

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: P300643

Luminaire Tested: **GLNA-AF-09-LED-E1-RW-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300643  
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-09-LED-E1-RW-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular  
Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38051.1 lumens  
Efficiency: N/A  
Efficacy: 101.7 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): 374  
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

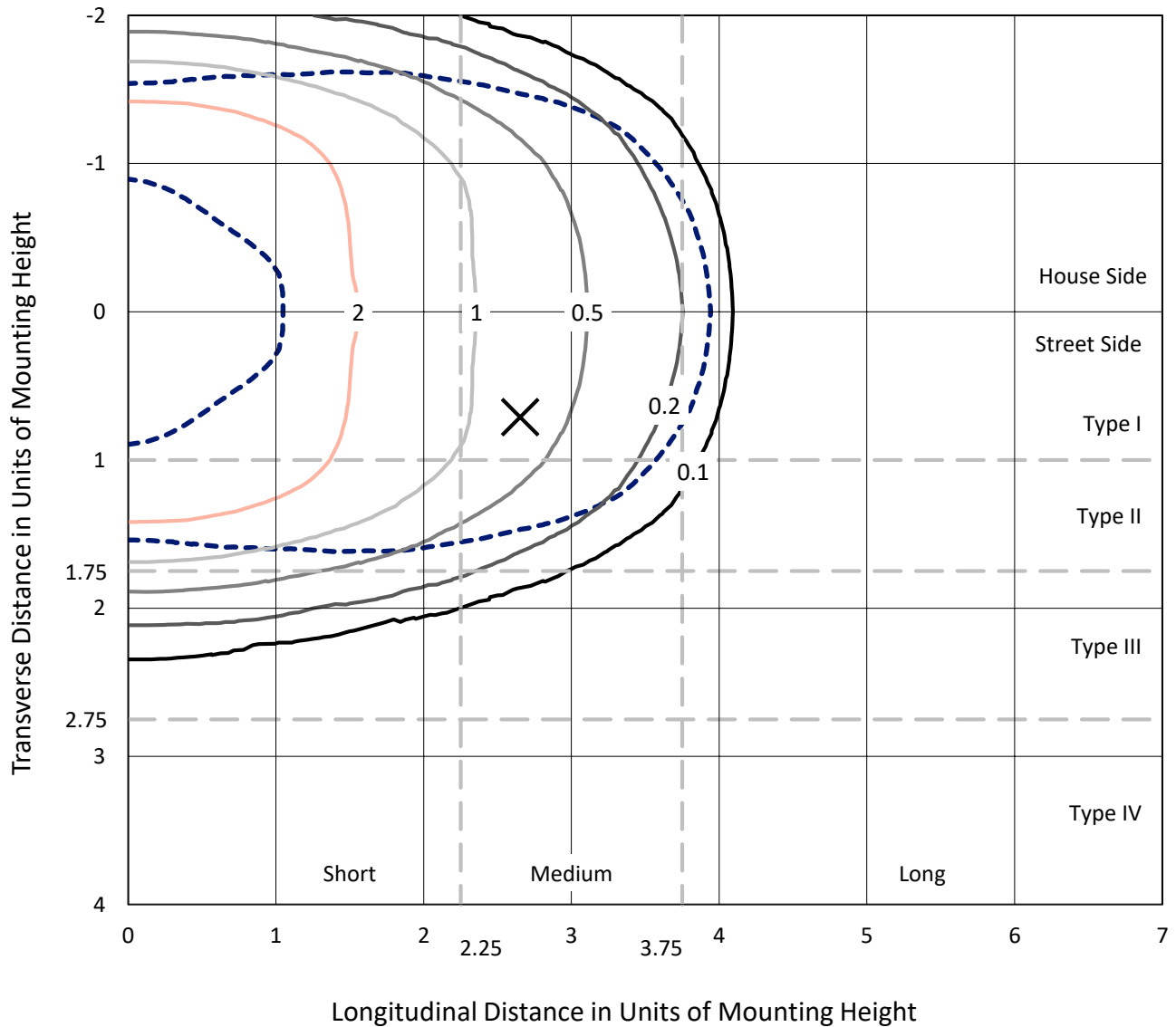


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### Iso-Footcandle Lines of Horizontal Illumination

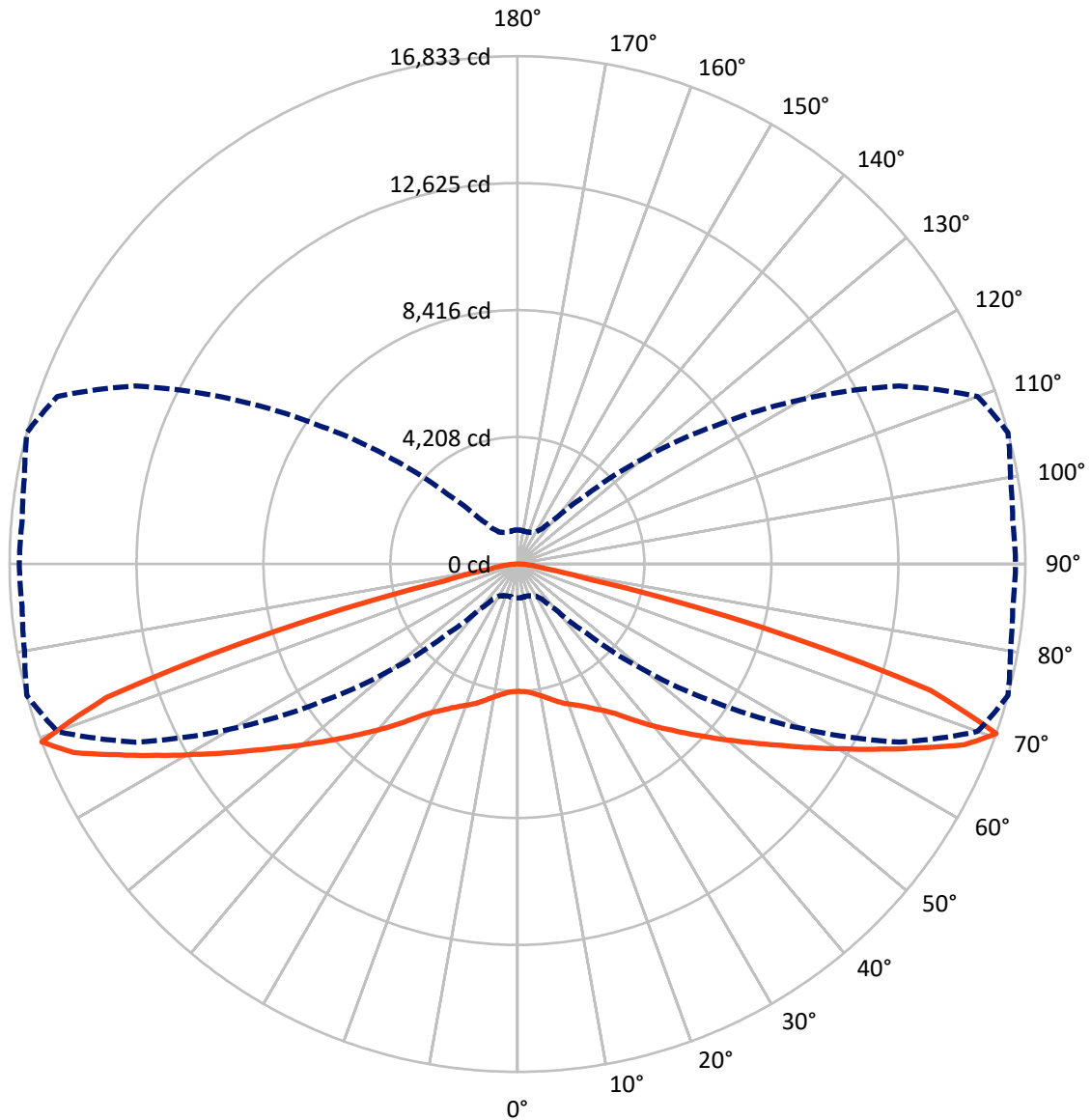
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 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	19025.6	0.0	19025.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	19025.6	0.0	19025.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	38051.1	0.0	38051.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	404.8	1.1
10°-20°	1257.8	3.3
20°-30°	2367.3	6.2
30°-40°	4192.1	11.0
40°-50°	7010.5	18.4
50°-60°	9769.2	25.7
60°-70°	9059.4	23.8
70°-80°	3610.4	9.5
80°-90°	379.5	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°	38051.1	100.0
0°-180°	38051.1	100.0

**Coefficient of Utilization**



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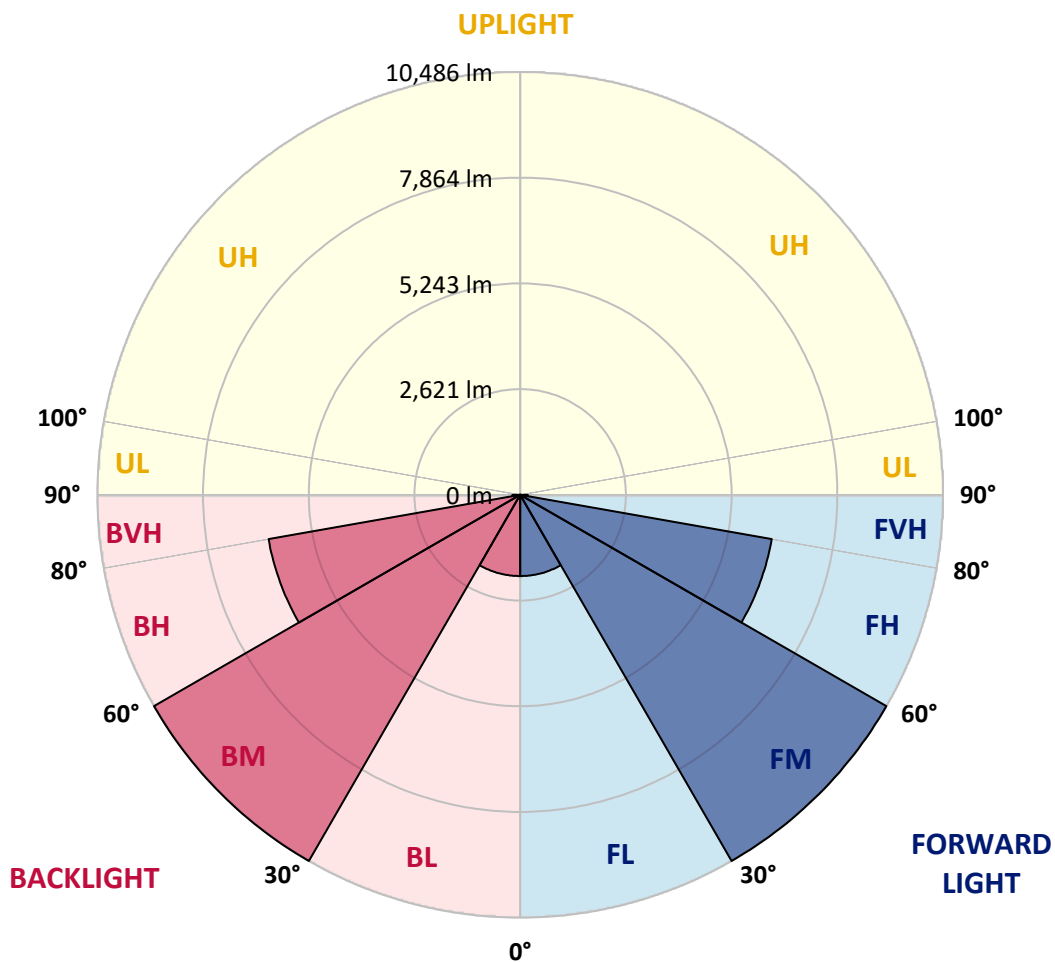
