

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: P190815

Luminaire Tested: **GLEON-AF-07-LED-E1-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190815  
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: GLEON-AF-07-LED-E1-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45243.1 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4

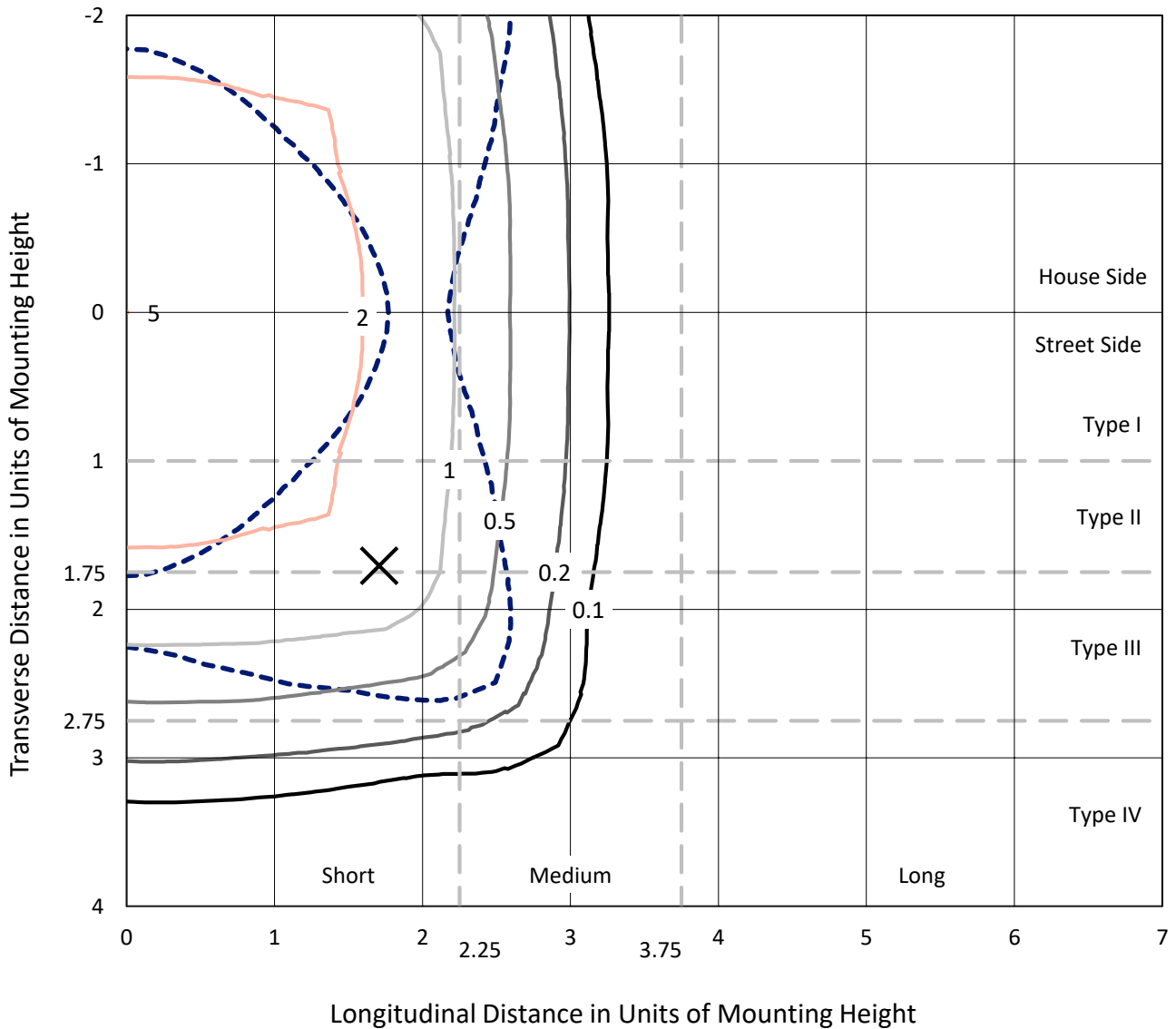
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P190815  
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### Iso-Footcandle Lines of Horizontal Illumination

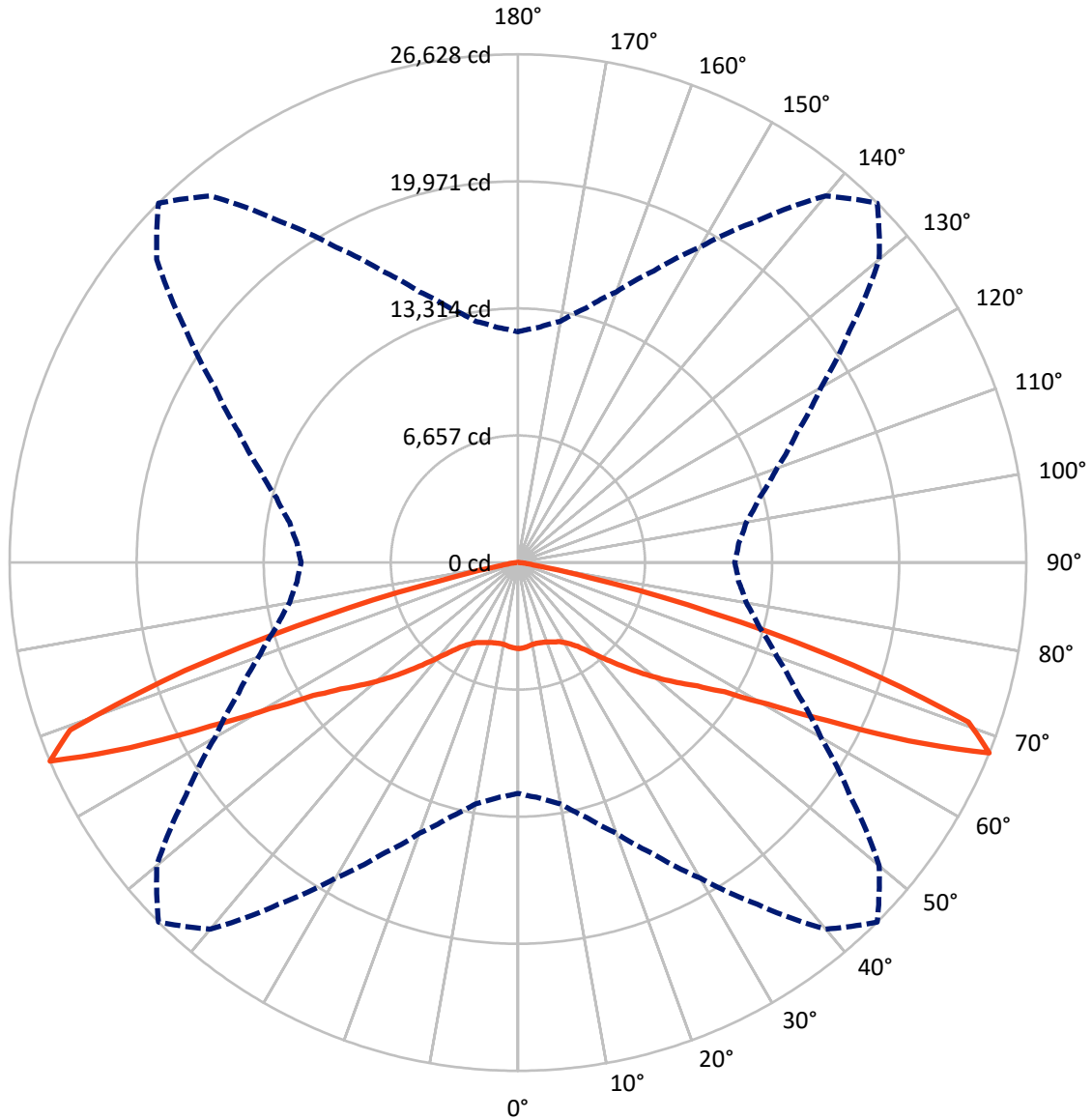
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P190815  
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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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CATALOG NUMBER: GLEON-AF-07-LED-E1-5MQ

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	22621.5	0.0	22621.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	22621.5	0.0	22621.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	45243.1	0.0	45243.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	422.0	0.9
10°-20°	1224.5	2.7
20°-30°	2081.7	4.6
30°-40°	3402.9	7.5
40°-50°	6074.8	13.4
50°-60°	10242.3	22.6
60°-70°	15894.6	35.1
70°-80°	5584.7	12.3
80°-90°	315.6	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°	45243.1	100.0
0°-180°	45243.1	100.0



REPORT NUMBER: P190815

