

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: P451305

Luminaire Tested: **GALN-SA2A-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6299 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

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

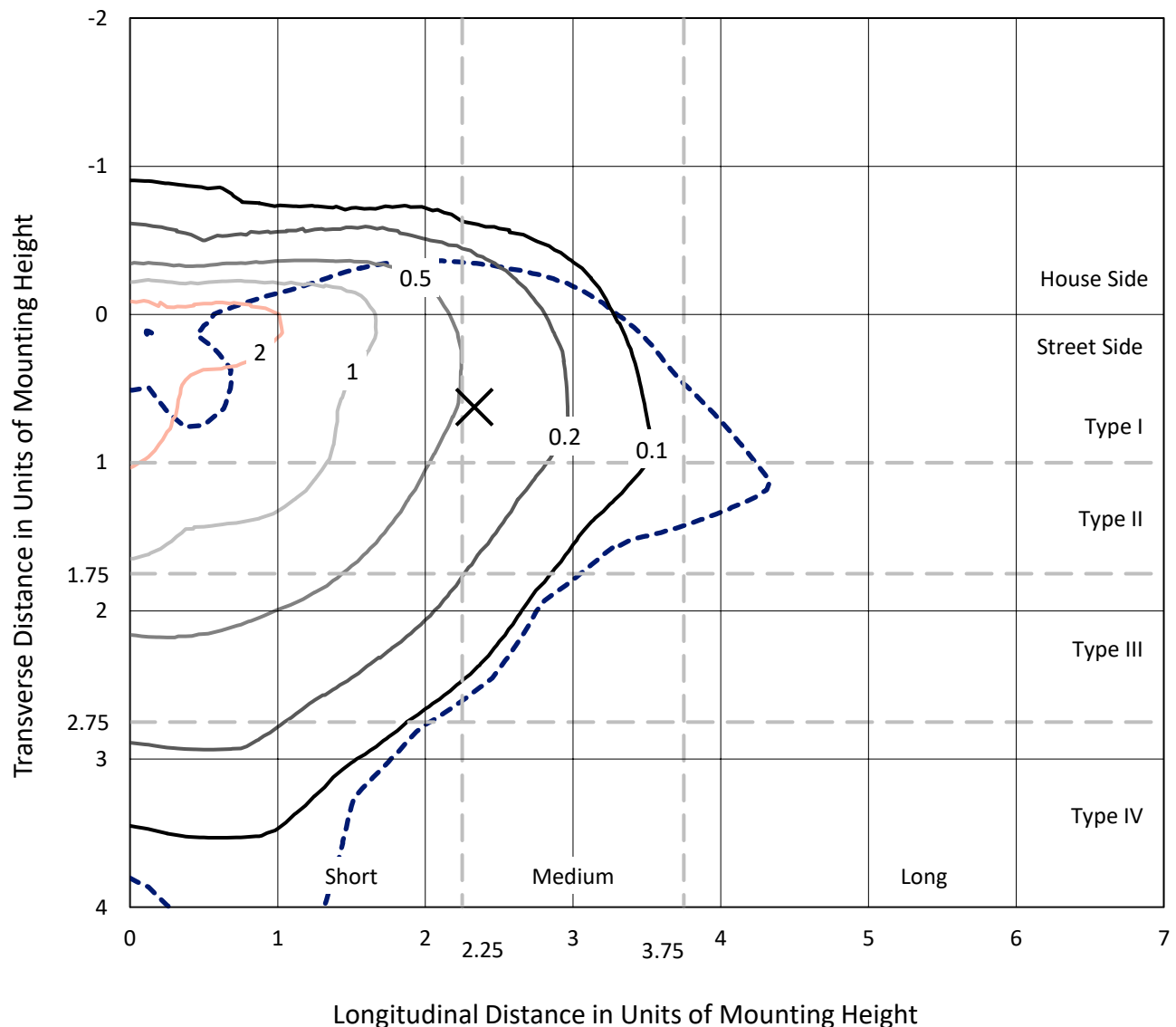


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Iso-Footcandle Lines of Horizontal Illumination

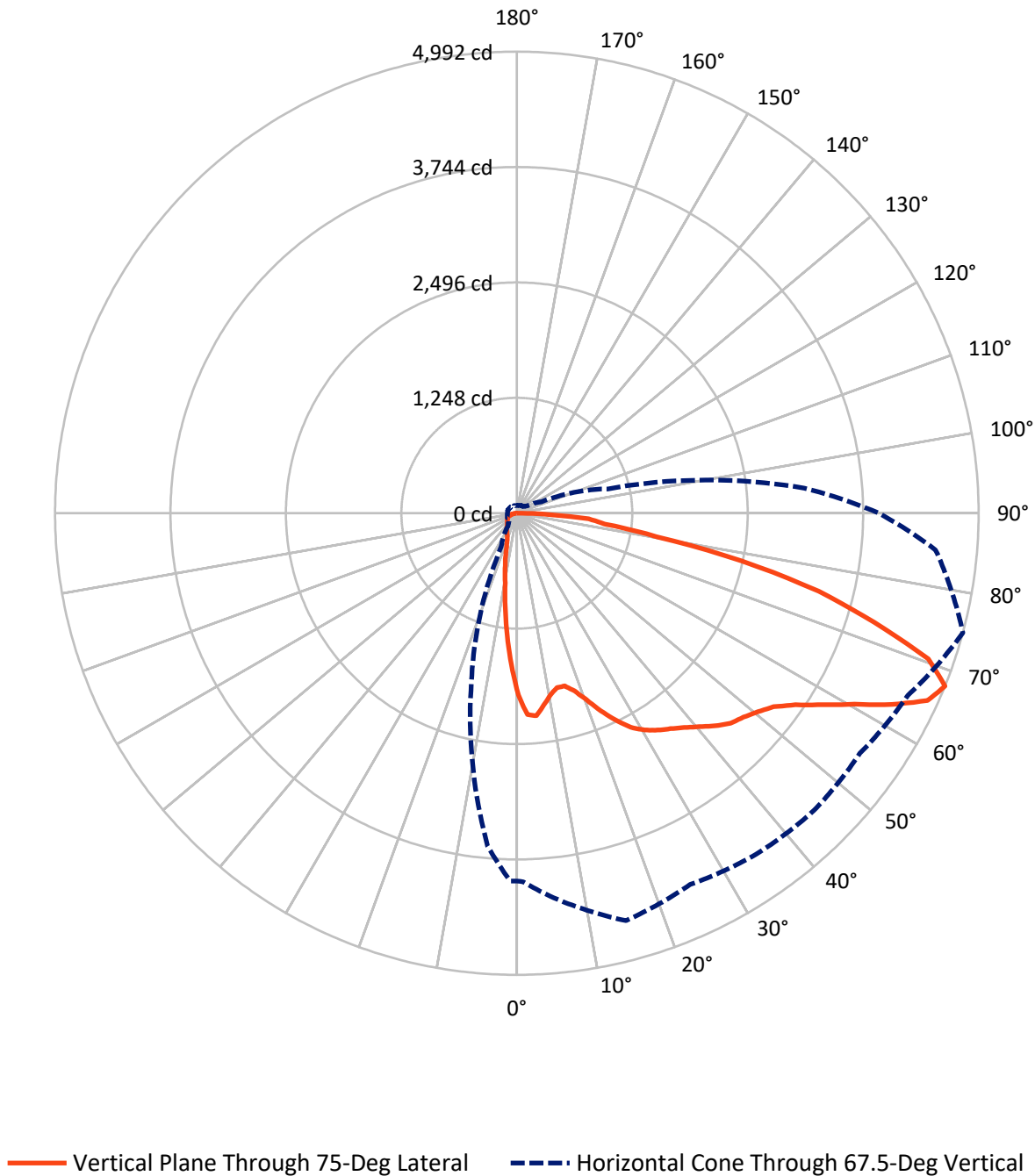
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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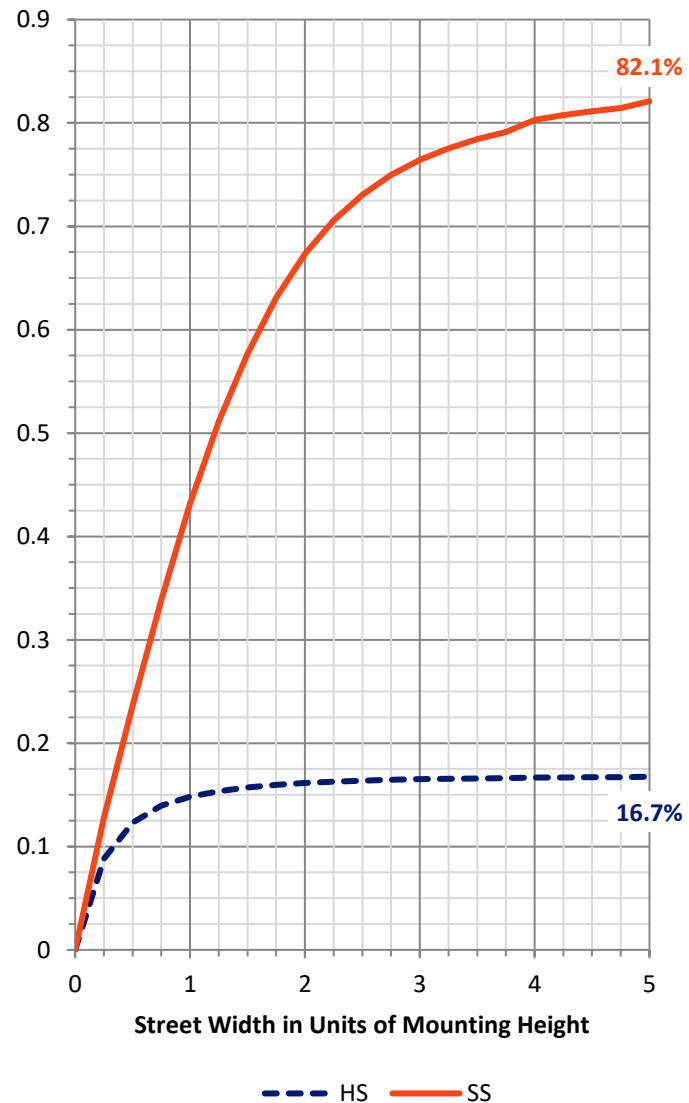
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1064.7	0.0	1064.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	5234.3	0.0	5234.3
	% Fixture	83.1	0.0	83.1
Total	Lumens	6299.0	0.0	6299.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.3	2.4
10°-20°	311.3	4.9
20°-30°	448.0	7.1
30°-40°	645.2	10.2
40°-50°	906.3	14.4
50°-60°	1264.0	20.1
60°-70°	1502.8	23.9
70°-80°	885.1	14.1
80°-90°	187.2	3.0
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°	6299.0	100.0
0°-180°	6299.0	100.0

Coefficient of Utilization



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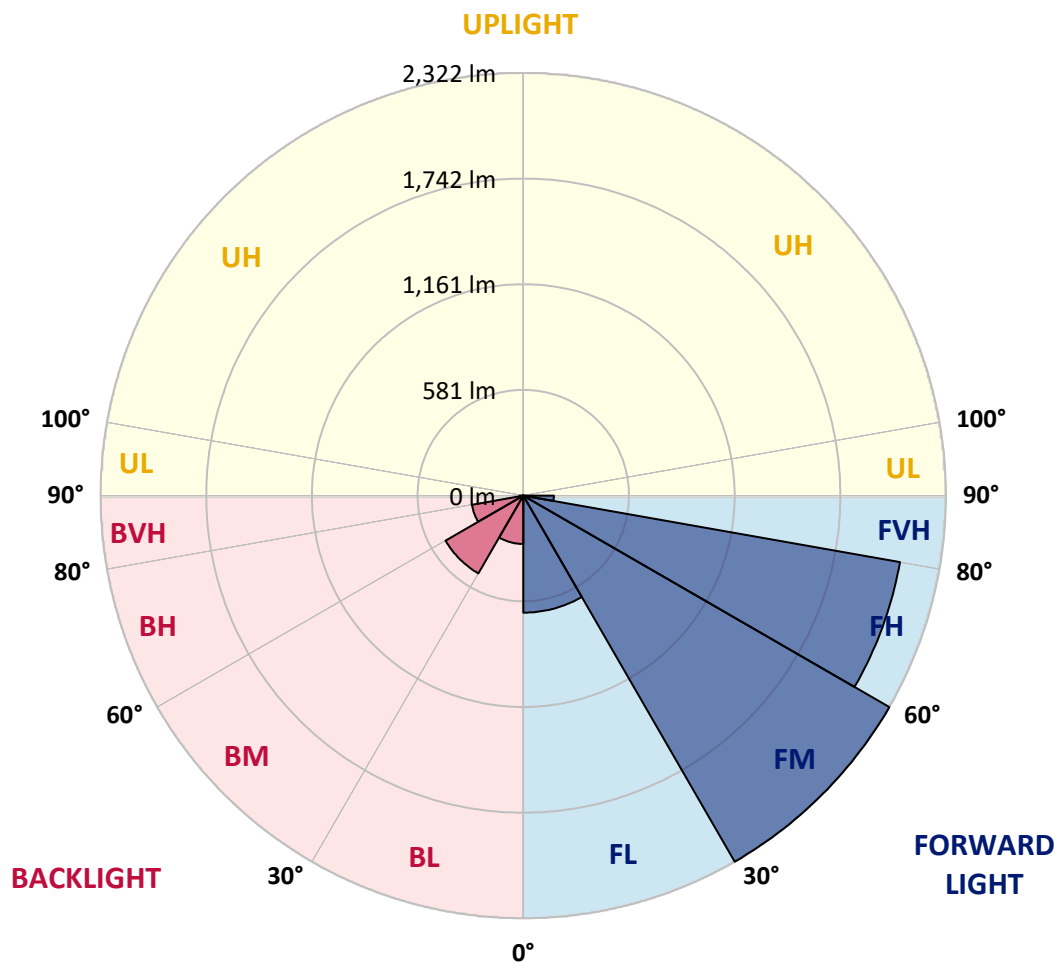
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	643.0	10.2			
FM	(30°-60°)	2322.2	36.9			
FH	(60°-80°)	2101.4	33.4			G2/5000
FVH	(80°-90°)	167.8	2.7			G2/225
BL	(0°-30°)	265.6	4.2	B1/500		
BM	(30°-60°)	493.3	7.8	B1/1000		
BH	(60°-80°)	286.5	4.5	B1/500		G1/500
