

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: P227950

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227950  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-XXX-LED-E1-T4W-XXB  
Description: IMPACT ELITE LED QUATER SPHERE 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: 649.6 lumens  
Efficiency: N/A  
Efficacy: 50.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G0

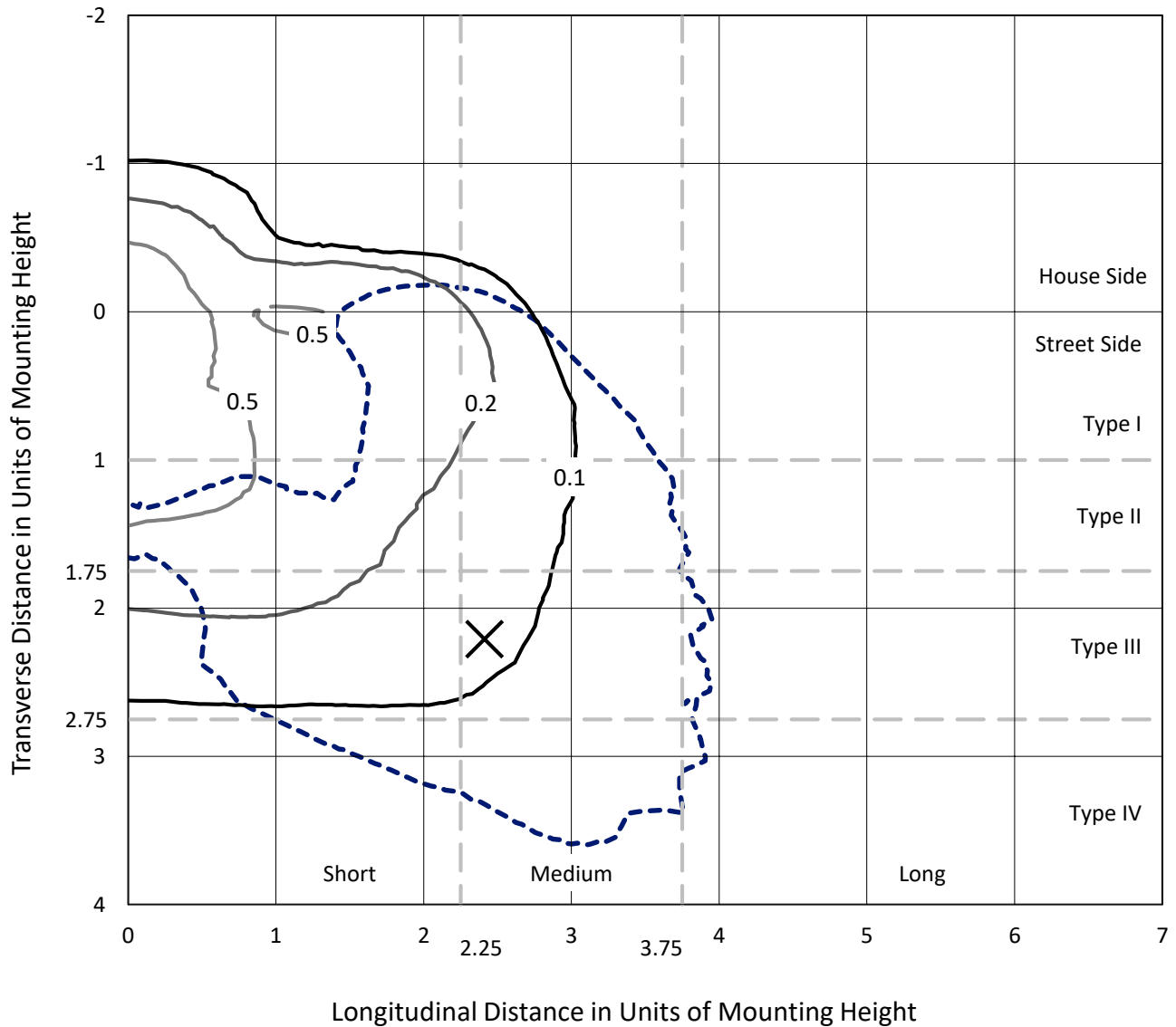
Input Watts (W): 13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P227950  
 CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-XXB

