

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: P193942

Luminaire Tested: **GLEON-AF-04-LED-E1-T2R-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193942
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-04-LED-E1-T2R-8030-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 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: 16492 lumens
Efficiency: N/A
Efficacy: 96.4 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): 171
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

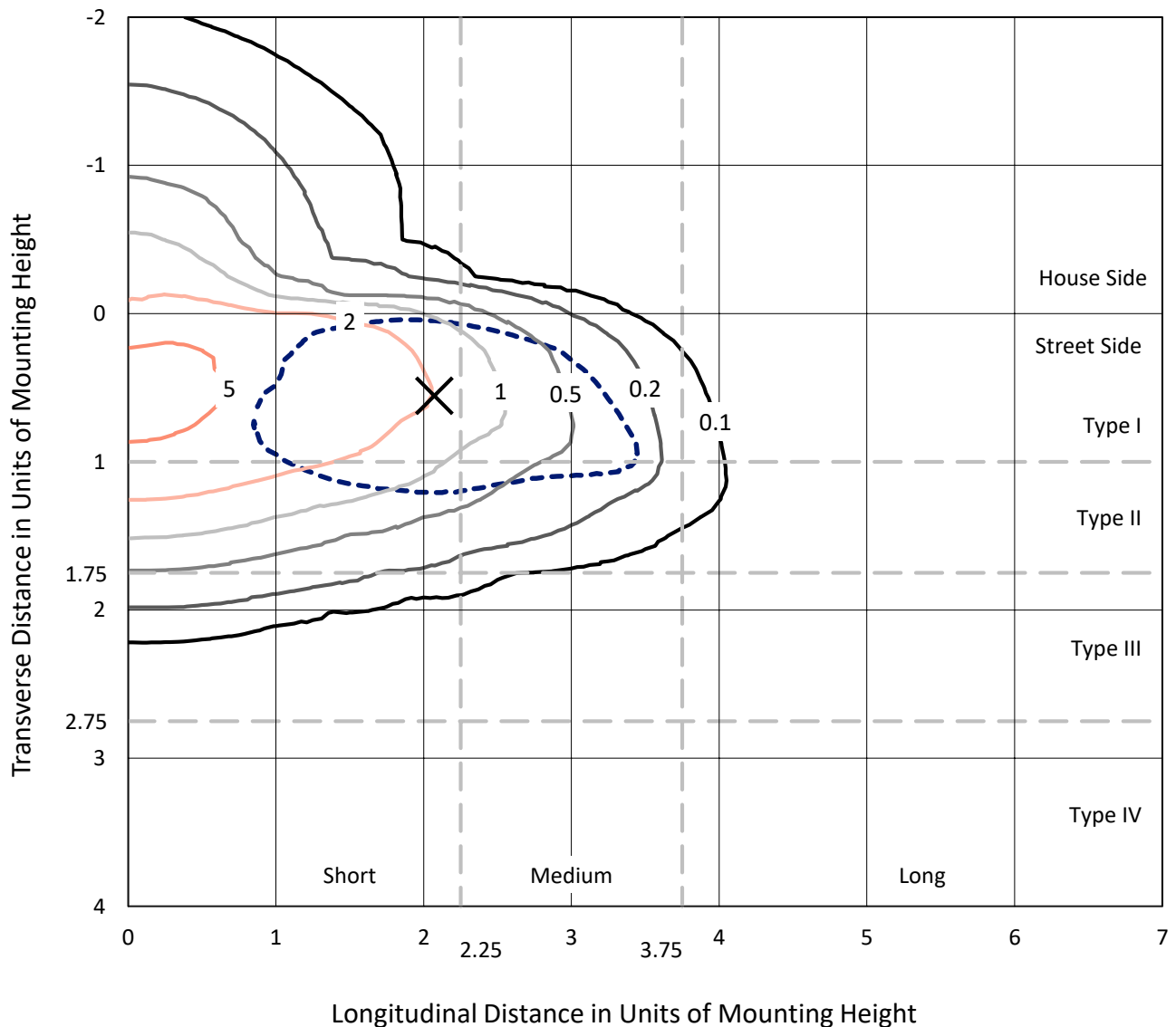


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

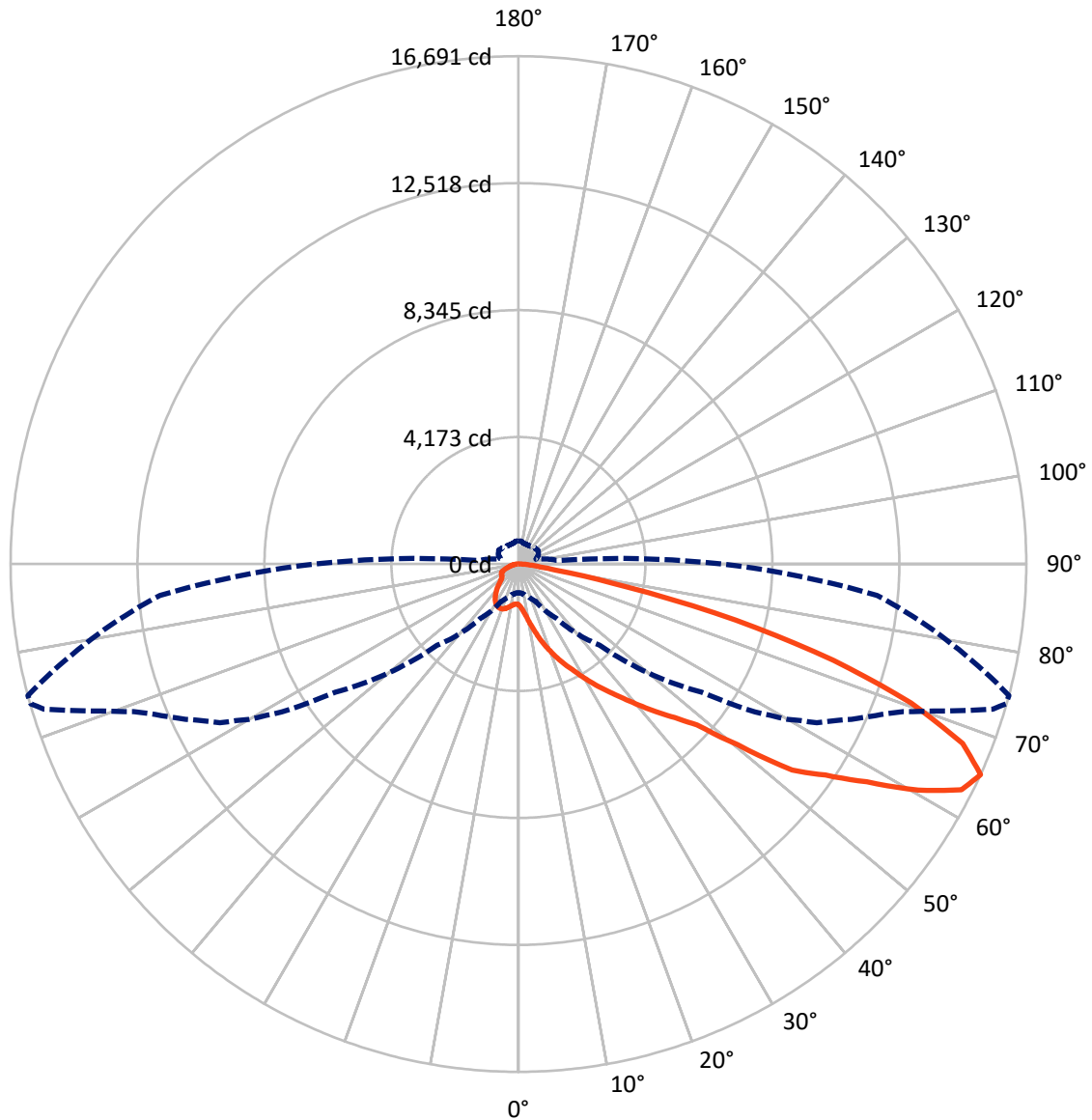


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - Full Cutoff

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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	2542.7	0.0	2542.7
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	13949.3	0.0	13949.3
	% Fixture	84.6	0.0	84.6
Total	Lumens	16492.0	0.0	16492.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	1.0
10°-20°	647.3	3.9
20°-30°	1328.0	8.1
30°-40°	2234.3	13.5
40°-50°	3087.2	18.7
50°-60°	3853.8	23.4
60°-70°	3468.0	21.0
70°-80°	1453.7	8.8
80°-90°	254.0	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°	16492.0	100.0
0°-180°	16492.0	100.0

Coefficient of Utilization



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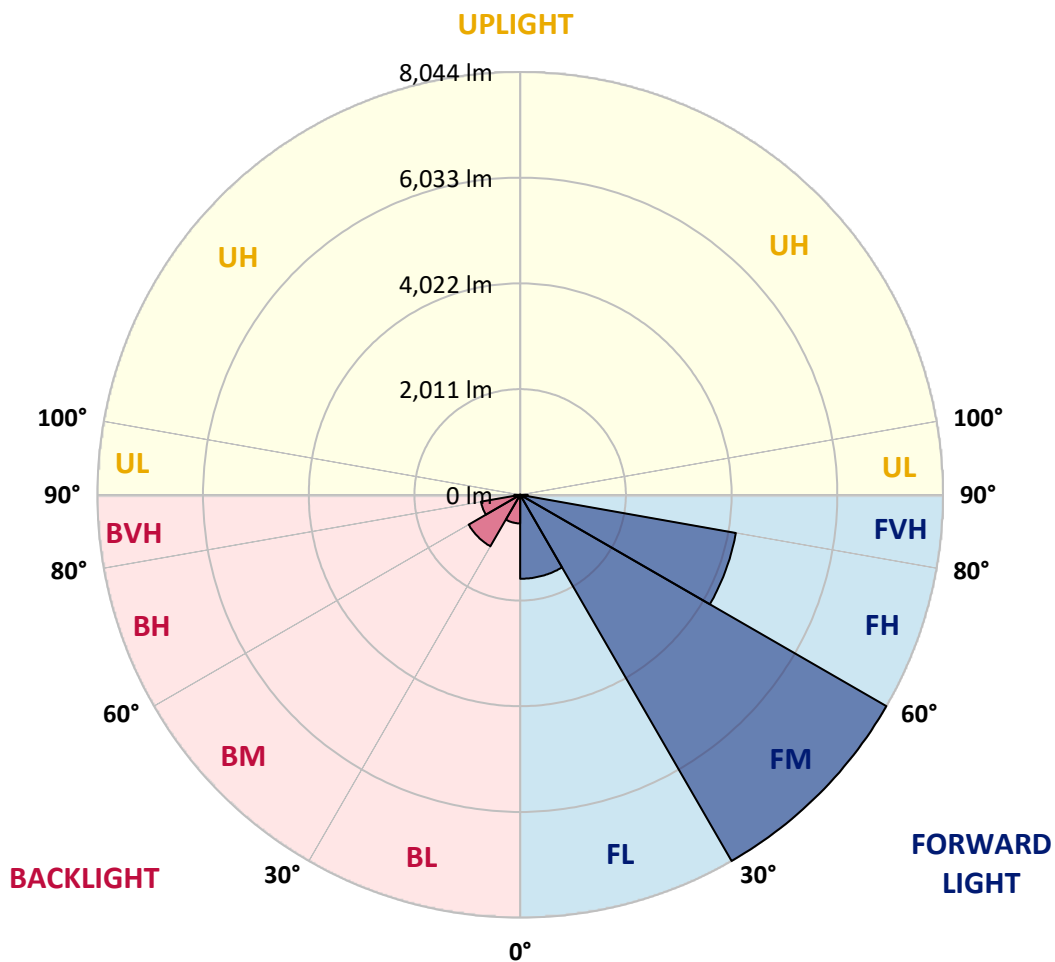
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1597.2	9.7			
FM (30°-60°)	8043.5	48.8			
FH (60°-80°)	4165.8	25.3			G2/5000
FVH (80°-90°)	142.8	0.9			G2/225
BL (0°-30°)	543.8	3.3	B2/1000		
BM (30°-60°)	1131.8	6.9	B2/2500		
BH (60°-80°)	755.9	4.6	B2/1000		G2/1000
