

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: P301567

Luminaire Tested: **GLNA-AF-02-LED-E1-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301567
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-02-LED-E1-T2R-7030
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12228.6 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 113
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

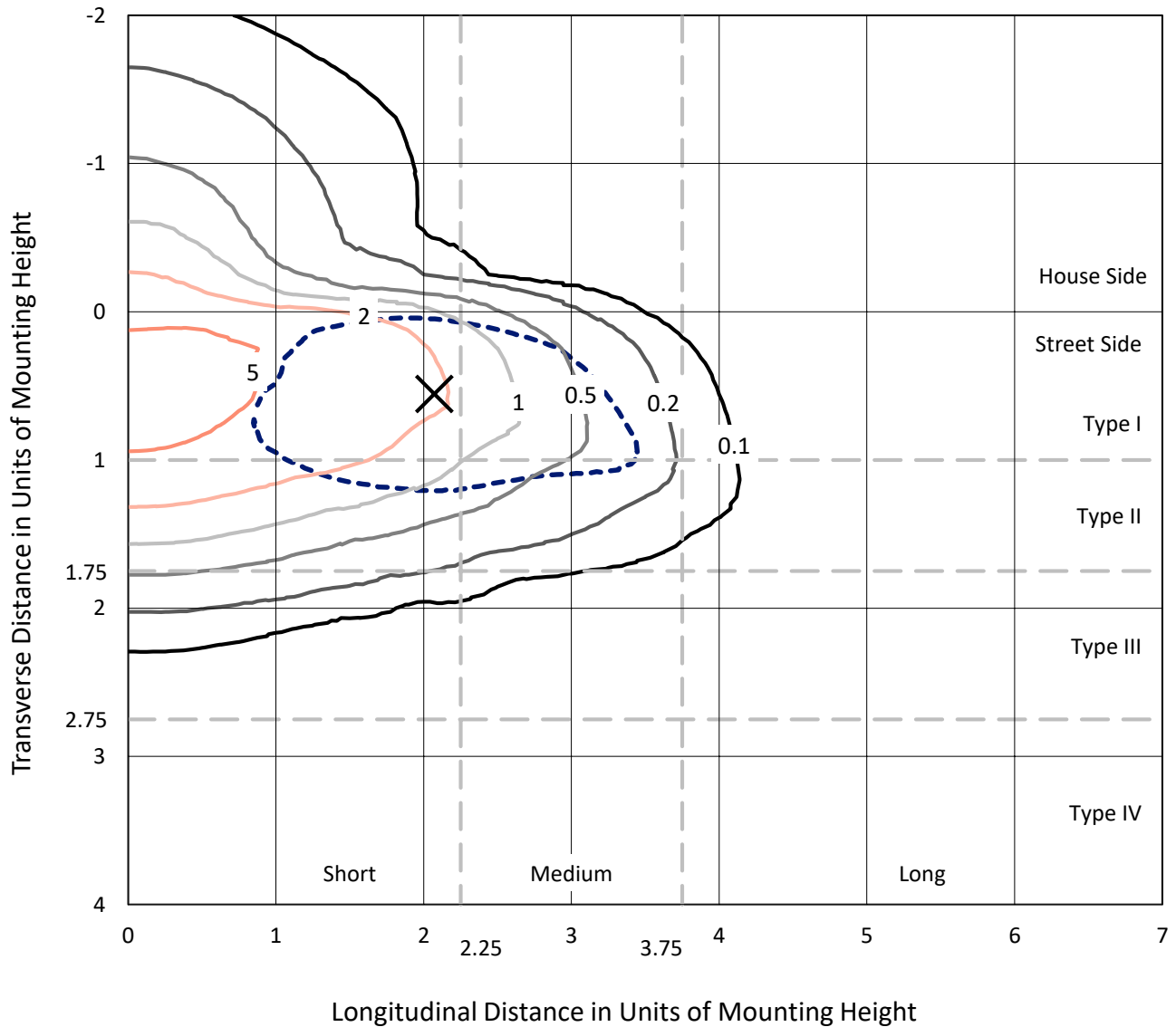


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Iso-Footcandle Lines of Horizontal Illumination

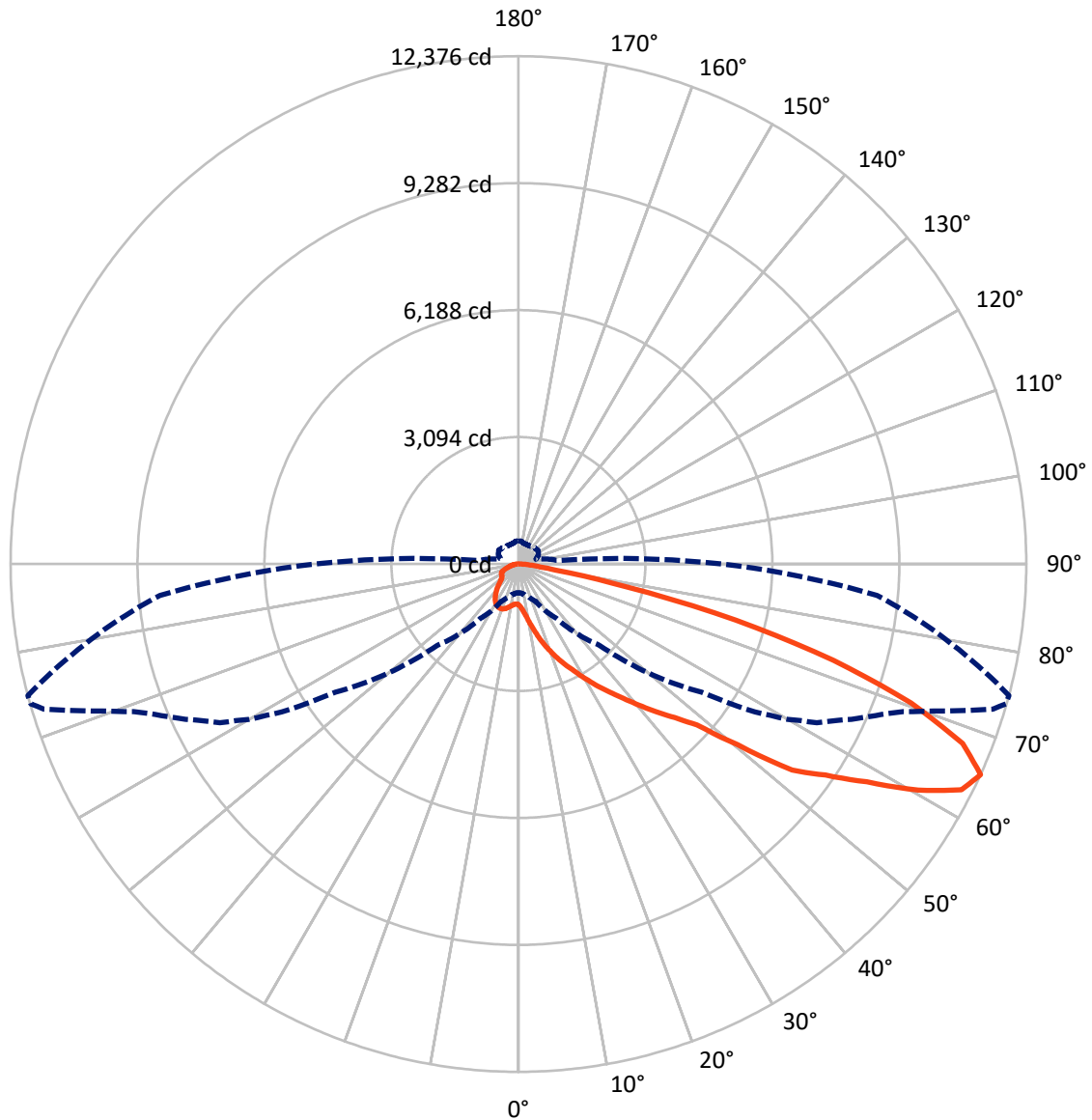
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 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	1885.4	0.0	1885.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	10343.2	0.0	10343.2
	% Fixture	84.6	0.0	84.6
Total	Lumens	12228.6	0.0	12228.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	1.0
10°-20°	480.0	3.9
20°-30°	984.7	8.1
30°-40°	1656.7	13.5
40°-50°	2289.1	18.7
50°-60°	2857.5	23.4
60°-70°	2571.5	21.0
70°-80°	1077.9	8.8
80°-90°	188.3	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°	12228.6	100.0
0°-180°	12228.6	100.0

Coefficient of Utilization



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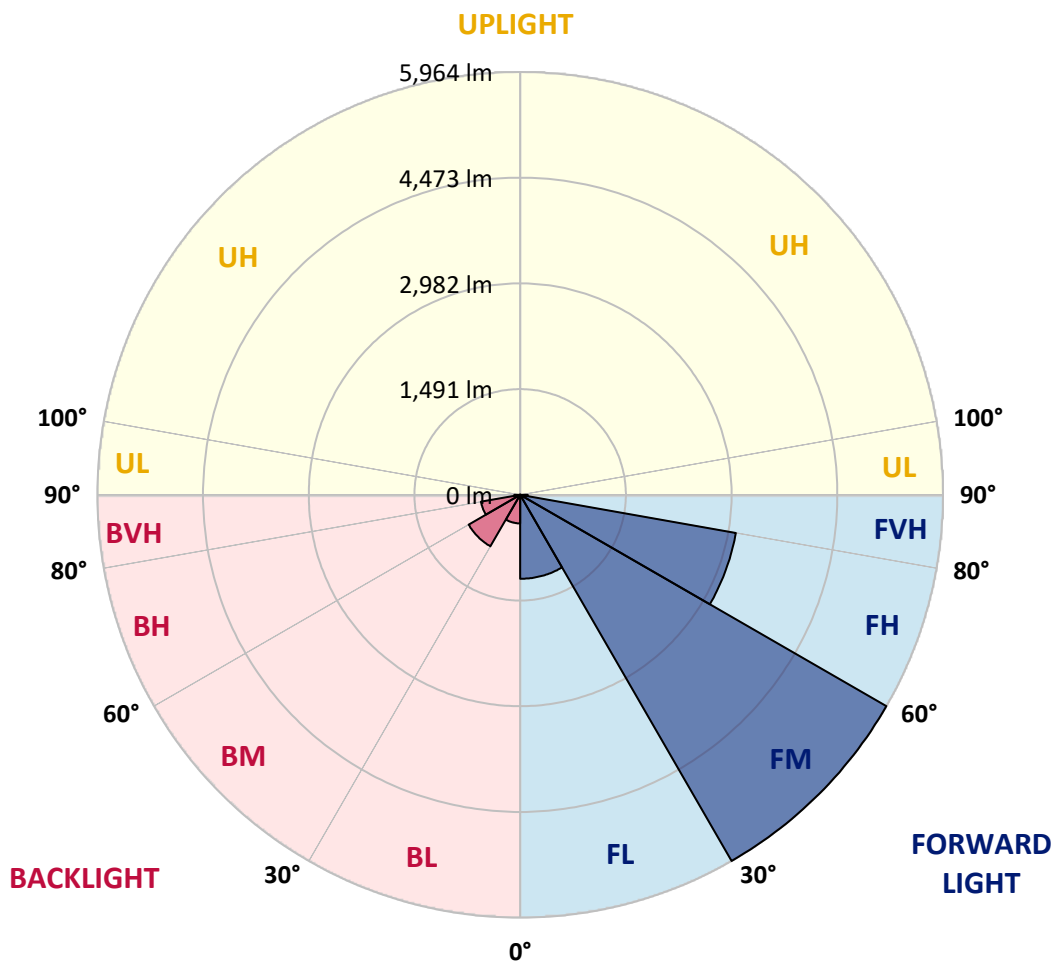
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1184.3	9.7			
FM	(30°-60°)	5964.2	48.8			
FH	(60°-80°)	3088.9	25.3			G2/5000
FVH	(80°-90°)	105.8	0.9			G2/225
BL	(0°-30°)	403.2	3.3	B1/500		
BM	(30°-60°)	839.2	6.9	B1/1000		
BH	(60°-80°)	560.5	4.6	B2/1000		G2/1000
BVH	(80°-90°)	82.5	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°	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8
