

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: P299408

Luminaire Tested: **GLNA-AF-03-LED-E1-5NQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299408  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-5NQ-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14597.9 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

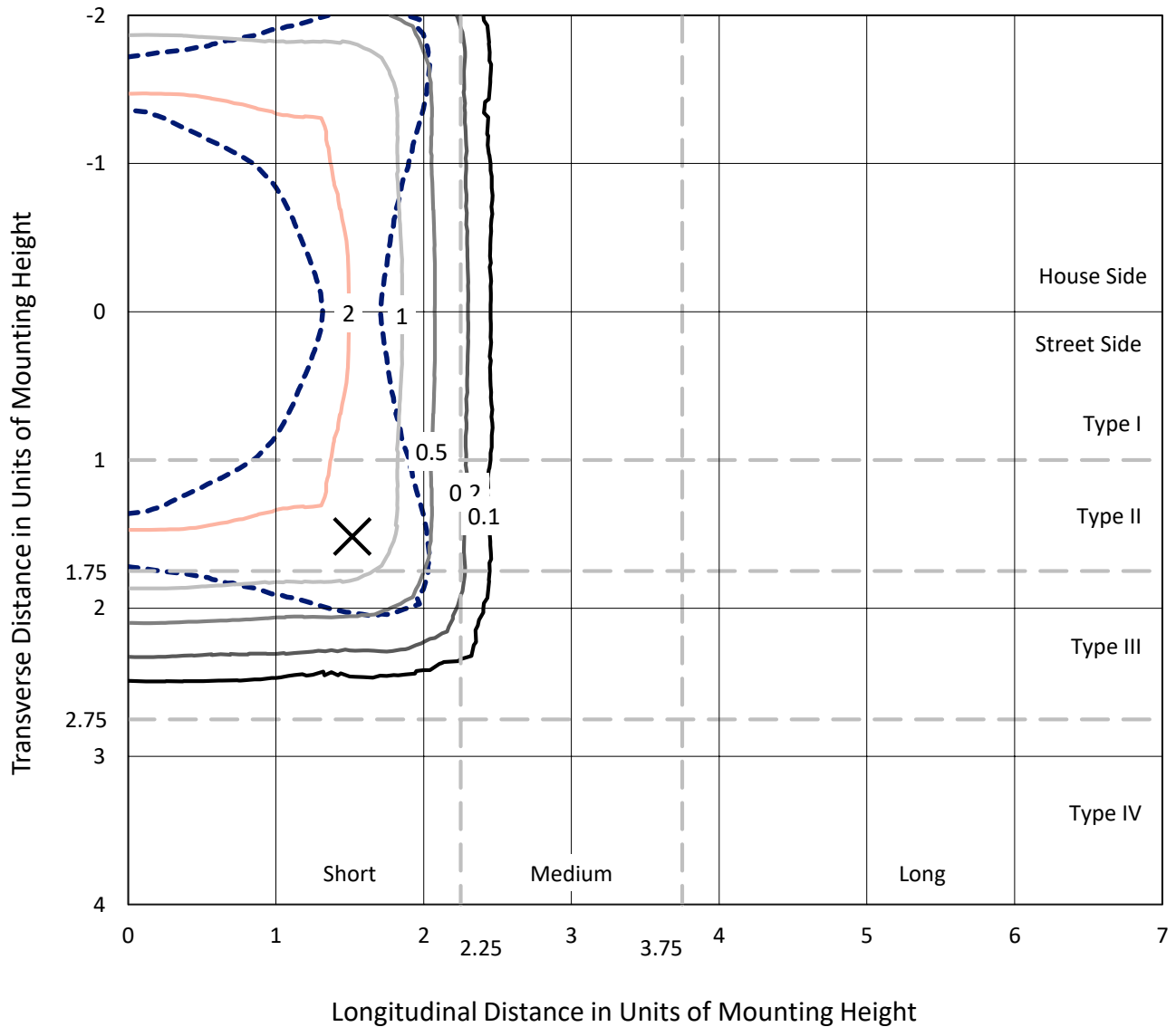
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P299408  
 CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

