

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: P298983

Luminaire Tested: **GLNA-AF-02-LED-E1-SLL-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298983
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-02-LED-E1-SLL-8030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K 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: 5734.7 lumens
Efficiency: N/A
Efficacy: 86.9 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): 66
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



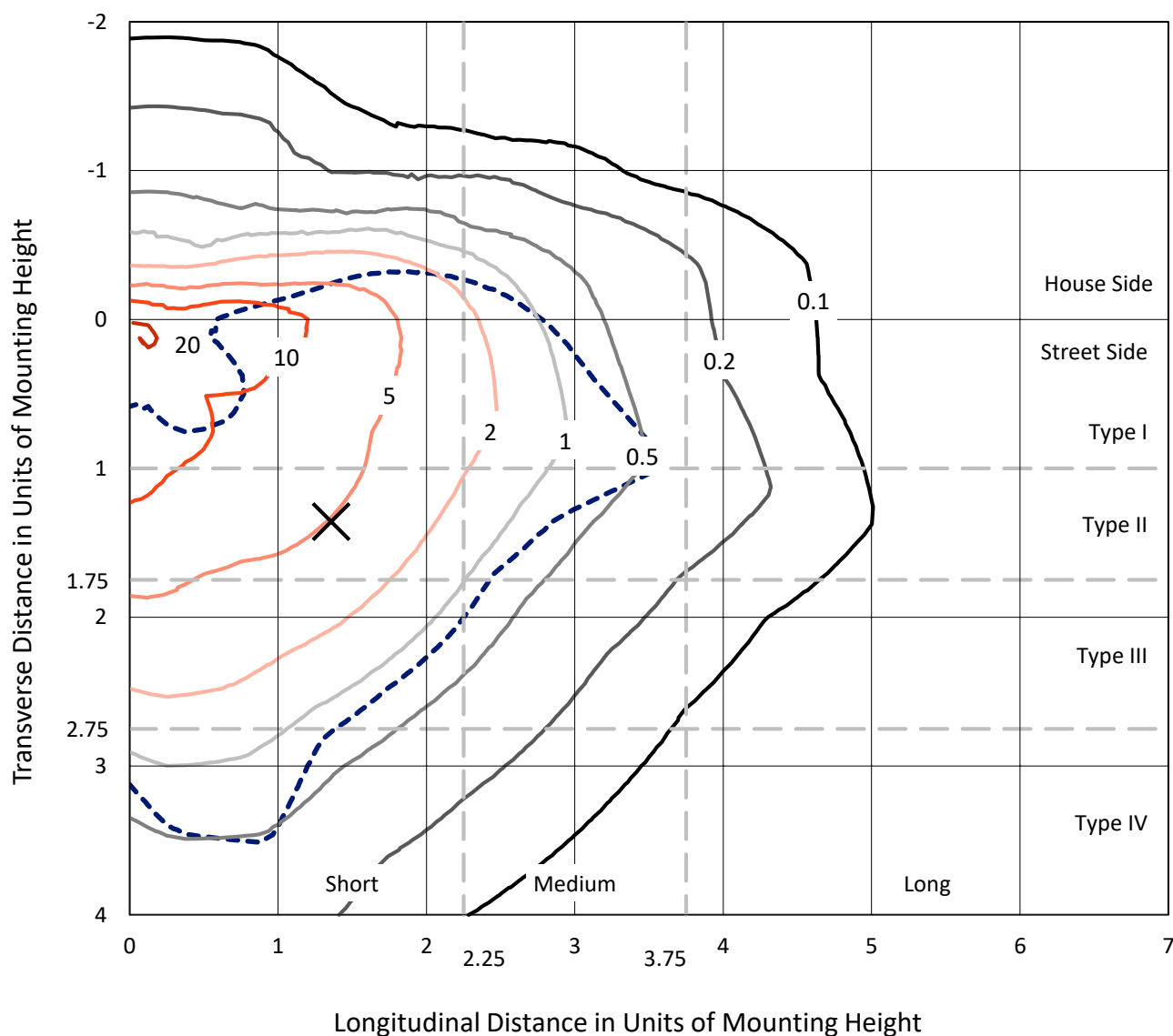
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

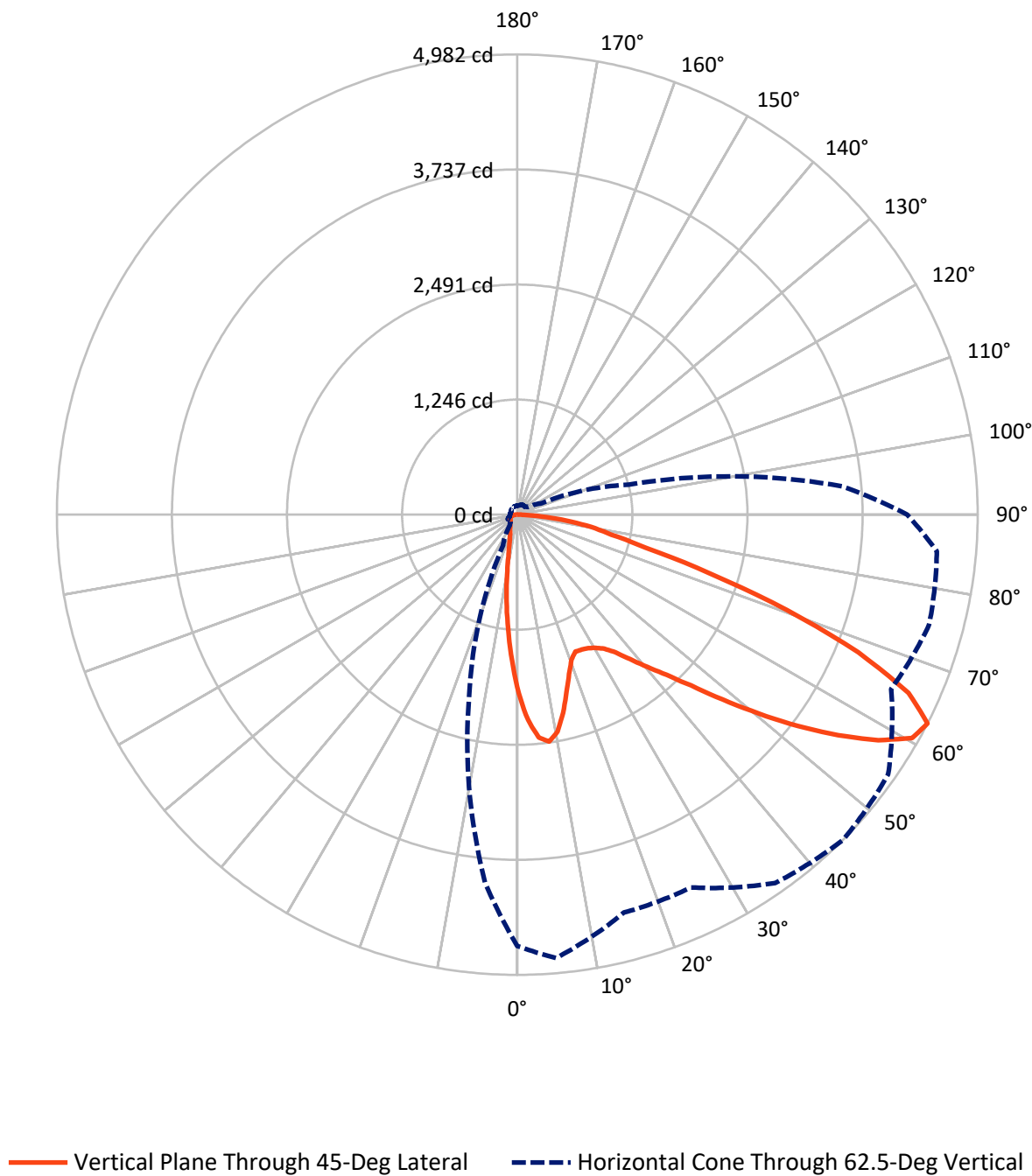


Based on 10 foot mounting height. Maximum calculated value = 22.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	949.0	0.0	949.0
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	4785.7	0.0	4785.7
	% Fixture	83.5	0.0	83.5
Total	Lumens	5734.7	0.0	5734.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.0	2.5
10°-20°	258.6	4.5
20°-30°	377.1	6.6
30°-40°	580.8	10.1
40°-50°	854.7	14.9
50°-60°	1253.7	21.9
60°-70°	1401.5	24.4
70°-80°	686.1	12.0
80°-90°	181.2	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°	5734.7	100.0
0°-180°	5734.7	100.0

Coefficient of Utilization



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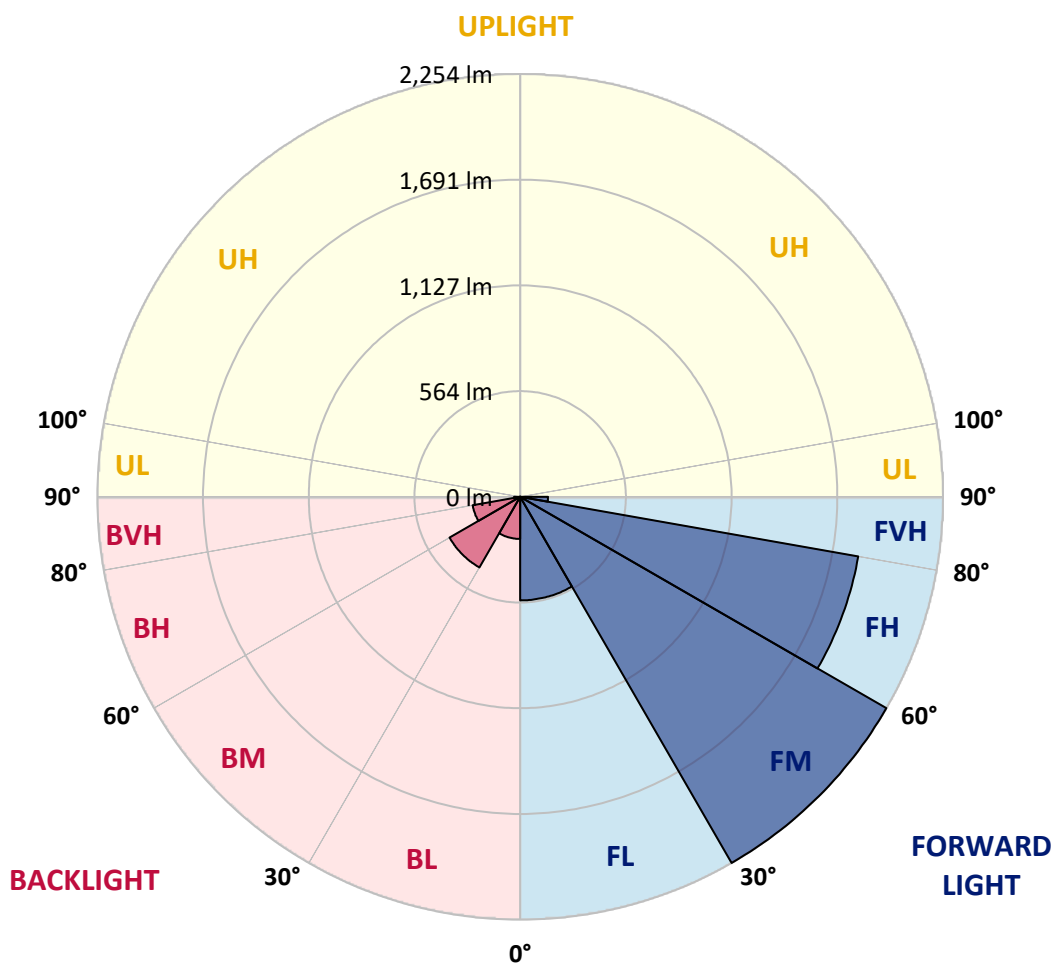
CATALOG NUMBER: GLNA-AF-02-LED-E1-SLL-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	552.2	9.6			
FM	(30°-60°)	2254.4	39.3			
FH	(60°-80°)	1830.3	31.9			G2/5000
FVH	(80°-90°)	148.8	2.6			G2/225
BL	(0°-30°)	224.5	3.9	B1/500		
BM	(30°-60°)	434.8	7.6	B1/1000		
BH	(60°-80°)	257.3	4.5	B1/500		G1/500
