

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: P173458

Luminaire Tested: **ENT-EXX-LED-E1-BL2-7050-BBB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P173458  
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-EXX-LED-E1-BL2-7050-BBB  
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE  
LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1819.3 lumens  
Efficiency: N/A  
Efficacy: 330.8 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

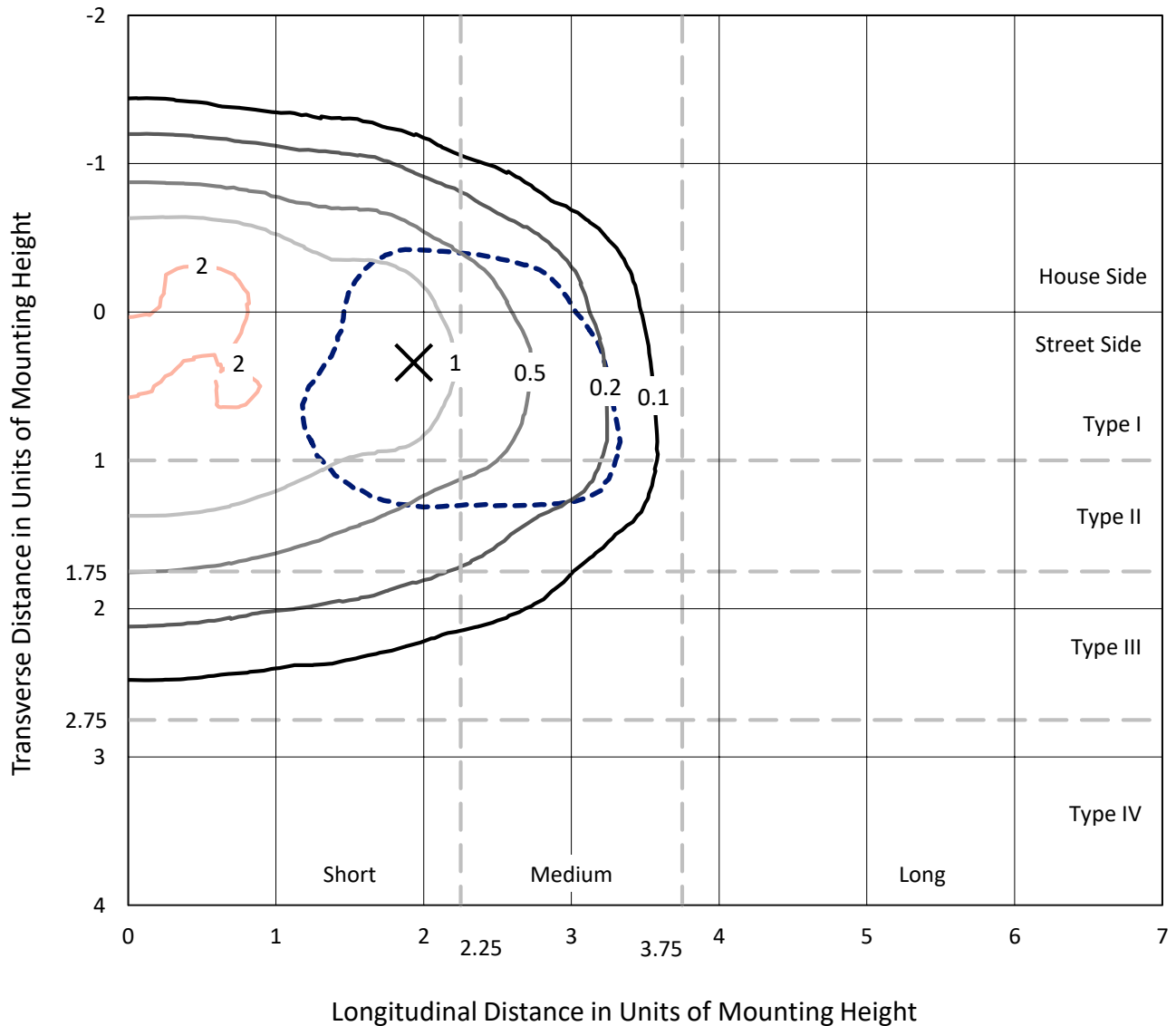
Input Watts (W): 5.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P173458  
 CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

