

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: P227098

Luminaire Tested: **IST-AF-1200-LED-E1-SL4-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35947)-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-1200-LED-E1-SL4-7050-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV 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: 7899.9 lumens
Efficiency: N/A
Efficacy: 95.5 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

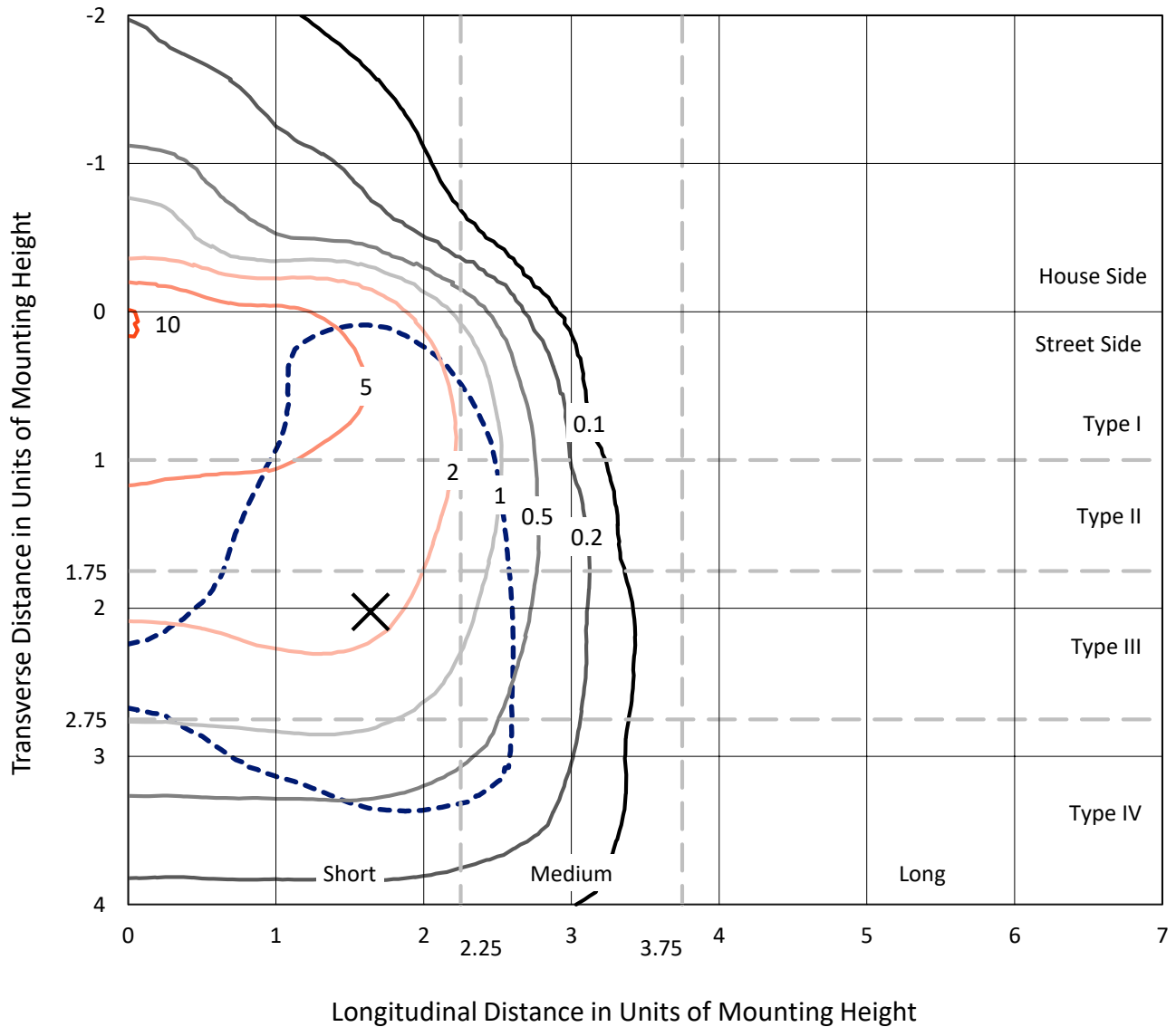
Input Watts (W): 82.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

