

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: P162585

Luminaire Tested: **ECM-E01-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162585  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E01-LED-E1-SL4-HSS-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (21) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1632.8 lumens  
Efficiency: N/A  
Efficacy: 66.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

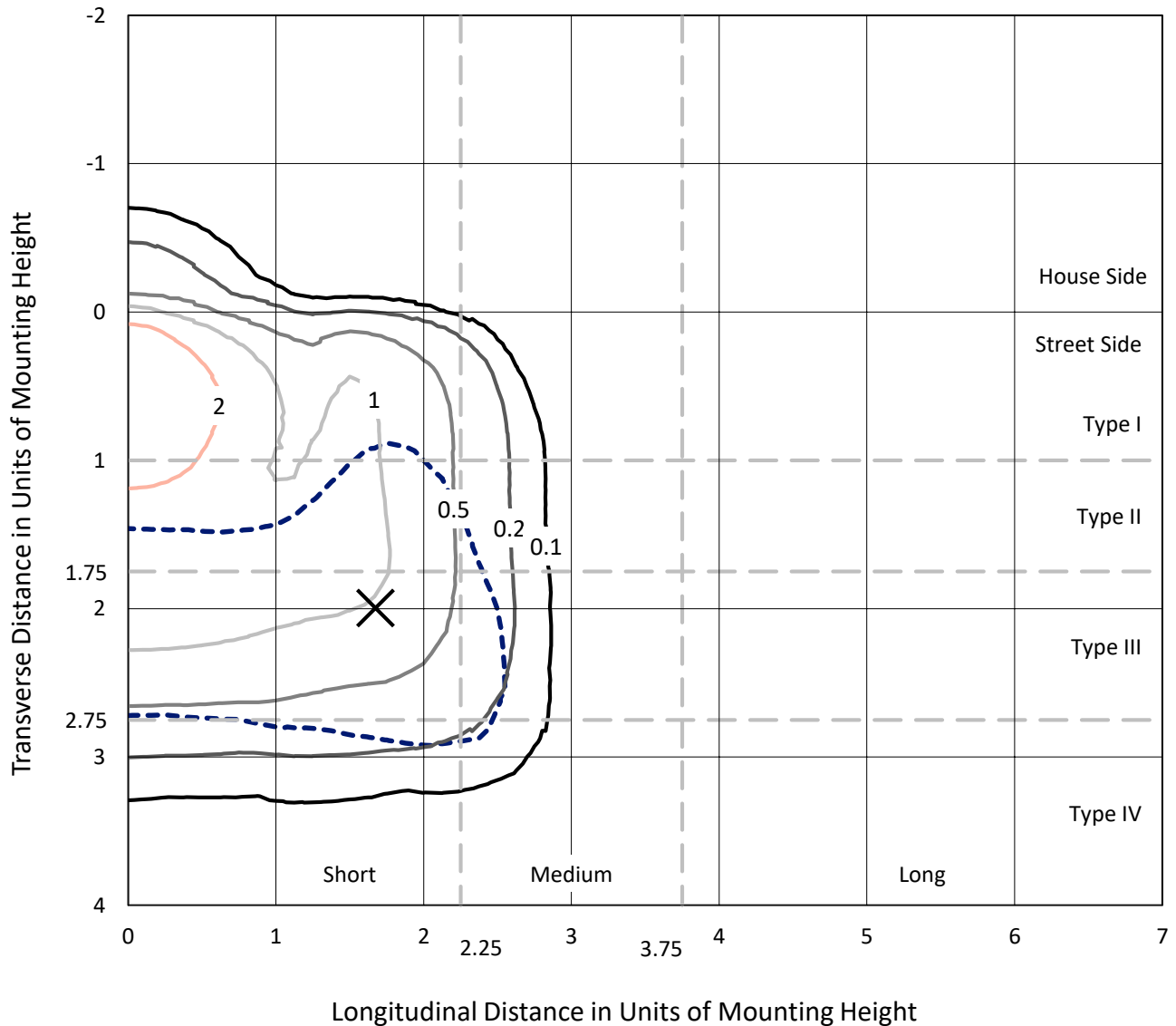
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P162585  
 CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

### Iso-Footcandle Lines of Horizontal Illumination

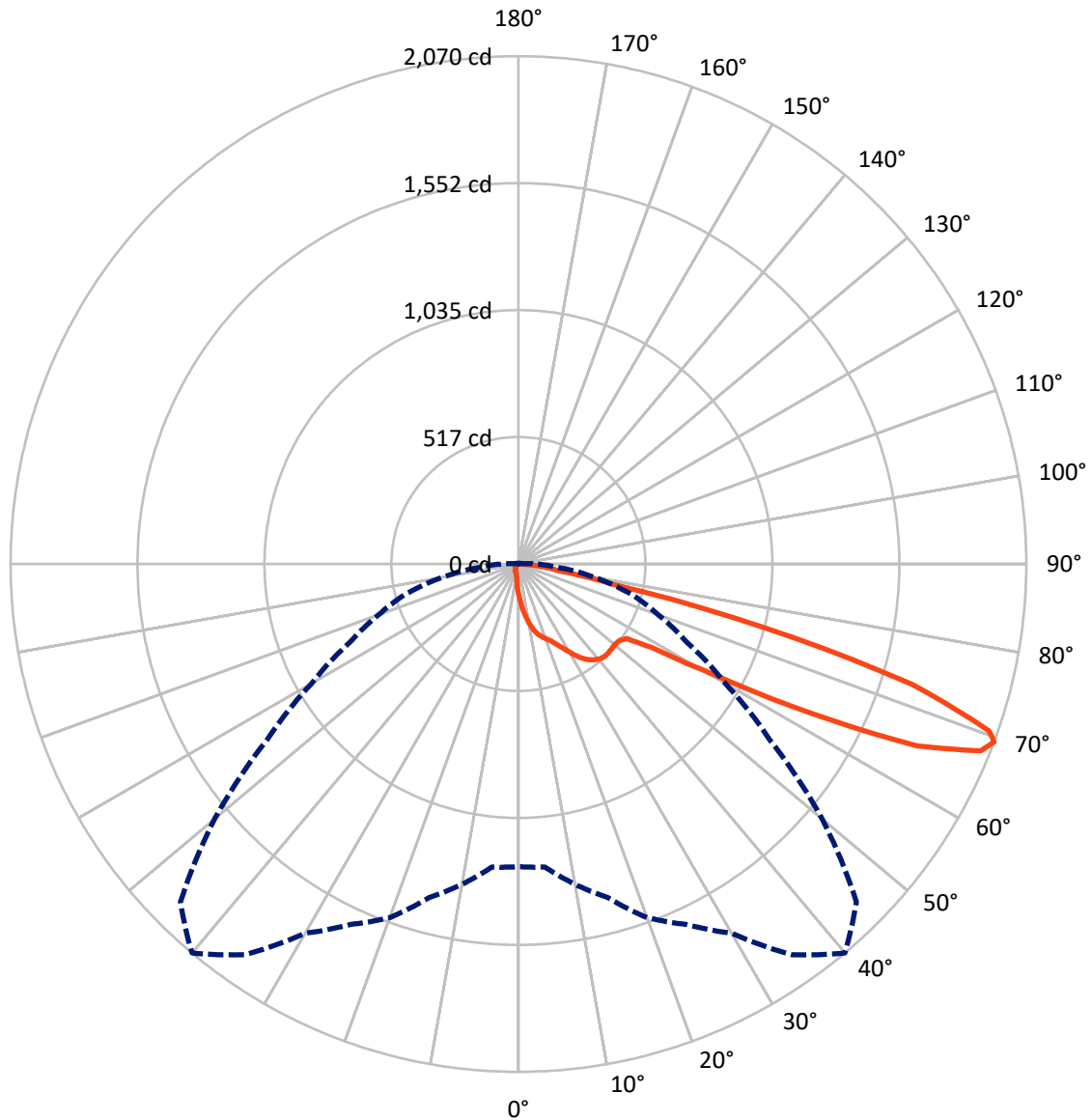
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P162585  
CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P162585

CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	48.6	0.0	48.6
	% Fixture	3.0	0.0	3.0
<b>Street Side</b>	Lumens	1584.2	0.0	1584.2
	% Fixture	97.0	0.0	97.0
<b>Total</b>	Lumens	1632.8	0.0	1632.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.7	0.8
10°-20°	43.7	2.7
20°-30°	83.6	5.1
30°-40°	139.1	8.5
40°-50°	188.2	11.5
50°-60°	294.3	18.0
60°-70°	605.1	37.1
70°-80°	243.5	14.9
80°-90°	22.5	1.4
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°	1632.8	100.0
0°-180°	1632.8	100.0



REPORT NUMBER: P162585

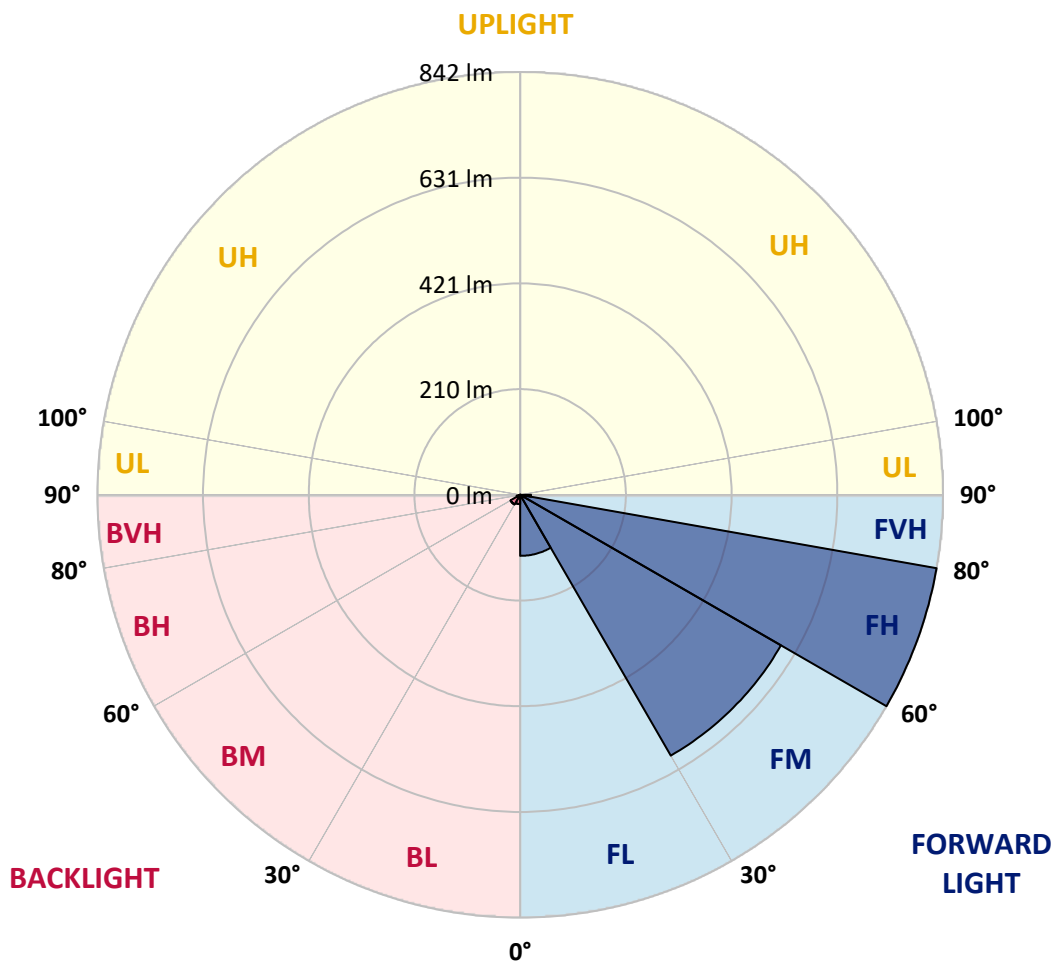
CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	121.5	7.4			
