

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: P226873

Luminaire Tested: **IST-AF-XXX-LED-E1-SL2-XXB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-XXX-LED-E1-SL2-XXB  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY  
BACKPACK BOX  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 656.7 lumens  
Efficiency: N/A  
Efficacy: 50.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B0 - U1 - G1

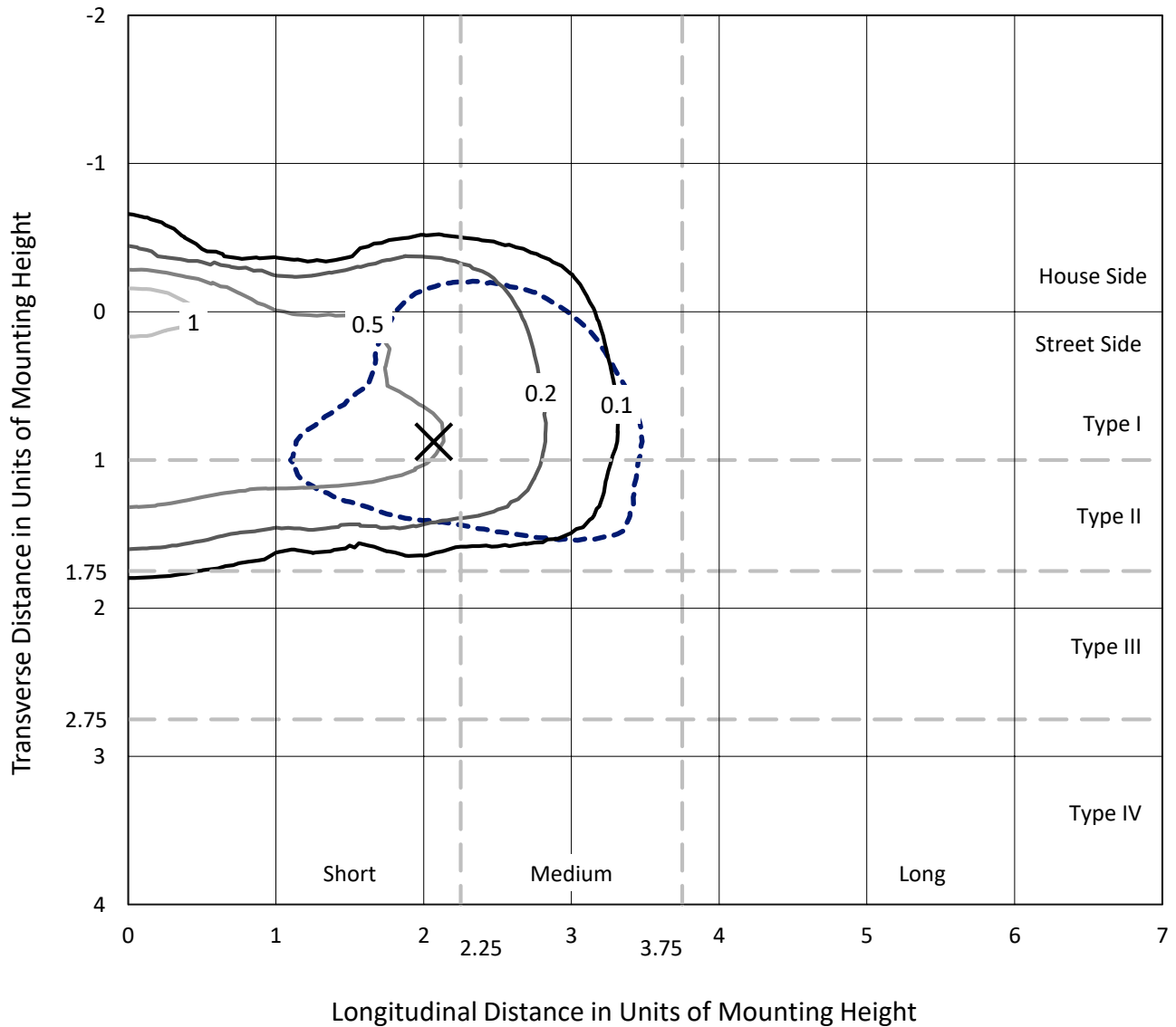
Input Watts (W): 13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

