

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: P173579

Luminaire Tested: **ENT-FXX-LED-E1-BL2-7050-CWB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P173579  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33644)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-FXX-LED-E1-BL2-7050-CWB  
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE  
LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (14) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1501.9 lumens  
Efficiency: N/A  
Efficacy: 273.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

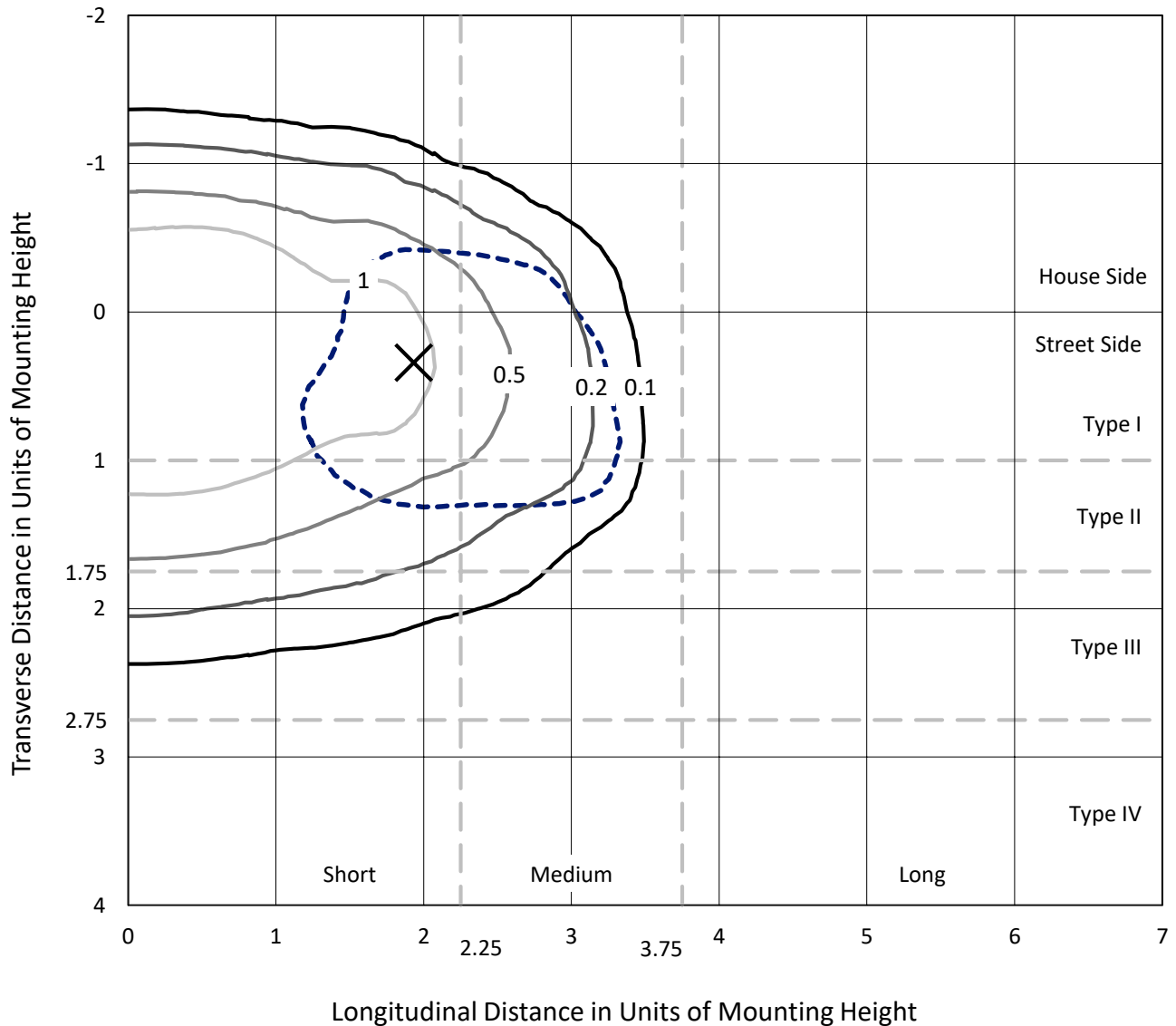
Input Watts (W): 5.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P173579  
 CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

