

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: P192210

Luminaire Tested: **GLEON-AF-02-LED-E1-T2R-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192210
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-T2R-7050
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12688 lumens
Efficiency: N/A
Efficacy: 112.3 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

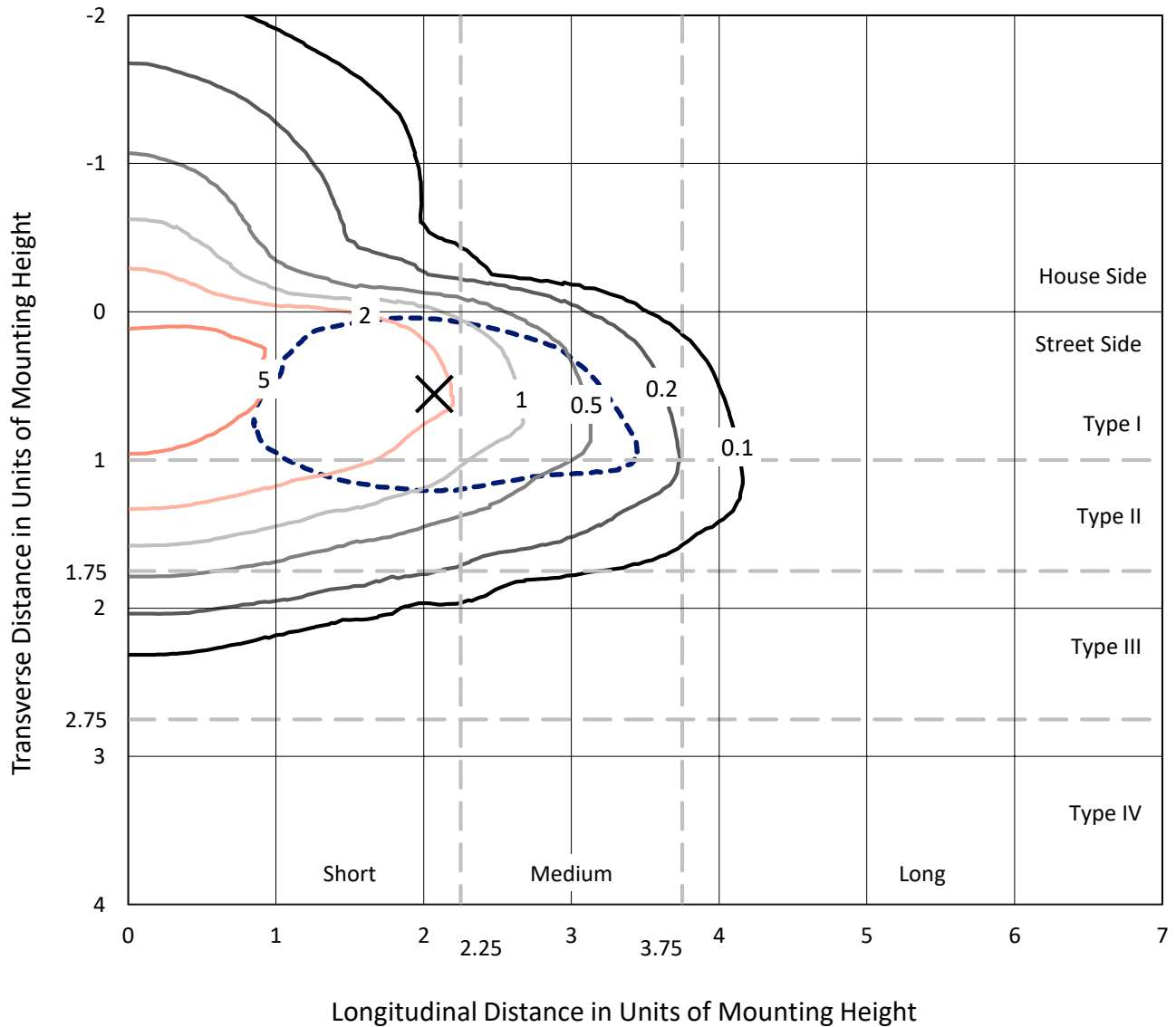
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

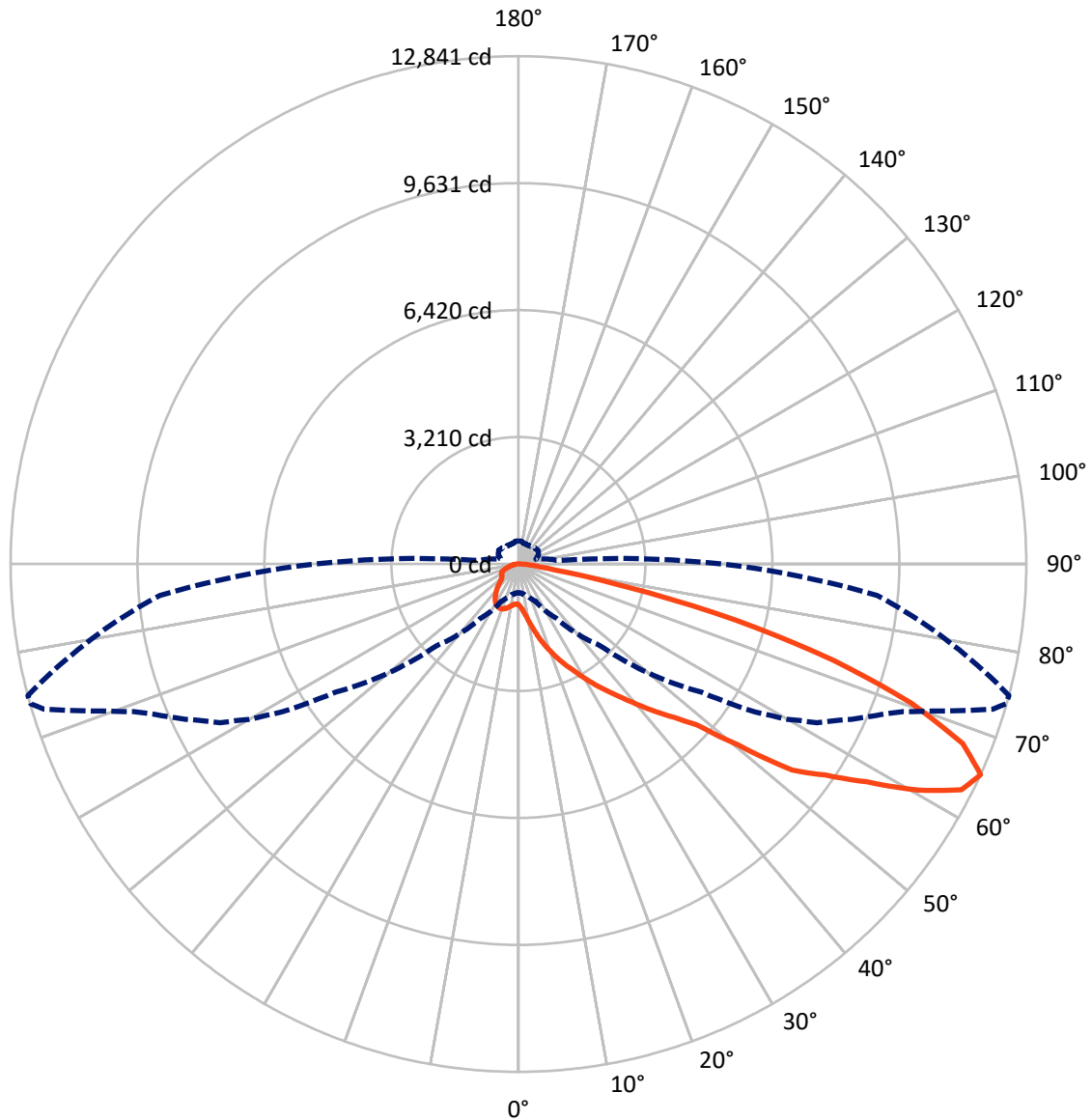
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8 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	1956.2	0.0	1956.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	10731.8	0.0	10731.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	12688.0	0.0	12688.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	1.0
10°-20°	498.0	3.9
20°-30°	1021.7	8.1
30°-40°	1719.0	13.5
40°-50°	2375.1	18.7
50°-60°	2964.9	23.4
60°-70°	2668.1	21.0
70°-80°	1118.4	8.8
80°-90°	195.4	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°	12688.0	100.0
0°-180°	12688.0	100.0

Coefficient of Utilization



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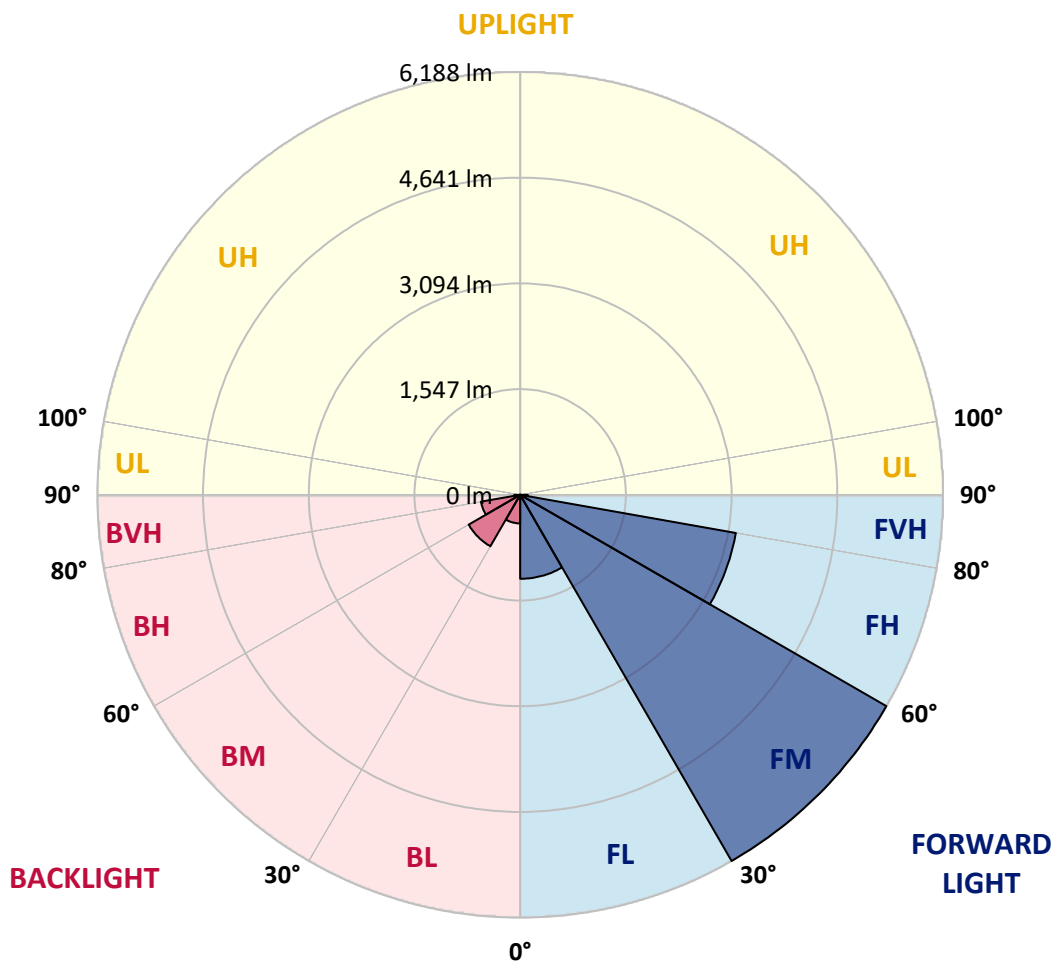
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1228.8	9.7			
FM (30°-60°)	6188.2	48.8			
FH (60°-80°)	3204.9	25.3			G2/5000
FVH (80°-90°)	109.8	0.9			G2/225
BL (0°-30°)	418.3	3.3	B1/500		
BM (30°-60°)	870.7	6.9	B1/1000		
BH (60°-80°)	581.5	4.6	B2/1000		G2/1000
BVH (80°-90°)	85.6	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°	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1
2.5°	1309.2	1294.8	1298.4	1274.4	1244.9	1206.5	1163.9	1163.3	1163.9	1159.7	1144.0
