

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: P173490

Luminaire Tested: **ENT-EXX-LED-E1-BL3-BBB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P173490
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33645)
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-BL3-BBB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1749.9 lumens
Efficiency: N/A
Efficacy: 318.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type III - 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

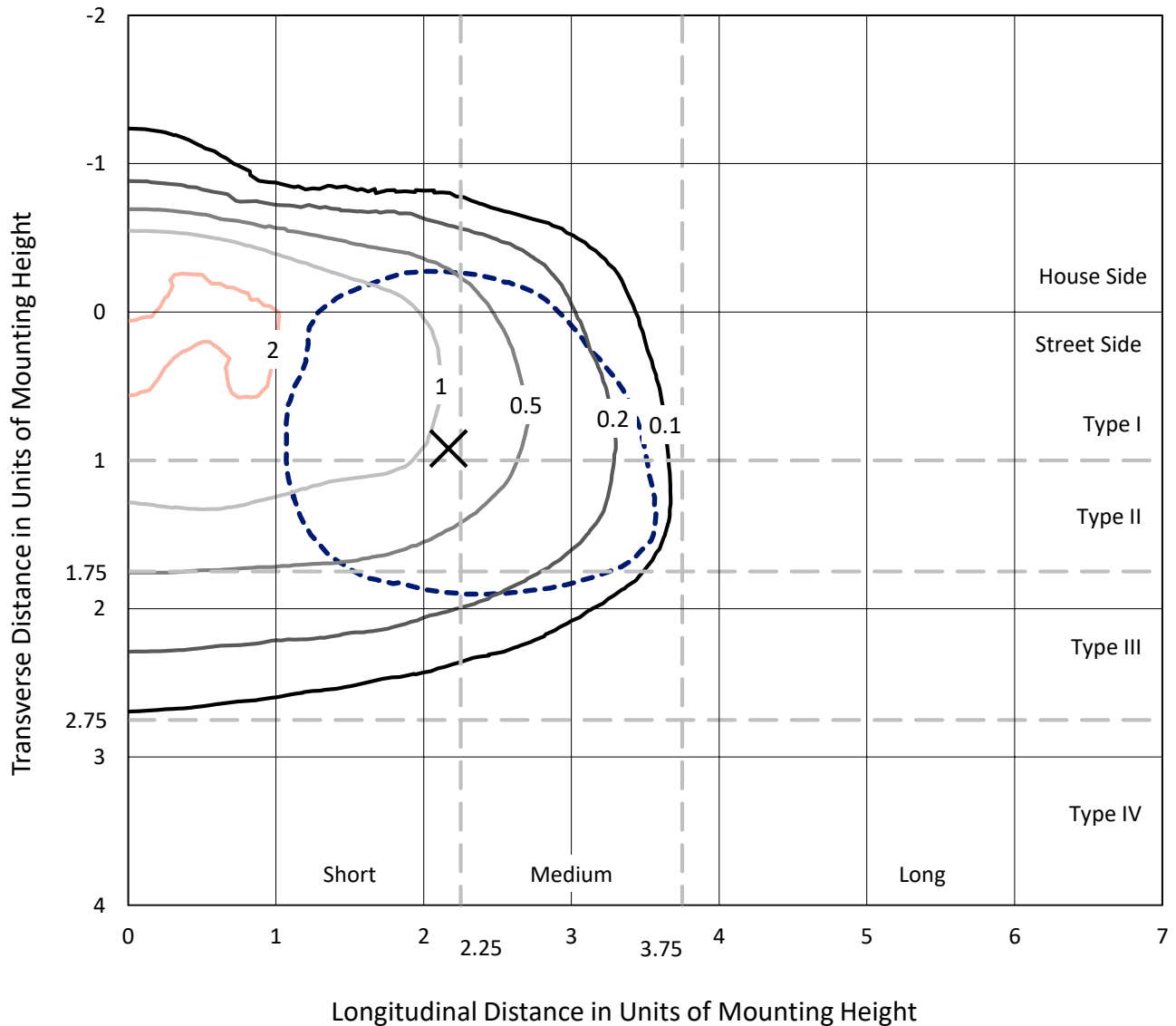


REPORT NUMBER: P173490

CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

Iso-Footcandle Lines of Horizontal Illumination

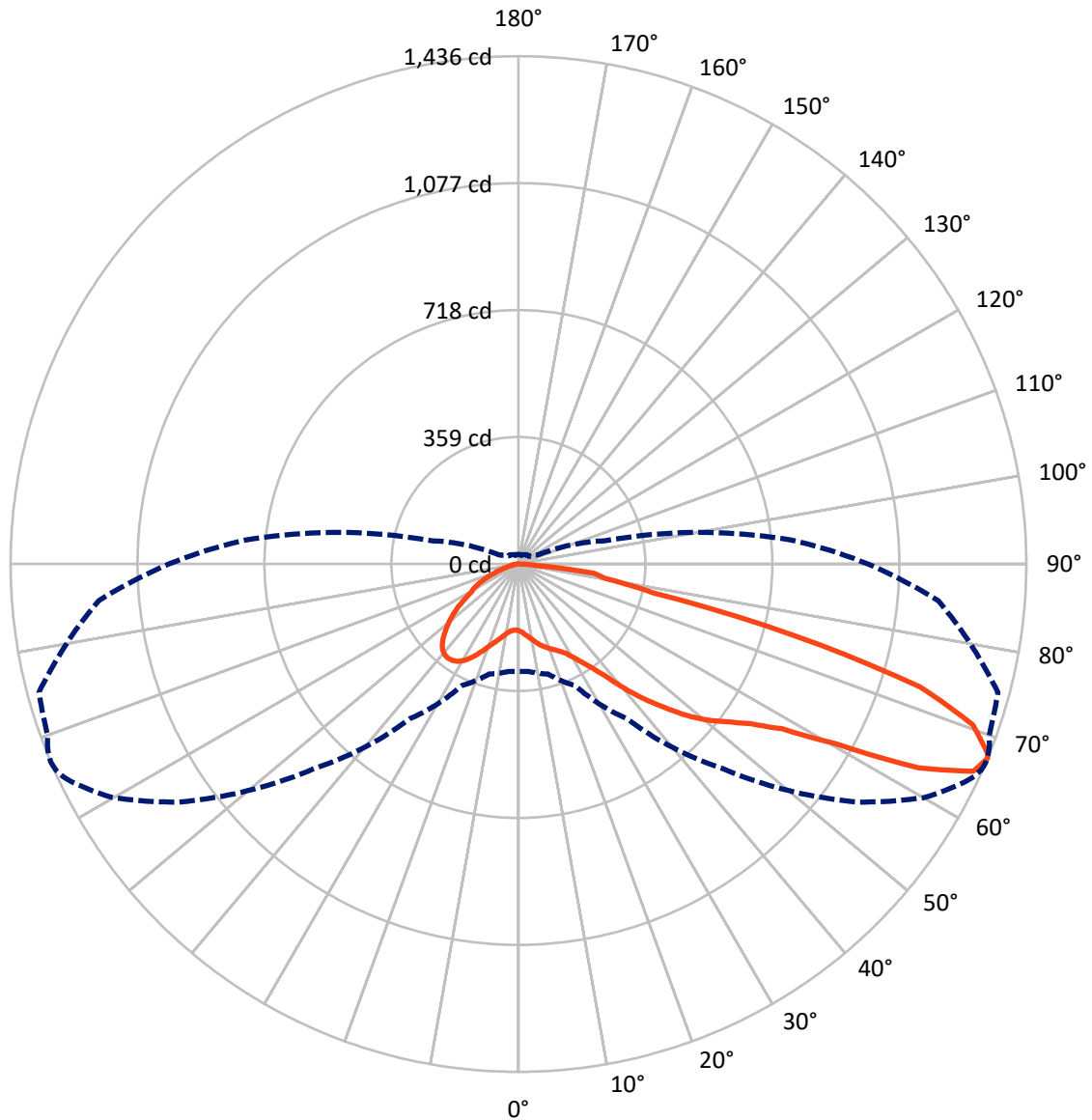
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P173490
CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P173490

CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	424.9	0.0	424.9
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	1325.0	0.0	1325.0
	% Fixture	75.7	0.0	75.7
Total	Lumens	1749.9	0.0	1749.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	1.1
10°-20°	65.7	3.8
20°-30°	119.1	6.8
30°-40°	174.1	9.9
40°-50°	263.7	15.1
50°-60°	378.2	21.6
60°-70°	483.3	27.6
70°-80°	225.6	12.9
80°-90°	21.1	1.2
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°	1749.9	100.0
0°-180°	1749.9	100.0



REPORT NUMBER: P173490

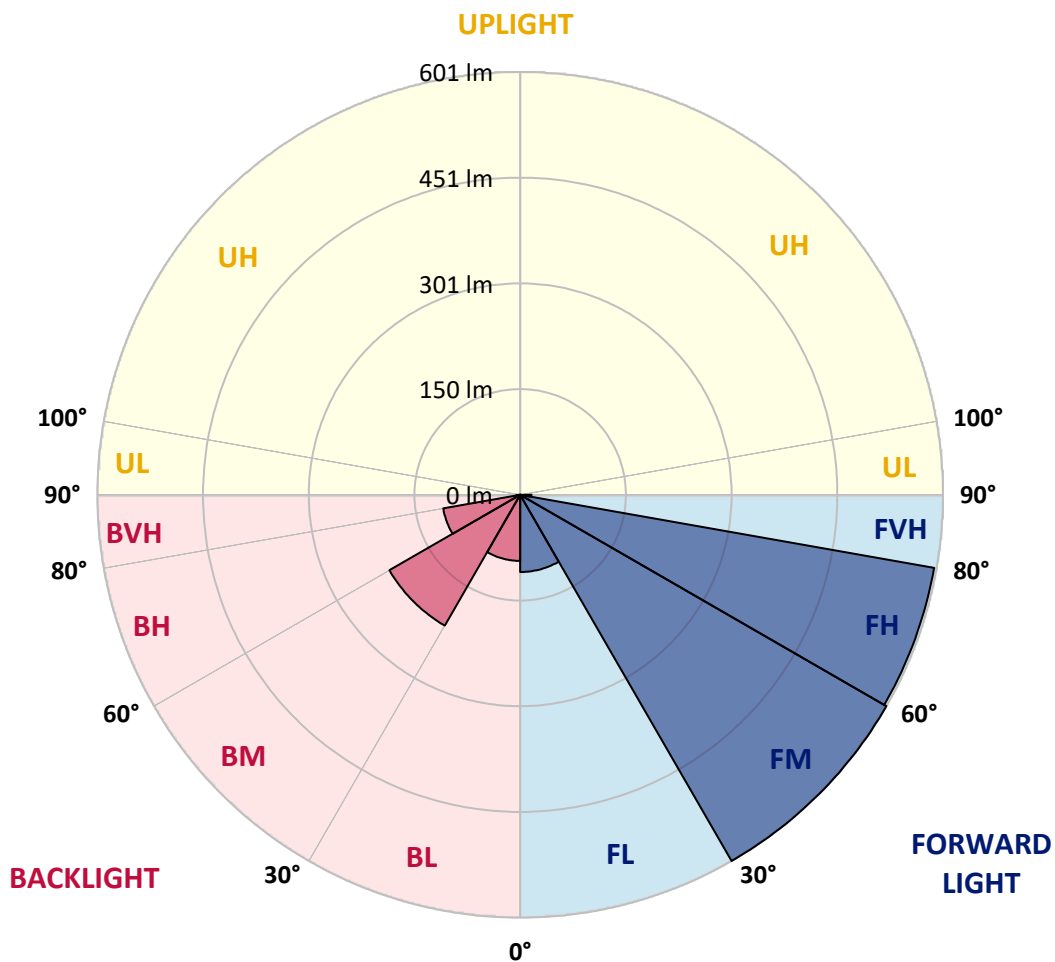
CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	109.8	6.3			
FM	(30°-60°)	601.4	34.4			
FH	(60°-80°)	597.8	34.2			G0/660
FVH	(80°-90°)	16.0	0.9			G1/100
BL	(0°-30°)	94.0	5.4	B0/110		
BM	(30°-60°)	214.6	12.3	B0/220		
BH	(60°-80°)	111.1	6.4	B1/500		G1/500
BVH	(80°-90°)	5.1	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 III Short





