

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: P190822

Luminaire Tested: **GLEON-AF-04-LED-E1-5MQ-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-5MQ-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28306.1 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 258
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

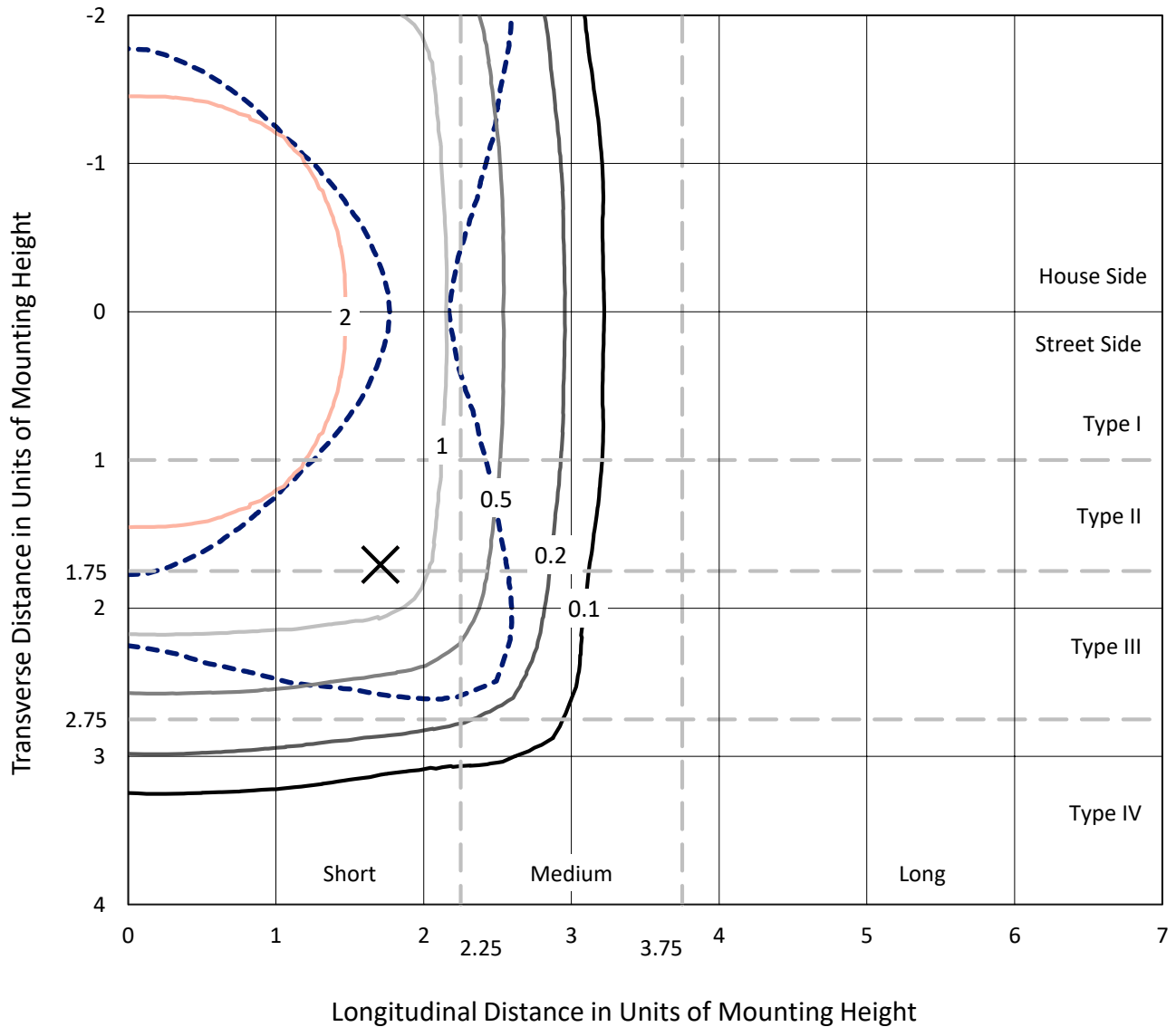


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Iso-Footcandle Lines of Horizontal Illumination

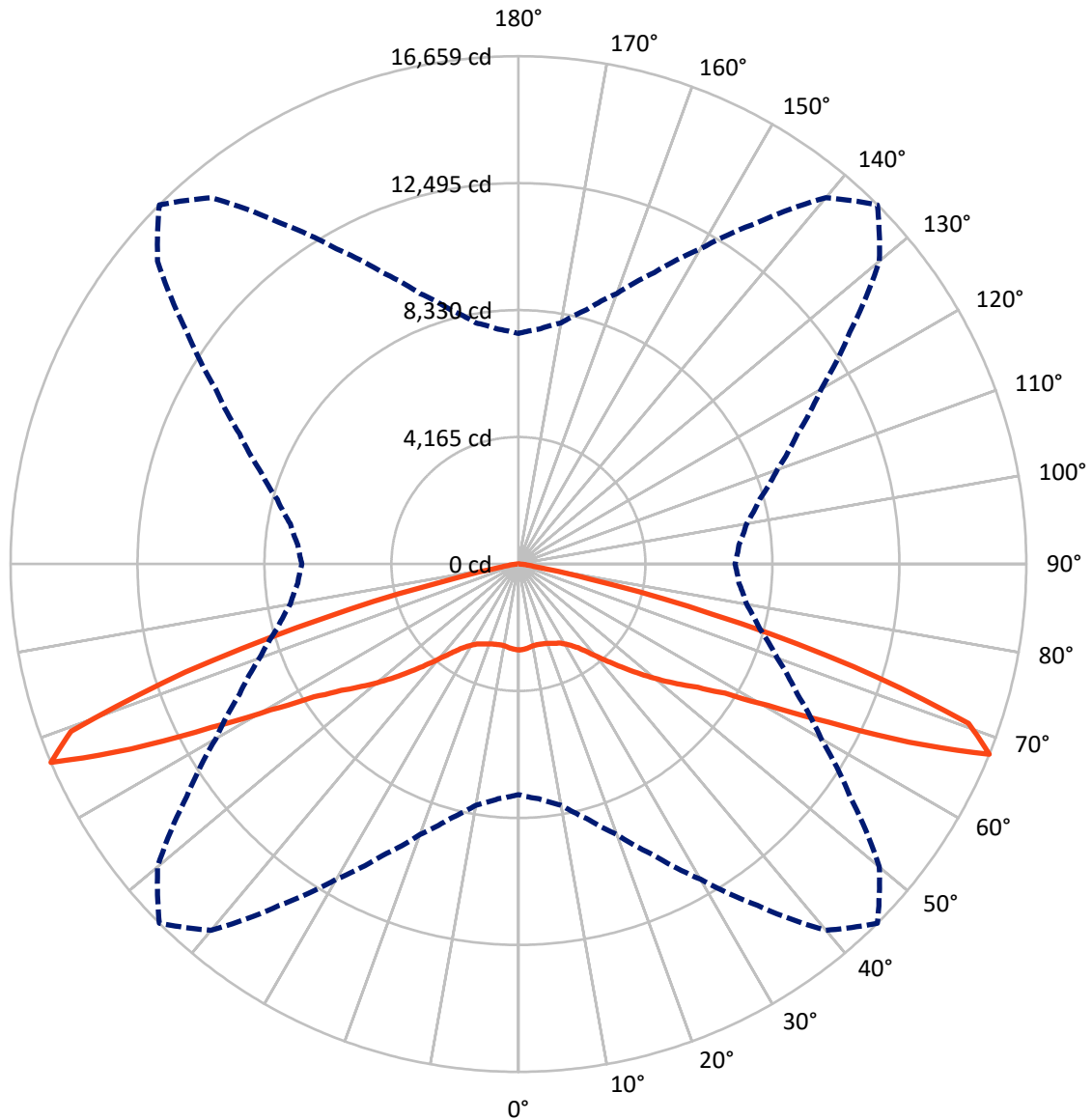
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14153.0	0.0	14153.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14153.0	0.0	14153.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	28306.1	0.0	28306.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.0	0.9
10°-20°	766.1	2.7
20°-30°	1302.4	4.6
30°-40°	2129.0	7.5
40°-50°	3800.7	13.4
50°-60°	6408.0	22.6
60°-70°	9944.3	35.1
70°-80°	3494.0	12.3
80°-90°	197.4	0.7
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°	28306.1	100.0
0°-180°	28306.1	100.0



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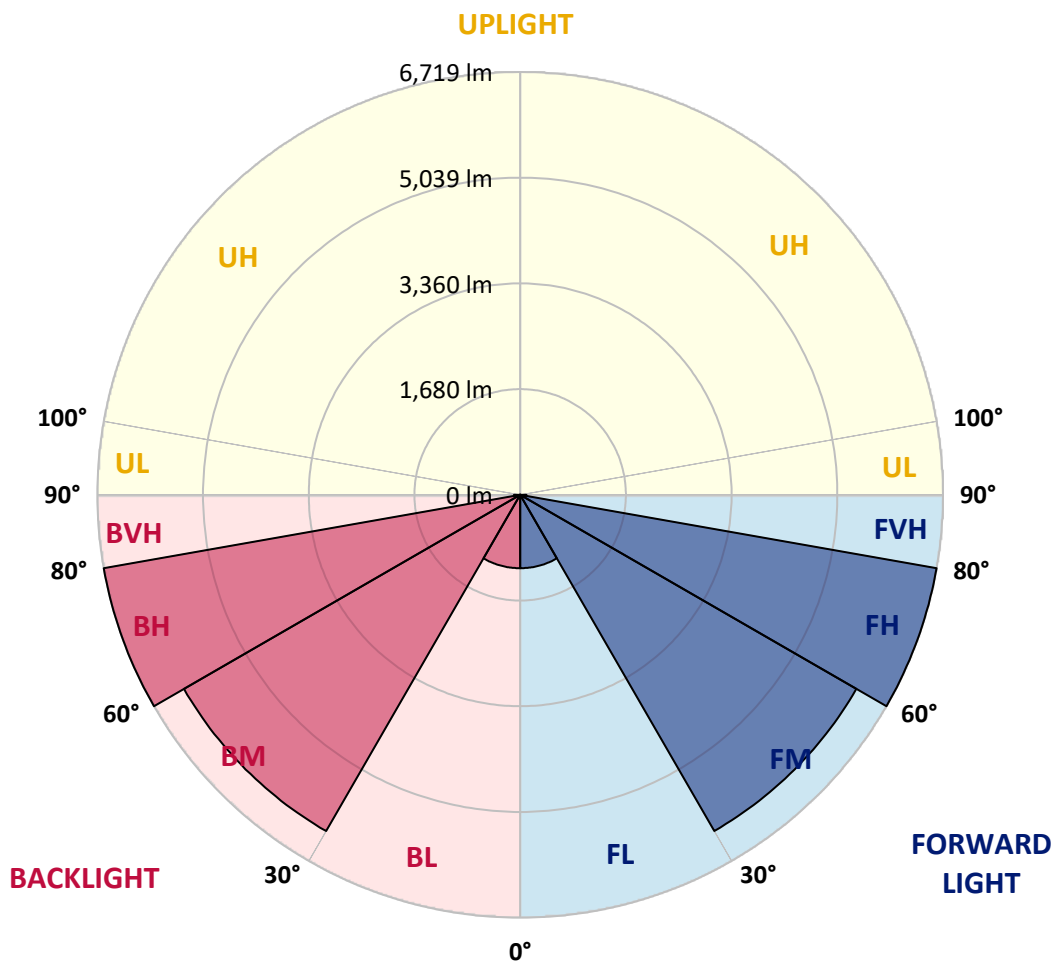
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1166.3	4.1			
FM	(30°-60°)	6168.9	21.8			
FH	(60°-80°)	6719.2	23.7			G3/7500
FVH	(80°-90°)	98.7	0.3			G1/100
