

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: P884001

Luminaire Tested: **NAV-SB4C-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25311 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

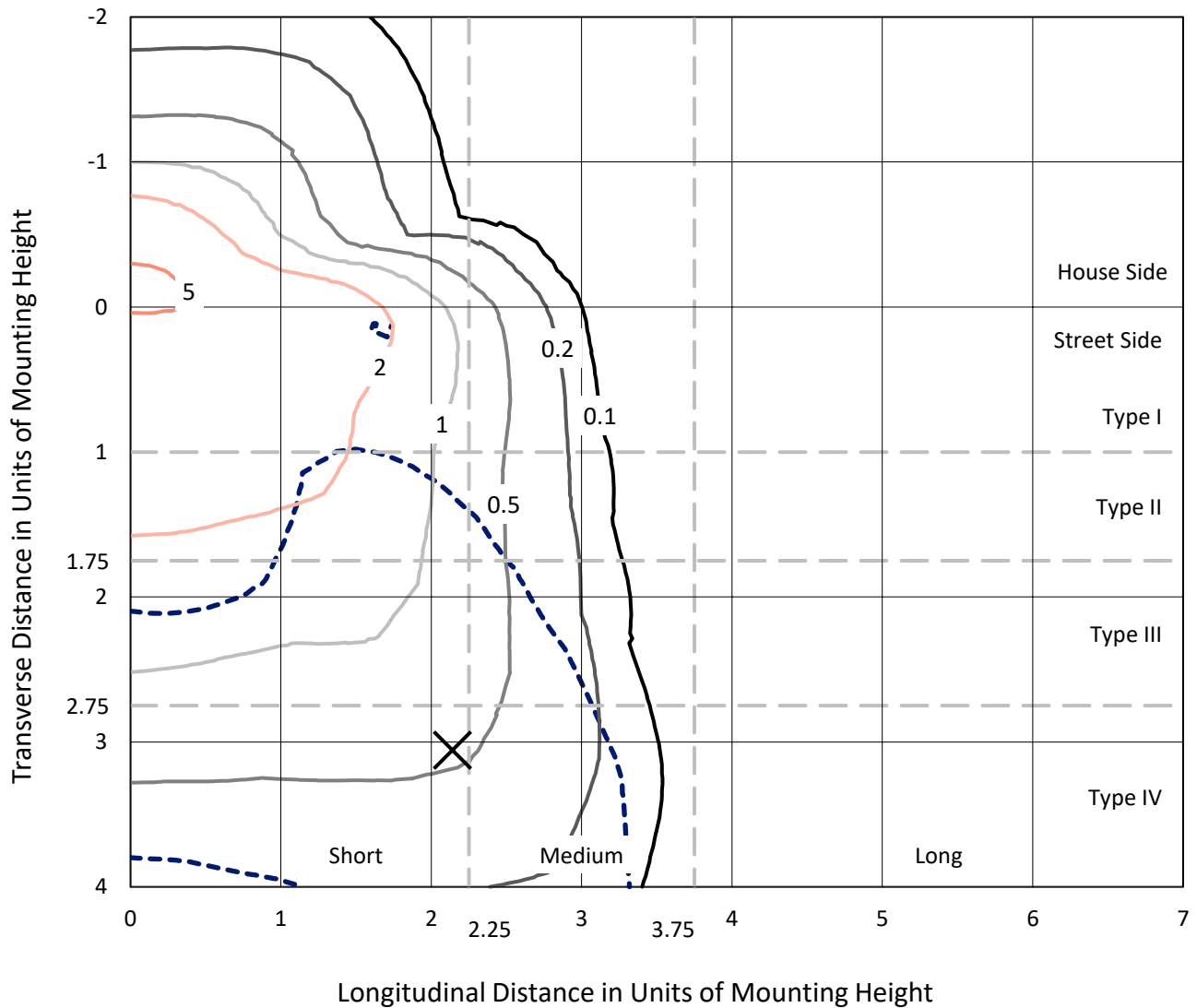
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: NAV-SB4C-835-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

