

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: P299740

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299740
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-08-LED-E1-SL2-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 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: 23644.5 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 257
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

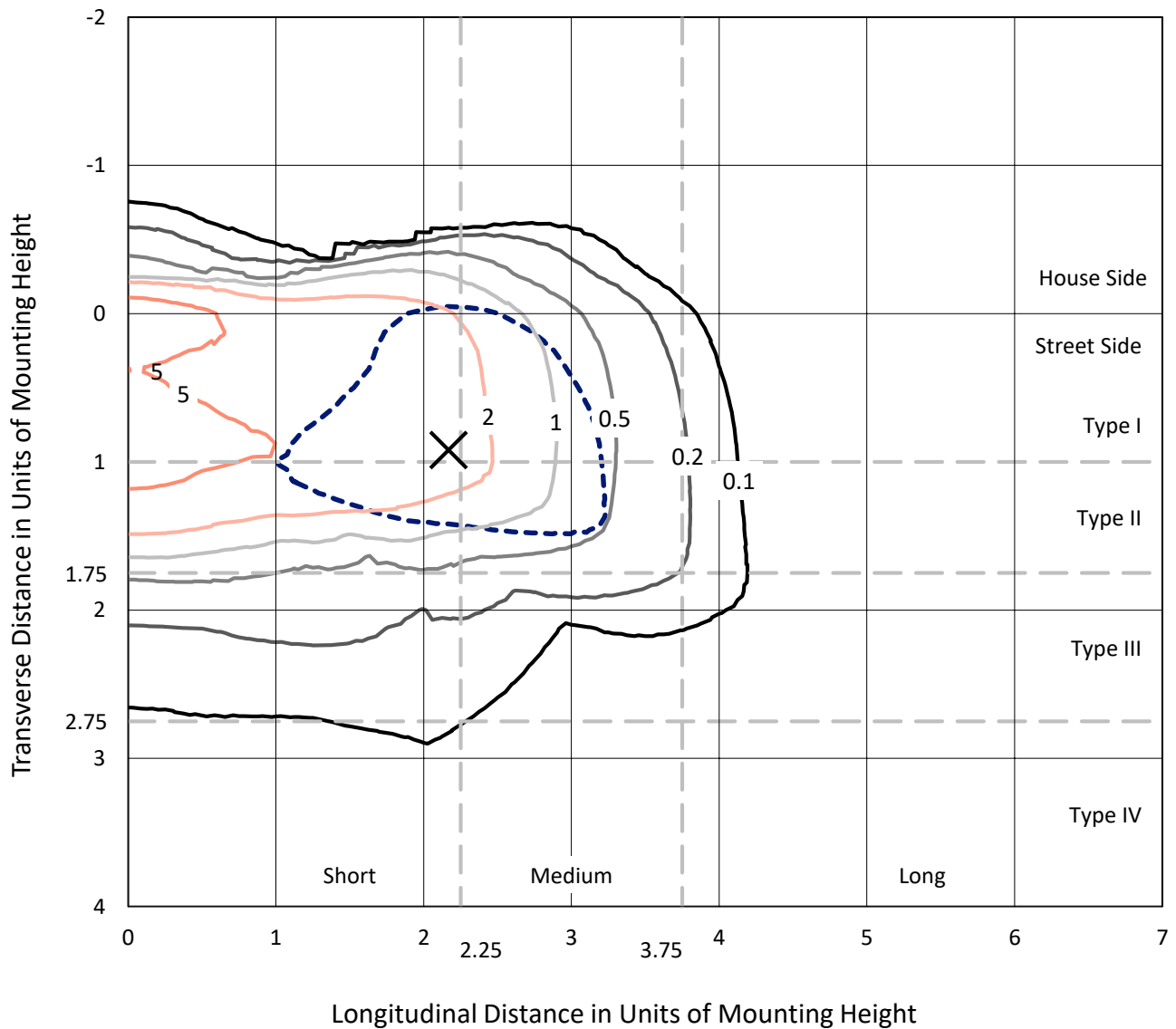


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

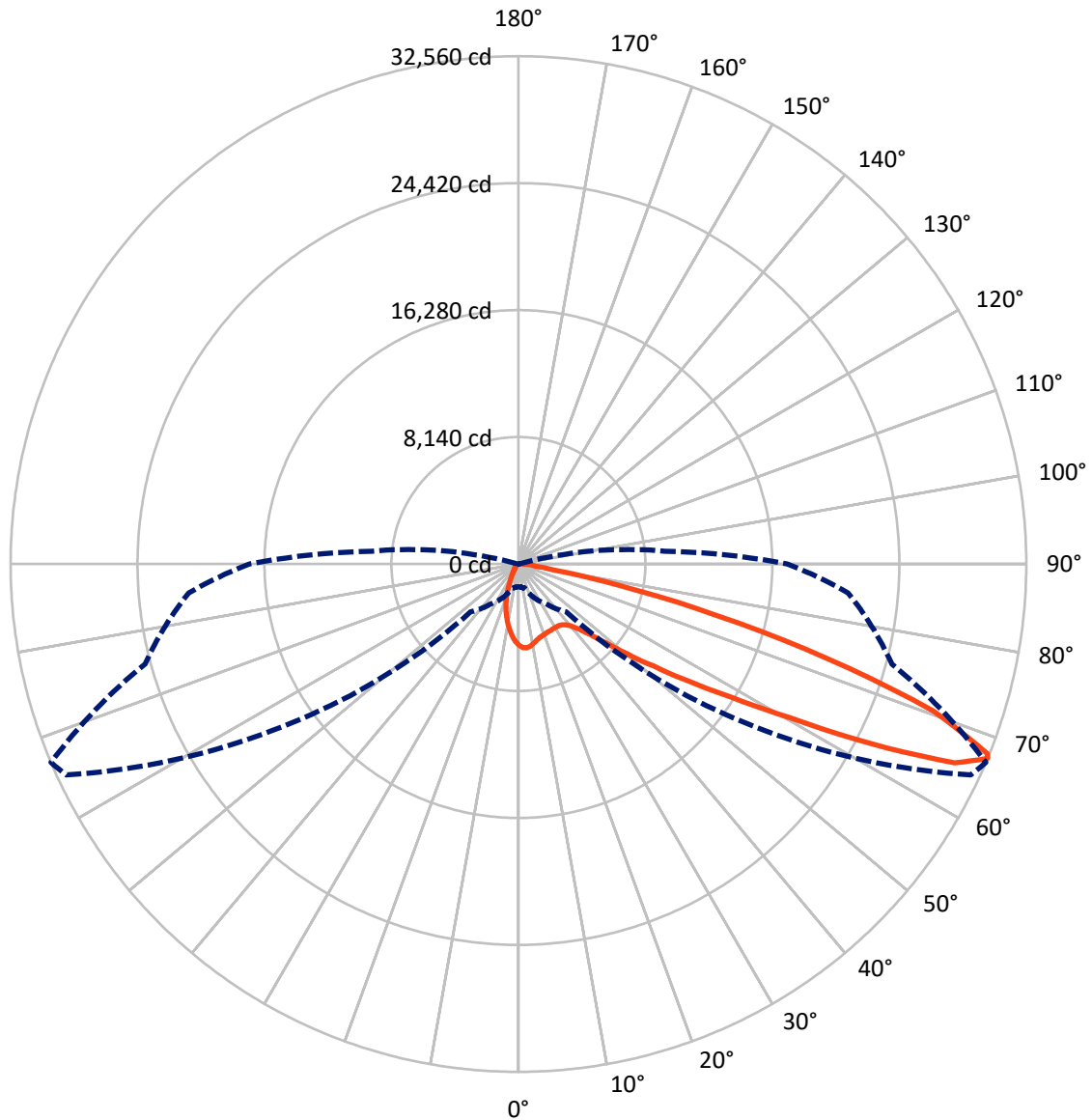


Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type II - Short - Semi-Cutoff

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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	2455.0	0.0	2455.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	21189.5	0.0	21189.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	23644.5	0.0	23644.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.3	1.8
10°-20°	903.1	3.8
20°-30°	1313.0	5.6
30°-40°	2048.3	8.7
40°-50°	3628.4	15.3
50°-60°	5741.6	24.3
60°-70°	6576.2	27.8
70°-80°	2727.8	11.5
80°-90°	281.8	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°	23644.5	100.0
0°-180°	23644.5	100.0

