

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: P456639

Luminaire Tested: **GALN-SA7D-830-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41911 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 433
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: 24 FT



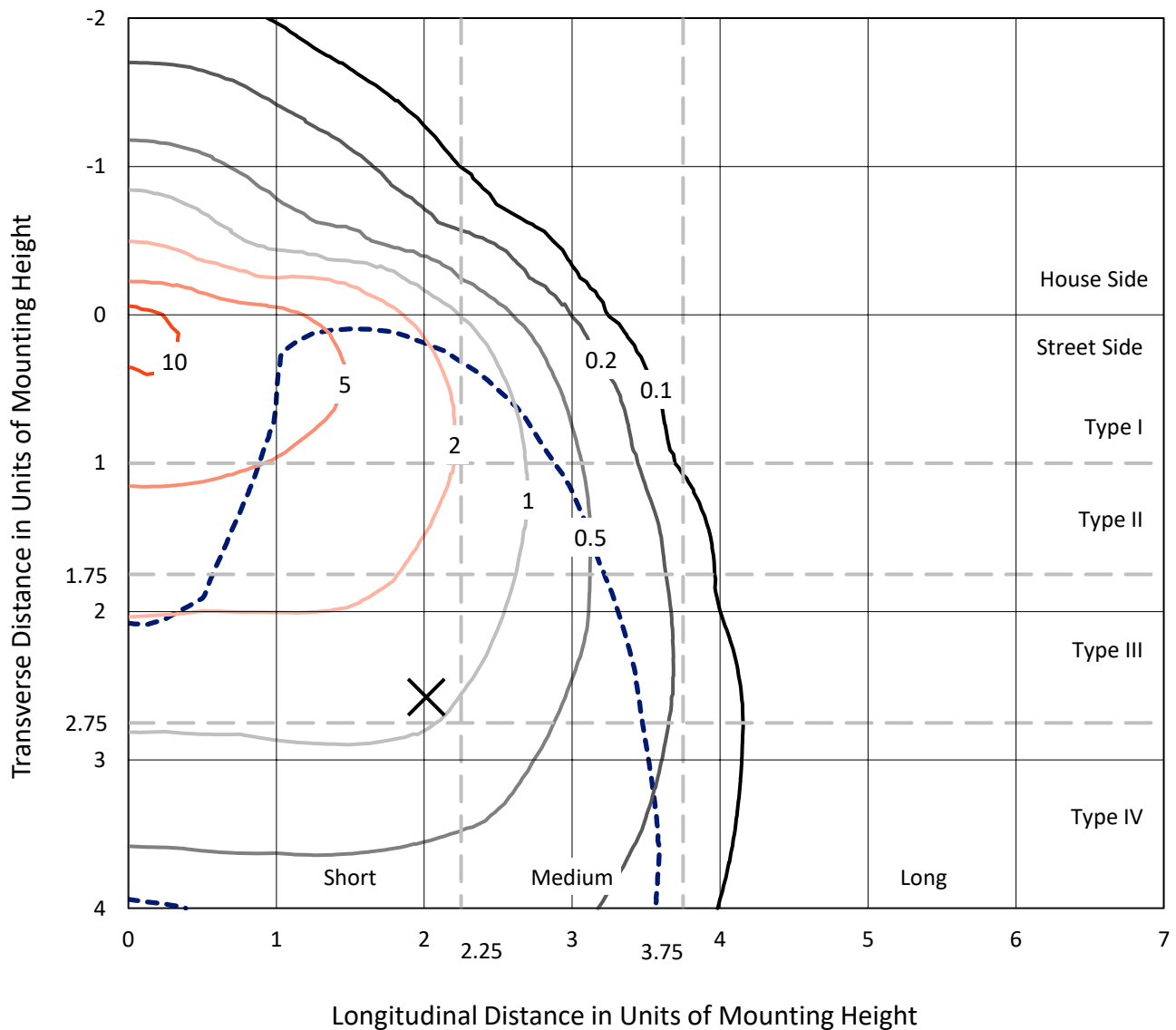
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Iso-Footcandle Lines of Horizontal Illumination

✗ Max cd

--- 1/2 Max cd



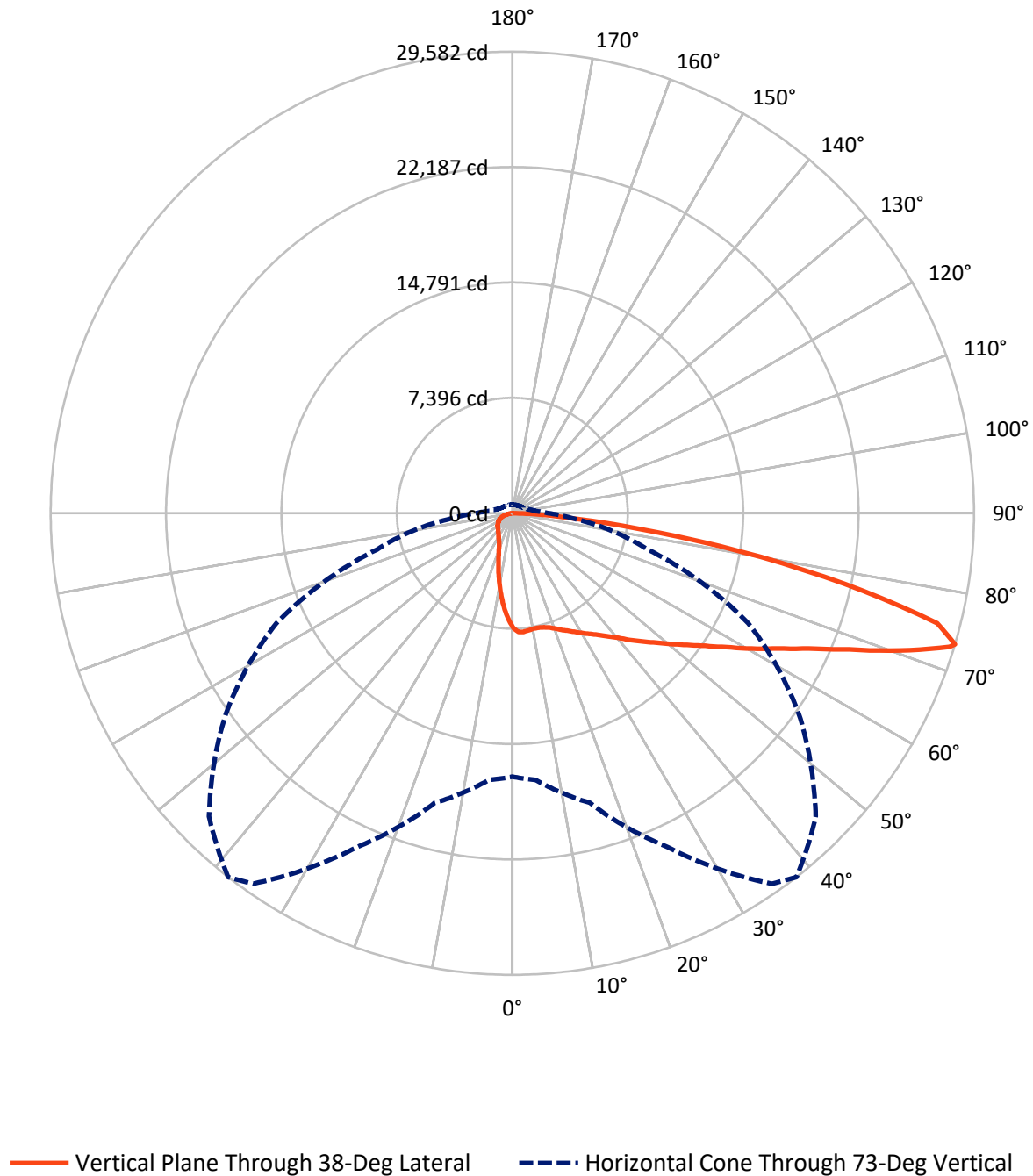
Based on 25 foot mounting height. Maximum calculated value = 12 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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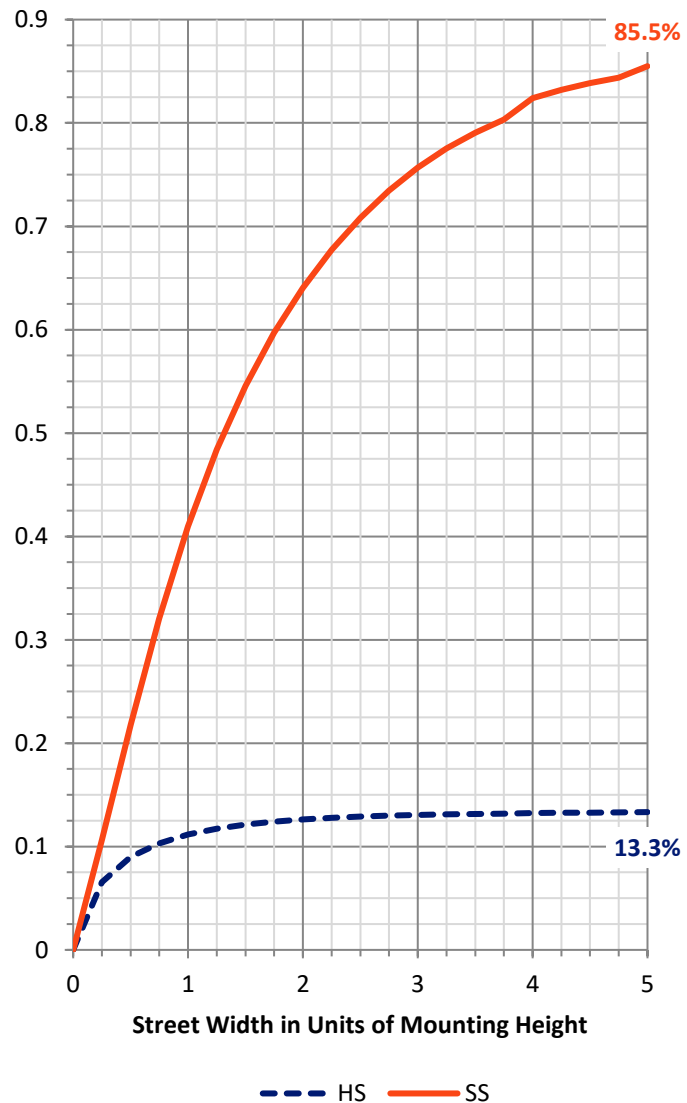
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5634.1	0.0	5634.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	36276.9	0.0	36276.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	41911.0	0.0	41911.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	642.7	1.5
10°-20°	1648.1	3.9
20°-30°	2566.5	6.1
30°-40°	3764.4	9.0
40°-50°	5584.1	13.3
50°-60°	7911.5	18.9
60°-70°	10036.0	23.9
70°-80°	8354.2	19.9
80°-90°	1403.6	3.3
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°	41911.0	100.0
0°-180°	41911.0	100.0

Coefficient of Utilization



