

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: P651736

Luminaire Tested: **GALN-SA2A-840-U-SLL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651736  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2A-840-U-SLL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5554 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

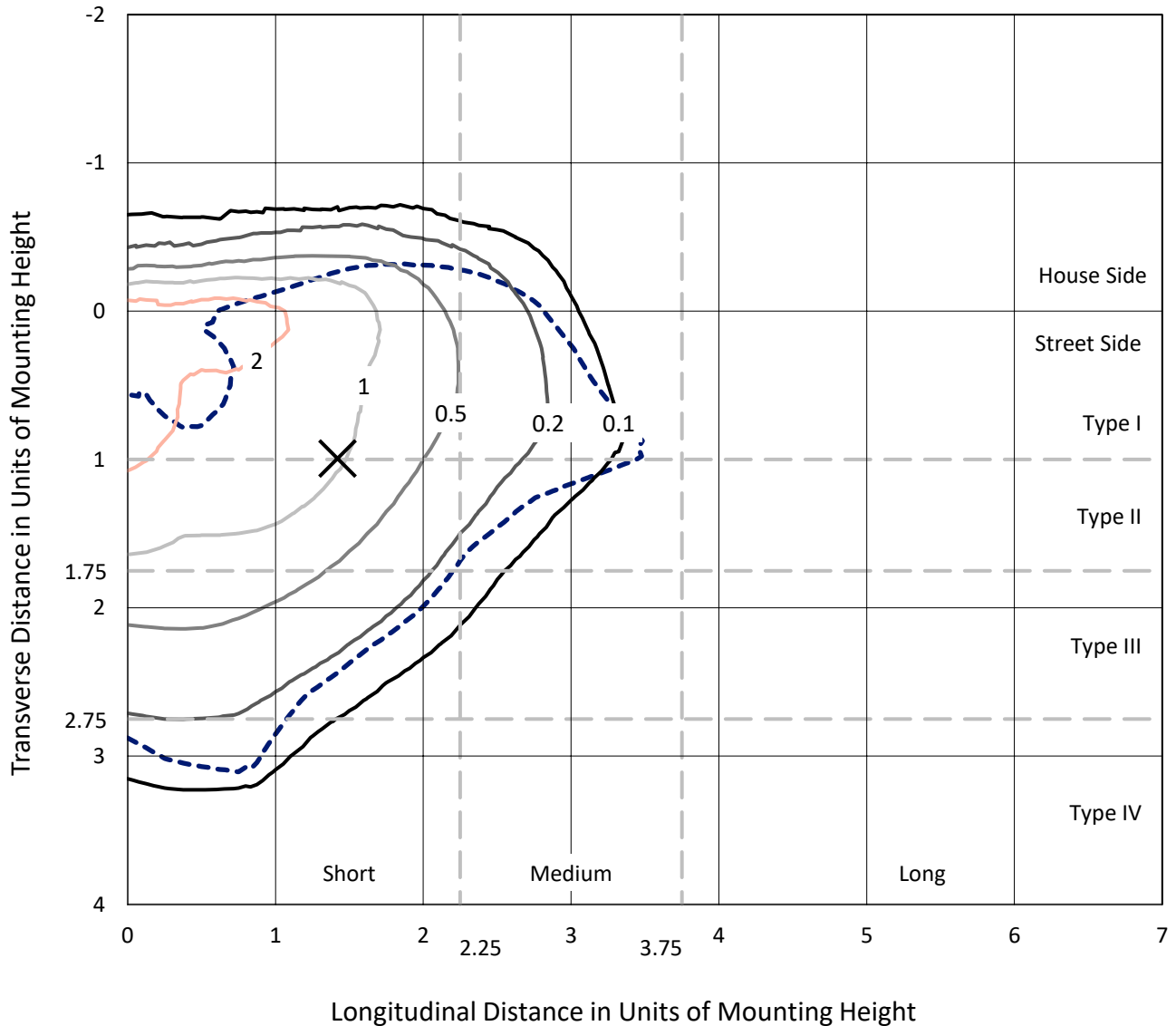
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

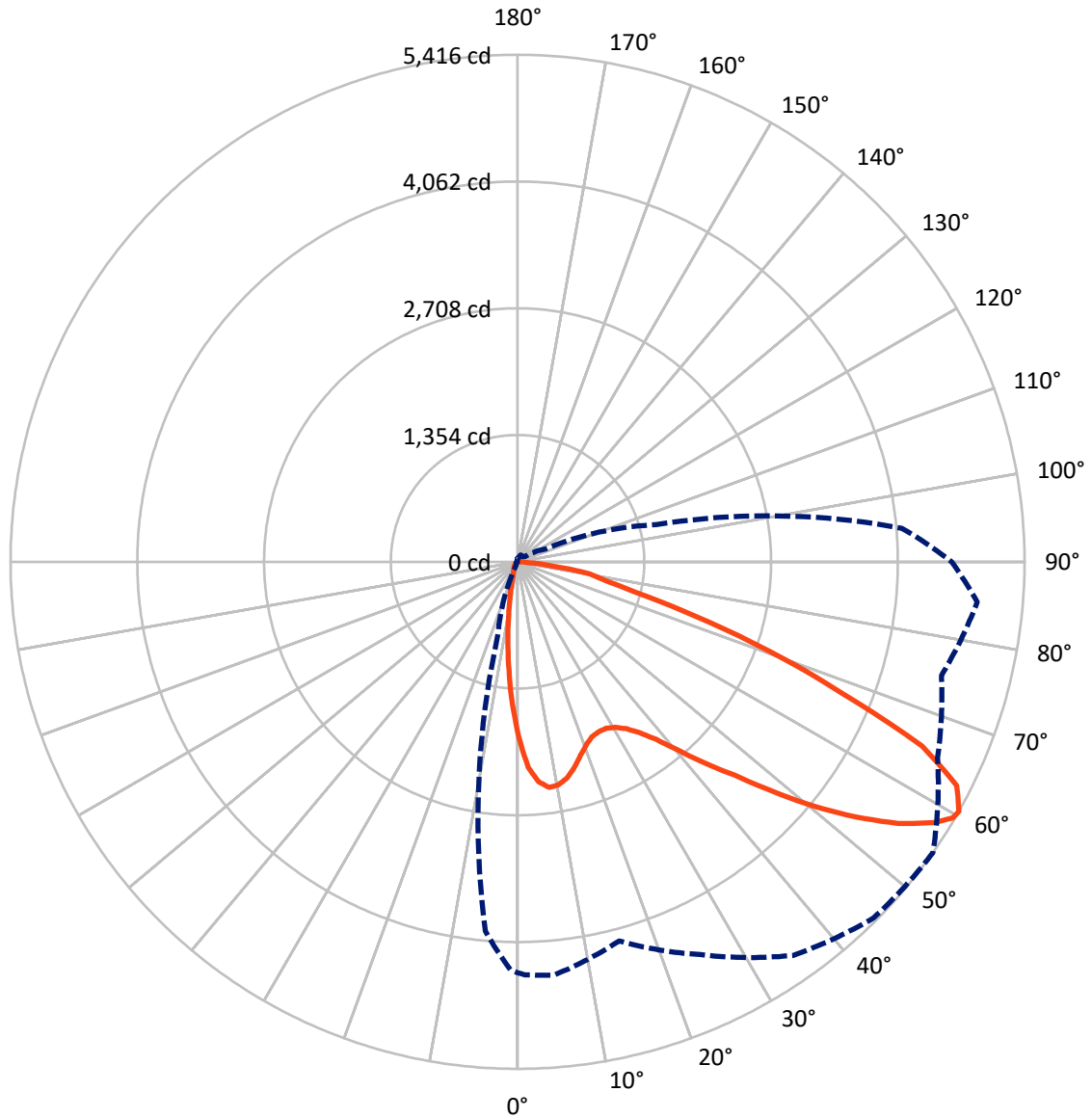
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical



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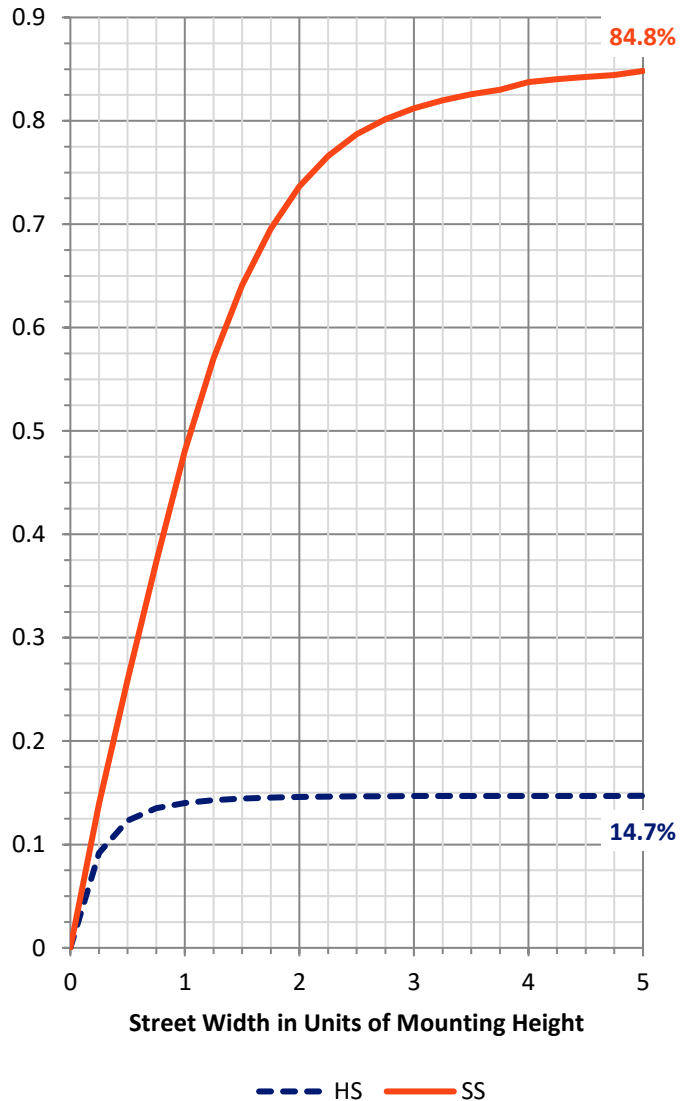
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	824.3	0.0	824.3
	% Fixture	14.8	0.0	14.8
<b>Street Side</b>	Lumens	4729.7	0.0	4729.7
	% Fixture	85.2	0.0	85.2
<b>Total</b>	Lumens	5554.0	0.0	5554.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.3	2.5
10°-20°	274.2	4.9
20°-30°	405.9	7.3
30°-40°	605.1	10.9
40°-50°	886.1	16.0
50°-60°	1279.3	23.0
60°-70°	1345.7	24.2
70°-80°	553.6	10.0
80°-90°	64.8	1.2
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°	5554.0	100.0
0°-180°	5554.0	100.0

**Coefficient of Utilization**



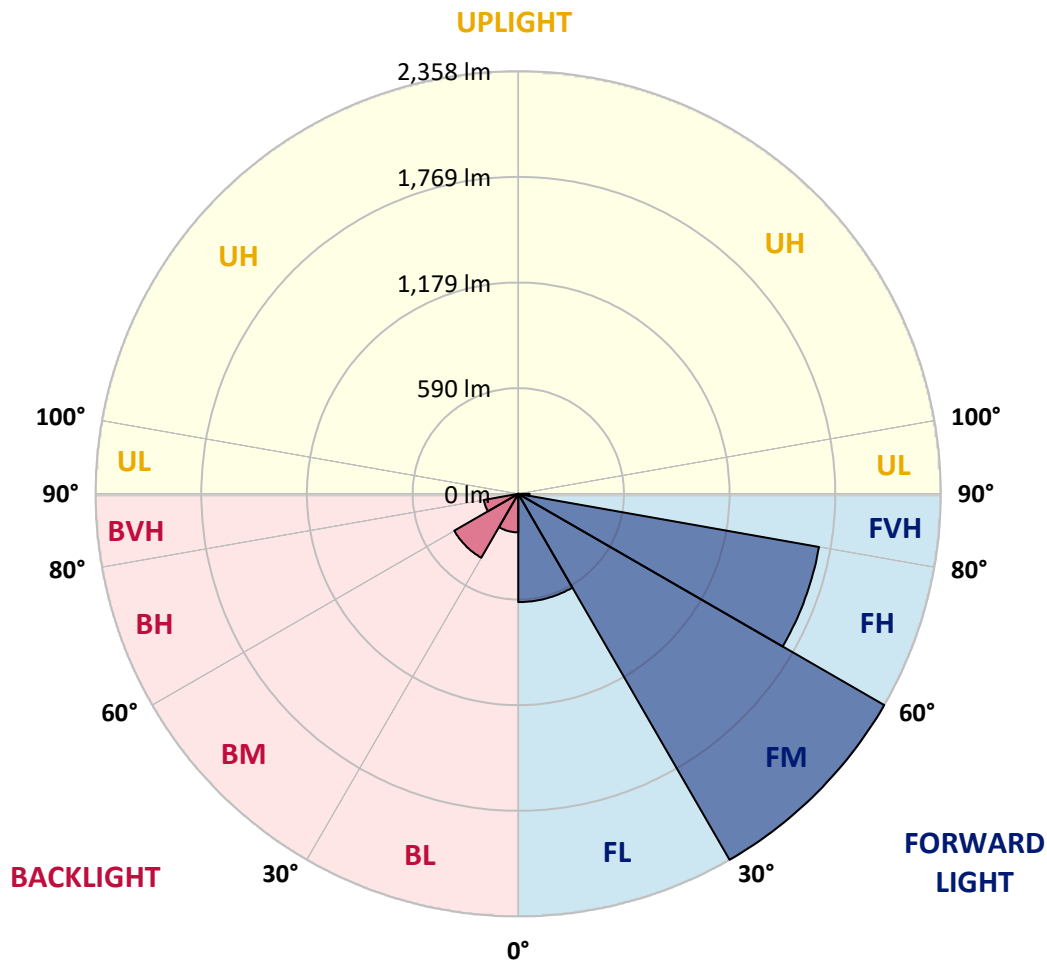
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	604.3	10.9			
FM (30°-60°)	2358.2	42.5			
FH (60°-80°)	1704.2	30.7			G1/1800
FVH (80°-90°)	62.9	1.1			G1/100
BL (0°-30°)	215.1	3.9	B1/500		
