

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: P456648

Luminaire Tested: **GALN-SA7D-830-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
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-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43636 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 433
Input Voltage (V): NR
Input Current (A_{in}): 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

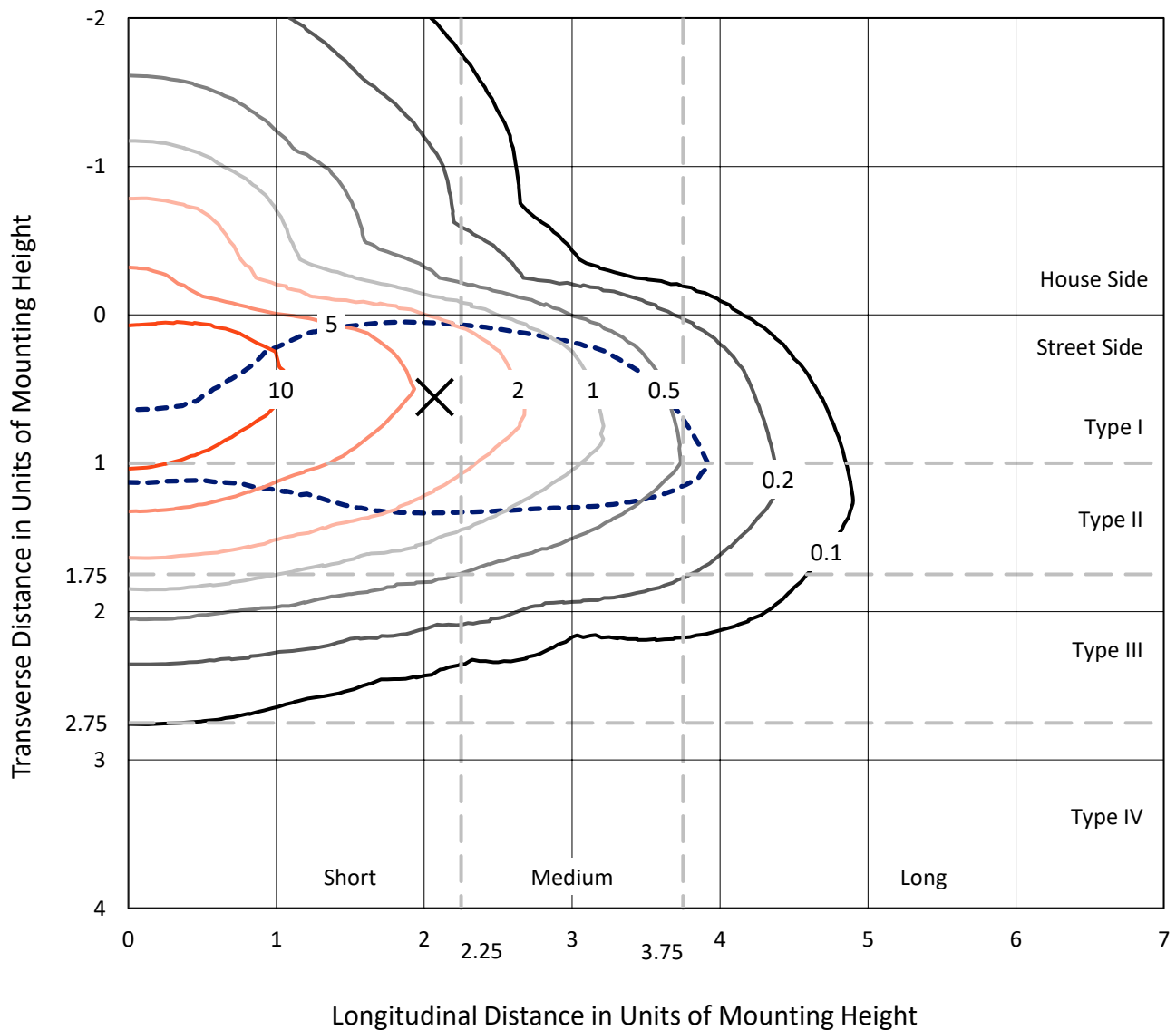


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

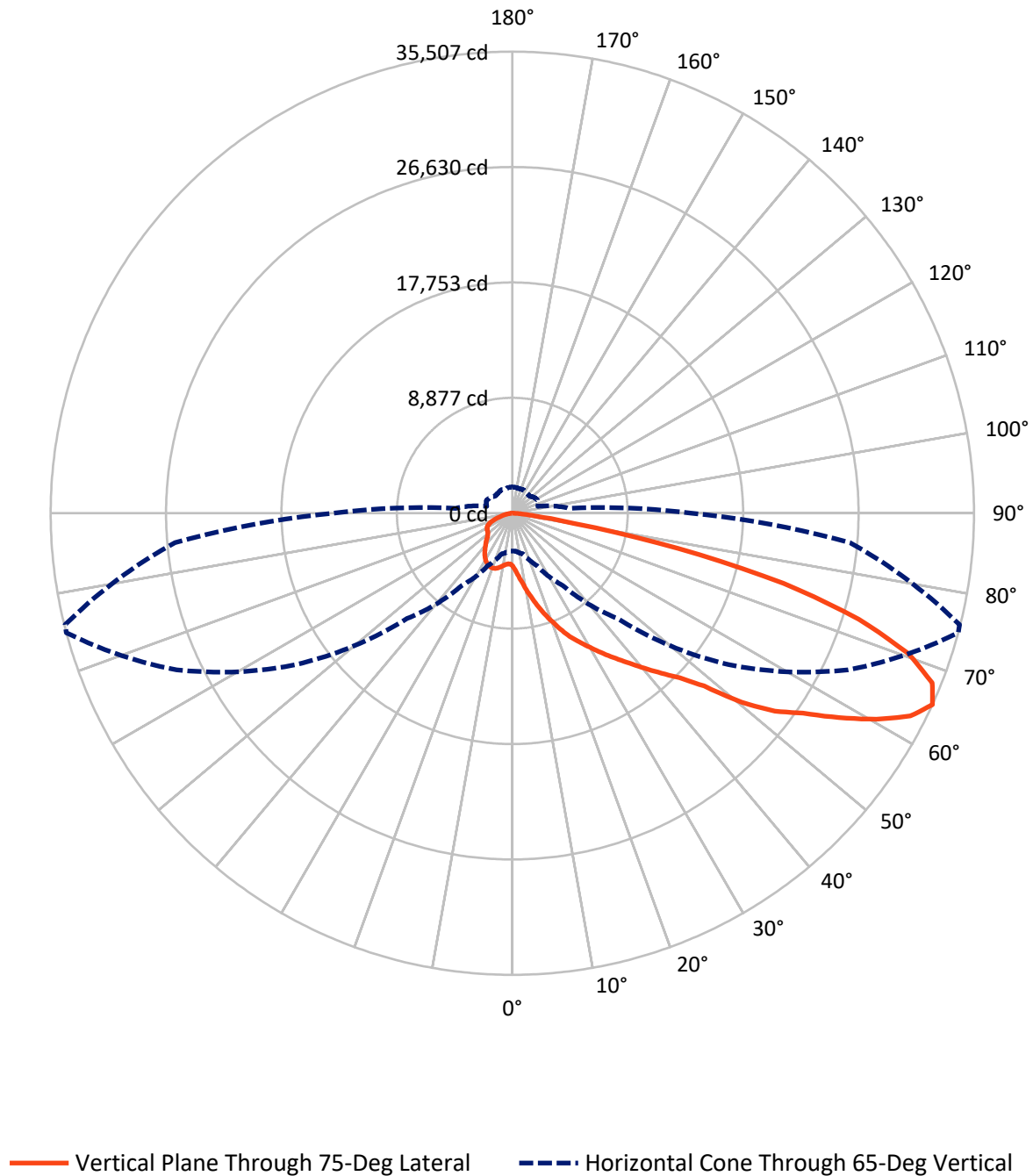


Based on 25 foot mounting height. Maximum calculated value = 16.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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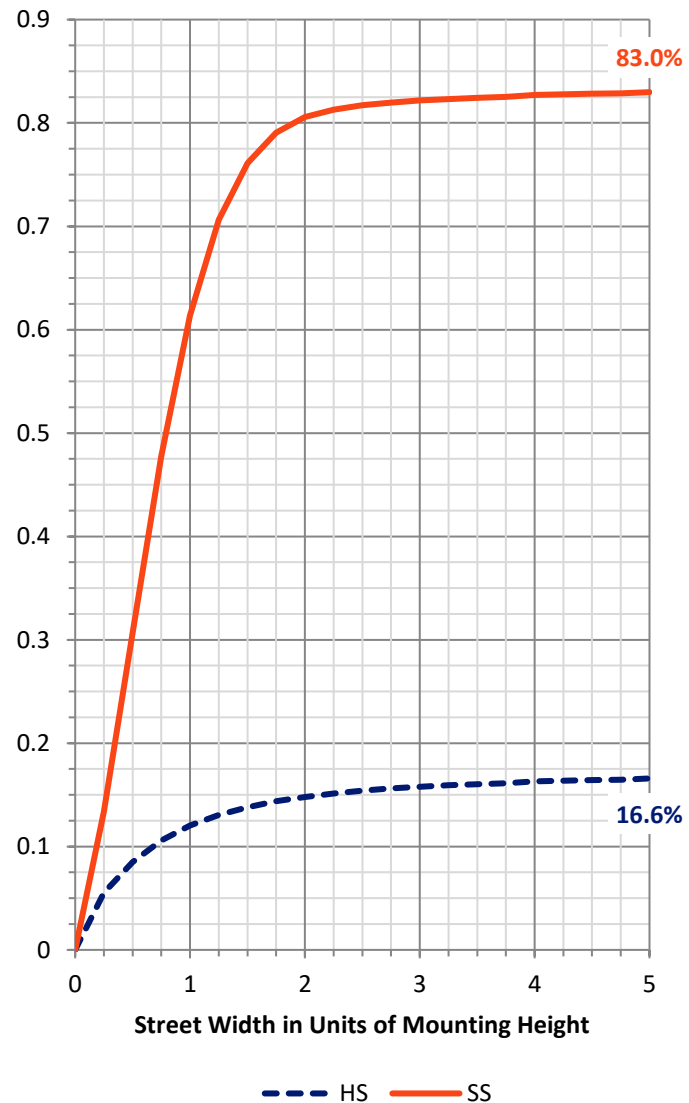
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7335.8	0.0	7335.8
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	36300.2	0.0	36300.2
	% Fixture	83.2	0.0	83.2
Total	Lumens	43636.0	0.0	43636.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.6	1.1
10°-20°	1929.4	4.4
20°-30°	3727.0	8.5
30°-40°	6053.7	13.9
40°-50°	8327.4	19.1
50°-60°	9831.8	22.5
60°-70°	8614.3	19.7
70°-80°	4112.5	9.4
80°-90°	547.2	1.3
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°	43636.0	100.0
0°-180°	43636.0	100.0

Coefficient of Utilization



