

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: P299458

Luminaire Tested: **GLNA-AF-01-LED-E1-SLR-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299458
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-01-LED-E1-SLR-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K 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: 3596.3 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

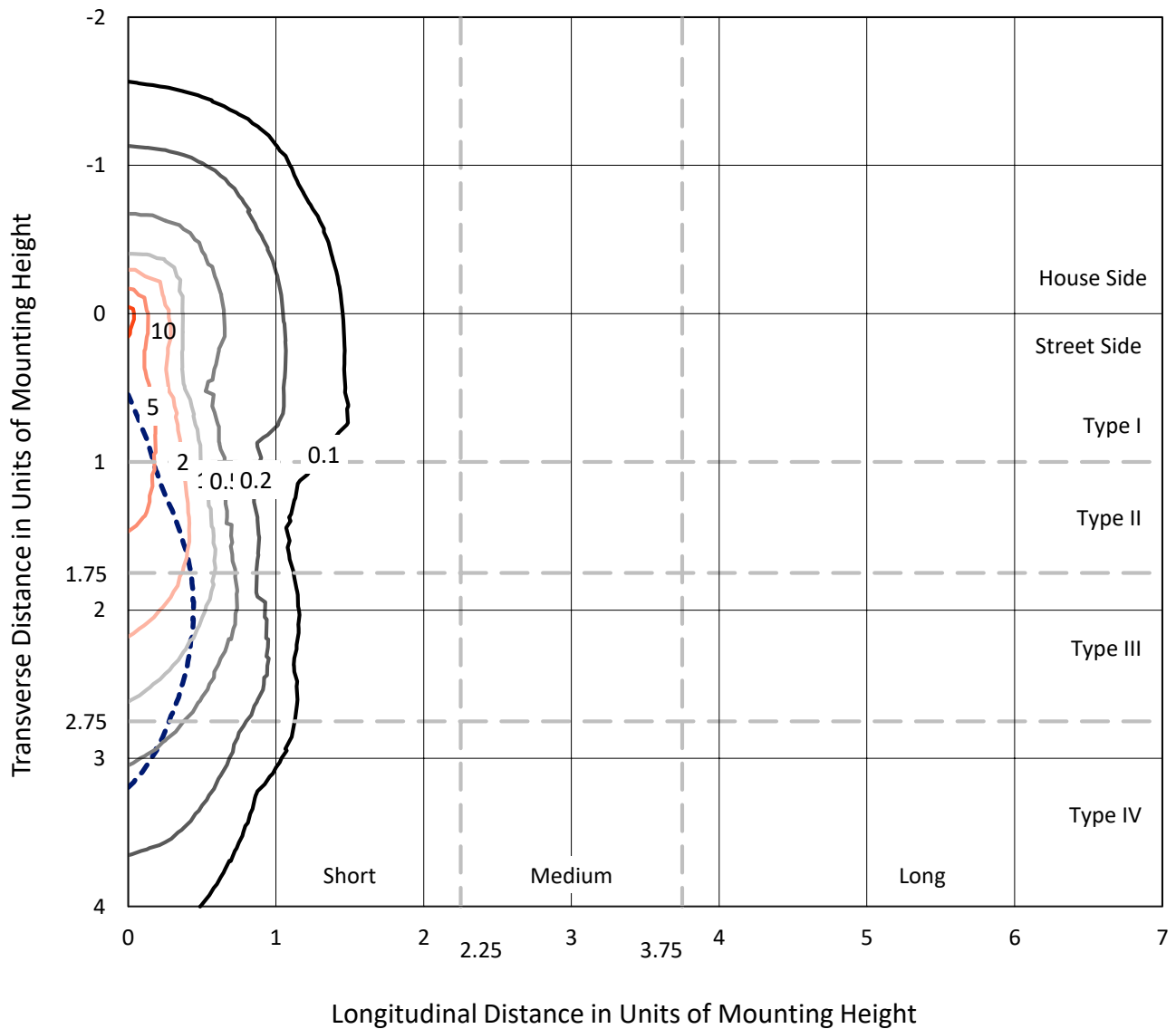
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

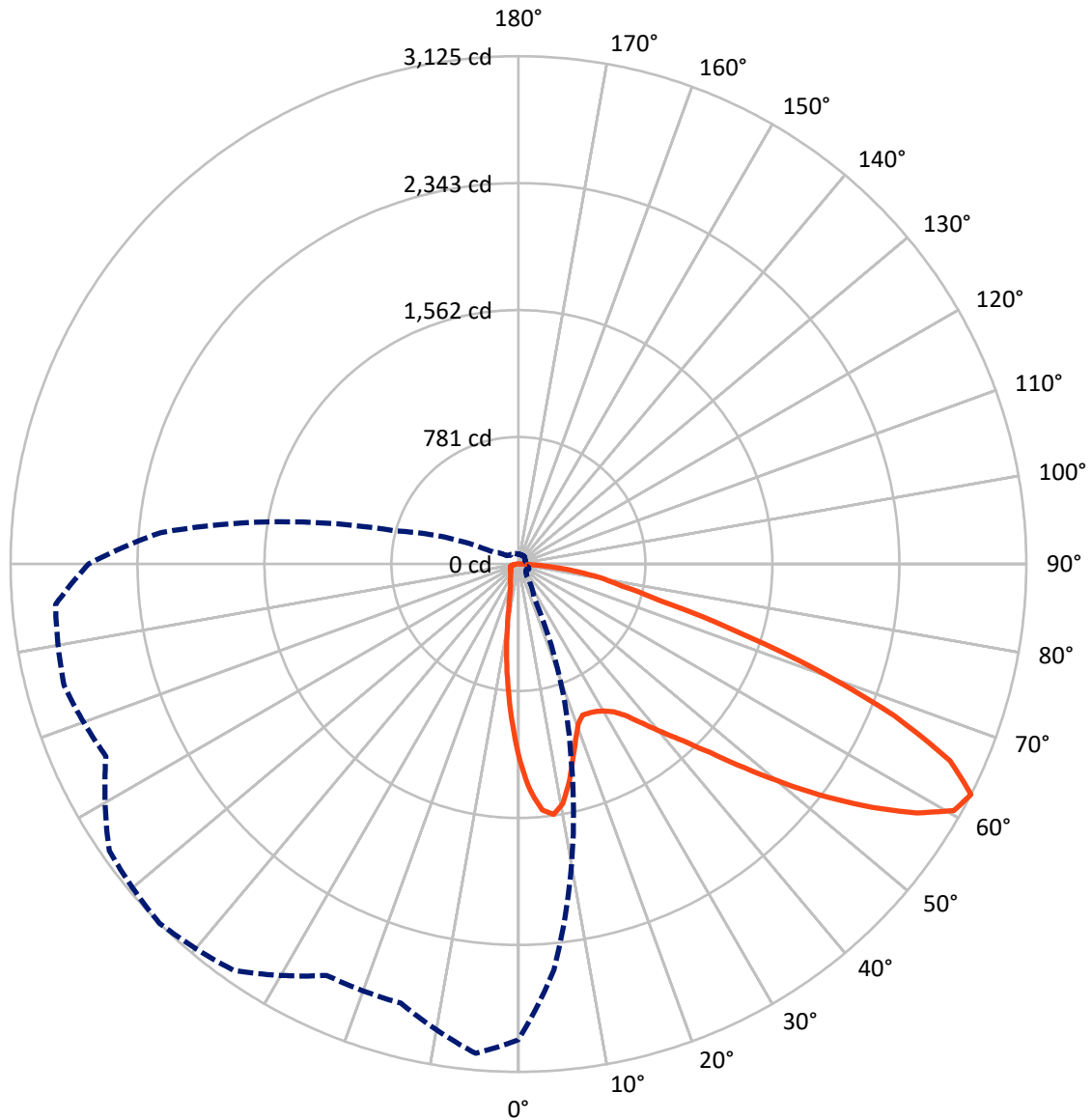
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.2 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	595.1	0.0	595.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	3001.1	0.0	3001.1
	% Fixture	83.5	0.0	83.5
Total	Lumens	3596.3	0.0	3596.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	2.5
10°-20°	162.2	4.5
20°-30°	236.5	6.6
30°-40°	364.2	10.1
40°-50°	536.0	14.9
50°-60°	786.2	21.9
60°-70°	878.9	24.4
70°-80°	430.3	12.0
80°-90°	113.6	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°	3596.3	100.0
0°-180°	3596.3	100.0



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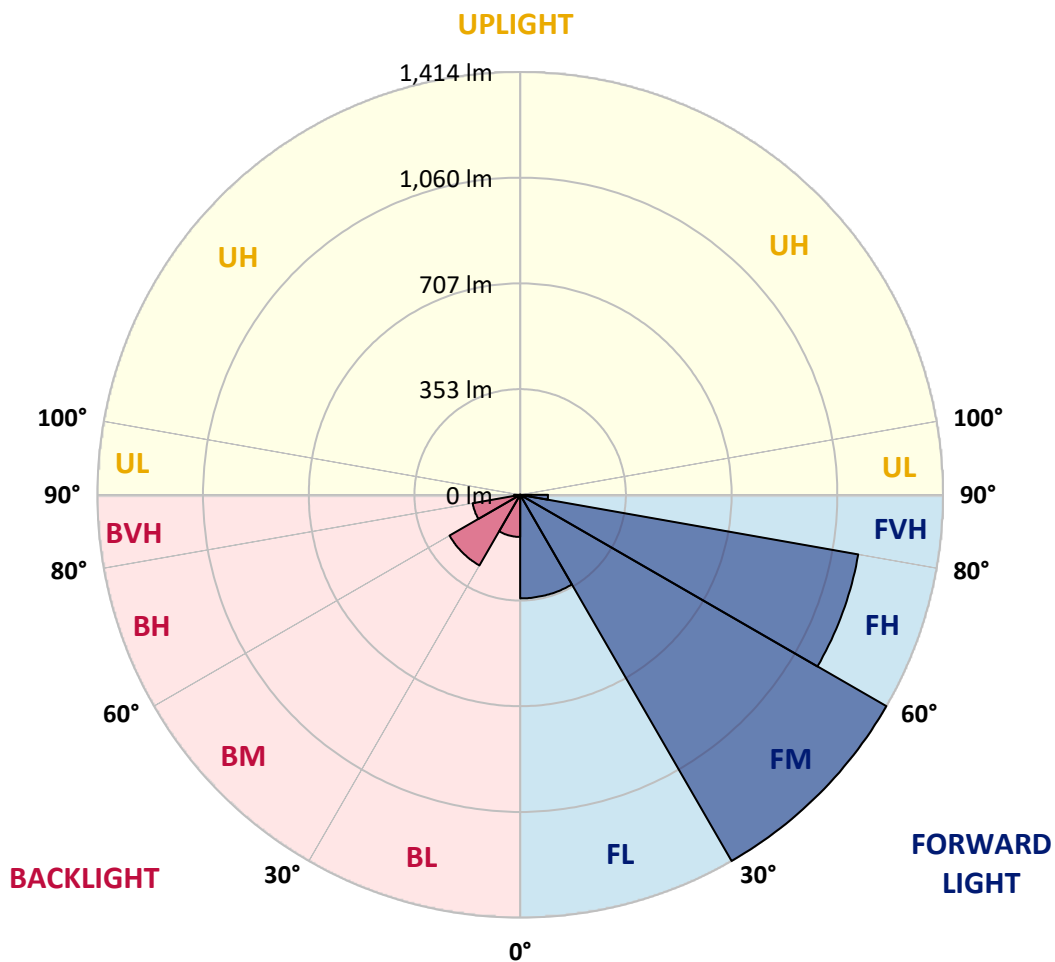
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLR-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	346.3	9.6			
FM	(30°-60°)	1413.7	39.3			
FH	(60°-80°)	1147.8	31.9			G1/1800
FVH	(80°-90°)	93.3	2.6			G1/100
BL	(0°-30°)	140.8	3.9	B1/500		
BM	(30°-60°)	272.7	7.6	B1/1000		
BH	(60°-80°)	161.3	4.5	B1/500		G1/500
