

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: P192221

Luminaire Tested: **GLEON-AF-03-LED-E1-T2R-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192221
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-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20769 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 191
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

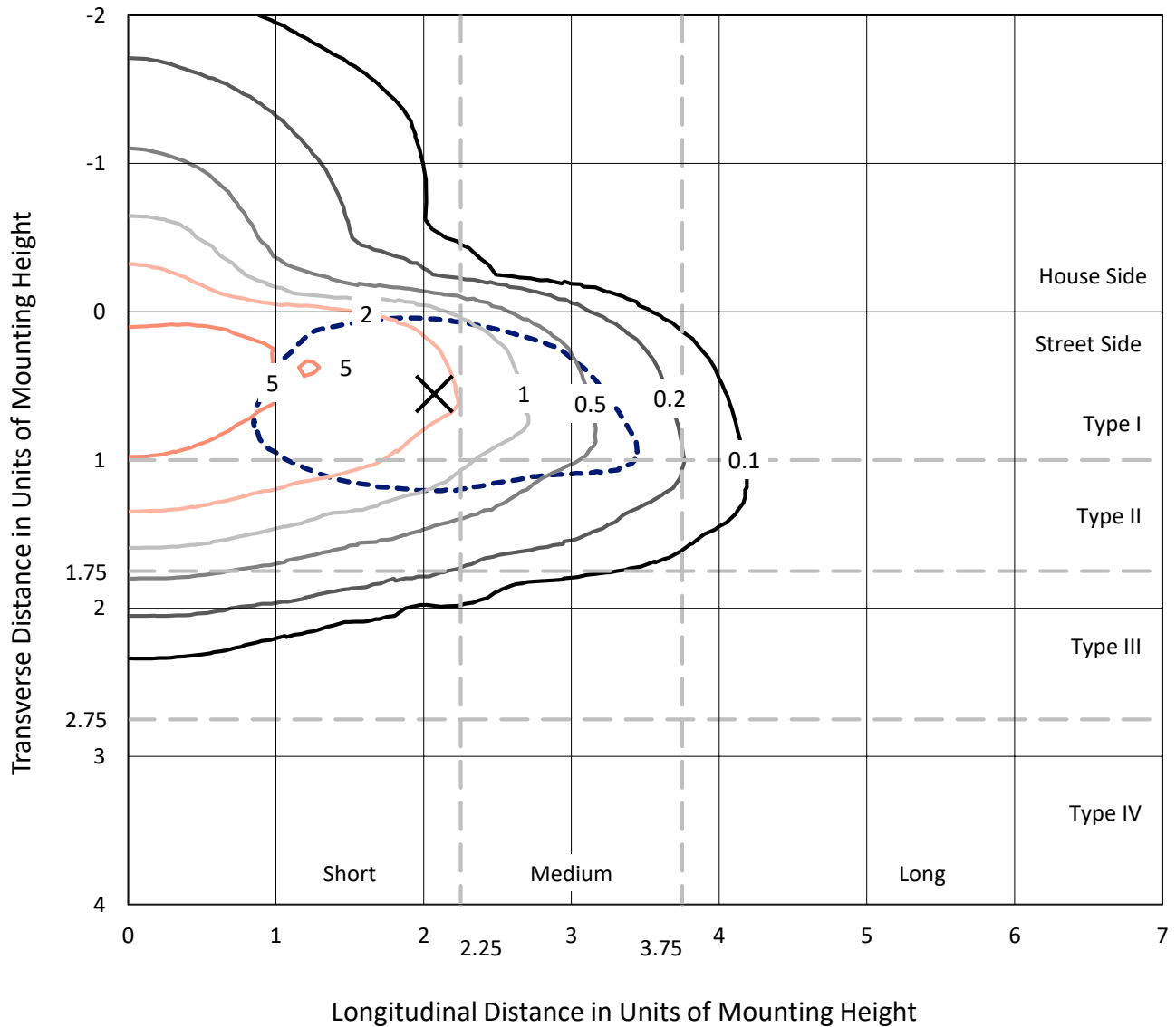


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

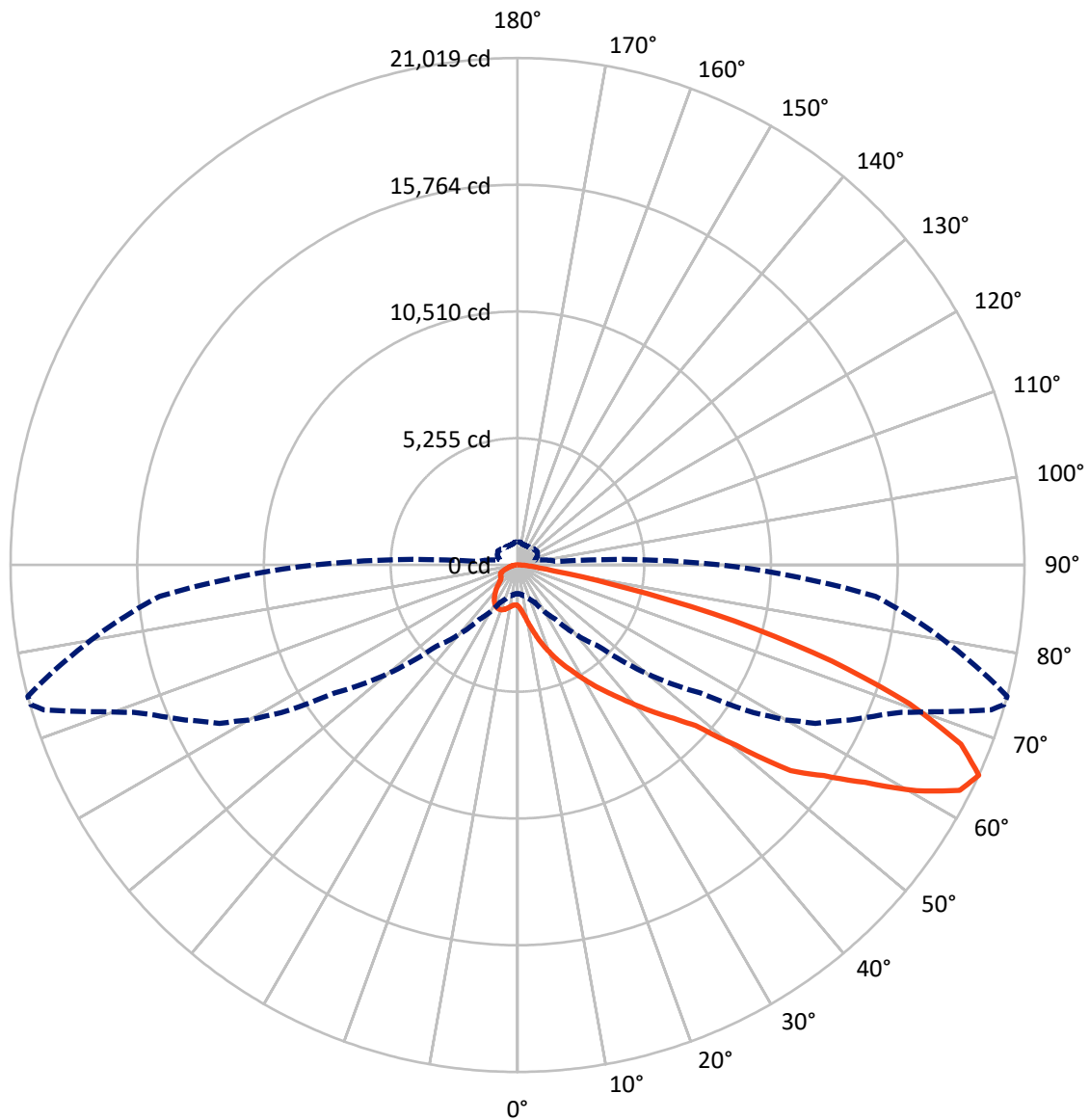


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - Full Cutoff

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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	3202.1	0.0	3202.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	17566.9	0.0	17566.9
	% Fixture	84.6	0.0	84.6
Total	Lumens	20769.0	0.0	20769.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	1.0
10°-20°	815.2	3.9
20°-30°	1672.4	8.1
30°-40°	2813.8	13.5
40°-50°	3887.8	18.7
50°-60°	4853.2	23.4
60°-70°	4367.4	21.0
70°-80°	1830.8	8.8
80°-90°	319.8	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°	20769.0	100.0
0°-180°	20769.0	100.0



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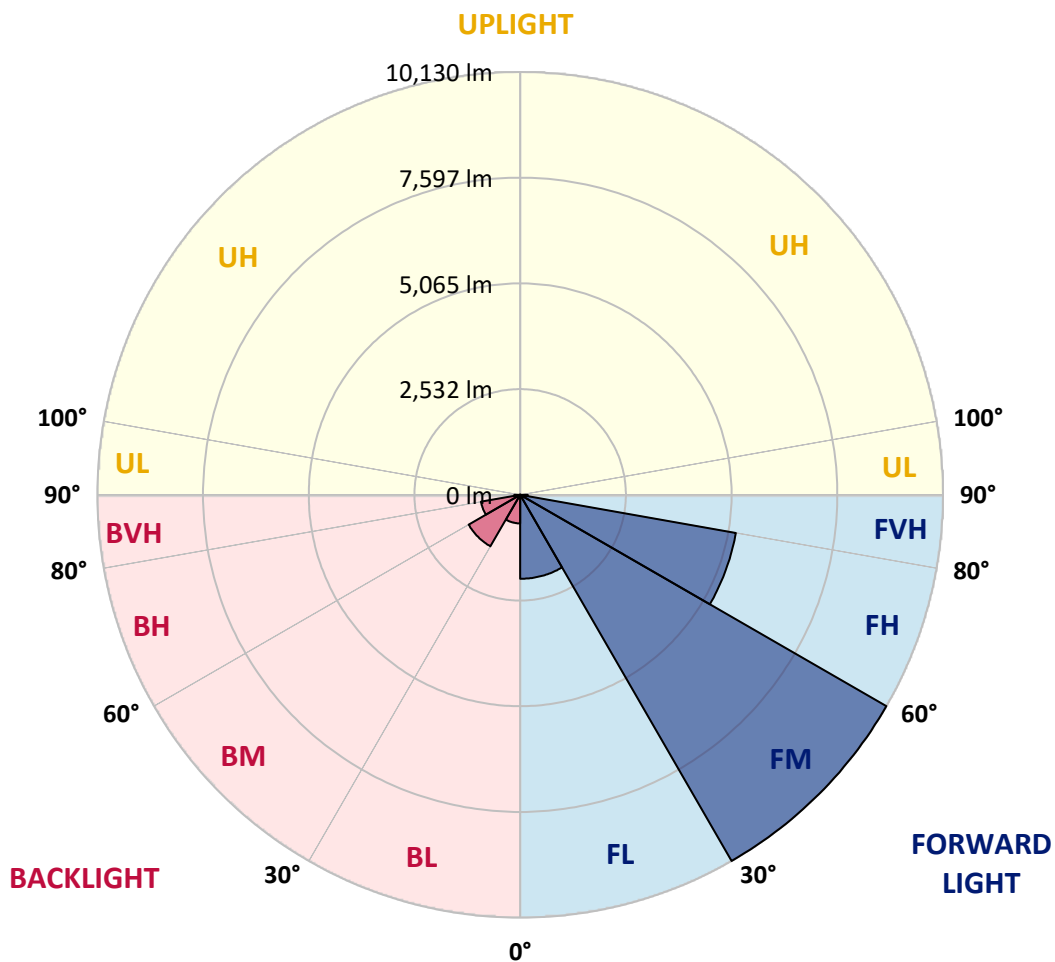
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2011.4	9.7			
FM (30°-60°)	10129.5	48.8			
FH (60°-80°)	5246.2	25.3			G3/7500
FVH (80°-90°)	179.8	0.9			G2/225
BL (0°-30°)	684.8	3.3	B2/1000		
BM (30°-60°)	1425.3	6.9	B2/2500		
BH (60°-80°)	951.9	4.6	B2/1000		G2/1000
BVH (80°-90°)	140.1	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°	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9
2.5°	2143.0	2119.4	2125.3	2086.0	2037.8	1974.9	1905.1	1904.1	1905.1	1898.2	1872.7
