

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: P299461

Luminaire Tested: **GLNA-AF-02-LED-E1-SLR-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299461  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-SLR-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Right OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

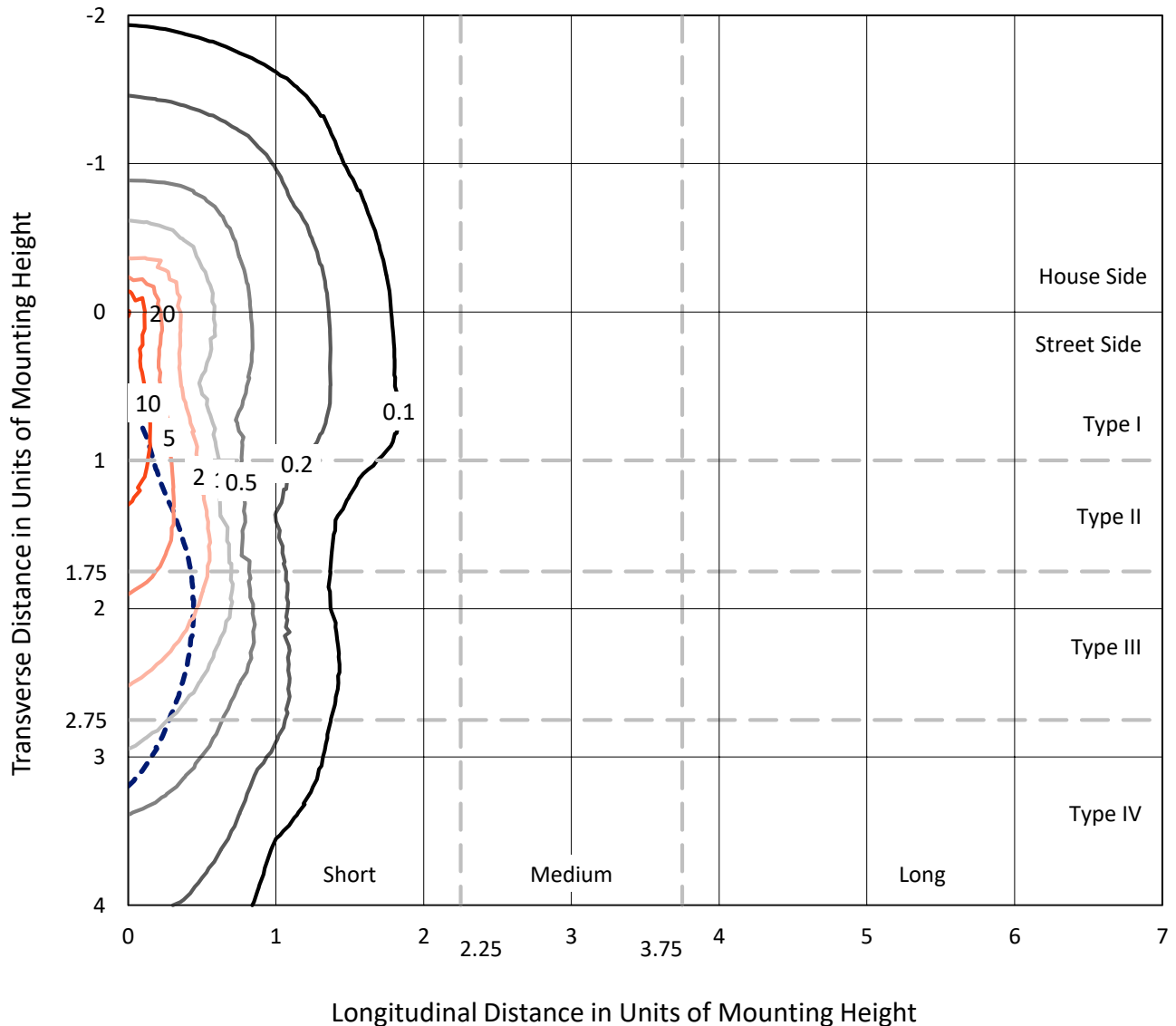
Lumens per Lamp: N/A  
Luminaire Lumens: 6105.6 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (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

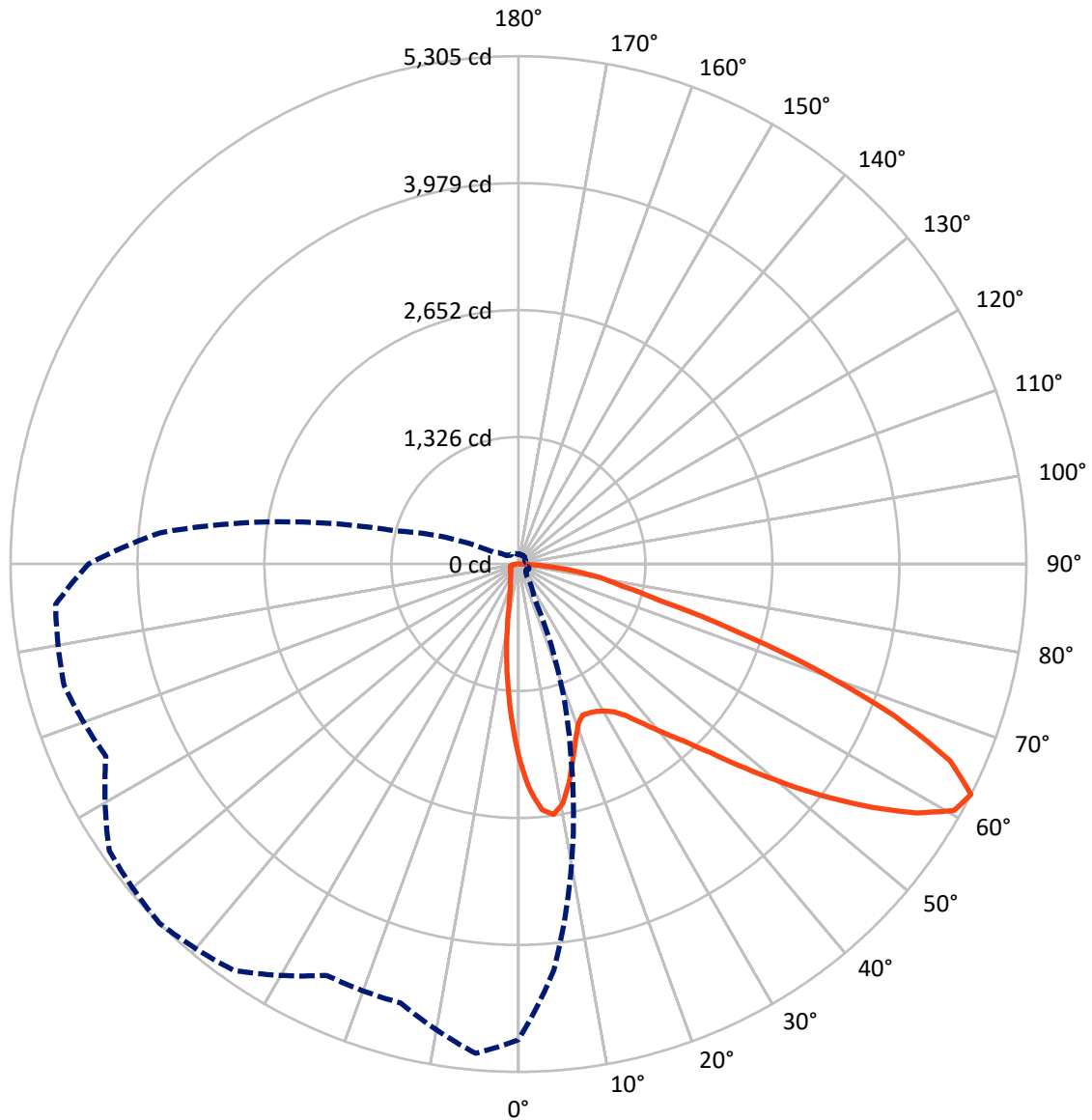
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.6 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1010.4	0.0	1010.4
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	5095.2	0.0	5095.2
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	6105.6	0.0	6105.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.2	2.5
10°-20°	275.4	4.5
20°-30°	401.5	6.6
30°-40°	618.3	10.1
40°-50°	910.0	14.9
50°-60°	1334.8	21.9
60°-70°	1492.1	24.4
70°-80°	730.5	12.0
80°-90°	192.9	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°	6105.6	100.0
0°-180°	6105.6	100.0

**Coefficient of Utilization**



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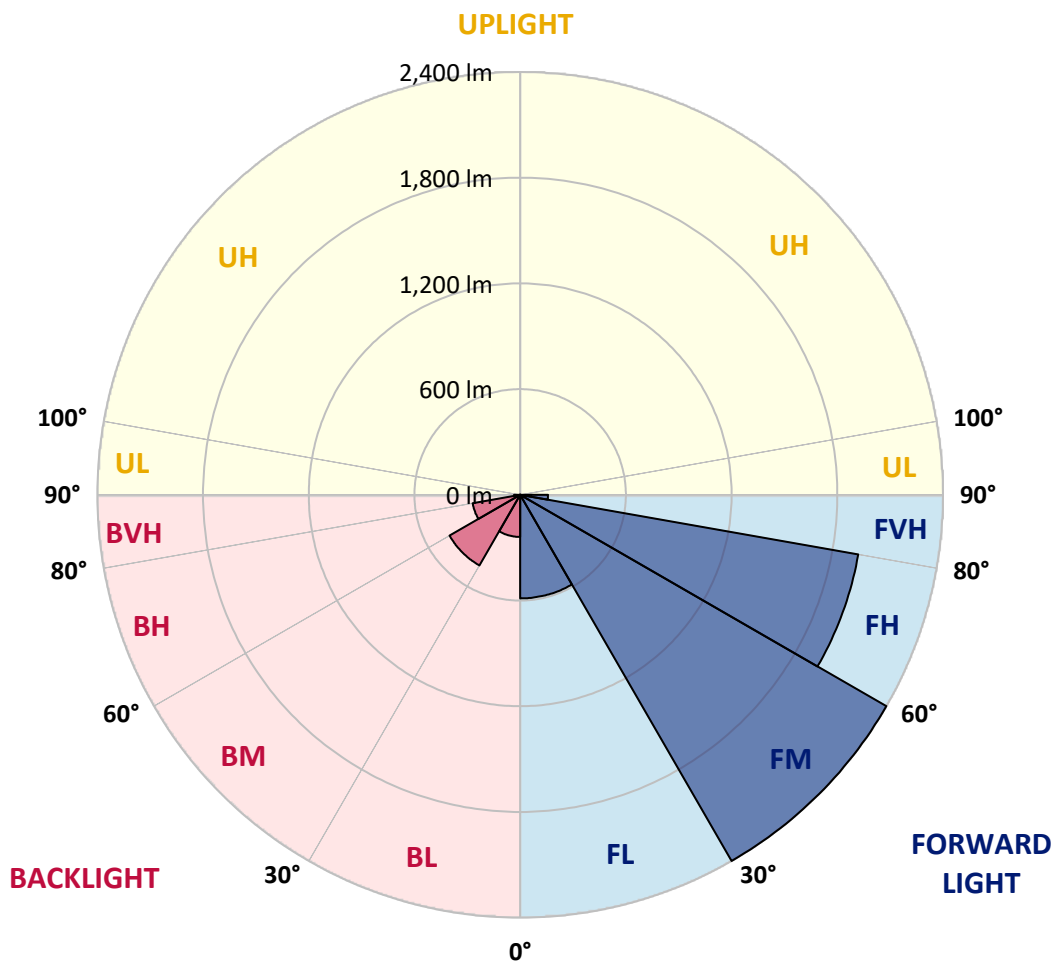
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	587.9	9.6			
FM	(30°-60°)	2400.2	39.3			
FH	(60°-80°)	1948.7	31.9			G2/5000
FVH	(80°-90°)	158.4	2.6			G2/225
BL	(0°-30°)	239.0	3.9	B1/500		
BM	(30°-60°)	463.0	7.6	B1/1000		
BH	(60°-80°)	273.9	4.5	B1/500		G1/500
BVH	(80°-90°)	34.5	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-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8
