

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: P193142

Luminaire Tested: **GLEON-AF-04-LED-E1-T2R-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193142
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-04-LED-E1-T2R-7030-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 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: 19547.6 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 171
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

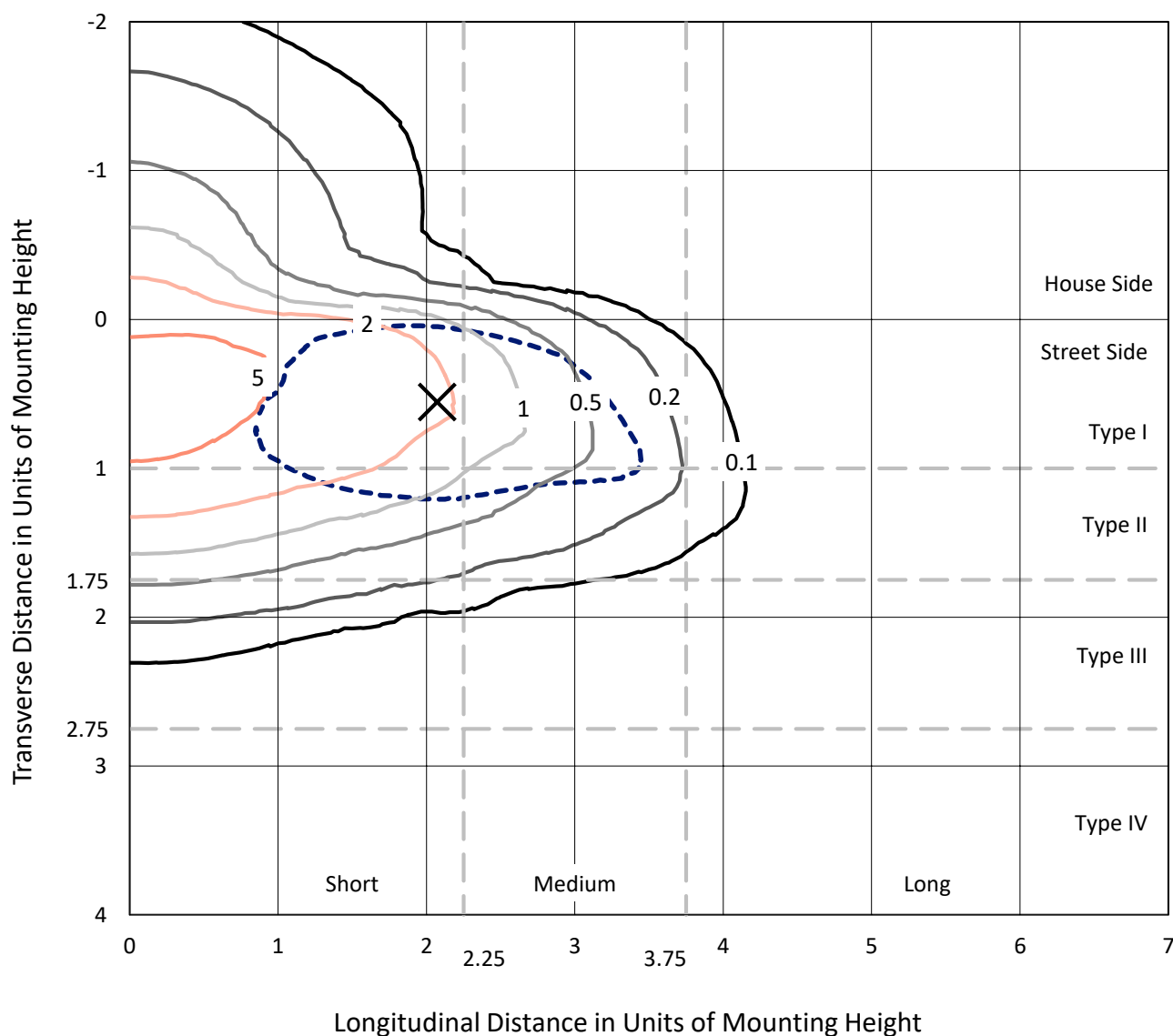


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

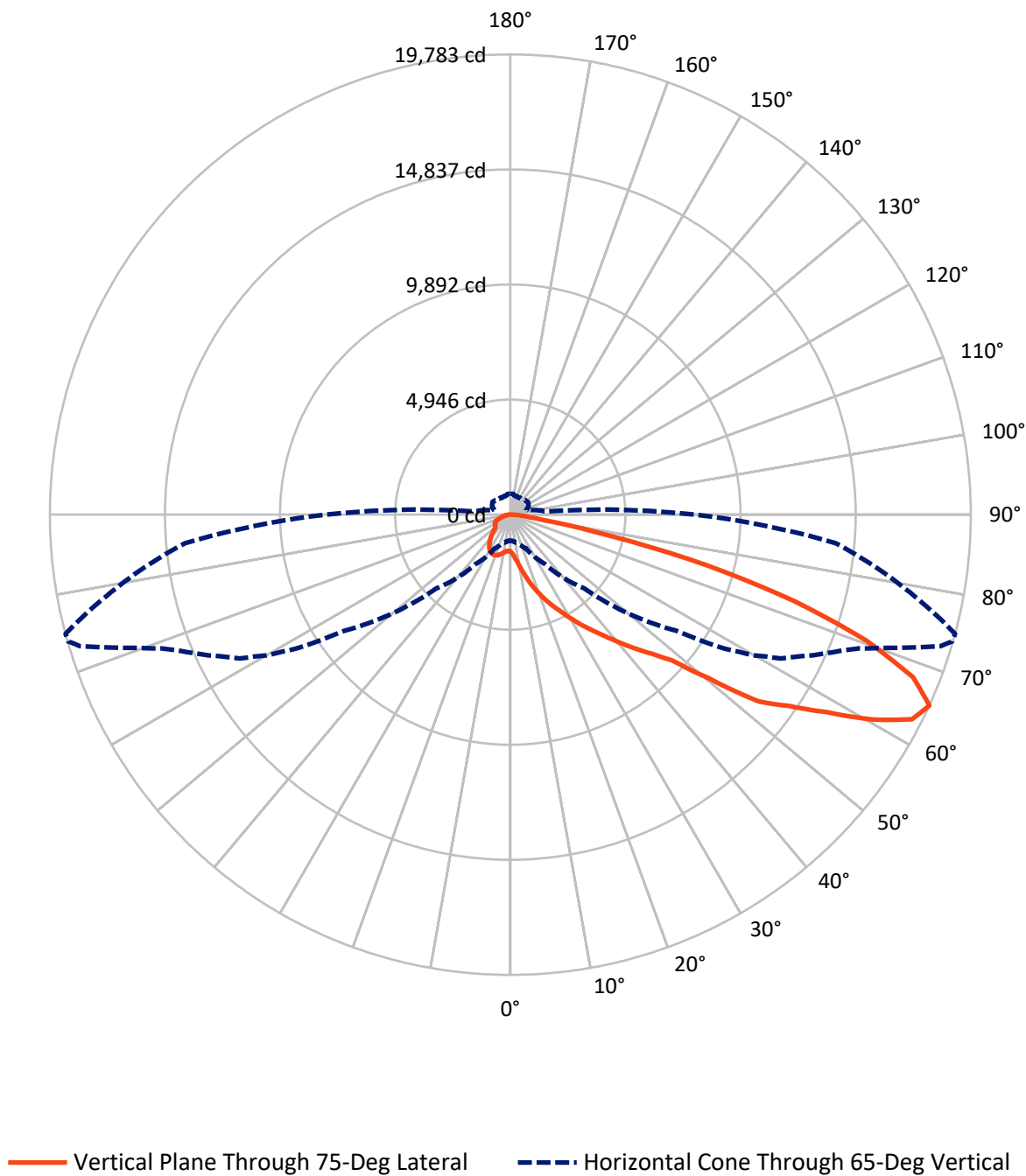


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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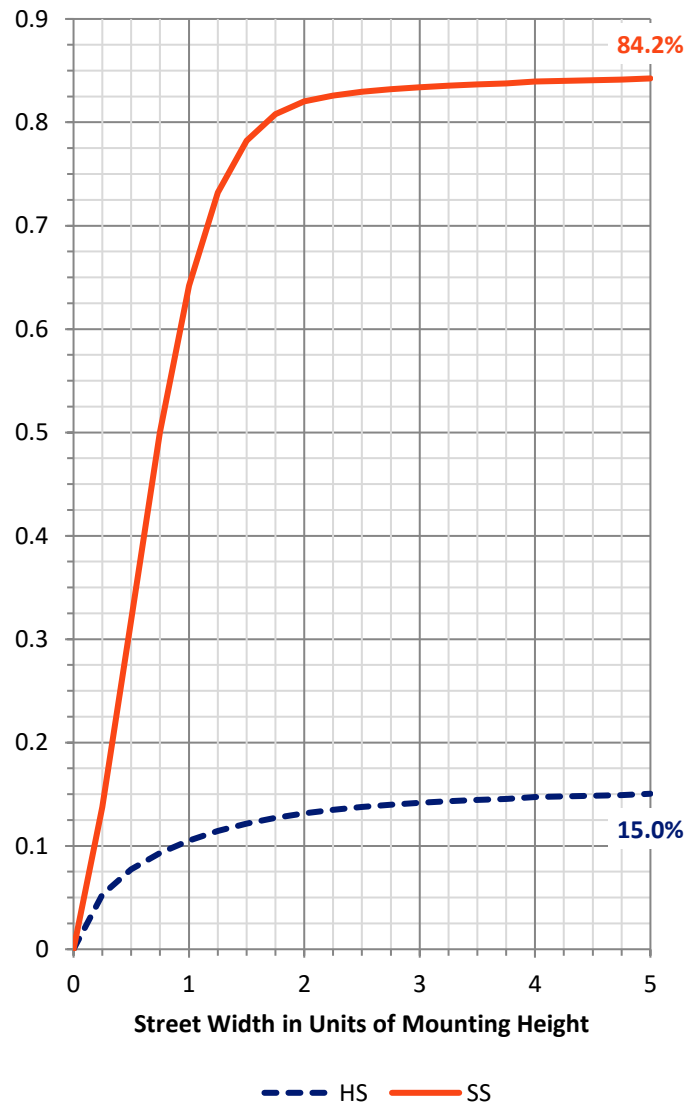
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3013.8	0.0	3013.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	16533.8	0.0	16533.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	19547.6	0.0	19547.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.4	1.0
10°-20°	767.2	3.9
20°-30°	1574.1	8.1
30°-40°	2648.3	13.5
40°-50°	3659.2	18.7
50°-60°	4567.8	23.4
60°-70°	4110.5	21.0
70°-80°	1723.1	8.8
80°-90°	301.0	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°	19547.6	100.0
0°-180°	19547.6	100.0

Coefficient of Utilization



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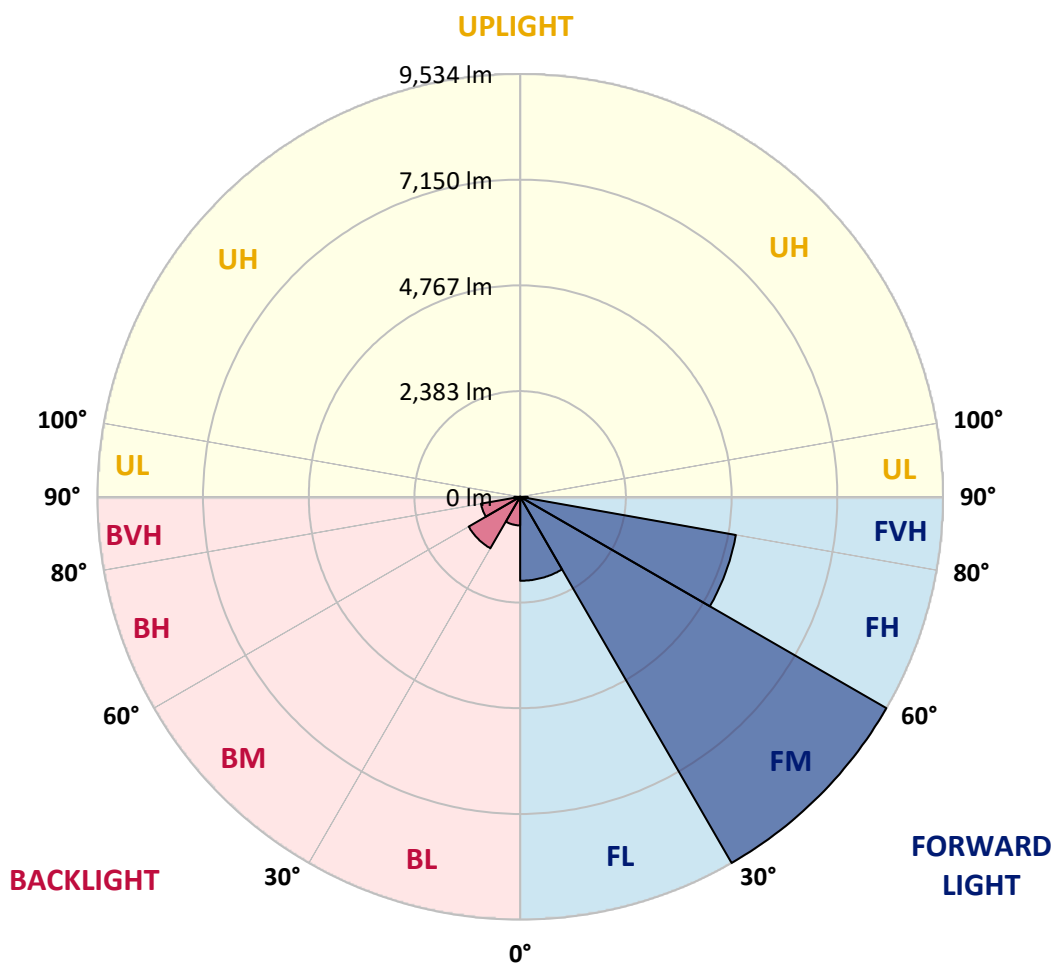
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1893.1	9.7			
FM	(30°-60°)	9533.8	48.8			
FH	(60°-80°)	4937.6	25.3			G2/5000