5°	2971.7	2943.2	2932.4	2843.9	2714.2	2529.4	2328.8	2307.2	2298.3	2275.7	2223.6
7.5°	3576.3	3560.6	3543.9	3477.0	3359.0	3152.6	2883.3	2837.1	2792.8	2782.0	2723.0
10°	3966.6	3962.6	3927.2	3909.5	3835.8	3656.9	3394.4	3350.2	3302.0	3285.3	3223.4
12.5°	4275.2	4274.3	4257.5	4262.5	4198.6	4068.8	3842.7	3802.4	3767.0	3715.9	3671.7
15°	4488.6	4489.5	4514.1	4541.6	4531.8	4444.3	4232.0	4214.3	4183.8	4148.4	4096.3
17.5°	4663.5	4668.5	4694.0	4744.1	4798.2	4791.3	4623.2	4608.5	4581.9	4533.8	4506.3
20°	5058.7	5077.4	5028.2	5028.2	5034.1	5060.7	4980.1	4968.3	4930.9	4905.4	4883.7
22.5°	5726.2	5747.8	5636.7	5523.7	5412.6	5332.0	5251.4	5266.1	5240.6	5222.9	5210.1
25°	6593.2	6610.0	6430.1	6239.4	6013.3	5718.3	5518.8	5509.9	5496.2	5485.4	5479.5
27.5°	7409.2	7416.0	7246.0	6966.8	6704.3	6280.6	5790.1	5779.3	5762.6	5741.9	5724.2
30°	8107.1	8105.2	7930.2	7663.8	7382.6	6913.7	6202.0	6168.6	6119.4	6063.4	6020.1
32.5°	8711.7	8708.7	8517.1	8240.8	7945.9	7540.9	6766.3	6697.4	6620.8	6511.7	6445.8
35°	9187.5	9185.5	9004.6	8716.6	8378.4	8131.7	7413.1	7328.6	7231.2	7084.8	6983.5
37.5°	9367.4	9367.4	9266.1	9069.5	8770.7	8601.6	8131.7	8029.5	7925.3	7759.1	7645.1
40°	9262.2	9264.2	9285.8	9249.4	9103.9	8974.2	8802.1	8741.2	8651.7	8502.3	8383.4
42.5°	8909.3	8920.1	9063.6	9239.6	9312.3	9291.7	9396.9	9369.3	9306.4	9191.4	9097.0
45°	8462.0	8495.4	8652.7	8985.0	9370.3	9566.0	9895.3	9898.2	9886.4	9824.5	9751.8
47.5°	7847.6	7894.8	8102.2	8551.5	9234.7	9832.4	10401.5	10428.1	10452.7	10412.4	10378.9
50°	7031.7	7087.7	7398.4	7994.1	8958.4	10108.6	11358.0	11478.0	11590.0	11576.3	11598.9
52.5°	6157.8	6223.6	6604.1	7267.6	8483.6	10172.5	11969.5	12165.1	12360.7	12521.0	12691.0
55°	5369.4	5334.0	5714.4	6413.3	7703.1	9884.5	12519.0	12754.9	12973.2	13169.8	13372.3
