

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: P173587

Luminaire Tested: **ENT-FXX-LED-E1-BL2-8030-CWB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P173587  
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-BL2-8030-CWB  
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE  
LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1235.3 lumens  
Efficiency: N/A  
Efficacy: 224.6 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

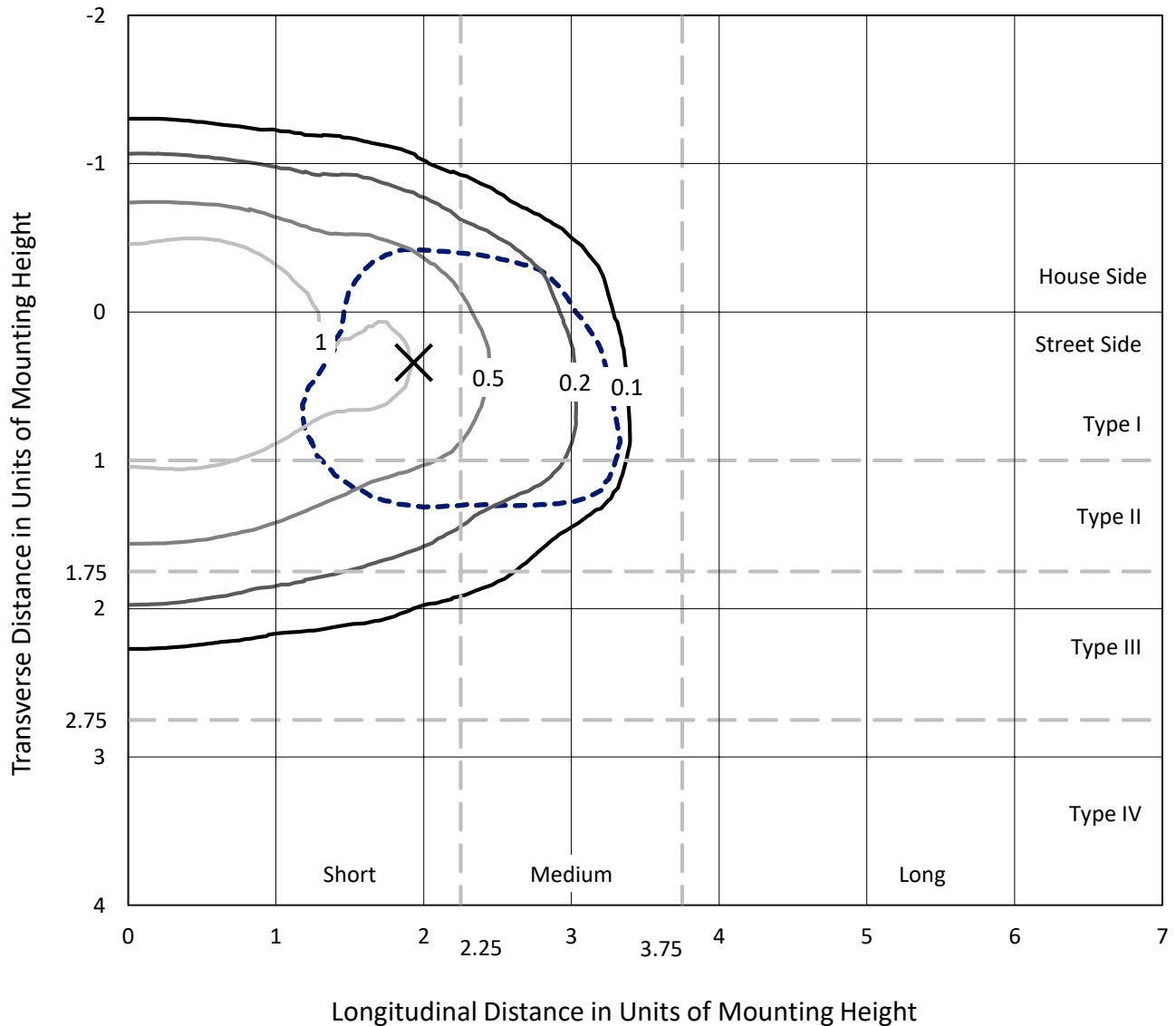
Input Watts (W): 5.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P173587  
 CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