BVH (80°-90°)	111.2	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°	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1701.7	1683.0	1687.7	1656.4	1618.2	1568.2	1512.8	1512.0	1512.8	1507.3	1487.0
5°	2359.8	2337.1	2328.5	2258.3	2155.2	2008.5	1849.2	1832.1	1825.0	1807.1	1765.7
7.5°	2839.8	2827.3	2814.1	2761.0	2667.3	2503.4	2289.5	2252.8	2217.7	2209.1	2162.3
10°	3149.7	3146.6	3118.5	3104.4	3045.9	2903.8	2695.4	2660.3	2622.0	2608.8	2559.6
12.5°	3394.8	3394.0	3380.8	3384.7	3333.9	3230.9	3051.4	3019.4	2991.3	2950.7	2915.5
15°	3564.2	3565.0	3584.5	3606.4	3598.6	3529.1	3360.5	3346.4	3322.2	3294.1	3252.8
17.5°	3703.2	3707.1	3727.4	3767.2	3810.1	3804.6	3671.2	3659.5	3638.4	3600.1	3578.3
20°	4017.0	4031.8	3992.8	3992.8	3997.5	4018.5	3954.5	3945.2	3915.5	3895.2	3878.0
22.5°	4547.0	4564.2	4476.0	4386.2	4298.0	4234.0	4170.0	4181.7	4161.4	4147.3	4137.2
25°	5235.5	5248.8	5105.9	4954.5	4774.9	4540.8	4382.3	4375.3	4364.3	4355.7	4351.1
27.5°	5883.4	5888.8	5753.8	5532.1	5323.7	4987.3	4597.7	4589.1	4575.9	4559.5	4545.4
30°	6437.6	6436.0	6297.1	6085.6	5862.3	5490.0	4924.8	4898.3	4859.2	4814.7	4780.4
32.5°	6917.7	6915.3	6763.1	6543.8	6309.6	5988.0	5372.9	5318.2	5257.3	5170.7	5118.4
35°	7295.5	7293.9	7150.3	6921.6	6653.1	6457.1	5886.5	5819.4	5742.1	5625.8	5545.4
37.5°	7438.3	7438.3	7357.9	7201.8	6964.5	6830.3	6457.1	6375.9	6293.2	6161.3	6070.7
40°	7354.8	7356.4	7373.5	7344.7	7229.1	7126.1	6989.5	6941.1	6870.1	6751.4	6657.0
42.5°	7074.6	7083.2	7197.1	7336.9	7394.6	7378.2	7461.8	7439.9	7389.9	7298.6	7223.7
45°	6719.4	6745.9	6870.8	7134.7	7440.7	7596.0	7857.5	7859.9	7850.5	7801.3	7743.6
47.5°	6231.5	6269.0	6433.7	6790.4	7333.0	7807.6	8259.5	8280.6	8300.1	8268.1	8241.6
50°	5583.6	5628.1	5874.8	6347.8	7113.6	8026.9	9019.1	9114.3	9203.3	9192.3	9210.3
52.5°	4889.7	4942.0	5244.1	5771.0	6736.6	8077.7	9504.6	9659.9	9815.3	9942.5	10077.5
