

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: P227158

Luminaire Tested: **ISW-AF-350-LED-E1-SLL-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227158
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: ISW-AF-350-LED-E1-SLL-7050-ULG
Description: IMPACT ELITE LED WEDGE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT, WITH
UPLIGHT GLOW
Light Source: (16) 5000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3890.7 lumens
Efficiency: N/A
Efficacy: 105.8 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 - G1

Input Watts (W): 36.79
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

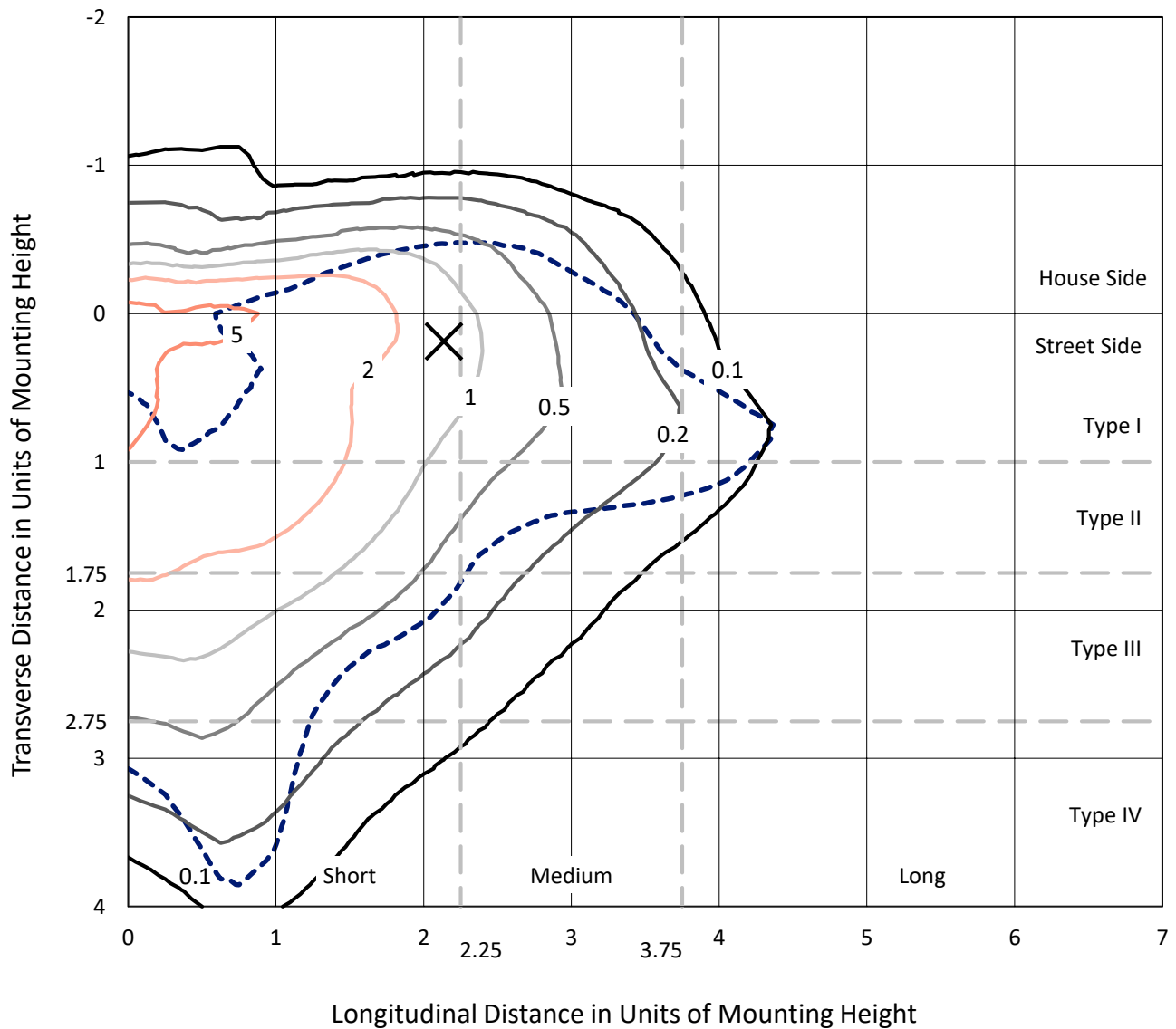


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Iso-Footcandle Lines of Horizontal Illumination