### Iso-Footcandle Lines of Horizontal Illumination

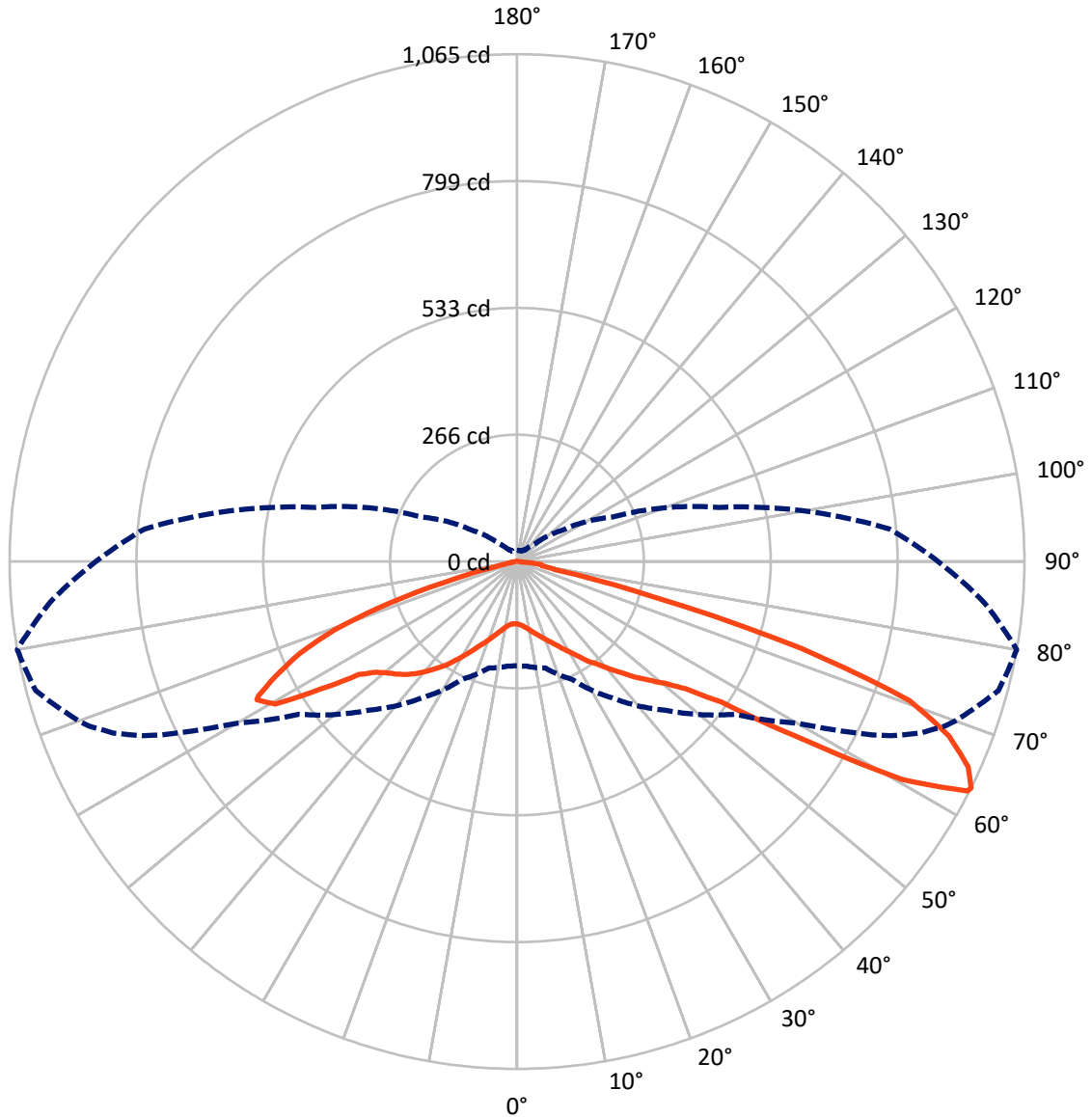
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.6 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P173587  
CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P173587

