

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: P193943

Luminaire Tested: **GLEON-AF-05-LED-E1-T2R-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193943
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-05-LED-E1-T2R-8030-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 20433 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 210
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

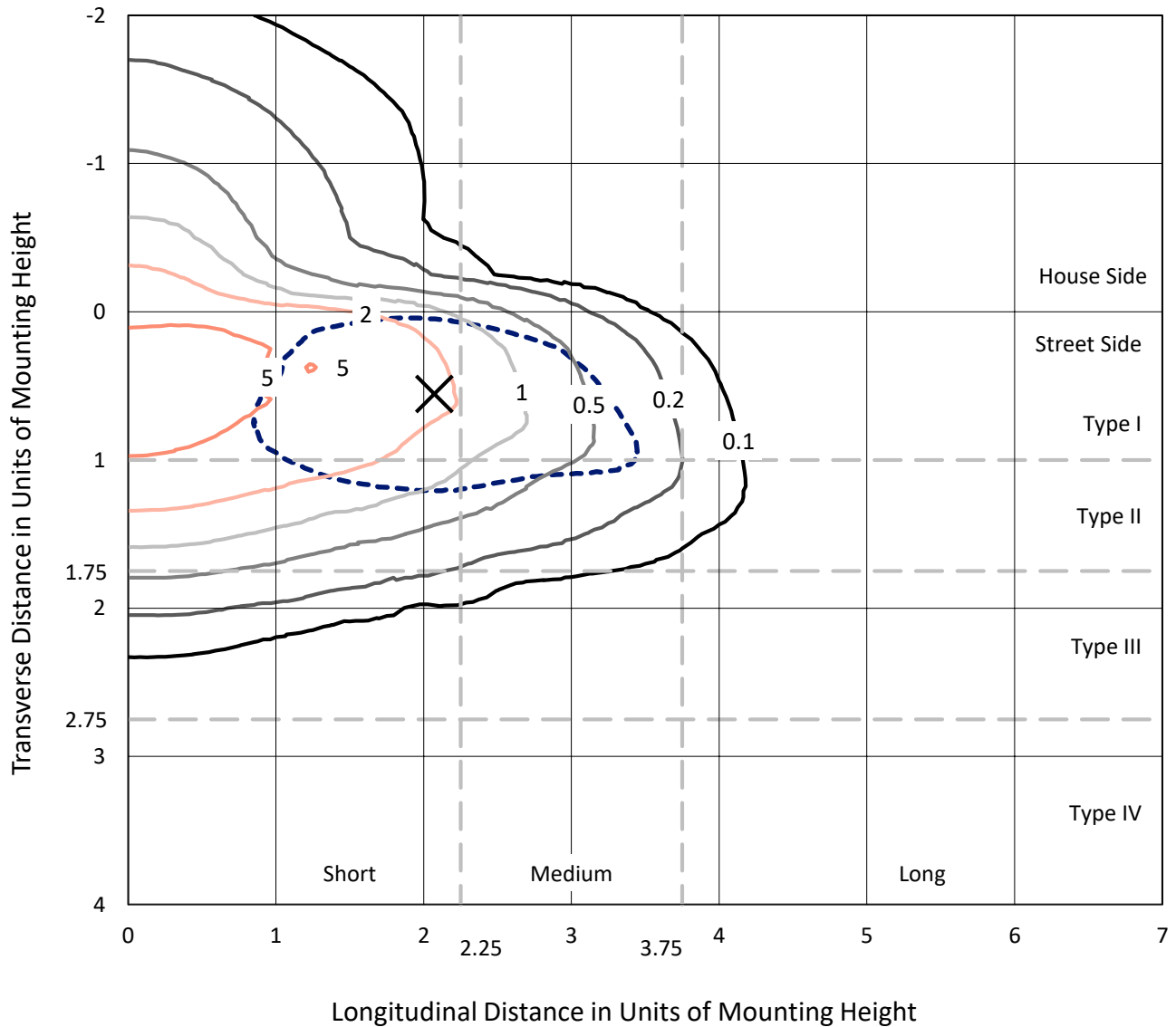


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Iso-Footcandle Lines of Horizontal Illumination

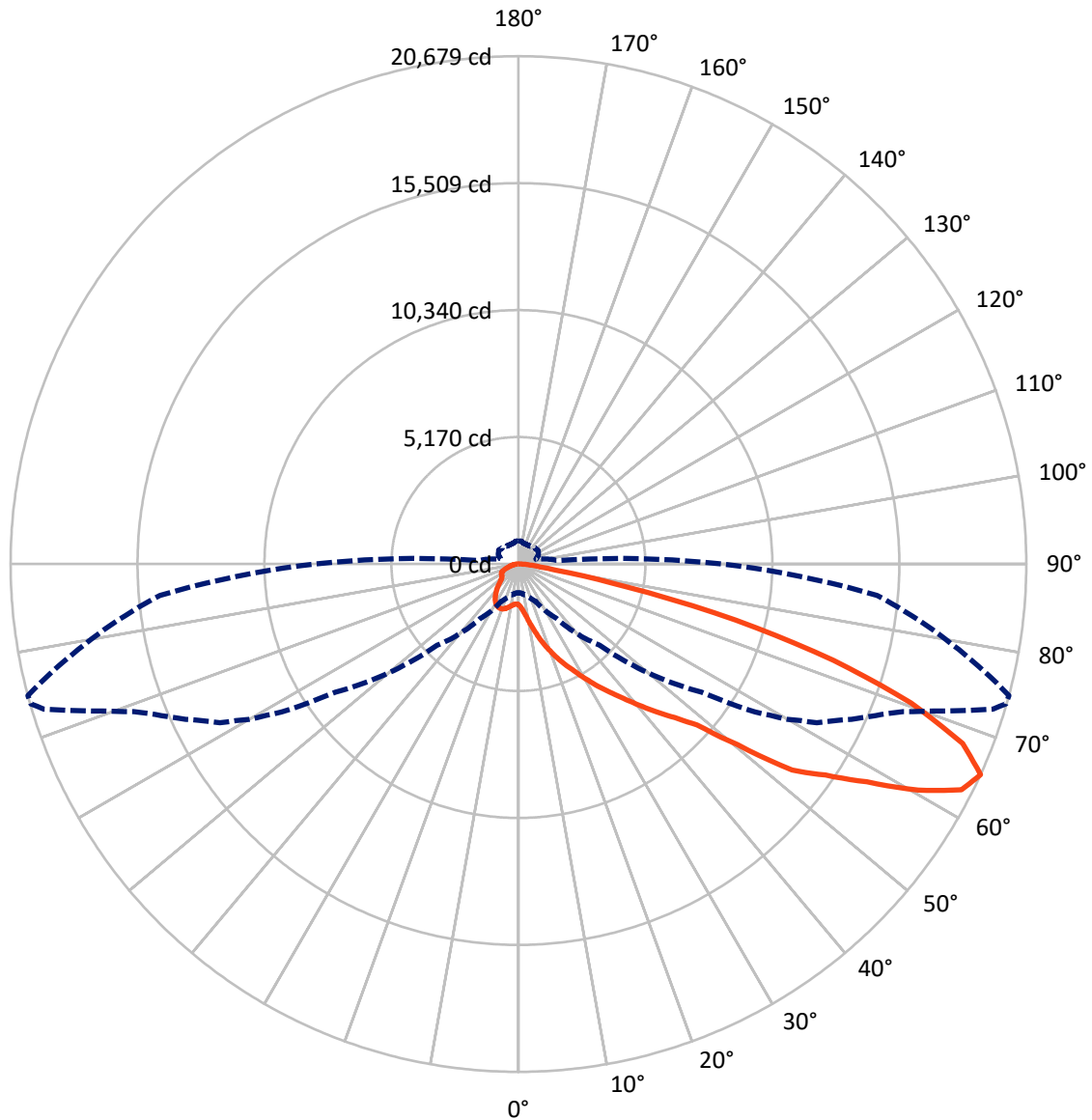
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	3150.3	0.0	3150.3
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	17282.7	0.0	17282.7
	% Fixture	84.6	0.0	84.6
Total	Lumens	20433.0	0.0	20433.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.3	1.0
10°-20°	802.0	3.9
20°-30°	1645.4	8.1
30°-40°	2768.3	13.5
40°-50°	3825.0	18.7
50°-60°	4774.7	23.4
60°-70°	4296.7	21.0
70°-80°	1801.1	8.8
80°-90°	314.7	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°	20433.0	100.0
0°-180°	20433.0	100.0



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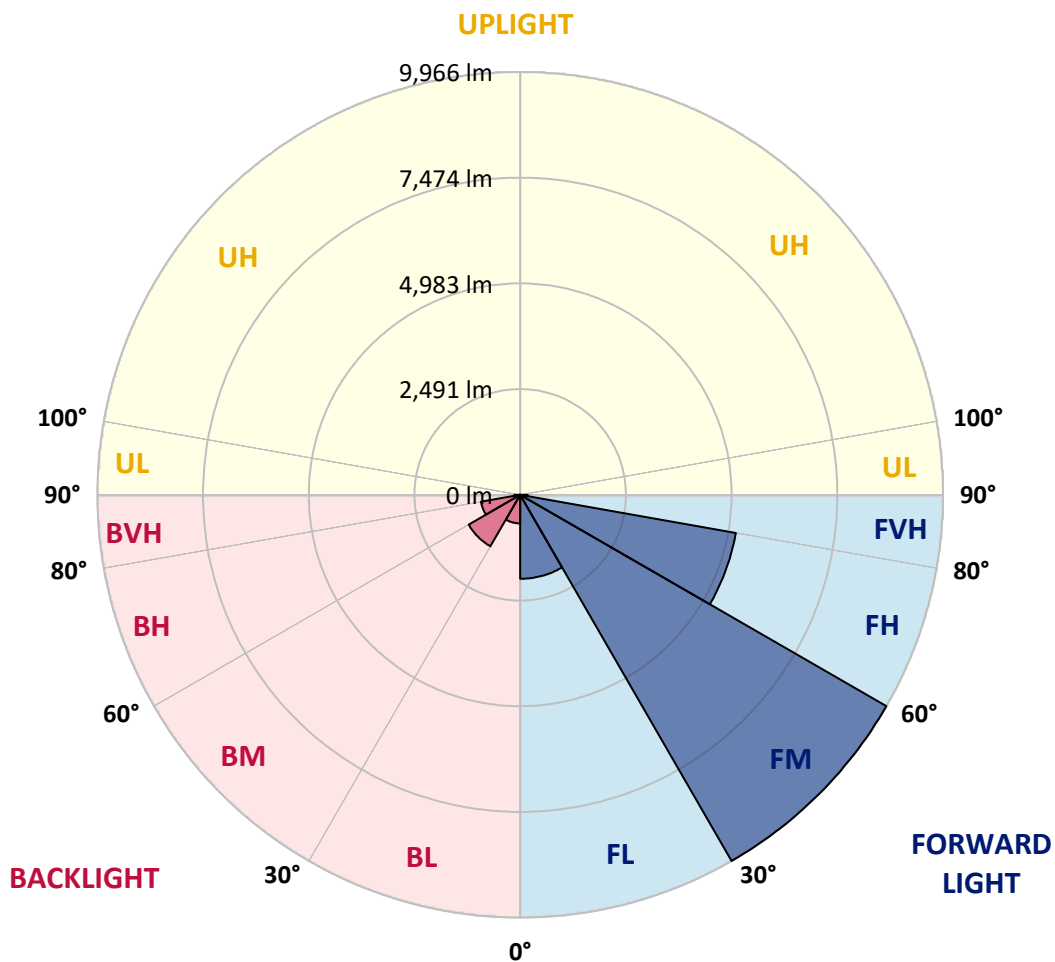
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1978.9	9.7			
FM (30°-60°)	9965.7	48.8			
FH (60°-80°)	5161.3	25.3			G3/7500
FVH (80°-90°)	176.9	0.9			G2/225
BL (0°-30°)	673.7	3.3	B2/1000		
BM (30°-60°)	1402.2	6.9	B2/2500		
BH (60°-80°)	936.5	4.6	B2/1000		G2/1000
BVH (80°-90°)	137.8	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6
2.5°	2108.4	2085.1	2090.9	2052.3	2004.9	1943.0	1874.3	1873.3	1874.3	1867.5	1842.4
5°	2923.7	2895.6	2885.0	2797.9	2670.3	2488.4	2291.1	2269.9	2261.2	2238.9	2187.7