55°	4263.6	4235.5	4537.6	5092.6	6116.8	7848.9	9940.9	10128.3	10301.6	10457.7	10618.5
57.5°	3415.1	3461.2	3764.1	4312.8	5296.4	7203.4	10241.5	10515.5	10764.5	11022.9	11250.8
60°	2496.4	2542.4	2871.0	3428.4	4405.7	6224.5	10012.0	10427.3	10826.1	11221.9	11531.0
62.5°	1507.3	1541.7	1831.3	2362.1	3397.2	5063.8	8989.4	9534.3	10121.3	10594.3	11068.1
65°	938.3	957.8	1064.7	1356.7	2181.8	3780.4	7344.7	7938.7	8571.0	9171.3	9663.8
67.5°	768.1	775.1	794.7	857.1	1198.2	2465.1	5466.5	5992.7	6563.3	7144.1	7692.0
70°	690.8	686.1	686.1	690.1	768.1	1325.5	3579.1	3921.7	4397.1	4902.2	5403.3
72.5°	623.7	619.0	610.4	598.7	626.8	808.7	1850.0	2108.4	2451.1	2899.9	3380.0
75°	560.5	554.2	544.1	529.2	548.8	610.4	888.3	996.8	1163.9	1402.7	1670.5
77.5°	494.9	487.1	477.7	466.8	491.8	474.6	520.7	559.7	623.7	700.2	800.9
80°	420.7	413.7	410.6	405.1	434.8	361.4	367.7	391.9	429.3	470.7	517.5
82.5°	329.4	329.4	341.9	344.2	377.0	259.9	274.8	295.8	315.4	337.2	359.1
85°	217.0	218.6	260.7	277.1	297.4	174.9	206.1	213.1	228.7	241.2	250.6
87.5°	67.9	73.4	159.2	176.4	171.0	99.1	126.5	129.6	140.5	149.1	156.9
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°	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1487.0	1477.7	1469.1	1468.3	1462.1	1453.5	1456.6	1443.3	1444.1	1437.1	1429.3
5°	1748.5	1742.3	1711.1	1702.5	1679.1	1664.2	1661.9	1630.7	1626.8	1608.8	1589.3
7.5°	2124.8	2104.5	2060.8	2039.7	1999.9	1970.2	1956.2	1914.8	1894.5	1847.7	1826.6
10°	2519.0	2493.2	2439.4	2409.7	2371.5	2323.8	2298.1	2238.0	2214.6	2171.6	2120.1
12.5°	2884.3	2858.6	2803.1	2780.5	2729.8	2679.0	2650.9	2583.0	2552.6	2483.9	2443.3
15°	3222.3	3196.6	3148.2	3124.7	3074.0	3032.6	2995.2	2928.0	2892.1	2828.1	2775.0
