

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: P227234

Luminaire Tested: **IST-AF-1000-LED-E1-SLL-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35948)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-1000-LED-E1-SLL-7030-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT, WITH
UPLIGHT GLOW
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6358.5 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - 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

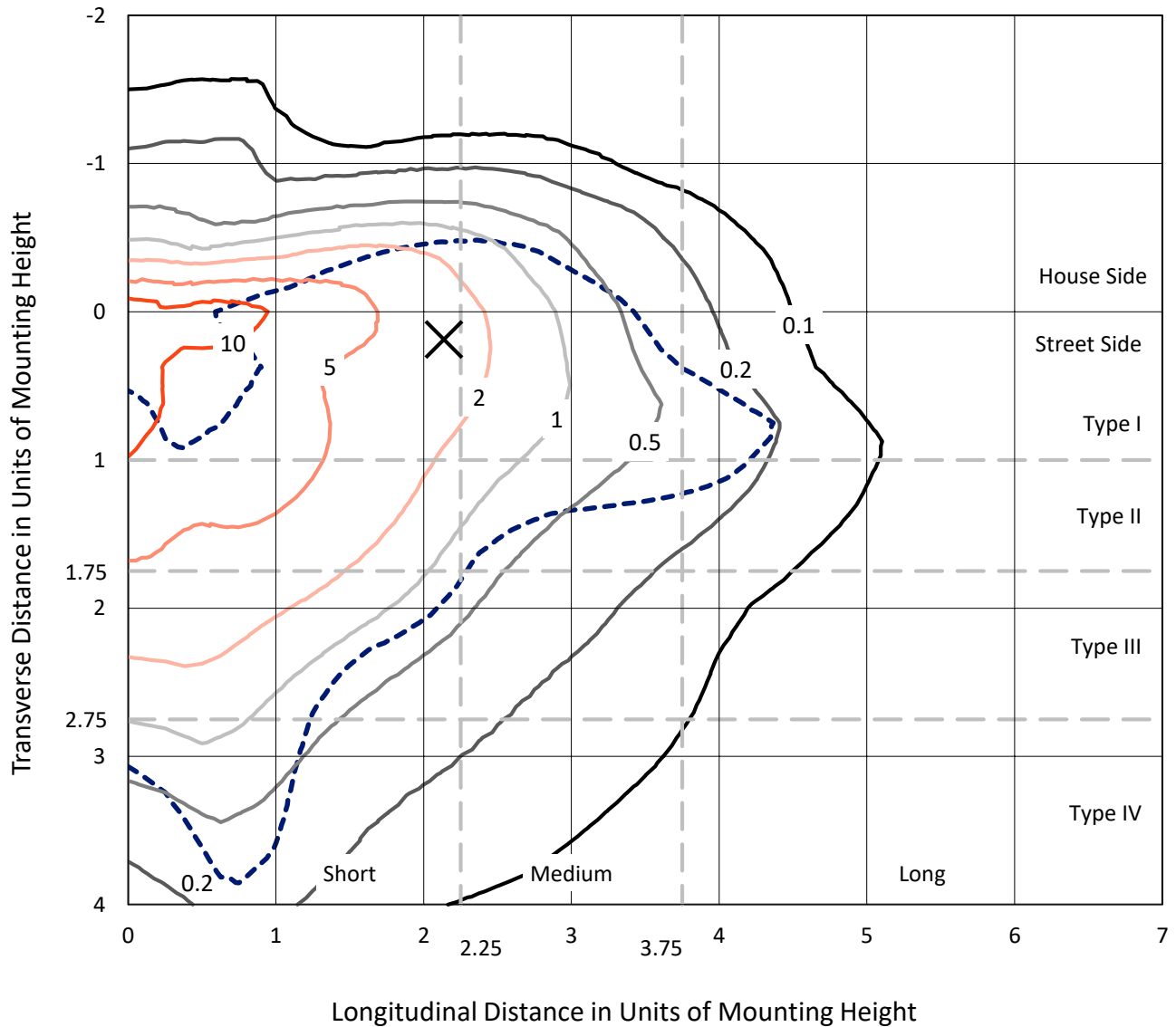


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Iso-Footcandle Lines of Horizontal Illumination

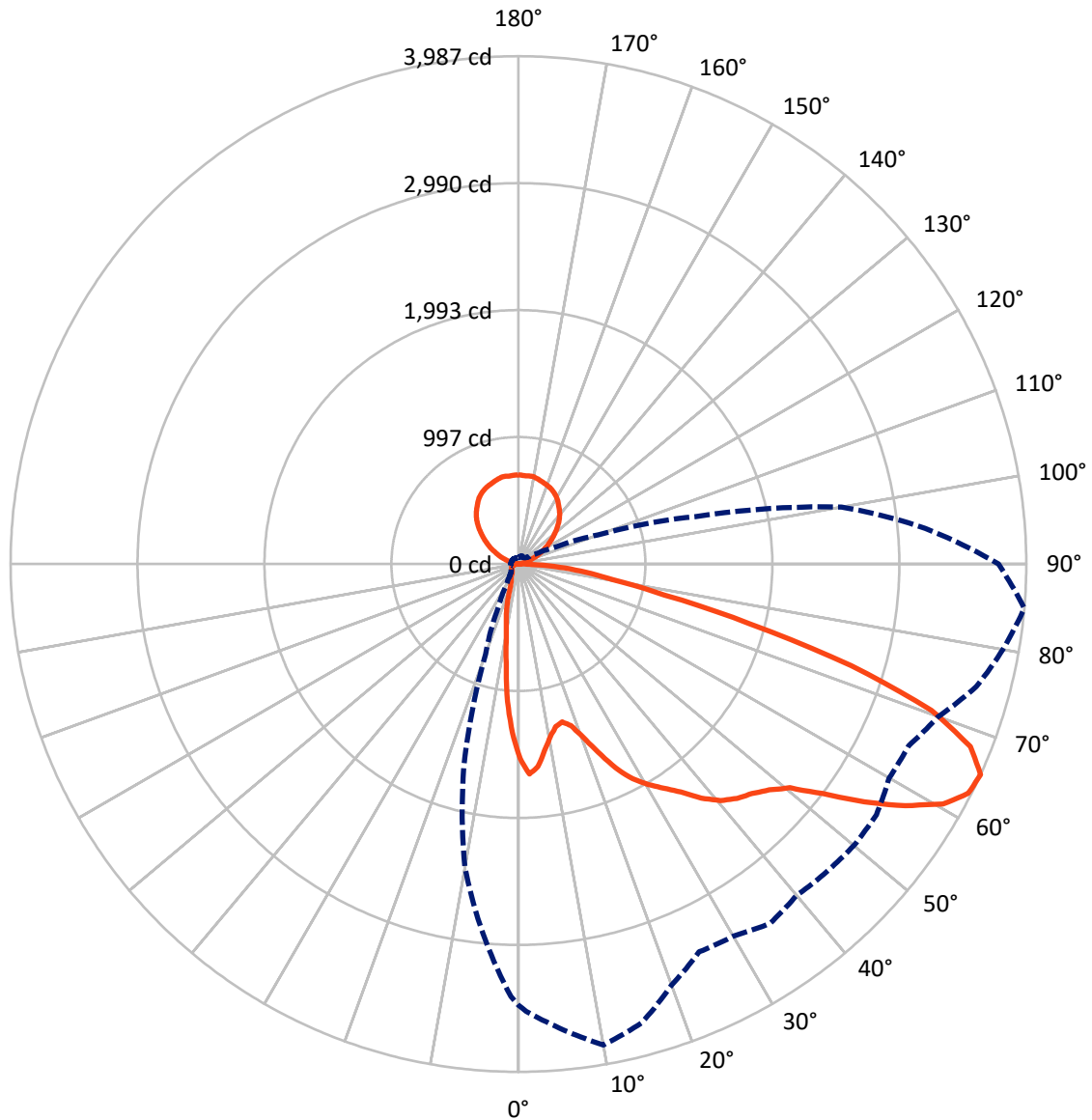
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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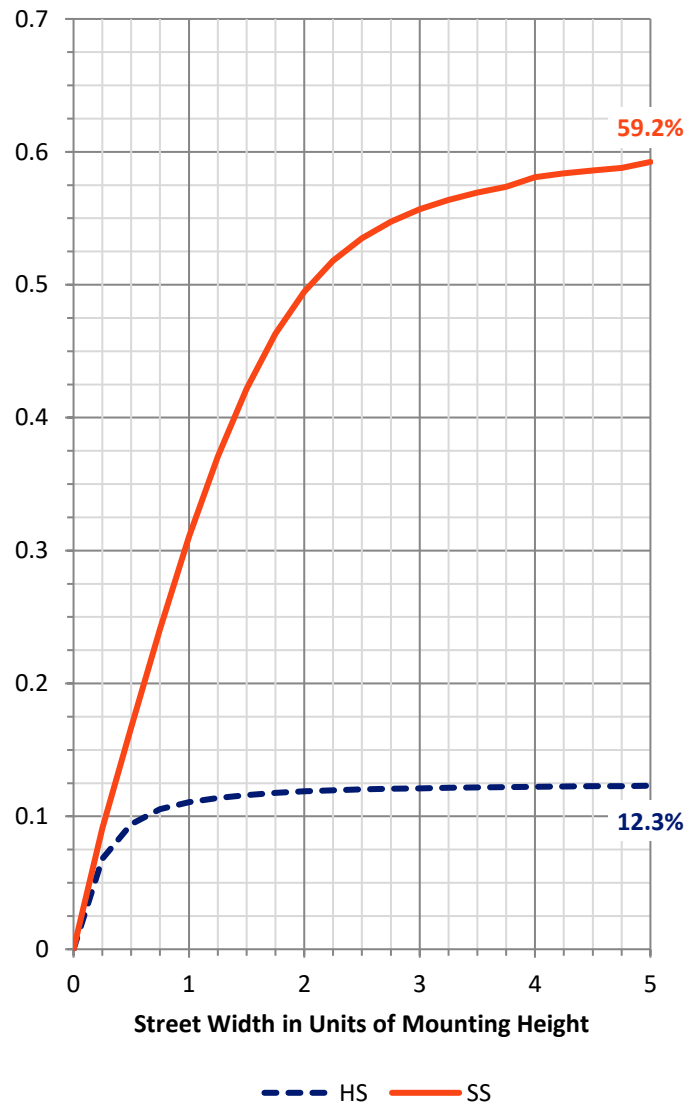
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	793.4	867.6	1661.0
	% Fixture	12.5	13.6	26.1
Street Side	Lumens	3829.8	867.7	4697.5
	% Fixture	60.2	13.6	73.9
Total	Lumens	4623.1	1735.3	6358.5
	% Fixture	72.7	27.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.1	1.8
10°-20°	217.7	3.4
20°-30°	310.4	4.9
30°-40°	450.3	7.1
40°-50°	644.2	10.1
50°-60°	989.1	15.6
60°-70°	1144.8	18.0
70°-80°	584.0	9.2
80°-90°	169.6	2.7
90°-100°	9.5	0.1
100°-110°	57.4	0.9
110°-120°	166.1	2.6
120°-130°	273.2	4.3
130°-140°	336.8	5.3
140°-150°	344.6	5.4
150°-160°	290.3	4.6
160°-170°	191.2	3.0
170°-180°	66.3	1.0
0°-90°	4623.1	72.7
0°-180°	6358.5	100.0