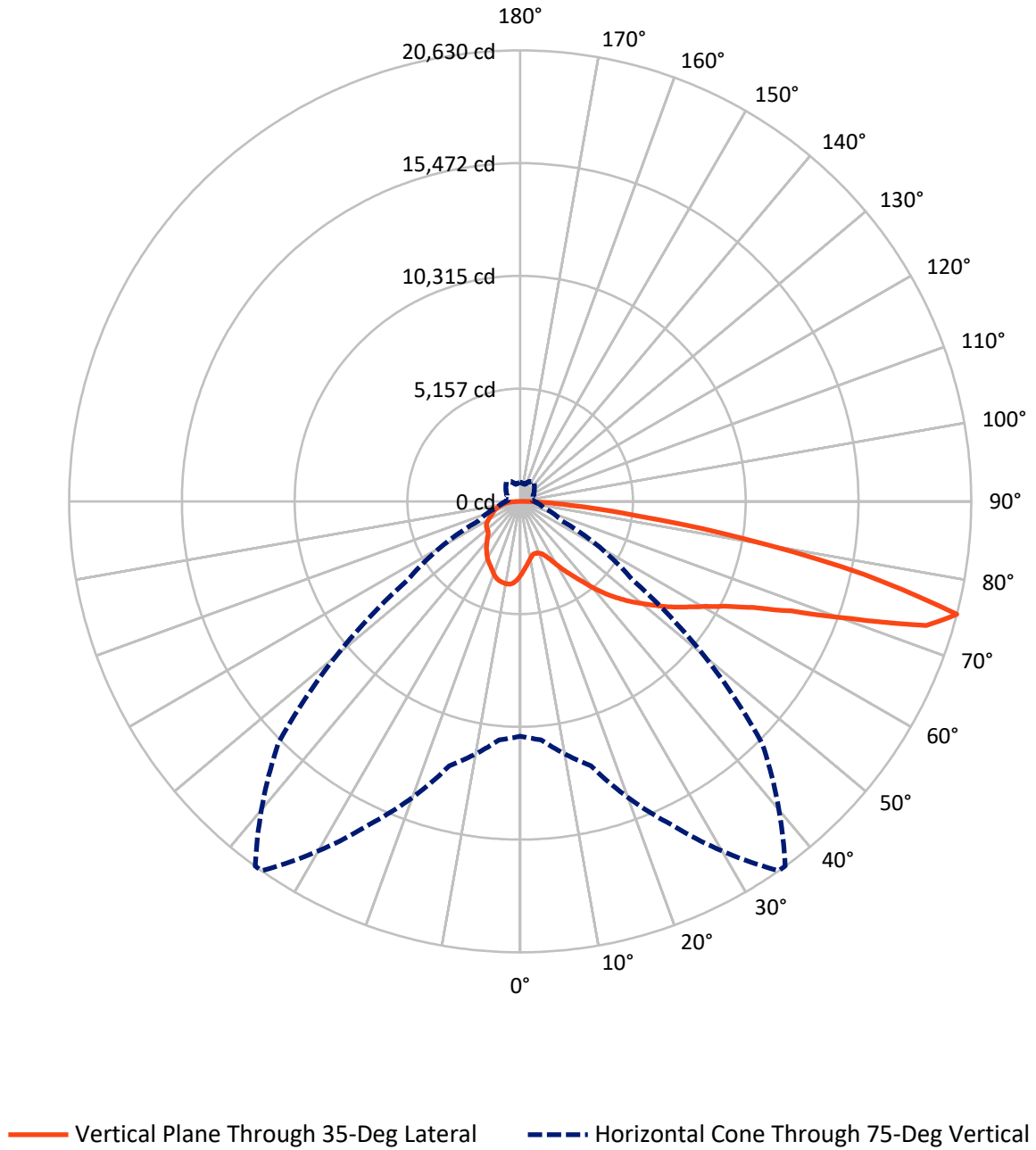
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Short - N/A

REPORT NUMBER: P884001
CATALOG NUMBER: NAV-SB4C-835-U-T4FT

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6023.4	0.0	6023.4
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	19287.6	0.0	19287.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	25311.0	0.0	25311.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.3	1.3
10°-20°	921.1	3.6
20°-30°	1546.8	6.1
30°-40°	2403.9	9.5
40°-50°	3568.1	14.1
50°-60°	4926.0	19.5
60°-70°	5976.3	23.6
70°-80°	4939.0	19.5
80°-90°	710.4	2.8
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°	25311.0	100.0
0°-180°	25311.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884001

