

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: P141065

Luminaire Tested: **ECM-F01-LED-E1-SL3**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141065  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33691)  
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-SL3  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (7) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2389 lumens  
Efficiency: N/A  
Efficacy: 92.2 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

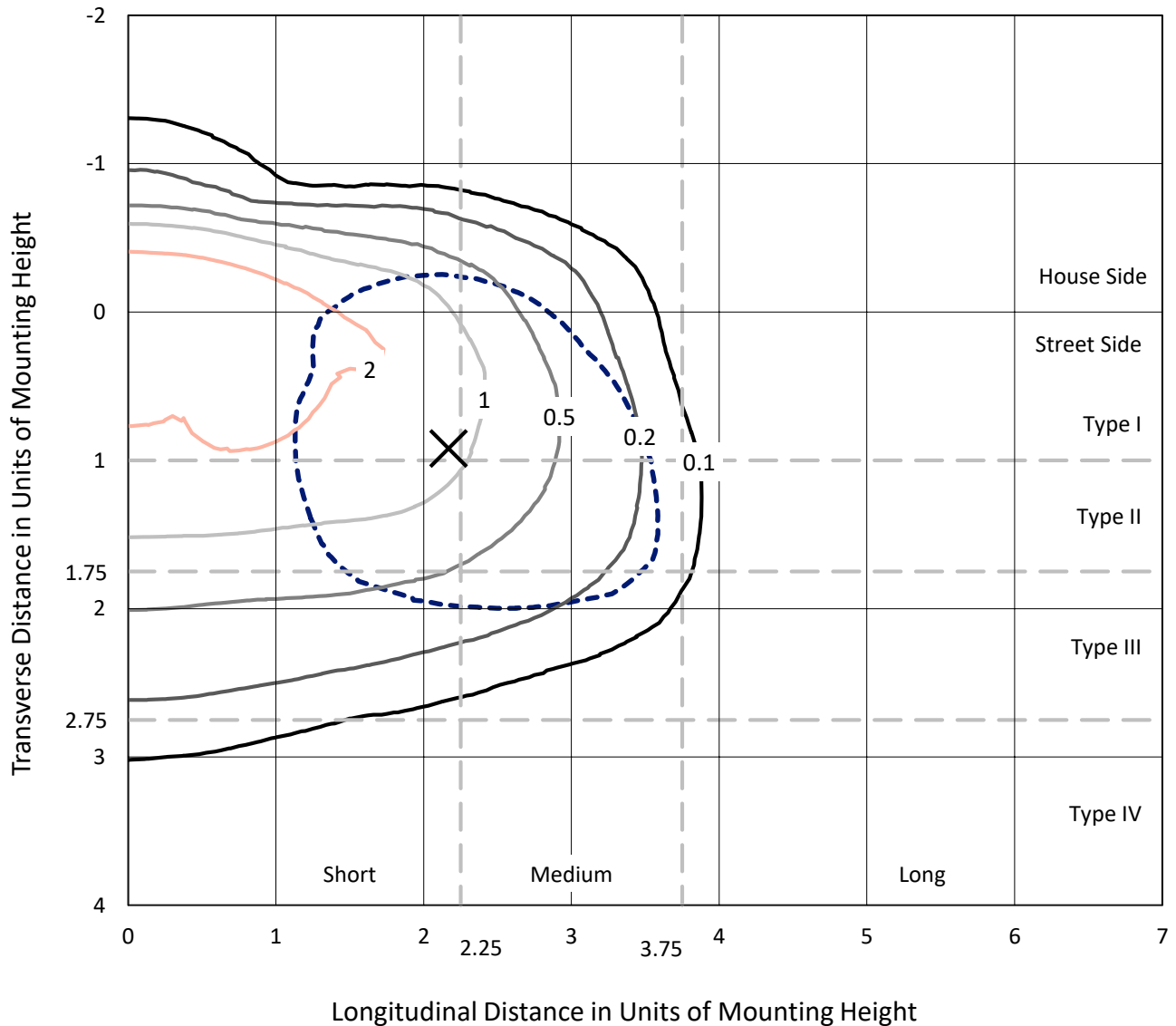
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

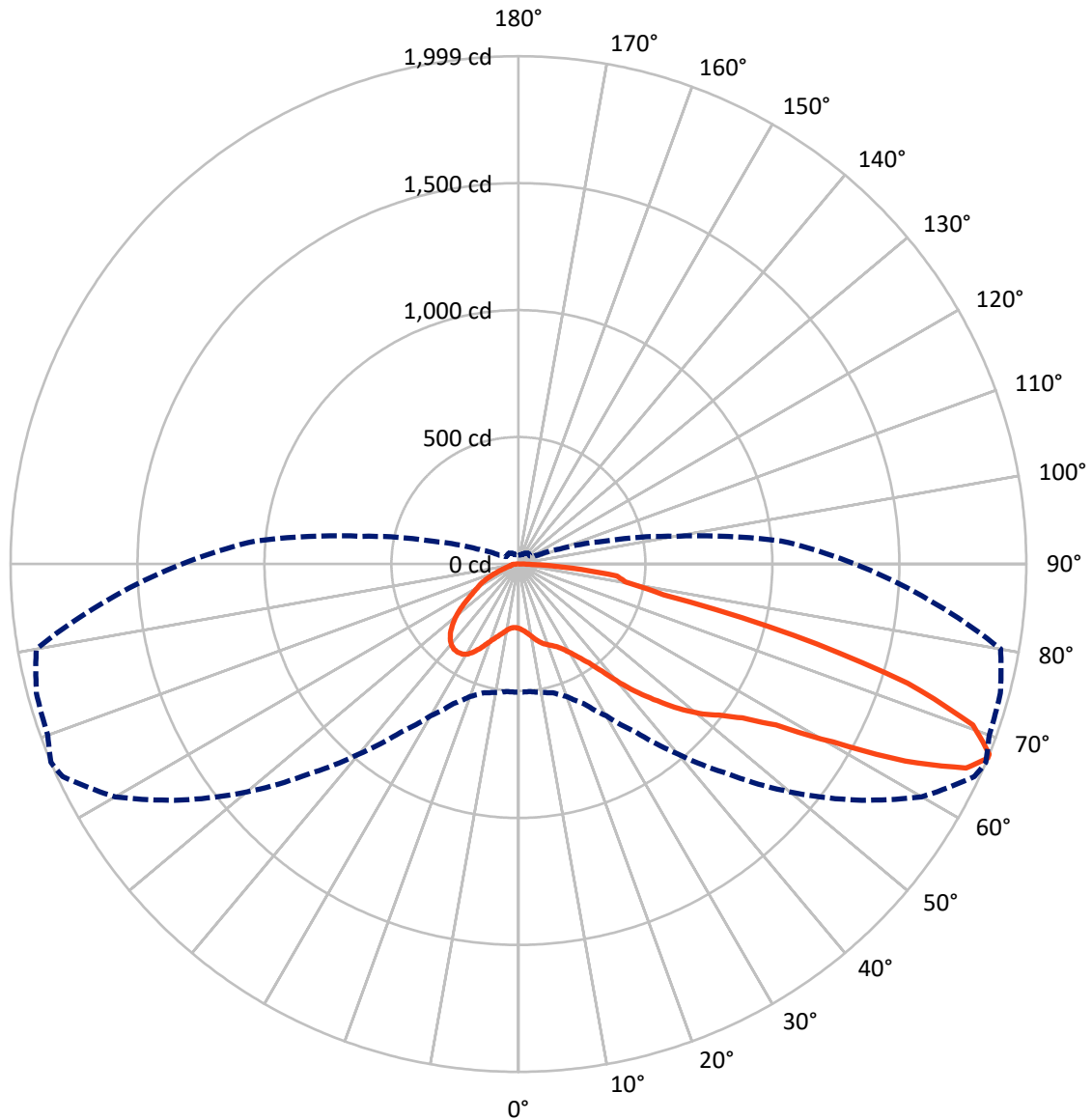
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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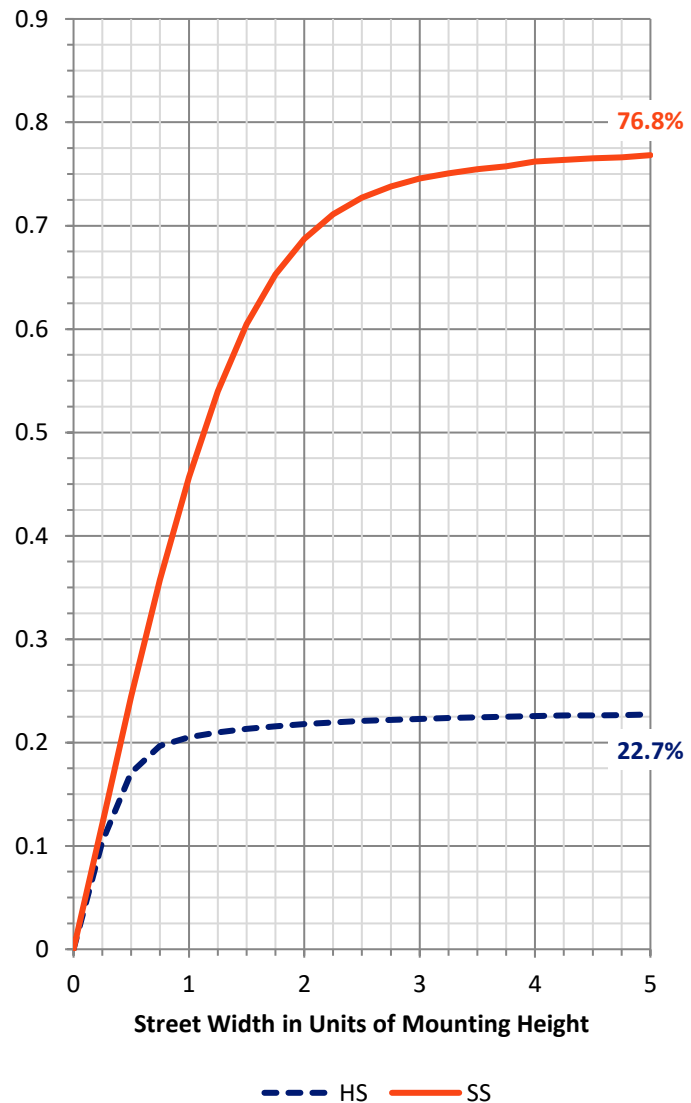
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	549.6	0.0	549.6
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	1839.4	0.0	1839.4
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	2389.0	0.0	2389.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.4	1.1
10°-20°	87.8	3.7
20°-30°	156.4	6.5
30°-40°	224.8	9.4
40°-50°	342.6	14.3
50°-60°	500.5	20.9
60°-70°	674.3	28.2
70°-80°	331.1	13.9
80°-90°	46.0	1.9
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°	2389.0	100.0
0°-180°	2389.0	100.0



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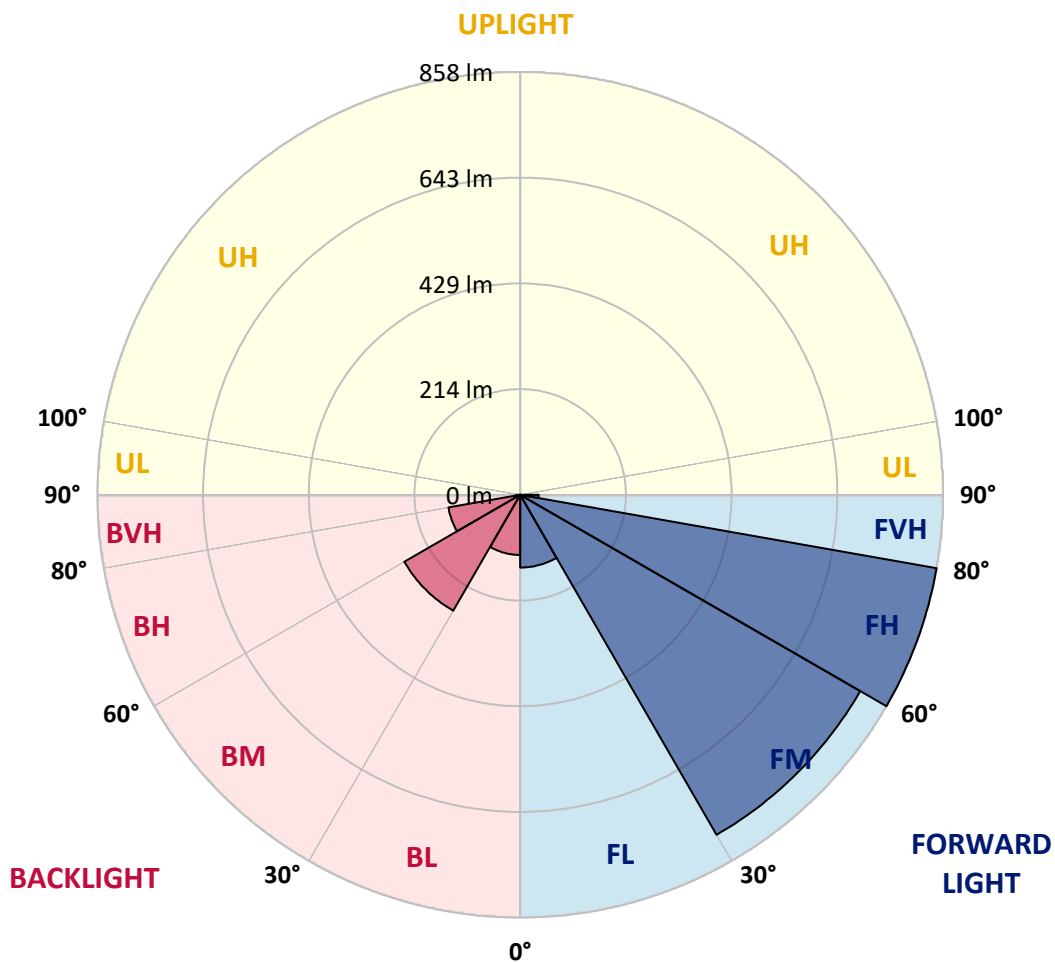
CATALOG NUMBER: ECM-F01-LED-E1-SL3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	147.6	6.2			
FM	(30°-60°)	796.4	33.3			
FH	(60°-80°)	857.6	35.9			G1/1800
