

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: P89341

Luminaire Tested: **ENT-BXX-LED-E1-BL2-CWB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P89341
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21305)
Test Lab: INNOVATION CENTER P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-BXX-LED-E1-BL2-CWB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1409.6 lumens
Efficiency: N/A
Efficacy: 256.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Full 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

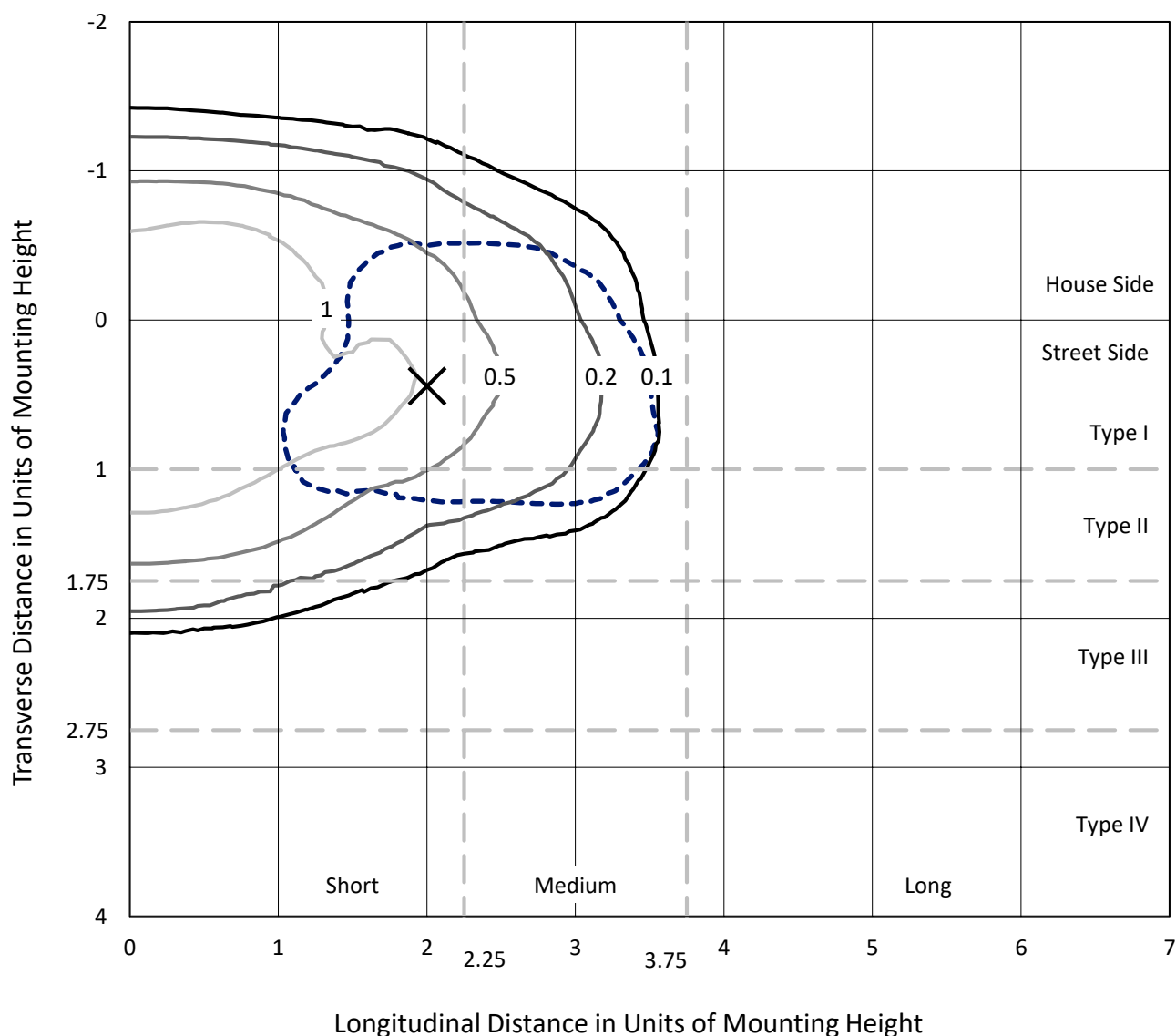


REPORT NUMBER: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

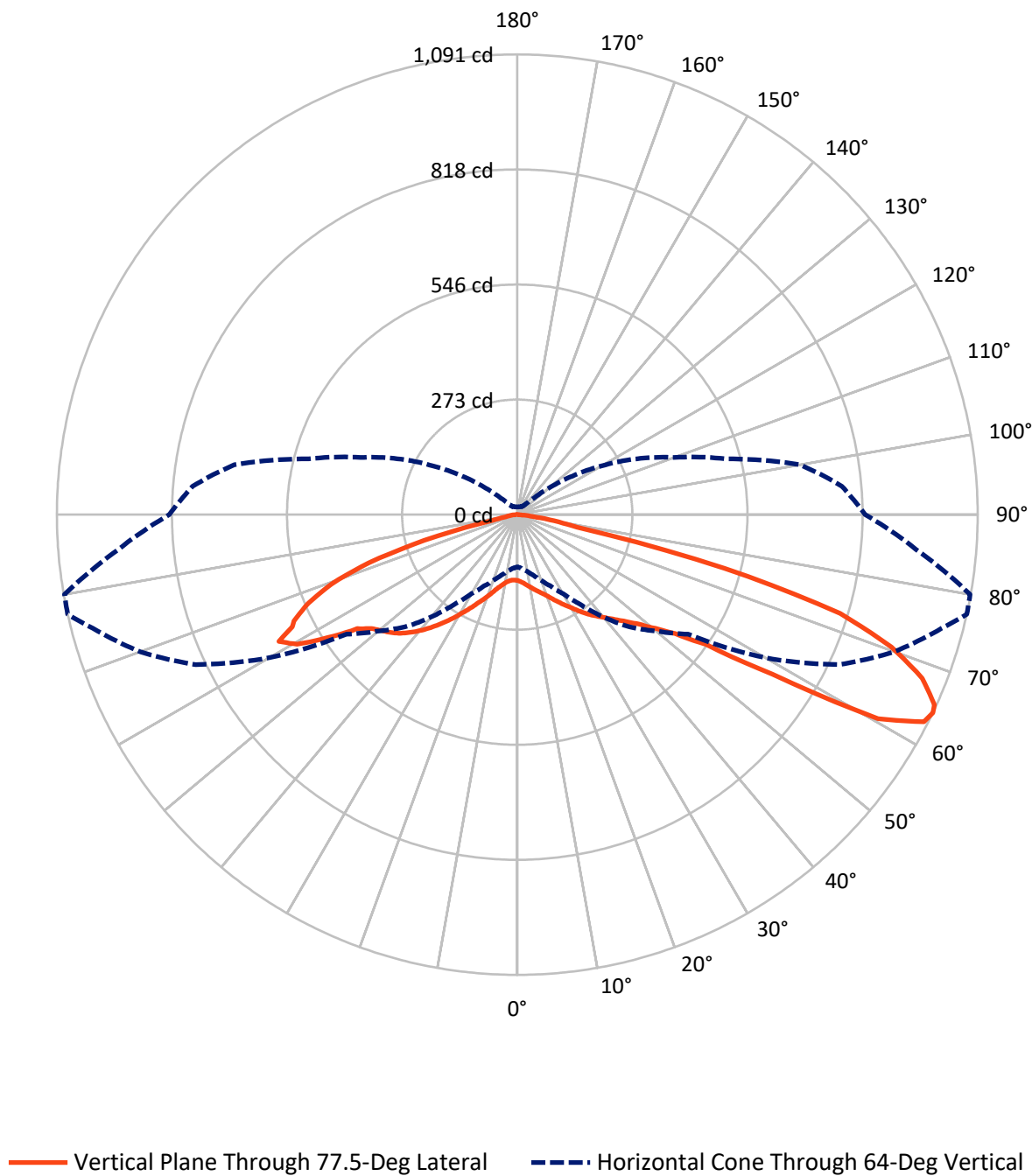


Based on 10 foot mounting height. Maximum calculated value = 1.9 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

