

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: P299690

Luminaire Tested: **GLNA-AF-10-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299690  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-10-LED-E1-5MQ-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

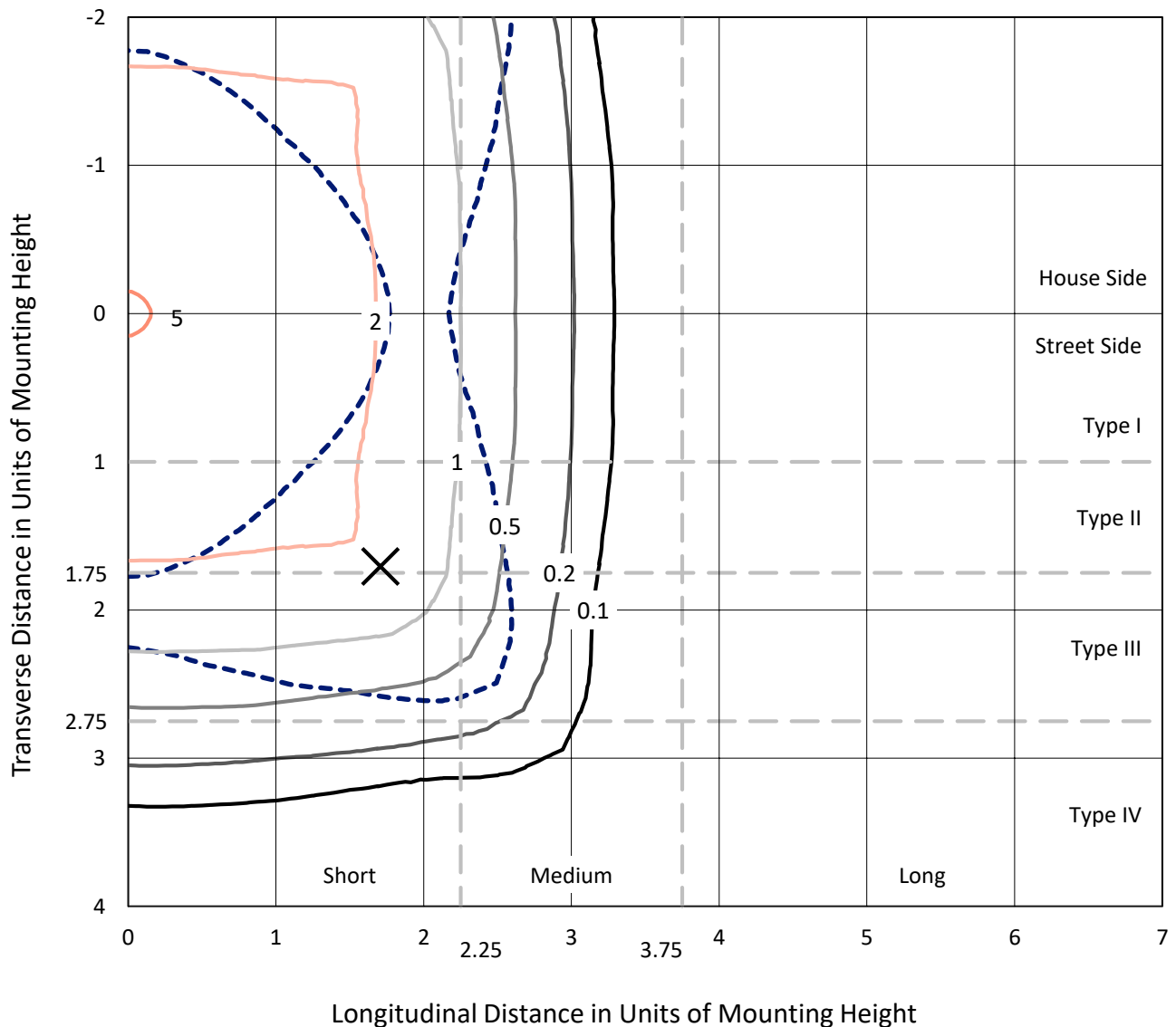
Lumens per Lamp: N/A  
Luminaire Lumens: 48200.9 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 419  
Input Voltage (V): NR  
Input Current (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

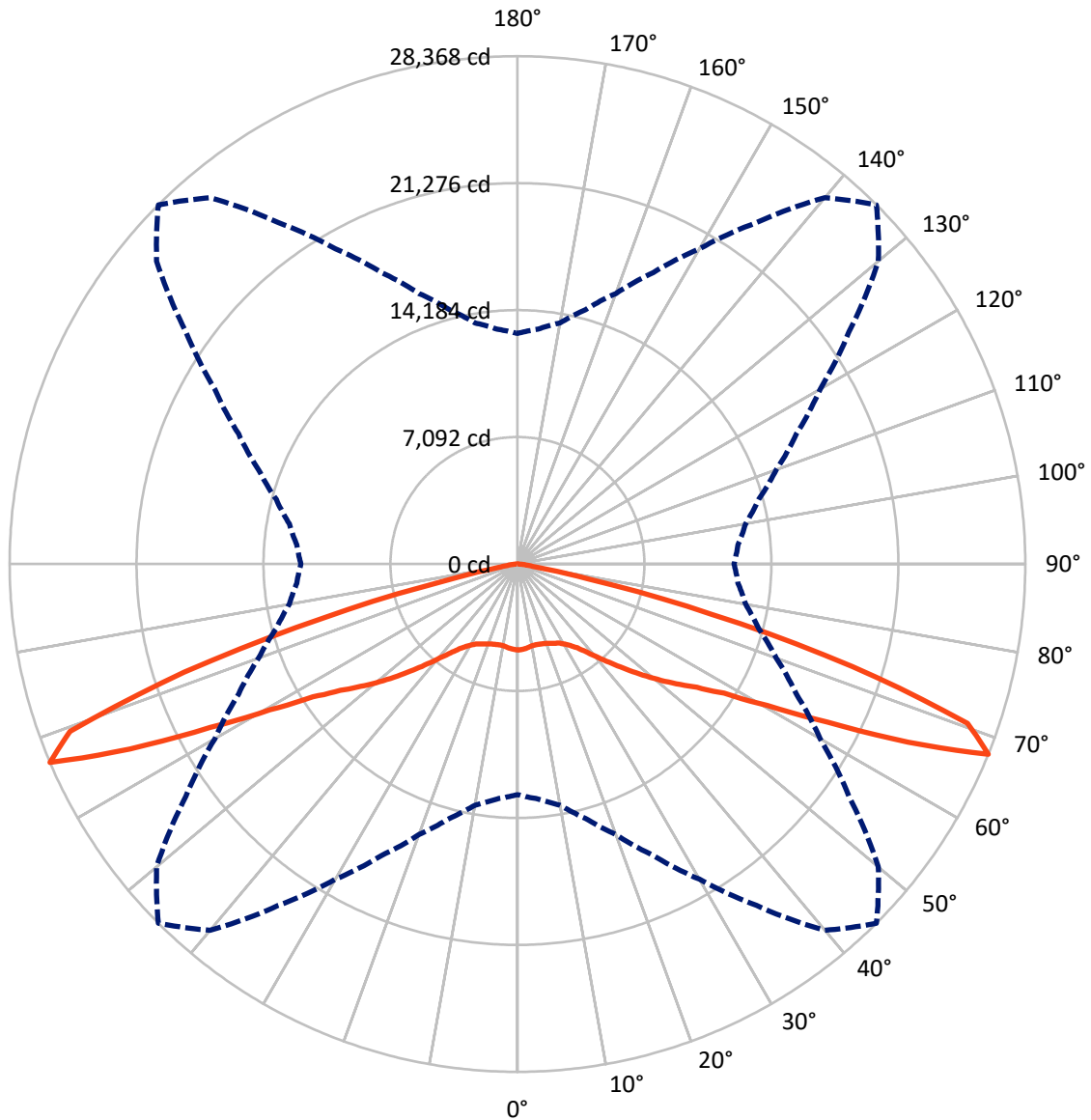


Based on 30 foot mounting height. Maximum calculated value = 5.3 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	24100.5	0.0	24100.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	24100.5	0.0	24100.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	48200.9	0.0	48200.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	449.6	0.9
10°-20°	1304.6	2.7
20°-30°	2217.8	4.6
30°-40°	3625.4	7.5
40°-50°	6472.0	13.4
50°-60°	10911.9	22.6
60°-70°	16933.7	35.1
70°-80°	5949.8	12.3
80°-90°	336.2	0.7
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°	48200.9	100.0
0°-180°	48200.9	100.0



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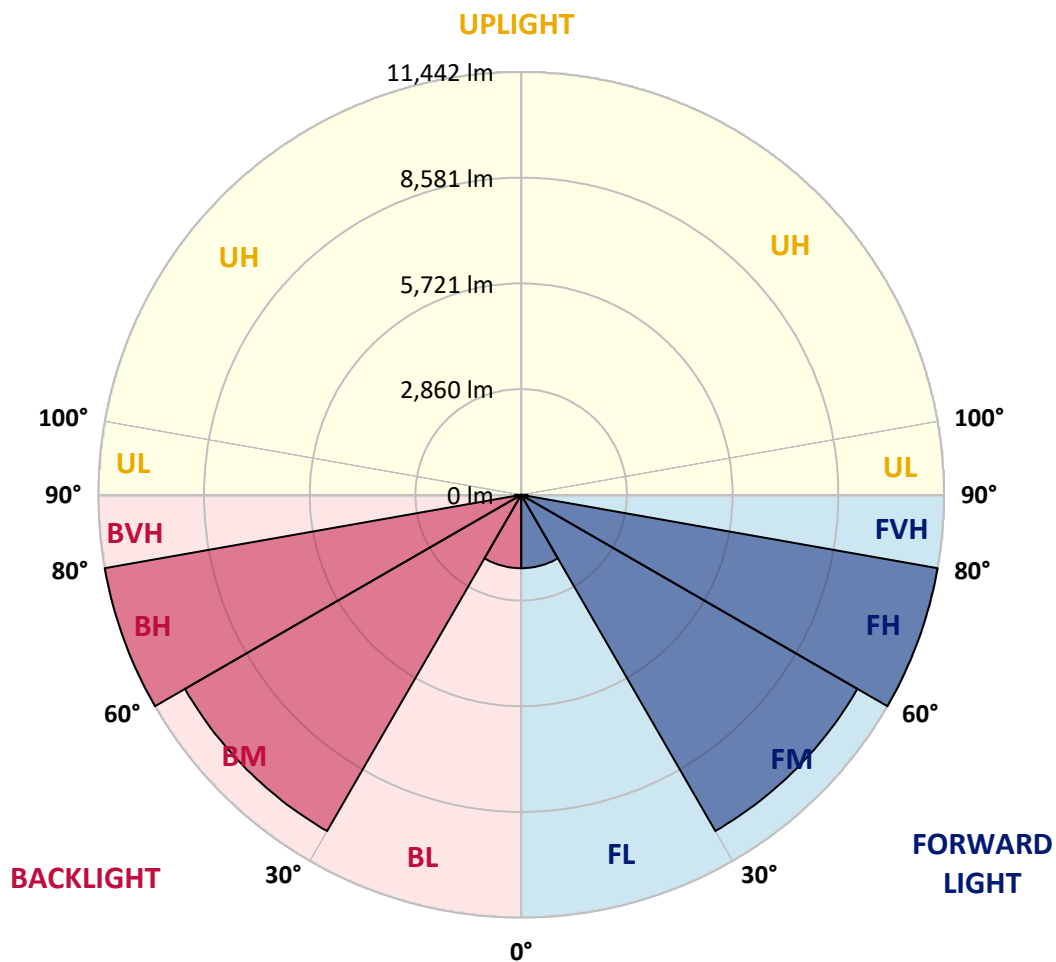
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1986.0	4.1			
FM (30°-60°)	10504.6	21.8			
