

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: P299846

Luminaire Tested: **GLNA-AF-06-LED-E1-5WQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299846  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-5WQ-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

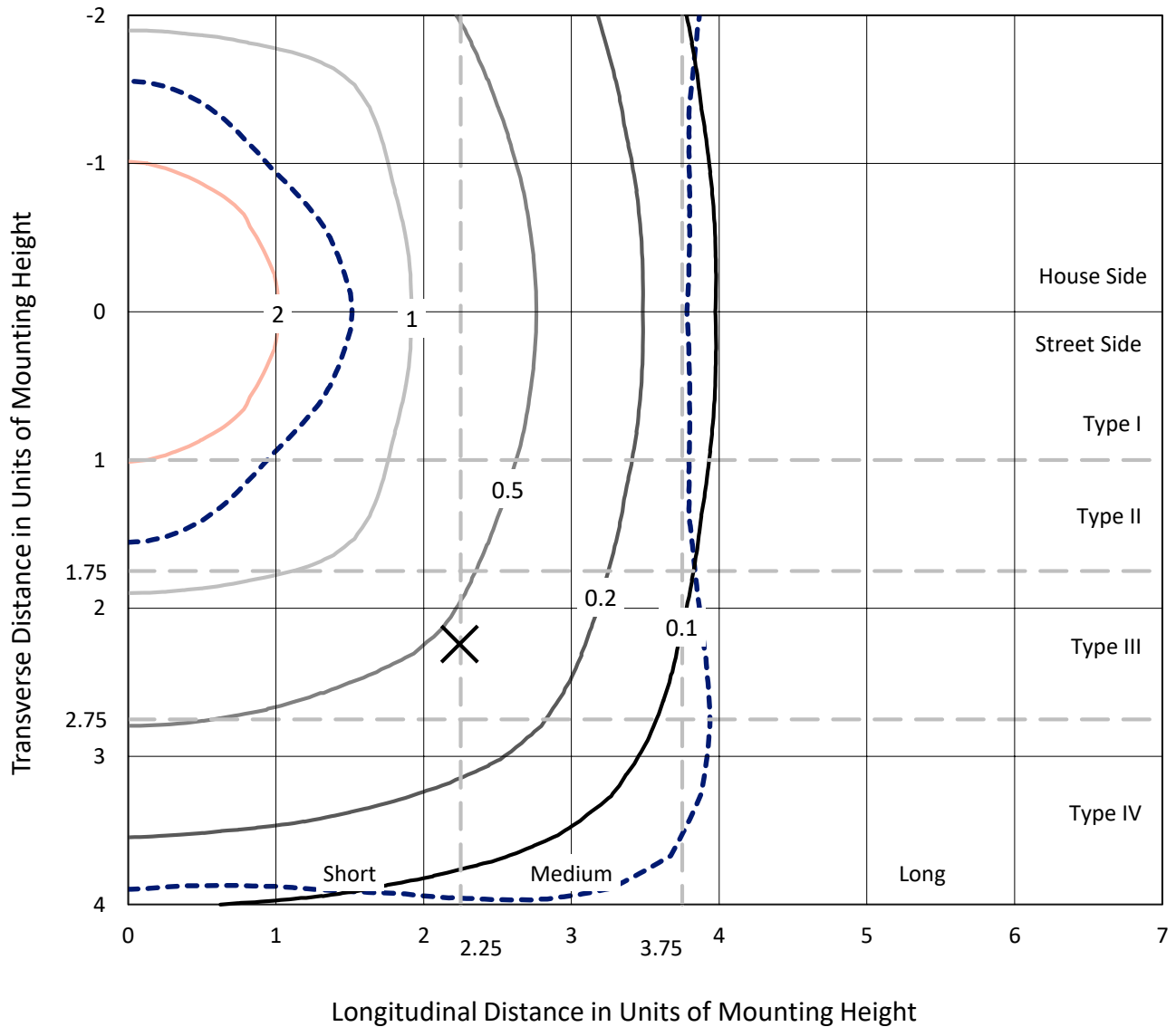
Lumens per Lamp: N/A  
Luminaire Lumens: 36145.9 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (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

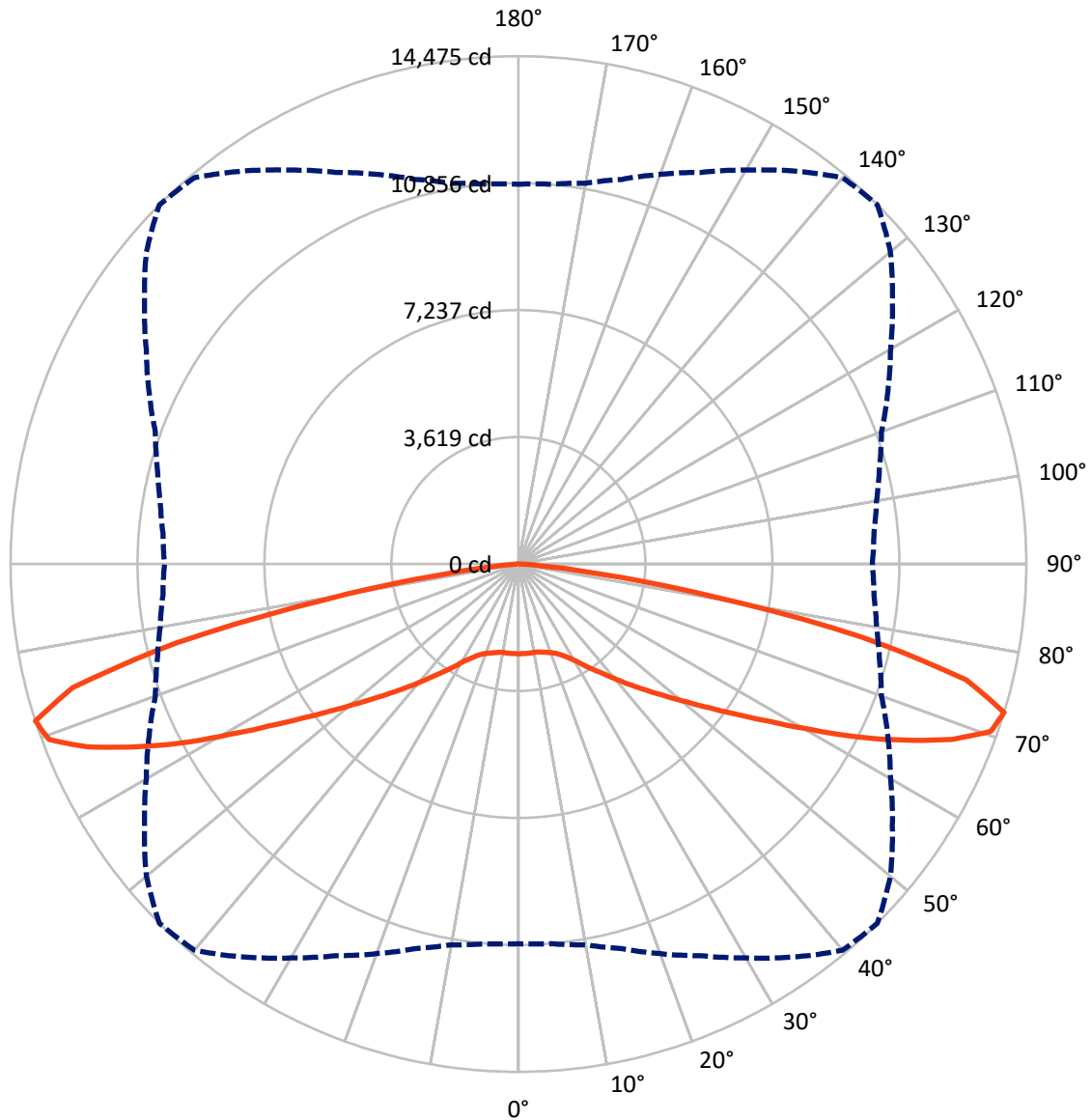
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18073.0	0.0	18073.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	18073.0	0.0	18073.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	36145.9	0.0	36145.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.4	0.7
10°-20°	742.3	2.1
20°-30°	1356.5	3.8
30°-40°	2338.9	6.5
40°-50°	3998.4	11.1
50°-60°	6480.8	17.9
60°-70°	10751.5	29.7
70°-80°	9469.5	26.2
80°-90°	763.5	2.1
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°	36145.9	100.0
0°-180°	36145.9	100.0



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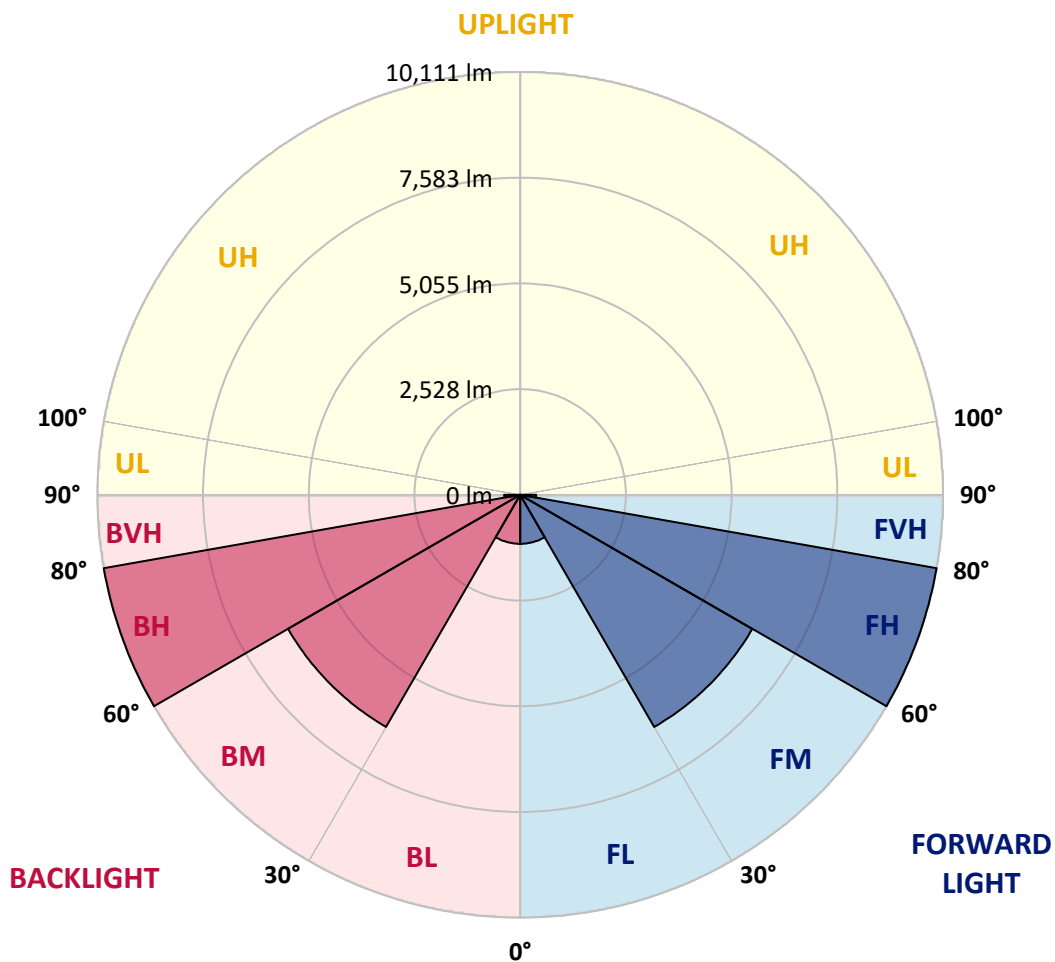
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1171.7	3.2			
FM	(30°-60°)	6409.1	17.7			
FH	(60°-80°)	10110.5	28.0			G4/12000
FVH	(80°-90°)	381.7	1.1			G3/500
BL	(0°-30°)	1171.7	3.2	B3/2500		
