

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: P142029

Luminaire Tested: **ECM-E02-LED-E1-T4-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P142029
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-E02-LED-E1-T4-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5253.2 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

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

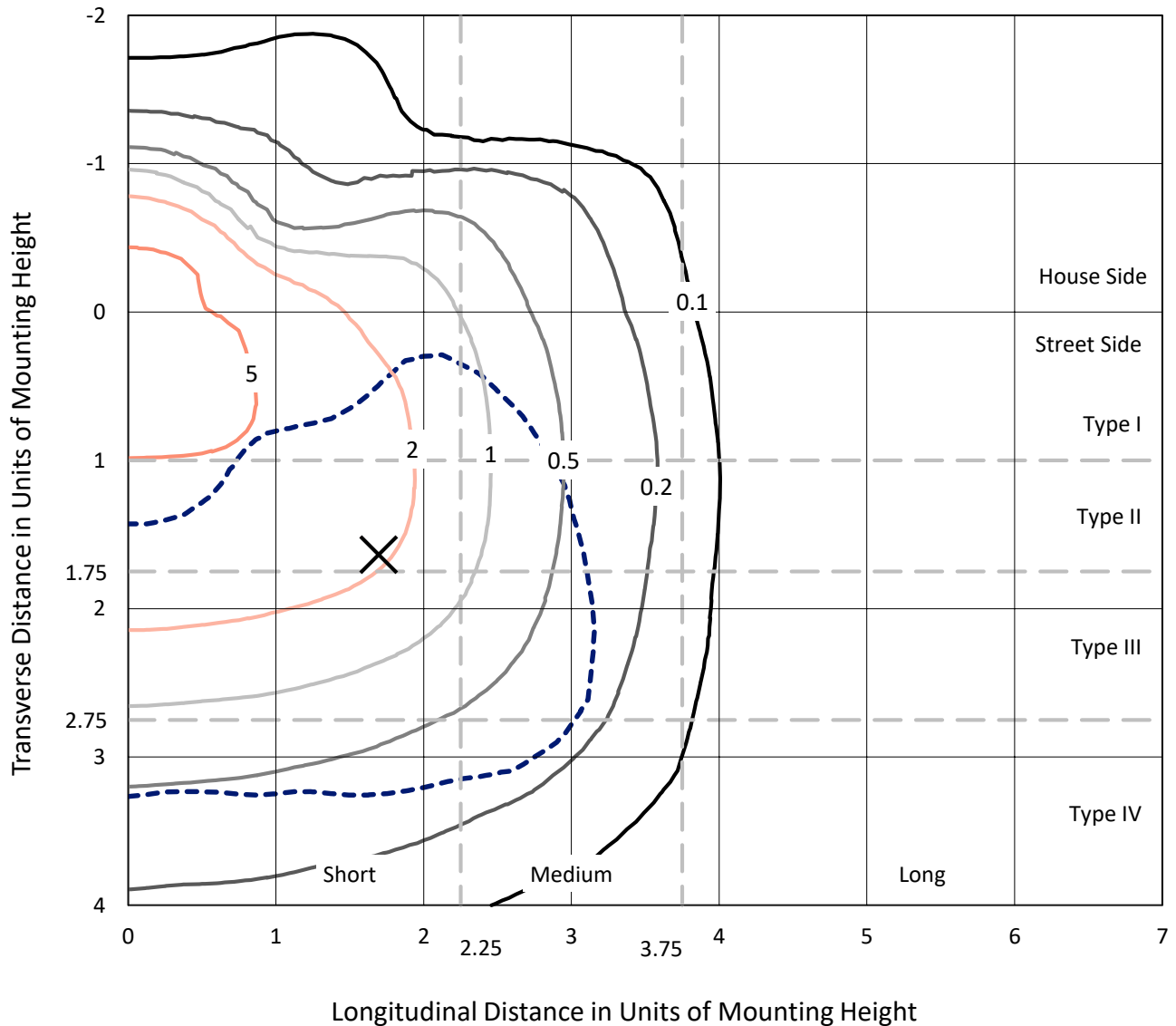


REPORT NUMBER: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

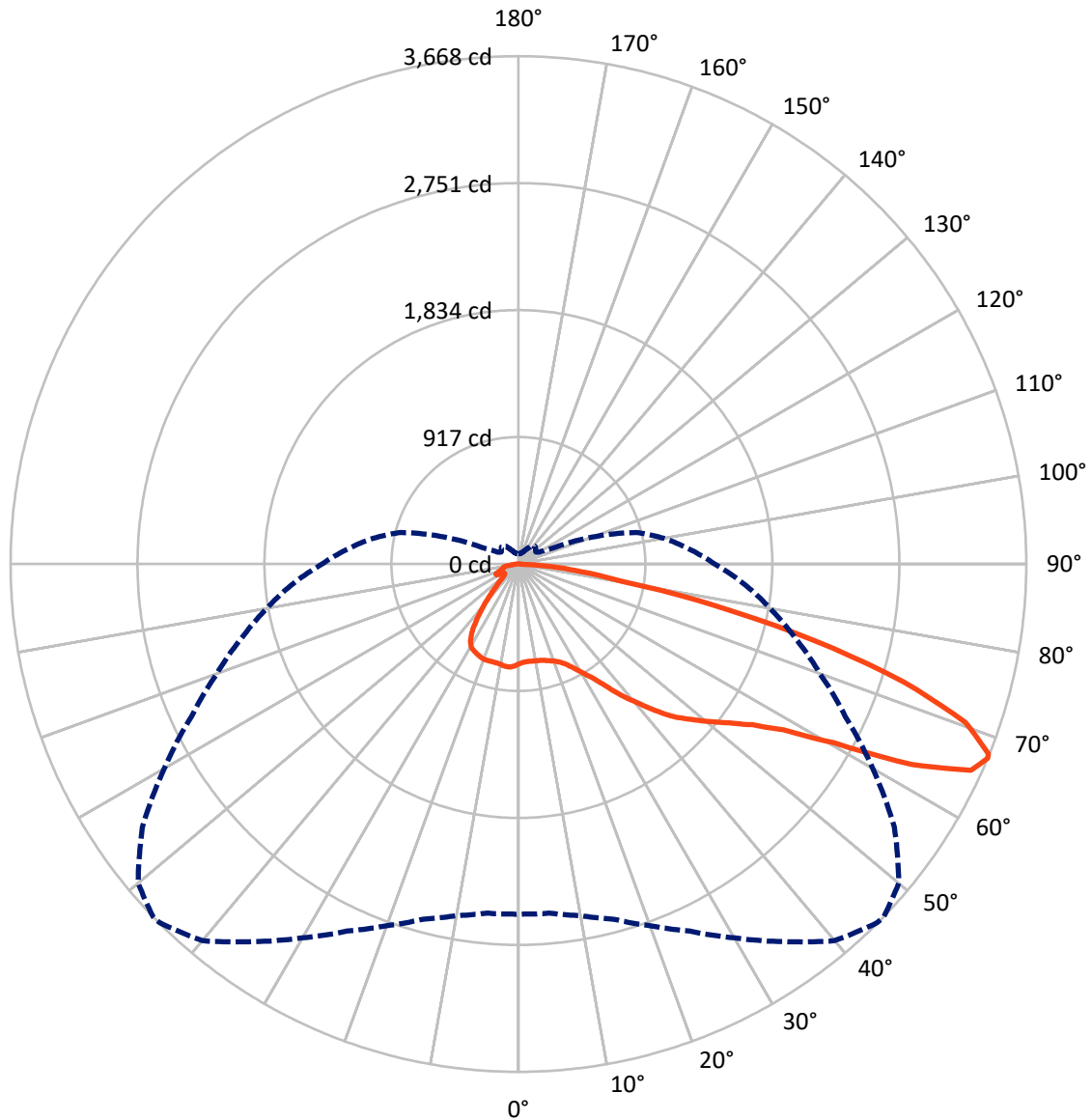


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

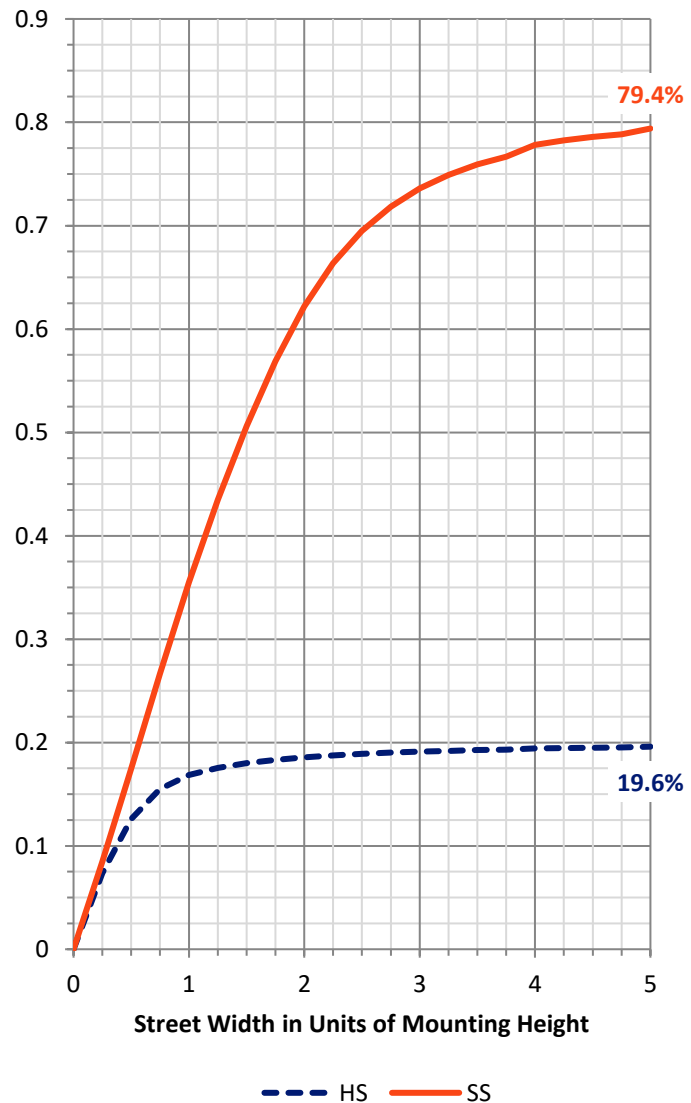
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1043.9	0.0	1043.9
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4209.2	0.0	4209.2
	% Fixture	80.1	0.0	80.1
Total	Lumens	5253.2	0.0	5253.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	1.3
10°-20°	206.8	3.9
20°-30°	347.6	6.6
30°-40°	519.9	9.9
40°-50°	677.1	12.9
50°-60°	927.4	17.7
60°-70°	1466.1	27.9
70°-80°	909.4	17.3
80°-90°	129.6	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°	5253.2	100.0
0°-180°	5253.2	100.0



REPORT NUMBER: P142029

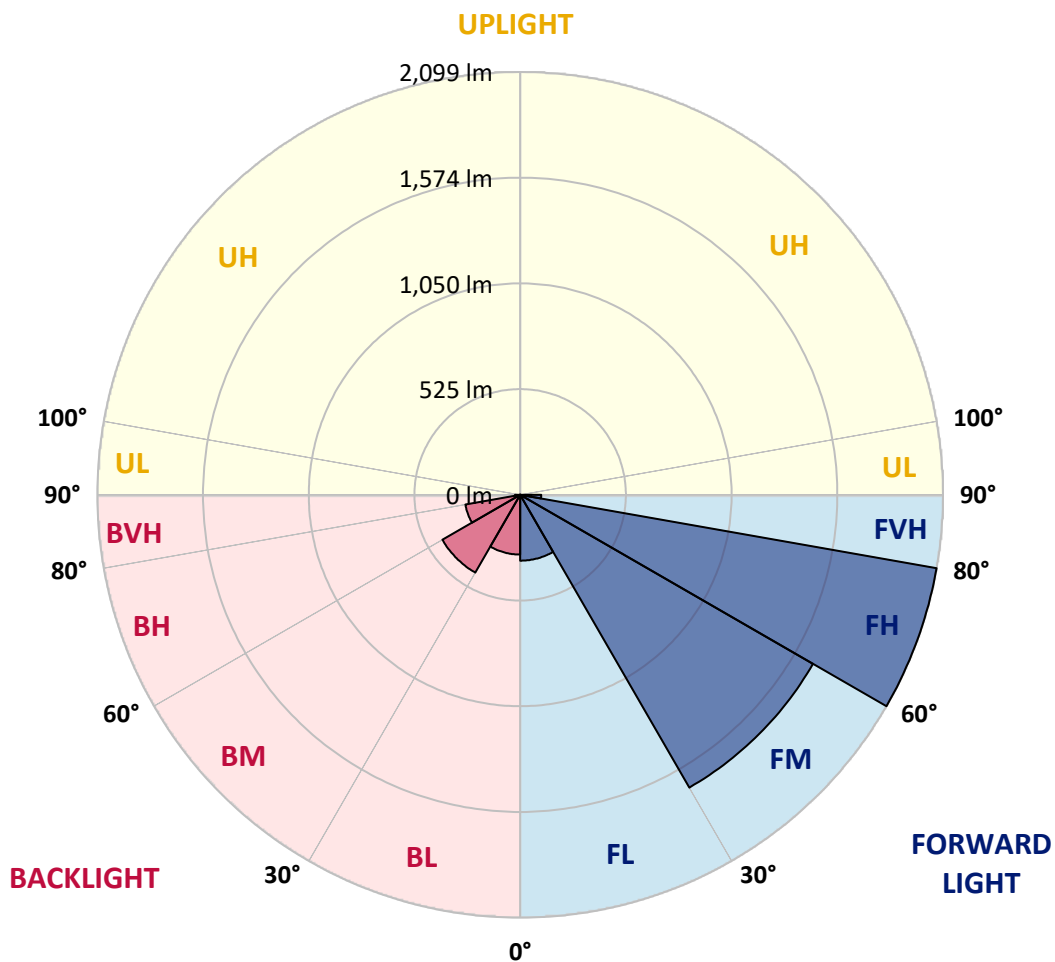
CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	327.1	6.2			
FM	(30°-60°)	1678.6	32.0			
FH	(60°-80°)	2099.2	40.0			G2/5000
FVH	(80°-90°)	104.4	2.0			G2/225
BL	(0°-30°)	296.5	5.6	B1/500		
