

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: P226843

Luminaire Tested: **IST-AF-1000-LED-E1-SL2-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)-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-SL2-7050-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL, 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: 7587.3 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - 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

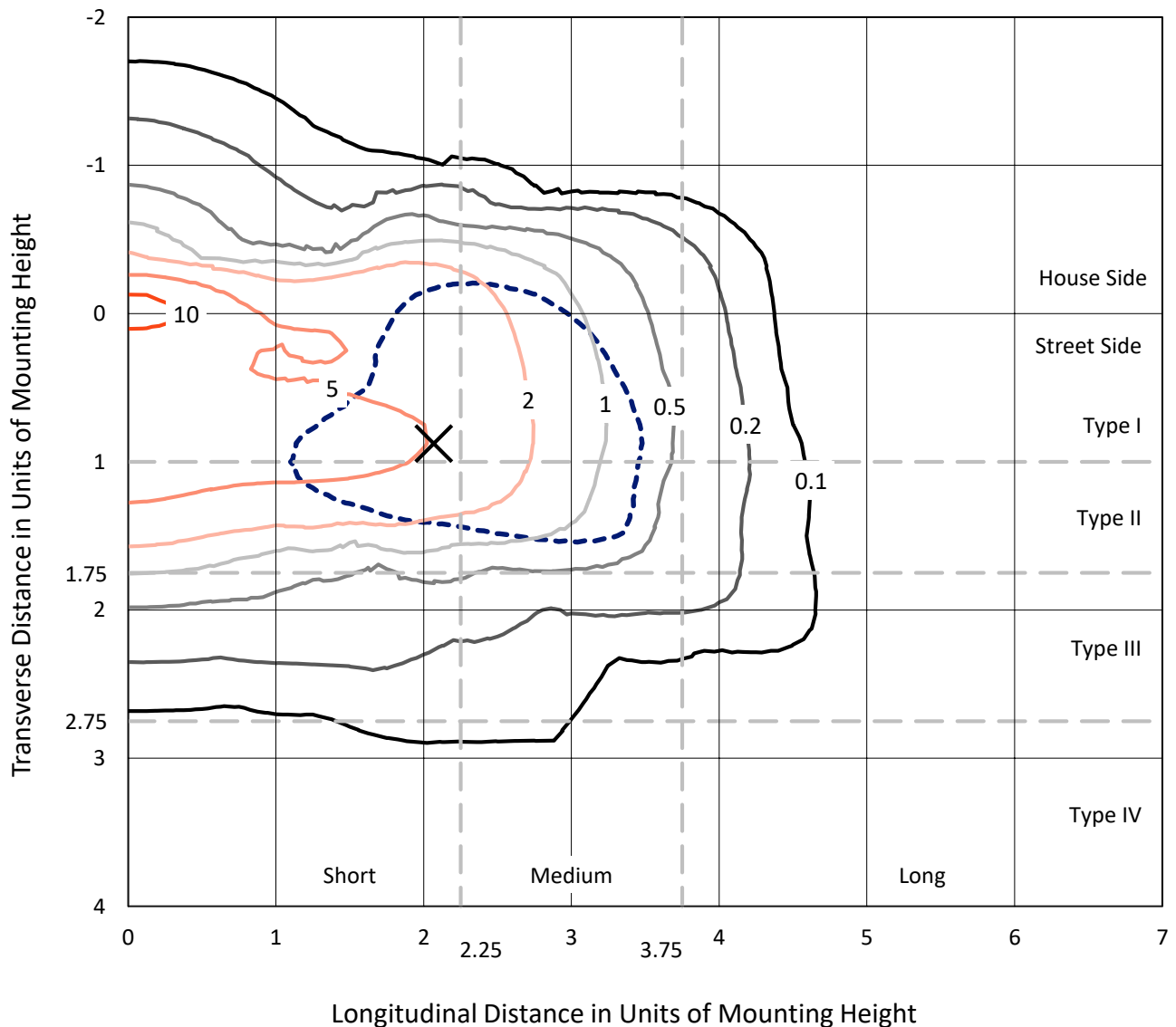


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Iso-Footcandle Lines of Horizontal Illumination