57.5°	4300.8	4358.8	4740.2	5431.3	6669.9	9071.5	12897.5	13242.5	13556.1	13881.5	14168.5
60°	3143.8	3201.8	3615.6	4317.5	5548.3	7838.8	12608.5	13131.4	13633.8	14132.2	14521.5
62.5°	1898.2	1941.5	2306.2	2974.7	4278.2	6377.0	11320.7	12006.8	12746.1	13341.8	13938.5
65°	1181.6	1206.2	1340.9	1708.5	2747.6	4760.9	9249.4	9997.5	10793.8	11549.7	12170.0
67.5°	967.3	976.2	1000.7	1079.4	1509.0	3104.4	6884.2	7546.8	8265.4	8996.8	9686.9
70°	870.0	864.1	864.1	869.0	967.3	1669.2	4507.2	4938.8	5537.5	6173.5	6804.6
72.5°	785.4	779.6	768.7	754.0	789.4	1018.4	2329.8	2655.2	3086.7	3652.0	4256.6
75°	705.8	698.0	685.2	666.5	691.1	768.7	1118.7	1255.3	1465.7	1766.5	2103.7
77.5°	623.2	613.4	601.6	587.9	619.3	597.7	655.7	704.8	785.4	881.8	1008.6
80°	529.9	521.0	517.1	510.2	547.6	455.1	463.0	493.5	540.7	592.8	651.8
82.5°	414.8	414.8	430.6	433.5	474.8	327.4	346.0	372.6	397.1	424.7	452.2
85°	273.3	275.3	328.3	349.0	374.5	220.2	259.5	268.4	288.0	303.8	315.6
87.5°	85.5	92.4	200.5	222.2	215.3	124.8	159.3	163.2	176.9	187.8	197.6
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9
2.5°	1872.7	1860.9	1850.1	1849.1	1841.2	1830.4	1834.4	1817.6	1818.6	1809.8	1799.9
5°	2202.0	2194.1	2154.8	2144.0	2114.5	2095.8	2092.9	2053.6	2048.7	2026.0	2001.5
7.5°	2675.8	2650.3	2595.2	2568.7	2518.5	2481.2	2463.5	2411.4	2385.8	2326.9	2300.3
10°	3172.3	3139.8	3072.0	3034.6	2986.5	2926.5	2894.1	2818.4	2788.9	2734.8	2669.9
12.5°	3632.3	3599.9	3530.1	3501.6	3437.7	3373.8	3338.4	3252.9	3214.5	3128.0	3076.9
15°	4058.0	4025.5	3964.6	3935.1	3871.2	3819.1	3771.9	3687.4	3642.2	3561.6	3494.7
17.5°	4470.9	4436.5	4383.4	4356.8	4294.9	4241.8	4190.7	4111.1	4064.9	3984.3	3924.3
20°	4854.2	4828.7	4790.4	4755.0	4693.0	4644.9	4583.9	4515.1	4448.3	4389.3	4332.3
