

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: P141074

Luminaire Tested: **ECM-F02-LED-E1-SL3-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141074  
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-F02-LED-E1-SL3-7030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (14) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4363.9 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

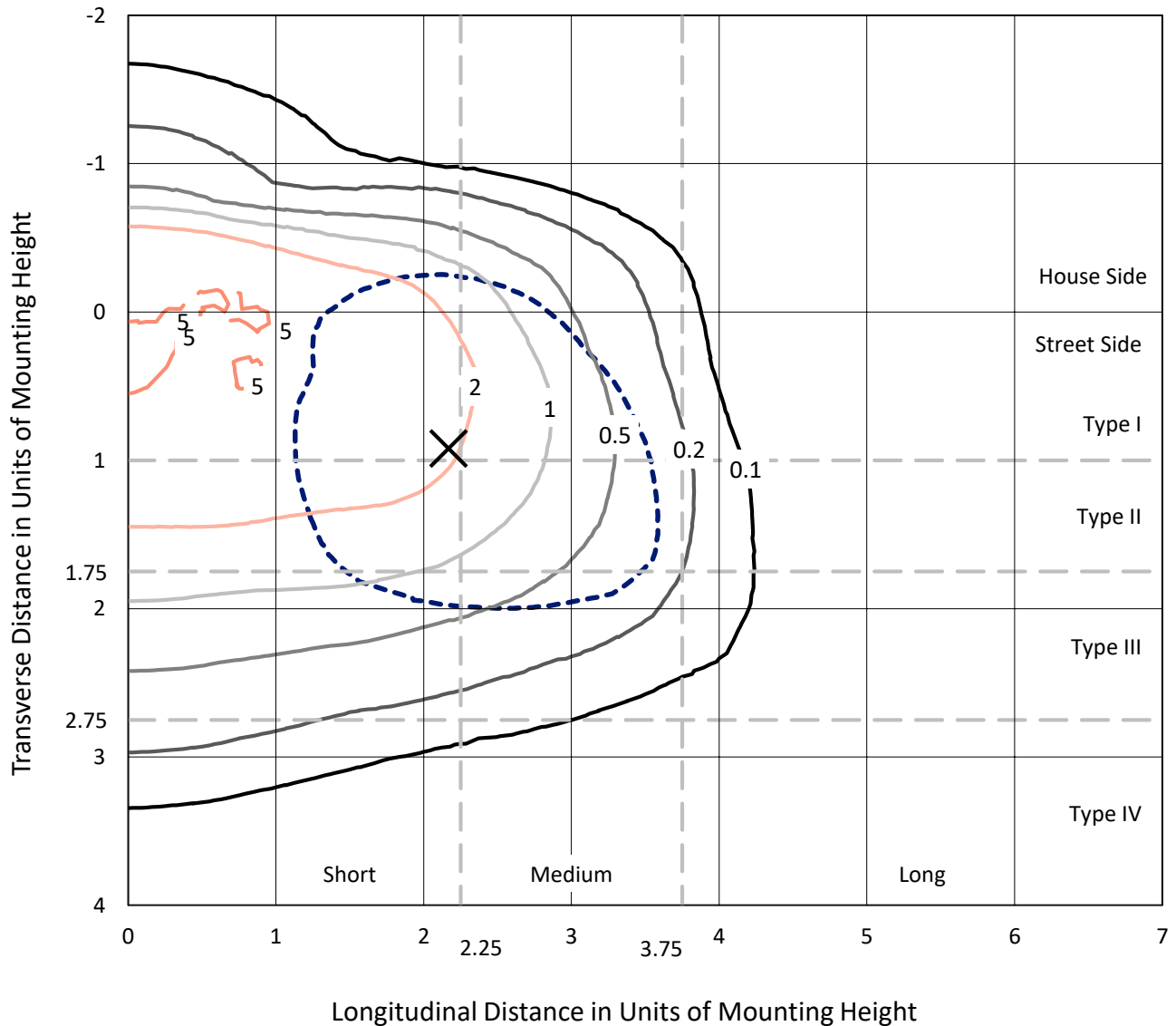
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P141074  
 CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

### Iso-Footcandle Lines of Horizontal Illumination

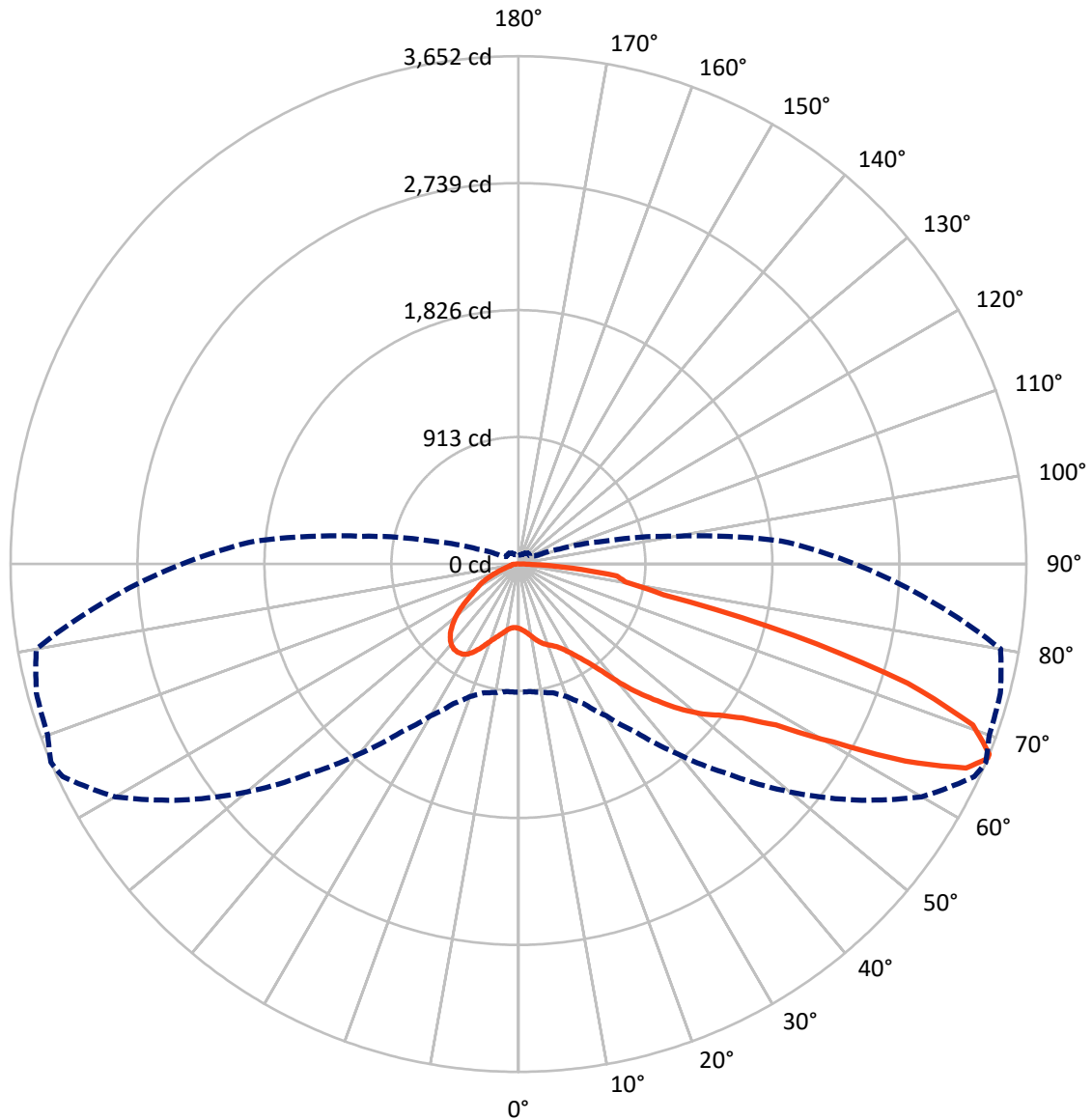
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P141074  
CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P141074

CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

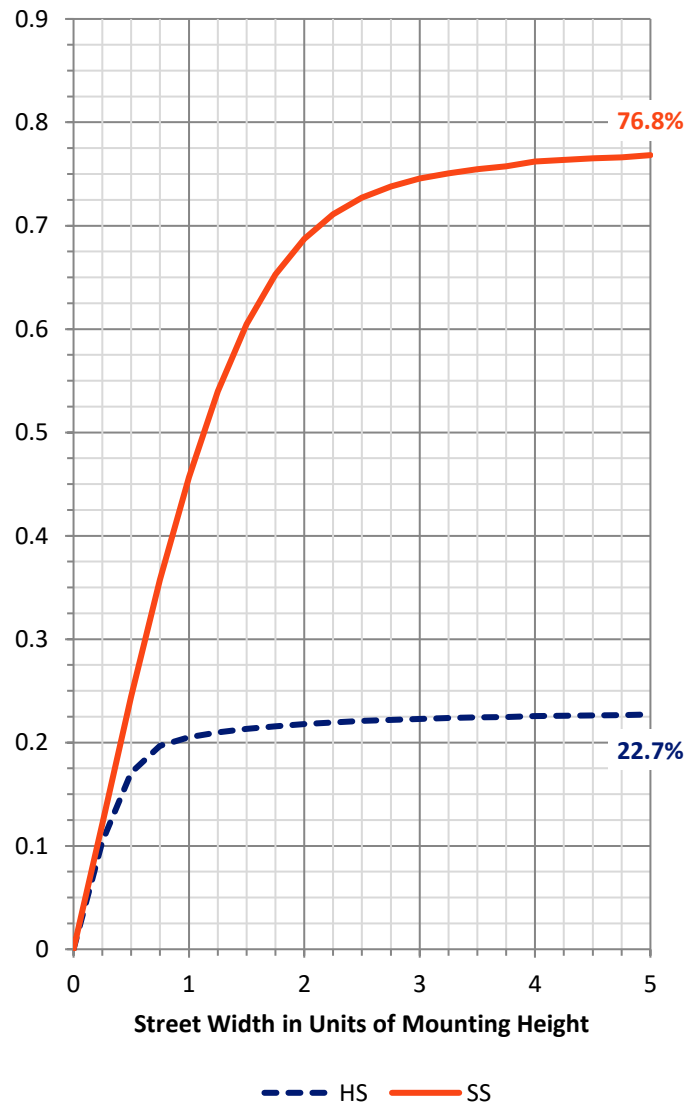
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1003.9	0.0	1003.9
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	3360.0	0.0	3360.0
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	4363.9	0.0	4363.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.4	1.1
10°-20°	160.5	3.7
20°-30°	285.6	6.5
30°-40°	410.7	9.4
40°-50°	625.9	14.3
50°-60°	914.2	20.9
60°-70°	1231.8	28.2
70°-80°	604.8	13.9
80°-90°	84.1	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°	4363.9	100.0
0°-180°	4363.9	100.0



REPORT NUMBER: P141074

