

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: P191403

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191403
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-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 25615.7 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - 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

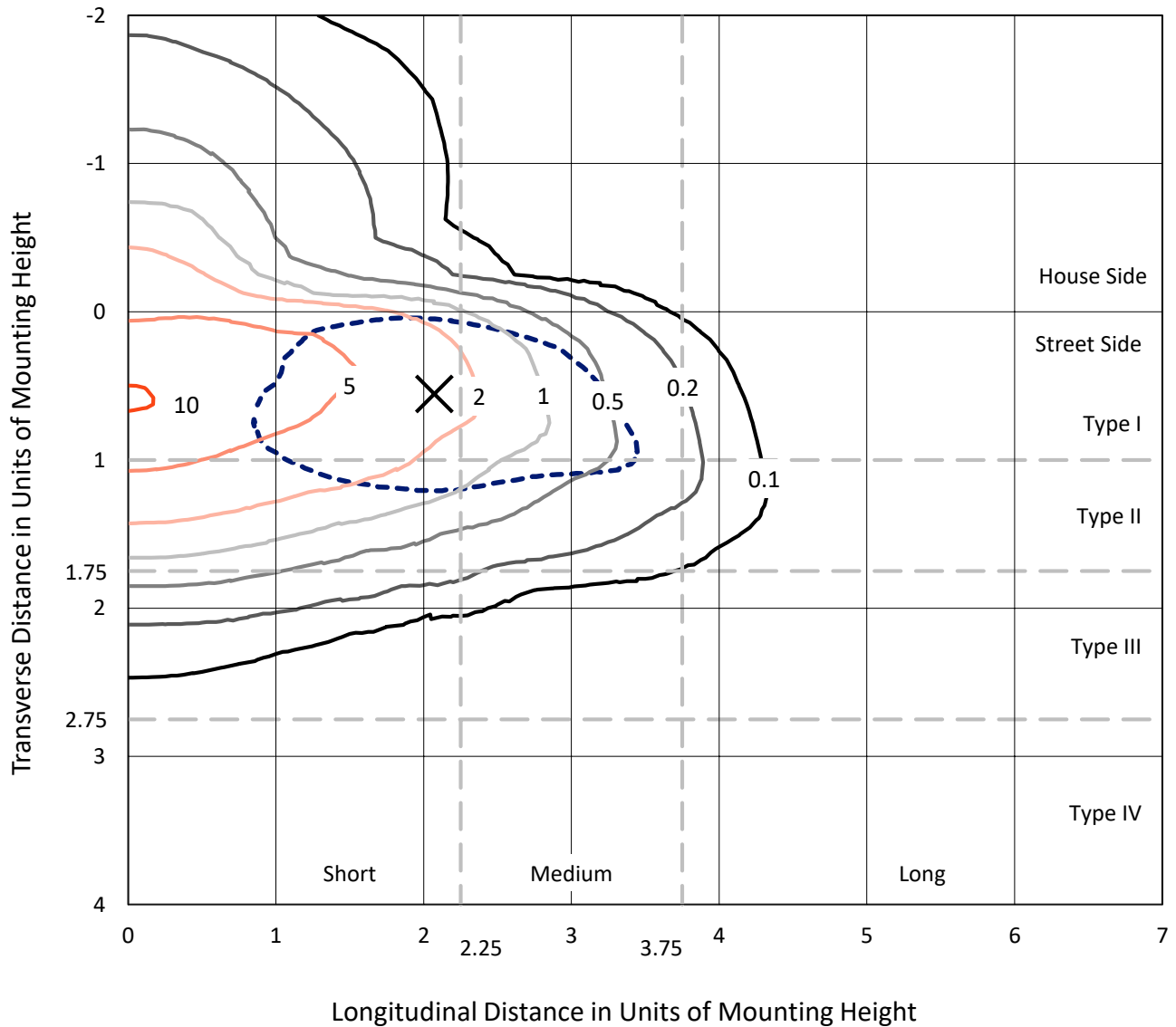


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Iso-Footcandle Lines of Horizontal Illumination

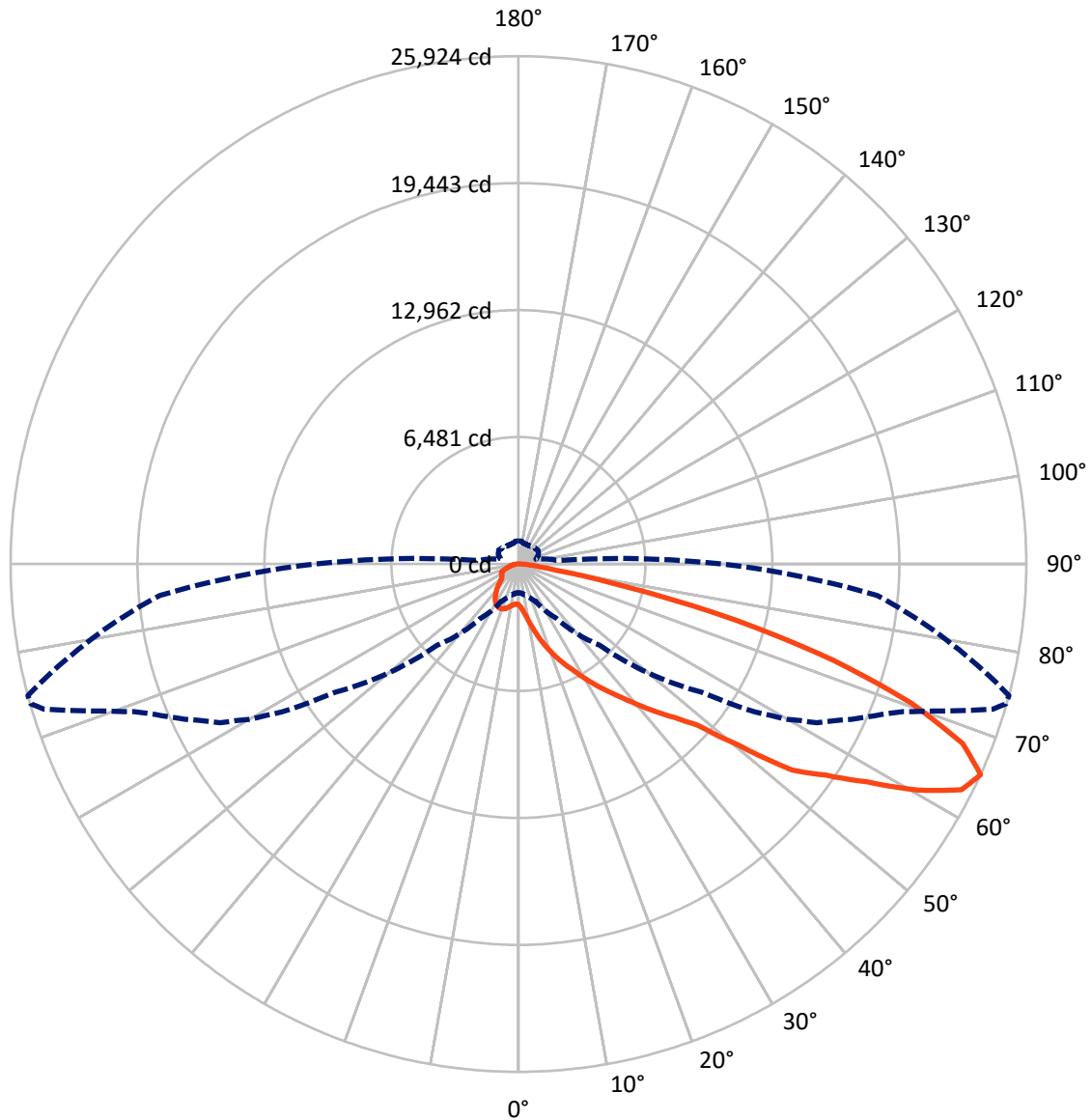
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 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	3949.3	0.0	3949.3
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	21666.4	0.0	21666.4
	% Fixture	84.6	0.0	84.6
Total	Lumens	25615.7	0.0	25615.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.3	1.0
10°-20°	1005.4	3.9
20°-30°	2062.7	8.1
30°-40°	3470.4	13.5
40°-50°	4795.1	18.7
50°-60°	5985.8	23.4
60°-70°	5386.5	21.0
70°-80°	2258.0	8.8
80°-90°	394.5	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°	25615.7	100.0
0°-180°	25615.7	100.0



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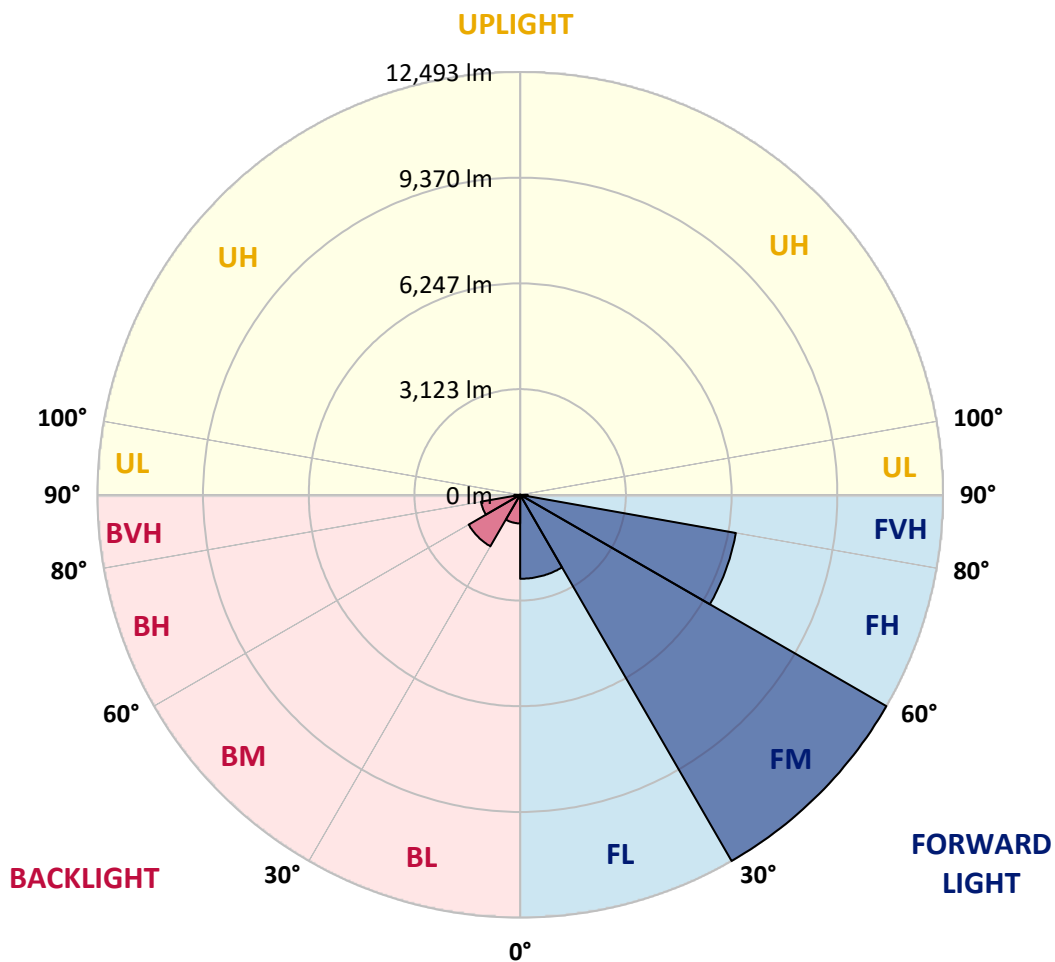
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2480.8	9.7			
FM	(30°-60°)	12493.4	48.8			
FH	(60°-80°)	6470.4	25.3			G3/7500
FVH	(80°-90°)	221.7	0.9			G2/225
BL	(0°-30°)	844.6	3.3	B2/1000		
BM	(30°-60°)	1757.9	6.9	B2/2500		
BH	(60°-80°)	1174.1	4.6	B3/2500		G3/2500
BVH	(80°-90°)	172.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8
2.5°	2643.1	2614.0	2621.3	2572.8	2513.4	2435.9	2349.7	2348.5	2349.7	2341.2	2309.7
5°	3665.2	3630.0	3616.7	3507.6	3347.6	3119.6	2872.2	2845.6	2834.7	2806.8	2742.5
7.5°	4410.9	4391.4	4370.9	4288.4	4143.0	3888.3	3556.1	3499.1	3444.6	3431.2	3358.4
