

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: P299600

Luminaire Tested: **GLNA-AF-05-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299600
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: GLNA-AF-05-LED-E1-5MQ-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30127.3 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

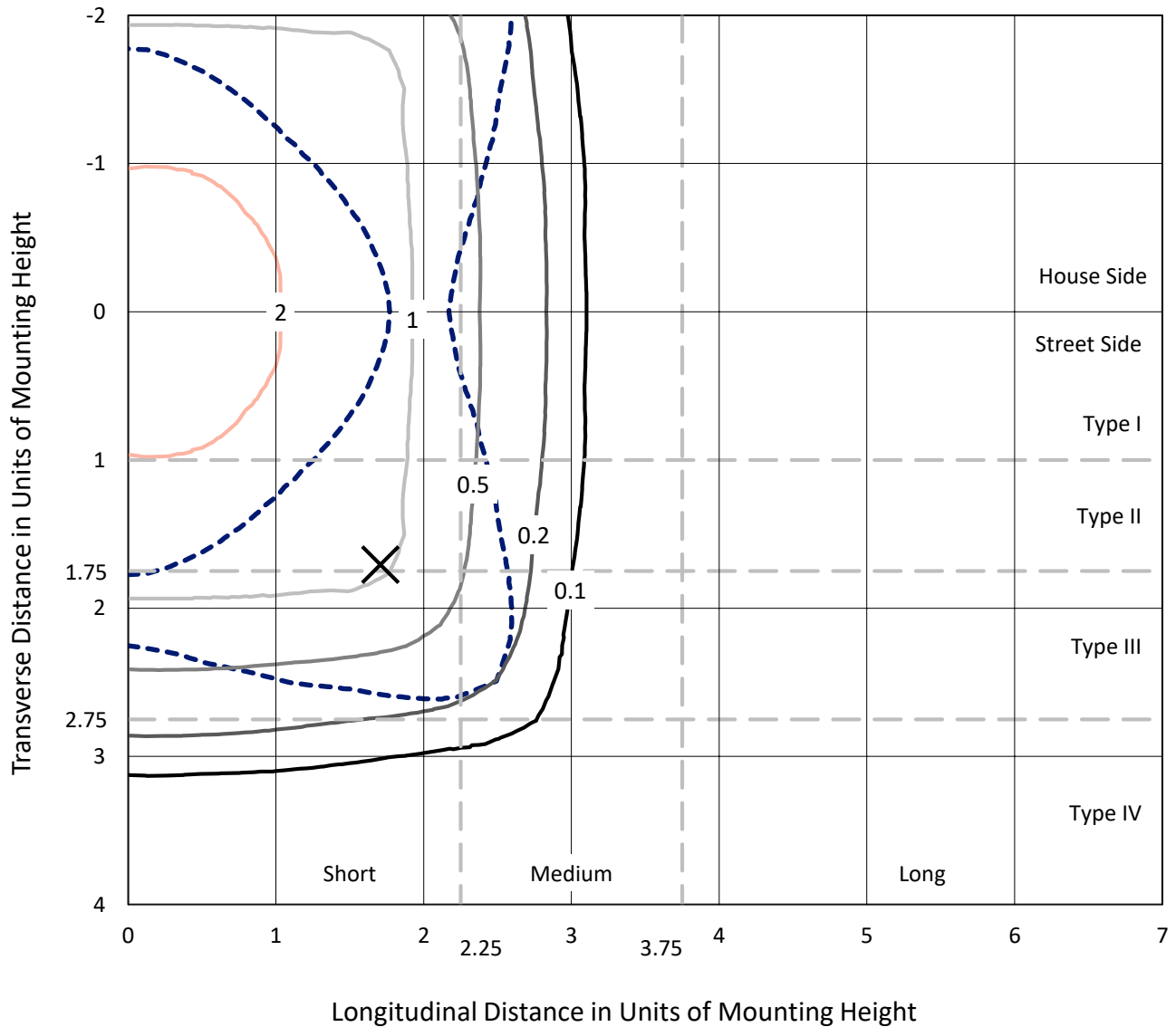
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

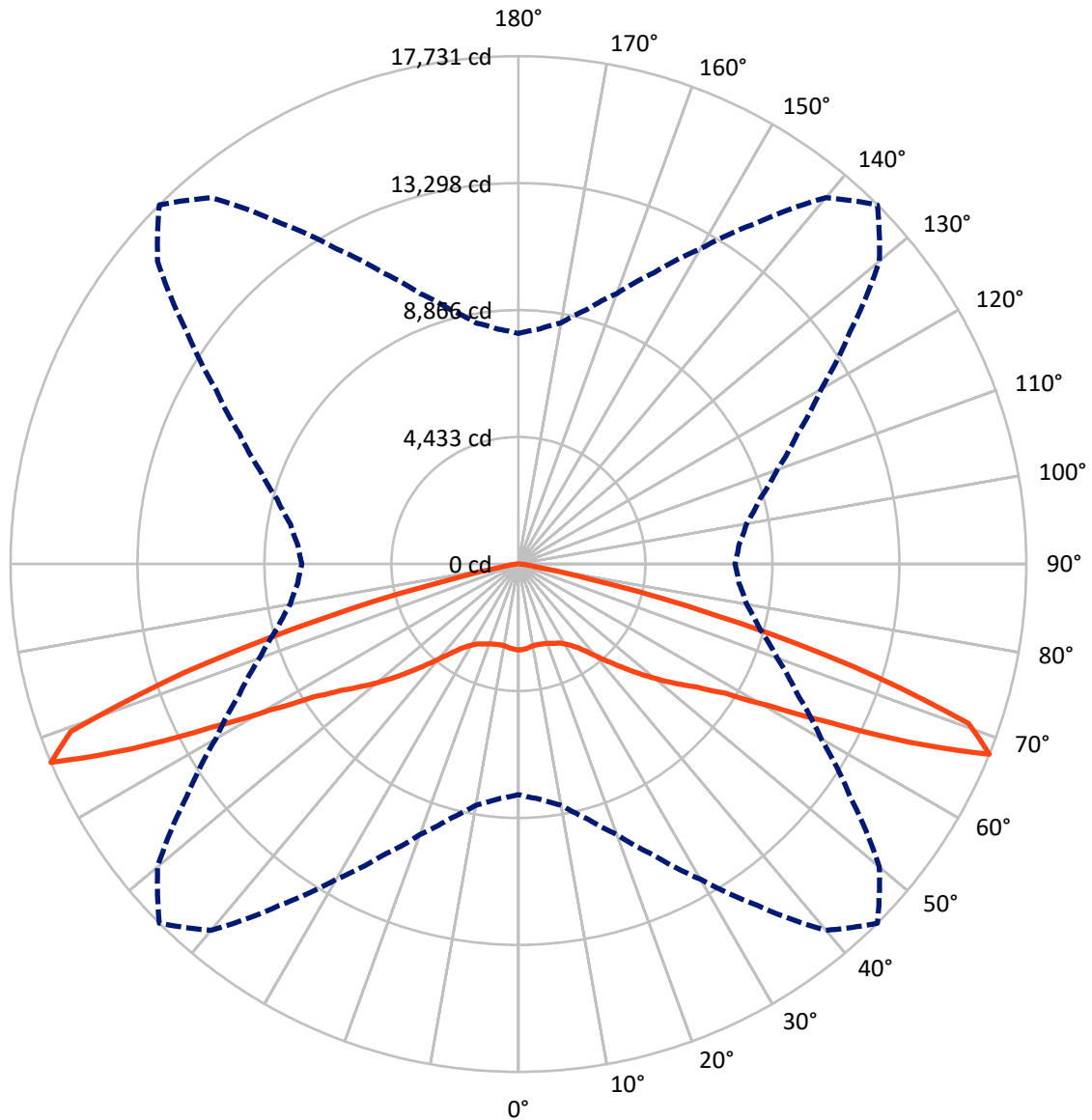
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.3 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	15063.7	0.0	15063.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15063.7	0.0	15063.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	30127.3	0.0	30127.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.0	0.9
10°-20°	815.4	2.7
20°-30°	1386.2	4.6
30°-40°	2266.0	7.5
40°-50°	4045.2	13.4
50°-60°	6820.4	22.6
60°-70°	10584.2	35.1
70°-80°	3718.8	12.3
80°-90°	210.2	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°	30127.3	100.0
0°-180°	30127.3	100.0



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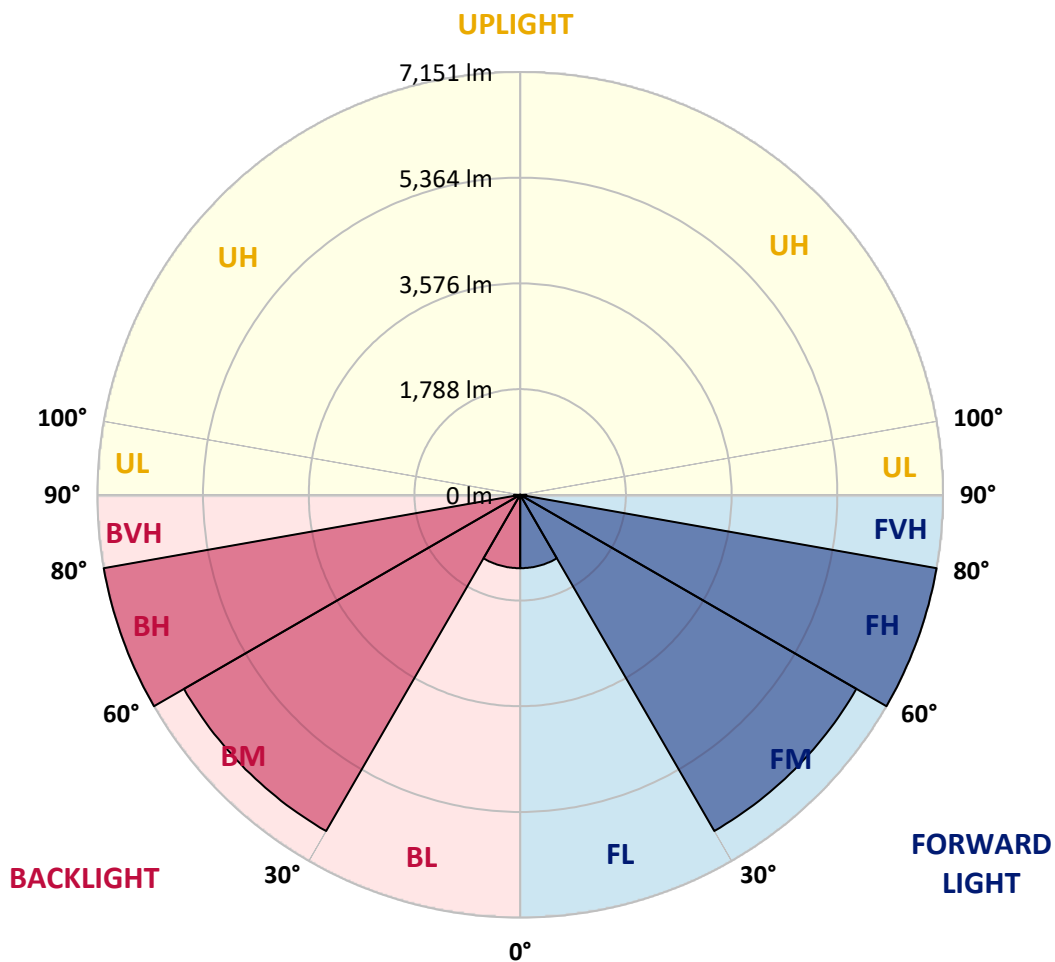
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1241.3	4.1			
FM	(30°-60°)	6565.8	21.8			
FH	(60°-80°)	7151.5	23.7			G3/7500
FVH	(80°-90°)	105.1	0.3			G2/225
