

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: P451992

Luminaire Tested: **GALN-SA2D-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12483 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 125
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



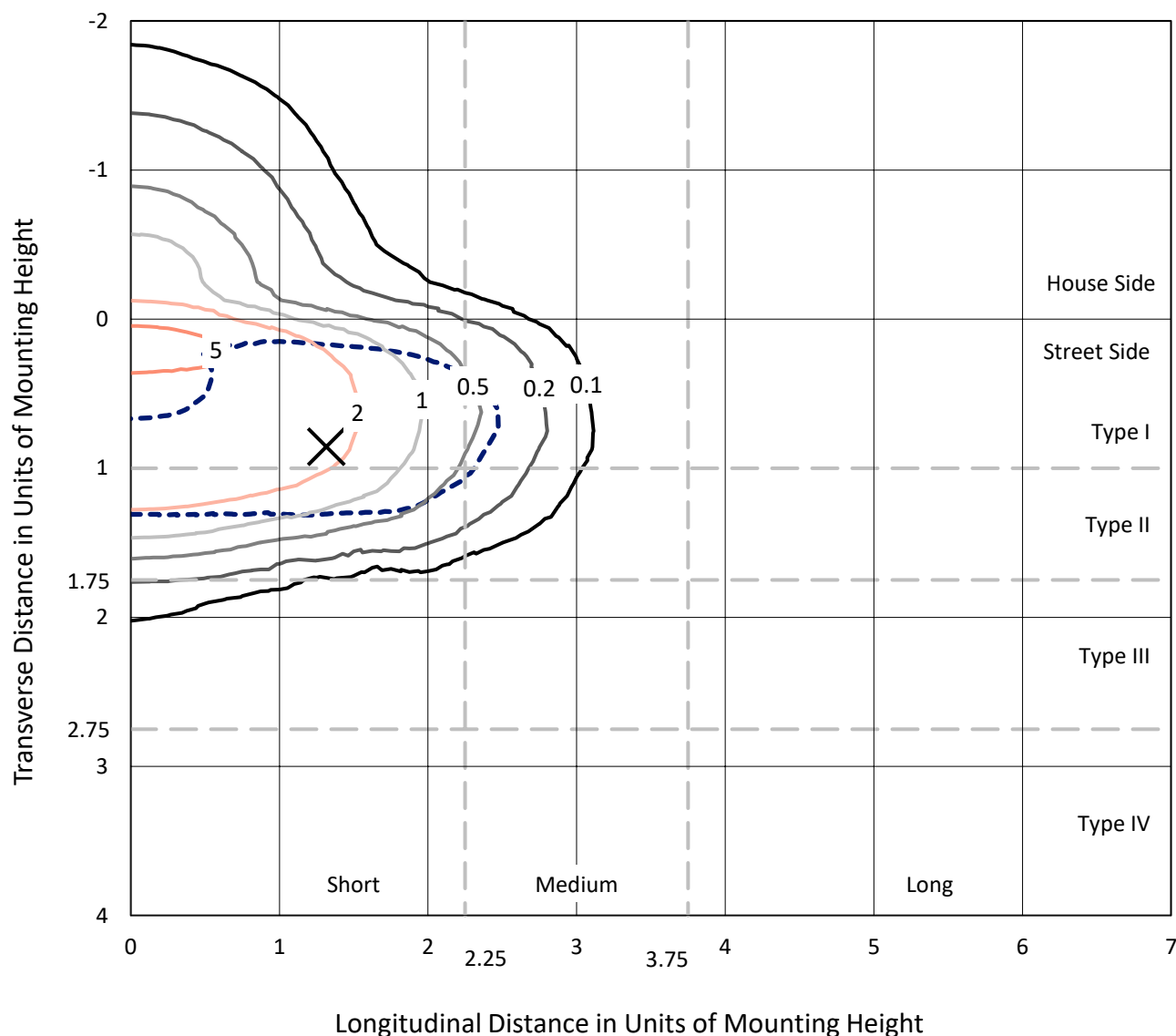
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd



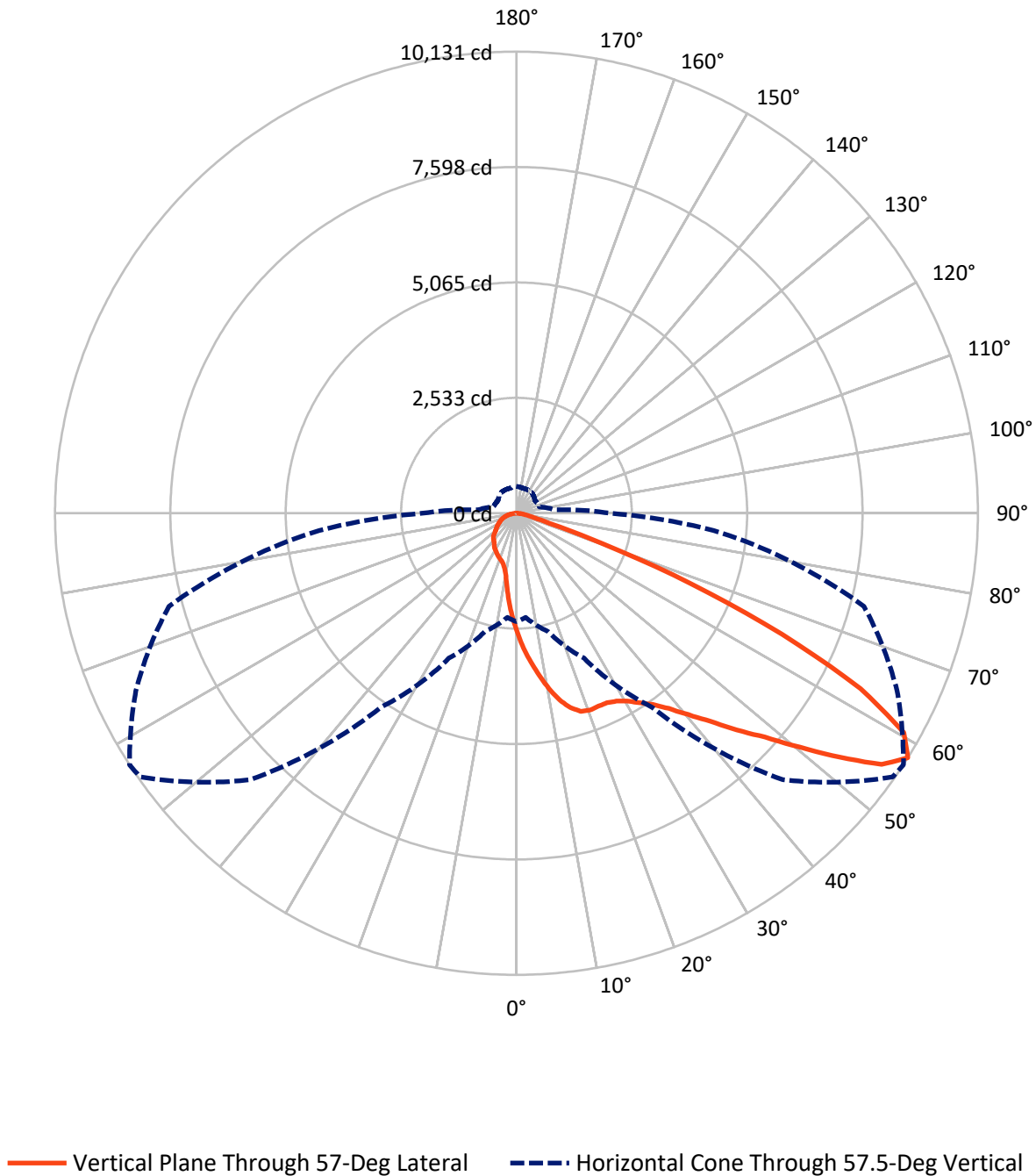
Based on 25 foot mounting height. Maximum calculated value = 6.4 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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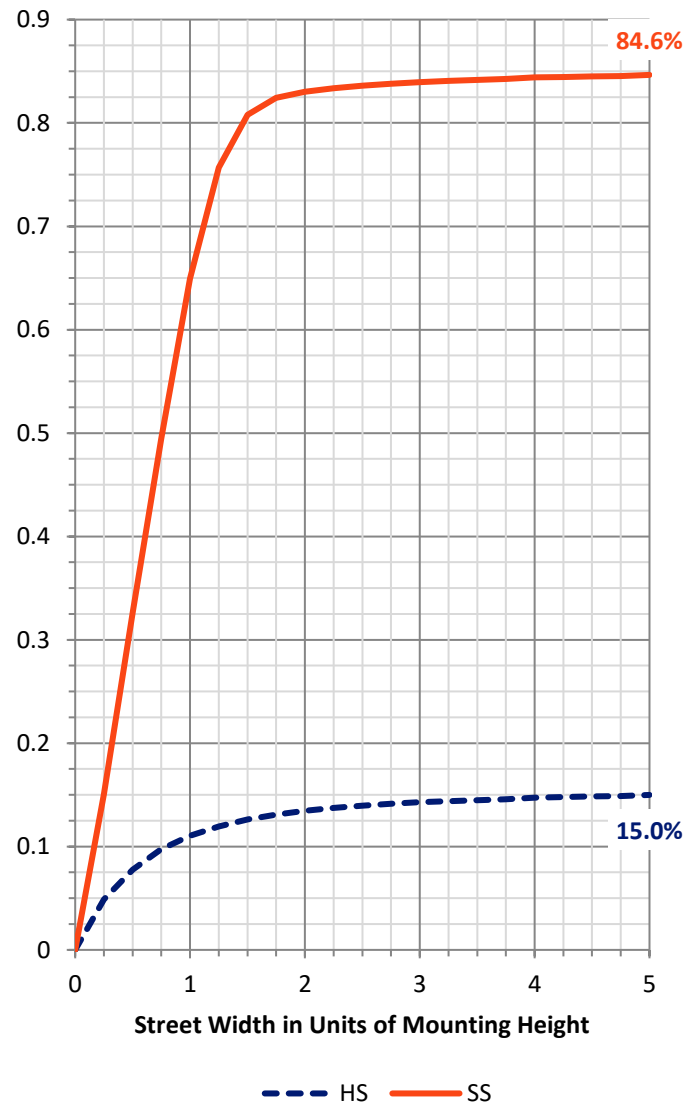
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1898.3	0.0	1898.3
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	10584.7	0.0	10584.7
	% Fixture	84.8	0.0	84.8
Total	Lumens	12483.0	0.0	12483.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.1	2.0
10°-20°	742.8	6.0
20°-30°	1233.4	9.9
30°-40°	1857.9	14.9
40°-50°	2789.5	22.3
50°-60°	3126.7	25.0
60°-70°	1829.9	14.7
70°-80°	541.3	4.3
80°-90°	109.4	0.9
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°	12483.0	100.0
0°-180°	12483.0	100.0

Coefficient of Utilization



