

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: FAIL-SAFE

Report Number: P837903

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P837903
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

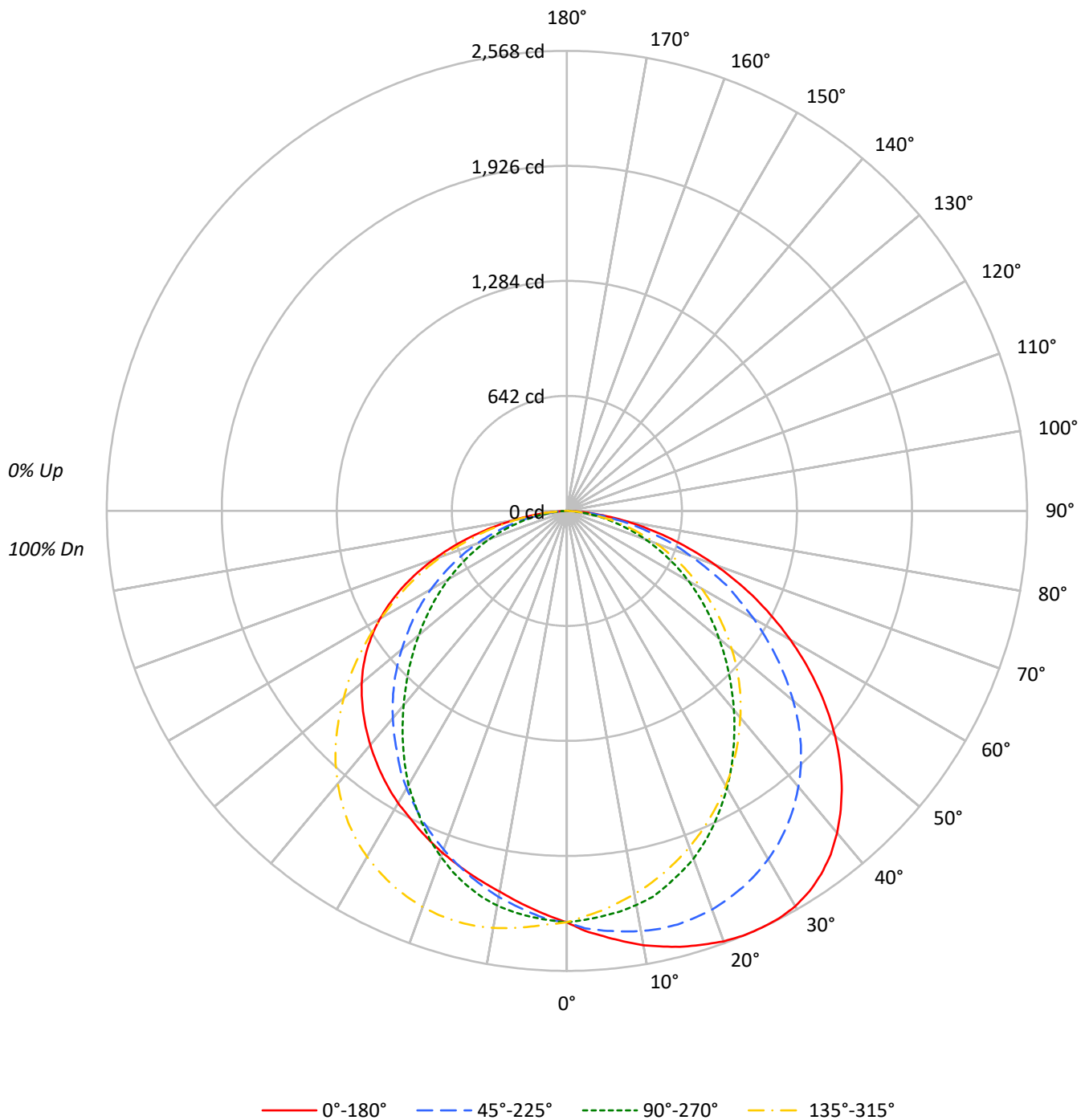
Lumens per Lamp: N/A
Luminaire Lumens: 6737.9 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): 120
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

TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6180	6180	6180	6180
5°	6441	6136	6020	6146
10°	6728	6104	5898	6113
15°	7016	6026	5840	6028
20°	7322	5917	5814	5883
25°	7625	5752	5814	5693
30°	7920	5551	5853	5490
35°	8131	5323	5911	5239
40°	8239	5094	5994	4979
45°	8255	4862	6110	4740
50°	8177	4640	6260	4517
55°	8008	4434	6399	4310
60°	7756	4218	6484	4109
65°	7409	3971	6450	3878
70°	6921	3680	6221	3612
75°	6227	3280	5709	3264
80°	5280	2748	4798	2789
85°	3671	1819	3044	1868

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.0	3.2
10°-20°	631.4	9.4
20°-30°	967.7	14.4
30°-40°	1176.6	17.5
40°-50°	1223.2	18.2
50°-60°	1104.9	16.4
60°-70°	840.0	12.5
70°-80°	468.3	7.0
80°-90°	107.8	1.6
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°-30°	1817.1	27.0
0°-40°	2993.7	44.4
0°-60°	5321.8	79.0
0°-90°	6737.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6737.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2297	2297	2297	2297	2297	
5°	2384	2271	2229	2275	2384	230
15°	2518	2163	2096	2164	2518	714
25°	2568	1937	1958	1917	2568	1186
35°	2475	1620	1800	1595	2475	1546
45°	2169	1278	1606	1246	2169	1670
55°	1707	945	1364	919	1707	1524
65°	1164	624	1013	609	1164	1150
75°	599	316	549	314	599	636
85°	119	59	99	60	119	150
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6
2.5°	2347.5	2313.2	2313.7	2343.7	2320.7	2332.0	2299.8	2312.1	2308.4	2311.1	2284.8
5°	2384.5	2347.5	2347.0	2372.7	2347.0	2351.8	2311.1	2319.1	2307.3	2299.8	2271.4
7.5°	2423.6	2386.6	2382.9	2405.4	2371.6	2367.9	2322.9	2322.9	2301.4	2282.7	2255.9
10°	2462.1	2424.1	2419.3	2436.4	2394.6	2382.3	2327.7	2319.1	2290.7	2262.9	2233.9