FM (30°-60°)	599.4	36.7			
FH (60°-80°)	841.6	51.5			G1/1800
FVH (80°-90°)	21.7	1.3			G1/100
BL (0°-30°)	18.5	1.1	B0/110		
BM (30°-60°)	22.2	1.4	B0/220		
BH (60°-80°)	7.1	0.4	B0/110		G0/110
BVH (80°-90°)	0.8	0.1			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: P162585  
 CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	164.5	162.6	160.5	160.5	157.8	157.8	156.2	151.9	151.4	149.0	146.6
5°	210.0	208.4	205.7	203.3	201.2	197.4	194.7	189.6	184.0	178.7	173.9
7.5°	254.4	253.6	248.8	248.0	244.5	238.3	233.0	225.5	215.9	208.4	199.5
10°	295.6	293.7	292.6	288.1	283.0	276.3	268.0	258.9	247.7	235.9	223.3
12.5°	328.2	327.1	322.3	320.4	315.1	308.4	298.0	286.2	275.0	259.7	245.0
15°	352.5	350.7	347.4	344.5	338.1	332.2	322.6	309.7	296.1	279.5	261.9
17.5°	372.9	369.4	368.6	364.0	357.3	350.4	339.7	327.9	311.9	295.3	276.0
20°	400.1	395.3	393.7	387.0	379.3	369.7	357.3	342.6	325.8	307.6	287.8
22.5°	432.2	428.8	425.3	419.4	409.5	395.9	377.9	361.9	340.5	320.4	299.0
25°	477.7	474.8	469.1	461.1	448.8	432.5	410.9	387.3	362.2	336.5	311.3
27.5°	521.8	519.2	515.2	509.0	495.1	477.2	450.4	420.5	388.7	357.6	329.8
30°	563.3	560.9	556.9	550.7	538.4	520.8	490.6	458.5	418.9	382.7	349.3
32.5°	608.0	607.2	602.6	593.8	583.1	559.3	526.4	491.9	451.8	410.0	371.0
35°	658.5	652.4	648.1	639.3	621.1	595.7	557.1	519.4	477.2	434.4	390.8
37.5°	701.3	695.4	690.1	678.9	656.7	624.3	580.7	539.2	495.6	452.0	407.6
