

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: P299737

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299737  
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-SL2-7027-600-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K 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: 20543.3 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

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

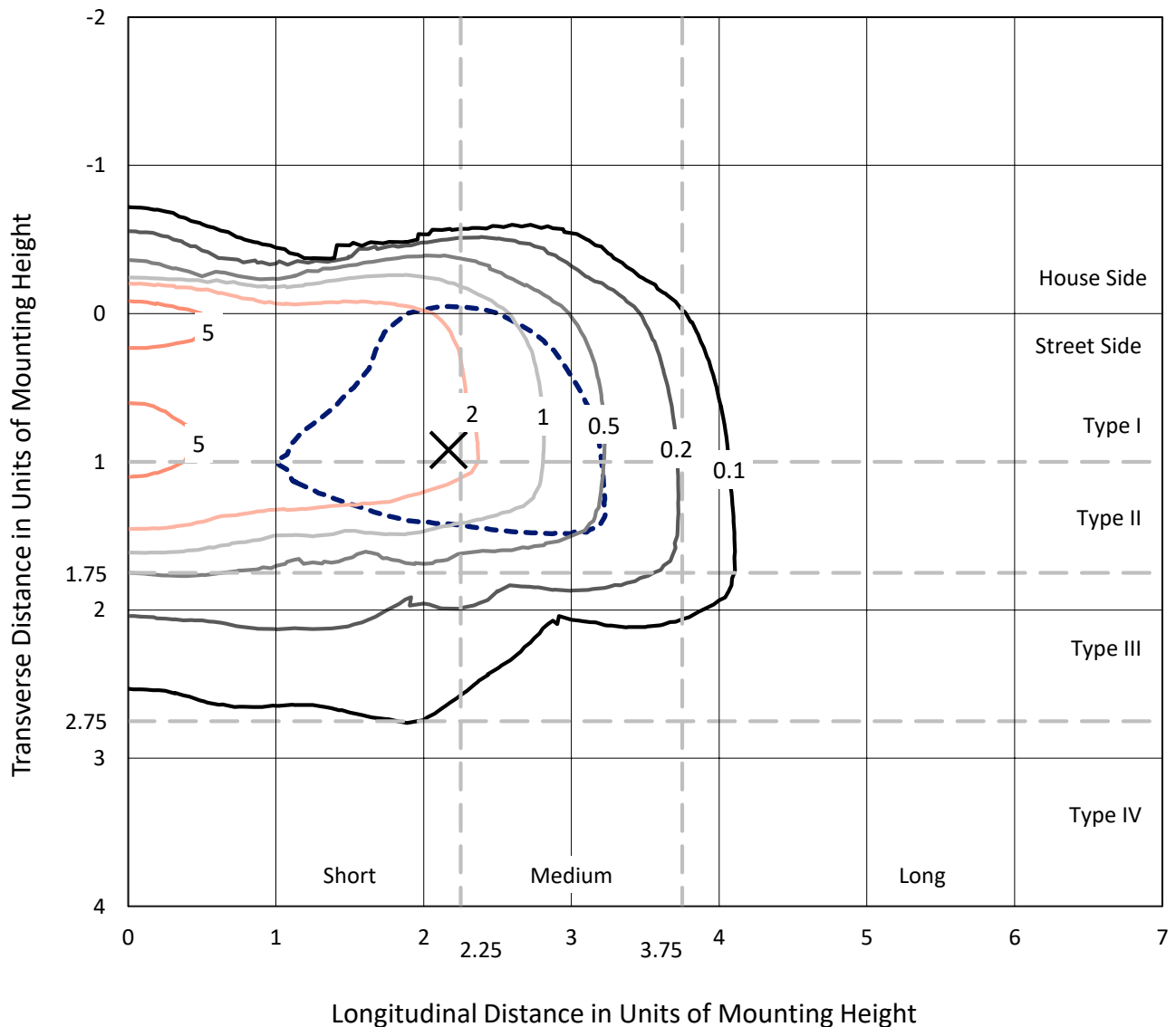


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

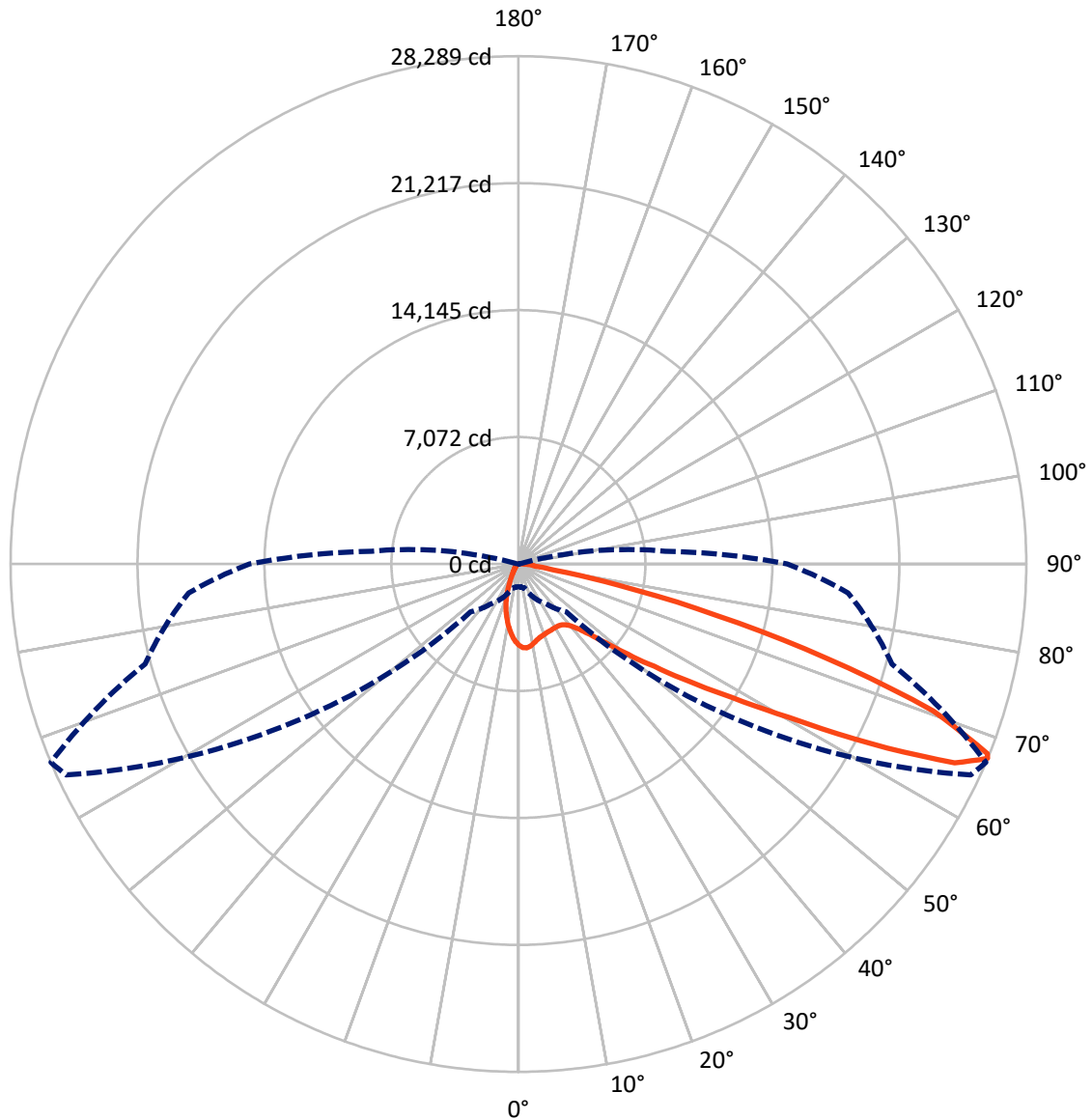


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Short - Semi-Cutoff

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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	2133.0	0.0	2133.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	18410.2	0.0	18410.2
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	20543.3	0.0	20543.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	368.6	1.8
10°-20°	784.6	3.8
20°-30°	1140.8	5.6
30°-40°	1779.6	8.7
40°-50°	3152.5	15.3
50°-60°	4988.6	24.3
60°-70°	5713.7	27.8
70°-80°	2370.0	11.5
80°-90°	244.8	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°	20543.3	100.0
0°-180°	20543.3	100.0