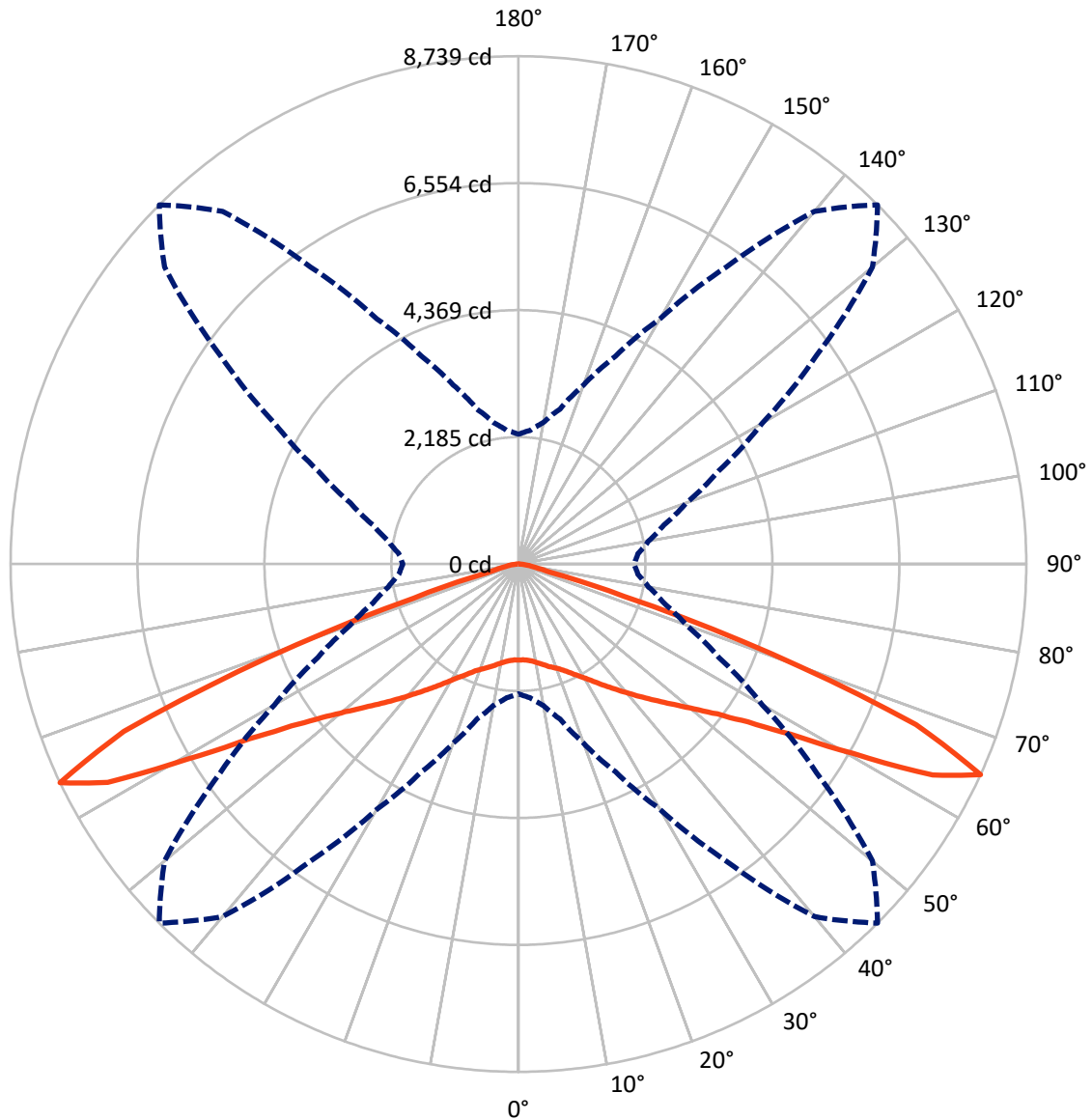
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P299408  
CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7298.9	0.0	7298.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7298.9	0.0	7298.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14597.9	0.0	14597.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.0	1.1
10°-20°	516.3	3.5
20°-30°	965.5	6.6
30°-40°	1632.8	11.2
40°-50°	2669.9	18.3
50°-60°	4245.5	29.1
60°-70°	3837.7	26.3
70°-80°	485.7	3.3
80°-90°	83.5	0.6
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°	14597.9	100.0
0°-180°	14597.9	100.0



