

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: P650838

Luminaire Tested: **GALN-SA4C-840-U-AFL-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P650838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-28)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-840-U-AFL-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21105.8 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

Input Watts (W): 213
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



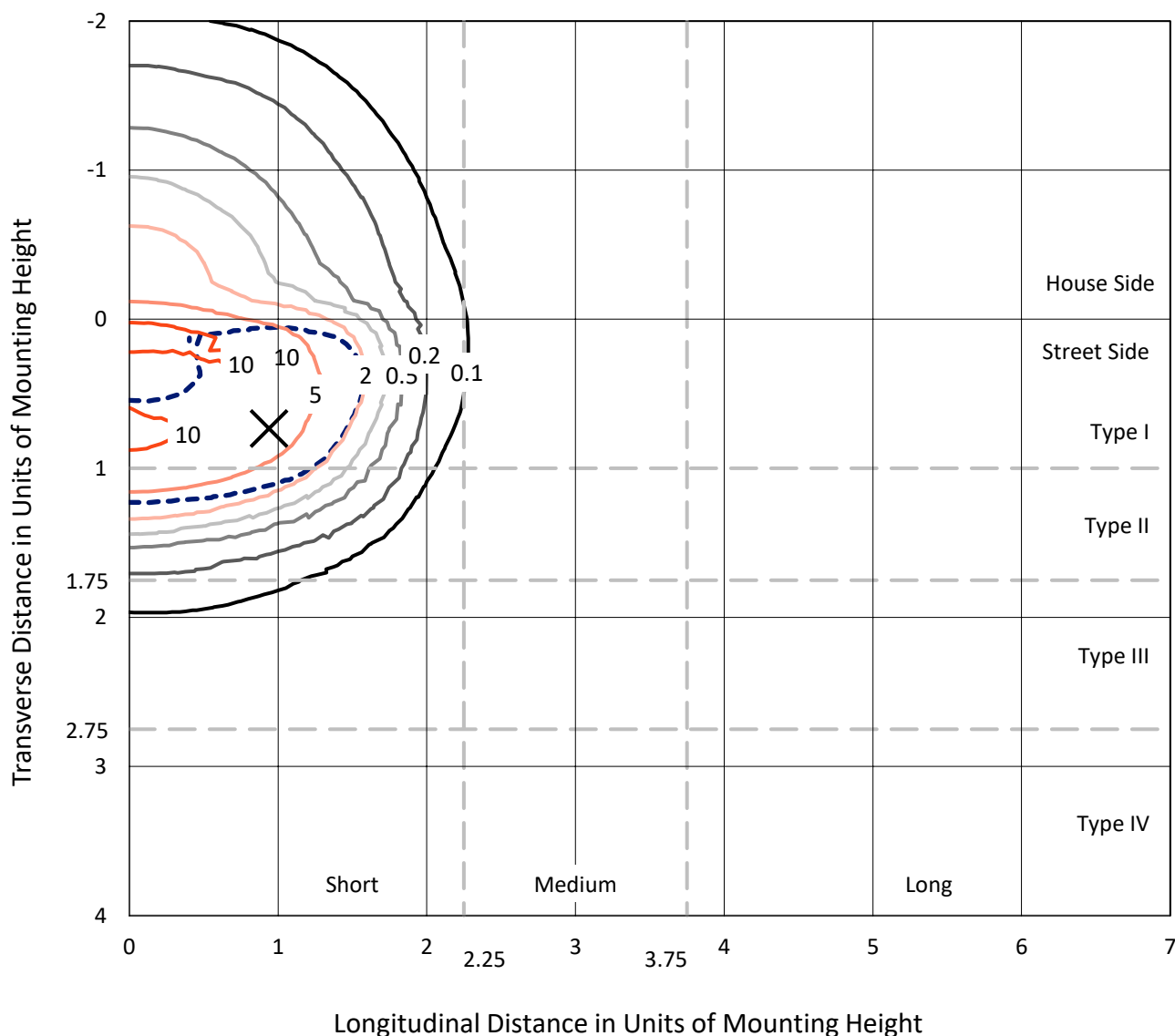
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

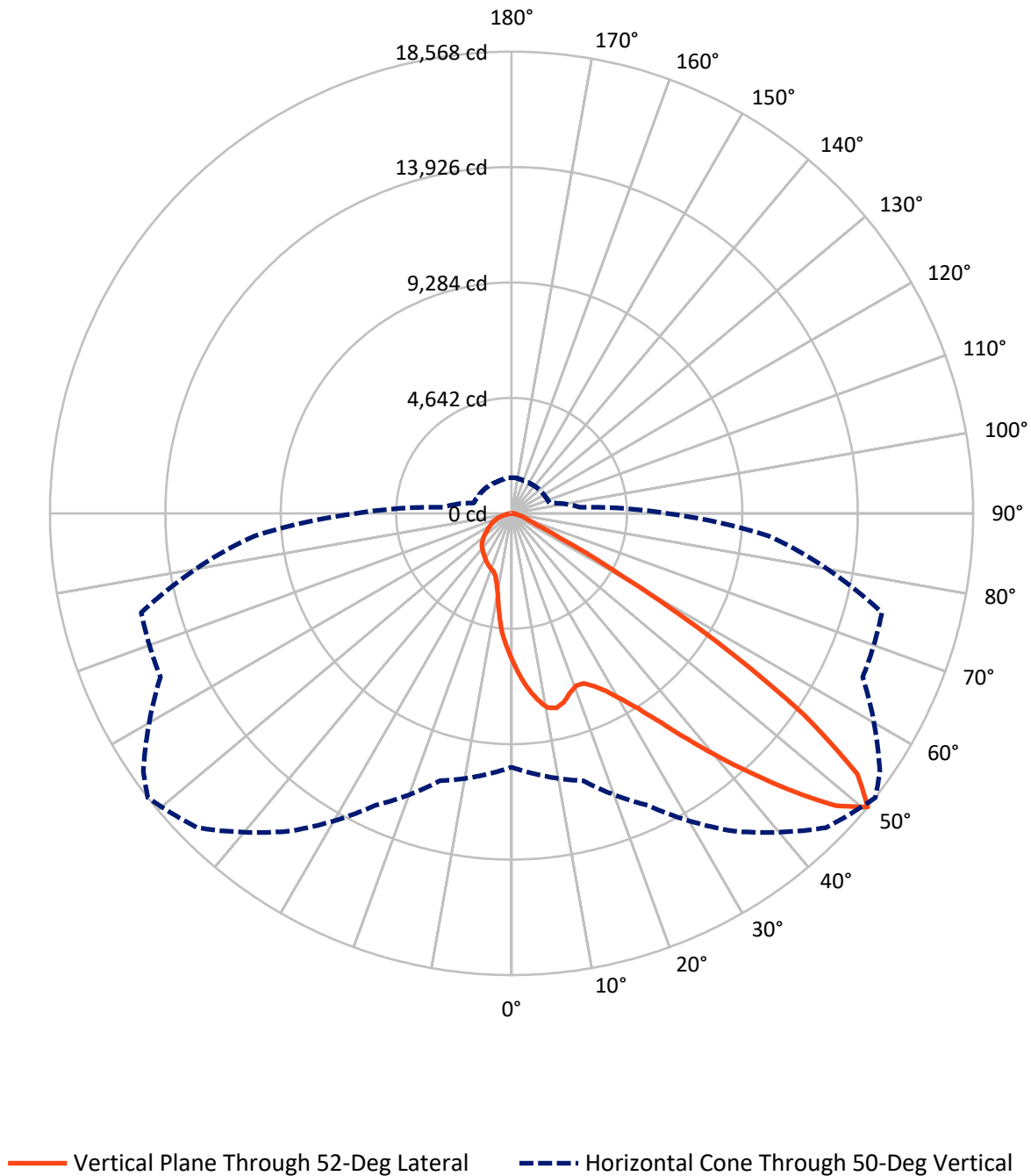


Based on 25 foot mounting height. Maximum calculated value = 12.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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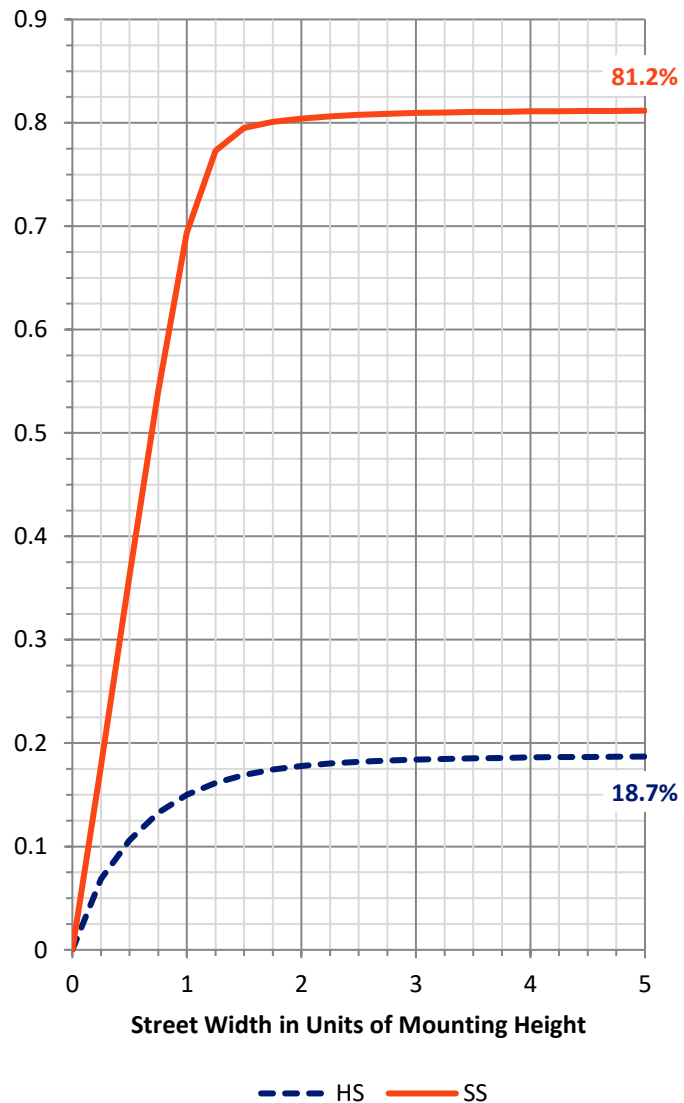
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3967.4	0.0	3967.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	17138.4	0.0	17138.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	21105.8	0.0	21105.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	548.4	2.6
10°-20°	1469.7	7.0
20°-30°	2475.7	11.7
30°-40°	4154.4	19.7
40°-50°	6355.2	30.1
50°-60°	4633.5	22.0
60°-70°	1031.2	4.9
70°-80°	371.9	1.8
80°-90°	65.8	0.3
