

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: INVUE

Report Number: P173453

Luminaire Tested: **ENC-FXX-LED-E1-SLR-ULG-CWB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P173453
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P20107) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-FXX-LED-E1-SLR-ULG-CWB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1403.6 lumens
Efficiency: N/A
Efficacy: 255.2 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U3 - G1

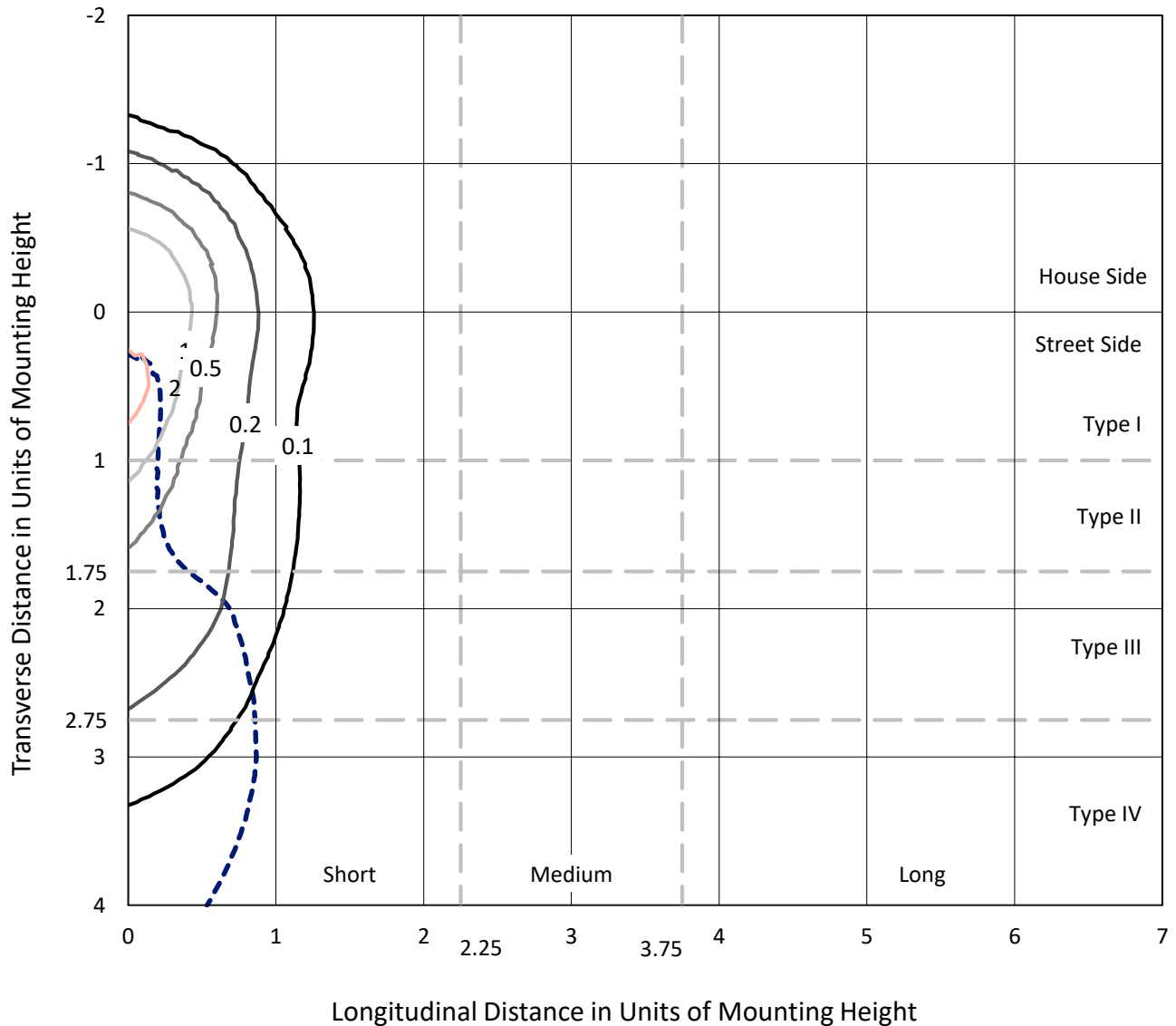
Input Watts (W): 5.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P173453
 CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

Iso-Footcandle Lines of Horizontal Illumination

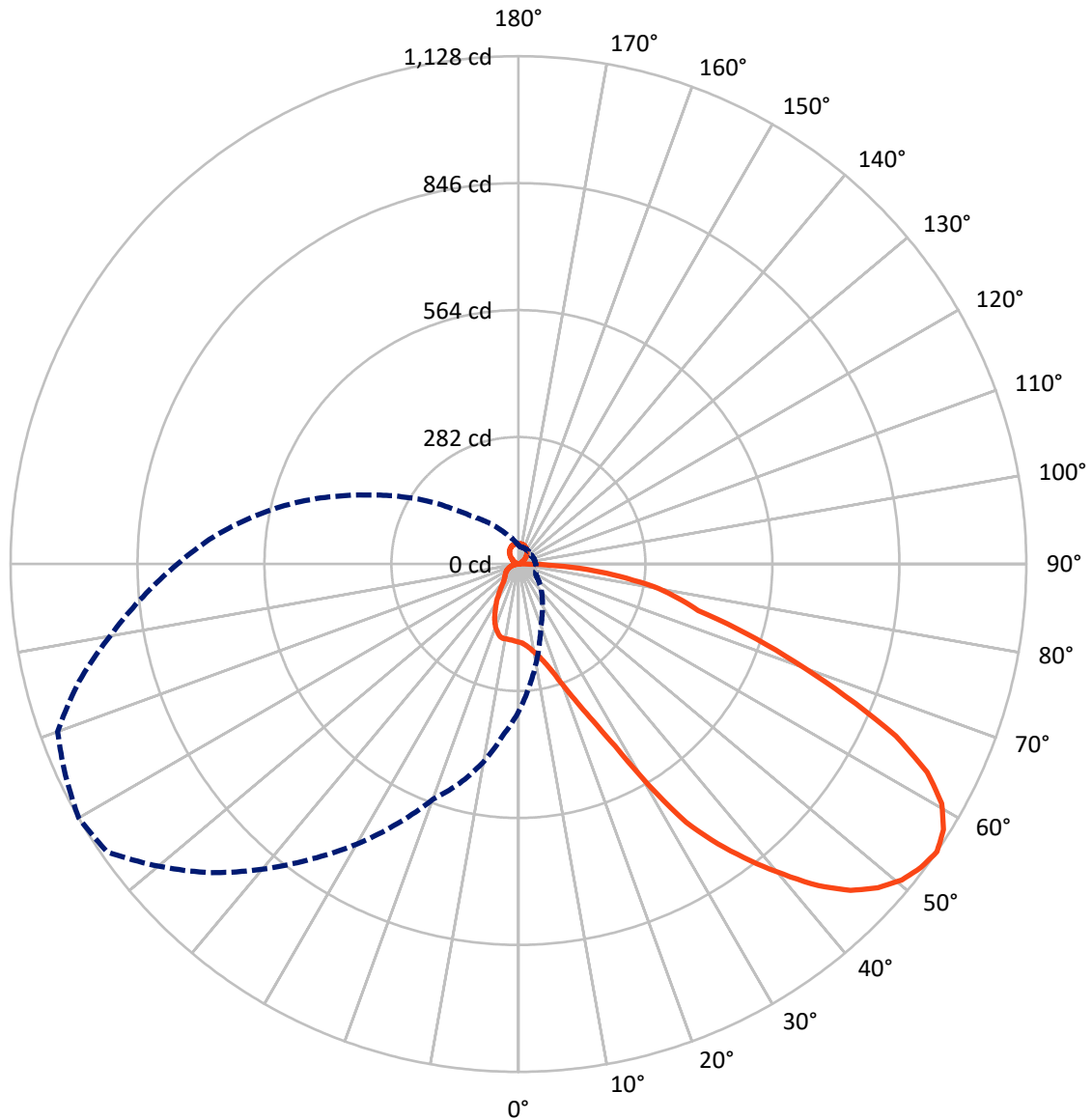
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P173453
CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