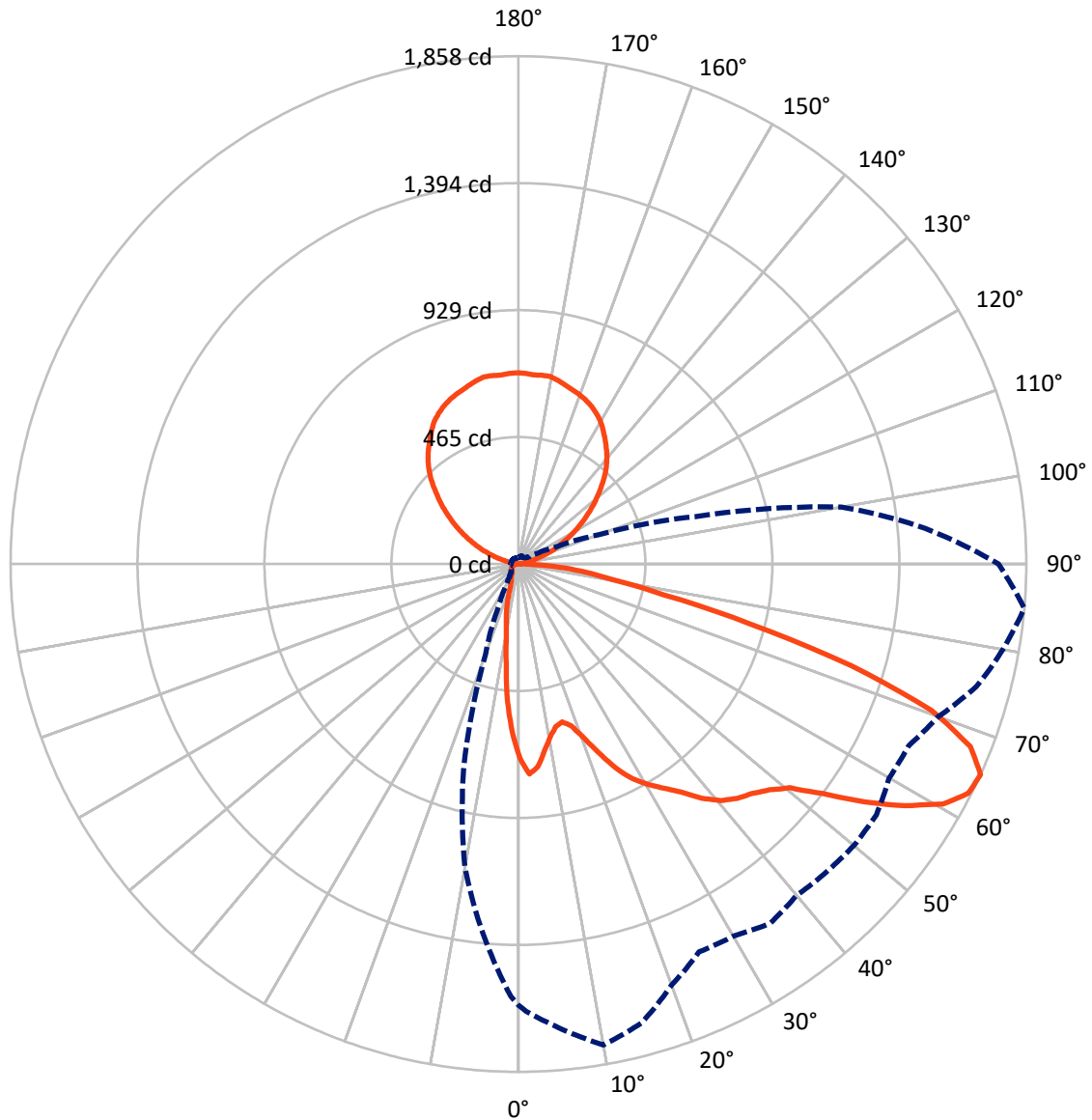
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.8 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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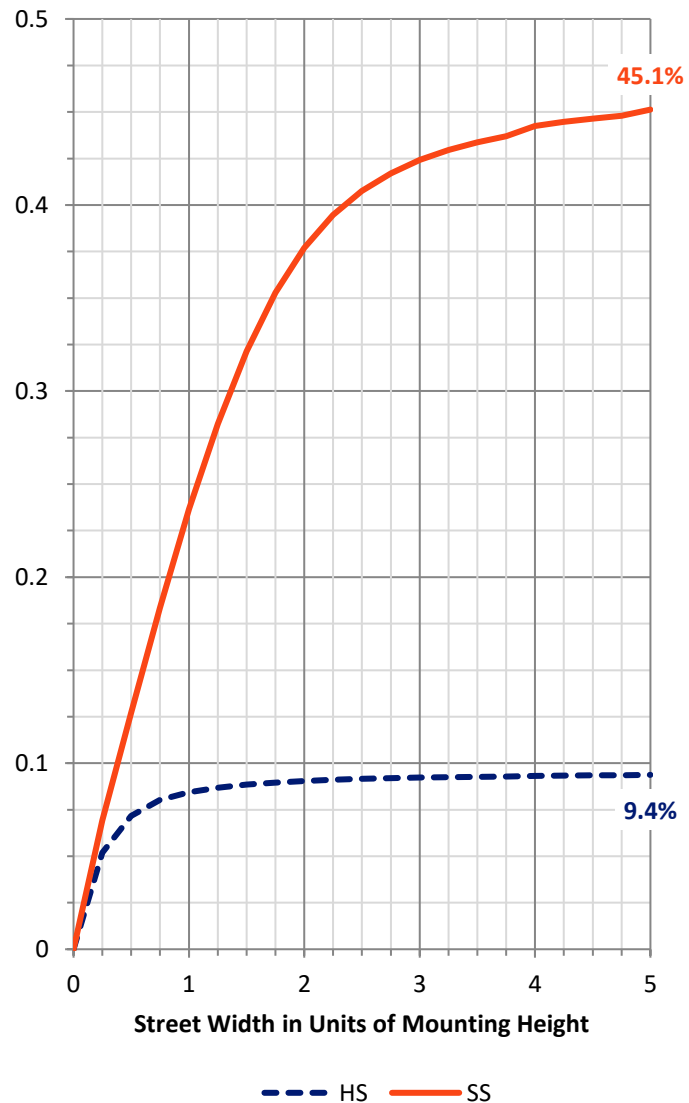
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	370.1	867.6	1237.7
	% Fixture	9.5	22.3	31.8
Street Side	Lumens	1785.4	867.7	2653.0
	% Fixture	45.9	22.3	68.2
Total	Lumens	2155.5	1735.2	3890.7
	% Fixture	55.4	44.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	1.4
10°-20°	101.5	2.6
20°-30°	144.7	3.7
30°-40°	209.9	5.4
40°-50°	300.3	7.7
50°-60°	461.0	11.8
60°-70°	533.6	13.7
70°-80°	272.2	7.0
80°-90°	79.6	2.0
90°-100°	9.4	0.2
100°-110°	57.4	1.5
110°-120°	166.1	4.3
120°-130°	273.2	7.0
130°-140°	336.8	8.7
140°-150°	344.6	8.9
150°-160°	290.3	7.5
160°-170°	191.2	4.9
170°-180°	66.3	1.7
0°-90°	2155.5	55.4
0°-180°	3890.7	100.0



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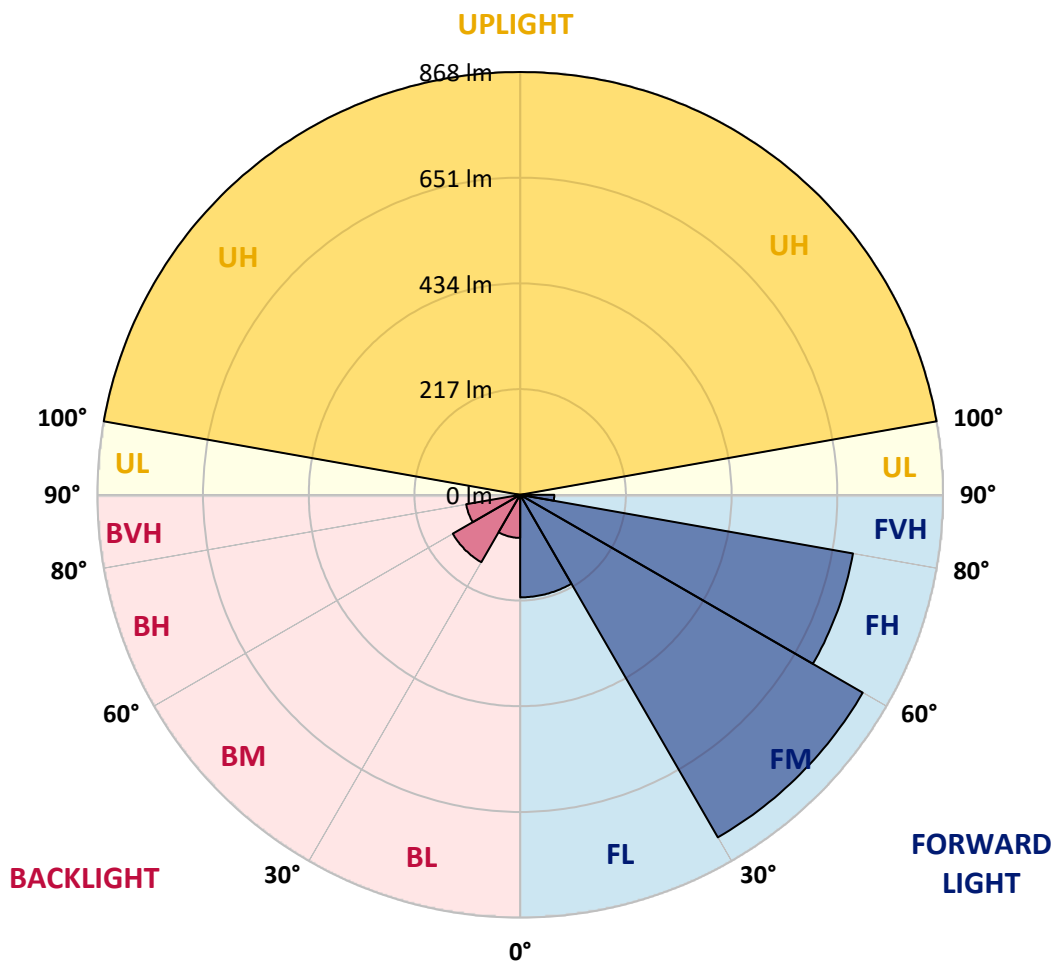
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	210.4	5.4			
FM	(30°-60°)	811.6	20.9			
FH	(60°-80°)	693.4	17.8			G1/1800
FVH	(80°-90°)	69.9	1.8			G1/100
BL	(0°-30°)	88.5	2.3	B0/110		
BM	(30°-60°)	159.6	4.1	B0/220		
BH	(60°-80°)	112.4	2.9	B1/500		G1/500
BVH	(80°-90°)	9.6	0.2			G0/10
UL	(90°-100°)	9.4	0.2		U1/10	
UH	(100°-180°)	867.6	22.3		U4/1000	

