

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: P191401

Luminaire Tested: **GLEON-AF-03-LED-E1-T2R-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191401
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-03-LED-E1-T2R-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15647.1 lumens
Efficiency: N/A
Efficacy: 126.2 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): 124
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

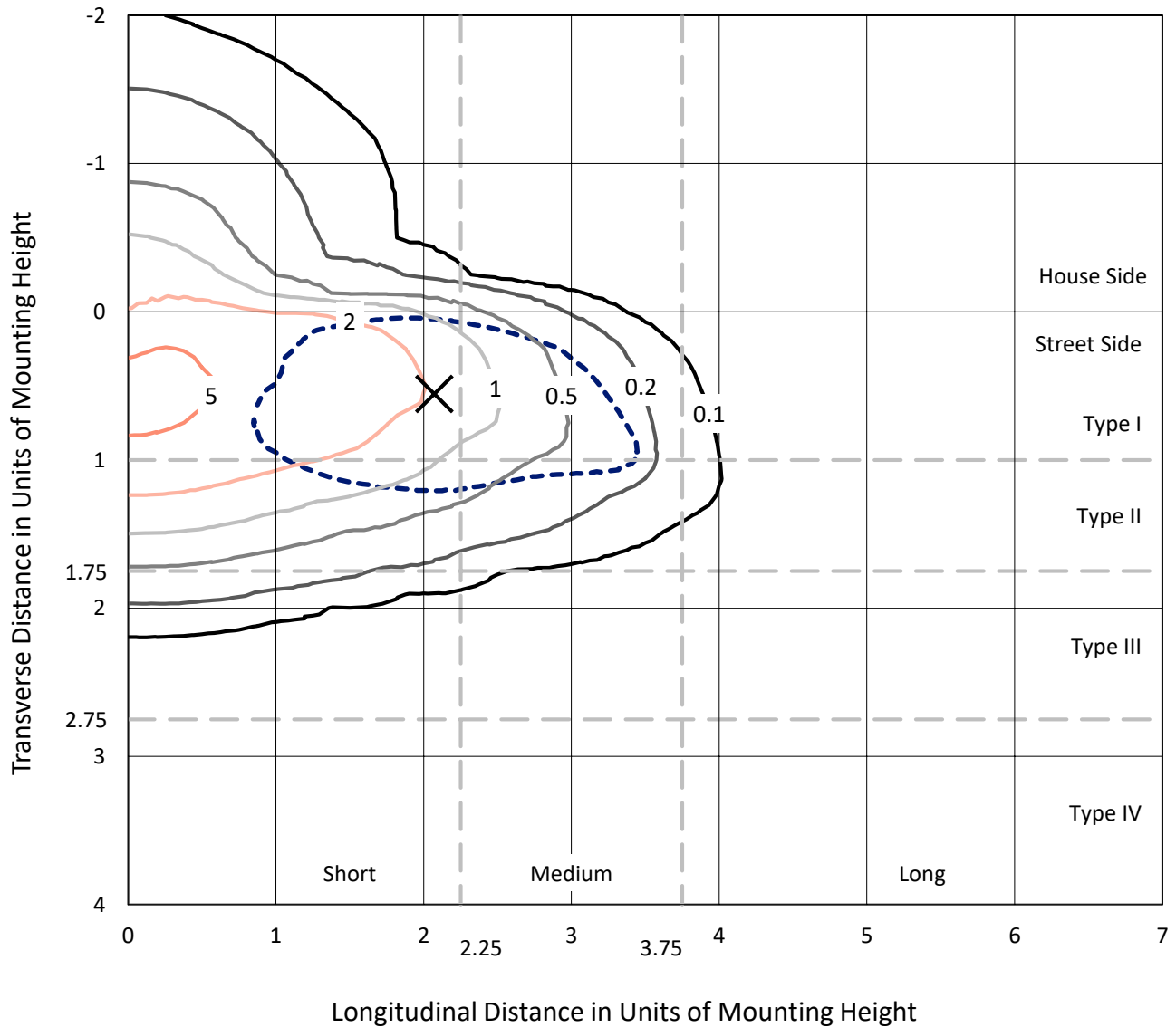


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Iso-Footcandle Lines of Horizontal Illumination

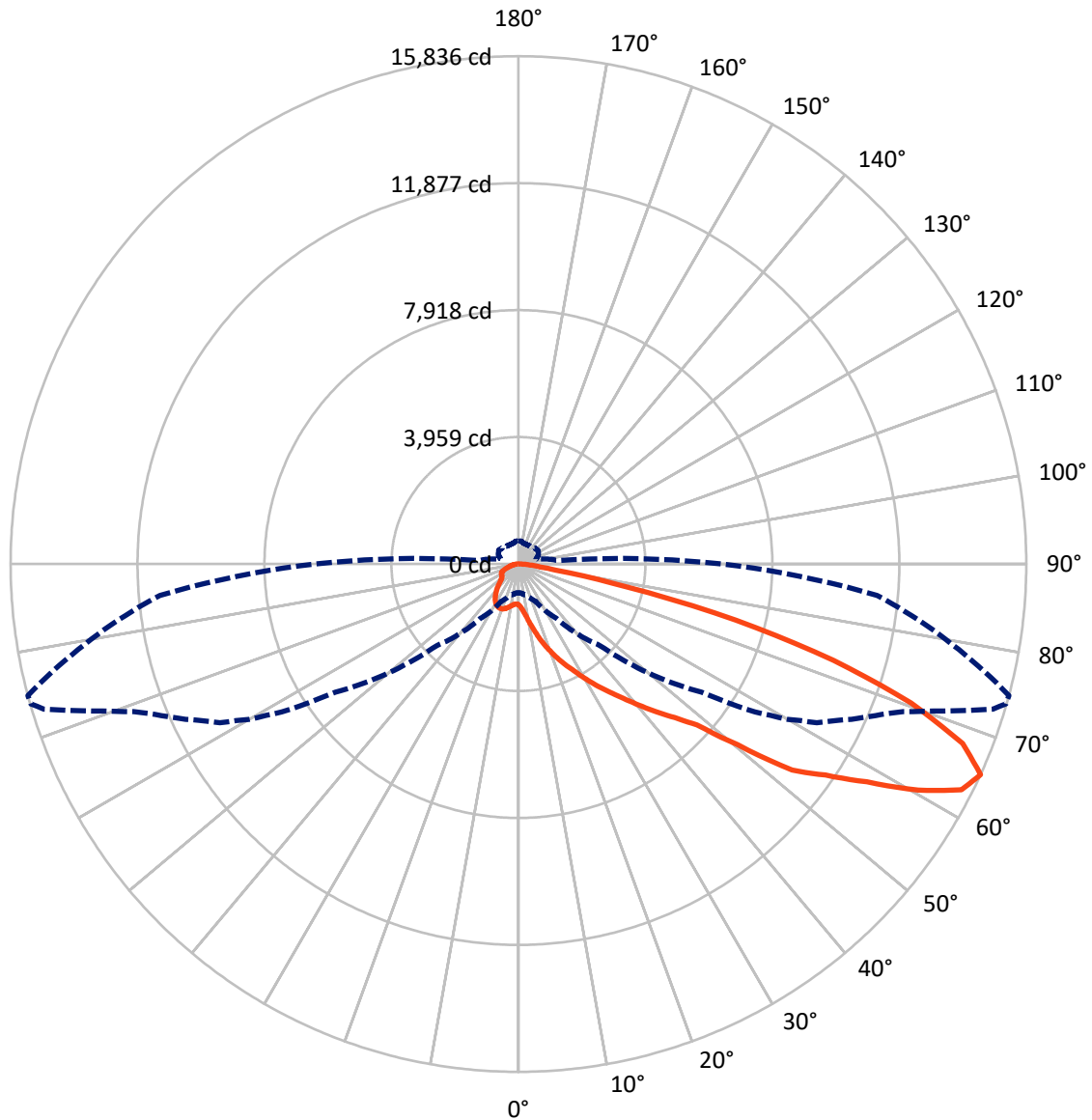
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	2412.4	0.0	2412.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	13234.7	0.0	13234.7
	% Fixture	84.6	0.0	84.6
Total	Lumens	15647.1	0.0	15647.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	1.0
10°-20°	614.1	3.9
20°-30°	1260.0	8.1
30°-40°	2119.9	13.5
40°-50°	2929.1	18.7
50°-60°	3656.3	23.4
60°-70°	3290.3	21.0
70°-80°	1379.3	8.8
80°-90°	241.0	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°	15647.1	100.0
0°-180°	15647.1	100.0



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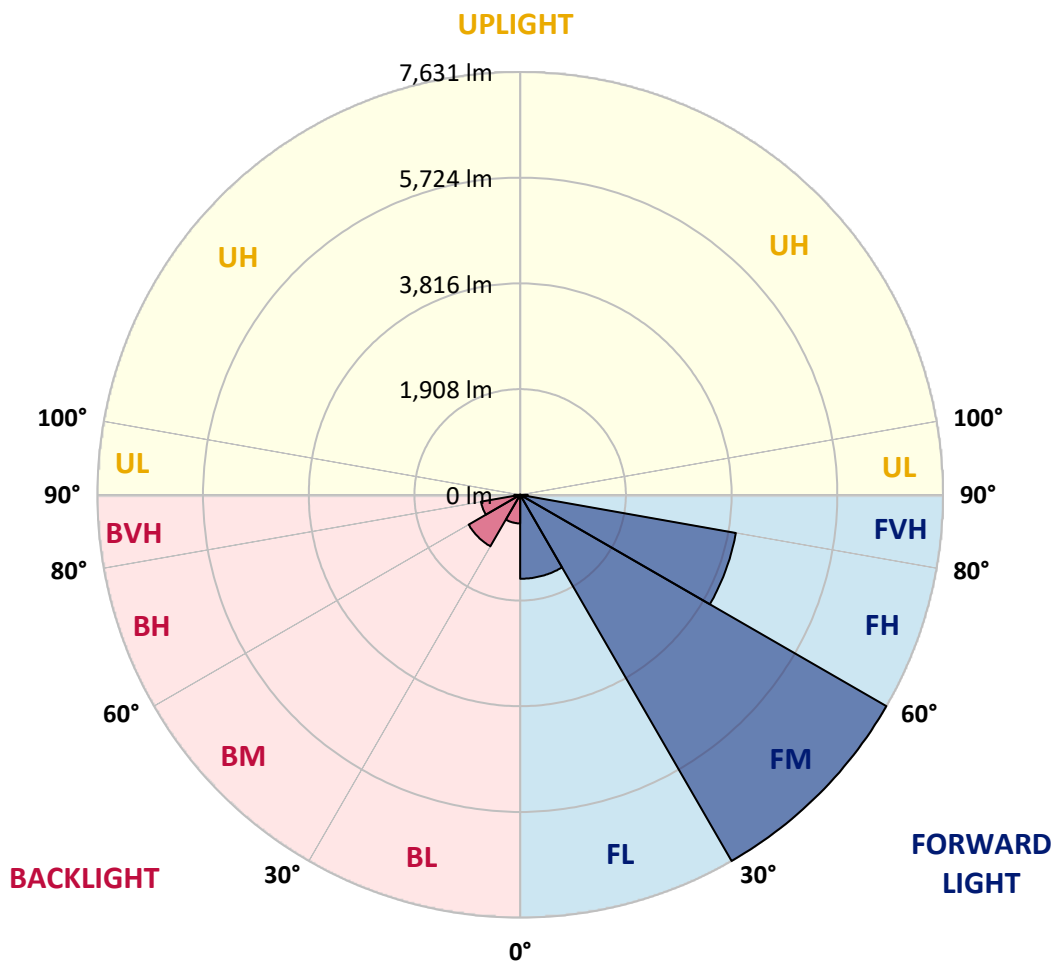
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1515.4	9.7			
FM (30°-60°)	7631.5	48.8			
FH (60°-80°)	3952.4	25.3			G2/5000
FVH (80°-90°)	135.4	0.9			G2/225
BL (0°-30°)	515.9	3.3	B2/1000		
BM (30°-60°)	1073.8	6.9	B2/2500		
BH (60°-80°)	717.2	4.6	B2/1000		G2/1000
BVH (80°-90°)	105.5	0.7			G2/225
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°	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6
2.5°	1614.5	1596.7	1601.2	1571.6	1535.2	1487.9	1435.3	1434.6	1435.3	1430.1	1410.9