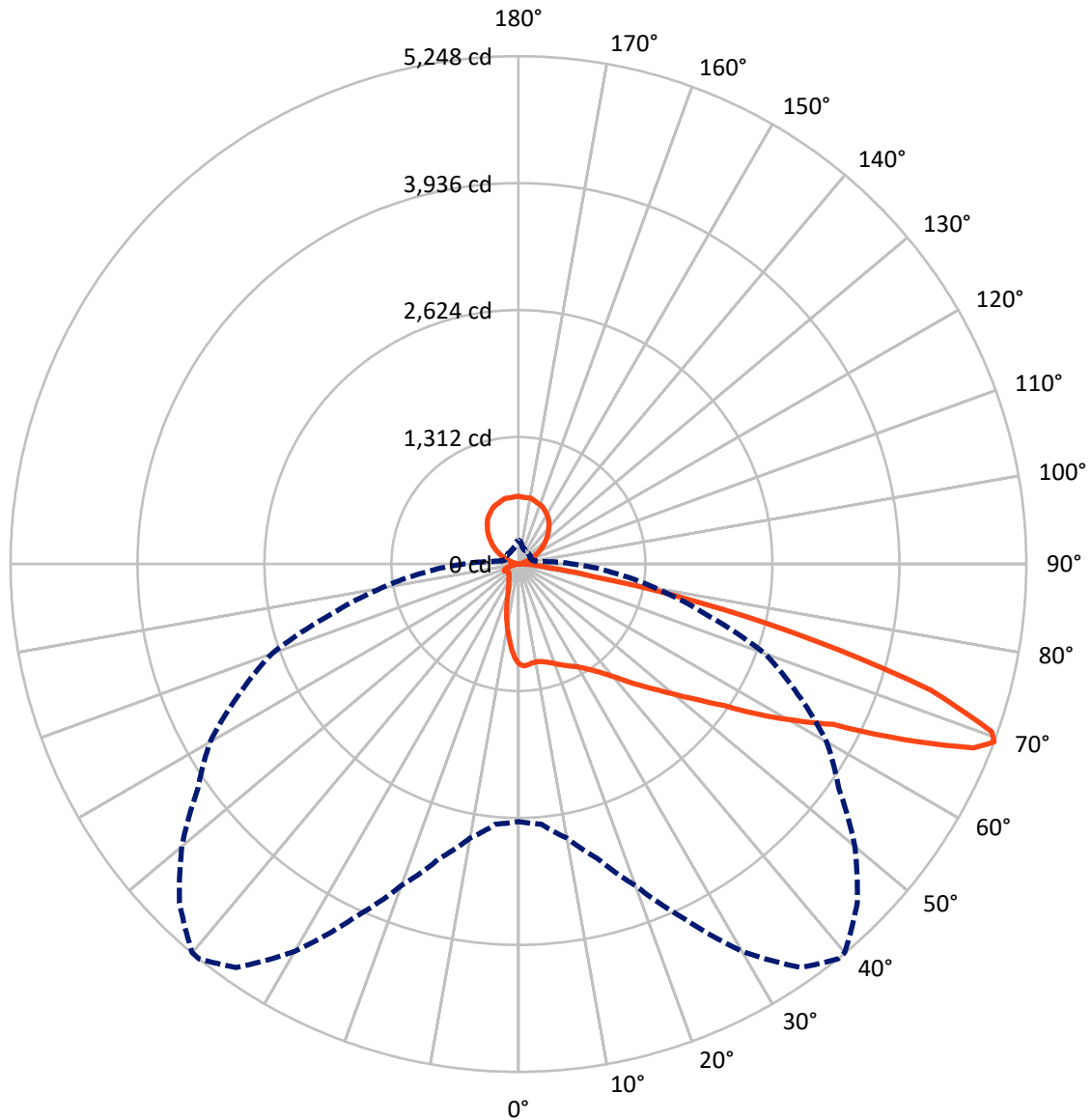
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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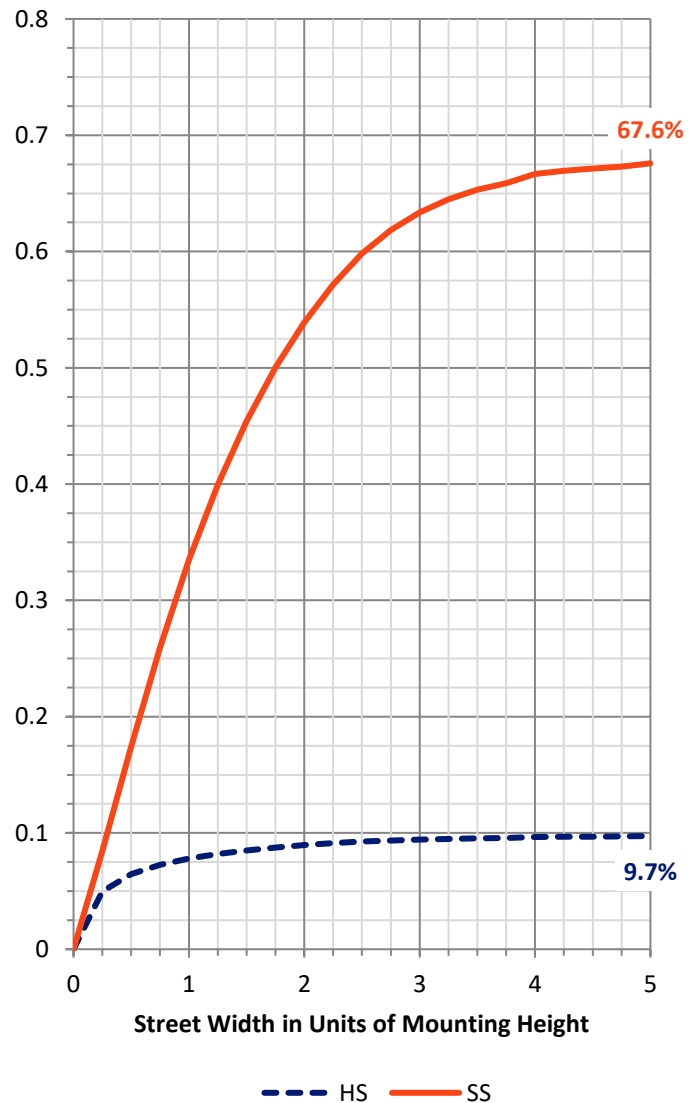
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	780.4	867.8	1648.2
	% Fixture	9.9	11.0	20.9
Street Side	Lumens	5382.6	869.1	6251.7
	% Fixture	68.1	11.0	79.1
Total	Lumens	6163.0	1736.8	7899.9
	% Fixture	78.0	22.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.1	1.1
10°-20°	224.7	2.8
20°-30°	349.7	4.4
30°-40°	528.6	6.7
40°-50°	845.9	10.7
50°-60°	1329.4	16.8
60°-70°	1790.0	22.7
70°-80°	887.9	11.2
80°-90°	117.7	1.5
90°-100°	11.0	0.1
100°-110°	57.4	0.7
110°-120°	166.1	2.1
120°-130°	273.2	3.5
130°-140°	336.8	4.3
140°-150°	344.6	4.4
150°-160°	290.3	3.7
160°-170°	191.2	2.4
170°-180°	66.3	0.8
0°-90°	6163.0	78.0
0°-180°	7899.9	100.0