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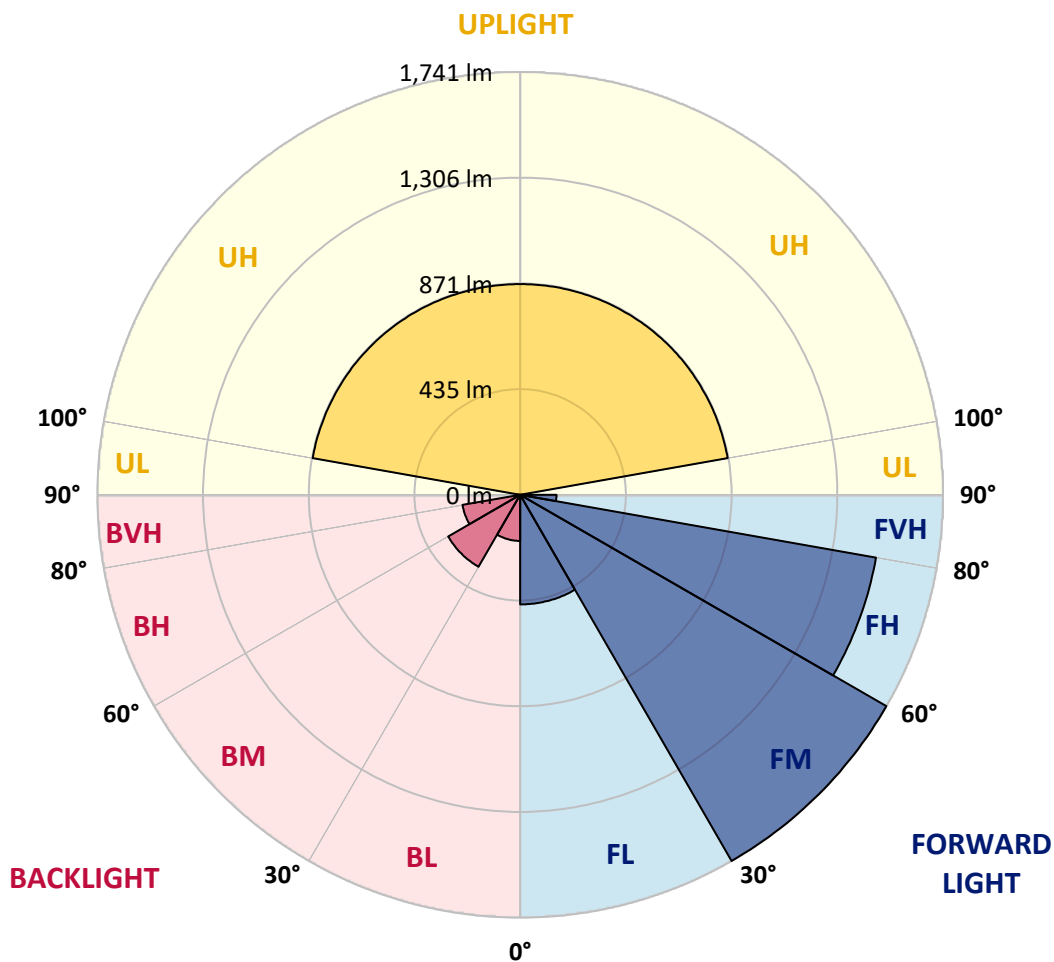
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.4	7.1			
FM	(30°-60°)	1741.2	27.4			
FH	(60°-80°)	1487.7	23.4			G1/1800
FVH	(80°-90°)	149.5	2.4			G2/225
BL	(0°-30°)	189.8	3.0	B1/500		
BM	(30°-60°)	342.3	5.4	B1/1000		
BH	(60°-80°)	241.1	3.8	B1/500		G1/500
BVH	(80°-90°)	20.1	0.3			G1/100
UL	(90°-100°)	9.5	0.1		U1/10	
UH	(100°-180°)	867.6	13.6		U4/1000	

BUG Rating: B1-U5-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
0°	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0
2.5°	1580.7	1582.3	1604.0	1625.0	1651.5	1647.6	1669.4	1685.7	1700.5	1702.8	1713.7
5°	1484.2	1499.8	1548.8	1590.8	1643.7	1684.9	1729.3	1764.3	1790.0	1814.1	1817.2
7.5°	1348.9	1360.6	1417.3	1483.5	1559.7	1614.2	1681.1	1739.4	1780.6	1819.5	1828.1
10°	1233.0	1243.9	1306.9	1392.4	1459.3	1530.1	1599.4	1646.8	1700.5	1734.0	1750.3
12.5°	1177.0	1190.2	1250.1	1327.9	1396.3	1464.8	1516.9	1558.1	1588.5	1594.7	1599.4
15°	1198.8	1205.8	1271.9	1341.1	1395.6	1429.8	1443.8	1468.7	1466.4	1478.8	1481.1
17.5°	1286.7	1283.5	1353.6	1401.8	1428.2	1424.3	1402.6	1389.3	1366.0	1359.0	1379.2
20°	1437.6	1448.5	1493.6	1523.1	1495.9	1432.9	1373.0	1331.8	1299.1	1288.2	1285.9
22.5°	1614.2	1628.2	1677.2	1661.6	1592.4	1477.2	1368.3	1302.2	1261.8	1250.1	1245.4
25°	1799.3	1808.6	1833.5	1780.6	1683.4	1534.0	1401.0	1308.4	1254.8	1237.6	1235.3
27.5°	1948.7	1958.0	1946.3	1885.6	1744.8	1597.8	1446.1	1336.4	1266.4	1249.3	1241.5
30°	2070.8	2075.5	2036.6	1961.1	1821.1	1668.6	1505.2	1385.4	1303.8	1264.9	1259.4
32.5°	2207.7	2204.6	2129.1	2024.9	1885.6	1732.4	1572.9	1440.7	1339.6	1292.1	1283.5
35°	2357.8	2330.6	2197.6	2087.9	1930.0	1781.4	1634.4	1499.0	1397.1	1334.1	1323.2
37.5°	2491.6	2463.6	2285.5	2137.7	1974.3	1819.5	1682.6	1574.5	1485.0	1427.5	1422.8
40°	2595.9	2561.6	2352.4	2171.1	1996.1	1847.5	1739.4	1669.4	1610.3	1563.6	1563.6
42.5°	2679.9	2642.5	2417.7	2210.0	2015.6	1890.3	1834.3	1810.2	1797.7	1772.1	1781.4
45°	2760.8	2722.7	2471.4	2234.9	2059.1	1973.5	1981.3	2002.3	2039.7	2024.9	2038.1
47.5°	2837.8	2800.5	2532.1	2274.6	2143.1	2122.9	2163.4	2247.4	2320.5	2378.1	2418.5
50°	2966.9	2922.6	2641.0	2391.3	2275.4	2285.5	2402.2	2567.1	2686.1	2739.0	2735.9
52.5°	3212.0	3149.0	2875.1	2609.1	2464.4	2520.4	2658.1	2865.8	3021.4	3062.6	3078.9
55°	3511.5	3461.7	3213.5	2897.7	2792.7	2812.1	2983.3	3218.2	3338.0	3380.8	3394.8
57.5°	3687.3	3674.0	3518.5	3206.5	3104.6	3096.8	3320.1	3512.2	3615.7	3656.2	3643.7
59°	3728.5	3732.4	3643.7	3425.1	3285.1	3268.0	3495.1	3673.3	3759.6	3772.1	3765.8
60°	3724.6	3746.4	3735.5	3544.9	3399.4	3377.7	3569.0	3738.6	3811.0	3830.4	3808.6
62.5°	3644.5	3681.8	3785.3	3765.1	3658.5	3547.2	3637.5	3760.4	3807.1	3788.4	3772.1
65°	3462.5	3511.5	3655.4	3834.3	3731.6	3516.9	3359.0	3373.0	3443.8	3397.1	3419.7
67.5°	3148.2	3204.2	3280.4	3686.5	3537.1	3177.0	2905.5	2772.5	2739.0	2784.1	2855.7
70°	2560.9	2597.4	2790.3	3364.4	3106.2	2611.4	2270.7	2093.3	2034.2	2138.5	2211.6
72.5°	1806.3	1860.7	2115.1	2784.1	2555.4	2091.8	1718.4	1555.0	1495.9	1500.6	1564.4
75°	1099.2	1173.1	1478.0	2201.5	2014.0	1602.5	1309.2	1191.8	1173.9	1163.7	1152.9
77.5°	725.0	753.0	971.6	1519.2	1358.2	1139.6	982.5	1030.7	1084.4	1096.1	1110.1
80°	491.6	500.2	630.1	1065.7	894.6	841.7	794.2	907.8	1009.7	1028.4	1018.3
82.5°	302.6	328.3	439.5	718.8	713.3	688.4	627.8	716.5	784.1	795.8	816.8
85°	105.0	109.7	269.9	634.8	725.0	732.8	517.3	408.4	459.0	450.4	323.6
87.5°	45.1	50.6	84.0	424.7	490.9	406.1	236.5	210.0	161.8	91.0	87.9
90°	8.1	8.1	7.3	9.9	18.7	15.3	15.0	10.3	8.0	7.5	7.0
92.5°	4.0	4.0	4.0	4.5	5.0	5.5	6.0	6.0	6.0	6.0	6.0
95°	5.0	5.0	5.0	5.5	6.0	6.5	7.0	7.0	7.0	7.0	7.0
97.5°	7.0	7.0	7.0	7.5	8.0	8.0	8.0	8.5	9.0	9.0	9.0
100°	8.0	8.0	8.0	8.5	9.0	9.5	10.0	11.0	12.0	16.5	21.0
102.5°	11.0	11.0	11.0	12.0	13.0	15.5	18.0	22.5	27.0	33.5	40.0
105°	21.0	21.2	22.0	24.5	27.0	31.5	36.0	42.0	48.0	55.5	63.0
107.5°	41.0	41.2	42.0	45.5	49.0	53.5	58.0	65.5	73.0	80.5	88.0