2.5°	1261.8	1247.9	1251.4	1228.2	1199.8	1162.8	1121.7	1121.2	1121.7	1117.6	1102.7
5°	1749.6	1733.0	1726.6	1674.4	1598.0	1489.3	1371.2	1358.5	1353.2	1340.0	1309.2
7.5°	2105.7	2096.5	2086.5	2047.2	1977.8	1856.3	1697.6	1670.5	1644.4	1638.0	1603.3
10°	2335.5	2333.1	2312.3	2301.8	2258.6	2153.1	1998.6	1972.5	1944.2	1934.4	1897.8
12.5°	2517.1	2516.6	2506.8	2509.8	2472.0	2395.7	2262.5	2238.8	2218.0	2187.8	2161.9
15°	2642.8	2643.3	2657.9	2674.1	2668.2	2616.7	2491.7	2481.3	2463.4	2442.6	2411.9
17.5°	2745.8	2748.8	2763.7	2793.2	2825.2	2821.1	2722.2	2713.4	2697.8	2669.4	2653.3
20°	2978.5	2989.5	2960.6	2960.6	2964.1	2979.7	2932.1	2925.3	2903.3	2888.2	2875.5
22.5°	3371.5	3384.2	3318.8	3252.4	3186.9	3139.4	3092.0	3100.6	3085.6	3075.2	3067.6
25°	3882.0	3892.0	3786.0	3673.7	3540.5	3366.9	3249.4	3244.1	3236.1	3229.7	3226.3
27.5°	4362.4	4366.5	4266.4	4101.9	3947.4	3697.9	3409.1	3402.8	3393.0	3380.8	3370.3
30°	4773.5	4772.3	4669.2	4512.3	4346.8	4070.7	3651.7	3632.0	3603.0	3570.0	3544.6
32.5°	5129.4	5127.7	5014.7	4852.1	4678.5	4440.0	3984.0	3943.5	3898.3	3833.9	3795.3
35°	5409.5	5408.4	5301.8	5132.3	4933.2	4787.9	4364.8	4315.0	4257.7	4171.5	4111.9
37.5°	5515.4	5515.4	5455.8	5340.1	5164.1	5064.5	4787.9	4727.6	4666.3	4568.5	4501.3
40°	5453.4	5454.6	5467.3	5446.0	5360.3	5283.9	5182.6	5146.7	5094.0	5006.1	4936.1
42.5°	5245.6	5252.0	5336.6	5440.2	5482.9	5470.9	5532.7	5516.6	5479.5	5411.9	5356.2
45°	4982.3	5002.0	5094.6	5290.3	5517.1	5632.3	5826.2	5827.9	5821.0	5784.6	5741.7
47.5°	4620.7	4648.3	4770.5	5035.0	5437.3	5789.3	6124.2	6139.9	6154.5	6130.8	6111.0
50°	4140.2	4173.2	4356.1	4706.8	5274.7	5951.9	6687.4	6758.2	6824.1	6816.0	6829.2
52.5°	3625.6	3664.4	3888.3	4279.1	4995.1	5989.5	7047.5	7162.7	7277.9	7372.2	7472.3
