

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: P300682

Luminaire Tested: **GLNA-AF-05-LED-E1-RW-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300682  
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-05-LED-E1-RW-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular  
Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19965.2 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4

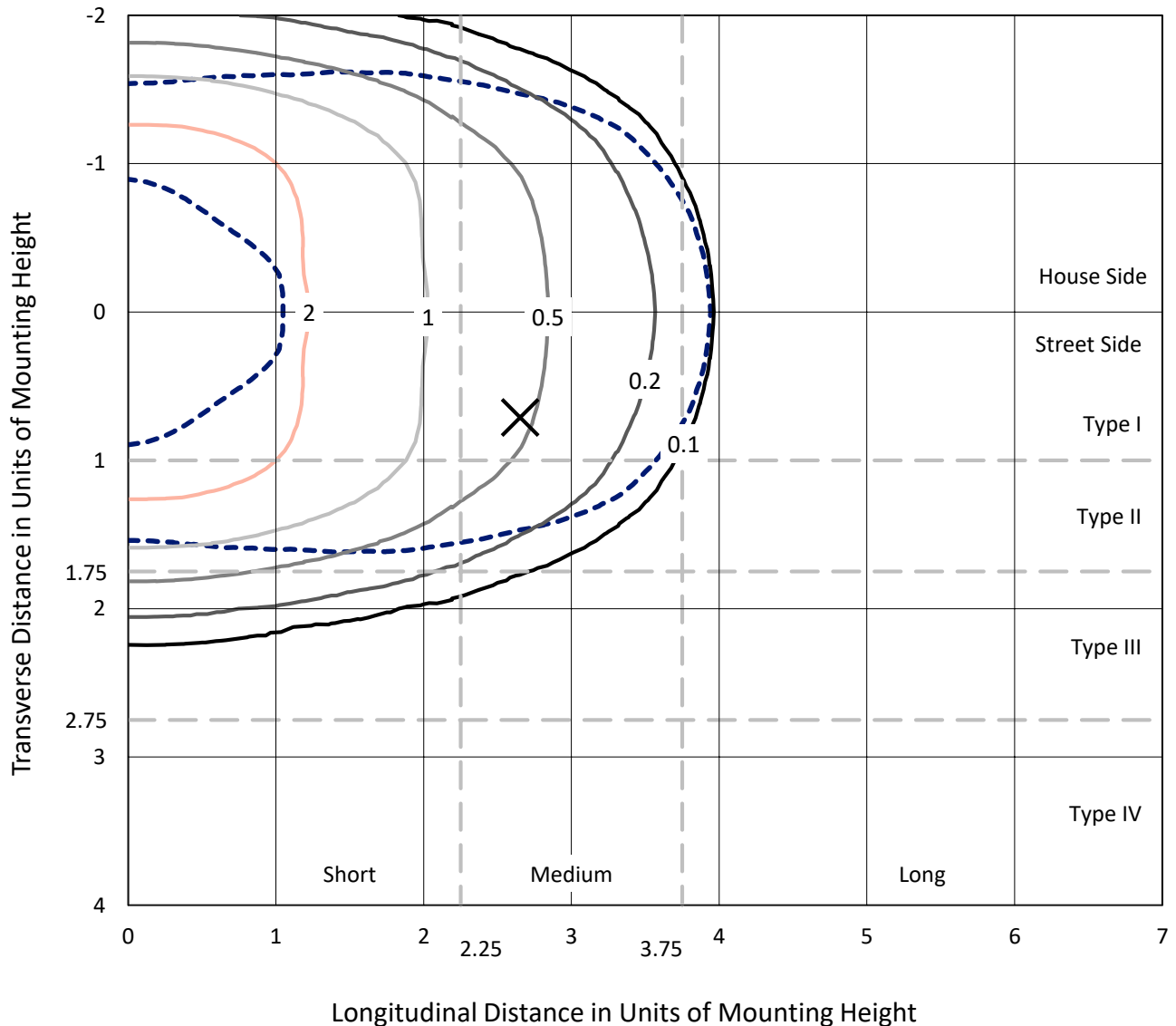
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

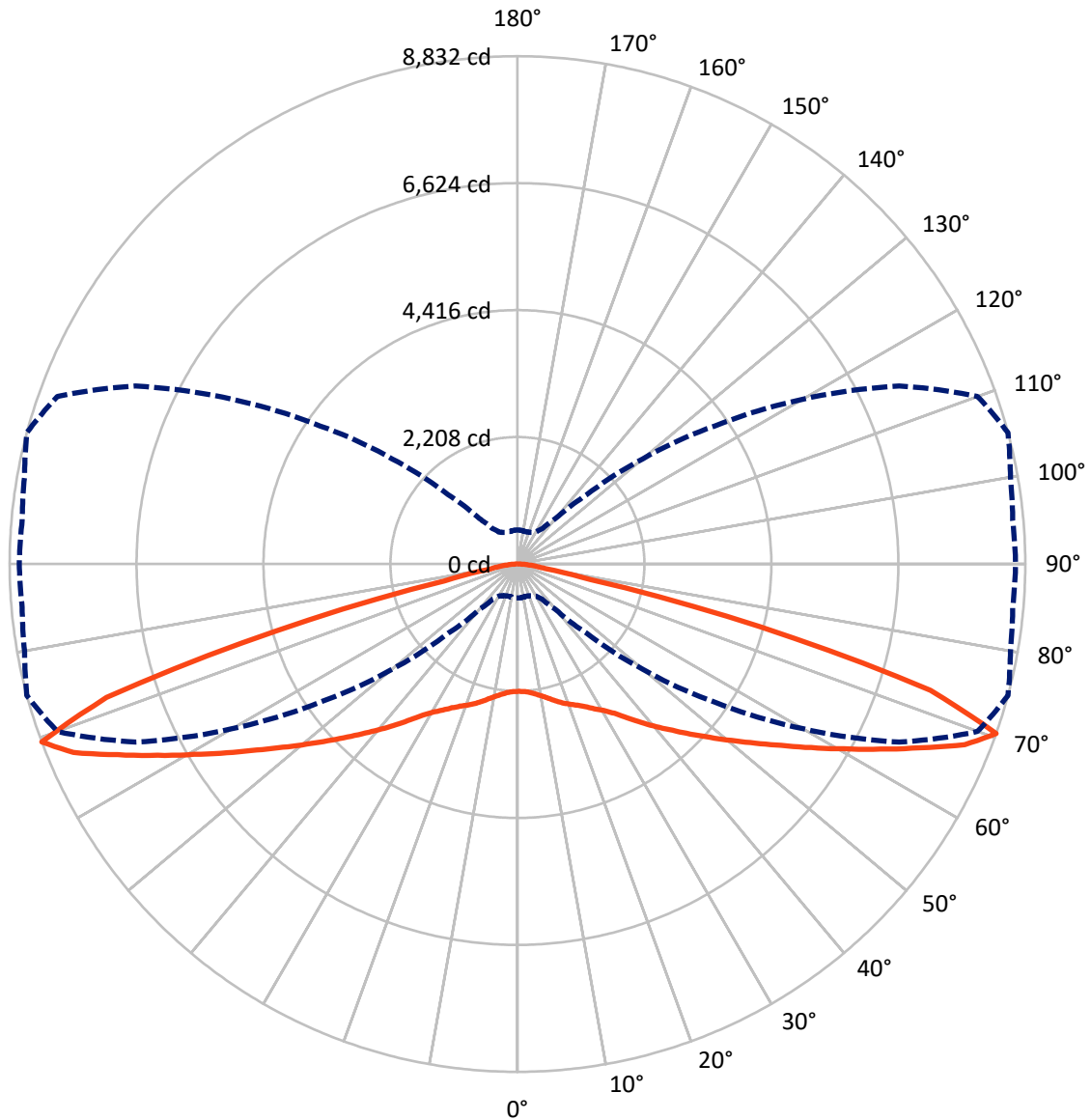
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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
<b>House Side</b>	Lumens	9982.6	0.0	9982.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9982.6	0.0	9982.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19965.2	0.0	19965.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.4	1.1
10°-20°	660.0	3.3
20°-30°	1242.1	6.2
30°-40°	2199.6	11.0
40°-50°	3678.4	18.4
50°-60°	5125.9	25.7
60°-70°	4753.4	23.8
70°-80°	1894.4	9.5
80°-90°	199.1	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°	19965.2	100.0
0°-180°	19965.2	100.0



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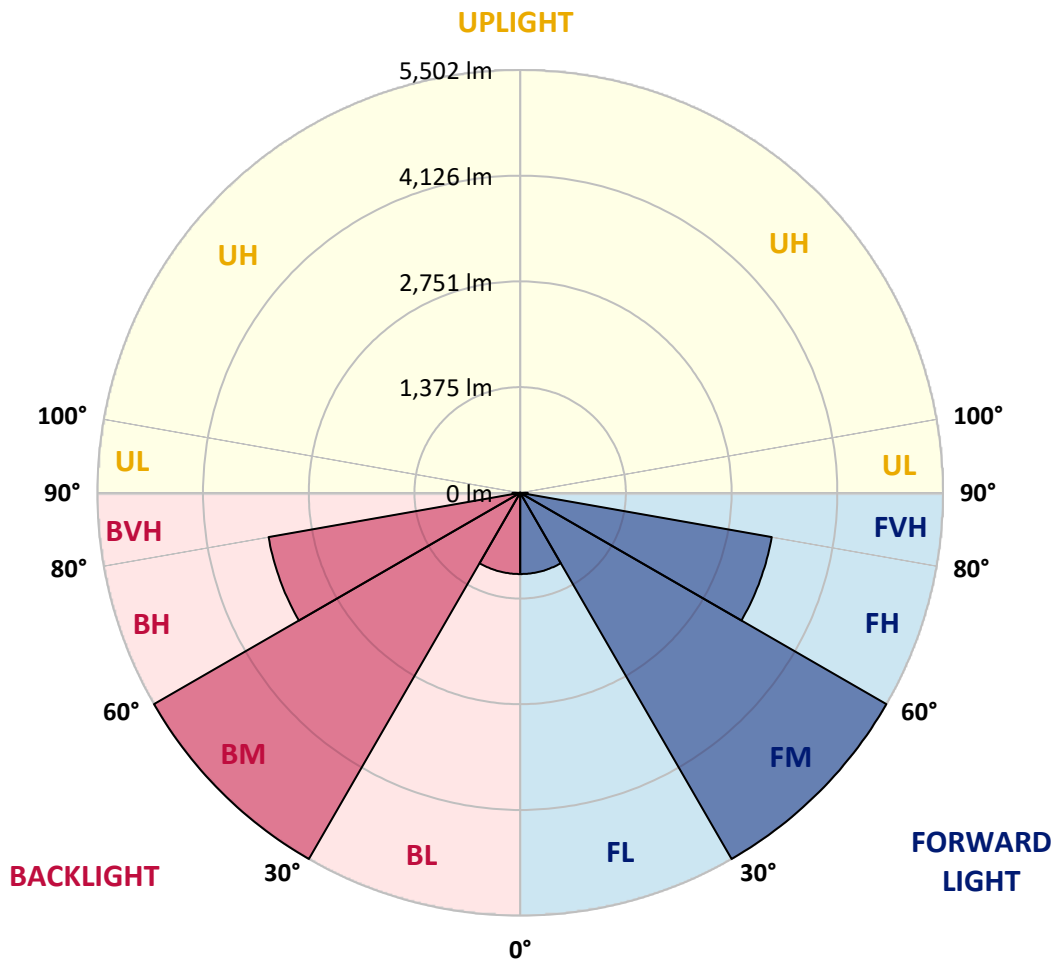
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1057.2	5.3			
FM	(30°-60°)	5501.9	27.6			