BL	(0°-30°)	1241.3	4.1	B3/2500		
BM	(30°-60°)	6565.8	21.8	B4/8500		
BH	(60°-80°)	7151.5	23.7	B5		G3/7500
BVH	(80°-90°)	105.1	0.3			G2/225
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°	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3
2.5°	2991.2	2994.0	2994.0	2994.0	2992.6	2992.6	2989.8	2992.6	2991.2	2987.1	2988.5
5°	2966.3	2969.1	2969.1	2967.7	2971.8	2970.5	2966.3	2969.1	2967.7	2964.9	2966.3
7.5°	2930.3	2934.4	2934.4	2933.0	2937.2	2935.8	2933.0	2934.4	2934.4	2930.3	2930.3
10°	2890.1	2892.9	2892.9	2891.5	2898.4	2898.4	2897.0	2901.2	2902.6	2898.4	2895.6
12.5°	2852.7	2856.8	2856.8	2862.4	2869.3	2872.1	2879.0	2884.6	2890.1	2888.7	2883.2
15°	2830.5	2833.3	2838.8	2845.8	2856.8	2866.5	2877.6	2890.1	2901.2	2903.9	2895.6
17.5°	2816.7	2820.8	2829.1	2838.8	2854.1	2870.7	2887.3	2903.9	2919.2	2924.7	2915.0
20°	2812.5	2815.3	2823.6	2840.2	2861.0	2885.9	2909.5	2928.9	2949.7	2956.6	2949.7
22.5°	2820.8	2826.4	2836.1	2855.5	2883.2	2915.0	2942.7	2969.1	2995.4	3007.9	2998.2
25°	2858.2	2863.8	2876.2	2901.2	2931.7	2964.9	2996.8	3027.3	3050.8	3063.3	3056.3
27.5°	2927.5	2934.4	2949.7	2974.6	3007.9	3043.9	3078.5	3103.5	3122.9	3127.0	3118.7
30°	3031.4	3046.7	3064.7	3092.4	3131.2	3161.6	3196.3	3218.4	3242.0	3242.0	3235.1
32.5°	3193.5	3208.8	3228.1	3254.5	3285.0	3318.2	3348.7	3368.1	3393.0	3394.4	3377.8