REPORT NUMBER: P173490

CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4
2.5°	195.9	195.9	196.2	196.2	195.9	195.9	193.9	193.9	193.9	193.6	193.6
5°	206.6	206.9	206.9	206.6	205.9	204.6	202.0	202.0	202.0	201.7	201.1
7.5°	218.9	218.5	218.9	217.9	216.6	215.0	211.4	211.1	210.4	210.4	209.8
10°	232.5	231.5	232.5	231.2	228.6	225.7	221.5	220.2	220.2	220.2	218.9
12.5°	246.4	246.1	246.7	244.4	239.9	236.7	232.5	230.8	230.5	230.5	229.9
15°	261.6	261.3	259.3	255.8	249.9	247.0	242.2	240.2	239.9	239.9	238.9
17.5°	277.5	277.5	272.6	265.2	257.1	252.9	249.3	248.0	247.7	247.7	247.4
20°	291.1	291.1	284.6	272.3	260.6	256.1	254.8	254.8	254.8	254.8	255.1
22.5°	301.1	300.1	291.4	276.2	261.9	258.0	261.3	261.6	261.6	262.2	262.6
25°	305.6	305.3	294.9	276.8	261.6	261.0	268.1	269.0	269.7	270.3	271.3
27.5°	306.0	306.0	295.6	276.5	261.3	266.1	276.5	279.4	280.1	281.3	283.0
30°	302.7	303.0	294.3	276.2	263.5	275.8	289.8	295.3	296.6	298.5	301.1
32.5°	298.8	299.5	294.3	279.4	273.6	292.7	311.1	318.9	320.2	322.8	325.4
35°	299.5	300.5	301.4	292.4	295.9	321.5	348.0	352.6	352.3	356.5	357.8
37.5°	303.7	306.0	313.1	314.7	328.3	363.9	391.8	401.5	401.5	405.4	404.1
40°	304.3	307.9	325.7	344.5	371.4	415.1	453.3	464.6	464.6	466.2	465.6
42.5°	319.6	322.8	348.4	381.7	419.9	471.4	513.5	523.5	525.8	524.2	525.5
45°	347.1	349.3	380.7	422.8	466.9	525.5	572.4	582.1	584.4	582.8	580.8
47.5°	382.0	385.3	418.6	468.5	513.8	575.3	632.6	644.0	646.2	643.6	644.6
50°	411.2	417.3	452.9	511.9	559.1	618.1	679.3	694.8	696.7	696.7	697.4
52.5°	437.7	443.2	477.5	543.3	595.7	656.6	713.9	734.0	736.2	737.9	739.1
55°	448.7	454.2	488.6	556.9	618.1	692.5	754.0	780.9	782.2	786.4	791.9
57.5°	449.1	453.6	487.3	556.5	629.7	724.9	808.8	850.5	855.7	861.2	870.6
60°	418.6	424.1	457.8	540.4	639.4	761.2	891.6	968.4	975.8	991.7	1012.4
62.5°	372.7	376.5	405.7	486.9	639.4	811.3	1025.0	1151.9	1176.9	1202.8	1241.0
65°	329.9	332.8	351.3	421.5	594.1	852.1	1164.6	1310.6	1337.5	1356.9	1389.3
67°	303.4	304.7	322.1	379.4	533.2	819.4	1174.0	1321.6	1344.6	1364.7	1405.5
67.5°	294.3	295.3	311.8	368.8	514.5	799.7	1159.7	1312.5	1337.5	1357.9	1399.3
70°	226.3	223.4	237.6	290.1	415.7	638.1	1018.2	1194.4	1222.8	1250.0	1300.2
72.5°	135.0	130.8	139.9	168.4	269.4	448.4	772.2	980.0	1016.3	1050.3	1116.0
75°	81.3	81.6	88.4	108.1	147.0	282.0	498.9	637.8	671.8	703.9	755.7
77.5°	40.5	40.1	46.3	62.8	107.2	175.2	289.8	367.8	379.1	394.3	388.2
80°	13.0	12.6	13.6	17.2	38.5	117.5	182.3	230.8	236.0	238.9	242.5
82.5°	1.9	2.3	2.6	4.2	7.1	28.2	113.3	160.6	167.7	176.1	192.3
85°	0.0	0.0	0.3	0.3	1.0	2.3	10.7	27.5	28.8	35.0	41.1
87.5°	0.0	0.0	0.0	0.3	0.6	1.0	1.6	1.6	1.6	1.6	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: P173490

CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	75°	85°	90°	95°	105°
0°	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4
2.5°	193.3	193.3	193.0	192.6	192.6	192.6	192.0	191.7	189.7	189.1	187.8
5°	201.1	201.1	200.4	200.1	199.8	199.8	198.8	196.8	194.3	192.6	190.0
7.5°	209.5	209.2	208.5	208.5	207.2	207.2	205.9	202.4	199.8	197.5	194.3
10°	219.2	218.9	217.9	217.6	216.9	216.3	215.0	210.8	208.2	205.3	201.4
12.5°	229.9	229.2	228.6	228.3	227.6	227.0	225.7	221.8	219.2	216.3	211.7
15°	239.3	238.9	238.3	238.0	238.0	237.3	236.3	232.8	230.2	227.0	223.4
17.5°	247.7	247.4	247.0	247.0	246.7	246.7	246.4	243.1	241.5	238.9	235.4
20°	254.8	255.1	255.1	255.1	255.4	255.8	256.4	254.8	253.2	250.9	249.0
22.5°	262.6	262.9	263.9	263.9	264.5	264.8	267.1	266.8	266.1	264.5	262.9
25°	272.0	272.6	273.3	274.2	274.6	275.5	279.4	281.0	279.7	278.8	280.4
27.5°	284.3	285.6	286.2	287.5	288.1	289.4	295.3	298.8	297.9	298.2	301.7
30°	302.7	304.0	306.0	306.6	308.9	309.5	316.3	321.8	321.8	321.2	327.6
32.5°	327.3	328.3	330.6	332.2	333.5	334.8	341.2	347.1	347.7	349.7	352.3
35°	359.7	360.3	361.6	364.2	363.9	364.6	368.1	373.9	377.2	381.7	373.9
37.5°	402.4	404.7	404.1	404.4	401.8	403.4	404.7	410.9	417.7	422.2	392.1
40°	463.3	464.9	463.3	461.0	459.1	458.1	456.2	463.0	468.8	465.6	406.3
42.5°	522.6	523.2	521.9	518.0	516.4	513.2	508.0	516.4	519.6	504.4	413.8
45°	581.2	580.2	577.9	577.3	574.0	570.8	567.9	573.4	572.1	542.3	417.0
47.5°	642.7	641.7	640.1	637.5	633.9	633.3	630.7	630.0	620.7	574.7	415.4
50°	696.4	697.1	693.5	694.8	693.2	689.9	687.7	689.0	666.6	603.2	412.1
52.5°	742.7	742.7	741.1	742.7	742.1	740.4	742.4	763.4	717.1	643.3	407.3
55°	796.5	798.4	797.1	798.7	799.7	803.3	811.3	860.6	792.6	692.5	396.3
57.5°	875.1	880.0	878.7	885.2	891.0	900.4	929.8	981.6	886.1	746.6	374.6
60°	1016.3	1032.2	1031.5	1042.8	1054.5	1065.2	1116.7	1126.7	992.0	817.2	358.4
62.5°	1251.3	1264.3	1269.8	1282.1	1289.5	1291.5	1332.9	1259.4	1086.5	881.3	349.3
65°	1403.5	1408.7	1413.5	1411.9	1407.4	1399.9	1402.5	1247.1	1055.1	840.2	299.8
67°	1421.6	1432.3	1436.2	1433.6	1426.8	1416.5	1403.8	1191.4	988.4	776.1	253.5
67.5°	1416.5	1427.5	1431.0	1428.8	1422.9	1415.2	1400.3	1170.4	965.8	755.3	241.5
70°	1333.3	1349.1	1363.7	1368.5	1368.9	1367.6	1352.7	1021.8	822.0	634.3	183.2
72.5°	1136.7	1157.1	1187.6	1177.8	1193.4	1183.4	1149.4	698.4	563.3	453.3	128.5
75°	767.0	776.1	800.7	772.5	775.1	757.3	625.2	405.7	349.3	294.9	77.4
77.5°	385.9	391.8	387.9	371.0	364.6	350.0	270.7	88.1	88.1	104.9	40.5
80°	244.8	247.0	249.6	253.5	258.4	259.0	187.8	25.9	23.3	24.3	22.0
82.5°	200.7	206.9	215.0	216.6	218.5	220.2	129.5	14.2	11.7	13.0	15.5
85°	46.6	50.5	48.2	42.7	45.7	35.3	18.1	5.8	5.2	6.5	10.7
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.3	2.3	5.5
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: P173490