Luminous Intensity Polar Plot



— Vertical Plane Through 300-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

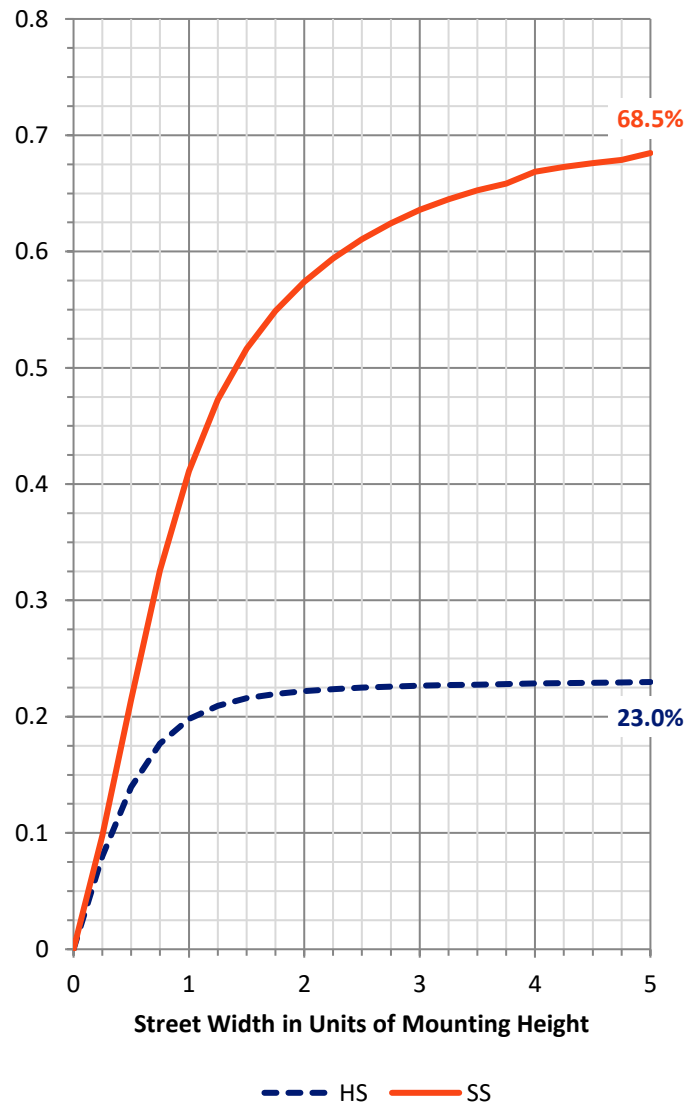
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	325.3	51.1	376.4
	% Fixture	23.2	3.6	26.8
Street Side	Lumens	976.1	51.1	1027.2
	% Fixture	69.5	3.6	73.2
Total	Lumens	1301.4	102.1	1403.6
	% Fixture	92.7	7.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	1.2
10°-20°	56.2	4.0
20°-30°	109.0	7.8
30°-40°	171.3	12.2
40°-50°	229.0	16.3
50°-60°	268.6	19.1
60°-70°	254.8	18.2
70°-80°	153.8	11.0
80°-90°	41.7	3.0
90°-100°	0.4	0.0
100°-110°	4.0	0.3
110°-120°	8.2	0.6
120°-130°	13.9	1.0
130°-140°	19.4	1.4
140°-150°	21.2	1.5
150°-160°	18.4	1.3
160°-170°	12.4	0.9
170°-180°	4.3	0.3
0°-90°	1301.4	92.7
0°-180°	1403.6	100.0



REPORT NUMBER: P173453

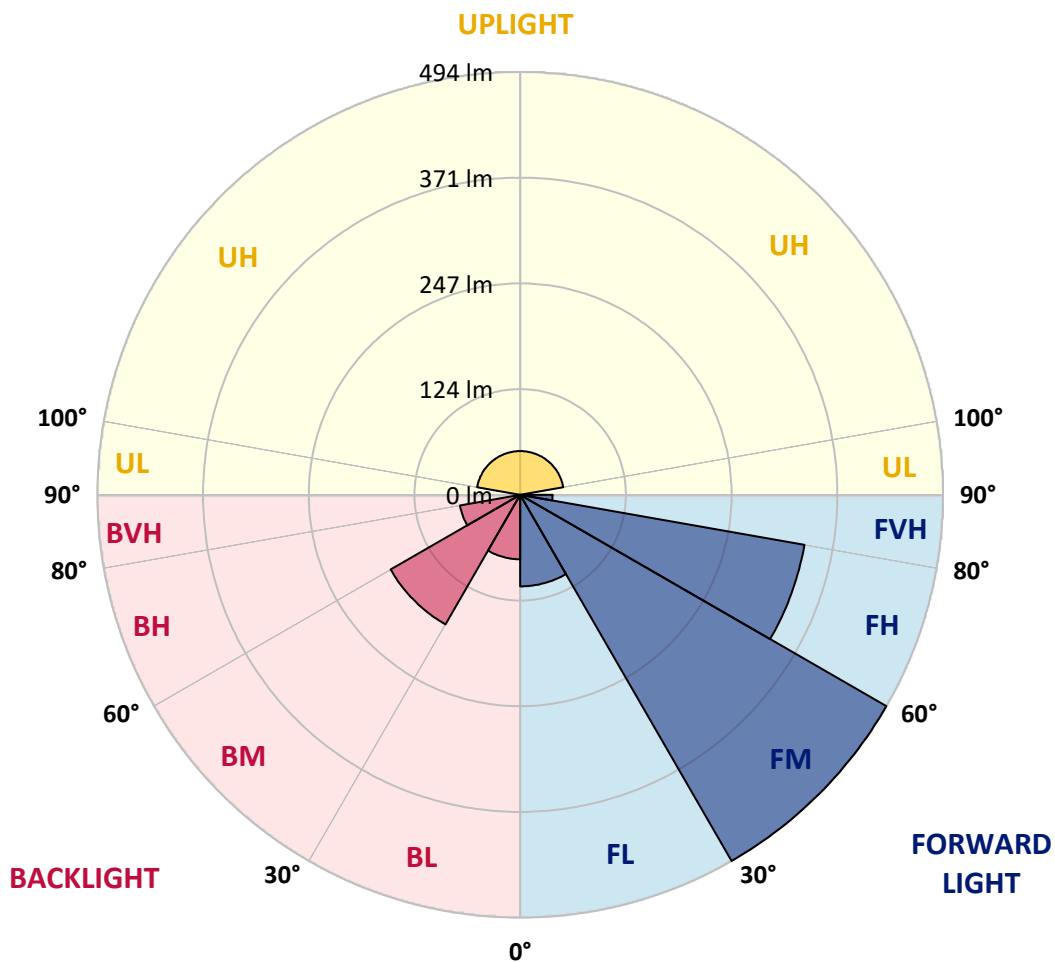
CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	107.0	7.6			
FM (30°-60°)	494.0	35.2			
FH (60°-80°)	337.2	24.0			G0/660
FVH (80°-90°)	37.9	2.7			G1/100
BL (0°-30°)	75.3	5.4	B0/110		
BM (30°-60°)	174.8	12.5	B0/220		
BH (60°-80°)	71.4	5.1	B0/110		G0/110
BVH (80°-90°)	3.8	0.3			G0/10
UL (90°-100°)	0.4	0.0		U1/10	
UH (100°-180°)	51.1	3.6		U3/500	