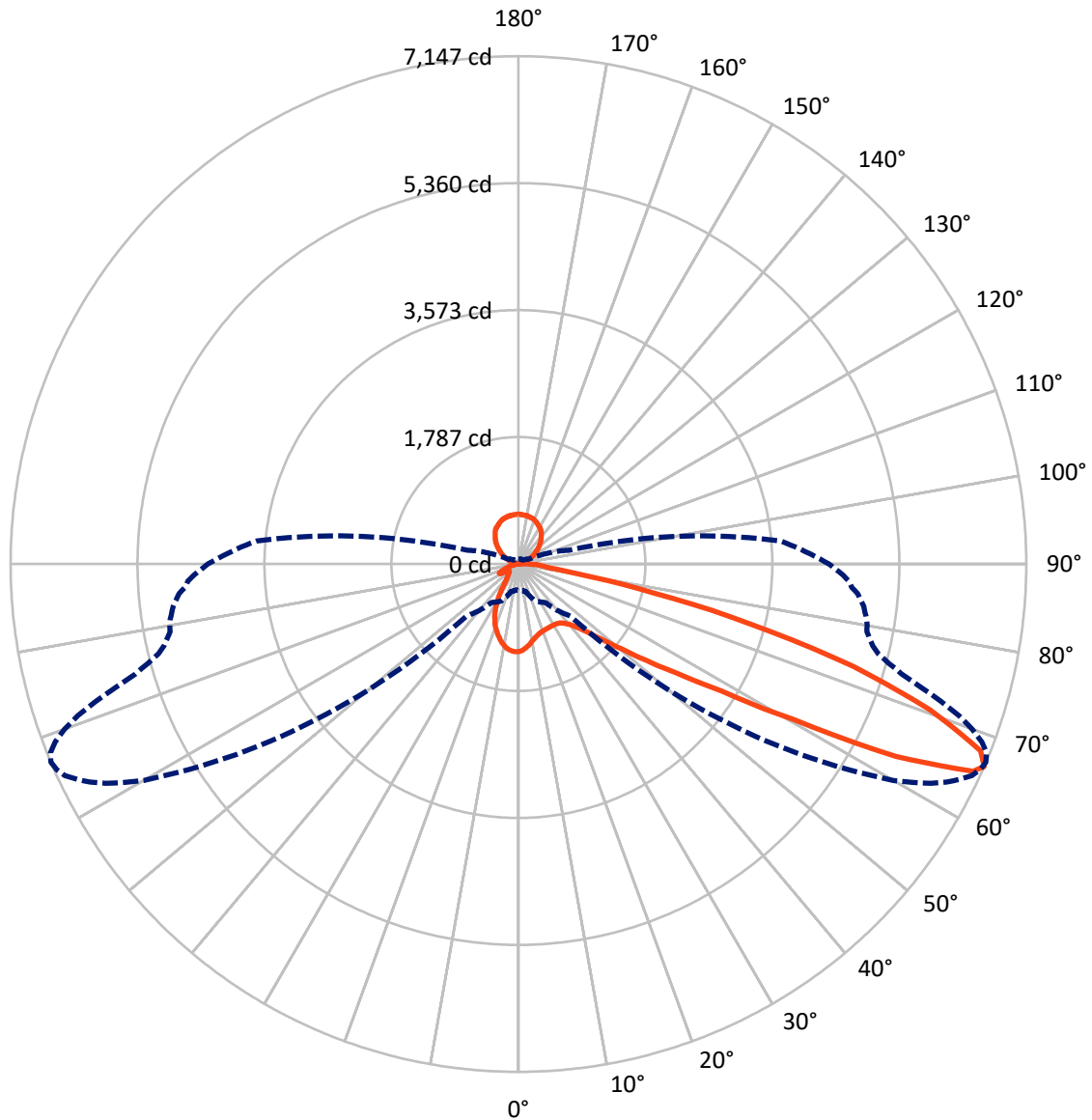
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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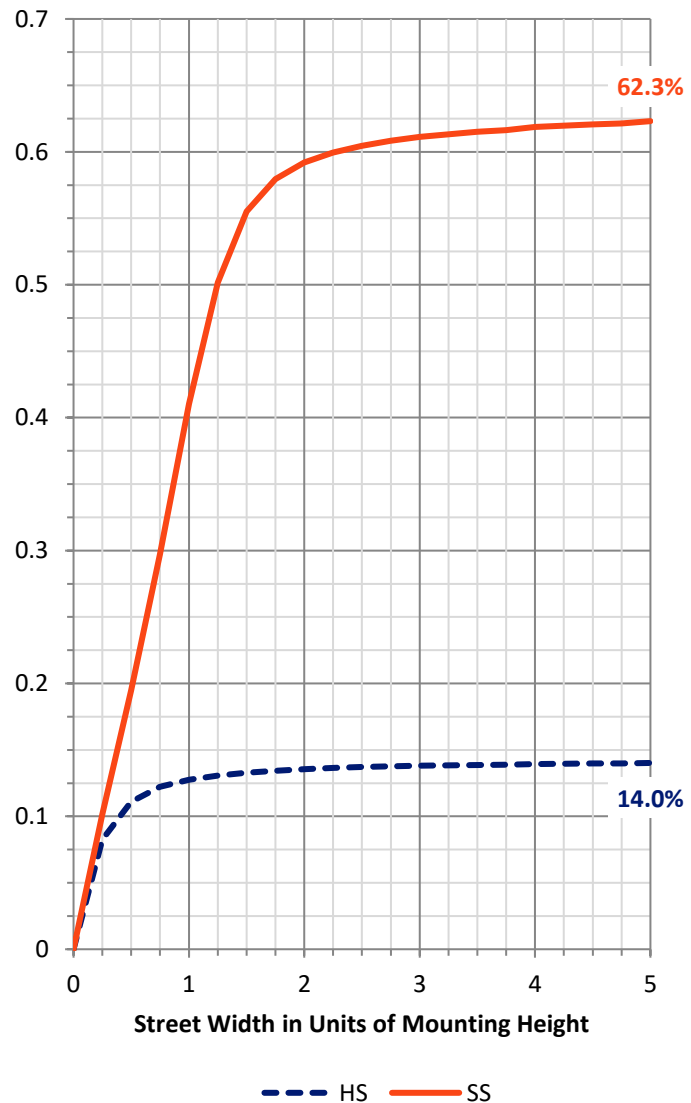
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1080.8	868.0	1948.9
	% Fixture	14.2	11.4	25.7
Street Side	Lumens	4769.1	869.2	5638.4
	% Fixture	62.9	11.5	74.3
Total	Lumens	5850.0	1737.3	7587.3
	% Fixture	77.1	22.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	1.4
10°-20°	254.2	3.4
20°-30°	348.6	4.6
30°-40°	498.0	6.6
40°-50°	807.4	10.6
50°-60°	1279.3	16.9
60°-70°	1621.2	21.4
70°-80°	805.9	10.6
80°-90°	128.7	1.7
90°-100°	11.4	0.2
100°-110°	57.4	0.8
110°-120°	166.1	2.2
120°-130°	273.2	3.6
130°-140°	336.8	4.4
140°-150°	344.6	4.5
150°-160°	290.3	3.8
160°-170°	191.2	2.5
170°-180°	66.3	0.9
0°-90°	5850.0	77.1
0°-180°	7587.3	100.0



