

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: P227685

Luminaire Tested: **ISS-AF-1000-LED-E1-T3-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29759)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-1000-LED-E1-T3-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7370.5 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G2

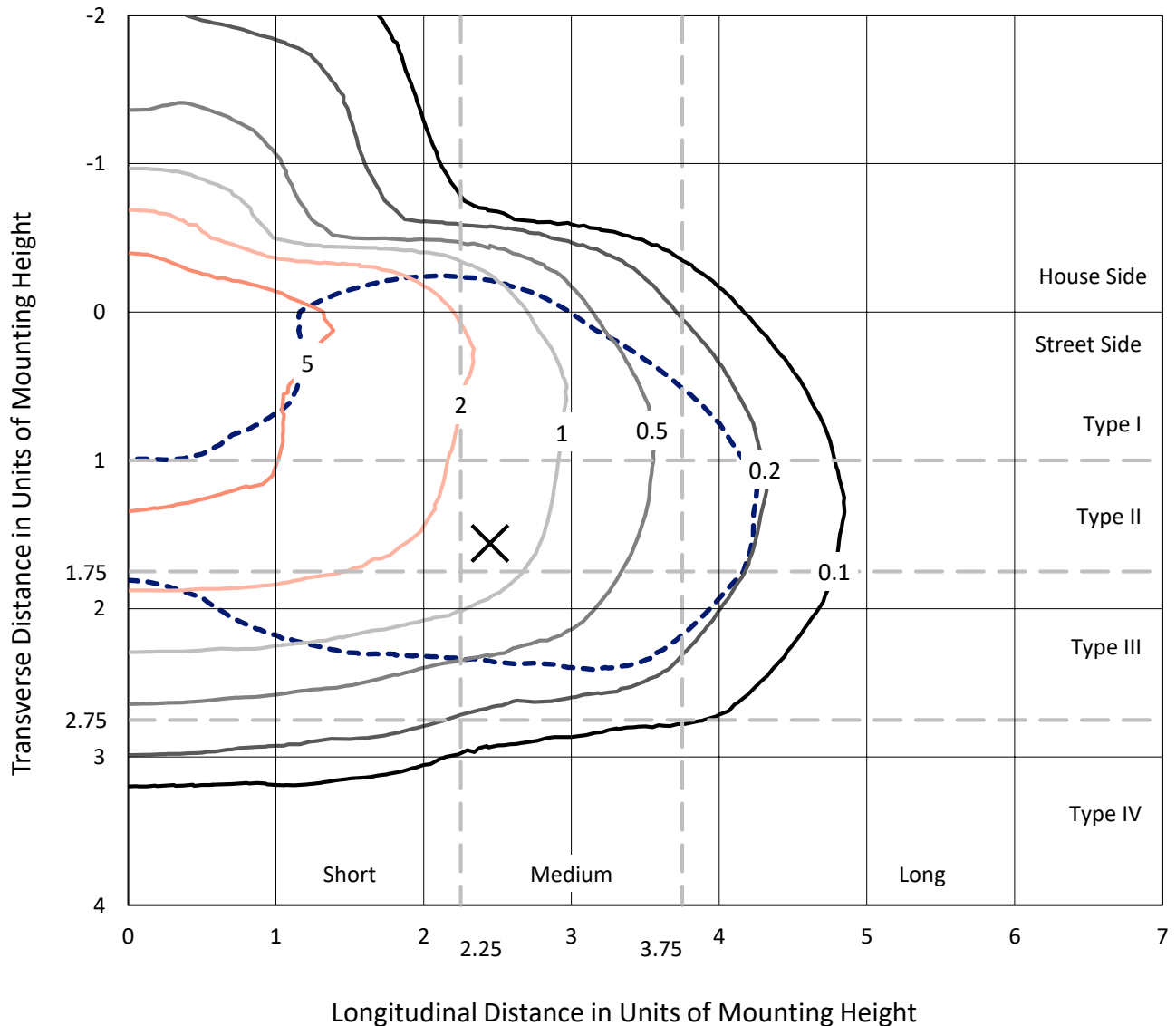
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

