

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: P300646

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300646  
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-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K 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: 43795.4 lumens  
Efficiency: N/A  
Efficacy: 117.1 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

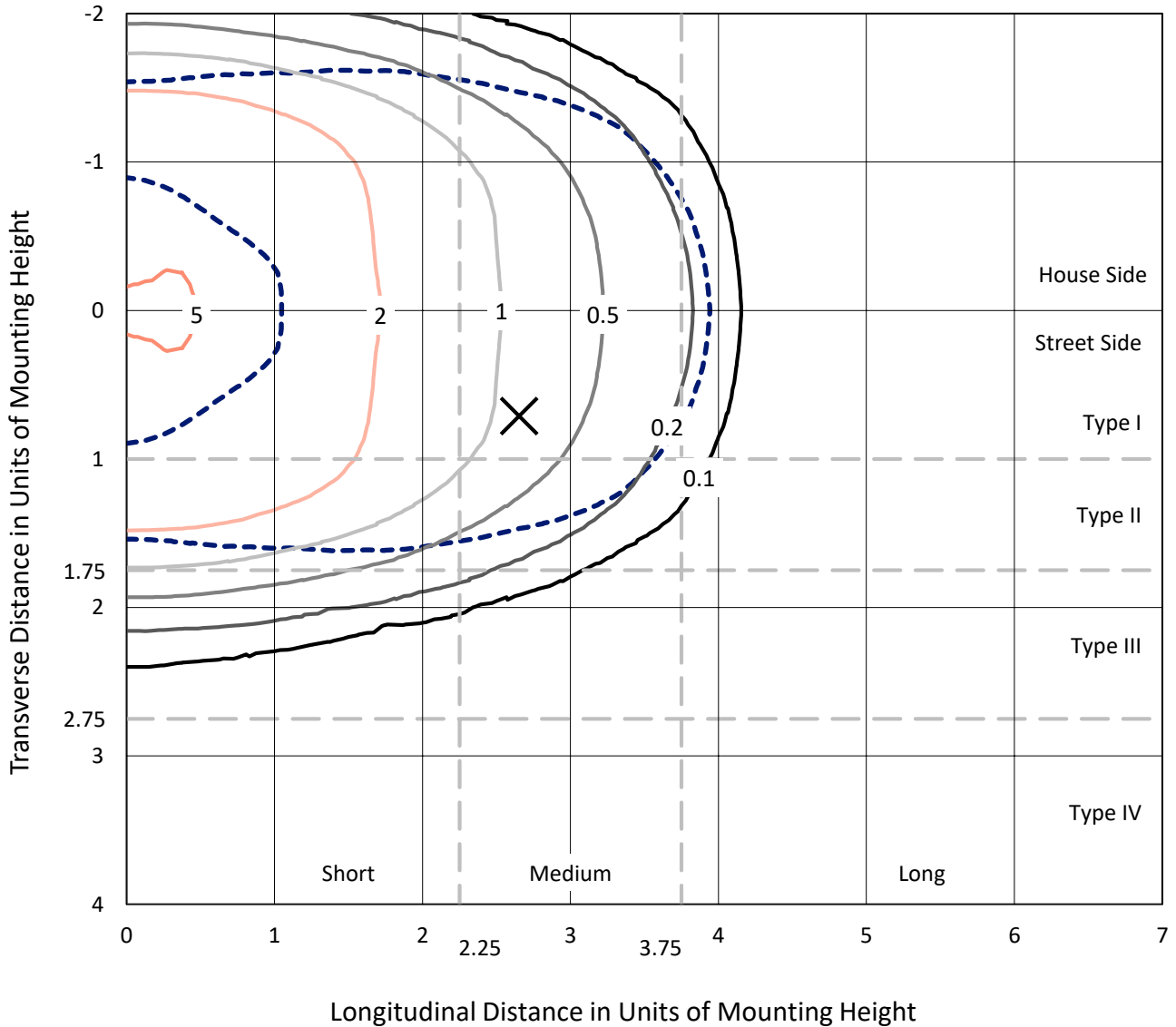
Input Watts (W): 374  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P300646  
 CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-800

