

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: P298975

Luminaire Tested: **GLNA-AF-01-LED-E1-SLL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298975
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-01-LED-E1-SLL-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 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: 3124.6 lumens
Efficiency: N/A
Efficacy: 91.9 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

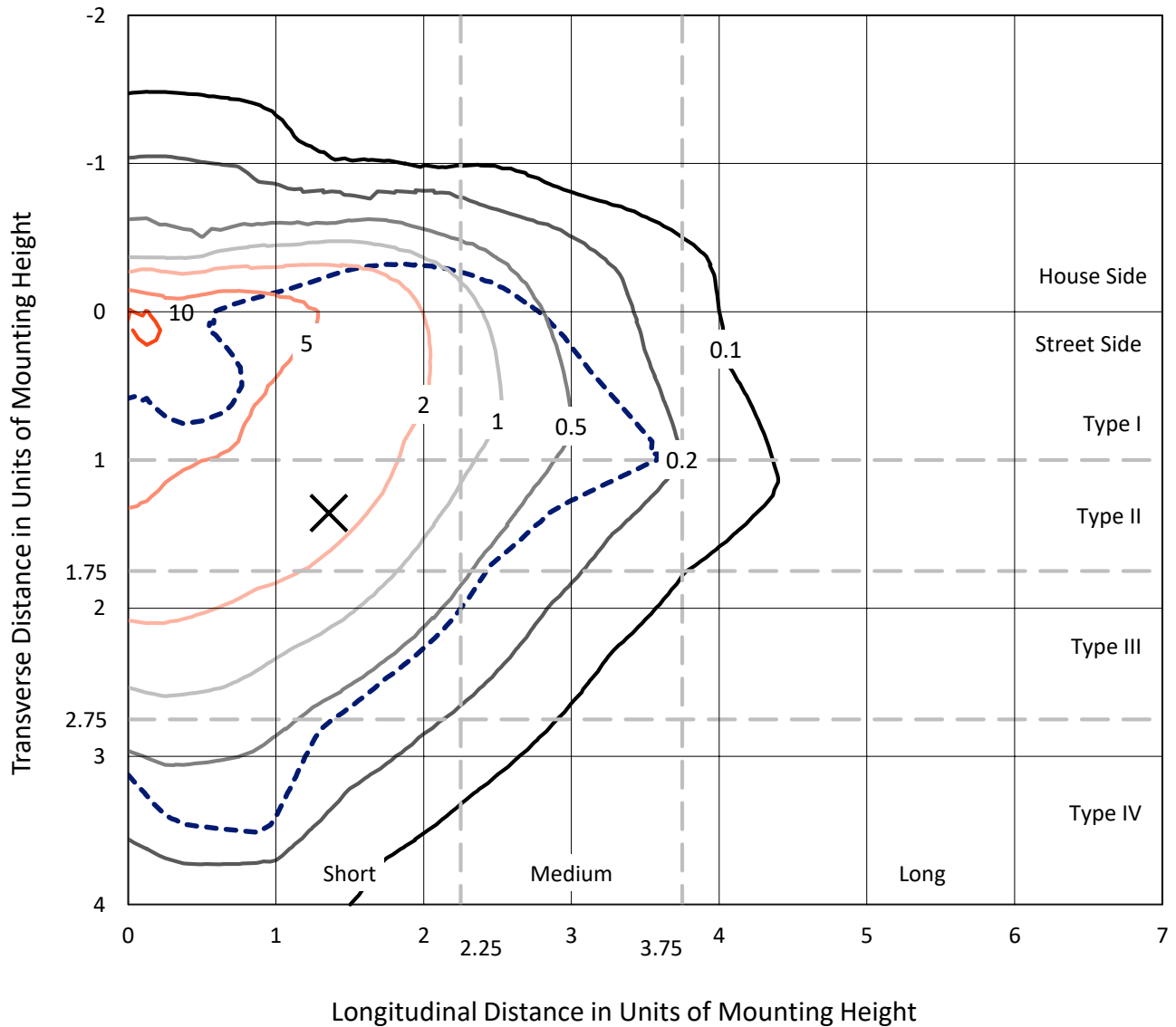


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Iso-Footcandle Lines of Horizontal Illumination

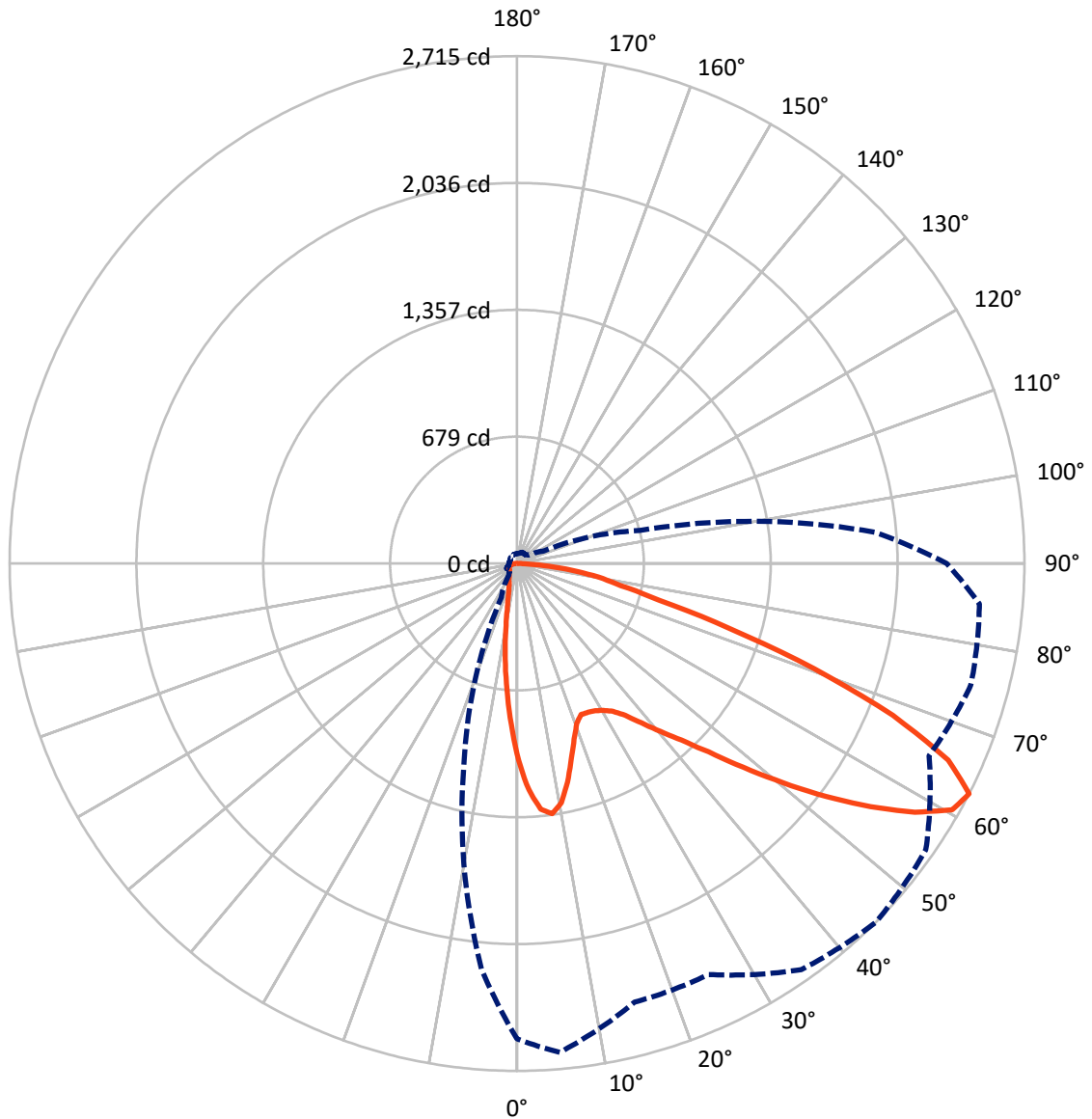
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.4 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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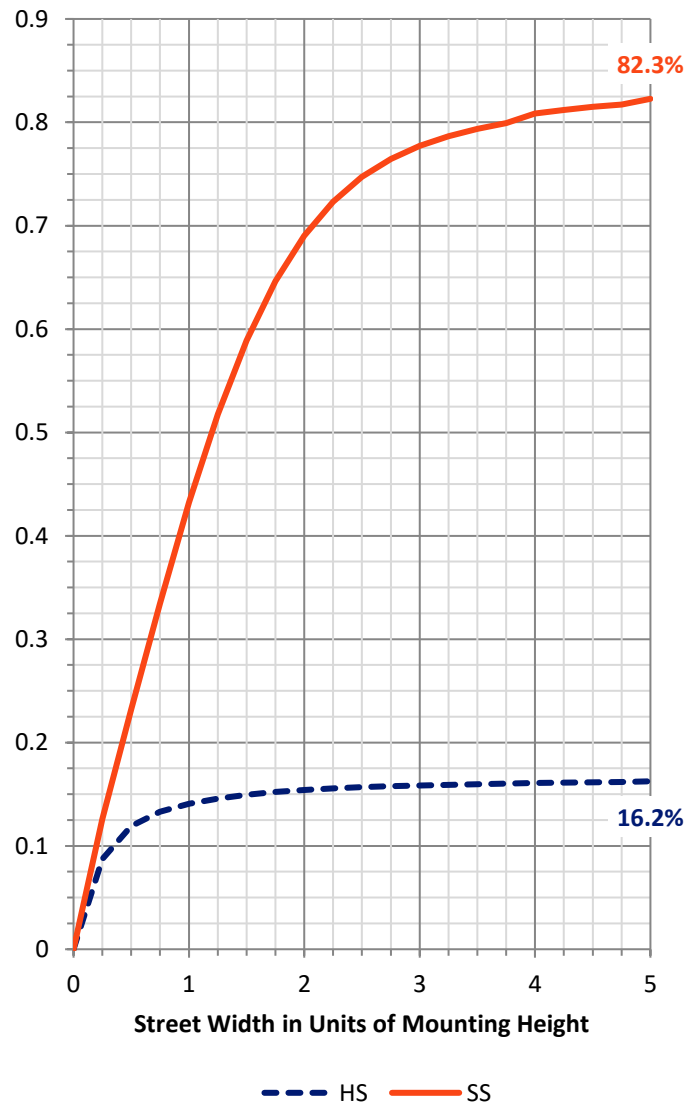
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	517.1	0.0	517.1
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	2607.5	0.0	2607.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	3124.6	0.0	3124.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	2.5
10°-20°	140.9	4.5
20°-30°	205.5	6.6
30°-40°	316.4	10.1
40°-50°	465.7	14.9
50°-60°	683.1	21.9
60°-70°	763.6	24.4
70°-80°	373.8	12.0
80°-90°	98.7	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°	3124.6	100.0
0°-180°	3124.6	100.0



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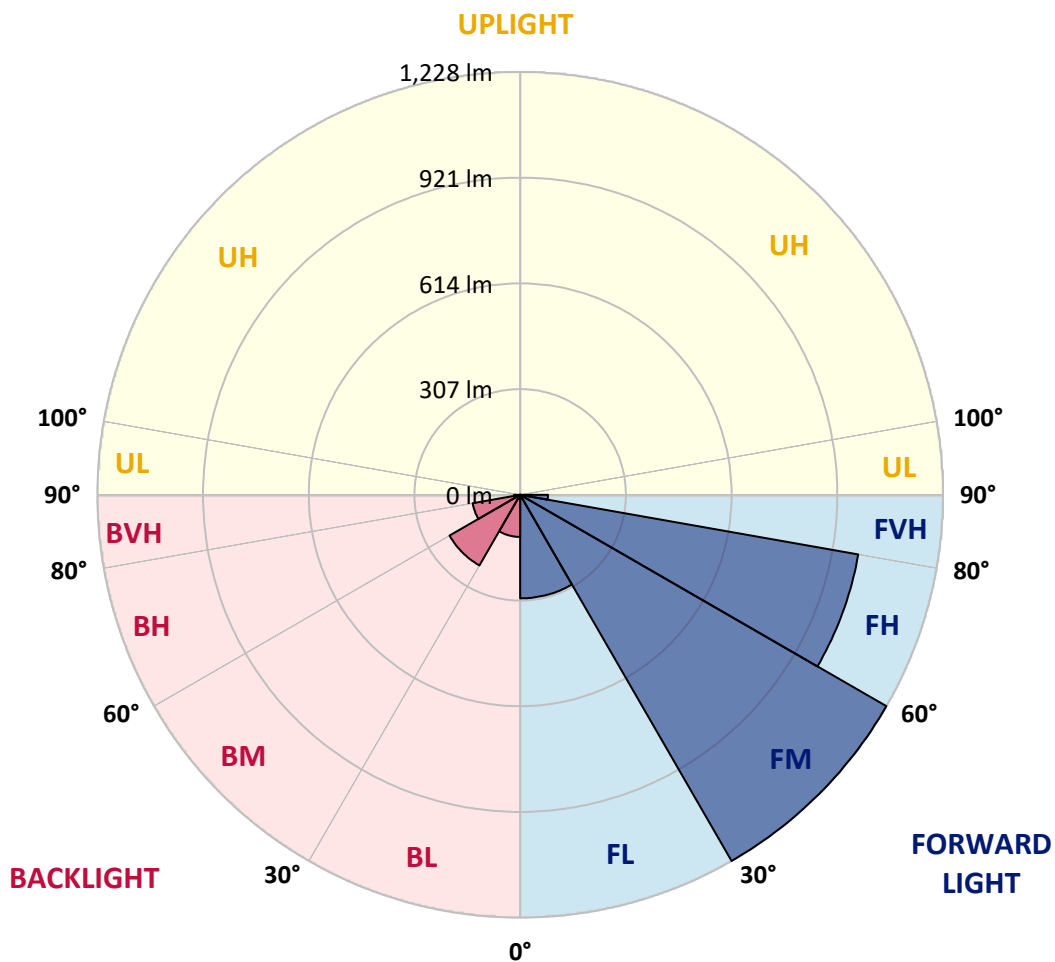
