

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: P451275

Luminaire Tested: **GALN-SA2A-827-U-SLL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451275
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-827-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 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: 4855 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

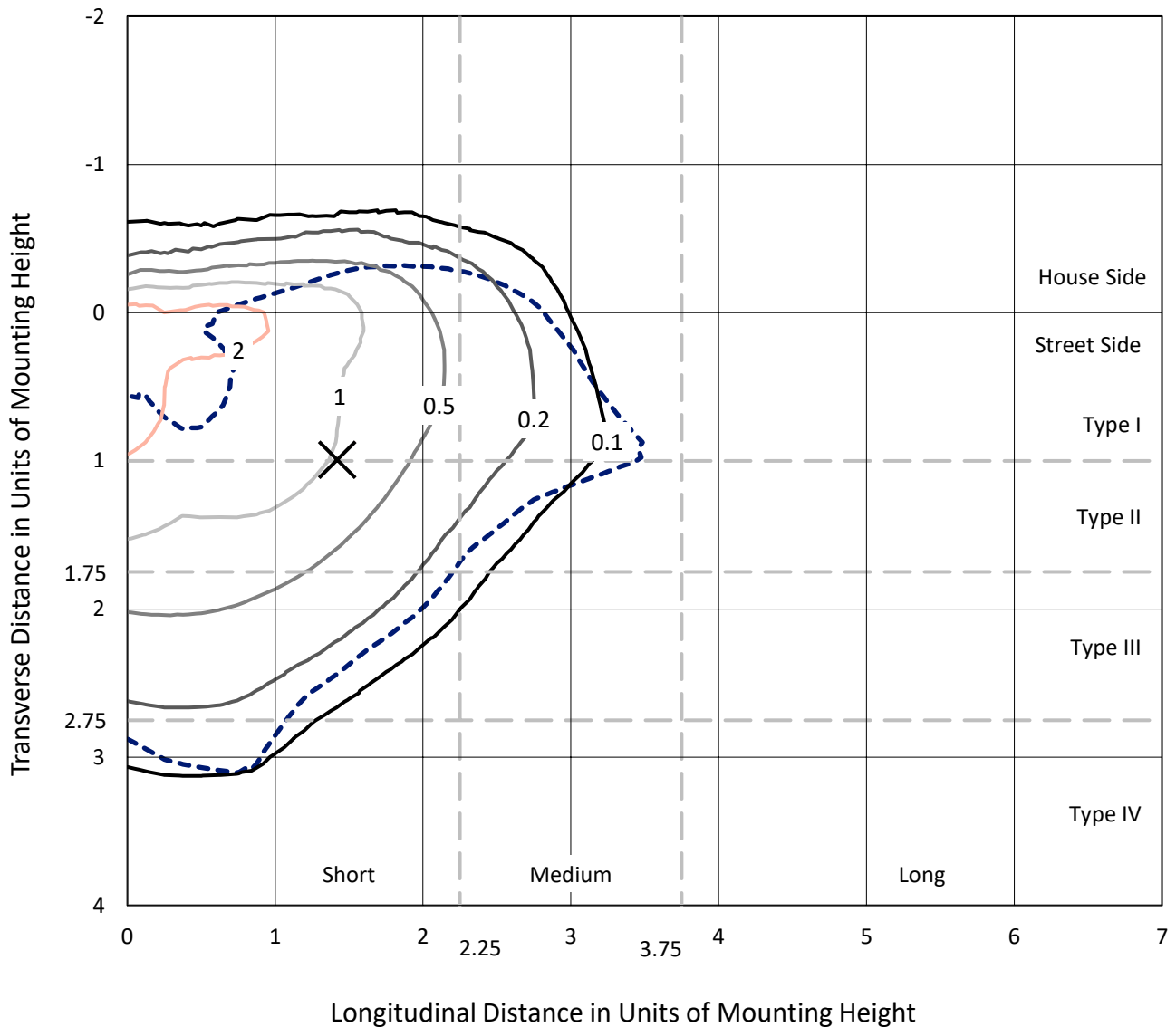
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

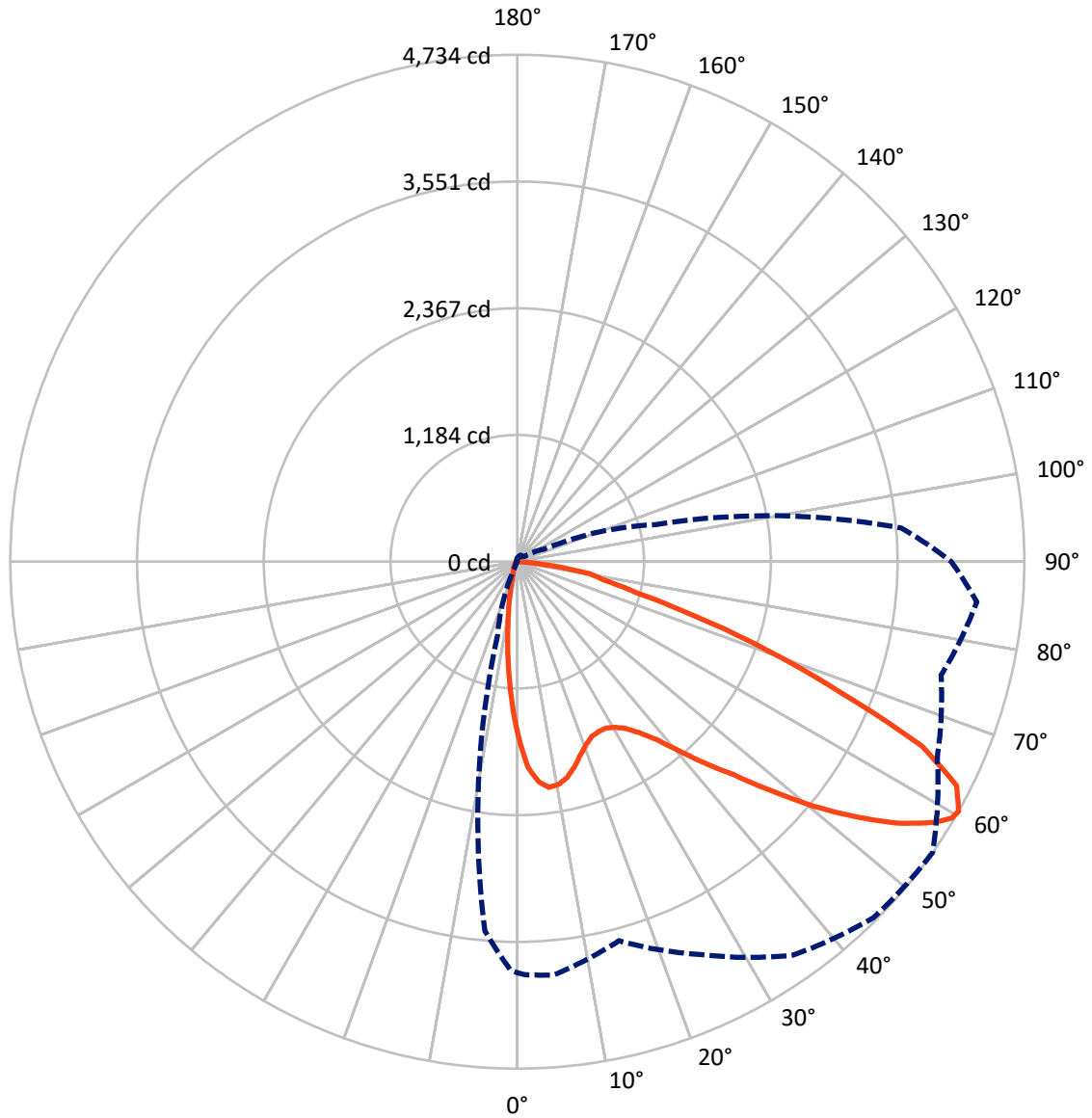
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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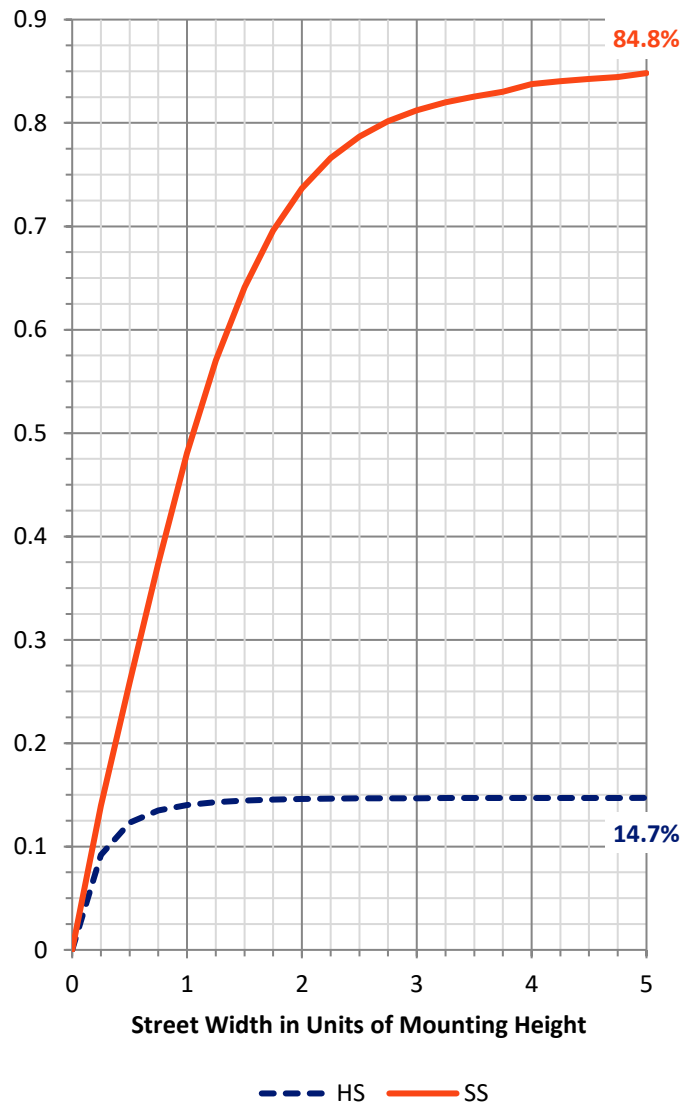
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	720.5	0.0	720.5
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	4134.5	0.0	4134.5
	% Fixture	85.2	0.0	85.2
Total	Lumens	4855.0	0.0	4855.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	2.5
10°-20°	239.7	4.9
20°-30°	354.8	7.3
30°-40°	528.9	10.9
40°-50°	774.6	16.0
50°-60°	1118.3	23.0
60°-70°	1176.4	24.2
70°-80°	483.9	10.0
80°-90°	56.7	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°	4855.0	100.0
0°-180°	4855.0	100.0



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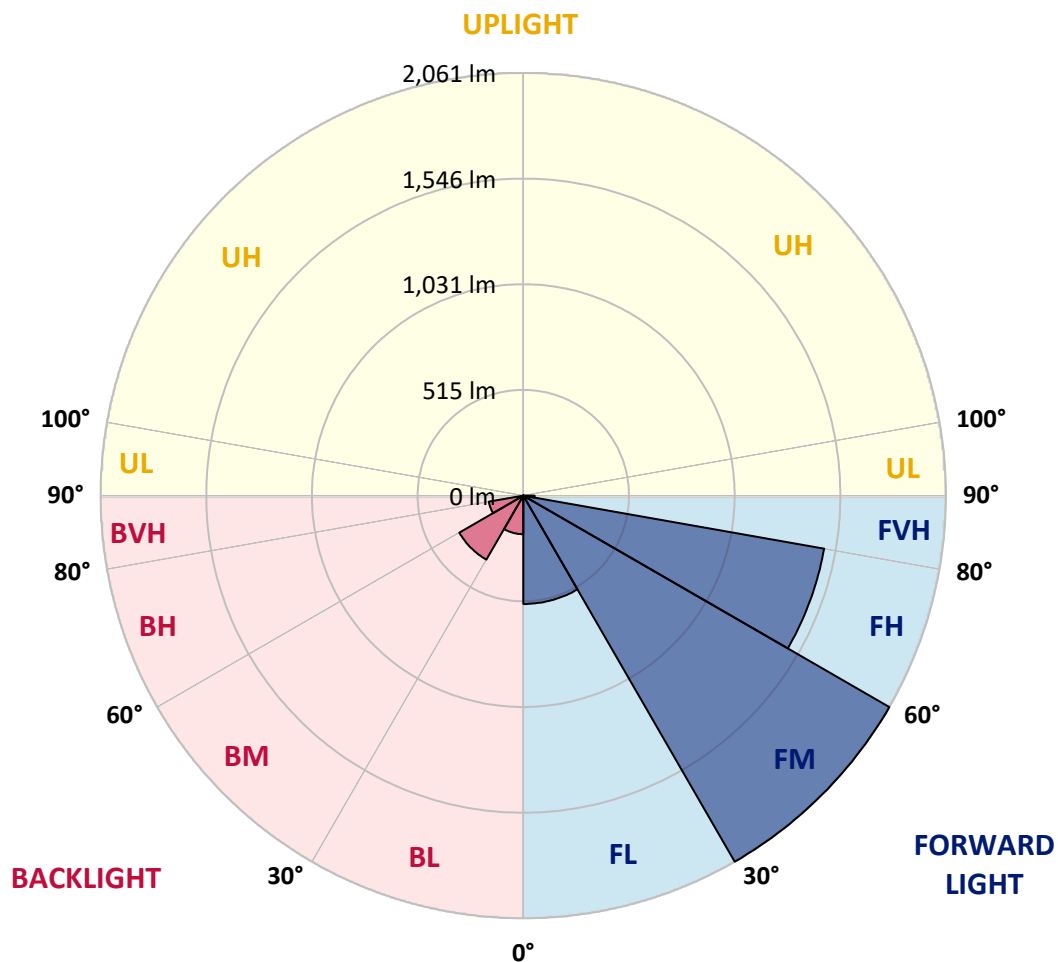
CATALOG NUMBER: GALN-SA2A-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	528.3	10.9			
FM (30°-60°)	2061.4	42.5			
FH (60°-80°)	1489.7	30.7			G1/1800