Coefficient of Utilization



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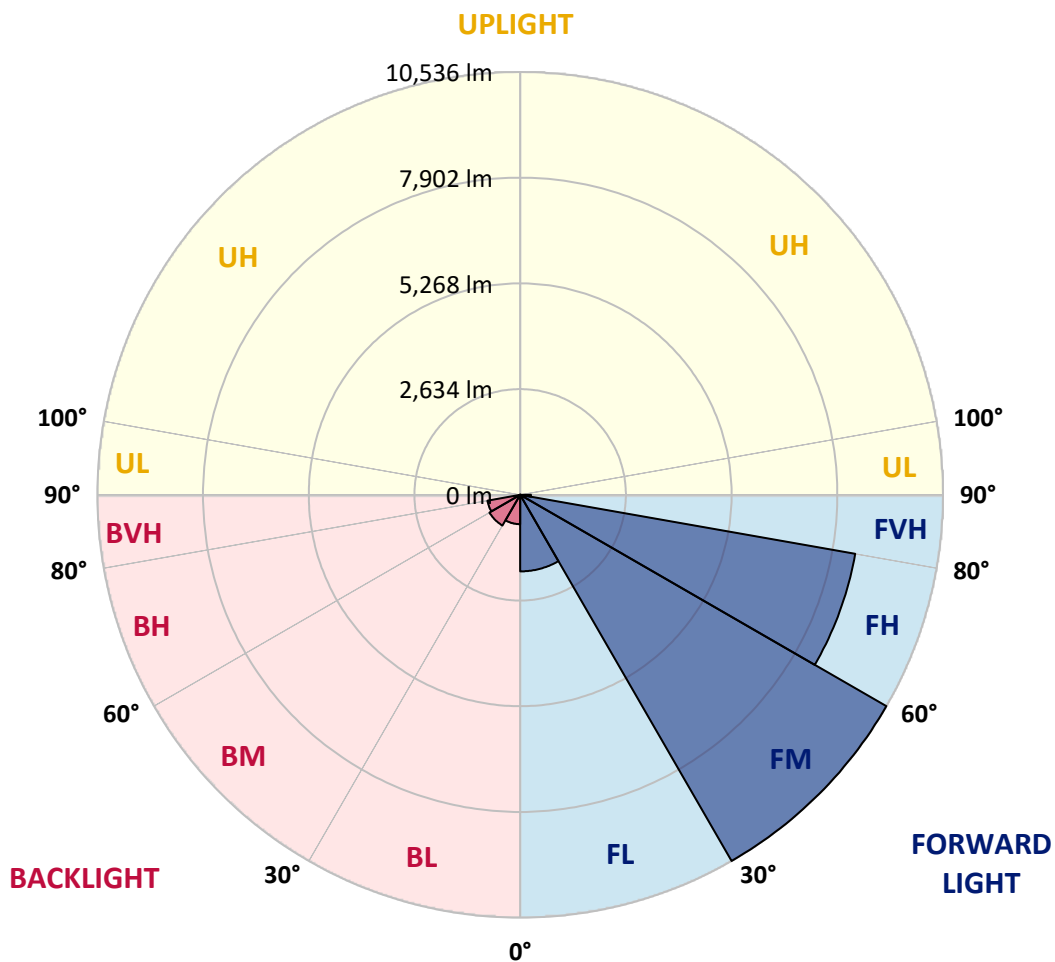
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1907.7	8.1			
FM	(30°-60°)	10536.0	44.6			
FH	(60°-80°)	8476.6	35.9			G4/12000
FVH	(80°-90°)	269.1	1.1			G3/500
BL	(0°-30°)	732.6	3.1	B2/1000		
BM	(30°-60°)	882.3	3.7	B1/1000		
BH	(60°-80°)	827.4	3.5	B2/1000		G2/1000
BVH	(80°-90°)	12.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5
2.5°	5391.0	5402.0	5400.7	5408.9	5428.2	5429.6	5410.3	5373.1	5364.8	5316.5	5232.4
5°	4971.8	5003.5	5022.8	5101.4	5189.7	5295.8	5375.8	5404.8	5400.7	5366.2	5239.3
7.5°	4493.2	4524.9	4547.0	4639.4	4756.6	4938.7	5146.9	5317.9	5333.1	5370.3	5233.8
10°	4174.6	4180.1	4210.5	4298.7	4421.5	4607.7	4855.9	5155.2	5200.7	5337.2	5220.0
12.5°	3912.6	3916.7	3956.7	4051.9	4182.9	4370.5	4631.1	4977.3	5047.6	5295.8	5217.2
15°	3726.4	3741.6	3777.4	3876.7	4016.0	4202.2	4469.8	4846.3	4930.4	5280.7	5242.1
17.5°	3664.3	3680.9	3691.9	3763.6	3890.5	4072.6	4347.0	4760.7	4855.9	5289.0	5290.3
20°	3729.2	3741.6	3716.7	3734.7	3813.3	3976.0	4243.6	4687.7	4800.7	5298.6	5352.4
22.5°	3970.5	3976.0	3908.4	3829.8	3816.0	3905.7	4162.2	4629.7	4751.1	5324.8	5425.5
25°	4384.2	4374.6	4264.3	4094.6	3934.7	3893.3	4113.9	4593.9	4726.3	5352.4	5501.3
27.5°	4883.5	4897.3	4745.6	4498.7	4193.9	3976.0	4107.0	4578.7	4715.2	5371.7	5567.5
30°	5490.3	5509.6	5335.8	5025.5	4588.4	4180.1	4170.5	4575.9	4708.3	5359.3	5573.1
32.5°	6109.5	6133.0	5996.4	5676.5	5115.2	4522.2	4313.9	4606.3	4722.1	5316.5	5541.3
35°	6757.7	6790.8	6699.8	6425.4	5829.6	5015.9	4566.3	4698.7	4787.0	5312.4	5509.6
37.5°	7652.8	7683.1	7512.1	7221.1	6694.3	5677.9	4971.8	4872.5	4940.0	5378.6	5517.9
40°	8989.2	8985.0	8543.7	8098.2	7644.5	6519.1	5541.3	5186.9	5221.4	5578.6	5619.9
42.5°	10445.5	10438.6	9786.3	9109.1	8699.5	7554.9	6290.2	5730.3	5706.8	5946.8	5884.7
45°	11568.1	11566.7	11034.4	10271.7	9969.7	8743.7	7258.3	6486.0	6450.2	6545.3	6372.9
47.5°	12046.7	12055.0	11787.4	11250.9	11377.8	10351.7	8478.9	7581.1	7527.3	7488.7	7226.6
