

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: P192193

Luminaire Tested: **GLEON-AF-05-LED-E1-T2R-7050-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192193  
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-7050-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 5000K, 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: 20421 lumens  
Efficiency: N/A  
Efficacy: 126.1 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): 162  
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

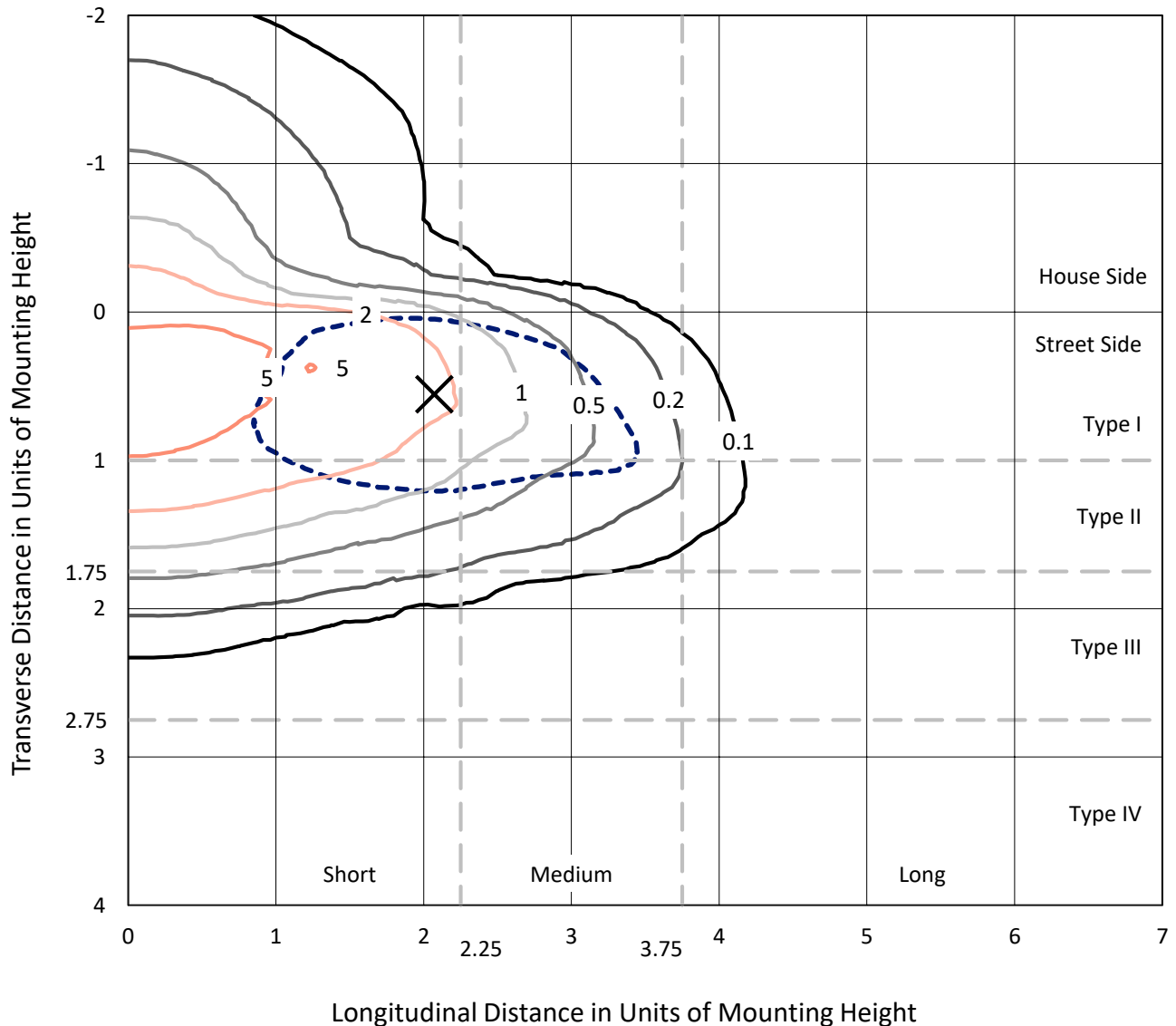


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### Iso-Footcandle Lines of Horizontal Illumination

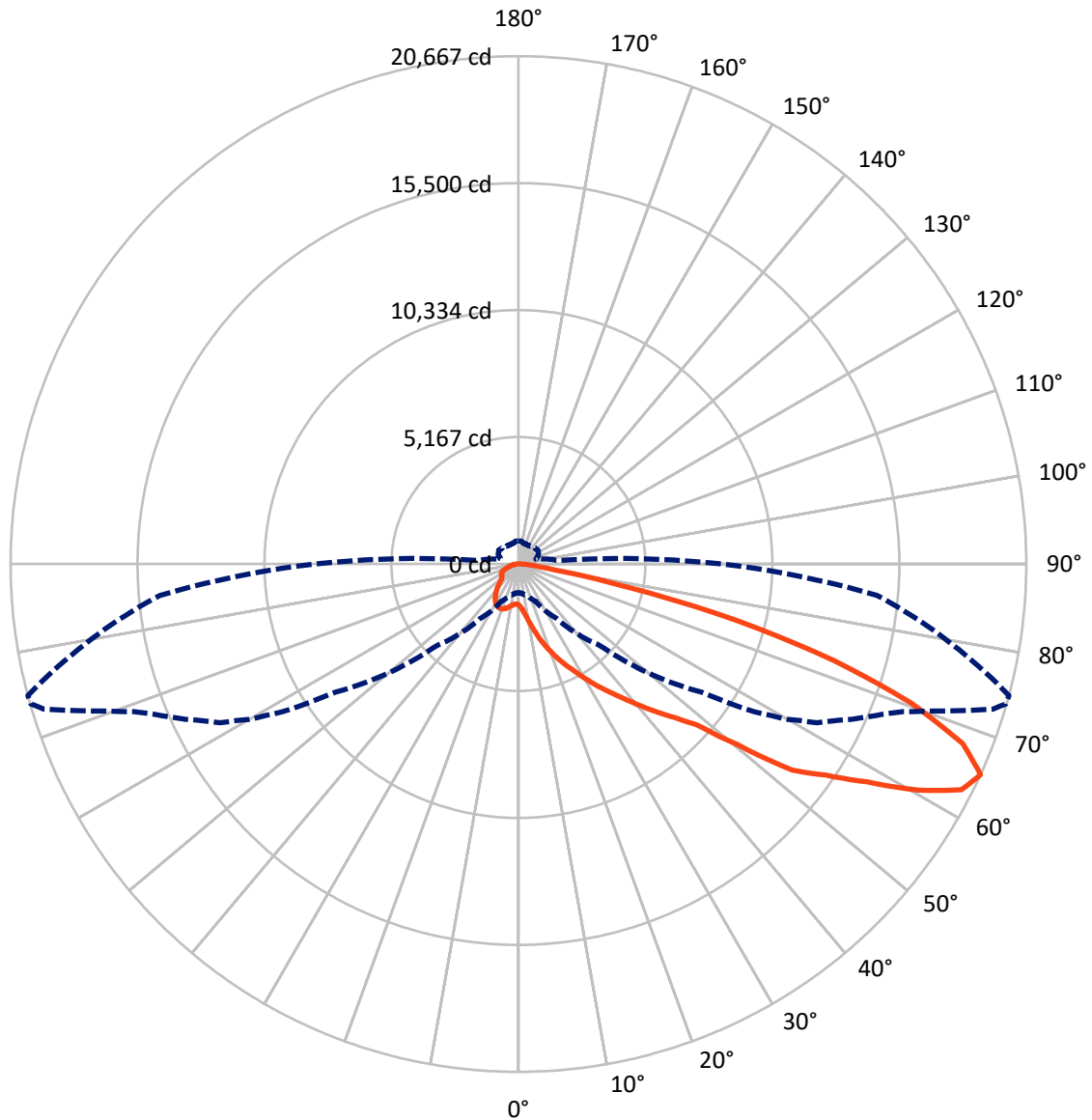
× Max cd  
 - - - 1/2 Max cd



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
<b>House Side</b>	Lumens	3148.4	0.0	3148.4
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	17272.6	0.0	17272.6
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	20421.0	0.0	20421.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.1	1.0
10°-20°	801.5	3.9
20°-30°	1644.4	8.1
30°-40°	2766.6	13.5
40°-50°	3822.7	18.7
50°-60°	4771.9	23.4
60°-70°	4294.2	21.0
70°-80°	1800.1	8.8
80°-90°	314.5	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°	20421.0	100.0
0°-180°	20421.0	100.0



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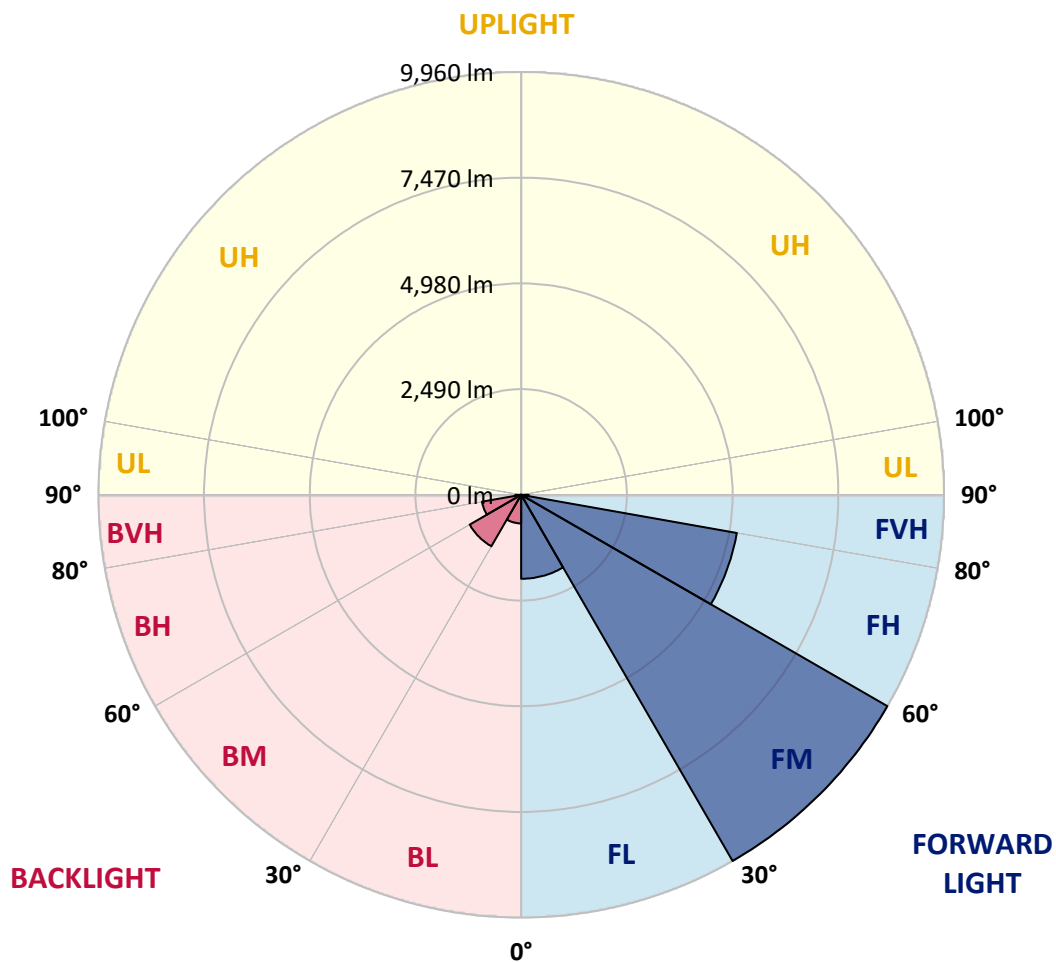
CATALOG NUMBER: GLEON-AF-05-LED-E1-T2R-7050-600

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1977.7	9.7			
FM (30°-60°)	9959.8	48.8			
FH (60°-80°)	5158.3	25.3			G3/7500
FVH (80°-90°)	176.8	0.9			G2/225
BL (0°-30°)	673.3	3.3	B2/1000		
BM (30°-60°)	1401.4	6.9	B2/2500		
BH (60°-80°)	936.0	4.6	B2/1000		G2/1000
BVH (80°-90°)	137.7	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6