22.5°	5188.5	5178.7	5137.4	5121.6	5068.6	5027.3	4974.2	4906.3	4858.2	4783.5	4730.4
25°	5476.5	5473.6	5453.9	5449.0	5411.6	5372.3	5360.5	5304.5	5260.2	5194.4	5139.3
27.5°	5724.2	5727.2	5722.3	5736.0	5726.2	5708.5	5709.5	5690.8	5665.3	5610.2	5562.0
30°	5999.5	5983.8	5992.6	6012.3	6018.2	6020.1	6052.6	6063.4	6061.4	6025.0	6001.5
32.5°	6388.8	6351.4	6317.0	6314.1	6333.7	6341.6	6396.6	6425.1	6449.7	6458.6	6462.5
35°	6885.2	6810.5	6738.7	6700.4	6667.0	6675.8	6715.1	6761.3	6815.4	6852.8	6897.0
37.5°	7510.4	7419.0	7292.2	7201.7	7179.1	7130.0	7155.5	7191.9	7245.0	7303.0	7379.7
40°	8268.3	8129.7	7987.2	7867.3	7802.4	7711.9	7711.0	7704.1	7736.5	7790.6	7898.7
42.5°	8997.8	8874.9	8723.5	8597.7	8513.1	8392.2	8367.6	8303.7	8318.5	8365.7	8470.8
45°	9681.0	9579.7	9487.3	9341.8	9270.1	9139.3	9098.0	9022.3	8980.1	9001.7	9106.9
47.5°	10342.6	10277.7	10181.3	10087.0	10031.9	9914.9	9861.9	9807.8	9753.7	9751.8	9861.9
50°	11632.3	11597.9	11483.9	11385.6	11412.1	11268.6	11277.4	11131.9	11197.8	11205.7	11436.7
52.5°	12844.4	12964.3	13048.9	13152.1	13218.9	13231.7	13275.9	13341.8	13421.4	13578.7	13793.0
55°	13538.4	13688.8	13776.3	13855.0	13984.7	14012.2	14086.0	14173.5	14243.3	14420.2	14602.1
57.5°	14363.2	14642.4	14778.0	14902.9	15077.9	15144.7	15267.6	15362.9	15453.4	15662.8	15883.0
60°	14871.4	15211.6	15487.8	15685.4	15904.6	16061.9	16247.7	16397.1	16609.4	16860.1	17188.4
62.5°	14467.4	14966.8	15333.4	15672.6	15970.5	16271.3	16537.7	16816.9	17139.3	17518.7	18028.0
65°	12858.2	13366.4	13994.5	14346.5	14740.7	15204.7	15609.7	16061.9	16501.3	17053.8	17806.8
67.5°	10351.4	10942.2	11648.0	12002.9	12456.1	12974.2	13428.3	13980.8	14493.9	15163.4	16094.3