5°	1815.5	1798.0	1791.4	1737.4	1658.1	1545.2	1422.7	1409.5	1404.1	1390.3	1358.4
7.5°	2184.8	2175.2	2165.0	2124.1	2052.1	1926.0	1761.4	1733.2	1706.2	1699.6	1663.5
10°	2423.2	2420.8	2399.2	2388.4	2343.3	2234.0	2073.7	2046.7	2017.2	2007.0	1969.2
12.5°	2611.8	2611.2	2601.0	2604.0	2564.9	2485.7	2347.5	2322.9	2301.3	2270.1	2243.1
15°	2742.1	2742.7	2757.7	2774.5	2768.5	2715.1	2585.4	2574.6	2555.9	2534.3	2502.5
17.5°	2849.0	2852.0	2867.6	2898.2	2931.3	2927.1	2824.4	2815.4	2799.2	2769.7	2752.9
20°	3090.4	3101.8	3071.8	3071.8	3075.4	3091.6	3042.4	3035.2	3012.4	2996.7	2983.5
22.5°	3498.2	3511.4	3443.5	3374.5	3306.6	3257.4	3208.1	3217.1	3201.5	3190.7	3182.9
25°	4027.9	4038.1	3928.2	3811.7	3673.6	3493.4	3371.5	3366.1	3357.7	3351.1	3347.5
27.5°	4526.3	4530.5	4426.6	4256.1	4095.7	3836.9	3537.2	3530.6	3520.4	3507.8	3497.0
30°	4952.7	4951.5	4844.6	4681.9	4510.1	4223.7	3788.9	3768.4	3738.4	3704.2	3677.8
32.5°	5322.1	5320.3	5203.2	5034.4	4854.2	4606.8	4133.6	4091.5	4044.7	3978.0	3937.8
35°	5612.7	5611.5	5501.0	5325.1	5118.5	4967.7	4528.7	4477.1	4417.6	4328.2	4266.3
37.5°	5722.6	5722.6	5660.8	5540.7	5358.1	5254.8	4967.7	4905.3	4841.6	4740.1	4670.5
40°	5658.4	5659.6	5672.8	5650.6	5561.7	5482.4	5377.3	5340.1	5285.4	5194.1	5121.5
42.5°	5442.8	5449.4	5537.1	5644.6	5689.0	5676.4	5740.6	5723.8	5685.4	5615.1	5557.5
45°	5169.5	5189.9	5286.0	5489.0	5724.4	5843.9	6045.1	6046.9	6039.7	6001.9	5957.4
47.5°	4794.2	4823.0	4949.7	5224.2	5641.6	6006.7	6354.4	6370.6	6385.6	6361.0	6340.6
50°	4295.7	4330.0	4519.7	4883.7	5472.8	6175.4	6938.7	7012.0	7080.5	7072.1	7085.9
52.5°	3761.8	3802.1	4034.5	4439.9	5182.7	6214.5	7312.3	7431.8	7551.3	7649.2	7753.1
55°	3280.2	3258.6	3491.0	3918.0	4705.9	6038.5	7648.0	7792.1	7925.4	8045.6	8169.3
