

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: P301711

Luminaire Tested: **GLNA-AF-06-LED-E1-T2R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194759)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-T2R-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23549.8 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): 193
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

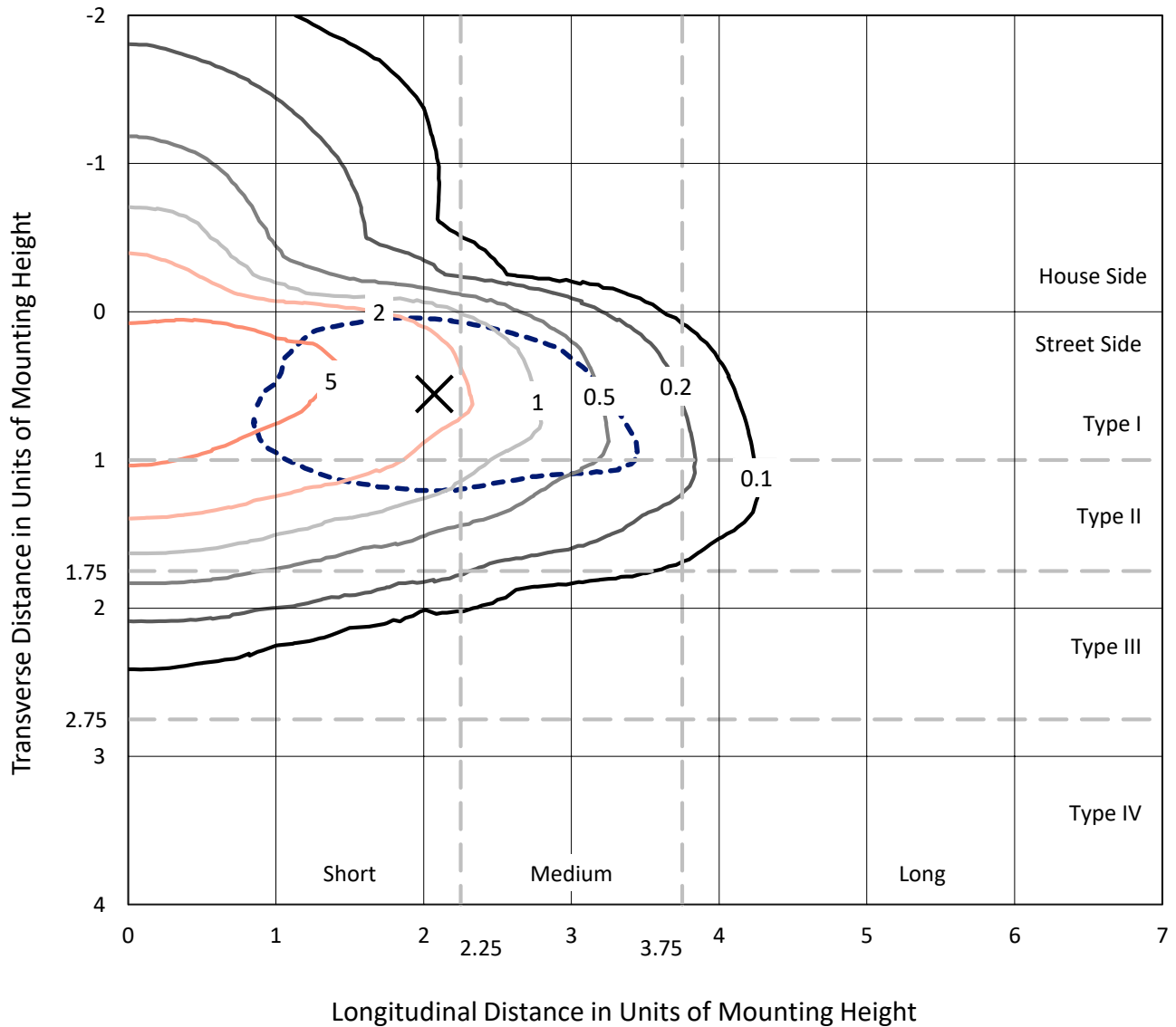


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Iso-Footcandle Lines of Horizontal Illumination

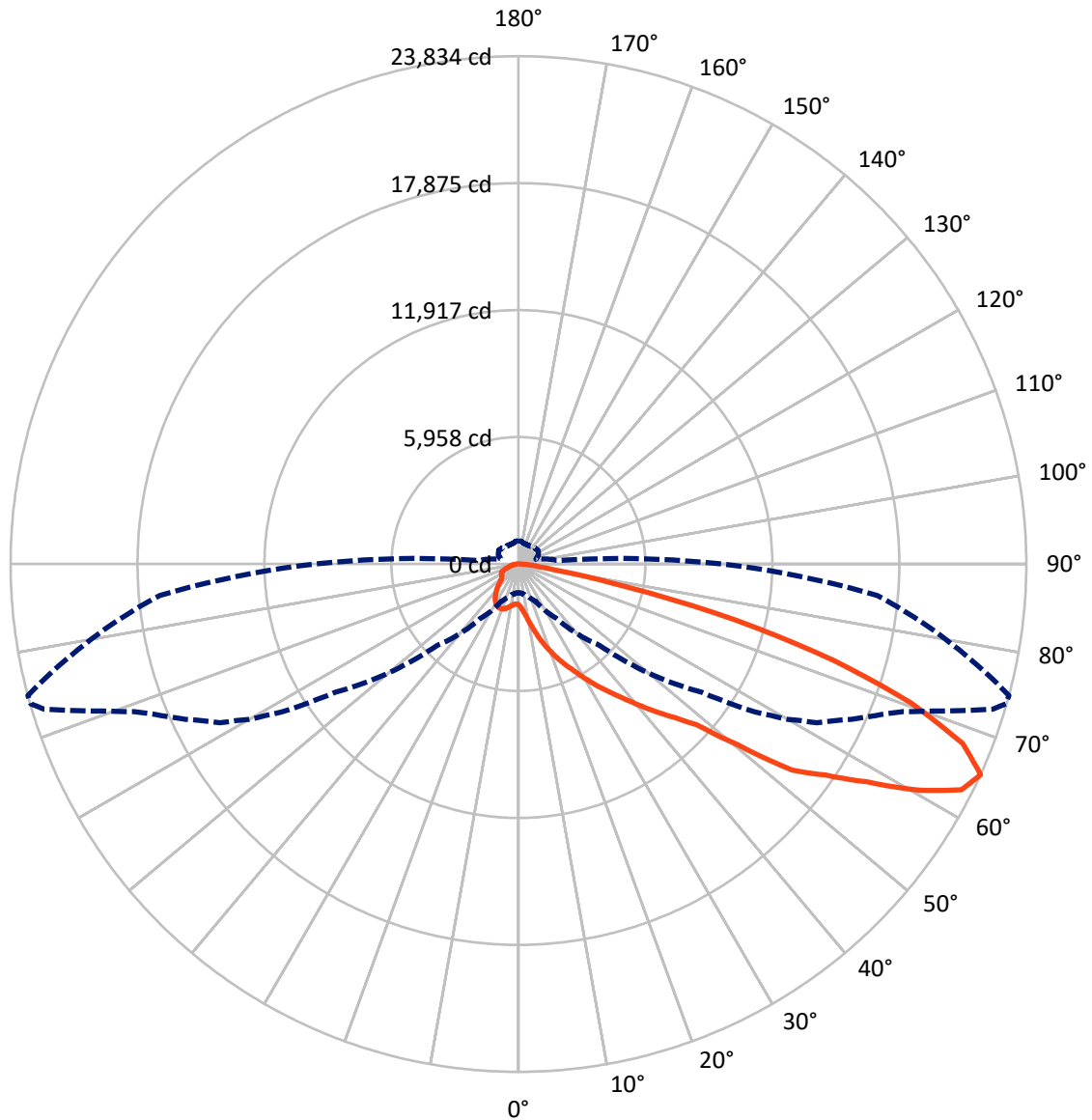
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 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	3630.8	0.0	3630.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	19919.0	0.0	19919.0
	% Fixture	84.6	0.0	84.6
Total	Lumens	23549.8	0.0	23549.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.6	1.0
10°-20°	924.3	3.9
20°-30°	1896.4	8.1
30°-40°	3190.5	13.5
40°-50°	4408.4	18.7
50°-60°	5503.0	23.4
60°-70°	4952.1	21.0
70°-80°	2075.9	8.8
80°-90°	362.7	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°	23549.8	100.0
0°-180°	23549.8	100.0

Coefficient of Utilization



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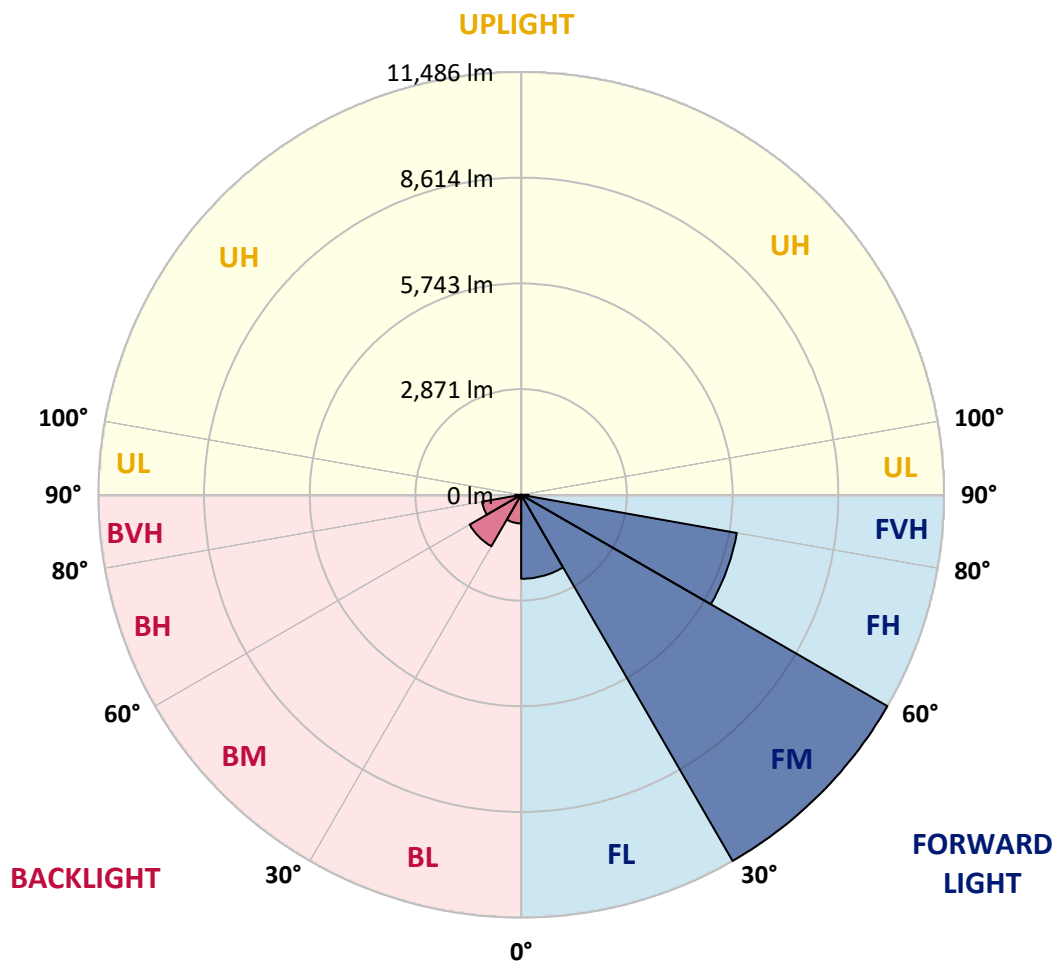
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2280.7	9.7			
FM (30°-60°)	11485.8	48.8			
FH (60°-80°)	5948.6	25.3			G3/7500
FVH (80°-90°)	203.9	0.9			G2/225
BL (0°-30°)	776.5	3.3	B2/1000		
BM (30°-60°)	1616.1	6.9	B2/2500		
BH (60°-80°)	1079.4	4.6	B3/2500		G3/2500
BVH (80°-90°)	158.8	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	2430.0	2403.3	2409.9	2365.2	2310.7	2239.2	2160.2	2159.2	2160.2	2152.3	2123.5
5°	3369.5	3337.4	3325.1	3224.6	3077.5	2868.2	2640.7	2616.2	2606.0	2580.5	2521.3
