

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: P141866

Luminaire Tested: **ECM-F01-LED-E1-T3-7050**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141866  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33683)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F01-LED-E1-T3-7050  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (7) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2487.2 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

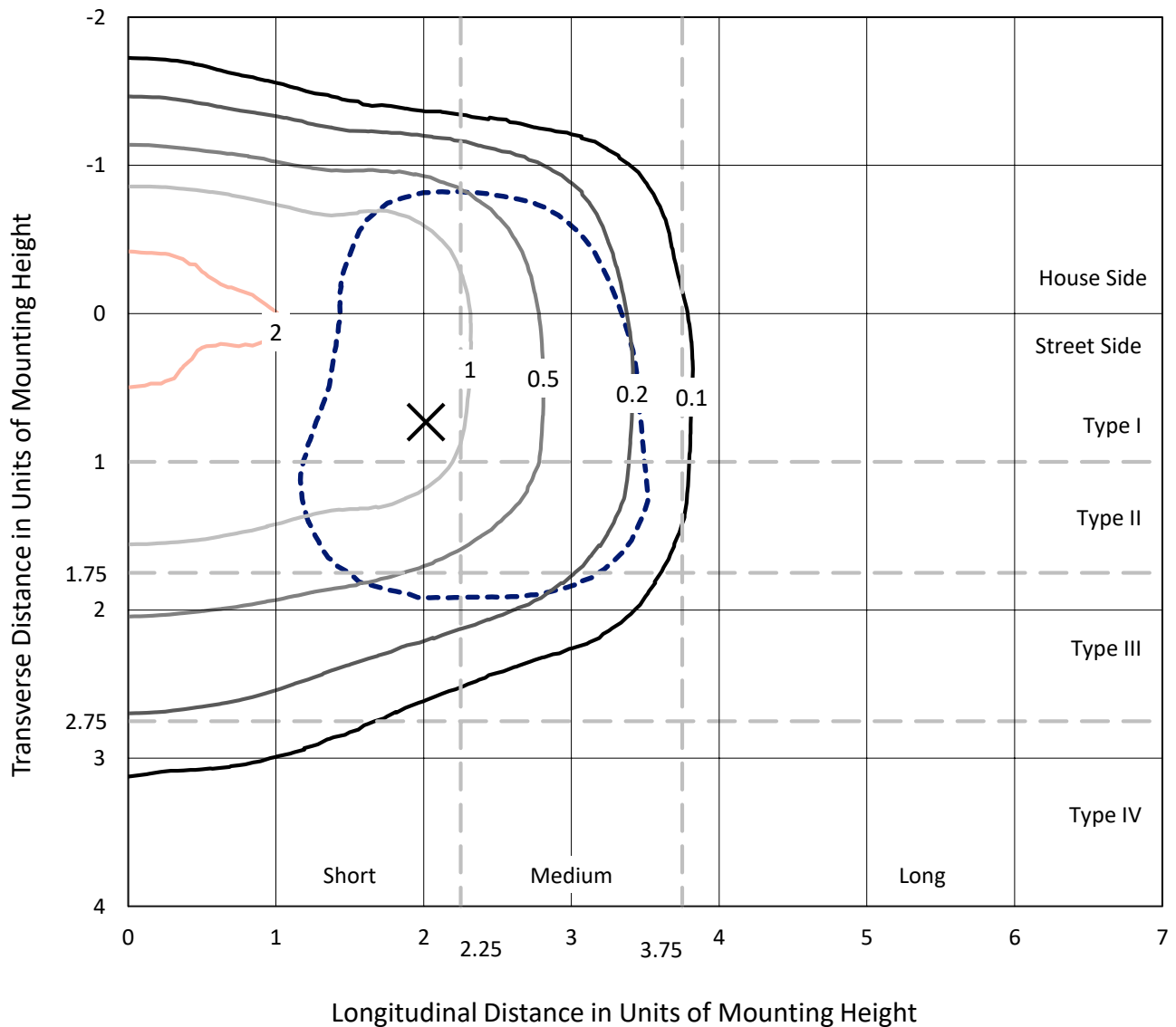
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P141866  
 CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