17.5°	3550.2	3522.8	3480.7	3459.6	3410.4	3368.3	3327.7	3264.5	3227.8	3163.8	3116.2
20°	3854.6	3834.3	3803.9	3775.8	3726.6	3688.3	3639.9	3585.3	3532.2	3485.4	3440.1
22.5°	4120.0	4112.2	4079.4	4066.9	4024.8	3992.0	3949.8	3896.0	3857.7	3798.4	3756.2
25°	4348.7	4346.4	4330.8	4326.9	4297.2	4266.0	4256.6	4212.1	4177.0	4124.7	4081.0
27.5°	4545.4	4547.8	4543.9	4554.8	4547.0	4532.9	4533.7	4518.9	4498.6	4454.9	4416.6
30°	4764.0	4751.5	4758.5	4774.2	4778.8	4780.4	4806.2	4814.7	4813.2	4784.3	4765.6
32.5°	5073.1	5043.5	5016.1	5013.8	5029.4	5035.7	5079.4	5102.0	5121.5	5128.5	5131.7
35°	5467.3	5408.0	5351.0	5320.6	5294.0	5301.1	5332.3	5369.0	5411.9	5441.6	5476.7
37.5°	5963.8	5891.2	5790.5	5718.7	5700.7	5661.7	5682.0	5710.9	5753.0	5799.1	5860.0
40°	6565.6	6455.6	6342.4	6247.1	6195.6	6123.8	6123.0	6117.6	6143.3	6186.3	6272.1
42.5°	7144.8	7047.3	6927.0	6827.1	6760.0	6664.0	6644.5	6593.7	6605.4	6642.9	6726.4
45°	7687.4	7606.9	7533.6	7418.0	7361.1	7257.2	7224.5	7164.3	7130.8	7148.0	7231.5
47.5°	8212.7	8161.2	8084.7	8009.7	7966.0	7873.1	7831.0	7788.0	7745.1	7743.6	7831.0
50°	9236.8	9209.5	9119.0	9040.9	9062.0	8948.0	8955.0	8839.5	8891.8	8898.1	9081.5
52.5°	10199.3	10294.6	10361.7	10443.6	10496.7	10506.9	10542.0	10594.3	10657.5	10782.4	10952.6
55°	10750.4	10869.9	10939.3	11001.8	11104.8	11126.7	11185.2	11254.7	11310.1	11450.6	11595.0
57.5°	11405.3	11627.0	11734.8	11833.9	11972.8	12025.9	12123.5	12199.2	12271.0	12437.3	12612.2
60°	11808.9	12079.0	12298.4	12455.3	12629.3	12754.2	12901.8	13020.4	13189.0	13388.1	13648.8
62.5°	11488.1	11884.6	12175.8	12445.1	12681.6	12920.5	13132.0	13353.7	13609.8	13911.1	14315.4
65°	10210.3	10613.8	11112.6	11392.1	11705.1	12073.5	12395.1	12754.2	13103.2	13541.9	14139.8
67.5°	8219.7	8688.9	9249.3	9531.1	9891.0	10302.4	10663.0	11101.7	11509.2	12040.8	12780.0
