

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: P883979

Luminaire Tested: **NAV-SB4C-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883979
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24677 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

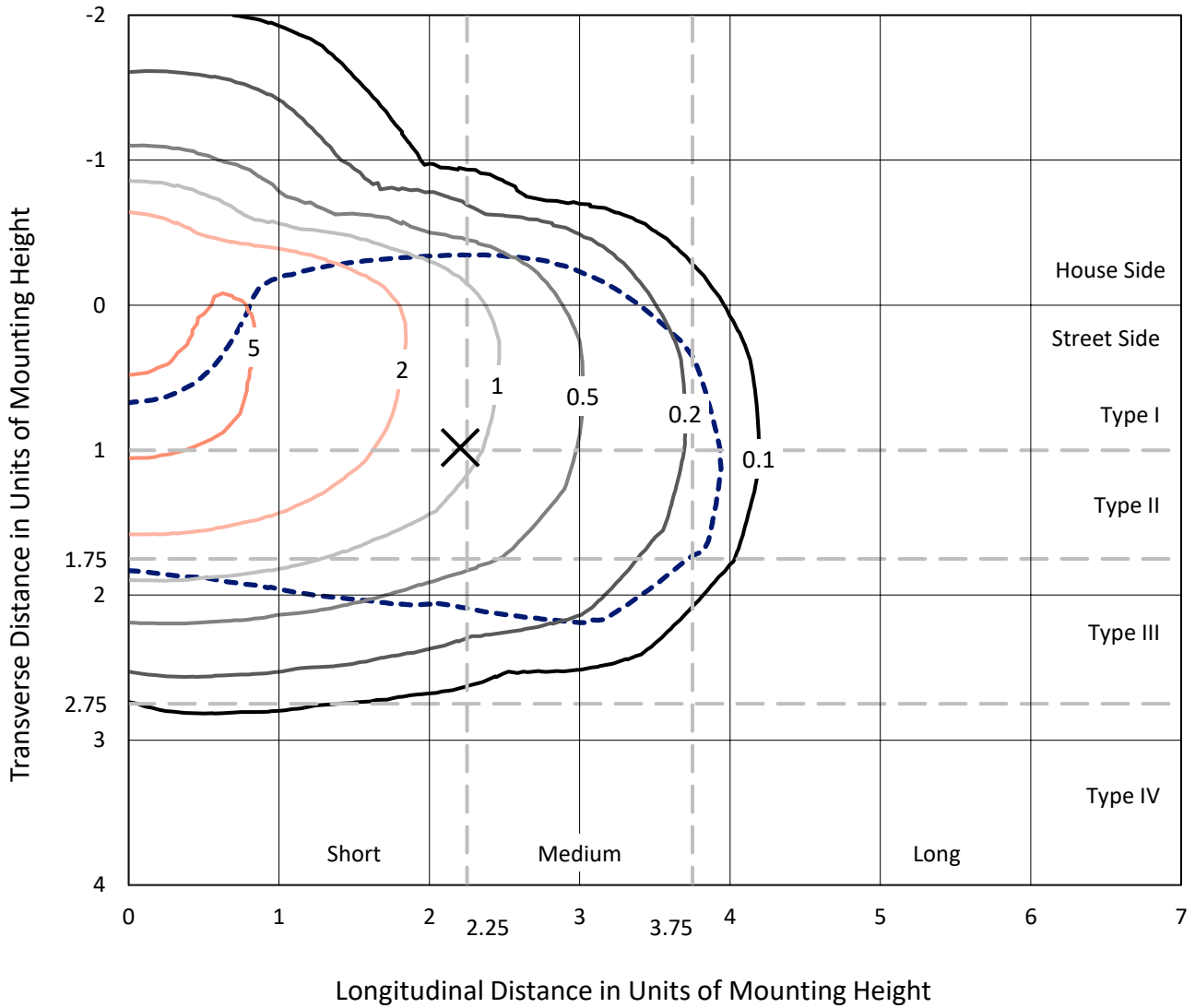
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

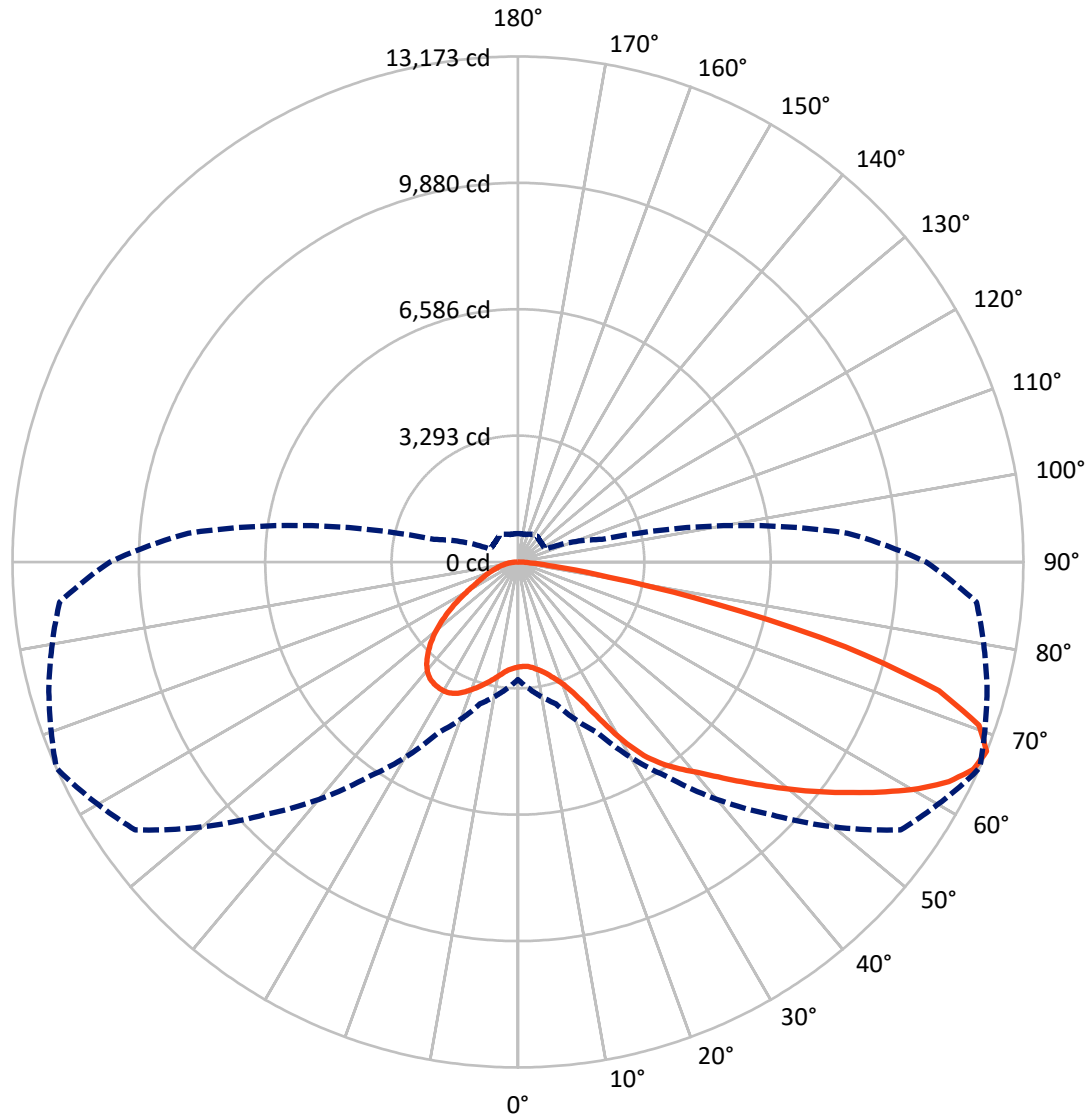
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Short - N/A

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CATALOG NUMBER: NAV-SB4C-827-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6135.9	0.0	6135.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	18541.1	0.0	18541.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	24677.0	0.0	24677.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.4	1.1
10°-20°	896.5	3.6
20°-30°	1728.0	7.0
30°-40°	3029.9	12.3
40°-50°	4504.5	18.3
50°-60°	5709.9	23.1
60°-70°	5587.0	22.6
70°-80°	2665.0	10.8
80°-90°	284.8	1.2
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°	24677.0	100.0
0°-180°	24677.0	100.0

Coefficient of Utilization



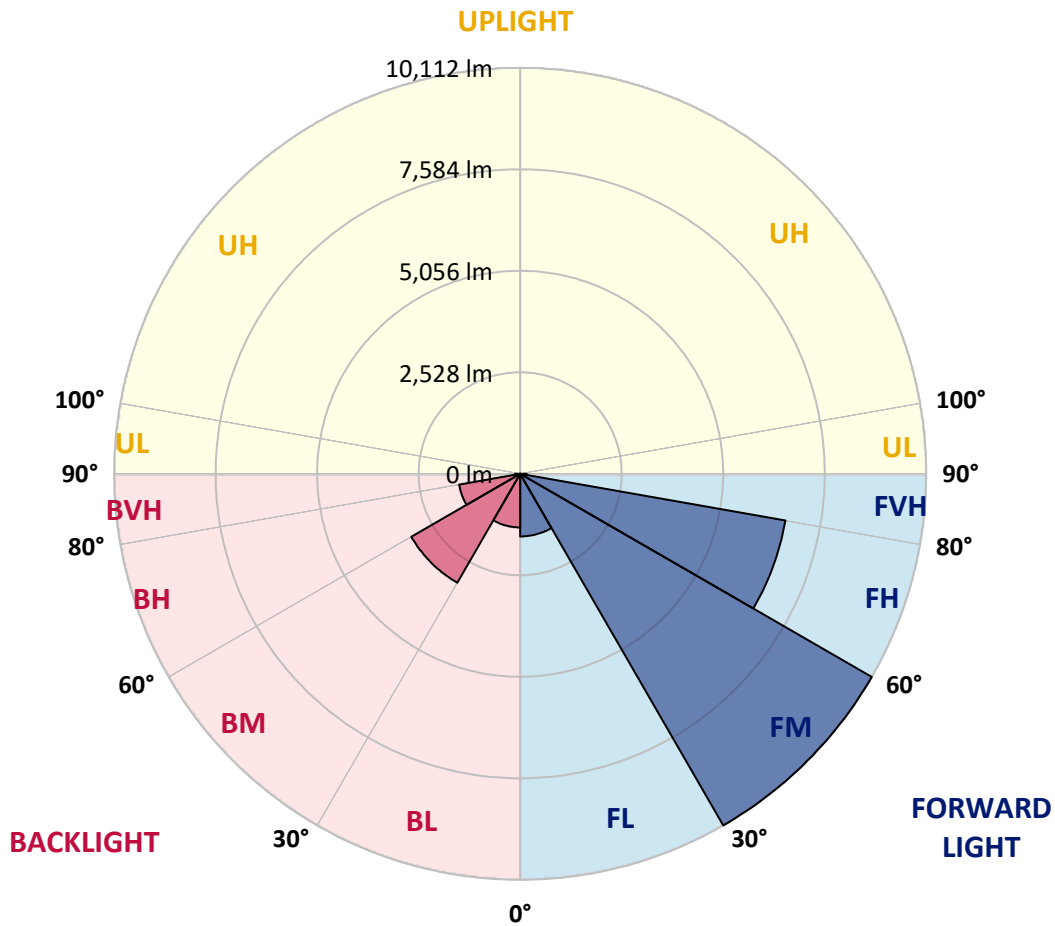
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1559.3	6.3			
FM (30°-60°)	10112.4	41.0			
FH (60°-80°)	6707.9	27.2			G3/7500
FVH (80°-90°)	161.5	0.7			G2/225
BL (0°-30°)	1336.6	5.4	B3/2500		
BM (30°-60°)	3131.8	12.7	B3/5000		
BH (60°-80°)	1544.1	6.3	B3/2500		G3/2500
BVH (80°-90°)	123.3	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0