BVH	(80°-90°)	20.3	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-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1262.4	1236.8	1194.0	1149.6	1122.5	1090.8	1066.1	1044.4	1000.9	992.4	1000.1
5°	1187.1	1135.6	1055.1	974.0	920.0	862.1	817.0	780.9	725.7	716.0	727.7
7.5°	1066.4	1004.7	898.3	794.9	718.6	646.2	597.6	558.9	515.8	497.2	498.4
10°	962.2	892.6	766.8	654.4	591.9	543.1	502.1	462.4	418.7	390.0	382.1
12.5°	903.8	823.8	678.9	578.4	520.5	469.1	425.0	382.5	335.9	306.6	298.3
15°	893.8	806.7	645.9	529.8	457.2	392.2	340.2	292.8	244.7	221.0	216.1
17.5°	937.5	837.2	635.2	486.5	397.7	317.5	253.6	200.7	161.5	149.7	148.7
20°	1021.2	895.7	633.8	445.8	339.0	245.0	176.7	138.2	121.0	117.6	117.8
22.5°	1138.9	986.5	650.8	415.2	285.1	182.7	132.9	115.6	108.9	105.8	105.8
25°	1291.1	1111.4	689.9	392.8	238.2	145.9	117.2	106.9	100.6	98.4	98.9
27.5°	1438.6	1233.0	735.4	375.2	207.6	132.4	111.1	101.8	96.3	94.1	95.1
30°	1553.6	1341.0	773.4	351.3	191.9	128.7	113.3	103.8	95.9	92.5	92.7
32.5°	1648.9	1435.5	805.2	334.1	178.1	110.3	97.7	93.5	92.5	88.6	86.6
35°	1770.7	1538.4	826.6	334.5	171.6	98.4	87.0	79.7	74.3	69.8	69.8
37.5°	1913.5	1656.6	849.3	339.0	169.2	91.5	83.2	75.9	71.0	66.6	65.8
40°	2054.6	1772.5	870.1	343.4	167.8	87.4	80.3	73.6	69.0	64.6	63.4
42.5°	2174.6	1867.8	888.6	345.6	163.1	87.0	78.1	71.9	67.6	62.8	61.7
45°	2263.4	1947.6	908.6	348.9	158.4	88.6	78.1	71.8	66.4	61.9	60.7
47.5°	2342.6	2041.3	942.0	348.9	152.6	85.6	80.7	71.9	66.3	61.5	60.5
50°	2448.8	2169.8	1005.3	340.8	144.5	82.4	85.0	71.2	64.5	60.7	59.5
52.5°	2595.1	2334.5	1105.7	326.8	132.1	76.3	84.4	70.8	62.7	58.7	57.3
55°	2768.1	2510.9	1215.2	310.4	113.5	71.9	81.5	69.8	60.7	56.3	54.9
