

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: P299680

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299680  
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-SL2-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K 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: 28996.6 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - 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

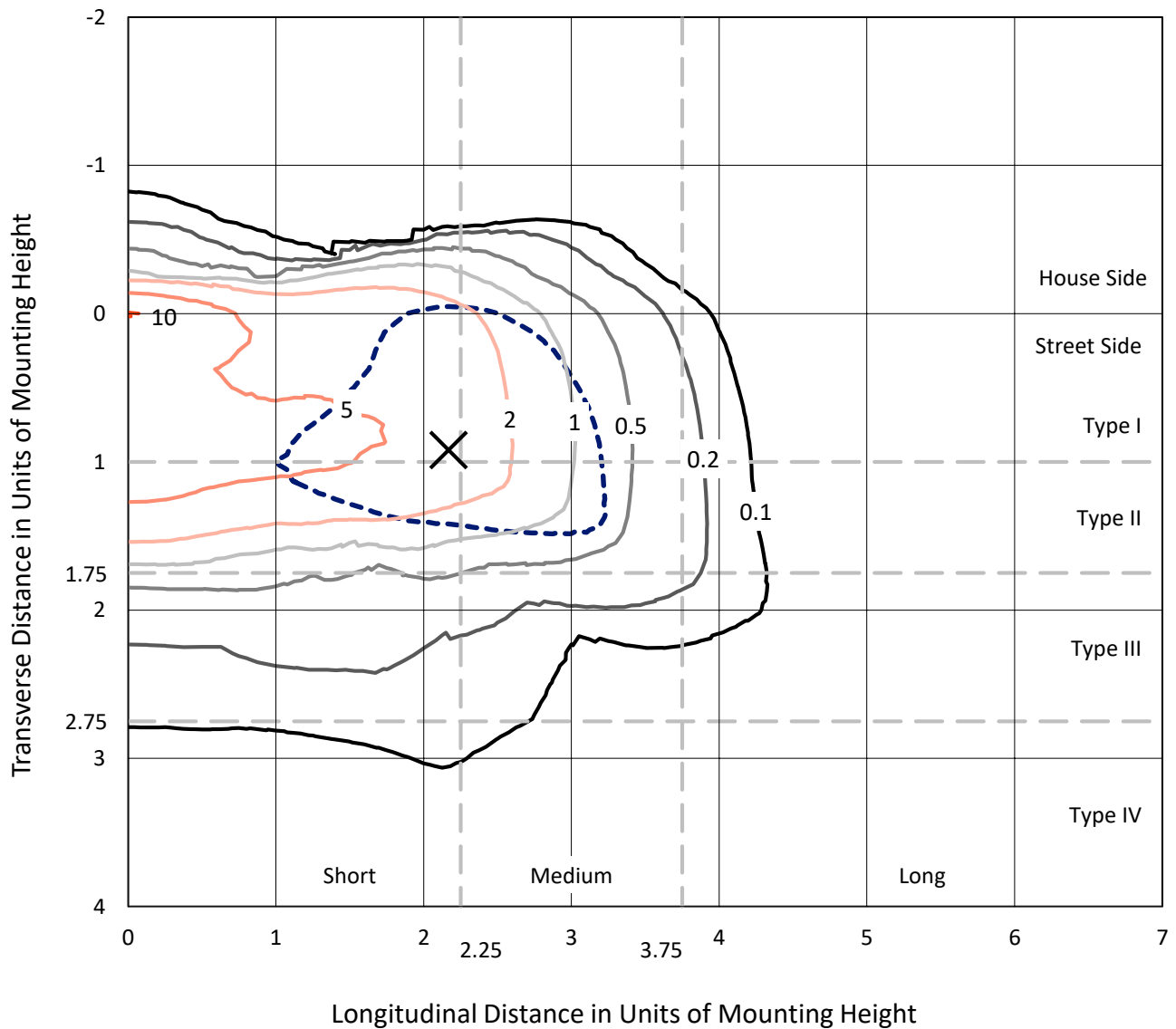


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

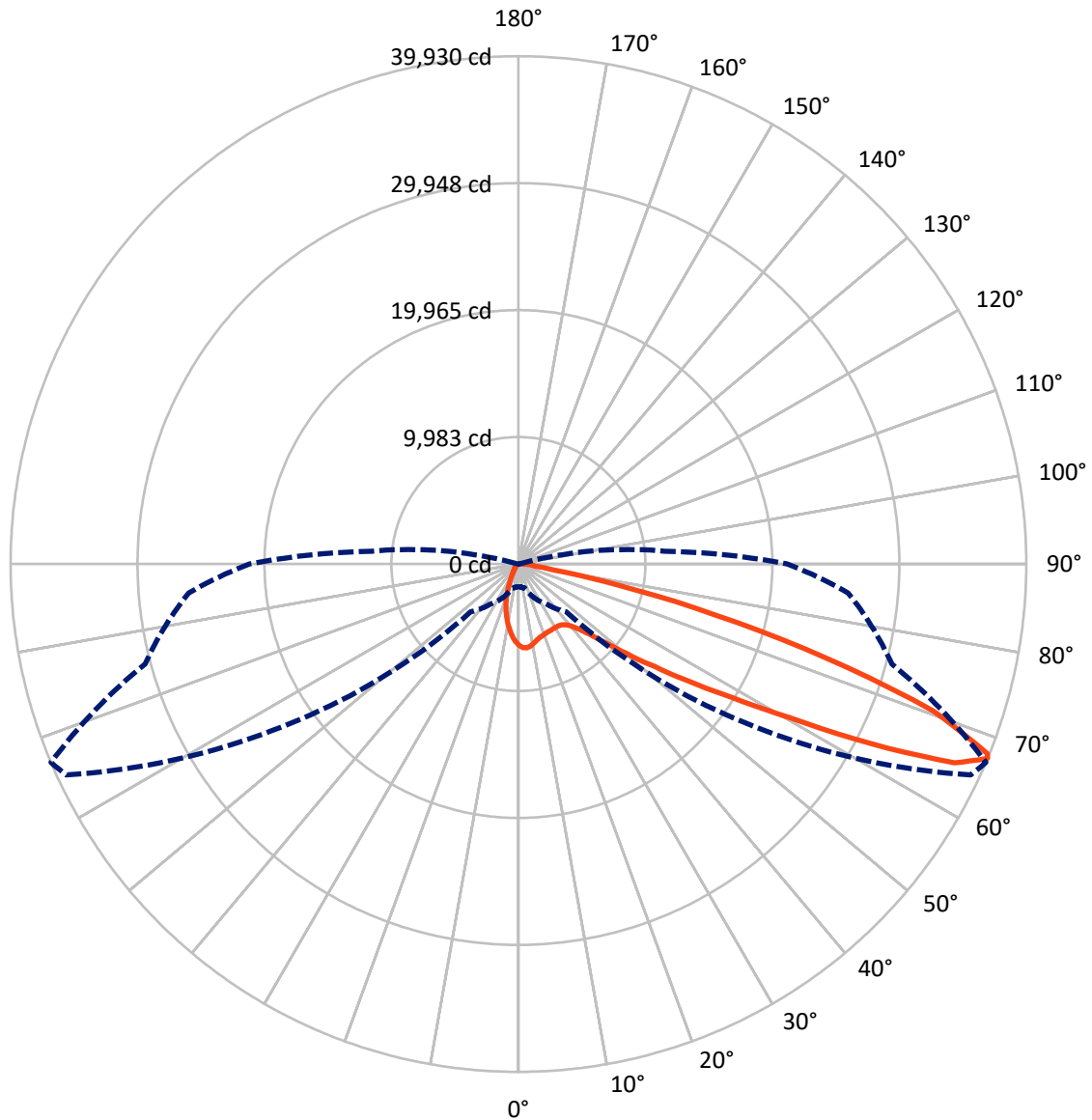


Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
 Type II - Short - Semi-Cutoff

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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	3010.7	0.0	3010.7
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	25985.9	0.0	25985.9
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	28996.6	0.0	28996.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	520.3	1.8
10°-20°	1107.5	3.8
20°-30°	1610.2	5.6
30°-40°	2511.9	8.7
40°-50°	4449.8	15.3
50°-60°	7041.3	24.3
60°-70°	8064.8	27.8
70°-80°	3345.2	11.5
80°-90°	345.5	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°	28996.6	100.0
0°-180°	28996.6	100.0



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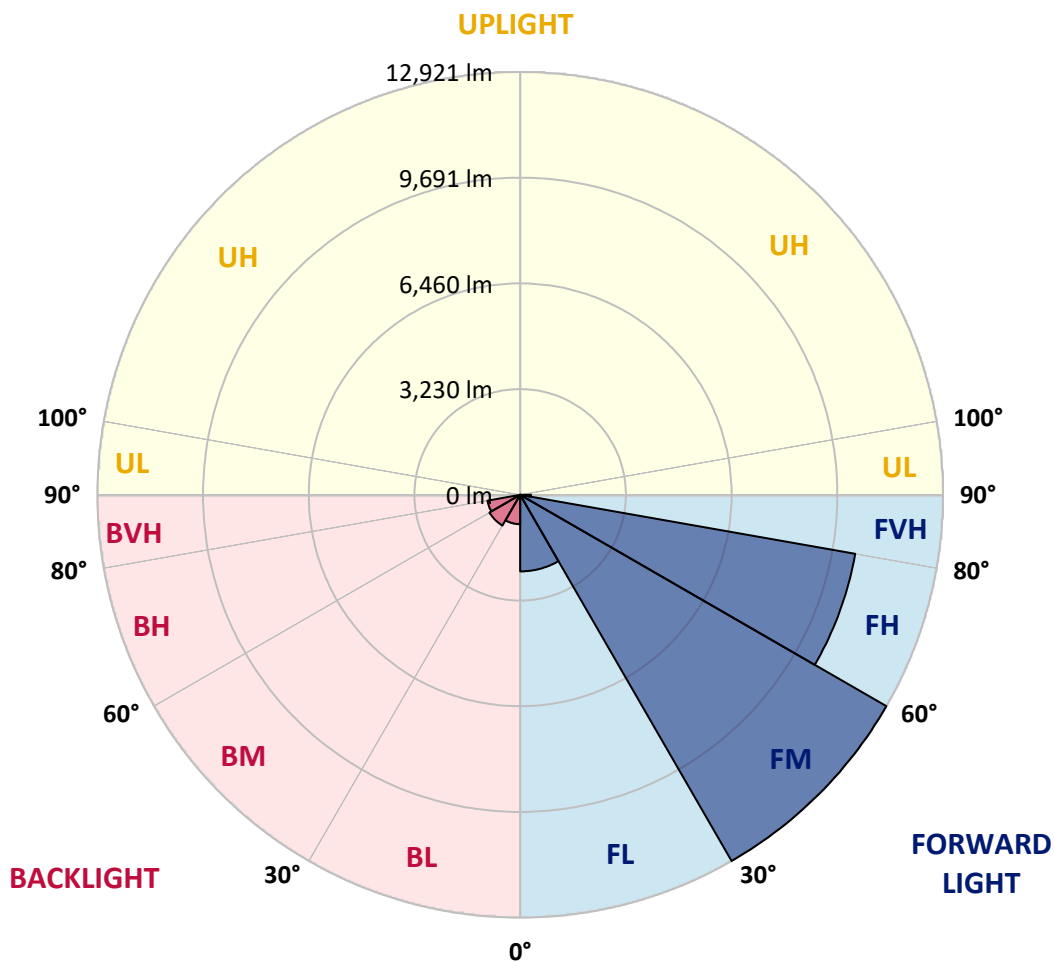
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2339.6	8.1			
FM (30°-60°)	12921.0	44.6			
FH (60°-80°)	10395.4	35.9			G4/12000
FVH (80°-90°)	330.0	1.1			G3/500
