

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: P226453

Luminaire Tested: **IST-AF-1000-LED-E1-T3-7050-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226453  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35938)-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-T3-7050-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, 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: 7806.2 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type III - 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

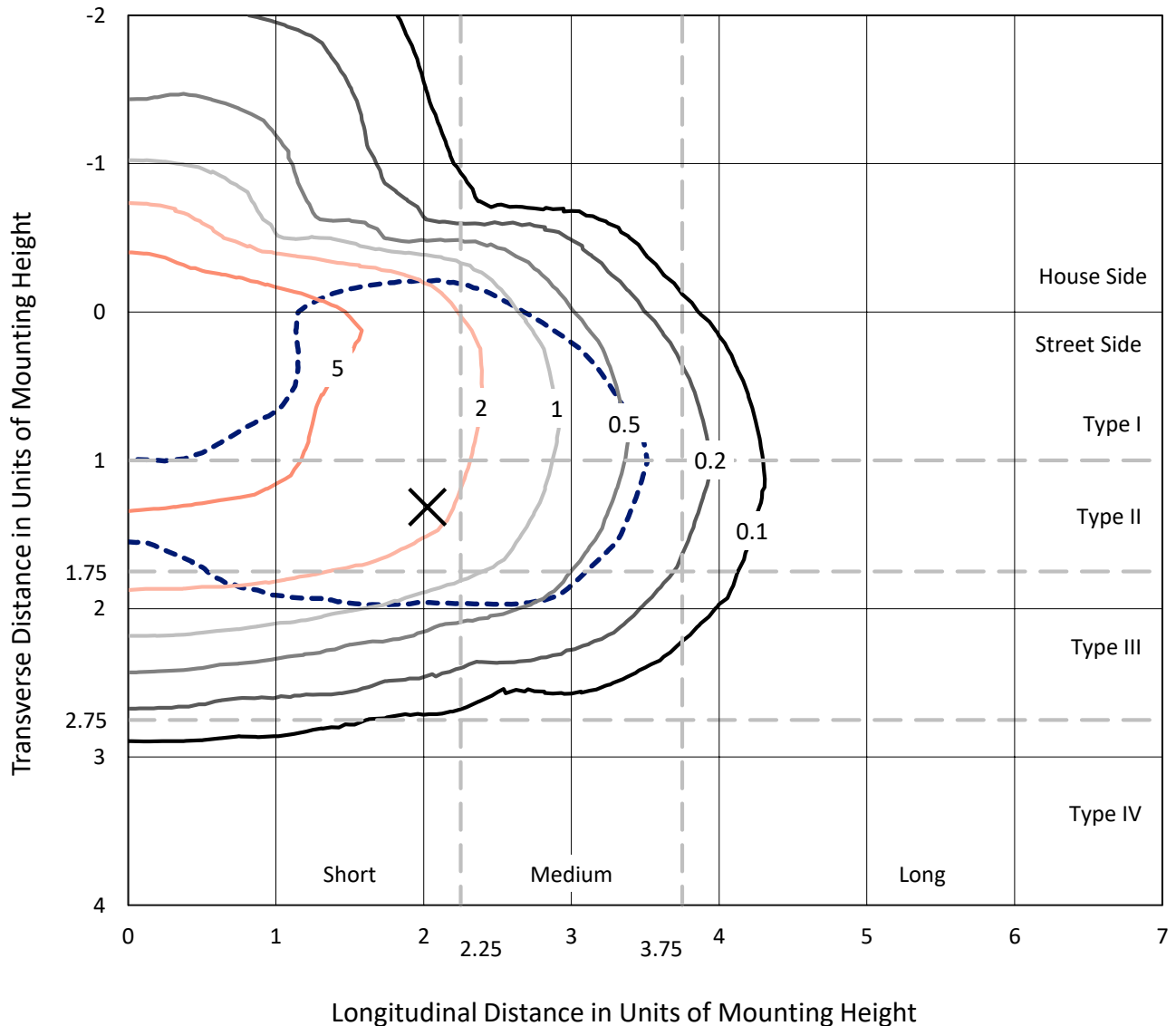


REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

### Iso-Footcandle Lines of Horizontal Illumination

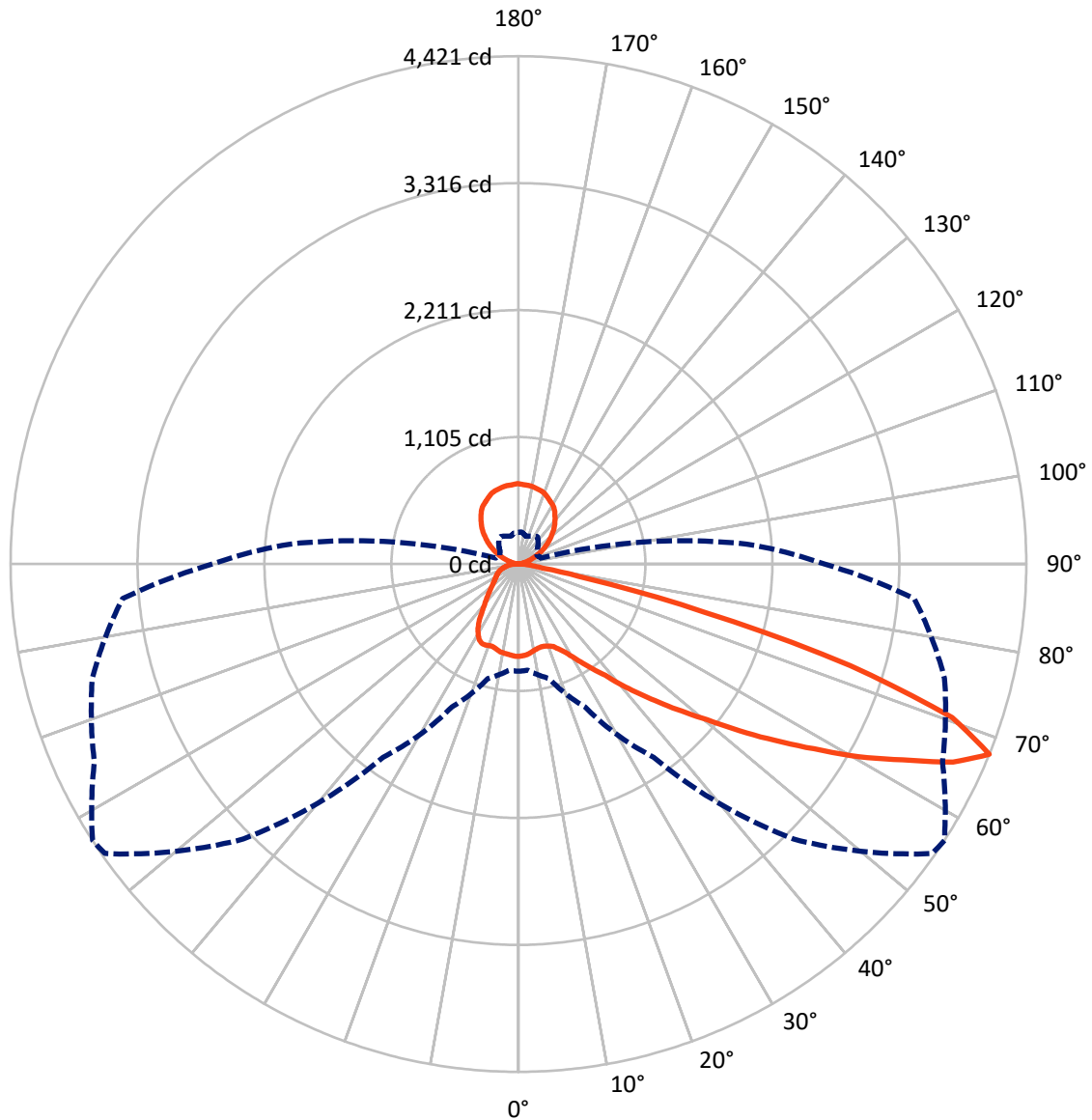
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.4 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P226453  
CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

