

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: P301693

Luminaire Tested: **GLNA-AF-03-LED-E1-T2R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194759)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-T2R-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12020.6 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

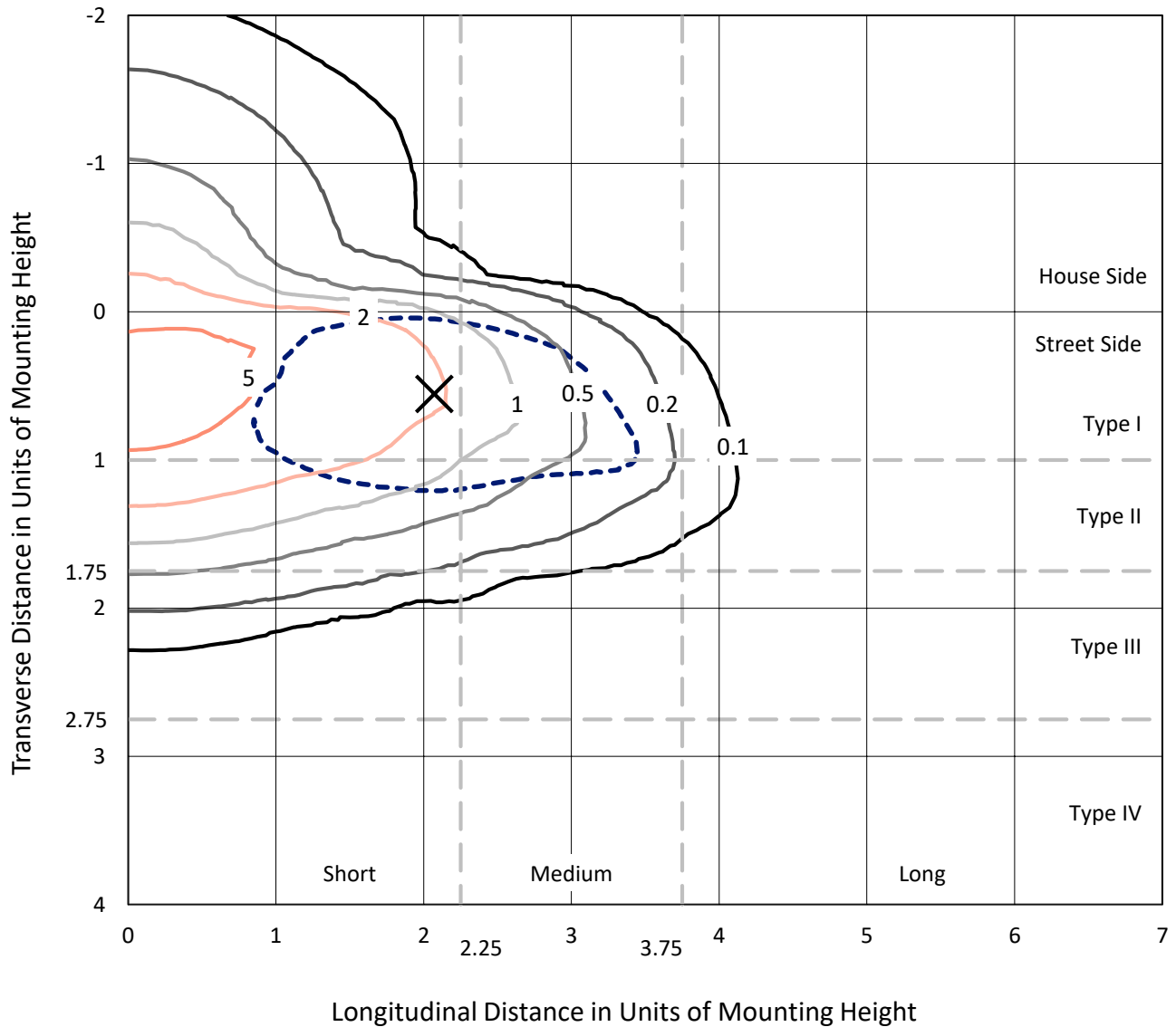
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

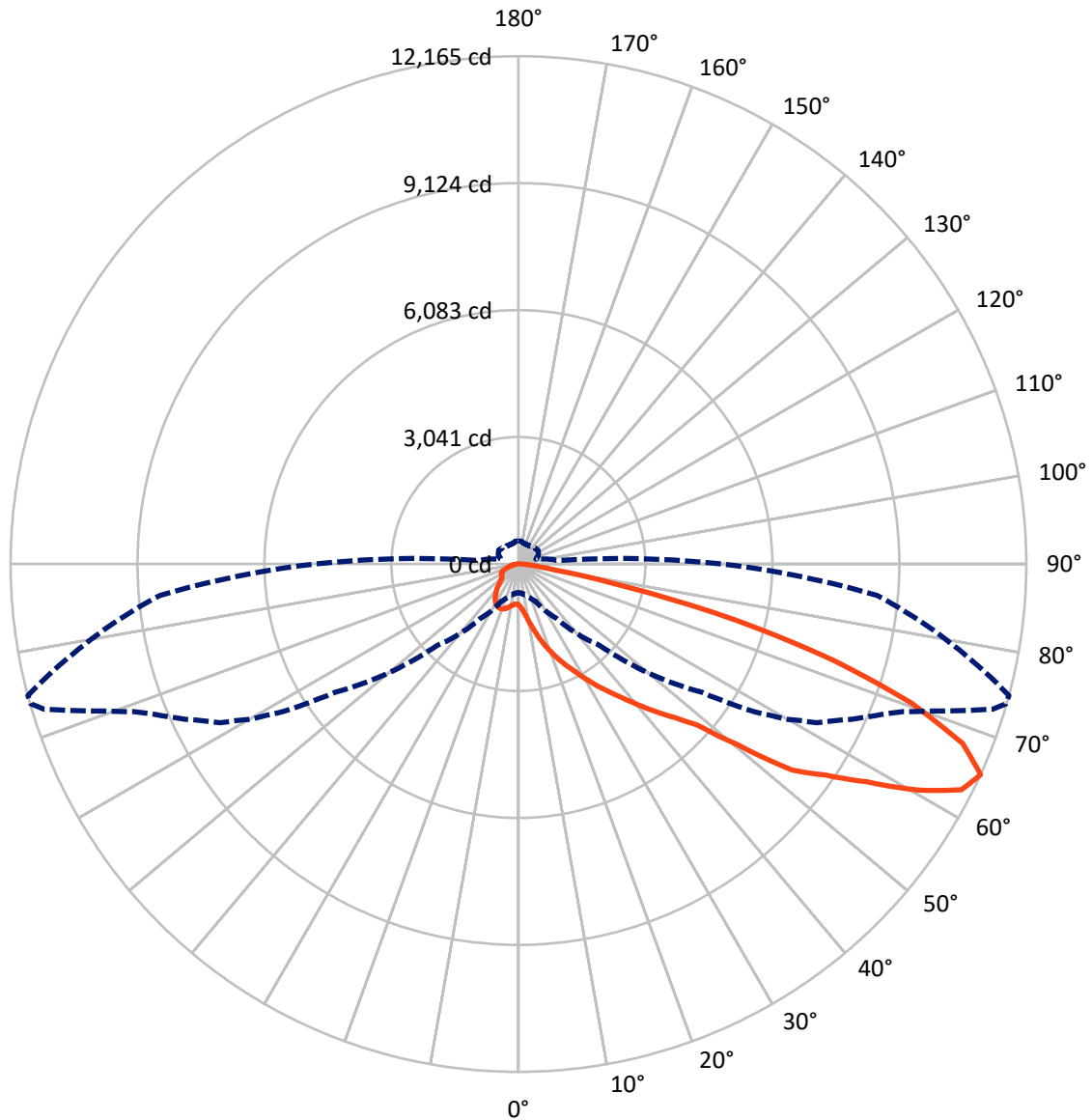
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1853.3	0.0	1853.3
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	10167.3	0.0	10167.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	12020.6	0.0	12020.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	1.0
10°-20°	471.8	3.9
20°-30°	968.0	8.1
30°-40°	1628.5	13.5
40°-50°	2250.2	18.7
50°-60°	2808.9	23.4
60°-70°	2527.7	21.0
70°-80°	1059.6	8.8
80°-90°	185.1	1.5
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°	12020.6	100.0
0°-180°	12020.6	100.0

Coefficient of Utilization



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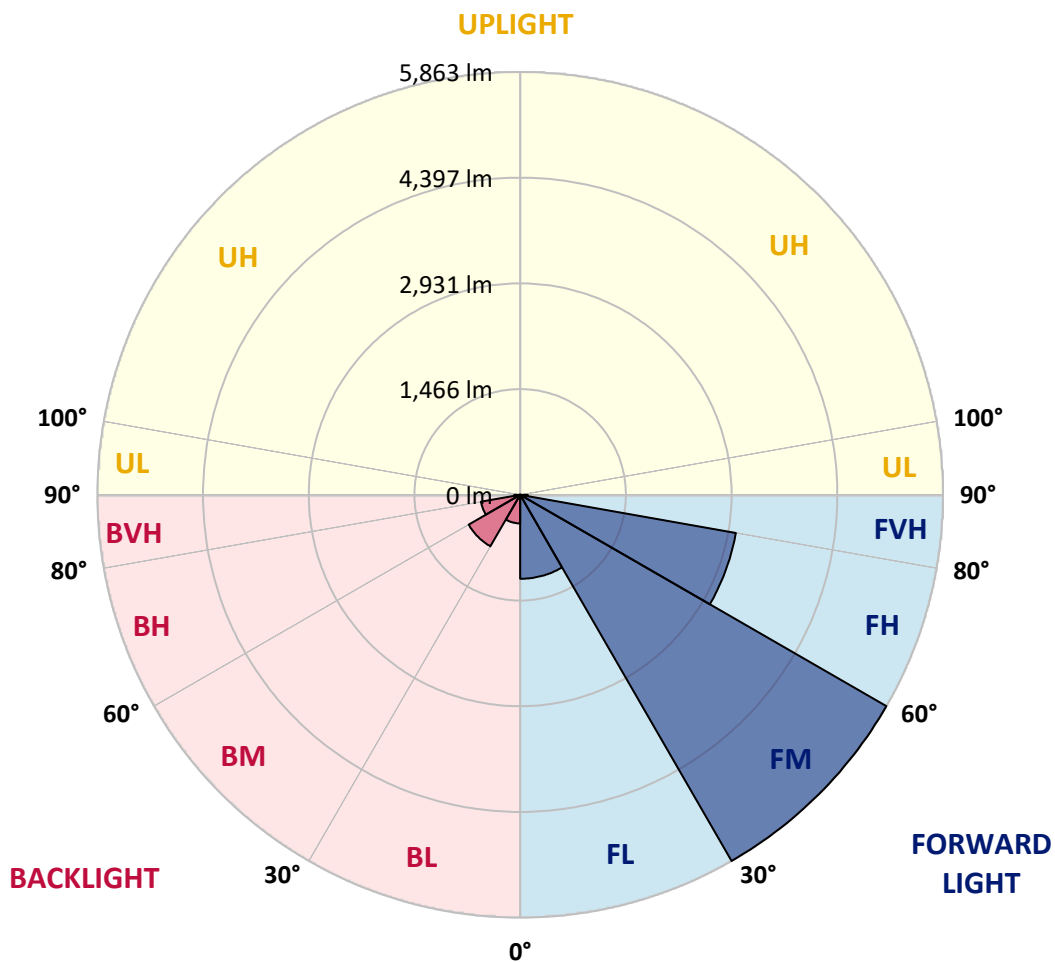
CATALOG NUMBER: GLNA-AF-03-LED-E1-T2R-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1164.2	9.7			
FM (30°-60°)	5862.7	48.8			
FH (60°-80°)	3036.4	25.3			G2/5000
FVH (80°-90°)	104.1	0.9			G2/225
BL (0°-30°)	396.3	3.3	B1/500		
BM (30°-60°)	824.9	6.9	B1/1000		
BH (60°-80°)	551.0	4.6	B2/1000		G2/1000
BVH (80°-90°)	81.1	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9
2.5°	1240.4	1226.7	1230.1	1207.3	1179.4	1143.0	1102.6	1102.1	1102.6	1098.6	1083.9
5°	1719.9	1703.5	1697.3	1646.0	1570.8	1464.0	1347.9	1335.4	1330.2	1317.2	1287.0
