

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: P227559

Luminaire Tested: **ISS-AF-1000-LED-E1-T2-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)-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-T2-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II, 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: 7251.8 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - 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

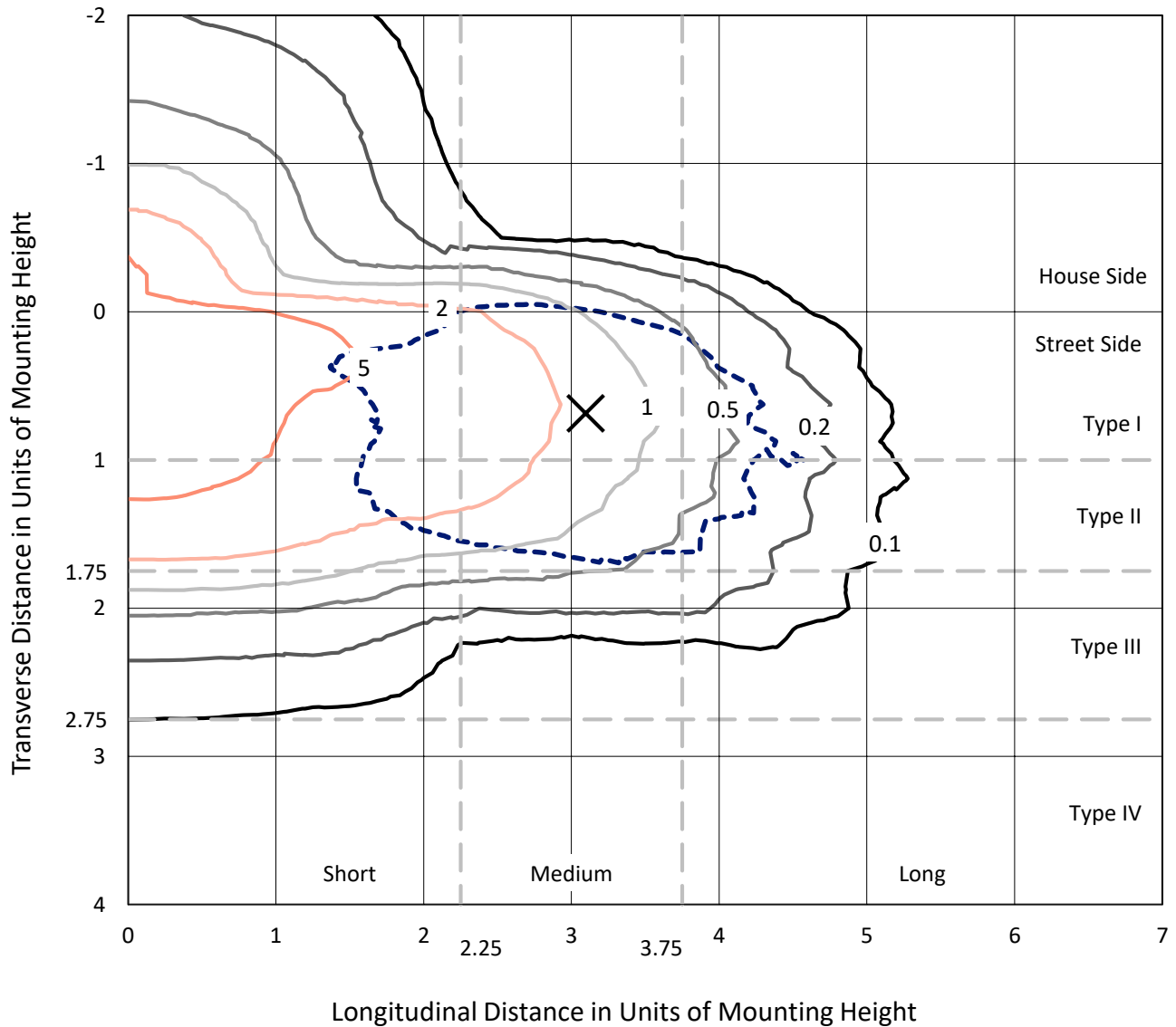


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Iso-Footcandle Lines of Horizontal Illumination