BUG Rating: B0-U3-G1

Type IV Short





REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5
2.5°	177.2	178.6	176.9	177.2	176.7	176.1	176.4	176.1	175.6	175.6	175.1
5°	181.5	181.8	180.7	180.4	179.9	179.1	179.3	178.6	178.0	177.5	176.4
7.5°	186.6	186.3	185.0	184.2	183.9	182.5	182.3	181.2	180.4	179.6	178.3
10°	194.3	192.2	190.6	189.2	188.7	187.1	185.7	185.2	183.9	182.0	181.0
12.5°	205.5	204.2	201.0	198.3	196.7	194.6	192.7	191.4	189.2	186.6	185.2
15°	225.6	221.3	217.6	213.6	210.3	206.9	202.3	198.9	195.1	190.6	187.1
17.5°	251.5	246.2	240.3	233.9	227.2	219.7	210.9	204.2	196.7	188.9	183.6
20°	283.3	273.4	265.1	252.8	240.6	228.8	214.9	203.1	192.4	182.3	174.5
22.5°	319.1	304.1	287.3	268.6	248.8	230.6	211.2	195.1	179.6	167.1	158.2
25°	360.0	336.5	310.8	282.5	254.2	227.2	203.1	183.1	166.5	151.6	141.6
27.5°	385.1	353.1	322.3	288.7	256.3	225.0	195.6	172.4	153.4	137.4	125.9
30°	390.5	358.1	322.1	285.5	252.0	217.8	185.7	159.8	138.7	121.9	110.4
32.5°	394.2	356.8	316.7	276.1	239.7	203.6	171.0	145.4	122.9	106.4	93.0
35°	395.3	351.7	306.6	261.4	223.2	186.3	153.7	126.7	107.2	90.9	78.8
37.5°	393.7	343.4	292.9	246.2	205.3	166.8	134.7	111.2	94.6	78.8	68.2
40°	387.3	333.0	280.6	231.5	187.1	147.3	118.7	98.4	84.2	72.2	63.9
42.5°	379.0	321.0	267.0	214.4	169.5	131.8	105.8	89.6	77.5	69.0	62.0
45°	368.6	308.4	252.8	199.1	154.5	120.0	98.4	84.7	75.4	67.9	61.5
47.5°	355.7	295.1	239.2	187.6	144.3	114.1	96.7	84.7	75.4	67.3	60.4
50°	343.7	283.0	228.8	180.4	139.8	114.4	98.4	85.8	75.1	66.3	58.5
52.5°	334.3	275.8	224.5	177.7	140.3	117.1	101.6	87.4	75.9	66.3	58.0
55°	328.5	272.9	224.0	180.1	145.9	124.3	106.6	92.2	79.6	68.4	58.8
57.5°	329.3	276.1	230.4	190.0	158.8	136.9	116.8	100.8	85.0	71.1	59.1
60°	337.6	286.8	245.9	213.3	180.1	153.7	129.6	108.2	87.4	70.3	57.2
62.5°	358.4	311.9	278.5	245.1	206.6	170.3	137.4	109.6	84.7	66.3	52.6
65°	398.0	357.1	325.0	283.3	228.5	177.2	136.6	105.6	79.6	59.9	46.5
67.5°	436.7	393.4	348.3	285.5	223.2	172.1	127.8	95.7	70.5	51.3	41.2
70°	474.1	418.0	360.0	282.8	207.7	148.1	106.6	79.9	56.1	42.8	35.3
72.5°	449.5	384.9	325.5	249.4	178.6	121.6	85.0	58.0	43.0	35.3	30.5
75°	343.2	298.3	246.7	191.4	131.8	85.8	56.7	41.2	33.2	27.8	24.9
77.5°	247.0	213.6	171.3	125.6	82.3	54.3	38.5	29.4	24.6	20.9	19.2
80°	143.3	122.9	96.0	69.2	47.0	33.9	25.7	20.9	17.9	15.2	14.7
82.5°	89.6	71.6	50.8	34.2	24.1	18.7	15.0	12.8	10.7	9.4	8.0
85°	38.8	27.8	15.8	8.8	6.7	5.1	4.0	3.5	2.9	2.7	2.1
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.6	1.6	1.6	1.6	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
102.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
105°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
107.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
110°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8



