

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: P140750

Luminaire Tested: **ECM-E02-LED-E1-RW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140750
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33689)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E02-LED-E1-RW
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5914.6 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

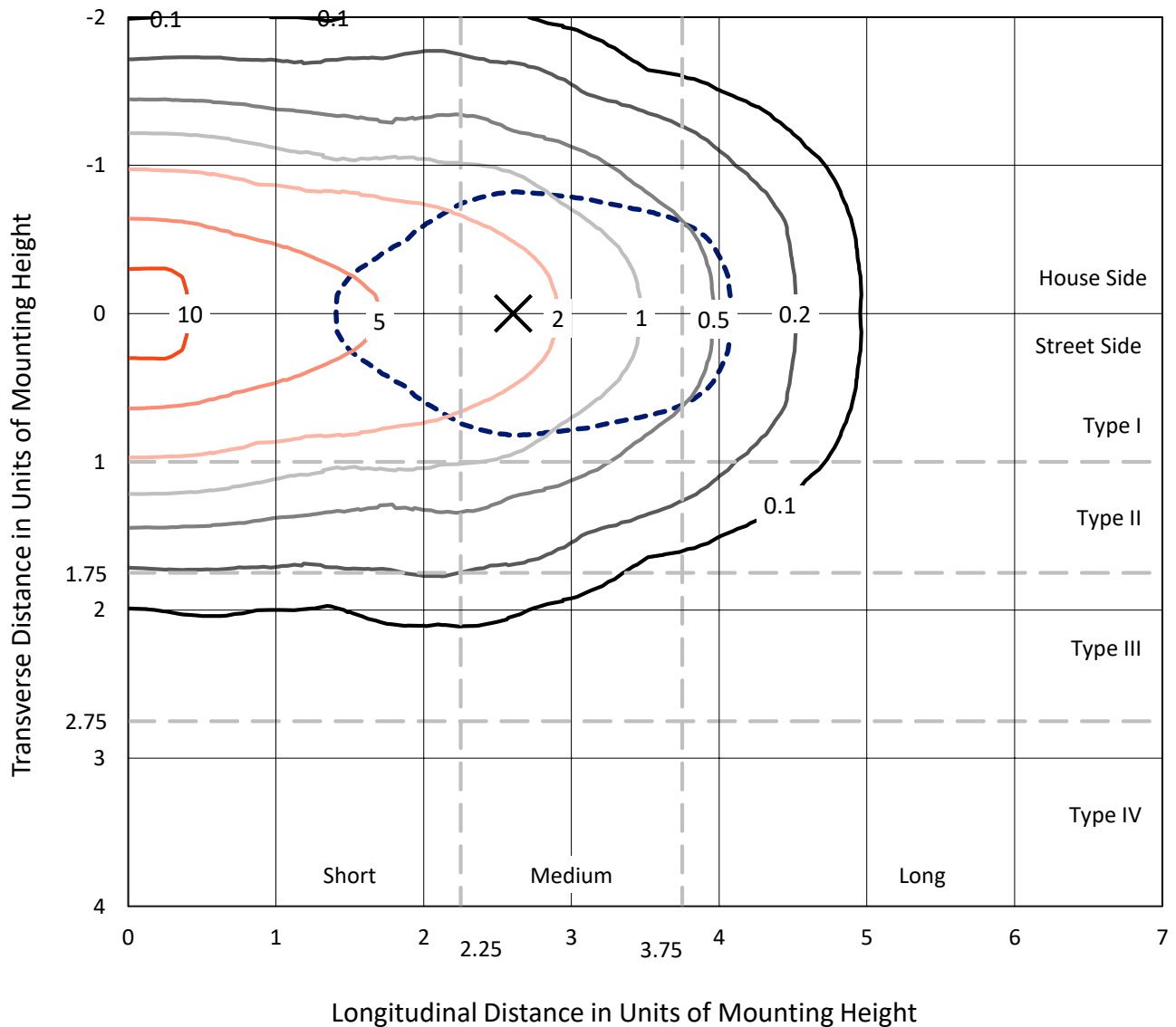
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P140750
 CATALOG NUMBER: ECM-E02-LED-E1-RW