BVH	(80°-90°)	32.4	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°	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6
2.5°	2013.1	2045.3	2108.1	2154.9	2212.1	2225.3	2243.7	2225.7	2193.8	2151.6	2137.7
5°	1893.1	1961.8	2114.0	2248.1	2367.2	2422.7	2438.2	2392.4	2300.1	2178.7	2104.6
7.5°	1700.5	1798.2	2004.3	2201.7	2377.2	2481.0	2478.4	2372.2	2202.3	2004.6	1885.8
10°	1534.3	1645.9	1882.4	2103.0	2289.3	2389.9	2351.0	2215.3	2012.5	1784.9	1656.0
12.5°	1441.3	1550.7	1790.6	2012.2	2167.9	2202.6	2172.9	2039.9	1848.8	1618.8	1505.9
15°	1425.2	1545.4	1754.1	1934.4	2021.7	1991.5	1956.1	1896.5	1761.5	1565.2	1447.6
17.5°	1495.0	1627.3	1796.0	1880.2	1865.3	1812.6	1802.6	1809.2	1776.8	1624.7	1489.2
20°	1628.6	1787.4	1895.9	1854.7	1746.5	1673.9	1676.5	1777.7	1873.8	1775.8	1620.9
22.5°	1816.1	1997.4	2039.9	1868.2	1696.4	1610.3	1631.2	1795.1	2028.6	1996.5	1798.8
25°	2058.8	2224.1	2193.5	1917.3	1701.4	1618.2	1634.9	1855.0	2211.4	2217.2	2018.9
27.5°	2294.0	2447.3	2322.4	1982.6	1722.2	1636.8	1658.9	1949.1	2386.1	2456.7	2270.5
30°	2477.5	2584.1	2373.4	2042.2	1763.2	1673.0	1700.5	2038.7	2465.6	2618.4	2464.0
32.5°	2629.5	2706.0	2454.8	2115.9	1838.5	1730.0	1778.3	2147.5	2580.0	2772.3	2653.4
35°	2823.6	2845.4	2556.0	2198.2	1954.9	1829.4	1889.3	2254.0	2689.1	2927.7	2840.1
37.5°	3051.3	3023.3	2651.5	2310.8	2105.3	1984.7	2034.3	2371.0	2778.9	3103.9	3030.7
40°	3276.4	3208.8	2771.4	2485.4	2324.7	2167.9	2226.6	2495.8	2862.8	3280.4	3217.1
42.5°	3467.7	3367.7	2889.5	2677.4	2528.9	2370.0	2440.0	2621.6	2942.8	3431.1	3378.8
45°	3609.3	3485.0	3002.1	2861.8	2810.4	2638.6	2671.7	2765.6	3029.5	3557.0	3511.8
47.5°	3735.6	3602.9	3129.4	3047.8	3056.6	2987.9	2934.5	2933.3	3131.8	3659.7	3637.6