5°	2238.8	2217.3	2209.3	2142.6	2044.8	1905.6	1754.5	1738.2	1731.5	1714.5	1675.3
7.5°	2694.4	2682.5	2669.9	2619.6	2530.7	2375.1	2172.2	2137.4	2104.1	2095.9	2051.5
10°	2988.3	2985.4	2958.7	2945.4	2889.8	2755.0	2557.3	2524.0	2487.7	2475.1	2428.5
12.5°	3220.9	3220.1	3207.6	3211.2	3163.2	3065.4	2895.1	2864.7	2838.0	2799.5	2766.2
15°	3381.6	3382.4	3400.9	3421.6	3414.2	3348.3	3188.3	3174.9	3152.0	3125.3	3086.1
17.5°	3513.4	3517.1	3536.4	3574.2	3614.9	3609.7	3483.0	3472.0	3451.9	3415.6	3395.0
20°	3811.2	3825.2	3788.2	3788.2	3792.7	3812.6	3751.9	3743.1	3714.8	3695.6	3679.3
22.5°	4314.0	4330.4	4246.7	4161.5	4077.8	4017.0	3956.4	3967.4	3948.2	3934.9	3925.3
25°	4967.2	4979.8	4844.3	4700.7	4530.3	4308.2	4157.8	4151.1	4140.7	4132.6	4128.1
27.5°	5581.9	5587.2	5459.0	5248.7	5050.9	4731.8	4362.2	4354.0	4341.4	4325.9	4312.6
30°	6107.8	6106.3	5974.4	5773.7	5562.0	5208.7	4672.5	4647.3	4610.2	4568.1	4535.5
32.5°	6563.3	6561.0	6416.7	6208.5	5986.3	5681.2	5097.6	5045.8	4988.0	4905.8	4856.2
35°	6921.7	6920.3	6784.0	6566.9	6312.2	6126.4	5584.9	5521.3	5447.9	5337.6	5261.2
37.5°	7057.2	7057.2	6980.9	6832.8	6607.6	6480.3	6126.4	6049.3	5970.8	5845.7	5759.7
40°	6978.0	6979.5	6995.8	6968.3	6858.8	6761.0	6631.4	6585.5	6518.0	6405.5	6315.9
42.5°	6712.1	6720.3	6828.4	6961.0	7015.8	7000.3	7079.4	7058.8	7011.3	6924.7	6853.6
45°	6375.1	6400.3	6518.9	6769.2	7059.5	7206.9	7455.0	7457.2	7448.3	7401.7	7346.8
47.5°	5912.2	5947.8	6104.0	6442.5	6957.3	7407.6	7836.3	7856.4	7874.9	7844.5	7819.3
50°	5297.6	5339.8	5573.9	6022.6	6749.1	7615.7	8557.0	8647.3	8731.8	8721.4	8738.5
52.5°	4639.2	4688.8	4975.4	5475.3	6391.4	7663.8	9017.6	9165.0	9312.4	9433.1	9561.2
55°	4045.2	4018.6	4305.2	4831.7	5803.4	7446.8	9431.6	9609.4	9773.8	9921.9	10074.4