40°	732.6	729.7	723.3	708.6	683.7	645.1	598.1	552.9	509.0	465.2	421.3
42.5°	755.9	751.3	744.1	728.9	699.4	655.6	605.0	558.5	515.2	473.2	430.1
45°	764.5	760.7	754.0	737.4	705.6	658.5	604.8	556.9	515.4	475.6	436.0
47.5°	759.4	755.6	749.7	734.2	702.9	655.0	600.0	552.3	512.8	476.4	441.4
50°	742.5	740.4	735.8	722.7	694.6	648.4	595.7	549.9	512.2	480.4	448.8
52.5°	740.9	739.6	734.0	720.9	692.2	646.2	595.1	551.3	516.8	485.5	454.2
55°	905.4	886.4	843.9	807.8	748.4	677.8	622.2	572.9	536.0	505.5	483.6
57.5°	1286.8	1258.5	1202.6	1133.8	997.4	863.4	756.2	678.6	640.3	626.4	634.7
60°	1465.5	1460.4	1451.6	1419.0	1349.1	1233.9	1105.5	966.7	911.0	906.2	923.1
62.5°	1550.3	1547.1	1549.8	1545.7	1524.1	1490.4	1453.5	1393.6	1338.5	1302.9	1227.4
65°	1589.3	1591.5	1606.7	1618.8	1621.4	1630.3	1657.3	1731.9	1786.5	1694.7	1485.3
67.5°	1490.1	1502.7	1537.7	1581.6	1633.0	1682.7	1763.0	1920.2	2032.3	1924.5	1627.1
69°	1233.6	1239.8	1325.3	1408.0	1533.4	1621.2	1737.5	1943.8	2069.7	1948.0	1615.8
70°	971.2	976.8	1068.6	1180.9	1393.0	1505.9	1658.1	1903.9	2034.7	1916.7	1558.1
72.5°	438.1	430.1	462.5	522.7	753.2	932.4	1198.6	1542.5	1678.7	1535.6	1165.7
75°	306.0	302.5	306.0	306.3	342.1	441.4	556.9	836.1	1034.1	892.3	556.9
77.5°	237.0	234.6	232.2	229.5	233.8	261.9	273.1	296.6	385.2	364.3	212.4
80°	187.5	185.4	191.2	189.4	189.4	192.6	190.4	181.6	165.0	153.0	137.0
82.5°	87.2	87.7	87.7	95.2	114.8	134.0	140.2	131.3	116.6	99.2	80.0
85°	8.3	9.4	15.8	24.3	48.4	54.6	54.8	45.5	45.5	35.8	28.9
