

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: P162451

Luminaire Tested: **ECM-F03-LED-E1-SL3-HSS-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162451  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F03-LED-E1-SL3-HSS-7030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 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: 3728.8 lumens  
Efficiency: N/A  
Efficacy: 47.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1

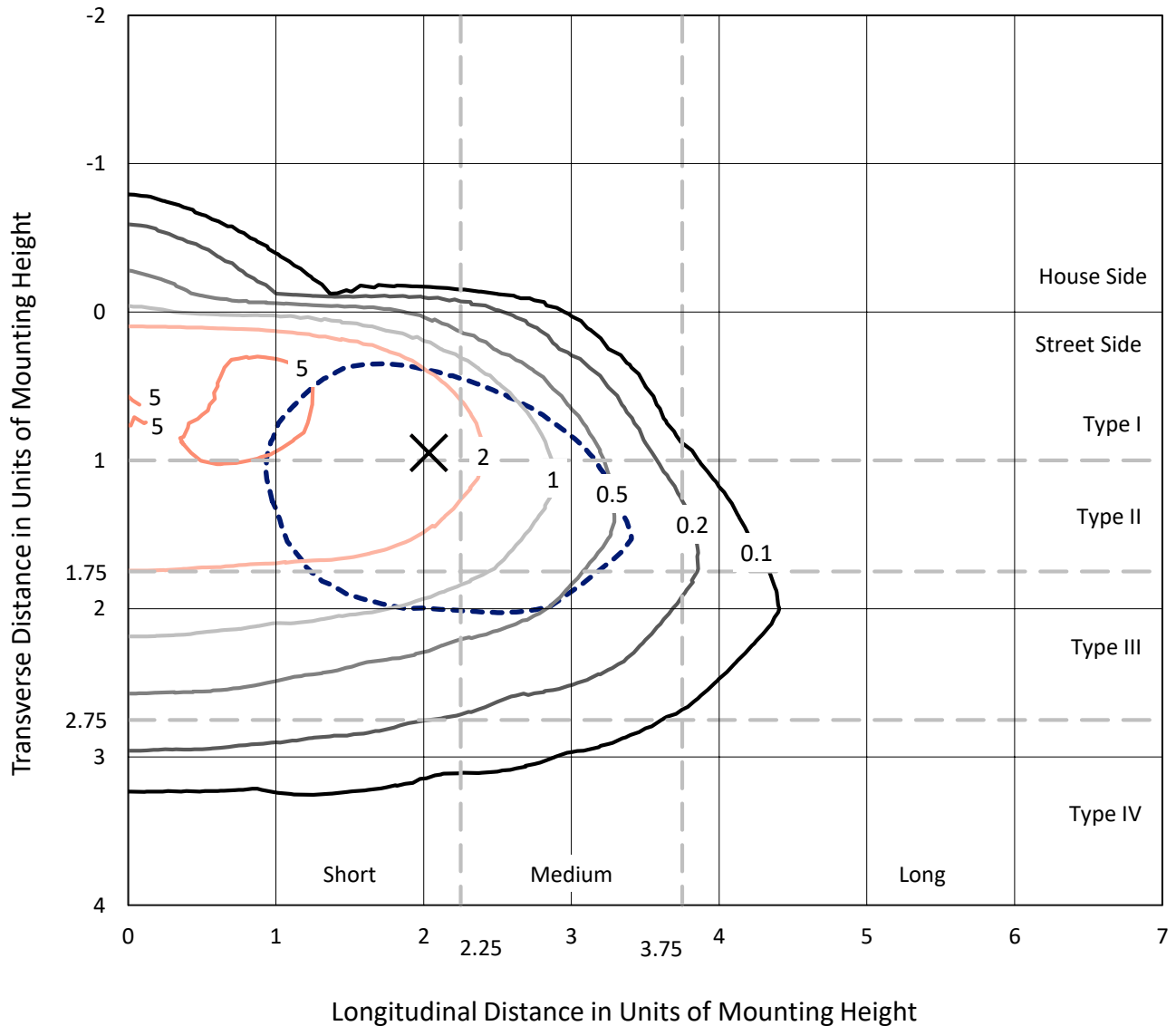
Input Watts (W): 78.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

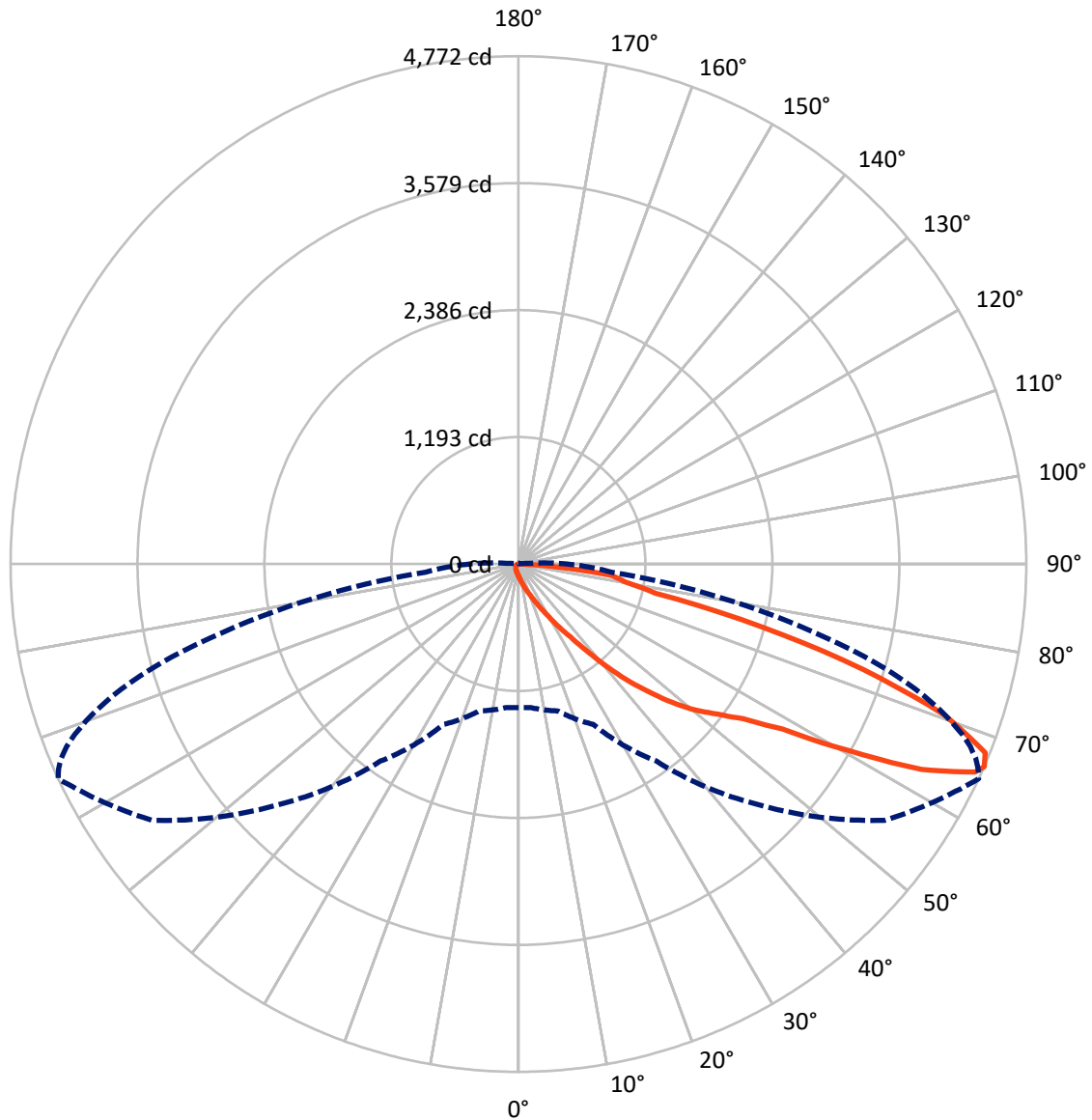
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	80.8	0.0	80.8
	% Fixture	2.2	0.0	2.2
<b>Street Side</b>	Lumens	3647.9	0.0	3647.9
	% Fixture	97.8	0.0	97.8
<b>Total</b>	Lumens	3728.8	0.0	3728.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.6	0.3
10°-20°	53.4	1.4
20°-30°	115.2	3.1
30°-40°	246.1	6.6
40°-50°	544.2	14.6
50°-60°	922.2	24.7
60°-70°	1230.6	33.0
70°-80°	542.1	14.5
80°-90°	62.4	1.7
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°	3728.8	100.0
0°-180°	3728.8	100.0



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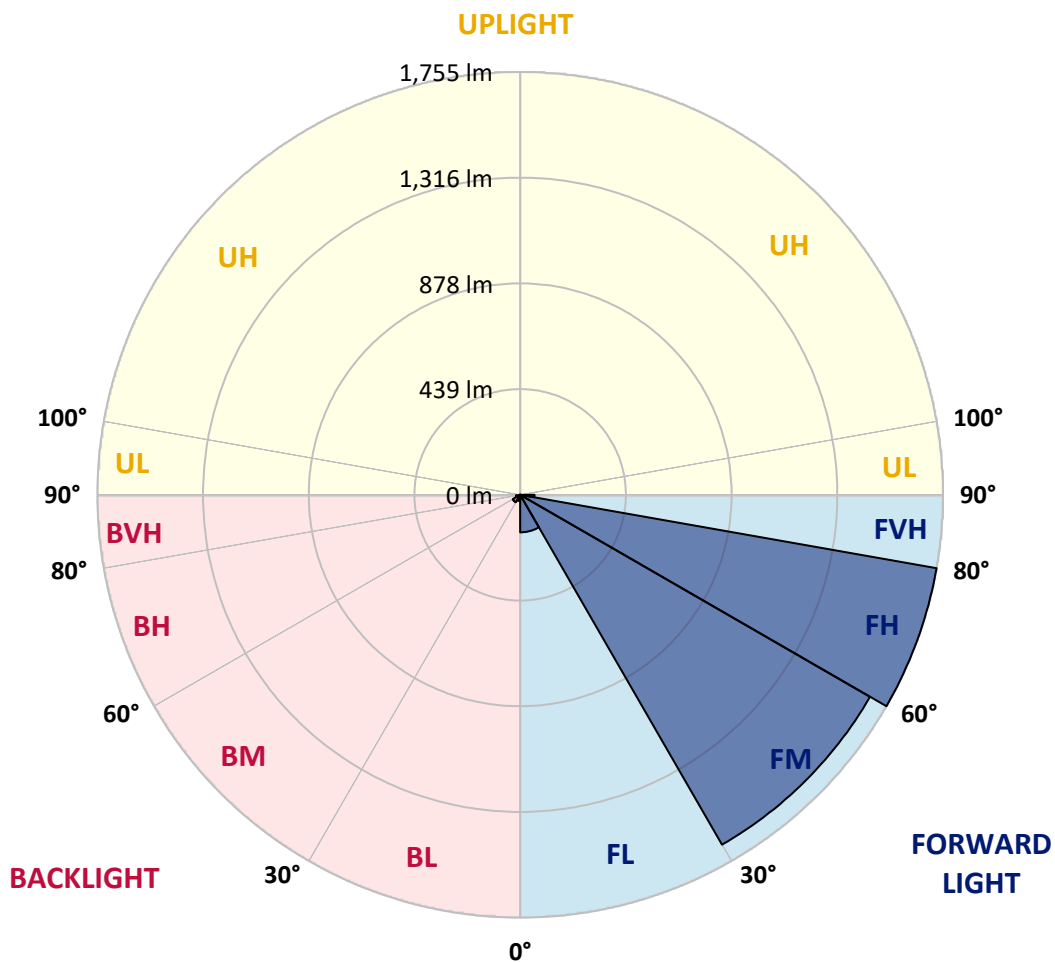
CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	155.7	4.2			
FM	(30°-60°)	1676.9	45.0			
FH	(60°-80°)	1755.3	47.1			G1/1800
FVH	(80°-90°)	59.9	1.6			G1/100
BL	(0°-30°)	25.5	0.7	B0/110		
BM	(30°-60°)	35.5	1.0	B0/220		
BH	(60°-80°)	17.3	0.5	B0/110		G0/110
BVH	(80°-90°)	2.5	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