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CANDELA DISTRIBUTION (continued):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
110°	66.0	66.4	68.0	71.0	74.0	80.5	87.0	94.5	102.0	108.0	114.0
112.5°	99.0	99.0	99.0	102.5	106.0	113.5	121.0	127.5	134.0	138.5	143.0
115°	140.0	139.8	139.0	143.0	147.0	153.0	159.0	163.5	168.0	171.0	174.0
117.5°	184.0	184.0	184.0	186.5	189.0	193.0	197.0	199.5	202.0	203.5	205.0
120°	225.0	224.6	223.0	224.5	226.0	229.5	233.0	235.0	237.0	240.0	243.0
122.5°	263.0	262.4	260.0	260.5	261.0	264.0	267.0	269.0	271.0	274.0	277.0
125°	298.0	297.2	294.0	295.0	296.0	297.5	299.0	302.0	305.0	307.5	310.0
127.5°	330.0	329.8	329.0	329.0	329.0	331.0	333.0	336.0	339.0	339.5	340.0
130°	363.0	362.6	361.0	361.5	362.0	364.0	366.0	368.0	370.0	371.0	372.0
132.5°	396.0	395.6	394.0	393.5	393.0	397.0	401.0	402.5	404.0	404.5	405.0
135°	429.0	428.4	426.0	426.0	426.0	429.0	432.0	433.5	435.0	436.0	437.0
137.5°	460.0	459.4	457.0	458.0	459.0	459.5	460.0	462.0	464.0	466.0	468.0
140°	488.0	487.4	485.0	486.0	487.0	488.0	489.0	490.0	491.0	494.0	497.0
142.5°	518.0	517.4	515.0	516.0	517.0	517.5	518.0	519.5	521.0	523.0	525.0
145°	550.0	549.2	546.0	545.0	544.0	545.5	547.0	548.5	550.0	550.5	551.0
147.5°	575.0	574.4	572.0	571.5	571.0	572.5	574.0	574.0	574.0	574.5	575.0
150°	595.0	594.4	592.0	592.5	593.0	593.0	593.0	593.0	593.0	593.0	593.0
152.5°	611.0	610.4	608.0	608.0	608.0	608.5	609.0	609.5	610.0	610.0	610.0
155°	629.0	628.2	625.0	625.0	625.0	626.0	627.0	628.5	630.0	629.0	628.0
157.5°	646.0	645.4	643.0	643.0	643.0	643.5	644.0	645.0	646.0	645.5	645.0
160°	663.0	662.4	660.0	659.5	659.0	657.5	656.0	655.5	655.0	655.0	655.0
162.5°	673.0	672.2	669.0	669.0	669.0	667.0	665.0	663.0	661.0	662.0	663.0
165°	681.0	680.4	678.0	677.0	676.0	676.0	676.0	674.5	673.0	673.0	673.0
167.5°	690.0	689.4	687.0	685.5	684.0	685.0	686.0	687.0	688.0	686.5	685.0
170°	698.0	697.4	695.0	693.5	692.0	692.0	692.0	692.5	693.0	692.0	691.0
172.5°	699.0	698.6	697.0	696.0	695.0	694.0	693.0	691.5	690.0	690.0	690.0
175°	700.0	699.6	698.0	697.5	697.0	696.0	695.0	693.0	691.0	690.5	690.0
177.5°	707.0	706.6	705.0	702.5	700.0	699.5	699.0	698.0	697.0	696.0	695.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0
2.5°	1711.4	1701.3	1707.5	1698.9	1684.9	1675.6	1664.7	1650.7	1634.4	1612.6	1590.8
5°	1810.2	1802.4	1783.0	1755.0	1716.1	1683.4	1644.5	1598.6	1560.5	1511.5	1465.6
7.5°	1818.7	1806.3	1770.5	1718.4	1658.5	1597.8	1551.9	1477.2	1429.0	1351.2	1299.1
10°	1741.0	1741.7	1705.9	1656.9	1594.7	1523.1	1457.0	1375.3	1304.5	1225.2	1138.1
12.5°	1626.6	1637.5	1639.0	1595.5	1534.8	1459.3	1385.4	1307.7	1219.8	1135.0	1054.8
15°	1496.7	1527.8	1530.1	1519.2	1487.4	1423.6	1355.9	1285.9	1196.4	1103.8	1013.6
17.5°	1380.8	1410.3	1437.6	1462.5	1464.0	1433.7	1392.4	1332.6	1243.1	1134.2	1028.4
20°	1292.9	1324.8	1371.4	1417.3	1467.9	1483.5	1486.6	1448.5	1352.8	1219.8	1076.6
22.5°	1256.3	1293.7	1341.1	1427.5	1516.9	1572.1	1603.3	1603.3	1502.9	1347.3	1156.0
25°	1248.5	1278.9	1351.2	1458.6	1578.4	1674.8	1734.0	1773.6	1701.3	1511.5	1254.0
27.5°	1254.0	1295.2	1384.7	1494.4	1619.6	1743.3	1840.5	1909.8	1842.1	1623.5	1345.0
30°	1275.8	1337.2	1429.8	1543.4	1672.5	1803.2	1920.6	2008.6	1958.8	1725.4	1431.3
32.5°	1313.9	1388.6	1493.6	1596.3	1724.6	1866.2	1982.1	2098.0	2061.4	1796.2	1477.2
35°	1370.7	1458.6	1554.3	1657.7	1780.6	1922.2	2045.9	2197.6	2184.4	1884.9	1523.1
37.5°	1462.5	1552.7	1640.6	1729.3	1846.0	1983.7	2137.7	2331.4	2320.5	2016.3	1597.0
40°	1624.3	1677.2	1742.5	1799.3	1909.0	2040.4	2205.4	2441.8	2480.7	2129.1	1662.4
42.5°	1825.0	1856.1	1874.8	1890.3	1946.3	2070.0	2254.4	2515.7	2579.5	2213.1	1712.9
45°	2080.9	2071.6	2034.2	1998.4	1992.2	2087.1	2276.9	2570.2	2657.3	2294.8	1764.3
47.5°	2383.5	2363.3	2261.4	2143.9	2078.6	2118.2	2316.6	2650.3	2753.0	2402.2	1828.1
50°	2732.8	2685.3	2518.9	2320.5	2199.9	2206.1	2417.0	2761.6	2879.0	2542.2	1947.1
52.5°	3056.4	2971.6	2773.2	2511.1	2338.4	2359.4	2597.4	2991.8	3137.3	2774.0	2147.0
55°	3341.9	3233.0	3019.0	2732.0	2575.6	2612.2	2886.0	3296.8	3434.5	3050.2	2349.3
57.5°	3584.6	3468.7	3257.9	3005.0	2810.6	2840.9	3143.5	3579.9	3672.5	3298.3	2543.0
59°	3695.0	3580.7	3386.2	3152.8	2970.8	3034.6	3325.5	3720.7	3760.4	3394.0	2616.9
60°	3748.7	3634.4	3463.2	3235.3	3068.8	3152.8	3422.0	3827.3	3793.1	3408.0	2644.9
62.5°	3744.8	3664.7	3551.9	3396.3	3366.0	3506.0	3735.5	3964.2	3815.6	3367.6	2662.8
65°	3437.6	3430.6	3360.5	3378.4	3505.2	3721.5	3862.3	3986.8	3768.9	3206.5	2576.4
67.5°	2867.4	2896.1	2905.5	3015.2	3311.5	3678.7	3802.4	3826.5	3565.9	2861.9	2308.0
70°	2213.9	2150.1	2255.1	2448.8	2875.9	3348.9	3524.7	3440.7	3150.5	2396.7	1884.9
72.5°	1567.5	1586.1	1737.1	1988.3	2423.2	2913.3	3188.6	2730.4	2370.3	1793.8	1336.4
75°	1179.3	1267.2	1340.3	1560.5	1968.1	2495.5	2722.7	1877.1	1544.1	1236.9	874.4
77.5°	1130.3	1123.3	1067.3	1114.0	1418.9	1748.0	1942.4	1171.5	966.9	809.0	528.2
80°	1044.7	984.8	882.9	837.8	893.8	1122.5	1233.0	753.0	643.3	565.5	297.9
82.5°	810.6	770.1	662.8	659.7	745.2	797.4	847.9	533.6	483.9	458.2	182.8
85°	514.2	528.2	541.4	660.4	826.9	836.2	659.7	325.2	255.2	359.4	116.7
87.5°	152.5	248.2	301.0	511.1	745.2	747.6	496.3	106.6	95.7	112.0	67.7
90°	7.0	7.0	8.0	9.0	9.0	9.0	8.8	7.0	7.0	7.0	8.0
92.5°	6.5	7.0	7.0	7.0	6.5	6.0	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	10.5	12.0	11.0	10.0	9.5	9.0	8.5	8.0	8.0	8.0	8.5
100°	25.0	29.0	27.5	26.0	24.5	23.0	21.0	19.0	19.0	19.0	21.0
102.5°	45.0	50.0	48.5	47.0	44.5	42.0	40.5	39.0	38.0	39.0	40.5
105°	67.5	72.0	71.0	70.0	67.5	65.0	63.0	61.0	61.0	61.0	63.0
107.5°	91.5	95.0	94.5	94.0	92.0	90.0	88.5	87.0	86.0	87.0	88.5



