

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: P162586

Luminaire Tested: **ECM-E01-LED-E1-SL4-HSS-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162586  
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-7030  
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, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

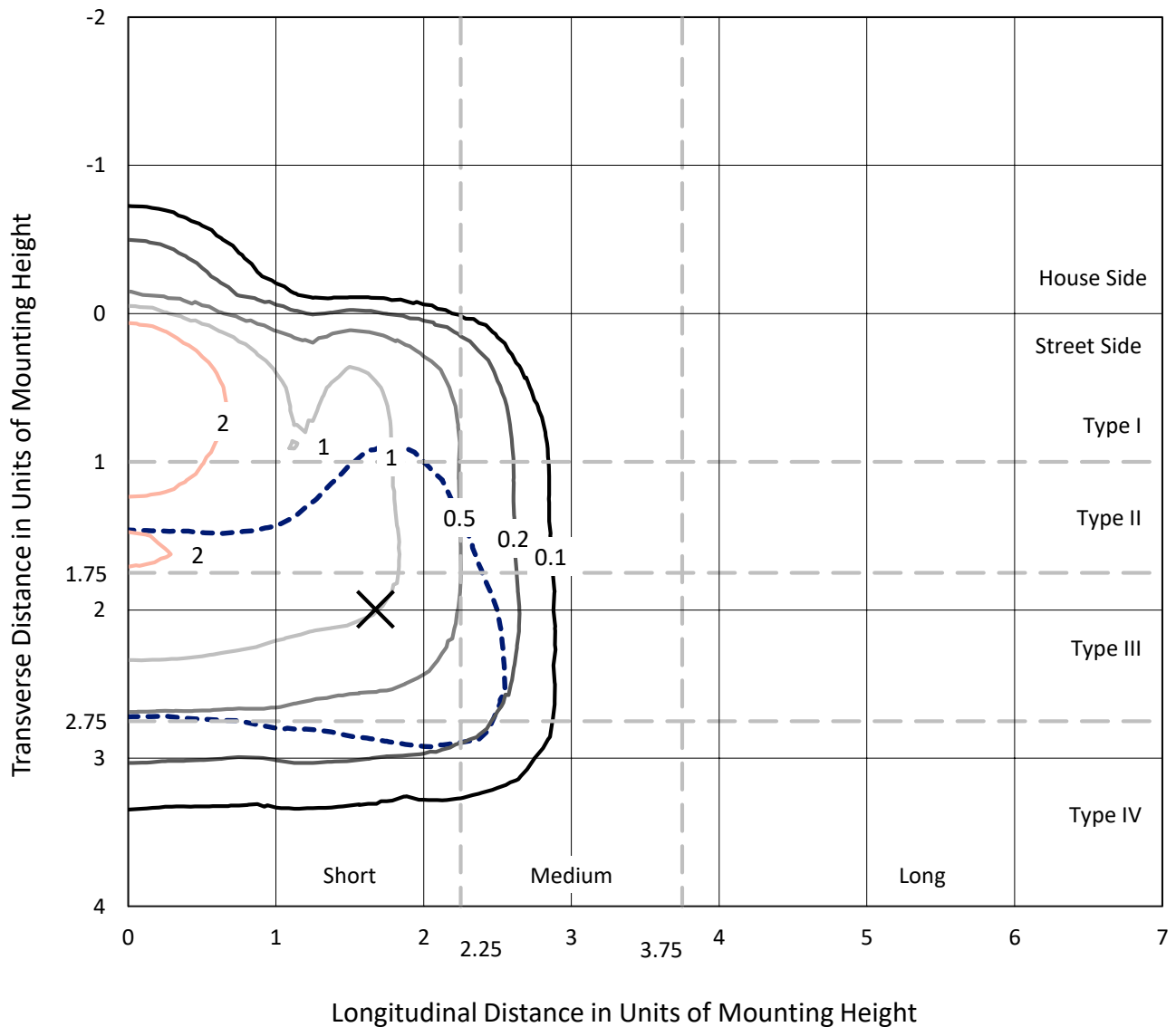
Lumens per Lamp: N/A  
Luminaire Lumens: 1767 lumens  
Efficiency: N/A  
Efficacy: 71.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 24.7  
Input Voltage (V): NR  
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



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### Iso-Footcandle Lines of Horizontal Illumination

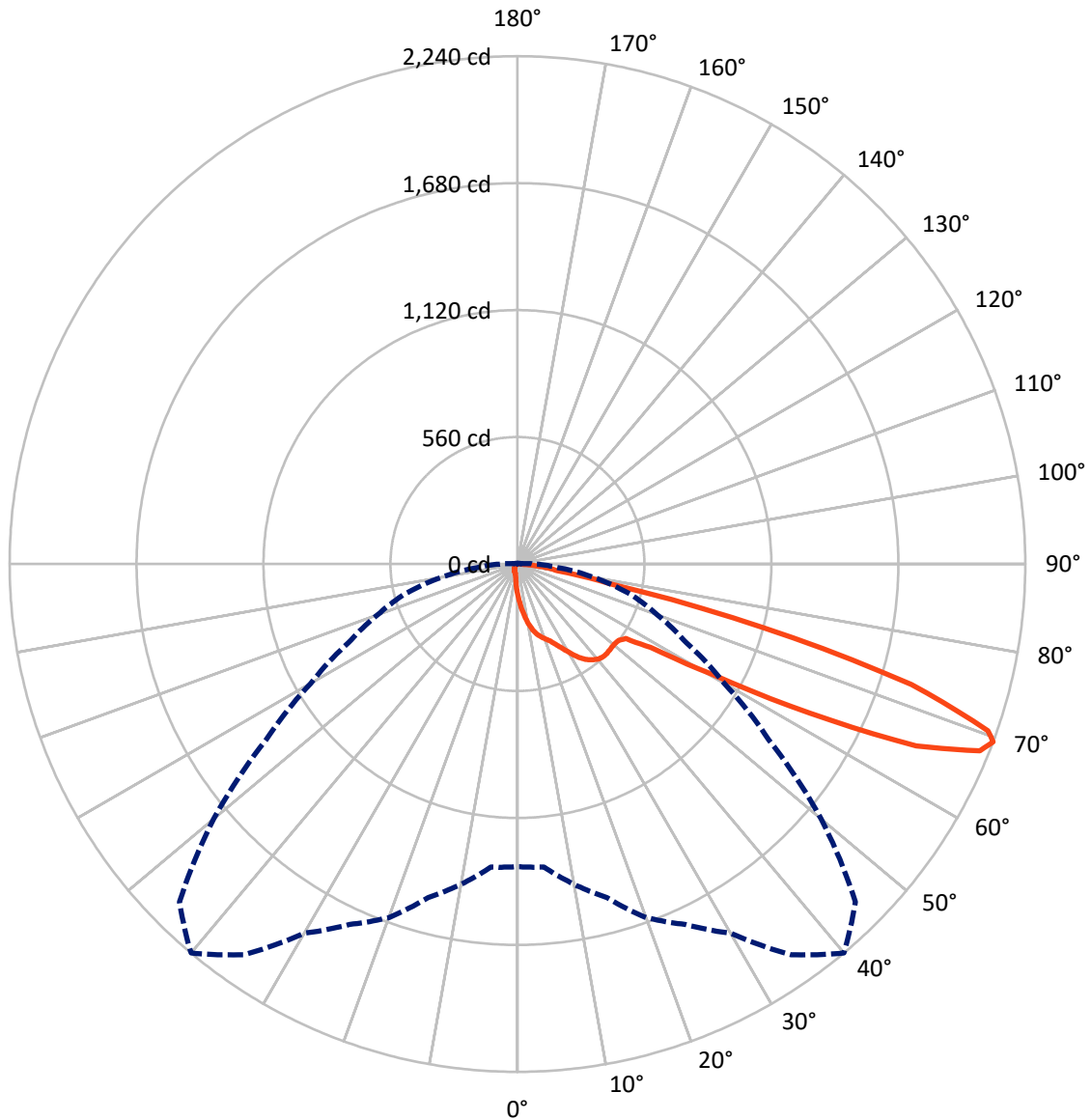
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc  
 Type IV - Short - Semi-Cutoff

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CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	52.6	0.0	52.6
	% Fixture	3.0	0.0	3.0
<b>Street Side</b>	Lumens	1714.4	0.0	1714.4
	% Fixture	97.0	0.0	97.0
<b>Total</b>	Lumens	1767.0	0.0	1767.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.7	0.8
10°-20°	47.3	2.7
20°-30°	90.5	5.1
30°-40°	150.5	8.5
40°-50°	203.7	11.5
50°-60°	318.5	18.0
60°-70°	654.9	37.1
70°-80°	263.5	14.9
80°-90°	24.4	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°	1767.0	100.0
0°-180°	1767.0	100.0



REPORT NUMBER: P162586

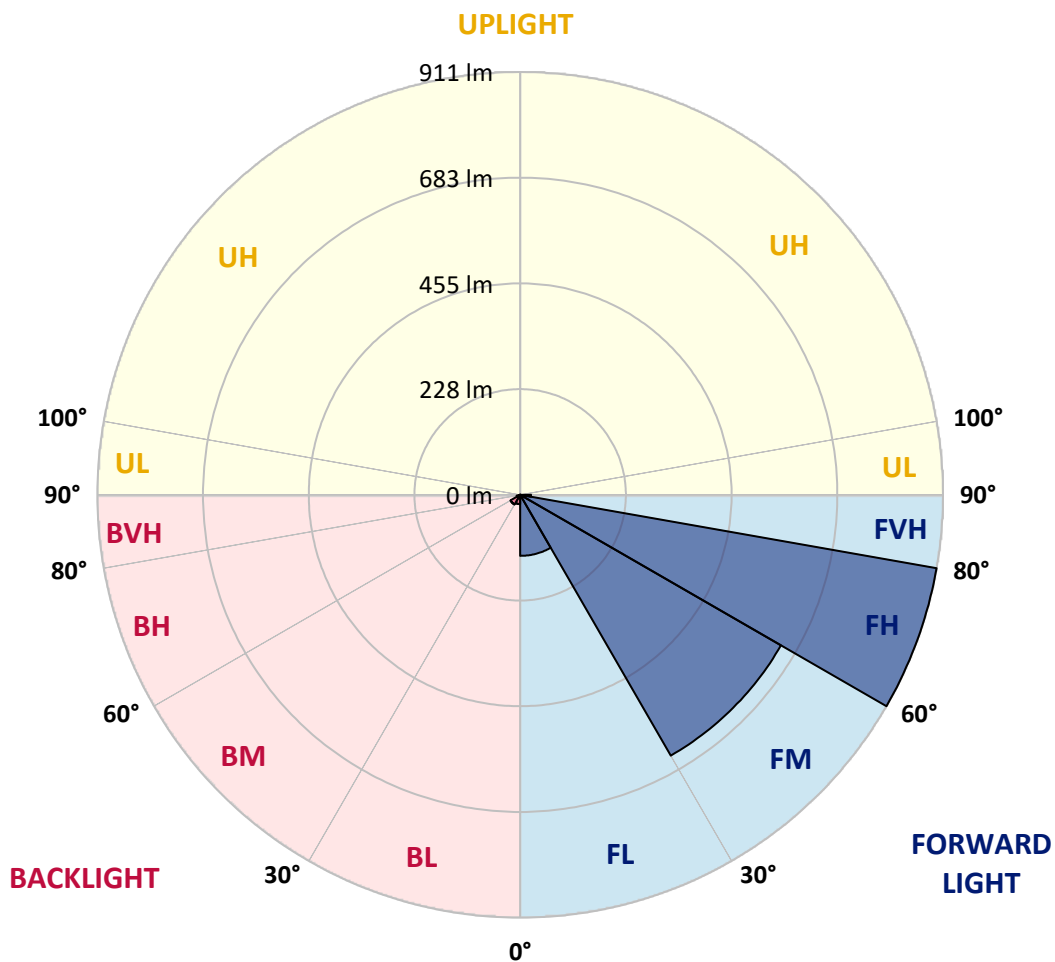
CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	131.5	7.4			
FM (30°-60°)	648.7	36.7			
FH (60°-80°)	910.7	51.5			G1/1800
FVH (80°-90°)	23.5	1.3			G1/100
BL (0°-30°)	20.0	1.1	B0/110		
BM (30°-60°)	24.0	1.4	B0/220		
BH (60°-80°)	7.7	0.4	B0/110		G0/110
BVH (80°-90°)	0.9	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





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 CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4
2.5°	178.0	176.0	173.7	173.7	170.8	170.8	169.0	164.4	163.8	161.2	158.6
5°	227.2	225.5	222.6	220.0	217.7	213.6	210.7	205.2	199.1	193.4	188.2
7.5°	275.3	274.4	269.2	268.3	264.6	257.9	252.1	244.0	233.6	225.5	215.9
10°	319.9	317.8	316.7	311.8	306.2	299.0	290.0	280.2	268.0	255.3	241.7
12.5°	355.2	354.0	348.8	346.8	341.0	333.7	322.4	309.7	297.6	281.1	265.1
15°	381.5	379.5	376.0	372.8	365.9	359.5	349.1	335.2	320.4	302.5	283.4
17.5°	403.5	399.7	398.9	394.0	386.7	379.2	367.6	354.9	337.5	319.6	298.7
20°	433.0	427.8	426.1	418.8	410.5	400.0	386.7	370.8	352.6	332.9	311.5
22.5°	467.8	464.0	460.2	453.9	443.2	428.4	409.0	391.6	368.5	346.8	323.6
25°	517.0	513.8	507.7	499.0	485.7	468.1	444.6	419.1	391.9	364.2	336.9
27.5°	564.7	561.8	557.5	550.8	535.8	516.4	487.5	455.0	420.6	387.0	356.9
30°	609.6	607.0	602.7	596.0	582.7	563.6	530.9	496.1	453.3	414.2	378.0
32.5°	657.9	657.1	652.2	642.6	631.0	605.2	569.7	532.3	488.9	443.7	401.5
35°	712.7	706.0	701.4	691.8	672.1	644.6	602.9	562.1	516.4	470.1	422.9
