

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: P89432

Luminaire Tested: **ENV-CXX-LED-E1-SLR-BBB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P89432
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21334)
Test Lab: INNOVATION CENTER P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-CXX-LED-E1-SLR-BBB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1017.3 lumens
Efficiency: N/A
Efficacy: 185.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - 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



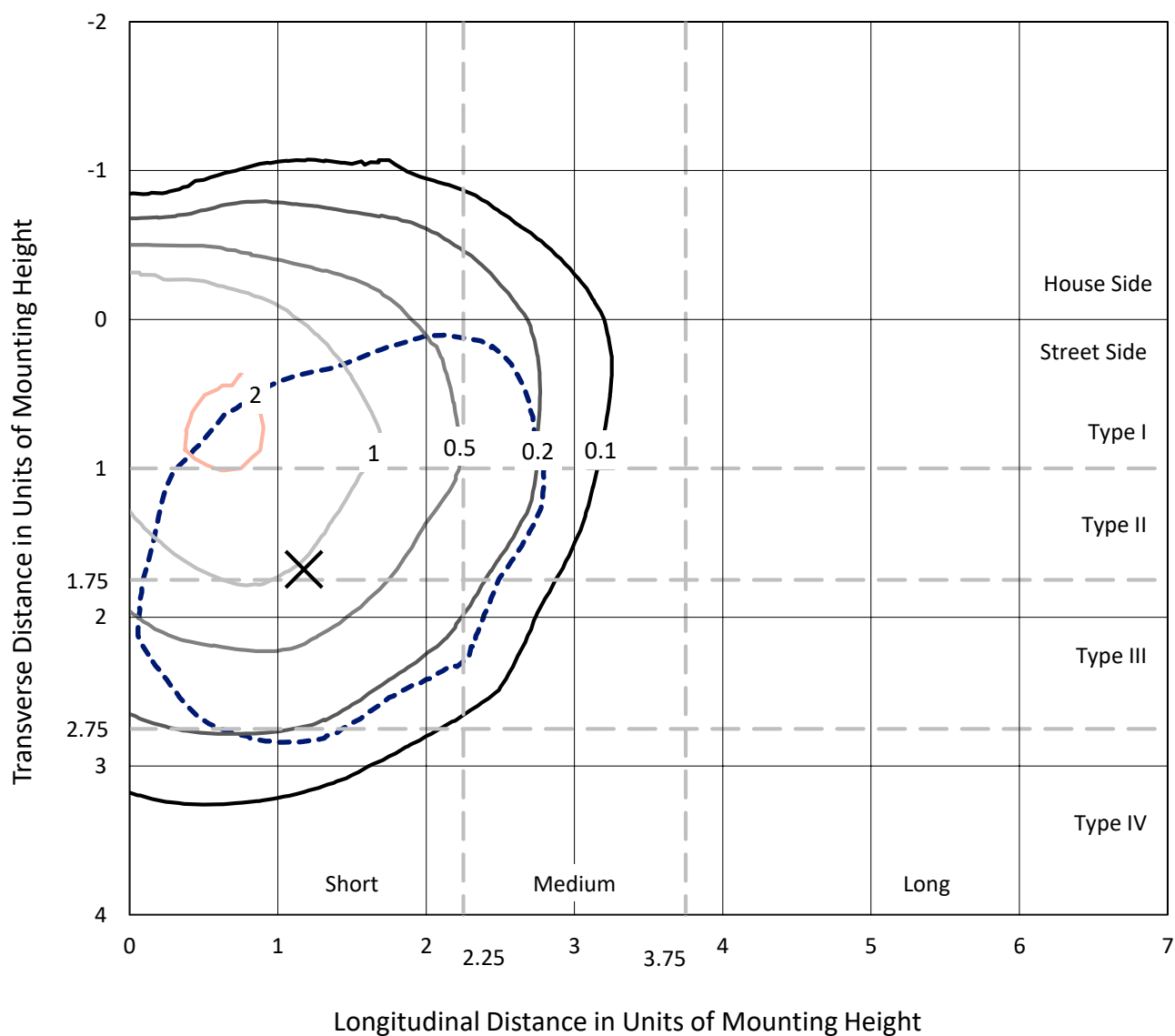
REPORT NUMBER: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

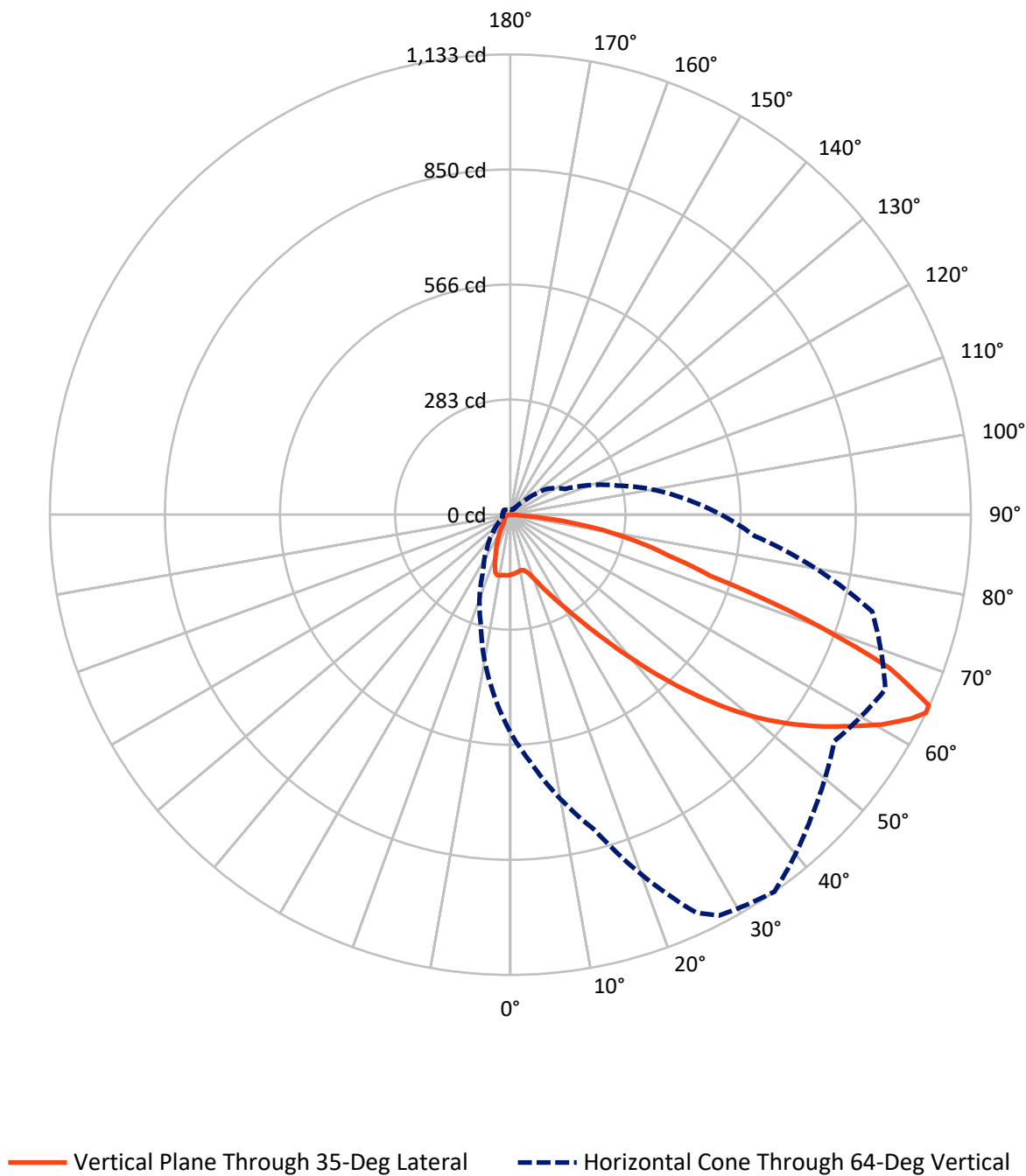


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

Luminous Intensity Polar Plot



REPORT NUMBER: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

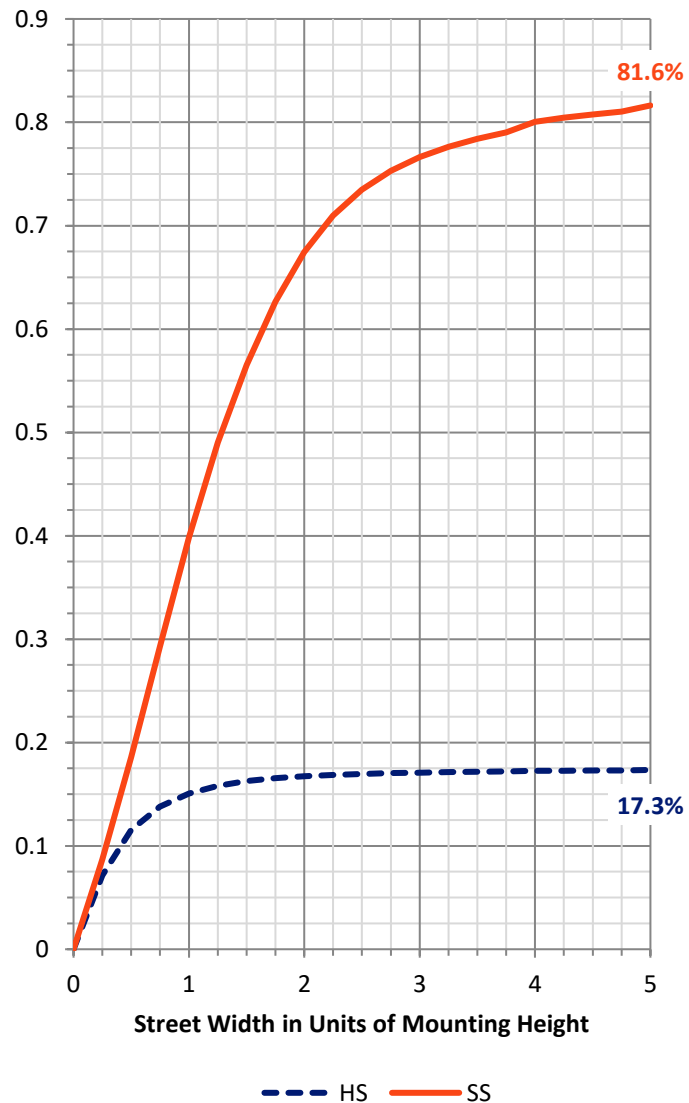
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	178.5	0.0	178.5
	% Fixture	17.5	0.0	17.5
Street Side	Lumens	838.9	0.0	838.9
	% Fixture	82.5	0.0	82.5
Total	Lumens	1017.3	0.0	1017.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.9	1.4
10°-20°	40.0	3.9
20°-30°	64.6	6.3
30°-40°	99.1	9.7
40°-50°	153.1	15.1
50°-60°	218.7	21.5
60°-70°	269.5	26.5
70°-80°	136.5	13.4
80°-90°	21.8	2.1
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°	1017.3	100.0
0°-180°	1017.3	100.0

Coefficient of Utilization



REPORT NUMBER: P89432

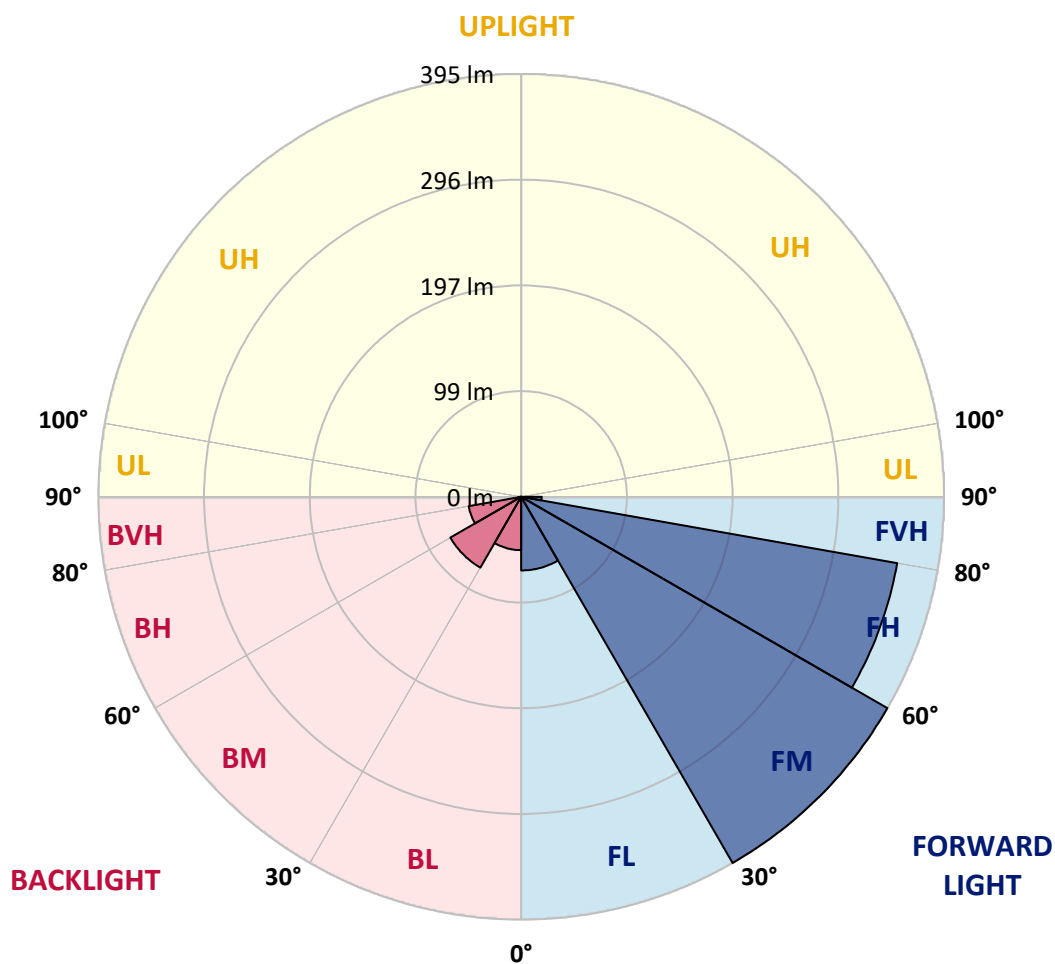
CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	68.7	6.8			
FM	(30°-60°)	394.6	38.8			
FH	(60°-80°)	356.3	35.0			G0/660
FVH	(80°-90°)	19.2	1.9			G1/100
BL	(0°-30°)	49.8	4.9	B0/110		
BM	(30°-60°)	76.3	7.5	B0/220		
BH	(60°-80°)	49.7	4.9	B0/110		G0/110
BVH	(80°-90°)	2.6	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short



REPORT NUMBER: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	27.5°	35°	45°	55°	65°	75°	85°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	148.9	148.6	148.3	148.3	148.0	146.3	146.0	144.4	143.8	143.4	143.4
5°	148.6	148.0	147.6	147.0	147.0	143.8	142.8	140.2	139.2	137.9	138.2
7.5°	149.3	148.6	147.6	145.7	145.0	141.8	138.9	135.3	134.0	132.1	132.1
10°	146.7	146.7	145.7	142.8	142.1	139.5	136.3	133.4	130.8	128.2	127.6
12.5°	143.1	143.4	142.8	141.8	141.8	140.2	137.3	134.0	130.5	128.2	127.2
15°	144.1	145.0	146.7	146.7	146.7	144.7	141.8	139.2	135.7	133.7	131.8
17.5°	149.3	151.5	154.1	155.4	155.4	154.1	150.9	148.0	144.7	143.4	141.8
20°	159.0	161.6	167.1	169.0	169.7	168.7	165.8	161.2	157.0	155.1	153.5
22.5°	170.3	174.2	182.6	186.5	188.1	187.5	183.9	177.1	172.2	168.0	166.4
25°	184.2	189.1	201.1	207.5	208.8	210.1	205.6	196.8	190.4	186.5	184.2
27.5°	203.0	208.5	223.4	231.5	233.1	236.0	233.1	223.7	214.0	210.4	206.2
30°	225.7	232.5	248.6	259.3	261.9	265.8	266.5	257.1	244.1	242.2	232.8
32.5°	252.9	261.9	279.7	292.7	296.2	304.0	307.6	296.2	284.9	280.7	258.7
35°	280.7	294.9	316.6	332.5	337.0	350.3	357.8	342.2	333.2	321.8	285.9