CATALOG NUMBER: GLNA-AF-01-LED-E1-SLL-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	300.9	9.6			
FM	(30°-60°)	1228.3	39.3			
FH	(60°-80°)	997.3	31.9			G1/1800
FVH	(80°-90°)	81.1	2.6			G1/100
BL	(0°-30°)	122.3	3.9	B1/500		
BM	(30°-60°)	236.9	7.6	B1/1000		
BH	(60°-80°)	140.2	4.5	B1/500		G1/500
BVH	(80°-90°)	17.6	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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1096.8	1114.4	1148.6	1174.1	1205.3	1212.5	1222.5	1212.6	1195.3	1172.3	1164.7
5°	1031.4	1068.9	1151.8	1224.9	1289.8	1320.0	1328.5	1303.5	1253.2	1187.0	1146.7
7.5°	926.5	979.7	1092.0	1199.6	1295.2	1351.8	1350.4	1292.5	1199.9	1092.2	1027.5
10°	835.9	896.8	1025.6	1145.8	1247.3	1302.1	1280.9	1207.0	1096.5	972.5	902.3
12.5°	785.3	844.9	975.6	1096.3	1181.2	1200.1	1183.9	1111.4	1007.3	882.0	820.5
15°	776.5	842.0	955.7	1054.0	1101.5	1085.1	1065.8	1033.3	959.8	852.8	788.7
17.5°	814.5	886.6	978.6	1024.4	1016.3	987.6	982.1	985.8	968.1	885.2	811.4
20°	887.3	973.9	1033.0	1010.5	951.6	912.0	913.4	968.6	1020.9	967.5	883.2
22.5°	989.5	1088.3	1111.4	1017.9	924.3	877.4	888.7	978.1	1105.3	1087.8	980.1
25°	1121.8	1211.8	1195.1	1044.6	927.0	881.7	890.7	1010.7	1204.9	1208.0	1100.0
27.5°	1249.9	1333.4	1265.3	1080.2	938.4	891.8	903.9	1062.0	1300.1	1338.5	1237.1
30°	1349.9	1408.0	1293.2	1112.7	960.7	911.5	926.5	1110.8	1343.4	1426.6	1342.5