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CATALOG NUMBER: IST-AF-1000-LED-E1-SLL-7030-ULG

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	117.0	120.0	120.5	121.0	120.0	119.0	117.5	116.0	117.0	116.0	117.5
112.5°	145.5	148.0	149.0	150.0	149.5	149.0	148.0	147.0	147.0	147.0	148.0
115°	176.5	179.0	180.5	182.0	180.5	179.0	178.0	177.0	178.0	177.0	178.0
117.5°	208.0	211.0	213.0	215.0	212.5	210.0	209.0	208.0	209.0	208.0	209.0
120°	244.5	246.0	248.0	250.0	247.5	245.0	244.0	243.0	243.0	243.0	244.0
122.5°	278.0	279.0	281.0	283.0	280.5	278.0	277.0	276.0	277.0	276.0	277.0
125°	311.5	313.0	314.0	315.0	312.5	310.0	310.0	310.0	310.0	310.0	310.0
127.5°	342.5	345.0	345.5	346.0	346.0	346.0	345.5	345.0	347.0	345.0	345.5
130°	374.5	377.0	379.0	381.0	381.0	381.0	380.0	379.0	380.0	379.0	380.0
132.5°	408.0	411.0	413.5	416.0	415.0	414.0	414.0	414.0	415.0	414.0	414.0
135°	440.0	443.0	445.5	448.0	447.5	447.0	448.5	450.0	451.0	450.0	448.5
137.5°	470.5	473.0	474.0	475.0	475.5	476.0	478.5	481.0	482.0	481.0	478.5
140°	498.5	500.0	501.0	502.0	503.0	504.0	506.5	509.0	511.0	509.0	506.5
142.5°	526.0	527.0	530.0	533.0	533.0	533.0	533.5	534.0	536.0	534.0	533.5
145°	553.5	556.0	559.0	562.0	561.5	561.0	559.5	558.0	560.0	558.0	559.5
147.5°	577.5	580.0	582.5	585.0	585.5	586.0	584.5	583.0	585.0	583.0	584.5
150°	595.0	597.0	598.5	600.0	601.5	603.0	604.5	606.0	610.0	606.0	604.5
152.5°	610.5	611.0	612.5	614.0	616.0	618.0	620.5	623.0	628.0	623.0	620.5
155°	627.0	626.0	628.5	631.0	633.5	636.0	637.0	638.0	641.0	638.0	637.0
157.5°	644.5	644.0	646.0	648.0	649.0	650.0	650.0	650.0	655.0	650.0	650.0
160°	656.5	658.0	661.0	664.0	662.5	661.0	660.5	660.0	666.0	660.0	660.5
162.5°	665.0	667.0	669.0	671.0	670.5	670.0	669.0	668.0	674.0	668.0	669.0
165°	672.5	672.0	674.5	677.0	678.5	680.0	679.0	678.0	682.0	678.0	679.0
167.5°	681.5	678.0	681.0	684.0	686.0	688.0	688.0	688.0	694.0	688.0	688.0
170°	688.5	686.0	687.5	689.0	691.5	694.0	695.0	696.0	701.0	696.0	695.0
172.5°	689.5	689.0	690.5	692.0	693.0	694.0	695.0	696.0	701.0	696.0	695.0
175°	690.0	690.0	692.5	695.0	695.5	696.0	695.0	694.0	699.0	694.0	695.0
177.5°	694.5	694.0	696.5	699.0	700.0	701.0	699.5	698.0	702.0	698.0	699.5
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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CATALOG NUMBER: IST-AF-1000-LED-E1-SLL-7030-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0
2.5°	1568.3	1565.1	1543.4	1506.8	1509.9	1492.8	1471.0	1436.0	1429.0	1409.6	1406.5
5°	1426.7	1390.1	1342.7	1285.1	1263.3	1233.8	1203.4	1181.6	1154.4	1129.5	1163.0
7.5°	1237.6	1184.0	1128.7	1068.1	1033.1	984.8	959.2	909.4	872.8	865.8	837.0
10°	1079.7	1012.1	949.0	894.6	829.2	784.1	751.5	724.2	699.3	669.0	650.3
12.5°	974.7	898.5	831.6	763.9	732.8	695.4	675.2	649.6	613.8	588.1	563.2
15°	927.3	844.8	771.7	712.6	667.4	632.4	596.7	565.5	526.6	497.9	469.1
17.5°	921.0	813.7	721.1	655.0	606.0	567.9	520.4	479.2	431.7	399.8	375.7
20°	928.0	790.4	674.4	588.1	538.3	471.4	427.1	376.5	329.8	287.8	249.7
22.5°	956.0	777.9	628.5	533.6	459.7	383.5	336.1	271.5	231.8	191.4	176.6
25°	994.2	770.1	588.9	473.7	380.4	304.9	240.4	186.7	168.8	158.7	153.2
27.5°	1034.6	756.1	544.5	418.5	316.6	224.8	179.7	157.1	150.1	144.7	140.8
30°	1065.0	728.9	490.1	359.4	252.0	192.1	160.2	145.5	140.8	134.6	130.7
32.5°	1078.2	686.9	441.1	303.4	212.4	164.9	140.0	131.5	126.8	121.4	119.0
35°	1075.8	639.4	416.2	281.6	194.5	146.2	122.9	117.5	111.2	105.8	100.3
37.5°	1078.2	595.9	396.7	276.2	186.7	132.2	112.0	108.1	103.5	98.0	93.3
40°	1087.5	571.8	387.4	264.5	180.5	126.8	103.5	99.6	98.8	92.6	88.7
42.5°	1091.4	574.1	382.7	248.2	164.9	125.2	103.5	94.9	94.9	90.2	85.6
45°	1086.7	591.2	385.8	238.8	153.2	117.5	108.9	94.9	92.6	88.7	84.0
47.5°	1100.7	603.7	385.8	237.3	145.5	109.7	103.5	104.2	94.1	89.5	82.5
50°	1158.3	615.3	378.1	234.9	143.1	101.9	98.0	102.7	105.8	91.0	83.2
52.5°	1260.2	630.1	369.5	231.0	140.0	95.7	91.0	96.5	108.1	95.7	83.2
55°	1364.4	656.6	364.1	224.8	135.4	91.8	82.5	92.6	98.8	94.9	82.5
57.5°	1475.7	685.3	358.6	210.0	124.5	87.9	79.3	80.9	88.7	91.8	80.1
59°	1509.1	699.3	353.9	199.1	115.1	84.8	77.0	74.7	79.3	87.9	78.6
60°	1533.3	700.1	348.5	189.8	109.7	83.2	75.5	72.3	73.9	90.2	79.3
62.5°	1535.6	699.3	331.4	170.4	98.8	80.1	73.1	69.2	67.7	75.5	80.9
65°	1439.1	666.7	300.3	160.2	99.6	77.0	69.2	66.1	63.0	64.6	70.0
67.5°	1258.7	582.7	267.6	162.6	105.0	74.7	66.1	63.0	60.7	59.1	61.5
70°	952.2	483.9	258.3	168.0	109.7	73.1	61.5	58.3	56.8	56.0	56.0
72.5°	659.7	398.3	248.2	171.9	113.6	72.3	56.8	53.7	52.9	52.1	52.1
75°	424.7	289.4	205.4	146.2	103.5	66.1	51.3	48.2	47.5	46.7	47.5
77.5°	251.3	202.3	150.9	102.7	75.5	52.9	44.3	42.0	42.0	42.0	42.8
80°	139.2	119.8	100.3	66.1	53.7	39.7	36.6	34.2	34.2	35.0	36.6
82.5°	83.2	66.1	56.8	42.0	36.6	28.0	27.2	25.7	26.4	27.2	28.8
85°	54.5	42.0	34.2	28.0	24.9	17.9	15.6	16.3	17.1	18.7	19.4
87.5°	30.3	23.3	18.7	16.3	14.8	7.8	6.2	6.2	7.8	9.3	10.9
90°	9.0	9.0	9.0	8.0	7.0	7.0	7.0	7.5	8.0	8.0	8.0
92.5°	6.0	6.5	7.0	7.0	7.0	6.5	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	9.0	9.5	10.0	11.0	12.0	10.5	9.0	9.0	9.0	8.5	8.0
100°	23.0	24.5	26.0	27.5	29.0	25.0	21.0	16.5	12.0	11.0	10.0
102.5°	42.0	44.5	47.0	48.5	50.0	45.0	40.0	33.5	27.0	22.5	18.0
105°	65.0	67.5	70.0	71.0	72.0	67.5	63.0	55.5	48.0	42.0	36.0
107.5°	90.0	92.0	94.0	94.5	95.0	91.5	88.0	80.5	73.0	65.5	58.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	119.0	120.0	121.0	120.5	120.0	117.0	114.0	108.0	102.0	94.5	87.0	0°
112.5°	149.0	149.5	150.0	149.0	148.0	145.5	143.0	138.5	134.0	127.5	121.0	2.5°
115°	179.0	180.5	182.0	180.5	179.0	176.5	174.0	171.0	168.0	163.5	159.0	5°
117.5°	210.0	212.5	215.0	213.0	211.0	208.0	205.0	203.5	202.0	199.5	197.0	7.5°
120°	245.0	247.5	250.0	248.0	246.0	244.5	243.0	240.0	237.0	235.0	233.0	10°
122.5°	278.0	280.5	283.0	281.0	279.0	278.0	277.0	274.0	271.0	269.0	267.0	12.5°
125°	310.0	312.5	315.0	314.0	313.0	311.5	310.0	307.5	305.0	302.0	299.0	15°
127.5°	346.0	346.0	346.0	345.5	345.0	342.5	340.0	339.5	339.0	336.0	333.0	17.5°
130°	381.0	381.0	381.0	379.0	377.0	374.5	372.0	371.0	370.0	368.0	366.0	20°
132.5°	414.0	415.0	416.0	413.5	411.0	408.0	405.0	404.5	404.0	402.5	401.0	22.5°
135°	447.0	447.5	448.0	445.5	443.0	440.0	437.0	436.0	435.0	433.5	432.0	25°
137.5°	476.0	475.5	475.0	474.0	473.0	470.5	468.0	466.0	464.0	462.0	460.0	27.5°
140°	504.0	503.0	502.0	501.0	500.0	498.5	497.0	494.0	491.0	490.0	489.0	30°
142.5°	533.0	533.0	533.0	530.0	527.0	526.0	525.0	523.0	521.0	519.5	518.0	32.5°
145°	561.0	561.5	562.0	559.0	556.0	553.5	551.0	550.5	550.0	548.5	547.0	35°
147.5°	586.0	585.5	585.0	582.5	580.0	577.5	575.0	574.5	574.0	574.0	574.0	37.5°
150°	603.0	601.5	600.0	598.5	597.0	595.0	593.0	593.0	593.0	593.0	593.0	40°
152.5°	618.0	616.0	614.0	612.5	611.0	610.5	610.0	610.0	610.0	609.5	609.0	42.5°
155°	636.0	633.5	631.0	628.5	626.0	627.0	628.0	629.0	630.0	628.5	627.0	45°
157.5°	650.0	649.0	648.0	646.0	644.0	644.5	645.0	645.5	646.0	645.0	644.0	47.5°
160°	661.0	662.5	664.0	661.0	658.0	656.5	655.0	655.0	655.0	655.5	656.0	50°
162.5°	670.0	670.5	671.0	669.0	667.0	665.0	663.0	662.0	661.0	663.0	665.0	52.5°
165°	680.0	678.5	677.0	674.5	672.0	672.5	673.0	673.0	673.0	674.5	676.0	55°
167.5°	688.0	686.0	684.0	681.0	678.0	681.5	685.0	686.5	688.0	687.0	686.0	57.5°
170°	694.0	691.5	689.0	687.5	686.0	688.5	691.0	692.0	693.0	692.5	692.0	59°
172.5°	694.0	693.0	692.0	690.5	689.0	689.5	690.0	690.0	690.0	691.5	693.0	60°
175°	696.0	695.5	695.0	692.5	690.0	690.0	690.0	690.5	691.0	693.0	695.0	62.5°
177.5°	701.0	700.0	699.0	696.5	694.0	694.5	695.0	696.0	697.0	698.0	699.0	65°
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	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°

