

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: P142039

Luminaire Tested: **ECM-E03-LED-E1-T4-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P142039  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33685)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E03-LED-E1-T4-7030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4  
Light Source: (63) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7879.8 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 75.2  
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

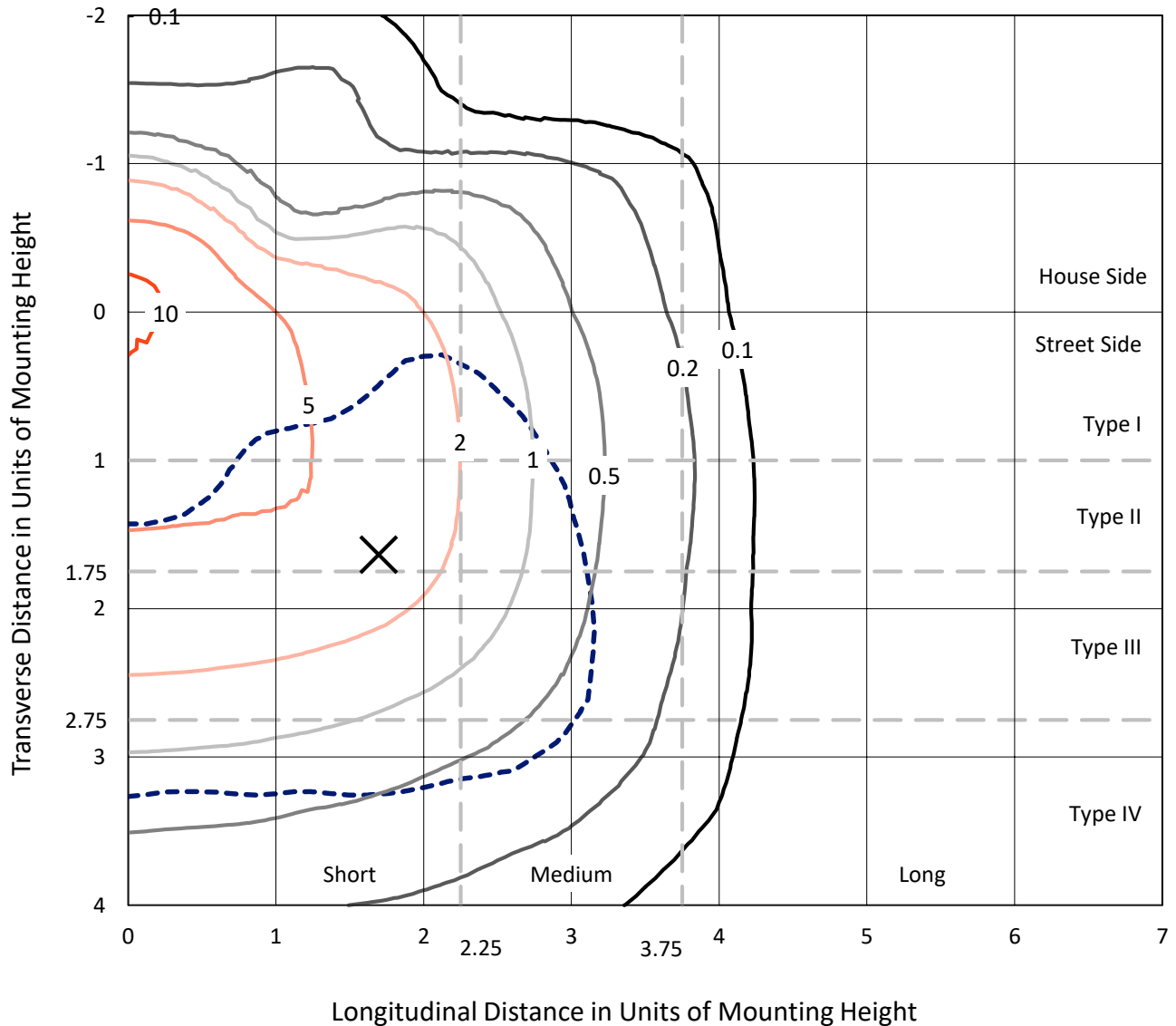


REPORT NUMBER: P142039

CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

