

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: P300616

Luminaire Tested: **GLNA-AF-04-LED-E1-RW-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300616
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-RW-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular
Wide Type I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19761.2 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

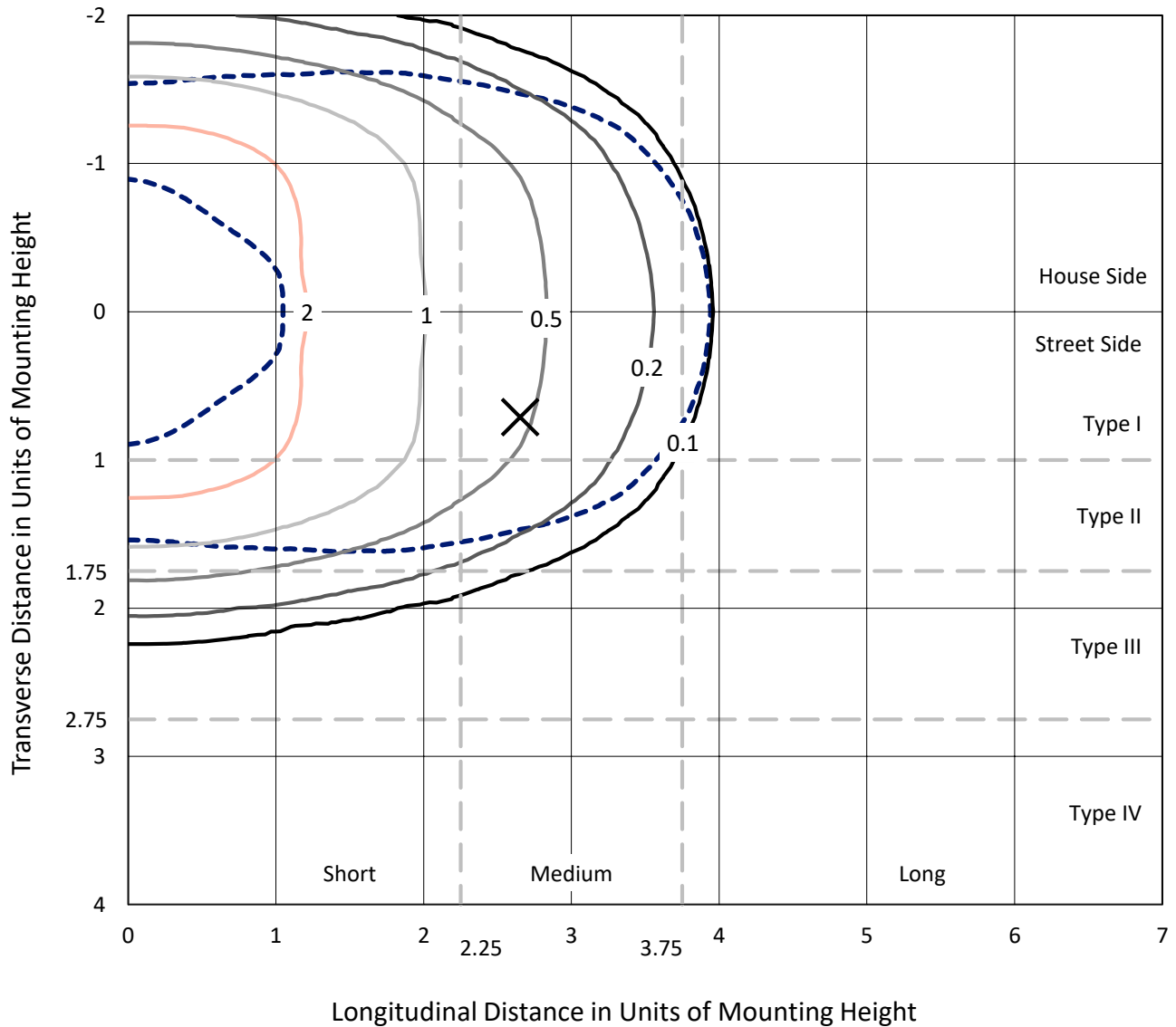
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

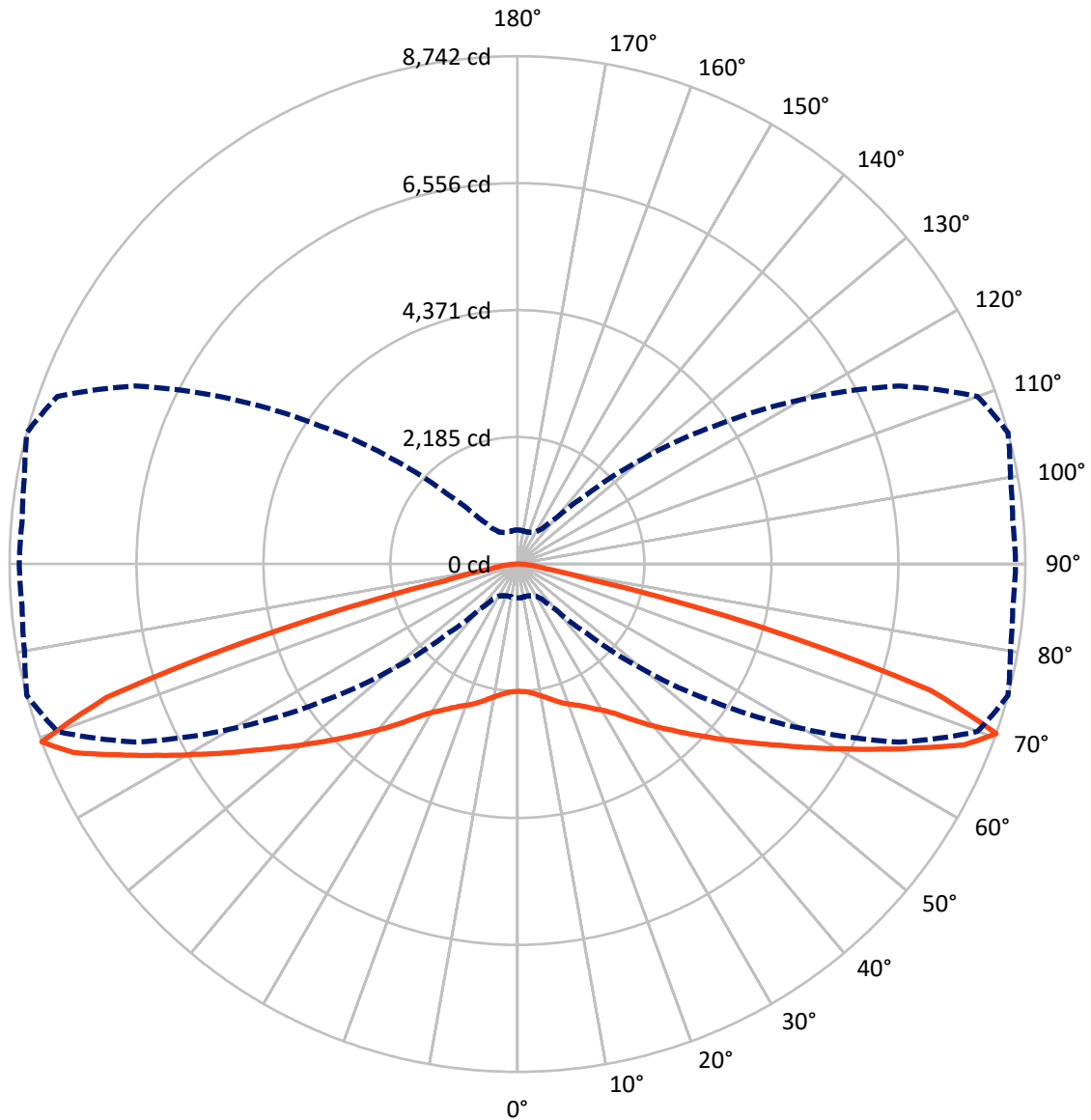
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9880.6	0.0	9880.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9880.6	0.0	9880.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	19761.2	0.0	19761.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.2	1.1
10°-20°	653.2	3.3
20°-30°	1229.4	6.2
30°-40°	2177.1	11.0
40°-50°	3640.8	18.4
50°-60°	5073.5	25.7
60°-70°	4704.8	23.8
70°-80°	1875.0	9.5
80°-90°	197.1	1.0
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°	19761.2	100.0
0°-180°	19761.2	100.0



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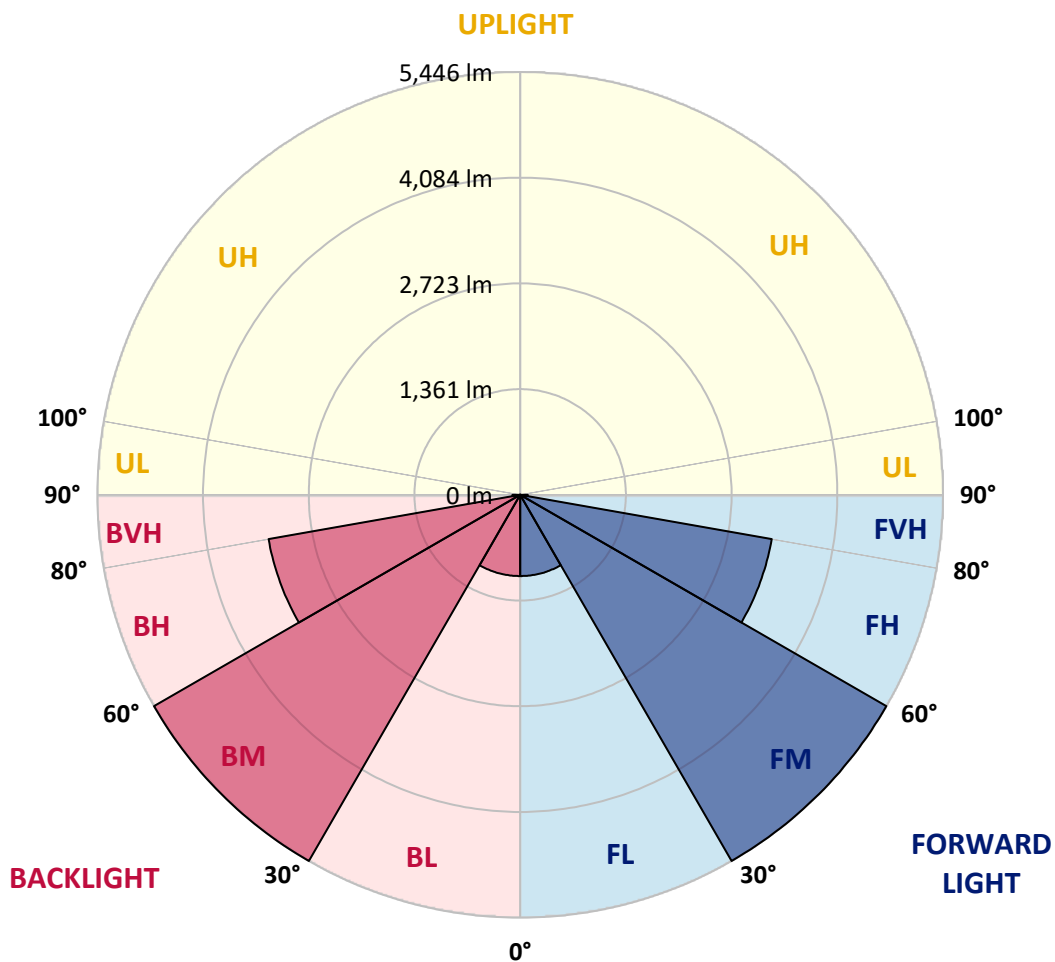
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1046.4	5.3			
FM	(30°-60°)	5445.7	27.6			
FH	(60°-80°)	3289.9	16.6			G2/5000
FVH	(80°-90°)	98.5	0.5			G1/100
