

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: P299401

Luminaire Tested: **GLNA-AF-02-LED-E1-SLR-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299401
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7487.6 lumens
Efficiency: N/A
Efficacy: 88.1 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): 85
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

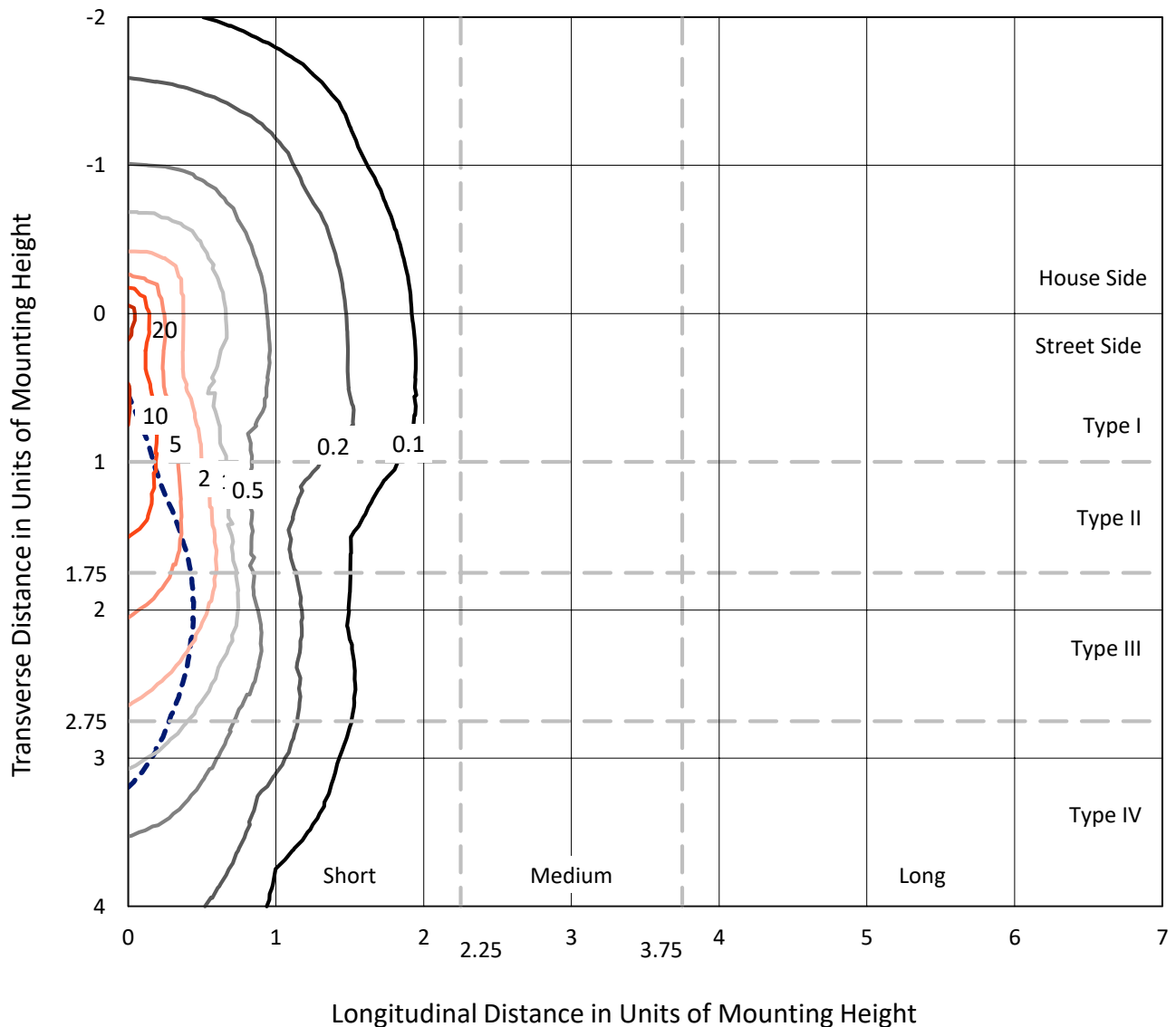


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Iso-Footcandle Lines of Horizontal Illumination

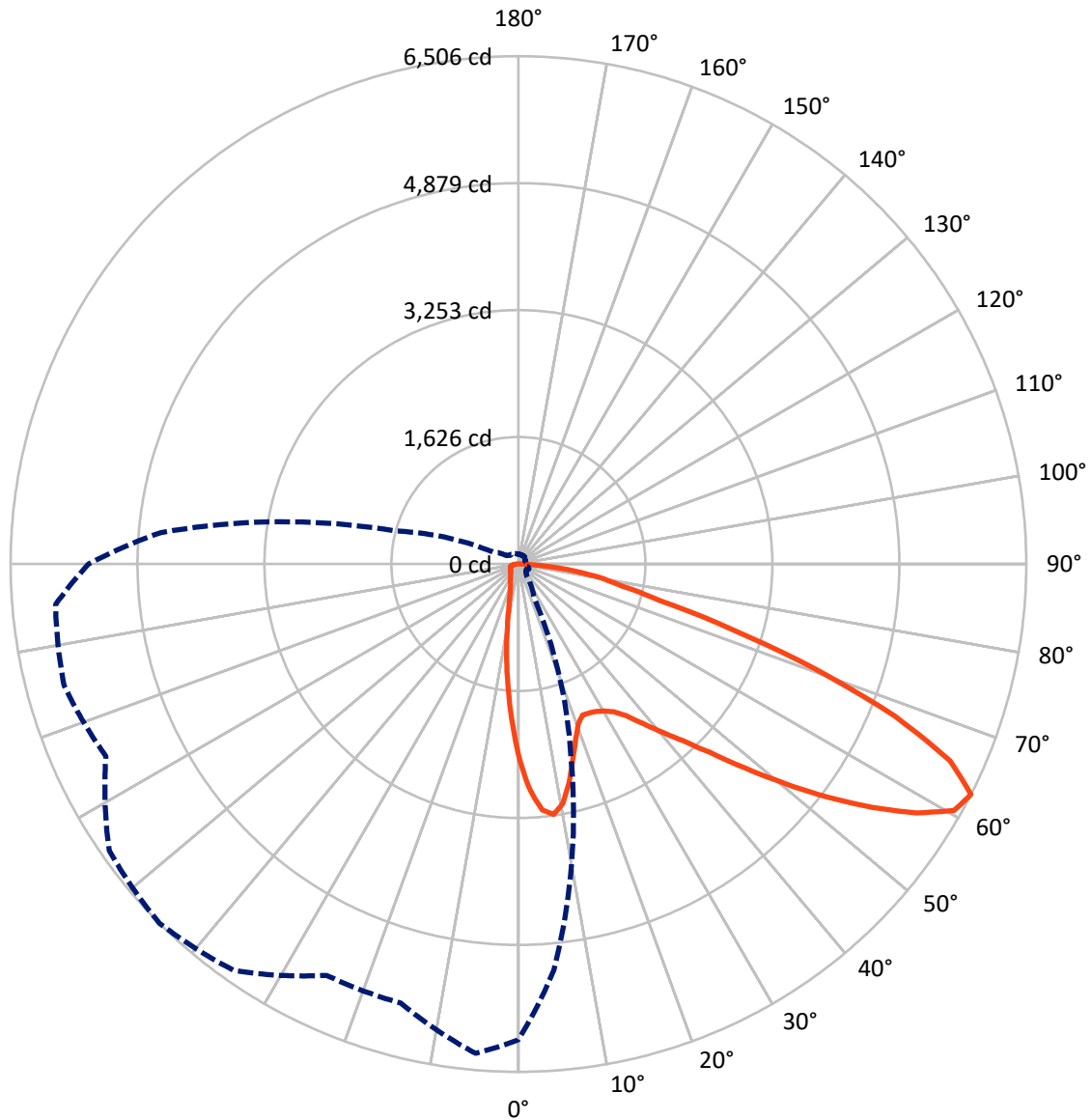
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 25.3 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
House Side	Lumens	1239.1	0.0	1239.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	6248.5	0.0	6248.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	7487.6	0.0	7487.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.2	2.5
10°-20°	337.7	4.5
20°-30°	492.3	6.6
30°-40°	758.3	10.1
40°-50°	1116.0	14.9
50°-60°	1636.9	21.9
60°-70°	1829.8	24.4
70°-80°	895.9	12.0
80°-90°	236.5	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°	7487.6	100.0
0°-180°	7487.6	100.0

Coefficient of Utilization



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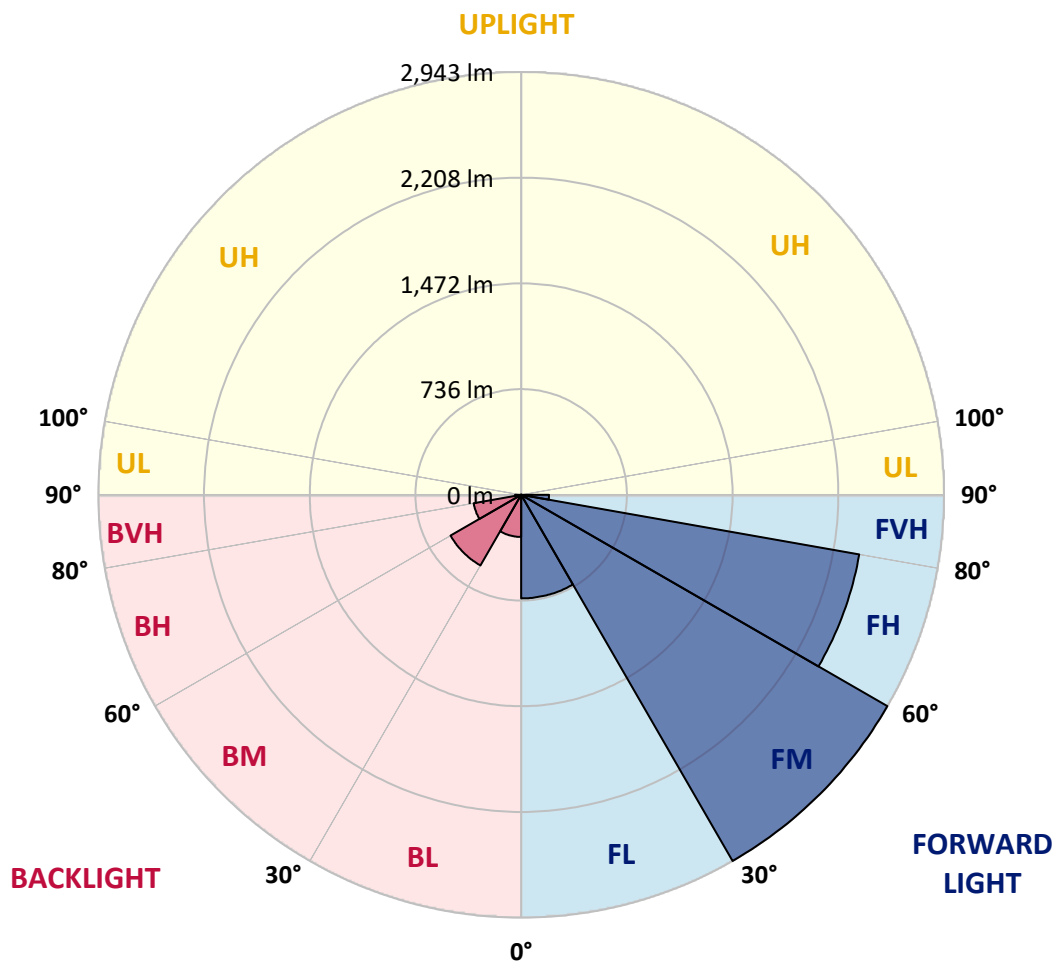
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	721.0	9.6			
FM	(30°-60°)	2943.5	39.3			
FH	(60°-80°)	2389.8	31.9			G2/5000
FVH	(80°-90°)	194.2	2.6			G2/225
BL	(0°-30°)	293.2	3.9	B1/500		
BM	(30°-60°)	567.7	7.6	B1/1000		
BH	(60°-80°)	335.9	4.5	B1/500		G1/500
BVH	(80°-90°)	42.3	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°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2628.5	2575.0	2486.0	2393.4	2337.1	2271.2	2219.7	2174.5	2083.9	2066.2	2082.3
