

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: P271718

Luminaire Tested: **IST-AF-600-LED-E1-T3-7027-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271718  
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-600-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**

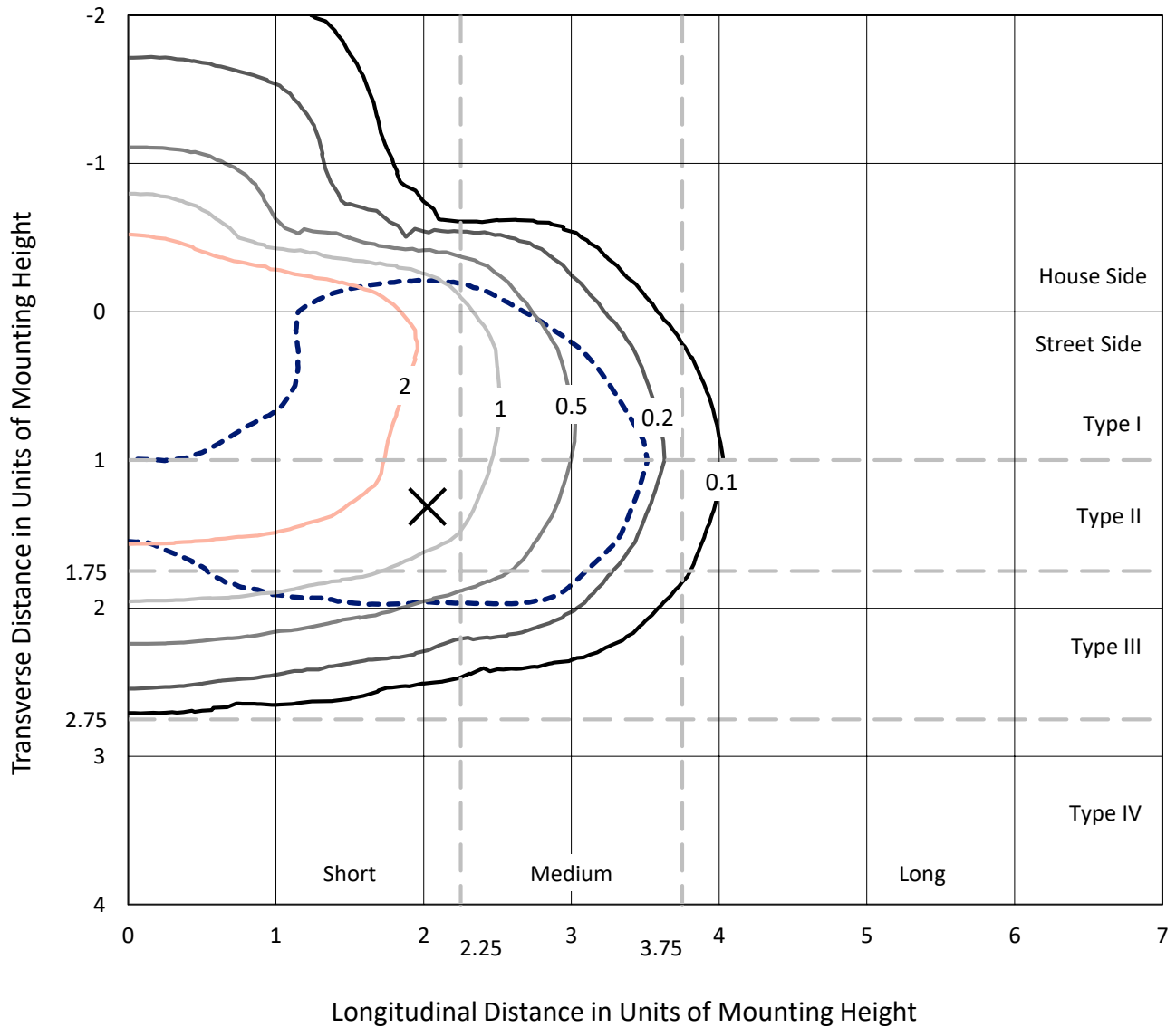
Lumens per Lamp: N/A  
Luminaire Lumens: 5268.2 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G1  
  
Input Watts (W): 50.4  
Input Voltage (V): 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: P271718  
 CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

