

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: P226743

Luminaire Tested: **IST-AF-XXX-LED-E1-T4W-XXB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226743  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)  
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-T4W-XXB  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY  
BACKPACK BOX  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 680.3 lumens  
Efficiency: N/A  
Efficacy: 52.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium - Semi-Cutoff  
BUG Rating: B0 - U1 - G0

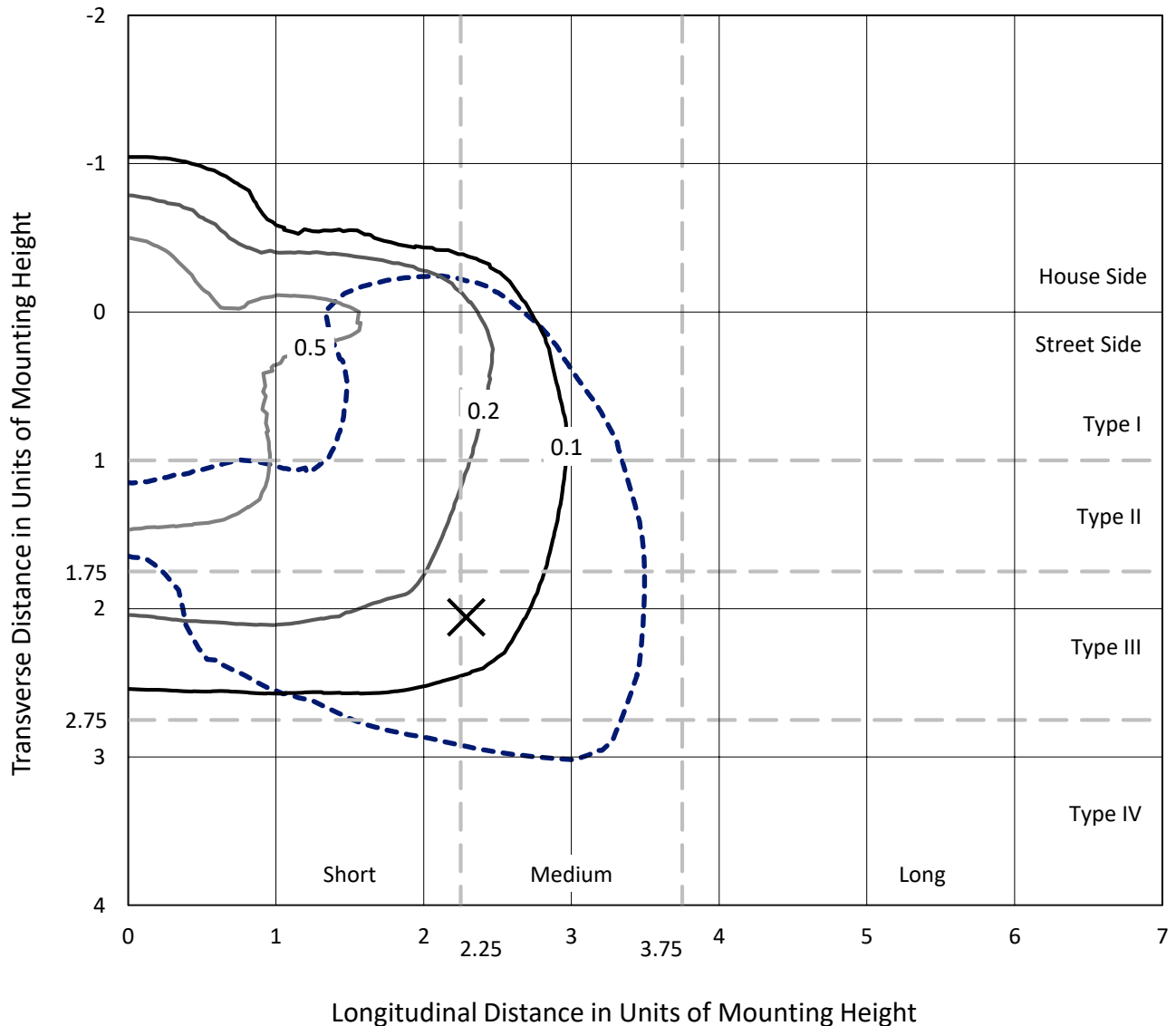
Input Watts (W): 13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P226743  
 CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

