

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: P271633

Luminaire Tested: **IST-AF-450-LED-E1-SL3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271633  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35946)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-450-LED-E1-SL3-7027  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL  
Light Source: (16) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

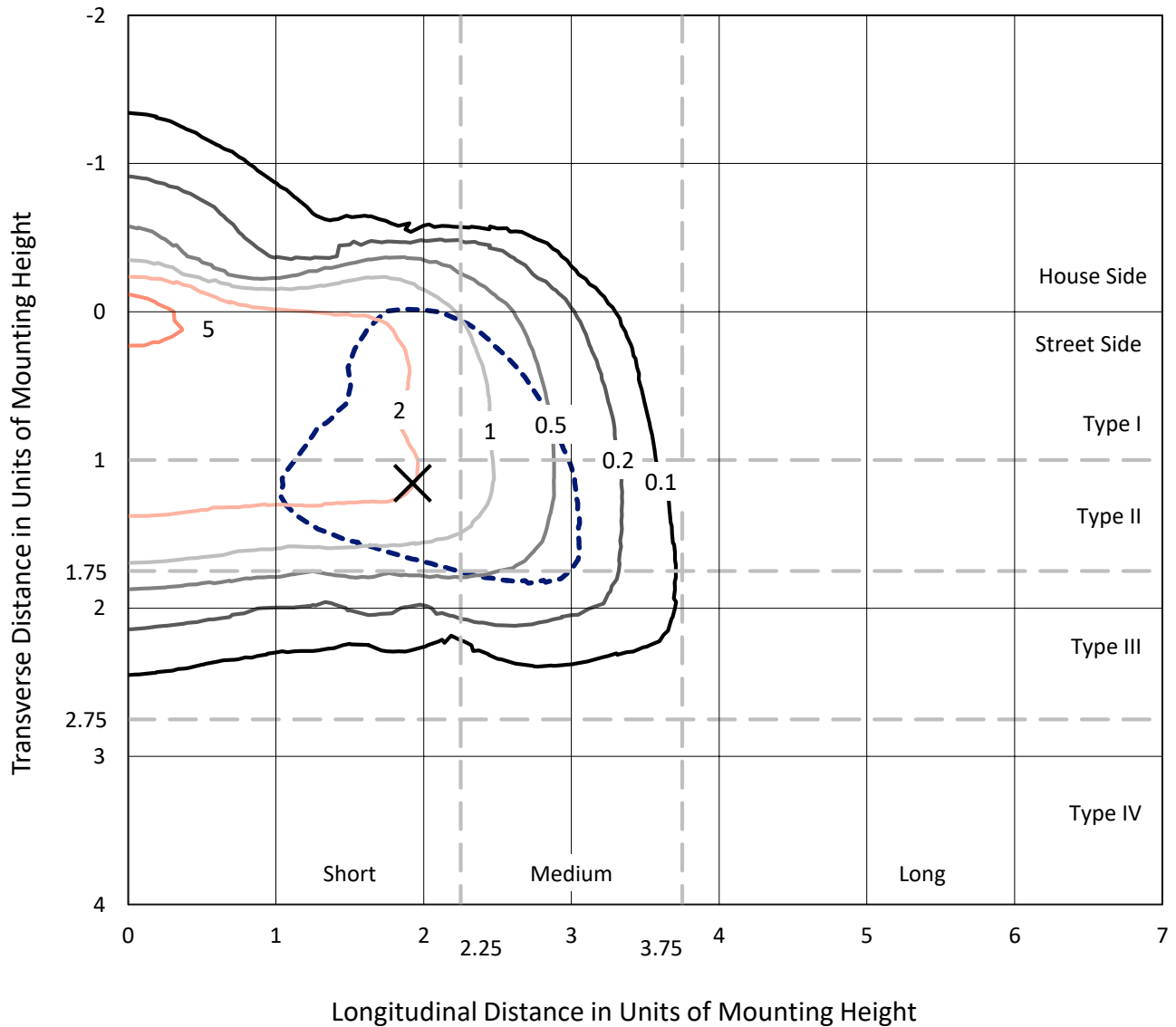
Lumens per Lamp: N/A  
Luminaire Lumens: 2580.1 lumens  
Efficiency: N/A  
Efficacy: 101.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U1 - G1  
  
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input 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: P271633  
 CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