87.5°	0.0	0.3	0.3	0.3	2.4	6.7	5.6	1.6	0.8	0.8	1.4
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: P162585  
 CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	142.3	141.5	138.3	135.1	132.1	128.9	126.0	123.0	119.8	117.4	114.5
5°	166.4	160.5	153.8	147.4	141.0	134.3	127.3	121.2	114.8	108.9	103.2
7.5°	190.7	179.2	170.1	158.6	148.2	137.7	128.1	118.2	109.1	100.6	92.6
10°	211.3	197.4	183.2	168.5	153.5	139.6	126.3	114.5	102.4	92.0	82.1
12.5°	228.2	210.5	193.1	174.6	157.8	140.2	123.6	109.4	95.2	83.4	73.3
15°	243.4	223.1	202.2	180.8	159.4	139.3	120.9	103.2	88.8	75.4	63.9
17.5°	255.7	232.4	208.9	184.8	161.8	138.3	117.4	99.0	82.1	68.2	57.0
20°	266.4	242.1	216.7	189.6	163.4	138.0	114.5	93.6	76.2	61.5	50.6
22.5°	276.3	252.0	224.7	195.8	165.8	137.7	111.8	89.6	71.1	56.4	45.5
25°	287.5	261.9	233.3	202.2	170.1	138.8	110.2	86.4	66.6	51.6	41.5
27.5°	300.1	273.1	243.4	210.2	175.7	141.0	109.7	82.9	62.6	47.1	38.3
30°	317.8	286.5	253.6	218.3	180.8	143.4	109.1	80.8	58.6	43.6	35.0
32.5°	333.3	299.6	264.8	226.6	186.4	145.8	108.9	77.8	54.8	40.1	32.6
35°	349.6	311.6	274.4	234.6	191.2	148.5	108.6	75.7	51.3	36.7	30.2
37.5°	363.8	321.8	281.9	241.5	196.6	150.8	108.9	73.8	48.1	33.7	28.1
40°	375.8	332.2	290.2	248.0	202.2	154.6	109.1	72.0	44.9	31.0	26.2
42.5°	386.5	342.1	299.0	255.2	208.6	158.9	110.7	70.3	42.3	28.6	24.3
45°	394.8	351.2	308.7	265.4	219.1	165.8	113.7	69.3	39.6	26.5	22.7