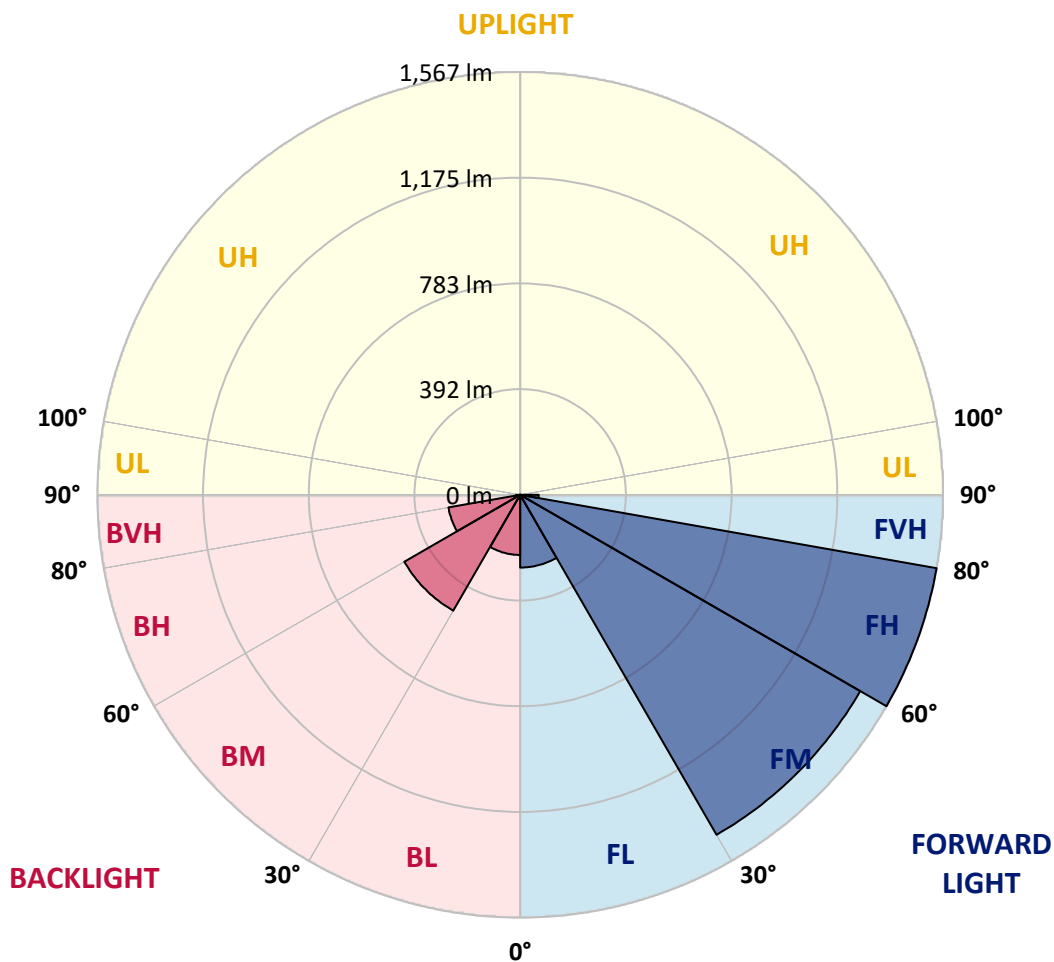
CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.6	6.2			
FM	(30°-60°)	1454.8	33.3			
FH	(60°-80°)	1566.7	35.9			G1/1800
FVH	(80°-90°)	68.9	1.6			G1/100
BL	(0°-30°)	222.9	5.1	B1/500		
BM	(30°-60°)	495.9	11.4	B1/1000		
BH	(60°-80°)	270.0	6.2	B1/500		G1/500
BVH	(80°-90°)	15.2	0.3			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 III Short





REPORT NUMBER: P141074

CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	487.1	484.6	486.6	486.1	484.6	482.6	483.6	482.1	481.0	479.5	478.0
5°	518.7	517.2	516.2	514.7	513.7	512.2	511.2	508.7	505.2	502.7	500.7
7.5°	549.9	549.4	547.9	545.9	541.9	540.9	537.3	534.8	531.8	526.8	522.8
10°	586.6	586.1	583.6	580.6	576.1	571.5	567.5	561.5	555.4	550.9	547.4
12.5°	630.8	628.3	623.3	619.3	614.3	607.2	600.7	593.6	585.1	578.1	574.0
15°	675.1	672.1	668.0	662.5	655.0	645.4	635.9	625.3	612.2	603.2	597.7
17.5°	711.3	709.3	704.7	697.2	689.7	678.1	665.5	650.9	634.9	621.3	612.7
20°	737.4	735.4	728.4	719.3	709.3	696.2	682.6	666.5	647.4	630.8	621.3
22.5°	748.5	745.4	737.4	725.3	711.8	695.7	681.1	667.5	649.9	637.4	627.3
25°	752.0	748.5	737.9	722.8	705.2	684.6	668.0	657.5	646.9	642.4	638.9
27.5°	750.0	747.0	735.4	716.8	693.2	669.0	651.5	643.9	644.4	653.0	657.0
30°	742.9	739.4	728.9	708.3	683.1	657.0	641.4	638.9	650.4	672.1	688.1
32.5°	731.4	728.9	720.3	702.7	680.1	657.5	646.4	652.0	672.1	705.7	733.4