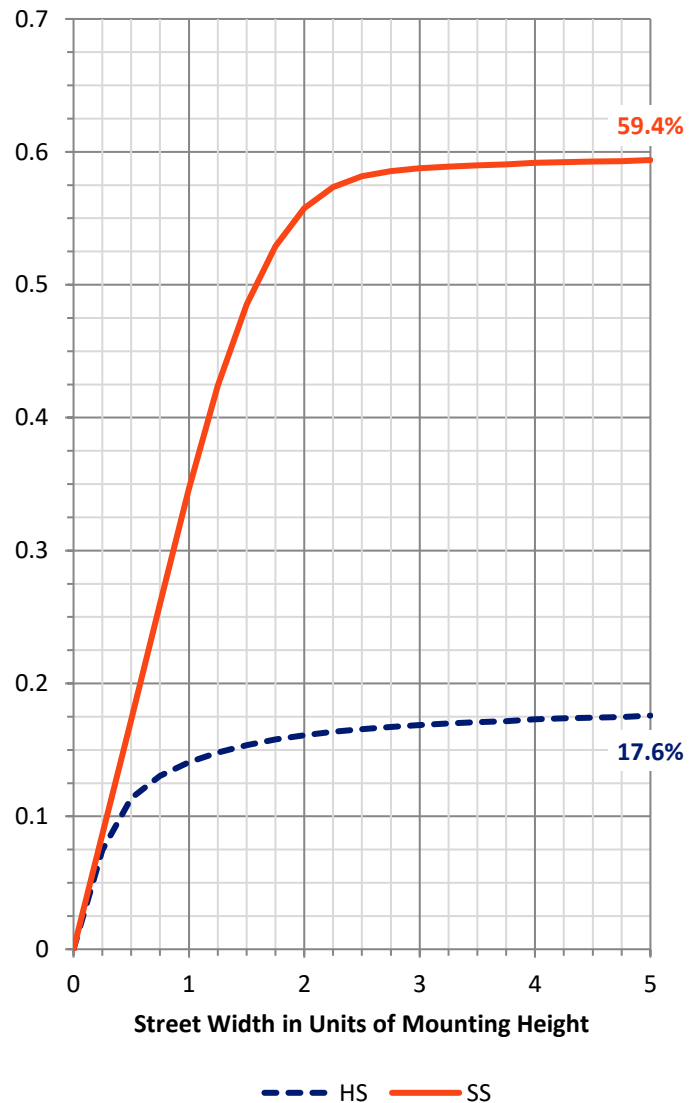
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1413.1	869.3	2282.4
	% Fixture	18.1	11.1	29.2
<b>Street Side</b>	Lumens	4655.7	868.1	5523.8
	% Fixture	59.6	11.1	70.8
<b>Total</b>	Lumens	6068.8	1737.4	7806.2
	% Fixture	77.7	22.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.2	1.0
10°-20°	216.2	2.8
20°-30°	372.1	4.8
30°-40°	605.0	7.8
40°-50°	975.9	12.5
50°-60°	1455.0	18.6
60°-70°	1638.7	21.0
70°-80°	631.7	8.1
80°-90°	98.9	1.3
90°-100°	11.5	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°	6068.8	77.7
0°-180°	7806.2	100.0



