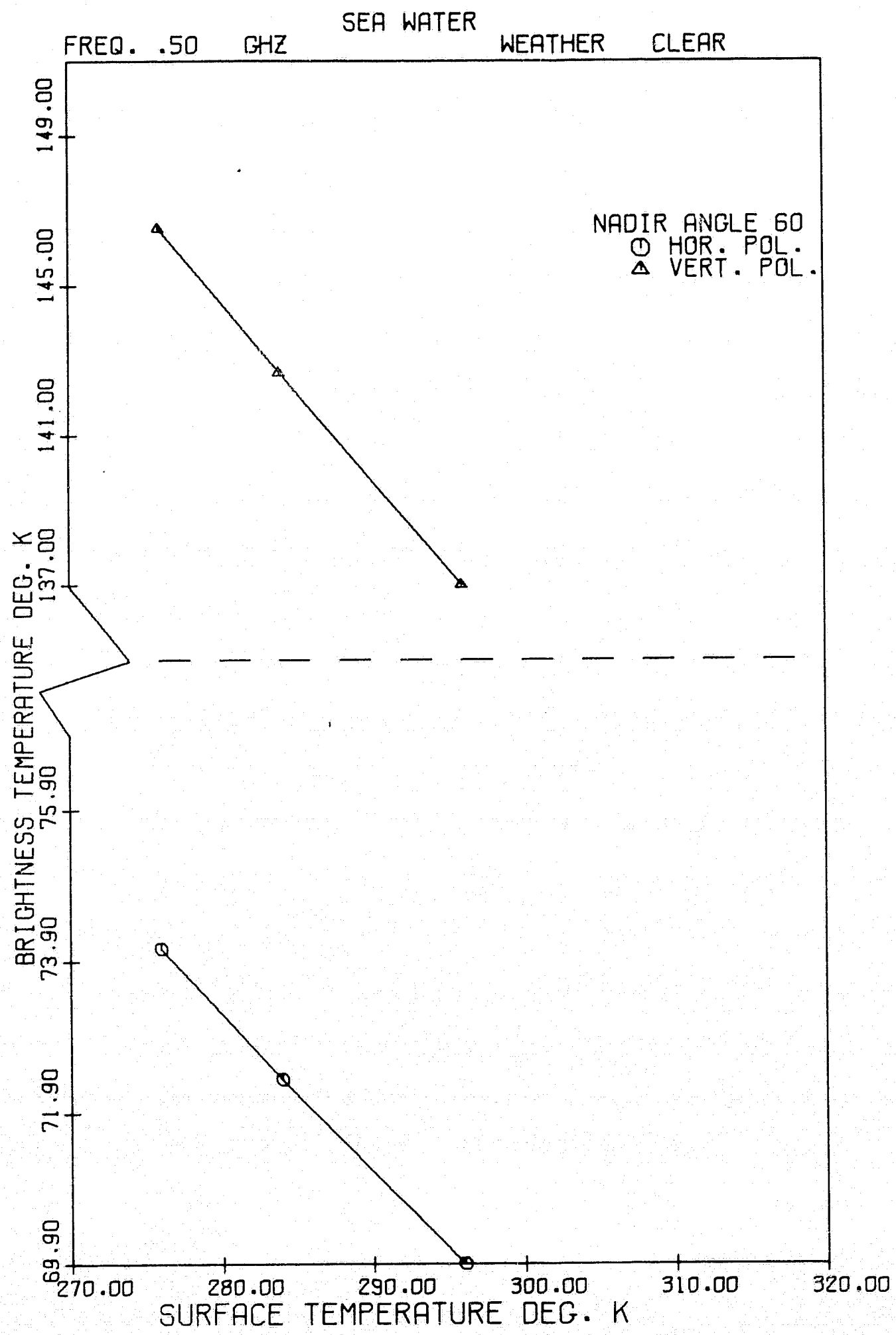
(Plots)

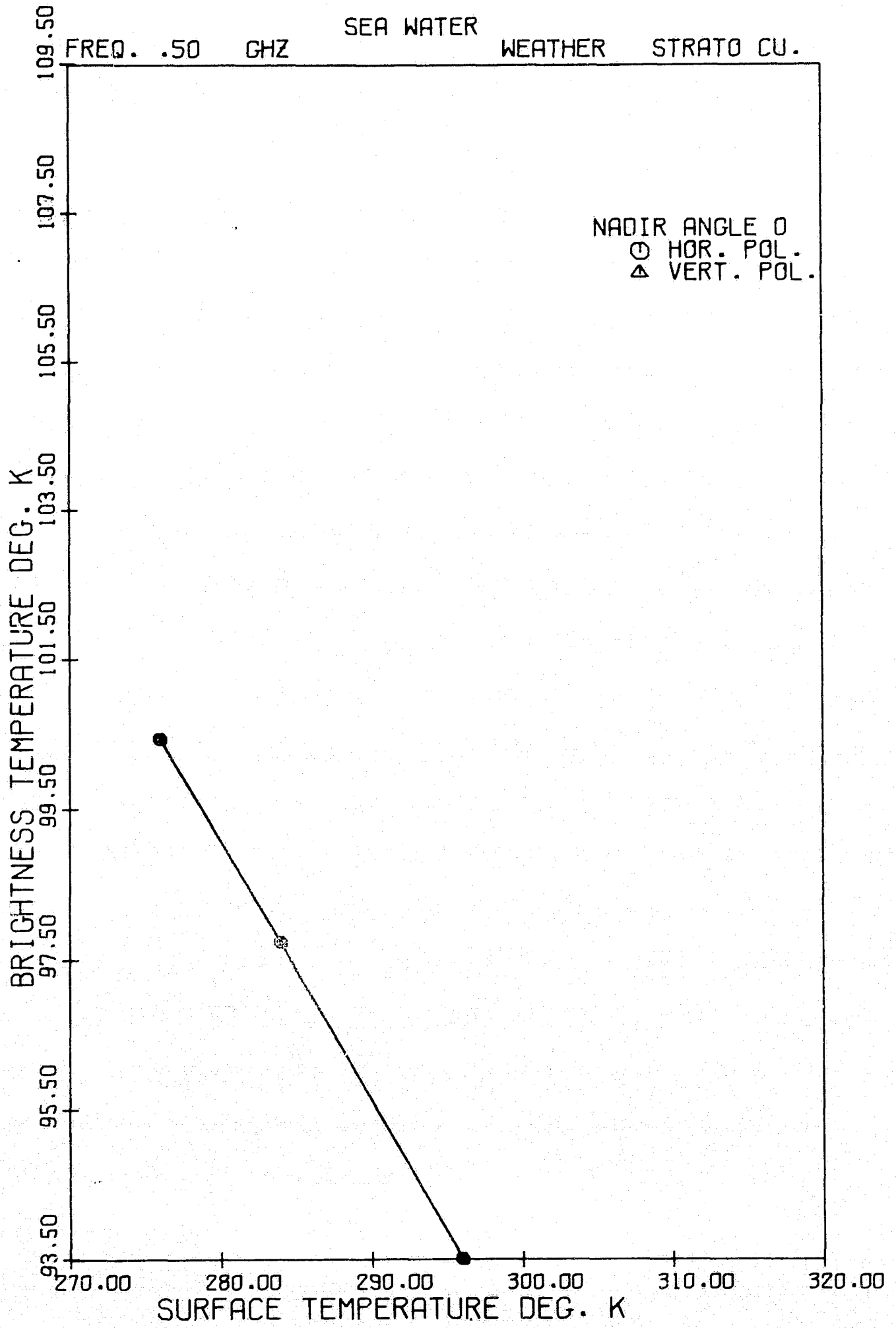

SEA WATER
FREQ. .50 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
109.50
107.50
105.50
103.50
101.50
99.50
97.50
95.50
93.50
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

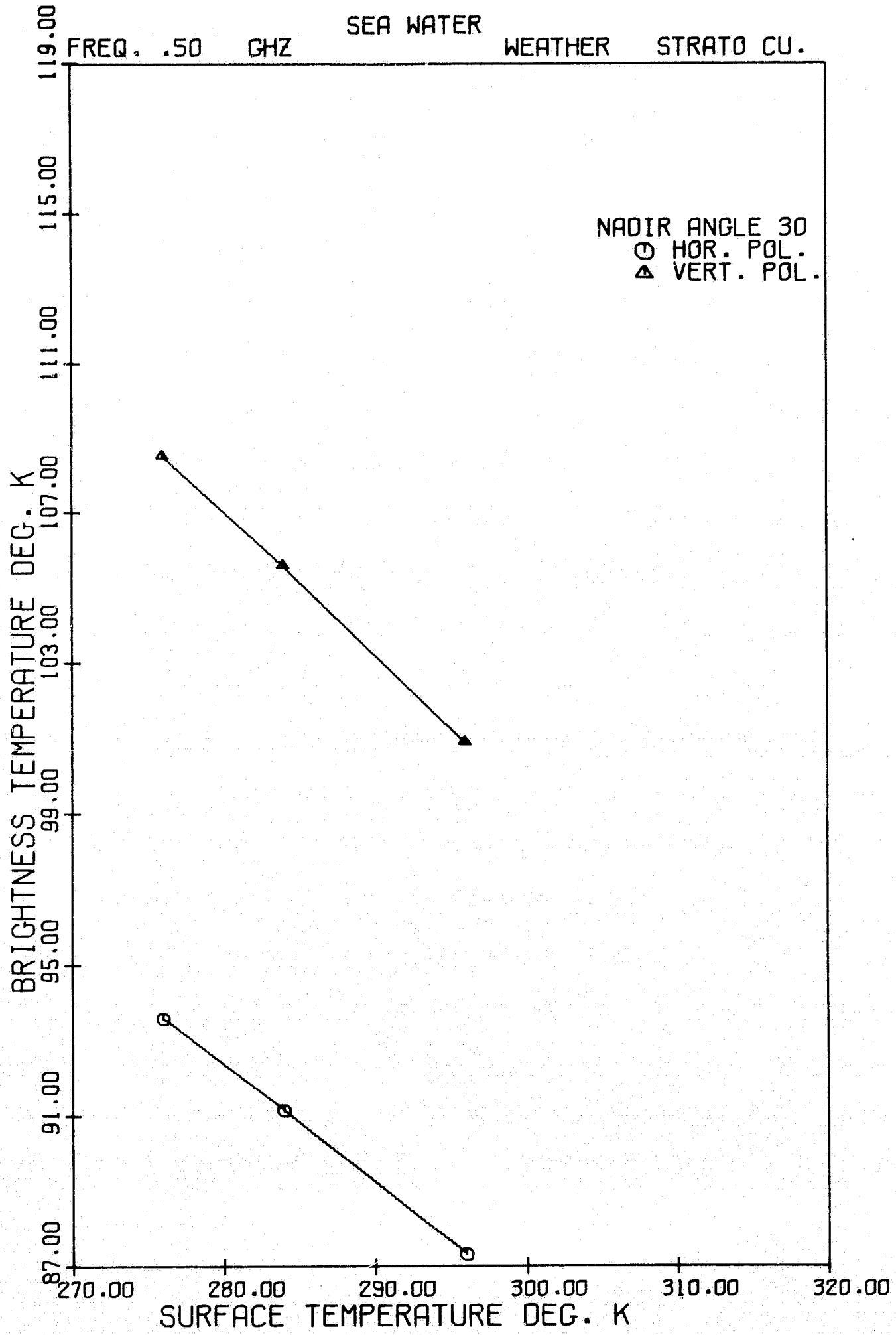

SEA WATER
FREQ. .50 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
115.00
111.00
107.00
103.00
99.00
95.00
91.00
87.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

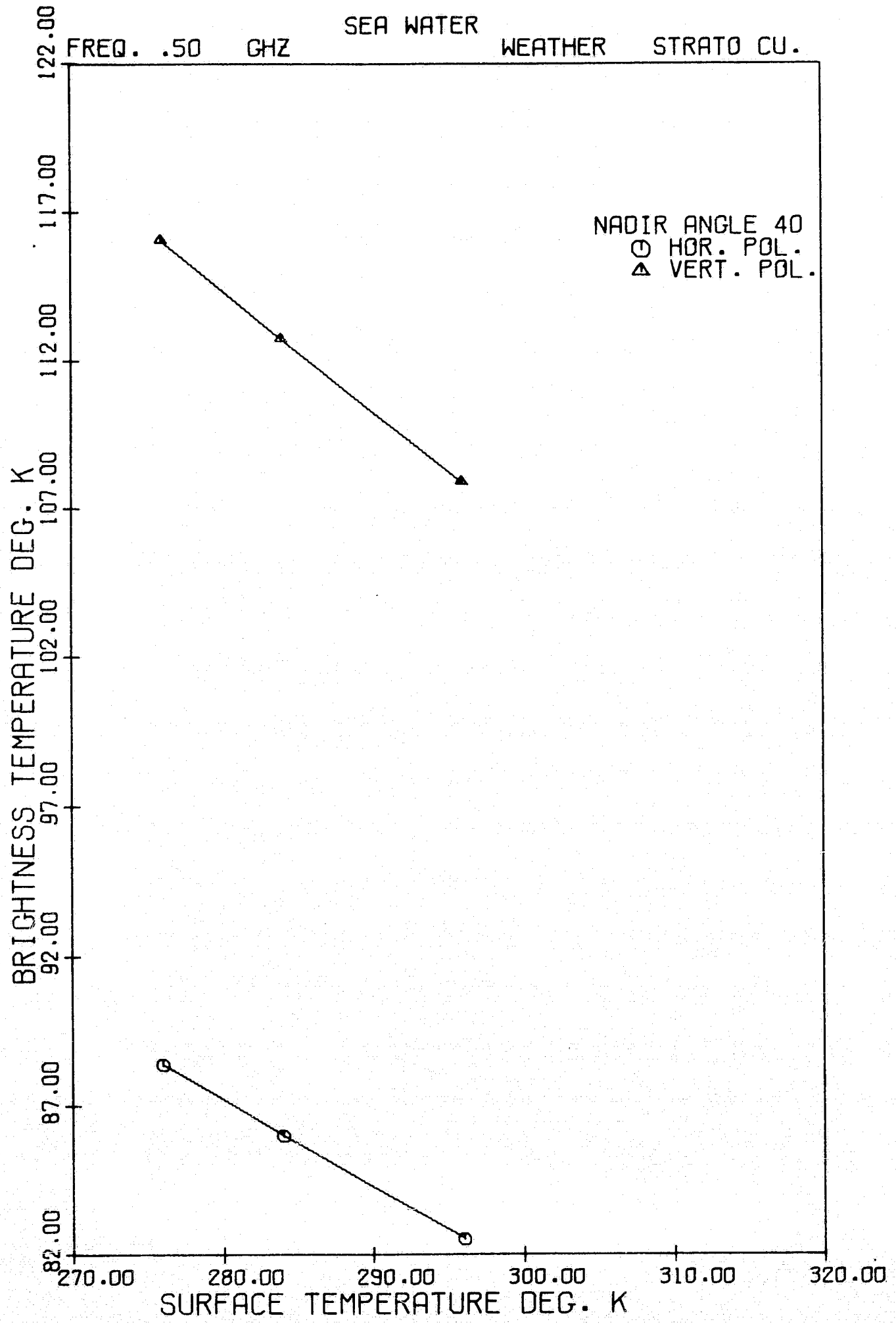

SEA WATER
FREQ. .50 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
122.00
117.00
112.00
107.00
102.00
97.00
92.00
87.00
82.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

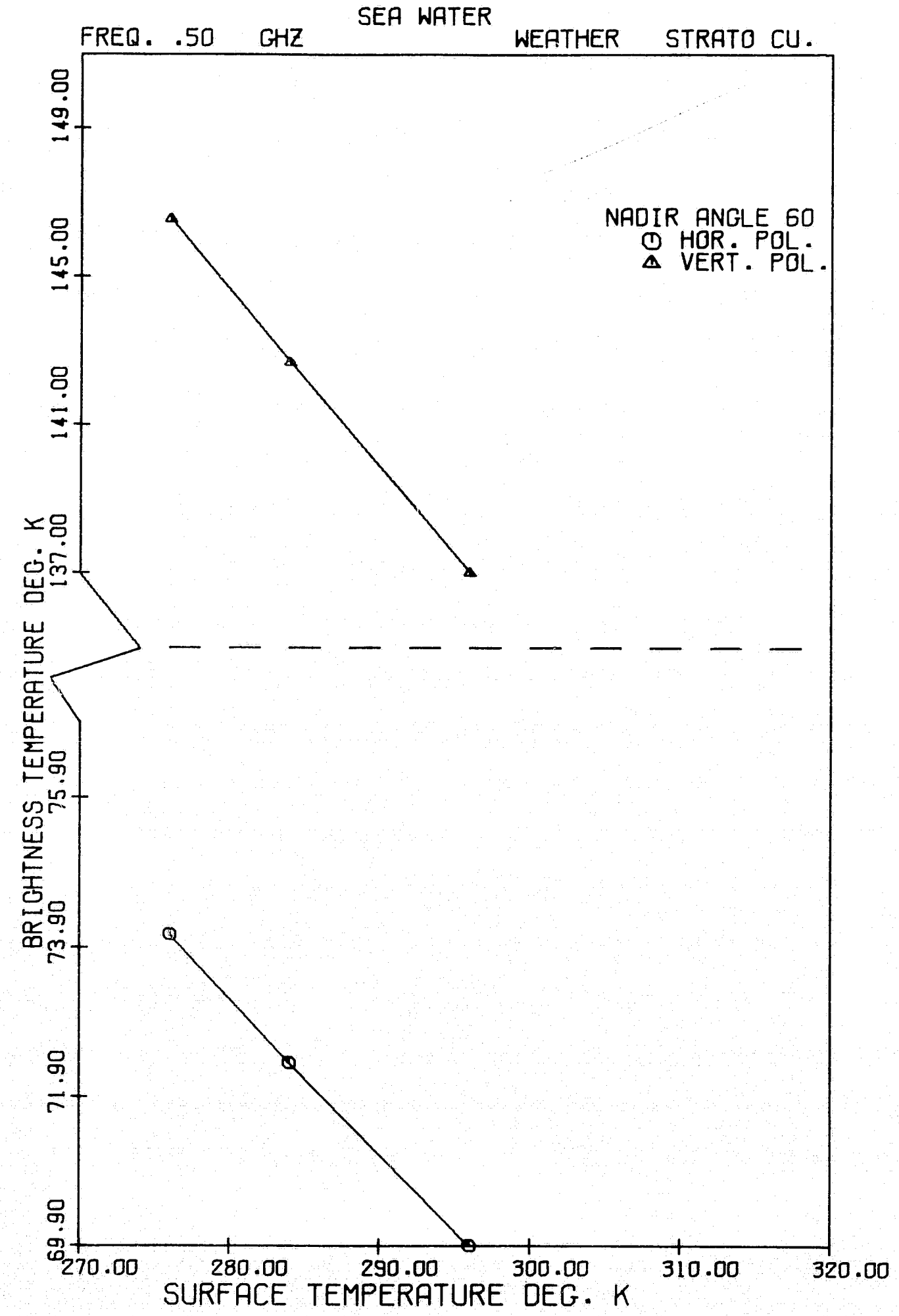

SEA WATER
FREQ. .50 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
131.00
127.00
123.00
119.00
82.70
80.70
78.70
76.70
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

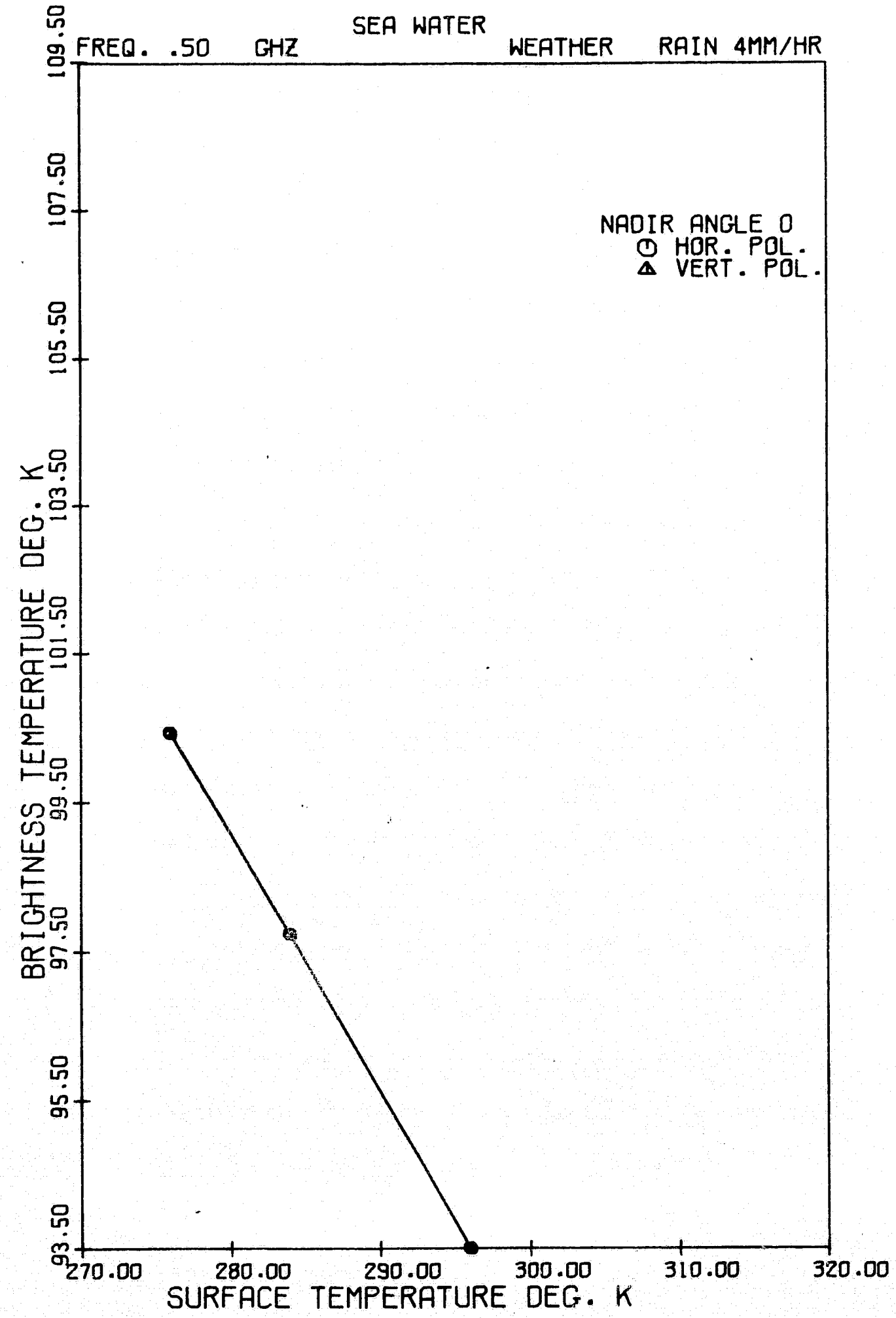

SEA WATER
FREQ. .50 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
149.00
145.00
141.00
137.00
75.90
73.90
71.90
69.90
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

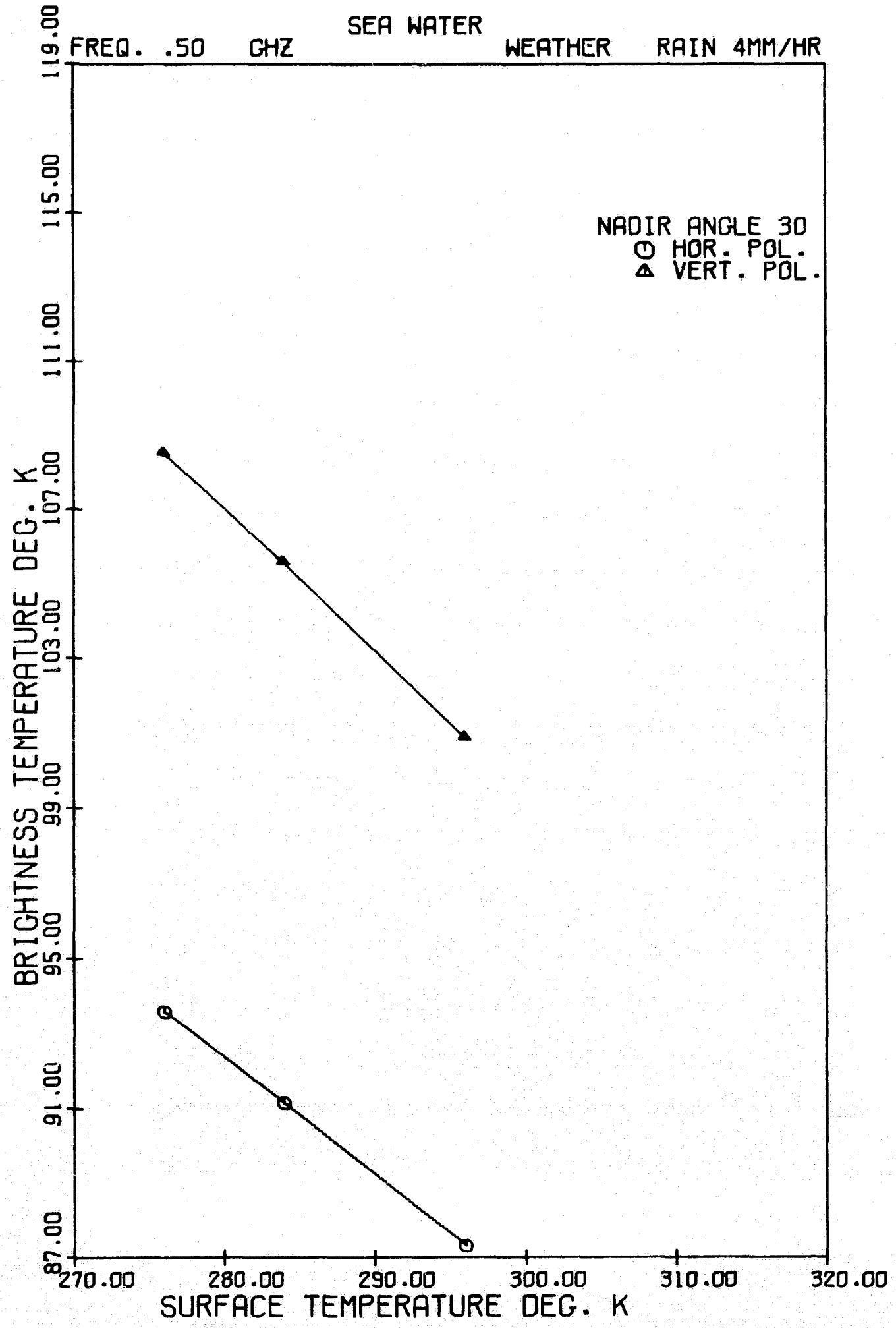

SEA WATER
FREQ. .50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
109.50
107.50
105.50
103.50
101.50
99.50
97.50
95.50
93.50
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

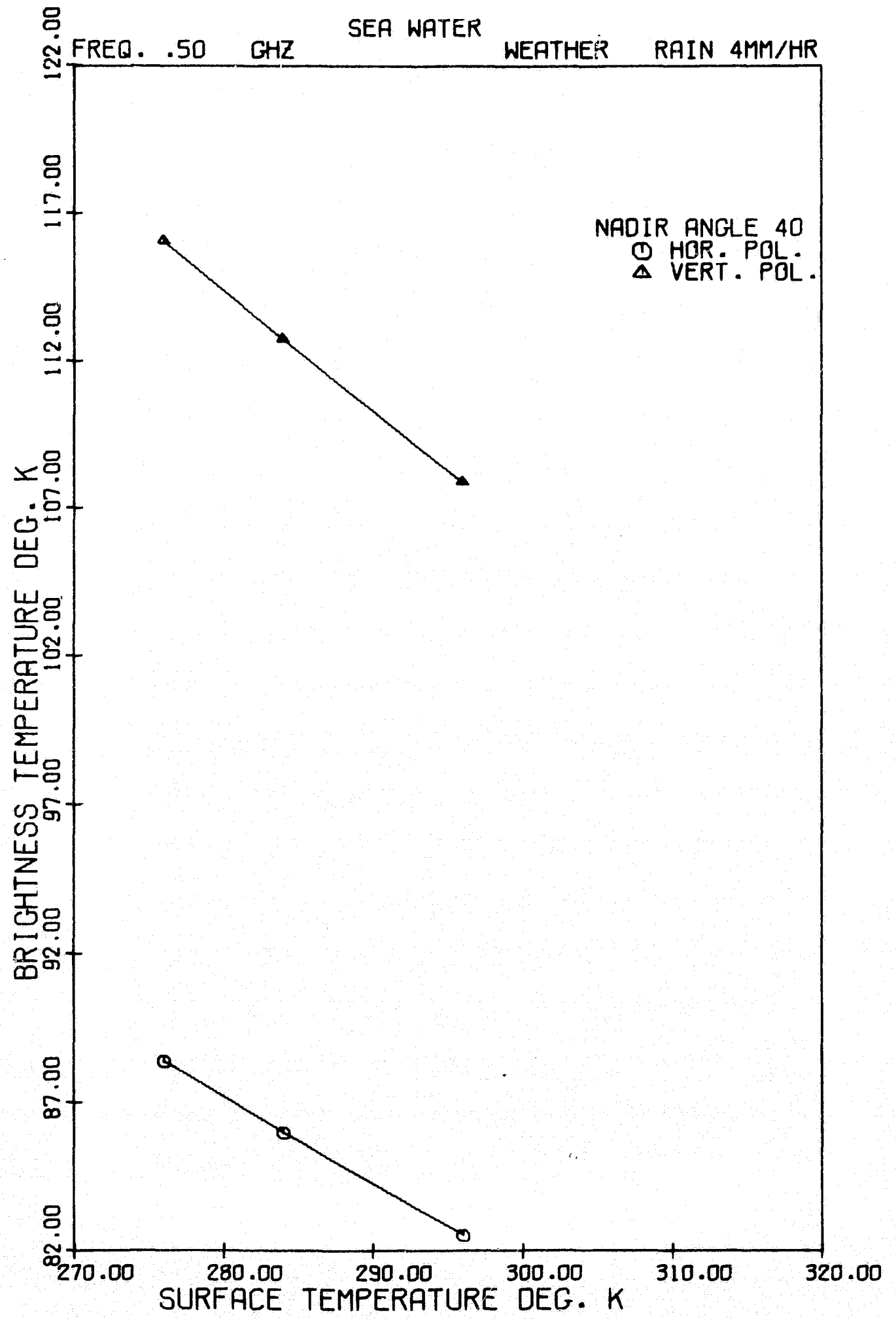

SEA WATER
FREQ. .50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
115.00
111.00
107.00
103.00
99.00
95.00
91.00
87.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

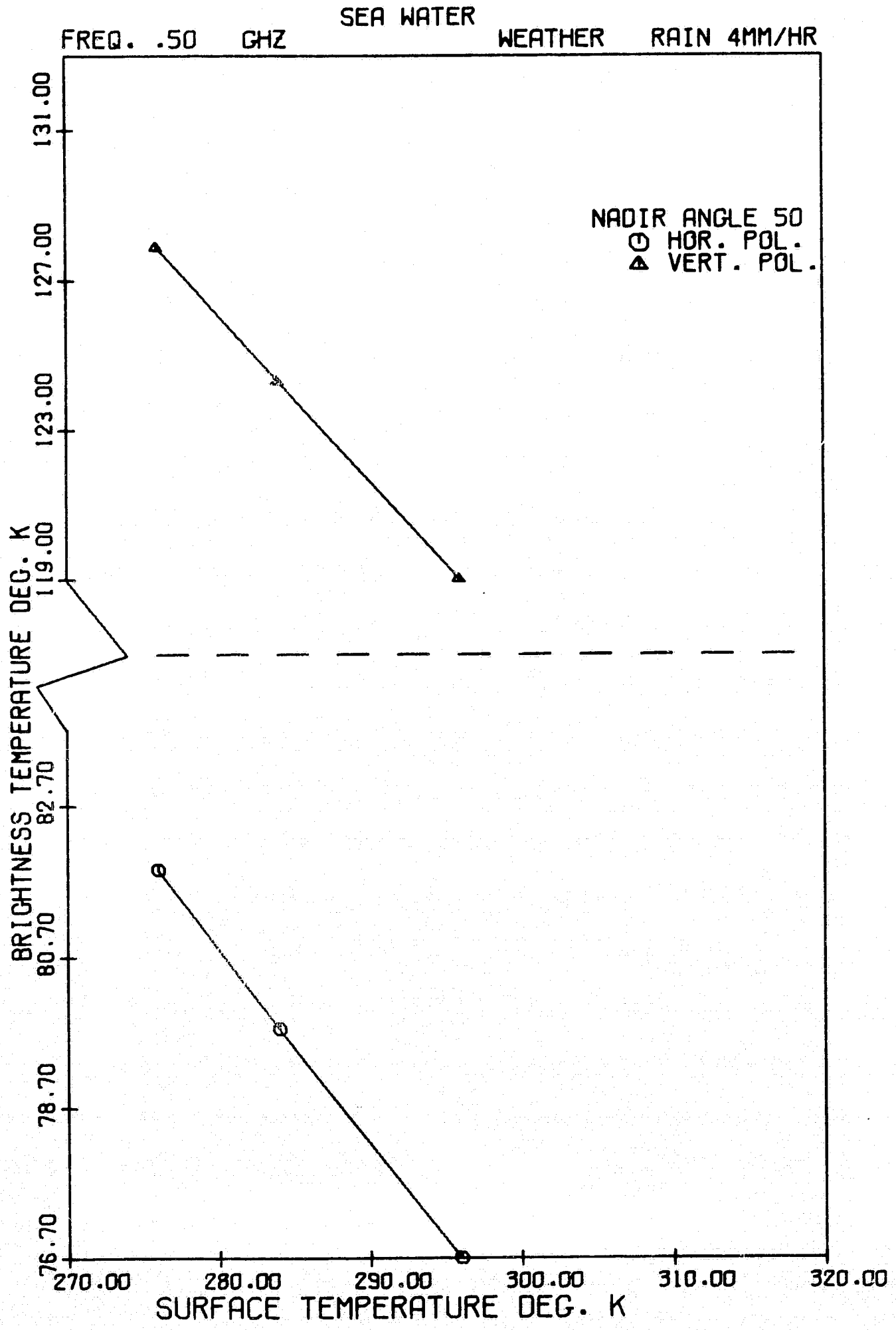

SEA WATER
FREQ. .50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
122.00
117.00
112.00
107.00
102.00
97.00
92.00
87.00
82.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

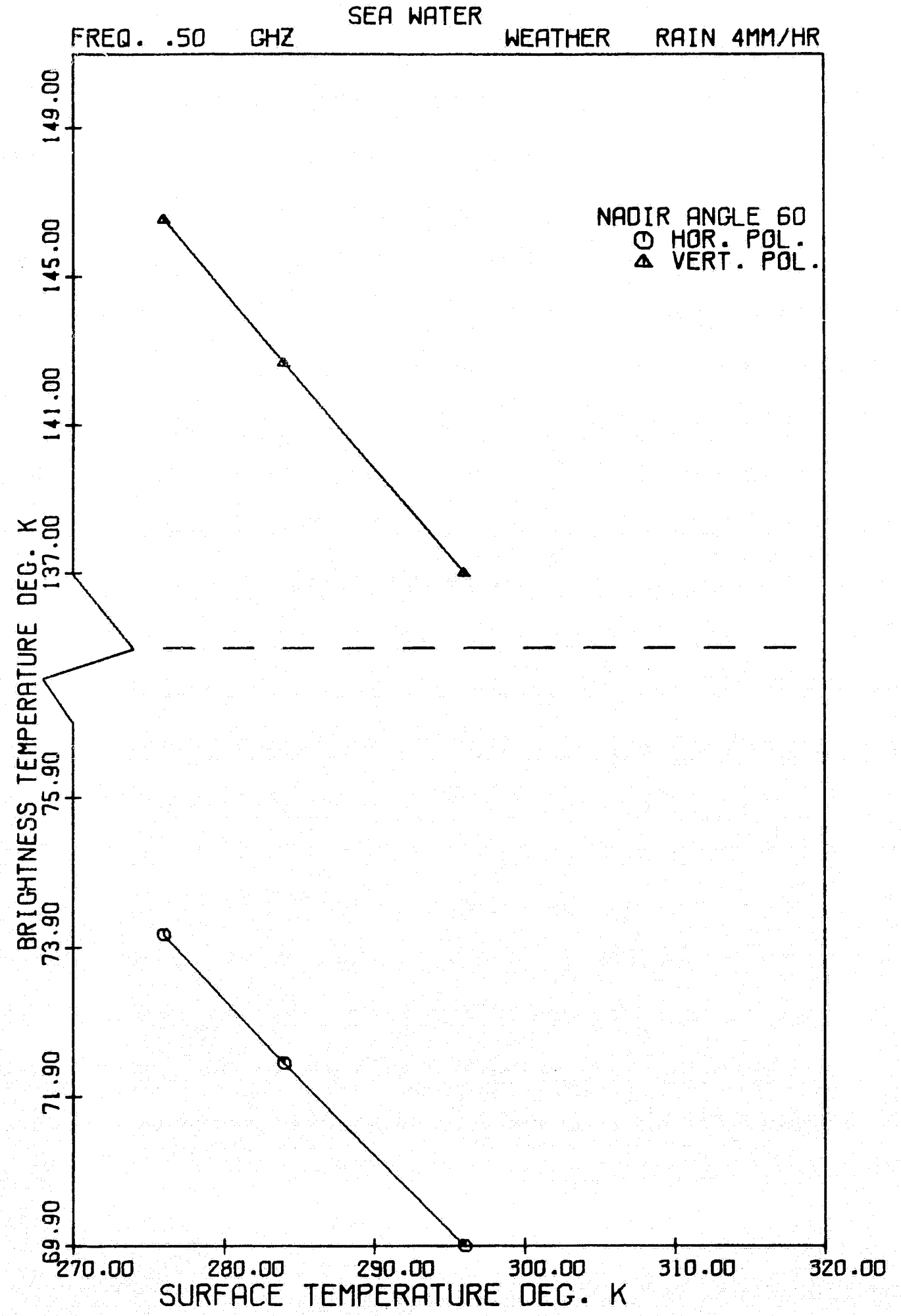

SEA WATER
FREQ. .50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
149.00
145.00
141.00
137.00
75.90
73.90
71.90
69.90
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

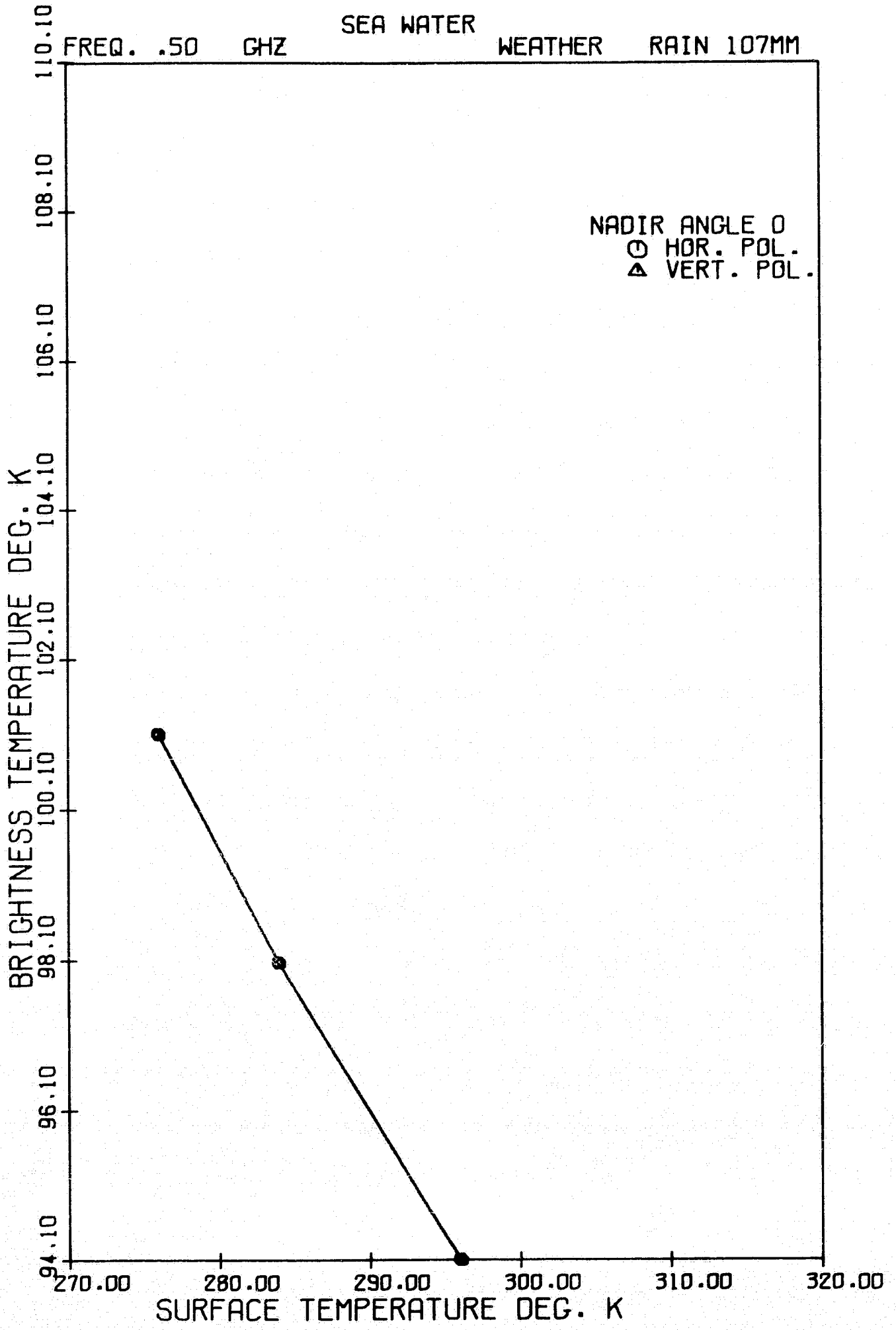

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
109.50
107.50
105.50
103.50
101.50
99.50
97.50
95.50
93.50
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

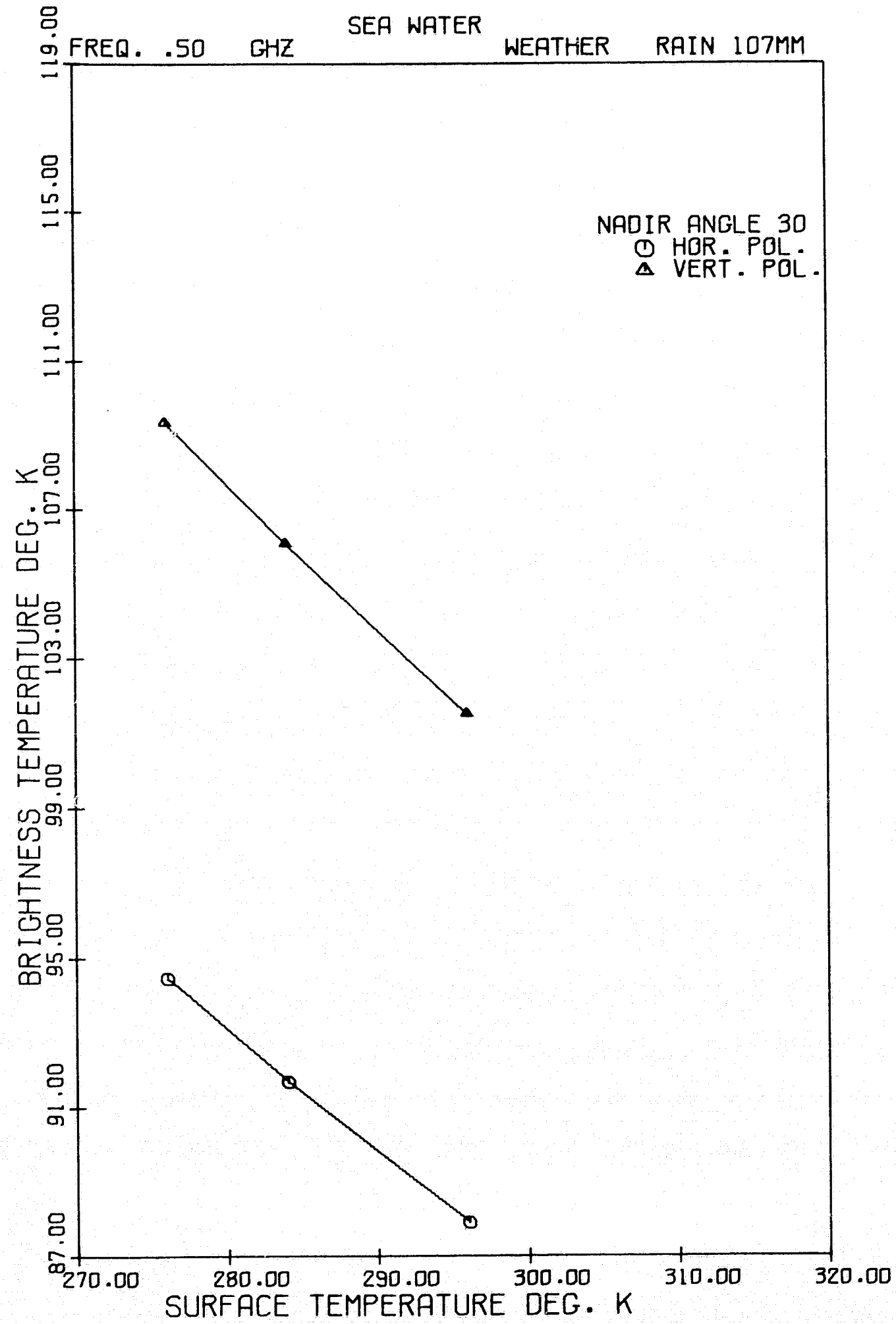

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
115.00
111.00
107.00
103.00
99.00
95.00
91.00
87.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

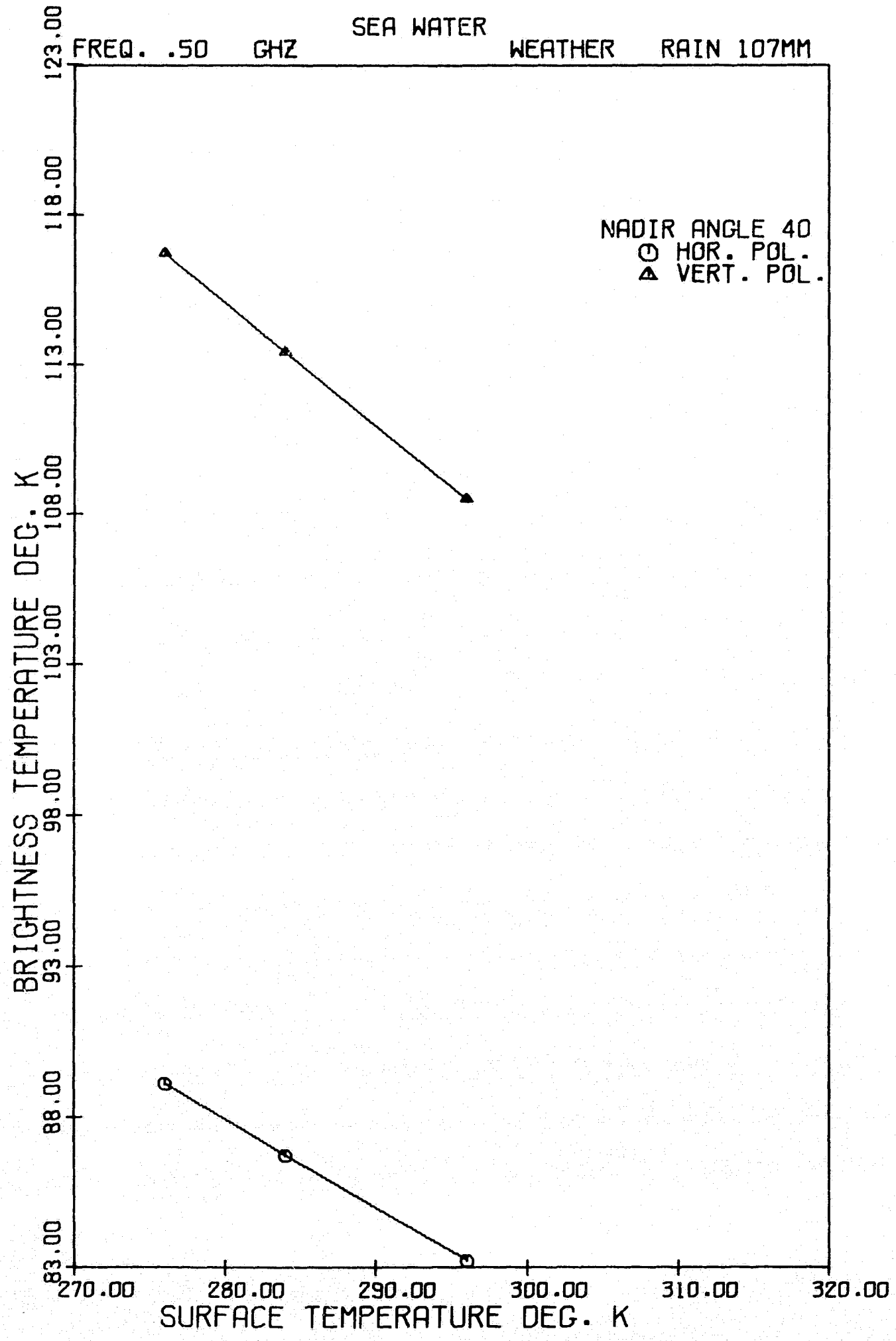

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
122.00
117.00
112.00
107.00
102.00
97.00
92.00
87.00
82.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

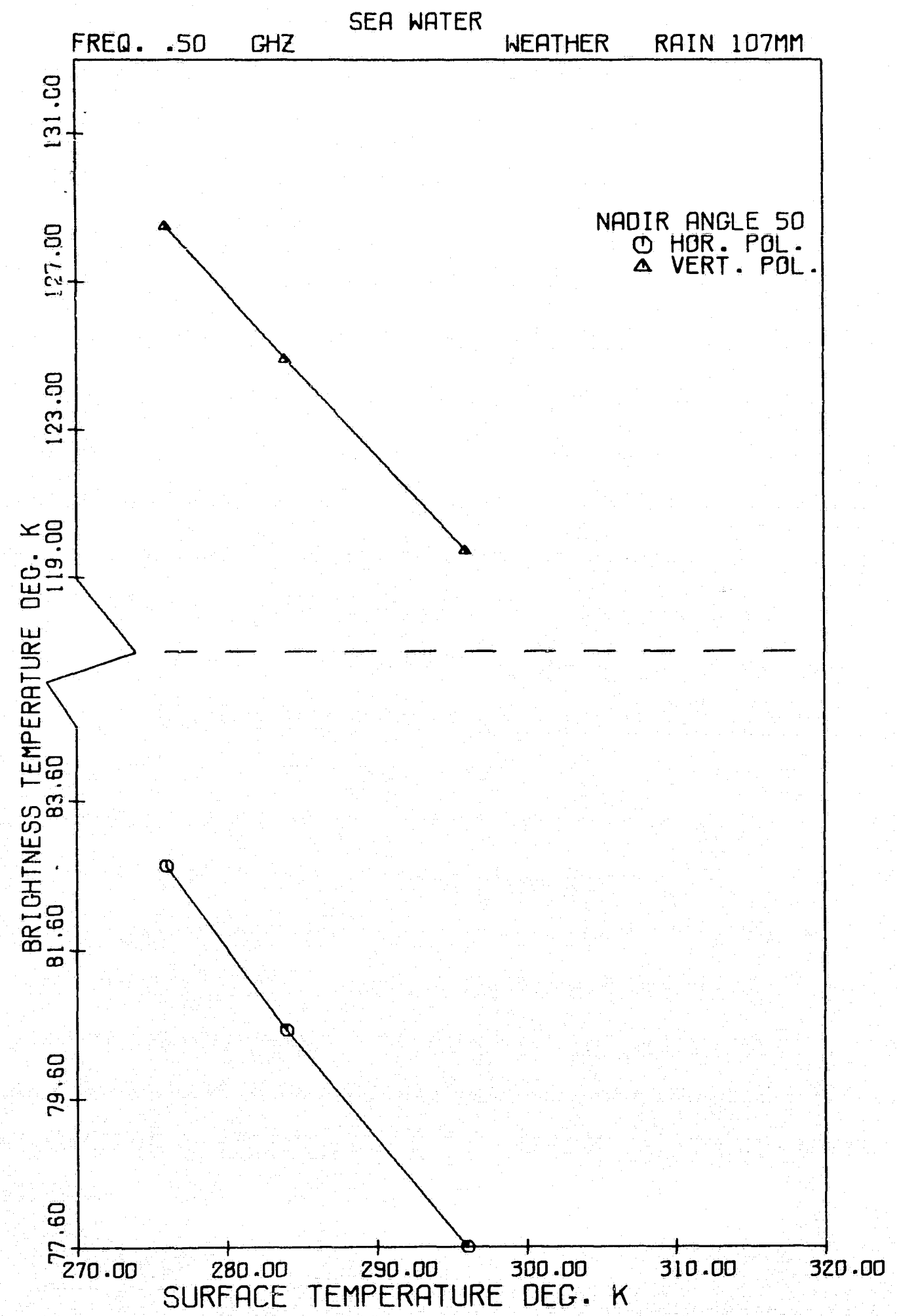

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
131.00
127.00
123.00
119.00
82.70
80.70
78.70
76.70
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