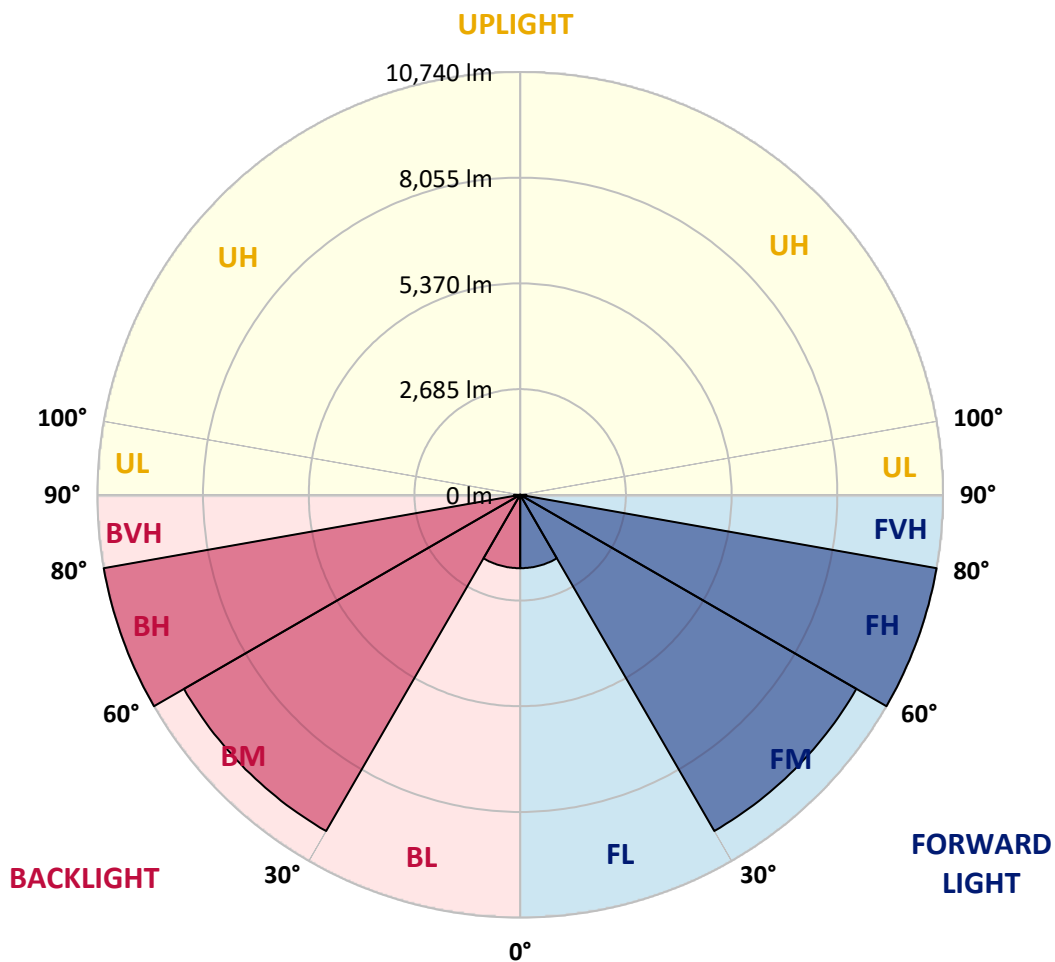
CATALOG NUMBER: GLEON-AF-07-LED-E1-5MQ

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1864.1	4.1			
FM	(30°-60°)	9860.0	21.8			
FH	(60°-80°)	10739.6	23.7			G4/12000
FVH	(80°-90°)	157.8	0.3			G2/225
BL	(0°-30°)	1864.1	4.1	B3/2500		
BM	(30°-60°)	9860.0	21.8	B5		
BH	(60°-80°)	10739.6	23.7	B5		G4/12000
BVH	(80°-90°)	157.8	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°	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7
2.5°	4492.0	4496.2	4496.2	4496.2	4494.1	4494.1	4489.9	4494.1	4492.0	4485.7	4487.9
5°	4454.5	4458.7	4458.7	4456.7	4462.9	4460.8	4454.5	4458.7	4456.7	4452.5	4454.5
7.5°	4400.4	4406.7	4406.7	4404.6	4410.9	4408.8	4404.6	4406.7	4406.7	4400.4	4400.4
10°	4340.2	4344.3	4344.3	4342.2	4352.7	4352.7	4350.5	4356.7	4358.9	4352.7	4348.5
12.5°	4283.9	4290.2	4290.2	4298.5	4309.0	4313.1	4323.5	4331.8	4340.2	4338.0	4329.7
15°	4250.7	4254.9	4263.1	4273.6	4290.2	4304.8	4321.5	4340.2	4356.7	4360.9	4348.5
17.5°	4229.9	4236.1	4248.6	4263.1	4286.1	4311.0	4336.0	4360.9	4383.9	4392.1	4377.6
20°	4223.7	4227.8	4240.2	4265.2	4296.4	4333.9	4369.2	4398.4	4429.6	4440.0	4429.6
22.5°	4236.1	4244.4	4259.0	4288.1	4329.7	4377.6	4419.1	4458.7	4498.2	4516.9	4502.4
25°	4292.3	4300.6	4319.3	4356.7	4402.6	4452.5	4500.4	4546.1	4581.5	4600.2	4589.8
27.5°	4396.3	4406.7	4429.6	4467.0	4516.9	4571.1	4623.1	4660.6	4689.7	4696.0	4683.5