### Iso-Footcandle Lines of Horizontal Illumination

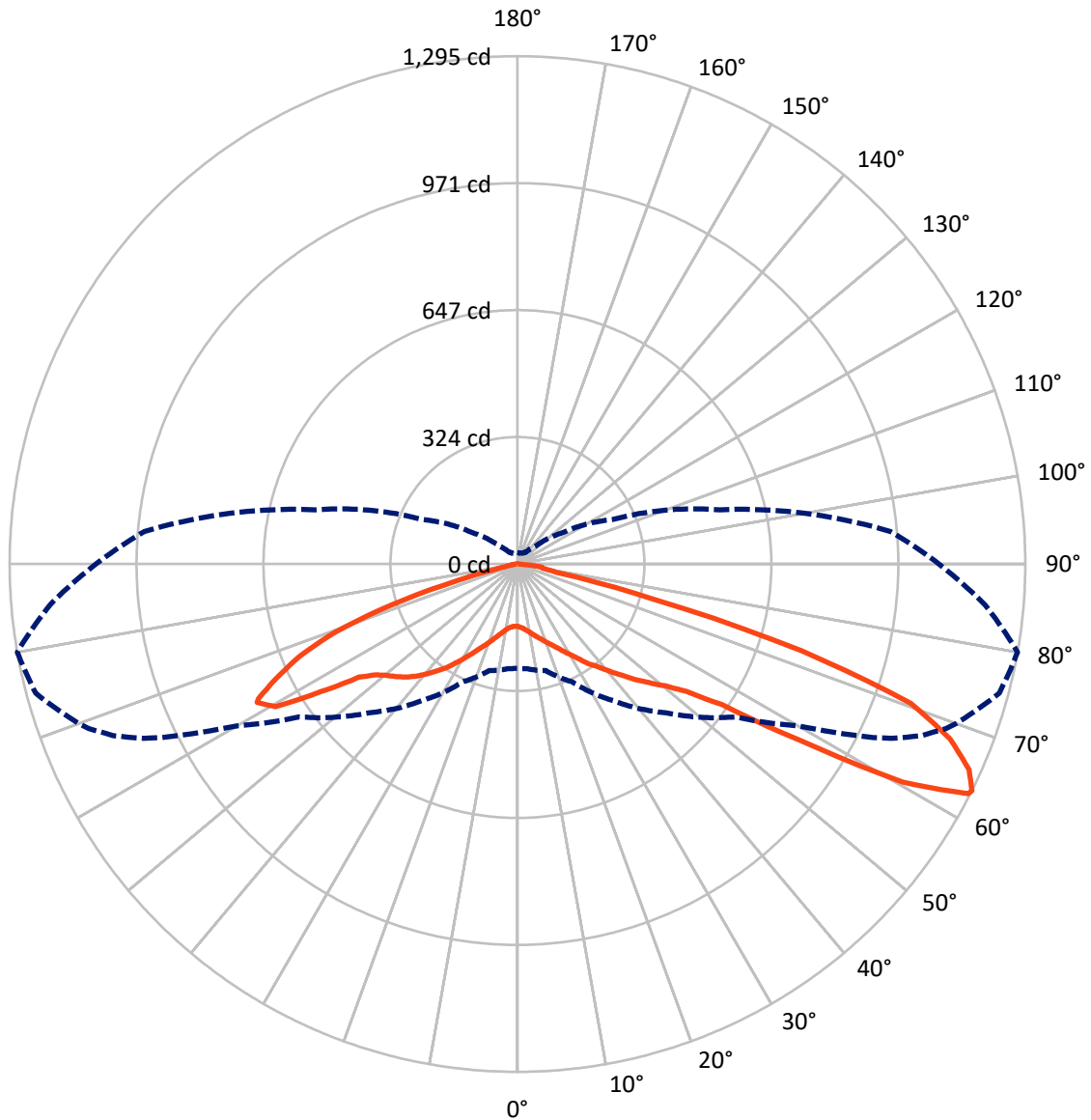
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P173579  
CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral      - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P173579