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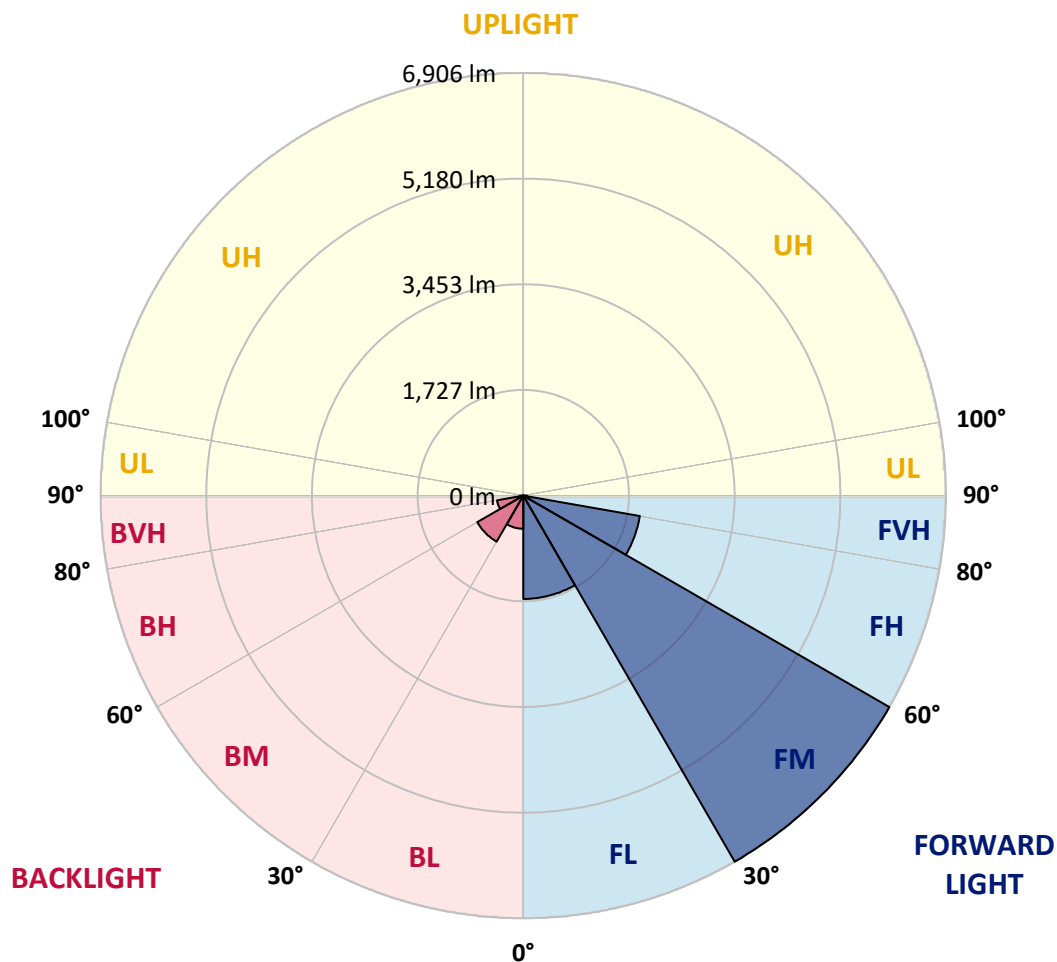
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1687.4	13.5			
FM	(30°-60°)	6906.1	55.3			
FH	(60°-80°)	1934.4	15.5			G2/5000
FVH	(80°-90°)	56.8	0.5			G1/100
BL	(0°-30°)	540.9	4.3	B2/1000		
BM	(30°-60°)	868.0	7.0	B1/1000		
BH	(60°-80°)	436.8	3.5	B1/500		G1/500
BVH	(80°-90°)	52.6	0.4			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°	57°	65°	75°	85°
0°	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5
2.5°	3258.7	3223.2	3195.1	3170.5	3138.4	3051.7	2964.9	2963.5	2894.5	2787.9	2678.6
5°	3789.6	3741.8	3747.9	3671.4	3594.9	3469.2	3285.3	3275.8	3128.9	2929.3	2726.4
7.5°	4135.4	4136.1	4116.9	4073.2	3990.5	3847.7	3639.3	3592.1	3387.8	3085.1	2781.1
10°	4117.6	4136.1	4168.2	4205.8	4231.0	4160.7	3970.7	3913.3	3647.5	3273.7	2841.9
12.5°	3881.2	3909.9	3955.7	4050.0	4202.3	4318.5	4253.6	4207.1	3948.2	3461.6	2908.8
15°	3733.6	3750.7	3776.0	3839.5	4003.5	4281.6	4449.7	4425.1	4231.7	3674.1	2984.0
17.5°	3688.5	3705.6	3713.8	3752.7	3869.6	4154.5	4526.9	4570.6	4483.2	3869.6	3059.9
20°	3733.6	3741.8	3741.8	3765.0	3856.6	4080.0	4523.5	4611.6	4689.5	4103.9	3130.9
22.5°	3851.8	3855.2	3850.4	3858.6	3927.0	4100.5	4491.4	4600.7	4856.3	4302.8	3186.3
