

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: P453170

Luminaire Tested: **GALN-SA4A-830-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453170
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-SA4A-830-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14256 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 121
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



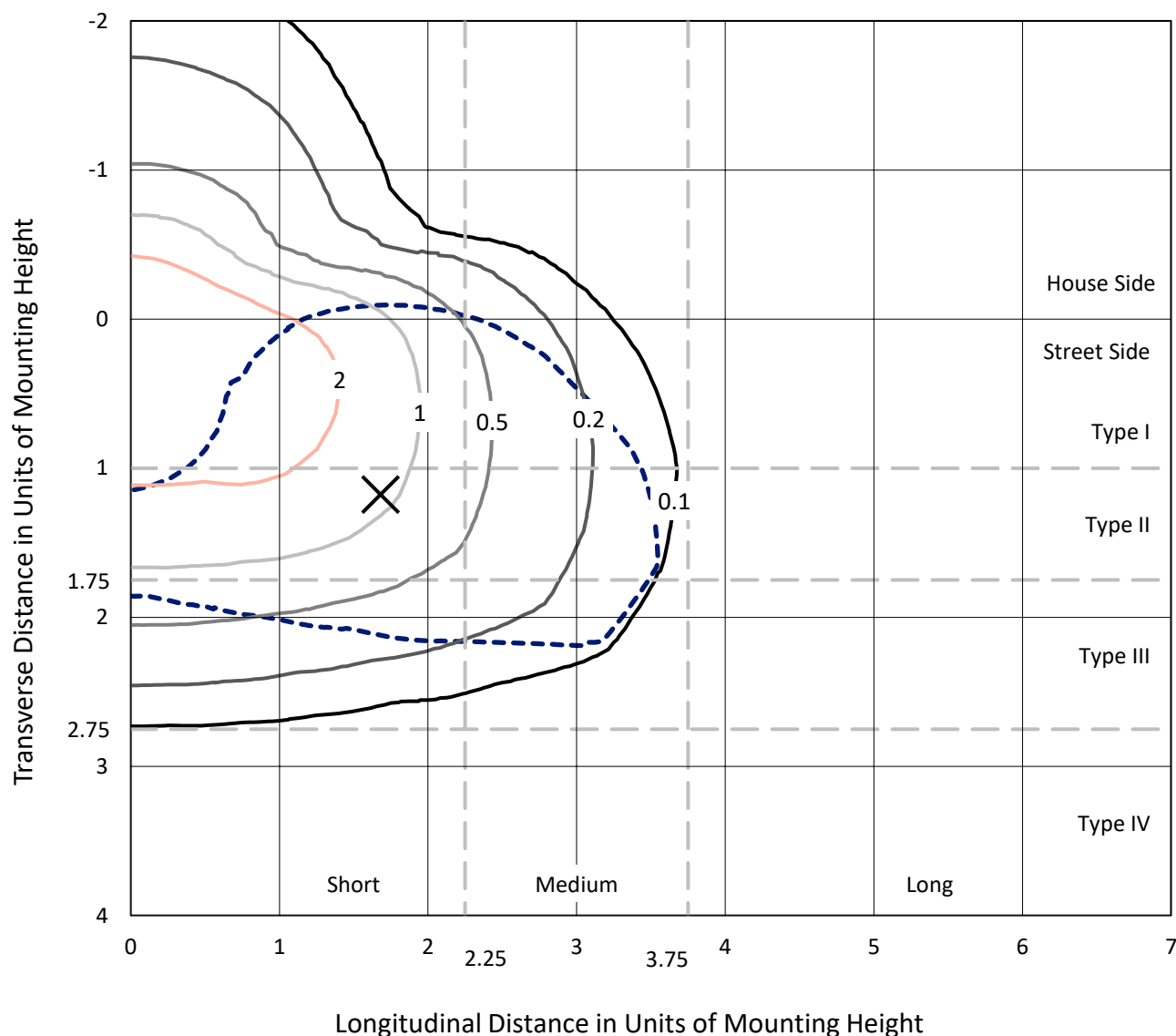
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



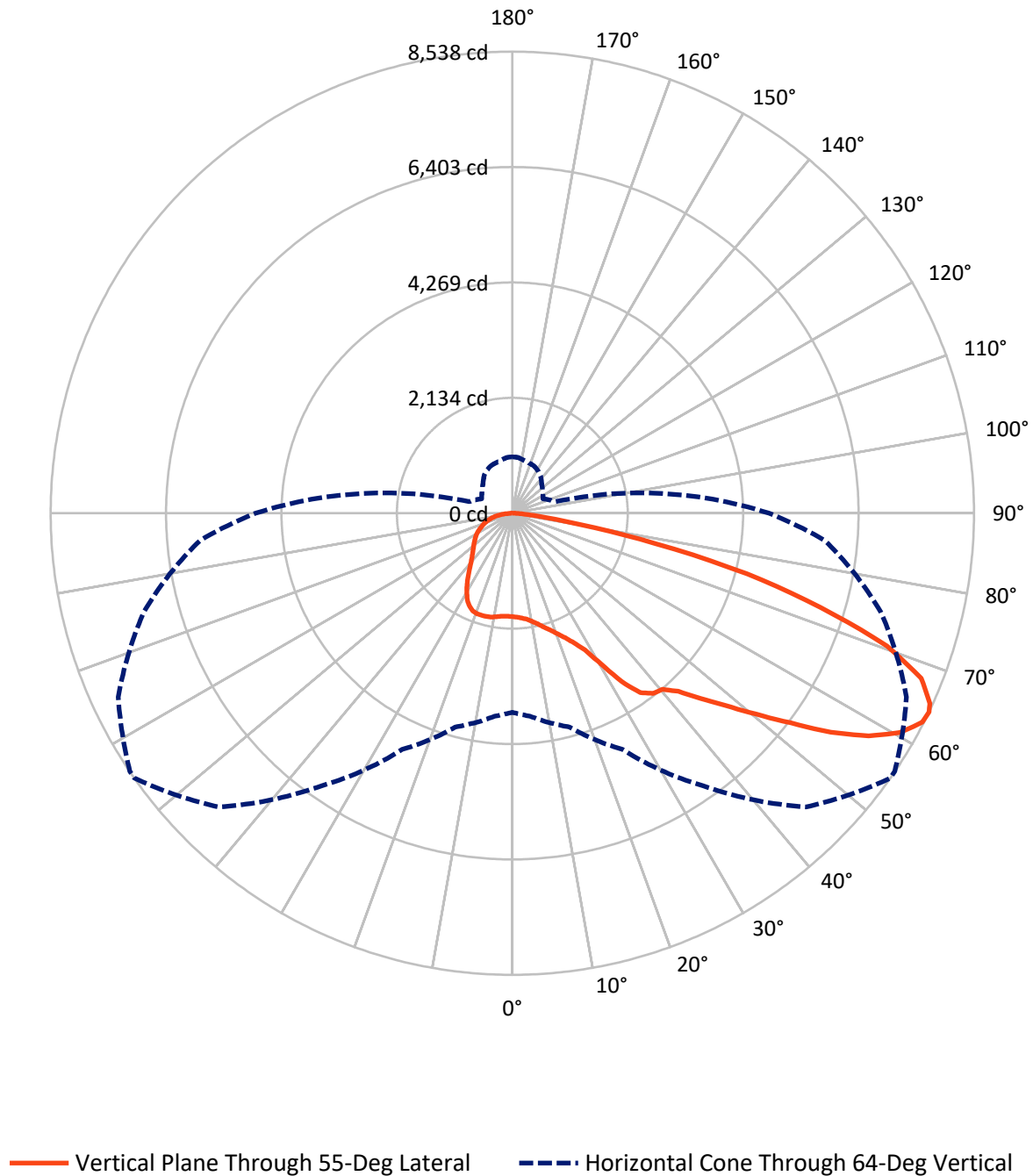
Based on 25 foot mounting height. Maximum calculated value = 3.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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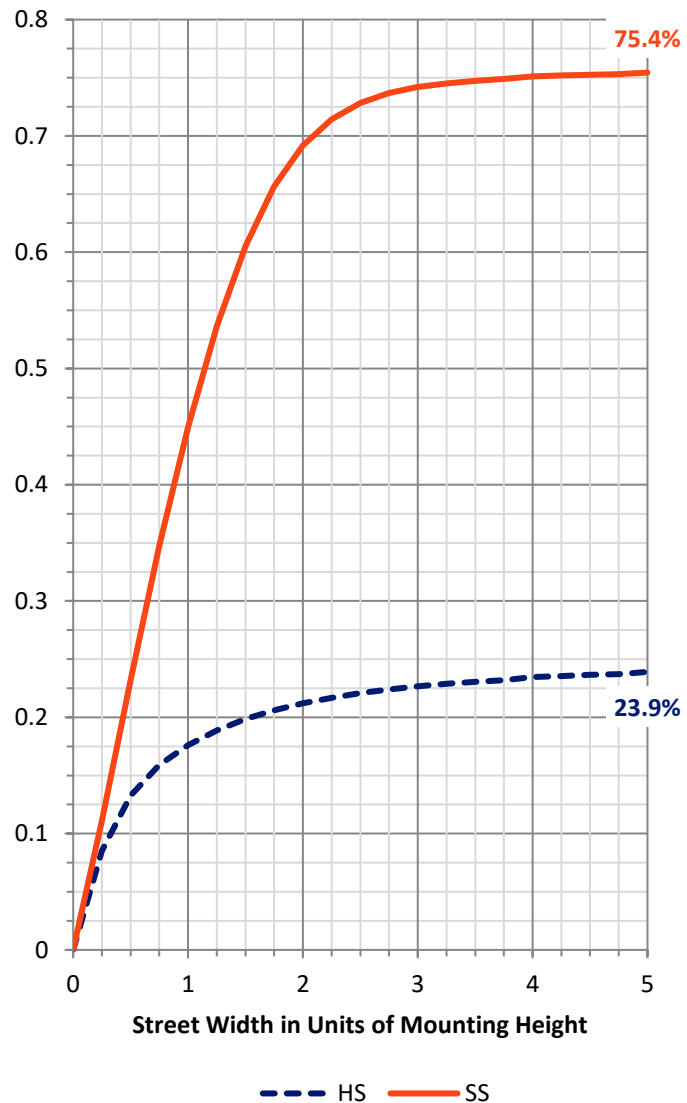
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3463.1	0.0	3463.1
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	10792.9	0.0	10792.9
	% Fixture	75.7	0.0	75.7
Total	Lumens	14256.0	0.0	14256.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	1.3
10°-20°	587.1	4.1
20°-30°	1045.1	7.3
30°-40°	1608.0	11.3
40°-50°	2279.5	16.0
50°-60°	3299.6	23.1
60°-70°	3414.7	24.0
70°-80°	1599.1	11.2
80°-90°	236.7	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°	14256.0	100.0
0°-180°	14256.0	100.0