5°	2471.7	2364.3	2196.7	2028.0	1915.6	1795.0	1701.1	1625.9	1511.0	1490.8	1515.1
7.5°	2220.2	2091.8	1870.3	1655.0	1496.2	1345.5	1244.3	1163.6	1073.9	1035.2	1037.6
10°	2003.3	1858.4	1596.6	1362.5	1232.4	1130.7	1045.5	962.7	871.7	812.1	795.6
12.5°	1881.8	1715.2	1413.4	1204.3	1083.7	976.8	885.0	796.5	699.3	638.4	621.2
15°	1860.9	1679.7	1344.8	1103.1	952.0	816.7	708.4	609.6	509.5	460.2	449.8
17.5°	1951.8	1743.1	1322.5	1012.9	828.1	661.0	528.1	417.8	336.3	311.6	309.5
20°	2126.3	1865.0	1319.6	928.2	705.9	510.0	368.0	287.7	252.0	244.9	245.4
22.5°	2371.3	2053.9	1355.0	864.4	593.5	380.3	276.6	240.7	226.8	220.2	220.2
25°	2688.1	2314.1	1436.5	817.9	495.9	303.8	244.1	222.7	209.5	205.0	205.9
27.5°	2995.3	2567.2	1531.2	781.3	432.1	275.8	231.3	212.0	200.5	195.9	198.0
30°	3234.8	2791.9	1610.2	731.4	399.6	267.9	235.9	216.1	199.6	192.6	193.0
32.5°	3433.2	2988.7	1676.5	695.6	370.8	229.7	203.4	194.6	192.6	184.4	180.3
35°	3686.7	3203.1	1720.9	696.4	357.2	205.0	181.1	165.9	154.8	145.3	145.3
37.5°	3983.9	3449.2	1768.3	705.9	352.4	190.5	173.3	158.0	147.8	138.7	137.1
40°	4277.8	3690.5	1811.5	715.0	349.4	181.9	167.1	153.1	143.7	134.6	132.1
42.5°	4527.7	3888.9	1850.2	719.5	339.6	181.1	162.6	149.8	140.8	130.8	128.5
45°	4712.5	4055.1	1891.8	726.5	329.7	184.4	162.6	149.4	138.3	128.8	126.4
47.5°	4877.5	4250.2	1961.3	726.5	317.7	178.2	168.0	149.8	137.9	128.0	126.0
50°	5098.5	4517.7	2093.0	709.6	300.9	171.6	176.9	148.2	134.2	126.4	123.9
52.5°	5403.1	4860.7	2302.1	680.4	275.0	158.9	175.7	147.4	130.5	122.2	119.4
55°	5763.3	5227.8	2530.1	646.2	236.3	149.8	169.6	145.3	126.4	117.3	114.4
57.5°	6044.4	5480.5	2690.6	593.5	202.5	144.9	150.3	143.3	121.4	111.9	109.5
