

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: P162595

Luminaire Tested: **ECM-E02-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162595
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-E02-LED-E1-SL4-HSS-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3265.6 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

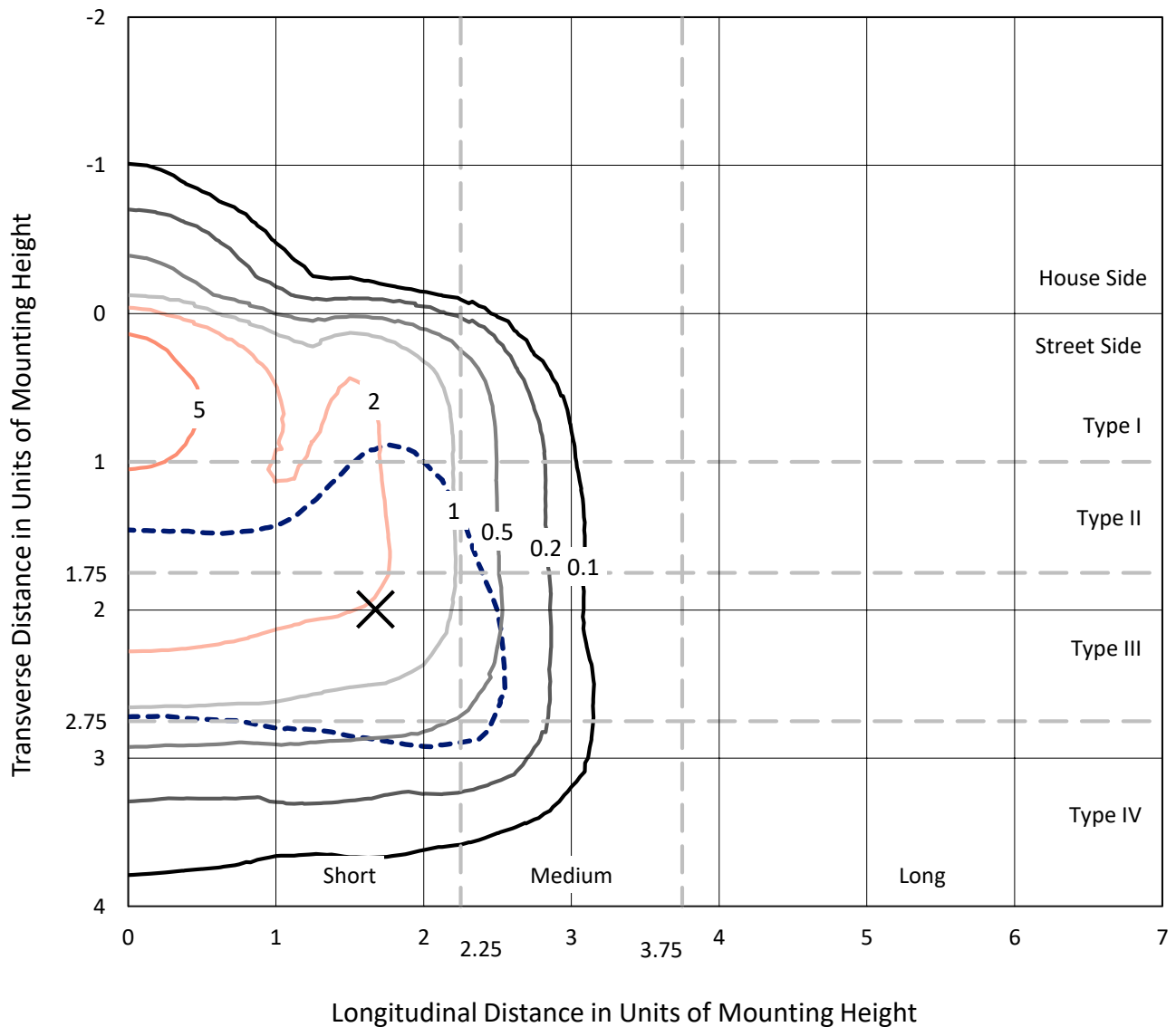
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P162595
 CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

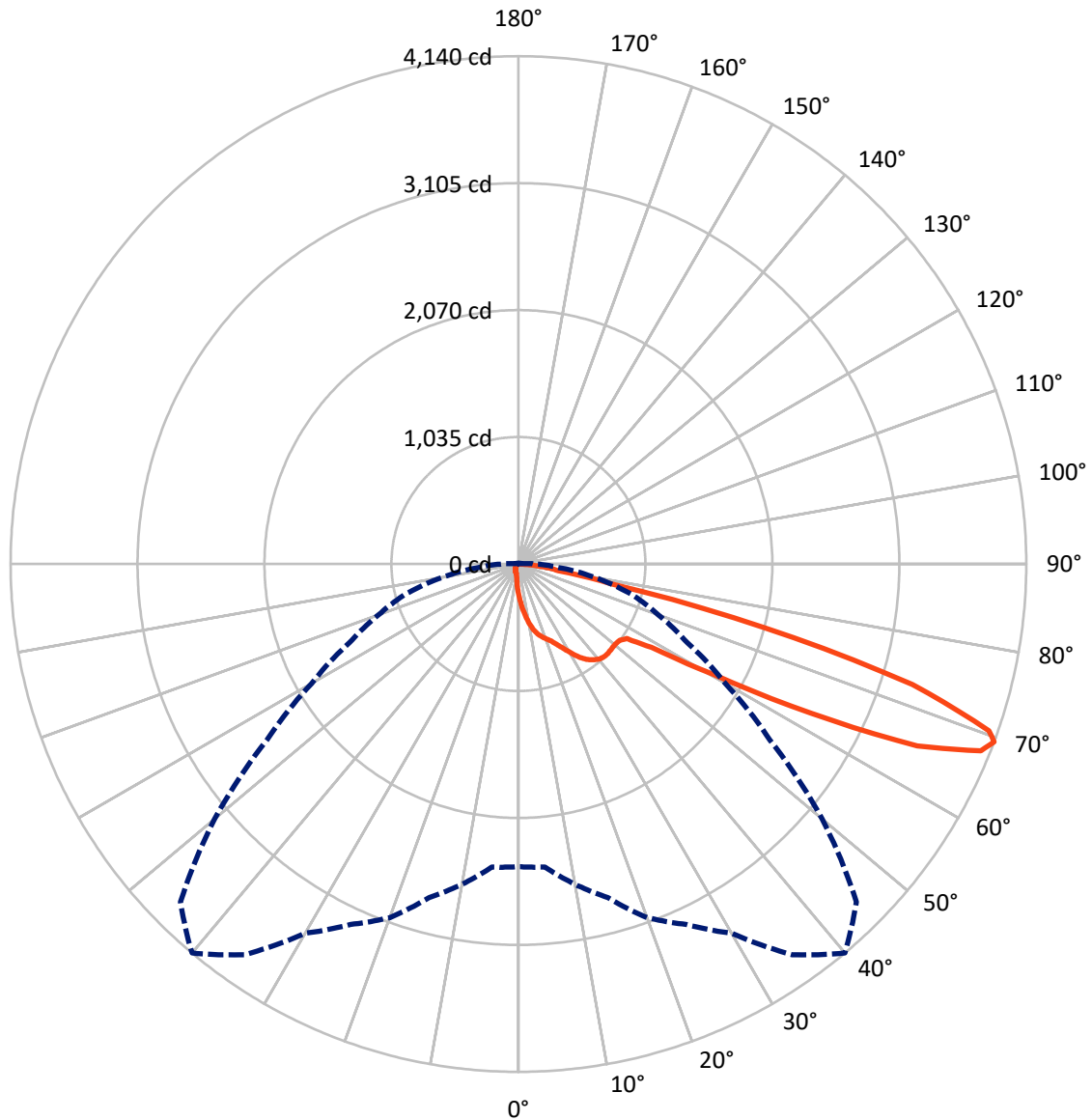
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P162595
CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P162595

CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	97.3	0.0	97.3
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	3168.4	0.0	3168.4
	% Fixture	97.0	0.0	97.0
Total	Lumens	3265.6	0.0	3265.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.3	0.8
10°-20°	87.4	2.7
20°-30°	167.3	5.1
30°-40°	278.2	8.5
40°-50°	376.4	11.5
50°-60°	588.7	18.0
60°-70°	1210.3	37.1
70°-80°	487.0	14.9
80°-90°	45.1	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°	3265.6	100.0
0°-180°	3265.6	100.0



REPORT NUMBER: P162595

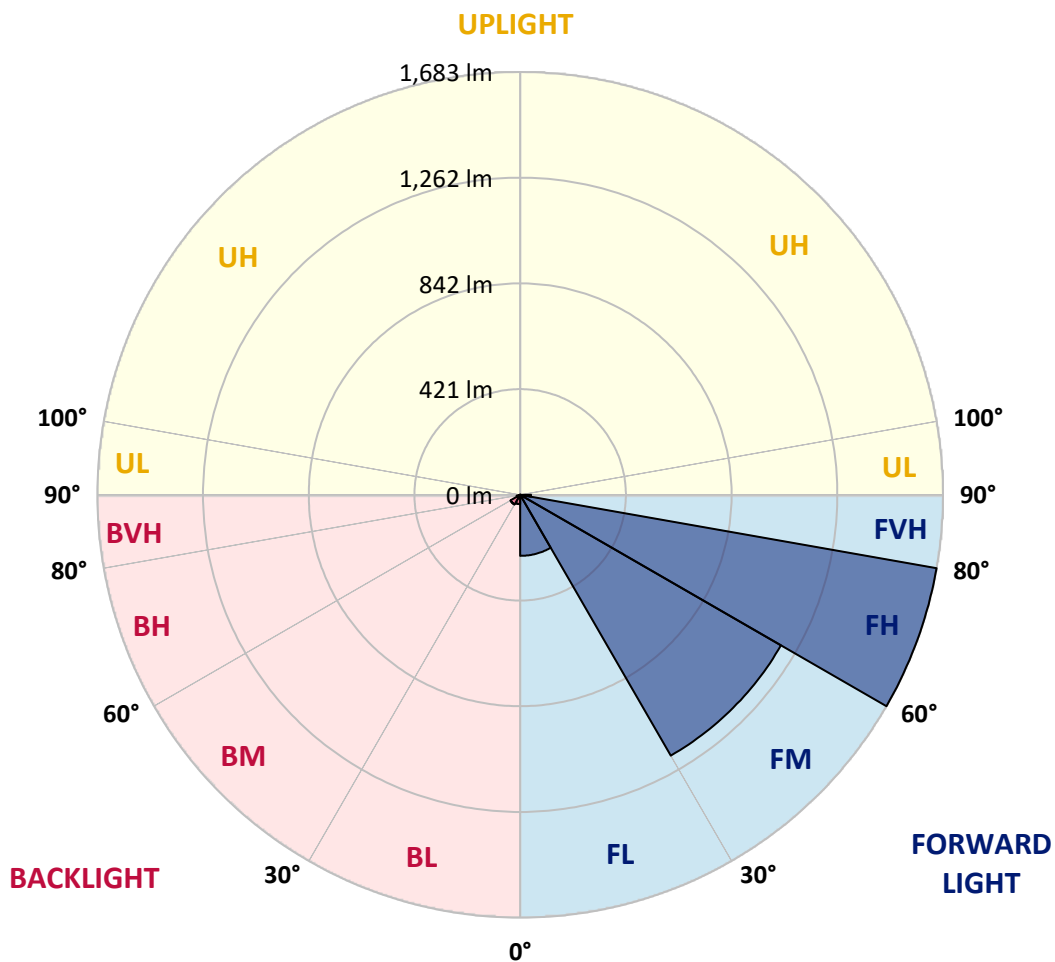
CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	243.0	7.4			
FM	(30°-60°)	1198.9	36.7			
FH	(60°-80°)	1683.1	51.5			G1/1800
FVH	(80°-90°)	43.4	1.3			G1/100
BL	(0°-30°)	37.0	1.1	B0/110		
BM	(30°-60°)	44.4	1.4	B0/220		
