

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: P141706

Luminaire Tested: **ECM-F01-LED-E1-T2-7050**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141706  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33682)  
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-T2-7050  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (7) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2497.3 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

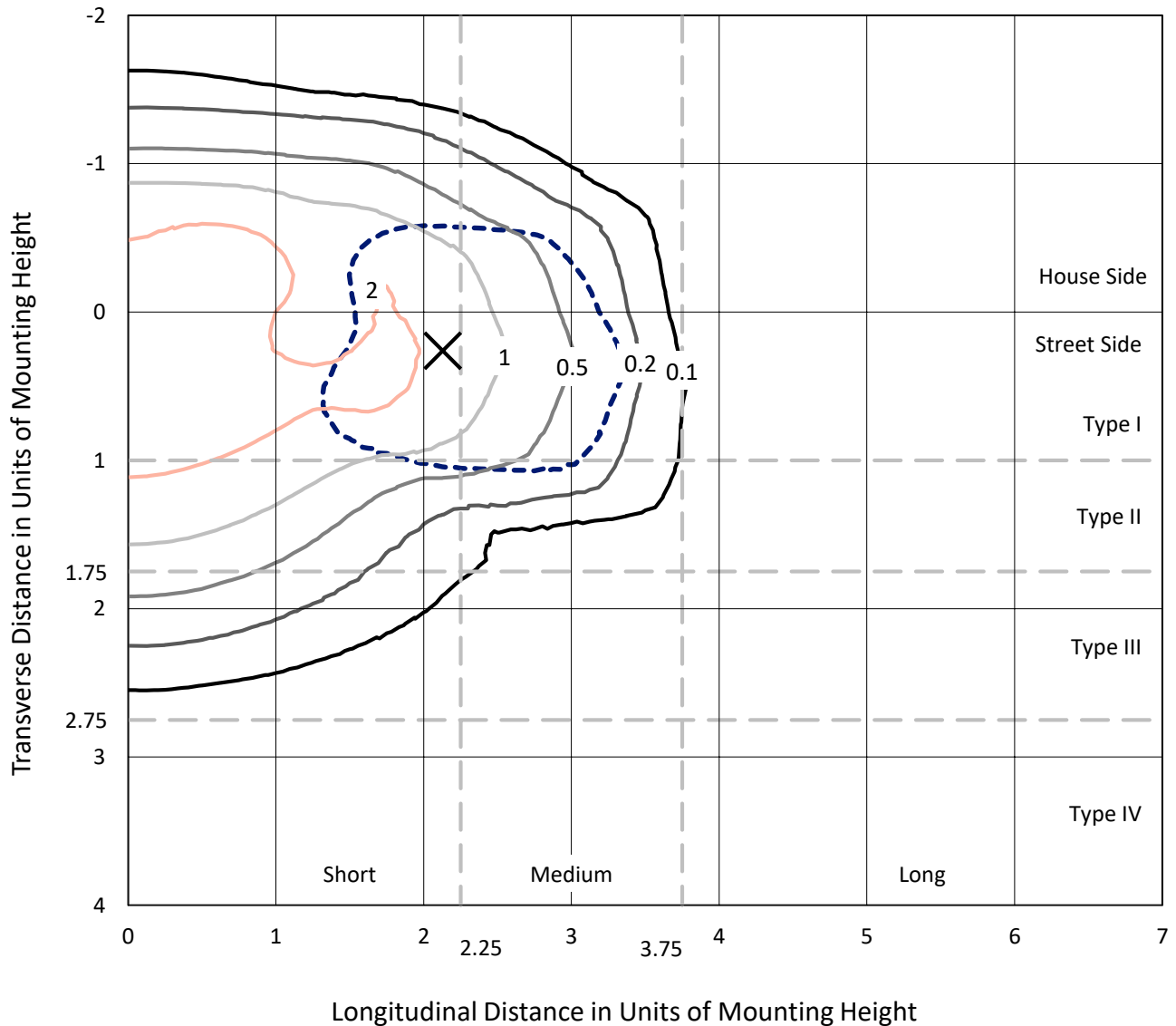
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

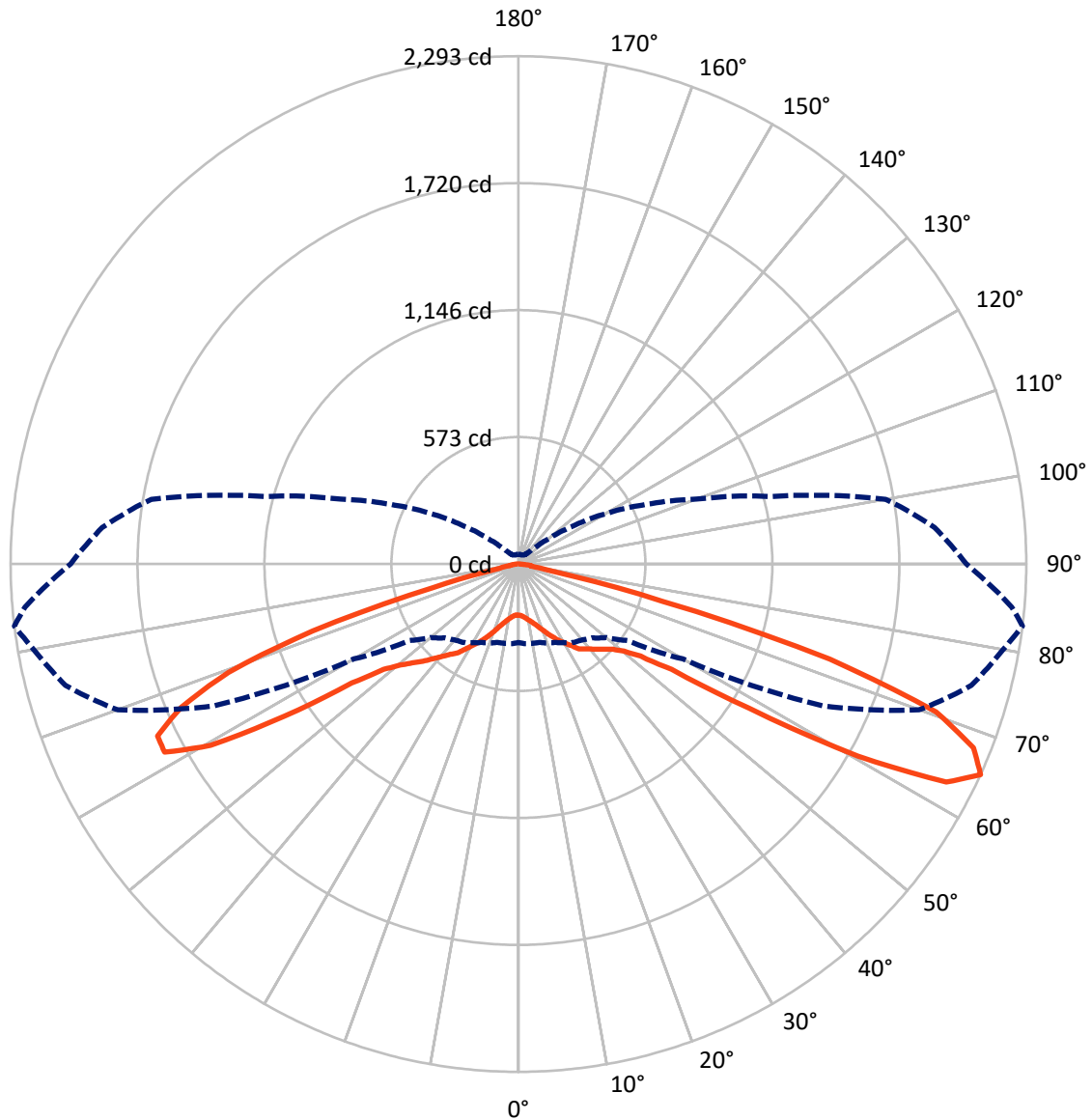
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 83-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	926.3	0.0	926.3
	% Fixture	37.1	0.0	37.1
<b>Street Side</b>	Lumens	1570.9	0.0	1570.9
	% Fixture	62.9	0.0	62.9
<b>Total</b>	Lumens	2497.3	0.0	2497.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	0.9
10°-20°	81.5	3.3
20°-30°	161.0	6.4
30°-40°	277.1	11.1
40°-50°	418.1	16.7
50°-60°	581.8	23.3
60°-70°	671.6	26.9
70°-80°	244.1	9.8
80°-90°	38.8	1.6
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°	2497.3	100.0
0°-180°	2497.3	100.0



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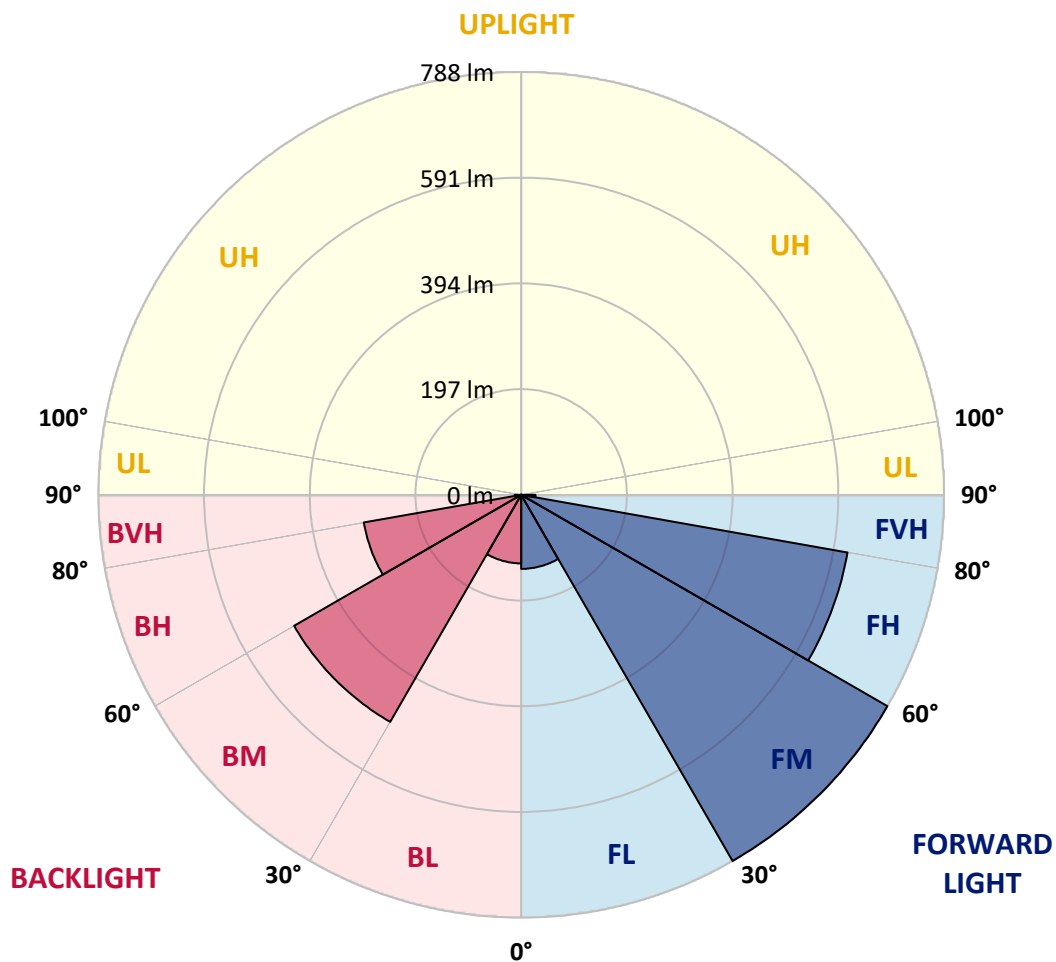
CATALOG NUMBER: ECM-F01-LED-E1-T2-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.1	5.5			
FM (30°-60°)	788.3	31.6			
FH (60°-80°)	617.8	24.7			G0/660
FVH (80°-90°)	26.8	1.1			G1/100
BL (0°-30°)	127.7	5.1	B1/500		
BM (30°-60°)	488.7	19.6	B1/1000		
