

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: P299995

Luminaire Tested: **GLNA-AF-06-LED-E1-SL3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-SL3-7027-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

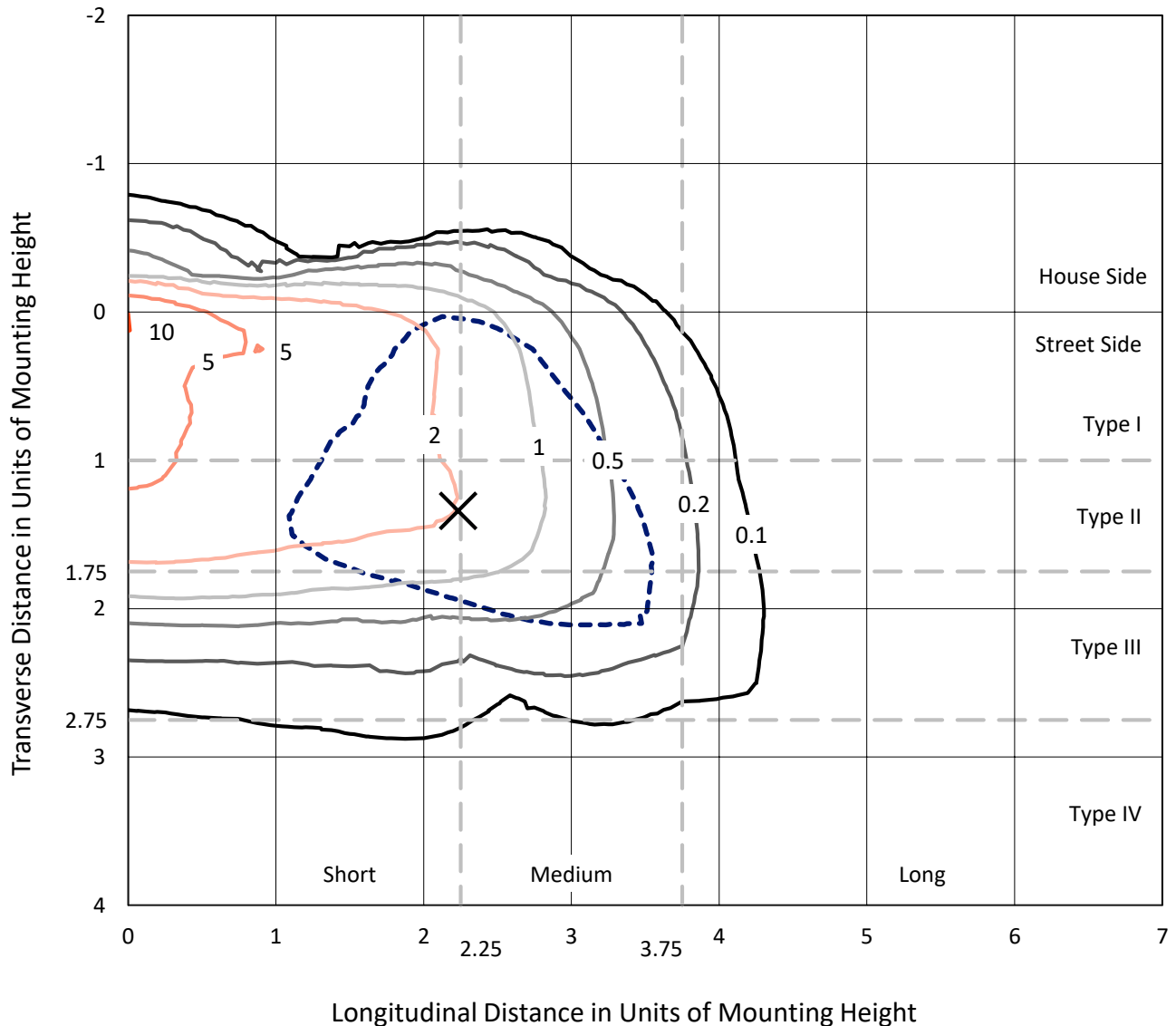
Lumens per Lamp: N/A  
Luminaire Lumens: 24004.5 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (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

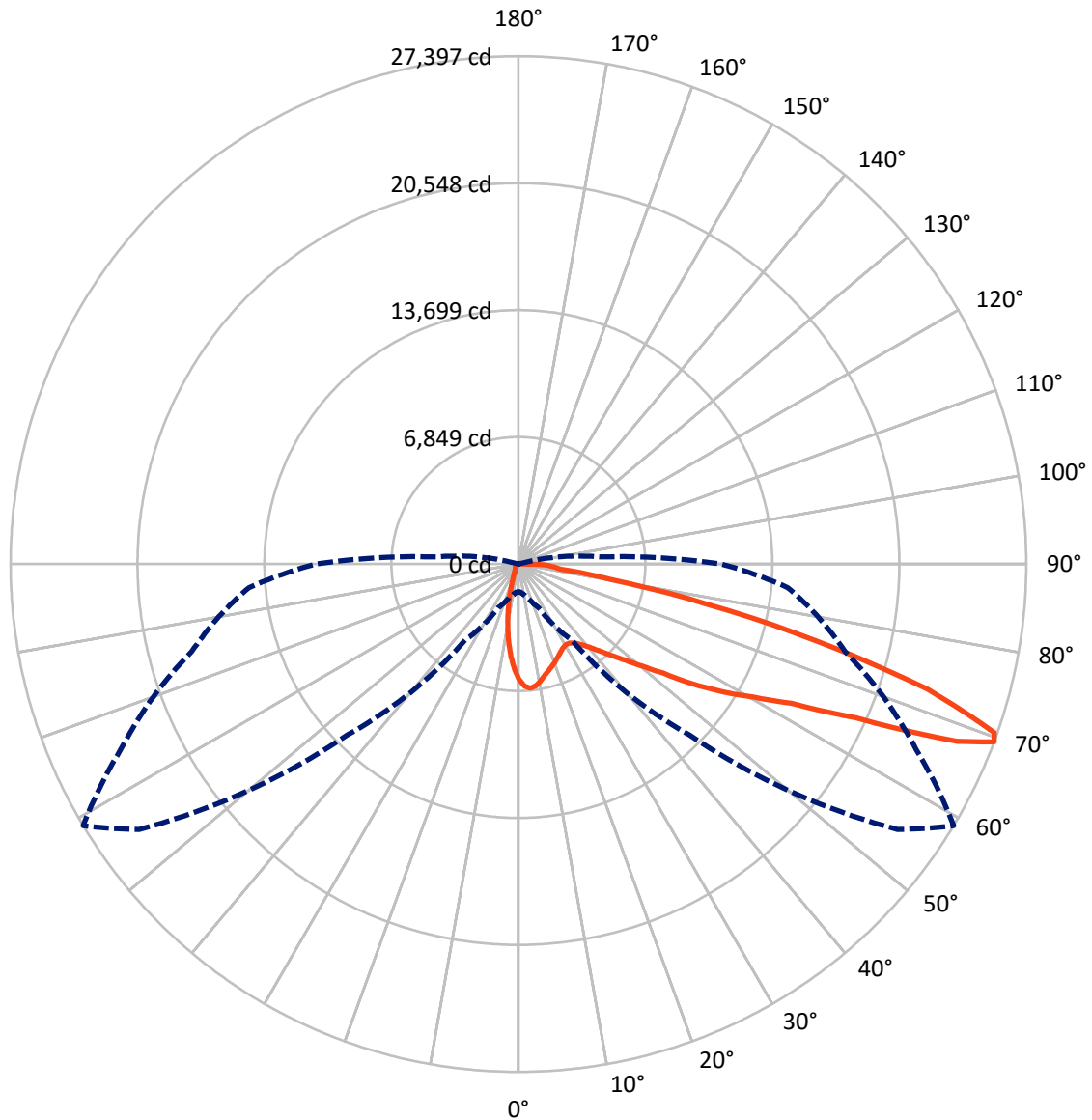


Based on 25 foot mounting height. Maximum calculated value = 10 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1954.8	0.0	1954.8
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	22049.7	0.0	22049.7
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	24004.5	0.0	24004.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	507.2	2.1
10°-20°	1047.9	4.4
20°-30°	1410.1	5.9
30°-40°	2047.4	8.5
40°-50°	3409.1	14.2
50°-60°	5318.1	22.2
60°-70°	6580.7	27.4
70°-80°	3335.0	13.9
80°-90°	349.0	1.5
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°	24004.5	100.0
0°-180°	24004.5	100.0



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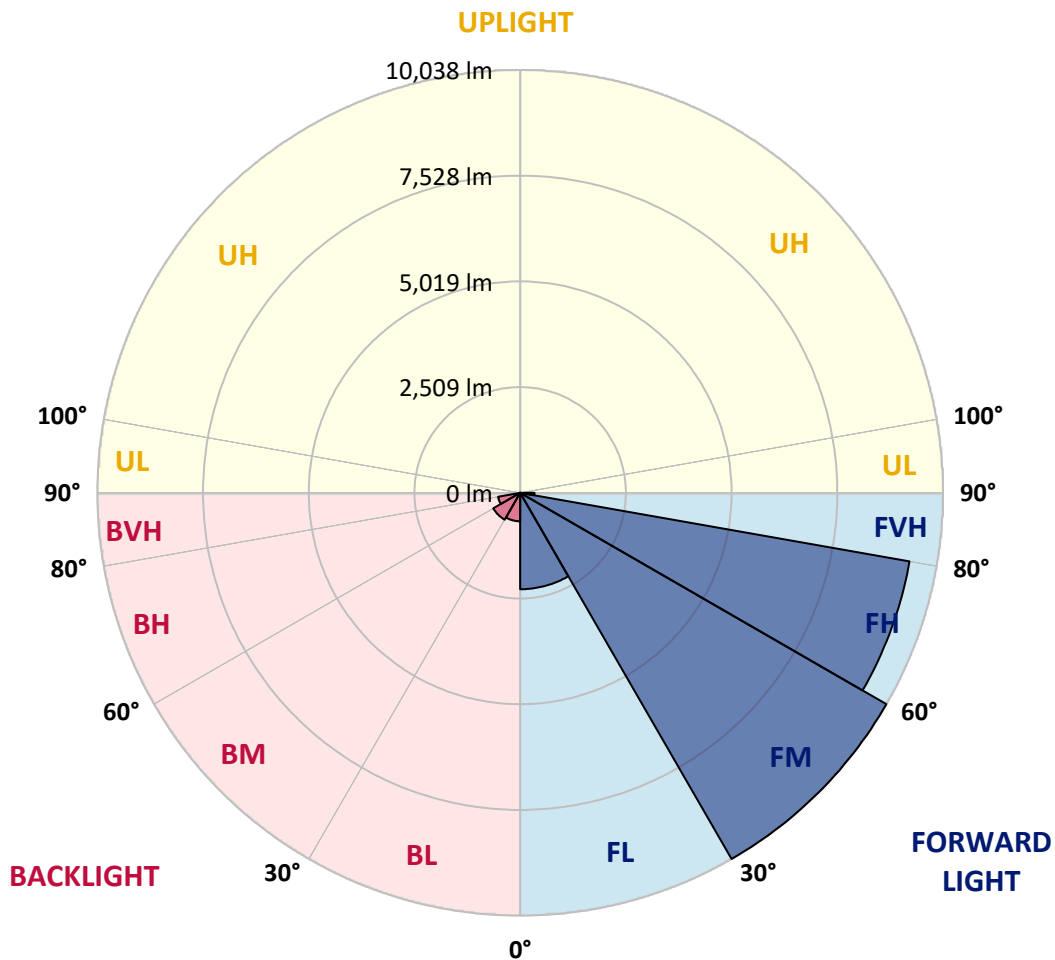
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2288.6	9.5			
FM	(30°-60°)	10038.0	41.8			
FH	(60°-80°)	9384.9	39.1			G4/12000
FVH	(80°-90°)	338.2	1.4			G3/500
BL	(0°-30°)	676.6	2.8	B2/1000		
BM	(30°-60°)	736.6	3.1	B1/1000		
BH	(60°-80°)	530.9	2.2	B2/1000		G2/1000