BM	(30°-60°)	445.8	8.5	B1/1000		
BH	(60°-80°)	276.4	5.3	B1/500		G1/500
BVH	(80°-90°)	25.2	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: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	46°
0°	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7
2.5°	703.9	705.7	705.1	704.5	705.1	705.7	706.3	708.2	708.8	709.4	710.0
5°	691.1	692.9	692.3	693.5	694.1	696.6	698.4	701.5	703.3	705.7	706.9
7.5°	687.4	688.7	688.7	689.9	690.5	692.9	696.0	699.6	703.3	706.9	708.2
10°	697.2	697.8	697.8	697.2	697.8	699.0	700.2	703.3	706.3	709.4	710.6
12.5°	720.3	718.5	717.9	716.1	716.7	714.2	714.2	713.6	713.6	714.2	714.2
15°	744.7	743.5	742.2	739.2	739.2	735.6	734.3	731.9	725.8	723.4	722.8
17.5°	766.6	765.4	763.0	760.5	759.3	754.4	753.2	748.9	741.6	736.2	734.3
20°	792.8	789.7	784.3	783.0	780.0	774.5	772.7	767.2	757.5	749.6	748.9
22.5°	833.0	828.1	822.6	818.4	810.4	805.0	800.1	792.8	781.2	772.1	769.6
25°	873.2	871.3	866.5	860.4	854.9	848.8	842.7	831.8	816.5	805.0	802.5
27.5°	929.8	925.5	919.4	909.7	906.7	896.3	891.4	882.3	867.1	852.5	850.0
30°	988.9	984.6	974.8	966.3	964.5	953.5	950.5	940.8	927.4	912.7	910.9
32.5°	1056.4	1052.2	1044.9	1040.0	1033.3	1027.2	1019.9	1010.8	993.7	981.5	979.1
35°	1142.9	1139.3	1130.7	1134.4	1128.3	1126.5	1122.2	1107.0	1088.1	1073.5	1075.9
37.5°	1211.1	1210.5	1212.3	1210.5	1218.4	1226.3	1226.3	1227.5	1218.4	1202.6	1199.5
40°	1275.0	1274.4	1279.3	1284.8	1306.1	1318.9	1333.5	1339.0	1329.2	1317.1	1312.8