### Iso-Footcandle Lines of Horizontal Illumination

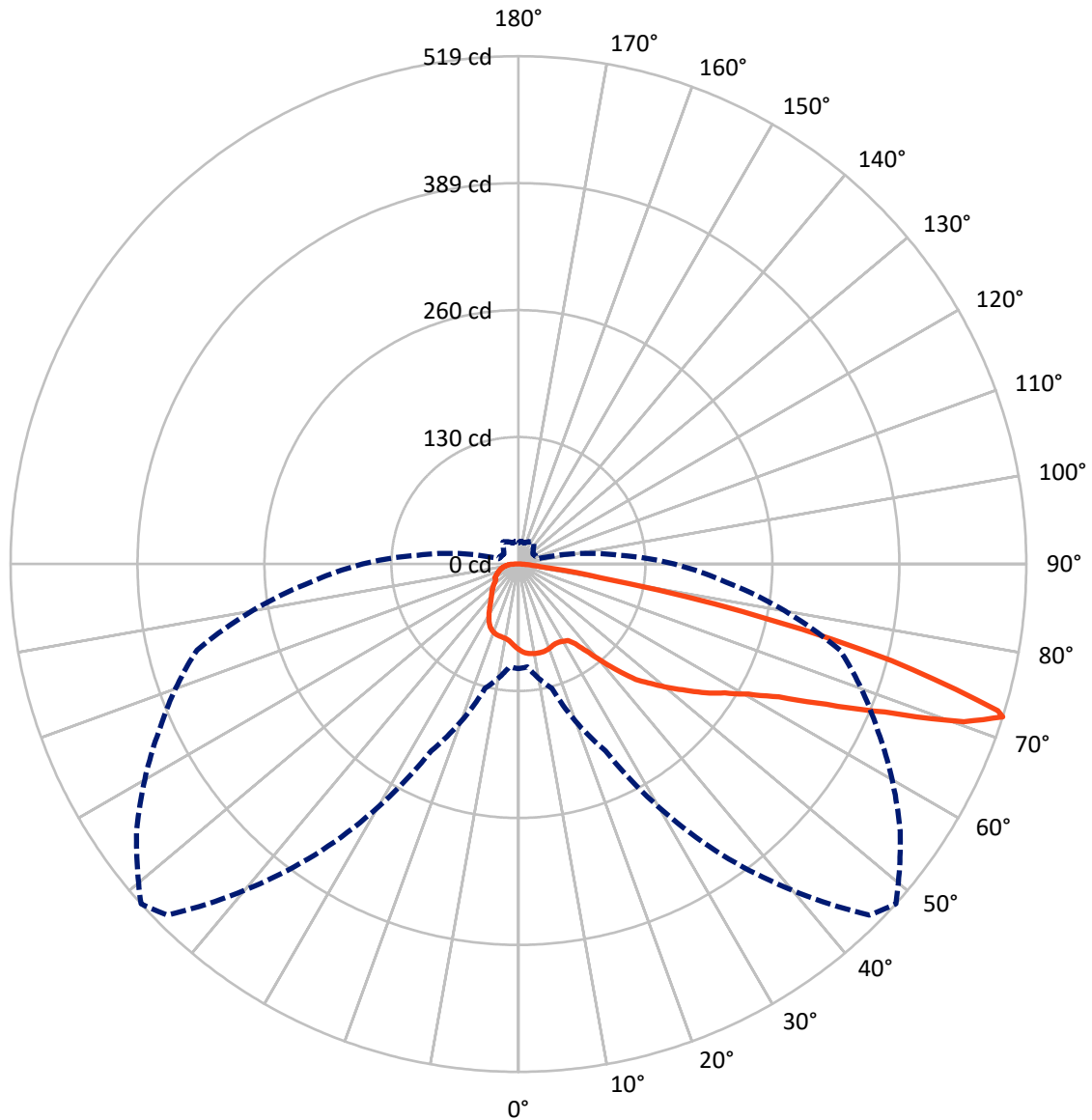
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Semi-Cutoff