57.5°	2627.4	2662.8	2895.8	3318.0	4074.7	5541.9	7879.2	8090.0	8281.6	8480.4	8655.7
60°	1920.6	1956.0	2208.8	2637.6	3389.5	4788.8	7702.6	8022.1	8329.0	8633.5	8871.3
62.5°	1159.7	1186.1	1408.9	1817.3	2613.6	3895.8	6915.9	7335.1	7786.7	8150.7	8515.2
65°	721.9	736.9	819.1	1043.8	1678.5	2908.5	5650.6	6107.6	6594.0	7055.9	7434.8
67.5°	590.9	596.3	611.4	659.4	921.8	1896.5	4205.6	4610.4	5049.4	5496.2	5917.8
70°	531.5	527.9	527.9	530.9	590.9	1019.7	2753.5	3017.2	3382.9	3771.4	4157.0
72.5°	479.8	476.2	469.6	460.6	482.2	622.2	1423.3	1622.1	1885.7	2231.0	2600.4
75°	431.2	426.4	418.6	407.2	422.2	469.6	683.4	766.9	895.4	1079.2	1285.2
77.5°	380.7	374.7	367.5	359.1	378.3	365.1	400.6	430.6	479.8	538.7	616.2
80°	323.7	318.3	315.9	311.7	334.5	278.1	282.9	301.5	330.3	362.1	398.2
82.5°	253.4	253.4	263.0	264.8	290.1	200.0	211.4	227.6	242.6	259.4	276.3
85°	167.0	168.2	200.6	213.2	228.8	134.5	158.5	163.9	176.0	185.6	192.8
87.5°	52.2	56.5	122.5	135.7	131.5	76.3	97.3	99.7	108.1	114.7	120.7
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°	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1
2.5°	1144.0	1136.8	1130.2	1129.6	1124.8	1118.2	1120.6	1110.4	1111.0	1105.6	1099.6
5°	1345.2	1340.4	1316.4	1309.8	1291.8	1280.4	1278.6	1254.5	1251.5	1237.7	1222.7
7.5°	1634.7	1619.1	1585.4	1569.2	1538.6	1515.8	1505.0	1473.1	1457.5	1421.5	1405.3
10°	1938.0	1918.2	1876.7	1853.9	1824.5	1787.8	1768.0	1721.8	1703.8	1670.7	1631.1
12.5°	2219.0	2199.2	2156.6	2139.2	2100.1	2061.1	2039.5	1987.2	1963.8	1910.9	1879.7
15°	2479.1	2459.2	2422.0	2404.0	2365.0	2333.1	2304.3	2252.7	2225.0	2175.8	2135.0
17.5°	2731.3	2710.3	2677.8	2661.6	2623.8	2591.4	2560.1	2511.5	2483.3	2434.0	2397.4