35°	728.4	727.9	723.8	714.3	697.7	683.1	678.6	694.2	727.4	773.6	808.8
37.5°	727.9	730.4	732.4	732.4	728.9	727.9	741.4	763.0	812.3	870.1	927.4
40°	737.9	742.4	752.5	765.6	778.1	796.2	823.9	864.6	915.9	986.2	1057.6
42.5°	769.1	779.1	796.2	818.8	851.5	885.2	929.9	980.7	1046.5	1117.4	1188.3
45°	829.9	844.5	857.0	892.7	936.0	975.7	1034.0	1100.8	1173.2	1262.2	1338.6
47.5°	910.3	920.9	947.0	984.7	1037.5	1094.3	1150.6	1208.9	1295.9	1388.9	1481.3
50°	990.7	998.8	1026.4	1070.7	1140.0	1202.4	1266.7	1324.5	1399.4	1497.9	1588.4
52.5°	1050.6	1061.6	1085.8	1129.0	1206.9	1277.8	1351.2	1415.0	1499.4	1587.9	1682.4
55°	1091.8	1098.8	1120.9	1163.2	1236.5	1317.5	1400.4	1478.8	1579.4	1679.4	1773.4
57.5°	1098.3	1105.4	1125.5	1162.7	1234.0	1319.0	1414.0	1510.0	1631.6	1763.8	1887.0
60°	1090.8	1096.3	1113.9	1144.6	1211.9	1304.9	1418.0	1538.6	1688.4	1858.8	2034.8
62.5°	1057.1	1062.6	1078.7	1103.8	1163.7	1264.2	1405.9	1580.9	1769.4	1983.5	2241.4
65°	993.8	997.3	1012.4	1032.5	1092.8	1194.8	1351.2	1572.3	1833.2	2124.8	2458.5
67°	921.9	920.4	937.5	957.6	1012.9	1106.9	1259.7	1477.3	1782.4	2135.8	2549.5
67.5°	899.8	903.8	920.4	934.4	988.2	1079.2	1225.5	1440.6	1739.2	2110.7	2548.0
70°	742.9	750.5	759.5	768.6	815.8	882.7	990.2	1198.3	1439.6	1791.5	2313.3
72.5°	509.7	494.6	501.2	498.1	512.7	554.9	629.8	812.8	1004.3	1306.9	1717.1
75°	258.4	275.0	272.9	285.5	306.1	332.8	367.4	435.8	586.1	764.0	1062.6
77.5°	144.8	140.7	154.8	157.8	169.9	198.0	259.4	349.4	418.2	491.1	600.7
