

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: P191322

Luminaire Tested: **GLEON-AF-04-LED-E1-SLR-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24296)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-SLR-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17440.3 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 171
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

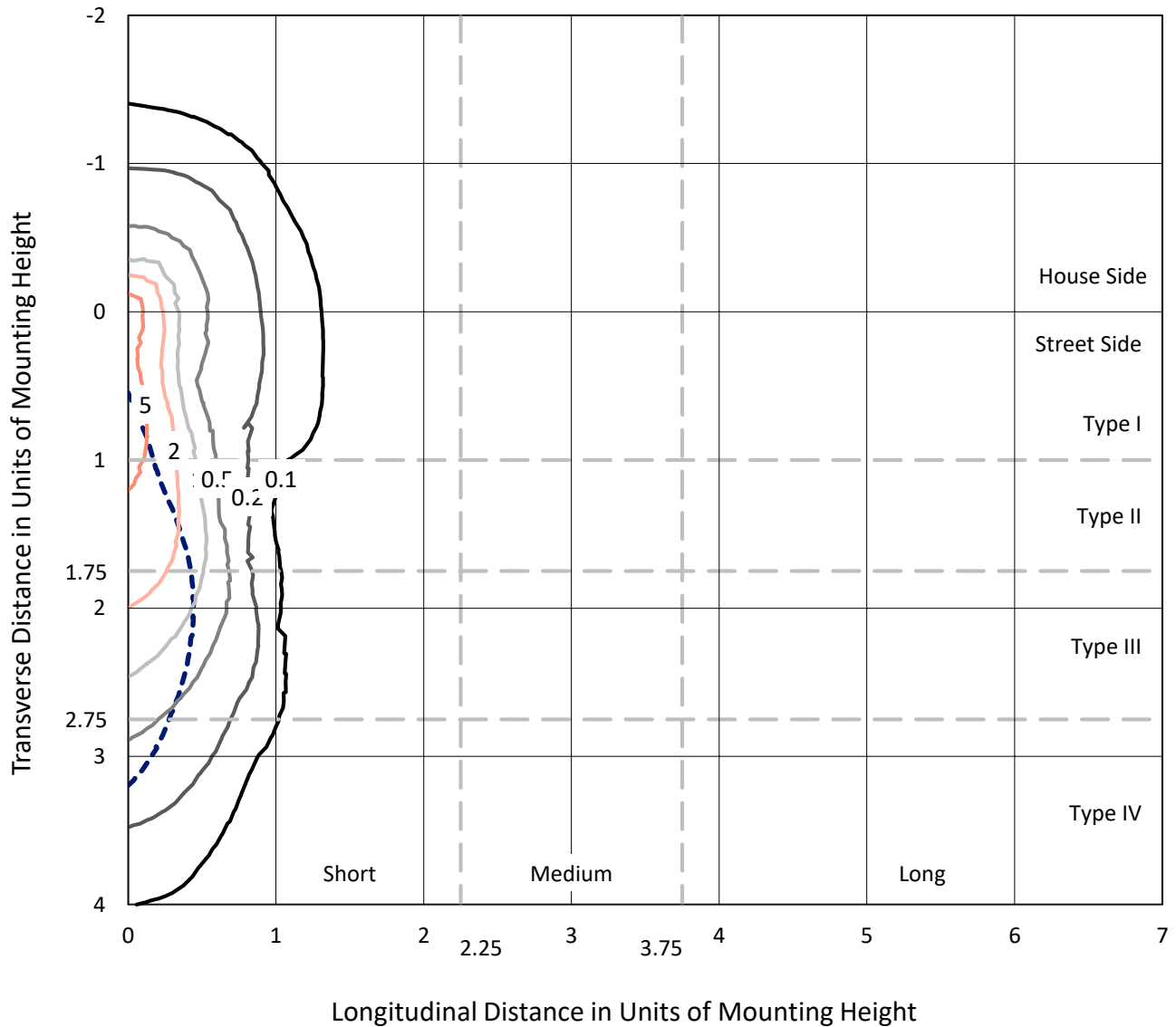


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

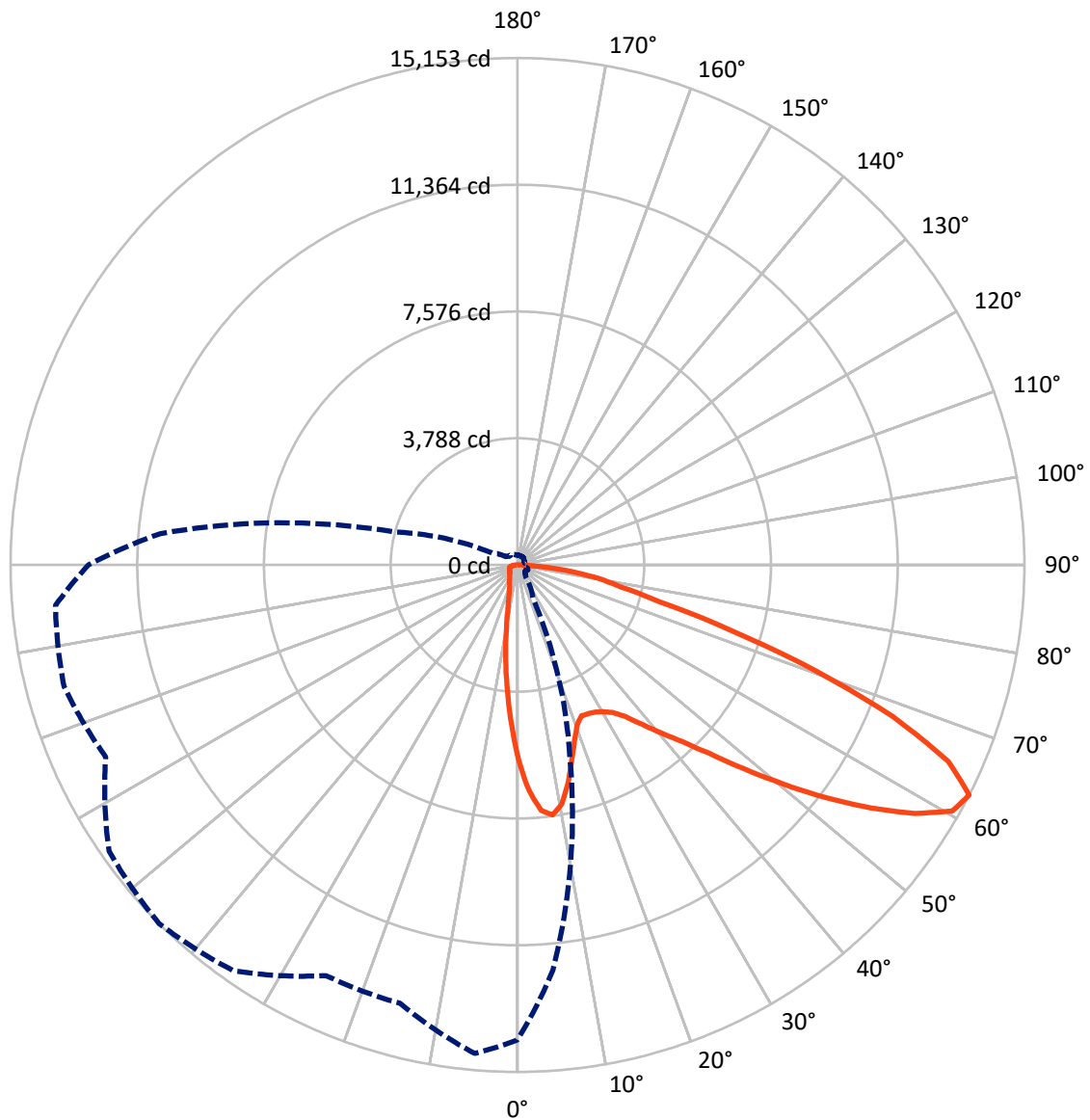


Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type IV - Short - Non-Cutoff

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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	2886.1	0.0	2886.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	14554.2	0.0	14554.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	17440.3	0.0	17440.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.9	2.5
10°-20°	786.5	4.5
20°-30°	1146.8	6.6
30°-40°	1766.2	10.1
40°-50°	2599.4	14.9
50°-60°	3812.7	21.9
60°-70°	4262.1	24.4
70°-80°	2086.7	12.0
80°-90°	550.9	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°	17440.3	100.0
0°-180°	17440.3	100.0



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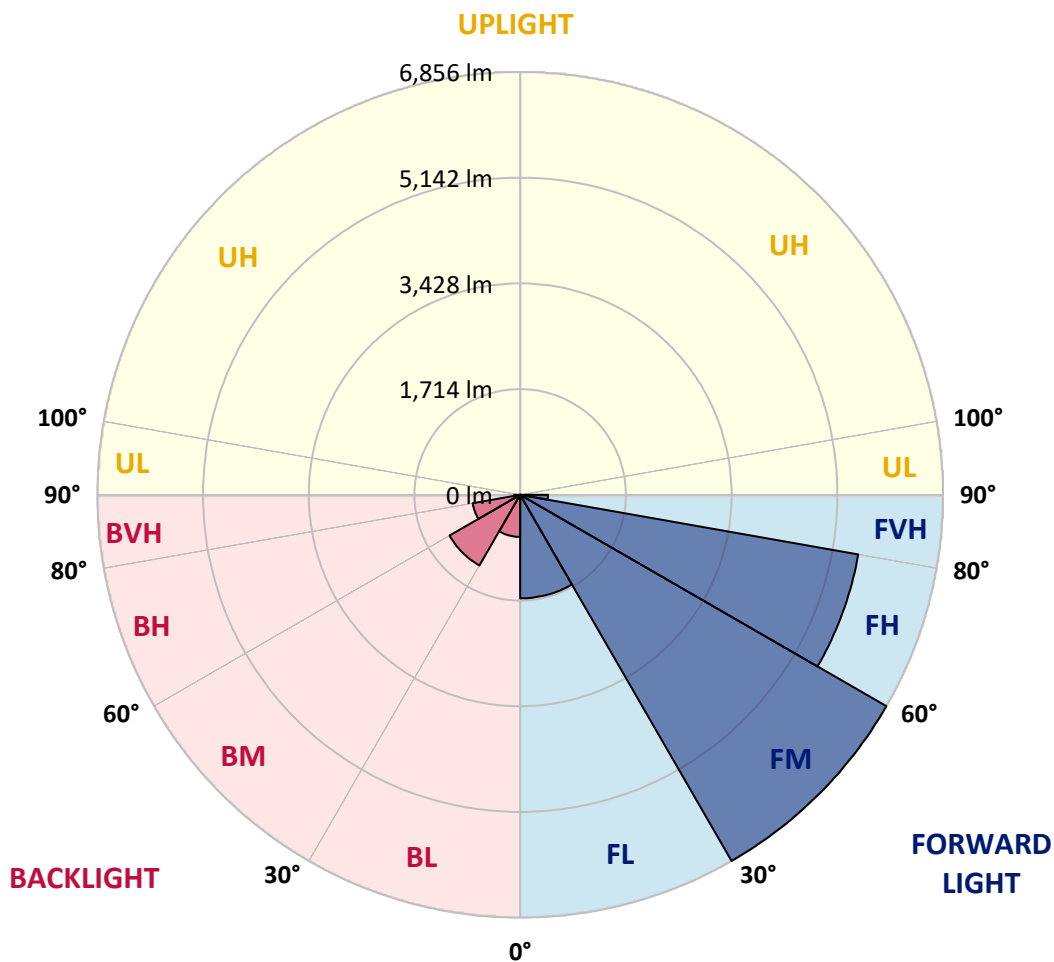
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1679.4	9.6			
FM	(30°-60°)	6855.9	39.3			
FH	(60°-80°)	5566.3	31.9			G3/7500
FVH	(80°-90°)	452.4	2.6			G3/500
BL	(0°-30°)	682.8	3.9	B2/1000		
BM	(30°-60°)	1322.4	7.6	B2/2500		
BH	(60°-80°)	782.4	4.5	B2/1000		G2/1000
BVH	(80°-90°)	98.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3
2.5°	6122.4	5997.8	5790.6	5575.0	5443.6	5290.2	5170.4	5064.9	4854.0	4812.8	4850.1