BL (0°-30°)	898.4	3.1	B2/1000		
BM (30°-60°)	1082.0	3.7	B2/2500		
BH (60°-80°)	1014.7	3.5	B3/2500		G3/2500
BVH (80°-90°)	15.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8
2.5°	6611.3	6624.8	6623.2	6633.3	6657.0	6658.7	6635.0	6589.3	6579.2	6520.0	6416.8
5°	6097.2	6136.1	6159.7	6256.1	6364.4	6494.6	6592.7	6628.2	6623.2	6580.9	6425.3
7.5°	5510.3	5549.2	5576.2	5689.6	5833.3	6056.6	6312.0	6521.7	6540.3	6585.9	6418.5
10°	5119.6	5126.3	5163.6	5271.8	5422.3	5650.7	5955.1	6322.1	6377.9	6545.4	6401.6
12.5°	4798.2	4803.3	4852.4	4969.1	5129.7	5359.7	5679.4	6103.9	6190.2	6494.6	6398.2
15°	4569.9	4588.5	4632.5	4754.3	4925.1	5153.4	5481.5	5943.2	6046.4	6476.0	6428.7
17.5°	4493.8	4514.1	4527.6	4615.6	4771.2	4994.4	5331.0	5838.4	5955.1	6486.2	6487.8
20°	4573.3	4588.5	4558.1	4580.1	4676.5	4876.0	5204.1	5748.7	5887.4	6498.0	6564.0
22.5°	4869.3	4876.0	4793.2	4696.8	4679.8	4789.8	5104.4	5677.7	5826.5	6530.1	6653.6
25°	5376.7	5364.8	5229.5	5021.5	4825.3	4774.6	5045.2	5633.7	5796.6	6564.0	6746.6
27.5°	5988.9	6005.8	5819.8	5517.0	5143.3	4876.0	5036.7	5615.1	5782.6	6587.6	6827.8
30°	6733.1	6756.8	6543.7	6163.1	5627.0	5126.3	5114.5	5611.8	5774.1	6572.4	6834.6
32.5°	7492.5	7521.2	7353.8	6961.4	6273.1	5545.8	5290.4	5649.0	5791.0	6520.0	6795.7
35°	8287.4	8328.0	8216.4	7879.8	7149.1	6151.3	5599.9	5762.3	5870.5	6514.9	6756.8
37.5°	9385.1	9422.3	9212.5	8855.7	8209.6	6963.1	6097.2	5975.4	6058.3	6596.1	6766.9
40°	11023.9	11018.9	10477.6	9931.3	9374.9	7994.8	6795.7	6361.0	6403.3	6841.3	6892.1
