

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: P227762

Luminaire Tested: **ISC-AF-XXX-LED-E1-T3-7030-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227762
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29759)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-AF-XXX-LED-E1-T3-7030-XXB
Description: IMPACT ELITE LED CYLINDER LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 561 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B0 - U0 - G0

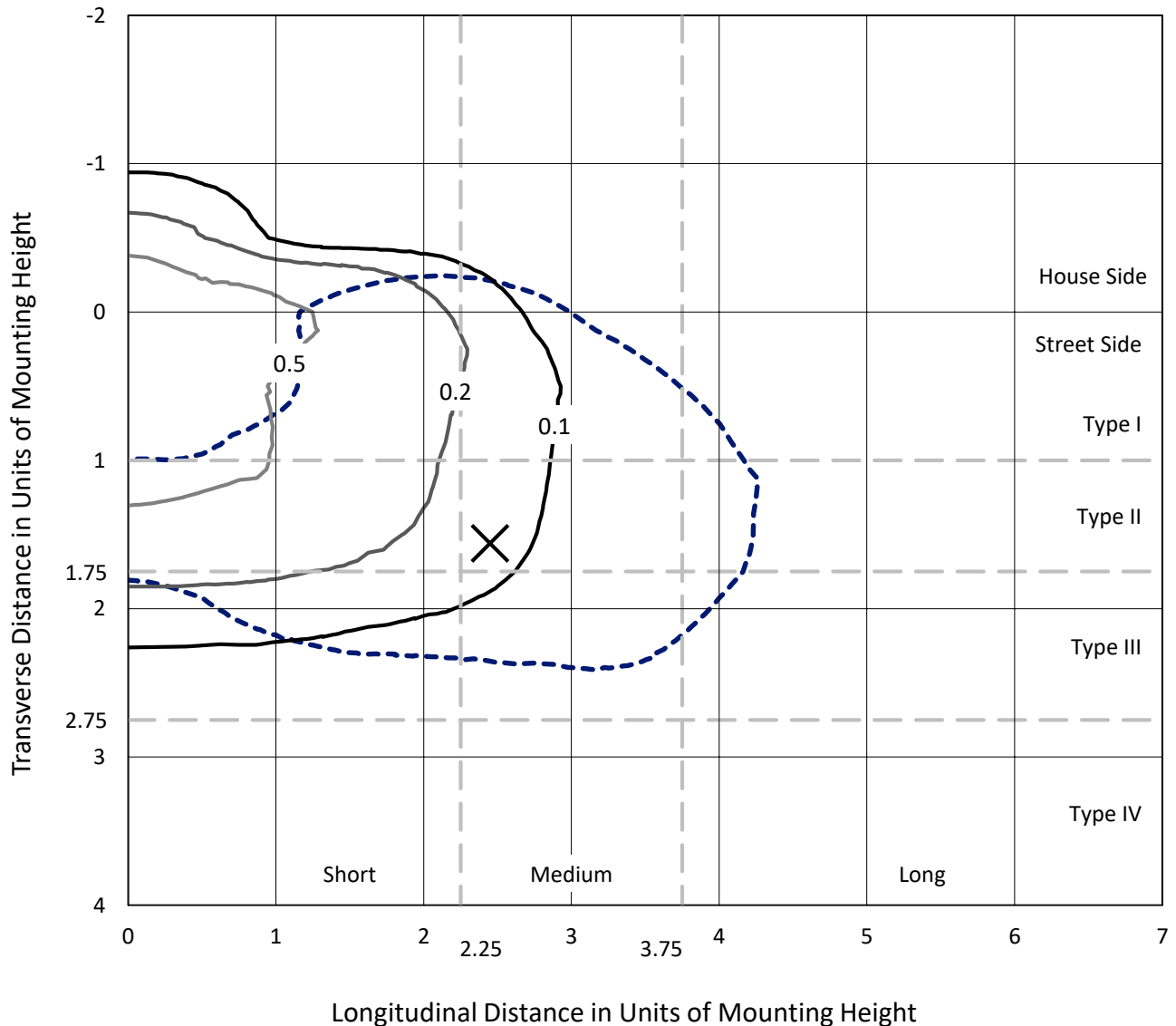
Input Watts (W): 13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P227762
 CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

