

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: P193932

Luminaire Tested: **GLEON-AF-04-LED-E1-T2R-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193932
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-8030-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13449 lumens
Efficiency: N/A
Efficacy: 104.3 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): 129
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

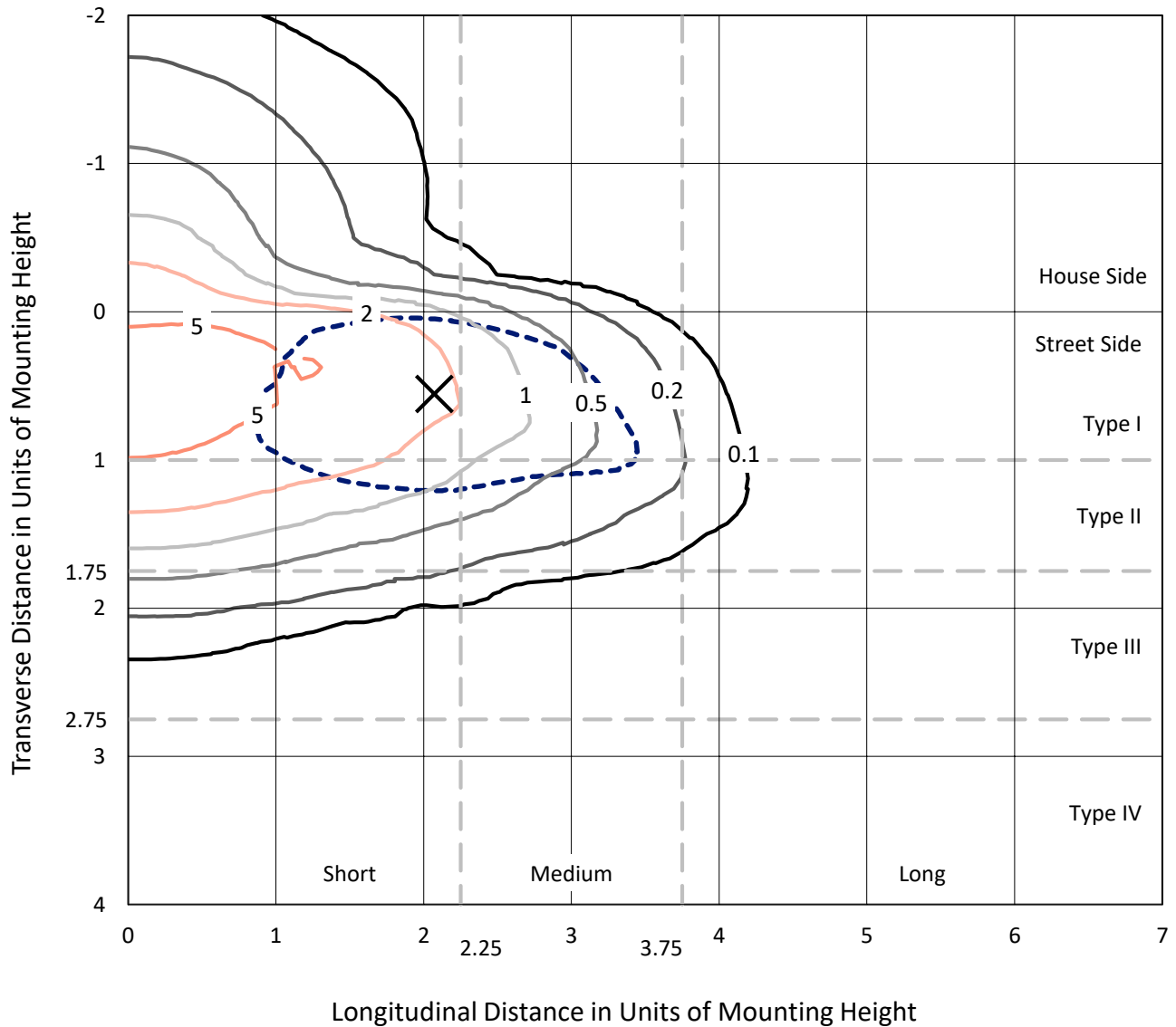


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

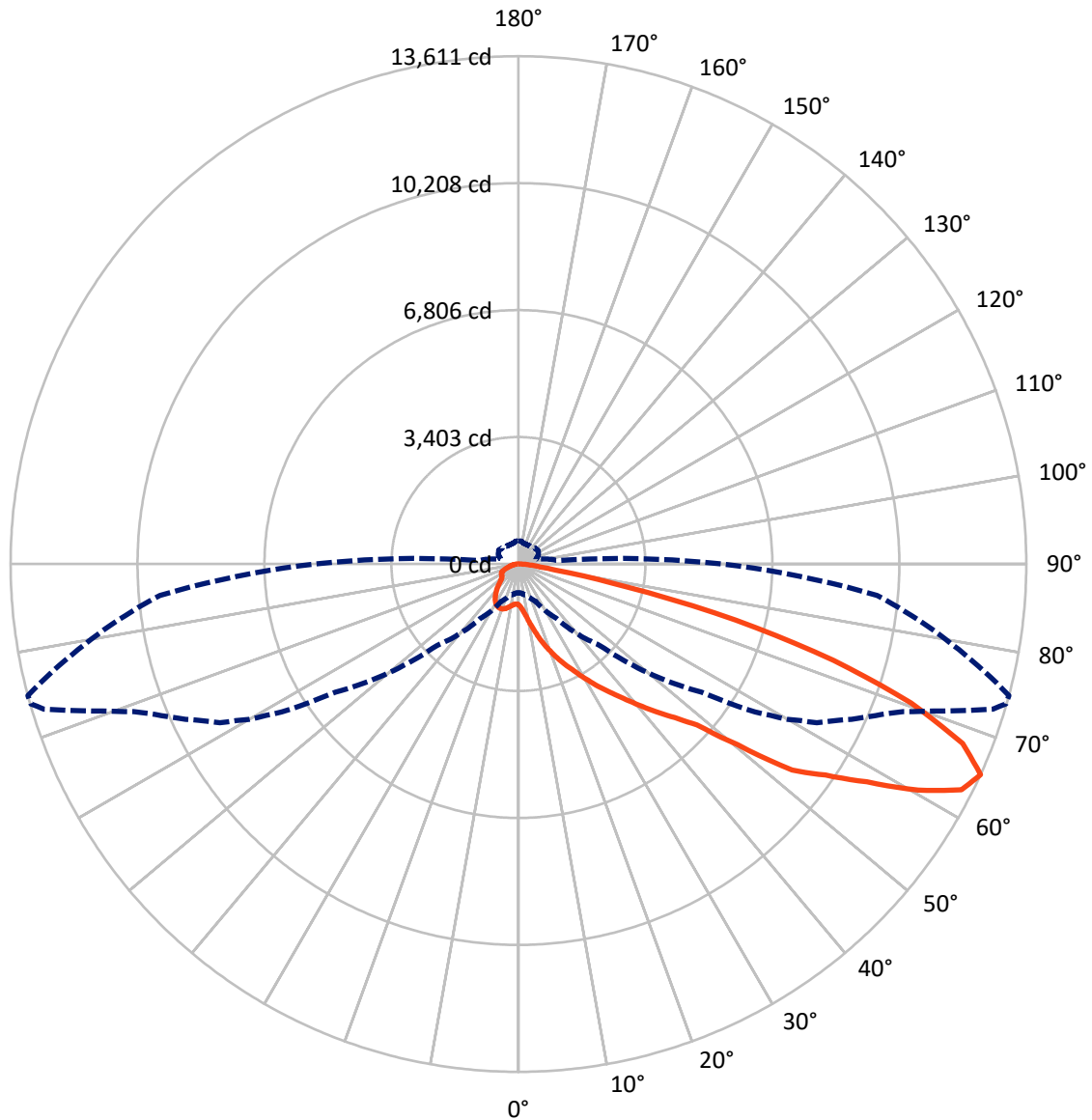


Based on 20 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - Full Cutoff

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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	2073.5	0.0	2073.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	11375.5	0.0	11375.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	13449.0	0.0	13449.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	1.0
10°-20°	527.9	3.9
20°-30°	1083.0	8.1
30°-40°	1822.1	13.5
40°-50°	2517.6	18.7
50°-60°	3142.7	23.4
60°-70°	2828.1	21.0
70°-80°	1185.5	8.8
80°-90°	207.1	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°	13449.0	100.0
0°-180°	13449.0	100.0



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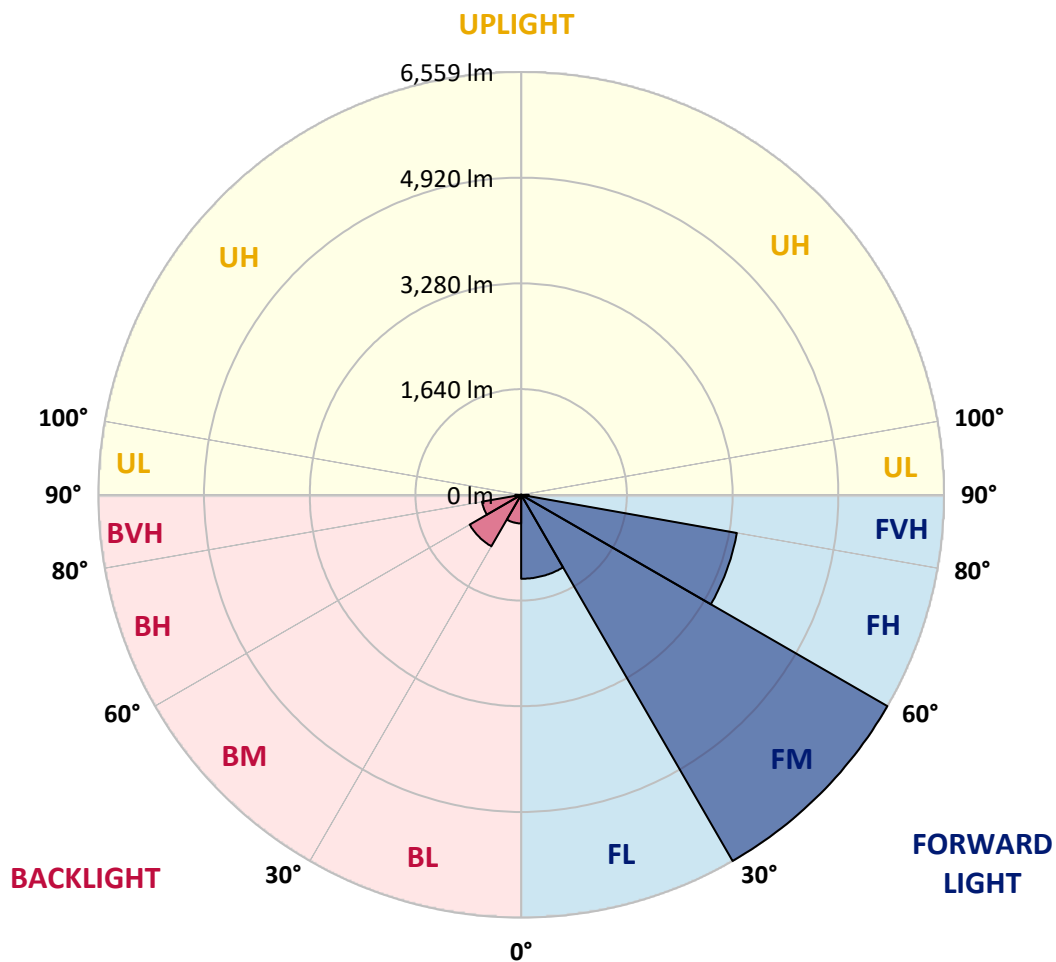
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1302.5	9.7			
FM (30°-60°)	6559.4	48.8			
FH (60°-80°)	3397.2	25.3			G2/5000
FVH (80°-90°)	116.4	0.9			G2/225
BL (0°-30°)	443.4	3.3	B1/500		
BM (30°-60°)	922.9	6.9	B1/1000		
BH (60°-80°)	616.4	4.6	B2/1000		G2/1000
BVH (80°-90°)	90.7	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°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
