

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: P298981

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298981  
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-02-LED-E1-SLL-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill  
Light Eliminator Left 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

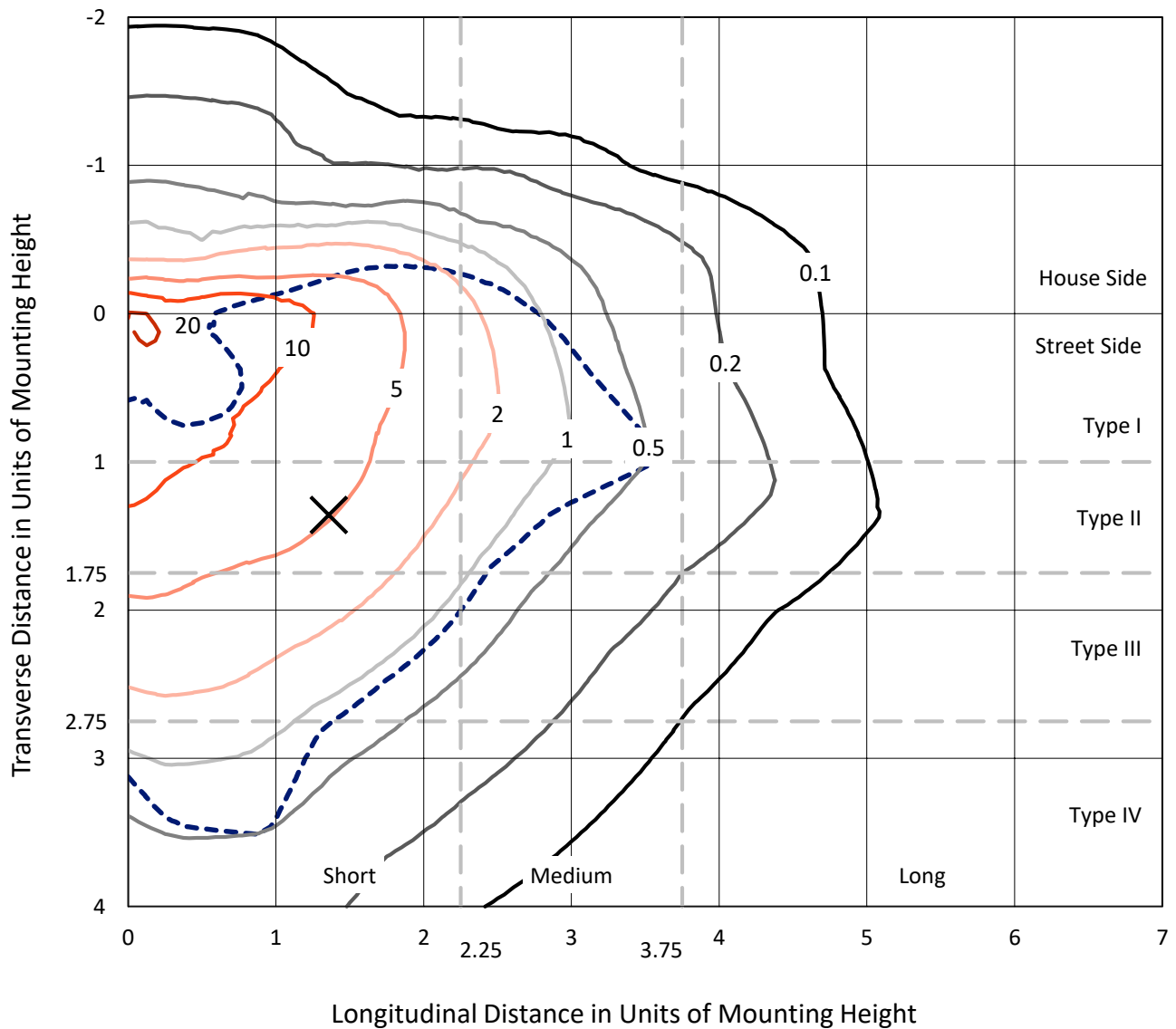


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

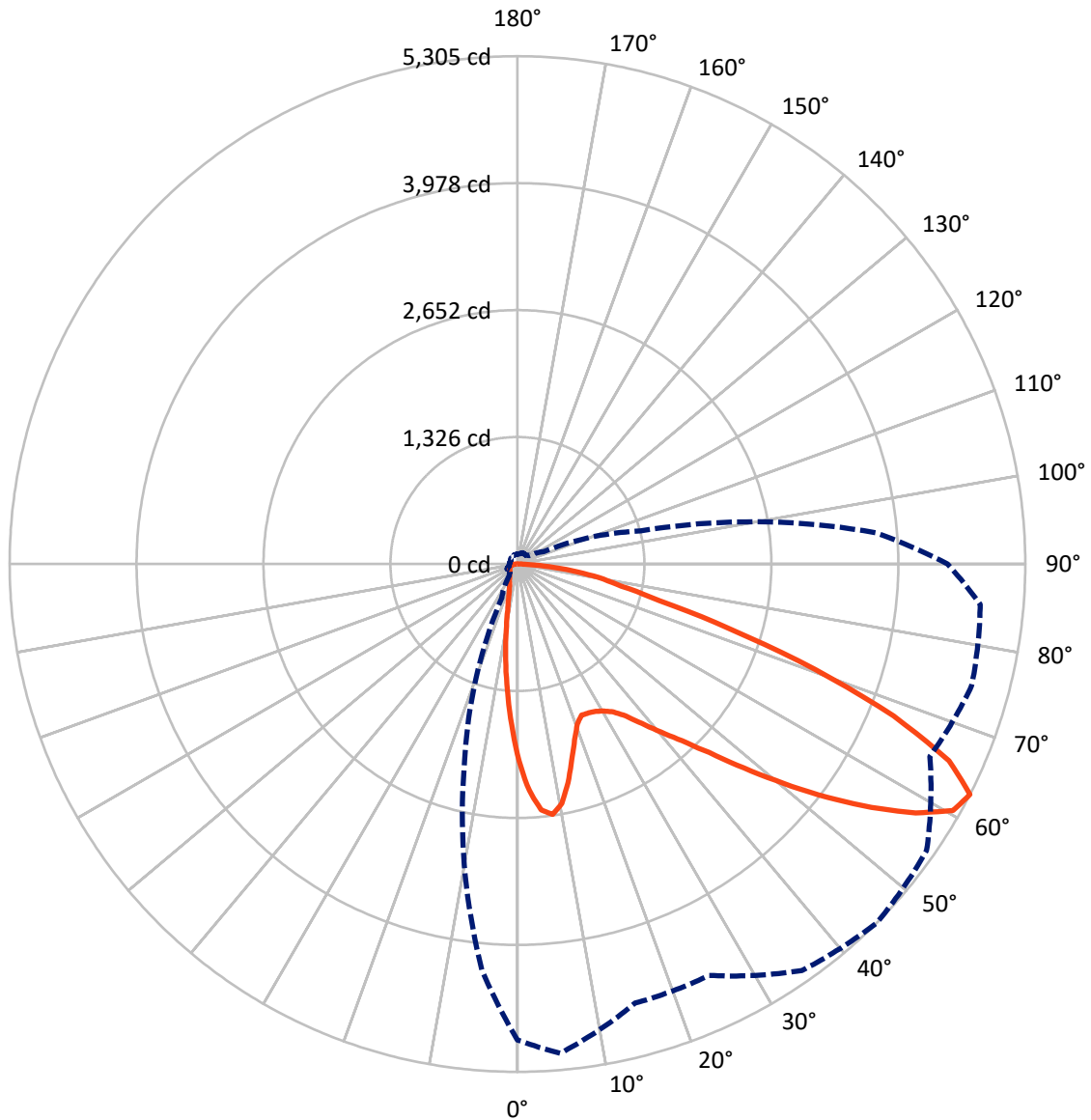


Based on 10 foot mounting height. Maximum calculated value = 24.3 fc  
 Type IV - Short - Non-Cutoff

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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
<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

**Coefficient of Utilization**

**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



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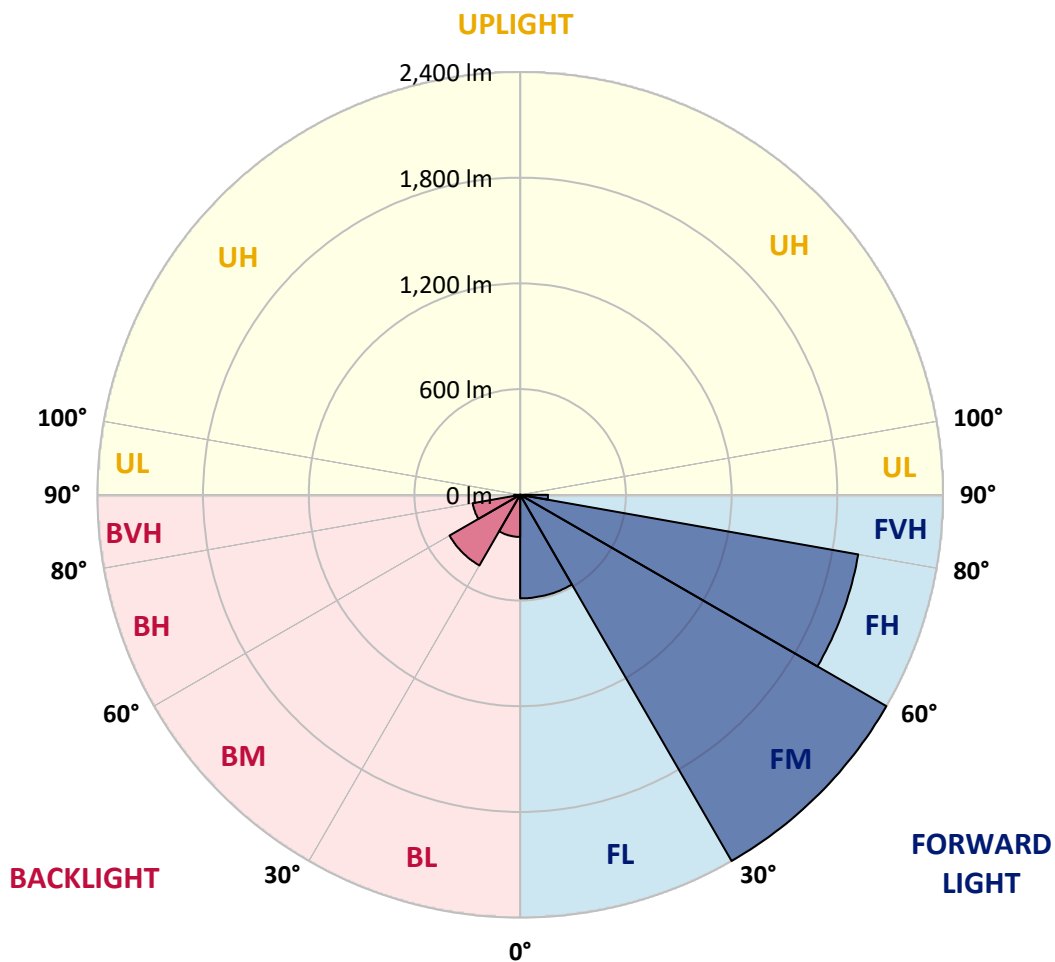
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

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°	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9
2.5°	2143.3	2177.6	2244.4	2294.3	2355.2	2369.2	2388.7	2369.6	2335.7	2290.7	2276.0
5°	2015.5	2088.7	2250.7	2393.4	2520.3	2579.3	2595.9	2547.1	2448.8	2319.6	2240.7
7.5°	1810.4	1914.5	2133.9	2344.1	2530.9	2641.4	2638.7	2525.6	2344.7	2134.2	2007.7
10°	1633.5	1752.3	2004.1	2239.0	2437.3	2544.4	2503.0	2358.6	2142.6	1900.3	1763.1
12.5°	1534.5	1651.0	1906.4	2142.3	2308.1	2345.1	2313.5	2171.8	1968.4	1723.5	1603.3
15°	1517.3	1645.3	1867.5	2059.5	2152.4	2120.3	2082.6	2019.2	1875.5	1666.4	1541.2