### Iso-Footcandle Lines of Horizontal Illumination

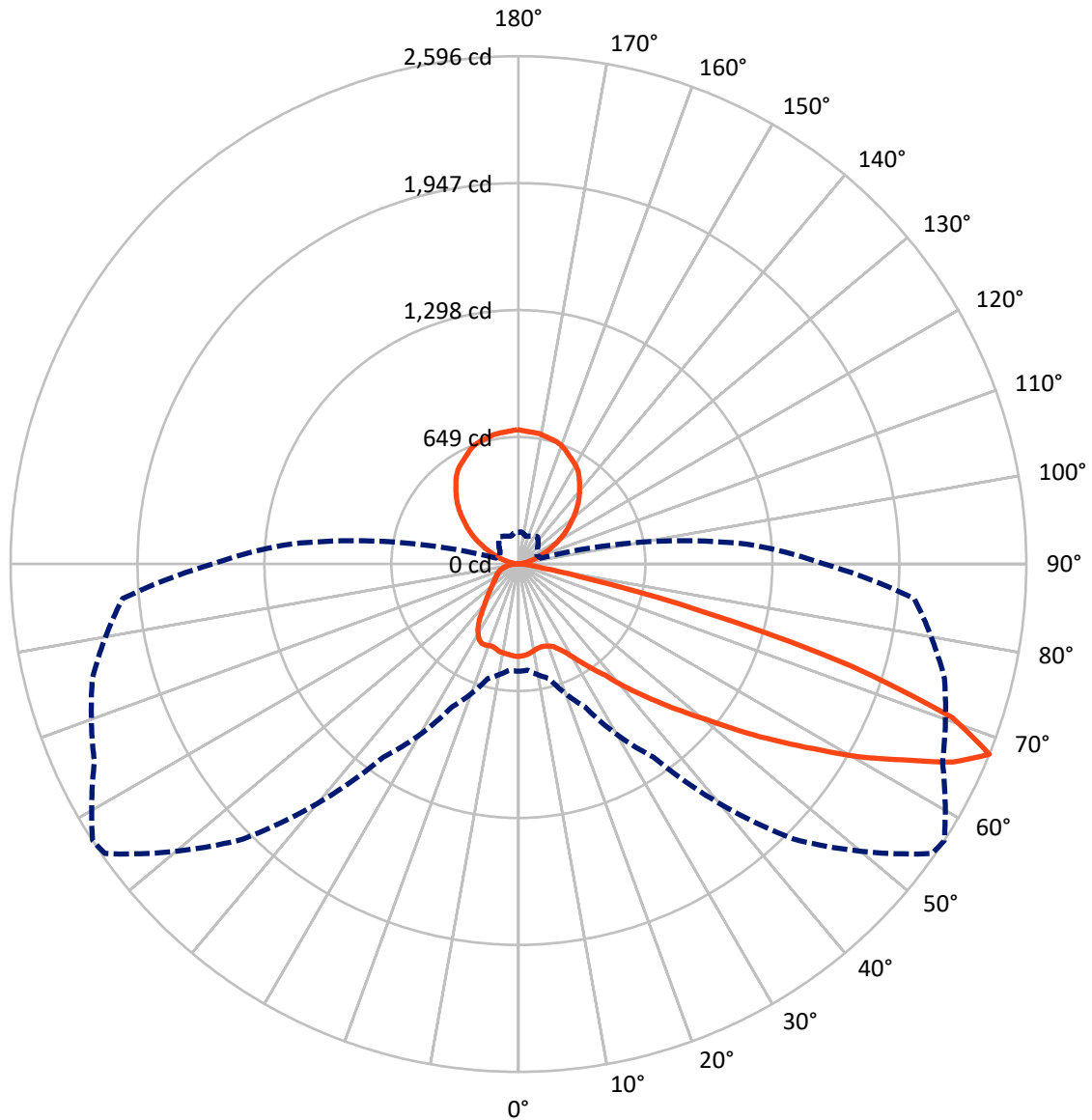
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.9 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P271718  
CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271718