32.5°	1432.7	1474.4	1337.5	1152.9	1001.7	942.6	968.9	1170.0	1405.7	1510.5	1445.7
35°	1538.4	1550.3	1392.6	1197.7	1065.1	996.7	1029.4	1228.1	1465.2	1595.1	1547.4
37.5°	1662.5	1647.2	1444.7	1259.0	1147.1	1081.4	1108.4	1291.8	1514.1	1691.2	1651.3
40°	1785.1	1748.3	1510.0	1354.2	1266.6	1181.2	1213.1	1359.8	1559.8	1787.3	1752.8
42.5°	1889.4	1834.9	1574.4	1458.8	1377.9	1291.3	1329.5	1428.4	1603.4	1869.4	1840.9
45°	1966.5	1898.8	1635.7	1559.2	1531.2	1437.6	1455.7	1506.8	1650.6	1938.0	1913.4
47.5°	2035.4	1963.0	1705.0	1660.6	1665.4	1627.9	1598.9	1598.2	1706.3	1994.0	1981.9
50°	2127.6	2052.2	1779.6	1765.0	1866.7	1841.8	1777.7	1704.9	1776.7	2057.6	2056.2
52.5°	2254.7	2193.4	1870.7	1877.5	2054.7	2070.9	1991.5	1833.1	1886.9	2174.1	2166.0
55°	2405.0	2369.2	1994.7	2006.9	2285.1	2296.8	2217.9	1993.3	2049.1	2343.0	2320.2
57.5°	2522.3	2514.8	2130.7	2162.2	2457.2	2509.8	2437.3	2178.8	2231.9	2485.2	2427.9
60°	2569.0	2605.6	2275.5	2318.8	2616.5	2674.6	2611.1	2341.8	2393.8	2544.2	2420.5
62.5°	2543.8	2625.5	2429.7	2426.1	2652.0	2714.7	2670.0	2432.5	2513.9	2483.3	2298.0
65°	2427.2	2553.9	2519.2	2398.5	2530.4	2535.5	2521.1	2391.9	2542.3	2291.1	2061.3
67.5°	2173.1	2355.5	2401.4	2161.5	2202.3	2168.9	2144.6	2170.0	2394.5	2003.1	1732.4
70°	1770.0	2044.5	2066.4	1728.8	1710.2	1687.7	1639.5	1779.1	2103.1	1641.7	1374.6
72.5°	1301.5	1590.0	1657.5	1268.0	1182.1	1186.7	1148.6	1340.7	1709.9	1219.5	1026.3
75°	890.4	1151.3	1296.8	884.7	781.7	783.6	778.7	950.0	1361.9	848.3	768.0