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	384.7	0.0	384.7
	% Fixture	31.1	0.0	31.1
<b>Street Side</b>	Lumens	850.6	0.0	850.6
	% Fixture	68.9	0.0	68.9
<b>Total</b>	Lumens	1235.3	0.0	1235.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.1	1.1
10°-20°	45.0	3.6
20°-30°	84.5	6.8
30°-40°	134.1	10.9
40°-50°	202.5	16.4
50°-60°	284.6	23.0
60°-70°	332.0	26.9
70°-80°	128.3	10.4
80°-90°	11.2	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°	1235.3	100.0
0°-180°	1235.3	100.0



REPORT NUMBER: P173587

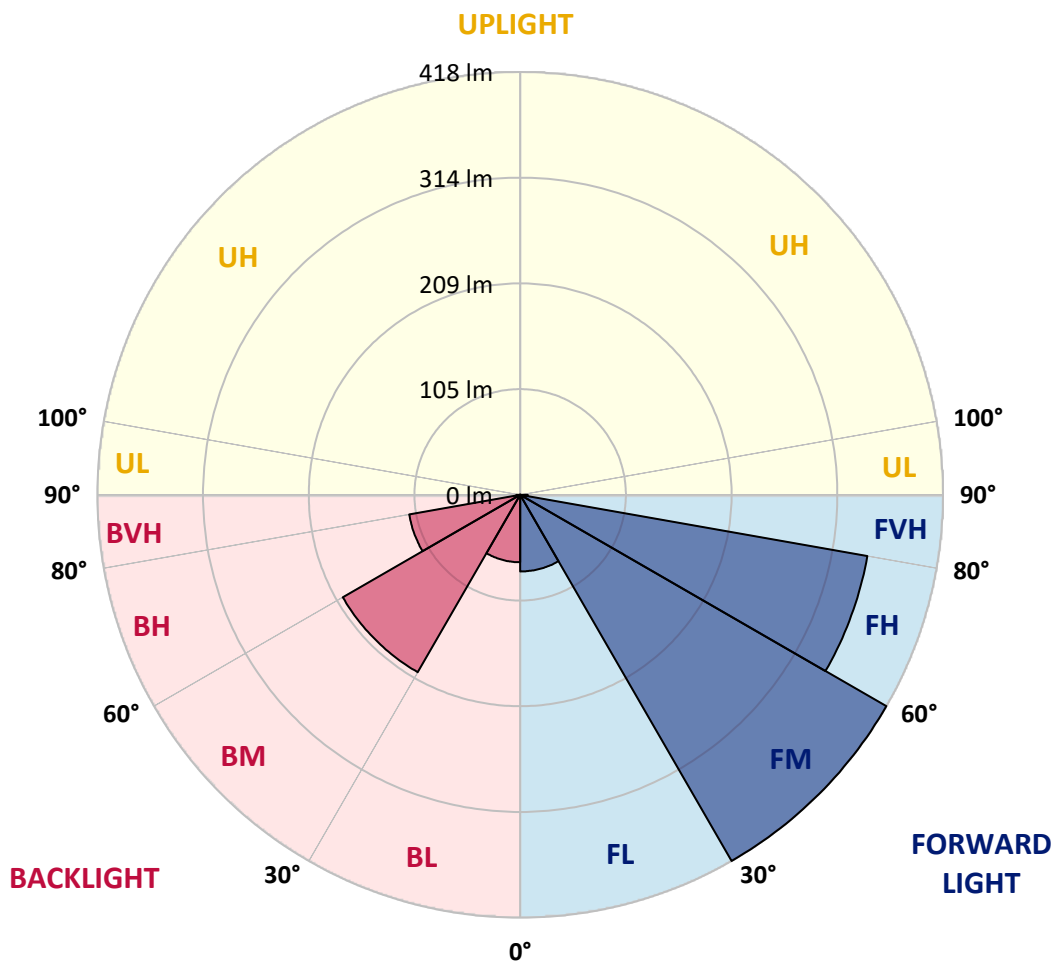
CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	75.9	6.1			
FM	(30°-60°)	418.4	33.9			
FH	(60°-80°)	348.8	28.2			G0/660
FVH	(80°-90°)	7.4	0.6			G0/10
BL	(0°-30°)	66.7	5.4	B0/110		
BM	(30°-60°)	202.7	16.4	B0/220		
BH	(60°-80°)	111.5	9.0	B1/500		G1/500
BVH	(80°-90°)	3.7	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: P173587