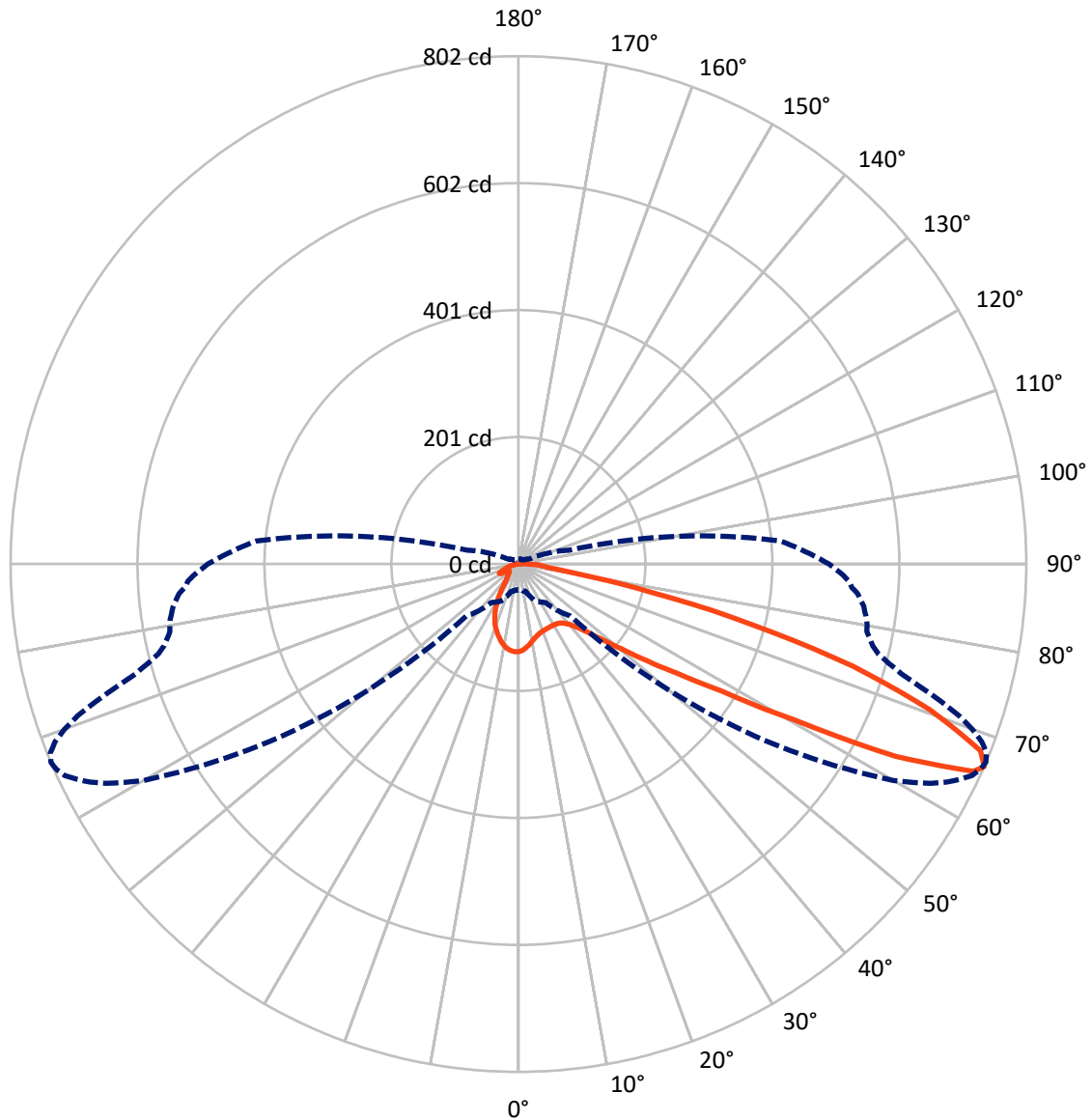
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.4 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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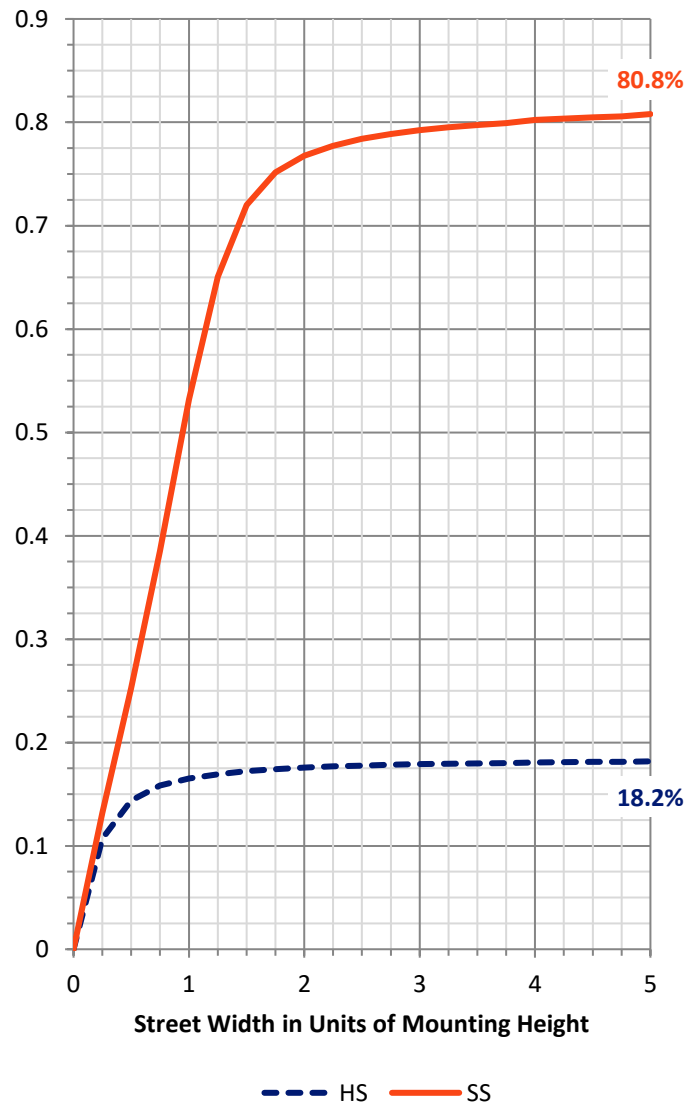
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	121.3	0.1	121.3
	% Fixture	18.5	0.0	18.5
<b>Street Side</b>	Lumens	535.2	0.2	535.4
	% Fixture	81.5	0.0	81.5
<b>Total</b>	Lumens	656.5	0.2	656.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.0	1.8
10°-20°	28.5	4.3
20°-30°	39.1	6.0
30°-40°	55.9	8.5
40°-50°	90.6	13.8
50°-60°	143.6	21.9
60°-70°	182.0	27.7
70°-80°	90.4	13.8
80°-90°	14.3	2.2
90°-100°	0.2	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°	656.5	100.0
0°-180°	656.7	100.0