REPORT NUMBER: P226743  
CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

### Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P226743

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

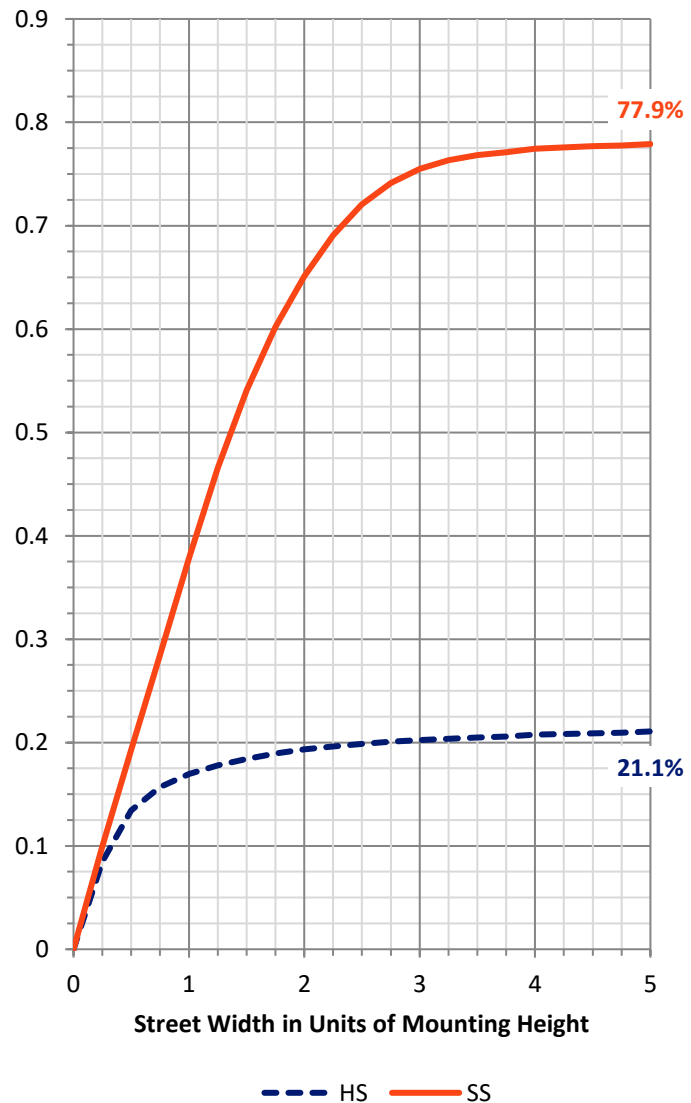
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	147.8	0.3	148.1
	% Fixture	21.7	0.0	21.8
<b>Street Side</b>	Lumens	532.1	0.1	532.2
	% Fixture	78.2	0.0	78.2
<b>Total</b>	Lumens	679.9	0.4	680.3
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.3	1.2
10°-20°	24.2	3.6
20°-30°	37.3	5.5
30°-40°	55.9	8.2
40°-50°	93.0	13.7
50°-60°	145.4	21.4
60°-70°	192.0	28.2
70°-80°	111.1	16.3
80°-90°	12.7	1.9
90°-100°	0.4	0.1
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°	679.9	99.9
0°-180°	680.3	100.0