57.5°	2903.1	2632.2	1292.3	285.1	97.3	69.6	72.2	68.8	58.3	53.7	52.6
60°	2956.8	2627.5	1313.5	251.2	89.4	67.6	63.1	77.1	56.3	51.8	50.4
62.5°	2927.8	2506.1	1254.2	227.5	87.6	65.1	59.1	71.3	54.8	50.4	48.4
65°	2793.6	2291.0	1097.0	221.2	92.7	62.5	56.6	56.0	52.6	48.4	46.4
67.5°	2501.2	1969.6	878.3	221.8	99.2	59.9	54.0	51.2	49.6	46.3	44.5
70°	2037.2	1557.2	654.7	223.4	102.6	56.9	51.2	48.2	46.4	43.1	41.9
72.5°	1497.9	1200.2	475.7	213.1	103.2	53.6	47.5	44.9	43.1	39.6	38.5
75°	1024.8	918.1	329.9	176.6	90.0	48.8	43.3	40.9	39.7	35.4	34.8
77.5°	748.6	689.1	211.1	131.1	69.4	42.9	38.2	36.4	35.6	30.8	30.0
80°	600.8	545.2	132.1	89.8	50.8	36.0	32.0	31.1	30.2	25.5	24.9
82.5°	416.7	365.1	84.8	58.3	38.2	27.9	25.3	24.9	23.7	19.4	18.8
85°	219.8	198.3	53.7	39.7	27.6	19.2	17.6	17.6	17.0	12.9	12.4
87.5°	28.1	45.7	27.3	20.8	15.2	8.5	8.5	8.3	8.9	7.3	6.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	981.9	991.4	982.3	982.9	993.0	1023.0	1036.7	1047.9	1060.0	1067.9	1071.5
5°	711.7	733.9	741.3	757.1	780.5	818.8	834.0	845.1	852.5	856.8	858.6
7.5°	486.7	500.1	515.2	540.7	591.5	614.0	624.1	621.5	613.3	610.3	607.3
10°	366.9	361.6	358.8	372.9	414.0	436.7	443.8	436.9	432.3	433.4	438.3
12.5°	284.3	275.0	263.7	262.1	289.2	309.6	314.1	314.5	322.8	330.1	341.0
15°	207.2	206.2	200.7	197.3	212.7	229.3	231.3	234.8	242.4	247.7	257.2
17.5°	146.1	151.4	155.8	157.9	169.6	181.5	179.3	177.5	176.1	176.1	180.7
20°	117.8	121.4	126.9	133.2	145.1	153.4	148.1	140.9	135.8	134.2	134.8
22.5°	106.2	108.9	112.1	117.6	128.3	134.1	128.3	123.2	118.0	116.2	115.6
25°	100.2	103.8	106.8	110.9	118.8	122.7	117.2	113.5	110.3	108.1	106.5
