

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P884080

Luminaire Tested: **NAV-SB4D-722-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24882 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

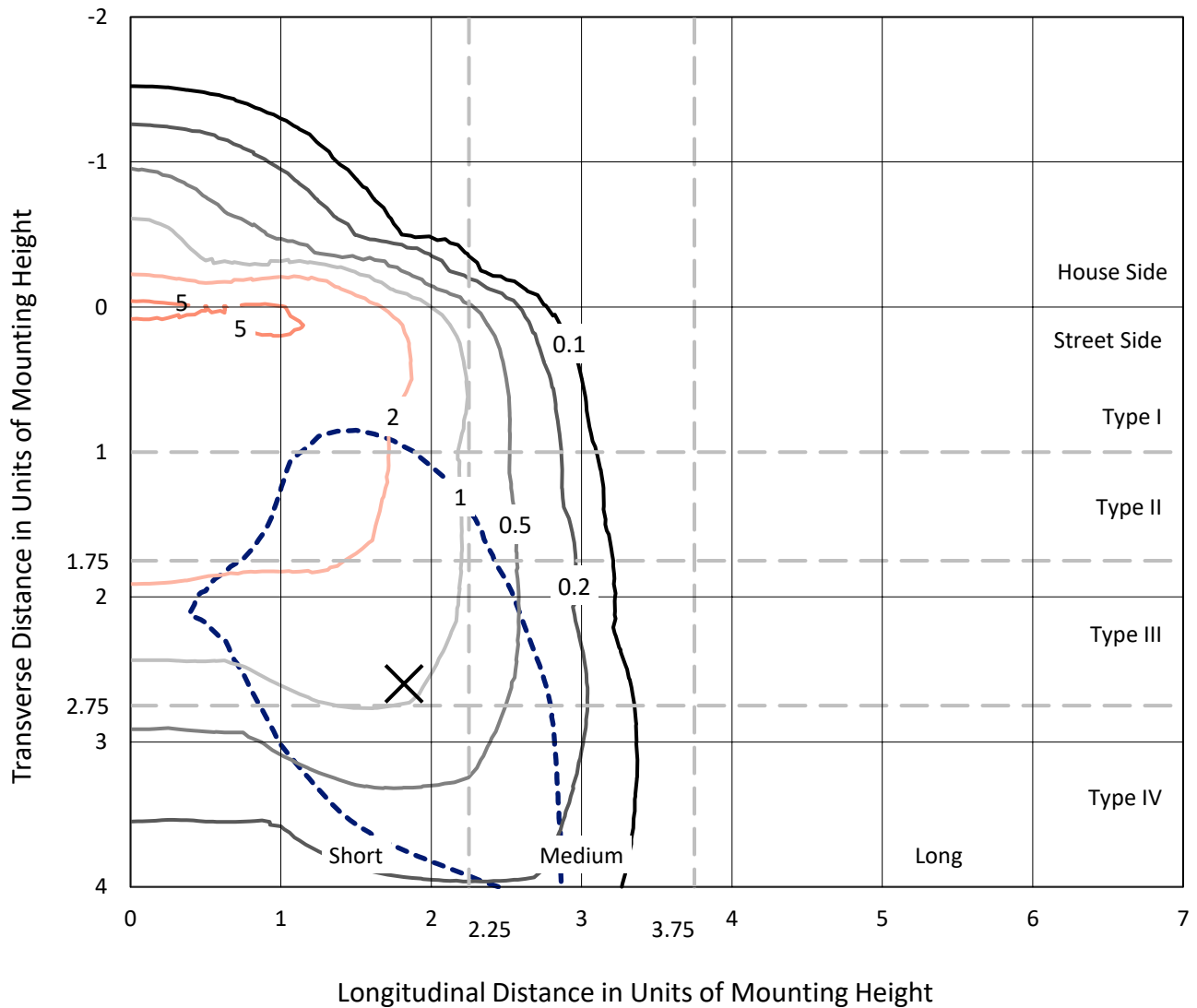
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884080
 CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

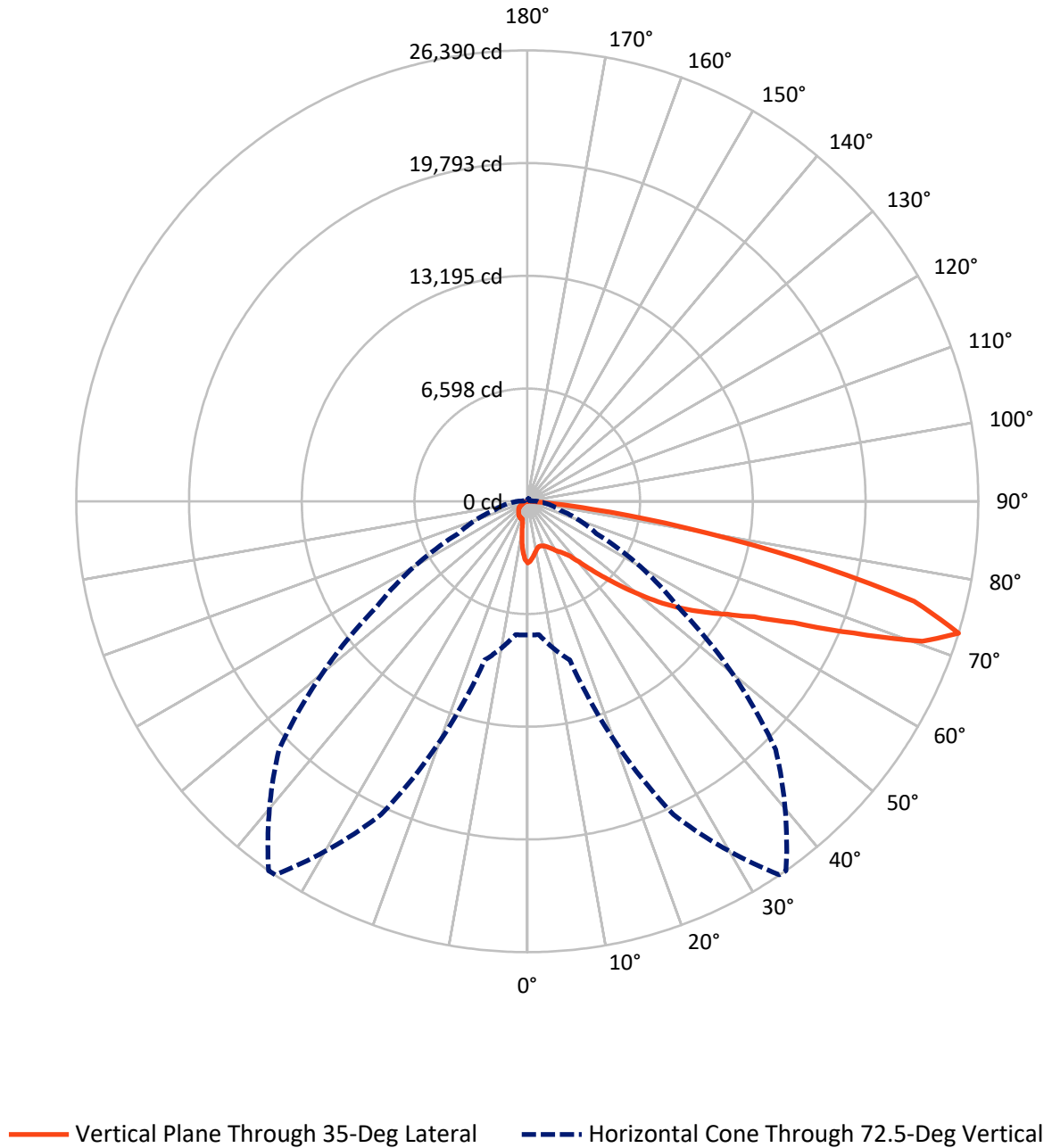
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P884080
CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P884080
 CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2800.3	0.0	2800.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	22081.6	0.0	22081.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	24882.0	0.0	24882.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	1.2
10°-20°	693.2	2.8
20°-30°	1126.2	4.5
30°-40°	1879.0	7.6
40°-50°	3555.1	14.3
50°-60°	5649.0	22.7
60°-70°	6988.2	28.1
70°-80°	4343.9	17.5
80°-90°	351.1	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24882.0	100.0
0°-180°	24882.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884080

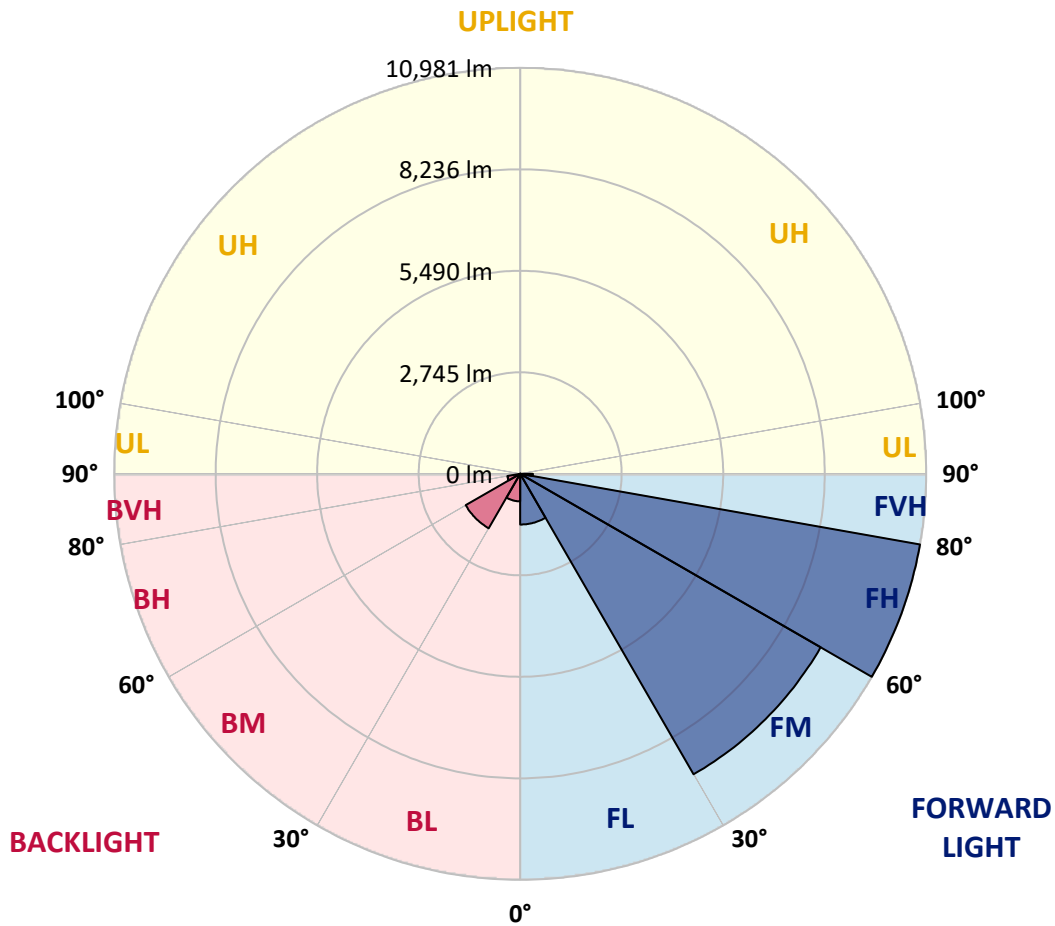
CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1371.6	5.5			
FM (30°-60°)	9383.0	37.7			
FH (60°-80°)	10980.7	44.1			G4/12000
FVH (80°-90°)	346.3	1.4			G3/500
BL (0°-30°)	744.1	3.0	B2/1000		
BM (30°-60°)	1700.1	6.8	B2/2500		
BH (60°-80°)	351.4	1.4	B1/500		G1/500