37.5°	759.0	752.6	746.8	734.6	710.6	675.6	628.4	583.5	536.4	489.2	441.1
40°	792.8	789.7	782.7	766.8	739.8	698.2	647.2	598.3	550.8	503.4	455.9
42.5°	818.0	813.1	805.3	788.8	756.9	709.5	654.8	604.4	557.5	512.1	465.4
45°	827.3	823.2	816.0	798.0	763.6	712.7	654.5	602.7	557.8	514.7	471.8
47.5°	821.8	817.7	811.4	794.6	760.7	708.9	649.3	597.7	554.9	515.5	477.6
50°	803.5	801.2	796.3	782.1	751.7	701.6	644.6	595.1	554.3	519.9	485.7
52.5°	801.8	800.4	794.3	780.1	749.1	699.3	644.0	596.6	559.2	525.4	491.5
55°	979.8	959.3	913.2	874.2	809.9	733.5	673.3	620.0	580.1	547.1	523.3
57.5°	1392.6	1361.9	1301.4	1227.0	1079.4	934.4	818.3	734.4	693.0	677.9	686.9
60°	1585.9	1580.4	1570.9	1535.6	1460.0	1335.3	1196.3	1046.1	985.9	980.7	998.9
62.5°	1677.7	1674.2	1677.1	1672.8	1649.3	1612.9	1572.9	1508.1	1448.5	1410.0	1328.3
65°	1720.0	1722.3	1738.8	1751.8	1754.7	1764.3	1793.5	1874.3	1933.3	1834.0	1607.4
67.5°	1612.6	1626.2	1664.1	1711.6	1767.2	1821.0	1907.8	2078.0	2199.3	2082.7	1760.8
69°	1335.0	1341.7	1434.3	1523.7	1659.5	1754.4	1880.3	2103.5	2239.8	2108.1	1748.6
70°	1051.0	1057.1	1156.4	1278.0	1507.5	1629.7	1794.4	2060.4	2201.9	2074.2	1686.1
72.5°	474.1	465.4	500.5	565.6	815.1	1009.0	1297.1	1669.3	1816.7	1661.8	1261.5
75°	331.2	327.4	331.2	331.4	370.2	477.6	602.7	904.9	1119.0	965.6	602.7
77.5°	256.5	253.9	251.3	248.4	253.0	283.4	295.5	321.0	416.8	394.2	229.8
80°	202.9	200.6	207.0	204.9	204.9	208.4	206.1	196.6	178.6	165.6	148.2
82.5°	94.3	94.9	94.9	103.1	124.2	145.0	151.7	142.1	126.2	107.4	86.6