### Iso-Footcandle Lines of Horizontal Illumination

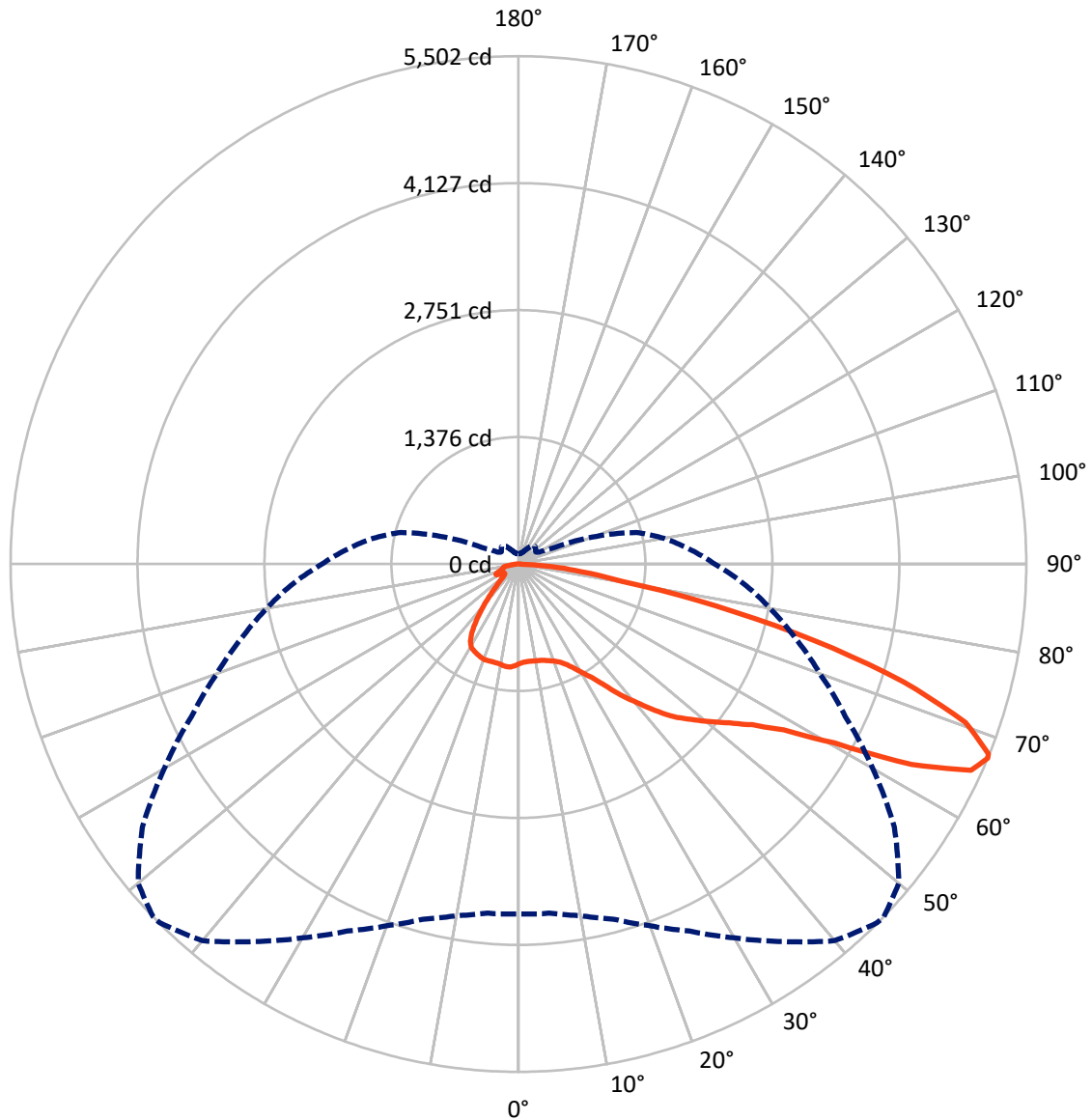
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P142039  
CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1565.9	0.0	1565.9
	% Fixture	19.9	0.0	19.9
<b>Street Side</b>	Lumens	6313.9	0.0	6313.9
	% Fixture	80.1	0.0	80.1
<b>Total</b>	Lumens	7879.8	0.0	7879.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.9	1.3
10°-20°	310.1	3.9
20°-30°	521.4	6.6
30°-40°	779.8	9.9
40°-50°	1015.7	12.9
50°-60°	1391.1	17.7
60°-70°	2199.2	27.9
70°-80°	1364.1	17.3
80°-90°	194.4	2.5
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°	7879.8	100.0
0°-180°	7879.8	100.0