7.5°	2069.9	2060.8	2051.0	2012.4	1944.2	1824.7	1668.7	1642.1	1616.4	1610.2	1576.1
10°	2295.8	2293.4	2273.0	2262.7	2220.1	2116.5	1964.6	1939.0	1911.1	1901.5	1865.5
12.5°	2474.3	2473.8	2464.2	2467.1	2429.9	2355.0	2224.0	2200.7	2180.3	2150.6	2125.1
15°	2597.9	2598.4	2612.7	2628.6	2622.9	2572.2	2449.4	2439.1	2421.5	2401.1	2370.9
17.5°	2699.1	2702.0	2716.7	2745.7	2777.1	2773.1	2675.9	2667.2	2651.9	2624.0	2608.2
20°	2927.8	2938.6	2910.3	2910.3	2913.7	2929.0	2882.3	2875.5	2853.9	2839.1	2826.6
22.5°	3314.2	3326.7	3262.4	3197.1	3132.7	3086.0	3039.4	3047.8	3033.2	3022.9	3015.4
25°	3816.0	3825.8	3721.6	3611.2	3480.3	3309.6	3194.2	3188.9	3181.0	3174.8	3171.4
27.5°	4288.2	4292.3	4193.9	4032.2	3880.3	3635.0	3351.1	3344.9	3335.3	3323.3	3313.0
30°	4692.3	4691.1	4589.8	4435.6	4272.9	4001.5	3589.6	3570.2	3541.7	3509.3	3484.3
32.5°	5042.2	5040.5	4929.4	4769.6	4598.9	4364.5	3916.2	3876.4	3832.0	3768.7	3730.7
35°	5317.4	5316.4	5211.6	5045.0	4849.2	4706.5	4290.6	4241.6	4185.3	4100.5	4042.0
37.5°	5421.6	5421.6	5363.0	5249.3	5076.3	4978.4	4706.5	4647.2	4587.0	4490.8	4424.8
40°	5360.7	5361.8	5374.3	5353.4	5269.2	5194.1	5094.5	5059.2	5007.4	4921.0	4852.1
42.5°	5156.4	5162.7	5245.9	5347.7	5389.7	5377.9	5438.6	5422.8	5386.3	5319.8	5265.1
45°	4897.5	4916.9	5007.9	5200.3	5423.3	5536.5	5727.1	5728.8	5722.0	5686.2	5644.0
47.5°	4542.1	4569.2	4689.4	4949.3	5344.8	5690.8	6020.1	6035.4	6049.8	6026.5	6007.1
50°	4069.8	4102.2	4282.0	4626.8	5185.0	5850.6	6573.7	6643.2	6708.0	6700.1	6713.1
52.5°	3564.0	3602.1	3822.2	4206.4	4910.2	5887.6	6927.6	7040.9	7154.1	7246.8	7345.2
55°	3107.6	3087.2	3307.4	3711.8	4458.4	5720.8	7245.8	7382.3	7508.6	7622.3	7739.6
