

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: P299165

Luminaire Tested: **GLNA-AF-02-LED-E1-SL2-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299165  
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-02-LED-E1-SL2-7050-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9605 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

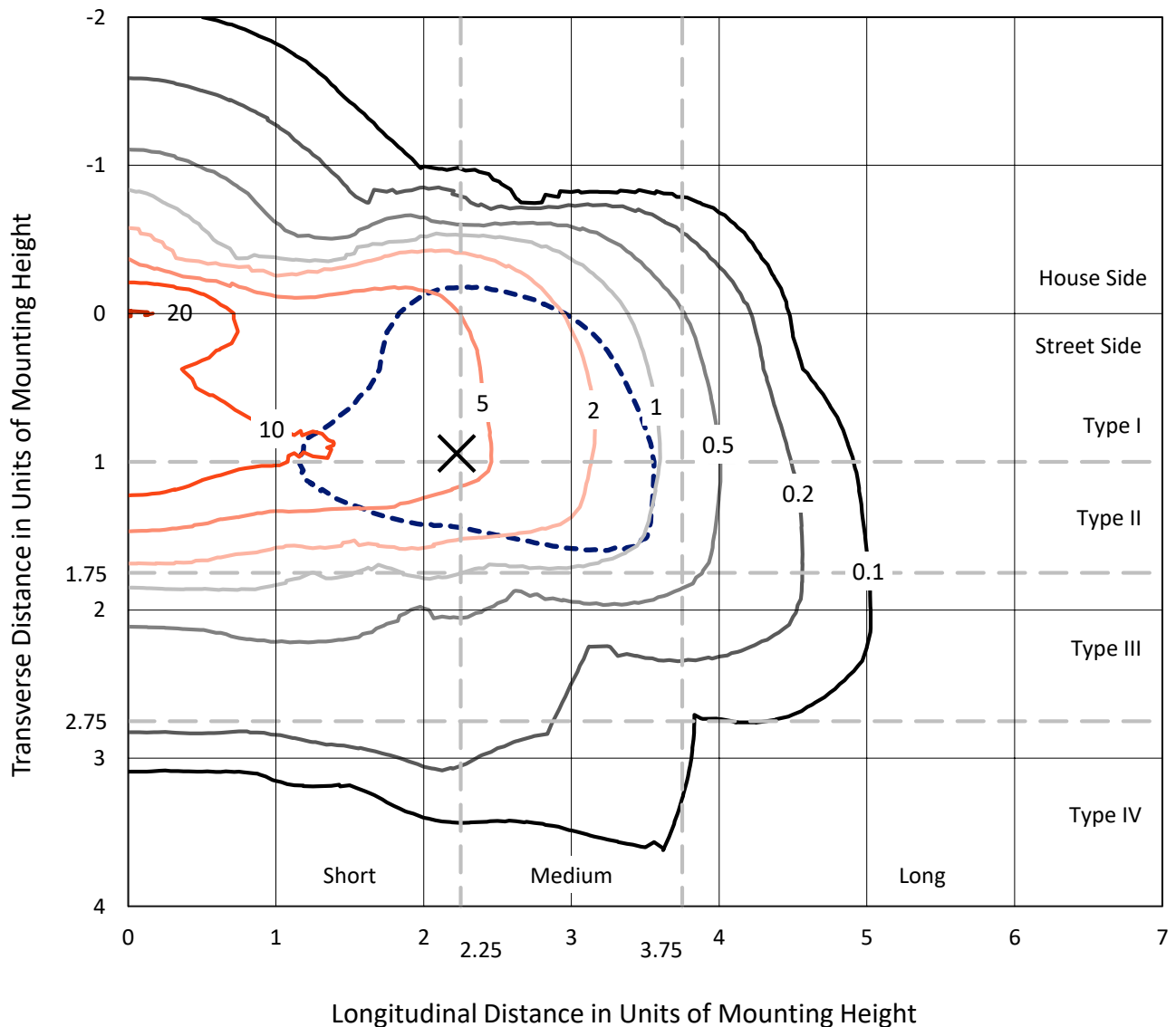
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

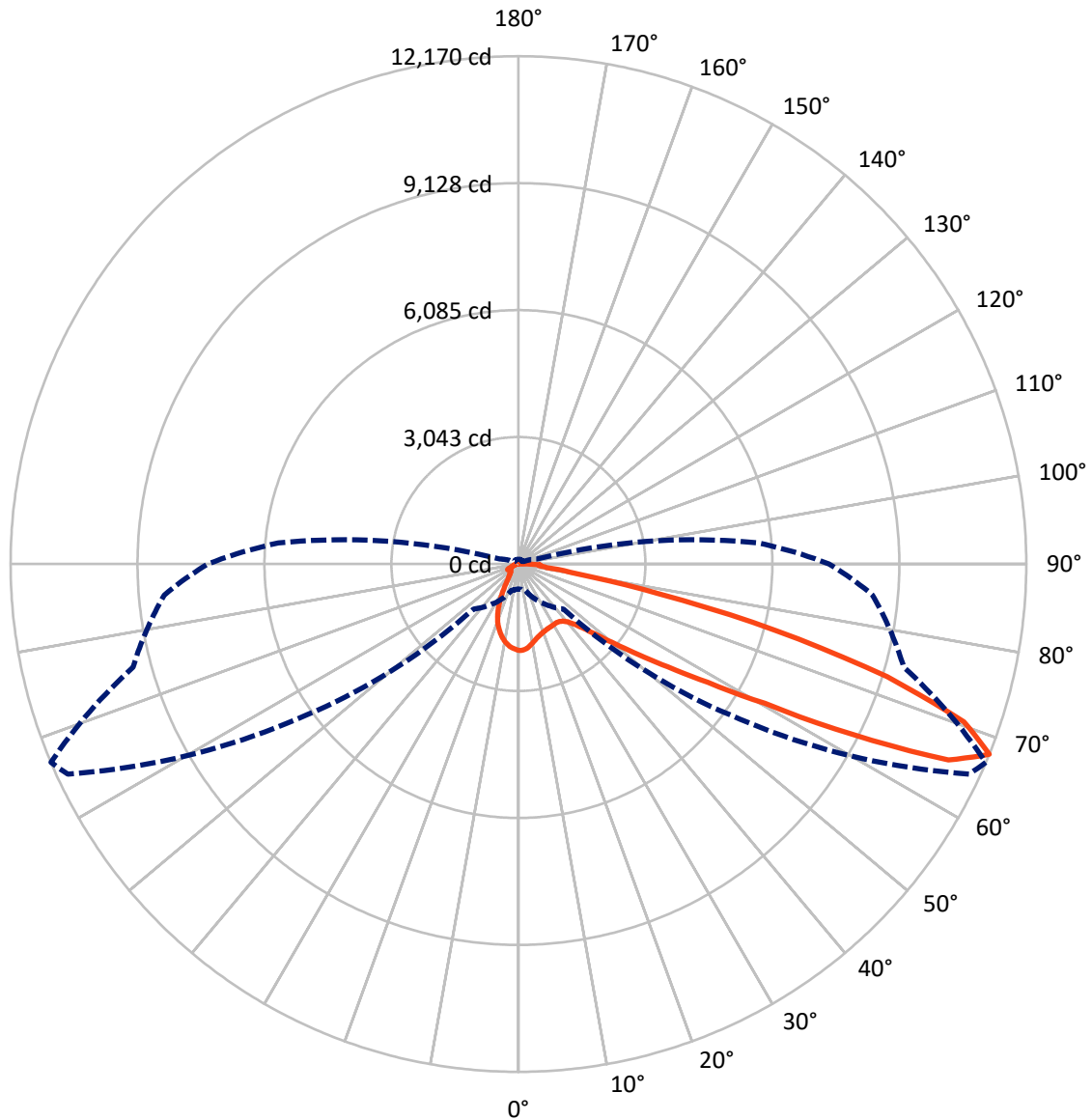
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.7 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	1591.4	0.0	1591.4
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	8013.5	0.0	8013.5
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	9605.0	0.0	9605.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.8	1.8
10°-20°	409.0	4.3
20°-30°	554.4	5.8
30°-40°	788.1	8.2
40°-50°	1318.5	13.7
50°-60°	2085.9	21.7
60°-70°	2657.2	27.7
70°-80°	1391.8	14.5
80°-90°	223.2	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°	9605.0	100.0
0°-180°	9605.0	100.0



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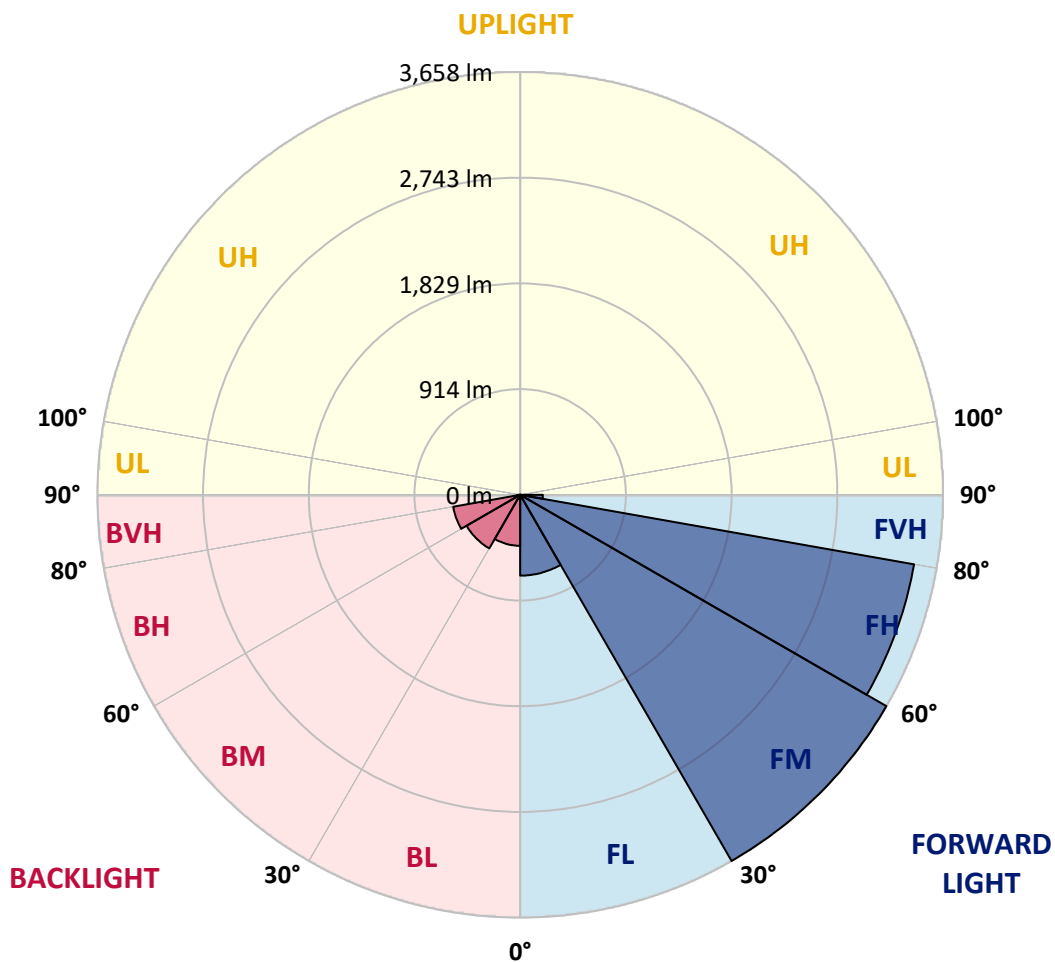
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	699.0	7.3			
FM (30°-60°)	3657.8	38.1			
FH (60°-80°)	3460.5	36.0			G2/5000
FVH (80°-90°)	196.3	2.0			G2/225
BL (0°-30°)	441.1	4.6	B1/500		
BM (30°-60°)	534.8	5.6	B1/1000		
BH (60°-80°)	588.6	6.1	B2/1000		G2/1000