7.5°	3518.4	3503.0	3486.5	3420.8	3304.7	3101.6	2836.6	2791.2	2747.6	2737.0	2679.0
10°	3902.4	3898.5	3863.7	3846.3	3773.8	3597.7	3339.5	3296.0	3248.6	3232.2	3171.2
12.5°	4206.1	4205.1	4188.7	4193.5	4130.6	4003.0	3780.5	3740.9	3706.1	3655.8	3612.3
15°	4415.9	4416.9	4441.1	4468.2	4458.5	4372.4	4163.5	4146.1	4116.1	4081.3	4030.1
17.5°	4588.1	4592.9	4618.1	4667.4	4720.6	4713.8	4548.4	4533.9	4507.8	4460.4	4433.4
20°	4976.9	4995.3	4946.9	4946.9	4952.7	4978.8	4899.5	4887.9	4851.2	4826.0	4804.7
22.5°	5633.6	5654.8	5545.6	5434.3	5325.0	5245.7	5166.4	5180.9	5155.8	5138.4	5125.8
25°	6486.6	6503.0	6326.0	6138.4	5916.0	5625.8	5429.5	5420.8	5407.3	5396.6	5390.8
27.5°	7289.3	7296.1	7128.8	6854.1	6595.9	6179.0	5696.4	5685.8	5669.3	5649.0	5631.6
30°	7976.0	7974.0	7801.9	7539.8	7263.2	6801.9	6101.7	6068.8	6020.4	5965.3	5922.7
32.5°	8570.8	8567.9	8379.3	8107.5	7817.4	7418.9	6656.8	6589.1	6513.7	6406.3	6341.5
35°	9038.9	9036.9	8859.0	8575.6	8242.9	8000.1	7293.2	7210.0	7114.3	6970.1	6870.5
37.5°	9215.8	9215.8	9116.2	8922.8	8628.8	8462.4	8000.1	7899.6	7797.0	7633.6	7521.4
40°	9112.4	9114.3	9135.6	9099.8	8956.6	8829.0	8659.7	8599.8	8511.8	8364.8	8247.7
42.5°	8765.2	8775.8	8917.0	9090.1	9161.7	9141.4	9244.9	9217.8	9155.9	9042.7	8949.9
45°	8325.1	8358.0	8512.7	8839.6	9218.7	9411.2	9735.2	9738.1	9726.5	9665.6	9594.0
47.5°	7720.6	7767.1	7971.1	8413.1	9085.3	9673.3	10233.3	10259.4	10283.6	10243.9	10211.0
50°	6917.9	6973.0	7278.7	7864.7	8813.5	9945.1	11174.3	11292.3	11402.5	11389.0	11411.2
52.5°	6058.1	6122.9	6497.2	7150.0	8346.4	10007.9	11775.8	11968.3	12160.8	12318.4	12485.7
55°	5282.5	5247.7	5622.0	6309.6	7578.5	9724.6	12316.5	12548.6	12763.3	12956.7	13155.9
57.5°	4231.2	4288.3	4663.5	5343.4	6562.0	8924.7	12688.8	13028.3	13336.8	13656.9	13939.3