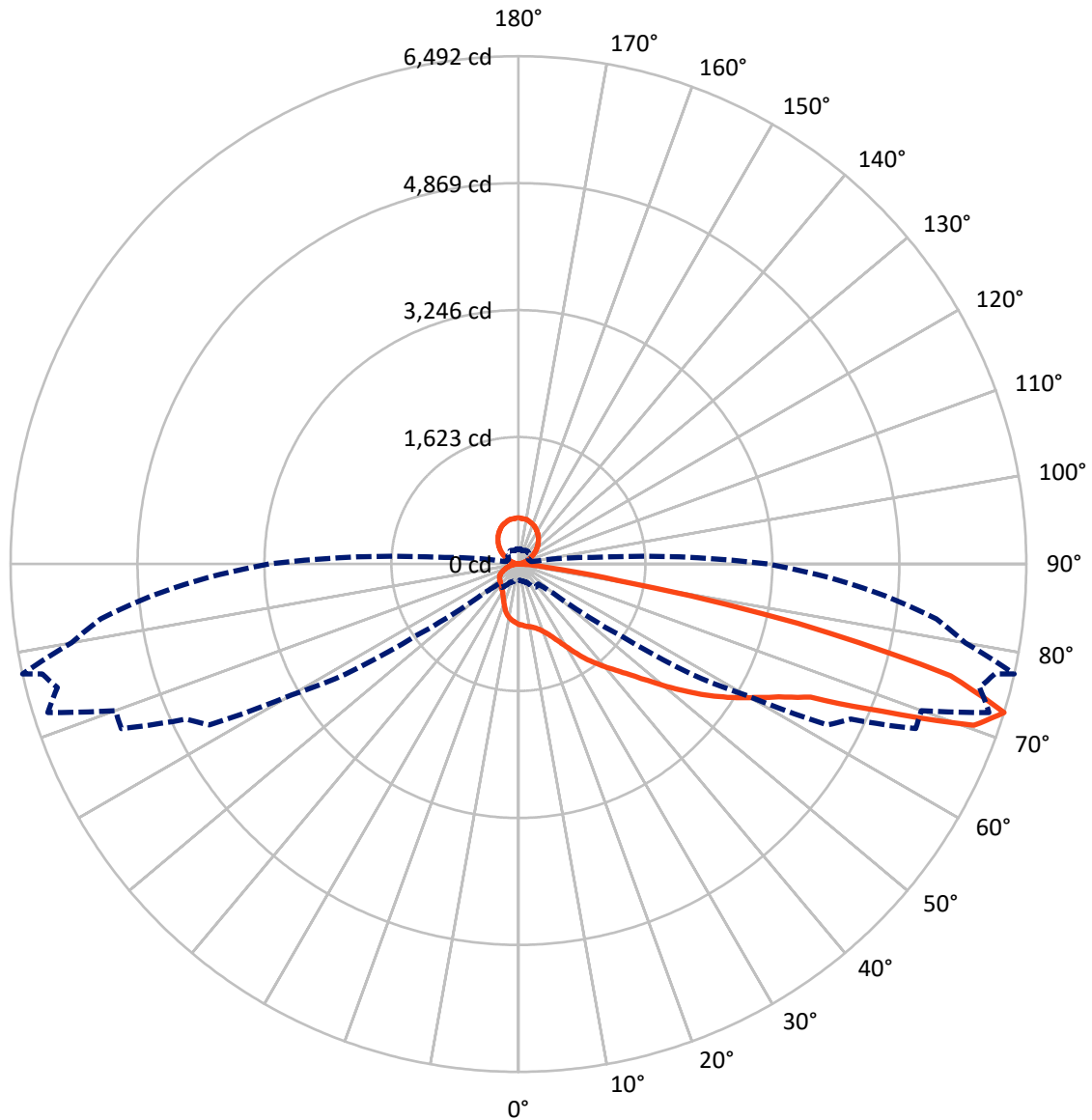
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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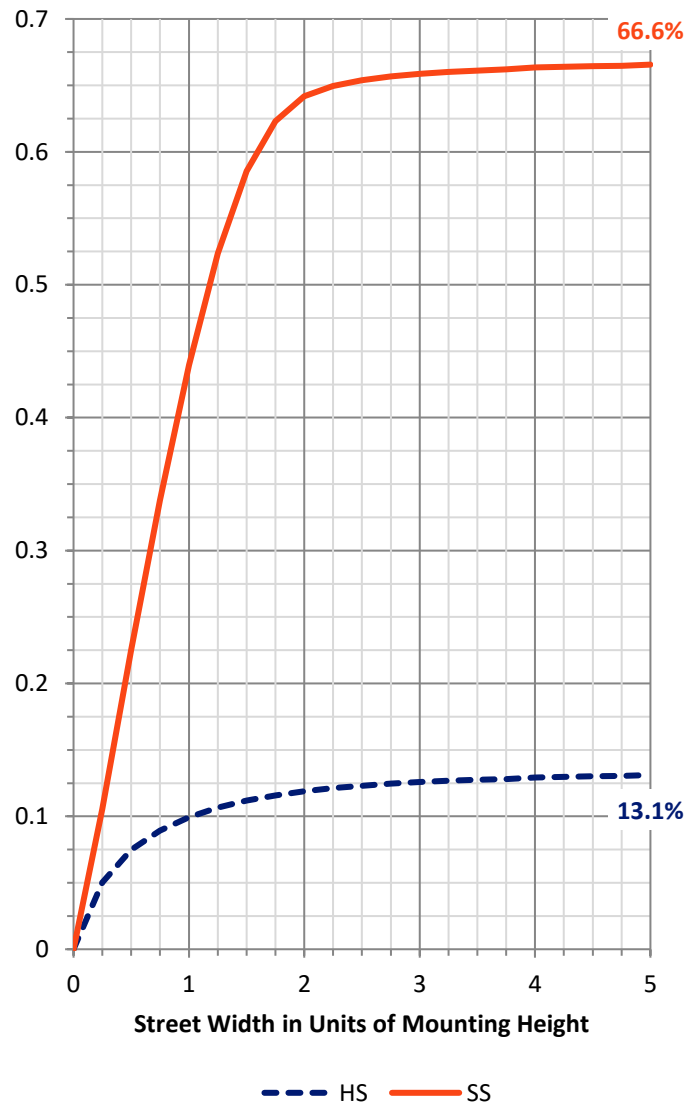
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	959.9	729.4	1689.3
	% Fixture	13.2	10.1	23.3
Street Side	Lumens	4833.1	729.4	5562.5
	% Fixture	66.6	10.1	76.7
Total	Lumens	5793.0	1458.9	7251.8
	% Fixture	79.9	20.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	1.0
10°-20°	220.3	3.0
20°-30°	391.1	5.4
30°-40°	619.6	8.5
40°-50°	929.5	12.8
50°-60°	1204.5	16.6
60°-70°	1368.6	18.9
70°-80°	908.2	12.5
80°-90°	79.4	1.1
90°-100°	4.8	0.1
100°-110°	70.6	1.0
110°-120°	156.6	2.2
120°-130°	229.0	3.2
130°-140°	271.7	3.7
140°-150°	275.5	3.8
150°-160°	236.4	3.3
160°-170°	158.7	2.2
170°-180°	55.6	0.8
0°-90°	5793.0	79.9
0°-180°	7251.8	100.0



