

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: P227103

Luminaire Tested: **IST-AF-1000-LED-E1-SL4-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227103
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-1000-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: 7152.5 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

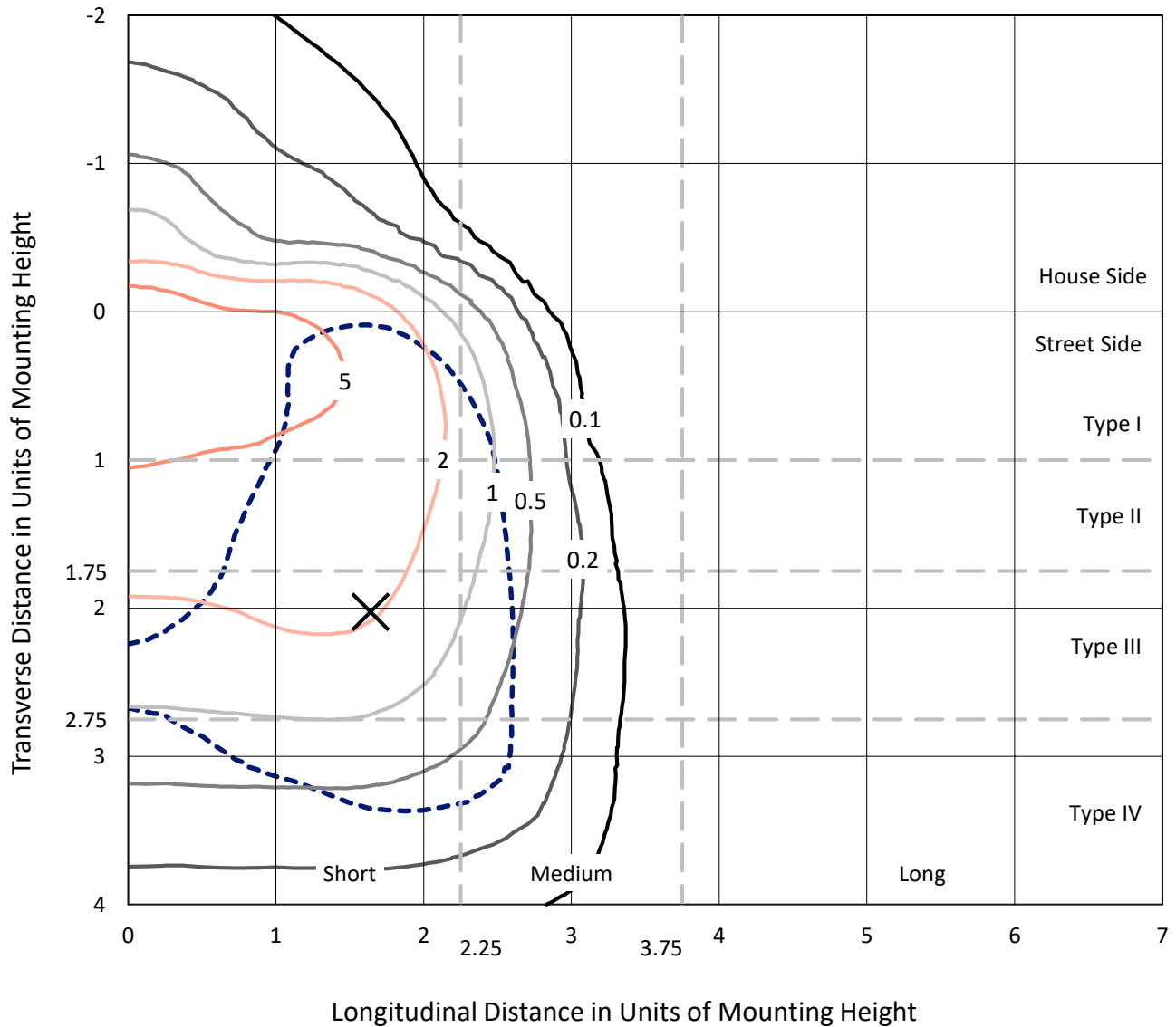
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P227103
 CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

