

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: McGRAW-EDISON

Report Number: P299698

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-SL2-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3089 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

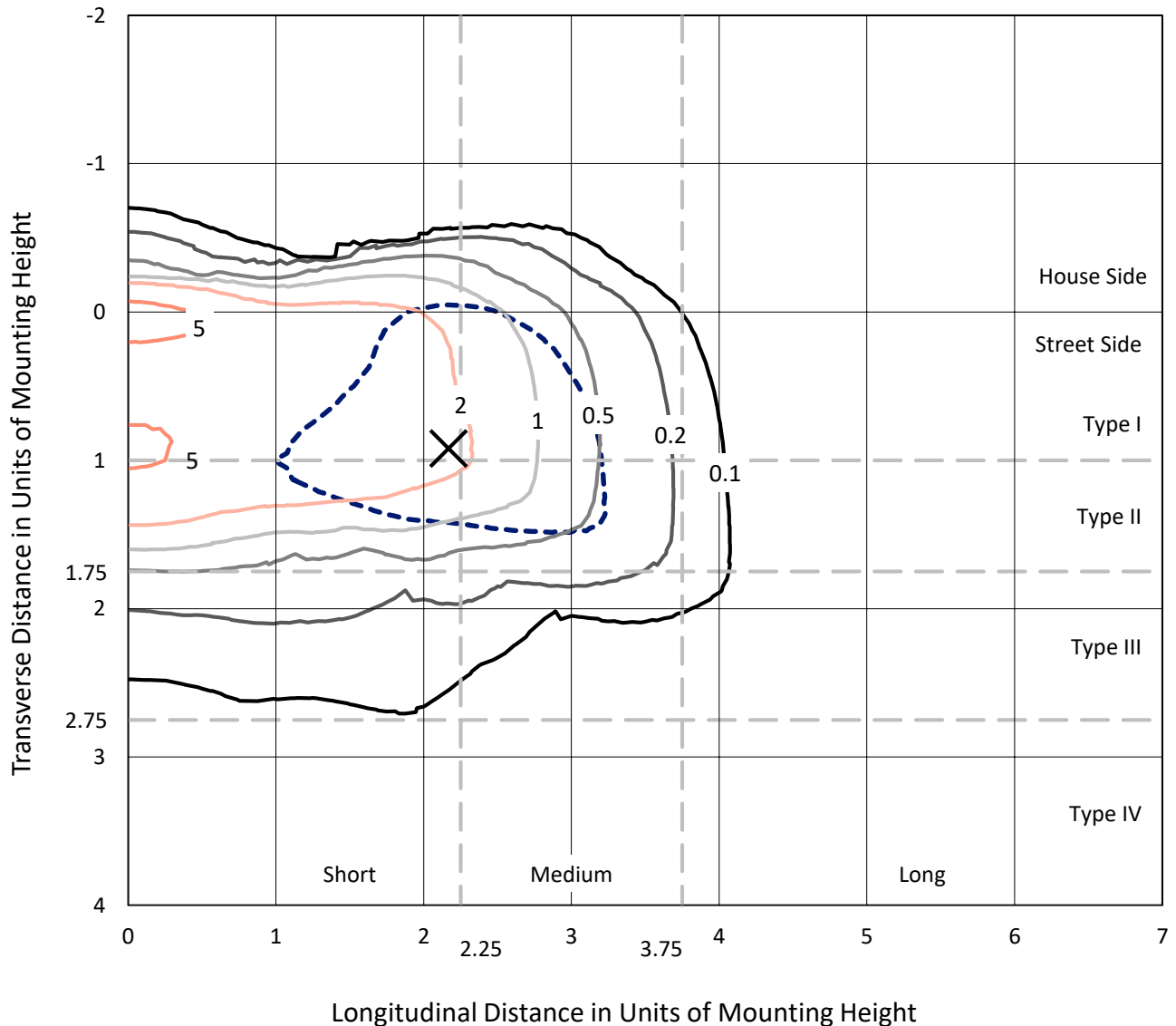


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

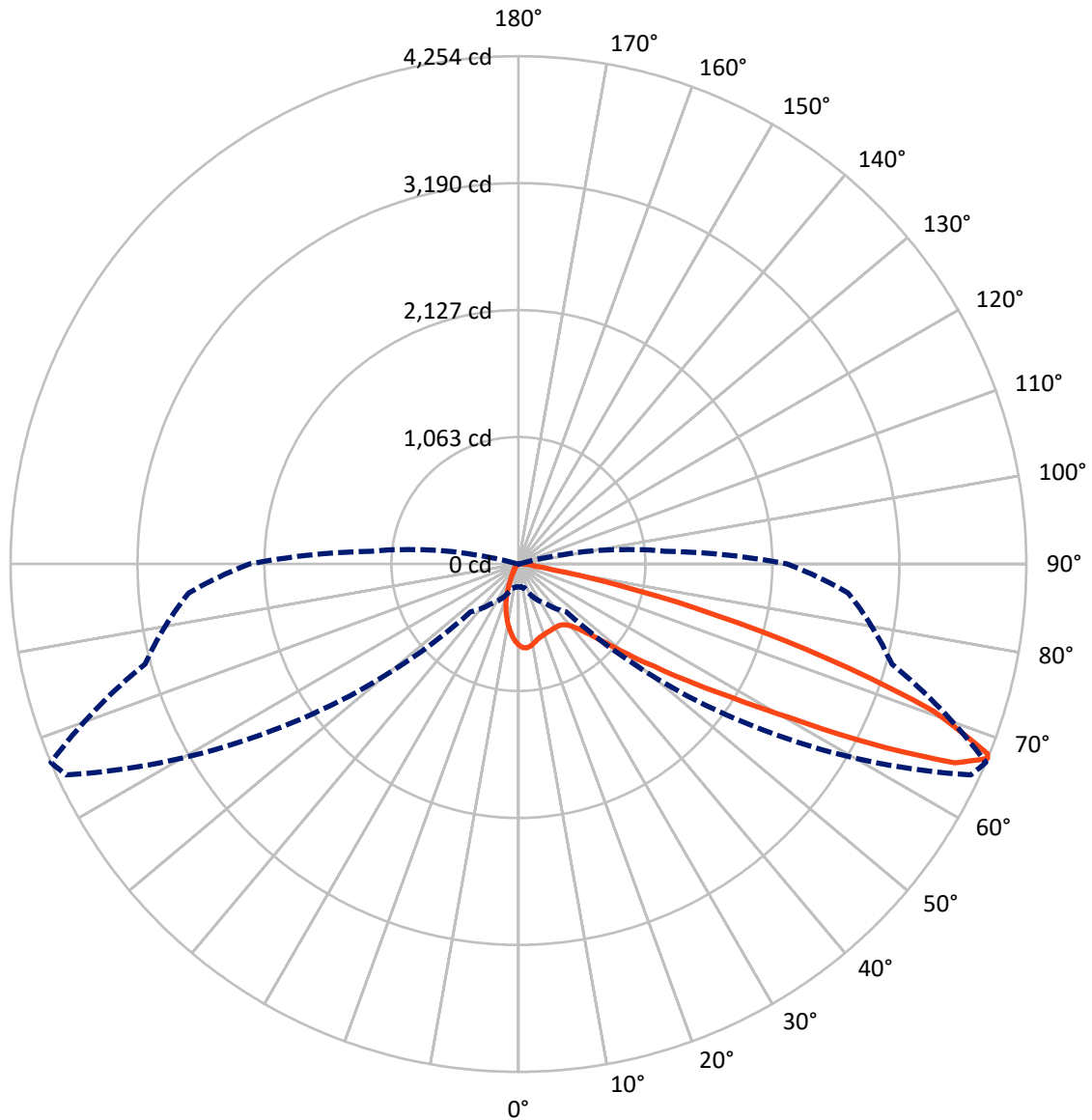


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	320.7	0.0	320.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	2768.3	0.0	2768.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	3089.0	0.0	3089.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	1.8
10°-20°	118.0	3.8
20°-30°	171.5	5.6
30°-40°	267.6	8.7
40°-50°	474.0	15.3
50°-60°	750.1	24.3
60°-70°	859.1	27.8
70°-80°	356.4	11.5
80°-90°	36.8	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°	3089.0	100.0
0°-180°	3089.0	100.0



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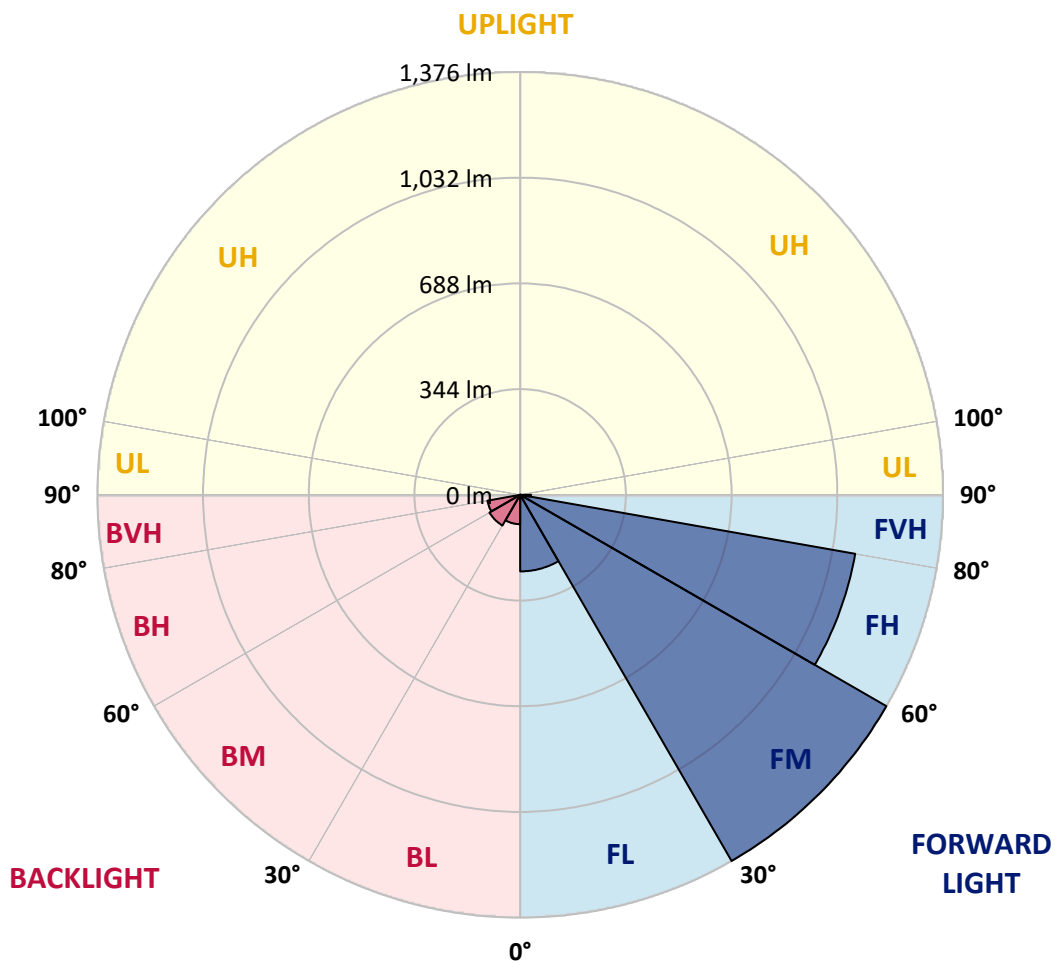
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	249.2	8.1			
FM	(30°-60°)	1376.5	44.6			
FH	(60°-80°)	1107.4	35.9			G1/1800
FVH	(80°-90°)	35.2	1.1			G1/100
BL	(0°-30°)	95.7	3.1	B0/110		
BM	(30°-60°)	115.3	3.7	B0/220		
BH	(60°-80°)	108.1	3.5	B0/110		G0/110