2.5°	2143.3	2099.7	2027.2	1951.7	1905.7	1852.0	1810.0	1773.1	1699.3	1684.9	1698.0
5°	2015.5	1927.9	1791.2	1653.7	1562.0	1463.7	1387.1	1325.8	1232.1	1215.6	1235.4
7.5°	1810.4	1705.7	1525.1	1349.5	1220.0	1097.2	1014.6	948.8	875.7	844.2	846.1
10°	1633.5	1515.4	1301.9	1111.0	1004.9	922.0	852.5	785.0	710.8	662.2	648.8
12.5°	1534.5	1398.6	1152.5	982.0	883.7	796.5	721.6	649.5	570.2	520.5	506.5
15°	1517.4	1369.7	1096.5	899.5	776.3	665.9	577.6	497.1	415.5	375.2	366.8
17.5°	1591.6	1421.4	1078.4	826.0	675.3	539.0	430.6	340.7	274.2	254.1	252.4
20°	1733.8	1520.8	1076.0	756.9	575.6	415.9	300.0	234.6	205.4	199.7	200.1
22.5°	1933.6	1674.8	1104.9	704.8	484.0	310.1	225.6	196.3	184.9	179.5	179.5
25°	2192.0	1886.9	1171.3	666.9	404.4	247.7	199.0	181.6	170.8	167.1	167.9
27.5°	2442.4	2093.3	1248.5	637.1	352.4	224.9	188.6	172.8	163.5	159.7	161.5
30°	2637.7	2276.6	1313.0	596.4	325.9	218.5	192.3	176.2	162.8	157.1	157.4
32.5°	2799.5	2437.0	1367.0	567.2	302.4	187.3	165.8	158.7	157.1	150.4	147.0
35°	3006.3	2611.9	1403.3	567.9	291.3	167.1	147.6	135.2	126.2	118.5	118.5
37.5°	3248.6	2812.6	1441.9	575.6	287.3	155.4	141.3	128.8	120.5	113.1	111.8
40°	3488.2	3009.3	1477.2	583.0	284.9	148.3	136.3	124.9	117.2	109.7	107.7
42.5°	3692.0	3171.1	1508.7	586.7	276.9	147.6	132.6	122.1	114.8	106.7	104.8
45°	3842.7	3306.6	1542.6	592.4	268.9	150.4	132.6	121.8	112.8	105.1	103.0
47.5°	3977.2	3465.7	1599.3	592.4	259.1	145.3	137.0	122.1	112.5	104.4	102.7
50°	4157.5	3683.9	1706.7	578.7	245.4	139.9	144.3	120.8	109.4	103.0	101.0
52.5°	4405.8	3963.5	1877.2	554.8	224.2	129.5	143.3	120.2	106.4	99.7	97.3
55°	4699.5	4262.8	2063.1	526.9	192.6	122.1	138.3	118.5	103.0	95.6	93.3