50°	3904.9	3766.6	3266.2	3239.4	3426.1	3380.3	3262.7	3129.1	3260.9	3776.4	3773.8
52.5°	4138.2	4025.8	3433.3	3445.9	3771.1	3800.9	3655.2	3364.4	3463.2	3990.4	3975.3
55°	4414.2	4348.5	3661.0	3683.4	4194.0	4215.5	4070.7	3658.4	3760.9	4300.4	4258.4
57.5°	4629.4	4615.6	3910.6	3968.4	4509.9	4606.4	4473.4	3999.0	4096.3	4561.3	4456.0
60°	4715.1	4782.3	4176.4	4255.8	4802.2	4909.0	4792.4	4298.0	4393.6	4669.5	4442.5
62.5°	4668.9	4818.8	4459.5	4452.8	4867.4	4982.4	4900.5	4464.5	4614.0	4557.8	4217.8
65°	4454.8	4687.4	4623.7	4402.1	4644.2	4653.6	4627.1	4390.1	4666.0	4205.1	3783.2
67.5°	3988.4	4323.3	4407.4	3967.1	4042.1	3980.6	3936.1	3982.8	4394.8	3676.4	3179.5
70°	3248.6	3752.4	3792.7	3173.0	3138.9	3097.6	3009.0	3265.3	3859.9	3013.1	2522.9
72.5°	2388.7	2918.3	3042.1	2327.2	2169.6	2178.0	2108.1	2460.7	3138.3	2238.2	1883.6
75°	1634.2	2113.1	2380.2	1623.8	1434.8	1438.2	1429.3	1743.6	2499.6	1557.0	1409.5
77.5°	1193.9	1509.7	1795.1	1091.6	1059.8	1040.3	1035.6	1220.0	1916.4	1130.5	1094.5
80°	958.0	1115.4	1205.7	756.6	813.6	812.1	785.9	838.9	1251.5	826.9	818.6
82.5°	664.6	857.2	976.9	592.9	549.1	539.9	546.4	624.8	884.6	565.2	537.5
85°	350.6	569.3	967.5	525.5	325.9	260.0	323.5	511.6	766.4	299.5	262.2
87.5°	44.8	164.6	640.5	209.7	128.6	69.3	153.6	288.1	492.1	61.1	53.3
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°	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6
2.5°	2102.1	2060.2	2005.3	1954.5	1901.9	1849.5	1781.1	1738.2	1708.6	1702.9	1690.4
5°	2051.1	1911.7	1806.4	1715.3	1632.7	1515.9	1451.4	1397.7	1369.1	1366.3	1359.4
7.5°	1815.5	1623.2	1481.0	1352.1	1235.1	1140.9	1036.8	988.4	968.4	973.1	977.8
10°	1570.5	1355.6	1192.2	1060.4	957.4	878.0	794.5	738.1	698.9	691.0	689.5