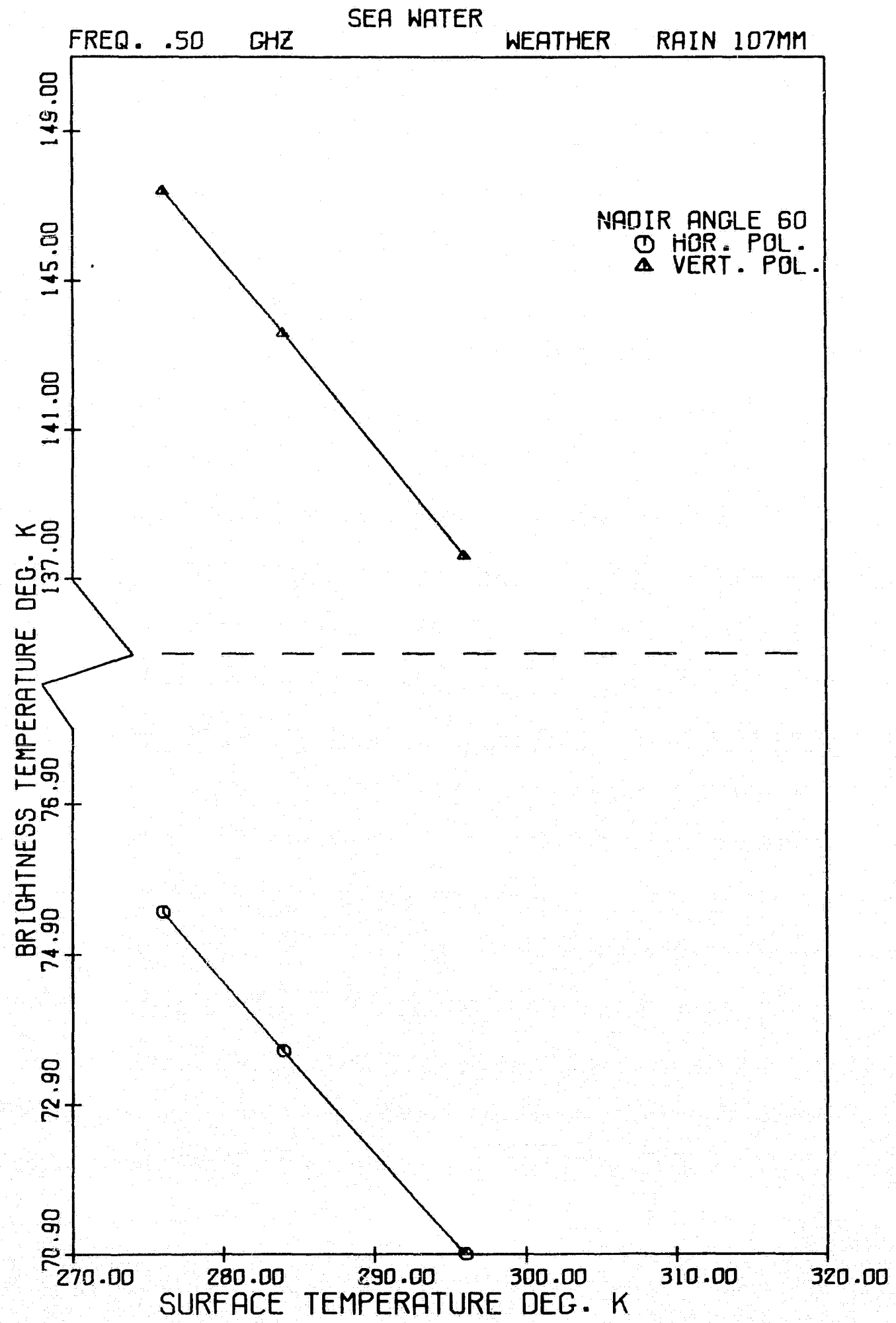

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
149.00
145.00
141.00
137.00
75.90
73.90
71.90
69.90
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

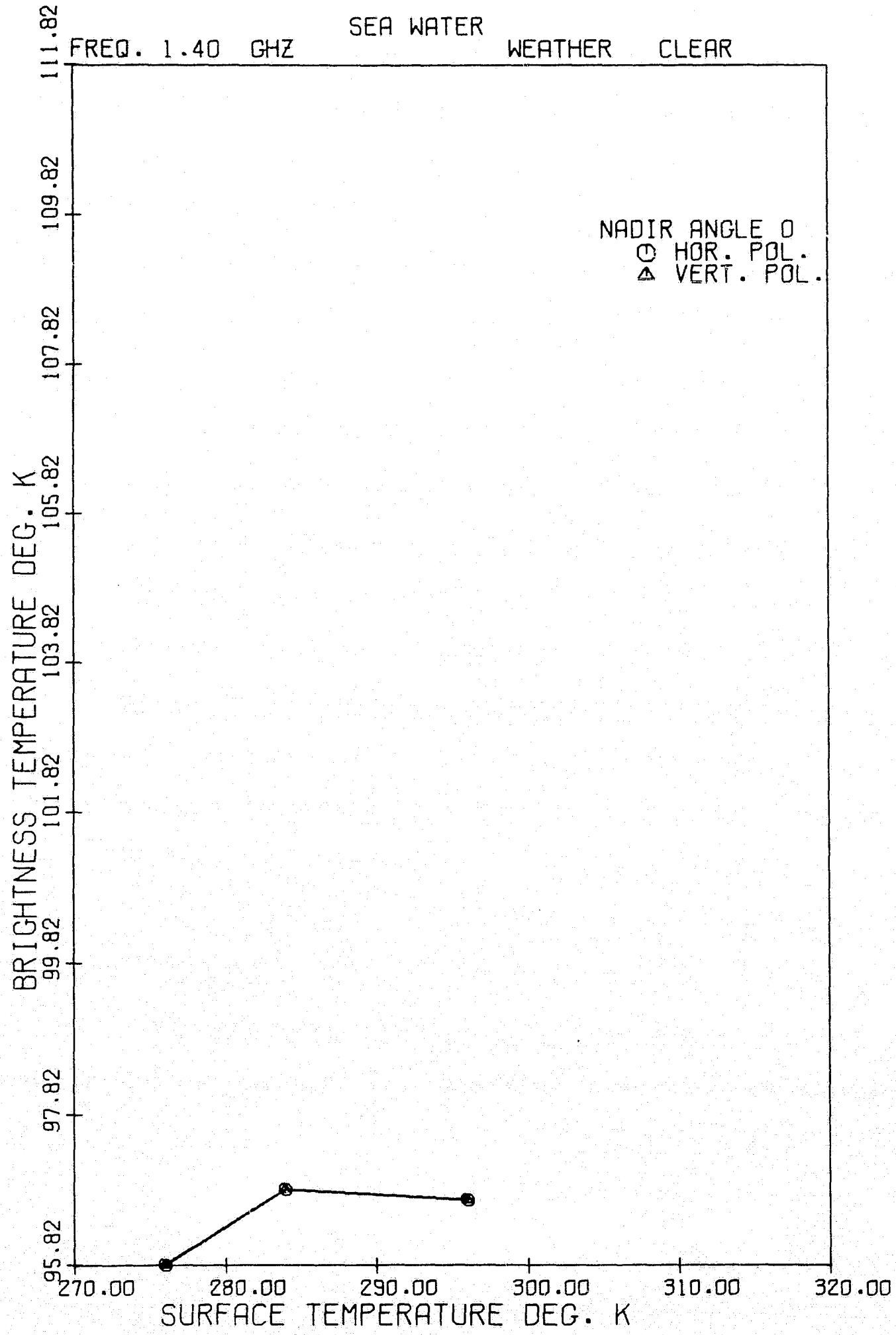

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
110.10
108.10
106.10
104.10
102.10
100.10
98.10
96.10
94.10
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

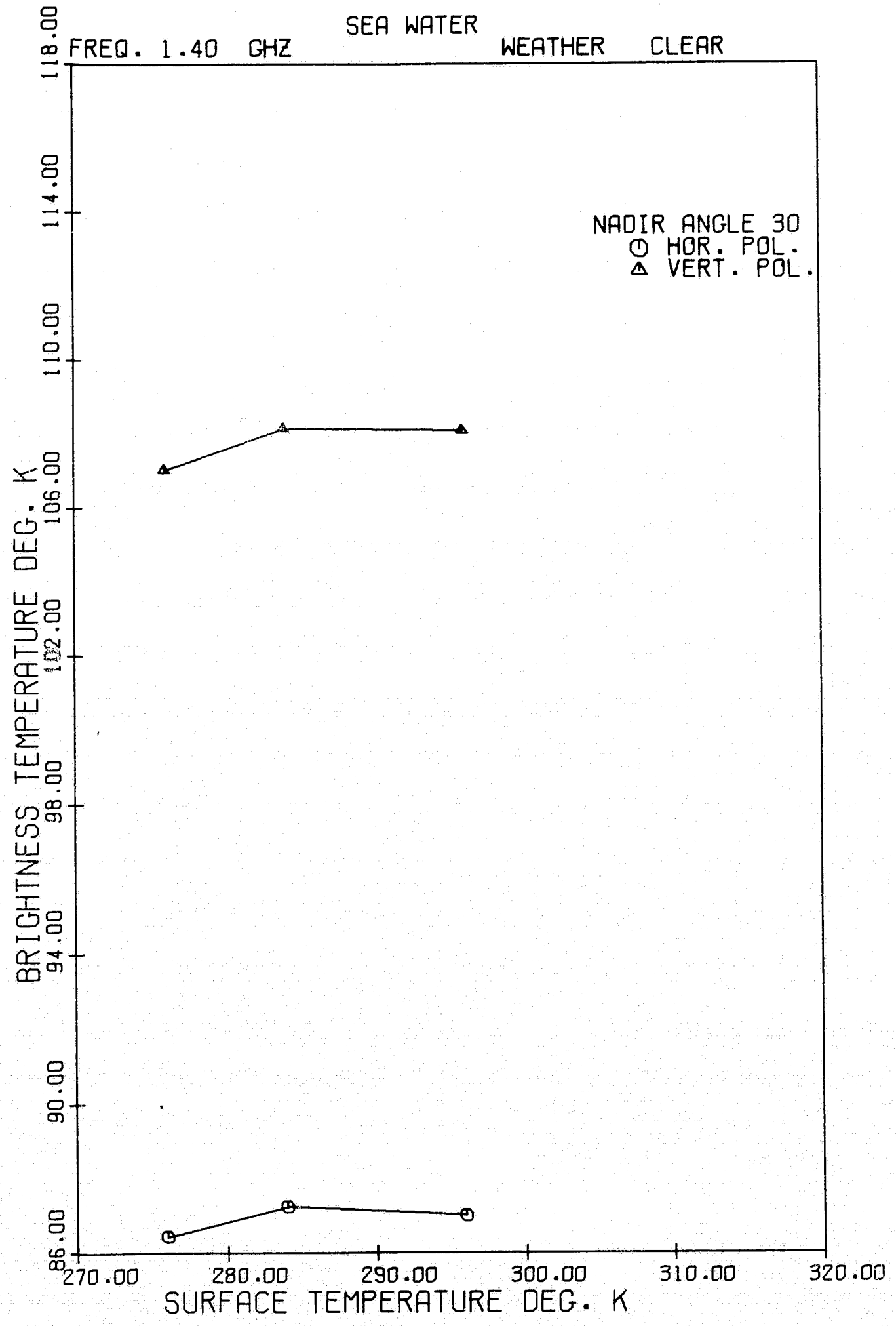

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
115.00
111.00
107.00
103.00
99.00
95.00
91.00
87.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

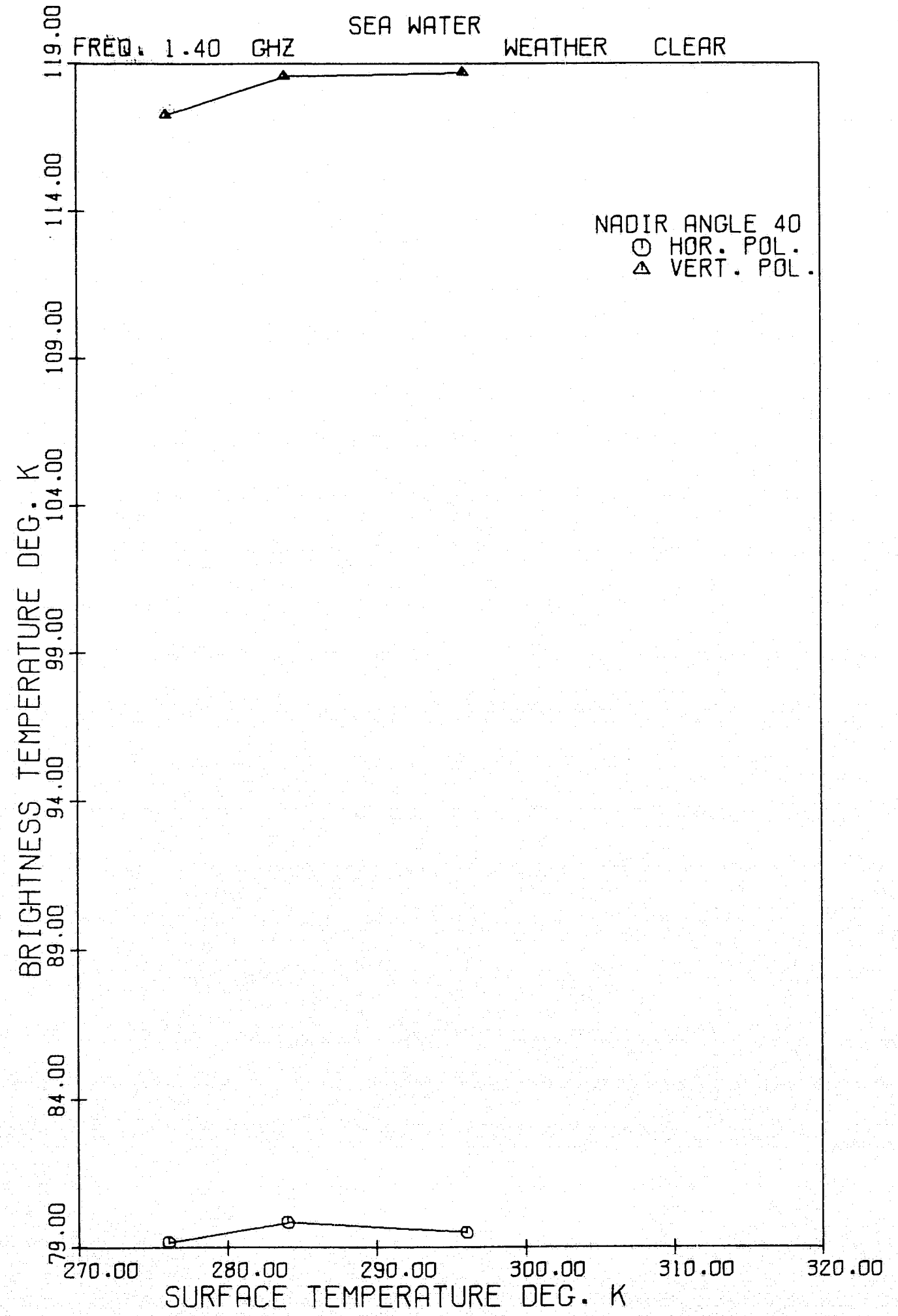

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
123.00
118.00
113.00
108.00
103.00
98.00
93.00
88.00
83.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

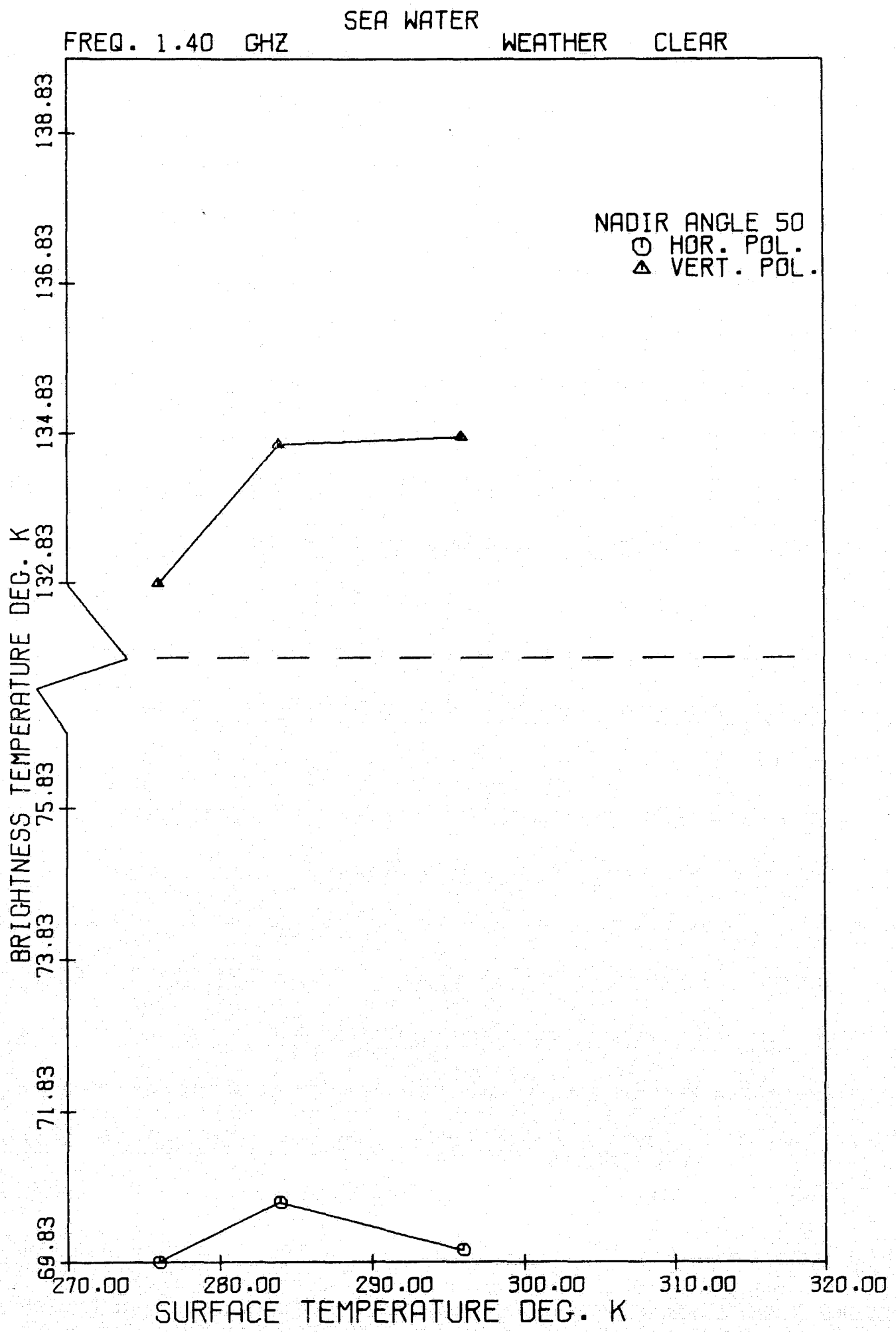

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
131.00
127.00
123.00
119.00
83.60
81.60
79.60
77.60
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

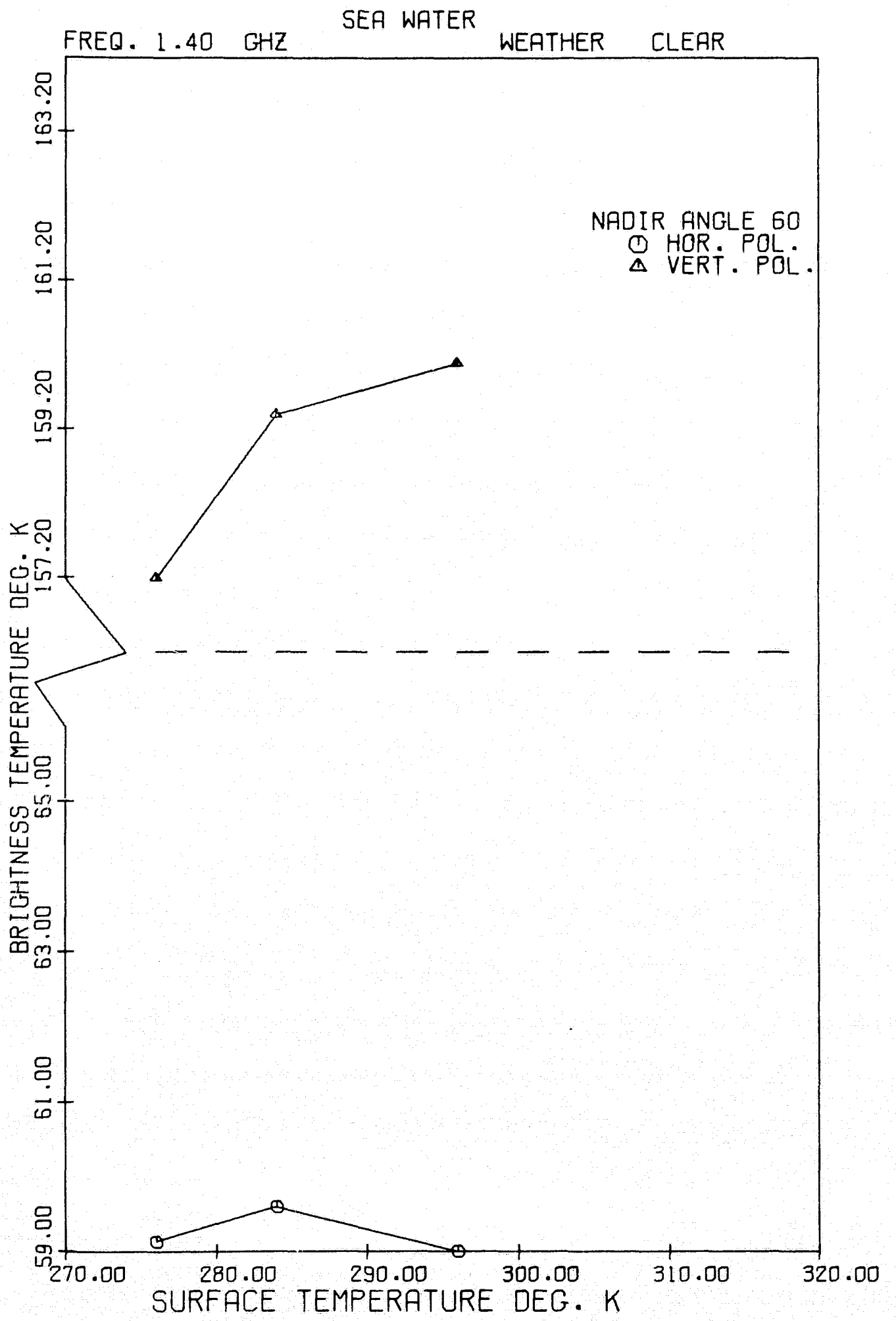

SEA WATER
FREQ. .50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
149.00
145.00
141.00
137.00
76.90
74.90
72.90
70.90
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

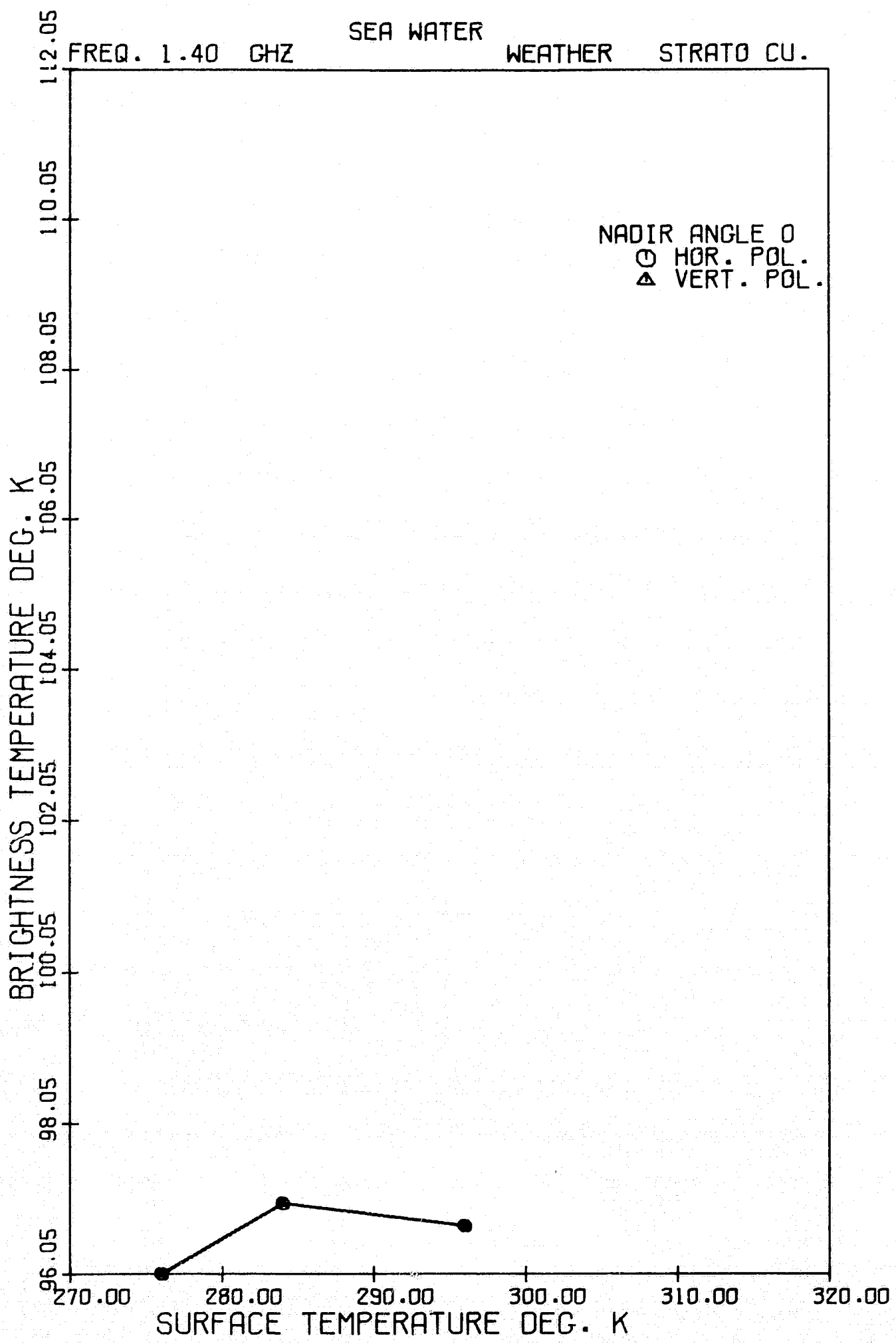

SEA WATER
FREQ. 1.40 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
111.82
109.82
107.82
105.82
103.82
101.82
99.82
97.82
95.82
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

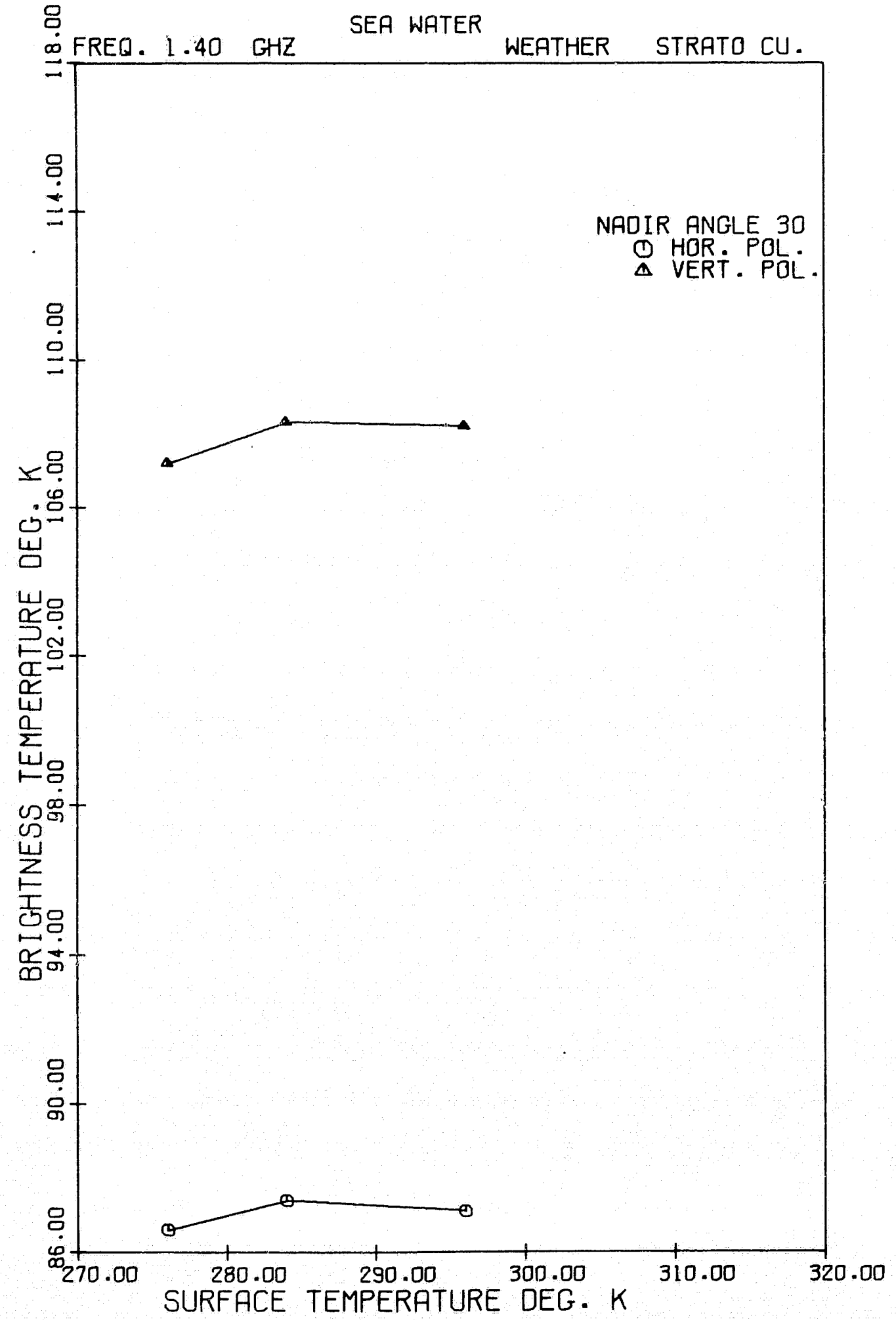

SEA WATER
FREQ. 1.40 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
118.00
114.00
110.00
106.00
102.00
98.00
94.00
90.00
86.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

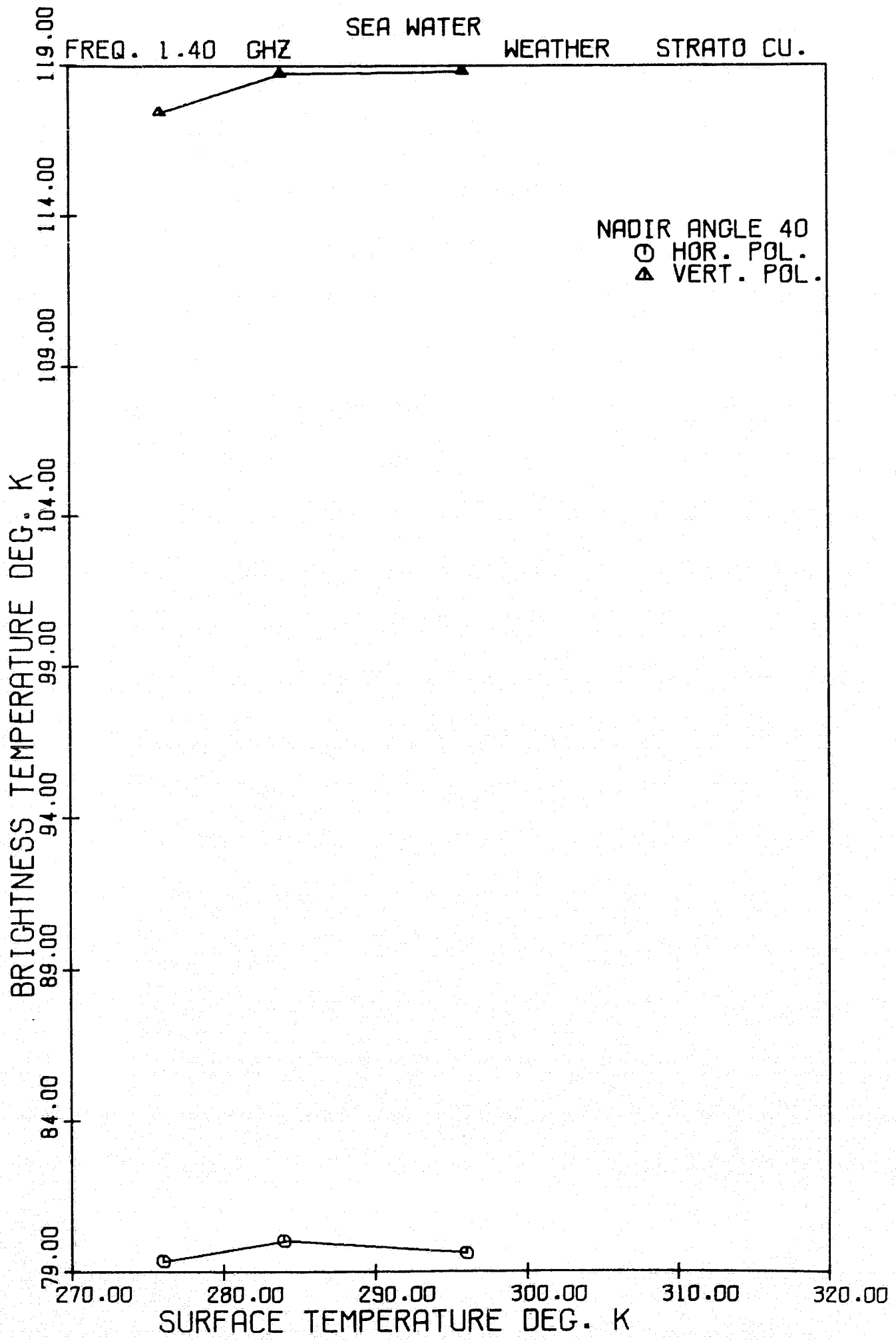

SEA WATER
FREQ. 1.40 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
114.00
109.00
104.00
99.00
94.00
89.00
84.00
79.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

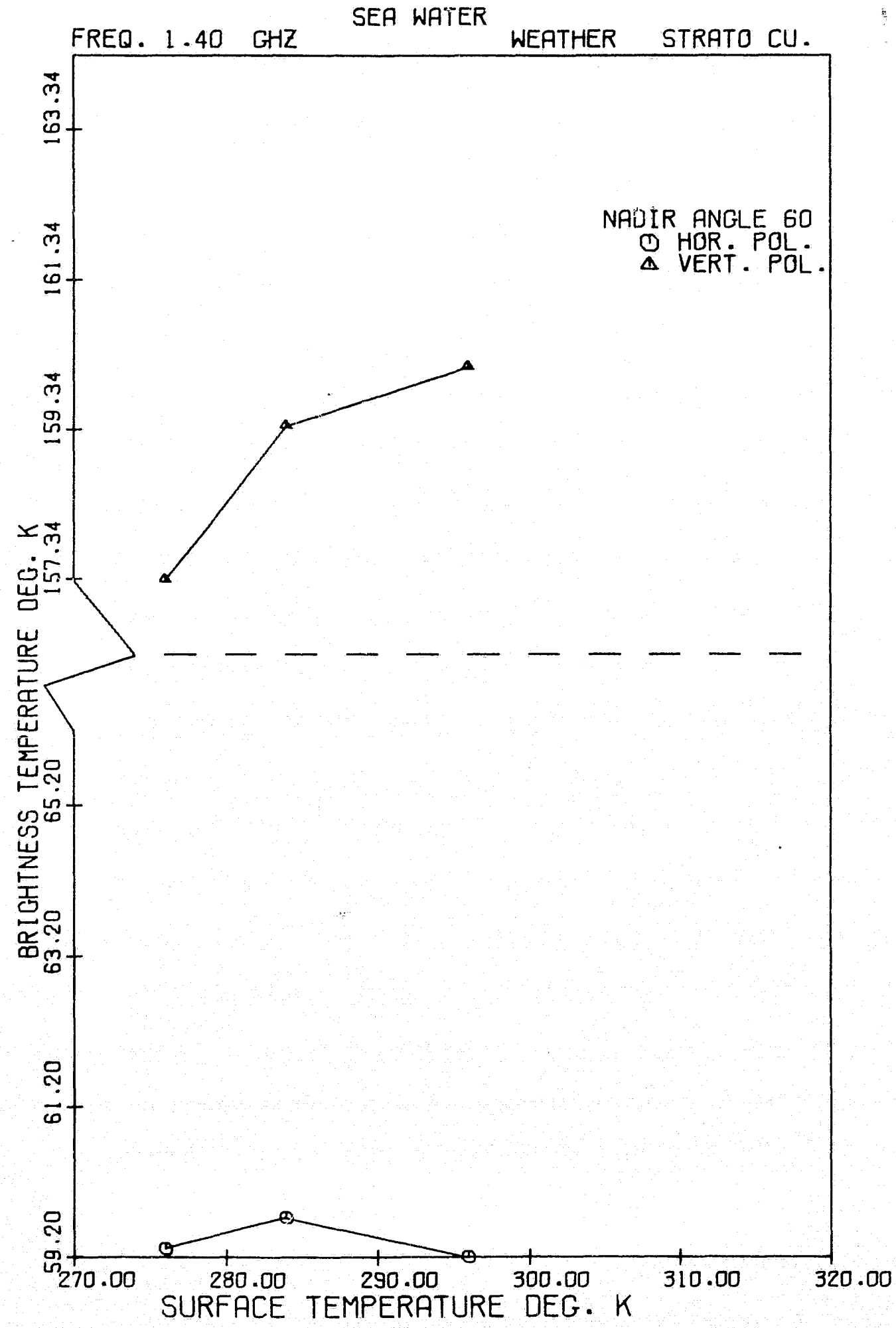

SEA WATER
FREQ. 1.40 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
138.83
136.83
134.83
132.83
75.83
73.83
71.83
69.83
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

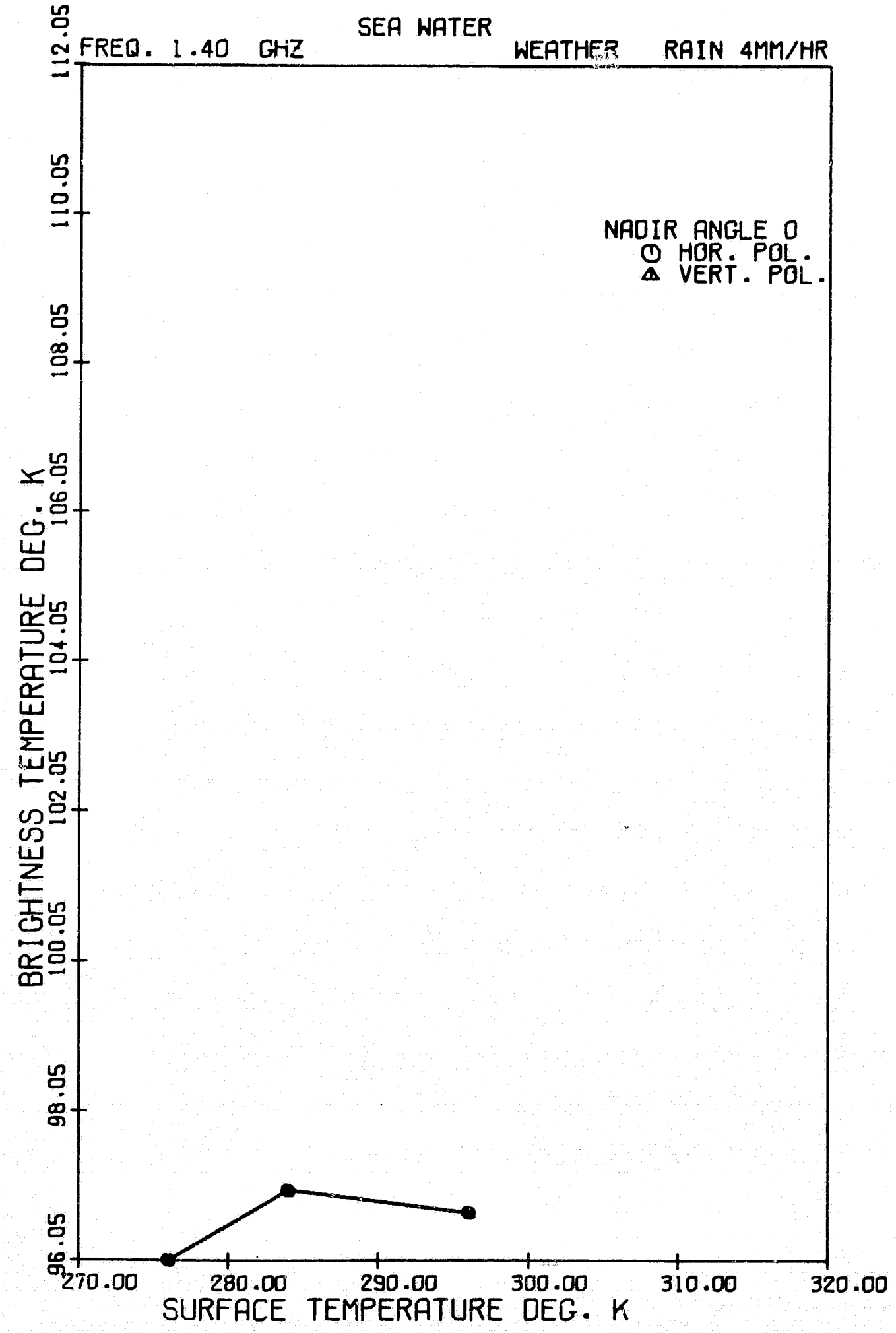

SEA WATER
FREQ. 1.40 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
163.20
161.20
159.20
157.20
65.00
63.00
61.00
59.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

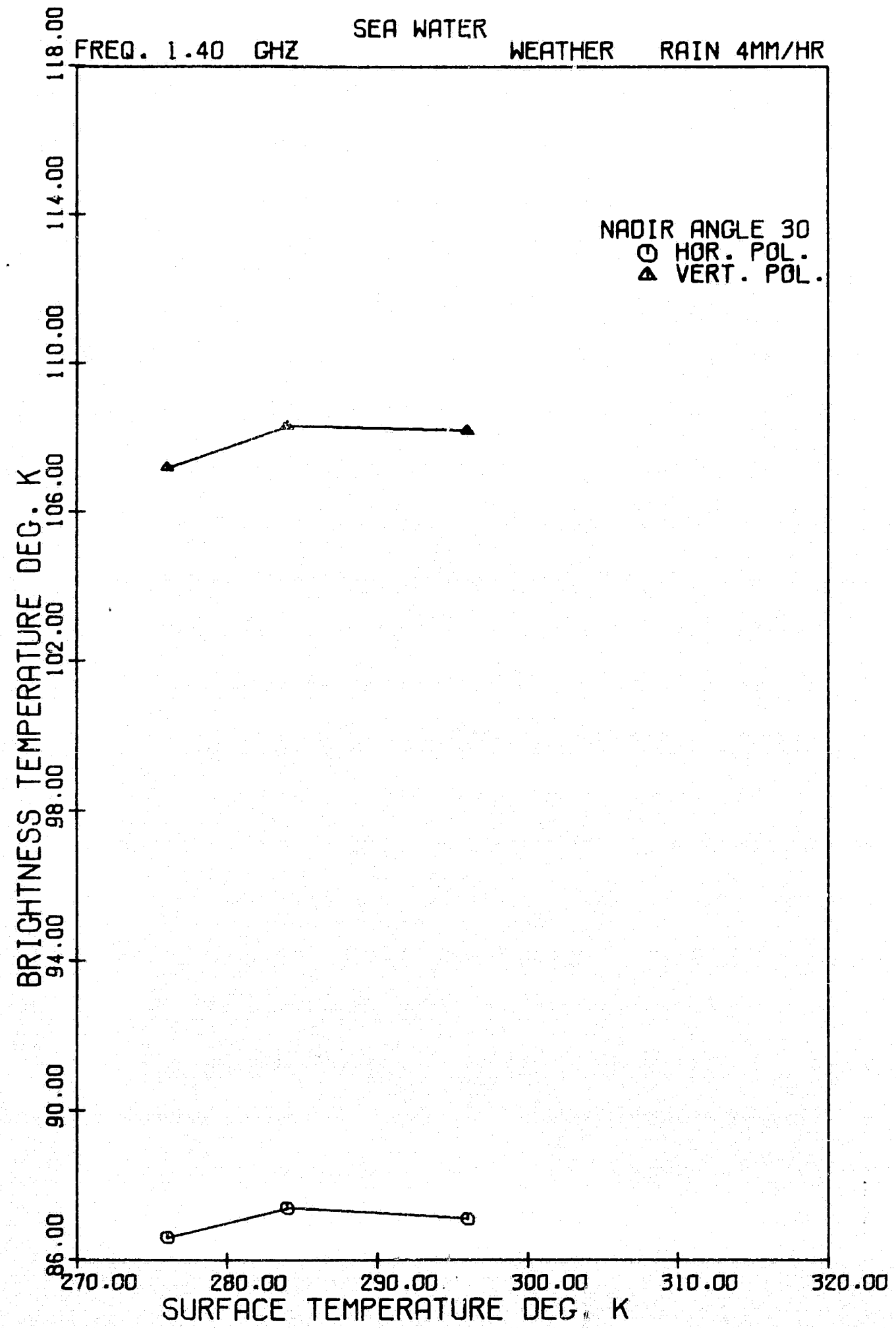

SEA WATER
FREQ. 1.40 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
112.05
110.05
108.05
106.05
104.05
102.05
100.05
98.05
96.05
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

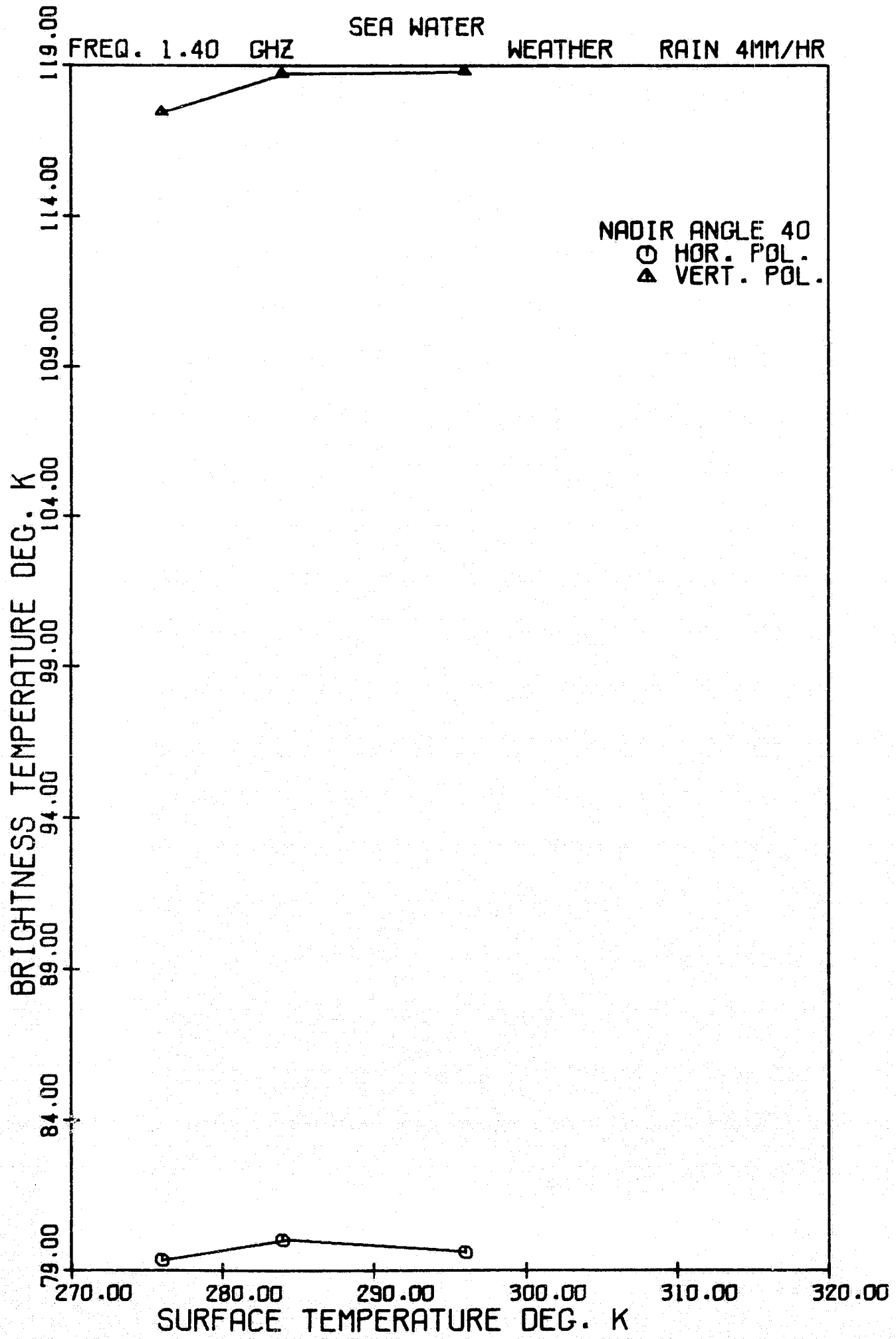

SEA WATER
FREQ. 1.40 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
118.00
114.00
110.00
106.00
102.00
98.00
94.00
90.00
86.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

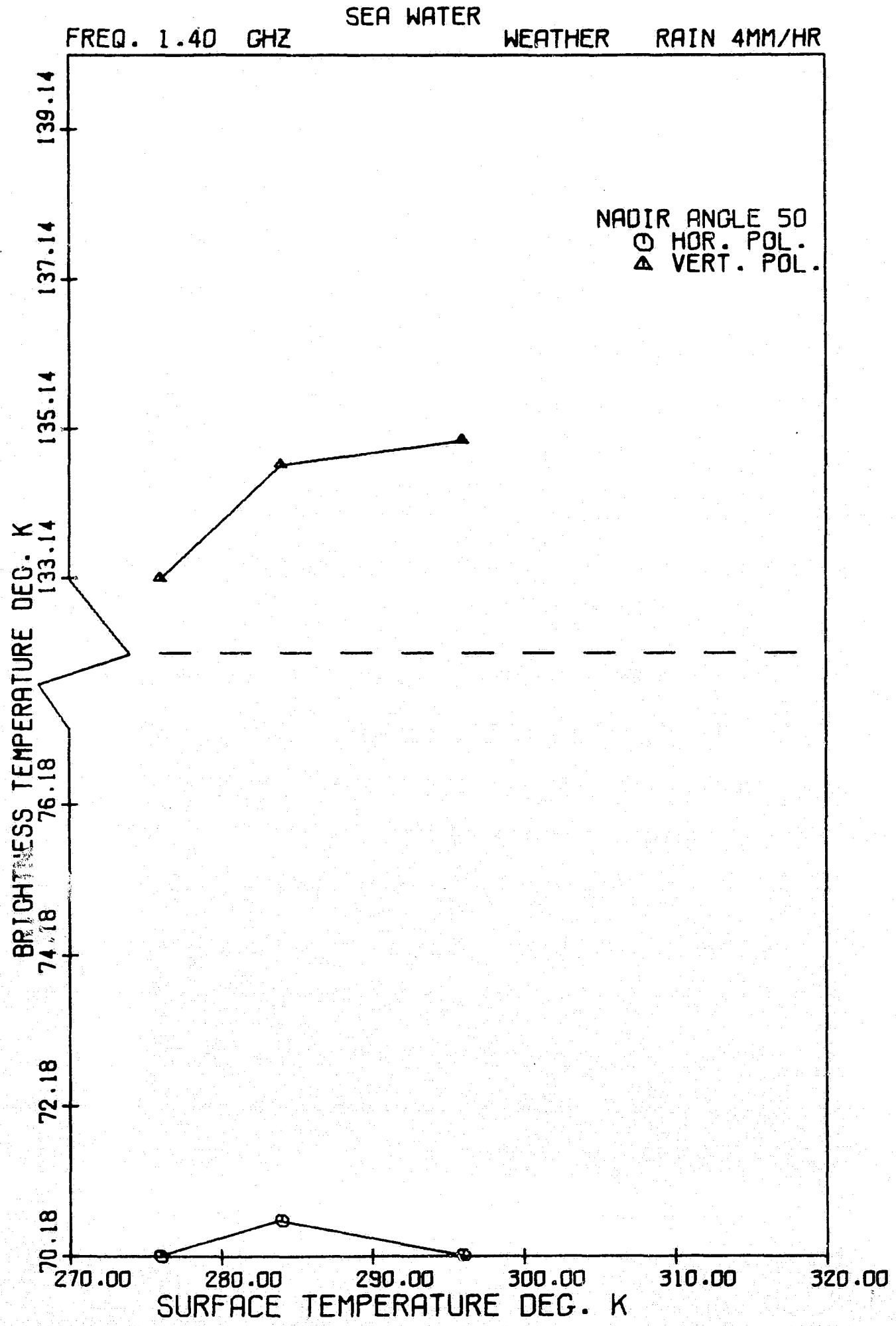

SEA WATER
FREQ. 1.40 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
114.00
109.00
104.00
99.00
94.00
89.00
84.00
79.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

