

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: P299670

Luminaire Tested: **GLNA-AF-06-LED-E1-5MQ-7060-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299670
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-06-LED-E1-5MQ-7060-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30111.6 lumens
Efficiency: N/A
Efficacy: 120.9 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

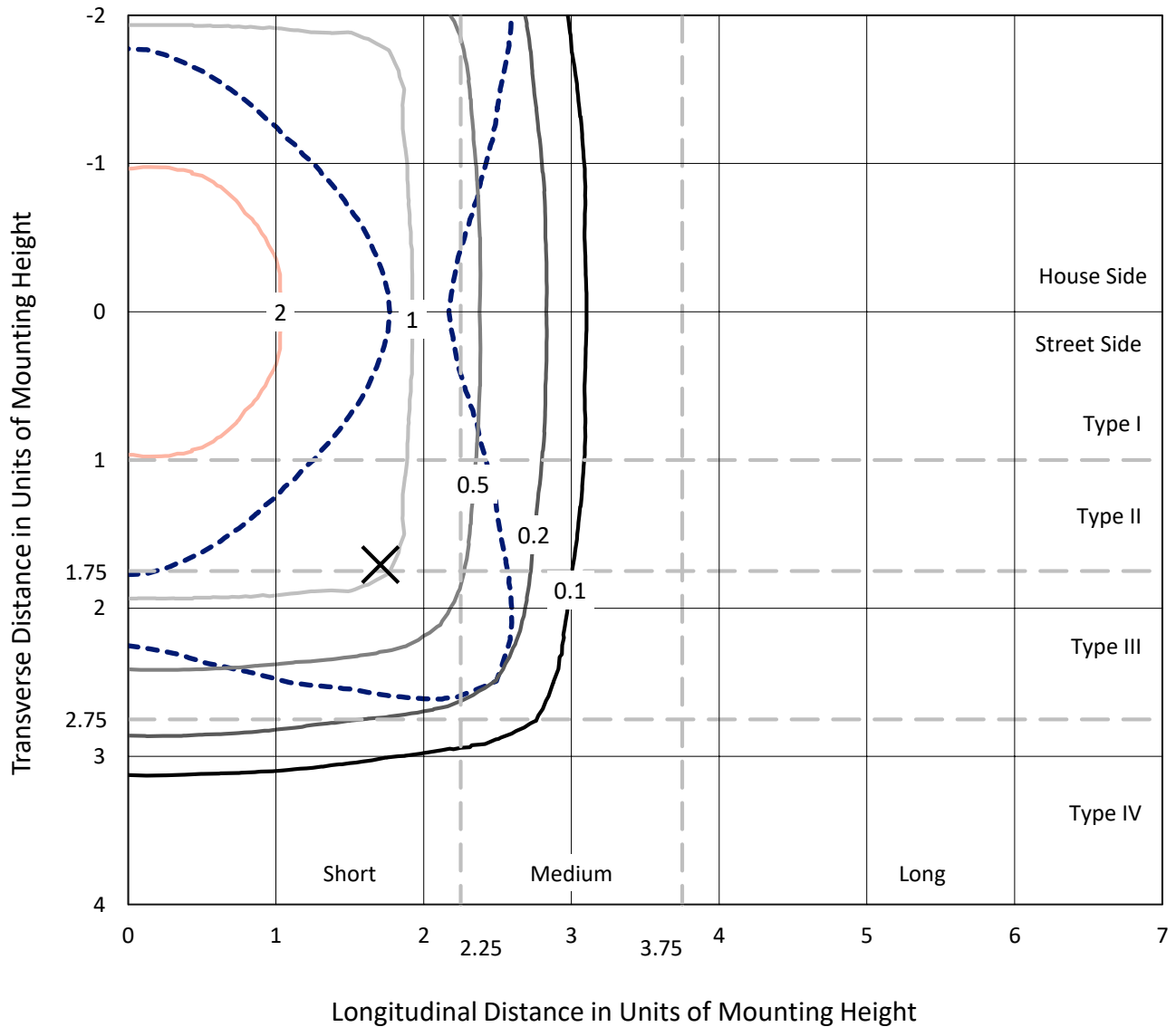
Input Watts (W): 249
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

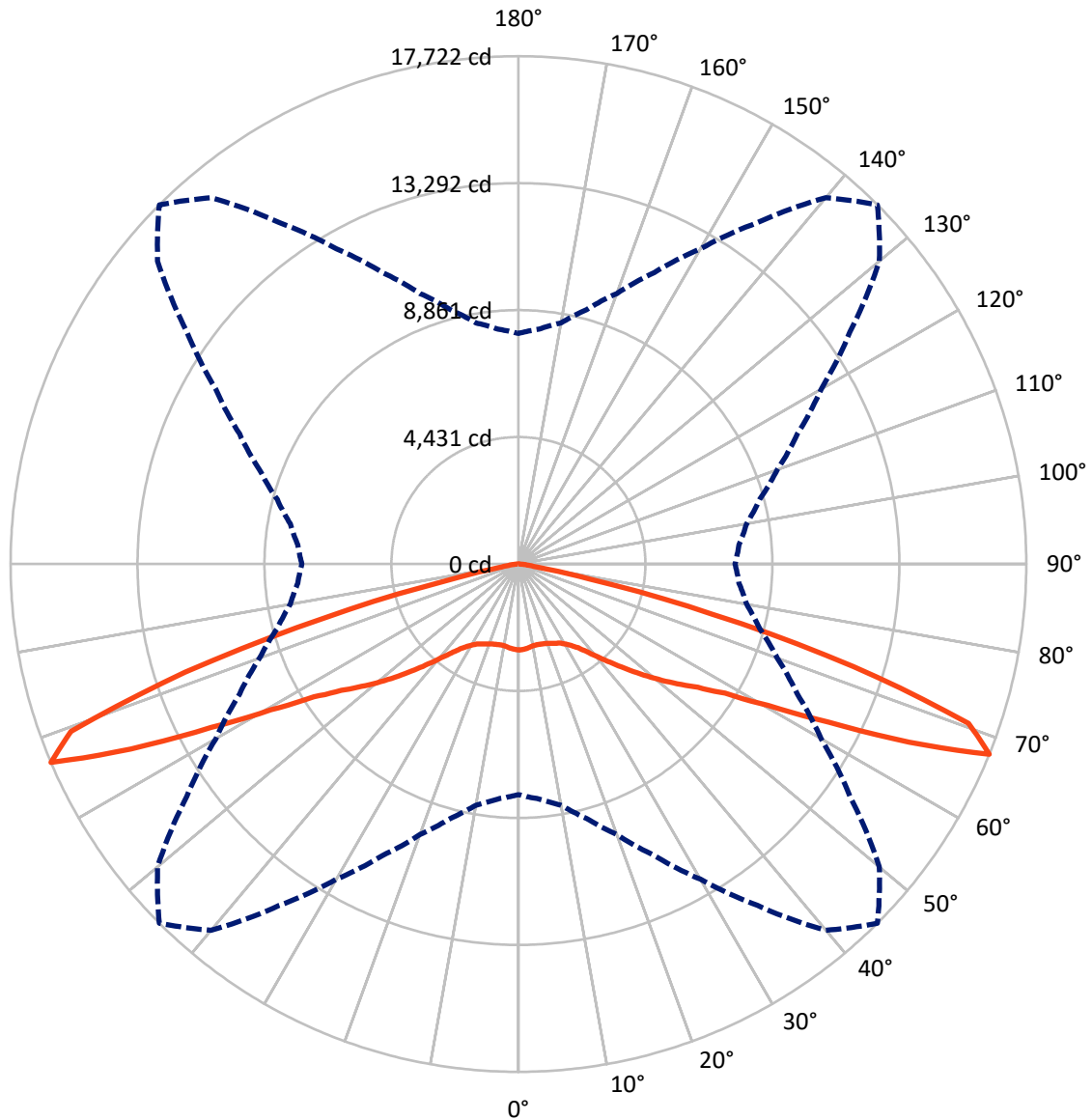
× Max cd
 - - - 1/2 Max cd



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	15055.8	0.0	15055.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15055.8	0.0	15055.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	30111.6	0.0	30111.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.9	0.9
10°-20°	815.0	2.7
20°-30°	1385.5	4.6
30°-40°	2264.8	7.5
40°-50°	4043.1	13.4
50°-60°	6816.8	22.6
60°-70°	10578.6	35.1
70°-80°	3716.9	12.3
80°-90°	210.0	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°	30111.6	100.0
0°-180°	30111.6	100.0



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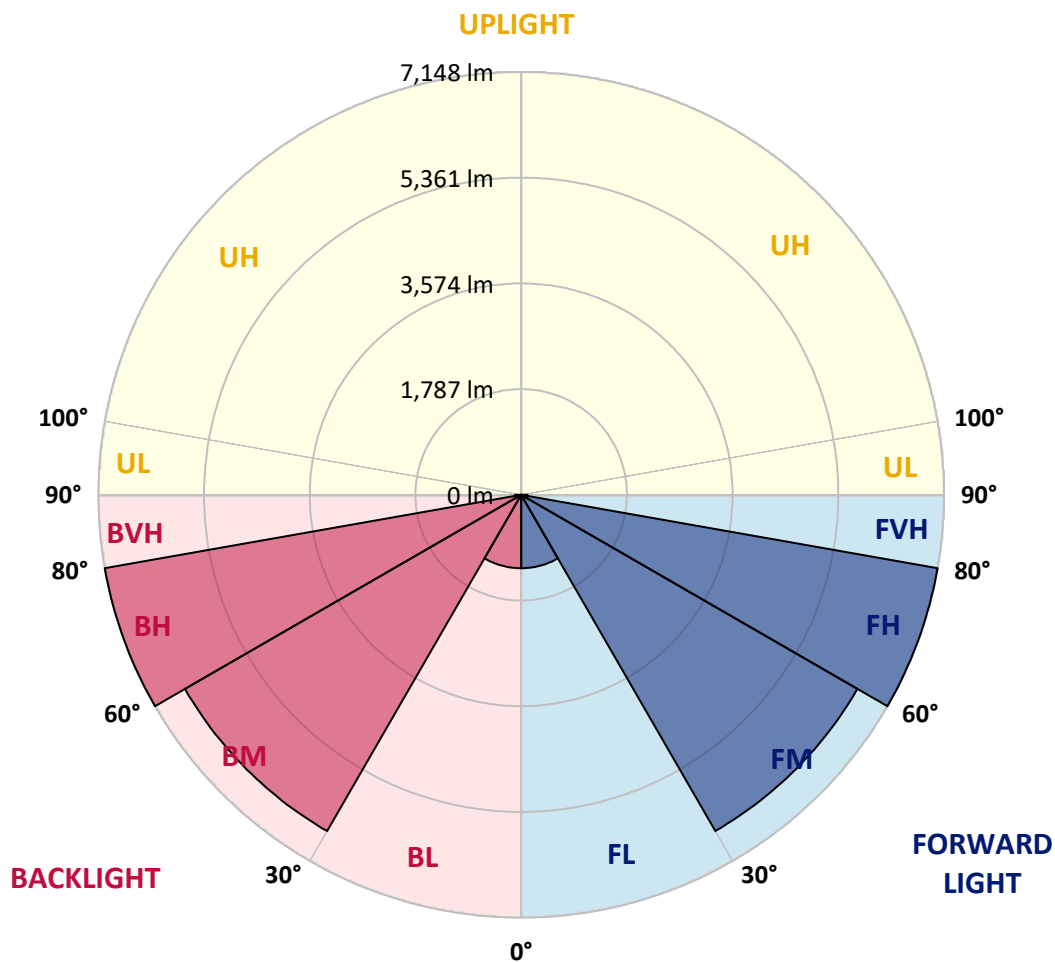
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1240.7	4.1			
FM	(30°-60°)	6562.3	21.8			
FH	(60°-80°)	7147.7	23.7			G3/7500
