

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: P227951

Luminaire Tested: **ISS-AF-XXX-LED-E1-T4W-8030-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227951
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-8030-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) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 518 lumens
Efficiency: N/A
Efficacy: 39.8 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

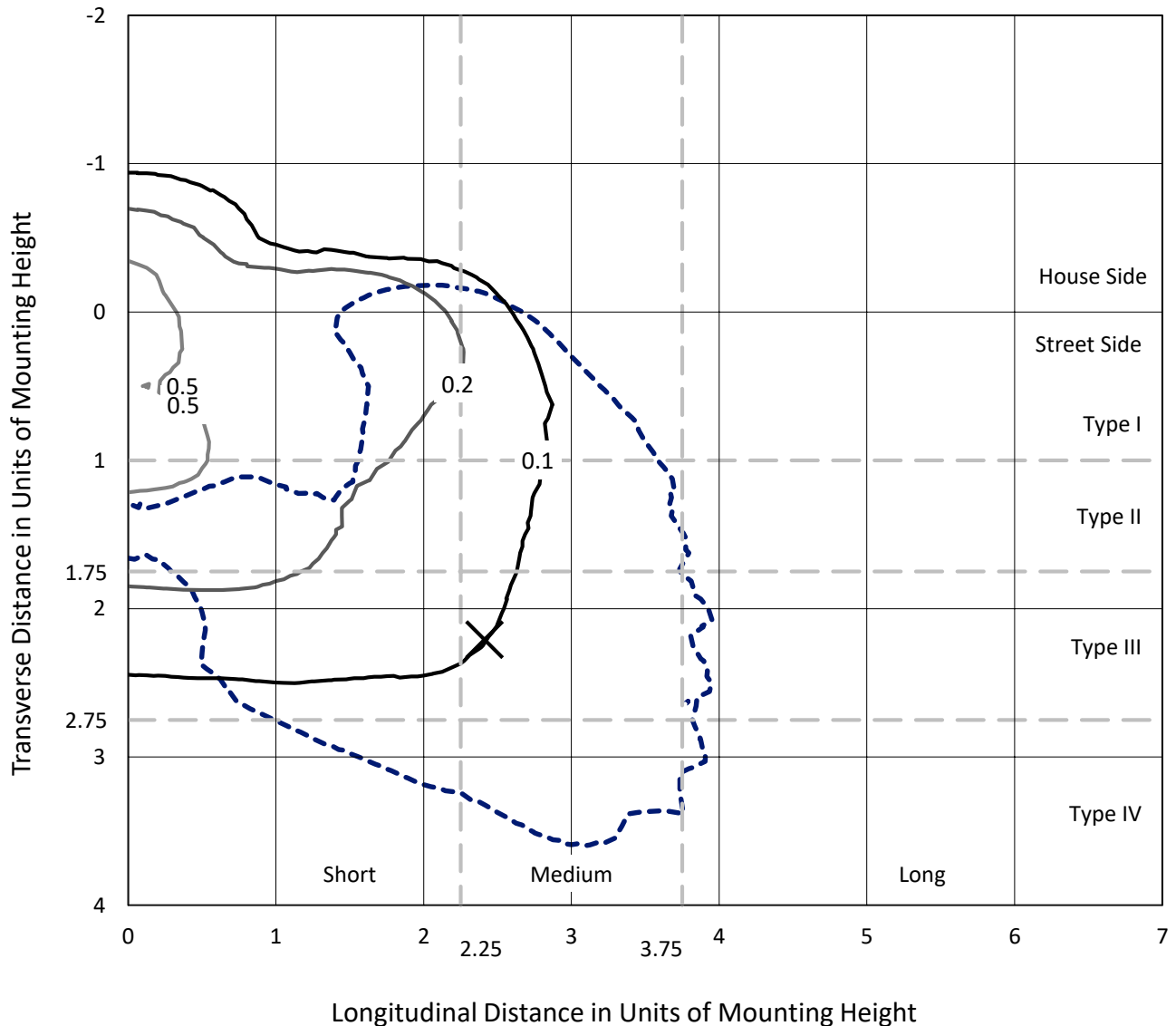
Input Watts (W): 13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P227951
 CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

Iso-Footcandle Lines of Horizontal Illumination

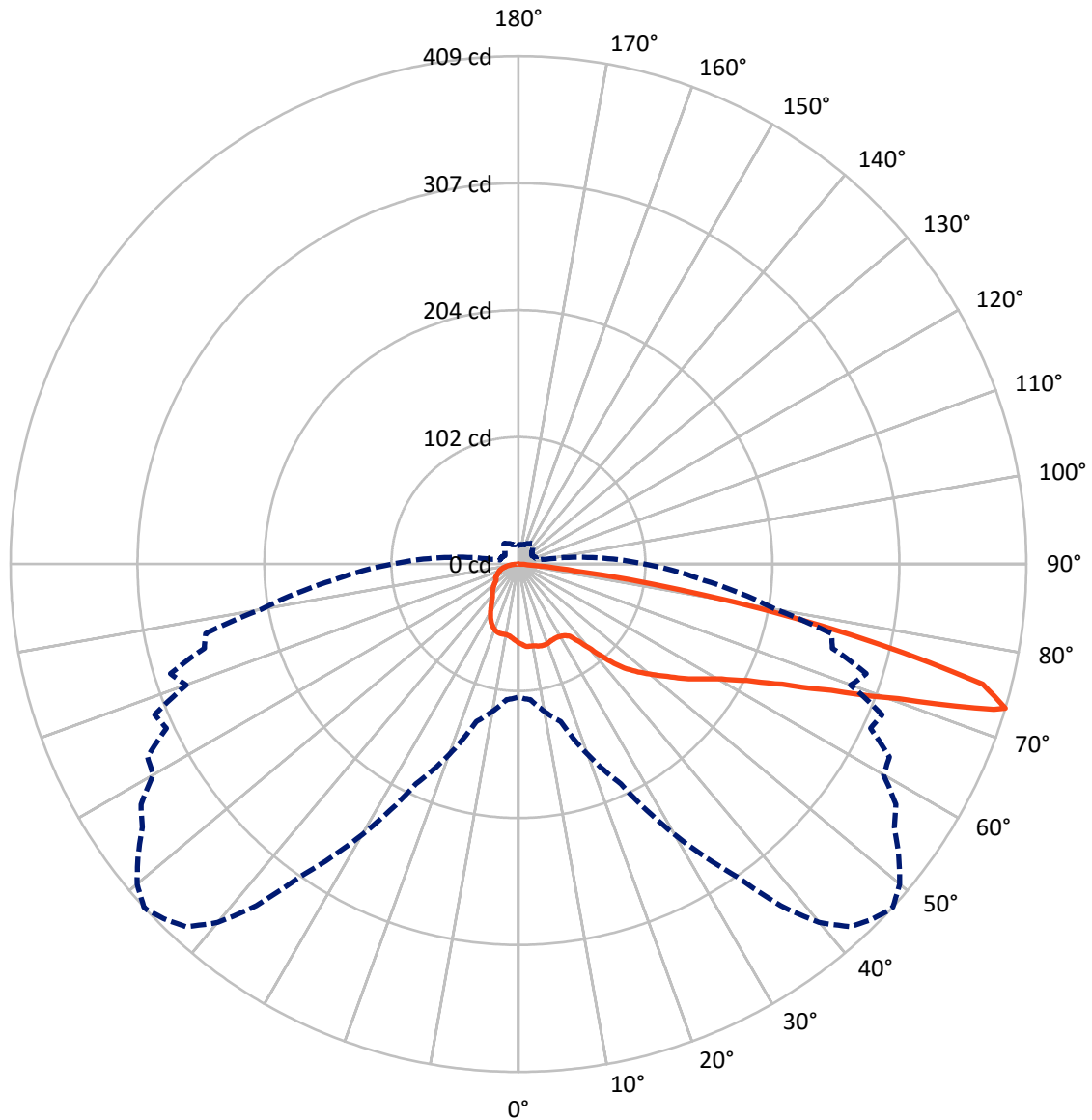
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.7 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P227951
CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

Luminous Intensity Polar Plot



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

REPORT NUMBER: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	103.5	0.0	103.5
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	414.5	0.0	414.5
	% Fixture	80.0	0.0	80.0
Total	Lumens	518.0	0.0	518.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.1	1.2
10°-20°	18.0	3.5
20°-30°	27.7	5.3
30°-40°	40.4	7.8
40°-50°	66.6	12.9
50°-60°	104.3	20.1
60°-70°	141.5	27.3
70°-80°	104.8	20.2
80°-90°	8.5	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°	518.0	100.0
0°-180°	518.0	100.0



REPORT NUMBER: P227951