FVH (80°-90°)	55.0	1.1			G1/100
BL (0°-30°)	188.0	3.9	B1/500		
BM (30°-60°)	360.3	7.4	B1/1000		
BH (60°-80°)	170.5	3.5	B1/500		G1/500
BVH (80°-90°)	1.7	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°	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9
2.5°	1796.0	1793.0	1819.5	1862.9	1906.6	1929.4	1924.9	1923.0	1886.8	1860.3	1804.6
5°	1792.2	1807.6	1855.0	1972.4	2061.3	2104.3	2117.0	2063.6	1992.9	1890.5	1764.2
7.5°	1685.0	1704.1	1781.4	1964.9	2123.0	2216.4	2213.0	2127.5	1981.7	1823.3	1643.1
10°	1552.0	1574.4	1665.2	1887.9	2093.1	2216.4	2223.1	2114.7	1933.5	1730.2	1540.7
12.5°	1458.2	1484.7	1585.2	1816.2	2016.1	2137.5	2145.4	2066.9	1897.3	1694.3	1485.1
15°	1426.4	1451.4	1553.5	1779.9	1934.3	1999.6	1997.8	1989.6	1883.1	1702.9	1488.1
17.5°	1481.0	1501.5	1616.6	1796.4	1857.6	1850.9	1860.6	1900.2	1886.0	1775.1	1582.2
20°	1621.8	1642.8	1766.5	1846.8	1799.0	1756.4	1760.9	1827.0	1913.7	1910.7	1729.5
22.5°	1815.8	1851.3	1963.4	1944.7	1791.1	1697.7	1688.4	1774.3	1960.8	2066.9	1928.3
25°	2061.3	2097.2	2184.6	2100.9	1829.6	1683.9	1675.3	1758.2	2018.0	2219.4	2152.1
27.5°	2267.6	2294.9	2381.9	2253.0	1886.4	1689.9	1675.7	1760.5	2064.3	2349.1	2340.8
30°	2432.8	2452.9	2504.1	2324.0	1935.4	1716.0	1699.6	1793.4	2084.9	2412.2	2493.7
32.5°	2565.8	2599.8	2615.9	2399.9	2005.6	1765.3	1737.3	1856.5	2134.9	2490.3	2654.0
35°	2717.9	2757.1	2736.6	2472.4	2098.3	1842.3	1807.9	1958.9	2210.8	2562.4	2840.1