REPORT NUMBER: P142039

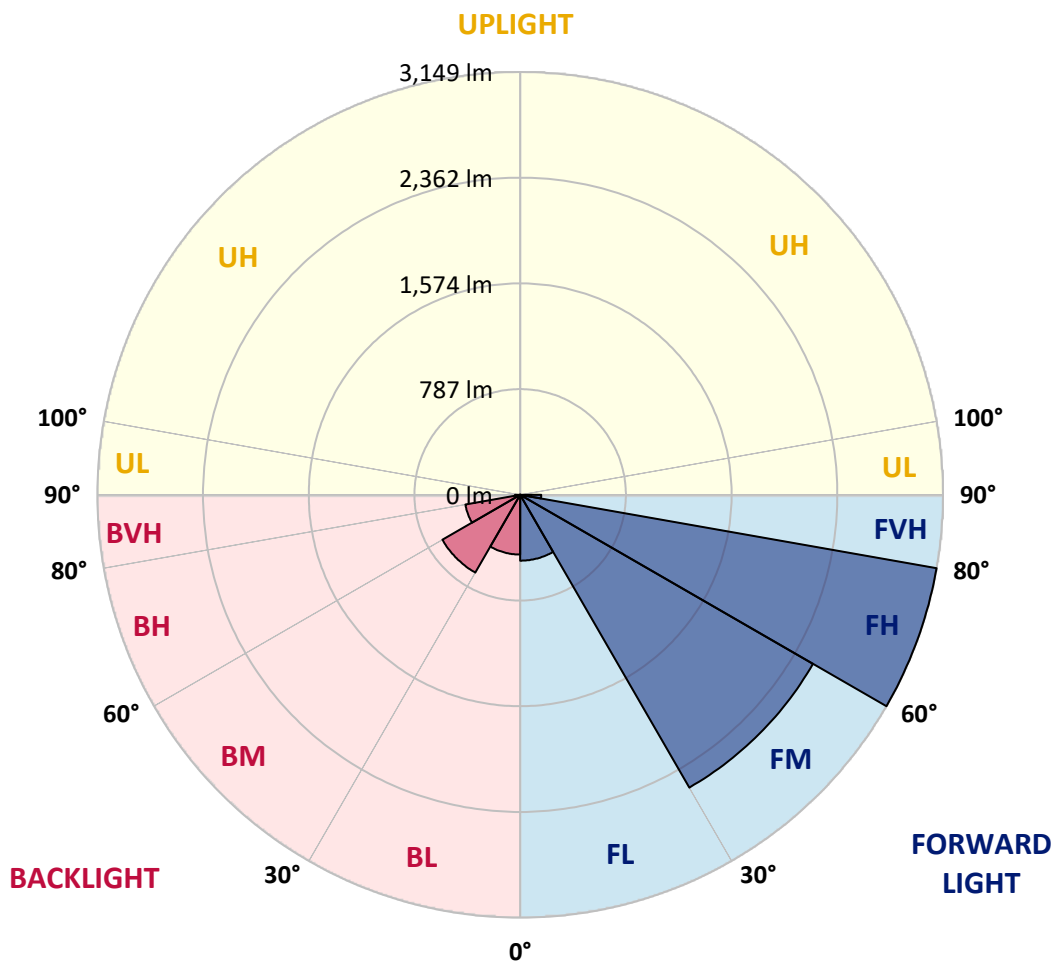
CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	490.7	6.2			
FM	(30°-60°)	2517.9	32.0			
FH	(60°-80°)	3148.8	40.0			G2/5000
FVH	(80°-90°)	156.6	2.0			G2/225
BL	(0°-30°)	444.8	5.6	B1/500		
BM	(30°-60°)	668.7	8.5	B1/1000		
BH	(60°-80°)	414.5	5.3	B1/500		G1/500
BVH	(80°-90°)	37.8	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-G2**