REPORT NUMBER: P299408

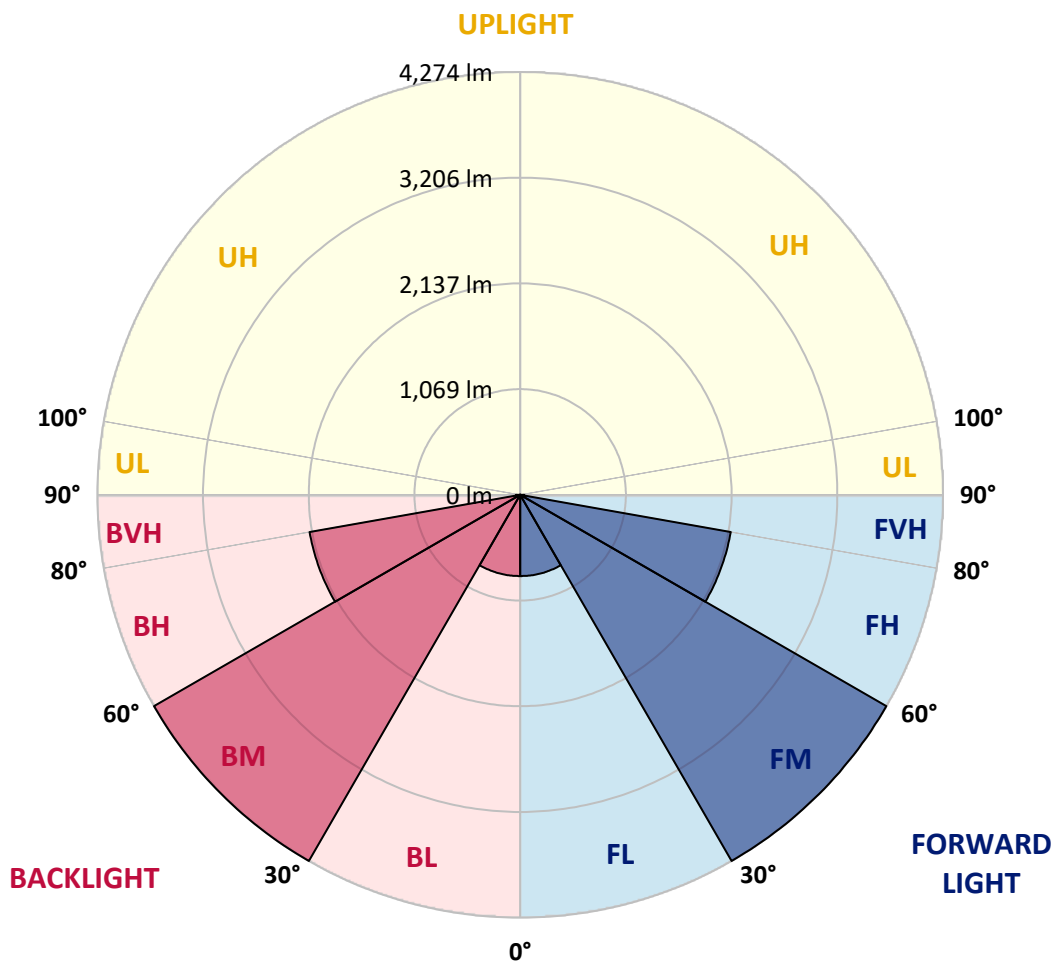
CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	821.4	5.6			
FM (30°-60°)	4274.1	29.3			
FH (60°-80°)	2161.7	14.8			G2/5000
FVH (80°-90°)	41.8	0.3			G1/100
BL (0°-30°)	821.4	5.6	B2/1000		
BM (30°-60°)	4274.1	29.3	B3/5000		
BH (60°-80°)	2161.7	14.8	B3/2500		G2/5000
BVH (80°-90°)	41.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