2.5°	1387.7	1372.4	1376.3	1350.8	1319.6	1278.9	1233.7	1233.0	1233.7	1229.2	1212.7
5°	1924.3	1905.9	1898.9	1841.6	1757.6	1637.9	1508.0	1494.0	1488.3	1473.7	1439.9
7.5°	2315.8	2305.7	2294.8	2251.5	2175.2	2041.5	1867.1	1837.1	1808.5	1801.5	1763.3
10°	2568.6	2566.0	2543.1	2531.6	2483.9	2368.0	2198.1	2169.4	2138.2	2127.4	2087.3
12.5°	2768.4	2767.8	2757.0	2760.2	2718.8	2634.8	2488.3	2462.2	2439.3	2406.2	2377.6
15°	2906.6	2907.2	2923.1	2940.9	2934.6	2877.9	2740.4	2729.0	2709.2	2686.3	2652.6
17.5°	3019.9	3023.1	3039.6	3072.1	3107.1	3102.6	2993.8	2984.2	2967.0	2935.9	2918.0
20°	3275.8	3287.9	3256.0	3256.0	3259.9	3277.1	3224.9	3217.2	3193.0	3176.5	3162.5
22.5°	3708.0	3722.0	3650.1	3576.9	3504.9	3452.7	3400.6	3410.1	3393.5	3382.1	3373.8
25°	4269.5	4280.3	4163.8	4040.3	3893.9	3702.9	3573.7	3568.0	3559.1	3552.1	3548.2
27.5°	4797.8	4802.3	4692.1	4511.4	4341.4	4067.0	3749.4	3742.4	3731.6	3718.2	3706.7
30°	5249.8	5248.5	5135.2	4962.7	4780.6	4477.0	4016.1	3994.5	3962.6	3926.4	3898.3
32.5°	5641.3	5639.4	5515.2	5336.4	5145.4	4883.1	4381.5	4336.9	4287.3	4216.6	4174.0
35°	5949.4	5948.1	5831.0	5644.5	5425.5	5265.7	4800.4	4745.6	4682.6	4587.8	4522.2
37.5°	6065.9	6065.9	6000.3	5873.0	5679.5	5570.0	5265.7	5199.5	5132.0	5024.4	4950.6
40°	5997.8	5999.0	6013.0	5989.5	5895.3	5811.2	5699.8	5660.4	5602.4	5505.7	5428.7
42.5°	5769.2	5776.2	5869.2	5983.1	6030.2	6016.8	6085.0	6067.1	6026.4	5951.9	5890.8
45°	5479.6	5501.2	5603.1	5818.2	6067.8	6194.5	6407.7	6409.6	6402.0	6361.9	6314.8
47.5°	5081.7	5112.3	5246.6	5537.5	5979.9	6367.0	6735.5	6752.7	6768.6	6742.5	6720.9
50°	4553.4	4589.7	4790.8	5176.6	5801.1	6545.8	7354.9	7432.6	7505.1	7496.2	7510.9
52.5°	3987.5	4030.1	4276.5	4706.2	5493.6	6587.2	7750.9	7877.5	8004.2	8108.0	8218.1