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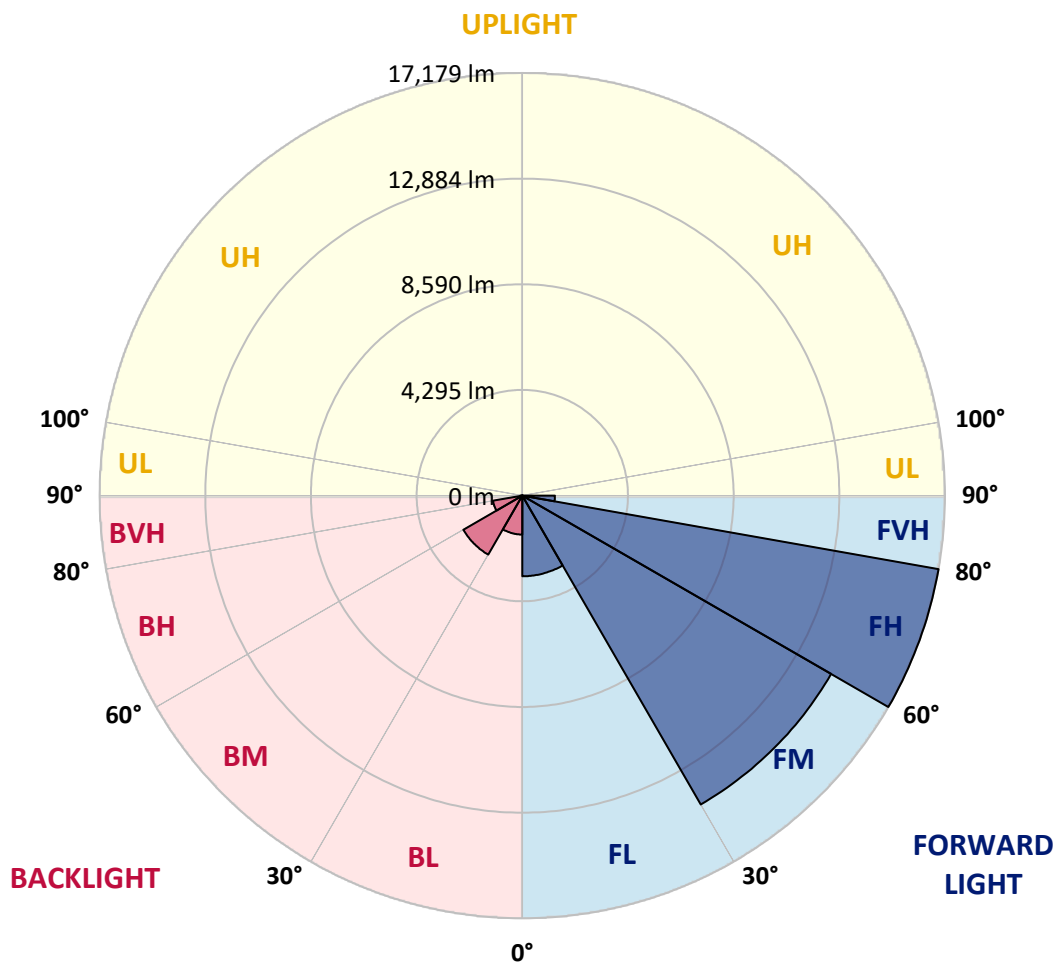
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3276.3	7.8			
FM	(30°-60°)	14494.0	34.6			
FH	(60°-80°)	17179.1	41.0			G5
FVH	(80°-90°)	1327.5	3.2			G5
BL	(0°-30°)	1581.0	3.8	B3/2500		
BM	(30°-60°)	2766.0	6.6	B3/5000		
BH	(60°-80°)	1211.0	2.9	B3/2500		G3/2500
BVH	(80°-90°)	76.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1
2.5°	7658.9	7696.8	7677.8	7651.8	7635.2	7618.7	7595.0	7526.4	7471.9	7412.8	7320.5
5°	7715.7	7739.4	7722.8	7689.7	7651.8	7635.2	7590.3	7500.3	7412.8	7313.4	7176.1
7.5°	7682.6	7692.0	7673.1	7632.9	7599.7	7569.0	7516.9	7417.5	7311.0	7190.3	7010.4
10°	7564.2	7599.7	7599.7	7566.6	7533.5	7516.9	7464.8	7370.2	7273.1	7135.8	6922.8
12.5°	7467.2	7505.1	7535.8	7526.4	7524.0	7524.0	7483.8	7412.8	7299.1	7169.0	6915.7
15°	7400.9	7445.9	7512.2	7550.0	7573.7	7580.8	7564.2	7502.7	7386.7	7235.2	6944.1
17.5°	7386.7	7441.2	7561.9	7644.7	7706.2	7703.9	7699.1	7613.9	7486.1	7329.9	6979.6
20°	7450.6	7521.6	7689.7	7819.8	7909.8	7893.2	7867.2	7755.9	7606.8	7431.7	7012.8
22.5°	7642.3	7715.7	7900.3	8042.3	8129.9	8129.9	8051.8	7905.0	7746.5	7550.0	7057.7
25°	7916.9	7997.3	8193.8	8338.2	8378.4	8347.6	8269.5	8092.0	7909.8	7720.4	7152.4
27.5°	8253.0	8350.0	8532.2	8652.9	8641.1	8617.4	8537.0	8309.8	8127.5	7954.7	7313.4