REPORT NUMBER: P299408

CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1653.1	1654.5	1655.9	1654.5	1655.9	1653.8	1652.4	1654.5	1652.4	1650.4	1651.8
5°	1667.5	1668.2	1668.2	1666.1	1668.2	1666.8	1664.7	1667.5	1665.4	1663.4	1664.7
7.5°	1691.4	1694.1	1692.1	1690.0	1691.4	1690.0	1688.7	1689.4	1688.7	1686.6	1687.3
10°	1723.5	1725.6	1724.2	1723.5	1724.9	1724.2	1722.9	1722.2	1722.9	1720.8	1720.8
12.5°	1762.5	1761.8	1761.1	1761.8	1763.9	1763.9	1763.2	1763.9	1765.2	1765.9	1764.6
15°	1800.8	1802.2	1802.2	1802.2	1806.3	1809.7	1811.7	1813.1	1815.8	1816.5	1813.8
17.5°	1848.7	1848.7	1848.0	1848.7	1852.8	1858.2	1860.3	1863.0	1865.7	1867.8	1864.4
20°	1902.0	1903.4	1903.4	1904.7	1910.2	1916.3	1916.3	1917.7	1916.3	1917.7	1915.7
22.5°	1966.9	1971.0	1971.0	1971.7	1977.2	1984.7	1982.7	1984.7	1981.3	1984.0	1981.3
25°	2051.7	2057.9	2056.5	2056.5	2060.6	2065.4	2066.1	2070.2	2069.5	2072.9	2070.9
27.5°	2147.4	2157.0	2159.7	2159.0	2161.8	2166.6	2167.9	2172.7	2170.0	2172.7	2171.4
30°	2262.3	2266.4	2271.9	2273.9	2277.3	2282.1	2282.1	2282.8	2279.4	2283.5	2285.5
32.5°	2381.2	2388.8	2394.2	2406.5	2412.7	2416.1	2415.4	2416.8	2413.4	2418.8	2422.9
35°	2538.5	2544.0	2552.8	2562.4	2570.6	2569.9	2567.9	2568.6	2568.6	2573.4	2577.5
37.5°	2727.9	2729.2	2740.9	2754.5	2758.6	2754.5	2742.2	2739.5	2733.3	2739.5	2746.3
40°	2928.2	2933.0	2956.2	2965.1	2967.2	2959.6	2941.9	2931.6	2917.9	2925.4	2935.0
42.5°	3138.1	3147.6	3168.8	3184.6	3191.4	3186.6	3162.0	3146.3	3128.5	3132.6	3142.2
45°	3370.5	3382.1	3412.2	3427.3	3440.3	3432.7	3408.8	3384.9	3356.8	3358.9	3373.9
47.5°	3630.3	3641.9	3680.9	3706.2	3713.0	3711.7	3685.0	3652.2	3613.9	3612.5	3625.5
50°	3921.6	3933.2	3981.7	4020.7	4040.5	4038.5	4007.0	3960.5	3914.0	3914.7	3931.1
52.5°	4206.0	4220.3	4270.9	4337.9	4376.9	4404.9	4385.8	4342.0	4285.3	4286.6	4301.7
55°	4472.6	4496.5	4554.6	4645.6	4718.0	4796.7	4819.2	4817.9	4783.7	4793.2	4808.3
57.5°	4601.8	4637.4	4726.9	4870.5	5018.2	5178.2	5313.5	5414.7	5457.8	5522.7	5507.7
60°	4357.1	4413.8	4545.8	4757.0	5048.9	5382.6	5740.1	6089.5	6387.6	6612.5	6483.3
62.5°	3567.4	3641.3	3801.2	4072.0	4513.6	5047.6	5731.9	6557.8	7457.5	8000.4	7612.7
65°	2232.2	2308.8	2471.5	2761.4	3278.2	3942.1	4870.5	6239.2	7920.4	8738.7	7949.8
67.5°	870.3	912.0	1000.2	1185.5	1573.8	2164.5	3096.4	4649.7	6660.4	7377.5	6536.6
70°	436.2	440.3	456.7	490.9	574.3	745.9	1134.9	2155.6	3819.7	4613.4	3682.3
72.5°	315.2	315.9	324.1	339.1	365.8	404.1	477.9	659.7	1242.2	1898.6	1164.3
75°	241.3	244.1	248.9	257.1	271.4	290.6	317.2	380.1	471.1	546.3	459.4
77.5°	186.0	191.4	194.8	202.4	211.3	224.2	231.8	255.7	297.4	313.1	308.3
80°	141.5	146.3	153.8	160.0	166.1	172.3	169.6	180.5	202.4	215.4	208.5
82.5°	90.2	95.7	117.6	123.1	125.8	129.9	125.1	125.8	135.4	143.6	135.4
85°	58.1	61.5	74.5	81.4	82.0	84.8	82.7	77.9	77.9	71.1	80.0
87.5°	26.7	27.3	33.5	39.7	41.0	36.9	36.2	34.9	28.0	26.7	28.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299408