BVH	(80°-90°)	19.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0
2.5°	2121.9	2124.7	2142.9	2195.8	2232.1	2245.5	2254.7	2237.4	2220.4	2179.2	2117.0
5°	2115.4	2132.0	2179.2	2298.0	2391.7	2432.1	2444.2	2392.1	2306.0	2200.2	2073.0
7.5°	1991.8	2014.0	2086.7	2285.9	2451.1	2545.6	2533.1	2438.9	2283.8	2095.2	1917.5
10°	1845.2	1869.8	1957.5	2198.2	2411.1	2541.1	2541.1	2426.4	2220.4	1996.2	1791.4
12.5°	1728.8	1754.7	1854.9	2108.1	2327.9	2451.1	2471.7	2373.1	2174.8	1933.6	1708.6
15°	1690.5	1715.5	1823.3	2053.6	2239.8	2314.9	2321.8	2289.5	2152.6	1938.1	1705.0
17.5°	1738.1	1770.4	1879.5	2069.7	2159.0	2163.5	2168.7	2194.2	2155.0	2019.3	1778.5
20°	1875.9	1910.6	2024.5	2121.9	2088.3	2042.3	2045.1	2110.5	2183.7	2153.4	1954.2
22.5°	2074.6	2104.9	2221.6	2213.5	2058.4	1963.5	1943.7	2035.0	2226.1	2320.6	2141.2
25°	2289.1	2324.6	2458.7	2349.7	2066.9	1916.7	1904.1	1990.6	2270.1	2476.9	2357.3
27.5°	2534.7	2569.4	2675.2	2487.0	2111.4	1913.0	1898.1	1986.5	2309.7	2621.5	2563.8
30°	2717.3	2749.2	2821.1	2602.5	2165.9	1937.3	1918.7	2018.4	2343.6	2720.5	2764.9
32.5°	2860.6	2893.8	2933.0	2674.4	2237.8	1981.3	1947.0	2076.6	2388.0	2796.0	2914.0
35°	3010.1	3049.3	3046.5	2738.3	2304.8	2032.2	1998.7	2160.6	2457.9	2861.9	3103.0
37.5°	3199.5	3215.3	3195.1	2795.6	2385.2	2123.9	2105.3	2285.4	2557.3	2941.4	3324.0
40°	3391.8	3423.3	3319.5	2865.1	2483.0	2296.4	2294.3	2470.0	2675.2	3034.7	3538.0
42.5°	3556.6	3583.3	3435.8	2925.7	2601.3	2506.8	2522.2	2717.7	2829.9	3143.0	3710.1
45°	3680.6	3704.5	3543.3	2984.2	2757.2	2750.0	2840.4	2983.0	3025.0	3240.3	3811.1