Coefficient of Utilization



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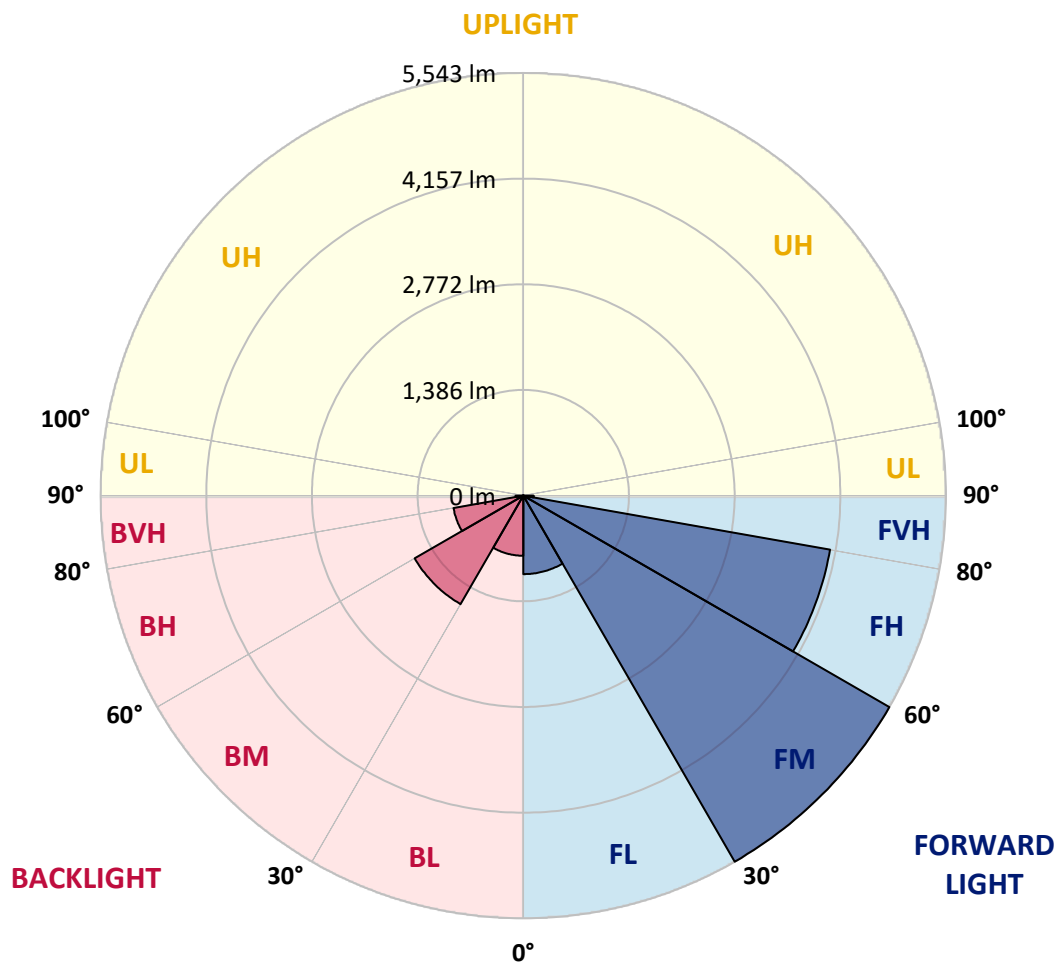
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1029.5	7.2			
FM	(30°-60°)	5543.1	38.9			
FH	(60°-80°)	4084.8	28.7			G2/5000
FVH	(80°-90°)	135.5	1.0			G2/225
BL	(0°-30°)	788.8	5.5	B2/1000		
BM	(30°-60°)	1644.1	11.5	B2/2500		
BH	(60°-80°)	929.1	6.5	B2/1000		G2/1000
BVH	(80°-90°)	101.2	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7
2.5°	1934.2	1933.4	1935.8	1933.4	1935.0	1929.4	1927.0	1928.6	1926.2	1922.3	1915.1
5°	1958.0	1957.2	1958.0	1954.8	1956.4	1953.3	1947.7	1949.3	1945.3	1936.6	1926.2
7.5°	1998.5	1995.4	1995.4	1994.6	1991.4	1986.6	1982.7	1981.1	1977.1	1966.0	1950.1
10°	2051.0	2051.0	2051.8	2045.4	2049.4	2040.7	2036.7	2035.9	2022.4	2008.1	1985.8
12.5°	2120.1	2124.1	2121.7	2118.5	2117.0	2113.8	2100.3	2103.4	2088.3	2063.7	2036.7
15°	2206.0	2212.3	2208.3	2206.7	2202.8	2190.9	2185.3	2182.9	2163.0	2127.3	2091.5
17.5°	2319.6	2311.6	2308.5	2304.5	2287.8	2279.1	2269.5	2267.9	2250.5	2208.3	2152.7
20°	2418.9	2430.0	2423.7	2419.7	2403.0	2386.3	2379.2	2376.8	2361.7	2315.6	2226.6
22.5°	2537.3	2539.7	2542.1	2532.6	2524.6	2511.9	2499.2	2495.2	2489.6	2442.0	2333.1
25°	2663.7	2673.2	2665.3	2655.7	2646.2	2645.4	2657.3	2655.7	2653.3	2607.2	2474.5