2.5°	2708.5	2724.0	2720.2	2713.7	2712.4	2715.0	2718.9	2722.7	2721.4	2727.9	2738.3
5°	2700.7	2716.3	2715.0	2715.0	2720.2	2730.5	2737.0	2743.5	2737.0	2744.8	2759.0
7.5°	2705.9	2717.6	2722.7	2727.9	2740.9	2760.3	2775.9	2790.2	2782.4	2791.5	2809.6
10°	2772.0	2781.1	2786.3	2786.3	2795.3	2817.4	2832.9	2858.9	2852.4	2866.7	2890.0
12.5°	2892.6	2901.7	2901.7	2896.5	2903.0	2917.2	2922.4	2950.9	2939.3	2962.6	2985.9
15°	3040.4	3058.5	3044.3	3035.2	3037.8	3052.1	3050.8	3072.8	3061.1	3080.6	3101.3
17.5°	3203.8	3227.1	3203.8	3202.5	3197.3	3212.8	3214.1	3233.6	3212.8	3227.1	3241.4
20°	3396.9	3429.4	3409.9	3416.4	3404.7	3411.2	3417.7	3446.2	3413.8	3424.2	3420.3
22.5°	3669.2	3708.1	3687.4	3712.0	3704.2	3699.0	3697.7	3748.3	3697.7	3701.6	3664.0
25°	4066.0	4112.6	4076.3	4110.0	4110.0	4126.9	4146.3	4211.2	4126.9	4102.3	4005.0
27.5°	4652.0	4698.7	4627.4	4648.1	4641.6	4683.1	4662.4	4823.1	4732.4	4692.2	4496.4
30°	5357.3	5440.3	5305.5	5300.3	5293.8	5359.9	5389.7	5496.1	5404.0	5363.8	5127.8
32.5°	6119.7	6206.6	6045.8	5999.1	5974.5	6014.7	5990.0	6075.6	6012.1	5949.8	5658.1
35°	6926.1	7011.7	6858.7	6768.0	6669.4	6585.1	6497.0	6519.0	6459.4	6364.7	6062.6
37.5°	7688.5	7845.4	7683.3	7586.1	7404.6	7239.9	6993.6	6891.1	6835.4	6748.5	6443.8
40°	8465.1	8554.6	8431.4	8348.4	8151.4	7893.4	7499.2	7282.7	7207.5	7123.2	6865.2
42.5°	9036.9	9122.5	9056.4	8999.3	8845.0	8545.5	8036.0	7765.0	7656.1	7561.4	7342.3
45°	9490.7	9554.2	9512.7	9533.5	9467.4	9176.9	8592.2	8282.3	8169.5	8054.1	7881.7