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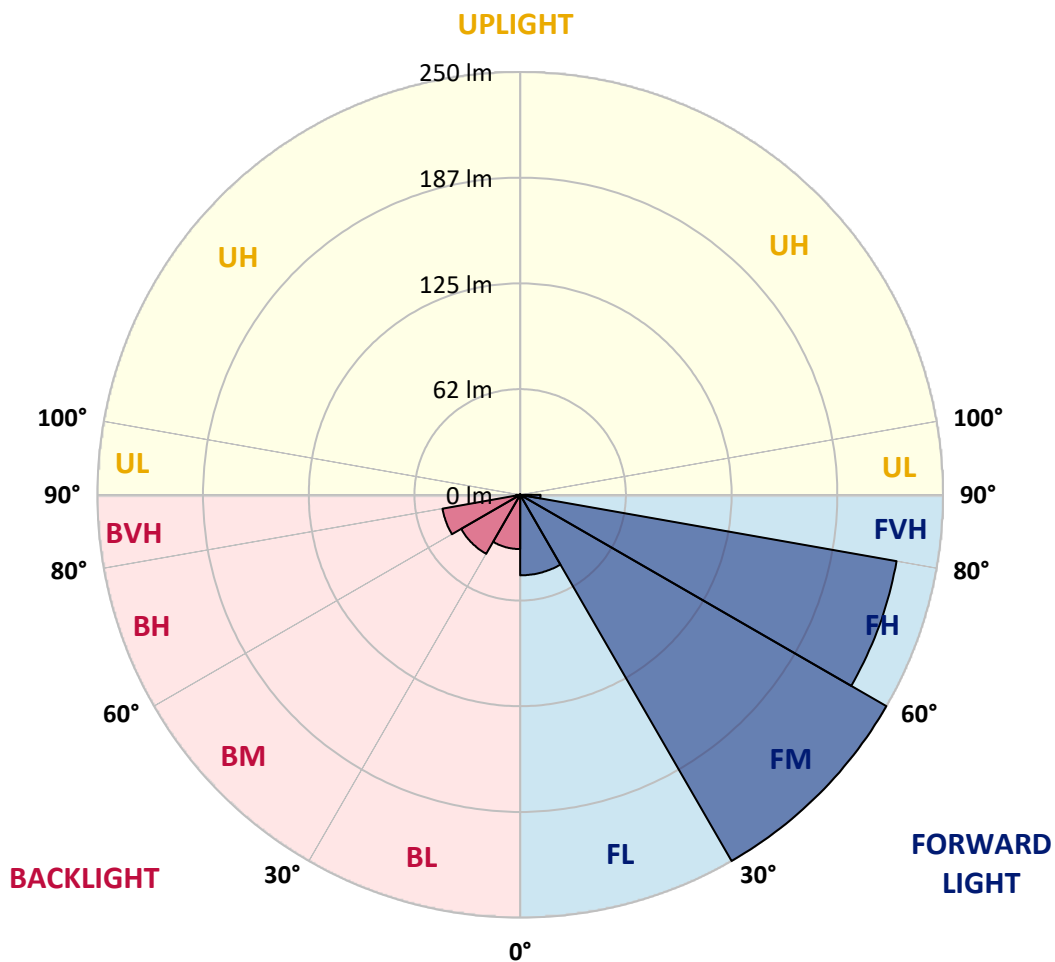
CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-XXB