BUG Rating: B1-U5-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
0°	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8
2.5°	736.8	737.5	747.7	757.5	769.8	768.0	778.1	785.7	792.6	793.7	798.8
5°	691.8	699.1	721.9	741.5	766.2	785.4	806.1	822.4	834.3	845.6	847.0
7.5°	628.7	634.2	660.7	691.5	727.0	752.4	783.6	810.8	830.0	848.1	852.1
10°	574.7	579.8	609.2	649.0	680.2	713.2	745.5	767.6	792.6	808.2	815.8
12.5°	548.6	554.8	582.7	619.0	650.9	682.8	707.1	726.3	740.4	743.3	745.5
15°	558.8	562.0	592.8	625.1	650.5	666.5	673.0	684.6	683.5	689.3	690.4
17.5°	599.7	598.3	630.9	653.4	665.7	663.9	653.8	647.6	636.7	633.5	642.9
20°	670.1	675.2	696.2	710.0	697.3	667.9	640.0	620.8	605.5	600.5	599.4
22.5°	752.4	758.9	781.8	774.5	742.2	688.6	637.8	607.0	588.1	582.7	580.5
25°	838.7	843.0	854.6	830.0	784.7	715.0	653.0	609.9	584.9	576.9	575.8
27.5°	908.3	912.7	907.2	878.9	813.3	744.8	674.1	622.9	590.3	582.3	578.7
30°	965.2	967.4	949.3	914.1	848.8	777.8	701.6	645.8	607.7	589.6	587.0
32.5°	1029.1	1027.6	992.4	943.8	878.9	807.5	733.2	671.5	624.4	602.3	598.3
35°	1099.0	1086.3	1024.3	973.2	899.6	830.3	761.8	698.7	651.2	621.9	616.8
37.5°	1161.4	1148.3	1065.3	996.4	920.3	848.1	784.3	733.9	692.2	665.4	663.2
40°	1210.0	1194.0	1096.5	1012.0	930.4	861.2	810.8	778.1	750.6	728.8	728.8
42.5°	1249.1	1231.7	1127.0	1030.1	939.5	881.1	855.0	843.8	838.0	826.0	830.3
45°	1286.9	1269.1	1152.0	1041.7	959.8	919.9	923.5	933.3	950.7	943.8	950.0
47.5°	1322.8	1305.3	1180.3	1060.2	999.0	989.5	1008.4	1047.5	1081.6	1108.5	1127.3
50°	1382.9	1362.3	1231.0	1114.6	1060.6	1065.3	1119.7	1196.6	1252.0	1276.7	1275.3
52.5°	1497.2	1467.8	1340.2	1216.2	1148.7	1174.8	1239.0	1335.8	1408.3	1427.5	1435.2
55°	1636.8	1613.6	1497.9	1350.7	1301.7	1310.8	1390.6	1500.1	1555.9	1575.8	1582.4
57.5°	1718.7	1712.5	1640.0	1494.6	1447.1	1443.5	1547.6	1637.1	1685.4	1704.2	1698.4
59°	1737.9	1739.7	1698.4	1596.5	1531.2	1523.3	1629.1	1712.2	1752.4	1758.2	1755.3
60°	1736.1	1746.3	1741.2	1652.4	1584.5	1574.4	1663.6	1742.6	1776.4	1785.4	1775.3
62.5°	1698.8	1716.2	1764.4	1755.0	1705.3	1653.4	1695.5	1752.8	1774.5	1765.8	1758.2
65°	1613.9	1636.8	1703.8	1787.2	1739.4	1639.3	1565.7	1572.2	1605.2	1583.5	1594.0
67.5°	1467.4	1493.5	1529.1	1718.3	1648.7	1480.8	1354.3	1292.3	1276.7	1297.7	1331.1
70°	1193.7	1210.7	1300.6	1568.2	1447.8	1217.2	1058.4	975.7	948.2	996.8	1030.9
72.5°	842.0	867.3	985.9	1297.7	1191.1	975.0	801.0	724.8	697.3	699.4	729.2
75°	512.3	546.8	688.9	1026.1	938.8	746.9	610.3	555.5	547.2	542.4	537.4
77.5°	337.9	351.0	452.9	708.2	633.1	531.2	458.0	480.4	505.5	510.9	517.4
80°	229.2	233.1	293.7	496.8	417.0	392.3	370.2	423.2	470.7	479.4	474.6
82.5°	141.1	153.0	204.9	335.0	332.5	320.9	292.6	334.0	365.5	370.9	380.7
85°	49.0	51.1	125.8	295.9	337.9	341.6	241.1	190.4	213.9	209.9	150.8
87.5°	21.0	23.6	39.2	198.0	228.8	189.3	110.2	97.9	75.4	42.4	41.0
90°	6.5	6.5	6.1	7.8	12.4	11.1	11.3	9.1	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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CATALOG NUMBER: ISW-AF-350-LED-E1-SLL-7050-ULG

