

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: P298915

Luminaire Tested: **GLNA-AF-01-LED-E1-SLL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191289)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-SLL-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Left OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3831.8 lumens
Efficiency: N/A
Efficacy: 87.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

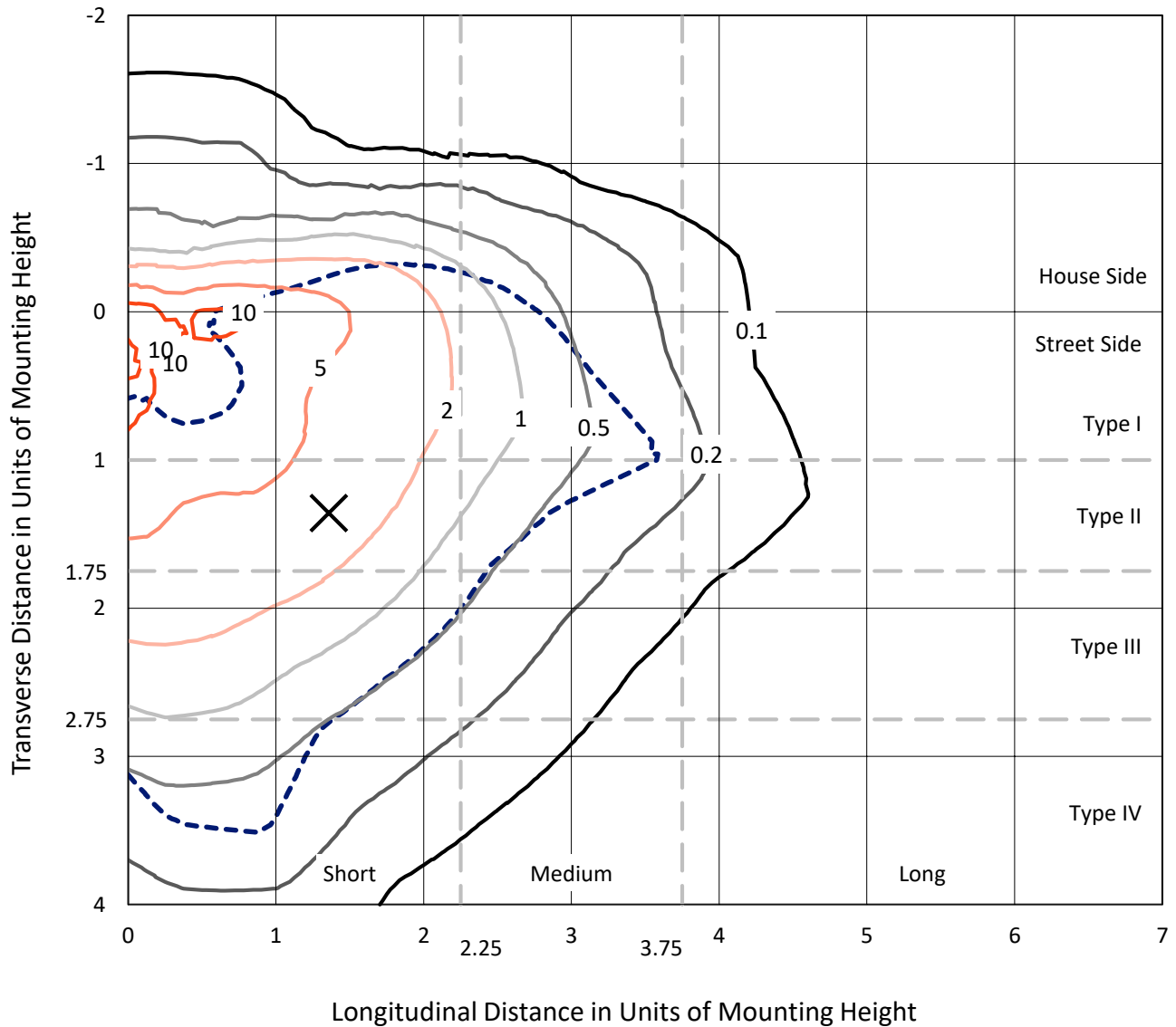
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

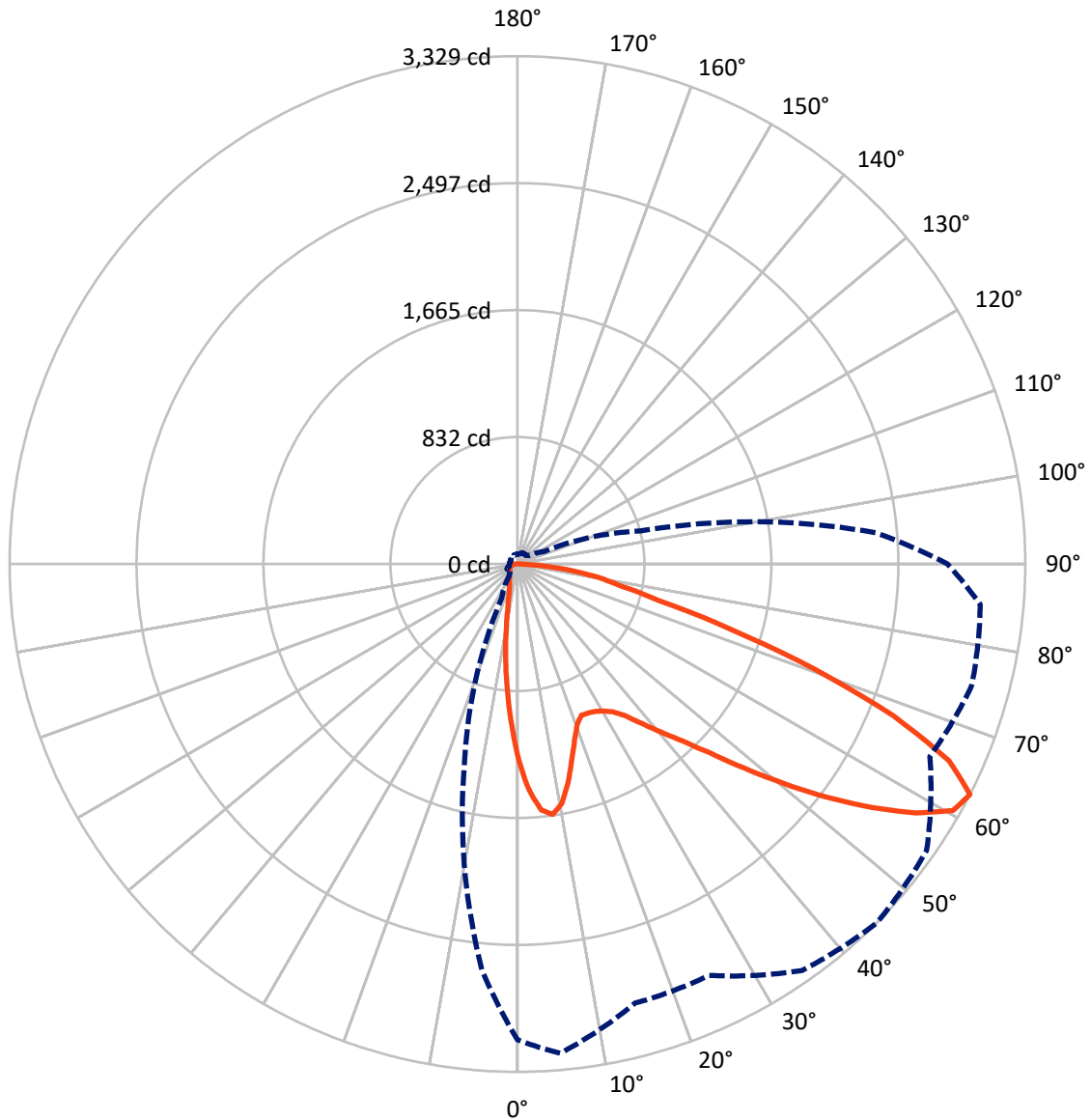
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	634.1	0.0	634.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	3197.7	0.0	3197.7
	% Fixture	83.5	0.0	83.5
Total	Lumens	3831.8	0.0	3831.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	2.5
10°-20°	172.8	4.5
20°-30°	252.0	6.6
30°-40°	388.1	10.1
40°-50°	571.1	14.9
50°-60°	837.7	21.9
60°-70°	936.4	24.4
70°-80°	458.5	12.0
80°-90°	121.0	3.2
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°	3831.8	100.0
0°-180°	3831.8	100.0



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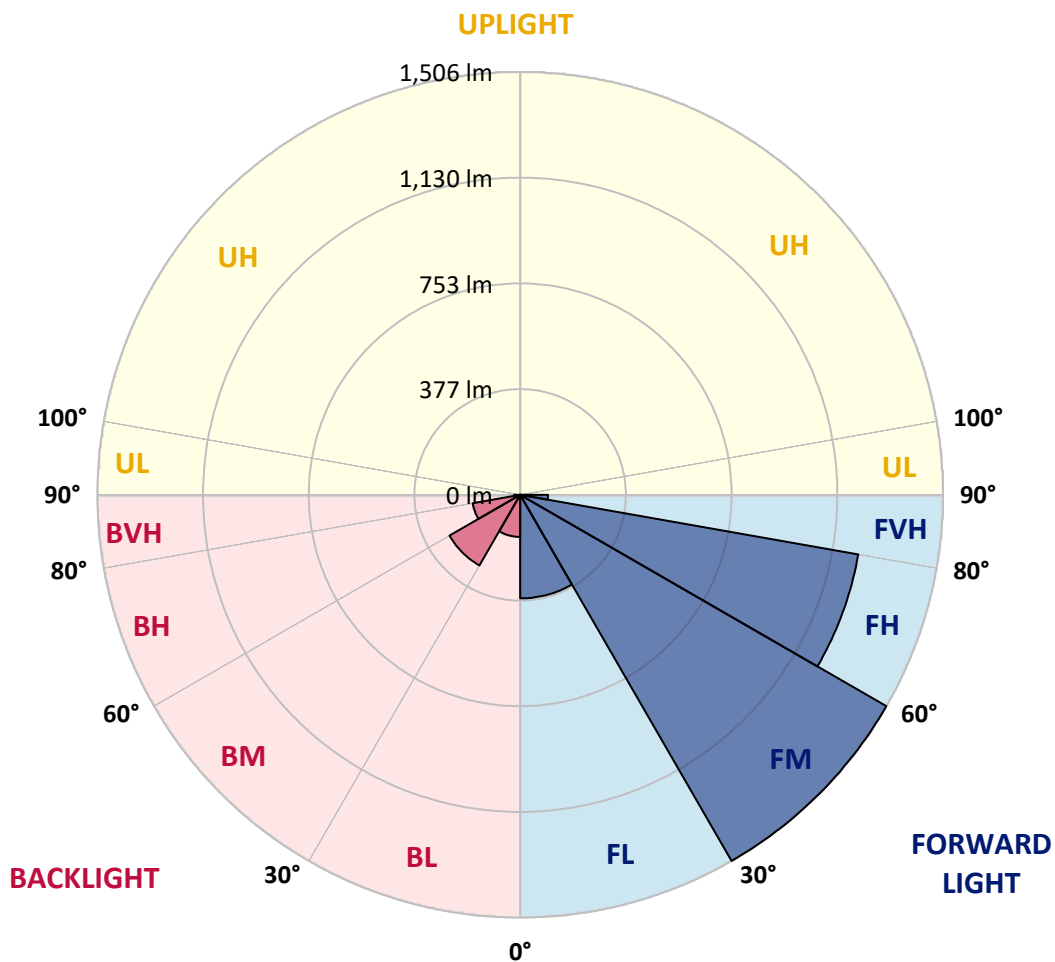
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	369.0	9.6			
FM	(30°-60°)	1506.3	39.3			
FH	(60°-80°)	1223.0	31.9			G1/1800
FVH	(80°-90°)	99.4	2.6			G1/100
BL	(0°-30°)	150.0	3.9	B1/500		
BM	(30°-60°)	290.5	7.6	B1/1000		
BH	(60°-80°)	171.9	4.5	B1/500		G1/500
BVH	(80°-90°)	21.6	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1345.1	1366.6	1408.6	1439.9	1478.1	1486.9	1499.2	1487.1	1465.9	1437.6	1428.4