57.5°	2489.2	2522.8	2743.5	3143.5	3860.4	5250.3	7464.7	7664.5	7846.0	8034.3	8200.4
60°	1819.5	1853.0	2092.5	2498.8	3211.2	4536.8	7297.4	7600.2	7890.9	8179.3	8404.6
62.5°	1098.6	1123.7	1334.7	1721.7	2476.2	3690.9	6552.1	6949.2	7377.1	7721.9	8067.2
65°	683.9	698.1	776.1	988.9	1590.3	2755.5	5353.4	5786.3	6247.1	6684.7	7043.7
67.5°	559.8	564.9	579.3	624.7	873.3	1796.8	3984.4	4367.9	4783.8	5207.1	5606.6
70°	503.5	500.1	500.1	503.0	559.8	966.1	2608.7	2858.5	3205.0	3573.1	3938.3
72.5°	454.5	451.2	444.9	436.5	456.9	589.4	1348.4	1536.8	1786.5	2113.6	2463.5
75°	408.5	403.9	396.6	385.8	400.0	444.9	647.4	726.6	848.3	1022.5	1217.6
77.5°	360.7	354.9	348.2	340.3	358.5	346.0	379.4	407.9	454.5	510.4	583.8
80°	306.7	301.6	299.2	295.4	317.0	263.5	268.0	285.6	312.9	343.1	377.2
82.5°	240.2	240.2	249.1	251.0	274.8	189.5	200.3	215.7	229.9	245.7	261.8
85°	158.1	159.3	190.0	202.0	216.7	127.4	150.2	155.3	166.8	175.9	182.6
87.5°	49.5	53.5	116.1	128.6	124.6	72.2	92.2	94.5	102.5	108.7	114.4
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9
2.5°	1083.9	1077.0	1070.7	1070.2	1065.7	1059.4	1061.6	1052.0	1052.5	1047.5	1041.7
5°	1274.5	1269.9	1247.1	1240.9	1223.8	1213.0	1211.3	1188.6	1185.7	1172.7	1158.3
7.5°	1548.7	1533.9	1502.0	1486.6	1457.6	1436.0	1425.9	1395.7	1380.8	1346.7	1331.3
10°	1836.0	1817.3	1777.9	1756.3	1728.5	1693.7	1675.0	1631.3	1614.1	1582.8	1545.4
12.5°	2102.3	2083.6	2043.1	2026.6	1989.6	1952.6	1932.2	1882.8	1860.5	1810.3	1780.8
15°	2348.6	2329.9	2294.6	2277.5	2240.6	2210.4	2183.0	2134.2	2108.1	2061.3	2022.7
17.5°	2587.6	2567.7	2536.9	2521.6	2485.8	2455.1	2425.6	2379.3	2352.6	2306.1	2271.3
20°	2809.5	2794.7	2772.6	2752.0	2716.2	2688.3	2653.1	2613.2	2574.6	2540.3	2507.4