12.5°	2491.1	2452.5	2448.7	2459.5	2412.3	2389.8	2327.7	2311.1	2269.3	2230.2	2207.7
15°	2518.4	2478.7	2468.6	2473.9	2419.8	2389.8	2320.2	2294.5	2240.9	2189.5	2163.2
17.5°	2537.7	2499.6	2489.5	2488.9	2423.6	2380.7	2304.1	2268.7	2204.5	2142.3	2116.1
20°	2557.0	2518.9	2506.1	2496.4	2422.5	2368.4	2280.5	2232.9	2157.9	2088.2	2066.2
22.5°	2566.6	2527.5	2513.6	2499.1	2415.5	2345.9	2251.6	2191.1	2105.4	2022.3	2004.1
25°	2568.2	2528.0	2513.0	2492.1	2401.6	2319.1	2214.1	2140.7	2044.8	1952.7	1937.1
27.5°	2563.9	2520.0	2505.0	2479.8	2380.7	2286.4	2169.6	2083.4	1980.5	1878.7	1862.1
30°	2548.9	2504.5	2490.0	2457.3	2351.2	2246.2	2120.9	2019.6	1909.3	1801.1	1786.6
32.5°	2518.9	2475.5	2463.7	2431.1	2319.1	2199.6	2064.1	1951.1	1830.5	1727.1	1705.7
35°	2475.0	2431.6	2424.1	2389.8	2274.1	2143.9	2002.0	1876.1	1747.0	1641.4	1620.5
37.5°	2417.7	2381.2	2370.0	2336.2	2221.1	2080.7	1930.7	1794.6	1661.8	1548.2	1535.4
40°	2345.4	2311.1	2302.5	2272.5	2159.5	2010.5	1853.6	1710.5	1573.9	1468.4	1450.2
42.5°	2262.9	2230.7	2225.9	2194.8	2083.4	1932.9	1770.0	1623.2	1482.3	1380.5	1362.3
45°	2169.1	2138.0	2137.0	2107.5	2000.4	1846.6	1682.1	1534.8	1392.9	1287.3	1277.7
47.5°	2065.7	2037.9	2037.9	2010.5	1907.7	1751.8	1591.6	1442.7	1302.9	1209.6	1192.5
50°	1953.2	1927.0	1918.9	1905.5	1805.4	1648.4	1496.2	1352.7	1213.9	1125.0	1108.4
52.5°	1833.2	1810.7	1816.1	1791.4	1694.5	1540.7	1399.8	1251.4	1124.5	1043.6	1027.0
55°	1706.8	1674.6	1679.5	1670.4	1578.7	1429.8	1291.6	1167.9	1036.6	960.5	945.0
57.5°	1575.5	1533.7	1550.9	1545.5	1455.5	1316.2	1192.5	1073.0	949.3	879.1	864.1
60°	1441.1	1400.9	1418.6	1413.7	1329.1	1202.7	1090.2	979.3	862.5	798.7	783.7
62.5°	1302.9	1265.9	1282.0	1278.2	1200.5	1086.4	988.4	886.6	775.2	717.9	703.9
65°	1163.6	1128.2	1142.7	1140.0	1068.2	981.4	883.9	790.7	687.3	637.5	623.6
67.5°	1021.1	988.4	1001.8	1001.8	935.9	852.9	778.9	693.7	601.1	558.2	545.4
70°	879.6	849.1	860.9	859.8	804.1	736.6	672.9	596.8	513.7	478.4	467.7
72.5°	737.1	710.4	721.1	720.0	673.4	630.0	566.8	500.9	428.6	400.2	390.5
75°	598.9	573.7	583.9	582.9	544.8	504.1	461.8	407.1	345.0	325.2	315.5
