

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: P299900

Luminaire Tested: **GLNA-AF-05-LED-E1-5WQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299900  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
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-E1-5WQ-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24402.2 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 210  
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

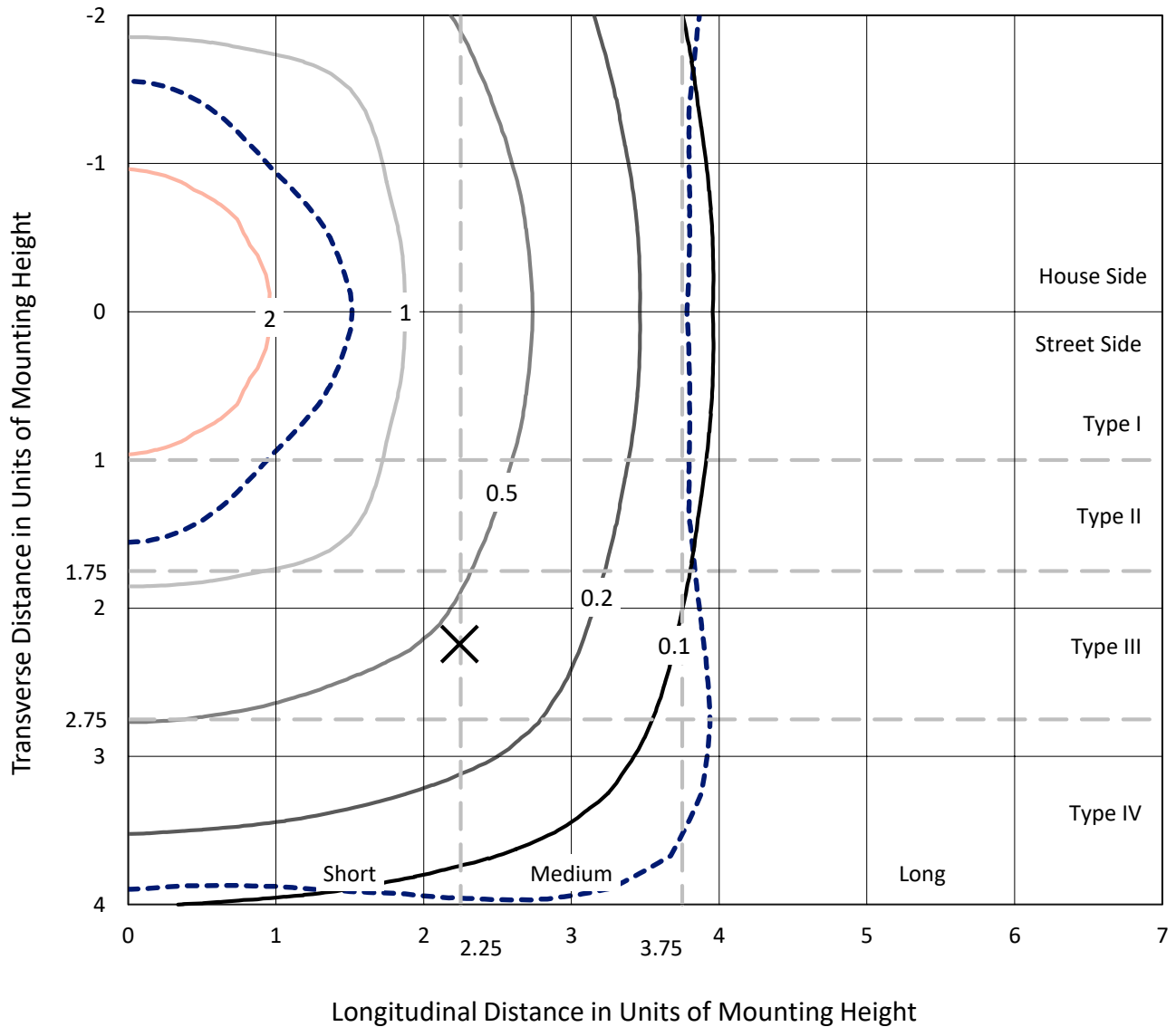


REPORT NUMBER: P299900

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

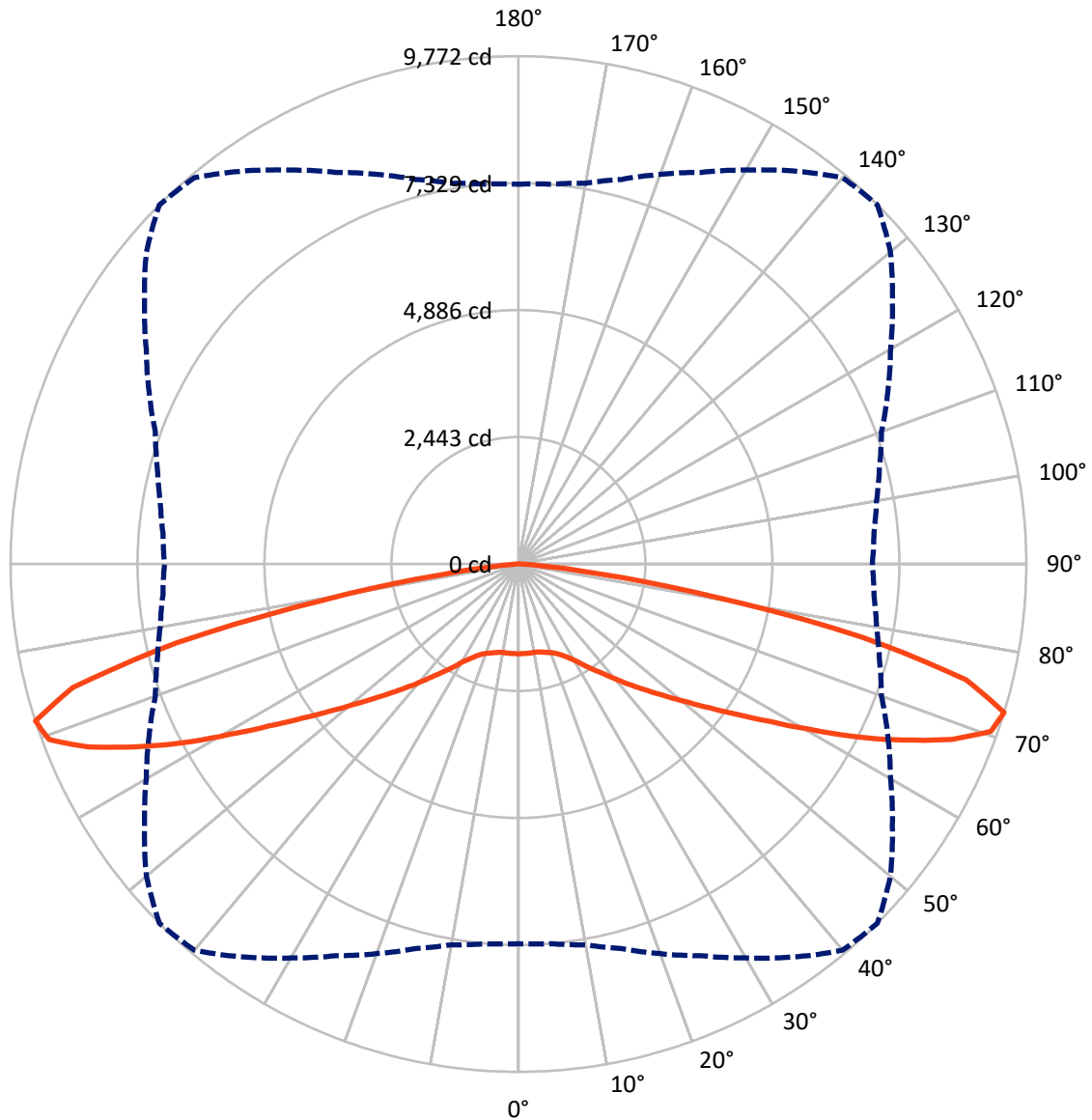


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299900

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12201.1	0.0	12201.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12201.1	0.0	12201.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	24402.2	0.0	24402.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.0	0.7
10°-20°	501.2	2.1
20°-30°	915.8	3.8
30°-40°	1579.0	6.5
40°-50°	2699.3	11.1
50°-60°	4375.2	17.9
60°-70°	7258.4	29.7
70°-80°	6392.9	26.2
80°-90°	515.4	2.1
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°	24402.2	100.0
0°-180°	24402.2	100.0