BH	(60°-80°)	14.2	0.4	B0/110		G0/110
BVH	(80°-90°)	1.7	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: P162595
 CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6
2.5°	329.0	325.3	321.0	321.0	315.6	315.6	312.4	303.8	302.8	298.0	293.1
5°	419.9	416.7	411.4	406.6	402.3	394.8	389.5	379.3	368.0	357.3	347.7
7.5°	508.8	507.1	497.5	495.9	489.0	476.6	465.9	451.0	431.7	416.7	399.1
10°	591.1	587.4	585.2	576.2	566.0	552.6	536.0	517.8	495.4	471.8	446.7
12.5°	656.4	654.3	644.6	640.9	630.2	616.8	595.9	572.4	549.9	519.4	490.0
15°	705.1	701.3	694.9	689.0	676.2	664.4	645.1	619.5	592.2	559.0	523.7
17.5°	745.8	738.8	737.1	728.1	714.7	700.8	679.4	655.8	623.8	590.6	552.1
20°	800.3	790.7	787.4	774.1	758.6	739.3	714.7	685.3	651.6	615.2	575.6
22.5°	864.5	857.6	850.6	838.8	819.0	791.7	755.9	723.8	681.0	640.9	598.1
25°	955.5	949.5	938.3	922.3	897.7	865.0	821.7	774.6	724.3	673.0	622.7
27.5°	1043.7	1038.3	1030.3	1018.0	990.2	954.4	900.9	841.0	777.3	715.3	659.6
30°	1126.6	1121.8	1113.8	1101.5	1076.9	1041.5	981.1	916.9	837.7	765.5	698.7
32.5°	1216.0	1214.3	1205.3	1187.6	1166.2	1118.6	1052.8	983.8	903.5	820.1	742.0
35°	1317.1	1304.8	1296.2	1278.5	1242.2	1191.3	1114.3	1038.9	954.4	868.7	781.6
37.5°	1402.7	1390.9	1380.2	1357.7	1313.3	1248.6	1161.4	1078.5	991.3	904.1	815.3
40°	1465.2	1459.4	1446.5	1417.1	1367.3	1290.3	1196.2	1105.7	1018.0	930.3	842.5
42.5°	1511.8	1502.7	1488.2	1457.7	1398.9	1311.2	1210.1	1117.0	1030.3	946.3	860.2