### Iso-Footcandle Lines of Horizontal Illumination

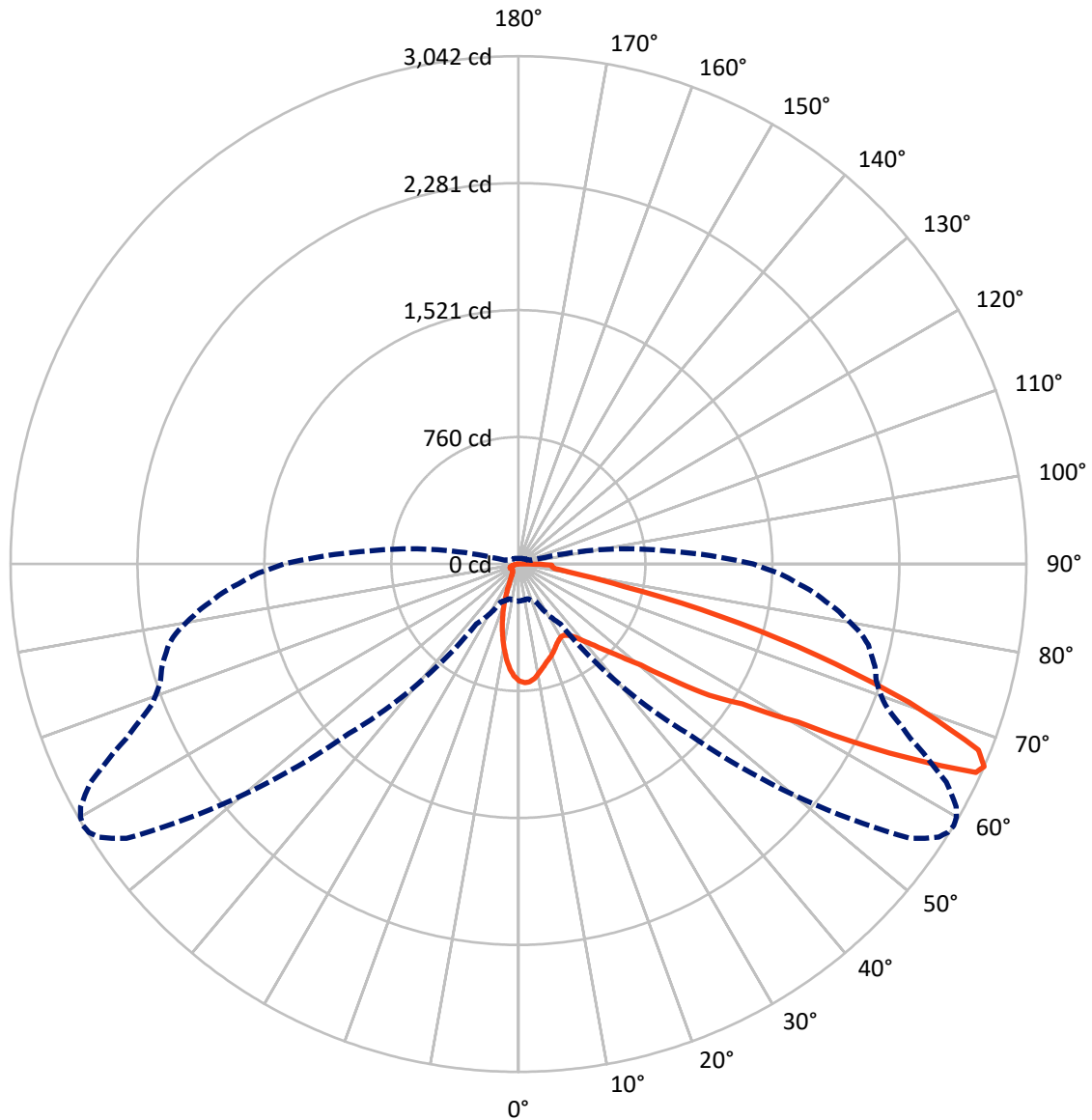
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P271633  
CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

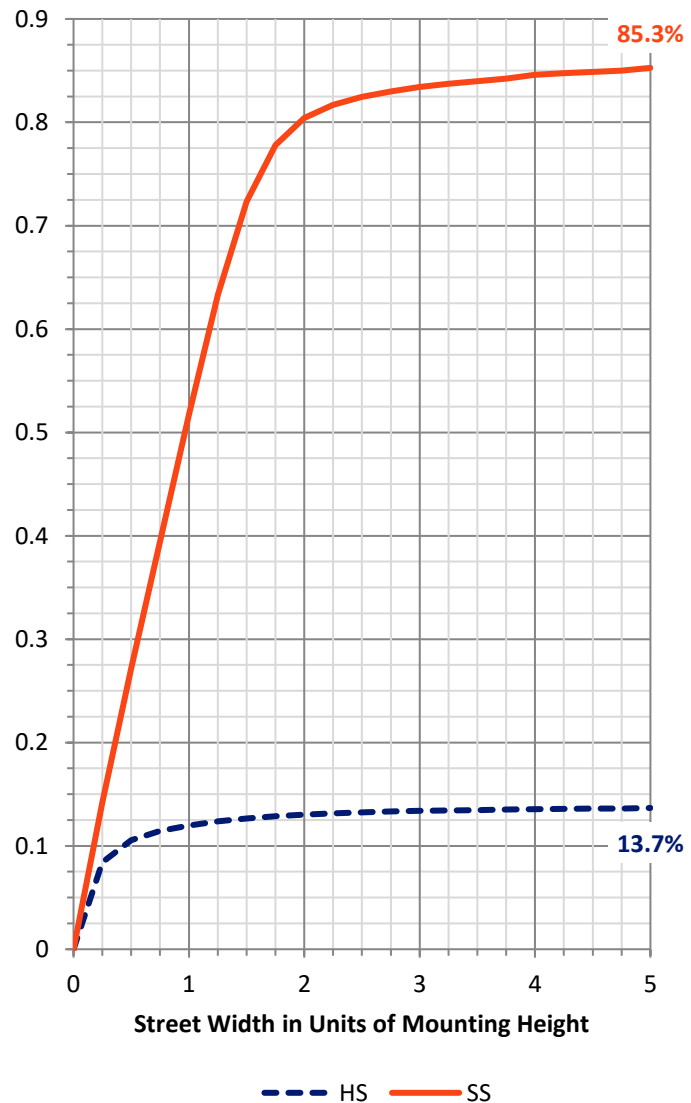
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	358.0	0.2	358.1
	% Fixture	13.9	0.0	13.9
<b>Street Side</b>	Lumens	2221.0	0.9	2221.9
	% Fixture	86.1	0.0	86.1
<b>Total</b>	Lumens	2578.9	1.1	2580.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	2.3
10°-20°	126.2	4.9
20°-30°	158.3	6.1
30°-40°	216.6	8.4
40°-50°	348.5	13.5
50°-60°	605.5	23.5
60°-70°	735.7	28.5
70°-80°	274.4	10.6
80°-90°	54.0	2.1
90°-100°	1.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2578.9	100.0
0°-180°	2580.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271633