BL	(0°-30°)	1166.3	4.1	B3/2500		
BM	(30°-60°)	6168.9	21.8	B4/8500		
BH	(60°-80°)	6719.2	23.7	B5		G3/7500
BVH	(80°-90°)	98.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8
2.5°	2810.5	2813.0	2813.0	2813.0	2811.7	2811.7	2809.1	2811.7	2810.5	2806.5	2807.8
5°	2786.9	2789.6	2789.6	2788.3	2792.1	2790.9	2786.9	2789.6	2788.3	2785.7	2786.9
7.5°	2753.2	2757.1	2757.1	2755.7	2759.6	2758.4	2755.7	2757.1	2757.1	2753.2	2753.2
10°	2715.4	2718.0	2718.0	2716.7	2723.2	2723.2	2721.9	2725.8	2727.1	2723.2	2720.5
12.5°	2680.2	2684.1	2684.1	2689.3	2695.9	2698.4	2705.0	2710.2	2715.4	2714.1	2708.9
15°	2659.4	2662.0	2667.2	2673.7	2684.1	2693.2	2703.7	2715.4	2725.8	2728.4	2720.5
17.5°	2646.4	2650.3	2658.1	2667.2	2681.6	2697.1	2712.8	2728.4	2742.7	2748.0	2738.8
20°	2642.5	2645.0	2652.9	2668.5	2688.0	2711.4	2733.6	2751.8	2771.4	2777.8	2771.4
22.5°	2650.3	2655.5	2664.6	2682.8	2708.9	2738.8	2764.8	2789.6	2814.3	2826.0	2816.9
25°	2685.5	2690.7	2702.3	2725.8	2754.4	2785.7	2815.6	2844.2	2866.4	2878.1	2871.6
27.5°	2750.5	2757.1	2771.4	2794.8	2826.0	2859.9	2892.4	2915.8	2934.0	2938.0	2930.1
30°	2848.2	2862.5	2879.4	2905.4	2941.9	2970.5	3003.1	3023.8	3046.0	3046.0	3039.5
32.5°	3000.4	3014.7	3033.0	3057.7	3086.3	3117.6	3146.3	3164.5	3187.9	3189.3	3173.6
35°	3228.2	3234.8	3250.4	3266.0	3292.1	3319.4	3344.1	3355.8	3375.3	3376.7	3362.3