Iso-Footcandle Lines of Horizontal Illumination

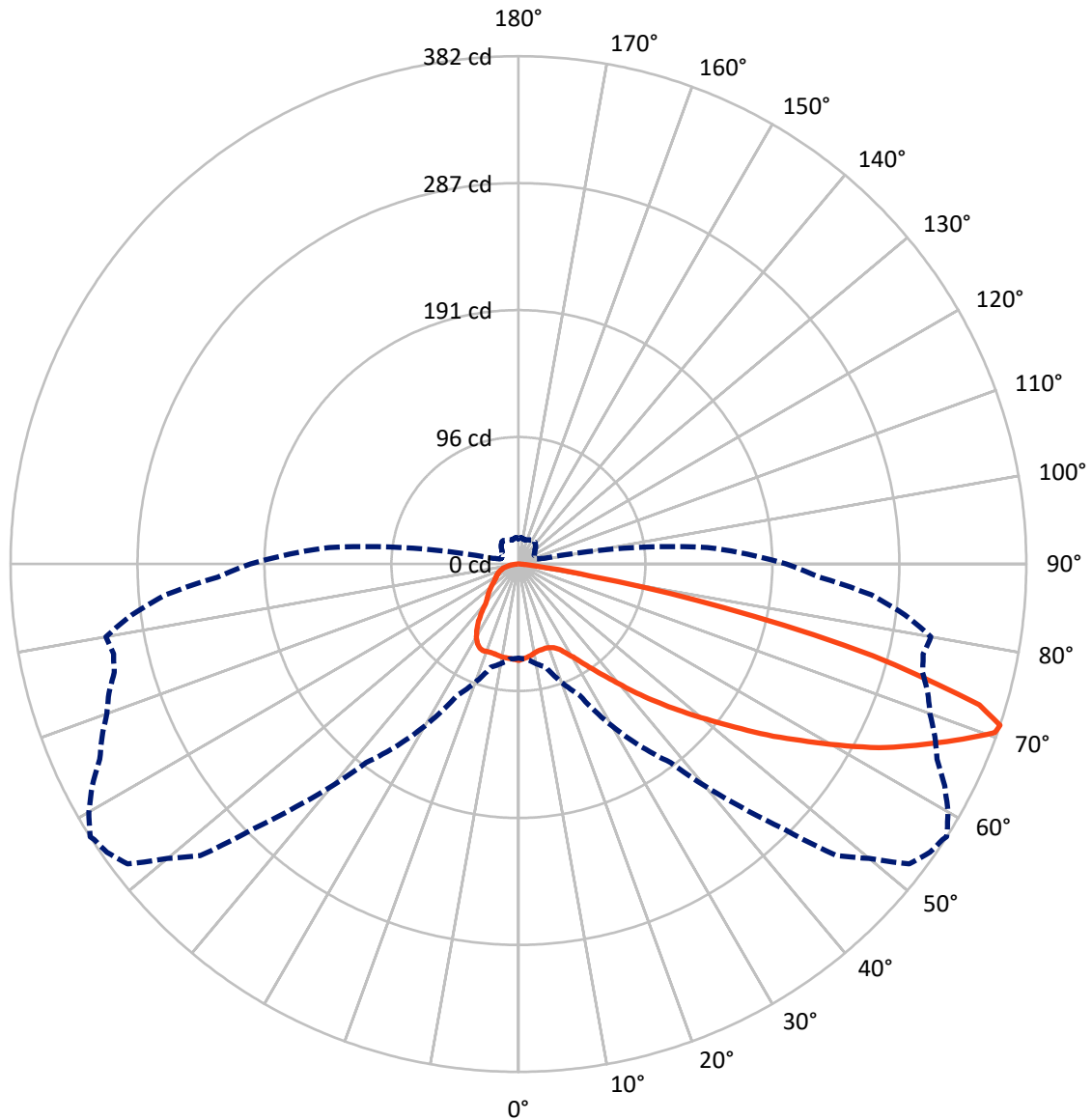
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P227762
CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	122.1	0.0	122.1
	% Fixture	21.8	0.0	21.8
Street Side	Lumens	438.9	0.0	438.9
	% Fixture	78.2	0.0	78.2
Total	Lumens	561.0	0.0	561.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	1.2
10°-20°	19.7	3.5
20°-30°	32.6	5.8
30°-40°	51.9	9.3
40°-50°	84.4	15.0
50°-60°	126.5	22.6
60°-70°	150.9	26.9
70°-80°	81.5	14.5
80°-90°	6.6	1.2
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°	561.0	100.0
0°-180°	561.0	100.0



