

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: P300712

Luminaire Tested: **GLNA-AF-10-LED-E1-RW-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300712  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)  
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-RW-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND  
Rectangular Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

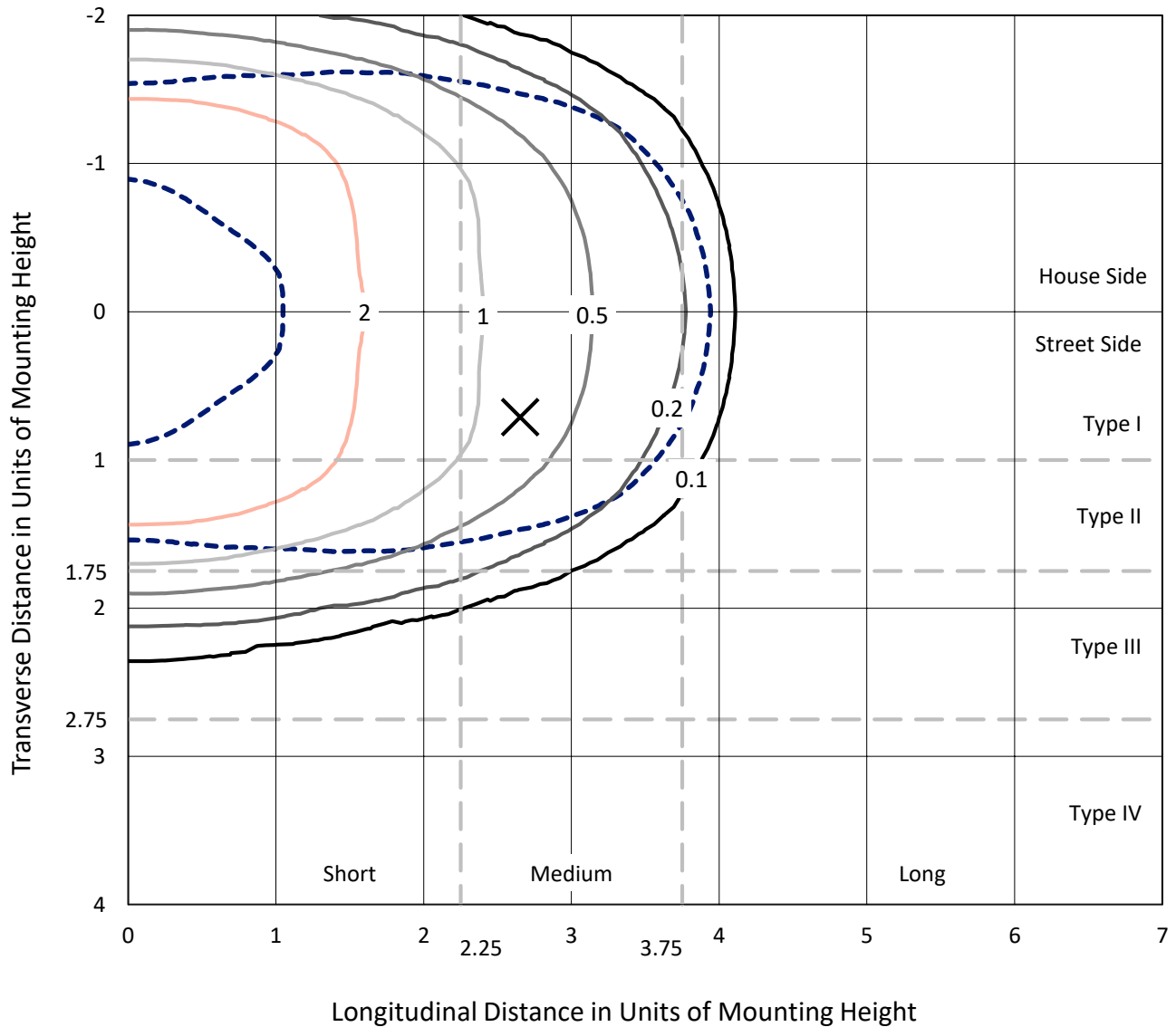
Lumens per Lamp: N/A  
Luminaire Lumens: 39538.6 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 323  
Input Voltage (V): NR  
Input Current (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

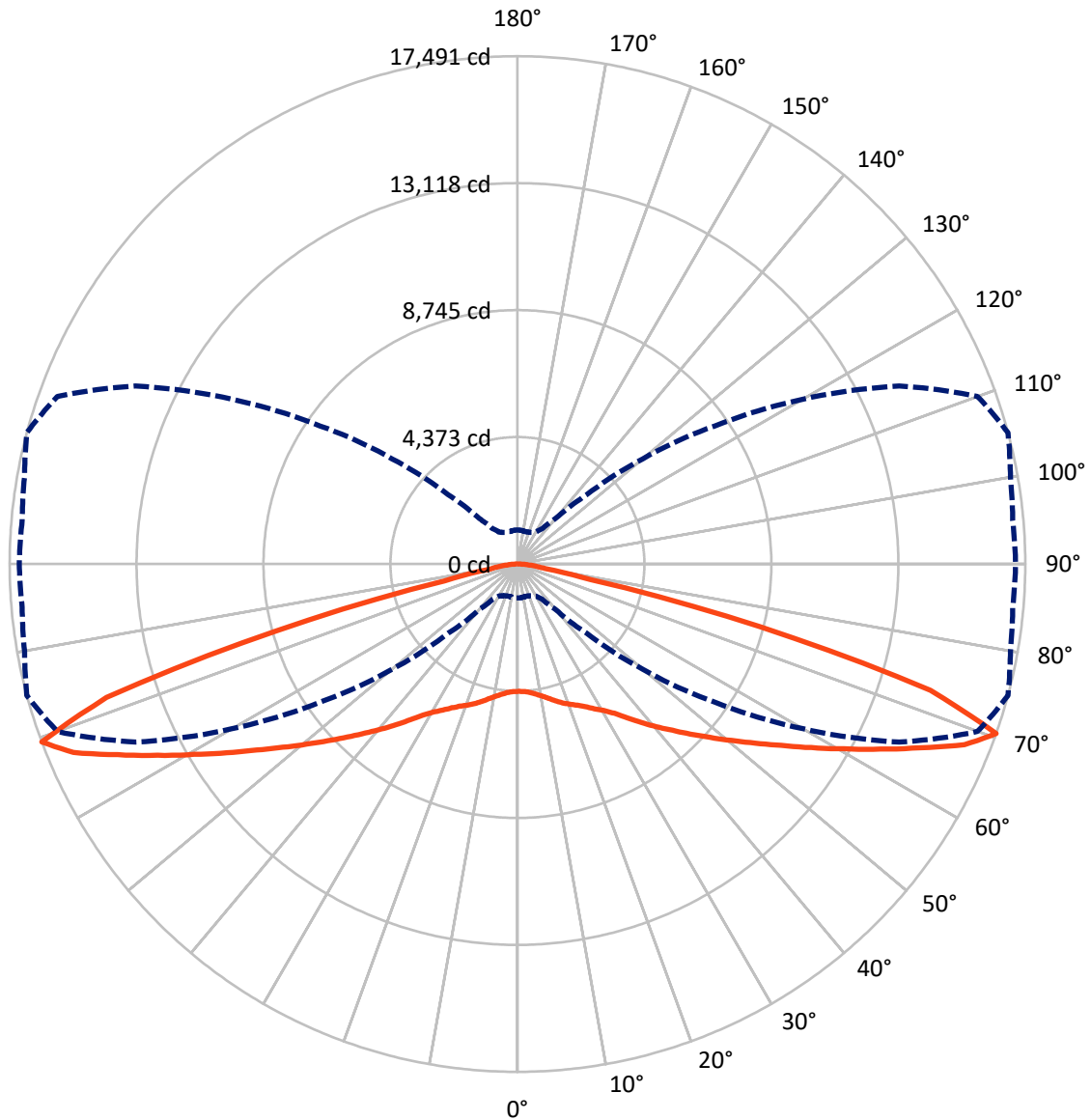
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.9 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	19769.3	0.0	19769.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	19769.3	0.0	19769.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	39538.6	0.0	39538.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	420.6	1.1
10°-20°	1307.0	3.3
20°-30°	2459.9	6.2
30°-40°	4356.0	11.0
40°-50°	7284.6	18.4
50°-60°	10151.1	25.7
60°-70°	9413.5	23.8
70°-80°	3751.6	9.5
80°-90°	394.3	1.0
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°	39538.6	100.0
0°-180°	39538.6	100.0



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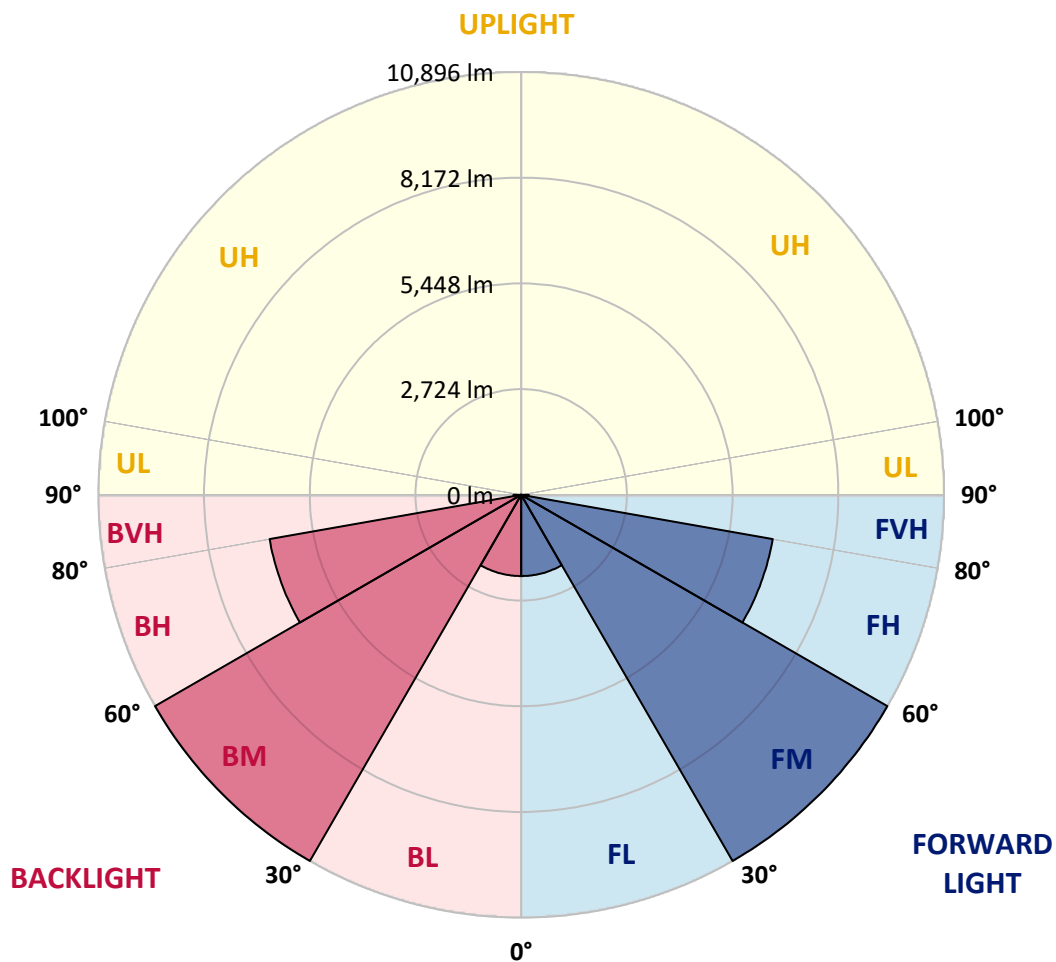