BM (30°-60°)	412.2	7.4	B1/1000		
BH (60°-80°)	195.1	3.5	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6
2.5°	2054.6	2051.1	2081.5	2131.1	2181.0	2207.2	2202.1	2199.9	2158.4	2128.1	2064.4
5°	2050.3	2067.8	2122.1	2256.3	2358.1	2407.2	2421.7	2360.6	2279.9	2162.7	2018.2
7.5°	1927.6	1949.4	2037.9	2247.7	2428.6	2535.4	2531.7	2433.8	2267.0	2085.8	1879.7
10°	1775.4	1801.0	1904.9	2159.7	2394.4	2535.4	2543.2	2419.2	2211.8	1979.3	1762.6
12.5°	1668.1	1698.5	1813.4	2077.6	2306.4	2445.3	2454.3	2364.5	2170.4	1938.3	1698.9
15°	1631.8	1660.4	1777.1	2036.1	2212.8	2287.5	2285.4	2276.0	2154.1	1948.1	1702.3
17.5°	1694.2	1717.7	1849.4	2055.0	2125.1	2117.4	2128.5	2173.8	2157.6	2030.6	1810.0
20°	1855.3	1879.3	2020.8	2112.7	2057.9	2009.2	2014.4	2090.1	2189.2	2185.8	1978.5
22.5°	2077.2	2117.8	2246.1	2224.7	2049.0	1942.1	1931.4	2029.8	2243.1	2364.5	2205.9
25°	2358.1	2399.1	2499.1	2403.4	2093.0	1926.3	1916.5	2011.3	2308.5	2538.9	2461.9
27.5°	2594.1	2625.3	2724.8	2577.4	2158.0	1933.1	1916.9	2013.9	2361.5	2687.2	2677.8
30°	2783.0	2806.1	2864.6	2658.6	2214.0	1963.1	1944.2	2051.5	2385.0	2759.5	2852.7
32.5°	2935.2	2974.1	2992.4	2745.4	2294.3	2019.5	1987.5	2123.8	2442.3	2848.8	3036.1
35°	3109.2	3154.1	3130.5	2828.3	2400.4	2107.5	2068.2	2240.9	2529.1	2931.3	3249.0
37.5°	3329.8	3381.5	3289.6	2915.5	2512.4	2240.1	2221.7	2405.5	2660.8	3049.3	3477.3
