

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: P227100

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227100
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-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) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7316.7 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

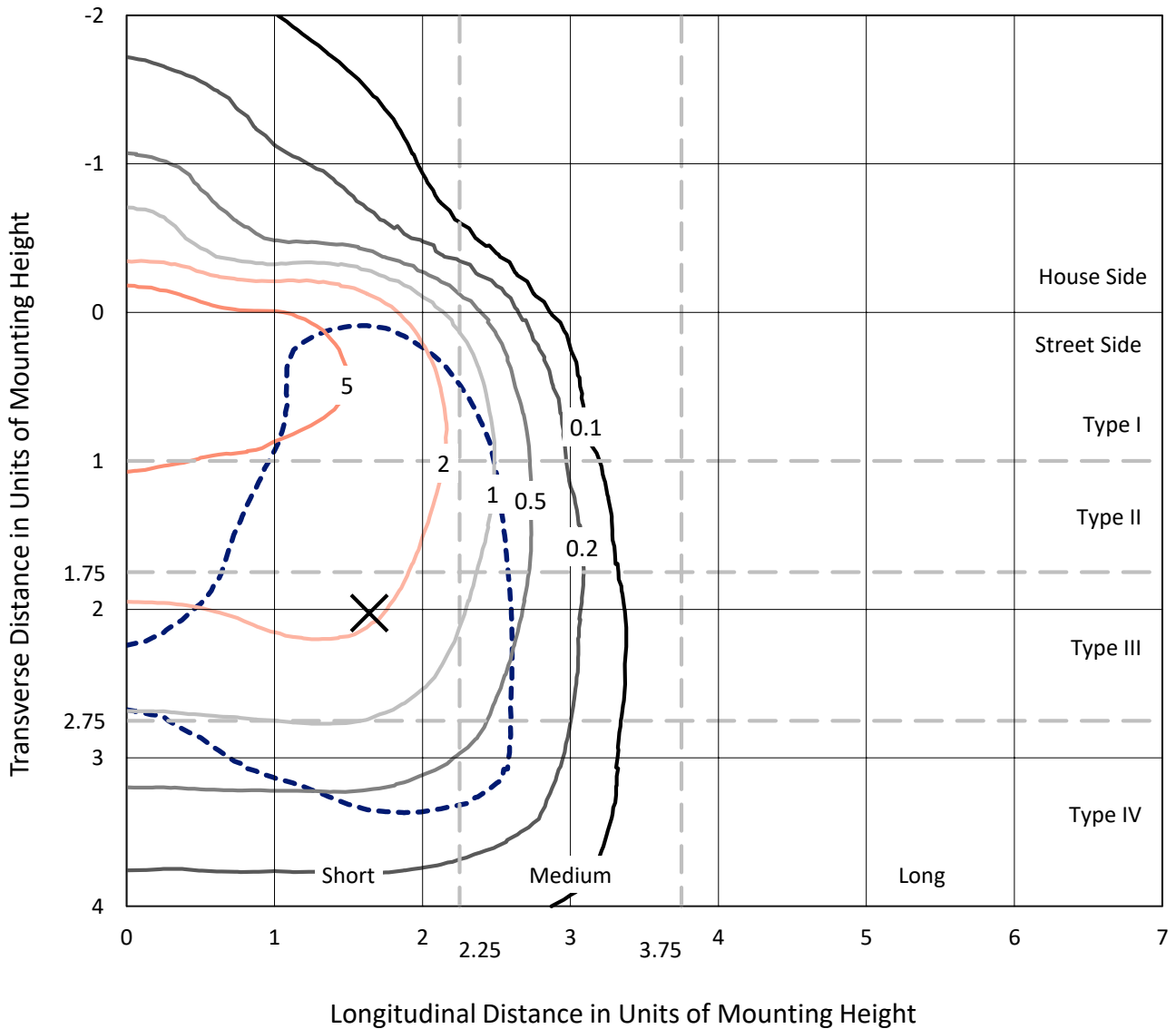
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