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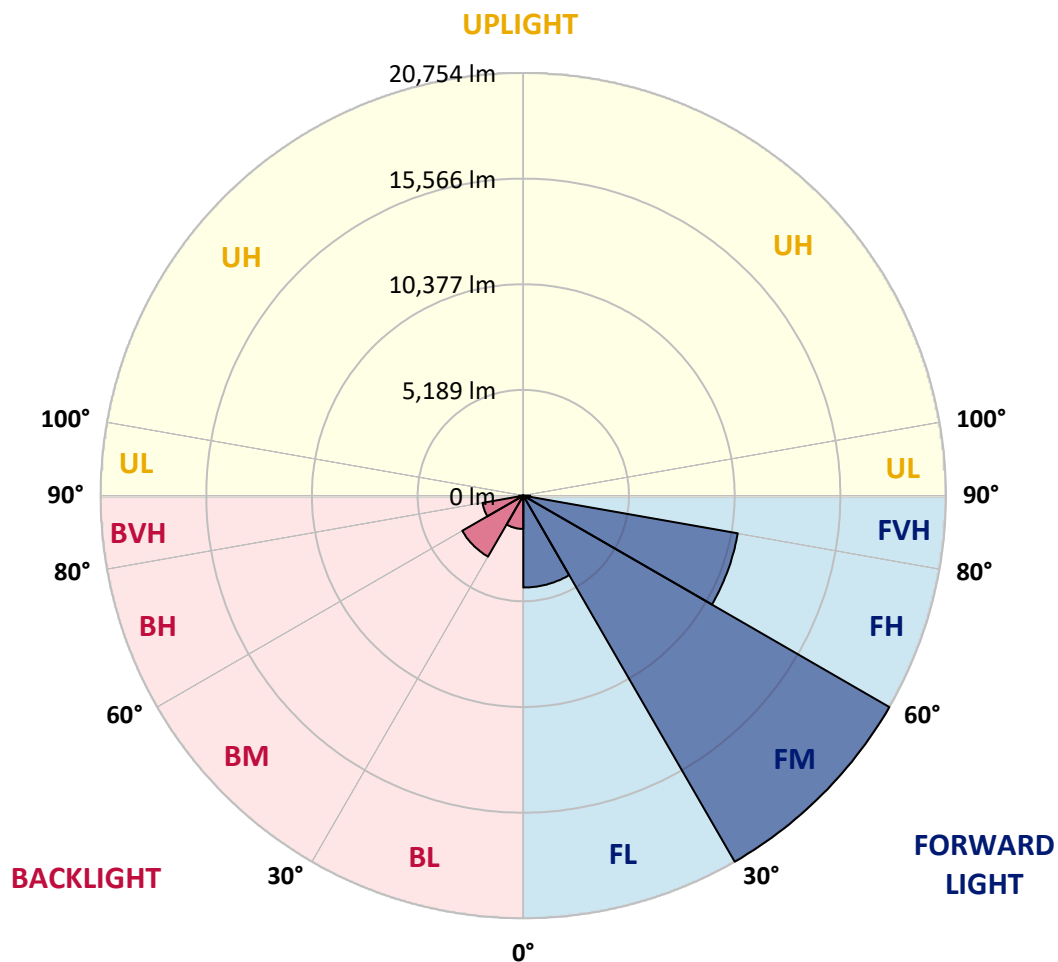
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4511.3	10.3			
FM	(30°-60°)	20754.2	47.6			
FH	(60°-80°)	10692.8	24.5			G4/12000
FVH	(80°-90°)	342.0	0.8			G3/500
BL	(0°-30°)	1637.7	3.8	B3/2500		
BM	(30°-60°)	3458.8	7.9	B3/5000		
BH	(60°-80°)	2034.1	4.7	B3/2500		G3/2500
BVH	(80°-90°)	205.2	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3
2.5°	5386.8	5351.3	5313.5	5209.3	5098.1	4972.7	4792.8	4620.0	4390.4	4383.3	4212.9
5°	6880.3	6856.6	6688.6	6591.5	6333.6	5990.4	5699.3	5247.2	4828.3	4778.6	4447.2
7.5°	8253.0	8160.7	8096.8	7921.7	7666.1	7225.9	6662.6	6051.9	5351.3	5285.1	4736.0
10°	9287.3	9277.9	9244.7	9093.3	8901.6	8463.7	7838.9	6963.1	6014.0	5883.9	5086.3
12.5°	10061.3	10068.4	10063.7	10061.3	9924.0	9552.4	8875.5	7952.5	6683.9	6591.5	5491.0
15°	10570.1	10641.2	10669.6	10787.9	10799.7	10551.2	9969.0	8908.7	7438.9	7301.6	5926.5
17.5°	10906.2	10941.7	11074.3	11275.5	11438.8	11393.8	10875.5	9793.8	8210.4	7980.9	6378.5
20°	11228.1	11289.7	11391.4	11666.0	11954.7	12087.3	11722.8	10700.3	8974.9	8828.2	6877.9
22.5°	11897.9	11985.5	12021.0	12160.6	12406.8	12641.1	12475.4	11568.9	9812.8	9614.0	7408.1
25°	13031.6	13123.9	13024.5	12991.4	13071.9	13187.8	13152.3	12387.9	10603.3	10319.3	7909.9