37.5°	3529.0	3530.3	3540.6	3545.9	3569.3	3599.3	3622.7	3630.5	3648.7	3646.1	3631.8
40°	3879.1	3885.6	3889.6	3897.3	3922.1	3950.7	3975.4	3979.4	3998.9	3994.9	3976.7
42.5°	4283.9	4286.6	4308.7	4320.4	4343.9	4358.2	4389.4	4393.3	4416.7	4406.4	4385.5
45°	4738.2	4761.6	4782.5	4805.9	4830.7	4847.6	4872.3	4867.1	4882.7	4867.1	4855.4
47.5°	5216.0	5232.9	5279.8	5316.2	5356.6	5370.9	5406.0	5390.4	5406.0	5383.9	5380.0
50°	5741.8	5771.8	5812.2	5853.8	5896.8	5920.2	5965.7	5946.2	5967.1	5946.2	5934.5
52.5°	6259.9	6267.7	6356.3	6417.5	6477.3	6504.6	6532.1	6522.9	6524.2	6522.9	6511.2
55°	6752.0	6770.2	6858.8	6942.1	7046.2	7123.0	7169.9	7164.6	7152.9	7141.2	7121.7
57.5°	7306.5	7324.7	7426.3	7529.1	7647.6	7756.9	7852.0	7949.6	7987.3	7997.7	7954.8
60°	8056.4	8055.0	8190.4	8315.4	8484.6	8647.3	8855.6	9067.7	9311.2	9424.4	9274.7
62.5°	8819.2	8850.4	9045.6	9266.9	9615.7	9955.6	10339.6	10717.0	11102.3	11416.0	11082.9
65°	8728.0	8847.8	9138.0	9639.2	10283.5	11049.0	11876.9	12752.9	13544.4	14088.5	13478.0
67.5°	7564.3	7734.8	8030.3	8639.5	9445.2	10549.1	11939.4	13671.9	15685.7	16659.4	15452.7
70°	5482.8	5675.4	5985.3	6580.1	7378.1	8427.3	9937.4	12017.4	14683.3	15664.9	14335.8
72.5°	2728.4	2832.6	3023.8	3402.6	4006.7	4858.0	6227.4	8226.9	10585.6	11486.3	10271.9
75°	926.8	975.0	1007.5	1131.2	1322.6	1657.1	2337.9	3596.6	5486.7	6577.6	5408.6