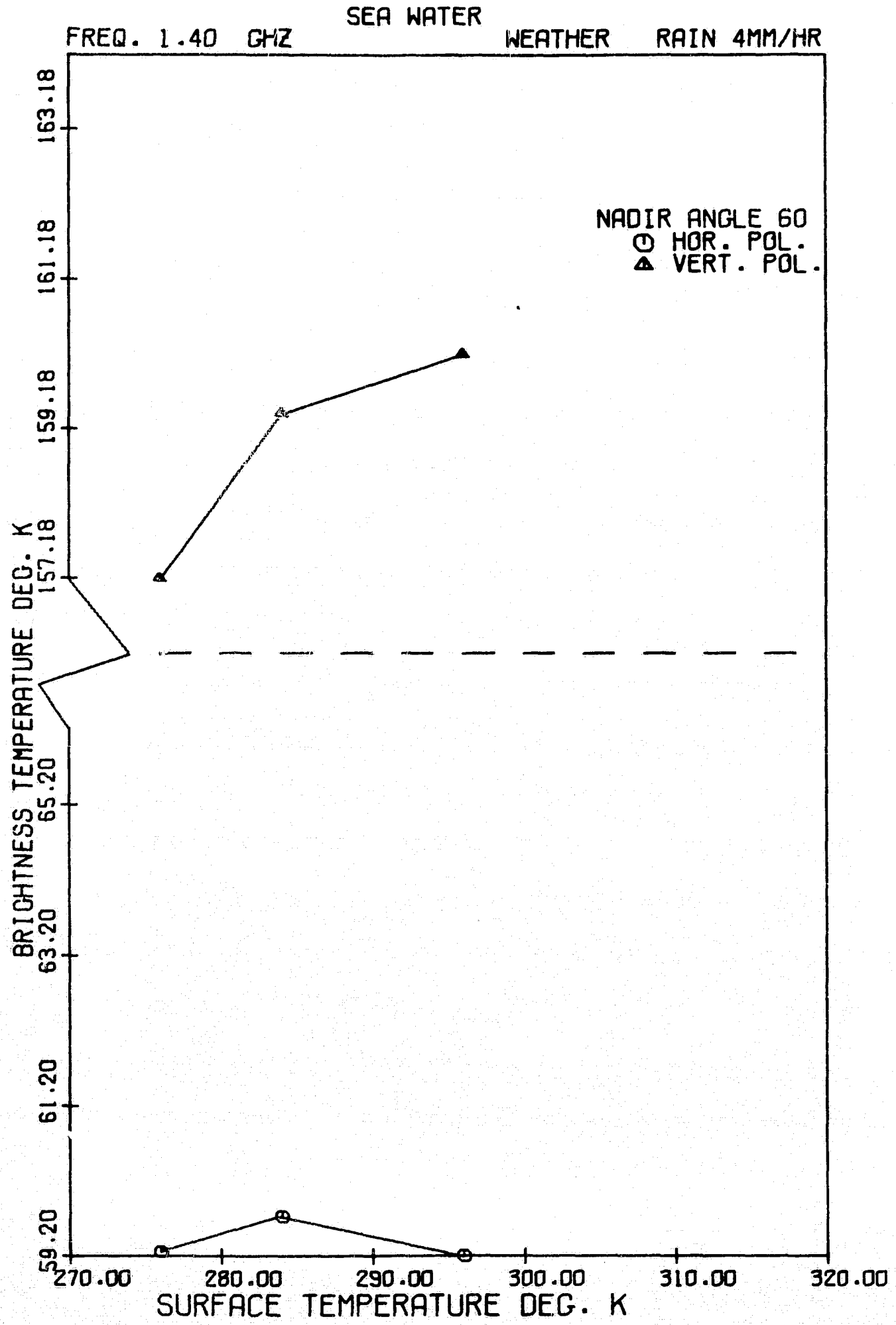

SEA WATER
FREQ. 1.40 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
163.34
161.34
159.34
157.34
65.20
63.20
61.20
59.20
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

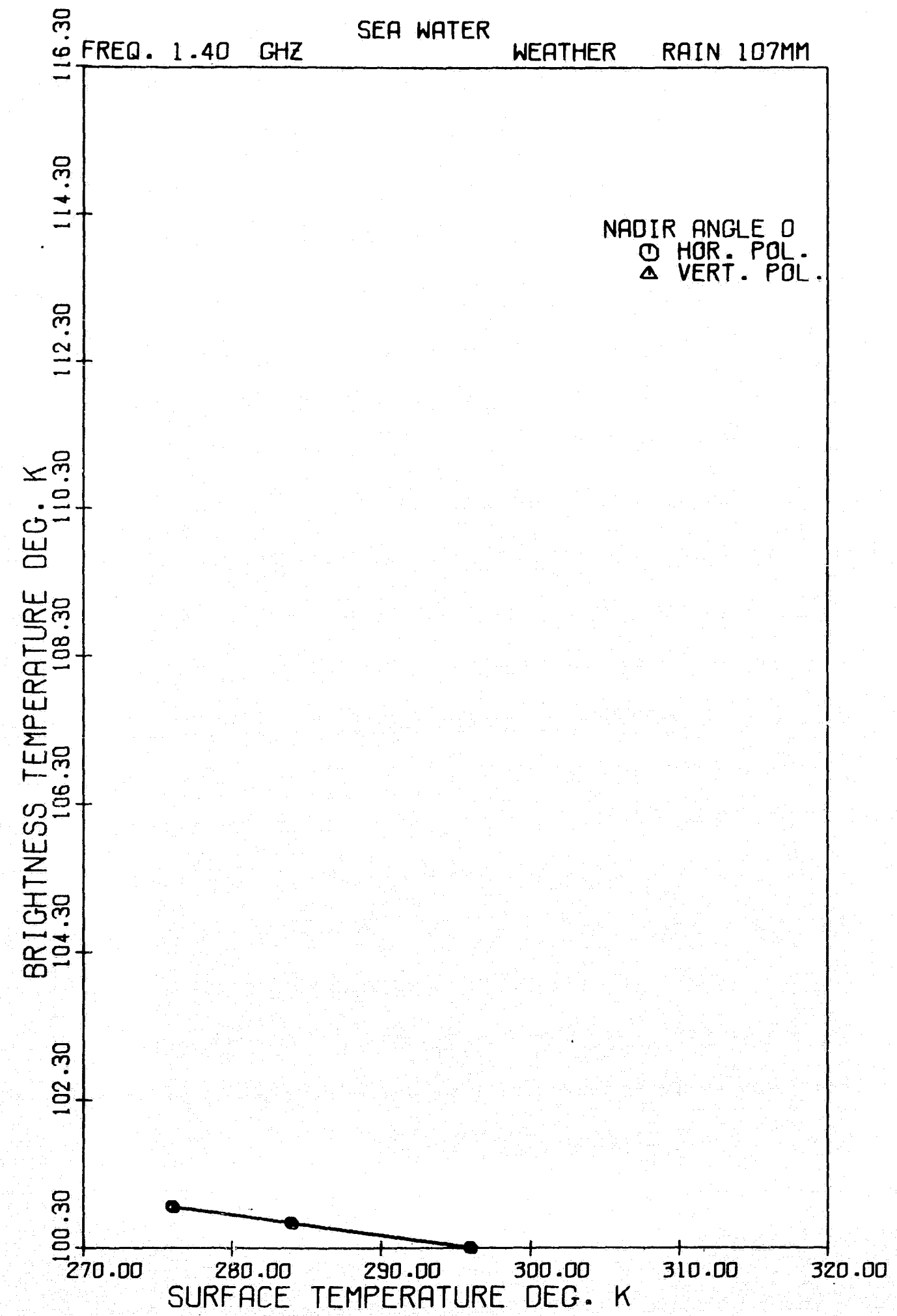

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
112.05
110.05
108.05
106.05
104.05
102.05
100.05
98.05
96.05
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

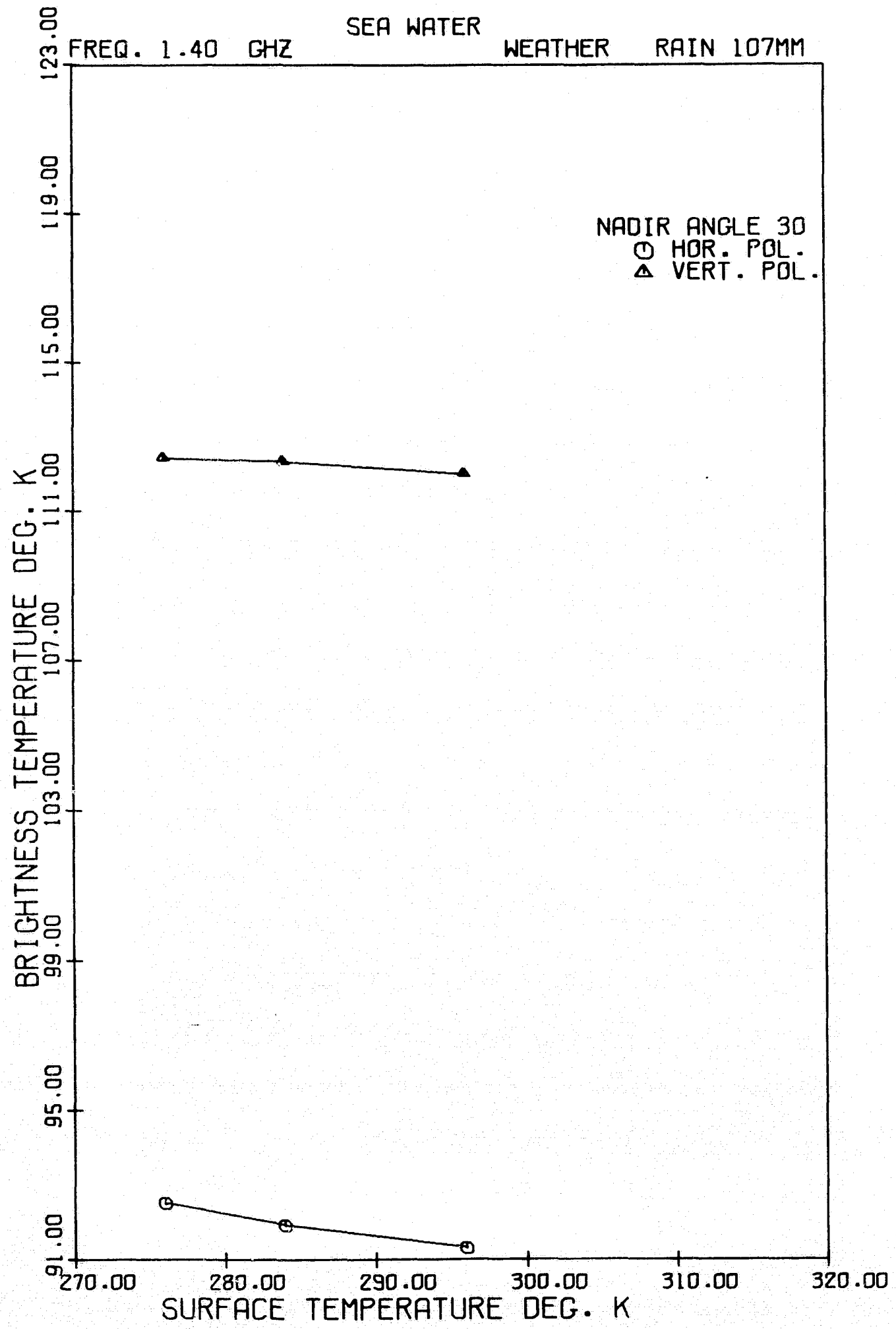

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
118.00
114.00
110.00
106.00
102.00
98.00
94.00
90.00
86.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

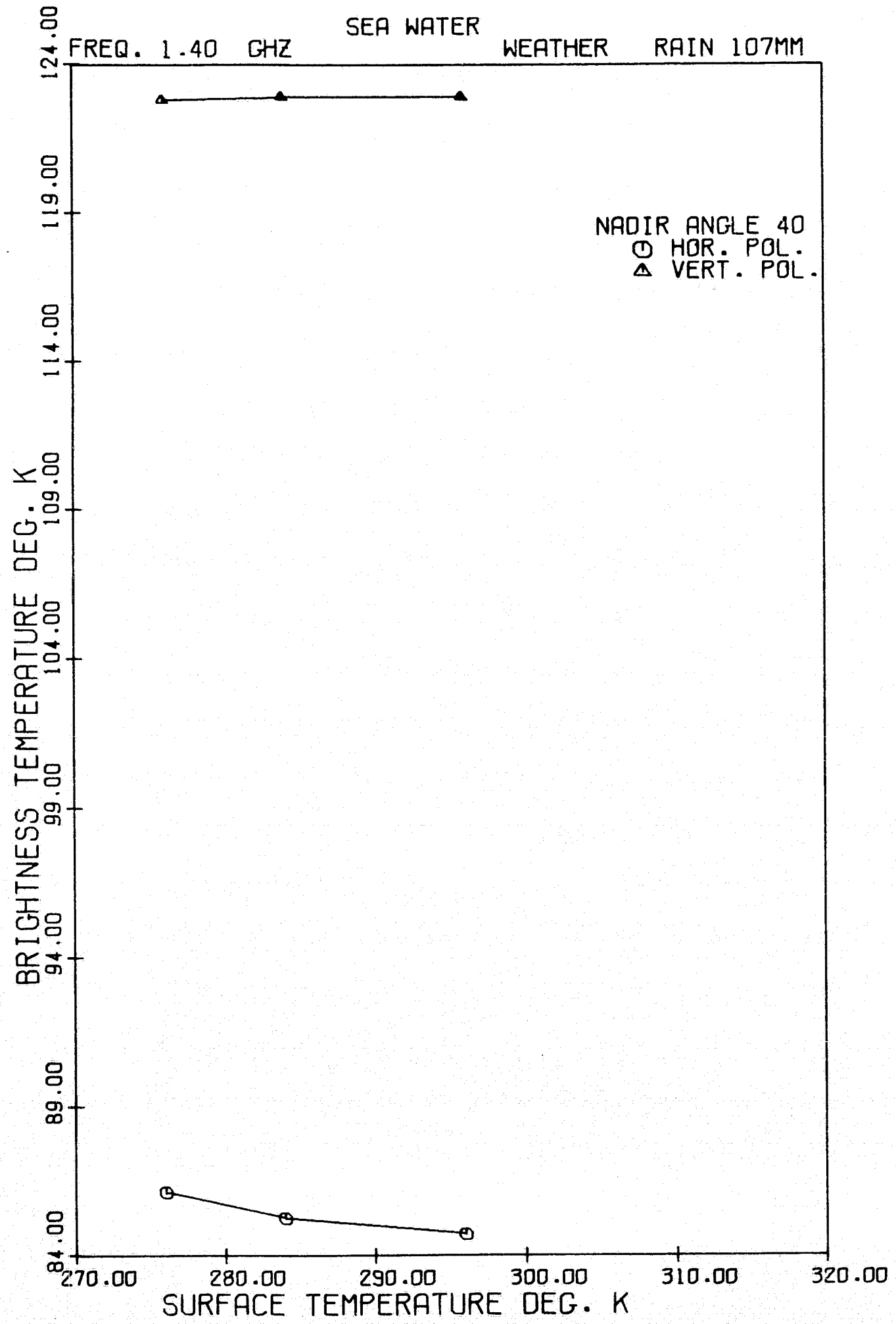

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.00
114.00
109.00
104.00
99.00
94.00
89.00
84.00
79.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

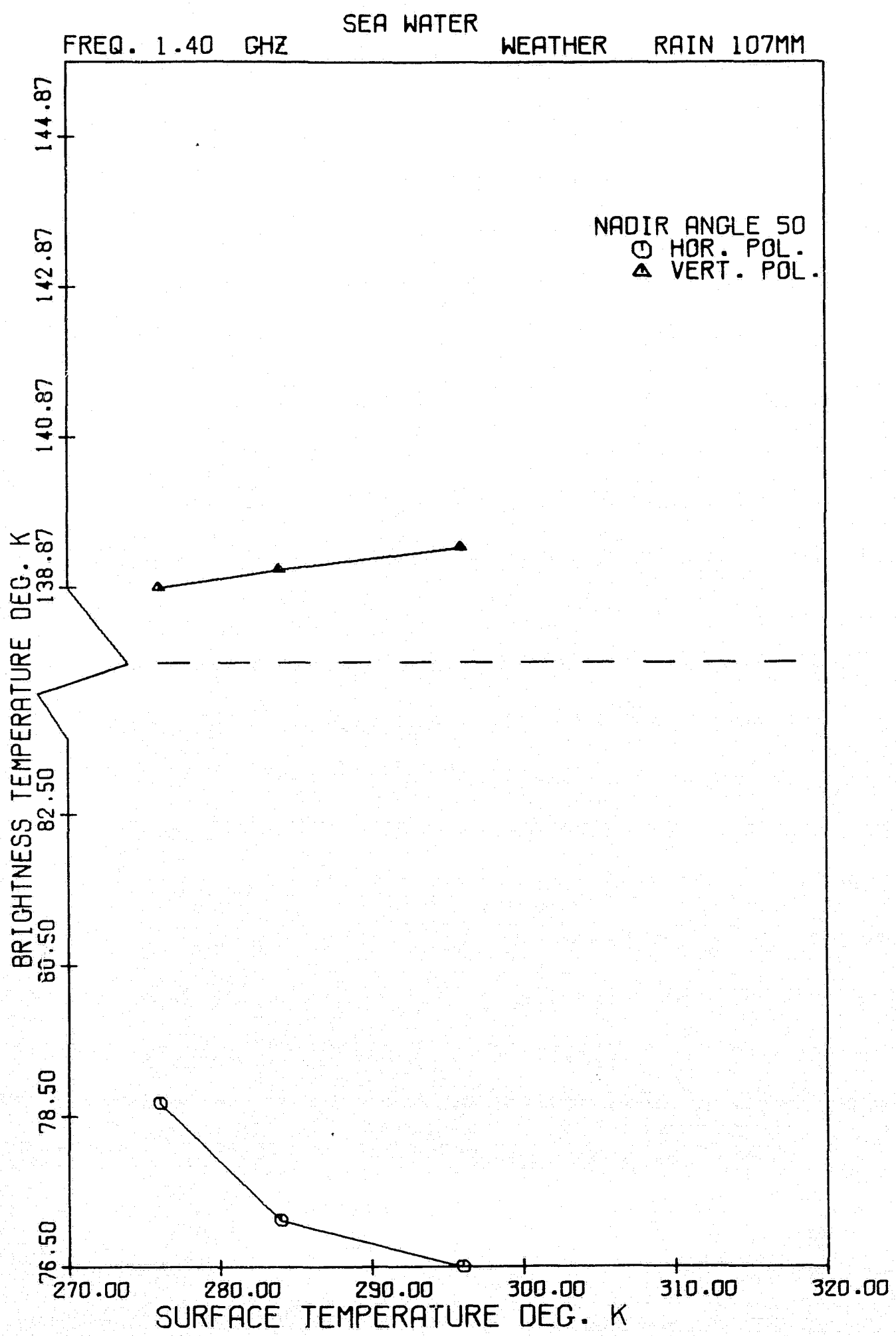

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
139.14
137.14
135.14
133.14
76.18
74.18
72.18
70.18
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

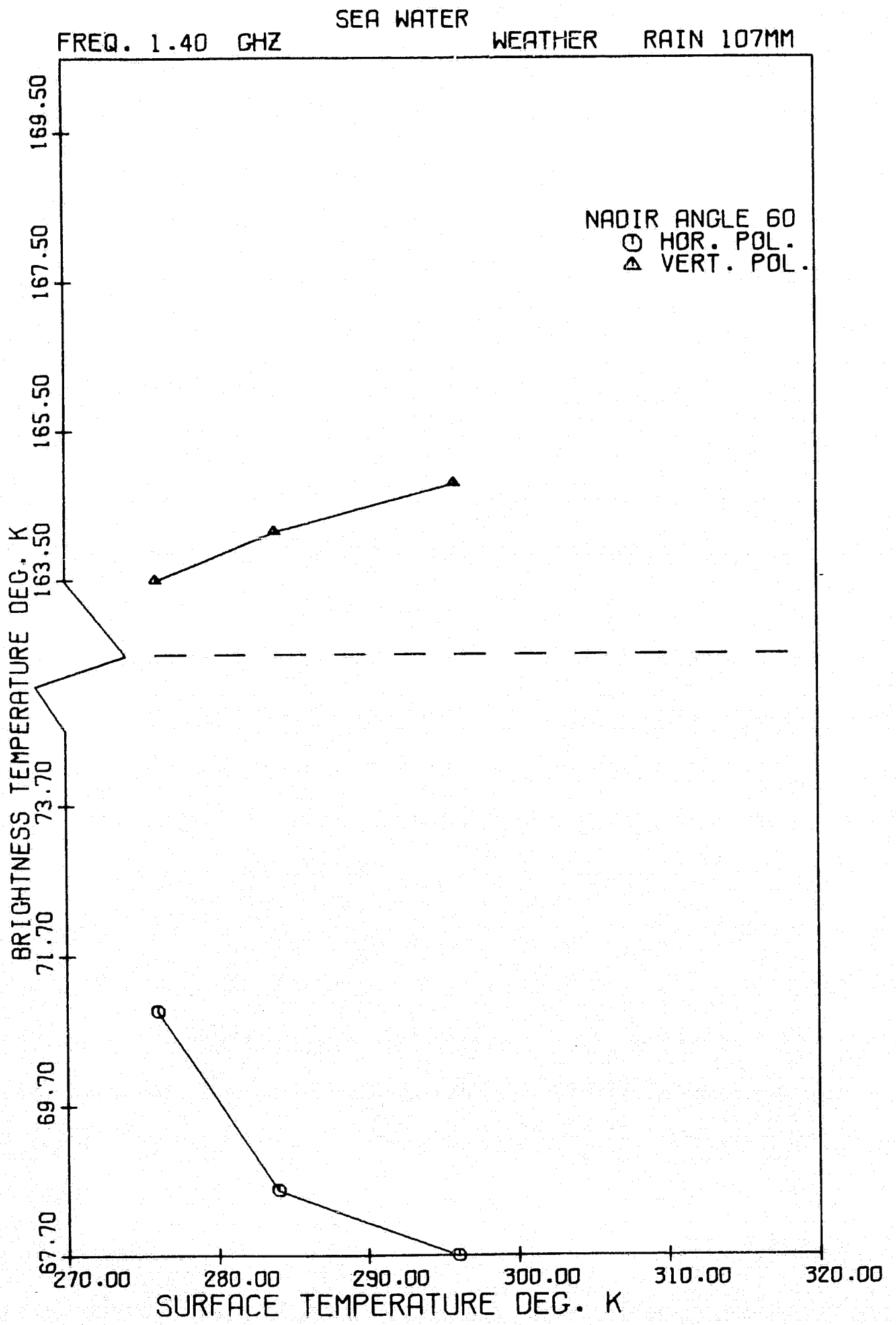

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
163.18
161.18
159.18
157.18
65.20
63.20
61.20
59.20
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

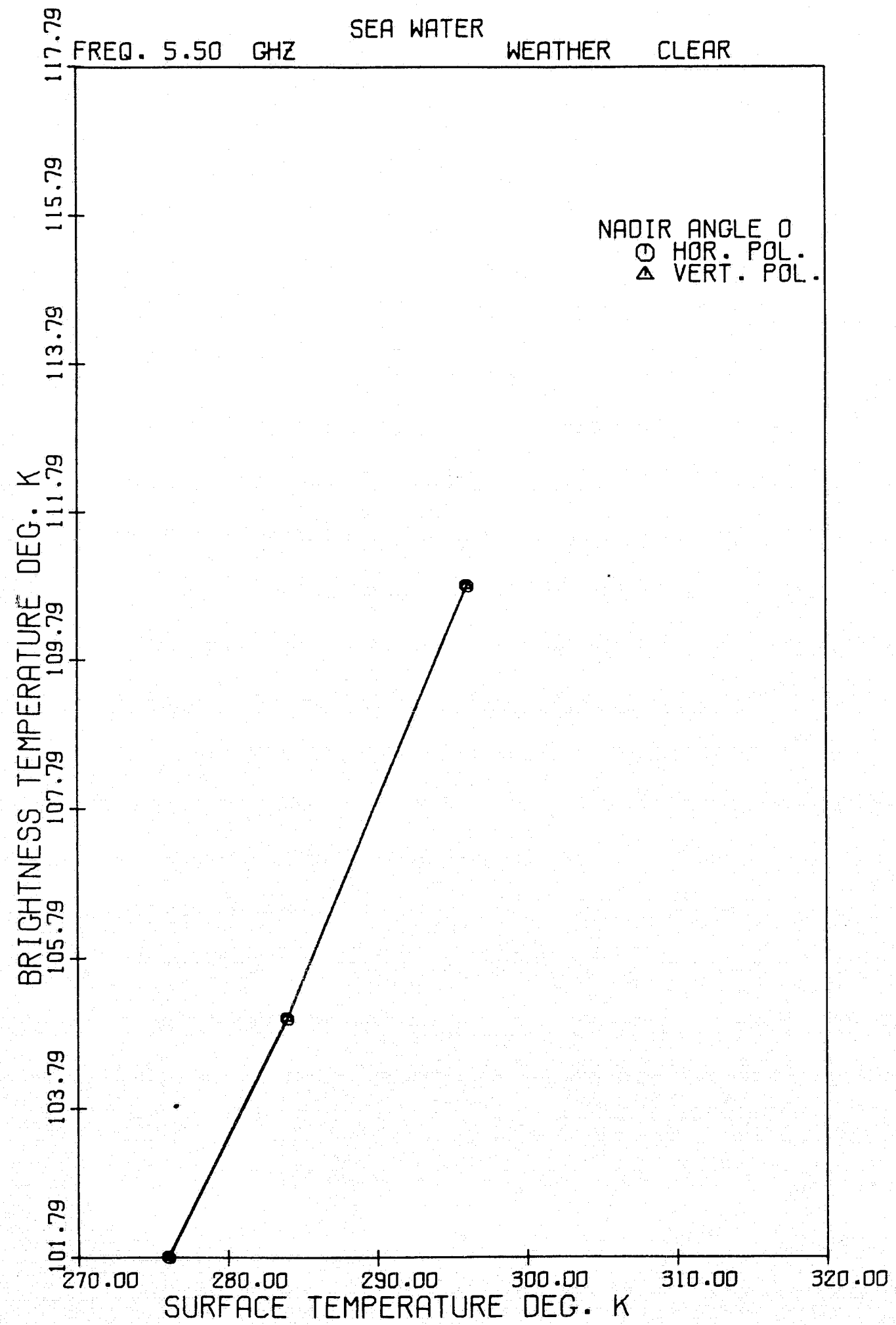

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
116.30
114.30
112.30
110.30
108.30
106.30
104.30
102.30
100.30
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

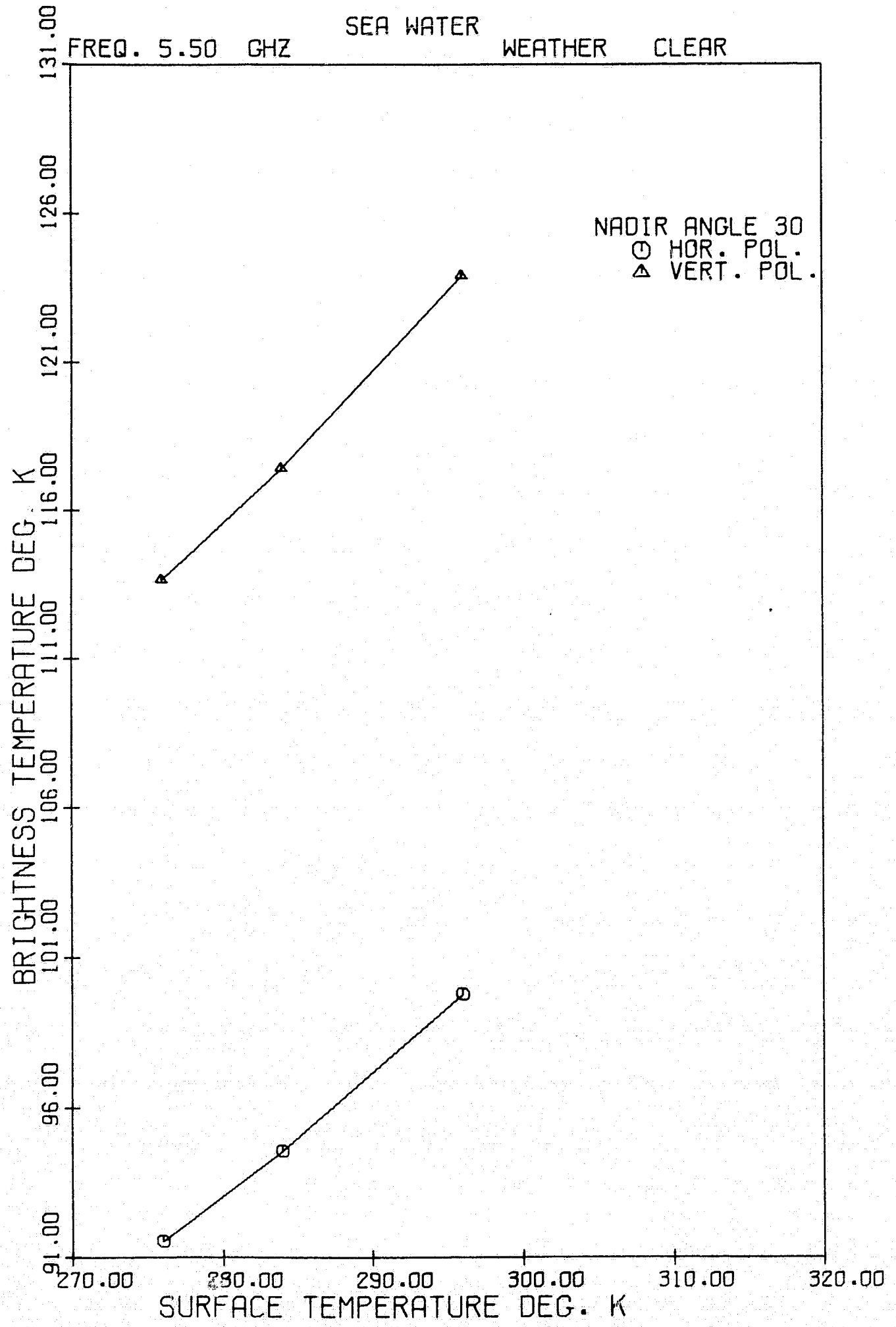

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
123.00
119.00
115.00
111.00
107.00
103.00
99.00
95.00
91.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

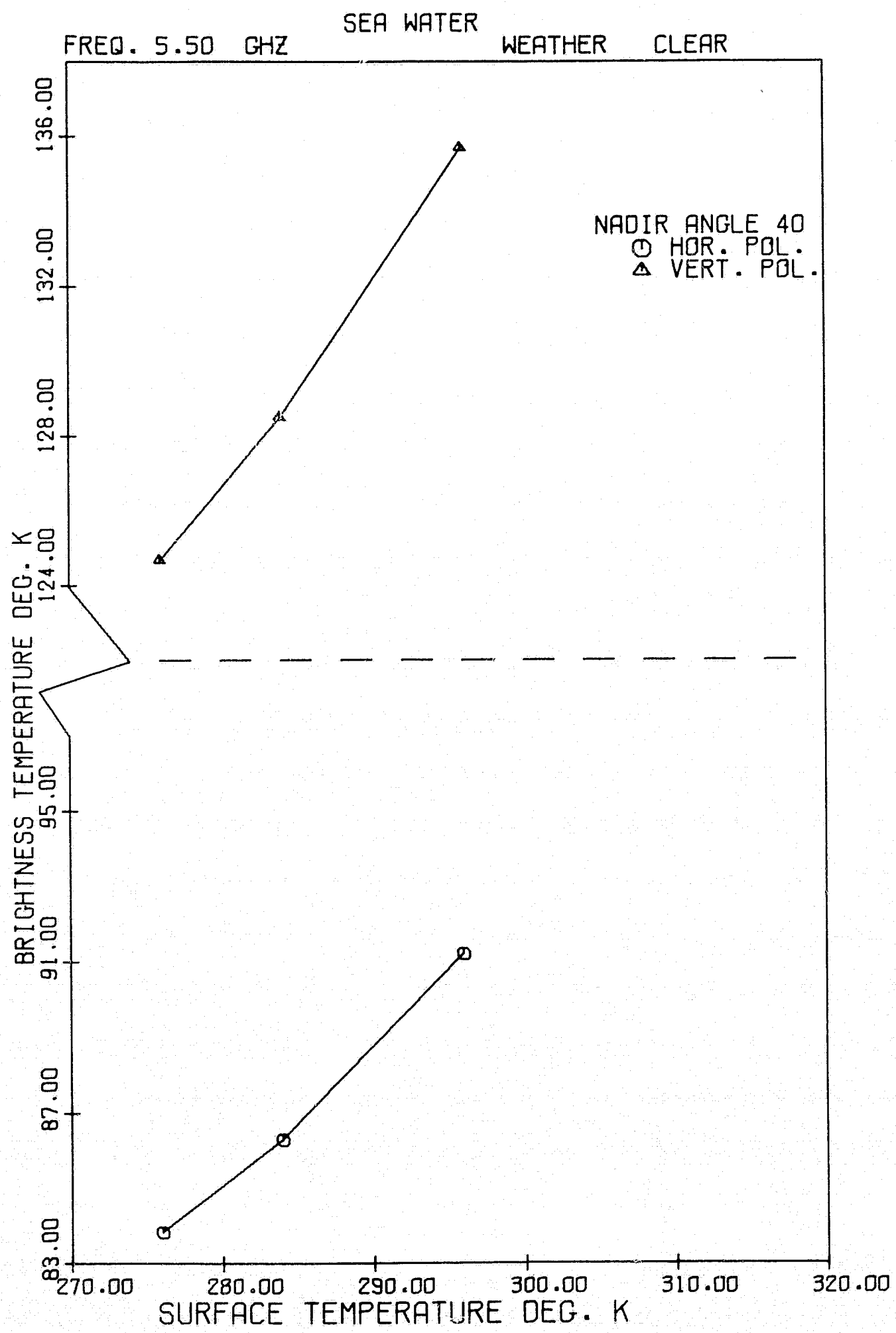

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
124.00
119.00
114.00
109.00
104.00
99.00
94.00
89.00
84.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

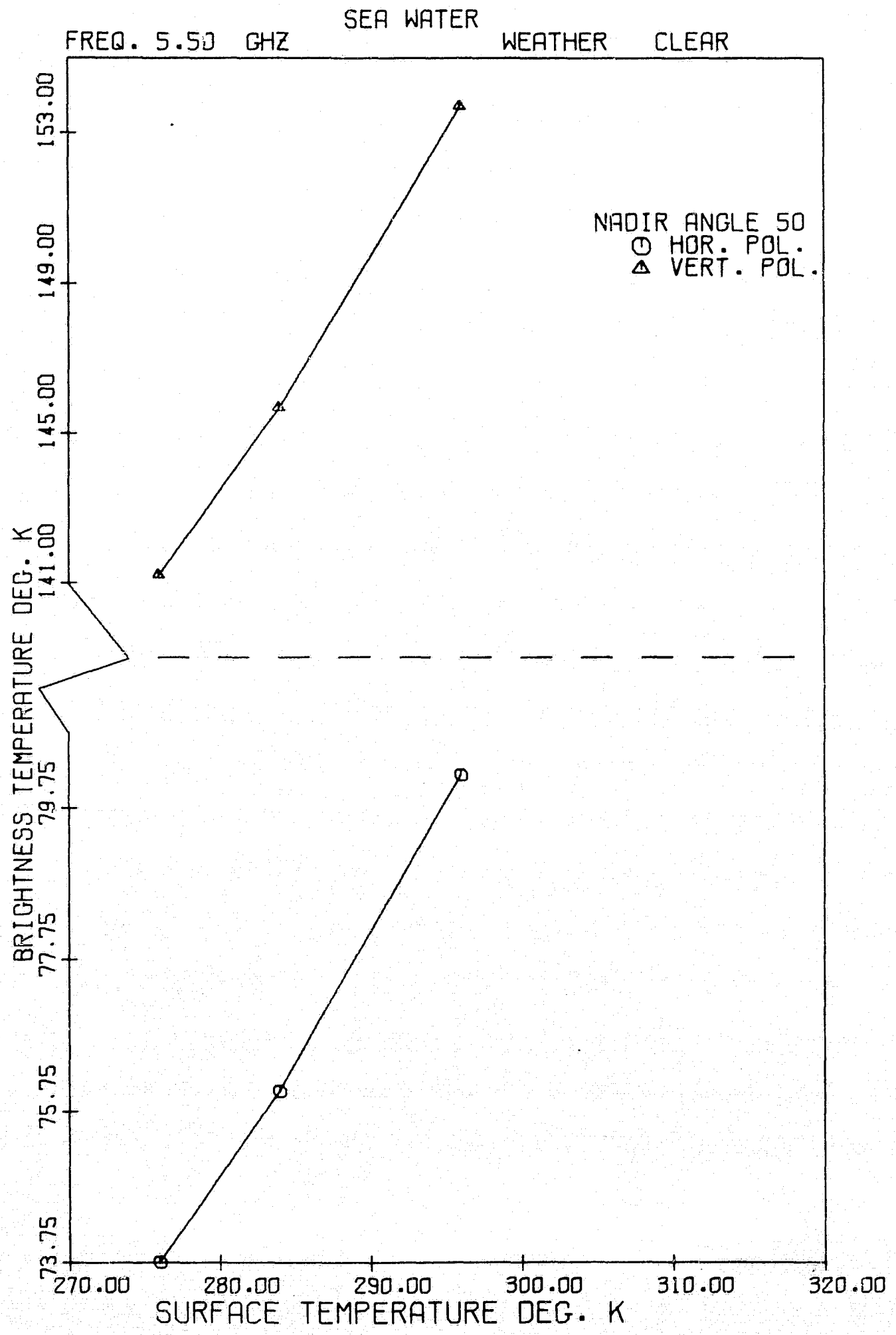

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
144.87
142.87
140.87
138.87
82.50
80.50
78.50
76.50
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

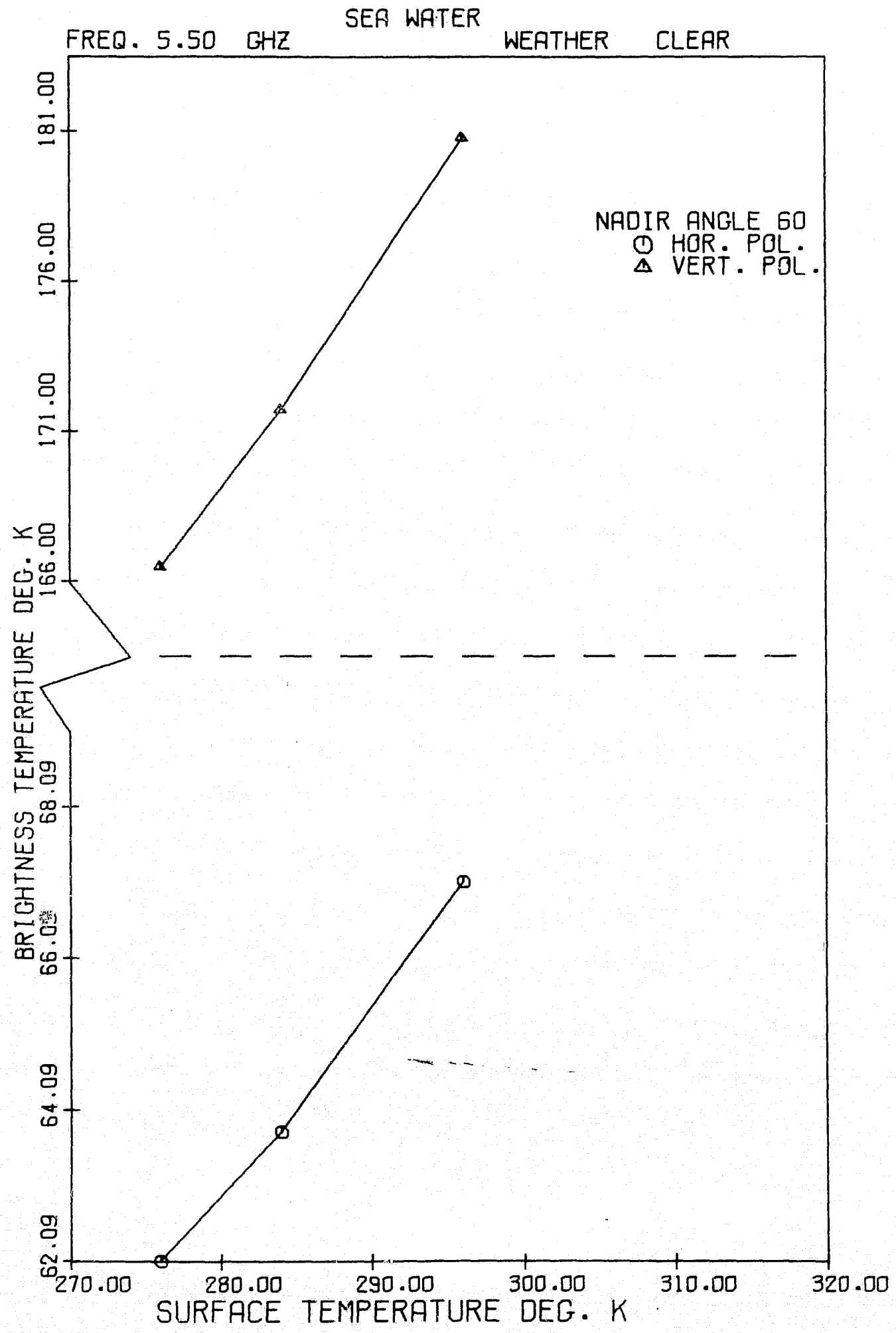

SEA WATER
FREQ. 1.40 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
169.50
167.50
165.50
163.50
73.70
71.70
69.70
67.70
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

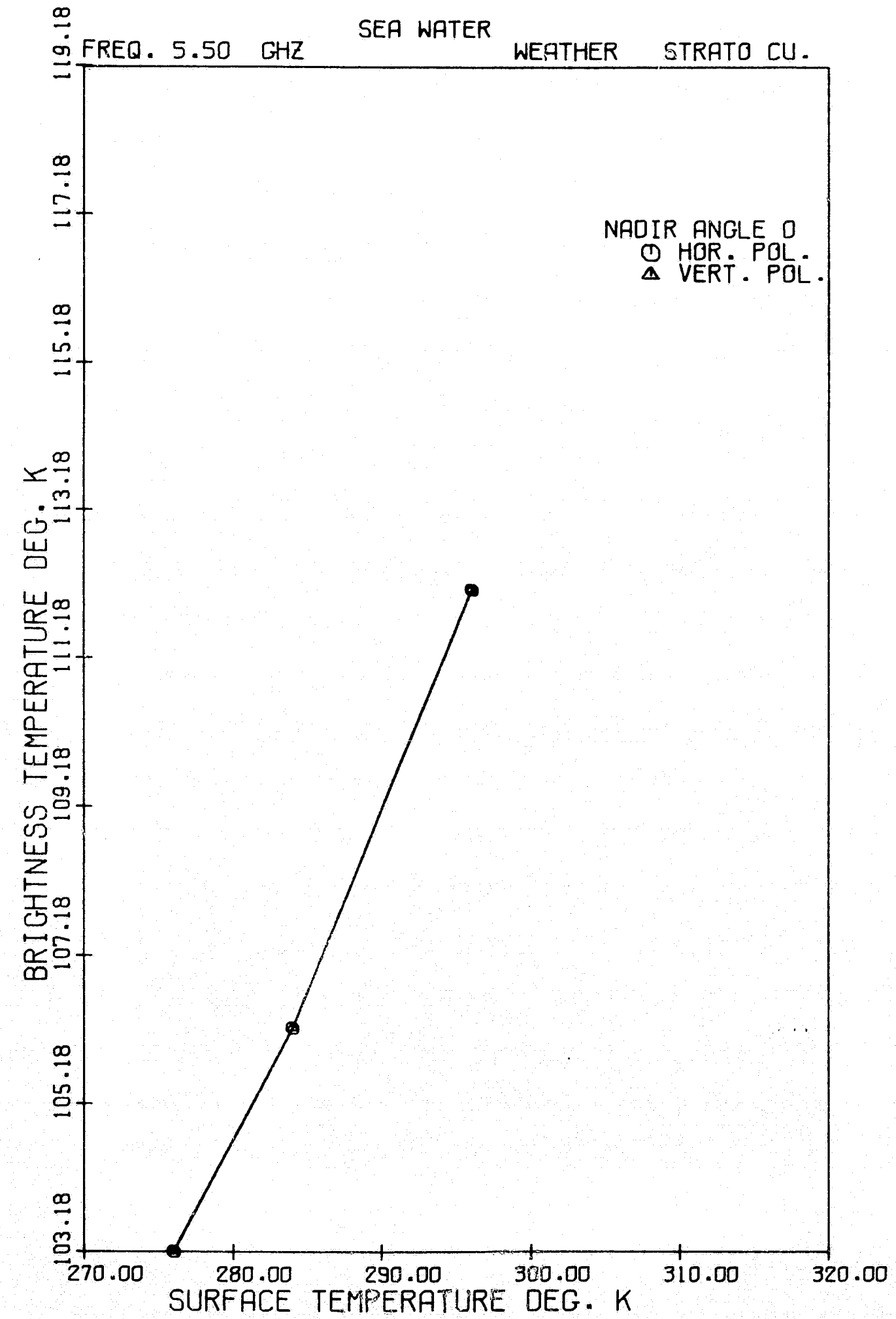

SEA WATER
FREQ. 5.50 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
117.79
115.79
113.79
111.79
109.79
107.79
105.79
103.79
101.79
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

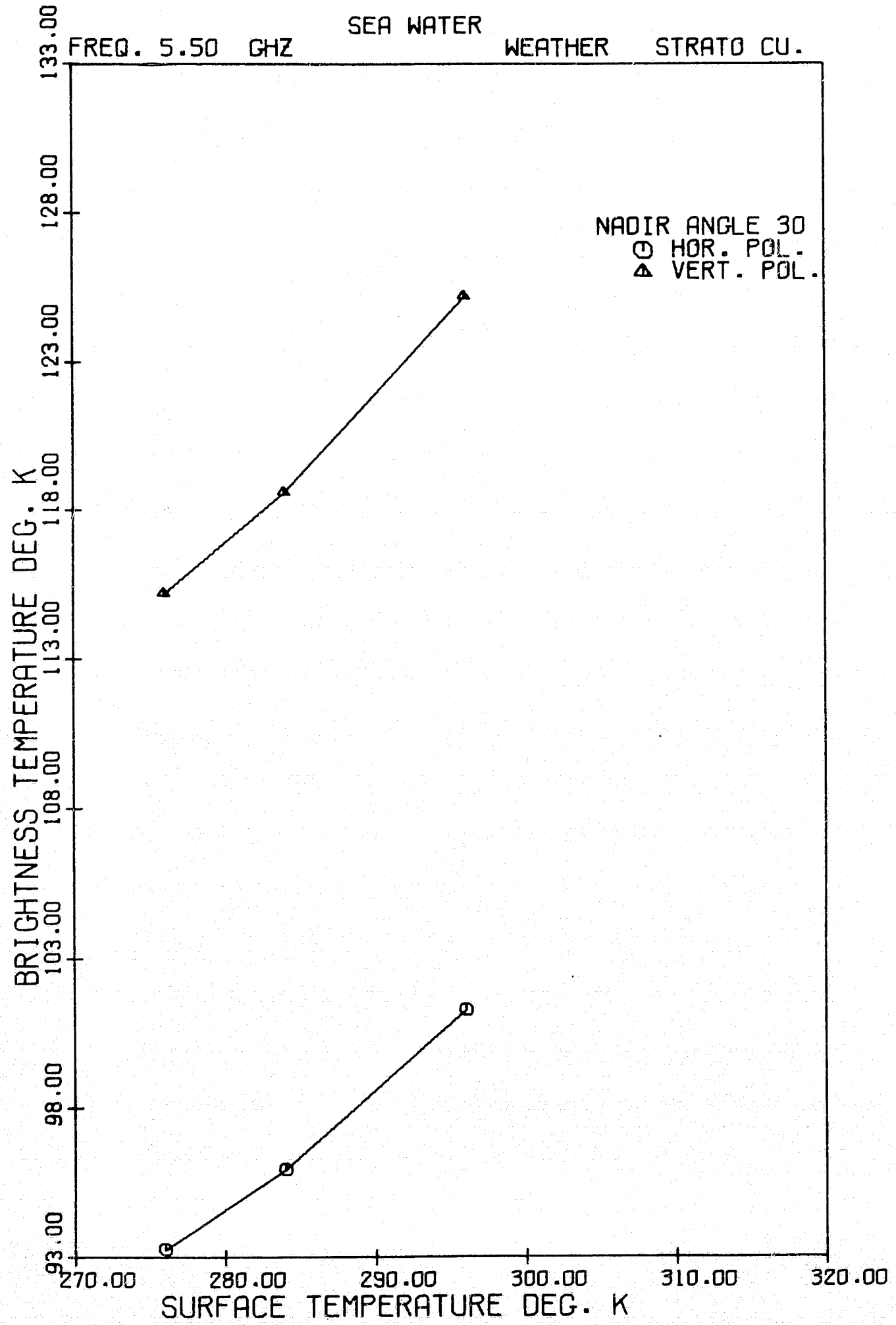

SEA WATER
FREQ. 5.50 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
131.00
126.00
121.00
116.00
111.00
106.00
101.00
96.00
91.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

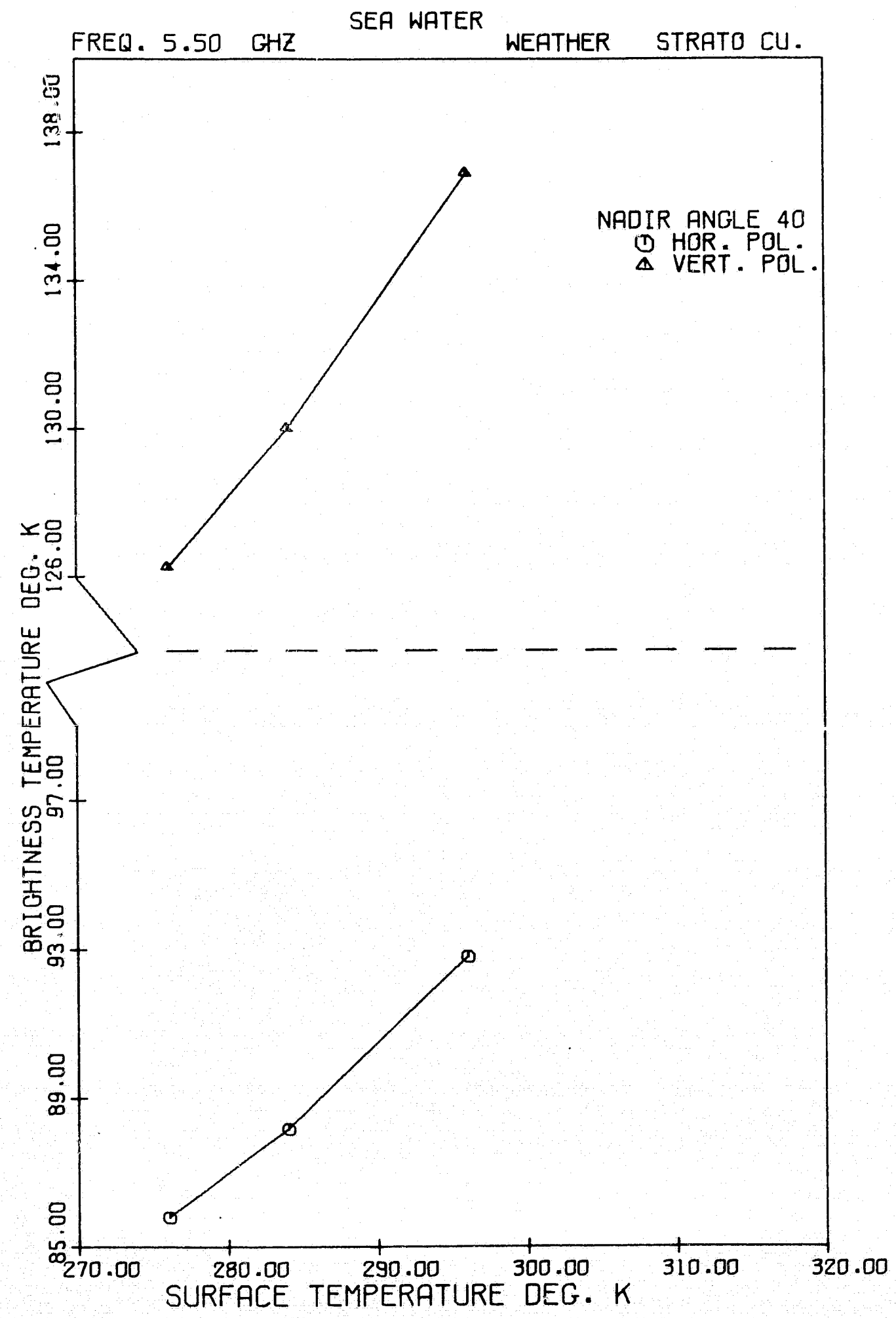

SEA WATER
FREQ. 5.50 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
136.00
132.00
128.00
124.00
95.00
91.00
87.00
83.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