37.5°	310.2	330.9	361.6	380.7	386.9	406.6	419.3	396.0	387.5	361.6	311.8
40°	338.7	367.8	415.1	439.0	445.8	473.0	495.4	458.4	444.5	398.2	334.1
42.5°	365.5	402.8	470.1	505.1	513.2	548.5	577.3	521.6	495.4	431.3	353.9
45°	388.8	435.1	523.2	571.8	582.8	627.5	660.2	584.7	542.3	466.2	373.3
47.5°	404.7	461.0	568.2	635.5	650.4	707.1	733.0	642.3	586.3	497.6	390.5
50°	418.3	484.3	610.3	698.4	714.5	784.2	790.3	697.7	630.4	528.1	409.2
52.5°	433.2	505.1	648.8	756.0	779.9	854.1	838.2	751.1	671.5	558.2	428.7
55°	453.6	528.1	688.3	822.7	850.8	919.5	881.3	805.5	715.8	589.6	452.9
57.5°	479.2	556.5	736.6	903.3	933.7	982.6	918.2	855.1	774.4	640.1	497.9
60°	509.6	595.7	796.5	1013.1	1033.8	1048.7	970.6	918.2	883.2	700.3	541.0
62.5°	530.3	613.5	840.2	1092.7	1109.2	1105.6	1014.0	969.7	988.4	749.8	576.0
64°	535.5	617.4	803.9	1080.4	1112.4	1132.8	1048.7	972.6	1017.9	921.4	603.5
65°	539.7	618.7	807.5	1070.7	1105.0	1131.2	1043.2	968.0	1010.8	776.1	599.0
67.5°	484.0	551.0	706.4	951.5	987.2	1005.0	984.9	901.0	948.9	728.1	585.0
70°	442.3	498.6	616.4	789.3	800.0	771.2	786.7	747.9	786.4	590.9	510.2
72.5°	369.7	408.3	465.2	525.8	521.3	514.5	578.2	489.2	489.2	436.1	418.0
75°	305.0	342.2	355.8	357.4	355.5	401.5	443.9	351.9	314.7	311.5	326.0
77.5°	248.0	284.6	269.7	268.7	275.8	319.9	359.4	294.0	243.5	232.5	233.4
80°	177.1	223.7	188.1	199.8	209.2	230.2	261.6	188.4	140.2	109.8	127.6
82.5°	130.5	159.9	126.3	138.6	137.9	130.8	127.2	70.3	35.3	10.4	2.3
