

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: P271738

Luminaire Tested: **IST-AF-1000-LED-E1-T3-7027-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271738  
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-T3-7027-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III, WITH UPLIGHT GLOW  
Light Source: (16) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6977.7 lumens  
Efficiency: N/A  
Efficacy: 97.9 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 - G1  
  
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

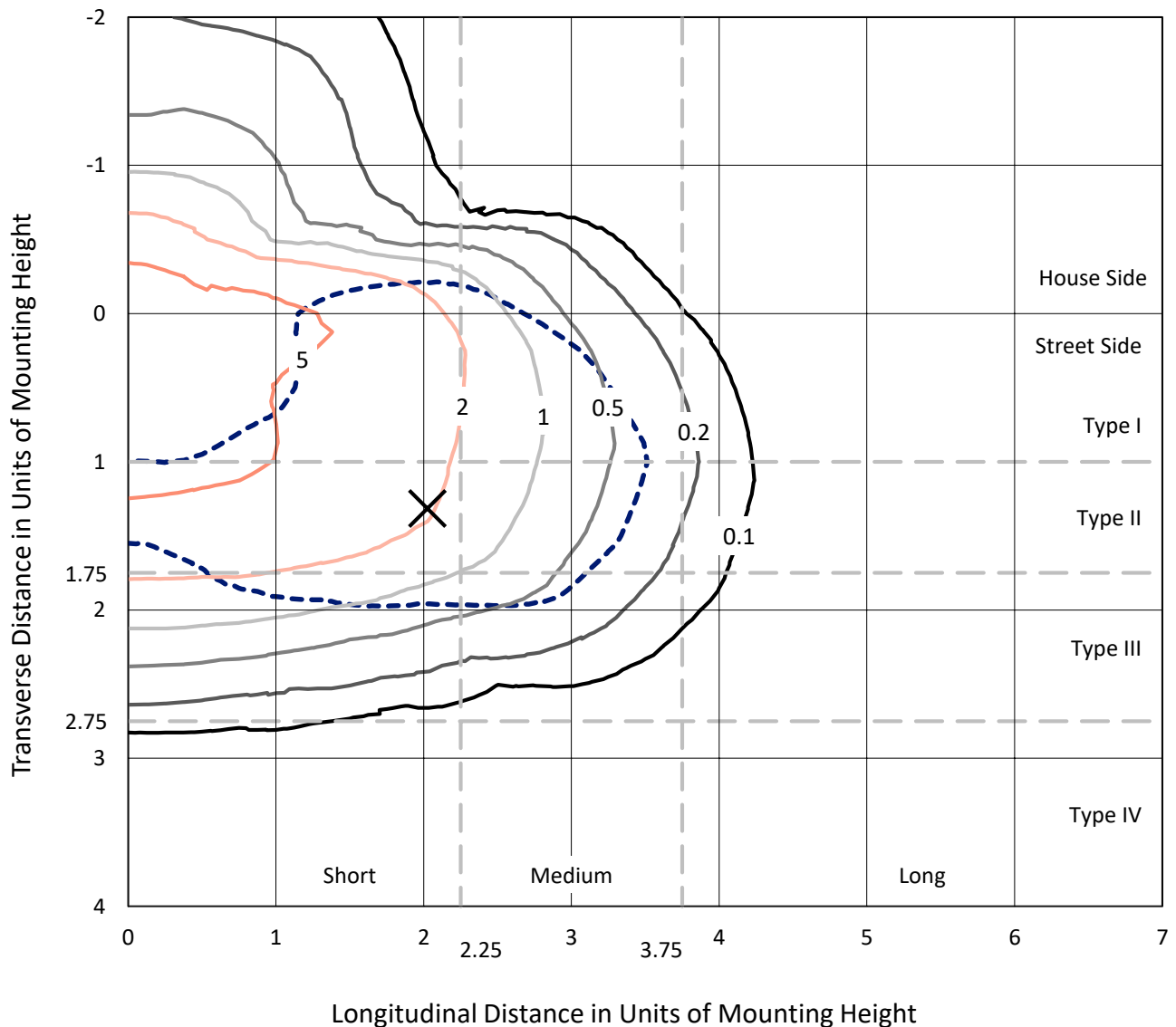


REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

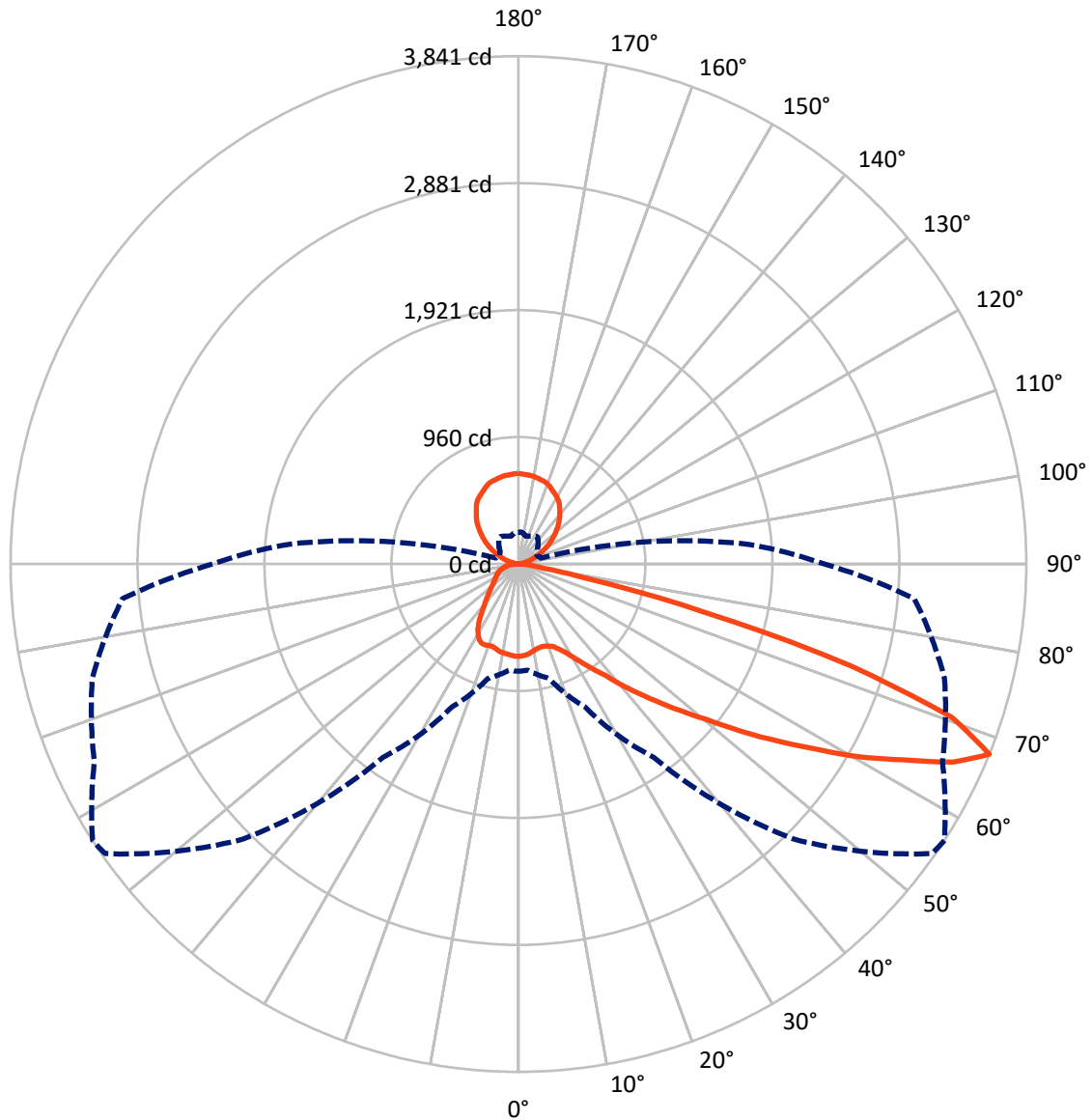


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

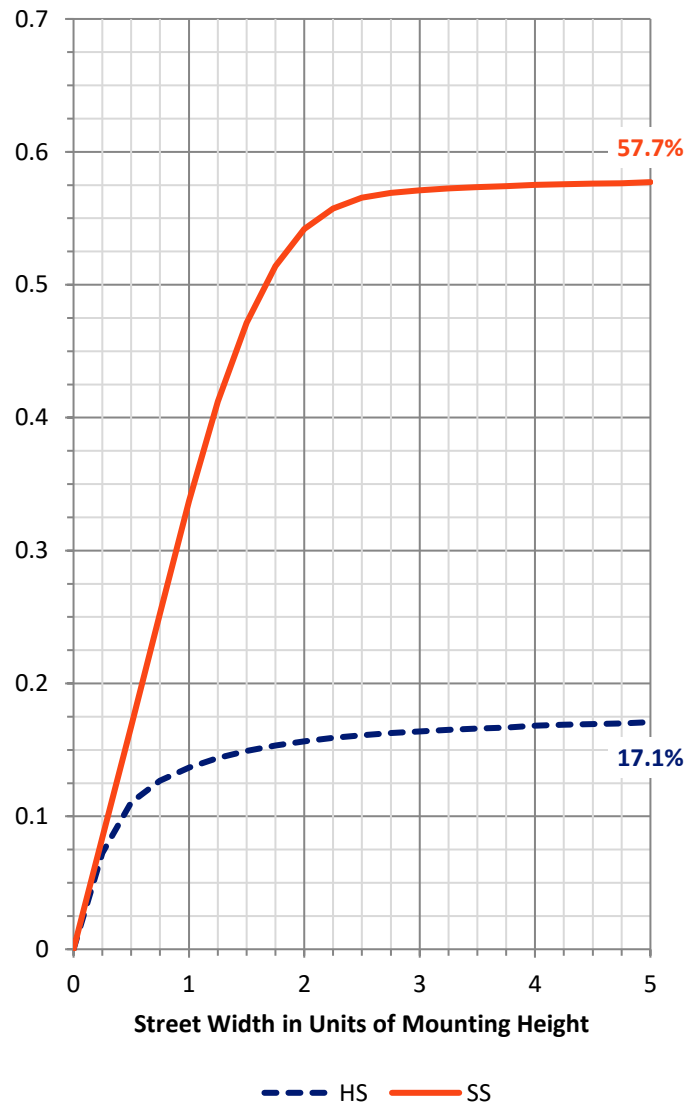
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1227.7	853.0	2080.8
	% Fixture	17.6	12.2	29.8
<b>Street Side</b>	Lumens	4045.0	851.9	4896.9
	% Fixture	58.0	12.2	70.2
<b>Total</b>	Lumens	5272.7	1704.9	6977.7
	% Fixture	75.6	24.4	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	0.9
10°-20°	187.9	2.7
20°-30°	323.3	4.6
30°-40°	525.6	7.5
40°-50°	847.9	12.2
50°-60°	1264.1	18.1
60°-70°	1423.7	20.4
70°-80°	548.9	7.9
80°-90°	86.1	1.2
90°-100°	11.0	0.2
100°-110°	56.3	0.8
110°-120°	163.0	2.3
120°-130°	268.1	3.8
130°-140°	330.6	4.7
140°-150°	338.2	4.8
150°-160°	284.9	4.1
160°-170°	187.6	2.7
170°-180°	65.0	0.9
0°-90°	5272.7	75.6
0°-180°	6977.7	100.0



