

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: P454794

Luminaire Tested: **GALN-SA5D-830-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454794
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-830-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30528 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 309
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

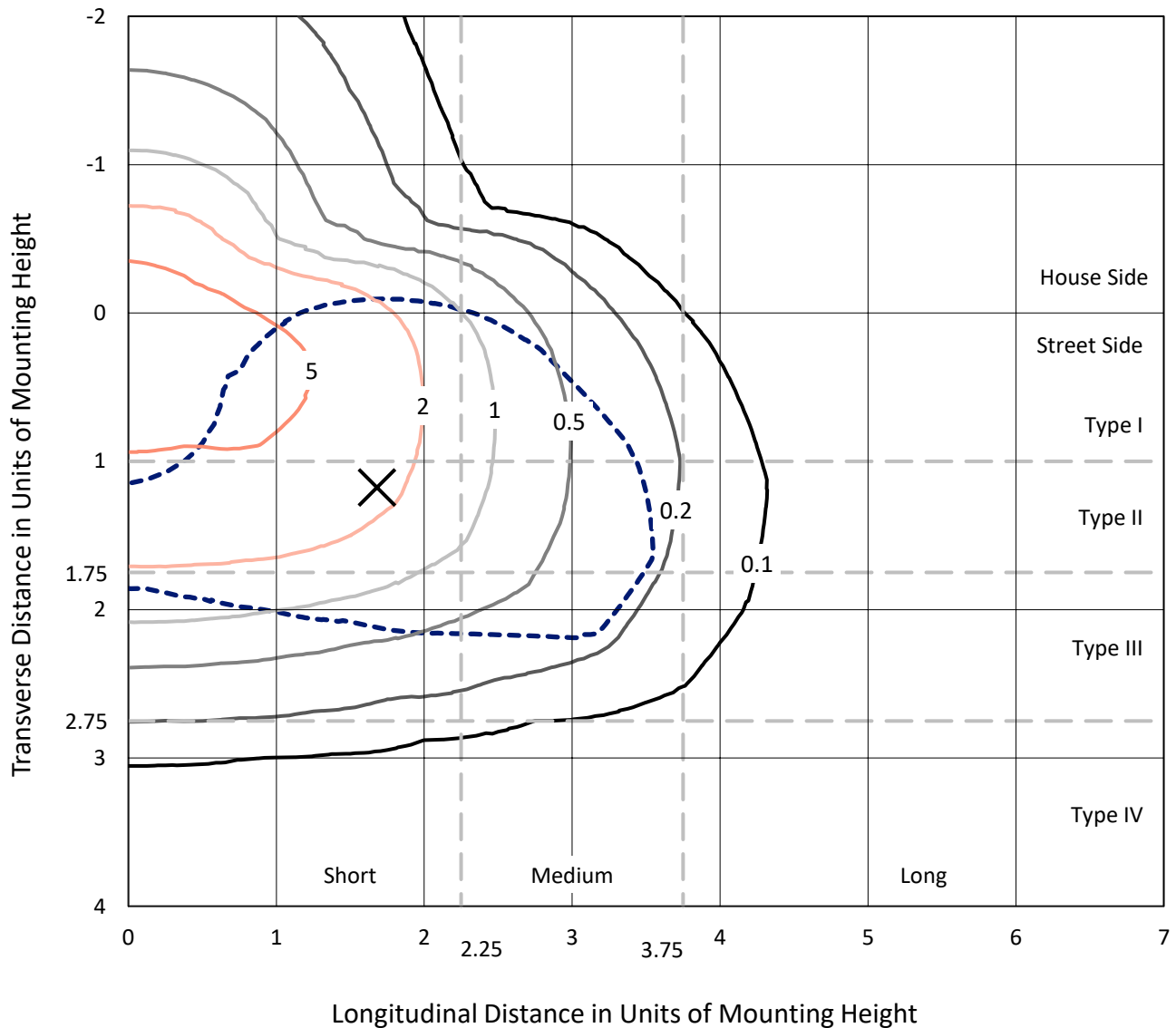


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

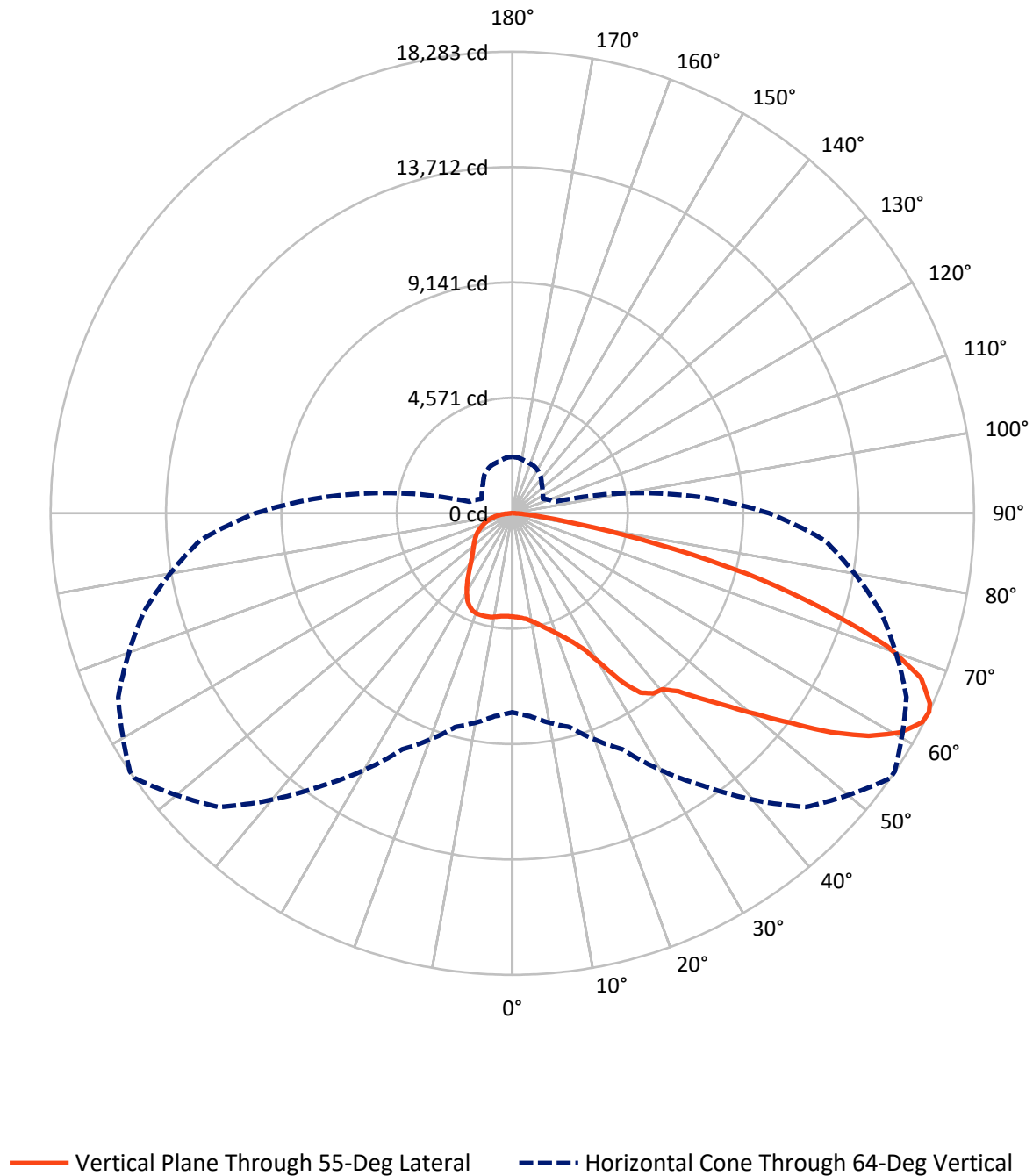


Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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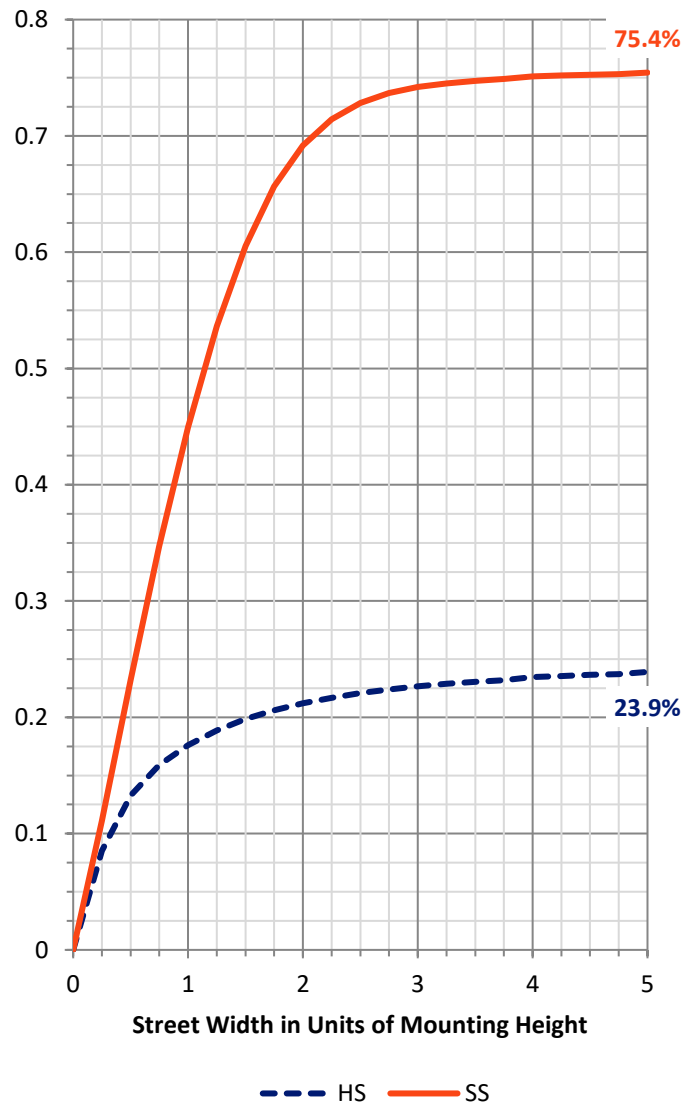
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7415.9	0.0	7415.9
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	23112.2	0.0	23112.2
	% Fixture	75.7	0.0	75.7
Total	Lumens	30528.0	0.0	30528.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.4	1.3
10°-20°	1257.2	4.1
20°-30°	2238.1	7.3
30°-40°	3443.5	11.3
40°-50°	4881.4	16.0
50°-60°	7065.8	23.1
60°-70°	7312.3	24.0
70°-80°	3424.4	11.2
80°-90°	506.9	1.7
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°	30528.0	100.0
0°-180°	30528.0	100.0

Coefficient of Utilization



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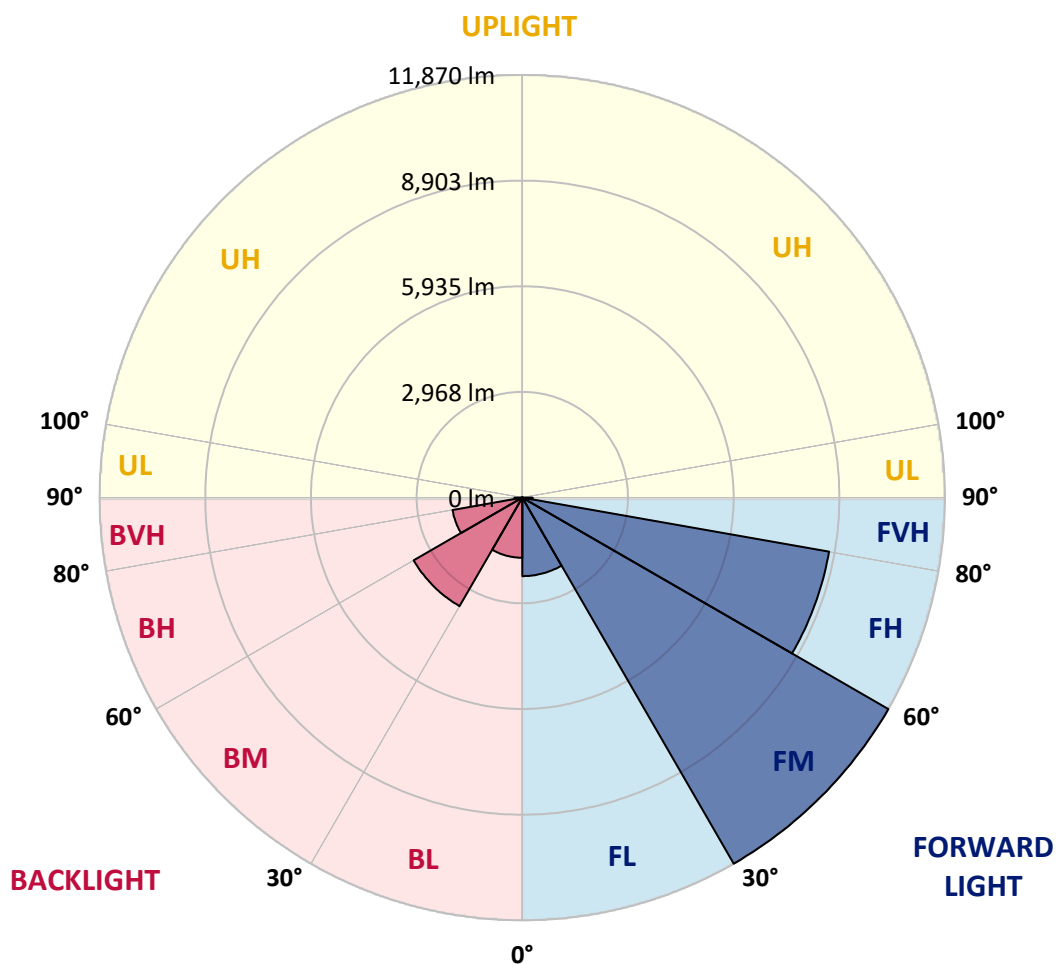