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	47.6	7.2			
FM (30°-60°)	249.8	38.0			
FH (60°-80°)	225.8	34.4			G0/660
FVH (80°-90°)	12.0	1.8			G1/100
BL (0°-30°)	32.1	4.9	B0/110		
BM (30°-60°)	40.3	6.1	B0/220		
BH (60°-80°)	46.6	7.1	B0/110		G0/110
BVH (80°-90°)	2.3	0.4			G0/10
UL (90°-100°)	0.2	0.0		U1/10	
UH (100°-180°)	0.1	0.0		U1/10	

**BUG Rating: B0-U1-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2
2.5°	128.5	128.8	130.4	131.3	132.6	133.0	134.5	135.0	135.5	135.4	135.4
5°	116.9	117.8	118.6	120.4	122.2	124.5	127.4	129.5	129.9	130.4	130.7
7.5°	108.1	108.7	110.1	111.4	113.8	116.9	120.9	123.7	124.3	124.5	125.2
10°	101.9	102.3	103.5	105.2	107.9	111.0	115.3	118.0	119.0	119.4	120.0
12.5°	97.1	97.7	98.7	100.6	103.5	106.7	111.1	114.0	114.6	115.1	115.9
15°	94.0	94.4	95.4	97.4	100.0	103.2	107.5	111.0	111.4	111.9	112.6
17.5°	93.4	93.7	94.3	95.9	97.9	101.0	105.4	108.2	108.9	109.7	110.4
20°	95.9	96.0	96.2	96.4	97.6	99.5	103.9	106.9	107.5	108.1	109.1
22.5°	101.0	101.3	100.8	100.0	99.1	99.5	103.2	106.4	106.8	107.3	108.1
25°	109.8	109.6	108.0	106.9	103.8	101.3	103.4	106.1	106.6	107.1	108.0
27.5°	120.3	119.9	119.0	116.0	110.8	105.6	104.5	106.6	106.9	107.3	108.1
30°	131.6	131.7	130.8	127.6	120.8	112.1	107.2	107.7	107.9	108.3	108.8
32.5°	141.7	143.1	143.0	142.9	133.3	120.8	112.4	110.4	110.1	110.4	110.6
35°	153.4	153.7	156.5	157.8	150.1	133.7	119.9	115.5	114.4	114.5	114.3
37.5°	166.0	166.4	171.1	173.6	167.6	148.3	129.8	123.2	122.0	120.9	120.2
40°	184.4	186.0	188.4	191.1	188.1	168.0	143.0	133.9	131.1	130.9	129.3
42.5°	211.9	211.3	210.1	212.4	208.8	190.0	158.9	149.0	147.0	144.2	142.1
45°	238.8	239.9	234.7	235.7	235.9	215.3	181.9	168.1	167.0	163.8	161.4
47.5°	256.9	255.7	248.8	253.9	266.2	245.1	208.5	194.1	191.8	190.2	188.6
50°	257.9	256.9	252.5	261.4	287.7	297.9	245.6	228.8	225.6	222.6	221.7
52.5°	233.8	232.4	233.9	252.0	295.5	342.1	298.0	271.9	269.2	266.8	263.3
55°	190.9	192.5	199.5	225.5	283.6	373.5	401.1	338.5	327.0	326.9	318.4
57.5°	142.6	141.0	146.2	170.6	253.4	384.6	495.7	480.3	454.7	437.4	416.6
60°	96.2	96.6	101.4	114.0	176.4	372.5	559.2	613.2	604.2	600.6	594.9
62.5°	66.7	67.3	71.7	83.5	103.1	299.6	577.8	687.6	703.8	717.1	713.8
65°	46.6	46.7	51.2	69.4	77.2	154.0	536.8	697.6	721.5	744.4	765.0
66°	41.1	41.2	44.9	64.5	74.1	116.1	501.2	683.8	711.2	737.8	759.0
67.5°	35.2	35.8	38.7	54.8	71.0	89.6	414.1	642.8	671.5	700.8	728.9
70°	24.1	24.3	26.9	44.5	66.5	78.7	236.0	501.9	541.4	592.9	622.8
72.5°	17.3	17.1	17.4	27.5	68.2	78.2	124.0	330.3	385.7	430.9	463.1
75°	15.3	14.9	13.6	17.1	49.8	85.3	83.1	194.5	236.6	277.7	310.8
77.5°	13.7	12.9	12.3	13.1	24.7	80.4	74.6	111.4	132.9	163.6	189.0
80°	10.4	9.9	10.3	11.4	14.8	74.0	74.1	74.1	79.9	90.0	100.0
82.5°	7.0	6.3	7.2	9.4	11.2	55.8	76.5	65.4	64.3	63.9	64.7
85°	4.3	3.8	5.0	7.0	8.6	29.2	78.6	69.0	64.0	59.2	54.3
87.5°	1.5	1.7	2.6	4.1	5.6	12.6	68.8	60.9	57.4	51.4	45.8
90°	0.4	0.3	0.5	1.2	1.3	2.4	10.5	16.9	10.0	5.0	4.1
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