40°	3558.0	3588.0	3443.9	3021.5	2650.1	2432.8	2450.4	2650.1	2833.0	3190.8	3720.1
42.5°	3736.3	3764.6	3602.5	3110.4	2790.7	2661.6	2734.7	2945.0	3030.5	3335.7	3901.3
45°	3872.7	3896.6	3712.3	3207.5	2980.5	2992.9	3131.0	3249.0	3228.4	3424.2	4041.1
47.5°	3978.7	3999.2	3797.0	3311.8	3264.8	3398.1	3609.3	3659.4	3433.6	3520.0	4167.7
50°	4022.3	4028.3	3823.5	3444.7	3587.5	3914.6	4134.8	4104.4	3668.8	3626.5	4302.3
52.5°	4079.2	4077.9	3899.2	3571.3	3891.1	4376.3	4596.0	4527.2	3934.7	3785.9	4453.7
55°	4228.4	4230.1	4061.2	3750.9	4149.7	4749.0	4984.2	4934.1	4215.1	4055.2	4630.2
57.5°	4409.6	4416.0	4291.6	3960.8	4396.8	5019.3	5274.0	5254.8	4594.3	4354.9	4796.9
59°	4433.2	4445.9	4400.6	4108.7	4543.4	5102.2	5373.2	5392.0	4797.4	4552.4	4887.1
60°	4390.4	4411.8	4432.3	4192.5	4629.4	5132.1	5379.2	5416.0	4950.0	4686.6	4928.2
62.5°	4204.0	4237.8	4340.8	4450.2	4736.7	5038.9	5188.1	5265.1	5138.9	5039.4	4932.0
65°	3959.9	3977.4	4126.2	4496.0	4528.4	4603.7	4649.9	4748.6	4911.9	5175.3	4755.4
67.5°	3559.8	3611.5	3793.6	4230.5	3914.2	3825.2	3813.7	3715.4	4139.5	4851.2	4320.3
70°	2940.7	2963.9	3188.2	3468.3	2954.0	2817.2	2871.9	2835.2	3208.8	4176.2	3477.3
72.5°	2223.9	2276.0	2495.3	2764.6	2010.1	1832.7	1983.6	1969.9	2410.2	3356.3	2388.9
75°	1582.2	1615.9	1895.5	2163.6	1407.7	1192.7	1247.0	1297.9	1682.6	2650.1	1411.6
77.5°	1087.2	1116.2	1326.1	1430.8	1026.9	983.6	899.9	949.1	1102.6	1572.3	768.2
80°	655.8	654.5	792.6	818.2	715.2	830.7	696.9	782.3	666.5	672.9	297.5