80°	65.8	72.9	77.4	70.4	72.9	78.9	102.5	160.9	270.4	411.7	473.5
82.5°	36.7	39.2	45.7	46.2	48.3	49.8	53.8	62.3	83.9	169.9	334.3
85°	23.1	24.1	30.7	33.7	35.2	35.2	35.2	37.2	42.7	50.3	86.5
87.5°	8.5	9.0	14.1	18.6	19.1	18.1	17.1	19.6	18.1	18.6	28.1
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: P141074

CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	67°	70°	75°	80°	85°	90°	95°	100°
0°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	477.0	475.0	473.0	472.5	471.0	470.0	467.5	465.5	463.5	461.9	460.4
5°	496.1	492.1	488.6	487.1	485.1	482.6	477.5	474.0	471.0	468.0	465.0
7.5°	517.7	512.7	507.7	505.7	502.7	498.1	492.6	488.6	483.6	479.0	475.0
10°	541.9	536.3	532.3	530.3	527.8	521.3	517.7	510.7	505.2	499.1	494.1
12.5°	568.0	565.5	560.0	558.0	555.4	550.9	545.9	539.9	532.8	526.3	520.3
15°	591.6	587.6	584.1	583.6	582.1	579.6	573.0	566.5	560.5	551.9	546.9
17.5°	606.2	604.7	604.2	603.7	602.7	601.2	598.2	591.1	585.6	578.6	571.5
20°	615.3	616.8	619.3	621.3	622.3	623.3	621.8	614.8	609.2	603.2	597.2
22.5°	624.8	628.8	635.4	638.4	641.9	646.9	645.9	641.4	638.4	631.3	626.8
25°	638.4	646.4	657.5	661.5	668.0	674.6	676.1	673.6	670.6	665.5	665.5
27.5°	661.5	673.1	687.6	696.2	702.7	711.8	714.8	713.3	713.8	710.8	717.8
30°	697.7	713.8	733.4	742.4	750.5	761.0	763.0	766.1	764.0	769.6	778.1
32.5°	752.5	772.6	792.7	801.2	808.3	819.3	825.9	823.9	830.9	834.4	846.5
35°	836.9	857.0	872.6	874.1	882.2	888.2	894.2	892.2	911.3	918.9	925.4