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	467.7	0.0	467.7
	% Fixture	31.1	0.0	31.1
<b>Street Side</b>	Lumens	1034.1	0.0	1034.1
	% Fixture	68.9	0.0	68.9
<b>Total</b>	Lumens	1501.9	0.0	1501.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.9	1.1
10°-20°	54.7	3.6
20°-30°	102.7	6.8
30°-40°	163.1	10.9
40°-50°	246.1	16.4
50°-60°	346.0	23.0
60°-70°	403.7	26.9
70°-80°	156.0	10.4
80°-90°	13.6	0.9
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°	1501.9	100.0
0°-180°	1501.9	100.0



REPORT NUMBER: P173579

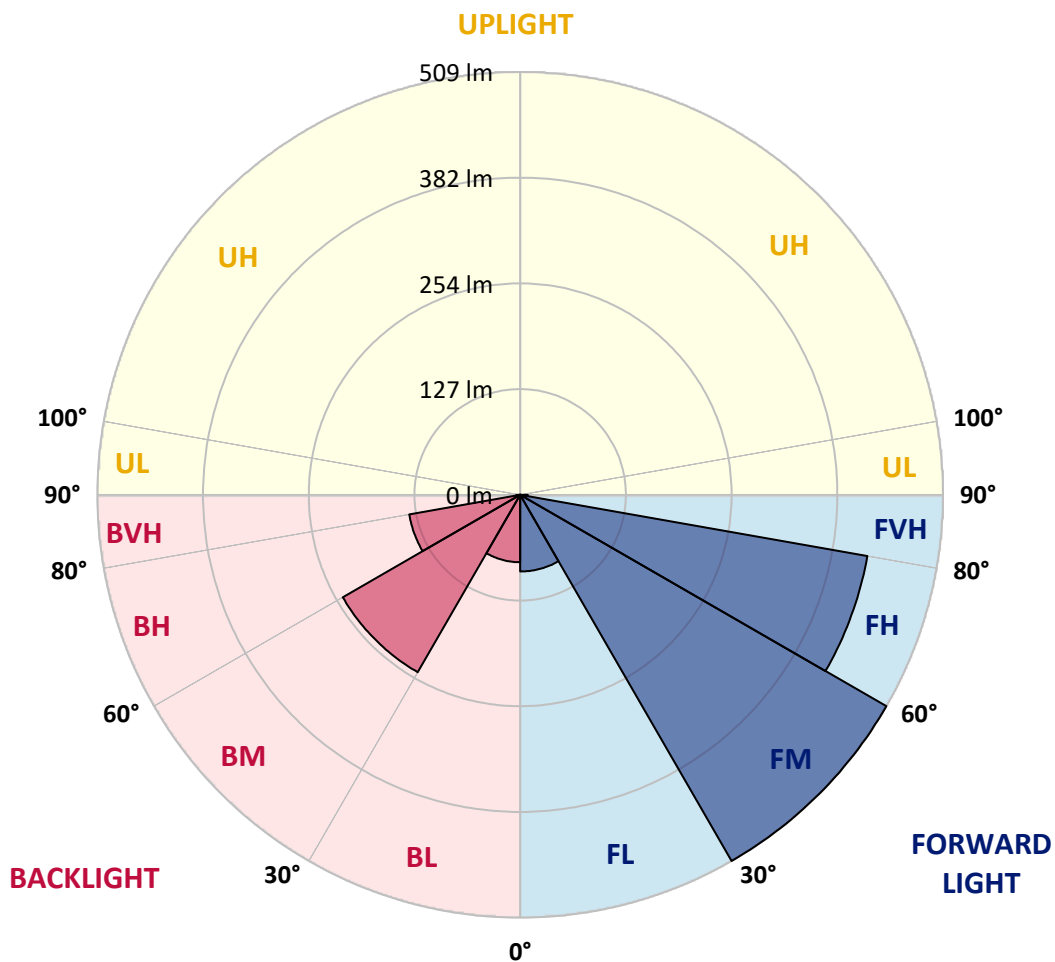
CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	92.2	6.1			
FM	(30°-60°)	508.7	33.9			
FH	(60°-80°)	424.1	28.2			G0/660
FVH	(80°-90°)	9.0	0.6			G0/10
BL	(0°-30°)	81.1	5.4	B0/110		
BM	(30°-60°)	246.5	16.4	B1/1000		
BH	(60°-80°)	135.6	9.0	B1/500		G1/500
BVH	(80°-90°)	4.5	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P173579