27.5°	14508.5	14520.3	14326.3	14141.7	13942.8	13883.7	13774.8	13114.5	11289.7	11053.0	8414.0
30°	16094.3	16037.5	15715.6	15381.9	15045.8	14714.4	14402.0	13815.0	12054.1	11782.0	8908.7
32.5°	17566.4	17535.7	17178.3	16659.9	16091.9	15779.5	15147.5	14522.7	12873.0	12610.3	9417.5
35°	18669.4	18714.3	18321.4	17755.8	17135.7	16858.7	16061.1	15265.9	13720.4	13434.0	9971.3
37.5°	19452.8	19429.1	19081.2	18591.2	18046.9	17805.5	17128.6	16077.7	14631.6	14357.0	10577.2
40°	19732.0	19717.8	19459.9	19102.5	18756.9	18671.7	18245.7	16953.4	15675.3	15353.5	11306.2
42.5°	19554.5	19585.3	19414.9	19317.9	19254.0	19315.5	19355.7	18101.3	16813.8	16517.9	12096.7
45°	19010.2	18993.6	18969.9	19128.5	19488.3	19893.0	20453.9	19185.3	18051.6	17814.9	13157.1
47.5°	18037.4	18155.8	18214.9	18652.8	19438.6	20397.1	21717.8	20638.5	19848.0	19642.1	14773.6
50°	16676.5	16771.2	17121.5	17900.1	19071.7	20586.5	22953.3	23014.8	22844.4	22458.6	16529.8
52.5°	14551.1	14697.9	15419.7	16846.9	18319.1	20508.4	23701.2	25052.6	25277.5	24988.7	18259.9
55°	12172.5	12378.4	13140.5	15012.6	17282.4	20082.3	24217.1	26233.7	27130.7	26863.2	19926.1
57.5°	9843.5	10061.3	10844.7	12657.7	15474.2	19140.3	24555.6	27549.6	29653.7	29305.8	21999.4
60°	7377.3	7604.5	8276.7	10144.1	12899.1	17299.0	24326.0	28690.4	32174.3	32025.2	24075.1
