

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: P299672

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299672  
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-07-LED-E1-SL2-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 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: 24754.4 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 295  
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

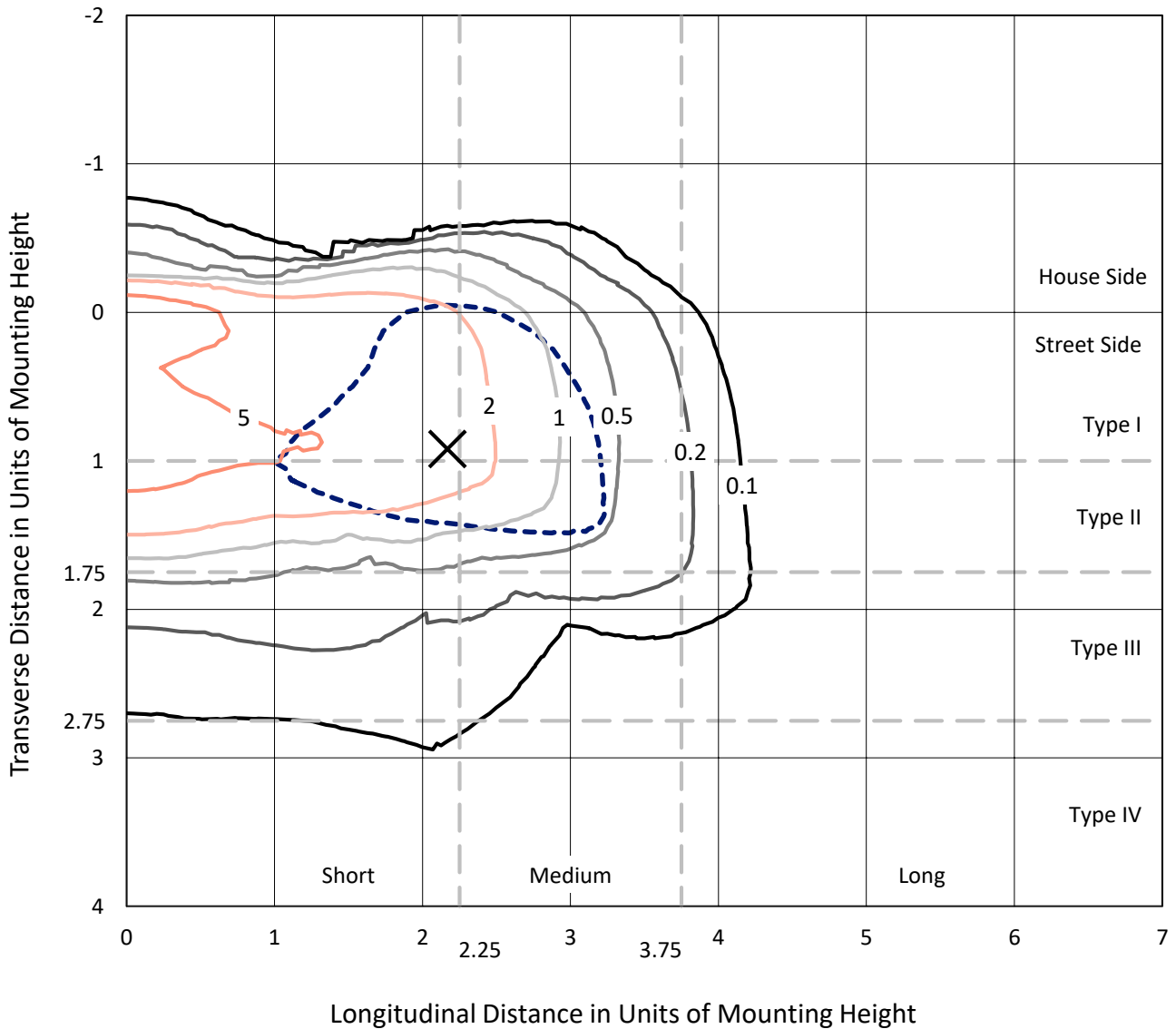


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

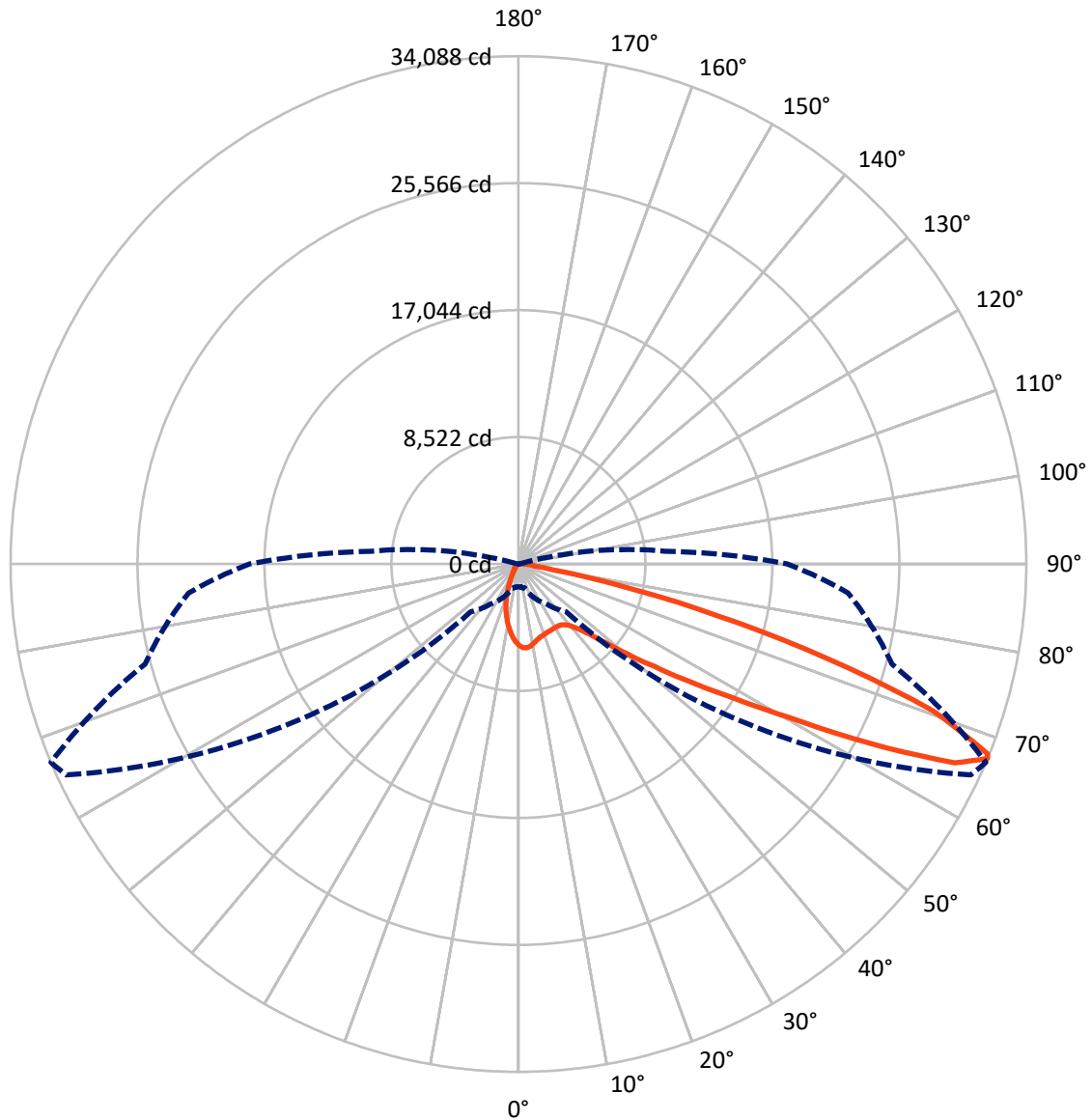


Based on 25 foot mounting height. Maximum calculated value = 8.7 fc  
 Type II - Short - Semi-Cutoff

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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	2570.2	0.0	2570.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	22184.2	0.0	22184.2
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	24754.4	0.0	24754.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	444.2	1.8
10°-20°	945.5	3.8
20°-30°	1374.6	5.6
30°-40°	2144.4	8.7
40°-50°	3798.8	15.3
50°-60°	6011.2	24.3
60°-70°	6884.9	27.8
70°-80°	2855.8	11.5
80°-90°	295.0	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°	24754.4	100.0
0°-180°	24754.4	100.0



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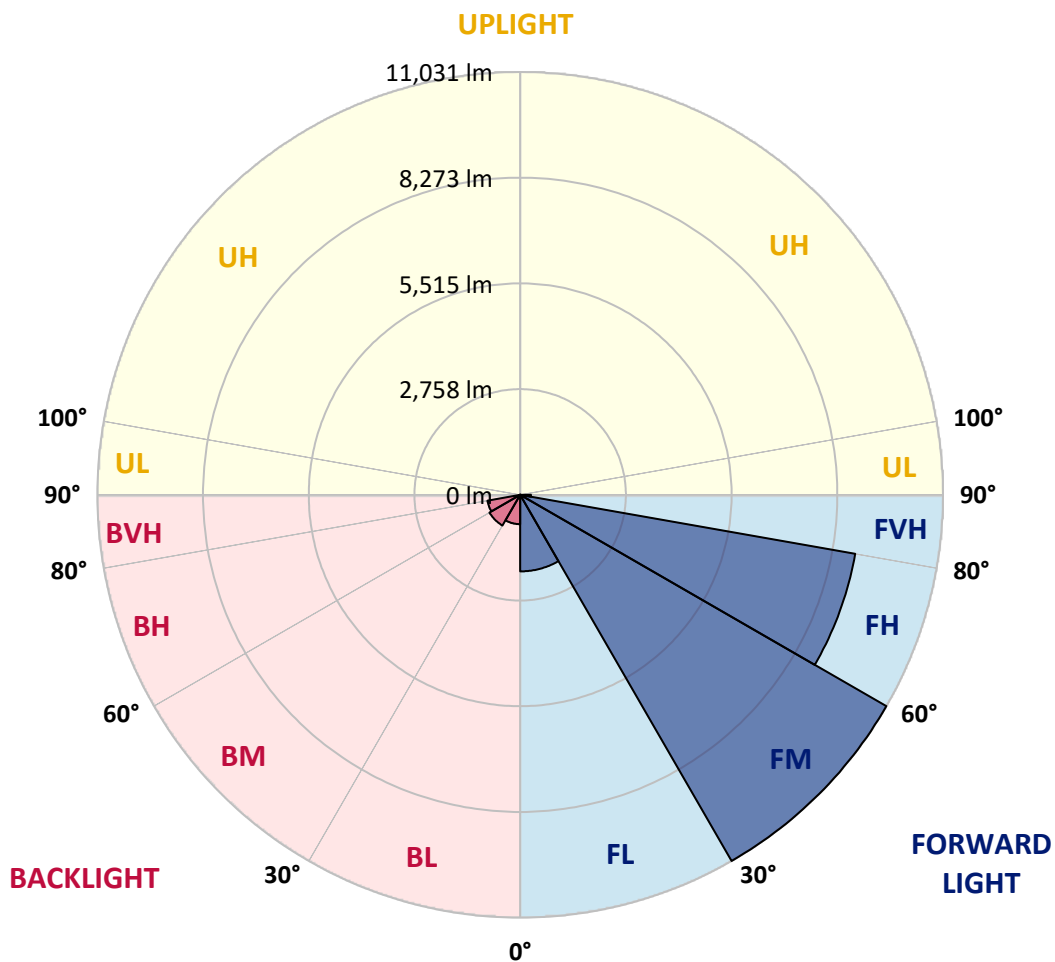
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1997.3	8.1			
FM (30°-60°)	11030.6	44.6			
FH (60°-80°)	8874.5	35.9			G4/12000