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°	21105.8	100.0
0°-180°	21105.8	100.0

Coefficient of Utilization



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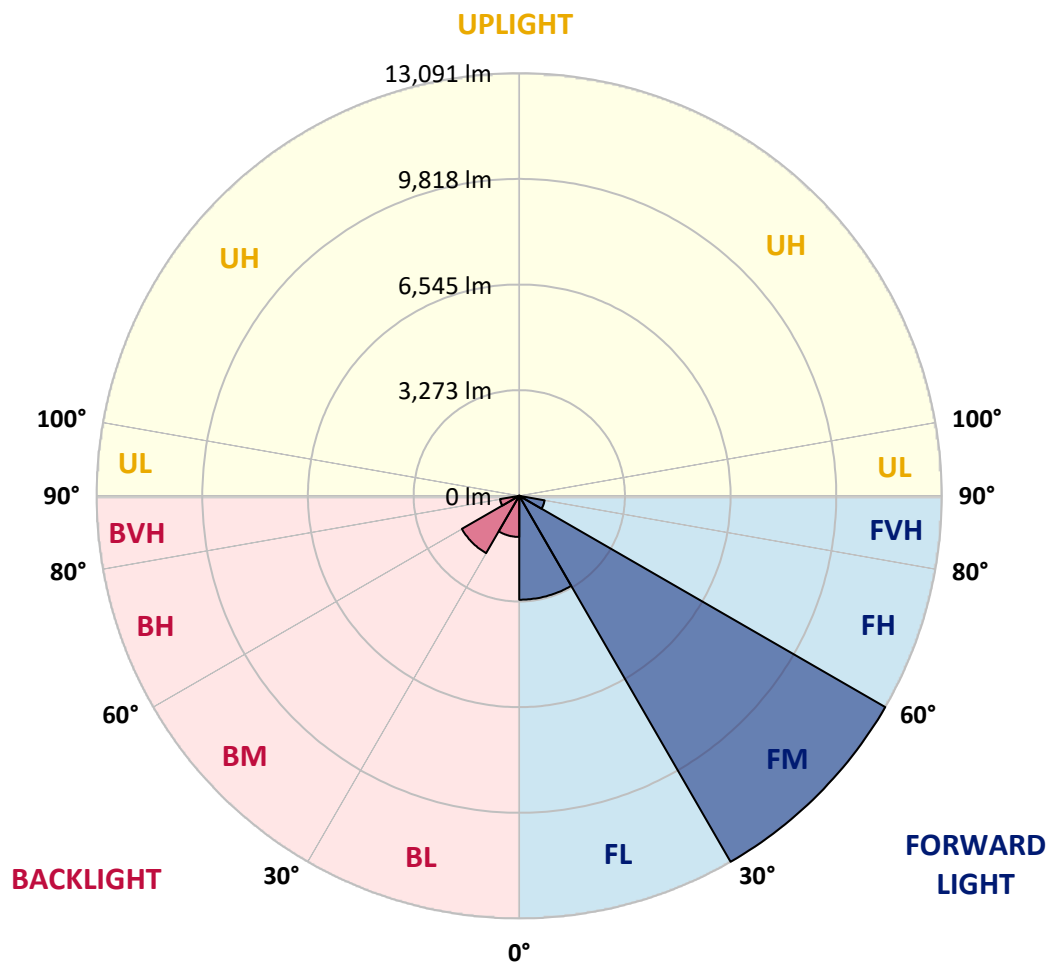
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3219.3	15.3			
FM	(30°-60°)	13090.9	62.0			
FH	(60°-80°)	798.7	3.8			G1/1800
FVH	(80°-90°)	29.5	0.1			G1/100
BL	(0°-30°)	1274.4	6.0	B3/2500		
BM	(30°-60°)	2052.2	9.7	B2/2500		
BH	(60°-80°)	604.5	2.9	B2/1000		G2/1000
BVH	(80°-90°)	36.3	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3
2.5°	7004.9	6870.1	6885.4	6788.7	6684.4	6653.9	6547.1	6445.3	6369.1	6206.2	6056.2
5°	7656.0	7615.3	7554.4	7478.0	7399.2	7205.9	7096.5	6969.3	6689.6	6437.7	6188.4
7.5°	7750.2	7742.6	7775.6	7775.6	7803.6	7729.8	7574.7	7485.7	7188.0	6778.5	6315.7
10°	7088.9	7111.7	7272.0	7480.6	7770.5	7971.5	7946.0	7923.1	7597.6	7038.0	6465.7
12.5°	6562.3	6511.4	6605.6	6783.7	7218.6	7704.4	8032.6	8035.1	7951.2	7452.6	6575.1
15°	6264.8	6300.4	6325.8	6409.8	6737.8	7300.0	7877.4	8047.8	8416.6	7745.1	6748.0
17.5°	6455.5	6336.0	6330.9	6351.2	6519.1	6941.4	7589.9	7882.4	8671.0	8121.5	6961.7
20°	6704.8	6702.3	6631.0	6605.6	6603.0	6979.5	7401.7	7798.5	8805.8	8609.9	7177.9