### Iso-Footcandle Lines of Horizontal Illumination

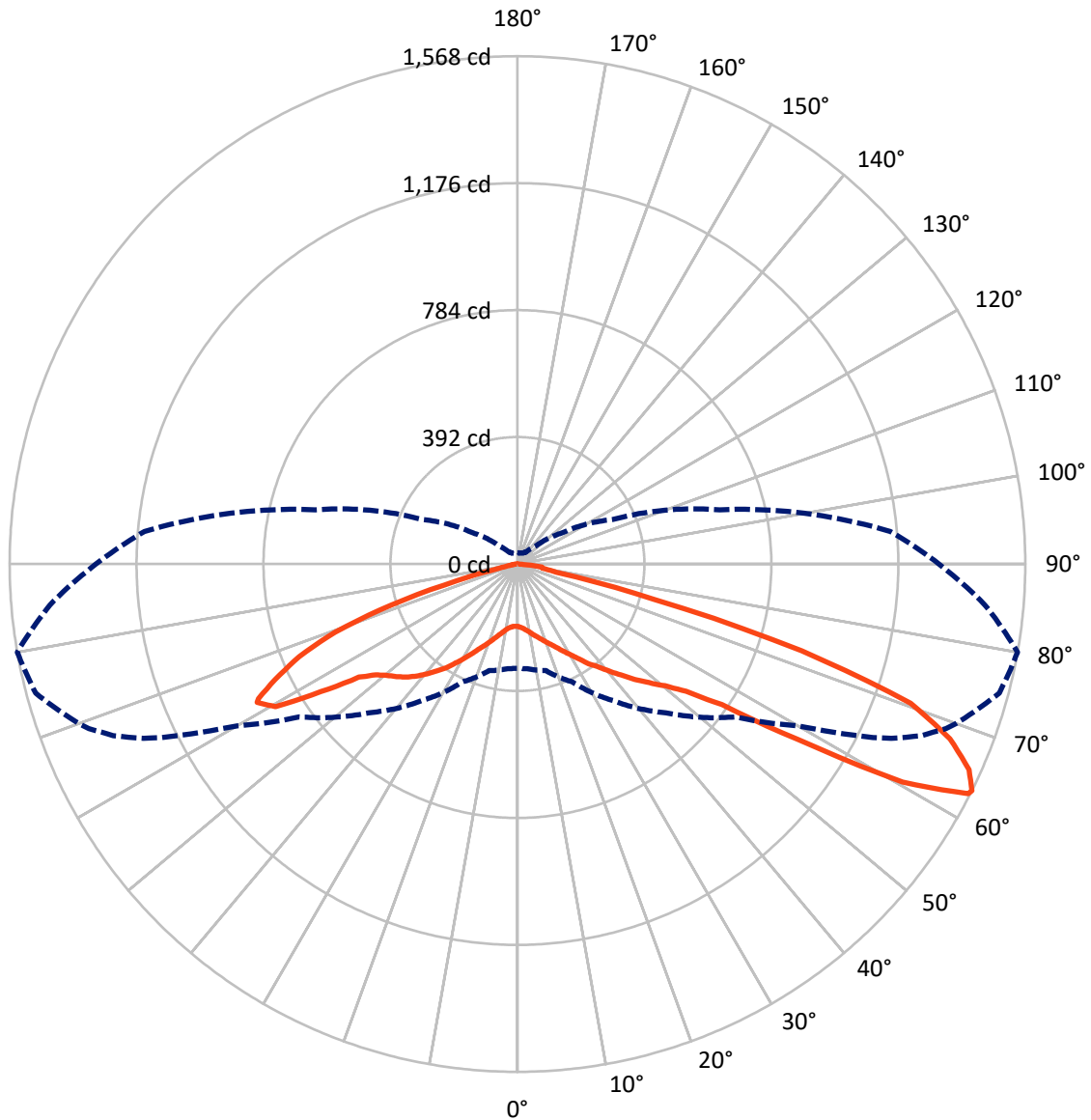
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P173458  
CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P173458

CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	566.6	0.0	566.6
	% Fixture	31.1	0.0	31.1
<b>Street Side</b>	Lumens	1252.7	0.0	1252.7
	% Fixture	68.9	0.0	68.9
<b>Total</b>	Lumens	1819.3	0.0	1819.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.3	1.1
10°-20°	66.2	3.6
20°-30°	124.5	6.8
30°-40°	197.5	10.9
40°-50°	298.2	16.4
50°-60°	419.1	23.0
60°-70°	489.0	26.9
70°-80°	189.0	10.4
80°-90°	16.4	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°	1819.3	100.0
0°-180°	1819.3	100.0



REPORT NUMBER: P173458

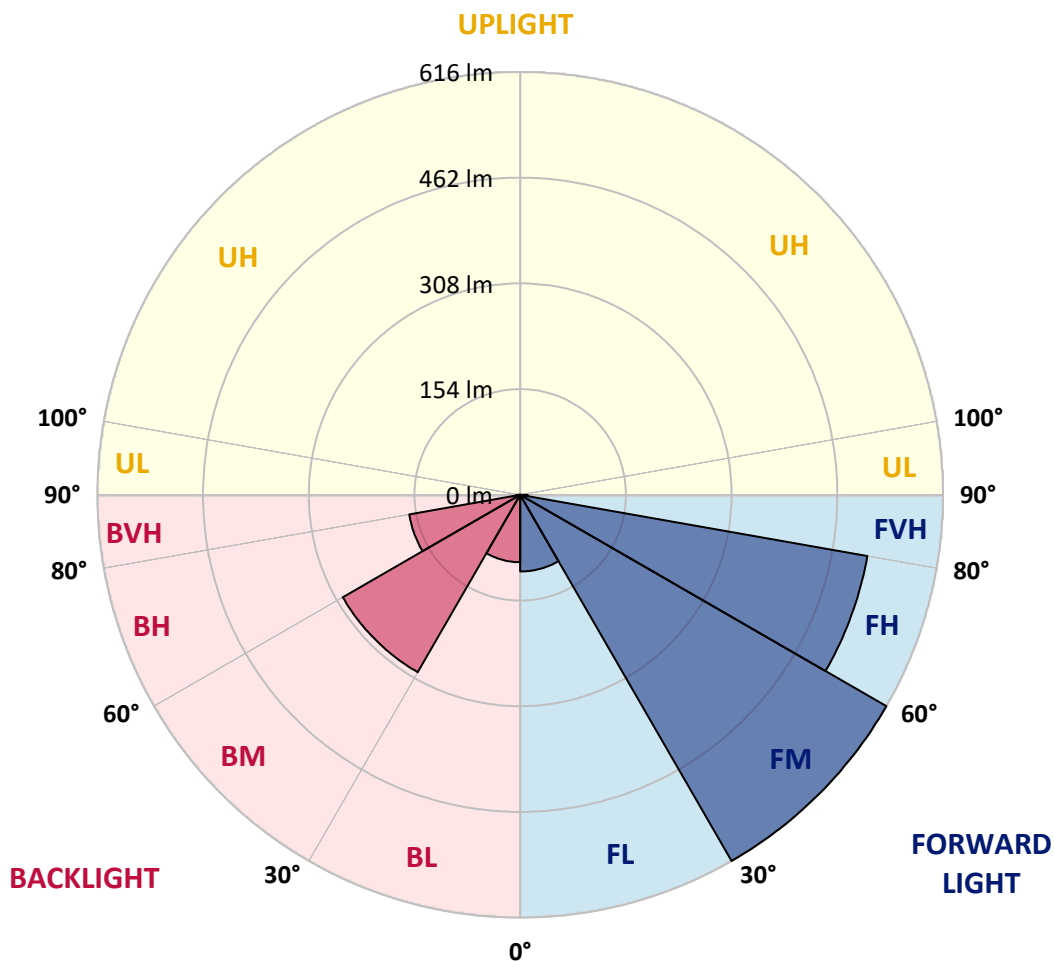
CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	111.7	6.1			
FM (30°-60°)	616.2	33.9			
FH (60°-80°)	513.8	28.2			G0/660
FVH (80°-90°)	11.0	0.6			G1/100
BL (0°-30°)	98.3	5.4	B0/110		
BM (30°-60°)	298.6	16.4	B1/1000		
BH (60°-80°)	164.2	9.0	B1/500		G1/500
BVH (80°-90°)	5.5	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: P173458

CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7
2.5°	202.3	201.6	202.0	201.6	201.6	201.0	199.0	199.0	198.7	199.0	198.3
5°	213.3	212.9	212.6	212.0	212.0	210.6	207.3	206.6	207.0	206.3	205.0
7.5°	225.6	225.2	224.6	223.2	222.6	220.6	215.9	215.3	214.9	214.3	213.3
10°	237.9	237.5	236.5	234.9	233.2	230.2	225.6	223.9	223.6	223.2	222.3
12.5°	250.5	249.5	249.8	246.8	244.2	240.5	235.2	233.6	233.2	232.9	232.6
15°	264.4	264.1	263.4	259.5	254.5	249.5	244.2	242.2	240.8	241.2	240.8
17.5°	277.7	277.4	275.1	269.4	262.8	257.1	250.5	249.2	249.2	248.8	248.8
20°	287.4	287.0	284.7	277.7	269.1	262.8	257.5	257.5	257.1	257.5	257.8
22.5°	291.7	291.7	288.7	281.1	271.8	267.1	265.5	266.4	266.8	267.1	267.8
25°	293.4	293.4	290.3	281.4	272.7	273.4	275.4	277.1	277.7	277.7	280.1
27.5°	296.3	296.7	292.7	283.0	276.1	282.4	287.4	289.7	290.7	291.4	294.3
30°	305.3	305.0	301.6	291.4	286.0	295.0	304.0	306.3	308.6	308.6	311.9
32.5°	318.6	318.3	316.3	308.3	306.0	317.3	325.3	330.2	329.9	330.6	332.9
35°	336.2	336.5	337.8	335.9	337.8	349.1	358.1	360.1	360.4	360.8	361.1
37.5°	356.1	356.5	363.8	370.1	379.1	395.7	401.0	402.0	399.7	399.7	399.0
40°	371.1	372.7	389.0	405.6	424.6	447.1	455.1	453.1	451.5	450.2	446.2
42.5°	401.7	402.6	419.9	443.8	470.4	501.6	515.6	509.0	508.6	502.6	499.7
45°	432.2	434.9	453.5	480.4	512.3	555.4	576.1	570.4	569.4	566.7	558.5
47.5°	456.5	460.1	480.7	512.6	549.2	599.0	635.9	639.9	637.5	634.5	627.9
50°	477.1	480.0	501.0	535.9	577.7	632.2	685.0	699.3	701.3	700.0	698.3
52.5°	490.3	493.3	513.9	551.1	594.3	656.8	721.6	749.8	755.8	755.5	762.4
55°	490.7	494.0	515.3	556.1	603.6	673.7	755.5	800.0	807.3	816.2	831.2
57.5°	472.4	475.7	502.3	549.5	606.3	687.0	788.3	866.7	886.7	904.3	945.5
60°	421.6	422.9	452.1	515.3	593.7	684.0	813.3	924.2	952.4	990.6	1057.1
62.5°	343.5	346.2	364.1	425.6	534.9	657.8	823.2	988.3	1034.8	1090.7	1197.0
63°	321.9	324.2	340.9	401.7	514.9	649.5	822.9	998.6	1049.8	1107.3	1221.9
65°	248.5	249.2	261.4	307.3	422.6	589.0	805.0	984.0	1048.8	1115.9	1236.2
67.5°	200.3	202.6	214.9	247.2	333.9	494.7	724.5	852.5	896.7	962.8	1105.9
70°	156.8	160.8	172.4	209.0	284.7	398.3	609.6	711.6	738.9	770.4	892.0
72.5°	103.6	104.6	106.6	126.9	198.7	310.0	507.3	576.7	587.4	609.9	669.4
75°	48.8	52.5	55.5	65.8	96.0	203.0	367.8	409.6	422.3	445.8	467.4
77.5°	21.3	20.9	22.2	30.2	50.5	90.4	228.9	302.7	307.0	301.6	292.4
80°	6.6	7.0	7.3	8.0	16.0	43.2	99.0	203.3	224.6	238.9	234.9
82.5°	0.7	0.3	1.0	2.0	3.3	6.3	37.2	95.3	119.9	147.2	182.1
85°	0.0	0.0	0.3	0.3	0.7	1.3	2.3	10.0	16.6	19.3	38.2
87.5°	0.0	0.0	0.3	0.3	0.7	1.0	1.0	1.3	1.3	1.3	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