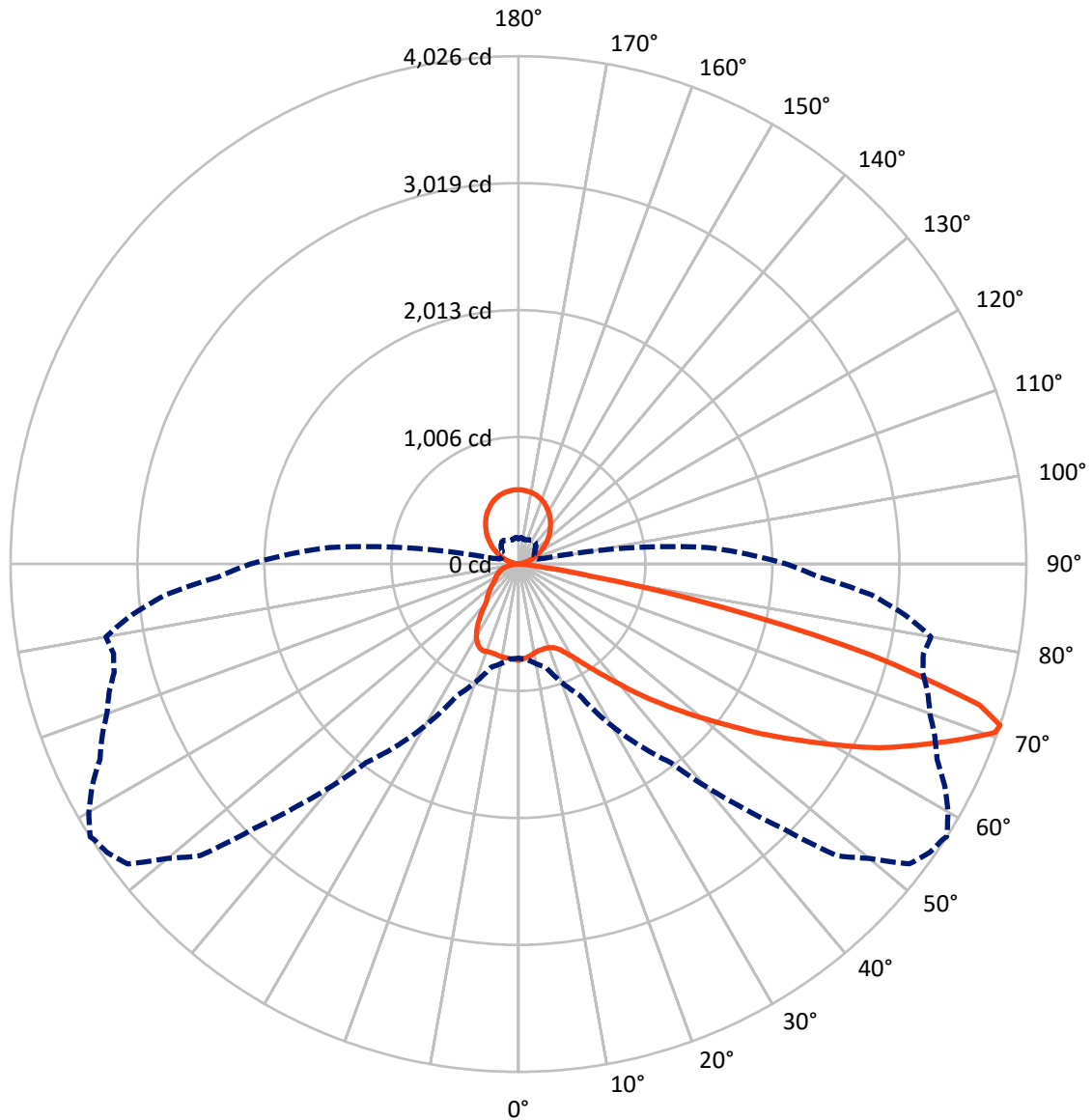
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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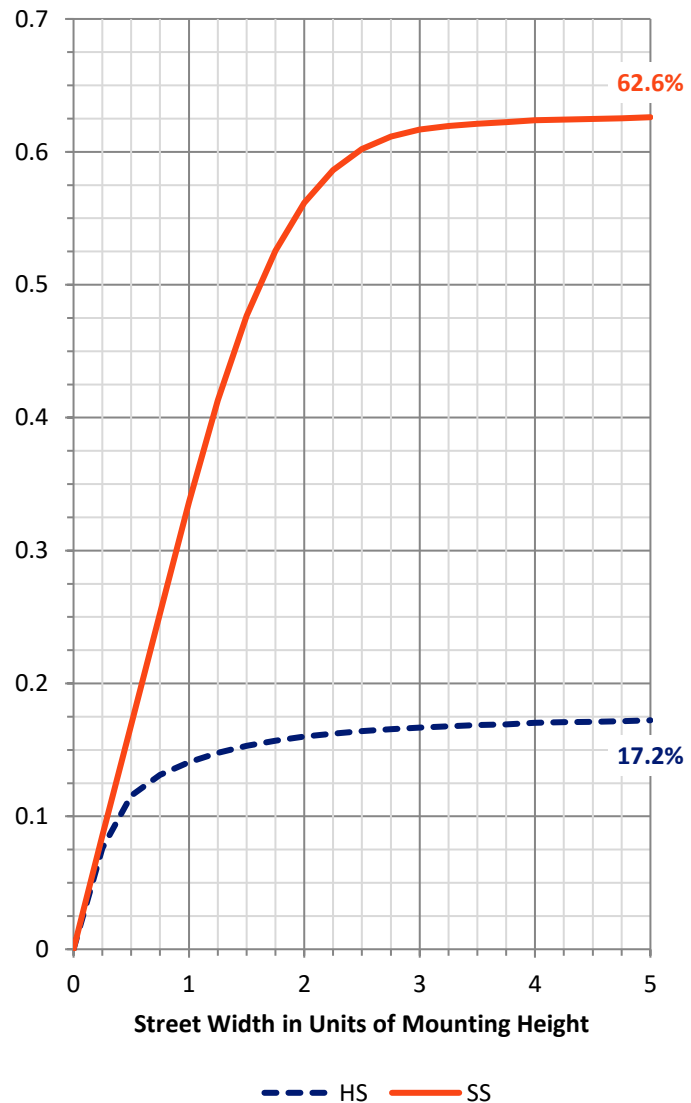
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1287.0	729.4	2016.4
	% Fixture	17.5	9.9	27.4
Street Side	Lumens	4624.6	729.4	5354.1
	% Fixture	62.7	9.9	72.6
Total	Lumens	5911.6	1458.9	7370.5
	% Fixture	80.2	19.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	1.0
10°-20°	207.1	2.8
20°-30°	343.8	4.7
30°-40°	547.3	7.4
40°-50°	889.2	12.1
50°-60°	1333.1	18.1
60°-70°	1590.4	21.6
70°-80°	859.0	11.7
80°-90°	69.9	0.9
90°-100°	4.8	0.1
100°-110°	70.6	1.0
110°-120°	156.6	2.1
120°-130°	229.0	3.1
130°-140°	271.7	3.7
140°-150°	275.5	3.7
150°-160°	236.4	3.2
160°-170°	158.7	2.2
170°-180°	55.6	0.8
0°-90°	5911.6	80.2
0°-180°	7370.5	100.0