7.5°	4055.2	4037.4	4018.2	3942.5	3808.9	3574.8	3269.3	3217.0	3166.8	3154.5	3087.7
10°	4497.7	4493.0	4453.0	4432.9	4349.5	4146.5	3848.9	3798.6	3744.1	3725.2	3654.8
12.5°	4847.5	4846.5	4827.7	4833.3	4760.5	4613.7	4357.1	4311.5	4271.5	4213.3	4163.4
15°	5089.6	5090.5	5118.7	5149.7	5138.5	5039.3	4798.6	4778.4	4744.0	4704.0	4644.8
17.5°	5288.0	5293.6	5322.3	5379.2	5440.7	5432.8	5242.3	5225.5	5195.4	5140.8	5109.7
20°	5736.0	5757.2	5701.6	5701.6	5708.2	5738.3	5646.7	5633.5	5591.2	5562.1	5537.6
22.5°	6492.9	6517.4	6391.4	6263.4	6137.4	6045.8	5954.6	5971.1	5942.3	5922.2	5907.6
25°	7475.9	7495.1	7291.1	7074.9	6818.3	6484.0	6257.8	6247.5	6232.0	6219.8	6213.1
27.5°	8401.1	8409.1	8216.3	7899.5	7601.9	7121.5	6565.3	6553.1	6534.2	6510.7	6490.6
30°	9192.7	9190.4	8992.0	8689.8	8371.0	7839.3	7032.5	6994.5	6938.6	6875.1	6826.2
32.5°	9878.2	9874.9	9657.3	9344.2	9009.9	8550.6	7672.4	7594.3	7507.4	7383.4	7309.0
35°	10417.5	10415.5	10210.2	9883.8	9500.3	9220.5	8405.8	8309.9	8199.4	8033.4	7918.7
37.5°	10621.5	10621.5	10506.8	10283.9	9945.0	9753.2	9220.5	9104.5	8986.4	8797.9	8668.6
40°	10502.2	10504.5	10529.0	10488.0	10322.9	10175.8	9980.7	9911.6	9810.1	9640.8	9505.9
42.5°	10102.1	10114.3	10277.3	10476.7	10559.0	10535.9	10654.9	10623.9	10552.4	10422.1	10315.0
45°	9594.8	9632.9	9811.1	10188.0	10624.8	10846.7	11220.0	11223.3	11210.1	11140.0	11057.4
47.5°	8898.5	8951.7	9187.1	9696.3	10471.1	11148.9	11794.1	11824.2	11852.3	11806.6	11768.6
50°	7973.3	8036.8	8388.9	9064.4	10157.9	11462.1	12878.6	13014.9	13141.8	13126.3	13151.8
52.5°	6982.3	7057.0	7488.2	8240.8	9619.6	11534.5	13572.0	13793.9	14015.8	14197.3	14390.1
55°	6088.2	6048.1	6479.7	7271.9	8734.4	11207.8	14195.3	14462.8	14710.2	14933.0	15162.9