Luminous Intensity Polar Plot



REPORT NUMBER: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

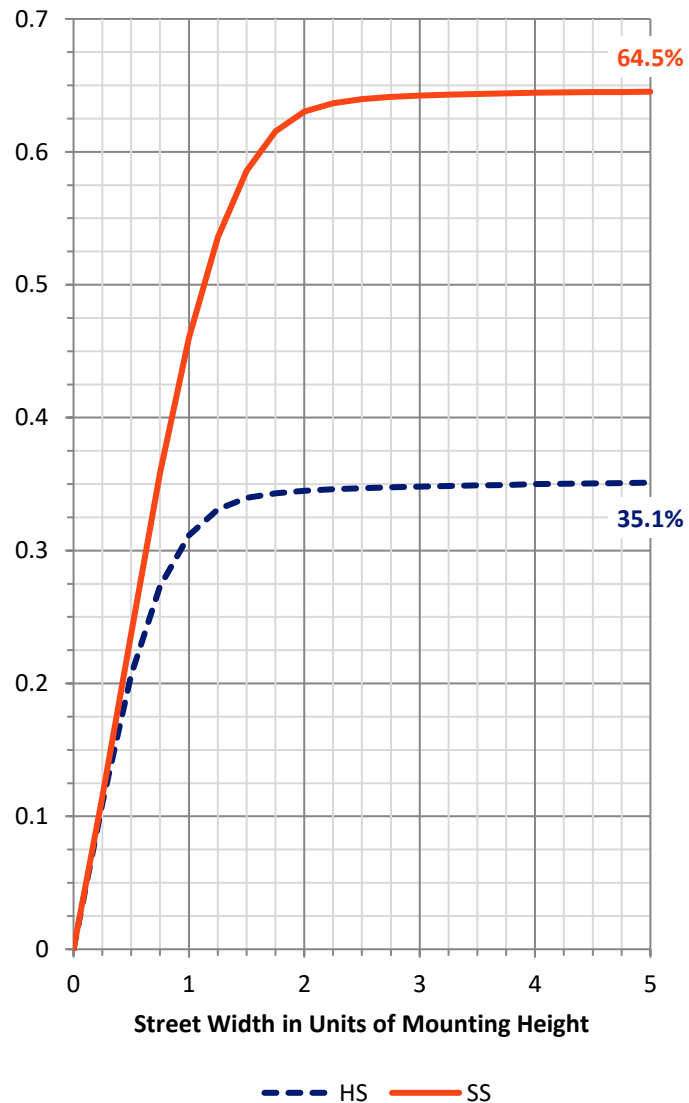
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	499.9	0.0	499.9
	% Fixture	35.5	0.0	35.5
Street Side	Lumens	909.6	0.0	909.6
	% Fixture	64.5	0.0	64.5
Total	Lumens	1409.6	0.0	1409.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.5	1.1
10°-20°	52.3	3.7
20°-30°	101.6	7.2
30°-40°	173.8	12.3
40°-50°	259.5	18.4
50°-60°	338.6	24.0
60°-70°	334.7	23.7
70°-80°	123.0	8.7
80°-90°	10.7	0.8
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°	1409.6	100.0
0°-180°	1409.6	100.0