REPORT NUMBER: P226743

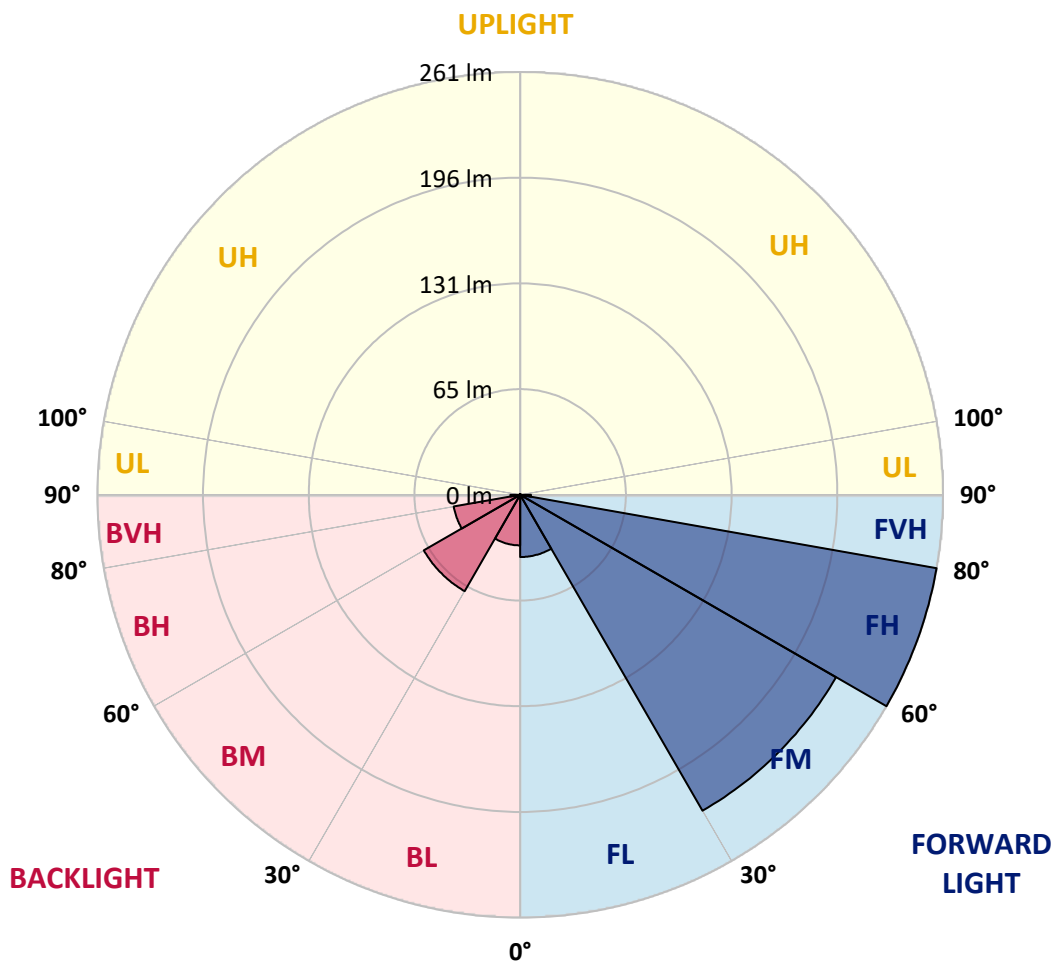
CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	38.5	5.7			
FM	(30°-60°)	225.5	33.2			
FH	(60°-80°)	261.4	38.4			G0/660
FVH	(80°-90°)	6.7	1.0			G0/10
BL	(0°-30°)	31.3	4.6	B0/110		
BM	(30°-60°)	68.8	10.1	B0/220		
BH	(60°-80°)	41.7	6.1	B0/110		G0/110
BVH	(80°-90°)	6.1	0.9			G0/10
UL	(90°-100°)	0.4	0.1		U1/10	
UH	(100°-180°)	0.3	0.0		U1/10	