27.5°	2869.5	2878.2	2880.6	2870.3	2833.7	2836.9	2863.9	2872.7	2909.2	2832.9	2656.5
30°	2985.5	2994.2	3014.1	3053.0	3111.1	3161.9	3227.1	3246.9	3281.9	3138.1	2872.7
32.5°	3057.0	3060.2	3096.0	3168.3	3342.3	3532.2	3709.4	3716.6	3738.8	3537.0	3070.5
35°	3169.9	3172.2	3200.9	3280.3	3484.5	3800.8	4075.0	4083.7	4065.4	3661.0	3162.7
37.5°	3308.9	3315.3	3333.6	3399.5	3643.5	4025.7	4226.7	4220.4	4058.3	3759.5	3325.6
40°	3511.6	3511.6	3490.1	3579.1	3811.1	4154.4	4280.0	4268.9	4226.0	4044.8	3573.5
42.5°	3690.4	3687.2	3738.0	3798.4	4020.9	4353.1	4503.3	4521.6	4592.3	4403.2	3855.6
45°	3923.2	3937.5	3966.1	4075.8	4377.7	4692.4	4886.3	4903.8	5003.9	4825.1	4185.4
47.5°	4158.4	4163.2	4253.0	4399.2	4819.6	5152.5	5311.4	5340.1	5431.4	5318.6	4540.6
50°	4325.3	4370.6	4514.4	4744.9	5274.9	5713.5	5837.5	5871.7	6033.0	5855.8	4954.6
52.5°	4501.7	4546.2	4721.8	5073.1	5797.8	6287.3	6439.9	6462.9	6630.6	6399.3	5378.2
55°	4652.7	4694.0	4893.5	5363.9	6214.2	6872.9	7149.5	7122.5	7202.7	6818.1	5704.8
57.5°	4677.3	4710.7	4961.8	5549.8	6527.3	7375.2	7771.7	7787.6	7694.6	7131.2	5974.2
60°	4486.6	4554.9	4843.4	5530.0	6667.9	7724.8	8235.8	8246.9	7983.1	7291.7	6081.5
62.5°	4148.9	4141.7	4490.6	5210.5	6470.8	7804.3	8509.1	8497.2	8095.9	7214.6	5977.4