REPORT NUMBER: P226453

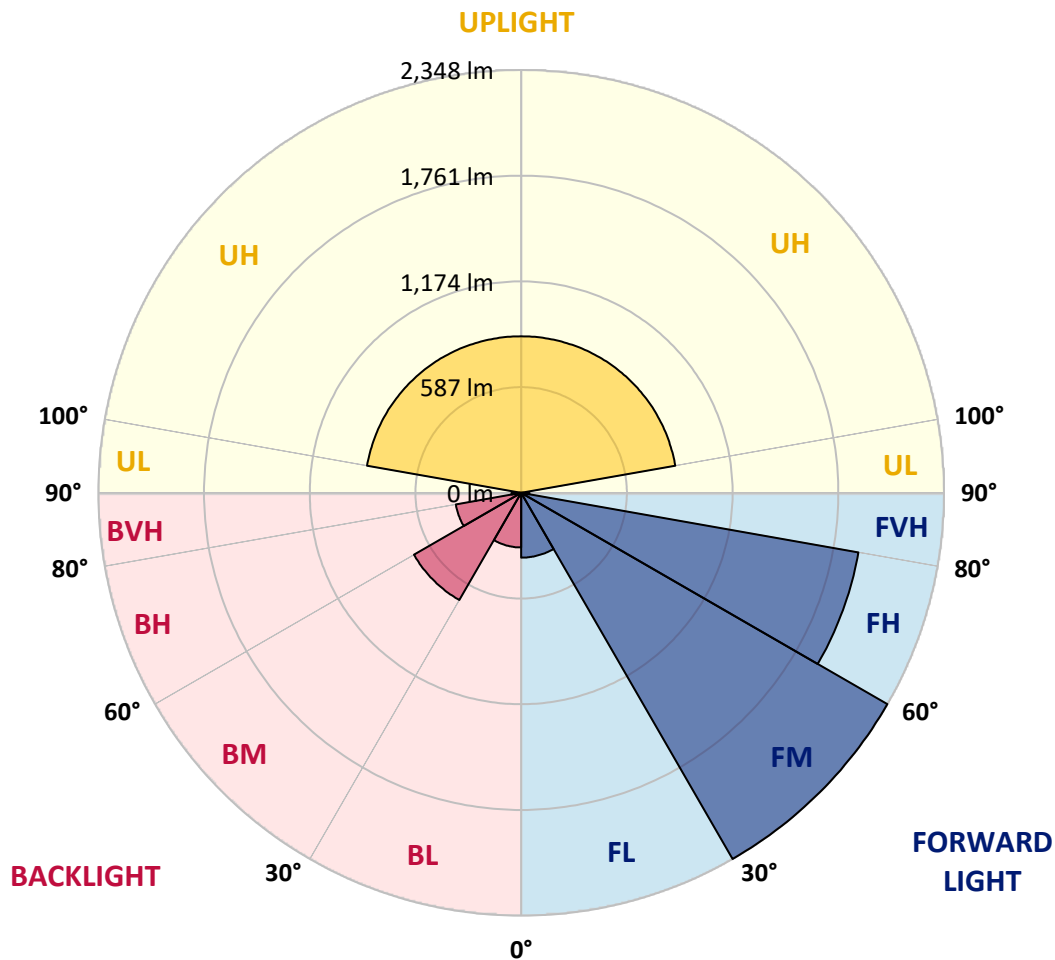
CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	360.1	4.6			
FM	(30°-60°)	2348.4	30.1			
FH	(60°-80°)	1901.8	24.4			G2/5000
FVH	(80°-90°)	45.5	0.6			G1/100
BL	(0°-30°)	303.5	3.9	B1/500		
BM	(30°-60°)	687.5	8.8	B1/1000		
BH	(60°-80°)	368.6	4.7	B1/500		G1/500
BVH	(80°-90°)	53.5	0.7			G1/100
UL	(90°-100°)	11.5	0.1		U2/50	
UH	(100°-180°)	869.3	11.1		U4/1000	