55°	3161.4	3140.6	3364.7	3776.1	4535.5	5819.8	7371.1	7510.0	7638.5	7754.2	7873.5
57.5°	2532.3	2566.4	2791.0	3197.9	3927.2	5341.1	7593.8	7797.1	7981.7	8173.3	8342.3
60°	1850.9	1885.1	2128.8	2542.0	3266.8	4615.3	7423.7	7731.7	8027.4	8320.8	8550.0
62.5°	1117.6	1143.2	1357.8	1751.5	2519.0	3754.8	6665.4	7069.5	7504.7	7855.5	8206.8
65°	695.7	710.2	789.5	1006.0	1617.8	2803.2	5446.0	5886.4	6355.2	6800.4	7165.6
67.5°	569.5	574.7	589.3	635.5	888.4	1827.9	4053.4	4443.5	4866.5	5297.2	5703.6
70°	512.2	508.8	508.8	511.7	569.5	982.8	2653.8	2907.9	3260.4	3634.9	4006.5
72.5°	462.4	459.0	452.6	444.0	464.8	599.6	1371.7	1563.3	1817.5	2150.2	2506.2
75°	415.5	410.9	403.5	392.5	406.9	452.6	658.6	739.2	863.0	1040.2	1238.7
77.5°	366.9	361.1	354.2	346.1	364.7	352.0	386.0	415.0	462.4	519.2	593.9
80°	312.0	306.8	304.4	300.5	322.5	268.0	272.7	290.5	318.3	349.1	383.8
82.5°	244.3	244.3	253.4	255.3	279.5	192.8	203.8	219.4	233.9	250.0	266.3
85°	160.9	162.1	193.3	205.5	220.5	129.6	152.8	158.0	169.6	178.9	185.8
87.5°	50.3	54.4	118.1	130.8	126.7	73.5	93.7	96.2	104.2	110.6	116.4
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°	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8
2.5°	1102.7	1095.6	1089.3	1088.8	1084.1	1077.8	1080.0	1070.2	1070.7	1065.6	1059.7
5°	1296.5	1291.9	1268.7	1262.3	1245.0	1234.0	1232.3	1209.1	1206.2	1193.0	1178.4
7.5°	1575.5	1560.4	1528.0	1512.3	1482.8	1460.8	1450.5	1419.8	1404.7	1370.0	1354.4
10°	1867.8	1848.7	1808.7	1786.7	1758.4	1723.0	1704.0	1659.5	1642.0	1610.2	1572.1
12.5°	2138.7	2119.7	2078.4	2061.6	2024.0	1986.4	1965.6	1915.3	1892.7	1841.7	1811.6
15°	2389.2	2370.2	2334.3	2316.9	2279.3	2248.6	2220.8	2171.2	2144.5	2097.0	2057.7