55°	3476.9	3454.0	3700.4	4153.0	4988.2	6400.7	8106.7	8259.5	8400.8	8528.1	8659.2
57.5°	2785.0	2822.5	3069.5	3517.0	4319.1	5874.3	8351.8	8575.2	8778.3	8989.0	9174.9
60°	2035.7	2073.3	2341.3	2795.8	3592.8	5076.0	8164.6	8503.3	8828.6	9151.3	9403.4
62.5°	1229.2	1257.2	1493.4	1926.3	2770.3	4129.4	7330.7	7775.1	8253.8	8639.5	9025.9
65°	765.2	781.1	868.3	1106.4	1779.2	3082.9	5989.5	6473.9	6989.5	7479.0	7880.7
67.5°	626.4	632.1	648.0	699.0	977.1	2010.3	4457.9	4886.9	5352.3	5825.9	6272.7
70°	563.4	559.5	559.5	562.7	626.4	1080.9	2918.7	3198.1	3585.8	3997.7	4406.3
72.5°	508.6	504.8	497.8	488.2	511.2	659.5	1508.7	1719.4	1998.8	2364.9	2756.3
75°	457.1	452.0	443.7	431.6	447.5	497.8	724.4	812.9	949.1	1143.9	1362.3
77.5°	403.6	397.2	389.6	380.7	401.0	387.0	424.6	456.4	508.6	571.0	653.1
80°	343.1	337.4	334.8	330.4	354.6	294.7	299.8	319.6	350.1	383.9	422.0
82.5°	268.6	268.6	278.8	280.7	307.5	212.0	224.1	241.3	257.2	275.0	292.8
85°	177.0	178.2	212.6	226.0	242.5	142.6	168.1	173.8	186.5	196.7	204.3
87.5°	55.4	59.8	129.9	143.9	139.4	80.8	103.1	105.7	114.6	121.6	128.0
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°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
2.5°	1212.7	1205.0	1198.0	1197.4	1192.3	1185.3	1187.8	1177.0	1177.7	1171.9	1165.6
5°	1425.9	1420.8	1395.4	1388.4	1369.3	1357.2	1355.3	1329.8	1326.6	1312.0	1296.1
7.5°	1732.7	1716.2	1680.5	1663.4	1630.9	1606.7	1595.2	1561.5	1545.0	1506.8	1489.6
10°	2054.2	2033.2	1989.3	1965.1	1933.9	1895.1	1874.1	1825.0	1805.9	1770.9	1728.9
12.5°	2352.1	2331.1	2285.9	2267.5	2226.1	2184.7	2161.8	2106.4	2081.6	2025.6	1992.5
15°	2627.8	2606.7	2567.3	2548.2	2506.8	2473.1	2442.5	2387.8	2358.5	2306.3	2263.0