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REPORT NUMBER: P
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DISTRIBUTION (continued):

CANDELA DISTRIBUTION

160°	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	110°	160°
1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	110°	80.5
1417.3	1394.8	1370.7	1352.8	1360.6	1334.9	1337.2	1330.2	1327.1	1325.6	1309.2	112.5°	113.5
1122.5	1131.1	1095.3	1099.2	1110.1	1083.6	1065.7	1095.3	1091.4	1065.0	1079.7	115°	153.0
809.0	811.4	795.0	758.5	758.5	777.9	784.9	798.9	808.2	840.9	820.7	117.5°	193.0
618.4	596.7	580.3	564.0	554.6	535.2	539.9	557.0	567.9	586.5	601.3	120°	229.5
537.5	513.4	484.6	459.7	446.5	428.6	417.0	413.1	417.0	405.3	406.1	122.5°	264.0
446.5	424.7	392.8	379.6	354.7	340.7	332.9	322.8	315.1	298.7	291.7	125°	297.5
346.2	317.4	284.7	284.7	266.8	255.2	252.0	249.7	245.0	236.5	227.9	127.5°	331.0
230.3	211.6	192.9	183.6	185.1	183.6	178.9	186.7	186.7	189.8	188.3	130°	364.0
168.0	164.9	157.9	152.5	149.4	148.6	149.4	151.7	156.4	160.2	164.1	132.5°	397.0
150.9	149.4	143.1	137.7	136.9	135.4	135.4	137.7	138.5	139.2	138.5	135°	429.0
140.0	136.9	131.5	127.6	126.0	125.2	126.0	123.7	122.1	122.9	122.1	137.5°	459.5
126.8	124.5	119.0	115.9	115.1	115.1	112.8	112.0	110.5	111.2	110.5	140°	488.0
116.7	113.6	108.1	104.2	104.2	103.5	104.2	103.5	102.7	101.9	101.9	142.5°	517.5
98.0	97.2	91.8	90.2	91.0	93.3	93.3	93.3	94.1	93.3	93.3	145°	545.5
91.0	90.2	84.8	80.9	80.1	80.1	80.1	81.7	84.0	84.8	86.3	147.5°	572.5
86.3	85.6	80.1	77.0	75.5	74.7	73.9	73.9	74.7	77.8	80.1	150°	593.0
83.2	81.7	76.2	72.3	71.6	70.8	70.0	70.0	70.0	70.8	73.1	152.5°	608.5
81.7	79.3	73.1	69.2	67.7	66.9	66.9	67.7	66.9	66.9	66.9	155°	626.0
79.3	77.8	71.6	66.9	65.3	65.3	64.6	64.6	64.6	63.0	63.0	157.5°	643.5
78.6	76.2	70.0	65.3	63.8	63.0	62.2	63.0	61.5	60.7	59.9	160°	657.5
77.0	73.9	66.9	63.0	62.2	60.7	59.9	59.9	59.9	58.3	58.3	162.5°	667.0
76.2	72.3	65.3	61.5	59.9	58.3	57.6	57.6	59.1	57.6	57.6	165°	676.0
75.5	70.0	63.0	58.3	57.6	56.0	55.2	56.0	58.3	56.8	56.0	167.5°	685.0
72.3	68.5	61.5	57.6	56.0	54.5	53.7	54.5	56.0	56.0	56.0	170°	692.0
70.8	66.9	59.9	56.0	55.2	53.7	52.9	52.9	55.2	55.2	54.5	172.5°	694.0
68.5	65.3	58.3	53.7	52.1	52.1	51.3	51.3	52.1	52.1	52.9	175°	696.0
65.3	63.8	56.8	51.3	50.6	49.8	49.8	49.8	49.8	51.3	51.3	177.5°	699.5
62.2	61.5	54.5	49.8	48.2	48.2	48.2	48.2	48.2	49.0	49.8	180°	700.0
57.6	57.6	51.3	46.7	45.9	45.1	45.1	45.1	45.1	45.9	46.7		
52.9	53.7	47.5	42.8	42.0	42.0	42.0	42.0	42.8	42.8	43.6		
48.2	49.0	42.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1	39.7		
43.6	43.6	36.6	31.9	32.7	33.4	34.2	33.4	33.4	34.2	36.6		
37.3	36.6	30.3	26.4	26.4	28.0	28.8	28.0	28.8	28.8	31.9		
29.6	29.6	23.3	19.4	19.4	22.6	22.6	22.6	23.3	24.1	26.4		
22.6	21.8	16.3	13.2	13.2	15.6	16.3	17.1	17.9	18.7	20.2		
13.2	13.2	8.6	5.4	6.2	7.0	9.3	9.3	9.3	10.9	13.2		
7.5	7.8	6.0	5.0	5.0	5.0	6.0	7.0	7.5	8.0	8.0		
5.5	5.0	4.5	4.0	4.0	4.0	4.5	5.0	5.5	6.0	6.0		
6.5	6.0	5.5	5.0	5.0	5.0	5.5	6.0	6.5	7.0	7.0		
8.0	8.0	7.5	7.0	7.0	7.0	7.5	8.0	8.0	8.0	8.5		
9.5	9.0	8.5	8.0	8.0	8.0	8.5	9.0	9.5	10.0	11.0		
15.5	13.0	12.0	11.0	11.0	11.0	12.0	13.0	15.5	18.0	22.5		
31.5	27.0	24.5	22.0	21.0	22.0	24.5	27.0	31.5	36.0	42.0		
53.5	49.0	45.5	42.0	41.0	42.0	45.5	49.0	53.5	58.0	65.5		