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2015.0	5.3			
FM	(30°-60°)	10485.9	27.6			
FH	(60°-80°)	6334.9	16.6			G3/7500
FVH	(80°-90°)	189.8	0.5			G2/225
BL	(0°-30°)	2015.0	5.3	B3/2500		
BM	(30°-60°)	10485.9	27.6	B5		
BH	(60°-80°)	6334.9	16.6	B5		G5
BVH	(80°-90°)	189.8	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°	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8
2.5°	4213.6	4210.0	4213.6	4211.8	4215.4	4215.4	4219.0	4226.2	4226.2	4231.5	4229.7
5°	4172.2	4170.4	4175.8	4181.2	4186.6	4197.4	4208.2	4224.4	4236.9	4245.9	4254.9
7.5°	4091.3	4091.3	4098.5	4111.1	4123.6	4147.0	4172.2	4204.6	4236.9	4263.9	4287.3
10°	4024.7	4028.3	4037.3	4058.9	4080.5	4116.5	4150.6	4197.4	4242.3	4287.3	4323.3
12.5°	3985.2	3990.6	4006.8	4039.1	4075.1	4123.6	4175.8	4235.1	4285.5	4339.4	4375.4
15°	3997.8	4001.4	4024.7	4064.3	4111.1	4172.2	4242.3	4312.5	4371.8	4429.4	4477.9
17.5°	4067.9	4073.3	4100.3	4145.2	4193.8	4265.7	4341.2	4420.4	4494.1	4558.8	4618.2
20°	4193.8	4199.2	4233.3	4281.9	4339.4	4413.2	4488.7	4571.4	4654.2	4722.5	4789.0
22.5°	4371.8	4380.8	4413.2	4461.7	4526.5	4605.6	4695.5	4783.6	4862.8	4925.7	4985.1
25°	4605.6	4625.4	4656.0	4709.9	4778.2	4850.2	4947.3	5037.2	5112.7	5172.1	5215.2
27.5°	4936.5	4963.5	4986.9	5039.0	5105.5	5173.9	5271.0	5350.1	5422.1	5479.6	5512.0
30°	5375.3	5402.3	5425.7	5476.0	5537.2	5601.9	5693.6	5763.7	5808.7	5853.7	5851.9