85°	76.4	84.8	74.8	59.2	58.9	23.3	8.1	0.0	0.0	0.0	0.0
87.5°	1.6	1.0	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
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: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	143.8	144.1	144.1	144.1	143.4	144.7	145.0	145.7	146.3	146.0	146.7
5°	137.9	138.2	139.2	139.9	140.2	142.8	143.1	144.7	145.4	146.0	146.0
7.5°	131.8	132.1	132.7	134.0	136.0	138.9	141.8	144.4	146.0	147.3	147.3
10°	127.9	127.9	127.9	129.5	132.4	136.6	141.5	145.0	147.3	148.9	148.9
12.5°	127.2	126.3	126.6	127.9	130.5	134.4	137.6	141.5	142.8	143.4	143.8
15°	131.4	130.5	131.1	131.4	131.4	131.1	131.4	131.1	130.2	129.5	129.5
17.5°	141.8	140.5	139.9	136.6	131.4	126.6	121.1	117.5	114.6	112.3	111.4
20°	154.4	152.8	148.9	141.2	132.4	123.0	114.0	107.2	102.6	99.7	98.7
22.5°	167.4	165.1	158.6	146.3	134.4	119.5	107.5	98.4	92.3	89.4	88.4
25°	184.9	180.0	168.4	151.8	136.3	116.2	100.0	89.4	82.2	78.4	77.7
27.5°	203.6	196.2	177.4	155.7	136.3	112.0	91.6	79.0	70.9	66.7	65.4
30°	224.7	214.0	185.8	156.4	133.4	105.9	82.6	68.6	59.2	53.7	52.8
32.5°	246.1	229.5	190.0	153.8	127.2	99.4	73.8	56.7	45.3	40.5	39.2
35°	266.8	243.1	193.3	148.9	120.4	91.0	63.1	44.4	34.0	29.5	28.8
37.5°	284.9	255.4	194.6	144.7	112.3	81.3	54.1	36.3	26.5	23.6	23.3
40°	300.1	267.1	197.2	141.2	104.6	73.5	49.5	32.7	23.6	21.7	22.0
42.5°	314.0	276.8	200.4	137.3	97.8	70.3	47.6	30.1	21.7	20.7	21.0
45°	328.3	287.8	203.6	135.0	94.5	69.6	45.0	26.9	20.4	20.1	20.1