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
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





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**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2
2.5°	135.5	136.1	136.3	136.1	136.2	136.8	136.6	136.9	136.9	137.1	137.1
5°	131.1	131.6	132.3	132.2	133.0	133.3	133.6	134.0	134.5	134.7	135.3
7.5°	125.9	126.6	127.4	127.8	128.3	129.2	129.5	130.4	131.2	132.0	132.6
10°	120.8	121.9	122.8	123.1	124.1	124.6	125.7	126.3	127.4	128.4	129.2
12.5°	116.6	117.6	118.0	119.0	120.0	120.9	121.4	122.8	123.7	125.0	126.2
15°	113.4	114.5	115.3	115.9	116.9	117.9	118.7	120.0	121.1	122.4	123.6
17.5°	111.5	112.1	113.0	113.6	114.9	116.0	116.9	118.4	119.7	120.8	122.2
20°	110.0	110.7	111.6	112.4	113.5	115.1	115.8	117.4	118.8	120.1	121.4
22.5°	109.3	109.9	110.8	111.7	112.8	114.1	115.3	116.7	118.2	119.6	120.9
25°	108.9	109.6	110.3	111.2	112.4	113.8	114.9	116.4	117.7	119.2	120.8
27.5°	109.0	109.5	110.3	111.1	112.4	113.5	114.7	116.2	117.7	119.1	120.8
30°	109.5	109.7	110.6	111.3	112.4	113.5	114.6	116.2	117.5	119.0	120.8
32.5°	110.8	111.2	111.6	112.1	113.0	114.0	115.2	116.6	117.8	119.3	120.8
35°	114.1	113.8	114.1	114.3	115.0	115.8	116.7	118.0	119.1	120.4	121.9
37.5°	119.2	118.6	118.8	118.7	118.7	119.3	120.2	121.0	121.9	123.3	124.8
40°	128.7	127.2	126.7	125.7	125.4	125.9	126.4	126.5	127.7	129.3	130.0
42.5°	140.9	138.9	139.2	137.5	137.0	136.4	137.2	136.7	137.4	138.4	139.9
45°	160.2	158.4	156.4	153.5	154.2	151.9	151.3	151.5	151.4	151.8	153.6
47.5°	183.3	180.9	179.5	178.5	176.4	175.1	173.5	170.9	171.5	172.4	173.9
50°	217.1	216.3	213.8	210.2	209.7	207.9	207.4	205.2	204.4	204.3	204.2
52.5°	262.2	257.0	256.0	252.7	250.1	248.4	247.8	244.7	241.6	243.4	243.2
55°	317.1	312.8	307.4	304.4	302.4	298.2	297.1	293.2	291.4	290.4	288.0
57.5°	409.5	394.6	383.4	377.9	370.1	362.2	359.5	351.5	345.5	341.1	341.4
60°	570.5	543.9	512.6	498.6	466.2	461.5	439.2	433.7	420.3	411.4	406.3
62.5°	711.6	704.3	689.4	668.9	636.4	598.8	582.0	548.4	522.2	510.8	494.9
65°	779.0	789.1	793.2	789.4	776.3	753.5	733.4	700.6	656.6	631.8	600.9
66°	775.5	790.5	798.2	802.1	797.4	783.9	762.7	735.8	701.7	663.9	629.2
67.5°	750.2	765.0	775.5	787.5	787.5	783.3	774.7	756.7	732.6	699.6	668.5
70°	647.0	667.0	685.6	689.3	699.5	696.3	703.2	691.7	686.0	672.2	655.5
72.5°	504.0	520.7	536.7	552.7	550.0	546.6	545.8	548.3	536.6	540.7	536.4
75°	335.2	364.0	380.3	378.8	379.8	380.7	373.5	357.1	369.8	353.8	359.2
77.5°	203.8	217.1	221.5	216.6	210.1	201.8	188.5	180.8	169.6	170.5	163.1
80°	106.9	108.5	105.0	95.0	89.6	84.7	69.5	62.6	56.4	54.0	48.6
82.5°	61.3	57.2	52.9	49.5	43.1	38.8	32.8	29.2	25.1	21.5	20.3
85°	49.6	44.2	40.2	36.4	32.0	28.2	23.3	19.4	16.5	14.3	13.8
87.5°	40.9	37.2	33.0	29.5	25.3	21.3	16.5	12.8	10.1	8.2	7.6
90°	3.7	4.9	3.6	1.9	3.0	1.5	0.9	1.0	0.8	0.8	0.9
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