45°	1528.9	1521.4	1508.0	1474.8	1411.2	1317.1	1209.6	1113.8	1030.9	951.2	872.0
47.5°	1518.7	1511.3	1499.5	1468.4	1405.9	1310.1	1199.9	1104.7	1025.5	952.8	882.7
50°	1485.0	1480.8	1471.6	1445.5	1389.3	1296.7	1191.3	1099.9	1024.4	960.8	897.7
52.5°	1481.8	1479.2	1467.9	1441.7	1384.5	1292.4	1190.3	1102.5	1033.6	970.9	908.4
55°	1810.8	1772.8	1687.8	1615.6	1496.8	1355.6	1244.3	1145.9	1072.0	1011.0	967.2
57.5°	2573.7	2516.9	2405.1	2267.7	1994.9	1726.9	1512.3	1357.2	1280.7	1252.9	1269.5
60°	2931.0	2920.8	2903.2	2837.9	2698.3	2467.8	2211.0	1933.3	1822.1	1812.4	1846.1
62.5°	3100.6	3094.2	3099.5	3091.5	3048.2	2980.8	2906.9	2787.1	2676.9	2605.8	2454.9
65°	3178.7	3183.0	3213.5	3237.5	3242.9	3260.6	3314.6	3463.9	3573.0	3389.5	2970.6
67.5°	2980.2	3005.4	3075.4	3163.2	3265.9	3365.4	3525.9	3840.4	4064.6	3849.0	3254.1
69°	2467.2	2479.5	2650.7	2816.0	3066.9	3242.4	3475.0	3887.5	4139.5	3896.1	3231.6
70°	1942.4	1953.7	2137.2	2361.8	2786.1	3011.8	3316.2	3807.8	4069.4	3833.5	3116.1
72.5°	876.2	860.2	925.0	1045.3	1506.4	1864.8	2397.2	3085.1	3357.4	3071.2	2331.3
75°	612.0	605.0	612.0	612.5	684.2	882.7	1113.8	1672.3	2068.1	1784.6	1113.8
77.5°	474.0	469.1	464.4	459.0	467.6	523.7	546.2	593.3	770.3	728.6	424.8
80°	375.0	370.7	382.5	378.7	378.7	385.1	380.9	363.3	330.1	306.0	273.9
82.5°	174.4	175.4	175.4	190.5	229.5	268.0	280.3	262.6	233.2	198.5	160.0
85°	16.6	18.7	31.6	48.7	96.8	109.2	109.7	90.9	90.9	71.7	57.8
87.5°	0.0	0.6	0.6	0.6	4.8	13.4	11.3	3.2	1.6	1.6	2.7
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: P162595
 CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6
2.5°	284.6	283.0	276.5	270.1	264.3	257.9	252.0	246.1	239.6	234.9	228.9
5°	332.8	321.0	307.6	294.8	281.9	268.6	254.7	242.3	229.5	217.7	206.5
7.5°	381.4	358.4	340.2	317.2	296.4	275.5	256.2	236.4	218.3	201.2	185.1
10°	422.6	394.8	366.5	337.0	307.0	279.2	252.5	228.9	204.9	184.0	164.2
12.5°	456.3	421.0	386.2	349.3	315.6	280.3	247.2	218.8	190.5	166.9	146.6
15°	486.8	446.1	404.4	361.6	318.9	278.7	241.8	206.5	177.6	150.8	127.8
17.5°	511.4	464.9	417.8	369.7	323.6	276.5	234.9	197.9	164.2	136.4	113.9
20°	532.8	484.1	433.3	379.3	326.8	276.0	228.9	187.3	152.5	123.1	101.1
22.5°	552.6	503.9	449.3	391.6	331.7	275.5	223.6	179.2	142.3	112.9	90.9
25°	575.1	523.7	466.5	404.4	340.2	277.6	220.4	172.8	133.2	103.2	82.9
27.5°	600.2	546.2	486.8	420.5	351.4	281.9	219.3	165.8	125.2	94.1	76.5
30°	635.5	573.0	507.1	436.5	361.6	286.7	218.3	161.5	117.1	87.2	70.1
32.5°	666.5	599.2	529.6	453.1	372.9	291.6	217.7	155.7	109.7	80.2	65.3
35°	699.2	623.2	548.9	469.1	382.5	296.9	217.2	151.4	102.7	73.3	60.4
37.5°	727.5	643.6	563.8	483.0	393.2	301.7	217.7	147.6	96.3	67.4	56.2
40°	751.6	664.4	580.4	495.9	404.4	309.2	218.3	143.9	89.9	62.1	52.4
42.5°	773.0	684.2	598.1	510.3	417.3	317.8	221.5	140.7	84.5	57.2	48.7
45°	789.6	702.4	617.4	530.7	438.1	331.7	227.4	138.5	79.2	52.9	45.5
47.5°	806.7	729.2	650.0	562.8	468.6	353.6	237.5	138.0	74.9	49.7	42.8
50°	830.3	755.9	678.9	595.4	496.4	376.1	249.8	138.5	69.5	46.5	40.1