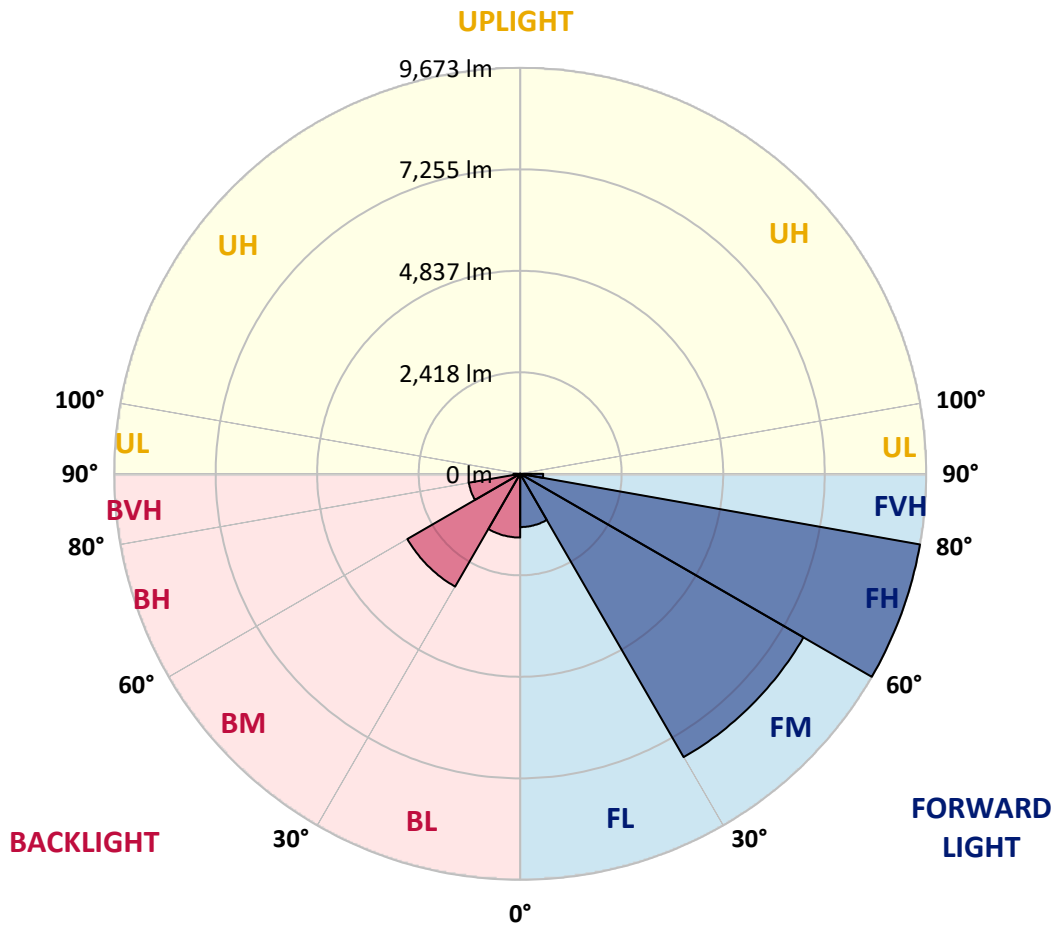
CATALOG NUMBER: NAV-SB4C-835-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1269.3	5.0			
FM (30°-60°)	7794.4	30.8			
FH (60°-80°)	9673.5	38.2			G4/12000
FVH (80°-90°)	550.4	2.2			G4/750
BL (0°-30°)	1518.0	6.0	B3/2500		
BM (30°-60°)	3103.6	12.3	B3/5000		
BH (60°-80°)	1241.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	160.0	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



