

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: P191347

Luminaire Tested: **GLEON-AF-09-LED-E1-SLR-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24296)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SLR-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52478.4 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

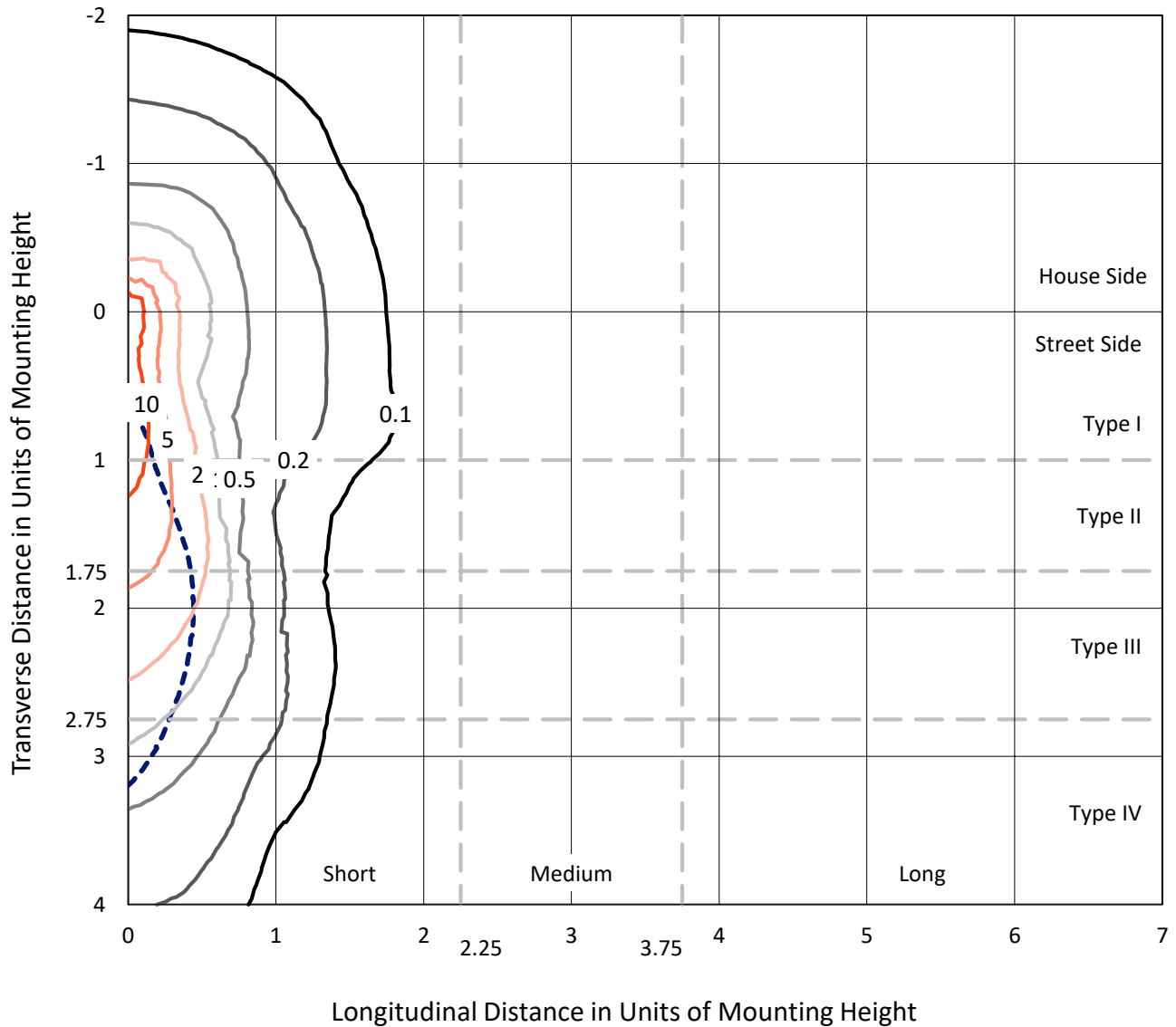
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

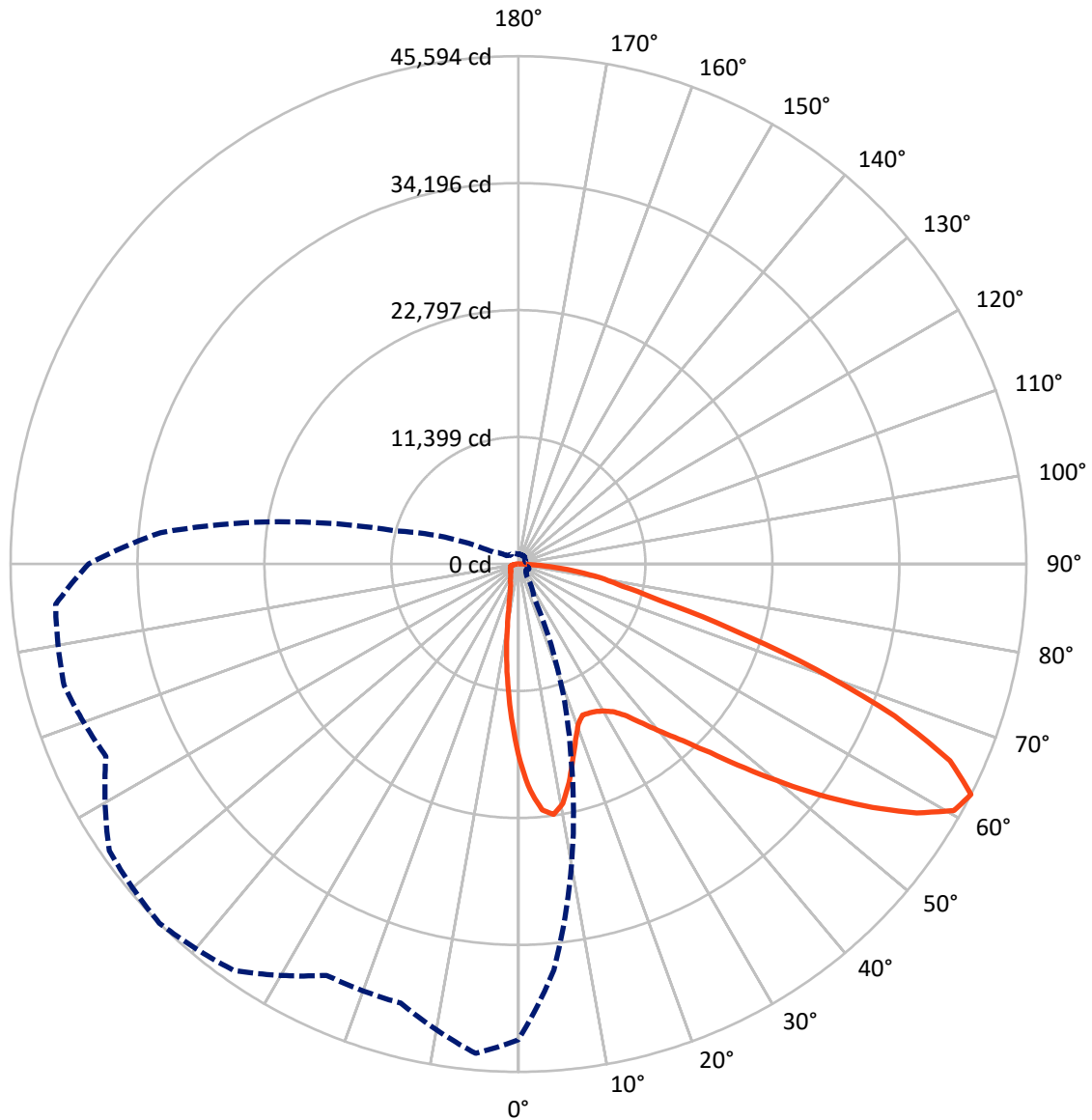
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8684.4	0.0	8684.4
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	43794.0	0.0	43794.0
	% Fixture	83.5	0.0	83.5
Total	Lumens	52478.4	0.0	52478.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1290.7	2.5
10°-20°	2366.7	4.5
20°-30°	3450.7	6.6
30°-40°	5314.6	10.1
40°-50°	7821.6	14.9
50°-60°	11472.7	21.9
60°-70°	12824.8	24.4
70°-80°	6278.8	12.0
80°-90°	1657.8	3.2
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°	52478.4	100.0
0°-180°	52478.4	100.0



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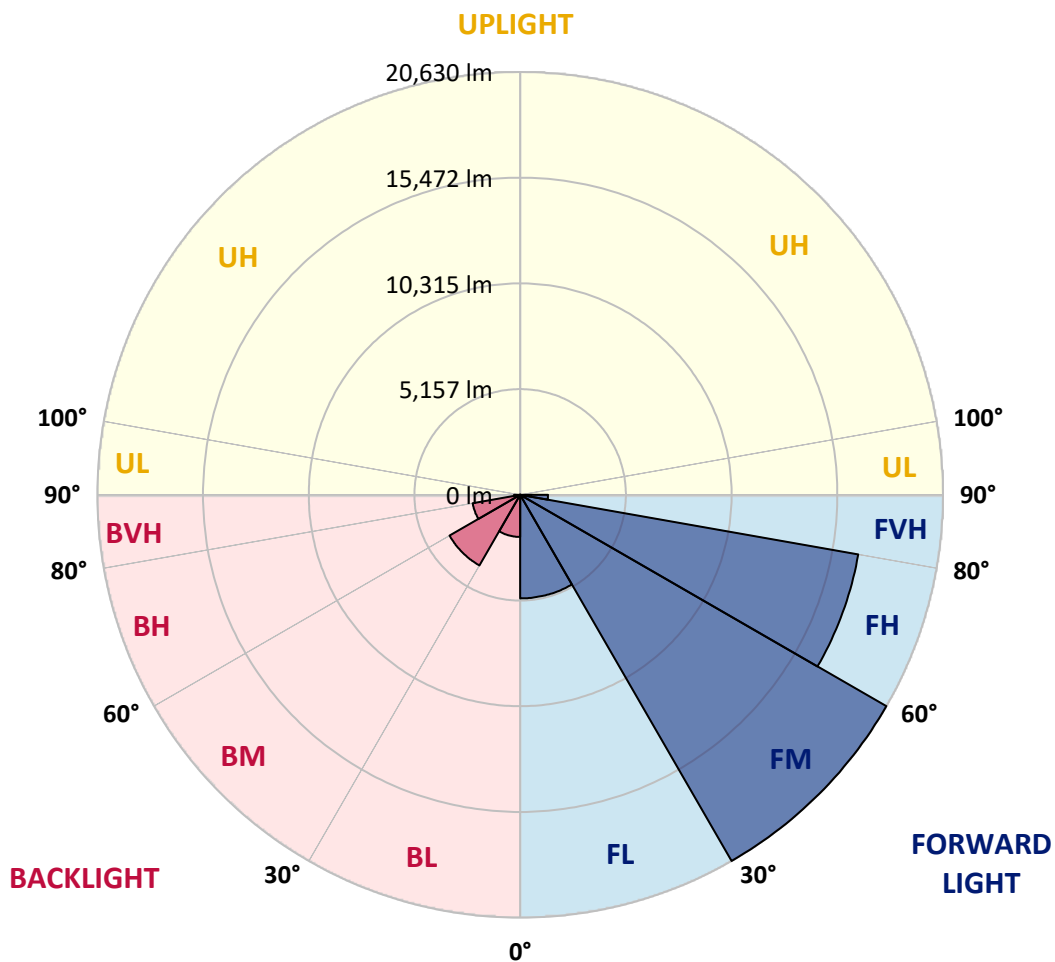
CATALOG NUMBER: GLEON-AF-09-LED-E1-SLR-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5053.5	9.6			
FM	(30°-60°)	20629.7	39.3			
FH	(60°-80°)	16749.3	31.9			G5
FVH	(80°-90°)	1361.4	2.6			G5
BL	(0°-30°)	2054.6	3.9	B3/2500		
BM	(30°-60°)	3979.2	7.6	B3/5000		
BH	(60°-80°)	2354.4	4.5	B3/2500		G3/2500
BVH	(80°-90°)	296.3	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	18422.4	18047.4	17424.2	16775.2	16379.9	15918.3	15557.8	15240.4	14605.8	14481.7	14594.2