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

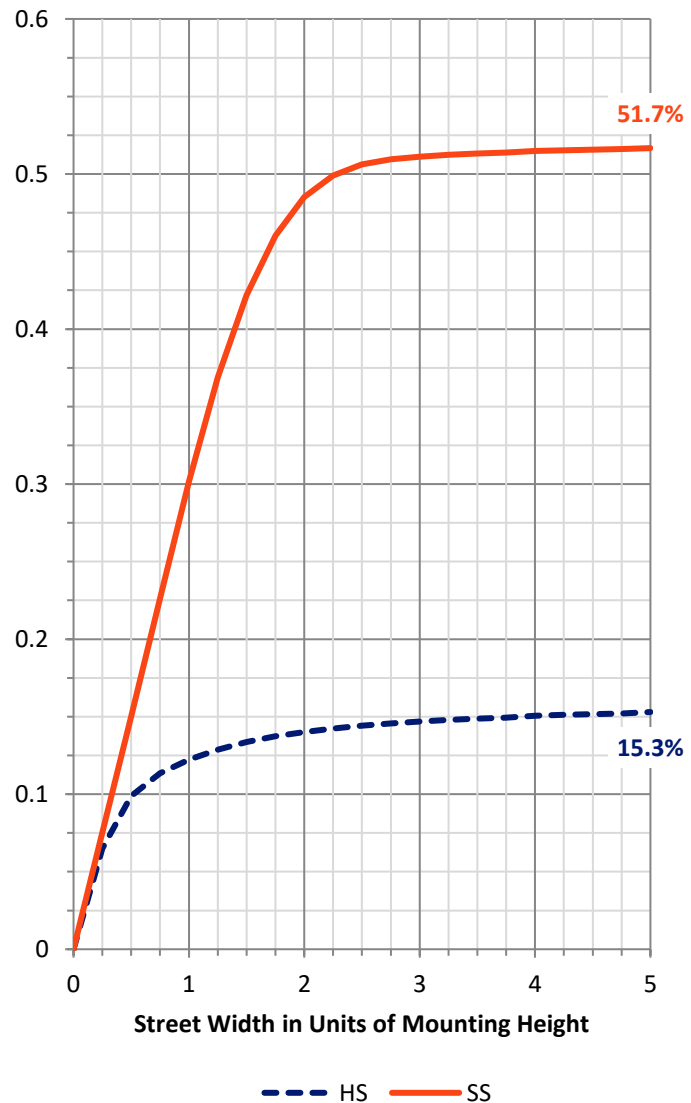
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	830.0	852.5	1682.5
	% Fixture	15.8	16.2	31.9
<b>Street Side</b>	Lumens	2734.0	851.8	3585.7
	% Fixture	51.9	16.2	68.1
<b>Total</b>	Lumens	3563.9	1704.3	5268.2
	% Fixture	67.6	32.4	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.2	0.8
10°-20°	127.0	2.4
20°-30°	218.5	4.1
30°-40°	355.3	6.7
40°-50°	573.0	10.9
50°-60°	854.3	16.2
60°-70°	962.2	18.3
70°-80°	371.0	7.0
80°-90°	58.5	1.1
90°-100°	10.4	0.2
100°-110°	56.3	1.1
110°-120°	163.0	3.1
120°-130°	268.1	5.1
130°-140°	330.6	6.3
140°-150°	338.2	6.4
150°-160°	284.9	5.4
160°-170°	187.6	3.6
170°-180°	65.0	1.2
0°-90°	3563.9	67.6
0°-180°	5268.2	100.0