FVH (80°-90°)	281.7	1.1			G3/500
BL (0°-30°)	767.0	3.1	B2/1000		
BM (30°-60°)	923.7	3.7	B1/1000		
BH (60°-80°)	866.3	3.5	B2/1000		G2/1000
BVH (80°-90°)	13.3	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°	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3
2.5°	5644.1	5655.6	5654.2	5662.8	5683.1	5684.5	5664.3	5625.3	5616.6	5566.1	5478.0
5°	5205.1	5238.3	5258.6	5340.9	5433.3	5544.4	5628.2	5658.5	5654.2	5618.1	5485.2
7.5°	4704.1	4737.3	4760.4	4857.2	4979.9	5170.5	5388.5	5567.5	5583.4	5622.4	5479.5
10°	4370.6	4376.4	4408.1	4500.5	4629.0	4824.0	5083.9	5397.2	5444.8	5587.8	5465.0
12.5°	4096.2	4100.6	4142.5	4242.1	4379.2	4575.6	4848.5	5210.9	5284.6	5544.4	5462.1
15°	3901.3	3917.2	3954.7	4058.7	4204.5	4399.5	4679.6	5073.7	5161.8	5528.6	5488.1
17.5°	3836.4	3853.7	3865.2	3940.3	4073.1	4263.7	4551.1	4984.2	5083.9	5537.2	5538.7
20°	3904.2	3917.2	3891.2	3910.0	3992.3	4162.7	4442.8	4907.7	5026.1	5547.3	5603.6
22.5°	4156.9	4162.7	4091.9	4009.6	3995.2	4089.0	4357.6	4847.1	4974.1	5574.8	5680.2
25°	4590.1	4579.9	4464.4	4286.8	4119.4	4076.0	4307.1	4809.5	4948.1	5603.6	5759.6
27.5°	5112.7	5127.2	4968.3	4709.9	4390.8	4162.7	4299.8	4793.6	4936.6	5623.9	5828.9
30°	5748.0	5768.2	5586.3	5261.4	4803.7	4376.4	4366.3	4790.7	4929.4	5610.9	5834.7
32.5°	6396.3	6420.9	6277.9	5943.0	5355.3	4734.4	4516.4	4822.5	4943.8	5566.1	5801.5
35°	7074.9	7109.6	7014.3	6727.0	6103.2	5251.3	4780.6	4919.3	5011.7	5561.8	5768.2
37.5°	8012.0	8043.8	7864.7	7560.1	7008.5	5944.4	5205.1	5101.2	5171.9	5631.1	5776.9
