

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: P458495

Luminaire Tested: **GALN-SA9D-830-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458495
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-SA9D-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 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: 54549 lumens
Efficiency: N/A
Efficacy: 98.8 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): 552
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

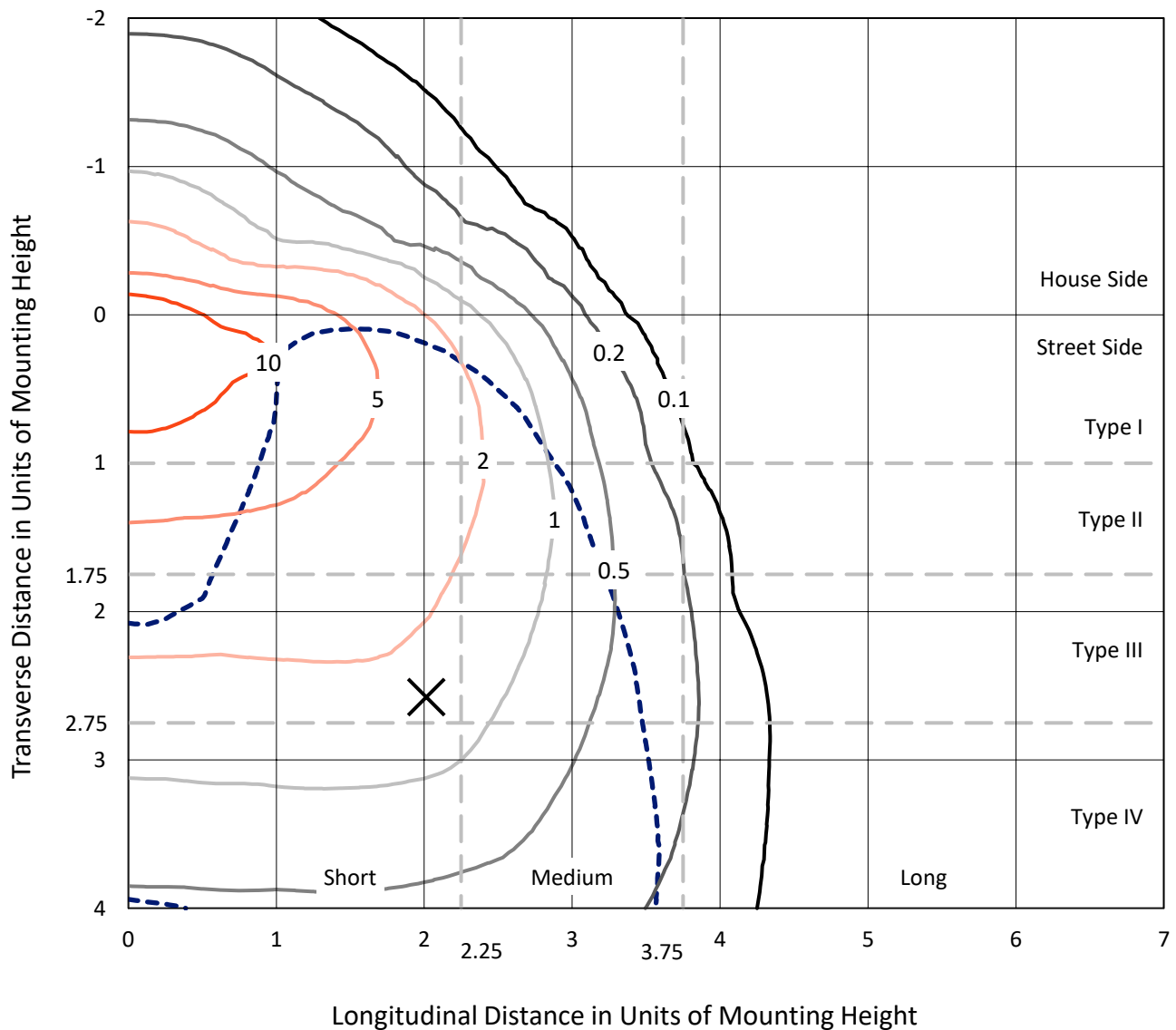


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

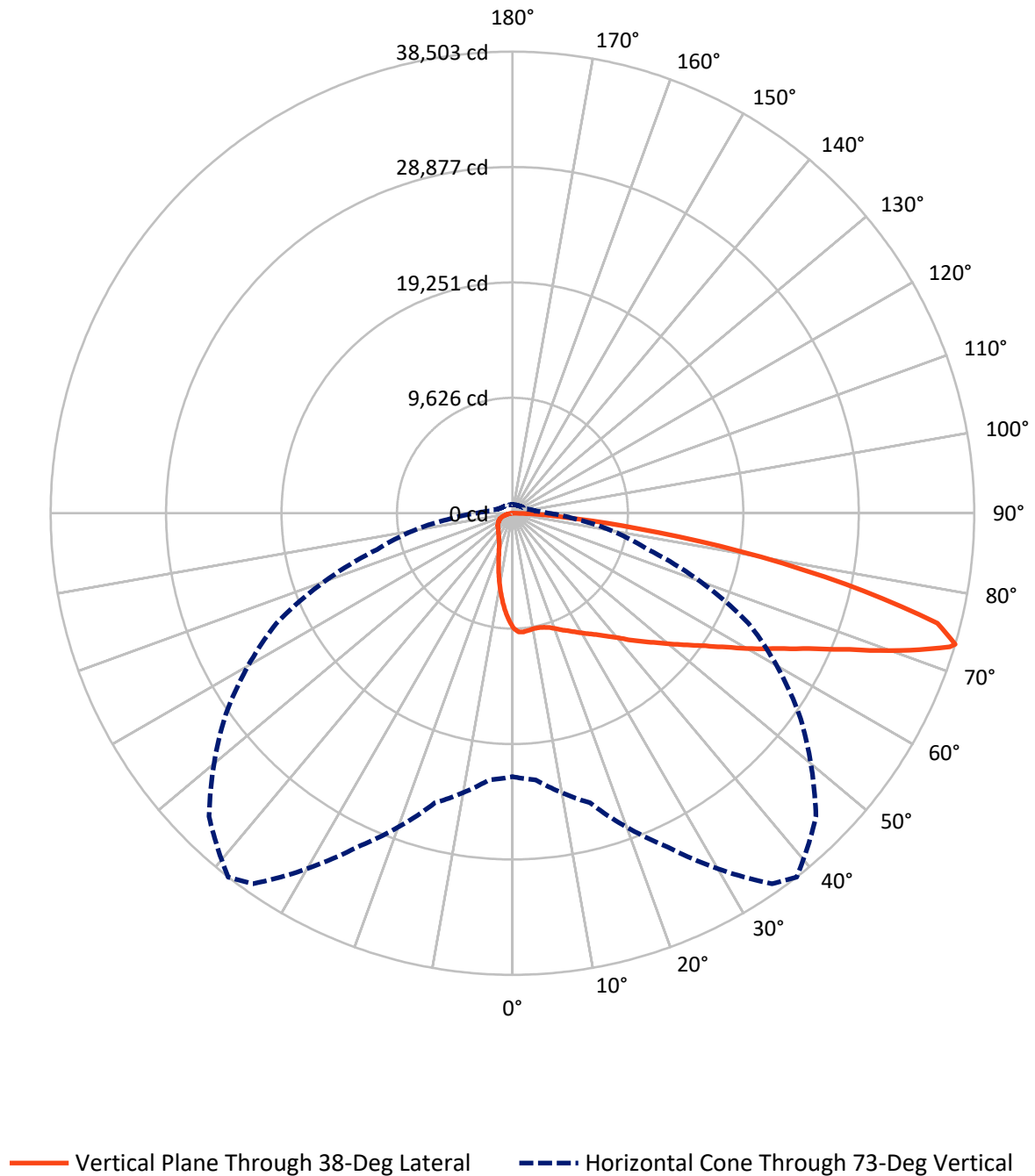


Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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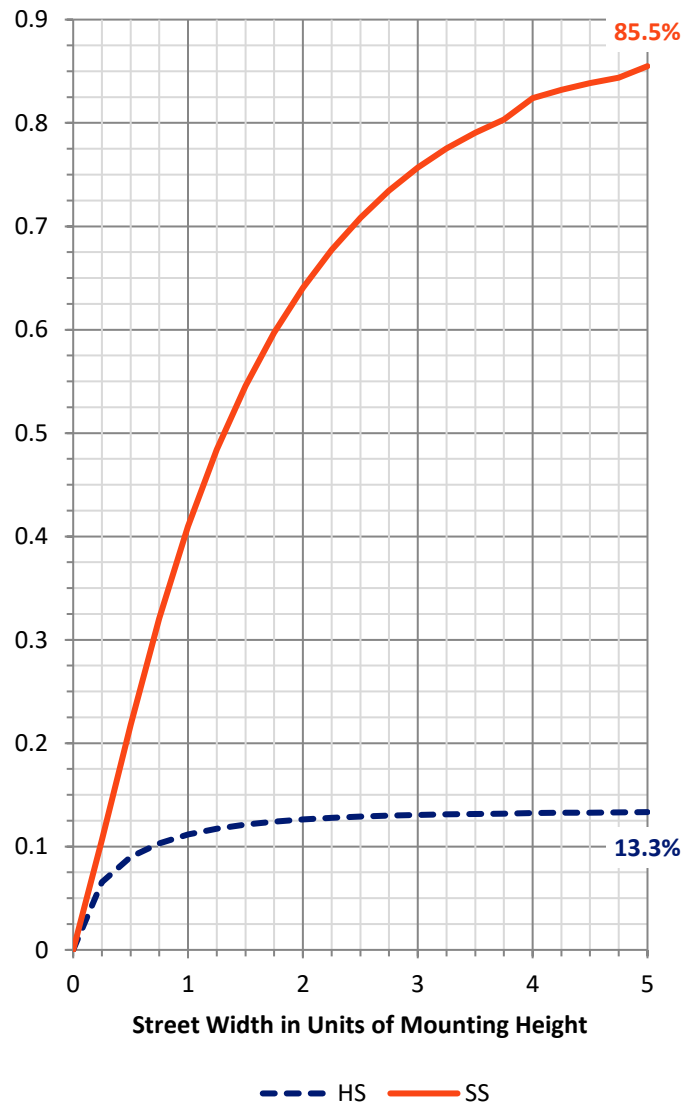
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7333.0	0.0	7333.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	47216.0	0.0	47216.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	54549.0	0.0	54549.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	836.5	1.5
10°-20°	2145.1	3.9
20°-30°	3340.4	6.1
30°-40°	4899.5	9.0
40°-50°	7267.9	13.3
50°-60°	10297.2	18.9
60°-70°	13062.2	23.9
70°-80°	10873.3	19.9
80°-90°	1826.9	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°	54549.0	100.0
0°-180°	54549.0	100.0

Coefficient of Utilization