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°	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8
2.5°	797.7	793.0	795.9	791.9	785.4	781.0	776.0	769.4	761.8	751.7	741.5
5°	843.8	840.1	831.1	818.0	799.9	784.7	766.5	745.1	727.4	704.5	683.1
7.5°	847.8	842.0	825.3	801.0	773.1	744.8	723.4	688.6	666.1	629.8	605.5
10°	811.5	811.9	795.2	772.3	743.3	710.0	679.1	641.1	608.1	571.1	530.5
12.5°	758.2	763.3	764.0	743.7	715.4	680.2	645.8	609.5	568.6	529.0	491.7
15°	697.6	712.1	713.2	708.2	693.3	663.6	632.0	599.4	557.7	514.5	472.5
17.5°	643.6	657.4	670.1	681.7	682.4	668.3	649.0	621.1	579.4	528.7	479.4
20°	602.6	617.5	639.3	660.7	684.2	691.5	692.9	675.2	630.6	568.6	501.8
22.5°	585.6	603.0	625.1	665.4	707.1	732.8	747.3	747.3	700.5	628.0	538.8
25°	582.0	596.1	629.8	679.9	735.7	780.7	808.2	826.7	793.0	704.5	584.5
27.5°	584.5	603.7	645.4	696.5	754.9	812.6	857.9	890.2	858.6	756.7	626.9
30°	594.7	623.3	666.5	719.4	779.6	840.5	895.3	936.2	913.0	804.2	667.2
32.5°	612.4	647.2	696.2	744.0	803.9	869.9	923.9	977.9	960.9	837.2	688.6
35°	638.9	679.9	724.5	772.7	830.0	896.0	953.6	1024.3	1018.2	878.6	710.0
37.5°	681.7	723.7	764.7	806.1	860.4	924.6	996.4	1086.7	1081.6	939.9	744.4
40°	757.1	781.8	812.2	838.7	889.8	951.1	1028.0	1138.2	1156.3	992.4	774.9
42.5°	850.7	865.2	873.9	881.1	907.2	964.9	1050.8	1172.6	1202.4	1031.6	798.4
45°	969.9	965.6	948.2	931.5	928.6	972.8	1061.3	1198.0	1238.6	1069.7	822.4
47.5°	1111.0	1101.6	1054.1	999.3	968.9	987.4	1079.8	1235.4	1283.2	1119.7	852.1
50°	1273.8	1251.7	1174.1	1081.6	1025.4	1028.3	1126.6	1287.2	1342.0	1185.0	907.6
52.5°	1424.6	1385.1	1292.7	1170.5	1090.0	1099.8	1210.7	1394.5	1462.4	1293.0	1000.8
55°	1557.7	1507.0	1407.2	1273.4	1200.6	1217.6	1345.2	1536.7	1600.9	1421.7	1095.0
57.5°	1670.8	1616.8	1518.6	1400.7	1310.1	1324.2	1465.3	1668.7	1711.8	1537.4	1185.3
59°	1722.3	1669.0	1578.4	1469.6	1384.8	1414.5	1550.1	1734.3	1752.8	1582.0	1219.8
60°	1747.4	1694.1	1614.3	1508.0	1430.4	1469.6	1595.1	1784.0	1768.0	1588.5	1232.8
62.5°	1745.5	1708.2	1655.6	1583.1	1569.0	1634.2	1741.2	1847.8	1778.5	1569.7	1241.2
65°	1602.3	1599.1	1566.4	1574.8	1633.9	1734.7	1800.3	1858.3	1756.8	1494.6	1200.9
67.5°	1336.5	1349.9	1354.3	1405.4	1543.6	1714.7	1772.4	1783.6	1662.1	1334.0	1075.8
70°	1032.0	1002.2	1051.2	1141.5	1340.5	1561.0	1642.9	1603.8	1468.5	1117.2	878.6
72.5°	730.6	739.3	809.7	926.8	1129.5	1357.9	1486.3	1272.7	1104.8	836.1	622.9
75°	549.7	590.7	624.8	727.4	917.4	1163.2	1269.1	874.9	719.8	576.5	407.6
77.5°	526.9	523.6	497.5	519.2	661.4	814.8	905.4	546.1	450.7	377.1	246.2
80°	487.0	459.0	411.5	390.5	416.6	523.2	574.7	351.0	299.9	263.6	138.9
82.5°	377.8	359.0	308.9	307.5	347.4	371.7	395.2	248.7	225.5	213.6	85.2
85°	239.7	246.2	252.4	307.8	385.4	389.8	307.5	151.6	118.9	167.5	54.4
87.5°	71.1	115.7	140.3	238.2	347.4	348.5	231.3	49.7	44.6	52.2	31.5
90°	7.0	7.0	8.0	9.0	9.0	9.0	8.4	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: ISW-AF-350-LED-E1-SLL-7050-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: ISW-AF-350-LED-E1-SLL-7050-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8
2.5°	731.0	729.5	719.4	702.4	703.8	695.8	685.7	669.4	666.1	657.0	655.6
5°	665.0	648.0	625.8	599.0	588.9	575.1	560.9	550.8	538.1	526.5	542.1
7.5°	576.9	551.9	526.1	497.8	481.5	459.0	447.1	423.9	406.8	403.6	390.2
10°	503.3	471.7	442.4	417.0	386.5	365.5	350.3	337.6	326.0	311.8	303.1
12.5°	454.3	418.8	387.6	356.1	341.6	324.2	314.7	302.8	286.1	274.1	262.5
15°	432.2	393.8	359.7	332.1	311.1	294.8	278.1	263.6	245.5	232.1	218.6
17.5°	429.3	379.3	336.1	305.3	282.5	264.7	242.6	223.4	201.2	186.4	175.1
20°	432.6	368.4	314.4	274.1	250.9	219.7	199.1	175.5	153.7	134.2	116.4
22.5°	445.6	362.6	293.0	248.7	214.3	178.8	156.6	126.5	108.1	89.2	82.3
25°	463.4	359.0	274.5	220.8	177.3	142.1	112.0	87.0	78.7	74.0	71.4
27.5°	482.3	352.4	253.8	195.1	147.6	104.8	83.8	73.2	70.0	67.4	65.6
30°	496.4	339.8	228.4	167.5	117.5	89.6	74.7	67.8	65.6	62.7	60.9
32.5°	502.6	320.2	205.6	141.4	99.0	76.9	65.3	61.3	59.1	56.6	55.5
35°	501.5	298.1	194.0	131.3	90.6	68.2	57.3	54.8	51.9	49.3	46.8
37.5°	502.6	277.7	184.9	128.7	87.0	61.6	52.2	50.4	48.2	45.7	43.5
40°	506.9	266.5	180.6	123.3	84.1	59.1	48.2	46.4	46.0	43.1	41.3
42.5°	508.7	267.6	178.4	115.7	76.9	58.4	48.2	44.2	44.2	42.1	39.9
45°	506.5	275.6	179.8	111.3	71.4	54.8	50.8	44.2	43.1	41.3	39.2
47.5°	513.1	281.4	179.8	110.6	67.8	51.1	48.2	48.6	43.9	41.7	38.4
50°	539.9	286.8	176.2	109.5	66.7	47.5	45.7	47.9	49.3	42.4	38.8
52.5°	587.4	293.7	172.2	107.7	65.3	44.6	42.4	45.0	50.4	44.6	38.8
55°	636.0	306.0	169.7	104.8	63.1	42.8	38.4	43.1	46.0	44.2	38.4
57.5°	687.8	319.4	167.2	97.9	58.0	41.0	37.0	37.7	41.3	42.8	37.3
59°	703.4	326.0	165.0	92.8	53.7	39.5	35.9	34.8	37.0	41.0	36.6
60°	714.7	326.3	162.4	88.5	51.1	38.8	35.2	33.7	34.4	42.1	37.0
62.5°	715.8	326.0	154.5	79.4	46.0	37.3	34.1	32.3	31.5	35.2	37.7
65°	670.8	310.7	140.0	74.7	46.4	35.9	32.3	30.8	29.4	30.1	32.6
67.5°	586.7	271.6	124.7	75.8	49.0	34.8	30.8	29.4	28.3	27.6	28.6
70°	443.8	225.5	120.4	78.3	51.1	34.1	28.6	27.2	26.5	26.1	26.1
72.5°	307.5	185.6	115.7	80.1	52.9	33.7	26.5	25.0	24.7	24.3	24.3
75°	198.0	134.9	95.7	68.2	48.2	30.8	23.9	22.5	22.1	21.8	22.1
77.5°	117.1	94.3	70.3	47.9	35.2	24.7	20.7	19.6	19.6	19.6	19.9
80°	64.9	55.8	46.8	30.8	25.0	18.5	17.0	16.0	16.0	16.3	17.0
82.5°	38.8	30.8	26.5	19.6	17.0	13.1	12.7	12.0	12.3	12.7	13.4
85°	25.4	19.6	16.0	13.1	11.6	8.3	7.3	7.6	8.0	8.7	9.1
87.5°	14.1	10.9	8.7	7.6	6.9	3.6	2.9	2.9	3.6	4.4	5.1
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°
711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	110°	80.5
660.7	650.1	638.9	630.6	634.2	622.2	623.3	620.0	618.6	617.9	610.3	112.5°	113.5
523.2	527.2	510.5	512.3	517.4	505.1	496.8	510.5	508.7	496.4	503.3	115°	153.0
377.1	378.2	370.6	353.5	353.5	362.6	365.9	372.4	376.7	392.0	382.5	117.5°	193.0
288.3	278.1	270.5	262.9	258.5	249.5	251.6	259.6	264.7	273.4	280.3	120°	229.5
250.6	239.3	225.9	214.3	208.1	199.8	194.4	192.5	194.4	188.9	189.3	122.5°	264.0
208.1	198.0	183.1	176.9	165.3	158.8	155.2	150.5	146.9	139.2	136.0	125°	297.5
161.4	147.9	132.7	132.7	124.4	118.9	117.5	116.4	114.2	110.2	106.2	127.5°	331.0
107.3	98.6	89.9	85.6	86.3	85.6	83.4	87.0	87.0	88.5	87.7	130°	364.0
78.3	76.9	73.6	71.1	69.6	69.3	69.6	70.7	72.9	74.7	76.5	132.5°	397.0
70.3	69.6	66.7	64.2	63.8	63.1	63.1	64.2	64.5	64.9	64.5	135°	429.0
65.3	63.8	61.3	59.5	58.7	58.4	58.7	57.7	56.9	57.3	56.9	137.5°	459.5
59.1	58.0	55.5	54.0	53.7	53.7	52.6	52.2	51.5	51.9	51.5	140°	488.0
54.4	52.9	50.4	48.6	48.6	48.2	48.6	48.2	47.9	47.5	47.5	142.5°	517.5
45.7	45.3	42.8	42.1	42.4	43.5	43.5	43.5	43.9	43.5	43.5	145°	545.5
42.4	42.1	39.5	37.7	37.3	37.3	37.3	38.1	39.2	39.5	40.2	147.5°	572.5
40.2	39.9	37.3	35.9	35.2	34.8	34.4	34.4	34.8	36.3	37.3	150°	593.0
38.8	38.1	35.5	33.7	33.4	33.0	32.6	32.6	32.6	33.0	34.1	152.5°	608.5
38.1	37.0	34.1	32.3	31.5	31.2	31.2	31.5	31.2	31.2	31.2	155°	626.0
37.0	36.3	33.4	31.2	30.5	30.5	30.1	30.1	30.1	29.4	29.4	157.5°	643.5
36.6	35.5	32.6	30.5	29.7	29.4	29.0	29.4	28.6	28.3	27.9	160°	657.5
35.9	34.4	31.2	29.4	29.0	28.3	27.9	27.9	27.9	27.2	27.2	162.5°	667.0
35.5	33.7	30.5	28.6	27.9	27.2	26.8	26.8	27.6	26.8	26.8	165°	676.0
35.2	32.6	29.4	27.2	26.8	26.1	25.7	26.1	27.2	26.5	26.1	167.5°	685.0
33.7	31.9	28.6	26.8	26.1	25.4	25.0	25.4	26.1	26.1	26.1	170°	692.0
33.0	31.2	27.9	26.1	25.7	25.0	24.7	24.7	25.7	25.7	25.4	172.5°	694.0
31.9	30.5	27.2	25.0	24.3	24.3	23.9	23.9	24.3	24.3	24.7	175°	696.0
30.5	29.7	26.5	23.9	23.6	23.2	23.2	23.2	23.2	23.9	23.9	177.5°	699.5
29.0	28.6	25.4	23.2	22.5	22.5	22.5	22.5	22.5	22.8	23.2	180°	700.0
26.8	26.8	23.9	21.8	21.4	21.0	21.0	21.0	21.0	21.4	21.8		
24.7	25.0	22.1	19.9	19.6	19.6	19.6	19.6	19.9	19.9	20.3		
22.5	22.8	19.9	17.8	17.8	17.8	17.8	17.8	17.8	17.8	18.5		
20.3	20.3	17.0	14.9	15.2	15.6	16.0	15.6	15.6	16.0	17.0		
17.4	17.0	14.1	12.3	12.3	13.1	13.4	13.1	13.4	13.4	14.9		
13.8	13.8	10.9	9.1	9.1	10.5	10.5	10.5	10.9	11.2	12.3		
10.5	10.2	7.6	6.2	6.2	7.3	7.6	8.0	8.3	8.7	9.4		
6.2	6.2	4.0	2.5	2.9	3.3	4.4	4.4	4.4	5.1	6.2		
7.5	7.4	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		

