

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: P227091

Luminaire Tested: **IST-AF-350-LED-E1-SL4-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227091
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-350-LED-E1-SL4-8030-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) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3559.8 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U5 - G1

Input Watts (W): 36.79
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

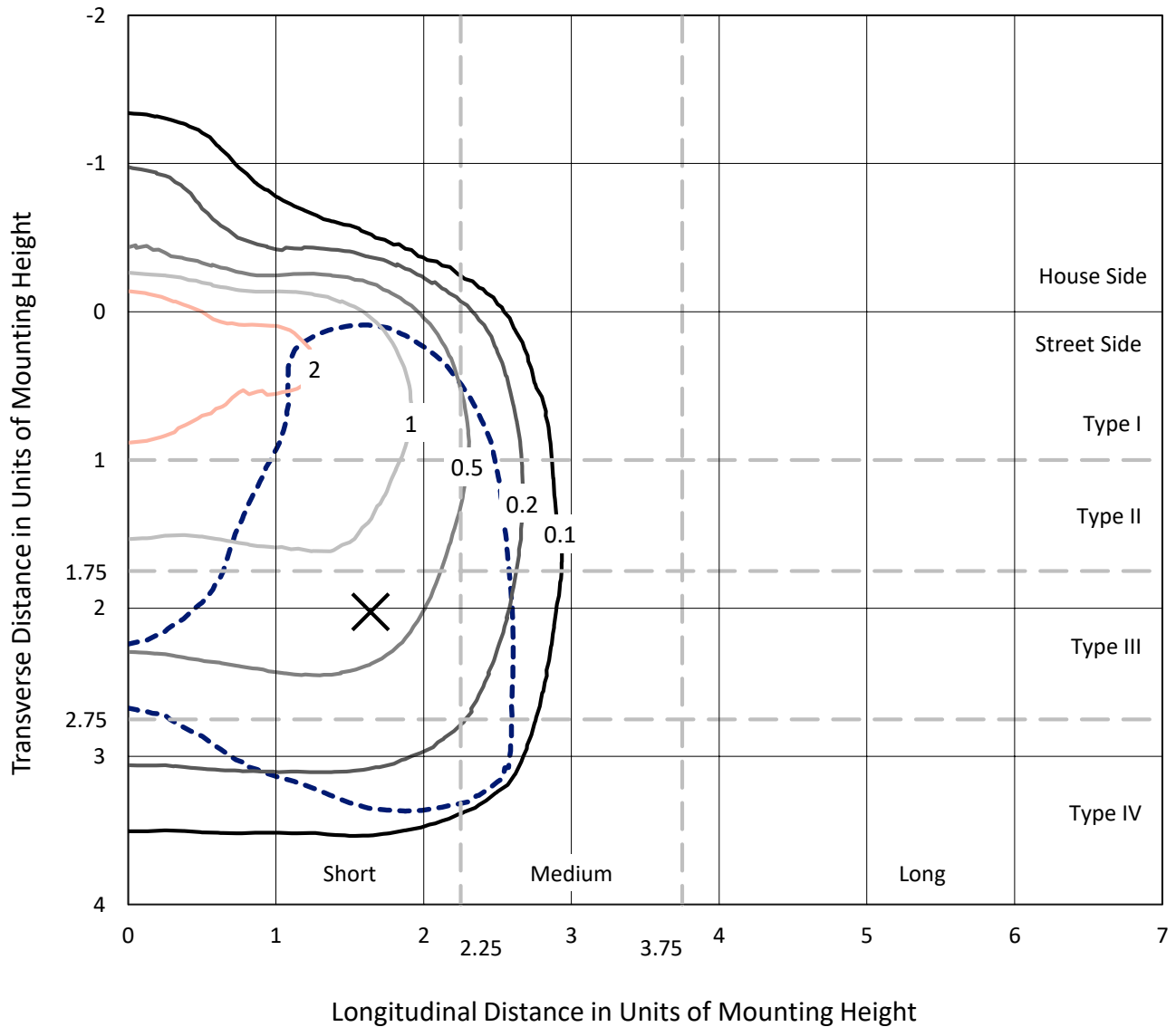


REPORT NUMBER: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

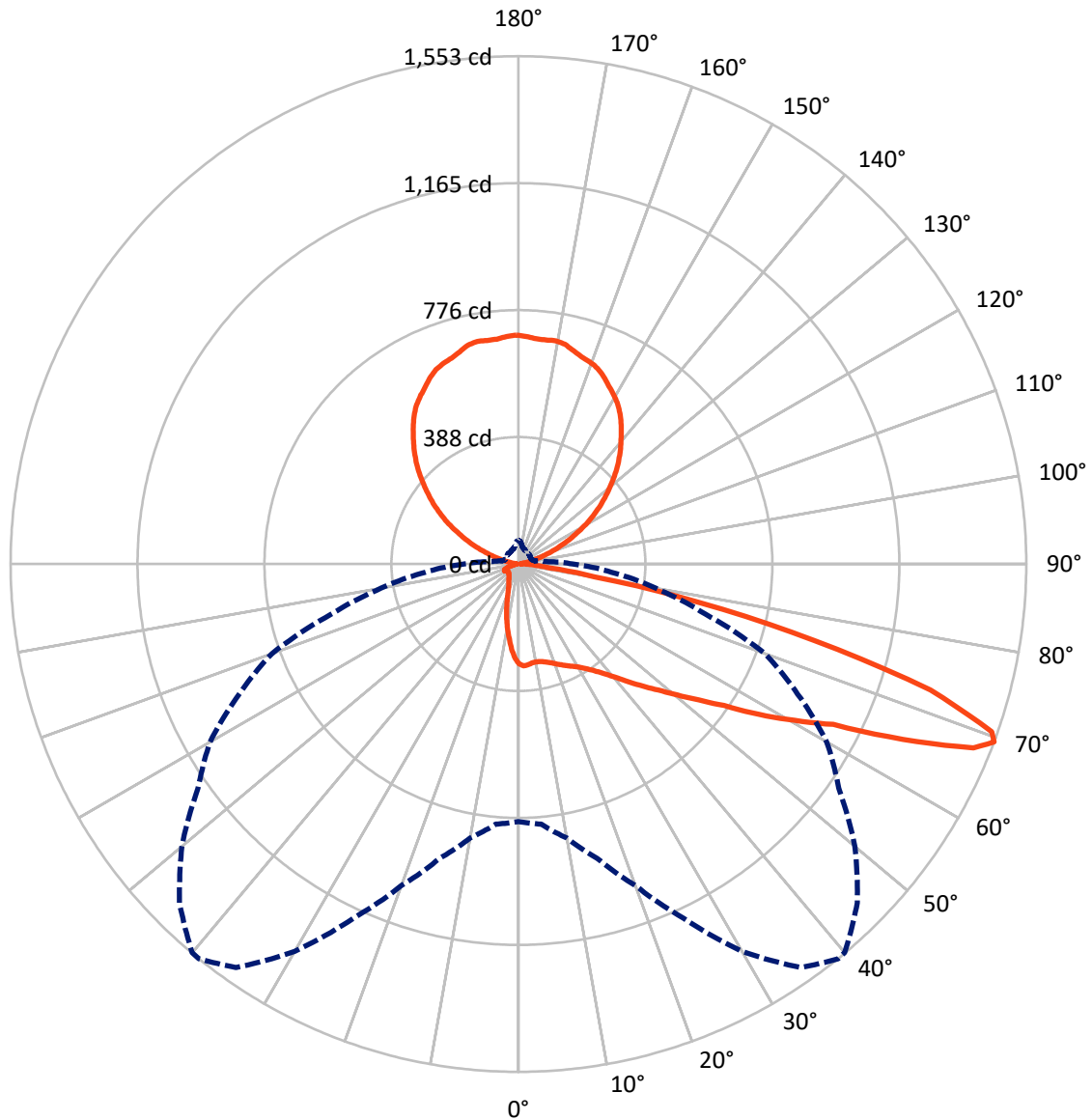


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

Luminous Intensity Polar Plot



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

REPORT NUMBER: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

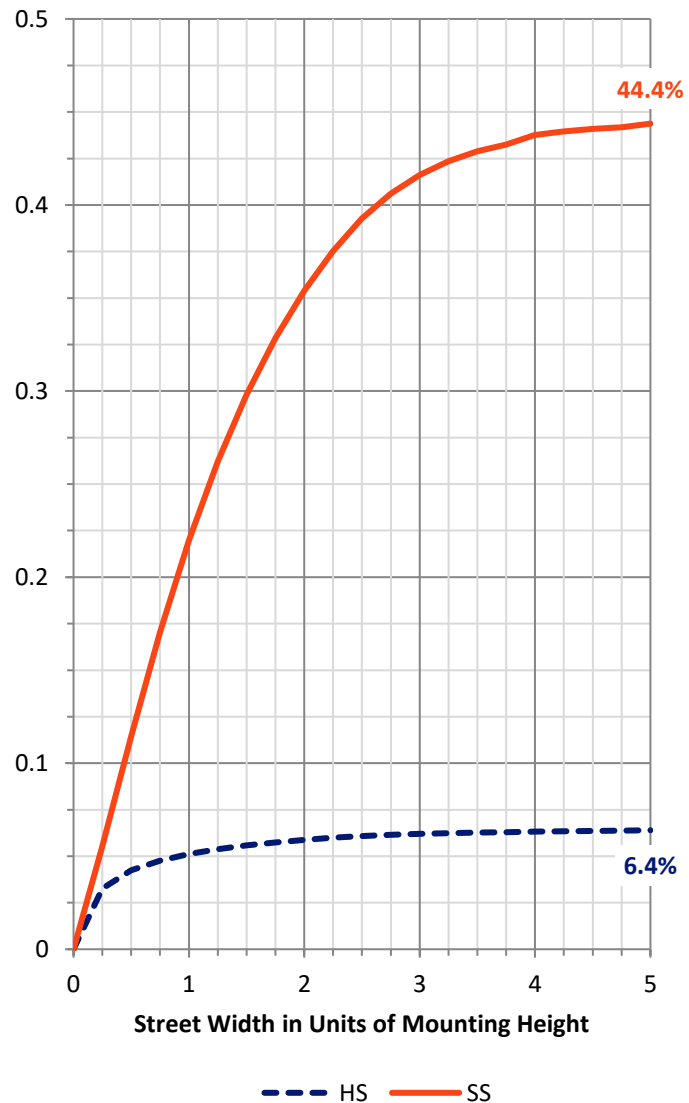
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	231.2	867.6	1098.9
	% Fixture	6.5	24.4	30.9
Street Side	Lumens	1592.9	868.0	2460.9
	% Fixture	44.7	24.4	69.1
Total	Lumens	1824.1	1735.6	3559.8
	% Fixture	51.2	48.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	0.7
10°-20°	66.5	1.9
20°-30°	103.5	2.9
30°-40°	156.4	4.4
40°-50°	250.3	7.0
50°-60°	393.3	11.0
60°-70°	529.6	14.9
70°-80°	262.7	7.4
80°-90°	35.5	1.0
90°-100°	9.8	0.3
100°-110°	57.4	1.6
110°-120°	166.1	4.7
120°-130°	273.2	7.7
130°-140°	336.8	9.5
140°-150°	344.6	9.7
150°-160°	290.3	8.2
160°-170°	191.2	5.4
170°-180°	66.3	1.9
0°-90°	1824.1	51.2
0°-180°	3559.8	100.0