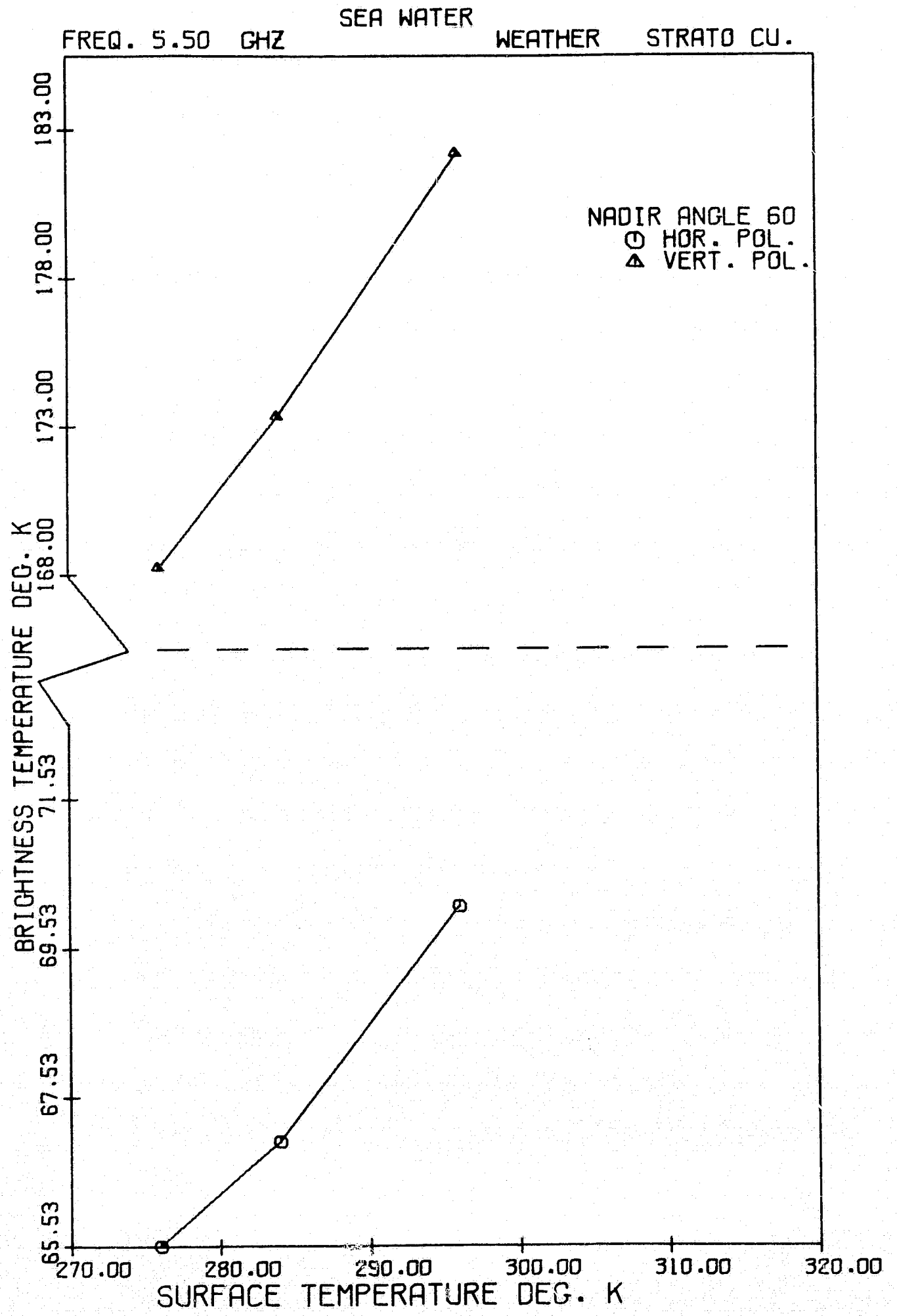

SEA WATER
FREQ. 5.50 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
153.00
149.00
145.00
141.00
79.75
77.75
75.75
73.75
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

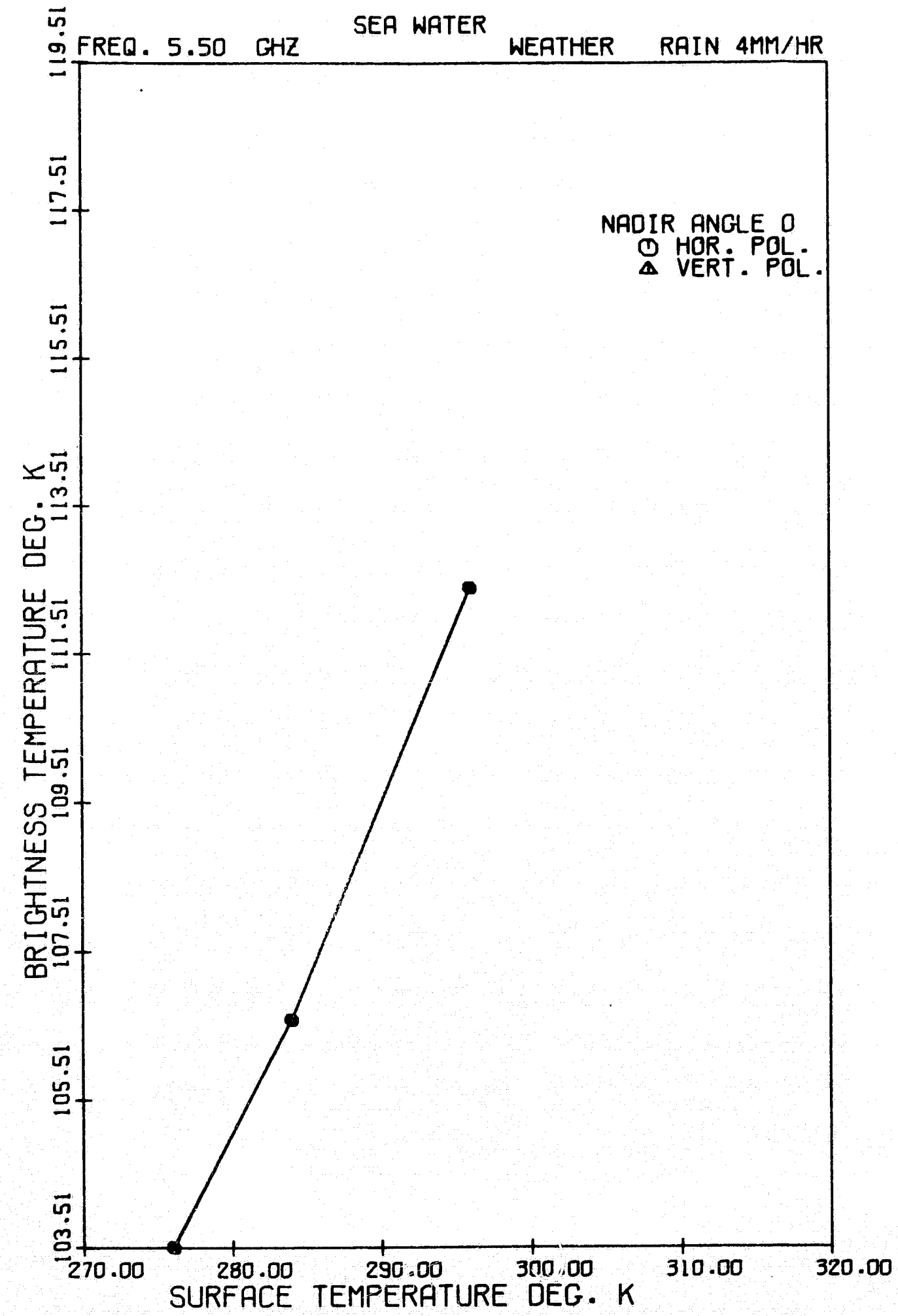

SEA WATER
FREQ. 5.50 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
181.00
176.00
171.00
166.00
68.09
66.09
64.09
62.09
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

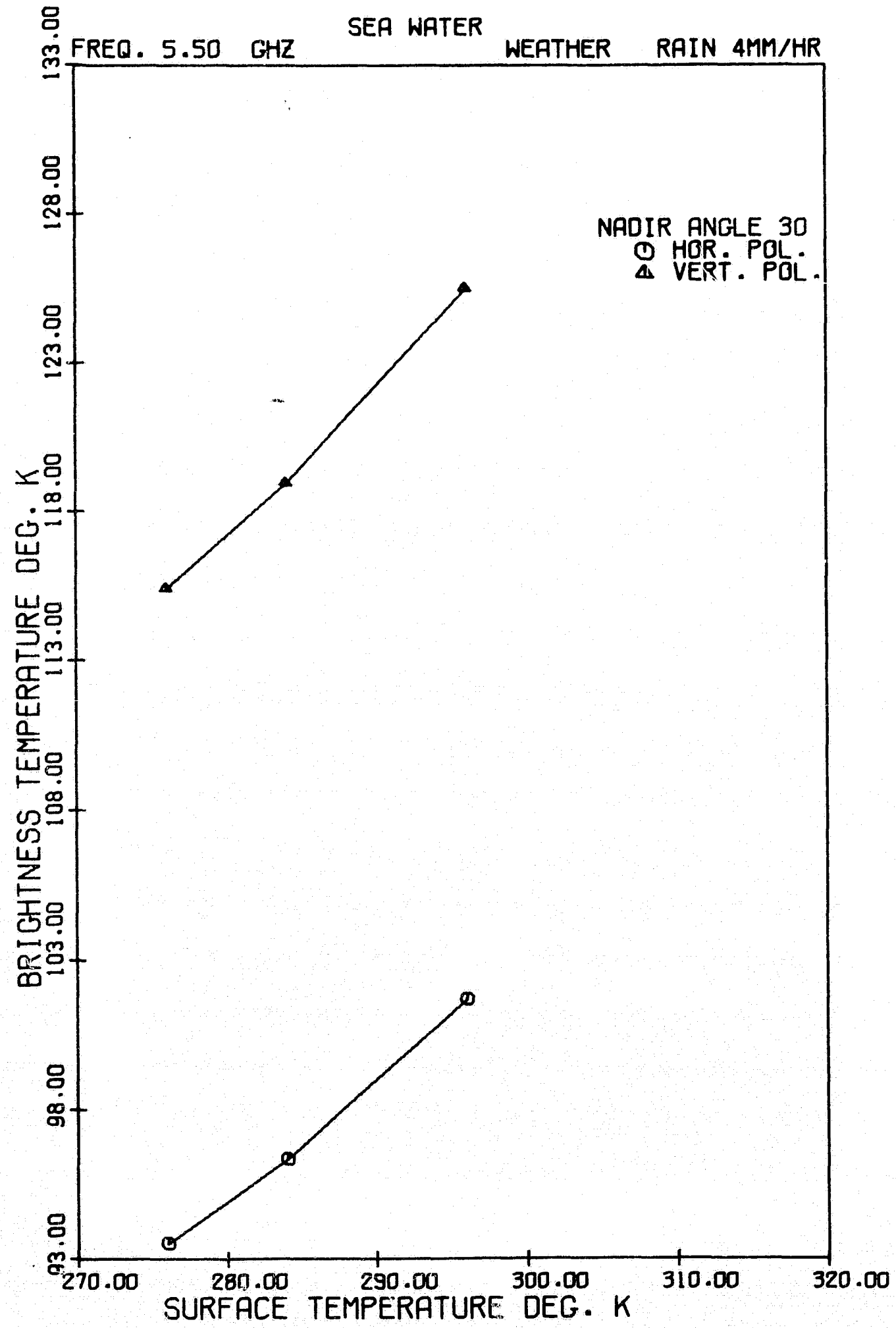

SEA WATER
FREQ. 5.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.18
117.18
115.18
113.18
111.18
109.18
107.18
105.18
103.18
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

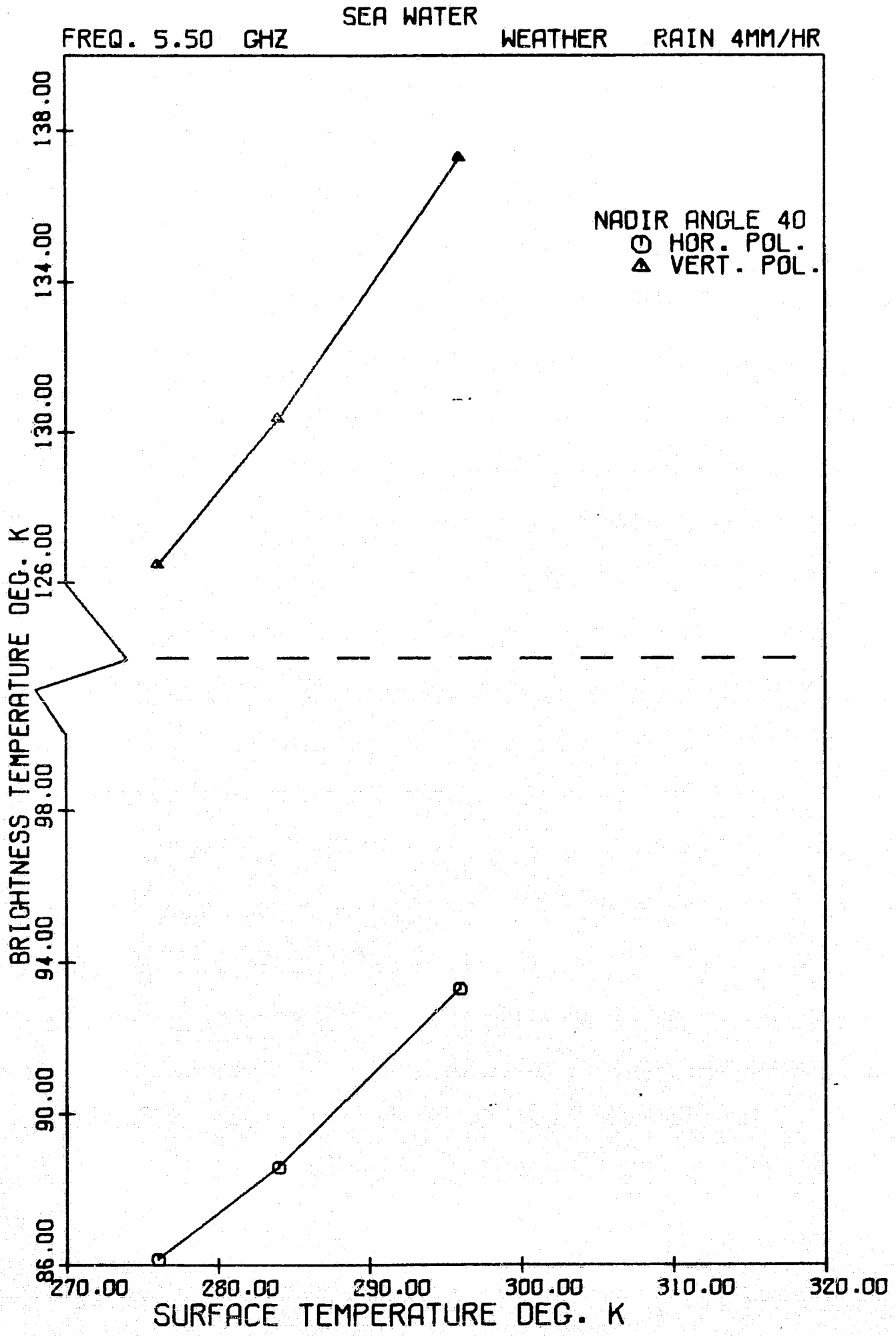

SEA WATER
FREQ. 5.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
133.00
128.00
123.00
118.00
113.00
108.00
103.00
98.00
93.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

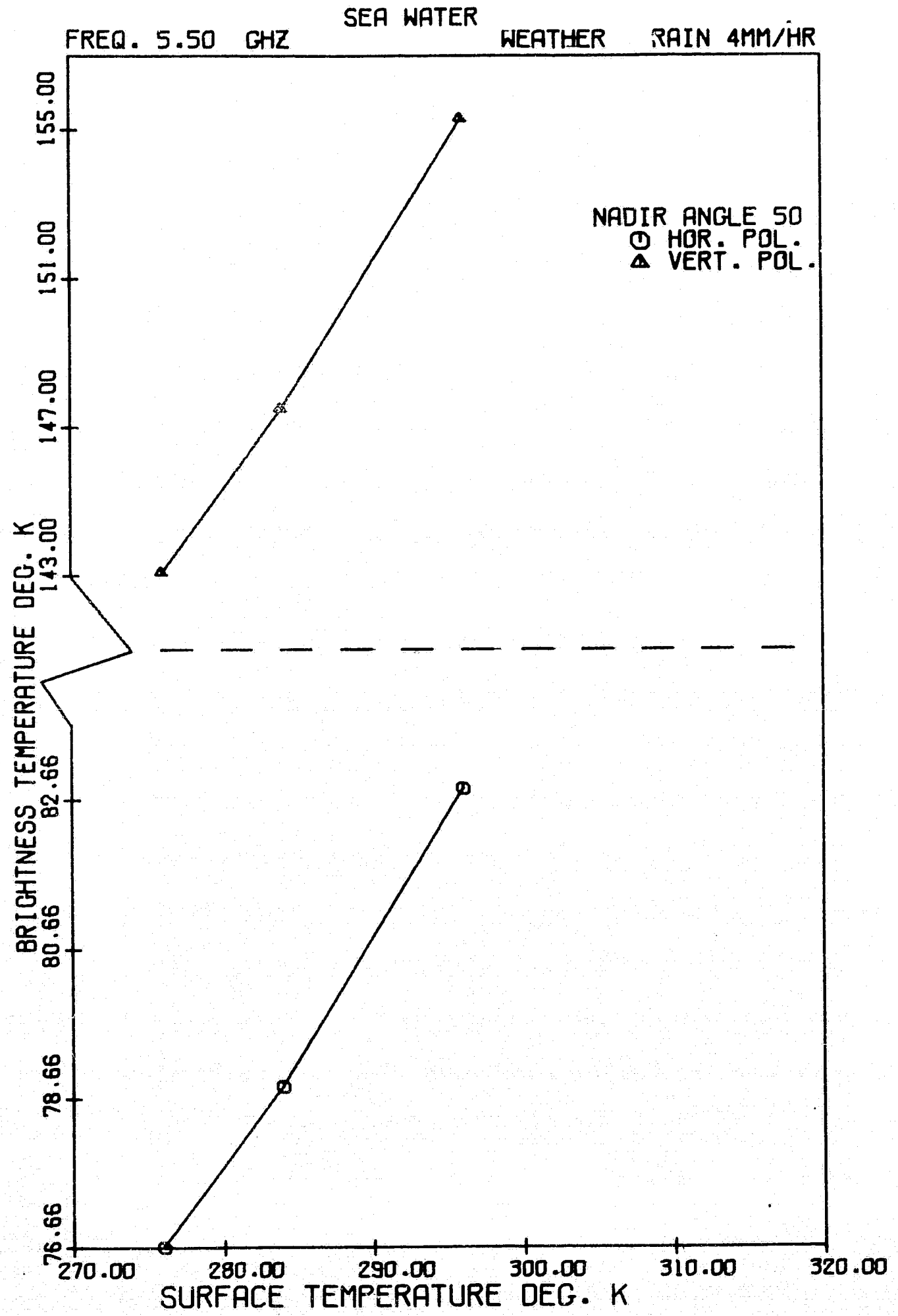

SEA WATER
FREQ. 5.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
138.00
134.00
130.00
126.00
97.00
93.00
89.00
85.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

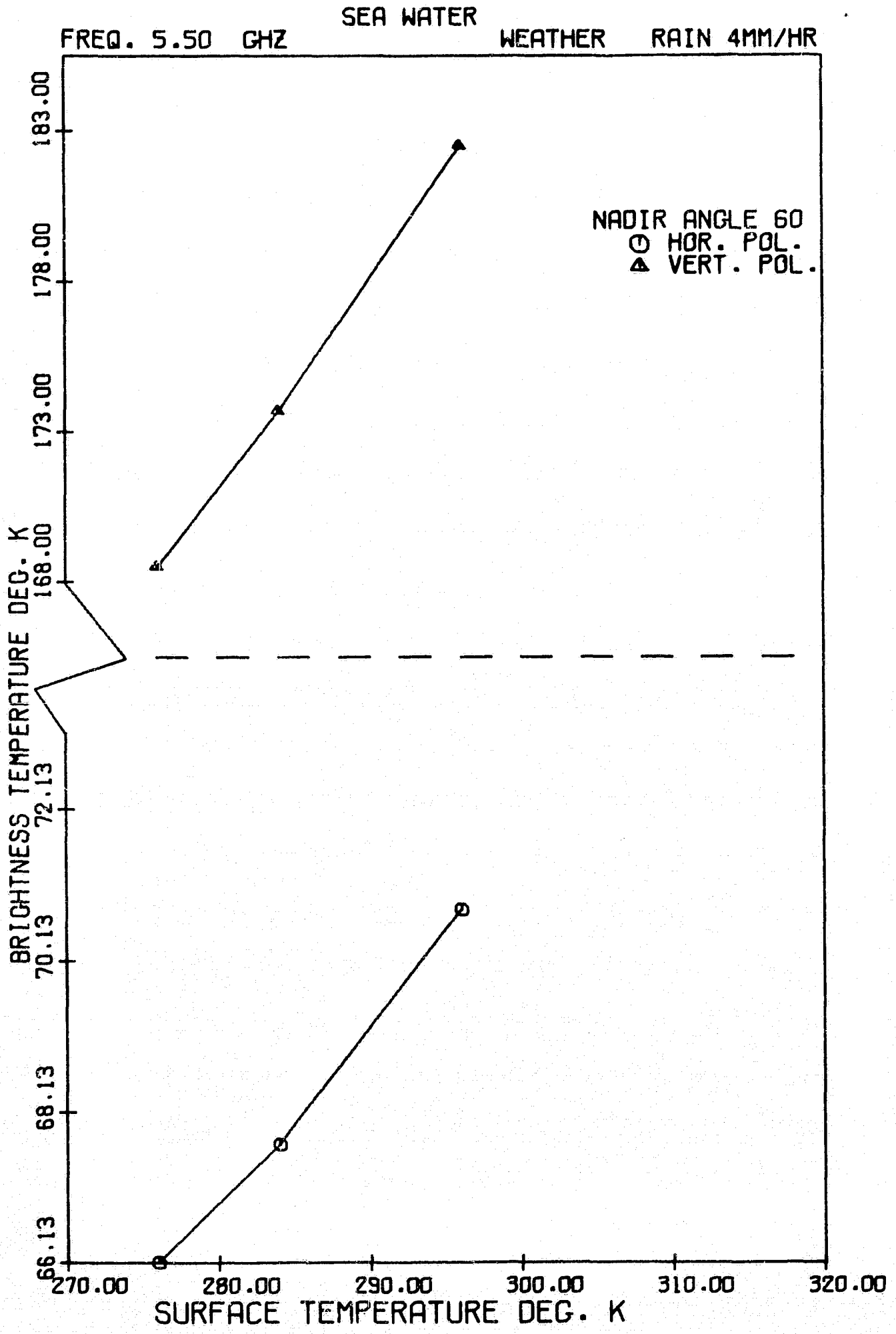

SEA WATER
FREQ. 5.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
183.00
178.00
173.00
168.00
71.53
69.53
67.53
65.53
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

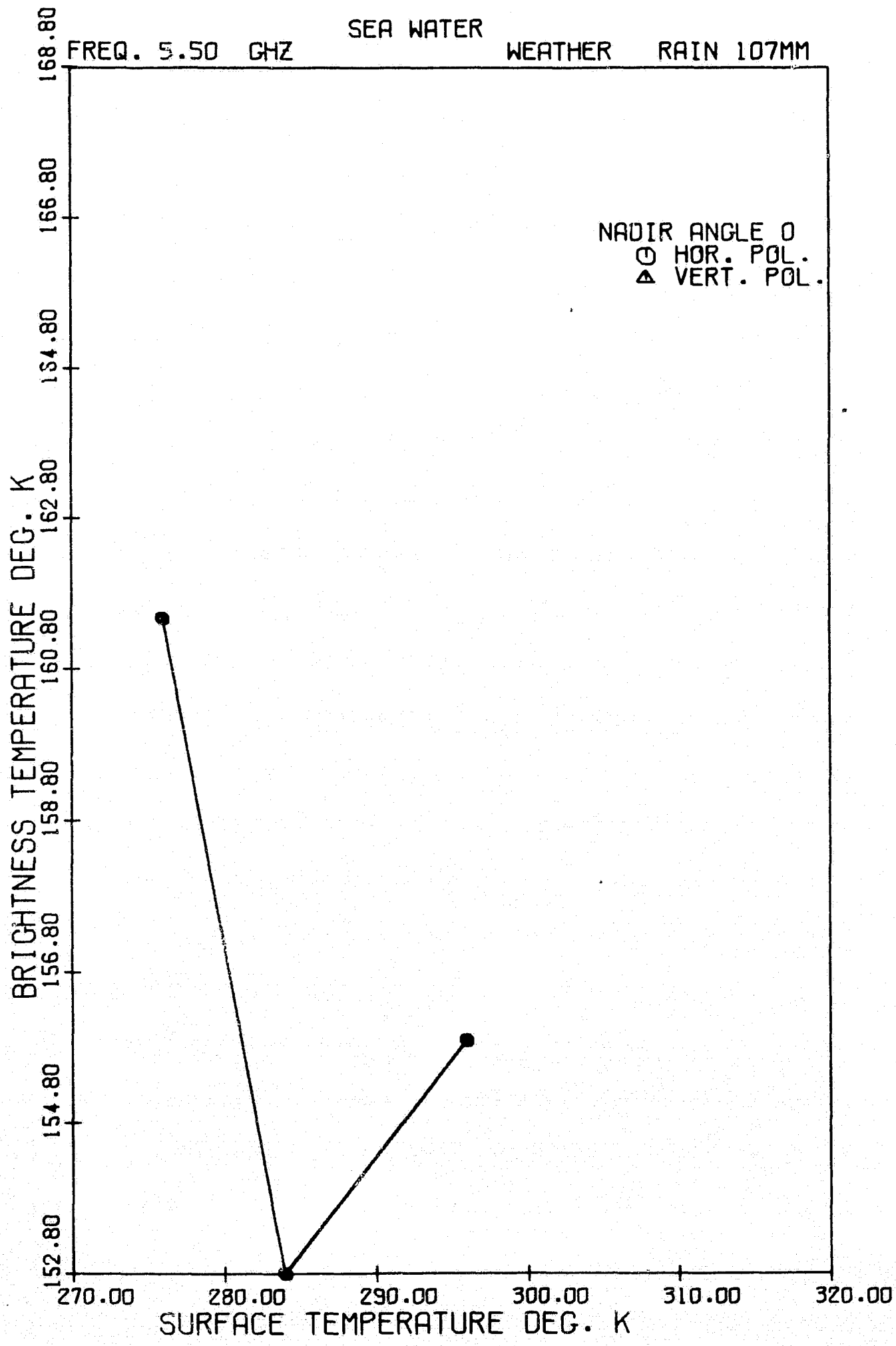

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
119.51
117.51
115.51
113.51
111.51
109.51
107.51
105.51
103.51
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

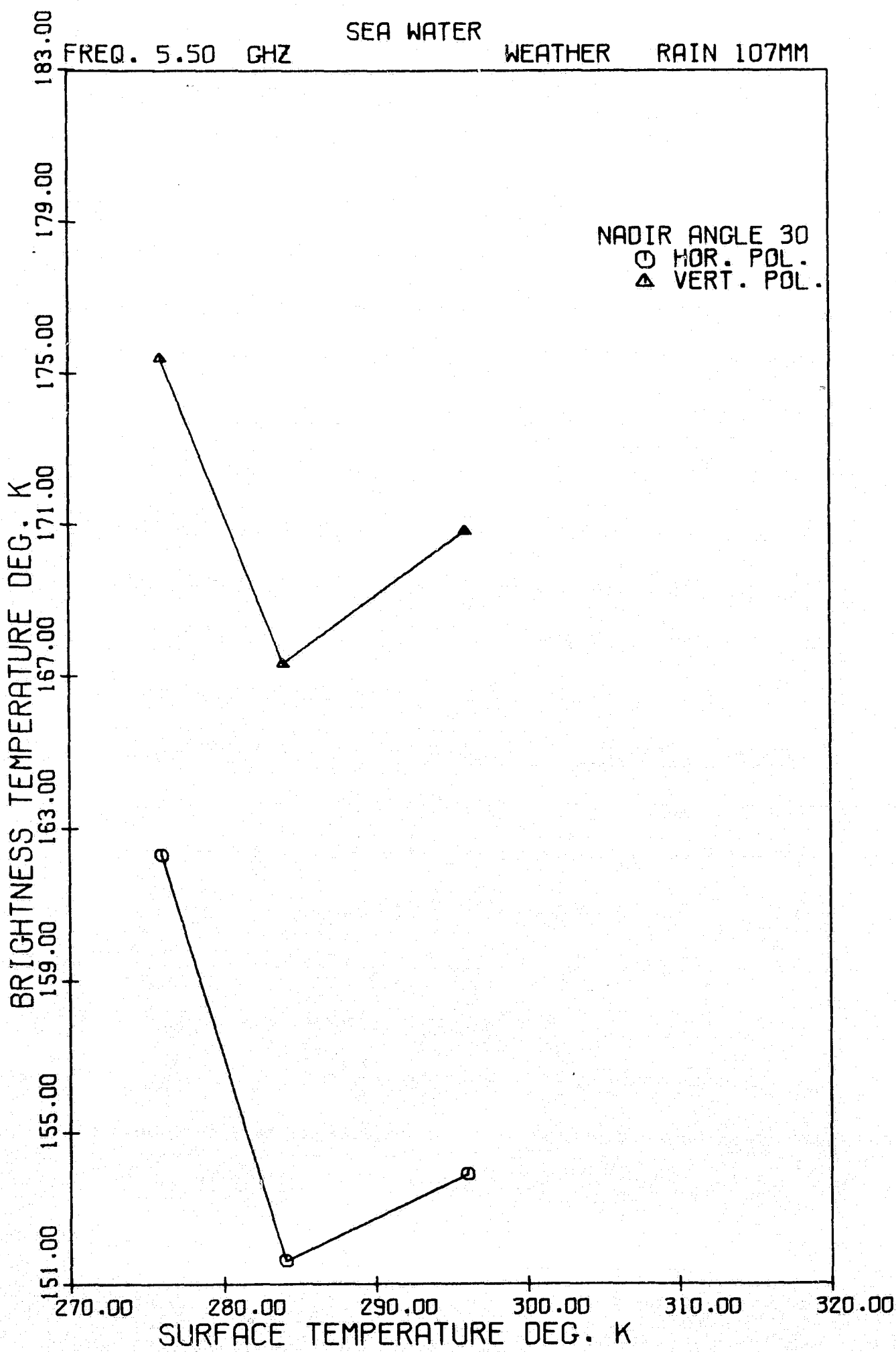

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
133.00
128.00
123.00
118.00
113.00
108.00
103.00
98.00
93.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

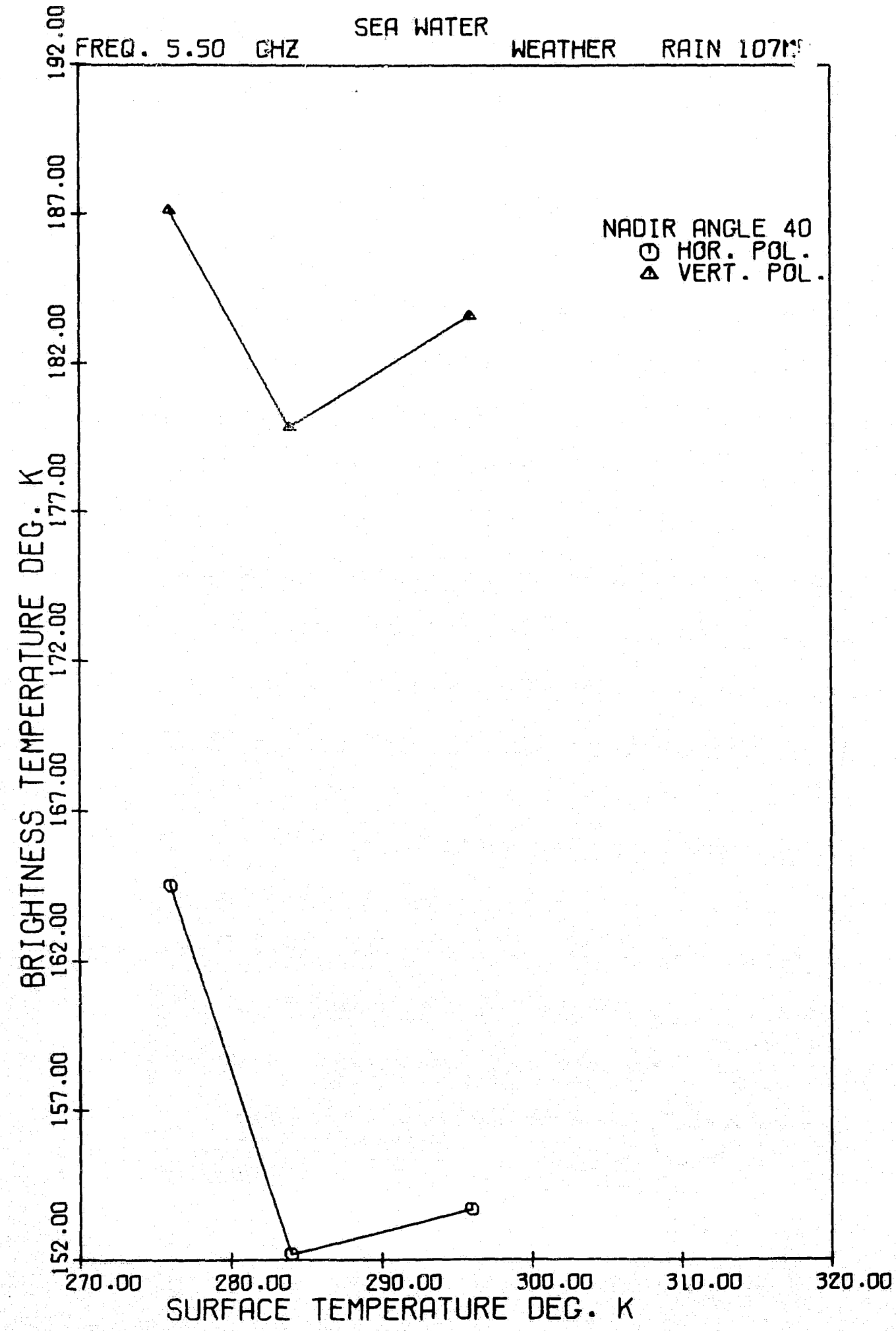

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
138.00
134.00
130.00
126.00
98.00
94.00
90.00
86.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

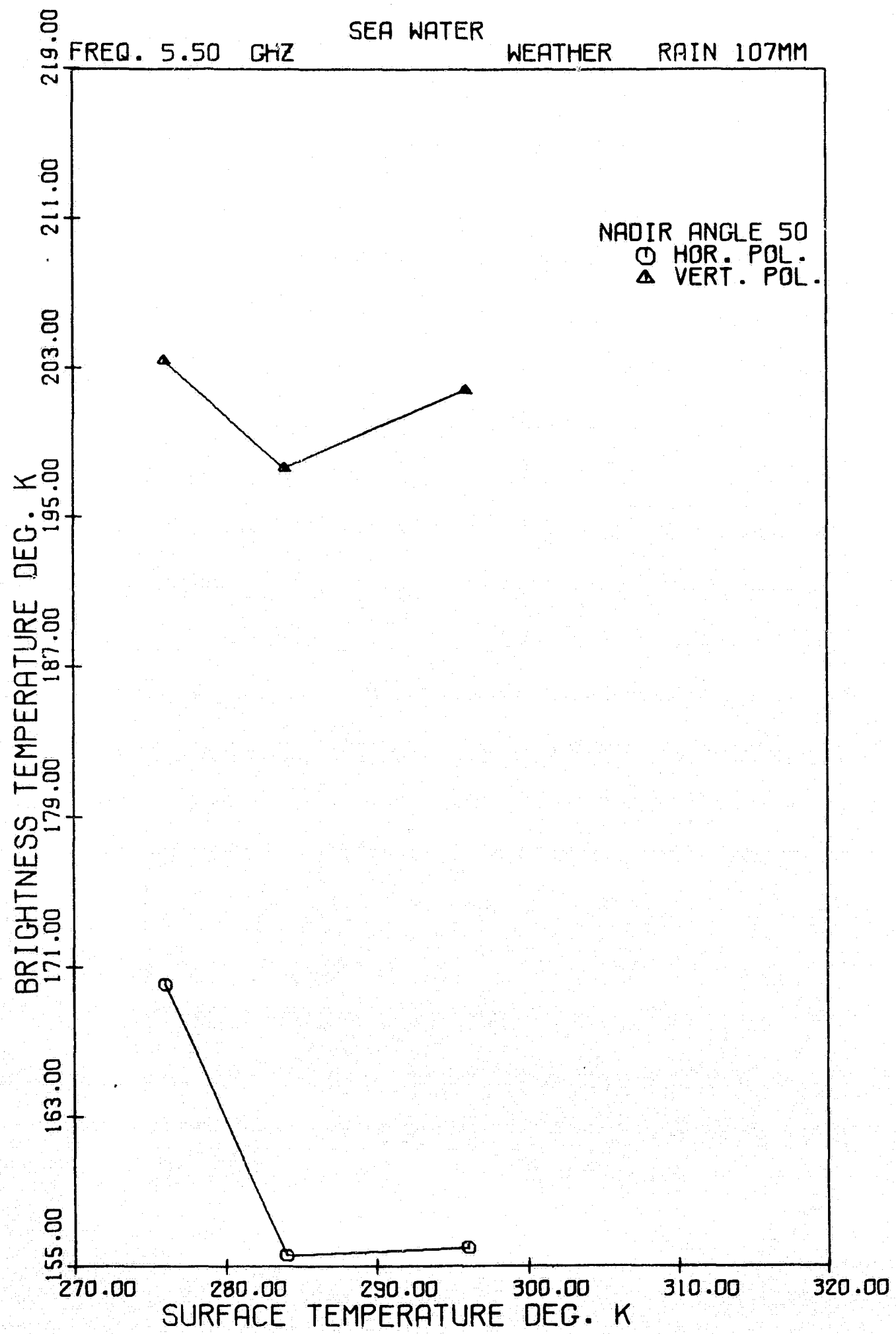

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
155.00
151.00
147.00
143.00
82.66
80.66
78.66
76.66
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

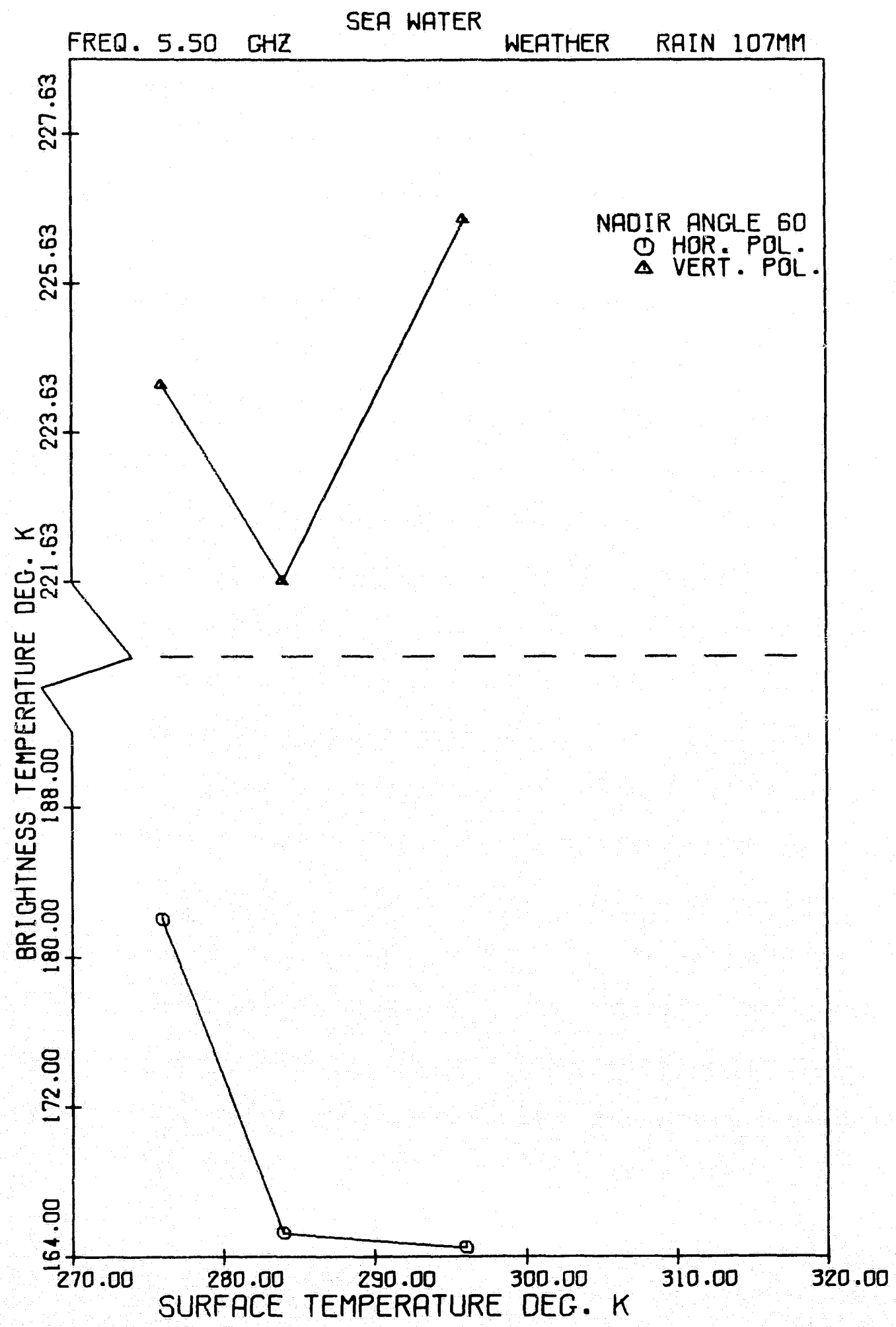

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
183.00
178.00
173.00
168.00
72.13
70.13
68.13
66.13
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

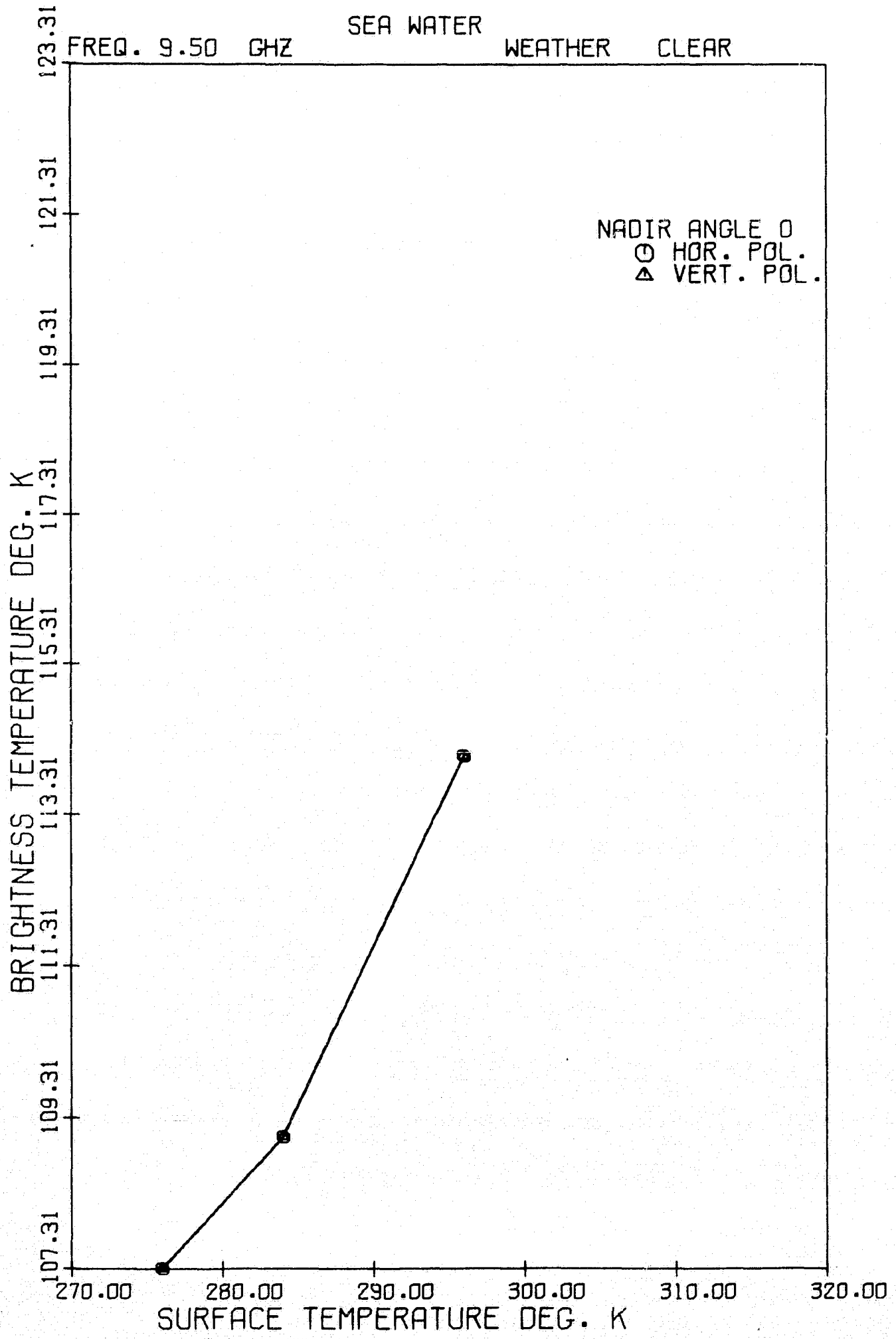

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
① HOR. POL.
△ VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
168.80
166.80
164.80
162.80
160.80
158.80
156.80
154.80
152.80
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

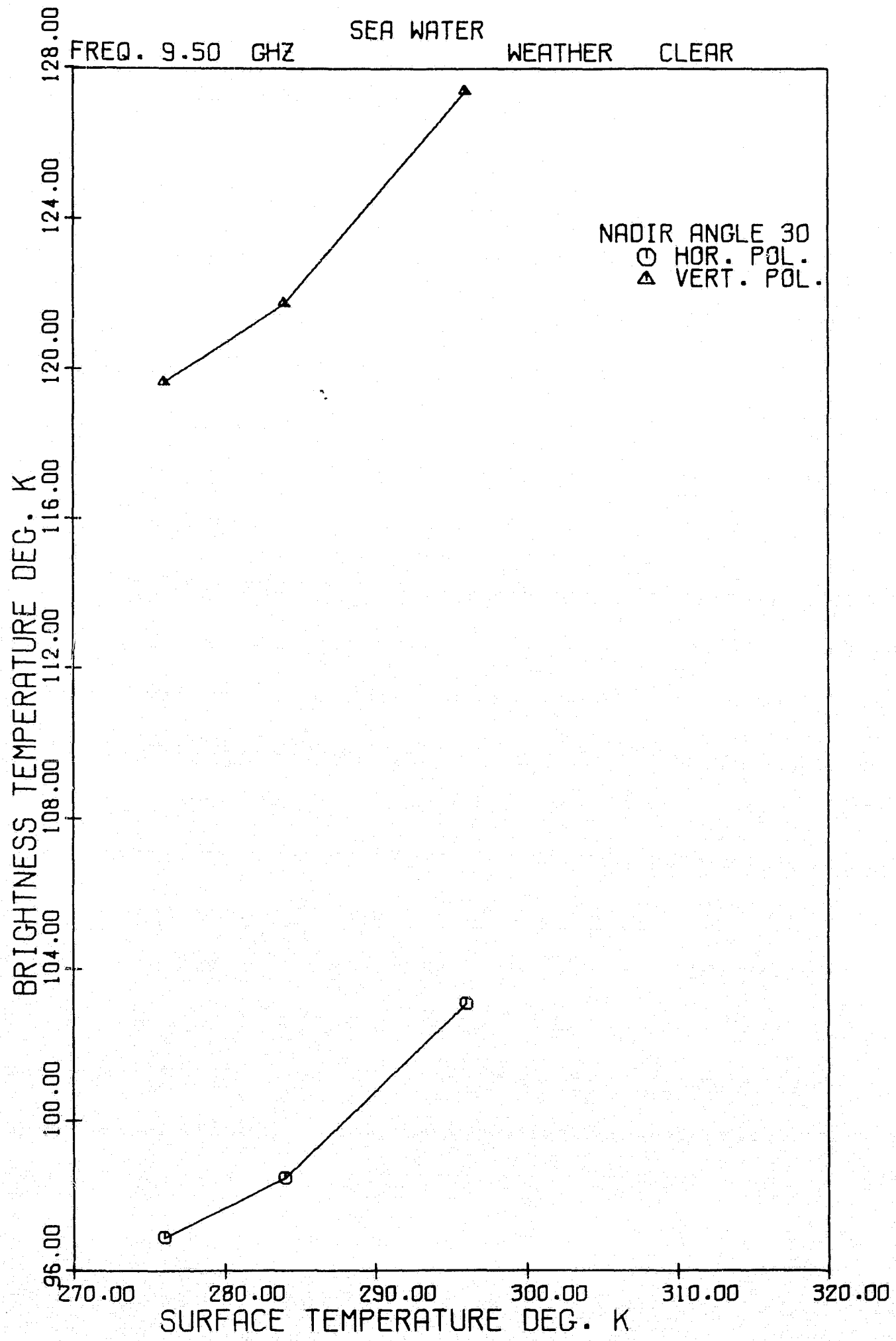

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
183.00
179.00
175.00
171.00
167.00
163.00
159.00
155.00
151.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

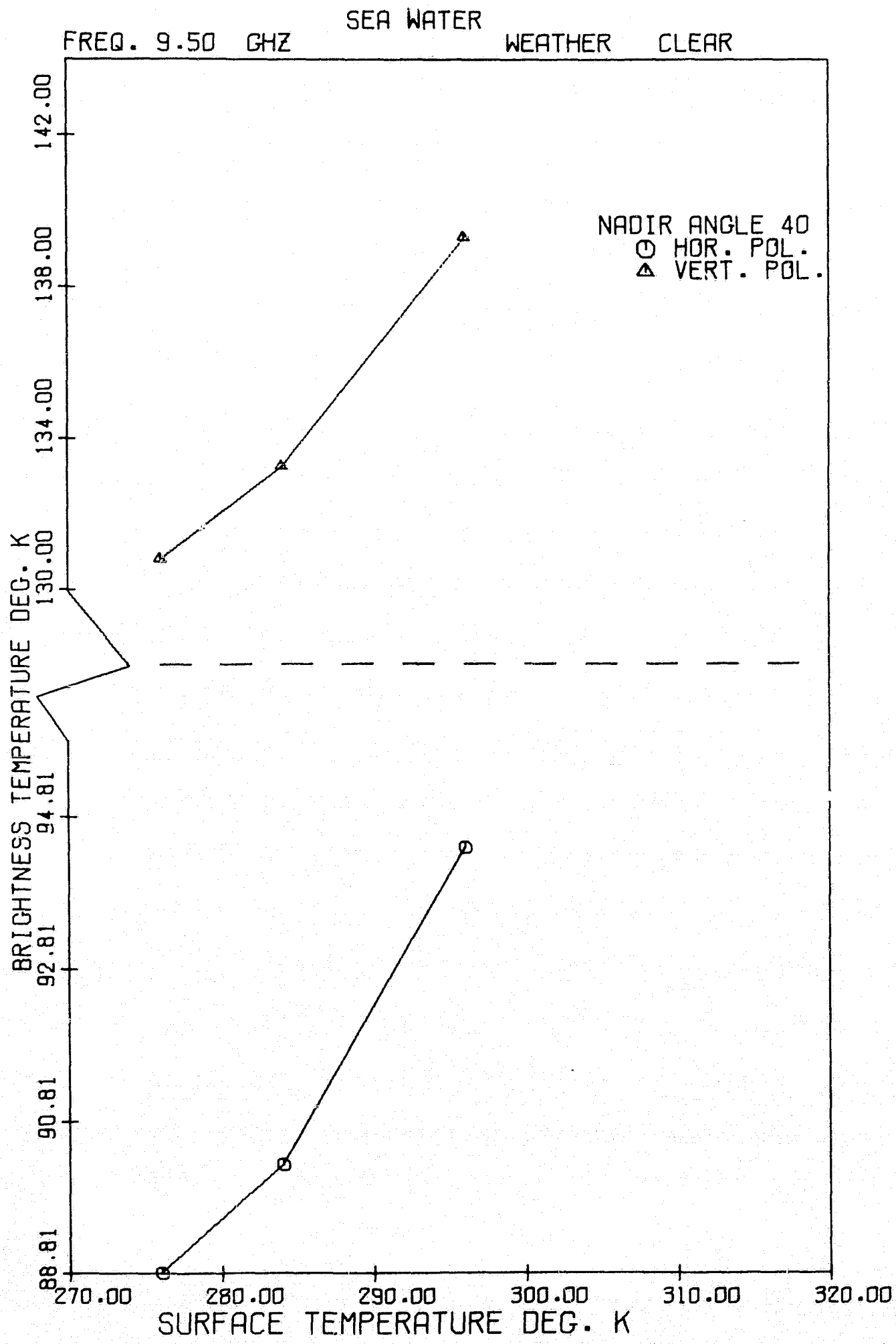

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 107M
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
192.00
187.00
182.00
177.00
172.00
167.00
162.00
157.00
152.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

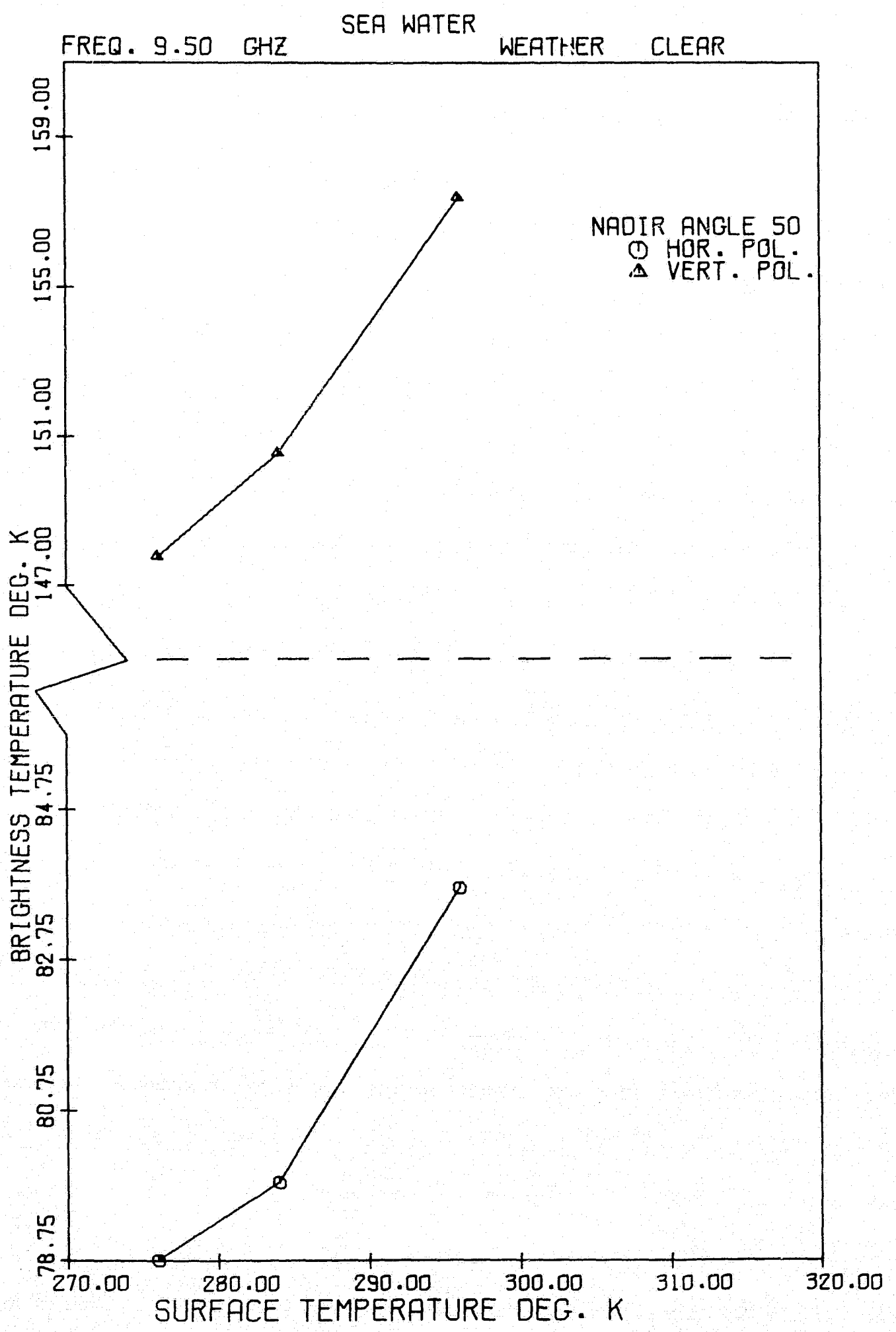

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
219.00
211.00
203.00
195.00
187.00
179.00
171.00
163.00
155.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