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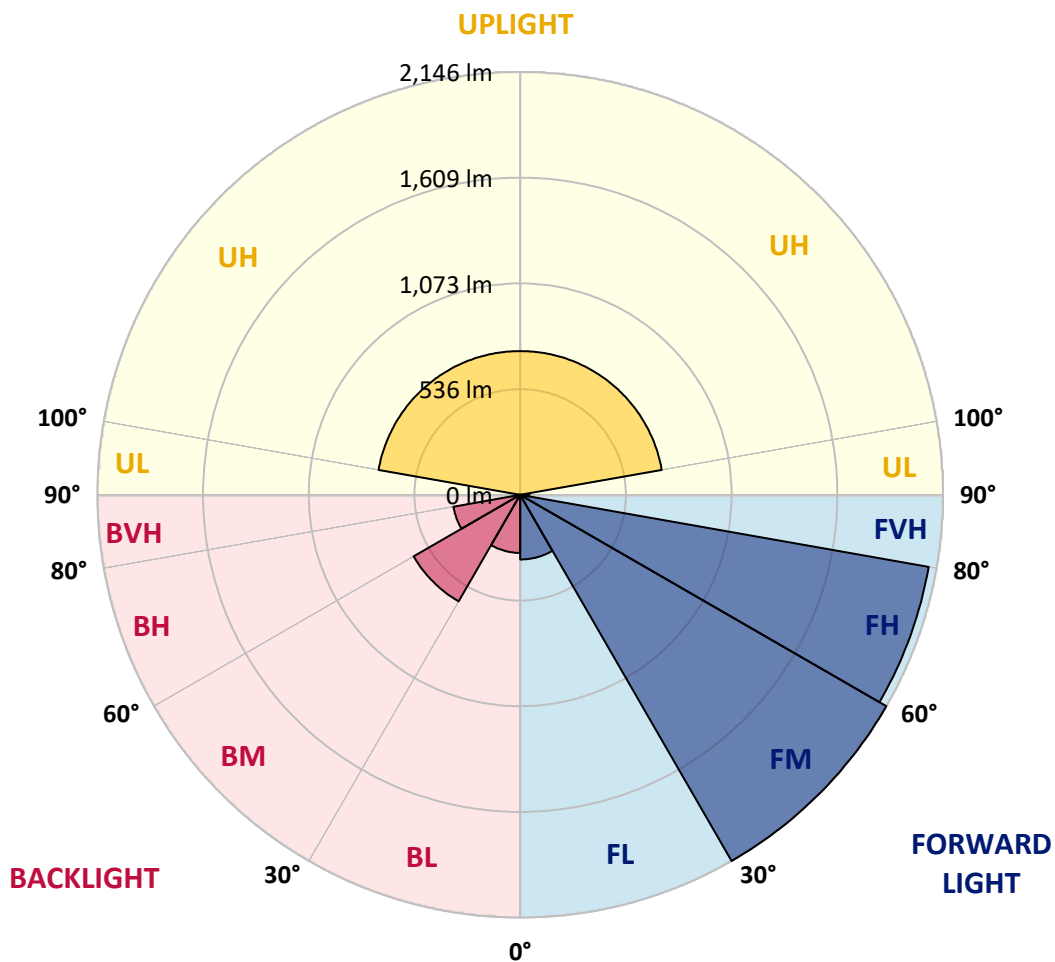
CATALOG NUMBER: ISS-AF-1000-LED-E1-T3-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	328.0	4.4			
FM	(30°-60°)	2145.5	29.1			
FH	(60°-80°)	2105.1	28.6			G2/5000
FVH	(80°-90°)	46.1	0.6			G1/100
BL	(0°-30°)	294.8	4.0	B1/500		
BM	(30°-60°)	624.1	8.5	B1/1000		
BH	(60°-80°)	344.3	4.7	B1/500		G1/500
BVH	(80°-90°)	23.9	0.3			G1/100
UL	(90°-100°)	4.8	0.1		U1/10	
UH	(100°-180°)	729.4	9.9		U4/1000	