57.5°	4928.8	4468.9	2194.0	484.0	165.1	118.2	122.5	116.8	99.0	91.2	89.3
60°	5020.0	4460.9	2230.0	426.5	151.7	114.8	107.1	130.9	95.6	87.9	85.6
62.5°	4970.7	4254.8	2129.3	386.3	148.7	110.4	100.4	121.1	93.0	85.6	82.2
65°	4742.8	3889.6	1862.5	375.5	157.4	106.1	96.0	95.0	89.3	82.2	78.8
67.5°	4246.4	3343.9	1491.2	376.6	168.5	101.7	91.6	87.0	84.2	78.5	75.5
70°	3458.7	2643.8	1111.6	379.3	174.2	96.6	87.0	81.9	78.8	73.2	71.1
72.5°	2543.1	2037.6	807.6	361.8	175.2	90.9	80.6	76.2	73.2	67.2	65.4
75°	1739.9	1558.7	560.2	299.7	152.7	82.9	73.5	69.5	67.5	60.0	59.0
77.5°	1271.0	1170.0	358.5	222.5	117.8	72.9	64.8	61.8	60.5	52.3	51.0
80°	1020.0	925.6	224.2	152.4	86.3	61.1	54.4	52.7	51.3	43.3	42.3
82.5°	707.5	619.9	144.0	99.0	64.8	47.3	43.0	42.3	40.2	32.9	31.9
85°	373.2	336.6	91.2	67.5	46.9	32.5	29.9	29.9	28.9	21.8	21.1
87.5°	47.7	77.5	46.3	35.3	25.8	14.4	14.4	14.1	15.1	12.4	10.8
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°	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8
2.5°	1667.1	1683.2	1667.8	1668.8	1685.9	1736.9	1760.0	1779.1	1799.7	1813.1	1819.1
5°	1208.3	1245.9	1258.6	1285.4	1325.1	1390.2	1416.0	1434.8	1447.3	1454.6	1457.7
7.5°	826.4	849.1	874.6	917.9	1004.2	1042.5	1059.6	1055.2	1041.2	1036.1	1031.1
10°	623.0	613.9	609.1	633.0	702.8	741.4	753.5	741.7	734.0	735.7	744.1
12.5°	482.6	466.9	447.8	445.0	491.1	525.6	533.3	533.9	548.1	560.5	579.0
15°	351.8	350.0	340.7	335.0	361.1	389.4	392.7	398.7	411.5	420.6	436.6
17.5°	248.0	257.1	264.5	268.1	288.0	308.1	304.4	301.4	299.0	299.0	306.8
20°	200.1	206.1	215.5	226.2	246.4	260.4	251.4	239.3	230.5	227.9	228.9
22.5°	180.3	184.9	190.3	199.7	217.8	227.6	217.8	209.1	200.4	197.3	196.3