'227158
 ISW-AF-350-LED-E1-SLL-7050-ULG

REPORT NUMBER: P227158
 CATALOG NUMBER: ISW-AF-3!

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°	711.8	711.8
106.0	102.5	99.0	99.0	99.0	102.5	106.0	113.5	121.0	127.5	2.5°	616.8	616.4
147.0	143.0	139.0	140.0	139.0	143.0	147.0	153.0	159.0	163.5	5°	506.2	502.9
189.0	186.5	184.0	184.0	184.0	186.5	189.0	193.0	197.0	199.5	7.5°	392.3	404.3
226.0	224.5	223.0	225.0	223.0	224.5	226.0	229.5	233.0	235.0	10°	282.8	291.2
261.0	260.5	260.0	263.0	260.0	260.5	261.0	264.0	267.0	269.0	12.5°	196.9	201.2
296.0	295.0	294.0	298.0	294.0	295.0	296.0	297.5	299.0	302.0	15°	135.6	144.3
329.0	329.0	329.0	330.0	329.0	329.0	329.0	331.0	333.0	336.0	17.5°	105.5	106.6
362.0	361.5	361.0	363.0	361.0	361.5	362.0	364.0	366.0	368.0	20°	87.0	87.7
393.0	393.5	394.0	396.0	394.0	393.5	393.0	397.0	401.0	402.5	22.5°	77.2	78.7
426.0	426.0	426.0	429.0	426.0	426.0	426.0	429.0	432.0	433.5	25°	64.9	66.4
459.0	458.0	457.0	460.0	457.0	458.0	459.0	459.5	460.0	462.0	27.5°	57.3	58.7
487.0	486.0	485.0	488.0	485.0	486.0	487.0	488.0	489.0	490.0	30°	52.6	53.3
517.0	516.0	515.0	518.0	515.0	516.0	517.0	517.5	518.0	519.5	32.5°	47.9	47.9
544.0	545.0	546.0	550.0	546.0	545.0	544.0	545.5	547.0	548.5	35°	43.9	44.2
571.0	571.5	572.0	575.0	572.0	571.5	571.0	572.5	574.0	574.0	37.5°	41.0	41.7
593.0	592.5	592.0	595.0	592.0	592.5	593.0	593.0	593.0	593.0	40°	38.4	38.8
608.0	608.0	608.0	611.0	608.0	608.0	608.0	608.5	609.0	609.5	42.5°	34.8	35.5
625.0	625.0	625.0	629.0	625.0	625.0	625.0	626.0	627.0	628.5	45°	31.5	31.9
643.0	643.0	643.0	646.0	643.0	643.0	643.0	643.5	644.0	645.0	47.5°	29.4	29.4
659.0	659.5	660.0	663.0	660.0	659.5	659.0	657.5	656.0	655.5	50°	27.9	28.3
669.0	669.0	669.0	673.0	669.0	669.0	669.0	667.0	665.0	663.0	52.5°	27.2	27.6
676.0	677.0	678.0	681.0	678.0	677.0	676.0	676.0	676.0	674.5	55°	26.8	27.6
684.0	685.5	687.0	690.0	687.0	685.5	684.0	685.0	686.0	687.0	57.5°	26.8	27.2
692.0	693.5	695.0	698.0	695.0	693.5	692.0	692.0	692.0	692.5	59°	26.5	26.8
695.0	696.0	697.0	699.0	697.0	696.0	695.0	694.0	693.0	691.5	60°	26.5	27.2
697.0	697.5	698.0	700.0	698.0	697.5	697.0	696.0	695.0	693.0	62.5°	25.4	26.1
700.0	702.5	705.0	707.0	705.0	702.5	700.0	699.5	699.0	698.0	65°	24.7	25.4
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	23.6	24.7
										70°	22.5	23.6
										72.5°	21.0	22.5
										75°	19.6	20.7
										77.5°	17.8	18.9
										80°	15.6	16.0
										82.5°	13.1	13.1
										85°	9.8	8.7
										87.5°	5.4	5.8
										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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CATALOG NUMBER: ISW-AF-350-LED-E1-