5°	5757.1	5506.9	5116.7	4723.6	4461.9	4181.0	3962.4	3787.0	3519.5	3472.5	3529.1
7.5°	5171.3	4872.2	4356.4	3855.0	3484.9	3134.0	2898.2	2710.3	2501.3	2411.2	2416.9
10°	4666.1	4328.6	3718.8	3173.4	2870.4	2633.6	2435.1	2242.4	2030.6	1891.5	1853.2
12.5°	4383.2	3994.9	3292.3	2805.2	2524.3	2275.0	2061.2	1855.1	1628.8	1487.0	1446.7
15°	4334.3	3912.5	3132.2	2569.3	2217.6	1902.1	1649.9	1419.9	1186.9	1071.8	1047.9
17.5°	4546.2	4060.2	3080.3	2359.4	1929.0	1539.7	1230.0	973.1	783.3	725.8	721.0
20°	4952.7	4344.0	3073.7	2161.9	1644.2	1187.9	857.1	670.1	586.8	570.4	571.4
22.5°	5523.1	4784.0	3156.1	2013.3	1382.5	885.9	644.3	560.9	528.3	512.9	512.9
25°	6261.4	5389.9	3346.0	1904.9	1155.2	707.6	568.6	518.6	487.9	477.4	479.4
27.5°	6976.6	5979.6	3566.4	1819.6	1006.7	642.3	538.8	493.8	466.9	456.3	461.1
30°	7534.5	6503.0	3750.5	1703.6	930.9	624.1	549.3	503.3	464.9	448.7	449.6
32.5°	7996.6	6961.3	3904.8	1620.3	863.8	535.0	473.6	453.5	448.7	429.5	419.9
35°	8587.3	7460.7	4008.4	1622.2	832.2	477.4	421.9	386.4	360.5	338.4	338.4
37.5°	9279.4	8034.1	4118.6	1644.2	820.6	443.9	403.7	368.2	344.2	323.0	319.3
40°	9964.0	8595.9	4219.3	1665.3	814.0	423.7	389.2	356.6	334.6	313.5	307.7
42.5°	10545.9	9057.9	4309.4	1675.8	790.9	421.9	378.7	348.9	327.9	304.8	299.1
45°	10976.4	9445.3	4406.3	1692.2	767.9	429.5	378.7	348.0	322.1	300.0	294.3
47.5°	11360.8	9899.7	4568.3	1692.2	740.1	415.1	391.2	348.9	321.2	298.2	293.4
50°	11875.6	10522.9	4875.1	1652.8	700.8	399.8	412.2	345.1	312.5	294.3	288.6
52.5°	12585.1	11321.5	5362.1	1584.8	640.5	370.1	409.4	343.2	303.9	284.8	278.0
55°	13424.0	12176.7	5893.2	1505.2	550.3	348.9	395.0	338.4	294.3	273.2	266.5
57.5°	14078.8	12765.3	6267.1	1382.5	471.7	337.5	350.0	333.6	282.8	260.8	255.0
60°	14339.5	12742.3	6369.7	1218.5	433.3	327.9	305.9	373.9	273.2	251.1	244.5