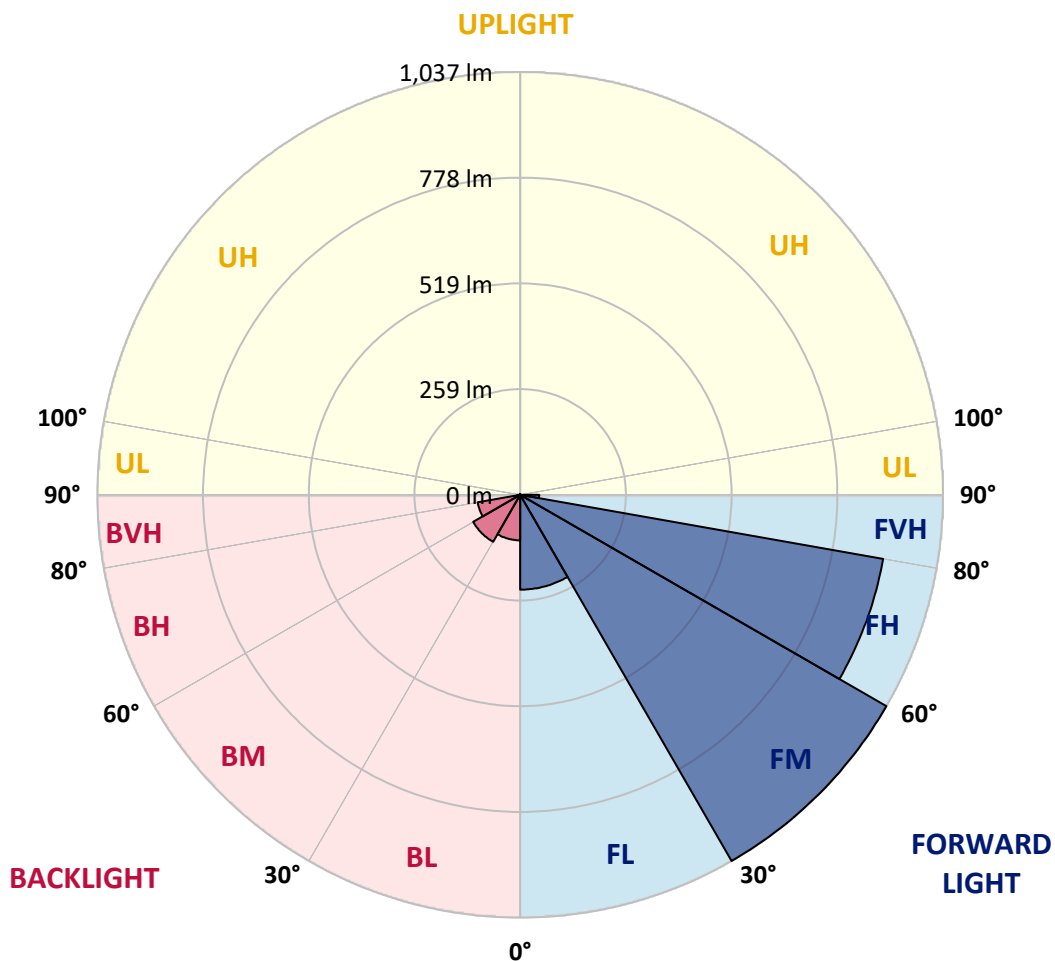
CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	232.7	9.0			
FM (30°-60°)	1037.5	40.2			
FH (60°-80°)	904.3	35.0			G1/1800
FVH (80°-90°)	46.6	1.8			G1/100
BL (0°-30°)	111.6	4.3	B1/500		
BM (30°-60°)	133.1	5.2	B0/220		
BH (60°-80°)	105.9	4.1	B0/110		G0/110
BVH (80°-90°)	7.4	0.3			G0/10
UL (90°-100°)	1.1	0.0		U1/10	
UH (100°-180°)	0.2	0.0		U1/10	