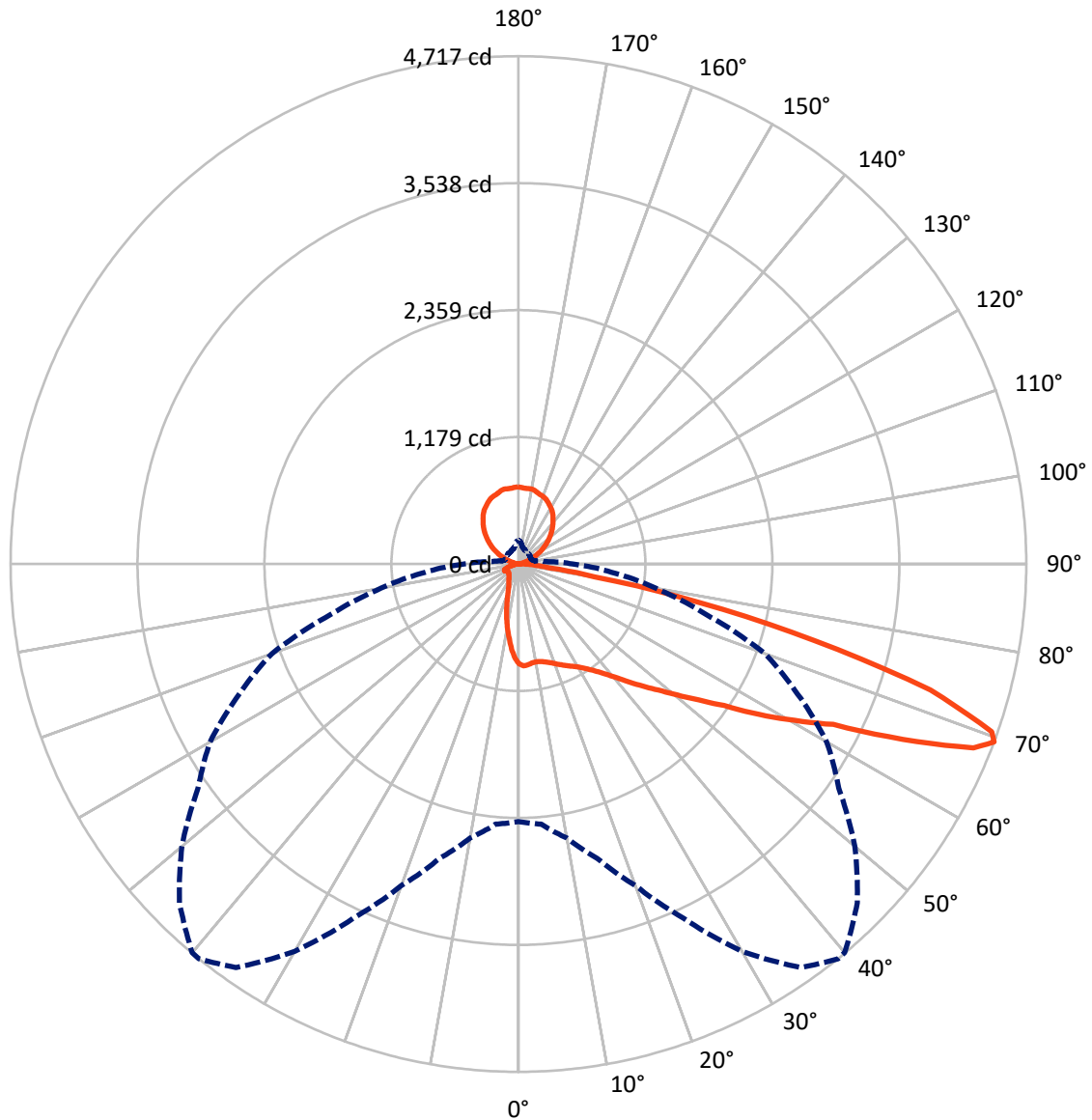
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 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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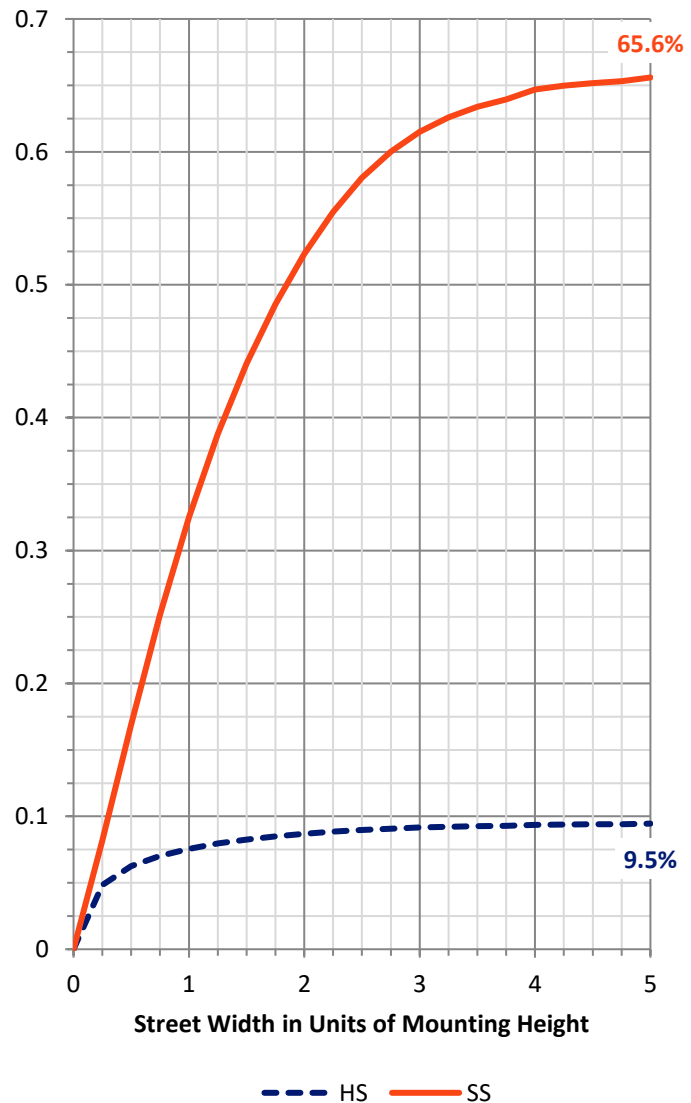
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	701.6	887.6	1589.2
	% Fixture	9.6	12.1	21.7
Street Side	Lumens	4838.6	888.8	5727.5
	% Fixture	66.1	12.1	78.3
Total	Lumens	5540.2	1776.5	7316.7
	% Fixture	75.7	24.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	1.1
10°-20°	202.0	2.8
20°-30°	314.4	4.3
30°-40°	475.2	6.5
40°-50°	760.4	10.4
50°-60°	1195.0	16.3
60°-70°	1609.1	22.0
70°-80°	798.2	10.9
80°-90°	105.9	1.4
90°-100°	11.0	0.2
100°-110°	58.7	0.8
110°-120°	169.9	2.3
120°-130°	279.4	3.8
130°-140°	344.6	4.7
140°-150°	352.5	4.8
150°-160°	297.0	4.1
160°-170°	195.5	2.7
170°-180°	67.8	0.9
0°-90°	5540.2	75.7
0°-180°	7316.7	100.0