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2204.6	7.2			
FM	(30°-60°)	11870.1	38.9			
FH	(60°-80°)	8747.2	28.7			G4/12000
FVH	(80°-90°)	290.3	1.0			G3/500
BL	(0°-30°)	1689.0	5.5	B3/2500		
BM	(30°-60°)	3520.6	11.5	B3/5000		
BH	(60°-80°)	1989.5	6.5	B3/2500		G3/2500
BVH	(80°-90°)	216.7	0.7			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9
2.5°	4141.9	4140.2	4145.3	4140.2	4143.6	4131.7	4126.6	4130.0	4124.9	4116.4	4101.0
5°	4192.9	4191.2	4192.9	4186.1	4189.5	4182.7	4170.8	4174.2	4165.7	4147.0	4124.9
7.5°	4279.7	4272.9	4272.9	4271.2	4264.4	4254.2	4245.7	4242.3	4233.8	4209.9	4175.9
10°	4392.0	4392.0	4393.7	4380.1	4388.6	4369.9	4361.4	4359.7	4330.8	4300.1	4252.5
12.5°	4540.1	4548.6	4543.5	4536.7	4533.3	4526.5	4497.5	4504.3	4472.0	4419.3	4361.4
15°	4723.9	4737.5	4729.0	4725.6	4717.0	4691.5	4679.6	4674.5	4632.0	4555.4	4478.8
17.5°	4967.2	4950.2	4943.4	4934.9	4899.1	4880.4	4860.0	4856.6	4819.1	4729.0	4609.8
20°	5179.9	5203.7	5190.1	5181.6	5145.9	5110.1	5094.8	5089.7	5057.4	4958.7	4768.1
22.5°	5433.5	5438.6	5443.7	5423.2	5406.2	5379.0	5351.8	5343.3	5331.4	5229.3	4996.1
25°	5704.0	5724.4	5707.4	5687.0	5666.6	5664.9	5690.4	5687.0	5681.9	5583.2	5299.0
27.5°	6144.8	6163.5	6168.6	6146.5	6068.2	6075.0	6132.8	6151.6	6229.8	6066.5	5688.7