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8
2.5°	137.4	136.9	137.1	136.9	136.9	136.5	135.1	135.1	134.9	135.1	134.7
5°	144.8	144.6	144.4	143.9	143.9	143.0	140.8	140.3	140.5	140.1	139.2
7.5°	153.2	152.9	152.5	151.6	151.1	149.8	146.6	146.2	146.0	145.5	144.8
10°	161.5	161.3	160.6	159.5	158.4	156.3	153.2	152.0	151.8	151.6	150.9
12.5°	170.1	169.4	169.6	167.6	165.8	163.3	159.7	158.6	158.4	158.1	157.9
15°	179.6	179.3	178.9	176.2	172.8	169.4	165.8	164.4	163.5	163.8	163.5
17.5°	188.6	188.4	186.8	183.0	178.4	174.6	170.1	169.2	169.2	169.0	169.0
20°	195.1	194.9	193.3	188.6	182.7	178.4	174.8	174.8	174.6	174.8	175.1
22.5°	198.0	198.0	196.0	190.8	184.5	181.4	180.2	180.9	181.1	181.4	181.8
25°	199.2	199.2	197.1	191.1	185.2	185.6	187.0	188.1	188.6	188.6	190.1
27.5°	201.2	201.4	198.7	192.2	187.5	191.7	195.1	196.7	197.4	197.8	199.9
30°	207.3	207.1	204.8	197.8	194.2	200.3	206.4	208.0	209.6	209.6	211.8
32.5°	216.3	216.1	214.8	209.3	207.8	215.4	220.8	224.2	224.0	224.5	226.0
35°	228.3	228.5	229.4	228.1	229.4	237.1	243.2	244.5	244.8	245.0	245.2
37.5°	241.8	242.0	247.0	251.3	257.4	268.7	272.3	273.0	271.4	271.4	270.9
40°	252.0	253.1	264.2	275.4	288.3	303.6	309.0	307.7	306.6	305.7	302.9
42.5°	272.7	273.4	285.1	301.4	319.4	340.6	350.1	345.6	345.4	341.3	339.3
45°	293.5	295.3	307.9	326.2	347.9	377.2	391.1	387.3	386.6	384.8	379.2
47.5°	309.9	312.4	326.4	348.1	372.9	406.7	431.8	434.5	432.9	430.9	426.3
50°	323.9	326.0	340.2	363.8	392.3	429.3	465.1	474.8	476.2	475.3	474.1
52.5°	333.0	335.0	349.0	374.2	403.6	446.0	489.9	509.1	513.2	513.0	517.7
55°	333.2	335.4	349.9	377.6	409.9	457.5	513.0	543.2	548.2	554.2	564.4
57.5°	320.8	323.0	341.1	373.1	411.7	466.5	535.3	588.5	602.1	614.0	642.0
60°	286.3	287.1	307.0	349.9	403.1	464.5	552.2	627.5	646.7	672.7	717.8
62.5°	233.2	235.1	247.2	289.0	363.2	446.6	559.0	671.1	702.7	740.6	812.7
63°	218.6	220.2	231.5	272.7	349.6	441.0	558.7	678.1	712.8	751.8	829.7
65°	168.7	169.2	177.5	208.7	286.9	399.9	546.6	668.1	712.1	757.7	839.4
67.5°	136.0	137.6	146.0	167.8	226.7	335.9	492.0	578.8	608.8	653.7	750.9
70°	106.5	109.2	117.1	141.9	193.3	270.5	413.9	483.2	501.7	523.1	605.7
72.5°	70.4	71.1	72.4	86.2	134.9	210.5	344.5	391.6	398.8	414.2	454.5
75°	33.2	35.6	37.7	44.7	65.2	137.8	249.7	278.1	286.7	302.7	317.4
77.5°	14.4	14.2	15.1	20.5	34.3	61.4	155.4	205.5	208.4	204.8	198.5
80°	4.5	4.7	5.0	5.4	10.8	29.3	67.2	138.1	152.5	162.2	159.5
82.5°	0.5	0.2	0.7	1.4	2.3	4.3	25.3	64.8	81.4	99.9	123.6
85°	0.0	0.0	0.2	0.2	0.5	0.9	1.6	6.8	11.3	13.1	25.9
87.5°	0.0	0.0	0.2	0.2	0.5	0.7	0.7	0.9	0.9	0.9	0.9
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: P173587