25°	4043.8	4049.3	4017.9	3998.7	4048.6	4190.7	4509.1	4609.6	4986.8	4492.7	3223.2
27.5°	4261.8	4268.6	4230.4	4185.9	4209.2	4302.1	4578.8	4669.0	5084.5	4680.0	3246.4
30°	4529.0	4531.7	4467.5	4414.2	4399.1	4468.1	4697.7	4781.8	5206.1	4900.7	3281.2
32.5°	4802.3	4822.8	4740.1	4664.9	4639.7	4660.8	4873.4	4954.7	5351.0	5137.8	3337.3
35°	5174.0	5177.4	5078.3	4986.8	4903.4	4930.7	5098.2	5156.9	5551.2	5411.8	3416.5
37.5°	5638.0	5669.4	5532.7	5361.9	5259.4	5219.8	5370.1	5434.3	5832.0	5748.0	3536.1
40°	6153.2	6164.8	6048.0	5941.4	5754.1	5639.3	5743.2	5812.9	6178.5	6149.1	3674.8
42.5°	6477.1	6502.4	6511.2	6500.3	6359.5	6166.9	6206.5	6239.3	6588.5	6525.6	3817.0
45°	6586.4	6624.0	6751.1	7020.3	7035.3	6845.4	6753.1	6784.6	7035.3	6905.5	3952.9
47.5°	6405.3	6469.6	6703.9	7256.0	7669.4	7683.8	7405.7	7336.7	7442.6	7220.5	4051.3
50°	5937.3	5950.9	6309.7	7109.1	7966.7	8485.3	8197.6	8069.2	7829.3	7453.5	4119.0
52.5°	5213.0	5228.7	5529.3	6426.5	7783.6	9045.6	9124.2	8894.6	8222.2	7634.6	4163.4
55°	3869.6	3960.5	4291.2	5158.3	6915.8	8993.0	9860.8	9730.3	8697.1	7778.1	4233.1
57.5°	2379.3	2295.9	2688.1	3509.5	5201.3	8270.1	10088.4	10130.7	9219.9	7898.4	4349.9
60°	1094.7	1111.1	1273.0	1810.1	3170.5	6469.6	9502.1	9769.9	9508.9	7894.3	4379.3