5°	17323.3	16570.4	15396.2	14213.5	13425.9	12580.7	11922.9	11395.0	10590.1	10448.7	10618.9
7.5°	15560.6	14660.6	13108.6	11599.9	10486.3	9430.5	8720.8	8155.4	7526.5	7255.3	7272.6
10°	14040.4	13024.9	11190.2	9548.7	8637.1	7924.6	7327.4	6747.6	6110.0	5691.7	5576.3
12.5°	13189.3	12021.0	9906.5	8441.0	7595.7	6845.7	6202.4	5582.1	4901.3	4474.4	4353.2
15°	13042.2	11772.9	9424.7	7731.3	6672.6	5723.4	4964.8	4272.4	3571.4	3225.3	3153.1
17.5°	13679.7	12217.2	9268.9	7099.5	5804.2	4633.0	3701.2	2928.1	2356.9	2183.8	2169.4
20°	14903.0	13071.1	9248.7	6505.3	4947.4	3574.3	2579.1	2016.4	1765.5	1716.5	1719.4
22.5°	16619.4	14395.2	9496.8	6058.1	4159.9	2665.6	1938.6	1687.6	1589.6	1543.3	1543.3
25°	18840.7	16218.4	10068.0	5732.1	3476.2	2129.0	1710.7	1560.7	1468.3	1436.6	1442.4
27.5°	20992.8	17992.6	10731.5	5475.3	3029.1	1932.9	1621.3	1485.6	1404.9	1373.2	1387.6
30°	22671.7	19567.6	11285.4	5126.3	2801.1	1878.0	1653.0	1514.5	1399.1	1350.1	1353.0
32.5°	24062.2	20946.6	11749.8	4875.3	2599.2	1609.7	1425.1	1364.5	1350.1	1292.4	1263.5
35°	25839.2	22449.6	12061.4	4881.1	2504.0	1436.6	1269.3	1162.6	1084.7	1018.3	1018.3
37.5°	27922.1	24174.7	12393.2	4947.4	2469.4	1335.7	1214.5	1107.8	1035.6	972.2	960.7
40°	29981.8	25865.2	12696.0	5010.9	2449.3	1275.1	1171.3	1073.2	1006.8	943.4	926.0
42.5°	31732.9	27255.7	12967.2	5042.6	2380.0	1269.3	1139.5	1050.1	986.6	917.4	900.1
45°	33028.2	28421.2	13258.6	5091.6	2310.7	1292.4	1139.5	1047.2	969.2	903.0	885.7
47.5°	34185.0	29788.5	13746.1	5091.6	2227.1	1249.1	1177.0	1050.1	966.4	897.1	882.7
50°	35734.1	31663.7	14669.2	4973.4	2108.8	1203.0	1240.4	1038.5	940.4	885.7	868.3