42.5°	12809.9	12801.5	12001.5	11171.1	10668.8	9265.0	7714.0	7027.4	6998.6	7292.9	7216.8
45°	14186.7	14185.0	13532.1	12596.8	12226.4	10722.9	8901.3	7954.2	7910.2	8026.9	7815.5
47.5°	14773.6	14783.7	14455.6	13797.7	13953.3	12694.9	10398.1	9297.1	9231.1	9183.8	8862.4
50°	14316.9	14337.2	14364.3	14235.7	15220.1	15345.2	12405.7	11189.7	11157.5	10946.1	10443.8
52.5°	12825.2	12928.3	13246.3	13653.9	15659.8	17888.9	15553.2	13540.6	13368.1	13143.1	12590.1
55°	10311.9	10425.2	11029.0	12018.4	15005.3	19559.9	19964.2	16571.4	16283.9	15612.4	14814.1
57.5°	6824.4	7000.3	7876.4	9134.7	13104.2	19828.9	24364.9	20777.7	19776.4	17938.0	17038.2
60°	3759.8	3928.9	4879.4	6019.4	9464.5	18499.5	27324.7	26254.1	24485.0	20537.5	19739.2
62.5°	2315.4	2406.7	3108.6	4169.1	5676.0	14601.0	27937.0	33136.1	31087.9	23884.6	23001.8
65°	1843.5	1882.4	2225.8	3408.0	4069.3	8684.9	25959.8	38382.5	37699.2	27937.0	25922.6
67°	1789.4	1804.6	1967.0	2926.0	3835.9	5324.2	21748.5	39236.6	39930.0	30389.4	26014.0
67.5°	1801.2	1818.2	1972.1	2792.3	3829.1	4892.9	20297.4	38900.0	39776.1	30583.9	25609.7
70°	1737.0	1789.4	2257.9	2790.7	3641.4	4065.9	12155.4	33704.3	34615.9	28417.3	21729.9
72.5°	615.6	619.0	975.9	2257.9	3959.3	4109.9	6103.9	24708.3	25383.1	21738.3	15666.6
75°	365.3	311.2	324.7	642.7	3783.5	3991.5	3521.3	15788.3	16040.3	12456.5	7933.9
77.5°	252.0	219.9	226.6	284.1	1441.0	3935.7	2797.4	8233.3	7964.4	4368.6	1689.6
80°	143.8	126.8	135.3	248.6	524.3	3671.8	2638.4	3338.6	2846.5	740.8	466.8