30°	8671.9	8742.9	8932.2	8960.6	8918.0	8913.3	8799.7	8572.5	8402.1	8269.5	7542.9
32.5°	9067.1	9131.0	9282.5	9294.3	9218.6	9228.1	9121.6	8913.3	8816.3	8768.9	7928.7
35°	9486.1	9519.2	9649.4	9635.2	9585.5	9578.4	9535.8	9336.9	9367.7	9452.9	8475.4
37.5°	9836.3	9902.6	9976.0	9987.8	9985.4	10009.1	10037.5	9942.8	10120.4	10387.8	9192.6
40°	10158.2	10215.0	10323.9	10361.8	10454.1	10501.4	10598.4	10600.8	11010.3	11450.5	10075.4
42.5°	10376.0	10473.0	10676.5	10745.2	10970.0	11112.0	11256.4	11410.2	12004.3	12570.0	11116.8
45°	10565.3	10693.1	11031.6	11244.6	11549.9	11722.7	12028.0	12349.9	13204.3	13945.1	12174.7
47.5°	10851.7	10965.3	11353.4	11729.8	12191.3	12390.1	12846.9	13327.3	14444.5	15256.3	13187.7
50°	11249.3	11317.9	11713.2	12326.2	12915.5	13171.1	13774.7	14468.1	15769.9	16550.9	14077.6
52.5°	11758.2	11786.6	12101.3	12917.9	13694.2	14011.3	14811.3	15620.7	16929.6	17675.1	14782.9
55°	12359.3	12312.0	12558.1	13545.1	14584.1	14998.3	15857.4	16787.6	18233.7	18584.0	15296.5
57.5°	12953.4	12880.0	13076.5	14307.2	15682.3	16181.7	17182.8	17989.9	19398.1	19433.6	15656.2
60°	13583.0	13528.5	13762.8	15201.8	17029.0	17620.7	18546.1	19237.2	20524.7	20025.3	15713.1
62.5°	14229.1	14141.5	14475.2	16207.7	18546.1	19083.3	19980.4	20562.6	21630.0	20245.4	15166.3
65°	14856.3	14816.0	15332.0	17402.9	20273.8	20884.5	21755.4	22150.7	22515.2	19914.1	13810.2