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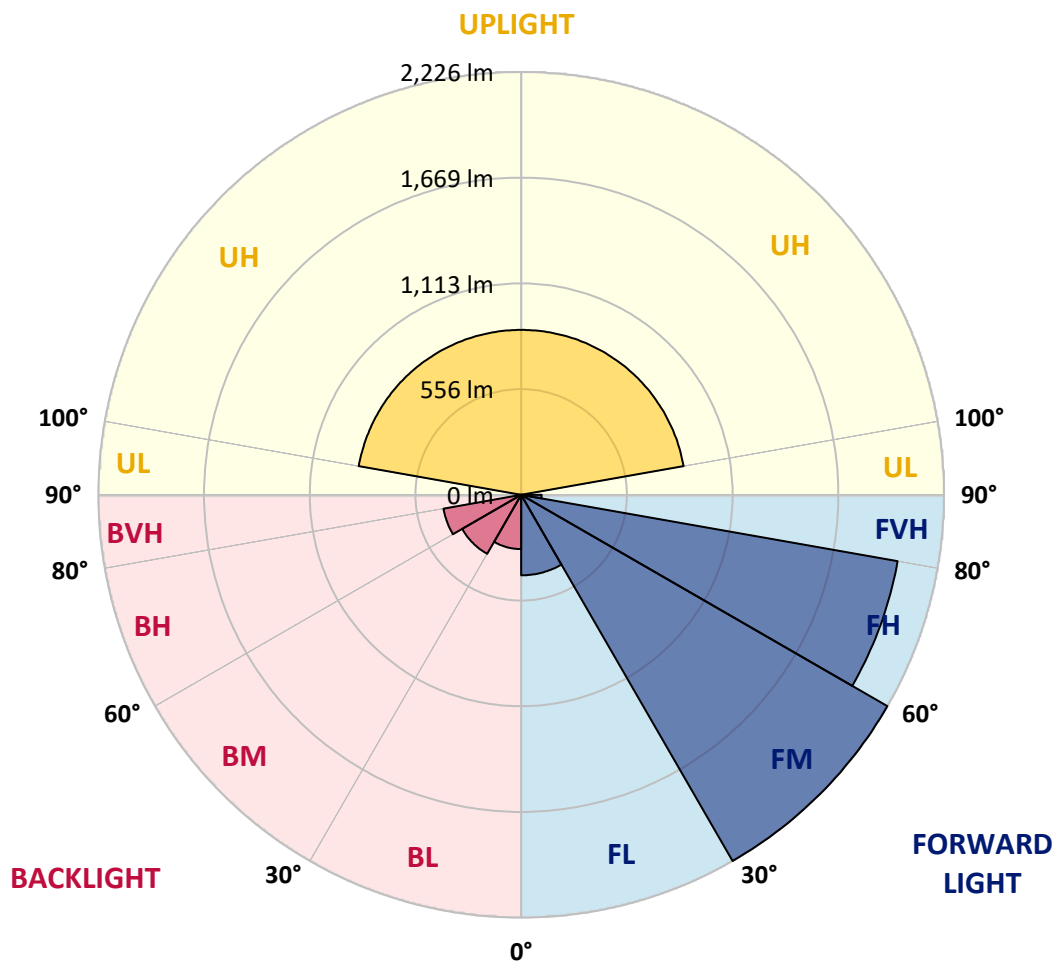
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	423.9	5.6			
FM (30°-60°)	2225.8	29.3			
FH (60°-80°)	2011.9	26.5			G2/5000
FVH (80°-90°)	107.6	1.4			G2/225
BL (0°-30°)	285.7	3.8	B1/500		
BM (30°-60°)	358.9	4.7	B1/1000		
BH (60°-80°)	415.2	5.5	B1/500		G1/500
BVH (80°-90°)	21.1	0.3			G1/100
UL (90°-100°)	11.4	0.2		U2/50	
UH (100°-180°)	868.0	11.4		U4/1000	