Iso-Footcandle Lines of Horizontal Illumination

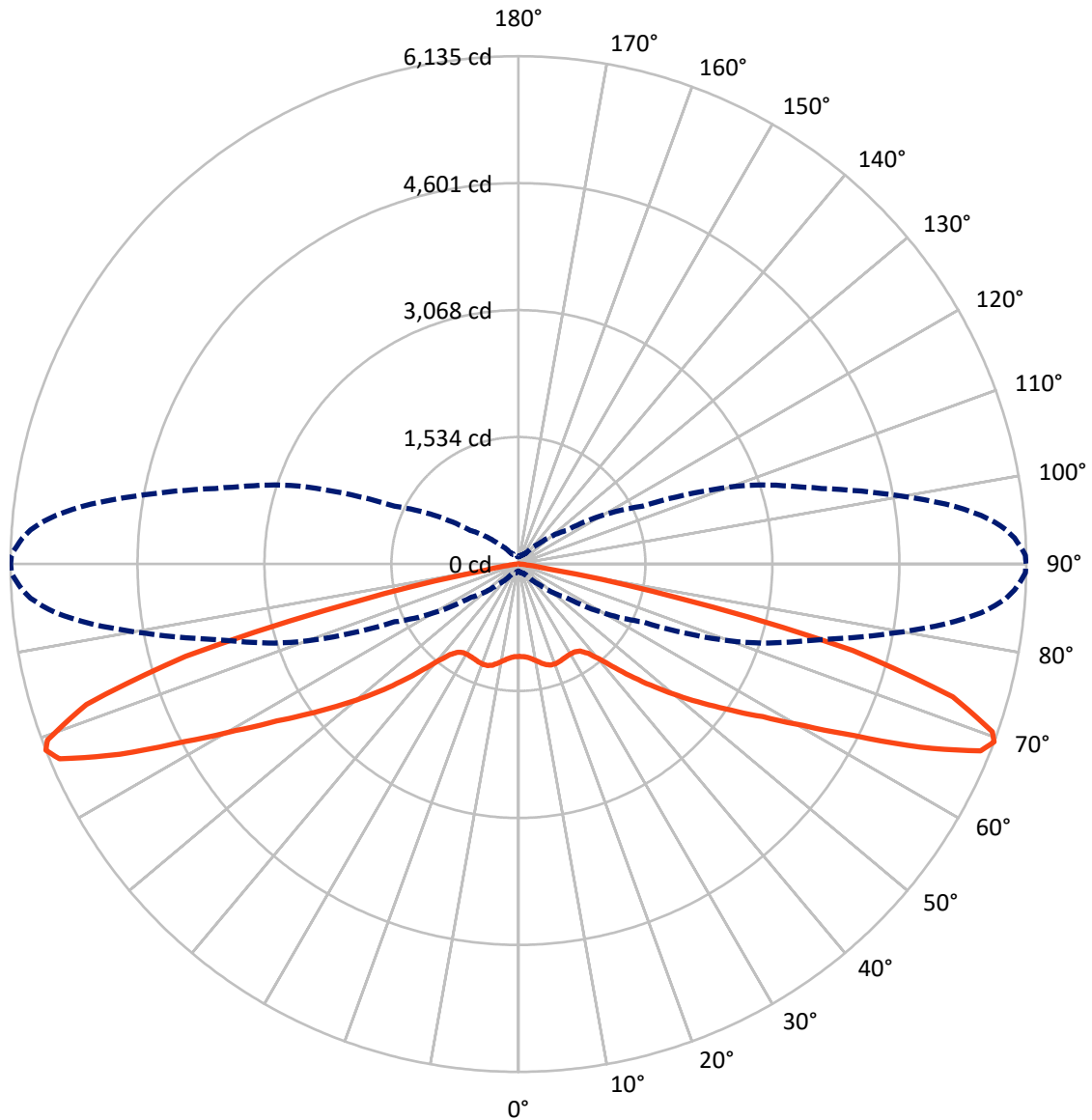
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type I - Short - Full Cutoff