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1
2.5°	167.0	166.5	166.7	166.5	166.5	165.9	164.3	164.3	164.0	164.3	163.7
5°	176.1	175.8	175.5	175.0	175.0	173.9	171.1	170.6	170.8	170.3	169.2
7.5°	186.2	185.9	185.4	184.3	183.7	182.1	178.3	177.7	177.5	176.9	176.1
10°	196.4	196.1	195.3	193.9	192.5	190.0	186.2	184.8	184.6	184.3	183.5
12.5°	206.8	206.0	206.2	203.8	201.6	198.6	194.2	192.8	192.5	192.3	192.0
15°	218.3	218.0	217.5	214.2	210.1	206.0	201.6	199.9	198.8	199.1	198.8
17.5°	229.3	229.0	227.1	222.4	216.9	212.3	206.8	205.7	205.7	205.4	205.4
20°	237.2	237.0	235.0	229.3	222.1	216.9	212.5	212.5	212.3	212.5	212.8
22.5°	240.8	240.8	238.3	232.0	224.3	220.5	219.1	220.0	220.2	220.5	221.0
25°	242.2	242.2	239.7	232.3	225.1	225.7	227.3	228.7	229.3	229.3	231.2
27.5°	244.6	244.9	241.6	233.7	227.9	233.1	237.2	239.1	240.0	240.5	243.0
30°	252.0	251.8	249.0	240.5	236.1	243.5	250.9	252.9	254.8	254.8	257.5
32.5°	263.0	262.7	261.1	254.5	252.6	261.9	268.5	272.6	272.3	272.9	274.8
35°	277.5	277.8	278.9	277.3	278.9	288.2	295.6	297.3	297.6	297.8	298.1
37.5°	294.0	294.3	300.3	305.5	312.9	326.6	331.0	331.9	329.9	329.9	329.4
40°	306.3	307.7	321.1	334.9	350.5	369.2	375.7	374.1	372.7	371.6	368.3
42.5°	331.6	332.4	346.7	366.4	388.4	414.1	425.7	420.1	419.9	414.9	412.5
45°	356.8	359.0	374.4	396.6	422.9	458.5	475.5	470.9	470.1	467.9	461.0
47.5°	376.8	379.8	396.8	423.2	453.3	494.5	524.9	528.2	526.3	523.8	518.3
50°	393.8	396.3	413.6	442.4	476.9	521.9	565.5	577.3	579.0	577.9	576.5
52.5°	404.8	407.3	424.3	455.0	490.6	542.2	595.7	619.0	623.9	623.6	629.4
55°	405.1	407.8	425.4	459.1	498.3	556.2	623.6	660.4	666.4	673.8	686.2
57.5°	390.0	392.7	414.7	453.6	500.5	567.2	650.8	715.5	732.0	746.5	780.5
60°	348.0	349.1	373.3	425.4	490.1	564.7	671.4	763.0	786.3	817.8	872.7
62.5°	283.6	285.8	300.6	351.3	441.5	543.0	679.6	815.9	854.3	900.4	988.1
63°	265.7	267.7	281.4	331.6	425.1	536.2	679.3	824.4	866.6	914.1	1008.7
65°	205.1	205.7	215.8	253.7	348.9	486.3	664.5	812.3	865.8	921.2	1020.5
67.5°	165.4	167.3	177.5	204.0	275.6	408.4	598.2	703.7	740.2	794.8	913.0
70°	129.4	132.7	142.3	172.5	235.0	328.8	503.3	587.4	609.9	636.0	736.4
72.5°	85.6	86.4	88.0	104.8	164.0	255.9	418.8	476.1	484.9	503.5	552.6
75°	40.3	43.3	45.8	54.3	79.3	167.6	303.6	338.1	348.6	368.1	385.9
77.5°	17.5	17.3	18.4	25.0	41.7	74.6	188.9	249.8	253.4	249.0	241.3
80°	5.5	5.8	6.0	6.6	13.2	35.6	81.7	167.8	185.4	197.2	193.9
82.5°	0.6	0.3	0.8	1.7	2.8	5.2	30.7	78.7	99.0	121.5	150.3
85°	0.0	0.0	0.3	0.3	0.6	1.1	1.9	8.2	13.7	15.9	31.5
87.5°	0.0	0.0	0.3	0.3	0.6	0.8	0.8	1.1	1.1	1.1	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: P173579

