

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: P191312

Luminaire Tested: **GLEON-AF-04-LED-E1-SLR-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191312
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-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA 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: 14222.1 lumens
Efficiency: N/A
Efficacy: 110.2 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): 129
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

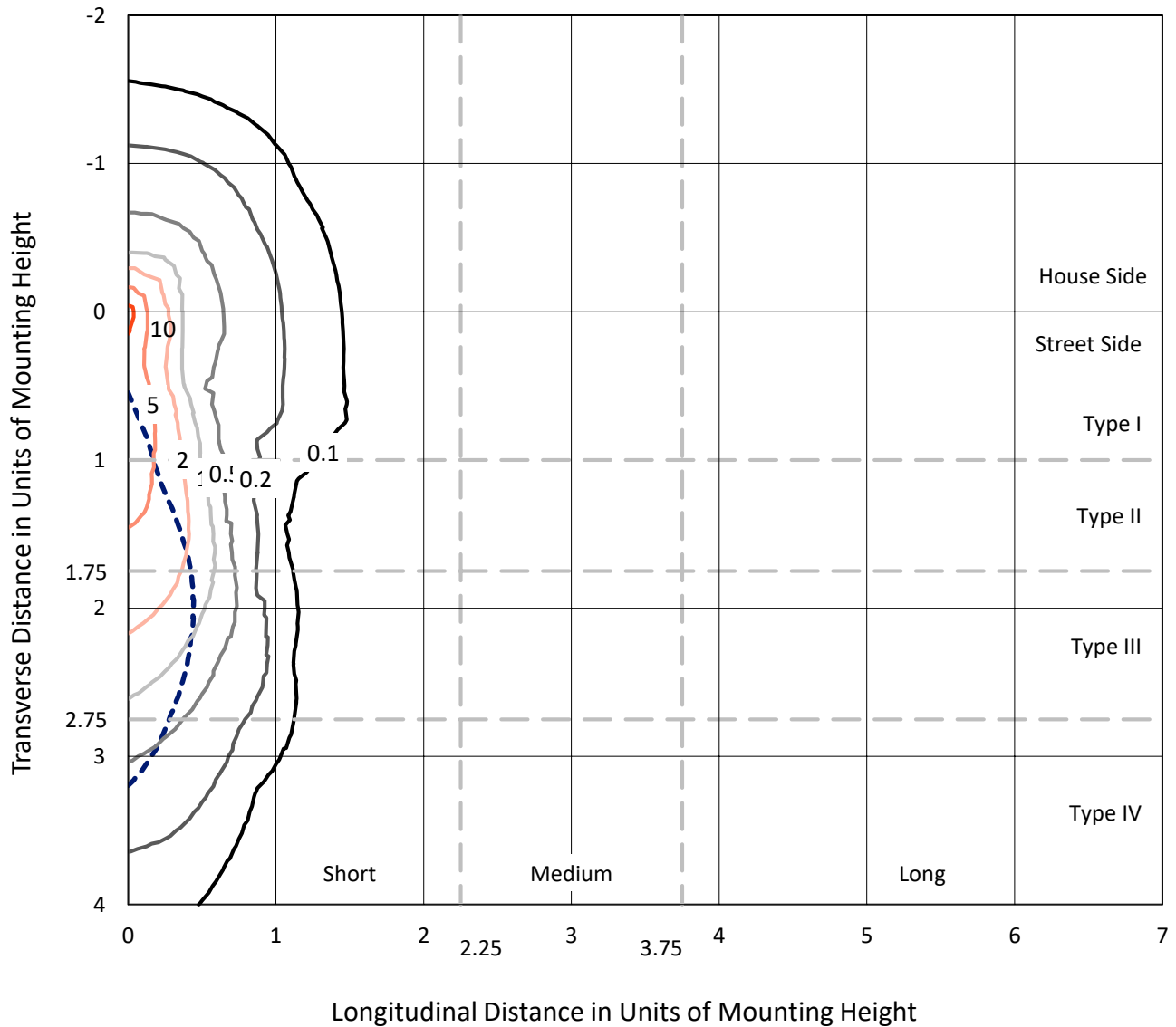


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

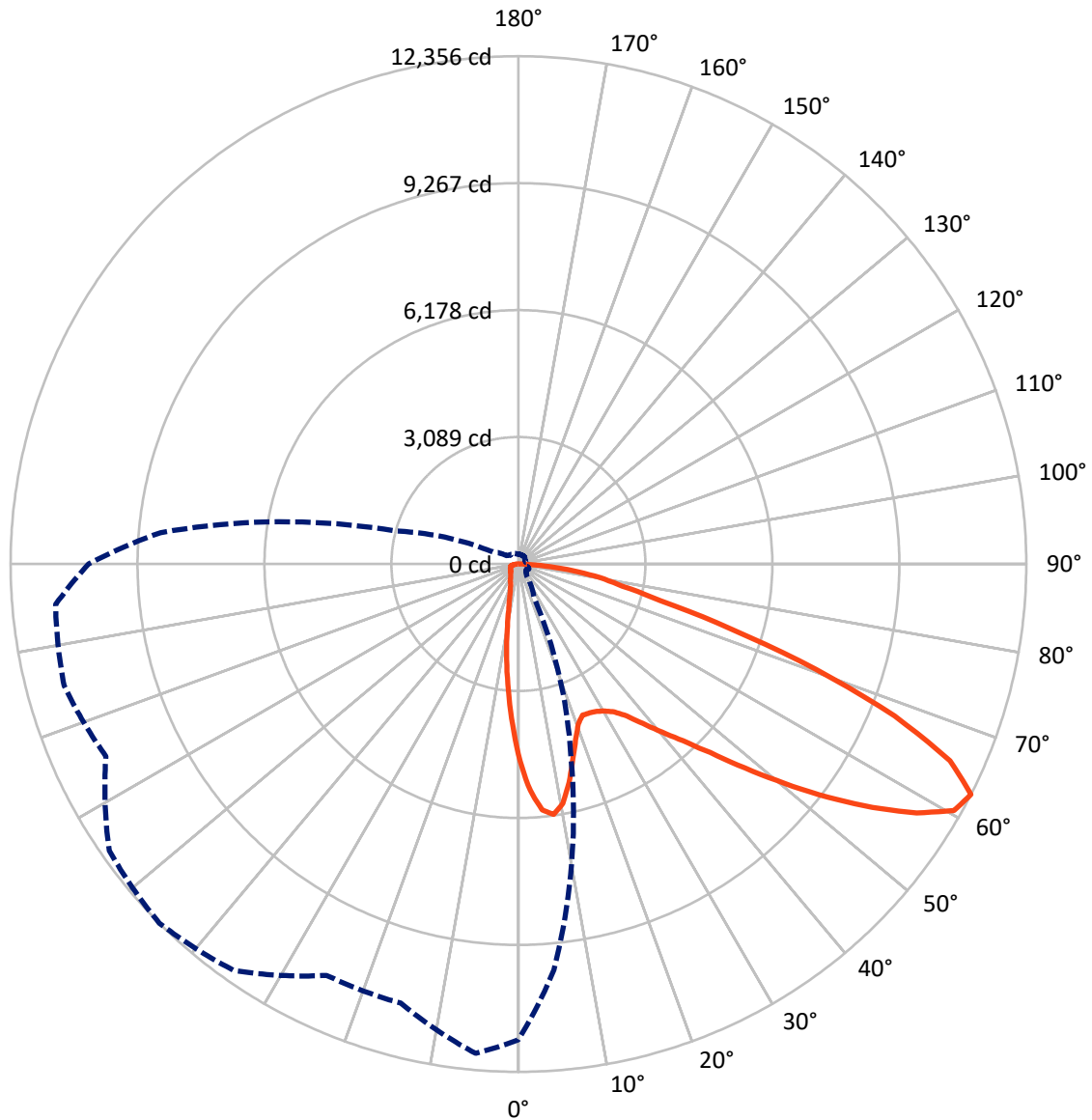


Based on 20 foot mounting height. Maximum calculated value = 12 fc
 Type IV - Short - Non-Cutoff

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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	2353.6	0.0	2353.6
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	11868.5	0.0	11868.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	14222.1	0.0	14222.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.8	2.5
10°-20°	641.4	4.5
20°-30°	935.2	6.6
30°-40°	1440.3	10.1
40°-50°	2119.7	14.9
50°-60°	3109.2	21.9
60°-70°	3475.6	24.4
70°-80°	1701.6	12.0
80°-90°	449.3	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°	14222.1	100.0
0°-180°	14222.1	100.0



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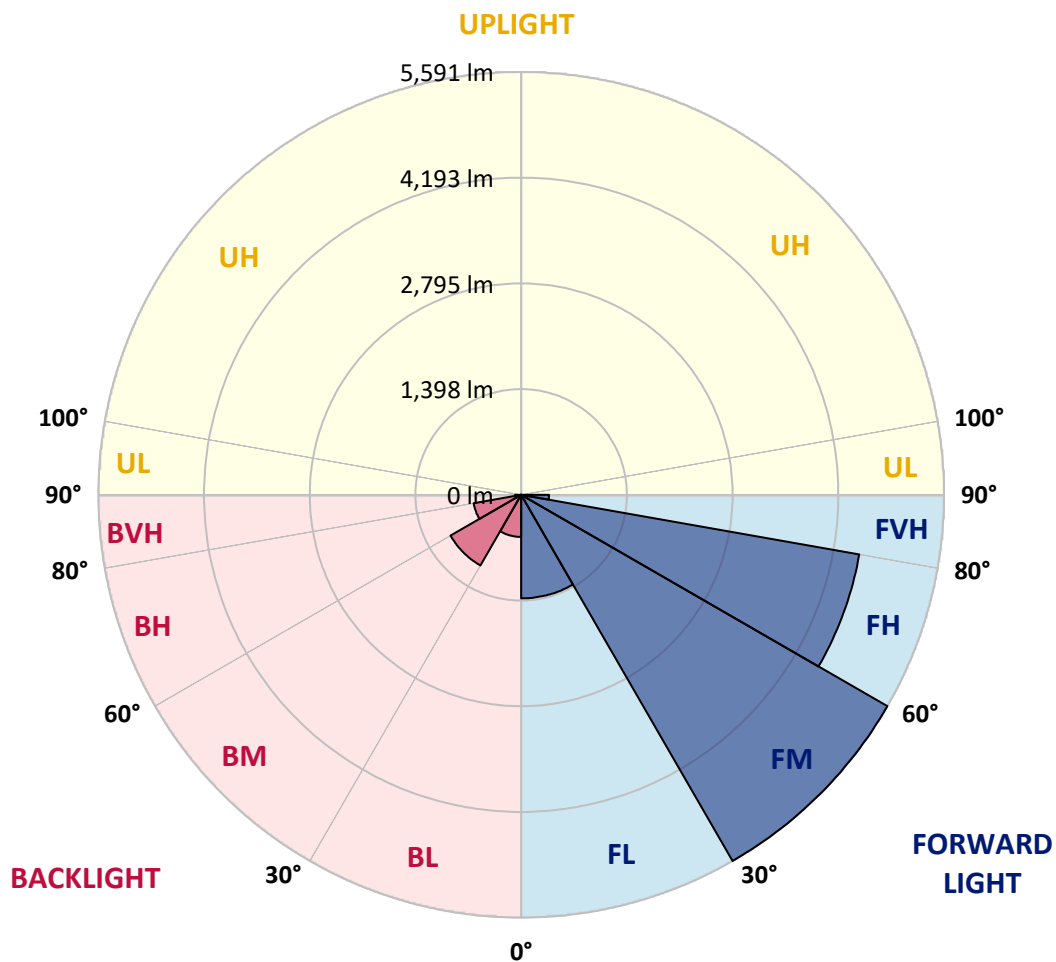
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLR-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1369.5	9.6			
FM (30°-60°)	5590.8	39.3			
FH (60°-80°)	4539.2	31.9			G2/5000
FVH (80°-90°)	369.0	2.6			G3/500
BL (0°-30°)	556.8	3.9	B2/1000		
BM (30°-60°)	1078.4	7.6	B2/2500		
BH (60°-80°)	638.0	4.5	B2/1000		G2/1000