FH	(60°-80°)	3323.9	16.6			G2/5000
FVH	(80°-90°)	99.6	0.5			G1/100
BL	(0°-30°)	1057.2	5.3	B3/2500		
BM	(30°-60°)	5501.9	27.6	B4/8500		
BH	(60°-80°)	3323.9	16.6	B4/5000		G4/5000
BVH	(80°-90°)	99.6	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°	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6
2.5°	2210.8	2208.9	2210.8	2209.9	2211.8	2211.8	2213.7	2217.4	2217.4	2220.3	2219.3
5°	2189.1	2188.2	2191.0	2193.8	2196.7	2202.3	2208.0	2216.5	2223.1	2227.8	2232.5
7.5°	2146.7	2146.7	2150.4	2157.0	2163.7	2175.9	2189.1	2206.1	2223.1	2237.3	2249.5
10°	2111.8	2113.6	2118.4	2129.7	2141.0	2159.9	2177.8	2202.3	2225.9	2249.5	2268.4
12.5°	2091.0	2093.8	2102.3	2119.3	2138.2	2163.7	2191.0	2222.2	2248.6	2276.9	2295.8
15°	2097.6	2099.5	2111.8	2132.5	2157.0	2189.1	2225.9	2262.7	2293.9	2324.1	2349.5
17.5°	2134.4	2137.2	2151.4	2175.0	2200.5	2238.2	2277.8	2319.3	2358.0	2392.0	2423.1
20°	2200.5	2203.3	2221.2	2246.7	2276.9	2315.6	2355.2	2398.6	2442.0	2477.9	2512.8
22.5°	2293.9	2298.6	2315.6	2341.0	2375.0	2416.5	2463.7	2510.0	2551.5	2584.5	2615.6
25°	2416.5	2426.9	2443.0	2471.3	2507.1	2544.9	2595.8	2643.0	2682.6	2713.8	2736.4
27.5°	2590.2	2604.3	2616.6	2643.9	2678.9	2714.7	2765.7	2807.2	2844.9	2875.1	2892.1
30°	2820.4	2834.5	2846.8	2873.2	2905.3	2939.3	2987.4	3024.2	3047.8	3071.4	3070.4
32.5°	3099.7	3114.8	3119.5	3147.8	3180.8	3217.6	3261.0	3281.8	3300.7	3303.5	3286.5