### Iso-Footcandle Lines of Horizontal Illumination

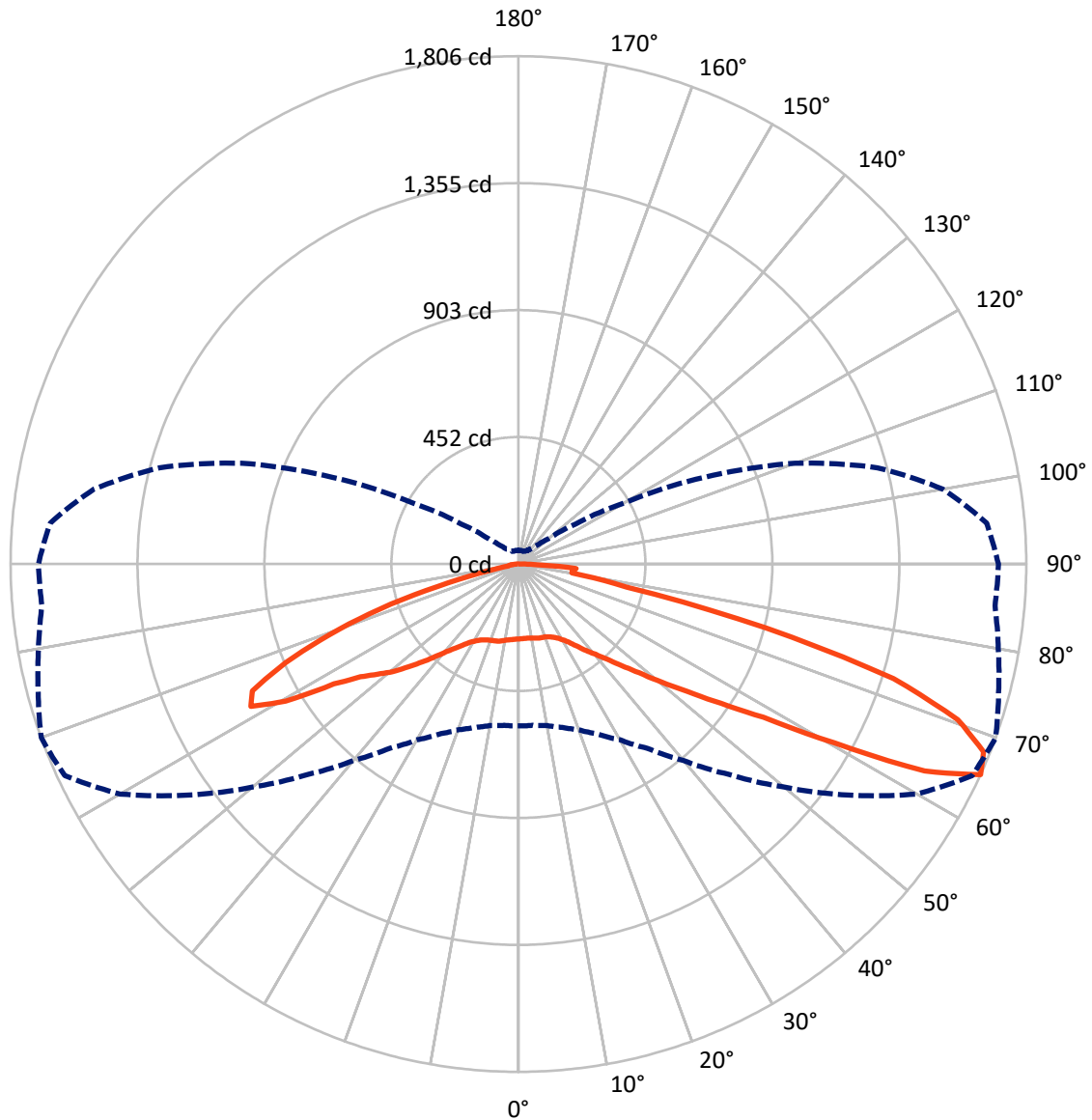
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P141866  
CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P141866

CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	839.6	0.0	839.6
	% Fixture	33.8	0.0	33.8
<b>Street Side</b>	Lumens	1647.6	0.0	1647.6
	% Fixture	66.2	0.0	66.2
<b>Total</b>	Lumens	2487.2	0.0	2487.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.7	1.0
10°-20°	76.0	3.1
20°-30°	130.6	5.3
30°-40°	209.4	8.4
40°-50°	342.9	13.8
50°-60°	536.7	21.6
60°-70°	754.2	30.3
70°-80°	356.9	14.4
80°-90°	54.8	2.2
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°	2487.2	100.0
0°-180°	2487.2	100.0



REPORT NUMBER: P141866

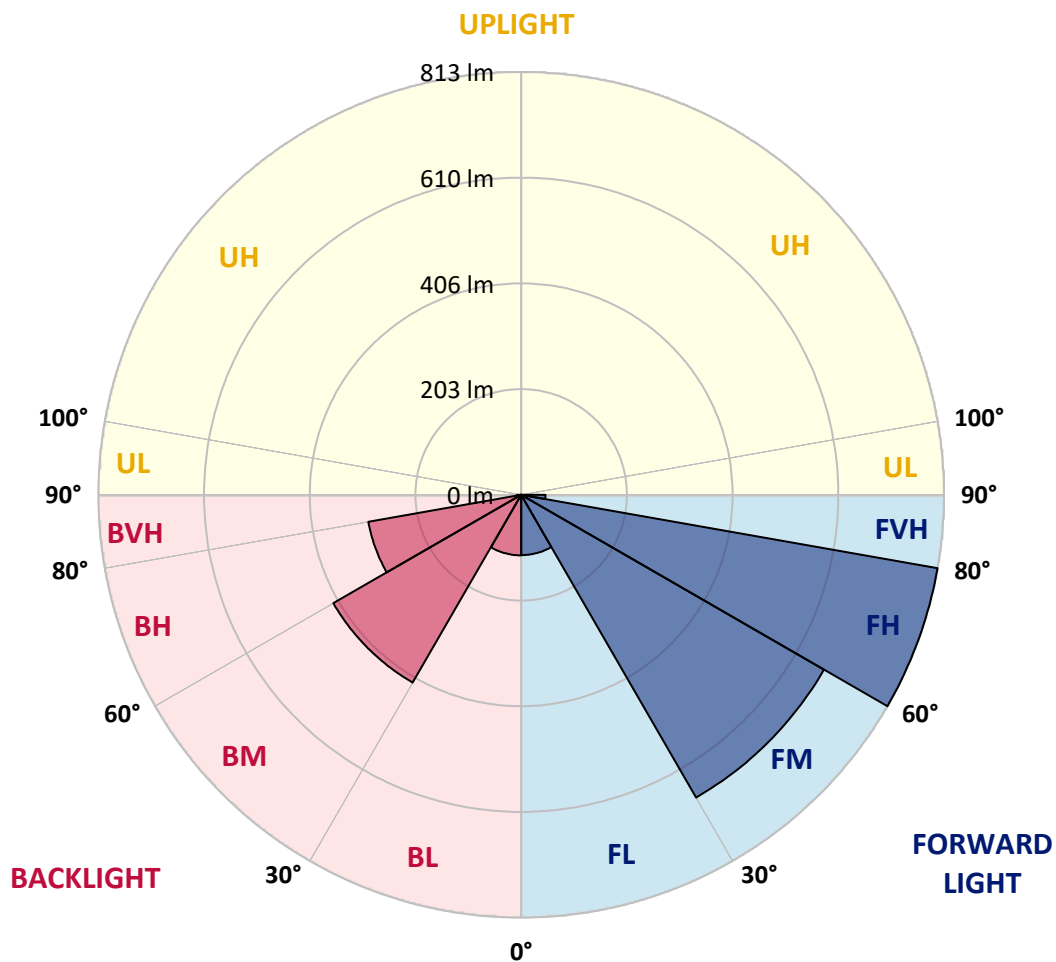
CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	115.9	4.7			
FM (30°-60°)	672.1	27.0			
FH (60°-80°)	812.9	32.7			G1/1800
FVH (80°-90°)	46.7	1.9			G1/100
BL (0°-30°)	116.4	4.7	B1/500		
BM (30°-60°)	416.8	16.8	B1/1000		
BH (60°-80°)	298.2	12.0	B1/500		G1/500
BVH (80°-90°)	8.1	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: P141866

CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5
2.5°	265.1	265.4	265.4	264.9	264.9	265.1	265.1	265.4	265.4	265.4	265.7
5°	265.1	265.4	265.4	265.1	264.9	265.4	265.1	265.4	265.4	265.4	265.4
7.5°	264.6	264.9	264.9	264.6	264.9	265.1	265.1	265.7	266.0	266.0	266.3
10°	261.7	262.0	262.3	262.3	262.9	263.7	264.0	265.1	265.4	266.3	266.8
12.5°	256.7	256.7	257.2	257.8	258.6	260.3	261.2	262.9	264.3	265.4	267.4
15°	252.1	252.1	252.7	253.0	254.7	255.8	257.5	259.5	262.0	264.3	267.4
17.5°	254.4	254.4	254.1	253.8	254.1	254.1	255.5	257.5	259.8	262.9	266.8
20°	263.2	262.9	261.7	261.2	260.9	259.8	258.9	258.6	259.8	262.0	266.0
22.5°	270.8	270.2	269.9	269.4	270.2	269.7	268.5	267.1	265.4	264.6	266.8
25°	275.3	275.6	275.6	275.6	277.3	277.8	278.4	276.7	274.7	271.9	272.2
27.5°	281.5	281.8	281.2	282.4	284.3	285.7	287.2	288.3	287.2	285.5	283.5
30°	294.8	294.8	293.9	294.8	296.5	297.9	299.9	301.8	301.8	300.1	298.2
32.5°	308.6	308.9	308.9	309.5	312.0	313.1	316.0	317.9	319.3	318.2	319.3
35°	325.3	325.0	325.8	326.1	330.1	331.5	337.1	338.5	340.8	341.4	342.2
37.5°	352.9	353.5	351.8	350.7	354.1	354.1	361.4	365.4	364.8	368.8	371.6
40°	397.6	395.0	394.2	393.6	395.6	395.3	395.0	400.4	402.9	403.5	404.9
42.5°	447.0	447.8	447.0	449.0	449.0	447.5	446.4	445.6	450.4	453.5	454.0
45°	504.9	506.0	504.3	502.9	506.6	508.5	508.5	510.8	514.7	516.2	515.3
47.5°	551.2	554.3	552.9	554.8	560.8	567.5	576.6	582.5	586.7	590.7	596.9
50°	593.0	594.4	597.8	604.2	613.0	623.7	638.4	653.1	661.6	671.4	678.8
52.5°	618.4	622.6	627.7	638.4	653.1	668.1	690.6	714.6	736.1	747.1	755.9
55°	633.6	636.7	643.5	658.2	678.8	701.1	729.3	762.4	790.9	815.2	834.1
57.5°	633.0	635.6	644.9	661.0	685.6	713.5	748.8	790.0	832.1	872.5	908.1
60°	620.9	623.2	632.5	649.7	676.5	709.8	752.2	802.7	859.8	920.5	982.9
62.5°	602.3	604.0	612.2	629.4	656.5	692.1	741.8	808.1	889.1	984.9	1106.0
65°	576.0	576.0	583.6	601.4	627.4	667.2	722.0	799.9	912.0	1057.7	1233.9
67.5°	537.3	537.3	543.5	558.2	578.6	606.2	661.0	742.0	860.3	1034.8	1241.0
70°	464.2	465.3	465.3	474.4	483.4	495.8	521.8	583.9	694.9	865.4	1068.2
72.5°	340.2	319.6	335.7	350.4	360.6	367.3	382.3	401.8	457.7	585.6	769.1
75°	214.3	219.7	231.8	248.5	273.6	299.6	328.1	340.2	335.2	350.4	473.8
77.5°	129.9	125.4	137.2	162.1	190.3	225.6	279.0	325.3	351.8	350.1	335.4
80°	56.2	54.8	62.7	74.5	88.4	120.3	169.1	232.7	303.3	344.2	338.0
82.5°	20.0	20.3	25.7	30.5	36.7	47.2	66.9	107.0	169.7	241.7	298.7
85°	5.9	6.5	9.0	12.7	14.4	16.4	22.6	33.6	57.3	91.5	162.6
87.5°	1.7	2.0	2.5	4.5	4.2	4.0	4.5	7.1	5.4	4.5	22.6
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: P141866

CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5
2.5°	265.4	265.4	265.4	265.7	265.4	265.4	265.7	265.7	266.0	266.3	266.8
5°	265.1	265.1	265.4	265.4	265.4	265.7	266.0	266.3	266.8	267.7	268.5
7.5°	266.0	266.0	265.7	266.0	266.0	266.3	266.8	267.1	268.2	269.1	270.5
10°	266.8	266.8	267.1	267.4	267.4	268.0	268.8	269.1	270.2	271.9	273.3
12.5°	268.0	268.8	269.9	270.5	271.1	271.6	272.5	273.0	274.5	276.7	278.4
15°	268.8	270.8	271.9	273.3	274.2	274.5	275.3	276.4	277.8	280.1	282.1
17.5°	268.8	271.3	273.0	274.5	275.9	276.7	277.6	278.7	280.7	282.9	284.9
20°	268.5	272.2	274.5	276.7	279.3	280.1	281.5	282.6	284.9	287.7	289.1
22.5°	269.9	274.2	277.3	281.2	284.1	286.3	288.0	290.0	291.7	293.7	294.2
25°	274.2	278.4	283.5	288.3	292.2	295.6	297.9	299.6	301.6	302.4	301.3
27.5°	281.2	284.3	291.4	298.5	304.7	308.9	311.4	313.7	314.3	316.0	311.7
30°	293.9	295.3	302.7	312.9	319.9	327.0	330.4	332.6	332.9	331.8	324.4
32.5°	314.8	312.3	318.8	332.3	343.1	349.0	354.4	355.8	354.9	351.3	339.4
35°	340.2	336.3	339.4	359.2	371.0	379.8	384.9	386.3	384.3	377.8	361.4
37.5°	371.6	370.2	371.6	390.5	411.1	419.3	421.6	423.3	418.5	406.6	385.1
40°	406.3	406.6	404.9	422.1	448.1	460.0	465.3	461.7	455.7	438.8	415.1
42.5°	454.3	452.6	446.7	462.2	495.5	507.7	512.5	509.7	503.7	482.3	454.6
45°	517.8	512.2	506.6	514.7	546.9	562.7	569.8	567.8	557.4	531.4	505.4
47.5°	595.5	589.6	579.1	577.7	610.2	628.8	631.4	628.2	620.3	594.4	562.5
50°	677.1	675.4	670.6	659.3	688.4	707.0	705.3	703.1	694.3	661.3	628.5
52.5°	761.5	764.9	761.8	753.9	785.0	792.6	793.1	786.4	776.2	745.7	701.1
55°	850.2	862.9	867.7	873.9	898.5	897.3	890.8	874.7	877.3	842.6	780.7
57.5°	944.2	983.2	1013.9	1027.8	1051.2	1058.0	1041.6	1047.0	1044.7	1008.9	911.5
60°	1068.2	1161.3	1241.5	1290.9	1322.6	1310.4	1333.3	1334.4	1373.1	1294.3	1142.4
62.5°	1265.8	1436.9	1579.2	1621.9	1630.1	1627.2	1600.1	1627.2	1619.9	1523.9	1327.1
65°	1432.1	1635.7	1780.3	1806.2	1768.1	1733.1	1701.5	1706.9	1671.8	1532.9	1321.7
67.5°	1454.7	1657.4	1791.6	1784.2	1700.9	1636.0	1583.5	1542.2	1470.8	1345.2	1161.1
70°	1276.0	1490.9	1663.7	1658.0	1542.2	1455.6	1370.3	1308.2	1235.3	1138.2	964.0
72.5°	992.5	1183.9	1351.4	1394.9	1280.8	1185.1	1106.8	1027.8	952.7	860.3	750.5
75°	675.7	819.7	897.6	909.5	805.0	733.3	703.1	638.4	558.8	539.0	457.7
77.5°	392.5	447.8	424.1	392.5	316.0	232.1	177.3	151.6	152.2	174.8	167.4
80°	319.1	303.8	239.7	192.3	130.7	66.6	44.6	38.4	38.7	44.9	43.5
82.5°	328.9	337.7	277.6	194.3	133.8	70.6	33.9	25.1	29.4	31.9	31.3
85°	243.7	319.3	286.3	206.1	143.7	75.1	22.0	13.8	19.5	23.7	25.4
87.5°	68.3	107.3	83.3	55.1	40.1	13.6	8.8	7.3	9.0	12.4	12.4
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: P141866

CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5
2.5°	267.1	268.2	268.0	268.5	268.8	269.7	270.2	269.9	269.9	270.5	271.1
5°	269.4	270.8	270.8	271.6	272.5	273.6	274.5	273.9	274.2	274.7	275.3
7.5°	271.6	273.3	273.6	274.5	275.0	275.6	276.1	275.3	275.0	275.0	274.7
10°	274.5	276.1	275.9	275.9	275.6	275.0	273.9	271.9	270.5	269.7	269.1
12.5°	279.3	280.4	278.7	277.0	274.2	272.2	269.7	267.4	265.7	264.3	263.7
15°	283.5	282.9	280.9	277.8	273.9	270.8	268.2	265.1	263.2	261.5	260.6
17.5°	285.7	283.8	280.9	278.1	274.7	271.9	268.8	265.1	262.0	259.8	258.6
20°	288.0	284.9	281.2	278.4	275.9	273.6	271.3	266.8	262.9	259.5	257.8
22.5°	291.4	287.2	283.5	280.9	278.4	276.1	273.9	269.7	265.4	260.9	258.4
25°	296.2	290.5	288.0	285.5	282.6	280.4	277.3	273.3	268.8	263.4	259.8
27.5°	303.8	298.7	295.9	293.4	290.0	286.3	282.9	277.6	273.3	267.1	262.3
30°	314.8	309.5	306.9	304.4	300.4	295.6	290.8	284.1	278.1	271.1	264.9
32.5°	328.7	325.8	322.7	318.5	313.1	307.2	300.1	291.1	282.6	273.9	266.0
35°	350.1	345.3	340.2	336.0	328.1	319.9	309.2	295.9	284.6	273.9	264.3
37.5°	374.7	369.6	362.8	355.2	343.3	330.4	315.4	298.7	283.8	270.8	260.1
40°	404.3	397.8	388.8	374.4	356.9	337.4	317.4	296.5	279.0	264.0	251.6
42.5°	443.6	430.3	412.8	391.6	366.8	340.2	314.8	290.5	270.8	254.4	242.0
45°	487.9	466.7	438.5	406.9	372.4	339.1	309.2	280.9	258.6	240.6	227.6
47.5°	535.6	502.6	461.1	416.5	373.0	332.9	298.2	266.5	241.4	222.2	206.1
50°	589.6	535.1	476.9	421.3	369.3	321.9	282.4	245.9	220.0	197.1	182.4
52.5°	635.9	563.6	487.9	419.3	356.3	302.7	256.4	221.1	190.6	170.3	155.9
55°	690.6	591.3	493.8	409.4	335.4	272.8	228.4	189.2	160.4	142.3	129.9
57.5°	783.0	638.1	498.9	389.4	301.0	235.2	189.7	153.0	130.4	114.6	105.9
60°	961.1	729.0	519.8	359.4	257.2	190.0	146.5	119.7	100.2	89.8	83.6
62.5°	1077.8	790.9	510.5	313.4	201.0	142.3	107.3	86.4	75.1	67.5	64.7
65°	1048.1	728.5	433.1	248.5	140.0	94.6	72.0	59.3	54.2	50.3	48.6
67.5°	900.2	587.6	314.0	160.7	88.7	57.6	47.2	42.1	39.8	38.1	37.8
70°	717.2	414.2	186.6	85.3	49.1	38.1	33.6	31.6	30.8	30.8	30.8
72.5°	520.4	238.6	91.8	46.0	33.0	29.1	27.1	26.5	26.3	26.3	26.5
75°	297.3	103.3	47.2	31.6	27.1	25.1	24.0	24.0	24.0	24.0	24.3
77.5°	103.6	47.2	33.3	26.5	23.4	22.3	21.7	22.3	22.6	22.6	22.6
80°	37.8	33.3	28.5	23.2	20.9	19.8	19.8	20.6	21.2	20.6	20.3
82.5°	29.9	26.3	23.2	20.0	18.4	17.8	18.1	18.6	18.4	18.1	17.2
85°	22.9	17.2	16.1	15.0	14.7	14.7	15.8	16.1	15.0	14.4	13.6
87.5°	11.3	9.0	8.2	9.6	9.3	8.5	8.8	8.8	7.3	6.8	7.1
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: P141866