5°	1264.9	1310.9	1412.5	1502.1	1581.7	1618.8	1629.2	1598.5	1536.8	1455.7	1406.2
7.5°	1136.2	1201.5	1339.2	1471.1	1588.4	1657.7	1656.0	1585.1	1471.5	1339.4	1260.0
10°	1025.2	1099.8	1257.8	1405.2	1529.7	1596.9	1570.9	1480.2	1344.7	1192.6	1106.5
12.5°	963.1	1036.2	1196.5	1344.5	1448.6	1471.8	1451.9	1363.0	1235.4	1081.6	1006.2
15°	952.3	1032.6	1172.0	1292.5	1350.9	1330.7	1307.0	1267.2	1177.0	1045.8	967.2
17.5°	998.9	1087.3	1200.1	1256.3	1246.4	1211.2	1204.5	1208.9	1187.2	1085.6	995.1
20°	1088.2	1194.3	1266.8	1239.3	1167.0	1118.5	1120.2	1187.8	1252.0	1186.5	1083.1
22.5°	1213.5	1334.6	1363.0	1248.3	1133.5	1076.0	1089.9	1199.5	1355.5	1334.0	1201.9
25°	1375.7	1486.1	1465.7	1281.1	1136.8	1081.2	1092.4	1239.5	1477.6	1481.5	1349.0
27.5°	1532.8	1635.2	1551.8	1324.7	1150.8	1093.7	1108.4	1302.4	1594.4	1641.5	1517.1
30°	1655.4	1726.7	1585.9	1364.5	1178.1	1117.9	1136.2	1362.2	1647.5	1749.6	1646.4
32.5°	1757.0	1808.1	1640.2	1413.8	1228.5	1156.0	1188.2	1434.9	1723.9	1852.4	1773.0
35°	1886.7	1901.2	1707.9	1468.8	1306.2	1222.4	1262.4	1506.1	1796.8	1956.2	1897.7
37.5°	2038.8	2020.1	1771.7	1544.0	1406.7	1326.2	1359.3	1584.2	1856.8	2074.0	2025.1
40°	2189.2	2144.1	1851.8	1660.7	1553.3	1448.6	1487.8	1667.7	1912.9	2191.9	2149.6
42.5°	2317.1	2250.3	1930.7	1789.0	1689.7	1583.6	1630.4	1751.7	1966.3	2292.6	2257.6
45°	2411.6	2328.6	2005.9	1912.2	1877.9	1763.1	1785.2	1847.9	2024.3	2376.7	2346.5
47.5°	2496.1	2407.4	2091.0	2036.5	2042.4	1996.4	1960.8	1960.0	2092.6	2445.3	2430.6
50°	2609.2	2516.7	2182.4	2164.5	2289.2	2258.7	2180.1	2090.8	2178.9	2523.3	2521.6