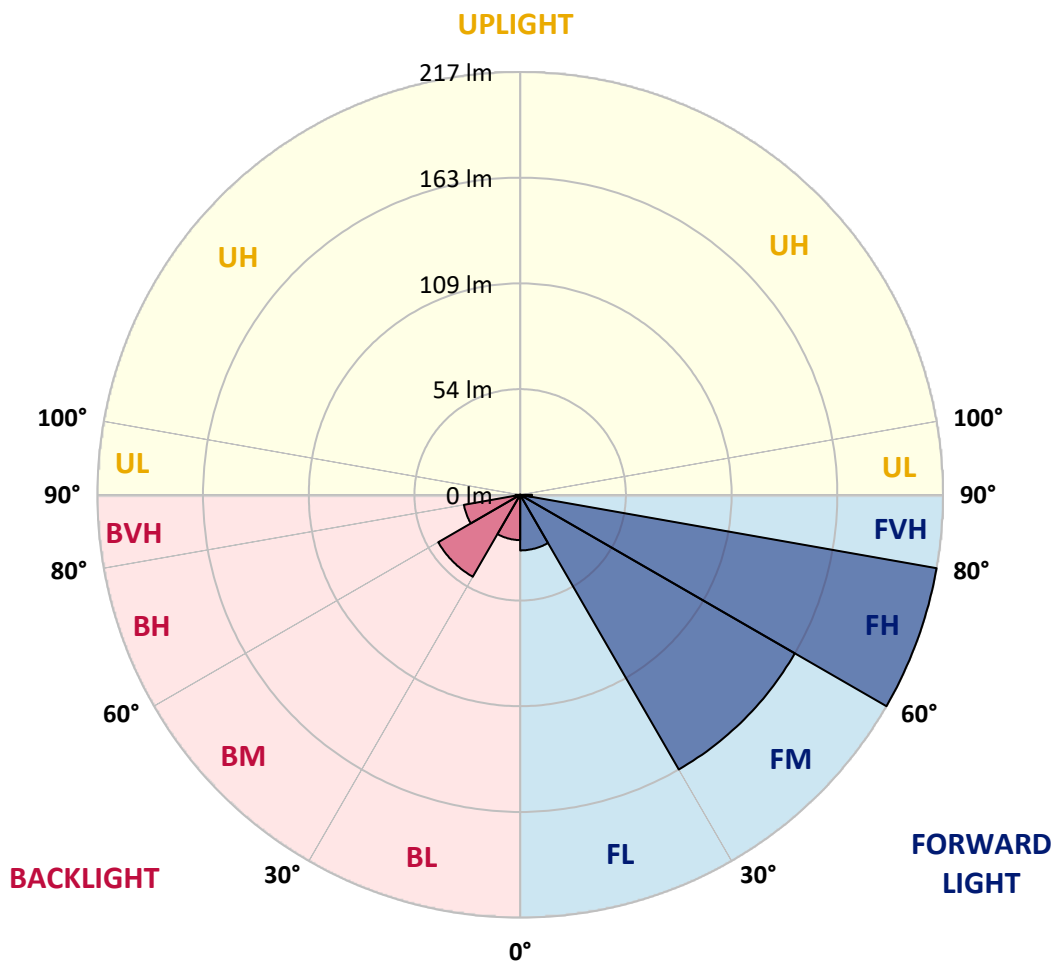
CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	28.6	5.5			
FM	(30°-60°)	162.8	31.4			
FH	(60°-80°)	217.0	41.9			G0/660
FVH	(80°-90°)	6.1	1.2			G0/10
BL	(0°-30°)	23.2	4.5	B0/110		
BM	(30°-60°)	48.6	9.4	B0/220		
BH	(60°-80°)	29.3	5.7	B0/110		G0/110
BVH	(80°-90°)	2.4	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: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
2.5°	67.4	67.2	66.7	66.5	66.0	65.7	65.5	65.3	65.8	65.5	65.0
5°	71.6	71.3	70.6	69.6	68.6	67.9	67.7	67.4	67.4	67.0	66.7
7.5°	74.7	74.6	73.5	72.0	70.3	69.1	68.4	67.9	68.1	67.7	66.7
10°	77.6	77.3	75.6	73.7	71.1	69.8	68.9	68.1	68.7	68.2	66.9
12.5°	79.9	79.5	77.1	74.7	71.8	70.3	69.4	68.9	69.6	69.3	67.7
15°	81.1	80.7	78.3	75.4	72.3	70.6	70.3	69.9	70.5	69.8	68.4
17.5°	80.4	80.4	78.1	75.1	72.5	70.8	70.3	69.9	70.6	69.9	68.4
20°	77.8	78.1	76.6	73.4	71.5	70.3	69.8	69.1	69.8	69.1	68.1
22.5°	74.6	74.9	74.0	71.1	69.8	68.9	68.7	68.1	68.6	68.1	67.0
25°	71.6	71.6	71.3	68.7	68.6	67.9	68.1	67.7	68.1	67.4	66.7
27.5°	71.8	71.8	70.5	67.9	67.7	67.7	67.7	67.7	67.9	67.4	66.7
30°	81.9	82.2	78.3	71.1	68.6	68.2	68.4	68.2	68.4	68.2	67.4
32.5°	97.1	97.1	93.4	82.2	73.2	71.0	70.1	69.9	69.4	69.3	68.6
35°	112.2	112.0	108.2	95.9	84.5	80.2	77.5	74.9	73.7	72.5	71.3
37.5°	124.8	124.3	123.8	109.8	97.8	92.9	89.6	85.8	83.4	81.4	78.7
40°	136.6	137.5	139.4	122.6	111.1	106.5	103.3	98.5	96.1	93.5	90.3
42.5°	152.9	154.1	154.2	136.5	123.3	120.2	117.6	114.1	111.5	108.4	105.5
45°	168.6	168.8	169.3	151.3	138.2	134.2	132.4	128.9	125.7	121.7	119.4