57.5°	3240.2	3283.9	3571.2	4091.9	5025.0	6834.3	9716.8	9976.7	10212.9	10458.1	10674.4
60°	2368.4	2412.1	2723.9	3252.8	4180.0	5905.6	9499.0	9893.1	10271.4	10647.0	10940.3
62.5°	1430.1	1462.7	1737.5	2241.1	3223.1	4804.3	8528.9	9045.7	9602.7	10051.5	10501.1
65°	890.2	908.7	1010.2	1287.2	2070.0	3586.8	6968.3	7532.0	8131.8	8701.4	9168.7
67.5°	728.8	735.4	753.9	813.1	1136.8	2338.9	5186.5	5685.7	6227.0	6778.1	7297.9
70°	655.4	651.0	651.0	654.7	728.8	1257.5	3395.7	3720.8	4171.8	4651.1	5126.5
72.5°	591.8	587.3	579.2	568.0	594.7	767.3	1755.3	2000.4	2325.5	2751.3	3206.8
75°	531.7	525.8	516.2	502.2	520.7	579.2	842.8	945.7	1104.3	1330.9	1584.9
77.5°	469.5	462.2	453.3	442.8	466.6	450.3	494.0	531.0	591.8	664.3	759.8
80°	399.2	392.5	389.5	384.4	412.6	342.9	348.8	371.7	407.3	446.6	491.0
82.5°	312.5	312.5	324.4	326.6	357.7	246.6	260.6	280.7	299.2	320.0	340.6
85°	205.9	207.4	247.3	262.9	282.1	165.9	195.5	202.1	217.0	228.8	237.7
87.5°	64.4	69.7	151.1	167.4	162.2	94.0	120.0	123.0	133.3	141.5	148.8
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6
2.5°	1410.9	1402.0	1393.9	1393.1	1387.1	1379.0	1382.0	1369.4	1370.1	1363.5	1356.0
5°	1658.9	1653.0	1623.4	1615.2	1593.0	1578.9	1576.8	1547.1	1543.4	1526.3	1507.8
7.5°	2015.9	1996.7	1955.2	1935.2	1897.5	1869.3	1855.9	1816.7	1797.4	1753.0	1733.0
10°	2389.9	2365.5	2314.4	2286.3	2250.0	2204.8	2180.3	2123.3	2101.1	2060.3	2011.5
12.5°	2736.5	2712.1	2659.6	2638.1	2589.9	2541.7	2515.1	2450.7	2421.8	2356.6	2318.1
15°	3057.2	3032.7	2986.9	2964.6	2916.5	2877.3	2841.8	2778.0	2744.0	2683.2	2632.9
17.5°	3368.3	3342.4	3302.4	3282.3	3235.7	3195.7	3157.2	3097.2	3062.4	3001.6	2956.5
20°	3657.2	3637.8	3609.0	3582.3	3535.6	3499.4	3453.5	3401.6	3351.3	3306.8	3263.8