42.5°	1334.7	1333.5	1340.2	1360.3	1386.5	1410.2	1435.2	1456.5	1461.4	1448.0	1444.9
45°	1393.8	1395.6	1404.1	1426.7	1461.4	1492.4	1535.0	1560.0	1575.8	1568.5	1573.4
47.5°	1465.0	1466.8	1476.0	1502.8	1533.2	1572.2	1622.1	1664.7	1683.6	1683.6	1677.5
50°	1549.7	1558.2	1567.9	1586.2	1621.5	1659.9	1720.8	1763.4	1793.8	1792.6	1787.7
52.5°	1662.3	1664.1	1680.0	1694.6	1725.0	1764.0	1818.8	1877.2	1915.6	1911.9	1906.5
55°	1813.9	1806.6	1817.0	1831.0	1863.8	1897.9	1957.6	2025.2	2064.2	2052.6	2048.9
57.5°	2005.1	1999.0	2006.3	2023.4	2064.8	2092.8	2140.9	2203.0	2257.8	2267.5	2259.0
60°	2280.9	2280.9	2295.6	2332.1	2374.1	2416.1	2477.6	2552.5	2609.1	2623.1	2622.5
62.5°	2607.9	2628.6	2631.7	2679.2	2759.5	2832.0	2927.6	3059.7	3144.4	3204.6	3188.8
65°	2660.3	2667.0	2693.8	2767.5	2876.4	3004.9	3153.5	3327.0	3503.0	3590.1	3592.5
67°	2528.8	2531.2	2578.1	2655.4	2780.2	2925.2	3117.6	3328.9	3551.7	3664.4	3668.0
67.5°	2488.0	2483.1	2525.1	2606.1	2742.5	2905.7	3086.5	3308.8	3538.9	3659.5	3661.3
70°	2214.6	2217.0	2249.9	2340.0	2484.3	2637.1	2839.3	3067.6	3310.0	3420.2	3425.7
72.5°	1909.5	1893.7	1923.5	2019.7	2088.5	2237.7	2423.4	2595.7	2808.9	2913.0	2910.5
75°	1456.5	1412.6	1465.0	1521.0	1559.4	1707.4	1823.0	1941.8	2138.5	2217.6	2213.4
77.5°	784.9	783.0	840.3	884.1	941.4	1074.7	1176.4	1251.3	1416.9	1455.9	1460.8
80°	426.2	442.1	476.2	524.9	571.1	635.1	694.1	741.0	795.2	770.3	764.8