BUG Rating: B1-U5-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1144.6	1147.2	1162.1	1170.1	1181.5	1185.0	1198.2	1203.5	1207.9	1207.0	1207.0
5°	1041.7	1049.6	1056.7	1072.5	1089.2	1109.4	1134.9	1154.2	1157.7	1162.1	1164.8
7.5°	963.5	968.7	981.0	992.5	1013.6	1041.7	1077.7	1102.4	1107.6	1109.4	1115.5
10°	908.1	911.6	922.2	937.1	961.7	989.0	1026.8	1052.3	1060.2	1063.7	1069.0
12.5°	865.0	870.3	880.0	895.8	922.2	950.3	989.8	1015.3	1020.6	1025.0	1032.9
15°	837.8	841.3	850.1	867.6	891.4	919.5	958.2	989.0	992.5	996.9	1003.9
17.5°	832.5	835.1	840.4	853.6	872.0	899.3	938.9	964.3	970.5	976.7	983.7
20°	853.6	855.3	857.1	858.9	869.4	887.0	925.7	952.9	958.2	963.5	972.3
22.5°	899.3	901.9	897.5	891.4	883.5	887.0	919.5	947.6	951.2	956.4	963.5
25°	978.4	975.8	962.6	952.9	924.8	901.9	921.3	945.0	949.4	954.7	962.6
27.5°	1071.6	1068.1	1060.2	1033.8	987.2	940.6	931.8	949.4	952.0	956.4	963.5
30°	1171.8	1172.7	1165.7	1136.6	1076.9	998.6	955.6	960.0	961.7	965.2	969.6
32.5°	1262.4	1275.5	1274.7	1272.9	1187.6	1076.9	1001.3	983.7	981.0	983.7	985.4
35°	1367.0	1369.6	1394.2	1406.5	1337.1	1191.1	1068.1	1029.4	1018.9	1019.7	1018.0
37.5°	1479.5	1483.0	1525.2	1546.3	1492.7	1321.3	1156.9	1097.1	1087.4	1077.7	1070.7
40°	1643.0	1657.1	1679.0	1702.8	1676.4	1496.2	1273.8	1192.9	1168.3	1166.5	1152.5
42.5°	1887.4	1883.0	1872.4	1891.8	1860.1	1692.2	1415.3	1328.3	1309.8	1285.2	1265.9
45°	2127.4	2137.0	2091.3	2100.1	2101.9	1919.0	1620.1	1497.9	1488.3	1459.3	1438.2
47.5°	2289.1	2278.6	2217.0	2261.9	2371.7	2183.6	1857.5	1729.1	1708.9	1694.0	1680.8
50°	2297.9	2289.1	2249.6	2328.7	2563.4	2653.9	2188.0	2038.6	2009.6	1983.2	1975.3
52.5°	2083.4	2071.1	2084.3	2245.2	2632.8	3047.8	2654.8	2422.7	2399.0	2377.0	2346.3
55°	1701.0	1715.1	1777.5	2008.7	2526.5	3327.3	3573.4	3016.1	2914.1	2913.3	2837.7
57.5°	1270.3	1256.2	1302.8	1519.9	2257.5	3426.6	4417.4	4279.3	4051.7	3897.8	3712.3
60°	857.1	860.6	903.7	1015.3	1570.9	3318.5	4982.6	5463.5	5383.5	5350.9	5300.8
62.5°	594.3	599.5	639.1	743.7	918.6	2669.8	5147.9	6127.2	6270.5	6389.1	6360.1
65°	415.8	416.7	456.2	618.0	688.3	1371.4	4783.1	6215.1	6428.7	6632.6	6815.5
66°	366.6	367.5	400.0	574.9	660.2	1034.7	4466.6	6092.9	6336.4	6573.7	6762.7
67.5°	313.8	319.1	344.6	488.8	632.9	798.2	3689.5	5728.1	5983.0	6244.1	6493.7
70°	215.4	217.1	240.0	396.5	592.5	700.6	2102.8	4471.9	4824.4	5283.3	5548.7
72.5°	153.8	152.1	154.7	245.3	608.3	696.2	1105.0	2943.1	3436.3	3838.9	4126.4
75°	137.1	132.7	121.3	152.1	443.9	760.4	740.2	1732.7	2108.0	2474.6	2769.1
77.5°	122.2	115.2	109.0	116.9	219.8	716.4	664.6	992.5	1184.1	1457.5	1684.3
80°	93.2	88.8	92.3	101.1	131.9	659.3	660.2	660.2	712.1	801.7	891.4
82.5°	61.5	56.3	64.2	83.5	99.3	496.7	682.2	582.8	573.2	569.6	575.8
85°	38.7	33.4	44.8	62.4	76.5	259.3	699.7	615.4	570.5	527.4	484.4
87.5°	14.1	15.8	22.9	36.0	50.1	112.5	613.6	542.4	511.6	458.0	407.9
90°	8.5	7.6	11.4	18.5	19.4	28.1	101.1	158.3	97.9	53.2	44.6
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.5	7.6	7.7	7.8
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.0	10.8	10.6	10.4
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	27.5	27.2	26.9	26.6
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	48.5	48.2	47.9	47.6
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.0	70.8	70.6	70.4
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.5	94.4	94.3	94.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.5	120.6	120.7	120.8
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	149.0	149.2	149.4	149.6
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	180.5	180.8	181.1	181.4
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	213.0	213.4	213.8	214.2
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	248.0	248.4	248.8	249.2
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	281.0	281.4	281.8	282.2
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	314.0	314.2	314.4	314.6
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.5	345.6	345.7	345.8
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	379.0	379.4	379.8	380.2
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	413.5	414.0	414.5	415.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	445.5	446.0	446.5	447.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	474.0	474.2	474.4	474.6
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	501.0	501.2	501.4	501.6
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	530.0	530.6	531.2	531.8
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	559.0	559.6	560.2	560.8
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	582.5	583.0	583.5	584.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	598.5	598.8	599.1	599.4
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	612.5	612.8	613.1	613.4
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	628.5	629.0	629.5	630.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	646.0	646.4	646.8	647.2
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	661.0	661.6	662.2	662.8
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	669.0	669.4	669.8	670.2
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	674.5	675.0	675.5	676.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	681.0	681.6	682.2	682.8
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	687.5	687.8	688.1	688.4
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	690.5	690.8	691.1	691.4
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	692.5	693.0	693.5	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	696.5	697.0	697.5	698.0
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):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1207.9	1212.2	1214.0	1212.2	1213.1	1218.4	1216.6	1219.3	1219.3	1221.0	1221.0
5°	1168.3	1171.8	1178.8	1178.0	1185.0	1187.6	1190.3	1193.8	1198.2	1200.8	1206.1
7.5°	1121.7	1128.7	1134.9	1138.4	1142.8	1151.6	1154.2	1162.1	1169.2	1176.2	1181.5
10°	1076.9	1086.5	1093.6	1096.2	1105.9	1110.3	1119.9	1126.1	1134.9	1143.7	1151.6
12.5°	1039.1	1047.9	1051.4	1060.2	1069.0	1077.7	1082.1	1093.6	1102.4	1113.8	1124.3
15°	1010.9	1019.7	1026.8	1032.9	1041.7	1050.5	1057.5	1069.0	1079.5	1090.9	1100.6
17.5°	993.4	998.6	1007.4	1012.7	1023.2	1033.8	1041.7	1054.9	1066.3	1076.0	1089.2
20°	980.2	986.3	994.2	1002.1	1011.8	1025.0	1032.0	1046.1	1058.4	1069.8	1082.1
22.5°	973.1	979.3	987.2	995.1	1005.7	1016.2	1027.6	1039.9	1053.1	1065.4	1077.7
25°	970.5	975.8	982.8	990.7	1002.1	1013.6	1023.2	1037.3	1048.7	1061.9	1076.9
27.5°	971.4	974.9	982.8	989.8	1001.3	1011.8	1021.5	1035.6	1048.7	1061.0	1076.0
30°	974.9	977.5	985.4	991.6	1001.3	1011.8	1020.6	1035.6	1047.0	1060.2	1076.0
32.5°	987.2	990.7	994.2	998.6	1007.4	1015.3	1025.9	1039.1	1049.6	1062.8	1076.0
35°	1016.2	1013.6	1016.2	1018.0	1024.1	1032.0	1039.9	1051.4	1061.0	1072.5	1086.5
37.5°	1061.9	1056.7	1058.4	1057.5	1057.5	1062.8	1070.7	1078.6	1086.5	1098.0	1112.0
40°	1146.3	1133.1	1129.6	1119.9	1117.3	1121.7	1127.0	1127.9	1137.5	1152.5	1158.6
42.5°	1255.3	1237.7	1240.4	1224.6	1220.2	1214.9	1221.9	1217.5	1223.7	1233.3	1246.5
45°	1427.6	1410.9	1393.3	1367.8	1373.1	1353.8	1348.5	1350.3	1349.4	1352.9	1368.7
47.5°	1633.3	1611.3	1599.9	1590.3	1571.8	1560.4	1545.4	1523.4	1528.7	1535.7	1549.8
50°	1934.0	1926.9	1905.0	1873.3	1868.9	1852.2	1847.8	1828.5	1821.4	1820.6	1819.7
52.5°	2335.7	2290.0	2281.2	2251.3	2228.5	2212.6	2207.4	2180.1	2152.9	2168.7	2166.9
55°	2825.4	2787.6	2739.2	2712.8	2694.4	2656.6	2646.9	2612.6	2596.8	2588.0	2566.0
57.5°	3648.2	3515.4	3416.1	3366.9	3297.4	3227.1	3202.5	3132.2	3077.6	3039.0	3041.6
60°	5082.8	4846.4	4567.7	4442.9	4153.6	4111.4	3912.8	3864.4	3744.9	3665.8	3620.0
62.5°	6339.9	6275.7	6142.1	5960.1	5670.0	5336.0	5185.7	4886.8	4653.0	4551.0	4409.4
65°	6940.3	7030.9	7067.8	7033.5	6917.5	6713.5	6534.2	6242.3	5850.3	5628.7	5353.6
66°	6909.5	7044.0	7111.7	7146.9	7104.7	6984.3	6796.1	6556.2	6252.9	5915.3	5606.8
67.5°	6684.5	6815.5	6909.5	7016.8	7016.8	6979.0	6902.5	6742.5	6528.0	6233.5	5956.6
70°	5765.0	5942.6	6108.7	6141.2	6232.7	6204.5	6265.2	6163.2	6112.2	5989.2	5840.6
72.5°	4491.2	4639.8	4782.2	4924.6	4900.9	4870.1	4863.9	4885.0	4781.3	4818.2	4779.5
75°	2987.1	3242.9	3388.8	3374.8	3384.4	3392.4	3327.3	3182.3	3294.8	3152.4	3199.8
77.5°	1815.3	1934.0	1973.5	1929.6	1872.4	1798.6	1679.9	1610.5	1511.1	1519.0	1453.1
80°	952.0	967.0	935.3	846.6	798.2	754.2	618.9	558.2	502.0	480.9	433.4
82.5°	545.9	509.9	471.2	441.3	384.2	345.5	292.7	259.3	223.3	191.6	180.2
85°	442.2	393.8	357.8	324.4	285.7	251.4	207.5	173.2	146.8	127.5	123.1
87.5°	364.8	331.4	294.5	262.8	225.0	189.9	146.8	114.3	90.5	73.0	67.7
90°	41.3	53.0	40.6	26.6	35.4	23.1	16.9	17.8	16.0	16.0	16.9
92.5°	7.0	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1
95°	7.9	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1
97.5°	10.2	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1
100°	26.3	26.0	25.7	25.4	25.1	24.8	24.5	24.2	23.9	23.6	23.3
102.5°	47.3	47.0	46.5	46.0	45.5	45.0	44.5	44.0	43.5	43.0	42.5
105°	70.2	70.0	69.5	69.0	68.5	68.0	67.5	67.0	66.5	66.0	65.5
107.5°	94.1	94.0	93.6	93.2	92.8	92.4	92.0	91.6	91.2	90.8	90.4



