

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: P300577

Luminaire Tested: **GLNA-AF-08-LED-E1-RW-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300577  
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-08-LED-E1-RW-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND  
Rectangular Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42223.1 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B5 - U0 - G5

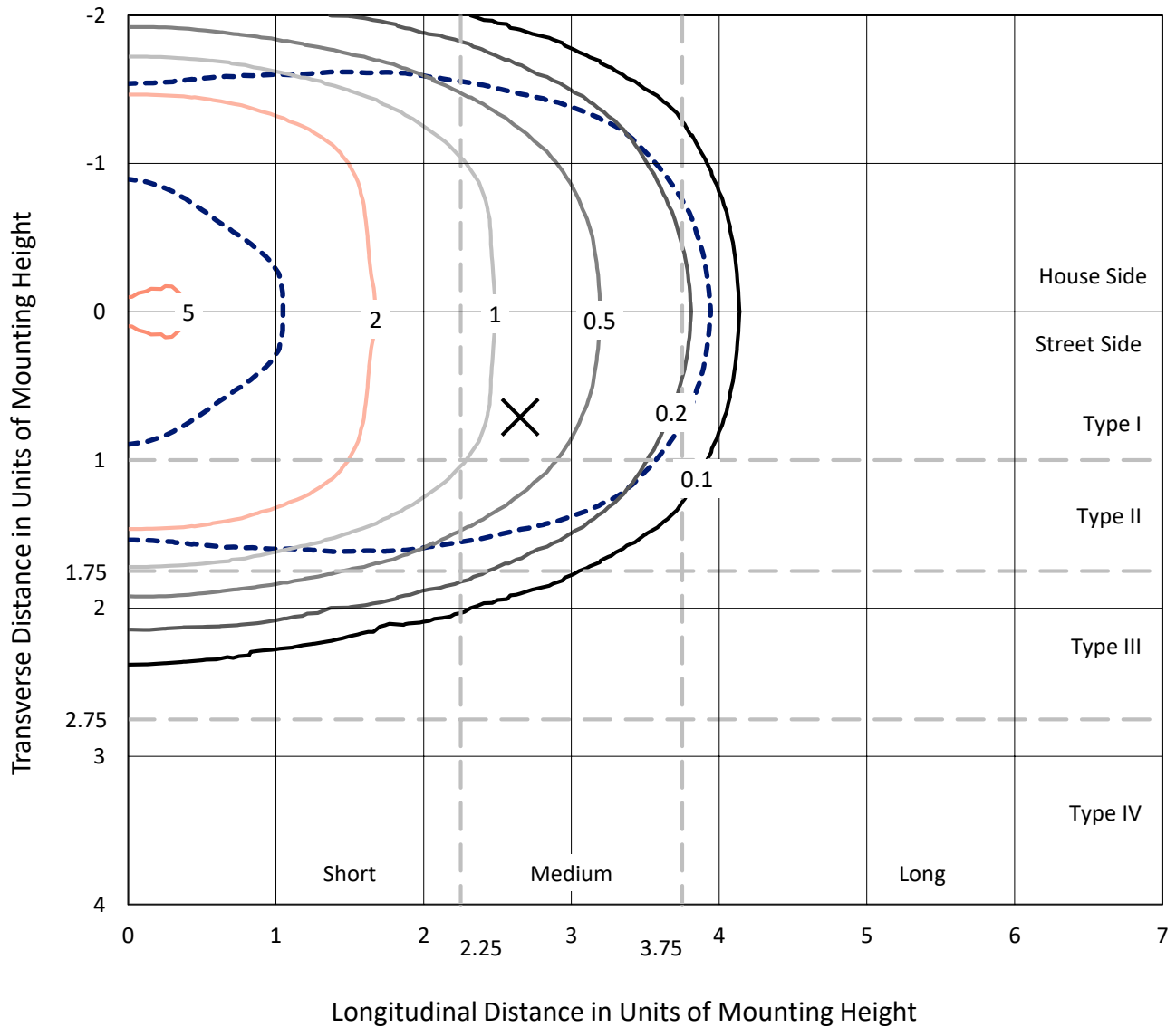
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

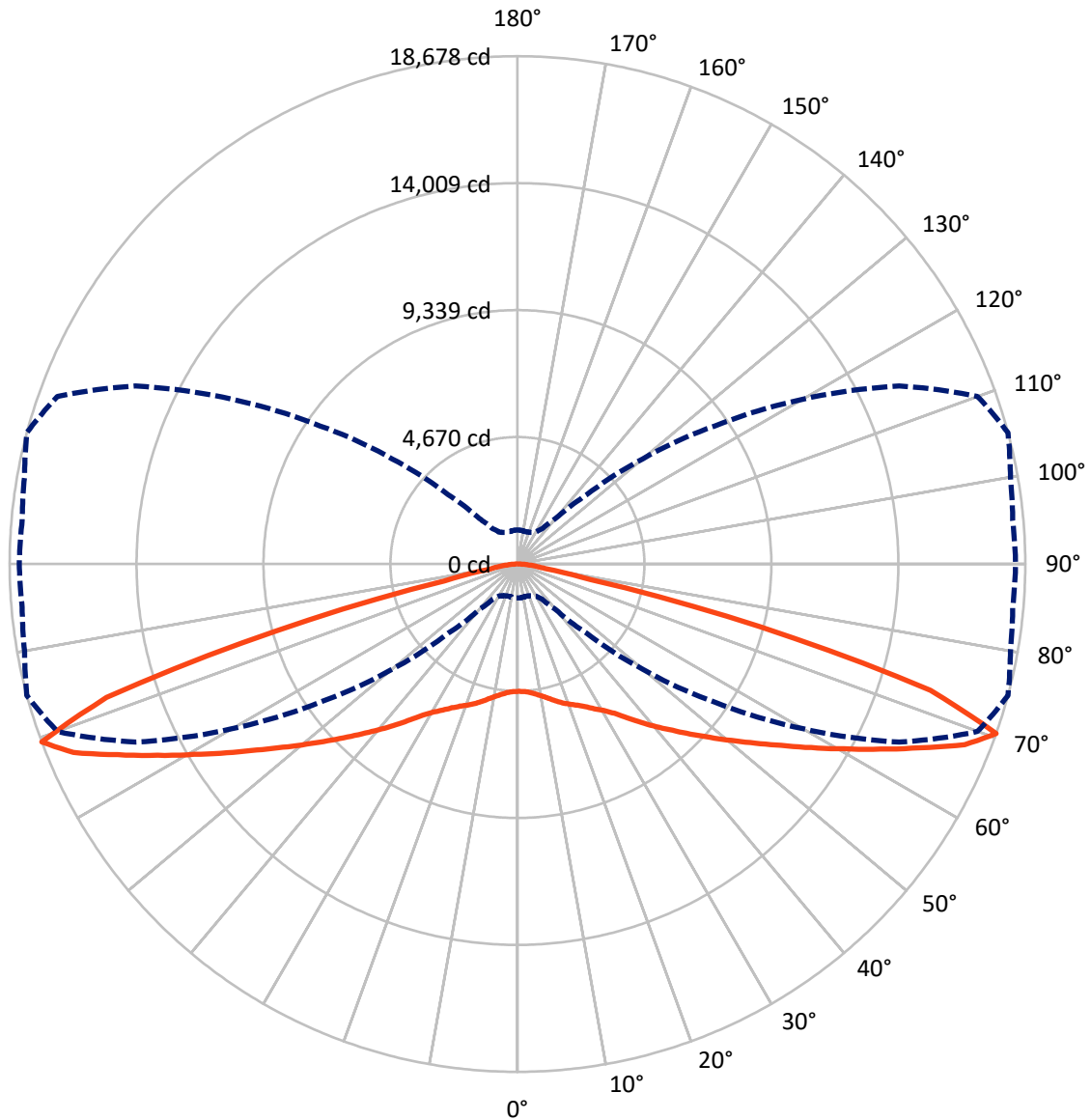
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 fc  
 Type 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	21111.6	0.0	21111.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	21111.6	0.0	21111.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	42223.1	0.0	42223.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	449.2	1.1
10°-20°	1395.7	3.3
20°-30°	2626.9	6.2
30°-40°	4651.7	11.0
40°-50°	7779.2	18.4
50°-60°	10840.3	25.7
60°-70°	10052.7	23.8
70°-80°	4006.3	9.5
80°-90°	421.1	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°	42223.1	100.0
0°-180°	42223.1	100.0



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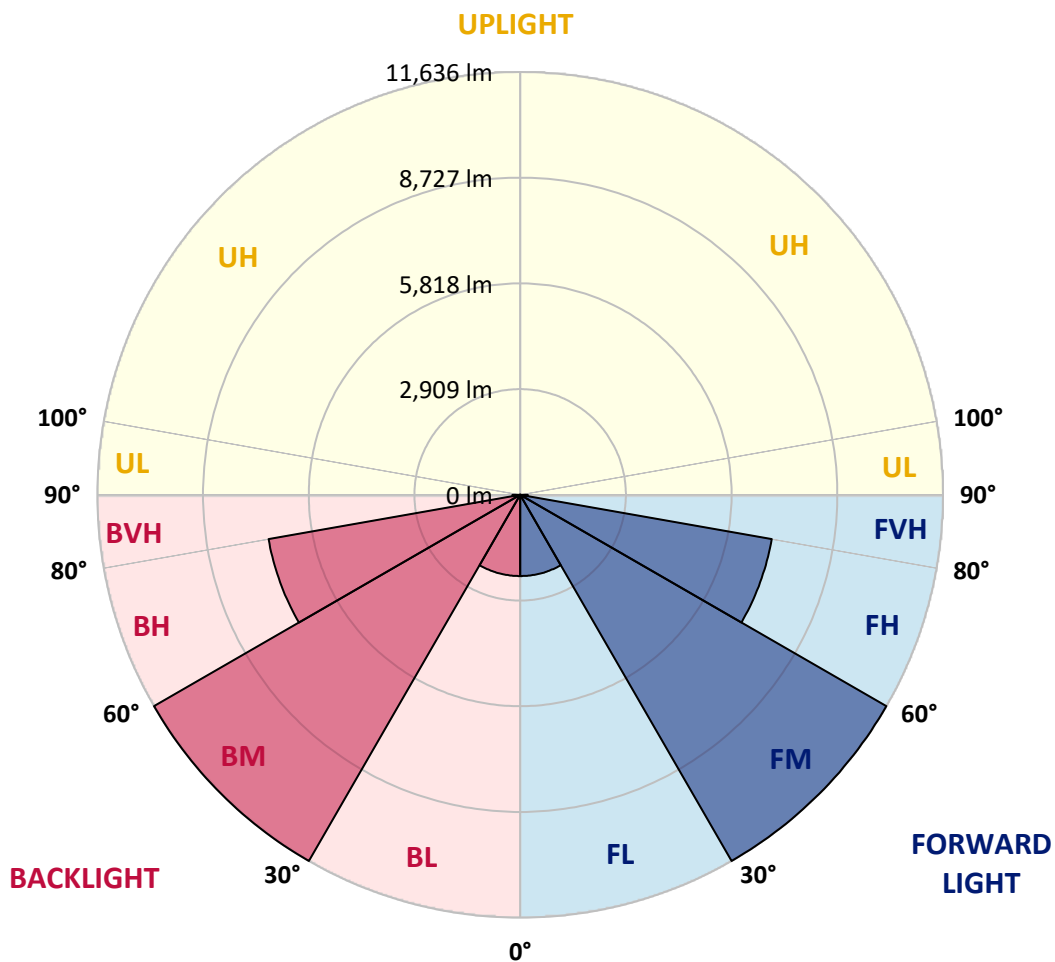
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2235.9	5.3			
FM	(30°-60°)	11635.6	27.6			
FH	(60°-80°)	7029.5	16.6			G3/7500