47.5°	179.4	178.9	181.1	168.4	155.6	151.2	148.4	143.3	138.3	133.4	129.8
50°	192.5	192.0	192.0	187.9	175.8	170.7	165.9	156.3	151.0	144.8	139.7
52.5°	204.2	202.3	203.5	205.9	197.0	190.5	182.1	171.3	164.3	156.8	150.3
55°	220.1	210.3	213.1	221.4	218.0	207.9	196.8	185.4	177.3	168.8	162.8
57.5°	214.6	207.9	216.0	230.7	230.5	221.1	211.7	197.7	189.6	181.6	174.2
60°	194.9	198.4	215.8	237.0	237.9	230.5	222.8	209.8	203.5	195.1	187.8
62.5°	179.7	184.7	208.6	236.5	246.2	239.4	233.1	225.4	220.9	213.9	206.4
65°	178.9	181.8	205.0	236.0	258.0	254.4	251.5	247.9	247.1	242.0	233.2
67.5°	187.1	189.8	211.2	249.1	275.5	273.9	278.2	277.5	281.3	278.7	271.5
70°	171.0	172.5	198.9	253.8	315.3	322.2	331.7	331.2	339.3	333.1	324.7
72.5°	120.0	123.1	146.4	209.6	316.2	352.8	375.0	393.8	402.5	404.1	400.1
73°	107.2	109.6	131.2	195.3	307.6	346.6	376.5	395.9	403.6	408.3	408.7
75°	37.3	38.5	57.3	118.3	245.9	302.5	341.0	358.4	356.5	370.5	385.9
77.5°	12.0	12.1	14.9	30.6	118.7	187.8	230.7	246.7	237.5	252.7	273.3
80°	7.4	7.7	9.7	13.9	31.1	56.9	96.4	120.7	115.8	130.0	151.8
82.5°	4.4	4.6	6.0	8.5	12.5	13.9	18.1	24.6	30.3	36.4	47.7
85°	2.1	2.2	2.9	3.9	5.1	5.3	5.1	4.8	5.5	6.3	7.4
87.5°	0.0	0.0	0.2	0.3	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: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
2.5°	65.5	65.0	65.0	64.3	64.6	64.0	64.3	63.6	64.0	63.1	63.6
5°	66.5	65.7	65.7	64.6	64.8	63.6	64.1	62.8	63.4	61.9	62.9
7.5°	67.0	65.5	66.2	64.3	65.1	63.1	64.1	61.9	63.3	60.9	62.6