REPORT NUMBER: P227762

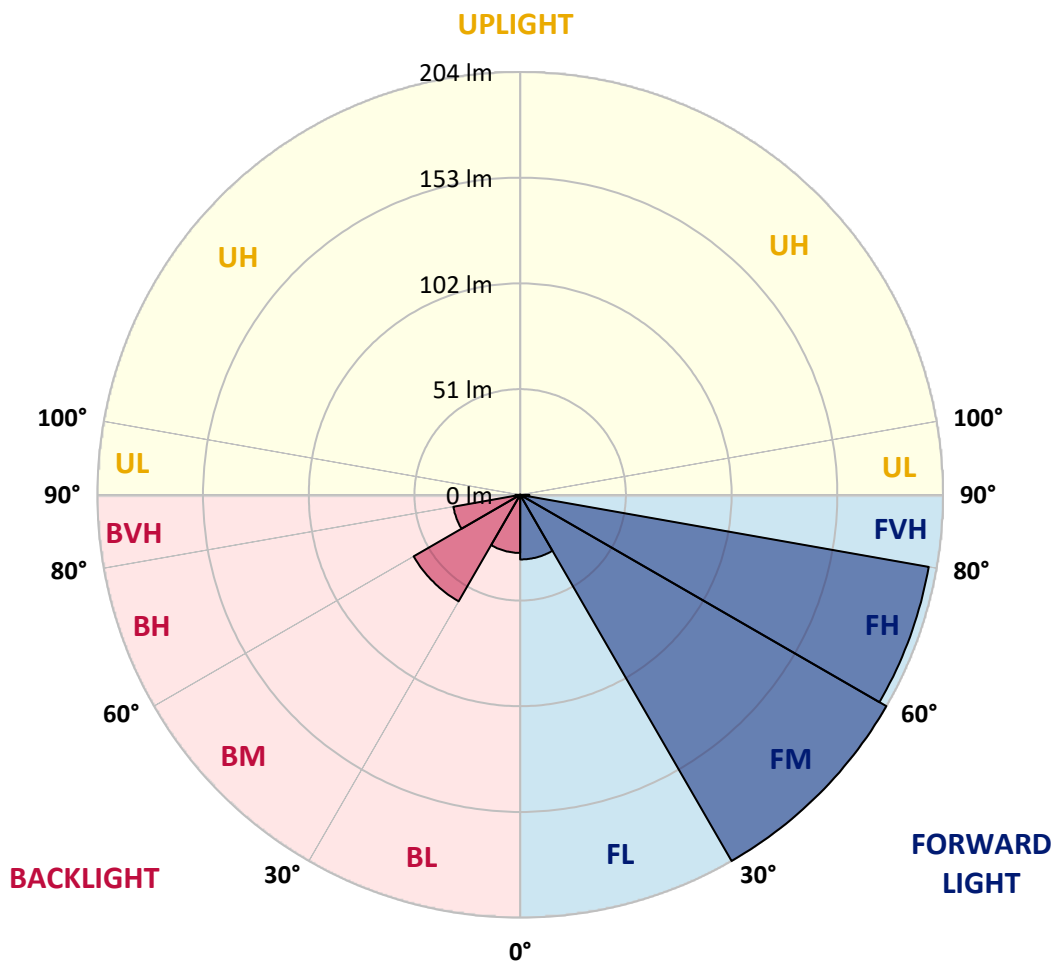
CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	31.1	5.5			
FM	(30°-60°)	203.6	36.3			
FH	(60°-80°)	199.8	35.6			G0/660
FVH	(80°-90°)	4.4	0.8			G0/10
BL	(0°-30°)	28.0	5.0	B0/110		
BM	(30°-60°)	59.2	10.6	B0/220		
BH	(60°-80°)	32.7	5.8	B0/110		G0/110
BVH	(80°-90°)	2.3	0.4			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 III Medium