BUG Rating: B1-U5-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7
2.5°	763.7	761.8	759.7	759.7	759.7	757.8	752.0	753.9	759.7	755.9	761.8
5°	761.8	757.8	755.9	755.9	755.9	750.0	748.1	746.1	757.8	748.1	755.9
7.5°	740.2	740.2	736.3	740.2	744.2	738.3	734.4	736.3	746.1	736.3	746.1
10°	724.7	720.8	718.7	718.7	722.7	714.8	711.0	714.8	726.6	714.8	728.5
12.5°	718.7	720.8	714.8	714.8	712.9	703.2	703.2	703.2	712.9	703.2	714.8
15°	728.5	726.6	720.8	716.8	711.0	703.2	701.2	703.2	711.0	699.3	712.9
17.5°	742.3	742.3	732.4	722.7	716.8	709.0	709.0	705.1	711.0	703.2	712.9
20°	777.3	771.5	757.8	742.3	726.6	722.7	714.8	714.8	718.7	711.0	716.8
22.5°	837.9	832.1	808.6	779.3	753.9	744.2	740.2	738.3	734.4	730.5	730.5
25°	918.0	908.3	880.9	845.8	802.7	794.9	787.2	781.2	767.6	767.6	757.8
27.5°	1003.9	994.2	964.8	925.8	873.1	861.3	851.6	843.7	820.3	820.3	802.7
30°	1101.6	1089.9	1054.8	1011.7	951.2	947.3	933.6	921.9	890.7	888.7	865.2
32.5°	1214.9	1199.2	1164.1	1107.4	1043.0	1044.9	1023.5	1015.7	974.7	976.6	945.3
35°	1343.7	1326.3	1291.1	1216.8	1150.4	1156.2	1136.7	1123.1	1072.3	1072.3	1039.1
37.5°	1480.5	1480.5	1435.6	1349.7	1269.6	1283.2	1259.8	1246.2	1195.3	1203.2	1150.4
40°	1632.8	1642.7	1593.8	1496.2	1414.1	1420.0	1402.4	1386.7	1326.3	1339.9	1283.2
42.5°	1793.0	1810.6	1767.7	1666.1	1574.2	1593.8	1564.5	1548.8	1484.4	1513.8	1447.3
45°	2025.4	2029.3	1949.2	1851.6	1775.4	1793.0	1752.0	1746.2	1666.1	1697.3	1630.9
47.5°	2171.9	2162.2	2103.6	2045.0	2000.1	2035.3	1998.1	1988.3	1896.6	1918.0	1824.2
50°	2271.6	2277.4	2232.5	2226.7	2234.4	2300.8	2295.0	2275.5	2166.1	2150.4	2033.2
52.5°	2361.4	2336.0	2328.2	2382.9	2466.8	2545.0	2576.2	2550.8	2431.8	2388.7	2275.5
55°	2345.7	2308.7	2349.7	2482.5	2648.5	2769.6	2773.5	2755.9	2648.5	2630.9	2507.9
57.5°	2240.3	2248.1	2332.1	2521.6	2802.8	2927.8	2949.3	2927.8	2839.9	2855.6	2754.0
60°	2093.8	2109.4	2242.2	2486.4	2925.8	3033.3	3043.1	3068.4	3009.8	3050.8	2980.6
62.5°	1875.1	1896.6	2066.5	2398.5	2839.9	3000.1	3089.9	3148.5	3136.8	3230.6	3193.4
65°	1722.8	1722.8	1888.8	2296.9	2755.9	2966.9	3101.7	3211.0	3226.7	3375.1	3361.4
67.5°	1439.5	1449.2	1591.8	2013.7	2654.4	2892.7	3095.8	3281.3	3375.1	3609.5	3621.2
70°	996.1	1003.9	1097.7	1437.6	2144.6	2347.7	2646.6	2949.3	3230.6	3584.1	3767.7
71°	746.1	755.9	847.7	1146.5	1816.5	1984.4	2295.0	2609.4	2963.0	3422.0	3629.0
72.5°	365.3	371.1	460.9	736.3	1263.8	1478.6	1658.2	1959.1	2334.1	2859.5	3152.4
75°	169.9	171.9	191.4	265.7	482.4	574.3	654.3	847.7	1080.1	1541.1	1896.6
77.5°	125.0	125.0	136.8	173.8	250.0	253.9	250.0	255.8	308.6	441.4	664.1
80°	91.8	91.8	99.6	117.2	166.0	166.0	160.2	162.1	156.2	162.1	183.6
82.5°	60.6	60.6	64.4	70.3	101.6	101.6	97.7	97.7	93.7	91.8	99.6
85°	35.2	37.1	39.1	33.2	43.0	41.0	37.1	41.0	39.1	35.2	43.0
87.5°	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.9	0.0	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.1	4.1	5.3	6.6	8.0	9.2	10.2	11.3
100°	8.2	8.2	10.2	14.3	22.5	24.6	26.6	28.6	30.7	31.2	31.7
102.5°	28.6	28.6	32.7	38.9	46.0	47.3	48.6	49.9	51.1	51.4	51.7
105°	55.2	55.2	57.3	62.4	67.5	68.5	69.6	70.6	71.6	71.8	72.1
107.5°	79.8	78.8	81.8	85.9	90.0	90.8	91.6	92.3	93.1	93.6	94.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.5	114.1	114.6	115.1	115.6
112.5°	126.8	126.8	128.9	132.0	135.0	135.5	136.1	136.6	137.1	137.6	138.1
115°	149.4	150.4	152.4	154.5	157.5	158.0	158.6	159.1	159.6	160.1	160.6
117.5°	172.9	173.9	175.9	178.0	181.1	181.6	182.1	182.6	183.1	183.3	183.6
120°	197.4	199.5	200.5	202.5	205.6	205.8	206.1	206.4	206.6	207.1	207.7
122.5°	224.0	225.0	226.1	228.1	231.2	231.4	231.7	232.0	232.2	232.4	232.7
125°	249.6	251.6	252.7	253.7	256.8	257.0	257.3	257.6	257.8	258.0	258.3
127.5°	273.1	275.2	276.2	278.2	280.3	280.8	281.3	281.8	282.3	282.8	283.4
130°	296.7	298.7	299.7	300.7	304.8	305.0	305.4	305.7	305.9	306.4	306.9
132.5°	320.2	321.2	324.3	325.3	328.4	328.6	328.9	329.2	329.4	330.2	330.9
135°	343.7	344.7	346.8	348.8	352.9	352.9	352.9	352.9	352.9	353.7	354.5
137.5°	367.2	368.3	371.3	372.4	375.4	375.4	375.4	375.4	375.4	375.9	376.4
140°	390.8	391.8	393.8	394.9	396.9	397.1	397.4	397.7	397.9	398.1	398.4
142.5°	413.3	415.3	417.4	416.3	419.4	419.4	419.4	419.4	419.4	419.9	420.4
145°	434.8	435.8	437.8	437.8	440.9	441.1	441.4	441.7	441.9	442.4	442.9
147.5°	454.2	454.2	457.3	458.3	462.4	462.6	462.9	463.2	463.4	463.6	463.9
150°	471.6	472.6	474.6	475.7	479.8	480.0	480.3	480.6	480.8	481.0	481.3
152.5°	490.0	491.0	494.1	493.1	496.1	496.3	496.6	496.9	497.2	497.4	497.7
155°	510.5	511.5	513.5	512.5	514.5	514.5	514.5	514.5	514.5	514.7	515.1
157.5°	524.8	526.8	528.9	527.8	530.9	530.9	530.9	530.9	530.9	530.9	530.9
160°	537.0	539.1	541.1	541.1	544.2	544.2	544.2	544.2	544.2	544.2	544.2
162.5°	547.3	548.3	551.4	550.3	553.4	553.4	553.4	553.4	553.4	553.6	553.9
165°	558.5	559.6	561.6	560.6	564.7	564.7	564.7	564.7	564.7	564.9	565.2
167.5°	567.7	568.8	571.8	570.8	573.9	573.7	573.4	573.1	572.9	572.9	572.9
170°	574.9	575.9	579.0	578.0	580.0	579.8	579.5	579.2	579.0	578.8	578.5
172.5°	578.0	579.0	582.1	580.0	582.1	581.9	581.5	581.2	581.0	581.2	581.5
175°	580.0	582.1	583.1	582.1	585.1	585.1	585.1	585.1	585.1	585.3	585.6
177.5°	585.1	586.2	588.2	587.2	591.3	591.1	590.8	590.4	590.2	590.2	590.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7
2.5°	753.9	759.7	759.7	752.0	757.8	752.0	755.9	750.0	755.9	746.1	757.8
5°	748.1	753.9	753.9	742.3	753.9	742.3	752.0	738.3	752.0	736.3	752.0
7.5°	732.4	746.1	746.1	730.5	744.2	732.4	744.2	730.5	742.3	724.7	744.2
10°	714.8	728.5	730.5	714.8	730.5	716.8	734.4	716.8	734.4	714.8	736.3
12.5°	703.2	718.7	722.7	705.1	724.7	707.1	728.5	709.0	728.5	707.1	732.4
15°	701.2	714.8	718.7	703.2	720.8	701.2	726.6	703.2	728.5	705.1	734.4
17.5°	703.2	714.8	718.7	701.2	718.7	703.2	724.7	705.1	728.5	707.1	734.4
20°	709.0	716.8	716.8	707.1	720.8	707.1	724.7	705.1	730.5	711.0	736.3
22.5°	726.6	728.5	728.5	720.8	728.5	718.7	732.4	718.7	736.3	720.8	744.2
25°	755.9	753.9	750.0	748.1	750.0	744.2	752.0	742.3	759.7	746.1	769.6
27.5°	806.7	798.8	794.9	794.9	793.0	794.9	794.9	791.0	798.8	794.9	810.6
30°	869.2	855.5	849.7	855.5	847.7	855.5	853.6	851.6	859.4	855.5	869.2
32.5°	951.2	927.7	923.8	935.6	919.9	933.6	921.9	927.7	933.6	937.5	945.3
35°	1046.9	1019.6	1015.7	1027.3	1009.8	1029.3	1015.7	1023.5	1027.3	1037.2	1043.0
37.5°	1160.2	1127.0	1121.2	1136.7	1113.3	1134.8	1115.2	1138.7	1132.8	1146.5	1152.4
40°	1296.9	1257.8	1244.2	1265.7	1238.3	1255.9	1236.3	1261.7	1255.9	1283.2	1289.1
42.5°	1464.9	1408.2	1394.6	1416.1	1375.1	1380.9	1365.2	1394.6	1390.7	1427.7	1433.7
45°	1638.8	1570.3	1550.8	1572.3	1525.4	1537.2	1513.8	1545.0	1543.0	1572.3	1595.7
47.5°	1832.1	1748.1	1722.8	1746.2	1689.5	1703.2	1679.7	1712.9	1714.9	1748.1	1771.5
50°	2033.2	1945.3	1912.2	1933.7	1880.9	1890.7	1867.2	1908.2	1906.3	1951.2	1968.8
52.5°	2252.0	2162.2	2136.7	2146.6	2084.1	2095.7	2076.2	2127.0	2115.3	2142.7	2177.8
55°	2494.3	2390.7	2361.4	2390.7	2316.5	2332.1	2306.8	2353.6	2334.1	2369.3	2379.0
57.5°	2742.2	2640.7	2617.2	2638.7	2568.4	2580.2	2546.9	2586.0	2570.4	2593.8	2609.4
60°	3005.9	2914.2	2890.8	2914.2	2845.7	2847.7	2791.1	2832.1	2808.7	2838.0	2832.1
62.5°	3257.9	3179.7	3173.9	3207.2	3121.2	3111.4	3043.1	3072.3	3039.2	3058.7	3035.2
65°	3472.7	3427.8	3435.7	3463.0	3386.8	3363.4	3285.2	3300.9	3252.1	3252.1	3222.7
67.5°	3754.0	3705.2	3705.2	3728.7	3632.9	3572.3	3464.9	3451.2	3371.2	3355.6	3287.3
70°	3988.4	4002.1	3986.4	4006.0	3892.7	3769.7	3627.1	3558.7	3453.2	3402.4	3322.3
71°	3904.4	3982.6	4009.9	4025.5	3931.7	3808.8	3660.2	3572.3	3470.8	3402.4	3316.5
72.5°	3523.6	3713.0	3820.4	3820.4	3832.2	3754.0	3611.4	3515.7	3400.5	3310.7	3230.6
75°	2468.8	2777.4	2916.1	2900.5	3002.1	3037.2	3048.9	3007.9	2943.4	2814.5	2757.9
77.5°	1099.7	1449.2	1658.2	1660.2	1769.6	1865.2	1941.5	2021.6	1992.2	1929.7	1925.8
80°	250.0	453.2	580.1	585.9	685.6	773.5	826.2	906.2	916.1	826.2	775.4
82.5°	107.4	126.9	144.5	142.6	175.7	210.9	250.0	271.5	261.8	216.8	205.1
85°	44.9	58.6	62.5	58.6	72.2	80.1	93.7	95.7	111.3	99.6	105.5
87.5°	0.0	1.9	1.9	0.0	3.9	0.0	3.9	1.9	9.7	3.9	11.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	12.3	13.3	12.1	11.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1
100°	32.2	32.7	32.3	32.2	31.7	31.2	30.7	29.9	29.2	28.4	27.6
102.5°	52.0	52.2	52.0	52.0	51.7	51.4	51.1	50.6	50.1	49.6	49.1
105°	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6
107.5°	94.6	95.1	94.9	94.9	94.6	94.3	94.1	93.9	93.6	93.3	93.1