62.5°	754.4	739.3	698.3	794.7	1445.9	4091.6	8026.1	8479.9	8929.5	7648.9	4262.5
65°	674.4	659.4	580.1	553.5	664.2	1783.4	5834.8	6407.4	7518.4	7029.9	3971.4
67.5°	630.0	609.5	527.5	475.6	474.2	710.0	3440.5	4129.9	5576.5	5943.4	3441.1
70°	583.5	567.1	485.8	428.4	403.8	446.2	1512.2	1979.5	3620.8	4283.0	2680.6
72.5°	537.1	517.9	444.8	383.3	351.2	334.1	579.4	753.7	2045.8	2567.9	1643.4
75°	469.4	459.9	397.7	347.1	312.3	269.9	367.6	419.6	978.5	1179.4	824.8
77.5°	410.7	400.4	353.3	303.4	278.1	219.3	261.0	284.9	412.7	478.3	372.4
80°	300.7	310.9	297.9	267.9	248.0	172.2	175.6	195.4	245.3	271.3	227.5
82.5°	190.6	209.8	229.6	206.4	187.9	136.0	121.6	129.1	167.4	177.7	101.1
85°	79.9	81.3	133.2	125.7	107.3	80.6	73.1	77.2	89.5	93.6	47.1
87.5°	30.7	30.1	47.1	43.7	33.5	23.2	23.2	26.0	35.5	32.8	15.0
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°	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5	2622.5
2.5°	2631.4	2582.9	2486.6	2367.0	2279.5	2181.1	2094.3	2032.2	2008.9	1998.0	1977.5
5°	2629.4	2533.7	2334.2	2125.1	1957.0	1784.8	1639.3	1545.0	1536.8	1473.9	1467.7
7.5°	2630.1	2483.8	2166.1	1858.6	1602.4	1426.1	1305.8	1274.4	1236.8	1227.2	1232.0