22.5°	7142.3	7142.3	7025.3	6969.3	6849.8	7157.6	7427.1	7696.7	9029.6	8945.6	7282.1
25°	7874.8	7755.3	7554.4	7416.9	7348.3	7457.7	7696.7	7938.5	9225.4	9301.7	7498.4
27.5°	8551.4	8363.2	8264.0	8027.4	7935.8	7872.3	8091.0	8335.2	9454.4	9856.3	7615.3
30°	9319.5	9286.5	9108.5	8803.3	8576.9	8459.9	8660.8	8902.4	9874.0	10423.4	7885.0
32.5°	10693.1	10392.9	10151.3	9777.4	9408.6	9159.3	9357.7	9517.9	10570.9	11016.1	8180.1
35°	12176.0	12079.3	11662.1	10988.1	10423.4	10199.6	10316.6	10436.1	11382.3	11921.6	8676.0
37.5°	13633.5	13501.2	13157.8	12590.5	11903.8	11448.5	11532.5	11672.3	12293.0	13142.5	9281.4
40°	14681.3	14518.6	14345.6	14261.7	13580.0	12956.9	12908.5	12944.1	13524.0	14287.1	9952.9
42.5°	14757.7	14958.6	15012.0	15350.3	15190.1	14678.8	14381.2	14388.8	14699.2	15419.0	10632.0
45°	14597.4	14411.7	14806.0	15729.3	16258.4	16497.5	15996.4	15932.7	15426.6	16075.2	10970.3
47.5°	12916.2	12967.0	13633.5	15093.4	16622.1	17690.4	17573.4	17362.3	15815.8	16052.3	10916.9
50°	10209.8	10517.5	11135.7	12954.3	15604.7	17878.6	18567.9	18079.6	15584.3	15421.5	10372.6
52.5°	6798.9	6926.1	7333.0	9680.8	12547.3	15981.1	17423.3	17535.2	15370.6	14594.9	9683.3
55°	3026.8	3016.7	3589.0	5056.6	7872.3	12160.7	14236.2	14917.9	14549.1	13753.0	9011.8
57.5°	1281.9	1325.2	1559.2	2184.9	3871.3	7338.1	9645.1	10242.9	11189.1	11293.4	6913.4