17.5°	2632.4	2612.1	2580.8	2565.2	2528.8	2497.6	2467.5	2420.5	2393.3	2346.0	2310.6
20°	2858.1	2843.0	2820.5	2799.6	2763.2	2734.9	2699.0	2658.5	2619.1	2584.3	2550.8
22.5°	3054.9	3049.1	3024.9	3015.6	2984.3	2960.0	2928.7	2888.9	2860.4	2816.4	2785.2
25°	3224.6	3222.8	3211.2	3208.2	3186.3	3163.1	3156.2	3123.2	3097.1	3058.3	3026.1
27.5°	3370.3	3372.0	3369.3	3377.4	3371.5	3361.1	3361.7	3350.8	3335.6	3303.2	3274.9
30°	3532.4	3523.1	3528.5	3540.0	3543.4	3544.6	3563.7	3570.0	3569.0	3547.5	3533.6
32.5°	3761.6	3739.7	3719.4	3717.7	3729.2	3733.8	3766.3	3783.1	3797.5	3802.7	3805.1
35°	4053.9	4009.9	3967.7	3945.2	3925.4	3930.6	3953.8	3981.1	4012.8	4034.8	4060.9
37.5°	4422.0	4368.3	4293.6	4240.3	4226.9	4198.1	4213.0	4234.5	4265.7	4299.9	4345.1
40°	4868.2	4786.7	4702.7	4632.2	4594.0	4540.6	4540.1	4536.0	4555.2	4587.0	4650.7
42.5°	5297.8	5225.4	5136.3	5062.3	5012.5	4941.2	4926.8	4889.2	4897.8	4925.6	4987.6
45°	5700.0	5640.4	5586.0	5500.5	5458.0	5381.1	5356.7	5312.3	5287.4	5300.1	5362.1
47.5°	6089.6	6051.4	5994.6	5939.1	5906.7	5837.8	5806.6	5774.7	5742.9	5741.7	5806.6
50°	6849.0	6828.7	6761.6	6703.7	6719.4	6634.9	6640.0	6554.4	6593.2	6597.8	6733.8
52.5°	7562.6	7633.3	7683.1	7743.7	7783.2	7790.8	7816.7	7855.5	7902.4	7994.9	8121.1
55°	7971.2	8059.8	8111.3	8157.7	8234.1	8250.2	8293.7	8345.2	8386.2	8490.5	8597.6
57.5°	8457.0	8621.3	8701.1	8774.6	8877.6	8917.0	8989.4	9045.6	9098.8	9222.1	9351.7
60°	8756.1	8956.5	9119.1	9235.3	9364.4	9457.1	9566.5	9654.4	9779.4	9927.1	10120.4
62.5°	8518.3	8812.2	9028.2	9227.9	9403.2	9580.4	9737.2	9901.7	10091.4	10314.8	10614.7
65°	7570.8	7869.9	8239.8	8447.0	8679.2	8952.3	9190.8	9457.1	9715.7	10041.1	10484.4
67.5°	6094.9	6442.6	6858.3	7067.2	7334.1	7639.0	7906.5	8231.7	8533.9	8928.0	9476.2
