

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: P885166

Luminaire Tested: **NAV-SB6B-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20278 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

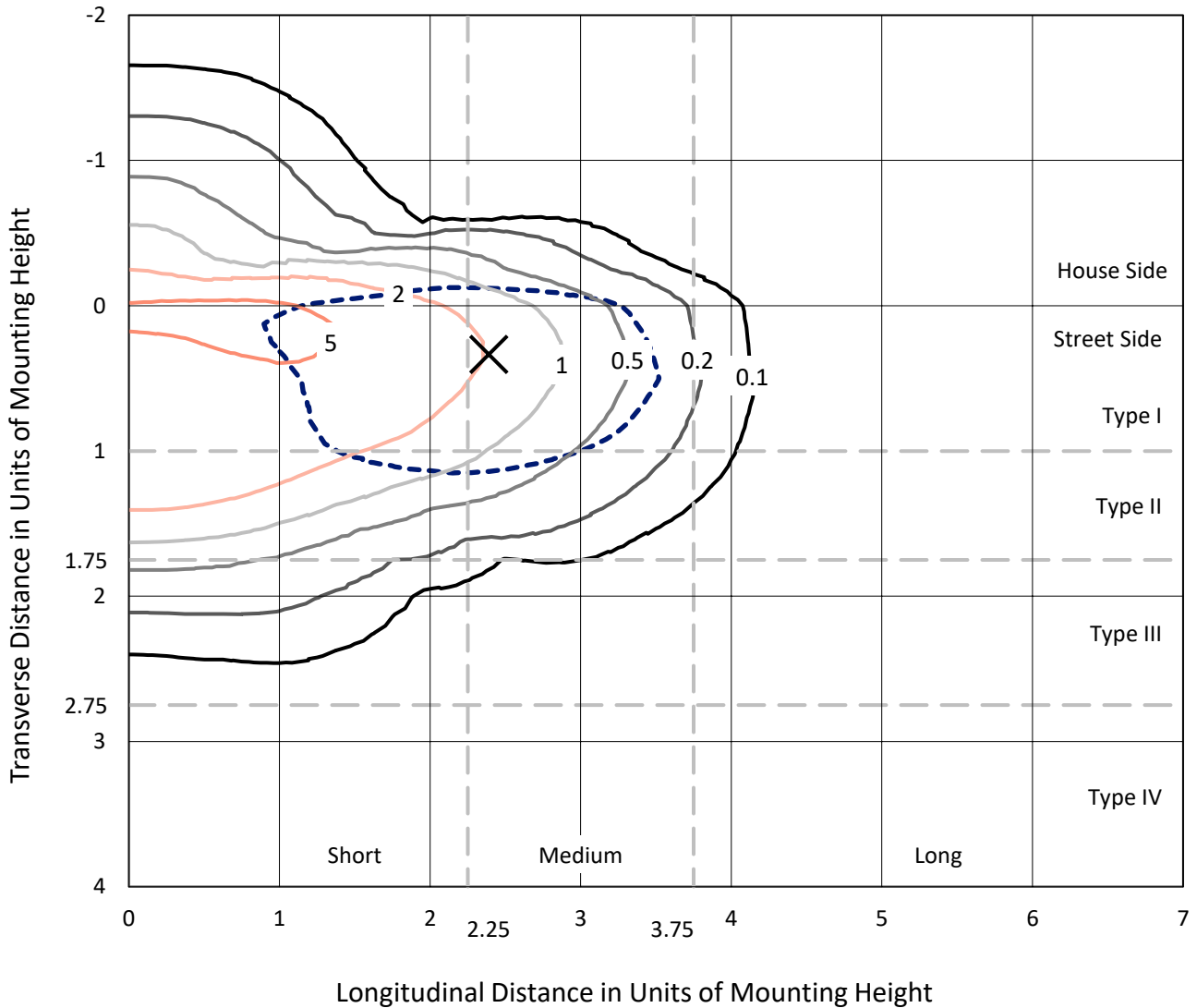
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

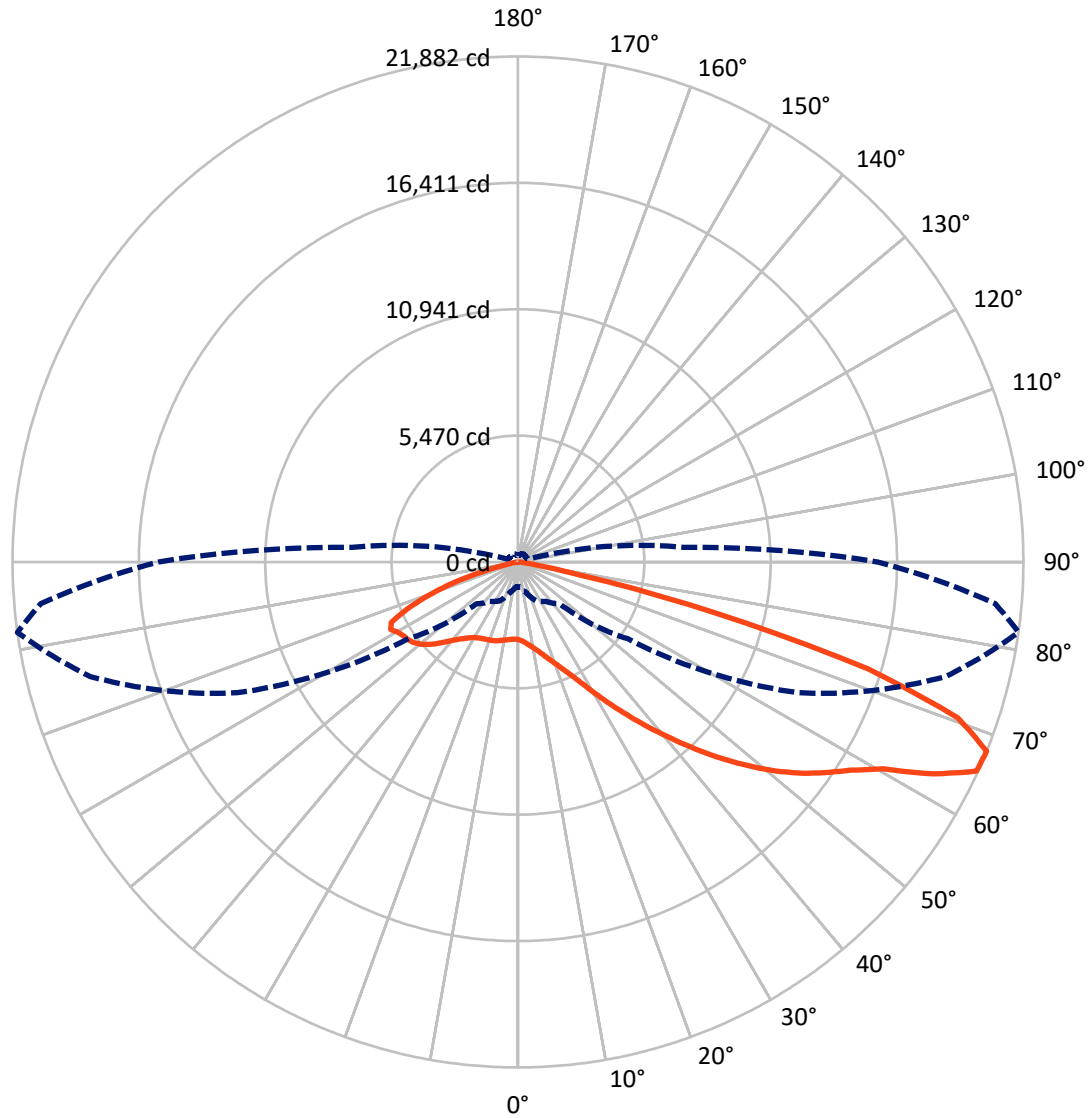
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3673.2	0.0	3673.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16604.8	0.0	16604.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	20278.0	0.0	20278.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.3	1.5
10°-20°	777.8	3.8
20°-30°	1245.7	6.1
30°-40°	2202.8	10.9
40°-50°	3859.5	19.0
50°-60°	5147.5	25.4
60°-70°	4792.1	23.6
70°-80°	1839.2	9.1
80°-90°	114.2	0.6
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°	20278.0	100.0
0°-180°	20278.0	100.0

Coefficient of Utilization



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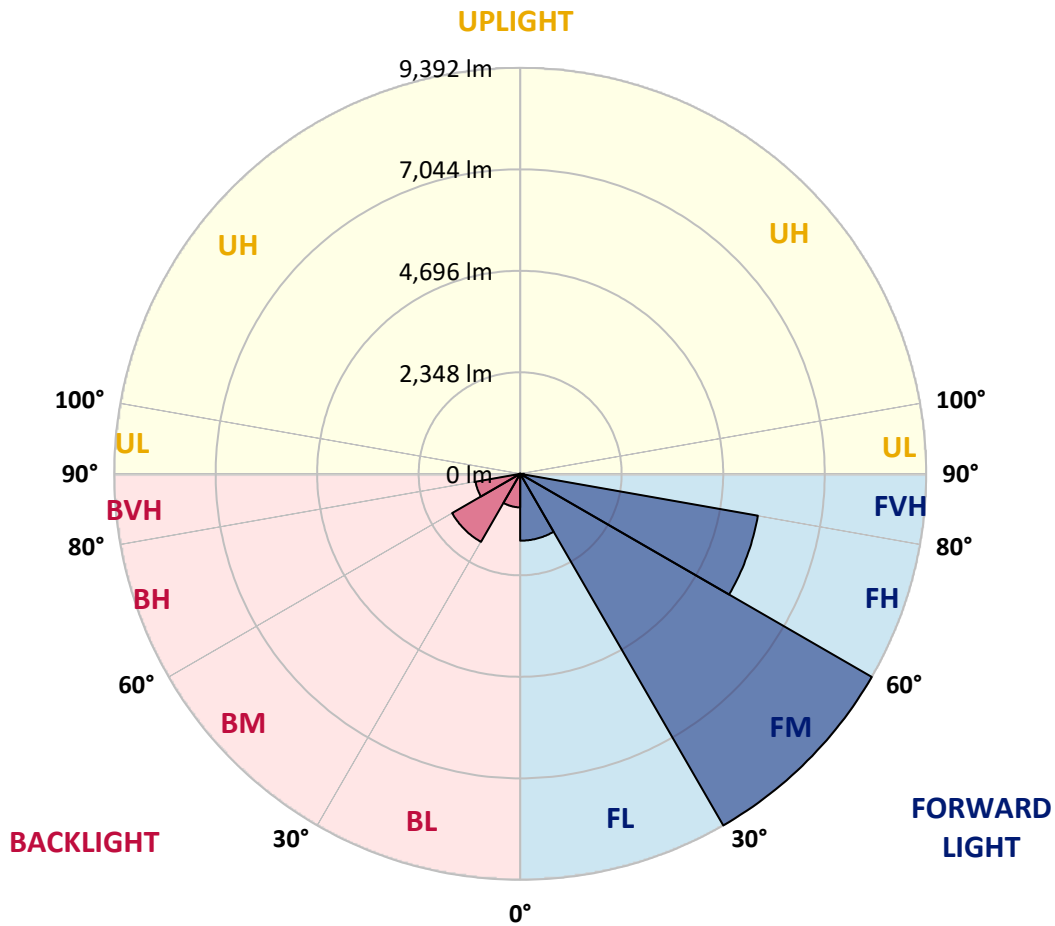
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1547.0	7.6			
FM (30°-60°)	9391.9	46.3			
FH (60°-80°)	5582.8	27.5			G3/7500
FVH (80°-90°)	83.1	0.4			G1/100
BL (0°-30°)	775.8	3.8	B2/1000		
BM (30°-60°)	1817.8	9.0	B2/2500		
BH (60°-80°)	1048.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	31.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4