60°	867.3	872.5	936.0	1093.7	1620.3	3446.5	5059.1	5776.4	6453.0	6407.2	3667.8
62.5°	681.6	699.5	747.8	811.4	961.4	1564.3	2263.7	2663.1	2706.3	2276.5	1391.4
65°	582.5	585.0	633.4	686.8	752.9	910.6	1091.2	1111.5	1124.2	1083.5	1022.5
67.5°	480.7	485.8	523.9	585.0	646.1	696.9	747.8	773.2	831.7	946.2	930.9
70°	381.6	389.1	422.3	473.1	529.1	559.6	623.2	646.1	699.5	788.5	824.1
72.5°	290.0	292.5	320.5	356.1	407.0	437.5	490.9	516.4	551.9	628.2	661.4
75°	208.6	216.2	236.6	254.3	262.0	282.3	333.2	361.2	412.1	445.1	447.7
77.5°	109.4	114.5	119.5	119.5	145.0	183.2	216.2	231.4	267.1	292.5	279.8
80°	43.2	45.8	58.5	78.9	101.8	132.3	155.2	162.8	193.3	208.6	216.2
82.5°	25.4	28.0	38.2	55.9	73.8	94.1	111.9	119.5	139.9	157.7	162.8
85°	12.7	15.2	22.9	35.6	48.4	58.5	55.9	53.4	53.4	50.9	53.4
87.5°	5.0	5.0	7.7	7.7	7.7	10.2	12.7	12.7	12.7	15.2	15.2
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°	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3	5949.3
2.5°	5957.0	5855.2	5761.1	5588.2	5400.0	5346.6	5127.8	5048.9	4993.0	4926.8	4906.5
5°	5987.5	5852.7	5550.0	5201.6	4924.3	4568.2	4334.2	4082.4	3899.3	3853.5	3840.8
7.5°	6051.1	5819.6	5298.2	4771.7	4204.5	3721.2	3352.4	3154.0	2978.5	2968.3	2950.5