47.5°	3786.1	3809.1	3618.0	3073.1	2949.9	3040.4	3197.9	3259.7	3191.9	3296.1	3924.2
50°	3874.9	3881.8	3669.3	3178.9	3189.0	3396.3	3548.9	3588.9	3356.7	3376.1	4022.4
52.5°	3967.4	3958.5	3757.8	3312.2	3447.6	3733.9	3845.0	3886.6	3514.6	3474.6	4165.3
55°	4174.6	4183.1	3956.1	3480.3	3708.9	4065.6	4211.8	4171.8	3689.5	3656.0	4347.1
57.5°	4425.1	4417.8	4235.2	3743.2	3975.1	4374.2	4483.2	4419.0	3923.0	3905.2	4531.3
60°	4522.4	4532.1	4468.7	4026.0	4237.7	4644.4	4755.9	4656.1	4202.9	4194.8	4670.3
62.5°	4424.7	4479.2	4522.0	4277.6	4461.4	4843.1	4953.8	4839.9	4495.0	4553.5	4767.6
65°	4230.0	4241.7	4387.5	4490.9	4569.3	4875.9	4933.6	4873.0	4738.9	4880.3	4763.2
67.5°	3977.1	3987.2	4158.1	4560.8	4430.3	4504.2	4544.6	4526.9	4663.4	4992.2	4543.8
70°	3736.4	3728.3	3908.8	4382.7	3856.7	3744.4	3778.0	3722.2	4024.0	4718.7	4113.6
72.5°	3267.8	3296.9	3490.8	3887.4	3053.7	2871.1	2944.3	2800.1	3094.9	4041.3	3338.9
75°	2559.7	2566.6	2890.1	3262.6	2303.6	2015.6	2114.6	2054.4	2370.7	3371.2	2305.6
77.5°	1772.5	1757.1	2104.9	2491.9	1642.8	1475.6	1477.2	1448.5	1655.3	2482.2	1566.4
80°	1125.8	1102.3	1317.6	1539.4	1129.0	1207.8	1168.2	1167.0	1077.7	1531.3	947.2
82.5°	608.3	634.2	832.5	965.0	809.9	933.5	855.5	830.5	739.6	958.5	605.9
85°	277.1	301.3	443.9	656.4	615.2	622.1	415.6	490.4	612.0	778.4	323.5
87.5°	27.1	34.7	91.7	309.8	210.0	165.6	61.8	119.2	153.9	276.7	25.9
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°	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0