77.5°	650.5	822.6	978.1	594.8	577.4	566.8	564.2	664.7	1044.1	616.0	596.3
80°	522.0	607.7	657.0	412.2	443.3	442.4	428.2	457.1	681.9	450.5	446.0
82.5°	362.1	467.0	532.3	323.1	299.2	294.2	297.7	340.4	482.0	308.0	292.8
85°	191.0	310.2	527.1	286.3	177.6	141.7	176.3	278.7	417.6	163.2	142.9
87.5°	24.4	89.7	349.0	114.2	70.1	37.7	83.7	157.0	268.1	33.3	29.1
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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	1145.3	1122.5	1092.6	1064.9	1036.2	1007.7	970.4	947.1	930.9	927.8	921.0
5°	1117.5	1041.6	984.2	934.6	889.6	826.0	790.8	761.6	745.9	744.4	740.6
7.5°	989.2	884.4	806.9	736.7	673.0	621.6	564.9	538.5	527.6	530.2	532.8
10°	855.7	738.6	649.6	577.8	521.6	478.4	432.9	402.1	380.8	376.5	375.6
12.5°	758.2	629.7	543.3	492.6	449.2	408.4	360.2	323.9	296.3	286.8	280.5
15°	716.9	576.4	485.9	431.3	383.3	331.7	286.8	248.9	223.5	215.2	210.6
17.5°	725.7	561.7	446.4	376.5	315.2	261.2	204.7	172.2	157.0	153.1	153.1
20°	771.8	558.9	413.7	326.0	249.5	187.0	140.7	122.1	117.1	116.6	118.0
22.5°	836.3	568.6	389.4	282.3	193.9	136.6	109.6	102.7	100.5	101.0	102.5
25°	932.5	601.0	371.7	243.2	152.2	111.8	97.7	93.6	92.6	94.0	95.8
27.5°	1046.5	633.5	360.7	213.8	128.5	102.2	92.9	88.7	89.3	91.1	92.7
30°	1146.7	660.1	343.4	192.9	121.1	102.7	92.9	87.1	86.4	86.8	87.3
32.5°	1236.6	678.1	323.1	173.0	104.4	91.2	86.8	85.9	82.1	80.7	80.9