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CATALOG NUMBER: IST-AF-1000-LED-E1-SL2-7050-ULG

CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
110°	120.9	121.0	120.8	120.6	120.4	120.2	120.0	119.8	119.6	119.4	119.2
112.5°	149.8	150.0	149.9	149.8	149.7	149.6	149.5	149.4	149.3	149.2	149.1
115°	181.7	182.0	181.7	181.4	181.1	180.8	180.5	180.2	179.9	179.6	179.3
117.5°	214.6	215.0	214.5	214.0	213.5	213.0	212.5	212.0	211.5	211.0	210.5
120°	249.6	250.0	249.5	249.0	248.5	248.0	247.5	247.0	246.5	246.0	245.5
122.5°	282.6	283.0	282.5	282.0	281.5	281.0	280.5	280.0	279.5	279.0	278.5
125°	314.8	315.0	314.5	314.0	313.5	313.0	312.5	312.0	311.5	311.0	310.5
127.5°	345.9	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0
130°	380.6	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0
132.5°	415.5	416.0	415.8	415.6	415.4	415.2	415.0	414.8	414.6	414.4	414.2
135°	447.5	448.0	447.9	447.8	447.7	447.6	447.5	447.4	447.3	447.2	447.1
137.5°	474.8	475.0	475.1	475.2	475.3	475.4	475.5	475.6	475.7	475.8	475.9
140°	501.8	502.0	502.2	502.4	502.6	502.8	503.0	503.2	503.4	503.6	503.8
142.5°	532.4	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
145°	561.4	562.0	561.9	561.8	561.7	561.6	561.5	561.4	561.3	561.2	561.1
147.5°	584.5	585.0	585.1	585.2	585.3	585.4	585.5	585.6	585.7	585.8	585.9
150°	599.7	600.0	600.3	600.6	600.9	601.2	601.5	601.8	602.1	602.4	602.7
152.5°	613.7	614.0	614.4	614.8	615.2	615.6	616.0	616.4	616.8	617.2	617.6
155°	630.5	631.0	631.5	632.0	632.5	633.0	633.5	634.0	634.5	635.0	635.5
157.5°	647.6	648.0	648.2	648.4	648.6	648.8	649.0	649.2	649.4	649.6	649.8
160°	663.4	664.0	663.7	663.4	663.1	662.8	662.5	662.2	661.9	661.6	661.3
162.5°	670.6	671.0	670.9	670.8	670.7	670.6	670.5	670.4	670.3	670.2	670.1
165°	676.5	677.0	677.3	677.6	677.9	678.2	678.5	678.8	679.1	679.4	679.7
167.5°	683.4	684.0	684.4	684.8	685.2	685.6	686.0	686.4	686.8	687.2	687.6
170°	688.7	689.0	689.5	690.0	690.5	691.0	691.5	692.0	692.5	693.0	693.5
172.5°	691.7	692.0	692.2	692.4	692.6	692.8	693.0	693.2	693.4	693.6	693.8
175°	694.5	695.0	695.1	695.2	695.3	695.4	695.5	695.6	695.7	695.8	695.9
177.5°	698.5	699.0	699.2	699.4	699.6	699.8	700.0	700.2	700.4	700.6	700.8
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):