37.5°	2910.7	2955.9	2875.6	2548.6	2196.2	1958.2	1942.1	2102.8	2325.9	2665.6	3039.6
40°	3110.3	3136.4	3010.5	2641.3	2316.5	2126.7	2142.0	2316.5	2476.5	2789.3	3251.9
42.5°	3266.1	3290.8	3149.1	2719.0	2439.5	2326.6	2390.5	2574.4	2649.1	2916.0	3410.4
45°	3385.3	3406.2	3245.2	2803.8	2605.4	2616.2	2737.0	2840.1	2822.2	2993.3	3532.6
47.5°	3478.0	3495.9	3319.2	2895.0	2853.9	2970.5	3155.1	3198.8	3001.5	3077.0	3643.2
50°	3516.1	3521.3	3342.3	3011.2	3136.1	3421.9	3614.4	3587.9	3207.1	3170.1	3760.9
52.5°	3565.8	3564.7	3408.5	3121.9	3401.4	3825.5	4017.6	3957.4	3439.5	3309.5	3893.2
55°	3696.2	3697.7	3550.1	3278.8	3627.5	4151.4	4356.9	4313.2	3684.6	3544.9	4047.5
57.5°	3854.7	3860.3	3751.5	3462.3	3843.5	4387.6	4610.3	4593.5	4016.1	3806.8	4193.2
59°	3875.2	3886.4	3846.8	3591.6	3971.6	4460.1	4697.0	4713.4	4193.6	3979.5	4272.1
60°	3837.9	3856.5	3874.5	3664.8	4046.8	4486.2	4702.2	4734.4	4327.0	4096.8	4308.0
62.5°	3674.9	3704.5	3794.5	3890.2	4140.6	4404.8	4535.2	4602.4	4492.2	4405.1	4311.3
65°	3461.5	3476.9	3606.9	3930.2	3958.6	4024.3	4064.7	4151.0	4293.8	4524.0	4157.0
67.5°	3111.8	3157.0	3316.2	3698.1	3421.6	3343.8	3333.7	3247.8	3618.5	4240.7	3776.6
70°	2570.7	2590.8	2787.0	3031.8	2582.2	2462.7	2510.5	2478.4	2805.0	3650.6	3039.6
72.5°	1944.0	1989.6	2181.3	2416.7	1757.1	1602.0	1734.0	1722.0	2106.9	2933.9	2088.2
75°	1383.0	1412.6	1657.0	1891.3	1230.6	1042.6	1090.1	1134.5	1470.9	2316.5	1233.9
77.5°	950.3	975.7	1159.2	1250.8	897.6	859.9	786.6	829.6	963.8	1374.5	671.5