10°	4892.3	4887.4	4843.7	4821.9	4730.9	4510.3	4186.5	4132.0	4072.6	4052.0	3975.6
12.5°	5272.9	5271.7	5251.1	5257.1	5178.4	5018.3	4739.4	4689.7	4646.0	4583.0	4528.5
15°	5536.0	5537.2	5567.5	5601.5	5589.4	5481.5	5219.6	5197.7	5160.2	5116.5	5052.3
17.5°	5751.8	5757.9	5789.4	5851.3	5918.0	5909.5	5702.1	5683.9	5651.2	5591.8	5557.8
20°	6239.3	6262.3	6201.6	6201.6	6208.9	6241.6	6142.2	6127.7	6081.6	6050.1	6023.4
22.5°	7062.5	7089.2	6952.2	6812.8	6675.7	6576.3	6476.9	6495.0	6463.5	6441.7	6426.0
25°	8131.8	8152.5	7930.6	7695.4	7416.5	7052.8	6806.6	6795.8	6778.8	6765.4	6758.1
27.5°	9138.2	9146.7	8936.9	8592.6	8268.8	7746.3	7141.3	7127.9	7107.4	7081.9	7060.1
30°	9999.0	9996.6	9780.7	9452.2	9105.5	8527.1	7649.3	7608.1	7547.4	7478.4	7425.0
32.5°	10744.7	10741.1	10504.6	10163.9	9800.2	9300.7	8345.2	8260.4	8165.8	8031.2	7950.0
35°	11331.5	11329.1	11106.0	10750.7	10333.6	10029.3	9143.0	9038.8	8918.7	8738.0	8613.2
37.5°	11553.4	11553.4	11428.5	11186.0	10817.4	10608.9	10029.3	9903.3	9774.7	9569.8	9429.2
40°	11423.6	11426.1	11452.8	11407.8	11228.4	11068.4	10856.3	10781.1	10670.7	10486.5	10339.7
42.5°	10988.3	11001.7	11178.7	11395.8	11485.5	11460.0	11589.7	11555.8	11478.2	11336.3	11219.9
45°	10436.8	10478.0	10671.9	11081.7	11557.0	11798.3	12204.4	12208.1	12193.6	12117.2	12027.4
47.5°	9679.0	9737.2	9993.0	10547.0	11389.7	12126.9	12828.8	12861.6	12891.9	12842.2	12801.0
50°	8672.6	8741.7	9124.8	9859.6	11049.0	12467.5	14008.6	14156.5	14294.7	14277.7	14305.7
52.5°	7594.8	7676.0	8145.2	8963.6	10463.4	12546.4	14762.7	15004.0	15245.2	15442.9	15652.7
55°	6622.4	6578.7	7047.9	7910.0	9500.8	12191.1	15440.5	15731.4	16000.6	16243.1	16492.8
57.5°	5304.4	5376.0	5846.4	6698.8	8226.5	11188.4	15907.3	16332.8	16719.6	17120.9	17475.0