Iso-Footcandle Lines of Horizontal Illumination

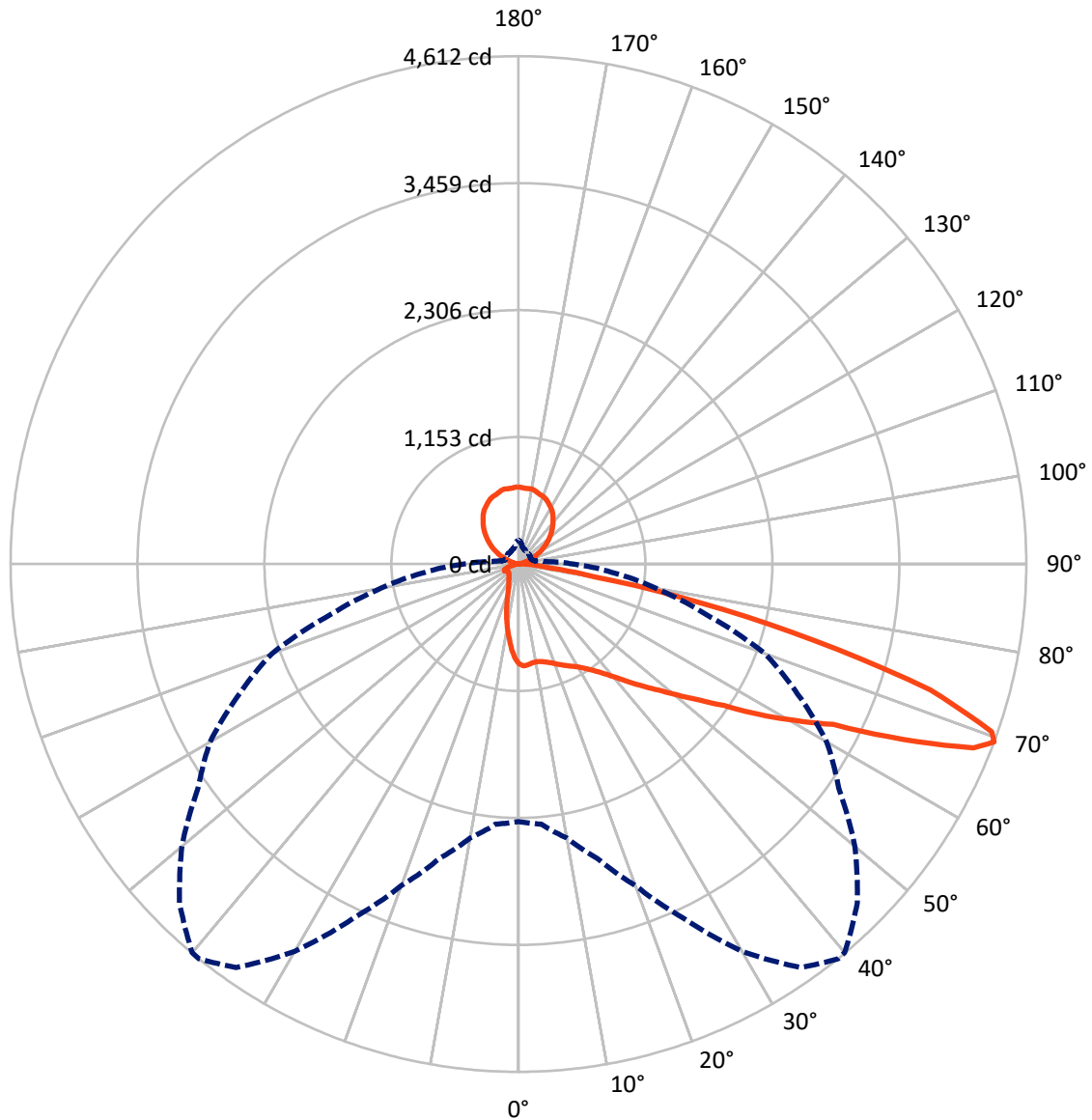
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P227103
CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P227103

CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

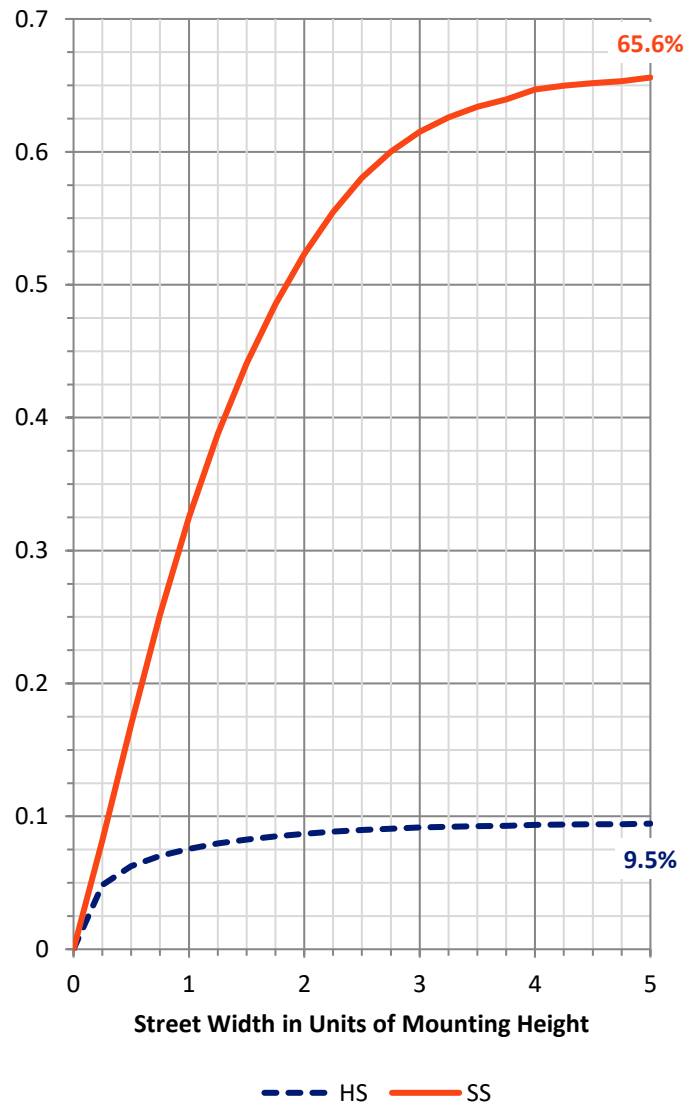
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	685.8	867.7	1553.6
	% Fixture	9.6	12.1	21.7
Street Side	Lumens	4730.1	868.9	5599.0
	% Fixture	66.1	12.1	78.3
Total	Lumens	5415.9	1736.6	7152.5
	% Fixture	75.7	24.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	1.1
10°-20°	197.5	2.8
20°-30°	307.3	4.3
30°-40°	464.5	6.5
40°-50°	743.3	10.4
50°-60°	1168.2	16.3
60°-70°	1573.0	22.0
70°-80°	780.2	10.9
80°-90°	103.5	1.4
90°-100°	10.8	0.2
100°-110°	57.4	0.8
110°-120°	166.1	2.3
120°-130°	273.2	3.8
130°-140°	336.8	4.7
140°-150°	344.6	4.8
150°-160°	290.3	4.1
160°-170°	191.2	2.7
170°-180°	66.3	0.9
0°-90°	5415.9	75.7
0°-180°	7152.5	100.0