62.5°	14198.6	12153.7	6082.1	1103.5	424.7	315.4	286.6	346.1	265.6	244.5	234.9
65°	13547.7	11110.6	5320.0	1072.8	449.6	303.0	274.2	271.3	255.0	234.9	225.3
67.5°	12129.6	9551.7	4259.6	1075.6	481.3	290.5	261.8	248.3	240.6	224.3	215.7
70°	9879.6	7551.8	3175.2	1083.3	497.6	276.1	248.3	233.9	225.3	209.0	203.3
72.5°	7264.2	5820.4	2306.7	1033.5	500.4	259.8	230.1	217.6	209.0	191.7	187.0
75°	4970.0	4452.3	1600.1	856.1	436.2	236.8	209.9	198.5	192.7	171.7	168.7
77.5°	3630.7	3342.1	1023.9	635.7	336.6	208.1	185.1	176.4	172.6	149.6	145.8
80°	2913.6	2644.1	640.5	435.3	246.4	174.5	155.3	150.5	146.7	123.7	120.8
82.5°	2020.9	1770.7	411.3	282.8	185.1	135.1	122.8	120.8	115.1	93.9	91.0
85°	1066.1	961.6	260.8	192.7	134.2	93.0	85.3	85.3	82.4	62.3	60.4
87.5°	136.2	221.5	132.3	100.7	73.9	41.2	41.2	40.3	43.2	35.5	30.7
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°	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3
2.5°	4761.9	4808.0	4763.9	4766.7	4815.6	4961.3	5027.5	5082.1	5140.6	5179.0	5196.3
5°	3451.3	3558.7	3595.2	3671.9	3785.0	3971.0	4044.8	4098.6	4133.9	4155.1	4163.7
7.5°	2360.4	2425.5	2498.5	2622.1	2868.5	2977.8	3026.7	3014.2	2973.9	2959.6	2945.2
10°	1779.4	1753.5	1740.0	1808.2	2007.5	2117.8	2152.3	2118.7	2096.7	2101.6	2125.5
12.5°	1378.6	1333.6	1278.9	1271.2	1402.6	1501.4	1523.4	1525.3	1565.6	1601.0	1653.8
15°	1004.7	999.9	973.1	956.8	1031.5	1112.2	1121.7	1139.0	1175.4	1201.3	1247.3
17.5°	708.5	734.4	755.4	766.0	822.6	880.1	869.5	860.9	854.3	854.3	876.3
20°	571.4	588.6	615.5	646.2	703.7	744.0	718.1	683.5	658.7	651.0	653.9
22.5°	514.9	528.3	543.6	570.4	622.2	650.0	622.2	597.3	572.3	563.7	560.9
25°	486.1	503.3	517.7	537.9	576.2	595.4	568.6	550.3	535.0	524.5	516.8