10°	2632.1	2420.3	1985.7	1594.8	1346.8	1231.3	1186.2	1173.9	1175.3	1179.4	1180.1
12.5°	2634.8	2358.8	1798.5	1394.6	1203.3	1155.5	1150.7	1161.6	1173.2	1182.1	1184.2
15°	2638.3	2288.4	1616.0	1233.4	1131.6	1127.5	1143.2	1161.6	1178.0	1191.0	1193.1
17.5°	2634.2	2206.4	1463.0	1134.3	1091.9	1111.7	1137.7	1160.9	1176.0	1188.3	1189.6
20°	2624.6	2114.8	1315.4	1064.6	1067.3	1099.4	1127.5	1149.3	1165.7	1171.9	1176.7
22.5°	2587.7	2005.5	1186.9	1010.6	1037.9	1082.4	1115.8	1128.8	1110.4	1097.4	1100.8
25°	2524.8	1863.4	1067.3	966.9	1011.3	1058.4	1092.6	1061.2	1046.1	1040.7	1043.4
27.5°	2446.2	1707.6	977.1	921.1	977.1	1031.8	1022.2	1016.8	1009.9	1001.0	1003.1
30°	2361.5	1555.2	900.6	885.6	940.2	971.7	975.8	984.6	977.1	963.5	968.9
32.5°	2282.9	1411.7	842.5	855.5	914.3	909.5	940.2	950.5	915.6	869.9	871.9
35°	2216.0	1278.5	798.8	826.1	869.9	871.9	902.6	867.1	829.5	807.7	809.0
37.5°	2165.4	1174.6	770.1	800.8	813.1	839.1	822.7	804.3	799.5	784.4	785.1
40°	2135.3	1083.7	751.6	781.0	779.0	796.7	744.1	762.6	769.4	764.6	765.3
42.5°	2105.3	1019.5	732.5	753.7	753.0	718.2	706.5	722.3	740.0	742.1	740.7
45°	2081.4	969.6	712.7	712.0	725.7	671.0	667.6	677.2	702.4	714.7	714.1
47.5°	2054.7	927.9	682.6	663.5	667.6	641.6	636.2	640.3	671.0	690.8	696.3