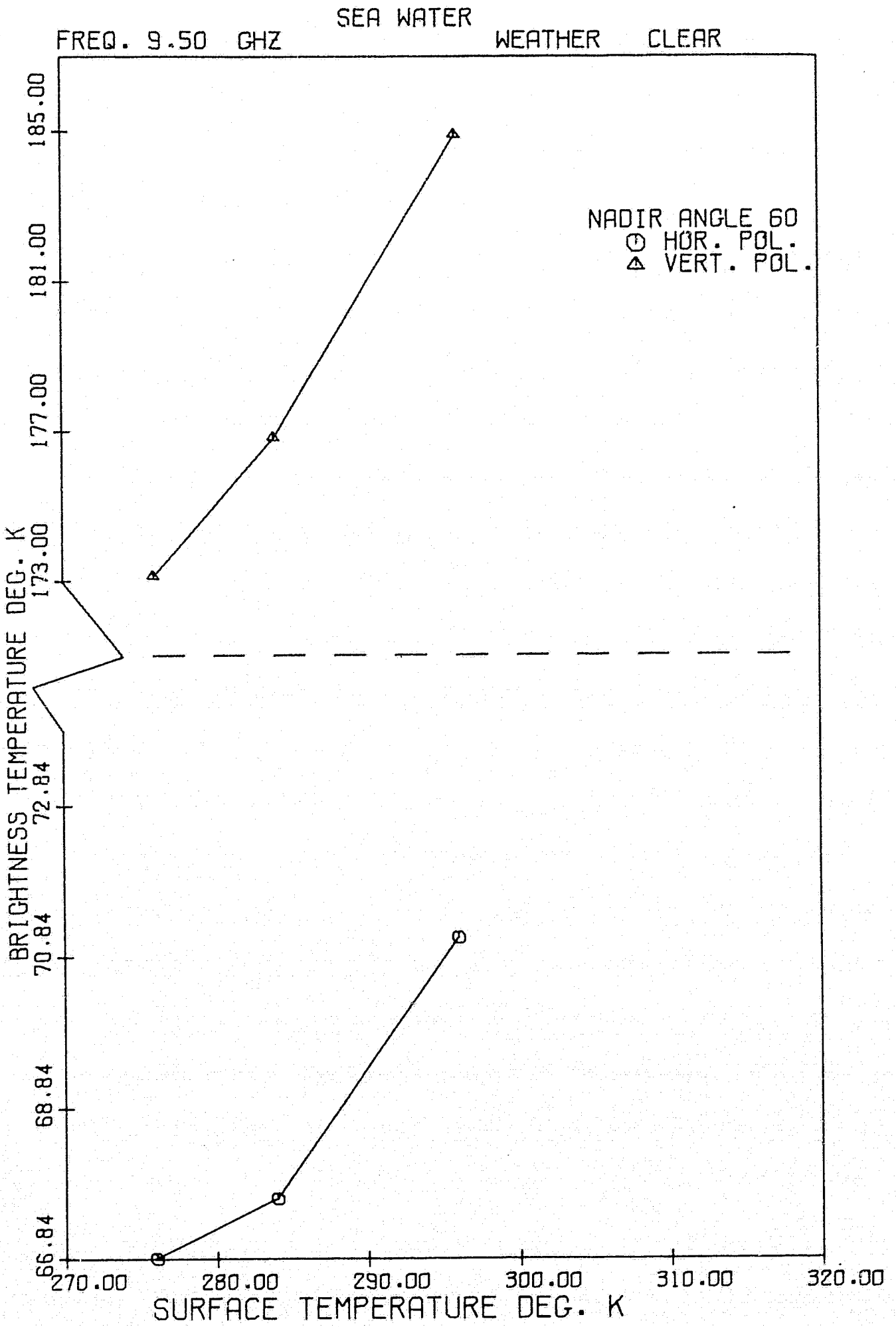

SEA WATER
FREQ. 5.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
227.63
225.63
223.63
221.63
188.00
180.00
172.00
164.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

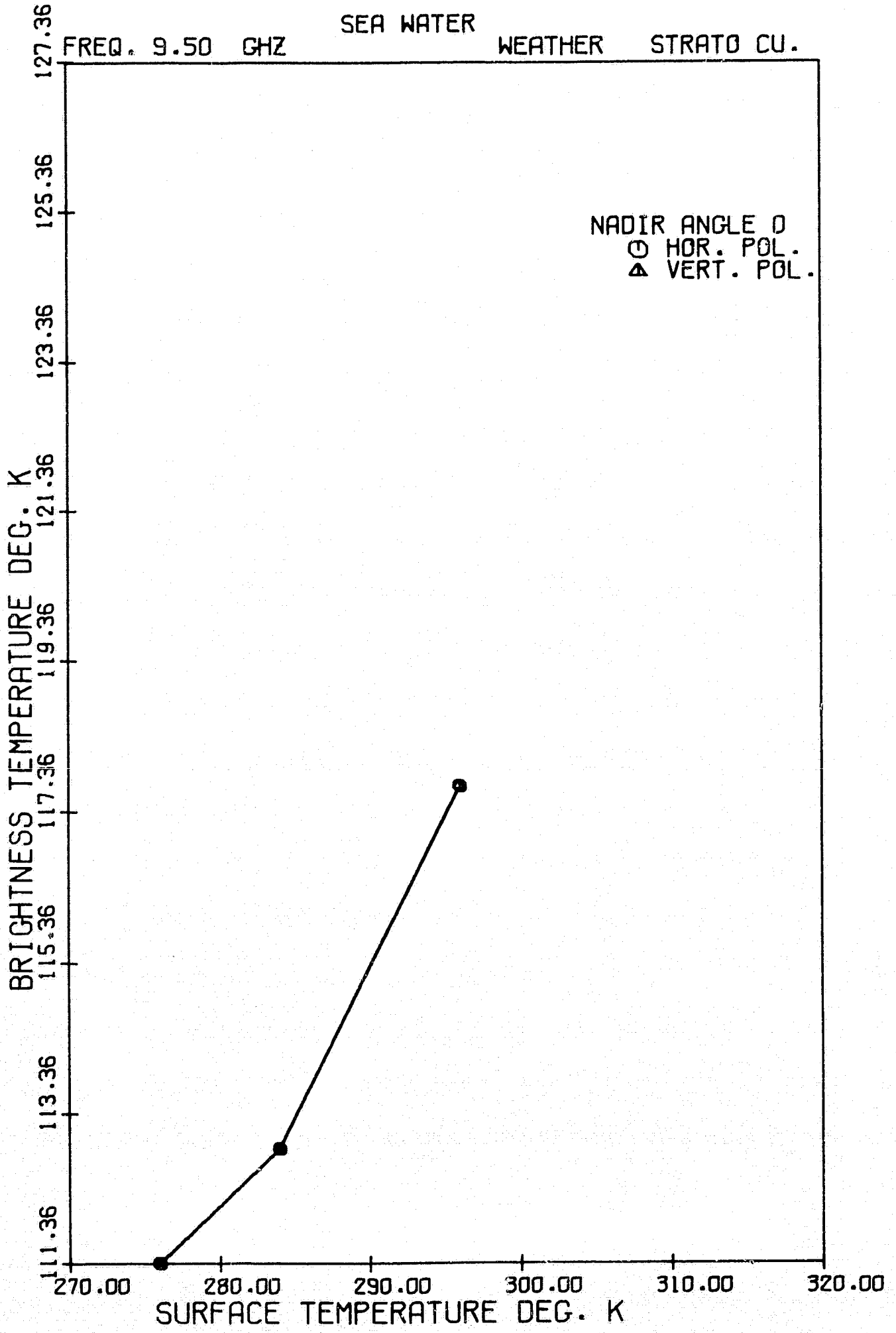

SEA WATER
FREQ. 9.50 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
123.31
121.31
119.31
117.31
115.31
113.31
111.31
109.31
107.31
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

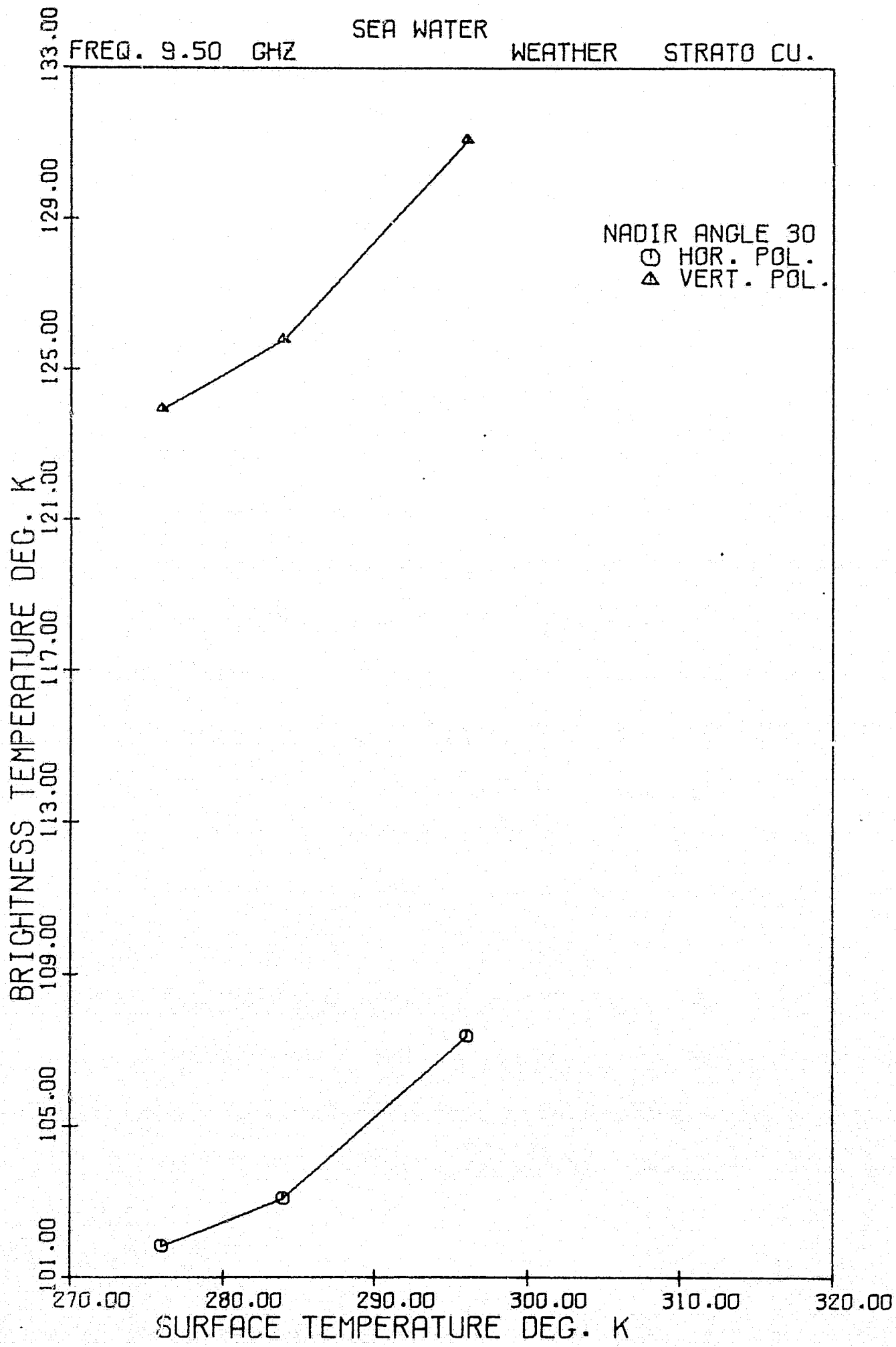

SEA WATER
FREQ. 9.50 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
128.00
124.00
120.00
116.00
112.00
108.00
104.00
100.00
96.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

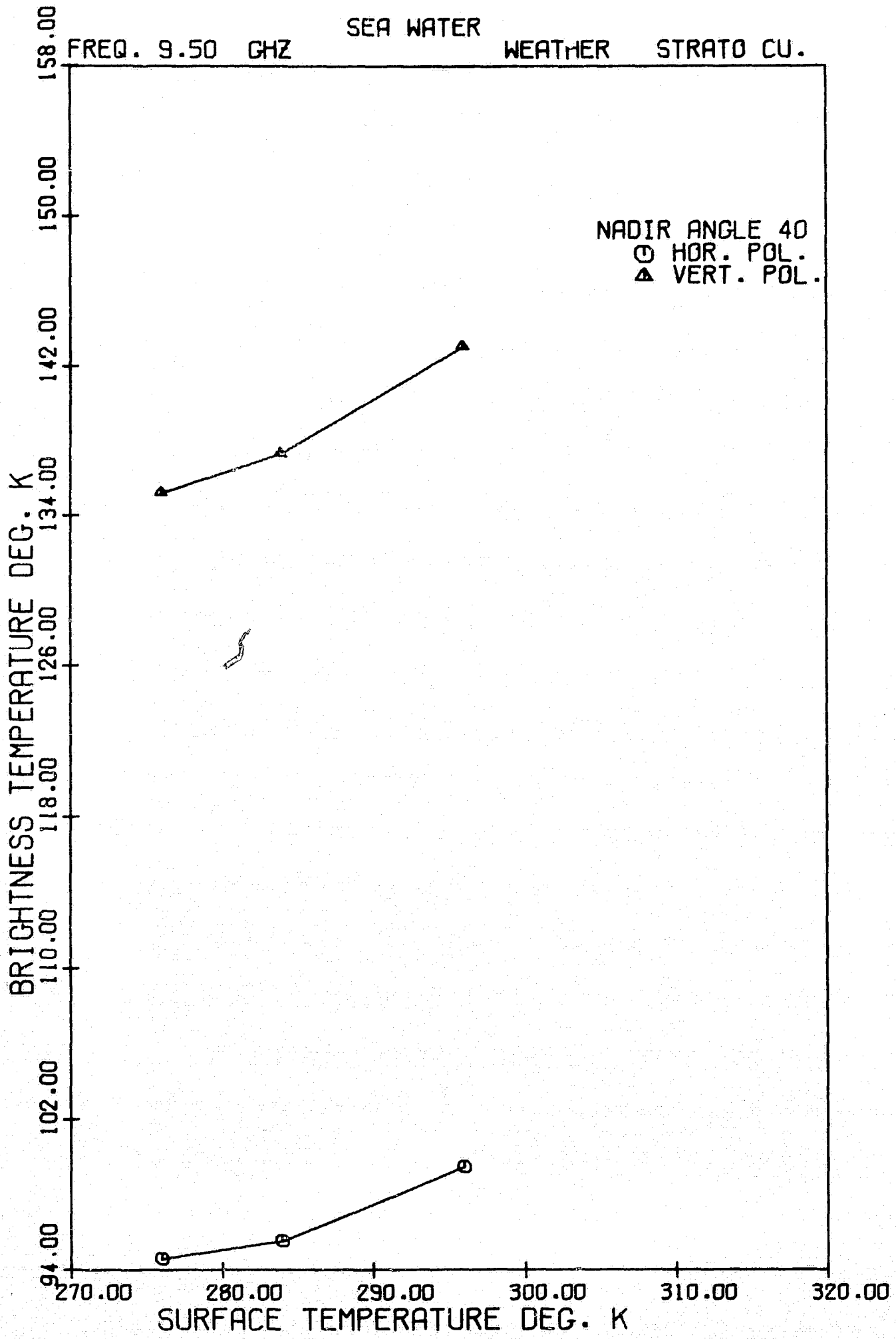

SEA WATER
FREQ. 9.50 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
142.00
138.00
134.00
130.00
94.81
92.81
90.81
88.81
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

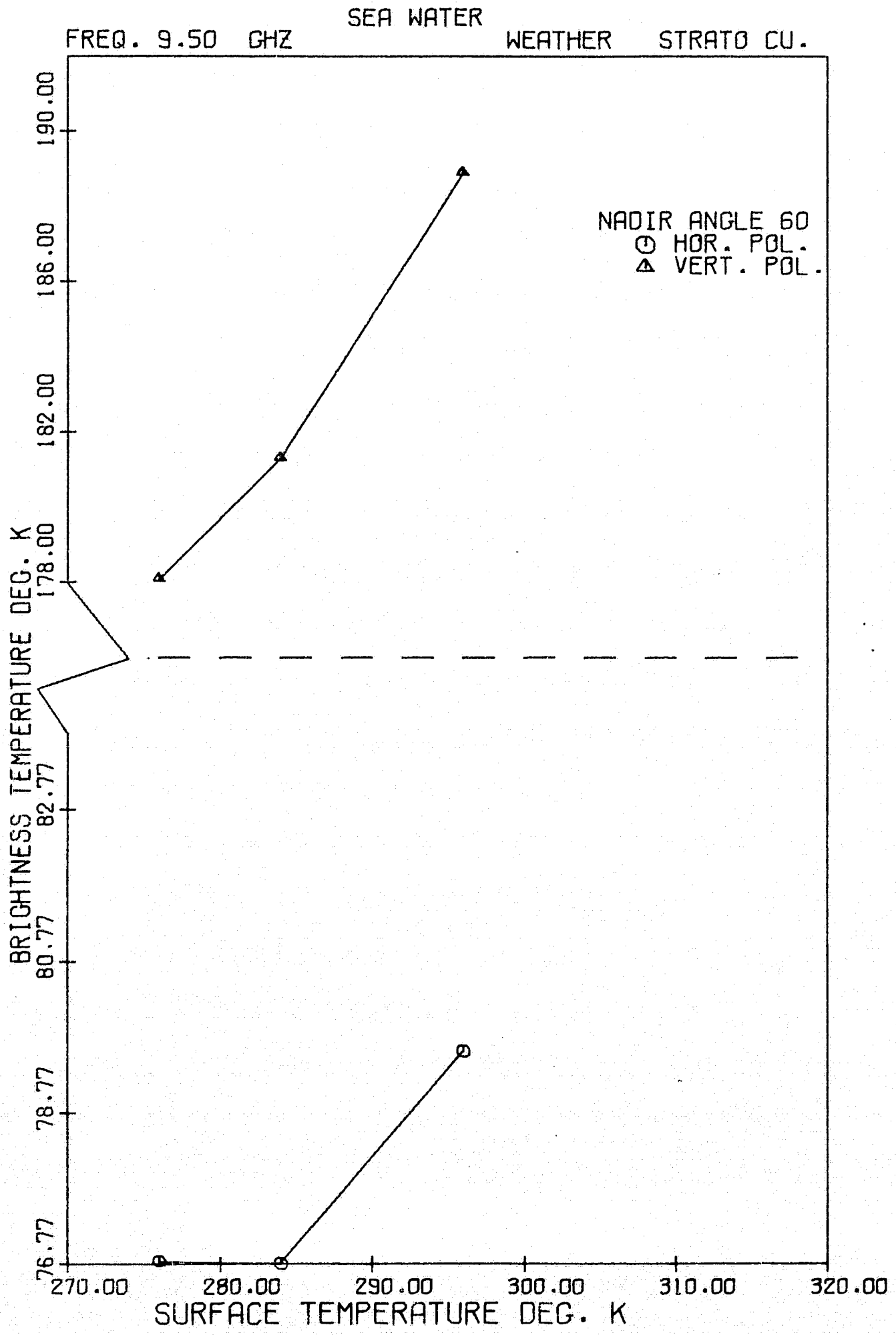

SEA WATER
FREQ. 9.50 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
159.00
155.00
151.00
147.00
84.75
82.75
80.75
78.75
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

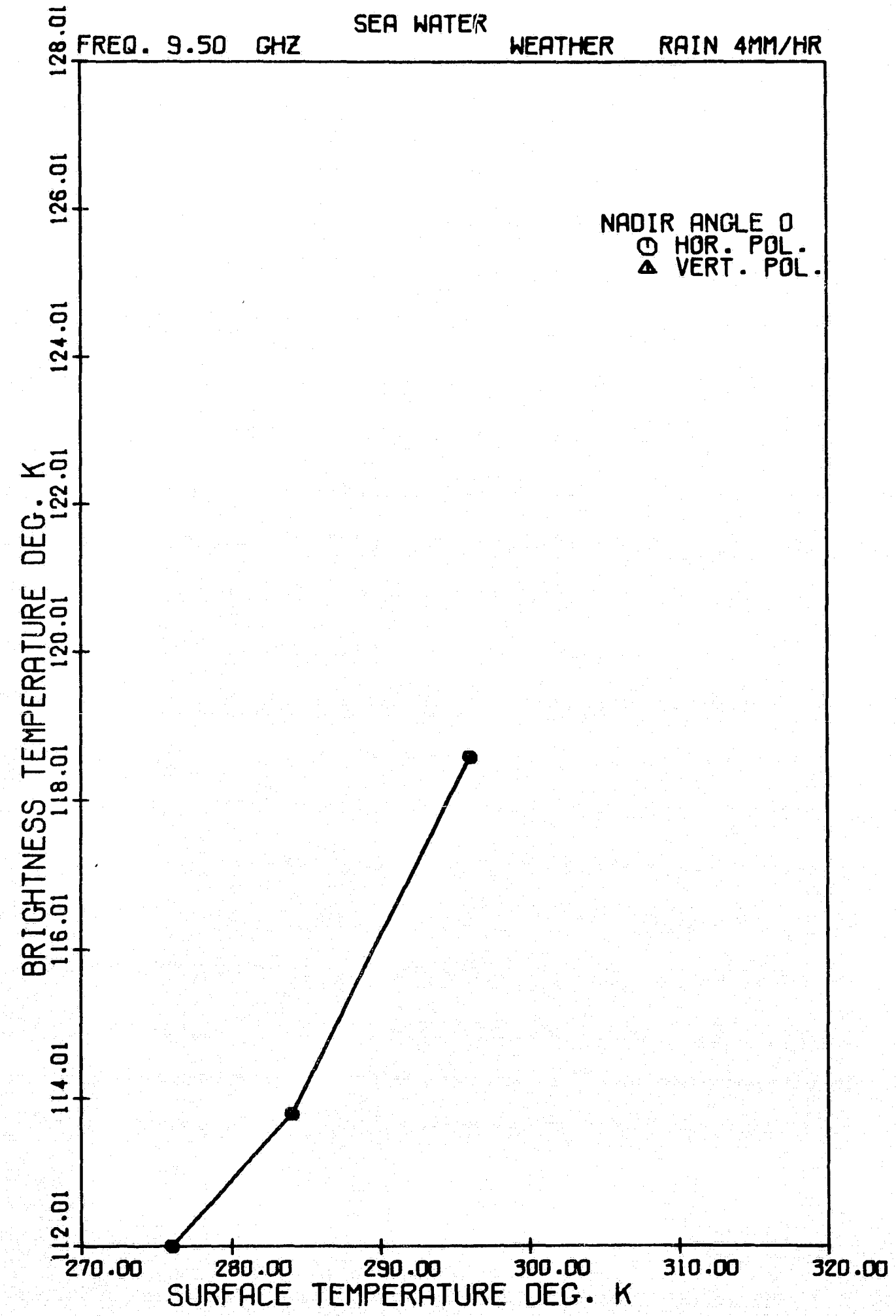

SEA WATER
FREQ. 9.50 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
185.00
181.00
177.00
173.00
72.84
70.84
68.84
66.84
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

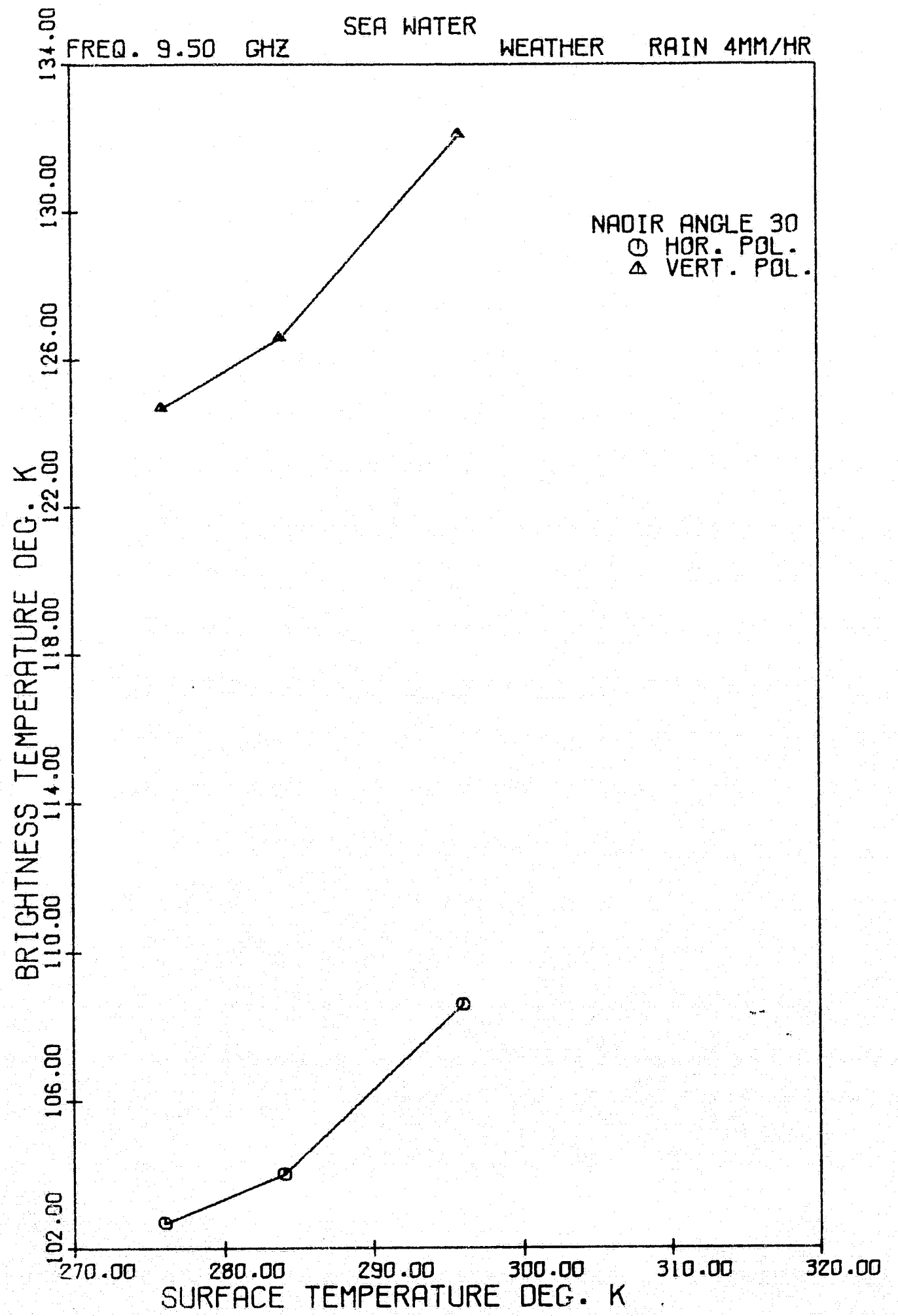

SEA WATER
FREQ. 9.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
127.36
125.36
123.36
121.36
119.36
117.36
115.36
113.36
111.36
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

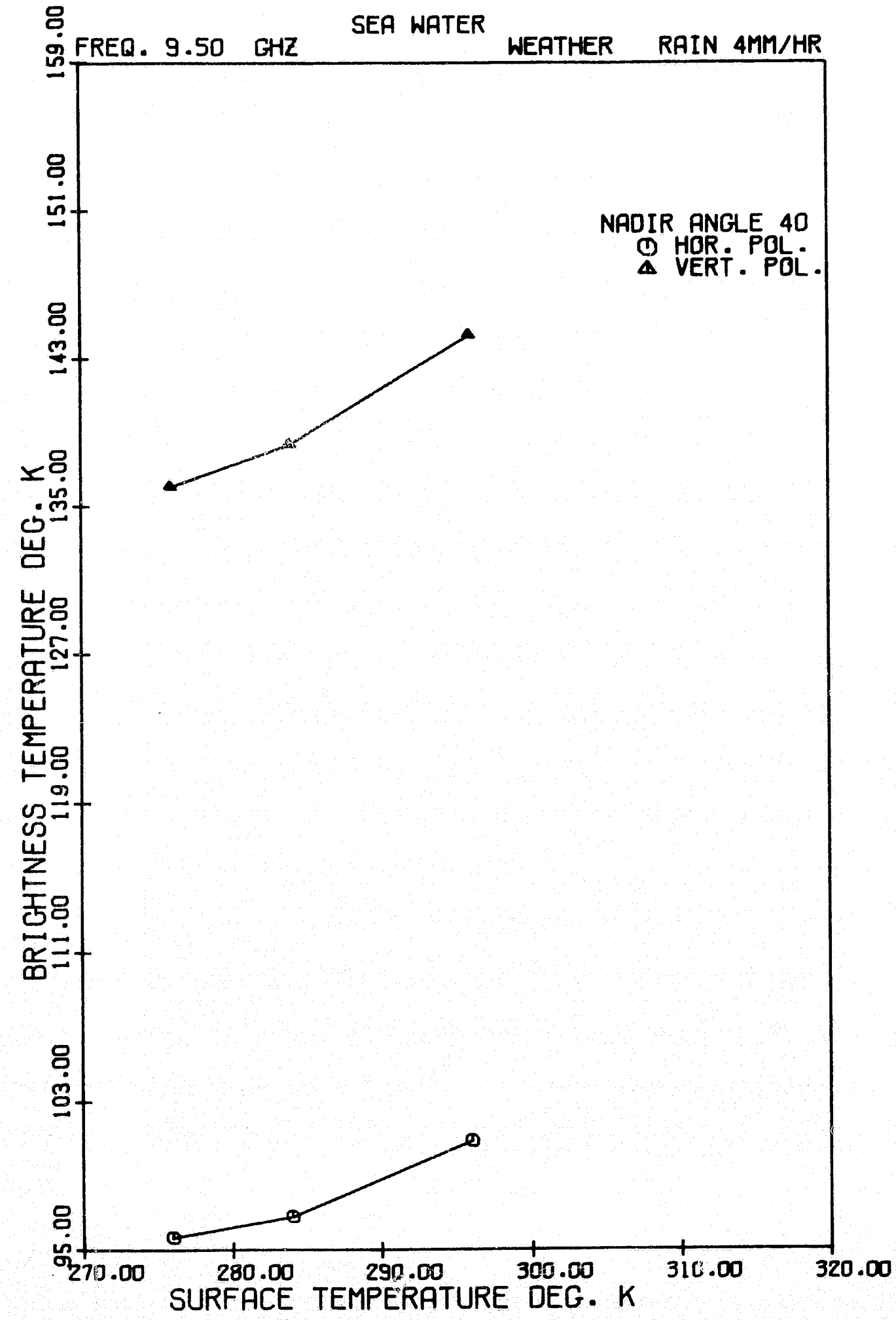

SEA WATER
FREQ. 9.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
133.00
129.00
125.00
121.00
117.00
113.00
109.00
105.00
101.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

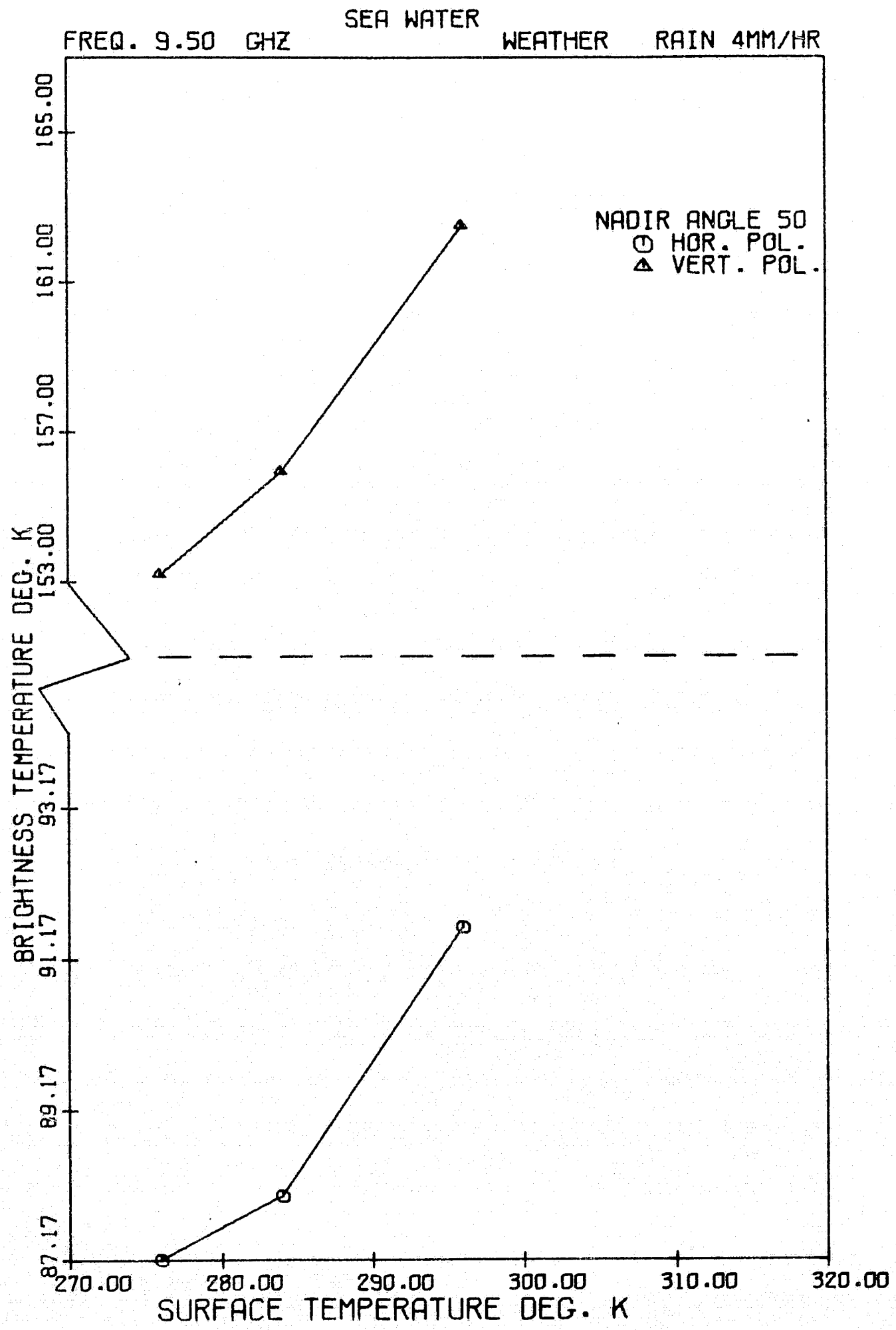

SEA WATER
FREQ. 9.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
158.00
150.00
142.00
134.00
126.00
118.00
110.00
102.00
94.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

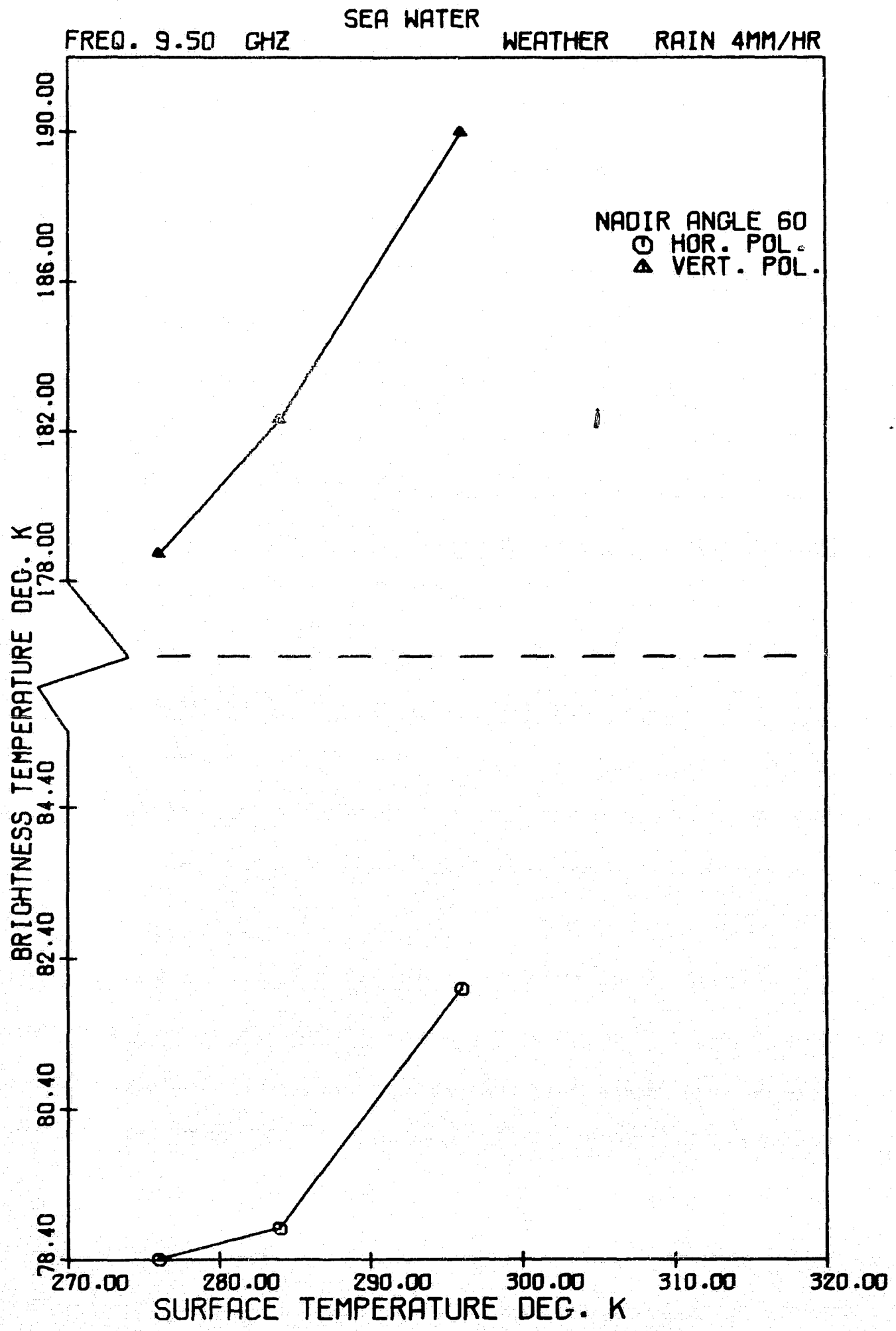

SEA WATER
FREQ. 9.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
190.00
186.00
182.00
178.00
82.77
80.77
78.77
76.77
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

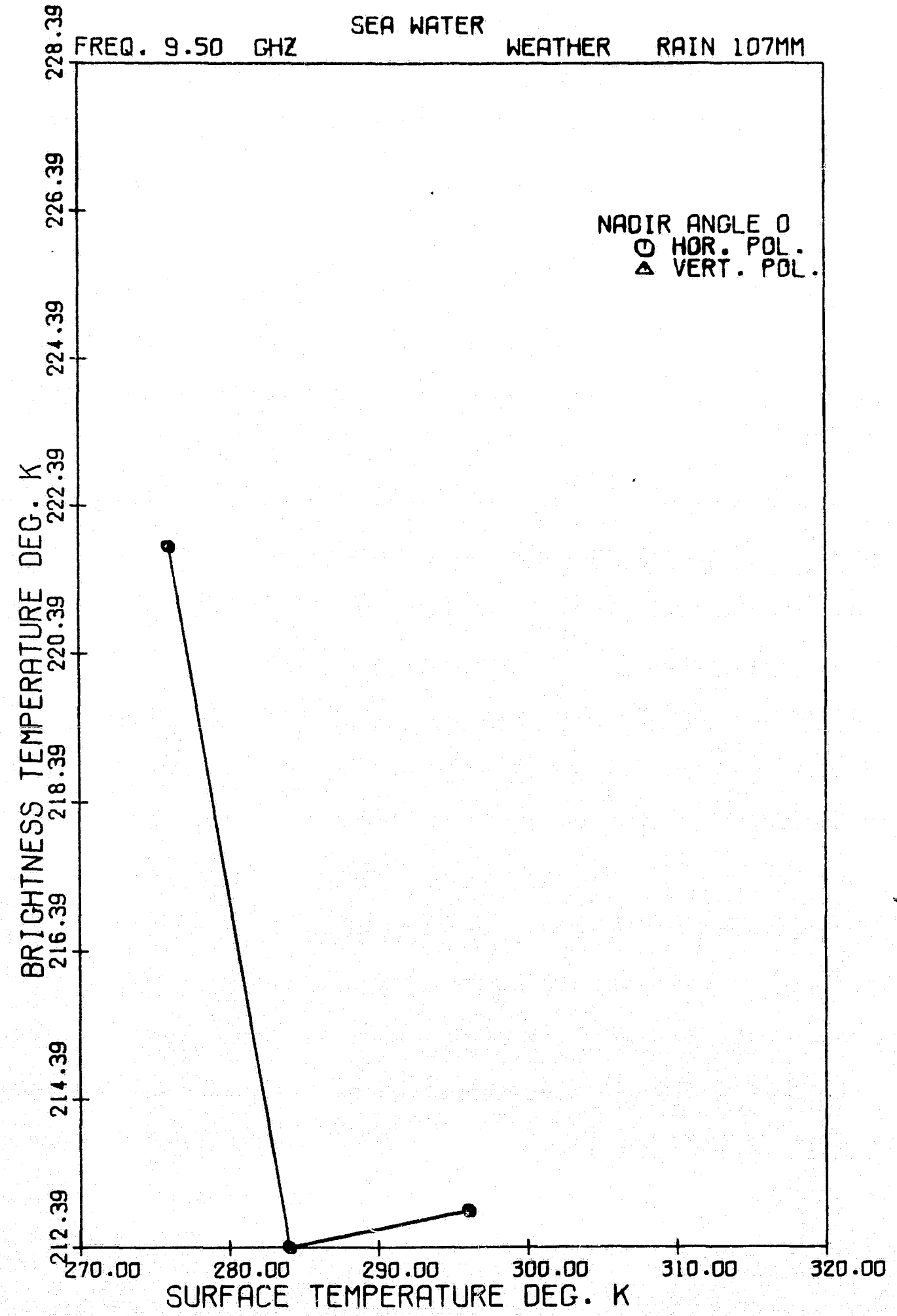

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
128.01
126.01
124.01
122.01
120.01
118.01
116.01
114.01
112.01
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

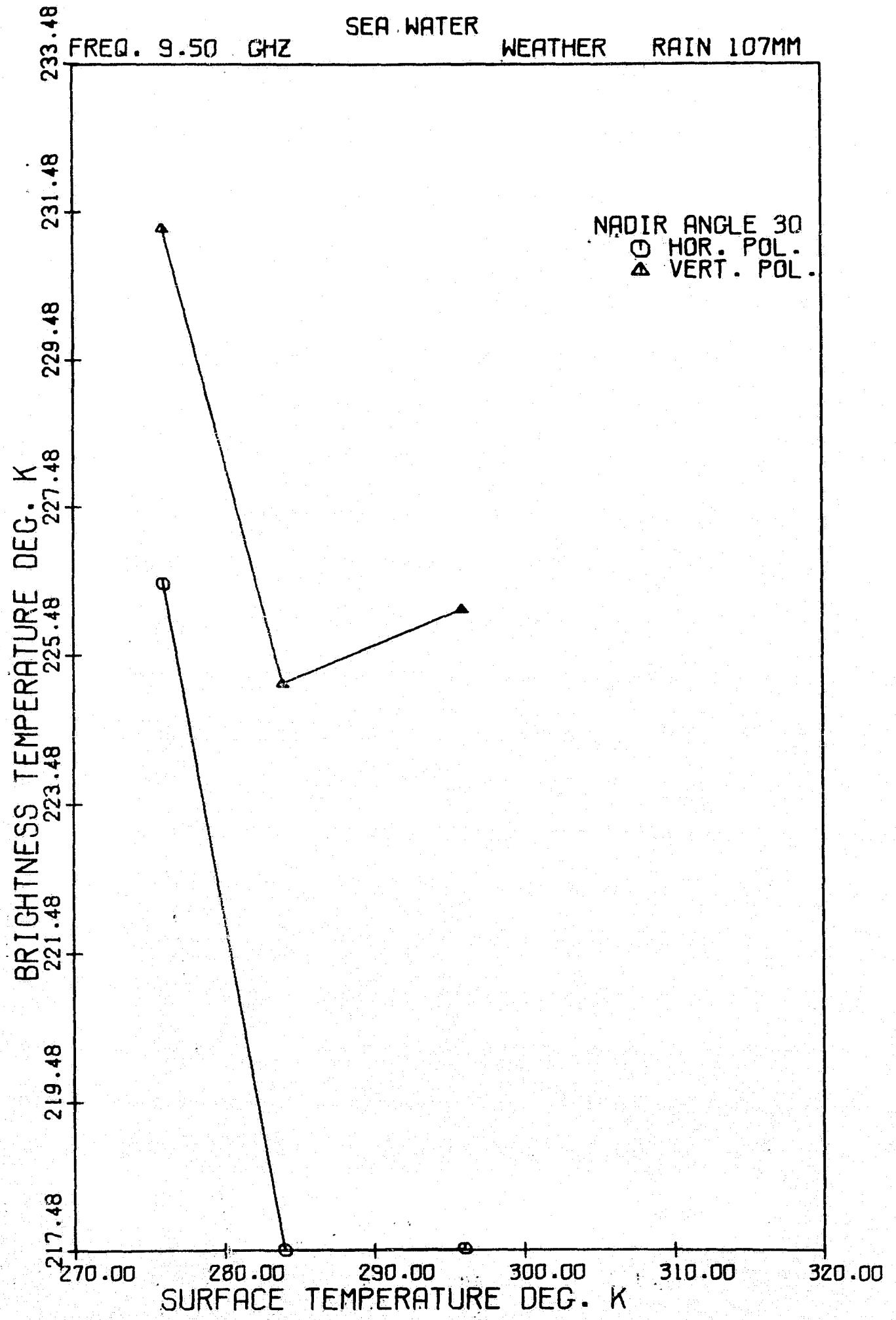

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
134.00
130.00
126.00
122.00
118.00
114.00
110.00
106.00
102.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

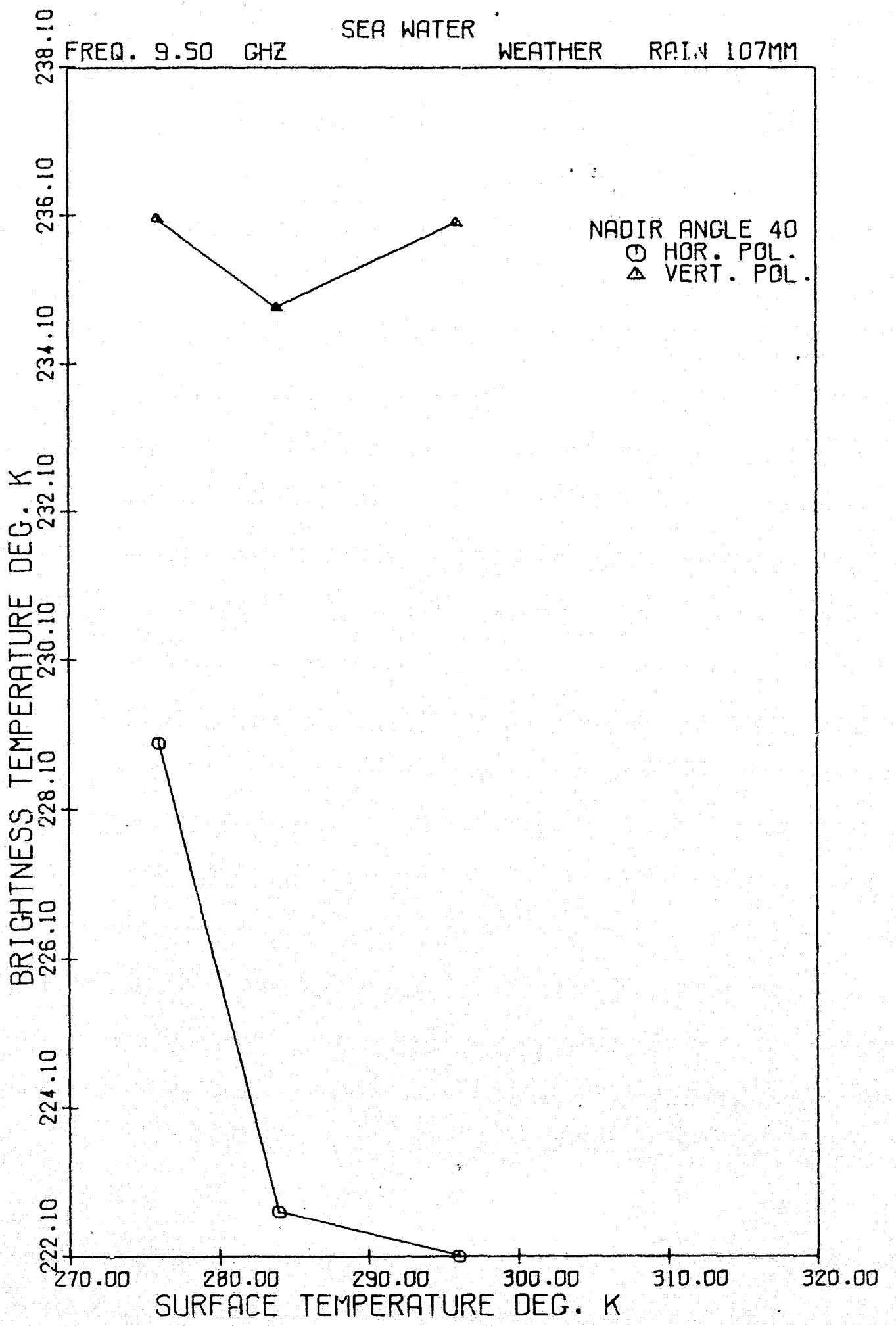

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
159.00
151.00
143.00
135.00
127.00
119.00
111.00
103.00
95.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

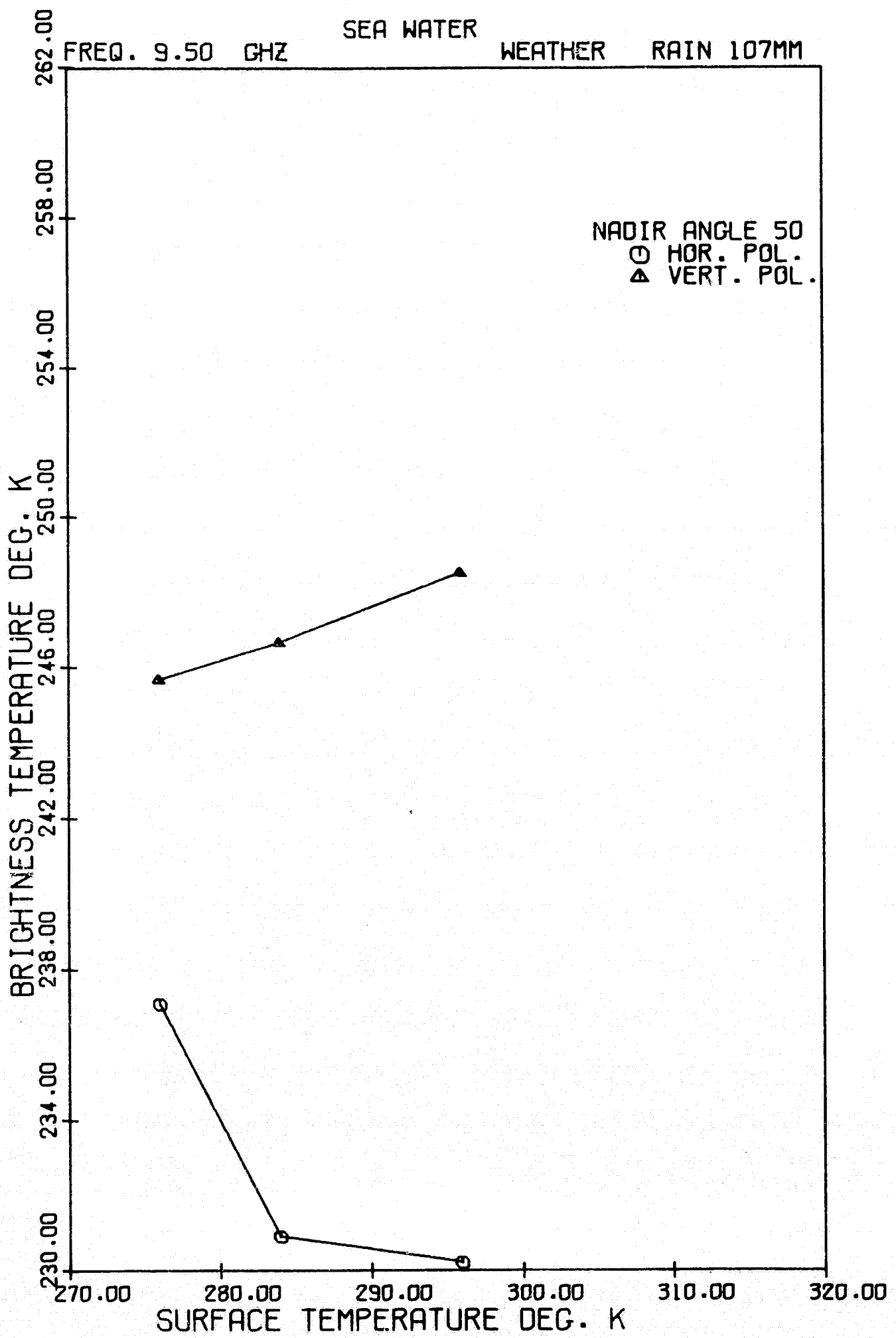

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
165.00
161.00
157.00
153.00
93.17
91.17
89.17
87.17
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