22.5°	3003.0	2997.2	2973.4	2964.3	2933.6	2909.6	2878.9	2839.7	2811.7	2768.5	2737.8
25°	3169.7	3168.0	3156.5	3153.7	3132.1	3109.3	3102.5	3070.1	3044.5	3006.3	2974.6
27.5°	3313.0	3314.7	3312.0	3319.9	3314.2	3303.9	3304.6	3293.8	3278.9	3247.0	3219.2
30°	3472.3	3463.2	3468.5	3479.8	3483.1	3484.3	3503.1	3509.3	3508.3	3487.2	3473.5
32.5°	3697.7	3676.1	3656.1	3654.4	3665.8	3670.3	3702.2	3718.8	3732.9	3738.0	3740.4
35°	3984.9	3941.7	3900.2	3878.1	3858.7	3863.7	3886.5	3913.4	3944.6	3966.2	3991.8
37.5°	4346.8	4294.0	4220.5	4168.2	4155.1	4126.7	4141.4	4162.5	4193.2	4226.8	4271.2
40°	4785.4	4705.3	4622.7	4553.4	4515.9	4463.4	4462.9	4458.9	4477.8	4509.0	4571.6
42.5°	5207.7	5136.5	5048.9	4976.2	4927.2	4857.2	4843.0	4806.0	4814.5	4841.8	4902.8
45°	5603.0	5544.5	5491.0	5406.9	5365.2	5289.6	5265.6	5221.9	5197.4	5209.9	5270.9
47.5°	5986.0	5948.5	5892.7	5838.1	5806.2	5738.6	5707.8	5676.4	5645.2	5644.0	5707.8
50°	6732.5	6712.6	6646.6	6589.7	6605.1	6522.0	6527.1	6442.9	6481.0	6485.6	6619.3
52.5°	7434.0	7503.5	7552.4	7612.0	7650.8	7658.3	7683.8	7721.9	7768.0	7859.0	7983.0
55°	7835.7	7922.8	7973.4	8019.0	8094.1	8109.9	8152.6	8203.3	8243.6	8346.1	8451.4
57.5°	8313.1	8474.7	8553.1	8625.4	8726.7	8765.3	8836.5	8891.7	8944.0	9065.2	9192.7
60°	8607.2	8804.1	8964.0	9078.2	9205.1	9296.3	9403.8	9490.2	9613.1	9758.2	9948.3
62.5°	8373.4	8662.3	8874.7	9071.0	9243.3	9417.5	9571.6	9733.3	9919.8	10139.4	10434.2
65°	7442.1	7736.1	8099.6	8303.4	8531.5	8800.1	9034.5	9296.3	9550.5	9870.3	10306.1
67.5°	5991.2	6333.0	6741.6	6947.0	7209.3	7509.1	7772.0	8091.7	8388.8	8776.1	9315.0
70°	4318.4	4760.5	5104.1	5318.6	5624.8	5933.7	6187.5	6559.5	6805.3	7202.4	7759.5