37.5°	953.6	970.6	980.2	976.7	967.1	978.7	986.7	998.8	1010.9	1024.4	1000.3
40°	1104.9	1132.0	1128.0	1122.9	1104.9	1107.4	1110.9	1117.4	1137.5	1133.0	1064.1
42.5°	1248.6	1276.3	1271.7	1266.2	1242.1	1229.5	1239.1	1250.6	1261.7	1219.0	1116.4
45°	1393.9	1419.0	1397.4	1404.9	1383.3	1377.8	1396.4	1402.9	1390.4	1311.9	1160.6
47.5°	1544.7	1571.8	1561.3	1553.7	1538.1	1536.6	1547.2	1557.2	1507.5	1379.3	1193.8
50°	1660.3	1700.5	1695.0	1690.5	1673.4	1671.4	1696.5	1703.5	1614.0	1450.7	1227.0
52.5°	1749.3	1801.5	1811.6	1805.6	1801.5	1802.5	1874.9	1864.4	1740.7	1537.1	1265.7
55°	1854.3	1908.6	1945.3	1952.8	1962.9	1977.5	2120.7	2105.1	1915.6	1661.8	1306.4
57.5°	1993.6	2094.1	2149.4	2183.6	2211.2	2305.7	2487.7	2427.9	2157.9	1822.7	1354.7
60°	2198.6	2398.2	2512.8	2599.8	2654.6	2819.4	3040.1	2819.9	2439.4	2015.7	1418.0
62.5°	2527.9	2853.6	3072.8	3122.0	3145.2	3302.0	3459.8	3120.0	2642.5	2143.4	1428.1
65°	2847.1	3254.2	3510.1	3538.7	3521.7	3563.9	3608.1	3129.1	2595.2	2083.0	1310.4
67°	2959.7	3348.7	3617.7	3652.3	3602.1	3588.5	3521.1	2964.2	2418.8	1898.1	1146.6
67.5°	2953.6	3337.7	3616.7	3651.8	3602.1	3580.5	3481.4	2897.8	2349.4	1852.8	1114.9
70°	2722.4	3091.4	3402.0	3467.9	3440.2	3382.9	3119.5	2454.5	1946.8	1520.1	859.6
72.5°	2210.2	2608.8	2855.1	2928.0	2947.6	2800.3	2323.3	1718.1	1403.4	1086.3	623.3
75°	1483.9	1880.0	2081.5	2044.8	1925.7	1674.9	1226.5	906.3	769.1	631.8	385.5