2.5°	142.0	141.2	138.4	138.4	134.1	131.2	127.6	124.0	124.0	123.3	122.6
5°	187.8	183.5	182.8	174.9	168.4	159.2	150.6	139.0	137.6	136.2	135.5
7.5°	238.7	238.0	231.6	222.2	209.3	192.1	174.9	156.3	153.4	152.0	149.1
10°	304.7	301.1	292.5	276.7	257.3	234.4	206.4	177.0	173.5	170.6	169.2
12.5°	367.7	361.3	356.3	336.2	311.9	278.1	244.4	202.1	199.3	195.7	190.0
15°	426.5	420.8	412.2	395.0	367.7	325.4	286.1	234.4	227.3	222.2	217.9
17.5°	472.5	468.8	458.8	439.4	410.0	372.8	325.4	267.4	261.6	255.2	247.3
20°	516.1	511.1	495.4	468.8	437.3	408.6	372.0	310.4	302.5	294.7	286.1
22.5°	557.7	552.7	526.9	483.2	449.5	437.3	424.3	359.1	347.0	340.5	331.9
25°	615.8	605.0	564.9	495.4	450.2	459.5	481.7	422.2	410.8	401.4	387.9
27.5°	693.9	679.6	616.5	513.2	453.1	483.9	547.7	498.9	486.8	476.0	460.9
30°	782.1	772.8	697.5	556.3	473.9	519.7	621.5	596.4	582.1	569.2	551.2
32.5°	871.0	858.1	783.6	638.0	529.8	589.2	714.0	709.7	691.0	678.9	659.5
35°	949.1	942.6	887.5	772.1	657.3	711.2	837.3	842.3	825.8	813.0	791.4
37.5°	1002.2	1002.2	991.4	916.2	860.2	900.4	1018.6	1019.4	1002.9	973.5	962.8
40°	1029.4	1037.3	1076.0	1090.3	1087.5	1139.1	1256.7	1243.8	1230.1	1215.1	1179.2
42.5°	1085.4	1092.5	1174.9	1273.9	1338.4	1406.5	1487.5	1483.2	1466.7	1439.4	1406.5
45°	1180.0	1189.3	1287.5	1444.5	1577.1	1673.9	1725.5	1705.5	1688.9	1663.2	1645.9
47.5°	1300.4	1318.3	1429.4	1623.7	1783.6	1943.4	1997.2	1944.2	1929.8	1909.7	1881.7
50°	1428.7	1445.9	1564.2	1786.4	1967.1	2157.8	2247.4	2157.8	2137.0	2130.6	2099.0
52.5°	1539.8	1554.1	1668.1	1911.9	2107.6	2331.3	2461.7	2343.4	2328.4	2306.8	2283.9