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2093.7	5.3			
FM	(30°-60°)	10895.8	27.6			
FH	(60°-80°)	6582.5	16.6			G3/7500
FVH	(80°-90°)	197.2	0.5			G2/225
BL	(0°-30°)	2093.7	5.3	B3/2500		
BM	(30°-60°)	10895.8	27.6	B5		
BH	(60°-80°)	6582.5	16.6	B5		G5
BVH	(80°-90°)	197.2	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7
2.5°	4378.3	4374.5	4378.3	4376.4	4380.1	4380.1	4383.9	4391.4	4391.4	4397.0	4395.1
5°	4335.3	4333.4	4339.0	4344.6	4350.2	4361.5	4372.7	4389.5	4402.6	4411.9	4421.3
7.5°	4251.2	4251.2	4258.7	4271.8	4284.8	4309.1	4335.3	4368.9	4402.6	4430.6	4454.9
10°	4182.1	4185.8	4195.1	4217.6	4240.0	4277.4	4312.9	4361.5	4408.2	4454.9	4492.3
12.5°	4141.0	4146.6	4163.4	4197.0	4234.4	4284.8	4339.0	4400.7	4453.0	4509.1	4546.5
15°	4154.0	4157.8	4182.1	4223.2	4271.8	4335.3	4408.2	4481.1	4542.7	4602.5	4653.0
17.5°	4226.9	4232.5	4260.5	4307.3	4357.7	4432.5	4510.9	4593.2	4669.8	4737.1	4798.7
20°	4357.7	4363.3	4398.8	4449.3	4509.1	4585.7	4664.2	4750.1	4836.1	4907.1	4976.2
22.5°	4542.7	4552.1	4585.7	4636.1	4703.4	4785.6	4879.1	4970.6	5052.9	5118.3	5179.9
25°	4785.6	4806.2	4838.0	4894.0	4965.0	5039.8	5140.7	5234.1	5312.6	5374.3	5419.1
27.5°	5129.5	5157.5	5181.8	5236.0	5305.1	5376.1	5477.0	5559.3	5634.0	5693.8	5727.4
30°	5585.4	5613.5	5637.8	5690.1	5753.6	5820.9	5916.2	5989.1	6035.8	6082.5	6080.6
32.5°	6138.6	6168.5	6177.8	6233.9	6299.3	6372.1	6458.1	6499.2	6536.6	6542.2	6508.5