12.5°	1391.5	1155.7	997.2	904.1	824.4	749.6	661.1	594.5	543.8	526.4	514.9
15°	1315.8	1058.0	891.9	791.6	703.6	608.7	526.4	456.7	410.2	395.0	386.5
17.5°	1331.9	1030.9	819.3	691.0	578.5	479.5	375.8	316.1	288.1	280.9	280.9
20°	1416.5	1025.8	759.3	598.4	458.0	343.2	258.2	224.1	215.0	214.1	216.5
22.5°	1535.0	1043.5	714.7	518.0	355.9	250.6	201.1	188.5	184.4	185.4	188.2
25°	1711.5	1103.1	682.3	446.4	279.3	205.2	179.3	171.8	169.9	172.4	175.9
27.5°	1920.8	1162.7	662.0	392.5	235.8	187.6	170.5	162.7	163.9	167.1	170.2
30°	2104.6	1211.6	630.2	354.1	222.3	188.5	170.5	159.9	158.6	159.2	160.2
32.5°	2269.6	1244.6	592.9	317.5	191.7	167.4	159.2	157.7	150.6	148.1	148.5
35°	2411.7	1244.6	570.6	296.1	171.8	148.5	135.3	127.4	123.8	124.1	127.7
37.5°	2548.8	1219.7	559.6	284.0	161.1	141.2	129.6	122.6	117.9	117.0	117.6
40°	2669.8	1183.4	547.0	279.0	152.9	136.8	125.9	120.0	115.0	113.5	113.8
42.5°	2766.9	1154.1	533.1	272.4	147.8	133.7	123.2	118.2	112.6	110.9	110.6
45°	2871.9	1144.3	514.9	259.1	150.3	134.0	122.6	117.3	111.5	109.7	109.1
47.5°	3010.3	1174.9	495.9	243.4	155.8	135.6	123.5	117.3	111.2	109.7	109.1
50°	3184.6	1246.8	471.9	220.3	150.3	140.0	123.2	116.3	111.2	109.7	108.5
52.5°	3408.5	1343.9	440.5	193.9	147.2	150.6	122.6	114.4	109.7	107.6	105.3
55°	3680.5	1423.3	402.8	172.1	140.0	147.8	121.7	112.3	107.3	104.1	102.1
57.5°	3879.7	1452.0	354.7	158.0	129.9	143.1	120.3	109.4	104.1	101.5	99.1
60°	3840.3	1396.5	314.0	149.1	123.8	129.3	119.4	106.8	101.2	99.4	97.0
62.5°	3524.8	1251.5	287.8	145.0	120.0	117.9	120.3	104.4	98.8	96.7	96.1
65°	3051.6	1037.4	277.4	144.1	117.0	111.2	112.0	101.5	95.8	94.3	93.6
67.5°	2517.2	837.3	268.3	147.2	112.9	106.5	103.5	97.7	92.9	91.4	90.2