55°	1605.8	1617.2	1724.1	1972.1	2202.9	2487.5	2668.9	2564.9	2542.7	2534.1	2501.1
57.5°	1628.0	1639.5	1735.5	1980.0	2254.5	2630.2	2920.5	2924.1	2897.6	2866.8	2856.7
60°	1628.0	1640.9	1721.9	1960.6	2304.7	2782.2	3256.0	3554.9	3497.6	3491.9	3455.3
62.5°	1560.6	1572.8	1654.6	1901.1	2372.1	2987.2	3723.4	4251.0	4234.5	4197.3	4137.0
65°	1414.3	1421.6	1501.8	1749.2	2346.3	3175.7	4128.4	4714.1	4687.6	4614.4	4537.1
66°	1348.4	1354.2	1429.4	1662.4	2261.7	3201.5	4200.1	4772.2	4728.4	4666.8	4579.4
67.5°	1253.1	1263.1	1316.2	1501.1	2058.9	3111.9	4155.0	4731.3	4693.3	4618.7	4531.3
70°	836.6	829.4	1016.5	1152.0	1568.5	2535.5	3727.7	4248.2	4248.9	4213.8	4178.6
72.5°	397.1	401.4	455.9	709.0	1026.6	1693.9	2967.1	3390.8	3439.5	3376.5	3332.7
75°	285.3	291.8	324.7	433.7	612.2	1016.5	1923.4	2371.4	2372.8	2261.0	2161.3
77.5°	83.2	86.7	121.8	267.4	458.8	686.1	1104.7	1318.3	1287.5	1207.2	1132.0
80°	34.4	34.4	35.8	85.3	184.2	466.0	772.8	1015.1	1011.5	980.6	936.2
82.5°	12.9	13.6	17.2	35.1	43.7	114.7	515.4	881.0	878.9	835.1	803.6
85°	1.4	1.4	4.3	15.1	16.5	21.5	103.2	388.5	386.4	388.5	340.5
87.5°	0.0	0.0	0.8	1.4	2.2	2.9	4.3	15.1	16.5	15.8	14.3
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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**CANDELA DISTRIBUTION (continued):**

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
2.5°	122.6	121.2	121.2	120.4	120.4	120.4	119.7	119.0	119.0	118.3	117.5
5°	134.1	132.6	131.9	130.4	129.8	129.0	127.6	126.9	125.5	124.7	124.0
7.5°	147.7	144.8	144.1	142.0	139.8	138.4	136.9	134.7	133.3	130.4	129.8