22.5°	3908.9	3901.5	3870.4	3858.6	3818.6	3787.5	3747.5	3696.3	3660.1	3603.8	3563.8
25°	4126.0	4123.7	4108.9	4105.2	4077.1	4047.4	4038.5	3996.4	3963.0	3913.4	3871.9
27.5°	4312.6	4314.8	4311.1	4321.5	4314.0	4300.7	4301.4	4287.4	4268.2	4226.6	4190.3
30°	4519.9	4508.0	4514.7	4529.5	4534.0	4535.5	4559.9	4568.1	4566.6	4539.1	4521.4
32.5°	4813.2	4785.1	4759.2	4756.9	4771.8	4777.7	4819.1	4840.6	4859.1	4865.8	4868.7
35°	5187.2	5130.9	5076.9	5048.0	5022.8	5029.4	5059.1	5093.9	5134.6	5162.7	5196.1
37.5°	5658.2	5589.4	5493.9	5425.7	5408.6	5371.6	5390.8	5418.3	5458.3	5501.9	5559.7
40°	6229.3	6124.8	6017.4	5927.1	5878.2	5810.1	5809.3	5804.1	5828.6	5869.3	5950.8
42.5°	6778.8	6686.2	6572.2	6477.3	6413.7	6322.6	6304.0	6256.0	6267.0	6302.6	6381.8
45°	7293.5	7217.2	7147.6	7038.0	6983.9	6885.4	6854.3	6797.3	6765.5	6781.8	6861.0
47.5°	7791.9	7743.0	7670.5	7599.4	7557.9	7469.8	7429.8	7389.1	7348.3	7346.8	7429.8
50°	8763.6	8737.6	8651.8	8577.7	8597.7	8489.6	8496.2	8386.7	8436.3	8442.2	8616.2
52.5°	9676.8	9767.1	9830.9	9908.6	9958.9	9968.6	10001.9	10051.5	10111.5	10230.0	10391.4
55°	10199.6	10313.0	10378.9	10438.1	10535.9	10556.6	10612.2	10678.1	10730.7	10863.9	11001.0
57.5°	10821.0	11031.3	11133.6	11227.6	11359.5	11409.8	11502.4	11574.2	11642.3	11800.0	11966.0
60°	11203.9	11460.1	11668.3	11817.1	11982.3	12100.8	12240.7	12353.4	12513.3	12702.2	12949.5
62.5°	10899.5	11275.8	11552.0	11807.5	12031.9	12258.5	12459.2	12669.6	12912.5	13198.3	13582.0
65°	9687.1	10070.0	10543.2	10808.4	11105.4	11455.0	11760.1	12100.8	12431.8	12848.1	13415.4
67.5°	7798.6	8243.7	8775.5	9042.8	9384.2	9774.5	10116.7	10532.9	10919.5	11423.9	12125.2
70°	5621.2	6196.6	6644.0	6923.2	7321.7	7723.8	8054.1	8538.5	8858.4	9375.3	10100.4