27.5°	469.7	485.1	489.0	498.5	531.1	548.4	535.0	527.3	517.7	508.1	498.5
30°	452.6	449.6	442.9	443.9	469.7	487.0	486.1	487.9	487.0	484.2	482.2
32.5°	413.2	407.4	401.7	407.4	431.4	446.7	447.7	451.5	451.5	450.6	458.3
35°	344.2	354.8	361.4	378.7	407.4	420.8	415.1	405.5	388.3	377.8	376.8
37.5°	318.3	320.2	331.7	355.7	387.3	399.8	391.2	369.1	357.6	355.7	358.5
40°	305.9	307.7	314.5	336.6	368.2	380.6	373.0	356.6	346.1	345.1	350.0
42.5°	297.2	299.1	303.0	318.3	344.2	359.6	360.5	348.9	336.6	337.5	342.3
45°	292.4	293.4	292.4	300.0	324.1	342.3	350.0	342.3	331.7	333.6	339.4
47.5°	291.4	288.6	284.8	286.6	311.6	329.8	339.4	336.6	331.7	333.6	338.4
50°	287.7	280.9	276.1	275.2	300.0	319.3	327.9	327.9	329.8	333.6	338.4
52.5°	276.1	268.4	268.4	265.6	292.4	310.7	316.4	317.3	320.2	326.9	333.6
55°	261.8	258.8	261.8	257.0	286.6	303.9	306.8	308.7	310.7	316.4	326.0
57.5°	249.3	245.4	252.2	250.2	281.8	297.2	297.2	301.1	301.1	308.7	316.4
60°	242.5	234.9	237.7	239.7	275.2	291.4	289.5	293.4	295.3	302.0	307.7
62.5°	233.9	227.2	227.2	232.0	267.5	282.8	281.8	284.8	292.4	294.3	300.0
65°	223.4	220.5	217.6	223.4	259.8	273.2	274.2	278.0	284.8	286.6	291.4
67.5°	212.9	213.8	208.1	213.8	253.1	263.6	263.6	271.3	274.2	278.0	282.8
70°	201.3	202.3	197.5	204.2	248.3	253.1	252.2	262.7	264.6	267.5	272.3
72.5°	187.0	187.0	185.1	194.7	240.6	242.5	240.6	249.3	250.2	253.1	255.0
75°	171.7	171.7	169.7	183.1	235.9	231.1	225.3	232.0	233.9	235.9	235.9
77.5°	151.5	153.4	153.4	169.7	219.5	226.3	207.0	210.9	213.8	214.7	211.9
80°	126.5	131.3	133.3	154.4	184.0	209.0	185.1	187.9	188.8	188.8	185.1
82.5°	96.9	105.5	110.3	133.3	141.0	175.4	161.1	164.0	161.1	155.3	153.4
85°	67.1	78.7	84.4	101.6	106.4	135.1	134.2	134.2	128.5	120.8	119.9
87.5°	36.4	43.2	47.0	60.4	72.8	91.0	98.7	95.9	91.0	86.2	87.3