52.5°	847.4	783.2	716.3	652.1	562.8	444.6	297.4	148.2	66.8	43.9	36.9
55°	948.5	937.2	938.9	949.5	880.6	756.4	497.5	214.0	78.7	49.7	36.4
57.5°	1337.4	1377.0	1400.0	1399.4	1285.5	1066.2	668.2	275.0	87.7	57.8	43.3
60°	1848.8	1818.9	1776.6	1672.3	1520.9	1217.0	747.3	295.8	76.0	46.0	39.6
62.5°	2300.8	2125.4	1969.7	1800.7	1602.2	1269.5	763.4	294.2	66.3	34.8	27.8
65°	2582.8	2267.1	2015.7	1803.9	1570.1	1225.6	722.2	270.1	56.2	28.4	23.0
67.5°	2650.2	2190.7	1834.9	1564.8	1311.7	953.8	530.1	203.3	43.9	23.5	20.3
69°	2503.1	1947.3	1520.4	1213.8	954.4	632.8	327.9	128.4	33.7	21.4	18.7
70°	2302.5	1693.7	1238.4	974.1	706.7	444.6	229.5	90.4	27.3	19.8	17.1
72.5°	1481.3	889.6	608.8	423.7	291.6	177.1	89.9	40.7	20.9	16.6	13.9
75°	574.5	329.0	238.6	181.3	141.8	98.4	54.6	26.2	17.7	13.9	10.7
77.5°	283.0	216.7	177.1	121.4	70.6	43.9	29.4	20.3	14.5	10.2	7.0
80°	223.6	148.7	88.8	55.1	41.7	31.6	22.5	16.6	10.7	6.4	4.8
82.5°	114.5	62.6	46.0	37.5	31.0	24.6	18.2	11.8	7.0	4.3	3.8
85°	35.8	26.2	23.5	23.0	21.4	17.7	12.8	7.5	4.3	2.7	2.7
87.5°	2.7	3.8	4.8	3.8	4.3	3.8	4.8	3.2	2.1	2.1	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: P162595
 CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6
2.5°	224.7	218.3	212.4	208.6	201.7	199.0	196.3	195.2	190.5	191.5	187.3
5°	196.3	185.1	176.6	168.0	160.0	154.1	149.3	143.4	138.5	136.4	132.1
7.5°	170.7	156.2	145.0	135.9	126.3	118.8	112.4	108.1	103.8	99.5	97.3
10°	148.2	132.7	119.8	110.7	101.6	95.2	90.4	87.2	84.5	82.9	82.4