2.5°	2107.1	2083.9	2089.7	2051.1	2003.7	1941.8	1873.2	1872.2	1873.2	1866.4	1841.3
5°	2921.9	2893.9	2883.3	2796.3	2668.7	2487.0	2289.8	2268.5	2259.8	2237.6	2186.4
7.5°	3516.4	3500.9	3484.5	3418.8	3302.8	3099.8	2834.9	2789.5	2746.0	2735.4	2677.4
10°	3900.1	3896.2	3861.4	3844.0	3771.5	3595.6	3337.6	3294.1	3246.7	3230.3	3169.4
12.5°	4203.6	4202.6	4186.2	4191.0	4128.2	4000.6	3778.3	3738.7	3703.9	3653.6	3610.1
15°	4413.3	4414.3	4438.5	4465.5	4455.9	4369.9	4161.1	4143.7	4113.7	4078.9	4027.7
17.5°	4585.4	4590.2	4615.4	4664.7	4717.8	4711.1	4545.8	4531.3	4505.2	4457.8	4430.7
20°	4974.0	4992.3	4944.0	4944.0	4949.8	4975.9	4896.6	4885.0	4848.3	4823.2	4801.9
22.5°	5630.3	5651.5	5542.3	5431.1	5321.9	5242.7	5163.4	5177.9	5152.8	5135.4	5122.8
25°	6482.8	6499.2	6322.3	6134.8	5912.5	5622.5	5426.3	5417.6	5404.1	5393.4	5387.6
27.5°	7285.0	7291.8	7124.6	6850.1	6592.0	6175.4	5693.1	5682.5	5666.0	5645.7	5628.3
30°	7971.3	7969.4	7797.3	7535.4	7258.9	6797.9	6098.1	6065.2	6016.9	5961.8	5919.3
32.5°	8565.7	8562.8	8374.3	8102.7	7812.8	7414.5	6652.9	6585.2	6509.8	6402.5	6337.8
35°	9033.5	9031.6	8853.8	8570.6	8238.1	7995.4	7288.9	7205.8	7110.1	6966.1	6866.5
37.5°	9210.4	9210.4	9110.9	8917.6	8623.7	8457.5	7995.4	7894.9	7792.5	7629.1	7517.0
40°	9107.0	9108.9	9130.2	9094.4	8951.4	8823.8	8654.6	8594.7	8506.8	8359.8	8242.9
42.5°	8760.0	8770.6	8911.8	9084.8	9156.3	9136.0	9239.4	9212.4	9150.5	9037.4	8944.6
45°	8320.2	8353.1	8507.7	8834.4	9213.3	9405.7	9729.5	9732.4	9720.8	9659.9	9588.4
47.5°	7716.1	7762.5	7966.5	8408.2	9079.9	9667.6	10227.3	10253.4	10277.5	10237.9	10205.0
50°	6913.9	6969.0	7274.4	7860.1	8808.3	9939.2	11167.7	11285.6	11395.8	11382.3	11404.5
52.5°	6054.6	6119.3	6493.4	7145.8	8341.5	10002.0	11768.9	11961.3	12153.6	12311.2	12478.4