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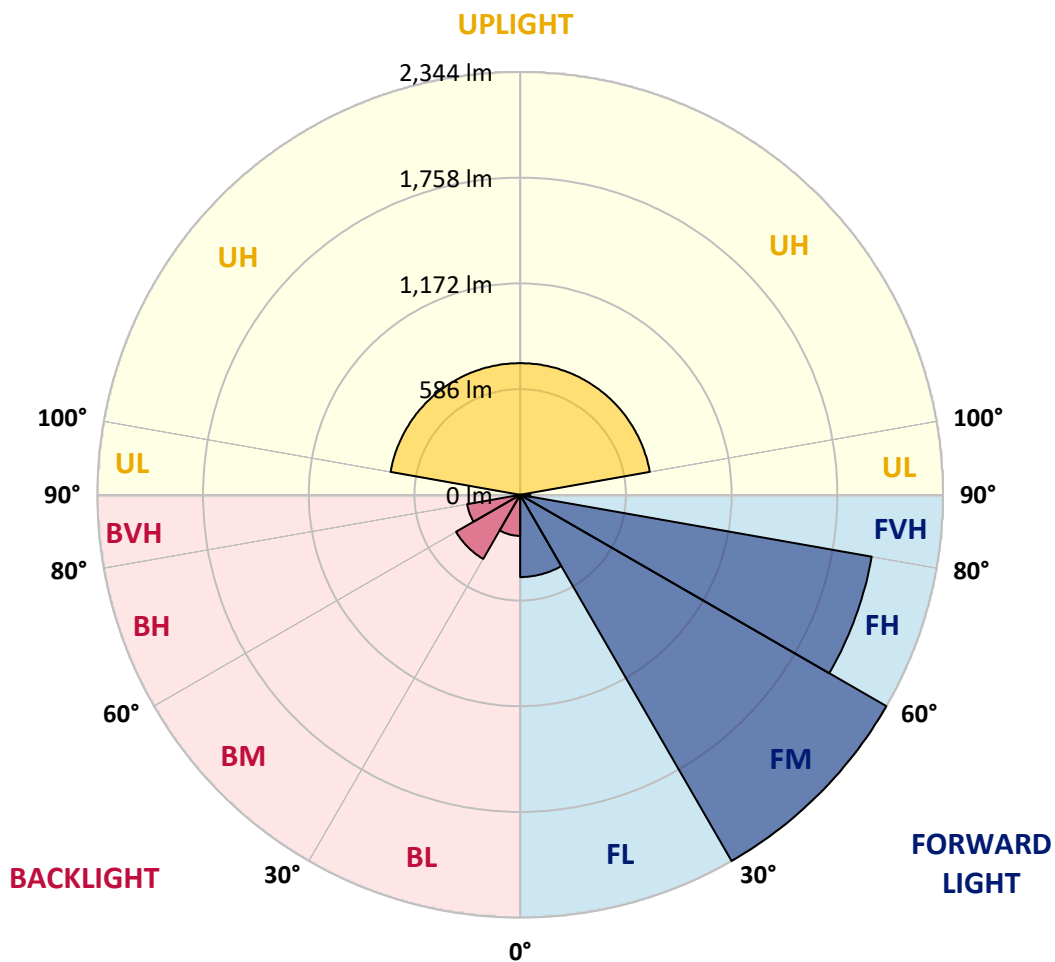
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	455.7	6.3			
FM (30°-60°)	2343.5	32.3			
FH (60°-80°)	1978.3	27.3			G2/5000
FVH (80°-90°)	55.5	0.8			G1/100
BL (0°-30°)	227.4	3.1	B1/500		
BM (30°-60°)	410.0	5.7	B1/1000		
BH (60°-80°)	298.5	4.1	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	10.1		U4/1000	