35°	3412.0	3419.6	3438.4	3476.2	3513.9	3544.1	3585.6	3596.0	3596.0	3581.9	3544.1
37.5°	3754.5	3759.3	3785.7	3828.1	3866.8	3898.0	3926.3	3947.0	3936.7	3906.5	3843.2
40°	4130.1	4138.6	4176.3	4214.1	4257.5	4286.7	4316.9	4320.7	4310.3	4266.0	4180.1
42.5°	4488.7	4496.2	4534.0	4593.4	4650.0	4690.6	4718.9	4724.6	4691.5	4651.0	4544.3
45°	4797.2	4817.0	4866.1	4935.9	5018.0	5075.6	5114.3	5130.3	5101.1	5048.2	4924.6
47.5°	5041.6	5061.4	5131.2	5214.3	5316.2	5409.6	5473.8	5507.7	5500.2	5460.6	5325.6
50°	5220.9	5239.8	5315.2	5417.2	5536.0	5652.1	5761.6	5842.7	5871.0	5853.1	5729.5
52.5°	5241.6	5272.8	5361.5	5498.3	5653.1	5811.6	5967.3	6105.0	6198.4	6212.6	6121.1
55°	4952.0	4983.1	5105.8	5308.6	5538.9	5797.4	6046.5	6278.7	6462.7	6557.0	6508.9
57.5°	4268.8	4324.5	4453.7	4691.5	5030.3	5417.2	5814.4	6226.8	6601.4	6851.4	6899.5
60°	3271.4	3337.5	3467.7	3720.6	4098.0	4559.4	5089.7	5699.3	6360.7	6923.1	7259.0
62.5°	2098.5	2160.8	2297.6	2517.5	2825.1	3325.2	3894.2	4617.9	5506.8	6394.7	7194.9
65°	1078.5	1112.5	1184.2	1317.3	1556.9	1930.6	2441.1	3162.9	4179.2	5274.7	6431.5
67.5°	683.2	689.8	705.8	724.7	786.0	915.3	1153.1	1603.2	2439.2	3581.9	4935.9
70°	590.7	590.7	583.1	580.3	587.9	605.8	642.6	747.3	1029.5	1700.4	2846.8
72.5°	540.7	535.0	521.8	511.4	509.5	509.5	517.1	533.1	578.4	692.6	1114.4