17.5°	1591.6	1732.5	1912.2	2001.7	1985.9	1929.8	1919.1	1926.2	1891.7	1729.8	1585.5
20°	1733.9	1903.0	2018.5	1974.6	1859.4	1782.2	1784.9	1892.7	1995.0	1890.6	1725.8
22.5°	1933.5	2126.6	2171.8	1989.0	1806.1	1714.4	1736.6	1911.2	2159.8	2125.6	1915.1
25°	2192.0	2367.9	2335.4	2041.3	1811.4	1722.8	1740.6	1974.9	2354.4	2360.5	2149.5
27.5°	2442.4	2605.6	2472.5	2110.8	1833.6	1742.6	1766.2	2075.2	2540.4	2615.6	2417.3
30°	2637.7	2751.2	2526.9	2174.2	1877.2	1781.2	1810.4	2170.5	2625.1	2787.7	2623.3
32.5°	2799.5	2881.0	2613.5	2252.8	1957.4	1841.9	1893.3	2286.3	2746.9	2951.6	2825.0
35°	3006.2	3029.4	2721.3	2340.4	2081.3	1947.7	2011.4	2399.8	2863.0	3117.0	3023.7
37.5°	3248.6	3218.8	2822.9	2460.2	2241.4	2113.1	2165.8	2524.3	2958.6	3304.6	3226.7
40°	3488.2	3416.3	2950.6	2646.1	2475.0	2308.1	2370.6	2657.2	3047.9	3492.6	3425.1
42.5°	3692.0	3585.5	3076.4	2850.5	2692.4	2523.3	2597.8	2791.1	3133.1	3653.0	3597.3
45°	3842.7	3710.4	3196.2	3046.8	2992.1	2809.2	2844.5	2944.4	3225.4	3787.0	3738.9
47.5°	3977.2	3835.9	3331.8	3244.9	3254.3	3181.1	3124.3	3123.0	3334.3	3896.4	3872.8
50°	4157.4	4010.1	3477.4	3448.9	3647.6	3598.9	3473.7	3331.4	3471.8	4020.6	4017.9
52.5°	4405.8	4286.1	3655.4	3668.8	4014.9	4046.7	3891.6	3581.9	3687.2	4248.4	4232.4
55°	4699.6	4629.6	3897.8	3921.5	4465.2	4488.1	4333.9	3895.0	4004.1	4578.4	4533.8
57.5°	4928.7	4914.0	4163.5	4225.0	4801.6	4904.3	4762.7	4257.6	4361.2	4856.3	4744.2
60°	5020.0	5091.5	4446.5	4531.0	5112.8	5226.4	5102.3	4575.9	4677.7	4971.4	4729.8
62.5°	4970.8	5130.4	4747.9	4740.8	5182.2	5304.6	5217.3	4753.2	4912.4	4852.6	4490.5