2.5°	3550.6	3571.1	3559.4	3553.6	3543.3	3528.7	3517.1	3480.6	3442.6	3417.8	3409.0
5°	3622.2	3642.6	3641.2	3647.0	3654.3	3658.7	3655.8	3614.9	3560.9	3518.5	3493.7
7.5°	3560.9	3584.2	3603.2	3632.4	3683.5	3737.5	3763.8	3755.0	3699.6	3641.2	3610.5
10°	3387.1	3411.9	3457.2	3525.8	3633.9	3750.6	3848.5	3893.7	3858.7	3794.4	3752.1
12.5°	3068.8	3093.7	3182.7	3331.6	3512.7	3715.6	3902.5	4023.7	4032.4	3968.2	3918.5
15°	2711.2	2736.0	2830.9	3017.7	3293.7	3619.3	3931.7	4160.9	4238.3	4182.8	4122.9
17.5°	2489.2	2511.1	2582.7	2733.1	3020.7	3426.5	3921.5	4306.9	4483.6	4439.8	4368.2
20°	2422.1	2441.1	2474.6	2579.8	2819.2	3226.5	3854.3	4444.1	4747.8	4723.0	4642.7
22.5°	2493.6	2511.1	2521.4	2568.1	2718.5	3095.1	3769.6	4584.3	5054.4	5057.3	4959.5
25°	2658.6	2676.1	2664.4	2693.6	2759.3	3054.2	3737.5	4749.3	5439.8	5471.9	5361.0
27.5°	2930.1	2931.6	2903.9	2902.4	2912.6	3115.6	3771.1	4925.9	5926.0	5985.9	5848.6
30°	3474.7	3452.8	3346.2	3230.9	3178.3	3299.5	3864.5	5134.7	6499.8	6606.3	6434.1
32.5°	4314.2	4282.1	4086.4	3810.5	3533.1	3595.9	4032.4	5372.7	7124.6	7317.3	7107.1
35°	5225.2	5216.5	5012.1	4601.8	4117.1	4017.8	4305.4	5685.1	7806.4	8113.0	7863.4
37.5°	6072.0	6067.6	5950.8	5467.6	4877.7	4606.2	4743.4	6093.9	8536.4	8980.2	8685.3
40°	6845.8	6858.9	6742.1	6310.0	5715.8	5361.0	5339.1	6599.0	9348.2	9924.8	9574.4
42.5°	7514.4	7529.0	7410.8	7091.0	6543.6	6196.1	6070.5	7218.1	10140.9	10939.5	10524.9
