

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: P884598

Luminaire Tested: **NAV-SB5C-727-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884598
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27010 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

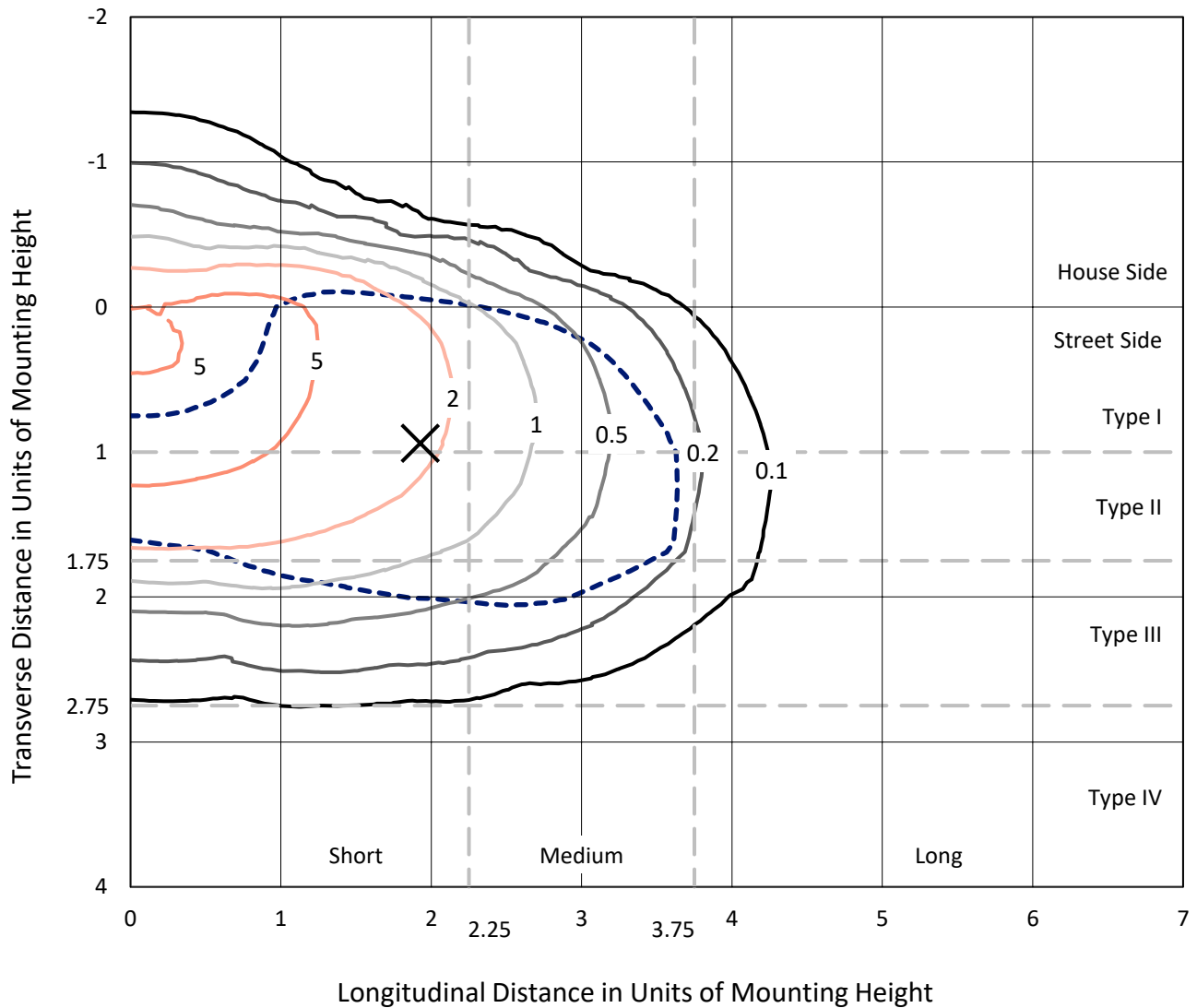
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

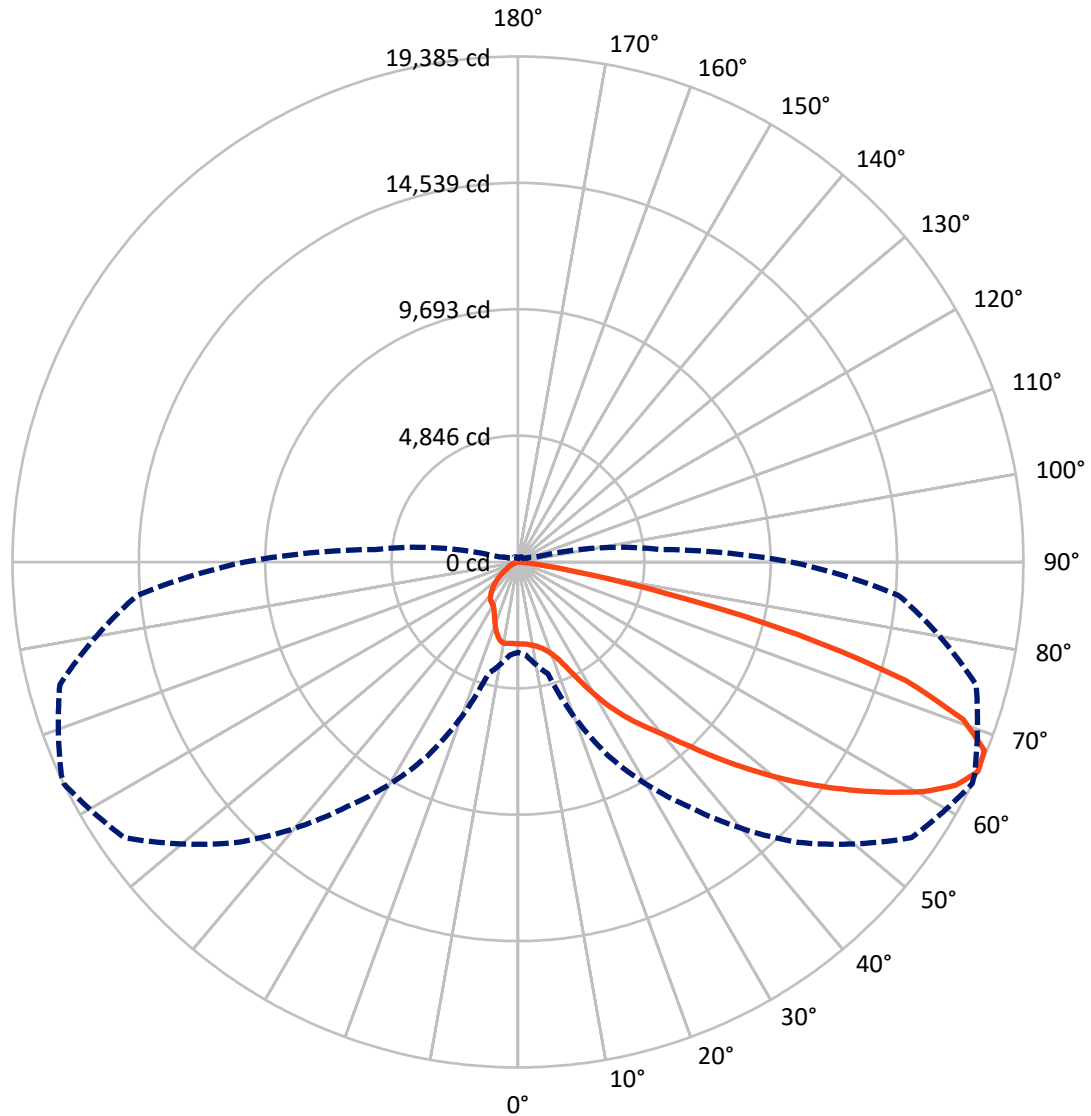
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3612.1	0.0	3612.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	23397.9	0.0	23397.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	27010.0	0.0	27010.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.8	1.1
10°-20°	786.1	2.9
20°-30°	1489.6	5.5
30°-40°	3014.3	11.2
40°-50°	5134.9	19.0
50°-60°	6983.1	25.9
60°-70°	6557.5	24.3
70°-80°	2627.2	9.7
80°-90°	127.3	0.5
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°	27010.0	100.0
0°-180°	27010.0	100.0

Coefficient of Utilization



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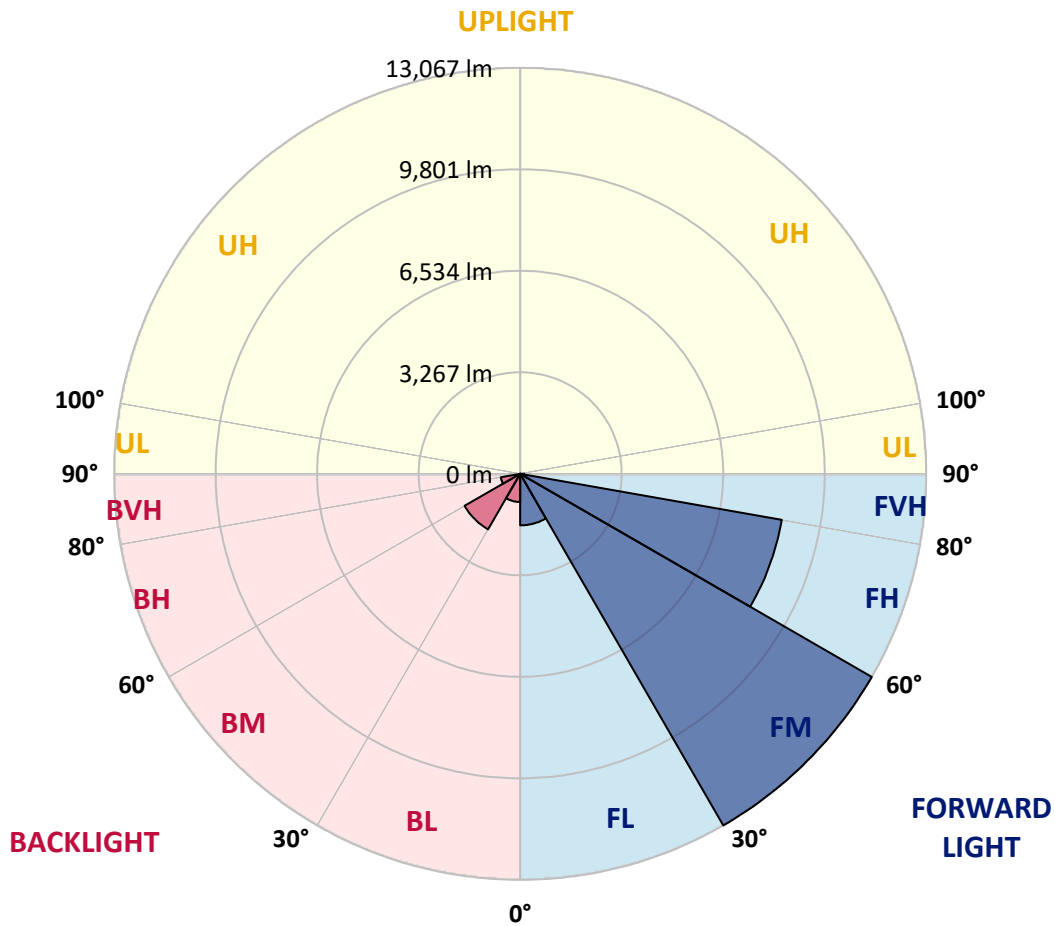
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1658.7	6.1			
FM (30°-60°)	13067.4	48.4			
FH (60°-80°)	8550.8	31.7			G4/12000
FVH (80°-90°)	121.1	0.4			G2/225
BL (0°-30°)	906.9	3.4	B2/1000		
BM (30°-60°)	2065.0	7.6	B2/2500		
BH (60°-80°)	634.0	2.3	B2/1000		G2/1000
BVH (80°-90°)	6.2	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5