32.5°	5907.6	5936.4	5945.4	5999.3	6062.3	6132.4	6215.1	6254.7	6290.7	6296.1	6263.7
35°	6502.9	6517.3	6553.2	6625.2	6697.1	6754.6	6833.8	6853.6	6853.6	6826.6	6754.6
37.5°	7155.7	7164.7	7215.0	7296.0	7369.7	7429.0	7483.0	7522.5	7502.8	7445.2	7324.7
40°	7871.4	7887.6	7959.5	8031.5	8114.2	8170.0	8227.5	8234.7	8214.9	8130.4	7966.7
42.5°	8554.8	8569.2	8641.1	8754.4	8862.3	8939.7	8993.6	9004.4	8941.5	8864.1	8660.9
45°	9142.9	9180.6	9274.2	9407.2	9563.7	9673.4	9747.1	9777.7	9721.9	9621.2	9385.7
47.5°	9608.6	9646.4	9779.5	9937.7	10132.0	10310.0	10432.3	10497.0	10482.7	10407.1	10150.0
50°	9950.3	9986.3	10130.2	10324.4	10551.0	10772.2	10980.8	11135.5	11189.4	11155.2	10919.7
52.5°	9989.9	10049.2	10218.3	10479.1	10774.0	11076.1	11372.8	11635.4	11813.4	11840.4	11666.0
55°	9437.8	9497.1	9730.9	10117.6	10556.4	11049.1	11523.9	11966.3	12317.0	12496.8	12405.1
57.5°	8135.8	8241.9	8488.3	8941.5	9587.1	10324.4	11081.5	11867.4	12581.3	13057.9	13149.6
60°	6234.9	6360.8	6609.0	7090.9	7810.3	8689.7	9700.4	10862.1	12122.8	13194.6	13834.8
62.5°	3999.6	4118.2	4379.0	4798.0	5384.3	6337.4	7421.8	8801.2	10495.2	12187.5	13712.5
65°	2055.5	2120.3	2256.9	2510.5	2967.3	3679.4	4652.4	6028.1	7964.9	10052.8	12257.6
67.5°	1302.0	1314.6	1345.2	1381.1	1498.0	1744.4	2197.6	3055.4	4648.8	6826.6	9407.2
70°	1125.8	1125.8	1111.4	1106.0	1120.4	1154.5	1224.7	1424.3	1962.0	3240.6	5425.7