CATALOG NUMBER: GLNA-AF-03-LED-E1-5NQ-7030-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8	1651.8
2.5°	1651.1	1652.4	1653.1	1655.2	1655.9	1655.9	1656.5	1657.9
5°	1664.1	1666.1	1666.8	1669.5	1670.2	1669.5	1670.9	1671.6
7.5°	1687.3	1690.7	1692.1	1694.8	1692.8	1695.5	1696.2	1696.2
10°	1721.5	1724.9	1725.6	1728.3	1727.0	1728.3	1728.3	1727.0
12.5°	1766.6	1767.3	1765.2	1767.3	1764.6	1765.9	1763.9	1762.5
15°	1816.5	1814.5	1809.7	1809.7	1805.6	1806.3	1805.6	1804.9
17.5°	1865.1	1861.0	1857.5	1856.2	1852.8	1852.1	1850.0	1850.0
20°	1918.4	1916.3	1914.3	1911.6	1908.1	1904.7	1904.0	1905.4
22.5°	1982.7	1982.0	1982.0	1980.6	1975.8	1972.4	1970.4	1970.4
25°	2068.8	2062.6	2062.6	2062.0	2059.9	2057.9	2053.8	2055.8
27.5°	2165.9	2162.5	2165.2	2164.5	2162.5	2162.5	2159.7	2159.7
30°	2285.5	2284.2	2288.3	2284.8	2278.0	2277.3	2274.6	2271.2
32.5°	2423.6	2422.3	2428.4	2424.3	2413.4	2407.2	2401.8	2399.0
35°	2577.5	2578.1	2585.7	2582.9	2570.6	2566.5	2556.9	2555.6
37.5°	2745.6	2756.6	2769.6	2772.3	2762.0	2759.3	2749.1	2743.6
40°	2943.2	2957.6	2977.4	2982.2	2971.3	2969.2	2954.8	2947.3
42.5°	3153.8	3178.4	3203.0	3207.1	3196.2	3185.2	3171.6	3166.1
45°	3389.0	3418.4	3450.5	3458.7	3442.3	3429.3	3411.5	3411.5
47.5°	3652.9	3689.8	3726.0	3748.6	3733.6	3719.9	3698.7	3685.0
50°	3964.6	4015.2	4062.4	4085.6	4061.7	4035.7	3998.8	3986.5
52.5°	4355.7	4410.4	4451.4	4439.1	4402.2	4365.9	4325.6	4309.2
55°	4854.8	4873.2	4873.2	4826.7	4752.9	4692.1	4628.5	4607.3
57.5°	5479.0	5407.9	5298.5	5159.7	4985.4	4833.6	4731.0	4682.5
60°	6212.6	5870.7	5484.4	5105.0	4793.2	4536.2	4383.7	4314.0
62.5°	6701.4	5807.1	5033.2	4424.1	3975.6	3665.9	3455.3	3373.3
65°	6263.1	4843.2	3806.7	3077.9	2589.1	2273.9	2065.4	1988.8
67.5°	4587.5	3034.8	2027.1	1452.8	1064.5	849.1	763.7	728.1
70°	2059.2	1068.6	655.0	511.4	441.0	404.7	389.0	383.5
72.5°	620.8	449.2	378.8	341.8	313.8	296.0	283.0	281.7
75°	374.7	311.8	276.9	255.0	237.2	222.9	216.0	214.0
77.5°	261.8	229.0	212.6	196.9	183.2	172.3	166.1	161.3
80°	183.9	168.2	160.7	151.8	142.9	132.6	123.7	119.6
82.5°	123.1	119.6	119.6	114.2	106.7	97.1	79.3	75.2
85°	79.3	78.6	80.0	77.9	72.5	62.2	51.3	48.5
87.5°	36.9	37.6	41.7	41.0	39.7	32.8	26.0	24.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)