77.5°	467.1	441.4	450.0	450.0	422.1	392.7	358.9	316.6	272.7	251.2	244.3
80°	340.7	328.4	324.1	324.6	305.9	286.6	269.5	228.7	196.6	182.1	177.3
82.5°	223.9	213.7	209.5	210.5	199.8	188.0	177.3	148.9	127.5	118.9	116.2
85°	118.9	111.4	107.7	110.4	108.2	101.8	96.4	77.1	63.7	60.5	58.9
87.5°	37.5	32.7	30.0	39.6	33.7	30.0	28.9	23.0	17.7	17.7	17.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6
2.5°	2293.4	2293.4	2272.5	2267.7	2265.5	2268.2	2247.3	2243.6	2273.6	2263.4	2240.4
5°	2275.2	2274.1	2244.6	2239.3	2239.3	2236.1	2212.5	2207.1	2237.1	2228.6	2203.4
7.5°	2252.7	2249.5	2214.6	2210.9	2205.5	2203.4	2177.1	2173.4	2199.1	2193.7	2170.2
10°	2225.4	2222.1	2180.9	2178.2	2172.3	2168.0	2143.4	2140.7	2167.0	2158.4	2139.6
12.5°	2189.5	2183.6	2141.2	2138.6	2133.7	2132.1	2108.0	2107.0	2135.9	2127.3	2107.5
15°	2142.3	2137.5	2090.4	2091.4	2092.0	2092.0	2072.7	2071.6	2100.0	2096.2	2074.8
17.5°	2090.4	2083.9	2038.9	2042.1	2045.9	2050.2	2035.2	2037.9	2067.9	2063.0	2043.7
20°	2031.4	2025.0	1981.1	1990.2	1998.2	2006.8	1997.1	2004.6	2032.5	2030.4	2015.9
22.5°	1965.5	1959.1	1918.4	1932.3	1945.7	1961.8	1957.5	1966.1	1995.5	1995.0	1982.1
25°	1885.2	1886.8	1850.9	1868.0	1890.5	1913.0	1914.6	1928.6	1961.2	1958.0	1946.2
27.5°	1810.2	1812.3	1774.3	1803.2	1833.2	1862.1	1869.1	1888.4	1921.6	1918.9	1908.7
30°	1731.4	1734.1	1697.1	1736.8	1773.2	1808.6	1823.6	1849.8	1883.6	1883.6	1872.9
32.5°	1649.5	1654.3	1615.7	1668.7	1711.1	1752.3	1778.6	1805.9	1844.5	1843.4	1834.3
35°	1565.4	1570.7	1535.4	1602.9	1645.2	1695.5	1728.2	1764.6	1798.9	1799.5	1792.5
37.5°	1479.6	1486.1	1453.9	1527.9	1576.1	1635.5	1677.3	1713.7	1751.8	1753.9	1747.5
40°	1394.5	1401.4	1373.6	1444.8	1505.9	1572.3	1620.5	1663.4	1705.2	1706.2	1702.0
42.5°	1309.3	1316.8	1295.9	1365.5	1434.6	1505.9	1562.7	1611.4	1654.3	1657.0	1652.1
45°	1226.2	1232.7	1217.7	1293.7	1360.2	1437.9	1503.2	1558.4	1601.8	1605.5	1603.9
47.5°	1143.7	1149.6	1136.2	1205.9	1282.5	1365.0	1440.5	1501.6	1547.7	1552.0	1550.9
50°	1062.9	1067.7	1053.2	1126.1	1202.1	1290.0	1368.7	1439.5	1490.9	1495.2	1494.6