47.5°	340.3	296.6	206.9	134.7	94.9	67.3	42.1	24.0	19.1	18.8	19.1
50°	353.2	306.6	211.7	135.0	94.9	65.4	38.9	21.7	17.8	17.5	17.5
52.5°	368.8	320.8	219.8	139.5	94.2	62.5	35.6	19.1	16.5	16.5	16.5
55°	394.7	347.4	234.7	142.8	93.2	59.9	33.0	17.5	15.5	15.5	15.5
57.5°	437.4	380.4	249.0	145.7	91.9	57.3	29.8	16.2	14.9	14.9	14.9
60°	472.0	406.0	260.6	148.9	89.7	53.4	26.2	15.2	14.2	14.2	13.9
62.5°	496.0	422.8	270.7	149.6	85.8	48.9	22.7	13.9	13.3	13.3	13.0
64°	518.3	434.5	276.2	149.6	110.7	45.0	19.7	13.3	12.6	12.3	12.0
65°	513.5	428.3	270.0	145.4	79.0	43.1	18.8	12.6	12.3	12.0	12.0
67.5°	506.4	412.8	250.6	131.8	69.0	36.3	14.9	11.3	11.3	11.0	11.0
70°	459.7	366.8	210.1	108.8	56.0	29.8	10.7	10.0	10.7	10.7	10.7
72.5°	382.4	313.4	167.1	84.2	44.4	21.7	9.4	9.4	10.4	10.0	9.7
75°	284.3	224.7	120.1	62.8	30.1	16.5	9.1	8.7	9.4	9.4	9.4
77.5°	183.9	135.3	87.7	46.0	21.7	13.3	8.4	7.8	8.1	8.4	8.4
80°	101.7	71.6	41.8	19.1	11.0	8.7	6.5	6.5	6.8	7.1	7.1
82.5°	0.6	0.3	2.9	3.6	2.9	3.9	4.2	4.9	5.2	6.2	5.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.6	2.9	3.6	3.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	148.6	148.6	149.6	149.6	148.6	148.9	148.9	149.9	149.9	149.9	149.9
5°	148.0	148.6	149.9	149.6	148.9	148.9	149.3	150.2	150.2	150.2	150.2
7.5°	148.9	149.6	150.5	149.9	149.6	149.9	150.5	151.5	151.8	151.8	152.2
10°	150.2	150.9	152.5	151.8	151.5	152.2	153.5	154.1	155.1	155.1	155.4
12.5°	146.0	148.0	150.5	152.8	153.8	154.1	155.1	155.7	156.4	157.0	156.7