80°	573.2	572.1	692.8	715.3	625.2	726.1	609.1	683.9	582.6	588.2	260.1
82.5°	372.2	368.5	423.8	461.9	347.9	365.8	245.5	353.9	379.7	164.1	82.2
85°	166.7	173.8	203.7	268.7	152.5	81.1	50.1	108.7	161.8	82.6	0.0
87.5°	17.2	13.5	35.9	65.4	20.9	2.2	7.5	3.7	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°	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9
2.5°	1778.8	1757.1	1692.5	1631.9	1580.0	1516.5	1475.4	1410.7	1371.5	1359.5	1361.4
5°	1707.4	1645.0	1522.1	1423.8	1314.3	1251.9	1157.0	1065.8	1016.5	998.1	989.9
7.5°	1557.9	1491.0	1342.7	1188.4	1071.0	961.5	890.9	810.5	755.6	710.4	702.5
10°	1447.0	1359.1	1175.3	1009.4	916.7	834.5	763.8	683.5	618.8	567.3	553.1
12.5°	1380.4	1282.2	1077.0	938.0	850.2	765.7	673.8	580.7	514.6	458.9	433.1
15°	1368.5	1254.5	1049.3	886.8	778.4	676.4	554.2	453.7	385.7	333.0	316.9
17.5°	1440.6	1304.2	1045.2	833.3	684.6	540.0	412.9	329.6	253.0	223.5	211.9
20°	1569.2	1392.0	1044.9	771.3	588.2	415.9	290.0	214.9	183.9	169.7	162.9
22.5°	1744.4	1511.6	1064.7	717.9	488.0	306.8	207.0	171.2	153.2	141.6	139.0
25°	1958.5	1688.7	1113.2	681.6	411.4	240.7	170.8	146.5	131.5	126.3	124.1
27.5°	2148.8	1858.4	1166.7	644.3	356.5	213.0	158.4	134.2	122.2	118.1	114.7
30°	2312.8	2012.4	1192.5	594.9	312.4	195.1	160.7	143.5	127.8	115.5	109.9
32.5°	2449.6	2130.4	1209.3	550.1	275.0	159.6	127.1	111.0	103.9	99.4	95.7
35°	2620.7	2258.2	1199.2	524.7	256.0	145.4	115.8	95.7	83.7	74.7	71.0