55°	5279.4	5244.6	5618.7	6305.9	7574.0	9718.8	12309.2	12541.2	12755.8	12949.1	13148.2
57.5°	4228.7	4285.8	4660.8	5340.3	6558.2	8919.5	12681.4	13020.6	13329.0	13648.9	13931.1
60°	3091.1	3148.1	3555.0	4245.2	5455.3	7707.4	12397.2	12911.4	13405.3	13895.4	14278.1
62.5°	1866.4	1909.0	2267.6	2924.8	4206.5	6270.1	11131.0	11805.7	12532.5	13118.3	13705.0
65°	1161.8	1186.0	1318.4	1679.9	2701.6	4681.1	9094.4	9830.0	10612.9	11356.2	11966.1
67.5°	951.1	959.8	984.0	1061.3	1483.7	3052.4	6768.9	7420.3	8126.9	8846.0	9524.6
70°	855.4	849.6	849.6	854.4	951.1	1641.2	4431.7	4856.0	5444.7	6070.0	6690.6
72.5°	772.3	766.5	755.9	741.4	776.2	1001.4	2290.8	2610.7	3035.0	3590.8	4185.2
75°	694.0	686.3	673.7	655.3	679.5	755.9	1100.0	1234.3	1441.2	1736.9	2068.5
77.5°	612.8	603.1	591.5	578.0	608.9	587.7	644.7	693.0	772.3	867.0	991.7
80°	521.0	512.3	508.4	501.6	538.4	447.5	455.3	485.2	531.6	582.8	640.8
82.5°	407.9	407.9	423.4	426.3	466.9	321.9	340.2	366.3	390.5	417.6	444.6
85°	268.7	270.6	322.8	343.1	368.3	216.5	255.2	263.9	283.2	298.7	310.3
87.5°	84.1	90.9	197.2	218.4	211.7	122.8	156.6	160.5	174.0	184.6	194.3
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°	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6
2.5°	1841.3	1829.7	1819.1	1818.1	1810.4	1799.7	1803.6	1787.2	1788.2	1779.5	1769.8
5°	2165.1	2157.4	2118.7	2108.1	2079.1	2060.7	2057.8	2019.2	2014.3	1992.1	1967.9
7.5°	2631.0	2605.9	2551.7	2525.6	2476.3	2439.6	2422.2	2371.0	2345.9	2287.9	2261.8
10°	3119.1	3087.2	3020.5	2983.8	2936.4	2877.5	2845.6	2771.1	2742.2	2689.0	2625.2
12.5°	3571.5	3539.6	3470.9	3442.9	3380.1	3317.3	3282.5	3198.4	3160.7	3075.6	3025.4
15°	3990.0	3958.1	3898.2	3869.2	3806.3	3755.1	3708.7	3625.6	3581.1	3501.9	3436.1
17.5°	4396.0	4362.1	4309.9	4283.8	4222.9	4170.7	4120.5	4042.2	3996.8	3917.5	3858.5