85°	9.0	10.1	17.1	26.3	52.4	59.1	59.3	49.2	49.2	38.8	31.3
87.5°	0.0	0.3	0.3	0.3	2.6	7.2	6.1	1.7	0.9	0.9	1.5
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: P162586  
 CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4
2.5°	154.0	153.1	149.6	146.2	143.0	139.5	136.3	133.1	129.7	127.1	123.9
5°	180.1	173.7	166.4	159.5	152.6	145.3	137.8	131.1	124.2	117.8	111.7
7.5°	206.4	193.9	184.1	171.6	160.4	149.1	138.6	127.9	118.1	108.8	100.2
10°	228.7	213.6	198.3	182.4	166.1	151.1	136.6	123.9	110.9	99.6	88.9
12.5°	246.9	227.8	209.0	189.0	170.8	151.7	133.7	118.4	103.1	90.3	79.3
15°	263.4	241.4	218.8	195.7	172.5	150.8	130.8	111.7	96.1	81.6	69.2
17.5°	276.7	251.5	226.1	200.0	175.1	149.6	127.1	107.1	88.9	73.8	61.7
20°	288.3	261.9	234.5	205.2	176.9	149.4	123.9	101.3	82.5	66.6	54.7
22.5°	299.0	272.7	243.1	211.9	179.5	149.1	121.0	97.0	77.0	61.1	49.2
25°	311.2	283.4	252.4	218.8	184.1	150.2	119.3	93.5	72.1	55.9	44.9
27.5°	324.8	295.5	263.4	227.5	190.2	152.6	118.7	89.7	67.7	50.9	41.4
30°	343.9	310.0	274.4	236.2	195.7	155.1	118.1	87.4	63.4	47.2	37.9
32.5°	360.7	324.2	286.6	245.2	201.8	157.8	117.8	84.2	59.3	43.4	35.3
35°	378.3	337.2	297.0	253.9	207.0	160.7	117.5	81.9	55.6	39.7	32.7
37.5°	393.7	348.2	305.1	261.4	212.7	163.2	117.8	79.9	52.1	36.5	30.4
40°	406.7	359.5	314.1	268.3	218.8	167.3	118.1	77.9	48.6	33.6	28.4
42.5°	418.3	370.2	323.6	276.1	225.8	172.0	119.8	76.1	45.7	31.0	26.3
45°	427.2	380.0	334.0	287.2	237.1	179.5	123.0	75.0	42.8	28.6	24.6