### Iso-Footcandle Lines of Horizontal Illumination

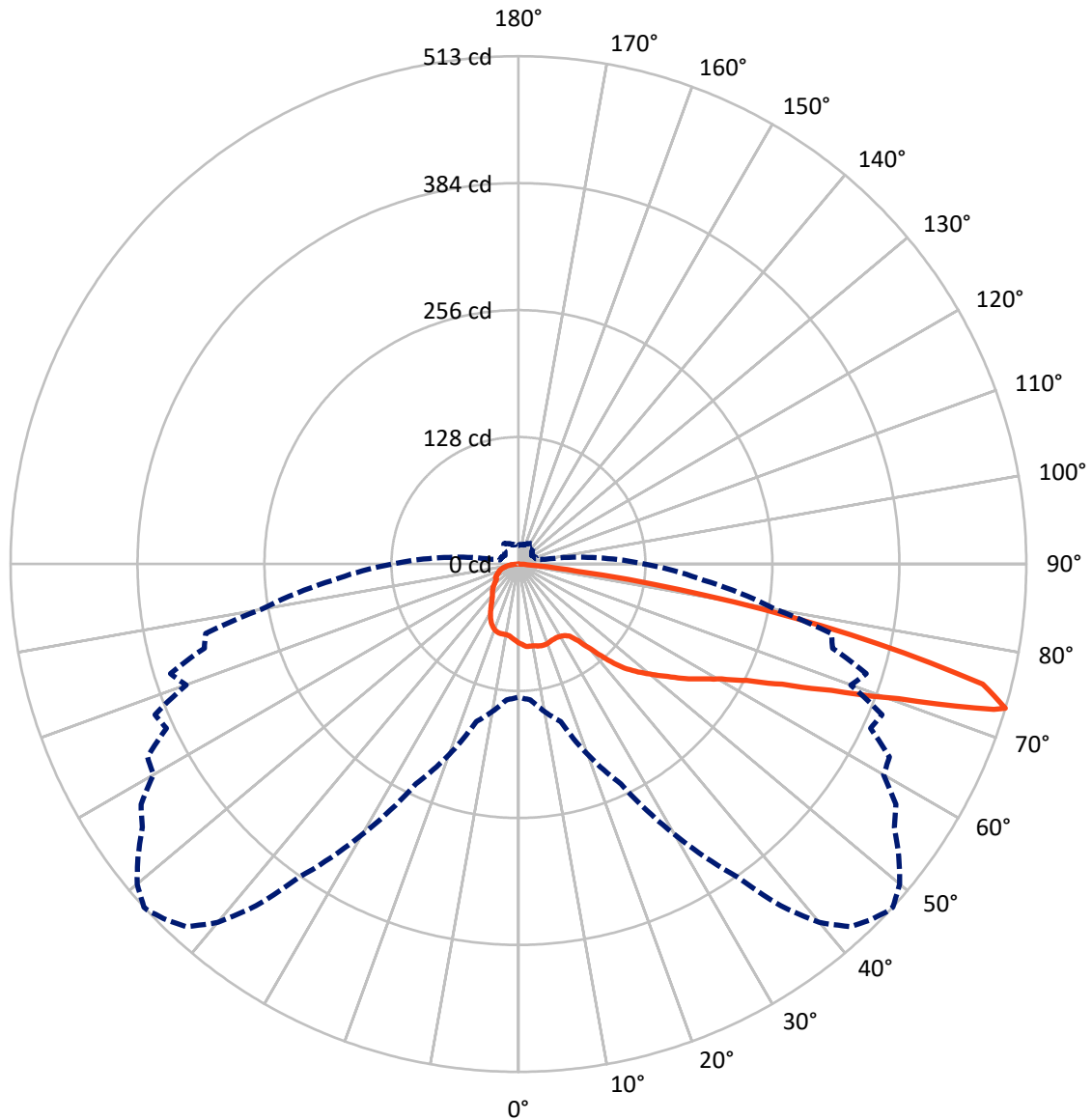
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.9 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P227950  
CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-XXB

### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P227950

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

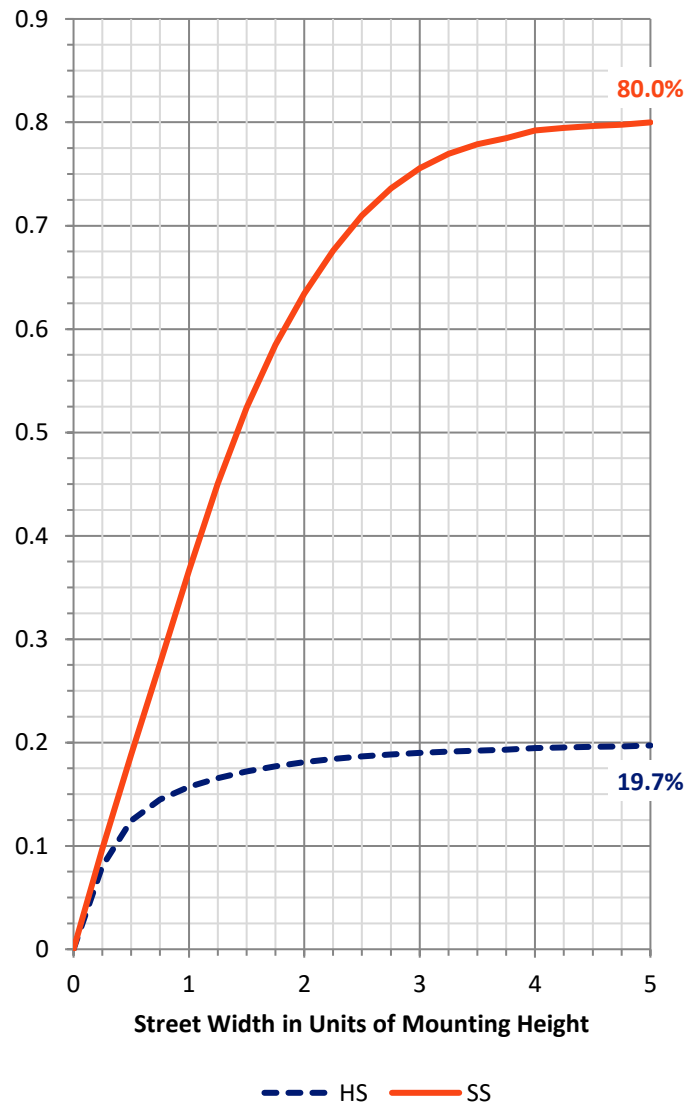
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	129.8	0.0	129.8
	% Fixture	20.0	0.0	20.0
<b>Street Side</b>	Lumens	519.8	0.0	519.8
	% Fixture	80.0	0.0	80.0
<b>Total</b>	Lumens	649.6	0.0	649.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.6	1.2
10°-20°	22.6	3.5
20°-30°	34.7	5.3
30°-40°	50.7	7.8
40°-50°	83.6	12.9
50°-60°	130.8	20.1
60°-70°	177.5	27.3
70°-80°	131.4	20.2
80°-90°	10.6	1.6
90°-100°	0.0	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°	649.6	100.0
0°-180°	649.6	100.0