50°	11674.3	11690.9	11712.9	11608.1	12410.8	12512.8	10115.9	9124.3	9098.1	8925.7	8516.1
52.5°	10457.9	10542.1	10801.3	11133.7	12769.3	14587.0	12682.5	11041.3	10900.6	10717.2	10266.2
55°	8408.5	8500.9	8993.3	9800.1	12235.6	15949.6	16279.2	13512.7	13278.2	12730.7	12079.8
57.5°	5564.8	5708.2	6422.6	7448.7	10685.5	16168.9	19867.7	16942.6	16126.1	14627.0	13893.3
60°	3065.8	3203.7	3978.8	4908.3	7717.6	15084.9	22281.2	21408.2	19965.6	16746.7	16095.8
62.5°	1888.0	1962.5	2534.8	3399.5	4628.4	11906.0	22780.4	27019.9	25349.7	19476.0	18756.1
65°	1503.2	1535.0	1814.9	2778.9	3318.2	7081.8	21168.2	31297.9	30740.8	22780.4	21137.9
67°	1459.1	1471.5	1603.9	2385.9	3127.9	4341.5	17734.2	31994.4	32559.8	24780.2	21212.4
67.5°	1468.8	1482.6	1608.1	2276.9	3122.3	3989.8	16550.9	31719.9	32434.3	24938.8	20882.7
70°	1416.4	1459.1	1841.1	2275.6	2969.3	3315.4	9911.8	27483.3	28226.6	23172.1	17719.0
72.5°	502.0	504.8	795.8	1841.1	3228.5	3351.3	4977.3	20147.7	20697.9	17725.9	12774.9
75°	297.9	253.8	264.8	524.1	3085.1	3254.7	2871.3	12874.2	13079.6	10157.3	6469.5
77.5°	205.5	179.3	184.8	231.7	1175.0	3209.2	2281.1	6713.6	6494.3	3562.3	1377.7
80°	117.2	103.4	110.3	202.7	427.5	2994.1	2151.4	2722.4	2321.1	604.1	380.6
82.5°	62.1	52.4	63.4	166.9	297.9	1866.0	2155.6	1315.7	1042.6	204.1	259.3
85°	22.1	17.9	30.3	114.5	198.6	572.3	1998.4	1106.1	868.9	99.3	197.2
87.5°	4.1	4.1	12.4	46.9	80.0	175.1	1181.9	656.5	439.9	59.3	135.2
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°	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5	5214.5
2.5°	5197.9	5138.6	5058.6	4960.7	4844.9	4742.8	4667.0	4588.4	4571.8	4544.2	4540.1
5°	5163.5	5061.4	4862.8	4635.2	4392.5	4173.2	3995.3	3836.7	3766.4	3705.7	3698.8
7.5°	5112.4	4959.3	4621.5	4254.6	3875.3	3530.6	3238.2	3031.3	2841.0	2750.0	2736.2
10°	5053.1	4833.8	4349.8	3840.9	3316.8	2830.0	2395.5	2031.5	1810.8	1679.8	1663.2
12.5°	4998.0	4711.1	4072.6	3412.0	2715.5	2064.6	1506.0	1158.5	926.8	833.0	822.0
15°	4971.8	4611.8	3813.3	2973.4	2086.6	1314.3	823.3	637.2	561.3	539.2	537.9
17.5°	4969.0	4527.7	3559.5	2519.7	1461.9	764.0	536.5	489.6	474.4	468.9	468.9