65°	4742.8	4990.5	4922.7	4686.7	4944.5	4954.5	4926.3	4674.0	4967.7	4477.0	4027.9
67.5°	4246.3	4602.8	4692.4	4223.7	4303.4	4238.1	4190.7	4240.3	4679.0	3914.1	3385.1
70°	3458.7	3995.1	4037.9	3378.2	3341.9	3297.9	3203.6	3476.5	4109.5	3208.0	2686.1
72.5°	2543.1	3107.0	3238.8	2477.7	2309.9	2318.8	2244.4	2619.8	3341.2	2383.0	2005.4
75°	1739.9	2249.7	2534.1	1728.8	1527.6	1531.2	1521.7	1856.4	2661.2	1657.7	1500.6
77.5°	1271.1	1607.3	1911.2	1162.2	1128.3	1107.5	1102.5	1298.9	2040.3	1203.6	1165.3
80°	1019.9	1187.5	1283.7	805.5	866.2	864.6	836.7	893.1	1332.4	880.4	871.5
82.5°	707.6	912.6	1040.1	631.3	584.7	574.9	581.7	665.2	941.8	601.8	572.2
85°	373.3	606.1	1030.1	559.5	347.0	276.9	344.4	544.7	816.0	318.9	279.1
87.5°	47.7	175.2	682.0	223.3	137.0	73.8	163.5	306.7	524.0	65.0	56.8
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°	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9
2.5°	2238.1	2193.4	2135.0	2080.8	2024.8	1969.0	1896.3	1850.6	1819.1	1813.0	1799.7
5°	2183.7	2035.3	1923.2	1826.2	1738.3	1614.0	1545.2	1488.1	1457.6	1454.7	1447.3
7.5°	1932.9	1728.1	1576.8	1439.5	1315.0	1214.6	1103.8	1052.3	1031.0	1036.1	1041.1
10°	1672.0	1443.2	1269.3	1129.0	1019.3	934.7	845.8	785.8	744.1	735.7	734.0
12.5°	1481.5	1230.4	1061.7	962.5	877.7	798.1	703.9	632.9	579.0	560.5	548.2
15°	1400.8	1126.4	949.6	842.8	749.1	648.1	560.5	486.3	436.7	420.6	411.5
17.5°	1418.1	1097.5	872.3	735.7	615.9	510.5	400.1	336.6	306.7	299.1	299.1
20°	1508.1	1092.2	808.5	637.1	487.6	365.4	274.9	238.6	228.9	227.9	230.6
22.5°	1634.2	1111.0	760.9	551.5	378.9	266.8	214.1	200.7	196.3	197.4	200.4