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
110°	116.1	116.6	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6
112.5°	138.6	139.1	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1
115°	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6
117.5°	183.9	184.1	184.3	184.3	184.6	184.9	185.2	184.9	184.6	184.3	184.1
120°	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7
122.5°	233.0	233.2	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3
125°	258.6	258.8	259.0	259.0	259.3	259.6	259.8	259.8	259.8	259.8	259.8
127.5°	283.9	284.4	284.2	284.2	283.9	283.6	283.4	283.6	283.9	284.2	284.4
130°	307.4	307.9	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9
132.5°	331.6	332.5	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5
135°	355.2	356.0	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0
137.5°	377.0	377.5	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5
140°	398.7	399.0	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0
142.5°	420.9	421.5	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5
145°	443.4	444.0	443.8	443.8	443.4	443.1	442.9	443.1	443.4	443.8	444.0
147.5°	464.2	464.4	464.0	463.9	463.4	462.9	462.4	462.6	462.9	463.2	463.4
150°	481.6	481.8	481.4	481.3	480.8	480.3	479.8	479.8	479.8	479.8	479.8
152.5°	498.0	498.2	498.0	498.0	497.7	497.4	497.2	497.2	497.2	497.2	497.2
155°	515.4	515.6	515.4	515.4	515.1	514.7	514.5	514.7	515.1	515.4	515.6
157.5°	530.9	530.9	530.5	530.4	529.9	529.4	528.9	529.1	529.4	529.7	529.9
160°	544.2	544.2	543.8	543.7	543.2	542.7	542.2	542.2	542.2	542.2	542.2
162.5°	554.2	554.4	554.0	553.9	553.4	552.9	552.4	551.9	551.4	550.9	550.3
165°	565.5	565.7	565.1	564.9	564.2	563.4	562.6	562.1	561.6	561.1	560.6
167.5°	572.9	572.9	572.4	572.3	571.8	571.3	570.8	571.0	571.3	571.6	571.8
170°	578.2	578.0	577.8	577.8	577.5	577.1	576.9	577.5	578.0	578.5	579.0
172.5°	581.9	582.1	581.6	581.5	581.0	580.5	580.0	580.2	580.5	580.8	581.0
175°	585.9	586.2	585.5	585.3	584.6	583.9	583.1	582.6	582.1	581.5	581.0
177.5°	590.2	590.2	589.6	589.4	588.7	588.0	587.2	587.2	587.2	587.2	587.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