BUG Rating: B1-U5-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	837.9	834.0	832.1	828.2	824.3	822.2	816.4	812.5	818.4	816.4	816.4
5°	900.4	896.5	890.7	884.8	877.0	871.1	865.3	859.4	863.3	859.4	855.5
7.5°	951.2	947.3	939.5	933.6	925.8	918.0	910.2	908.3	904.3	898.5	896.5
10°	980.5	976.6	972.7	968.7	957.1	951.2	941.4	935.6	937.5	929.8	929.8
12.5°	1007.8	1003.9	1002.0	1002.0	992.3	986.3	982.4	976.6	980.5	968.7	964.8
15°	1033.3	1029.3	1023.5	1029.3	1027.3	1025.4	1023.5	1021.5	1027.3	1015.7	1017.6
17.5°	1074.3	1072.3	1060.6	1052.7	1054.8	1060.6	1064.5	1062.5	1062.5	1056.7	1058.7
20°	1138.7	1138.7	1123.1	1109.4	1087.9	1087.9	1089.9	1087.9	1091.8	1095.8	1101.6
22.5°	1187.5	1183.7	1177.7	1166.1	1142.6	1123.1	1123.1	1115.2	1121.2	1123.1	1134.8
25°	1250.0	1246.2	1232.5	1232.5	1209.0	1183.7	1179.8	1168.0	1181.7	1156.2	1175.8
27.5°	1326.3	1322.3	1304.8	1296.9	1285.2	1253.9	1246.2	1248.1	1261.8	1224.7	1244.2
30°	1421.9	1418.0	1396.5	1375.1	1355.5	1322.3	1318.4	1316.4	1347.7	1304.8	1330.1
32.5°	1543.0	1543.0	1519.6	1490.2	1451.3	1406.3	1390.7	1392.6	1435.6	1388.8	1431.7
35°	1726.6	1703.2	1660.2	1615.2	1574.3	1521.5	1500.1	1496.2	1535.2	1488.3	1537.2
37.5°	1843.8	1828.2	1789.1	1755.9	1711.0	1660.2	1644.6	1650.4	1683.7	1615.2	1685.6
40°	1949.3	1947.3	1921.9	1900.4	1855.5	1804.8	1824.3	1902.4	1990.3	1857.5	1859.4
42.5°	2019.6	2023.5	2021.6	2023.5	1998.1	1945.3	1978.6	2087.9	2238.3	2160.3	2087.9
45°	2031.3	2045.0	2050.8	2089.9	2115.3	2084.1	2101.7	2216.8	2517.7	2638.8	2312.6
47.5°	2060.6	2074.2	2062.6	2109.4	2226.7	2224.7	2295.0	2338.0	2379.0	2398.5	2644.6
50°	2099.7	2125.1	2113.3	2152.4	2248.1	2302.8	2363.3	2418.1	2384.8	2261.7	2328.2
52.5°	2101.7	2130.9	2195.4	2234.4	2328.2	2316.5	2357.5	2328.2	2379.0	2252.0	2316.5
55°	1929.8	1935.6	2123.1	2320.4	2484.4	2451.3	2425.8	2359.4	2423.9	2265.7	2347.8
57.5°	1658.3	1677.7	1873.1	2205.2	2556.8	2586.0	2578.2	2572.3	2623.2	2412.2	2502.0
60°	1359.4	1382.8	1568.4	1959.1	2406.3	2482.5	2588.0	2652.4	2783.3	2699.3	2847.8
62.5°	847.7	865.3	1070.3	1558.7	2123.1	2273.5	2427.8	2504.0	2693.4	2732.5	2984.5
65°	404.3	410.2	490.3	847.7	1543.0	1826.3	2054.8	2216.8	2449.3	2625.1	2964.9
67.5°	314.5	316.4	345.8	451.2	791.0	980.5	1240.2	1455.1	1703.2	2183.7	2605.6
70°	252.0	252.0	275.4	332.0	490.3	515.7	582.1	654.3	759.7	1146.5	1488.3
72.5°	210.9	210.9	226.6	261.8	363.2	369.2	365.3	359.4	359.4	453.2	578.2
75°	177.8	175.7	185.6	209.0	269.5	277.3	273.4	259.7	244.2	244.2	275.4
77.5°	144.5	144.5	152.3	164.1	195.3	199.3	199.3	187.5	173.8	175.7	189.5
80°	113.2	113.2	119.2	126.9	136.8	134.7	134.7	123.1	113.2	111.3	119.2
82.5°	82.0	84.0	97.7	91.8	87.9	82.0	82.0	80.1	72.2	66.4	70.3
85°	25.4	27.3	46.9	54.7	44.9	37.1	35.2	29.3	31.2	25.4	29.3
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
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.5	114.1	114.6	115.1	115.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
0°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	806.7	810.6	802.8	802.8	793.0	798.8	789.1	791.0	781.2	785.2	785.2
5°	845.8	847.7	837.9	834.0	824.3	824.3	814.5	814.5	800.8	804.8	800.8