60°	3092.9	3150.0	3557.1	4247.7	5458.5	7711.9	12404.5	12919.0	13413.2	13903.5	14286.5
62.5°	1867.5	1910.1	2268.9	2926.6	4209.0	6273.8	11137.5	11812.6	12539.9	13126.0	13713.0
65°	1162.5	1186.7	1319.2	1680.9	2703.1	4683.8	9099.8	9835.8	10619.2	11362.9	11973.1
67.5°	951.7	960.4	984.5	1061.9	1484.6	3054.2	6772.9	7424.7	8131.7	8851.2	9530.2
70°	855.9	850.1	850.1	854.9	951.7	1642.2	4434.3	4858.9	5447.9	6073.6	6694.5
72.5°	772.7	766.9	756.3	741.8	776.6	1002.0	2292.1	2612.2	3036.8	3592.9	4187.7
75°	694.4	686.7	674.1	655.7	679.9	756.3	1100.6	1235.0	1442.0	1737.9	2069.7
77.5°	613.2	603.5	591.9	578.3	609.3	588.0	645.1	693.4	772.7	867.5	992.3
80°	521.3	512.6	508.7	501.9	538.7	447.8	455.5	485.5	531.9	583.2	641.2
82.5°	408.1	408.1	423.6	426.5	467.1	322.1	340.4	366.5	390.7	417.8	444.9
85°	268.9	270.8	323.0	343.3	368.5	216.6	255.3	264.0	283.4	298.8	310.5
87.5°	84.1	90.9	197.3	218.6	211.8	122.8	156.7	160.5	174.1	184.7	194.4
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°	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6
2.5°	1842.4	1830.8	1820.1	1819.2	1811.4	1800.8	1804.7	1788.2	1789.2	1780.5	1770.8
5°	2166.4	2158.6	2120.0	2109.3	2080.3	2061.9	2059.0	2020.3	2015.5	1993.3	1969.1
7.5°	2632.5	2607.4	2553.2	2527.1	2477.8	2441.1	2423.6	2372.4	2347.2	2289.2	2263.1
10°	3120.9	3089.0	3022.3	2985.5	2938.2	2879.2	2847.2	2772.8	2743.8	2690.6	2626.7
12.5°	3573.6	3541.7	3473.0	3444.9	3382.1	3319.2	3284.4	3200.3	3162.5	3077.4	3027.1
15°	3992.3	3960.4	3900.5	3871.4	3808.6	3757.3	3710.9	3627.7	3583.2	3503.9	3438.2
17.5°	4398.5	4364.7	4312.5	4286.3	4225.4	4173.2	4122.9	4044.6	3999.1	3919.8	3860.8
20°	4775.7	4750.6	4712.9	4678.0	4617.1	4569.7	4509.8	4442.1	4376.3	4318.3	4262.2