35°	6757.1	6772.0	6809.4	6884.1	6958.9	7018.7	7100.9	7121.5	7121.5	7093.4	7018.7
37.5°	7435.4	7444.7	7497.1	7581.2	7657.8	7719.4	7775.5	7816.6	7796.1	7736.3	7611.1
40°	8179.1	8196.0	8270.7	8345.4	8431.4	8489.3	8549.1	8556.6	8536.0	8448.2	8278.2
42.5°	8889.2	8904.2	8978.9	9096.6	9208.8	9289.1	9345.2	9356.4	9291.0	9210.6	8999.5
45°	9500.3	9539.5	9636.7	9775.0	9937.5	10051.5	10128.1	10159.9	10102.0	9997.3	9752.5
47.5°	9984.3	10023.5	10161.8	10326.2	10528.0	10713.0	10840.1	10907.4	10892.4	10813.9	10546.7
50°	10339.3	10376.7	10526.2	10728.0	10963.4	11193.3	11410.0	11570.8	11626.8	11591.3	11346.5
52.5°	10380.4	10442.1	10617.7	10888.7	11195.2	11509.1	11817.4	12090.2	12275.2	12303.3	12122.0
55°	9806.7	9868.4	10111.3	10513.1	10969.0	11481.1	11974.4	12434.1	12798.5	12985.3	12890.0
57.5°	8453.8	8564.1	8820.1	9291.0	9961.8	10728.0	11514.7	12331.3	13073.2	13568.4	13663.7
60°	6478.7	6609.5	6867.3	7368.1	8115.6	9029.4	10079.6	11286.7	12596.6	13710.4	14375.6
62.5°	4155.9	4279.2	4550.2	4985.6	5594.8	6585.2	7712.0	9145.2	10905.5	12663.9	14248.5
65°	2135.9	2203.2	2345.2	2608.7	3083.3	3823.3	4834.2	6263.8	8276.3	10445.8	12736.8
67.5°	1352.9	1366.0	1397.8	1435.1	1556.6	1812.6	2283.5	3174.9	4830.5	7093.4	9775.0
70°	1169.8	1169.8	1154.8	1149.2	1164.2	1199.7	1272.6	1480.0	2038.7	3367.3	5637.8
72.5°	1070.7	1059.5	1033.4	1012.8	1009.1	1009.1	1024.0	1055.8	1145.5	1371.6	2206.9