35°	1314.0	678.1	310.9	161.3	93.6	80.9	73.7	69.4	67.5	67.6	69.6
37.5°	1388.7	664.5	304.9	154.7	87.8	76.9	70.6	66.8	64.2	63.7	64.1
40°	1454.6	644.8	298.0	152.0	83.3	74.5	68.6	65.4	62.7	61.8	62.0
42.5°	1507.6	628.8	290.4	148.4	80.5	72.8	67.1	64.4	61.3	60.4	60.3
45°	1564.8	623.5	280.5	141.2	81.9	73.0	66.8	63.9	60.8	59.8	59.4
47.5°	1640.1	640.2	270.2	132.6	84.9	73.9	67.3	63.9	60.6	59.8	59.4
50°	1735.1	679.3	257.1	120.0	81.9	76.3	67.1	63.3	60.6	59.8	59.1
52.5°	1857.1	732.2	240.0	105.7	80.2	82.1	66.8	62.3	59.8	58.6	57.4
55°	2005.3	775.5	219.5	93.8	76.3	80.5	66.3	61.2	58.4	56.7	55.6
57.5°	2113.9	791.1	193.3	86.1	70.8	78.0	65.6	59.6	56.7	55.3	54.0
60°	2092.4	760.9	171.1	81.2	67.5	70.4	65.1	58.2	55.1	54.1	52.9
62.5°	1920.5	681.9	156.8	79.0	65.4	64.2	65.6	56.9	53.8	52.7	52.4
65°	1662.7	565.2	151.2	78.5	63.7	60.6	61.0	55.3	52.2	51.4	51.0
67.5°	1371.5	456.2	146.2	80.2	61.5	58.0	56.4	53.2	50.6	49.8	49.1
70°	1081.6	379.4	143.9	79.2	58.8	55.5	53.6	51.0	48.8	47.9	47.4
72.5°	871.0	320.5	142.7	78.1	55.1	52.0	50.3	48.1	45.7	45.3	44.8
75°	737.1	252.0	130.8	74.9	51.0	47.9	46.7	44.7	42.3	42.3	41.9
77.5°	568.6	182.2	108.7	66.3	46.7	43.3	42.3	40.7	38.0	38.5	38.3
80°	420.0	118.9	85.0	55.0	41.4	38.1	37.6	36.1	33.1	33.8	33.8
82.5°	287.7	78.0	61.2	45.0	35.4	32.3	32.3	30.7	27.5	27.8	28.9
85°	144.5	53.6	45.7	34.8	27.5	25.9	25.9	24.8	21.5	21.6	23.0
87.5°	44.0	32.3	30.2	24.9	19.7	19.4	18.5	17.7	15.6	15.4	16.3