FVH	(80°-90°)	37.7	1.6			G1/100
BL	(0°-30°)	122.0	5.1	B1/500		
BM	(30°-60°)	271.5	11.4	B1/1000		
BH	(60°-80°)	147.8	6.2	B1/500		G1/500
BVH	(80°-90°)	8.3	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4
2.5°	266.6	265.3	266.4	266.1	265.3	264.2	264.7	263.9	263.3	262.5	261.7
5°	284.0	283.2	282.6	281.8	281.2	280.4	279.9	278.5	276.6	275.2	274.1
7.5°	301.0	300.8	299.9	298.8	296.6	296.1	294.2	292.8	291.1	288.4	286.2
10°	321.1	320.9	319.5	317.8	315.4	312.9	310.7	307.4	304.1	301.6	299.7
12.5°	345.3	344.0	341.2	339.0	336.3	332.4	328.8	325.0	320.3	316.5	314.2
15°	369.6	367.9	365.7	362.7	358.6	353.3	348.1	342.3	335.2	330.2	327.2
17.5°	389.4	388.3	385.8	381.7	377.5	371.2	364.3	356.4	347.5	340.1	335.4
20°	403.7	402.6	398.7	393.8	388.3	381.1	373.7	364.9	354.4	345.3	340.1
22.5°	409.7	408.1	403.7	397.1	389.6	380.8	372.9	365.4	355.8	348.9	343.4
25°	411.7	409.7	404.0	395.7	386.1	374.8	365.7	359.9	354.2	351.7	349.7
27.5°	410.6	408.9	402.6	392.4	379.5	366.3	356.6	352.5	352.8	357.5	359.7
30°	406.7	404.8	399.0	387.7	374.0	359.7	351.1	349.7	356.1	367.9	376.7
32.5°	400.4	399.0	394.3	384.7	372.3	359.9	353.9	356.9	367.9	386.3	401.5
35°	398.7	398.5	396.3	391.0	381.9	374.0	371.5	380.0	398.2	423.5	442.8
37.5°	398.5	399.8	400.9	400.9	399.0	398.5	405.9	417.7	444.7	476.3	507.7
40°	404.0	406.4	411.9	419.1	426.0	435.9	451.0	473.3	501.4	539.9	579.0
42.5°	421.0	426.5	435.9	448.3	466.1	484.6	509.1	536.9	572.9	611.7	650.5
45°	454.3	462.3	469.2	488.7	512.4	534.1	566.0	602.6	642.3	691.0	732.8
47.5°	498.3	504.1	518.4	539.1	568.0	599.1	629.9	661.8	709.4	760.3	810.9