10°	164.9	161.3	158.4	155.5	153.4	149.8	147.7	144.8	142.0	139.8	137.6
12.5°	187.1	182.1	177.8	174.9	169.9	165.6	161.3	159.2	153.4	150.6	147.0
15°	211.5	205.8	200.7	195.0	191.4	184.2	178.5	172.1	169.2	164.1	158.4
17.5°	243.0	233.7	225.8	220.1	212.9	205.8	199.3	192.9	184.2	178.5	171.3
20°	276.7	268.8	258.1	248.1	239.5	230.8	221.5	212.9	205.0	195.7	187.1
22.5°	319.7	308.2	295.3	285.3	273.9	264.5	251.6	240.1	227.3	215.0	205.0
25°	374.2	359.1	347.0	332.7	319.0	304.7	288.9	274.5	258.1	246.6	229.4
27.5°	441.6	427.3	410.8	392.2	378.5	357.0	336.2	318.3	299.0	281.0	261.6
30°	527.6	506.8	489.6	471.7	444.5	423.7	399.3	374.9	348.4	330.5	301.1
32.5°	630.9	608.6	582.8	557.0	531.9	502.5	472.5	442.3	412.9	379.9	349.9
35°	757.0	730.5	701.1	673.2	634.4	602.9	564.9	523.3	490.3	452.3	414.3
37.5°	924.0	880.3	854.5	825.1	772.8	729.8	687.5	645.9	587.8	547.7	493.9
40°	1133.4	1107.5	1065.2	1018.0	970.6	914.0	856.7	801.4	734.1	678.1	615.8
42.5°	1379.3	1341.3	1298.2	1230.1	1182.1	1115.5	1050.2	977.1	894.6	823.0	749.8
45°	1610.1	1564.9	1532.0	1463.9	1413.7	1334.8	1255.9	1178.5	1083.2	990.7	906.1
47.5°	1859.6	1822.3	1767.8	1712.6	1661.7	1572.8	1487.5	1393.6	1293.2	1183.5	1073.8
50°	2078.9	2049.5	2012.3	1945.6	1889.0	1814.4	1714.1	1611.5	1484.6	1375.7	1251.0
52.5°	2265.3	2242.4	2190.0	2142.7	2091.8	2021.5	1932.0	1833.7	1696.8	1577.1	1435.2
55°	2485.4	2468.9	2423.0	2393.6	2348.5	2281.1	2197.2	2106.1	1961.4	1830.8	1670.3
57.5°	2845.9	2833.1	2792.9	2780.7	2736.3	2677.5	2574.3	2476.8	2307.6	2145.6	1962.0