BH (60°-80°)	297.8	11.9	B1/500		G1/500
BVH (80°-90°)	12.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3
2.5°	242.5	243.1	242.5	242.5	242.3	242.0	242.0	241.7	241.1	240.6	240.3
5°	255.8	256.1	255.3	255.3	255.5	255.3	254.4	254.7	252.4	251.6	251.0
7.5°	270.5	271.3	270.2	269.7	269.4	268.8	268.0	266.5	264.9	263.4	262.6
10°	287.2	288.0	287.4	286.3	284.6	283.8	282.9	280.7	278.7	276.4	274.7
12.5°	306.9	307.2	306.6	304.4	303.3	300.7	297.9	295.3	292.5	289.1	286.3
15°	326.4	326.7	325.8	323.6	322.2	319.1	315.1	311.7	306.9	303.0	299.3
17.5°	341.4	341.9	340.2	338.5	336.6	332.6	328.9	325.0	319.9	315.7	312.0
20°	346.5	347.3	346.2	345.3	344.2	342.2	338.5	335.2	330.6	327.5	324.7
22.5°	344.2	345.0	344.5	344.5	344.5	344.2	342.5	341.7	338.8	337.4	336.9
25°	340.8	341.7	341.1	341.7	342.8	344.2	344.2	345.9	345.6	347.9	349.3
27.5°	349.6	350.1	348.7	348.7	349.8	352.1	351.5	354.9	355.5	360.0	364.2
30°	380.1	380.1	377.8	375.5	376.4	375.8	375.3	377.5	377.5	381.7	383.7
32.5°	425.5	422.4	422.1	421.8	419.9	421.3	416.8	417.0	415.1	415.6	414.8
35°	475.5	475.2	474.1	473.5	472.7	476.9	473.5	476.3	469.3	466.7	461.9
37.5°	519.3	520.4	521.2	525.5	527.4	535.9	537.9	539.3	532.0	532.2	521.5
40°	563.3	564.7	567.8	575.4	581.1	589.0	592.7	598.6	599.2	600.3	592.4
42.5°	611.3	609.0	613.3	622.9	629.9	637.8	642.6	653.7	659.9	663.0	664.1
45°	650.0	647.4	649.4	655.1	661.6	671.7	682.2	698.6	711.8	726.2	734.1
47.5°	670.0	670.6	672.0	675.4	679.9	689.8	704.5	725.4	746.8	770.0	790.6