FVH	(80°-90°)	210.6	0.5			G2/225
BL	(0°-30°)	2235.9	5.3	B3/2500		
BM	(30°-60°)	11635.6	27.6	B5		
BH	(60°-80°)	7029.5	16.6	B5		G5
BVH	(80°-90°)	210.6	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°	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5
2.5°	4675.5	4671.6	4675.5	4673.6	4677.5	4677.5	4681.5	4689.5	4689.5	4695.5	4693.5
5°	4629.7	4627.7	4633.6	4639.6	4645.6	4657.6	4669.6	4687.5	4701.5	4711.5	4721.4
7.5°	4539.9	4539.9	4547.8	4561.8	4575.8	4601.7	4629.7	4665.6	4701.5	4731.4	4757.4
10°	4466.0	4470.0	4480.0	4503.9	4527.9	4567.8	4605.7	4657.6	4707.5	4757.4	4797.3
12.5°	4422.1	4428.1	4446.1	4482.0	4521.9	4575.8	4633.6	4699.5	4755.4	4815.2	4855.1
15°	4436.1	4440.1	4466.0	4509.9	4561.8	4629.7	4707.5	4785.3	4851.2	4915.0	4968.9
17.5°	4513.9	4519.9	4549.8	4599.7	4653.6	4733.4	4817.2	4905.0	4986.9	5058.7	5124.5
20°	4653.6	4659.6	4697.5	4751.4	4815.2	4897.1	4980.9	5072.7	5164.5	5240.3	5314.1
22.5°	4851.2	4861.1	4897.1	4950.9	5022.8	5110.6	5210.4	5308.1	5395.9	5465.8	5531.6
25°	5110.6	5132.5	5166.5	5226.3	5302.1	5382.0	5489.7	5589.5	5673.3	5739.2	5787.1
27.5°	5477.8	5507.7	5533.6	5591.5	5665.3	5741.2	5848.9	5936.7	6016.6	6080.4	6116.3
30°	5964.7	5994.6	6020.5	6076.4	6144.3	6216.1	6317.9	6395.7	6445.6	6495.5	6493.5
32.5°	6555.3	6587.3	6597.3	6657.1	6727.0	6804.8	6896.6	6940.5	6980.4	6986.4	6950.5
35°	7215.9	7231.8	7271.7	7351.6	7431.4	7495.2	7583.0	7605.0	7605.0	7575.1	7495.2