Type IV Short





REPORT NUMBER: P142039

CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	46°
0°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1055.8	1058.6	1057.7	1056.7	1057.7	1058.6	1059.5	1062.2	1063.1	1064.1	1065.0
5°	1036.7	1039.4	1038.5	1040.3	1041.2	1044.9	1047.6	1052.2	1054.9	1058.6	1060.4
7.5°	1031.2	1033.0	1033.0	1034.8	1035.7	1039.4	1044.0	1049.4	1054.9	1060.4	1062.2
10°	1045.8	1046.7	1046.7	1045.8	1046.7	1048.5	1050.4	1054.9	1059.5	1064.1	1065.9
12.5°	1080.5	1077.8	1076.8	1074.1	1075.0	1071.4	1071.4	1070.4	1070.4	1071.4	1071.4
15°	1117.0	1115.2	1113.4	1108.8	1108.8	1103.3	1101.5	1097.8	1088.7	1085.1	1084.1
17.5°	1149.9	1148.1	1144.4	1140.8	1138.9	1131.6	1129.8	1123.4	1112.5	1104.2	1101.5
20°	1189.2	1184.6	1176.4	1174.6	1170.0	1161.8	1159.0	1150.8	1136.2	1124.3	1123.4
22.5°	1249.5	1242.2	1233.9	1227.5	1215.7	1207.4	1200.1	1189.2	1171.8	1158.1	1154.5
25°	1309.7	1307.0	1299.7	1290.6	1282.3	1273.2	1264.1	1247.6	1224.8	1207.4	1203.8
27.5°	1394.7	1388.3	1379.2	1364.5	1360.0	1344.5	1337.1	1323.4	1300.6	1278.7	1275.0
30°	1483.3	1476.9	1462.3	1449.5	1446.7	1430.3	1425.7	1411.1	1391.0	1369.1	1366.4
32.5°	1584.7	1578.3	1567.3	1560.0	1550.0	1540.8	1529.9	1516.2	1490.6	1472.3	1468.7
35°	1714.4	1708.9	1696.1	1701.6	1692.4	1689.7	1683.3	1660.5	1632.2	1610.2	1613.9
37.5°	1816.7	1815.7	1818.5	1815.7	1827.6	1839.5	1839.5	1841.3	1827.6	1803.9	1799.3
40°	1912.6	1911.6	1918.9	1927.2	1959.1	1978.3	2000.2	2008.5	1993.8	1975.6	1969.2
42.5°	2002.1	2000.2	2010.3	2040.4	2079.7	2115.3	2152.8	2184.7	2192.0	2171.9	2167.4
45°	2090.7	2093.4	2106.2	2140.0	2192.0	2238.6	2302.6	2340.0	2363.8	2352.8	2360.1
47.5°	2197.5	2200.3	2214.0	2254.1	2299.8	2358.3	2433.2	2497.1	2525.4	2525.4	2516.3
50°	2324.5	2337.3	2351.9	2379.3	2432.3	2489.8	2581.1	2645.1	2690.7	2688.9	2681.6
52.5°	2493.4	2496.2	2519.9	2541.9	2587.5	2646.0	2728.2	2815.9	2873.4	2867.9	2859.7
55°	2720.9	2709.9	2725.4	2746.4	2795.8	2846.9	2936.4	3037.8	3096.3	3078.9	3073.4
57.5°	3007.7	2998.5	3009.5	3035.1	3097.2	3139.2	3211.3	3304.5	3386.7	3401.3	3388.5
60°	3421.4	3421.4	3443.3	3498.1	3561.2	3624.2	3716.4	3828.8	3913.7	3934.7	3933.8
62.5°	3911.9	3942.9	3947.5	4018.7	4139.3	4248.0	4391.4	4589.6	4716.5	4807.0	4783.2
65°	3990.4	4000.5	4040.7	4151.2	4314.7	4507.4	4730.2	4990.5	5254.5	5385.1	5388.8
67°	3793.1	3796.8	3867.1	3983.1	4170.4	4387.7	4676.4	4993.3	5327.6	5496.5	5502.0
67.5°	3731.9	3724.6	3787.7	3909.1	4113.7	4358.5	4629.8	4963.1	5308.4	5489.2	5492.0
70°	3321.9	3325.5	3374.8	3510.0	3726.5	3955.7	4259.0	4601.5	4965.0	5130.3	5138.5
72.5°	2864.3	2840.5	2885.3	3029.6	3132.8	3356.6	3635.1	3893.6	4213.3	4369.5	4365.8
75°	2184.7	2119.0	2197.5	2281.5	2339.1	2561.0	2734.6	2912.7	3207.7	3326.4	3320.0
77.5°	1177.3	1174.6	1260.4	1326.2	1412.0	1612.1	1764.6	1876.9	2125.4	2183.8	2191.1
80°	639.3	663.1	714.2	787.3	856.7	952.6	1041.2	1111.5	1192.8	1155.4	1147.2
82.5°	385.4	424.7	503.3	559.0	586.4	629.3	692.3	732.5	764.5	695.1	681.4
85°	61.2	110.5	284.1	339.8	369.0	389.1	402.8	429.3	391.8	367.2	373.6
87.5°	20.1	22.8	43.8	96.8	84.9	58.5	76.7	111.4	53.0	28.3	27.4
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: P142039

CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1065.9	1066.8	1069.5	1073.2	1075.0	1079.6	1079.6	1083.2	1083.2	1086.0	1088.7
5°	1063.1	1067.7	1071.4	1076.8	1079.6	1086.0	1088.7	1094.2	1096.9	1100.6	1104.2
7.5°	1067.7	1074.1	1078.7	1085.1	1089.6	1096.0	1098.8	1103.3	1106.1	1110.6	1112.5
10°	1071.4	1077.8	1083.2	1090.5	1094.2	1098.8	1101.5	1105.2	1106.1	1108.8	1110.6
12.5°	1075.9	1078.7	1083.2	1089.6	1093.3	1096.0	1098.8	1101.5	1104.2	1104.2	1104.2
15°	1082.3	1079.6	1080.5	1086.0	1089.6	1091.5	1094.2	1096.0	1096.9	1096.9	1095.1
17.5°	1096.0	1088.7	1084.1	1084.1	1086.0	1087.8	1087.8	1085.1	1083.2	1080.5	1076.8
20°	1116.1	1104.2	1095.1	1090.5	1086.9	1082.3	1075.0	1065.9	1057.7	1050.4	1045.8
22.5°	1144.4	1132.6	1121.6	1111.5	1099.7	1084.1	1068.6	1049.4	1033.9	1022.0	1017.5
25°	1197.4	1180.0	1171.8	1156.3	1138.0	1113.4	1089.6	1063.1	1044.9	1028.4	1021.1
27.5°	1268.6	1254.9	1236.7	1228.5	1204.7	1176.4	1149.9	1117.9	1092.4	1072.3	1058.6
30°	1359.1	1349.9	1334.4	1320.7	1297.9	1272.3	1233.0	1197.4	1152.6	1117.0	1096.9
32.5°	1463.2	1449.5	1435.8	1418.4	1402.0	1368.2	1331.7	1277.8	1215.7	1154.5	1117.0
35°	1593.8	1580.1	1571.0	1543.6	1516.2	1479.6	1430.3	1366.4	1279.6	1197.4	1133.5
37.5°	1773.7	1744.5	1699.7	1660.5	1611.2	1555.4	1499.7	1423.0	1326.2	1219.3	1131.6
40°	1929.9	1887.0	1836.7	1769.2	1699.7	1626.7	1560.9	1477.8	1364.5	1237.6	1118.9
42.5°	2132.7	2058.7	1973.8	1884.2	1789.3	1701.6	1620.3	1525.3	1392.9	1238.5	1088.7
45°	2315.3	2224.0	2111.7	1990.2	1874.2	1767.3	1674.2	1569.1	1416.6	1234.8	1054.0
47.5°	2477.9	2371.1	2234.1	2087.9	1950.9	1830.4	1728.1	1617.5	1447.7	1246.7	1041.2
50°	2635.0	2512.6	2358.3	2181.1	2028.6	1897.0	1790.2	1671.4	1499.7	1286.9	1061.3
52.5°	2803.1	2654.2	2479.7	2279.7	2113.5	1977.4	1857.8	1736.3	1561.8	1340.8	1097.8
55°	3008.6	2839.6	2640.5	2419.5	2228.6	2077.0	1941.8	1813.9	1635.8	1407.5	1140.8
57.5°	3282.6	3111.8	2882.5	2627.7	2427.7	2247.8	2085.2	1940.9	1748.2	1499.7	1204.7
60°	3810.5	3599.5	3294.5	3017.7	2801.2	2589.3	2393.0	2195.7	1963.7	1686.0	1369.1
62.5°	4658.1	4364.0	3985.9	3600.4	3308.2	3027.8	2768.4	2511.7	2222.2	1910.7	1564.6
65°	5244.5	4880.9	4406.0	3922.8	3527.4	3184.9	2875.2	2570.2	2247.8	1950.9	1649.5
67°	5378.7	4972.3	4431.6	3907.3	3477.1	3105.4	2768.4	2450.5	2126.3	1856.8	1599.3
67.5°	5373.2	4967.7	4411.5	3874.4	3443.3	3077.1	2737.3	2403.0	2084.3	1820.3	1574.6
70°	5048.1	4640.7	4081.8	3547.5	3131.9	2767.5	2424.9	2133.6	1808.4	1594.7	1410.2
72.5°	4277.2	3922.8	3471.6	2991.2	2635.0	2308.9	2034.9	1749.1	1466.8	1324.4	1179.1
75°	3252.4	2938.2	2524.5	2172.9	1901.6	1675.1	1400.2	1212.0	1013.8	916.1	864.0
77.5°	2149.1	1788.3	1502.5	1167.3	968.2	790.0	622.9	494.1	412.8	433.8	474.0
80°	1137.1	902.4	667.7	517.0	399.1	310.5	246.6	184.5	134.3	157.1	197.3
82.5°	619.3	527.9	390.0	310.5	253.9	210.1	161.7	113.3	84.0	93.2	134.3
85°	353.5	310.5	241.1	188.2	164.4	134.3	92.2	62.1	60.3	64.8	83.1