REPORT NUMBER: P271738

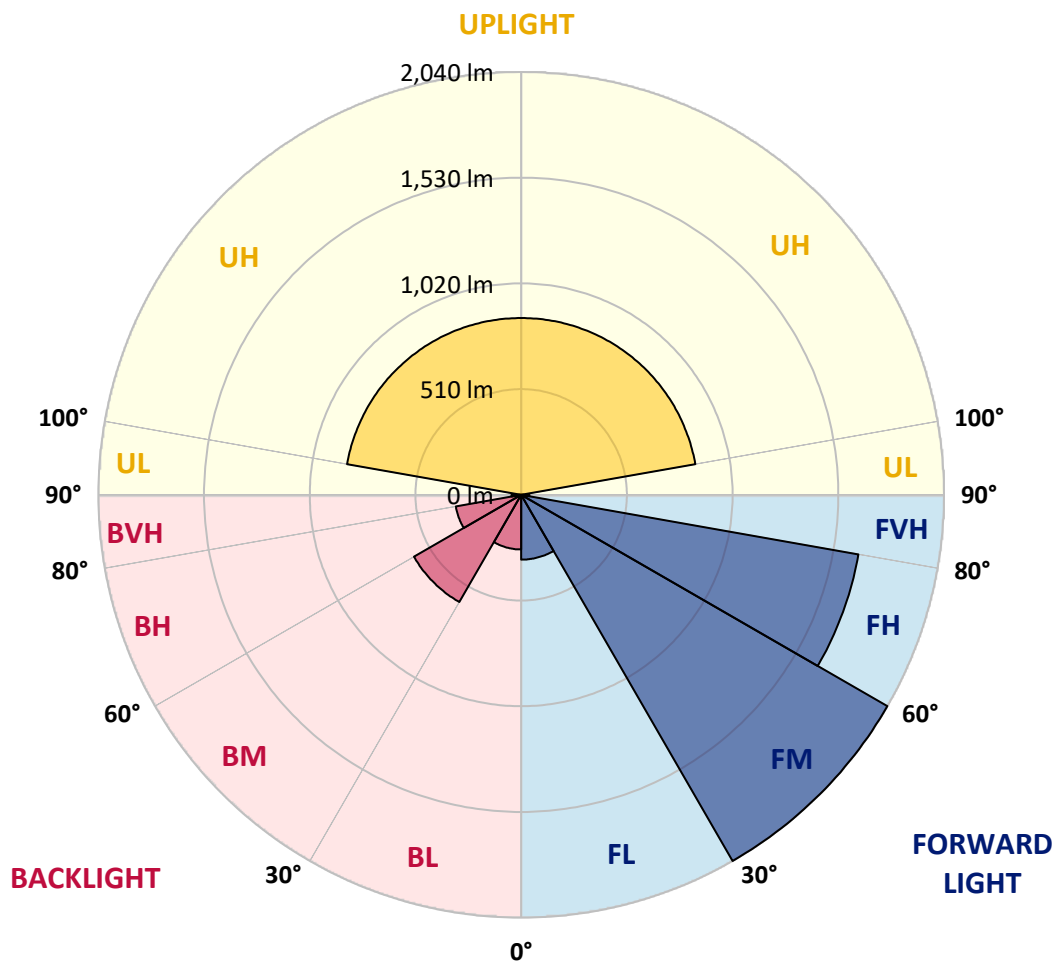
CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	312.8	4.5			
FM	(30°-60°)	2040.3	29.2			
FH	(60°-80°)	1652.3	23.7			G1/1800
FVH	(80°-90°)	39.5	0.6			G1/100
BL	(0°-30°)	263.7	3.8	B1/500		
BM	(30°-60°)	597.3	8.6	B1/1000		
BH	(60°-80°)	320.2	4.6	B1/500		G1/500
BVH	(80°-90°)	46.5	0.7			G1/100
UL	(90°-100°)	11.0	0.2		U2/50	
UH	(100°-180°)	853.0	12.2		U4/1000	