52.5°	37868.9	34066.7	16134.7	4768.6	1927.0	1113.6	1231.8	1032.8	914.5	856.8	836.6
55°	40393.1	36640.0	17733.0	4529.1	1655.9	1050.1	1188.6	1018.3	885.7	822.1	802.0
57.5°	42363.4	38411.2	18858.0	4159.9	1419.3	1015.5	1052.9	1003.9	851.0	784.7	767.3
60°	43148.1	38341.9	19166.6	3666.6	1304.0	986.6	920.2	1125.0	822.1	755.9	735.6
62.5°	42724.1	36570.7	18301.2	3320.4	1278.0	949.1	862.6	1041.5	799.1	735.6	706.8
65°	40765.2	33432.1	16007.9	3228.1	1353.0	911.6	825.0	816.4	767.3	706.8	677.9
67.5°	36498.6	28741.3	12817.2	3236.7	1448.2	874.1	787.6	747.2	724.0	675.0	649.1
70°	29728.0	22723.6	9554.5	3259.8	1497.2	830.8	747.2	703.9	677.9	628.9	611.6
72.5°	21858.2	17513.6	6940.8	3109.9	1505.9	781.7	692.3	654.9	628.9	576.9	562.5
75°	14954.8	13397.1	4814.7	2576.1	1312.5	712.6	631.8	597.2	579.8	516.4	507.7
77.5°	10924.8	10056.4	3081.0	1912.6	1012.5	626.0	556.8	530.8	519.2	450.0	438.5
80°	8766.9	7956.3	1927.0	1309.7	741.4	525.1	467.4	453.0	441.4	372.1	363.5
82.5°	6081.1	5328.2	1237.6	851.0	556.8	406.7	369.3	363.5	346.2	282.7	274.0
85°	3207.9	2893.4	784.7	579.8	403.9	279.8	256.8	256.8	248.1	187.5	181.8
87.5°	409.7	666.4	398.1	302.9	222.1	124.1	124.1	121.1	129.8	106.7	92.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	14328.9	14467.3	14334.6	14343.3	14490.4	14928.8	15127.9	15292.4	15468.3	15583.7	15635.7
5°	10385.3	10708.5	10818.0	11048.8	11389.2	11948.9	12171.0	12332.6	12439.3	12502.7	12528.7
7.5°	7102.3	7298.5	7517.8	7889.9	8631.4	8960.2	9107.3	9069.8	8948.7	8905.4	8862.1
10°	5354.2	5276.3	5236.0	5440.8	6040.8	6372.6	6476.4	6375.4	6309.0	6323.5	6395.6