Coefficient of Utilization



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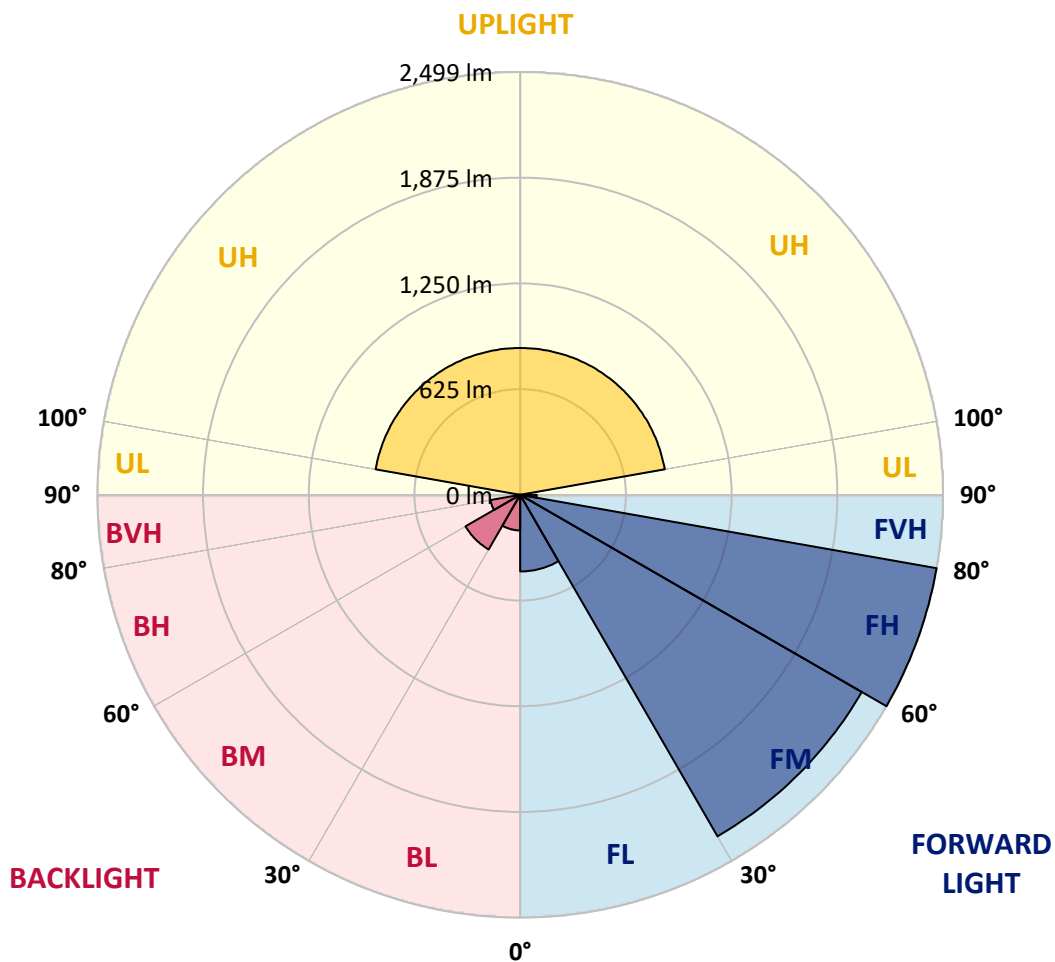
CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	453.2	5.7			
FM	(30°-60°)	2331.3	29.5			
FH	(60°-80°)	2499.4	31.6			G2/5000
FVH	(80°-90°)	98.8	1.3			G1/100
BL	(0°-30°)	210.4	2.7	B1/500		
BM	(30°-60°)	372.6	4.7	B1/1000		
BH	(60°-80°)	178.5	2.3	B1/500		G1/500
BVH	(80°-90°)	18.9	0.2			G1/100
UL	(90°-100°)	11.0	0.1		U2/50	
UH	(100°-180°)	867.8	11.0		U4/1000	