### Iso-Footcandle Lines of Horizontal Illumination

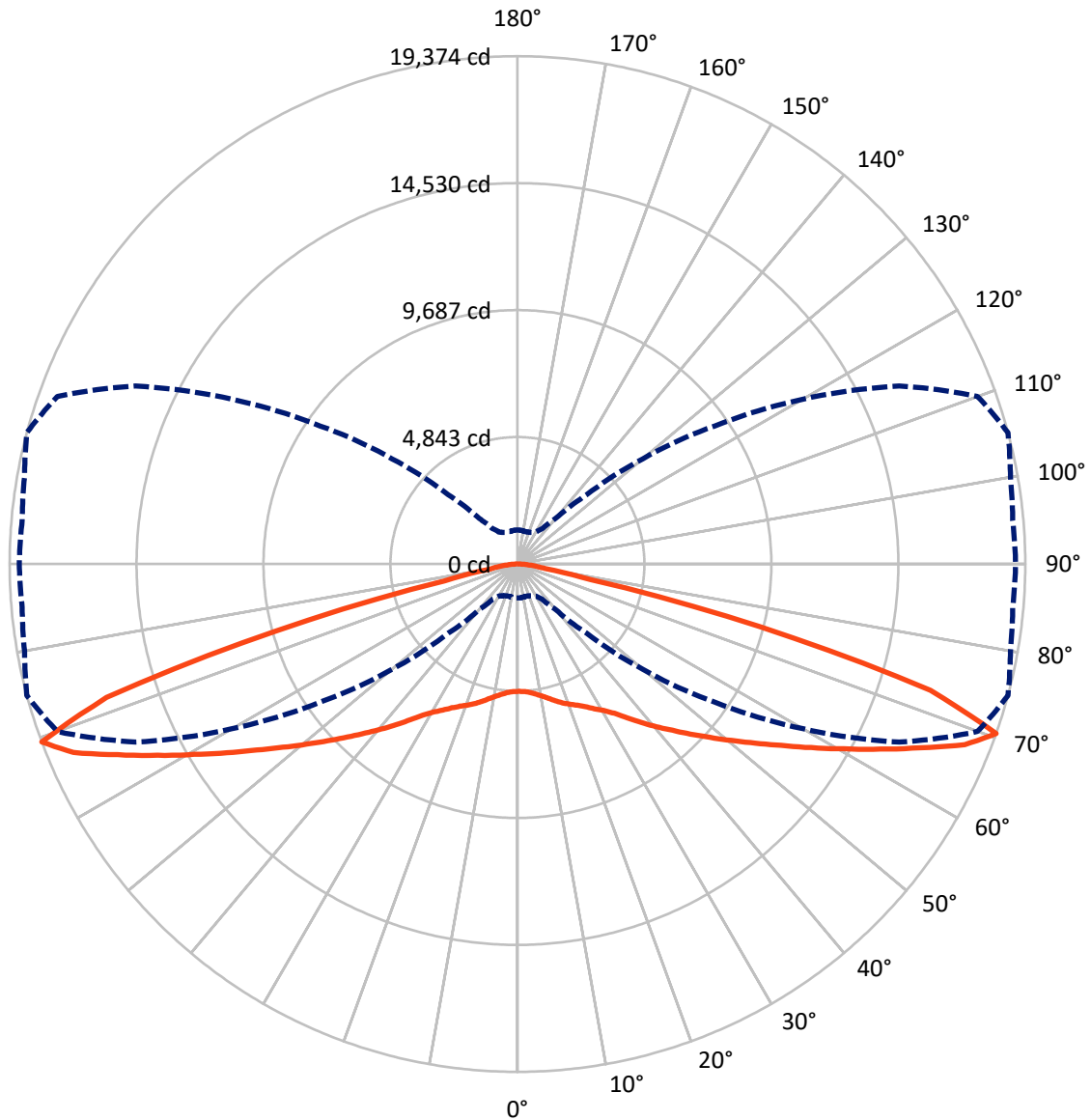
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P300646  
CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300646

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	21897.7	0.0	21897.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	21897.7	0.0	21897.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	43795.4	0.0	43795.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	465.9	1.1
10°-20°	1447.7	3.3
20°-30°	2724.7	6.2
30°-40°	4825.0	11.0
40°-50°	8068.9	18.4
50°-60°	11244.0	25.7
60°-70°	10427.0	23.8
70°-80°	4155.5	9.5
80°-90°	436.8	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°	43795.4	100.0
0°-180°	43795.4	100.0