10°	67.7	65.5	66.7	64.6	65.7	63.3	64.6	61.9	63.6	60.7	62.2
12.5°	68.7	66.3	67.4	65.0	66.3	63.6	65.0	62.2	64.0	60.7	62.6
15°	69.4	67.0	68.1	65.7	66.7	63.6	65.3	62.1	64.0	60.5	62.6
17.5°	69.3	67.0	68.1	65.3	66.5	63.4	65.1	61.9	63.6	60.0	62.2
20°	68.6	66.7	67.4	65.0	66.0	62.9	64.5	61.2	63.1	59.5	61.7
22.5°	67.7	65.8	66.7	64.5	65.5	62.4	63.8	60.9	62.8	59.2	61.2
25°	67.2	65.7	66.2	64.0	65.3	62.6	64.0	60.7	62.8	59.2	61.6
27.5°	67.0	65.7	66.7	64.6	65.8	63.4	64.8	61.9	63.6	59.8	62.2
30°	68.1	66.9	67.7	66.0	67.0	64.6	66.0	63.3	65.0	61.4	64.1
32.5°	69.3	68.1	68.9	67.4	68.9	66.5	68.2	65.5	67.5	64.0	66.5
35°	71.8	70.5	71.6	69.9	71.6	69.8	71.6	68.7	71.3	67.7	70.5
37.5°	78.5	74.7	75.9	74.0	75.8	73.4	76.6	73.7	76.6	73.2	76.9
40°	89.1	82.4	83.6	79.7	82.2	78.7	82.6	80.4	84.3	80.0	84.8
42.5°	102.9	96.6	95.4	89.4	91.7	87.4	91.3	87.4	92.7	88.6	94.6
45°	115.6	108.9	107.0	101.2	102.8	97.1	102.1	96.6	103.6	98.8	106.4
47.5°	126.0	118.2	116.6	110.0	112.7	107.4	113.5	107.7	116.3	111.5	120.2
50°	135.6	125.9	125.5	118.3	122.9	117.6	126.4	122.4	130.8	126.0	136.3
52.5°	146.5	134.2	135.9	129.4	136.8	132.4	142.4	136.8	147.7	142.6	153.9
55°	158.2	145.2	149.6	145.7	154.4	151.5	160.1	154.9	165.7	160.6	172.5
57.5°	171.0	159.9	167.7	165.9	173.6	170.0	179.5	174.9	185.7	181.4	193.4
60°	187.8	180.4	188.1	187.9	194.6	194.4	200.6	197.8	208.1	206.2	217.2
62.5°	209.5	203.7	211.9	209.6	217.7	216.3	223.8	223.8	231.2	233.8	244.7
65°	238.7	231.0	240.8	237.3	245.4	245.7	250.5	251.4	260.3	263.2	272.6