50°	676.5	676.8	678.8	682.2	686.4	696.9	712.1	735.8	761.8	794.3	825.9
52.5°	678.5	677.4	679.4	681.0	683.9	692.6	707.0	731.9	761.2	800.5	847.4
55°	671.2	669.8	673.1	675.4	677.7	684.7	695.7	718.6	749.1	793.7	855.0
57.5°	642.9	643.2	648.0	653.9	659.9	669.5	683.9	705.6	735.8	779.9	848.5
60°	595.2	594.4	600.3	607.6	617.8	633.0	650.8	672.9	698.0	734.7	802.2
62.5°	508.5	511.9	513.9	524.9	525.5	547.2	558.8	580.8	602.3	630.5	691.2
65°	354.1	361.4	363.4	366.2	379.5	390.8	409.4	432.6	446.7	471.5	516.7
67.5°	220.5	225.9	226.2	233.5	245.1	258.1	272.5	295.9	317.4	321.3	343.9
70°	183.0	183.3	187.2	192.6	201.6	214.9	229.0	245.4	264.9	277.3	275.0
72.5°	151.6	153.3	156.1	161.5	171.4	183.3	201.3	222.2	246.5	271.3	293.4
75°	101.6	104.5	105.3	107.9	112.7	123.4	136.9	156.7	188.1	225.0	271.9
77.5°	53.9	54.5	56.5	58.4	61.0	67.5	76.2	86.4	107.0	138.9	194.0
80°	27.4	28.5	29.9	31.3	31.1	32.8	35.3	39.8	46.9	61.0	87.8
82.5°	9.9	12.7	16.7	18.6	18.6	19.2	20.0	20.9	20.3	22.6	28.2
85°	4.5	5.1	6.5	10.2	10.4	10.4	10.4	11.0	10.4	9.3	11.0
87.5°	0.0	0.8	0.8	2.5	2.8	2.5	2.8	3.7	2.8	2.3	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	83°	85°	90°	95°	100°
0°	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3
2.5°	238.9	238.3	236.9	236.3	234.6	233.5	232.9	232.4	231.5	230.4	229.6
5°	249.3	247.6	245.7	244.5	242.3	240.0	239.2	238.0	236.1	234.4	232.4
7.5°	260.3	258.4	256.1	253.6	251.3	248.8	247.6	246.5	243.7	241.4	238.6
10°	272.2	269.4	266.8	264.6	262.6	259.8	257.8	256.9	254.4	251.0	248.2
12.5°	283.5	280.4	277.8	275.0	273.0	270.8	268.8	268.0	266.0	262.9	260.6