REPORT NUMBER: P300646

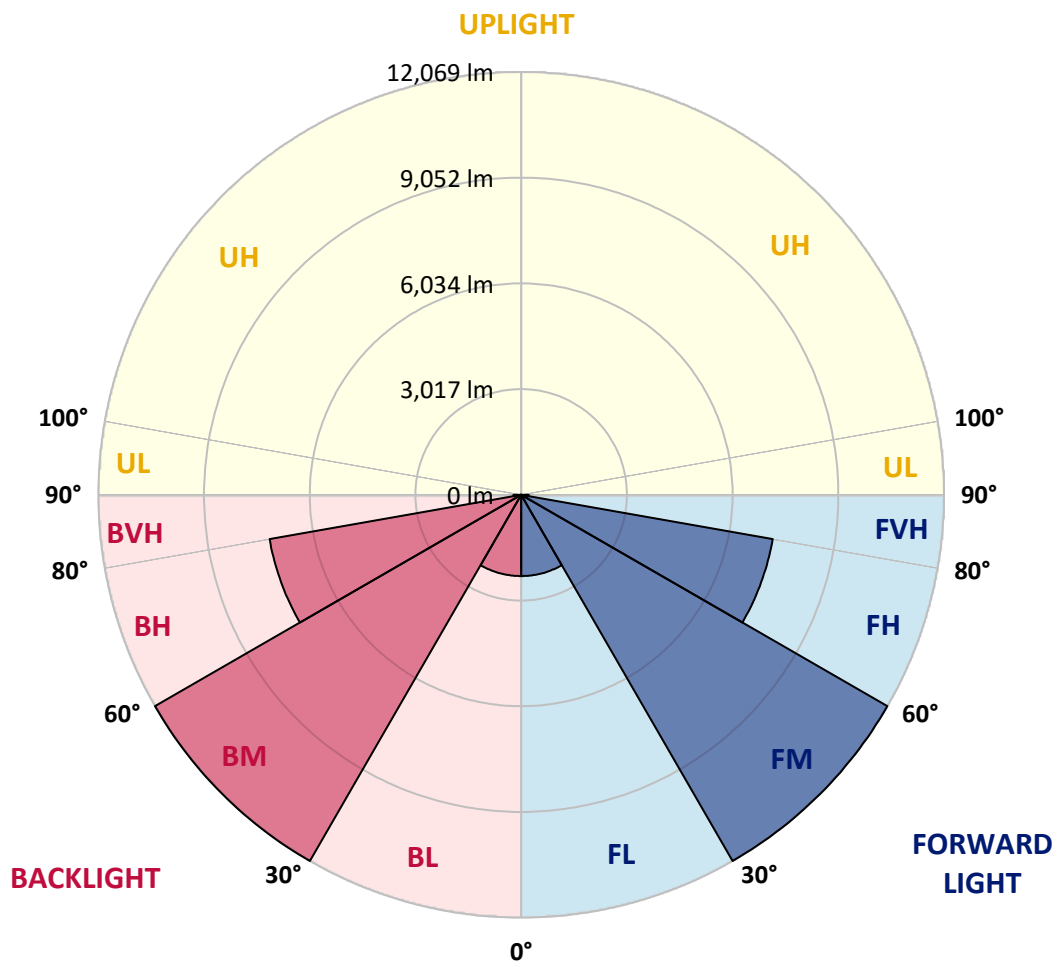
CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2319.1	5.3			
FM	(30°-60°)	12068.9	27.6			
FH	(60°-80°)	7291.2	16.6			G3/7500
FVH	(80°-90°)	218.4	0.5			G2/225
BL	(0°-30°)	2319.1	5.3	B3/2500		
BM	(30°-60°)	12068.9	27.6	B5		
BH	(60°-80°)	7291.2	16.6	B5		G5
BVH	(80°-90°)	218.4	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