Coefficient of Utilization



REPORT NUMBER: P227103

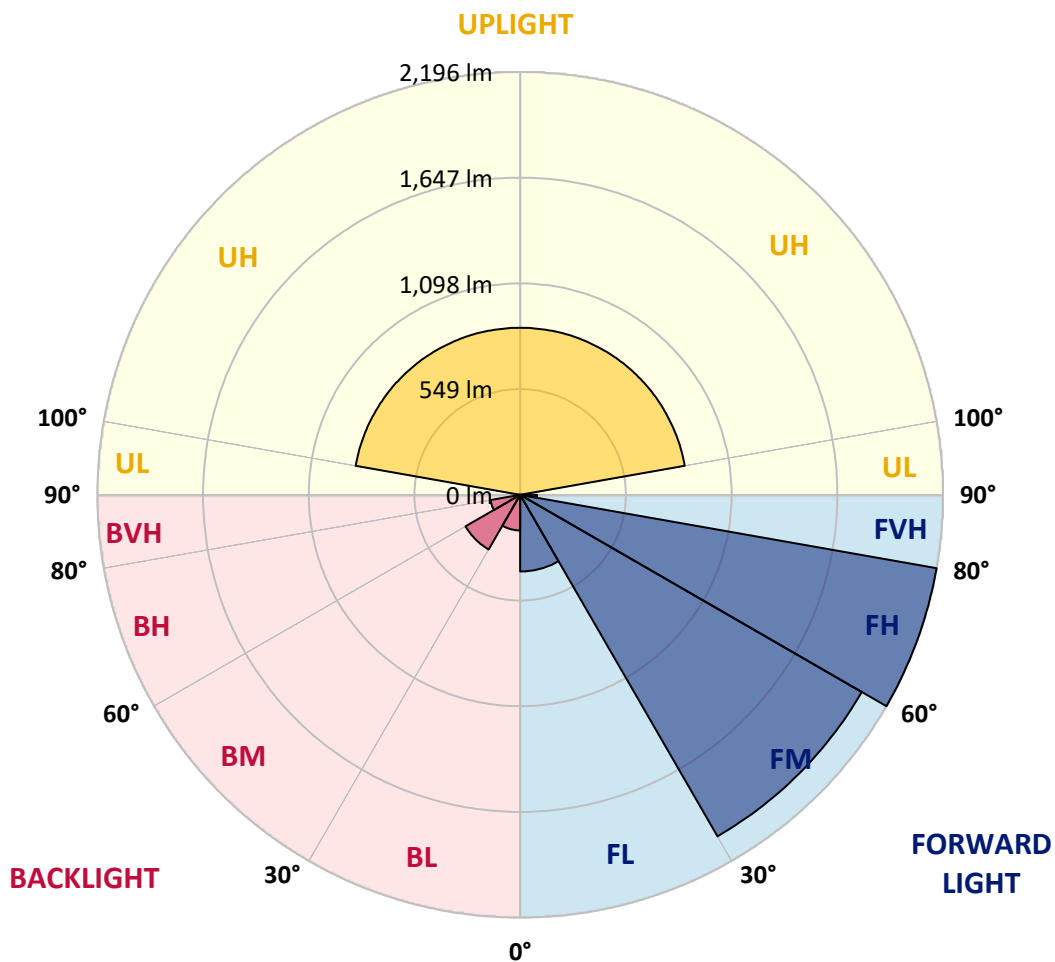
CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	398.2	5.6			
FM	(30°-60°)	2048.6	28.6			
FH	(60°-80°)	2196.4	30.7			G2/5000
FVH	(80°-90°)	86.9	1.2			G1/100
BL	(0°-30°)	184.9	2.6	B1/500		
BM	(30°-60°)	327.4	4.6	B1/1000		
BH	(60°-80°)	156.9	2.2	B1/500		G1/500
BVH	(80°-90°)	16.7	0.2			G1/100
UL	(90°-100°)	10.8	0.2		U2/50	
UH	(100°-180°)	867.7	12.1		U4/1000	