57.5°	4876.6	4942.4	5374.9	6158.6	7562.9	10285.9	14624.2	15015.7	15371.2	15740.2	16065.6
60°	3564.5	3630.3	4099.6	4895.5	6291.2	8888.2	14296.5	14889.7	15459.1	16024.2	16465.7
62.5°	2152.3	2201.6	2614.9	3373.1	4851.1	7230.9	12836.3	13614.4	14452.6	15128.1	15804.7
65°	1339.8	1367.6	1520.4	1937.4	3115.5	5398.4	10488.0	11336.1	12238.8	13096.2	13799.5
67.5°	1096.8	1106.7	1134.8	1223.8	1710.8	3520.2	7805.9	8557.2	9372.0	10201.3	10983.9
70°	986.4	979.8	979.8	985.4	1096.8	1892.7	5110.7	5600.1	6278.9	7000.1	7715.7
72.5°	890.5	883.9	871.6	855.1	895.1	1154.7	2641.7	3010.7	3500.1	4140.9	4826.3
75°	800.2	791.3	777.1	755.9	783.7	871.6	1268.4	1423.5	1661.9	2003.2	2385.4
77.5°	706.6	695.4	682.2	666.6	702.3	677.9	743.3	799.2	890.5	999.9	1143.8
80°	600.8	590.9	586.3	578.7	621.0	516.2	525.1	559.5	613.0	672.2	739.0
82.5°	470.5	470.5	488.1	491.7	538.3	371.3	392.5	422.6	450.4	481.4	512.9
85°	309.8	312.1	372.3	395.8	424.6	249.7	294.3	304.2	326.7	344.6	357.8
87.5°	96.9	104.8	227.5	252.0	244.0	141.5	180.5	185.2	200.7	212.9	224.2
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	2123.5	2110.0	2097.7	2096.7	2087.8	2075.6	2079.9	2061.0	2062.0	2052.1	2040.8
5°	2496.8	2487.9	2443.3	2431.0	2397.6	2376.5	2373.2	2328.5	2322.9	2297.4	2269.3
7.5°	3034.2	3005.1	2942.6	2912.5	2855.6	2813.3	2793.4	2734.2	2705.1	2638.4	2608.3
10°	3596.9	3560.2	3483.2	3440.9	3386.3	3318.2	3281.5	3195.9	3162.1	3101.0	3027.5
12.5°	4118.7	4082.0	4002.7	3970.3	3897.8	3825.4	3785.4	3688.5	3644.9	3546.7	3488.8
15°	4601.2	4564.5	4495.4	4462.0	4389.5	4330.4	4276.8	4181.2	4130.0	4038.4	3962.7
17.5°	5069.4	5030.4	4970.2	4940.1	4870.0	4809.8	4751.9	4661.3	4609.1	4517.8	4449.7
20°	5504.2	5475.1	5431.8	5391.5	5321.4	5266.8	5197.7	5119.6	5043.9	4976.8	4912.3