REPORT NUMBER: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
2.5°	72.5	72.3	72.1	72.1	72.1	71.9	71.4	71.5	72.1	71.7	72.3
5°	72.3	71.9	71.7	71.7	71.7	71.2	71.0	70.8	71.9	71.0	71.7
7.5°	70.2	70.2	69.9	70.2	70.6	70.1	69.7	69.9	70.8	69.9	70.8
10°	68.8	68.4	68.2	68.2	68.6	67.8	67.5	67.8	69.0	67.8	69.1
12.5°	68.2	68.4	67.8	67.8	67.7	66.7	66.7	66.7	67.7	66.7	67.8
15°	69.1	69.0	68.4	68.0	67.5	66.7	66.5	66.7	67.5	66.4	67.7
17.5°	70.4	70.4	69.5	68.6	68.0	67.3	67.3	66.9	67.5	66.7	67.7
20°	73.8	73.2	71.9	70.4	69.0	68.6	67.8	67.8	68.2	67.5	68.0
22.5°	79.5	79.0	76.7	74.0	71.5	70.6	70.2	70.1	69.7	69.3	69.3
25°	87.1	86.2	83.6	80.3	76.2	75.4	74.7	74.1	72.8	72.8	71.9
27.5°	95.3	94.3	91.6	87.9	82.9	81.7	80.8	80.1	77.8	77.8	76.2
30°	104.5	103.4	100.1	96.0	90.3	89.9	88.6	87.5	84.5	84.3	82.1
32.5°	115.3	113.8	110.5	105.1	99.0	99.2	97.1	96.4	92.5	92.7	89.7
35°	127.5	125.9	122.5	115.5	109.2	109.7	107.9	106.6	101.8	101.8	98.6
37.5°	140.5	140.5	136.2	128.1	120.5	121.8	119.6	118.3	113.4	114.2	109.2
40°	155.0	155.9	151.2	142.0	134.2	134.8	133.1	131.6	125.9	127.2	121.8
42.5°	170.2	171.8	167.7	158.1	149.4	151.2	148.5	147.0	140.9	143.6	137.3
45°	192.2	192.6	185.0	175.7	168.5	170.2	166.3	165.7	158.1	161.1	154.8
47.5°	206.1	205.2	199.6	194.1	189.8	193.1	189.6	188.7	180.0	182.0	173.1
50°	215.6	216.1	211.9	211.3	212.0	218.3	217.8	215.9	205.6	204.1	193.0
52.5°	224.1	221.7	220.9	226.1	234.1	241.5	244.5	242.1	230.8	226.7	215.9
55°	222.6	219.1	223.0	235.6	251.3	262.8	263.2	261.5	251.3	249.7	238.0
57.5°	212.6	213.3	221.3	239.3	266.0	277.8	279.9	277.8	269.5	271.0	261.3
60°	198.7	200.2	212.8	236.0	277.7	287.9	288.8	291.2	285.6	289.5	282.8
62.5°	177.9	180.0	196.1	227.6	269.5	284.7	293.2	298.8	297.7	306.6	303.1
65°	163.5	163.5	179.2	218.0	261.5	281.6	294.3	304.7	306.2	320.3	319.0
67.5°	136.6	137.5	151.1	191.1	251.9	274.5	293.8	311.4	320.3	342.5	343.6
70°	94.5	95.3	104.2	136.4	203.5	222.8	251.2	279.9	306.6	340.1	357.5
71°	70.8	71.7	80.4	108.8	172.4	188.3	217.8	247.6	281.2	324.7	344.4
72.5°	34.7	35.2	43.7	69.9	119.9	140.3	157.4	185.9	221.5	271.4	299.2
75°	16.1	16.3	18.2	25.2	45.8	54.5	62.1	80.4	102.5	146.2	180.0
77.5°	11.9	11.9	13.0	16.5	23.7	24.1	23.7	24.3	29.3	41.9	63.0
80°	8.7	8.7	9.5	11.1	15.8	15.8	15.2	15.4	14.8	15.4	17.4
82.5°	5.7	5.7	6.1	6.7	9.6	9.6	9.3	9.3	8.9	8.7	9.5
85°	3.3	3.5	3.7	3.2	4.1	3.9	3.5	3.9	3.7	3.3	4.1
87.5°	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.2
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: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