2.5°	2091.6	2070.6	1999.1	1940.1	1877.5	1829.8	1767.6	1726.0	1697.3	1654.1	1648.9
5°	1995.4	1944.1	1819.7	1692.9	1583.4	1501.0	1417.4	1340.7	1295.4	1281.3	1263.1
7.5°	1833.4	1747.0	1587.0	1441.6	1316.0	1193.2	1098.7	1031.6	986.8	960.6	929.0
10°	1700.1	1600.0	1405.3	1227.1	1123.7	1047.4	964.2	892.3	836.9	789.7	763.8
12.5°	1610.5	1497.4	1278.4	1133.8	1053.9	972.7	875.3	794.5	712.9	659.2	636.2
15°	1583.4	1463.8	1239.3	1087.4	972.7	866.4	757.4	651.9	571.2	520.3	503.3
17.5°	1649.7	1505.1	1238.9	1025.6	877.3	750.5	610.7	511.8	429.0	391.0	378.9
20°	1773.3	1584.2	1242.5	964.6	773.9	595.4	444.3	363.1	323.5	307.4	301.3
22.5°	1945.7	1705.0	1253.4	904.4	660.8	457.3	332.8	291.6	277.5	274.7	273.5
25°	2158.2	1854.5	1290.2	850.3	565.5	349.0	278.3	259.7	251.6	248.8	248.4
27.5°	2353.7	2047.5	1334.6	803.8	473.4	300.9	251.6	235.9	227.8	227.4	228.2
30°	2530.2	2209.1	1371.8	751.7	403.5	267.4	234.3	218.5	210.9	210.4	212.9
32.5°	2682.9	2342.0	1399.2	700.4	364.8	246.8	218.5	201.6	195.1	193.9	195.1
35°	2846.1	2474.5	1386.7	660.4	342.5	229.8	206.8	190.3	182.6	178.9	178.9
37.5°	3032.3	2611.0	1365.3	627.3	332.4	215.7	196.7	180.6	172.9	169.2	168.8
40°	3235.5	2747.5	1335.8	597.8	322.3	207.2	189.8	172.9	163.6	160.0	159.1
42.5°	3414.8	2864.3	1311.6	578.4	305.8	208.8	183.8	167.2	155.5	150.7	150.3
45°	3570.8	2981.8	1307.1	567.1	292.0	206.4	182.2	162.8	149.1	143.8	143.0
47.5°	3692.7	3104.2	1332.6	560.7	277.1	193.5	192.7	160.0	143.4	137.7	136.9
50°	3841.4	3277.9	1390.7	547.3	263.4	181.4	203.6	159.6	139.0	131.7	129.7