22.5°	5104.5	5094.9	5054.3	5038.8	4986.6	4945.9	4893.7	4827.0	4779.6	4706.1	4653.9
25°	5387.9	5385.0	5365.7	5360.8	5324.1	5285.4	5273.8	5218.7	5175.1	5110.3	5056.2
27.5°	5631.6	5634.5	5629.7	5643.2	5633.6	5616.2	5617.1	5598.7	5573.6	5519.4	5472.1
30°	5902.4	5887.0	5895.7	5915.0	5920.8	5922.7	5954.7	5965.3	5963.4	5927.6	5904.4
32.5°	6285.4	6248.7	6214.8	6211.9	6231.3	6239.0	6293.2	6321.2	6345.4	6354.1	6358.0
35°	6773.8	6700.3	6629.7	6592.0	6559.1	6567.8	6606.5	6652.0	6705.2	6741.9	6785.4
37.5°	7388.9	7299.0	7174.2	7085.2	7063.0	7014.6	7039.8	7075.6	7127.8	7184.9	7260.3
40°	8134.6	7998.2	7858.0	7740.0	7676.2	7587.2	7586.2	7579.4	7611.4	7664.6	7770.9
42.5°	8852.2	8731.3	8582.4	8458.6	8375.4	8256.4	8232.3	8169.4	8183.9	8230.3	8333.8
45°	9524.4	9424.7	9333.8	9190.7	9120.1	8991.5	8950.8	8876.4	8834.8	8856.1	8959.5
47.5°	10175.2	10111.4	10016.6	9923.8	9869.6	9754.5	9702.3	9649.1	9595.9	9594.0	9702.3
50°	11444.1	11410.3	11298.1	11201.4	11227.5	11086.3	11095.0	10951.8	11016.6	11024.4	11251.7
52.5°	12636.6	12754.6	12837.8	12939.3	13005.1	13017.6	13061.2	13126.0	13204.3	13359.0	13569.9
55°	13319.4	13467.4	13553.4	13630.8	13758.5	13785.6	13858.1	13944.2	14012.8	14186.9	14365.8
57.5°	14130.8	14405.5	14539.0	14661.8	14833.9	14899.7	15020.6	15114.4	15203.4	15409.4	15626.0
60°	14630.8	14965.5	15237.2	15431.6	15647.3	15802.0	15984.8	16131.8	16340.7	16587.3	16910.4
62.5°	14233.3	14724.6	15085.4	15419.0	15712.1	16008.0	16270.1	16544.8	16862.0	17235.3	17736.3
65°	12650.1	13150.1	13768.1	14114.4	14502.2	14958.7	15357.1	15802.0	16234.3	16777.9	17518.7
67.5°	10183.9	10765.2	11459.6	11808.7	12254.6	12764.3	13211.1	13754.6	14259.4	14918.1	15833.9
70°	7340.6	8092.0	8676.2	9040.8	9561.1	10086.3	10517.6	11150.1	11567.9	12243.0	13189.8