REPORT NUMBER: P227950

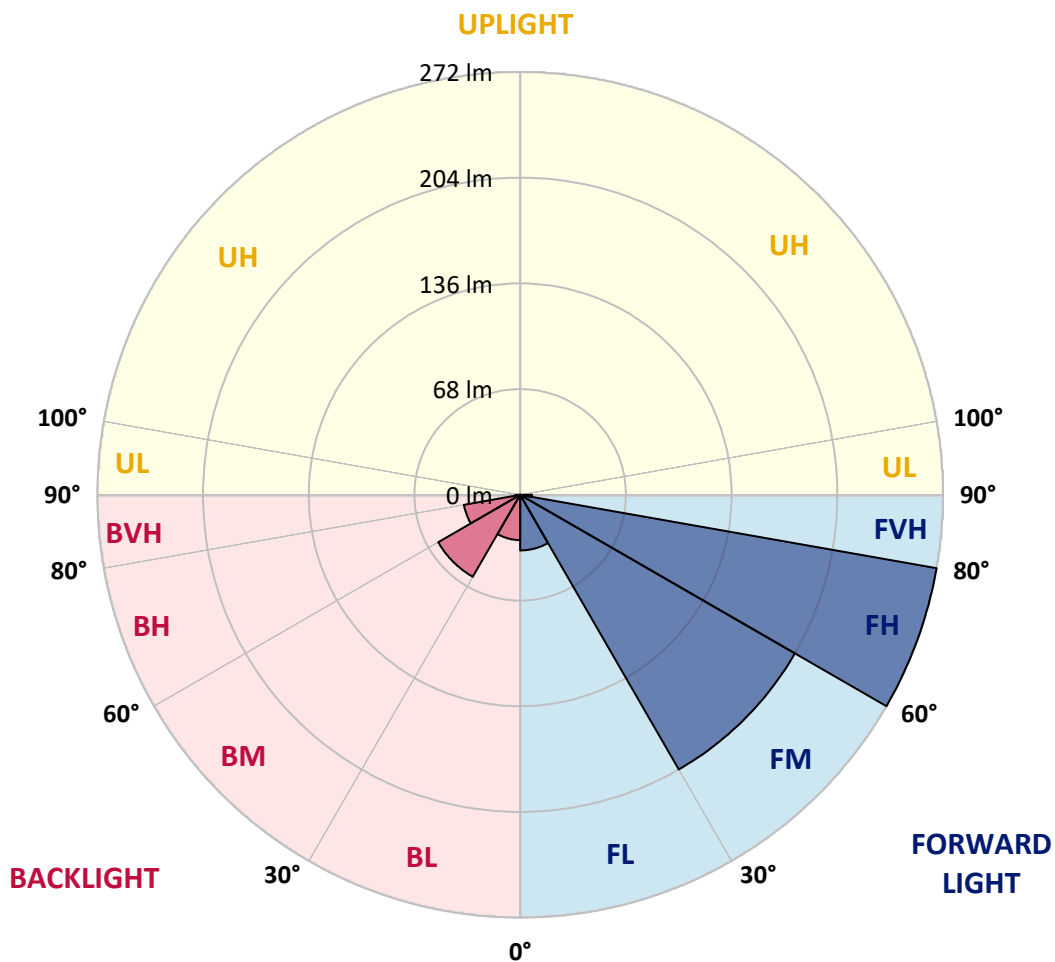
CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	35.8	5.5			
FM	(30°-60°)	204.2	31.4			
FH	(60°-80°)	272.2	41.9			G0/660
FVH	(80°-90°)	7.7	1.2			G0/10
BL	(0°-30°)	29.1	4.5	B0/110		
BM	(30°-60°)	60.9	9.4	B0/220		
BH	(60°-80°)	36.8	5.7	B0/110		G0/110
BVH	(80°-90°)	3.0	0.5			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G0**