BVH (80°-90°)	4.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



REPORT NUMBER: P884080
 CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2
2.5°	3445.8	3475.0	3480.4	3489.6	3489.6	3500.5	3518.7	3544.2	3586.2	3608.1	3622.6
5°	3176.0	3197.8	3225.2	3247.1	3289.0	3294.5	3365.6	3434.9	3531.5	3604.4	3655.5
7.5°	2904.3	2929.8	2966.3	3019.2	3073.9	3090.3	3197.8	3314.5	3467.7	3604.4	3690.1
10°	2712.9	2714.7	2747.5	2800.4	2887.9	2908.0	3039.2	3205.1	3396.6	3582.5	3722.9
12.5°	2605.3	2618.1	2632.7	2672.8	2756.6	2769.4	2909.8	3104.9	3325.5	3569.8	3761.2
15°	2605.3	2614.4	2623.5	2643.6	2711.1	2722.0	2846.0	3041.1	3289.0	3575.2	3823.2
17.5°	2632.7	2647.2	2640.0	2663.7	2734.8	2742.1	2851.4	3022.8	3287.2	3609.9	3918.0
20°	2698.3	2709.2	2694.6	2709.2	2780.3	2794.9	2908.0	3057.5	3318.2	3670.0	4036.5
22.5°	2802.2	2807.7	2773.0	2784.0	2856.9	2875.1	3006.4	3155.9	3392.9	3766.7	4195.1
25°	2933.5	2944.4	2891.6	2904.3	2973.6	2995.5	3146.8	3303.6	3511.4	3899.8	4397.5
27.5°	3084.8	3090.3	3044.7	3042.9	3132.2	3163.2	3316.4	3485.9	3670.0	4067.5	4652.7
30°	3258.0	3274.4	3230.7	3223.4	3336.4	3361.9	3513.3	3710.2	3903.4	4319.1	5015.5
32.5°	3394.7	3407.5	3382.0	3400.2	3515.1	3535.1	3752.1	4027.4	4269.9	4676.4	5509.6
35°	3591.7	3598.9	3540.6	3573.4	3704.7	3755.7	4078.4	4472.2	4731.1	5124.9	6155.0
37.5°	4304.5	4304.5	4056.6	3894.3	4020.1	4065.7	4525.1	5032.0	5300.0	5726.6	6968.2
40°	5290.8	5274.4	4911.6	4579.8	4563.4	4652.7	5161.4	5737.5	6034.7	6448.6	7883.4