64°	3682.4	3768.2	4094.0	4818.0	6153.0	7681.9	8537.7	8531.4	8041.9	7054.1	5800.2
65°	3397.9	3393.2	3715.0	4496.9	5836.7	7497.5	8486.9	8478.1	7929.0	6910.3	5662.7
67.5°	2453.1	2464.2	2782.1	3470.2	4744.9	6776.8	8155.5	8122.9	7484.0	6433.5	5139.8
70°	1486.0	1492.4	1741.9	2302.1	3405.9	5478.3	7351.3	7352.9	6803.0	5721.5	4374.6
72.5°	782.7	799.4	899.5	1307.2	2068.5	3843.7	5963.9	6105.3	5840.7	4883.1	3455.9
75°	435.5	437.9	508.6	644.5	1055.3	2151.1	4482.6	4523.2	4624.1	3930.3	2555.6
77.5°	332.2	336.9	359.2	416.4	574.5	997.3	2712.9	2916.4	3258.9	2770.9	1458.2
80°	269.4	274.2	293.2	327.4	382.2	472.8	1260.3	1370.0	1744.3	1230.1	569.0
82.5°	209.8	206.6	231.2	253.5	278.1	279.7	517.3	572.1	710.4	529.2	246.3
85°	155.8	155.8	175.6	170.8	179.6	163.7	228.1	251.9	284.5	224.9	114.4
87.5°	62.0	68.3	115.2	103.3	80.3	64.4	84.2	89.0	98.5	88.2	47.7
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°	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7	1912.7
2.5°	1915.9	1918.3	1912.7	1908.8	1907.2	1904.8	1902.4	1903.2	1906.4	1909.5	1908.8
5°	1925.4	1926.2	1916.7	1911.9	1908.8	1905.6	1905.6	1908.0	1914.3	1919.1	1919.1
7.5°	1949.3	1949.3	1935.8	1927.0	1922.3	1916.7	1915.1	1915.9	1920.7	1927.0	1927.8
10°	1986.6	1983.4	1966.0	1952.5	1943.7	1930.2	1918.3	1911.9	1914.3	1918.3	1918.3