40°	9411.1	9406.8	8944.8	8478.4	8003.4	6825.2	5801.5	5430.4	5466.5	5840.4	5883.8
42.5°	10935.8	10928.6	10245.7	9536.7	9107.9	7909.5	6585.5	5999.3	5974.7	6226.0	6161.0
45°	12111.1	12109.7	11552.4	10753.9	10437.7	9154.1	7599.1	6790.5	6753.0	6852.6	6672.1
47.5°	12612.2	12620.8	12340.7	11779.1	11911.9	10837.7	8876.9	7936.9	7880.6	7840.2	7565.9
50°	12222.3	12239.7	12262.8	12153.0	12993.4	13100.2	10590.8	9552.6	9525.2	9344.7	8915.9
52.5°	10948.8	11036.9	11308.4	11656.3	13368.8	15271.8	13277.8	11559.6	11412.3	11220.3	10748.1
55°	8803.3	8900.0	9415.5	10260.1	12810.0	16698.3	17043.4	14147.0	13901.5	13328.3	12646.8
57.5°	5826.0	5976.2	6724.1	7798.3	11187.1	16927.9	20800.3	17737.9	16883.1	15313.6	14545.5
60°	3209.7	3354.1	4165.6	5138.7	8079.9	15793.0	23327.1	22413.1	20902.9	17532.9	16851.4
62.5°	1976.7	2054.6	2653.8	3559.1	4845.6	12464.9	23849.8	28288.2	26539.7	20390.3	19636.6
65°	1573.8	1607.0	1900.1	2909.4	3473.9	7414.3	22161.9	32767.1	32183.8	23849.8	22130.1
67°	1527.6	1540.6	1679.2	2497.9	3274.7	4545.3	18566.7	33496.3	34088.2	25943.4	22208.1
67.5°	1537.7	1552.2	1683.5	2383.8	3268.9	4177.1	17327.8	33208.9	33956.8	26109.4	21863.0
70°	1482.9	1527.6	1927.6	2382.4	3108.6	3471.1	10377.1	28773.4	29551.6	24259.8	18550.8
72.5°	525.6	528.5	833.1	1927.6	3380.1	3508.6	5210.9	21093.4	21669.5	18558.0	13374.5
75°	311.9	265.7	277.2	548.7	3229.9	3407.5	3006.1	13478.5	13693.6	10634.1	6773.2
77.5°	215.1	187.7	193.5	242.6	1230.2	3359.9	2388.2	7028.7	6799.2	3729.5	1442.4