Coefficient of Utilization



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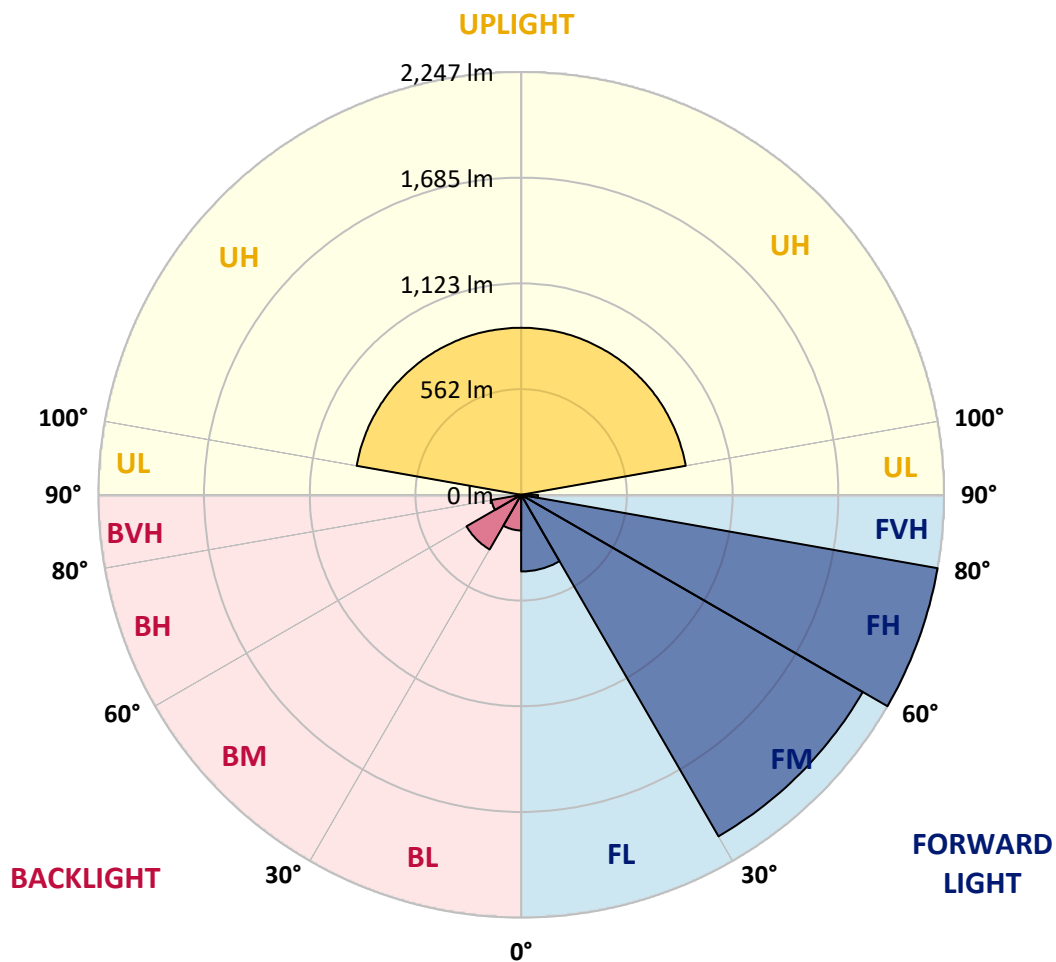
CATALOG NUMBER: IST-AF-1000-LED-E1-SL4-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	407.4	5.6			
FM	(30°-60°)	2095.6	28.6			
FH	(60°-80°)	2246.8	30.7			G2/5000
FVH	(80°-90°)	88.9	1.2			G1/100
BL	(0°-30°)	189.1	2.6	B1/500		
BM	(30°-60°)	334.9	4.6	B1/1000		
BH	(60°-80°)	160.5	2.2	B1/500		G1/500
BVH	(80°-90°)	17.0	0.2			G1/100
UL	(90°-100°)	11.0	0.2		U2/50	
UH	(100°-180°)	887.6	12.1		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°	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0
2.5°	950.5	951.3	951.3	952.3	948.7	948.7	949.6	946.0	947.8	946.9	942.4
5°	952.3	953.2	952.3	953.2	948.7	946.9	943.3	938.8	940.6	939.7	933.4
7.5°	947.8	948.7	946.9	947.8	942.4	938.8	933.4	929.9	927.1	926.2	918.1
10°	937.9	940.6	937.0	939.7	935.2	931.6	928.9	925.4	923.5	922.6	913.6
12.5°	923.5	925.4	926.2	929.9	929.9	930.7	930.7	928.0	928.9	928.0	920.9
15°	910.0	916.4	922.6	926.2	933.4	937.9	941.5	940.6	943.3	942.4	937.9
17.5°	910.0	915.4	926.2	937.9	951.3	957.7	963.1	963.1	964.0	962.2	955.0
20°	913.6	923.5	941.5	961.3	977.4	990.0	993.7	992.8	989.2	989.2	976.6
22.5°	943.3	949.6	969.3	990.9	1013.4	1026.0	1026.9	1024.3	1017.0	1015.3	999.9
25°	985.6	992.8	1010.8	1038.6	1055.7	1065.6	1062.9	1053.9	1046.7	1040.4	1024.3
27.5°	1051.2	1056.6	1074.6	1093.4	1103.4	1106.9	1096.2	1083.6	1075.5	1072.8	1051.2
30°	1118.7	1125.9	1140.3	1151.9	1160.0	1149.2	1132.1	1117.8	1110.5	1108.8	1088.9
32.5°	1201.4	1202.3	1212.2	1214.9	1215.8	1197.8	1174.4	1160.9	1158.2	1154.6	1139.4
35°	1276.9	1281.5	1279.6	1278.7	1270.6	1248.1	1228.4	1220.3	1217.6	1216.7	1204.1
37.5°	1344.4	1351.5	1347.0	1338.9	1329.1	1311.1	1290.5	1281.5	1290.5	1285.0	1287.7
40°	1410.0	1410.0	1404.6	1400.1	1388.5	1371.4	1364.1	1365.0	1379.4	1383.0	1386.6
42.5°	1466.7	1465.8	1460.4	1456.8	1454.9	1451.4	1447.8	1464.9	1492.7	1498.1	1506.2
