

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: P299227

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
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-SL2-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

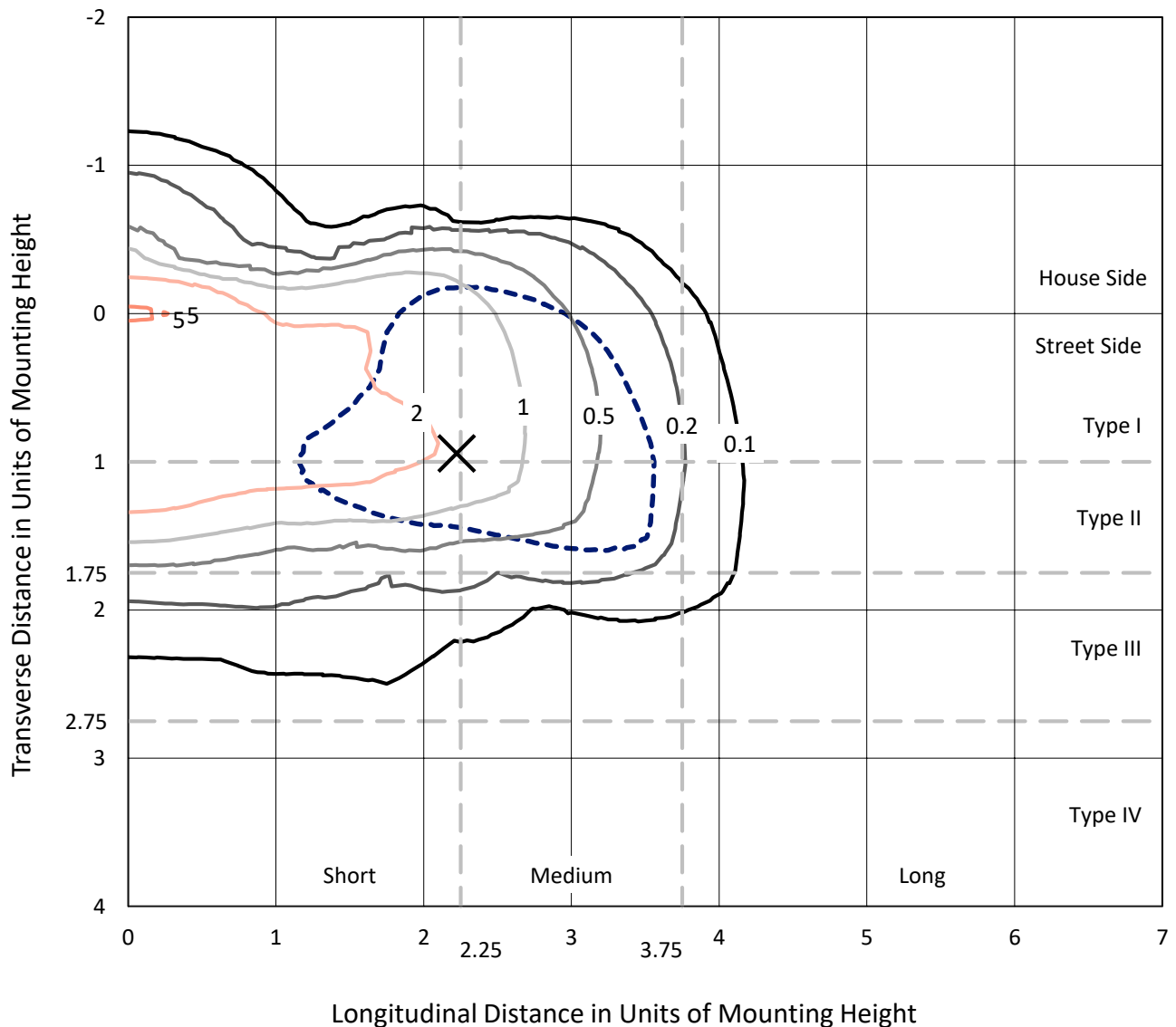
Lumens per Lamp: N/A  
Luminaire Lumens: 10154 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (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

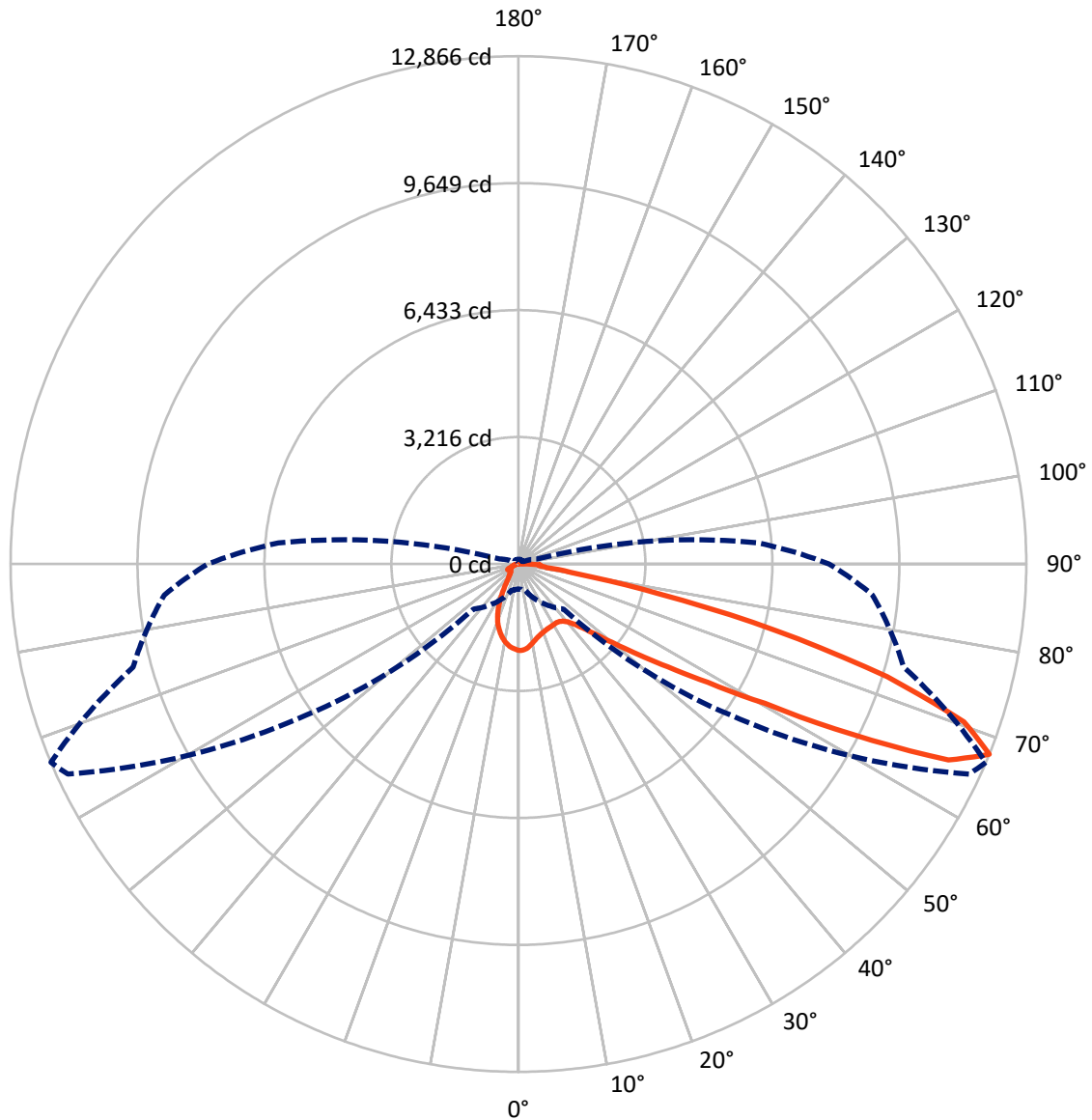
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1682.4	0.0	1682.4
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	8471.6	0.0	8471.6
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	10154.0	0.0	10154.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.9	1.8
10°-20°	432.4	4.3
20°-30°	586.1	5.8
30°-40°	833.2	8.2
40°-50°	1393.9	13.7
50°-60°	2205.1	21.7
60°-70°	2809.1	27.7
70°-80°	1471.4	14.5
80°-90°	236.0	2.3
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°	10154.0	100.0
0°-180°	10154.0	100.0

**Coefficient of Utilization**



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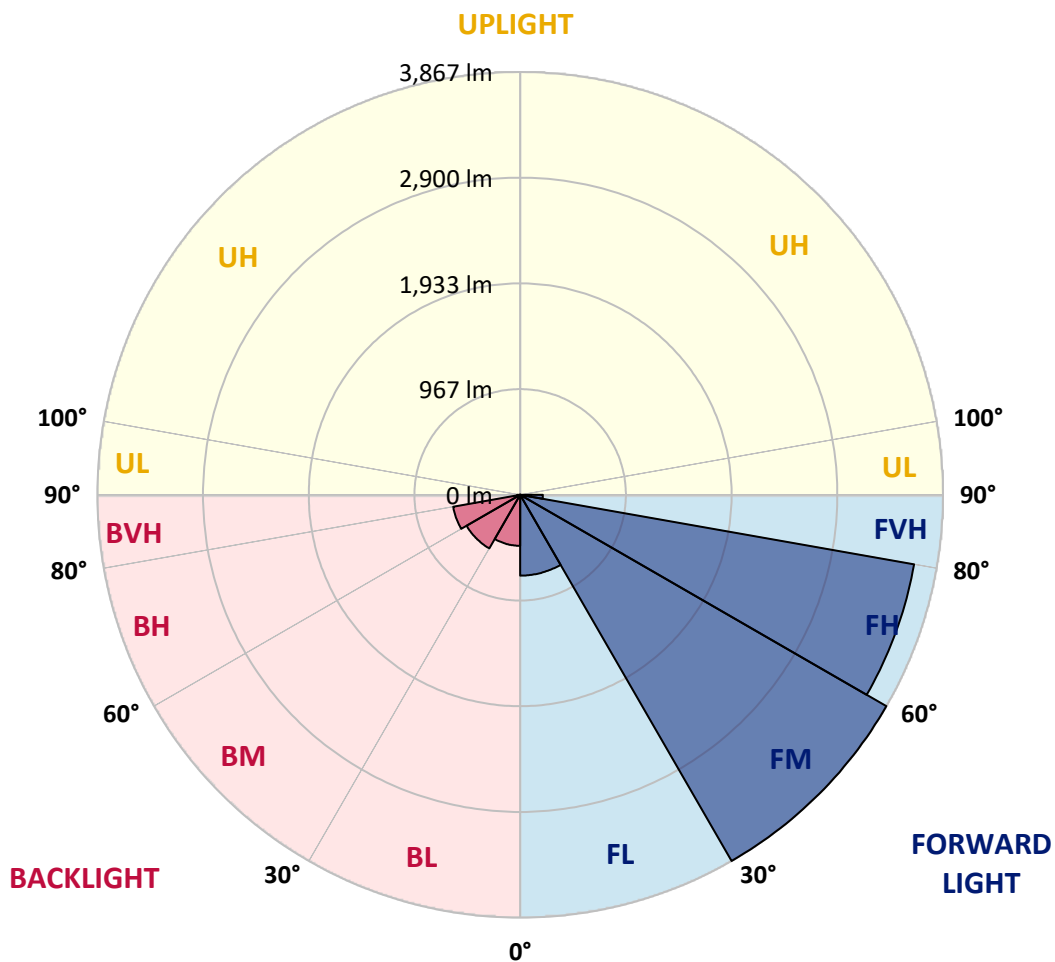
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	739.0	7.3			
FM (30°-60°)	3866.9	38.1			
FH (60°-80°)	3658.3	36.0			G2/5000
FVH (80°-90°)	207.5	2.0			G2/225
BL (0°-30°)	466.3	4.6	B1/500		
BM (30°-60°)	565.3	5.6	B1/1000		
BH (60°-80°)	622.3	6.1	B2/1000		G2/1000