10°	6122.3	5720.4	5023.5	4196.8	3471.9	3024.2	2803.0	2716.5	2673.3	2663.1	2658.0
12.5°	6180.8	5700.1	4715.7	3637.2	2953.1	2683.5	2617.3	2609.7	2627.5	2632.6	2642.8
15°	6206.2	5618.7	4344.4	3136.2	2630.1	2530.8	2558.8	2589.4	2602.1	2635.1	2609.7
17.5°	6254.6	5514.4	3886.5	2739.4	2449.4	2467.2	2515.6	2551.2	2571.5	2594.4	2561.3
20°	6280.0	5420.3	3456.7	2502.8	2385.8	2418.9	2485.1	2513.0	2538.5	2548.7	2510.5
22.5°	6257.1	5227.0	3077.7	2312.1	2324.8	2368.0	2426.5	2457.1	2441.8	2401.1	2378.2
25°	6196.1	4954.8	2683.5	2190.0	2238.3	2314.6	2360.4	2337.6	2309.6	2286.7	2279.0
27.5°	6193.5	4621.6	2398.5	2078.1	2164.6	2268.8	2253.5	2233.3	2246.0	2228.1	2207.8
30°	6206.2	4298.6	2164.6	2014.5	2111.2	2162.0	2179.8	2159.4	2174.7	2141.7	2151.9
32.5°	6140.1	3983.2	2011.9	1940.7	2047.6	2045.0	2103.5	2118.8	2083.2	2014.5	2024.6
35°	6168.1	3728.8	1882.2	1907.6	1976.4	1976.4	2022.1	2004.4	1910.2	1869.5	1879.7
37.5°	6361.4	3479.6	1818.7	1861.9	1907.6	1928.0	1912.8	1836.4	1813.5	1813.5	1818.7
40°	6544.6	3265.9	1780.5	1851.7	1844.1	1856.8	1744.9	1752.5	1752.5	1755.1	1742.3
42.5°	6707.3	3121.0	1750.0	1790.7	1803.4	1737.3	1668.5	1661.0	1678.7	1676.2	1666.0
45°	6765.8	3001.4	1706.7	1721.9	1732.1	1622.8	1589.7	1574.4	1594.8	1602.4	1612.6
47.5°	6542.0	2902.2	1658.4	1627.8	1607.5	1536.3	1493.0	1465.1	1490.5	1533.7	1543.9