FVH	(80°-90°)	169.2	0.9			G2/225
BL	(0°-30°)	644.5	3.3	B2/1000		
BM	(30°-60°)	1341.5	6.9	B2/2500		
BH	(60°-80°)	896.0	4.6	B2/1000		G2/1000
BVH	(80°-90°)	131.8	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	2017.0	1994.7	2000.3	1963.3	1918.0	1858.8	1793.1	1792.2	1793.1	1786.6	1762.6
5°	2796.9	2770.2	2760.0	2676.7	2554.6	2380.6	2191.8	2171.5	2163.3	2141.9	2092.9
7.5°	3366.0	3351.2	3335.4	3272.6	3161.5	2967.2	2713.7	2670.2	2628.6	2618.4	2562.9
10°	3733.3	3729.6	3696.2	3679.7	3610.3	3441.8	3194.8	3153.2	3107.9	3092.1	3033.8
12.5°	4023.8	4022.9	4007.2	4011.8	3951.7	3829.5	3616.7	3578.8	3545.5	3497.4	3455.8
15°	4224.6	4225.5	4248.6	4274.6	4265.3	4183.0	3983.1	3966.4	3937.8	3904.5	3855.4
17.5°	4389.3	4393.9	4418.0	4465.1	4516.0	4509.5	4351.4	4337.5	4312.5	4267.1	4241.2
20°	4761.2	4778.8	4732.6	4732.6	4738.1	4763.0	4687.2	4676.1	4640.9	4616.9	4596.5
22.5°	5389.4	5409.8	5305.3	5198.9	5094.3	5018.4	4942.6	4956.4	4932.4	4915.7	4903.7
25°	6205.5	6221.2	6051.9	5872.4	5659.6	5382.0	5194.1	5185.9	5173.0	5162.7	5157.2
27.5°	6973.5	6979.9	6819.9	6557.0	6310.0	5911.3	5449.7	5439.4	5423.6	5404.3	5387.6
30°	7630.3	7628.5	7463.8	7213.1	6948.5	6507.2	5837.2	5805.8	5759.5	5706.8	5666.0
32.5°	8199.4	8196.6	8016.2	7756.2	7478.6	7097.4	6368.2	6303.6	6231.4	6128.7	6066.7
35°	8647.3	8645.3	8475.1	8203.9	7885.7	7653.5	6977.2	6897.5	6806.0	6668.1	6572.8
37.5°	8816.4	8816.4	8721.2	8536.1	8254.9	8095.8	7653.5	7557.3	7459.1	7302.8	7195.5
40°	8717.5	8719.3	8739.6	8705.4	8568.5	8446.4	8284.5	8227.1	8142.9	8002.2	7890.3
