

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: P299678

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299678  
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-SL2-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 800mA 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: 28047.9 lumens  
Efficiency: N/A  
Efficacy: 84.0 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): 334  
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

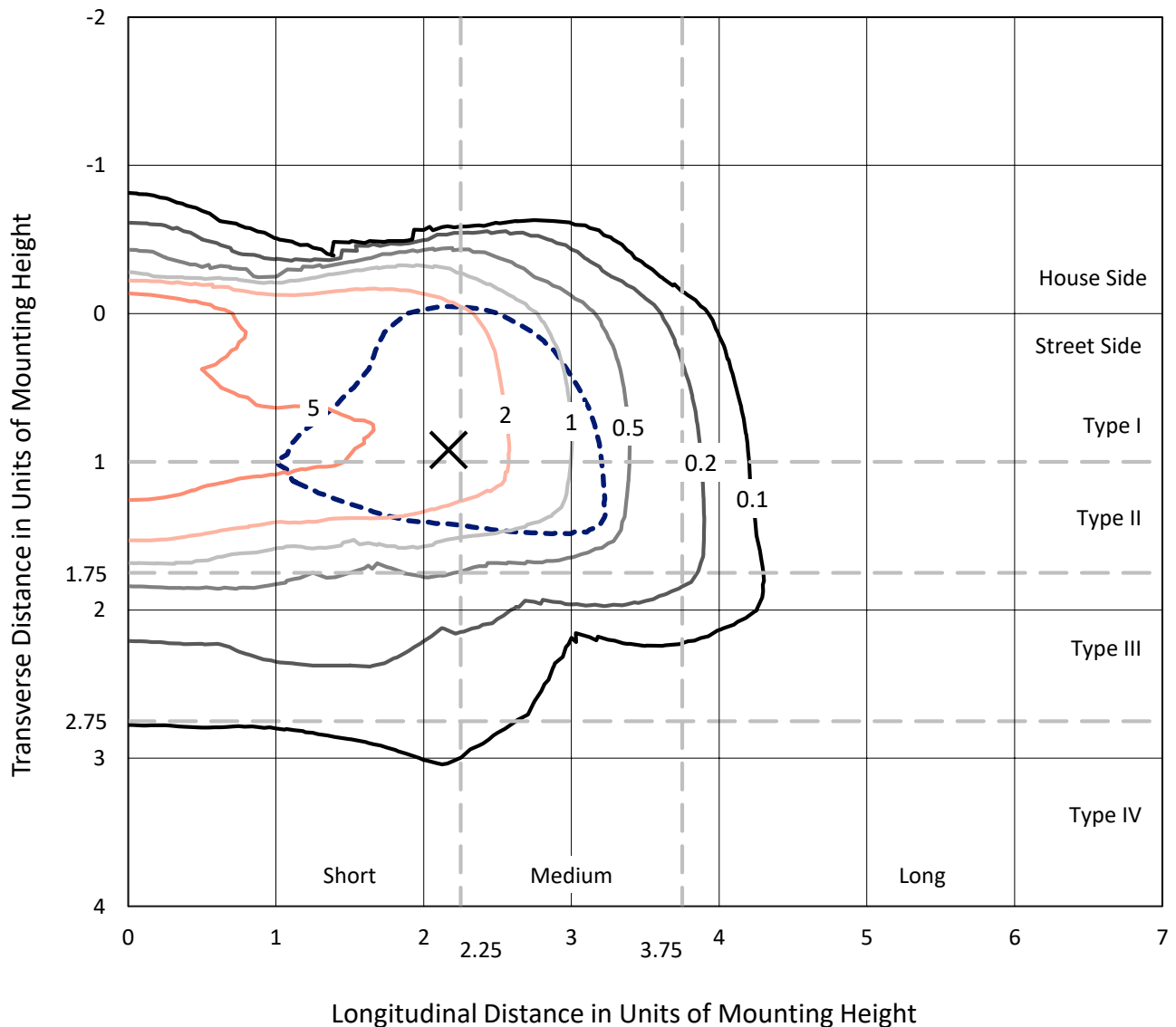


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

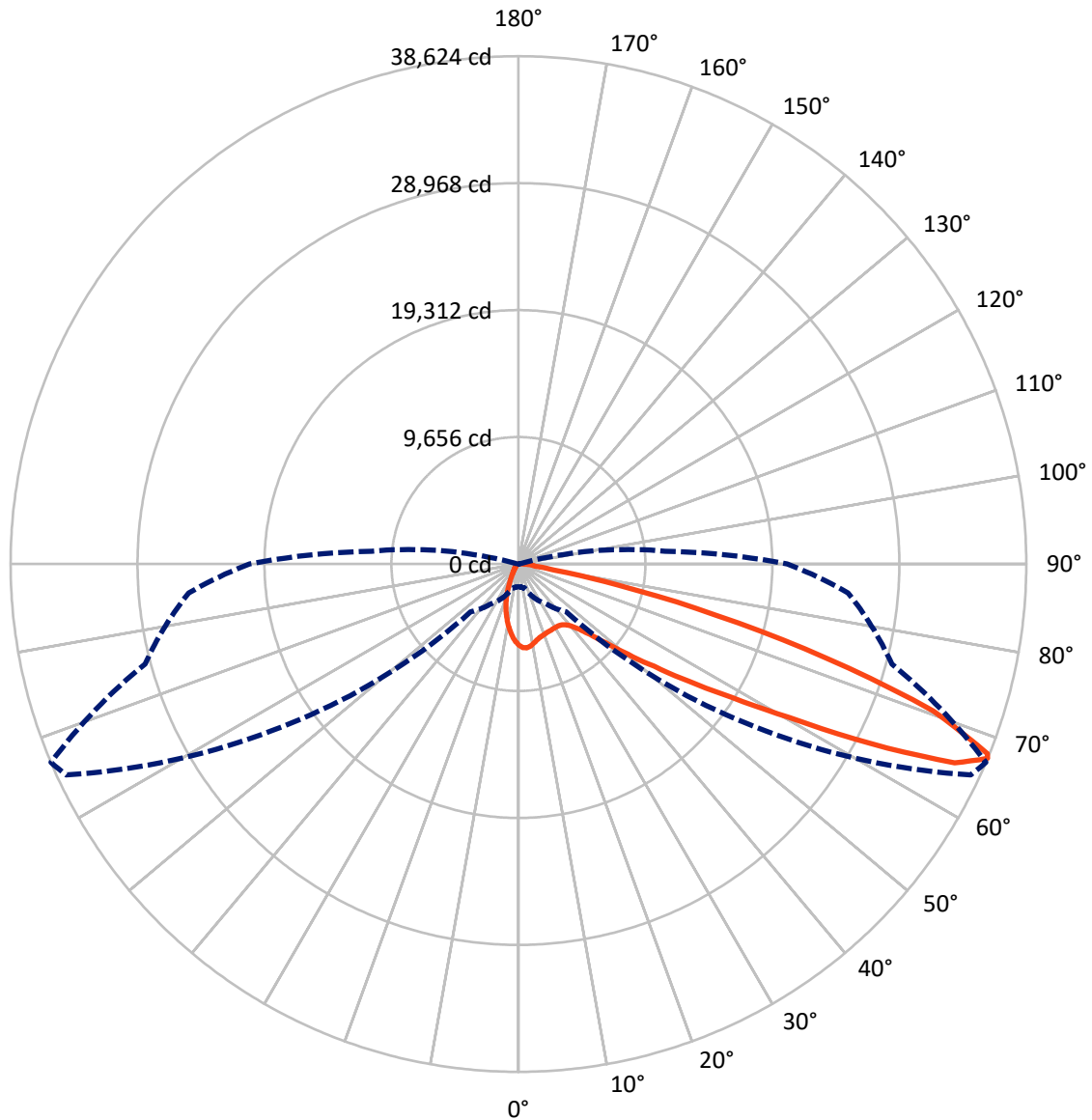


Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type II - Short - Semi-Cutoff

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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
<b>House Side</b>	Lumens	2912.2	0.0	2912.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	25135.6	0.0	25135.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	28047.9	0.0	28047.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	503.3	1.8
10°-20°	1071.2	3.8
20°-30°	1557.5	5.6
30°-40°	2429.7	8.7
40°-50°	4304.2	15.3
50°-60°	6810.9	24.3
60°-70°	7801.0	27.8
70°-80°	3235.8	11.5
80°-90°	334.2	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°	28047.9	100.0
0°-180°	28047.9	100.0



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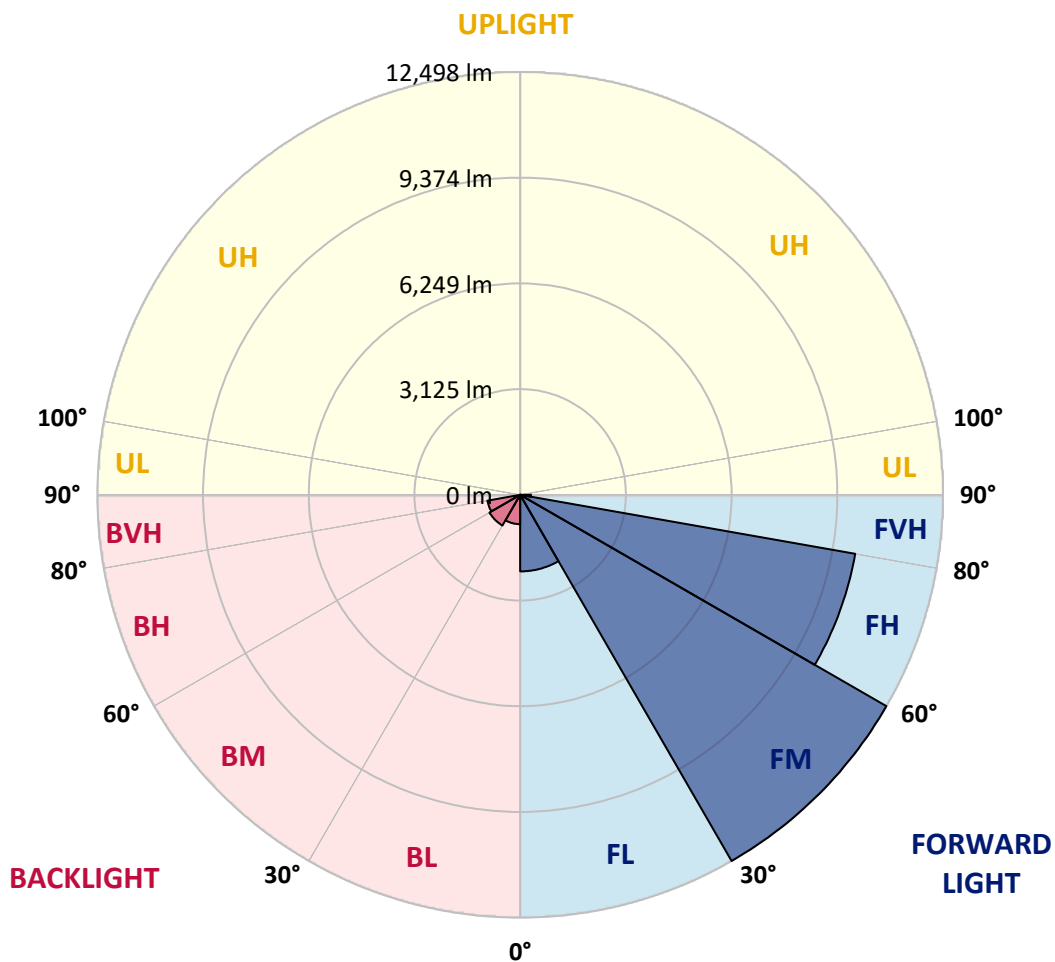
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2263.0	8.1			
FM (30°-60°)	12498.2	44.6			