15°	295.3	292.2	289.4	287.4	285.2	283.8	282.6	281.2	280.4	277.8	276.7
17.5°	308.1	305.2	302.7	301.0	300.1	299.9	299.6	299.0	298.2	296.5	295.6
20°	322.5	319.9	319.1	318.8	319.1	319.3	319.9	319.9	320.2	319.1	318.8
22.5°	336.3	336.3	337.7	339.4	341.1	342.2	343.1	341.9	342.2	343.9	345.3
25°	351.5	354.1	357.7	360.6	363.1	365.1	366.2	366.8	367.3	369.9	372.4
27.5°	367.9	371.9	377.2	380.9	385.7	388.8	391.1	390.8	391.6	395.0	399.5
30°	388.2	392.2	397.8	402.9	409.4	413.9	414.8	414.2	415.3	418.5	427.5
32.5°	416.8	417.6	421.3	426.4	433.4	437.9	438.8	440.2	442.7	448.4	459.4
35°	456.9	453.2	452.9	455.2	461.9	470.7	471.5	472.4	473.5	480.9	495.5
37.5°	511.1	496.1	487.1	480.0	480.9	484.0	485.7	486.2	489.0	500.3	525.2
40°	579.1	551.2	531.1	511.1	503.7	504.3	504.9	504.3	509.9	527.4	559.9
42.5°	653.7	629.1	594.1	552.6	531.7	524.9	525.8	526.3	535.1	560.5	596.6
45°	732.7	716.9	676.2	611.3	566.4	549.2	548.6	549.8	564.2	600.0	638.1
47.5°	802.2	806.1	776.2	700.0	622.9	579.1	575.4	577.4	600.9	639.3	677.9
50°	857.2	883.2	881.0	820.5	714.4	630.8	617.8	620.6	648.3	688.1	722.8
52.5°	898.7	951.5	985.4	961.4	869.1	724.5	690.9	686.1	720.9	762.9	784.4
55°	926.4	1012.0	1100.9	1142.4	1104.9	927.0	839.2	828.7	866.3	919.9	929.2
57.5°	944.8	1085.4	1276.8	1437.2	1488.3	1335.8	1225.7	1182.0	1209.3	1266.1	1254.0
60°	914.3	1114.5	1489.2	1776.6	1922.0	1884.2	1761.6	1695.6	1644.5	1640.2	1572.7
62.5°	797.4	1045.3	1575.3	1938.1	2142.5	2189.7	2167.9	2089.7	1948.3	1869.8	1717.3