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CANDELA DISTRIBUTION (continued):

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7
2.5°	750.0	759.7	750.0	759.7	753.9	759.7	757.8	759.7	750.0	759.7	748.1
5°	736.3	752.0	738.3	750.0	738.3	752.0	752.0	752.0	738.3	753.9	740.2
7.5°	724.7	742.3	724.7	742.3	730.5	744.2	744.2	750.0	734.4	752.0	732.4
10°	712.9	734.4	712.9	738.3	718.7	740.2	742.3	746.1	724.7	748.1	728.5
12.5°	707.1	734.4	709.0	734.4	711.0	740.2	742.3	746.1	722.7	752.0	726.6
15°	707.1	736.3	709.0	736.3	711.0	740.2	744.2	748.1	722.7	753.9	726.6
17.5°	707.1	736.3	712.9	738.3	714.8	742.3	746.1	750.0	726.6	753.9	730.5
20°	712.9	740.2	716.8	744.2	720.8	748.1	750.0	755.9	730.5	755.9	734.4
22.5°	726.6	750.0	730.5	755.9	738.3	759.7	761.8	767.6	748.1	769.6	752.0
25°	750.0	775.4	759.7	779.3	769.6	787.2	791.0	791.0	783.3	796.9	791.0
27.5°	798.8	818.4	806.7	824.2	818.4	832.1	832.1	834.0	839.8	843.7	849.7
30°	861.3	875.0	871.1	880.9	882.8	890.7	890.7	902.3	925.8	902.3	900.4
32.5°	945.3	953.2	955.1	959.0	966.8	972.7	980.5	994.2	1013.7	959.0	941.4
35°	1048.8	1050.8	1056.7	1062.5	1076.2	1080.1	1105.5	1095.8	1095.8	1009.8	972.7
37.5°	1162.2	1162.2	1177.7	1177.7	1211.0	1212.9	1238.3	1187.5	1158.2	1046.9	992.3
40°	1304.8	1302.7	1320.3	1324.2	1369.2	1371.2	1367.3	1255.9	1193.4	1056.7	982.4
42.5°	1455.1	1461.0	1484.4	1492.3	1525.4	1537.2	1488.3	1302.7	1209.0	1050.8	949.2
45°	1619.2	1630.9	1660.2	1681.7	1716.8	1703.2	1586.0	1324.2	1191.4	1015.7	884.8
47.5°	1798.9	1810.6	1834.0	1875.1	1890.7	1875.1	1666.1	1332.1	1164.1	961.0	791.0
50°	1980.5	2000.1	2033.2	2091.8	2099.7	2060.6	1763.8	1361.3	1142.6	904.3	683.6
52.5°	2185.6	2205.2	2244.3	2341.8	2322.3	2242.2	1879.0	1416.1	1148.5	869.2	591.8
55°	2402.4	2429.7	2505.9	2601.7	2558.7	2433.7	2005.9	1496.2	1171.9	832.1	490.2
57.5°	2630.9	2660.2	2759.8	2873.2	2789.2	2621.2	2134.8	1558.7	1183.7	755.9	378.9
60°	2857.5	2898.5	3027.4	3121.2	2990.3	2781.3	2250.1	1599.7	1152.4	611.3	293.0
62.5°	3064.6	3130.9	3275.5	3326.2	3117.2	2882.9	2312.6	1570.3	1025.4	421.9	236.3
65°	3211.0	3297.0	3390.7	3384.8	3093.8	2849.7	2265.7	1435.6	763.7	279.3	201.2
67.5°	3273.5	3353.6	3375.1	3275.5	2925.8	2703.2	2097.8	1156.2	439.5	209.0	175.7
70°	3297.0	3365.3	3244.2	3004.0	2597.7	2343.8	1714.9	736.3	240.3	169.9	152.3
71°	3287.3	3320.4	3089.9	2808.7	2388.7	2123.1	1503.9	560.6	205.1	158.3	144.5
72.5°	3154.4	3107.5	2752.0	2439.5	2025.4	1755.9	1169.9	353.5	168.0	142.6	134.7
75°	2578.2	2367.2	2025.4	1730.5	1378.9	1103.6	634.7	181.7	134.7	123.1	117.2
77.5°	1685.6	1502.0	1220.7	992.3	753.9	572.2	259.7	125.0	107.4	103.5	101.6
80°	601.6	482.4	365.3	320.3	242.2	199.3	126.9	95.7	84.0	85.9	84.0
82.5°	169.9	156.2	134.7	125.0	109.4	107.4	82.0	72.2	66.4	70.3	68.3
85°	84.0	72.2	52.8	50.7	39.1	44.9	41.0	48.8	43.0	44.9	41.0
87.5°	5.8	7.8	1.9	5.8	0.0	5.8	7.8	9.7	1.9	7.8	5.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.9	4.6	4.3	4.1	4.1	4.1	4.1	4.6	4.9	5.1	5.6
100°	27.4	27.1	26.8	26.6	26.1	25.6	26.6	27.1	27.4	27.6	28.4
102.5°	49.3	49.6	49.9	50.1	49.6	49.1	50.1	49.6	49.3	49.1	49.6
105°	71.1	71.6	72.1	72.6	71.6	70.6	72.6	71.6	71.1	70.6	71.1
107.5°	93.3	93.6	93.9	94.1	93.6	93.1	94.1	93.6	93.3	93.1	93.3