72.5°	4648.1	5240.9	5956.6	6416.0	6878.3	7410.2	7851.2	8396.7	8786.4	9401.5	10259.4
75°	2499.1	2936.2	3564.9	4001.0	4496.2	4950.8	5467.2	5832.8	6121.0	6607.5	7303.8
77.5°	1171.2	1437.2	1755.4	2090.9	2426.5	2776.6	3117.1	3413.0	3536.8	3815.4	4226.4
80°	710.8	796.9	889.8	993.2	1133.5	1246.6	1396.5	1504.9	1512.6	1600.6	1726.3
82.5°	474.9	506.8	534.8	560.9	596.7	624.8	656.7	694.4	709.9	730.2	770.8
85°	324.0	339.5	345.3	361.7	357.8	367.5	380.1	392.7	399.4	398.5	416.8
87.5°	199.2	207.0	210.8	214.7	211.8	207.9	213.7	220.5	222.4	216.6	218.6
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6
2.5°	1772.8	1764.1	1755.4	1749.5	1747.6	1696.4	1674.1	1659.6	1628.7	1603.5	1583.2
5°	1955.5	1937.2	1922.7	1905.3	1895.6	1766.0	1718.6	1685.7	1631.6	1599.6	1570.6
7.5°	2249.6	2198.3	2168.3	2134.5	2105.5	1871.4	1793.1	1741.8	1666.4	1623.8	1590.9
10°	2583.2	2530.0	2482.6	2430.4	2385.0	2011.6	1897.5	1818.2	1718.6	1663.5	1620.0
12.5°	2955.6	2903.3	2843.4	2776.6	2718.6	2189.6	2031.0	1917.8	1781.5	1708.0	1647.0
15°	3395.6	3303.7	3231.2	3153.8	3086.1	2402.4	2186.7	2030.0	1848.2	1748.6	1667.3
17.5°	3804.7	3708.0	3609.4	3541.7	3463.3	2641.2	2343.4	2144.1	1903.3	1774.7	1671.2
20°	4204.1	4098.7	4013.6	3922.7	3840.5	2888.8	2510.7	2244.7	1939.1	1775.7	1647.0
22.5°	4556.2	4490.4	4395.6	4297.0	4213.8	3136.4	2667.4	2329.8	1952.6	1753.4	1604.5
25°	4956.6	4886.9	4770.9	4687.7	4594.9	3388.8	2821.1	2395.6	1944.9	1711.8	1538.7
27.5°	5384.0	5306.7	5187.7	5100.7	4988.5	3650.9	2962.3	2443.0	1915.9	1644.1	1450.7
30°	5829.9	5759.3	5642.3	5554.3	5441.1	3928.5	3120.0	2474.9	1857.9	1550.3	1348.2
32.5°	6308.6	6249.6	6133.6	6041.7	5920.8	4229.3	3267.0	2484.6	1769.9	1439.1	1239.9
