

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: P299916

Luminaire Tested: **GLNA-AF-07-LED-E1-5WQ-7060-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299916  
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-07-LED-E1-5WQ-7060-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35702.5 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G4

Input Watts (W): 295  
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

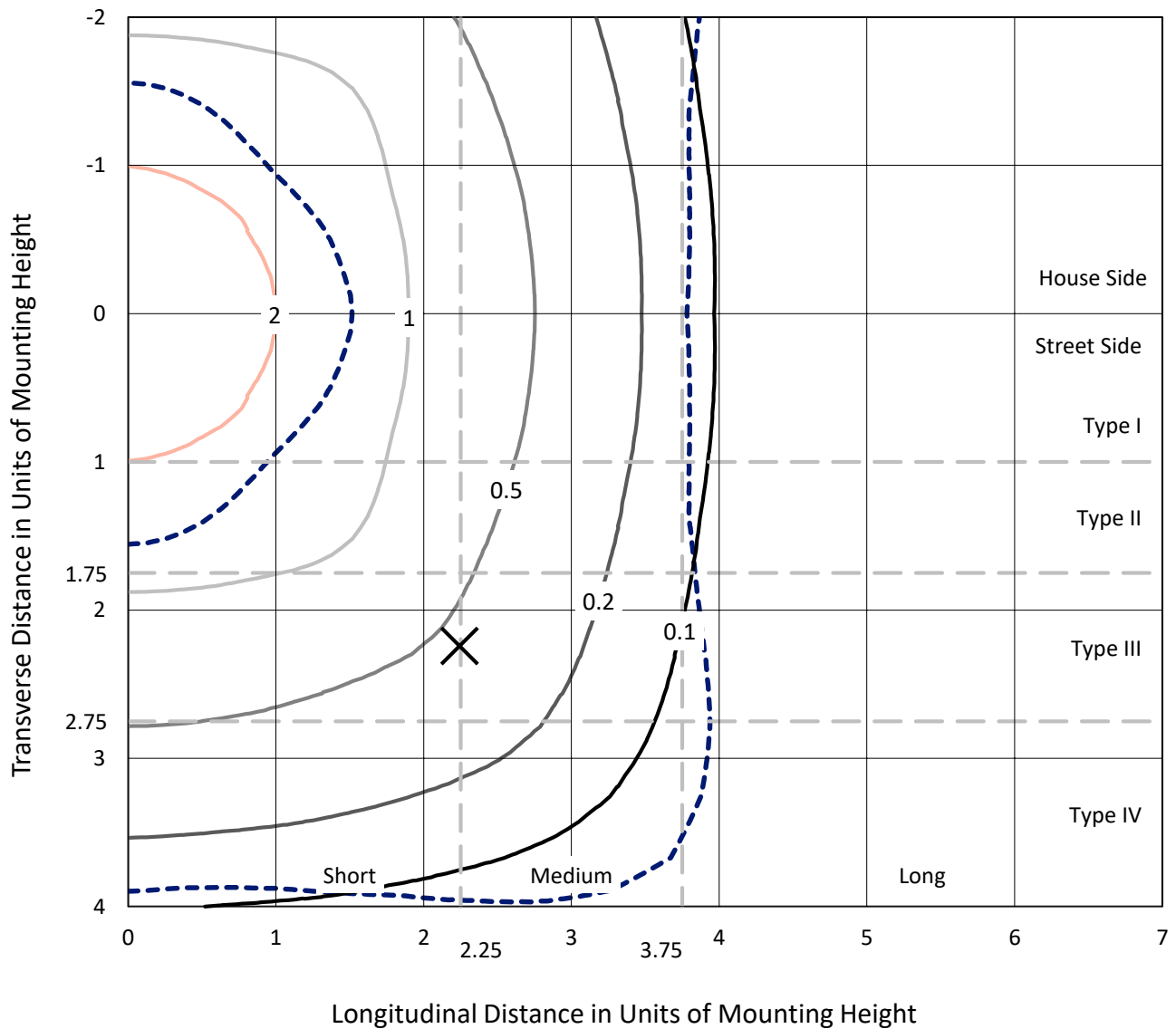


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

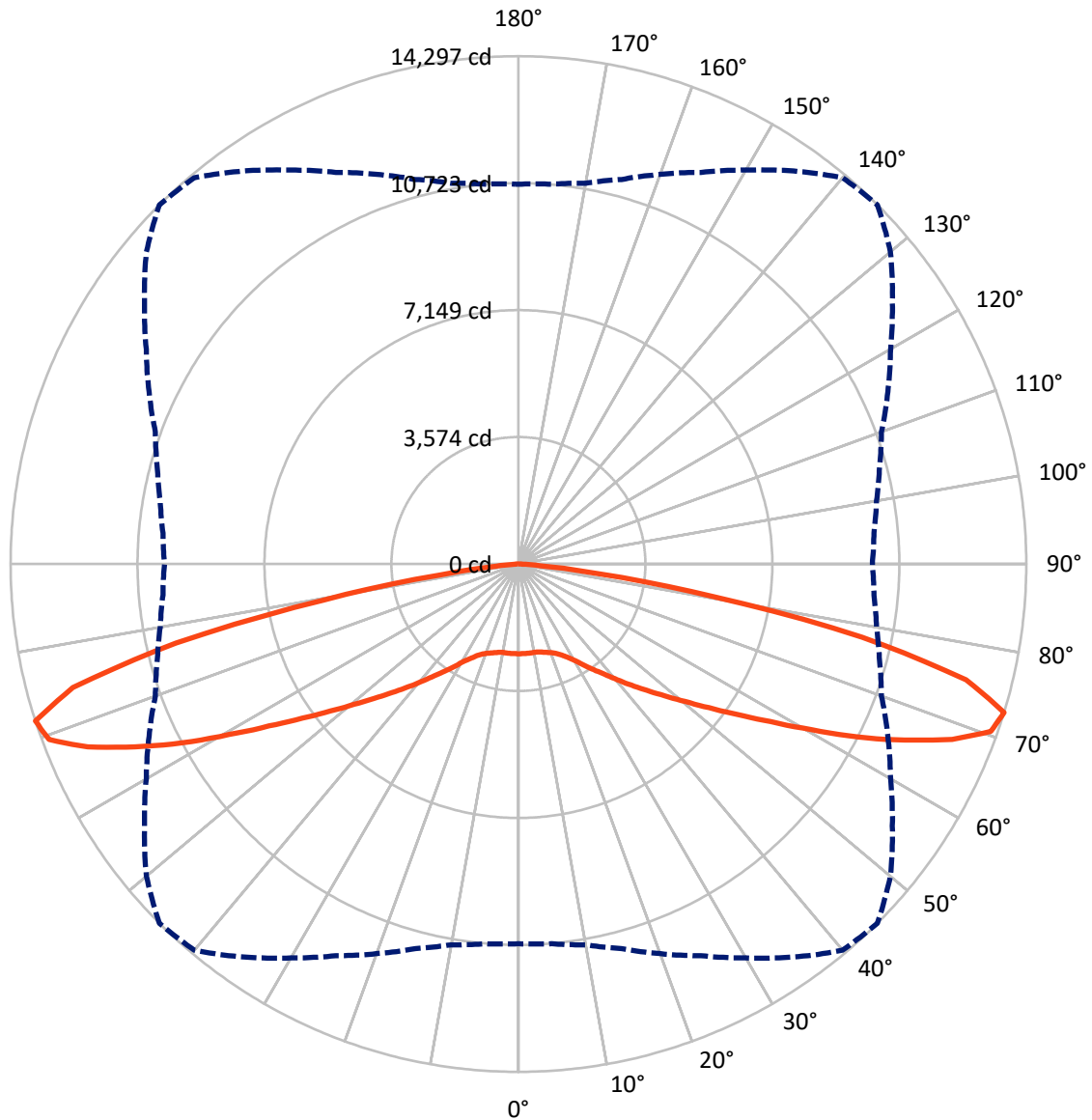


Based on 30 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - Semi-Cutoff

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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	17851.2	0.0	17851.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17851.2	0.0	17851.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	35702.5	0.0	35702.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.4	0.7
10°-20°	733.2	2.1
20°-30°	1339.9	3.8
30°-40°	2310.2	6.5
40°-50°	3949.3	11.1
50°-60°	6401.3	17.9
60°-70°	10619.6	29.7
70°-80°	9353.3	26.2
80°-90°	754.1	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°	35702.5	100.0
0°-180°	35702.5	100.0