20°	2965.5	2949.9	2926.5	2904.9	2867.0	2837.6	2800.4	2758.3	2717.5	2681.5	2646.6
22.5°	3169.7	3163.7	3138.5	3128.9	3096.4	3071.2	3038.8	2997.3	2967.9	2922.3	2889.8
25°	3345.7	3343.9	3331.8	3328.8	3306.0	3282.0	3274.8	3240.6	3213.5	3173.3	3139.7
27.5°	3497.0	3498.8	3495.8	3504.2	3498.2	3487.4	3488.0	3476.6	3461.0	3427.3	3397.9
30°	3665.2	3655.5	3660.9	3673.0	3676.6	3677.8	3697.6	3704.2	3703.0	3680.8	3666.4
32.5°	3903.0	3880.1	3859.1	3857.3	3869.3	3874.1	3907.8	3925.2	3940.2	3945.6	3948.0
35°	4206.2	4160.6	4116.8	4093.3	4072.9	4078.3	4102.4	4130.6	4163.6	4186.4	4213.5
37.5°	4588.2	4532.3	4454.9	4399.6	4385.8	4355.8	4371.4	4393.6	4426.0	4461.5	4508.3
40°	5051.2	4966.5	4879.5	4806.2	4766.6	4711.3	4710.7	4706.5	4726.3	4759.4	4825.4
42.5°	5496.8	5421.8	5329.3	5252.4	5200.8	5126.9	5111.9	5072.8	5081.8	5110.7	5174.9
45°	5914.2	5852.4	5795.9	5707.0	5663.2	5583.3	5558.1	5511.8	5486.0	5499.2	5563.5
47.5°	6318.4	6278.7	6219.9	6162.2	6128.6	6057.1	6024.7	5991.7	5958.6	5957.4	6024.7
50°	7106.3	7085.3	7015.6	6955.6	6971.8	6884.1	6889.5	6800.6	6840.9	6845.7	6986.8
52.5°	7846.8	7920.0	7971.7	8034.7	8075.6	8083.4	8110.4	8150.7	8199.3	8295.4	8426.3
55°	8270.8	8362.6	8416.1	8464.1	8543.4	8560.2	8605.3	8658.7	8701.4	8809.5	8920.6
57.5°	8774.6	8945.2	9028.1	9104.3	9211.2	9252.1	9327.1	9385.4	9440.6	9568.5	9703.1
60°	9085.1	9292.9	9461.7	9582.4	9716.3	9812.4	9925.9	10017.2	10146.9	10300.0	10500.6
62.5°	8838.3	9143.4	9367.4	9574.6	9756.5	9940.3	10103.0	10273.6	10470.6	10702.4	11013.5
65°	7855.2	8165.7	8549.4	8764.4	9005.2	9288.7	9536.1	9812.4	10080.8	10418.3	10878.3
67.5°	6323.8	6684.7	7115.9	7332.7	7609.6	7926.0	8203.5	8541.0	8854.5	9263.5	9832.2