50°	6254.6	2772.4	1582.1	1523.6	1480.3	1449.8	1419.3	1391.4	1409.1	1439.6	1432.1
52.5°	5829.8	2569.0	1485.5	1424.4	1350.6	1358.2	1330.3	1315.0	1325.2	1325.2	1317.6
55°	5224.5	2111.2	1322.6	1279.4	1218.4	1238.7	1243.8	1223.5	1203.1	1220.9	1205.7
57.5°	3566.1	1490.5	1180.2	1180.2	1119.2	1147.1	1144.6	1096.2	1048.0	1053.0	1042.8
60°	2062.8	1187.8	1088.7	1078.5	1014.8	1037.8	1042.8	1009.8	936.0	941.1	930.9
62.5°	1172.6	1014.8	951.3	936.0	923.3	943.7	943.7	900.4	836.8	841.9	831.7
65°	997.1	941.1	849.6	847.0	841.9	847.0	826.6	780.9	724.9	702.0	704.6
67.5°	905.5	869.9	780.9	758.0	742.7	740.2	702.0	658.8	633.4	613.0	610.5
70°	793.6	765.6	699.5	668.9	653.7	618.1	580.0	551.9	516.4	506.2	516.4
72.5°	628.2	625.7	600.3	567.2	534.1	506.2	473.1	435.0	401.9	394.3	376.4
75°	435.0	440.0	445.1	440.0	412.1	376.4	338.3	307.8	267.1	244.1	239.1
77.5°	284.8	292.5	300.2	290.0	272.1	239.1	213.7	175.5	145.0	127.2	124.6
80°	208.6	218.7	223.9	216.2	195.9	170.4	142.5	111.9	89.1	73.8	73.8
82.5°	160.2	170.4	175.5	162.8	142.5	122.1	101.8	78.9	61.1	48.4	45.8
85°	55.9	53.4	63.6	66.1	78.9	73.8	61.1	45.8	35.6	25.4	22.9
87.5°	15.2	15.2	17.8	17.8	15.2	12.7	12.7	12.7	10.2	7.7	7.7
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)