35°	3436.0	3442.9	3459.5	3476.1	3503.9	3533.0	3559.3	3571.7	3592.5	3593.9	3578.7
37.5°	3756.0	3757.4	3768.5	3774.0	3799.0	3830.8	3855.8	3864.1	3883.5	3880.7	3865.5
40°	4128.7	4135.6	4139.8	4148.1	4174.4	4204.9	4231.2	4235.4	4256.2	4252.0	4232.6
42.5°	4559.6	4562.4	4585.9	4598.4	4623.3	4638.6	4671.8	4676.0	4700.9	4689.8	4667.7
45°	5043.1	5068.1	5090.2	5115.2	5141.5	5159.5	5185.8	5180.3	5196.9	5180.3	5167.8
47.5°	5551.6	5569.6	5619.5	5658.3	5701.2	5716.5	5753.9	5737.2	5753.9	5730.3	5726.2
50°	6111.3	6143.2	6186.1	6230.5	6276.2	6301.1	6349.6	6328.8	6351.0	6328.8	6316.4
52.5°	6662.7	6671.0	6765.3	6830.4	6894.1	6923.2	6952.3	6942.6	6944.0	6942.6	6930.1
55°	7186.4	7205.8	7300.0	7388.7	7499.6	7581.3	7631.2	7625.6	7613.2	7600.7	7579.9
57.5°	7776.7	7796.0	7904.1	8013.6	8139.6	8256.0	8357.2	8461.1	8501.3	8512.3	8466.6
60°	8574.7	8573.3	8717.4	8850.4	9030.5	9203.7	9425.4	9651.2	9910.3	10030.8	9871.5
62.5°	9386.6	9419.8	9627.6	9863.2	10234.5	10596.1	11004.8	11406.6	11816.7	12150.6	11795.9
65°	9289.6	9417.0	9726.0	10259.4	10945.2	11759.9	12641.0	13573.5	14415.8	14995.0	14345.2
67.5°	8051.0	8232.5	8547.0	9195.4	10053.0	11227.9	12707.5	14551.6	16694.9	17731.3	16446.9
70°	5835.6	6040.7	6370.4	7003.6	7852.9	8969.5	10576.7	12790.7	15628.1	16672.8	15258.2
72.5°	2903.9	3014.8	3218.4	3621.6	4264.5	5170.6	6628.1	8756.2	11266.7	12225.4	10932.8