70°	7461.3	8225.1	8818.8	9189.5	9718.3	10252.1	10690.6	11333.5	11758.1	12444.3	13406.7
72.5°	4724.5	5327.1	6054.5	6521.5	6991.4	7532.0	7980.3	8534.7	8930.9	9556.1	10428.1
75°	2540.2	2984.5	3623.5	4066.8	4570.1	5032.2	5557.1	5928.7	6221.7	6716.1	7423.9
77.5°	1190.5	1460.8	1784.2	2125.3	2466.4	2822.3	3168.3	3469.1	3595.0	3878.1	4295.9
80°	722.5	810.0	904.4	1009.6	1152.1	1267.1	1419.5	1529.6	1537.5	1626.9	1754.7
82.5°	482.7	515.1	543.6	570.2	606.5	635.0	667.5	705.8	721.6	742.2	783.5
85°	329.3	345.0	350.9	367.7	363.7	373.6	386.3	399.1	406.0	405.0	423.7
87.5°	202.5	210.4	214.3	218.2	215.3	211.4	217.3	224.1	226.1	220.2	222.2
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9
2.5°	1801.9	1793.1	1784.2	1778.3	1776.4	1724.3	1701.6	1686.9	1655.4	1629.9	1609.2
5°	1987.7	1969.0	1954.3	1936.6	1926.8	1795.0	1746.9	1713.4	1658.4	1625.9	1596.5
7.5°	2286.5	2234.4	2204.0	2169.6	2140.1	1902.2	1822.6	1770.5	1693.8	1650.5	1617.1
10°	2625.7	2571.6	2523.5	2470.4	2424.2	2044.7	1928.7	1848.1	1746.9	1690.8	1646.6
12.5°	3004.2	2951.1	2890.1	2822.3	2763.3	2225.6	2064.4	1949.4	1810.8	1736.0	1674.1
15°	3451.5	3358.1	3284.3	3205.7	3136.9	2441.9	2222.7	2063.4	1878.6	1777.3	1694.8
17.5°	3867.3	3769.0	3668.7	3599.9	3520.3	2684.7	2381.9	2179.4	1934.6	1803.9	1698.7
20°	4273.3	4166.1	4079.6	3987.2	3903.6	2936.3	2552.0	2281.6	1971.0	1804.9	1674.1
22.5°	4631.1	4564.3	4467.9	4367.6	4283.1	3188.0	2711.2	2368.1	1984.8	1782.3	1630.9
25°	5038.1	4967.3	4849.3	4764.8	4670.4	3444.6	2867.5	2435.0	1976.9	1740.0	1564.0
27.5°	5472.6	5393.9	5273.0	5184.5	5070.5	3711.0	3011.0	2483.2	1947.4	1671.2	1474.6
30°	5925.8	5854.0	5735.1	5645.6	5530.6	3993.1	3171.3	2515.6	1888.4	1575.8	1370.4
32.5°	6412.4	6352.4	6234.4	6141.0	6018.2	4298.8	3320.7	2525.4	1799.0	1462.8	1260.3