BVH (80°-90°)	80.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	4992.6	4891.0	4722.1	4546.2	4439.1	4314.0	4216.3	4130.3	3958.3	3924.7	3955.1
5°	4694.7	4490.7	4172.5	3851.9	3638.5	3409.5	3231.2	3088.2	2870.0	2831.7	2877.9
7.5°	4217.1	3973.1	3552.5	3143.6	2841.9	2555.7	2363.4	2210.2	2039.8	1966.2	1970.9
10°	3805.1	3529.9	3032.6	2587.8	2340.7	2147.6	1985.8	1828.6	1655.9	1542.5	1511.2
12.5°	3574.4	3257.8	2684.7	2287.5	2058.5	1855.2	1680.9	1512.8	1328.3	1212.6	1179.8
15°	3534.5	3190.6	2554.2	2095.2	1808.3	1551.1	1345.5	1157.9	967.9	874.1	854.5
17.5°	3707.4	3311.0	2512.0	1924.1	1573.0	1255.6	1003.1	793.5	638.7	591.8	587.9
20°	4038.8	3542.4	2506.4	1763.0	1340.8	968.6	699.0	546.5	478.4	465.1	466.0
22.5°	4504.0	3901.2	2573.7	1641.8	1127.4	722.4	525.4	457.4	430.8	418.3	418.3
25°	5106.0	4395.3	2728.5	1553.5	942.0	576.9	463.6	423.0	397.9	389.3	390.9
27.5°	5689.2	4876.1	2908.4	1483.9	820.9	523.9	439.4	402.6	380.7	372.1	376.0
30°	6144.3	5303.0	3058.4	1389.3	759.1	508.9	448.0	410.4	379.2	365.9	366.6
32.5°	6521.0	5676.7	3184.3	1321.2	704.4	436.3	386.2	369.8	365.9	350.3	342.4
35°	7002.6	6084.0	3268.7	1322.8	678.6	389.3	344.0	315.1	294.0	276.0	276.0
37.5°	7567.1	6551.6	3358.7	1340.8	669.2	362.0	329.2	300.2	280.7	263.5	260.3
40°	8125.3	7009.7	3440.7	1358.0	663.8	345.6	317.4	290.8	272.8	255.6	250.9
42.5°	8599.8	7386.5	3514.2	1366.6	645.0	344.0	308.8	284.6	267.4	248.6	244.0
45°	8950.9	7702.4	3593.2	1379.9	626.3	350.3	308.8	283.8	262.7	244.7	240.0
47.5°	9264.5	8072.9	3725.3	1379.9	603.5	338.5	319.0	284.6	261.9	243.2	239.3
50°	9684.3	8581.1	3975.5	1347.8	571.5	326.0	336.1	281.4	254.9	240.0	235.3
52.5°	10262.8	9232.3	4372.6	1292.3	522.2	301.8	333.8	279.9	247.9	232.2	226.7
55°	10946.9	9929.7	4805.7	1227.4	448.8	284.6	322.1	276.0	240.0	222.8	217.4