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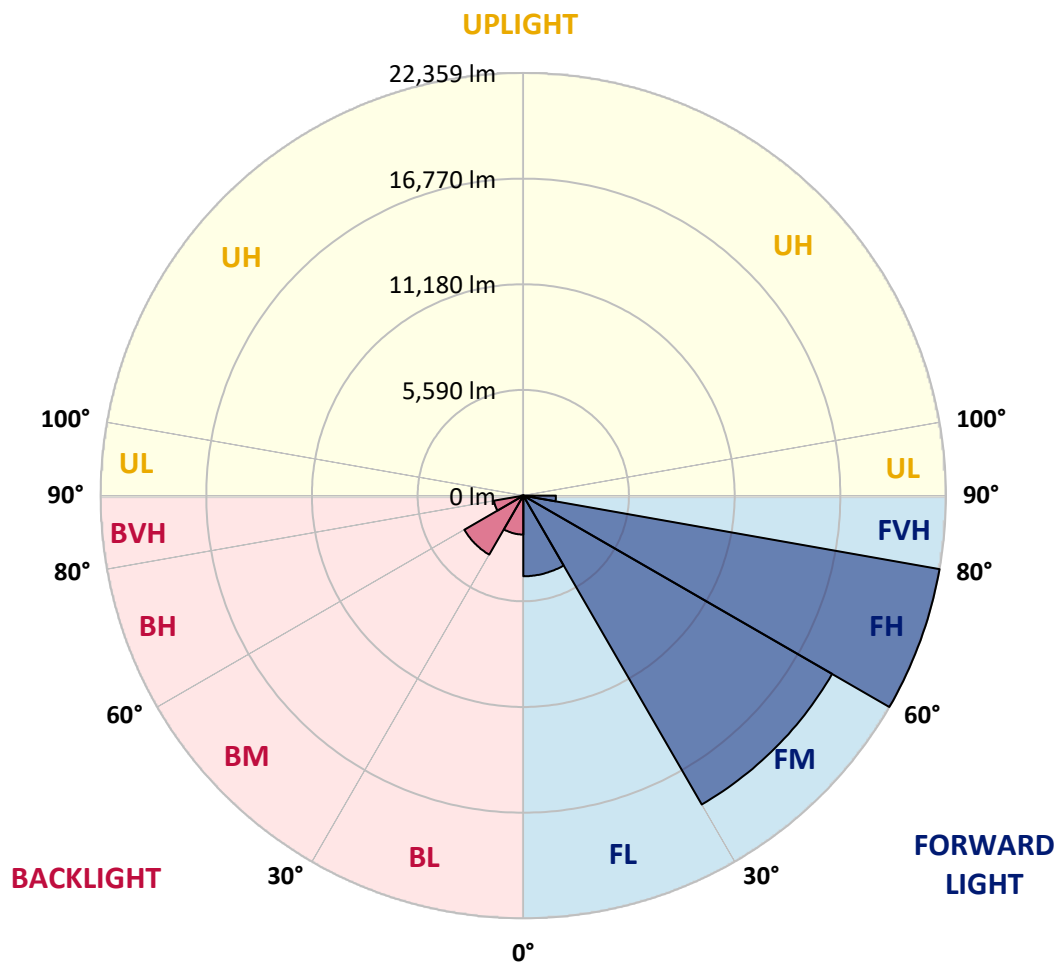
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4264.3	7.8			
FM	(30°-60°)	18864.5	34.6			
FH	(60°-80°)	22359.4	41.0			G5
FVH	(80°-90°)	1727.8	3.2			G5
BL	(0°-30°)	2057.7	3.8	B3/2500		
BM	(30°-60°)	3600.0	6.6	B3/5000		
BH	(60°-80°)	1576.2	2.9	B3/2500		G3/2500
BVH	(80°-90°)	99.1	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°	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3
2.5°	9968.4	10017.7	9993.0	9959.2	9937.6	9916.0	9885.2	9795.9	9725.0	9648.0	9527.9
5°	10042.3	10073.1	10051.6	10008.4	9959.2	9937.6	9879.1	9762.0	9648.0	9518.6	9340.0
7.5°	9999.2	10011.5	9986.9	9934.5	9891.4	9851.3	9783.6	9654.2	9515.6	9358.5	9124.3
10°	9845.2	9891.4	9891.4	9848.3	9805.1	9783.6	9715.8	9592.6	9466.3	9287.6	9010.4
12.5°	9718.9	9768.2	9808.2	9795.9	9792.8	9792.8	9740.4	9648.0	9500.2	9330.7	9001.1
15°	9632.6	9691.2	9777.4	9826.7	9857.5	9866.7	9845.2	9765.1	9614.1	9417.0	9038.1
17.5°	9614.1	9685.0	9842.1	9949.9	10030.0	10026.9	10020.8	9909.9	9743.5	9540.2	9084.3
20°	9697.3	9789.7	10008.4	10177.9	10294.9	10273.4	10239.5	10094.7	9900.6	9672.7	9127.4
22.5°	9946.8	10042.3	10282.6	10467.4	10581.4	10581.4	10479.8	10288.8	10082.4	9826.7	9186.0
25°	10304.2	10408.9	10664.6	10852.5	10904.9	10864.8	10763.2	10532.1	10294.9	10048.5	9309.2