25°	1822.2	1174.4	726.4	475.3	297.3	218.5	190.9	182.9	180.9	183.6	187.3
27.5°	2045.0	1237.8	704.8	417.8	251.0	199.7	181.5	173.2	174.5	177.9	181.2
30°	2240.7	1289.9	671.0	377.0	236.7	200.7	181.5	170.2	168.9	169.5	170.5
32.5°	2416.3	1325.1	631.3	338.0	204.1	178.3	169.5	167.9	160.4	157.7	158.1
35°	2567.7	1325.1	607.5	315.2	182.9	158.1	144.0	135.7	131.8	132.2	136.0
37.5°	2713.7	1298.5	595.8	302.4	171.5	150.4	137.9	130.5	125.5	124.5	125.2
40°	2842.4	1260.0	582.4	297.0	162.8	145.7	134.0	127.8	122.5	120.8	121.2
42.5°	2945.8	1228.7	567.6	290.0	157.3	142.3	131.2	125.8	119.9	118.1	117.8
45°	3057.6	1218.3	548.2	275.9	160.1	142.6	130.5	124.9	118.8	116.8	116.1
47.5°	3204.9	1250.9	528.0	259.1	165.8	144.4	131.5	124.9	118.4	116.8	116.1
50°	3390.5	1327.4	502.4	234.6	160.1	149.1	131.2	123.8	118.4	116.8	115.5
52.5°	3628.9	1430.8	468.9	206.5	156.7	160.4	130.5	121.8	116.8	114.5	112.1
55°	3918.5	1515.4	428.9	183.3	149.1	157.3	129.5	119.5	114.2	110.8	108.7
57.5°	4130.6	1545.9	377.6	168.2	138.3	152.3	128.1	116.5	110.8	108.1	105.5
60°	4088.7	1486.8	334.3	158.7	131.8	137.6	127.2	113.7	107.8	105.8	103.3
62.5°	3752.8	1332.4	306.4	154.4	127.8	125.5	128.1	111.1	105.1	103.0	102.3
65°	3249.0	1104.5	295.4	153.4	124.5	118.4	119.2	108.1	102.0	100.3	99.7
67.5°	2680.0	891.5	285.7	156.7	120.2	113.4	110.2	104.1	98.9	97.3	96.0
70°	2113.4	741.4	281.2	154.7	114.8	108.4	104.8	99.7	95.3	93.6	92.6
72.5°	1701.9	626.3	278.8	152.6	107.8	101.7	98.3	93.9	89.2	88.6	87.6
75°	1440.3	492.4	255.5	146.3	99.7	93.6	91.3	87.3	82.6	82.6	81.9
77.5°	1111.0	356.1	212.5	129.5	91.3	84.5	82.6	79.5	74.2	75.2	74.9