**BUG Rating: B1-U1-G1**

Type II Short





REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9
2.5°	719.1	716.8	721.1	719.5	720.7	714.8	713.5	712.4	713.2	712.0	712.0
5°	702.1	700.9	706.1	708.9	711.2	710.4	710.0	710.0	710.4	707.7	708.0
7.5°	652.3	651.5	658.5	663.8	675.3	681.9	690.7	691.1	691.9	690.7	693.0
10°	599.3	601.7	608.0	616.2	633.2	643.5	660.2	663.4	664.6	664.9	665.4
12.5°	548.7	546.3	554.2	570.0	592.9	609.6	630.5	632.0	634.0	636.9	639.6
15°	503.5	506.4	512.7	529.2	553.4	576.7	604.0	605.5	609.6	611.9	615.9
17.5°	472.7	472.7	479.9	495.2	517.9	547.4	581.8	584.7	587.9	590.9	595.3
20°	457.2	457.2	460.0	469.2	488.9	517.3	558.9	562.1	567.5	571.2	577.1
22.5°	456.1	455.7	455.4	457.2	469.2	491.2	534.4	538.7	543.5	549.0	554.2
25°	468.7	469.9	465.1	462.0	463.2	473.5	511.0	513.4	522.5	526.0	532.4
27.5°	486.9	488.9	484.9	480.2	473.0	466.4	491.2	495.2	501.2	507.1	515.0
30°	513.0	512.7	512.2	509.1	495.2	474.2	485.4	488.0	493.3	498.0	504.8
32.5°	541.0	544.4	546.7	545.1	530.9	495.2	493.7	496.0	500.7	503.5	507.9
35°	577.5	579.0	588.2	588.2	573.9	532.9	517.0	519.0	521.4	522.5	525.7
37.5°	617.5	623.1	636.4	644.4	622.2	579.5	553.7	553.7	555.0	555.7	557.8
40°	663.8	671.7	690.3	705.3	691.1	637.7	602.0	605.5	604.4	602.9	607.2
42.5°	717.6	726.2	748.7	763.0	754.8	707.7	666.9	664.6	668.1	663.4	664.9
45°	780.1	786.7	809.7	824.7	831.4	793.6	751.9	747.2	747.2	736.9	741.3
47.5°	836.2	838.2	860.4	886.9	908.5	909.4	850.9	847.7	840.2	833.4	831.8
50°	888.4	894.4	908.5	937.5	982.9	1022.5	986.9	977.1	968.7	943.8	951.3
52.5°	979.1	990.5	999.5	1017.0	1070.8	1151.1	1194.9	1179.6	1177.6	1155.0	1149.9
55°	996.0	997.2	1027.2	1127.7	1254.3	1312.1	1396.3	1396.0	1402.3	1395.1	1388.4
57.5°	916.1	906.6	956.9	1089.4	1343.8	1640.3	1614.6	1617.4	1609.1	1587.3	1580.7
60°	713.5	721.5	775.7	944.6	1279.3	1852.3	2022.1	1971.8	2007.8	1951.3	1920.8
62.5°	401.5	392.4	429.2	606.7	1049.4	1863.4	2577.1	2582.5	2600.0	2568.3	2494.0
65°	259.1	255.1	251.5	307.0	628.9	1630.1	2884.0	2952.0	2992.7	3009.4	3010.6
66°	222.7	219.5	215.1	251.2	438.2	1436.3	2864.2	2937.0	3001.9	3032.7	3041.8
67.5°	189.5	184.7	184.0	208.0	305.0	1114.3	2675.5	2789.9	2847.2	2927.0	2970.7
70°	144.8	142.4	149.5	179.6	234.2	524.5	2132.0	2281.2	2380.1	2442.5	2482.8
72.5°	121.5	120.6	130.5	164.2	221.9	297.5	1492.4	1652.6	1755.8	1815.7	1871.0
75°	95.0	95.7	108.8	156.7	220.7	259.1	867.0	1019.8	1079.9	1174.1	1245.9
77.5°	71.1	70.3	80.7	126.6	215.1	262.7	450.5	513.8	579.9	627.7	645.2
80°	49.9	50.7	57.7	87.0	167.7	270.2	280.8	295.5	309.4	324.7	327.9
82.5°	33.2	33.7	42.7	59.7	116.3	257.9	262.2	255.5	244.9	231.4	216.9
85°	20.2	21.0	30.5	40.3	90.2	233.4	271.4	253.5	237.3	219.5	201.7
87.5°	10.3	11.5	18.1	23.7	53.4	115.2	282.4	269.4	247.2	219.9	200.1
90°	2.8	2.8	4.0	5.9	10.7	23.4	71.1	64.0	32.0	60.9	30.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9