BUG Rating: B1-U5-G2

Type IV Short





REPORT NUMBER: P227103

CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2
2.5°	929.2	930.0	930.0	930.9	927.4	927.4	928.3	924.8	926.5	925.7	921.3
5°	930.9	931.8	930.9	931.8	927.4	925.7	922.1	917.7	919.5	918.6	912.5
7.5°	926.5	927.4	925.7	926.5	921.3	917.7	912.5	909.0	906.3	905.4	897.5
10°	916.9	919.5	916.0	918.6	914.2	910.7	908.1	904.6	902.8	901.9	893.1
12.5°	902.8	904.6	905.4	909.0	909.0	909.8	909.8	907.2	908.1	907.2	900.2
15°	889.6	895.8	901.9	905.4	912.5	916.9	920.4	919.5	922.1	921.3	916.9
17.5°	889.6	894.9	905.4	916.9	930.0	936.2	941.5	941.5	942.4	940.6	933.6
20°	893.1	902.8	920.4	939.7	955.5	967.8	971.4	970.5	967.0	967.0	954.7
22.5°	922.1	928.3	947.6	968.7	990.7	1003.0	1003.9	1001.3	994.2	992.5	977.5
25°	963.5	970.5	988.1	1015.3	1032.0	1041.7	1039.1	1030.3	1023.2	1017.1	1001.3
27.5°	1027.6	1032.9	1050.5	1068.9	1078.6	1082.1	1071.6	1059.3	1051.4	1048.7	1027.6
30°	1093.6	1100.6	1114.7	1126.1	1134.0	1123.4	1106.7	1092.7	1085.6	1083.9	1064.5
32.5°	1174.4	1175.3	1185.0	1187.6	1188.5	1170.9	1148.1	1134.9	1132.2	1128.7	1113.8
35°	1248.3	1252.7	1250.9	1250.0	1242.1	1220.1	1200.8	1192.9	1190.3	1189.4	1177.1
37.5°	1314.2	1321.2	1316.8	1308.9	1299.3	1281.7	1261.5	1252.7	1261.5	1256.2	1258.8
40°	1378.4	1378.4	1373.1	1368.7	1357.3	1340.6	1333.5	1334.4	1348.5	1352.0	1355.5
42.5°	1433.8	1432.9	1427.6	1424.1	1422.3	1418.8	1415.3	1432.0	1459.2	1464.5	1472.4
45°	1494.4	1493.5	1473.3	1480.3	1492.6	1495.3	1507.6	1546.3	1579.7	1582.3	1599.0
47.5°	1553.3	1546.3	1526.9	1534.0	1569.1	1587.6	1607.8	1662.3	1708.9	1718.6	1765.2
50°	1614.8	1607.8	1586.7	1599.9	1649.1	1683.4	1730.9	1806.5	1870.6	1883.8	1944.5
52.5°	1679.0	1678.1	1661.4	1681.6	1742.3	1811.7	1886.5	1971.7	2050.0	2066.7	2156.3
55°	1756.4	1752.0	1744.9	1769.6	1855.7	1948.9	2065.8	2181.8	2267.1	2297.0	2387.5
57.5°	1843.4	1841.6	1842.5	1893.5	1997.2	2138.8	2282.0	2438.5	2579.2	2600.3	2684.7
60°	1919.0	1922.5	1942.7	2022.7	2152.8	2344.5	2545.8	2757.6	2882.4	2904.4	2987.1
62.5°	2011.3	2031.5	2076.3	2177.4	2330.4	2562.5	2823.5	3047.7	3208.6	3253.4	3409.9
65°	2232.8	2248.6	2332.2	2454.3	2649.5	2946.6	3246.4	3572.5	3838.0	3878.4	4012.9
67.5°	2394.6	2435.0	2566.0	2765.5	3047.7	3427.5	3838.9	4233.6	4457.7	4476.2	4382.1
69°	2338.3	2371.7	2526.4	2767.3	3107.5	3549.7	4061.3	4473.5	4611.6	4608.0	4352.2
70°	2252.2	2282.9	2453.5	2687.3	3057.4	3535.6	4064.8	4475.3	4558.8	4527.2	4234.4
72.5°	1886.5	1913.7	2073.7	2318.1	2676.7	3151.4	3649.9	3930.3	3912.7	3886.3	3402.9
75°	1177.9	1176.2	1316.0	1457.5	1736.1	2216.1	2587.1	2812.1	2776.1	2755.9	2184.5
77.5°	440.4	471.2	522.2	674.2	802.6	1061.9	1361.7	1612.2	1681.6	1592.9	1176.2
80°	229.4	246.1	279.5	333.2	383.3	438.7	527.4	678.6	702.4	654.9	474.7
82.5°	181.1	201.3	234.7	280.4	315.6	294.5	277.8	287.5	285.7	272.5	241.7
85°	137.1	160.9	215.4	262.0	312.1	263.7	210.1	183.7	163.5	164.4	174.9
87.5°	68.6	88.8	169.7	228.6	271.6	174.9	137.1	106.4	88.8	85.3	114.3
90°	26.1	26.1	40.3	51.8	69.0	38.8	37.9	30.9	24.3	24.2	33.4
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