67.5°	15523.7	15604.2	16427.8	18998.1	22527.0	23293.8	24233.5	23861.9	22768.4	18344.9	11630.4
70°	16541.4	16593.5	17866.8	21088.0	25431.1	26356.5	26810.9	24470.1	21547.2	15365.1	8742.9
72.5°	16979.3	17208.9	19152.0	23282.0	28730.3	29296.0	27677.1	23114.0	17949.7	10437.5	4593.9
73°	16882.2	17156.8	19211.2	23615.7	28988.3	29582.4	27492.5	22415.8	16685.8	8989.0	3938.3
75°	15672.8	16011.3	18441.9	23336.5	28486.6	28131.5	24524.6	19104.6	11275.3	4087.4	1794.0
77.5°	12366.4	12463.5	14612.5	18844.3	22432.3	21774.4	18354.4	11940.4	4605.8	1519.5	1017.7
80°	6203.3	6560.7	8236.4	10794.9	15000.7	14785.3	11585.4	5647.1	1919.5	892.3	674.5
82.5°	2984.5	3237.8	4011.7	5263.7	8288.5	8092.0	5737.1	3086.3	1218.9	520.7	397.6
85°	1921.8	2111.2	2553.8	2511.2	3408.2	3254.3	2577.4	2336.0	721.9	272.2	276.9
87.5°	1268.6	1389.3	1666.2	1332.5	1240.2	1121.9	1138.4	1315.9	142.0	104.1	37.9
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°	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1	7363.1
2.5°	7282.6	7251.8	7150.0	7050.6	6956.0	6866.0	6806.9	6728.8	6676.7	6690.9	6712.2
5°	7100.3	7031.7	6851.8	6676.7	6511.0	6314.6	6156.0	6028.2	5931.2	5895.6	5888.5
7.5°	6908.6	6792.7	6534.7	6234.1	5952.5	5708.7	5427.0	5287.4	5124.1	5067.3	5048.3