12.5°	127.3	112.4	100.5	92.6	85.6	82.4	80.2	78.7	78.1	77.6	77.6
15°	111.3	96.3	87.2	81.3	78.1	76.5	76.0	74.9	73.8	73.3	73.3
17.5°	96.3	85.1	78.7	75.5	73.8	72.8	71.7	70.6	69.5	69.0	69.0
20°	86.1	77.0	73.8	71.7	70.1	69.0	67.4	66.3	65.8	65.3	64.7
22.5°	78.1	72.2	70.1	68.5	66.3	64.7	63.6	62.6	61.5	61.0	60.4
25°	72.2	68.5	66.8	64.7	62.6	61.0	59.4	57.8	56.7	56.2	55.1
27.5°	67.9	65.3	63.1	60.4	58.3	56.7	55.1	53.5	52.4	51.4	50.8
30°	64.2	61.5	58.9	56.7	54.0	52.4	50.3	48.7	48.2	47.1	46.0
32.5°	60.4	57.8	55.1	52.4	49.7	47.6	46.5	44.4	43.3	42.8	41.7
35°	56.2	53.5	50.3	48.2	45.5	43.3	41.7	40.1	39.0	38.0	37.5
37.5°	52.4	49.2	46.0	43.3	41.2	39.0	37.5	35.8	34.8	33.7	33.1
40°	48.2	45.0	41.7	39.0	36.9	35.3	33.7	32.1	31.0	30.5	30.5
42.5°	44.4	40.7	37.5	35.3	33.7	31.6	29.9	28.4	27.8	27.3	27.8
45°	40.7	36.9	34.2	32.1	30.5	28.4	26.7	25.7	25.2	25.7	26.2
47.5°	37.5	33.7	31.0	29.4	27.8	26.2	24.6	23.5	23.5	24.6	25.7
50°	34.2	30.5	28.4	27.3	25.7	24.1	21.9	21.4	21.9	23.0	24.1
52.5°	31.0	26.7	25.2	24.6	23.0	21.4	19.8	19.2	19.8	20.9	20.3
55°	27.8	23.5	23.0	22.5	20.9	18.7	17.1	17.1	17.1	16.6	15.5
57.5°	26.7	20.9	20.3	19.8	18.2	16.0	15.0	13.9	13.4	11.8	11.3
60°	27.8	18.7	18.7	17.7	16.0	13.9	12.3	10.7	9.6	8.6	8.6
62.5°	22.5	17.1	16.6	15.5	13.4	11.3	9.6	8.0	7.5	7.0	7.0
65°	18.2	15.5	14.5	12.8	11.3	9.1	7.5	6.4	5.9	5.9	6.4
67.5°	16.6	13.9	12.3	10.7	9.1	7.0	5.9	5.3	5.3	5.9	5.9
69°	15.5	12.8	11.3	9.6	8.0	6.4	5.3	5.3	5.3	5.3	5.9