47.5°	436.5	394.5	351.7	304.5	253.6	191.3	128.5	74.7	40.5	26.9	23.2
50°	449.2	409.0	367.3	322.2	268.6	203.5	135.2	75.0	37.6	25.2	21.7
52.5°	458.5	423.8	387.6	352.9	304.5	240.5	160.9	80.2	36.2	23.7	20.0
55°	513.2	507.1	508.0	513.8	476.5	409.3	269.2	115.8	42.6	26.9	19.7
57.5°	723.6	745.1	757.5	757.2	695.6	576.9	361.5	148.8	47.5	31.3	23.4
60°	1000.4	984.2	961.3	904.9	822.9	658.5	404.4	160.1	41.1	24.9	21.4
62.5°	1245.0	1150.0	1065.8	974.3	866.9	686.9	413.0	159.2	35.9	18.8	15.0
65°	1397.5	1226.7	1090.7	976.1	849.6	663.2	390.8	146.2	30.4	15.3	12.5
67.5°	1434.0	1185.3	992.8	846.7	709.8	516.1	286.9	110.0	23.7	12.7	11.0
69°	1354.4	1053.6	822.7	656.8	516.4	342.4	177.4	69.5	18.2	11.6	10.1
70°	1245.8	916.4	670.1	527.1	382.4	240.5	124.2	48.9	14.8	10.7	9.3
72.5°	801.5	481.4	329.4	229.3	157.8	95.8	48.6	22.0	11.3	9.0	7.5
75°	310.9	178.0	129.1	98.1	76.7	53.2	29.5	14.2	9.6	7.5	5.8
77.5°	153.1	117.2	95.8	65.7	38.2	23.7	15.9	11.0	7.8	5.5	3.8
80°	121.0	80.5	48.0	29.8	22.6	17.1	12.1	9.0	5.8	3.5	2.6
82.5°	62.0	33.9	24.9	20.3	16.8	13.3	9.8	6.4	3.8	2.3	2.0
85°	19.4	14.2	12.7	12.5	11.6	9.6	6.9	4.0	2.3	1.5	1.5
87.5°	1.5	2.0	2.6	2.0	2.3	2.0	2.6	1.7	1.2	1.2	0.9
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: P162586

CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4
2.5°	121.6	118.1	114.9	112.9	109.1	107.7	106.2	105.6	103.1	103.6	101.3
5°	106.2	100.2	95.5	90.9	86.6	83.4	80.8	77.6	75.0	73.8	71.5
7.5°	92.3	84.5	78.5	73.5	68.3	64.3	60.8	58.5	56.1	53.8	52.7