70°	5924.8	6531.3	7002.8	7297.1	7717.0	8140.9	8489.0	8999.5	9336.8	9881.6	10645.8
72.5°	3751.6	4230.1	4807.7	5178.5	5551.6	5981.0	6336.9	6777.2	7091.8	7588.2	8280.6
75°	2017.1	2369.9	2877.3	3229.3	3629.0	3995.9	4412.7	4707.8	4940.4	5333.1	5895.1
77.5°	945.3	1160.0	1416.8	1687.7	1958.5	2241.1	2515.9	2754.7	2854.7	3079.5	3411.2
80°	573.7	643.2	718.2	801.7	914.9	1006.2	1127.2	1214.6	1220.9	1291.9	1393.4
82.5°	383.3	409.0	431.7	452.7	481.6	504.3	530.0	560.5	573.0	589.4	622.1
85°	261.5	274.0	278.7	291.9	288.8	296.6	306.8	316.9	322.4	321.6	336.4
87.5°	160.8	167.0	170.2	173.3	171.0	167.8	172.5	178.0	179.5	174.9	176.4
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°	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1430.8	1423.8	1416.8	1412.1	1410.5	1369.2	1351.2	1339.5	1314.5	1294.2	1277.8
5°	1578.4	1563.5	1551.8	1537.8	1530.0	1425.4	1387.1	1360.6	1316.9	1291.1	1267.7
7.5°	1815.7	1774.3	1750.1	1722.8	1699.4	1510.5	1447.2	1405.9	1345.0	1310.6	1284.1
10°	2085.0	2042.1	2003.8	1961.6	1925.0	1623.6	1531.5	1467.5	1387.1	1342.6	1307.5
12.5°	2385.5	2343.4	2295.0	2241.1	2194.3	1767.3	1639.3	1547.9	1437.9	1378.5	1329.4
15°	2740.7	2666.5	2608.0	2545.5	2490.9	1939.0	1764.9	1638.5	1491.7	1411.3	1345.8
17.5°	3070.9	2992.8	2913.2	2858.6	2795.3	2131.8	1891.4	1730.6	1536.2	1432.4	1348.9
20°	3393.3	3308.2	3239.5	3166.1	3099.8	2331.7	2026.4	1811.8	1565.1	1433.2	1329.4
22.5°	3677.4	3624.3	3547.8	3468.2	3401.1	2531.5	2152.9	1880.5	1576.0	1415.2	1295.0
25°	4000.6	3944.4	3850.7	3783.6	3708.6	2735.2	2277.0	1933.5	1569.8	1381.7	1241.9
27.5°	4345.6	4283.2	4187.1	4116.9	4026.3	2946.8	2391.0	1971.8	1546.4	1327.0	1170.9
30°	4705.5	4648.5	4554.0	4483.0	4391.7	3170.8	2518.2	1997.6	1499.5	1251.3	1088.2