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	75°	80°	85°	90°	95°
0°	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1
2.5°	163.5	163.5	162.9	163.2	162.9	162.9	162.4	161.8	161.5	160.2	159.4
5°	169.2	169.2	168.9	168.4	168.4	168.1	166.7	165.4	164.5	162.9	161.3
7.5°	175.8	175.5	175.0	174.4	174.4	174.2	172.2	170.8	169.2	166.7	164.8
10°	183.5	183.2	182.7	181.8	181.8	181.6	179.6	177.5	176.1	173.1	170.6
12.5°	191.7	190.9	190.6	190.0	189.5	189.5	187.8	185.7	184.6	181.3	178.8
15°	198.6	198.0	197.7	197.5	197.2	196.7	195.3	193.4	192.5	189.8	187.8
17.5°	205.1	205.1	205.4	204.9	204.6	204.0	203.2	202.7	201.8	199.4	198.3
20°	212.8	212.8	213.4	213.1	212.8	213.7	213.4	213.1	213.1	210.9	210.1
22.5°	221.9	221.6	222.4	222.1	222.4	223.2	224.3	223.8	224.9	223.5	223.0
25°	232.3	232.0	232.8	233.4	234.0	234.5	236.7	237.2	238.6	238.3	237.2
27.5°	244.1	244.3	244.6	246.0	246.8	247.4	250.4	252.0	254.8	253.7	254.8
30°	257.8	259.2	260.3	261.6	261.9	262.5	267.4	269.0	270.4	271.2	272.9
32.5°	276.7	277.5	277.8	279.5	280.0	280.8	286.0	288.2	290.2	290.4	293.5
35°	299.8	300.3	301.1	301.9	303.0	302.5	308.5	311.8	314.3	314.6	317.9
37.5°	330.2	328.3	329.1	328.0	326.4	326.4	328.3	331.6	334.3	336.5	339.8
40°	366.7	365.3	365.0	362.5	359.8	357.3	356.3	358.2	360.4	362.3	366.4
42.5°	408.4	407.0	402.3	400.7	396.0	393.3	385.9	386.7	390.5	391.6	394.1
45°	457.2	452.2	450.6	440.4	438.5	434.7	420.7	419.6	422.9	423.2	421.5
47.5°	512.8	509.3	505.5	498.3	490.9	484.6	463.2	452.0	455.5	455.2	447.3
50°	573.4	572.9	567.2	562.5	555.9	546.9	508.7	488.2	490.9	488.4	473.9
52.5°	631.3	629.7	629.4	625.8	623.4	620.4	574.0	538.6	532.3	527.1	508.5
55°	692.2	696.3	693.6	699.3	703.7	703.2	684.0	632.1	600.1	595.9	567.4
57.5°	793.7	803.5	816.7	817.3	829.1	846.1	880.6	843.3	763.0	747.0	708.9
60°	910.0	935.5	968.4	984.6	1009.8	1036.1	1122.8	1128.5	1016.1	954.7	884.7
62.5°	1026.8	1060.3	1099.2	1124.4	1155.7	1176.3	1267.9	1289.8	1187.2	1074.0	958.8
63°	1051.5	1085.8	1119.5	1144.2	1170.5	1189.4	1271.7	1294.7	1196.6	1074.2	954.1
65°	1064.4	1096.5	1122.8	1144.7	1162.3	1175.2	1240.2	1265.1	1184.2	1034.5	901.7
67.5°	966.5	1018.0	1051.2	1077.8	1095.6	1113.5	1173.2	1188.9	1131.5	957.1	822.2
70°	800.0	859.5	911.9	953.3	984.0	1011.2	1074.0	1063.3	1013.9	831.8	697.4
72.5°	588.5	640.4	691.4	738.3	778.3	812.9	854.3	757.5	682.3	553.2	482.7
75°	395.7	407.0	430.3	453.6	468.2	478.0	452.5	360.6	292.9	262.7	229.8
77.5°	233.7	226.0	226.8	221.0	217.2	216.4	181.6	100.9	53.2	54.3	57.0
80°	186.5	178.0	168.9	158.8	152.2	145.1	118.2	64.7	23.1	18.6	19.5
82.5°	150.8	148.6	143.7	133.3	122.9	110.5	84.5	62.3	13.2	10.4	11.2
85°	29.3	32.9	29.6	32.4	24.1	22.8	13.4	14.5	5.2	4.7	5.8
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	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: P173579