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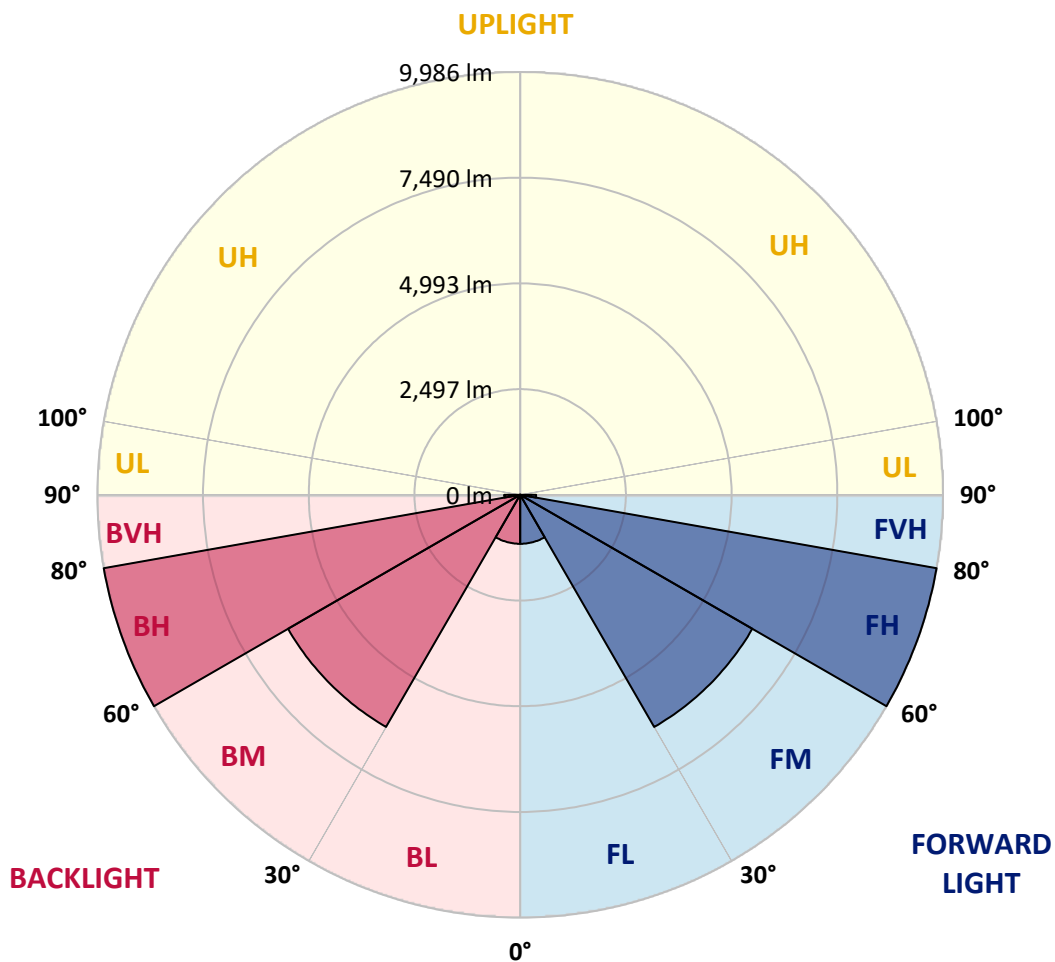
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1157.3	3.2			
FM	(30°-60°)	6330.4	17.7			
FH	(60°-80°)	9986.5	28.0			G4/12000
FVH	(80°-90°)	377.1	1.1			G3/500
BL	(0°-30°)	1157.3	3.2	B3/2500		
BM	(30°-60°)	6330.4	17.7	B4/8500		
BH	(60°-80°)	9986.5	28.0	B5		G4/12000
BVH	(80°-90°)	377.1	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°	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3
2.5°	2528.3	2529.9	2531.6	2529.9	2529.9	2528.3	2526.7	2528.3	2526.7	2523.4	2525.0
5°	2536.5	2539.8	2539.8	2536.5	2538.1	2536.5	2533.2	2534.8	2531.6	2526.7	2526.7
7.5°	2546.3	2547.9	2547.9	2544.7	2546.3	2543.0	2539.8	2538.1	2534.8	2528.3	2523.4
10°	2561.0	2562.7	2561.0	2557.8	2557.8	2552.9	2544.7	2541.4	2534.8	2525.0	2520.1
12.5°	2577.4	2579.1	2577.4	2574.1	2572.5	2564.3	2557.8	2552.9	2547.9	2539.8	2531.6
15°	2600.3	2603.6	2600.3	2593.8	2588.9	2582.3	2579.1	2580.7	2582.3	2575.8	2567.6
17.5°	2642.9	2644.6	2639.6	2624.9	2618.4	2611.8	2611.8	2615.1	2620.0	2616.7	2608.5
20°	2721.5	2716.6	2705.1	2687.1	2678.9	2667.5	2665.8	2667.5	2667.5	2665.8	2659.3
22.5°	2819.8	2816.5	2801.8	2778.8	2767.4	2760.8	2751.0	2742.8	2741.2	2736.3	2729.7
25°	2937.7	2936.0	2918.0	2898.4	2890.2	2882.0	2873.8	2862.3	2852.5	2841.1	2834.5
27.5°	3088.3	3081.8	3055.6	3045.7	3034.3	3029.4	3017.9	3004.8	2996.6	2981.9	2973.7
30°	3253.7	3253.7	3232.4	3229.1	3229.1	3217.7	3204.6	3181.6	3166.9	3152.2	3147.3
32.5°	3419.1	3420.7	3399.4	3406.0	3410.9	3419.1	3422.4	3414.2	3404.3	3402.7	3392.9
35°	3658.2	3651.6	3630.3	3635.2	3633.6	3632.0	3632.0	3650.0	3653.2	3656.5	3636.9
37.5°	3954.5	3954.5	3933.3	3933.3	3923.4	3913.6	3900.5	3912.0	3930.0	3934.9	3921.8
40°	4293.5	4305.0	4278.8	4277.1	4280.4	4249.3	4234.6	4252.6	4264.0	4283.7	4268.9
42.5°	4693.1	4684.9	4658.7	4655.4	4637.4	4627.6	4614.5	4629.2	4647.2	4660.3	4665.2