82.5°	257.0	283.1	335.5	372.6	390.9	419.5	461.5	488.3	509.6	463.4	454.2
85°	40.8	73.7	189.4	226.5	246.0	259.4	268.5	286.2	261.2	244.8	249.0
87.5°	13.4	15.2	29.2	64.5	56.6	39.0	51.1	74.3	35.3	18.9	18.3
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: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7
2.5°	710.6	711.2	713.0	715.5	716.7	719.7	719.7	722.2	722.2	724.0	725.8
5°	708.8	711.8	714.2	717.9	719.7	724.0	725.8	729.5	731.3	733.7	736.2
7.5°	711.8	716.1	719.1	723.4	726.4	730.7	732.5	735.6	737.4	740.4	741.6
10°	714.2	718.5	722.2	727.0	729.5	732.5	734.3	736.8	737.4	739.2	740.4
12.5°	717.3	719.1	722.2	726.4	728.9	730.7	732.5	734.3	736.2	736.2	736.2
15°	721.5	719.7	720.3	724.0	726.4	727.6	729.5	730.7	731.3	731.3	730.1
17.5°	730.7	725.8	722.8	722.8	724.0	725.2	725.2	723.4	722.2	720.3	717.9
20°	744.1	736.2	730.1	727.0	724.6	721.5	716.7	710.6	705.1	700.2	697.2
22.5°	763.0	755.0	747.7	741.0	733.1	722.8	712.4	699.6	689.3	681.4	678.3
25°	798.3	786.7	781.2	770.9	758.7	742.2	726.4	708.8	696.6	685.6	680.8
27.5°	845.8	836.6	824.5	819.0	803.1	784.3	766.6	745.3	728.2	714.8	705.7
30°	906.0	900.0	889.6	880.5	865.2	848.2	822.0	798.3	768.4	744.7	731.3
32.5°	975.5	966.3	957.2	945.6	934.7	912.1	887.8	851.9	810.4	769.6	744.7
35°	1062.5	1053.4	1047.3	1029.0	1010.8	986.4	953.5	910.9	853.1	798.3	755.6
37.5°	1182.5	1163.0	1133.2	1107.0	1074.1	1037.0	999.8	948.7	884.1	812.9	754.4