BL	(0°-30°)	1046.4	5.3	B3/2500		
BM	(30°-60°)	5445.7	27.6	B4/8500		
BH	(60°-80°)	3289.9	16.6	B4/5000		G4/5000
BVH	(80°-90°)	98.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0
2.5°	2188.2	2186.4	2188.2	2187.3	2189.2	2189.2	2191.0	2194.8	2194.8	2197.6	2196.6
5°	2166.8	2165.8	2168.6	2171.4	2174.2	2179.8	2185.4	2193.8	2200.4	2205.1	2209.7
7.5°	2124.7	2124.7	2128.5	2135.0	2141.5	2153.7	2166.8	2183.6	2200.4	2214.4	2226.5
10°	2090.2	2092.0	2096.7	2107.9	2119.1	2137.8	2155.6	2179.8	2203.2	2226.5	2245.2
12.5°	2069.6	2072.4	2080.8	2097.7	2116.3	2141.5	2168.6	2199.5	2225.6	2253.6	2272.3
15°	2076.2	2078.0	2090.2	2110.7	2135.0	2166.8	2203.2	2239.6	2270.4	2300.3	2325.5
17.5°	2112.6	2115.4	2129.4	2152.8	2178.0	2215.3	2254.6	2295.6	2333.9	2367.6	2398.4
20°	2178.0	2180.8	2198.5	2223.7	2253.6	2291.9	2331.1	2374.1	2417.1	2452.6	2487.1
22.5°	2270.4	2275.1	2291.9	2317.1	2350.8	2391.8	2438.5	2484.3	2525.4	2558.1	2588.9
25°	2391.8	2402.1	2418.0	2446.0	2481.5	2518.9	2569.3	2616.0	2655.2	2686.0	2708.5
27.5°	2563.7	2577.7	2589.8	2616.9	2651.5	2687.0	2737.4	2778.5	2815.9	2845.7	2862.6
30°	2791.6	2805.6	2817.7	2843.9	2875.6	2909.3	2956.9	2993.3	3016.7	3040.0	3039.1
32.5°	3068.0	3083.0	3087.6	3115.7	3148.3	3184.8	3227.7	3248.3	3267.0	3269.8	3252.9
35°	3377.2	3384.6	3403.3	3440.7	3478.0	3507.9	3549.0	3559.3	3559.3	3545.3	3507.9