CANDELA DISTRIBUTION (continued):

	52.5°	55°	57°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
2.5°	71.5	72.1	72.1	71.4	71.9	71.4	71.7	71.2	71.7	70.8	71.9
5°	71.0	71.5	71.5	70.4	71.5	70.4	71.4	70.1	71.4	69.9	71.4
7.5°	69.5	70.8	70.8	69.3	70.6	69.5	70.6	69.3	70.4	68.8	70.6
10°	67.8	69.1	69.3	67.8	69.3	68.0	69.7	68.0	69.7	67.8	69.9
12.5°	66.7	68.2	68.6	66.9	68.8	67.1	69.1	67.3	69.1	67.1	69.5
15°	66.5	67.8	68.2	66.7	68.4	66.5	69.0	66.7	69.1	66.9	69.7
17.5°	66.7	67.8	68.2	66.5	68.2	66.7	68.8	66.9	69.1	67.1	69.7
20°	67.3	68.0	68.0	67.1	68.4	67.1	68.8	66.9	69.3	67.5	69.9
22.5°	69.0	69.1	69.1	68.4	69.1	68.2	69.5	68.2	69.9	68.4	70.6
25°	71.7	71.5	71.2	71.0	71.2	70.6	71.4	70.4	72.1	70.8	73.0
27.5°	76.6	75.8	75.4	75.4	75.3	75.4	75.4	75.1	75.8	75.4	76.9
30°	82.5	81.2	80.6	81.2	80.4	81.2	81.0	80.8	81.6	81.2	82.5
32.5°	90.3	88.0	87.7	88.8	87.3	88.6	87.5	88.0	88.6	89.0	89.7
35°	99.3	96.8	96.4	97.5	95.8	97.7	96.4	97.1	97.5	98.4	99.0
37.5°	110.1	106.9	106.4	107.9	105.7	107.7	105.8	108.1	107.5	108.8	109.4
40°	123.1	119.4	118.1	120.1	117.5	119.2	117.3	119.7	119.2	121.8	122.3
42.5°	139.0	133.6	132.3	134.4	130.5	131.0	129.6	132.3	132.0	135.5	136.0
45°	155.5	149.0	147.2	149.2	144.8	145.9	143.6	146.6	146.4	149.2	151.4
47.5°	173.9	165.9	163.5	165.7	160.3	161.6	159.4	162.6	162.7	165.9	168.1
50°	193.0	184.6	181.5	183.5	178.5	179.4	177.2	181.1	180.9	185.2	186.8
52.5°	213.7	205.2	202.8	203.7	197.8	198.9	197.0	201.8	200.7	203.3	206.7
55°	236.7	226.9	224.1	226.9	219.8	221.3	218.9	223.3	221.5	224.8	225.8
57.5°	260.2	250.6	248.4	250.4	243.7	244.9	241.7	245.4	243.9	246.1	247.6
60°	285.3	276.5	274.3	276.5	270.1	270.2	264.9	268.8	266.5	269.3	268.8
62.5°	309.2	301.8	301.2	304.3	296.2	295.3	288.8	291.6	288.4	290.3	288.0
65°	329.6	325.3	326.0	328.6	321.4	319.2	311.8	313.2	308.6	308.6	305.8
67.5°	356.2	351.6	351.6	353.8	344.8	339.0	328.8	327.5	319.9	318.4	311.9
70°	378.5	379.8	378.3	380.2	369.4	357.7	344.2	337.7	327.7	322.9	315.3
71°	370.5	377.9	380.5	382.0	373.1	361.4	347.4	339.0	329.4	322.9	314.7
72.5°	334.4	352.4	362.5	362.5	363.7	356.2	342.7	333.6	322.7	314.2	306.6
75°	234.3	263.6	276.7	275.2	284.9	288.2	289.3	285.4	279.3	267.1	261.7
77.5°	104.4	137.5	157.4	157.5	167.9	177.0	184.2	191.8	189.1	183.1	182.8
80°	23.7	43.0	55.0	55.6	65.1	73.4	78.4	86.0	86.9	78.4	73.6
82.5°	10.2	12.0	13.7	13.5	16.7	20.0	23.7	25.8	24.8	20.6	19.5
85°	4.3	5.6	5.9	5.6	6.9	7.6	8.9	9.1	10.6	9.5	10.0
87.5°	0.0	0.2	0.2	0.0	0.4	0.0	0.4	0.2	0.9	0.4	1.1
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: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