REPORT NUMBER: P173458

CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	75°	80°	85°	90°	95°
0°	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7
2.5°	198.0	198.0	197.3	197.7	197.3	197.3	196.7	196.0	195.7	194.0	193.0
5°	205.0	205.0	204.7	204.0	204.0	203.6	202.0	200.3	199.3	197.3	195.4
7.5°	212.9	212.6	212.0	211.3	211.3	211.0	208.6	207.0	205.0	202.0	199.7
10°	222.3	221.9	221.3	220.3	220.3	219.9	217.6	214.9	213.3	209.6	206.6
12.5°	232.2	231.2	230.9	230.2	229.5	229.5	227.6	224.9	223.6	219.6	216.6
15°	240.5	239.8	239.5	239.2	238.9	238.2	236.5	234.2	233.2	229.9	227.6
17.5°	248.5	248.5	248.8	248.2	247.8	247.2	246.2	245.5	244.5	241.5	240.2
20°	257.8	257.8	258.5	258.1	257.8	258.8	258.5	258.1	258.1	255.5	254.5
22.5°	268.8	268.4	269.4	269.1	269.4	270.4	271.8	271.1	272.4	270.8	270.1
25°	281.4	281.1	282.1	282.7	283.4	284.0	286.7	287.4	289.0	288.7	287.4
27.5°	295.7	296.0	296.3	298.0	299.0	299.6	303.3	305.3	308.6	307.3	308.6
30°	312.3	314.0	315.3	316.9	317.3	317.9	323.9	325.9	327.6	328.6	330.6
32.5°	335.2	336.2	336.5	338.5	339.2	340.2	346.5	349.1	351.5	351.8	355.5
35°	363.1	363.8	364.8	365.8	367.1	366.4	373.8	377.7	380.7	381.0	385.1
37.5°	400.0	397.6	398.6	397.3	395.3	395.3	397.6	401.7	405.0	407.6	411.6
40°	444.2	442.5	442.2	439.2	435.9	432.9	431.5	433.9	436.5	438.9	443.8
42.5°	494.7	493.0	487.4	485.4	479.7	476.4	467.4	468.4	473.1	474.4	477.4
45°	553.8	547.8	545.8	533.5	531.2	526.6	509.6	508.3	512.3	512.6	510.6
47.5°	621.2	616.9	612.3	603.6	594.7	587.0	561.1	547.5	551.8	551.5	541.8
50°	694.7	694.0	687.0	681.4	673.4	662.4	616.2	591.4	594.7	591.7	574.1
52.5°	764.8	762.8	762.4	758.1	755.1	751.5	695.3	652.5	644.8	638.5	615.9
55°	838.5	843.5	840.2	847.2	852.5	851.8	828.5	765.8	726.9	721.9	687.3
57.5°	961.4	973.4	989.3	990.0	1004.3	1024.9	1066.7	1021.6	924.2	904.9	858.8
60°	1102.3	1133.2	1173.1	1192.6	1223.2	1255.1	1360.1	1367.1	1230.8	1156.4	1071.7
62.5°	1243.8	1284.3	1331.5	1362.1	1399.9	1424.9	1535.8	1562.4	1438.2	1300.9	1161.4
63°	1273.7	1315.3	1356.1	1386.0	1417.9	1440.8	1540.5	1568.4	1449.5	1301.3	1155.8
65°	1289.3	1328.2	1360.1	1386.7	1407.9	1423.6	1502.3	1532.5	1434.5	1253.1	1092.3
67.5°	1170.7	1233.2	1273.4	1305.6	1327.2	1348.8	1421.2	1440.2	1370.7	1159.4	996.0
70°	969.1	1041.2	1104.6	1154.8	1192.0	1224.9	1300.9	1288.0	1228.2	1007.6	844.8
72.5°	712.9	775.7	837.5	894.3	942.8	984.7	1034.8	917.6	826.6	670.1	584.7
75°	479.4	493.0	521.3	549.5	567.1	579.0	548.2	436.9	354.8	318.3	278.4
77.5°	283.0	273.7	274.7	267.8	263.1	262.1	219.9	122.3	64.5	65.8	69.1
80°	225.9	215.6	204.7	192.3	184.4	175.7	143.2	78.4	27.9	22.6	23.6
82.5°	182.7	180.0	174.1	161.5	148.8	133.9	102.3	75.4	16.0	12.6	13.6
85°	35.5	39.9	35.9	39.2	29.2	27.6	16.3	17.6	6.3	5.6	7.0
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7
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: P173458