52.5°	4039.3	3504.1	1469.5	523.5	243.6	170.1	194.3	159.6	133.7	126.4	124.0
55°	4338.6	3792.5	1546.7	490.0	215.7	155.1	175.3	154.7	126.0	119.6	117.9
57.5°	4537.0	4003.4	1595.9	443.5	181.0	144.2	151.1	147.0	118.4	111.5	111.5
60°	4547.1	4059.9	1572.5	384.9	159.1	134.1	131.3	148.2	111.5	104.2	103.4
62.5°	4430.7	3921.4	1450.5	332.4	147.4	123.2	118.8	130.1	104.6	97.3	96.1
65°	4249.0	3567.9	1238.9	307.4	141.0	113.5	107.0	106.6	97.3	90.5	88.9
67.5°	3914.9	3118.0	1017.9	292.9	137.7	102.6	96.5	94.5	88.9	83.2	82.4
70°	3422.5	2611.4	816.3	286.8	136.1	91.3	86.4	84.0	79.2	74.7	74.3
72.5°	2662.7	2118.2	673.8	282.8	135.3	80.8	75.5	72.3	69.5	65.4	65.4
75°	1912.6	1558.4	514.2	254.9	125.2	69.5	63.8	61.8	57.8	54.5	55.3
77.5°	1205.7	1049.4	338.5	187.4	96.9	55.7	50.9	49.7	46.5	42.0	44.8
80°	814.3	738.0	197.5	117.9	61.0	40.8	39.2	38.8	35.1	30.3	30.7
82.5°	554.2	543.7	102.6	67.1	35.1	23.8	23.0	23.8	19.8	16.2	16.2
85°	216.5	295.7	48.5	26.3	11.3	3.6	5.3	5.7	3.2	1.6	2.0
87.5°	4.0	30.3	1.2	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°	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0
2.5°	1640.8	1637.1	1643.2	1617.3	1622.6	1632.3	1637.1	1640.0	1680.0	1670.7	1696.1
5°	1280.1	1276.4	1299.9	1303.1	1315.2	1312.8	1324.5	1327.3	1341.9	1347.1	1382.7
7.5°	931.1	946.8	973.5	987.2	1007.8	1014.3	1008.2	1023.2	992.9	1014.7	1021.1
10°	748.1	729.1	717.8	749.3	753.3	783.2	771.1	761.4	779.2	780.0	797.0
12.5°	622.9	582.1	555.0	563.9	573.6	586.5	588.5	607.9	620.8	633.0	643.1
15°	488.4	474.2	449.6	437.5	451.2	456.4	469.0	485.1	498.9	502.5	516.2