REPORT NUMBER: P271718

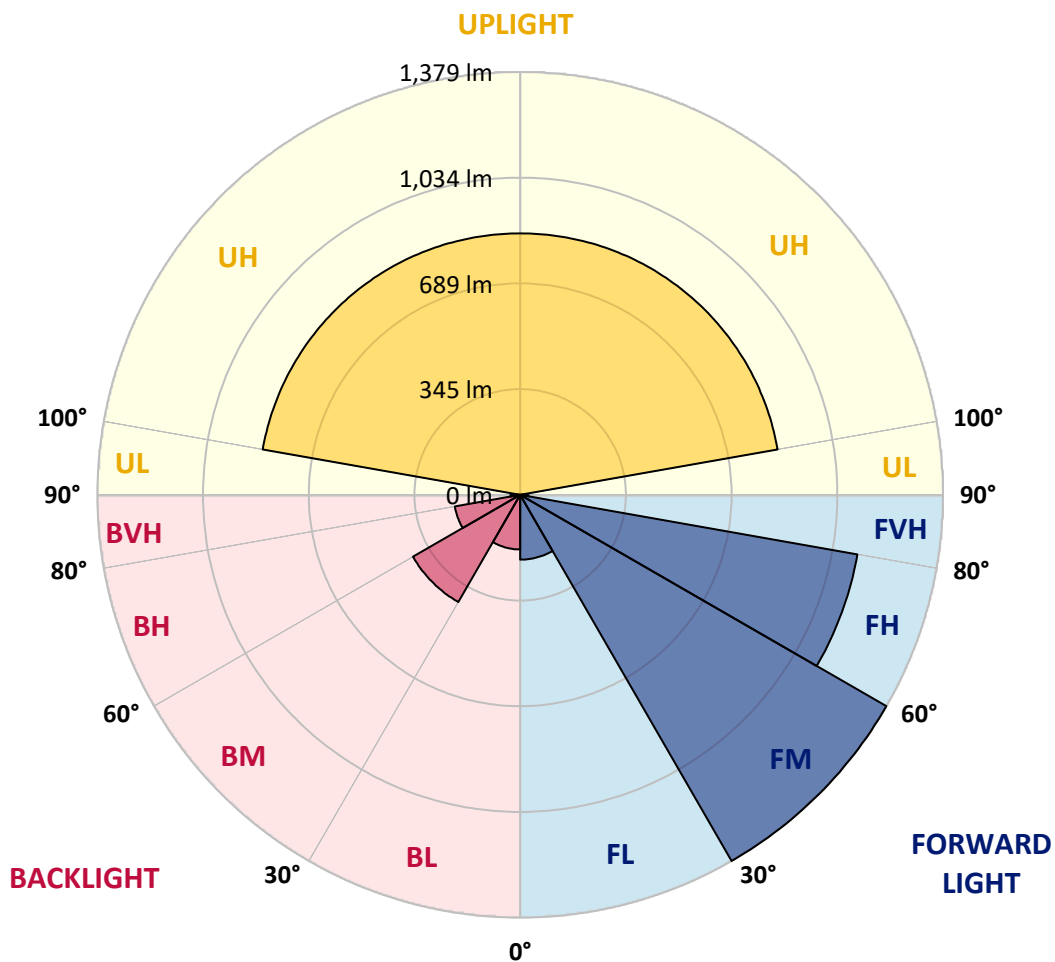
CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	211.4	4.0			
FM (30°-60°)	1378.9	26.2			
FH (60°-80°)	1116.7	21.2			G1/1800
FVH (80°-90°)	26.9	0.5			G1/100
BL (0°-30°)	178.2	3.4	B1/500		
BM (30°-60°)	403.7	7.7	B1/1000		
BH (60°-80°)	216.4	4.1	B1/500		G1/500
BVH (80°-90°)	31.6	0.6			G1/100
UL (90°-100°)	10.4	0.2		U2/50	
UH (100°-180°)	852.5	16.2		U4/1000	