10°	80.2	71.8	64.8	59.9	55.0	51.5	48.9	47.2	45.7	44.9	44.6
12.5°	68.9	60.8	54.4	50.1	46.3	44.6	43.4	42.6	42.3	42.0	42.0
15°	60.2	52.1	47.2	44.0	42.3	41.4	41.1	40.5	39.9	39.7	39.7
17.5°	52.1	46.0	42.6	40.8	39.9	39.4	38.8	38.2	37.6	37.3	37.3
20°	46.6	41.7	39.9	38.8	37.9	37.3	36.5	35.9	35.6	35.3	35.0
22.5°	42.3	39.1	37.9	37.1	35.9	35.0	34.4	33.9	33.3	33.0	32.7
25°	39.1	37.1	36.2	35.0	33.9	33.0	32.1	31.3	30.7	30.4	29.8
27.5°	36.7	35.3	34.2	32.7	31.5	30.7	29.8	29.0	28.4	27.8	27.5
30°	34.7	33.3	31.8	30.7	29.2	28.4	27.2	26.3	26.1	25.5	24.9
32.5°	32.7	31.3	29.8	28.4	26.9	25.8	25.2	24.0	23.4	23.2	22.6
35°	30.4	29.0	27.2	26.1	24.6	23.4	22.6	21.7	21.1	20.6	20.3
37.5°	28.4	26.6	24.9	23.4	22.3	21.1	20.3	19.4	18.8	18.2	17.9
40°	26.1	24.3	22.6	21.1	20.0	19.1	18.2	17.4	16.8	16.5	16.5
42.5°	24.0	22.0	20.3	19.1	18.2	17.1	16.2	15.3	15.0	14.8	15.0
45°	22.0	20.0	18.5	17.4	16.5	15.3	14.5	13.9	13.6	13.9	14.2
47.5°	20.3	18.2	16.8	15.9	15.0	14.2	13.3	12.7	12.7	13.3	13.9
50°	18.5	16.5	15.3	14.8	13.9	13.0	11.9	11.6	11.9	12.5	13.0
52.5°	16.8	14.5	13.6	13.3	12.5	11.6	10.7	10.4	10.7	11.3	11.0
55°	15.0	12.7	12.5	12.1	11.3	10.1	9.3	9.3	9.3	9.0	8.4
57.5°	14.5	11.3	11.0	10.7	9.8	8.7	8.1	7.5	7.2	6.4	6.1
60°	15.0	10.1	10.1	9.6	8.7	7.5	6.7	5.8	5.2	4.6	4.6
62.5°	12.1	9.3	9.0	8.4	7.2	6.1	5.2	4.4	4.0	3.8	3.8
65°	9.8	8.4	7.8	6.9	6.1	4.9	4.0	3.5	3.2	3.2	3.5
67.5°	9.0	7.5	6.7	5.8	4.9	3.8	3.2	2.9	2.9	3.2	3.2
69°	8.4	6.9	6.1	5.2	4.4	3.5	2.9	2.9	2.9	2.9	3.2
70°	7.8	6.7	5.8	4.9	3.8	2.9	2.6	2.6	2.9	2.9	3.2