27.5°	10741.6	10867.9	11105.1	11262.2	11246.8	11216.0	11111.2	10815.5	10578.3	10353.5	9518.6
30°	11286.8	11379.2	11625.7	11662.7	11607.2	11601.0	11453.2	11157.5	10935.7	10763.2	9817.5
32.5°	11801.3	11884.4	12081.6	12097.0	11998.4	12010.7	11872.1	11601.0	11474.7	11413.1	10319.6
35°	12346.5	12389.6	12559.1	12540.6	12475.9	12466.7	12411.2	12152.4	12192.5	12303.4	11031.2
37.5°	12802.4	12888.7	12984.2	12999.6	12996.5	13027.3	13064.3	12941.0	13172.1	13520.2	11964.5
40°	13221.4	13295.3	13437.0	13486.3	13606.4	13668.0	13794.3	13797.4	14330.3	14903.3	13113.6
42.5°	13504.8	13631.1	13896.0	13985.3	14278.0	14462.8	14650.7	14850.9	15624.1	16360.4	14469.0
45°	13751.2	13917.6	14358.1	14635.3	15032.7	15257.6	15654.9	16073.9	17185.9	18150.1	15845.9
47.5°	14123.9	14271.8	14777.0	15266.8	15867.5	16126.2	16720.8	17346.1	18800.1	19856.7	17164.4
50°	14641.5	14730.8	15245.2	16043.1	16810.1	17142.8	17928.3	18830.9	20525.2	21541.7	18322.6
52.5°	15303.8	15340.7	15750.4	16813.2	17823.6	18236.4	19277.6	20331.1	22034.6	23004.9	19240.6
55°	16086.2	16024.6	16345.0	17629.5	18981.8	19520.9	20639.1	21849.8	23731.9	24187.8	19909.1
57.5°	16859.4	16763.9	17019.6	18621.4	20411.2	21061.2	22364.2	23414.6	25247.5	25293.7	20377.3
60°	17678.8	17608.0	17912.9	19785.8	22164.0	22934.1	24138.5	25038.0	26713.8	26063.8	20451.2
62.5°	18519.8	18405.8	18840.1	21095.0	24138.5	24837.8	26005.3	26763.1	28152.4	26350.3	19739.6