7.5°	882.8	882.8	873.1	865.3	855.5	851.6	839.8	834.0	822.2	820.3	814.5
10°	914.1	914.1	900.4	892.6	880.9	875.0	859.4	853.6	839.8	830.1	824.3
12.5°	953.2	949.3	933.6	925.8	906.2	904.3	880.9	877.0	857.4	851.6	841.8
15°	1000.0	1003.9	978.6	976.6	949.3	947.3	916.1	914.1	884.8	882.8	869.2
17.5°	1050.8	1058.7	1037.2	1035.2	1002.0	1002.0	964.8	962.9	923.8	921.9	904.3
20°	1095.8	1105.5	1091.8	1095.8	1066.4	1068.4	1027.3	1027.3	972.7	968.7	953.2
22.5°	1136.8	1156.2	1144.6	1166.1	1136.8	1150.4	1095.8	1105.5	1041.1	1033.3	1009.8
25°	1177.7	1203.2	1199.3	1234.4	1212.9	1236.3	1179.8	1199.3	1115.2	1121.2	1089.9
27.5°	1218.7	1252.0	1248.1	1298.8	1291.1	1337.9	1289.1	1310.6	1218.7	1224.7	1189.5
30°	1287.2	1324.3	1310.6	1363.3	1363.3	1439.5	1402.4	1435.6	1334.0	1345.8	1304.8
32.5°	1378.9	1421.9	1380.9	1449.3	1445.3	1545.0	1515.7	1572.3	1472.7	1488.3	1437.6
35°	1478.6	1546.9	1480.5	1556.7	1545.0	1648.5	1628.9	1720.8	1615.2	1632.8	1582.1
37.5°	1609.4	1691.4	1603.6	1670.0	1617.3	1736.4	1724.7	1849.7	1742.3	1787.2	1726.6
40°	1763.8	1828.2	1718.8	1775.4	1687.6	1810.6	1791.1	1962.9	1863.3	1935.6	1880.9
42.5°	1906.3	1951.3	1806.7	1877.0	1771.5	1896.6	1861.4	2068.4	1982.5	2093.8	2033.3
45°	2035.3	2086.0	1894.6	1972.8	1855.5	1992.3	1931.7	2170.0	2111.4	2279.3	2218.8
47.5°	2218.8	2144.6	1974.7	2076.3	1945.3	2095.8	2015.7	2289.2	2267.7	2505.9	2435.6
50°	2158.3	2207.1	2041.1	2146.6	2027.4	2211.0	2123.1	2431.8	2437.6	2752.0	2711.0
52.5°	2164.2	2246.2	2091.8	2238.3	2123.1	2371.2	2279.3	2603.6	2630.9	2990.3	2933.7
55°	2199.2	2320.4	2168.0	2365.3	2257.9	2548.9	2484.4	2789.2	2836.0	3214.9	3181.8
57.5°	2287.2	2455.2	2298.9	2556.8	2445.4	2752.0	2693.4	2980.6	3045.0	3439.6	3429.9
60°	2625.1	2824.3	2550.8	2836.0	2687.6	2982.5	2904.4	3181.8	3246.2	3654.4	3679.9
62.5°	3002.1	3347.8	3185.7	3482.5	3089.9	3388.8	3158.3	3429.9	3433.7	3884.9	3965.0
65°	3099.7	3631.0	3769.7	4322.4	4117.3	4424.0	3808.8	3990.3	3756.0	4304.8	4420.1
67.5°	3062.6	3713.0	4097.8	4720.8	4953.3	5488.4	5384.9	5322.4	4779.4	5174.0	5312.7
70°	2248.1	2937.6	3879.0	4511.8	5181.9	5533.3	6090.0	6146.7	6123.3	6068.6	6160.3
72.5°	1023.5	1605.5	2625.1	3347.8	4453.3	4689.6	5496.3	5480.7	6308.8	6103.7	6248.3
75°	402.3	619.2	1250.0	1869.2	3080.2	3371.2	4285.3	4058.8	5091.9	4791.2	5099.8
77.5°	220.8	277.3	468.7	802.8	1681.7	1836.0	2623.2	2244.3	3158.3	2636.8	2740.3
80°	132.8	166.0	214.8	304.7	714.8	755.9	1119.2	902.3	1291.1	980.5	951.2
82.5°	72.2	89.8	107.4	150.4	265.7	294.9	386.8	347.7	414.1	353.5	345.8
85°	29.3	39.1	41.0	60.6	87.9	101.6	123.1	132.8	162.1	148.4	144.5
87.5°	0.0	1.9	0.0	3.9	0.0	3.9	0.0	5.8	5.8	9.7	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	11.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1	4.9
100°	32.2	32.7	32.2	31.7	31.2	30.7	29.9	29.2	28.4	27.6	27.4
102.5°	52.0	52.2	52.0	51.7	51.4	51.1	50.6	50.1	49.6	49.1	49.3
105°	72.4	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6	71.0
107.5°	94.6	95.1	94.9	94.6	94.3	94.1	93.9	93.6	93.3	93.1	93.3
110°	116.1	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6	115.8