80°	122.7	108.3	115.5	212.2	447.6	3134.6	2252.4	2850.2	2430.0	632.4	398.5
82.5°	65.0	54.9	66.4	174.7	311.9	1953.6	2256.8	1377.4	1091.6	213.7	271.4
85°	23.1	18.8	31.8	119.8	207.9	599.2	2092.2	1158.0	909.6	104.0	206.5
87.5°	4.3	4.3	13.0	49.1	83.7	183.4	1237.4	687.3	460.6	62.1	141.5
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°	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3	5459.3
2.5°	5441.9	5379.8	5296.1	5193.6	5072.3	4965.5	4886.0	4803.7	4786.4	4757.5	4753.2
5°	5405.8	5299.0	5091.1	4852.8	4598.7	4369.1	4182.9	4016.8	3943.2	3879.7	3872.4
7.5°	5352.4	5192.1	4838.4	4454.3	4057.3	3696.3	3390.2	3173.6	2974.4	2879.1	2864.6
10°	5290.3	5060.8	4554.0	4021.2	3472.5	2962.8	2508.0	2126.8	1895.8	1758.6	1741.3
12.5°	5232.6	4932.2	4263.7	3572.1	2843.0	2161.5	1576.7	1212.8	970.3	872.1	860.5
15°	5205.1	4828.3	3992.3	3113.0	2184.6	1376.0	862.0	667.1	587.7	564.6	563.1
17.5°	5202.3	4740.2	3726.6	2637.9	1530.5	799.9	561.7	512.6	496.7	490.9	490.9
20°	5200.8	4656.5	3460.9	2145.6	971.7	532.8	467.8	456.3	444.7	437.5	437.5
22.5°	5216.7	4581.4	3183.7	1643.1	612.2	431.7	411.5	400.0	385.5	375.4	374.0
25°	5232.6	4523.6	2900.7	1169.5	443.3	375.4	355.2	339.3	319.1	306.1	304.7
27.5°	5235.5	4451.4	2597.5	782.6	371.1	327.8	301.8	277.2	254.1	241.1	239.7
30°	5192.1	4330.2	2261.1	528.5	327.8	284.4	249.8	223.8	202.1	192.0	192.0
32.5°	5107.0	4180.0	1891.5	398.5	291.7	244.0	206.5	181.9	167.5	163.2	161.7
35°	5030.4	4018.3	1511.7	337.9	261.3	206.5	168.9	153.0	144.4	142.9	141.5