27.5°	96.9	100.0	100.8	102.8	109.5	113.1	110.3	108.7	106.8	104.8	102.8
30°	93.3	92.7	91.3	91.5	96.9	100.4	100.2	100.6	100.4	99.8	99.5
32.5°	85.2	84.0	82.8	84.0	88.9	92.1	92.3	93.1	93.1	92.9	94.5
35°	71.0	73.1	74.5	78.1	84.0	86.8	85.6	83.6	80.1	77.9	77.7
37.5°	65.7	66.0	68.4	73.3	79.9	82.4	80.7	76.1	73.7	73.3	73.9
40°	63.1	63.4	64.8	69.4	75.9	78.5	76.9	73.6	71.3	71.2	72.2
42.5°	61.3	61.7	62.5	65.7	71.0	74.2	74.3	71.9	69.4	69.6	70.6
45°	60.3	60.5	60.3	61.9	66.8	70.6	72.2	70.6	68.4	68.8	70.0
47.5°	60.1	59.5	58.7	59.1	64.3	68.0	70.0	69.4	68.4	68.8	69.8
50°	59.3	57.9	56.9	56.7	61.9	65.8	67.6	67.6	68.0	68.8	69.8
52.5°	56.9	55.4	55.4	54.8	60.3	64.0	65.2	65.4	66.0	67.4	68.8
55°	54.0	53.4	54.0	53.0	59.1	62.7	63.3	63.7	64.0	65.2	67.2
57.5°	51.4	50.6	52.0	51.6	58.1	61.3	61.3	62.1	62.1	63.7	65.2
60°	50.0	48.4	49.0	49.4	56.7	60.1	59.7	60.5	60.9	62.3	63.4
62.5°	48.2	46.9	46.9	47.8	55.2	58.3	58.1	58.7	60.3	60.7	61.9
65°	46.1	45.5	44.9	46.1	53.6	56.3	56.6	57.3	58.7	59.1	60.1
67.5°	43.9	44.1	42.9	44.1	52.2	54.3	54.3	56.0	56.6	57.3	58.3
70°	41.5	41.7	40.7	42.1	51.2	52.2	52.0	54.2	54.6	55.2	56.1
72.5°	38.5	38.5	38.2	40.2	49.6	50.0	49.6	51.4	51.6	52.2	52.6
75°	35.4	35.4	35.0	37.8	48.7	47.6	46.4	47.8	48.2	48.7	48.7
77.5°	31.2	31.7	31.7	35.0	45.2	46.7	42.7	43.5	44.1	44.3	43.7
80°	26.1	27.1	27.5	31.8	37.9	43.1	38.2	38.7	39.0	39.0	38.2
82.5°	20.0	21.7	22.7	27.5	29.1	36.1	33.2	33.8	33.2	32.0	31.7
85°	13.8	16.2	17.4	20.9	22.0	27.9	27.6	27.6	26.5	24.9	24.7
87.5°	7.5	8.9	9.7	12.4	15.0	18.8	20.3	19.7	18.8	17.8	18.0
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°	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1090.1	1116.9	1159.9	1192.6	1225.7	1257.5	1291.9	1318.2	1340.5	1349.3	1375.7