**BUG Rating: B0-U1-G0**

Type IV Medium





REPORT NUMBER: P226743

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
2.5°	92.2	92.1	92.1	91.2	90.9	90.4	90.1	89.5	88.9	88.2	87.4
5°	96.6	96.9	96.5	95.3	93.8	92.3	91.7	90.2	88.4	86.7	85.1
7.5°	100.9	101.0	99.8	97.9	95.6	93.1	92.4	90.4	88.4	86.1	83.9
10°	103.9	104.0	102.4	99.6	96.6	93.8	93.0	91.0	88.5	86.0	83.2
12.5°	105.7	105.8	103.4	100.6	96.9	94.1	93.3	91.3	88.7	85.5	82.3
15°	105.4	105.7	103.7	100.6	96.7	94.2	93.2	91.6	88.2	85.0	81.7
17.5°	103.4	103.8	102.2	98.7	95.7	93.7	92.7	90.9	87.7	84.4	80.7
20°	99.5	100.0	99.3	96.0	93.9	92.4	91.7	90.1	87.1	83.6	79.8
22.5°	95.2	95.7	95.5	92.8	91.8	90.9	90.2	89.1	86.4	83.0	79.4
25°	92.1	92.5	92.2	89.8	90.1	90.1	89.7	88.8	86.3	83.2	79.4
27.5°	97.3	97.3	94.7	89.9	89.4	90.2	90.1	89.6	87.6	84.2	80.2
30°	116.4	115.0	110.3	98.2	92.0	91.6	91.5	91.1	89.4	86.3	82.7
32.5°	137.8	136.4	130.8	115.6	102.7	94.2	93.3	93.4	93.0	90.1	86.4
35°	156.9	156.7	152.3	135.8	119.4	103.6	100.0	97.7	97.5	96.3	93.4
37.5°	172.3	172.3	172.7	154.0	137.5	118.5	112.5	105.0	105.0	104.2	102.5
40°	189.9	190.6	191.5	170.3	156.8	136.3	129.4	118.0	114.7	115.7	116.1
42.5°	212.9	213.9	213.3	190.5	174.4	157.4	149.0	135.3	126.8	128.7	132.8
45°	228.5	228.9	233.1	211.6	196.6	175.4	168.3	149.5	141.1	144.7	152.0
47.5°	246.1	247.1	247.9	235.6	222.7	195.8	182.7	163.2	157.7	163.3	174.8
50°	263.4	262.2	264.0	263.5	247.3	213.8	198.4	176.0	176.4	183.9	202.9
52.5°	278.4	274.0	278.4	283.9	279.2	232.3	214.3	191.1	196.8	206.0	235.9
55°	290.0	279.5	286.8	302.2	301.2	248.7	232.5	211.2	220.9	233.3	276.1
57.5°	266.4	267.7	287.8	314.6	314.0	265.3	248.6	236.4	248.2	262.2	323.6
60°	244.4	250.1	281.2	316.5	323.0	283.4	270.1	265.0	275.9	293.0	369.2
62.5°	232.7	238.1	270.5	312.8	337.4	310.1	298.9	295.1	309.9	329.1	409.8
65°	236.4	239.8	269.8	318.3	353.8	350.6	345.8	339.3	346.7	364.7	428.2
67.5°	226.2	231.7	264.0	328.2	383.9	399.9	404.0	397.0	390.8	388.3	401.4
70°	168.3	173.6	207.6	287.8	408.6	485.5	483.0	459.9	418.1	383.2	313.6
72°	106.9	105.5	131.4	210.8	363.1	507.5	519.1	476.4	405.7	340.2	213.0
72.5°	77.7	84.7	109.0	187.5	345.0	495.5	512.5	471.1	389.4	321.4	187.4
75°	18.9	20.0	26.2	67.2	202.0	372.9	394.1	364.0	284.3	190.8	83.1
77.5°	12.8	13.3	17.3	23.6	59.4	212.6	233.9	201.0	127.2	65.0	37.0
80°	9.6	9.8	12.5	16.8	24.7	72.5	85.5	68.0	31.7	36.0	26.4
82.5°	6.8	7.0	9.5	12.4	16.4	17.0	22.6	25.0	20.6	23.6	15.3
85°	4.6	4.6	7.0	8.5	10.3	8.4	9.0	12.5	13.9	14.0	9.4
87.5°	2.5	2.8	4.1	5.4	5.4	3.9	4.2	6.4	7.8	8.4	5.6
90°	0.9	0.9	1.6	2.0	1.3	1.0	0.9	1.3	1.8	2.7	1.7
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: P226743

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
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: P226743