70°	1985.1	696.4	264.1	145.3	107.9	101.8	98.4	93.6	89.5	87.9	87.0
72.5°	1598.5	588.2	261.9	143.4	101.2	95.5	92.3	88.2	83.8	83.2	82.3
75°	1352.8	462.5	240.0	137.4	93.6	87.9	85.8	82.0	77.6	77.6	77.0
77.5°	1043.5	334.4	199.6	121.7	85.8	79.4	77.6	74.7	69.7	70.6	70.3
80°	770.8	218.2	156.1	100.9	76.0	70.0	69.0	66.2	60.8	62.1	62.1
82.5°	528.1	143.1	112.3	82.6	64.9	59.3	59.3	56.4	50.5	51.1	53.0
85°	265.2	98.4	83.8	64.0	50.5	47.6	47.6	45.4	39.4	39.7	42.3
87.5°	80.7	59.3	55.5	45.7	36.2	35.6	34.0	32.4	28.7	28.3	30.0
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°	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6
2.5°	1671.1	1653.1	1631.5	1583.5	1567.4	1566.4	1581.0	1565.8	1594.8	1582.6	1596.1
5°	1347.6	1330.1	1305.7	1244.6	1207.4	1182.1	1170.2	1134.9	1160.4	1141.8	1157.3
7.5°	991.1	995.2	979.2	943.3	862.2	821.6	797.6	776.1	794.8	792.8	822.5
10°	696.7	707.7	696.4	660.2	594.5	572.2	576.6	585.1	609.4	621.9	667.7
12.5°	501.6	500.9	493.7	461.2	418.1	420.5	438.5	453.3	475.7	489.0	535.5
15°	374.5	368.8	365.7	339.1	314.6	320.0	328.8	330.3	344.6	352.5	390.3
17.5°	283.1	285.9	289.3	270.5	251.9	248.4	241.5	232.9	237.1	238.7	257.5
20°	224.7	236.1	244.7	231.4	212.6	202.3	193.5	187.9	187.9	187.6	192.9
22.5°	196.4	204.6	213.8	204.6	187.6	178.7	173.7	169.3	168.7	168.7	173.7
25°	181.0	187.0	195.8	189.5	176.8	170.2	165.5	159.9	157.7	157.0	160.5
27.5°	173.4	175.9	180.3	174.6	163.9	160.8	159.5	154.5	151.6	150.0	153.6
30°	160.5	159.9	160.2	154.5	145.9	145.6	147.8	148.8	147.8	147.5	152.9
32.5°	148.5	147.2	146.9	141.8	134.0	132.1	134.0	135.9	138.1	141.2	147.5
35°	133.3	136.5	138.4	134.0	124.4	118.8	116.7	113.2	111.2	111.2	118.5
37.5°	121.4	128.6	131.5	127.4	117.0	109.1	105.3	104.7	105.0	106.2	113.2