BUG Rating: B1-U5-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4
2.5°	1057.4	1058.4	1058.4	1059.4	1055.4	1055.4	1056.4	1052.4	1054.4	1053.4	1048.4
5°	1059.4	1060.4	1059.4	1060.4	1055.4	1053.4	1049.4	1044.4	1046.4	1045.4	1038.4
7.5°	1054.4	1055.4	1053.4	1054.4	1048.4	1044.4	1038.4	1034.4	1031.4	1030.4	1021.4
10°	1043.4	1046.4	1042.4	1045.4	1040.4	1036.4	1033.4	1029.4	1027.4	1026.4	1016.4
12.5°	1027.4	1029.4	1030.4	1034.4	1034.4	1035.4	1035.4	1032.4	1033.4	1032.4	1024.4
15°	1012.4	1019.4	1026.4	1030.4	1038.4	1043.4	1047.4	1046.4	1049.4	1048.4	1043.4
17.5°	1012.4	1018.4	1030.4	1043.4	1058.4	1065.4	1071.4	1071.4	1072.4	1070.4	1062.4
20°	1016.4	1027.4	1047.4	1069.4	1087.4	1101.4	1105.4	1104.4	1100.4	1100.4	1086.4
22.5°	1049.4	1056.4	1078.4	1102.4	1127.4	1141.4	1142.4	1139.4	1131.4	1129.4	1112.4
25°	1096.4	1104.4	1124.4	1155.4	1174.4	1185.4	1182.4	1172.4	1164.4	1157.4	1139.4
27.5°	1169.4	1175.4	1195.4	1216.4	1227.4	1231.4	1219.4	1205.4	1196.4	1193.4	1169.4
30°	1244.4	1252.4	1268.4	1281.5	1290.5	1278.5	1259.4	1243.4	1235.4	1233.4	1211.4
32.5°	1336.5	1337.5	1348.5	1351.5	1352.5	1332.5	1306.5	1291.5	1288.5	1284.5	1267.4
35°	1420.5	1425.5	1423.5	1422.5	1413.5	1388.5	1366.5	1357.5	1354.5	1353.5	1339.5
37.5°	1495.5	1503.5	1498.5	1489.5	1478.5	1458.5	1435.5	1425.5	1435.5	1429.5	1432.5
40°	1568.6	1568.6	1562.6	1557.5	1544.5	1525.5	1517.5	1518.5	1534.5	1538.5	1542.5
42.5°	1631.6	1630.6	1624.6	1620.6	1618.6	1614.6	1610.6	1629.6	1660.6	1666.6	1675.6
45°	1700.6	1699.6	1676.6	1684.6	1698.6	1701.6	1715.6	1759.6	1797.6	1800.6	1819.6
47.5°	1767.6	1759.6	1737.6	1745.6	1785.6	1806.6	1829.6	1891.7	1944.7	1955.7	2008.7
50°	1837.6	1829.6	1805.6	1820.6	1876.7	1915.7	1969.7	2055.7	2128.8	2143.8	2212.8
52.5°	1910.7	1909.7	1890.7	1913.7	1982.7	2061.7	2146.8	2243.8	2332.8	2351.8	2453.9
55°	1998.7	1993.7	1985.7	2013.7	2111.7	2217.8	2350.8	2482.9	2579.9	2613.9	2717.0
57.5°	2097.7	2095.7	2096.7	2154.8	2272.8	2433.9	2596.9	2775.0	2935.0	2959.0	3055.1
60°	2183.8	2187.8	2210.8	2301.8	2449.9	2667.9	2897.0	3138.1	3280.2	3305.2	3399.2
62.5°	2288.8	2311.8	2362.8	2477.9	2651.9	2916.0	3213.1	3468.2	3651.3	3702.3	3880.4
65°	2540.9	2558.9	2653.9	2793.0	3015.1	3353.2	3694.3	4065.4	4367.5	4413.6	4566.6
67.5°	2725.0	2771.0	2920.0	3147.1	3468.2	3900.4	4368.5	4817.7	5072.8	5093.8	4986.8
69°	2660.9	2699.0	2875.0	3149.1	3536.2	4039.4	4621.6	5090.8	5247.8	5243.8	4952.7
70°	2562.9	2597.9	2792.0	3058.1	3479.2	4023.4	4625.6	5092.8	5187.8	5151.8	4818.7
72.5°	2146.8	2177.8	2359.8	2637.9	3046.1	3586.3	4153.5	4472.6	4452.6	4422.6	3872.4
75°	1340.5	1338.5	1497.5	1658.6	1975.7	2521.9	2944.0	3200.1	3159.1	3136.1	2485.9
77.5°	501.2	536.2	594.2	767.3	913.3	1208.4	1549.5	1834.6	1913.7	1812.6	1338.5
80°	261.1	280.1	318.1	379.1	436.2	499.2	600.2	772.3	799.3	745.3	540.2
82.5°	206.1	229.1	267.1	319.1	359.1	335.1	316.1	327.1	325.1	310.1	275.1