72.5°	2734.4	3083.1	3504.2	3774.5	4046.4	4359.4	4618.9	4939.7	5168.9	5530.8	6035.4
75°	1470.3	1727.3	2097.1	2353.8	2645.1	2912.5	3216.3	3431.3	3600.9	3887.2	4296.8
77.5°	689.0	845.4	1032.6	1230.1	1427.5	1633.5	1833.8	2007.8	2080.7	2244.6	2486.3
80°	418.2	468.9	523.4	584.3	666.9	733.4	821.6	885.3	889.8	941.6	1015.6
82.5°	279.3	298.1	314.6	330.0	351.1	367.6	386.3	408.5	417.6	429.5	453.5
85°	190.6	199.7	203.0	212.8	210.5	216.2	223.6	231.1	234.9	234.4	245.2
87.5°	117.1	121.7	124.1	126.2	124.6	122.4	125.7	129.8	130.8	127.4	128.6
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9	976.9
2.5°	1042.9	1037.8	1032.6	1029.2	1028.0	998.0	984.8	976.4	958.2	943.3	931.3
5°	1150.4	1139.6	1131.2	1120.9	1115.1	1038.8	1011.0	991.8	959.9	941.1	923.9
7.5°	1323.4	1293.2	1275.6	1255.7	1238.7	1101.0	1054.9	1024.7	980.3	955.3	935.9
10°	1519.7	1488.5	1460.5	1429.7	1403.1	1183.5	1116.3	1069.6	1011.0	978.6	952.9
12.5°	1738.8	1708.1	1672.8	1633.5	1599.4	1288.1	1194.8	1128.3	1048.0	1004.8	969.0
15°	1997.7	1943.5	1900.8	1855.4	1815.6	1413.4	1286.4	1194.3	1087.3	1028.7	981.0
17.5°	2238.2	2181.3	2123.4	2083.6	2037.5	1553.8	1378.6	1261.3	1119.7	1044.1	983.1
20°	2473.3	2411.2	2361.2	2307.7	2259.3	1699.5	1477.0	1320.5	1140.8	1044.6	969.0
22.5°	2680.4	2641.6	2585.9	2527.8	2478.9	1845.1	1569.2	1370.7	1148.7	1031.6	943.8
25°	2915.9	2875.0	2806.7	2757.7	2703.2	1993.6	1659.6	1409.3	1144.2	1007.1	905.2
27.5°	3167.3	3121.9	3051.9	3000.8	2934.8	2147.7	1742.7	1437.2	1127.1	967.3	853.4
30°	3429.6	3388.1	3319.2	3267.6	3200.9	2311.1	1835.5	1455.9	1093.0	912.1	793.1
32.5°	3711.3	3676.6	3608.4	3554.4	3483.1	2488.0	1921.9	1461.6	1041.2	846.6	729.5