50°	542.4	546.8	561.9	586.1	624.1	658.2	693.4	725.1	766.1	820.0	869.6
52.5°	575.1	581.2	594.4	618.0	660.7	699.5	739.7	774.6	820.8	869.3	921.0
55°	597.7	601.5	613.6	636.8	676.9	721.2	766.6	809.6	864.6	919.4	970.8
57.5°	601.3	605.1	616.1	636.5	675.6	722.1	774.1	826.6	893.2	965.6	1033.0
60°	597.1	600.2	609.8	626.6	663.4	714.4	776.3	842.3	924.3	1017.6	1113.9
62.5°	578.7	581.7	590.5	604.3	637.0	692.1	769.7	865.4	968.6	1085.8	1227.0
65°	544.0	545.9	554.2	565.2	598.2	654.1	739.7	860.7	1003.6	1163.2	1345.9
67°	504.7	503.8	513.2	524.2	554.5	605.9	689.6	808.7	975.8	1169.2	1395.7
67.5°	492.6	494.8	503.8	511.6	541.0	590.8	670.9	788.7	952.1	1155.5	1394.9
70°	406.7	410.8	415.8	420.7	446.6	483.2	542.1	656.0	788.1	980.7	1266.4
72.5°	279.0	270.8	274.3	272.7	280.7	303.8	344.8	445.0	549.8	715.5	940.0
75°	141.4	150.5	149.4	156.3	167.6	182.2	201.2	238.6	320.9	418.3	581.7
77.5°	79.3	77.0	84.8	86.4	93.0	108.4	142.0	191.2	228.9	268.8	328.8
80°	36.0	39.9	42.4	38.5	39.9	43.2	56.1	88.1	148.0	225.4	259.2
82.5°	20.1	21.5	25.0	25.3	26.4	27.2	29.4	34.1	46.0	93.0	183.0
85°	12.7	13.2	16.8	18.4	19.3	19.3	19.3	20.4	23.4	27.5	47.3
87.5°	4.7	5.0	7.7	10.2	10.5	9.9	9.4	10.7	9.9	10.2	15.4
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°	67°	70°	75°	80°	85°	90°	95°	100°
0°	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4
2.5°	261.1	260.0	258.9	258.7	257.8	257.3	255.9	254.8	253.7	252.9	252.1
5°	271.6	269.4	267.5	266.6	265.5	264.2	261.4	259.5	257.8	256.2	254.5
7.5°	283.4	280.7	277.9	276.8	275.2	272.7	269.7	267.5	264.7	262.2	260.0