REPORT NUMBER: P173453

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
115°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
117.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
120°	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
122.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
125°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
127.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
130°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
132.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
135°	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
137.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
140°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
142.5°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
145°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
147.5°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
150°	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
152.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
155°	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
157.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
160°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
162.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
165°	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
167.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
170°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
172.5°	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9
175°	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
177.5°	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
180°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5
2.5°	175.1	174.5	174.2	174.2	173.7	173.7	173.2	173.5	173.2	172.7	172.4
5°	176.1	175.3	174.8	174.2	173.5	173.2	172.7	172.7	171.9	171.0	170.8
7.5°	177.5	176.4	175.6	174.5	173.5	172.9	171.9	171.3	170.5	169.7	169.5
10°	180.1	178.3	176.9	175.6	173.7	172.7	171.0	170.3	169.5	168.4	167.8
12.5°	183.1	180.7	178.8	175.6	173.7	171.9	170.3	168.6	167.1	166.0	165.7
15°	183.1	180.1	176.1	173.2	170.5	167.8	166.3	164.6	162.8	162.0	161.7
17.5°	178.6	173.5	169.7	166.5	164.1	162.0	160.4	159.6	158.0	156.3	155.8
20°	168.1	162.2	158.0	154.5	151.8	149.7	149.1	148.3	147.5	147.5	147.8
22.5°	151.0	144.6	140.9	137.1	134.2	133.1	133.4	134.2	134.4	134.2	136.0
25°	133.9	127.8	122.7	119.2	115.7	116.5	115.5	117.3	118.1	118.4	120.5
27.5°	117.3	110.7	105.3	102.4	100.8	99.7	98.9	101.3	101.8	103.7	105.6
30°	99.7	93.5	87.4	85.0	83.7	82.9	83.1	85.2	86.6	89.3	90.9
32.5°	83.4	75.9	71.4	68.2	66.8	66.6	66.8	68.4	70.0	73.5	75.9
35°	69.5	62.3	58.5	56.7	54.8	54.0	54.8	55.3	55.8	58.8	61.7
37.5°	61.5	56.4	53.5	51.6	50.2	49.4	49.4	49.2	49.4	50.0	51.3
40°	58.0	54.3	51.6	49.7	48.6	48.1	47.9	47.6	47.3	47.3	47.3
42.5°	56.7	52.4	49.7	48.1	47.6	47.6	47.6	47.3	46.8	46.2	46.0
45°	55.6	51.1	48.1	46.8	46.8	46.8	47.0	46.8	46.2	45.4	44.6
47.5°	53.7	49.2	46.5	45.4	45.4	45.4	45.7	45.4	44.9	44.4	43.6
50°	51.6	46.8	44.1	43.3	43.0	43.0	42.8	42.5	42.2	41.7	40.9
52.5°	50.2	45.2	42.8	42.2	41.7	41.4	40.9	40.6	40.1	39.8	39.0
55°	50.0	44.1	42.0	41.4	40.9	40.1	39.0	38.5	37.4	37.1	36.6
57.5°	49.2	43.0	40.6	39.3	37.9	37.1	36.1	35.5	35.0	34.5	33.9
60°	46.5	39.8	36.9	36.1	35.3	35.0	34.5	33.9	33.2	32.3	31.3
62.5°	41.4	35.8	33.9	33.7	33.4	32.9	32.3	31.5	31.0	29.9	28.9
65°	37.4	33.7	32.6	32.1	31.8	31.0	30.5	29.9	29.1	28.3	27.3
67.5°	33.9	31.3	30.7	29.9	29.7	29.1	28.3	27.8	27.0	26.2	25.1
70°	30.7	28.6	28.3	27.8	27.3	27.0	25.9	25.1	24.9	23.8	23.0
72.5°	27.3	25.9	25.4	24.9	24.3	24.1	23.5	23.0	22.4	21.4	20.3
75°	22.7	22.2	21.9	21.4	21.1	20.6	19.8	19.0	18.7	17.9	17.1
77.5°	18.2	17.6	17.6	17.1	16.3	15.5	14.7	13.6	13.6	13.6	13.1
80°	12.8	12.3	11.5	11.2	10.7	10.2	9.4	8.8	8.3	8.3	8.3
82.5°	7.5	7.2	6.7	5.9	5.3	5.1	4.3	3.8	3.5	2.9	2.9
85°	1.6	1.6	1.1	1.1	0.8	0.8	0.8	0.6	0.6	0.3	0.3
87.5°	1.3	1.3	1.3	1.1	1.1	1.1	0.8	0.8	0.8	0.6	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
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°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
102.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
105°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
107.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
110°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
115°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
117.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
120°	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
122.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
125°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
127.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
130°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
132.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
135°	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
137.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
140°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
142.5°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
145°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
147.5°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
150°	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
152.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
155°	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
157.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
160°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
162.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
165°	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
167.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
170°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
172.5°	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9
175°	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
177.5°	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
180°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5
2.5°	172.4	172.1	171.6	170.5	170.3	170.0	170.3	170.3	170.0	170.3	170.5
5°	170.8	170.5	169.7	169.2	168.6	168.6	170.3	170.3	169.5	169.7	170.8
7.5°	169.5	169.5	168.9	168.6	168.9	169.7	171.0	172.1	171.9	173.5	174.0
10°	167.8	168.1	168.4	169.5	171.0	172.4	174.5	176.4	176.9	178.3	179.1
12.5°	166.3	167.3	168.6	170.8	172.9	175.1	177.5	179.6	179.9	181.2	182.3
15°	162.2	163.8	165.7	168.1	171.3	173.7	177.2	178.8	179.3	180.1	181.5
17.5°	156.1	156.9	158.2	160.9	164.4	167.6	171.6	174.2	175.9	176.9	177.5
20°	147.8	149.4	150.2	152.6	154.5	156.9	162.2	165.7	168.9	170.5	172.1
22.5°	136.3	138.2	140.1	142.5	143.5	145.1	150.2	155.6	160.4	163.6	165.4
25°	121.9	124.0	126.7	129.6	131.0	132.6	138.4	143.8	149.7	155.3	158.0
27.5°	107.5	110.1	112.8	116.3	118.4	120.3	125.4	130.4	136.6	141.9	144.6
30°	93.5	97.3	99.7	103.7	105.6	107.5	112.0	117.6	121.9	128.0	131.5
32.5°	79.1	81.8	86.3	90.9	93.0	94.9	99.2	104.0	107.7	113.9	119.0
35°	66.0	68.4	73.2	77.8	79.1	82.0	86.3	90.6	94.1	99.7	104.5
37.5°	53.7	57.7	61.5	64.9	67.9	70.0	74.0	77.8	79.6	85.0	90.1
40°	47.9	49.7	52.4	55.6	57.5	59.6	62.6	65.8	67.9	71.6	75.9
42.5°	45.7	45.7	46.5	48.1	50.5	51.6	54.3	55.8	58.8	60.4	64.1
45°	44.1	43.6	43.8	43.8	44.6	45.4	47.6	49.2	51.1	52.4	54.8
47.5°	42.8	41.7	41.4	40.9	40.6	41.2	42.8	44.1	44.9	46.0	46.8
50°	39.8	39.0	38.2	37.7	37.4	37.9	39.3	40.4	40.6	41.2	41.7
52.5°	38.2	37.1	36.4	35.5	35.5	36.1	37.1	37.9	38.2	38.5	39.0
55°	36.1	35.5	35.0	34.2	33.9	34.7	35.5	36.4	36.9	36.9	37.4
57.5°	33.4	32.9	33.4	33.2	32.9	33.4	34.5	35.3	35.5	35.5	35.8
60°	30.7	30.5	30.5	31.0	31.5	32.3	33.2	34.2	33.9	33.4	33.7
62.5°	28.3	28.1	28.3	29.1	29.9	30.7	31.8	32.6	31.8	31.3	31.3
65°	26.7	26.5	26.7	27.0	27.3	28.1	29.4	29.7	29.1	29.1	29.1
67.5°	24.6	24.3	24.1	24.3	24.6	24.9	25.9	26.2	26.2	26.2	26.2
70°	21.9	21.7	21.4	21.4	21.4	21.7	21.9	22.4	23.0	23.5	23.8
72.5°	19.0	18.5	18.5	18.5	17.9	18.2	18.5	19.5	20.0	20.6	21.1
75°	16.0	15.5	15.5	15.0	15.2	15.5	15.5	16.0	16.6	17.4	17.9
77.5°	12.6	12.6	12.6	12.3	12.3	12.6	12.8	12.8	13.4	14.2	15.0
80°	8.0	8.0	8.5	8.8	9.1	9.4	9.9	10.2	10.4	11.2	11.5
82.5°	2.9	3.2	3.5	3.5	4.3	5.3	5.6	6.4	7.0	7.7	7.7
85°	0.3	0.3	0.3	0.3	0.3	0.6	0.8	1.1	1.6	2.4	2.9
87.5°	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	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
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°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
102.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
105°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
107.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
110°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8