47.5°	403.3	364.6	325.0	281.4	234.3	176.8	118.7	69.0	37.4	24.9	21.4
50°	415.1	377.9	339.4	297.7	248.2	188.0	124.9	69.3	34.8	23.3	20.1
52.5°	423.7	391.6	358.2	326.1	281.4	222.3	148.7	74.1	33.4	21.9	18.5
55°	474.2	468.6	469.4	474.8	440.3	378.2	248.8	107.0	39.3	24.9	18.2
57.5°	668.7	688.5	700.0	699.7	642.8	533.1	334.1	137.5	43.9	28.9	21.7
60°	924.4	909.4	888.3	836.1	760.4	608.5	373.7	147.9	38.0	23.0	19.8
62.5°	1150.4	1062.7	984.9	900.3	801.1	634.7	381.7	147.1	33.2	17.4	13.9
65°	1291.4	1133.6	1007.9	901.9	785.1	612.8	361.1	135.1	28.1	14.2	11.5
67.5°	1325.1	1095.3	917.4	782.4	655.9	476.9	265.1	101.6	21.9	11.8	10.2
69°	1251.5	973.6	760.2	606.9	477.2	316.4	164.0	64.2	16.9	10.7	9.4
70°	1151.2	846.8	619.2	487.1	353.4	222.3	114.8	45.2	13.6	9.9	8.6
72.5°	740.7	444.8	304.4	211.8	145.8	88.5	44.9	20.3	10.4	8.3	6.9
75°	287.3	164.5	119.3	90.7	70.9	49.2	27.3	13.1	8.8	6.9	5.3
77.5°	141.5	108.3	88.5	60.7	35.3	21.9	14.7	10.2	7.2	5.1	3.5
80°	111.8	74.4	44.4	27.5	20.9	15.8	11.2	8.3	5.3	3.2	2.4
82.5°	57.3	31.3	23.0	18.7	15.5	12.3	9.1	5.9	3.5	2.1	1.9
85°	17.9	13.1	11.8	11.5	10.7	8.8	6.4	3.7	2.1	1.4	1.4
87.5°	1.4	1.9	2.4	1.9	2.1	1.9	2.4	1.6	1.1	1.1	0.8
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: P162585

CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	112.3	109.1	106.2	104.3	100.8	99.5	98.2	97.6	95.2	95.8	93.6
5°	98.2	92.6	88.3	84.0	80.0	77.0	74.6	71.7	69.3	68.2	66.1
7.5°	85.3	78.1	72.5	67.9	63.1	59.4	56.2	54.0	51.9	49.7	48.7
