

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: P300679

Luminaire Tested: **GLNA-AF-05-LED-E1-RW-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300679  
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-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular  
Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

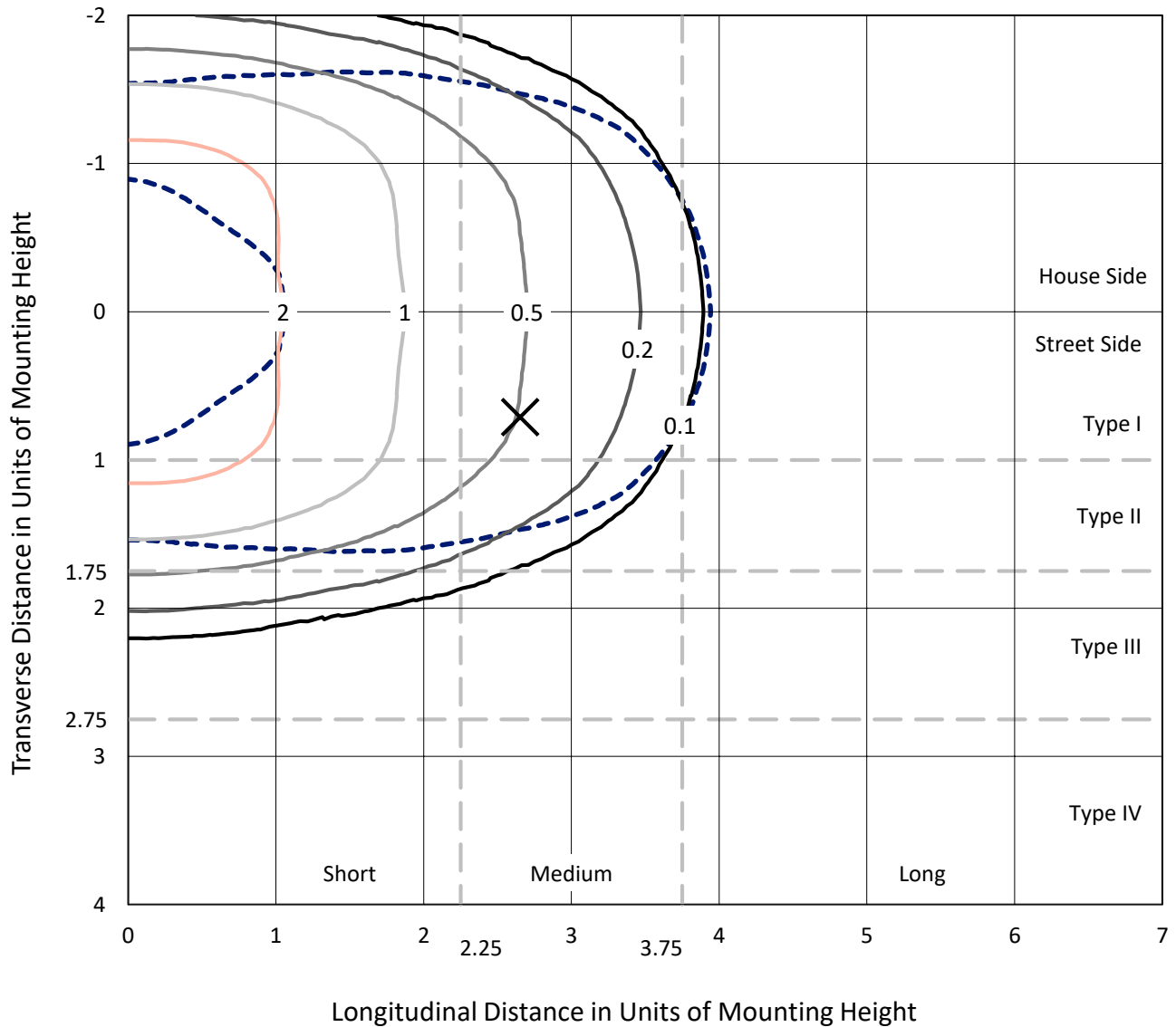
Lumens per Lamp: N/A  
Luminaire Lumens: 17346.6 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (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

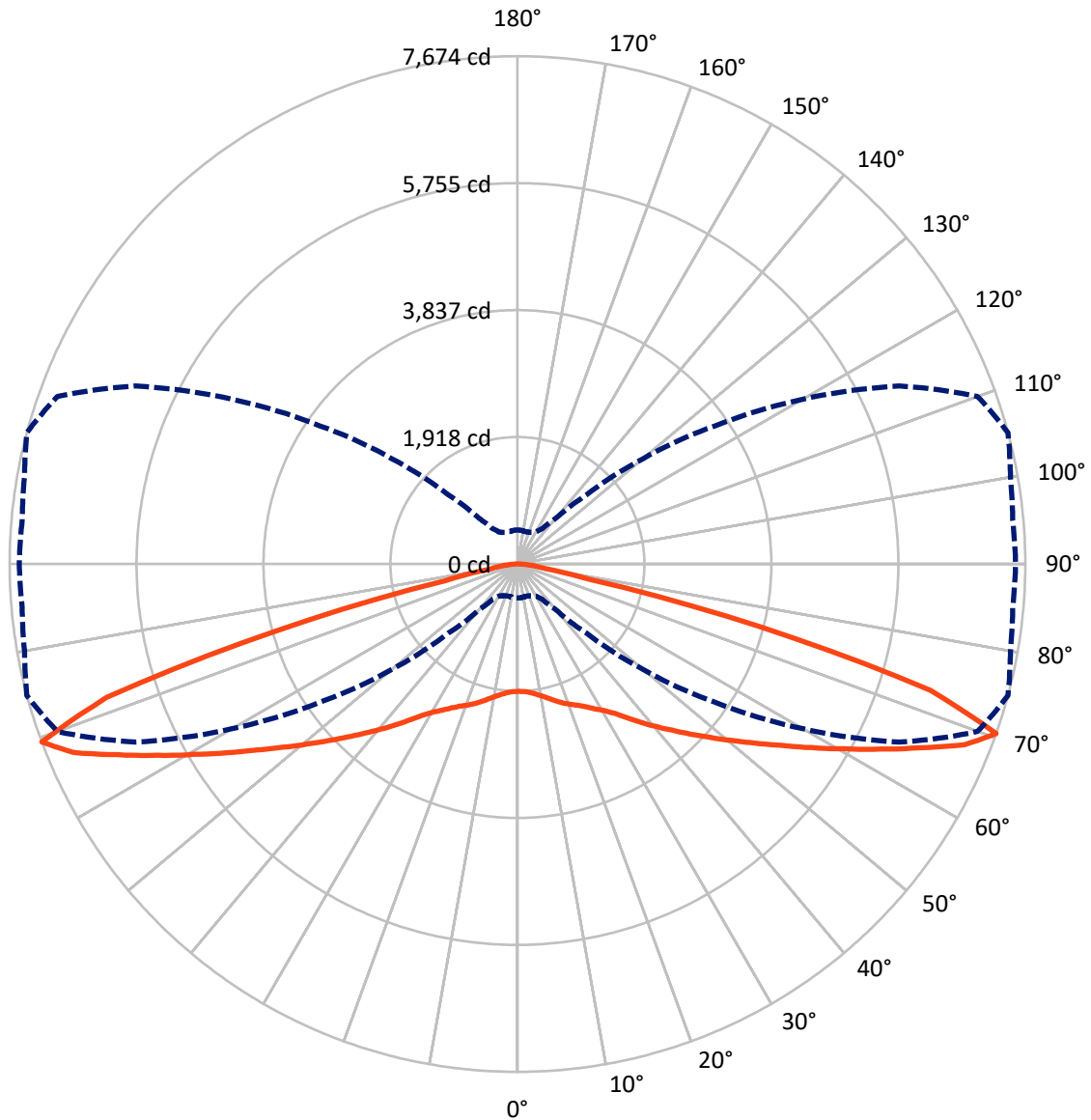
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	8673.3	0.0	8673.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8673.3	0.0	8673.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	17346.6	0.0	17346.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.5	1.1
10°-20°	573.4	3.3
20°-30°	1079.2	6.2
30°-40°	1911.1	11.0
40°-50°	3195.9	18.4
50°-60°	4453.5	25.7
60°-70°	4129.9	23.8
70°-80°	1645.9	9.5
80°-90°	173.0	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°	17346.6	100.0
0°-180°	17346.6	100.0



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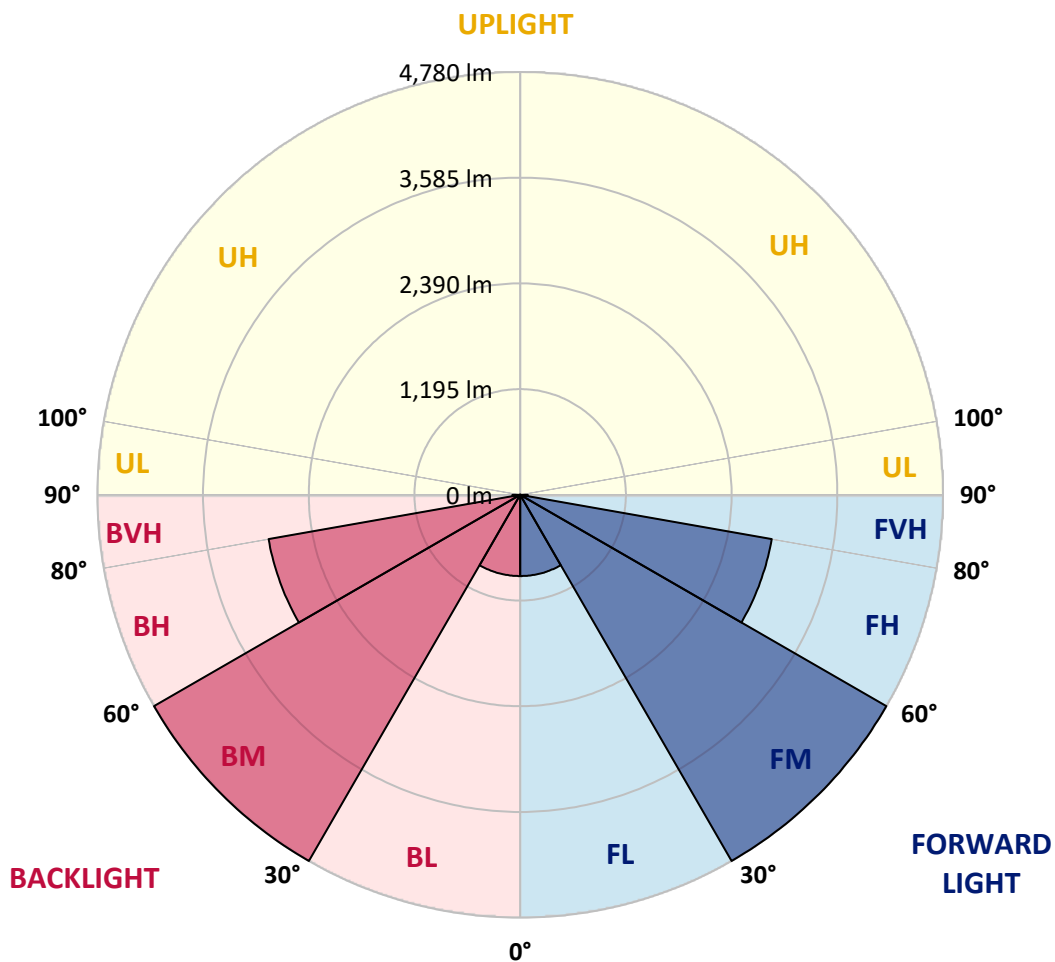
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	918.6	5.3			
FM	(30°-60°)	4780.3	27.6			
FH	(60°-80°)	2887.9	16.6			G2/5000