10°	296.6	293.6	291.4	290.3	288.9	285.4	283.4	279.6	276.6	273.2	270.5
12.5°	310.9	309.6	306.5	305.4	304.1	301.6	298.8	295.5	291.7	288.1	284.8
15°	323.9	321.7	319.8	319.5	318.7	317.3	313.7	310.1	306.8	302.1	299.4
17.5°	331.9	331.0	330.8	330.5	329.9	329.1	327.5	323.6	320.6	316.7	312.9
20°	336.8	337.6	339.0	340.1	340.7	341.2	340.4	336.5	333.5	330.2	326.9
22.5°	342.0	344.2	347.8	349.5	351.4	354.2	353.6	351.1	349.5	345.6	343.1
25°	349.5	353.9	359.9	362.1	365.7	369.3	370.1	368.7	367.1	364.3	364.3
27.5°	362.1	368.5	376.4	381.1	384.7	389.6	391.3	390.5	390.7	389.1	392.9
30°	381.9	390.7	401.5	406.4	410.8	416.6	417.7	419.4	418.3	421.3	426.0
32.5°	411.9	422.9	434.0	438.6	442.5	448.5	452.1	451.0	454.9	456.8	463.4
35°	458.2	469.2	477.7	478.5	482.9	486.2	489.5	488.4	498.9	503.0	506.6
37.5°	522.0	531.4	536.6	534.7	529.4	535.8	540.2	546.8	553.4	560.8	547.6
40°	604.8	619.7	617.5	614.7	604.8	606.2	608.1	611.7	622.7	620.2	582.5
42.5°	683.5	698.7	696.2	693.2	680.0	673.1	678.3	684.6	690.7	667.3	611.2
45°	763.1	776.8	765.0	769.1	757.3	754.3	764.4	768.0	761.1	718.2	635.4
47.5°	845.6	860.5	854.7	850.6	842.0	841.2	847.0	852.5	825.2	755.1	653.5
50°	908.9	930.9	927.9	925.4	916.1	915.0	928.7	932.6	883.6	794.2	671.7
52.5°	957.6	986.2	991.7	988.4	986.2	986.8	1026.4	1020.6	952.9	841.5	692.9
55°	1015.1	1044.8	1064.9	1069.1	1074.6	1082.5	1161.0	1152.4	1048.7	909.7	715.2
57.5°	1091.3	1146.4	1176.6	1195.4	1210.5	1262.2	1361.8	1329.1	1181.3	997.8	741.6
60°	1203.6	1312.9	1375.6	1423.2	1453.2	1543.5	1664.3	1543.7	1335.4	1103.5	776.3
62.5°	1383.9	1562.2	1682.1	1709.1	1721.8	1807.6	1894.0	1708.0	1446.6	1173.3	781.8