FVH	(80°-90°)	105.0	0.3			G2/225
BL	(0°-30°)	1240.7	4.1	B3/2500		
BM	(30°-60°)	6562.3	21.8	B4/8500		
BH	(60°-80°)	7147.7	23.7	B5		G3/7500
BVH	(80°-90°)	105.0	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°	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7
2.5°	2989.7	2992.4	2992.4	2992.4	2991.1	2991.1	2988.3	2991.1	2989.7	2985.5	2986.9
5°	2964.7	2967.5	2967.5	2966.1	2970.3	2968.9	2964.7	2967.5	2966.1	2963.4	2964.7
7.5°	2928.7	2932.9	2932.9	2931.5	2935.7	2934.3	2931.5	2932.9	2932.9	2928.7	2928.7
10°	2888.6	2891.3	2891.3	2890.0	2896.9	2896.9	2895.5	2899.7	2901.0	2896.9	2894.1
12.5°	2851.2	2855.3	2855.3	2860.9	2867.8	2870.6	2877.5	2883.0	2888.6	2887.2	2881.7
15°	2829.0	2831.8	2837.3	2844.3	2855.3	2865.0	2876.1	2888.6	2899.7	2902.4	2894.1
17.5°	2815.2	2819.3	2827.7	2837.3	2852.6	2869.2	2885.8	2902.4	2917.7	2923.2	2913.5
20°	2811.0	2813.8	2822.1	2838.7	2859.5	2884.4	2908.0	2927.4	2948.1	2955.0	2948.1
22.5°	2819.3	2824.9	2834.6	2854.0	2881.7	2913.5	2941.2	2967.5	2993.8	3006.3	2996.6
25°	2856.7	2862.3	2874.7	2899.7	2930.1	2963.4	2995.2	3025.7	3049.2	3061.7	3054.7
27.5°	2926.0	2932.9	2948.1	2973.0	3006.3	3042.3	3076.9	3101.8	3121.2	3125.4	3117.1
30°	3029.8	3045.1	3063.1	3090.8	3129.5	3160.0	3194.6	3216.8	3240.3	3240.3	3233.4
32.5°	3191.8	3207.1	3226.5	3252.8	3283.2	3316.5	3346.9	3366.3	3391.2	3392.6	3376.0