50°	2021.2	886.3	645.0	619.1	602.0	614.3	615.7	616.3	647.1	669.6	674.4
52.5°	1994.6	854.8	602.0	582.9	562.4	589.7	599.9	601.3	619.8	638.2	641.6
55°	2010.3	837.1	559.6	546.0	527.5	564.4	584.2	587.0	591.1	604.7	606.8
57.5°	2057.4	841.2	525.5	507.7	494.0	534.3	567.8	569.9	567.1	583.5	586.3
60°	2071.8	839.1	500.2	465.3	457.1	502.2	543.9	548.0	547.3	571.2	576.0
62.5°	2011.7	813.1	474.9	429.8	424.3	469.4	510.4	526.8	530.2	564.4	570.6
65°	1870.2	759.8	441.4	392.2	392.2	434.6	478.3	500.9	510.4	556.2	563.0
67.5°	1683.7	697.0	407.3	360.1	358.7	401.1	444.2	467.4	482.4	544.6	548.7
70°	1397.4	612.2	364.9	325.3	325.3	363.5	402.5	430.5	452.3	522.7	522.7
72.5°	957.3	509.1	313.6	285.6	286.3	321.8	361.5	392.9	418.9	479.0	480.4
75°	605.4	397.7	257.6	243.3	246.0	279.5	320.5	353.3	405.2	473.5	475.6
77.5°	321.8	279.5	205.0	201.6	205.0	235.7	281.5	326.6	406.6	410.7	403.8
80°	208.4	198.2	161.9	155.1	156.5	190.0	250.8	310.2	326.6	330.7	315.7
82.5°	113.4	125.7	114.8	108.0	108.0	148.3	213.9	246.7	234.4	194.7	185.9
85°	48.5	58.8	59.4	51.9	49.9	91.6	143.5	134.6	125.0	119.6	118.2
87.5°	13.7	19.1	19.1	14.3	10.9	25.3	28.7	8.2	0.0	0.7	1.4
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)