60°	3877.4	3948.9	4459.3	5325.1	6843.0	9668.0	15550.8	16195.9	16815.4	17430.1	17910.2
62.5°	2341.2	2394.6	2844.4	3668.8	5276.6	7865.2	13962.5	14808.7	15720.5	16455.3	17191.2
65°	1457.4	1487.7	1653.8	2107.3	3388.8	5871.8	11407.8	12330.5	13312.7	14245.0	15010.1
67.5°	1193.1	1203.9	1234.3	1331.3	1861.1	3828.9	8490.7	9307.9	10194.2	11096.3	11947.5
70°	1073.0	1065.7	1065.7	1071.8	1193.1	2058.7	5559.0	6091.4	6829.7	7614.1	8392.5
72.5°	968.7	961.5	948.2	930.0	973.5	1256.1	2873.5	3274.8	3807.1	4504.3	5249.9
75°	870.5	860.8	845.1	822.0	852.3	948.2	1379.8	1548.3	1807.8	2178.8	2594.6
77.5°	768.6	756.6	742.0	725.1	763.8	737.1	808.7	869.3	968.7	1087.6	1244.0
80°	653.5	642.6	637.7	629.2	675.4	561.4	571.0	608.7	666.9	731.1	803.8
82.5°	511.7	511.7	531.0	534.7	585.6	403.8	426.8	459.5	489.8	523.8	557.7
85°	337.1	339.5	405.0	430.5	462.0	271.6	320.1	331.0	355.3	374.6	389.2
87.5°	105.5	114.0	247.3	274.0	265.6	154.0	196.4	201.3	218.2	231.6	243.7
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°	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8
2.5°	2309.7	2295.2	2281.8	2280.6	2271.0	2257.6	2262.5	2241.8	2243.0	2232.1	2220.0
5°	2715.8	2706.2	2657.7	2644.3	2608.0	2584.9	2581.3	2532.8	2526.7	2498.9	2468.6
7.5°	3300.2	3268.7	3200.8	3168.1	3106.3	3060.3	3038.4	2974.1	2942.6	2869.9	2837.2
10°	3912.6	3872.6	3788.9	3742.8	3683.4	3609.5	3569.5	3476.1	3439.7	3373.0	3293.0
12.5°	4480.0	4440.0	4353.9	4318.7	4239.9	4161.2	4117.5	4012.0	3964.7	3858.0	3794.9
15°	5005.0	4965.0	4889.8	4853.4	4774.6	4710.4	4652.2	4547.8	4492.1	4392.7	4310.2
17.5°	5514.2	5471.8	5406.3	5373.6	5297.1	5231.7	5168.7	5070.5	5013.5	4914.1	4840.1
20°	5987.0	5955.5	5908.3	5864.6	5788.2	5728.8	5653.6	5568.7	5486.3	5413.6	5343.3
22.5°	6399.3	6387.2	6336.3	6316.8	6251.4	6200.4	6134.9	6051.3	5991.9	5899.8	5834.3