35°	3434.2	3441.1	3457.7	3474.3	3502.0	3531.1	3557.4	3569.9	3590.6	3592.0	3576.8
37.5°	3754.0	3755.4	3766.5	3772.0	3797.0	3828.8	3853.7	3862.1	3881.4	3878.7	3863.4
40°	4126.5	4133.5	4137.6	4145.9	4172.2	4202.7	4229.0	4233.2	4253.9	4249.8	4230.4
42.5°	4557.2	4560.0	4583.5	4596.0	4620.9	4636.1	4669.4	4673.5	4698.4	4687.4	4665.2
45°	5040.5	5065.4	5087.6	5112.5	5138.8	5156.8	5183.1	5177.6	5194.2	5177.6	5165.1
47.5°	5548.7	5566.7	5616.5	5655.3	5698.2	5713.5	5750.9	5734.2	5750.9	5727.3	5723.2
50°	6108.1	6140.0	6182.9	6227.2	6272.9	6297.8	6346.3	6325.5	6347.7	6325.5	6313.1
52.5°	6659.2	6667.6	6761.7	6826.8	6890.5	6919.6	6948.7	6939.0	6940.3	6939.0	6926.5
55°	7182.7	7202.1	7296.2	7384.9	7495.6	7577.3	7627.2	7621.6	7609.2	7596.7	7575.9
57.5°	7772.6	7792.0	7900.0	8009.4	8135.4	8251.7	8352.8	8456.6	8496.8	8507.9	8462.2
60°	8570.2	8568.8	8712.8	8845.8	9025.8	9198.9	9420.4	9646.1	9905.1	10025.6	9866.3
62.5°	9381.7	9414.9	9622.6	9858.0	10229.1	10590.5	10999.0	11400.6	11810.5	12144.2	11789.7
65°	9284.7	9412.1	9720.9	10254.0	10939.5	11753.7	12634.4	13566.4	14408.3	14987.1	14337.7
67.5°	8046.8	8228.2	8542.5	9190.6	10047.7	11222.0	12700.9	14544.0	16686.2	17722.0	16438.3
70°	5832.6	6037.5	6367.1	6999.9	7848.7	8964.8	10571.2	12784.0	15619.9	16664.0	15250.2
72.5°	2902.4	3013.2	3216.8	3619.7	4262.2	5167.9	6624.6	8751.6	11260.8	12219.0	10927.0