17.5°	374.8	377.3	373.2	366.0	374.4	378.5	379.3	379.7	383.3	380.9	401.1
20°	301.7	310.2	320.3	321.9	324.8	326.8	323.1	309.4	309.8	318.3	324.8
22.5°	273.1	274.7	286.0	289.6	298.5	294.9	284.4	277.9	277.1	279.1	282.3
25°	250.4	252.9	260.9	266.6	273.5	267.0	259.3	253.3	252.5	254.5	257.7
27.5°	230.2	233.9	241.1	246.8	253.3	247.2	239.9	234.7	234.3	233.9	235.9
30°	214.1	218.1	223.4	229.8	234.3	229.0	222.2	219.3	218.9	218.1	218.9
32.5°	197.9	204.4	209.6	212.9	217.3	213.3	208.0	206.4	203.6	201.2	199.9
35°	179.7	186.6	194.7	198.7	203.2	199.1	195.5	188.6	183.8	183.4	184.2
37.5°	169.2	172.1	178.5	185.4	189.8	187.8	181.0	174.1	172.9	172.9	173.7
40°	160.0	161.2	164.0	172.9	181.0	174.9	166.4	164.4	164.4	164.0	164.4
42.5°	150.7	151.9	151.9	158.7	171.7	162.0	155.5	155.5	155.5	155.9	157.1
45°	142.2	142.6	142.2	147.0	159.1	151.1	146.6	147.8	148.6	149.5	150.3
47.5°	134.9	135.3	134.9	139.0	145.0	141.8	139.4	141.0	142.6	143.8	144.6
50°	128.5	128.0	128.9	131.3	134.1	134.9	133.3	135.7	136.5	138.1	140.2
52.5°	122.8	122.4	123.2	124.4	128.5	128.5	128.5	130.5	132.1	133.7	136.5
55°	116.3	116.7	117.9	119.6	124.8	124.0	124.4	126.0	127.6	130.1	131.7
57.5°	110.3	111.1	112.7	115.1	120.4	120.0	120.4	121.2	123.2	124.4	126.0
60°	103.4	105.0	107.0	108.7	113.9	113.5	115.5	117.1	118.4	118.4	119.2
62.5°	96.5	99.0	101.0	102.2	107.8	108.3	111.1	112.3	113.1	112.3	113.5
65°	89.7	93.3	94.1	95.7	101.4	101.8	105.0	107.8	107.0	106.2	108.3
67.5°	82.8	87.2	86.8	88.9	94.5	95.3	98.2	103.0	101.4	100.6	102.2