75°	986.5	1037.7	1072.4	1204.0	1407.6	1763.7	2488.3	3828.1	5839.8	7000.8	5756.6
77.5°	569.4	570.8	594.4	617.9	652.6	691.4	788.3	1034.9	1790.0	2542.3	1852.4
80°	368.5	367.1	386.5	404.6	428.1	447.5	453.0	479.4	552.8	655.3	586.1
82.5°	191.2	214.7	257.7	281.3	325.6	333.9	322.8	313.1	331.1	343.6	351.9
85°	105.3	91.4	137.2	177.3	196.7	199.5	199.5	188.4	195.4	191.2	207.8
87.5°	48.5	44.3	54.0	87.3	92.8	79.0	83.1	73.4	52.6	51.3	58.2
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°	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3	3002.3
2.5°	2988.5	2989.8	2989.8	2994.0	2995.4	2998.2	3000.9	3002.3
5°	2964.9	2969.1	2966.3	2970.5	2970.5	2973.2	2973.2	2974.6
7.5°	2930.3	2934.4	2934.4	2934.4	2933.0	2937.2	2937.2	2937.2
10°	2894.2	2897.0	2895.6	2892.9	2890.1	2894.2	2892.9	2891.5
12.5°	2883.2	2876.2	2870.7	2867.9	2862.4	2863.8	2859.6	2859.6
15°	2890.1	2877.6	2867.9	2863.8	2858.2	2855.5	2852.7	2854.1
17.5°	2908.1	2892.9	2880.4	2873.5	2866.5	2862.4	2856.8	2858.2
20°	2940.0	2922.0	2903.9	2890.1	2877.6	2870.7	2866.5	2865.2
22.5°	2987.1	2960.8	2934.4	2913.6	2897.0	2887.3	2883.2	2880.4
25°	3041.1	3012.0	2981.5	2958.0	2941.4	2928.9	2920.6	2920.6
27.5°	3109.0	3085.4	3057.7	3030.0	3014.8	3002.3	2996.8	2994.0
30°	3222.6	3200.4	3178.3	3151.9	3132.6	3120.1	3110.4	3102.1
32.5°	3368.1	3350.1	3332.1	3312.7	3294.7	3278.0	3262.8	3255.9