52.5°	982.5	987.3	975.0	1051.6	1120.7	1213.4	1299.1	1375.7	1426.6	1433.0	1434.1
55°	904.8	907.0	897.3	970.7	1037.7	1134.6	1233.2	1307.7	1358.6	1363.9	1367.1
57.5°	827.1	827.7	819.6	889.8	954.1	1053.2	1156.6	1234.8	1283.0	1288.4	1293.2
60°	750.0	749.5	740.4	808.4	870.0	968.0	1075.7	1153.4	1200.0	1204.8	1211.2
62.5°	673.4	671.8	663.7	726.4	784.3	881.2	989.5	1064.5	1108.9	1112.1	1120.7
65°	597.3	595.7	588.2	646.1	698.6	791.2	897.3	968.6	1008.7	1013.0	1011.4
67.5°	522.3	519.1	513.2	565.2	612.9	698.6	800.4	868.4	901.6	905.4	915.5
70°	447.3	443.6	430.2	485.4	527.1	603.7	698.6	759.1	787.0	790.7	789.1
72.5°	373.4	369.6	355.2	406.1	441.4	508.4	593.0	643.4	667.5	670.7	670.7
75°	301.6	299.5	290.4	328.9	358.4	413.0	484.8	526.6	545.4	549.1	548.0
77.5°	232.5	230.9	221.8	255.0	278.0	318.7	376.6	409.3	423.2	427.5	436.6
80°	166.6	166.1	151.6	184.3	194.5	228.7	271.1	296.2	303.7	309.6	316.1
82.5°	106.6	107.1	92.7	120.5	124.8	146.8	173.0	188.6	193.9	198.7	203.6
85°	52.0	54.1	46.1	63.7	64.3	75.5	86.8	92.7	94.8	98.6	102.9
87.5°	13.4	15.5	8.6	18.2	16.1	20.9	24.1	25.7	25.2	27.9	29.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6
2.5°	2247.9	2265.0	2256.4	2284.3	2295.0	2277.9	2307.9	2308.4	2287.0	2312.1	2326.1
5°	2213.0	2230.7	2225.4	2254.3	2267.7	2252.7	2289.1	2296.1	2275.2	2303.6	2326.1
7.5°	2177.7	2198.6	2191.6	2221.1	2237.1	2225.4	2264.5	2275.7	2259.6	2290.7	2320.7
10°	2147.1	2164.8	2157.3	2188.4	2202.3	2192.7	2231.2	2252.1	2237.1	2275.2	2311.1
12.5°	2117.1	2131.6	2123.0	2148.7	2162.1	2149.8	2197.0	2216.2	2205.5	2245.2	2291.2
15°	2078.6	2094.6	2082.9	2105.9	2116.1	2105.4	2143.9	2177.1	2163.7	2207.1	2258.0
17.5°	2049.1	2058.2	2042.1	2060.4	2066.2	2051.8	2090.9	2123.6	2113.9	2161.1	2220.0
20°	2016.4	2023.9	2001.4	2011.6	2011.1	1992.9	2028.7	2060.9	2054.5	2106.4	2173.4
22.5°	1980.0	1983.7	1957.5	1959.6	1958.6	1928.6	1960.7	1993.4	1990.7	2043.2	2118.2
25°	1941.4	1942.0	1908.2	1907.1	1895.4	1860.0	1888.4	1925.4	1917.3	1974.1	2052.9
27.5°	1903.4	1898.0	1857.3	1847.7	1828.9	1786.6	1811.8	1845.0	1840.2	1895.9	1983.2