BVH (80°-90°)	28.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2100.1	2103.6	2114.6	2121.6	2153.1	2166.7	2176.2	2185.7	2187.2	2191.7	2187.2
5°	1879.7	1887.3	1907.8	1930.8	1991.9	2040.0	2090.6	2143.1	2152.6	2186.7	2196.2
7.5°	1709.0	1707.0	1724.0	1751.6	1814.1	1880.7	1969.4	2074.0	2094.6	2171.2	2208.2
10°	1584.3	1582.8	1600.8	1629.4	1689.0	1752.1	1852.2	1995.4	2024.5	2146.6	2219.7
12.5°	1492.2	1492.7	1510.7	1542.3	1602.8	1666.4	1768.1	1919.3	1956.4	2118.1	2231.8
15°	1431.1	1435.1	1449.6	1483.2	1542.3	1605.8	1705.5	1862.2	1903.8	2095.6	2245.3
17.5°	1410.6	1417.1	1422.1	1446.6	1497.2	1560.8	1658.4	1820.2	1864.2	2080.0	2257.3
20°	1429.6	1437.1	1427.6	1436.1	1468.1	1524.2	1621.4	1787.1	1832.2	2062.5	2258.8
22.5°	1511.2	1518.2	1490.2	1465.6	1463.6	1497.7	1590.8	1761.1	1807.6	2049.5	2259.3
25°	1654.9	1659.4	1612.4	1555.3	1499.7	1488.2	1569.3	1743.0	1792.6	2038.0	2249.8
27.5°	1831.2	1834.7	1780.6	1696.5	1584.8	1510.7	1561.8	1732.5	1784.1	2028.0	2233.8
30°	2045.5	2062.0	1989.4	1883.2	1720.5	1577.3	1576.8	1727.0	1774.6	2010.9	2202.2
32.5°	2264.8	2271.8	2221.7	2114.1	1903.3	1694.5	1618.9	1731.0	1772.1	1990.4	2162.2
35°	2487.1	2496.1	2463.6	2377.0	2153.1	1866.2	1701.0	1754.6	1787.6	1983.4	2134.1
37.5°	2775.0	2787.1	2742.0	2641.9	2457.1	2099.1	1837.7	1813.6	1835.2	2003.4	2125.6
40°	3230.2	3224.7	3093.0	2943.8	2789.6	2397.0	2033.0	1913.8	1926.3	2068.0	2151.6