70°	4558.2	5024.8	5387.5	5613.9	5937.0	6263.1	6531.0	6923.7	7183.2	7602.4	8190.3
72.5°	2886.2	3254.4	3698.8	3984.0	4271.1	4601.4	4875.3	5214.0	5456.0	5837.9	6370.6
75°	1551.8	1823.3	2213.6	2484.5	2792.0	3074.2	3394.9	3621.9	3800.9	4103.0	4535.3
77.5°	727.3	892.4	1090.0	1298.4	1506.8	1724.2	1935.6	2119.3	2196.2	2369.2	2624.4
80°	441.4	494.9	552.5	616.8	703.8	774.1	867.2	934.5	939.3	993.9	1072.0
82.5°	294.9	314.7	332.1	348.3	370.5	388.0	407.8	431.2	440.8	453.4	478.6
85°	201.2	210.8	214.4	224.6	222.2	228.2	236.0	243.8	248.0	247.4	258.8
87.5°	123.7	128.5	130.9	133.3	131.5	129.1	132.7	136.9	138.1	134.5	135.7
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°	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1
2.5°	1100.8	1095.4	1090.0	1086.4	1085.2	1053.4	1039.6	1030.5	1011.3	995.7	983.1
5°	1214.3	1202.9	1193.9	1183.1	1177.1	1096.6	1067.2	1046.8	1013.1	993.3	975.3
7.5°	1396.9	1365.0	1346.4	1325.4	1307.4	1162.1	1113.4	1081.6	1034.7	1008.3	987.9
10°	1604.1	1571.0	1541.6	1509.2	1481.0	1249.1	1178.3	1129.0	1067.2	1032.9	1005.9
12.5°	1835.3	1802.8	1765.6	1724.2	1688.1	1359.6	1261.2	1190.9	1106.2	1060.6	1022.7
15°	2108.5	2051.5	2006.4	1958.4	1916.4	1491.8	1357.8	1260.6	1147.6	1085.8	1035.3
17.5°	2362.6	2302.5	2241.2	2199.2	2150.6	1640.1	1455.1	1331.4	1181.9	1102.0	1037.7
20°	2610.6	2545.1	2492.3	2435.8	2384.8	1793.8	1559.0	1393.9	1204.1	1102.6	1022.7
22.5°	2829.2	2788.3	2729.5	2668.2	2616.6	1947.6	1656.3	1446.7	1212.5	1088.8	996.3
25°	3077.8	3034.6	2962.5	2910.9	2853.2	2104.3	1751.8	1487.6	1207.7	1063.0	955.5
27.5°	3343.3	3295.2	3221.3	3167.3	3097.6	2267.1	1839.5	1517.0	1189.7	1020.9	900.8
30°	3620.1	3576.3	3503.6	3449.0	3378.7	2439.4	1937.4	1536.8	1153.7	962.7	837.2