72.5°	6.1	5.2	4.9	4.0	2.9	2.6	2.3	2.6	2.6	2.9	2.9
75°	4.6	3.8	3.8	3.2	2.3	2.0	2.0	2.3	2.3	2.6	2.6
77.5°	3.2	2.6	2.6	2.3	2.0	1.7	1.7	2.0	2.3	2.3	2.6
80°	2.3	2.0	1.7	2.0	1.7	1.5	1.7	2.0	2.0	2.3	2.3
82.5°	1.7	1.7	1.7	1.7	1.5	1.5	1.7	1.7	2.0	2.3	2.3
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.7	2.0	2.0
87.5°	0.9	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5	1.7	1.7
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: P162586

CATALOG NUMBER: ECM-E01-LED-E1-SL4-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	133.4	133.4	133.4	133.4
2.5°	100.7	100.4	99.3	99.6
5°	70.6	68.9	70.1	69.7
7.5°	51.8	51.5	51.2	51.8
10°	44.3	44.3	44.0	44.3
12.5°	41.7	41.7	41.7	41.7
15°	39.7	39.7	39.4	39.4
17.5°	37.3	37.3	37.3	37.1
20°	35.0	34.7	34.7	34.7
22.5°	32.4	32.1	32.1	32.1
25°	29.8	29.5	29.5	29.5
27.5°	27.2	26.9	26.6	26.6
30°	24.6	24.3	24.0	24.0
32.5°	22.0	21.7	21.4	21.4
35°	19.7	19.7	19.4	19.1
37.5°	17.7	17.7	17.7	17.7
40°	16.2	16.5	16.5	16.5
42.5°	15.3	15.6	15.9	16.2
45°	14.8	15.3	15.6	15.6
47.5°	14.5	14.8	15.0	15.0
50°	13.3	13.0	13.0	13.0
52.5°	10.7	10.1	9.8	9.6
55°	7.8	7.5	6.9	6.9
57.5°	5.5	5.5	5.2	5.2
60°	4.4	4.4	4.0	4.4
62.5°	3.8	3.8	3.8	3.8
65°	3.5	3.5	3.5	3.5
67.5°	3.5	3.5	3.5	3.5
69°	3.2	3.2	3.2	3.2
70°	3.2	3.2	3.2	3.2
72.5°	2.9	2.9	2.9	2.9
75°	2.6	2.9	2.9	2.9
77.5°	2.6	2.6	2.6	2.6
80°	2.3	2.3	2.6	2.6
82.5°	2.3	2.3	2.3	2.3
85°	2.0	2.0	2.3	2.3
87.5°	1.7	1.7	2.0	2.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)