80°	820.7	232.3	166.2	107.4	81.0	74.5	73.4	70.5	64.7	66.1	66.1
82.5°	562.2	152.3	119.5	87.9	69.1	63.1	63.1	60.0	53.7	54.4	56.4
85°	282.3	104.8	89.2	68.1	53.7	50.7	50.7	48.4	41.9	42.3	45.0
87.5°	86.0	63.1	59.1	48.7	38.6	37.9	36.2	34.5	30.5	30.2	31.9
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9
2.5°	1779.1	1760.0	1737.0	1685.9	1668.8	1667.7	1683.3	1667.0	1698.0	1684.9	1699.3
5°	1434.7	1416.1	1390.2	1325.1	1285.5	1258.5	1245.9	1208.3	1235.5	1215.6	1232.2
7.5°	1055.2	1059.6	1042.5	1004.2	918.0	874.7	849.2	826.3	846.2	844.1	875.7
10°	741.8	753.4	741.4	702.9	632.9	609.2	613.9	622.9	648.8	662.1	710.8
12.5°	534.0	533.3	525.6	491.1	445.1	447.7	466.9	482.6	506.4	520.6	570.2
15°	398.7	392.7	389.3	361.1	334.9	340.7	350.1	351.7	366.9	375.2	415.6
17.5°	301.4	304.4	308.0	288.0	268.1	264.4	257.1	248.0	252.5	254.1	274.1
20°	239.3	251.4	260.5	246.3	226.3	215.4	206.0	200.0	200.0	199.7	205.4
22.5°	209.1	217.8	227.6	217.8	199.7	190.2	184.9	180.2	179.6	179.6	184.9
25°	192.7	199.1	208.4	201.8	188.3	181.2	176.2	170.2	167.9	167.1	170.8
27.5°	184.6	187.3	192.0	185.9	174.5	171.2	169.9	164.5	161.4	159.7	163.5
30°	170.8	170.2	170.5	164.5	155.4	155.0	157.3	158.4	157.3	157.0	162.8
32.5°	158.1	156.7	156.4	151.0	142.6	140.7	142.6	144.7	147.0	150.4	157.0
35°	142.0	145.3	147.3	142.6	132.5	126.5	124.2	120.5	118.4	118.4	126.2
37.5°	129.2	137.0	140.0	135.7	124.5	116.1	112.1	111.5	111.8	113.1	120.5
40°	124.9	130.5	133.1	128.9	117.8	110.2	107.8	107.1	107.8	109.8	117.1
42.5°	122.1	126.2	125.8	120.5	111.5	106.1	104.8	104.1	104.8	106.8	114.8
45°	119.9	122.5	119.9	113.4	105.1	102.3	102.6	102.3	103.0	105.1	112.8