37.5°	2800.1	2386.1	1181.6	503.7	247.4	134.9	110.2	90.8	77.7	68.4	63.5
40°	2985.8	2504.5	1161.1	484.3	239.5	128.2	106.9	86.7	73.6	63.5	58.3
42.5°	3155.9	2620.0	1152.9	471.6	226.8	129.3	104.3	84.8	69.5	59.0	54.6
45°	3293.4	2729.5	1164.1	464.9	213.0	127.4	105.0	82.6	66.1	56.1	51.6
47.5°	3440.2	2884.2	1200.3	458.2	199.6	118.5	110.6	82.2	64.6	54.2	49.3
50°	3611.0	3082.2	1283.3	441.7	183.1	108.7	117.7	81.8	62.8	51.9	47.1
52.5°	3838.6	3307.2	1368.8	412.9	159.2	99.4	112.5	80.7	59.0	49.3	44.5
55°	4043.0	3544.1	1441.3	378.9	128.9	86.0	101.3	75.9	52.7	44.8	40.4
57.5°	4127.5	3677.9	1439.1	331.8	103.1	75.5	83.3	69.5	46.0	39.6	35.9
59°	4096.5	3661.1	1390.9	297.1	94.2	69.9	69.1	68.8	43.0	35.9	32.9
60°	4052.7	3599.8	1339.0	279.9	88.6	66.1	63.5	68.0	40.4	33.6	30.6
62.5°	3885.3	3345.7	1166.7	250.8	81.1	56.1	50.8	57.5	35.9	29.1	26.5
65°	3642.8	2955.2	987.7	242.5	78.8	46.3	42.2	41.1	30.6	24.7	22.4
67.5°	3169.7	2500.8	800.1	236.9	79.6	38.9	37.0	31.0	25.4	20.6	19.1
70°	2537.8	1949.9	655.1	230.6	80.3	31.8	31.0	24.7	20.6	17.2	15.7
72.5°	1541.9	1155.8	515.7	200.3	78.1	25.4	27.7	18.7	14.9	12.3	11.6
75°	953.3	791.1	319.9	155.8	51.6	18.7	19.4	11.6	10.1	7.8	7.8
77.5°	552.3	499.6	114.4	56.1	22.8	11.2	8.6	6.0	5.6	3.4	3.4
80°	229.1	183.5	39.6	19.1	12.3	5.2	1.9	0.4	0.0	0.0	0.0
82.5°	66.9	59.4	10.8	8.6	3.7	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°	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9
2.5°	1329.6	1317.3	1311.7	1330.7	1313.2	1335.6	1318.4	1325.9	1347.9	1357.6	1382.7