BVH	(80°-90°)	1.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2
2.5°	704.3	705.7	705.6	706.6	709.2	709.4	706.8	702.0	700.9	694.6	683.6
5°	649.5	653.7	656.2	666.5	678.0	691.9	702.3	706.1	705.6	701.1	684.5
7.5°	587.0	591.2	594.0	606.1	621.4	645.2	672.4	694.8	696.7	701.6	683.8
10°	545.4	546.1	550.1	561.6	577.6	602.0	634.4	673.5	679.4	697.3	682.0
12.5°	511.2	511.7	516.9	529.4	546.5	571.0	605.0	650.3	659.4	691.9	681.6
15°	486.8	488.8	493.5	506.5	524.7	549.0	583.9	633.1	644.1	689.9	684.8
17.5°	478.7	480.9	482.3	491.7	508.3	532.1	567.9	622.0	634.4	691.0	691.2
20°	487.2	488.8	485.6	487.9	498.2	519.4	554.4	612.4	627.2	692.2	699.3
22.5°	518.7	519.4	510.6	500.3	498.5	510.3	543.8	604.8	620.7	695.7	708.8
25°	572.8	571.5	557.1	534.9	514.0	508.6	537.5	600.2	617.5	699.3	718.7
27.5°	638.0	639.8	620.0	587.7	547.9	519.4	536.6	598.2	616.0	701.8	727.4
30°	717.3	719.8	697.1	656.6	599.4	546.1	544.9	597.8	615.1	700.2	728.1
32.5°	798.2	801.2	783.4	741.6	668.3	590.8	563.6	601.8	616.9	694.6	723.9
35°	882.9	887.2	875.3	839.4	761.6	655.3	596.6	613.9	625.4	694.0	719.8
37.5°	999.8	1003.8	981.4	943.4	874.6	741.8	649.5	636.6	645.4	702.7	720.9
40°	1174.4	1173.8	1116.2	1058.0	998.7	851.7	723.9	677.6	682.1	728.8	734.2