REPORT NUMBER: P884001
 CATALOG NUMBER: NAV-SB4C-835-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9
2.5°	3110.1	3129.3	3137.5	3133.4	3153.9	3151.2	3179.9	3215.5	3264.8	3312.7	3382.4
5°	2870.7	2891.2	2909.0	2925.4	2965.1	2977.4	3022.6	3091.0	3181.3	3273.0	3387.9
7.5°	2647.7	2665.5	2692.8	2722.9	2790.0	2802.3	2877.5	2984.3	3110.1	3244.2	3403.0
10°	2465.7	2483.5	2512.2	2546.4	2629.9	2644.9	2740.7	2883.0	3047.2	3216.9	3419.4
12.5°	2387.7	2393.2	2409.6	2443.8	2516.3	2525.9	2631.2	2794.1	2985.6	3196.4	3444.0
15°	2383.6	2394.5	2395.9	2413.7	2473.9	2478.0	2575.1	2736.6	2947.3	3192.2	3481.0
17.5°	2424.6	2432.8	2420.5	2431.5	2482.1	2488.9	2565.6	2709.2	2935.0	3210.0	3543.9
20°	2534.1	2540.9	2504.0	2488.9	2525.9	2531.4	2606.6	2727.0	2947.3	3247.0	3630.1
22.5°	2766.7	2770.8	2680.5	2618.9	2621.7	2624.4	2690.1	2799.5	2995.2	3314.0	3739.6
25°	3129.3	3126.6	2982.9	2863.9	2795.4	2780.4	2824.2	2917.2	3075.9	3403.0	3880.5
27.5°	3553.5	3533.0	3389.3	3211.4	3062.3	3040.4	3030.8	3070.5	3190.9	3520.6	4052.9
30°	4032.4	4013.2	3858.6	3626.0	3419.4	3383.8	3293.5	3273.0	3361.9	3680.7	4292.4
32.5°	4557.8	4545.5	4360.8	4078.9	3802.5	3761.5	3609.6	3554.8	3624.6	3922.9	4626.2
35°	4998.4	4987.5	4834.2	4544.1	4206.2	4155.5	4000.9	3939.3	3974.9	4233.5	5062.7
37.5°	5396.6	5391.1	5259.7	5031.2	4682.3	4620.8	4447.0	4426.5	4419.6	4642.6	5592.2
40°	5766.0	5752.3	5615.5	5495.1	5236.5	5180.4	5027.1	5009.3	4957.4	5146.2	6191.6
42.5°	6175.1	6139.6	5941.2	5885.1	5815.3	5768.8	5677.1	5679.8	5564.9	5714.0	6826.5
45°	6509.0	6488.5	6284.6	6251.8	6327.0	6307.9	6387.2	6407.8	6184.7	6309.2	7486.0
47.5°	6867.5	6848.3	6675.9	6652.7	6856.6	6862.0	7142.5	7149.4	6789.5	6927.7	8146.9
50°	7309.5	7282.1	7111.1	7139.8	7368.3	7388.8	7901.9	7855.4	7346.4	7555.8	8802.3
52.5°	7600.9	7617.3	7580.4	7626.9	7938.9	7958.0	8649.0	8530.0	7897.8	8175.6	9445.4
55°	7815.7	7848.6	7963.5	8070.2	8540.9	8560.1	9353.7	9171.7	8354.8	8750.3	10050.2
57.5°	8092.1	8045.6	8260.4	8468.4	9112.9	9163.5	10039.2	9790.2	8759.9	9245.6	10464.8
60°	8488.9	8456.1	8623.0	8930.9	9753.2	9834.0	10764.4	10347.1	9056.8	9638.3	10545.5
62.5°	9293.5	9211.4	9237.4	9509.7	10560.5	10667.3	11582.7	10832.8	9204.6	9791.6	10113.1
65°	10496.2	10355.3	10223.9	10412.8	11697.6	11803.0	12506.3	11214.6	9149.8	9494.6	8965.1
67.5°	12010.9	11871.4	11709.9	11887.8	13372.4	13455.9	13646.1	11429.4	8718.8	8350.7	6935.9
70°	13260.2	13208.2	13401.1	14133.2	16047.4	16050.2	15107.4	11251.5	7538.0	5920.6	4013.2
72.5°	13094.6	13063.2	14079.8	16343.0	19418.9	19346.4	16490.8	9905.1	5077.8	2670.9	1503.8
75°	10742.5	10946.4	12521.3	16303.3	20629.9	20620.3	15643.8	6296.9	2100.3	1107.0	777.2
77.5°	5760.5	6083.5	8129.1	12036.9	16104.9	16347.1	10998.4	2203.0	901.7	708.8	537.7
80°	1878.7	2160.5	3240.1	6128.6	10464.8	10419.6	4713.8	864.8	617.1	502.2	372.2
82.5°	797.7	830.6	1447.7	2894.0	5370.6	5287.1	1501.0	496.7	433.8	343.4	229.9
85°	312.0	348.9	639.0	1338.2	2326.1	2275.5	541.8	246.3	277.8	224.4	136.8
87.5°	102.6	124.5	228.5	458.4	723.8	697.8	132.7	84.8	120.4	102.6	49.3
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: P884001