65°	1558.6	1781.5	1921.5	1937.2	1927.9	1951.0	1975.2	1713.0	1420.7	1140.3	717.4
67°	1620.2	1833.2	1980.4	1999.4	1971.9	1964.5	1927.6	1622.7	1324.1	1039.1	627.7
67.5°	1616.9	1827.2	1979.9	1999.1	1971.9	1960.1	1905.9	1586.4	1286.2	1014.3	610.3
70°	1490.3	1692.3	1862.4	1898.4	1883.3	1851.9	1707.7	1343.7	1065.8	832.1	470.5
72.5°	1209.9	1428.2	1563.0	1602.9	1613.6	1533.0	1271.9	940.5	768.3	594.7	341.2
75°	812.3	1029.2	1139.5	1119.4	1054.2	916.9	671.4	496.1	421.0	345.9	211.1
77.5°	460.6	627.9	619.4	584.7	529.7	392.1	190.4	103.2	98.5	115.0	89.4
80°	307.6	387.2	413.6	427.1	424.0	290.0	78.7	39.9	34.4	34.4	33.8
82.5°	256.7	334.6	378.9	390.7	364.1	220.4	47.1	26.1	20.9	23.4	26.1
85°	108.1	168.7	223.2	214.6	170.6	85.9	23.9	13.8	13.8	18.2	22.8
87.5°	26.1	38.8	54.8	53.1	42.7	19.8	12.1	8.5	8.5	14.0	19.8
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°	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4	253.4
2.5°	251.8	250.7	250.7	249.6	249.0	248.5	248.2	248.5	247.7	246.8	247.1
5°	253.2	251.5	250.7	248.8	247.7	246.6	245.7	245.5	244.1	243.3	243.3
7.5°	257.8	255.6	254.0	251.8	249.6	247.9	246.6	245.7	243.8	242.4	242.2
10°	267.5	264.4	262.0	258.7	255.6	253.4	251.0	249.6	247.4	246.0	245.5
12.5°	281.8	277.4	273.5	268.6	265.0	261.7	260.3	258.1	257.3	256.5	256.7
15°	295.3	290.0	286.5	282.6	278.5	276.6	273.8	273.5	273.8	272.4	272.4
17.5°	309.0	304.9	300.8	299.4	295.5	294.2	292.2	291.1	288.7	286.2	283.2
20°	323.3	321.1	319.5	317.8	317.0	313.7	308.7	303.0	295.0	287.8	281.8
22.5°	341.8	340.4	340.7	339.3	334.9	326.6	315.4	303.2	290.3	278.8	269.7