42.5°	1364.7	1363.7	1278.5	1190.1	1136.5	987.0	821.8	748.6	745.6	776.9	768.8
45°	1511.3	1511.1	1441.6	1341.9	1302.5	1142.3	948.3	847.4	842.7	855.1	832.6
47.5°	1573.8	1574.9	1540.0	1469.9	1486.4	1352.4	1107.7	990.4	983.4	978.4	944.1
50°	1525.2	1527.3	1530.2	1516.5	1621.4	1634.7	1321.6	1192.0	1188.6	1166.1	1112.6
52.5°	1366.3	1377.3	1411.1	1454.6	1668.2	1905.7	1656.9	1442.5	1424.1	1400.1	1341.2
55°	1098.5	1110.6	1174.9	1280.3	1598.5	2083.7	2126.8	1765.4	1734.7	1663.2	1578.2
57.5°	727.0	745.7	839.1	973.1	1396.0	2112.4	2595.6	2213.5	2106.8	1910.9	1815.1
60°	400.5	418.5	519.8	641.2	1008.3	1970.8	2910.9	2796.9	2608.4	2187.9	2102.8
62.5°	246.7	256.4	331.2	444.1	604.7	1555.5	2976.1	3530.0	3311.8	2544.4	2450.4
65°	196.4	200.5	237.1	363.1	433.5	925.2	2765.5	4088.9	4016.1	2976.1	2761.6
67°	190.6	192.2	209.5	311.7	408.6	567.2	2316.9	4179.9	4253.8	3237.4	2771.3
67.5°	191.9	193.7	210.1	297.5	407.9	521.2	2162.3	4144.0	4237.4	3258.1	2728.2
70°	185.0	190.6	240.5	297.3	387.9	433.1	1294.9	3590.5	3687.7	3027.3	2314.9
72.5°	65.6	65.9	104.0	240.5	421.8	437.8	650.3	2632.2	2704.1	2315.8	1669.0
75°	38.9	33.2	34.6	68.5	403.1	425.2	375.1	1681.9	1708.8	1327.0	845.2
77.5°	26.8	23.4	24.1	30.3	153.5	419.3	298.0	877.1	848.4	465.4	180.0
80°	15.3	13.5	14.4	26.5	55.9	391.2	281.1	355.7	303.2	78.9	49.7