FVH	(80°-90°)	86.5	0.5			G1/100
BL	(0°-30°)	918.6	5.3	B2/1000		
BM	(30°-60°)	4780.3	27.6	B3/5000		
BH	(60°-80°)	2887.9	16.6	B4/5000		G4/5000
BVH	(80°-90°)	86.5	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°	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1
2.5°	1920.9	1919.2	1920.9	1920.0	1921.7	1921.7	1923.3	1926.6	1926.6	1929.1	1928.2
5°	1902.0	1901.2	1903.6	1906.1	1908.6	1913.5	1918.4	1925.8	1931.5	1935.6	1939.7
7.5°	1865.1	1865.1	1868.4	1874.1	1879.9	1890.5	1902.0	1916.8	1931.5	1943.8	1954.5
10°	1834.8	1836.4	1840.5	1850.4	1860.2	1876.6	1892.2	1913.5	1934.0	1954.5	1970.9
12.5°	1816.7	1819.2	1826.6	1841.3	1857.7	1879.9	1903.6	1930.7	1953.7	1978.2	1994.6
15°	1822.5	1824.1	1834.8	1852.8	1874.1	1902.0	1934.0	1965.9	1993.0	2019.2	2041.4
17.5°	1854.5	1856.9	1869.2	1889.7	1911.8	1944.6	1979.1	2015.1	2048.8	2078.3	2105.3
20°	1911.8	1914.3	1929.9	1952.0	1978.2	2011.9	2046.3	2084.0	2121.7	2152.9	2183.2
22.5°	1993.0	1997.1	2011.9	2034.0	2063.5	2099.6	2140.6	2180.7	2216.8	2245.5	2272.6
25°	2099.6	2108.6	2122.5	2147.1	2178.3	2211.1	2255.3	2296.3	2330.8	2357.8	2377.5
27.5°	2250.4	2262.7	2273.4	2297.2	2327.5	2358.6	2402.9	2439.0	2471.8	2498.0	2512.8
30°	2450.5	2462.8	2473.4	2496.4	2524.3	2553.8	2595.6	2627.5	2648.0	2668.5	2667.7
32.5°	2693.1	2706.3	2710.4	2734.9	2763.6	2795.6	2833.3	2851.4	2867.8	2870.2	2855.5