45°	1528.7	1527.8	1507.1	1514.3	1526.9	1529.6	1542.2	1581.8	1616.0	1618.6	1635.7
47.5°	1588.9	1581.8	1561.9	1569.2	1605.1	1624.0	1644.7	1700.5	1748.1	1758.0	1805.7
50°	1651.9	1644.7	1623.1	1636.6	1686.9	1722.0	1770.6	1848.0	1913.5	1927.0	1989.1
52.5°	1717.5	1716.6	1699.5	1720.2	1782.3	1853.3	1929.8	2017.0	2097.0	2114.1	2205.8
55°	1796.7	1792.2	1784.9	1810.2	1898.3	1993.6	2113.2	2231.9	2319.1	2349.7	2442.3
57.5°	1885.7	1883.9	1884.8	1937.0	2043.0	2187.9	2334.4	2494.5	2638.4	2660.0	2746.3
60°	1963.0	1966.6	1987.3	2069.1	2202.2	2398.3	2604.2	2820.9	2948.6	2971.1	3055.7
62.5°	2057.5	2078.1	2124.0	2227.4	2383.9	2621.3	2888.3	3117.6	3282.2	3328.1	3488.2
65°	2284.0	2300.2	2385.7	2510.6	2710.3	3014.2	3320.9	3654.5	3926.1	3967.4	4105.0
67.5°	2449.6	2490.9	2624.9	2829.0	3117.6	3506.2	3927.0	4330.8	4560.0	4578.9	4482.7
69°	2392.0	2426.1	2584.4	2830.8	3178.8	3631.2	4154.5	4576.2	4717.4	4713.8	4452.1
70°	2303.9	2335.3	2509.8	2749.0	3127.6	3616.7	4158.1	4578.0	4663.4	4631.1	4331.6
72.5°	1929.8	1957.6	2121.3	2371.3	2738.1	3223.7	3733.7	4020.5	4002.5	3975.5	3481.0
75°	1204.9	1203.2	1346.2	1491.0	1775.9	2267.0	2646.5	2876.6	2839.8	2819.2	2234.6
77.5°	450.5	482.0	534.2	689.7	821.0	1086.3	1393.0	1649.2	1720.2	1629.5	1203.2
80°	234.7	251.7	285.9	340.8	392.1	448.8	539.5	694.2	718.5	669.9	485.6
82.5°	185.3	205.9	240.1	286.8	322.8	301.3	284.2	294.1	292.3	278.8	247.2
85°	140.2	164.6	220.3	268.0	319.3	269.8	214.9	187.9	167.3	168.2	178.9
87.5°	70.2	90.8	173.6	233.8	277.8	178.9	140.2	108.8	90.8	87.3	116.9
90°	26.7	26.7	41.2	53.0	70.6	39.7	38.8	31.6	24.9	24.8	34.2
92.5°	4.1	4.1	4.6	5.1	5.6	6.1	6.1	6.1	6.1	6.1	6.1
95°	5.1	5.1	5.6	6.1	6.6	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	7.2	7.2	7.7	8.2	8.2	8.2	8.7	9.2	9.2	9.2	9.2
100°	8.2	8.2	8.7	9.2	9.7	10.2	11.3	12.3	16.0	16.9	21.5
102.5°	11.3	11.3	12.3	13.3	15.9	18.4	23.0	27.6	32.9	34.3	40.9
105°	21.5	22.5	25.1	27.6	32.2	36.8	43.0	49.1	55.2	56.8	64.4
107.5°	41.9	43.0	46.5	50.1	54.7	59.3	67.0	74.7	80.8	82.3	90.0