87.5°	58.5	78.5	63.9	43.8	49.3	48.4	42.9	32.9	24.7	34.7	44.8
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°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1090.5	1093.3	1096.9	1097.8	1096.9	1099.7	1104.2	1107.9	1105.2	1103.3	1107.9
5°	1107.9	1109.7	1114.3	1114.3	1115.2	1117.0	1119.8	1122.5	1118.9	1118.9	1120.7
7.5°	1115.2	1115.2	1119.8	1117.9	1117.9	1117.0	1119.8	1120.7	1115.2	1114.3	1115.2
10°	1110.6	1110.6	1112.5	1108.8	1107.9	1107.0	1107.0	1107.9	1102.4	1100.6	1103.3
12.5°	1104.2	1104.2	1102.4	1100.6	1098.8	1096.9	1098.8	1099.7	1096.0	1096.0	1096.9
15°	1093.3	1090.5	1089.6	1089.6	1090.5	1091.5	1095.1	1097.8	1095.1	1093.3	1093.3
17.5°	1075.0	1073.2	1075.9	1081.4	1087.8	1092.4	1097.8	1099.7	1093.3	1086.0	1080.5
20°	1047.6	1052.2	1062.2	1077.8	1091.5	1098.8	1098.8	1092.4	1077.8	1063.1	1055.8
22.5°	1019.3	1032.1	1054.0	1077.8	1094.2	1096.9	1086.9	1073.2	1053.1	1037.6	1023.9
25°	1023.0	1038.5	1060.4	1080.5	1091.5	1086.9	1068.6	1051.3	1027.5	1011.1	991.0
27.5°	1061.3	1075.9	1086.9	1093.3	1089.6	1075.0	1054.0	1030.3	1003.8	980.9	957.2
30°	1092.4	1098.8	1097.8	1092.4	1078.7	1055.8	1031.2	1002.9	970.9	946.2	915.2
32.5°	1097.8	1086.0	1067.7	1047.6	1029.3	1003.8	975.5	942.6	907.0	875.0	843.9
35°	1087.8	1043.0	1002.9	962.7	935.3	903.3	878.6	840.3	801.0	773.6	750.8
37.5°	1050.4	972.7	908.8	852.2	812.0	775.4	738.0	700.5	667.7	654.9	648.5
40°	1002.9	885.9	788.2	709.7	666.7	631.1	592.8	562.6	547.1	535.2	530.7
42.5°	933.4	787.3	665.8	581.8	527.0	494.1	456.7	440.2	432.9	435.7	432.0
45°	868.6	684.1	531.6	438.4	401.0	369.9	351.6	344.3	340.7	338.9	341.6
47.5°	822.9	604.6	428.4	333.4	302.3	280.4	273.1	270.4	269.4	265.8	264.9
50°	812.0	558.1	350.7	259.4	235.6	223.8	220.1	217.4	215.6	212.8	206.4
52.5°	824.8	545.3	312.4	222.9	202.8	193.6	190.9	186.3	184.5	177.2	169.0
55°	846.7	549.8	300.5	212.8	192.7	182.7	179.0	177.2	170.8	162.6	152.5
57.5°	892.3	578.2	306.0	215.6	194.5	185.4	183.6	181.8	173.5	161.7	148.9
60°	1024.8	660.4	334.3	234.7	209.2	202.8	203.7	200.0	188.2	172.6	153.4
62.5°	1229.4	788.2	386.3	258.5	232.9	232.9	238.4	235.6	217.4	191.8	164.4
65°	1335.3	864.9	408.3	265.8	240.2	252.1	269.4	266.7	240.2	201.9	165.3
67°	1318.9	850.3	395.5	254.8	226.5	242.0	259.4	260.3	231.1	192.7	158.0
67.5°	1303.4	840.3	389.1	250.3	222.9	238.4	254.8	252.1	227.4	189.1	156.2
70°	1170.9	738.0	347.1	233.8	206.4	211.0	215.6	211.9	192.7	167.1	144.3
72.5°	1011.1	612.9	306.0	223.8	197.3	190.0	190.0	183.6	170.8	153.4	137.0
75°	770.9	476.8	268.5	212.8	186.3	175.4	173.5	169.0	158.0	145.2	130.6
77.5°	470.4	341.6	232.9	196.4	172.6	163.5	164.4	161.7	150.7	138.8	125.1
80°	235.6	221.0	195.5	170.8	156.2	147.0	148.0	142.5	133.3	124.2	113.3
82.5°	144.3	152.5	137.0	129.7	120.6	110.5	85.9	100.5	97.7	89.5	84.9
85°	95.9	95.0	85.9	75.8	69.4	60.3	53.9	54.8	60.3	62.1	62.1
87.5°	46.6	44.8	41.1	38.4	36.5	30.1	28.3	32.0	32.0	33.8	32.9
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: P142039