22.5°	5883.1	5871.9	5825.3	5807.4	5747.2	5700.3	5640.1	5563.4	5508.5	5423.9	5363.7
25°	6209.8	6206.5	6184.0	6178.4	6136.1	6091.5	6078.2	6014.7	5964.5	5889.8	5827.6
27.5°	6490.6	6493.9	6488.6	6504.1	6492.9	6472.7	6474.0	6452.9	6423.8	6361.3	6306.7
30°	6802.7	6784.9	6795.1	6817.3	6823.9	6826.2	6862.9	6875.1	6873.1	6831.8	6805.0
32.5°	7244.2	7201.8	7162.8	7159.5	7181.7	7190.6	7253.1	7285.5	7313.3	7323.2	7327.8
35°	7806.9	7722.3	7640.9	7597.6	7559.6	7569.5	7614.2	7666.7	7727.9	7770.2	7820.5
37.5°	8515.9	8412.4	8268.5	8166.0	8140.2	8084.7	8113.5	8154.8	8215.0	8280.8	8367.7
40°	9375.3	9218.2	9056.5	8920.6	8847.2	8744.4	8743.4	8735.4	8772.5	8833.6	8956.3
42.5°	10202.6	10063.0	9891.4	9748.9	9653.0	9515.8	9488.0	9415.6	9432.1	9485.7	9605.1
45°	10977.0	10862.3	10757.4	10592.8	10511.1	10363.0	10316.0	10230.4	10182.4	10206.9	10326.3
47.5°	11727.3	11653.9	11544.4	11437.6	11375.1	11242.5	11182.3	11120.8	11059.7	11057.4	11182.3
50°	13189.8	13150.8	13021.5	12910.1	12940.1	12777.5	12787.4	12622.4	12697.1	12706.0	12967.9
52.5°	14564.0	14700.3	14796.2	14912.9	14988.9	15003.5	15053.4	15128.1	15218.4	15396.6	15639.7
55°	15351.0	15521.6	15620.8	15710.1	15857.2	15888.3	15972.0	16071.2	16150.2	16350.9	16557.3
57.5°	16286.4	16602.9	16756.6	16898.2	17096.6	17172.3	17311.8	17420.0	17522.5	17759.9	18009.5
60°	16862.5	17248.3	17561.5	17785.3	18034.0	18212.6	18423.2	18592.5	18833.2	19117.6	19489.9
62.5°	16404.5	16970.6	17386.6	17771.1	18108.7	18450.0	18751.9	19068.6	19434.0	19864.2	20441.9
65°	14579.9	15155.9	15868.2	16267.3	16714.3	17240.4	17699.7	18212.6	18710.5	19337.1	20190.9
67.5°	11737.5	12407.1	13207.6	13610.1	14123.9	14711.2	15226.3	15852.6	16434.6	17193.5	18249.3
70°	8460.3	9326.3	9999.6	10419.8	11019.7	11624.8	12122.1	12850.9	13332.3	14110.4	15201.9