CATALOG NUMBER: ECM-F01-LED-E1-T3-7050

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	266.5	266.5	266.5	266.5
2.5°	271.1	271.3	272.2	271.9
5°	275.0	275.3	275.9	275.9
7.5°	274.2	274.5	274.5	274.5
10°	267.7	267.7	268.2	268.2
12.5°	262.6	262.3	262.3	261.7
15°	259.5	258.9	259.2	258.4
17.5°	257.2	256.9	256.9	256.4
20°	256.4	255.8	255.5	255.0
22.5°	255.8	255.5	255.0	254.4
25°	257.2	255.8	255.5	255.0
27.5°	258.6	257.2	256.1	255.8
30°	260.1	257.5	256.1	255.5
32.5°	259.8	256.4	254.4	253.6
35°	256.7	252.4	249.9	249.0
37.5°	250.7	245.9	242.0	240.6
40°	242.3	236.1	232.4	230.4
42.5°	232.1	225.0	221.9	220.2
45°	215.4	209.8	206.1	204.7
47.5°	196.8	189.2	185.8	184.4
50°	172.8	166.6	163.8	161.8
52.5°	147.4	141.7	139.2	138.1
55°	122.8	120.0	116.0	115.2
57.5°	99.7	98.8	96.0	95.7
60°	81.0	79.6	77.6	77.6
62.5°	63.8	62.4	61.6	61.6
65°	49.1	48.8	48.3	48.0
67.5°	37.8	38.7	39.0	38.4
70°	31.6	31.9	31.9	31.9
72.5°	27.4	27.4	27.4	27.1
75°	24.8	24.8	24.3	24.0
77.5°	22.9	22.6	22.9	22.6
80°	20.0	19.8	19.2	18.6
82.5°	16.7	16.4	15.0	15.0
85°	13.0	12.1	11.0	9.9
87.5°	7.3	6.5	4.8	3.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)