FH (60°-80°)	11441.7	23.7			G4/12000
FVH (80°-90°)	168.1	0.3			G2/225
BL (0°-30°)	1986.0	4.1	B3/2500		
BM (30°-60°)	10504.6	21.8	B5		
BH (60°-80°)	11441.7	23.7	B5		G4/12000
BVH (80°-90°)	168.1	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4
2.5°	4785.7	4790.1	4790.1	4790.1	4787.9	4787.9	4783.5	4787.9	4785.7	4779.0	4781.3
5°	4745.8	4750.2	4750.2	4748.0	4754.7	4752.4	4745.8	4750.2	4748.0	4743.6	4745.8
7.5°	4688.2	4694.8	4694.8	4692.6	4699.2	4697.0	4692.6	4694.8	4694.8	4688.2	4688.2
10°	4623.9	4628.3	4628.3	4626.1	4637.2	4637.2	4635.0	4641.6	4643.8	4637.2	4632.7
12.5°	4564.0	4570.7	4570.7	4579.5	4590.6	4595.1	4606.1	4615.0	4623.9	4621.7	4612.8
15°	4528.6	4533.0	4541.9	4552.9	4570.7	4586.2	4603.9	4623.9	4641.6	4646.0	4632.7
17.5°	4506.4	4513.0	4526.3	4541.9	4566.2	4592.8	4619.4	4646.0	4670.4	4679.3	4663.8
20°	4499.7	4504.2	4517.5	4544.1	4577.3	4617.2	4654.9	4685.9	4719.2	4730.3	4719.2
22.5°	4513.0	4521.9	4537.4	4568.5	4612.8	4663.8	4708.1	4750.2	4792.3	4812.3	4796.8
25°	4572.9	4581.8	4601.7	4641.6	4690.4	4743.6	4794.6	4843.3	4881.0	4901.0	4889.9
27.5°	4683.7	4694.8	4719.2	4759.1	4812.3	4869.9	4925.3	4965.2	4996.3	5002.9	4989.6
30°	4850.0	4874.4	4903.2	4947.5	5009.6	5058.3	5113.8	5149.2	5186.9	5186.9	5175.8
32.5°	5109.3	5133.7	5164.7	5206.8	5255.6	5308.8	5357.6	5388.6	5428.5	5430.7	5404.1
35°	5497.2	5508.3	5534.9	5561.5	5605.8	5652.4	5694.5	5714.5	5747.7	5749.9	5725.5