35°	2964.5	2971.1	2987.5	3020.2	3053.0	3079.3	3115.3	3124.4	3124.4	3112.1	3079.3
37.5°	3262.1	3266.2	3289.2	3326.0	3359.7	3386.7	3411.3	3429.3	3420.3	3394.1	3339.2
40°	3588.4	3595.8	3628.6	3661.4	3699.1	3724.5	3750.7	3754.0	3745.0	3706.4	3631.8
42.5°	3899.9	3906.5	3939.3	3990.9	4040.1	4075.4	4100.0	4104.9	4076.2	4040.9	3948.3
45°	4168.0	4185.2	4227.9	4288.5	4359.8	4409.9	4443.5	4457.4	4432.0	4386.1	4278.7
47.5°	4380.3	4397.6	4458.2	4530.4	4618.9	4700.1	4755.8	4785.3	4778.8	4744.3	4627.1
50°	4536.1	4552.5	4618.1	4706.6	4809.9	4910.8	5005.9	5076.4	5101.0	5085.4	4978.0
52.5°	4554.1	4581.2	4658.3	4777.1	4911.6	5049.3	5184.6	5304.3	5385.5	5397.7	5318.2
55°	4302.5	4329.5	4436.1	4612.4	4812.4	5037.0	5253.5	5455.1	5615.0	5697.0	5655.2
57.5°	3708.9	3757.3	3869.6	4076.2	4370.5	4706.6	5051.8	5410.0	5735.5	5952.8	5994.6
60°	2842.3	2899.7	3012.9	3232.6	3560.5	3961.4	4422.2	4951.8	5526.5	6015.1	6306.9
62.5°	1823.3	1877.4	1996.3	2187.3	2454.6	2889.1	3383.4	4012.2	4784.5	5556.0	6251.2
65°	937.1	966.6	1028.9	1144.5	1352.7	1677.4	2120.9	2748.1	3631.0	4582.8	5587.9
67.5°	593.6	599.3	613.2	629.6	682.9	795.2	1001.8	1392.9	2119.3	3112.1	4288.5
70°	513.2	513.2	506.7	504.2	510.8	526.3	558.3	649.3	894.4	1477.3	2473.4
72.5°	469.8	464.8	453.4	444.3	442.7	442.7	449.3	463.2	502.6	601.8	968.2