37.5°	3716.2	3720.9	3747.0	3789.0	3827.3	3858.1	3886.2	3906.7	3896.4	3866.6	3804.0
40°	4087.9	4096.3	4133.7	4171.0	4214.0	4242.9	4272.8	4276.6	4266.3	4222.4	4137.4
42.5°	4442.8	4450.3	4487.6	4546.5	4602.5	4642.7	4670.7	4676.3	4643.6	4603.4	4497.9
45°	4748.2	4767.8	4816.4	4885.5	4966.7	5023.7	5062.0	5077.9	5048.9	4996.6	4874.3
47.5°	4990.1	5009.7	5078.8	5161.0	5261.9	5354.3	5417.8	5451.5	5444.0	5404.8	5271.2
50°	5167.5	5186.2	5260.9	5361.8	5479.5	5594.4	5702.7	5783.0	5811.0	5793.3	5670.9
52.5°	5188.1	5218.9	5306.7	5442.1	5595.3	5752.2	5906.3	6042.7	6135.1	6149.1	6058.5
55°	4901.4	4932.2	5053.6	5254.4	5482.3	5738.2	5984.7	6214.5	6396.6	6490.0	6442.4
57.5°	4225.2	4280.3	4408.2	4643.6	4978.9	5361.8	5755.0	6163.1	6533.9	6781.4	6829.0
60°	3238.0	3303.4	3432.3	3682.6	4056.1	4512.8	5037.7	5641.1	6295.8	6852.4	7184.9
62.5°	2077.1	2138.7	2274.2	2491.8	2796.2	3291.2	3854.4	4570.7	5450.5	6329.4	7121.4
65°	1067.5	1101.1	1172.1	1303.8	1541.0	1910.9	2416.1	3130.6	4136.5	5220.8	6365.8
67.5°	676.2	682.7	698.6	717.3	778.0	905.9	1141.3	1586.8	2414.3	3545.3	4885.5
70°	584.7	584.7	577.2	574.4	581.9	599.6	636.0	739.7	1018.9	1683.0	2817.7
72.5°	535.2	529.5	516.5	506.2	504.3	504.3	511.8	527.7	572.5	685.5	1103.0
75°	493.1	477.2	459.5	447.4	442.7	438.0	437.1	439.9	449.2	467.0	526.7