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CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-XXB

**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
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: P226873

CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-XXB

**CANDELA DISTRIBUTION (continued):**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2
2.5°	137.4	137.4	137.5	137.7	137.8	137.8	137.8	138.0	138.1	137.8	138.1
5°	135.6	136.2	136.6	136.9	137.0	137.3	137.5	137.7	138.0	138.0	138.2
7.5°	133.4	134.3	134.7	135.2	135.7	136.3	136.9	137.3	137.5	137.8	138.1
10°	130.5	131.7	132.6	133.4	134.1	135.0	135.8	136.5	137.4	137.5	138.1
12.5°	127.5	129.1	129.8	131.3	132.3	133.8	134.6	135.4	136.5	137.0	137.7
15°	125.3	126.6	128.2	129.5	131.1	132.9	133.9	135.0	136.5	137.5	138.5
17.5°	123.6	125.5	127.2	129.0	130.9	132.8	134.3	135.5	137.4	137.9	138.9
20°	123.2	125.2	126.8	128.8	130.8	133.3	135.0	136.5	138.2	139.2	140.1
22.5°	123.0	124.9	126.8	129.1	131.4	134.0	135.8	137.6	139.4	140.2	141.0
25°	122.8	124.8	126.9	129.5	132.0	134.7	136.9	138.5	140.2	141.1	141.7
27.5°	122.8	124.9	127.3	129.8	132.5	135.4	137.5	139.1	140.6	141.4	141.6
30°	122.7	124.9	127.2	130.0	132.9	136.0	138.2	139.7	141.0	141.5	141.3
32.5°	122.9	125.2	127.7	130.5	133.5	136.5	138.8	140.5	141.2	141.1	141.0
35°	123.8	126.0	128.9	131.8	134.7	137.5	139.8	141.0	141.6	141.4	140.9
37.5°	126.4	128.7	131.6	134.7	137.1	140.2	142.3	143.1	143.2	142.7	141.5
40°	132.0	134.2	136.8	140.2	143.0	145.3	147.2	148.2	147.6	146.5	145.3
42.5°	140.8	143.5	146.6	149.4	152.7	155.7	156.2	156.8	155.8	153.7	152.1
45°	154.9	156.6	160.5	162.5	166.9	168.4	169.5	169.8	167.7	165.9	163.2
47.5°	175.2	178.5	181.3	183.2	186.4	188.3	190.5	189.6	187.8	184.9	181.4
50°	207.1	209.3	212.8	216.4	219.7	221.1	221.1	220.1	219.0	213.5	209.1
52.5°	246.4	246.6	251.7	256.0	258.9	256.9	259.3	256.9	256.1	252.3	248.6
55°	292.0	290.1	296.2	300.0	302.6	305.0	304.5	304.2	301.7	297.4	293.0
57.5°	335.1	340.5	343.5	349.0	350.4	352.0	351.3	350.4	348.8	346.4	344.4
60°	397.5	401.2	403.9	404.9	408.6	409.1	411.5	407.4	408.5	405.6	399.4
62.5°	482.3	478.4	480.5	480.5	479.4	475.6	477.6	479.2	476.5	474.1	473.2
65°	577.4	564.7	552.4	550.3	544.7	543.4	541.9	537.9	536.2	532.0	528.8
66°	605.8	586.0	574.5	567.4	560.6	559.1	556.9	552.8	549.4	543.6	538.0
67.5°	637.6	612.2	594.8	584.7	576.3	570.8	566.5	560.6	555.3	546.6	537.6
70°	635.6	614.6	593.6	578.4	565.7	554.3	547.7	534.9	524.1	511.7	501.3
72.5°	534.1	530.3	518.1	509.5	494.1	488.0	470.4	462.3	447.2	431.2	426.3
75°	371.2	356.6	350.4	346.9	340.1	321.3	309.1	311.8	294.2	278.5	269.5
77.5°	162.3	165.2	148.1	140.3	134.5	124.3	114.9	108.3	104.5	102.1	90.9
80°	44.9	39.2	38.7	35.9	35.3	31.5	31.9	29.2	27.3	26.9	26.1
82.5°	19.6	19.2	18.6	18.3	18.0	17.7	17.2	17.1	16.5	16.0	16.1
85°	13.0	12.9	12.6	12.4	11.9	11.2	10.6	10.2	10.3	9.8	9.7
87.5°	7.6	7.4	7.3	7.0	6.9	6.2	6.3	5.8	5.7	5.6	5.3
90°	1.1	1.2	1.4	1.4	1.0	1.8	1.5	1.4	1.4	1.2	1.2
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: P226873  
 CATALOG NUMBER: IST-AF-XXX-LED-E1-SL2-XXB