77.5°	535.0	536.3	558.4	580.5	613.2	649.6	740.7	972.4	1681.8	2388.7	1740.3
80°	346.3	344.9	363.1	380.1	402.2	420.4	425.6	450.4	519.4	615.7	550.7
82.5°	179.6	201.7	242.1	264.2	305.9	313.7	303.3	294.2	311.1	322.8	330.6
85°	98.9	85.9	128.9	166.6	184.8	187.4	187.4	177.1	183.5	179.6	195.3
87.5°	45.5	41.6	50.7	82.0	87.3	74.2	78.2	68.9	49.5	48.2	54.6
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°	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8	2820.8
2.5°	2807.8	2809.1	2809.1	2813.0	2814.3	2816.9	2819.6	2820.8
5°	2785.7	2789.6	2786.9	2790.9	2790.9	2793.5	2793.5	2794.8
7.5°	2753.2	2757.1	2757.1	2757.1	2755.7	2759.6	2759.6	2759.6
10°	2719.3	2721.9	2720.5	2718.0	2715.4	2719.3	2718.0	2716.7
12.5°	2708.9	2702.3	2697.1	2694.6	2689.3	2690.7	2686.8	2686.8
15°	2715.4	2703.7	2694.6	2690.7	2685.5	2682.8	2680.2	2681.6
17.5°	2732.3	2718.0	2706.3	2699.8	2693.2	2689.3	2684.1	2685.5
20°	2762.3	2745.3	2728.4	2715.4	2703.7	2697.1	2693.2	2692.0
22.5°	2806.5	2781.8	2757.1	2737.5	2721.9	2712.8	2708.9	2706.3
25°	2857.3	2829.9	2801.2	2779.2	2763.5	2751.8	2744.1	2744.1
27.5°	2921.0	2898.9	2872.9	2846.9	2832.6	2820.8	2815.6	2813.0
30°	3027.8	3007.0	2986.1	2961.4	2943.1	2931.5	2922.4	2914.6
32.5°	3164.5	3147.5	3130.6	3112.4	3095.4	3079.9	3065.6	3059.0
35°	3357.1	3344.1	3332.4	3311.6	3305.1	3295.9	3288.2	3281.6