62.5°	4759.6	5010.5	5595.1	7140.6	9914.5	14783.1	23097.6	29320.0	34356.5	34176.7	25589.9
65°	2899.3	2927.7	3249.6	4433.0	6785.6	11445.9	20288.2	28484.5	35506.8	35452.4	26051.4
67.5°	1874.5	1919.5	2066.2	2655.6	4068.5	7950.1	16222.1	25727.2	34834.6	34815.7	25097.6
70°	1583.4	1597.6	1663.9	1791.7	2364.4	4821.2	11391.4	21332.0	32280.8	32280.8	22804.2
72.5°	1415.3	1434.3	1458.0	1498.2	1687.5	2731.3	6797.5	16605.5	27871.5	28056.1	19410.2
75°	1285.2	1280.4	1294.6	1301.7	1439.0	1784.6	3514.7	12281.3	21561.6	21192.4	14056.4
77.5°	1100.6	1107.7	1100.6	1131.3	1271.0	1358.5	1784.6	8241.2	13067.1	12589.0	7055.4
80°	904.1	916.0	927.8	946.7	1086.4	1031.9	1072.2	3756.1	4833.0	4731.2	2179.8
82.5°	679.3	695.8	714.8	759.7	854.4	681.6	676.9	1604.7	1744.3	1597.6	802.3
85°	274.5	324.3	489.9	534.9	537.3	374.0	416.6	669.8	712.4	695.8	314.8
87.5°	63.9	75.7	158.6	239.0	220.1	139.6	153.8	217.7	248.5	229.6	106.5
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°	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3	4054.3
2.5°	4134.8	4052.0	3910.0	3801.1	3723.0	3654.3	3611.7	3585.7	3576.2	3573.9	3576.2
5°	4274.4	4127.7	3902.9	3760.9	3682.7	3637.8	3611.7	3609.4	3611.7	3614.1	3607.0
7.5°	4466.2	4255.5	3962.0	3829.5	3770.3	3737.2	3725.3	3720.6	3723.0	3720.6	3720.6