35°	6763.2	6722.6	6624.9	6538.8	6413.1	4513.6	3422.7	2479.7	1665.4	1317.2	1141.2
37.5°	7274.8	7250.6	7202.3	7093.0	6939.2	4899.5	3609.4	2459.4	1537.7	1196.3	1065.8
40°	7820.3	7822.2	7770.0	7695.5	7552.4	5367.6	3831.8	2419.8	1398.5	1090.0	997.1
42.5°	8397.6	8427.6	8402.5	8349.3	8211.9	5839.6	4097.8	2371.4	1263.1	986.5	929.4
45°	9059.2	9095.9	9134.6	9056.3	8922.8	6462.4	4447.9	2308.6	1117.0	900.4	883.0
47.5°	9822.2	9880.3	9915.1	9916.0	9782.6	7234.2	5016.5	2270.8	987.4	842.4	860.8
50°	11432.5	11450.9	11533.1	11676.2	11573.7	9020.5	6009.8	2247.6	899.4	806.6	844.3
52.5°	13752.7	13954.8	14097.0	14087.3	13948.0	10154.9	6557.2	2127.7	847.2	793.1	836.6
55°	14697.6	14950.0	15213.0	15282.7	15174.4	11123.0	7074.6	2007.8	822.1	802.7	839.5
57.5°	15956.8	16382.3	16743.1	16894.9	16738.2	12361.9	7755.5	1944.9	814.3	828.8	857.8
60°	17427.8	17953.9	18427.8	18700.5	18700.5	13785.6	8461.5	1918.8	803.7	867.5	888.8
62.5°	18372.7	19145.4	19861.1	20260.5	20248.9	14776.9	8774.8	1829.8	779.5	894.6	931.4
65°	18376.5	19295.3	20207.3	20656.1	20679.3	14655.0	8257.4	1616.1	735.0	898.5	973.9
67.5°	16844.6	17824.3	18887.2	19389.1	19505.2	13490.6	7148.1	1328.8	662.5	859.8	989.4
70°	14226.6	15183.1	16268.2	16761.4	16967.4	11500.2	5757.4	1024.2	569.6	774.7	957.5
72.5°	11208.1	12146.3	12901.6	13262.3	13422.9	8790.3	4192.5	773.7	467.1	652.8	871.4
75°	7935.3	8639.4	9040.8	9121.1	9146.2	5298.9	2547.4	575.4	384.9	507.7	736.0
77.5°	4478.8	4780.6	4747.7	4783.5	4485.6	2045.5	1109.3	412.0	317.2	385.9	570.6
80°	1748.6	1802.7	1693.5	1659.6	1522.3	761.1	489.4	287.2	253.4	292.1	399.4
82.5°	770.8	796.0	772.7	778.5	744.7	392.7	293.0	207.9	193.4	213.7	265.0
85°	424.6	432.3	430.4	442.9	424.6	156.7	139.3	127.7	135.4	145.1	170.2