47.5°	9673.5	9740.9	9807.1	9930.2	10043.0	9829.1	9189.9	8842.4	8723.2	8605.2	8435.3
50°	9652.8	9721.5	9913.4	10175.3	10525.3	10454.0	9820.0	9438.8	9328.6	9193.8	9036.9
52.5°	9486.8	9564.6	9811.0	10246.6	10804.1	10922.1	10461.8	10054.7	9951.0	9790.2	9633.3
55°	9051.2	9097.9	9467.4	10084.5	10870.2	11248.8	11090.6	10710.8	10607.0	10382.7	10211.6
57.5°	8243.4	8310.9	8848.9	9647.6	10704.3	11470.5	11643.0	11400.5	11300.7	10977.8	10798.9
60°	7189.3	7297.0	7912.8	8913.7	10281.6	11469.2	12144.7	12078.6	11995.6	11563.9	11377.2
62.5°	5996.5	6121.0	6713.5	7876.5	9542.6	11143.8	12458.5	12646.5	12603.7	12104.5	11866.0
65°	4605.3	4690.9	5280.8	6534.6	8392.5	10445.0	12494.8	13034.2	13041.9	12515.5	12121.4
67.5°	3066.3	3312.7	3824.8	4903.5	6852.2	9302.7	12175.8	13097.7	13172.9	12656.9	11993.0
70°	1496.2	1820.3	2322.1	3186.9	4903.5	7551.1	11342.2	12576.5	12743.7	12244.6	11228.1
72.5°	621.0	726.1	999.6	1572.7	2814.8	5095.4	9667.0	11163.2	11473.1	10849.5	9440.1
75°	418.8	453.8	571.8	806.5	1282.3	2512.7	6971.5	8323.8	8823.0	8194.2	6697.9
77.5°	322.8	344.9	416.2	564.0	762.4	950.4	3731.5	5016.3	5274.3	4882.8	3485.1
80°	254.1	271.0	311.2	411.0	540.7	508.2	1271.9	2272.8	2421.9	2031.7	1120.2
82.5°	220.4	226.9	223.0	278.8	359.1	296.9	417.5	838.9	925.7	671.6	365.6
85°	159.5	177.6	185.4	172.4	190.6	150.4	171.1	296.9	326.7	291.7	206.2