45°	5076.2	5069.7	5040.2	5040.2	5022.2	5014.0	5020.6	5045.1	5053.3	5071.3	5089.3
47.5°	5454.5	5446.3	5426.7	5434.8	5436.5	5451.2	5472.5	5495.4	5518.4	5542.9	5551.1
50°	5840.9	5842.6	5821.3	5840.9	5865.5	5906.4	5963.7	6001.4	6048.9	6080.0	6089.8
52.5°	6193.0	6199.5	6222.5	6268.3	6317.4	6397.7	6495.9	6587.6	6666.2	6718.6	6715.4
55°	6615.5	6625.3	6681.0	6759.6	6839.8	6961.0	7106.7	7268.8	7399.8	7475.2	7427.7
57.5°	7155.8	7177.1	7239.4	7345.8	7465.3	7622.5	7822.3	8066.3	8269.3	8370.9	8293.9
60°	7897.6	7910.7	7986.1	8104.0	8248.1	8442.9	8709.8	9037.3	9323.9	9458.2	9369.7
62.5°	8875.2	8899.8	8960.4	9079.9	9227.3	9448.3	9774.2	10183.6	10540.5	10727.2	10527.4
65°	10042.7	10121.3	10172.1	10293.3	10430.8	10665.0	11005.6	11444.4	11827.6	11950.4	11719.5
67.5°	11198.8	11267.6	11356.0	11495.2	11634.4	11898.0	12214.1	12639.8	13060.6	13172.0	12813.4
70°	11704.8	11744.1	11881.6	12071.6	12338.5	12649.6	13014.8	13492.9	14013.7	14105.4	13650.1
72.5°	10691.2	10730.5	10884.4	11207.0	11672.0	12166.6	12803.6	13506.0	14193.8	14297.0	13669.8
75°	8085.9	8022.1	8249.7	8677.1	9304.2	9993.6	10884.4	11891.5	12885.4	13014.8	12266.5
77.5°	4178.9	4170.7	4342.6	4873.2	5621.5	6405.9	7386.7	8524.8	9497.5	9890.5	9281.3
80°	1177.4	1190.5	1272.3	1536.0	1973.2	2539.8	3306.1	4372.1	5167.9	5574.0	5233.4
82.5°	461.8	497.8	528.9	578.0	635.3	718.9	959.6	1427.9	1915.9	2289.2	1874.9
85°	165.4	176.8	250.5	296.4	301.3	317.7	361.9	422.5	509.3	607.5	499.4
87.5°	62.2	68.8	80.2	132.6	131.0	119.5	145.7	152.3	114.6	104.8	129.4
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°	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3	2528.3
2.5°	2521.7	2523.4	2523.4	2525.0	2526.7	2526.7	2529.9	2529.9
5°	2523.4	2523.4	2520.1	2521.7	2520.1	2520.1	2521.7	2521.7
7.5°	2520.1	2518.5	2515.2	2513.6	2510.3	2510.3	2510.3	2510.3
10°	2515.2	2513.6	2510.3	2508.6	2507.0	2507.0	2507.0	2507.0
12.5°	2528.3	2523.4	2520.1	2518.5	2518.5	2518.5	2518.5	2518.5