FH (60°-80°)	10055.2	35.9			G4/12000
FVH (80°-90°)	319.2	1.1			G3/500
BL (0°-30°)	869.0	3.1	B2/1000		
BM (30°-60°)	1046.6	3.7	B2/2500		
BH (60°-80°)	981.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	15.1	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°	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6
2.5°	6395.0	6408.1	6406.4	6416.3	6439.2	6440.8	6417.9	6373.7	6363.9	6306.6	6206.9
5°	5897.7	5935.3	5958.2	6051.4	6156.1	6282.1	6377.0	6411.3	6406.4	6365.5	6215.0
7.5°	5330.0	5367.6	5393.8	5503.4	5642.4	5858.4	6105.4	6308.3	6326.3	6370.4	6208.5
10°	4952.1	4958.6	4994.6	5099.3	5244.9	5465.8	5760.2	6115.2	6169.2	6331.2	6192.1
12.5°	4641.2	4646.1	4693.6	4806.5	4961.9	5184.4	5493.6	5904.2	5987.6	6282.1	6188.9
15°	4420.4	4438.4	4480.9	4598.7	4763.9	4984.8	5302.2	5748.8	5848.6	6264.1	6218.3
17.5°	4346.8	4366.4	4379.5	4464.5	4615.1	4831.0	5156.6	5647.4	5760.2	6273.9	6275.6
20°	4423.6	4438.4	4408.9	4430.2	4523.4	4716.5	5033.9	5560.6	5694.8	6285.4	6349.2
22.5°	4709.9	4716.5	4636.3	4543.1	4526.7	4633.1	4937.3	5491.9	5635.9	6316.5	6435.9
25°	5200.7	5189.3	5058.4	4857.2	4667.4	4618.3	4880.1	5449.4	5606.5	6349.2	6525.9
27.5°	5793.0	5809.3	5629.4	5336.5	4975.0	4716.5	4871.9	5431.4	5593.4	6372.1	6604.4
30°	6512.8	6535.7	6329.5	5961.5	5442.9	4958.6	4947.2	5428.1	5585.2	6357.4	6610.9
32.5°	7247.3	7275.1	7113.2	6733.6	6067.8	5364.3	5117.3	5464.1	5601.5	6306.6	6573.3
35°	8016.2	8055.5	7947.5	7622.0	6915.2	5950.0	5416.7	5573.7	5678.4	6301.7	6535.7
37.5°	9078.0	9114.0	8911.1	8565.9	7941.0	6735.3	5897.7	5779.9	5860.0	6380.3	6545.5