5°	995.2	982.4	976.5	1005.2	1003.7	1017.9	1016.5	1029.5	1040.7	1015.7	1041.5
7.5°	693.2	684.6	698.8	721.2	745.2	737.3	737.3	719.7	725.7	722.0	720.9
10°	527.3	497.8	490.3	489.5	498.5	500.4	490.3	466.0	475.0	477.6	493.3
12.5°	414.8	392.0	357.3	341.6	337.4	340.8	307.6	286.3	296.3	290.4	305.7
15°	297.5	278.8	258.2	240.7	235.8	229.1	192.8	167.4	164.4	165.5	168.2
17.5°	212.3	199.6	199.6	180.9	170.8	150.6	132.3	121.1	120.0	121.1	122.9
20°	156.6	149.9	149.1	144.2	133.0	119.6	106.9	104.6	103.9	105.8	106.5
22.5°	134.9	127.8	121.8	121.5	111.0	99.8	93.8	90.8	91.2	91.9	93.8
25°	120.7	113.2	106.9	103.1	95.7	87.8	82.2	80.7	80.7	81.8	82.2
27.5°	110.6	101.3	95.7	90.4	83.7	77.0	72.1	71.0	70.3	71.0	72.9
30°	103.5	94.2	87.1	79.2	74.0	67.6	63.5	62.0	61.7	62.0	63.5
32.5°	88.6	83.0	77.4	70.3	63.9	59.8	55.3	52.7	52.7	53.4	54.9
35°	66.9	63.9	63.5	61.7	56.4	51.9	46.7	44.1	44.1	45.6	46.3
37.5°	59.0	53.4	52.7	51.9	49.7	43.7	38.9	36.6	36.2	37.4	38.9
40°	53.8	47.5	44.1	43.3	43.7	37.0	31.8	29.5	29.5	29.9	31.4
42.5°	49.7	42.2	36.2	35.5	37.0	31.0	25.8	23.5	23.5	23.5	25.4
45°	46.3	37.7	30.6	26.9	29.1	25.4	20.9	18.7	17.9	18.7	19.4
47.5°	44.1	34.4	26.9	21.7	21.7	20.2	16.8	14.2	13.5	13.8	14.9
50°	42.2	31.4	22.8	17.6	15.7	16.1	12.7	10.8	10.1	10.1	11.2
52.5°	39.2	28.4	19.8	14.9	12.0	10.8	9.3	7.8	7.5	7.8	8.6
55°	35.5	25.8	17.2	12.3	9.3	7.5	6.7	5.6	5.2	5.6	6.7
57.5°	31.4	21.7	13.8	9.7	6.4	4.9	4.5	3.7	3.0	3.4	4.1