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°	
110°	115.8	116.1	116.4	116.6	116.1	115.6	116.6	116.1	115.8	115.6	115.8	0°
112.5°	138.6	139.1	139.6	140.1	139.1	138.1	140.1	139.1	138.6	138.1	138.3	2.5°
115°	162.1	162.6	163.2	163.7	163.2	162.6	163.7	162.6	162.1	161.6	161.6	5°
117.5°	184.6	185.2	185.7	186.2	185.2	184.1	186.2	185.2	184.6	184.1	184.3	7.5°
120°	209.2	209.7	210.2	210.7	209.7	208.7	210.7	209.7	209.2	208.7	208.7	10°
122.5°	235.3	236.3	237.3	238.3	237.8	237.3	238.3	236.3	235.3	234.3	234.1	12.5°
125°	260.6	261.4	262.1	262.9	262.4	261.9	262.9	261.4	260.6	259.8	259.8	15°
127.5°	285.2	285.9	286.6	287.4	285.9	284.4	287.4	285.9	285.2	284.4	284.2	17.5°
130°	309.7	310.5	311.2	312.0	311.0	310.0	312.0	310.5	309.7	308.9	308.7	20°
132.5°	334.3	335.0	335.7	336.6	335.5	334.5	336.6	335.0	334.3	333.5	333.3	22.5°
135°	357.5	358.0	358.5	359.1	358.5	358.0	359.1	358.0	357.5	357.0	356.8	25°
137.5°	379.5	380.5	381.6	382.6	381.6	380.5	382.6	380.5	379.5	378.5	378.3	27.5°
140°	402.0	403.0	404.1	405.1	404.1	403.0	405.1	403.0	402.0	401.0	400.5	30°
142.5°	423.3	424.0	424.7	425.5	425.0	424.5	425.5	424.0	423.3	422.5	422.3	32.5°
145°	444.8	445.5	446.2	447.0	446.0	445.0	447.0	445.5	444.8	444.0	443.8	35°
147.5°	464.2	464.9	465.6	466.5	464.9	463.4	466.5	464.9	464.2	463.4	463.2	37.5°
150°	480.8	481.8	482.8	483.9	482.3	480.8	483.9	481.8	480.8	479.8	479.8	40°
152.5°	498.0	498.7	499.4	500.2	498.7	497.2	500.2	498.7	498.0	497.2	497.2	42.5°
155°	516.4	517.1	517.8	518.6	517.6	516.6	518.6	517.1	516.4	515.6	515.4	45°
157.5°	531.1	532.4	533.8	535.0	533.5	531.9	535.0	532.4	531.1	529.9	529.7	47.5°
160°	543.0	543.7	544.4	545.2	544.2	543.2	545.2	543.7	543.0	542.2	542.2	50°
162.5°	550.9	551.4	551.9	552.4	550.9	549.3	552.4	551.4	550.9	550.3	550.9	52.5°
165°	561.1	561.6	562.1	562.6	561.6	560.6	562.6	561.6	561.1	560.6	561.1	55°
167.5°	572.9	573.9	574.9	575.9	574.9	573.9	575.9	573.9	572.9	571.8	571.6	57.5°
170°	580.2	581.5	582.9	584.1	583.1	582.1	584.1	581.5	580.2	579.0	578.5	60°
172.5°	581.9	582.6	583.3	584.1	582.6	581.0	584.1	582.6	581.9	581.0	580.8	62.5°
175°	581.9	582.6	583.3	584.1	582.6	581.0	584.1	582.6	581.9	581.0	581.5	65°
177.5°	588.0	588.7	589.4	590.2	588.7	587.2	590.2	588.7	588.0	587.2	587.2	67.5°
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	70°
												71°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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REPORT NUMBER: P
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DISTRIBUTION (continued):

CANDELA DISTRIBUTION

110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	110°	110°
763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	110°	116.1
761.8	753.9	763.7	753.9	763.7	757.8	763.7	757.8	763.7	767.6	767.6	112.5°	138.6
757.8	744.2	761.8	752.0	763.7	753.9	761.8	755.9	765.7	769.6	773.5	115°	161.6
755.9	742.3	759.7	746.1	763.7	750.0	761.8	753.9	765.7	769.6	777.3	117.5°	184.6
753.9	736.3	759.7	740.2	761.8	748.1	761.8	750.0	763.7	767.6	769.6	120°	208.7
753.9	734.4	759.7	738.3	761.8	742.3	759.7	742.3	761.8	759.7	753.9	122.5°	233.7
755.9	730.5	759.7	734.4	759.7	736.3	757.8	734.4	753.9	748.1	744.2	125°	259.8
755.9	730.5	757.8	732.4	755.9	734.4	752.0	730.5	748.1	746.1	740.2	127.5°	283.9
759.7	734.4	757.8	740.2	757.8	736.3	750.0	730.5	744.2	732.4	709.0	130°	308.4
771.5	753.9	771.5	753.9	761.8	742.3	748.1	724.7	722.7	703.2	666.0	132.5°	333.0
798.8	791.0	787.2	765.7	759.7	734.4	726.6	699.3	689.5	660.2	609.4	135°	356.5
834.0	816.4	793.0	767.6	742.3	711.0	689.5	668.0	646.5	609.4	544.9	137.5°	378.0
857.4	832.1	783.3	748.1	701.2	675.8	638.7	615.2	584.0	537.2	474.6	140°	400.0
873.1	834.0	759.7	718.7	656.2	623.1	574.3	548.8	503.9	459.0	414.1	142.5°	422.0
877.0	826.2	728.5	683.6	601.6	564.5	500.0	472.7	429.7	398.4	380.8	145°	443.4
861.3	798.8	679.8	621.1	531.2	488.3	427.7	408.3	382.8	371.1	363.2	147.5°	462.9
830.1	746.1	603.5	535.2	443.3	410.2	378.9	378.9	365.3	359.4	345.8	150°	479.8
773.5	668.0	505.8	439.5	377.0	371.1	353.5	361.3	351.6	347.7	328.2	152.5°	497.2
685.6	556.7	408.3	369.2	339.8	343.7	332.0	339.8	334.0	332.0	308.6	155°	515.1
572.2	443.3	343.7	330.1	310.6	316.4	306.7	316.4	310.6	312.5	294.9	157.5°	529.4
457.1	359.4	304.7	296.9	283.3	287.1	281.2	291.0	289.1	296.9	287.1	160°	542.2
365.3	306.7	271.5	265.7	257.8	259.7	257.8	267.6	269.5	285.2	285.2	162.5°	551.4
302.8	263.7	244.2	242.2	234.4	236.3	238.2	248.1	255.8	275.4	285.2	165°	561.6
259.7	236.3	222.7	220.8	216.8	218.7	222.7	234.4	242.2	267.6	289.1	167.5°	571.3
228.5	214.8	205.1	205.1	201.2	205.1	209.0	220.8	230.5	259.7	281.2	170°	578.0
205.1	195.3	189.5	191.4	189.5	193.3	197.2	209.0	220.8	248.1	269.5	172.5°	580.5
183.6	177.8	173.8	175.7	175.7	181.7	185.6	197.2	207.0	232.4	259.7	175°	582.1
166.0	162.1	160.2	162.1	164.1	169.9	175.7	183.6	191.4	214.8	246.1	177.5°	587.2
152.3	148.4	148.4	148.4	150.4	156.2	164.1	168.0	175.7	201.2	230.5	180°	589.2
144.5	142.6	142.6	142.6	144.5	150.4	158.3	162.1	169.9	195.3	222.7		
134.7	134.7	136.8	134.7	138.7	140.7	148.4	152.3	162.1	187.5	212.9		
119.2	119.2	121.1	121.1	125.0	125.0	130.8	134.7	146.5	168.0	191.4		
105.5	105.5	109.4	107.4	107.4	103.5	111.3	115.3	125.0	146.5	169.9		
89.8	87.9	91.8	85.9	84.0	80.1	85.9	91.8	107.4	121.1	125.0		
70.3	64.4	66.4	60.6	60.6	56.7	62.5	64.4	74.3	87.9	95.7		
43.0	35.2	39.1	33.2	37.1	33.2	35.2	37.1	44.9	54.7	52.8		
9.7	5.8	7.8	1.9	5.8	0.0	5.8	1.9	5.8	1.9	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
6.1	6.6	7.2	8.7	10.2	11.8	13.3	12.3	11.3	9.2	4.1		
29.2	29.9	30.7	31.2	31.7	32.2	32.7	32.2	31.7	30.7	22.5		
50.1	50.6	51.1	51.4	51.7	52.0	52.2	52.0	51.7	51.1	46.0		
71.6	72.1	72.6	72.6	72.6	72.6	72.6	72.4	72.1	71.6	67.5		
93.6	93.9	94.1	94.3	94.6	94.9	95.1	94.6	94.1	93.1	90.0		