40°	10663.2	10658.3	10134.8	9606.4	9068.2	7733.2	6573.3	6152.9	6193.8	6617.5	6666.6
42.5°	12390.8	12382.6	11608.8	10805.5	10319.7	8961.8	7461.6	6797.4	6769.6	7054.3	6980.7
45°	13722.5	13720.8	13089.4	12184.7	11826.4	10372.0	8610.1	7693.9	7651.4	7764.3	7559.8
47.5°	14290.2	14300.0	13982.6	13346.2	13496.7	12279.6	10057.9	8992.9	8929.1	8883.3	8572.5
50°	13848.4	13868.1	13894.2	13769.9	14722.0	14843.1	11999.8	10823.5	10792.5	10588.0	10102.1
52.5°	12405.5	12505.3	12812.9	13207.1	15147.4	17303.6	15044.3	13097.5	12930.7	12713.1	12178.1
55°	9974.5	10084.1	10668.1	11625.2	14514.3	18919.9	19310.9	16029.2	15751.1	15101.6	14329.4
57.5°	6601.1	6771.3	7618.7	8835.8	12675.5	19180.1	23567.7	20097.8	19129.3	17351.0	16480.7
60°	3636.7	3800.3	4719.8	5822.4	9154.9	17894.2	26430.6	25395.1	23683.9	19865.5	19093.3
62.5°	2239.6	2328.0	3006.9	4032.7	5490.3	14123.3	27022.9	32051.8	30070.7	23103.1	22249.1
65°	1783.2	1820.8	2152.9	3296.5	3936.1	8400.7	25110.4	37126.6	36465.7	27022.9	25074.4
67°	1730.9	1745.6	1902.6	2830.2	3710.4	5150.0	21036.9	37952.7	38623.5	29395.0	25162.8
67.5°	1742.3	1758.7	1907.5	2701.0	3703.8	4732.8	19633.2	37627.2	38474.6	29583.1	24771.8
70°	1680.1	1730.9	2184.0	2699.3	3522.2	3932.9	11757.7	32601.5	33483.3	27487.5	21018.9
72.5°	595.5	598.8	944.0	2184.0	3829.8	3975.4	5904.2	23899.8	24552.6	21027.1	15153.9
75°	353.4	301.0	314.1	621.7	3659.7	3860.9	3406.1	15271.7	15515.5	12048.9	7674.3
77.5°	243.8	212.7	219.2	274.8	1393.8	3806.9	2705.9	7963.9	7703.8	4225.7	1634.3