87.5°	64.8	95.9	118.0	111.5	70.0	42.8	53.2	86.9	99.8	108.9	67.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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 CATALOG NUMBER: NAV-SB4C-827-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0	2737.0
2.5°	2739.6	2748.7	2755.2	2762.9	2768.1	2775.9	2791.5	2800.5	2801.8	2808.3	2807.0
5°	2764.2	2777.2	2791.5	2812.2	2835.5	2855.0	2884.8	2905.6	2913.3	2919.8	2918.5
7.5°	2817.4	2835.5	2861.5	2897.8	2931.5	2957.4	2993.7	3018.4	3043.0	3052.1	3053.4
10°	2896.5	2922.4	2960.0	3009.3	3045.6	3079.3	3116.9	3137.6	3162.3	3172.6	3177.8
12.5°	2995.0	3022.2	3071.5	3140.2	3173.9	3197.3	3210.2	3205.1	3210.2	3219.3	3221.9
15°	3107.8	3137.6	3193.4	3267.3	3290.6	3269.9	3241.4	3215.4	3211.5	3214.1	3223.2
17.5°	3241.4	3263.4	3328.2	3390.5	3373.6	3288.0	3225.8	3184.3	3163.6	3157.1	3166.2
20°	3428.1	3428.1	3481.2	3520.1	3407.3	3262.1	3164.9	3097.4	3054.7	3036.5	3032.6
22.5°	3655.0	3634.2	3667.9	3640.7	3400.8	3189.5	3054.7	2938.0	2873.1	2847.2	2843.3
25°	3942.8	3918.2	3909.1	3740.5	3354.2	3074.1	2855.0	2713.7	2656.6	2642.4	2645.0
27.5°	4377.1	4314.9	4196.9	3795.0	3268.6	2892.6	2621.6	2490.7	2458.2	2459.5	2463.4
30°	4955.4	4830.9	4541.8	3804.1	3128.6	2635.9	2383.0	2289.7	2274.1	2280.6	2302.7
32.5°	5490.9	5372.9	4894.5	3762.6	2913.3	2384.3	2169.1	2106.9	2083.5	2091.3	2101.7
35°	5910.9	5878.5	5221.2	3704.2	2648.8	2148.4	1977.2	1924.1	1878.7	1868.3	1876.1
37.5°	6307.7	6294.7	5466.2	3622.5	2386.9	1981.1	1822.9	1752.9	1686.8	1650.5	1651.8
40°	6743.3	6730.4	5627.0	3496.8	2154.9	1835.9	1684.2	1592.2	1510.5	1444.4	1450.8