10°	6792.7	6636.5	6274.3	5855.4	5431.8	5027.0	4721.7	4473.2	4248.4	4205.8	4184.5
12.5°	6759.5	6553.6	6066.1	5526.4	4963.1	4466.1	4014.1	3687.4	3469.7	3420.0	3346.6
15°	6740.6	6485.0	5872.0	5195.1	4480.3	3874.4	3398.7	3017.6	2818.8	2686.3	2688.7
17.5°	6724.0	6406.9	5654.2	4833.0	4063.8	3365.6	2840.1	2497.0	2314.7	2243.7	2236.6
20°	6700.4	6314.6	5403.4	4451.9	3588.0	2901.7	2425.9	2170.3	2047.3	1988.1	1985.7
22.5°	6690.9	6224.6	5157.2	4063.8	3166.8	2544.3	2151.4	1971.5	1893.4	1853.2	1853.2
25°	6714.6	6160.7	4899.2	3694.5	2792.8	2239.0	1962.1	1839.0	1794.0	1772.7	1765.6
27.5°	6787.9	6132.3	4643.6	3325.3	2449.6	2030.7	1834.3	1749.1	1715.9	1699.3	1701.7
30°	6927.6	6130.0	4392.7	2960.8	2194.0	1872.1	1732.5	1673.3	1647.3	1637.8	1635.4
32.5°	7152.4	6182.0	4146.6	2660.3	1978.6	1739.6	1637.8	1595.2	1583.4	1576.3	1573.9
35°	7533.5	6328.8	3902.8	2385.7	1813.0	1621.2	1547.9	1526.6	1510.0	1517.1	1519.5
37.5°	8047.1	6582.0	3670.9	2170.3	1687.5	1533.7	1472.1	1453.2	1443.7	1450.8	1457.9
40°	8735.8	6946.5	3476.8	1997.6	1597.6	1460.3	1405.9	1389.3	1379.8	1391.7	1394.0
42.5°	9495.5	7367.8	3315.9	1862.7	1524.2	1398.8	1346.7	1327.8	1320.7	1327.8	1330.1
45°	10276.6	7857.7	3233.0	1765.6	1462.7	1353.8	1299.4	1278.1	1261.5	1256.8	1263.9
47.5°	11045.8	8283.7	3230.7	1706.4	1413.0	1313.6	1254.4	1230.7	1209.4	1197.6	1195.2