25°	170.2	176.2	181.3	188.3	201.7	208.4	199.0	192.6	187.3	183.6	180.9
27.5°	164.5	169.8	171.2	174.6	185.9	191.9	187.3	184.6	181.3	177.9	174.6
30°	158.4	157.4	155.1	155.4	164.5	170.5	170.2	170.8	170.5	169.5	168.9
32.5°	144.7	142.7	140.6	142.7	151.0	156.4	156.8	158.1	158.1	157.8	160.4
35°	120.5	124.2	126.5	132.6	142.7	147.3	145.3	141.9	136.0	132.2	131.9
37.5°	111.5	112.1	116.1	124.5	135.6	139.9	137.0	129.2	125.2	124.5	125.5
40°	107.1	107.7	110.0	117.8	128.8	133.2	130.6	124.9	121.1	120.8	122.5
42.5°	104.0	104.8	106.1	111.5	120.5	125.9	126.2	122.1	117.8	118.2	119.8
45°	102.3	102.7	102.3	105.1	113.4	119.8	122.5	119.8	116.1	116.8	118.8
47.5°	102.0	101.0	99.7	100.4	109.1	115.4	118.8	117.8	116.1	116.8	118.5
50°	100.7	98.4	96.6	96.3	105.1	111.8	114.8	114.8	115.4	116.8	118.5
52.5°	96.6	94.0	94.0	93.0	102.3	108.7	110.8	111.1	112.1	114.4	116.8
55°	91.6	90.6	91.6	89.9	100.4	106.4	107.4	108.1	108.7	110.8	114.1
57.5°	87.3	86.0	88.3	87.6	98.7	104.0	104.0	105.4	105.4	108.1	110.8
60°	84.9	82.2	83.2	83.9	96.3	102.0	101.4	102.7	103.3	105.8	107.7
62.5°	81.9	79.6	79.6	81.2	93.7	99.0	98.7	99.7	102.3	103.0	105.1
65°	78.2	77.2	76.2	78.2	90.9	95.6	96.0	97.3	99.7	100.4	102.0
67.5°	74.5	74.9	72.9	74.9	88.6	92.3	92.3	95.0	96.0	97.3	99.0
70°	70.5	70.8	69.1	71.5	87.0	88.6	88.3	92.0	92.7	93.7	95.3
72.5°	65.4	65.4	64.8	68.2	84.2	84.9	84.2	87.3	87.6	88.6	89.3
75°	60.0	60.0	59.4	64.1	82.6	80.9	78.8	81.2	81.9	82.6	82.6
77.5°	53.0	53.8	53.8	59.4	76.8	79.3	72.4	73.9	74.9	75.2	74.2
80°	44.3	46.0	46.6	54.1	64.4	73.2	64.8	65.7	66.1	66.1	64.8
82.5°	33.9	36.9	38.6	46.6	49.4	61.4	56.4	57.4	56.4	54.4	53.8
85°	23.5	27.5	29.6	35.6	37.3	47.3	46.9	46.9	45.0	42.3	42.0