**BUG Rating: B1-U5-G2**

Type III Short





REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4
2.5°	798.2	800.0	801.8	800.9	800.9	800.9	800.9	799.1	801.8	801.8	800.0
5°	785.1	785.9	786.8	788.6	790.3	792.1	793.0	793.0	793.8	793.0	791.2
7.5°	765.7	766.6	770.1	770.1	771.9	775.4	777.1	778.9	781.5	781.5	780.7
10°	759.6	759.6	759.6	756.9	758.7	759.6	762.2	762.2	769.2	772.7	774.5
12.5°	766.6	765.7	765.7	758.7	752.5	749.9	752.5	753.4	761.3	766.6	770.1
15°	782.4	782.4	780.7	770.1	757.8	748.1	747.3	747.3	753.4	761.3	767.5
17.5°	819.3	822.9	810.6	793.8	773.6	757.8	751.6	750.8	755.2	761.3	767.5
20°	889.7	888.8	870.3	840.4	805.3	778.9	764.0	762.2	761.3	764.8	771.9
22.5°	973.2	969.7	947.7	909.9	861.5	813.2	784.2	780.7	773.6	776.3	785.9
25°	1062.9	1063.7	1036.5	987.3	926.6	868.6	824.6	821.1	806.2	804.4	814.9
27.5°	1152.5	1164.0	1127.0	1080.4	1008.4	938.9	874.7	869.5	856.3	851.9	862.4
30°	1283.5	1279.1	1233.4	1172.7	1100.7	1013.6	952.1	942.4	916.0	922.2	933.6
32.5°	1394.3	1404.0	1362.6	1290.6	1195.6	1104.2	1033.0	1027.7	1002.2	1009.2	1025.1
35°	1529.7	1552.5	1498.0	1409.2	1317.8	1223.7	1138.5	1124.4	1104.2	1118.2	1130.6
37.5°	1684.4	1695.8	1653.6	1539.3	1446.2	1347.7	1251.0	1229.0	1207.0	1236.0	1258.0
40°	1832.1	1850.6	1796.0	1699.3	1591.2	1497.1	1391.6	1387.3	1336.3	1367.9	1425.1
42.5°	2051.0	2073.8	1986.8	1874.3	1776.7	1663.3	1563.1	1539.3	1484.0	1528.8	1624.6
45°	2204.0	2203.1	2144.2	2051.0	1991.2	1881.3	1745.9	1717.8	1658.0	1717.8	1846.2
47.5°	2259.3	2272.5	2252.3	2240.9	2219.8	2139.8	1940.2	1913.8	1857.6	1946.4	2065.1
50°	2341.1	2337.6	2337.6	2407.9	2468.6	2451.9	2167.9	2130.1	2071.2	2177.6	2348.1
52.5°	2362.2	2330.6	2379.8	2514.3	2706.8	2720.9	2432.5	2411.4	2341.1	2444.8	2654.9
55°	2303.3	2295.4	2373.6	2568.8	2872.1	2972.3	2739.3	2710.3	2631.2	2720.0	2986.4
57.5°	2171.4	2191.7	2317.4	2557.4	2986.4	3193.8	3076.0	3034.7	2921.3	2974.9	3315.2
60°	2033.4	2043.1	2209.2	2516.9	3017.1	3347.7	3429.5	3405.7	3211.4	3243.1	3558.7
62.5°	1880.4	1857.6	2029.9	2483.5	2982.9	3559.6	3772.3	3753.8	3524.4	3514.7	3731.9
65°	1453.2	1484.8	1631.6	2052.7	2748.1	3724.8	4181.1	4157.4	3873.4	3738.9	3713.4
67.5°	933.6	927.5	1031.2	1372.3	2053.6	3385.5	4394.7	4421.1	4073.0	3840.0	3458.5
70°	334.9	344.6	383.3	623.3	1126.2	2255.8	3874.3	4005.3	3926.2	3651.0	2814.9
72.5°	204.0	204.0	232.1	280.4	456.3	1069.9	2761.3	3020.7	3204.4	3008.4	2079.1
75°	160.0	159.1	168.8	193.4	246.2	350.8	1468.1	1668.6	2055.4	2078.2	1183.3
77.5°	126.6	125.7	135.4	146.8	183.7	185.5	468.6	610.1	943.3	887.9	422.9
80°	102.0	101.1	108.1	111.6	134.5	128.4	188.1	218.0	330.5	290.1	182.9
82.5°	92.3	92.3	99.3	85.3	93.2	90.5	116.9	124.8	166.2	172.3	109.9
85°	59.8	61.5	93.2	82.6	60.7	55.4	74.7	79.1	103.7	113.4	53.6
87.5°	28.1	30.8	71.2	68.6	40.4	29.9	42.2	44.8	56.3	69.5	31.6
90°	10.3	10.3	15.8	17.7	13.3	12.3	14.0	13.6	15.2	17.8	15.8
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.2	8.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.6	10.0	9.0	8.0
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	28.4	26.0	23.0	19.0
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	49.4	47.0	42.0	39.0
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.6	70.0	65.0	61.0
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.8	94.0	90.0	87.0
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.2	121.0	119.0	116.0



REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	148.4	150.0	149.0	147.0
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	179.6	182.0	179.0	177.0
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	211.8	215.0	210.0	208.0
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	246.8	250.0	245.0	243.0
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	279.8	283.0	278.0	276.0
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	313.4	315.0	310.0	310.0
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.2	346.0	346.0	345.0
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	377.8	381.0	381.0	379.0
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	412.0	416.0	414.0	414.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	444.0	448.0	447.0	450.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	473.4	475.0	476.0	481.0
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	500.4	502.0	504.0	509.0
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	528.2	533.0	533.0	534.0
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	557.2	562.0	561.0	558.0
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	581.0	585.0	586.0	583.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	597.6	600.0	603.0	606.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	611.6	614.0	618.0	623.0
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	627.0	631.0	636.0	638.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	644.8	648.0	650.0	650.0
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	659.2	664.0	661.0	660.0
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	667.8	671.0	670.0	668.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	673.0	677.0	680.0	678.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	679.2	684.0	688.0	688.0
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	686.6	689.0	694.0	696.0
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	689.6	692.0	694.0	696.0
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	691.0	695.0	696.0	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	695.0	699.0	701.0	698.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0





REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4	804.4
2.5°	802.6	800.9	801.8	802.6	803.5	806.2	807.0	807.0	807.0	806.2	807.9
5°	793.0	791.2	791.2	793.8	796.5	800.0	805.3	809.7	811.4	812.3	812.3
7.5°	782.4	780.7	781.5	785.9	790.3	793.0	798.2	800.9	807.9	807.9	809.7
10°	775.4	777.1	778.0	782.4	785.9	785.9	785.1	783.3	781.5	785.9	784.2
12.5°	771.0	773.6	772.7	778.0	779.8	772.7	762.2	748.1	746.4	748.1	749.9
15°	769.2	769.2	771.9	771.9	763.1	749.0	735.8	736.7	738.5	743.7	743.7
17.5°	769.2	770.1	771.9	765.7	749.9	737.6	734.9	732.3	722.6	720.0	717.4
20°	775.4	773.6	775.4	764.0	749.9	740.2	720.0	700.7	682.2	674.3	670.8
22.5°	790.3	787.7	786.8	775.4	757.8	725.3	685.7	655.8	624.2	613.6	610.1
25°	816.7	815.8	809.7	801.8	752.5	689.2	639.1	591.6	557.4	538.9	539.8
27.5°	863.3	863.3	859.8	824.6	725.3	644.4	576.7	528.4	493.2	475.6	473.0
30°	933.6	935.4	937.1	830.8	682.2	578.5	508.1	475.6	454.5	441.3	440.4
32.5°	1020.7	1030.3	1018.9	823.7	623.3	498.5	454.5	443.1	432.5	423.7	422.9
35°	1135.8	1162.2	1090.1	795.6	557.4	444.0	422.0	414.1	406.2	400.0	400.9
37.5°	1290.6	1316.0	1135.8	748.1	473.0	413.2	403.5	391.2	378.9	365.7	364.0
40°	1473.4	1465.5	1151.6	658.5	420.2	398.2	385.1	369.2	348.1	328.8	325.3
42.5°	1656.3	1603.5	1138.5	547.7	385.9	385.1	366.6	346.4	325.3	308.6	308.6
45°	1861.1	1724.8	1098.0	444.0	358.7	371.0	348.1	327.0	307.7	295.4	294.5
47.5°	2054.5	1838.2	1031.2	370.1	331.4	352.5	334.1	314.7	296.3	285.7	283.1
50°	2281.3	1967.5	980.2	320.0	305.1	334.1	326.2	308.6	291.0	278.7	276.9
52.5°	2510.8	2093.2	941.5	285.7	281.3	320.0	322.6	312.1	293.6	269.9	268.1
55°	2750.8	2250.6	864.2	258.5	260.2	309.5	327.0	319.1	305.9	267.3	265.5
57.5°	2952.1	2395.6	728.8	240.0	243.5	301.5	328.8	313.8	298.9	269.0	266.4
60°	3109.5	2494.9	534.5	225.1	228.6	292.7	320.9	295.4	276.0	269.0	264.6
62.5°	3157.8	2498.5	355.2	207.5	217.1	277.8	306.8	285.7	262.9	266.4	264.6
65°	3036.5	2366.6	254.1	190.8	207.5	260.2	300.7	276.0	256.7	270.8	269.0
67.5°	2662.9	1993.8	204.0	177.6	194.3	241.8	289.2	267.3	251.4	280.4	275.2
70°	2074.7	1430.3	173.2	164.4	180.2	224.2	273.4	257.6	244.4	272.5	265.5
72.5°	1367.9	842.2	153.0	152.1	163.5	209.2	255.8	248.8	233.0	247.0	236.5
75°	713.8	390.3	132.7	138.0	145.1	196.0	240.0	233.0	215.4	220.7	217.1
77.5°	280.4	182.9	115.2	121.3	129.2	176.7	219.8	212.7	197.8	193.4	192.5
80°	153.8	123.1	95.8	103.7	109.0	159.1	198.7	190.8	174.9	172.3	169.7
82.5°	97.6	80.0	79.1	84.4	91.4	141.5	178.5	166.2	153.0	180.2	145.9
85°	45.7	47.5	56.3	63.3	71.2	120.4	155.6	142.4	129.2	125.7	111.6
87.5°	25.5	31.6	36.9	43.1	49.2	84.4	123.1	110.8	96.7	82.6	85.3
90°	13.2	13.2	19.5	18.7	17.5	19.3	68.7	62.5	55.4	27.9	19.9
92.5°	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	5.0	4.0	4.0
95°	7.0	7.0	7.0	8.0	7.0	7.0	7.0	7.0	6.0	5.0	5.0
97.5°	8.0	8.0	9.0	10.0	12.0	9.0	9.0	8.0	8.0	7.0	7.0
100°	19.0	19.0	23.0	26.0	29.0	21.0	12.0	10.0	9.0	8.0	8.0
102.5°	38.0	39.0	42.0	47.0	50.0	40.0	27.0	18.0	13.0	11.0	11.0
105°	61.0	61.0	65.0	70.0	72.0	63.0	48.0	36.0	27.0	22.0	21.0
107.5°	86.0	87.0	90.0	94.0	95.0	88.0	73.0	58.0	49.0	42.0	41.0
110°	117.0	116.0	119.0	121.0	120.0	114.0	102.0	87.0	74.0	68.0	66.0