BVH (80°-90°)	26.9	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°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	1986.5	1989.8	2000.2	2006.9	2036.7	2049.5	2058.5	2067.5	2068.9	2073.2	2068.9
5°	1778.1	1785.2	1804.6	1826.4	1884.2	1929.7	1977.5	2027.2	2036.2	2068.5	2077.5
7.5°	1616.6	1614.7	1630.8	1656.8	1716.1	1779.0	1862.9	1961.9	1981.3	2053.8	2088.8
10°	1498.6	1497.2	1514.3	1541.3	1597.6	1657.3	1752.1	1887.5	1915.0	2030.6	2099.7
12.5°	1411.5	1412.0	1429.0	1458.9	1516.2	1576.3	1672.5	1815.5	1850.6	2003.6	2111.1
15°	1353.7	1357.5	1371.2	1403.0	1458.9	1519.0	1613.3	1761.5	1800.8	1982.2	2123.9
17.5°	1334.3	1340.4	1345.2	1368.4	1416.2	1476.4	1568.7	1721.7	1763.4	1967.6	2135.2
20°	1352.3	1359.4	1350.4	1358.4	1388.8	1441.8	1533.7	1690.5	1733.1	1951.0	2136.7
22.5°	1429.5	1436.1	1409.6	1386.4	1384.5	1416.7	1504.8	1665.8	1709.9	1938.7	2137.1
25°	1565.4	1569.7	1525.2	1471.2	1418.6	1407.7	1484.4	1648.8	1695.7	1927.8	2128.1
27.5°	1732.2	1735.5	1684.3	1604.7	1499.1	1429.0	1477.3	1638.8	1687.6	1918.3	2113.0
30°	1934.9	1950.5	1881.8	1781.4	1627.5	1492.0	1491.5	1633.6	1678.6	1902.2	2083.1
32.5°	2142.3	2149.0	2101.6	1999.8	1800.4	1602.8	1531.3	1637.4	1676.3	1882.8	2045.2
35°	2352.6	2361.2	2330.4	2248.4	2036.7	1765.3	1609.0	1659.7	1690.9	1876.1	2018.7
37.5°	2625.0	2636.4	2593.7	2499.0	2324.2	1985.6	1738.3	1715.6	1735.9	1895.1	2010.7
40°	3055.6	3050.3	2925.8	2784.6	2638.7	2267.4	1923.0	1810.3	1822.2	1956.2	2035.3