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
112.5°	138.6	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1	138.5
115°	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	162.0
117.5°	183.9	184.1	184.3	184.6	184.9	185.2	184.9	184.6	184.3	184.1	184.5
120°	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	209.1
122.5°	233.0	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3	235.1
125°	258.6	258.8	259.0	259.3	259.6	259.8	259.8	259.8	259.8	259.8	260.4
127.5°	283.9	284.4	284.2	283.9	283.6	283.4	283.6	283.9	284.2	284.4	285.0
130°	307.4	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9	309.5
132.5°	331.6	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5	334.1
135°	355.2	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0	357.4
137.5°	377.0	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5	379.3
140°	398.7	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0	401.8
142.5°	420.9	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5	423.1
145°	443.4	444.0	443.8	443.4	443.1	442.9	443.1	443.4	443.8	444.0	444.6
147.5°	464.2	464.4	463.9	463.4	462.9	462.4	462.6	462.9	463.2	463.4	464.0
150°	481.6	481.8	481.3	480.8	480.3	479.8	479.8	479.8	479.8	479.8	480.6
152.5°	498.0	498.2	498.0	497.7	497.4	497.2	497.2	497.2	497.2	497.2	497.8
155°	515.4	515.6	515.4	515.1	514.7	514.5	514.7	515.1	515.4	515.6	516.2
157.5°	530.9	530.9	530.4	529.9	529.4	528.9	529.1	529.4	529.7	529.9	530.9
160°	544.2	544.2	543.7	543.2	542.7	542.2	542.2	542.2	542.2	542.2	542.8
162.5°	554.2	554.4	553.9	553.4	552.9	552.4	551.9	551.4	550.9	550.3	550.8
165°	565.5	565.7	564.9	564.2	563.4	562.6	562.1	561.6	561.1	560.6	561.0
167.5°	572.9	572.9	572.3	571.8	571.3	570.8	571.0	571.3	571.6	571.8	572.6
170°	578.2	578.0	577.8	577.5	577.1	576.9	577.5	578.0	578.5	579.0	580.0
172.5°	581.9	582.1	581.5	581.0	580.5	580.0	580.2	580.5	580.8	581.0	581.6
175°	585.9	586.2	585.3	584.6	583.9	583.1	582.6	582.1	581.5	581.0	581.6
177.5°	590.2	590.2	589.4	588.7	588.0	587.2	587.2	587.2	587.2	587.2	587.8
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°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	779.3	785.2	777.3	777.3	767.6	773.5	767.6	761.8	752.0	753.9	740.3
5°	793.0	796.9	787.2	783.3	777.3	775.4	763.7	752.0	738.3	738.3	722.7
7.5°	806.7	806.7	793.0	793.0	779.3	775.4	757.8	738.3	718.7	716.8	693.4
10°	814.5	812.5	794.9	794.9	775.4	773.5	752.0	722.7	695.3	687.5	654.3
12.5°	830.1	828.2	806.7	802.8	777.3	777.3	746.1	707.1	668.0	654.3	607.4
15°	849.7	851.6	826.2	820.3	791.0	789.1	746.1	687.5	634.7	613.3	556.7
17.5°	880.9	882.8	847.7	841.8	806.7	800.8	748.1	664.1	589.8	566.4	515.7
20°	921.9	916.1	869.2	867.3	820.3	814.5	746.1	628.9	544.9	521.5	476.6
22.5°	972.7	966.8	906.2	900.4	845.8	836.0	744.2	591.8	503.9	478.5	449.3
25°	1043.0	1035.2	961.0	953.2	884.8	869.2	742.3	552.8	468.7	449.3	431.7
27.5°	1130.9	1115.2	1025.4	1017.6	925.8	906.2	734.4	507.8	433.6	419.9	412.1
30°	1236.3	1222.7	1107.4	1095.8	980.5	955.1	726.6	466.8	408.3	402.3	396.5
32.5°	1361.3	1347.7	1207.1	1193.4	1050.8	1013.7	712.9	433.6	392.6	392.6	384.7
35°	1492.3	1480.5	1314.5	1304.8	1128.9	1080.1	695.3	404.3	378.9	378.9	371.1
37.5°	1609.4	1619.2	1431.7	1423.8	1207.1	1146.5	675.8	384.7	367.2	363.2	355.5
40°	1736.4	1759.8	1541.1	1546.9	1289.1	1216.8	652.3	369.2	353.5	349.6	347.7
42.5°	1865.2	1910.3	1656.3	1677.7	1371.2	1289.1	634.7	359.4	347.7	339.8	337.9
45°	2025.4	2089.9	1798.9	1839.9	1466.8	1377.0	628.9	347.7	330.1	320.3	314.5
47.5°	2224.7	2310.6	1974.7	2021.6	1593.8	1482.5	640.7	343.7	318.3	306.7	294.9
50°	2461.0	2543.1	2183.7	2203.2	1736.4	1597.7	666.0	349.6	314.5	296.9	279.3
52.5°	2711.0	2773.5	2404.3	2382.9	1884.8	1711.0	695.3	351.6	304.7	287.1	265.7
55°	2968.8	3004.0	2609.4	2552.8	2019.6	1824.3	734.4	349.6	296.9	277.3	250.0
57.5°	3220.8	3232.5	2791.1	2736.4	2152.4	1959.1	783.3	343.7	285.2	265.7	236.3
60°	3466.9	3486.4	2992.3	2941.5	2296.9	2132.9	853.6	334.0	269.5	255.8	224.6
62.5°	3736.4	3800.9	3232.5	3240.3	2496.2	2404.3	986.3	322.2	253.9	238.2	207.0
65°	4103.7	4349.8	3629.0	3812.6	2879.0	2916.1	1240.2	289.1	232.4	212.9	191.4
67.5°	5023.6	5293.2	4591.9	4666.2	3775.5	3554.9	1400.4	246.1	205.1	191.4	177.8
70°	6176.0	5982.6	5484.6	5035.4	4299.0	3654.4	1232.5	207.0	181.7	173.8	166.0
72.5°	6492.4	5799.0	5388.8	4715.0	3974.8	3187.6	943.4	177.8	162.1	158.3	152.3
75°	5705.3	4701.4	4724.8	3746.3	3295.0	2429.8	644.6	152.3	140.7	138.7	136.8
77.5°	3648.6	2416.1	2941.5	1851.6	1902.4	1125.0	314.5	126.9	121.1	121.1	117.2
80°	1296.9	804.8	910.2	584.0	531.2	357.4	169.9	101.6	97.7	99.6	97.7
82.5°	388.7	308.6	302.8	236.3	183.6	150.4	93.7	78.2	74.3	76.2	72.2
85°	156.2	121.1	101.6	78.2	64.4	58.6	50.7	52.8	46.9	50.7	44.9
87.5°	9.7	7.8	5.8	7.8	0.0	3.9	9.7	7.8	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
110°	115.8	116.1	116.4	116.6	116.1	115.6	116.6	116.1	115.8	115.6	115.8