75°	498.2	482.2	464.2	452.0	447.3	442.5	441.6	444.4	453.9	471.8	532.2
77.5°	446.3	425.6	404.8	392.5	386.9	380.3	374.6	368.0	363.3	368.9	395.4
80°	384.0	360.5	344.4	336.9	331.2	321.8	309.5	298.2	287.8	285.9	301.9
82.5°	309.5	282.1	283.1	285.9	275.5	262.3	249.1	236.8	218.9	209.5	218.9
85°	250.1	235.9	229.3	247.2	232.1	212.3	191.5	169.8	141.5	118.9	129.3
87.5°	97.2	97.2	145.3	223.6	201.0	164.2	140.6	119.8	74.5	57.6	58.5
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°	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6	2214.6
2.5°	2218.4	2220.3	2219.3	2218.4	2218.4	2217.4	2218.4	2218.4
5°	2235.4	2240.1	2240.1	2242.0	2242.0	2242.9	2243.9	2242.9
7.5°	2260.8	2269.3	2275.0	2281.6	2282.5	2283.5	2285.4	2283.5
10°	2286.3	2303.3	2315.6	2327.8	2333.5	2335.4	2337.3	2337.3
12.5°	2318.4	2342.0	2363.7	2385.4	2395.8	2401.4	2401.4	2405.2
15°	2371.2	2394.8	2420.3	2449.6	2467.5	2476.9	2479.8	2479.8
17.5°	2445.8	2466.5	2488.2	2516.6	2539.2	2551.5	2554.3	2553.4
20°	2532.6	2552.4	2564.7	2582.6	2602.4	2616.6	2620.4	2620.4
22.5°	2631.7	2643.0	2644.9	2650.5	2666.6	2685.5	2694.0	2695.8
25°	2741.1	2744.0	2736.4	2736.4	2746.8	2764.7	2773.2	2774.2
27.5°	2882.7	2868.5	2849.6	2843.0	2849.6	2870.4	2880.8	2884.6
30°	3059.1	3025.2	2981.7	2958.2	2954.4	2981.7	3000.6	3003.4
32.5°	3261.0	3212.0	3154.4	3106.3	3094.0	3111.0	3133.7	3132.7