37.5°	7940.3	7950.2	8006.1	8095.9	8177.7	8243.6	8303.4	8347.3	8325.4	8261.5	8127.8
40°	8734.5	8752.4	8832.3	8912.1	9003.9	9065.7	9129.6	9137.6	9115.6	9021.8	8840.2
42.5°	9492.8	9508.7	9588.6	9714.3	9834.0	9919.8	9979.7	9991.7	9921.8	9836.0	9610.5
45°	10145.3	10187.2	10291.0	10438.7	10612.3	10734.0	10815.8	10849.7	10787.9	10676.1	10414.7
47.5°	10662.2	10704.1	10851.7	11027.3	11242.9	11440.4	11576.1	11648.0	11632.0	11548.2	11262.8
50°	11041.3	11081.2	11240.9	11456.4	11707.8	11953.3	12184.8	12356.4	12416.2	12378.3	12116.9
52.5°	11085.2	11151.1	11338.7	11628.0	11955.3	12290.5	12619.8	12911.1	13108.7	13138.6	12945.1
55°	10472.6	10538.4	10797.9	11226.9	11713.8	12260.6	12787.4	13278.3	13667.4	13867.0	13765.2
57.5°	9027.8	9145.6	9418.9	9921.8	10638.2	11456.4	12296.5	13168.6	13960.8	14489.6	14591.4
60°	6918.5	7058.2	7333.6	7868.4	8666.6	9642.4	10763.9	12053.1	13451.9	14641.3	15351.7
62.5°	4438.1	4569.8	4859.1	5324.1	5974.6	7032.3	8235.6	9766.2	11646.0	13523.8	15216.0
65°	2280.9	2352.7	2504.4	2785.8	3292.6	4082.9	5162.5	6689.0	8838.2	11155.1	13601.6
67.5°	1444.8	1458.7	1492.7	1532.6	1662.3	1935.7	2438.5	3390.4	5158.5	7575.1	10438.7
70°	1249.2	1249.2	1233.2	1227.3	1243.2	1281.1	1359.0	1580.5	2177.1	3596.0	6020.5
72.5°	1143.4	1131.5	1103.5	1081.6	1077.6	1077.6	1093.6	1127.5	1223.3	1464.7	2356.7