42.5°	6342.8	6317.3	5823.2	5495.0	5440.3	5471.3	5896.1	6607.2	6909.8	7329.2	8867.9
45°	7276.3	7269.0	6816.8	6375.6	6277.2	6375.6	6813.2	7624.5	7841.5	8282.7	9850.6
47.5°	8058.4	8058.4	7728.4	7440.4	7389.3	7447.7	8054.8	8753.1	8733.0	9298.2	10807.8
50°	8959.1	8951.8	8638.2	8514.2	8567.1	8649.1	9484.1	9941.8	9655.5	10295.5	11662.8
52.5°	9589.9	9633.6	9526.1	9506.0	9775.9	9918.1	10935.4	11104.9	10481.4	11241.7	12302.8
55°	10089.4	10140.5	10264.5	10404.8	10924.5	11110.4	12341.1	12208.0	11172.4	12062.1	12671.1
57.5°	10796.8	10723.9	10915.3	11192.5	12032.9	12257.2	13703.0	13249.0	11728.5	12727.6	12711.2
60°	11655.5	11666.5	11699.3	12049.3	13139.6	13427.7	15044.8	14233.5	12085.8	13136.0	12266.3
62.5°	12687.5	12703.9	12771.3	13309.2	14625.5	14897.1	16474.2	15039.4	12249.9	13021.1	11117.7
65°	12616.4	12685.6	13438.6	15278.2	16884.4	17152.4	18142.4	15604.5	12001.9	11971.0	9052.1
67.5°	11493.3	11606.3	12866.1	17630.1	20290.1	20589.1	20158.8	15715.8	10931.7	9309.1	5905.3
70°	10020.2	10060.3	11575.3	19745.0	24233.6	24536.3	21963.8	14492.4	8295.4	5192.4	2645.4
72.5°	7825.1	7834.2	9611.8	20235.4	26374.0	26390.4	20547.2	10758.5	4461.3	1994.6	918.9
75°	5589.8	5535.2	6437.6	16410.4	23203.5	23389.5	15404.0	5046.5	1704.7	942.6	457.6
77.5°	2997.3	3057.5	3642.7	9732.1	16029.3	16346.6	8404.8	1454.9	867.8	641.8	302.6
80°	926.2	977.2	1493.2	4455.8	9079.4	9270.8	3115.8	647.2	605.3	457.6	198.7
82.5°	291.7	302.6	696.5	1872.4	3768.5	3856.0	902.5	366.5	413.9	302.6	116.7