40°	1286.6	1258.0	1224.5	1179.4	1133.2	1084.5	1040.6	985.2	909.7	825.1	745.9
42.5°	1421.8	1372.5	1315.8	1256.2	1192.8	1134.4	1080.2	1016.9	928.6	825.7	725.8
45°	1543.6	1482.7	1407.8	1326.8	1249.5	1178.2	1116.1	1046.1	944.4	823.2	702.7
47.5°	1651.9	1580.7	1489.4	1391.9	1300.6	1220.2	1152.0	1078.4	965.1	831.1	694.1
50°	1756.7	1675.1	1572.2	1454.1	1352.4	1264.7	1193.4	1114.3	999.8	857.9	707.5
52.5°	1868.7	1769.5	1653.2	1519.8	1409.0	1318.3	1238.5	1157.5	1041.2	893.9	731.9
55°	2005.7	1893.1	1760.3	1613.0	1485.7	1384.6	1294.5	1209.3	1090.5	938.3	760.5
57.5°	2188.4	2074.5	1921.7	1751.8	1618.5	1498.5	1390.1	1293.9	1165.4	999.8	803.1
60°	2540.3	2399.7	2196.3	2011.8	1867.5	1726.2	1595.3	1463.8	1309.1	1124.0	912.7
62.5°	3105.4	2909.3	2657.2	2400.3	2205.4	2018.5	1845.6	1674.5	1481.5	1273.8	1043.0
65°	3496.3	3254.0	2937.3	2615.2	2351.6	2123.2	1916.8	1713.4	1498.5	1300.6	1099.7
67°	3585.8	3314.9	2954.4	2604.9	2318.1	2070.3	1845.6	1633.7	1417.5	1237.9	1066.2
67.5°	3582.2	3311.8	2941.0	2583.0	2295.6	2051.4	1824.9	1602.0	1389.5	1213.5	1049.7
70°	3365.4	3093.8	2721.2	2365.0	2087.9	1845.0	1616.6	1422.4	1205.6	1063.1	940.1
72.5°	2851.5	2615.2	2314.4	1994.1	1756.7	1539.3	1356.6	1166.0	977.9	882.9	786.1
75°	2168.3	1958.8	1683.0	1448.6	1267.7	1116.7	933.4	808.0	675.9	610.7	576.0
77.5°	1432.7	1192.2	1001.6	778.2	645.4	526.7	415.3	329.4	275.2	289.2	316.0
80°	758.1	601.6	445.1	344.6	266.1	207.0	164.4	123.0	89.5	104.7	131.5