REPORT NUMBER: P226453

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7050-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	147.0	147.0	149.0	150.0	148.0	143.0	134.0	121.0	106.0	99.0	99.0
115°	178.0	177.0	179.0	182.0	179.0	174.0	168.0	159.0	147.0	139.0	140.0
117.5°	209.0	208.0	210.0	215.0	211.0	205.0	202.0	197.0	189.0	184.0	184.0
120°	243.0	243.0	245.0	250.0	246.0	243.0	237.0	233.0	226.0	223.0	225.0
122.5°	277.0	276.0	278.0	283.0	279.0	277.0	271.0	267.0	261.0	260.0	263.0
125°	310.0	310.0	310.0	315.0	313.0	310.0	305.0	299.0	296.0	294.0	298.0
127.5°	347.0	345.0	346.0	346.0	345.0	340.0	339.0	333.0	329.0	329.0	330.0
130°	380.0	379.0	381.0	381.0	377.0	372.0	370.0	366.0	362.0	361.0	363.0
132.5°	415.0	414.0	414.0	416.0	411.0	405.0	404.0	401.0	393.0	394.0	396.0
135°	451.0	450.0	447.0	448.0	443.0	437.0	435.0	432.0	426.0	426.0	429.0
137.5°	482.0	481.0	476.0	475.0	473.0	468.0	464.0	460.0	459.0	457.0	460.0
140°	511.0	509.0	504.0	502.0	500.0	497.0	491.0	489.0	487.0	485.0	488.0
142.5°	536.0	534.0	533.0	533.0	527.0	525.0	521.0	518.0	517.0	515.0	518.0
145°	560.0	558.0	561.0	562.0	556.0	551.0	550.0	547.0	544.0	546.0	550.0
147.5°	585.0	583.0	586.0	585.0	580.0	575.0	574.0	574.0	571.0	572.0	575.0
150°	610.0	606.0	603.0	600.0	597.0	593.0	593.0	593.0	593.0	592.0	595.0
152.5°	628.0	623.0	618.0	614.0	611.0	610.0	610.0	609.0	608.0	608.0	611.0
155°	641.0	638.0	636.0	631.0	626.0	628.0	630.0	627.0	625.0	625.0	629.0
157.5°	655.0	650.0	650.0	648.0	644.0	645.0	646.0	644.0	643.0	643.0	646.0
160°	666.0	660.0	661.0	664.0	658.0	655.0	655.0	656.0	659.0	660.0	663.0
162.5°	674.0	668.0	670.0	671.0	667.0	663.0	661.0	665.0	669.0	669.0	673.0
165°	682.0	678.0	680.0	677.0	672.0	673.0	673.0	676.0	676.0	678.0	681.0
167.5°	694.0	688.0	688.0	684.0	678.0	685.0	688.0	686.0	684.0	687.0	690.0
170°	701.0	696.0	694.0	689.0	686.0	691.0	693.0	692.0	692.0	695.0	698.0
172.5°	701.0	696.0	694.0	692.0	689.0	690.0	690.0	693.0	695.0	697.0	699.0
175°	699.0	694.0	696.0	695.0	690.0	690.0	691.0	695.0	697.0	698.0	700.0
177.5°	702.0	698.0	701.0	699.0	694.0	695.0	697.0	699.0	700.0	705.0	707.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)