60°	6156.3	5470.6	2734.7	523.1	186.0	140.8	131.3	160.5	117.3	107.8	104.9
62.5°	6095.9	5217.9	2611.3	473.8	182.3	135.4	123.1	148.5	114.0	104.9	100.8
65°	5816.4	4770.1	2284.0	460.5	193.0	130.1	117.8	116.5	109.5	100.8	96.7
67.5°	5207.6	4100.8	1828.7	461.8	206.6	124.7	112.4	106.7	103.3	96.3	92.6
70°	4241.6	3242.3	1363.2	465.2	213.6	118.5	106.7	100.4	96.7	89.7	87.2
72.5°	3118.8	2498.9	990.4	443.7	214.8	111.5	98.8	93.5	89.7	82.4	80.2
75°	2133.8	1911.5	687.0	367.6	187.3	101.7	90.1	85.2	82.7	73.6	72.4
77.5°	1558.7	1434.8	439.6	272.9	144.4	89.3	79.5	75.8	74.1	64.2	62.6
80°	1250.9	1135.2	275.0	186.9	105.8	74.9	66.7	64.7	62.9	53.1	51.8
82.5°	867.6	760.2	176.6	121.4	79.5	58.1	52.7	51.8	49.3	40.4	39.1
85°	457.7	412.8	111.9	82.7	57.6	39.9	36.6	36.6	35.4	26.8	25.9
87.5°	58.4	95.1	56.8	43.2	31.7	17.7	17.7	17.3	18.6	15.2	13.2
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°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2044.4	2064.2	2045.3	2046.5	2067.5	2130.0	2158.4	2181.9	2207.0	2223.5	2230.8
5°	1481.8	1527.9	1543.5	1576.4	1625.0	1704.9	1736.5	1759.6	1774.9	1783.9	1787.6
7.5°	1013.4	1041.3	1072.6	1125.7	1231.5	1278.5	1299.4	1294.0	1276.8	1270.6	1264.5
10°	764.0	752.9	747.0	776.3	861.9	909.3	924.1	909.6	900.2	902.3	912.5
12.5°	591.9	572.6	549.1	545.8	602.2	644.6	654.1	654.8	672.1	687.3	710.0
15°	431.4	429.3	417.8	410.8	442.9	477.5	481.6	489.0	504.7	515.7	535.4
17.5°	304.2	315.3	324.4	328.8	353.1	377.8	373.3	369.6	366.7	366.7	376.2
20°	245.4	252.7	264.3	277.4	302.2	319.4	308.3	293.4	282.7	279.5	280.7
22.5°	221.1	226.8	233.4	244.9	267.2	279.1	267.2	256.4	245.7	242.0	240.7
25°	208.7	216.1	222.3	230.9	247.3	255.6	244.1	236.3	229.7	225.2	221.8