BVH	(80°-90°)	10.7	0.0			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9
2.5°	6847.9	6845.5	6815.5	6801.9	6777.2	6725.9	6645.7	6603.8	6536.0	6417.6	6259.0
5°	6785.5	6818.3	6835.6	6837.2	6854.9	6835.6	6763.7	6728.7	6635.0	6444.8	6160.0
7.5°	6362.2	6374.1	6424.6	6467.8	6552.0	6632.2	6658.1	6642.9	6587.4	6383.9	6005.0
10°	5908.9	5920.8	5980.8	6037.5	6151.7	6275.0	6405.3	6432.8	6455.9	6296.8	5855.9
12.5°	5517.6	5530.0	5591.2	5665.6	5798.7	5950.8	6153.0	6197.8	6299.7	6214.2	5736.3
15°	5181.0	5186.4	5246.4	5338.4	5497.5	5692.7	5922.4	5994.3	6150.5	6155.9	5631.9
17.5°	4894.6	4908.2	4945.2	5033.1	5206.9	5448.6	5716.1	5819.3	6002.2	6107.0	5530.0
20°	4719.5	4733.1	4731.9	4780.8	4936.9	5194.6	5509.8	5633.1	5855.9	6056.8	5439.1
22.5°	4685.8	4685.8	4650.5	4643.5	4736.0	4951.7	5295.3	5445.7	5723.9	6035.0	5375.4
25°	4806.7	4800.9	4713.0	4641.0	4645.1	4773.8	5087.3	5266.5	5613.0	6049.8	5341.3
27.5°	5061.9	5054.9	4943.5	4806.7	4696.5	4695.3	4929.9	5122.7	5524.6	6120.5	5354.9
30°	5414.5	5412.0	5291.2	5118.6	4919.3	4736.0	4875.7	5050.8	5467.5	6247.9	5386.1
32.5°	5800.0	5795.9	5705.0	5523.4	5270.6	4919.3	4932.8	5079.5	5483.9	6417.6	5462.1
35°	6208.9	6201.9	6162.4	6003.8	5725.6	5257.1	5120.2	5234.1	5587.1	6671.6	5611.3
37.5°	6651.1	6658.1	6686.4	6534.4	6242.6	5730.9	5433.8	5511.1	5794.6	7016.4	5854.2
40°	7304.1	7302.9	7312.3	7112.6	6831.9	6310.4	5871.9	5896.5	6142.3	7473.8	6223.7
42.5°	8488.9	8406.3	8155.2	7747.9	7465.6	6972.9	6424.6	6398.7	6567.2	8039.7	6740.7