82.5°	76.1	64.3	77.8	204.6	365.3	2288.3	2643.5	1613.5	1278.6	250.3	318.0
85°	27.1	22.0	37.2	140.4	243.5	701.9	2450.7	1356.4	1065.5	121.8	241.9
87.5°	5.1	5.1	15.2	57.5	98.1	214.8	1449.4	805.1	539.5	72.7	165.7
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°	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8	6394.8
2.5°	6374.5	6301.8	6203.7	6083.6	5941.6	5816.4	5723.4	5627.0	5606.7	5572.9	5567.8
5°	6332.2	6207.1	5963.5	5684.5	5386.8	5117.9	4899.7	4705.2	4619.0	4544.5	4536.1
7.5°	6269.7	6081.9	5667.6	5217.7	4752.6	4329.7	3971.2	3717.5	3484.1	3372.5	3355.5
10°	6196.9	5928.0	5334.4	4710.3	4067.6	3470.6	2937.8	2491.3	2220.7	2060.0	2039.7
12.5°	6129.3	5777.5	4994.4	4184.3	3330.2	2531.9	1846.9	1420.7	1136.6	1021.5	1008.0
15°	6097.2	5655.7	4676.5	3646.5	2558.9	1611.8	1009.7	781.4	688.4	661.3	659.6
17.5°	6093.8	5552.6	4365.3	3090.0	1792.8	937.0	657.9	600.4	581.8	575.0	575.0
20°	6092.1	5454.5	4054.1	2513.3	1138.2	624.1	548.0	534.5	520.9	512.5	512.5
22.5°	6110.7	5366.5	3729.3	1924.7	717.1	505.7	482.0	468.5	451.6	439.7	438.0
25°	6129.3	5298.9	3397.8	1370.0	519.2	439.7	416.1	397.5	373.8	358.6	356.9
27.5°	6132.7	5214.3	3042.7	916.7	434.7	383.9	353.5	324.7	297.7	282.4	280.8
30°	6081.9	5072.2	2648.6	619.0	383.9	333.2	292.6	262.2	236.8	224.9	224.9
32.5°	5982.1	4896.3	2215.6	466.8	341.6	285.8	241.9	213.1	196.2	191.1	189.4
35°	5892.5	4706.9	1770.8	395.8	306.1	241.9	197.9	179.3	169.1	167.4	165.7
37.5°	5840.1	4554.7	1353.0	358.6	272.3	203.0	167.4	153.9	148.8	145.5	147.1