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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	67.5	69.6	72.6	75.7	82.3	89.0	96.7	104.3	109.3	110.5	116.6
112.5°	101.3	101.3	104.9	108.4	116.1	123.8	130.4	137.1	140.8	141.7	146.3
115°	143.2	142.2	146.3	150.4	156.5	162.6	167.3	171.9	174.3	174.9	178.0
117.5°	188.2	188.2	190.8	193.3	197.4	201.5	204.1	206.6	207.9	208.2	209.7
120°	230.2	228.1	229.7	231.2	234.8	238.3	240.4	242.4	244.9	245.5	248.6
122.5°	269.0	266.0	266.5	267.0	270.1	273.1	275.2	277.2	279.7	280.3	283.4
125°	304.8	300.7	301.8	302.8	304.3	305.9	308.9	312.0	314.0	314.6	317.1
127.5°	337.6	336.6	336.6	336.6	338.6	340.6	343.7	346.8	347.2	347.3	347.8
130°	371.3	369.3	369.8	370.3	372.4	374.4	376.4	378.5	379.3	379.5	380.5
132.5°	405.1	403.0	402.5	402.0	406.1	410.2	411.7	413.3	413.7	413.8	414.3
135°	438.8	435.8	435.8	435.8	438.8	441.9	443.4	445.0	445.8	446.0	447.0
137.5°	470.6	467.5	468.5	469.5	470.0	470.6	472.6	474.6	476.3	476.7	478.7
140°	499.2	496.1	497.2	498.2	499.2	500.2	501.2	502.3	504.7	505.3	508.4
142.5°	529.9	526.8	527.8	528.9	529.4	529.9	531.4	533.0	534.6	535.0	537.0
145°	562.6	558.5	557.5	556.5	558.0	559.6	561.1	562.6	563.0	563.1	563.6
147.5°	588.2	585.1	584.6	584.1	585.6	587.2	587.2	587.2	587.6	587.7	588.2
150°	608.7	605.6	606.1	606.6	606.6	606.6	606.6	606.6	606.6	606.6	606.6
152.5°	625.0	622.0	622.0	622.0	622.5	623.0	623.5	624.0	624.0	624.0	624.0
155°	643.4	639.3	639.3	639.3	640.4	641.4	642.9	644.5	643.6	643.4	642.4
157.5°	660.8	657.8	657.8	657.8	658.3	658.8	659.8	660.8	660.4	660.3	659.8
160°	678.2	675.1	674.6	674.1	672.6	671.1	670.5	670.0	670.0	670.0	670.0
162.5°	688.4	684.4	684.4	684.4	682.3	680.3	678.2	676.2	677.0	677.2	678.2
165°	696.6	693.6	692.5	691.5	691.5	691.5	690.0	688.4	688.4	688.4	688.4
167.5°	705.8	702.8	701.2	699.7	700.7	701.7	702.8	703.8	702.6	702.3	700.7
170°	714.0	711.0	709.4	707.9	707.9	707.9	708.4	708.9	708.1	707.9	706.9
172.5°	715.0	713.0	712.0	711.0	709.9	708.9	707.4	705.8	705.8	705.8	705.8
175°	716.1	714.0	713.5	713.0	712.0	711.0	708.9	706.9	706.4	706.3	705.8
177.5°	723.2	721.2	718.6	716.1	715.6	715.0	714.0	713.0	712.2	712.0	711.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0
2.5°	938.8	938.8	937.0	936.1	933.4	929.9	927.1	922.6	919.9	915.4	910.0
5°	927.1	923.5	921.7	918.1	912.7	908.3	902.9	896.5	889.4	880.4	870.4
7.5°	911.9	906.4	900.1	898.4	892.0	886.7	880.4	871.3	861.4	845.3	832.7
10°	905.5	900.1	894.8	891.2	883.0	876.8	869.6	857.8	845.3	823.7	800.4
12.5°	911.9	906.4	901.0	894.8	887.5	880.4	870.4	856.1	839.0	811.1	782.4
15°	927.1	921.7	912.7	906.4	896.5	890.3	876.8	860.6	835.3	801.2	763.4
17.5°	944.2	936.1	928.0	918.1	909.1	901.0	886.7	865.9	834.5	794.0	745.4
20°	960.3	951.3	938.8	931.6	922.6	910.9	895.6	870.4	832.7	779.6	726.6
22.5°	979.3	967.6	954.1	946.0	938.8	928.9	910.9	878.5	832.7	771.5	705.0
25°	1003.5	988.3	974.8	966.7	962.2	955.0	933.4	897.4	839.0	767.0	687.0
27.5°	1032.4	1012.5	1000.9	995.4	994.5	989.2	967.6	922.6	853.3	767.0	669.9
30°	1066.5	1049.4	1034.1	1034.1	1044.9	1041.4	1017.0	961.3	875.9	769.8	657.3
32.5°	1114.2	1097.1	1088.1	1097.1	1108.8	1112.4	1084.4	1016.1	912.7	782.4	644.8
35°	1184.3	1173.5	1167.2	1180.7	1204.1	1213.1	1179.0	1097.9	966.7	806.6	637.6
37.5°	1276.9	1268.9	1260.7	1284.1	1328.2	1346.2	1296.7	1192.4	1044.0	847.1	633.9
40°	1383.0	1384.0	1393.0	1439.7	1481.9	1519.7	1463.9	1335.4	1150.1	904.6	637.6
42.5°	1509.0	1518.8	1549.4	1614.1	1696.0	1725.6	1671.7	1508.0	1282.3	973.8	646.5
45°	1665.4	1691.4	1743.6	1839.9	1938.8	1984.6	1908.2	1725.6	1448.7	1084.4	671.8
47.5°	1831.8	1889.3	1977.5	2094.3	2209.5	2239.1	2144.7	1922.5	1611.5	1182.5	710.4
50°	2044.9	2115.1	2203.1	2343.4	2465.7	2483.7	2358.7	2105.1	1753.5	1267.9	747.3
52.5°	2243.6	2338.9	2451.3	2614.0	2738.1	2715.7	2553.8	2267.9	1866.0	1326.4	767.9
55°	2515.1	2614.0	2740.9	2883.0	3006.1	2952.2	2731.0	2406.4	1955.9	1369.5	774.3
57.5°	2825.4	2901.0	3025.1	3170.7	3251.7	3159.0	2905.5	2541.2	2041.3	1370.4	724.8
60°	3130.2	3218.4	3355.1	3498.1	3543.0	3382.9	3026.8	2561.9	1956.7	1222.9	580.0
62.5°	3581.7	3670.7	3739.9	3763.3	3682.4	3360.5	2885.6	2343.4	1686.9	964.8	410.9
65°	4086.2	3985.4	3851.4	3725.6	3505.2	3016.1	2488.2	1925.3	1309.3	644.8	283.3
67.5°	4218.3	3911.7	3620.3	3339.7	2928.8	2401.9	1876.7	1354.3	839.8	366.9	192.4
69°	4080.8	3632.9	3308.3	2863.1	2438.7	1797.5	1293.1	867.8	501.8	255.4	161.0
70°	3828.9	3363.2	2923.4	2446.8	1889.3	1373.1	859.7	568.4	327.3	186.2	144.7
72.5°	2889.2	2310.1	1780.4	1156.4	705.0	391.2	275.2	196.9	155.6	136.7	124.1
75°	1670.8	1112.4	728.3	388.5	230.2	170.8	149.2	133.1	123.2	118.7	107.9
77.5°	705.0	440.6	298.5	218.5	154.7	132.2	115.1	106.1	105.3	102.5	92.6
80°	321.0	275.2	234.7	164.6	117.8	100.8	88.1	86.3	88.1	85.4	75.5
82.5°	238.3	234.7	196.0	126.7	89.9	67.4	54.8	57.6	64.8	70.2	61.2
85°	198.8	198.8	164.6	94.4	59.3	43.2	42.2	47.7	53.9	58.4	49.4
87.5°	182.5	175.3	94.4	48.6	34.2	27.9	26.1	23.4	23.4	40.5	34.2
90°	25.2	15.2	12.7	12.8	13.7	12.8	13.6	11.7	11.7	11.7	12.7
92.5°	6.6	7.2	7.2	7.2	6.6	6.1	6.1	6.1	6.1	6.1	6.1
95°	7.2	7.2	7.7	8.2	7.7	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	10.7	12.3	11.3	10.2	9.7	9.2	8.7	8.2	8.2	8.2	8.7
100°	25.6	29.7	28.1	26.6	25.1	23.5	21.5	19.4	19.4	19.4	21.5
102.5°	46.0	51.1	49.6	48.1	45.5	43.0	41.4	39.9	38.9	39.9	41.4
105°	69.0	73.7	72.6	71.6	69.0	66.5	64.4	62.4	62.4	62.4	64.4
107.5°	93.6	97.2	96.7	96.2	94.1	92.1	90.5	89.0	88.0	89.0	90.5