CANDELA DISTRIBUTION (continued):

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
2.5°	71.2	72.1	71.2	72.1	71.5	72.1	71.9	72.1	71.2	72.1	71.0
5°	69.9	71.4	70.1	71.2	70.1	71.4	71.4	71.4	70.1	71.5	70.2
7.5°	68.8	70.4	68.8	70.4	69.3	70.6	70.6	71.2	69.7	71.4	69.5
10°	67.7	69.7	67.7	70.1	68.2	70.2	70.4	70.8	68.8	71.0	69.1
12.5°	67.1	69.7	67.3	69.7	67.5	70.2	70.4	70.8	68.6	71.4	69.0
15°	67.1	69.9	67.3	69.9	67.5	70.2	70.6	71.0	68.6	71.5	69.0
17.5°	67.1	69.9	67.7	70.1	67.8	70.4	70.8	71.2	69.0	71.5	69.3
20°	67.7	70.2	68.0	70.6	68.4	71.0	71.2	71.7	69.3	71.7	69.7
22.5°	69.0	71.2	69.3	71.7	70.1	72.1	72.3	72.8	71.0	73.0	71.4
25°	71.2	73.6	72.1	74.0	73.0	74.7	75.1	75.1	74.3	75.6	75.1
27.5°	75.8	77.7	76.6	78.2	77.7	79.0	79.0	79.1	79.7	80.1	80.6
30°	81.7	83.0	82.7	83.6	83.8	84.5	84.5	85.6	87.9	85.6	85.4
32.5°	89.7	90.5	90.6	91.0	91.7	92.3	93.0	94.3	96.2	91.0	89.3
35°	99.5	99.7	100.3	100.8	102.1	102.5	104.9	104.0	104.0	95.8	92.3
37.5°	110.3	110.3	111.8	111.8	114.9	115.1	117.5	112.7	109.9	99.3	94.2
40°	123.8	123.6	125.3	125.7	129.9	130.1	129.7	119.2	113.3	100.3	93.2
42.5°	138.1	138.6	140.9	141.6	144.8	145.9	141.2	123.6	114.7	99.7	90.1
45°	153.7	154.8	157.5	159.6	162.9	161.6	150.5	125.7	113.1	96.4	84.0
47.5°	170.7	171.8	174.0	177.9	179.4	177.9	158.1	126.4	110.5	91.2	75.1
50°	187.9	189.8	193.0	198.5	199.3	195.5	167.4	129.2	108.4	85.8	64.9
52.5°	207.4	209.3	213.0	222.2	220.4	212.8	178.3	134.4	109.0	82.5	56.2
55°	228.0	230.6	237.8	246.9	242.8	230.9	190.4	142.0	111.2	79.0	46.5
57.5°	249.7	252.4	261.9	272.7	264.7	248.7	202.6	147.9	112.3	71.7	36.0
60°	271.2	275.1	287.3	296.2	283.8	263.9	213.5	151.8	109.4	58.0	27.8
62.5°	290.8	297.1	310.8	315.7	295.8	273.6	219.5	149.0	97.3	40.0	22.4
65°	304.7	312.9	321.8	321.2	293.6	270.4	215.0	136.2	72.5	26.5	19.1
67.5°	310.7	318.2	320.3	310.8	277.7	256.5	199.1	109.7	41.7	19.8	16.7
70°	312.9	319.4	307.9	285.1	246.5	222.4	162.7	69.9	22.8	16.1	14.5
71°	311.9	315.1	293.2	266.5	226.7	201.5	142.7	53.2	19.5	15.0	13.7
72.5°	299.3	294.9	261.2	231.5	192.2	166.6	111.0	33.5	15.9	13.5	12.8
75°	244.7	224.6	192.2	164.2	130.9	104.7	60.2	17.2	12.8	11.7	11.1
77.5°	160.0	142.5	115.8	94.2	71.5	54.3	24.7	11.9	10.2	9.8	9.6
80°	57.1	45.8	34.7	30.4	23.0	18.9	12.0	9.1	8.0	8.2	8.0
82.5°	16.1	14.8	12.8	11.9	10.4	10.2	7.8	6.9	6.3	6.7	6.5
85°	8.0	6.9	5.0	4.8	3.7	4.3	3.9	4.6	4.1	4.3	3.9