42.5°	3760.0	3746.5	3519.6	3285.3	3155.1	2757.5	2291.3	2087.5	2085.0	2195.2	2243.3
45°	4182.6	4171.6	3967.3	3678.4	3574.2	3168.1	2625.3	2346.4	2327.9	2397.0	2412.5
47.5°	4411.4	4411.9	4294.3	4058.4	4055.9	3689.9	3054.5	2721.0	2688.9	2721.5	2704.9
50°	4331.3	4341.8	4329.3	4254.2	4495.6	4373.9	3614.8	3243.2	3178.6	3210.7	3147.1
52.5°	3943.8	3957.3	4031.4	4146.6	4680.3	5200.6	4438.0	3892.2	3817.1	3805.6	3734.9
55°	3256.8	3273.3	3424.5	3737.5	4526.6	5755.9	5736.9	4719.4	4599.7	4491.1	4461.0
57.5°	2244.8	2272.3	2515.7	2980.3	4029.4	5923.6	7283.6	5898.6	5655.3	5275.7	5282.7
60°	1265.3	1297.4	1584.3	2006.4	3025.9	5741.4	8460.3	7684.7	7171.0	6194.5	6246.6
62.5°	804.7	839.2	1057.0	1394.0	1815.6	4759.9	8942.5	10167.8	9515.4	7327.2	7378.3
65°	651.5	666.5	769.1	1150.7	1318.4	2867.7	8576.5	12213.3	11970.0	8764.8	8526.4
67.5°	635.9	640.9	694.0	965.9	1264.3	1611.9	6841.0	12595.9	12865.8	10107.2	9004.6
70°	628.4	645.9	782.1	921.8	1210.8	1359.5	4111.0	11547.3	11973.5	10458.3	8368.2
72.5°	304.9	303.9	393.6	833.7	1364.0	1410.1	2112.1	9343.1	9770.8	9060.7	6876.5
75°	245.9	224.8	214.8	305.4	1311.4	1456.1	1346.0	6428.9	6738.3	6074.9	4227.2
77.5°	233.3	208.3	190.8	191.3	554.3	1544.3	1140.2	3558.2	3648.3	2744.0	1158.2
80°	193.3	170.2	157.7	177.8	268.4	1470.6	1232.8	1610.3	1477.7	674.0	385.6
82.5°	134.2	122.2	118.7	149.2	214.8	1048.0	1433.6	865.3	725.6	337.5	237.8