27.5°	201.7	208.2	210.0	214.1	228.0	235.4	229.7	226.4	222.3	218.2	214.1
30°	194.3	193.0	190.2	190.5	201.7	209.1	208.7	209.5	209.1	207.8	207.1
32.5°	177.4	174.9	172.5	174.9	185.2	191.8	192.3	193.9	193.9	193.5	196.8
35°	147.8	152.3	155.1	162.6	174.9	180.7	178.2	174.1	166.7	162.1	161.7
37.5°	136.7	137.4	142.4	152.6	166.4	171.6	168.0	158.5	153.5	152.6	153.9
40°	131.3	132.1	134.9	144.4	158.0	163.4	160.1	153.1	148.5	148.2	150.3
42.5°	127.6	128.5	130.1	136.7	147.8	154.4	154.8	149.8	144.4	144.9	146.9
45°	125.5	126.0	125.5	128.8	139.1	146.9	150.3	146.9	142.4	143.3	145.7
47.5°	125.1	123.9	122.2	123.1	133.8	141.6	145.7	144.4	142.4	143.3	145.3
50°	123.5	120.6	118.5	118.1	128.8	137.1	140.8	140.8	141.6	143.3	145.3
52.5°	118.5	115.3	115.3	114.0	125.5	133.3	135.8	136.2	137.4	140.3	143.3
55°	112.4	111.1	112.4	110.3	123.1	130.5	131.7	132.6	133.3	135.8	139.9
57.5°	107.0	105.4	108.3	107.4	121.0	127.6	127.6	129.2	129.2	132.6	135.8
60°	104.2	100.8	102.1	102.9	118.1	125.1	124.4	126.0	126.7	129.7	132.1
62.5°	100.4	97.6	97.6	99.6	114.9	121.4	121.0	122.2	125.5	126.4	128.8
65°	95.9	94.7	93.5	95.9	111.5	117.3	117.8	119.4	122.2	123.1	125.1
67.5°	91.3	91.8	89.3	91.8	108.7	113.1	113.1	116.5	117.8	119.4	121.4
70°	86.5	86.9	84.7	87.7	106.7	108.7	108.3	112.8	113.6	114.9	116.9
72.5°	80.2	80.2	79.5	83.6	103.3	104.2	103.3	107.0	107.4	108.7	109.5
75°	73.6	73.6	72.9	78.6	101.3	99.2	96.7	99.6	100.4	101.3	101.3
77.5°	65.0	65.9	65.9	72.9	94.2	97.2	88.8	90.6	91.8	92.2	91.0
80°	54.3	56.4	57.2	66.3	79.0	89.7	79.5	80.6	81.1	81.1	79.5
82.5°	41.6	45.2	47.4	57.2	60.6	75.3	69.2	70.4	69.2	66.7	65.9
85°	28.8	33.8	36.3	43.6	45.7	58.1	57.6	57.6	55.2	51.8	51.5
87.5°	15.7	18.6	20.2	25.9	31.3	39.1	42.4	41.1	39.1	37.0	37.5