65°	601.4	856.4	1514.0	1925.7	2117.4	2221.9	2292.8	2236.6	2022.0	1886.2	1683.4
67.5°	384.3	552.9	1259.3	1776.3	1956.5	2073.9	2215.7	2190.0	1915.8	1742.4	1521.9
70°	280.7	306.4	854.4	1503.6	1701.8	1805.1	1999.9	1988.7	1680.0	1485.2	1266.7
72.5°	323.3	228.4	468.4	1123.2	1276.5	1357.9	1469.4	1442.0	1173.8	1038.5	883.8
75°	364.5	255.5	264.0	666.4	713.2	656.2	671.4	583.1	454.9	403.2	397.3
77.5°	306.9	320.5	239.4	286.3	263.7	190.0	142.3	111.5	87.2	93.7	104.2
80°	178.5	360.3	316.8	149.1	167.2	133.0	59.3	49.1	40.7	41.2	41.8
82.5°	55.1	225.0	445.8	182.1	165.5	187.5	54.5	33.3	26.8	30.2	34.2
85°	18.4	94.3	357.5	191.2	107.0	100.0	24.0	16.4	13.6	18.9	26.8
87.5°	4.5	22.9	66.4	25.1	15.8	9.6	8.2	5.9	6.5	11.9	16.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3	231.3
2.5°	229.0	228.1	227.3	226.7	225.9	225.9	225.0	225.0	223.9	223.3	223.3
5°	230.7	229.0	227.6	226.2	224.8	224.2	223.1	222.5	221.4	220.5	220.0
7.5°	236.3	234.1	232.4	230.7	229.0	228.1	227.0	225.9	225.6	225.0	224.5
10°	245.9	242.8	241.4	240.3	238.0	237.5	236.3	235.5	234.6	233.8	234.1
12.5°	258.4	256.1	255.5	253.3	252.7	251.9	250.2	249.6	247.3	245.7	244.8
15°	274.2	273.3	273.3	272.2	270.5	269.1	266.5	265.1	261.2	258.6	255.8
17.5°	295.1	294.2	294.5	293.4	291.4	288.9	286.0	281.8	275.9	271.3	265.7
20°	319.3	319.1	319.6	318.8	316.2	312.9	306.1	299.9	291.7	283.5	277.3
22.5°	346.5	347.9	348.4	346.2	343.3	336.3	328.9	319.9	308.9	298.2	289.4
25°	375.3	378.6	380.6	377.5	374.1	365.1	354.1	341.9	326.4	313.4	301.8
27.5°	403.5	410.5	413.4	411.7	406.3	393.6	378.9	362.8	343.9	326.7	311.7