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TION (continued):

CANDELA DISTRIBUTION (con

112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°		155°	165°
116.4	116.6	116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5	0°	763.7	763.7
138.9	139.1	139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	2.5°	771.5	769.6
161.6	161.6	161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	5°	781.2	781.2
184.9	185.2	184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	7.5°	783.3	787.2
208.7	208.7	208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	10°	769.6	765.7
233.4	233.2	233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	12.5°	748.1	744.2
259.8	259.8	259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	15°	746.1	744.2
283.6	283.4	283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	17.5°	732.4	722.7
308.1	307.9	307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	20°	693.4	675.8
332.7	332.5	332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	22.5°	638.7	613.3
356.2	356.0	356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	25°	572.2	537.2
377.7	377.5	377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	27.5°	500.0	464.8
399.5	399.0	399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	30°	443.3	416.0
421.7	421.5	421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	32.5°	402.3	386.8
443.1	442.9	443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	35°	369.2	359.4
462.6	462.4	462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	37.5°	347.7	332.0
479.8	479.8	480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	40°	326.2	306.7
497.2	497.2	497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	42.5°	306.7	287.1
514.7	514.5	514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	45°	287.1	273.4
529.1	528.9	529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	47.5°	277.3	265.7
542.2	542.2	542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	50°	273.4	261.8
551.9	552.4	552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	52.5°	277.3	267.6
562.1	562.6	563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	55°	285.2	279.3
571.0	570.8	571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	57.5°	277.3	267.6
577.5	576.9	577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	60°	259.7	244.2
580.2	580.0	580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	62.5°	248.1	232.4
582.6	583.1	583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	65°	238.2	226.6
587.2	587.2	588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	67.5°	228.5	216.8
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	70°	216.8	205.1
										71°	210.9	197.2
										72.5°	201.2	185.6
										75°	181.7	166.0
										77.5°	150.4	132.8
										80°	115.3	103.5
										82.5°	85.9	76.2
										85°	44.9	35.2
										87.5°	0.0	0.0
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	1.0	1.0
										97.5°	3.1	2.0
										100°	14.3	10.2
										102.5°	38.9	32.7
										105°	62.4	57.3
										107.5°	85.9	81.8



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175°	180°
763.7	763.7
771.5	769.6
783.3	785.2
791.0	789.1
769.6	765.7
748.1	748.1
746.1	746.1
718.7	716.8
671.9	666.0
605.5	599.7
523.4	515.7
451.2	451.2
402.3	402.3
377.0	378.9
353.5	355.5
318.3	318.3
289.1	289.1
275.4	273.4
263.7	261.8
255.8	253.9
248.1	248.1
242.2	242.2
242.2	238.2
244.2	238.2
240.3	236.3
240.3	238.2
244.2	240.3
244.2	236.3
222.7	209.0
210.9	199.3
189.5	181.7
162.1	160.2
126.9	125.0
103.5	97.7
74.3	64.4
29.3	29.3
0.0	0.0
0.0	0.0
0.0	0.0
1.0	1.0
2.0	2.0
8.2	8.2
28.6	28.6
55.2	55.2
78.8	79.8

CANDELA DISTRIBUTION (continued):

	155°	165°	175°
110°	108.4	105.4	104.3
112.5°	132.0	128.9	126.8
115°	154.5	152.4	150.4
117.5°	178.0	175.9	173.9
120°	202.5	200.5	199.5
122.5°	228.1	226.1	225.0
125°	253.7	252.7	251.6
127.5°	278.2	276.2	275.2
130°	300.7	299.7	298.7
132.5°	325.3	324.3	321.2
135°	348.8	346.8	344.7
137.5°	372.4	371.3	368.3
140°	394.9	393.8	391.8
142.5°	416.3	417.4	415.3
145°	437.8	437.8	435.8
147.5°	458.3	457.3	454.2
150°	475.7	474.6	472.6
152.5°	493.1	494.1	491.0
155°	512.5	513.5	511.5
157.5°	527.8	528.9	526.8
160°	541.1	541.1	539.1
162.5°	550.3	551.4	548.3
165°	560.6	561.6	559.6
167.5°	570.8	571.8	568.8
170°	578.0	579.0	575.9
172.5°	580.0	582.1	579.0
175°	582.1	583.1	582.1
177.5°	587.2	588.2	586.2
180°	589.2	589.2	589.2



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180°
103.3
126.8
149.4
172.9
197.4
224.0
249.6
273.1
296.7
320.2
343.7
367.2
390.8
413.3
434.8
454.2
471.6
490.0
510.5
524.8
537.0
547.3
558.5
567.7
574.9
578.0
580.0
585.1
589.2

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