45°	10081.4	9904.7	9253.3	8472.9	8111.6	7719.6	7104.4	7021.8	7129.0	8719.9	7378.9
47.5°	11450.7	11267.5	10346.1	9227.4	8797.1	8428.1	7901.2	7752.0	7787.4	9481.4	8187.7
50°	11916.4	11826.8	11022.1	9884.6	9460.8	9319.9	8825.9	8643.8	8593.7	10362.1	9125.5
52.5°	11754.9	11748.3	11212.0	10310.7	10069.1	10242.9	9988.9	9778.5	9594.0	11290.9	10079.8
55°	11495.5	11529.6	11289.2	10683.9	10675.7	11085.8	11579.8	11404.7	10870.0	12299.4	10902.5
57.5°	10780.5	10925.5	11246.1	11389.9	11723.6	12143.2	12904.7	13007.9	12375.4	13071.6	11585.1
60°	8747.0	9065.9	10113.9	11491.4	13074.5	14119.6	14503.8	14591.8	13610.4	13713.5	12506.9
62.5°	6208.9	6534.4	7863.4	10194.0	13094.6	16716.0	16885.8	16539.7	14970.7	14665.3	14096.5
65°	3295.5	3547.0	4632.8	7358.3	11353.3	17318.9	21051.7	20020.2	17370.3	16536.9	16150.1
67.5°	1685.8	1761.8	2193.7	3601.3	7805.1	15383.3	24785.8	25511.9	21506.3	18394.0	16051.1
69°	1491.8	1536.6	1823.0	2603.5	4997.8	13029.7	24967.8	27397.4	23671.6	18239.1	14586.4
70°	1444.1	1483.6	1744.1	2356.5	3906.6	10926.8	24271.2	27231.8	24225.2	17650.2	13492.4
72.5°	1225.9	1259.6	1553.0	2082.4	3175.1	5423.9	19716.1	23075.7	21738.4	14703.1	9766.2
75°	819.9	931.2	1490.6	1952.1	2953.6	3081.4	12998.4	16675.3	15490.5	9917.0	5087.3
77.5°	196.9	211.6	420.8	1553.0	2701.3	2712.0	6685.2	10366.2	8455.2	3534.7	1202.5
80°	106.0	101.9	117.9	308.2	2515.1	2545.1	3009.5	5031.9	3019.0	586.4	396.2