77.5°	841.5	1147.1	1131.5	1068.2	967.6	716.3	347.8	188.5	180.0	210.1	163.4
80°	562.0	707.2	755.5	780.1	774.6	529.8	143.8	72.9	62.8	62.8	61.8
82.5°	469.0	611.2	692.2	713.8	665.0	402.6	86.0	47.8	38.2	42.7	47.8
85°	197.5	308.1	407.7	392.1	311.7	156.8	43.7	25.1	25.1	33.2	41.7
87.5°	47.8	70.9	100.0	97.0	77.9	36.2	22.1	15.6	15.6	25.6	36.2
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: P141074

CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	459.9	457.9	457.9	455.9	454.9	453.9	453.4	453.9	452.4	450.9	451.4
5°	462.4	459.4	457.9	454.4	452.4	450.4	448.9	448.4	445.9	444.4	444.4
7.5°	471.0	467.0	464.0	459.9	455.9	452.9	450.4	448.9	445.4	442.8	442.3
10°	488.6	483.1	478.5	472.5	467.0	463.0	458.4	455.9	451.9	449.4	448.4
12.5°	514.7	506.7	499.6	490.6	484.1	478.0	475.5	471.5	470.0	468.5	469.0
15°	539.4	529.8	523.3	516.2	508.7	505.2	500.1	499.6	500.1	497.6	497.6
17.5°	564.5	556.9	549.4	546.9	539.9	537.3	533.8	531.8	527.3	522.8	517.2
20°	590.6	586.6	583.6	580.6	579.1	573.0	564.0	553.4	538.9	525.8	514.7
22.5°	624.3	621.8	622.3	619.8	611.7	596.7	576.1	553.9	530.3	509.2	492.6
25°	667.0	669.5	666.5	654.0	630.8	600.2	568.5	537.3	506.2	481.0	458.4
27.5°	721.3	719.3	705.2	673.1	633.4	589.6	548.9	511.7	474.5	445.4	417.2
30°	780.6	766.1	729.4	679.1	623.3	570.5	520.3	477.0	433.8	399.6	367.9
32.5°	840.5	798.7	739.4	672.1	605.7	543.4	487.1	436.3	386.5	348.3	311.7
35°	885.7	818.8	737.9	657.0	579.1	507.7	442.3	379.5	321.7	276.0	238.8