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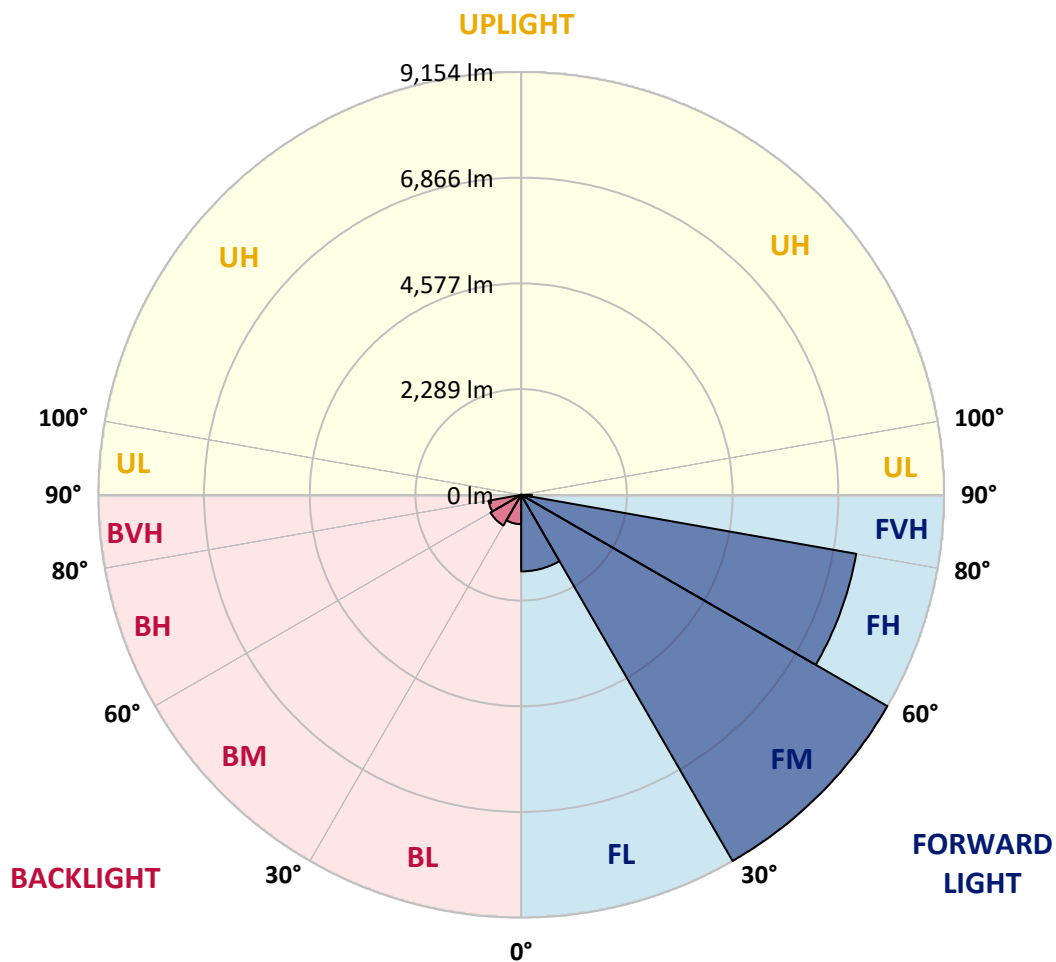
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1657.5	8.1			
FM (30°-60°)	9154.1	44.6			
FH (60°-80°)	7364.8	35.9			G3/7500
FVH (80°-90°)	233.8	1.1			G3/500
BL (0°-30°)	636.5	3.1	B2/1000		
BM (30°-60°)	766.6	3.7	B1/1000		
BH (60°-80°)	718.9	3.5	B2/1000		G2/1000
BVH (80°-90°)	11.0	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-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5
2.5°	4683.9	4693.5	4692.3	4699.5	4716.3	4717.5	4700.7	4668.3	4661.2	4619.2	4546.1
5°	4319.7	4347.2	4364.0	4432.3	4509.0	4601.2	4670.7	4695.9	4692.3	4662.3	4552.1
7.5°	3903.9	3931.4	3950.6	4030.9	4132.7	4290.9	4471.8	4620.4	4633.6	4665.9	4547.3
10°	3627.1	3631.9	3658.2	3734.9	3841.6	4003.3	4219.0	4479.0	4518.6	4637.2	4535.3
12.5°	3399.4	3403.0	3437.7	3520.4	3634.3	3797.2	4023.7	4324.4	4385.6	4601.2	4532.9
15°	3237.6	3250.8	3282.0	3368.3	3489.3	3651.0	3883.5	4210.6	4283.7	4588.1	4554.5
17.5°	3183.7	3198.1	3207.7	3270.0	3380.2	3538.4	3776.9	4136.3	4219.0	4595.2	4596.4
20°	3240.0	3250.8	3229.3	3244.8	3313.1	3454.5	3687.0	4072.8	4171.1	4603.6	4650.4
22.5°	3449.7	3454.5	3395.8	3327.5	3315.5	3393.4	3616.3	4022.5	4127.9	4626.4	4713.9
25°	3809.2	3800.8	3705.0	3557.6	3418.6	3382.6	3574.3	3991.3	4106.4	4650.4	4779.8
27.5°	4243.0	4254.9	4123.1	3908.7	3643.8	3454.5	3568.4	3978.2	4096.8	4667.1	4837.3
30°	4770.2	4787.0	4636.0	4366.4	3986.5	3631.9	3623.5	3975.8	4090.8	4656.4	4842.1
32.5°	5308.2	5328.6	5209.9	4932.0	4444.3	3929.0	3748.1	4002.1	4102.8	4619.2	4814.5
35°	5871.4	5900.1	5821.0	5582.6	5065.0	4358.0	3967.4	4082.4	4159.1	4615.6	4787.0
37.5°	6649.0	6675.4	6526.8	6274.0	5816.3	4933.2	4319.7	4233.4	4292.1	4673.1	4794.2
40°	7810.1	7806.5	7423.1	7036.1	6641.8	5664.1	4814.5	4506.6	4536.5	4846.9	4882.8
42.5°	9075.5	9069.5	8502.7	7914.4	7558.5	6564.0	5465.2	4978.7	4958.3	5166.8	5112.9
45°	10050.8	10049.6	9587.1	8924.5	8662.1	7596.8	6306.3	5635.3	5604.2	5686.8	5537.1
47.5°	10466.6	10473.8	10241.4	9775.2	9885.5	8994.0	7366.8	6586.7	6540.0	6506.4	6278.8