REPORT NUMBER: P227100

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	119.7	122.8	123.3	123.8	122.8	121.7	120.2	118.7	119.7	118.7	120.2
112.5°	148.8	151.4	152.4	153.4	152.9	152.4	151.4	150.4	150.4	150.4	151.4
115°	180.6	183.1	184.6	186.2	184.6	183.1	182.1	181.1	182.1	181.1	182.1
117.5°	212.8	215.8	217.9	219.9	217.4	214.8	213.8	212.8	213.8	212.8	213.8
120°	250.1	251.6	253.7	255.7	253.2	250.6	249.6	248.6	248.6	248.6	249.6
122.5°	284.4	285.4	287.4	289.5	286.9	284.4	283.4	282.3	283.4	282.3	283.4
125°	318.6	320.2	321.2	322.2	319.7	317.1	317.1	317.1	317.1	317.1	317.1
127.5°	350.4	352.9	353.4	353.9	353.9	353.9	353.4	352.9	355.0	352.9	353.4
130°	383.1	385.7	387.7	389.7	389.7	389.7	388.7	387.7	388.7	387.7	388.7
132.5°	417.4	420.4	423.0	425.5	424.5	423.5	423.5	423.5	424.5	423.5	423.5
135°	450.1	453.2	455.7	458.3	457.8	457.3	458.8	460.3	461.4	460.3	458.8
137.5°	481.3	483.9	484.9	485.9	486.4	486.9	489.5	492.0	493.1	492.0	489.5
140°	509.9	511.5	512.5	513.5	514.5	515.6	518.1	520.7	522.7	520.7	518.1
142.5°	538.1	539.1	542.2	545.2	545.2	545.2	545.7	546.3	548.3	546.3	545.7
145°	566.2	568.8	571.8	574.9	574.4	573.9	572.3	570.8	572.9	570.8	572.3
147.5°	590.8	593.3	595.9	598.4	598.9	599.4	597.9	596.4	598.4	596.4	597.9
150°	608.7	610.7	612.2	613.8	615.3	616.8	618.4	619.9	624.0	619.9	618.4
152.5°	624.5	625.0	626.6	628.1	630.1	632.2	634.7	637.3	642.4	637.3	634.7
155°	641.4	640.4	642.9	645.5	648.0	650.6	651.6	652.6	655.7	652.6	651.6
157.5°	659.3	658.8	660.8	662.9	663.9	664.9	664.9	664.9	670.0	664.9	664.9
160°	671.6	673.1	676.2	679.2	677.7	676.2	675.7	675.1	681.3	675.1	675.7
162.5°	680.3	682.3	684.4	686.4	685.9	685.4	684.4	683.3	689.5	683.3	684.4
165°	687.9	687.4	690.0	692.5	694.1	695.6	694.6	693.6	697.7	693.6	694.6
167.5°	697.1	693.6	696.6	699.7	701.7	703.8	703.8	703.8	709.9	703.8	703.8
170°	704.3	701.7	703.3	704.8	707.4	709.9	711.0	712.0	717.1	712.0	711.0
172.5°	705.3	704.8	706.3	707.9	708.9	709.9	711.0	712.0	717.1	712.0	711.0
175°	705.8	705.8	708.4	711.0	711.5	712.0	711.0	709.9	715.0	709.9	711.0
177.5°	710.4	709.9	712.5	715.0	716.1	717.1	715.6	714.0	718.1	714.0	715.6
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