**BUG Rating: B1-U5-G1**

Type III Short





REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9
2.5°	693.5	695.1	696.5	695.7	695.7	695.7	695.7	694.3	696.5	696.5	695.1
5°	682.0	682.8	683.6	685.0	686.7	688.2	688.9	688.9	689.7	688.9	687.5
7.5°	665.3	666.0	669.1	669.1	670.7	673.7	675.2	676.7	679.0	679.0	678.2
10°	660.0	660.0	660.0	657.6	659.2	660.0	662.2	662.2	668.2	671.3	672.9
12.5°	666.0	665.3	665.3	659.2	653.8	651.5	653.8	654.5	661.4	666.0	669.1
15°	679.7	679.7	678.2	669.1	658.4	649.9	649.3	649.3	654.5	661.4	666.8
17.5°	711.9	714.9	704.2	689.7	672.1	658.4	653.1	652.3	656.1	661.4	666.8
20°	772.9	772.3	756.1	730.2	699.6	676.7	663.8	662.2	661.4	664.5	670.7
22.5°	845.6	842.5	823.4	790.5	748.5	706.4	681.4	678.2	672.1	674.4	682.8
25°	923.4	924.2	900.6	857.7	805.0	754.7	716.5	713.3	700.4	698.9	708.0
27.5°	1001.3	1011.2	979.2	938.7	876.0	815.8	760.0	755.4	744.0	740.1	749.3
30°	1115.2	1111.3	1071.6	1018.9	956.2	880.7	827.2	818.7	795.9	801.2	811.1
32.5°	1211.4	1219.8	1183.9	1121.3	1038.7	959.3	897.5	892.8	870.6	876.8	890.6
35°	1329.0	1348.9	1301.6	1224.4	1144.9	1063.2	989.1	976.9	959.3	971.6	982.3
37.5°	1463.4	1473.3	1436.7	1337.4	1256.4	1170.9	1086.9	1067.7	1048.7	1073.8	1093.0
40°	1591.8	1607.8	1560.4	1476.5	1382.4	1300.7	1209.1	1205.3	1161.0	1188.5	1238.1
42.5°	1781.9	1801.8	1726.1	1628.4	1543.6	1445.1	1358.0	1337.4	1289.2	1328.2	1411.5
45°	1914.7	1914.1	1862.8	1781.9	1730.0	1634.5	1516.9	1492.4	1440.5	1492.4	1603.9
47.5°	1963.0	1974.4	1956.8	1946.9	1928.6	1859.0	1685.7	1662.8	1613.9	1691.0	1794.2
50°	2033.9	2030.9	2030.9	2092.1	2144.7	2130.2	1883.5	1850.7	1799.5	1891.9	2040.1
52.5°	2052.3	2024.8	2067.6	2184.4	2351.8	2363.9	2113.4	2095.0	2033.9	2124.1	2306.7
55°	2001.2	1994.2	2062.1	2231.7	2495.3	2582.4	2380.0	2354.7	2286.0	2363.1	2594.6
57.5°	1886.6	1904.0	2013.3	2221.9	2594.6	2774.9	2672.5	2636.5	2538.1	2584.6	2880.2
60°	1766.7	1775.1	1919.4	2186.7	2621.3	2908.5	2979.6	2958.8	2790.1	2817.6	3091.8
62.5°	1633.7	1613.9	1763.6	2157.7	2591.5	3092.5	3277.4	3261.4	3062.1	3053.6	3242.3
65°	1262.6	1290.1	1417.5	1783.5	2387.5	3236.1	3632.6	3611.9	3365.2	3248.5	3226.3
67.5°	811.1	805.8	895.9	1192.3	1784.2	2941.3	3818.2	3841.2	3538.6	3336.2	3004.7
70°	291.1	299.5	333.0	541.5	978.4	1959.9	3365.9	3479.9	3411.0	3172.1	2445.6
72.5°	177.1	177.1	201.6	243.6	396.4	929.6	2399.0	2624.4	2783.9	2613.7	1806.3
75°	139.0	138.2	146.6	168.1	213.9	304.7	1275.5	1449.7	1785.7	1805.6	1028.1
77.5°	110.0	109.2	117.6	127.6	159.6	161.2	407.1	530.1	819.5	771.5	367.4
80°	88.7	87.9	94.0	96.9	116.9	111.5	163.4	189.5	287.2	252.1	158.9
82.5°	80.2	80.2	86.2	74.1	80.9	78.7	101.6	108.4	144.4	149.7	95.5
85°	51.9	53.4	80.9	71.9	52.7	48.1	64.9	68.7	90.1	98.5	46.6
87.5°	24.4	26.7	61.8	59.6	35.1	26.1	36.7	39.0	48.9	60.4	27.5
90°	9.5	9.5	14.6	16.3	12.5	11.5	12.9	12.6	14.1	16.5	14.6
92.5°	4.0	4.0	4.9	5.9	5.9	5.9	6.8	6.8	6.8	5.9	5.9
95°	4.9	4.9	5.9	6.8	6.8	6.8	6.8	7.1	7.8	6.8	6.8
97.5°	6.8	6.8	7.8	7.8	8.8	8.8	11.8	11.4	9.8	8.8	7.8
100°	7.8	7.8	8.8	9.8	11.8	20.6	28.5	27.8	25.5	22.5	18.7
102.5°	10.8	10.8	12.8	17.7	26.5	39.3	49.0	48.5	46.2	41.2	38.3
105°	20.6	21.6	26.5	35.3	47.1	61.8	70.7	70.2	68.7	63.8	59.8
107.5°	40.2	41.2	48.1	57.0	71.7	86.3	93.2	93.1	92.3	88.3	85.4
110°	64.8	66.7	72.7	85.4	100.1	111.9	117.8	117.9	118.8	116.8	113.8



REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
112.5°	97.2	97.2	104.0	118.8	131.5	140.3	145.3	145.6	147.2	146.2	144.3
115°	137.4	136.5	144.3	156.0	164.9	170.8	175.7	176.2	178.7	175.7	173.7
117.5°	180.6	180.6	185.5	193.3	198.3	201.2	207.1	207.9	211.0	206.1	204.2
120°	220.8	218.8	221.8	228.7	232.6	238.5	241.5	242.3	245.3	240.5	238.5
122.5°	258.2	255.2	256.2	262.0	266.0	271.8	273.8	274.6	277.8	272.8	270.9
125°	292.5	288.5	290.5	293.5	299.3	304.3	307.2	307.6	309.2	304.3	304.3
127.5°	323.9	322.9	322.9	326.8	332.7	333.7	338.6	338.8	339.6	339.6	338.6
130°	356.3	354.3	355.3	359.2	363.2	365.1	370.0	370.8	374.0	374.0	372.0
132.5°	388.7	386.7	385.7	393.5	396.5	397.5	403.4	404.3	408.3	406.3	406.3
135°	421.0	418.1	418.1	424.0	427.0	428.9	434.8	435.8	439.7	438.7	441.7
137.5°	451.5	448.5	450.5	451.5	455.4	459.3	464.2	464.6	466.2	467.2	472.1
140°	479.0	476.0	478.0	480.0	481.9	487.8	490.7	491.1	492.7	494.7	499.5
142.5°	508.4	505.5	507.5	508.4	511.3	515.3	517.2	518.4	523.2	523.2	524.1
145°	539.8	535.9	534.0	536.8	539.8	540.8	545.7	546.9	551.6	550.6	547.7
147.5°	564.3	561.4	560.5	563.3	563.3	564.3	569.3	570.2	574.2	575.2	572.2
150°	584.0	581.0	582.0	582.0	582.0	582.0	586.0	586.5	588.9	591.8	594.8
152.5°	599.7	596.7	596.7	597.7	598.7	598.7	599.7	600.2	602.7	606.5	611.5
155°	617.3	613.5	613.5	615.4	618.3	616.3	614.4	615.4	619.3	624.2	626.2
157.5°	634.0	631.1	631.1	632.0	634.0	633.0	632.0	632.9	636.0	638.0	638.0
160°	650.7	647.8	646.8	643.8	642.8	642.8	645.8	647.0	651.7	648.8	647.8
162.5°	660.5	656.6	656.6	652.7	648.8	650.7	654.7	655.4	658.5	657.6	655.7
165°	668.4	665.5	663.5	663.5	660.5	660.5	659.5	660.5	664.5	667.4	665.5
167.5°	677.2	674.3	671.3	673.3	675.3	672.3	665.5	666.6	671.3	675.3	675.3
170°	685.0	682.2	679.2	679.2	680.2	678.2	673.3	673.9	676.2	681.2	683.1
172.5°	686.0	684.1	682.2	680.2	677.2	677.2	676.2	676.9	679.2	681.2	683.1
175°	687.0	685.0	684.1	682.2	678.2	677.2	677.2	678.2	682.2	683.1	681.2
177.5°	693.9	692.0	687.0	686.0	684.1	682.2	681.2	682.2	686.0	688.0	685.0
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0





REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9	698.9
2.5°	697.4	695.7	696.5	697.4	698.2	700.4	701.1	701.1	701.1	700.4	701.9
5°	688.9	687.5	687.5	689.7	692.0	695.1	699.6	703.5	705.0	705.8	705.8
7.5°	679.7	678.2	679.0	682.8	686.7	688.9	693.5	695.7	701.9	701.9	703.5
10°	673.7	675.2	676.0	679.7	682.8	682.8	682.0	680.6	679.0	682.8	681.4
12.5°	669.9	672.1	671.3	676.0	677.5	671.3	662.2	649.9	648.5	649.9	651.5
15°	668.2	668.2	670.7	670.7	662.9	650.7	639.3	640.0	641.6	646.2	646.2
17.5°	668.2	669.1	670.7	665.3	651.5	640.9	638.5	636.2	627.8	625.5	623.2
20°	673.7	672.1	673.7	663.8	651.5	643.1	625.5	608.7	592.7	585.9	582.8
22.5°	686.7	684.4	683.6	673.7	658.4	630.1	595.8	569.7	542.3	533.1	530.1
25°	709.5	708.9	703.5	696.5	653.8	598.8	555.3	514.0	484.3	468.2	468.9
27.5°	750.1	750.1	747.0	716.5	630.1	559.8	501.1	459.0	428.5	413.2	411.0
30°	811.1	812.7	814.2	721.8	592.7	502.6	441.4	413.2	394.9	383.5	382.7
32.5°	886.8	895.1	885.2	715.7	541.5	433.1	394.9	384.9	375.9	368.1	367.4
35°	986.8	1009.8	947.2	691.2	484.3	385.7	366.6	359.7	352.9	347.6	348.4
37.5°	1121.3	1143.5	986.8	649.9	411.0	359.1	350.6	339.9	329.2	317.7	316.2
40°	1280.2	1273.3	1000.5	572.1	365.1	345.9	334.6	320.8	302.5	285.6	282.6
42.5°	1438.9	1393.1	989.1	475.8	335.2	334.6	318.4	300.9	282.6	268.1	268.1
45°	1616.9	1498.6	954.0	385.7	311.6	322.3	302.5	284.1	267.3	256.6	255.8
47.5°	1784.9	1597.1	895.9	321.5	288.0	306.3	290.2	273.4	257.5	248.2	246.0
50°	1982.0	1709.4	851.6	278.0	265.0	290.2	283.3	268.1	252.9	242.1	240.6
52.5°	2181.4	1818.6	818.1	248.2	244.4	278.0	280.3	271.2	255.1	234.5	233.0
55°	2389.9	1955.3	750.8	224.6	226.0	268.9	284.1	277.3	265.8	232.2	230.7
57.5°	2564.8	2081.4	633.1	208.5	211.6	261.9	285.6	272.6	259.7	233.6	231.4
60°	2701.6	2167.6	464.3	195.5	198.5	254.3	278.7	256.6	239.8	233.6	229.9
62.5°	2743.5	2170.7	308.6	180.3	188.6	241.4	266.5	248.2	228.3	231.4	229.9
65°	2638.1	2056.1	220.7	165.7	180.3	226.0	261.1	239.8	223.0	235.3	233.6
67.5°	2313.6	1732.3	177.1	154.3	168.8	210.0	251.3	232.2	218.5	243.6	239.1
70°	1802.4	1242.6	150.5	142.8	156.6	194.8	237.5	223.8	212.3	236.7	230.7
72.5°	1188.5	731.7	132.9	132.1	142.0	181.7	222.3	216.1	202.4	214.7	205.4
75°	620.2	339.1	115.3	119.9	126.0	170.3	208.5	202.4	187.2	191.7	188.6
77.5°	243.6	158.9	100.0	105.4	112.3	153.5	190.9	184.8	171.8	168.1	167.3
80°	133.7	106.9	83.3	90.1	94.7	138.2	172.7	165.7	152.0	149.7	147.4
82.5°	84.8	69.5	68.7	73.3	79.4	123.0	155.0	144.4	132.9	156.6	126.8
85°	39.7	41.2	48.9	55.0	61.8	104.7	135.1	123.8	112.3	109.2	96.9
87.5°	22.2	27.5	32.1	37.4	42.8	73.3	106.9	96.3	84.0	71.9	74.1
90°	12.1	12.1	18.0	17.2	16.0	17.6	60.5	55.2	48.9	24.7	17.9
92.5°	5.9	5.9	5.9	6.8	6.8	5.9	5.9	5.9	4.9	4.0	4.0
95°	6.8	6.8	6.8	7.8	6.8	6.8	6.8	6.8	5.9	4.9	4.9
97.5°	7.8	7.8	8.8	9.8	11.8	8.8	8.8	7.8	7.8	6.8	6.8
100°	18.7	18.7	22.5	25.5	28.5	20.6	11.8	9.8	8.8	7.8	7.8
102.5°	37.3	38.3	41.2	46.2	49.0	39.3	26.5	17.7	12.8	10.8	10.8
105°	59.8	59.8	63.8	68.7	70.7	61.8	47.1	35.3	26.5	21.6	20.6
107.5°	84.4	85.4	88.3	92.3	93.2	86.3	71.7	57.0	48.1	41.2	40.2
110°	114.8	113.8	116.8	118.8	117.8	111.9	100.1	85.4	72.7	66.7	64.8