77.5°	441.8	421.2	400.7	388.5	382.9	376.4	370.8	364.2	359.6	365.2	391.3
80°	380.1	356.8	340.9	333.4	327.8	318.5	306.3	295.1	284.9	283.0	298.9
82.5°	306.3	279.3	280.2	283.0	272.7	259.6	246.6	234.4	216.7	207.3	216.7
85°	247.5	233.5	226.9	244.7	229.8	210.1	189.6	168.1	140.1	117.7	128.0
87.5°	96.2	96.2	143.8	221.3	198.9	162.5	139.2	118.6	73.8	57.0	57.9
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°	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0	2192.0
2.5°	2195.7	2197.6	2196.6	2195.7	2195.7	2194.8	2195.7	2195.7
5°	2212.5	2217.2	2217.2	2219.1	2219.1	2220.0	2220.9	2220.0
7.5°	2237.7	2246.1	2251.8	2258.3	2259.2	2260.2	2262.0	2260.2
10°	2263.0	2279.8	2291.9	2304.1	2309.7	2311.5	2313.4	2313.4
12.5°	2294.7	2318.1	2339.5	2361.0	2371.3	2376.9	2376.9	2380.6
15°	2347.0	2370.4	2395.6	2424.5	2442.3	2451.6	2454.4	2454.4
17.5°	2420.8	2441.3	2462.8	2490.8	2513.3	2525.4	2528.2	2527.3
20°	2506.7	2526.3	2538.5	2556.2	2575.8	2589.8	2593.6	2593.6
22.5°	2604.8	2616.0	2617.9	2623.5	2639.3	2658.0	2666.4	2668.3
25°	2713.1	2715.9	2708.5	2708.5	2718.7	2736.5	2744.9	2745.8
27.5°	2853.2	2839.2	2820.5	2814.0	2820.5	2841.1	2851.3	2855.1
30°	3027.9	2994.2	2951.3	2927.9	2924.2	2951.3	2970.0	2972.8
32.5°	3227.7	3179.2	3122.2	3074.6	3062.4	3079.2	3101.6	3100.7
35°	3465.0	3407.0	3337.9	3277.2	3249.2	3266.0	3297.8	3301.5