85°	85.6	73.1	81.1	108.7	167.2	483.7	1476.7	674.5	536.3	214.3	134.2
87.5°	39.6	32.0	40.1	60.1	109.2	166.7	1405.1	757.6	552.3	113.2	84.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2191.2	2181.7	2174.2	2160.2	2144.6	2129.6	2116.1	2099.1	2094.1	2089.5	2096.6
5°	2198.2	2188.7	2161.2	2118.1	2070.5	2026.0	1981.4	1943.3	1919.8	1906.8	1914.3
7.5°	2208.7	2195.2	2138.1	2059.0	1973.4	1895.3	1814.6	1750.1	1702.5	1680.0	1686.5
10°	2218.2	2192.2	2099.1	1980.4	1855.2	1739.0	1611.9	1506.7	1428.6	1387.5	1397.5
12.5°	2222.2	2180.7	2044.5	1882.2	1710.5	1540.2	1353.0	1195.7	1083.6	1042.5	1034.0
15°	2226.2	2167.7	1984.4	1770.6	1535.7	1294.9	1032.5	844.2	751.1	730.6	726.1
17.5°	2227.2	2145.1	1916.3	1649.4	1330.9	1003.0	706.0	586.4	586.9	619.9	623.9
20°	2216.7	2111.6	1833.7	1498.7	1085.6	693.5	484.7	464.2	539.8	622.4	632.4
22.5°	2192.7	2067.0	1740.0	1322.9	804.7	456.7	375.0	397.6	495.2	596.4	607.9
25°	2162.2	2012.9	1629.4	1119.1	532.8	326.5	314.5	342.0	408.1	475.7	482.2
27.5°	2120.6	1948.8	1505.2	885.8	346.0	268.9	276.9	295.4	322.5	352.5	355.5
30°	2067.0	1872.2	1372.5	645.9	261.4	241.9	253.4	263.4	274.9	291.9	293.4
32.5°	2005.4	1798.6	1236.3	446.2	231.8	227.8	236.8	241.9	250.9	261.4	262.4
35°	1953.9	1728.5	1095.1	315.5	219.3	217.3	223.3	225.3	233.8	245.4	246.4
37.5°	1924.3	1671.4	949.4	254.4	210.8	207.8	211.3	211.3	223.3	240.4	242.9
40°	1926.3	1639.9	803.7	229.8	203.8	199.8	200.3	200.3	215.8	234.3	235.8