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
2.5°	87.2	86.5	85.7	85.3	85.1	84.7	84.4	84.2	84.2	83.8	83.9
5°	84.4	83.5	82.3	81.6	81.5	81.5	81.7	81.7	81.8	81.5	81.9
7.5°	83.0	81.9	80.4	79.5	78.9	78.8	79.2	79.9	80.3	80.0	80.4
10°	81.9	80.9	79.2	78.1	77.5	77.3	77.6	78.5	79.7	79.7	80.1
12.5°	81.0	79.6	77.8	77.0	76.6	76.7	77.1	77.7	79.2	79.6	79.8
15°	80.0	78.5	76.9	75.9	75.9	76.2	76.6	77.3	78.7	79.5	79.7
17.5°	79.1	77.4	76.2	75.3	75.3	75.7	76.2	77.0	77.9	79.2	79.2
20°	78.2	76.8	75.2	74.4	74.3	74.6	75.2	76.1	76.7	78.1	78.2
22.5°	77.6	76.1	74.5	73.3	72.8	72.6	73.2	74.1	74.8	76.1	76.3
25°	77.4	75.7	73.7	71.5	70.3	69.9	70.2	71.2	71.8	72.8	73.1
27.5°	78.2	76.4	73.4	69.5	66.8	65.7	66.0	66.7	66.9	68.0	68.4
30°	80.5	78.6	74.0	67.3	62.5	60.5	60.5	60.6	60.9	61.8	61.9
32.5°	84.4	82.4	75.8	65.1	58.0	55.2	54.5	54.1	54.1	54.0	54.1
35°	91.5	89.9	78.9	62.5	53.2	50.1	48.5	47.6	46.6	46.2	46.1
37.5°	101.7	100.4	83.2	59.5	48.9	45.8	43.8	42.0	41.0	40.9	41.4
40°	117.0	115.6	88.0	56.2	44.9	42.7	40.4	38.6	37.5	37.5	38.1
42.5°	135.8	131.7	93.2	51.6	41.6	40.4	38.1	36.5	35.4	34.8	34.7
45°	157.8	150.8	98.2	47.4	38.1	38.6	36.3	34.6	33.1	31.6	31.4
47.5°	185.3	169.9	102.5	43.1	34.3	36.6	34.5	32.7	30.7	28.8	28.5
50°	213.9	191.9	106.3	38.6	30.8	34.5	32.5	30.3	27.4	25.8	25.8
52.5°	246.9	218.3	111.1	33.6	28.1	32.0	30.2	27.2	24.9	24.7	24.7
55°	283.8	246.0	114.5	29.6	26.1	29.5	28.6	27.7	26.9	27.1	27.2
57.5°	322.2	275.0	111.5	26.8	24.3	28.9	31.5	30.3	27.8	27.7	27.6
60°	355.4	297.5	95.1	25.1	23.1	29.9	33.8	30.3	27.8	29.2	29.2
62.5°	377.1	308.1	63.3	22.8	21.2	28.2	32.9	29.4	27.9	31.6	31.9
65°	374.1	296.1	36.4	21.2	20.0	26.0	31.9	28.3	26.1	28.1	27.5
67.5°	330.0	248.3	26.4	20.6	19.1	24.3	29.9	26.7	24.2	26.8	25.8
70°	237.2	169.0	22.7	19.9	18.5	22.5	28.5	25.8	23.3	25.1	23.4
72°	159.2	102.8	20.9	19.4	18.0	21.3	27.5	25.0	22.4	23.4	21.5
72.5°	135.4	81.1	20.4	19.2	17.8	21.0	27.2	24.8	22.2	23.2	21.4
75°	50.6	31.8	18.0	17.8	16.4	19.5	26.1	23.8	21.2	20.9	20.2
77.5°	26.1	20.2	15.3	15.7	14.7	17.9	24.8	22.5	19.5	18.4	18.0
80°	18.9	14.6	12.5	13.3	12.5	16.1	23.0	20.5	17.8	16.6	16.1
82.5°	12.0	9.1	9.5	10.5	10.6	14.2	20.9	18.3	15.8	14.8	14.0
85°	5.7	5.4	6.8	7.8	8.6	12.1	19.1	16.3	13.8	11.9	12.0
87.5°	3.1	4.2	4.1	5.2	6.6	9.8	17.0	13.3	11.0	8.9	9.0
90°	0.7	1.1	1.2	2.0	2.7	4.2	10.9	7.6	7.4	3.2	2.8
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: P226743

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4W-XXB

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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

(END OF REPORT)