42.5°	3556.7	3543.9	3329.3	3107.7	2984.5	2608.4	2167.4	1974.7	1972.3	2076.5	2122.0
45°	3956.4	3946.0	3752.8	3479.5	3381.0	2996.8	2483.4	2219.5	2202.0	2267.4	2282.1
47.5°	4172.9	4173.4	4062.1	3839.0	3836.6	3490.4	2889.3	2573.8	2543.5	2574.3	2558.7
50°	4097.1	4107.1	4095.2	4024.2	4252.5	4137.4	3419.3	3067.9	3006.8	3037.1	2976.9
52.5°	3730.5	3743.3	3813.4	3922.3	4427.3	4919.4	4198.0	3681.7	3610.7	3599.8	3533.0
55°	3080.7	3096.3	3239.3	3535.4	4281.8	5444.7	5426.7	4464.2	4351.0	4248.2	4219.8
57.5°	2123.4	2149.4	2379.6	2819.2	3811.5	5603.3	6889.8	5579.7	5349.5	4990.4	4997.1
60°	1196.9	1227.2	1498.6	1897.9	2862.3	5430.9	8002.9	7269.2	6783.2	5859.6	5908.8
62.5°	761.2	793.8	999.9	1318.7	1717.5	4502.6	8459.0	9618.0	9000.9	6931.0	6979.3
65°	616.2	630.4	727.5	1088.5	1247.1	2712.6	8112.8	11552.9	11322.7	8290.9	8065.4
67.5°	601.5	606.3	656.5	913.7	1196.0	1524.7	6471.1	11914.8	12170.1	9560.7	8517.7
70°	594.4	611.0	739.8	872.0	1145.3	1286.0	3888.7	10923.0	11326.0	9892.8	7915.7
72.5°	288.5	287.5	372.3	788.6	1290.2	1333.8	1997.9	8837.9	9242.4	8570.8	6504.7
75°	232.6	212.7	203.2	288.9	1240.5	1377.4	1273.2	6081.3	6374.0	5746.4	3998.6
77.5°	220.7	197.0	180.5	180.9	524.3	1460.8	1078.5	3365.8	3451.1	2595.6	1095.6
80°	182.8	161.0	149.2	168.1	253.9	1391.1	1166.1	1523.3	1397.8	637.5	364.7
82.5°	126.9	115.6	112.3	141.1	203.2	991.4	1356.1	818.5	686.3	319.2	225.0