REPORT NUMBER: P227100

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

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0	928.0
2.5°	905.5	901.9	892.9	891.2	888.4	884.9	883.9	879.4	870.4	868.7	869.6
5°	864.2	849.8	839.8	831.8	825.5	809.4	803.0	795.9	783.3	779.6	774.3
7.5°	815.6	798.5	778.8	764.3	747.3	730.2	716.7	699.6	686.1	678.0	663.6
10°	777.9	754.4	728.3	699.6	677.1	651.0	633.9	614.2	592.6	572.9	558.4
12.5°	749.1	716.7	678.9	644.8	612.3	584.5	553.9	526.1	499.1	472.1	448.8
15°	725.7	685.2	637.6	594.4	554.8	513.4	479.3	440.6	406.4	383.1	353.4
17.5°	700.5	648.3	591.7	541.3	490.1	446.9	403.8	363.2	330.9	300.3	276.1
20°	669.9	607.0	545.8	487.4	428.9	379.5	335.4	296.8	265.3	241.0	223.0
22.5°	635.8	562.0	491.0	427.2	368.7	320.1	278.8	250.0	226.6	213.1	207.8
25°	602.5	517.9	437.9	367.8	309.3	268.0	240.1	215.8	204.1	198.8	198.8
27.5°	571.9	473.0	384.0	315.7	259.0	226.6	205.0	195.2	189.8	189.8	192.4
30°	543.2	428.0	332.8	263.5	218.5	194.3	182.5	178.9	179.8	183.4	187.0
32.5°	509.8	384.8	288.7	226.6	189.8	173.6	164.6	165.4	169.9	176.3	182.5
35°	474.8	339.0	250.0	198.8	169.9	157.3	152.0	152.8	159.2	167.3	173.6
37.5°	443.3	302.2	220.3	177.2	155.6	147.5	143.0	143.9	148.3	158.3	166.3
40°	411.8	270.7	196.0	164.6	147.5	139.4	136.7	135.7	139.4	148.3	158.3
42.5°	384.8	243.7	181.7	155.6	142.1	134.9	131.2	131.2	133.1	140.2	150.2
45°	368.7	227.5	171.8	149.2	137.6	131.2	127.7	125.9	128.6	133.1	142.1
47.5°	368.7	219.4	165.4	144.7	134.0	128.6	124.1	123.2	124.1	128.6	137.6
50°	381.3	221.2	164.6	143.0	132.2	125.0	120.5	120.5	122.3	128.6	135.7
52.5°	392.1	224.8	167.3	144.7	132.2	123.2	117.8	116.9	119.6	125.9	132.2
55°	390.3	224.8	169.9	147.5	134.9	124.1	116.9	116.0	117.8	124.1	130.4
57.5°	348.9	211.3	167.3	149.2	138.5	128.6	121.4	118.7	120.5	125.9	131.2
60°	282.3	187.9	160.1	149.2	143.9	136.7	129.5	127.7	128.6	134.0	140.2
62.5°	221.2	167.3	151.1	148.3	146.6	143.0	140.2	138.5	138.5	143.0	148.3
65°	179.8	151.1	143.9	144.7	146.6	145.7	144.7	143.9	143.9	146.6	152.0
67.5°	150.2	135.7	134.0	136.7	138.5	139.4	140.2	139.4	140.2	143.0	149.2
69°	136.7	127.7	125.9	127.7	131.2	132.2	134.0	133.1	134.0	136.7	143.0
70°	128.6	121.4	119.6	122.3	125.0	125.9	127.7	126.7	127.7	130.4	136.7
72.5°	111.5	103.4	100.8	102.5	105.3	105.3	107.9	108.8	107.0	107.9	112.4
75°	95.3	86.3	81.8	82.8	82.8	82.8	84.5	84.5	82.8	81.8	82.8
77.5°	80.0	70.2	64.8	64.8	64.8	63.8	61.2	62.1	62.9	62.1	62.9
80°	62.9	54.8	49.4	49.4	49.4	47.7	46.7	46.7	48.6	50.3	49.4
82.5°	48.6	40.5	37.7	36.8	36.8	35.1	35.1	36.8	36.0	36.8	38.7
85°	35.1	28.7	26.1	27.0	26.1	24.2	25.2	27.9	27.9	27.0	28.7
87.5°	21.6	18.0	17.1	18.0	16.2	13.5	12.6	13.5	15.2	14.4	16.2
90°	11.9	11.0	11.0	10.0	9.8	9.0	9.0	9.5	10.8	10.8	10.0
92.5°	6.1	6.6	7.2	7.2	7.2	6.6	6.1	6.1	6.1	6.1	6.1
95°	7.2	7.7	8.2	7.7	7.2	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	9.2	9.7	10.2	11.3	12.3	10.7	9.2	9.2	9.2	8.7	8.2
100°	23.5	25.1	26.6	28.1	29.7	25.6	21.5	16.9	12.3	11.3	10.2
102.5°	43.0	45.5	48.1	49.6	51.1	46.0	40.9	34.3	27.6	23.0	18.4
105°	66.5	69.0	71.6	72.6	73.7	69.0	64.4	56.8	49.1	43.0	36.8
107.5°	92.1	94.1	96.2	96.7	97.2	93.6	90.0	82.3	74.7	67.0	59.3