35°	3500.7	3442.2	3372.4	3311.1	3282.8	3299.7	3331.8	3335.6
37.5°	3777.2	3700.8	3620.6	3543.2	3498.8	3503.6	3537.5	3548.8
40°	4085.7	3986.7	3885.7	3781.9	3718.7	3706.4	3747.9	3754.5
42.5°	4416.0	4288.6	4161.2	4032.9	3951.8	3932.9	3981.0	3978.2
45°	4768.0	4605.7	4456.6	4315.0	4218.8	4190.5	4230.1	4230.1
47.5°	5146.3	4946.3	4768.9	4608.5	4503.8	4463.2	4500.9	4503.8
50°	5547.4	5335.1	5126.5	4948.2	4822.7	4770.8	4819.9	4827.4
52.5°	5946.5	5739.9	5529.4	5325.6	5173.7	5110.5	5167.1	5191.6
55°	6351.3	6148.4	5947.5	5748.4	5568.1	5493.6	5554.0	5585.1
57.5°	6778.8	6591.0	6399.4	6198.4	6024.8	5908.8	5972.9	6014.4
60°	7279.8	7119.4	6920.3	6698.5	6523.0	6405.1	6441.9	6478.7
62.5°	7676.1	7738.4	7569.5	7312.8	7087.3	6936.3	6972.2	7010.9
65°	7484.6	8123.4	8273.4	8013.9	7701.6	7466.6	7451.5	7471.4
67.5°	6256.0	7496.8	8401.7	8649.0	8387.6	8061.1	8000.7	8030.0
70°	4184.8	5730.4	7327.0	8515.9	8832.0	8705.6	8646.1	8664.0
72.5°	2009.8	3337.5	4970.8	6551.3	7513.8	7955.4	8097.0	8165.8
75°	735.1	1324.8	2395.8	3610.2	4358.4	5045.4	5493.6	5676.6
77.5°	443.5	535.0	765.3	1152.1	1305.0	1460.7	1400.3	1430.5
80°	328.4	370.8	419.9	471.8	488.8	488.8	469.9	454.8
82.5°	230.2	257.6	281.2	309.5	317.0	302.9	249.1	198.2
85°	148.1	160.4	170.8	188.7	184.0	175.5	117.9	104.7
87.5°	67.9	77.4	81.1	89.6	85.9	82.1	58.5	49.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)