30°	4552.3	4575.2	4602.3	4643.9	4702.2	4747.9	4800.0	4833.2	4868.6	4868.6	4858.2
32.5°	4795.8	4818.7	4847.8	4887.4	4933.1	4983.0	5028.8	5058.0	5095.4	5097.5	5072.5
35°	5159.9	5170.3	5195.3	5220.2	5261.9	5305.5	5345.0	5363.7	5395.0	5397.1	5374.2
37.5°	5640.6	5642.6	5659.3	5667.6	5705.0	5752.9	5790.3	5802.8	5831.9	5827.8	5804.8
40°	6200.2	6210.6	6216.9	6229.4	6268.8	6314.7	6354.2	6360.4	6391.6	6385.4	6356.2
42.5°	6847.2	6851.4	6886.8	6905.5	6943.0	6965.9	7015.8	7022.0	7059.5	7042.8	7009.6
45°	7573.4	7610.9	7644.1	7681.5	7721.1	7748.1	7787.7	7779.3	7804.3	7779.3	7760.6
47.5°	8336.9	8364.1	8438.9	8497.1	8561.7	8584.6	8640.8	8615.8	8640.8	8605.4	8599.1
50°	9177.5	9225.4	9289.9	9356.4	9425.2	9462.6	9535.4	9504.2	9537.5	9504.2	9485.4
52.5°	10005.6	10018.1	10159.5	10257.3	10353.1	10396.8	10440.4	10425.9	10428.0	10425.9	10407.2
55°	10792.0	10821.2	10962.7	11095.8	11262.3	11385.0	11459.9	11451.6	11432.9	11414.2	11383.0
57.5°	11678.4	11707.6	11869.8	12034.2	12223.5	12398.3	12550.2	12706.3	12766.5	12783.2	12714.6
60°	12876.8	12874.8	13091.1	13290.9	13561.4	13821.4	14154.4	14493.5	14882.5	15063.6	14824.3
62.5°	14096.1	14146.0	14458.1	14811.8	15369.4	15912.4	16526.2	17129.6	17745.4	18246.9	17714.2
65°	13950.4	14141.9	14605.8	15406.9	16436.8	17660.1	18983.4	20383.6	21648.6	22518.3	21542.5
67.5°	12090.4	12363.0	12835.3	13808.9	15096.8	16861.2	19083.2	21852.6	25071.2	26627.5	24698.8
70°	8763.5	9071.4	9566.6	10517.5	11792.9	13469.8	15883.4	19208.2	23469.2	25037.9	22913.7