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6
2.5°	1223.7	1223.7	1225.4	1227.2	1228.1	1228.1	1228.1	1229.8	1230.7	1228.1	1230.7
5°	1208.7	1213.1	1216.6	1219.3	1220.2	1222.8	1225.4	1227.2	1229.8	1229.8	1231.6
7.5°	1188.5	1196.4	1200.8	1205.2	1209.6	1214.0	1219.3	1222.8	1224.6	1228.1	1230.7
10°	1163.0	1172.7	1181.5	1188.5	1194.7	1203.5	1210.5	1215.8	1223.7	1224.6	1230.7
12.5°	1135.8	1149.8	1156.9	1170.1	1178.8	1192.0	1199.1	1207.0	1215.8	1220.2	1227.2
15°	1116.4	1128.7	1141.9	1154.2	1168.3	1184.1	1192.9	1203.5	1215.8	1225.4	1234.2
17.5°	1101.5	1118.2	1133.1	1149.0	1166.5	1183.2	1196.4	1207.9	1223.7	1228.9	1237.7
20°	1097.1	1115.5	1130.5	1147.2	1165.7	1187.6	1203.5	1215.8	1231.6	1240.4	1248.3
22.5°	1095.3	1112.9	1130.5	1150.7	1170.9	1193.8	1210.5	1226.3	1242.1	1250.0	1256.2
25°	1093.6	1112.0	1131.4	1154.2	1176.2	1199.9	1219.3	1234.2	1249.2	1257.1	1262.4
27.5°	1093.6	1112.9	1134.0	1156.9	1180.6	1207.0	1225.4	1239.5	1252.7	1259.7	1261.5
30°	1092.7	1112.9	1133.1	1158.6	1184.1	1211.4	1231.6	1244.8	1256.2	1260.6	1258.8
32.5°	1094.5	1115.5	1137.5	1163.0	1189.4	1215.8	1236.9	1251.8	1258.0	1257.1	1256.2
35°	1103.2	1122.6	1148.1	1173.6	1200.8	1225.4	1245.7	1256.2	1261.5	1259.7	1255.3
37.5°	1127.0	1146.3	1171.8	1199.9	1221.0	1249.2	1267.6	1275.5	1276.4	1271.1	1260.6
40°	1176.2	1195.5	1218.4	1249.2	1274.7	1294.0	1311.6	1320.4	1315.1	1305.4	1294.0
42.5°	1254.4	1279.1	1306.3	1330.9	1360.8	1387.2	1391.6	1396.9	1388.1	1369.6	1355.5
45°	1380.2	1395.1	1430.3	1448.7	1487.4	1500.6	1510.3	1512.9	1493.6	1478.6	1454.0
47.5°	1561.2	1590.3	1614.9	1632.4	1660.6	1678.2	1697.5	1688.7	1673.8	1648.3	1615.7
50°	1846.1	1864.5	1896.2	1927.8	1957.7	1970.0	1970.0	1961.2	1951.6	1902.3	1862.8
52.5°	2195.9	2197.7	2243.4	2281.2	2306.7	2288.2	2310.2	2288.2	2282.1	2247.8	2215.3
55°	2601.2	2584.5	2639.9	2673.3	2696.1	2718.1	2713.7	2711.1	2688.2	2649.5	2610.0
57.5°	2986.2	3034.6	3060.9	3110.2	3121.6	3136.5	3130.4	3121.6	3108.4	3086.4	3068.9
60°	3541.8	3574.3	3598.1	3607.7	3640.3	3644.7	3666.6	3630.6	3639.4	3613.9	3558.5
62.5°	4297.8	4262.6	4281.1	4281.1	4271.4	4237.2	4255.6	4269.7	4245.9	4224.8	4216.1
65°	5144.4	5031.0	4922.0	4903.5	4853.4	4842.0	4827.9	4792.7	4777.8	4740.9	4711.0
66°	5397.5	5221.7	5118.9	5055.6	4994.9	4981.7	4962.4	4925.5	4895.6	4843.7	4793.6
67.5°	5681.5	5454.7	5300.0	5210.3	5135.6	5086.3	5047.7	4994.9	4947.4	4870.1	4790.1
70°	5663.0	5475.8	5289.4	5153.1	5040.6	4939.5	4879.8	4766.4	4669.7	4558.9	4467.5
72.5°	4758.4	4725.0	4616.9	4540.4	4402.4	4348.8	4190.6	4118.5	3984.9	3841.6	3797.6
75°	3308.0	3177.0	3121.6	3090.8	3030.2	2863.2	2754.1	2777.9	2621.4	2481.6	2401.6
77.5°	1446.1	1472.5	1319.5	1250.9	1198.2	1107.6	1023.2	965.2	931.8	909.8	810.5
80°	400.0	349.0	344.6	320.0	314.7	280.4	284.8	260.2	243.5	240.0	232.1
82.5°	174.9	171.4	166.1	163.5	160.9	157.4	153.0	152.1	146.8	142.4	143.3
85°	116.0	115.2	112.5	109.9	105.5	99.3	94.9	91.4	92.3	87.9	87.0
87.5°	67.7	65.9	65.1	61.5	60.7	55.4	56.3	51.9	51.0	50.1	47.5
90°	18.7	19.3	21.8	20.7	17.0	24.7	21.9	19.9	20.6	17.7	17.5
92.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0
100°	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.4	19.0
102.5°	42.0	41.7	41.4	41.1	40.8	40.5	40.2	39.9	39.6	39.3	39.0
105°	65.0	64.6	64.2	63.8	63.4	63.0	62.6	62.2	61.8	61.4	61.0
107.5°	90.0	89.7	89.4	89.1	88.8	88.5	88.2	87.9	87.6	87.3	87.0