72.5°	1030.5	1019.7	994.5	974.7	971.1	971.1	985.5	1016.1	1102.4	1320.0	2123.9
75°	949.5	919.0	884.8	861.4	852.4	843.4	841.6	847.0	865.0	899.2	1014.3
77.5°	850.6	811.1	771.5	748.1	737.3	724.7	713.9	701.4	692.4	703.2	753.5
80°	731.9	687.0	656.4	642.0	631.2	613.2	589.9	568.3	548.5	544.9	575.5
82.5°	589.9	537.7	539.5	544.9	525.1	499.9	474.8	451.4	417.2	399.2	417.2
85°	476.6	449.6	437.0	471.2	442.4	404.6	365.1	323.7	269.8	226.6	246.4
87.5°	185.2	185.2	276.9	426.2	383.1	312.9	268.0	228.4	142.1	109.7	111.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8	4220.8
2.5°	4227.9	4231.5	4229.7	4227.9	4227.9	4226.2	4227.9	4227.9
5°	4260.3	4269.3	4269.3	4272.9	4272.9	4274.7	4276.5	4274.7
7.5°	4308.9	4325.1	4335.9	4348.4	4350.2	4352.0	4355.6	4352.0
10°	4357.4	4389.8	4413.2	4436.6	4447.3	4450.9	4454.5	4454.5
12.5°	4418.6	4463.5	4504.9	4546.3	4566.0	4576.8	4576.8	4584.0
15°	4519.3	4564.2	4612.8	4668.5	4702.7	4720.7	4726.1	4726.1
17.5°	4661.4	4700.9	4742.3	4796.2	4839.4	4862.8	4868.2	4866.4
20°	4826.8	4864.6	4887.9	4922.1	4959.9	4986.9	4994.1	4994.1
22.5°	5015.6	5037.2	5040.8	5051.6	5082.2	5118.1	5134.3	5137.9
25°	5224.2	5229.6	5215.2	5215.2	5235.0	5269.2	5285.4	5287.2
27.5°	5494.0	5467.0	5431.1	5418.5	5431.1	5470.6	5490.4	5497.6
30°	5830.3	5765.5	5682.8	5637.9	5630.7	5682.8	5718.8	5724.2
32.5°	6215.1	6121.6	6011.9	5920.2	5896.8	5929.2	5972.4	5970.6
35°	6671.9	6560.4	6427.3	6310.5	6256.5	6288.9	6350.0	6357.2