5°	876.6	910.2	950.7	1023.8	1075.6	1132.7	1198.8	1286.2	1319.8	1366.3	1442.3
7.5°	619.8	650.2	715.4	774.6	847.9	928.8	1017.9	1138.5	1182.6	1257.1	1381.0
10°	462.8	498.2	550.5	600.4	665.0	747.7	850.1	984.9	1038.5	1119.3	1262.1
12.5°	372.9	414.6	470.1	517.0	567.0	625.3	724.8	872.6	944.4	1015.1	1159.4
15°	286.4	330.1	381.8	441.3	496.4	559.3	663.5	825.2	907.8	981.6	1104.7
17.5°	198.3	235.6	300.7	362.7	433.4	513.8	646.5	835.2	933.9	1018.9	1114.2
20°	140.6	161.9	215.3	287.3	375.2	476.2	643.3	888.2	1016.5	1113.6	1175.1
22.5°	118.2	126.1	157.2	223.2	324.8	448.1	654.4	962.5	1128.0	1252.0	1272.1
25°	107.7	112.5	128.7	175.2	279.9	427.8	691.7	1073.3	1266.0	1390.4	1386.8
27.5°	102.0	106.9	117.6	147.9	246.2	415.2	729.1	1204.6	1423.8	1540.6	1496.3
30°	100.2	106.9	118.2	139.4	222.0	395.2	759.7	1319.8	1545.2	1642.0	1546.2
32.5°	98.9	99.8	105.0	120.2	199.1	371.8	780.5	1423.2	1663.9	1738.5	1617.9
35°	79.9	84.8	93.1	107.7	185.6	357.8	780.5	1512.4	1781.0	1836.0	1686.3
37.5°	76.9	81.3	88.6	101.0	178.1	350.9	764.9	1598.4	1900.6	1946.5	1742.6
40°	75.3	78.9	85.8	95.9	174.9	343.0	742.1	1674.2	2017.4	2057.1	1795.3
42.5°	74.2	77.3	83.8	92.7	170.8	334.3	723.7	1735.1	2118.9	2151.6	1845.5
45°	73.6	76.9	84.0	94.3	162.5	322.8	717.6	1800.9	2202.3	2230.5	1899.8
47.5°	73.6	77.5	85.0	97.7	152.6	311.0	736.8	1887.8	2281.2	2295.0	1963.8
50°	73.0	77.3	87.8	94.3	138.2	295.9	781.9	1997.1	2366.6	2368.1	2044.9
52.5°	71.8	76.9	94.5	92.3	121.6	276.2	842.8	2137.5	2492.9	2502.4	2171.8
55°	70.4	76.3	92.7	87.8	108.0	252.7	892.6	2308.0	2670.4	2696.7	2358.5