REPORT NUMBER: P227091

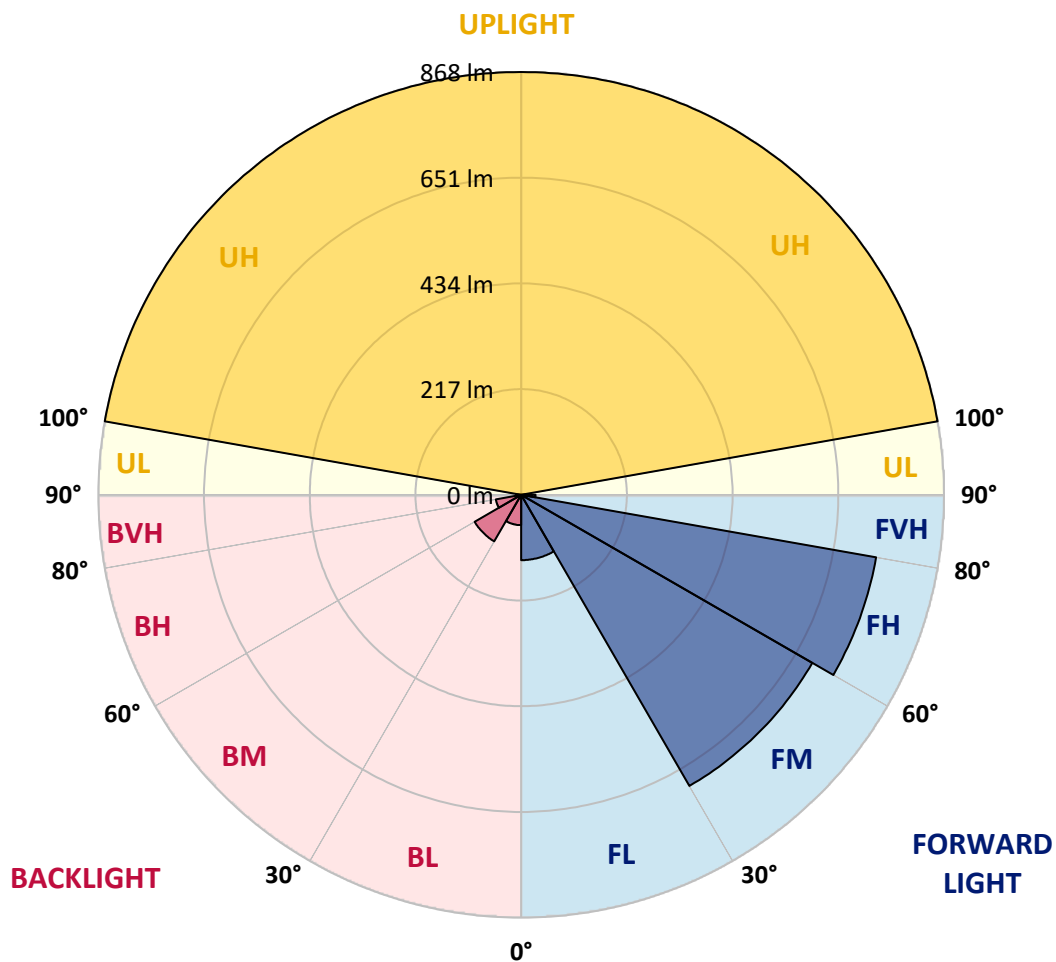
CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	134.1	3.8			
FM	(30°-60°)	689.7	19.4			
FH	(60°-80°)	739.5	20.8			G1/1800
FVH	(80°-90°)	29.6	0.8			G1/100
BL	(0°-30°)	62.2	1.7	B0/110		
BM	(30°-60°)	110.2	3.1	B0/220		
BH	(60°-80°)	52.8	1.5	B0/110		G0/110
BVH	(80°-90°)	5.9	0.2			G0/10
UL	(90°-100°)	9.8	0.3		U1/10	
UH	(100°-180°)	867.6	24.4		U4/1000	