82.5°	74.8	70.7	76.0	129.0	791.5	2318.3	2177.3	2277.6	1251.4	225.2	177.9
85°	27.1	25.9	41.9	116.7	248.2	1332.8	2236.9	1878.5	1013.9	103.2	130.3
87.5°	9.5	8.2	16.4	63.7	76.0	567.5	1380.4	1419.9	399.0	62.5	61.2
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°	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9	6247.9
2.5°	6192.4	6108.2	5953.7	5794.6	5647.9	5471.6	5383.2	5296.5	5260.0	5246.4	5182.7
5°	6013.3	5870.6	5542.3	5212.3	4908.2	4585.1	4372.3	4201.3	4100.6	4051.7	3974.5
7.5°	5783.9	5550.5	5052.0	4543.2	4069.4	3602.5	3256.5	2990.2	2806.9	2718.9	2638.8
10°	5561.2	5250.5	4542.0	3848.3	3204.7	2585.8	2107.8	1761.8	1540.7	1438.8	1373.9
12.5°	5361.9	4958.7	4049.2	3171.0	2363.1	1638.5	1152.3	877.0	739.7	692.1	669.1
15°	5183.9	4689.9	3583.6	2527.4	1600.3	936.6	630.0	536.3	514.5	514.5	511.7
17.5°	5015.4	4426.5	3134.0	1923.3	1004.4	572.9	479.2	466.9	466.9	472.2	472.2
20°	4853.9	4175.4	2699.6	1380.4	632.5	454.5	433.2	430.3	433.2	439.7	439.7
22.5°	4715.4	3947.3	2294.0	947.3	469.7	409.7	399.0	394.9	396.2	400.3	403.2
25°	4612.3	3754.6	1911.4	641.9	404.4	373.2	361.2	354.3	348.9	348.9	351.4
27.5°	4547.3	3591.8	1540.7	466.9	363.7	339.5	320.1	309.5	297.1	290.6	293.0
30°	4499.7	3436.9	1193.0	381.4	325.9	301.2	277.0	259.3	241.6	233.4	236.3
32.5°	4482.0	3312.0	891.8	336.6	291.8	264.7	234.7	211.6	192.7	185.8	187.4
35°	4529.7	3212.9	653.0	304.1	264.7	230.6	196.9	171.0	156.2	152.1	153.3
37.5°	4654.6	3159.9	488.6	277.0	240.4	202.2	164.4	139.7	130.3	130.3	131.5