72.5°	3559.4	4013.3	4561.4	4913.2	5267.2	5674.5	6012.3	6430.0	6728.5	7199.4	7856.4
75°	1913.7	2248.4	2729.8	3063.9	3443.0	3791.2	4186.6	4466.6	4687.3	5059.8	5593.1
77.5°	896.9	1100.6	1344.2	1601.2	1858.2	2126.3	2387.0	2613.6	2708.4	2921.6	3236.4
80°	544.3	610.3	681.4	760.6	868.0	954.6	1069.4	1152.4	1158.3	1225.7	1322.0
82.5°	363.7	388.1	409.6	429.5	457.0	478.4	502.9	531.7	543.6	559.1	590.2
85°	248.1	259.9	264.4	277.0	274.0	281.4	291.0	300.6	305.9	305.1	319.2
87.5°	152.5	158.5	161.4	164.4	162.2	159.3	163.7	168.9	170.3	165.9	167.4
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6
2.5°	1357.6	1350.9	1344.2	1339.8	1338.3	1299.0	1282.0	1270.9	1247.2	1228.0	1212.4
5°	1497.5	1483.5	1472.3	1459.0	1451.6	1352.3	1316.0	1290.9	1249.4	1225.0	1202.8
7.5°	1722.6	1683.4	1660.5	1634.5	1612.3	1433.1	1373.1	1333.8	1276.0	1243.5	1218.3
10°	1978.2	1937.5	1901.2	1861.2	1826.4	1540.5	1453.1	1392.3	1316.0	1273.9	1240.5
12.5°	2263.3	2223.3	2177.4	2126.3	2081.8	1676.7	1555.3	1468.7	1364.2	1307.9	1261.3
15°	2600.2	2530.0	2474.4	2415.1	2363.3	1839.7	1674.5	1554.6	1415.3	1339.0	1276.8
17.5°	2913.6	2839.5	2763.9	2712.1	2652.1	2022.6	1794.5	1641.9	1457.5	1359.0	1279.8
20°	3219.4	3138.7	3073.6	3003.9	2941.0	2212.2	1922.6	1719.0	1484.9	1359.7	1261.3
22.5°	3489.0	3438.6	3366.0	3290.5	3226.8	2401.8	2042.6	1784.1	1495.2	1342.7	1228.7
25°	3795.7	3742.3	3653.4	3589.7	3518.6	2595.1	2160.4	1834.5	1489.3	1310.9	1178.3
27.5°	4123.0	4063.7	3972.6	3905.9	3820.0	2795.8	2268.5	1870.8	1467.1	1259.0	1110.9
30°	4464.4	4410.4	4320.7	4253.3	4166.7	3008.4	2389.2	1895.2	1422.7	1187.2	1032.4
32.5°	4831.0	4785.8	4697.0	4626.6	4534.0	3238.7	2501.7	1902.6	1355.3	1102.0	949.5