82.5°	412.8	351.9	260.0	207.0	169.3	140.0	107.8	75.5	56.0	62.1	89.5
85°	235.6	207.0	160.7	125.4	109.6	89.5	61.5	41.4	40.2	43.2	55.4
87.5°	39.0	52.4	42.6	29.2	32.9	32.3	28.6	21.9	16.4	23.1	29.8
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: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7	719.7
2.5°	727.0	728.9	731.3	731.9	731.3	733.1	736.2	738.6	736.8	735.6	738.6
5°	738.6	739.8	742.9	742.9	743.5	744.7	746.5	748.3	745.9	745.9	747.1
7.5°	743.5	743.5	746.5	745.3	745.3	744.7	746.5	747.1	743.5	742.9	743.5
10°	740.4	740.4	741.6	739.2	738.6	738.0	738.0	738.6	734.9	733.7	735.6
12.5°	736.2	736.2	734.9	733.7	732.5	731.3	732.5	733.1	730.7	730.7	731.3
15°	728.9	727.0	726.4	726.4	727.0	727.6	730.1	731.9	730.1	728.9	728.9
17.5°	716.7	715.5	717.3	720.9	725.2	728.2	731.9	733.1	728.9	724.0	720.3
20°	698.4	701.5	708.2	718.5	727.6	732.5	732.5	728.2	718.5	708.8	703.9
22.5°	679.5	688.1	702.7	718.5	729.5	731.3	724.6	715.5	702.1	691.7	682.6
25°	682.0	692.3	706.9	720.3	727.6	724.6	712.4	700.8	685.0	674.1	660.7
27.5°	707.5	717.3	724.6	728.9	726.4	716.7	702.7	686.8	669.2	654.0	638.1
30°	728.2	732.5	731.9	728.2	719.1	703.9	687.4	668.6	647.3	630.8	610.1
32.5°	731.9	724.0	711.8	698.4	686.2	669.2	650.3	628.4	604.6	583.3	562.6
35°	725.2	695.4	668.6	641.8	623.5	602.2	585.8	560.2	534.0	515.7	500.5
37.5°	700.2	648.5	605.9	568.1	541.3	517.0	492.0	467.0	445.1	436.6	432.3
40°	668.6	590.6	525.5	473.1	444.5	420.8	395.2	375.1	364.7	356.8	353.8