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°	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3
2.5°	5286.4	5416.7	5624.8	5784.0	5944.1	6098.4	6265.2	6392.7	6501.1	6543.2	6671.7
5°	4251.0	4413.9	4610.4	4965.2	5216.3	5493.5	5813.6	6237.4	6400.4	6625.7	6994.8
7.5°	3005.5	3153.2	3469.5	3756.3	4112.0	4504.1	4936.5	5521.3	5735.1	6096.5	6697.6
10°	2244.4	2416.0	2670.0	2911.6	3225.2	3625.8	4122.5	4776.4	5036.1	5428.3	6120.4
12.5°	1808.2	2010.4	2279.9	2507.0	2749.6	3032.4	3514.7	4231.7	4579.8	4923.1	5622.9
15°	1389.2	1601.0	1851.2	2139.8	2407.3	2712.3	3217.5	4001.7	4402.5	4760.0	5357.3
17.5°	961.6	1142.8	1458.2	1759.3	2101.6	2491.7	3135.0	4050.6	4529.0	4941.3	5403.3
20°	681.7	785.2	1044.0	1393.1	1819.6	2309.5	3119.7	4307.5	4929.7	5400.5	5698.7
22.5°	573.3	611.6	762.2	1082.4	1575.1	2173.4	3173.4	4668.0	5470.4	6071.5	6169.3
25°	522.5	545.5	624.1	849.5	1357.6	2074.6	3354.6	5204.9	6139.6	6742.7	6725.4
27.5°	494.7	518.6	570.4	717.1	1193.6	2013.3	3535.7	5841.5	6904.7	7471.2	7256.5
30°	486.1	518.6	573.3	675.9	1076.7	1916.5	3684.4	6400.4	7493.3	7963.1	7498.1
32.5°	479.4	484.2	509.1	582.9	965.5	1803.4	3785.0	6901.7	8069.5	8431.0	7846.1
35°	387.3	411.3	451.5	522.5	900.2	1735.2	3785.0	7334.1	8637.1	8903.6	8177.9
37.5°	373.0	394.0	429.5	489.9	863.8	1701.7	3709.3	7751.2	9217.1	9439.5	8451.1
40°	365.3	382.5	416.0	464.9	848.4	1663.4	3599.0	8119.4	9783.7	9976.4	8706.1
42.5°	359.6	374.8	406.5	449.6	828.3	1621.2	3509.8	8414.7	10275.5	10434.7	8949.6
45°	356.6	373.0	407.4	457.3	788.1	1565.6	3480.2	8734.0	10680.1	10817.2	9213.3
47.5°	356.6	375.8	412.2	473.6	740.1	1508.0	3573.2	9154.8	11062.6	11129.7	9523.9
50°	353.7	374.8	425.6	457.3	670.1	1435.2	3791.8	9685.0	11476.8	11484.5	9917.0
52.5°	348.0	373.0	458.3	447.7	589.6	1339.3	4087.0	10365.7	12089.4	12135.5	10532.4