37.5°	3622.7	3617.5	3617.5	3595.4	3590.1	3586.3	3578.4	3579.7
40°	3971.5	3976.7	3970.3	3962.4	3958.5	3948.1	3948.1	3957.2
42.5°	4384.2	4388.0	4402.4	4389.4	4403.7	4390.7	4382.8	4389.4
45°	4863.2	4877.5	4906.2	4893.2	4902.3	4880.1	4852.8	4854.1
47.5°	5400.8	5413.9	5425.5	5416.4	5417.8	5381.3	5344.8	5335.7
50°	5959.3	5964.4	5971.0	5958.0	5960.5	5920.2	5878.6	5879.8
52.5°	6511.2	6535.9	6561.9	6526.8	6519.0	6473.4	6414.8	6391.4
55°	7142.5	7177.6	7147.8	7086.6	7025.3	6964.1	6887.4	6874.3
57.5°	7920.9	7861.1	7767.4	7651.5	7566.9	7480.9	7402.9	7370.4
60°	9004.0	8778.8	8609.6	8437.7	8329.7	8224.2	8121.4	8105.8
62.5°	10534.8	10145.6	9808.5	9453.1	9162.8	8936.3	8755.3	8704.6
65°	12453.5	11533.2	10735.3	9990.6	9343.7	8855.6	8548.4	8413.0
67.5°	13278.8	11461.7	10093.6	9036.5	8190.4	7599.4	7267.5	7102.1
70°	11668.6	9505.2	8017.3	6958.9	6188.3	5558.3	5257.7	5080.6
72.5°	8027.7	6046.5	4781.2	3902.6	3286.8	2759.6	2551.3	2535.8
75°	3604.5	2387.4	1645.4	1267.8	1067.4	928.1	885.2	852.6
77.5°	1008.8	745.8	665.2	622.3	580.5	532.4	514.1	518.1
80°	490.7	463.4	445.2	417.9	380.1	339.7	321.5	329.3
82.5°	325.4	321.5	333.3	313.7	259.0	220.0	184.8	169.2
85°	197.8	200.5	204.4	205.7	174.4	122.3	83.3	93.7
87.5°	78.2	89.8	97.6	101.6	95.0	58.6	46.9	48.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)