35°	5179.1	5148.0	5073.1	5007.2	4911.0	3456.4	2621.0	1898.9	1275.3	1008.7	873.9
37.5°	5570.9	5552.4	5515.3	5431.7	5313.8	3751.9	2763.9	1883.4	1177.5	916.2	816.1
40°	5988.6	5990.0	5950.0	5893.0	5783.4	4110.4	2934.3	1853.0	1070.9	834.6	763.5
42.5°	6430.7	6453.7	6434.4	6393.6	6288.5	4471.8	3137.9	1815.9	967.2	755.4	711.8
45°	6937.2	6965.4	6995.0	6935.1	6832.8	4948.7	3406.0	1767.9	855.4	689.5	676.2
47.5°	7521.7	7566.1	7592.8	7593.5	7491.3	5539.8	3841.5	1738.9	756.2	645.1	659.2
50°	8754.7	8768.8	8831.7	8941.3	8862.8	6907.7	4602.2	1721.2	688.8	617.7	646.5
52.5°	10531.5	10686.3	10795.1	10787.7	10681.0	7776.4	5021.4	1629.4	648.8	607.3	640.7
55°	11255.0	11448.4	11649.8	11703.1	11620.1	8517.7	5417.5	1537.5	629.5	614.7	642.8
57.5°	12219.2	12545.2	12821.4	12937.7	12817.7	9466.5	5938.9	1489.3	623.6	634.7	656.9
60°	13345.7	13748.7	14111.5	14320.4	14320.4	10556.6	6479.6	1469.4	615.4	664.3	680.6
62.5°	14069.4	14661.0	15209.1	15515.0	15506.1	11315.8	6719.6	1401.2	596.9	685.1	713.2
65°	14072.3	14775.8	15474.3	15817.9	15835.7	11222.4	6323.3	1237.6	562.8	688.0	745.8
67.5°	12899.2	13649.4	14463.3	14847.7	14936.6	10330.8	5473.8	1017.6	507.3	658.4	757.6
70°	10894.3	11626.8	12457.8	12835.5	12993.2	8806.6	4408.8	784.3	436.2	593.2	733.3
72.5°	8582.9	9301.3	9879.7	10156.0	10278.9	6731.4	3210.5	592.5	357.7	499.9	667.3
75°	6076.6	6615.8	6923.2	6984.7	7003.9	4057.7	1950.8	440.7	294.7	388.8	563.6
77.5°	3429.7	3660.8	3635.7	3663.1	3435.0	1566.3	849.5	315.5	243.0	295.5	437.0
80°	1339.0	1380.5	1296.8	1270.9	1165.8	582.9	374.7	219.9	194.1	223.6	305.9
82.5°	590.2	609.5	591.8	596.2	570.3	300.6	224.4	159.3	148.1	163.7	203.0
85°	325.1	331.0	329.6	339.2	325.1	120.0	106.7	97.8	103.7	111.1	130.3
87.5°	158.5	160.0	154.8	163.0	157.7	60.8	52.6	55.5	60.8	62.2	62.2