67.5°	278.4	269.5	277.2	270.7	279.9	279.4	283.5	285.2	286.4	293.4	294.5
70°	335.5	322.2	329.2	320.3	322.0	323.2	315.5	321.1	307.5	318.6	303.5
72.5°	397.2	382.0	369.9	361.0	343.4	340.8	318.4	323.2	294.1	303.7	273.3
73°	400.5	385.8	369.4	360.1	339.3	336.5	312.6	316.7	284.5	293.6	261.6
75°	364.1	368.0	328.5	332.2	296.0	300.3	262.8	267.6	228.1	234.9	193.7
77.5°	245.4	258.5	214.3	230.8	185.9	202.5	151.7	153.2	111.8	104.5	71.0
80°	121.6	132.9	94.2	102.9	69.1	67.9	41.4	34.4	29.2	29.9	30.8
82.5°	35.1	39.5	24.5	24.3	17.3	16.4	16.4	17.4	17.8	19.8	19.3
85°	6.7	8.0	7.0	9.4	8.4	9.2	8.5	9.9	9.2	11.5	9.9
87.5°	0.2	0.0	0.2	0.5	0.5	1.2	0.9	1.4	1.4	2.4	2.2
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: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

CANDELA DISTRIBUTION (continued):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
2.5°	62.9	63.8	63.4	63.1	62.8	62.6	61.9	62.2	61.4	62.1	61.4
5°	61.6	62.6	62.1	61.4	61.0	60.7	59.5	60.4	59.0	60.2	59.2
7.5°	60.0	61.7	61.2	60.5	59.8	59.5	57.1	59.0	56.9	58.7	56.9
10°	59.5	61.4	60.7	59.8	59.2	58.8	55.9	58.1	55.9	57.8	55.6
12.5°	59.2	61.4	60.4	59.5	58.8	58.3	55.1	57.8	54.9	57.6	55.1
15°	58.8	61.4	60.0	59.0	58.3	57.8	54.4	57.5	54.2	57.3	54.4
17.5°	58.5	60.9	59.7	58.5	57.8	57.5	53.7	56.9	53.5	56.9	54.0
20°	58.0	60.4	59.0	57.8	57.1	56.6	52.8	56.3	52.7	56.1	52.8
22.5°	57.3	59.8	58.7	57.5	56.8	55.9	51.8	55.4	51.6	55.1	52.0
25°	57.5	60.2	58.7	57.5	56.4	55.6	51.1	55.1	50.8	54.2	50.8
27.5°	58.3	60.7	59.2	58.1	56.8	55.7	51.1	54.7	50.4	53.4	49.8