40°	117.3	122.6	125.1	121.1	110.6	103.5	101.2	100.6	101.2	103.2	110.0
42.5°	114.7	118.5	118.2	113.2	104.7	99.7	98.4	97.7	98.4	100.3	107.9
45°	112.6	115.0	112.6	106.5	98.8	96.1	96.4	96.1	96.7	98.8	105.9
47.5°	110.6	111.5	108.5	102.4	94.3	93.6	94.9	95.8	96.4	98.1	105.6
50°	107.9	107.9	105.0	98.8	90.5	90.8	92.3	94.6	94.9	96.7	102.8
52.5°	104.4	104.1	102.1	96.1	87.3	88.2	88.2	90.8	91.4	93.6	100.0
55°	101.5	100.9	100.0	94.3	84.5	86.1	85.1	86.1	87.6	89.9	96.7
57.5°	99.1	97.7	97.7	92.6	82.3	82.9	80.7	82.0	83.8	85.8	92.9
60°	96.4	95.2	95.8	90.5	78.8	78.2	77.3	79.7	80.4	82.6	89.9
62.5°	93.6	92.6	92.9	87.9	76.3	74.7	74.7	77.0	77.3	80.4	87.3
65°	91.4	90.2	89.9	85.5	73.5	71.6	72.6	73.5	74.1	77.3	83.8
67.5°	89.2	86.7	86.7	83.2	70.3	68.4	70.3	70.0	71.0	73.8	79.1
70°	86.4	82.9	83.2	81.7	67.1	64.9	66.5	66.2	66.8	68.7	74.1
72.5°	82.0	79.1	79.7	79.1	64.0	60.8	61.4	61.4	61.4	63.0	68.7
75°	76.3	74.1	76.0	77.6	60.2	55.8	56.4	56.4	55.5	56.4	63.3
77.5°	69.3	68.1	74.4	72.3	55.8	50.5	50.5	49.8	48.0	49.2	56.7
80°	61.8	60.8	68.7	60.5	50.8	43.9	43.2	41.5	39.7	40.6	48.3
82.5°	53.9	53.0	57.7	46.4	43.9	36.2	34.7	31.8	30.0	30.9	37.8
85°	44.2	44.2	44.5	35.0	33.4	27.7	25.9	22.1	19.9	20.5	27.1
87.5°	31.5	32.4	30.0	23.9	19.9	15.5	14.2	12.0	10.0	11.7	14.2
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6	1937.6
2.5°	1665.5	1700.1	1739.5	1789.9	1833.2	1904.0	1972.2	2013.1
5°	1245.3	1303.0	1374.7	1467.2	1553.3	1682.4	1810.8	1893.1
7.5°	891.2	953.0	1030.5	1145.9	1267.7	1432.4	1602.1	1700.5
10°	737.4	800.8	866.0	943.9	1043.5	1222.8	1423.3	1534.3
12.5°	610.0	677.8	748.1	830.1	922.4	1082.5	1313.6	1441.3
15°	466.9	542.5	625.4	729.2	844.8	1029.9	1286.5	1425.2