20°	4772.9	4747.8	4710.1	4675.3	4614.4	4567.0	4507.1	4439.4	4373.7	4315.7	4259.7
22.5°	5101.5	5091.9	5051.3	5035.8	4983.6	4943.0	4890.8	4824.1	4776.8	4703.3	4651.1
25°	5384.7	5381.8	5362.5	5357.7	5321.0	5282.3	5270.7	5215.6	5172.1	5107.3	5053.2
27.5°	5628.3	5631.2	5626.4	5639.9	5630.3	5612.9	5613.8	5595.5	5570.3	5516.2	5468.8
30°	5899.0	5883.5	5892.2	5911.5	5917.3	5919.3	5951.2	5961.8	5959.9	5924.1	5900.9
32.5°	6281.7	6245.0	6211.2	6208.3	6227.6	6235.3	6289.5	6317.5	6341.7	6350.4	6354.2
35°	6769.8	6696.4	6625.8	6588.1	6555.3	6564.0	6602.6	6648.1	6701.2	6737.9	6781.4
37.5°	7384.6	7294.7	7170.0	7081.1	7058.8	7010.5	7035.6	7071.4	7123.6	7180.6	7256.0
40°	8129.8	7993.5	7853.4	7735.4	7671.6	7582.7	7581.8	7575.0	7606.9	7660.0	7766.4
42.5°	8847.0	8726.2	8577.3	8453.6	8370.5	8251.6	8227.4	8164.6	8179.1	8225.5	8328.9
45°	9518.8	9419.2	9328.3	9185.3	9114.7	8986.2	8945.6	8871.2	8829.6	8850.9	8954.3
47.5°	10169.3	10105.5	10010.7	9918.0	9863.8	9748.8	9696.6	9643.4	9590.3	9588.4	9696.6
50°	11437.4	11403.6	11291.4	11194.8	11220.9	11079.8	11088.5	10945.4	11010.2	11017.9	11245.0
52.5°	12629.2	12747.1	12830.2	12931.7	12997.4	13010.0	13053.5	13118.3	13196.5	13351.2	13561.9
55°	13311.6	13459.5	13545.5	13622.8	13750.4	13777.5	13849.9	13936.0	14004.6	14178.6	14357.4
57.5°	14122.5	14397.0	14530.4	14653.2	14825.2	14890.9	15011.8	15105.5	15194.4	15400.3	15616.8
60°	14622.2	14956.7	15228.3	15422.6	15638.1	15792.8	15975.4	16122.4	16331.1	16577.6	16900.4
62.5°	14225.0	14716.0	15076.5	15410.0	15702.9	15998.6	16260.6	16535.1	16852.1	17225.2	17725.9
65°	12642.7	13142.4	13760.1	14106.1	14493.7	14949.9	15348.1	15792.8	16224.8	16768.0	17508.4
67.5°	10178.0	10758.9	11452.9	11801.8	12247.4	12756.8	13203.3	13746.5	14251.1	14909.3	15824.6