17.5°	2895.1	2872.8	2838.5	2821.3	2781.2	2746.8	2713.7	2662.1	2632.2	2580.0	2541.2
20°	3143.4	3126.8	3102.0	3079.1	3039.0	3007.8	2968.3	2923.8	2880.5	2842.3	2805.4
22.5°	3359.8	3353.4	3326.7	3316.5	3282.1	3255.4	3221.0	3177.1	3145.9	3097.5	3063.2
25°	3546.3	3544.4	3531.7	3528.5	3504.3	3478.8	3471.2	3434.9	3406.3	3363.6	3328.0
27.5°	3706.7	3708.6	3705.5	3714.4	3708.0	3696.6	3697.2	3685.1	3668.5	3632.9	3601.7
30°	3885.0	3874.8	3880.5	3893.3	3897.1	3898.3	3919.4	3926.4	3925.1	3901.5	3886.3
32.5°	4137.1	4112.9	4090.6	4088.7	4101.4	4106.5	4142.2	4160.6	4176.5	4182.3	4184.8
35°	4458.5	4410.1	4363.7	4338.9	4317.2	4322.9	4348.4	4378.3	4413.3	4437.5	4466.2
37.5°	4863.4	4804.2	4722.1	4663.5	4648.9	4617.0	4633.6	4657.1	4691.5	4729.1	4778.7
40°	5354.2	5264.4	5172.1	5094.5	5052.4	4993.9	4993.2	4988.8	5009.8	5044.8	5114.8
42.5°	5826.5	5746.9	5648.9	5567.4	5512.7	5434.4	5418.5	5377.1	5386.6	5417.2	5485.3
45°	6268.9	6203.4	6143.5	6049.3	6002.8	5918.2	5891.4	5842.4	5815.1	5829.1	5897.2
47.5°	6697.3	6655.3	6592.9	6531.8	6496.2	6420.4	6386.1	6351.0	6316.0	6314.8	6386.1
50°	7532.5	7510.2	7436.4	7372.7	7389.9	7297.0	7302.7	7208.5	7251.2	7256.2	7405.8
52.5°	8317.4	8395.1	8449.8	8516.7	8559.9	8568.2	8596.9	8639.5	8691.1	8792.9	8931.7
55°	8766.8	8864.2	8920.9	8971.8	9055.8	9073.7	9121.4	9178.0	9223.2	9337.8	9455.6
57.5°	9300.9	9481.7	9569.5	9650.4	9763.7	9807.0	9886.5	9948.3	10006.9	10142.4	10285.0
60°	9630.0	9850.3	10029.1	10157.1	10299.0	10400.9	10521.2	10618.0	10755.5	10917.8	11130.4
62.5°	9368.4	9691.8	9929.2	10148.8	10341.7	10536.5	10709.0	10889.8	11098.6	11344.3	11674.0
65°	8326.3	8655.4	9062.2	9290.1	9545.3	9845.8	10108.1	10400.9	10685.4	11043.2	11530.8
67.5°	6703.1	7085.6	7542.7	7772.5	8066.0	8401.4	8695.5	9053.3	9385.6	9819.1	10421.9