65°	19336.1	19283.7	19955.3	22650.7	26387.3	27182.0	28315.7	28830.1	29304.5	25919.1	17974.5
67.5°	20204.8	20309.5	21381.5	24726.9	29319.9	30318.0	31540.9	31057.3	29634.1	23876.7	15137.4
70°	21529.4	21597.2	23254.5	27447.0	33099.6	34304.1	34895.5	31849.0	28044.6	19998.4	11379.2
72.5°	22099.3	22398.1	24927.1	30302.6	37393.8	38130.0	36023.0	30083.8	23362.3	13584.9	5979.2
73°	21973.0	22330.3	25004.2	30736.9	37729.6	38502.8	35782.7	29175.1	21717.3	11699.6	5125.9
75°	20398.9	20839.4	24003.0	30373.4	37076.5	36614.4	31919.8	24865.5	14675.3	5320.0	2335.0
77.5°	16095.4	16221.7	19018.8	24526.7	29196.7	28340.3	23889.0	15541.0	5994.6	1977.7	1324.6
80°	8073.9	8539.1	10720.0	14050.0	19524.0	19243.7	15078.9	7350.0	2498.3	1161.3	877.9
82.5°	3884.5	4214.1	5221.4	6851.0	10787.8	10532.1	7467.1	4016.9	1586.4	677.7	517.5
85°	2501.3	2747.8	3323.8	3268.4	4435.9	4235.6	3354.6	3040.4	939.5	354.3	360.4
87.5°	1651.1	1808.2	2168.6	1734.3	1614.2	1460.1	1481.7	1712.7	184.8	135.5	49.3
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°	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3	9583.3
2.5°	9478.6	9438.6	9306.1	9176.7	9053.5	8936.4	8859.4	8757.8	8690.0	8708.5	8736.2
5°	9241.4	9152.1	8918.0	8690.0	8474.4	8218.7	8012.3	7846.0	7719.7	7673.4	7664.2
7.5°	8991.9	8840.9	8505.2	8114.0	7747.4	7430.1	7063.5	6881.8	6669.2	6595.3	6570.6