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°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	910.5	900.7	888.9	862.8	854.0	853.4	861.4	853.1	868.9	862.3	869.6
5°	734.2	724.7	711.4	678.1	657.8	644.1	637.6	618.4	632.2	622.1	630.6
7.5°	540.0	542.3	533.5	513.9	469.8	447.6	434.6	422.9	433.0	432.0	448.1
10°	379.6	385.6	379.4	359.7	323.9	311.7	314.1	318.8	332.0	338.8	363.8
12.5°	273.3	272.9	269.0	251.3	227.8	229.1	238.9	247.0	259.2	266.4	291.8
15°	204.0	201.0	199.2	184.8	171.4	174.4	179.2	180.0	187.7	192.0	212.7
17.5°	154.2	155.8	157.6	147.4	137.2	135.3	131.6	126.9	129.2	130.0	140.3
20°	122.4	128.6	133.3	126.1	115.8	110.2	105.4	102.4	102.4	102.2	105.1
22.5°	107.0	111.5	116.5	111.5	102.2	97.4	94.6	92.2	91.9	91.9	94.6
25°	98.6	101.9	106.7	103.3	96.4	92.7	90.2	87.1	85.9	85.5	87.4
27.5°	94.5	95.8	98.2	95.1	89.3	87.6	86.9	84.2	82.6	81.7	83.7
30°	87.4	87.1	87.3	84.2	79.5	79.3	80.5	81.1	80.5	80.3	83.3
32.5°	80.9	80.2	80.0	77.3	73.0	72.0	73.0	74.0	75.2	76.9	80.3
35°	72.7	74.4	75.4	73.0	67.8	64.7	63.6	61.7	60.6	60.6	64.6
37.5°	66.1	70.1	71.7	69.4	63.7	59.4	57.4	57.0	57.2	57.9	61.7
40°	63.9	66.8	68.1	66.0	60.3	56.4	55.1	54.8	55.1	56.2	59.9
42.5°	62.5	64.6	64.4	61.7	57.0	54.3	53.6	53.2	53.6	54.6	58.8
45°	61.3	62.7	61.3	58.0	53.8	52.4	52.5	52.4	52.7	53.8	57.7
47.5°	60.3	60.8	59.1	55.8	51.4	51.0	51.7	52.2	52.5	53.5	57.5
50°	58.8	58.8	57.2	53.8	49.3	49.5	50.3	51.5	51.7	52.7	56.0
52.5°	56.9	56.7	55.6	52.4	47.6	48.1	48.1	49.5	49.8	51.0	54.5