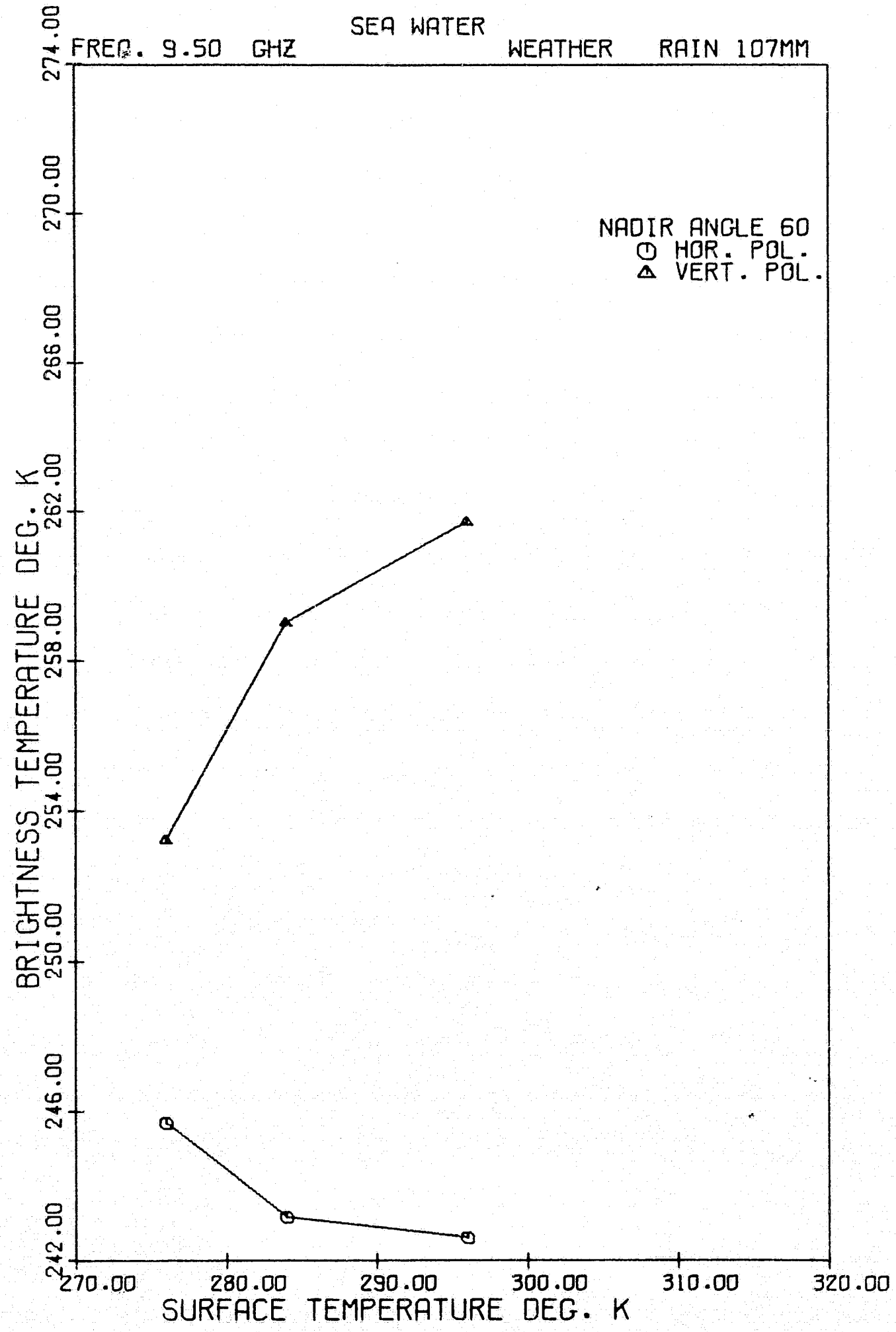

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
190.00
186.00
182.00
178.00
84.40
82.40
80.40
78.40
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

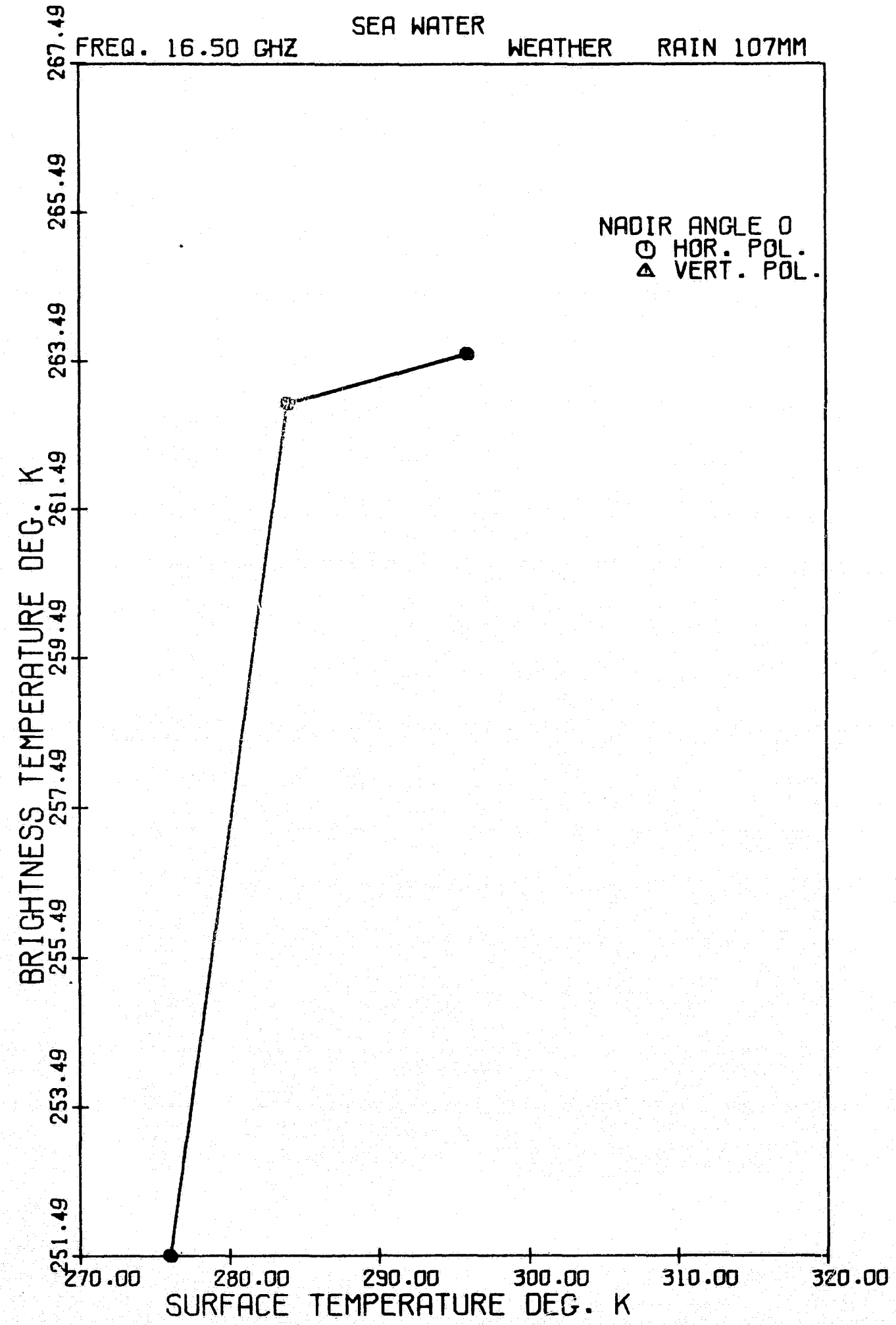

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
228.39
226.39
224.39
222.39
220.39
218.39
216.39
214.39
212.39
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

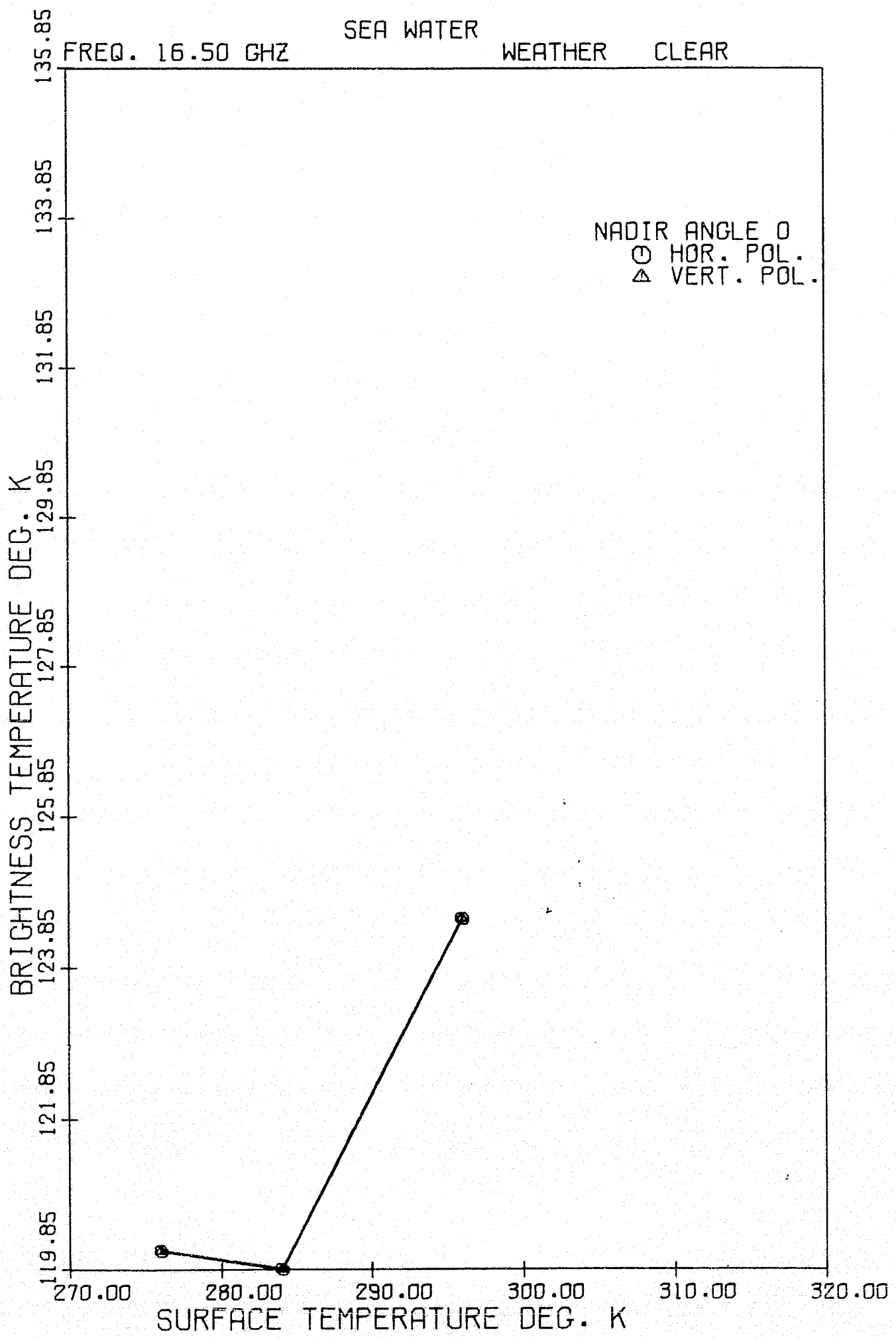

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
233.48
231.48
229.48
227.48
225.48
223.48
221.48
219.48
217.48
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

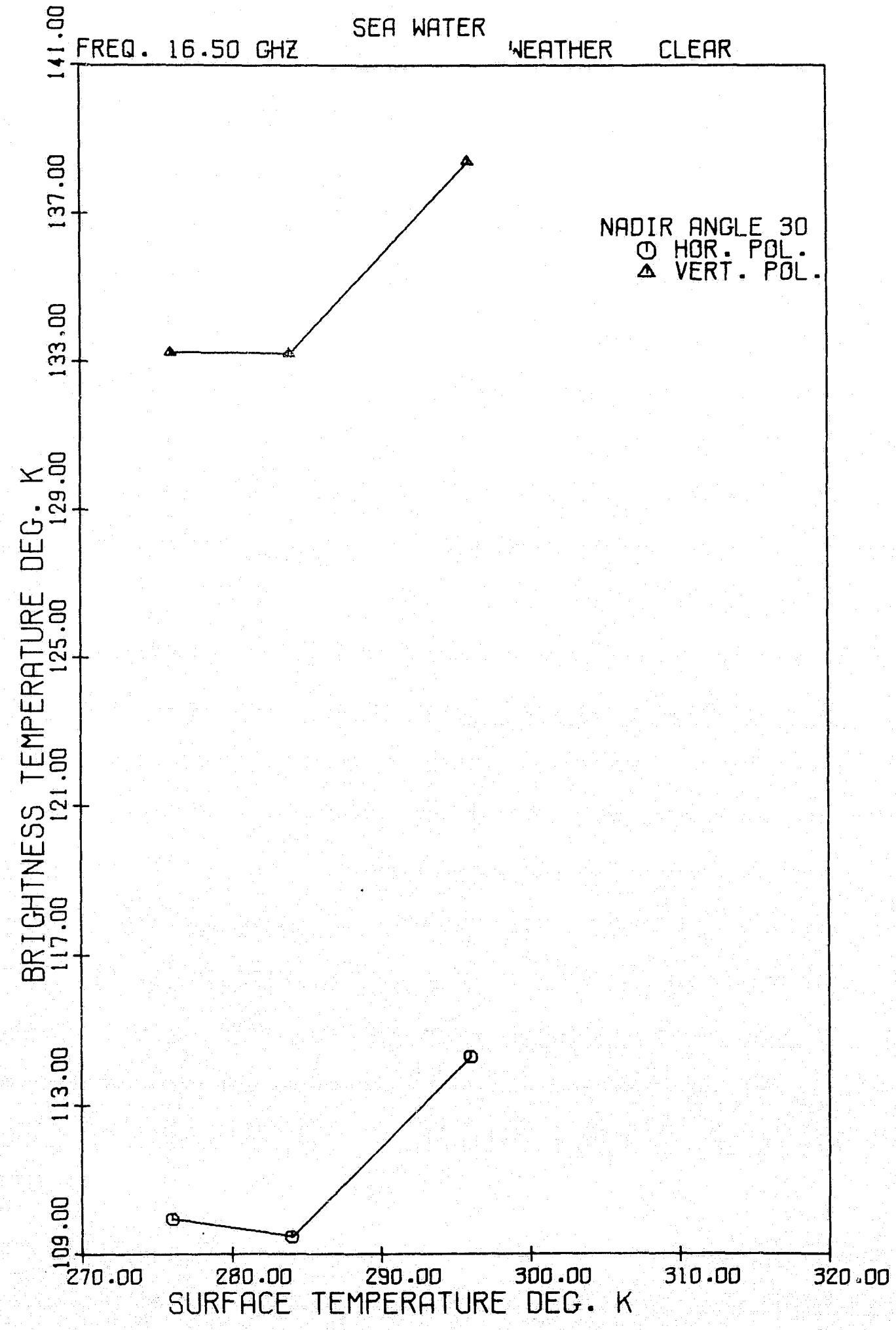

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
238.10
236.10
234.10
232.10
230.10
228.10
226.10
224.10
222.10
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

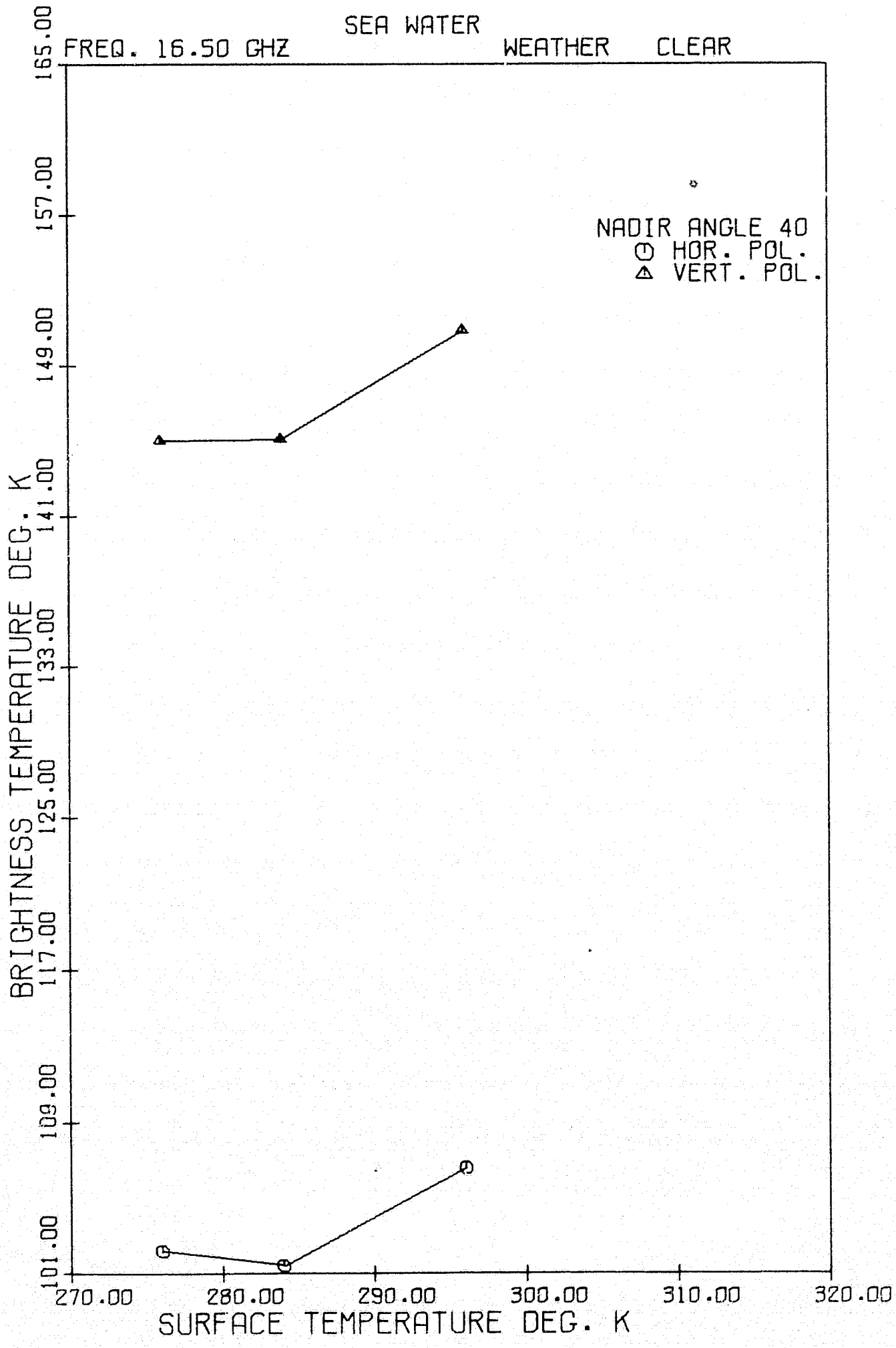

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
262.00
258.00
254.00
250.00
246.00
242.00
238.00
234.00
230.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

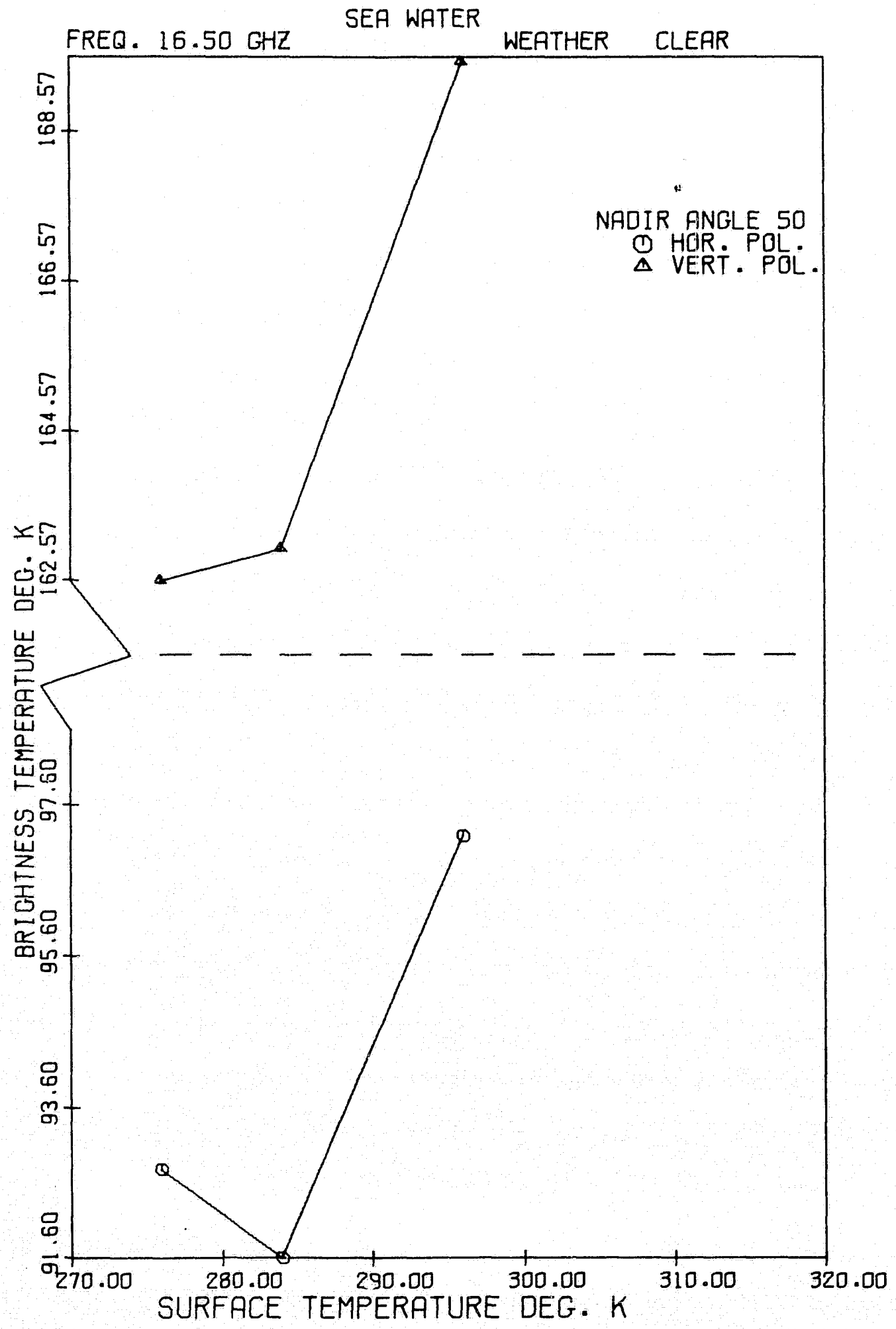

SEA WATER
FREQ. 9.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
274.00
270.00
266.00
262.00
258.00
254.00
250.00
246.00
242.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

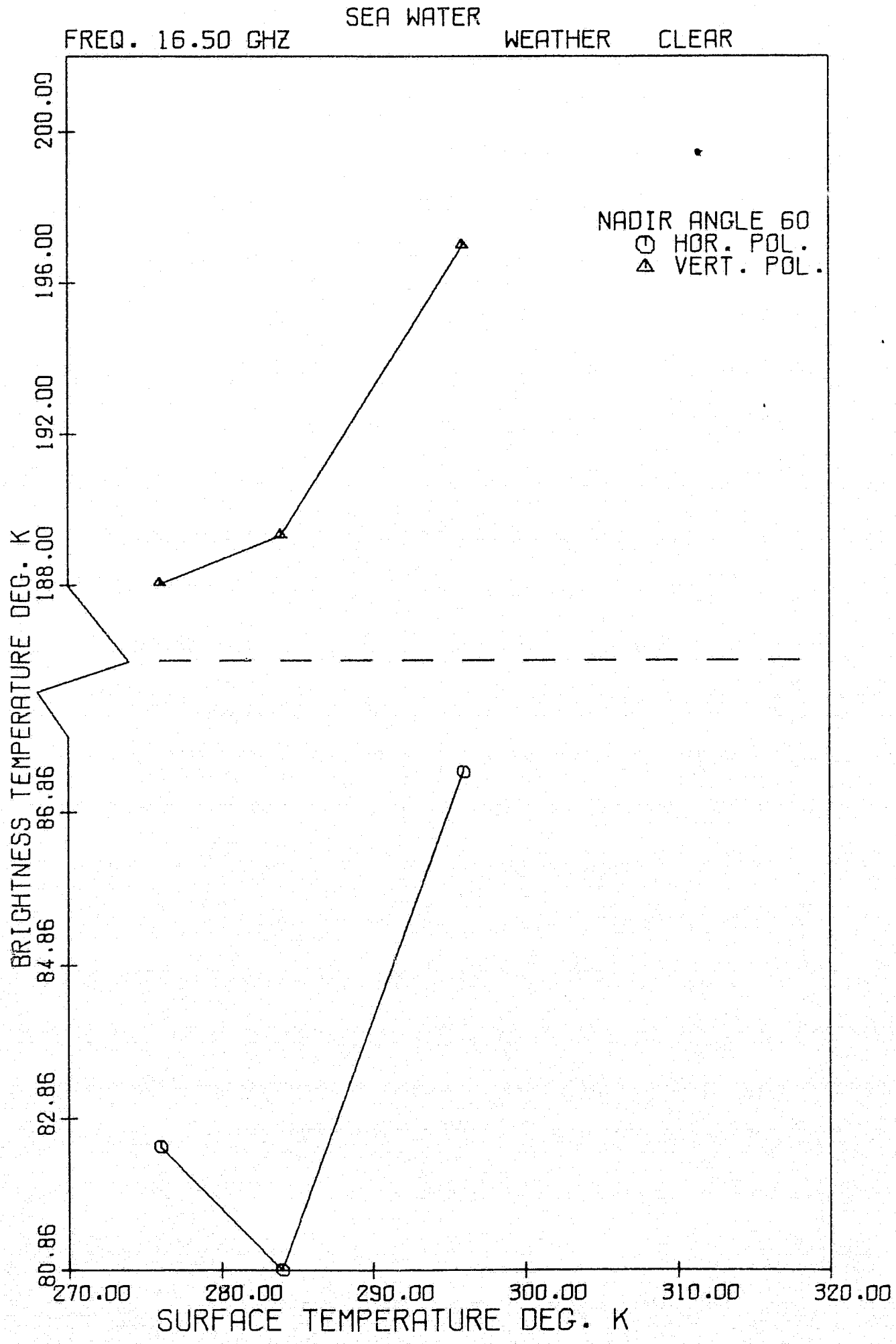

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
267.49
265.49
263.49
261.49
259.49
257.49
255.49
253.49
251.49
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

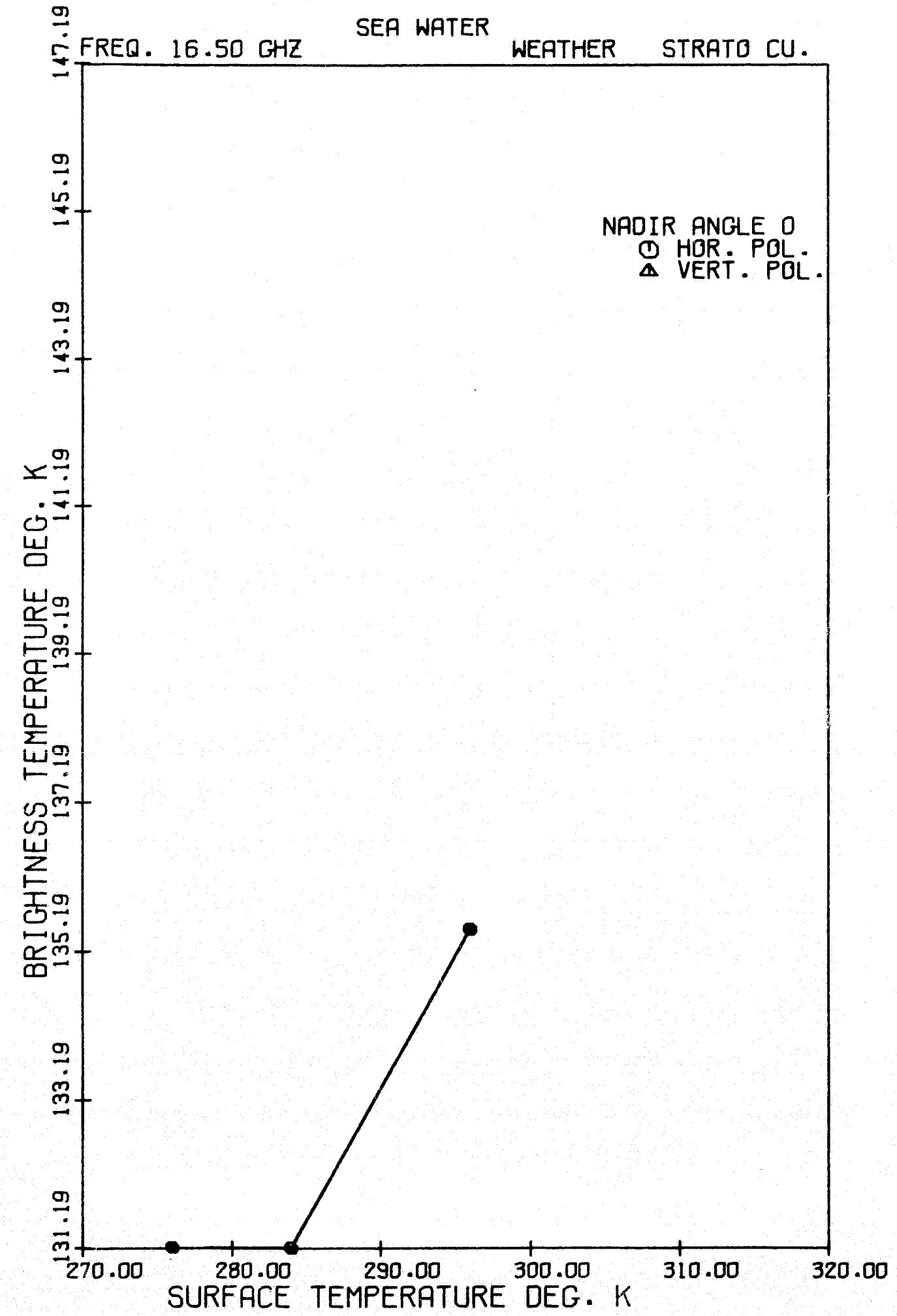

SEA WATER
FREQ. 16.50 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
135.85
133.85
131.85
129.85
127.85
125.85
123.85
121.85
119.85
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

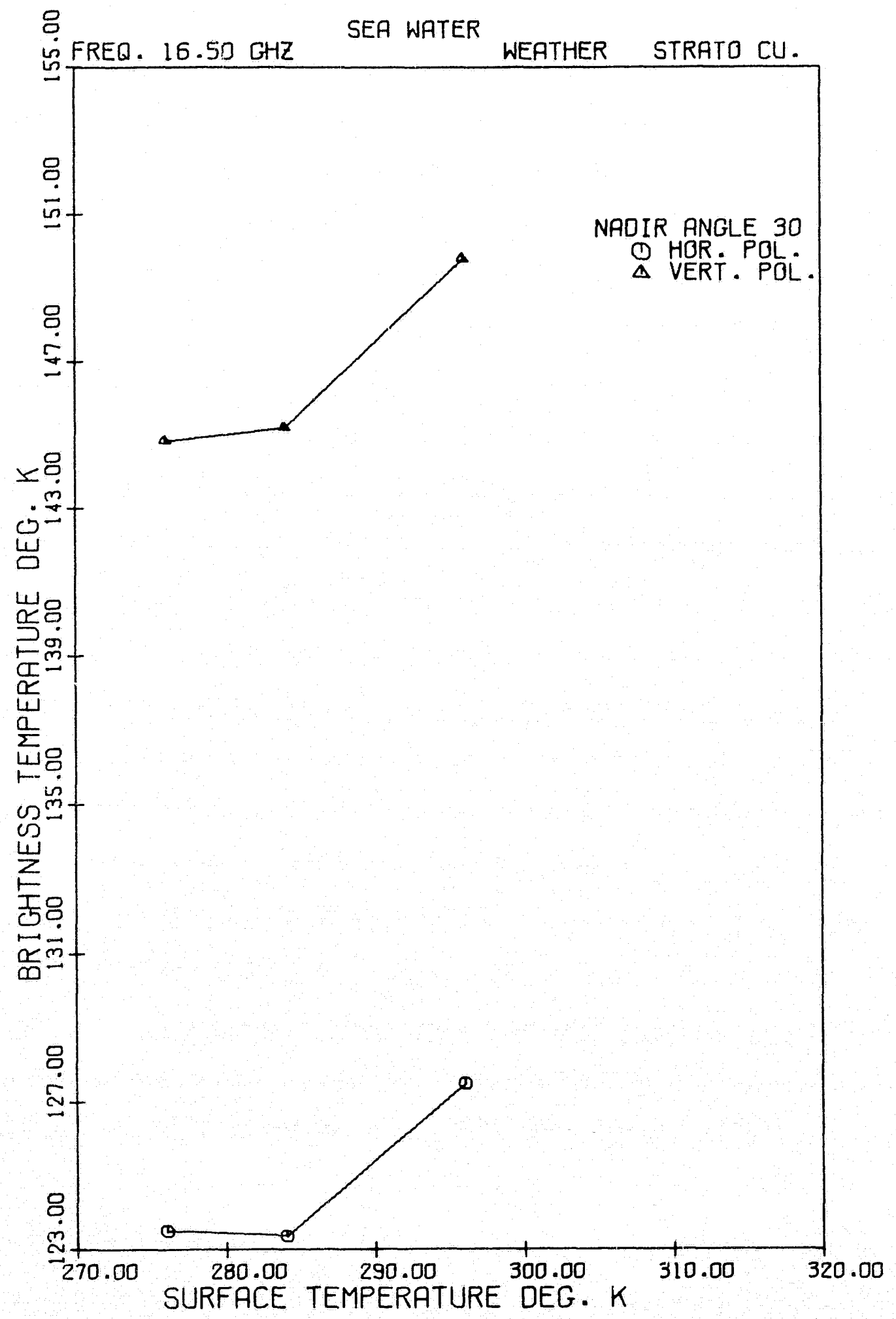

SEA WATER
FREQ. 16.50 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
141.00
137.00
133.00
129.00
125.00
121.00
117.00
113.00
109.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

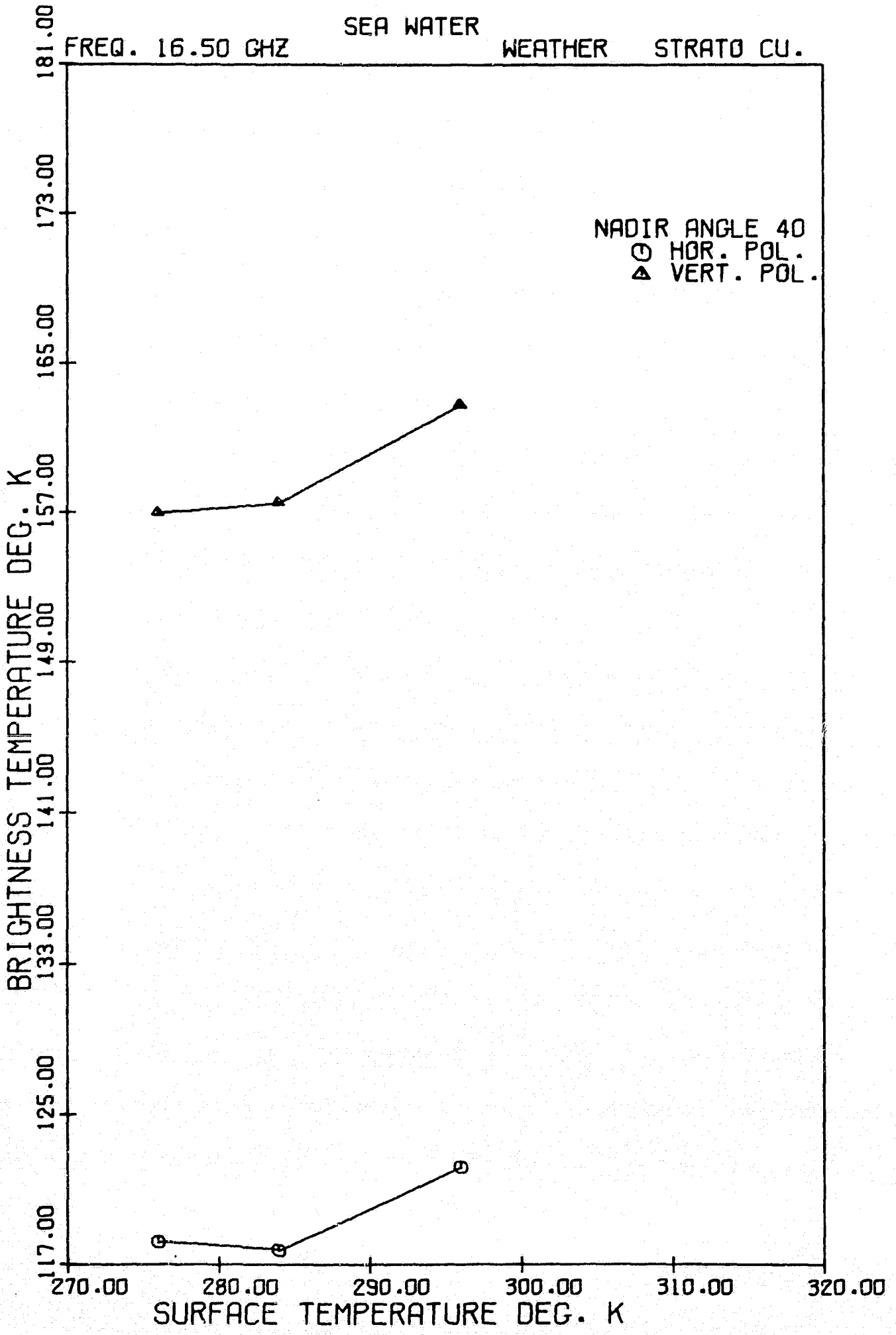

SEA WATER
FREQ. 16.50 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
165.00
157.00
149.00
141.00
133.00
125.00
117.00
109.00
101.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

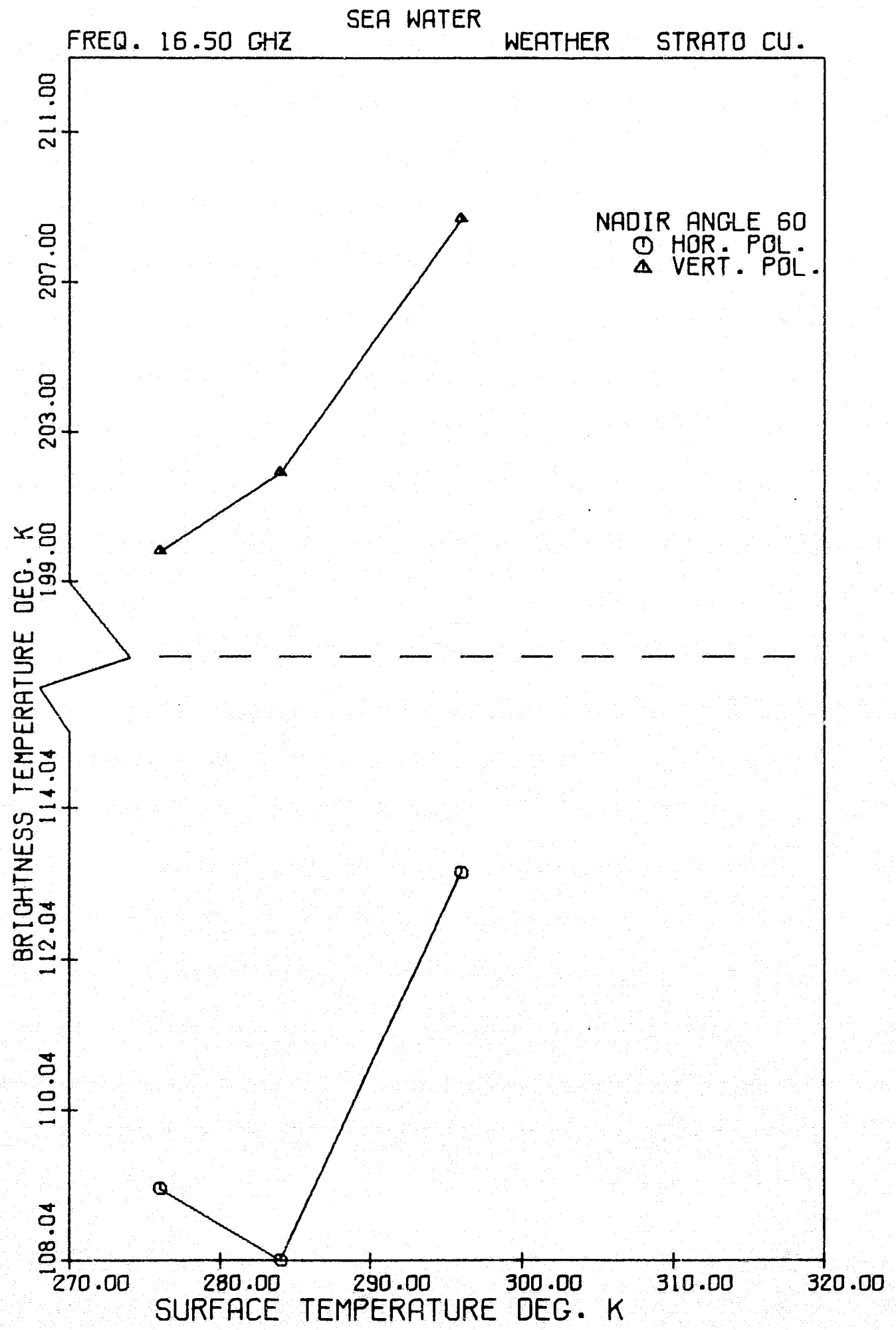

SEA WATER
FREQ. 16.50 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
168.57
166.57
164.57
162.57
97.60
95.60
93.60
91.60
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

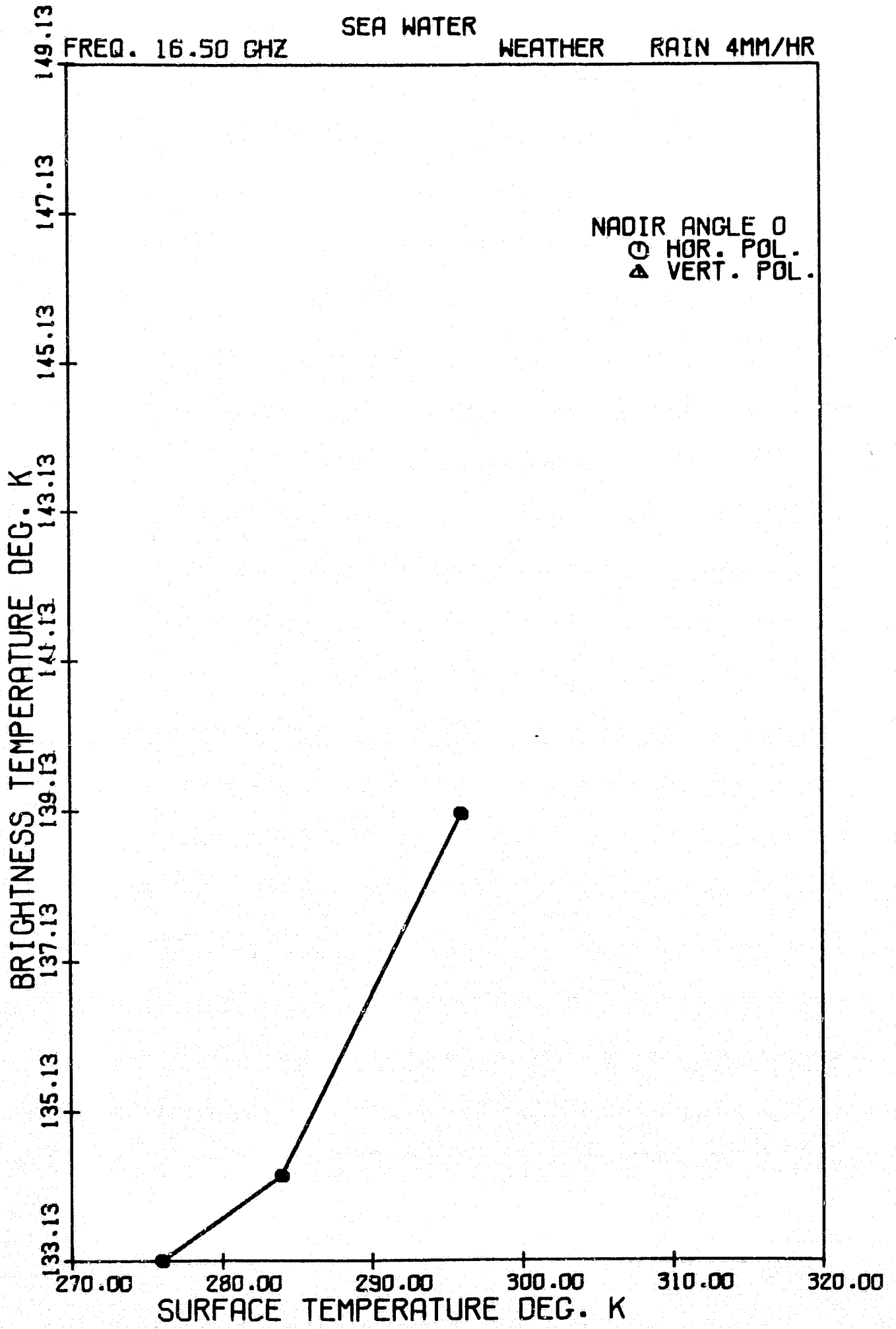

SEA WATER
FREQ. 16.50 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
200.00
196.00
192.00
188.00
86.86
84.86
82.86
80.86
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

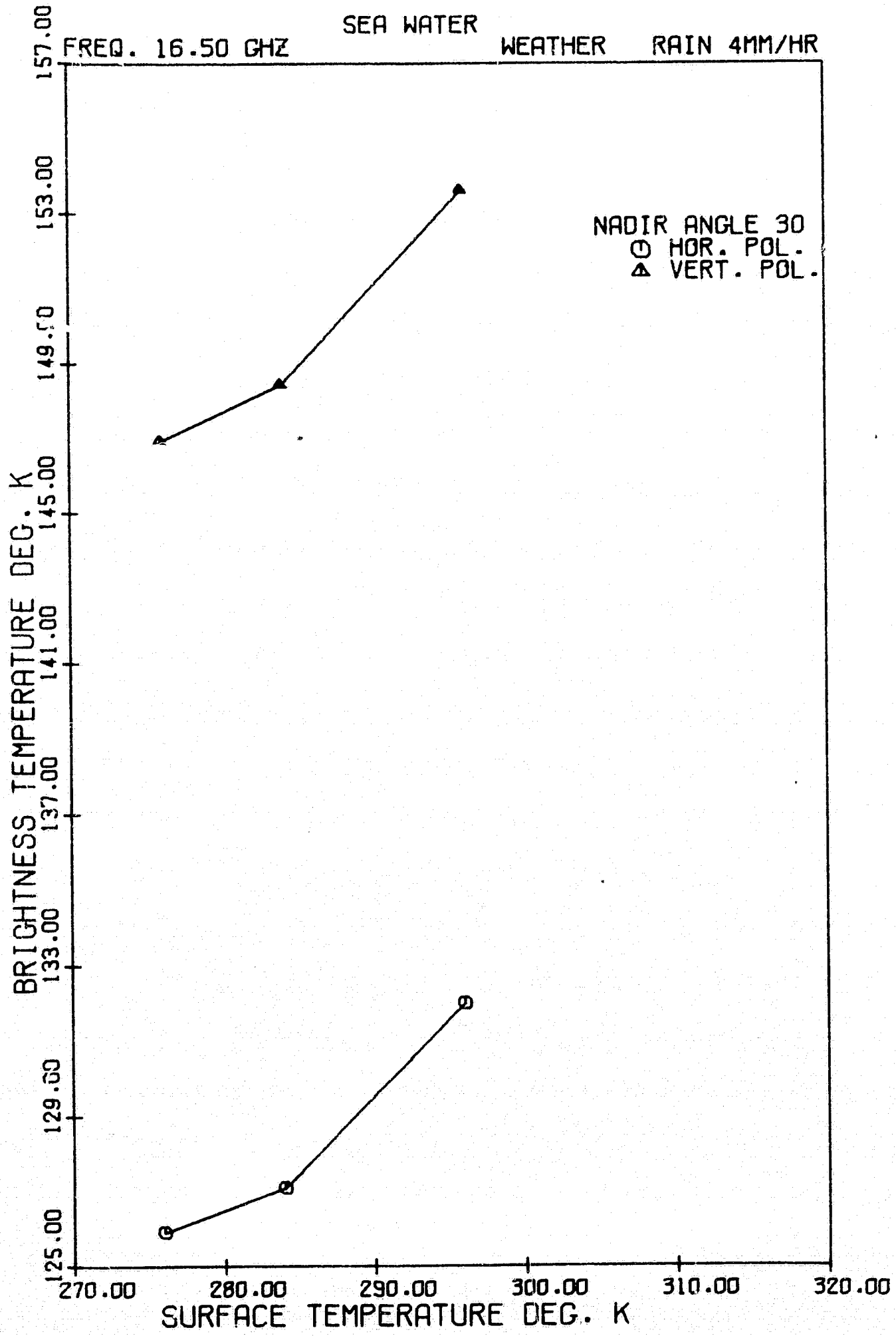

SEA WATER
FREQ. 16.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
147.19
145.19
143.19
141.19
139.19
137.19
135.19
133.19
131.19
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

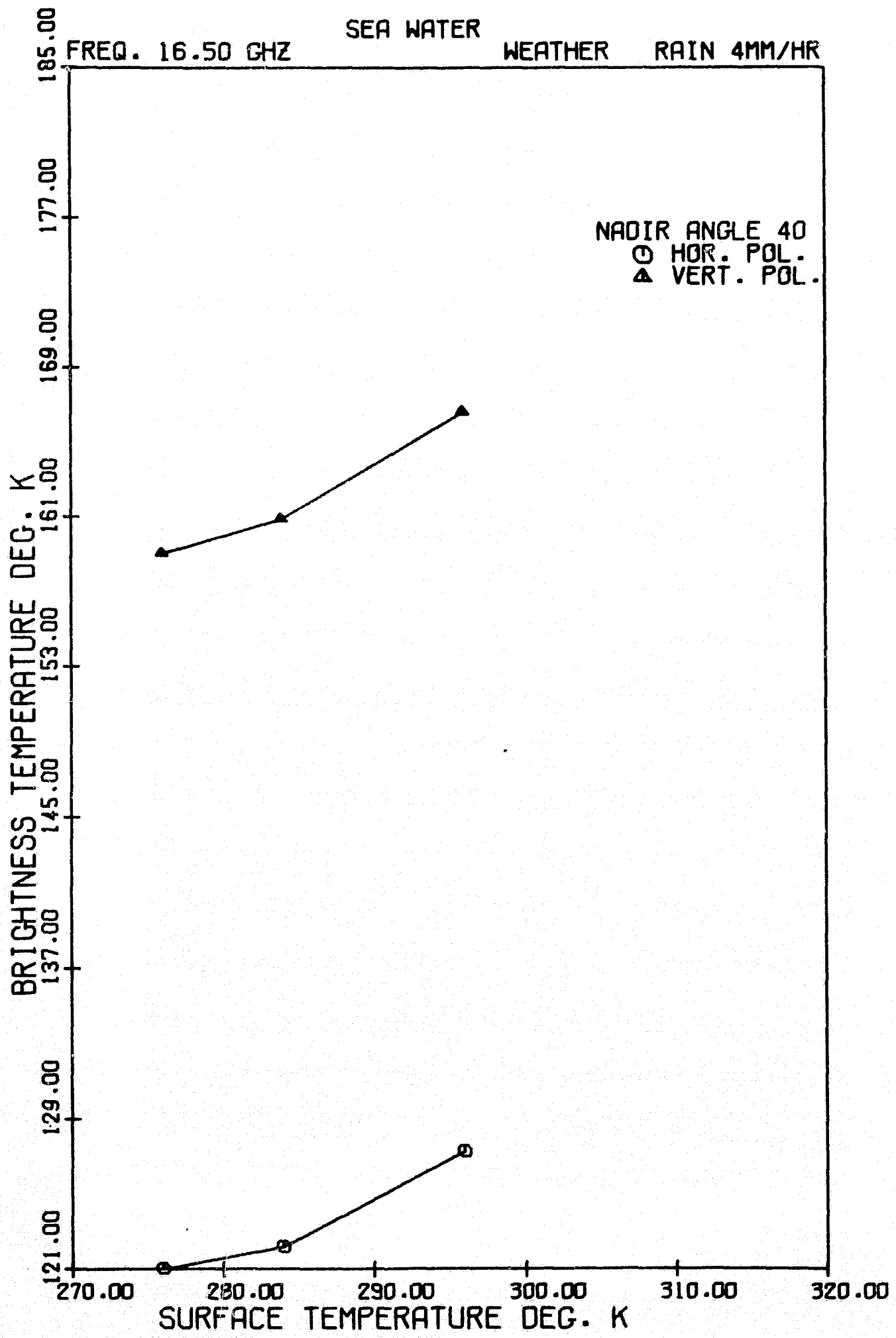

SEA WATER
FREQ. 16.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
155.00
151.00
147.00
143.00
139.00
135.00
131.00
127.00
123.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