87.5°	12.8	15.1	16.5	21.1	25.5	31.9	34.5	33.5	31.9	30.2	30.6
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8
2.5°	1850.7	1896.3	1969.1	2024.8	2080.9	2135.0	2193.4	2238.0	2275.9	2290.7	2335.6
5°	1488.2	1545.2	1614.0	1738.2	1826.2	1923.1	2035.3	2183.6	2240.6	2319.6	2448.7
7.5°	1052.2	1103.9	1214.6	1315.0	1439.6	1576.8	1728.1	1932.9	2007.8	2134.3	2344.7
10°	785.7	845.8	934.7	1019.3	1129.1	1269.4	1443.2	1672.1	1763.1	1900.4	2142.7
12.5°	633.0	703.8	798.1	877.7	962.6	1061.6	1230.5	1481.4	1603.4	1723.5	1968.4
15°	486.3	560.5	648.2	749.1	842.7	949.5	1126.4	1401.0	1541.2	1666.5	1875.5
17.5°	336.6	400.0	510.5	615.8	735.7	872.3	1097.6	1418.0	1585.5	1729.9	1891.6
20°	238.7	274.8	365.5	487.7	637.1	808.5	1092.2	1508.0	1725.8	1890.6	1995.0
22.5°	200.7	214.1	266.8	378.9	551.4	760.8	1111.0	1634.1	1915.1	2125.5	2159.8
25°	182.9	191.0	218.5	297.4	475.2	726.3	1174.4	1822.1	2149.4	2360.5	2354.4
27.5°	173.1	181.6	199.7	251.1	417.9	704.8	1237.8	2045.0	2417.2	2615.6	2540.4
30°	170.2	181.6	200.7	236.6	377.0	670.9	1289.8	2240.6	2623.3	2787.8	2625.0
32.5°	167.9	169.5	178.2	204.0	337.9	631.3	1325.1	2416.2	2825.0	2951.6	2746.8
35°	135.6	144.0	158.1	182.9	315.2	607.5	1325.1	2567.6	3023.7	3117.0	2863.0
37.5°	130.6	138.0	150.4	171.5	302.4	595.7	1298.5	2713.6	3226.7	3304.7	2958.6
40°	127.9	133.9	145.7	162.8	297.0	582.3	1259.9	2842.5	3425.1	3492.5	3047.9
42.5°	125.9	131.3	142.4	157.4	290.0	567.6	1228.7	2945.8	3597.3	3653.0	3133.2
45°	124.9	130.6	142.7	160.1	275.9	548.1	1218.4	3057.6	3738.9	3786.9	3225.4
47.5°	124.9	131.6	144.3	165.8	259.1	528.0	1250.9	3205.0	3872.9	3896.3	3334.1
50°	123.9	131.3	149.1	160.1	234.6	502.4	1327.4	3390.5	4017.9	4020.5	3471.8