2.5°	3130.7	3152.4	3147.0	3141.5	3139.7	3143.4	3145.2	3143.4	3143.4	3143.4	3145.2
5°	3070.9	3089.0	3089.0	3101.7	3119.8	3141.5	3157.8	3161.5	3165.1	3170.5	3168.7
7.5°	2956.9	2971.3	2982.2	3023.8	3069.1	3127.1	3175.9	3201.3	3204.9	3224.8	3232.1
10°	2879.0	2897.1	2915.2	2958.7	3023.8	3110.8	3194.1	3255.6	3264.7	3311.7	3333.5
12.5°	2875.4	2893.5	2917.0	2964.1	3040.1	3132.5	3233.9	3322.6	3338.9	3407.7	3453.0
15°	2913.4	2935.1	2956.9	3014.8	3096.3	3208.5	3317.2	3427.6	3443.9	3541.7	3590.6
17.5°	2991.3	3020.2	3036.5	3094.5	3181.4	3306.3	3449.4	3576.1	3590.6	3704.7	3766.2
20°	3145.2	3179.6	3185.0	3232.1	3317.2	3451.2	3621.4	3778.9	3797.0	3927.4	3996.2
22.5°	3463.8	3512.7	3469.3	3492.8	3568.9	3702.9	3887.5	4086.7	4112.1	4260.5	4322.1
25°	4025.2	4094.0	3981.7	3941.9	3974.5	4113.9	4345.7	4597.3	4626.3	4745.8	4776.6
27.5°	5127.9	5039.1	4868.9	4702.4	4604.6	4684.2	4945.0	5256.4	5292.6	5408.5	5372.3
30°	6339.2	6261.4	6031.4	5662.0	5430.3	5417.6	5658.4	6006.1	6047.7	6158.1	6047.7
32.5°	7552.4	7478.1	7228.3	6773.8	6371.8	6172.6	6339.2	6724.9	6746.6	6817.2	6654.3
35°	8745.6	8669.6	8419.7	7954.4	7460.0	7007.4	6974.8	7409.3	7416.6	7490.8	7248.2
37.5°	9946.1	9882.7	9616.6	9160.3	8673.2	8048.5	7746.1	8057.6	8066.6	8139.0	7887.4
40°	10802.6	10829.7	10646.8	10293.8	9875.5	9192.9	8611.6	8747.4	8693.1	8814.4	8664.1
42.5°	11537.7	11592.0	11432.7	11255.2	11012.6	10411.5	9683.6	9660.0	9573.1	9638.3	9482.6