75°	986.7	954.9	919.4	895.1	885.7	876.4	874.5	880.1	898.8	934.3	1053.9
77.5°	883.9	842.8	801.7	777.4	766.2	753.1	741.9	728.8	719.4	730.6	783.0
80°	760.5	713.8	682.1	667.1	655.9	637.2	612.9	590.5	569.9	566.2	598.0
82.5°	612.9	558.7	560.6	566.2	545.6	519.5	493.3	469.0	433.5	414.8	433.5
85°	495.2	467.2	454.1	489.6	459.7	420.4	379.3	336.4	280.3	235.5	256.0
87.5°	192.5	192.5	287.8	442.9	398.0	325.1	278.4	237.3	147.6	114.0	115.9
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°	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7	4385.7
2.5°	4393.2	4397.0	4395.1	4393.2	4393.2	4391.4	4393.2	4393.2
5°	4426.9	4436.2	4436.2	4439.9	4439.9	4441.8	4443.7	4441.8
7.5°	4477.3	4494.1	4505.3	4518.4	4520.3	4522.2	4525.9	4522.2
10°	4527.8	4561.4	4585.7	4610.0	4621.2	4624.9	4628.7	4628.7
12.5°	4591.3	4638.0	4681.0	4724.0	4744.5	4755.7	4755.7	4763.2
15°	4695.9	4742.7	4793.1	4851.0	4886.6	4905.2	4910.8	4910.8
17.5°	4843.6	4884.7	4927.7	4983.7	5028.6	5052.9	5058.5	5056.6
20°	5015.5	5054.7	5079.0	5114.5	5153.8	5181.8	5189.3	5189.3
22.5°	5211.7	5234.1	5237.9	5249.1	5280.8	5318.2	5335.0	5338.8
25°	5428.5	5434.1	5419.1	5419.1	5439.7	5475.2	5492.0	5493.9
27.5°	5708.8	5680.7	5643.4	5630.3	5643.4	5684.5	5705.0	5712.5
30°	6058.2	5990.9	5905.0	5858.3	5850.8	5905.0	5942.3	5948.0
32.5°	6458.1	6360.9	6246.9	6151.6	6127.3	6161.0	6205.8	6204.0
35°	6932.7	6816.9	6678.6	6557.1	6501.1	6534.7	6598.2	6605.7