87.5°	207.0	208.9	202.1	212.8	206.0	79.3	68.7	72.5	79.3	81.2	81.2
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°	1660.6	1660.6	1660.6	1660.6	1660.6	1660.6
2.5°	1568.7	1561.0	1561.9	1560.0	1556.1	1556.1
5°	1555.2	1547.4	1547.4	1545.5	1540.6	1541.6
7.5°	1568.7	1556.1	1551.3	1544.5	1537.7	1537.7
10°	1584.2	1561.9	1548.4	1536.8	1528.1	1528.1
12.5°	1595.8	1561.0	1538.7	1523.2	1514.5	1514.5
15°	1599.6	1554.2	1523.2	1504.9	1497.1	1496.2
17.5°	1587.1	1528.1	1490.4	1469.1	1459.4	1456.5
20°	1548.4	1480.7	1435.2	1411.1	1397.5	1392.7
22.5°	1490.4	1413.0	1359.8	1334.6	1317.2	1314.3
25°	1409.1	1325.9	1273.7	1249.5	1239.9	1237.0
27.5°	1314.3	1237.0	1192.5	1177.0	1168.3	1167.3
30°	1224.4	1158.6	1125.7	1114.1	1103.5	1101.6
32.5°	1140.3	1098.7	1086.1	1069.7	1044.5	1041.6
35°	1080.3	1076.4	1067.7	1031.0	1000.0	991.3
37.5°	1043.5	1079.3	1034.8	962.3	940.1	938.1
40°	1022.3	1049.3	972.9	947.8	949.7	947.8
42.5°	973.9	1002.0	974.9	963.3	971.0	972.9
45°	925.5	956.5	989.4	981.6	1000.0	1000.0
47.5°	898.5	944.9	988.4	988.4	1015.5	1025.2
50°	867.5	935.2	972.9	986.5	1007.8	1000.0
52.5°	865.6	918.8	950.7	974.9	984.5	975.8
55°	868.5	905.2	928.5	955.5	967.1	968.1
57.5°	872.4	897.5	913.0	925.5	960.4	960.4
60°	882.0	890.7	899.4	906.2	951.7	952.6
62.5°	897.5	884.0	882.0	888.8	946.8	943.0
65°	921.7	874.3	859.8	866.6	942.0	930.4
67.5°	954.6	859.8	831.7	836.6	938.1	913.0
70°	984.5	836.6	796.9	792.1	901.4	856.9
72.5°	987.4	809.5	748.6	734.1	783.4	740.8
75°	939.1	791.1	695.4	652.8	647.0	641.2
77.5°	846.2	780.5	633.5	566.7	555.1	559.0
80°	707.9	740.8	559.0	479.7	542.6	535.8
82.5°	529.0	653.8	474.9	424.6	423.6	374.3
85°	294.0	509.7	386.9	318.2	221.5	214.7
87.5°	82.2	283.4	270.8	179.9	122.8	127.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)