BUG Rating: B0-U5-G1

Type IV Short





REPORT NUMBER: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	312.8	313.1	313.1	313.4	312.2	312.2	312.5	311.4	312.0	311.7	310.2
5°	313.4	313.7	313.4	313.7	312.2	311.7	310.5	309.0	309.6	309.3	307.2
7.5°	312.0	312.2	311.7	312.0	310.2	309.0	307.2	306.0	305.1	304.9	302.2
10°	308.7	309.6	308.4	309.3	307.8	306.6	305.7	304.6	304.0	303.7	300.7
12.5°	304.0	304.6	304.9	306.0	306.0	306.3	306.3	305.4	305.7	305.4	303.1
15°	299.5	301.6	303.7	304.9	307.2	308.7	309.9	309.6	310.5	310.2	308.7
17.5°	299.5	301.3	304.9	308.7	313.1	315.2	317.0	317.0	317.3	316.7	314.3
20°	300.7	304.0	309.9	316.4	321.7	325.9	327.0	326.8	325.6	325.6	321.4
22.5°	310.5	312.5	319.1	326.2	333.6	337.7	338.0	337.1	334.7	334.2	329.1
25°	324.4	326.8	332.7	341.8	347.5	350.7	349.8	346.9	344.5	342.4	337.1
27.5°	346.0	347.8	353.7	359.9	363.2	364.3	360.8	356.6	354.0	353.1	346.0
30°	368.2	370.6	375.3	379.1	381.8	378.3	372.6	367.9	365.5	364.9	358.4
32.5°	395.4	395.7	399.0	399.9	400.2	394.2	386.5	382.1	381.2	380.0	375.0
35°	420.3	421.8	421.2	420.9	418.2	410.8	404.3	401.6	400.7	400.4	396.3
37.5°	442.5	444.8	443.4	440.7	437.4	431.5	424.7	421.8	424.7	422.9	423.8
40°	464.1	464.1	462.3	460.8	457.0	451.4	449.0	449.3	454.0	455.2	456.4
42.5°	482.7	482.4	480.7	479.5	478.9	477.7	476.5	482.1	491.3	493.1	495.8
45°	503.2	502.9	496.0	498.4	502.6	503.4	507.6	520.6	531.9	532.7	538.4
47.5°	523.0	520.6	514.1	516.5	528.3	534.5	541.3	559.7	575.4	578.6	594.3
50°	543.7	541.3	534.2	538.7	555.2	566.8	582.8	608.2	629.8	634.3	654.7
52.5°	565.3	565.0	559.4	566.2	586.6	610.0	635.2	663.9	690.2	695.8	726.0
55°	591.3	589.9	587.5	595.8	624.8	656.2	695.5	734.6	763.3	773.4	803.9
57.5°	620.7	620.1	620.4	637.5	672.4	720.1	768.3	821.0	868.4	875.5	903.9
60°	646.1	647.3	654.1	681.0	724.8	789.4	857.1	928.5	970.5	977.9	1005.7
62.5°	677.2	684.0	699.1	733.1	784.6	862.8	950.7	1026.1	1080.3	1095.4	1148.1
65°	751.8	757.1	785.2	826.4	892.1	992.1	1093.0	1202.8	1292.2	1305.8	1351.1
67.5°	806.2	819.8	863.9	931.1	1026.1	1154.0	1292.5	1425.4	1500.9	1507.1	1475.4
69°	787.3	798.5	850.6	931.7	1046.3	1195.1	1367.4	1506.2	1552.7	1551.5	1465.4
70°	758.3	768.6	826.1	904.8	1029.4	1190.4	1368.6	1506.8	1534.9	1524.3	1425.7
72.5°	635.2	644.3	698.2	780.5	901.2	1061.1	1228.9	1323.3	1317.4	1308.5	1145.7
75°	396.6	396.0	443.1	490.7	584.5	746.1	871.0	946.8	934.7	927.9	735.5
77.5°	148.3	158.6	175.8	227.0	270.2	357.5	458.5	542.8	566.2	536.3	396.0
80°	77.2	82.9	94.1	112.2	129.0	147.7	177.6	228.5	236.5	220.5	159.8
82.5°	61.0	67.8	79.0	94.4	106.3	99.2	93.5	96.8	96.2	91.8	81.4
85°	46.2	54.2	72.5	88.2	105.1	88.8	70.7	61.9	55.1	55.3	58.9
87.5°	23.1	29.9	57.1	77.0	91.5	58.9	46.2	35.8	29.9	28.7	38.5
90°	12.1	12.1	17.5	22.1	28.2	18.4	18.1	15.7	13.2	13.1	15.9