42.5°	1980.9	1647.9	674.5	220.3	198.3	193.8	191.3	192.8	205.8	217.8	218.8
45°	2109.1	1704.5	553.3	214.3	192.8	191.3	185.8	185.3	190.3	195.8	195.8
47.5°	2319.4	1816.1	471.2	210.3	188.3	187.8	181.3	174.8	174.3	176.3	176.3
50°	2661.4	2008.4	416.1	205.8	185.3	181.3	173.8	163.7	160.2	161.7	161.7
52.5°	3174.1	2351.4	395.1	199.8	178.8	172.3	163.7	153.7	150.7	151.2	151.2
55°	3846.6	2878.2	392.1	192.8	171.8	161.2	154.2	146.7	143.2	144.2	144.2
57.5°	4668.3	3606.8	445.7	181.8	162.2	150.2	146.2	141.2	138.7	140.2	139.7
60°	5667.3	4560.2	661.0	170.2	152.7	140.2	140.2	136.2	134.2	135.7	135.2
62.5°	6817.9	5655.3	929.4	161.7	142.7	132.2	134.2	132.2	130.2	131.2	130.7
65°	7838.4	6368.8	870.3	155.2	132.7	124.7	128.2	127.2	125.7	126.7	126.2
67.5°	7868.0	6104.4	488.7	148.2	123.2	117.2	122.2	121.7	120.7	121.7	121.2
70°	7021.7	5154.5	275.4	135.2	113.2	108.2	115.2	114.7	113.7	115.7	115.2
72.5°	5625.7	3740.5	201.3	119.2	103.2	98.6	106.7	106.2	106.2	109.2	107.7
75°	3237.2	1924.8	160.7	102.1	92.6	89.1	96.1	96.6	97.6	101.6	98.6
77.5°	922.8	599.9	131.2	86.6	79.6	78.1	85.1	86.1	86.6	91.1	87.1
80°	343.0	276.4	108.2	72.6	65.1	65.6	72.1	73.6	74.1	78.6	73.6
82.5°	218.8	182.3	87.6	56.1	51.1	50.6	58.6	60.6	60.6	61.1	58.1
85°	127.7	109.2	66.1	40.6	36.1	34.6	43.6	47.1	45.6	44.6	42.6
87.5°	85.6	75.1	40.6	22.5	19.5	18.5	25.5	28.0	27.0	25.5	24.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)