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
110°	119.0	118.7	118.4	118.1	117.8	117.5	117.2	116.9	116.6	116.3	116.0	0°
112.5°	149.0	148.8	148.6	148.4	148.2	148.0	147.8	147.6	147.4	147.2	147.0	2.5°
115°	179.0	178.8	178.6	178.4	178.2	178.0	177.8	177.6	177.4	177.2	177.0	5°
117.5°	210.0	209.8	209.6	209.4	209.2	209.0	208.8	208.6	208.4	208.2	208.0	7.5°
120°	245.0	244.8	244.6	244.4	244.2	244.0	243.8	243.6	243.4	243.2	243.0	10°
122.5°	278.0	277.8	277.6	277.4	277.2	277.0	276.8	276.6	276.4	276.2	276.0	12.5°
125°	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	15°
127.5°	346.0	345.9	345.8	345.7	345.6	345.5	345.4	345.3	345.2	345.1	345.0	17.5°
130°	381.0	380.8	380.6	380.4	380.2	380.0	379.8	379.6	379.4	379.2	379.0	20°
132.5°	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	22.5°
135°	447.0	447.3	447.6	447.9	448.2	448.5	448.8	449.1	449.4	449.7	450.0	25°
137.5°	476.0	476.5	477.0	477.5	478.0	478.5	479.0	479.5	480.0	480.5	481.0	27.5°
140°	504.0	504.5	505.0	505.5	506.0	506.5	507.0	507.5	508.0	508.5	509.0	30°
142.5°	533.0	533.1	533.2	533.3	533.4	533.5	533.6	533.7	533.8	533.9	534.0	32.5°
145°	561.0	560.7	560.4	560.1	559.8	559.5	559.2	558.9	558.6	558.3	558.0	35°
147.5°	586.0	585.7	585.4	585.1	584.8	584.5	584.2	583.9	583.6	583.3	583.0	37.5°
150°	603.0	603.3	603.6	603.9	604.2	604.5	604.8	605.1	605.4	605.7	606.0	40°
152.5°	618.0	618.5	619.0	619.5	620.0	620.5	621.0	621.5	622.0	622.5	623.0	42.5°
155°	636.0	636.2	636.4	636.6	636.8	637.0	637.2	637.4	637.6	637.8	638.0	45°
157.5°	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	47.5°
160°	661.0	660.9	660.8	660.7	660.6	660.5	660.4	660.3	660.2	660.1	660.0	50°
162.5°	670.0	669.8	669.6	669.4	669.2	669.0	668.8	668.6	668.4	668.2	668.0	52.5°
165°	680.0	679.8	679.6	679.4	679.2	679.0	678.8	678.6	678.4	678.2	678.0	55°
167.5°	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	57.5°
170°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	60°
172.5°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	62.5°
175°	696.0	695.8	695.6	695.4	695.2	695.0	694.8	694.6	694.4	694.2	694.0	65°
177.5°	701.0	700.7	700.4	700.1	699.8	699.5	699.2	698.9	698.6	698.3	698.0	66°
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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 NUMBER: IST-AF-1000-LED-E1-SL2-7050-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	86°	
1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	1231.6	110°	116.2
1233.3	1235.1	1236.0	1235.1	1236.9	1236.0	1236.9	1236.0	1231.6	1230.7	1229.8	112.5°	147.0
1235.1	1238.6	1239.5	1240.4	1238.6	1240.4	1236.9	1222.8	1207.0	1189.4	1175.3	115°	177.2
1236.9	1241.3	1243.9	1243.9	1244.8	1243.0	1229.8	1199.1	1162.1	1125.2	1097.1	117.5°	208.2
1236.0	1242.1	1244.8	1245.7	1245.7	1242.1	1210.5	1161.3	1105.0	1048.7	991.6	120°	243.0
1233.3	1238.6	1243.0	1243.0	1243.9	1231.6	1182.4	1112.0	1032.0	947.6	871.2	122.5°	276.2
1238.6	1243.9	1243.9	1243.9	1243.0	1221.9	1152.5	1050.5	943.2	829.0	715.6	125°	310.0
1246.5	1249.2	1247.4	1247.4	1243.9	1212.2	1119.1	989.8	849.2	698.0	539.8	127.5°	345.4
1253.6	1255.3	1254.4	1250.0	1245.7	1201.7	1084.8	925.7	736.7	539.8	382.4	130°	379.2
1260.6	1262.4	1258.0	1250.9	1244.8	1187.6	1043.5	843.9	609.2	369.2	253.2	132.5°	414.2
1261.5	1263.2	1255.3	1245.7	1236.9	1166.5	993.4	756.9	469.4	239.1	197.8	135°	450.2
1260.6	1258.8	1245.7	1233.3	1223.7	1141.0	938.0	648.8	313.0	180.2	172.3	137.5°	481.2
1254.4	1246.5	1236.0	1221.9	1207.9	1112.9	882.6	528.3	197.8	156.5	156.5	140°	509.4
1245.7	1237.7	1224.6	1206.1	1190.3	1085.7	819.3	405.3	158.2	144.2	145.9	142.5°	534.4
1242.1	1233.3	1214.0	1194.7	1174.4	1061.0	752.5	272.5	142.4	136.3	137.1	145°	558.4
1249.2	1234.2	1214.9	1192.9	1169.2	1039.9	683.0	189.9	134.5	127.5	129.2	147.5°	583.4
1272.9	1258.8	1236.0	1207.9	1182.4	1027.6	609.2	157.4	126.6	120.4	120.4	150°	606.8
1330.0	1311.6	1280.8	1247.4	1216.6	1035.6	543.3	143.3	120.4	114.3	114.3	152.5°	624.0
1422.3	1400.4	1364.3	1326.5	1286.1	1074.2	468.5	138.0	116.0	107.2	105.5	155°	638.6
1580.6	1551.6	1504.1	1459.3	1410.9	1141.0	392.9	134.5	110.8	102.9	99.3	157.5°	651.0
1829.4	1786.3	1730.0	1671.1	1612.2	1263.2	333.2	131.0	107.2	99.3	95.8	160°	661.2
2149.3	2120.3	2050.0	1972.6	1902.3	1506.7	298.9	128.3	104.6	94.9	92.3	162.5°	669.2
2557.2	2509.8	2454.4	2384.9	2301.4	1822.3	295.4	127.5	102.0	91.4	89.7	165°	678.8
2988.0	2969.5	2875.5	2832.4	2741.8	2242.5	359.5	129.2	100.2	88.8	86.1	167.5°	689.2
3479.4	3486.4	3398.5	3351.0	3276.3	2775.2	572.3	134.5	100.2	86.1	83.5	170°	697.0
4122.0	4133.4	4029.7	3973.4	3910.1	3372.1	899.3	143.3	102.9	83.5	80.9	172.5°	697.0
4648.6	4587.0	4520.2	4421.8	4341.8	3705.3	865.9	159.1	106.4	80.9	78.2	175°	695.0
4703.1	4659.1	4574.7	4468.3	4370.8	3707.1	756.0	164.4	107.2	80.0	77.4	177.5°	698.8
4696.0	4617.8	4522.0	4432.3	4336.5	3612.1	584.6	171.4	109.9	78.2	75.6	180°	700.0
4370.8	4260.9	4167.7	4043.8	3943.5	3232.4	359.5	170.5	106.4	73.0	71.2		
3604.2	3548.0	3437.2	3337.9	3233.2	2616.1	246.1	152.1	94.1	65.9	66.8		
2331.3	2267.1	2154.6	2098.4	2039.5	1673.8	191.6	123.9	80.0	58.9	61.5		
778.0	752.5	711.2	734.0	699.7	652.3	140.7	94.1	64.2	51.0	54.5		
233.0	227.7	235.6	221.5	234.7	198.7	92.3	65.9	49.2	44.0	48.3		
138.0	136.3	136.3	136.3	132.7	123.9	60.7	45.7	37.8	36.9	40.4		
84.4	82.6	83.5	82.6	84.4	75.6	41.3	31.6	28.1	27.3	32.5		
48.3	48.3	49.2	47.5	48.3	46.6	29.0	20.2	18.5	17.6	23.7		
18.4	18.4	15.8	14.9	15.8	19.3	16.9	15.2	12.3	11.4	15.9		
6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0		
7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0	7.0		
8.0	8.0	8.0	8.0	8.0	8.0	9.0	10.0	12.0	9.0	9.0		
19.0	19.0	19.0	19.0	19.0	19.0	23.0	26.0	29.0	21.0	12.0		
38.8	38.6	38.4	38.2	38.0	39.0	42.0	47.0	50.0	40.0	27.0		
61.0	61.0	61.0	61.0	61.0	61.0	65.0	70.0	72.0	63.0	48.0		
86.8	86.6	86.4	86.2	86.0	87.0	90.0	94.0	95.0	88.0	73.0		

'226843
 IST-AF-1000-LED-E1-SL2-7050-ULG

REPORT NUMBER: P226843
 CATALOG NUMBER: IST-AF-10

TION (continued):