42.5°	8385.3	8395.5	8530.6	8696.2	8764.7	8745.2	8844.2	8818.4	8759.1	8650.8	8562.1
45°	7964.4	7995.8	8143.8	8456.5	8819.3	9003.4	9313.4	9316.1	9304.9	9246.7	9178.3
47.5°	7386.0	7430.5	7625.7	8048.6	8691.6	9254.1	9789.8	9814.8	9837.9	9800.0	9768.6
50°	6618.2	6671.0	6963.2	7523.9	8431.5	9514.1	10690.0	10802.9	10908.5	10895.5	10916.7
52.5°	5795.6	5857.6	6215.6	6840.1	7984.6	9574.3	11265.6	11449.8	11633.8	11784.6	11944.7
55°	5053.6	5020.3	5378.4	6036.1	7250.1	9303.2	11782.7	12004.9	12210.3	12395.3	12585.9
57.5°	4047.8	4102.4	4461.5	5111.9	6277.7	8537.9	12138.9	12463.7	12758.9	13065.1	13335.3
60°	2958.8	3013.5	3403.0	4063.6	5221.9	7377.7	11866.9	12359.2	12832.0	13301.1	13667.5
62.5°	1786.6	1827.4	2170.6	2799.8	4026.6	6001.9	10655.0	11300.6	11996.4	12557.1	13118.8
65°	1112.1	1135.2	1262.1	1608.1	2586.0	4480.8	8705.4	9409.5	10159.0	10870.5	11454.3
67.5°	910.4	918.8	942.0	1015.9	1420.3	2921.9	6479.4	7103.0	7779.3	8467.7	9117.1
70°	818.8	813.3	813.3	818.0	910.4	1571.0	4242.2	4648.3	5211.7	5810.4	6404.4
72.5°	739.2	733.6	723.6	709.6	743.0	958.5	2192.9	2499.1	2905.2	3437.2	4006.2
75°	664.3	656.8	644.8	627.2	650.4	723.6	1052.9	1181.5	1379.5	1662.6	1980.0
77.5°	586.6	577.3	566.3	553.3	582.9	562.5	617.1	663.4	739.2	830.0	949.3
80°	498.7	490.3	486.6	480.2	515.3	428.4	435.8	464.5	508.8	557.9	613.4
82.5°	390.5	390.5	405.3	408.0	446.9	308.1	325.7	350.6	373.7	399.7	425.6
85°	257.2	259.1	308.9	328.5	352.5	207.3	244.3	252.6	271.1	285.9	296.9
87.5°	80.6	87.0	188.8	209.1	202.6	117.5	149.9	153.6	166.5	176.7	186.0