70°	4831.6	5326.2	5710.7	5950.6	6293.1	6638.8	6922.7	7339.0	7614.0	8058.3	8681.5
72.5°	3059.3	3449.6	3920.6	4223.0	4527.3	4877.4	5167.7	5526.7	5783.2	6188.1	6752.7
75°	1644.9	1932.6	2346.4	2633.5	2959.4	3258.6	3598.5	3839.1	4028.8	4349.0	4807.4
77.5°	770.9	945.9	1155.4	1376.3	1597.2	1827.6	2051.7	2246.5	2327.9	2511.3	2781.8
80°	467.9	524.5	585.6	653.8	746.1	820.5	919.2	990.5	995.6	1053.5	1136.3
82.5°	312.6	333.6	352.0	369.2	392.8	411.2	432.2	457.1	467.2	480.6	507.3
85°	213.3	223.4	227.3	238.1	235.5	241.9	250.2	258.4	262.9	262.3	274.4
87.5°	131.1	136.2	138.8	141.3	139.4	136.9	140.7	145.1	146.4	142.6	143.9
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
2.5°	1166.8	1161.1	1155.4	1151.6	1150.3	1116.5	1101.9	1092.4	1072.0	1055.4	1042.1
5°	1287.1	1275.0	1265.5	1254.0	1247.7	1162.4	1131.2	1109.5	1073.9	1052.9	1033.8
7.5°	1480.7	1446.9	1427.2	1404.9	1385.8	1231.8	1180.2	1146.5	1096.8	1068.8	1047.2
10°	1700.3	1665.3	1634.1	1599.7	1569.8	1324.1	1248.9	1196.7	1131.2	1094.9	1066.3
12.5°	1945.4	1911.0	1871.5	1827.6	1789.4	1441.2	1336.8	1262.3	1172.6	1124.2	1084.1
15°	2235.0	2174.5	2126.8	2075.9	2031.3	1581.2	1439.3	1336.2	1216.5	1150.9	1097.4
17.5°	2504.3	2440.6	2375.7	2331.1	2279.6	1738.5	1542.4	1411.3	1252.8	1168.1	1100.0
20°	2767.2	2697.8	2641.8	2581.9	2527.8	1901.4	1652.5	1477.5	1276.3	1168.7	1084.1
22.5°	2998.9	2955.6	2893.2	2828.3	2773.5	2064.4	1755.7	1533.5	1285.2	1154.1	1056.1
25°	3262.4	3216.6	3140.2	3085.4	3024.3	2230.5	1856.9	1576.8	1280.1	1126.7	1012.8
27.5°	3543.8	3492.9	3414.6	3357.3	3283.4	2403.0	1949.8	1608.0	1261.0	1082.2	954.9
30°	3837.2	3790.8	3713.7	3655.8	3581.3	2585.7	2053.6	1629.0	1222.8	1020.4	887.4