10°	4721.8	4433.0	4078.0	3940.7	3891.0	3853.2	3834.2	3822.4	3812.9	3803.5	3798.7
12.5°	5003.4	4629.5	4203.4	4070.9	3999.9	3940.7	3898.1	3867.4	3846.1	3824.8	3820.0
15°	5318.2	4837.7	4343.1	4158.5	4056.7	3969.1	3895.8	3846.1	3808.2	3777.4	3775.1
17.5°	5618.8	5034.2	4437.8	4198.7	4049.6	3926.5	3829.5	3760.9	3713.5	3673.3	3668.5
20°	5940.7	5221.2	4480.4	4172.7	3978.6	3829.5	3701.7	3618.8	3564.4	3519.4	3512.3
22.5°	6264.9	5379.7	4475.6	4089.8	3855.5	3680.4	3545.5	3457.9	3394.0	3349.0	3332.5
25°	6575.0	5507.6	4416.5	3957.3	3685.1	3502.9	3365.6	3285.1	3228.3	3173.9	3173.9
27.5°	6854.3	5583.3	4305.2	3796.4	3510.0	3318.3	3209.4	3136.0	3083.9	3048.4	3027.1
30°	7128.8	5618.8	4153.7	3592.8	3325.4	3162.1	3074.5	3031.9	2984.5	2944.3	2939.6
32.5°	7375.0	5611.7	3964.4	3394.0	3150.2	3034.2	2998.7	2965.6	2915.9	2859.1	2844.9
35°	7614.0	5564.4	3739.6	3176.3	3003.5	2958.5	2968.0	2920.6	2830.7	2759.7	2747.9
37.5°	7874.4	5479.2	3493.4	2998.7	2880.4	2923.0	2946.7	2842.5	2695.8	2584.6	2558.5
40°	8174.9	5382.1	3237.8	2821.2	2783.4	2889.9	2889.9	2698.2	2497.0	2428.3	2409.4
42.5°	8527.6	5301.6	3024.8	2672.1	2702.9	2809.4	2797.6	2506.4	2423.6	2388.1	2378.6
45°	9086.2	5273.2	2804.7	2541.9	2636.6	2714.7	2617.7	2440.2	2392.8	2364.4	2355.0
47.5°	9969.0	5306.4	2610.6	2444.9	2560.9	2620.1	2416.5	2395.2	2362.1	2321.8	2317.1