30°	6393.2	6411.9	6454.5	6537.8	6662.1	6771.0	6910.5	6953.1	7027.9	6719.9	6151.6
32.5°	6546.4	6553.2	6629.7	6784.6	7157.3	7564.0	7943.4	7958.7	8006.4	7574.2	6575.3
35°	6788.0	6793.1	6854.4	7024.5	7461.9	8139.1	8726.2	8744.9	8705.8	7839.6	6772.7
37.5°	7085.8	7099.4	7138.5	7279.8	7802.2	8620.7	9051.2	9037.6	8690.5	8050.6	7121.5
40°	7519.7	7519.7	7473.8	7664.4	8161.2	8896.4	9165.2	9141.4	9049.5	8661.5	7652.4
42.5°	7902.6	7895.8	8004.7	8134.0	8610.5	9321.8	9643.4	9682.5	9834.0	9429.0	8256.5
45°	8401.2	8431.8	8493.1	8727.9	9374.5	10048.4	10463.6	10501.0	10715.5	10332.6	8962.7
47.5°	8904.9	8915.1	9107.4	9420.5	10320.7	11033.7	11374.0	11435.3	11631.0	11389.3	9723.4
50°	9262.2	9359.2	9667.2	10160.7	11295.7	12235.1	12500.5	12573.7	12919.1	12539.7	10610.0
52.5°	9640.0	9735.3	10111.4	10863.5	12415.4	13463.7	13790.4	13839.7	14198.8	13703.6	11516.9
55°	9963.3	10051.8	10478.9	11486.3	13307.1	14717.8	15310.0	15252.1	15424.0	14600.4	12216.3
57.5°	10016.1	10087.5	10625.3	11884.5	13977.6	15793.3	16642.4	16676.4	16477.3	15270.8	12793.2
60°	9607.7	9754.0	10371.7	11842.0	14278.8	16542.0	17636.2	17660.0	17095.0	15614.6	13022.9
62.5°	8884.5	8869.1	9616.2	11157.9	13856.8	16712.2	18221.6	18196.0	17336.7	15449.5	12800.0
64°	7885.6	8069.4	8767.0	10317.3	13176.1	16450.1	18282.8	18269.2	17221.0	15105.8	12420.5