32.5°	4152.3	4113.5	4037.1	3976.6	3897.1	2783.7	2150.3	1635.3	1164.9	947.2	816.1
35°	4451.5	4424.8	4360.5	4303.8	4221.1	2970.9	2252.8	1632.2	1096.2	867.0	751.2
37.5°	4788.3	4772.4	4740.5	4668.6	4567.4	3224.9	2375.7	1618.8	1012.1	787.4	701.5
40°	5147.3	5148.6	5114.2	5065.2	4971.0	3533.0	2522.1	1592.7	920.5	717.4	656.3
42.5°	5527.3	5547.1	5530.5	5495.5	5405.1	3843.6	2697.1	1560.9	831.4	649.3	611.7
45°	5962.7	5986.9	6012.4	5960.8	5873.0	4253.6	2927.6	1519.5	735.2	592.6	581.2
47.5°	6465.0	6503.2	6526.1	6526.7	6438.9	4761.5	3301.9	1494.7	649.9	554.5	566.5
50°	7524.9	7537.0	7591.1	7685.3	7617.8	5937.3	3955.6	1479.4	592.0	530.9	555.7
52.5°	9052.0	9185.1	9278.6	9272.3	9180.6	6684.0	4315.9	1400.5	557.6	522.0	550.6
55°	9673.9	9840.1	10013.2	10059.1	9987.8	7321.2	4656.5	1321.5	541.1	528.4	552.5
57.5°	10502.7	10782.8	11020.3	11120.2	11017.1	8136.6	5104.6	1280.1	536.0	545.5	564.6
60°	11471.0	11817.3	12129.2	12308.7	12308.7	9073.7	5569.3	1263.0	529.0	571.0	585.0
62.5°	12092.9	12601.5	13072.6	13335.5	13327.8	9726.1	5775.6	1204.4	513.1	588.8	613.0
65°	12095.4	12700.2	13300.5	13595.8	13611.1	9645.9	5435.0	1063.7	483.8	591.4	641.0
67.5°	11087.1	11732.0	12431.6	12761.9	12838.3	8879.5	4704.9	874.6	436.0	565.9	651.2
70°	9363.9	9993.5	10707.7	11032.4	11168.0	7569.4	3789.5	674.1	374.9	509.9	630.2
72.5°	7377.2	7994.7	8491.8	8729.3	8834.9	5785.8	2759.5	509.3	307.5	429.7	573.5
75°	5223.0	5686.5	5950.6	6003.5	6020.0	3487.8	1676.7	378.8	253.4	334.2	484.4
77.5°	2947.9	3146.6	3124.9	3148.5	2952.4	1346.3	730.1	271.2	208.8	254.0	375.6
80°	1150.9	1186.6	1114.6	1092.4	1002.0	501.0	322.1	189.1	166.8	192.2	262.9
82.5°	507.3	523.9	508.6	512.4	490.2	258.4	192.9	136.9	127.3	140.7	174.4
85°	279.5	284.5	283.3	291.5	279.5	103.1	91.7	84.0	89.1	95.5	112.0