52.5°	2765.1	2689.9	2294.1	2302.5	2519.7	2539.7	2442.3	2248.0	2314.1	2666.3	2656.2
55°	2949.4	2905.5	2446.2	2461.1	2802.4	2816.7	2720.0	2444.5	2513.0	2873.4	2845.4
57.5°	3093.3	3084.0	2613.0	2651.6	3013.5	3077.9	2989.0	2672.0	2737.1	3047.8	2977.4
60°	3150.6	3195.4	2790.6	2843.7	3208.7	3280.1	3202.2	2871.8	2935.7	3120.1	2968.4
62.5°	3119.6	3219.8	2979.7	2975.3	3252.3	3329.2	3274.4	2983.1	3083.0	3045.5	2818.2
65°	2976.6	3132.0	3089.5	2941.4	3103.2	3109.5	3091.7	2933.4	3117.7	2809.7	2527.9
67.5°	2665.0	2888.7	2944.9	2650.8	2700.8	2659.8	2630.0	2661.2	2936.5	2456.5	2124.5
70°	2170.7	2507.3	2534.2	2120.1	2097.4	2069.7	2010.6	2181.8	2579.1	2013.3	1685.8
72.5°	1596.1	1949.9	2032.7	1555.0	1449.7	1455.3	1408.6	1644.2	2097.0	1495.5	1258.6
75°	1092.0	1411.9	1590.4	1085.0	958.7	960.9	955.0	1165.1	1670.2	1040.3	941.8
77.5°	797.7	1008.7	1199.5	729.4	708.1	695.1	691.9	815.2	1280.5	755.4	731.3
80°	640.1	745.3	805.7	505.5	543.6	542.6	525.1	560.5	836.2	552.5	547.0
82.5°	444.1	572.8	652.8	396.2	366.9	360.8	365.1	417.5	591.1	377.7	359.1
85°	234.3	380.4	646.5	351.1	217.8	173.8	216.2	341.8	512.1	200.1	175.2
87.5°	30.0	110.0	428.0	140.1	86.0	46.3	102.6	192.5	328.8	40.8	35.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1404.6	1376.6	1339.9	1305.9	1270.8	1235.8	1190.1	1161.4	1141.7	1137.8	1129.5
5°	1370.5	1277.3	1207.0	1146.1	1090.9	1012.9	969.8	933.9	914.8	912.9	908.3
7.5°	1213.1	1084.6	989.6	903.4	825.3	762.3	692.8	660.4	647.1	650.2	653.4
10°	1049.4	905.8	796.6	708.6	639.7	586.6	530.8	493.2	467.0	461.7	460.7
12.5°	929.8	772.2	666.3	604.1	550.9	500.9	441.7	397.2	363.4	351.7	344.0