50-LED-E1-SLL-7050-ULG

tinued):

CANDELA DISTRIBUTION (continued):

225°	230°	235°	240°	245°	250°	255°	260°	265°		215°	220°	225°
711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	711.8	110°	102.0	108.0	114.0
608.8	608.8	619.7	620.8	608.1	611.3	617.5	610.3	618.2	112.5°	134.0	138.5	143.0
510.9	506.5	506.9	504.0	509.1	503.3	509.4	507.3	505.5	115°	168.0	171.0	174.0
396.7	404.3	398.9	388.3	396.7	390.2	377.8	378.9	365.1	117.5°	202.0	203.5	205.0
298.1	292.6	289.7	284.6	271.2	273.8	260.0	262.2	266.9	120°	237.0	240.0	243.0
205.6	201.6	206.3	203.1	197.6	198.7	201.6	204.5	212.1	122.5°	271.0	274.0	277.0
144.3	142.5	141.4	143.6	149.8	153.0	157.7	166.4	170.8	125°	305.0	307.5	310.0
108.4	108.8	107.7	111.0	116.0	118.6	119.7	120.4	125.5	127.5°	339.0	339.5	340.0
89.6	91.0	90.6	91.7	90.3	88.8	89.9	87.7	85.9	130°	370.0	371.0	372.0
78.3	78.7	76.9	76.5	74.3	72.5	71.1	71.1	70.3	132.5°	404.0	404.5	405.0
66.4	66.7	64.9	64.9	64.5	65.6	64.9	63.5	63.1	135°	435.0	436.0	437.0
59.5	58.7	57.7	57.7	56.9	56.9	57.3	57.7	57.3	137.5°	464.0	466.0	468.0
53.3	52.6	52.2	52.6	52.2	52.6	52.9	52.6	52.9	140°	491.0	494.0	497.0
49.0	48.2	48.2	48.6	48.2	48.6	48.6	48.6	48.2	142.5°	521.0	523.0	525.0
45.3	44.6	44.6	44.6	44.2	43.5	42.8	41.7	40.6	145°	550.0	550.5	551.0
42.4	42.1	41.3	41.0	39.9	37.7	37.0	37.0	37.0	147.5°	574.0	574.5	575.0
39.9	39.2	38.8	37.3	35.9	35.2	35.2	35.2	35.2	150°	593.0	593.0	593.0
36.6	35.5	34.8	34.4	34.1	34.1	33.7	33.7	33.7	152.5°	610.0	610.0	610.0
32.6	32.3	32.3	32.6	32.6	32.6	32.6	32.3	32.6	155°	630.0	629.0	628.0
30.1	30.1	30.5	30.8	31.2	31.5	31.9	31.5	31.9	157.5°	646.0	645.5	645.0
29.0	29.0	29.0	29.7	30.1	30.5	31.2	31.2	31.2	160°	655.0	655.0	655.0
28.3	28.3	28.6	29.0	29.4	29.7	30.1	30.5	30.8	162.5°	661.0	662.0	663.0
27.9	28.3	27.9	28.3	28.6	29.4	29.7	29.7	30.1	165°	673.0	673.0	673.0
27.9	27.9	27.9	27.9	28.6	29.0	28.6	29.0	29.4	167.5°	688.0	686.5	685.0
27.9	27.9	27.6	27.9	28.3	28.6	28.3	28.3	29.0	170°	693.0	692.0	691.0
27.6	27.9	27.6	27.6	27.9	28.3	27.9	28.3	28.6	172.5°	690.0	690.0	690.0
26.8	27.2	26.8	27.2	27.2	27.6	27.6	27.6	27.9	175°	691.0	690.5	690.0
26.1	26.1	26.1	26.5	26.5	26.8	26.8	27.2	26.8	177.5°	697.0	696.0	695.0
25.4	25.4	25.4	25.7	25.7	26.1	26.5	26.1	26.1	180°	700.0	700.0	700.0
24.7	24.3	23.9	24.3	24.7	24.7	25.0	24.7	25.0				
23.6	23.2	22.8	22.8	23.2	23.2	23.6	23.2	23.2				
21.8	21.8	21.0	21.0	21.0	21.0	21.4	21.0	20.7				
19.6	19.6	18.9	18.9	18.9	18.9	18.5	18.5	18.5				
16.3	16.7	16.7	16.3	16.3	16.0	16.0	15.6	15.2				
12.3	13.1	13.4	13.4	13.4	13.4	13.4	12.7	12.0				
8.7	9.8	10.9	10.9	10.5	10.5	10.5	9.4	8.3				
5.4	6.5	6.9	7.6	6.5	6.2	6.2	5.4	5.1				
7.0	7.0	7.7	8.4	10.1	10.1	10.5	8.7	7.4				
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: ISW-AF-350-LED-E1-SLL-7050-