BM	(30°-60°)	6409.1	17.7	B4/8500		
BH	(60°-80°)	10110.5	28.0	B5		G4/12000
BVH	(80°-90°)	381.7	1.1			G3/500
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°	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7
2.5°	2559.7	2561.4	2563.0	2561.4	2561.4	2559.7	2558.0	2559.7	2558.0	2554.7	2556.4
5°	2568.0	2571.3	2571.3	2568.0	2569.6	2568.0	2564.7	2566.3	2563.0	2558.0	2558.0
7.5°	2577.9	2579.6	2579.6	2576.3	2577.9	2574.6	2571.3	2569.6	2566.3	2559.7	2554.7
10°	2592.9	2594.5	2592.9	2589.5	2589.5	2584.6	2576.3	2573.0	2566.3	2556.4	2551.4
12.5°	2609.4	2611.1	2609.4	2606.1	2604.5	2596.2	2589.5	2584.6	2579.6	2571.3	2563.0
15°	2632.6	2636.0	2632.6	2626.0	2621.0	2614.4	2611.1	2612.7	2614.4	2607.8	2599.5
17.5°	2675.7	2677.4	2672.4	2657.5	2650.9	2644.2	2644.2	2647.6	2652.5	2649.2	2640.9
20°	2755.3	2750.3	2738.7	2720.5	2712.2	2700.6	2699.0	2700.6	2700.6	2699.0	2692.3
22.5°	2854.8	2851.5	2836.6	2813.3	2801.7	2795.1	2785.2	2776.9	2775.2	2770.2	2763.6
25°	2974.2	2972.5	2954.3	2934.4	2926.1	2917.8	2909.5	2897.9	2887.9	2876.3	2869.7
27.5°	3126.7	3120.0	3093.5	3083.6	3072.0	3067.0	3055.4	3042.1	3033.8	3018.9	3010.6
30°	3294.1	3294.1	3272.6	3269.2	3269.2	3257.6	3244.4	3221.2	3206.2	3191.3	3186.4
32.5°	3461.6	3463.2	3441.7	3448.3	3453.3	3461.6	3464.9	3456.6	3446.6	3445.0	3435.0
35°	3703.6	3697.0	3675.4	3680.4	3678.7	3677.1	3677.1	3695.3	3698.6	3701.9	3682.0