87.5°	0.6	0.7	0.2	0.6	0.0	0.6	0.7	0.9	0.2	0.7	0.6
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: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
2.5°	72.3	71.5	72.5	71.5	72.5	71.9	72.5	71.9	72.5	72.8	72.8
5°	71.9	70.6	72.3	71.4	72.5	71.5	72.3	71.7	72.7	73.0	73.4
7.5°	71.7	70.4	72.1	70.8	72.5	71.2	72.3	71.5	72.7	73.0	73.8
10°	71.5	69.9	72.1	70.2	72.3	71.0	72.3	71.2	72.5	72.8	73.0
12.5°	71.5	69.7	72.1	70.1	72.3	70.4	72.1	70.4	72.3	72.1	71.5
15°	71.7	69.3	72.1	69.7	72.1	69.9	71.9	69.7	71.5	71.0	70.6
17.5°	71.7	69.3	71.9	69.5	71.7	69.7	71.4	69.3	71.0	70.8	70.2
20°	72.1	69.7	71.9	70.2	71.9	69.9	71.2	69.3	70.6	69.5	67.3
22.5°	73.2	71.5	73.2	71.5	72.3	70.4	71.0	68.8	68.6	66.7	63.2
25°	75.8	75.1	74.7	72.7	72.1	69.7	69.0	66.4	65.4	62.6	57.8
27.5°	79.1	77.5	75.3	72.8	70.4	67.5	65.4	63.4	61.4	57.8	51.7
30°	81.4	79.0	74.3	71.0	66.5	64.1	60.6	58.4	55.4	51.0	45.0
32.5°	82.9	79.1	72.1	68.2	62.3	59.1	54.5	52.1	47.8	43.6	39.3
35°	83.2	78.4	69.1	64.9	57.1	53.6	47.5	44.9	40.8	37.8	36.1
37.5°	81.7	75.8	64.5	58.9	50.4	46.3	40.6	38.7	36.3	35.2	34.5
40°	78.8	70.8	57.3	50.8	42.1	38.9	36.0	36.0	34.7	34.1	32.8
42.5°	73.4	63.4	48.0	41.7	35.8	35.2	33.5	34.3	33.4	33.0	31.1
45°	65.1	52.8	38.7	35.0	32.3	32.6	31.5	32.3	31.7	31.5	29.3
47.5°	54.3	42.1	32.6	31.3	29.5	30.0	29.1	30.0	29.5	29.7	28.0
50°	43.4	34.1	28.9	28.2	26.9	27.2	26.7	27.6	27.4	28.2	27.2
52.5°	34.7	29.1	25.8	25.2	24.5	24.7	24.5	25.4	25.6	27.1	27.1
55°	28.7	25.0	23.2	23.0	22.2	22.4	22.6	23.5	24.3	26.1	27.1
57.5°	24.7	22.4	21.1	20.9	20.6	20.8	21.1	22.2	23.0	25.4	27.4
60°	21.7	20.4	19.5	19.5	19.1	19.5	19.8	20.9	21.9	24.7	26.7
62.5°	19.5	18.5	18.0	18.2	18.0	18.3	18.7	19.8	20.9	23.5	25.6
65°	17.4	16.9	16.5	16.7	16.7	17.2	17.6	18.7	19.6	22.1	24.7
67.5°	15.8	15.4	15.2	15.4	15.6	16.1	16.7	17.4	18.2	20.4	23.4
70°	14.5	14.1	14.1	14.1	14.3	14.8	15.6	15.9	16.7	19.1	21.9
71°	13.7	13.5	13.5	13.5	13.7	14.3	15.0	15.4	16.1	18.5	21.1
72.5°	12.8	12.8	13.0	12.8	13.2	13.3	14.1	14.5	15.4	17.8	20.2
75°	11.3	11.3	11.5	11.5	11.9	11.9	12.4	12.8	13.9	15.9	18.2
77.5°	10.0	10.0	10.4	10.2	10.2	9.8	10.6	10.9	11.9	13.9	16.1
80°	8.5	8.3	8.7	8.2	8.0	7.6	8.2	8.7	10.2	11.5	11.9
82.5°	6.7	6.1	6.3	5.7	5.7	5.4	5.9	6.1	7.0	8.3	9.1
85°	4.1	3.3	3.7	3.2	3.5	3.2	3.3	3.5	4.3	5.2	5.0
87.5°	0.9	0.6	0.7	0.2	0.6	0.0	0.6	0.2	0.6	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: P227762