15°	131.1	134.0	140.5	146.7	150.5	152.2	152.8	154.8	154.4	155.1	154.8
17.5°	112.7	114.6	121.4	129.5	137.3	142.8	144.1	144.1	143.8	145.7	146.0
20°	99.1	99.1	103.6	109.4	117.5	124.3	126.9	126.3	127.2	129.5	131.4
22.5°	88.4	88.1	89.4	92.3	96.2	100.7	104.6	107.2	111.1	113.3	116.2
25°	77.4	76.4	77.4	79.0	80.9	84.5	88.7	92.9	98.7	102.0	104.9
27.5°	65.1	64.8	65.7	66.7	68.6	71.9	76.1	80.6	86.8	90.3	94.5
30°	52.4	53.1	53.7	55.4	57.0	60.9	64.8	69.0	74.8	78.4	83.2
32.5°	39.8	41.1	43.1	45.3	47.3	50.5	54.4	57.6	61.5	65.4	70.6
35°	29.5	30.8	33.0	36.3	38.5	41.4	44.4	46.9	49.9	52.4	57.6
37.5°	24.0	24.6	26.2	29.1	31.7	34.3	36.6	37.9	39.5	41.4	44.7
40°	22.3	22.7	23.0	24.6	26.5	28.8	30.8	31.4	31.4	32.1	34.3
42.5°	21.7	22.0	22.7	23.3	24.6	25.6	27.2	27.8	28.2	28.2	28.5
45°	20.7	21.0	21.7	23.0	23.6	24.9	26.2	26.2	26.2	26.5	26.2
47.5°	19.4	20.1	20.7	21.7	22.7	24.0	24.9	24.9	24.9	25.3	25.3
50°	18.1	18.8	19.7	20.7	21.7	23.0	24.0	24.0	24.0	24.0	24.0
52.5°	16.5	17.2	18.1	19.4	20.4	21.7	22.7	22.3	22.3	22.7	22.7
55°	15.9	16.2	16.8	18.5	19.1	20.7	21.4	21.0	21.0	21.4	21.7
57.5°	14.9	15.2	15.9	17.5	18.1	19.7	20.1	19.7	20.4	20.7	20.7
60°	14.2	13.9	14.9	16.5	17.2	19.4	19.7	19.4	19.7	20.1	20.4
62.5°	13.3	13.0	13.9	15.9	17.2	19.1	18.8	18.5	19.1	19.7	20.1
64°	12.3	12.3	13.0	14.9	16.8	18.8	18.5	18.1	18.8	19.1	19.4
65°	12.0	12.0	13.0	15.2	16.8	18.5	18.1	18.1	18.8	19.4	19.4
67.5°	11.0	11.0	12.0	13.9	15.5	17.2	17.2	17.5	18.5	18.8	18.8
70°	10.4	10.4	10.7	12.6	13.9	15.2	15.2	16.2	17.5	17.5	17.8