80°	139.1	122.7	130.9	240.5	507.1	3551.7	2552.1	3229.4	2753.3	716.6	451.5
82.5°	73.6	62.2	75.3	198.0	353.4	2213.5	2557.0	1560.7	1236.8	242.1	307.6
85°	26.2	21.3	36.0	135.8	235.6	678.9	2370.5	1312.0	1030.7	117.8	233.9
87.5°	4.9	4.9	14.7	55.6	94.9	207.8	1402.0	778.7	521.9	70.3	160.3
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°	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6	6185.6
2.5°	6166.0	6095.6	6000.7	5884.6	5747.1	5626.1	5536.1	5442.9	5423.2	5390.5	5385.6
5°	6125.1	6004.0	5768.4	5498.5	5210.5	4950.4	4739.4	4551.3	4467.8	4395.8	4387.7
7.5°	6064.5	5882.9	5482.1	5047.0	4597.1	4188.1	3841.2	3595.9	3370.1	3262.1	3245.8
10°	5994.2	5734.1	5159.8	4556.2	3934.5	3357.0	2841.7	2409.8	2148.0	1992.6	1973.0
12.5°	5928.7	5588.5	4831.0	4047.4	3221.2	2449.0	1786.5	1374.2	1099.4	988.1	975.0
15°	5897.7	5470.7	4523.4	3527.1	2475.2	1559.1	976.7	755.8	665.8	639.7	638.0
17.5°	5894.4	5370.9	4222.4	2988.9	1734.1	906.3	636.4	580.8	562.8	556.2	556.2
20°	5892.7	5276.0	3921.4	2431.0	1101.0	603.7	530.1	517.0	503.9	495.7	495.7
22.5°	5910.7	5190.9	3607.3	1861.7	693.6	489.2	466.2	453.2	436.8	425.4	423.7
25°	5928.7	5125.5	3286.7	1325.1	502.2	425.4	402.4	384.5	361.5	346.8	345.2
27.5°	5932.0	5043.7	2943.1	886.7	420.4	371.4	341.9	314.1	287.9	273.2	271.6
30°	5882.9	4906.3	2561.9	598.8	371.4	322.3	283.0	253.6	229.0	217.6	217.6
32.5°	5786.4	4736.1	2143.1	451.5	330.5	276.5	233.9	206.1	189.8	184.9	183.2
35°	5699.7	4552.9	1712.9	382.8	296.1	233.9	191.4	173.4	163.6	162.0	160.3