45°	12173.3	12218.5	12075.5	12033.8	12028.4	11606.5	10855.1	10713.8	10592.5	10579.8	10393.3
47.5°	12406.8	12493.7	12555.3	12694.7	12966.3	12788.9	12066.4	11847.3	11711.5	11611.9	11316.8
50°	12495.6	12587.9	12797.9	13203.5	13846.3	13922.4	13272.3	13026.1	12859.5	12678.4	12243.9
52.5°	12376.1	12540.8	12823.3	13505.9	14438.4	14831.3	14429.4	14213.9	14023.8	13728.6	13084.0
55°	11671.7	11836.5	12414.1	13502.3	14733.6	15468.7	15523.0	15427.1	15213.4	14748.1	13763.0
57.5°	10186.9	10431.4	11345.8	13042.4	14728.1	16017.3	16595.0	16663.8	16424.7	15758.4	14297.2
60°	8130.0	8461.3	9576.7	12023.0	14273.7	16314.3	17534.7	17878.7	17625.2	16754.3	14729.9
62.5°	5672.9	6056.8	7112.4	10425.9	13234.3	16100.6	18221.0	18856.5	18664.6	17645.2	14896.5
65°	3460.2	3583.4	4434.4	8204.2	11467.1	15206.2	18432.8	19385.2	19321.9	18190.2	14650.3
67.5°	2305.0	2408.2	2652.7	5625.8	8901.3	13419.0	17925.8	19292.9	19311.0	18101.4	13748.6
70°	1388.8	1477.5	1636.9	3271.9	5768.9	10621.5	16355.9	18115.9	18221.0	16915.4	12039.3
72.5°	572.2	631.9	776.8	1483.0	2987.6	6741.2	13024.3	15553.8	15798.3	14223.0	9239.9
75°	324.1	354.9	456.3	744.2	1296.5	3141.5	7889.2	11041.6	11401.9	9803.1	5558.8
77.5°	215.5	230.0	295.1	481.6	729.7	1071.9	3371.5	5752.6	6440.6	5354.2	2406.4
80°	144.9	157.5	202.8	322.3	474.4	459.9	1073.7	2131.2	2621.9	1839.7	586.7
82.5°	97.8	99.6	144.9	211.9	300.6	222.7	316.9	662.7	832.9	532.3	222.7
85°	56.1	54.3	106.8	123.1	134.0	92.3	96.0	199.2	260.7	224.5	126.7