35°	3573.1	3559.3	3546.8	3524.6	3517.7	3508.0	3499.7	3492.8
37.5°	3855.8	3850.2	3850.2	3826.7	3821.1	3817.0	3808.7	3810.0
40°	4227.1	4232.6	4225.7	4217.4	4213.2	4202.1	4202.1	4211.8
42.5°	4666.3	4670.4	4685.7	4671.8	4687.0	4673.2	4664.9	4671.8
45°	5176.1	5191.4	5221.8	5208.0	5217.7	5194.1	5165.0	5166.4
47.5°	5748.3	5762.2	5774.6	5764.9	5766.3	5727.5	5688.7	5679.0
50°	6342.7	6348.2	6355.2	6341.3	6344.1	6301.1	6256.8	6258.2
52.5°	6930.1	6956.5	6984.2	6946.8	6938.4	6889.9	6827.6	6802.7
55°	7602.1	7639.5	7607.6	7542.5	7477.4	7412.3	7330.5	7316.7
57.5°	8430.6	8366.9	8267.1	8143.8	8053.7	7962.3	7879.2	7844.5
60°	9583.3	9343.6	9163.5	8980.6	8865.6	8753.4	8644.0	8627.3
62.5°	11212.6	10798.4	10439.5	10061.3	9752.3	9511.3	9318.7	9264.6
65°	13254.8	12275.3	11426.0	10633.5	9944.9	9425.4	9098.4	8954.3
67.5°	14133.2	12199.1	10742.9	9617.9	8717.4	8088.4	7735.1	7559.1
70°	12419.4	10116.7	8533.1	7406.7	6586.5	5916.0	5595.9	5407.5
72.5°	8544.2	6435.5	5088.8	4153.6	3498.3	2937.2	2715.5	2698.9
75°	3836.4	2541.0	1751.2	1349.4	1136.1	987.8	942.1	907.5
77.5°	1073.7	793.9	708.0	662.3	617.9	566.7	547.3	551.4
80°	522.3	493.2	473.8	444.7	404.6	361.6	342.2	350.5
82.5°	346.4	342.2	354.7	333.9	275.7	234.1	196.7	180.1
85°	210.6	213.4	217.5	218.9	185.7	130.2	88.7	99.8
87.5°	83.1	95.6	103.9	108.1	101.1	62.3	49.9	51.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)