40°	5880.7	4427.8	999.6	328.1	238.5	169.1	142.1	135.3	130.2	128.5	128.5
42.5°	6058.3	4405.9	742.5	301.1	206.3	140.4	123.5	118.4	115.0	113.3	115.0
45°	6525.1	4541.2	576.7	275.7	174.2	118.4	104.9	103.2	101.5	101.5	101.5
47.5°	7226.9	4820.2	480.3	246.9	145.5	101.5	91.3	89.6	87.9	89.6	89.6
50°	8415.9	5331.0	429.6	218.2	120.1	86.3	77.8	77.8	77.8	77.8	79.5
52.5°	10223.9	6335.6	395.8	189.4	98.1	72.7	66.0	66.0	67.7	67.7	69.3
55°	12238.3	7668.4	365.3	160.7	82.9	60.9	54.1	55.8	57.5	59.2	59.2
57.5°	14423.5	9144.9	340.0	131.9	71.0	49.0	45.7	47.4	49.0	52.4	52.4
60°	17060.2	10743.2	302.7	103.2	59.2	38.9	35.5	38.9	44.0	47.4	49.0
62.5°	19955.7	12289.0	255.4	81.2	49.0	30.4	28.8	35.5	42.3	45.7	47.4
65°	21934.5	12774.4	196.2	66.0	37.2	22.0	23.7	32.1	40.6	45.7	45.7
67°	21132.9	11582.1	160.7	55.8	30.4	16.9	22.0	32.1	40.6	44.0	45.7
67.5°	20576.4	11115.3	153.9	54.1	28.8	16.9	22.0	32.1	40.6	45.7	45.7
70°	16742.2	8350.0	128.5	40.6	23.7	15.2	18.6	30.4	38.9	44.0	44.0
72.5°	11632.8	5148.3	115.0	28.8	20.3	13.5	16.9	28.8	37.2	42.3	44.0
75°	5530.6	1863.8	98.1	22.0	18.6	11.8	15.2	28.8	37.2	42.3	42.3
77.5°	1128.1	433.0	79.5	18.6	15.2	11.8	13.5	27.1	35.5	40.6	40.6
80°	370.4	167.4	59.2	16.9	15.2	11.8	13.5	25.4	35.5	38.9	40.6
82.5°	267.2	84.6	38.9	16.9	15.2	11.8	11.8	25.4	33.8	38.9	38.9
85°	204.6	59.2	25.4	16.9	15.2	11.8	11.8	23.7	32.1	37.2	37.2
87.5°	135.3	23.7	20.3	16.9	15.2	11.8	11.8	23.7	30.4	35.5	37.2
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)