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2269.6	2325.5	2414.9	2483.2	2551.9	2618.2	2689.9	2744.6	2791.1	2809.3	2864.3
5°	1825.1	1895.0	1979.4	2131.6	2239.6	2358.4	2496.0	2677.9	2747.8	2844.7	3003.0
7.5°	1290.4	1353.7	1489.6	1612.7	1765.4	1933.8	2119.3	2370.4	2462.2	2617.4	2875.4
10°	963.6	1037.2	1146.3	1250.1	1384.6	1556.7	1769.9	2050.7	2162.2	2330.5	2627.7
12.5°	776.3	863.2	978.8	1076.4	1180.5	1301.9	1509.0	1816.8	1966.3	2113.6	2414.0
15°	596.4	687.3	794.9	918.7	1033.5	1164.5	1381.4	1718.1	1890.0	2043.7	2300.0
17.5°	412.8	490.6	626.0	755.2	902.3	1069.8	1346.0	1739.0	1944.4	2121.4	2319.8
20°	292.7	337.1	448.2	598.1	781.3	991.5	1339.4	1849.3	2116.4	2318.6	2446.5
22.5°	246.1	262.5	327.2	464.7	676.2	933.1	1362.5	2004.1	2348.6	2606.7	2648.6
25°	224.3	234.3	267.9	364.7	582.8	890.7	1440.2	2234.6	2635.9	2894.9	2887.4
27.5°	212.3	222.7	244.9	307.9	512.5	864.4	1518.0	2508.0	2964.4	3207.6	3115.4
30°	208.7	222.7	246.1	290.2	462.3	822.8	1581.8	2747.8	3217.1	3418.8	3219.2
32.5°	205.9	207.8	218.6	250.2	414.4	774.2	1625.0	2963.2	3464.4	3619.7	3368.6
35°	166.4	176.6	193.9	224.3	386.5	745.0	1625.0	3148.8	3708.2	3822.6	3511.0
37.5°	160.1	169.2	184.4	210.3	370.8	730.6	1592.5	3327.9	3957.1	4052.7	3628.3
40°	156.9	164.2	178.7	199.6	364.2	714.1	1545.1	3485.9	4200.4	4283.1	3737.8
42.5°	154.4	161.0	174.6	193.0	355.6	696.1	1506.9	3612.6	4411.6	4479.9	3842.4
45°	153.1	160.1	174.9	196.4	338.3	672.1	1494.2	3749.7	4585.3	4644.1	3955.5
47.5°	153.1	161.4	176.9	203.4	317.7	647.5	1534.0	3930.5	4749.5	4778.3	4088.9
50°	151.9	161.0	182.8	196.4	287.7	616.2	1627.9	4158.0	4927.3	4930.6	4257.7
52.5°	149.4	160.1	196.8	192.3	253.1	575.1	1754.7	4450.3	5190.4	5210.1	4521.9