85°	81.0	69.2	76.7	102.8	158.2	457.6	1396.8	638.0	507.3	202.7	126.9
87.5°	37.4	30.3	37.9	56.8	103.3	157.7	1329.1	716.6	522.4	107.0	80.0
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°	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2072.7	2063.7	2056.6	2043.3	2028.7	2014.5	2001.7	1985.6	1980.8	1976.6	1983.2
5°	2079.3	2070.3	2044.3	2003.6	1958.6	1916.4	1874.3	1838.3	1816.0	1803.7	1810.8
7.5°	2089.3	2076.5	2022.5	1947.7	1866.7	1792.8	1716.5	1655.4	1610.4	1589.1	1595.3
10°	2098.3	2073.7	1985.6	1873.3	1754.9	1645.0	1524.7	1425.2	1351.3	1312.5	1322.0
12.5°	2102.1	2062.8	1933.9	1780.5	1618.0	1457.0	1279.8	1131.1	1025.0	986.2	978.1
15°	2105.9	2050.5	1877.1	1674.8	1452.7	1224.9	976.7	798.6	710.5	691.1	686.8
17.5°	2106.8	2029.1	1812.7	1560.2	1259.0	948.7	667.9	554.7	555.1	586.4	590.2
20°	2096.9	1997.4	1734.5	1417.7	1026.9	656.0	458.5	439.1	510.6	588.8	598.2
22.5°	2074.1	1955.2	1646.0	1251.4	761.2	432.0	354.8	376.1	468.4	564.1	575.0
25°	2045.2	1904.1	1541.3	1058.6	504.0	308.8	297.5	323.5	386.0	450.0	456.1
27.5°	2005.9	1843.5	1423.8	837.9	327.3	254.4	261.9	279.5	305.0	333.5	336.3
30°	1955.2	1771.0	1298.3	611.0	247.2	228.8	239.7	249.1	260.0	276.1	277.6
32.5°	1897.0	1701.4	1169.5	422.0	219.3	215.5	224.0	228.8	237.3	247.2	248.2
35°	1848.2	1635.1	1035.9	298.4	207.5	205.6	211.3	213.1	221.2	232.1	233.0
37.5°	1820.3	1581.1	898.1	240.6	199.4	196.6	199.9	199.9	211.3	227.4	229.7
40°	1822.2	1551.2	760.2	217.4	192.8	189.0	189.5	189.5	204.1	221.7	223.1