25°	6754.5	6750.9	6726.6	6720.6	6674.5	6626.0	6611.4	6542.4	6487.8	6406.5	6338.6
27.5°	7060.1	7063.7	7057.6	7074.6	7062.5	7040.7	7041.9	7018.9	6987.3	6919.4	6860.0
30°	7399.5	7380.2	7391.0	7415.3	7422.6	7425.0	7465.0	7478.4	7475.9	7431.0	7402.0
32.5°	7879.7	7833.6	7791.2	7787.5	7811.8	7821.5	7889.4	7924.5	7954.9	7965.7	7970.6
35°	8491.9	8399.9	8311.3	8264.0	8222.8	8233.7	8282.2	8339.2	8405.9	8451.9	8506.6
37.5°	9263.0	9150.3	8993.9	8882.4	8854.5	8793.9	8825.4	8870.2	8935.7	9007.3	9101.8
40°	10197.9	10027.0	9851.1	9703.2	9623.2	9511.6	9510.4	9501.9	9542.0	9608.6	9742.0
42.5°	11097.5	10946.0	10759.2	10604.0	10499.8	10350.6	10320.3	10241.5	10259.7	10317.9	10447.6
45°	11940.2	11815.3	11701.3	11521.9	11433.3	11272.1	11221.2	11127.8	11075.7	11102.4	11232.1
47.5°	12756.1	12676.1	12557.2	12440.9	12373.0	12228.7	12163.2	12096.6	12029.9	12027.4	12163.2
50°	14346.9	14304.4	14163.8	14042.6	14075.3	13898.2	13909.2	13729.7	13811.0	13820.7	14105.6
52.5°	15841.8	15989.7	16094.0	16221.3	16303.7	16319.5	16374.1	16455.3	16553.5	16747.4	17011.8
55°	16697.8	16883.3	16991.2	17088.2	17248.3	17282.1	17373.1	17481.0	17567.1	17785.3	18009.7
57.5°	17715.1	18059.4	18226.6	18380.7	18596.4	18678.9	18830.5	18948.1	19059.6	19317.9	19589.5
60°	18341.8	18761.3	19102.1	19345.7	19616.1	19810.2	20039.3	20223.5	20485.4	20794.6	21199.6
62.5°	17843.5	18459.5	18911.7	19330.0	19697.3	20068.4	20396.9	20741.2	21139.0	21607.0	22235.1
65°	15858.8	16485.6	17260.4	17694.4	18180.6	18752.8	19252.4	19810.2	20352.1	21033.5	21962.2
67.5°	12767.0	13495.7	14366.2	14803.9	15362.9	16001.8	16562.0	17243.4	17876.3	18702.0	19850.2
70°	9202.5	10144.5	10876.8	11333.9	11986.2	12644.6	13185.3	13978.3	14502.1	15348.4	16535.3