75°	1053.6	1019.7	981.8	955.9	945.9	935.9	933.9	939.9	959.9	997.8	1125.5
77.5°	943.9	900.0	856.1	830.1	818.2	804.2	792.2	778.3	768.3	780.3	836.1
80°	812.2	762.3	728.4	712.4	700.4	680.5	654.5	630.6	608.6	604.6	638.6
82.5°	654.5	596.7	598.7	604.6	582.7	554.8	526.8	500.9	463.0	443.0	463.0
85°	528.8	498.9	484.9	522.8	490.9	449.0	405.1	359.2	299.3	251.4	273.4
87.5°	205.5	205.5	307.3	472.9	425.0	347.2	297.3	253.4	157.6	121.7	123.7
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°	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5	4683.5
2.5°	4691.5	4695.5	4693.5	4691.5	4691.5	4689.5	4691.5	4691.5
5°	4727.4	4737.4	4737.4	4741.4	4741.4	4743.4	4745.4	4743.4
7.5°	4781.3	4799.3	4811.2	4825.2	4827.2	4829.2	4833.2	4829.2
10°	4835.2	4871.1	4897.1	4923.0	4935.0	4939.0	4943.0	4943.0
12.5°	4903.0	4952.9	4998.8	5044.7	5066.7	5078.6	5078.6	5086.6
15°	5014.8	5064.7	5118.6	5180.4	5218.3	5238.3	5244.3	5244.3
17.5°	5172.4	5216.3	5262.2	5322.1	5370.0	5395.9	5401.9	5399.9
20°	5356.0	5397.9	5423.9	5461.8	5503.7	5533.6	5541.6	5541.6
22.5°	5565.6	5589.5	5593.5	5605.5	5639.4	5679.3	5697.3	5701.3
25°	5797.0	5803.0	5787.1	5787.1	5809.0	5846.9	5864.9	5866.9
27.5°	6096.4	6066.4	6026.5	6012.6	6026.5	6070.4	6092.4	6100.4
30°	6469.5	6397.7	6305.9	6256.0	6248.0	6305.9	6345.8	6351.8
32.5°	6896.6	6792.8	6671.1	6569.3	6543.4	6579.3	6627.2	6625.2
35°	7403.5	7279.7	7132.1	7002.3	6942.5	6978.4	7046.2	7054.2