55°	55.3	55.0	54.5	51.4	46.1	46.9	46.4	46.9	47.7	49.0	52.7
57.5°	54.0	53.2	53.2	50.5	44.8	45.2	44.0	44.7	45.7	46.7	50.6
60°	52.5	51.9	52.2	49.3	42.9	42.6	42.1	43.4	43.8	45.0	49.0
62.5°	51.0	50.5	50.6	47.9	41.6	40.7	40.7	41.9	42.1	43.8	47.6
65°	49.8	49.1	49.0	46.6	40.0	39.0	39.5	40.0	40.4	42.1	45.7
67.5°	48.6	47.2	47.2	45.3	38.3	37.2	38.3	38.1	38.7	40.2	43.1
70°	47.1	45.2	45.3	44.5	36.6	35.4	36.2	36.1	36.4	37.4	40.4
72.5°	44.7	43.1	43.4	43.1	34.8	33.1	33.5	33.5	33.5	34.3	37.4
75°	41.6	40.4	41.4	42.3	32.8	30.4	30.7	30.7	30.2	30.7	34.5
77.5°	37.7	37.1	40.5	39.4	30.4	27.5	27.5	27.2	26.2	26.8	30.9
80°	33.7	33.1	37.4	33.0	27.7	23.9	23.5	22.6	21.6	22.1	26.3
82.5°	29.4	28.9	31.4	25.3	23.9	19.7	18.9	17.3	16.3	16.8	20.6
85°	24.1	24.1	24.3	19.1	18.2	15.1	14.1	12.0	10.8	11.2	14.8
87.5°	17.2	17.7	16.3	13.0	10.8	8.4	7.8	6.5	5.5	6.4	7.8
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7	1055.7
2.5°	907.4	926.3	947.8	975.2	998.8	1037.4	1074.5	1096.8
5°	678.5	709.9	749.0	799.4	846.3	916.7	986.6	1031.4
7.5°	485.5	519.2	561.5	624.3	690.7	780.5	872.9	926.5
10°	401.8	436.3	471.8	514.3	568.6	666.3	775.5	835.9
12.5°	332.4	369.3	407.6	452.3	502.6	589.8	715.7	785.3
15°	254.4	295.6	340.7	397.3	460.3	561.2	700.9	776.5
17.5°	174.4	220.4	275.8	345.6	422.7	551.8	727.4	814.5
20°	120.0	153.6	212.8	294.6	387.4	550.7	778.2	887.3
22.5°	100.5	115.4	158.7	247.7	360.7	565.5	857.1	989.5