12.5°	2031.9	2023.2	2000.9	1982.7	1961.2	1935.8	1911.1	1898.4	1897.6	1901.6	1900.0
15°	2080.4	2070.9	2039.9	2006.5	1969.1	1931.8	1902.4	1884.1	1869.8	1865.8	1874.6
17.5°	2136.8	2117.0	2074.0	2027.9	1972.3	1923.9	1877.8	1840.4	1815.0	1807.8	1810.2
20°	2205.2	2178.9	2120.9	2048.6	1969.9	1895.2	1823.7	1773.7	1732.3	1719.6	1721.2
22.5°	2299.7	2254.4	2169.4	2058.9	1950.1	1841.2	1741.9	1676.7	1626.7	1606.8	1618.7
25°	2407.0	2357.7	2215.5	2056.6	1898.4	1754.6	1644.9	1559.9	1514.6	1485.2	1491.6
27.5°	2554.8	2467.4	2264.8	2035.1	1824.5	1648.9	1521.8	1441.5	1400.2	1385.1	1392.2
30°	2743.9	2609.6	2318.0	1977.1	1707.7	1515.4	1397.8	1345.3	1320.7	1301.6	1308.0
32.5°	2880.6	2709.8	2329.9	1879.3	1581.4	1393.8	1313.6	1274.6	1247.6	1229.3	1233.3
35°	2978.4	2794.8	2324.4	1759.4	1449.4	1293.7	1246.8	1215.0	1171.3	1131.6	1124.4
37.5°	3109.5	2901.3	2283.8	1628.2	1319.1	1226.1	1192.8	1134.0	1071.2	1017.9	1015.6
40°	3310.5	3026.0	2197.2	1474.1	1207.9	1176.1	1135.6	1059.3	991.7	948.8	945.6
42.5°	3517.9	3141.3	2079.6	1312.0	1116.5	1123.6	1074.4	998.9	957.6	929.7	926.6
45°	3771.4	3266.0	1952.5	1171.3	1048.9	1074.4	1021.1	977.4	952.8	934.5	929.7
47.5°	4045.6	3394.0	1809.4	1045.0	991.7	1029.1	998.9	979.0	965.5	952.8	947.2
50°	4341.2	3537.0	1675.1	943.3	940.1	982.2	996.5	989.3	981.4	977.4	972.7