37.5°	4003.7	4003.7	3982.1	3982.1	3972.2	3962.2	3949.0	3960.6	3978.8	3983.8	3970.5
40°	4346.8	4358.4	4331.9	4330.3	4333.6	4302.1	4287.2	4305.4	4317.0	4336.9	4322.0
42.5°	4751.3	4743.1	4716.5	4713.2	4695.0	4685.0	4671.8	4686.7	4704.9	4718.2	4723.2
45°	5139.3	5132.7	5102.8	5102.8	5084.6	5076.3	5082.9	5107.8	5116.1	5134.3	5152.5
47.5°	5522.2	5514.0	5494.1	5502.3	5504.0	5518.9	5540.5	5563.7	5586.9	5611.8	5620.1
50°	5913.5	5915.1	5893.6	5913.5	5938.4	5979.8	6037.8	6076.0	6124.0	6155.5	6165.5
52.5°	6269.9	6276.6	6299.8	6346.2	6395.9	6477.2	6576.6	6669.5	6749.0	6802.1	6798.8
55°	6697.6	6707.6	6764.0	6843.5	6924.8	7047.4	7195.0	7359.1	7491.7	7568.0	7519.9
57.5°	7244.7	7266.3	7329.3	7437.0	7558.1	7717.2	7919.5	8166.5	8372.1	8474.8	8396.9
60°	7995.7	8009.0	8085.3	8204.6	8350.5	8547.8	8818.0	9149.6	9439.7	9575.6	9486.1
62.5°	8985.5	9010.3	9071.7	9192.7	9341.9	9565.7	9895.6	10310.1	10671.5	10860.5	10658.2
65°	10167.5	10247.1	10298.5	10421.1	10560.4	10797.5	11142.3	11586.6	11974.5	12098.9	11865.1
67.5°	11337.9	11407.5	11497.1	11638.0	11778.9	12045.8	12365.8	12796.8	13222.9	13335.6	12972.5
70°	11850.2	11890.0	12029.2	12221.5	12491.8	12806.8	13176.5	13660.5	14187.7	14280.6	13819.7
72.5°	10824.0	10863.8	11019.6	11346.2	11817.0	12317.7	12962.6	13673.8	14370.1	14474.5	13839.6
75°	8186.4	8121.7	8352.2	8784.9	9419.8	10117.8	11019.6	12039.2	13045.5	13176.5	12418.8