65°	7276.4	7266.2	7955.3	9629.8	12498.8	16055.3	18173.9	18155.2	16979.3	14797.8	12126.1
67.5°	5253.1	5276.9	5957.6	7431.2	10160.7	14511.9	17464.3	17394.5	16026.4	13776.8	11006.4
70°	3182.1	3195.7	3730.1	4929.8	7293.4	11731.4	15742.2	15745.6	14568.1	12252.1	9367.7
72.5°	1676.2	1711.9	1926.3	2799.3	4429.5	8231.0	12771.1	13074.0	12507.3	10456.8	7400.6
75°	932.5	937.6	1089.1	1380.1	2259.8	4606.4	9599.2	9685.9	9902.1	8416.5	5472.6
77.5°	711.3	721.5	769.2	891.7	1230.3	2135.6	5809.5	6245.2	6978.6	5933.7	3122.6
80°	576.9	587.1	627.9	701.1	818.5	1012.5	2698.9	2933.7	3735.2	2634.2	1218.4
82.5°	449.2	442.4	495.2	542.8	595.6	599.0	1107.8	1225.2	1521.3	1133.3	527.5
85°	333.5	333.5	376.1	365.9	384.6	350.5	488.4	539.4	609.2	481.6	245.0
87.5°	132.7	146.3	246.7	221.2	171.9	137.8	180.4	190.6	211.0	188.9	102.1
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°	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9	4095.9
2.5°	4102.7	4107.8	4095.9	4087.4	4084.0	4078.9	4073.8	4075.5	4082.3	4089.1	4087.4
5°	4123.2	4124.9	4104.4	4094.2	4087.4	4080.6	4080.6	4085.7	4099.3	4109.5	4109.5
7.5°	4174.2	4174.2	4145.3	4126.6	4116.4	4104.4	4101.0	4102.7	4113.0	4126.6	4128.3
10°	4254.2	4247.4	4209.9	4181.0	4162.3	4133.4	4107.8	4094.2	4099.3	4107.8	4107.8
12.5°	4351.2	4332.5	4284.8	4245.7	4199.7	4145.3	4092.5	4065.3	4063.6	4072.1	4068.7