15°	2562.7	2551.2	2543.0	2543.0	2544.7	2547.9	2547.9	2551.2
17.5°	2605.3	2592.2	2584.0	2577.4	2580.7	2585.6	2588.9	2592.2
20°	2656.0	2649.5	2638.0	2631.5	2631.5	2638.0	2641.3	2642.9
22.5°	2726.4	2721.5	2716.6	2708.4	2708.4	2711.7	2718.2	2718.2
25°	2831.2	2828.0	2824.7	2818.1	2816.5	2816.5	2819.8	2823.0
27.5°	2962.2	2963.9	2960.6	2958.9	2954.0	2952.4	2957.3	2955.7
30°	3137.4	3145.6	3153.8	3147.3	3139.1	3134.2	3129.2	3122.7
32.5°	3374.9	3365.0	3358.5	3347.0	3332.3	3319.2	3309.4	3297.9
35°	3599.2	3582.8	3576.3	3586.1	3584.5	3576.3	3564.8	3555.0
37.5°	3874.3	3871.0	3874.3	3892.3	3889.0	3897.2	3874.3	3872.7
40°	4221.5	4224.7	4247.7	4268.9	4280.4	4291.9	4278.8	4265.7
42.5°	4624.3	4622.6	4630.8	4660.3	4680.0	4693.1	4665.2	4661.9
45°	5050.0	5038.6	5045.1	5069.7	5089.3	5104.1	5073.0	5073.0
47.5°	5518.4	5498.7	5477.4	5505.3	5516.7	5526.5	5502.0	5493.8
50°	6040.7	5999.8	5953.9	5965.4	5965.4	5962.1	5931.0	5929.4
52.5°	6640.0	6564.7	6481.2	6450.1	6432.1	6412.4	6358.4	6332.2
55°	7329.4	7216.4	7085.4	7005.2	6962.6	6908.6	6818.5	6794.0
57.5°	8135.1	7958.2	7732.2	7634.0	7539.0	7450.6	7350.7	7322.9
60°	9089.7	8829.4	8529.7	8347.9	8244.8	8159.6	8056.5	8051.6
62.5°	10154.1	9743.1	9404.1	9240.4	9165.0	9089.7	8991.5	9004.6
65°	11236.5	10807.5	10489.8	10357.1	10286.7	10224.5	10126.3	10141.0
67.5°	12304.1	11909.5	11560.7	11424.8	11346.2	11267.6	11179.2	11193.9
70°	13070.5	12580.9	12187.9	11886.6	11698.2	11485.4	11347.8	11313.4
72.5°	12851.0	12096.2	11472.3	10874.6	10524.2	10239.2	10046.0	9962.5
75°	11121.9	10090.2	9287.9	8554.3	8141.6	7805.9	7561.9	7409.7
77.5°	8259.5	7100.2	6152.1	5307.1	4639.0	4190.3	3874.3	3669.6
80°	4521.1	3438.7	2513.6	1766.9	1298.5	1079.1	953.0	892.4
82.5°	1408.2	908.8	669.7	578.0	537.1	514.2	476.5	415.9
85°	448.7	393.0	365.2	348.8	332.4	289.8	199.8	181.8
87.5°	173.6	178.5	176.8	167.0	170.3	122.8	98.2	86.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)