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	1762.6	1751.4	1741.3	1740.4	1733.0	1722.8	1726.6	1710.8	1711.6	1703.4	1694.1
5°	2072.5	2065.1	2028.1	2017.9	1990.1	1972.5	1969.8	1932.8	1928.2	1906.9	1883.7
7.5°	2518.4	2494.4	2442.6	2417.6	2370.4	2335.3	2318.6	2269.6	2245.5	2190.0	2165.1
10°	2985.7	2955.1	2891.3	2856.1	2810.8	2754.4	2723.9	2652.6	2624.9	2573.9	2513.0
12.5°	3418.7	3388.1	3322.5	3295.7	3235.5	3175.4	3142.1	3061.6	3025.5	2944.1	2895.9
15°	3819.3	3788.8	3731.4	3703.7	3643.6	3594.5	3550.1	3470.5	3428.0	3352.1	3289.1
17.5°	4207.9	4175.6	4125.6	4100.6	4042.3	3992.4	3944.3	3869.3	3825.8	3750.0	3693.5
20°	4568.7	4544.7	4508.6	4475.4	4417.1	4371.7	4314.3	4249.5	4186.7	4131.1	4077.4
22.5°	4883.4	4874.0	4835.3	4820.4	4770.5	4731.6	4681.6	4617.9	4572.5	4502.1	4452.2
25°	5154.5	5151.7	5133.1	5128.5	5093.3	5056.4	5045.3	4992.5	4950.9	4889.0	4837.1
27.5°	5387.6	5390.5	5385.7	5398.7	5389.4	5372.9	5373.7	5356.1	5332.1	5280.3	5234.9
30°	5646.6	5631.9	5640.2	5658.6	5664.2	5666.0	5696.7	5706.8	5705.0	5670.7	5648.4
32.5°	6013.1	5977.9	5945.6	5942.7	5961.1	5968.7	6020.4	6047.3	6070.5	6078.7	6082.5
35°	6480.2	6410.0	6342.4	6306.3	6274.9	6283.2	6320.2	6363.7	6414.6	6449.8	6491.4
37.5°	7068.7	6982.6	6863.3	6778.2	6756.9	6710.7	6734.7	6768.9	6818.9	6873.5	6945.7
40°	7782.1	7651.7	7517.5	7404.6	7343.6	7258.4	7257.4	7251.0	7281.6	7332.4	7434.2
42.5°	8468.5	8353.0	8210.5	8092.1	8012.4	7898.7	7875.5	7815.5	7829.3	7873.7	7972.6
45°	9111.6	9016.3	8929.3	8792.4	8724.9	8601.9	8562.9	8491.7	8452.0	8472.3	8571.3