Type IV Medium





REPORT NUMBER: P227950

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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	84.5	84.3	83.7	83.4	82.8	82.3	82.1	81.9	82.6	82.1	81.5
5°	89.8	89.4	88.6	87.3	86.0	85.1	84.9	84.5	84.5	84.1	83.7
7.5°	93.7	93.5	92.2	90.2	88.2	86.6	85.7	85.1	85.3	84.9	83.7
10°	97.4	96.9	94.8	92.4	89.2	87.5	86.4	85.3	86.2	85.5	83.9
12.5°	100.1	99.7	96.7	93.7	90.0	88.2	87.1	86.4	87.3	86.8	84.9
15°	101.7	101.2	98.2	94.5	90.7	88.6	88.2	87.7	88.4	87.5	85.7
17.5°	100.8	100.8	98.0	94.1	90.9	88.8	88.2	87.7	88.6	87.7	85.7
20°	97.6	98.0	96.1	92.0	89.6	88.2	87.5	86.6	87.5	86.6	85.3
22.5°	93.5	93.9	92.9	89.2	87.5	86.4	86.2	85.3	86.0	85.3	84.1
25°	89.8	89.8	89.4	86.2	86.0	85.1	85.3	84.9	85.3	84.5	83.7
27.5°	90.0	90.0	88.4	85.1	84.9	84.9	84.9	84.9	85.1	84.5	83.7
30°	102.7	103.1	98.2	89.2	86.0	85.5	85.7	85.5	85.7	85.5	84.5
32.5°	121.8	121.8	117.1	103.1	91.8	89.0	87.9	87.7	87.1	86.8	86.0
35°	140.7	140.5	135.7	120.3	106.0	100.6	97.2	93.9	92.4	90.9	89.4
37.5°	156.5	155.9	155.3	137.7	122.7	116.4	112.3	107.6	104.6	102.1	98.6
40°	171.3	172.4	174.7	153.7	139.4	133.6	129.5	123.5	120.5	117.3	113.2
42.5°	191.7	193.2	193.4	171.1	154.6	150.8	147.5	143.0	139.8	136.0	132.3
45°	211.4	211.6	212.3	189.8	173.3	168.4	165.9	161.7	157.6	152.6	149.7
47.5°	224.9	224.3	227.1	211.2	195.2	189.6	186.1	179.7	173.5	167.3	162.8
50°	241.4	240.8	240.8	235.7	220.4	214.0	208.0	196.0	189.3	181.6	175.2
52.5°	256.0	253.7	255.1	258.2	247.0	238.9	228.3	214.8	206.0	196.6	188.5
55°	276.0	263.7	267.2	277.7	273.4	260.8	246.8	232.4	222.4	211.6	204.2
57.5°	269.1	260.8	270.8	289.3	289.1	277.2	265.5	247.9	237.8	227.7	218.5
60°	244.5	248.8	270.6	297.2	298.3	289.1	279.4	263.1	255.1	244.7	235.5
62.5°	225.4	231.6	261.6	296.6	308.8	300.2	292.3	282.6	277.0	268.2	258.8
65°	224.3	227.9	257.1	295.9	323.6	319.1	315.4	310.9	309.9	303.4	292.5
67.5°	234.6	238.0	264.8	312.4	345.5	343.5	348.8	348.0	352.7	349.5	340.5
70°	214.4	216.4	249.4	318.2	395.4	404.0	416.0	415.3	425.4	417.7	407.2
72.5°	150.6	154.4	183.5	262.9	396.5	442.3	470.3	493.9	504.7	506.7	501.8
73°	134.4	137.5	164.5	244.9	385.8	434.7	472.2	496.4	506.1	512.1	512.5
75°	46.7	48.3	71.8	148.4	308.3	379.3	427.6	449.5	447.1	464.6	484.0
77.5°	15.0	15.2	18.6	38.4	148.8	235.5	289.3	309.4	297.9	316.9	342.7
80°	9.2	9.6	12.2	17.4	39.1	71.4	120.9	151.4	145.2	163.0	190.4
82.5°	5.6	5.8	7.5	10.7	15.7	17.4	22.7	30.9	38.0	45.6	59.8
85°	2.6	2.8	3.7	4.9	6.4	6.6	6.4	6.0	6.9	8.0	9.2
87.5°	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.0	0.0	0.2	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227950