52.5°	4665.4	3683.2	1562.3	871.7	894.8	948.8	997.3	1002.8	1002.8	1000.5	997.3
55°	4884.7	3784.9	1447.9	813.7	848.7	921.8	995.7	1017.2	1025.1	1021.9	1018.7
57.5°	5046.8	3840.5	1304.0	763.7	809.7	895.6	987.0	1018.7	1026.7	1030.7	1029.1
60°	5080.2	3788.9	1115.7	711.2	767.6	857.4	955.2	994.9	1005.2	1029.9	1032.3
62.5°	4930.0	3630.0	928.2	659.6	716.0	799.4	912.3	967.9	988.5	1026.7	1030.7
64°	4745.7	3452.0	824.1	627.0	682.6	766.8	890.8	960.7	987.8	1038.6	1041.8
65°	4610.6	3322.4	758.9	606.3	661.1	745.4	878.9	963.1	994.9	1056.9	1061.7
67.5°	4113.1	2876.6	627.8	557.8	610.3	708.8	881.3	983.0	993.3	1064.0	1063.2
70°	3403.5	2290.2	526.1	513.3	561.0	679.4	871.7	951.2	952.0	998.9	987.8
72.5°	2548.4	1692.6	456.1	467.3	506.2	609.5	823.3	908.3	894.8	901.1	890.0
75°	1750.6	1119.7	392.6	418.0	449.0	538.8	754.9	824.8	803.4	795.4	787.5
77.5°	934.5	619.0	326.6	369.5	390.2	465.7	658.8	726.3	704.1	673.1	662.7
80°	378.3	291.6	263.0	305.9	317.9	375.1	548.3	590.4	573.7	519.7	502.2
82.5°	189.9	174.8	206.6	240.8	241.6	267.8	407.7	447.4	410.0	344.1	329.0
85°	99.3	102.5	142.2	169.3	149.4	144.6	244.8	271.0	248.7	216.1	194.7
87.5°	35.8	41.3	74.7	73.9	52.4	27.8	54.0	26.2	14.3	8.7	11.1
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)