85°	83.9	85.7	309.9	698.3	931.6	949.9	253.4	142.2	237.0	187.8	60.2
87.5°	9.1	29.2	116.7	116.7	82.0	80.2	27.3	31.0	67.5	23.7	10.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884080

CATALOG NUMBER: NAV-SB4D-722-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2	3606.2
2.5°	3613.5	3615.4	3591.7	3551.5	3507.8	3471.3	3425.7	3389.3	3363.8	3356.5	3369.2
5°	3639.1	3626.3	3558.8	3436.7	3290.8	3165.0	3024.6	2913.4	2840.5	2809.5	2820.4
7.5°	3677.3	3640.9	3493.2	3252.5	2973.6	2725.6	2474.0	2279.0	2155.0	2093.0	2102.1
10°	3710.2	3637.2	3383.8	2986.4	2559.7	2184.2	1845.1	1609.9	1478.6	1416.6	1418.4
12.5°	3741.2	3635.4	3241.6	2670.9	2093.0	1633.6	1318.2	1201.5	1165.0	1152.2	1148.6
15°	3799.5	3640.9	3062.9	2310.0	1628.1	1234.3	1119.4	1117.6	1124.9	1121.3	1119.4
17.5°	3879.7	3646.3	2860.6	1927.1	1256.2	1088.4	1083.0	1099.4	1110.3	1104.8	1103.0
20°	3983.6	3668.2	2645.4	1547.9	1079.3	1052.0	1064.7	1079.3	1088.4	1079.3	1077.5
22.5°	4129.5	3706.5	2410.2	1243.4	1022.8	1030.1	1041.0	1057.4	1066.6	1053.8	1052.0
25°	4308.2	3766.7	2178.7	1081.1	995.5	1004.6	1021.0	1039.2	1050.1	1037.4	1035.6
27.5°	4539.7	3863.3	1965.4	1044.7	968.1	973.6	997.3	1024.6	1039.2	1022.8	1022.8
30°	4875.2	4021.9	1781.2	1061.1	951.7	938.9	971.8	1010.0	1026.4	1011.9	1010.0
32.5°	5320.0	4246.2	1668.2	1086.6	944.4	898.8	929.8	979.0	1006.4	997.3	997.3
35°	5903.4	4587.1	1624.4	1115.8	938.9	856.9	878.8	931.6	979.0	988.2	988.2