REPORT NUMBER: P173453
 CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
112.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	0°
115°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	2.5°
117.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	5°
120°	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	7.5°
122.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	10°
125°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	12.5°
127.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	15°
130°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.5°
132.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	20°
135°	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	22.5°
137.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	25°
140°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	27.5°
142.5°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	30°
145°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	32.5°
147.5°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35°
150°	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.5°
152.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	40°
155°	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	42.5°
157.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	45°
160°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	47.5°
162.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	50°
165°	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	52.5°
167.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	55°
170°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	57.5°
172.5°	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	60°
175°	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	62.5°
177.5°	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	65°
180°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	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°
												110°



NUMBER: P173453
 NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°	165°	
173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	112.5°	6.9
170.8	171.6	171.3	171.0	171.3	171.9	171.6	171.9	172.1	172.7	172.4	115°	8.1
171.0	171.9	172.1	172.1	172.7	173.5	173.5	173.7	174.0	174.5	174.5	117.5°	9.6
174.8	176.7	176.7	176.9	177.7	178.6	178.8	179.1	178.8	178.8	178.8	120°	11.3
180.4	182.5	182.8	184.2	185.2	185.0	185.0	185.2	184.7	184.2	183.3	122.5°	13.2
183.3	185.2	185.7	187.1	188.7	188.9	189.8	190.3	189.8	188.4	187.1	125°	15.5
182.5	184.2	185.2	186.8	188.7	189.8	191.4	191.9	191.6	190.0	188.4	127.5°	17.9
179.1	181.0	182.3	184.4	186.6	188.2	189.8	190.6	190.6	189.2	188.2	130°	20.4
173.5	175.6	177.5	179.9	182.5	184.4	186.3	186.8	186.8	186.3	187.1	132.5°	22.8
167.6	170.0	172.1	174.5	178.0	179.9	182.0	183.6	184.4	185.5	188.9	135°	25.2
160.1	161.2	163.8	166.5	171.3	174.5	179.1	183.3	187.6	192.4	199.4	137.5°	27.6
147.0	148.9	152.1	155.8	160.6	166.5	174.8	183.1	190.8	198.0	206.6	140°	29.9
136.0	139.5	143.0	147.3	152.3	158.0	167.6	178.3	187.6	196.2	205.5	142.5°	32.1
124.3	128.6	133.1	138.7	143.5	148.6	156.6	168.4	179.6	189.2	199.1	145°	34.0
110.7	115.2	119.7	125.6	130.7	137.1	144.3	155.8	168.6	179.6	191.4	147.5°	35.6
96.0	99.9	105.0	110.4	116.3	123.7	131.5	142.2	155.6	167.3	180.7	150°	37.3
82.0	86.3	91.4	97.3	103.2	111.2	120.0	130.2	142.5	155.0	169.2	152.5°	38.8
69.0	74.6	79.9	85.8	91.9	99.4	108.8	119.7	132.0	145.4	160.4	155°	40.0
58.0	62.3	67.9	72.7	79.4	86.6	96.2	108.5	122.7	136.9	152.6	157.5°	41.1
48.4	51.1	55.8	61.7	67.9	75.4	83.4	95.7	110.1	125.6	143.3	160°	42.2
42.5	43.8	47.3	52.6	58.5	66.0	73.0	83.7	98.1	113.3	131.5	162.5°	43.2
39.6	40.1	42.0	46.0	51.6	58.3	65.8	74.8	87.7	102.6	120.0	165°	44.0
37.9	38.2	38.8	41.7	46.5	52.6	60.1	67.3	78.8	93.0	109.9	167.5°	44.4
36.1	36.4	36.6	38.2	41.7	47.0	53.5	59.3	69.8	82.3	98.4	170°	44.5
34.2	34.7	35.3	35.8	38.2	41.7	46.5	51.6	58.8	69.8	82.9	172.5°	44.9
31.8	32.3	33.2	33.7	34.5	36.6	39.6	42.8	46.5	54.3	64.9	175°	45.5
29.7	30.2	30.5	30.7	31.3	31.8	32.9	33.7	35.5	40.1	47.6	177.5°	45.7
26.7	27.3	27.3	27.5	27.8	27.8	28.3	28.6	29.1	30.5	33.7	180°	45.6
24.3	24.6	24.9	25.1	25.1	25.1	24.9	25.1	24.9	24.9	26.2		
21.4	21.7	21.9	22.2	22.4	22.7	23.0	23.0	22.7	22.2	22.2		
18.2	18.2	18.7	19.0	19.2	20.0	20.6	20.0	20.0	19.8	19.8		
15.2	15.8	16.0	16.0	16.6	17.4	17.9	17.6	16.8	16.8	17.1		
11.8	12.0	12.3	12.6	12.8	13.6	14.4	14.7	14.2	14.4	14.4		
7.7	8.0	8.5	8.8	9.1	9.9	10.7	11.5	11.2	11.8	11.2		
3.5	4.0	4.3	4.3	5.1	5.9	7.0	7.7	8.8	9.1	8.3		
0.0	0.3	0.3	0.3	1.1	1.9	3.5	5.3	7.2	5.6	4.3		
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		
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6		
2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8		
3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8		
4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		
5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8		

'173453
 ENC-FXX-LED-E1-SLR-ULG-CWB

REPORT NUMBER: P173453
 CATALOG NUMBER: ENC-FXX-I

TION (continued):