CATALOG NUMBER: ENT-EXX-LED-E1-BL2-7050-BBB

**CANDELA DISTRIBUTION (continued):**

	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7	192.7
2.5°	191.3	190.0	189.0	187.7	187.0	186.0	185.7	184.7	185.0
5°	192.0	189.7	187.7	185.7	184.4	183.7	183.1	182.4	182.4
7.5°	195.4	192.3	190.0	187.7	186.7	185.4	185.0	184.1	184.1
10°	202.3	199.0	196.0	193.4	192.0	190.4	189.7	188.7	188.7
12.5°	212.6	209.6	206.3	202.3	199.7	197.7	196.0	195.4	195.4
15°	224.2	221.9	219.3	213.9	209.6	206.0	202.6	201.3	201.0
17.5°	238.2	236.2	233.6	227.6	220.6	212.9	207.3	204.7	204.3
20°	255.1	253.1	249.2	240.8	229.9	217.9	209.0	205.0	204.7
22.5°	272.4	272.4	265.8	252.1	235.9	219.9	208.0	202.6	201.6
25°	291.4	292.4	282.4	261.1	239.2	218.9	203.6	197.0	195.7
27.5°	314.3	313.3	296.7	268.1	239.5	214.9	196.7	188.7	187.4
30°	339.5	332.9	308.3	272.1	237.2	207.6	187.4	178.4	177.4
32.5°	364.8	350.5	316.9	272.7	230.6	197.0	175.1	165.8	164.4
35°	391.7	366.1	322.2	269.1	219.6	182.7	159.8	150.8	149.5
37.5°	414.3	378.1	323.9	259.5	203.0	166.1	145.9	136.5	134.2
40°	434.9	386.7	320.9	243.9	184.4	149.8	131.2	123.3	122.6
42.5°	453.8	390.7	310.3	223.6	165.8	135.9	118.9	111.3	110.6
45°	468.4	388.0	292.4	201.3	150.5	123.9	108.0	101.0	99.7
47.5°	477.7	378.4	267.8	182.7	137.9	111.6	96.0	88.7	87.4
50°	485.0	364.1	242.9	168.4	125.6	99.0	83.7	77.1	76.1
52.5°	494.7	345.8	221.3	155.5	111.3	84.7	71.1	64.8	63.8
55°	515.9	330.2	206.0	141.2	96.0	69.8	58.5	54.5	53.2
57.5°	588.0	335.5	196.3	123.9	78.4	56.1	48.5	46.2	45.8
60°	663.8	358.1	191.7	104.0	60.8	45.5	41.2	40.5	40.2
62.5°	659.8	337.8	172.4	81.7	46.8	37.5	35.5	35.9	35.9
63°	646.5	325.6	166.1	76.7	44.5	36.6	34.5	34.5	34.5
65°	566.1	276.1	134.9	58.1	37.2	32.6	30.9	31.2	31.6
67.5°	467.4	199.3	88.7	40.5	33.5	29.6	27.6	26.9	26.9
70°	357.5	134.2	52.5	35.2	33.2	27.6	24.2	23.6	23.6
72.5°	234.5	82.0	35.5	35.2	32.9	26.3	22.6	21.3	21.3
75°	107.7	40.5	29.6	33.9	31.2	24.2	19.9	18.3	17.9
77.5°	41.9	25.6	26.6	28.6	24.2	19.9	17.9	16.6	16.3
80°	24.2	20.6	23.2	20.6	17.6	15.3	15.3	14.3	14.0
82.5°	17.6	17.6	17.9	15.0	13.3	12.6	12.6	11.6	11.3
85°	12.6	13.0	15.0	11.9	10.3	9.0	8.3	8.3	8.0
87.5°	6.3	10.3	8.3	5.0	4.7	4.3	4.3	4.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)