37.5°	6610.8	5061.1	1637.2	1128.5	922.5	822.3	833.2	878.8	940.8	969.9	977.2
40°	7414.8	5613.5	1710.1	1115.8	904.3	793.1	794.9	829.5	884.2	928.0	942.6
42.5°	8244.4	6259.0	1845.1	1068.4	887.9	767.6	762.1	785.8	822.3	853.2	866.0
45°	9033.8	6922.6	1978.1	1002.7	867.8	742.0	729.3	738.4	745.7	758.4	765.7
47.5°	9723.0	7389.3	1939.9	942.6	840.5	712.9	691.0	687.3	665.5	663.6	661.8
50°	10198.8	7491.4	1722.9	882.4	800.4	680.0	645.4	623.5	585.2	567.0	568.8
52.5°	10350.2	7088.5	1407.5	822.3	734.7	636.3	587.1	552.4	505.0	488.6	486.8
55°	10149.6	6299.1	1124.9	749.3	643.6	577.9	523.3	477.7	439.4	419.3	419.3
57.5°	9659.2	5294.5	889.7	663.6	547.0	512.3	457.6	412.0	379.2	359.2	355.5
60°	8846.0	4204.2	703.7	561.5	466.7	441.2	384.7	355.5	326.3	302.6	297.2
62.5°	7611.7	3000.9	552.4	444.9	390.2	361.0	328.2	306.3	271.7	238.8	233.4
65°	5939.9	1835.9	426.6	326.3	313.6	299.0	278.9	258.9	217.0	184.1	178.7
67.5°	3746.6	869.7	304.5	246.1	248.0	240.7	231.5	215.1	184.1	155.0	151.3
70°	1650.0	421.2	200.5	187.8	184.1	184.1	191.4	186.0	156.8	129.4	124.0
72.5°	561.5	226.1	149.5	142.2	133.1	131.3	160.4	155.0	125.8	100.3	94.8
75°	293.5	151.3	109.4	102.1	80.2	96.6	127.6	120.3	89.3	65.6	60.2
77.5°	191.4	107.6	74.8	65.6	45.6	63.8	94.8	83.9	52.9	32.8	29.2
80°	120.3	71.1	43.8	31.0	21.9	34.6	51.0	36.5	20.1	7.3	5.5
82.5°	63.8	36.5	16.4	10.9	9.1	10.9	12.8	9.1	3.6	0.0	0.0
85°	25.5	12.8	5.5	3.6	1.8	0.0	3.6	1.8	0.0	0.0	0.0
87.5°	9.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)