52.5°	121.8	130.6	160.4	156.8	206.4	468.9	1430.8	3628.9	4232.3	4248.4	3687.2
55°	119.5	129.5	157.4	149.1	183.3	429.0	1515.4	3918.5	4533.7	4578.3	4004.1
57.5°	116.4	128.2	152.4	138.3	168.2	377.6	1546.0	4130.6	4744.1	4856.2	4361.2
60°	113.8	127.2	137.6	131.9	158.7	334.3	1486.8	4088.7	4729.7	4971.3	4677.7
62.5°	111.1	128.2	125.5	127.9	154.3	306.4	1332.5	3752.7	4490.4	4852.6	4912.3
65°	108.1	119.2	118.5	124.5	153.4	295.4	1104.6	3248.9	4027.9	4477.0	4967.7
67.5°	104.0	110.0	113.4	120.2	156.8	285.6	891.4	2680.0	3385.1	3914.1	4679.0
70°	99.7	104.8	108.4	114.8	154.7	281.2	741.4	2113.4	2686.1	3207.9	4109.5
72.5°	94.0	98.4	101.7	107.7	152.7	278.9	626.3	1702.0	2005.4	2383.0	3341.3
75°	87.3	91.2	93.7	99.7	146.3	255.4	492.4	1440.2	1500.6	1657.7	2661.2
77.5°	79.6	82.6	84.5	91.2	129.5	212.5	356.1	1111.0	1165.3	1203.5	2040.3
80°	70.5	73.5	74.5	80.9	107.4	166.1	232.3	820.6	871.6	880.3	1332.5
82.5°	60.0	63.1	63.1	69.1	87.9	119.5	152.4	562.2	572.3	601.8	941.8
85°	48.4	50.7	50.7	53.8	68.2	89.3	104.8	282.3	279.2	318.8	815.9
87.5°	34.5	36.3	37.9	38.6	48.7	59.0	63.1	86.0	56.7	65.1	523.9
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8	2062.8
2.5°	2369.6	2388.7	2369.2	2355.2	2294.4	2244.4	2177.5	2143.3
5°	2547.1	2595.8	2579.3	2520.3	2393.4	2250.7	2088.6	2015.5
7.5°	2525.6	2638.7	2641.4	2531.0	2344.1	2134.0	1914.5	1810.4
10°	2358.5	2503.1	2544.4	2437.4	2239.0	2004.1	1752.3	1633.5
12.5°	2171.9	2313.5	2345.1	2308.1	2142.4	1906.4	1651.0	1534.5
15°	2019.1	2082.6	2120.1	2152.4	2059.5	1867.4	1645.2	1517.4
17.5°	1926.2	1919.2	1929.9	1985.9	2001.7	1912.0	1732.5	1591.6
20°	1892.6	1784.9	1782.2	1859.4	1974.5	2018.5	1903.0	1733.8
22.5°	1911.1	1736.6	1714.4	1806.1	1989.0	2171.9	2126.5	1933.6