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

Type III Short





REPORT NUMBER: P271718

CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3
2.5°	468.7	469.7	470.8	470.3	470.3	470.3	470.3	469.3	470.8	470.8	469.7
5°	461.0	461.5	462.0	463.1	464.1	465.1	465.6	465.6	466.1	465.6	464.6
7.5°	449.6	450.1	452.2	452.2	453.3	455.4	456.2	457.3	458.9	458.9	458.3
10°	446.0	446.0	446.0	444.4	445.5	446.0	447.5	447.5	451.7	453.7	454.8
12.5°	450.1	449.6	449.6	445.5	441.9	440.3	441.9	442.3	447.1	450.1	452.2
15°	459.4	459.4	458.3	452.2	445.0	439.3	438.8	438.8	442.3	447.1	450.7
17.5°	481.1	483.2	475.9	466.1	454.3	445.0	441.3	440.9	443.4	447.1	450.7
20°	522.5	521.8	511.0	493.5	472.9	457.3	448.5	447.5	447.1	449.2	453.3
22.5°	571.4	569.3	556.5	534.3	505.8	477.4	460.4	458.3	454.3	455.8	461.5
25°	624.1	624.6	608.6	579.7	544.0	510.0	484.2	482.1	473.4	472.3	478.5
27.5°	676.7	683.5	661.8	634.5	592.2	551.3	513.7	510.6	502.8	500.2	506.5
30°	753.7	751.2	724.2	688.6	646.3	595.1	559.0	553.4	537.8	541.5	548.2
32.5°	818.7	824.4	800.1	757.8	702.0	648.4	606.5	603.4	588.5	592.6	602.0
35°	898.2	911.6	879.6	827.5	773.8	718.6	668.5	660.3	648.4	656.6	663.8
37.5°	989.0	995.8	971.0	903.9	849.2	791.4	734.5	721.7	708.8	725.8	738.7
40°	1075.8	1086.6	1054.6	997.8	934.3	879.1	817.2	814.5	784.6	803.3	836.8
42.5°	1204.3	1217.7	1166.6	1100.5	1043.2	976.6	917.8	903.9	871.4	897.7	954.0
45°	1294.2	1293.6	1259.1	1204.3	1169.2	1104.6	1025.1	1008.7	973.5	1008.7	1084.1
47.5°	1326.7	1334.4	1322.6	1315.7	1303.4	1256.5	1139.3	1123.8	1090.7	1142.9	1212.6
50°	1374.7	1372.6	1372.6	1413.9	1449.5	1439.7	1273.0	1250.8	1216.1	1278.6	1378.8
52.5°	1387.1	1368.5	1397.3	1476.4	1589.4	1597.6	1428.3	1416.0	1374.7	1435.6	1559.0
55°	1352.5	1347.9	1393.8	1508.3	1686.5	1745.2	1608.5	1591.4	1545.1	1597.2	1753.5
57.5°	1275.1	1286.9	1360.8	1501.7	1753.5	1875.4	1806.2	1782.0	1715.3	1746.8	1946.6
60°	1193.9	1199.7	1297.2	1477.9	1771.6	1965.7	2013.7	1999.8	1885.7	1904.2	2089.5
62.5°	1104.2	1090.7	1191.9	1458.3	1751.4	2090.2	2215.0	2204.2	2069.4	2063.8	2191.3
65°	853.3	871.9	958.1	1205.3	1613.6	2187.1	2455.1	2441.1	2274.4	2195.5	2180.5
67.5°	548.2	544.6	605.5	805.8	1205.9	1987.9	2580.5	2596.0	2391.6	2254.7	2030.8
70°	196.7	202.4	225.0	366.0	661.2	1324.6	2275.0	2351.9	2305.4	2143.9	1652.9
72.5°	119.7	119.7	136.4	164.7	268.0	628.3	1621.4	1773.7	1881.6	1766.4	1220.9
75°	94.0	93.4	99.2	113.5	144.5	206.0	862.0	979.8	1207.0	1220.3	694.7
77.5°	74.3	73.8	79.5	86.1	107.9	109.0	275.2	358.2	553.9	521.4	248.3
80°	59.8	59.4	63.5	65.6	79.1	75.4	110.5	128.0	194.1	170.4	107.3
82.5°	54.2	54.2	58.3	50.0	54.8	53.2	68.7	73.3	97.6	101.1	64.5
85°	35.1	36.1	54.8	48.5	35.7	32.5	43.8	46.4	60.9	66.6	31.5
87.5°	16.5	18.1	41.8	40.2	23.7	17.6	24.7	26.3	33.1	40.7	18.5
90°	8.1	8.1	12.0	13.6	11.0	10.0	11.0	10.9	12.5	14.0	12.0
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: P271718