REPORT NUMBER: P227103

CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

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



REPORT NUMBER: P227103

CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2
2.5°	917.7	917.7	916.0	915.1	912.5	909.0	906.3	901.9	899.3	894.9	889.6
5°	906.3	902.8	901.0	897.5	892.2	887.9	882.6	876.4	869.4	860.6	850.9
7.5°	891.4	886.1	879.9	878.2	872.0	866.8	860.6	851.8	842.1	826.3	814.0
10°	885.2	879.9	874.7	871.2	863.2	857.1	850.1	838.6	826.3	805.2	782.4
12.5°	891.4	886.1	880.8	874.7	867.6	860.6	850.9	836.9	820.2	792.9	764.8
15°	906.3	901.0	892.2	886.1	876.4	870.3	857.1	841.3	816.6	783.2	746.3
17.5°	923.0	915.1	907.2	897.5	888.7	880.8	866.8	846.5	815.8	776.2	728.7
20°	938.8	930.0	917.7	910.7	901.9	890.5	875.5	850.9	814.0	762.1	710.3
22.5°	957.3	945.9	932.7	924.8	917.7	908.1	890.5	858.8	814.0	754.2	689.2
25°	981.0	966.1	952.9	945.0	940.6	933.6	912.5	877.3	820.2	749.8	671.6
27.5°	1009.2	989.8	978.4	973.1	972.2	967.0	945.9	901.9	834.2	749.8	654.9
30°	1042.6	1025.9	1010.9	1010.9	1021.5	1018.0	994.2	939.7	856.2	752.5	642.6
32.5°	1089.2	1072.5	1063.7	1072.5	1083.9	1087.4	1060.1	993.3	892.2	764.8	630.3
35°	1157.7	1147.2	1141.0	1154.2	1177.1	1185.9	1152.5	1073.3	945.0	788.5	623.3
37.5°	1248.3	1240.4	1232.4	1255.3	1298.4	1316.0	1267.6	1165.6	1020.6	828.1	619.7
40°	1352.0	1352.9	1361.7	1407.4	1448.7	1485.6	1431.1	1305.4	1124.3	884.3	623.3
42.5°	1475.1	1484.7	1514.6	1577.9	1657.9	1686.9	1634.2	1474.2	1253.5	952.0	632.0
45°	1628.0	1653.5	1704.5	1798.6	1895.3	1940.1	1865.4	1686.9	1416.2	1060.1	656.7
47.5°	1790.7	1846.9	1933.1	2047.3	2159.9	2188.9	2096.6	1879.4	1575.3	1156.0	694.5
50°	1999.0	2067.6	2153.7	2290.8	2410.4	2428.0	2305.8	2057.9	1714.2	1239.5	730.5
52.5°	2193.3	2286.4	2396.3	2555.4	2676.7	2654.8	2496.5	2217.0	1824.1	1296.6	750.7
55°	2458.7	2555.4	2679.4	2818.3	2938.7	2886.0	2669.7	2352.4	1912.0	1338.8	756.9
57.5°	2762.0	2835.9	2957.2	3099.6	3178.7	3088.1	2840.3	2484.2	1995.5	1339.7	708.5
60°	3060.0	3146.2	3279.8	3419.6	3463.5	3307.0	2958.9	2504.4	1912.8	1195.5	567.0
62.5°	3501.3	3588.3	3656.0	3678.9	3599.8	3285.1	2820.9	2290.8	1649.1	943.2	401.7
65°	3994.5	3896.0	3765.0	3642.0	3426.6	2948.4	2432.4	1882.1	1279.9	630.3	276.9
67.5°	4123.7	3823.9	3539.1	3264.8	2863.1	2348.0	1834.6	1323.9	821.0	358.7	188.1
69°	3989.2	3551.4	3234.1	2798.9	2384.0	1757.2	1264.1	848.3	490.5	249.7	157.4
70°	3743.0	3287.7	2857.8	2391.9	1846.9	1342.3	840.4	555.6	320.0	182.0	141.5
72.5°	2824.4	2258.3	1740.5	1130.5	689.2	382.4	269.0	192.5	152.1	133.6	121.3
75°	1633.3	1087.4	712.0	379.8	225.0	167.0	145.9	130.1	120.4	116.0	105.5
77.5°	689.2	430.7	291.8	213.6	151.2	129.2	112.5	103.7	102.9	100.2	90.5
80°	313.8	269.0	229.4	160.9	115.2	98.5	86.1	84.4	86.1	83.5	73.8
82.5°	233.0	229.4	191.6	123.9	87.9	65.9	53.6	56.3	63.3	68.6	59.8
85°	194.3	194.3	160.9	92.3	58.0	42.2	41.3	46.6	52.7	57.1	48.3
87.5°	178.4	171.4	92.3	47.5	33.4	27.3	25.5	22.9	22.9	39.6	33.4
90°	24.6	14.9	12.4	12.5	13.4	12.5	13.3	11.4	11.4	11.4	12.4
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: P227103