82.5°	425.8	421.5	484.8	528.4	398.0	418.5	280.9	404.9	434.4	187.7	94.0
85°	190.7	198.8	233.0	307.4	174.4	92.8	57.3	124.4	185.1	94.4	0.0
87.5°	19.7	15.4	41.0	74.8	24.0	2.5	8.6	4.3	0.0	0.0	0.0
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°	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6
2.5°	2034.9	2010.1	1936.2	1866.9	1807.5	1734.8	1687.7	1613.8	1568.9	1555.3	1557.4
5°	1953.2	1881.8	1741.2	1628.8	1503.5	1432.1	1323.6	1219.2	1162.8	1141.8	1132.4
7.5°	1782.2	1705.7	1536.0	1359.5	1225.2	1099.9	1019.1	927.2	864.4	812.7	803.7
10°	1655.3	1554.8	1344.5	1154.7	1048.6	954.6	873.8	781.9	708.0	648.9	632.7
12.5°	1579.1	1466.7	1232.1	1073.0	972.5	875.9	770.8	664.3	588.7	525.0	495.4
15°	1565.5	1435.1	1200.4	1014.4	890.5	773.8	633.9	519.0	441.2	380.9	362.6
17.5°	1648.0	1491.9	1195.7	953.4	783.1	617.7	472.4	377.0	289.4	255.7	242.4
20°	1795.0	1592.4	1195.3	882.4	672.9	475.8	331.8	245.8	210.3	194.1	186.4
22.5°	1995.5	1729.3	1217.9	821.2	558.3	350.9	236.8	195.8	175.3	162.1	159.0
25°	2240.5	1931.9	1273.5	779.8	470.7	275.3	195.4	167.6	150.5	144.5	142.0
27.5°	2458.1	2126.0	1334.7	737.0	407.8	243.6	181.2	153.5	139.8	135.1	131.3
30°	2645.8	2302.1	1364.1	680.5	357.4	223.1	183.8	164.2	146.2	132.1	125.6
32.5°	2802.2	2437.1	1383.4	629.2	314.6	182.6	145.3	127.0	118.8	113.7	109.4
35°	2998.0	2583.4	1371.8	600.2	292.8	166.3	132.5	109.4	95.8	85.5	81.2