25°	365.2	366.5	364.9	358.0	345.3	328.6	311.2	294.2	277.1	263.3	251.0
27.5°	394.9	393.8	386.1	368.5	346.7	322.8	300.5	280.1	259.8	243.8	228.4
30°	427.3	419.4	399.3	371.8	341.2	312.3	284.8	261.1	237.5	218.8	201.4
32.5°	460.1	437.3	404.8	367.9	331.6	297.5	266.6	238.9	211.6	190.7	170.6
35°	484.9	448.3	404.0	359.7	317.0	277.9	242.2	207.8	176.1	151.1	130.7
37.5°	507.7	454.3	398.5	347.0	296.9	252.1	207.5	170.3	138.4	113.4	95.8
40°	521.7	453.8	387.7	326.1	269.1	214.1	165.7	127.4	99.3	80.9	71.3
42.5°	530.0	448.0	369.3	298.3	230.9	171.4	122.2	87.8	70.7	62.7	58.3
45°	534.1	435.6	346.4	261.1	184.6	122.5	84.2	63.3	56.4	54.2	53.1
47.5°	531.6	418.3	313.7	219.3	137.6	83.9	60.3	53.4	51.2	50.1	49.8
50°	525.9	395.7	279.3	173.9	97.7	60.3	50.6	48.7	47.9	47.6	47.1
52.5°	517.6	369.0	240.0	134.8	69.3	50.1	47.3	46.5	46.0	45.1	44.9
55°	503.8	336.0	199.8	99.3	55.6	47.3	46.0	45.7	44.6	43.8	43.2
57.5°	487.3	300.8	161.8	77.9	51.2	46.2	45.4	45.1	44.0	42.9	41.8
60°	479.1	276.0	133.2	67.4	50.4	46.8	46.2	45.7	44.3	42.7	41.3
62.5°	458.7	249.3	114.7	64.1	51.5	48.7	48.4	47.3	45.4	43.8	41.6
65°	406.2	211.6	97.7	60.8	53.1	51.7	52.3	50.9	48.7	46.0	42.4
67°	343.1	172.0	82.6	58.3	55.0	55.9	56.7	55.9	52.3	48.2	43.5
67.5°	326.1	160.2	78.4	57.5	55.6	56.7	58.1	57.2	53.4	48.7	44.0
70°	245.2	114.7	62.2	54.5	57.5	60.5	63.3	63.0	59.2	53.4	46.0
72.5°	169.5	78.4	50.4	50.9	55.9	61.4	64.9	66.6	62.7	55.9	47.1
75°	102.1	50.1	42.4	46.0	50.9	56.4	62.2	62.7	58.3	51.5	44.0
77.5°	50.1	36.0	34.9	36.3	41.0	45.7	48.2	45.1	42.4	37.7	34.9
80°	30.3	28.3	27.8	30.8	33.6	32.7	30.8	28.3	27.0	25.9	24.8