47.5°	9734.4	9673.3	9582.6	9493.7	9441.9	9331.9	9281.9	9231.0	9180.1	9178.3	9281.9
50°	10948.3	10915.9	10808.5	10715.9	10740.9	10605.9	10614.2	10477.3	10539.2	10546.7	10764.1
52.5°	12089.0	12201.8	12281.5	12378.6	12441.6	12453.6	12495.2	12557.1	12632.1	12780.2	12981.8
55°	12742.3	12883.8	12966.2	13040.1	13162.3	13188.1	13257.6	13339.9	13405.6	13572.1	13743.2
57.5°	13518.5	13781.2	13908.9	14026.4	14191.1	14254.1	14369.7	14459.5	14544.6	14741.6	14948.9
60°	13996.8	14317.0	14577.0	14762.9	14969.3	15117.3	15292.2	15432.8	15632.6	15868.6	16177.6
62.5°	13616.6	14086.6	14431.7	14750.9	15031.3	15314.4	15565.1	15827.9	16131.4	16488.5	16967.8
65°	12102.0	12580.3	13171.5	13502.8	13873.7	14310.4	14691.6	15117.3	15530.8	16050.8	16759.6
67.5°	9742.6	10298.7	10963.0	11297.0	11723.5	12211.2	12638.6	13158.5	13641.6	14271.7	15147.8
70°	7022.4	7741.3	8300.2	8649.1	9146.7	9649.2	10061.8	10667.0	11066.7	11712.5	12618.3
72.5°	4446.7	5013.8	5698.5	6137.9	6580.2	7089.1	7511.0	8032.8	8405.7	8994.1	9814.8
75°	2390.8	2808.9	3410.4	3827.7	4301.4	4736.3	5230.3	5580.1	5855.8	6321.2	6987.3
77.5°	1120.5	1374.9	1679.4	2000.3	2321.4	2656.3	2982.0	3265.1	3383.5	3650.1	4043.2
80°	680.0	762.4	851.2	950.2	1084.4	1192.6	1336.0	1439.6	1447.0	1531.3	1651.6
82.5°	454.3	484.8	511.7	536.7	570.9	597.6	628.2	664.3	679.1	698.5	737.4
85°	310.0	324.7	330.3	346.1	342.3	351.6	363.7	375.7	382.1	381.2	398.8
87.5°	190.5	198.0	201.7	205.4	202.6	199.0	204.5	211.0	212.8	207.3	209.1