30°	60.0	62.4	61.0	59.5	58.3	56.9	52.0	54.9	50.4	52.3	48.7
32.5°	62.9	65.1	63.8	62.6	61.2	59.2	53.7	55.7	50.8	51.6	47.9
35°	66.7	69.4	68.7	67.9	66.2	62.6	56.6	56.9	51.5	51.0	46.7
37.5°	72.8	76.6	76.4	76.3	74.4	67.9	59.8	59.3	52.2	50.4	45.1
40°	80.9	85.3	86.5	87.7	83.8	74.2	63.6	61.7	52.5	49.4	42.7
42.5°	90.3	96.3	99.9	102.1	94.9	81.2	67.9	64.5	52.5	47.9	40.0
45°	101.9	108.9	115.8	118.2	107.2	88.7	72.3	66.7	51.8	45.5	36.4
47.5°	116.1	124.3	133.7	134.9	120.6	96.8	75.4	68.2	49.6	42.2	33.2
50°	131.8	141.8	155.6	154.8	134.7	105.2	77.5	69.3	45.7	38.5	29.2
52.5°	149.5	161.9	181.6	177.7	152.0	115.6	79.3	70.6	40.9	34.0	25.3
55°	171.5	186.4	211.0	202.6	171.2	127.0	82.1	70.8	34.5	28.7	22.4
57.5°	195.3	211.2	242.6	227.4	189.1	135.9	80.9	65.3	28.2	24.3	20.2
60°	223.8	243.2	274.3	250.5	204.2	139.0	72.5	53.9	24.1	21.9	19.2
62.5°	255.8	275.0	300.3	266.6	212.7	133.9	53.9	37.3	20.7	19.5	17.6
65°	289.8	308.0	312.8	268.0	207.1	111.3	33.3	24.5	18.0	17.4	16.2
67.5°	321.1	322.8	301.0	245.7	179.7	77.6	22.7	19.5	16.6	16.4	15.7
70°	329.2	299.6	250.2	191.3	129.8	46.2	18.5	16.9	15.9	15.9	15.4
72.5°	275.0	228.1	167.2	115.9	70.8	24.6	15.7	15.4	15.0	15.0	14.7
73°	257.9	210.2	149.8	101.2	59.8	22.1	15.4	15.0	14.9	14.7	14.5
75°	171.3	132.0	85.0	51.3	27.9	15.9	13.7	13.7	13.5	13.7	13.5
77.5°	66.0	49.8	32.8	22.1	15.9	12.5	11.6	11.8	11.6	12.0	11.8
80°	29.1	28.7	21.7	15.6	11.6	9.4	9.4	9.4	9.6	9.7	9.7
82.5°	19.8	16.8	12.8	9.6	7.0	6.8	7.0	7.0	7.2	7.4	7.2
85°	10.9	9.2	6.8	4.3	3.8	4.6	4.6	4.6	4.4	4.4	4.3