10°	74.1	66.3	59.9	55.4	50.8	47.6	45.2	43.6	42.3	41.5	41.2
12.5°	63.7	56.2	50.3	46.3	42.8	41.2	40.1	39.3	39.0	38.8	38.8
15°	55.6	48.1	43.6	40.7	39.0	38.3	38.0	37.4	36.9	36.7	36.7
17.5°	48.1	42.5	39.3	37.7	36.9	36.4	35.8	35.3	34.8	34.5	34.5
20°	43.1	38.5	36.9	35.8	35.0	34.5	33.7	33.2	32.9	32.6	32.4
22.5°	39.0	36.1	35.0	34.2	33.2	32.4	31.8	31.3	30.7	30.5	30.2
25°	36.1	34.2	33.4	32.4	31.3	30.5	29.7	28.9	28.4	28.1	27.5
27.5°	34.0	32.6	31.6	30.2	29.1	28.4	27.5	26.8	26.2	25.7	25.4
30°	32.1	30.7	29.4	28.4	27.0	26.2	25.2	24.3	24.1	23.5	23.0
32.5°	30.2	28.9	27.5	26.2	24.9	23.8	23.3	22.2	21.7	21.4	20.9
35°	28.1	26.8	25.2	24.1	22.7	21.7	20.9	20.1	19.5	19.0	18.7
37.5°	26.2	24.6	23.0	21.7	20.6	19.5	18.7	17.9	17.4	16.9	16.6
40°	24.1	22.5	20.9	19.5	18.5	17.7	16.9	16.0	15.5	15.2	15.2
42.5°	22.2	20.3	18.7	17.7	16.9	15.8	15.0	14.2	13.9	13.6	13.9
45°	20.3	18.5	17.1	16.0	15.2	14.2	13.4	12.8	12.6	12.8	13.1
47.5°	18.7	16.9	15.5	14.7	13.9	13.1	12.3	11.8	11.8	12.3	12.8
50°	17.1	15.2	14.2	13.6	12.8	12.0	11.0	10.7	11.0	11.5	12.0
52.5°	15.5	13.4	12.6	12.3	11.5	10.7	9.9	9.6	9.9	10.4	10.2
55°	13.9	11.8	11.5	11.2	10.4	9.4	8.6	8.6	8.6	8.3	7.8
57.5°	13.4	10.4	10.2	9.9	9.1	8.0	7.5	6.9	6.7	5.9	5.6
60°	13.9	9.4	9.4	8.8	8.0	6.9	6.2	5.3	4.8	4.3	4.3
62.5°	11.2	8.6	8.3	7.8	6.7	5.6	4.8	4.0	3.7	3.5	3.5
65°	9.1	7.8	7.2	6.4	5.6	4.6	3.7	3.2	3.0	3.0	3.2
67.5°	8.3	6.9	6.2	5.3	4.6	3.5	3.0	2.7	2.7	3.0	3.0
69°	7.8	6.4	5.6	4.8	4.0	3.2	2.7	2.7	2.7	2.7	3.0