40°	4890.5	3158.7	392.5	258.1	218.6	175.1	135.6	117.9	112.6	115.5	116.7
42.5°	5235.3	3230.6	341.9	240.4	199.7	149.2	112.6	100.3	99.0	101.9	103.2
45°	5706.3	3362.1	314.8	225.2	179.2	124.9	94.9	86.7	86.7	90.8	92.5
47.5°	6283.3	3554.9	291.8	210.4	158.6	104.4	81.4	76.0	77.3	81.4	82.6
50°	6978.2	3798.1	268.8	194.0	143.8	86.7	70.7	66.6	67.8	73.2	74.8
52.5°	7769.7	4125.3	249.9	179.2	124.9	71.9	59.6	57.1	59.6	65.3	66.6
55°	8448.2	4418.3	226.9	166.9	100.3	59.6	48.9	48.9	51.8	58.4	59.6
57.5°	9101.2	4724.9	206.3	143.8	78.9	47.7	40.7	41.9	46.0	53.0	54.2
60°	10059.6	5244.7	182.1	120.8	59.6	37.8	34.1	35.3	40.7	47.7	48.9
62.5°	11687.0	6036.3	157.4	100.3	46.0	30.0	27.1	30.0	36.6	44.8	46.0
65°	13155.8	6358.1	129.0	84.2	35.3	23.0	23.0	27.1	35.3	43.6	44.8
67.5°	12337.2	5352.0	100.3	66.6	27.1	17.7	18.9	25.9	34.1	43.6	44.8
69°	10910.7	4376.4	85.5	53.0	23.0	16.4	17.7	25.9	34.1	41.9	43.6
70°	9799.1	3695.0	76.0	44.8	20.5	16.4	17.7	24.2	34.1	41.9	43.6
72.5°	6563.1	1995.2	61.2	32.5	18.9	14.8	14.8	24.2	32.5	40.7	41.9
75°	2820.5	551.1	48.9	23.0	16.4	13.6	13.6	23.0	31.2	39.5	41.9
77.5°	515.8	139.7	39.5	20.5	16.4	13.6	12.3	21.8	30.0	37.8	39.5
80°	205.1	69.0	31.2	17.7	14.8	12.3	10.7	20.5	28.4	36.6	37.8
82.5°	123.7	39.5	25.9	16.4	14.8	10.7	9.5	17.7	27.1	35.3	36.6
85°	100.3	27.1	20.5	16.4	13.6	10.7	8.2	16.4	24.2	34.1	35.3
87.5°	48.9	18.9	18.9	14.8	13.6	10.7	8.2	14.8	23.0	32.5	34.1
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)