57.5°	11480.9	10409.8	5110.7	1127.4	384.6	275.2	285.4	272.1	230.7	212.7	208.0
60°	11693.5	10391.0	5194.3	993.7	353.3	267.4	249.4	304.9	222.8	204.8	199.4
62.5°	11578.6	9911.0	4959.8	899.9	346.4	257.2	233.7	282.2	216.6	199.4	191.5
65°	11047.8	9060.4	4338.2	874.8	366.6	247.0	223.6	221.3	208.0	191.5	183.7
67.5°	9891.4	7789.2	3473.5	877.2	392.5	236.9	213.4	202.4	196.2	182.9	175.9
70°	8056.6	6158.3	2589.4	883.4	405.8	225.2	202.4	190.8	183.7	170.4	165.7
72.5°	5923.7	4746.4	1881.0	842.8	408.1	211.9	187.6	177.5	170.4	156.4	152.4
75°	4052.9	3630.8	1304.9	698.2	355.7	193.1	171.2	161.8	157.1	139.9	137.6
77.5°	2960.7	2725.3	834.9	518.3	274.5	169.6	150.9	143.8	140.8	121.9	118.9
80°	2375.9	2156.2	522.2	355.0	200.9	142.3	126.6	122.8	119.6	100.9	98.5
82.5°	1648.1	1444.0	335.4	230.7	150.9	110.3	100.0	98.5	93.8	76.6	74.3
85°	869.4	784.2	212.7	157.1	109.5	75.8	69.6	69.6	67.2	50.8	49.2
87.5°	111.0	180.6	107.9	82.0	60.1	33.7	33.7	32.8	35.2	28.9	25.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	3883.2	3920.8	3884.8	3887.1	3927.0	4045.9	4099.8	4144.4	4192.1	4223.4	4237.4
5°	2814.5	2902.1	2931.8	2994.3	3086.5	3238.3	3298.4	3342.2	3371.1	3388.3	3395.4
7.5°	1924.8	1978.0	2037.4	2138.3	2339.2	2428.3	2468.2	2458.0	2425.2	2413.4	2401.7
10°	1451.1	1429.9	1418.9	1474.5	1637.1	1727.0	1755.2	1727.8	1709.9	1713.7	1733.3
12.5°	1124.2	1087.5	1042.9	1036.7	1143.8	1224.3	1242.3	1243.8	1276.6	1305.6	1348.7
15°	819.4	815.4	793.5	780.2	841.3	906.8	914.7	928.7	958.5	979.6	1017.1
17.5°	577.8	598.8	616.0	624.6	670.7	717.7	709.1	702.1	696.6	696.6	714.5
20°	466.0	480.1	502.0	526.9	573.9	606.7	585.5	557.4	537.2	530.8	533.2
22.5°	419.8	430.8	443.2	465.1	507.4	530.1	507.4	487.0	466.8	459.7	457.4