20°	4967.6	4447.7	3305.8	2049.4	928.2	508.9	446.8	435.8	424.8	417.9	417.9
22.5°	4982.8	4376.0	3041.0	1569.4	584.8	412.4	393.1	382.0	368.2	358.6	357.2
25°	4998.0	4320.8	2770.7	1117.1	423.4	358.6	339.3	324.1	304.8	292.4	291.0
27.5°	5000.7	4251.9	2481.1	747.5	354.4	313.1	288.2	264.8	242.7	230.3	228.9
30°	4959.3	4136.0	2159.7	504.8	313.1	271.7	238.6	213.8	193.1	183.4	183.4
32.5°	4878.0	3992.6	1806.7	380.6	278.6	233.1	197.2	173.8	160.0	155.8	154.5
35°	4804.9	3838.1	1443.9	322.7	249.6	197.2	161.4	146.2	137.9	136.5	135.2
37.5°	4762.1	3714.0	1103.3	292.4	222.0	165.5	136.5	125.5	121.4	118.6	120.0
40°	4795.2	3610.6	815.1	267.6	194.5	137.9	115.8	110.3	106.2	104.8	104.8
42.5°	4940.0	3592.6	605.4	245.5	168.3	114.5	100.7	96.5	93.8	92.4	93.8
45°	5320.7	3703.0	470.3	224.8	142.1	96.5	85.5	84.1	82.7	82.7	82.7
47.5°	5893.0	3930.5	391.7	201.4	118.6	82.7	74.5	73.1	71.7	73.1	73.1
50°	6862.5	4347.0	350.3	177.9	97.9	70.3	63.4	63.4	63.4	63.4	64.8
52.5°	8336.8	5166.2	322.7	154.5	80.0	59.3	53.8	53.8	55.2	55.2	56.5
55°	9979.4	6253.0	297.9	131.0	67.6	49.6	44.1	45.5	46.9	48.3	48.3
57.5°	11761.2	7456.9	277.2	107.6	57.9	40.0	37.2	38.6	40.0	42.8	42.8
60°	13911.3	8760.2	246.9	84.1	48.3	31.7	29.0	31.7	35.9	38.6	40.0
62.5°	16272.3	10020.7	208.2	66.2	40.0	24.8	23.4	29.0	34.5	37.2	38.6
65°	17885.9	10416.6	160.0	53.8	30.3	17.9	19.3	26.2	33.1	37.2	37.2
67°	17232.2	9444.3	131.0	45.5	24.8	13.8	17.9	26.2	33.1	35.9	37.2
67.5°	16778.5	9063.6	125.5	44.1	23.4	13.8	17.9	26.2	33.1	37.2	37.2
70°	13652.0	6808.8	104.8	33.1	19.3	12.4	15.2	24.8	31.7	35.9	35.9
72.5°	9485.6	4198.1	93.8	23.4	16.5	11.0	13.8	23.4	30.3	34.5	35.9
75°	4509.7	1519.8	80.0	17.9	15.2	9.7	12.4	23.4	30.3	34.5	34.5
77.5°	919.9	353.1	64.8	15.2	12.4	9.7	11.0	22.1	29.0	33.1	33.1
80°	302.0	136.5	48.3	13.8	12.4	9.7	11.0	20.7	29.0	31.7	33.1
82.5°	217.9	69.0	31.7	13.8	12.4	9.7	9.7	20.7	27.6	31.7	31.7
85°	166.9	48.3	20.7	13.8	12.4	9.7	9.7	19.3	26.2	30.3	30.3
87.5°	110.3	19.3	16.5	13.8	12.4	9.7	9.7	19.3	24.8	29.0	30.3
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)