60°	3443.1	3417.3	3358.5	3328.4	3234.5	3155.6	3021.6	2887.6	2683.2	2476.8	2255.9
62.5°	4082.6	4010.2	3898.3	3802.2	3668.9	3532.0	3352.8	3147.8	2908.3	2663.2	2409.4
65°	4427.4	4304.1	4162.9	4010.2	3837.4	3636.0	3410.2	3164.3	2906.9	2648.1	2380.0
66°	4466.8	4327.7	4177.9	4008.0	3815.9	3601.5	3372.2	3114.1	2846.7	2594.3	2326.2
67.5°	4417.3	4271.8	4113.4	3924.8	3717.0	3494.8	3253.9	2985.7	2728.4	2472.5	2211.5
70°	4071.1	3926.3	3785.0	3586.5	3365.0	3141.3	2913.4	2613.7	2370.0	2134.9	1902.6
72.5°	3251.0	3152.7	3013.0	2843.1	2627.3	2365.0	2175.0	1906.8	1695.4	1467.4	1287.5
75°	2031.6	1893.3	1720.5	1504.0	1339.1	1126.2	1015.1	811.5	691.0	585.7	483.9
77.5°	1038.8	934.8	813.6	691.8	574.9	458.8	354.8	250.9	169.2	117.5	87.5
80°	858.1	766.4	666.0	554.9	451.6	350.5	252.4	172.1	109.7	71.7	55.9
82.5°	709.0	631.5	542.0	438.7	349.1	275.3	191.4	124.7	77.4	50.2	39.4
85°	301.8	273.9	211.5	167.8	126.1	93.2	65.2	43.7	30.8	25.1	22.9
87.5°	12.9	14.3	13.6	10.8	7.9	7.9	7.2	5.7	5.7	5.7	5.7
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):**

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
2.5°	117.5	116.9	116.1	116.1	115.4	114.7	110.4	106.8	102.5	99.7	96.8
5°	122.6	121.8	120.4	119.7	118.3	117.5	108.3	100.4	93.9	88.9	85.3
7.5°	127.6	126.9	124.7	122.6	121.8	120.4	105.4	95.4	86.7	81.0	77.4
10°	134.1	131.9	129.8	126.9	124.7	122.6	102.5	89.6	80.3	75.2	71.7
12.5°	143.4	139.8	136.2	132.6	129.8	126.1	101.1	84.6	75.2	69.5	66.0
15°	154.1	149.1	144.8	140.5	135.5	131.9	98.2	80.3	71.0	65.2	60.9
17.5°	164.1	158.4	152.0	145.5	140.5	135.5	95.4	76.0	66.7	60.9	56.6