37.5°	7988.1	7826.5	7656.9	7493.2	7399.5	7409.4	7481.3	7505.2
40°	8640.7	8431.2	8217.6	7998.1	7864.4	7838.5	7926.3	7940.3
42.5°	9339.1	9069.7	8800.3	8528.9	8357.3	8317.4	8419.2	8413.2
45°	10083.5	9740.2	9424.9	9125.6	8922.1	8862.2	8946.0	8946.0
47.5°	10883.7	10460.6	10085.5	9746.2	9524.7	9438.9	9518.7	9524.7
50°	11731.8	11282.8	10841.8	10464.6	10199.2	10089.4	10193.2	10209.2
52.5°	12575.9	12138.9	11693.9	11262.8	10941.5	10807.8	10927.6	10979.5
55°	13432.0	13002.9	12577.9	12156.8	11775.7	11618.0	11745.7	11811.6
57.5°	14336.0	13938.8	13533.7	13108.7	12741.5	12496.1	12631.8	12719.6
60°	15395.6	15056.3	14635.3	14166.3	13795.2	13545.7	13623.5	13701.4
62.5°	16233.7	16365.4	16008.2	15465.4	14988.5	14669.2	14745.0	14826.9
65°	15828.6	17179.6	17496.9	16948.1	16287.6	15790.7	15758.8	15800.7
67.5°	13230.4	15854.6	17768.3	18291.1	17738.3	17047.9	16920.2	16982.0
70°	8850.2	12118.9	15495.4	18009.7	18678.2	18410.8	18285.1	18323.0
72.5°	4250.5	7058.2	10512.5	13855.0	15890.5	16824.4	17123.7	17269.4
75°	1554.5	2801.7	5066.7	7634.9	9217.4	10670.1	11618.0	12005.2
77.5°	937.9	1131.5	1618.4	2436.6	2759.8	3089.1	2961.4	3025.2
80°	694.4	784.2	888.0	997.8	1033.7	1033.7	993.8	961.8
82.5°	486.9	544.8	594.7	654.5	670.5	640.6	526.8	419.1
85°	313.3	339.2	361.2	399.1	389.1	371.2	249.4	221.5
87.5°	143.7	163.6	171.6	189.6	181.6	173.6	123.7	103.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)