15°	4455.0	4434.6	4368.2	4296.7	4216.8	4136.8	4073.8	4034.7	4004.0	3995.5	4014.3
17.5°	4575.8	4533.3	4441.4	4342.7	4223.6	4119.8	4021.1	3941.1	3886.6	3871.3	3876.4
20°	4722.2	4666.0	4541.8	4386.9	4218.5	4058.5	3905.3	3798.1	3709.7	3682.4	3685.8
22.5°	4924.7	4827.7	4645.6	4409.0	4175.9	3942.8	3730.1	3590.5	3483.3	3440.8	3466.3
25°	5154.4	5048.9	4744.3	4403.9	4065.3	3757.3	3522.5	3340.4	3243.4	3180.4	3194.0
27.5°	5470.9	5283.7	4849.8	4358.0	3907.1	3531.0	3258.7	3086.8	2998.4	2966.0	2981.3
30°	5875.9	5588.3	4963.8	4233.8	3656.9	3245.1	2993.2	2880.9	2828.2	2787.3	2801.0
32.5°	6168.6	5802.7	4989.3	4024.5	3386.3	2984.7	2812.9	2729.5	2671.6	2632.5	2641.0
35°	6377.9	5984.8	4977.4	3767.5	3103.9	2770.3	2669.9	2601.9	2508.3	2423.2	2407.9
37.5°	6658.7	6212.8	4890.6	3486.7	2824.8	2625.7	2554.2	2428.3	2293.9	2179.8	2174.7
40°	7089.2	6480.0	4705.1	3156.6	2586.5	2518.5	2431.7	2268.3	2123.7	2031.8	2025.0
42.5°	7533.3	6726.7	4453.3	2809.5	2390.9	2406.2	2300.7	2139.0	2050.5	1991.0	1984.2
45°	8076.2	6993.9	4181.0	2508.3	2246.2	2300.7	2186.7	2093.1	2040.3	2001.2	1991.0
47.5°	8663.2	7267.9	3874.7	2237.7	2123.7	2203.7	2139.0	2096.5	2067.5	2040.3	2028.4
50°	9296.3	7574.2	3587.1	2019.9	2013.1	2103.3	2133.9	2118.6	2101.6	2093.1	2082.9