42.5°	622.3	524.9	443.9	387.9	351.3	329.4	304.5	293.5	288.6	290.4	288.0
45°	579.1	456.1	354.4	292.3	267.3	246.6	234.4	229.6	227.1	225.9	227.7
47.5°	548.6	403.1	285.6	222.2	201.5	186.9	182.1	180.2	179.6	177.2	176.6
50°	541.3	372.0	233.8	172.9	157.1	149.2	146.7	144.9	143.7	141.9	137.6
52.5°	549.8	363.5	208.2	148.6	135.2	129.1	127.3	124.2	123.0	118.1	112.6
55°	564.5	366.6	200.3	141.9	128.5	121.8	119.3	118.1	113.9	108.4	101.7
57.5°	594.9	385.4	204.0	143.7	129.7	123.6	122.4	121.2	115.7	107.8	99.3
60°	683.2	440.2	222.9	156.5	139.4	135.2	135.8	133.3	125.4	115.1	102.3
62.5°	819.6	525.5	257.6	172.3	155.3	155.3	158.9	157.1	144.9	127.9	109.6
65°	890.2	576.6	272.2	177.2	160.1	168.1	179.6	177.8	160.1	134.6	110.2
67°	879.3	566.9	263.7	169.9	151.0	161.4	172.9	173.5	154.1	128.5	105.3
67.5°	868.9	560.2	259.4	166.8	148.6	158.9	169.9	168.1	151.6	126.0	104.1
70°	780.6	492.0	231.4	155.9	137.6	140.7	143.7	141.3	128.5	111.4	96.2
72.5°	674.1	408.6	204.0	149.2	131.5	126.7	126.7	122.4	113.9	102.3	91.3
75°	513.9	317.8	179.0	141.9	124.2	116.9	115.7	112.6	105.3	96.8	87.1
77.5°	313.6	227.7	155.3	130.9	115.1	109.0	109.6	107.8	100.5	92.6	83.4
80°	157.1	147.4	130.3	113.9	104.1	98.0	98.6	95.0	88.9	82.8	75.5
82.5°	96.2	101.7	91.3	86.5	80.4	73.7	57.2	67.0	65.2	59.7	56.6
85°	63.9	63.3	57.2	50.5	46.3	40.2	35.9	36.5	40.2	41.4	41.4
87.5°	31.1	29.8	27.4	25.6	24.4	20.1	18.9	21.3	21.3	22.5	21.9