15°	879.2	706.9	595.9	528.9	470.1	406.7	351.7	305.2	274.1	263.9	258.3
17.5°	890.0	688.8	547.5	461.7	386.6	320.4	251.1	211.2	192.5	187.7	187.7
20°	946.5	685.4	507.4	399.8	306.0	229.3	172.5	149.8	143.7	143.1	144.7
22.5°	1025.6	697.3	477.6	346.1	237.8	167.5	134.4	126.0	123.2	123.9	125.8
25°	1143.6	737.1	455.9	298.3	186.6	137.1	119.8	114.8	113.5	115.2	117.5
27.5°	1283.4	776.9	442.4	262.2	157.5	125.3	113.9	108.7	109.5	111.7	113.7
30°	1406.2	809.6	421.1	236.6	148.5	126.0	113.9	106.8	106.0	106.4	107.0
32.5°	1516.5	831.6	396.2	212.1	128.1	111.9	106.4	105.4	100.7	98.9	99.2
35°	1611.5	831.6	381.3	197.8	114.8	99.2	90.4	85.1	82.7	82.9	85.3
37.5°	1703.1	815.0	373.9	189.8	107.6	94.4	86.6	81.9	78.8	78.2	78.6
40°	1783.9	790.8	365.5	186.4	102.2	91.4	84.1	80.2	76.9	75.8	76.0
42.5°	1848.8	771.1	356.2	182.0	98.7	89.3	82.3	79.0	75.2	74.1	73.9
45°	1919.0	764.6	344.0	173.1	100.5	89.5	81.9	78.4	74.5	73.3	72.9
47.5°	2011.4	785.1	331.4	162.6	104.1	90.6	82.5	78.4	74.3	73.3	72.9
50°	2127.9	833.1	315.3	147.2	100.5	93.5	82.3	77.7	74.3	73.3	72.5
52.5°	2277.5	898.0	294.3	129.6	98.3	100.7	81.9	76.4	73.3	71.9	70.4
55°	2459.2	951.0	269.1	115.0	93.5	98.7	81.3	75.0	71.7	69.5	68.2
57.5°	2592.4	970.2	237.0	105.6	86.8	95.6	80.4	73.1	69.5	67.8	66.2
60°	2566.0	933.1	209.8	99.6	82.7	86.4	79.8	71.4	67.6	66.4	64.8
62.5°	2355.2	836.2	192.3	96.9	80.2	78.8	80.4	69.7	66.0	64.6	64.2
65°	2039.0	693.2	185.4	96.3	78.2	74.3	74.8	67.8	64.0	63.0	62.6
67.5°	1682.0	559.5	179.3	98.3	75.4	71.2	69.1	65.3	62.1	61.1	60.2
70°	1326.4	465.3	176.5	97.1	72.1	68.0	65.8	62.6	59.8	58.7	58.1