37.5°	6009.3	6011.5	6029.2	6038.1	6078.0	6129.0	6168.9	6182.2	6213.2	6208.8	6184.4
40°	6605.5	6616.6	6623.3	6636.6	6678.7	6727.5	6769.6	6776.2	6809.5	6802.8	6771.8
42.5°	7294.9	7299.3	7337.0	7357.0	7396.9	7421.3	7474.5	7481.1	7521.0	7503.3	7467.8
45°	8068.5	8108.4	8143.9	8183.8	8225.9	8254.7	8296.8	8288.0	8314.6	8288.0	8268.0
47.5°	8882.0	8910.8	8990.6	9052.7	9121.4	9145.8	9205.6	9179.0	9205.6	9168.0	9161.3
50°	9777.5	9828.5	9897.2	9968.2	10041.3	10081.2	10158.8	10125.5	10161.0	10125.5	10105.6
52.5°	10659.7	10673.0	10823.8	10928.0	11029.9	11076.5	11123.0	11107.5	11109.7	11107.5	11087.6
55°	11497.6	11528.7	11679.4	11821.3	11998.6	12129.4	12209.2	12200.3	12180.3	12160.4	12127.1
57.5°	12441.9	12472.9	12645.8	12821.0	13022.7	13208.9	13370.7	13536.9	13601.2	13618.9	13545.8
60°	13718.7	13716.5	13947.0	14159.8	14448.0	14725.0	15079.7	15441.0	15855.5	16048.4	15793.4
62.5°	15017.6	15070.8	15403.3	15780.1	16374.2	16952.7	17606.6	18249.5	18905.6	19439.8	18872.3
65°	14862.5	15066.4	15560.7	16414.1	17511.3	18814.7	20224.5	21716.3	23064.0	23990.5	22950.9
67.5°	12880.8	13171.2	13674.4	14711.7	16083.8	17963.5	20330.9	23281.2	26710.3	28368.4	26313.5
70°	9336.4	9664.5	10192.0	11205.0	12563.8	14350.4	16921.7	20463.9	25003.5	26674.8	24411.7
72.5°	4646.0	4823.4	5149.2	5794.3	6822.8	8272.4	10604.3	14009.1	18025.6	19559.5	17491.4