32.5°	5091.9	5044.2	4950.6	4876.4	4778.8	3413.6	2636.9	2005.4	1428.5	1161.5	1000.7
35°	5458.7	5426.0	5347.1	5277.6	5176.2	3643.1	2762.5	2001.5	1344.2	1063.2	921.1
37.5°	5871.7	5852.2	5813.1	5724.9	5600.8	3954.5	2913.2	1985.1	1241.2	965.6	860.2
40°	6311.9	6313.5	6271.3	6211.2	6095.7	4332.3	3092.7	1953.1	1128.7	879.7	804.8
42.5°	6778.0	6802.1	6781.9	6738.9	6628.1	4713.3	3307.4	1914.0	1019.5	796.2	750.2
45°	7311.9	7341.5	7372.8	7309.5	7201.8	5216.0	3590.0	1863.3	901.6	726.7	712.7
47.5°	7927.8	7974.6	8002.7	8003.5	7895.8	5838.9	4049.0	1832.8	797.0	679.9	694.7
50°	9227.5	9242.3	9308.7	9424.2	9341.4	7280.7	4850.6	1814.1	726.0	651.0	681.5
52.5°	11100.1	11263.3	11378.0	11370.2	11257.8	8196.3	5292.5	1717.3	683.8	640.1	675.2
55°	11862.8	12066.5	12278.8	12335.0	12247.6	8977.7	5710.1	1620.5	663.5	647.9	677.6
57.5°	12879.1	13222.6	13513.7	13636.3	13509.8	9977.6	6259.6	1569.8	657.3	669.0	692.4
60°	14066.4	14491.1	14873.6	15093.7	15093.7	11126.7	6829.5	1548.7	648.7	700.2	717.4
62.5°	14829.1	15452.8	16030.4	16352.8	16343.4	11926.8	7082.4	1476.9	629.2	722.1	751.7
65°	14832.2	15573.8	16309.9	16672.1	16690.8	11828.4	6664.8	1304.4	593.3	725.2	786.1
67.5°	13595.7	14386.5	15244.3	15649.5	15743.1	10888.6	5769.4	1072.5	534.7	694.0	798.6
70°	11482.6	12254.6	13130.5	13528.6	13694.8	9282.1	4646.9	826.7	459.8	625.3	772.8
72.5°	9046.4	9803.6	10413.2	10704.4	10833.9	7094.9	3383.9	624.5	377.0	526.9	703.3
75°	6404.8	6973.1	7297.1	7361.8	7382.1	4276.9	2056.1	464.5	310.7	409.8	594.0
77.5°	3615.0	3858.5	3832.0	3860.8	3620.4	1651.0	895.3	332.5	256.0	311.5	460.6
80°	1411.3	1455.0	1366.8	1339.5	1228.7	614.3	395.0	231.8	204.5	235.7	322.4
82.5°	622.1	642.4	623.7	628.4	601.1	316.9	236.5	167.8	156.1	172.5	213.9
85°	342.7	348.9	347.4	357.5	342.7	126.5	112.4	103.0	109.3	117.1	137.4