10°	8840.9	8637.6	8166.3	7621.1	7069.7	6542.9	6145.5	5822.1	5529.4	5474.0	5446.3
12.5°	8797.8	8529.8	7895.2	7192.9	6459.7	5812.8	5224.5	4799.4	4516.0	4451.3	4355.8
15°	8773.2	8440.5	7642.6	6761.6	5831.3	5042.7	4423.6	3927.6	3668.8	3496.3	3499.4
17.5°	8751.6	8338.8	7359.2	6290.3	5289.2	4380.4	3696.6	3249.9	3012.7	2920.3	2911.0
20°	8720.8	8218.7	7032.7	5794.4	4670.0	3776.7	3157.5	2824.8	2664.6	2587.6	2584.5
22.5°	8708.5	8101.6	6712.3	5289.2	4121.7	3311.5	2800.1	2566.0	2464.4	2412.0	2412.0
25°	8739.3	8018.5	6376.6	4808.6	3635.0	2914.1	2553.7	2393.5	2335.0	2307.3	2298.0
27.5°	8834.8	7981.5	6043.9	4328.1	3188.3	2643.0	2387.4	2276.5	2233.3	2211.8	2214.9
30°	9016.5	7978.4	5717.3	3853.7	2855.6	2436.6	2254.9	2177.9	2144.0	2131.7	2128.6
32.5°	9309.2	8046.2	5397.0	3462.4	2575.3	2264.1	2131.7	2076.2	2060.8	2051.6	2048.5
35°	9805.1	8237.2	5079.7	3105.1	2359.6	2110.1	2014.6	1986.9	1965.3	1974.6	1977.7
37.5°	10473.6	8566.8	4777.8	2824.8	2196.4	1996.1	1916.1	1891.4	1879.1	1888.3	1897.6
40°	11370.0	9041.2	4525.2	2599.9	2079.3	1900.6	1829.8	1808.2	1795.9	1811.3	1814.4
42.5°	12358.8	9589.5	4315.7	2424.3	1983.8	1820.6	1752.8	1728.1	1718.9	1728.1	1731.2
45°	13375.4	10227.2	4207.9	2298.0	1903.7	1762.0	1691.2	1663.5	1641.9	1635.7	1645.0
47.5°	14376.5	10781.6	4204.8	2221.0	1839.0	1709.7	1632.6	1601.8	1574.1	1558.7	1555.6