75°	1578.2	1660.3	1715.7	1926.2	2252.1	2821.8	3981.1	6124.5	9343.1	11200.6	9210.1
77.5°	911.0	913.2	950.9	988.6	1044.0	1106.1	1261.3	1655.8	2863.9	4067.5	2963.6
80°	589.6	587.4	618.4	647.3	684.9	716.0	724.8	767.0	884.4	1048.5	937.6
82.5°	305.9	343.6	412.3	450.0	520.9	534.2	516.5	501.0	529.8	549.7	563.0
85°	168.5	146.3	219.4	283.7	314.8	319.2	319.2	301.5	312.5	305.9	332.5
87.5°	77.6	70.9	86.4	139.6	148.5	126.3	133.0	117.5	84.2	82.0	93.1
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4	4803.4
2.5°	4781.3	4783.5	4783.5	4790.1	4792.3	4796.8	4801.2	4803.4
5°	4743.6	4750.2	4745.8	4752.4	4752.4	4756.9	4756.9	4759.1
7.5°	4688.2	4694.8	4694.8	4694.8	4692.6	4699.2	4699.2	4699.2
10°	4630.5	4635.0	4632.7	4628.3	4623.9	4630.5	4628.3	4626.1
12.5°	4612.8	4601.7	4592.8	4588.4	4579.5	4581.8	4575.1	4575.1
15°	4623.9	4603.9	4588.4	4581.8	4572.9	4568.5	4564.0	4566.2
17.5°	4652.7	4628.3	4608.4	4597.3	4586.2	4579.5	4570.7	4572.9
20°	4703.7	4674.9	4646.0	4623.9	4603.9	4592.8	4586.2	4584.0
22.5°	4779.0	4736.9	4694.8	4661.6	4635.0	4619.4	4612.8	4608.4
25°	4865.5	4818.9	4770.2	4732.5	4705.9	4685.9	4672.6	4672.6
27.5°	4974.1	4936.4	4892.1	4847.8	4823.4	4803.4	4794.6	4790.1
30°	5155.9	5120.4	5084.9	5042.8	5011.8	4991.8	4976.3	4963.0
32.5°	5388.6	5359.8	5331.0	5299.9	5271.1	5244.5	5220.1	5209.1
35°	5716.7	5694.5	5674.6	5639.1	5628.0	5612.5	5599.2	5588.1