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: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-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: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	309.0	309.0	308.4	308.1	307.2	306.0	305.1	303.7	302.8	301.3	299.5
5°	305.1	304.0	303.4	302.2	300.4	298.9	297.2	295.1	292.7	289.8	286.5
7.5°	300.1	298.3	296.3	295.7	293.6	291.8	289.8	286.8	283.5	278.2	274.1
10°	298.0	296.3	294.5	293.3	290.6	288.6	286.2	282.4	278.2	271.1	263.4
12.5°	300.1	298.3	296.6	294.5	292.1	289.8	286.5	281.8	276.1	267.0	257.5
15°	305.1	303.4	300.4	298.3	295.1	293.0	288.6	283.2	275.0	263.7	251.3
17.5°	310.8	308.1	305.4	302.2	299.2	296.6	291.8	285.0	274.7	261.3	245.4
20°	316.1	313.1	309.0	306.6	303.7	299.8	294.8	286.5	274.1	256.6	239.1
22.5°	322.3	318.5	314.0	311.4	309.0	305.7	299.8	289.2	274.1	253.9	232.0
25°	330.3	325.3	320.8	318.2	316.7	314.3	307.2	295.4	276.1	252.5	226.1
27.5°	339.8	333.3	329.4	327.6	327.3	325.6	318.5	303.7	280.9	252.5	220.5
30°	351.0	345.4	340.4	340.4	343.9	342.7	334.7	316.4	288.3	253.4	216.4
32.5°	366.7	361.1	358.1	361.1	364.9	366.1	356.9	334.4	300.4	257.5	212.2
35°	389.8	386.2	384.2	388.6	396.3	399.3	388.0	361.4	318.2	265.5	209.8
37.5°	420.3	417.6	415.0	422.6	437.1	443.1	426.8	392.5	343.6	278.8	208.7
40°	455.2	455.5	458.5	473.8	487.8	500.2	481.8	439.5	378.5	297.7	209.8
42.5°	496.6	499.9	510.0	531.3	558.2	568.0	550.2	496.3	422.1	320.5	212.8
45°	548.1	556.7	573.9	605.6	638.1	653.2	628.1	568.0	476.8	356.9	221.1
47.5°	602.9	621.8	650.8	689.3	727.2	737.0	705.9	632.8	530.4	389.2	233.8
50°	673.0	696.1	725.1	771.3	811.6	817.5	776.3	692.9	577.1	417.3	246.0
52.5°	738.4	769.8	806.8	860.4	901.2	893.8	840.6	746.4	614.1	436.6	252.8
55°	827.8	860.4	902.1	948.9	989.4	971.7	898.9	792.0	643.7	450.8	254.8
57.5°	929.9	954.8	995.6	1043.6	1070.2	1039.7	956.3	836.4	671.9	451.1	238.6
60°	1030.3	1059.3	1104.3	1151.3	1166.1	1113.4	996.2	843.2	644.0	402.5	190.9
62.5°	1178.9	1208.2	1230.9	1238.6	1212.0	1106.0	949.8	771.3	555.2	317.6	135.3
65°	1344.9	1311.7	1267.6	1226.2	1153.7	992.7	819.0	633.7	430.9	212.2	93.2
67.5°	1388.4	1287.5	1191.6	1099.2	964.0	790.5	617.7	445.7	276.4	120.8	63.3
69°	1343.1	1195.7	1088.9	942.4	802.7	591.6	425.6	285.6	165.2	84.1	53.0
70°	1260.2	1106.9	962.2	805.3	621.8	451.9	282.9	187.1	107.7	61.3	47.7
72.5°	951.0	760.3	586.0	380.6	232.0	128.7	90.6	64.8	51.2	45.0	40.8
75°	549.9	366.1	239.7	127.9	75.8	56.2	49.1	43.8	40.5	39.1	35.5
77.5°	232.0	145.0	98.3	71.9	50.9	43.5	37.9	34.9	34.6	33.7	30.5
80°	105.7	90.6	77.2	54.2	38.8	33.1	29.0	28.4	29.0	28.1	24.9
82.5°	78.4	77.2	64.5	41.7	29.6	22.2	18.1	18.9	21.3	23.1	20.1
85°	65.4	65.4	54.2	31.1	19.5	14.2	13.9	15.7	17.8	19.2	16.3
87.5°	60.1	57.7	31.1	16.0	11.2	9.2	8.6	7.7	7.7	13.3	11.2
90°	12.9	9.7	9.5	10.2	10.5	10.2	9.8	8.5	8.5	8.5	9.5
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: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-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: P227091

CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.4
2.5°	298.0	296.9	293.9	293.3	292.4	291.2	290.9	289.5	286.5	285.9	286.2
5°	284.4	279.7	276.4	273.8	271.7	266.4	264.3	261.9	257.8	256.6	254.8
7.5°	268.4	262.8	256.3	251.6	246.0	240.3	235.9	230.3	225.8	223.2	218.4
10°	256.0	248.3	239.7	230.3	222.9	214.3	208.7	202.1	195.0	188.5	183.8
12.5°	246.5	235.9	223.5	212.2	201.6	192.4	182.3	173.1	164.3	155.4	147.7
15°	238.8	225.5	209.8	195.6	182.6	169.0	157.8	145.0	133.8	126.1	116.3
17.5°	230.6	213.4	194.7	178.2	161.3	147.1	132.9	119.6	108.9	98.9	90.9
20°	220.5	199.8	179.7	160.4	141.2	124.9	110.4	97.7	87.3	79.3	73.4
22.5°	209.3	185.0	161.6	140.6	121.3	105.4	91.8	82.3	74.6	70.1	68.4
25°	198.3	170.5	144.1	121.1	101.8	88.2	79.0	71.0	67.2	65.4	65.4
27.5°	188.2	155.7	126.4	103.9	85.2	74.6	67.5	64.2	62.4	62.4	63.3
30°	178.8	140.9	109.5	86.7	71.9	63.9	60.1	58.9	59.2	60.4	61.6
32.5°	167.8	126.7	95.0	74.6	62.4	57.1	54.2	54.5	55.9	58.0	60.1
35°	156.3	111.6	82.3	65.4	55.9	51.8	50.0	50.3	52.4	55.1	57.1
37.5°	145.9	99.4	72.5	58.3	51.2	48.5	47.1	47.4	48.8	52.1	54.8
40°	135.6	89.1	64.5	54.2	48.5	45.9	45.0	44.7	45.9	48.8	52.1
42.5°	126.7	80.2	59.8	51.2	46.8	44.4	43.2	43.2	43.8	46.2	49.4
45°	121.3	74.9	56.5	49.1	45.3	43.2	42.0	41.4	42.3	43.8	46.8
47.5°	121.3	72.2	54.5	47.7	44.1	42.3	40.8	40.5	40.8	42.3	45.3
50°	125.5	72.8	54.2	47.1	43.5	41.1	39.7	39.7	40.3	42.3	44.7
52.5°	129.0	74.0	55.1	47.7	43.5	40.5	38.8	38.5	39.4	41.4	43.5
55°	128.5	74.0	55.9	48.5	44.4	40.8	38.5	38.2	38.8	40.8	42.9
57.5°	114.8	69.6	55.1	49.1	45.6	42.3	40.0	39.1	39.7	41.4	43.2
60°	92.9	61.9	52.7	49.1	47.4	45.0	42.6	42.0	42.3	44.1	46.2
62.5°	72.8	55.1	49.7	48.8	48.2	47.1	46.2	45.6	45.6	47.1	48.8
65°	59.2	49.7	47.4	47.7	48.2	47.9	47.7	47.4	47.4	48.2	50.0
67.5°	49.4	44.7	44.1	45.0	45.6	45.9	46.2	45.9	46.2	47.1	49.1
69°	45.0	42.0	41.4	42.0	43.2	43.5	44.1	43.8	44.1	45.0	47.1