85°	156.1	183.1	245.1	298.1	355.1	300.1	239.1	209.1	186.1	187.1	199.1
87.5°	78.0	101.0	193.1	260.1	309.1	199.1	156.1	121.0	101.0	97.0	130.0
90°	29.0	29.0	45.0	58.0	77.5	43.0	42.0	34.0	26.6	26.5	37.0
92.5°	4.0	4.0	4.5	5.0	5.5	6.0	6.0	6.0	6.0	6.0	6.0
95°	5.0	5.0	5.5	6.0	6.5	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	7.0	7.0	7.5	8.0	8.0	8.0	8.5	9.0	9.0	9.0	9.0
100°	8.0	8.0	8.5	9.0	9.5	10.0	11.0	12.0	15.6	16.5	21.0
102.5°	11.0	11.0	12.0	13.0	15.5	18.0	22.5	27.0	32.2	33.5	40.0
105°	21.0	22.0	24.5	27.0	31.5	36.0	42.0	48.0	54.0	55.5	63.0
107.5°	41.0	42.0	45.5	49.0	53.5	58.0	65.5	73.0	79.0	80.5	88.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	66.0	68.0	71.0	74.0	80.5	87.0	94.5	102.0	106.8	108.0	114.0
112.5°	99.0	99.0	102.5	106.0	113.5	121.0	127.5	134.0	137.6	138.5	143.0
115°	140.0	139.0	143.0	147.0	153.0	159.0	163.5	168.0	170.4	171.0	174.0
117.5°	184.0	184.0	186.5	189.0	193.0	197.0	199.5	202.0	203.2	203.5	205.0
120°	225.0	223.0	224.5	226.0	229.5	233.0	235.0	237.0	239.4	240.0	243.0
122.5°	263.0	260.0	260.5	261.0	264.0	267.0	269.0	271.0	273.4	274.0	277.0
125°	298.0	294.0	295.0	296.0	297.5	299.0	302.0	305.0	307.0	307.5	310.0
127.5°	330.0	329.0	329.0	329.0	331.0	333.0	336.0	339.0	339.4	339.5	340.0
130°	363.0	361.0	361.5	362.0	364.0	366.0	368.0	370.0	370.8	371.0	372.0
132.5°	396.0	394.0	393.5	393.0	397.0	401.0	402.5	404.0	404.4	404.5	405.0
135°	429.0	426.0	426.0	426.0	429.0	432.0	433.5	435.0	435.8	436.0	437.0
137.5°	460.0	457.0	458.0	459.0	459.5	460.0	462.0	464.0	465.6	466.0	468.0
140°	488.0	485.0	486.0	487.0	488.0	489.0	490.0	491.0	493.4	494.0	497.0
142.5°	518.0	515.0	516.0	517.0	517.5	518.0	519.5	521.0	522.6	523.0	525.0
145°	550.0	546.0	545.0	544.0	545.5	547.0	548.5	550.0	550.4	550.5	551.0
147.5°	575.0	572.0	571.5	571.0	572.5	574.0	574.0	574.0	574.4	574.5	575.0
150°	595.0	592.0	592.5	593.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0
152.5°	611.0	608.0	608.0	608.0	608.5	609.0	609.5	610.0	610.0	610.0	610.0
155°	629.0	625.0	625.0	625.0	626.0	627.0	628.5	630.0	629.2	629.0	628.0
157.5°	646.0	643.0	643.0	643.0	643.5	644.0	645.0	646.0	645.6	645.5	645.0
160°	663.0	660.0	659.5	659.0	657.5	656.0	655.5	655.0	655.0	655.0	655.0
162.5°	673.0	669.0	669.0	669.0	667.0	665.0	663.0	661.0	661.8	662.0	663.0
165°	681.0	678.0	677.0	676.0	676.0	676.0	674.5	673.0	673.0	673.0	673.0
167.5°	690.0	687.0	685.5	684.0	685.0	686.0	687.0	688.0	686.8	686.5	685.0
170°	698.0	695.0	693.5	692.0	692.0	692.0	692.5	693.0	692.2	692.0	691.0
172.5°	699.0	697.0	696.0	695.0	694.0	693.0	691.5	690.0	690.0	690.0	690.0
175°	700.0	698.0	697.5	697.0	696.0	695.0	693.0	691.0	690.6	690.5	690.0
177.5°	707.0	705.0	702.5	700.0	699.5	699.0	698.0	697.0	696.2	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°	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4
2.5°	1044.4	1044.4	1042.4	1041.4	1038.4	1034.4	1031.4	1026.4	1023.4	1018.4	1012.4