REPORT NUMBER: P140750
CATALOG NUMBER: ECM-E02-LED-E1-RW

Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P140750

CATALOG NUMBER: ECM-E02-LED-E1-RW

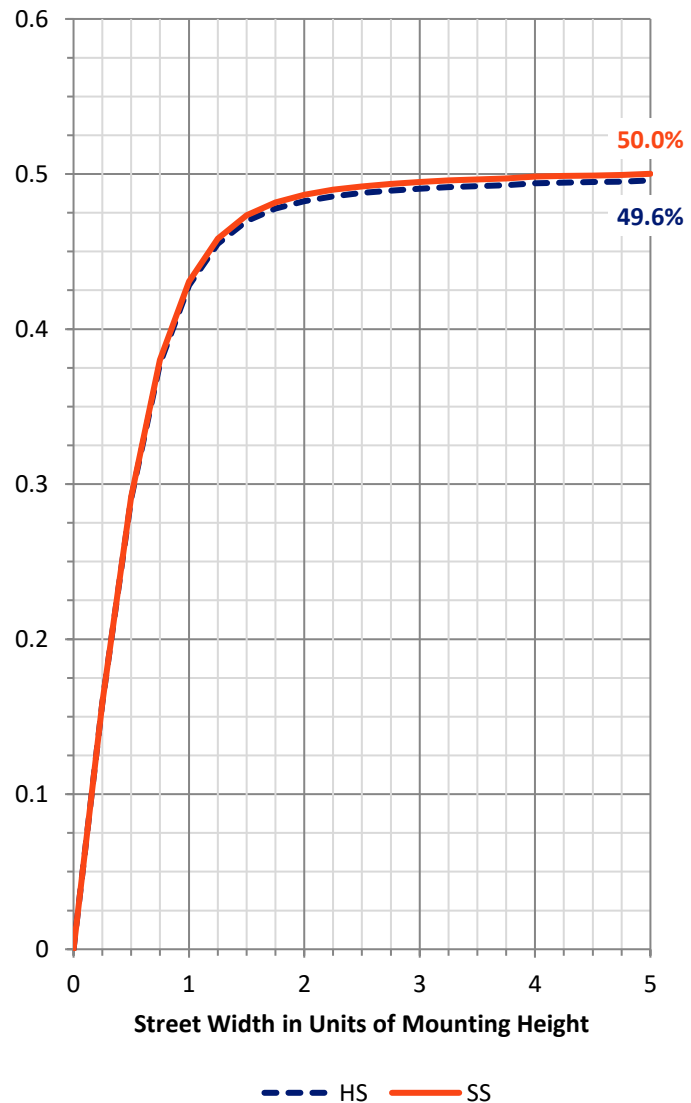
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2957.3	0.0	2957.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2957.3	0.0	2957.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	5914.6	0.0	5914.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	1.8
10°-20°	343.7	5.8
20°-30°	555.8	9.4
30°-40°	694.3	11.7
40°-50°	868.4	14.7
50°-60°	1070.1	18.1
60°-70°	1324.8	22.4
70°-80°	865.9	14.6
80°-90°	82.3	1.4
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°	5914.6	100.0
0°-180°	5914.6	100.0