2.5°	711.5	712.4	711.5	710.4	711.5	710.4	710.0	709.6	710.0	709.2	708.9
5°	708.0	708.9	708.9	706.4	706.1	707.7	705.3	706.1	705.3	704.5	702.9
7.5°	691.1	691.4	691.9	690.3	691.4	691.4	690.7	690.7	689.9	690.3	688.7
10°	667.4	668.9	670.5	669.7	669.2	672.8	671.2	672.4	672.4	671.2	671.7
12.5°	641.6	644.4	646.3	646.3	647.9	651.9	651.5	652.3	655.4	655.4	654.2
15°	617.9	620.5	623.9	626.2	629.4	632.0	634.0	637.3	638.9	638.9	640.9
17.5°	599.3	603.2	606.7	608.0	612.4	617.0	618.2	622.2	624.6	625.8	628.2
20°	581.0	585.4	589.7	593.7	597.7	603.2	606.0	608.3	612.4	614.7	618.2
22.5°	559.7	566.4	572.0	576.7	583.4	588.2	593.7	597.7	602.4	606.0	608.7
25°	539.5	548.7	556.1	560.9	570.0	576.7	583.4	589.4	595.3	600.4	604.4
27.5°	520.9	531.3	540.3	547.9	557.8	568.4	575.2	585.1	592.9	600.1	604.8
30°	511.9	520.6	530.0	538.7	548.7	562.1	573.2	585.9	595.7	604.8	611.9
32.5°	513.8	521.7	530.0	537.5	547.9	562.9	574.4	589.0	603.6	615.5	624.6
35°	529.6	536.7	542.3	549.0	558.2	569.5	581.8	597.4	615.5	631.3	643.2
37.5°	562.9	564.9	570.4	575.5	580.2	590.9	602.4	615.5	636.4	653.1	669.7
40°	604.0	609.1	614.4	616.7	622.2	628.9	634.0	647.9	666.5	688.3	706.4
42.5°	665.4	667.4	668.1	668.9	670.9	675.6	683.1	695.7	714.0	733.4	753.5
45°	734.2	736.5	738.9	740.0	737.3	740.0	748.0	753.9	771.7	789.9	815.6
47.5°	829.5	822.4	818.7	823.6	821.2	827.1	830.7	834.3	855.5	877.4	899.1
50°	951.8	947.4	941.9	942.2	946.5	942.6	944.9	958.0	965.2	983.4	1012.2
52.5°	1147.1	1133.6	1112.7	1103.6	1108.8	1105.5	1106.7	1109.6	1104.7	1121.8	1146.2
55°	1388.4	1371.0	1357.2	1349.3	1320.0	1317.6	1298.2	1291.1	1275.6	1291.9	1286.4
57.5°	1560.4	1549.4	1542.3	1518.6	1505.1	1478.3	1470.3	1460.7	1439.4	1450.1	1459.6
60°	1892.7	1853.1	1839.7	1798.1	1784.3	1758.6	1725.8	1709.6	1698.5	1708.8	1702.5
62.5°	2447.3	2392.4	2381.7	2283.1	2259.0	2199.7	2138.0	2129.6	2094.8	2073.1	2068.0
65°	2988.8	2910.1	2851.2	2743.5	2670.8	2586.1	2492.0	2423.2	2352.3	2316.8	2269.7
66°	3029.2	2997.9	2938.5	2875.7	2769.7	2677.1	2570.3	2495.9	2416.4	2354.0	2313.7
67.5°	2960.4	2943.7	2922.7	2880.1	2813.6	2727.3	2626.0	2531.2	2435.5	2361.8	2297.3
70°	2502.3	2520.5	2544.2	2533.1	2495.1	2461.5	2372.2	2319.2	2247.1	2150.6	2111.1
72.5°	1888.8	1937.5	1920.8	1858.3	1829.1	1805.8	1773.3	1737.7	1634.5	1622.6	1575.9
75°	1215.1	1198.9	1209.6	1133.6	1081.9	1060.4	983.4	951.8	874.2	823.9	785.6
77.5°	640.4	608.7	584.3	517.3	469.5	441.4	403.9	359.5	291.5	287.5	225.5
80°	297.1	272.9	250.8	227.5	204.2	173.2	150.3	122.6	108.3	93.0	86.7
82.5°	201.7	186.3	172.8	157.5	139.7	118.3	102.0	86.7	74.0	66.5	60.5
85°	182.7	166.2	151.2	131.7	113.2	95.3	78.0	64.5	52.6	45.9	42.0
87.5°	177.7	157.0	141.2	120.2	102.0	83.8	67.2	52.2	40.7	33.2	28.5
90°	22.5	24.2	17.3	16.6	7.2	9.2	6.7	4.0	4.3	3.1	3.5
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