Coefficient of Utilization



REPORT NUMBER: P89341

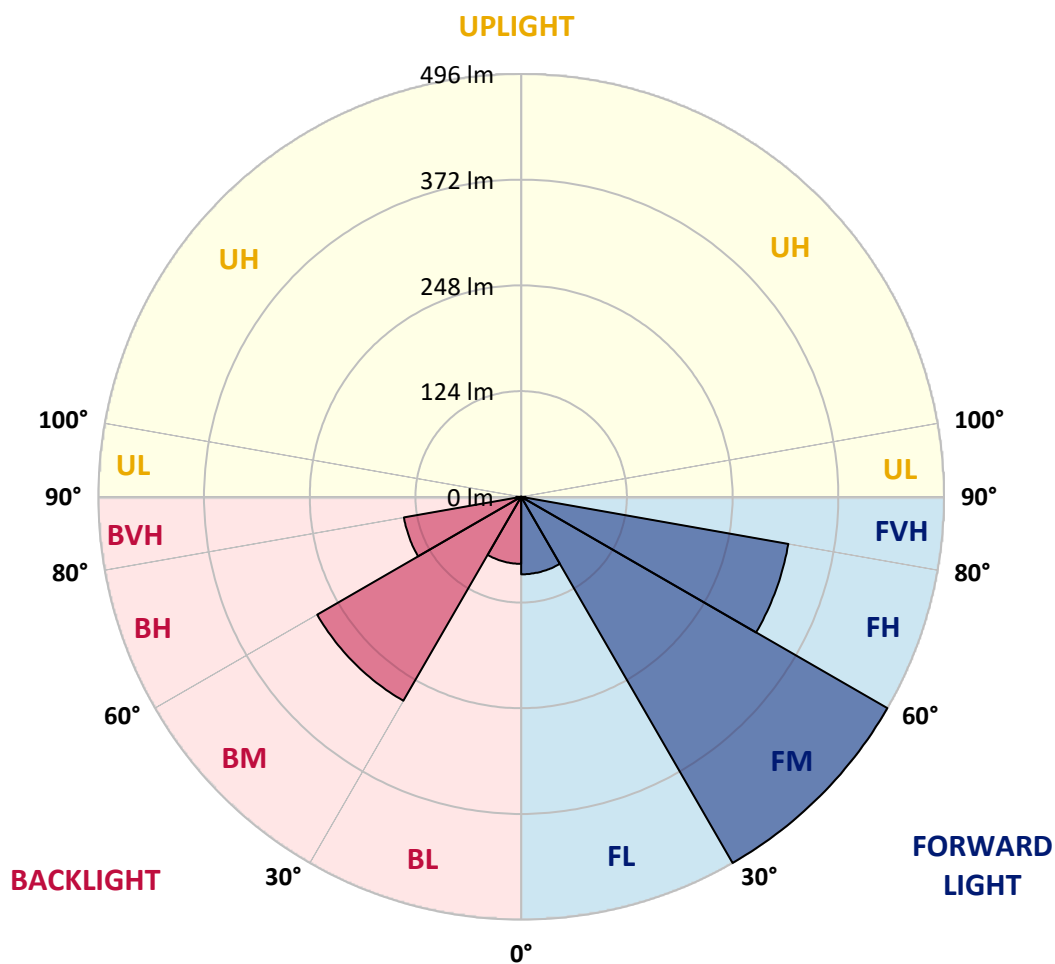
CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	90.8	6.4			
FM	(30°-60°)	495.8	35.2			
FH	(60°-80°)	318.1	22.6			G0/660
FVH	(80°-90°)	5.0	0.4			G0/10
BL	(0°-30°)	78.6	5.6	B0/110		
BM	(30°-60°)	276.1	19.6	B1/1000		
BH	(60°-80°)	139.6	9.9	B1/500		G1/500
BVH	(80°-90°)	5.7	0.4			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: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7
2.5°	164.9	164.1	164.5	163.7	163.7	163.7	163.7	162.9	163.3	163.3	162.5
5°	174.8	174.0	173.6	173.6	173.2	172.8	172.8	171.6	171.6	171.2	169.7
7.5°	185.2	184.4	184.4	184.0	183.6	182.4	182.4	181.2	180.8	180.0	178.4
10°	193.5	192.7	192.7	192.0	192.0	190.8	190.0	190.0	188.8	187.6	185.6
12.5°	201.5	201.1	201.1	199.9	199.5	197.9	197.5	196.7	195.9	194.3	192.3
15°	211.1	211.1	210.7	208.7	207.9	205.5	204.7	203.1	202.3	199.9	197.9
17.5°	221.0	220.6	220.6	218.2	216.6	214.2	212.6	210.3	207.9	204.7	203.1
20°	229.4	229.4	229.0	227.0	225.0	221.8	219.4	216.6	213.5	210.3	208.3
22.5°	234.6	233.8	233.4	232.2	231.0	227.8	225.4	223.0	219.8	216.2	213.8
25°	237.7	236.9	236.9	236.5	236.2	234.1	232.6	230.6	228.2	224.6	222.2
27.5°	243.3	242.9	243.3	244.1	244.9	244.5	243.3	242.5	240.5	237.4	235.3
30°	257.3	257.3	258.0	259.2	260.4	261.6	262.0	262.0	260.0	257.6	254.5
32.5°	281.9	282.4	283.1	285.1	287.5	287.9	287.9	287.5	286.3	284.3	278.8
35°	313.4	313.4	314.6	317.0	319.0	320.6	321.4	319.8	317.4	313.8	311.0
37.5°	346.5	346.5	347.7	351.2	353.2	354.4	355.2	354.8	352.8	348.4	344.5
40°	377.1	378.3	379.9	384.3	386.7	387.5	387.9	386.7	387.9	385.9	382.7
42.5°	402.2	403.8	405.4	408.6	411.8	413.3	415.0	416.2	420.1	421.3	420.9
45°	425.3	426.5	426.5	427.3	431.3	432.9	436.9	440.1	448.0	452.0	455.6
47.5°	442.8	444.8	444.0	443.6	447.6	448.4	451.6	458.8	469.5	477.5	486.6
50°	443.2	446.4	448.8	451.6	456.8	459.5	462.8	470.3	485.0	497.0	510.5
52.5°	434.5	438.9	442.0	446.8	456.4	463.1	470.3	477.9	491.8	510.5	530.8
55°	416.6	422.1	428.5	437.7	450.4	461.6	473.5	485.0	498.2	520.9	547.5
57.5°	373.5	378.7	387.9	402.6	423.7	446.0	469.9	490.6	506.6	528.8	561.1
60°	318.6	322.6	331.3	345.6	370.0	399.4	431.7	464.7	492.6	520.9	555.1
62.5°	251.3	252.5	256.5	264.0	280.3	305.0	339.7	386.7	427.7	466.3	506.9
64°	123.8	127.8	136.6	148.9	165.7	186.8	216.2	258.8	315.8	376.3	428.9
65°	108.3	110.7	119.9	132.2	151.3	171.6	200.3	244.5	300.3	363.6	420.1
67.5°	47.4	47.8	49.8	53.0	58.9	69.7	85.2	109.9	150.5	214.2	295.5
70°	28.7	28.3	29.5	30.3	32.7	36.2	42.2	55.8	79.6	110.3	167.6
72.5°	19.9	19.9	19.9	19.9	21.1	21.9	23.5	26.3	33.4	55.4	102.0
75°	14.3	13.9	15.1	15.5	16.3	16.3	17.1	17.9	20.3	25.5	47.8
77.5°	10.4	10.0	10.4	10.7	11.1	11.6	12.3	13.5	15.5	17.9	22.7
80°	4.0	3.6	4.4	4.8	5.6	6.0	6.4	7.6	9.6	10.7	12.8