72.5°	1068.1	393.1	175.0	95.8	67.6	63.8	61.7	58.9	56.0	55.6	55.0
75°	903.9	309.0	160.4	91.8	62.6	58.7	57.3	54.8	51.8	51.8	51.4
77.5°	697.3	223.5	133.3	81.3	57.3	53.1	51.8	49.9	46.6	47.2	47.0
80°	515.0	145.8	104.3	67.4	50.8	46.8	46.1	44.2	40.6	41.5	41.5
82.5°	352.8	95.6	75.0	55.2	43.4	39.6	39.6	37.7	33.7	34.1	35.4
85°	177.2	65.8	56.0	42.7	33.7	31.8	31.8	30.4	26.3	26.5	28.2
87.5°	54.0	39.6	37.1	30.6	24.2	23.8	22.7	21.7	19.1	18.9	20.0
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1116.6	1104.5	1090.1	1058.0	1047.3	1046.6	1056.4	1046.2	1065.6	1057.4	1066.5
5°	900.4	888.7	872.5	831.6	806.8	789.9	781.9	758.3	775.4	762.9	773.3
7.5°	662.3	665.0	654.3	630.3	576.1	549.0	533.0	518.6	531.0	529.7	549.6
10°	465.5	472.9	465.3	441.1	397.2	382.3	385.3	390.9	407.2	415.5	446.1
12.5°	335.1	334.7	329.9	308.2	279.3	281.0	293.0	302.9	317.8	326.7	357.8
15°	250.2	246.4	244.3	226.6	210.2	213.8	219.7	220.7	230.2	235.5	260.8
17.5°	189.1	191.1	193.3	180.7	168.3	166.0	161.4	155.6	158.4	159.5	172.0
20°	150.2	157.8	163.5	154.6	142.0	135.2	129.3	125.5	125.5	125.3	128.9
22.5°	131.2	136.7	142.8	136.7	125.3	119.4	116.0	113.1	112.7	112.7	116.0
25°	121.0	124.9	130.8	126.6	118.2	113.7	110.6	106.8	105.4	104.9	107.2
27.5°	115.8	117.5	120.5	116.7	109.5	107.4	106.6	103.3	101.3	100.2	102.6
30°	107.2	106.8	107.0	103.3	97.5	97.3	98.7	99.4	98.7	98.5	102.2
32.5°	99.2	98.3	98.1	94.8	89.5	88.3	89.5	90.8	92.2	94.4	98.5
35°	89.1	91.2	92.5	89.5	83.2	79.4	78.0	75.6	74.3	74.3	79.2
37.5°	81.1	86.0	87.9	85.1	78.2	72.9	70.4	70.0	70.2	71.0	75.6
40°	78.4	81.9	83.6	80.9	73.9	69.1	67.6	67.2	67.6	68.9	73.5