37.5°	3738.6	3662.9	3583.6	3507.0	3463.1	3467.8	3501.4	3512.6
40°	4044.0	3945.9	3846.0	3743.3	3680.7	3668.6	3709.6	3716.2
42.5°	4370.9	4244.8	4118.7	3991.7	3911.4	3892.7	3940.3	3937.5
45°	4719.2	4558.6	4411.0	4271.0	4175.7	4147.7	4186.9	4186.9
47.5°	5093.8	4895.8	4720.2	4561.4	4457.7	4417.6	4454.9	4457.7
50°	5490.7	5280.5	5074.1	4897.6	4773.4	4722.0	4770.6	4778.1
52.5°	5885.7	5681.2	5472.9	5271.2	5120.8	5058.3	5114.3	5138.6
55°	6286.4	6085.6	5886.7	5689.6	5511.2	5437.5	5497.2	5528.0
57.5°	6709.5	6523.6	6334.0	6135.1	5963.3	5848.4	5911.9	5953.0
60°	7205.4	7046.6	6849.6	6630.1	6456.4	6339.6	6376.1	6412.5
62.5°	7597.7	7659.3	7492.1	7238.1	7014.9	6865.5	6901.0	6939.2
65°	7408.1	8040.4	8188.9	7932.0	7622.9	7390.3	7375.4	7395.0
67.5°	6192.1	7420.2	8315.9	8560.6	8301.9	7978.7	7919.0	7947.9
70°	4142.1	5671.9	7252.1	8428.9	8741.8	8616.6	8557.8	8575.5
72.5°	1989.3	3303.4	4920.0	6484.4	7437.0	7874.1	8014.2	8082.4
75°	727.5	1311.3	2371.3	3573.3	4313.9	4993.8	5437.5	5618.6
77.5°	439.0	529.5	757.4	1140.4	1291.7	1445.8	1386.0	1415.9
80°	325.0	367.0	415.6	467.0	483.8	483.8	465.1	450.2
82.5°	227.9	255.0	278.3	306.3	313.8	299.8	246.6	196.1
85°	146.6	158.8	169.0	186.8	182.1	173.7	116.7	103.7
87.5°	67.2	76.6	80.3	88.7	85.0	81.3	57.9	48.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)