REPORT NUMBER: P300646

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9
2.5°	4849.6	4845.5	4849.6	4847.6	4851.7	4851.7	4855.9	4864.1	4864.1	4870.3	4868.3
5°	4802.0	4800.0	4806.2	4812.4	4818.6	4831.0	4843.4	4862.1	4876.6	4886.9	4897.3
7.5°	4708.9	4708.9	4717.2	4731.7	4746.2	4773.1	4802.0	4839.3	4876.6	4907.6	4934.5
10°	4632.3	4636.5	4646.8	4671.6	4696.5	4737.9	4777.2	4831.0	4882.8	4934.5	4975.9
12.5°	4586.8	4593.0	4611.6	4648.9	4690.3	4746.2	4806.2	4874.5	4932.4	4994.5	5035.9
15°	4601.3	4605.4	4632.3	4677.9	4731.7	4802.0	4882.8	4963.5	5031.8	5098.0	5153.9
17.5°	4682.0	4688.2	4719.2	4771.0	4826.9	4909.7	4996.6	5087.7	5172.5	5247.1	5315.4
20°	4826.9	4833.1	4872.4	4928.3	4994.5	5079.4	5166.3	5261.5	5356.8	5435.4	5512.0
22.5°	5031.8	5042.1	5079.4	5135.3	5209.8	5300.9	5404.4	5505.8	5596.9	5669.3	5737.6
25°	5300.9	5323.6	5358.8	5420.9	5499.6	5582.4	5694.1	5797.6	5884.6	5952.9	6002.6
27.5°	5681.7	5712.8	5739.7	5799.7	5876.3	5954.9	6066.7	6157.8	6240.6	6306.8	6344.1
30°	6186.8	6217.8	6244.7	6302.7	6373.1	6447.6	6553.1	6633.9	6685.6	6737.3	6735.3
32.5°	6799.4	6832.6	6842.9	6905.0	6977.4	7058.2	7153.4	7198.9	7240.3	7246.5	7209.3
35°	7484.6	7501.1	7542.5	7625.3	7708.1	7774.3	7865.4	7888.2	7888.2	7857.1	7774.3
37.5°	8235.9	8246.3	8304.2	8397.4	8482.2	8550.5	8612.6	8658.2	8635.4	8569.2	8430.5
40°	9059.7	9078.3	9161.1	9243.9	9339.1	9403.3	9469.5	9477.8	9455.1	9357.8	9169.4
42.5°	9846.3	9862.8	9945.6	10076.0	10200.2	10289.2	10351.3	10363.7	10291.3	10202.3	9968.4
45°	10523.1	10566.6	10674.2	10827.4	11007.4	11133.7	11218.6	11253.7	11189.6	11073.7	10802.5
47.5°	11059.2	11102.7	11255.8	11438.0	11661.5	11866.4	12007.2	12081.7	12065.1	11978.2	11682.2
50°	11452.5	11493.9	11659.4	11883.0	12143.8	12398.4	12638.5	12816.5	12878.6	12839.3	12568.1
52.5°	11498.0	11566.3	11760.9	12061.0	12400.4	12748.2	13089.7	13391.9	13596.8	13627.9	13427.1
55°	10862.5	10930.9	11199.9	11644.9	12150.0	12717.1	13263.6	13772.8	14176.4	14383.4	14277.8
57.5°	9364.0	9486.1	9769.7	10291.3	11034.3	11883.0	12754.4	13658.9	14480.6	15029.1	15134.7
60°	7176.2	7321.0	7606.7	8161.4	8989.3	10001.5	11164.7	12501.9	13952.8	15186.5	15923.3
62.5°	4603.3	4739.9	5040.1	5522.3	6197.1	7294.1	8542.3	10129.8	12079.6	14027.3	15782.6
65°	2365.8	2440.3	2597.7	2889.5	3415.2	4234.9	5354.7	6938.1	9167.3	11570.4	14108.1
67.5°	1498.6	1513.1	1548.2	1589.6	1724.2	2007.7	2529.4	3516.7	5350.6	7857.1	10827.4
70°	1295.7	1295.7	1279.2	1273.0	1289.5	1328.8	1409.6	1639.3	2258.2	3729.9	6244.7
72.5°	1186.0	1173.6	1144.6	1121.9	1117.7	1117.7	1134.3	1169.5	1268.8	1519.3	2444.5
75°	1092.9	1057.7	1018.4	991.5	981.1	970.8	968.7	974.9	995.6	1034.9	1167.4
77.5°	979.0	933.5	888.0	861.1	848.6	834.1	821.7	807.2	796.9	809.3	867.3