42.5°	1873.8	1558.8	638.0	208.4	187.6	183.3	180.9	182.4	194.7	206.0	207.0
45°	1995.0	1612.3	523.4	202.7	182.4	180.9	175.7	175.3	180.0	185.2	185.2
47.5°	2194.0	1717.9	445.7	198.9	178.1	177.6	171.5	165.3	164.8	166.7	166.7
50°	2517.5	1899.8	393.6	194.7	175.3	171.5	164.4	154.9	151.6	153.0	153.0
52.5°	3002.5	2224.3	373.7	189.0	169.1	162.9	154.9	145.4	142.6	143.0	143.0
55°	3638.6	2722.6	370.9	182.4	162.5	152.5	145.9	138.8	135.5	136.4	136.4
57.5°	4415.9	3411.7	421.6	171.9	153.5	142.1	138.3	133.6	131.2	132.6	132.1
60°	5360.8	4313.6	625.2	161.0	144.5	132.6	132.6	128.8	126.9	128.4	127.9
62.5°	6449.3	5349.5	879.1	153.0	135.0	125.0	126.9	125.0	123.2	124.1	123.6
65°	7414.6	6024.4	823.2	146.8	125.5	117.9	121.3	120.3	118.9	119.8	119.4
67.5°	7442.5	5774.3	462.3	140.2	116.5	110.8	115.6	115.1	114.2	115.1	114.6
70°	6642.1	4875.8	260.5	127.9	107.0	102.3	108.9	108.5	107.5	109.4	108.9
72.5°	5321.5	3538.2	190.4	112.7	97.6	93.3	100.9	100.4	100.4	103.3	101.8
75°	3062.2	1820.7	152.0	96.6	87.6	84.3	90.9	91.4	92.4	96.2	93.3
77.5°	872.9	567.4	124.1	81.9	75.3	73.9	80.5	81.5	81.9	86.2	82.4
80°	324.5	261.5	102.3	68.7	61.6	62.0	68.2	69.6	70.1	74.4	69.6
82.5°	207.0	172.4	82.9	53.0	48.3	47.8	55.4	57.3	57.3	57.8	54.9
85°	120.8	103.3	62.5	38.4	34.1	32.7	41.2	44.5	43.1	42.2	40.3
87.5°	81.0	71.0	38.4	21.3	18.5	17.5	24.2	26.5	25.6	24.2	22.7
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)