70°	4393.2	4842.8	5192.4	5410.7	5722.1	6036.3	6294.6	6673.0	6923.0	7327.0	7893.8
72.5°	2781.7	3136.5	3564.9	3839.8	4116.4	4434.9	4698.8	5025.2	5258.4	5626.5	6139.9
75°	1495.7	1757.2	2133.4	2394.5	2690.9	2962.9	3271.9	3490.7	3663.2	3954.5	4371.2
77.5°	700.9	860.1	1050.5	1251.4	1452.2	1661.7	1865.5	2042.6	2116.7	2283.5	2529.3
80°	425.5	477.0	532.4	594.4	678.4	746.0	835.8	900.6	905.2	957.9	1033.1
82.5°	284.2	303.2	320.1	335.7	357.1	374.0	393.0	415.5	424.8	437.0	461.4
85°	193.9	203.1	206.6	216.5	214.1	219.9	227.5	235.1	239.0	238.5	249.5
87.5°	119.2	123.8	126.2	128.4	126.7	124.5	127.9	132.0	133.1	129.6	130.8
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8	993.8
2.5°	1060.9	1055.8	1050.5	1047.0	1045.8	1015.3	1001.9	993.3	974.7	959.6	947.4
5°	1170.3	1159.3	1150.7	1140.3	1134.4	1056.8	1028.5	1008.9	976.5	957.4	939.9
7.5°	1346.3	1315.6	1297.7	1277.5	1260.1	1120.0	1073.1	1042.4	997.2	971.8	952.1
10°	1546.0	1514.2	1485.7	1454.5	1427.4	1204.0	1135.6	1088.1	1028.5	995.5	969.4
12.5°	1768.9	1737.6	1701.7	1661.7	1627.0	1310.4	1215.5	1147.8	1066.1	1022.1	985.7
15°	2032.3	1977.1	1933.7	1887.5	1847.0	1437.8	1308.7	1215.0	1106.1	1046.5	997.9
17.5°	2276.9	2219.1	2160.2	2119.7	2072.8	1580.7	1402.5	1283.1	1139.1	1062.1	1000.2
20°	2516.1	2452.9	2402.1	2347.7	2298.4	1728.9	1502.6	1343.4	1160.5	1062.7	985.7
22.5°	2726.8	2687.3	2630.6	2571.6	2521.8	1877.0	1596.3	1394.4	1168.6	1049.4	960.2
25°	2966.3	2924.8	2855.2	2805.4	2750.0	2028.1	1688.3	1433.7	1164.0	1024.5	920.8
27.5°	3222.1	3176.0	3104.7	3052.7	2985.5	2184.9	1772.8	1462.0	1146.6	984.0	868.1
30°	3489.0	3446.7	3376.7	3324.1	3256.3	2351.1	1867.3	1481.1	1111.9	927.9	806.8