CATALOG NUMBER: ENT-EXX-LED-E1-BL3-BBB

CANDELA DISTRIBUTION (continued):

	115°	125°	135°	145°	155°	165°	175°	180°
0°	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4
2.5°	186.5	185.5	184.2	183.9	183.6	182.9	182.6	182.3
5°	187.5	185.5	183.6	182.3	181.6	181.0	180.3	180.3
7.5°	191.3	189.1	186.2	184.9	183.6	182.6	182.0	182.0
10°	197.8	195.2	191.7	190.0	188.4	187.5	186.8	186.2
12.5°	207.5	204.3	200.1	197.5	195.9	195.6	194.9	194.6
15°	219.5	215.9	211.4	208.8	206.2	205.6	204.9	204.6
17.5°	231.5	228.6	225.0	220.5	215.3	211.1	209.2	208.8
20°	245.1	243.8	238.3	228.3	216.9	208.2	204.6	204.6
22.5°	262.2	258.7	245.4	227.6	210.8	198.5	193.6	193.6
25°	281.0	269.0	244.4	220.5	199.8	184.5	178.1	178.1
27.5°	297.5	272.0	238.6	208.5	183.2	166.7	159.3	159.0
30°	310.5	270.3	228.3	191.7	163.8	145.0	136.6	136.6
32.5°	317.6	264.8	214.0	171.9	140.2	118.8	108.5	108.8
35°	319.6	255.4	195.2	145.7	111.7	90.7	81.3	81.3
37.5°	317.6	240.6	171.9	116.9	83.5	68.6	61.5	60.9
40°	311.1	218.2	140.8	85.5	62.2	53.4	50.5	49.9
42.5°	298.2	191.3	105.9	61.2	49.9	46.3	45.7	45.3
45°	277.8	155.1	73.5	47.9	44.7	43.7	43.7	43.4
47.5°	252.2	118.5	52.4	42.4	42.1	42.1	42.1	42.1
50°	223.7	83.9	42.7	40.1	39.8	40.5	40.8	40.8
52.5°	194.3	58.6	39.2	38.5	37.9	38.9	39.2	39.2
55°	162.2	46.0	37.6	36.9	35.9	36.3	36.9	36.9
57.5°	129.2	40.8	36.9	35.9	34.0	34.0	34.6	34.6
60°	102.6	39.2	36.6	34.3	31.7	31.7	32.4	32.7
62.5°	85.8	38.9	36.6	32.7	30.8	29.8	30.4	30.4
65°	71.6	38.9	35.6	32.7	29.1	27.8	28.5	28.5
67°	59.9	38.2	35.0	32.7	28.5	26.9	26.9	26.9
67.5°	56.7	37.9	35.3	32.7	28.2	26.5	26.2	26.2
70°	42.4	34.3	35.3	33.0	27.5	24.3	23.6	23.6
72.5°	33.0	31.4	34.3	34.0	26.9	22.3	21.0	20.7
75°	26.9	28.5	34.6	33.0	25.3	20.4	18.5	18.1
77.5°	23.0	24.3	29.1	26.5	21.0	18.1	16.2	15.9
80°	18.1	20.7	20.7	18.1	15.5	14.6	13.6	13.6
82.5°	14.6	15.9	13.6	12.3	11.7	11.3	10.7	10.7
85°	12.0	13.0	10.0	9.1	8.7	8.4	7.8	7.8
87.5°	9.4	8.1	5.2	4.9	4.9	4.5	4.5	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)