77.5°	4230.8	4222.5	4396.6	4933.7	5691.3	6485.4	7478.5	8630.7	9615.4	10013.3	9396.6
80°	1192.0	1205.2	1288.1	1555.0	1997.7	2571.3	3347.2	4426.4	5232.1	5643.3	5298.4
82.5°	467.5	504.0	535.5	585.2	643.2	727.8	971.5	1445.6	1939.7	2317.7	1898.2
85°	167.4	179.0	253.6	300.1	305.0	321.6	366.4	427.7	515.6	615.1	505.6
87.5°	63.0	69.6	81.2	134.3	132.6	121.0	147.5	154.2	116.0	106.1	131.0
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°	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7	2559.7
2.5°	2553.1	2554.7	2554.7	2556.4	2558.0	2558.0	2561.4	2561.4
5°	2554.7	2554.7	2551.4	2553.1	2551.4	2551.4	2553.1	2553.1
7.5°	2551.4	2549.7	2546.4	2544.8	2541.5	2541.5	2541.5	2541.5
10°	2546.4	2544.8	2541.5	2539.8	2538.1	2538.1	2538.1	2538.1
12.5°	2559.7	2554.7	2551.4	2549.7	2549.7	2549.7	2549.7	2549.7
15°	2594.5	2582.9	2574.6	2574.6	2576.3	2579.6	2579.6	2582.9
17.5°	2637.6	2624.3	2616.1	2609.4	2612.7	2617.7	2621.0	2624.3
20°	2689.0	2682.4	2670.8	2664.1	2664.1	2670.8	2674.1	2675.7
22.5°	2760.3	2755.3	2750.3	2742.1	2742.1	2745.4	2752.0	2752.0
25°	2866.4	2863.1	2859.8	2853.1	2851.5	2851.5	2854.8	2858.1
27.5°	2999.0	3000.7	2997.4	2995.7	2990.7	2989.1	2994.0	2992.4
30°	3176.4	3184.7	3193.0	3186.4	3178.1	3173.1	3168.1	3161.5
32.5°	3416.8	3406.8	3400.2	3388.6	3373.7	3360.4	3350.5	3338.9
35°	3643.9	3627.3	3620.7	3630.7	3629.0	3620.7	3609.1	3599.2