SLL-7050-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°	711.8	711.8	711.8	711.8
145.5	148.0	149.0	150.0	149.5	149.0	148.0	147.0	2.5°	611.3	624.8	626.6	628.4
176.5	179.0	180.5	182.0	180.5	179.0	178.0	177.0	5°	502.6	516.0	508.4	511.6
208.0	211.0	213.0	215.0	212.5	210.0	209.0	208.0	7.5°	366.9	358.2	369.5	376.4
244.5	246.0	248.0	250.0	247.5	245.0	244.0	243.0	10°	268.0	278.1	282.5	290.4
278.0	279.0	281.0	283.0	280.5	278.0	277.0	276.0	12.5°	222.3	228.8	236.8	249.5
311.5	313.0	314.0	315.0	312.5	310.0	310.0	310.0	15°	180.2	184.9	195.1	207.4
342.5	345.0	345.5	346.0	346.0	346.0	345.5	345.0	17.5°	131.3	138.1	144.7	154.8
374.5	377.0	379.0	381.0	381.0	381.0	380.0	379.0	20°	88.1	91.0	99.0	103.7
408.0	411.0	413.5	416.0	415.0	414.0	414.0	414.0	22.5°	70.7	71.8	73.2	77.2
440.0	443.0	445.5	448.0	447.5	447.0	448.5	450.0	25°	63.5	64.2	65.3	66.7
470.5	473.0	474.0	475.0	475.5	476.0	478.5	481.0	27.5°	57.7	58.0	59.1	59.8
498.5	500.0	501.0	502.0	503.0	504.0	506.5	509.0	30°	52.6	52.2	52.6	53.7
526.0	527.0	530.0	533.0	533.0	533.0	533.5	534.0	32.5°	47.1	47.1	47.9	47.9
553.5	556.0	559.0	562.0	561.5	561.0	559.5	558.0	35°	40.6	40.2	41.0	42.1
577.5	580.0	582.5	585.0	585.5	586.0	584.5	583.0	37.5°	37.3	37.7	38.4	39.2
595.0	597.0	598.5	600.0	601.5	603.0	604.5	606.0	40°	35.5	35.9	36.6	37.3
610.5	611.0	612.5	614.0	616.0	618.0	620.5	623.0	42.5°	33.7	34.4	35.2	36.3
627.0	626.0	628.5	631.0	633.5	636.0	637.0	638.0	45°	32.6	33.4	34.4	35.5
644.5	644.0	646.0	648.0	649.0	650.0	650.0	650.0	47.5°	32.3	33.0	34.1	35.5
656.5	658.0	661.0	664.0	662.5	661.0	660.5	660.0	50°	31.5	32.6	33.7	35.2
665.0	667.0	669.0	671.0	670.5	670.0	669.0	668.0	52.5°	31.5	32.3	33.4	35.2
672.5	672.0	674.5	677.0	678.5	680.0	679.0	678.0	55°	30.5	31.5	32.6	34.4
681.5	678.0	681.0	684.0	686.0	688.0	688.0	688.0	57.5°	29.7	30.5	31.9	34.1
688.5	686.0	687.5	689.0	691.5	694.0	695.0	696.0	59°	29.4	30.1	31.5	33.7
689.5	689.0	690.5	692.0	693.0	694.0	695.0	696.0	60°	28.6	29.7	31.2	33.4
690.0	690.0	692.5	695.0	695.5	696.0	695.0	694.0	62.5°	27.9	29.0	30.5	32.6
694.5	694.0	696.5	699.0	700.0	701.0	699.5	698.0	65°	26.8	28.3	29.7	31.2
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	26.1	26.8	28.3	29.7
								70°	24.7	25.4	26.5	27.6
								72.5°	22.8	23.2	23.9	25.0
								75°	20.3	20.7	21.0	22.1
								77.5°	17.8	17.8	18.1	19.6
								80°	14.9	14.9	15.2	16.0
								82.5°	11.2	11.2	12.0	13.1
								85°	8.0	7.6	8.7	9.4
								87.5°	4.7	4.4	4.7	4.7
								90°	7.4	8.1	8.7	9.7
								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: ISW-AF-350-LED-E1-SLL-7050-ULG

ULG

CANDELA DISTRIBUTION (continued):