REPORT NUMBER: P299900

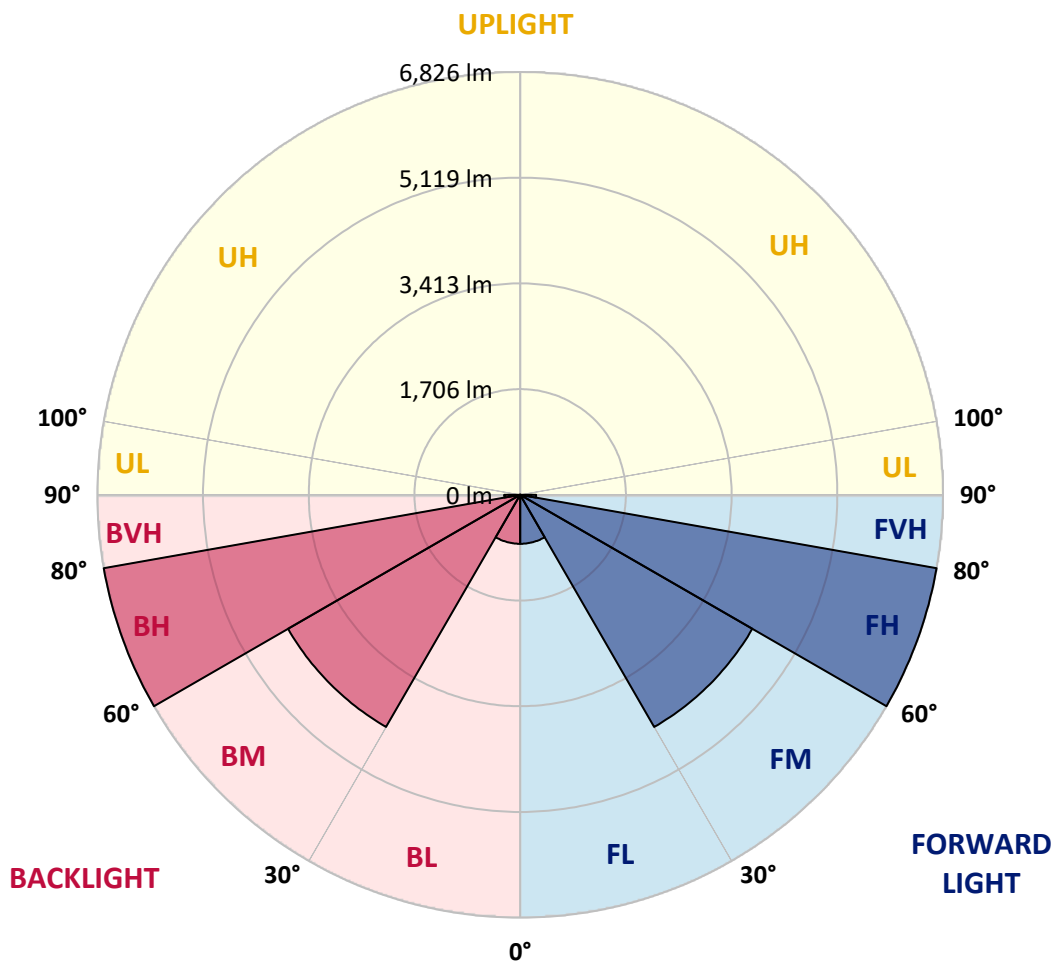
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	791.0	3.2			
FM	(30°-60°)	4326.8	17.7			
FH	(60°-80°)	6825.6	28.0			G3/7500
FVH	(80°-90°)	257.7	1.1			G3/500
BL	(0°-30°)	791.0	3.2	B2/1000		
BM	(30°-60°)	4326.8	17.7	B3/5000		
BH	(60°-80°)	6825.6	28.0	B5		G3/7500
BVH	(80°-90°)	257.7	1.1			G3/500
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