**CANDELA DISTRIBUTION (continued):**

	71°	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°
0°	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9
2.5°	708.0	706.9	708.0	707.7	706.1	706.4	706.9	705.3	704.5	704.5	704.1
5°	701.8	700.9	701.8	701.4	698.9	698.5	698.5	697.4	695.7	694.6	693.9
7.5°	686.7	687.5	687.0	685.9	684.7	684.7	683.5	680.7	679.2	677.6	676.1
10°	669.7	669.7	670.0	669.7	667.7	666.9	665.4	663.8	664.2	660.2	657.0
12.5°	654.7	654.7	654.2	653.4	652.3	651.9	651.9	647.0	645.9	644.7	641.2
15°	640.4	641.2	641.2	641.2	639.2	639.2	637.3	634.0	634.0	630.5	626.9
17.5°	629.4	630.5	630.1	630.5	630.9	628.5	625.0	623.1	620.5	618.7	613.9
20°	619.8	620.5	621.0	621.0	619.8	618.2	615.1	611.9	610.4	606.4	600.4
22.5°	611.2	612.7	613.1	613.1	611.6	610.4	607.2	602.4	599.3	594.5	589.0
25°	607.5	609.6	608.3	609.1	607.5	604.8	600.4	596.6	591.7	585.9	579.9
27.5°	608.7	611.6	610.8	610.4	608.3	606.4	600.9	596.0	590.5	583.4	575.9
30°	615.9	620.5	618.7	617.0	616.7	611.9	606.7	600.1	593.7	585.4	576.7
32.5°	629.4	631.7	632.0	630.9	628.9	625.0	617.9	609.1	602.0	592.2	581.8
35°	651.5	653.9	653.1	653.1	651.1	644.7	636.1	627.4	617.5	606.4	595.7
37.5°	682.4	686.7	685.9	684.3	681.9	674.4	667.7	657.0	645.9	631.3	619.0
40°	721.1	727.9	733.7	732.6	727.0	720.4	714.0	701.8	690.7	674.4	661.0
42.5°	773.4	782.4	789.9	795.4	793.1	784.4	773.4	768.2	752.3	735.7	721.9
45°	840.2	859.2	865.9	872.6	872.6	867.0	864.7	854.4	837.8	815.6	802.5
47.5°	928.4	953.7	961.2	972.7	979.4	973.4	969.1	951.8	940.6	910.2	907.0
50°	1035.6	1060.9	1081.5	1094.9	1092.9	1098.1	1087.8	1077.9	1062.4	1037.5	1028.8
52.5°	1172.4	1192.6	1211.2	1219.1	1227.4	1226.3	1223.9	1217.1	1197.7	1184.2	1162.1
55°	1312.9	1329.4	1351.9	1365.1	1375.8	1373.8	1364.6	1348.4	1351.9	1323.9	1311.6
57.5°	1472.6	1490.8	1515.4	1527.7	1532.4	1556.5	1550.6	1548.6	1541.9	1532.0	1519.3
60°	1747.6	1752.8	1772.9	1803.8	1841.7	1834.2	1843.7	1850.0	1854.8	1832.6	1831.0
62.5°	2075.1	2081.5	2098.8	2105.2	2110.7	2111.5	2098.8	2098.8	2077.0	2048.6	2026.5
65°	2253.8	2240.8	2229.0	2222.2	2207.6	2194.5	2175.5	2149.8	2113.0	2069.2	2029.6
66°	2279.6	2253.1	2237.7	2220.6	2197.3	2173.2	2150.6	2115.4	2072.3	2020.1	1967.8
67.5°	2254.7	2218.3	2182.3	2157.4	2124.9	2081.5	2041.8	2000.7	1960.0	1888.3	1839.7
70°	2027.3	1983.6	1944.1	1889.6	1838.1	1795.4	1727.4	1655.8	1596.8	1521.7	1473.8
72.5°	1505.5	1454.1	1402.6	1325.9	1251.1	1240.1	1154.6	1070.4	1025.2	964.8	916.1
75°	743.7	678.8	586.6	545.5	485.7	456.5	440.3	379.4	364.7	305.0	304.2
77.5°	210.0	180.4	160.2	139.7	131.0	124.7	102.9	98.5	89.4	87.9	82.6
80°	79.5	75.2	73.2	71.1	69.2	68.0	67.2	64.0	62.5	60.2	58.9
82.5°	57.3	55.8	52.2	51.0	49.5	47.1	46.7	44.6	43.5	41.1	40.3
85°	38.8	36.8	34.9	32.9	32.0	31.6	30.5	29.6	28.8	27.7	27.3
87.5°	26.1	24.2	21.8	21.0	20.6	21.0	21.4	20.6	20.2	19.3	19.0
90°	3.1	4.3	4.0	4.0	4.7	4.0	4.0	4.3	4.0	4.0	3.5
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271633  
 CATALOG NUMBER: IST-AF-450-LED-E1-SL3-7027

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	71°	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												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: P271633  
 NUMBER: IST-AF-450-LED-E1-SL3-7027