70°	42.3	40.0	39.4	40.3	41.1	41.4	42.0	41.7	42.0	42.9	45.0
72.5°	36.7	34.0	33.1	33.7	34.6	34.6	35.5	35.8	35.2	35.5	37.0
75°	31.4	28.4	26.9	27.2	27.2	27.2	27.8	27.8	27.2	26.9	27.2
77.5°	26.3	23.1	21.3	21.3	21.3	21.0	20.1	20.4	20.7	20.4	20.7
80°	20.7	18.1	16.3	16.3	16.3	15.7	15.4	15.4	16.0	16.6	16.3
82.5°	16.0	13.3	12.4	12.1	12.1	11.5	11.5	12.1	11.8	12.1	12.7
85°	11.5	9.5	8.6	8.9	8.6	8.0	8.3	9.2	9.2	8.9	9.5
87.5°	7.1	5.9	5.6	5.9	5.3	4.4	4.1	4.4	5.0	4.7	5.3
90°	9.9	9.6	9.6	8.6	7.9	7.6	7.6	8.1	8.9	8.9	8.6
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: P227091
 CATALOG NUMBER: IST-AF-350-LED-E1-SL4-8030-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: P227091
 NUMBER: IST-AF-350-LED-E1-SL4-8030-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
305.4	305.4	305.4	305.4	305.4
284.1	285.0	281.2	282.9	281.8
253.1	251.6	251.3	250.4	248.6
216.7	215.5	211.9	213.1	210.4
179.1	178.8	172.3	172.6	169.3
144.4	139.1	136.4	132.6	134.7
111.9	107.4	101.8	100.3	102.4
84.4	79.9	77.2	74.9	74.0
69.8	67.2	65.7	64.8	64.2
67.5	66.9	66.6	66.0	65.7
66.0	66.6	66.6	66.6	66.0
64.5	65.7	66.0	65.7	65.1
63.0	63.9	63.9	63.6	62.7
61.0	61.9	61.9	61.6	61.0
58.6	59.2	59.5	59.5	59.8
56.8	57.4	58.0	58.6	59.5
54.8	55.6	55.9	57.1	58.3
52.1	53.3	53.9	54.8	55.9
49.4	50.9	51.2	52.4	53.6
48.2	49.4	49.4	50.3	51.2
46.8	47.4	47.1	47.7	47.9
45.3	45.9	45.6	46.2	46.5
44.1	44.7	45.3	45.9	46.2
44.7	45.6	45.9	46.8	47.1
47.4	48.5	49.7	50.9	51.8
50.0	51.5	54.2	59.5	61.6
51.5	53.6	59.8	69.0	71.6
50.6	53.3	60.7	70.4	73.7
48.8	50.9	58.9	69.0	71.9
46.5	48.5	56.5	67.5	70.1
37.6	38.8	47.7	58.0	59.8
27.5	28.4	35.2	39.4	39.1
21.3	22.5	24.9	25.2	24.9
16.9	17.5	18.6	18.6	18.9
13.0	13.3	13.9	13.3	13.0
9.8	9.5	9.2	8.9	8.6
5.6	5.6	4.7	4.1	3.8
8.1	7.9	6.9	5.6	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

'227091

IST-AF-350-LED-E1-SL4-8030-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)