17.5°	320.0	404.5	506.3	634.3	775.8	1012.8	1335.1	1495.0
20°	220.3	281.8	390.6	540.7	710.9	1010.7	1428.3	1628.6
22.5°	184.4	211.8	291.3	454.6	662.0	1037.8	1573.1	1816.1
25°	170.5	187.0	232.6	379.9	626.4	1100.2	1772.4	2058.8
27.5°	162.4	177.1	211.2	331.1	598.4	1172.7	1966.2	2294.0
30°	165.5	180.6	205.2	306.1	560.2	1233.2	2138.4	2477.5
32.5°	149.1	155.8	175.9	284.0	532.8	1283.9	2289.0	2629.5
35°	127.1	138.7	157.0	273.7	533.4	1318.0	2453.3	2823.6
37.5°	121.1	132.7	145.9	269.9	540.7	1354.3	2641.8	3051.3
40°	117.3	128.0	139.4	267.7	547.6	1387.4	2826.6	3276.4
42.5°	114.7	124.4	138.7	260.0	551.1	1417.1	2978.4	3467.7
45°	114.4	124.4	141.2	252.5	556.4	1448.9	3105.9	3609.3
47.5°	114.7	128.6	136.5	243.4	556.4	1502.1	3255.3	3735.6
50°	113.5	135.6	131.5	230.5	543.5	1603.0	3460.2	3904.9
52.5°	112.9	134.7	121.7	210.6	521.1	1763.2	3722.8	4138.2
55°	111.2	129.9	114.7	181.0	495.0	1937.9	4004.0	4414.2
57.5°	109.7	115.0	110.9	155.1	454.6	2060.8	4197.5	4629.4
60°	122.9	100.6	107.9	142.5	400.7	2094.5	4190.0	4715.1
62.5°	113.8	94.3	103.8	139.7	362.9	1999.9	3996.4	4668.9
65°	89.2	90.2	99.7	147.8	352.8	1749.4	3653.4	4454.8
67.5°	81.7	86.1	95.5	158.3	353.8	1400.6	3140.9	3988.4
70°	77.0	81.7	90.8	163.6	356.2	1044.2	2483.1	3248.6
72.5°	71.6	75.7	85.5	164.6	339.8	758.4	1913.9	2388.7
75°	65.2	69.0	77.9	143.4	281.5	526.1	1464.0	1634.2
77.5°	58.0	60.8	68.4	110.6	209.1	336.7	1098.9	1193.9
80°	49.5	51.1	57.4	81.1	143.1	210.6	869.5	958.0
82.5°	39.7	40.3	44.5	60.8	92.9	135.3	582.3	664.6
85°	28.0	28.0	30.6	44.2	63.3	85.8	316.1	350.6
87.5°	13.2	13.5	13.5	24.3	33.1	43.6	72.9	44.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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