50°	15192.9	11222.1	4278.8	2187.1	1783.6	1651.1	1574.1	1543.3	1506.3	1475.5	1481.7
52.5°	15809.0	11508.6	4312.7	2171.7	1752.8	1589.5	1512.5	1484.8	1441.7	1401.6	1401.6
55°	16206.3	11576.4	4229.5	2156.3	1728.1	1524.8	1441.7	1417.0	1373.9	1333.8	1333.8
57.5°	16341.9	11366.9	3930.7	2119.4	1703.5	1469.4	1370.8	1349.2	1315.4	1275.3	1269.2
60°	16027.7	10658.4	3407.0	2008.5	1654.2	1410.9	1293.8	1284.6	1272.2	1238.3	1235.3
62.5°	14817.0	9155.1	2837.1	1863.7	1571.0	1349.2	1222.9	1238.3	1247.6	1229.1	1226.0
65°	12802.4	7433.2	2424.3	1663.5	1460.1	1263.0	1145.9	1186.0	1210.6	1210.6	1204.5
67.5°	10384.3	5708.1	2042.4	1490.9	1321.5	1145.9	1059.7	1090.5	1109.0	1102.8	1118.2
70°	7380.8	3866.0	1663.5	1293.8	1145.9	1013.5	948.8	948.8	936.5	930.3	930.3
72.5°	3579.5	2208.7	1349.2	1081.2	976.5	865.6	813.2	791.7	767.0	764.0	748.6
73°	2991.1	1980.7	1287.6	1041.2	936.5	844.0	785.5	751.6	736.2	723.9	720.8
75°	1820.6	1503.3	1075.1	877.9	797.8	727.0	674.6	643.8	628.4	619.2	616.1
77.5°	1198.3	1121.3	834.8	671.5	609.9	566.8	545.2	514.4	505.2	492.9	492.9
80°	893.3	856.4	597.6	474.4	437.4	400.5	394.3	388.1	363.5	348.1	341.9
82.5°	576.0	609.9	406.6	317.3	277.2	246.4	249.5	258.8	234.1	212.6	206.4
85°	409.7	440.5	246.4	144.8	117.1	101.7	114.0	101.7	104.7	83.2	67.8
87.5°	67.8	117.1	43.1	18.5	9.2	6.2	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)