20°	178.5	169.9	162.0	154.1	147.0	140.5	91.0	71.7	63.1	56.6	52.3
22.5°	194.3	184.2	174.2	163.5	154.1	145.5	87.5	68.1	59.5	53.1	48.0
25°	214.4	202.1	188.5	174.9	164.1	152.7	83.8	64.5	55.9	49.5	44.4
27.5°	242.3	225.1	210.1	192.9	176.4	163.5	81.0	61.7	52.3	45.8	40.9
30°	280.3	255.2	231.6	212.9	193.6	174.9	78.1	58.1	49.5	42.3	36.6
32.5°	322.6	293.2	265.9	238.0	213.6	192.1	75.2	55.2	45.8	38.7	33.7
35°	374.9	337.6	301.1	268.8	239.5	210.7	72.4	52.3	43.0	35.1	30.1
37.5°	450.2	403.6	355.6	314.0	276.0	238.0	70.3	49.5	39.4	31.5	26.5
40°	553.4	493.2	434.5	377.8	328.3	281.0	67.4	46.6	36.6	28.7	23.7
42.5°	665.2	592.1	514.7	450.9	382.8	323.3	64.5	43.7	33.7	25.8	20.8
45°	804.4	713.3	619.4	532.6	449.5	372.8	61.7	40.9	30.1	22.9	17.9
47.5°	956.3	840.2	734.1	625.1	526.2	434.5	58.1	38.7	27.2	20.1	15.8
50°	1112.6	990.0	855.9	731.9	614.4	496.1	54.5	35.1	24.4	17.9	12.9
52.5°	1281.0	1136.3	999.3	845.2	708.3	577.1	50.9	32.3	22.2	15.8	10.8
55°	1495.4	1333.4	1172.8	1000.0	835.1	671.0	47.4	28.7	19.4	13.6	8.6
57.5°	1764.9	1572.8	1375.7	1180.7	980.6	794.3	44.4	25.1	16.5	11.5	7.2
60°	2019.4	1795.0	1556.3	1331.9	1106.1	888.9	40.1	22.2	14.3	9.3	7.2
62.5°	2151.3	1895.4	1638.1	1390.7	1149.8	922.6	35.8	18.6	12.2	7.9	6.5
65°	2119.0	1858.1	1608.6	1359.1	1123.3	901.1	31.5	16.5	10.8	7.2	6.5
66°	2072.4	1814.4	1563.5	1326.2	1101.1	878.2	29.4	15.8	10.0	7.2	5.7
67.5°	1970.6	1721.2	1481.7	1261.0	1040.2	834.4	26.5	14.3	9.3	6.5	5.7
70°	1683.2	1456.6	1265.3	1068.9	888.9	703.2	21.5	12.2	7.9	5.7	5.7
72.5°	1114.0	959.9	832.3	716.1	598.6	464.5	17.9	10.0	6.5	5.7	5.1