12.5°	4148.4	4012.7	3848.3	3825.2	4220.5	4517.7	4583.9	4589.8	4710.9	4817.6	4976.2
15°	3023.2	3008.8	2928.1	2879.0	3104.0	3346.4	3375.2	3427.2	3536.8	3614.7	3753.1
17.5°	2131.8	2209.8	2273.2	2304.9	2475.1	2648.2	2616.5	2590.5	2570.4	2570.4	2636.8
20°	1719.4	1771.2	1852.1	1944.3	2117.4	2238.6	2160.7	2056.8	1981.9	1958.7	1967.4
22.5°	1549.2	1589.6	1635.7	1716.5	1872.2	1955.9	1872.2	1797.2	1722.2	1696.3	1687.6
25°	1462.6	1514.5	1557.7	1618.4	1733.8	1791.5	1710.7	1655.9	1609.7	1578.0	1554.9
27.5°	1413.5	1459.8	1471.2	1500.1	1598.2	1650.1	1609.7	1586.6	1557.7	1528.9	1500.1
30°	1361.6	1353.0	1332.8	1335.7	1413.5	1465.5	1462.6	1468.3	1465.5	1456.8	1451.1
32.5°	1243.4	1226.0	1208.7	1226.0	1298.1	1344.4	1347.2	1358.8	1358.8	1355.8	1378.9
35°	1035.6	1067.3	1087.6	1139.5	1226.0	1266.4	1249.1	1220.3	1168.3	1136.6	1133.7
37.5°	957.8	963.5	998.1	1070.3	1165.4	1203.0	1177.0	1110.6	1076.0	1070.3	1078.9
40°	920.2	926.0	946.2	1012.5	1107.8	1145.3	1122.2	1073.2	1041.5	1038.5	1052.9
42.5°	894.3	900.1	911.6	957.8	1035.6	1081.8	1084.7	1050.1	1012.5	1015.5	1029.9
45°	879.8	882.7	879.8	903.0	975.1	1029.9	1052.9	1029.9	998.1	1003.9	1021.2
47.5°	877.0	868.3	856.8	862.6	937.5	992.4	1021.2	1012.5	998.1	1003.9	1018.3
50°	865.4	845.3	830.8	828.0	903.0	960.7	986.6	986.6	992.4	1003.9	1018.3
52.5°	830.8	807.7	807.7	799.1	879.8	934.7	952.0	954.8	963.5	983.7	1003.9
55°	787.6	778.9	787.6	773.1	862.6	914.5	923.1	928.9	934.7	952.0	980.8
57.5°	750.0	738.5	758.7	752.9	848.1	894.3	894.3	905.8	905.8	928.9	952.0
60°	729.9	706.8	715.5	721.2	828.0	877.0	871.2	882.7	888.5	908.7	926.0