CATALOG NUMBER: ECM-E03-LED-E1-T4-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1108.8	1110.6	1109.7	1112.5	1109.7
5°	1121.6	1121.6	1122.5	1123.4	1122.5
7.5°	1115.2	1114.3	1116.1	1117.9	1117.0
10°	1103.3	1104.2	1106.1	1108.8	1108.8
12.5°	1098.8	1099.7	1103.3	1106.1	1106.1
15°	1095.1	1096.0	1097.8	1101.5	1098.8
17.5°	1078.7	1075.0	1075.0	1077.8	1075.0
20°	1049.4	1044.0	1044.0	1043.0	1042.1
22.5°	1014.7	1001.0	997.4	992.8	993.7
25°	971.8	953.5	943.5	938.0	936.2
27.5°	937.1	916.1	906.0	897.8	895.1
30°	893.3	869.5	861.3	856.7	854.9
32.5°	829.3	808.3	797.4	794.6	789.1
35°	732.5	723.4	718.8	712.4	713.3
37.5°	635.7	633.0	622.0	625.6	622.0
40°	531.6	530.7	532.5	529.7	536.1
42.5°	433.8	431.1	435.7	432.9	435.7
45°	336.1	341.6	348.0	345.2	348.9
47.5°	257.6	258.5	256.7	258.5	260.3
50°	198.2	196.4	194.5	190.9	192.7
52.5°	163.5	157.1	152.5	149.8	148.9
55°	144.3	137.9	134.3	130.6	130.6
57.5°	138.8	130.6	125.1	122.4	121.5
60°	139.7	128.8	121.5	116.9	116.0
62.5°	143.4	128.8	118.7	114.2	112.3
65°	142.5	127.0	116.9	112.3	110.5
67°	137.9	124.2	116.0	111.4	110.5
67.5°	136.1	123.3	116.0	111.4	109.6
70°	129.7	120.6	114.2	109.6	107.8
72.5°	124.2	116.9	109.6	105.9	104.1
75°	118.7	111.4	105.0	101.4	100.5
77.5°	113.3	105.0	100.5	95.9	92.2
80°	103.2	94.1	87.7	80.4	78.5
82.5°	84.9	77.6	71.2	64.8	63.9
85°	63.0	60.3	54.8	49.3	49.3
87.5°	34.7	38.4	33.8	31.1	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)