82.5°	1.2	0.8	1.2	1.2	1.6	1.6	2.4	2.8	3.6	4.8	6.8
85°	0.8	0.4	0.8	0.8	1.2	1.2	1.2	1.2	1.6	1.6	2.4
87.5°	0.8	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.2	1.6
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: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	77.5°	80°	85°	90°	95°	100°
0°	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7
2.5°	161.7	161.7	160.9	160.1	159.7	159.3	158.1	157.7	157.7	156.5	156.1
5°	168.5	167.6	166.9	165.2	164.1	163.3	162.5	160.5	159.3	158.5	156.5
7.5°	176.4	175.6	174.4	171.6	170.0	169.3	168.1	165.2	163.7	162.5	159.7
10°	184.0	182.8	181.2	178.4	176.4	175.2	173.6	170.8	168.5	166.9	164.5
12.5°	190.8	190.0	188.0	184.8	182.8	182.4	180.4	177.6	174.8	173.2	171.2
15°	196.7	195.9	193.9	192.0	190.0	189.1	188.0	184.8	182.0	181.2	179.6
17.5°	201.9	201.5	199.9	198.7	197.5	197.1	195.9	193.9	192.0	191.5	190.8
20°	207.5	207.9	206.7	206.7	206.7	206.3	206.3	204.7	203.5	203.1	203.5
22.5°	213.5	214.7	214.7	215.9	217.4	217.8	217.4	215.9	215.9	216.2	217.4
25°	222.6	223.8	225.0	226.6	228.6	230.2	230.2	229.4	229.4	229.8	232.2
27.5°	234.6	235.8	237.4	239.3	241.7	243.3	243.7	243.7	243.7	245.3	248.1
30°	251.7	251.3	252.5	254.5	256.5	257.3	258.5	259.7	259.2	261.6	266.8
32.5°	274.0	270.8	270.0	270.8	272.4	273.6	274.0	274.8	275.2	279.1	285.9
35°	302.7	295.9	290.7	287.9	288.3	289.9	290.7	289.9	290.7	297.1	306.6
37.5°	337.3	326.5	315.4	307.8	305.0	305.0	305.8	305.4	307.4	315.4	328.6
40°	376.3	364.0	346.1	330.5	323.0	321.4	321.4	321.8	325.0	334.5	349.6
42.5°	416.6	403.8	381.9	357.6	342.9	339.7	338.9	338.9	343.3	356.4	372.7
45°	456.8	447.6	423.7	391.8	367.6	361.2	358.0	356.4	363.2	379.1	393.9
47.5°	495.0	491.0	471.9	432.1	400.2	387.5	381.1	377.5	385.5	401.0	412.1
50°	525.7	534.4	521.3	484.3	439.6	423.7	408.6	401.8	408.2	423.7	428.9
52.5°	551.9	572.2	577.0	544.4	491.8	468.7	451.2	434.5	441.6	452.8	449.2
55°	585.4	622.4	644.3	635.6	579.4	543.6	521.7	495.8	497.0	501.0	486.2
57.5°	616.4	708.5	782.9	800.0	769.0	713.2	661.1	624.4	620.4	620.0	581.8
60°	620.0	738.7	861.0	950.6	1001.5	982.0	929.8	818.0	763.0	736.7	669.8
62.5°	579.0	745.9	881.3	979.3	1062.9	1081.6	1046.9	911.1	835.9	798.9	714.0
64°	493.8	678.6	841.1	950.6	1041.3	1091.1	1089.6	949.0	824.3	772.2	680.6
65°	488.2	674.2	823.5	944.2	1039.0	1086.4	1081.6	954.5	827.9	770.6	665.8
67.5°	348.9	562.7	743.1	890.8	967.7	1035.4	1049.7	965.7	814.4	734.7	625.2
70°	229.0	386.7	595.8	798.9	866.5	940.6	962.1	905.2	749.5	664.7	556.3
72.5°	169.7	236.9	460.4	662.3	741.9	800.4	800.0	757.0	608.9	539.2	443.6
75°	111.5	178.8	330.5	431.7	495.4	507.3	459.5	405.4	348.4	340.5	286.3
77.5°	56.6	113.5	181.6	154.5	137.0	144.2	139.4	92.8	54.6	51.4	63.7
80°	23.5	55.4	104.3	86.4	76.1	88.4	93.6	67.3	36.6	32.2	29.5
82.5°	10.4	18.7	36.6	43.8	31.5	37.4	45.0	33.1	24.7	23.1	21.9