37.5°	6168.9	6160.0	6160.0	6122.3	6113.4	6106.8	6093.5	6095.7
40°	6762.9	6771.8	6760.7	6747.4	6740.8	6723.0	6723.0	6738.5
42.5°	7465.6	7472.2	7496.6	7474.5	7498.8	7476.7	7463.4	7474.5
45°	8281.3	8305.7	8354.5	8332.3	8347.8	8310.1	8263.6	8265.8
47.5°	9196.8	9218.9	9238.9	9223.4	9225.6	9163.5	9101.5	9085.9
50°	10147.7	10156.6	10167.7	10145.5	10149.9	10081.2	10010.3	10012.5
52.5°	11087.6	11129.7	11174.0	11114.2	11100.9	11023.3	10923.5	10883.6
55°	12162.6	12222.5	12171.5	12067.3	11963.1	11858.9	11728.2	11706.0
57.5°	13488.2	13386.2	13226.6	13029.3	12885.2	12738.9	12605.9	12550.5
60°	15332.4	14948.9	14660.7	14368.2	14184.2	14004.6	13829.5	13802.9
62.5°	17939.1	17276.4	16702.3	16097.1	15602.8	15217.1	14909.0	14822.6
65°	21206.4	19639.3	18280.5	17012.6	15910.9	15079.7	14556.6	14326.0
67.5°	22611.8	19517.4	17187.7	15387.8	13947.0	12940.6	12375.4	12093.9
70°	19869.8	16185.8	13652.2	11850.1	10537.8	9465.0	8952.9	8651.5
72.5°	13669.9	10296.2	8141.7	6645.4	5597.0	4699.2	4344.6	4318.0
75°	6137.8	4065.3	2801.8	2159.0	1817.6	1580.5	1507.3	1451.9
77.5°	1717.9	1270.1	1132.7	1059.5	988.6	906.6	875.6	882.2
80°	835.7	789.1	758.1	711.5	647.3	578.5	547.5	560.8
82.5°	554.2	547.5	567.5	534.2	441.1	374.6	314.8	288.2
85°	336.9	341.4	348.0	350.2	297.0	208.4	141.9	159.6
87.5°	133.0	152.9	166.2	172.9	161.8	99.7	79.8	82.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)