37.5°	3203.2	2729.5	1351.7	576.3	283.0	154.3	126.2	103.9	88.9	78.2	72.7
40°	3415.7	2865.1	1328.2	554.1	274.0	146.7	122.3	99.2	84.2	72.7	66.7
42.5°	3610.2	2997.2	1318.9	539.5	259.4	147.9	119.3	97.1	79.5	67.5	62.4
45°	3767.5	3122.5	1331.6	531.8	243.6	145.7	120.1	94.4	75.7	64.1	59.0
47.5°	3935.5	3299.4	1373.1	524.1	228.2	135.5	126.6	94.0	73.9	62.0	56.4
50°	4130.9	3526.0	1468.0	505.3	209.5	124.4	134.6	93.6	71.8	59.5	53.8
52.5°	4391.3	3783.3	1565.9	472.4	182.1	113.7	128.7	92.3	67.5	56.4	50.9
55°	4625.1	4054.4	1648.9	433.5	147.5	98.3	115.9	86.8	60.3	51.3	46.2
57.5°	4721.7	4207.4	1646.3	379.6	118.0	86.4	95.4	79.5	52.6	45.3	41.0
59°	4686.2	4188.2	1591.2	339.8	107.7	80.0	79.1	78.6	49.2	41.0	37.6
60°	4636.2	4118.0	1531.7	320.2	101.3	75.7	72.7	77.8	46.2	38.4	35.1
62.5°	4444.7	3827.4	1334.7	286.9	92.8	64.1	58.1	65.9	41.0	33.3	30.4
65°	4167.2	3380.7	1129.9	277.4	90.2	53.0	48.3	47.0	35.1	28.2	25.7
67.5°	3626.1	2860.8	915.3	271.1	91.1	44.5	42.3	35.5	29.1	23.5	21.8
70°	2903.1	2230.7	749.4	263.7	91.9	36.3	35.5	28.2	23.5	19.7	17.9
72.5°	1763.8	1322.2	590.0	229.2	89.3	29.1	31.6	21.4	17.1	14.1	13.3
75°	1090.5	905.0	365.9	178.3	59.0	21.4	22.2	13.3	11.5	9.0	9.0
77.5°	631.8	571.5	130.8	64.1	26.1	12.8	9.8	6.8	6.4	3.9	3.9
80°	262.1	209.9	45.3	21.8	14.1	6.0	2.1	0.4	0.0	0.0	0.0
82.5°	76.5	68.0	12.4	9.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6
2.5°	1521.0	1506.9	1500.5	1522.3	1502.2	1527.8	1508.2	1516.7	1542.0	1553.1	1581.8