87.5°	167.0	168.6	163.1	171.7	166.3	64.0	55.4	58.5	64.0	65.6	65.6
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°	1340.3	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1266.1	1259.9	1260.7	1259.1	1256.0	1256.0
5°	1255.2	1249.0	1249.0	1247.4	1243.5	1244.3
7.5°	1266.1	1256.0	1252.1	1246.6	1241.2	1241.2
10°	1278.6	1260.7	1249.7	1240.4	1233.3	1233.3
12.5°	1288.0	1259.9	1241.9	1229.4	1222.4	1222.4
15°	1291.1	1254.4	1229.4	1214.6	1208.4	1207.6
17.5°	1281.0	1233.3	1202.9	1185.7	1177.9	1175.6
20°	1249.7	1195.1	1158.4	1138.9	1128.0	1124.1
22.5°	1202.9	1140.5	1097.5	1077.2	1063.2	1060.8
25°	1137.3	1070.2	1028.1	1008.5	1000.7	998.4
27.5°	1060.8	998.4	962.5	950.0	943.0	942.2
30°	988.2	935.2	908.6	899.3	890.7	889.1
32.5°	920.3	886.8	876.6	863.3	843.0	840.7
35°	871.9	868.8	861.8	832.1	807.1	800.1
37.5°	842.3	871.1	835.2	776.7	758.7	757.2
40°	825.1	847.0	785.3	765.0	766.5	765.0
42.5°	786.1	808.7	786.8	777.5	783.7	785.3
45°	747.0	772.0	798.6	792.3	807.1	807.1
47.5°	725.2	762.6	797.8	797.8	819.6	827.4
50°	700.2	754.8	785.3	796.2	813.4	807.1
52.5°	698.6	741.6	767.3	786.8	794.7	787.6
55°	701.0	730.6	749.4	771.2	780.6	781.4
57.5°	704.1	724.4	736.9	747.0	775.1	775.1
60°	711.9	718.9	726.0	731.4	768.1	768.9
62.5°	724.4	713.5	711.9	717.4	764.2	761.1
65°	743.9	705.7	694.0	699.4	760.3	750.9
67.5°	770.5	694.0	671.3	675.2	757.2	736.9
70°	794.7	675.2	643.2	639.3	727.5	691.6
72.5°	797.0	653.4	604.2	592.5	632.3	597.9
75°	758.0	638.5	561.3	526.9	522.2	517.5
77.5°	683.0	629.9	511.3	457.4	448.1	451.2
80°	571.4	597.9	451.2	387.2	437.9	432.5
82.5°	427.0	527.7	383.3	342.7	341.9	302.1
85°	237.3	411.4	312.2	256.8	178.8	173.3
87.5°	66.4	228.7	218.6	145.2	99.1	103.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)