72.5°	4360.9	4527.4	4833.2	5438.7	6404.1	7764.8	9953.6	13149.4	16919.4	18359.2	16418.1
75°	1481.4	1558.4	1610.4	1808.1	2113.9	2648.6	3736.7	5748.7	8769.8	10513.3	8644.9
77.5°	855.1	857.2	892.6	927.9	980.0	1038.2	1183.9	1554.2	2688.1	3817.9	2781.8
80°	553.4	551.4	580.5	607.5	642.9	672.1	680.4	719.9	830.1	984.1	880.0
82.5°	287.1	322.5	387.0	422.4	489.0	501.5	484.8	470.3	497.3	516.0	528.5
85°	158.1	137.3	206.0	266.3	295.4	299.6	299.6	282.9	293.4	287.1	312.1
87.5°	72.8	66.6	81.1	131.0	139.4	118.6	124.8	110.3	79.1	77.0	87.4
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7	4508.7
2.5°	4487.9	4489.9	4489.9	4496.2	4498.2	4502.4	4506.6	4508.7
5°	4452.5	4458.7	4454.5	4460.8	4460.8	4465.0	4465.0	4467.0
7.5°	4400.4	4406.7	4406.7	4406.7	4404.6	4410.9	4410.9	4410.9
10°	4346.4	4350.5	4348.5	4344.3	4340.2	4346.4	4344.3	4342.2
12.5°	4329.7	4319.3	4311.0	4306.8	4298.5	4300.6	4294.3	4294.3
15°	4340.2	4321.5	4306.8	4300.6	4292.3	4288.1	4283.9	4286.1
17.5°	4367.2	4344.3	4325.5	4315.2	4304.8	4298.5	4290.2	4292.3
20°	4415.1	4387.9	4360.9	4340.2	4321.5	4311.0	4304.8	4302.6
22.5°	4485.7	4446.3	4406.7	4375.5	4350.5	4336.0	4329.7	4325.5
25°	4567.0	4523.2	4477.5	4442.1	4417.1	4398.4	4385.9	4385.9
27.5°	4668.8	4633.5	4591.9	4550.3	4527.4	4508.7	4500.4	4496.2
30°	4839.5	4806.2	4772.9	4733.4	4704.2	4685.5	4671.0	4658.4
32.5°	5058.0	5030.9	5003.9	4974.7	4947.7	4922.7	4899.8	4889.4