75°	432.9	418.9	403.4	392.7	388.6	384.5	383.7	386.1	394.3	409.9	462.4
77.5°	387.8	369.7	351.7	341.0	336.1	330.4	325.5	319.7	315.6	320.6	343.5
80°	333.7	313.2	299.2	292.7	287.8	279.6	268.9	259.1	250.0	248.4	262.3
82.5°	268.9	245.1	245.9	248.4	239.4	227.9	216.4	205.8	190.2	182.0	190.2
85°	217.3	205.0	199.2	214.8	201.7	184.5	166.4	147.6	123.0	103.3	112.3
87.5°	84.4	84.4	126.3	194.3	174.6	142.7	122.2	104.1	64.8	50.0	50.8
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°	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1	1924.1
2.5°	1927.4	1929.1	1928.2	1927.4	1927.4	1926.6	1927.4	1927.4
5°	1942.2	1946.3	1946.3	1947.9	1947.9	1948.7	1949.6	1948.7
7.5°	1964.3	1971.7	1976.6	1982.3	1983.2	1984.0	1985.6	1984.0
10°	1986.4	2001.2	2011.9	2022.5	2027.4	2029.1	2030.7	2030.7
12.5°	2014.3	2034.8	2053.7	2072.5	2081.5	2086.5	2086.5	2089.7
15°	2060.2	2080.7	2102.9	2128.3	2143.9	2152.0	2154.5	2154.5
17.5°	2125.0	2143.0	2161.9	2186.5	2206.2	2216.8	2219.3	2218.5
20°	2200.4	2217.6	2228.3	2243.9	2261.1	2273.4	2276.7	2276.7
22.5°	2286.5	2296.3	2298.0	2302.9	2316.8	2333.2	2340.6	2342.2
25°	2381.6	2384.1	2377.5	2377.5	2386.5	2402.1	2409.5	2410.3
27.5°	2504.6	2492.3	2475.9	2470.1	2475.9	2493.9	2502.9	2506.2
30°	2657.9	2628.4	2590.7	2570.2	2566.9	2590.7	2607.1	2609.5
32.5°	2833.3	2790.7	2740.7	2698.9	2688.2	2703.0	2722.6	2721.8