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-7050-CWB

**CANDELA DISTRIBUTION (continued):**

	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1	159.1
2.5°	158.0	156.9	156.1	155.0	154.4	153.6	153.3	152.5	152.8
5°	158.5	156.6	155.0	153.3	152.2	151.7	151.1	150.5	150.5
7.5°	161.3	158.8	156.9	155.0	154.1	153.0	152.8	151.9	151.9
10°	167.0	164.3	161.8	159.6	158.5	157.2	156.6	155.8	155.8
12.5°	175.5	173.1	170.3	167.0	164.8	163.2	161.8	161.3	161.3
15°	185.1	183.2	181.0	176.6	173.1	170.0	167.3	166.2	165.9
17.5°	196.7	195.0	192.8	187.8	182.1	175.8	171.1	168.9	168.7
20°	210.6	209.0	205.7	198.8	189.8	179.9	172.5	169.2	168.9
22.5°	224.9	224.9	219.4	208.1	194.7	181.6	171.7	167.3	166.5
25°	240.5	241.3	233.1	215.6	197.5	180.7	168.1	162.6	161.5
27.5°	259.4	258.6	244.9	221.3	197.7	177.5	162.4	155.8	154.7
30°	280.3	274.8	254.5	224.6	195.8	171.4	154.7	147.3	146.4
32.5°	301.1	289.3	261.6	225.1	190.3	162.6	144.5	136.9	135.8
35°	323.3	302.2	266.0	222.1	181.3	150.8	131.9	124.5	123.4
37.5°	342.0	312.1	267.4	214.2	167.6	137.1	120.4	112.7	110.8
40°	359.0	319.2	264.9	201.3	152.2	123.7	108.3	101.8	101.2
42.5°	374.6	322.5	256.2	184.6	136.9	112.2	98.2	91.9	91.3
45°	386.7	320.3	241.3	166.2	124.2	102.3	89.1	83.4	82.3
47.5°	394.4	312.4	221.0	150.8	113.8	92.1	79.3	73.2	72.1
50°	400.4	300.6	200.5	139.1	103.7	81.7	69.1	63.6	62.8
52.5°	408.4	285.5	182.7	128.3	91.9	69.9	58.7	53.5	52.6
55°	425.9	272.6	170.0	116.6	79.3	57.6	48.3	45.0	43.9
57.5°	485.4	277.0	162.1	102.3	64.7	46.4	40.0	38.1	37.8
60°	548.0	295.6	158.3	85.8	50.2	37.6	34.0	33.4	33.2
62.5°	544.7	278.9	142.3	67.5	38.7	31.0	29.3	29.6	29.6
63°	533.7	268.8	137.1	63.4	36.7	30.2	28.5	28.5	28.5
65°	467.3	227.9	111.3	48.0	30.7	26.9	25.5	25.8	26.1
67.5°	385.9	164.5	73.2	33.4	27.7	24.4	22.8	22.2	22.2
70°	295.1	110.8	43.3	29.1	27.4	22.8	20.0	19.5	19.5
72.5°	193.6	67.7	29.3	29.1	27.2	21.7	18.6	17.5	17.5
75°	88.9	33.4	24.4	28.0	25.8	20.0	16.4	15.1	14.8
77.5°	34.5	21.1	22.0	23.6	20.0	16.4	14.8	13.7	13.4
80°	20.0	17.0	19.2	17.0	14.5	12.6	12.6	11.8	11.5
82.5°	14.5	14.5	14.8	12.3	11.0	10.4	10.4	9.6	9.3
85°	10.4	10.7	12.3	9.9	8.5	7.4	6.9	6.9	6.6
87.5°	5.2	8.5	6.9	4.1	3.9	3.6	3.6	3.6	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)