30°	1862.7	1855.7	1805.9	1788.2	1760.9	1712.1	1733.0	1764.1	1766.8	1815.5	1907.1
32.5°	1824.1	1806.4	1751.2	1725.5	1691.2	1634.5	1645.7	1677.3	1681.6	1730.9	1825.2
35°	1774.3	1762.5	1694.5	1650.5	1616.8	1554.6	1566.4	1588.4	1594.8	1643.0	1738.9
37.5°	1727.1	1708.4	1636.1	1582.5	1539.1	1473.7	1477.0	1499.5	1505.9	1554.6	1649.5
40°	1678.4	1651.6	1573.9	1511.2	1461.4	1392.9	1389.1	1412.7	1417.5	1465.2	1550.9
42.5°	1626.4	1594.3	1507.0	1438.4	1381.1	1311.4	1303.9	1324.3	1329.6	1376.2	1460.4
45°	1573.9	1535.4	1438.4	1363.4	1300.7	1229.5	1222.0	1237.5	1245.5	1289.5	1370.4
47.5°	1518.2	1473.2	1367.7	1284.1	1219.3	1148.0	1138.9	1154.5	1160.9	1204.3	1280.9
50°	1459.8	1405.2	1294.8	1202.7	1138.4	1068.2	1054.8	1073.0	1078.9	1119.6	1194.6
52.5°	1395.5	1335.0	1217.1	1120.7	1056.4	989.5	973.4	991.1	998.0	1037.7	1106.8
55°	1327.5	1262.1	1138.9	1045.2	975.5	910.2	896.8	903.7	918.7	956.2	1020.5
57.5°	1250.9	1186.1	1056.4	961.1	894.1	831.4	820.2	826.6	840.5	877.0	934.8
60°	1169.5	1100.9	972.3	877.0	812.1	752.7	742.5	748.4	763.4	796.6	850.2
62.5°	1089.1	1012.0	885.5	790.7	731.8	676.6	673.9	671.8	685.7	717.9	765.0
65°	991.6	917.7	795.0	705.0	651.4	601.6	590.9	595.7	609.1	638.6	687.9
67.5°	887.1	820.2	702.3	619.3	571.6	527.1	518.0	520.2	534.1	559.8	602.7
70°	776.2	717.3	607.5	533.0	492.9	451.1	445.2	445.7	459.1	481.6	519.1
72.5°	660.0	607.0	511.6	447.9	414.6	384.6	379.3	372.9	385.2	404.5	436.6
75°	541.6	495.0	416.2	364.3	338.0	312.9	308.0	301.6	313.9	330.5	355.7
77.5°	422.1	384.6	323.6	283.4	263.0	244.3	240.0	233.0	245.4	257.7	277.5
80°	305.4	278.0	241.6	199.3	192.3	180.0	175.7	168.2	180.0	188.0	203.0
82.5°	197.1	178.9	158.0	128.6	127.5	118.4	116.2	107.7	118.4	123.2	134.5
85°	99.6	91.1	85.7	65.4	67.5	61.6	61.1	52.0	60.5	62.7	69.1
87.5°	28.4	30.0	26.8	16.1	20.4	19.3	19.3	13.9	19.3	19.3	22.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837903

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4STD-40-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6	2296.6
2.5°	2298.7	2307.9	2310.0	2309.5	2315.4	2347.5	2336.8	2347.5