70°	75.1	78.4	78.8	80.0	87.7	86.4	90.9	95.3	94.1	94.5	94.5
72.5°	66.6	69.5	69.5	71.9	80.0	78.0	81.6	86.4	86.4	86.0	86.0
75°	56.6	58.2	59.8	63.4	71.9	69.5	71.9	76.3	77.2	76.3	76.3
77.5°	45.6	48.1	48.9	53.7	59.8	59.4	61.8	63.8	65.4	64.6	64.6
80°	32.3	34.7	38.0	43.2	46.9	48.1	49.3	50.9	51.7	51.7	52.5
82.5°	18.2	21.8	24.6	29.9	31.5	37.6	37.2	38.4	37.2	32.7	36.4
85°	4.0	7.7	10.9	13.7	15.8	21.8	23.0	25.9	21.4	19.8	19.8
87.5°	0.0	0.0	0.0	0.0	0.0	3.2	6.5	8.9	7.7	6.5	6.5
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0	1968.0
2.5°	1717.5	1752.7	1795.1	1868.2	1919.5	1974.8	2030.6	2089.9	2105.7	2121.9
5°	1392.4	1461.4	1499.0	1597.1	1700.1	1831.0	1938.1	2055.2	2104.1	2115.4
7.5°	1054.7	1101.5	1200.1	1299.4	1427.1	1564.4	1728.4	1911.0	1968.0	1991.8
10°	836.1	900.0	986.4	1093.0	1204.9	1352.8	1537.8	1751.0	1831.8	1845.2
12.5°	711.7	782.8	876.9	989.6	1095.5	1206.9	1393.6	1613.7	1700.1	1728.8
15°	569.1	655.2	763.8	882.6	997.7	1119.7	1308.7	1557.2	1656.9	1690.5
17.5°	447.2	516.6	634.2	763.0	899.6	1053.9	1291.0	1584.2	1707.0	1738.1
20°	342.1	391.8	490.8	626.9	786.9	988.8	1295.4	1686.4	1833.4	1875.9
22.5°	295.7	321.1	381.3	511.0	689.9	932.3	1313.6	1826.6	2003.9	2074.6
25°	267.8	281.1	315.1	399.9	597.4	877.3	1355.2	2015.2	2242.2	2289.1
27.5°	244.0	253.7	274.7	335.7	513.4	826.4	1403.7	2224.5	2464.8	2534.7
30°	221.4	234.3	254.1	298.1	459.7	780.0	1464.7	2394.1	2652.2	2717.3
32.5°	204.0	216.9	235.1	271.8	414.0	731.1	1501.0	2543.2	2805.3	2860.6
35°	189.8	200.8	219.7	250.8	379.3	694.0	1493.7	2661.5	2953.6	3010.1