42.5°	76.7	79.2	79.0	75.6	70.0	66.6	65.8	65.3	65.8	67.0	72.1
45°	75.2	76.9	75.2	71.2	66.0	64.2	64.4	64.2	64.6	66.0	70.8
47.5°	73.9	74.5	72.5	68.4	63.0	62.6	63.4	64.0	64.4	65.6	70.6
50°	72.1	72.1	70.2	66.0	60.4	60.7	61.7	63.2	63.4	64.6	68.7
52.5°	69.7	69.5	68.2	64.2	58.3	58.9	58.9	60.7	61.1	62.6	66.8
55°	67.8	67.4	66.8	63.0	56.5	57.5	56.9	57.5	58.5	60.0	64.6
57.5°	66.2	65.3	65.3	61.9	55.0	55.4	54.0	54.8	56.0	57.3	62.1
60°	64.4	63.6	64.0	60.4	52.7	52.2	51.6	53.3	53.7	55.2	60.0
62.5°	62.6	61.9	62.1	58.7	51.0	49.9	49.9	51.4	51.6	53.7	58.3
65°	61.1	60.2	60.0	57.1	49.1	47.9	48.5	49.1	49.5	51.6	56.0
67.5°	59.6	57.9	57.9	55.6	47.0	45.7	47.0	46.8	47.5	49.3	52.9
70°	57.7	55.4	55.6	54.6	44.9	43.4	44.4	44.2	44.7	45.9	49.5
72.5°	54.8	52.9	53.3	52.9	42.7	40.6	41.0	41.0	41.0	42.1	45.9
75°	51.0	49.5	50.8	51.8	40.2	37.3	37.7	37.7	37.1	37.7	42.3
77.5°	46.3	45.5	49.7	48.3	37.3	33.7	33.7	33.3	32.1	32.9	37.9
80°	41.3	40.6	45.9	40.4	33.9	29.3	28.9	27.8	26.5	27.1	32.3
82.5°	36.0	35.4	38.6	31.0	29.3	24.2	23.2	21.3	20.0	20.7	25.2
85°	29.5	29.5	29.7	23.4	22.3	18.5	17.3	14.8	13.3	13.7	18.1
87.5°	21.1	21.7	20.0	16.0	13.3	10.3	9.5	8.0	6.7	7.8	9.5
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1112.8	1136.0	1162.3	1196.0	1224.9	1272.2	1317.8	1345.1
5°	832.1	870.6	918.6	980.4	1037.9	1124.2	1209.9	1264.9
7.5°	595.5	636.8	688.6	765.7	847.0	957.1	1070.5	1136.2
10°	492.7	535.1	578.6	630.7	697.3	817.1	951.0	1025.2
12.5°	407.6	452.9	499.9	554.6	616.3	723.3	877.7	963.1
15°	312.0	362.5	417.9	487.2	564.5	688.2	859.6	952.3
17.5°	213.8	270.3	338.3	423.8	518.4	676.8	892.1	998.9