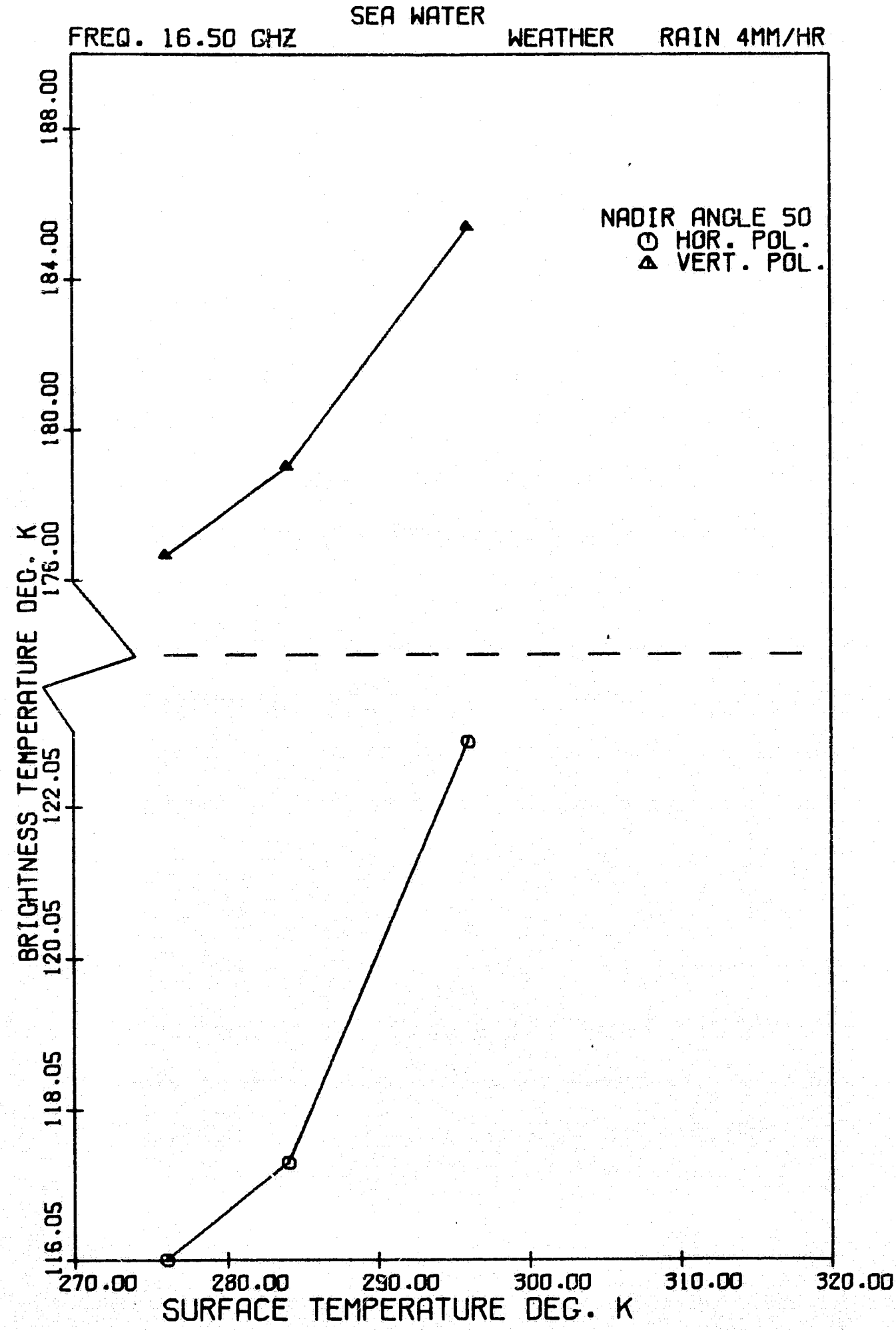

SEA WATER
FREQ. 16.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
181.00
173.00
165.00
157.00
149.00
141.00
133.00
125.00
117.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

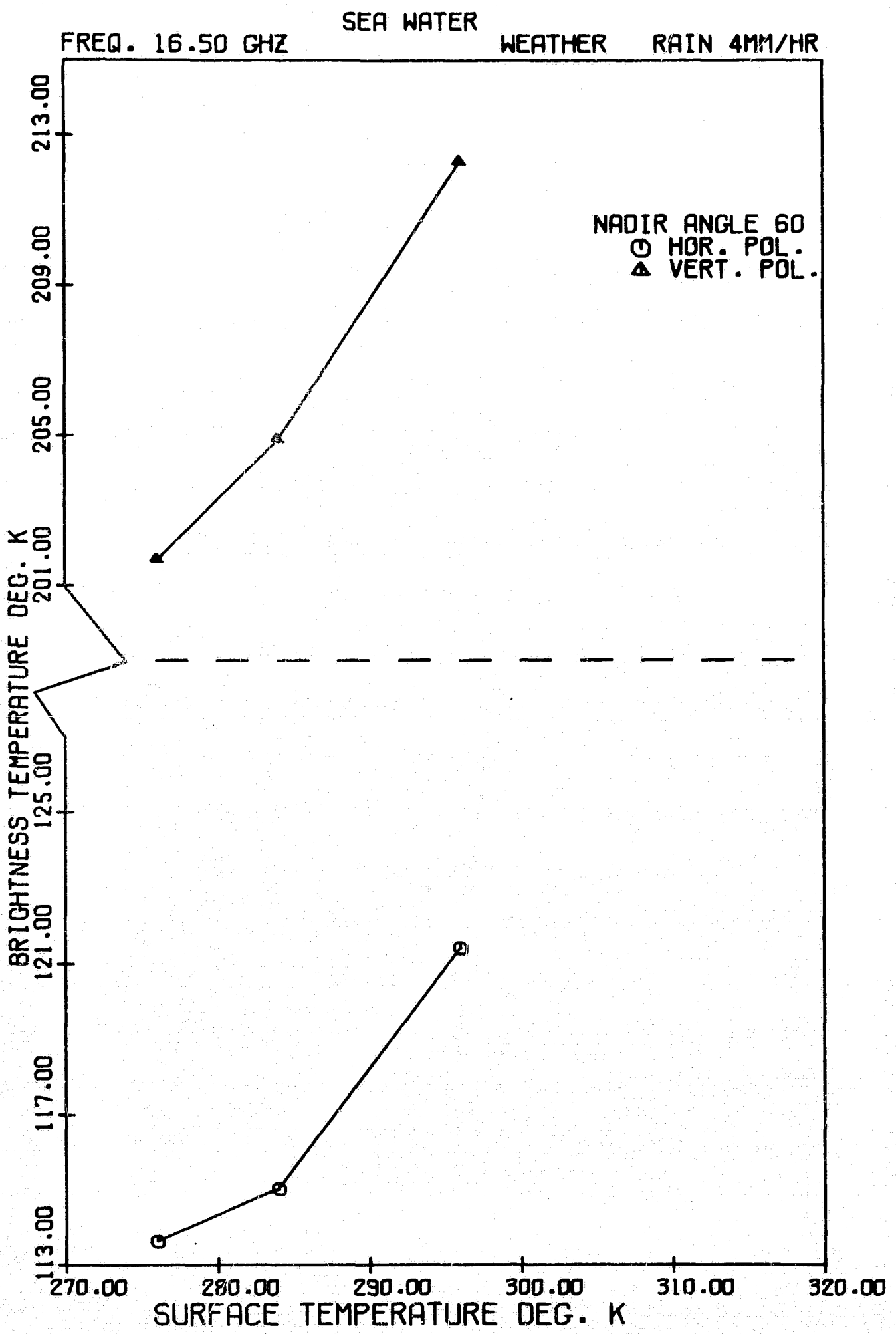

SEA WATER
FREQ. 16.50 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
199.00
203.00
207.00
211.00
108.04
110.04
112.04
114.04
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

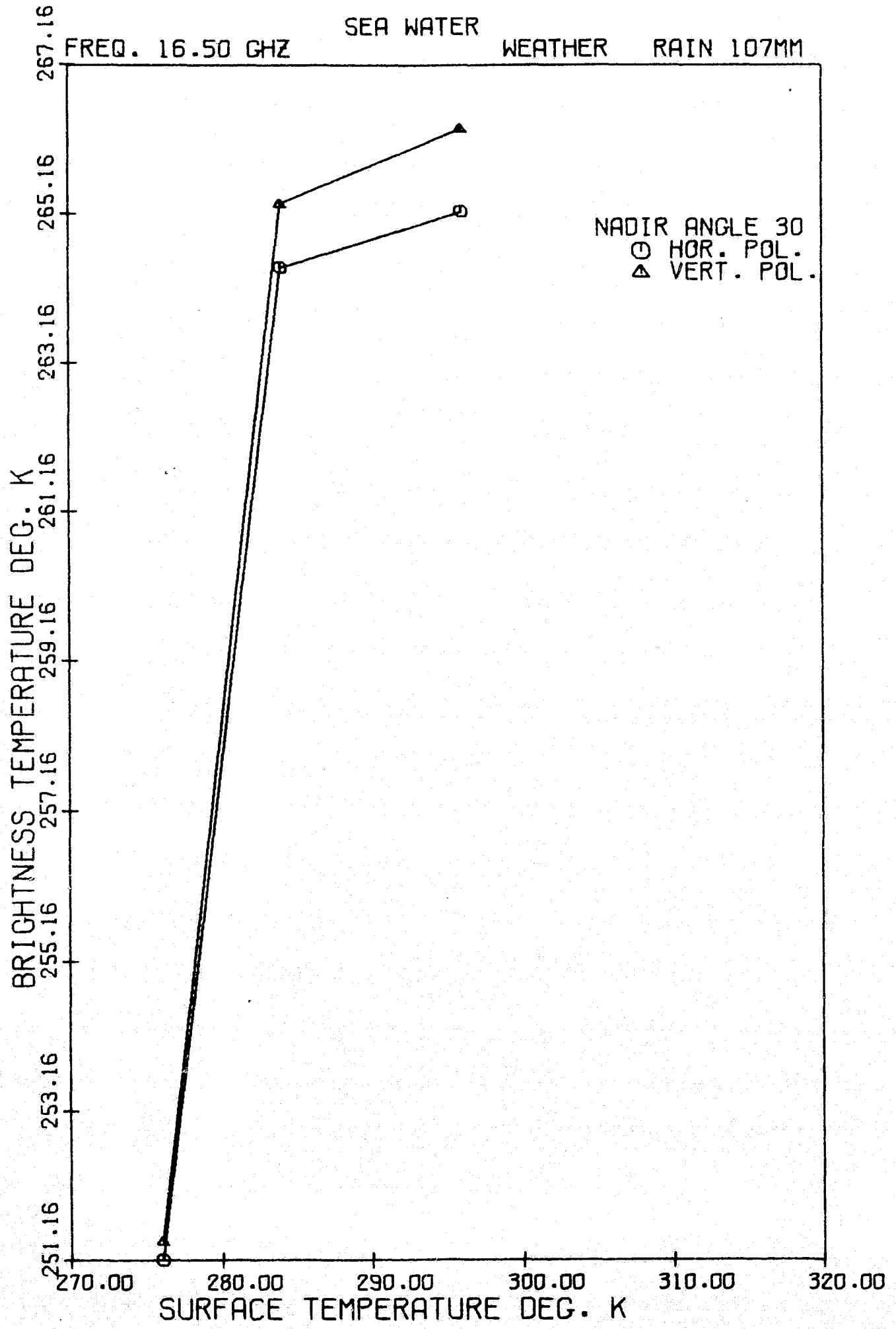

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
149.13
147.13
145.13
143.13
141.13
139.13
137.13
135.13
133.13
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

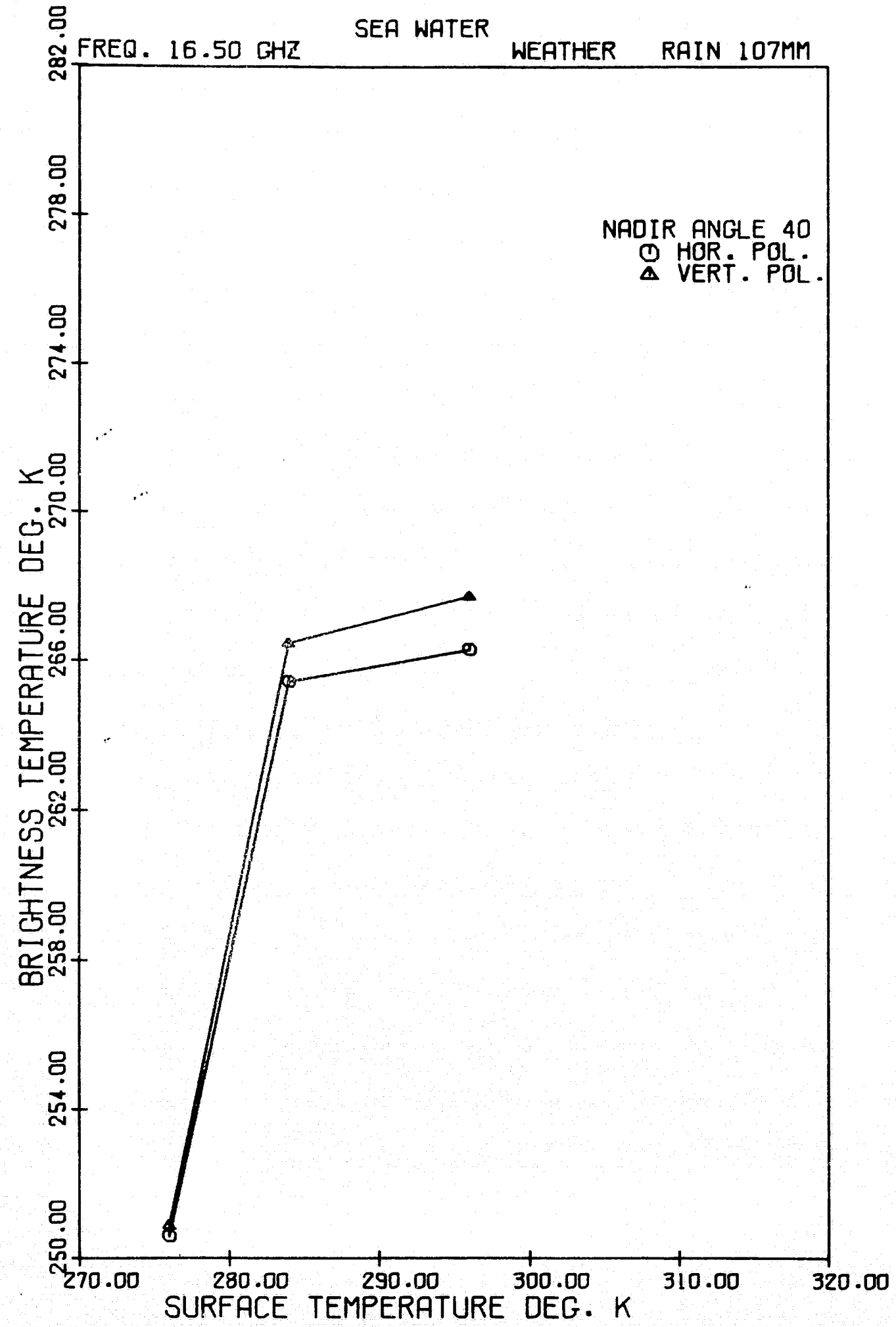

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
157.00
153.00
149.00
145.00
141.00
137.00
133.00
129.00
125.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

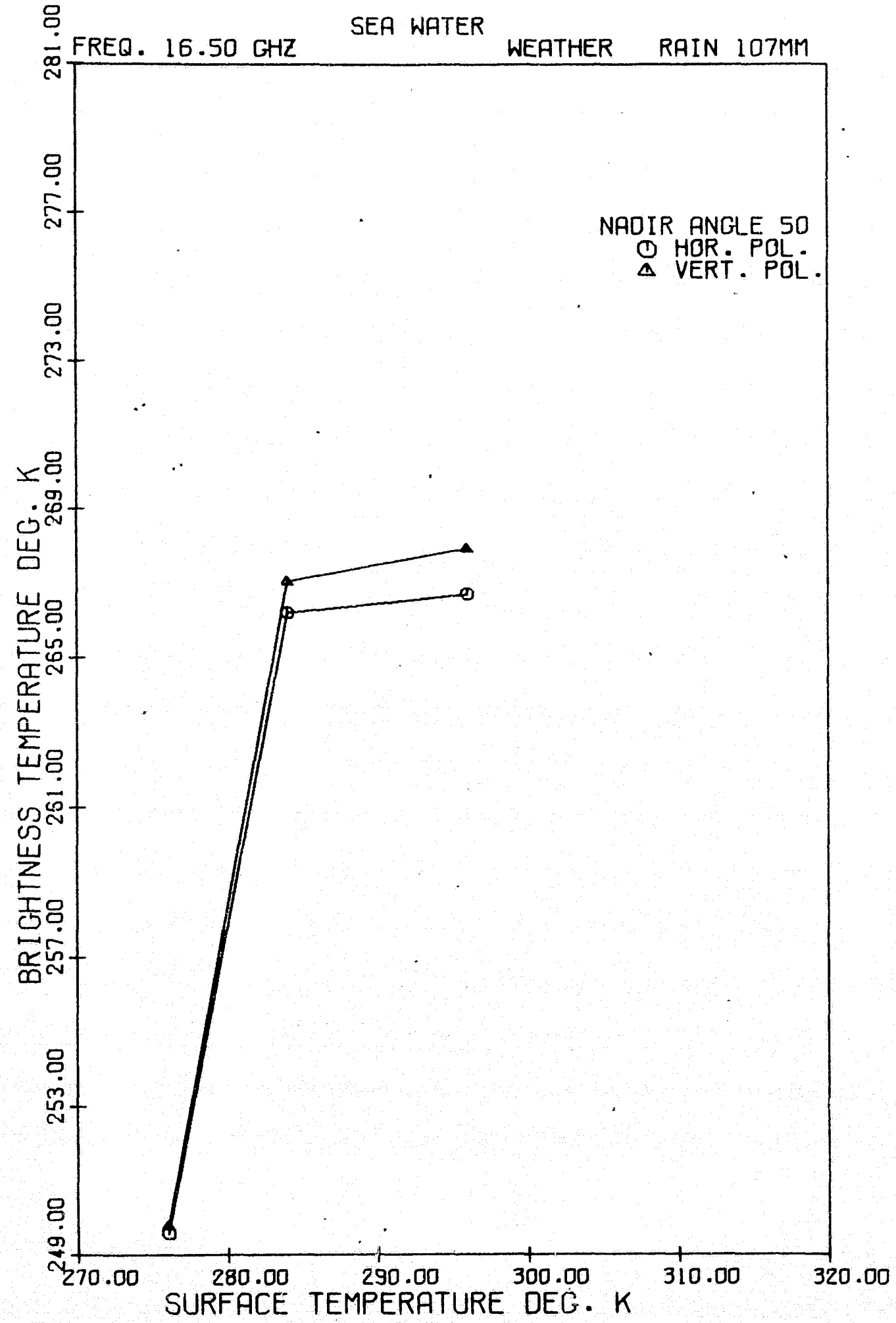

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
185.00
177.00
169.00
161.00
153.00
145.00
137.00
129.00
121.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

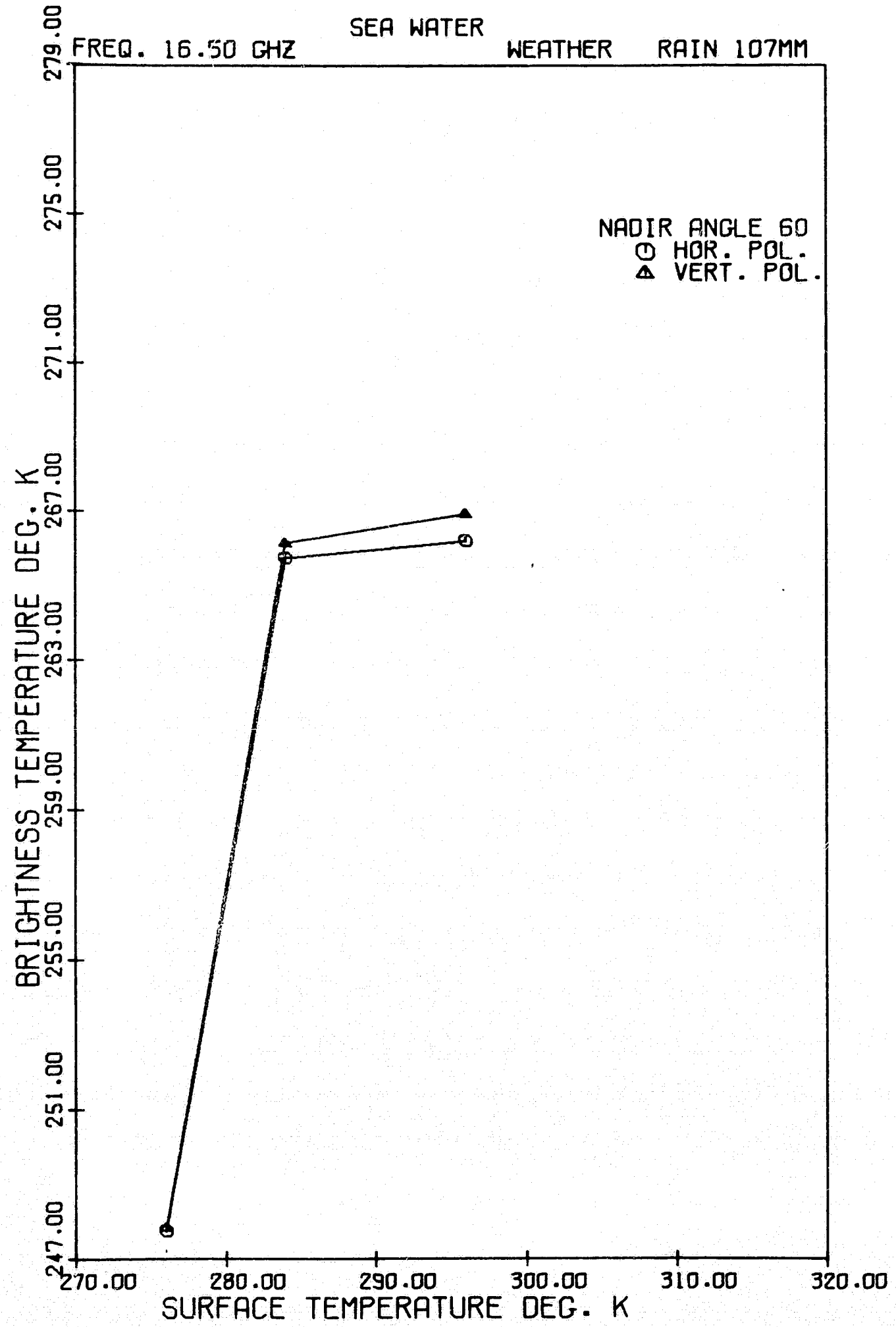

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
188.00
184.00
180.00
176.00
122.05
120.05
118.05
116.05
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

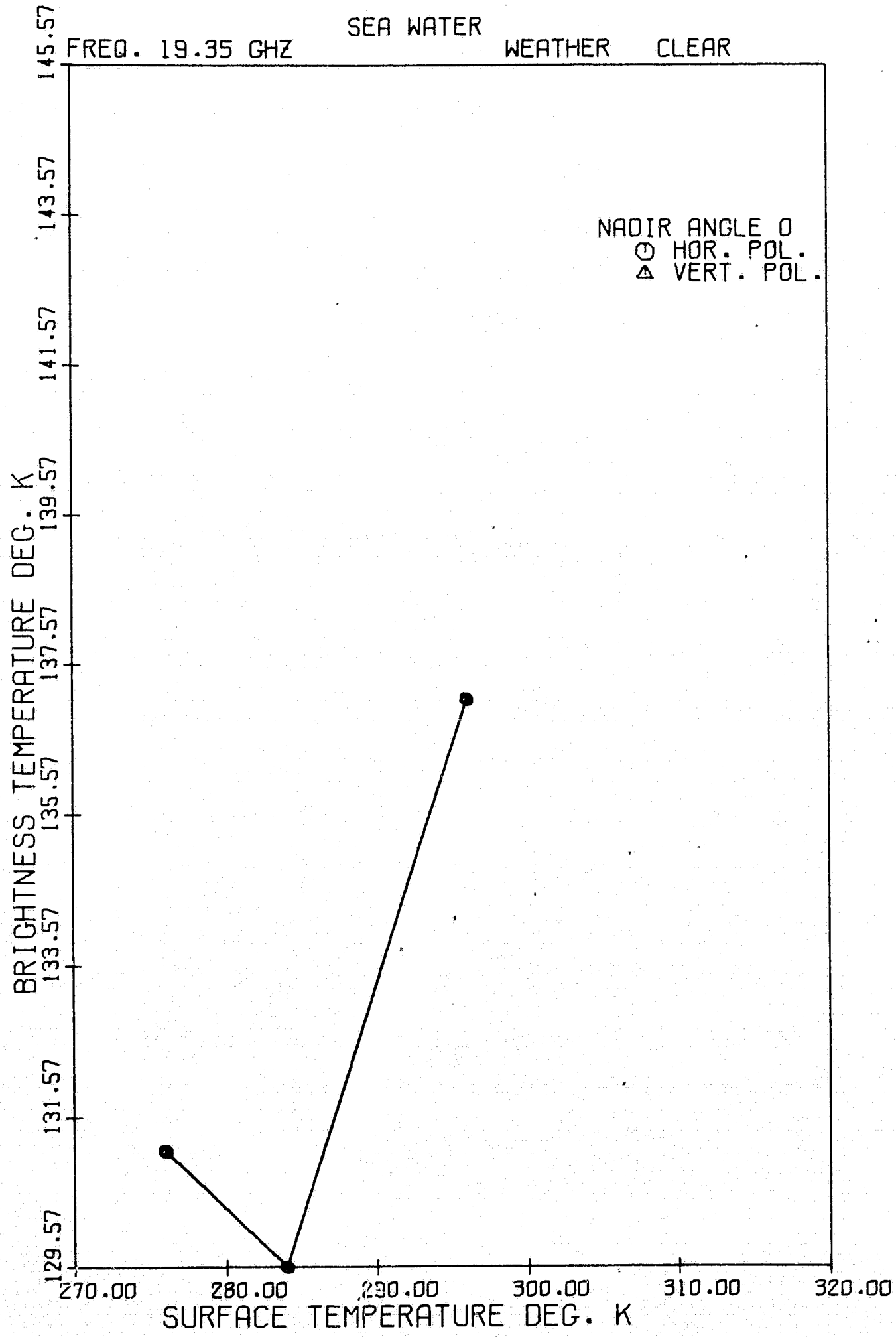

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
113.00
117.00
121.00
125.00
201.00
205.00
209.00
213.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

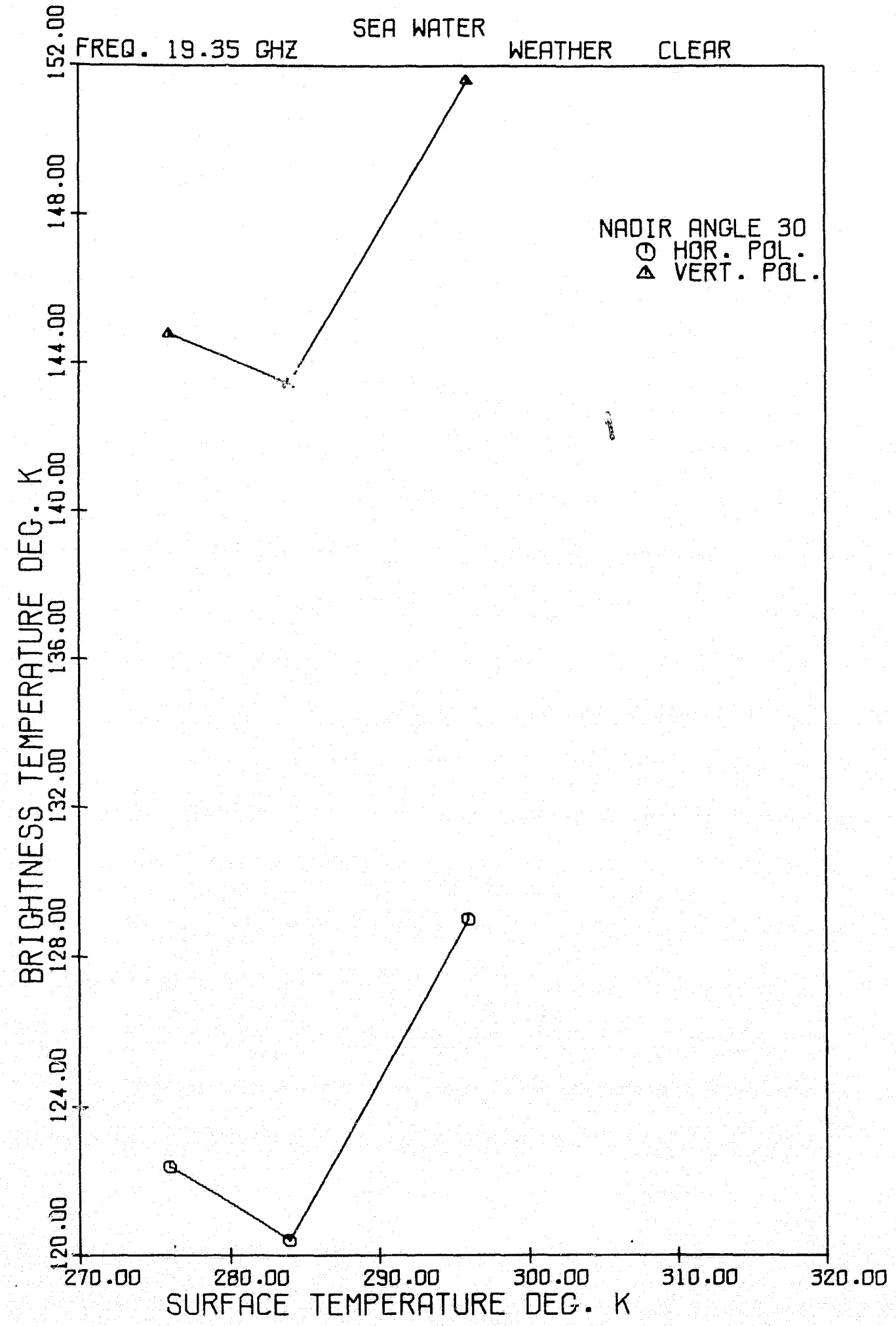

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
267.16
265.16
263.16
261.16
259.16
257.16
255.16
253.16
251.16
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

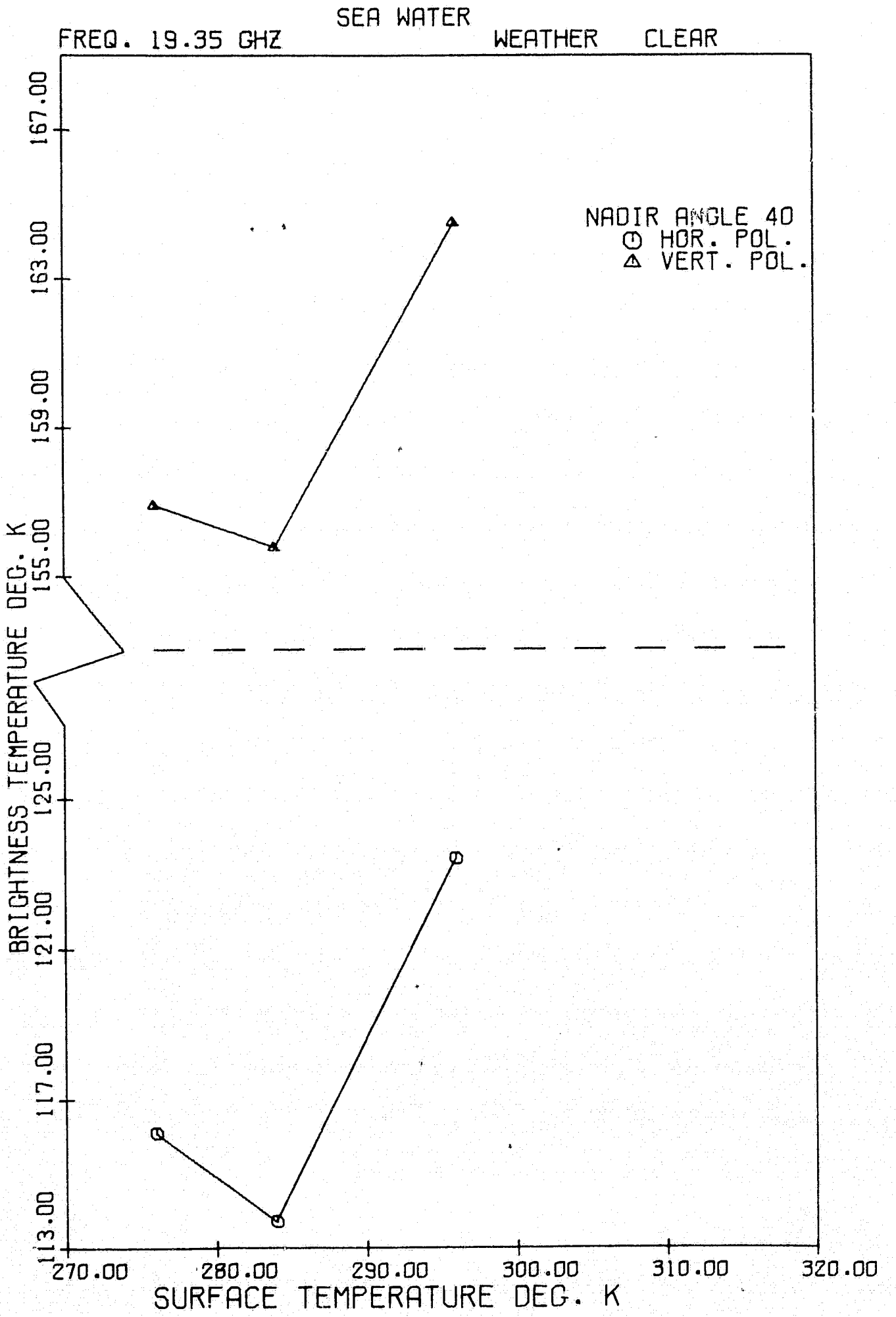

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
282.00
278.00
274.00
270.00
266.00
262.00
258.00
254.00
250.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

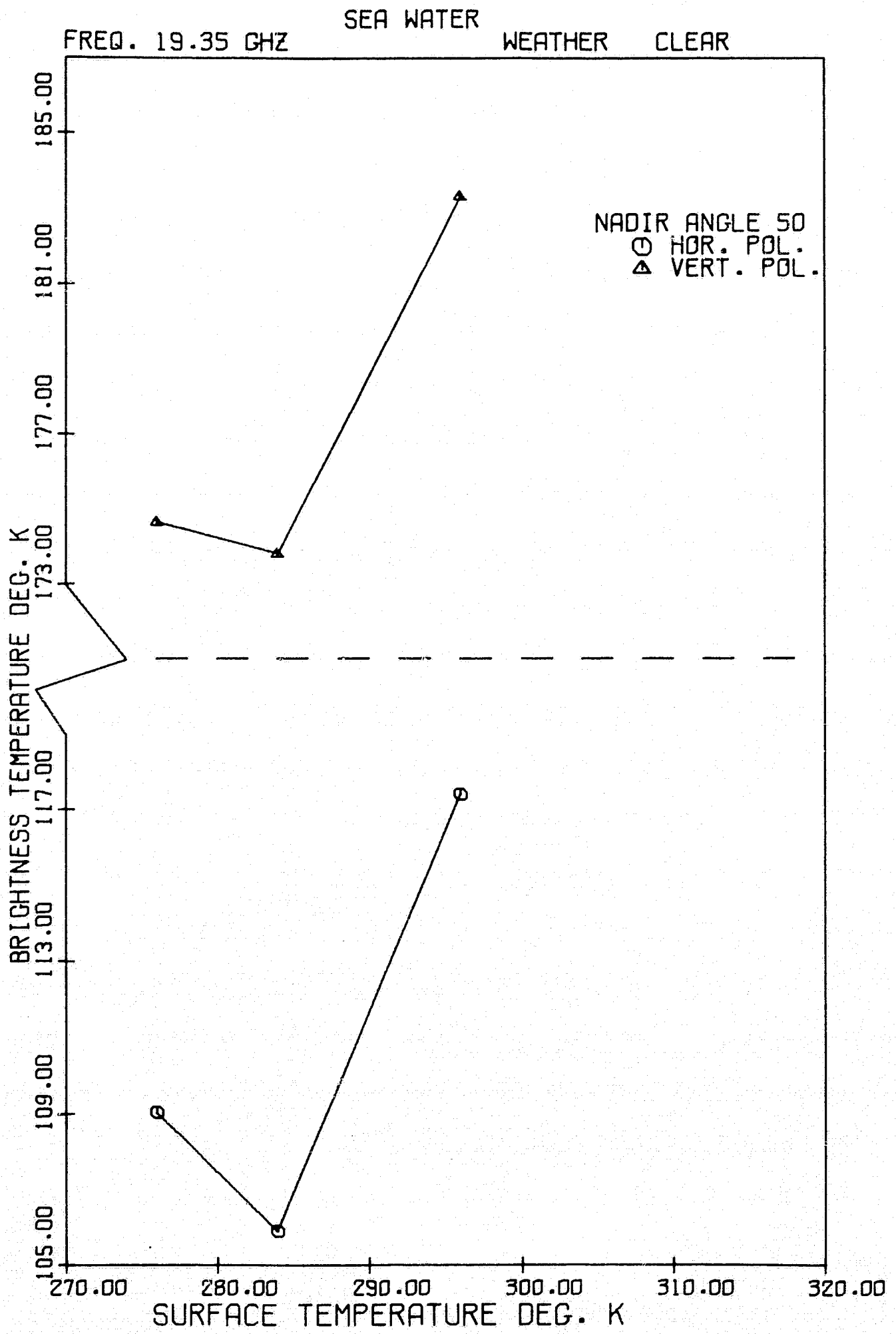

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
281.00
277.00
273.00
269.00
265.00
261.00
257.00
253.00
249.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

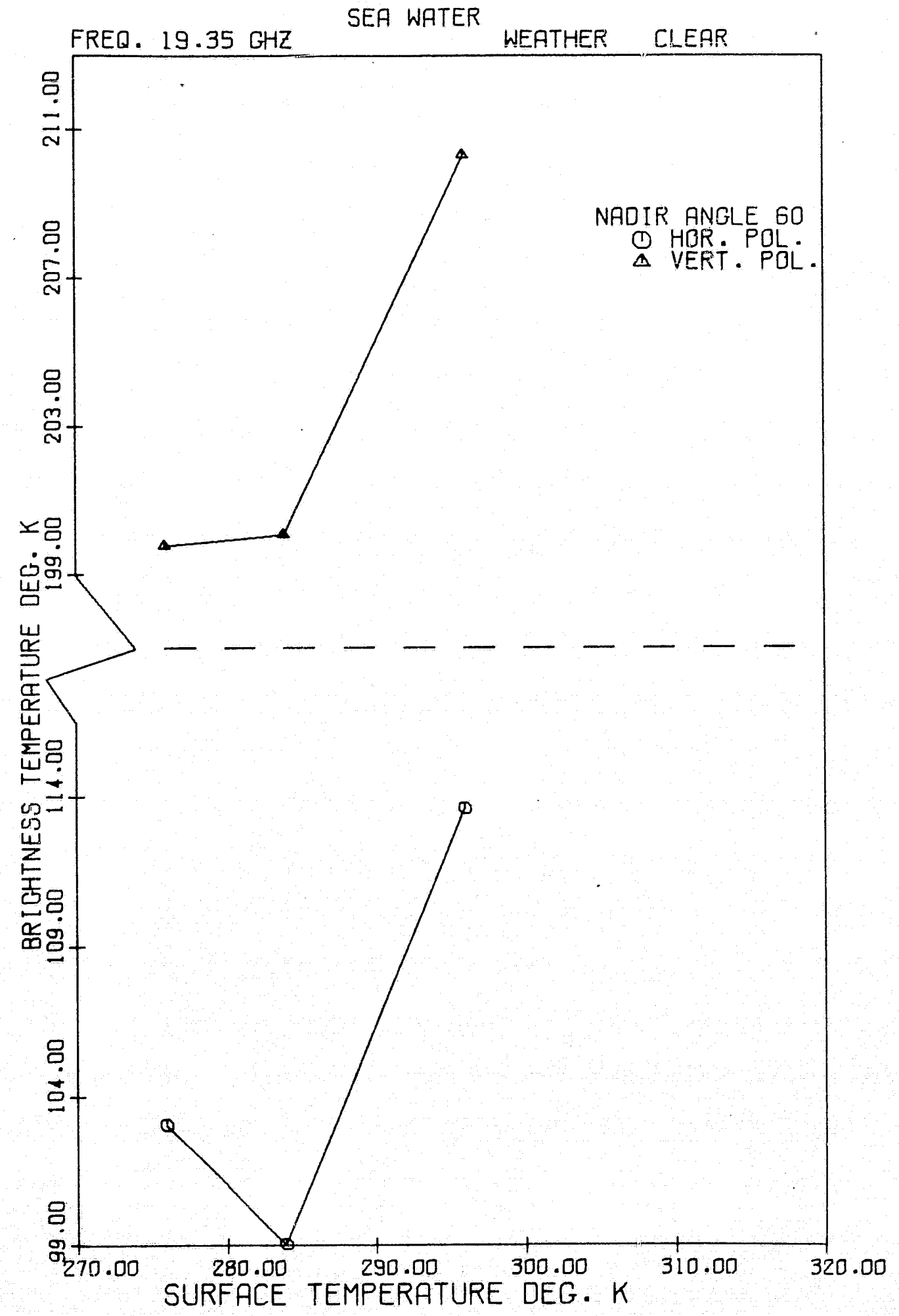

SEA WATER
FREQ. 16.50 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
279.00
275.00
271.00
267.00
263.00
259.00
255.00
251.00
247.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

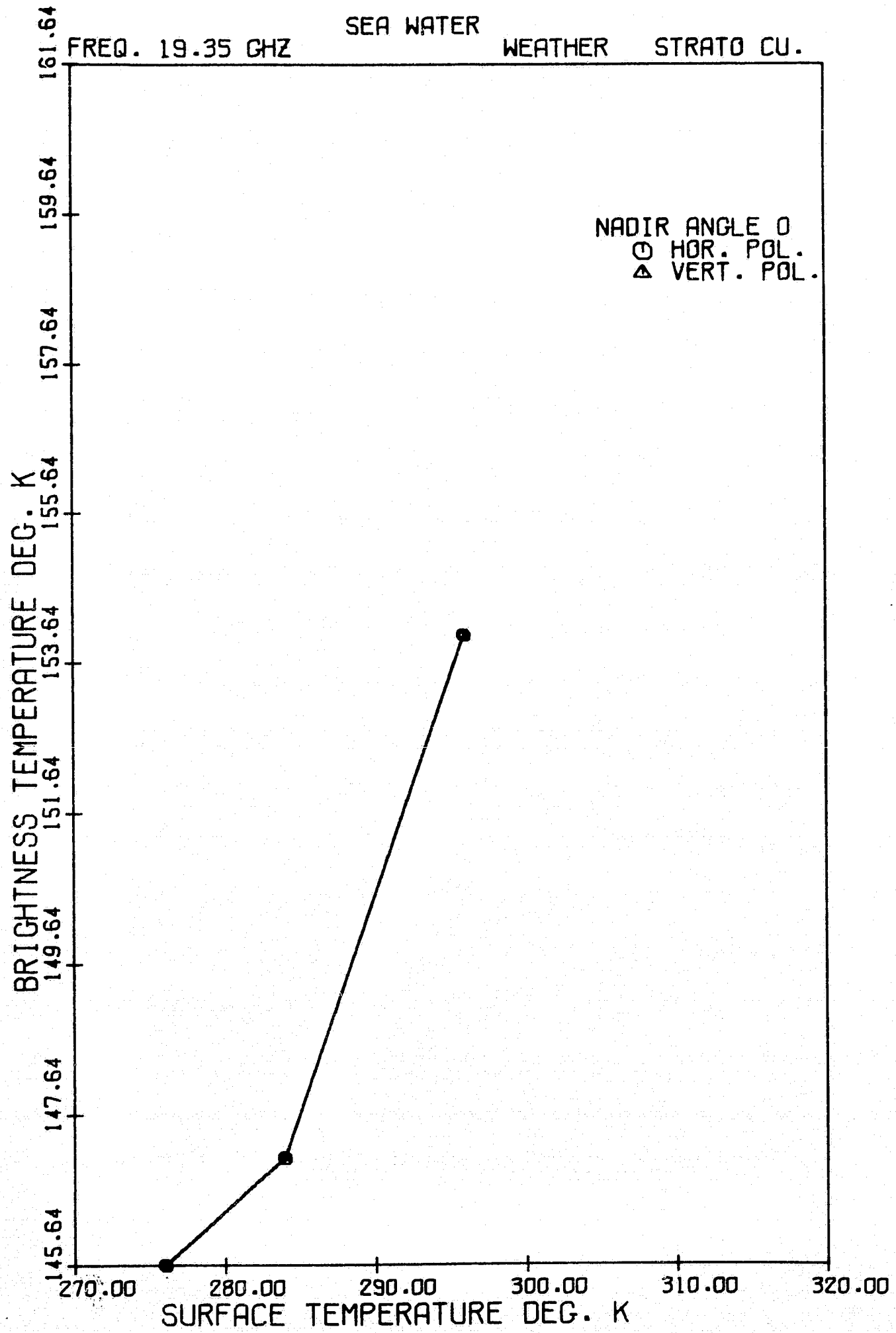

SEA WATER
FREQ. 19.35 GHZ
WEATHER CLEAR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
145.57
143.57
141.57
139.57
137.57
135.57
133.57
131.57
129.57
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

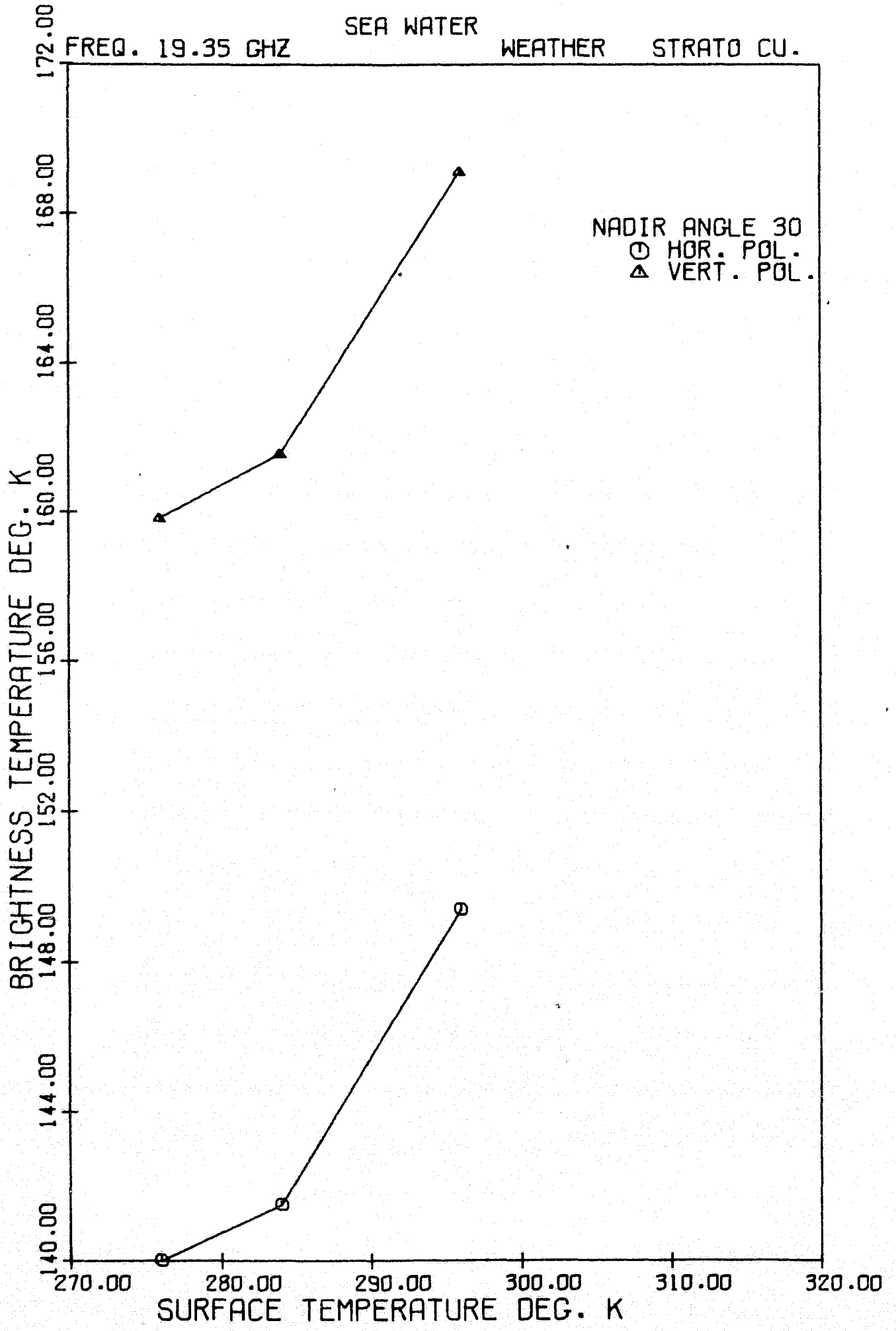

SEA WATER
FREQ. 19.35 GHZ
WEATHER CLEAR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
152.00
148.00
144.00
140.00
136.00
132.00
128.00
124.00
120.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

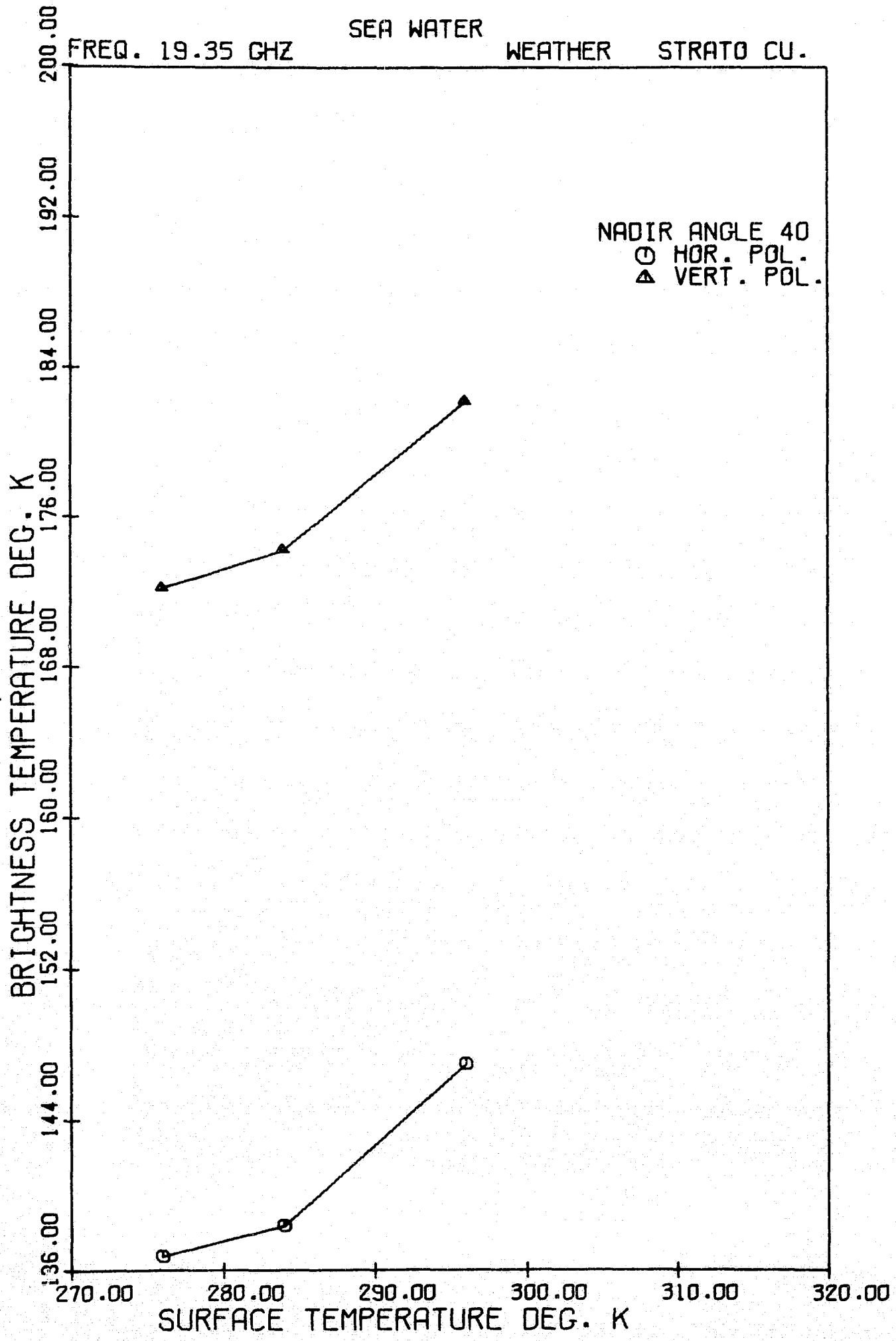

SEA WATER
FREQ. 19.35 GHZ
WEATHER CLEAR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
113.00
117.00
121.00
125.00
155.00
159.00
163.00
167.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