59°	28.8	19.4	12.0	7.8	4.9	3.4	3.4	2.6	1.9	2.2	3.4
60°	27.7	17.9	10.1	6.7	4.1	2.6	2.6	1.9	1.1	1.5	2.6
62.5°	23.5	14.9	7.8	4.1	1.9	0.4	1.1	0.4	0.0	0.4	1.1
65°	19.8	12.0	5.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.4
67.5°	16.4	9.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	13.1	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	9.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	5.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	2.2	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°	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9	1643.9
2.5°	1384.2	1437.6	1470.5	1532.5	1596.1	1645.0	1706.3	1761.2	1784.0	1796.0
5°	1067.7	1142.0	1205.2	1299.7	1387.5	1494.4	1602.8	1730.6	1779.5	1792.2
7.5°	749.3	825.1	891.3	1000.8	1125.9	1269.1	1431.3	1593.4	1664.8	1685.0
10°	541.1	622.2	702.9	812.4	929.4	1084.5	1253.4	1454.1	1536.3	1552.0
12.5°	341.6	428.6	559.8	695.1	818.8	943.6	1120.3	1338.6	1429.4	1458.2
15°	198.1	263.1	362.1	538.5	695.8	861.0	1053.8	1295.2	1396.9	1426.4
17.5°	132.7	155.1	223.1	358.0	565.8	784.8	1037.0	1330.7	1443.2	1481.0
20°	111.7	121.8	145.7	218.2	435.7	716.7	1041.5	1427.1	1574.8	1621.8
22.5°	98.3	107.6	122.9	157.0	304.2	632.3	1062.8	1565.0	1755.6	1815.8
25°	86.7	96.0	109.5	130.0	204.4	534.8	1109.5	1766.8	1995.2	2061.3
27.5°	77.0	85.6	97.2	114.7	157.3	426.0	1151.0	1963.4	2213.8	2267.6
30°	68.0	75.1	86.3	99.8	130.8	328.5	1171.9	2135.3	2373.0	2432.8