5°	1031.4	1027.4	1025.4	1021.4	1015.4	1010.4	1004.4	997.4	989.3	979.3	968.3
7.5°	1014.4	1008.4	1001.4	999.4	992.3	986.3	979.3	969.3	958.3	940.3	926.3
10°	1007.4	1001.4	995.4	991.3	982.3	975.3	967.3	954.3	940.3	916.3	890.3
12.5°	1014.4	1008.4	1002.4	995.4	987.3	979.3	968.3	952.3	933.3	902.3	870.3
15°	1031.4	1025.4	1015.4	1008.4	997.4	990.3	975.3	957.3	929.3	891.3	849.3
17.5°	1050.4	1041.4	1032.4	1021.4	1011.4	1002.4	986.3	963.3	928.3	883.3	829.3
20°	1068.4	1058.4	1044.4	1036.4	1026.4	1013.4	996.4	968.3	926.3	867.3	808.3
22.5°	1089.4	1076.4	1061.4	1052.4	1044.4	1033.4	1013.4	977.3	926.3	858.3	784.3
25°	1116.4	1099.4	1084.4	1075.4	1070.4	1062.4	1038.4	998.4	933.3	853.3	764.3
27.5°	1148.4	1126.4	1113.4	1107.4	1106.4	1100.4	1076.4	1026.4	949.3	853.3	745.3
30°	1186.4	1167.4	1150.4	1150.4	1162.4	1158.4	1131.4	1069.4	974.3	856.3	731.3
32.5°	1239.4	1220.4	1210.4	1220.4	1233.4	1237.4	1206.4	1130.4	1015.4	870.3	717.3
35°	1317.5	1305.5	1298.5	1313.5	1339.5	1349.5	1311.5	1221.4	1075.4	897.3	709.2
37.5°	1420.5	1411.5	1402.5	1428.5	1477.5	1497.5	1442.5	1326.5	1161.4	942.3	705.2
40°	1538.5	1539.5	1549.5	1601.6	1648.6	1690.6	1628.6	1485.5	1279.5	1006.4	709.2
42.5°	1678.6	1689.6	1723.6	1795.6	1886.7	1919.7	1859.7	1677.6	1426.5	1083.4	719.3
45°	1852.7	1881.7	1939.7	2046.7	2156.8	2207.8	2122.7	1919.7	1611.6	1206.4	747.3
47.5°	2037.7	2101.7	2199.8	2329.8	2457.9	2490.9	2385.8	2138.8	1792.6	1315.5	790.3
50°	2274.8	2352.8	2450.9	2606.9	2743.0	2763.0	2623.9	2341.8	1950.7	1410.5	831.3
52.5°	2495.9	2601.9	2727.0	2908.0	3046.1	3021.1	2841.0	2522.9	2075.7	1475.5	854.3
55°	2798.0	2908.0	3049.1	3207.1	3344.2	3284.2	3038.1	2676.9	2175.8	1523.5	861.3
57.5°	3143.1	3227.1	3365.2	3527.2	3617.3	3514.2	3232.1	2827.0	2270.8	1524.5	806.3
60°	3482.2	3580.3	3732.3	3891.4	3941.4	3763.3	3367.2	2850.0	2176.8	1360.5	645.2
62.5°	3984.4	4083.4	4160.5	4186.5	4096.4	3738.3	3210.1	2606.9	1876.7	1073.4	457.2
65°	4545.6	4433.6	4284.5	4144.5	3899.4	3355.2	2768.0	2141.8	1456.5	717.3	315.1
67.5°	4692.7	4351.5	4027.4	3715.3	3258.1	2671.9	2087.7	1506.5	934.3	408.1	214.1
69°	4539.6	4041.4	3680.3	3185.1	2713.0	1999.7	1438.5	965.3	558.2	284.1	179.1
70°	4259.5	3741.3	3252.1	2722.0	2101.7	1527.5	956.3	632.2	364.1	207.1	161.1
72.5°	3214.1	2569.9	1980.7	1286.5	784.3	435.2	306.1	219.1	173.1	152.1	138.0
75°	1858.7	1237.4	810.3	432.2	256.1	190.1	166.1	148.1	137.0	132.0	120.0
77.5°	784.3	490.2	332.1	243.1	172.1	147.1	128.0	118.0	117.0	114.0	103.0
80°	357.1	306.1	261.1	183.1	131.0	112.0	98.0	96.0	98.0	95.0	84.0
82.5°	265.1	261.1	218.1	141.0	100.0	75.0	61.0	64.0	72.0	78.0	68.0
85°	221.1	221.1	183.1	105.0	66.0	48.0	47.0	53.0	60.0	65.0	55.0
87.5°	203.1	195.1	105.0	54.0	38.0	31.0	29.0	26.0	26.0	45.0	38.0
90°	27.0	16.0	13.0	13.0	14.0	13.0	14.0	12.0	12.0	12.0	13.0
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