75°	985.9	1037.2	1071.8	1203.3	1406.9	1762.8	2487.0	3826.1	5836.7	6997.1	5753.6
77.5°	569.1	570.5	594.1	617.6	652.2	691.0	787.9	1034.4	1789.1	2541.0	1851.4
80°	368.3	367.0	386.3	404.3	427.9	447.3	452.8	479.1	552.5	655.0	585.7
82.5°	191.1	214.6	257.6	281.1	325.4	333.7	322.6	313.0	331.0	343.4	351.7
85°	105.2	91.4	137.1	177.2	196.6	199.4	199.4	188.3	195.2	191.1	207.7
87.5°	48.5	44.3	54.0	87.2	92.8	78.9	83.1	73.4	52.6	51.2	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°	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7	3000.7
2.5°	2986.9	2988.3	2988.3	2992.4	2993.8	2996.6	2999.4	3000.7
5°	2963.4	2967.5	2964.7	2968.9	2968.9	2971.7	2971.7	2973.0
7.5°	2928.7	2932.9	2932.9	2932.9	2931.5	2935.7	2935.7	2935.7
10°	2892.7	2895.5	2894.1	2891.3	2888.6	2892.7	2891.3	2890.0
12.5°	2881.7	2874.7	2869.2	2866.4	2860.9	2862.3	2858.1	2858.1
15°	2888.6	2876.1	2866.4	2862.3	2856.7	2854.0	2851.2	2852.6
17.5°	2906.6	2891.3	2878.9	2872.0	2865.0	2860.9	2855.3	2856.7
20°	2938.4	2920.4	2902.4	2888.6	2876.1	2869.2	2865.0	2863.7
22.5°	2985.5	2959.2	2932.9	2912.1	2895.5	2885.8	2881.7	2878.9
25°	3039.5	3010.4	2980.0	2956.4	2939.8	2927.4	2919.0	2919.0
27.5°	3107.4	3083.8	3056.1	3028.4	3013.2	3000.7	2995.2	2992.4
30°	3220.9	3198.8	3176.6	3150.3	3130.9	3118.4	3108.8	3100.4
32.5°	3366.3	3348.3	3330.3	3310.9	3292.9	3276.3	3261.1	3254.2