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°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	1695.9	1687.6	1679.4	1673.8	1671.8	1622.8	1601.5	1587.6	1558.0	1534.0	1514.6
5°	1870.8	1853.2	1839.4	1822.7	1813.4	1689.4	1644.2	1612.6	1560.9	1530.2	1502.6
7.5°	2152.1	2103.0	2074.4	2041.9	2014.2	1790.3	1715.4	1666.3	1594.2	1553.4	1522.0
10°	2471.3	2420.4	2375.1	2325.1	2281.7	1924.5	1815.4	1739.4	1644.2	1591.4	1549.8
12.5°	2827.5	2777.5	2720.1	2656.3	2600.8	2094.7	1942.9	1834.7	1704.2	1634.0	1575.6
15°	3248.5	3160.6	3091.2	3017.2	2952.4	2298.3	2092.0	1942.1	1768.2	1672.8	1595.0
17.5°	3639.9	3547.3	3452.9	3388.1	3313.3	2526.8	2241.8	2051.3	1820.8	1697.8	1598.8
20°	4022.0	3921.1	3839.7	3752.7	3674.1	2763.6	2401.8	2147.5	1855.1	1698.8	1575.6
22.5°	4358.8	4295.8	4205.2	4110.8	4031.2	3000.5	2551.8	2228.9	1868.0	1677.4	1535.0
25°	4741.8	4675.2	4564.2	4484.5	4395.7	3241.9	2698.9	2291.8	1860.6	1637.7	1472.0
27.5°	5150.7	5076.7	4962.9	4879.6	4772.3	3492.7	2833.9	2337.2	1832.9	1572.9	1387.8
30°	5577.2	5509.7	5397.7	5313.6	5205.3	3758.3	2984.8	2367.6	1777.3	1483.0	1289.8
32.5°	6035.3	5978.7	5867.8	5780.0	5664.2	4046.0	3125.5	2376.9	1693.2	1376.7	1186.1
35°	6470.2	6431.2	6337.8	6255.4	6135.1	4318.0	3274.4	2372.2	1593.2	1260.2	1091.7
37.5°	6959.6	6936.5	6890.2	6785.6	6638.5	4687.2	3452.9	2352.9	1471.0	1144.5	1019.6
40°	7481.4	7483.2	7433.2	7362.0	7225.1	5134.9	3665.7	2314.8	1337.9	1042.8	954.0
42.5°	8033.8	8062.5	8038.4	7987.5	7856.1	5586.5	3920.2	2268.7	1208.3	943.8	889.2
45°	8666.6	8701.7	8738.8	8663.8	8536.1	6182.3	4255.1	2208.5	1068.7	861.4	844.7