REPORT NUMBER: P299900

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1
2.5°	1728.1	1729.2	1730.3	1729.2	1729.2	1728.1	1726.9	1728.1	1726.9	1724.7	1725.8
5°	1733.7	1735.9	1735.9	1733.7	1734.8	1733.7	1731.4	1732.5	1730.3	1726.9	1726.9
7.5°	1740.4	1741.5	1741.5	1739.3	1740.4	1738.1	1735.9	1734.8	1732.5	1728.1	1724.7
10°	1750.4	1751.6	1750.4	1748.2	1748.2	1744.8	1739.3	1737.0	1732.5	1725.8	1722.5
12.5°	1761.6	1762.8	1761.6	1759.4	1758.3	1752.7	1748.2	1744.8	1741.5	1735.9	1730.3
15°	1777.3	1779.5	1777.3	1772.8	1769.5	1765.0	1762.8	1763.9	1765.0	1760.5	1754.9
17.5°	1806.4	1807.5	1804.2	1794.1	1789.6	1785.1	1785.1	1787.4	1790.7	1788.5	1782.9
20°	1860.1	1856.8	1848.9	1836.6	1831.0	1823.2	1822.1	1823.2	1823.2	1822.1	1817.6
22.5°	1927.3	1925.0	1915.0	1899.3	1891.5	1887.0	1880.3	1874.7	1873.6	1870.2	1865.7
25°	2007.9	2006.7	1994.4	1981.0	1975.4	1969.8	1964.2	1956.4	1949.7	1941.8	1937.4
27.5°	2110.8	2106.4	2088.4	2081.7	2073.9	2070.5	2062.7	2053.7	2048.2	2038.1	2032.5
30°	2223.9	2223.9	2209.3	2207.1	2207.1	2199.2	2190.3	2174.6	2164.5	2154.5	2151.1
32.5°	2336.9	2338.0	2323.5	2328.0	2331.3	2336.9	2339.1	2333.5	2326.8	2325.7	2319.0
35°	2500.3	2495.8	2481.3	2484.6	2483.5	2482.4	2482.4	2494.7	2497.0	2499.2	2485.8
37.5°	2702.9	2702.9	2688.3	2688.3	2681.6	2674.9	2666.0	2673.8	2686.1	2689.5	2680.5
40°	2934.6	2942.4	2924.5	2923.4	2925.6	2904.3	2894.3	2906.6	2914.4	2927.8	2917.8
42.5°	3207.7	3202.1	3184.1	3181.9	3169.6	3162.9	3153.9	3164.0	3176.3	3185.3	3188.6
45°	3469.5	3465.1	3444.9	3444.9	3432.6	3427.0	3431.5	3448.3	3453.9	3466.2	3478.5
47.5°	3728.1	3722.5	3709.1	3714.7	3715.8	3725.8	3740.4	3756.1	3771.7	3788.5	3794.1
50°	3992.2	3993.3	3978.8	3992.2	4009.0	4037.0	4076.2	4101.9	4134.4	4155.6	4162.3
52.5°	4232.8	4237.3	4253.0	4284.3	4317.9	4372.7	4439.9	4502.6	4556.3	4592.1	4589.9
55°	4521.6	4528.3	4566.4	4620.1	4674.9	4757.8	4857.4	4968.2	5057.7	5109.2	5076.7
57.5°	4890.9	4905.5	4948.0	5020.8	5102.5	5209.9	5346.5	5513.2	5652.0	5721.4	5668.8
60°	5397.9	5406.9	5458.4	5539.0	5637.5	5770.6	5953.1	6176.9	6372.8	6464.5	6404.1
62.5°	6066.1	6082.9	6124.3	6206.0	6306.7	6457.8	6680.6	6960.4	7204.3	7331.9	7195.4
65°	6864.1	6917.8	6952.5	7035.3	7129.4	7289.4	7522.2	7822.1	8084.0	8168.0	8010.2
67.5°	7654.3	7701.3	7761.7	7856.8	7952.0	8132.2	8348.2	8639.2	8926.8	9002.9	8757.8
70°	8000.1	8027.0	8121.0	8250.8	8433.2	8645.9	8895.5	9222.3	9578.2	9640.9	9329.7
72.5°	7307.3	7334.2	7439.4	7659.9	7977.7	8315.7	8751.1	9231.2	9701.3	9771.8	9343.2
75°	5526.7	5483.0	5638.6	5930.7	6359.3	6830.5	7439.4	8127.7	8807.1	8895.5	8384.0
77.5°	2856.2	2850.6	2968.1	3330.8	3842.2	4378.3	5048.8	5826.6	6491.4	6760.0	6343.7
80°	804.7	813.7	869.6	1049.8	1348.6	1735.9	2259.7	2988.3	3532.2	3809.8	3577.0
82.5°	315.6	340.2	361.5	395.1	434.3	491.3	655.9	975.9	1309.5	1564.7	1281.5
85°	113.0	120.9	171.2	202.6	205.9	217.1	247.3	288.8	348.1	415.2	341.4
87.5°	42.5	47.0	54.8	90.7	89.5	81.7	99.6	104.1	78.3	71.6	88.4
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: P299900