30°	437.1	446.4	451.5	449.0	438.5	421.8	404.1	382.3	358.3	337.7	319.6
32.5°	472.4	484.0	487.6	482.3	467.0	446.1	423.0	396.4	369.3	345.6	325.3
35°	511.6	522.4	523.2	512.8	492.7	466.2	437.4	405.5	374.4	347.9	325.6
37.5°	545.8	556.5	555.7	540.2	515.9	482.8	446.1	407.4	371.3	341.1	316.8
40°	581.7	593.5	587.0	567.0	535.6	493.6	447.3	400.7	359.4	326.4	299.9
42.5°	619.5	624.6	613.0	587.9	547.5	493.3	437.7	384.6	340.8	304.1	276.1
45°	654.2	650.3	633.6	600.0	546.6	481.1	418.7	364.5	316.0	279.3	251.9
47.5°	685.3	672.9	647.2	600.0	533.4	459.7	394.5	338.5	290.3	253.3	226.2
50°	718.9	692.9	652.8	589.6	509.4	433.7	368.8	312.6	262.9	225.0	195.4
52.5°	763.5	716.9	652.8	570.6	484.5	407.4	341.7	282.4	231.0	191.4	162.1
55°	868.0	767.2	664.1	560.2	462.5	379.8	309.5	243.4	193.4	155.6	131.3
57.5°	1073.2	877.3	720.9	579.4	454.3	349.8	268.0	200.2	152.8	121.1	100.8
60°	1244.1	966.2	766.9	594.1	441.0	311.2	217.1	153.3	113.5	89.5	76.2
62.5°	1288.1	967.4	748.0	556.0	387.4	253.3	160.1	105.6	77.9	64.9	57.9
65°	1178.0	855.5	636.2	453.5	295.1	175.9	100.2	64.1	52.0	47.4	44.6
67.5°	990.2	681.6	471.5	316.2	186.1	96.8	56.2	44.0	39.5	38.1	36.7
70°	759.5	478.9	306.9	185.2	97.4	50.3	40.1	36.1	34.2	33.3	32.2
72.5°	468.2	282.9	166.9	88.9	48.6	38.4	35.9	34.4	31.9	30.8	29.6
75°	198.8	121.4	69.2	45.2	39.0	36.7	34.7	33.0	31.1	29.4	28.2
77.5°	66.9	46.3	40.9	39.5	39.0	36.7	34.2	31.9	29.9	28.0	26.8
80°	40.7	37.0	37.8	37.6	39.0	36.4	33.0	30.5	28.2	26.3	24.8
82.5°	35.3	35.0	35.9	36.7	38.7	35.0	31.1	27.4	24.6	22.6	21.2