47.5°	117.8	118.8	115.5	109.1	100.3	99.7	101.0	102.0	102.6	104.5	112.4
50°	114.8	114.8	111.8	105.1	96.3	96.6	98.3	100.7	101.0	103.0	109.5
52.5°	111.1	110.8	108.7	102.3	92.9	93.9	93.9	96.6	97.3	99.7	106.4
55°	108.1	107.4	106.4	100.3	90.0	91.6	90.7	91.6	93.3	95.7	103.0
57.5°	105.5	104.1	104.1	98.6	87.6	88.3	86.0	87.3	89.2	91.3	98.9
60°	102.6	101.3	102.0	96.3	83.9	83.2	82.3	84.9	85.6	87.9	95.7
62.5°	99.7	98.6	98.9	93.6	81.3	79.5	79.5	81.9	82.3	85.6	92.9
65°	97.3	96.0	95.7	91.0	78.2	76.3	77.2	78.2	78.9	82.3	89.2
67.5°	95.0	92.3	92.3	88.6	74.9	72.8	74.9	74.5	75.6	78.6	84.2
70°	92.0	88.3	88.6	86.9	71.5	69.1	70.8	70.5	71.1	73.1	78.9
72.5°	87.3	84.2	84.9	84.2	68.1	64.7	65.4	65.4	65.4	67.1	73.1
75°	81.3	78.9	81.0	82.6	64.1	59.4	60.0	60.0	59.1	60.0	67.4
77.5°	73.8	72.5	79.2	76.9	59.4	53.7	53.7	53.1	51.1	52.4	60.4
80°	65.8	64.7	73.1	64.4	54.0	46.7	46.0	44.2	42.3	43.3	51.4
82.5°	57.4	56.4	61.5	49.4	46.7	38.6	36.9	33.9	31.9	32.9	40.2
85°	47.1	47.1	47.4	37.3	35.5	29.5	27.6	23.5	21.1	21.8	28.9
87.5°	33.6	34.5	31.9	25.5	21.1	16.5	15.1	12.7	10.7	12.4	15.1
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°	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9	2062.9
2.5°	1773.1	1810.1	1852.0	1905.6	1951.7	2027.1	2099.7	2143.3
5°	1325.8	1387.2	1463.6	1562.1	1653.7	1791.2	1927.9	2015.5
7.5°	948.8	1014.6	1097.2	1220.0	1349.6	1525.1	1705.7	1810.4
10°	785.1	852.6	922.0	1004.9	1111.0	1301.9	1515.4	1633.5
12.5°	649.5	721.6	796.5	883.7	982.0	1152.5	1398.6	1534.5
15°	497.1	577.6	665.8	776.3	899.4	1096.5	1369.7	1517.3
17.5°	340.7	430.7	539.0	675.3	826.0	1078.3	1421.4	1591.6