CATALOG NUMBER: ISC-AF-XXX-LED-E1-T3-7030-XXB

CANDELA DISTRIBUTION (continued):

	155°	165°	175°	180°
0°	72.5	72.5	72.5	72.5
2.5°	73.2	73.0	73.2	73.0
5°	74.1	74.1	74.3	74.5
7.5°	74.3	74.7	75.1	74.9
10°	73.0	72.7	73.0	72.7
12.5°	71.0	70.6	71.0	71.0
15°	70.8	70.6	70.8	70.8
17.5°	69.5	68.6	68.2	68.0
20°	65.8	64.1	63.8	63.2
22.5°	60.6	58.2	57.5	56.9
25°	54.3	51.0	49.7	48.9
27.5°	47.5	44.1	42.8	42.8
30°	42.1	39.5	38.2	38.2
32.5°	38.2	36.7	35.8	36.0
35°	35.0	34.1	33.5	33.7
37.5°	33.0	31.5	30.2	30.2
40°	31.0	29.1	27.4	27.4
42.5°	29.1	27.2	26.1	25.9
45°	27.2	25.9	25.0	24.8
47.5°	26.3	25.2	24.3	24.1
50°	25.9	24.8	23.5	23.5
52.5°	26.3	25.4	23.0	23.0
55°	27.1	26.5	23.0	22.6
57.5°	26.3	25.4	23.2	22.6
60°	24.7	23.2	22.8	22.4
62.5°	23.5	22.1	22.8	22.6
65°	22.6	21.5	23.2	22.8
67.5°	21.7	20.6	23.2	22.4
70°	20.6	19.5	21.1	19.8
71°	20.0	18.7	20.0	18.9
72.5°	19.1	17.6	18.0	17.2
75°	17.2	15.8	15.4	15.2
77.5°	14.3	12.6	12.0	11.9
80°	10.9	9.8	9.8	9.3
82.5°	8.2	7.2	7.0	6.1
85°	4.3	3.3	2.8	2.8
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)