32.5°	3917.4	3880.7	3808.7	3751.6	3676.6	2626.2	2028.7	1542.8	1099.0	893.6	769.9
35°	4199.6	4174.4	4113.8	4060.3	3982.2	2802.8	2125.3	1539.8	1034.1	817.9	708.6
37.5°	4517.3	4502.3	4472.3	4404.4	4308.9	3042.4	2241.2	1527.2	954.9	742.9	661.8
40°	4856.0	4857.2	4824.8	4778.6	4689.7	3333.0	2379.4	1502.6	868.4	676.8	619.2
42.5°	5214.6	5233.2	5217.6	5184.5	5099.3	3626.1	2544.5	1472.5	784.3	612.6	577.1
45°	5625.3	5648.2	5672.2	5623.5	5540.7	4012.9	2761.9	1433.5	693.6	559.1	548.3
47.5°	6099.2	6135.2	6156.8	6157.4	6074.6	4492.1	3115.0	1410.1	613.2	523.1	534.5
50°	7099.1	7110.5	7161.5	7250.4	7186.8	5601.3	3731.8	1395.7	558.5	500.9	524.3
52.5°	8539.8	8665.3	8753.6	8747.6	8661.1	6305.8	4071.7	1321.2	526.1	492.5	519.5
55°	9126.5	9283.3	9446.6	9489.9	9422.6	6906.9	4393.0	1246.7	510.5	498.5	521.3
57.5°	9908.5	10172.7	10396.7	10491.0	10393.7	7676.2	4815.8	1207.7	505.7	514.7	532.7
60°	10821.9	11148.6	11442.9	11612.2	11612.2	8560.2	5254.2	1191.5	499.1	538.7	551.9
62.5°	11408.6	11888.5	12332.9	12580.9	12573.7	9175.8	5448.8	1136.2	484.0	555.5	578.3
65°	11411.0	11981.6	12547.9	12826.5	12840.9	9100.1	5127.5	1003.5	456.4	557.9	604.8
67.5°	10459.8	11068.1	11728.1	12039.8	12111.9	8377.1	4438.7	825.2	411.4	533.9	614.4
70°	8834.1	9428.0	10101.8	10408.1	10536.0	7141.1	3575.1	636.0	353.7	481.0	594.5
72.5°	6959.8	7542.3	8011.3	8235.3	8335.0	5458.4	2603.4	480.4	290.1	405.4	541.1
75°	4927.5	5364.7	5613.9	5663.8	5679.4	3290.4	1581.8	357.3	239.0	315.3	457.0
77.5°	2781.1	2968.5	2948.1	2970.3	2785.3	1270.2	688.8	255.8	197.0	239.6	354.3
80°	1085.8	1119.4	1051.6	1030.5	945.3	472.6	303.9	178.4	157.3	181.4	248.0
82.5°	478.6	494.3	479.8	483.4	462.4	243.8	182.0	129.1	120.1	132.7	164.6
85°	263.6	268.4	267.2	275.1	263.6	97.3	86.5	79.3	84.1	90.1	105.7