87.5°	3.4	2.6	1.9	0.5	0.9	0.9	1.2	1.0	1.0	1.2	1.2
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: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
2.5°	62.1	61.6	62.1	61.2	61.9	61.2	61.7	61.7	61.6	61.6	61.6
5°	60.0	59.2	60.0	59.5	60.0	59.3	59.8	60.0	60.2	60.7	60.5
7.5°	58.5	56.8	58.7	56.9	58.5	56.9	58.3	58.5	59.0	59.7	60.2
10°	57.8	55.6	57.8	55.7	57.6	55.9	57.6	57.8	58.3	59.2	60.0
12.5°	57.5	55.1	57.5	55.4	57.5	55.7	57.5	58.0	58.3	59.0	60.0
15°	57.1	54.7	57.5	55.2	57.5	55.7	57.6	58.0	58.5	59.2	60.0
17.5°	56.9	54.2	57.1	55.1	57.1	55.4	57.5	57.5	58.1	59.0	59.5
20°	56.3	53.7	56.3	54.2	56.3	54.7	56.4	56.4	57.1	57.5	58.3
22.5°	55.2	52.5	54.9	53.0	54.9	53.4	54.7	54.7	55.2	55.7	56.3
25°	53.7	51.1	53.2	51.5	52.8	51.5	52.5	52.3	52.7	53.0	53.4
27.5°	52.0	49.4	51.1	49.2	50.1	48.7	49.4	49.1	49.2	49.4	49.6
30°	50.1	47.5	48.4	46.7	46.9	45.5	45.8	45.3	45.1	45.0	44.6
32.5°	48.0	45.3	45.3	43.6	43.3	42.1	42.1	41.4	40.9	40.2	39.5
35°	45.5	43.1	41.9	40.5	39.8	38.6	38.5	37.6	36.4	35.2	34.5
37.5°	42.9	40.2	38.5	37.1	36.4	35.6	35.4	34.7	33.3	32.0	31.0
40°	39.5	36.8	34.9	34.4	33.9	33.2	33.3	32.5	31.1	29.6	28.7
42.5°	36.1	33.7	32.1	32.0	31.6	31.5	31.6	31.0	29.4	28.0	27.0
45°	33.2	30.8	29.2	29.1	28.9	29.6	29.8	29.6	27.9	26.5	25.1
47.5°	30.3	27.4	26.3	26.0	26.2	27.2	27.5	28.0	26.5	25.0	23.1
50°	26.8	24.1	23.8	23.4	23.6	24.5	25.3	26.3	25.0	22.7	20.2
52.5°	23.8	21.4	21.5	21.2	21.5	22.2	22.9	24.6	22.9	20.7	19.5
55°	21.4	19.5	19.8	19.5	19.8	20.7	21.2	22.6	22.6	22.1	21.0
57.5°	19.7	18.3	18.6	18.3	18.8	19.5	20.0	22.9	24.6	23.3	21.2