47.5°	9396.7	9452.1	9485.5	9486.3	9358.7	6920.7	4799.1	2172.4	944.6	805.9	823.5
50°	10937.1	10954.7	11033.3	11170.2	11072.3	8629.7	5749.3	2150.2	860.4	771.6	807.8
52.5°	13156.7	13350.1	13486.1	13476.8	13343.7	9714.9	6273.0	2035.5	810.4	758.7	800.4
55°	14060.7	14302.1	14553.8	14620.4	14516.8	10641.1	6768.1	1920.8	786.4	768.0	803.0
57.5°	15265.2	15672.3	16017.5	16162.8	16012.9	11826.2	7419.4	1860.6	779.0	792.9	820.6
60°	16672.6	17175.9	17629.3	17890.2	17890.2	13188.1	8094.8	1835.7	768.8	830.0	850.2
62.5°	17576.5	18315.7	19000.4	19382.6	19371.4	14136.5	8394.6	1750.6	745.7	855.8	891.0
65°	17580.3	18459.3	19331.7	19760.9	19783.2	14019.9	7899.6	1546.0	703.2	859.6	931.7
67.5°	16114.6	17052.0	18068.8	18549.0	18660.0	12906.0	6838.3	1271.2	633.8	822.5	946.5
70°	13610.1	14525.2	15563.2	16035.1	16232.2	11001.9	5507.9	979.8	544.9	741.1	915.9
72.5°	10722.4	11619.9	12342.5	12687.6	12841.2	8409.3	4010.9	740.2	446.9	624.5	833.6
75°	7591.5	8265.0	8649.1	8725.8	8749.9	5069.3	2437.0	550.5	368.2	485.7	704.0
77.5°	4284.7	4573.4	4541.9	4576.3	4291.1	1956.9	1061.2	394.1	303.5	369.2	545.9
80°	1672.8	1724.6	1620.1	1587.6	1456.3	728.1	468.1	274.8	242.4	279.3	382.1
82.5°	737.4	761.4	739.2	744.8	712.4	375.7	280.4	199.0	185.0	204.5	253.5
85°	406.2	413.5	411.7	423.7	406.2	149.9	133.2	122.2	129.6	138.8	162.8
87.5°	198.0	199.8	193.4	203.5	197.1	75.8	65.7	69.4	75.8	77.7	77.7
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):

	135°	145°	155°	165°	175°	180°
0°	1588.6	1588.6	1588.6	1588.6	1588.6	1588.6
2.5°	1500.6	1493.3	1494.2	1492.4	1488.6	1488.6