45°	7968.5	8059.0	8041.5	7786.0	7393.3	7032.6	6949.4	7994.8	11044.6	12015.5	11529.3
47.5°	8097.0	8180.2	8311.6	8346.6	8107.2	7752.4	7851.7	8930.6	11958.6	13093.0	12539.6
50°	7780.2	7857.5	8130.5	8494.1	8660.5	8551.0	8729.1	9933.6	12894.4	14167.5	13531.0
52.5°	7155.3	7234.1	7578.7	8153.9	8832.8	9177.3	9609.5	10922.0	13801.0	15185.1	14469.7
55°	6251.6	6334.8	6777.2	7428.3	8504.3	9435.8	10343.8	11908.9	14631.8	16100.5	15316.5
57.5°	5022.3	5083.6	5543.5	6454.5	7678.0	9178.8	10885.5	12986.4	15414.3	16999.8	16156.0
60°	3273.2	3327.3	3861.6	4877.7	6308.5	8320.3	10993.5	14187.9	16453.8	18169.3	17287.4
62.5°	2176.8	2213.3	2530.1	3276.2	4442.7	6672.0	10361.4	15147.1	17978.0	20204.4	19227.7
65°	1493.5	1530.0	1846.9	2366.6	2870.3	4413.5	8543.7	15020.1	19359.1	21820.6	20665.8
67.5°	1065.8	1096.4	1365.1	1855.6	2077.5	2563.7	5791.7	13396.6	19160.6	21881.9	20743.2
70°	763.6	781.1	1003.0	1445.4	1651.2	1540.3	3220.7	10246.0	16776.5	20205.9	19163.5
72.5°	534.3	540.2	696.4	1100.8	1330.0	1124.2	1533.0	6831.2	12688.6	15859.6	14856.6
75°	362.1	369.4	468.6	807.4	1067.2	858.5	811.7	3663.1	7448.7	8778.8	7869.2
77.5°	221.9	224.8	302.2	551.9	798.6	654.1	522.7	1551.9	2882.0	2829.4	2411.9
80°	125.6	125.6	192.7	343.1	544.6	421.9	366.5	659.9	912.5	801.5	706.6
82.5°	70.1	71.5	140.2	213.2	360.6	249.7	201.5	305.1	394.2	348.9	303.7
85°	29.2	32.1	86.1	100.7	172.3	124.1	81.8	128.5	146.0	129.9	94.9
87.5°	2.9	4.4	26.3	19.0	20.4	24.8	11.7	24.8	20.4	20.4	14.6