REPORT NUMBER: P227098

CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7050-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



REPORT NUMBER: P227098

CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7050-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4	1032.4
2.5°	1007.4	1003.4	993.4	991.3	988.3	984.3	983.3	978.3	968.3	966.3	967.3
5°	961.3	945.3	934.3	925.3	918.3	900.3	893.3	885.3	871.3	867.3	861.3
7.5°	907.3	888.3	866.3	850.3	831.3	812.3	797.3	778.3	763.3	754.3	738.3
10°	865.3	839.3	810.3	778.3	753.3	724.3	705.2	683.2	659.2	637.2	621.2
12.5°	833.3	797.3	755.3	717.3	681.2	650.2	616.2	585.2	555.2	525.2	499.2
15°	807.3	762.3	709.2	661.2	617.2	571.2	533.2	490.2	452.2	426.2	393.1
17.5°	779.3	721.3	658.2	602.2	545.2	497.2	449.2	404.1	368.1	334.1	307.1
20°	745.3	675.2	607.2	542.2	477.2	422.1	373.1	330.1	295.1	268.1	248.1
22.5°	707.2	625.2	546.2	475.2	410.1	356.1	310.1	278.1	252.1	237.1	231.1
25°	670.2	576.2	487.2	409.1	344.1	298.1	267.1	240.1	227.1	221.1	221.1
27.5°	636.2	526.2	427.2	351.1	288.1	252.1	228.1	217.1	211.1	211.1	214.1
30°	604.2	476.2	370.1	293.1	243.1	216.1	203.1	199.1	200.1	204.1	208.1
32.5°	567.2	428.2	321.1	252.1	211.1	193.1	183.1	184.1	189.1	196.1	203.1
35°	528.2	377.1	278.1	221.1	189.1	175.1	169.1	170.1	177.1	186.1	193.1
37.5°	493.2	336.1	245.1	197.1	173.1	164.1	159.1	160.1	165.1	176.1	185.1
40°	458.2	301.1	218.1	183.1	164.1	155.1	152.1	151.1	155.1	165.1	176.1
42.5°	428.2	271.1	202.1	173.1	158.1	150.1	146.1	146.1	148.1	156.1	167.1
45°	410.1	253.1	191.1	166.1	153.1	146.1	142.1	140.0	143.1	148.1	158.1
47.5°	410.1	244.1	184.1	161.1	149.1	143.1	138.0	137.0	138.0	143.1	153.1
50°	424.1	246.1	183.1	159.1	147.1	139.0	134.0	134.0	136.0	143.1	151.1
52.5°	436.2	250.1	186.1	161.1	147.1	137.0	131.0	130.0	133.0	140.0	147.1
55°	434.2	250.1	189.1	164.1	150.1	138.0	130.0	129.0	131.0	138.0	145.1
57.5°	388.1	235.1	186.1	166.1	154.1	143.1	135.0	132.0	134.0	140.0	146.1
60°	314.1	209.1	178.1	166.1	160.1	152.1	144.1	142.1	143.1	149.1	156.1
62.5°	246.1	186.1	168.1	165.1	163.1	159.1	156.1	154.1	154.1	159.1	165.1
65°	200.1	168.1	160.1	161.1	163.1	162.1	161.1	160.1	160.1	163.1	169.1
67.5°	167.1	151.1	149.1	152.1	154.1	155.1	156.1	155.1	156.1	159.1	166.1
69°	152.1	142.1	140.0	142.1	146.1	147.1	149.1	148.1	149.1	152.1	159.1
70°	143.1	135.0	133.0	136.0	139.0	140.0	142.1	141.0	142.1	145.1	152.1
72.5°	124.0	115.0	112.0	114.0	117.0	117.0	120.0	121.0	119.0	120.0	125.0
75°	106.0	96.0	91.0	92.0	92.0	92.0	94.0	94.0	92.0	91.0	92.0
77.5°	89.0	78.0	72.0	72.0	72.0	71.0	68.0	69.0	70.0	69.0	70.0
80°	70.0	61.0	55.0	55.0	55.0	53.0	52.0	52.0	54.0	56.0	55.0
82.5°	54.0	45.0	42.0	41.0	41.0	39.0	39.0	41.0	40.0	41.0	43.0
85°	39.0	32.0	29.0	30.0	29.0	27.0	28.0	31.0	31.0	30.0	32.0
87.5°	24.0	20.0	19.0	20.0	18.0	15.0	14.0	15.0	17.0	16.0	18.0
90°	12.0	11.0	11.0	10.0	10.0	9.0	9.0	9.5	11.0	11.0	10.0
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