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

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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	110°	
773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	112.5°	138.6
750.0	736.3	742.3	736.3	740.3	728.5	732.4	722.7	722.7	720.8	711.0	115°	161.6
724.7	711.0	709.0	695.3	697.2	681.7	679.8	662.2	662.2	646.5	617.2	117.5°	184.6
689.5	668.0	666.0	638.7	636.8	615.3	607.4	587.9	585.9	568.4	550.8	120°	208.7
644.6	611.3	605.5	570.3	572.2	548.8	546.9	533.3	533.3	525.4	525.4	122.5°	233.7
593.7	556.7	552.8	525.4	527.3	511.8	513.7	505.8	509.7	513.7	527.3	125°	259.8
546.9	517.6	513.7	496.1	498.1	494.2	500.0	500.0	505.8	515.7	539.1	127.5°	283.9
507.8	482.4	484.4	476.6	484.4	482.4	494.2	492.2	503.9	515.7	544.9	130°	308.4
472.7	459.0	464.8	462.9	472.7	472.7	482.4	484.4	494.2	509.7	543.0	132.5°	333.0
449.3	445.3	451.2	451.2	459.0	460.9	470.8	476.6	482.4	498.1	527.3	135°	356.5
435.6	433.6	439.5	441.4	447.2	449.3	459.0	459.0	468.7	478.5	494.2	137.5°	378.0
416.0	412.1	419.9	419.9	427.8	425.8	437.5	433.6	443.3	447.2	451.2	140°	400.0
402.3	396.5	402.3	400.4	406.2	400.4	406.2	400.4	406.2	406.2	400.4	142.5°	422.0
388.7	382.8	384.7	377.0	382.8	375.0	377.0	369.2	373.1	369.2	371.1	145°	443.4
375.0	367.2	367.2	357.4	357.4	347.7	351.6	343.7	351.6	357.4	355.5	147.5°	462.9
355.5	349.6	349.6	341.8	345.8	341.8	349.6	345.8	347.7	339.8	326.2	150°	479.8
343.7	347.7	345.8	351.6	347.7	341.8	335.9	324.3	322.2	318.3	310.6	152.5°	497.2
326.2	330.1	320.3	328.2	322.2	324.3	320.3	314.5	310.6	306.7	298.8	155°	515.1
300.7	300.7	293.0	304.7	298.8	310.6	306.7	306.7	302.8	296.9	291.0	157.5°	529.4
279.3	281.2	273.4	283.3	279.3	294.9	293.0	298.8	298.8	294.9	279.3	160°	542.2
265.7	261.8	255.8	265.7	263.7	277.3	279.3	291.0	289.1	291.0	277.3	162.5°	551.4
253.9	246.1	240.3	246.1	246.1	257.8	261.8	275.4	277.3	281.2	273.4	165°	561.6
240.3	230.5	226.6	230.5	230.5	242.2	248.1	257.8	263.7	275.4	271.5	167.5°	571.3
228.5	214.8	210.9	214.8	216.8	228.5	234.4	244.2	252.0	267.6	265.7	170°	578.0
214.8	203.2	199.3	205.1	207.0	218.7	224.6	234.4	240.3	257.8	257.8	172.5°	580.5
199.3	189.5	189.5	191.4	195.3	207.0	210.9	224.6	226.6	248.1	250.0	175°	582.1
185.6	179.7	179.7	181.7	185.6	195.3	197.2	210.9	212.9	234.4	240.3	177.5°	587.2
173.8	169.9	169.9	171.9	173.8	181.7	183.6	197.2	201.2	220.8	230.5	180°	589.2
162.1	158.3	156.2	156.2	162.1	168.0	171.9	185.6	187.5	205.1	216.8		
148.4	144.5	144.5	142.6	148.4	152.3	160.2	168.0	171.9	189.5	197.2		
134.7	130.8	130.8	128.9	132.8	140.7	142.6	150.4	152.3	168.0	175.7		
117.2	113.2	113.2	113.2	117.2	119.2	121.1	128.9	132.8	146.5	154.3		
97.7	93.7	95.7	93.7	99.6	91.8	97.7	105.5	109.4	117.2	113.2		
74.3	68.3	70.3	70.3	72.2	66.4	70.3	74.3	78.2	84.0	82.0		
46.9	41.0	44.9	41.0	44.9	39.1	43.0	43.0	46.9	43.0	41.0		
9.7	3.9	9.7	3.9	11.8	0.0	5.8	0.0	3.9	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		
116.1	116.4	116.6	116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5		