42.5°	7233.4	7156.9	5703.5	3316.6	1957.8	1712.7	1571.4	1446.9	1339.3	1278.4	1282.3
45°	7768.9	7596.5	5702.2	3087.1	1791.8	1599.9	1450.8	1274.5	1174.7	1117.6	1115.0
47.5°	8336.8	8016.5	5632.2	2832.9	1631.1	1475.5	1264.1	1129.3	1063.2	1028.2	1020.4
50°	8922.8	8409.4	5512.9	2541.2	1466.4	1334.1	1147.4	1055.4	1004.8	972.4	960.7
52.5°	9473.9	8765.9	5369.0	2210.6	1299.1	1196.7	1095.6	1024.3	971.1	934.8	919.3
55°	9986.0	9073.2	5165.4	1872.2	1163.0	1104.7	1070.9	1011.3	950.4	907.6	890.7
57.5°	10441.1	9272.9	4814.1	1554.6	1065.8	1041.1	1045.0	989.3	919.3	882.9	859.6
60°	10819.7	9419.4	4294.2	1260.2	986.7	978.9	1004.8	947.8	866.1	824.6	806.5
62.5°	11046.6	9416.8	3656.3	1032.0	919.3	921.8	951.7	895.9	812.9	774.0	762.4
65°	11027.1	9186.0	2956.1	882.9	854.4	857.0	895.9	838.9	768.9	745.5	744.2
67.5°	10636.9	8623.3	2267.7	785.7	783.1	794.8	840.2	800.0	741.6	739.0	742.9
70°	9580.2	7455.1	1633.6	707.9	709.2	726.1	785.7	775.3	727.4	732.5	731.3
72.5°	7682.0	5684.1	1096.9	626.2	627.5	654.8	733.8	755.9	713.1	781.8	792.2
75°	5116.2	3544.8	705.3	539.4	540.7	575.7	688.5	718.3	674.2	779.2	785.7
77.5°	2458.2	1593.5	510.8	453.8	453.8	486.2	595.1	643.1	574.4	605.5	554.9
80°	849.2	599.0	401.9	365.6	357.8	379.9	501.8	557.5	495.3	456.4	427.9
82.5°	334.5	311.2	322.8	283.9	258.0	272.3	390.3	460.3	364.3	329.3	328.0
85°	191.9	202.3	228.2	188.0	149.1	167.3	286.5	330.6	274.9	242.5	247.6
87.5°	51.9	71.3	105.0	97.2	67.4	71.3	136.1	182.8	158.2	121.9	125.8
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)