35°	3978.7	3954.9	3897.3	3846.7	3772.8	2655.3	2013.6	1458.8	979.8	774.9	671.4
37.5°	4279.8	4265.4	4237.1	4172.8	4082.3	2882.3	2123.4	1446.8	904.7	703.8	627.0
40°	4600.6	4601.8	4571.1	4527.2	4443.0	3157.7	2254.2	1423.5	822.6	641.2	586.5
42.5°	4940.2	4957.9	4943.1	4911.9	4831.0	3435.4	2410.7	1395.1	743.1	580.3	546.9
45°	5329.4	5351.0	5373.8	5327.7	5249.3	3801.8	2616.6	1358.2	657.1	529.6	519.5
47.5°	5778.4	5812.5	5832.9	5833.6	5755.1	4255.8	2951.1	1335.9	580.9	495.5	506.3
50°	6725.6	6736.6	6784.8	6869.1	6808.8	5306.6	3535.5	1322.2	529.1	474.4	496.7
52.5°	8090.5	8209.5	8293.2	8287.5	8205.5	5974.0	3857.5	1251.7	498.4	466.5	492.2
55°	8646.5	8795.0	8949.8	8990.6	8927.0	6543.6	4162.0	1181.1	483.6	472.2	493.9
57.5°	9387.3	9637.6	9849.9	9939.2	9847.0	7272.4	4562.5	1144.2	479.0	487.6	504.7
60°	10252.6	10562.1	10841.0	11001.3	11001.3	8109.9	4977.9	1128.8	472.8	510.4	522.9
62.5°	10808.6	11263.1	11684.2	11919.1	11912.2	8693.1	5162.2	1076.5	458.6	526.3	547.9
65°	10810.8	11351.4	11887.8	12151.9	12165.4	8621.5	4857.9	950.7	432.4	528.6	573.0
67.5°	9909.6	10485.9	11111.2	11406.6	11474.7	7936.4	4205.2	781.8	389.7	505.8	582.1
70°	8369.3	8932.1	9570.4	9860.7	9981.9	6765.4	3386.9	602.5	335.2	455.7	563.2
72.5°	6593.6	7145.5	7589.9	7802.1	7896.6	5171.3	2466.4	455.2	274.8	384.0	512.6
75°	4668.3	5082.5	5318.6	5365.9	5380.6	3117.4	1498.6	338.6	226.5	298.7	432.9
77.5°	2634.8	2812.4	2793.0	2814.1	2638.9	1203.4	652.7	242.4	186.7	227.0	335.7
80°	1028.7	1060.6	996.3	976.4	895.6	447.8	287.9	168.9	149.0	171.8	234.9
82.5°	453.5	468.2	454.5	458.1	438.2	231.1	172.3	122.4	113.8	125.7	156.0
85°	249.8	254.4	253.2	260.6	249.8	92.2	81.9	75.1	79.7	85.4	100.1