70°	7336.2	8087.3	8671.1	9035.5	9555.5	10080.3	10511.4	11143.6	11561.1	12235.8	13182.1
72.5°	4645.3	5237.8	5953.1	6412.2	6874.2	7405.8	7846.6	8391.7	8781.3	9396.0	10253.4
75°	2497.6	2934.5	3562.8	3998.7	4493.6	4947.9	5464.0	5829.4	6117.4	6603.6	7299.5
77.5°	1170.5	1436.3	1754.3	2089.7	2425.1	2775.0	3115.2	3411.0	3534.7	3813.1	4223.9
80°	710.4	796.5	889.2	992.7	1132.8	1245.9	1395.7	1504.0	1511.7	1599.7	1725.3
82.5°	474.6	506.5	534.5	560.6	596.4	624.4	656.3	694.0	709.5	729.8	770.4
85°	323.8	339.3	345.1	361.5	357.6	367.3	379.9	392.4	399.2	398.2	416.6
87.5°	199.1	206.8	210.7	214.6	211.7	207.8	213.6	220.4	222.3	216.5	218.4
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):**

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6
2.5°	1771.7	1763.0	1754.3	1748.5	1746.6	1695.4	1673.1	1658.6	1627.7	1602.6	1582.3
5°	1954.4	1936.0	1921.5	1904.1	1894.5	1765.0	1717.6	1684.7	1630.6	1598.7	1569.7
7.5°	2248.2	2197.0	2167.0	2133.2	2104.2	1870.3	1792.0	1740.8	1665.4	1622.9	1590.0
10°	2581.7	2528.5	2481.2	2429.0	2383.6	2010.5	1896.4	1817.1	1717.6	1662.5	1619.0
12.5°	2953.8	2901.6	2841.7	2775.0	2717.0	2188.3	2029.8	1916.7	1780.4	1707.0	1646.1
15°	3393.6	3301.8	3229.3	3152.0	3084.3	2401.0	2185.4	2028.8	1847.1	1747.6	1666.4
17.5°	3802.5	3705.8	3607.2	3539.6	3461.3	2639.7	2342.0	2142.9	1902.2	1773.7	1670.2
20°	4201.7	4096.3	4011.3	3920.4	3838.2	2887.1	2509.2	2243.4	1938.0	1774.6	1646.1
22.5°	4553.5	4487.8	4393.1	4294.5	4211.3	3134.6	2665.8	2328.5	1951.5	1752.4	1603.5
25°	4953.7	4884.1	4768.1	4685.0	4592.2	3386.9	2819.5	2394.2	1943.8	1710.8	1537.8
27.5°	5380.9	5303.6	5184.7	5097.7	4985.6	3648.8	2960.6	2441.6	1914.8	1643.2	1449.9
30°	5826.5	5755.9	5639.0	5551.0	5437.9	3926.2	3118.1	2473.4	1856.8	1549.4	1347.4