87.5°	7.2	10.9	41.6	32.6	18.1	19.9	19.9	34.4	50.7	54.3	27.2
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°	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5	3141.5
2.5°	3145.2	3143.4	3137.9	3132.5	3119.8	3112.6	3116.2	3112.6	3110.8	3112.6	3119.8
5°	3168.7	3163.3	3148.8	3130.7	3105.3	3074.5	3054.6	3025.7	2998.5	2982.2	2985.8
7.5°	3232.1	3226.6	3206.7	3156.0	3074.5	2946.0	2828.3	2725.1	2647.2	2602.0	2603.8
10°	3333.5	3324.4	3293.6	3181.4	2967.7	2687.1	2453.5	2259.7	2133.0	2073.2	2067.8
12.5°	3453.0	3442.1	3387.8	3157.8	2764.9	2326.7	2004.4	1789.0	1671.3	1618.8	1613.3
15°	3594.2	3579.7	3472.9	3045.6	2469.8	1928.4	1633.2	1472.1	1396.0	1349.0	1350.8
17.5°	3769.9	3744.5	3536.3	2877.2	2149.3	1624.2	1405.1	1283.8	1216.8	1171.5	1167.9
20°	3998.0	3956.4	3587.0	2676.2	1854.1	1432.3	1251.2	1149.8	1099.1	1059.3	1052.0
22.5°	4316.7	4256.9	3648.5	2458.9	1645.9	1300.1	1137.1	1062.9	1021.2	976.0	968.7
25°	4711.4	4640.8	3724.6	2257.9	1502.9	1186.0	1053.8	992.3	943.4	890.9	885.4
27.5°	5263.7	5136.9	3815.1	2093.2	1379.7	1088.2	977.8	909.0	852.8	809.4	800.3
30°	5879.3	5671.1	3894.8	1993.6	1267.5	997.7	878.2	809.4	756.9	726.1	720.7
32.5°	6462.3	6179.9	3947.3	1950.1	1166.1	894.5	769.5	695.3	655.5	646.4	651.8
35°	7012.8	6639.8	3941.9	1908.5	1075.5	791.3	662.7	586.7	555.9	561.3	561.3
37.5°	7646.5	7130.5	3903.8	1843.3	1001.3	697.1	570.4	503.4	476.2	478.0	485.3