72.5°	5827.0	6570.2	7467.4	8043.4	8622.9	9289.7	9842.6	10526.5	11015.0	11786.1	12861.6
75°	3133.0	3681.0	4469.1	5015.8	5636.7	6206.5	6854.0	7312.3	7673.6	8283.4	9156.3
77.5°	1468.2	1801.7	2200.6	2621.3	3042.1	3480.9	3907.7	4278.7	4433.9	4783.1	5298.4
80°	891.2	999.0	1115.4	1245.1	1421.0	1562.9	1750.8	1886.5	1896.2	2006.6	2164.3
82.5°	595.4	635.4	670.4	703.2	748.1	783.3	823.3	870.5	890.0	915.4	966.3
85°	406.2	425.5	432.8	453.5	448.6	460.7	476.5	492.2	500.7	499.5	522.5
87.5°	249.8	259.4	264.3	269.1	265.6	260.6	267.9	276.4	278.9	271.6	274.0
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8
2.5°	2222.4	2211.5	2200.6	2193.3	2190.9	2126.6	2098.8	2080.6	2041.7	2010.2	1984.7
5°	2451.6	2428.5	2410.4	2388.5	2376.4	2214.0	2154.5	2113.3	2045.4	2005.4	1969.0
7.5°	2820.2	2755.9	2718.3	2675.8	2639.5	2346.0	2247.8	2183.6	2089.1	2035.7	1994.4
10°	3238.5	3171.8	3112.3	3046.9	2989.9	2521.9	2378.8	2279.4	2154.5	2085.4	2030.9
12.5°	3705.2	3639.8	3564.6	3480.9	3408.2	2745.0	2546.1	2404.2	2233.3	2141.1	2064.8
15°	4256.9	4141.7	4050.8	3953.8	3868.9	3011.7	2741.3	2544.9	2317.0	2192.1	2090.3
17.5°	4769.7	4648.5	4524.8	4440.0	4341.8	3311.2	2937.7	2688.0	2386.1	2224.8	2095.1
20°	5270.4	5138.4	5031.7	4917.6	4814.6	3621.6	3147.5	2814.0	2430.9	2226.0	2064.8
22.5°	5711.9	5629.4	5510.5	5386.9	5282.6	3931.9	3343.9	2920.7	2447.9	2198.1	2011.4
25°	6213.8	6126.5	5981.0	5876.8	5760.3	4248.4	3536.8	3003.2	2438.2	2146.0	1929.0
27.5°	6749.6	6652.7	6503.5	6394.5	6253.8	4577.0	3713.7	3062.6	2401.9	2061.1	1818.7
30°	7308.6	7220.1	7073.4	6963.0	6821.2	4925.0	3911.4	3102.6	2329.1	1943.5	1690.1
32.5°	7908.7	7834.8	7689.3	7574.1	7422.6	5302.1	4095.6	3114.8	2218.8	1804.1	1554.4
35°	8478.6	8427.7	8305.2	8197.3	8039.7	5658.5	4290.9	3108.7	2087.8	1651.3	1430.7