20°	147.2	188.3	261.0	361.3	475.0	675.3	954.4	1088.2
22.5°	123.2	141.5	194.6	303.7	442.4	693.4	1051.1	1213.5
25°	113.9	124.9	155.4	253.8	418.6	735.2	1184.3	1375.7
27.5°	108.5	118.4	141.1	221.2	399.8	783.6	1313.8	1532.8
30°	110.6	120.7	137.1	204.5	374.3	824.0	1428.8	1655.4
32.5°	99.6	104.1	117.5	189.8	356.0	857.9	1529.5	1757.0
35°	84.9	92.7	104.9	182.8	356.4	880.7	1639.2	1886.7
37.5°	80.9	88.7	97.5	180.3	361.3	904.9	1765.2	2038.8
40°	78.4	85.5	93.1	178.9	365.9	927.0	1888.7	2189.2
42.5°	76.7	83.2	92.7	173.8	368.2	946.9	1990.1	2317.1
45°	76.4	83.2	94.4	168.7	371.8	968.1	2075.3	2411.6
47.5°	76.7	86.0	91.2	162.6	371.8	1003.7	2175.1	2496.1
50°	75.8	90.6	87.9	154.0	363.2	1071.1	2312.0	2609.2
52.5°	75.4	90.0	81.3	140.7	348.2	1178.1	2487.5	2765.1
55°	74.3	86.8	76.7	121.0	330.8	1294.9	2675.4	2949.4
57.5°	73.3	76.9	74.1	103.7	303.7	1377.0	2804.7	3093.3
60°	82.1	67.2	72.1	95.2	267.7	1399.5	2799.7	3150.6
62.5°	76.0	63.0	69.3	93.3	242.5	1336.3	2670.3	3119.6
65°	59.6	60.2	66.6	98.7	235.7	1168.9	2441.1	2976.6
67.5°	54.6	57.5	63.8	105.8	236.4	935.9	2098.7	2665.0
70°	51.4	54.6	60.7	109.3	238.0	697.7	1659.2	2170.7
72.5°	47.9	50.6	57.1	110.0	227.0	506.8	1278.8	1596.1
75°	43.6	46.1	52.0	95.8	188.1	351.5	978.2	1092.0
77.5°	38.8	40.6	45.7	73.9	139.7	225.0	734.3	797.7
80°	33.1	34.1	38.4	54.2	95.6	140.7	581.0	640.1
82.5°	26.5	26.9	29.7	40.6	62.1	90.4	389.1	444.1
85°	18.7	18.7	20.4	29.5	42.3	57.3	211.2	234.3
87.5°	8.8	9.0	9.0	16.2	22.1	29.1	48.7	30.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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