37.5°	4985.7	3888.3	1155.1	306.1	232.5	173.3	142.9	131.4	127.1	124.2	125.6
40°	5020.3	3780.0	853.3	280.1	203.6	144.4	121.3	115.5	111.2	109.7	109.7
42.5°	5171.9	3761.3	633.9	257.0	176.2	119.8	105.4	101.1	98.2	96.7	98.2
45°	5570.4	3876.8	492.4	235.4	148.7	101.1	89.5	88.1	86.6	86.6	86.6
47.5°	6169.6	4115.0	410.1	210.8	124.2	86.6	78.0	76.5	75.1	76.5	76.5
50°	7184.7	4551.1	366.7	186.3	102.5	73.6	66.4	66.4	66.4	66.4	67.9
52.5°	8728.2	5408.7	337.9	161.7	83.7	62.1	56.3	56.3	57.8	57.8	59.2
55°	10447.8	6546.5	311.9	137.2	70.7	52.0	46.2	47.6	49.1	50.5	50.5
57.5°	12313.3	7807.0	290.2	112.6	60.6	41.9	39.0	40.4	41.9	44.8	44.8
60°	14564.3	9171.4	258.5	88.1	50.5	33.2	30.3	33.2	37.5	40.4	41.9
62.5°	17036.2	10491.1	218.0	69.3	41.9	26.0	24.5	30.3	36.1	39.0	40.4
65°	18725.5	10905.5	167.5	56.3	31.8	18.8	20.2	27.4	34.7	39.0	39.0
67°	18041.1	9887.6	137.2	47.6	26.0	14.4	18.8	27.4	34.7	37.5	39.0
67.5°	17566.1	9489.1	131.4	46.2	24.5	14.4	18.8	27.4	34.7	39.0	39.0
70°	14292.8	7128.4	109.7	34.7	20.2	13.0	15.9	26.0	33.2	37.5	37.5
72.5°	9930.9	4395.1	98.2	24.5	17.3	11.6	14.4	24.5	31.8	36.1	37.5
75°	4721.4	1591.1	83.7	18.8	15.9	10.1	13.0	24.5	31.8	36.1	36.1
77.5°	963.1	369.6	67.9	15.9	13.0	10.1	11.6	23.1	30.3	34.7	34.7
80°	316.2	142.9	50.5	14.4	13.0	10.1	11.6	21.7	30.3	33.2	34.7
82.5°	228.1	72.2	33.2	14.4	13.0	10.1	10.1	21.7	28.9	33.2	33.2
85°	174.7	50.5	21.7	14.4	13.0	10.1	10.1	20.2	27.4	31.8	31.8
87.5°	115.5	20.2	17.3	14.4	13.0	10.1	10.1	20.2	26.0	30.3	31.8
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)