87.5°	136.2	137.5	133.0	140.0	135.6	52.2	45.2	47.7	52.2	53.5	53.5
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°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
2.5°	1032.5	1027.4	1028.1	1026.8	1024.2	1024.2
5°	1023.6	1018.5	1018.5	1017.2	1014.1	1014.7
7.5°	1032.5	1024.2	1021.1	1016.6	1012.1	1012.1
10°	1042.7	1028.1	1019.1	1011.5	1005.8	1005.8
12.5°	1050.3	1027.4	1012.8	1002.6	996.9	996.9
15°	1052.9	1023.0	1002.6	990.5	985.4	984.8
17.5°	1044.6	1005.8	981.0	966.9	960.6	958.7
20°	1019.1	974.6	944.7	928.8	919.8	916.7
22.5°	981.0	930.0	895.0	878.5	867.0	865.1
25°	927.5	872.7	838.4	822.4	816.1	814.2
27.5°	865.1	814.2	784.9	774.7	769.0	768.3
30°	805.9	762.6	741.0	733.3	726.3	725.1
32.5°	750.5	723.1	714.9	704.0	687.5	685.6
35°	711.0	708.5	702.8	678.6	658.2	652.5
37.5°	686.9	710.4	681.1	633.4	618.7	617.5
40°	672.9	690.7	640.4	623.8	625.1	623.8
42.5°	641.0	659.5	641.7	634.0	639.1	640.4
45°	609.2	629.6	651.2	646.1	658.2	658.2
47.5°	591.4	621.9	650.6	650.6	668.4	674.8
50°	571.0	615.6	640.4	649.3	663.3	658.2
52.5°	569.7	604.7	625.7	641.7	648.0	642.3
55°	571.6	595.8	611.1	628.9	636.6	637.2
57.5°	574.2	590.7	600.9	609.2	632.1	632.1
60°	580.6	586.3	592.0	596.5	626.4	627.0
62.5°	590.7	581.8	580.6	585.0	623.2	620.7
65°	606.6	575.5	565.9	570.4	620.0	612.4
67.5°	628.3	565.9	547.4	550.6	617.5	600.9
70°	648.0	550.6	524.5	521.3	593.3	564.0
72.5°	649.9	532.8	492.7	483.2	515.6	487.6
75°	618.1	520.7	457.7	429.7	425.9	422.0
77.5°	557.0	513.7	417.0	373.0	365.4	367.9
80°	466.0	487.6	367.9	315.7	357.1	352.7
82.5°	348.2	430.3	312.6	279.5	278.8	246.4
85°	193.5	335.5	254.6	209.4	145.8	141.3
87.5°	54.1	186.5	178.2	118.4	80.8	84.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)