72.5°	5357.1	6040.2	6865.2	7394.6	7927.3	8540.7	9048.9	9677.5	10126.5	10835.5	11824.2
75°	2880.4	3384.0	4108.5	4611.4	5182.1	5705.9	6301.1	6722.4	7054.7	7615.5	8418.0
77.5°	1349.8	1656.3	2023.0	2409.9	2796.7	3200.2	3592.6	3933.6	4076.4	4397.5	4871.0
80°	819.4	918.6	1025.4	1144.8	1306.4	1436.7	1609.7	1734.3	1743.3	1844.8	1989.6
82.5°	547.2	583.9	616.4	646.4	687.8	720.2	756.9	800.2	818.1	841.5	888.5
85°	373.3	391.2	397.8	417.0	412.3	423.6	438.1	452.7	460.3	459.3	480.5
87.5°	229.5	238.4	243.0	247.3	244.0	239.7	246.3	254.3	256.3	249.7	252.0
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°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	2043.2	2033.2	2023.0	2016.4	2014.1	1955.2	1929.4	1912.9	1877.2	1848.1	1824.6
5°	2253.8	2232.6	2216.1	2195.9	2184.7	2035.2	1980.7	1943.0	1880.5	1843.8	1810.0
7.5°	2592.7	2533.5	2499.1	2460.1	2426.7	2156.9	2066.6	2007.5	1920.5	1871.5	1833.5
10°	2977.3	2916.1	2861.2	2801.0	2748.8	2318.6	2187.0	2095.4	1980.7	1917.2	1866.9
12.5°	3406.5	3346.3	3277.2	3200.2	3133.4	2523.6	2340.8	2210.5	2053.1	1968.4	1898.3
15°	3913.7	3807.6	3723.9	3635.0	3556.9	2769.0	2520.3	2339.8	2130.1	2015.4	1921.8
17.5°	4384.9	4273.5	4160.1	4082.0	3991.8	3044.1	2700.9	2471.0	2193.6	2045.5	1926.1
20°	4845.5	4723.8	4626.0	4521.1	4426.2	3329.4	2893.6	2587.1	2234.9	2046.5	1898.3
22.5°	5251.2	5175.2	5066.1	4952.3	4856.4	3614.8	3074.2	2685.3	2250.5	2021.0	1849.1
25°	5712.5	5632.5	5498.6	5402.7	5295.9	3905.8	3251.4	2761.0	2241.6	1973.1	1773.3
27.5°	6205.2	6116.3	5979.0	5878.8	5749.6	4207.7	3414.1	2815.6	2208.2	1895.0	1671.8
30°	6719.1	6637.7	6502.8	6401.6	6271.0	4527.8	3596.0	2852.3	2141.4	1786.9	1553.8
32.5°	7270.9	7202.8	7069.2	6963.4	6823.9	4874.3	3765.3	2863.5	2039.9	1658.6	1429.1
35°	7794.7	7748.1	7635.3	7536.1	7391.3	5202.0	3944.8	2857.9	1919.5	1518.1	1315.4