'227234
 IST-AF-1000-LED-E1-SLL-7030-ULG

REPORT NUMBER: P227234
 CATALOG NUMBER: IST-AF-10

TION (continued):

CANDELA DISTRIBUTION (con

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°		215°	220°
74.0	71.0	68.0	66.0	68.0	71.0	74.0	80.5	87.0	94.5	0°	1527.0	1527.0
106.0	102.5	99.0	99.0	99.0	102.5	106.0	113.5	121.0	127.5	2.5°	1323.2	1322.4
147.0	143.0	139.0	140.0	139.0	143.0	147.0	153.0	159.0	163.5	5°	1086.0	1079.0
189.0	186.5	184.0	184.0	184.0	186.5	189.0	193.0	197.0	199.5	7.5°	841.7	867.4
226.0	224.5	223.0	225.0	223.0	224.5	226.0	229.5	233.0	235.0	10°	606.8	624.7
261.0	260.5	260.0	263.0	260.0	260.5	261.0	264.0	267.0	269.0	12.5°	422.4	431.7
296.0	295.0	294.0	298.0	294.0	295.0	296.0	297.5	299.0	302.0	15°	290.9	309.6
329.0	329.0	329.0	330.0	329.0	329.0	329.0	331.0	333.0	336.0	17.5°	226.4	228.7
362.0	361.5	361.0	363.0	361.0	361.5	362.0	364.0	366.0	368.0	20°	186.7	188.3
393.0	393.5	394.0	396.0	394.0	393.5	393.0	397.0	401.0	402.5	22.5°	165.7	168.8
426.0	426.0	426.0	429.0	426.0	426.0	426.0	429.0	432.0	433.5	25°	139.2	142.4
459.0	458.0	457.0	460.0	457.0	458.0	459.0	459.5	460.0	462.0	27.5°	122.9	126.0
487.0	486.0	485.0	488.0	485.0	486.0	487.0	488.0	489.0	490.0	30°	112.8	114.4
517.0	516.0	515.0	518.0	515.0	516.0	517.0	517.5	518.0	519.5	32.5°	102.7	102.7
544.0	545.0	546.0	550.0	546.0	545.0	544.0	545.5	547.0	548.5	35°	94.1	94.9
571.0	571.5	572.0	575.0	572.0	571.5	571.0	572.5	574.0	574.0	37.5°	87.9	89.5
593.0	592.5	592.0	595.0	592.0	592.5	593.0	593.0	593.0	593.0	40°	82.5	83.2
608.0	608.0	608.0	611.0	608.0	608.0	608.0	608.5	609.0	609.5	42.5°	74.7	76.2
625.0	625.0	625.0	629.0	625.0	625.0	625.0	626.0	627.0	628.5	45°	67.7	68.5
643.0	643.0	643.0	646.0	643.0	643.0	643.0	643.5	644.0	645.0	47.5°	63.0	63.0
659.0	659.5	660.0	663.0	660.0	659.5	659.0	657.5	656.0	655.5	50°	59.9	60.7
669.0	669.0	669.0	673.0	669.0	669.0	669.0	667.0	665.0	663.0	52.5°	58.3	59.1
676.0	677.0	678.0	681.0	678.0	677.0	676.0	676.0	676.0	674.5	55°	57.6	59.1
684.0	685.5	687.0	690.0	687.0	685.5	684.0	685.0	686.0	687.0	57.5°	57.6	58.3
692.0	693.5	695.0	698.0	695.0	693.5	692.0	692.0	692.0	692.5	59°	56.8	57.6
695.0	696.0	697.0	699.0	697.0	696.0	695.0	694.0	693.0	691.5	60°	56.8	58.3
697.0	697.5	698.0	700.0	698.0	697.5	697.0	696.0	695.0	693.0	62.5°	54.5	56.0
700.0	702.5	705.0	707.0	705.0	702.5	700.0	699.5	699.0	698.0	65°	52.9	54.5
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	50.6	52.9
										70°	48.2	50.6
										72.5°	45.1	48.2
										75°	42.0	44.3
										77.5°	38.1	40.5
										80°	33.4	34.2
										82.5°	28.0	28.0
										85°	21.0	18.7
										87.5°	11.7	12.4
										90°	8.0	7.5
										92.5°	6.0	6.0
										95°	7.0	7.0
										97.5°	9.0	9.0
										100°	12.0	16.5
										102.5°	27.0	33.5
										105°	48.0	55.5
										107.5°	73.0	80.5



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tinued):

CANDELA DISTRIBUTION (continued):

225°	230°	235°	240°	245°	250°	255°	260°	265°		215°	220°	225°
1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	110°	102.0	108.0	114.0
1306.1	1306.1	1329.4	1331.8	1304.5	1311.5	1324.8	1309.2	1326.3	112.5°	134.0	138.5	143.0
1096.1	1086.7	1087.5	1081.3	1092.2	1079.7	1093.0	1088.3	1084.4	115°	168.0	171.0	174.0
851.0	867.4	855.7	833.1	851.0	837.0	810.6	812.9	783.4	117.5°	202.0	203.5	205.0
639.4	627.8	621.5	610.7	581.9	587.3	557.8	562.4	572.5	120°	237.0	240.0	243.0
441.1	432.5	442.6	435.6	424.0	426.3	432.5	438.7	455.1	122.5°	271.0	274.0	277.0
309.6	305.7	303.4	308.1	321.3	328.3	338.4	357.1	366.4	125°	305.0	307.5	310.0
232.6	233.4	231.0	238.0	248.9	254.4	256.7	258.3	269.2	127.5°	339.0	339.5	340.0
192.1	195.3	194.5	196.8	193.7	190.6	192.9	188.3	184.4	130°	370.0	371.0	372.0
168.0	168.8	164.9	164.1	159.5	155.6	152.5	152.5	150.9	132.5°	404.0	404.5	405.0
142.4	143.1	139.2	139.2	138.5	140.8	139.2	136.1	135.4	135°	435.0	436.0	437.0
127.6	126.0	123.7	123.7	122.1	122.1	122.9	123.7	122.9	137.5°	464.0	466.0	468.0
114.4	112.8	112.0	112.8	112.0	112.8	113.6	112.8	113.6	140°	491.0	494.0	497.0
105.0	103.5	103.5	104.2	103.5	104.2	104.2	104.2	103.5	142.5°	521.0	523.0	525.0
97.2	95.7	95.7	95.7	94.9	93.3	91.8	89.5	87.1	145°	550.0	550.5	551.0
91.0	90.2	88.7	87.9	85.6	80.9	79.3	79.3	79.3	147.5°	574.0	574.5	575.0
85.6	84.0	83.2	80.1	77.0	75.5	75.5	75.5	75.5	150°	593.0	593.0	593.0
78.6	76.2	74.7	73.9	73.1	73.1	72.3	72.3	72.3	152.5°	610.0	610.0	610.0
70.0	69.2	69.2	70.0	70.0	70.0	70.0	69.2	70.0	155°	630.0	629.0	628.0
64.6	64.6	65.3	66.1	66.9	67.7	68.5	67.7	68.5	157.5°	646.0	645.5	645.0
62.2	62.2	62.2	63.8	64.6	65.3	66.9	66.9	66.9	160°	655.0	655.0	655.0
60.7	60.7	61.5	62.2	63.0	63.8	64.6	65.3	66.1	162.5°	661.0	662.0	663.0
59.9	60.7	59.9	60.7	61.5	63.0	63.8	63.8	64.6	165°	673.0	673.0	673.0
59.9	59.9	59.9	59.9	61.5	62.2	61.5	62.2	63.0	167.5°	688.0	686.5	685.0
59.9	59.9	59.1	59.9	60.7	61.5	60.7	60.7	62.2	170°	693.0	692.0	691.0
59.1	59.9	59.1	59.1	59.9	60.7	59.9	60.7	61.5	172.5°	690.0	690.0	690.0
57.6	58.3	57.6	58.3	58.3	59.1	59.1	59.1	59.9	175°	691.0	690.5	690.0
56.0	56.0	56.0	56.8	56.8	57.6	57.6	58.3	57.6	177.5°	697.0	696.0	695.0
54.5	54.5	54.5	55.2	55.2	56.0	56.8	56.0	56.0	180°	700.0	700.0	700.0
52.9	52.1	51.3	52.1	52.9	52.9	53.7	52.9	53.7				
50.6	49.8	49.0	49.0	49.8	49.8	50.6	49.8	49.8				
46.7	46.7	45.1	45.1	45.1	45.1	45.9	45.1	44.3				
42.0	42.0	40.5	40.5	40.5	40.5	39.7	39.7	39.7				
35.0	35.8	35.8	35.0	35.0	34.2	34.2	33.4	32.7				
26.4	28.0	28.8	28.8	28.8	28.8	28.8	27.2	25.7				
18.7	21.0	23.3	23.3	22.6	22.6	22.6	20.2	17.9				
11.7	14.0	14.8	16.3	14.0	13.2	13.2	11.7	10.9				
7.0	7.0	8.6	8.8	11.3	11.3	12.1	9.6	7.8				
6.0	6.5	7.0	7.0	7.0	6.5	6.0	6.0	6.0				
7.0	7.0	7.0	7.5	8.0	7.5	7.0	7.0	7.0				
9.0	10.5	12.0	11.0	10.0	9.5	9.0	8.5	8.0				
21.0	25.0	29.0	27.5	26.0	24.5	23.0	21.0	19.0				
40.0	45.0	50.0	48.5	47.0	44.5	42.0	40.5	39.0				
63.0	67.5	72.0	71.0	70.0	67.5	65.0	63.0	61.0				
88.0	91.5	95.0	94.5	94.0	92.0	90.0	88.5	87.0				