CATALOG NUMBER: IST-AF-1000-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: P227103

CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2	907.2
2.5°	885.2	881.7	872.9	871.2	868.5	865.0	864.1	859.7	850.9	849.2	850.1
5°	844.8	830.7	821.0	813.1	807.0	791.2	785.0	778.0	765.7	762.1	756.9
7.5°	797.3	780.6	761.3	747.2	730.5	713.8	700.6	683.9	670.7	662.8	648.7
10°	760.4	737.5	712.0	683.9	661.9	636.4	619.7	600.4	579.3	560.0	545.9
12.5°	732.3	700.6	663.7	630.3	598.6	571.4	541.5	514.3	487.9	461.5	438.7
15°	709.4	669.8	623.3	581.1	542.4	501.9	468.5	430.7	397.3	374.5	345.5
17.5°	684.8	633.8	578.4	529.2	479.1	436.9	394.7	355.1	323.5	293.6	269.9
20°	654.9	593.4	533.6	476.5	419.3	371.0	327.9	290.1	259.3	235.6	218.0
22.5°	621.5	549.4	480.0	417.6	360.4	312.9	272.5	244.4	221.5	208.3	203.1
25°	589.0	506.3	428.1	359.5	302.4	262.0	234.7	211.0	199.5	194.3	194.3
27.5°	559.1	462.4	375.4	308.6	253.2	221.5	200.4	190.8	185.5	185.5	188.1
30°	531.0	418.4	325.3	257.6	213.6	189.9	178.4	174.9	175.8	179.3	182.8
32.5°	498.4	376.2	282.2	221.5	185.5	169.7	160.9	161.7	166.1	172.3	178.4
35°	464.1	331.4	244.4	194.3	166.1	153.8	148.6	149.4	155.6	163.5	169.7
37.5°	433.4	295.4	215.4	173.2	152.1	144.2	139.8	140.7	145.0	154.7	162.6
40°	402.6	264.6	191.6	160.9	144.2	136.3	133.6	132.7	136.3	145.0	154.7
42.5°	376.2	238.2	177.6	152.1	138.9	131.9	128.3	128.3	130.1	137.1	146.8
45°	360.4	222.4	167.9	145.9	134.5	128.3	124.8	123.1	125.7	130.1	138.9
47.5°	360.4	214.5	161.7	141.5	131.0	125.7	121.3	120.4	121.3	125.7	134.5
50°	372.7	216.2	160.9	139.8	129.2	122.2	117.8	117.8	119.6	125.7	132.7
52.5°	383.3	219.8	163.5	141.5	129.2	120.4	115.2	114.3	116.9	123.1	129.2
55°	381.5	219.8	166.1	144.2	131.9	121.3	114.3	113.4	115.2	121.3	127.5
57.5°	341.1	206.6	163.5	145.9	135.4	125.7	118.7	116.0	117.8	123.1	128.3
60°	276.0	183.7	156.5	145.9	140.7	133.6	126.6	124.8	125.7	131.0	137.1
62.5°	216.2	163.5	147.7	145.0	143.3	139.8	137.1	135.4	135.4	139.8	145.0
65°	175.8	147.7	140.7	141.5	143.3	142.4	141.5	140.7	140.7	143.3	148.6
67.5°	146.8	132.7	131.0	133.6	135.4	136.3	137.1	136.3	137.1	139.8	145.9
69°	133.6	124.8	123.1	124.8	128.3	129.2	131.0	130.1	131.0	133.6	139.8
70°	125.7	118.7	116.9	119.6	122.2	123.1	124.8	123.9	124.8	127.5	133.6
72.5°	109.0	101.1	98.5	100.2	102.9	102.9	105.5	106.4	104.6	105.5	109.9
75°	93.2	84.4	80.0	80.9	80.9	80.9	82.6	82.6	80.9	80.0	80.9
77.5°	78.2	68.6	63.3	63.3	63.3	62.4	59.8	60.7	61.5	60.7	61.5
80°	61.5	53.6	48.3	48.3	48.3	46.6	45.7	45.7	47.5	49.2	48.3
82.5°	47.5	39.6	36.9	36.0	36.0	34.3	34.3	36.0	35.2	36.0	37.8
85°	34.3	28.1	25.5	26.4	25.5	23.7	24.6	27.3	27.3	26.4	28.1
87.5°	21.1	17.6	16.7	17.6	15.8	13.2	12.3	13.2	14.9	14.1	15.8
90°	11.6	10.8	10.8	9.8	9.6	8.8	8.8	9.3	10.6	10.6	9.8
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: P227103
 CATALOG NUMBER: IST-AF-1000-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°