5°	1487.8	1480.4	1480.4	1478.5	1473.9	1474.8
7.5°	1500.6	1488.6	1484.1	1477.6	1471.0	1471.0
10°	1515.5	1494.2	1481.3	1470.2	1461.9	1461.9
12.5°	1526.6	1493.3	1472.0	1457.2	1448.9	1448.9
15°	1530.2	1486.8	1457.2	1439.6	1432.3	1431.3
17.5°	1518.2	1461.9	1425.8	1405.4	1396.2	1393.4
20°	1481.3	1416.5	1373.1	1349.9	1337.0	1332.3
22.5°	1425.8	1351.7	1300.8	1276.8	1260.2	1257.3
25°	1348.0	1268.5	1218.6	1195.4	1186.1	1183.4
27.5°	1257.3	1183.4	1140.7	1126.0	1117.7	1116.7
30°	1171.4	1108.4	1077.0	1065.9	1055.7	1053.8
32.5°	1090.9	1051.1	1039.0	1023.3	999.2	996.5
35°	1033.5	1029.8	1021.5	986.3	956.7	948.4
37.5°	998.3	1032.5	990.0	920.6	899.3	897.4
40°	978.0	1003.9	930.8	906.8	908.6	906.8
42.5°	931.7	958.5	932.6	921.5	928.9	930.8
45°	885.4	915.0	946.5	939.1	956.7	956.7
47.5°	859.6	903.9	945.5	945.5	971.6	980.7
50°	830.0	894.8	930.8	943.8	964.1	956.7
52.5°	828.0	879.0	909.5	932.6	942.0	933.5
55°	830.8	866.0	888.2	914.2	925.2	926.2
57.5°	834.5	858.6	873.4	885.4	918.8	918.8
60°	843.8	852.1	860.4	867.0	910.4	911.3
62.5°	858.6	845.6	843.8	850.2	905.8	902.1
65°	881.7	836.4	822.5	829.0	901.2	890.0
67.5°	913.2	822.5	795.7	800.4	897.4	873.4
70°	942.0	800.4	762.4	757.7	862.3	819.8
72.5°	944.6	774.4	716.0	702.2	749.4	708.8
75°	898.4	756.8	665.3	624.5	619.0	613.4
77.5°	809.6	746.7	606.1	542.2	531.1	534.9
80°	677.3	708.8	534.9	458.9	519.1	512.5
82.5°	506.1	625.4	454.3	406.2	405.3	358.1
85°	281.3	487.7	370.1	304.4	211.9	205.4
87.5°	78.6	271.1	259.1	172.1	117.5	122.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)