32.5°	59.0	65.8	76.6	87.4	107.6	250.4	1157.3	2261.6	2527.7	2565.8
35°	50.4	57.5	66.5	76.6	93.1	202.2	1084.5	2403.6	2688.0	2717.9
37.5°	43.3	49.3	58.7	66.5	84.1	161.8	996.3	2531.4	2867.7	2910.7
40°	36.6	42.6	51.9	59.0	77.4	127.4	916.7	2673.4	3057.2	3110.3
42.5°	29.9	37.0	45.2	56.8	66.5	97.2	820.3	2788.5	3199.6	3266.1
45°	23.9	31.8	40.7	56.4	57.9	74.0	727.2	2878.2	3325.5	3385.3
47.5°	19.1	26.9	39.2	52.7	47.5	58.7	674.1	2972.0	3430.2	3478.0
50°	15.3	22.4	41.1	46.3	39.6	49.7	672.7	3076.6	3484.3	3516.1
52.5°	12.3	18.3	34.8	35.5	33.6	43.7	713.0	3194.4	3539.7	3565.8
55°	10.5	15.3	22.8	26.2	30.3	39.6	743.3	3375.6	3671.6	3696.2
57.5°	8.2	13.1	17.6	20.9	26.9	36.2	747.4	3515.4	3838.6	3854.7
59°	7.1	11.2	15.7	18.7	24.7	34.0	730.6	3524.0	3849.4	3875.2
60°	6.0	10.1	13.8	17.6	22.8	32.1	712.3	3461.5	3809.1	3837.9
62.5°	4.5	7.8	10.1	14.2	18.7	27.7	625.6	3243.7	3654.7	3674.9
65°	3.0	5.6	7.5	10.5	14.6	23.9	509.7	2961.2	3416.3	3461.5
67.5°	1.9	4.1	6.0	7.8	12.0	20.2	363.2	2539.3	3082.6	3111.8
70°	1.1	2.6	4.5	6.4	9.3	16.1	215.6	2007.1	2564.7	2570.7
72.5°	0.7	1.9	3.0	4.5	7.5	14.6	104.6	1308.3	1872.6	1944.0
75°	0.4	1.1	1.9	3.4	6.0	12.0	50.1	874.1	1362.5	1383.0
77.5°	0.0	0.4	1.1	2.2	4.5	9.3	29.1	574.0	929.0	950.3
80°	0.0	0.0	0.7	1.9	3.4	6.0	17.6	338.6	562.8	573.2
82.5°	0.0	0.0	0.4	1.5	2.2	4.5	9.0	148.7	368.5	372.2
85°	0.0	0.0	0.4	1.5	1.9	3.0	3.4	20.2	163.7	166.7
87.5°	0.0	0.0	0.4	1.9	1.9	1.9	1.9	1.1	13.8	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)