CANDELA DISTRIBUTION (con

170°	175°	180°	185°	190°	195°	200°	205°	210°	215°		220°	225°
6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	0°	173.5	173.5
8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	2.5°	172.4	172.7
9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	5°	174.8	174.8
11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	7.5°	178.3	178.3
13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	10°	182.8	182.0
15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	12.5°	185.5	184.2
17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	15°	187.1	185.7
20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.5°	187.6	187.6
22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	20°	188.9	191.1
25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	22.5°	193.5	198.9
27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	25°	206.9	214.4
29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	27.5°	217.3	227.2
32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	30°	218.1	230.4
34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	32.5°	213.3	226.6
35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35°	206.1	221.3
37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.5°	197.2	214.4
38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	40°	187.1	204.7
40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	42.5°	177.7	195.9
41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	45°	171.0	190.3
42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	47.5°	163.8	184.4
43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	50°	152.3	176.7
44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	52.5°	140.1	164.4
44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	55°	128.8	152.1
44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	57.5°	116.8	140.3
44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	60°	101.0	124.6
45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	62.5°	80.7	102.9
45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	65°	58.0	76.7
45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	67.5°	39.3	52.1
										70°	28.6	35.5
										72.5°	23.2	26.7
										75°	20.6	22.4
										77.5°	18.2	19.2
										80°	14.4	15.5
										82.5°	11.2	12.3
										85°	8.3	9.1
										87.5°	3.8	3.8
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	0.2	0.2
										97.5°	0.5	0.5
										100°	1.6	1.6
										102.5°	2.8	2.8
										105°	3.8	3.8
										107.5°	4.8	4.8
										110°	5.8	5.8



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLF

LED-E1-SLR-ULG-CWB

<u>tinued):</u>										<u>CANDELA DISTRIBUTION (continued):</u>		
230°	235°	240°	245°	250°	255°	260°	265°	270°		220°	225°	230°
173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	173.5	112.5°	6.9	6.9	6.9
172.9	173.2	173.2	173.7	174.0	174.5	174.8	174.8	174.8	115°	8.1	8.1	8.1
175.3	175.6	175.9	176.7	176.9	177.7	178.6	178.8	179.6	117.5°	9.6	9.6	9.6
178.3	179.1	179.3	179.9	180.4	181.8	182.8	183.3	184.2	120°	11.3	11.3	11.3
181.8	182.0	182.0	182.5	183.9	184.7	186.0	188.4	190.0	122.5°	13.2	13.2	13.2
184.2	183.3	183.9	184.4	185.7	187.6	189.8	193.3	196.5	125°	15.5	15.5	15.5
185.7	185.7	187.1	188.2	190.6	193.5	197.5	202.3	207.1	127.5°	17.9	17.9	17.9
188.7	189.5	192.4	194.6	198.9	203.1	208.2	214.9	222.1	130°	20.4	20.4	20.4
194.0	196.2	199.4	202.9	207.1	213.6	222.1	230.6	240.3	132.5°	22.8	22.8	22.8
202.6	207.4	212.7	217.0	222.1	231.2	240.6	251.2	263.3	135°	25.2	25.2	25.2
221.3	226.6	234.7	241.9	249.1	262.2	274.2	286.5	302.8	137.5°	27.6	27.6	27.6
237.6	246.2	258.7	269.1	279.0	294.8	308.2	328.5	345.8	140°	29.9	29.9	29.9
244.6	258.5	274.2	289.2	307.6	323.1	342.9	367.2	389.9	142.5°	32.1	32.1	32.1
243.0	259.8	279.6	299.9	321.8	346.7	369.4	396.6	426.3	145°	34.0	34.0	34.0
239.2	258.2	281.2	305.5	331.7	362.7	391.3	425.2	462.1	147.5°	35.6	35.6	35.6
234.7	256.8	282.5	311.1	344.0	380.9	417.8	462.1	508.1	150°	37.3	37.3	37.3
227.7	253.1	284.1	319.7	360.0	403.3	451.7	504.6	554.1	152.5°	38.8	38.8	38.8
220.0	248.6	286.0	331.4	382.2	435.9	491.8	545.8	602.2	155°	40.0	40.0	40.0
214.9	247.2	290.8	345.1	404.1	466.4	528.7	587.7	649.2	157.5°	41.1	41.1	41.1
211.9	248.0	295.9	355.2	420.4	489.1	555.1	623.0	687.4	160°	42.2	42.2	42.2
209.3	250.2	300.4	361.6	430.8	503.8	576.0	649.2	720.6	162.5°	43.2	43.2	43.2
202.3	249.4	302.0	363.5	436.2	513.4	590.4	667.7	743.6	165°	44.0	44.0	44.0
190.3	241.9	298.5	361.6	437.8	519.1	599.8	681.3	756.7	167.5°	44.4	44.4	44.4
174.2	226.6	286.2	353.6	432.2	516.4	603.0	690.1	764.1	170°	44.5	44.5	44.5
156.3	202.9	264.6	335.2	414.0	500.1	588.8	681.8	755.6	172.5°	44.9	44.9	44.9
131.8	173.2	235.2	303.9	380.9	466.4	546.8	648.4	723.5	175°	45.5	45.5	45.5
100.8	137.6	191.1	261.1	339.4	414.3	487.2	588.8	672.2	177.5°	45.7	45.7	45.7
69.5	98.1	143.0	204.2	277.4	346.4	419.1	514.0	611.3	180°	45.6	45.6	45.6
45.2	63.6	94.6	141.6	199.7	263.3	323.7	410.5	514.8				
32.1	40.6	57.7	87.4	131.5	180.7	230.1	288.9	388.4				
25.4	29.7	35.5	50.8	77.0	112.5	152.3	189.5	272.6				
20.6	22.4	25.4	31.3	45.4	64.9	89.8	119.5	169.5				
16.6	17.9	19.8	22.2	28.1	37.4	52.1	65.8	96.7				
13.4	15.0	15.5	15.8	18.2	21.4	27.5	37.1	55.3				
9.6	10.2	10.2	10.4	10.9	11.8	15.8	27.3	40.4				
3.8	3.2	3.5	2.7	2.9	3.2	5.1	5.9	9.4				
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				
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5				
1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6				
2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8				
3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8				
4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8				
5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8				



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWI

3-ULG-CWB

CANDELA DISTRIBUTION (continued):