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: P142029

CATALOG NUMBER: ECM-E02-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	719.7	719.7	719.7	719.7	719.7
2.5°	739.2	740.4	739.8	741.6	739.8
5°	747.7	747.7	748.3	748.9	748.3
7.5°	743.5	742.9	744.1	745.3	744.7
10°	735.6	736.2	737.4	739.2	739.2
12.5°	732.5	733.1	735.6	737.4	737.4
15°	730.1	730.7	731.9	734.3	732.5
17.5°	719.1	716.7	716.7	718.5	716.7
20°	699.6	696.0	696.0	695.4	694.8
22.5°	676.5	667.4	664.9	661.9	662.5
25°	647.9	635.7	629.0	625.3	624.1
27.5°	624.7	610.7	604.0	598.5	596.7
30°	595.5	579.7	574.2	571.1	569.9
32.5°	552.9	538.9	531.6	529.7	526.1
35°	488.3	482.2	479.2	474.9	475.6
37.5°	423.8	422.0	414.7	417.1	414.7
40°	354.4	353.8	355.0	353.2	357.4
42.5°	289.2	287.4	290.4	288.6	290.4
45°	224.1	227.7	232.0	230.2	232.6
47.5°	171.7	172.3	171.1	172.3	173.5
50°	132.1	130.9	129.7	127.3	128.5
52.5°	109.0	104.7	101.7	99.9	99.3
55°	96.2	91.9	89.5	87.1	87.1
57.5°	92.6	87.1	83.4	81.6	81.0
60°	93.2	85.9	81.0	77.9	77.3
62.5°	95.6	85.9	79.2	76.1	74.9
65°	95.0	84.6	77.9	74.9	73.7
67°	91.9	82.8	77.3	74.3	73.7
67.5°	90.7	82.2	77.3	74.3	73.1
70°	86.5	80.4	76.1	73.1	71.9
72.5°	82.8	77.9	73.1	70.6	69.4
75°	79.2	74.3	70.0	67.6	67.0
77.5°	75.5	70.0	67.0	63.9	61.5
80°	68.8	62.7	58.5	53.6	52.4
82.5°	56.6	51.8	47.5	43.2	42.6
85°	42.0	40.2	36.5	32.9	32.9
87.5°	23.1	25.6	22.5	20.7	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)