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REPORT NUMBER: P227559
 CATALOG NUMBER: ISS-AF-10

TION (continued):

CANDELA DISTRIBUTION (con

112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°		155°	165°
138.9	139.1	139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	0°	773.5	773.5
161.6	161.6	161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	2.5°	701.2	693.4
184.9	185.2	184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	5°	601.6	587.9
208.7	208.7	208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	7.5°	541.0	537.2
233.4	233.2	233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	10°	529.3	535.2
259.8	259.8	259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	12.5°	543.0	552.8
283.6	283.4	283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	15°	560.6	578.2
308.1	307.9	307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	17.5°	574.3	597.7
332.7	332.5	332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	20°	576.2	599.7
356.2	356.0	356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	22.5°	558.6	574.3
377.7	377.5	377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	25°	513.7	521.5
399.5	399.0	399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	27.5°	457.1	455.1
421.7	421.5	421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	30°	398.4	394.6
443.1	442.9	443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	32.5°	377.0	363.2
462.6	462.4	462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	35°	343.7	339.8
479.8	479.8	480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	37.5°	332.0	365.3
497.2	497.2	497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	40°	318.3	359.4
514.7	514.5	514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	42.5°	306.7	330.1
529.1	528.9	529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	45°	285.2	294.9
542.2	542.2	542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	47.5°	275.4	271.5
551.9	552.4	552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	50°	267.6	267.6
562.1	562.6	563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	52.5°	261.8	257.8
571.0	570.8	571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	55°	253.9	250.0
577.5	576.9	577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	57.5°	248.1	238.2
580.2	580.0	580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	60°	242.2	232.4
582.6	583.1	583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	62.5°	238.2	226.6
587.2	587.2	588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	65°	232.4	220.8
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	67.5°	224.6	209.0
										70°	209.0	195.3
										72.5°	193.3	177.8
										75°	169.9	156.2
										77.5°	142.6	126.9
										80°	107.4	97.7
										82.5°	78.2	66.4
										85°	35.2	25.4
										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
										110°	108.4	105.4



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175°	180°
773.5	773.5
689.5	687.5
584.0	580.1
537.2	535.2
537.2	537.2
560.6	560.6
587.9	587.9
607.4	609.4
613.3	615.3
584.0	584.0
527.3	527.3
453.2	460.9
386.8	394.6
343.7	349.6
330.1	332.0
363.2	365.3
357.4	361.3
306.7	308.6
275.4	275.4
263.7	261.8
263.7	259.7
271.5	269.5
259.7	259.7
253.9	253.9
248.1	248.1
246.1	244.2
246.1	242.2
242.2	236.3
228.5	212.9
195.3	181.7
158.3	156.2
123.1	125.0
93.7	93.7
68.3	56.7
19.5	19.5
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
104.3	103.3

CANDELA DISTRIBUTION (continued):

	155°	165°	175°
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



-T2-ULG

<u>180°</u>
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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