85°	30.5	31.1	31.6	32.2	33.3	29.6	25.1	21.7	19.5	16.9	15.8
87.5°	20.3	22.0	23.2	23.4	22.6	14.1	8.2	9.6	9.9	8.5	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ECM-F01-LED-E1-T2-7050

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	231.3	231.3	231.3	231.3	231.3
2.5°	222.5	222.2	223.1	222.2	222.2
5°	219.7	219.4	219.4	219.4	218.8
7.5°	224.2	223.9	223.6	223.6	223.3
10°	232.9	232.7	232.7	232.4	232.4
12.5°	243.4	242.3	242.0	241.4	241.7
15°	253.6	250.5	249.6	248.8	247.9
17.5°	261.5	257.8	255.8	254.1	254.1
20°	271.3	266.5	264.0	261.5	261.5
22.5°	282.6	276.1	272.8	269.9	268.8
25°	292.0	283.8	279.0	275.6	274.7
27.5°	299.0	288.6	282.4	278.4	277.3
30°	304.7	292.8	285.5	281.2	279.5
32.5°	308.3	295.3	287.4	283.2	281.5
35°	306.4	292.5	282.9	277.8	276.7
37.5°	296.5	281.8	270.5	265.1	263.2
40°	278.4	262.6	250.7	244.2	243.1
42.5°	254.7	238.9	227.6	220.8	217.7
45°	229.3	212.9	202.2	196.0	192.3
47.5°	201.9	185.8	174.8	168.6	166.0
50°	173.1	157.6	148.2	141.5	138.9
52.5°	143.2	129.3	120.0	114.4	111.5
55°	114.6	103.3	95.4	91.8	89.8
57.5°	89.5	82.2	77.6	75.4	74.0
60°	69.5	65.8	64.1	62.4	62.7
62.5°	54.2	53.4	52.8	52.0	52.2
65°	43.8	43.2	43.5	43.2	43.5
67.5°	35.9	36.1	36.7	36.7	37.0
70°	31.6	31.9	32.5	32.5	32.5
72.5°	29.4	29.9	30.5	30.2	30.2
75°	27.7	29.1	30.2	29.1	28.0
77.5°	26.0	29.4	32.5	29.9	26.8
80°	23.7	31.1	34.7	30.2	25.7
82.5°	22.6	29.9	30.5	26.3	22.6
85°	20.9	33.9	35.3	24.0	17.2
87.5°	10.7	20.3	23.4	16.1	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)