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

82°	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	110°	82°
700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	700.9	0.0
703.4	702.1	702.6	700.9	700.5	701.4	701.8	701.8	700.5	693.4	685.0	112.5°	0.0
693.0	690.7	690.3	689.1	687.0	689.4	688.3	686.2	683.9	675.6	659.4	115°	0.0
674.0	672.4	670.5	668.9	667.7	666.9	666.5	664.6	660.2	644.7	617.5	117.5°	0.0
655.9	653.9	651.5	647.9	646.3	643.9	643.9	639.2	636.1	616.7	576.4	120°	0.0
638.1	634.5	633.2	630.9	626.6	624.6	621.8	617.0	612.4	589.0	536.0	122.5°	0.0
624.6	621.0	615.9	614.4	609.6	605.2	601.7	595.3	590.2	559.4	493.7	125°	0.0
609.9	607.2	601.7	598.1	592.9	587.9	581.8	573.9	570.4	531.3	453.4	127.5°	0.0
598.1	591.7	585.4	582.2	575.9	570.0	564.0	554.5	547.4	503.5	410.5	130°	0.0
584.3	578.7	572.0	566.4	557.8	551.0	544.4	534.4	525.7	475.5	367.5	132.5°	0.0
574.7	566.8	559.7	553.4	543.5	535.6	526.0	515.4	506.7	448.5	320.0	135°	0.0
569.2	561.4	552.2	544.4	532.9	523.7	513.4	501.5	490.5	426.9	275.3	137.5°	0.0
567.5	558.2	548.7	538.7	526.9	515.4	503.1	491.2	477.0	405.9	226.6	140°	0.0
572.4	560.9	550.2	538.4	524.5	511.5	499.2	483.7	469.5	387.7	178.9	142.5°	0.0
585.4	571.6	559.4	546.3	530.4	516.2	501.5	484.2	468.4	375.0	136.8	145°	0.0
606.0	592.9	578.7	565.7	547.4	531.7	515.4	496.9	477.8	369.8	103.2	147.5°	0.0
647.5	630.1	615.5	601.7	580.7	564.5	545.9	523.4	502.0	374.6	86.2	150°	0.0
705.7	683.9	670.5	658.2	632.0	614.4	592.9	567.2	543.0	388.1	76.0	152.5°	0.0
785.9	769.4	745.2	726.2	699.7	679.9	656.2	625.4	598.5	407.0	70.8	155°	0.0
886.4	864.7	840.9	821.6	792.7	758.3	733.4	696.2	665.7	436.7	68.5	157.5°	0.0
1009.4	983.4	951.3	935.0	895.1	868.2	835.1	795.1	756.4	482.6	69.6	160°	0.0
1143.1	1115.1	1090.1	1059.3	1022.9	992.9	961.2	918.9	870.2	569.5	74.4	162.5°	0.0
1284.4	1266.3	1242.4	1202.5	1182.7	1144.7	1104.4	1057.8	1022.5	682.7	85.9	165°	0.0
1490.1	1470.3	1467.5	1428.3	1398.3	1363.9	1332.3	1293.5	1252.0	883.7	112.7	167.5°	0.0
1806.5	1785.9	1762.6	1732.1	1696.4	1653.8	1614.6	1562.4	1516.2	1085.1	125.4	170°	0.0
1994.0	1956.0	1914.1	1867.8	1816.0	1763.0	1710.4	1643.4	1576.3	1097.3	113.2	172.5°	0.0
1978.2	1931.1	1877.6	1814.8	1760.2	1694.9	1638.4	1552.1	1490.8	977.1	92.2	175°	0.0
1919.6	1855.2	1805.0	1747.1	1678.8	1620.3	1560.4	1475.5	1405.4	895.9	84.2	177.5°	0.0
1769.8	1714.8	1645.2	1589.7	1539.1	1469.1	1412.9	1333.4	1285.1	776.9	75.5	180°	0.0
1414.5	1338.6	1279.6	1236.4	1179.1	1115.9	1066.0	999.2	956.4	514.2	65.3		
823.9	804.9	738.9	701.8	666.9	615.5	575.9	543.8	487.7	249.2	57.7		
254.0	236.2	233.8	198.5	210.0	179.6	174.8	159.0	159.0	95.7	45.5		
81.0	79.5	76.4	72.0	70.3	70.3	68.5	68.0	64.9	51.5	34.0		
57.3	56.1	55.0	53.8	53.0	53.4	51.8	51.0	50.2	37.2	26.9		
39.5	38.4	36.0	36.0	35.2	34.9	35.2	33.7	33.2	26.1	22.5		
26.9	26.5	26.1	25.7	25.3	25.0	24.5	23.4	22.5	18.1	15.8		
17.8	15.0	14.6	12.7	12.3	11.9	11.0	11.9	13.0	13.0	10.3		
4.0	3.5	4.0	4.0	3.1	3.5	3.5	2.8	2.8	4.0	3.5		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