25°	396.4	410.4	422.2	438.6	469.8	485.5	463.6	448.8	436.3	427.7	421.4
27.5°	383.1	395.6	398.7	406.5	433.1	447.2	436.3	429.9	422.2	414.4	406.5
30°	369.0	366.6	361.2	362.0	383.1	397.1	396.4	397.9	397.1	394.9	393.2
32.5°	337.0	332.3	327.5	332.3	351.8	364.3	365.1	368.3	368.3	367.4	373.7
35°	280.7	289.3	294.7	308.8	332.3	343.2	338.5	330.7	316.6	308.0	307.3
37.5°	259.5	261.2	270.5	290.0	315.9	326.0	319.0	301.0	291.6	290.0	292.4
40°	249.4	250.9	256.5	274.5	300.2	310.4	304.1	290.8	282.2	281.4	285.4
42.5°	242.3	244.0	247.0	259.5	280.7	293.2	294.0	284.6	274.5	275.2	279.1
45°	238.4	239.3	238.4	244.7	264.2	279.1	285.4	279.1	270.5	272.1	276.8
47.5°	237.6	235.3	232.2	233.7	254.1	268.9	276.8	274.5	270.5	272.1	276.0
50°	234.6	229.0	225.2	224.3	244.7	260.3	267.4	267.4	268.9	272.1	276.0
52.5°	225.2	218.9	218.9	216.6	238.4	253.3	258.0	258.8	261.2	266.6	272.1
55°	213.4	211.1	213.4	209.5	233.7	247.9	250.2	251.7	253.3	258.0	265.9
57.5°	203.3	200.2	205.6	204.1	229.9	242.3	242.3	245.5	245.5	251.7	258.0
60°	197.8	191.5	193.8	195.5	224.3	237.6	236.1	239.3	240.8	246.2	250.9
62.5°	190.8	185.3	185.3	189.2	218.1	230.7	229.9	232.2	238.4	240.0	244.7
65°	182.2	179.8	177.5	182.2	211.9	222.8	223.6	226.7	232.2	233.7	237.6
67.5°	173.6	174.3	169.6	174.3	206.4	215.0	215.0	221.3	223.6	226.7	230.7
70°	164.2	165.0	161.0	166.5	202.4	206.4	205.6	214.2	215.7	218.1	222.1
72.5°	152.4	152.4	150.9	158.7	196.2	197.8	196.2	203.3	204.1	206.4	208.0
75°	139.9	139.9	138.4	149.4	192.3	188.4	183.7	189.2	190.8	192.3	192.3
77.5°	123.6	125.1	125.1	138.4	179.0	184.5	168.9	172.0	174.3	175.1	172.8
80°	103.2	107.1	108.6	125.8	150.1	170.4	150.9	153.2	154.1	154.1	150.9
82.5°	79.0	86.0	89.9	108.6	114.9	143.1	131.3	133.7	131.3	126.6	125.1
85°	54.7	64.1	68.8	82.9	86.7	110.3	109.5	109.5	104.8	98.5	97.7