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

**CANDELA DISTRIBUTION (continued):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	82.1	81.5	81.5	80.6	81.0	80.2	80.6	79.8	80.2	79.1	79.8
5°	83.4	82.3	82.3	81.0	81.2	79.8	80.4	78.7	79.6	77.6	78.9
7.5°	84.1	82.1	83.0	80.6	81.7	79.1	80.4	77.6	79.4	76.3	78.5
10°	84.9	82.1	83.7	81.0	82.3	79.4	81.0	77.6	79.8	76.1	78.1
12.5°	86.2	83.2	84.5	81.5	83.2	79.8	81.5	78.1	80.2	76.1	78.5
15°	87.1	84.1	85.3	82.3	83.7	79.8	81.9	77.8	80.2	75.9	78.5
17.5°	86.8	84.1	85.3	81.9	83.4	79.6	81.7	77.6	79.8	75.3	78.1
20°	86.0	83.7	84.5	81.5	82.8	78.9	80.8	76.7	79.1	74.6	77.4
22.5°	84.9	82.6	83.7	80.8	82.1	78.3	80.0	76.3	78.7	74.2	76.7
25°	84.3	82.3	83.0	80.2	81.9	78.5	80.2	76.1	78.7	74.2	77.2
27.5°	84.1	82.3	83.7	81.0	82.6	79.6	81.2	77.6	79.8	75.1	78.1
30°	85.3	83.9	84.9	82.8	84.1	81.0	82.8	79.4	81.5	77.0	80.4
32.5°	86.8	85.3	86.4	84.5	86.4	83.4	85.5	82.1	84.7	80.2	83.4
35°	90.0	88.4	89.8	87.7	89.8	87.5	89.8	86.2	89.4	84.9	88.4
37.5°	98.4	93.7	95.2	92.9	95.0	92.0	96.1	92.4	96.1	91.8	96.5
40°	111.7	103.3	104.9	99.9	103.1	98.6	103.5	100.8	105.7	100.4	106.4
42.5°	129.1	121.1	119.7	112.1	115.0	109.6	114.5	109.6	116.2	111.1	118.6
45°	145.0	136.6	134.2	126.9	128.9	121.8	128.0	121.1	129.9	124.0	133.4
47.5°	158.0	148.1	146.3	137.9	141.3	134.6	142.4	135.1	145.8	139.8	150.8
50°	170.0	157.8	157.4	148.4	154.2	147.5	158.5	153.5	164.1	158.0	170.9
52.5°	183.7	168.4	170.4	162.3	171.5	165.9	178.6	171.5	185.3	178.8	193.0
55°	198.4	182.1	187.6	182.7	193.6	190.0	200.7	194.3	207.8	201.3	216.4
57.5°	214.4	200.5	210.3	208.0	217.7	213.2	225.2	219.3	232.8	227.5	242.5
60°	235.5	226.2	235.9	235.7	244.0	243.8	251.5	248.1	261.0	258.6	272.3
62.5°	262.7	255.4	265.7	262.9	272.9	271.3	280.7	280.7	289.9	293.1	306.9
65°	299.3	289.7	301.9	297.7	307.7	308.1	314.1	315.2	326.3	330.0	341.8
67.5°	349.1	338.0	347.6	339.4	351.0	350.4	355.5	357.6	359.2	368.0	369.3
70°	420.7	404.0	412.8	401.6	403.8	405.3	395.6	402.7	385.6	399.5	380.6
72.5°	498.1	479.0	463.8	452.7	430.6	427.4	399.3	405.3	368.8	380.8	342.7
73°	502.2	483.8	463.2	451.6	425.4	422.0	392.0	397.1	356.8	368.2	328.1
75°	456.5	461.5	411.9	416.6	371.1	376.5	329.6	335.6	286.0	294.6	243.0
77.5°	307.7	324.2	268.7	289.5	233.1	253.9	190.2	192.1	140.2	131.0	89.0
80°	152.4	166.6	118.2	129.1	86.6	85.1	51.9	43.1	36.6	37.5	38.6
82.5°	44.0	49.5	30.7	30.5	21.7	20.6	20.6	21.9	22.3	24.9	24.2
85°	8.4	10.1	8.8	11.8	10.5	11.6	10.7	12.5	11.6	14.3	12.5
87.5°	0.2	0.0	0.2	0.6	0.6	1.5	1.0	1.7	1.7	3.0	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P227950