25°	1974.8	1740.6	1722.7	1811.5	2041.3	2335.3	2367.9	2192.0
27.5°	2075.2	1766.1	1742.6	1833.6	2110.8	2472.6	2605.5	2442.4
30°	2170.5	1810.4	1781.2	1877.2	2174.2	2527.0	2751.2	2637.7
32.5°	2286.4	1893.3	1841.9	1957.4	2252.7	2613.5	2881.1	2799.5
35°	2399.8	2011.4	1947.7	2081.2	2340.3	2721.3	3029.4	3006.3
37.5°	2524.3	2165.9	2113.1	2241.4	2460.2	2823.0	3218.7	3248.6
40°	2657.2	2370.6	2308.1	2474.9	2646.2	2950.6	3416.4	3488.2
42.5°	2791.1	2597.8	2523.3	2692.4	2850.5	3076.4	3585.5	3692.0
45°	2944.5	2844.5	2809.2	2992.1	3046.9	3196.3	3710.4	3842.7
47.5°	3123.1	3124.4	3181.1	3254.3	3244.9	3331.8	3836.0	3977.2
50°	3331.5	3473.7	3599.0	3647.6	3449.0	3477.5	4010.1	4157.5
52.5°	3581.9	3891.7	4046.7	4014.8	3668.8	3655.3	4286.0	4405.8
55°	3895.0	4334.1	4488.1	4465.2	3921.5	3897.7	4629.7	4699.5
57.5°	4257.4	4762.6	4904.3	4801.5	4224.9	4163.6	4914.0	4928.8
60°	4576.0	5102.3	5226.5	5112.7	4531.1	4446.4	5091.5	5020.0
62.5°	4753.2	5217.4	5304.7	5182.2	4740.8	4747.8	5130.5	4970.7
65°	4674.0	4926.4	4954.6	4944.5	4686.7	4922.7	4990.5	4742.8
67.5°	4240.4	4190.7	4238.0	4303.5	4223.6	4692.4	4602.8	4246.4
70°	3476.5	3203.6	3298.0	3341.9	3378.1	4038.0	3995.0	3458.7
72.5°	2619.9	2244.4	2318.9	2309.8	2477.6	3238.8	3106.9	2543.1
75°	1856.4	1521.8	1531.1	1527.5	1728.8	2534.0	2249.8	1739.9
77.5°	1298.8	1102.5	1107.6	1128.3	1162.3	1911.1	1607.3	1271.0
80°	893.1	836.7	864.6	866.3	805.5	1283.8	1187.5	1020.0
82.5°	665.2	581.6	574.9	584.6	631.3	1040.2	912.5	707.5
85°	544.7	344.3	276.9	347.1	559.4	1030.1	606.2	373.2
87.5°	306.8	163.5	73.9	137.0	223.2	682.0	175.2	47.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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