52.5°	9990.5	7887.3	3345.5	1866.7	1916.1	2031.8	2135.6	2147.5	2147.5	2142.4	2135.6
55°	10460.2	8105.1	3100.5	1742.5	1817.4	1973.9	2132.2	2178.1	2195.2	2188.4	2181.5
57.5°	10807.3	8224.2	2792.5	1635.3	1734.0	1917.8	2113.5	2181.5	2198.6	2207.1	2203.7
60°	10878.8	8113.6	2389.2	1523.0	1643.8	1836.1	2045.4	2130.5	2152.6	2205.4	2210.5
62.5°	10557.2	7773.3	1987.6	1412.4	1533.2	1711.9	1953.5	2072.6	2116.9	2198.6	2207.1
64°	10162.4	7392.1	1764.6	1342.6	1461.7	1642.1	1907.6	2057.3	2115.2	2224.1	2230.9
65°	9873.1	7114.7	1625.1	1298.4	1415.8	1596.2	1882.1	2062.4	2130.5	2263.2	2273.4
67.5°	8807.9	6160.1	1344.3	1194.6	1306.9	1517.9	1887.2	2105.0	2127.1	2278.5	2276.8
70°	7288.3	4904.2	1126.5	1099.3	1201.4	1454.9	1866.7	2036.9	2038.6	2139.0	2115.2
72.5°	5457.3	3624.6	976.8	1000.6	1084.0	1305.2	1762.9	1945.0	1916.1	1929.7	1905.9
75°	3748.8	2397.7	840.6	895.1	961.4	1153.7	1616.6	1766.3	1720.4	1703.4	1686.4
77.5°	2001.2	1325.6	699.4	791.3	835.5	997.2	1410.7	1555.3	1507.7	1441.3	1419.2
80°	810.0	624.5	563.3	655.1	680.7	803.2	1174.2	1264.3	1228.6	1112.9	1075.5
82.5°	406.7	374.4	442.4	515.6	517.3	573.5	873.0	958.0	878.1	736.8	704.5
85°	212.7	219.5	304.6	362.5	319.9	309.7	524.1	580.3	532.6	462.9	416.9
87.5°	76.6	88.5	160.0	158.3	112.3	59.6	115.7	56.2	30.6	18.7	23.8
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)