70°	14.5	12.3	10.7	9.1	7.0	5.3	4.8	4.8	5.3	5.3	5.9
72.5°	11.3	9.6	9.1	7.5	5.3	4.8	4.3	4.8	4.8	5.3	5.3
75°	8.6	7.0	7.0	5.9	4.3	3.8	3.8	4.3	4.3	4.8	4.8
77.5°	5.9	4.8	4.8	4.3	3.8	3.2	3.2	3.8	4.3	4.3	4.8
80°	4.3	3.8	3.2	3.8	3.2	2.7	3.2	3.8	3.8	4.3	4.3
82.5°	3.2	3.2	3.2	3.2	2.7	2.7	3.2	3.2	3.8	4.3	4.3
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.2	3.2	3.8	3.8
87.5°	1.6	1.6	1.6	2.1	2.1	2.7	2.7	2.7	2.7	3.2	3.2
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: P162595

CATALOG NUMBER: ECM-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	246.6	246.6	246.6	246.6
2.5°	186.2	185.6	183.5	184.0
5°	130.5	127.3	129.5	128.9
7.5°	95.8	95.2	94.7	95.8
10°	81.9	81.9	81.3	81.9
12.5°	77.0	77.0	77.0	77.0
15°	73.3	73.3	72.8	72.8
17.5°	69.0	69.0	69.0	68.5
20°	64.7	64.2	64.2	64.2
22.5°	59.9	59.4	59.4	59.4
25°	55.1	54.6	54.6	54.6
27.5°	50.3	49.7	49.2	49.2
30°	45.5	45.0	44.4	44.4
32.5°	40.7	40.1	39.6	39.6
35°	36.4	36.4	35.8	35.3
37.5°	32.6	32.6	32.6	32.6
40°	29.9	30.5	30.5	30.5
42.5°	28.4	28.9	29.4	29.9
45°	27.3	28.4	28.9	28.9
47.5°	26.7	27.3	27.8	27.8
50°	24.6	24.1	24.1	24.1
52.5°	19.8	18.7	18.2	17.7
55°	14.5	13.9	12.8	12.8
57.5°	10.2	10.2	9.6	9.6
60°	8.0	8.0	7.5	8.0
62.5°	7.0	7.0	7.0	7.0
65°	6.4	6.4	6.4	6.4
67.5°	6.4	6.4	6.4	6.4
69°	5.9	5.9	5.9	5.9
70°	5.9	5.9	5.9	5.9
72.5°	5.3	5.3	5.3	5.3
75°	4.8	5.3	5.3	5.3
77.5°	4.8	4.8	4.8	4.8
80°	4.3	4.3	4.8	4.8
82.5°	4.3	4.3	4.3	4.3
85°	3.8	3.8	4.3	4.3
87.5°	3.2	3.2	3.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)