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	75°	80°	85°	90°	95°
0°	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8
2.5°	134.5	134.5	134.0	134.2	134.0	134.0	133.6	133.1	132.9	131.7	131.1
5°	139.2	139.2	139.0	138.5	138.5	138.3	137.1	136.0	135.3	134.0	132.6
7.5°	144.6	144.4	143.9	143.5	143.5	143.2	141.6	140.5	139.2	137.1	135.6
10°	150.9	150.7	150.2	149.5	149.5	149.3	147.8	146.0	144.8	142.3	140.3
12.5°	157.7	157.0	156.8	156.3	155.9	155.9	154.5	152.7	151.8	149.1	147.1
15°	163.3	162.9	162.6	162.4	162.2	161.8	160.6	159.0	158.4	156.1	154.5
17.5°	168.7	168.7	169.0	168.5	168.3	167.8	167.2	166.7	166.0	164.0	163.1
20°	175.1	175.1	175.5	175.3	175.1	175.7	175.5	175.3	175.3	173.5	172.8
22.5°	182.5	182.3	183.0	182.7	183.0	183.6	184.5	184.1	185.0	183.8	183.4
25°	191.1	190.8	191.5	192.0	192.4	192.9	194.7	195.1	196.3	196.0	195.1
27.5°	200.8	201.0	201.2	202.4	203.0	203.5	205.9	207.3	209.6	208.7	209.6
30°	212.0	213.2	214.1	215.2	215.4	215.9	219.9	221.3	222.4	223.1	224.5
32.5°	227.6	228.3	228.5	229.9	230.3	231.0	235.3	237.1	238.6	238.9	241.4
35°	246.5	247.0	247.7	248.4	249.3	248.8	253.8	256.5	258.5	258.8	261.4
37.5°	271.6	270.0	270.7	269.8	268.4	268.4	270.0	272.7	275.0	276.8	279.5
40°	301.6	300.5	300.3	298.2	296.0	293.9	293.0	294.6	296.4	298.0	301.4
42.5°	335.9	334.8	330.9	329.6	325.7	323.5	317.4	318.1	321.2	322.1	324.2
45°	376.0	372.0	370.6	362.3	360.7	357.5	346.0	345.1	347.9	348.1	346.7
47.5°	421.8	418.9	415.7	409.9	403.8	398.6	381.0	371.7	374.7	374.5	367.9
50°	471.7	471.2	466.5	462.7	457.2	449.8	418.4	401.5	403.8	401.8	389.8
52.5°	519.3	517.9	517.7	514.8	512.7	510.2	472.1	443.0	437.9	433.6	418.2
55°	569.4	572.7	570.5	575.2	578.8	578.4	562.6	520.0	493.6	490.2	466.7
57.5°	652.8	660.9	671.8	672.2	681.9	695.9	724.3	693.7	627.5	614.5	583.1
60°	748.5	769.5	796.5	809.8	830.6	852.2	923.5	928.3	835.8	785.2	727.7
62.5°	844.6	872.1	904.1	924.9	950.6	967.5	1042.8	1060.9	976.5	883.4	788.6
63°	864.9	893.1	920.8	941.1	962.8	978.3	1046.0	1065.0	984.2	883.6	784.8
65°	875.5	901.8	923.5	941.6	956.0	966.6	1020.0	1040.6	974.0	850.9	741.7
67.5°	794.9	837.3	864.6	886.5	901.2	915.8	965.0	977.9	930.7	787.3	676.3
70°	658.0	707.0	750.0	784.1	809.4	831.7	883.4	874.5	833.9	684.2	573.6
72.5°	484.1	526.7	568.7	607.2	640.2	668.6	702.7	623.0	561.2	455.0	397.0
75°	325.5	334.8	353.9	373.1	385.1	393.2	372.2	296.6	240.9	216.1	189.0
77.5°	192.2	185.9	186.6	181.8	178.7	178.0	149.3	83.0	43.8	44.7	46.9
80°	153.4	146.4	139.0	130.6	125.2	119.3	97.2	53.2	18.9	15.3	16.0
82.5°	124.1	122.3	118.2	109.6	101.0	90.9	69.5	51.2	10.8	8.6	9.3
85°	24.2	27.1	24.3	26.6	19.8	18.7	11.0	11.9	4.3	3.8	4.7
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
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: P173587