40°	8383.5	7697.2	3880.3	1720.2	919.8	610.2	494.3	440.0	420.1	412.8	411.0
42.5°	9169.3	8245.9	3883.9	1580.7	818.4	532.3	441.8	396.5	378.4	373.0	371.2
45°	9958.8	8769.2	3889.4	1435.9	711.6	472.6	403.8	365.8	354.9	347.7	347.7
47.5°	10701.2	9214.6	3788.0	1280.2	606.6	427.3	373.0	347.7	338.6	329.5	329.5
50°	11392.8	9511.5	3543.5	1099.1	523.3	391.1	349.5	331.4	322.3	313.2	313.2
52.5°	11930.6	9558.6	3139.7	912.6	465.3	363.9	335.0	318.7	307.8	298.8	297.0
55°	12169.6	9263.5	2565.7	738.8	420.1	340.4	320.5	304.2	291.5	282.5	280.7
57.5°	12108.1	8642.4	2000.8	593.9	376.6	316.9	302.4	291.5	277.0	262.5	260.7
60°	11805.7	7811.3	1508.3	494.3	336.8	291.5	282.5	273.4	253.5	231.8	228.1
62.5°	11282.4	6766.5	1075.5	409.2	293.3	262.5	258.9	251.7	222.7	182.9	179.3
65°	10482.1	5497.2	724.3	340.4	251.7	230.0	231.8	219.1	181.1	135.8	132.2
67.5°	9312.4	4019.7	463.5	278.8	210.0	191.9	193.7	186.5	153.9	115.9	110.5
70°	7822.2	2661.7	302.4	211.9	168.4	148.5	159.3	161.2	130.4	94.2	90.5
72.5°	5734.4	1571.7	211.9	157.5	123.1	103.2	130.4	134.0	105.0	70.6	67.0
75°	3268.3	746.0	159.3	114.1	76.0	72.4	101.4	101.4	72.4	47.1	43.5
77.5°	1372.5	311.4	112.3	74.2	43.5	41.6	68.8	63.4	36.2	21.7	21.7
80°	396.5	139.4	59.8	36.2	18.1	16.3	27.2	19.9	9.1	3.6	3.6
82.5°	155.7	61.6	23.5	14.5	7.2	7.2	3.6	0.0	0.0	0.0	0.0
85°	92.3	25.3	10.9	5.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	23.5	5.4	3.6	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)