75°	420.0	379.9	326.2	293.2	255.9	224.4	14.3	6.5	5.1	5.1	5.1
77.5°	74.6	68.8	60.9	55.9	51.6	47.4	11.5	4.3	4.3	5.1	5.1
80°	50.2	46.6	42.3	38.7	35.8	32.3	7.9	3.6	4.3	4.3	5.1
82.5°	35.8	33.7	31.5	28.7	26.5	23.7	5.1	3.6	4.3	4.3	4.3
85°	21.5	20.1	18.6	17.2	15.1	14.3	3.6	3.6	3.6	4.3	4.3
87.5°	5.7	5.1	5.7	5.7	4.3	5.1	2.9	2.9	2.9	3.6	3.6
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-F03-LED-E1-SL3-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	145°	155°	165°	175°	180°
0°	112.6	112.6	112.6	112.6	112.6
2.5°	95.4	95.4	93.9	96.1	96.1
5°	82.4	82.4	81.7	82.4	82.4
7.5°	75.2	74.6	74.6	74.6	75.2
10°	68.8	68.1	68.1	68.1	68.1
12.5°	63.1	62.4	61.7	62.4	62.4
15°	58.1	56.6	56.6	56.6	56.6
17.5°	53.8	52.3	51.6	51.6	51.6
20°	49.5	47.4	47.4	47.4	47.4
22.5°	45.2	43.0	43.0	43.0	43.0
25°	40.9	38.7	38.7	38.7	38.7
27.5°	37.2	35.1	35.1	35.1	35.1
30°	32.9	31.5	31.5	32.3	31.5
32.5°	30.1	28.0	28.0	28.7	28.7
35°	26.5	25.1	25.1	25.1	25.1
37.5°	22.9	21.5	21.5	21.5	21.5
40°	20.1	18.6	17.9	18.6	18.6
42.5°	17.2	15.8	15.1	15.1	15.1
45°	15.1	12.9	12.2	12.9	12.9
47.5°	12.2	10.8	10.8	11.5	11.5
50°	9.3	9.3	10.0	11.5	11.5
52.5°	8.6	8.6	10.0	11.5	11.5
55°	7.9	8.6	10.0	10.8	11.5
57.5°	7.2	8.6	10.0	10.8	10.8
60°	7.2	7.9	9.3	10.8	10.8
62.5°	6.5	7.2	8.6	10.0	10.0
65°	6.5	7.2	8.6	10.0	10.0
66°	6.5	7.2	8.6	10.0	10.0
67.5°	6.5	7.2	8.6	10.0	10.0
70°	6.5	7.2	8.6	9.3	9.3
72.5°	5.7	6.5	7.9	9.3	9.3
75°	5.7	6.5	7.9	9.3	9.3
77.5°	5.7	6.5	7.9	9.3	9.3
80°	5.7	6.5	7.9	8.6	9.3
82.5°	5.1	6.5	7.2	8.6	8.6
85°	5.1	5.7	7.2	7.9	8.6
87.5°	4.3	5.1	5.7	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)