50°	10787.9	5275.6	2473.3	2390.5	2494.6	2506.4	2333.7	2340.8	2321.8	2276.9	2267.4
52.5°	11457.7	5178.6	2385.7	2362.1	2437.8	2307.6	2255.6	2281.6	2274.5	2217.7	2208.2
55°	12193.8	5119.4	2343.1	2362.1	2399.9	2134.9	2182.2	2220.1	2210.6	2170.4	2168.0
57.5°	13086.1	5131.2	2312.4	2369.2	2362.1	2047.3	2108.8	2153.8	2151.4	2139.6	2139.6
60°	13999.6	5136.0	2265.0	2366.8	2317.1	1978.6	2033.1	2097.0	2101.7	2108.8	2108.8
62.5°	14302.6	4930.1	2172.7	2324.2	2217.7	1912.4	1962.1	2049.7	2044.9	2063.9	2066.2
65°	13736.9	4359.7	2035.5	2227.2	2089.9	1865.0	1907.6	1988.1	1962.1	2011.8	2021.3
67.5°	12503.8	3607.0	1822.4	2052.0	1947.9	1815.3	1872.1	1902.9	1855.6	1952.6	1955.0
70°	10806.8	2816.5	1552.6	1803.5	1786.9	1763.3	1843.7	1796.4	1730.1	1848.5	1824.8
72.5°	9036.5	2151.4	1240.2	1474.5	1571.6	1685.2	1794.0	1659.1	1566.8	1602.3	1559.7
75°	6788.0	1590.5	996.4	1155.0	1308.8	1573.9	1749.1	1493.5	1351.4	1318.3	1308.8
77.5°	3460.3	1039.0	745.5	863.9	982.2	1422.4	1687.5	1299.4	1119.5	1067.4	1043.8
80°	1235.5	646.1	525.4	596.4	662.7	1223.6	1474.5	1074.5	868.6	859.1	868.6
82.5°	572.8	416.6	352.7	390.5	392.9	816.5	1124.2	802.3	660.3	1003.5	847.3
85°	246.1	208.3	198.8	194.1	179.9	364.5	631.9	430.8	672.2	300.6	276.9
87.5°	73.4	82.8	73.4	54.4	40.2	40.2	63.9	23.7	16.6	11.8	11.8
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)