32.5°	6304.9	6246.0	6130.0	6038.1	5917.3	4226.8	3265.1	2483.1	1768.8	1438.3	1239.1
35°	6759.2	6718.6	6621.0	6535.0	6409.3	4511.0	3420.7	2478.3	1664.4	1316.5	1140.5
37.5°	7270.5	7246.4	7198.0	7088.8	6935.1	4896.6	3607.2	2458.0	1536.8	1195.6	1065.2
40°	7815.7	7817.6	7765.4	7691.0	7547.9	5364.5	3829.5	2418.4	1397.7	1089.3	996.5
42.5°	8392.7	8422.7	8397.5	8344.4	8207.1	5836.1	4095.3	2370.0	1262.3	985.9	928.9
45°	9053.8	9090.6	9129.2	9050.9	8917.6	6458.6	4445.2	2307.2	1116.4	899.9	882.5
47.5°	9816.5	9874.5	9909.3	9910.2	9776.8	7229.9	5013.6	2269.5	986.9	841.9	860.2
50°	11425.8	11444.2	11526.3	11669.4	11566.9	9015.2	6006.3	2246.3	898.9	806.1	843.8
52.5°	13744.6	13946.6	14088.7	14079.0	13939.8	10149.0	6553.3	2126.4	846.7	792.6	836.1
55°	14688.9	14941.2	15204.1	15273.7	15165.4	11116.5	7070.4	2006.6	821.6	802.3	839.0
57.5°	15947.4	16372.7	16733.2	16885.0	16728.4	12354.7	7750.9	1943.8	813.9	828.3	857.3
60°	17417.6	17943.4	18417.0	18689.6	18689.6	13777.5	8456.5	1917.7	803.2	867.0	888.3
62.5°	18361.9	19134.2	19849.4	20248.6	20237.0	14768.2	8769.7	1828.7	779.1	894.1	930.8
65°	18365.8	19284.0	20195.5	20644.0	20667.2	14646.4	8252.6	1615.1	734.6	897.9	973.3
67.5°	16834.7	17813.8	18876.1	19377.8	19493.7	13482.7	7143.9	1328.1	662.1	859.3	988.8
70°	14218.2	15174.1	16258.6	16751.6	16957.5	11493.5	5754.0	1023.6	569.3	774.2	956.9
72.5°	11201.6	12139.1	12894.0	13254.5	13415.0	8785.1	4190.1	773.3	466.9	652.4	870.9
75°	7930.7	8634.3	9035.5	9115.7	9140.8	5295.8	2545.9	575.1	384.7	507.4	735.6
77.5°	4476.2	4777.7	4744.9	4780.6	4482.9	2044.3	1108.7	411.8	317.0	385.7	570.3
80°	1747.6	1801.7	1692.5	1658.6	1521.4	760.7	489.1	287.1	253.2	291.9	399.2
82.5°	770.4	795.5	772.3	778.1	744.3	392.4	292.9	207.8	193.3	213.6	264.8
85°	424.3	432.1	430.1	442.7	424.3	156.6	139.2	127.6	135.3	145.0	170.1