55°	146.5	158.9	193.0	182.8	224.8	526.1	1858.4	4805.5	5560.0	5614.7	4910.5
57.5°	142.8	157.3	186.9	169.6	206.2	463.0	1895.9	5065.6	5818.0	5955.5	5348.4
60°	139.6	156.0	168.7	161.7	194.6	410.0	1823.4	5014.2	5800.3	6096.6	5736.5
62.5°	136.2	157.3	153.9	156.9	189.3	375.8	1634.1	4602.1	5506.9	5951.0	6024.2
65°	132.6	146.2	145.3	152.6	188.2	362.2	1354.6	3984.3	4939.7	5490.4	6092.2
67.5°	127.6	134.9	139.1	147.4	192.3	350.3	1093.2	3286.6	4151.4	4800.1	5738.1
70°	122.2	128.5	133.0	140.8	189.8	344.9	909.3	2591.8	3294.1	3934.1	5039.7
72.5°	115.3	120.6	124.7	132.1	187.3	342.0	768.1	2087.3	2459.4	2922.4	4097.6
75°	107.0	111.9	114.9	122.2	179.4	313.3	603.8	1766.2	1840.3	2033.0	3263.6
77.5°	97.6	101.3	103.7	111.9	158.9	260.6	436.7	1362.5	1429.1	1476.0	2502.1
80°	86.5	90.1	91.3	99.2	131.7	203.7	284.9	1006.3	1068.9	1079.6	1634.1
82.5°	73.6	77.4	77.4	84.7	107.8	146.5	186.9	689.4	701.8	738.0	1155.0
85°	59.3	62.2	62.2	65.9	83.6	109.5	128.5	346.2	342.4	391.0	1000.6
87.5°	42.4	44.5	46.5	47.4	59.7	72.4	77.4	105.4	69.5	79.9	642.5
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°	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8	2529.8
2.5°	2906.0	2929.4	2905.5	2888.3	2813.7	2752.4	2670.4	2628.5
5°	3123.6	3183.3	3163.1	3090.7	2935.1	2760.2	2561.4	2471.7
7.5°	3097.4	3236.0	3239.3	3104.0	2874.7	2617.0	2347.8	2220.2
10°	2892.4	3069.7	3120.4	2989.1	2745.8	2457.7	2149.0	2003.3
12.5°	2663.5	2837.2	2875.9	2830.6	2627.3	2337.9	2024.7	1881.8
15°	2476.2	2554.1	2600.0	2639.7	2525.7	2290.1	2017.6	1860.9
17.5°	2362.2	2353.6	2366.8	2435.4	2454.8	2344.9	2124.7	1951.8
20°	2321.1	2189.0	2185.6	2280.3	2421.5	2475.4	2333.8	2126.3
22.5°	2343.7	2129.7	2102.5	2214.9	2439.2	2663.5	2607.9	2371.3