35°	3041.6	2990.7	2930.1	2876.8	2852.2	2866.9	2894.8	2898.1
37.5°	3281.8	3215.4	3145.7	3078.5	3039.9	3044.0	3073.5	3083.4
40°	3549.9	3463.8	3376.1	3285.9	3230.9	3220.3	3256.4	3262.1
42.5°	3836.8	3726.1	3615.4	3503.9	3433.4	3417.0	3458.9	3456.4
45°	4142.6	4001.6	3872.0	3749.1	3665.5	3640.9	3675.3	3675.3
47.5°	4471.3	4297.5	4143.4	4004.0	3913.0	3877.8	3910.6	3913.0
50°	4819.8	4635.3	4454.1	4299.2	4190.1	4145.1	4187.7	4194.2
52.5°	5166.6	4987.0	4804.2	4627.1	4495.1	4440.2	4489.4	4510.7
55°	5518.3	5342.0	5167.4	4994.4	4837.8	4773.0	4825.5	4852.6
57.5°	5889.6	5726.5	5560.1	5385.5	5234.6	5133.8	5189.5	5225.6
60°	6325.0	6185.6	6012.6	5820.0	5667.5	5565.0	5597.0	5628.9
62.5°	6669.3	6723.4	6576.7	6353.7	6157.7	6026.6	6057.7	6091.3
65°	6502.9	7057.9	7188.3	6962.8	6691.4	6487.3	6474.2	6491.4
67.5°	5435.5	6513.5	7299.7	7514.5	7287.5	7003.8	6951.3	6976.7
70°	3635.9	4978.8	6366.0	7398.9	7673.6	7563.7	7512.1	7527.7
72.5°	1746.2	2899.7	4318.9	5692.1	6528.3	6912.0	7034.9	7094.8
75°	638.6	1151.0	2081.5	3136.7	3786.8	4383.6	4773.0	4932.1
77.5°	385.3	464.8	664.9	1001.0	1133.8	1269.1	1216.6	1242.9
80°	285.3	322.2	364.8	409.9	424.7	424.7	408.3	395.2
82.5°	200.0	223.8	244.3	268.9	275.5	263.2	216.4	172.2
85°	128.7	139.4	148.4	164.0	159.9	152.5	102.5	91.0
87.5°	59.0	67.2	70.5	77.9	74.6	71.3	50.8	42.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)