CATALOG NUMBER: IST-AF-600-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: P271718  
 CATALOG NUMBER: IST-AF-600-LED-E1-T3-7027-ULG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3	472.3
2.5°	471.3	470.3	470.8	471.3	471.8	473.4	473.9	473.9	473.9	473.4	474.3
5°	465.6	464.6	464.6	466.1	467.7	469.7	472.9	475.5	476.6	477.0	477.0
7.5°	459.4	458.3	458.9	461.5	464.1	465.6	468.7	470.3	474.3	474.3	475.5
10°	455.4	456.2	456.9	459.4	461.5	461.5	461.0	459.9	458.9	461.5	460.4
12.5°	452.7	454.3	453.7	456.9	457.9	453.7	447.5	439.3	438.2	439.3	440.3
15°	451.7	451.7	453.3	453.3	448.1	439.8	432.1	432.5	433.6	436.8	436.8
17.5°	451.7	452.2	453.3	449.6	440.3	433.2	431.5	430.0	424.3	422.8	421.2
20°	455.4	454.3	455.4	448.5	440.3	434.6	422.8	411.4	400.6	396.0	393.9
22.5°	464.1	462.4	462.0	455.4	445.0	425.9	402.6	385.1	366.5	360.3	358.2
25°	479.5	479.1	475.5	470.8	441.9	404.7	375.3	347.5	327.3	316.5	316.9
27.5°	506.9	506.9	504.8	484.2	425.9	378.4	338.6	310.3	289.6	279.2	277.8
30°	548.2	549.2	550.3	487.8	400.6	339.6	298.3	279.2	266.9	259.1	258.6
32.5°	599.3	605.0	598.3	483.6	366.0	292.7	266.9	260.1	254.0	248.8	248.3
35°	666.9	682.4	640.1	467.2	327.3	260.7	247.8	243.1	238.5	234.9	235.4
37.5°	757.8	772.7	666.9	439.3	277.8	242.6	237.0	229.7	222.5	214.8	213.7
40°	865.2	860.6	676.2	386.6	246.8	233.9	226.1	216.9	204.5	193.0	191.0
42.5°	972.5	941.5	668.5	321.6	226.6	226.1	215.2	203.4	191.0	181.2	181.2
45°	1092.8	1012.7	644.7	260.7	210.7	217.9	204.5	192.1	180.6	173.5	172.9
47.5°	1206.3	1079.4	605.5	217.3	194.7	207.0	196.2	184.8	173.9	167.7	166.3
50°	1339.6	1155.3	575.5	187.8	179.1	196.2	191.5	181.2	170.9	163.6	162.6
52.5°	1474.3	1229.2	552.9	167.7	165.2	187.8	189.5	183.3	172.5	158.6	157.5
55°	1615.2	1321.5	507.5	151.7	152.8	181.6	192.1	187.4	179.6	156.9	155.9
57.5°	1733.4	1406.7	428.0	140.9	143.0	177.1	193.0	184.3	175.5	157.9	156.5
60°	1825.9	1465.0	313.9	132.1	134.2	171.8	188.5	173.5	162.1	157.9	155.4
62.5°	1854.2	1467.0	208.6	121.8	127.5	163.1	180.2	167.7	154.4	156.5	155.4
65°	1783.0	1389.7	149.2	112.0	121.8	152.8	176.6	162.1	150.7	159.0	157.9
67.5°	1563.6	1170.9	119.7	104.2	114.1	141.9	169.8	156.9	147.6	164.7	161.5
70°	1218.2	839.8	101.7	96.6	105.8	131.6	160.5	151.3	143.5	160.0	155.9
72.5°	803.3	494.6	89.8	89.3	96.0	122.9	150.3	146.1	136.8	145.1	138.9
75°	419.1	229.2	78.0	81.0	85.2	115.2	140.9	136.8	126.5	129.5	127.5
77.5°	164.7	107.3	67.6	71.2	75.9	103.8	129.1	125.0	116.2	113.5	113.1
80°	90.3	72.2	56.2	60.9	64.0	93.4	116.7	112.0	102.8	101.1	99.6
82.5°	57.3	47.0	46.4	49.6	53.7	83.1	104.8	97.6	89.8	105.8	85.7
85°	26.8	27.8	33.1	37.2	41.8	70.8	91.4	83.6	75.9	73.8	65.6
87.5°	15.0	18.5	21.6	25.3	28.9	49.6	72.2	65.0	56.9	48.5	50.0
90°	10.5	10.5	15.0	14.6	13.0	14.1	43.5	39.9	35.2	18.3	13.7
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: P271718

CATALOG NUMBER: IST-AF-600-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)