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CATALOG NUMBER: IST-AF-1000-LED-E1-SLL-7030-

-SLL-7030-ULG

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°		270°	275°	280°	285°
117.0	120.0	120.5	121.0	120.0	119.0	117.5	116.0	0°	1527.0	1527.0	1527.0	1527.0
145.5	148.0	149.0	150.0	149.5	149.0	148.0	147.0	2.5°	1311.5	1340.3	1344.2	1348.1
176.5	179.0	180.5	182.0	180.5	179.0	178.0	177.0	5°	1078.2	1107.0	1090.6	1097.6
208.0	211.0	213.0	215.0	212.5	210.0	209.0	208.0	7.5°	787.2	768.6	792.7	807.5
244.5	246.0	248.0	250.0	247.5	245.0	244.0	243.0	10°	574.9	596.7	606.0	623.1
278.0	279.0	281.0	283.0	280.5	278.0	277.0	276.0	12.5°	476.9	490.9	508.0	535.2
311.5	313.0	314.0	315.0	312.5	310.0	310.0	310.0	15°	386.6	396.7	418.5	445.0
342.5	345.0	345.5	346.0	346.0	346.0	345.5	345.0	17.5°	281.6	296.4	310.4	332.2
374.5	377.0	379.0	381.0	381.0	381.0	380.0	379.0	20°	189.0	195.3	212.4	222.5
408.0	411.0	413.5	416.0	415.0	414.0	414.0	414.0	22.5°	151.7	154.0	157.1	165.7
440.0	443.0	445.5	448.0	447.5	447.0	448.5	450.0	25°	136.1	137.7	140.0	143.1
470.5	473.0	474.0	475.0	475.5	476.0	478.5	481.0	27.5°	123.7	124.5	126.8	128.4
498.5	500.0	501.0	502.0	503.0	504.0	506.5	509.0	30°	112.8	112.0	112.8	115.1
526.0	527.0	530.0	533.0	533.0	533.0	533.5	534.0	32.5°	101.1	101.1	102.7	102.7
553.5	556.0	559.0	562.0	561.5	561.0	559.5	558.0	35°	87.1	86.3	87.9	90.2
577.5	580.0	582.5	585.0	585.5	586.0	584.5	583.0	37.5°	80.1	80.9	82.5	84.0
595.0	597.0	598.5	600.0	601.5	603.0	604.5	606.0	40°	76.2	77.0	78.6	80.1
610.5	611.0	612.5	614.0	616.0	618.0	620.5	623.0	42.5°	72.3	73.9	75.5	77.8
627.0	626.0	628.5	631.0	633.5	636.0	637.0	638.0	45°	70.0	71.6	73.9	76.2
644.5	644.0	646.0	648.0	649.0	650.0	650.0	650.0	47.5°	69.2	70.8	73.1	76.2
656.5	658.0	661.0	664.0	662.5	661.0	660.5	660.0	50°	67.7	70.0	72.3	75.5
665.0	667.0	669.0	671.0	670.5	670.0	669.0	668.0	52.5°	67.7	69.2	71.6	75.5
672.5	672.0	674.5	677.0	678.5	680.0	679.0	678.0	55°	65.3	67.7	70.0	73.9
681.5	678.0	681.0	684.0	686.0	688.0	688.0	688.0	57.5°	63.8	65.3	68.5	73.1
688.5	686.0	687.5	689.0	691.5	694.0	695.0	696.0	59°	63.0	64.6	67.7	72.3
689.5	689.0	690.5	692.0	693.0	694.0	695.0	696.0	60°	61.5	63.8	66.9	71.6
690.0	690.0	692.5	695.0	695.5	696.0	695.0	694.0	62.5°	59.9	62.2	65.3	70.0
694.5	694.0	696.5	699.0	700.0	701.0	699.5	698.0	65°	57.6	60.7	63.8	66.9
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	56.0	57.6	60.7	63.8
								70°	52.9	54.5	56.8	59.1
								72.5°	49.0	49.8	51.3	53.7
								75°	43.6	44.3	45.1	47.5
								77.5°	38.1	38.1	38.9	42.0
								80°	31.9	31.9	32.7	34.2
								82.5°	24.1	24.1	25.7	28.0
								85°	17.1	16.3	18.7	20.2
								87.5°	10.1	9.3	10.1	10.1
								90°	7.8	9.3	9.6	10.6
								92.5°	6.0	6.0	6.0	6.0
								95°	7.0	7.0	7.0	7.0
								97.5°	8.0	8.0	8.5	9.0
								100°	19.0	19.0	21.0	23.0
								102.5°	38.0	39.0	40.5	42.0
								105°	61.0	61.0	63.0	65.0
								107.5°	86.0	87.0	88.5	90.0



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CATALOG NUMBER: IST-AF-1000-LED-E1-SLL-7030-ULG

ULG

CANDELA DISTRIBUTION (continued):

290°	295°	300°	305°	310°	315°	320°		270°	275°	280°	285°	290°
1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0	110°	117.0	116.0	117.5	119.0	120.0
1363.7	1355.9	1362.1	1386.2	1394.8	1405.7	1442.2	112.5°	147.0	147.0	148.0	149.0	149.5
1114.7	1124.9	1114.7	1163.7	1166.1	1198.8	1212.0	115°	178.0	177.0	178.0	179.0	180.5
819.1	832.4	854.1	886.8	896.1	942.8	982.5	117.5°	209.0	208.0	209.0	210.0	212.5
639.4	656.6	686.9	707.1	727.3	754.6	786.5	120°	243.0	243.0	244.0	245.0	247.5
567.9	585.8	612.2	637.9	666.7	687.7	714.1	122.5°	277.0	276.0	277.0	278.0	280.5
474.5	502.5	528.2	561.6	585.8	623.9	655.0	125°	310.0	310.0	310.0	310.0	312.5
362.5	401.4	427.1	467.5	504.1	537.5	579.5	127.5°	347.0	345.0	345.5	346.0	346.0
252.0	282.4	315.1	358.6	406.1	452.0	508.0	130°	380.0	379.0	380.0	381.0	381.0
173.5	189.8	214.7	259.8	308.8	375.0	435.6	132.5°	415.0	414.0	414.0	414.0	415.0
147.8	154.0	163.4	185.1	226.4	298.7	365.6	135°	451.0	450.0	448.5	447.0	447.5
131.5	136.1	142.4	153.2	175.0	224.8	298.7	137.5°	482.0	481.0	478.5	476.0	475.5
120.6	126.0	132.2	140.0	151.7	185.9	241.2	140°	511.0	509.0	506.5	504.0	503.0
105.8	109.7	115.1	123.7	132.2	159.5	213.1	142.5°	536.0	534.0	533.5	533.0	533.0
93.3	98.0	105.0	111.2	119.8	141.6	193.7	145°	560.0	558.0	559.5	561.0	561.5
87.1	91.8	98.0	103.5	109.7	127.6	179.7	147.5°	585.0	583.0	584.5	586.0	585.5
83.2	87.9	94.1	98.8	102.7	122.9	174.3	150°	610.0	606.0	604.5	603.0	601.5
80.9	86.3	91.8	94.9	102.7	125.2	161.0	152.5°	628.0	623.0	620.5	618.0	616.0
80.1	85.6	91.8	97.2	112.8	118.2	152.5	155°	641.0	638.0	637.0	636.0	633.5
80.9	85.6	93.3	108.9	109.7	112.0	143.1	157.5°	655.0	650.0	650.0	650.0	649.0
80.9	87.9	104.2	113.6	104.2	105.8	134.6	160°	666.0	660.0	660.5	661.0	662.5
81.7	91.0	108.1	105.8	101.1	98.8	125.2	162.5°	674.0	668.0	669.0	670.0	670.5
81.7	89.5	103.5	99.6	93.3	94.1	114.4	165°	682.0	678.0	679.0	680.0	678.5
79.3	89.5	99.6	90.2	85.6	89.5	105.0	167.5°	694.0	688.0	688.0	688.0	686.0
77.8	91.8	88.7	83.2	83.2	87.1	100.3	170°	701.0	696.0	695.0	694.0	691.5
77.0	94.1	84.0	80.9	80.9	86.3	98.0	172.5°	701.0	696.0	695.0	694.0	693.0
74.7	87.9	77.0	75.5	77.8	81.7	94.9	175°	699.0	694.0	695.0	696.0	695.5
70.0	73.1	70.8	70.8	73.9	78.6	93.3	177.5°	702.0	698.0	699.5	701.0	700.0
64.6	66.1	66.1	66.9	70.0	73.9	94.9	180°	700.0	700.0	700.0	700.0	700.0
59.9	59.9	61.5	62.2	64.6	70.0	91.0						
54.5	55.2	55.2	56.8	58.3	63.8	87.9						
48.2	48.2	49.8	49.8	52.1	57.6	78.6						
42.0	42.0	42.0	42.8	44.3	49.8	64.6						
35.0	35.0	35.0	35.8	36.6	41.2	49.0						
28.0	27.2	26.4	26.4	28.0	31.9	38.1						
19.4	19.4	18.7	18.7	18.7	21.0	25.7						
10.9	9.3	10.1	10.9	10.1	11.7	14.0						
9.8	10.6	10.3	10.1	10.1	10.1	12.2						
6.5	7.0	7.0	7.0	6.5	6.0	6.0						
7.5	8.0	7.5	7.0	7.0	7.0	7.0						
9.5	10.0	11.0	12.0	10.5	9.0	9.0						
24.5	26.0	27.5	29.0	25.0	21.0	16.5						
44.5	47.0	48.5	50.0	45.0	40.0	33.5						
67.5	70.0	71.0	72.0	67.5	63.0	55.5						
92.0	94.0	94.5	95.0	91.5	88.0	80.5						