62.5°	703.9	683.7	683.7	698.2	804.9	851.0	848.1	856.8	879.8	885.7	903.0
65°	672.2	663.5	654.9	672.2	781.7	822.1	825.0	836.6	856.8	862.6	877.0
67.5°	640.5	643.3	626.0	643.3	761.6	793.3	793.3	816.4	825.0	836.6	851.0
70°	605.8	608.7	594.2	614.5	747.2	761.6	758.7	790.4	796.2	804.9	819.3
72.5°	562.5	562.5	556.8	585.6	724.0	729.9	724.0	750.0	752.9	761.6	767.3
75°	516.4	516.4	510.7	551.0	709.6	695.2	677.9	698.2	703.9	709.6	709.6
77.5°	455.8	461.6	461.6	510.7	660.6	680.8	623.1	634.6	643.3	646.2	637.5
80°	380.8	395.3	401.0	464.4	553.9	628.9	556.8	565.4	568.4	568.4	556.8
82.5°	291.3	317.3	331.7	401.0	424.1	527.9	484.7	493.3	484.7	467.4	461.6
85°	201.9	236.5	253.9	305.8	320.2	406.7	403.9	403.9	386.6	363.5	360.6
87.5°	109.7	129.8	141.4	181.8	219.2	274.0	297.2	288.5	274.0	259.6	262.5
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	15906.8	16299.2	16925.1	17404.1	17885.8	18350.3	18852.3	19235.9	19561.9	19688.8	20075.4
5°	12791.3	13281.7	13873.1	14940.4	15696.3	16530.0	17493.5	18768.6	19259.0	19936.9	21047.5
7.5°	9043.9	9488.2	10440.1	11302.7	12372.9	13552.9	14853.9	16613.6	17256.9	18344.5	20153.3
10°	6753.3	7269.7	8034.2	8761.2	9704.5	10910.4	12404.7	14372.2	15153.9	16333.8	18416.6
12.5°	5440.8	6049.4	6860.1	7543.8	8273.6	9124.6	10575.7	12733.6	13780.7	14813.5	16919.4
15°	4180.1	4817.6	5570.6	6438.9	7243.7	8161.1	9681.4	12041.2	13247.0	14323.1	16120.3
17.5°	2893.4	3438.6	4387.7	5293.7	6323.5	7497.6	9433.3	12188.4	13627.9	14868.3	16258.8
20°	2051.1	2362.6	3141.6	4191.6	5475.3	6949.5	9387.2	12961.4	14833.7	16250.1	17147.3
22.5°	1725.1	1840.5	2293.5	3257.0	4739.7	6539.8	9548.7	14046.1	16460.7	18269.5	18563.7