37.5°	7480.3	7328.9	7170.1	7016.8	6929.0	6938.3	7005.6	7028.0
40°	8091.3	7895.1	7695.1	7489.6	7364.4	7340.1	7422.3	7435.4
42.5°	8745.3	8493.1	8240.8	7986.7	7826.0	7788.6	7883.9	7878.3
45°	9442.3	9120.9	8825.7	8545.4	8354.8	8298.7	8377.2	8377.2
47.5°	10191.7	9795.5	9444.2	9126.5	8919.1	8838.8	8913.5	8919.1
50°	10985.9	10565.4	10152.4	9799.3	9550.7	9448.0	9545.1	9560.1
52.5°	11776.3	11367.1	10950.4	10546.7	10245.9	10120.7	10232.8	10281.4
55°	12578.0	12176.2	11778.2	11383.9	11027.0	10879.3	10998.9	11060.6
57.5°	13424.5	13052.6	12673.3	12275.2	11931.4	11701.6	11828.6	11910.8
60°	14416.7	14099.1	13704.8	13265.6	12918.1	12684.5	12757.4	12830.2
62.5°	15201.6	15324.9	14990.4	14482.1	14035.5	13736.5	13807.5	13884.2
65°	14822.2	16087.3	16384.4	15870.5	15252.0	14786.7	14756.8	14796.1
67.5°	12389.2	14846.5	16638.6	17128.2	16610.5	15964.0	15844.4	15902.3
70°	8287.5	11348.4	14510.2	16864.7	17490.7	17240.3	17122.5	17158.1
72.5°	3980.2	6609.5	9844.1	12974.1	14880.2	15754.7	16035.0	16171.4
75°	1455.7	2623.6	4744.5	7149.5	8631.3	9991.7	10879.3	11241.9
77.5°	878.3	1059.5	1515.5	2281.6	2584.4	2892.7	2773.1	2832.9
80°	650.3	734.4	831.6	934.3	968.0	968.0	930.6	900.7
82.5°	456.0	510.1	556.9	612.9	627.9	599.8	493.3	392.4
85°	293.4	317.7	338.2	373.7	364.4	347.6	233.6	207.4
87.5°	134.5	153.2	160.7	177.5	170.0	162.6	115.9	97.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)