87.5°	29.7	35.2	38.3	49.2	59.4	74.3	80.5	78.2	74.3	70.4	71.1
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	4310.9	4417.2	4586.9	4716.6	4847.3	4973.1	5109.1	5213.1	5301.4	5335.8	5440.6
5°	3466.6	3599.5	3759.8	4048.9	4253.8	4479.7	4740.9	5086.4	5219.3	5403.0	5704.1
7.5°	2451.0	2571.4	2829.4	3063.1	3353.1	3672.9	4025.5	4502.4	4676.7	4971.5	5461.7
10°	1830.2	1970.2	2177.4	2374.4	2630.0	2956.8	3361.7	3895.0	4106.8	4426.6	4991.1
12.5°	1474.5	1639.5	1859.1	2044.5	2242.2	2472.9	2866.1	3450.9	3734.7	4014.6	4585.3
15°	1132.8	1305.6	1509.7	1744.9	1963.1	2211.7	2623.8	3263.2	3590.0	3881.7	4368.7
17.5°	784.2	931.9	1189.1	1434.6	1713.7	2031.9	2556.6	3303.1	3693.3	4029.4	4406.3
20°	555.9	640.3	851.4	1136.0	1483.9	1883.4	2544.0	3512.6	4020.1	4403.9	4647.1
22.5°	467.5	498.8	621.5	882.7	1284.5	1772.4	2587.8	3806.6	4461.0	4951.2	5031.0
25°	426.1	444.9	508.9	692.6	1107.0	1691.9	2735.6	4244.4	5006.7	5498.5	5484.3
27.5°	403.5	423.0	465.1	584.8	973.3	1641.8	2883.3	4763.6	5630.5	6092.6	5917.5
30°	396.4	423.0	467.5	551.2	878.0	1562.9	3004.5	5219.3	6110.6	6493.7	6114.5
32.5°	390.9	394.9	415.1	475.4	787.3	1470.6	3086.5	5628.3	6580.4	6875.3	6398.4
35°	315.9	335.4	368.3	426.1	734.1	1415.0	3086.5	5980.8	7043.3	7260.6	6668.8
37.5°	304.1	321.3	350.3	399.5	704.4	1387.7	3024.8	6320.9	7516.3	7697.7	6891.6
40°	297.9	311.9	339.3	379.2	691.9	1356.4	2934.9	6621.2	7978.3	8135.5	7099.6
42.5°	293.2	305.7	331.4	366.6	675.5	1322.1	2862.2	6862.0	8379.4	8509.2	7298.1
45°	290.8	304.1	332.3	373.0	642.6	1276.6	2838.0	7122.3	8709.3	8821.1	7513.2
47.5°	290.8	306.5	336.1	386.2	603.5	1229.8	2913.8	7465.5	9021.3	9076.0	7766.4
50°	288.5	305.7	347.1	373.0	546.5	1170.4	3092.1	7897.8	9359.0	9365.2	8087.0
52.5°	283.8	304.1	373.7	365.1	480.8	1092.2	3332.9	8452.9	9858.6	9896.1	8588.9