25°	2421.9	2134.6	2112.7	2221.5	2503.4	2864.0	2903.8	2688.1
27.5°	2545.0	2165.9	2137.0	2248.7	2588.6	3032.3	3195.3	2995.3
30°	2661.9	2220.2	2184.4	2302.1	2666.3	3099.0	3374.0	3234.8
32.5°	2803.9	2321.9	2258.9	2400.4	2762.7	3205.1	3533.2	3433.2
35°	2943.0	2466.7	2388.6	2552.3	2870.1	3337.3	3715.2	3686.7
37.5°	3095.7	2656.1	2591.4	2748.7	3017.1	3462.0	3947.3	3983.9
40°	3258.7	2907.2	2830.6	3035.2	3245.1	3618.5	4189.8	4277.8
42.5°	3423.0	3185.8	3094.5	3301.8	3495.7	3772.7	4397.1	4527.7
45°	3611.0	3488.4	3445.1	3669.4	3736.6	3919.8	4550.3	4712.5
47.5°	3830.0	3831.7	3901.2	3990.9	3979.4	4086.0	4704.3	4877.5
50°	4085.6	4260.1	4413.7	4473.3	4229.7	4264.7	4917.9	5098.5
52.5°	4392.6	4772.6	4962.7	4923.6	4499.3	4482.7	5256.2	5403.1
55°	4776.7	5315.1	5504.0	5476.0	4809.2	4779.9	5677.7	5763.3
57.5°	5221.2	5840.7	6014.4	5888.4	5181.3	5106.0	6026.4	6044.4
60°	5611.8	6257.3	6409.5	6270.0	5556.7	5452.9	6244.1	6156.3
62.5°	5829.1	6398.4	6505.5	6355.2	5813.9	5822.5	6291.8	6095.9
65°	5732.0	6041.6	6076.1	6063.7	5747.6	6037.0	6120.2	5816.4
67.5°	5200.2	5139.3	5197.4	5277.6	5179.7	5754.6	5644.7	5207.6
70°	4263.4	3928.7	4044.5	4098.3	4142.8	4952.0	4899.3	4241.6
72.5°	3213.0	2752.4	2843.8	2832.7	3038.4	3972.0	3810.2	3118.8
75°	2276.6	1866.2	1877.7	1873.2	2120.2	3107.6	2759.0	2133.8
77.5°	1592.8	1352.1	1358.3	1383.8	1425.4	2343.7	1971.2	1558.7
80°	1095.3	1026.1	1060.3	1062.4	987.9	1574.4	1456.3	1250.9
82.5°	815.8	713.2	705.0	717.0	774.2	1275.6	1119.1	867.6
85°	668.0	422.3	339.6	425.7	686.1	1263.3	743.4	457.7
87.5°	376.2	200.5	90.6	168.0	273.8	836.4	214.8	58.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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