37.5°	8384.6	8356.5	8300.9	8175.0	7997.7	5646.7	4160.1	2834.4	1772.4	1378.9	1228.4
40°	9013.2	9015.5	8955.3	8869.4	8704.4	6186.4	4416.3	2788.8	1611.6	1256.2	1149.1
42.5°	9678.5	9713.2	9684.1	9622.9	9464.6	6730.3	4722.9	2733.3	1455.9	1136.8	1071.3
45°	10441.0	10483.3	10528.0	10437.7	10283.9	7448.2	5126.3	2660.8	1287.3	1037.6	1017.8
47.5°	11320.6	11387.4	11427.4	11428.7	11274.9	8337.7	5781.6	2617.2	1138.1	970.8	992.0
50°	13176.2	13197.7	13292.3	13457.3	13339.3	10396.4	6926.4	2590.4	1036.6	929.5	973.1
52.5°	15850.3	16083.4	16247.4	16236.2	16075.5	11703.8	7557.3	2452.2	976.4	914.0	964.2
55°	16939.5	17230.5	17533.7	17613.7	17489.1	12819.8	8153.8	2314.0	947.3	925.2	967.5
57.5°	18390.8	18881.2	19297.1	19472.0	19291.5	14247.6	8938.5	2241.6	938.4	955.3	988.7
60°	20086.1	20692.5	21238.8	21552.9	21552.9	15888.3	9752.2	2211.5	926.2	999.9	1024.4
62.5°	21175.3	22065.8	22890.8	23351.0	23337.5	17030.8	10113.3	2109.0	898.4	1031.0	1073.3
65°	21179.6	22238.7	23289.5	23807.0	23833.5	16890.6	9517.1	1862.6	847.2	1035.6	1122.6
67.5°	19414.2	20543.1	21768.2	22346.8	22480.4	15548.4	8238.5	1531.6	763.5	991.0	1140.5
70°	16396.6	17499.0	18749.6	19318.3	19555.7	13254.3	6635.4	1180.5	656.7	892.8	1103.4
72.5°	12917.7	13998.9	14869.6	15285.2	15470.4	10131.2	4832.0	891.8	538.3	752.3	1004.2
75°	9145.8	9957.2	10419.8	10512.4	10541.2	6107.3	2936.0	663.3	443.7	585.3	848.1
77.5°	5162.0	5509.8	5471.8	5513.1	5169.9	2357.6	1278.7	474.8	365.7	444.7	657.7
80°	2015.4	2077.9	1951.9	1912.9	1754.5	877.2	564.1	331.0	292.0	336.6	460.3
82.5°	888.5	917.3	890.5	897.4	858.4	452.7	337.6	239.7	222.9	246.3	305.5
85°	489.4	498.3	496.0	510.5	489.4	180.5	160.4	147.1	156.1	167.3	196.1
87.5°	238.4	240.7	233.1	245.4	237.4	91.3	79.0	83.7	91.3	93.6	93.6