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

**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	78.9	80.0	79.6	79.1	78.7	78.5	77.6	78.1	77.0	77.8	77.0
5°	77.2	78.5	77.8	77.0	76.5	76.1	74.6	75.7	74.0	75.5	74.2
7.5°	75.3	77.4	76.7	75.9	75.1	74.6	71.6	74.0	71.4	73.6	71.4
10°	74.6	77.0	76.1	75.1	74.2	73.8	70.1	72.9	70.1	72.5	69.7
12.5°	74.2	77.0	75.7	74.6	73.8	73.1	69.0	72.5	68.8	72.2	69.0
15°	73.8	77.0	75.3	74.0	73.1	72.5	68.2	72.0	67.9	71.8	68.2
17.5°	73.3	76.3	74.9	73.3	72.5	72.0	67.3	71.4	67.1	71.4	67.7
20°	72.7	75.7	74.0	72.5	71.6	71.0	66.3	70.6	66.1	70.4	66.3
22.5°	71.8	75.1	73.6	72.0	71.2	70.1	65.0	69.5	64.8	69.0	65.2
25°	72.0	75.5	73.6	72.0	70.8	69.7	64.1	69.0	63.7	67.9	63.7
27.5°	73.1	76.1	74.2	72.9	71.2	69.9	64.1	68.6	63.2	66.9	62.4
30°	75.3	78.3	76.5	74.6	73.1	71.4	65.2	68.8	63.2	65.6	61.1
32.5°	78.9	81.7	80.0	78.5	76.7	74.2	67.3	69.9	63.7	64.8	60.0
35°	83.7	87.1	86.2	85.1	83.0	78.5	71.0	71.4	64.5	63.9	58.5
37.5°	91.3	96.1	95.9	95.6	93.3	85.1	75.1	74.4	65.4	63.2	56.6
40°	101.4	107.0	108.5	110.0	105.1	93.1	79.8	77.4	65.9	62.0	53.6
42.5°	113.2	120.7	125.2	128.0	119.0	101.9	85.1	80.8	65.9	60.0	50.2
45°	127.8	136.6	145.2	148.1	134.4	111.3	90.7	83.7	65.0	57.1	45.6
47.5°	145.6	155.9	167.7	169.2	151.2	121.3	94.5	85.5	62.2	53.0	41.6
50°	165.3	177.8	195.2	194.1	169.0	131.9	97.2	86.8	57.3	48.3	36.6
52.5°	187.4	203.1	227.7	222.8	190.7	145.0	99.5	88.6	51.2	42.7	31.7
55°	215.0	233.7	264.6	254.1	214.6	159.3	102.9	88.8	43.3	36.0	28.1
57.5°	244.9	264.8	304.2	285.2	237.1	170.4	101.4	81.9	35.4	30.5	25.3
60°	280.7	304.9	343.9	314.1	256.0	174.3	90.9	67.5	30.3	27.4	24.0
62.5°	320.8	344.8	376.5	334.3	266.8	167.9	67.5	46.7	26.0	24.4	22.1
65°	363.5	386.2	392.2	336.0	259.6	139.6	41.8	30.7	22.5	21.9	20.4
67.5°	402.7	404.9	377.4	308.1	225.4	97.4	28.5	24.4	20.8	20.6	19.7
70°	412.8	375.7	313.7	240.0	162.8	57.9	23.1	21.3	19.9	19.9	19.3
72.5°	344.8	286.0	209.7	145.4	88.8	30.9	19.7	19.3	18.8	18.8	18.4
73°	323.4	263.5	187.8	126.9	75.1	27.6	19.3	18.8	18.6	18.4	18.2
75°	214.8	165.5	106.6	64.3	35.0	19.9	17.2	17.2	17.0	17.2	17.0
77.5°	82.8	62.4	41.1	27.6	19.9	15.7	14.6	14.8	14.6	15.0	14.8
80°	36.4	36.0	27.2	19.5	14.6	11.8	11.8	11.8	12.0	12.2	12.2
82.5°	24.9	21.0	16.1	12.0	8.8	8.6	8.8	8.8	9.0	9.2	9.0
85°	13.7	11.6	8.6	5.3	4.7	5.8	5.8	5.8	5.6	5.6	5.3
87.5°	4.3	3.2	2.4	0.6	1.0	1.0	1.5	1.3	1.3	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227950