50°	10143.1	10157.5	10176.6	10085.6	10783.0	10871.6	8789.1	7927.6	7904.8	7755.0	7399.1
52.5°	9086.3	9159.3	9384.6	9673.4	11094.5	12673.8	11019.0	9593.1	9470.9	9311.5	8919.7
55°	7305.7	7385.9	7813.7	8514.7	10630.8	13857.6	14144.0	11740.4	11536.6	11060.9	10495.4
57.5°	4834.9	4959.5	5580.2	6471.7	9284.0	14048.2	17261.8	14720.4	14011.0	12708.5	12071.1
60°	2663.7	2783.5	3456.9	4264.5	6705.3	13106.3	19358.8	18600.3	17346.9	14550.2	13984.7
62.5°	1640.4	1705.1	2202.4	2953.7	4021.3	10344.4	19792.5	23475.9	22024.8	16921.5	16296.1
65°	1306.1	1333.6	1576.9	2414.5	2883.0	6153.0	18391.8	27192.8	26708.8	19792.5	18365.4
67°	1267.7	1278.5	1393.6	2073.0	2717.6	3772.1	15408.2	27798.0	28289.2	21530.0	18430.1
67.5°	1276.1	1288.1	1397.1	1978.3	2712.8	3466.5	14380.1	27559.5	28180.2	21667.8	18143.7
70°	1230.6	1267.7	1599.6	1977.1	2579.8	2880.6	8611.7	23878.5	24524.4	20132.8	15395.0
72.5°	436.2	438.6	691.4	1599.6	2805.1	2911.7	4324.4	17505.1	17983.2	15401.0	11099.3
75°	258.8	220.5	230.1	455.3	2680.5	2827.8	2494.7	11185.6	11364.1	8825.0	5620.9
77.5°	178.5	155.8	160.6	201.3	1020.9	2788.3	1981.9	5833.0	5642.5	3095.1	1197.0
80°	101.9	89.9	95.9	176.1	371.5	2601.4	1869.3	2365.3	2016.6	524.8	330.7
82.5°	53.9	45.5	55.1	145.0	258.8	1621.2	1872.8	1143.1	905.9	177.3	225.3
85°	19.2	15.6	26.4	99.5	172.5	497.3	1736.2	961.0	754.9	86.3	171.3
87.5°	3.6	3.6	10.8	40.7	69.5	152.2	1026.9	570.4	382.2	51.5	117.4
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°	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5	4530.5
2.5°	4516.2	4464.6	4395.1	4310.1	4209.4	4120.7	4054.8	3986.5	3972.2	3948.2	3944.6
5°	4486.2	4397.5	4225.0	4027.3	3816.4	3625.9	3471.3	3333.5	3272.4	3219.7	3213.7
7.5°	4441.9	4308.9	4015.3	3696.6	3367.1	3067.5	2813.5	2633.7	2468.4	2389.3	2377.3
10°	4390.3	4199.8	3779.2	3337.1	2881.8	2458.8	2081.3	1765.0	1573.3	1459.5	1445.1
12.5°	4342.4	4093.2	3538.4	2964.4	2359.3	1793.8	1308.5	1006.5	805.2	723.7	714.2
15°	4319.7	4006.9	3313.1	2583.4	1812.9	1141.9	715.3	553.6	487.7	468.5	467.3