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-800

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1
2.5°	1723.6	1724.7	1724.7	1725.8	1726.9	1726.9	1729.2	1729.2
5°	1724.7	1724.7	1722.5	1723.6	1722.5	1722.5	1723.6	1723.6
7.5°	1722.5	1721.3	1719.1	1718.0	1715.7	1715.7	1715.7	1715.7
10°	1719.1	1718.0	1715.7	1714.6	1713.5	1713.5	1713.5	1713.5
12.5°	1728.1	1724.7	1722.5	1721.3	1721.3	1721.3	1721.3	1721.3
15°	1751.6	1743.7	1738.1	1738.1	1739.3	1741.5	1741.5	1743.7
17.5°	1780.7	1771.7	1766.1	1761.6	1763.9	1767.2	1769.5	1771.7
20°	1815.4	1810.9	1803.0	1798.6	1798.6	1803.0	1805.3	1806.4
22.5°	1863.5	1860.1	1856.8	1851.2	1851.2	1853.4	1857.9	1857.9
25°	1935.1	1932.9	1930.6	1926.2	1925.0	1925.0	1927.3	1929.5
27.5°	2024.6	2025.8	2023.5	2022.4	2019.1	2017.9	2021.3	2020.2
30°	2144.4	2150.0	2155.6	2151.1	2145.5	2142.2	2138.8	2134.3
32.5°	2306.7	2300.0	2295.5	2287.7	2277.6	2268.6	2261.9	2254.1
35°	2460.0	2448.8	2444.4	2451.1	2449.9	2444.4	2436.5	2429.8
37.5°	2648.0	2645.8	2648.0	2660.4	2658.1	2663.7	2648.0	2646.9
40°	2885.3	2887.6	2903.2	2917.8	2925.6	2933.4	2924.5	2915.5
42.5°	3160.6	3159.5	3165.1	3185.3	3198.7	3207.7	3188.6	3186.4
45°	3451.6	3443.8	3448.3	3465.1	3478.5	3488.6	3467.3	3467.3
47.5°	3771.7	3758.3	3743.8	3762.8	3770.6	3777.3	3760.5	3754.9
50°	4128.8	4100.8	4069.4	4077.3	4077.3	4075.0	4053.8	4052.7
52.5°	4538.4	4486.9	4429.8	4408.6	4396.3	4382.8	4345.9	4328.0
55°	5009.6	4932.4	4842.8	4788.0	4758.9	4721.9	4660.4	4643.6
57.5°	5560.2	5439.4	5284.9	5217.8	5152.8	5092.4	5024.1	5005.1
60°	6212.7	6034.8	5830.0	5705.7	5635.2	5577.0	5506.5	5503.1
62.5°	6940.2	6659.3	6427.6	6315.7	6264.2	6212.7	6145.6	6154.5
65°	7680.0	7386.8	7169.7	7079.0	7030.9	6988.3	6921.2	6931.3
67.5°	8409.7	8140.0	7901.6	7808.7	7755.0	7701.3	7640.8	7650.9
70°	8933.5	8598.9	8330.3	8124.3	7995.6	7850.1	7756.1	7732.6
72.5°	8783.5	8267.6	7841.2	7432.7	7193.2	6998.4	6866.3	6809.3
75°	7601.7	6896.6	6348.2	5846.7	5564.7	5335.3	5168.5	5064.4
77.5°	5645.3	4852.9	4204.9	3627.4	3170.7	2864.1	2648.0	2508.1
80°	3090.1	2350.3	1718.0	1207.6	887.5	737.6	651.4	610.0
82.5°	962.5	621.2	457.8	395.1	367.1	351.4	325.7	284.3
85°	306.7	268.6	249.6	238.4	227.2	198.1	136.5	124.2
87.5°	118.6	122.0	120.9	114.2	116.4	83.9	67.2	59.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)