5°	2304.1	2324.5	2329.8	2337.3	2347.0	2383.4	2371.6	2384.5
7.5°	2307.3	2337.9	2349.6	2364.1	2379.6	2420.4	2410.7	2423.6
10°	2307.3	2347.0	2364.1	2388.2	2409.1	2456.2	2447.1	2462.1
12.5°	2297.7	2348.6	2372.7	2406.4	2433.2	2484.1	2480.4	2491.1
15°	2277.9	2340.5	2373.7	2417.1	2450.4	2507.1	2505.5	2518.4
17.5°	2251.1	2326.6	2366.8	2421.4	2463.2	2527.0	2530.7	2537.7
20°	2217.3	2300.4	2352.9	2419.8	2472.3	2542.5	2547.3	2557.0
22.5°	2172.9	2268.7	2332.0	2412.9	2473.4	2548.9	2557.5	2566.6
25°	2120.4	2230.7	2304.6	2399.5	2468.0	2548.4	2560.2	2568.2
27.5°	2060.4	2181.4	2269.8	2378.0	2453.0	2539.8	2554.3	2563.9
30°	1990.7	2128.9	2230.2	2350.2	2432.7	2523.7	2539.3	2548.9
32.5°	1918.9	2071.1	2183.0	2314.3	2403.2	2498.0	2511.4	2518.9
35°	1840.7	2000.9	2126.2	2268.2	2365.2	2456.8	2467.0	2475.0
37.5°	1755.5	1924.8	2061.4	2216.2	2311.6	2399.5	2408.6	2417.7
40°	1667.7	1845.0	1988.6	2152.5	2247.9	2329.3	2338.9	2345.4
42.5°	1579.3	1756.6	1910.9	2077.5	2172.3	2250.5	2256.4	2262.9
45°	1489.8	1665.0	1823.6	1994.5	2088.2	2161.6	2163.7	2169.1
47.5°	1398.7	1570.2	1727.7	1899.6	1992.3	2059.3	2061.4	2065.7
50°	1307.1	1475.4	1625.4	1797.3	1887.9	1958.6	1948.9	1953.2
52.5°	1217.1	1375.7	1528.9	1687.0	1776.4	1839.1	1841.8	1833.2
55°	1128.7	1278.2	1419.1	1571.2	1656.4	1705.2	1703.6	1706.8
57.5°	1039.3	1179.6	1308.7	1448.0	1531.1	1577.1	1586.8	1575.5
60°	948.2	1080.0	1195.7	1321.6	1402.0	1440.5	1451.8	1441.1
62.5°	857.7	978.7	1083.7	1193.6	1268.0	1315.7	1314.6	1302.9
65°	767.1	877.0	970.7	1063.9	1128.7	1176.4	1174.3	1163.6
67.5°	683.6	774.1	858.2	933.7	990.0	1022.7	1033.9	1021.1
70°	591.4	669.6	743.6	804.1	850.7	880.2	890.9	879.6
72.5°	499.3	565.7	617.7	676.1	712.0	736.6	747.9	737.1
75°	408.2	462.9	505.2	550.7	575.9	596.8	609.6	598.9
77.5°	319.8	362.1	395.9	429.1	458.0	462.9	474.1	467.1
80°	235.7	266.2	290.9	312.9	333.7	335.9	345.0	340.7
82.5°	157.0	177.3	183.7	206.8	220.2	218.0	227.1	223.9
85°	83.0	95.4	106.6	113.6	121.1	114.1	122.1	118.9
87.5°	27.9	29.5	25.7	36.4	40.2	34.3	39.1	37.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)