55°	278.3	301.8	366.6	347.1	426.9	999.1	3529.9	9127.6	10560.6	10664.7	9327.0
57.5°	271.3	298.6	355.0	322.1	391.7	879.5	3601.0	9621.7	11050.8	11312.0	10158.8
60°	265.0	296.3	320.5	307.3	369.8	778.7	3463.4	9524.0	11017.2	11580.1	10896.1
62.5°	258.8	298.6	292.4	297.9	359.7	713.8	3103.7	8741.4	10459.8	11303.4	11442.5
65°	251.7	277.5	276.0	290.0	357.3	688.0	2572.9	7567.9	9382.5	10428.6	11571.5
67.5°	242.3	256.5	264.2	279.9	365.1	665.3	2076.5	6242.8	7885.3	9117.5	10899.1
70°	232.2	244.0	252.6	267.4	360.4	655.2	1727.0	4923.1	6256.8	7472.6	9572.5
72.5°	218.9	229.0	236.9	250.9	355.7	649.7	1458.8	3964.5	4671.3	5550.8	7782.9
75°	203.3	212.7	218.1	232.2	340.8	594.9	1146.9	3354.8	3495.4	3861.3	6199.0
77.5°	185.3	192.3	197.0	212.7	301.8	494.9	829.5	2587.8	2714.4	2803.6	4752.6
80°	164.2	171.2	173.6	188.4	250.2	387.0	541.0	1911.5	2030.4	2050.7	3103.7
82.5°	139.9	147.0	147.0	161.0	204.8	278.3	355.0	1309.5	1333.0	1401.7	2193.7
85°	112.6	118.0	118.0	125.1	158.7	208.0	244.0	657.5	650.5	742.8	1900.5
87.5°	80.5	84.4	88.4	89.9	113.3	137.6	147.0	200.2	132.2	151.7	1220.4
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°	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0	4805.0
2.5°	5519.5	5564.1	5518.8	5486.0	5344.4	5228.0	5072.4	4992.6
5°	5933.1	6046.5	6008.2	5870.6	5575.1	5242.8	4865.2	4694.7
7.5°	5883.1	6146.6	6152.8	5895.6	5460.1	4970.7	4459.5	4217.1
10°	5493.8	5830.7	5926.9	5677.5	5215.4	4668.1	4081.8	3805.1
12.5°	5059.1	5389.0	5462.5	5376.5	4990.3	4440.6	3845.7	3574.4
15°	4703.3	4851.1	4938.7	5013.7	4797.1	4350.0	3832.4	3534.5
17.5°	4486.8	4470.4	4495.4	4626.0	4662.7	4453.9	4035.6	3707.4
20°	4408.6	4157.7	4151.4	4331.2	4599.4	4701.8	4432.9	4038.8
22.5°	4451.6	4045.1	3993.5	4206.9	4632.9	5059.1	4953.5	4504.0