25°	1572.2	1641.4	1878.0	2555.9	4084.8	6242.8	10094.0	15661.6	18474.3	20288.9	20236.9
27.5°	1488.6	1560.7	1716.5	2157.8	3591.6	6058.1	10639.2	17577.2	20776.4	22481.3	21835.1
30°	1462.6	1560.7	1725.1	2033.8	3239.7	5766.7	11086.3	19259.0	22547.7	23961.2	22562.1
32.5°	1442.4	1456.8	1531.9	1754.0	2905.0	5426.3	11389.2	20767.7	24281.5	25369.0	23609.3
35°	1165.4	1237.6	1358.8	1572.2	2708.9	5221.6	11389.2	22068.7	25989.2	26791.2	24607.4
37.5°	1122.2	1185.7	1292.4	1474.2	2599.2	5120.6	11161.3	23323.7	27734.5	28403.9	25429.5
40°	1099.2	1151.0	1252.0	1399.1	2553.1	5005.1	10829.6	24431.4	29439.5	30019.3	26197.0
42.5°	1081.8	1128.0	1223.1	1353.0	2492.5	4878.2	10561.3	25320.0	30919.4	31398.2	26929.7
45°	1073.2	1122.2	1226.0	1376.1	2371.3	4710.9	10471.8	26280.6	32136.7	32549.3	27723.0
47.5°	1073.2	1130.9	1240.4	1425.1	2227.1	4537.8	10751.7	27547.0	33287.8	33489.8	28657.7
50°	1064.5	1128.0	1280.8	1376.1	2016.4	4318.6	11409.4	29142.3	34534.0	34557.1	29840.5
52.5°	1047.2	1122.2	1378.9	1347.2	1774.2	4030.1	12297.9	31190.6	36377.5	36515.9	31692.6
55°	1027.0	1113.6	1353.0	1280.8	1575.1	3686.8	13024.9	33680.1	38968.0	39351.7	34415.7
57.5°	1001.1	1102.0	1309.7	1188.6	1445.3	3245.4	13287.4	35503.3	40776.8	41740.3	37485.2
60°	977.9	1093.3	1182.7	1133.7	1364.5	2873.3	12779.7	35142.8	40652.7	42729.8	40205.5
62.5°	954.8	1102.0	1078.9	1099.2	1327.0	2633.8	11452.7	32255.1	38595.8	41708.6	42222.1
65°	928.9	1024.1	1018.3	1070.3	1318.4	2538.7	9493.9	27924.9	34620.5	38480.4	42698.1
67.5°	894.3	946.2	975.1	1032.8	1347.2	2455.0	7662.0	23035.2	29096.2	33642.6	40217.1