35°	3571.3	3557.4	3544.9	3522.8	3515.9	3506.2	3497.9	3490.9
37.5°	3853.7	3848.2	3848.2	3824.7	3819.1	3815.0	3806.7	3808.1
40°	4224.9	4230.4	4223.5	4215.2	4211.0	4199.9	4199.9	4209.6
42.5°	4663.8	4668.0	4683.2	4669.4	4684.6	4670.7	4662.4	4669.4
45°	5173.4	5188.6	5219.1	5205.3	5215.0	5191.4	5162.3	5163.7
47.5°	5745.3	5759.2	5771.6	5761.9	5763.3	5724.5	5685.8	5676.1
50°	6339.4	6344.9	6351.8	6338.0	6340.8	6297.8	6253.5	6254.9
52.5°	6926.5	6952.8	6980.5	6943.1	6934.8	6886.3	6824.0	6799.1
55°	7598.1	7635.5	7603.6	7538.6	7473.5	7408.4	7326.7	7312.8
57.5°	8426.2	8362.5	8262.8	8139.5	8049.5	7958.1	7875.1	7840.4
60°	9578.3	9338.7	9158.7	8975.9	8861.0	8748.8	8639.4	8622.8
62.5°	11206.7	10792.7	10434.1	10056.0	9747.2	9506.3	9313.8	9259.8
65°	13247.9	12268.8	11420.0	10627.9	9939.7	9420.4	9093.6	8949.6
67.5°	14125.8	12192.7	10737.3	9612.9	8712.8	8084.1	7731.0	7555.2
70°	12412.9	10111.4	8528.7	7402.9	6583.1	5912.9	5593.0	5404.7
72.5°	8539.7	6432.1	5086.2	4151.5	3496.5	2935.7	2714.1	2697.5
75°	3834.4	2539.6	1750.3	1348.7	1135.5	987.3	941.6	907.0
77.5°	1073.2	793.5	707.6	661.9	617.6	566.4	547.0	551.1
80°	522.0	493.0	473.6	444.5	404.3	361.4	342.0	350.3
82.5°	346.2	342.0	354.5	333.7	275.6	234.0	196.6	180.0
85°	210.5	213.3	217.4	218.8	185.6	130.2	88.6	99.7
87.5°	83.1	95.5	103.9	108.0	101.1	62.3	49.9	51.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)