50°	11673.0	8622.2	3287.5	1680.4	1370.4	1268.6	1209.4	1185.8	1157.4	1133.7	1138.4
52.5°	12146.3	8842.3	3313.5	1668.6	1346.7	1221.3	1162.1	1140.8	1107.7	1076.9	1076.9
55°	12451.6	8894.4	3249.6	1656.7	1327.8	1171.6	1107.7	1088.7	1055.6	1024.8	1024.8
57.5°	12555.8	8733.4	3020.0	1628.3	1308.8	1129.0	1053.2	1036.6	1010.6	979.8	975.1
60°	12314.4	8189.1	2617.7	1543.1	1271.0	1084.0	994.0	986.9	977.5	951.4	949.1
62.5°	11384.2	7034.1	2179.8	1431.9	1207.1	1036.6	939.6	951.4	958.5	944.3	942.0
65°	9836.3	5711.0	1862.7	1278.1	1121.9	970.4	880.4	911.2	930.1	930.1	925.4
67.5°	7978.4	4385.6	1569.2	1145.5	1015.3	880.4	814.2	837.8	852.0	847.3	859.1
70°	5670.8	2970.3	1278.1	994.0	880.4	778.7	729.0	729.0	719.5	714.8	714.8
72.5°	2750.2	1697.0	1036.6	830.7	750.3	665.1	624.8	608.3	589.3	587.0	575.1
73°	2298.1	1521.8	989.3	800.0	719.5	648.5	603.5	577.5	565.7	556.2	553.8
75°	1398.8	1155.0	826.0	674.5	613.0	558.6	518.3	494.7	482.8	475.7	473.4
77.5°	920.7	861.5	641.4	516.0	468.6	435.5	418.9	395.3	388.2	378.7	378.7
80°	686.4	658.0	459.2	364.5	336.1	307.7	302.9	298.2	279.3	267.4	262.7
82.5°	442.6	468.6	312.4	243.8	213.0	189.3	191.7	198.8	179.9	163.3	158.6
85°	314.8	338.4	189.3	111.2	89.9	78.1	87.6	78.1	80.5	63.9	52.1
87.5°	52.1	89.9	33.1	14.2	7.1	4.7	0.0	0.0	0.0	0.0	0.0
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)