70°	856.8	900.1	931.8	986.6	1329.9	2417.4	6372.6	18165.7	23087.1	27573.0	35321.6
72.5°	807.7	845.3	874.1	926.0	1312.5	2397.3	5383.1	14628.9	17236.7	20482.1	28718.2
75°	750.0	784.7	804.9	856.8	1257.8	2195.4	4232.0	12378.7	12898.0	14248.1	22873.7
77.5°	683.7	709.6	727.0	784.7	1113.6	1826.1	3060.8	9548.7	10016.0	10344.9	17536.8
80°	605.8	631.8	640.5	695.2	923.1	1427.9	1996.3	7053.3	7491.9	7566.9	11452.7
82.5°	516.4	542.4	542.4	594.2	755.9	1027.0	1309.7	4832.0	4918.6	5172.4	8094.8
85°	415.4	435.6	435.6	461.6	585.6	767.3	900.1	2426.1	2400.1	2740.6	7012.9
87.5°	297.2	311.6	326.0	331.7	418.3	507.7	542.4	738.5	487.5	559.7	4503.2
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0	17730.0
2.5°	20366.7	20531.1	20363.9	20242.7	19720.5	19290.7	18716.6	18422.4
5°	21892.8	22311.1	22169.8	21662.0	20571.5	19345.5	17952.2	17323.3
7.5°	21708.1	22680.4	22703.5	21754.4	20147.5	18341.6	16455.0	15560.6
10°	20271.5	21514.9	21869.8	20949.5	19244.6	17225.2	15061.6	14040.4
12.5°	18667.6	19884.9	20156.1	19838.8	18413.7	16385.7	14190.4	13189.3
15°	17355.0	17900.2	18223.4	18500.3	17701.1	16051.1	14141.4	13042.2
17.5°	16555.9	16495.3	16587.7	17069.4	17205.0	16434.7	14891.4	13679.7
20°	16267.5	15341.4	15318.4	15981.9	16971.4	17349.2	16356.9	14903.0
22.5°	16426.1	14926.0	14735.6	15523.2	17095.3	18667.6	18278.2	16619.4
25°	16974.2	14960.7	14807.7	15569.3	17545.4	20072.5	20352.3	18840.7
27.5°	17836.8	15179.9	14977.9	15759.7	18142.5	21252.4	22394.7	20992.8
30°	18656.1	15560.6	15309.7	16134.7	18687.8	21719.7	23646.7	22671.7