82.5°	8.1	6.8	8.3	21.8	38.9	243.8	281.6	171.9	136.2	26.7	33.9
85°	2.9	2.3	4.0	15.0	25.9	74.8	261.1	144.5	113.5	13.0	25.8
87.5°	0.5	0.5	1.6	6.1	10.5	22.9	154.4	85.8	57.5	7.7	17.7
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°	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2	681.2
2.5°	679.1	671.3	660.9	648.1	633.0	619.6	609.7	599.4	597.3	593.7	593.1
5°	674.6	661.2	635.3	605.6	573.9	545.2	522.0	501.2	492.1	484.1	483.2
7.5°	667.9	647.9	603.8	555.8	506.3	461.2	423.1	396.0	371.2	359.3	357.5
10°	660.2	631.5	568.3	501.8	433.3	369.7	313.0	265.4	236.6	219.5	217.3
12.5°	653.0	615.5	532.1	445.8	354.8	269.7	196.8	151.3	121.1	108.8	107.4
15°	649.5	602.5	498.2	388.5	272.6	171.7	107.6	83.2	73.3	70.4	70.3
17.5°	649.2	591.5	465.0	329.2	191.0	99.8	70.1	64.0	62.0	61.3	61.3
20°	649.0	581.1	431.9	267.7	121.3	66.5	58.4	56.9	55.5	54.6	54.6
22.5°	651.0	571.7	397.3	205.0	76.4	53.9	51.4	49.9	48.1	46.8	46.7
25°	653.0	564.5	362.0	145.9	55.3	46.8	44.3	42.3	39.8	38.2	38.0
27.5°	653.3	555.5	324.1	97.7	46.3	40.9	37.7	34.6	31.7	30.1	29.9
30°	647.9	540.3	282.2	65.9	40.9	35.5	31.2	27.9	25.2	24.0	24.0
32.5°	637.3	521.6	236.0	49.7	36.4	30.4	25.8	22.7	20.9	20.4	20.2
35°	627.7	501.4	188.6	42.2	32.6	25.8	21.1	19.1	18.0	17.8	17.7