235°	240°	245°	250°	255°	260°	265°	270°		275°	280°	285°	290°
6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	0°	173.5	173.5	173.5	173.5
8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	2.5°	175.6	175.6	175.3	175.3
9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	5°	180.1	181.0	180.4	181.2
11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	7.5°	186.0	186.6	187.1	188.2
13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	10°	192.2	194.0	195.9	196.7
15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	12.5°	199.4	202.9	206.6	208.5
17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	15°	211.9	217.3	221.6	224.5
20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.5°	228.5	235.7	243.0	248.0
22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	20°	249.6	260.0	270.2	276.6
25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	22.5°	276.4	288.7	299.9	312.2
27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	25°	313.2	330.3	350.1	360.8
29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	27.5°	365.9	389.2	403.1	426.8
32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	30°	416.1	444.8	478.4	511.3
34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	32.5°	458.6	500.6	550.0	600.0
35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35°	503.3	556.5	613.7	677.8
37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.5°	556.7	611.8	673.5	743.8
38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	40°	605.4	668.2	743.8	808.8
40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	42.5°	659.1	725.9	811.2	886.3
41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	45°	711.2	781.0	874.3	956.6
42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	47.5°	756.9	827.0	926.4	1012.2
43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	50°	793.5	871.6	968.6	1050.9
44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	52.5°	822.1	904.7	1000.7	1077.6
44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	55°	837.1	920.5	1010.6	1088.9
44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	57.5°	839.2	919.4	1002.3	1078.7
44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	60°	818.9	890.0	969.1	1049.1
45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	62.5°	773.5	829.1	904.2	983.3
45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	65°	715.2	751.6	801.5	879.1
45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	67.5°	658.0	682.1	708.3	765.5
								70°	570.1	590.2	616.3	651.9
								72.5°	443.4	469.9	488.6	523.1
								75°	333.3	348.5	375.5	407.3
								77.5°	234.4	249.9	280.6	317.0
								80°	157.4	168.1	187.1	218.4
								82.5°	96.5	108.8	124.8	151.8
								85°	64.7	83.9	104.5	124.8
								87.5°	27.3	46.0	58.3	61.2
								90°	0.0	0.0	0.0	0.0
								92.5°	0.0	0.0	0.0	0.0
								95°	0.2	0.2	0.2	0.2
								97.5°	0.5	0.5	0.5	0.5
								100°	1.6	1.6	1.6	1.6
								102.5°	2.8	2.8	2.8	2.8
								105°	3.8	3.8	3.8	3.8
								107.5°	4.8	4.8	4.8	4.8
								110°	5.8	5.8	5.8	5.8



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

B

CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°	325°		275°	280°	285°	290°	295°
173.5	173.5	173.5	173.5	173.5	173.5	173.5	112.5°	6.9	6.9	6.9	6.9	6.9
176.1	175.9	176.4	176.4	176.1	176.1	176.9	115°	8.1	8.1	8.1	8.1	8.1
181.8	182.0	182.5	182.0	183.1	181.8	182.0	117.5°	9.6	9.6	9.6	9.6	9.6
189.5	189.8	190.6	190.3	191.1	190.3	189.2	120°	11.3	11.3	11.3	11.3	11.3
199.4	199.9	199.9	201.3	202.6	201.0	199.1	122.5°	13.2	13.2	13.2	13.2	13.2
210.9	212.7	211.9	214.6	215.9	214.9	213.6	125°	15.5	15.5	15.5	15.5	15.5
226.6	230.4	229.9	234.9	236.8	236.0	236.3	127.5°	17.9	17.9	17.9	17.9	17.9
250.2	255.5	256.3	264.3	269.4	268.6	267.3	130°	20.4	20.4	20.4	20.4	20.4
277.4	291.3	294.5	301.5	307.1	309.2	309.0	132.5°	22.8	22.8	22.8	22.8	22.8
323.7	333.8	341.1	353.6	358.7	363.5	362.2	135°	25.2	25.2	25.2	25.2	25.2
376.3	385.7	401.7	417.8	422.8	427.4	433.3	137.5°	27.6	27.6	27.6	27.6	27.6
443.7	457.3	482.7	504.4	516.6	512.9	511.0	140°	29.9	29.9	29.9	29.9	29.9
534.8	569.0	587.7	605.4	613.4	601.6	586.7	142.5°	32.1	32.1	32.1	32.1	32.1
643.9	683.9	695.7	704.3	689.0	673.0	629.2	145°	34.0	34.0	34.0	34.0	34.0
723.8	763.1	787.4	796.5	763.9	716.3	656.9	147.5°	35.6	35.6	35.6	35.6	35.6
795.9	835.8	846.4	850.5	806.6	745.2	687.4	150°	37.3	37.3	37.3	37.3	37.3
872.6	906.0	912.2	910.1	851.8	779.1	725.1	152.5°	38.8	38.8	38.8	38.8	38.8
942.4	976.6	971.0	961.6	895.4	821.9	762.3	155°	40.0	40.0	40.0	40.0	40.0
1008.7	1033.8	1023.7	1000.4	936.5	854.7	791.4	157.5°	41.1	41.1	41.1	41.1	41.1
1053.1	1074.2	1063.2	1033.8	964.8	876.9	807.4	160°	42.2	42.2	42.2	42.2	42.2
1086.7	1102.8	1096.4	1053.8	981.4	890.5	814.7	162.5°	43.2	43.2	43.2	43.2	43.2
1103.6	1119.3	1115.6	1057.6	983.6	892.7	811.2	165°	44.0	44.0	44.0	44.0	44.0
1109.7	1127.6	1114.5	1043.7	969.4	884.7	799.1	167.5°	44.4	44.4	44.4	44.4	44.4
1104.6	1112.9	1093.7	1017.2	940.5	859.8	782.0	170°	44.5	44.5	44.5	44.5	44.5
1085.9	1080.0	1053.6	971.3	899.6	825.3	763.1	172.5°	44.9	44.9	44.9	44.9	44.9
1033.5	1018.3	996.9	918.1	845.1	770.8	733.7	175°	45.5	45.5	45.5	45.5	45.5
925.6	921.3	911.4	852.9	780.4	709.6	685.8	177.5°	45.7	45.7	45.7	45.7	45.7
787.1	782.9	784.2	744.6	692.2	623.3	623.8	180°	45.6	45.6	45.6	45.6	45.6
674.9	651.3	623.5	581.1	550.6	541.2	571.4						
543.1	530.3	507.6	470.4	435.9	448.0	515.6						
419.9	412.1	428.7	433.0	419.6	411.6	434.6						
344.0	360.8	387.3	421.0	424.2	412.4	368.8						
261.9	305.8	342.4	387.8	383.0	357.6	310.0						
183.3	225.9	260.3	298.5	297.2	274.0	250.4						
140.3	153.7	166.8	206.9	222.4	204.5	178.8						
66.3	66.8	80.5	99.2	106.4	121.3	119.7						
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						
0.2	0.2	0.2	0.2	0.2	0.2	0.2						
0.5	0.5	0.5	0.5	0.5	0.5	0.5						
1.6	1.6	1.6	1.6	1.6	1.6	1.6						
2.8	2.8	2.8	2.8	2.8	2.8	2.8						
3.8	3.8	3.8	3.8	3.8	3.8	3.8						
4.8	4.8	4.8	4.8	4.8	4.8	4.8						
5.8	5.8	5.8	5.8	5.8	5.8	5.8						



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (continued):