37.5°	7198.8	7053.2	6900.3	6752.8	6668.3	6677.3	6742.1	6763.6
40°	7786.9	7598.1	7405.7	7207.8	7087.3	7064.0	7143.1	7155.7
42.5°	8416.3	8173.6	7930.8	7686.2	7531.5	7495.6	7587.3	7581.9
45°	9087.1	8777.8	8493.7	8223.9	8040.5	7986.5	8062.1	8062.1
47.5°	9808.3	9427.0	9088.9	8783.2	8583.6	8506.3	8578.2	8583.6
50°	10572.6	10167.9	9770.5	9430.6	9191.4	9092.5	9186.0	9200.4
52.5°	11333.3	10939.4	10538.4	10150.0	9860.4	9739.9	9847.8	9894.6
55°	12104.8	11718.1	11335.1	10955.6	10612.1	10470.1	10585.2	10644.5
57.5°	12919.4	12561.6	12196.5	11813.4	11482.5	11261.3	11383.6	11462.8
60°	13874.4	13568.6	13189.2	12766.6	12432.1	12207.3	12277.4	12347.6
62.5°	14629.7	14748.4	14426.5	13937.3	13507.5	13219.8	13288.1	13361.8
65°	14264.6	15482.1	15768.0	15273.5	14678.2	14230.4	14201.7	14239.4
67.5°	11923.1	14288.0	16012.6	16483.8	15985.6	15363.4	15248.3	15304.1
70°	7975.7	10921.5	13964.3	16230.2	16832.7	16591.7	16478.4	16512.6
72.5°	3830.5	6360.8	9473.8	12486.0	14320.4	15162.0	15431.7	15563.0
75°	1400.9	2524.9	4566.0	6880.5	8306.6	9615.8	10470.1	10818.9
77.5°	845.2	1019.7	1458.5	2195.8	2487.1	2783.9	2668.8	2726.3
80°	625.8	706.8	800.3	899.2	931.6	931.6	895.6	866.8
82.5°	438.8	491.0	535.9	589.9	604.2	577.3	474.8	377.7
85°	282.3	305.7	325.5	359.7	350.7	334.5	224.8	199.6
87.5°	129.5	147.5	154.7	170.8	163.7	156.5	111.5	93.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)