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):

	135°	145°	155°	165°	175°	180°
0°	1271.6	1271.6	1271.6	1271.6	1271.6	1271.6
2.5°	1201.3	1195.3	1196.0	1194.6	1191.6	1191.6
5°	1190.9	1185.0	1185.0	1183.5	1179.8	1180.5
7.5°	1201.3	1191.6	1188.0	1182.7	1177.5	1177.5
10°	1213.1	1196.0	1185.7	1176.8	1170.2	1170.2
12.5°	1222.0	1195.3	1178.3	1166.5	1159.8	1159.8
15°	1225.0	1190.2	1166.5	1152.4	1146.4	1145.7
17.5°	1215.4	1170.2	1141.3	1124.9	1117.6	1115.3
20°	1185.7	1133.8	1099.1	1080.5	1070.2	1066.4
22.5°	1141.3	1082.1	1041.3	1022.0	1008.7	1006.5
25°	1079.1	1015.4	975.4	956.9	949.5	947.3
27.5°	1006.5	947.3	913.2	901.3	894.7	894.0
30°	937.6	887.2	862.0	853.1	845.1	843.5
32.5°	873.2	841.4	831.7	819.1	799.8	797.6
35°	827.3	824.3	817.6	789.5	765.8	759.1
37.5°	799.1	826.5	792.5	736.9	719.9	718.4
40°	782.9	803.5	745.0	725.8	727.3	725.8
42.5°	745.8	767.3	746.5	737.6	743.6	745.0
45°	708.8	732.4	757.6	751.8	765.8	765.8
47.5°	688.0	723.5	756.9	756.9	777.6	785.0
50°	664.3	716.2	745.0	755.4	771.7	765.8
52.5°	662.9	703.6	728.0	746.5	753.9	747.3
55°	665.0	693.3	711.0	731.7	740.6	741.3
57.5°	668.0	687.3	699.1	708.8	735.4	735.4
60°	675.5	682.1	688.8	694.0	728.8	729.5
62.5°	687.3	676.9	675.5	680.6	725.1	722.1
65°	705.8	669.5	658.4	663.6	721.4	712.5
67.5°	731.0	658.4	636.9	640.7	718.4	699.1
70°	753.9	640.7	610.3	606.5	690.3	656.2
72.5°	756.2	619.9	573.3	562.1	599.9	567.3
75°	719.1	605.8	532.4	499.9	495.4	491.0
77.5°	648.0	597.7	485.1	434.0	425.1	428.1
80°	542.2	567.3	428.1	367.3	415.5	410.3
82.5°	405.1	500.6	363.7	325.1	324.4	286.6
85°	225.2	390.3	296.2	243.7	169.6	164.4
87.5°	62.9	217.0	207.4	137.8	94.0	97.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)