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CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°		325°	330°	335°	340°	345°	350°
121.0	120.5	120.0	117.0	114.0	108.0	0°	1527.0	1527.0	1527.0	1527.0	1527.0	1527.0
150.0	149.0	148.0	145.5	143.0	138.5	2.5°	1437.6	1457.8	1489.7	1495.9	1521.6	1539.5
182.0	180.5	179.0	176.5	174.0	171.0	5°	1218.2	1266.4	1283.5	1317.0	1375.3	1404.9
215.0	213.0	211.0	208.0	205.0	203.5	7.5°	1005.1	1041.6	1082.8	1136.5	1179.3	1229.9
250.0	248.0	246.0	244.5	243.0	240.0	10°	826.9	879.0	932.7	976.3	1036.2	1096.8
283.0	281.0	279.0	278.0	277.0	274.0	12.5°	734.3	763.1	816.0	877.5	952.2	1019.8
315.0	314.0	313.0	311.5	310.0	307.5	15°	686.1	720.3	777.1	842.5	921.8	1005.8
346.0	345.5	345.0	342.5	340.0	339.5	17.5°	626.2	680.7	745.2	838.6	941.3	1058.0
381.0	379.0	377.0	374.5	372.0	371.0	20°	567.1	633.2	718.0	840.9	983.3	1135.0
416.0	413.5	411.0	408.0	405.0	404.5	22.5°	515.0	593.5	700.9	854.9	1036.9	1239.2
448.0	445.5	443.0	440.0	437.0	436.0	25°	453.5	558.5	687.7	883.7	1119.4	1379.2
475.0	474.0	473.0	470.5	468.0	466.0	27.5°	404.5	525.1	668.2	908.6	1194.9	1513.8
502.0	501.0	500.0	498.5	497.0	494.0	30°	350.1	486.2	641.0	917.1	1286.7	1624.3
533.0	530.0	527.0	526.0	525.0	523.0	32.5°	306.5	449.6	609.9	909.4	1327.9	1701.3
562.0	559.0	556.0	553.5	551.0	550.5	35°	285.5	423.2	583.4	882.1	1362.1	1784.5
585.0	582.5	580.0	577.5	575.0	574.5	37.5°	271.5	394.4	557.8	837.0	1401.0	1867.0
600.0	598.5	597.0	595.0	593.0	593.0	40°	253.6	371.8	536.8	804.4	1431.3	1935.4
614.0	612.5	611.0	610.5	610.0	610.0	42.5°	237.3	351.6	520.4	775.6	1439.1	1996.9
631.0	628.5	626.0	627.0	628.0	629.0	45°	223.3	339.2	508.0	777.1	1444.6	2082.5
648.0	646.0	644.0	644.5	645.0	645.5	47.5°	212.4	327.5	503.3	803.6	1502.1	2201.5
664.0	661.0	658.0	656.5	655.0	655.0	50°	202.3	317.4	495.5	854.9	1594.7	2362.5
671.0	669.0	667.0	665.0	663.0	662.0	52.5°	190.6	303.4	485.4	907.8	1695.8	2578.0
677.0	674.5	672.0	672.5	673.0	673.0	55°	175.0	284.7	474.5	952.2	1833.5	2840.1
684.0	681.0	678.0	681.5	685.0	686.5	57.5°	150.9	262.9	467.5	974.7	1918.3	2991.0
689.0	687.5	686.0	688.5	691.0	692.0	59°	138.5	241.9	463.6	963.8	1940.9	3016.7
692.0	690.5	689.0	689.5	690.0	690.0	60°	131.5	229.5	457.4	950.6	1947.1	3000.4
695.0	692.5	690.0	690.0	690.0	690.5	62.5°	122.1	199.9	431.7	884.5	1860.0	2802.8
699.0	696.5	694.0	694.5	695.0	696.0	65°	124.5	189.0	373.4	753.0	1660.0	2417.0
700.0	700.0	700.0	700.0	700.0	700.0	67.5°	127.6	184.4	322.8	608.3	1323.2	2000.0
						70°	125.2	182.0	293.3	483.9	991.1	1497.5
						72.5°	122.1	171.9	254.4	389.0	628.5	1048.6
						75°	108.1	144.7	199.9	266.8	396.7	763.9
						77.5°	84.8	111.2	141.6	165.7	201.5	539.1
						80°	62.2	80.9	92.6	99.6	112.0	367.9
						82.5°	44.3	54.5	59.1	63.0	74.7	275.4
						85°	33.4	38.1	41.2	41.2	50.6	194.5
						87.5°	18.7	19.4	19.4	21.0	24.9	52.9
						90°	13.4	13.4	12.7	12.9	10.9	9.1
						92.5°	6.0	6.0	6.0	5.5	5.0	4.5
						95°	7.0	7.0	7.0	6.5	6.0	5.5
						97.5°	9.0	8.5	8.0	8.0	8.0	7.5
						100°	12.0	11.0	10.0	9.5	9.0	8.5
						102.5°	27.0	22.5	18.0	15.5	13.0	12.0
						105°	48.0	42.0	36.0	31.5	27.0	24.5
						107.5°	73.0	65.5	58.0	53.5	49.0	45.5



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CANDELA DISTRIBUTION (continued):

355°	359°	360°		325°	330°	335°	340°	345°	350°	355°
1527.0	1527.0	1527.0	110°	102.0	94.5	87.0	80.5	74.0	71.0	68.0
1559.7	1571.4	1580.7	112.5°	134.0	127.5	121.0	113.5	106.0	102.5	99.0
1450.0	1478.8	1484.2	115°	168.0	163.5	159.0	153.0	147.0	143.0	139.0
1285.9	1332.6	1348.9	117.5°	202.0	199.5	197.0	193.0	189.0	186.5	184.0
1165.3	1215.9	1233.0	120°	237.0	235.0	233.0	229.5	226.0	224.5	223.0
1099.2	1158.3	1177.0	122.5°	271.0	269.0	267.0	264.0	261.0	260.5	260.0
1100.7	1171.5	1198.8	125°	305.0	302.0	299.0	297.5	296.0	295.0	294.0
1172.3	1253.2	1286.7	127.5°	339.0	336.0	333.0	331.0	329.0	329.0	329.0
1295.2	1412.7	1437.6	130°	370.0	368.0	366.0	364.0	362.0	361.5	361.0
1461.7	1576.8	1614.2	132.5°	404.0	402.5	401.0	397.0	393.0	393.5	394.0
1618.0	1770.5	1799.3	135°	435.0	433.5	432.0	429.0	426.0	426.0	426.0
1772.1	1923.0	1948.7	137.5°	464.0	462.0	460.0	459.5	459.0	458.0	457.0
1891.1	2049.0	2070.8	140°	491.0	490.0	489.0	488.0	487.0	486.0	485.0
2005.4	2183.6	2207.7	142.5°	521.0	519.5	518.0	517.5	517.0	516.0	515.0
2133.0	2329.8	2357.8	145°	550.0	548.5	547.0	545.5	544.0	545.0	546.0
2248.1	2473.7	2491.6	147.5°	574.0	574.0	574.0	572.5	571.0	571.5	572.0
2375.7	2591.2	2595.9	150°	593.0	593.0	593.0	593.0	593.0	592.5	592.0
2480.0	2678.3	2679.9	152.5°	610.0	609.5	609.0	608.5	608.0	608.0	608.0
2581.1	2760.0	2760.8	155°	630.0	628.5	627.0	626.0	625.0	625.0	625.0
2686.9	2849.5	2837.8	157.5°	646.0	645.0	644.0	643.5	643.0	643.0	643.0
2854.1	2955.3	2966.9	160°	655.0	655.5	656.0	657.5	659.0	659.5	660.0
3108.5	3198.7	3212.0	162.5°	661.0	663.0	665.0	667.0	669.0	669.0	669.0
3404.1	3529.4	3511.5	165°	673.0	674.5	676.0	676.0	676.0	677.0	678.0
3529.4	3672.5	3687.3	167.5°	688.0	687.0	686.0	685.0	684.0	685.5	687.0
3508.4	3703.6	3728.5	170°	693.0	692.5	692.0	692.0	692.0	693.5	695.0
3474.9	3694.3	3724.6	172.5°	690.0	691.5	693.0	694.0	695.0	696.0	697.0
3285.1	3597.0	3644.5	175°	691.0	693.0	695.0	696.0	697.0	697.5	698.0
2966.2	3395.6	3462.5	177.5°	697.0	698.0	699.0	699.5	700.0	702.5	705.0
2556.2	3094.5	3148.2	180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0
1994.5	2515.0	2560.9								
1325.6	1726.9	1806.3								
842.5	1114.0	1099.2								
621.5	724.2	725.0								
451.2	497.1	491.6								
349.3	303.4	302.6								
122.1	107.4	105.0								
52.9	44.3	45.1								
7.3	7.3	8.1								
4.0	4.0	4.0								
5.0	5.0	5.0								
7.0	7.0	7.0								
8.0	8.0	8.0								
11.0	11.0	11.0								
22.0	21.2	21.0								
42.0	41.2	41.0								



359°	360°
66.4	66.0
99.0	99.0
139.8	140.0
184.0	184.0
224.6	225.0
262.4	263.0
297.2	298.0
329.8	330.0
362.6	363.0
395.6	396.0
428.4	429.0
459.4	460.0
487.4	488.0
517.4	518.0
549.2	550.0
574.4	575.0
594.4	595.0
610.4	611.0
628.2	629.0
645.4	646.0
662.4	663.0
672.2	673.0
680.4	681.0
689.4	690.0
697.4	698.0
698.6	699.0
699.6	700.0
706.6	707.0
700.0	700.0

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