37.5°	9120.0	9089.7	9029.1	8892.1	8699.3	6142.2	4524.8	3083.3	1927.8	1499.7	1336.1
40°	9803.9	9806.2	9740.7	9647.4	9468.0	6729.1	4803.7	3033.6	1753.2	1366.5	1250.0
42.5°	10527.7	10565.2	10533.7	10467.0	10294.9	7320.7	5137.2	2972.9	1583.4	1236.6	1165.1
45°	11357.0	11403.0	11451.5	11353.3	11186.0	8101.6	5576.0	2894.1	1400.4	1128.8	1106.9
47.5°	12313.6	12386.3	12430.0	12431.2	12263.9	9069.1	6288.9	2846.8	1237.9	1056.0	1079.1
50°	14332.3	14355.4	14458.4	14637.8	14509.3	11308.5	7534.1	2817.7	1127.6	1011.2	1058.4
52.5°	17240.9	17494.4	17672.6	17660.4	17485.9	12730.6	8220.3	2667.3	1062.1	994.2	1048.7
55°	18425.5	18742.0	19071.8	19159.1	19023.2	13944.4	8869.0	2517.1	1030.6	1006.4	1052.4
57.5°	20004.1	20537.6	20989.8	21180.2	20983.8	15497.5	9722.6	2438.2	1020.9	1039.1	1075.4
60°	21848.3	22507.8	23101.9	23443.8	23443.8	17282.1	10607.7	2405.5	1007.5	1087.6	1114.2
62.5°	23032.8	24001.5	24898.7	25399.5	25384.9	18524.9	11000.5	2294.0	977.2	1121.5	1167.6
65°	23037.7	24189.5	25332.8	25895.4	25924.4	18372.2	10351.9	2026.0	921.5	1126.4	1220.9
67.5°	21117.2	22345.3	23677.8	24307.1	24452.6	16912.3	8961.2	1665.9	830.5	1077.9	1240.3
70°	17835.0	19034.1	20394.6	21012.8	21271.1	14417.2	7217.6	1284.0	714.1	971.2	1200.3
72.5°	14051.0	15227.1	16174.0	16626.2	16827.5	11019.9	5255.9	970.0	585.6	818.4	1092.4
75°	9948.1	10830.8	11333.9	11434.5	11466.1	6642.9	3193.6	721.4	482.5	636.6	922.7
77.5°	5614.9	5993.2	5951.9	5996.7	5623.4	2564.3	1390.7	516.5	397.7	483.8	715.3
80°	2192.1	2260.0	2123.0	2080.6	1908.4	954.2	613.5	360.1	317.6	366.1	500.7
82.5°	966.3	997.9	968.7	976.0	933.5	492.2	367.3	260.6	242.4	267.9	332.3
85°	532.2	542.0	539.5	555.3	532.2	196.4	174.6	160.1	169.7	181.9	213.4
87.5°	259.4	261.9	253.4	266.8	258.3	99.4	86.1	90.9	99.4	101.9	101.9
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):