70°	7.2	6.2	5.3	4.6	3.5	2.7	2.4	2.4	2.7	2.7	3.0
72.5°	5.6	4.8	4.6	3.7	2.7	2.4	2.1	2.4	2.4	2.7	2.7
75°	4.3	3.5	3.5	3.0	2.1	1.9	1.9	2.1	2.1	2.4	2.4
77.5°	3.0	2.4	2.4	2.1	1.9	1.6	1.6	1.9	2.1	2.1	2.4
80°	2.1	1.9	1.6	1.9	1.6	1.4	1.6	1.9	1.9	2.1	2.1
82.5°	1.6	1.6	1.6	1.6	1.4	1.4	1.6	1.6	1.9	2.1	2.1
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6	1.9	1.9
87.5°	0.8	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4	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: P162585  
CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	123.3	123.3	123.3	123.3
2.5°	93.1	92.8	91.7	92.0
5°	65.3	63.7	64.7	64.5
7.5°	47.9	47.6	47.3	47.9
10°	40.9	40.9	40.7	40.9
12.5°	38.5	38.5	38.5	38.5
15°	36.7	36.7	36.4	36.4
17.5°	34.5	34.5	34.5	34.2
20°	32.4	32.1	32.1	32.1
22.5°	30.0	29.7	29.7	29.7
25°	27.5	27.3	27.3	27.3
27.5°	25.2	24.9	24.6	24.6
30°	22.7	22.5	22.2	22.2
32.5°	20.3	20.1	19.8	19.8
35°	18.2	18.2	17.9	17.7
37.5°	16.3	16.3	16.3	16.3
40°	15.0	15.2	15.2	15.2
42.5°	14.2	14.4	14.7	15.0
45°	13.6	14.2	14.4	14.4
47.5°	13.4	13.6	13.9	13.9
50°	12.3	12.0	12.0	12.0
52.5°	9.9	9.4	9.1	8.8
55°	7.2	6.9	6.4	6.4
57.5°	5.1	5.1	4.8	4.8
60°	4.0	4.0	3.7	4.0
62.5°	3.5	3.5	3.5	3.5
65°	3.2	3.2	3.2	3.2
67.5°	3.2	3.2	3.2	3.2
69°	3.0	3.0	3.0	3.0
70°	3.0	3.0	3.0	3.0
72.5°	2.7	2.7	2.7	2.7
75°	2.4	2.7	2.7	2.7
77.5°	2.4	2.4	2.4	2.4
80°	2.1	2.1	2.4	2.4
82.5°	2.1	2.1	2.1	2.1
85°	1.9	1.9	2.1	2.1
87.5°	1.6	1.6	1.9	1.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)