CATALOG NUMBER: NAV-SB4C-835-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9	3372.9
2.5°	3401.6	3423.5	3449.5	3487.8	3520.6	3548.0	3576.7	3594.5	3601.4	3621.9	3620.5
5°	3426.2	3474.1	3538.4	3601.4	3662.9	3699.9	3732.7	3749.1	3764.2	3775.1	3777.9
7.5°	3467.3	3528.8	3630.1	3712.2	3764.2	3794.3	3816.2	3810.7	3816.2	3818.9	3823.0
10°	3502.9	3589.1	3709.5	3787.5	3827.1	3828.5	3823.0	3803.9	3794.3	3795.7	3798.4
12.5°	3545.3	3641.0	3771.0	3836.7	3847.7	3817.6	3794.3	3761.5	3749.1	3743.7	3740.9
15°	3602.7	3712.2	3838.1	3862.7	3835.3	3797.0	3757.4	3704.0	3676.6	3654.7	3661.6
17.5°	3672.5	3792.9	3890.1	3872.3	3813.5	3750.5	3686.2	3605.5	3549.4	3526.1	3527.5
20°	3769.7	3877.8	3929.8	3851.8	3762.8	3667.0	3557.6	3459.1	3407.1	3383.8	3381.1
22.5°	3887.3	3991.3	3968.1	3816.2	3690.3	3537.1	3400.2	3327.7	3301.7	3285.3	3288.0
25°	4028.3	4117.2	3995.4	3764.2	3571.3	3364.7	3259.3	3236.0	3223.7	3211.4	3211.4
27.5°	4211.6	4259.5	4016.0	3687.6	3385.2	3181.3	3143.0	3147.1	3143.0	3122.5	3126.6
30°	4453.8	4444.2	4035.1	3563.1	3171.7	3015.7	3018.5	3036.3	3039.0	3025.3	3032.2
32.5°	4772.6	4675.5	4044.7	3401.6	2967.8	2870.7	2873.4	2892.6	2906.3	2883.0	2894.0
35°	5158.5	4945.0	4029.6	3199.1	2810.5	2732.5	2712.0	2717.4	2721.6	2699.7	2714.7
37.5°	5608.7	5247.4	3962.6	2974.7	2680.5	2597.0	2553.2	2516.3	2494.4	2473.9	2487.6
40°	6102.6	5577.2	3839.5	2755.8	2535.5	2453.4	2387.7	2317.9	2244.0	2216.6	2229.0
42.5°	6619.8	5916.5	3690.3	2546.4	2368.5	2301.5	2231.7	2130.4	2019.6	1963.5	1970.4
45°	7156.2	6264.1	3543.9	2339.8	2197.5	2168.8	2088.0	1966.2	1845.8	1774.7	1769.2
47.5°	7681.6	6592.5	3329.1	2131.8	2037.4	2068.9	2005.9	1893.7	1759.6	1647.4	1635.1
50°	8183.8	6900.3	2977.4	1921.1	1907.4	2038.8	1978.6	1817.1	1663.9	1520.2	1507.9
52.5°	8681.9	7149.4	2527.3	1729.5	1837.6	2030.6	1943.0	1765.1	1577.7	1427.1	1410.7
55°	9104.7	7278.0	2093.5	1565.3	1736.4	1960.8	1900.6	1703.5	1455.9	1295.8	1282.1
57.5°	9345.5	7174.0	1732.3	1403.9	1596.8	1845.8	1828.1	1572.2	1310.8	1187.7	1171.3
60°	9241.5	6752.6	1436.7	1262.9	1464.1	1721.3	1702.2	1442.2	1200.0	1083.7	1067.3
62.5°	8668.2	5949.4	1202.7	1139.8	1343.7	1594.1	1576.3	1342.3	1115.2	1003.0	985.2
65°	7513.3	4839.7	1020.8	1037.2	1221.9	1440.8	1466.8	1258.8	1048.1	938.7	920.9
67.5°	5730.4	3505.6	878.4	948.2	1102.9	1290.3	1365.6	1198.6	992.0	888.0	871.6
70°	3266.1	1990.9	758.0	862.0	997.5	1150.7	1287.6	1150.7	931.8	845.6	834.7
72.5°	1238.3	914.0	655.4	775.8	896.2	1033.1	1201.4	1075.5	862.0	797.7	786.8
75°	660.9	556.9	551.4	674.6	779.9	918.1	1093.3	1001.6	810.0	842.9	870.2
77.5°	450.2	394.1	461.1	577.4	652.7	790.9	978.3	889.4	701.9	699.2	644.5
80°	312.0	279.1	374.9	465.2	504.9	665.0	853.8	763.5	571.9	533.6	510.4
82.5°	187.5	182.0	280.5	347.5	357.1	513.1	707.4	640.4	468.0	407.8	410.5
85°	102.6	108.1	179.2	203.9	208.0	358.5	554.2	495.3	359.9	302.4	305.1
87.5°	28.7	36.9	65.7	80.7	99.9	186.1	329.8	294.2	180.6	125.9	125.9
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)