REPORT NUMBER: P140750

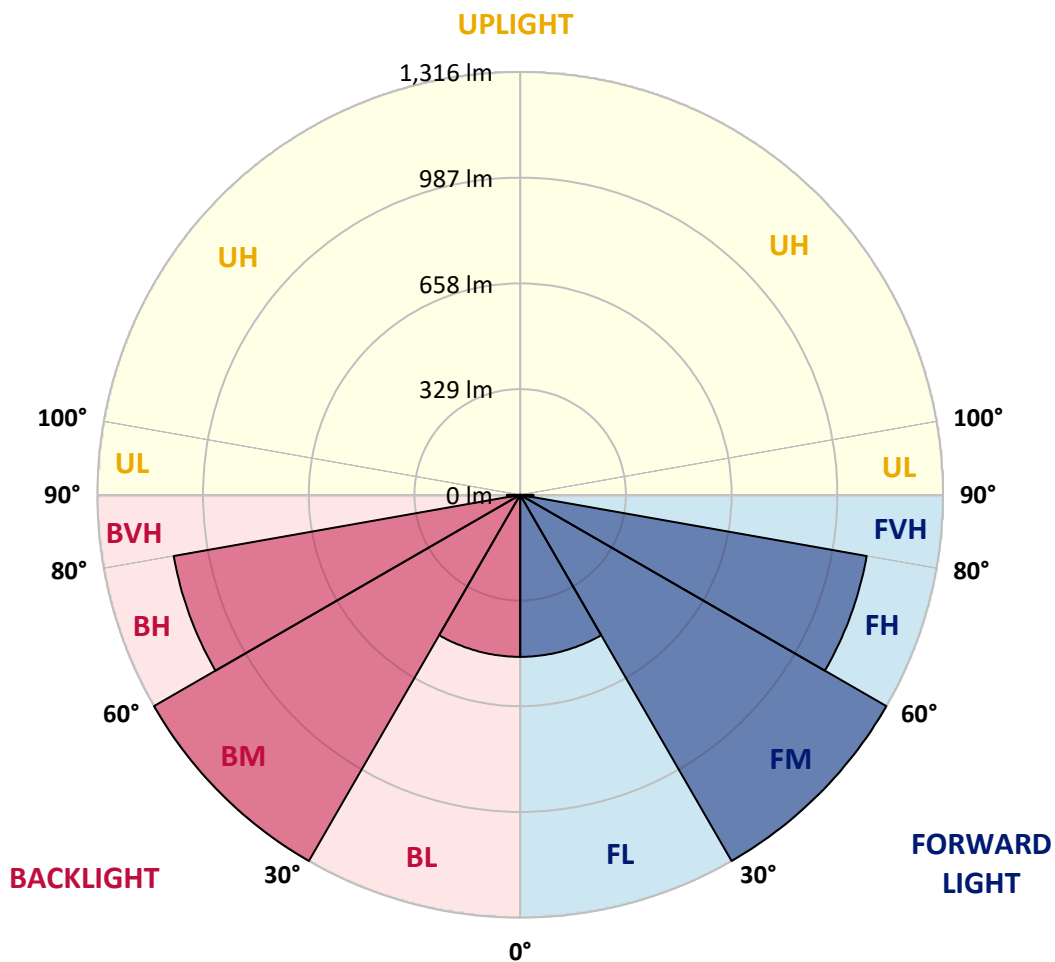
CATALOG NUMBER: ECM-E02-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	504.4	8.5			
FM	(30°-60°)	1316.4	22.3			
FH	(60°-80°)	1095.3	18.5			G1/1800
FVH	(80°-90°)	41.1	0.7			G1/100
BL	(0°-30°)	504.4	8.5	B2/1000		
BM	(30°-60°)	1316.4	22.3	B2/2500		
BH	(60°-80°)	1095.3	18.5	B3/2500		G3/2500
BVH	(80°-90°)	41.1	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Short