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

**CANDELA DISTRIBUTION (continued):**

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
2.5°	77.8	77.2	77.8	76.7	77.6	76.7	77.4	77.4	77.2	77.2	77.2
5°	75.3	74.2	75.3	74.6	75.3	74.4	75.1	75.3	75.5	76.1	75.9
7.5°	73.3	71.2	73.6	71.4	73.3	71.4	73.1	73.3	74.0	74.9	75.5
10°	72.5	69.7	72.5	69.9	72.2	70.1	72.2	72.5	73.1	74.2	75.3
12.5°	72.0	69.0	72.0	69.5	72.0	69.9	72.0	72.7	73.1	74.0	75.3
15°	71.6	68.6	72.0	69.3	72.0	69.9	72.2	72.7	73.3	74.2	75.3
17.5°	71.4	67.9	71.6	69.0	71.6	69.5	72.0	72.0	72.9	74.0	74.6
20°	70.6	67.3	70.6	67.9	70.6	68.6	70.8	70.8	71.6	72.0	73.1
22.5°	69.3	65.9	68.8	66.5	68.8	66.9	68.6	68.6	69.3	69.9	70.6
25°	67.3	64.1	66.7	64.5	66.3	64.5	65.9	65.6	66.1	66.5	66.9
27.5°	65.2	62.0	64.1	61.8	62.8	61.1	62.0	61.6	61.8	62.0	62.2
30°	62.8	59.6	60.7	58.5	58.7	57.1	57.5	56.8	56.6	56.4	56.0
32.5°	60.3	56.8	56.8	54.7	54.2	52.8	52.8	51.9	51.2	50.4	49.5
35°	57.1	54.0	52.6	50.8	49.9	48.5	48.3	47.2	45.6	44.2	43.3
37.5°	53.8	50.4	48.3	46.5	45.6	44.6	44.4	43.6	41.8	40.1	38.8
40°	49.5	46.1	43.8	43.1	42.5	41.6	41.8	40.7	39.1	37.1	36.0
42.5°	45.2	42.2	40.3	40.1	39.7	39.5	39.7	38.8	36.9	35.2	33.9
45°	41.6	38.6	36.6	36.4	36.2	37.1	37.3	37.1	35.0	33.2	31.5
47.5°	38.0	34.3	33.0	32.6	32.8	34.1	34.5	35.2	33.2	31.3	28.9
50°	33.7	30.3	29.8	29.4	29.6	30.7	31.7	33.0	31.3	28.5	25.3
52.5°	29.8	26.8	27.0	26.6	27.0	27.9	28.7	30.9	28.7	26.0	24.4
55°	26.8	24.4	24.9	24.4	24.9	26.0	26.6	28.3	28.3	27.6	26.4
57.5°	24.7	22.9	23.3	22.9	23.6	24.4	25.1	28.7	30.9	29.2	26.6
60°	23.3	21.9	22.1	21.7	22.1	23.3	24.7	28.9	32.4	28.9	27.0
62.5°	21.5	20.2	19.9	19.9	20.4	22.5	23.1	27.0	31.9	28.7	27.2
65°	20.2	19.1	18.8	18.6	19.1	20.6	21.3	25.1	30.9	27.2	24.7
67.5°	19.5	18.6	18.2	17.8	18.2	19.5	20.2	23.6	29.2	26.0	23.1
70°	18.8	18.0	17.8	17.4	17.6	18.4	19.3	21.7	27.6	24.4	21.7
72.5°	18.0	17.2	17.0	16.3	16.5	17.4	17.8	20.4	25.8	22.9	20.2
73°	17.8	17.0	16.8	16.1	16.3	17.0	17.4	19.9	25.3	22.7	19.9
75°	16.8	15.9	15.7	15.2	15.4	15.4	15.9	18.2	24.0	21.5	18.6
77.5°	14.8	14.1	13.9	13.5	13.3	13.1	13.7	16.1	21.9	19.3	15.0
80°	12.2	11.6	11.4	10.5	10.5	10.5	11.4	13.7	16.3	13.9	11.6
82.5°	9.0	8.6	8.6	8.0	7.7	7.5	8.2	9.4	12.9	10.9	9.0
85°	5.3	5.1	5.3	4.7	4.9	4.7	5.3	6.6	7.1	5.6	4.3
87.5°	1.3	1.5	1.5	1.5	1.3	1.3	1.0	0.8	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P227950

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

**CANDELA DISTRIBUTION (continued):**

	175°	180°
0°	79.8	79.8
2.5°	77.0	76.7
5°	75.9	75.9
7.5°	75.5	75.5
10°	75.7	75.7
12.5°	75.7	76.1
15°	76.3	76.1
17.5°	75.7	75.7
20°	74.0	74.4
22.5°	71.6	71.6
25°	67.7	67.9
27.5°	62.6	63.0
30°	56.2	56.6
32.5°	48.9	49.3
35°	43.1	43.3
37.5°	39.3	39.3
40°	36.0	36.0
42.5°	33.0	32.8
45°	30.0	29.6
47.5°	27.0	26.8
50°	24.4	24.4
52.5°	24.9	24.9
55°	26.8	26.8
57.5°	27.0	26.8
60°	29.4	29.2
62.5°	30.7	31.3
65°	26.8	26.0
67.5°	25.5	24.2
70°	22.9	21.0
72.5°	20.4	19.3
73°	19.7	18.8
75°	17.6	17.2
77.5°	13.3	13.1
80°	11.2	10.9
82.5°	7.5	7.1
85°	3.2	3.0
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)