37.5°	927.4	829.9	727.9	633.9	542.4	460.4	379.0	311.1	252.8	207.1	174.9
40°	953.0	828.9	708.3	595.7	491.6	391.1	302.6	232.7	181.5	147.8	130.2
42.5°	968.1	818.3	674.6	544.9	421.7	313.2	223.2	160.3	129.2	114.6	106.6
45°	975.7	795.7	632.9	477.0	337.3	223.7	153.8	115.6	103.0	99.0	97.0
47.5°	971.1	764.0	573.0	400.6	251.3	153.3	110.1	97.5	93.5	91.5	91.0
50°	960.6	722.8	510.2	317.7	178.4	110.1	92.5	89.0	87.5	87.0	86.0
52.5°	945.5	674.1	438.3	246.3	126.7	91.5	86.5	84.9	83.9	82.4	81.9
55°	920.4	613.8	364.9	181.5	101.5	86.5	83.9	83.4	81.4	79.9	78.9
57.5°	890.2	549.4	295.6	142.3	93.5	84.4	82.9	82.4	80.4	78.4	76.4
60°	875.1	504.2	243.3	123.2	92.0	85.5	84.4	83.4	80.9	77.9	75.4
62.5°	837.9	455.4	209.6	117.1	94.0	89.0	88.5	86.5	82.9	79.9	75.9
65°	741.9	386.5	178.4	111.1	97.0	94.5	95.5	93.0	89.0	83.9	77.4
67°	626.8	314.2	150.8	106.6	100.5	102.0	103.5	102.0	95.5	88.0	79.4
67.5°	595.7	292.5	143.3	105.1	101.5	103.5	106.1	104.6	97.5	89.0	80.4
70°	447.9	209.6	113.6	99.5	105.1	110.6	115.6	115.1	108.1	97.5	83.9
72.5°	309.6	143.3	92.0	93.0	102.0	112.1	118.6	121.6	114.6	102.0	86.0
75°	186.5	91.5	77.4	83.9	93.0	103.0	113.6	114.6	106.6	94.0	80.4
77.5°	91.5	65.8	63.8	66.4	74.9	83.4	88.0	82.4	77.4	68.9	63.8
80°	55.3	51.8	50.8	56.3	61.3	59.8	56.3	51.8	49.3	47.3	45.2
82.5°	46.2	46.7	47.8	48.8	47.8	42.2	36.2	33.2	31.2	31.2	31.7
85°	47.3	48.3	44.2	40.7	36.2	30.2	24.6	21.1	21.6	22.1	22.1
87.5°	36.7	35.2	31.2	25.6	20.6	15.1	12.1	10.1	11.1	10.6	11.6