35°	5365.9	5345.0	5326.3	5293.1	5282.6	5268.1	5255.6	5245.2
37.5°	5790.3	5782.0	5782.0	5746.6	5738.3	5732.1	5719.5	5721.7
40°	6347.9	6356.2	6345.9	6333.4	6327.2	6310.5	6310.5	6325.0
42.5°	7007.4	7013.7	7036.6	7015.8	7038.7	7017.9	7005.4	7015.8
45°	7773.1	7796.0	7841.7	7821.0	7835.5	7800.2	7756.5	7758.6
47.5°	8632.4	8653.2	8672.0	8657.3	8659.5	8601.2	8543.0	8528.3
50°	9525.0	9533.3	9543.7	9523.0	9527.0	9462.6	9396.0	9398.1
52.5°	10407.2	10446.7	10488.3	10432.2	10419.7	10346.8	10253.2	10215.8
55°	11416.2	11472.4	11424.6	11326.8	11229.0	11131.2	11008.5	10987.6
57.5°	12660.4	12564.7	12414.9	12229.8	12094.6	11957.2	11832.4	11780.4
60°	14391.5	14031.6	13761.1	13486.5	13313.8	13145.2	12980.8	12955.9
62.5°	16838.3	16216.2	15677.3	15109.3	14645.4	14283.4	13994.2	13912.9
65°	19905.1	18434.1	17158.7	15968.6	14934.6	14154.4	13663.3	13446.9
67.5°	21224.2	18319.7	16133.0	14443.6	13091.1	12146.5	11616.0	11351.8
70°	18650.5	15192.6	12814.4	11122.9	9891.2	8884.1	8403.5	8120.6
72.5°	12831.1	9664.4	7642.1	6237.6	5253.6	4410.9	4078.0	4053.0
75°	5761.2	3815.8	2629.9	2026.5	1706.1	1483.5	1414.8	1362.8
77.5°	1612.5	1192.1	1063.2	994.5	927.9	851.0	821.8	828.1
80°	784.4	740.7	711.6	667.9	607.5	543.1	513.9	526.4
82.5°	520.2	513.9	532.7	501.5	414.1	351.6	295.4	270.5
85°	316.3	320.4	326.6	328.8	278.8	195.6	133.2	149.8
87.5°	124.8	143.5	156.0	162.2	151.9	93.6	74.9	77.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)