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4	3359.4
2.5°	3381.3	3359.4	3303.9	3239.7	3155.0	3114.1	3058.6	3020.7	2988.5	2991.5	2962.3
5°	3447.0	3391.5	3267.4	3112.6	2919.9	2782.7	2636.7	2536.0	2454.2	2436.7	2397.3
7.5°	3537.5	3449.9	3232.4	2953.5	2627.9	2381.2	2160.7	2019.1	1918.4	1886.3	1854.2
10°	3654.3	3527.3	3187.1	2753.5	2284.8	1971.0	1734.4	1623.5	1554.9	1531.5	1514.0
12.5°	3790.1	3616.3	3127.2	2509.7	1931.5	1629.3	1478.9	1423.5	1401.6	1394.3	1389.9
15°	3960.9	3727.3	3036.7	2220.6	1632.2	1420.5	1356.3	1349.0	1351.9	1349.0	1347.5
17.5°	4163.8	3848.5	2889.3	1922.8	1430.8	1314.0	1290.6	1296.4	1303.7	1302.3	1299.4
20°	4385.7	3968.2	2700.9	1658.5	1293.5	1238.0	1224.9	1230.8	1236.6	1233.7	1232.2
22.5°	4638.3	4096.7	2492.2	1452.7	1201.6	1168.0	1153.4	1154.8	1154.8	1149.0	1146.1
25°	4940.5	4238.3	2273.2	1306.7	1131.5	1105.2	1087.7	1081.8	1073.1	1055.6	1052.6
27.5°	5301.1	4388.7	2062.9	1204.5	1076.0	1051.2	1030.7	1016.1	994.2	965.0	962.1
30°	5707.0	4571.1	1884.8	1140.2	1032.2	1007.4	984.0	962.1	930.0	893.5	890.6
32.5°	6184.4	4766.8	1754.9	1097.9	992.8	966.5	938.8	912.5	877.4	840.9	842.4
35°	6753.8	5003.3	1679.0	1068.7	962.1	927.1	896.4	867.2	840.9	808.8	805.9
37.5°	7371.4	5254.4	1655.6	1054.1	941.7	887.7	852.6	832.2	829.3	810.3	808.8
40°	8047.3	5552.2	1673.1	1045.3	919.8	849.7	811.7	807.4	814.7	781.1	782.5