37.5°	5649.0	4405.7	1308.8	346.8	263.4	196.3	162.0	148.9	144.0	140.7	142.3
40°	5688.2	4283.0	966.9	317.4	230.7	163.6	137.4	130.9	126.0	124.3	124.3
42.5°	5860.0	4261.7	718.2	291.2	199.6	135.8	119.4	114.5	111.2	109.6	111.2
45°	6311.6	4392.6	557.9	266.7	168.5	114.5	101.4	99.8	98.2	98.2	98.2
47.5°	6990.5	4662.5	464.6	238.9	140.7	98.2	88.3	86.7	85.1	86.7	86.7
50°	8140.6	5156.6	415.5	211.0	116.2	83.4	75.3	75.3	75.3	75.3	76.9
52.5°	9889.4	6128.3	382.8	183.2	94.9	70.3	63.8	63.8	65.4	65.4	67.1
55°	11837.8	7417.5	353.4	155.4	80.2	58.9	52.4	54.0	55.6	57.3	57.3
57.5°	13951.5	8845.7	328.8	127.6	68.7	47.4	44.2	45.8	47.4	50.7	50.7
60°	16502.0	10391.6	292.8	99.8	57.3	37.6	34.4	37.6	42.5	45.8	47.4
62.5°	19302.7	11886.9	247.0	78.5	47.4	29.4	27.8	34.4	40.9	44.2	45.8
65°	21216.8	12356.4	189.8	63.8	36.0	21.3	22.9	31.1	39.3	44.2	44.2
67°	20441.4	11203.1	155.4	54.0	29.4	16.4	21.3	31.1	39.3	42.5	44.2
67.5°	19903.1	10751.6	148.9	52.4	27.8	16.4	21.3	31.1	39.3	44.2	44.2
70°	16194.4	8076.8	124.3	39.3	22.9	14.7	18.0	29.4	37.6	42.5	42.5
72.5°	11252.2	4979.9	111.2	27.8	19.6	13.1	16.4	27.8	36.0	40.9	42.5
75°	5349.6	1802.8	94.9	21.3	18.0	11.5	14.7	27.8	36.0	40.9	40.9
77.5°	1091.2	418.8	76.9	18.0	14.7	11.5	13.1	26.2	34.4	39.3	39.3
80°	358.3	162.0	57.3	16.4	14.7	11.5	13.1	24.5	34.4	37.6	39.3
82.5°	258.5	81.8	37.6	16.4	14.7	11.5	11.5	24.5	32.7	37.6	37.6
85°	198.0	57.3	24.5	16.4	14.7	11.5	11.5	22.9	31.1	36.0	36.0
87.5°	130.9	22.9	19.6	16.4	14.7	11.5	11.5	22.9	29.4	34.4	36.0
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)