55°	341.3	370.1	449.6	425.6	523.4	1225.2	4328.6	11193.0	12950.4	13077.8	11437.5
57.5°	332.7	366.2	435.3	395.0	480.3	1078.6	4415.9	11798.9	13551.4	13871.6	12457.6
60°	325.0	363.4	393.1	376.8	453.5	954.9	4247.1	11679.0	13510.2	14200.5	13361.6
62.5°	317.3	366.2	358.5	365.3	441.0	875.3	3806.1	10719.4	12826.7	13861.1	14031.8
65°	308.7	340.3	338.4	355.7	438.1	843.6	3155.1	9280.4	11505.5	12788.3	14190.0
67.5°	297.2	314.5	324.1	343.2	447.7	815.9	2546.3	7655.4	9669.6	11180.5	13365.5
70°	284.8	299.1	309.6	327.9	442.0	803.4	2117.8	6037.0	7672.6	9163.4	11738.6
72.5°	268.4	280.9	290.5	307.7	436.2	796.7	1788.9	4861.7	5728.3	6806.9	9544.0
75°	249.3	260.8	267.5	284.8	418.0	729.6	1406.5	4113.9	4286.4	4735.1	7601.6
77.5°	227.2	235.9	241.6	260.8	370.1	606.9	1017.2	3173.4	3328.7	3437.9	5828.1
80°	201.3	209.9	212.9	231.1	306.8	474.5	663.4	2344.1	2489.8	2514.7	3806.1
82.5°	171.7	180.2	180.2	197.5	251.1	341.3	435.3	1605.8	1634.6	1719.0	2690.2
85°	138.1	144.7	144.7	153.4	194.7	255.0	299.1	806.3	797.7	910.7	2330.6
87.5°	98.7	103.5	108.3	110.3	139.0	168.7	180.2	245.4	162.0	186.0	1496.6
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3	5892.3
2.5°	6768.6	6823.2	6767.5	6727.3	6553.7	6410.9	6220.2	6122.4
5°	7275.7	7414.8	7367.7	7199.0	6836.6	6429.1	5966.1	5757.1
7.5°	7214.4	7537.4	7545.1	7229.7	6695.6	6095.6	5468.5	5171.3
10°	6736.8	7150.1	7268.1	6962.2	6395.6	5724.5	5005.5	4666.1
12.5°	6203.9	6608.5	6698.6	6593.1	6119.5	5445.5	4715.9	4383.2
15°	5767.6	5948.9	6056.2	6148.2	5882.7	5334.3	4699.6	4334.3
17.5°	5502.0	5481.9	5512.6	5672.8	5717.8	5461.8	4948.9	4546.2
20°	5406.2	5098.5	5090.8	5311.3	5640.1	5765.8	5436.0	4952.7
22.5°	5459.0	4960.4	4897.2	5158.8	5681.4	6203.9	6074.4	5523.1