REPORT NUMBER: P140750

CATALOG NUMBER: ECM-E02-LED-E1-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7
2.5°	1124.0	1124.6	1122.6	1123.3	1124.0	1123.3	1122.4	1122.4	1122.0	1121.7	1121.3
5°	1131.4	1131.7	1130.6	1132.4	1132.6	1133.7	1133.7	1134.0	1133.8	1133.6	1133.4
7.5°	1141.7	1143.0	1142.0	1144.4	1146.6	1150.0	1151.6	1155.6	1155.6	1155.5	1155.4
10°	1151.4	1152.7	1152.6	1158.0	1163.7	1170.0	1176.7	1183.0	1183.4	1183.8	1184.2
12.5°	1158.6	1159.6	1161.4	1171.0	1183.6	1194.4	1206.0	1216.0	1216.4	1216.8	1217.2
15°	1155.6	1158.0	1165.6	1181.0	1203.4	1221.0	1235.3	1247.4	1248.2	1249.0	1249.8
17.5°	1145.4	1149.0	1160.0	1186.0	1220.4	1248.6	1265.6	1269.0	1269.5	1270.1	1270.6
20°	1123.0	1128.3	1145.7	1182.6	1233.3	1271.6	1288.6	1282.6	1282.1	1281.6	1281.1
22.5°	1085.6	1092.7	1114.4	1167.0	1234.3	1288.4	1305.0	1288.4	1286.5	1284.6	1282.7
25°	1035.6	1041.3	1066.0	1128.4	1219.0	1291.3	1315.4	1292.0	1289.0	1286.0	1283.0
27.5°	975.0	979.6	1010.3	1076.6	1181.0	1276.0	1322.0	1298.4	1294.5	1290.6	1286.7
30°	906.7	910.7	944.4	1015.0	1127.6	1242.4	1321.4	1312.7	1308.1	1303.5	1298.9
32.5°	838.6	840.4	870.4	948.0	1068.4	1192.7	1310.3	1334.7	1330.2	1325.7	1321.3
35°	764.0	769.3	801.3	886.0	1001.3	1138.0	1295.7	1365.4	1362.8	1360.3	1357.7
37.5°	704.0	705.7	740.0	828.0	947.0	1088.4	1277.0	1404.6	1406.5	1408.3	1410.1
40°	644.0	644.0	678.0	769.3	892.7	1043.6	1261.4	1453.0	1462.1	1471.3	1480.4
42.5°	578.4	583.0	616.4	707.3	840.0	1005.6	1253.3	1511.0	1528.2	1545.4	1562.6
45°	517.0	520.0	554.0	643.0	774.4	962.4	1251.0	1575.6	1601.8	1627.9	1654.1
47.5°	456.7	461.0	493.4	575.0	702.6	904.6	1248.0	1649.4	1682.7	1716.1	1749.5
50°	400.6	403.4	439.3	513.7	632.0	830.0	1228.4	1731.6	1772.4	1813.2	1854.0
52.5°	341.4	346.7	376.3	453.0	560.6	749.6	1176.6	1821.4	1870.7	1920.0	1969.3
55°	279.4	278.0	313.6	385.6	498.4	672.6	1081.4	1899.0	1958.5	2018.1	2077.6
57.5°	204.6	209.0	241.6	314.6	426.0	608.0	969.0	1939.4	2013.6	2087.9	2162.1
60°	146.7	152.6	181.0	238.6	354.0	544.6	854.4	1911.3	2009.7	2108.1	2206.5
62.5°	114.6	117.3	141.6	179.0	276.0	478.4	777.3	1838.7	1974.4	2110.0	2245.7
65°	100.0	103.0	124.7	144.0	209.6	415.3	731.0	1780.6	1959.7	2138.8	2317.9
67.5°	91.0	94.6	113.4	126.6	172.0	361.6	720.0	1733.3	1943.4	2153.5	2363.5
69°	86.6	90.4	107.6	120.0	159.6	344.7	707.3	1653.6	1866.8	2080.0	2293.2
70°	84.7	87.6	104.3	116.0	155.7	334.6	678.7	1562.7	1768.8	1974.8	2180.9
72.5°	78.0	79.6	95.0	106.4	147.4	280.0	537.7	1169.7	1341.9	1514.1	1686.3
75°	69.0	71.6	85.6	97.4	118.3	179.4	352.7	707.0	834.5	962.1	1089.6
77.5°	59.4	61.7	73.7	93.0	91.0	108.6	202.6	395.0	463.9	532.9	601.8
80°	51.4	53.6	64.6	86.3	74.0	80.3	136.7	257.7	283.9	310.1	336.3
82.5°	40.4	42.0	54.4	70.4	57.4	59.6	102.3	225.0	240.8	256.6	272.4
85°	25.6	26.6	39.6	48.0	40.0	35.4	64.3	165.0	177.5	189.9	202.4
87.5°	9.0	12.7	17.6	16.6	16.6	12.7	22.6	61.0	65.9	70.7	75.6
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: P140750