300°	305°	310°	315°	320°	325°		330°	335°	340°	345°	350°	355°
6.9	6.9	6.9	6.9	6.9	6.9	0°	173.5	173.5	173.5	173.5	173.5	173.5
8.1	8.1	8.1	8.1	8.1	8.1	2.5°	177.2	176.9	176.9	176.9	177.2	176.9
9.6	9.6	9.6	9.6	9.6	9.6	5°	182.5	182.0	181.8	181.8	181.5	181.5
11.3	11.3	11.3	11.3	11.3	11.3	7.5°	189.5	188.4	188.4	187.6	187.4	186.6
13.2	13.2	13.2	13.2	13.2	13.2	10°	198.9	197.8	197.5	195.4	195.4	193.5
15.5	15.5	15.5	15.5	15.5	15.5	12.5°	212.5	212.5	212.5	209.8	209.3	206.1
17.9	17.9	17.9	17.9	17.9	17.9	15°	236.0	233.9	235.7	231.2	230.9	226.6
20.4	20.4	20.4	20.4	20.4	20.4	17.5°	267.8	267.8	264.1	261.9	260.6	254.4
22.8	22.8	22.8	22.8	22.8	22.8	20°	310.0	310.3	303.9	298.0	295.3	288.4
25.2	25.2	25.2	25.2	25.2	25.2	22.5°	363.7	358.7	350.7	346.4	342.1	330.6
27.6	27.6	27.6	27.6	27.6	27.6	25°	434.3	432.2	418.0	402.5	396.1	378.7
29.9	29.9	29.9	29.9	29.9	29.9	27.5°	503.5	499.0	476.3	449.8	433.5	409.7
32.1	32.1	32.1	32.1	32.1	32.1	30°	564.5	534.5	507.6	475.7	450.9	421.2
34.0	34.0	34.0	34.0	34.0	34.0	32.5°	596.3	558.6	519.3	493.1	461.8	429.0
35.6	35.6	35.6	35.6	35.6	35.6	35°	620.9	580.5	541.5	507.6	472.3	435.1
37.3	37.3	37.3	37.3	37.3	37.3	37.5°	652.2	609.6	566.6	526.3	483.2	439.7
38.8	38.8	38.8	38.8	38.8	38.8	40°	686.9	638.3	585.1	536.2	487.8	438.1
40.0	40.0	40.0	40.0	40.0	40.0	42.5°	715.8	656.9	594.4	539.4	486.2	431.4
41.1	41.1	41.1	41.1	41.1	41.1	45°	731.8	664.7	595.2	535.9	479.8	423.1
42.2	42.2	42.2	42.2	42.2	42.2	47.5°	739.3	665.0	589.9	528.1	471.2	411.3
43.2	43.2	43.2	43.2	43.2	43.2	50°	738.5	658.3	579.7	517.7	461.6	399.0
44.0	44.0	44.0	44.0	44.0	44.0	52.5°	730.5	647.3	567.9	509.4	453.3	388.6
44.4	44.4	44.4	44.4	44.4	44.4	55°	718.2	635.6	556.2	503.8	446.3	380.1
44.5	44.5	44.5	44.5	44.5	44.5	57.5°	704.3	625.4	547.6	502.7	442.3	378.4
44.9	44.9	44.9	44.9	44.9	44.9	60°	698.1	626.5	553.0	495.3	440.2	381.9
45.5	45.5	45.5	45.5	45.5	45.5	62.5°	694.1	636.6	564.0	500.3	443.7	396.6
45.7	45.7	45.7	45.7	45.7	45.7	65°	677.8	650.8	580.8	518.5	468.8	431.1
45.6	45.6	45.6	45.6	45.6	45.6	67.5°	658.3	654.8	587.5	529.2	497.4	476.0
						70°	638.0	650.5	597.1	557.3	539.6	531.1
						72.5°	605.4	619.8	570.1	546.3	541.0	534.8
						75°	504.9	507.6	469.6	456.5	465.9	451.4
						77.5°	363.0	369.9	345.3	348.8	379.3	348.0
						80°	268.9	241.6	226.1	236.5	265.7	221.0
						82.5°	221.6	179.3	152.1	166.3	177.5	130.4
						85°	170.5	136.9	112.5	90.9	86.6	55.8
						87.5°	133.9	98.9	55.1	31.0	20.9	1.3
						90°	0.0	0.0	0.0	0.0	0.0	0.0
						92.5°	0.0	0.0	0.0	0.0	0.0	0.0
						95°	0.2	0.2	0.2	0.2	0.2	0.2
						97.5°	0.5	0.5	0.5	0.5	0.5	0.5
						100°	1.6	1.6	1.6	1.6	1.6	1.6
						102.5°	2.8	2.8	2.8	2.8	2.8	2.8
						105°	3.8	3.8	3.8	3.8	3.8	3.8
						107.5°	4.8	4.8	4.8	4.8	4.8	4.8
						110°	5.8	5.8	5.8	5.8	5.8	5.8



REPORT NUMBER: P173453

CATALOG NUMBER: ENC-FXX-LED-E1-SLR-ULG-CWB

CANDELA DISTRIBUTION (continued):

360°		330°	335°	340°	345°	350°	355°	360°
173.5	112.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9
177.2	115°	8.1	8.1	8.1	8.1	8.1	8.1	8.1
181.5	117.5°	9.6	9.6	9.6	9.6	9.6	9.6	9.6
186.6	120°	11.3	11.3	11.3	11.3	11.3	11.3	11.3
194.3	122.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2
205.5	125°	15.5	15.5	15.5	15.5	15.5	15.5	15.5
225.6	127.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.9
251.5	130°	20.4	20.4	20.4	20.4	20.4	20.4	20.4
283.3	132.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8
319.1	135°	25.2	25.2	25.2	25.2	25.2	25.2	25.2
360.0	137.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6
385.1	140°	29.9	29.9	29.9	29.9	29.9	29.9	29.9
390.5	142.5°	32.1	32.1	32.1	32.1	32.1	32.1	32.1
394.2	145°	34.0	34.0	34.0	34.0	34.0	34.0	34.0
395.3	147.5°	35.6	35.6	35.6	35.6	35.6	35.6	35.6
393.7	150°	37.3	37.3	37.3	37.3	37.3	37.3	37.3
387.3	152.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8
379.0	155°	40.0	40.0	40.0	40.0	40.0	40.0	40.0
368.6	157.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1
355.7	160°	42.2	42.2	42.2	42.2	42.2	42.2	42.2
343.7	162.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2
334.3	165°	44.0	44.0	44.0	44.0	44.0	44.0	44.0
328.5	167.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4
329.3	170°	44.5	44.5	44.5	44.5	44.5	44.5	44.5
337.6	172.5°	44.9	44.9	44.9	44.9	44.9	44.9	44.9
358.4	175°	45.5	45.5	45.5	45.5	45.5	45.5	45.5
398.0	177.5°	45.7	45.7	45.7	45.7	45.7	45.7	45.7
436.7	180°	45.6	45.6	45.6	45.6	45.6	45.6	45.6
474.1								
449.5								
343.2								
247.0								
143.3								
89.6								
38.8								
1.3								
0.0								
0.0								
0.2								
0.5								
1.6								
2.8								
3.8								
4.8								
5.8								

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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(REPORT)