32.5°	3775.5	3740.2	3670.8	3615.9	3543.4	2531.0	1955.2	1486.9	1059.2	861.3	742.1
35°	4047.5	4023.3	3964.8	3913.2	3838.0	2701.2	2048.4	1484.0	996.7	788.3	683.0
37.5°	4353.8	4339.2	4310.4	4245.0	4152.9	2932.1	2160.2	1471.8	920.3	716.0	637.9
40°	4680.2	4681.4	4650.2	4605.5	4519.9	3212.4	2293.2	1448.1	836.9	652.3	596.7
42.5°	5025.7	5043.7	5028.6	4996.9	4914.6	3494.8	2452.4	1419.3	756.0	590.3	556.3
45°	5421.6	5443.6	5466.8	5419.9	5340.1	3867.6	2661.9	1381.7	668.4	538.8	528.5
47.5°	5878.4	5913.1	5933.8	5934.5	5854.7	4329.4	3002.2	1359.0	591.0	504.1	515.1
50°	6842.0	6853.1	6902.2	6987.9	6926.6	5398.5	3596.6	1345.1	538.3	482.7	505.3
52.5°	8230.5	8351.6	8436.7	8430.9	8347.4	6077.4	3924.2	1273.3	507.0	474.6	500.7
55°	8796.1	8947.2	9104.6	9146.2	9081.5	6656.9	4234.0	1201.6	491.9	480.4	502.4
57.5°	9549.7	9804.3	10020.3	10111.1	10017.4	7398.3	4641.4	1164.0	487.3	496.0	513.4
60°	10430.0	10744.9	11028.5	11191.7	11191.7	8250.2	5064.0	1148.3	480.9	519.2	531.9
62.5°	10995.6	11458.0	11886.4	12125.4	12118.3	8843.5	5251.5	1095.1	466.5	535.4	557.3
65°	10997.8	11547.8	12093.4	12362.2	12375.9	8770.7	4941.9	967.2	439.9	537.8	582.9
67.5°	10081.1	10667.3	11303.4	11603.9	11673.3	8073.7	4277.9	795.3	396.5	514.6	592.2
70°	8514.2	9086.6	9736.0	10031.3	10154.6	6882.5	3445.5	613.0	341.0	463.6	573.0
72.5°	6707.7	7269.1	7721.2	7937.1	8033.2	5260.8	2509.1	463.1	279.5	390.6	521.5
75°	4749.1	5170.4	5410.7	5458.7	5473.7	3171.3	1524.5	344.4	230.4	303.9	440.4
77.5°	2680.4	2861.1	2841.3	2862.8	2684.6	1224.2	664.0	246.6	189.9	230.9	341.5
80°	1046.5	1079.0	1013.6	993.3	911.0	455.5	292.9	171.9	151.6	174.8	239.0
82.5°	461.4	476.3	462.4	466.0	445.7	235.1	175.3	124.5	115.7	127.9	158.7
85°	254.1	258.8	257.6	265.1	254.1	93.7	83.3	76.4	81.0	86.9	101.8