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

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	121.7	122.8	123.8	123.3	122.8	119.7	116.6	110.5	104.3	96.7	89.0	0°
112.5°	152.4	152.9	153.4	152.4	151.4	148.8	146.3	141.7	137.1	130.4	123.8	2.5°
115°	183.1	184.6	186.2	184.6	183.1	180.6	178.0	174.9	171.9	167.3	162.6	5°
117.5°	214.8	217.4	219.9	217.9	215.8	212.8	209.7	208.2	206.6	204.1	201.5	7.5°
120°	250.6	253.2	255.7	253.7	251.6	250.1	248.6	245.5	242.4	240.4	238.3	10°
122.5°	284.4	286.9	289.5	287.4	285.4	284.4	283.4	280.3	277.2	275.2	273.1	12.5°
125°	317.1	319.7	322.2	321.2	320.2	318.6	317.1	314.6	312.0	308.9	305.9	15°
127.5°	353.9	353.9	353.9	353.4	352.9	350.4	347.8	347.3	346.8	343.7	340.6	17.5°
130°	389.7	389.7	389.7	387.7	385.7	383.1	380.5	379.5	378.5	376.4	374.4	20°
132.5°	423.5	424.5	425.5	423.0	420.4	417.4	414.3	413.8	413.3	411.7	410.2	22.5°
135°	457.3	457.8	458.3	455.7	453.2	450.1	447.0	446.0	445.0	443.4	441.9	25°
137.5°	486.9	486.4	485.9	484.9	483.9	481.3	478.7	476.7	474.6	472.6	470.6	27.5°
140°	515.6	514.5	513.5	512.5	511.5	509.9	508.4	505.3	502.3	501.2	500.2	30°
142.5°	545.2	545.2	545.2	542.2	539.1	538.1	537.0	535.0	533.0	531.4	529.9	32.5°
145°	573.9	574.4	574.9	571.8	568.8	566.2	563.6	563.1	562.6	561.1	559.6	35°
147.5°	599.4	598.9	598.4	595.9	593.3	590.8	588.2	587.7	587.2	587.2	587.2	37.5°
150°	616.8	615.3	613.8	612.2	610.7	608.7	606.6	606.6	606.6	606.6	606.6	40°
152.5°	632.2	630.1	628.1	626.6	625.0	624.5	624.0	624.0	624.0	623.5	623.0	42.5°
155°	650.6	648.0	645.5	642.9	640.4	641.4	642.4	643.4	644.5	642.9	641.4	45°
157.5°	664.9	663.9	662.9	660.8	658.8	659.3	659.8	660.3	660.8	659.8	658.8	47.5°
160°	676.2	677.7	679.2	676.2	673.1	671.6	670.0	670.0	670.0	670.5	671.1	50°
162.5°	685.4	685.9	686.4	684.4	682.3	680.3	678.2	677.2	676.2	678.2	680.3	52.5°
165°	695.6	694.1	692.5	690.0	687.4	687.9	688.4	688.4	688.4	690.0	691.5	55°
167.5°	703.8	701.7	699.7	696.6	693.6	697.1	700.7	702.3	703.8	702.8	701.7	57.5°
170°	709.9	707.4	704.8	703.3	701.7	704.3	706.9	707.9	708.9	708.4	707.9	60°
172.5°	709.9	708.9	707.9	706.3	704.8	705.3	705.8	705.8	705.8	707.4	708.9	62.5°
175°	712.0	711.5	711.0	708.4	705.8	705.8	705.8	706.3	706.9	708.9	711.0	65°
177.5°	717.1	716.1	715.0	712.5	709.9	710.4	711.0	712.0	713.0	714.0	715.0	67.5°
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	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: P227100
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REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
928.0	928.0	928.0	928.0	928.0
863.3	865.9	854.3	859.7	856.1
768.8	764.3	763.4	760.8	755.3
658.3	654.7	643.8	647.4	639.3
544.0	543.2	523.3	524.3	514.3
438.8	422.7	414.5	402.8	409.2
339.9	326.4	309.3	304.8	311.2
256.2	242.7	234.7	227.5	224.8
212.3	204.1	199.7	196.9	195.2
205.0	203.3	202.3	200.5	199.7
200.5	202.3	202.3	202.3	200.5
196.0	199.7	200.5	199.7	197.8
191.5	194.3	194.3	193.3	190.7
185.3	187.9	187.9	187.0	185.3
178.1	179.8	180.8	180.8	181.7
172.7	174.4	176.3	178.1	180.8
166.3	169.1	169.9	173.6	177.2
158.3	161.8	163.7	166.3	169.9
150.2	154.7	155.6	159.2	162.8
146.6	150.2	150.2	152.8	155.6
142.1	143.9	143.0	144.7	145.7
137.6	139.4	138.5	140.2	141.2
134.0	135.7	137.6	139.4	140.2
135.7	138.5	139.4	142.1	143.0
143.9	147.5	151.1	154.7	157.3
152.0	156.5	164.6	180.8	187.0
156.5	162.8	181.7	209.5	217.6
153.7	161.8	184.3	214.0	223.9
148.3	154.7	178.9	209.5	218.5
141.2	147.5	171.8	205.0	213.1
114.2	117.8	144.7	176.3	181.7
83.7	86.3	107.0	119.6	118.7
64.8	68.3	75.5	76.4	75.5
51.2	53.1	56.7	56.7	57.6
39.6	40.5	42.2	40.5	39.6
29.7	28.7	27.9	27.0	26.1
17.1	17.1	14.4	12.6	11.7
9.5	9.8	8.8	7.0	5.1
5.6	5.1	4.6	4.1	4.1
6.6	6.1	5.6	5.1	5.1
8.2	8.2	7.7	7.2	7.2
9.7	9.2	8.7	8.2	8.2
15.9	13.3	12.3	11.3	11.3
32.2	27.6	25.1	22.5	21.5
54.7	50.1	46.5	43.0	41.9

CANDELA DISTRIBUTION:

	160°
110°	82.3
112.5°	116.1
115°	156.5
117.5°	197.4
120°	234.8
122.5°	270.1
125°	304.3
127.5°	338.6
130°	372.4
132.5°	406.1
135°	438.8
137.5°	470.0
140°	499.2
142.5°	529.4
145°	558.0
147.5°	585.6
150°	606.6
152.5°	622.5
155°	640.4
157.5°	658.3
160°	672.6
162.5°	682.3
165°	691.5
167.5°	700.7
170°	707.9
172.5°	709.9
175°	712.0
177.5°	715.6
180°	716.1

'227100

IST-AF-1000-LED-E1-SL4-ULG

TION (continued):

165°	170°	175°	180°
75.7	72.6	69.6	67.5
108.4	104.9	101.3	101.3
150.4	146.3	142.2	143.2
193.3	190.8	188.2	188.2
231.2	229.7	228.1	230.2
267.0	266.5	266.0	269.0
302.8	301.8	300.7	304.8
336.6	336.6	336.6	337.6
370.3	369.8	369.3	371.3
402.0	402.5	403.0	405.1
435.8	435.8	435.8	438.8
469.5	468.5	467.5	470.6
498.2	497.2	496.1	499.2
528.9	527.8	526.8	529.9
556.5	557.5	558.5	562.6
584.1	584.6	585.1	588.2
606.6	606.1	605.6	608.7
622.0	622.0	622.0	625.0
639.3	639.3	639.3	643.4
657.8	657.8	657.8	660.8
674.1	674.6	675.1	678.2
684.4	684.4	684.4	688.4
691.5	692.5	693.6	696.6
699.7	701.2	702.8	705.8
707.9	709.4	711.0	714.0
711.0	712.0	713.0	715.0
713.0	713.5	714.0	716.1
716.1	718.6	721.2	723.2
716.1	716.1	716.1	716.1

(END OF REPORT)