37.5°	622.1	485.2	144.1	38.2	29.0	21.6	17.8	16.4	15.9	15.5	15.7
40°	626.5	471.7	106.5	35.0	25.4	18.0	15.1	14.4	13.9	13.7	13.7
42.5°	645.4	469.4	79.1	32.1	22.0	15.0	13.2	12.6	12.3	12.1	12.3
45°	695.1	483.8	61.4	29.4	18.6	12.6	11.2	11.0	10.8	10.8	10.8
47.5°	769.9	513.5	51.2	26.3	15.5	10.8	9.7	9.5	9.4	9.5	9.5
50°	896.6	567.9	45.8	23.2	12.8	9.2	8.3	8.3	8.3	8.3	8.5
52.5°	1089.2	674.9	42.2	20.2	10.5	7.7	7.0	7.0	7.2	7.2	7.4
55°	1303.8	816.9	38.9	17.1	8.8	6.5	5.8	5.9	6.1	6.3	6.3
57.5°	1536.5	974.2	36.2	14.1	7.6	5.2	4.9	5.0	5.2	5.6	5.6
60°	1817.4	1144.5	32.3	11.0	6.3	4.1	3.8	4.1	4.7	5.0	5.2
62.5°	2125.9	1309.2	27.2	8.6	5.2	3.2	3.1	3.8	4.5	4.9	5.0
65°	2336.7	1360.9	20.9	7.0	4.0	2.3	2.5	3.4	4.3	4.9	4.9
67°	2251.3	1233.8	17.1	5.9	3.2	1.8	2.3	3.4	4.3	4.7	4.9
67.5°	2192.0	1184.1	16.4	5.8	3.1	1.8	2.3	3.4	4.3	4.9	4.9
70°	1783.6	889.5	13.7	4.3	2.5	1.6	2.0	3.2	4.1	4.7	4.7
72.5°	1239.2	548.5	12.3	3.1	2.2	1.4	1.8	3.1	4.0	4.5	4.7
75°	589.2	198.6	10.5	2.3	2.0	1.3	1.6	3.1	4.0	4.5	4.5
77.5°	120.2	46.1	8.5	2.0	1.6	1.3	1.4	2.9	3.8	4.3	4.3
80°	39.5	17.8	6.3	1.8	1.6	1.3	1.4	2.7	3.8	4.1	4.3
82.5°	28.5	9.0	4.1	1.8	1.6	1.3	1.3	2.7	3.6	4.1	4.1
85°	21.8	6.3	2.7	1.8	1.6	1.3	1.3	2.5	3.4	4.0	4.0
87.5°	14.4	2.5	2.2	1.8	1.6	1.3	1.3	2.5	3.2	3.8	4.0
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)