CATALOG NUMBER: ECM-E02-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7
2.5°	1121.0	1120.6	1121.0	1121.0	1120.6	1120.3	1120.4	1120.0	1119.4	1119.4	1119.0
5°	1133.2	1133.0	1133.6	1133.4	1133.7	1133.4	1133.4	1133.0	1133.4	1132.0	1131.6
7.5°	1155.4	1155.3	1155.4	1156.4	1155.6	1155.4	1156.0	1156.0	1156.0	1155.4	1155.4
10°	1184.6	1185.0	1185.7	1186.4	1186.4	1186.4	1187.6	1186.6	1188.6	1186.6	1187.6
12.5°	1217.6	1218.0	1219.6	1220.4	1221.0	1221.0	1221.0	1223.0	1224.4	1224.0	1224.4
15°	1250.6	1251.4	1251.6	1252.6	1252.7	1253.0	1254.3	1256.7	1256.0	1257.4	1257.3
17.5°	1271.1	1271.6	1271.3	1271.4	1272.0	1273.0	1274.4	1275.6	1275.3	1276.4	1277.0
20°	1280.5	1280.0	1279.0	1278.3	1278.0	1278.7	1278.7	1279.0	1279.6	1279.7	1279.7
22.5°	1280.9	1279.0	1276.7	1275.4	1273.6	1272.6	1273.3	1272.6	1272.7	1272.6	1272.0
25°	1280.0	1277.0	1273.4	1270.6	1268.0	1266.4	1264.6	1264.0	1262.6	1262.6	1262.6
27.5°	1282.9	1279.0	1275.4	1270.4	1266.6	1264.6	1262.4	1260.0	1258.6	1257.4	1257.3
30°	1294.3	1289.7	1285.0	1279.0	1274.0	1272.4	1268.0	1265.6	1262.3	1260.7	1260.0
32.5°	1316.8	1312.3	1306.0	1299.3	1295.4	1290.4	1286.6	1281.6	1278.0	1275.6	1272.6
35°	1355.2	1352.6	1347.4	1343.0	1337.0	1331.4	1324.0	1321.4	1313.6	1312.4	1308.6
37.5°	1411.9	1413.7	1412.6	1409.4	1405.3	1400.3	1397.4	1391.6	1388.6	1385.6	1382.4
40°	1489.6	1498.7	1501.6	1505.4	1506.4	1510.7	1505.7	1505.0	1501.0	1504.3	1502.4
42.5°	1579.8	1597.0	1606.4	1617.3	1629.4	1640.3	1649.0	1663.6	1662.0	1673.4	1681.4
45°	1680.2	1706.4	1730.4	1748.6	1771.7	1797.0	1819.3	1840.0	1863.4	1876.6	1896.3
47.5°	1782.9	1816.3	1850.6	1884.7	1917.4	1950.0	1990.0	2026.4	2061.6	2085.6	2116.0
50°	1894.8	1935.6	1977.0	2018.7	2065.0	2116.4	2161.0	2208.4	2257.0	2306.4	2341.0
52.5°	2018.7	2068.0	2113.0	2157.0	2214.3	2268.7	2326.7	2386.0	2459.6	2513.4	2561.0
55°	2137.2	2196.7	2246.0	2298.6	2358.7	2419.0	2490.0	2564.4	2642.4	2719.6	2789.6
57.5°	2236.4	2310.6	2369.4	2421.6	2486.0	2555.6	2632.0	2724.0	2813.0	2909.0	2999.4
60°	2304.9	2403.4	2474.0	2537.0	2611.7	2689.0	2788.6	2897.4	3014.4	3133.6	3249.7
62.5°	2381.3	2517.0	2613.6	2703.7	2792.0	2878.0	2990.3	3125.4	3284.0	3428.4	3582.0
65°	2496.9	2676.0	2818.6	2933.4	3058.7	3184.0	3315.0	3472.6	3653.0	3863.6	4042.7
67.5°	2573.6	2783.7	2965.0	3129.3	3275.7	3428.0	3593.4	3782.0	3999.6	4214.6	4437.4
69°	2506.4	2719.6	2911.4	3092.4	3252.6	3416.7	3584.6	3774.6	3997.0	4234.7	4469.7
70°	2386.9	2593.0	2791.0	2981.6	3138.3	3309.6	3475.0	3656.0	3881.4	4119.0	4374.6
72.5°	1858.5	2030.7	2234.0	2418.0	2605.0	2761.4	2910.6	3092.4	3319.6	3546.0	3795.0
75°	1217.1	1344.6	1530.6	1682.0	1843.6	1990.3	2098.6	2279.0	2417.0	2630.0	2861.4
77.5°	670.7	739.6	836.4	959.6	1029.4	1112.0	1220.4	1286.0	1384.0	1533.0	1602.4
80°	362.5	388.6	429.4	455.0	475.6	455.4	444.3	464.0	455.7	453.4	431.0
82.5°	288.2	304.0	325.0	340.0	330.4	286.7	240.4	206.7	185.0	155.6	133.3
85°	214.9	227.4	235.4	245.3	243.6	220.4	176.4	136.3	107.0	85.4	74.3
87.5°	80.5	85.4	87.7	106.6	98.0	93.0	72.4	52.6	40.4	29.4	23.6
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: P140750