57.5°	68.6	75.5	89.8	81.5	99.0	222.4	910.6	2433.0	2794.4	2860.4	2568.8
60°	67.0	74.9	81.0	77.7	93.5	196.9	875.8	2408.3	2785.9	2928.2	2755.2
62.5°	65.4	75.5	73.9	75.3	90.9	180.5	784.8	2210.4	2644.9	2858.2	2893.4
65°	63.7	70.2	69.8	73.3	90.4	174.0	650.6	1913.6	2372.5	2637.0	2926.0
67.5°	61.3	64.8	66.8	70.8	92.3	168.2	525.0	1578.5	1993.9	2305.5	2756.0
70°	58.7	61.7	63.9	67.6	91.1	165.7	436.7	1244.8	1582.1	1889.5	2420.5
72.5°	55.4	57.9	59.9	63.4	90.0	164.3	368.9	1002.5	1181.2	1403.6	1968.0
75°	51.4	53.7	55.2	58.7	86.2	150.5	290.0	848.3	883.9	976.4	1567.5
77.5°	46.9	48.7	49.8	53.7	76.3	125.1	209.8	654.4	686.4	708.9	1201.7
80°	41.5	43.3	43.9	47.6	63.3	97.9	136.8	483.3	513.4	518.5	784.8
82.5°	35.4	37.2	37.2	40.7	51.8	70.4	89.8	331.1	337.1	354.5	554.7
85°	28.5	29.9	29.9	31.7	40.2	52.6	61.7	166.3	164.5	187.8	480.6
87.5°	20.3	21.4	22.3	22.7	28.7	34.8	37.2	50.6	33.4	38.4	308.6
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°	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1395.7	1407.0	1395.5	1387.2	1351.4	1322.0	1282.6	1262.4
5°	1500.3	1528.9	1519.2	1484.5	1409.7	1325.7	1230.2	1187.1
7.5°	1487.6	1554.2	1555.8	1490.8	1380.7	1256.9	1127.7	1066.4
10°	1389.2	1474.4	1498.7	1435.6	1318.8	1180.4	1032.1	962.2
12.5°	1279.2	1362.7	1381.3	1359.5	1261.9	1122.9	972.5	903.8
15°	1189.3	1226.7	1248.8	1267.8	1213.1	1099.9	969.1	893.8
17.5°	1134.5	1130.4	1136.7	1169.7	1179.0	1126.2	1020.5	937.5
20°	1114.8	1051.3	1049.7	1095.2	1163.0	1188.9	1120.9	1021.2
22.5°	1125.7	1022.9	1009.8	1063.8	1171.5	1279.2	1252.6	1138.9
25°	1163.2	1025.3	1014.7	1067.0	1202.3	1375.5	1394.7	1291.1