REPORT NUMBER: P271738

CATALOG NUMBER: IST-AF-1000-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	144.3	144.3	146.2	147.2	145.3	140.3	131.5	118.8	104.0	97.2	97.2
115°	174.7	173.7	175.7	178.7	175.7	170.8	164.9	156.0	144.3	136.5	137.4
117.5°	205.2	204.2	206.1	211.0	207.1	201.2	198.3	193.3	185.5	180.6	180.6
120°	238.5	238.5	240.5	245.3	241.5	238.5	232.6	228.7	221.8	218.8	220.8
122.5°	271.8	270.9	272.8	277.8	273.8	271.8	266.0	262.0	256.2	255.2	258.2
125°	304.3	304.3	304.3	309.2	307.2	304.3	299.3	293.5	290.5	288.5	292.5
127.5°	340.5	338.6	339.6	339.6	338.6	333.7	332.7	326.8	322.9	322.9	323.9
130°	373.0	372.0	374.0	374.0	370.0	365.1	363.2	359.2	355.3	354.3	356.3
132.5°	407.3	406.3	406.3	408.3	403.4	397.5	396.5	393.5	385.7	386.7	388.7
135°	442.7	441.7	438.7	439.7	434.8	428.9	427.0	424.0	418.1	418.1	421.0
137.5°	473.0	472.1	467.2	466.2	464.2	459.3	455.4	451.5	450.5	448.5	451.5
140°	501.5	499.5	494.7	492.7	490.7	487.8	481.9	480.0	478.0	476.0	479.0
142.5°	526.0	524.1	523.2	523.2	517.2	515.3	511.3	508.4	507.5	505.5	508.4
145°	549.7	547.7	550.6	551.6	545.7	540.8	539.8	536.8	534.0	535.9	539.8
147.5°	574.2	572.2	575.2	574.2	569.3	564.3	563.3	563.3	560.5	561.4	564.3
150°	598.7	594.8	591.8	588.9	586.0	582.0	582.0	582.0	582.0	581.0	584.0
152.5°	616.3	611.5	606.5	602.7	599.7	598.7	598.7	597.7	596.7	596.7	599.7
155°	629.2	626.2	624.2	619.3	614.4	616.3	618.3	615.4	613.5	613.5	617.3
157.5°	642.8	638.0	638.0	636.0	632.0	633.0	634.0	632.0	631.1	631.1	634.0
160°	653.7	647.8	648.8	651.7	645.8	642.8	642.8	643.8	646.8	647.8	650.7
162.5°	661.5	655.7	657.6	658.5	654.7	650.7	648.8	652.7	656.6	656.6	660.5
165°	669.3	665.5	667.4	664.5	659.5	660.5	660.5	663.5	663.5	665.5	668.4
167.5°	681.2	675.3	675.3	671.3	665.5	672.3	675.3	673.3	671.3	674.3	677.2
170°	688.0	683.1	681.2	676.2	673.3	678.2	680.2	679.2	679.2	682.2	685.0
172.5°	688.0	683.1	681.2	679.2	676.2	677.2	677.2	680.2	682.2	684.1	686.0
175°	686.0	681.2	683.1	682.2	677.2	677.2	678.2	682.2	684.1	685.0	687.0
177.5°	689.0	685.0	688.0	686.0	681.2	682.2	684.1	686.0	687.0	692.0	693.9
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0

(END OF REPORT)