87.5°	121.7	122.9	119.0	125.2	121.2	46.6	40.3	42.7	46.6	47.8	47.8
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):

	135°	145°	155°	165°	175°	180°
0°	976.9	976.9	976.9	976.9	976.9	976.9
2.5°	922.9	918.3	918.8	917.7	915.5	915.5
5°	915.0	910.4	910.4	909.2	906.4	906.9
7.5°	922.9	915.5	912.6	908.5	904.7	904.7
10°	932.0	918.8	910.9	904.2	898.9	898.9
12.5°	938.8	918.3	905.2	896.1	891.0	891.0
15°	941.1	914.3	896.1	885.3	880.7	880.2
17.5°	933.7	898.9	876.8	864.3	858.6	856.9
20°	910.9	871.1	844.4	830.1	822.1	819.3
22.5°	876.8	831.2	800.0	785.2	774.9	773.2
25°	829.1	780.1	749.4	735.0	729.5	727.6
27.5°	773.2	727.6	701.5	692.3	687.3	686.8
30°	720.4	681.5	662.3	655.4	649.1	648.1
32.5°	670.7	646.3	639.0	629.2	614.5	612.8
35°	635.5	633.3	628.2	606.4	588.4	583.1
37.5°	613.9	635.0	608.8	566.1	553.1	551.9
40°	601.4	617.4	572.3	557.7	558.7	557.7
42.5°	573.0	589.4	573.5	566.8	571.2	572.3
45°	544.5	562.7	582.1	577.6	588.4	588.4
47.5°	528.6	555.8	581.5	581.5	597.5	603.1
50°	510.4	550.2	572.3	580.3	592.9	588.4
52.5°	509.2	540.4	559.3	573.5	579.3	574.0
55°	510.9	532.5	546.2	562.2	569.0	569.5
57.5°	513.3	527.9	537.1	544.5	564.9	564.9
60°	518.8	524.1	529.1	533.2	559.8	560.4
62.5°	527.9	520.0	518.8	522.9	557.0	554.8
65°	542.3	514.3	505.8	509.7	554.1	547.4
67.5°	561.5	505.8	489.3	492.2	551.9	537.1
70°	579.3	492.2	468.9	466.0	530.3	504.1
72.5°	580.9	476.3	440.3	431.9	460.9	435.8
75°	552.4	465.3	409.1	384.0	380.6	377.2
77.5°	497.9	459.1	372.7	333.3	326.6	328.8
80°	416.6	435.8	328.8	282.2	319.2	315.3
82.5°	311.2	384.7	279.3	249.8	249.1	220.3
85°	173.0	299.9	227.5	187.2	130.3	126.2
87.5°	48.4	166.8	159.3	105.8	72.2	75.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)