17.5°	4317.3	3933.8	3092.7	2189.2	1270.1	663.8	466.1	425.4	412.2	407.4	407.4
20°	4316.1	3864.3	2872.2	1780.6	806.4	442.2	388.2	378.6	369.1	363.1	363.1
22.5°	4329.2	3802.0	2642.1	1363.6	508.1	358.3	341.5	331.9	319.9	311.5	310.3
25°	4342.4	3754.1	2407.3	970.6	367.9	311.5	294.8	281.6	264.8	254.0	252.8
27.5°	4344.8	3694.2	2155.6	649.4	307.9	272.0	250.4	230.1	210.9	200.1	198.9
30°	4308.9	3593.5	1876.4	438.6	272.0	236.1	207.3	185.7	167.8	159.4	159.4
32.5°	4238.2	3468.9	1569.7	330.7	242.0	202.5	171.3	151.0	139.0	135.4	134.2
35°	4174.7	3334.7	1254.6	280.4	216.9	171.3	140.2	127.0	119.8	118.6	117.4
37.5°	4137.5	3226.9	958.6	254.0	192.9	143.8	118.6	109.0	105.4	103.0	104.2
40°	4166.3	3137.0	708.2	232.5	169.0	119.8	100.7	95.9	92.3	91.1	91.1
42.5°	4292.1	3121.4	526.0	213.3	146.2	99.5	87.5	83.9	81.5	80.3	81.5
45°	4622.8	3217.3	408.6	195.3	123.4	83.9	74.3	73.1	71.9	71.9	71.9
47.5°	5120.1	3415.0	340.3	174.9	103.0	71.9	64.7	63.5	62.3	63.5	63.5
50°	5962.4	3776.9	304.4	154.6	85.1	61.1	55.1	55.1	55.1	55.1	56.3
52.5°	7243.4	4488.6	280.4	134.2	69.5	51.5	46.7	46.7	47.9	47.9	49.1
55°	8670.5	5432.8	258.8	113.8	58.7	43.1	38.3	39.5	40.7	41.9	41.9
57.5°	10218.6	6478.9	240.8	93.5	50.3	34.7	32.4	33.6	34.7	37.1	37.1
60°	12086.6	7611.2	214.5	73.1	41.9	27.6	25.2	27.6	31.2	33.6	34.7
62.5°	14138.0	8706.4	180.9	57.5	34.7	21.6	20.4	25.2	30.0	32.4	33.6
65°	15540.0	9050.3	139.0	46.7	26.4	15.6	16.8	22.8	28.8	32.4	32.4
67°	14972.0	8205.5	113.8	39.5	21.6	12.0	15.6	22.8	28.8	31.2	32.4
67.5°	14577.8	7874.8	109.0	38.3	20.4	12.0	15.6	22.8	28.8	32.4	32.4
70°	11861.4	5915.7	91.1	28.8	16.8	10.8	13.2	21.6	27.6	31.2	31.2
72.5°	8241.5	3647.4	81.5	20.4	14.4	9.6	12.0	20.4	26.4	30.0	31.2
75°	3918.2	1320.5	69.5	15.6	13.2	8.4	10.8	20.4	26.4	30.0	30.0
77.5°	799.2	306.7	56.3	13.2	10.8	8.4	9.6	19.2	25.2	28.8	28.8
80°	262.4	118.6	41.9	12.0	10.8	8.4	9.6	18.0	25.2	27.6	28.8
82.5°	189.3	59.9	27.6	12.0	10.8	8.4	8.4	18.0	24.0	27.6	27.6
85°	145.0	41.9	18.0	12.0	10.8	8.4	8.4	16.8	22.8	26.4	26.4
87.5°	95.9	16.8	14.4	12.0	10.8	8.4	8.4	16.8	21.6	25.2	26.4
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)