290°	295°	300°	305°	310°	315°	320°		270°	275°	280°	285°	290°
711.8	711.8	711.8	711.8	711.8	711.8	711.8	110°	117.0	116.0	117.5	119.0	120.0
635.6	632.0	634.9	646.1	650.1	655.2	672.3	112.5°	147.0	147.0	148.0	149.0	149.5
519.6	524.3	519.6	542.4	543.5	558.8	564.9	115°	178.0	177.0	178.0	179.0	180.5
381.8	388.0	398.1	413.4	417.7	439.5	458.0	117.5°	209.0	208.0	209.0	210.0	212.5
298.1	306.0	320.2	329.6	339.0	351.7	366.6	120°	243.0	243.0	244.0	245.0	247.5
264.7	273.0	285.4	297.3	310.7	320.5	332.9	122.5°	277.0	276.0	277.0	278.0	280.5
221.2	234.2	246.2	261.8	273.0	290.8	305.3	125°	310.0	310.0	310.0	310.0	312.5
169.0	187.1	199.1	217.9	235.0	250.6	270.1	127.5°	347.0	345.0	345.5	346.0	346.0
117.5	131.6	146.9	167.2	189.3	210.7	236.8	130°	380.0	379.0	380.0	381.0	381.0
80.9	88.5	100.1	121.1	144.0	174.8	203.1	132.5°	415.0	414.0	414.0	414.0	415.0
68.9	71.8	76.1	86.3	105.5	139.2	170.4	135°	451.0	450.0	448.5	447.0	447.5
61.3	63.5	66.4	71.4	81.6	104.8	139.2	137.5°	482.0	481.0	478.5	476.0	475.5
56.2	58.7	61.6	65.3	70.7	86.7	112.4	140°	511.0	509.0	506.5	504.0	503.0
49.3	51.1	53.7	57.7	61.6	74.3	99.4	142.5°	536.0	534.0	533.5	533.0	533.0
43.5	45.7	49.0	51.9	55.8	66.0	90.3	145°	560.0	558.0	559.5	561.0	561.5
40.6	42.8	45.7	48.2	51.1	59.5	83.8	147.5°	585.0	583.0	584.5	586.0	585.5
38.8	41.0	43.9	46.0	47.9	57.3	81.2	150°	610.0	606.0	604.5	603.0	601.5
37.7	40.2	42.8	44.2	47.9	58.4	75.1	152.5°	628.0	623.0	620.5	618.0	616.0
37.3	39.9	42.8	45.3	52.6	55.1	71.1	155°	641.0	638.0	637.0	636.0	633.5
37.7	39.9	43.5	50.8	51.1	52.2	66.7	157.5°	655.0	650.0	650.0	650.0	649.0
37.7	41.0	48.6	52.9	48.6	49.3	62.7	160°	666.0	660.0	660.5	661.0	662.5
38.1	42.4	50.4	49.3	47.1	46.0	58.4	162.5°	674.0	668.0	669.0	670.0	670.5
38.1	41.7	48.2	46.4	43.5	43.9	53.3	165°	682.0	678.0	679.0	680.0	678.5
37.0	41.7	46.4	42.1	39.9	41.7	49.0	167.5°	694.0	688.0	688.0	688.0	686.0
36.3	42.8	41.3	38.8	38.8	40.6	46.8	170°	701.0	696.0	695.0	694.0	691.5
35.9	43.9	39.2	37.7	37.7	40.2	45.7	172.5°	701.0	696.0	695.0	694.0	693.0
34.8	41.0	35.9	35.2	36.3	38.1	44.2	175°	699.0	694.0	695.0	696.0	695.5
32.6	34.1	33.0	33.0	34.4	36.6	43.5	177.5°	702.0	698.0	699.5	701.0	700.0
30.1	30.8	30.8	31.2	32.6	34.4	44.2	180°	700.0	700.0	700.0	700.0	700.0
27.9	27.9	28.6	29.0	30.1	32.6	42.4						
25.4	25.7	25.7	26.5	27.2	29.7	41.0						
22.5	22.5	23.2	23.2	24.3	26.8	36.6						
19.6	19.6	19.6	19.9	20.7	23.2	30.1						
16.3	16.3	16.3	16.7	17.0	19.2	22.8						
13.1	12.7	12.3	12.3	13.1	14.9	17.8						
9.1	9.1	8.7	8.7	8.7	9.8	12.0						
5.1	4.4	4.7	5.1	4.7	5.4	6.5						
9.4	9.7	9.1	8.5	8.5	8.5	9.7						
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°	711.8	711.8	711.8	711.8	711.8	711.8
150.0	149.0	148.0	145.5	143.0	138.5	2.5°	670.1	679.5	694.4	697.3	709.2	717.6
182.0	180.5	179.0	176.5	174.0	171.0	5°	567.8	590.3	598.3	613.9	641.1	654.9
215.0	213.0	211.0	208.0	205.0	203.5	7.5°	468.5	485.5	504.7	529.8	549.7	573.3
250.0	248.0	246.0	244.5	243.0	240.0	10°	385.4	409.7	434.8	455.1	483.0	511.3
283.0	281.0	279.0	278.0	277.0	274.0	12.5°	342.3	355.7	380.4	409.0	443.8	475.4
315.0	314.0	313.0	311.5	310.0	307.5	15°	319.8	335.8	362.2	392.7	429.7	468.8
346.0	345.5	345.0	342.5	340.0	339.5	17.5°	291.9	317.3	347.4	390.9	438.7	493.1
381.0	379.0	377.0	374.5	372.0	371.0	20°	264.3	295.2	334.7	392.0	458.3	529.0
416.0	413.5	411.0	408.0	405.0	404.5	22.5°	240.0	276.7	326.7	398.5	483.3	577.6
448.0	445.5	443.0	440.0	437.0	436.0	25°	211.4	260.3	320.5	411.9	521.8	642.9
475.0	474.0	473.0	470.5	468.0	466.0	27.5°	188.6	244.8	311.5	423.5	556.9	705.6
502.0	501.0	500.0	498.5	497.0	494.0	30°	163.2	226.6	298.8	427.5	599.7	757.1
533.0	530.0	527.0	526.0	525.0	523.0	32.5°	142.9	209.6	284.3	423.9	619.0	793.0
562.0	559.0	556.0	553.5	551.0	550.5	35°	133.1	197.3	271.9	411.2	634.9	831.8
585.0	582.5	580.0	577.5	575.0	574.5	37.5°	126.5	183.8	260.0	390.2	653.0	870.2
600.0	598.5	597.0	595.0	593.0	593.0	40°	118.2	173.3	250.2	374.9	667.2	902.1
614.0	612.5	611.0	610.5	610.0	610.0	42.5°	110.6	163.9	242.6	361.5	670.8	930.8
631.0	628.5	626.0	627.0	628.0	629.0	45°	104.1	158.1	236.8	362.2	673.3	970.7
648.0	646.0	644.0	644.5	645.0	645.5	47.5°	99.0	152.7	234.6	374.6	700.2	1026.1
664.0	661.0	658.0	656.5	655.0	655.0	50°	94.3	147.9	231.0	398.5	743.3	1101.2
671.0	669.0	667.0	665.0	663.0	662.0	52.5°	88.8	141.4	226.3	423.2	790.5	1201.6
677.0	674.5	672.0	672.5	673.0	673.0	55°	81.6	132.7	221.2	443.8	854.6	1323.8
684.0	681.0	678.0	681.5	685.0	686.5	57.5°	70.3	122.6	217.9	454.3	894.2	1394.2
689.0	687.5	686.0	688.5	691.0	692.0	59°	64.5	112.8	216.1	449.3	904.7	1406.2
692.0	690.5	689.0	689.5	690.0	690.0	60°	61.3	107.0	213.2	443.1	907.6	1398.5
695.0	692.5	690.0	690.0	690.0	690.5	62.5°	56.9	93.2	201.2	412.3	867.0	1306.4
699.0	696.5	694.0	694.5	695.0	696.0	65°	58.0	88.1	174.0	351.0	773.8	1126.6
700.0	700.0	700.0	700.0	700.0	700.0	67.5°	59.5	85.9	150.5	283.6	616.8	932.2
						70°	58.4	84.8	136.7	225.5	461.9	698.0
						72.5°	56.9	80.1	118.6	181.3	293.0	488.8
						75°	50.4	67.4	93.2	124.4	184.9	356.1
						77.5°	39.5	51.9	66.0	77.2	93.9	251.3
						80°	29.0	37.7	43.1	46.4	52.2	171.5
						82.5°	20.7	25.4	27.6	29.4	34.8	128.4
						85°	15.6	17.8	19.2	19.2	23.6	90.6
						87.5°	8.7	9.1	9.1	9.8	11.6	24.7
						90°	10.5	10.5	10.2	10.0	8.8	7.5
						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°
711.8	711.8	711.8	110°	102.0	94.5	87.0	80.5	74.0	71.0	68.0
727.0	732.4	736.8	112.5°	134.0	127.5	121.0	113.5	106.0	102.5	99.0
675.9	689.3	691.8	115°	168.0	163.5	159.0	153.0	147.0	143.0	139.0
599.4	621.1	628.7	117.5°	202.0	199.5	197.0	193.0	189.0	186.5	184.0
543.2	566.7	574.7	120°	237.0	235.0	233.0	229.5	226.0	224.5	223.0
512.3	539.9	548.6	122.5°	271.0	269.0	267.0	264.0	261.0	260.5	260.0
513.1	546.1	558.8	125°	305.0	302.0	299.0	297.5	296.0	295.0	294.0
546.4	584.1	599.7	127.5°	339.0	336.0	333.0	331.0	329.0	329.0	329.0
603.7	658.5	670.1	130°	370.0	368.0	366.0	364.0	362.0	361.5	361.0
681.3	735.0	752.4	132.5°	404.0	402.5	401.0	397.0	393.0	393.5	394.0
754.2	825.3	838.7	135°	435.0	433.5	432.0	429.0	426.0	426.0	426.0
826.0	896.3	908.3	137.5°	464.0	462.0	460.0	459.5	459.0	458.0	457.0
881.5	955.1	965.2	140°	491.0	490.0	489.0	488.0	487.0	486.0	485.0
934.8	1017.8	1029.1	142.5°	521.0	519.5	518.0	517.5	517.0	516.0	515.0
994.2	1086.0	1099.0	145°	550.0	548.5	547.0	545.5	544.0	545.0	546.0
1047.9	1153.1	1161.4	147.5°	574.0	574.0	574.0	572.5	571.0	571.5	572.0
1107.4	1207.8	1210.0	150°	593.0	593.0	593.0	593.0	593.0	592.5	592.0
1156.0	1248.4	1249.1	152.5°	610.0	609.5	609.0	608.5	608.0	608.0	608.0
1203.1	1286.5	1286.9	155°	630.0	628.5	627.0	626.0	625.0	625.0	625.0
1252.4	1328.2	1322.8	157.5°	646.0	645.0	644.0	643.5	643.0	643.0	643.0
1330.4	1377.5	1382.9	160°	655.0	655.5	656.0	657.5	659.0	659.5	660.0
1448.9	1491.0	1497.2	162.5°	661.0	663.0	665.0	667.0	669.0	669.0	669.0
1586.7	1645.1	1636.8	165°	673.0	674.5	676.0	676.0	676.0	677.0	678.0
1645.1	1711.8	1718.7	167.5°	688.0	687.0	686.0	685.0	684.0	685.5	687.0
1635.3	1726.3	1737.9	170°	693.0	692.5	692.0	692.0	692.0	693.5	695.0
1619.7	1722.0	1736.1	172.5°	690.0	691.5	693.0	694.0	695.0	696.0	697.0
1531.2	1676.6	1698.8	175°	691.0	693.0	695.0	696.0	697.0	697.5	698.0
1382.6	1582.7	1613.9	177.5°	697.0	698.0	699.0	699.5	700.0	702.5	705.0
1191.5	1442.4	1467.4	180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0
929.7	1172.3	1193.7								
617.9	805.0	842.0								
392.7	519.2	512.3								
289.7	337.6	337.9								
210.3	231.7	229.2								
162.8	141.4	141.1								
56.9	50.0	49.0								
24.7	20.7	21.0								
6.1	6.1	6.5								
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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