37.5°	179.7	189.0	208.0	231.0	353.0	655.2	1490.1	2817.8	3134.1	3199.5
40°	170.5	180.2	197.5	218.1	326.8	609.5	1492.1	2972.9	3326.4	3391.8
42.5°	163.2	174.1	188.2	214.5	299.7	572.8	1492.1	3107.9	3493.6	3556.6
45°	157.1	168.8	182.6	214.1	278.3	544.9	1482.0	3223.8	3626.9	3680.6
47.5°	151.9	164.8	184.6	206.8	273.1	524.7	1473.1	3316.7	3735.6	3786.1
50°	148.2	163.6	196.3	198.3	274.7	518.6	1516.0	3433.8	3831.3	3874.9
52.5°	145.4	164.0	195.9	185.8	271.8	522.7	1605.2	3616.8	3964.2	3967.4
55°	139.8	163.6	185.8	171.7	260.1	529.6	1719.9	3882.6	4172.2	4174.6
57.5°	134.1	159.1	172.5	159.6	236.3	529.6	1858.1	4134.2	4423.1	4425.1
60°	128.5	165.6	151.5	149.1	205.2	519.9	2003.9	4244.9	4501.8	4522.4
62.5°	122.8	166.8	135.3	139.8	182.6	496.4	2112.6	4122.5	4395.2	4424.7
65°	116.3	134.5	124.8	130.1	170.9	457.3	2078.2	3898.3	4194.8	4230.0
67.5°	108.7	113.9	113.5	120.0	166.8	399.5	1897.3	3614.8	3979.1	3977.1
70°	99.4	102.2	103.4	110.3	159.1	354.7	1581.0	3246.8	3691.1	3736.4
72.5°	89.7	92.1	93.3	99.4	151.5	329.2	1227.1	2739.9	3197.1	3267.8
75°	79.2	80.8	82.4	87.7	143.4	291.6	874.1	2091.6	2448.6	2559.7
77.5°	68.3	68.3	70.3	75.5	120.8	240.7	586.5	1467.1	1658.9	1772.5
80°	55.3	55.7	54.9	60.6	88.9	164.8	333.2	979.9	1103.9	1125.8
82.5°	42.4	41.2	41.6	44.4	66.2	112.3	177.7	608.7	620.4	608.3
85°	26.7	26.7	25.9	29.1	42.4	58.6	96.9	372.8	291.2	277.1
87.5°	10.9	8.9	10.1	11.7	20.2	23.8	38.0	76.7	29.5	27.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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