85°	2.8	3.6	6.0	9.2	10.4	11.1	13.9	12.3	11.6	12.8	13.9
87.5°	1.6	2.0	1.6	1.6	1.6	2.0	1.6	1.2	1.2	2.8	4.8
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: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7	155.7
2.5°	154.9	153.7	153.7	152.1	151.3	150.9	150.1	150.1	149.3	148.9	147.7
5°	154.5	152.9	152.1	150.5	148.9	147.7	146.5	145.8	144.6	144.2	142.2
7.5°	156.9	155.3	154.1	152.1	150.1	148.5	147.0	146.5	144.9	144.2	142.2
10°	161.3	159.7	158.5	156.1	154.5	152.9	151.3	150.5	148.9	147.7	146.1
12.5°	168.5	167.3	166.1	164.1	162.1	160.5	158.9	157.3	155.3	153.3	150.9
15°	177.2	176.4	175.6	173.6	171.6	169.7	167.6	165.2	162.5	159.3	155.7
17.5°	188.8	187.6	187.2	185.6	183.2	180.4	177.6	173.6	170.0	165.7	160.5
20°	202.7	201.5	201.9	199.9	196.3	193.2	188.0	183.2	178.4	172.8	166.9
22.5°	217.1	217.1	217.1	214.7	211.1	205.9	199.9	193.2	186.8	179.6	172.8
25°	233.4	234.6	234.6	231.8	226.6	220.2	212.3	203.9	195.5	187.2	178.4
27.5°	252.1	253.3	254.1	250.1	244.5	235.8	225.8	214.7	203.9	193.9	183.2
30°	272.0	274.0	275.2	269.2	262.0	251.3	238.1	223.8	210.7	198.7	186.4
32.5°	294.3	297.1	296.3	288.7	279.1	266.0	248.9	231.8	215.4	200.3	186.4
35°	316.2	319.8	316.2	306.2	293.9	277.6	256.9	236.2	215.4	198.3	183.2
37.5°	337.7	340.9	334.5	321.4	305.8	285.1	258.8	235.0	211.9	193.5	177.2
40°	360.0	360.0	348.9	334.1	313.8	286.3	256.9	229.8	205.9	186.4	170.0
42.5°	377.9	374.3	360.0	340.5	314.6	283.1	250.9	221.0	196.3	175.6	159.3
45°	394.6	385.1	366.4	341.3	309.4	273.6	238.9	209.1	184.0	163.7	147.3
47.5°	407.8	391.8	368.0	336.9	299.1	259.7	224.2	194.7	170.4	150.1	133.8
50°	417.3	395.1	364.8	327.4	283.9	242.9	208.3	179.6	154.9	134.2	117.1
52.5°	426.9	394.2	356.4	313.8	267.6	225.8	191.5	162.1	135.8	113.9	97.2
55°	444.8	397.4	348.4	298.7	250.9	209.5	172.8	140.2	112.7	91.6	75.7
57.5°	488.6	412.1	345.6	286.7	234.6	190.3	149.3	113.9	86.4	67.3	54.9
60°	541.2	433.3	350.4	277.6	215.9	165.2	119.5	84.4	60.5	46.6	38.2
62.5°	565.5	437.2	342.1	260.8	190.8	131.8	85.6	55.4	38.6	30.7	26.3
64°	511.3	395.8	313.4	231.4	159.3	97.2	55.8	34.6	25.9	22.3	20.7
65°	506.1	388.7	307.4	227.4	154.9	92.8	53.0	33.4	24.7	21.9	19.9
67.5°	451.2	315.8	232.6	163.7	103.2	53.7	29.5	21.1	18.3	17.5	16.7
70°	385.1	252.1	167.6	100.4	51.4	27.5	19.1	17.1	16.3	15.9	14.7
72.5°	298.3	174.4	98.4	50.6	26.7	17.9	16.3	15.5	15.1	14.7	13.9
75°	171.6	86.4	46.6	27.1	19.5	17.1	15.5	15.1	14.7	13.9	13.1
77.5°	52.2	27.9	22.7	20.3	18.3	17.5	15.9	14.3	13.1	12.8	11.9
80°	24.7	19.9	17.9	17.9	17.9	17.1	15.1	13.5	12.3	11.9	11.6
82.5°	19.1	16.7	15.5	15.5	15.1	14.7	13.5	13.1	11.9	11.1	10.7
85°	13.5	12.8	11.6	13.1	13.9	13.5	11.9	11.6	10.4	9.6	8.8
87.5°	6.4	9.2	10.4	11.1	12.3	10.4	8.4	8.4	6.8	6.4	5.6
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: P89341