32.5°	19651.3	16273.2	15831.8	16824.2	19362.8	22464.0	24763.2	24062.2
35°	20626.4	17288.7	16740.6	17888.6	20115.8	23390.0	26038.3	25839.2
37.5°	21696.7	18615.7	18162.8	19264.7	21145.6	24264.1	27665.3	27922.1
40°	22839.0	20375.4	19838.8	21272.6	22743.8	25360.4	29364.4	29981.8
42.5°	23990.0	22328.5	21688.0	23141.9	24500.7	26442.2	30818.4	31732.9
45°	25308.4	24448.7	24145.8	25718.1	26188.3	27472.1	31891.5	33028.2
47.5°	26843.2	26854.7	27342.2	27971.1	27890.3	28637.5	32970.4	34185.0
50°	28634.6	29857.8	30933.8	31352.1	29644.3	29889.5	34467.7	35734.1
52.5°	30786.6	33449.4	34782.2	34508.1	31533.8	31418.4	36839.0	37868.9
55°	33478.2	37251.6	38575.7	38379.5	33706.1	33501.2	39793.0	40393.1
57.5°	36593.8	40935.4	42152.8	41270.0	36313.9	35786.1	42236.5	42363.4
60°	39331.4	43854.8	44922.3	43944.3	38944.9	38218.0	43762.6	43148.1
62.5°	40854.6	44844.3	45594.4	44541.4	40747.9	40808.5	44097.2	42724.1
65°	40173.8	42343.2	42585.5	42499.0	40283.5	42311.5	42894.2	40765.2
67.5°	36446.7	36019.7	36426.5	36989.0	36302.4	40332.5	39562.2	36498.6
70°	29880.8	27535.5	28346.2	28724.0	29035.6	34707.1	34337.9	29728.0
72.5°	22518.8	19290.7	19931.2	19853.2	21295.7	27838.4	26704.6	21858.2
75°	15955.9	13079.8	13160.5	13128.8	14859.7	21780.3	19336.8	14954.8
77.5°	11164.2	9476.6	9519.9	9698.7	9990.1	16426.1	13815.4	10924.8
80°	7676.4	7191.9	7431.2	7445.6	6923.5	11034.4	10206.5	8766.9
82.5°	5717.7	4999.4	4941.7	5025.3	5426.3	8940.0	7843.8	6081.1
85°	4682.0	2959.8	2380.0	2982.9	4809.0	8853.4	5210.0	3207.9
87.5°	2636.8	1404.9	634.6	1177.0	1918.4	5861.9	1505.9	409.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)