60°	18.6	17.4	17.6	17.3	17.6	18.6	19.7	23.1	25.8	23.1	21.5
62.5°	17.1	16.1	15.9	15.9	16.2	18.0	18.5	21.5	25.5	22.9	21.7
65°	16.1	15.2	15.0	14.9	15.2	16.4	16.9	20.0	24.6	21.7	19.7
67.5°	15.6	14.9	14.5	14.2	14.5	15.6	16.1	18.8	23.3	20.7	18.5
70°	15.0	14.4	14.2	13.9	14.0	14.7	15.4	17.3	22.1	19.5	17.3
72.5°	14.4	13.7	13.5	13.0	13.2	13.9	14.2	16.2	20.5	18.3	16.1
73°	14.2	13.5	13.3	12.8	13.0	13.5	13.9	15.9	20.2	18.1	15.9
75°	13.3	12.7	12.5	12.1	12.3	12.3	12.7	14.5	19.2	17.1	14.9
77.5°	11.8	11.3	11.1	10.8	10.6	10.4	10.9	12.8	17.4	15.4	12.0
80°	9.7	9.2	9.1	8.4	8.4	8.4	9.1	10.9	13.0	11.1	9.2
82.5°	7.2	6.8	6.8	6.3	6.2	6.0	6.5	7.5	10.3	8.7	7.2
85°	4.3	4.1	4.3	3.8	3.9	3.8	4.3	5.3	5.6	4.4	3.4
87.5°	1.0	1.2	1.2	1.2	1.0	1.0	0.9	0.7	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: P227951

CATALOG NUMBER: ISS-AF-XXX-LED-E1-T4W-8030-XXB

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	63.6	63.6
2.5°	61.4	61.2
5°	60.5	60.5
7.5°	60.2	60.2
10°	60.4	60.4
12.5°	60.4	60.7
15°	60.9	60.7
17.5°	60.4	60.4
20°	59.0	59.3
22.5°	57.1	57.1
25°	54.0	54.2
27.5°	49.9	50.3
30°	44.8	45.1
32.5°	39.0	39.3
35°	34.4	34.5
37.5°	31.3	31.3
40°	28.7	28.7
42.5°	26.3	26.2
45°	23.9	23.6
47.5°	21.5	21.4
50°	19.5	19.5
52.5°	19.8	19.8
55°	21.4	21.4
57.5°	21.5	21.4
60°	23.4	23.3
62.5°	24.5	25.0
65°	21.4	20.7
67.5°	20.3	19.3
70°	18.3	16.8
72.5°	16.2	15.4
73°	15.7	15.0
75°	14.0	13.7
77.5°	10.6	10.4
80°	8.9	8.7
82.5°	6.0	5.6
85°	2.6	2.4
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)