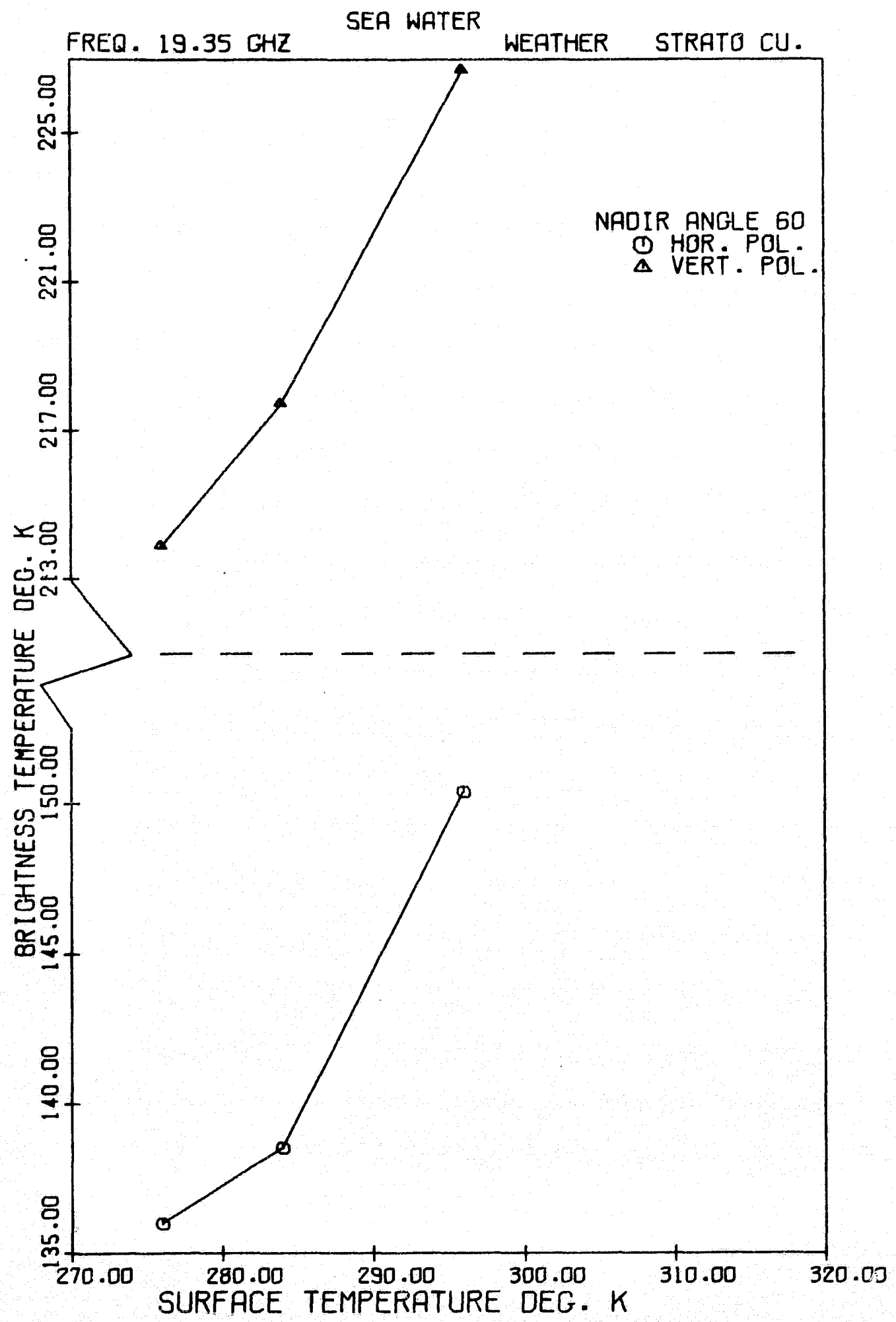

SEA WATER
FREQ. 19.35 GHZ
WEATHER CLEAR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
185.00
181.00
177.00
173.00
117.00
113.00
109.00
105.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

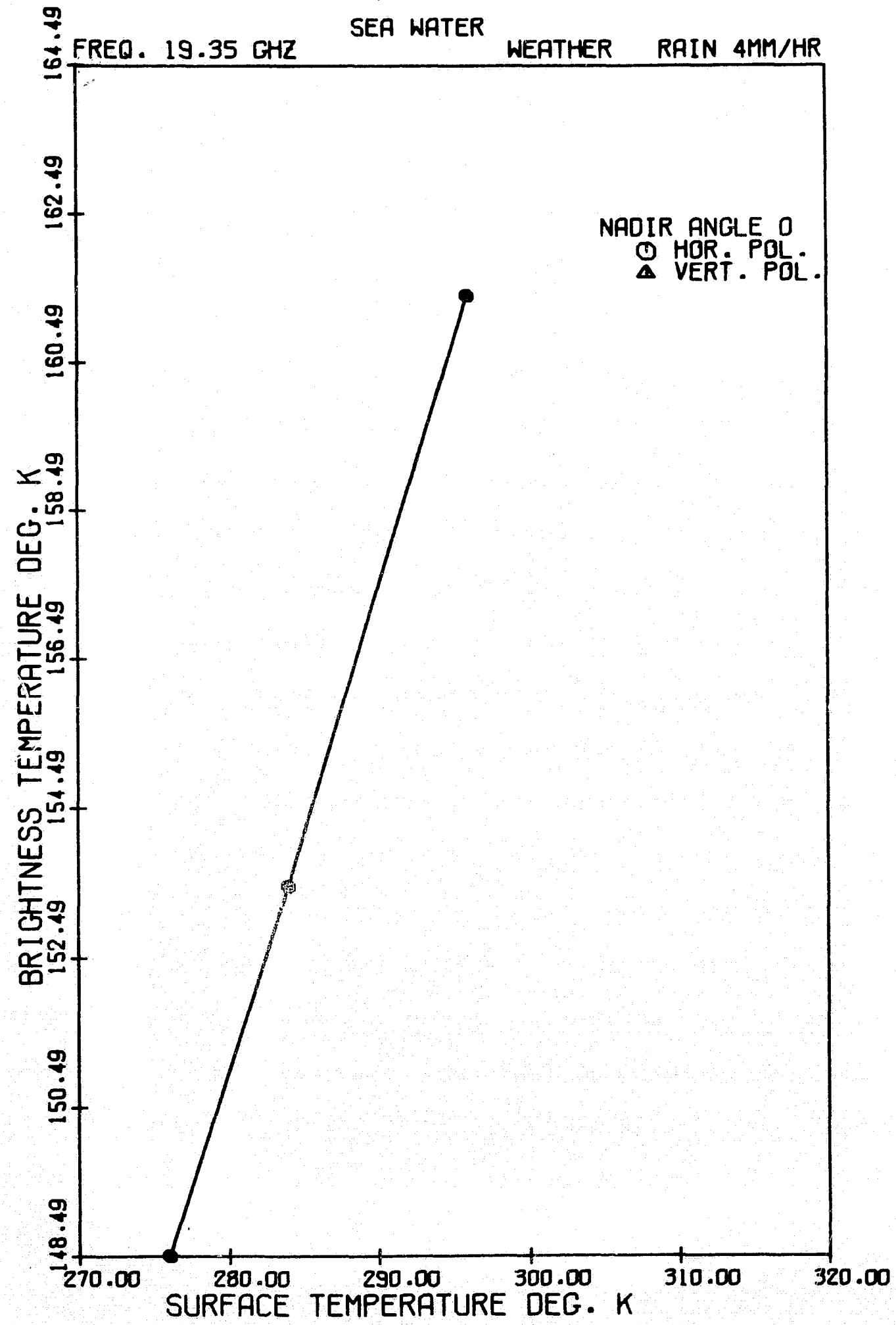

SEA WATER
FREQ. 19.35 GHZ
WEATHER CLEAR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
99.00
104.00
109.00
114.00
199.00
203.00
207.00
211.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

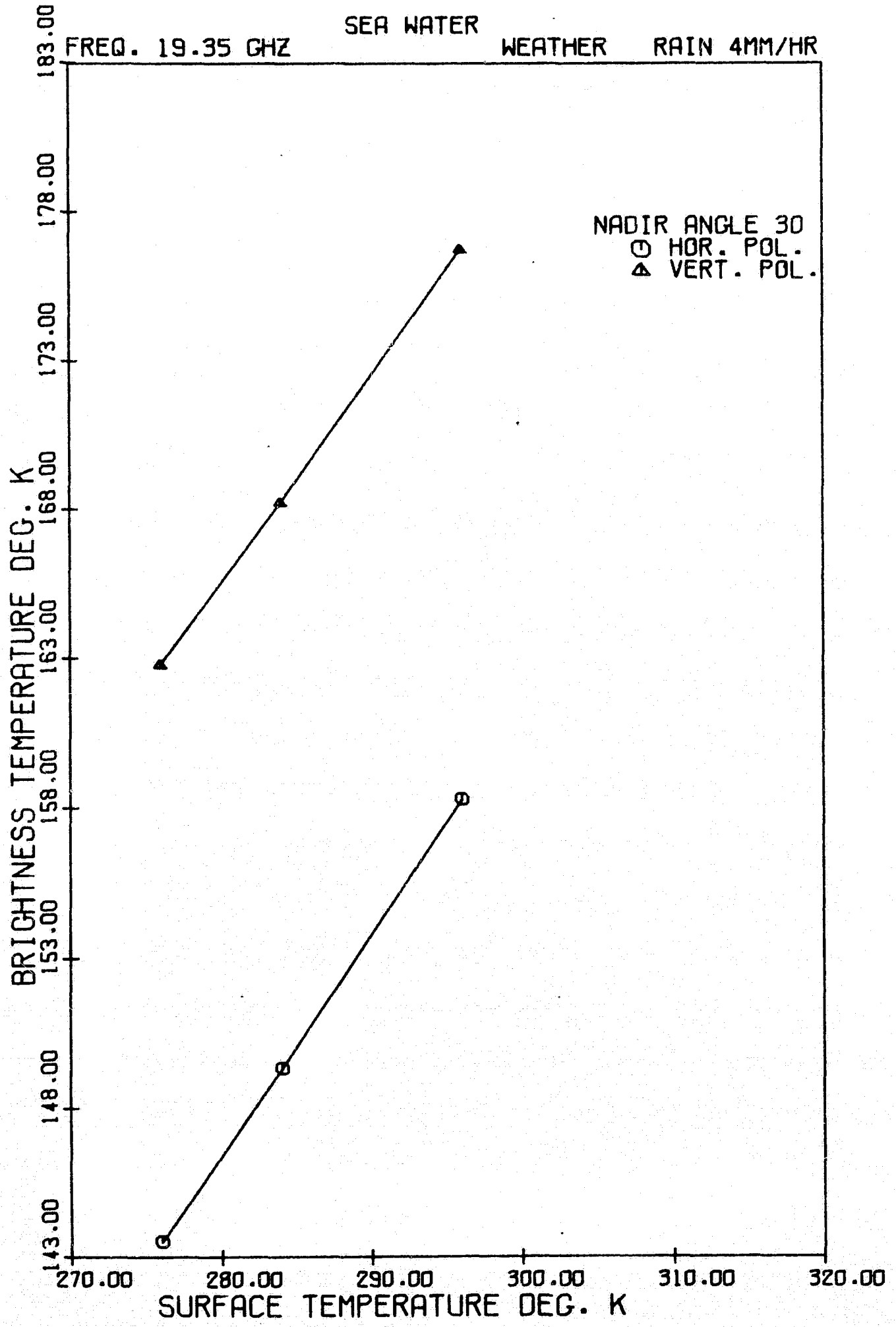

SEA WATER
FREQ. 19.35 GHZ
WEATHER STRATO CU.
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
161.64
159.64
157.64
155.64
153.64
151.64
149.64
147.64
145.64
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

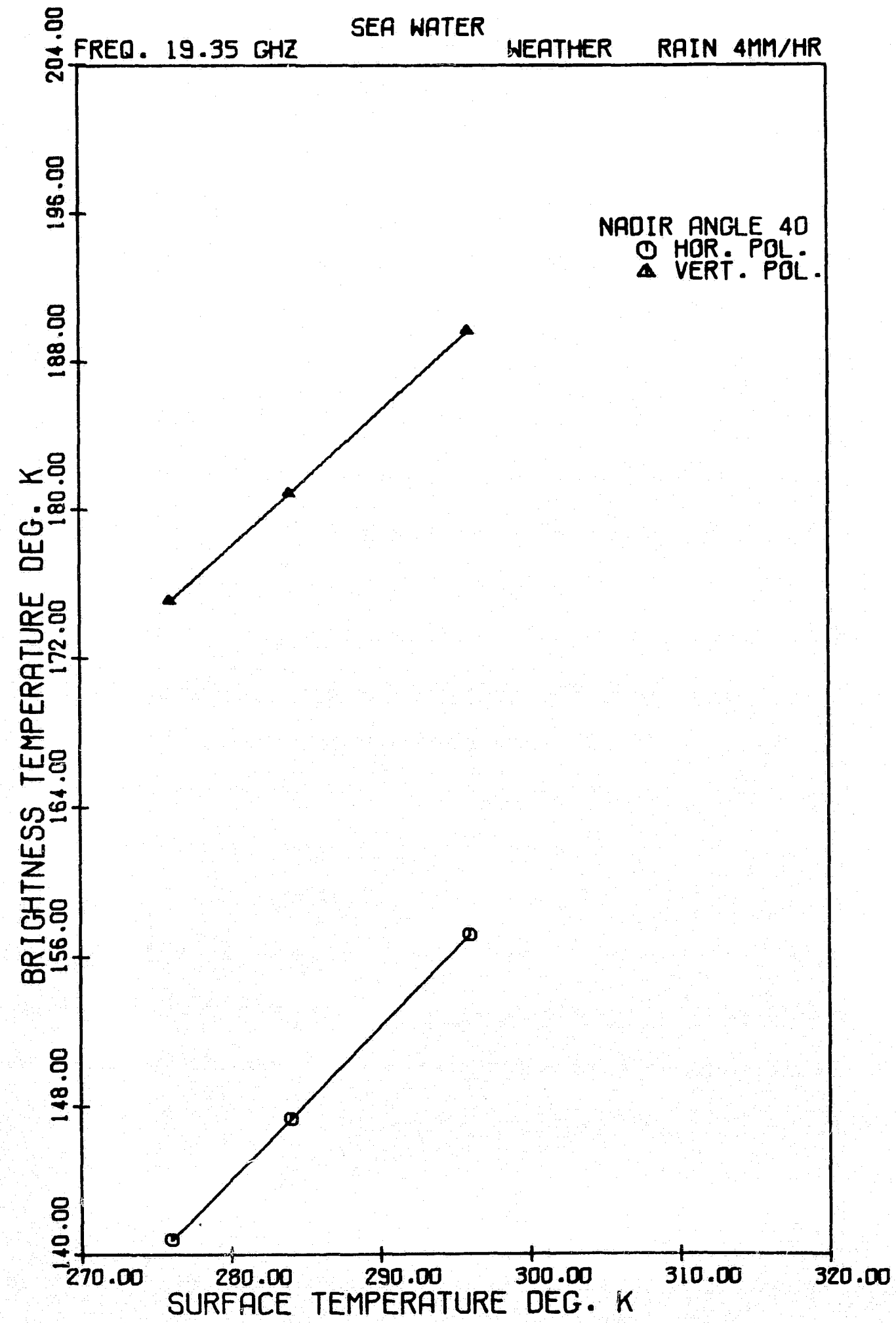

SEA WATER
FREQ. 19.35 GHZ
WEATHER STRATO CU.
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
172.00
168.00
164.00
160.00
156.00
152.00
148.00
144.00
140.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

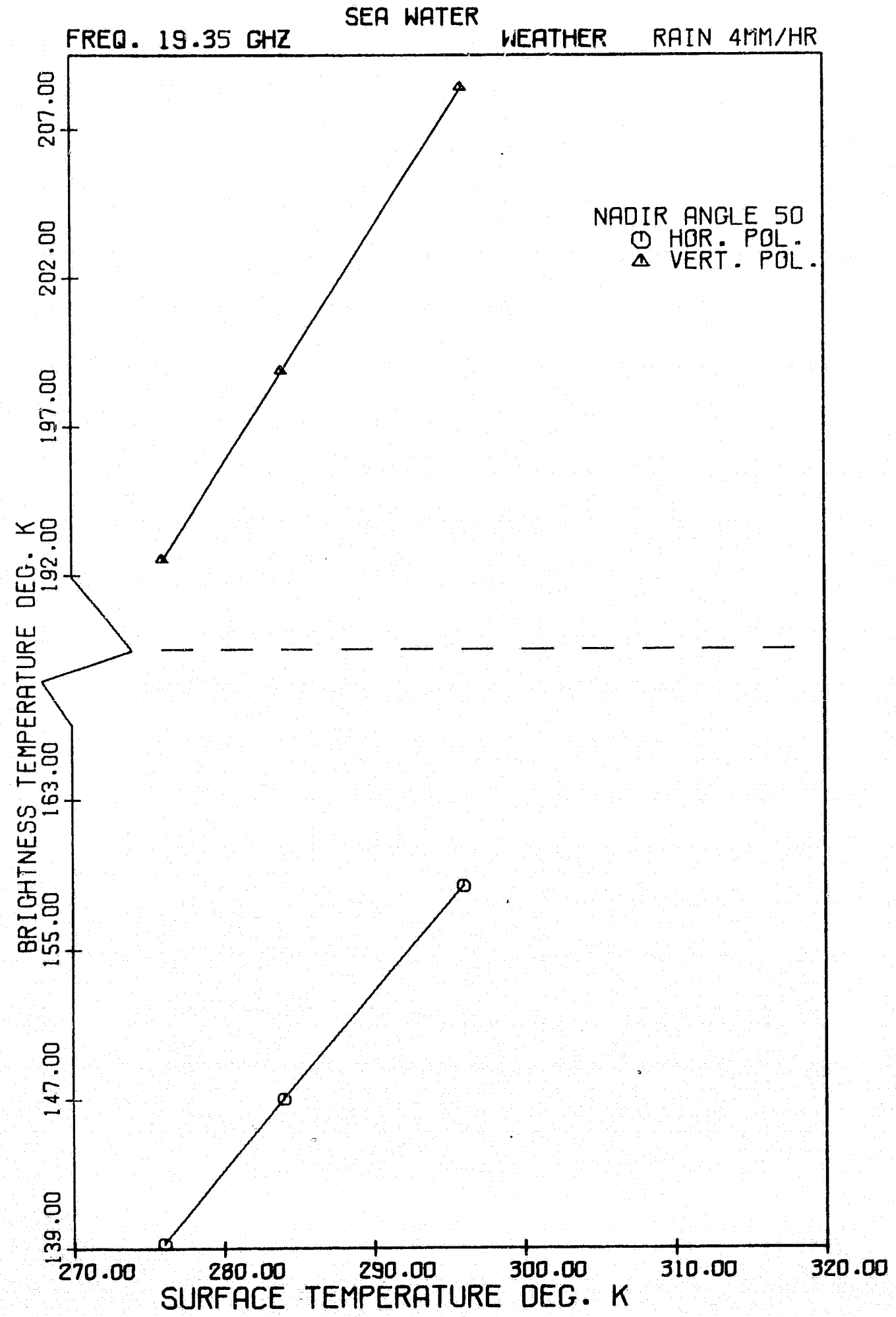

SEA WATER
FREQ. 19.35 GHZ
WEATHER STRATO CU.
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
200.00
192.00
184.00
176.00
168.00
160.00
152.00
144.00
136.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

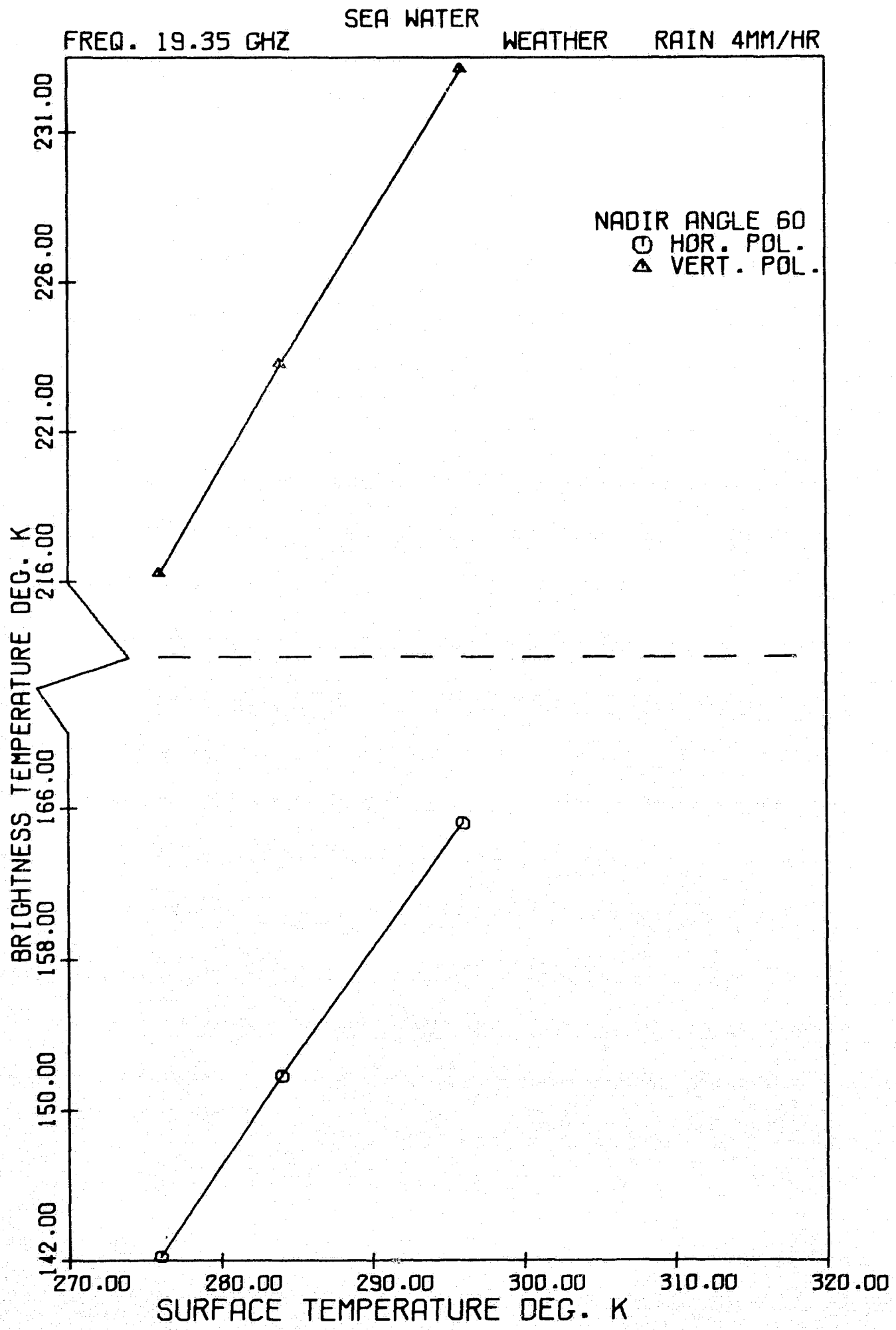

SEA WATER
FREQ. 19.35 GHZ
WEATHER STRATO CU.
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
225.00
221.00
217.00
213.00
150.00
145.00
140.00
135.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

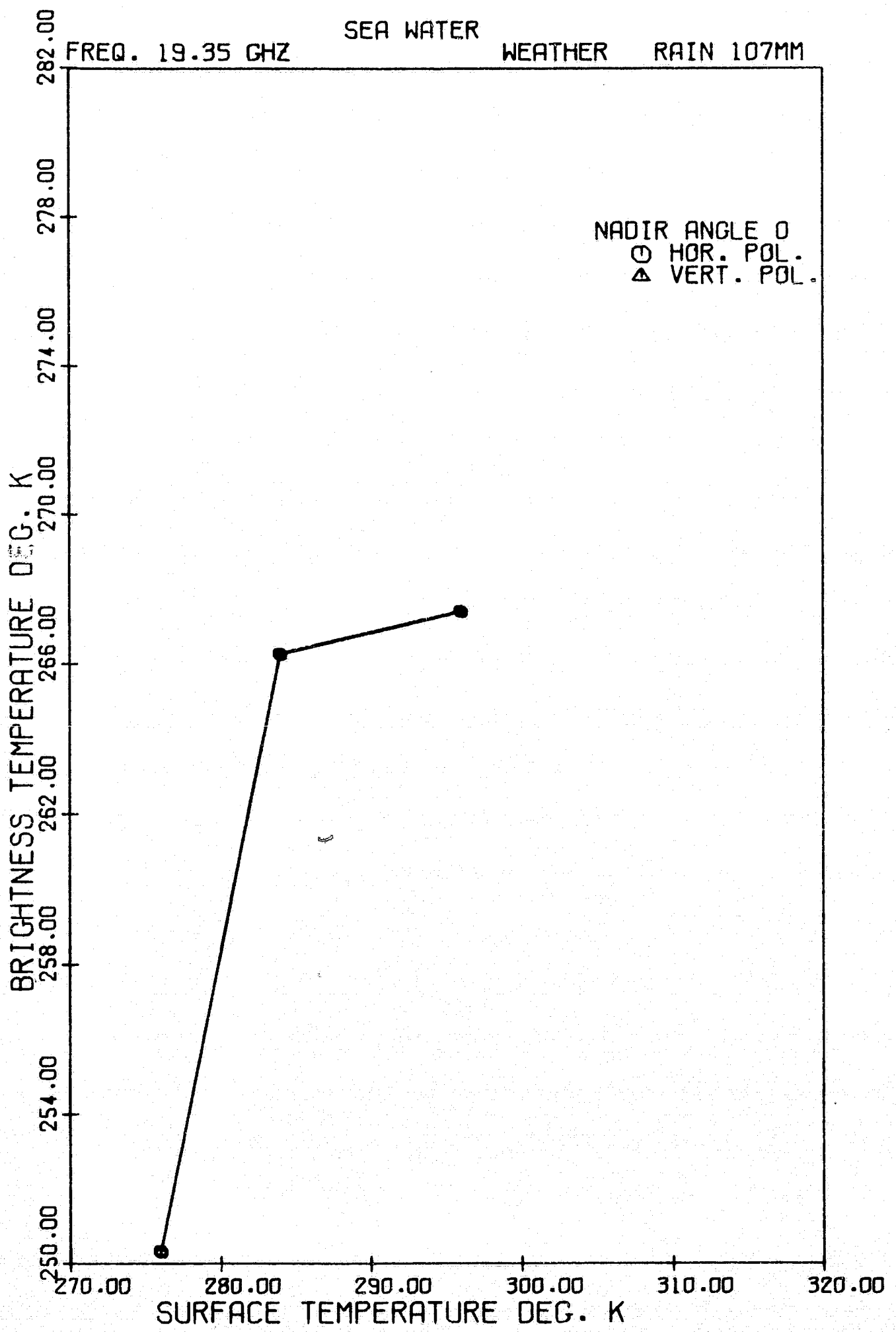

SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
164.49
162.49
160.49
158.49
156.49
154.49
152.49
150.49
148.49
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

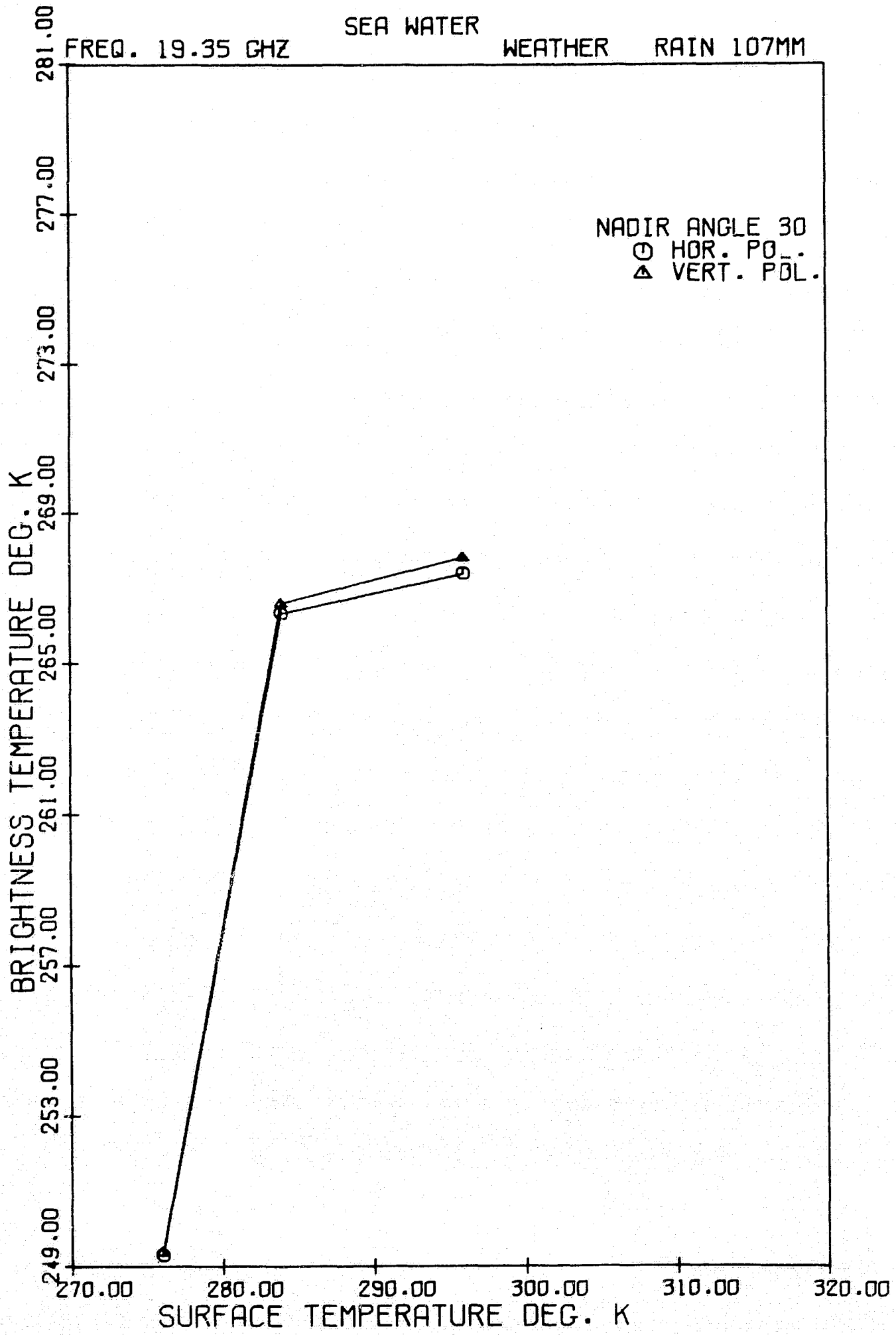

SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
183.00
178.00
173.00
168.00
163.00
158.00
153.00
148.00
143.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

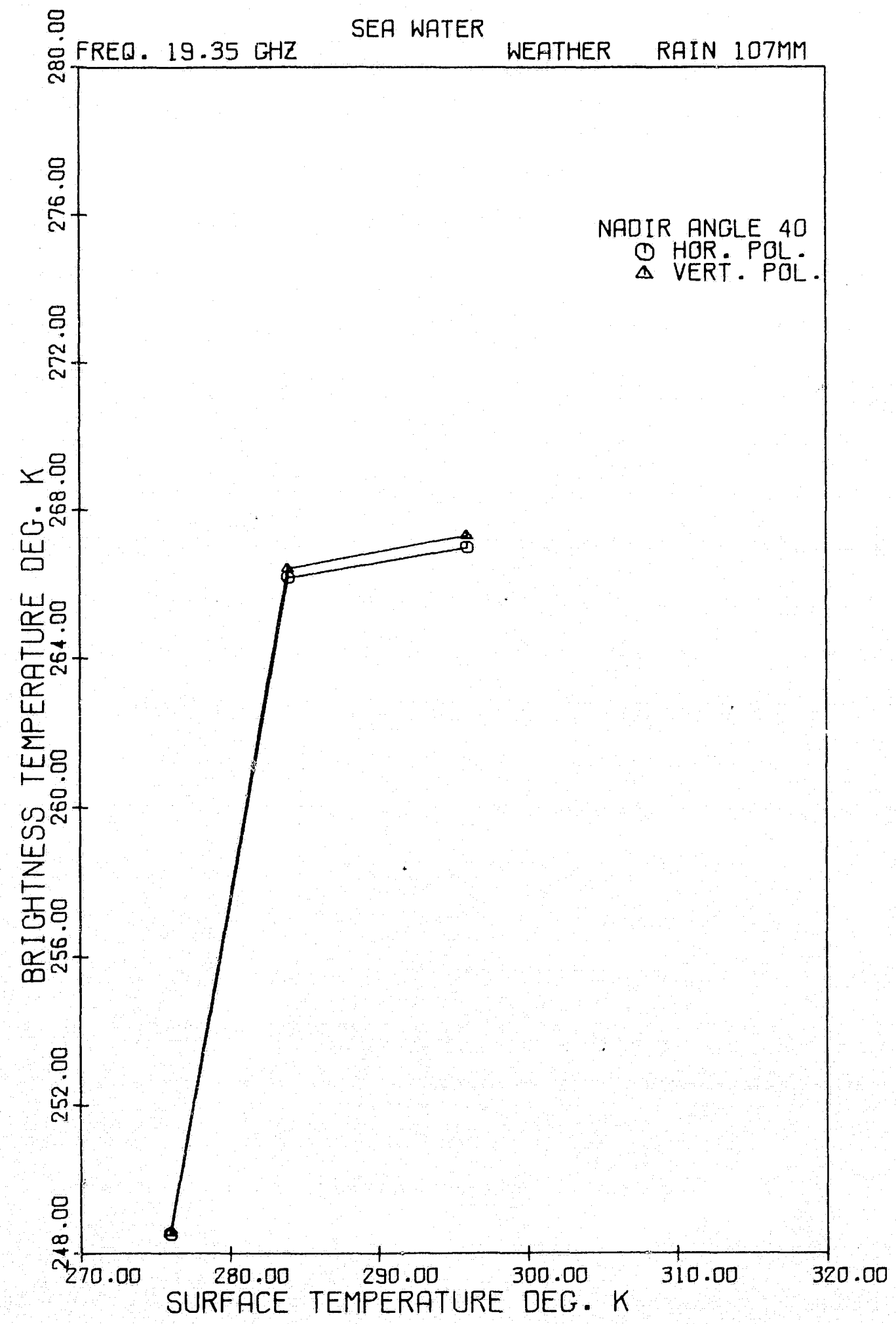

SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
204.00
196.00
188.00
180.00
172.00
164.00
156.00
148.00
140.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

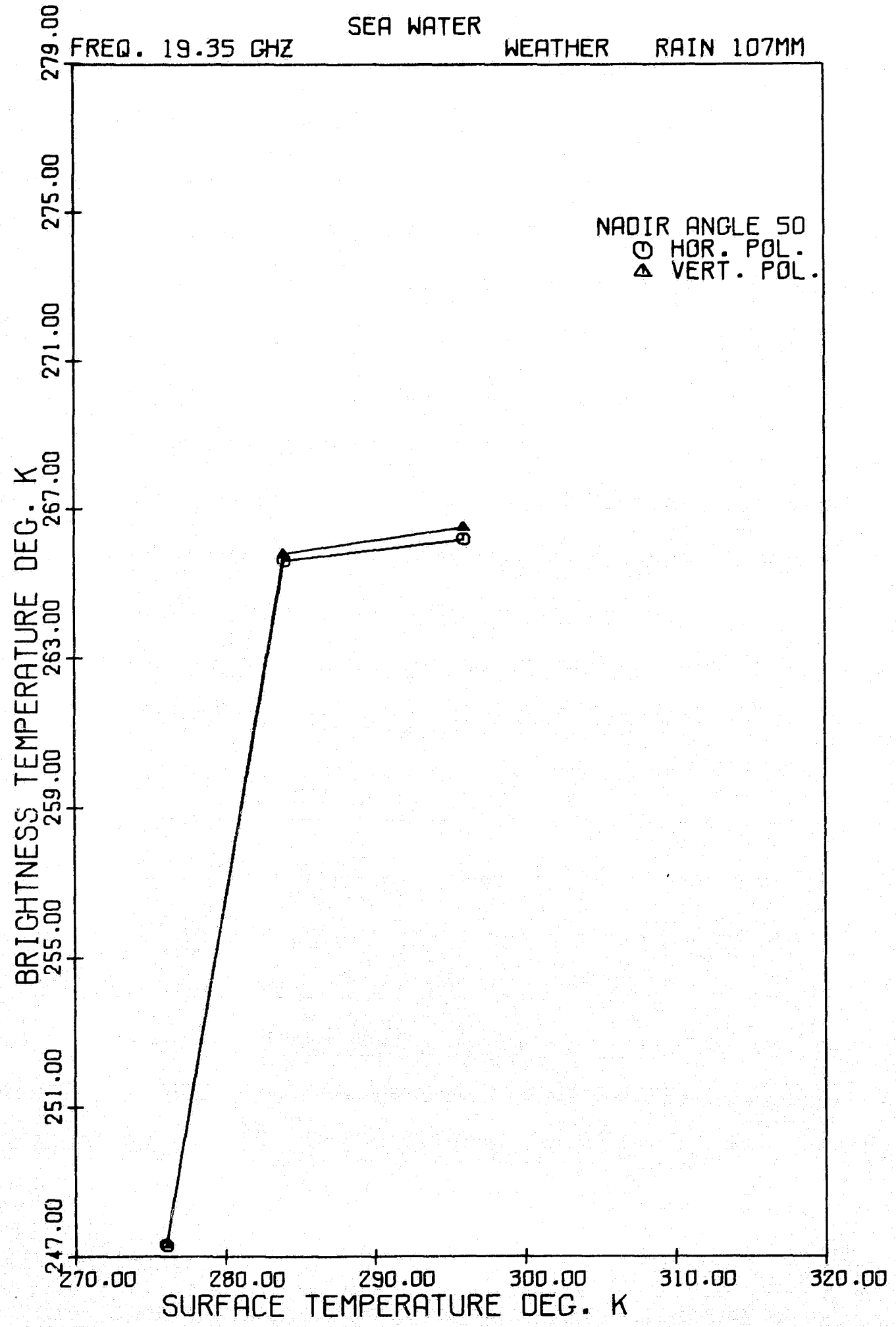

SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
192.00
163.00
155.00
147.00
139.00
207.00
202.00
197.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

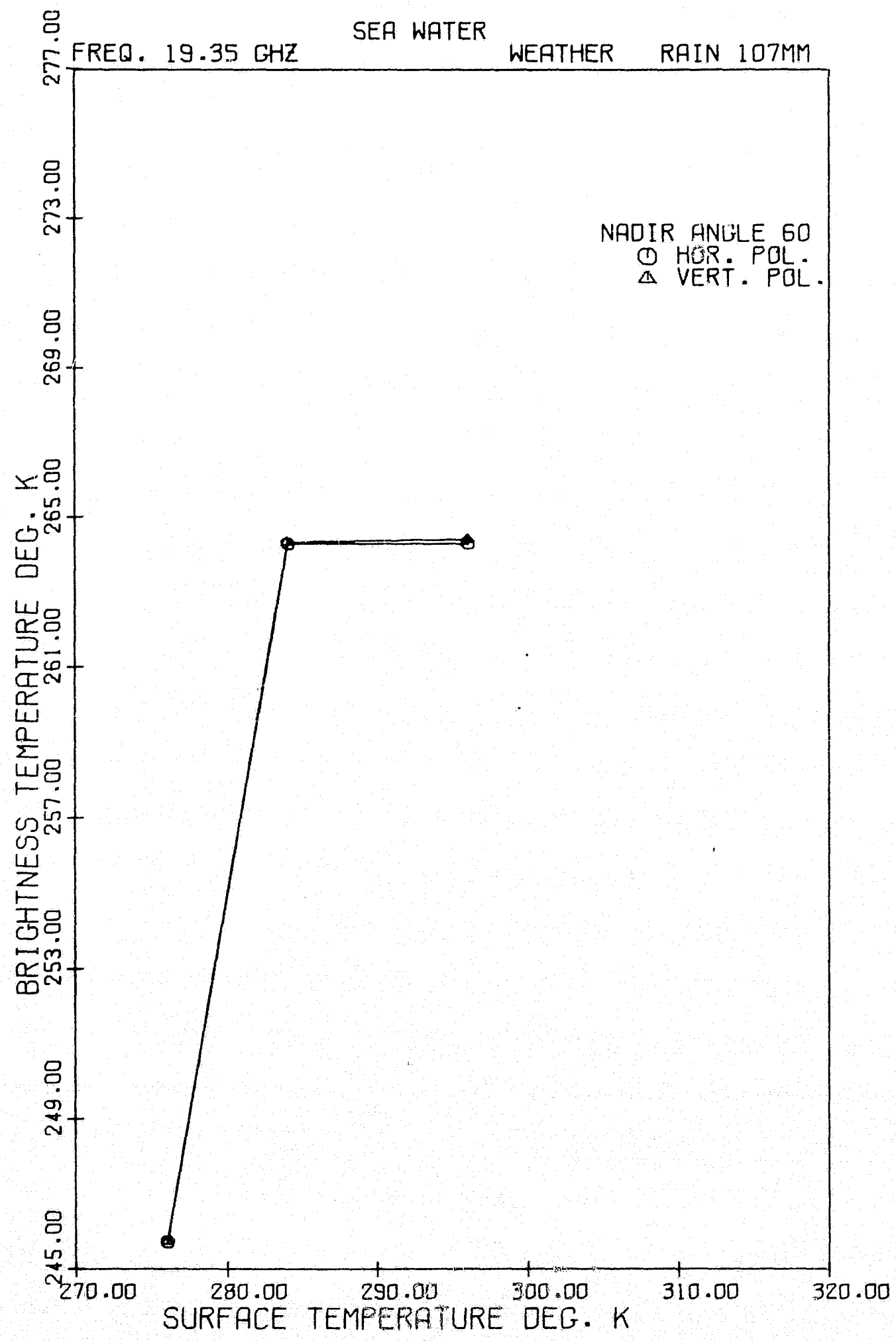

SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 4MM/HR
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
231.00
226.00
221.00
216.00
166.00
158.00
150.00
142.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K


SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 0
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
250.00
254.00
258.00
262.00
266.00
270.00
274.00
278.00
282.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K


SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 30
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
281.00
277.00
273.00
269.00
265.00
261.00
257.00
253.00
249.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K


SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 40
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
280.00
276.00
272.00
268.00
264.00
260.00
256.00
252.00
248.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K


SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 50
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
279.00
275.00
271.00
267.00
263.00
259.00
255.00
251.00
247.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K


SEA WATER
FREQ. 19.35 GHZ
WEATHER RAIN 107MM
NADIR ANGLE 60
HOR. POL.
VERT. POL.
BRIGHTNESS TEMPERATURE DEG. K
245.00
249.00
253.00
257.00
261.00
265.00
269.00
273.00
277.00
270.00
280.00
290.00
300.00
310.00
320.00
SURFACE TEMPERATURE DEG. K

PART IV

TEMPERATURE DEPENDENCE

OF

SEA WATER BRIGHTNESS TEMPERATURES

(Printouts)

SEA WATER FREQUENCY 2.50 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K

BRIGHTNESS TEMPERATURES DEG. K

NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	100.4	100.4	93.6	108.6	88.4	116.1	81.9	127.9	74.1	146.6
284 (MID-LATITUDE)	97.7	97.7	91.6	106.0	86.0	112.8	79.7	124.2	72.4	142.7
296 (TROPICAL)	93.5	93.5	87.3	100.9	82.5	107.9	76.7	119.0	69.9	137.0

SEA WATER FREQUENCY 0.50 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	100.4	100.4	93.6	108.6	88.4	116.1	81.9	127.9	74.1	146.6
284 (MID-LATITUDE)	97.7	97.7	91.2	105.6	86.0	112.8	79.8	124.3	72.4	142.7
296 (TROPICAL)	93.5	93.5	87.3	100.9	82.5	107.9	76.7	119.0	69.9	137.0

SEA WATER FREQUENCY 0.50 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	100.4	100.4	93.6	108.6	88.4	116.1	81.9	127.9	74.1	146.6
284 (MID-LATITUDE)	97.7	97.7	91.2	105.6	86.0	112.8	79.8	124.3	72.4	142.7
296 (TROPICAL)	93.5	93.5	87.3	100.9	82.5	107.9	76.7	119.0	69.9	137.0

SEA WATER FREQUENCY 0.50 GHZ WEATHER RAIN 107MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	101.1	101.1	94.5	109.4	64.1	116.7	82.7	128.5	75.5	147.4
284 (MID-LATITUDE)	98.1	98.1	91.7	106.1	86.7	113.4	80.5	124.9	73.6	143.6
296 (TROPICAL)	94.1	94.1	87.9	101.5	83.2	108.5	77.6	119.7	70.9	137.6

SEA WATER FREQUENCY 1.40 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	95.8	95.8	86.4	107.0	79.2	117.3	69.8	132.8	59.1	157.2
284 (MID-LATITUDE)	96.8	96.8	87.2	108.2	79.9	118.6	70.6	134.7	59.6	159.4
296 (TROPICAL)	96.7	96.7	87.0	108.1	79.5	118.7	70.0	134.8	59.0	160.1

SEA WATER FREQUENCY 1.40 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	96.1	96.1	86.6	107.2	79.4	117.5	70.2	133.1	59.3	157.3
284 (MID-LATITUDE)	97.0	97.0	87.4	108.3	80.0	118.7	70.7	134.7	59.7	159.4
296 (TROPICAL)	96.7	96.7	87.1	108.2	79.6	118.8	70.2	135.0	59.2	160.2

SEA WATER FREQUENCY 1.40 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	96.1	96.1	86.6	107.2	79.4	117.5	70.2	133.1	59.3	157.2
284 (MID-LATITUDE)	97.0	97.0	87.4	108.3	80.0	118.7	70.7	134.7	59.7	159.4
296 (TROPICAL)	96.7	96.7	87.1	108.2	79.6	118.8	70.2	135.0	59.2	160.2

SEA WATER FREQUENCY 1.40 GHZ WEATHER RAIN 107MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	100.9	100.9	92.5	112.5	86.1	122.8	78.7	138.9	71.0	163.5
284 (MID-LATITUDE)	100.6	100.6	91.9	112.3	85.3	122.9	77.1	139.1	68.6	164.2
296 (TROPICAL)	100.3	100.3	91.3	112.0	84.7	122.9	76.5	139.4	67.7	164.8

SEA WATER FREQUENCY 5.50 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	101.8	101.8	91.6	113.7	83.8	124.7	73.8	141.2	62.1	166.5
284 (MID-LATITUDE)	105.0	105.0	94.6	117.4	86.3	128.5	76.0	145.7	63.8	171.8
296 (TROPICAL)	110.8	110.8	99.8	123.9	91.2	135.7	80.2	153.7	67.1	180.8

SEA WATER FREQUENCY 5.50 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	103.2	103.2	93.3	115.2	85.8	126.3	76.2	142.8	65.5	168.3
284 (MID-LATITUDE)	106.2	106.2	96.0	118.6	88.2	130.0	78.3	147.2	66.9	173.4
296 (TROPICAL)	112.1	112.1	101.3	125.2	92.8	136.9	82.2	154.8	70.1	182.2

SEA WATER FREQUENCY 5.50 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K

BRIGHTNESS TEMPERATURES DEG. K

NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	103.5	103.5	93.5	115.4	86.1	126.5	76.7	143.1	66.1	168.5
284 (MID-LATITUDE)	106.6	106.6	96.4	119.0	88.6	130.4	78.8	147.5	67.7	173.7
296 (TROPICAL)	112.4	112.4	101.7	125.5	93.3	137.3	82.8	155.3	70.8	182.5

SEA WATER FREQUENCY 5.50 GHZ WEATHER RAIN 107MM/HR

SURFACE BRIGHTNESS TEMPERATURES DEG. K

TEMPERATURE DEG. K NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	161.5	161.5	162.3	175.4	164.5	187.1	170.1	203.4	182.1	224.3
284 (MID-LATITUDE)	152.8	152.8	151.6	167.3	152.2	179.8	155.6	197.6	165.3	221.6
296 (TROPICAL)	155.9	155.9	153.9	170.8	153.7	183.6	156.0	201.8	164.5	226.5

SEA WATER FREQUENCY 9.50 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	107.3	107.3	96.9	119.7	88.8	130.8	78.8	147.8	66.8	173.1
284 (MID-LATITUDE)	109.1	109.1	98.5	121.8	90.2	133.3	79.8	150.6	67.7	176.8
296 (TROPICAL)	114.1	114.1	103.1	127.4	94.4	139.3	83.7	157.4	71.1	184.9

SEA WATER FREQUENCY 9.50 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K

BRIGHTNESS TEMPERATURES DEG. K

NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	111.4	111.4	101.8	124.0	94.6	135.3	86.0	152.5	76.8	178.1
284 (MID-LATITUDE)	112.9	112.9	103.1	125.8	95.6	137.4	86.5	154.9	76.8	181.3
296 (TROPICAL)	117.7	117.7	107.4	131.1	99.5	143.1	90.0	161.5	79.6	188.9

SEA WATER FREQUENCY 9.51 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	112.0	112.0	102.7	124.7	95.7	136.1	87.2	153.2	78.4	178.9
284 (MID-LATITUDE)	113.8	113.8	104.0	126.6	96.8	138.4	88.0	155.9	78.8	182.3
296 (TROPICAL)	118.6	118.6	108.6	132.1	100.9	144.3	91.6	162.5	82.0	190.0

SEA WATER FREQUENCY 9.50 GHZ WEATHER RAIN 137MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	221.9	221.9	226.5	231.3	229.0	236.1	237.1	245.7	245.7	253.2
284 (MID-LATITUDE)	212.4	212.4	217.5	225.1	222.7	234.9	230.9	246.6	243.2	259.0
296 (TROPICAL)	212.9	212.9	217.5	226.1	222.1	236.0	230.2	248.5	242.6	261.7

SEA WATER FREQUENCY 16.50 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	120.1	120.1	110.0	133.3	102.2	145.1	92.8	162.6	82.5	188.1
284 (MID-LATITUDE)	119.8	119.8	109.5	133.2	101.4	145.1	91.6	163.0	80.9	189.4
296 (TROPICAL)	124.5	124.5	114.3	138.4	106.6	150.9	97.2	169.5	87.4	197.0

SEA WATER FREQUENCY 16.50 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K

BRIGHTNESS TEMPERATURES DEG. K

NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	131.2	131.2	123.5	144.9	118.2	157.0	112.6	174.7	109.0	199.8
284 (MID-LATITUDE)	131.2	131.2	123.4	145.2	117.8	157.5	112.0	175.8	108.0	201.9
296 (TROPICAL)	135.5	135.5	127.5	149.8	122.2	162.8	116.5	181.5	113.2	208.7

SEA WATER FREQUENCY 16.50 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	133.1	133.1	125.9	146.9	121.0	159.1	116.1	176.7	113.6	201.7
284 (MID-LATITUDE)	134.3	134.3	127.1	148.4	122.2	160.9	117.3	179.0	115.0	204.9
296 (TROPICAL)	139.1	139.1	132.0	153.6	127.3	166.6	122.9	185.4	121.4	212.3

SEA WATER FREQUENCY 16.50 GHZ WEATHER RAIN 107MM/HR

SURFACE BRIGHTNESS TEMPERATURES DEG. K

TEMPERATURE DEG. K NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	251.5	251.5	251.2	251.4	250.6	250.9	249.6	249.8	247.8	247.8
284 (MID-LATITUDE)	262.9	262.9	264.5	265.3	265.5	266.5	266.2	267.0	265.8	266.1
296 (TROPICAL)	263.6	263.6	265.2	266.3	266.3	267.7	266.7	267.9	266.2	266.9

SEA WATER FREQUENCY 19.35 GHZ WEATHER CLEAR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	131.1	131.1	122.4	144.8	116.1	156.9	109.1	174.6	103.1	199.8
284 (MID-LATITUDE)	129.6	129.6	120.4	143.4	113.7	155.8	105.9	173.8	99.0	200.1
296 (TROPICAL)	137.1	137.1	129.0	151.6	123.4	164.5	117.4	183.3	113.6	210.3

SEA WATER FREQUENCY 19.35 GHZ WEATHER STRATO. CU.

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	145.6	145.6	140.0	159.8	136.8	172.2	134.4	189.9	136.0	213.9
284 (MID-LATITUDE)	147.1	147.1	141.5	161.5	138.4	174.3	136.4	192.5	138.5	217.7
296 (TROPICAL)	154.0	154.0	149.4	169.1	147.0	182.2	146.2	201.0	150.4	226.7

SEA WATER FREQUENCY 19.35 GHZ WEATHER RAIN 4MM/HR

SURFACE TEMPERATURE DEG. K	BRIGHTNESS TEMPERATURES DEG. K NADIR ANGLES (DEGREES)									
	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	148.5	148.5	143.5	162.7	140.8	175.1	139.2	192.5	142.2	216.3
284 (MID-LATITUDE)	153.5	153.5	149.3	168.2	147.3	180.9	147.0	198.9	151.8	223.3
296 (TROPICAL)	161.4	161.4	158.3	176.7	157.2	189.7	158.4	208.4	165.2	233.1

SEA WATER FREQUENCY 19.35 GHZ WEATHER RAIN 107MM/HR

SURFACE TEMPERATURE DEG. K

BRIGHTNESS TEMPERATURES DEG. K

NADIR ANGLES (DEGREES)

	0		30		40		50		60	
	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.	HOR. POL.	VERT. POL.
276 (NORTHERN)	250.3	250.3	249.3	249.4	248.5	248.6	247.3	247.3	245.7	245.7
284 (MID-LATITUDE)	266.3	266.3	266.4	266.6	266.2	266.4	265.6	265.8	264.3	264.3
296 (TROPICAL)	267.4	267.4	267.4	267.8	267.0	267.3	266.2	266.5	264.3	264.4