80°	842.4	790.7	755.5	738.9	726.5	705.8	678.9	654.1	631.3	627.2	662.4
82.5°	678.9	618.9	621.0	627.2	604.4	575.4	546.4	519.5	480.2	459.5	480.2
85°	548.5	517.5	503.0	542.3	509.2	465.7	420.2	372.6	310.5	260.8	283.6
87.5°	213.2	213.2	318.8	490.6	440.9	360.2	308.4	262.9	163.5	126.3	128.3
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°	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9	4857.9
2.5°	4866.2	4870.3	4868.3	4866.2	4866.2	4864.1	4866.2	4866.2
5°	4903.5	4913.8	4913.8	4918.0	4918.0	4920.0	4922.1	4920.0
7.5°	4959.3	4978.0	4990.4	5004.9	5007.0	5009.0	5013.2	5009.0
10°	5015.2	5052.5	5079.4	5106.3	5118.7	5122.9	5127.0	5127.0
12.5°	5085.6	5137.4	5185.0	5232.6	5255.3	5267.8	5267.8	5276.0
15°	5201.5	5253.3	5309.2	5373.3	5412.6	5433.3	5439.6	5439.6
17.5°	5365.0	5410.6	5458.2	5520.3	5570.0	5596.9	5603.1	5601.0
20°	5555.5	5598.9	5625.8	5665.2	5708.6	5739.7	5748.0	5748.0
22.5°	5772.8	5797.6	5801.8	5814.2	5849.4	5890.8	5909.4	5913.5
25°	6012.9	6019.1	6002.6	6002.6	6025.3	6064.6	6083.3	6085.3
27.5°	6323.4	6292.3	6250.9	6236.4	6250.9	6296.5	6319.2	6327.5
30°	6710.4	6635.9	6540.7	6489.0	6480.7	6540.7	6582.1	6588.3
32.5°	7153.4	7045.8	6919.5	6813.9	6787.0	6824.3	6874.0	6871.9
35°	7679.1	7550.8	7397.6	7263.1	7201.0	7238.2	7308.6	7316.9
37.5°	8285.6	8117.9	7942.0	7772.3	7675.0	7685.3	7759.9	7784.7
40°	8962.4	8745.1	8523.6	8295.9	8157.3	8130.4	8221.4	8235.9
42.5°	9686.9	9407.4	9128.0	8846.5	8668.5	8627.1	8732.7	8726.5
45°	10458.9	10102.9	9775.9	9465.4	9254.3	9192.2	9279.1	9279.1
47.5°	11288.9	10850.1	10461.0	10109.1	9879.4	9790.4	9873.2	9879.4
50°	12168.6	11702.9	11245.5	10854.3	10579.0	10465.1	10572.8	10589.3
52.5°	13044.2	12590.9	12129.3	11682.2	11349.0	11210.3	11334.5	11388.3
55°	13932.1	13487.1	13046.2	12609.5	12214.2	12050.6	12183.1	12251.4
57.5°	14869.8	14457.9	14037.7	13596.8	13216.0	12961.4	13102.1	13193.2
60°	15968.9	15617.0	15180.2	14693.8	14308.8	14050.1	14130.8	14211.6
62.5°	16838.2	16974.8	16604.3	16041.3	15546.6	15215.4	15294.1	15379.0
65°	16418.0	17819.3	18148.4	17579.2	16894.1	16378.7	16345.6	16389.0
67.5°	13723.1	16444.9	18429.9	18972.2	18398.9	17682.7	17550.2	17614.4
70°	9179.8	12570.2	16072.3	18680.4	19373.8	19096.4	18966.0	19005.3
72.5°	4408.8	7321.0	10903.9	14370.9	16482.2	17450.9	17761.3	17912.4
75°	1612.4	2906.1	5255.3	7919.2	9560.6	11067.5	12050.6	12452.2
77.5°	972.8	1173.6	1678.6	2527.3	2862.6	3204.1	3071.7	3137.9
80°	720.3	813.4	921.1	1034.9	1072.2	1072.2	1030.8	997.7
82.5°	505.0	565.1	616.8	678.9	695.5	664.4	546.4	434.7
85°	325.0	351.9	374.6	414.0	403.6	385.0	258.7	229.8
87.5°	149.0	169.7	178.0	196.6	188.4	180.1	128.3	107.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)