87.5°	128.5	129.7	125.5	132.1	127.9	49.2	42.6	45.0	49.2	50.4	50.4
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):

	135°	145°	155°	165°	175°	180°
0°	1031.1	1031.1	1031.1	1031.1	1031.1	1031.1
2.5°	974.1	969.3	969.9	968.7	966.3	966.3
5°	965.7	960.9	960.9	959.7	956.7	957.3
7.5°	974.1	966.3	963.3	959.1	954.9	954.9
10°	983.7	969.9	961.5	954.3	948.9	948.9
12.5°	990.9	969.3	955.5	945.9	940.5	940.5
15°	993.3	965.1	945.9	934.5	929.6	929.0
17.5°	985.5	948.9	925.4	912.2	906.2	904.4
20°	961.5	919.4	891.2	876.2	867.8	864.8
22.5°	925.4	877.4	844.4	828.8	817.9	816.1
25°	875.0	823.4	790.9	775.9	769.9	768.1
27.5°	816.1	768.1	740.5	730.9	725.5	724.9
30°	760.3	719.5	699.0	691.8	685.2	684.0
32.5°	708.0	682.2	674.4	664.2	648.6	646.8
35°	670.8	668.4	663.0	640.2	621.0	615.6
37.5°	648.0	670.2	642.6	597.5	583.7	582.5
40°	634.8	651.6	604.2	588.5	589.7	588.5
42.5°	604.8	622.2	605.4	598.1	603.0	604.2
45°	574.7	593.9	614.4	609.6	621.0	621.0
47.5°	557.9	586.7	613.8	613.8	630.6	636.6
50°	538.7	580.7	604.2	612.6	625.8	621.0
52.5°	537.5	570.5	590.3	605.4	611.4	606.0
55°	539.3	562.1	576.5	593.3	600.5	601.1
57.5°	541.7	557.3	566.9	574.7	596.3	596.3
60°	547.7	553.1	558.5	562.7	590.9	591.5
62.5°	557.3	548.9	547.7	551.9	587.9	585.5
65°	572.3	542.9	533.9	538.1	584.9	577.7
67.5°	592.7	533.9	516.5	519.5	582.5	566.9
70°	611.4	519.5	494.9	491.8	559.7	532.1
72.5°	613.2	502.7	464.8	455.8	486.4	460.0
75°	583.1	491.2	431.8	405.4	401.8	398.2
77.5°	525.5	484.6	393.4	351.9	344.7	347.1
80°	439.6	460.0	347.1	297.9	336.9	332.7
82.5°	328.5	406.0	294.9	263.6	263.0	232.4
85°	182.6	316.5	240.2	197.6	137.5	133.3
87.5°	51.0	176.0	168.2	111.7	76.3	79.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)