	135°	145°	155°	165°	175°	180°
0°	2081.8	2081.8	2081.8	2081.8	2081.8	2081.8
2.5°	1966.6	1956.9	1958.1	1955.7	1950.9	1950.9
5°	1949.6	1939.9	1939.9	1937.5	1931.4	1932.7
7.5°	1966.6	1950.9	1944.7	1936.2	1927.8	1927.8
10°	1986.0	1958.1	1941.2	1926.5	1915.7	1915.7
12.5°	2000.5	1956.9	1929.0	1909.6	1898.7	1898.7
15°	2005.4	1948.4	1909.6	1886.5	1876.9	1875.7
17.5°	1989.6	1915.7	1868.4	1841.7	1829.5	1826.0
20°	1941.2	1856.2	1799.3	1769.0	1752.0	1745.9
22.5°	1868.4	1771.3	1704.7	1673.1	1651.3	1647.7
25°	1766.5	1662.3	1596.8	1566.4	1554.4	1550.7
27.5°	1647.7	1550.7	1494.9	1475.5	1464.7	1463.4
30°	1534.9	1452.5	1411.3	1396.7	1383.4	1381.0
32.5°	1429.5	1377.3	1361.5	1341.0	1309.5	1305.8
35°	1354.3	1349.5	1338.5	1292.5	1253.6	1242.8
37.5°	1308.3	1353.1	1297.3	1206.4	1178.5	1176.1
40°	1281.6	1315.5	1219.8	1188.2	1190.6	1188.2
42.5°	1220.9	1256.1	1222.1	1207.6	1217.3	1219.8
45°	1160.3	1199.1	1240.3	1230.6	1253.6	1253.6
47.5°	1126.4	1184.6	1239.1	1239.1	1273.1	1285.2
50°	1087.6	1172.4	1219.8	1236.6	1263.3	1253.6
52.5°	1085.1	1151.8	1191.8	1222.1	1234.3	1223.3
55°	1088.7	1134.9	1163.9	1197.9	1212.4	1213.6
57.5°	1093.6	1125.1	1144.6	1160.3	1203.9	1203.9
60°	1105.7	1116.7	1127.6	1136.1	1193.1	1194.3
62.5°	1125.1	1108.2	1105.7	1114.2	1187.0	1182.1
65°	1155.4	1096.1	1077.9	1086.4	1180.9	1166.4
67.5°	1196.6	1077.9	1042.7	1048.7	1176.1	1144.6
70°	1234.3	1048.7	999.0	993.0	1130.0	1074.2
72.5°	1237.9	1014.8	938.5	920.2	982.0	928.7
75°	1177.3	991.8	871.8	818.4	811.1	803.8
77.5°	1060.9	978.5	794.1	710.5	695.9	700.8
80°	887.5	928.7	700.8	601.4	680.2	671.7
82.5°	663.2	819.6	595.4	532.2	531.0	469.2
85°	368.6	638.9	485.0	398.8	277.6	269.1
87.5°	103.0	355.3	339.5	225.6	154.0	160.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)