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
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: P226873  
 NUMBER: IST-AF-XXX-LED-E1-SL2-XXB

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	110°	86°
138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	110°	0.0
138.4	138.6	138.7	138.6	138.8	138.7	138.8	138.7	138.2	138.1	138.0	112.5°	0.0
138.6	139.0	139.1	139.2	139.0	139.2	138.8	137.3	135.4	133.5	131.9	115°	0.0
138.8	139.3	139.6	139.6	139.7	139.5	138.0	134.6	130.4	126.3	123.2	117.5°	0.0
138.7	139.4	139.7	139.8	139.8	139.4	135.8	130.3	124.0	117.7	111.3	120°	0.0
138.4	139.0	139.5	139.5	139.6	138.2	132.7	124.8	115.8	106.4	97.8	122.5°	0.0
139.0	139.6	139.6	139.6	139.5	137.2	129.3	117.9	105.9	93.0	80.3	125°	0.0
139.9	140.2	140.0	140.0	139.6	136.1	125.6	111.1	95.3	78.4	60.6	127.5°	0.0
140.7	140.9	140.8	140.2	139.8	134.8	121.7	103.9	82.7	60.6	43.0	130°	0.0
141.5	141.7	141.2	140.3	139.7	133.3	117.1	94.7	68.3	41.4	28.4	132.5°	0.0
141.6	141.8	140.9	139.8	138.8	130.9	111.5	84.9	52.7	26.8	22.2	135°	0.0
141.5	141.3	139.8	138.4	137.4	128.1	105.3	72.8	35.1	20.3	19.3	137.5°	0.0
140.8	139.9	138.7	137.2	135.5	124.9	99.0	59.3	22.2	17.6	17.6	140°	0.0
139.8	138.9	137.5	135.3	133.6	121.8	92.0	45.5	17.8	16.2	16.4	142.5°	0.0
139.4	138.4	136.3	134.1	131.9	119.1	84.5	30.6	16.0	15.2	15.3	145°	0.0
140.2	138.5	136.4	133.9	131.2	116.7	76.6	21.3	15.1	14.3	14.5	147.5°	0.0
142.9	141.3	138.7	135.5	132.7	115.3	68.3	17.7	14.2	13.5	13.5	150°	0.0
149.2	147.2	143.7	140.0	136.6	116.2	61.0	16.1	13.5	12.8	12.8	152.5°	0.0
159.7	157.1	153.1	148.8	144.3	120.6	52.6	15.4	13.0	12.1	11.9	155°	0.0
177.4	174.1	168.8	163.8	158.4	128.1	44.1	15.1	12.5	11.6	11.2	157.5°	0.0
205.3	200.5	194.2	187.5	181.0	141.8	37.4	14.7	12.1	11.2	10.7	160°	0.0
241.2	237.9	230.1	221.4	213.5	169.1	33.6	14.4	11.8	10.6	10.3	162.5°	0.0
287.0	281.7	275.5	267.7	258.3	204.5	33.1	14.3	11.5	10.2	10.0	165°	0.0
335.3	333.3	322.7	317.9	307.7	251.6	40.3	14.5	11.3	9.9	9.7	167.5°	0.0
390.5	391.3	381.5	376.1	367.8	311.5	64.2	15.1	11.3	9.7	9.4	170°	0.0
462.6	463.9	452.2	445.9	438.8	378.5	101.0	16.1	11.6	9.4	9.1	172.5°	0.0
521.7	514.9	507.3	496.2	487.3	415.8	97.2	17.9	12.0	9.1	8.8	175°	0.0
527.8	522.9	513.4	501.5	490.5	416.0	84.8	18.4	12.1	9.0	8.7	177.5°	0.0
527.0	518.2	507.5	497.5	486.7	405.4	65.6	19.2	12.4	8.8	8.5	180°	0.0
490.5	478.2	467.8	453.9	442.6	362.7	40.3	19.1	12.0	8.2	8.0		
404.5	398.2	385.8	374.6	362.8	293.6	27.6	17.1	10.5	7.4	7.5		
261.7	254.4	241.8	235.5	228.9	187.8	21.5	13.9	9.0	6.6	7.0		
87.4	84.5	79.8	82.3	78.6	73.2	15.8	10.5	7.2	5.7	6.1		
26.2	25.6	26.4	24.9	26.4	22.3	10.3	7.4	5.5	4.9	5.4		
15.4	15.2	15.2	15.2	14.9	13.9	6.9	5.1	4.2	4.2	4.5		
9.5	9.3	9.4	9.3	9.5	8.5	4.6	3.6	3.2	3.1	3.7		
5.4	5.4	5.5	5.3	5.4	5.2	3.3	2.3	2.0	1.9	2.7		
1.3	1.3	1.0	0.9	1.0	1.4	0.9	0.7	0.6	0.5	0.9		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

'226873  
 IST-AF-XXX-LED-E1-SL2-XXB

REPORT NUMBER: P226873  
 CATALOG NUMBER: IST-AF-XX

**TION (continued):**

**CANDELA DISTRIBUTION (con**

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	138.2	138.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	137.3	136.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	129.4	127.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	118.2	116.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	105.4	102.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	89.0	82.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	70.1	61.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	48.3	41.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	33.9	31.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	26.2	26.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	21.7	22.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	19.1	20.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	17.6	18.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	16.5	16.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	15.2	15.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	14.1	14.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	13.1	13.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	12.3	12.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	11.4	11.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	10.8	10.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	10.3	10.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	9.9	9.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	9.6	9.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	9.3	9.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	9.0	8.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	8.8	8.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	8.6	8.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°	8.5	8.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	8.4	8.2
										70°	8.0	7.8
										72.5°	7.4	7.3
										75°	6.9	6.6
										77.5°	6.0	5.9
										80°	5.1	5.0
										82.5°	4.3	4.2
										85°	3.5	3.3
										87.5°	2.4	2.1
										90°	0.6	0.7
										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: P226873

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

X-LED-E1-SL2-XXB

**tinued):**

175°	180°
138.2	138.2
136.0	136.9
126.9	126.6
114.3	114.4
98.8	99.0
79.0	77.7
56.6	57.0
39.4	39.3
31.6	31.8
27.0	27.0
24.0	24.0
21.2	21.3
19.2	19.4
17.5	17.6
15.7	15.8
14.2	14.2
13.2	13.3
12.5	12.5
11.9	11.9
11.3	11.5
10.6	10.7
10.0	10.1
9.5	9.5
9.0	9.0
8.6	8.5
8.3	8.1
8.0	7.9
7.9	7.8
7.8	7.7
7.6	7.5
7.3	7.2
6.8	6.5
6.1	5.9
5.6	5.3
4.7	4.5
3.5	3.3
2.0	2.0
0.5	0.5
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

**CANDELA DISTRIBUTION (continued):**

	155°	165°	175°
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