82.5°	25.3	25.6	26.1	26.7	26.1	23.1	19.8	18.2	17.1	17.1	17.3
85°	25.9	26.4	24.2	22.3	19.8	16.5	13.5	11.6	11.8	12.1	12.1
87.5°	20.1	19.3	17.1	14.0	11.3	8.3	6.6	5.5	6.1	5.8	6.3
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-SL3

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	253.4	253.4	253.4	253.4	253.4
2.5°	247.1	246.8	247.1	247.1	247.4
5°	242.7	242.2	242.2	242.4	242.4
7.5°	241.6	241.1	241.1	241.3	241.1
10°	245.5	245.2	245.7	245.5	245.5
12.5°	257.0	257.0	258.1	258.7	258.1
15°	272.7	272.1	273.0	273.2	273.5
17.5°	281.5	279.0	278.2	278.8	277.7
20°	276.6	272.4	270.8	270.5	268.6
22.5°	262.5	256.5	254.0	252.9	250.7
25°	242.7	235.5	232.2	229.5	228.1
27.5°	219.0	210.2	205.6	203.4	202.5
30°	189.3	180.8	173.9	170.3	169.2
32.5°	156.3	143.9	136.8	132.4	129.3
35°	116.7	104.8	99.6	96.3	92.5
37.5°	84.8	77.6	73.2	71.0	70.2
40°	65.5	61.9	59.7	59.4	59.2
42.5°	56.7	55.0	54.8	54.2	53.7
45°	52.3	51.7	52.0	51.2	50.6
47.5°	49.3	49.0	49.0	48.4	48.2
50°	46.8	46.8	46.5	46.2	46.2
52.5°	44.6	44.9	44.9	44.3	44.3
55°	42.7	42.7	42.9	42.7	42.7
57.5°	41.3	41.0	41.3	41.3	41.3
60°	40.5	39.9	39.6	39.9	39.9
62.5°	39.6	38.8	38.5	38.5	38.8
65°	39.6	38.2	37.7	37.7	37.4
67°	39.9	37.7	36.6	36.0	35.8
67.5°	39.9	37.4	36.0	35.8	35.5
70°	39.9	36.3	34.4	33.0	33.0
72.5°	39.6	35.2	32.2	30.8	30.3
75°	37.7	33.3	30.5	28.9	28.3
77.5°	31.6	28.9	27.5	26.1	25.9
80°	23.9	22.6	21.5	18.4	17.1
82.5°	17.1	16.2	14.3	13.2	12.4
85°	12.1	11.3	10.5	9.4	9.4
87.5°	6.6	6.3	6.1	5.5	5.0
90°	0.0	0.0	0.0	0.0	0.0

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