72.5°	10.0	9.7	10.0	11.3	12.3	13.6	14.2	15.2	16.2	16.8	17.2
75°	9.4	9.1	9.4	10.4	11.0	12.0	13.3	14.2	15.5	15.9	16.2
77.5°	8.4	8.1	8.4	9.4	10.0	10.7	12.3	13.6	14.6	15.2	15.9
80°	7.1	6.8	6.5	8.1	8.7	9.4	10.7	11.7	13.0	13.6	14.2
82.5°	6.2	5.8	5.8	6.8	7.4	8.4	9.4	10.7	12.0	13.0	13.6
85°	3.9	4.2	4.2	5.5	6.2	6.8	8.1	9.4	10.7	11.0	11.7
87.5°	0.6	2.3	2.9	3.9	4.5	5.2	6.5	7.4	8.4	8.7	9.1
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: P89432

CATALOG NUMBER: ENV-CXX-LED-E1-SLR-BBB

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	332.5°	335°	345°	355°	360°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	149.6	149.6	149.6	149.6	148.9	148.6	148.6	148.6	148.9	148.9
5°	149.9	149.9	150.2	149.9	149.3	149.6	149.3	148.6	149.3	148.6
7.5°	152.2	151.8	151.8	151.5	151.5	151.2	151.2	149.6	149.9	149.3
10°	155.4	155.1	155.4	154.1	152.8	151.8	151.2	148.3	147.6	146.7
12.5°	158.3	158.0	157.7	155.1	150.5	148.0	147.0	144.4	143.1	143.1
15°	157.0	158.0	157.7	153.5	148.3	144.7	143.4	142.5	142.8	144.1
17.5°	149.6	152.8	156.1	152.8	147.6	146.0	145.0	146.0	148.0	149.3
20°	137.9	143.4	150.5	152.2	152.5	152.5	152.2	153.5	157.0	159.0
22.5°	123.7	132.7	144.7	155.1	160.9	161.9	162.5	164.8	167.7	170.3
25°	113.6	123.4	139.5	159.0	170.0	173.5	173.9	178.7	182.0	184.2
27.5°	104.6	115.6	134.4	158.3	174.8	184.2	186.2	194.6	200.7	203.0
30°	95.2	108.1	128.5	155.7	176.1	191.0	194.9	210.1	222.1	225.7
32.5°	83.9	99.4	122.4	151.8	176.8	193.9	199.8	224.7	245.1	252.9