5°	1138.5	1123.9	1117.0	1150.0	1148.2	1164.5	1162.8	1177.7	1190.6	1161.9	1191.4
7.5°	793.0	783.1	799.5	825.1	852.4	843.4	843.4	823.3	830.2	825.9	824.6
10°	603.2	569.4	560.9	560.0	570.3	572.4	560.9	533.1	543.4	546.3	564.3
12.5°	474.5	448.4	408.7	390.7	386.0	389.9	351.8	327.5	339.0	332.2	349.7
15°	340.3	318.9	295.4	275.3	269.7	262.1	220.6	191.5	188.1	189.4	192.3
17.5°	242.8	228.2	228.2	206.9	195.4	172.3	151.3	138.5	137.3	138.5	140.6
20°	179.1	171.4	170.6	165.0	152.2	136.8	122.3	119.7	118.8	121.0	121.9
22.5°	154.3	146.2	139.4	138.9	127.0	114.1	107.3	103.9	104.3	105.1	107.3
25°	138.1	129.5	122.3	118.0	109.4	100.5	94.0	92.3	92.3	93.6	94.0
27.5°	126.6	115.9	109.4	103.4	95.8	88.1	82.5	81.2	80.4	81.2	83.3
30°	118.4	107.7	99.6	90.7	84.6	77.4	72.7	71.0	70.6	71.0	72.7
32.5°	101.3	94.9	88.5	80.4	73.1	68.4	63.2	60.3	60.3	61.1	62.8
35°	76.5	73.1	72.7	70.6	64.6	59.5	53.4	50.5	50.5	52.1	53.0
37.5°	67.5	61.1	60.3	59.5	56.9	50.0	44.5	41.9	41.5	42.7	44.5
40°	61.6	54.3	50.5	49.6	50.0	42.3	36.3	33.8	33.8	34.2	35.9
42.5°	56.9	48.3	41.5	40.6	42.3	35.5	29.5	26.9	26.9	26.9	29.1
45°	53.0	43.1	35.1	30.8	33.3	29.1	24.0	21.4	20.5	21.4	22.2
47.5°	50.5	39.4	30.8	24.8	24.8	23.0	19.3	16.2	15.4	15.8	17.1
50°	48.3	35.9	26.1	20.1	17.9	18.4	14.5	12.4	11.5	11.5	12.8
52.5°	44.9	32.5	22.6	17.1	13.7	12.4	10.7	9.0	8.6	9.0	9.8
55°	40.6	29.5	19.7	14.1	10.7	8.6	7.7	6.4	6.0	6.4	7.7