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: P141074

CATALOG NUMBER: ECM-F02-LED-E1-SL3-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	463.0	463.0	463.0	463.0	463.0
2.5°	451.4	450.9	451.4	451.4	451.9
5°	443.3	442.3	442.3	442.8	442.8
7.5°	441.3	440.3	440.3	440.8	440.3
10°	448.4	447.9	448.9	448.4	448.4
12.5°	469.5	469.5	471.5	472.5	471.5
15°	498.1	497.1	498.6	499.1	499.6
17.5°	514.2	509.7	508.2	509.2	507.2
20°	505.2	497.6	494.6	494.1	490.6
22.5°	479.5	468.5	464.0	461.9	457.9
25°	443.3	430.3	424.2	419.2	416.7
27.5°	400.1	384.0	375.5	371.5	370.0
30°	345.8	330.2	317.7	311.1	309.1
32.5°	285.5	262.9	249.8	241.8	236.3
35°	213.1	191.5	182.0	175.9	168.9
37.5°	154.8	141.8	133.7	129.7	128.2
40°	119.6	113.1	109.1	108.6	108.1
42.5°	103.5	100.5	100.0	99.0	98.0
45°	95.5	94.5	95.0	93.5	92.5
47.5°	90.0	89.5	89.5	88.5	88.0
50°	85.5	85.5	84.9	84.4	84.4
52.5°	81.4	81.9	81.9	80.9	80.9
55°	77.9	77.9	78.4	77.9	77.9
57.5°	75.4	74.9	75.4	75.4	75.4
60°	73.9	72.9	72.4	72.9	72.9
62.5°	72.4	70.9	70.4	70.4	70.9
65°	72.4	69.9	68.9	68.9	68.4
67°	72.9	68.9	66.9	65.8	65.3
67.5°	72.9	68.4	65.8	65.3	64.8
70°	72.9	66.4	62.8	60.3	60.3
72.5°	72.4	64.3	58.8	56.3	55.3
75°	68.9	60.8	55.8	52.8	51.8
77.5°	57.8	52.8	50.3	47.8	47.3
80°	43.7	41.2	39.2	33.7	31.2
82.5°	31.2	29.7	26.1	24.1	22.6
85°	22.1	20.6	19.1	17.1	17.1
87.5°	12.1	11.6	11.1	10.1	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)