'271633  
 IST-AF-450-LED-E1-SL3-7027

REPORT NUMBER: P271633  
 CATALOG NUMBER: IST-AF-450

**TION (continued):**

**CANDELA DISTRIBUTION (con**

83°	84°	85°	86°	87°	88°	89°	90°	95°	105°		115°	125°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	700.9	700.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	678.0	671.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	642.0	627.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	593.3	565.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	537.5	497.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	479.9	428.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	426.1	358.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	369.5	286.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	315.2	216.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	254.0	151.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	186.3	110.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	132.9	87.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	99.4	74.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	79.5	64.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	67.6	58.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	60.5	54.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	56.5	52.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	54.2	50.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	53.0	49.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	52.2	47.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	51.5	47.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	51.8	48.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	53.8	48.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	57.0	48.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	59.4	49.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	60.2	50.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	59.4	51.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°	58.5	51.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	57.3	50.7
										70°	54.5	47.5
										72.5°	49.0	42.7
										75°	42.0	34.5
										77.5°	34.0	27.7
										80°	25.3	21.0
										82.5°	18.5	16.2
										85°	13.0	11.5
										87.5°	7.9	7.2
										90°	2.0	2.0
										92.5°	0.0	0.0
										95°	0.0	0.0
										97.5°	0.0	0.0
										100°	0.0	0.0
										102.5°	0.0	0.0
										105°	0.0	0.0
										107.5°	0.0	0.0



REPORT NUMBER: P271633

CATALOG NUMBER: IST-AF-450-LED-E1-S

0-LED-E1-SL3-7027

**tinued):**

135°	145°	155°	165°	175°	180°
700.9	700.9	700.9	700.9	700.9	700.9
667.4	666.9	657.0	655.0	648.3	651.9
610.8	604.0	586.2	582.6	575.2	573.2
543.0	524.5	510.2	494.4	479.4	486.9
464.0	432.7	401.5	380.9	372.5	369.8
388.9	332.6	293.5	253.1	238.9	244.1
297.9	233.8	181.5	158.2	144.8	142.4
210.0	149.8	125.9	119.8	117.0	117.0
142.4	114.4	105.2	102.5	102.5	102.9
108.3	96.1	92.2	92.5	94.1	94.5
89.8	85.0	83.0	85.9	89.0	89.4
77.5	76.4	76.7	80.3	83.5	83.8
68.0	69.2	70.8	74.0	76.7	77.5
61.4	63.3	64.5	66.5	68.0	68.5
56.5	58.9	58.5	59.7	60.9	61.4
53.8	55.0	53.8	54.5	54.5	55.3
51.5	51.8	49.9	50.2	51.0	51.0
49.0	48.7	46.7	47.5	48.7	49.0
46.7	45.9	44.3	45.9	47.9	48.3
44.6	43.8	43.1	45.1	47.5	47.9
43.8	43.1	42.3	45.1	47.5	47.9
43.8	43.1	42.3	44.3	46.7	47.1
44.3	43.5	42.0	43.8	45.5	45.9
44.6	43.8	41.1	42.3	43.1	43.5
44.6	43.1	40.3	40.7	40.7	41.1
43.8	42.0	38.8	38.8	38.4	38.4
43.8	40.3	37.2	36.4	35.7	35.7
43.5	40.0	36.8	35.7	34.5	34.5
42.7	39.2	36.0	34.5	33.2	33.2
40.0	37.5	34.0	32.4	31.2	30.8
35.7	34.5	31.6	30.5	29.3	28.8
30.0	30.5	28.8	28.0	26.9	26.5
25.3	26.1	25.3	25.0	24.2	23.7
20.2	21.8	21.0	21.0	21.4	20.6
15.5	17.3	16.6	17.3	18.1	17.0
10.7	12.7	12.7	13.0	13.5	12.7
6.7	8.4	7.9	8.4	8.4	7.9
1.5	2.8	1.5	2.3	2.0	1.5
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0

**CANDELA DISTRIBUTION (continued):**

	115°	125°	135°
110°	0.0	0.0	0.0
112.5°	0.0	0.0	0.0
115°	0.0	0.0	0.0
117.5°	0.0	0.0	0.0
120°	0.0	0.0	0.0
122.5°	0.0	0.0	0.0
125°	0.0	0.0	0.0
127.5°	0.0	0.0	0.0
130°	0.0	0.0	0.0
132.5°	0.0	0.0	0.0
135°	0.0	0.0	0.0
137.5°	0.0	0.0	0.0
140°	0.0	0.0	0.0
142.5°	0.0	0.0	0.0
145°	0.0	0.0	0.0
147.5°	0.0	0.0	0.0
150°	0.0	0.0	0.0
152.5°	0.0	0.0	0.0
155°	0.0	0.0	0.0
157.5°	0.0	0.0	0.0
160°	0.0	0.0	0.0
162.5°	0.0	0.0	0.0
165°	0.0	0.0	0.0
167.5°	0.0	0.0	0.0
170°	0.0	0.0	0.0
172.5°	0.0	0.0	0.0
175°	0.0	0.0	0.0
177.5°	0.0	0.0	0.0
180°	0.0	0.0	0.0