57.5°	35.9	24.8	15.8	11.1	7.2	5.6	5.1	4.3	3.4	3.9	4.7
59°	32.9	22.2	13.7	9.0	5.6	3.9	3.9	3.0	2.1	2.5	3.9
60°	31.6	20.5	11.5	7.7	4.7	3.0	3.0	2.1	1.3	1.7	3.0
62.5°	26.9	17.1	9.0	4.7	2.1	0.4	1.3	0.4	0.0	0.4	1.3
65°	22.6	13.7	6.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
67.5°	18.8	10.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	15.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	10.3	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6	1880.6
2.5°	1583.4	1644.6	1682.2	1753.1	1825.8	1881.8	1952.0	2014.8	2040.9	2054.6
5°	1221.4	1306.4	1378.7	1486.8	1587.3	1709.6	1833.5	1979.7	2035.7	2050.3
7.5°	857.1	943.9	1019.5	1144.9	1288.1	1451.8	1637.3	1822.9	1904.5	1927.6
10°	619.0	711.8	804.1	929.4	1063.2	1240.6	1433.8	1663.4	1757.4	1775.4
12.5°	390.7	490.3	640.4	795.2	936.6	1079.4	1281.6	1531.3	1635.2	1668.1
15°	226.6	301.0	414.3	616.0	796.0	985.0	1205.6	1481.7	1598.0	1631.8
17.5°	151.8	177.5	255.2	409.6	647.2	897.8	1186.3	1522.3	1651.0	1694.2
20°	127.8	139.4	166.7	249.7	498.5	820.0	1191.4	1632.6	1801.5	1855.3
22.5°	112.4	123.1	140.6	179.6	348.0	723.3	1215.8	1790.3	2008.4	2077.2
25°	99.2	109.8	125.2	148.8	233.9	611.7	1269.2	2021.2	2282.4	2358.1
27.5°	88.1	97.9	111.2	131.3	180.0	487.4	1316.7	2246.1	2532.5	2594.1
30°	77.8	86.0	98.7	114.1	149.6	375.8	1340.6	2442.7	2714.6	2783.0
32.5°	67.5	75.3	87.6	100.0	123.1	286.4	1324.0	2587.2	2891.6	2935.2