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°	1913.9	1913.9	1913.9	1913.9	1913.9	1913.9
2.5°	1808.1	1799.1	1800.1	1797.8	1793.5	1793.5
5°	1792.5	1783.6	1783.6	1781.3	1775.7	1776.6
7.5°	1808.1	1793.5	1787.9	1780.0	1772.4	1772.4
10°	1825.9	1800.1	1784.6	1771.4	1761.1	1761.1
12.5°	1839.1	1799.1	1773.3	1755.5	1745.6	1745.6
15°	1843.8	1791.2	1755.5	1734.3	1725.4	1724.4
17.5°	1829.2	1761.1	1717.8	1693.3	1682.1	1678.8
20°	1784.6	1706.5	1654.3	1626.2	1610.7	1605.0
22.5°	1717.8	1628.5	1567.3	1538.2	1518.1	1514.8
25°	1624.2	1528.3	1468.1	1440.0	1429.1	1425.5
27.5°	1514.8	1425.5	1374.2	1356.4	1346.5	1345.5
30°	1411.3	1335.2	1297.5	1284.0	1271.7	1269.7
32.5°	1314.1	1266.1	1251.9	1232.7	1203.9	1200.6
35°	1244.9	1240.6	1230.7	1188.1	1152.7	1142.4
37.5°	1202.6	1244.0	1192.7	1109.0	1083.6	1081.3
40°	1178.2	1209.6	1121.3	1092.5	1094.5	1092.5
42.5°	1122.6	1154.7	1123.6	1110.4	1119.0	1121.3
45°	1066.7	1102.4	1140.5	1131.5	1152.7	1152.7
47.5°	1035.6	1088.9	1139.1	1139.1	1170.5	1181.5
50°	999.9	1078.0	1121.3	1136.8	1161.6	1152.7
52.5°	997.6	1058.8	1095.8	1123.6	1134.8	1124.6
55°	1000.9	1043.2	1070.0	1101.4	1114.7	1115.7
57.5°	1005.5	1034.3	1052.2	1066.7	1106.7	1106.7
60°	1016.5	1026.7	1036.6	1044.6	1096.8	1097.8
62.5°	1034.3	1018.8	1016.5	1024.4	1091.2	1086.9
65°	1062.4	1007.5	991.0	998.6	1085.6	1072.3
67.5°	1100.1	991.0	958.6	964.2	1081.3	1052.2
70°	1134.8	964.2	918.6	913.0	1038.9	987.7
72.5°	1138.1	933.1	862.7	846.2	903.0	853.8
75°	1082.3	911.6	801.5	752.3	745.6	739.0
77.5°	975.5	899.4	730.1	653.1	639.8	644.1
80°	816.1	853.8	644.1	552.9	625.3	617.7
82.5°	609.7	753.6	547.2	489.4	488.1	431.5
85°	338.9	587.6	445.7	366.7	255.3	247.3
87.5°	94.9	326.7	312.1	207.3	141.5	147.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)