87.5°	123.8	125.0	121.0	127.4	123.3	47.4	41.0	43.4	47.4	48.6	48.6
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):

	135°	145°	155°	165°	175°	180°
0°	993.8	993.8	993.8	993.8	993.8	993.8
2.5°	938.9	934.2	934.7	933.5	931.3	931.3
5°	930.8	926.2	926.2	925.0	922.0	922.6
7.5°	938.9	931.3	928.4	924.3	920.3	920.3
10°	948.1	934.7	926.7	919.8	914.5	914.5
12.5°	955.0	934.2	920.8	911.6	906.4	906.4
15°	957.4	930.1	911.6	900.6	895.9	895.4
17.5°	949.9	914.5	892.0	879.3	873.4	871.7
20°	926.7	886.2	859.0	844.4	836.4	833.4
22.5°	892.0	845.6	813.9	798.8	788.3	786.6
25°	843.4	793.6	762.4	747.8	742.1	740.2
27.5°	786.6	740.2	713.6	704.3	699.2	698.7
30°	732.8	693.3	673.8	666.7	660.4	659.3
32.5°	682.3	657.4	650.1	640.1	625.2	623.4
35°	646.5	644.2	639.1	616.9	598.6	593.2
37.5°	624.5	645.9	619.3	575.9	562.7	561.5
40°	611.8	628.1	582.2	567.3	568.3	567.3
42.5°	582.9	599.6	583.4	576.6	581.0	582.2
45°	553.9	572.5	592.2	587.6	598.6	598.6
47.5°	537.8	565.4	591.5	591.5	607.8	613.5
50°	519.2	559.7	582.2	590.3	603.2	598.6
52.5°	518.0	549.8	569.0	583.4	589.3	584.0
55°	519.7	541.7	555.6	571.9	578.8	579.3
57.5°	522.1	537.1	546.4	553.9	574.7	574.7
60°	527.8	533.1	538.3	542.4	569.5	570.0
62.5°	537.1	529.0	527.8	531.9	566.6	564.4
65°	551.7	523.2	514.6	518.5	563.7	556.8
67.5°	571.3	514.6	497.8	500.7	561.5	546.4
70°	589.3	500.7	477.0	474.1	539.5	512.9
72.5°	591.0	484.5	448.0	439.4	468.9	443.3
75°	562.0	473.4	416.2	390.6	387.2	383.8
77.5°	506.5	467.0	379.1	339.1	332.2	334.5
80°	423.8	443.3	334.5	287.1	324.7	320.7
82.5°	316.6	391.3	284.2	254.1	253.4	224.1
85°	176.0	305.1	231.5	190.4	132.6	128.4
87.5°	49.3	169.6	162.1	107.7	73.5	76.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)