20°	234.6	300.1	415.9	575.6	756.9	1076.0	1520.7	1733.9
22.5°	196.3	225.5	310.1	484.0	704.8	1104.9	1674.9	1933.5
25°	181.5	199.1	247.7	404.4	666.9	1171.4	1887.0	2192.0
27.5°	172.9	188.6	224.9	352.5	637.1	1248.5	2093.4	2442.4
30°	176.2	192.3	218.5	325.9	596.4	1312.9	2276.6	2637.7
32.5°	158.7	165.8	187.3	302.4	567.2	1367.0	2437.0	2799.5
35°	135.3	147.6	167.1	291.3	567.9	1403.2	2611.9	3006.2
37.5°	128.9	141.3	155.4	287.3	575.6	1441.9	2812.6	3248.6
40°	124.9	136.3	148.4	285.0	583.0	1477.1	3009.4	3488.2
42.5°	122.1	132.5	147.6	276.9	586.7	1508.7	3171.1	3692.0
45°	121.8	132.5	150.4	268.8	592.4	1542.6	3306.7	3842.7
47.5°	122.1	137.0	145.3	259.1	592.4	1599.3	3465.8	3977.2
50°	120.8	144.4	140.0	245.4	578.7	1706.7	3683.9	4157.4
52.5°	120.2	143.4	129.5	224.2	554.8	1877.2	3963.5	4405.8
55°	118.4	138.3	122.1	192.7	527.0	2063.2	4262.9	4699.6
57.5°	116.8	122.5	118.1	165.2	484.0	2194.0	4468.9	4928.7
60°	130.9	107.1	114.8	151.7	426.6	2229.9	4461.0	5020.0
62.5°	121.2	100.3	110.5	148.7	386.4	2129.2	4254.8	4970.8
65°	95.0	96.0	106.1	157.3	375.6	1862.5	3889.6	4742.8
67.5°	86.9	91.6	101.7	168.6	376.7	1491.2	3344.0	4246.3
70°	81.9	86.9	96.6	174.2	379.3	1111.7	2643.7	3458.7
72.5°	76.3	80.6	91.0	175.2	361.7	807.5	2037.7	2543.1
75°	69.4	73.4	82.9	152.6	299.7	560.1	1558.7	1739.9
77.5°	61.8	64.7	72.8	117.8	222.6	358.5	1170.0	1271.1
80°	52.7	54.4	61.1	86.3	152.3	224.2	925.7	1019.9
82.5°	42.3	42.9	47.4	64.7	98.9	144.0	620.0	707.6
85°	29.9	29.9	32.6	47.1	67.4	91.3	336.6	373.3
87.5°	14.1	14.4	14.4	25.8	35.2	46.4	77.6	47.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)