42.5°	8762.7	5905.6	1702.3	1035.1	889.1	811.7	775.2	775.2	769.4	722.7	722.7
45°	9536.5	6312.9	1731.5	1010.3	852.6	773.8	746.0	735.8	711.0	665.7	664.3
47.5°	10316.1	6727.5	1753.4	965.0	808.8	741.7	716.8	693.5	657.0	616.1	614.6
50°	11056.3	7099.8	1730.1	897.9	759.2	711.0	684.7	652.6	613.2	585.4	581.1
52.5°	11717.7	7422.5	1630.8	819.0	706.6	678.9	655.5	621.9	589.8	560.6	557.7
55°	12292.9	7683.8	1455.6	744.6	659.9	651.1	627.8	585.4	541.6	516.8	513.9
57.5°	12844.8	7882.3	1236.6	683.3	617.6	620.5	585.4	547.5	506.6	480.3	477.4
60°	13579.1	8148.1	1014.7	626.3	572.3	581.1	543.1	515.4	464.3	430.7	426.3
62.5°	14752.9	8561.2	805.9	556.2	519.7	522.7	506.6	473.0	411.7	372.3	369.4
65°	15684.4	8409.4	635.1	480.3	459.9	464.3	464.3	427.8	362.1	316.8	312.4
67.5°	15579.3	7200.5	506.6	405.9	403.0	405.9	416.1	385.4	321.2	284.7	278.9
70°	14351.5	5727.4	405.9	337.3	350.4	343.1	372.3	351.9	289.1	252.6	248.2
72.5°	11710.4	4125.9	309.5	278.9	268.6	280.3	335.8	316.8	240.9	200.0	195.6
75°	6842.9	2201.6	230.7	220.5	194.2	233.6	297.8	270.1	184.0	147.5	143.1
77.5°	2227.9	767.9	169.4	162.1	144.5	188.3	254.0	227.8	150.4	116.8	112.4
80°	597.1	232.1	115.3	106.6	93.4	140.2	201.5	181.0	108.0	75.9	74.5
82.5°	239.4	97.8	67.2	59.9	51.1	96.4	159.1	146.0	80.3	48.2	48.2
85°	77.4	32.1	24.8	19.0	23.4	59.9	94.9	99.3	56.9	24.8	19.0
87.5°	10.2	4.4	4.4	5.8	4.4	10.2	29.2	27.7	16.1	2.9	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)