REPORT NUMBER: P227098
 CATALOG NUMBER: IST-AF-1200-LED-E1-SL4-7050-ULG

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	60°
172.5°	694.0	693.0	692.0	690.5	689.0	689.5	690.0	690.0	690.0	691.5	693.0	62.5°
175°	696.0	695.5	695.0	692.5	690.0	690.0	690.0	690.5	691.0	693.0	695.0	65°
177.5°	701.0	700.0	699.0	696.5	694.0	694.5	695.0	696.0	697.0	698.0	699.0	67.5°
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	69°
												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
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
1032.4	1032.4	1032.4	1032.4	1032.4
960.3	963.3	950.3	956.3	952.3
855.3	850.3	849.3	846.3	840.3
732.3	728.3	716.3	720.3	711.3
605.2	604.2	582.2	583.2	572.2
488.2	470.2	461.2	448.2	455.2
378.1	363.1	344.1	339.1	346.1
285.1	270.1	261.1	253.1	250.1
236.1	227.1	222.1	219.1	217.1
228.1	226.1	225.1	223.1	222.1
223.1	225.1	225.1	225.1	223.1
218.1	222.1	223.1	222.1	220.1
213.1	216.1	216.1	215.1	212.1
206.1	209.1	209.1	208.1	206.1
198.1	200.1	201.1	201.1	202.1
192.1	194.1	196.1	198.1	201.1
185.1	188.1	189.1	193.1	197.1
176.1	180.1	182.1	185.1	189.1
167.1	172.1	173.1	177.1	181.1
163.1	167.1	167.1	170.1	173.1
158.1	160.1	159.1	161.1	162.1
153.1	155.1	154.1	156.1	157.1
149.1	151.1	153.1	155.1	156.1
151.1	154.1	155.1	158.1	159.1
160.1	164.1	168.1	172.1	175.1
169.1	174.1	183.1	201.1	208.1
174.1	181.1	202.1	233.1	242.1
171.1	180.1	205.1	238.1	249.1
165.1	172.1	199.1	233.1	243.1
157.1	164.1	191.1	228.1	237.1
127.0	131.0	161.1	196.1	202.1
93.0	96.0	119.0	133.0	132.0
72.0	76.0	84.0	85.0	84.0
57.0	59.0	63.0	63.0	64.0
44.0	45.0	47.0	45.0	44.0
33.0	32.0	31.0	30.0	29.0
19.0	19.0	16.0	14.0	13.0
9.5	10.0	9.0	7.0	5.0
5.5	5.0	4.5	4.0	4.0
6.5	6.0	5.5	5.0	5.0
8.0	8.0	7.5	7.0	7.0
9.5	9.0	8.5	8.0	8.0
15.5	13.0	12.0	11.0	11.0
31.5	27.0	24.5	22.0	21.0
53.5	49.0	45.5	42.0	41.0

CANDELA DISTRIBUTION:

	160°
110°	80.5
112.5°	113.5
115°	153.0
117.5°	193.0
120°	229.5
122.5°	264.0
125°	297.5
127.5°	331.0
130°	364.0
132.5°	397.0
135°	429.0
137.5°	459.5
140°	488.0
142.5°	517.5
145°	545.5
147.5°	572.5
150°	593.0
152.5°	608.5
155°	626.0
157.5°	643.5
160°	657.5
162.5°	667.0
165°	676.0
167.5°	685.0
170°	692.0
172.5°	694.0
175°	696.0
177.5°	699.5
180°	700.0

'227098

IST-AF-1200-LED-E1-SL4-7050-ULG

TION (continued):

165°	170°	175°	180°
74.0	71.0	68.0	66.0
106.0	102.5	99.0	99.0
147.0	143.0	139.0	140.0
189.0	186.5	184.0	184.0
226.0	224.5	223.0	225.0
261.0	260.5	260.0	263.0
296.0	295.0	294.0	298.0
329.0	329.0	329.0	330.0
362.0	361.5	361.0	363.0
393.0	393.5	394.0	396.0
426.0	426.0	426.0	429.0
459.0	458.0	457.0	460.0
487.0	486.0	485.0	488.0
517.0	516.0	515.0	518.0
544.0	545.0	546.0	550.0
571.0	571.5	572.0	575.0
593.0	592.5	592.0	595.0
608.0	608.0	608.0	611.0
625.0	625.0	625.0	629.0
643.0	643.0	643.0	646.0
659.0	659.5	660.0	663.0
669.0	669.0	669.0	673.0
676.0	677.0	678.0	681.0
684.0	685.5	687.0	690.0
692.0	693.5	695.0	698.0
695.0	696.0	697.0	699.0
697.0	697.5	698.0	700.0
700.0	702.5	705.0	707.0
700.0	700.0	700.0	700.0

(END OF REPORT)