CATALOG NUMBER: ENT-BXX-LED-E1-BL2-CWB

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	155.7	155.7	155.7	155.7	155.7
2.5°	147.0	146.5	146.5	145.8	145.8
5°	141.4	141.0	140.6	139.8	139.8
7.5°	141.8	141.0	140.6	139.8	139.8
10°	144.9	144.2	143.4	143.0	143.0
12.5°	149.7	148.2	147.0	146.1	146.1
15°	153.7	151.3	149.3	148.5	148.2
17.5°	157.7	154.5	152.1	150.9	150.1
20°	162.9	158.5	155.7	153.7	153.3
22.5°	167.6	162.1	159.3	156.9	156.1
25°	172.0	166.1	162.5	159.3	158.5
27.5°	176.0	168.8	164.1	160.5	159.7
30°	177.6	169.3	163.3	159.3	158.9
32.5°	176.4	167.3	160.5	156.1	155.7
35°	172.8	163.7	156.5	151.7	151.3
37.5°	166.9	156.9	150.9	146.1	144.9
40°	158.5	149.7	143.0	138.6	137.8
42.5°	147.7	139.4	133.0	129.0	128.2
45°	136.2	127.4	121.5	117.9	116.7
47.5°	122.6	113.5	107.1	103.2	102.0
50°	105.1	96.0	90.0	86.0	84.8
52.5°	85.2	76.5	70.9	67.3	66.5
55°	64.9	57.8	53.7	51.0	50.2
57.5°	47.0	42.6	40.6	38.6	38.6
60°	33.9	31.9	30.7	29.9	29.5
62.5°	24.7	23.5	23.1	22.7	22.7
64°	19.9	19.1	18.7	18.3	18.3
65°	19.1	18.7	18.3	17.9	17.5
67.5°	16.3	15.5	15.5	14.7	14.7
70°	14.3	13.9	13.5	13.1	13.1
72.5°	13.9	13.1	13.1	12.8	12.8
75°	12.8	12.3	12.3	12.3	12.3
77.5°	11.6	11.6	11.9	11.6	11.1
80°	11.1	11.1	11.6	11.1	10.7
82.5°	10.4	10.7	11.1	10.4	9.6
85°	8.8	10.0	11.1	9.6	8.8
87.5°	5.2	6.0	6.4	5.2	4.8
90°	0.0	0.0	0.0	0.0	0.0

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