CATALOG NUMBER: ENT-FXX-LED-E1-BL2-8030-CWB

**CANDELA DISTRIBUTION (continued):**

	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8
2.5°	129.9	129.0	128.3	127.5	127.0	126.3	126.1	125.4	125.7
5°	130.4	128.8	127.5	126.1	125.2	124.7	124.3	123.8	123.8
7.5°	132.6	130.6	129.0	127.5	126.8	125.9	125.7	125.0	125.0
10°	137.4	135.1	133.1	131.3	130.4	129.2	128.8	128.1	128.1
12.5°	144.4	142.3	140.1	137.4	135.6	134.2	133.1	132.6	132.6
15°	152.3	150.7	148.9	145.3	142.3	139.9	137.6	136.7	136.5
17.5°	161.8	160.4	158.6	154.5	149.8	144.6	140.8	139.0	138.7
20°	173.2	171.9	169.2	163.5	156.1	148.0	141.9	139.2	139.0
22.5°	185.0	185.0	180.5	171.2	160.2	149.3	141.2	137.6	136.9
25°	197.8	198.5	191.7	177.3	162.4	148.6	138.3	133.8	132.9
27.5°	213.4	212.7	201.4	182.1	162.6	146.0	133.6	128.1	127.2
30°	230.6	226.0	209.3	184.7	161.1	141.0	127.2	121.1	120.5
32.5°	247.7	238.0	215.2	185.2	156.5	133.8	118.9	112.6	111.7
35°	266.0	248.6	218.8	182.7	149.1	124.1	108.5	102.4	101.5
37.5°	281.3	256.7	219.9	176.2	137.8	112.8	99.0	92.7	91.1
40°	295.3	262.6	217.9	165.6	125.2	101.7	89.1	83.7	83.2
42.5°	308.1	265.3	210.7	151.8	112.6	92.3	80.7	75.6	75.1
45°	318.1	263.5	198.5	136.7	102.2	84.1	73.3	68.6	67.7
47.5°	324.4	256.9	181.8	124.1	93.6	75.8	65.2	60.2	59.3
50°	329.3	247.2	164.9	114.4	85.3	67.2	56.9	52.3	51.7
52.5°	335.9	234.8	150.2	105.6	75.6	57.5	48.3	44.0	43.3
55°	350.3	224.2	139.9	95.9	65.2	47.4	39.7	37.0	36.1
57.5°	399.3	227.8	133.3	84.1	53.2	38.1	32.9	31.3	31.1
60°	450.7	243.2	130.2	70.6	41.3	30.9	28.0	27.5	27.3
62.5°	448.0	229.4	117.1	55.5	31.8	25.5	24.2	24.3	24.3
63°	439.0	221.1	112.8	52.1	30.2	24.8	23.5	23.5	23.5
65°	384.4	187.5	91.6	39.5	25.3	22.1	21.0	21.2	21.4
67.5°	317.4	135.3	60.2	27.5	22.8	20.1	18.7	18.3	18.3
70°	242.7	91.1	35.6	23.9	22.6	18.7	16.5	16.0	16.0
72.5°	159.3	55.7	24.2	23.9	22.3	17.8	15.3	14.4	14.4
75°	73.1	27.5	20.1	23.0	21.2	16.5	13.5	12.4	12.2
77.5°	28.4	17.4	18.0	19.4	16.5	13.5	12.2	11.3	11.0
80°	16.5	14.0	15.8	14.0	11.9	10.4	10.4	9.7	9.5
82.5°	11.9	11.9	12.2	10.2	9.0	8.6	8.6	7.9	7.7
85°	8.6	8.8	10.2	8.1	7.0	6.1	5.6	5.6	5.4
87.5°	4.3	7.0	5.6	3.4	3.2	2.9	2.9	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)