25°	4600.1	4054.5	4013.0	4219.4	4755.0	5439.8	5515.6	5106.0
27.5°	4834.0	4113.9	4059.2	4271.0	4916.8	5759.6	6069.2	5689.2
30°	5055.9	4217.1	4149.1	4372.6	5064.5	5886.3	6408.5	6144.3
32.5°	5325.7	4410.1	4290.6	4559.5	5247.5	6087.9	6711.1	6521.0
35°	5589.9	4685.3	4536.8	4848.0	5451.5	6338.9	7056.6	7002.6
37.5°	5879.9	5045.0	4922.2	5220.9	5730.7	6575.7	7497.5	7567.1
40°	6189.6	5521.9	5376.5	5765.0	6163.8	6872.9	7958.0	8125.3
42.5°	6501.5	6051.2	5877.7	6271.6	6639.9	7166.1	8352.1	8599.8
45°	6858.8	6625.9	6543.7	6969.8	7097.2	7445.1	8642.9	8950.9
47.5°	7274.7	7277.9	7409.9	7580.4	7558.5	7761.0	8935.3	9264.5
50°	7760.2	8091.7	8383.3	8496.6	8033.8	8100.3	9341.1	9684.3
52.5°	8343.5	9065.1	9426.3	9352.0	8545.9	8514.6	9983.7	10262.8
55°	9072.9	10095.5	10454.4	10401.2	9134.6	9079.1	10784.3	10946.9
57.5°	9917.2	11093.8	11423.8	11184.5	9841.4	9698.3	11446.4	11480.9
60°	10659.1	11885.1	12174.3	11909.3	10554.4	10357.4	11860.0	11693.5
62.5°	11071.9	12153.2	12356.4	12071.1	11043.1	11059.4	11950.7	11578.6
65°	10887.5	11475.4	11541.0	11517.6	10917.1	11466.8	11624.7	11047.8
67.5°	9877.3	9761.6	9871.9	10024.3	9838.2	10930.4	10721.8	9891.4
70°	8098.0	7462.3	7682.1	7784.5	7868.8	9405.9	9305.9	8056.6
72.5°	6102.8	5228.0	5401.5	5380.4	5771.3	7544.5	7237.2	5923.7
75°	4324.2	3544.7	3566.6	3558.0	4027.1	5902.6	5240.5	4052.9
77.5°	3025.6	2568.2	2580.0	2628.5	2707.4	4451.6	3744.1	2960.7
80°	2080.4	1949.0	2014.0	2017.9	1876.3	2990.4	2766.1	2375.9
82.5°	1549.6	1354.9	1339.2	1362.0	1470.6	2422.9	2125.7	1648.1
85°	1268.9	802.1	645.0	808.4	1303.2	2399.3	1412.0	869.4
87.5°	714.5	380.7	172.0	319.0	519.9	1588.6	408.1	111.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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