35°	70.9	88.7	114.0	146.0	172.9	194.3	202.4	237.0	268.4	280.7
37.5°	57.6	76.7	103.6	137.9	166.4	191.7	201.4	245.7	290.1	310.2
40°	45.3	65.1	92.3	127.6	158.3	187.1	197.8	251.6	310.2	338.7
42.5°	37.2	55.7	80.9	115.6	150.2	180.7	192.3	256.4	328.0	365.5
45°	32.7	49.9	73.5	102.6	140.8	174.2	187.1	259.0	341.6	388.8
47.5°	29.5	46.0	69.0	93.6	131.4	167.4	182.0	261.0	352.6	404.7
50°	26.9	42.4	65.7	88.7	123.7	161.9	176.8	262.2	361.6	418.3
52.5°	24.6	38.5	61.5	85.5	119.5	156.7	171.9	263.9	373.6	433.2
55°	23.0	34.6	57.3	81.9	117.2	153.5	168.7	269.4	390.1	453.6
57.5°	21.7	30.4	52.1	77.4	114.6	152.2	167.4	274.2	409.6	479.2
60°	21.0	26.9	46.6	71.6	111.4	151.5	167.4	280.4	430.3	509.6
62.5°	20.4	24.0	41.1	65.1	106.2	148.9	167.7	285.6	447.4	530.3
64°	19.7	21.4	35.3	58.3	98.4	142.5	161.9	280.7	448.4	535.5
65°	19.7	21.4	35.3	58.6	99.1	143.8	163.8	283.9	453.6	539.7
67.5°	19.1	19.7	29.1	49.9	88.1	130.2	148.0	250.9	402.1	484.0
70°	18.5	18.5	23.3	38.5	71.2	106.8	117.2	194.3	361.3	442.3
72.5°	17.5	17.8	20.4	29.5	48.2	79.6	93.6	159.6	294.3	369.7
75°	16.8	17.2	19.4	24.6	33.7	55.7	68.3	134.7	234.7	305.0
77.5°	16.5	16.5	18.5	22.0	28.8	39.2	46.0	101.0	182.3	248.0
80°	15.5	15.2	16.5	19.7	25.3	30.1	32.7	58.6	116.6	177.1
82.5°	13.9	13.9	14.9	17.5	19.7	23.3	23.0	37.9	76.4	130.5
85°	12.0	12.3	13.3	13.3	15.2	16.8	16.5	21.4	44.0	76.4
87.5°	9.4	9.7	10.7	11.3	11.7	10.0	9.4	9.1	13.3	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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