27.5°	1222.3	1040.3	1026.4	1080.0	1243.3	1456.4	1534.7	1438.6
30°	1278.5	1066.4	1049.1	1105.7	1280.6	1488.4	1620.5	1553.6
32.5°	1346.7	1115.2	1084.9	1152.9	1326.9	1539.4	1697.0	1648.9
35°	1413.5	1184.7	1147.2	1225.9	1378.5	1602.9	1784.4	1770.7
37.5°	1486.9	1275.7	1244.7	1320.2	1449.1	1662.8	1895.9	1913.5
40°	1565.1	1396.3	1359.5	1457.8	1558.6	1737.9	2012.3	2054.6
42.5°	1644.0	1530.1	1486.3	1585.8	1679.0	1812.0	2111.9	2174.6
45°	1734.3	1675.4	1654.7	1762.4	1794.7	1882.6	2185.5	2263.4
47.5°	1839.5	1840.3	1873.7	1916.8	1911.3	1962.5	2259.4	2342.6
50°	1962.3	2046.1	2119.9	2148.5	2031.5	2048.3	2362.0	2448.8
52.5°	2109.8	2292.2	2383.6	2364.8	2161.0	2153.0	2524.5	2595.1
55°	2294.2	2552.8	2643.5	2630.1	2309.8	2295.8	2727.0	2768.1
57.5°	2507.7	2805.2	2888.7	2828.2	2488.5	2452.4	2894.4	2903.1
60°	2695.3	3005.3	3078.5	3011.4	2668.9	2619.0	2999.0	2956.8
62.5°	2799.7	3073.1	3124.5	3052.4	2792.4	2796.5	3021.9	2927.8
65°	2753.1	2901.7	2918.3	2912.4	2760.5	2899.5	2939.5	2793.6
67.5°	2497.6	2468.4	2496.3	2534.8	2487.8	2763.9	2711.1	2501.2
70°	2047.7	1886.9	1942.5	1968.4	1989.8	2378.4	2353.1	2037.2
72.5°	1543.2	1322.0	1365.8	1360.5	1459.3	1907.7	1830.0	1497.9
75°	1093.4	896.3	901.8	899.7	1018.3	1492.5	1325.2	1024.8
77.5°	765.0	649.4	652.4	664.6	684.6	1125.7	946.7	748.6
80°	526.1	492.8	509.2	510.3	474.5	756.2	699.4	600.8
82.5°	391.8	342.6	338.6	344.4	371.8	612.7	537.5	416.7
85°	320.8	202.8	163.1	204.4	329.5	606.7	357.1	219.8
87.5°	180.7	96.3	43.5	80.7	131.5	401.7	103.2	28.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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