35°	57.7	65.9	76.1	87.6	106.5	231.3	1240.6	2749.6	3074.9	3109.2
37.5°	49.6	56.4	67.1	76.1	96.2	185.1	1139.7	2895.9	3280.6	3329.8
40°	41.9	48.7	59.5	67.5	88.5	145.7	1048.6	3058.3	3497.4	3558.0
42.5°	34.2	42.3	51.7	65.0	76.1	111.2	938.4	3190.0	3660.2	3736.3
45°	27.3	36.3	46.6	64.6	66.3	84.6	831.9	3292.6	3804.3	3872.7
47.5°	21.8	30.8	44.9	60.3	54.3	67.1	771.2	3399.9	3924.0	3978.7
50°	17.5	25.7	47.0	53.0	45.3	56.9	769.5	3519.6	3986.0	4022.3
52.5°	14.1	20.9	39.8	40.6	38.4	50.0	815.7	3654.2	4049.2	4079.2
55°	11.9	17.5	26.1	29.9	34.6	45.3	850.3	3861.5	4200.1	4228.4
57.5°	9.4	15.0	20.1	24.0	30.8	41.5	855.0	4021.5	4391.3	4409.6
59°	8.2	12.8	17.9	21.4	28.2	38.9	835.8	4031.2	4403.6	4433.2
60°	6.8	11.5	15.8	20.1	26.1	36.8	814.8	3959.9	4357.5	4390.4
62.5°	5.1	9.0	11.5	16.2	21.4	31.6	715.6	3710.7	4180.9	4204.0
65°	3.4	6.4	8.6	11.9	16.7	27.3	583.1	3387.5	3908.2	3959.9
67.5°	2.1	4.7	6.8	9.0	13.7	23.0	415.5	2904.8	3526.4	3559.8
70°	1.3	3.0	5.1	7.2	10.7	18.4	246.7	2296.1	2933.9	2940.7
72.5°	0.8	2.1	3.4	5.1	8.6	16.7	119.7	1496.6	2142.2	2223.9
75°	0.4	1.3	2.1	3.9	6.8	13.7	57.3	999.9	1558.6	1582.2
77.5°	0.0	0.4	1.3	2.5	5.1	10.7	33.3	656.7	1062.8	1087.2
80°	0.0	0.0	0.8	2.1	3.9	6.8	20.1	387.3	643.8	655.8
82.5°	0.0	0.0	0.4	1.7	2.5	5.1	10.3	170.1	421.5	425.8
85°	0.0	0.0	0.4	1.7	2.1	3.4	3.9	23.0	187.2	190.7
87.5°	0.0	0.0	0.4	2.1	2.1	2.1	2.1	1.3	15.8	19.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)