CATALOG NUMBER: ECM-E02-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7	1116.7
2.5°	1119.7	1119.4	1119.3	1119.3	1119.6	1119.0	1118.3	1119.0	1118.6	1118.7	1118.7
5°	1133.0	1132.6	1132.7	1133.0	1132.7	1133.0	1132.7	1131.4	1132.0	1132.4	1132.7
7.5°	1156.0	1155.6	1155.7	1157.4	1157.0	1156.6	1156.4	1157.0	1156.0	1156.0	1156.7
10°	1187.6	1189.0	1188.7	1189.7	1189.4	1188.6	1188.0	1188.6	1189.6	1190.0	1188.7
12.5°	1226.4	1226.6	1226.0	1227.7	1226.6	1229.0	1226.3	1227.6	1229.0	1227.0	1228.0
15°	1257.6	1257.6	1259.0	1259.4	1259.0	1259.6	1261.6	1260.6	1259.7	1261.4	1262.0
17.5°	1276.7	1277.6	1278.0	1278.4	1279.0	1279.6	1280.0	1279.6	1280.0	1280.7	1282.0
20°	1281.0	1280.6	1281.4	1281.6	1282.6	1282.7	1283.4	1283.0	1284.0	1284.3	1284.7
22.5°	1273.4	1273.6	1274.0	1275.0	1274.6	1275.4	1275.7	1276.6	1276.4	1277.0	1277.3
25°	1263.0	1263.7	1264.0	1263.7	1263.7	1264.0	1264.3	1264.0	1265.3	1266.0	1266.0
27.5°	1256.4	1256.3	1257.4	1257.0	1256.4	1257.0	1256.6	1256.6	1256.6	1257.0	1258.0
30°	1259.0	1258.0	1257.4	1257.4	1257.0	1256.4	1255.6	1254.6	1254.7	1255.0	1254.7
32.5°	1273.4	1271.4	1270.4	1269.3	1268.6	1267.0	1265.0	1264.4	1262.7	1262.6	1262.0
35°	1310.0	1307.6	1307.6	1304.0	1302.0	1301.0	1299.4	1294.4	1294.6	1292.7	1292.0
37.5°	1383.0	1379.0	1377.3	1380.6	1374.3	1377.0	1371.3	1369.0	1370.4	1366.6	1368.7
40°	1505.7	1512.0	1509.4	1513.0	1514.6	1515.4	1515.3	1509.6	1515.4	1506.3	1509.3
42.5°	1682.6	1699.3	1705.4	1707.4	1717.7	1715.0	1712.0	1711.6	1711.3	1715.7	1713.3
45°	1905.4	1907.6	1936.0	1941.4	1947.0	1953.4	1951.6	1959.0	1964.4	1957.0	1958.0
47.5°	2133.0	2156.6	2177.3	2188.6	2201.0	2194.6	2199.6	2202.6	2221.7	2219.6	2218.0
50°	2383.6	2423.4	2434.4	2446.7	2456.4	2475.6	2474.0	2485.7	2483.7	2499.4	2501.3
52.5°	2621.4	2665.0	2709.3	2728.7	2743.4	2765.6	2774.4	2787.0	2782.3	2781.0	2792.7
55°	2857.7	2930.6	2981.4	3031.0	3058.7	3088.4	3101.0	3119.0	3127.0	3130.7	3116.0
57.5°	3092.0	3179.6	3265.4	3326.6	3369.3	3414.0	3437.6	3457.4	3480.4	3488.0	3480.7
60°	3366.0	3494.4	3606.6	3688.6	3767.3	3816.0	3867.0	3904.4	3911.4	3943.0	3963.3
62.5°	3731.0	3887.4	4029.6	4149.0	4271.0	4362.0	4454.0	4490.6	4527.0	4551.6	4566.7
65°	4228.6	4434.6	4631.4	4801.0	4950.7	5102.0	5209.3	5265.7	5338.0	5352.4	5336.7
67.5°	4665.0	4908.0	5152.4	5368.3	5530.0	5687.0	5814.3	5907.6	5975.3	6008.6	6022.7
69°	4713.0	4960.0	5209.6	5425.0	5620.6	5777.3	5907.7	6000.4	6067.6	6125.4	6135.3
70°	4614.7	4892.0	5134.6	5352.0	5553.7	5713.4	5830.0	5936.0	6012.7	6057.0	6072.7
72.5°	4051.0	4300.3	4545.3	4795.7	4968.7	5160.4	5256.4	5341.3	5443.4	5501.3	5488.7
75°	3070.0	3285.7	3499.4	3686.6	3820.0	3890.6	4003.0	4085.4	4070.3	4168.0	4170.7
77.5°	1731.6	1759.7	1904.7	1885.4	1949.4	1951.0	1967.7	1996.6	1941.0	2055.4	1973.3
80°	420.0	414.4	444.4	409.0	406.0	403.0	393.0	412.6	415.4	395.0	398.7
82.5°	123.3	118.0	115.7	112.6	117.6	116.0	117.0	117.6	121.0	116.7	121.3
85°	67.6	63.7	63.4	61.6	61.4	57.7	57.4	57.3	55.0	55.6	55.3
87.5°	26.0	24.4	23.0	22.0	21.6	20.6	19.6	18.0	16.0	14.4	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)