35°	6874.4	6833.1	6733.8	6646.3	6518.5	4587.8	3479.0	2520.5	1692.8	1338.9	1160.0
37.5°	7394.4	7369.8	7320.7	7209.6	7053.3	4980.1	3668.7	2499.9	1563.0	1216.0	1083.3
40°	7948.9	7950.8	7897.7	7822.0	7676.6	5455.9	3894.8	2459.6	1421.5	1107.9	1013.5
42.5°	8535.7	8566.2	8540.6	8486.6	8347.0	5935.6	4165.1	2410.4	1283.8	1002.7	944.7
45°	9208.1	9245.5	9284.8	9205.2	9069.5	6568.7	4521.0	2346.5	1135.4	915.2	897.5
47.5°	9983.7	10042.7	10078.1	10079.1	9943.4	7353.1	5099.0	2308.2	1003.7	856.2	874.9
50°	11620.5	11639.2	11722.7	11868.2	11764.0	9168.8	6108.6	2284.6	914.2	819.9	858.2
52.5°	13978.8	14184.3	14328.8	14319.0	14177.4	10321.9	6665.0	2162.7	861.1	806.1	850.3
55°	14939.2	15195.8	15463.2	15534.0	15423.9	11305.9	7190.9	2040.8	835.6	815.9	853.3
57.5°	16219.2	16651.7	17018.4	17172.7	17013.5	12565.2	7883.0	1976.9	827.7	842.5	872.0
60°	17714.4	18249.1	18730.8	19008.0	19008.0	14012.2	8600.6	1950.4	816.9	881.8	903.4
62.5°	18674.8	19460.2	20187.7	20593.7	20581.9	15019.9	8919.1	1859.9	792.3	909.3	946.7
65°	18678.7	19612.6	20539.6	20995.8	21019.3	14896.0	8393.2	1642.7	747.1	913.2	989.9
67.5°	17121.6	18117.4	19197.8	19708.0	19825.9	13712.4	7265.6	1350.7	673.4	873.9	1005.6
70°	14460.5	15432.7	16535.7	17037.1	17246.4	11689.3	5852.0	1041.0	579.0	787.4	973.2
72.5°	11392.4	12346.0	13113.7	13480.4	13643.6	8934.8	4261.5	786.4	474.8	663.6	885.7
75°	8065.8	8781.5	9189.5	9271.0	9296.6	5386.1	2589.3	584.9	391.2	516.1	748.1
77.5°	4552.5	4859.2	4825.7	4862.1	4559.3	2079.1	1127.5	418.8	322.4	392.2	580.0
80°	1777.3	1832.4	1721.3	1686.9	1547.3	773.7	497.4	292.0	257.6	296.9	406.0
82.5°	783.5	809.0	785.4	791.3	756.9	399.1	297.9	211.4	196.6	217.3	269.4
85°	431.6	439.4	437.5	450.2	431.6	159.3	141.6	129.8	137.6	147.5	173.0