37.5°	3922.4	3919.1	3922.4	3940.7	3937.4	3945.6	3922.4	3920.8
40°	4273.9	4277.2	4300.4	4322.0	4333.6	4345.2	4331.9	4318.7
42.5°	4681.7	4680.1	4688.4	4718.2	4738.1	4751.3	4723.2	4719.9
45°	5112.8	5101.2	5107.8	5132.7	5152.5	5167.5	5136.0	5136.0
47.5°	5586.9	5567.0	5545.5	5573.6	5585.2	5595.2	5570.3	5562.0
50°	6115.7	6074.3	6027.9	6039.5	6039.5	6036.2	6004.7	6003.0
52.5°	6722.5	6646.3	6561.7	6530.2	6512.0	6492.1	6437.4	6410.8
55°	7420.5	7306.1	7173.4	7092.2	7049.1	6994.4	6903.2	6878.3
57.5°	8236.1	8057.1	7828.3	7728.8	7632.7	7543.1	7442.0	7413.8
60°	9202.6	8939.0	8635.7	8451.6	8347.2	8261.0	8156.5	8151.6
62.5°	10280.2	9864.1	9520.9	9355.2	9278.9	9202.6	9103.2	9116.4
65°	11376.1	10941.7	10620.1	10485.8	10414.5	10351.5	10252.0	10267.0
67.5°	12457.0	12057.4	11704.3	11566.7	11487.1	11407.5	11318.0	11332.9
70°	13232.8	12737.1	12339.3	12034.2	11843.6	11628.0	11488.8	11454.0
72.5°	13010.7	12246.4	11614.8	11009.7	10654.9	10366.4	10170.8	10086.3
75°	11260.0	10215.6	9403.2	8660.5	8242.7	7902.9	7655.9	7501.7
77.5°	8362.1	7188.4	6228.5	5373.0	4696.6	4242.4	3922.4	3715.2
80°	4577.3	3481.4	2544.8	1788.8	1314.7	1092.5	964.9	903.5
82.5°	1425.7	920.1	678.1	585.2	543.8	520.6	482.4	421.1
85°	454.2	397.9	369.7	353.1	336.5	293.4	202.3	184.0
87.5°	175.7	180.7	179.0	169.1	172.4	124.3	99.5	87.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)