25°	92.9	101.9	126.7	207.0	341.3	599.5	965.7	1121.8
27.5°	88.5	96.5	115.1	180.4	326.0	638.9	1071.3	1249.9
30°	90.2	98.4	111.8	166.8	305.2	671.9	1165.1	1349.9
32.5°	81.2	84.9	95.8	154.7	290.3	699.6	1247.2	1432.7
35°	69.3	75.6	85.5	149.1	290.6	718.1	1336.7	1538.4
37.5°	66.0	72.3	79.5	147.0	294.6	737.9	1439.4	1662.5
40°	63.9	69.8	75.9	145.9	298.4	755.9	1540.1	1785.1
42.5°	62.5	67.8	75.6	141.7	300.3	772.1	1622.8	1889.4
45°	62.3	67.8	76.9	137.6	303.2	789.4	1692.2	1966.5
47.5°	62.5	70.1	74.4	132.6	303.2	818.4	1773.6	2035.4
50°	61.8	73.9	71.7	125.6	296.1	873.4	1885.3	2127.6
52.5°	61.5	73.4	66.3	114.8	283.9	960.7	2028.3	2254.7
55°	60.6	70.8	62.5	98.6	269.7	1055.8	2181.6	2405.0
57.5°	59.8	62.7	60.4	84.5	247.7	1122.8	2287.0	2522.3
60°	67.0	54.8	58.8	77.6	218.3	1141.2	2282.9	2569.0
62.5°	62.0	51.4	56.5	76.1	197.7	1089.6	2177.4	2543.8
65°	48.6	49.1	54.3	80.5	192.2	953.1	1990.5	2427.2
67.5°	44.5	46.9	52.0	86.3	192.8	763.1	1711.3	2173.1
70°	41.9	44.5	49.5	89.2	194.1	568.9	1352.9	1770.0
72.5°	39.0	41.3	46.6	89.7	185.1	413.2	1042.8	1301.5
75°	35.5	37.6	42.4	78.1	153.4	286.7	797.7	890.4
77.5°	31.6	33.1	37.2	60.3	113.9	183.4	598.7	650.5
80°	27.0	27.8	31.3	44.2	78.0	114.8	473.7	522.0
82.5°	21.6	22.0	24.3	33.1	50.6	73.7	317.3	362.1
85°	15.3	15.3	16.7	24.1	34.5	46.7	172.2	191.0
87.5°	7.2	7.4	7.4	13.2	18.0	23.8	39.7	24.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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