87.5°	210.4	212.3	205.5	216.3	209.4	80.6	69.8	73.7	80.6	82.6	82.6
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°	1687.9	1687.9	1687.9	1687.9	1687.9	1687.9
2.5°	1594.5	1586.6	1587.6	1585.6	1581.7	1581.7
5°	1580.7	1572.9	1572.9	1570.9	1566.0	1567.0
7.5°	1594.5	1581.7	1576.8	1569.9	1563.0	1563.0
10°	1610.2	1587.6	1573.8	1562.0	1553.2	1553.2
12.5°	1622.0	1586.6	1564.0	1548.3	1539.4	1539.4
15°	1625.9	1579.7	1548.3	1529.6	1521.7	1520.8
17.5°	1613.2	1553.2	1514.9	1493.2	1483.4	1480.5
20°	1573.8	1505.0	1458.8	1434.3	1420.5	1415.6
22.5°	1514.9	1436.2	1382.2	1356.6	1338.9	1336.0
25°	1432.3	1347.7	1294.7	1270.1	1260.3	1257.3
27.5°	1336.0	1257.3	1212.1	1196.4	1187.5	1186.5
30°	1244.5	1177.7	1144.3	1132.5	1121.6	1119.7
32.5°	1159.0	1116.7	1104.0	1087.2	1061.7	1058.7
35°	1098.1	1094.1	1085.3	1047.9	1016.5	1007.6
37.5°	1060.7	1097.1	1051.9	978.1	955.5	953.5
40°	1039.1	1066.6	988.9	963.4	965.3	963.4
42.5°	989.9	1018.4	990.9	979.1	987.0	988.9
45°	940.8	972.2	1005.6	997.8	1016.5	1016.5
47.5°	913.2	960.4	1004.7	1004.7	1032.2	1042.0
50°	881.8	950.6	988.9	1002.7	1024.3	1016.5
52.5°	879.8	933.9	966.3	990.9	1000.7	991.9
55°	882.8	920.1	943.7	971.2	983.0	984.0
57.5°	886.7	912.3	928.0	940.8	976.2	976.2
60°	896.5	905.4	914.2	921.1	967.3	968.3
62.5°	912.3	898.5	896.5	903.4	962.4	958.5
65°	936.8	888.7	873.9	880.8	957.5	945.7
67.5°	970.3	873.9	845.4	850.3	953.5	928.0
70°	1000.7	850.3	810.0	805.1	916.2	871.0
72.5°	1003.7	822.8	760.9	746.1	796.3	753.0
75°	954.5	804.1	706.8	663.6	657.7	651.8
77.5°	860.2	793.3	643.9	576.1	564.3	568.2
80°	719.6	753.0	568.2	487.6	551.5	544.6
82.5°	537.7	664.5	482.7	431.6	430.6	380.4
85°	298.8	518.1	393.2	323.4	225.1	218.2
87.5°	83.6	288.0	275.3	182.8	124.8	129.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)