CANDELA DISTRIBUTION (con

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
116.4	116.6	116.8	117.0	116.0	119.0	121.0	120.0	114.0	102.0	0°	1231.6	1231.6
147.0	147.0	147.0	147.0	147.0	149.0	150.0	148.0	143.0	134.0	2.5°	1222.8	1216.6
177.4	177.6	177.8	178.0	177.0	179.0	182.0	179.0	174.0	168.0	5°	1153.3	1136.6
208.4	208.6	208.8	209.0	208.0	210.0	215.0	211.0	205.0	202.0	7.5°	1053.1	1033.8
243.0	243.0	243.0	243.0	243.0	245.0	250.0	246.0	243.0	237.0	10°	938.9	909.8
276.4	276.6	276.8	277.0	276.0	278.0	283.0	279.0	277.0	271.0	12.5°	792.9	735.8
310.0	310.0	310.0	310.0	310.0	310.0	315.0	313.0	310.0	305.0	15°	624.1	547.7
345.8	346.2	346.6	347.0	345.0	346.0	346.0	345.0	340.0	339.0	17.5°	429.9	368.3
379.4	379.6	379.8	380.0	379.0	381.0	381.0	377.0	372.0	370.0	20°	301.5	278.7
414.4	414.6	414.8	415.0	414.0	414.0	416.0	411.0	405.0	404.0	22.5°	233.0	233.8
450.4	450.6	450.8	451.0	450.0	447.0	448.0	443.0	437.0	435.0	25°	193.4	202.2
481.4	481.6	481.8	482.0	481.0	476.0	475.0	473.0	468.0	464.0	27.5°	170.5	179.3
509.8	510.2	510.6	511.0	509.0	504.0	502.0	500.0	497.0	491.0	30°	156.5	164.4
534.8	535.2	535.6	536.0	534.0	533.0	533.0	527.0	525.0	521.0	32.5°	146.8	150.3
558.8	559.2	559.6	560.0	558.0	561.0	562.0	556.0	551.0	550.0	35°	135.4	137.1
583.8	584.2	584.6	585.0	583.0	586.0	585.0	580.0	575.0	574.0	37.5°	125.7	125.7
607.6	608.4	609.2	610.0	606.0	603.0	600.0	597.0	593.0	593.0	40°	116.9	116.0
625.0	626.0	627.0	628.0	623.0	618.0	614.0	611.0	610.0	610.0	42.5°	109.0	108.1
639.2	639.8	640.4	641.0	638.0	636.0	631.0	626.0	628.0	630.0	45°	101.1	102.0
652.0	653.0	654.0	655.0	650.0	650.0	648.0	644.0	645.0	646.0	47.5°	96.7	97.6
662.4	663.6	664.8	666.0	660.0	661.0	664.0	658.0	655.0	655.0	50°	92.3	93.2
670.4	671.6	672.8	674.0	668.0	670.0	671.0	667.0	663.0	661.0	52.5°	88.8	88.8
679.6	680.4	681.2	682.0	678.0	680.0	677.0	672.0	673.0	673.0	55°	85.3	84.4
690.4	691.6	692.8	694.0	688.0	688.0	684.0	678.0	685.0	688.0	57.5°	82.6	80.9
698.0	699.0	700.0	701.0	696.0	694.0	689.0	686.0	691.0	693.0	60°	80.0	78.2
698.0	699.0	700.0	701.0	696.0	694.0	692.0	689.0	690.0	690.0	62.5°	78.2	75.6
696.0	697.0	698.0	699.0	694.0	696.0	695.0	690.0	690.0	691.0	65°	76.5	74.7
699.6	700.4	701.2	702.0	698.0	701.0	699.0	694.0	695.0	697.0	66°	75.6	73.8
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	74.7	73.0
										70°	71.2	69.4
										72.5°	65.9	65.1
										75°	60.7	58.9
										77.5°	53.6	52.7
										80°	45.7	44.8
										82.5°	38.7	36.9
										85°	30.8	29.0
										87.5°	21.1	19.3
										90°	13.3	13.2
										92.5°	6.0	5.0
										95°	7.0	6.0
										97.5°	8.0	8.0
										100°	10.0	9.0
										102.5°	18.0	13.0
										105°	36.0	27.0
										107.5°	58.0	49.0



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tinued):

175°	180°
1231.6	1231.6
1211.4	1219.3
1131.4	1128.7
1018.0	1018.9
880.8	882.6
703.3	692.7
503.7	508.1
350.8	349.9
281.3	283.1
240.9	240.9
214.5	214.5
189.0	189.9
171.4	173.2
155.6	156.5
139.8	140.7
126.6	126.6
117.8	118.7
111.6	111.6
105.5	105.5
100.2	102.0
94.9	95.8
89.7	90.5
84.4	84.4
80.0	80.0
76.5	75.6
73.8	72.1
71.2	70.3
70.3	69.4
69.4	68.6
67.7	66.8
65.1	64.2
59.8	58.0
54.5	52.7
50.1	47.5
42.2	40.4
30.8	29.0
18.5	18.5
9.4	9.4
4.0	4.0
5.0	5.0
7.0	7.0
8.0	8.0
11.0	11.0
22.0	21.0
42.0	41.0

CANDELA DISTRIBUTION (continued):

	155°	165°	175°
110°	87.0	74.0	68.0
112.5°	121.0	106.0	99.0
115°	159.0	147.0	139.0
117.5°	197.0	189.0	184.0
120°	233.0	226.0	223.0
122.5°	267.0	261.0	260.0
125°	299.0	296.0	294.0
127.5°	333.0	329.0	329.0
130°	366.0	362.0	361.0
132.5°	401.0	393.0	394.0
135°	432.0	426.0	426.0
137.5°	460.0	459.0	457.0
140°	489.0	487.0	485.0
142.5°	518.0	517.0	515.0
145°	547.0	544.0	546.0
147.5°	574.0	571.0	572.0
150°	593.0	593.0	592.0
152.5°	609.0	608.0	608.0
155°	627.0	625.0	625.0
157.5°	644.0	643.0	643.0
160°	656.0	659.0	660.0
162.5°	665.0	669.0	669.0
165°	676.0	676.0	678.0
167.5°	686.0	684.0	687.0
170°	692.0	692.0	695.0
172.5°	693.0	695.0	697.0
175°	695.0	697.0	698.0
177.5°	699.0	700.0	705.0
180°	700.0	700.0	700.0



-SL2-7050-ULG

180°
66.0
99.0
140.0
184.0
225.0
263.0
298.0
330.0
363.0
396.0
429.0
460.0
488.0
518.0
550.0
575.0
595.0
611.0
629.0
646.0
663.0
673.0
681.0
690.0
698.0
699.0
700.0
707.0
700.0

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