87.5°	206.8	208.8	202.0	212.6	205.9	79.3	68.6	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°	1659.6	1659.6	1659.6	1659.6	1659.6	1659.6
2.5°	1567.8	1560.0	1561.0	1559.1	1555.2	1555.2
5°	1554.2	1546.5	1546.5	1544.6	1539.7	1540.7
7.5°	1567.8	1555.2	1550.4	1543.6	1536.8	1536.8
10°	1583.2	1561.0	1547.5	1535.9	1527.2	1527.2
12.5°	1594.8	1560.0	1537.8	1522.3	1513.6	1513.6
15°	1598.7	1553.3	1522.3	1504.0	1496.2	1495.3
17.5°	1586.1	1527.2	1489.5	1468.2	1458.6	1455.7
20°	1547.5	1479.8	1434.4	1410.2	1396.7	1391.9
22.5°	1489.5	1412.2	1359.0	1333.9	1316.5	1313.6
25°	1408.3	1325.2	1273.0	1248.8	1239.1	1236.2
27.5°	1313.6	1236.2	1191.8	1176.3	1167.6	1166.6
30°	1223.7	1157.9	1125.1	1113.5	1102.9	1100.9
32.5°	1139.6	1098.0	1085.5	1069.0	1043.9	1041.0
35°	1079.7	1075.8	1067.1	1030.4	999.4	990.7
37.5°	1042.9	1078.7	1034.2	961.7	939.5	937.6
40°	1021.7	1048.7	972.4	947.2	949.2	947.2
42.5°	973.3	1001.4	974.3	962.7	970.4	972.4
45°	925.0	955.9	988.8	981.1	999.4	999.4
47.5°	897.9	944.3	987.8	987.8	1014.9	1024.6
50°	867.0	934.7	972.4	985.9	1007.2	999.4
52.5°	865.1	918.2	950.1	974.3	984.0	975.3
55°	868.0	904.7	927.9	955.0	966.6	967.5
57.5°	871.8	897.0	912.4	925.0	959.8	959.8
60°	881.5	890.2	898.9	905.7	951.1	952.1
62.5°	897.0	883.4	881.5	888.3	946.3	942.4
65°	921.1	873.8	859.3	866.0	941.4	929.8
67.5°	954.0	859.3	831.2	836.1	937.6	912.4
70°	984.0	836.1	796.5	791.6	900.8	856.4
72.5°	986.9	809.0	748.1	733.6	782.9	740.4
75°	938.5	790.7	695.0	652.4	646.6	640.8
77.5°	845.7	780.0	633.1	566.4	554.8	558.7
80°	707.5	740.4	558.7	479.4	542.2	535.5
82.5°	528.7	653.4	474.6	424.3	423.4	374.1
85°	293.8	509.4	386.6	318.0	221.3	214.6
87.5°	82.2	283.2	270.6	179.8	122.8	127.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)