25°	5641.1	4972.0	4921.1	5174.2	5830.9	6670.8	6763.8	6261.4
27.5°	5927.7	5044.8	4977.7	5237.5	6029.4	7062.9	7442.5	6976.6
30°	6200.0	5171.3	5088.0	5362.1	6210.5	7218.1	7858.6	7534.5
32.5°	6530.8	5408.1	5261.4	5591.2	6434.9	7465.5	8229.6	7996.6
35°	6854.8	5745.6	5563.4	5945.0	6685.1	7773.3	8653.3	8587.3
37.5°	7210.5	6186.6	6036.1	6402.3	7027.4	8063.7	9194.1	9279.4
40°	7590.2	6771.4	6593.1	7069.6	7558.5	8428.1	9758.7	9964.0
42.5°	7972.7	7420.5	7207.6	7690.9	8142.4	8787.6	10242.0	10545.9
45°	8410.8	8125.1	8024.4	8547.0	8703.3	9129.8	10598.6	10976.4
47.5°	8920.8	8924.7	9086.7	9295.8	9268.9	9517.1	10957.1	11360.8
50°	9516.2	9922.7	10280.3	10419.4	9851.7	9933.3	11454.7	11875.6
52.5°	10231.5	11116.3	11559.2	11468.2	10479.7	10441.4	12242.8	12585.1
55°	11125.9	12379.9	12819.9	12754.8	11201.6	11133.6	13224.5	13424.0
57.5°	12161.4	13604.2	14008.8	13715.4	12068.4	11892.8	14036.5	14078.8
60°	13071.2	14574.4	14929.1	14604.2	12942.7	12701.1	14543.7	14339.5
62.5°	13577.3	14903.3	15152.5	14802.6	13541.8	13562.0	14654.9	14198.6
65°	13351.0	14072.0	14152.5	14123.8	13387.6	14061.5	14255.1	13547.7
67.5°	12112.5	11970.6	12105.7	12292.7	12064.5	13403.8	13147.8	12129.6
70°	9930.4	9150.9	9420.4	9546.0	9649.5	11534.3	11411.6	9879.6
72.5°	7483.7	6410.9	6623.8	6597.9	7077.3	9251.6	8874.8	7264.2
75°	5302.7	4346.8	4373.6	4363.1	4938.4	7238.3	6426.3	4970.0
77.5°	3710.2	3149.4	3163.8	3223.2	3320.0	5459.0	4591.3	3630.7
80°	2551.1	2390.1	2469.6	2474.4	2300.9	3667.1	3391.9	2913.6
82.5°	1900.1	1661.5	1642.2	1670.1	1803.4	2971.1	2606.8	2020.9
85°	1556.0	983.7	790.9	991.3	1598.2	2942.3	1731.4	1066.1
87.5°	876.3	466.9	210.9	391.2	637.5	1948.1	500.4	136.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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