NUMBER: P227103
 NUMBER: IST-AF-1000-LED-E1-SL4-7050-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
907.2	907.2	907.2	907.2	907.2
843.9	846.5	835.1	840.4	836.9
751.6	747.2	746.3	743.7	738.4
643.5	640.0	629.4	632.9	625.0
531.8	531.0	511.6	512.5	502.8
429.0	413.2	405.2	393.8	400.0
332.3	319.1	302.4	298.0	304.2
250.5	237.3	229.4	222.4	219.8
207.5	199.5	195.2	192.5	190.8
200.4	198.7	197.8	196.0	195.2
196.0	197.8	197.8	197.8	196.0
191.6	195.2	196.0	195.2	193.4
187.2	189.9	189.9	189.0	186.4
181.1	183.7	183.7	182.8	181.1
174.1	175.8	176.7	176.7	177.6
168.8	170.5	172.3	174.1	176.7
162.6	165.3	166.1	169.7	173.2
154.7	158.2	160.0	162.6	166.1
146.8	151.2	152.1	155.6	159.1
143.3	146.8	146.8	149.4	152.1
138.9	140.7	139.8	141.5	142.4
134.5	136.3	135.4	137.1	138.0
131.0	132.7	134.5	136.3	137.1
132.7	135.4	136.3	138.9	139.8
140.7	144.2	147.7	151.2	153.8
148.6	153.0	160.9	176.7	182.8
153.0	159.1	177.6	204.8	212.7
150.3	158.2	180.2	209.2	218.9
145.0	151.2	174.9	204.8	213.6
138.0	144.2	167.9	200.4	208.3
111.6	115.2	141.5	172.3	177.6
81.8	84.4	104.6	116.9	116.0
63.3	66.8	73.8	74.7	73.8
50.1	51.9	55.4	55.4	56.3
38.7	39.6	41.3	39.6	38.7
29.0	28.1	27.3	26.4	25.5
16.7	16.7	14.1	12.3	11.4
9.3	9.6	8.6	6.8	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

'227103

IST-AF-1000-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)