

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: METALUX

Report Number: P189257

Luminaire Tested: **4SWLED-LD4-52HL-LC-UNV-L840-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P189257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26870)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-LD4-52HL-LC-UNV-L840-CD2-U
Description: [LUMINAIRE]METALUX LED STAIRWELL WITH NARROW CLEAR LENS

Light Source: EATON LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

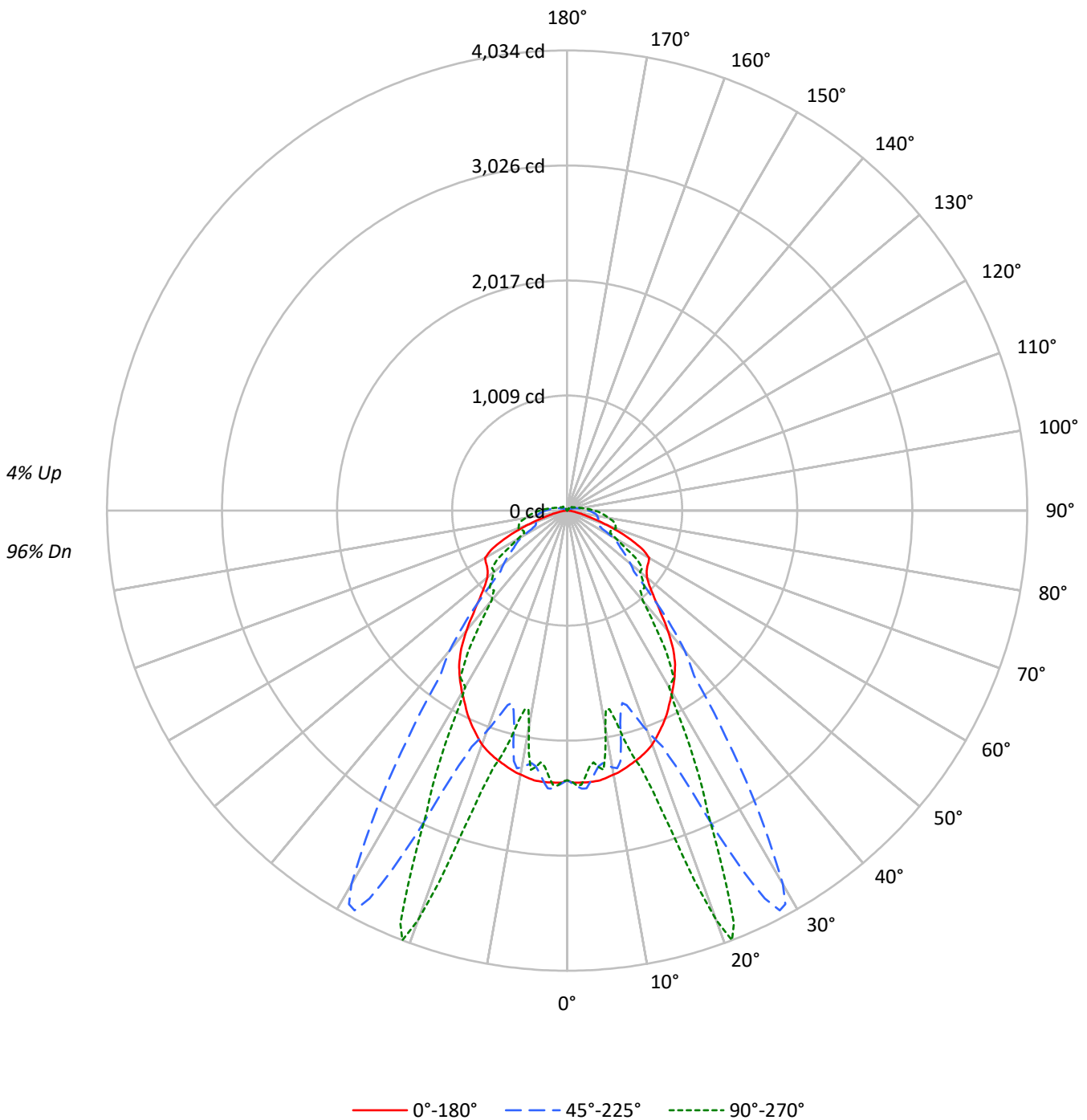
Lumens per Lamp: N/A
Luminaire Lumens: 6443.7 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.15 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.75' x H: 0.17')
CIE Type: Direct

Input Watts (W): 50.7
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	108	103	99	96	105	101	97	94	96	93	90	91	89	86	87	85	83	81
2	99	91	85	80	96	89	83	78	85	80	76	81	77	74	78	74	71	69
3	91	81	74	68	88	79	72	67	76	70	65	73	68	63	70	65	62	59
4	84	73	65	58	81	71	64	58	68	62	56	65	60	55	63	58	54	52
5	78	66	57	51	75	64	56	50	62	55	49	59	53	49	57	52	48	46
6	72	59	51	45	70	58	50	45	56	49	44	54	48	43	52	47	42	40
7	67	54	46	40	65	53	45	40	51	44	39	49	43	39	48	42	38	36
8	62	50	41	36	61	49	41	36	47	40	35	46	39	35	44	38	34	32
9	58	46	38	32	57	45	37	32	43	37	32	42	36	31	41	35	31	29
10	55	42	35	29	53	41	34	29	40	34	29	39	33	29	38	32	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18096	18096	18096
5°	18273	17763	16663
10°	18122	16751	13867
15°	17850	13136	15749
20°	17488	14882	26789
25°	16754	22748	20386
30°	15877	27851	12554
35°	14955	18280	10814
40°	13214	12416	7508
45°	11174	8157	7197
50°	10318	6122	6499
55°	10746	5105	6102
60°	11798	4307	4327
65°	10535	3171	3904
70°	7423	3307	4572
75°	4244	3648	4843
80°	2647	3980	4590
85°	1398	4174	4439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.3	3.4
10°-20°	622.5	9.7
20°-30°	1226.5	19.0
30°-40°	1265.5	19.6
40°-50°	1063.5	16.5
50°-60°	784.4	12.2
60°-70°	444.7	6.9
70°-80°	319.3	5.0
80°-90°	216.4	3.4
90°-100°	129.3	2.0
100°-110°	67.5	1.0
110°-120°	37.8	0.6
120°-130°	22.1	0.3
130°-140°	15.3	0.2
140°-150°	5.6	0.1
150°-160°	1.6	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	2070.3	32.1
0°-40°	3335.9	51.8
0°-60°	5183.7	80.4
0°-90°	6164.1	95.7
90°-120°	234.6	3.6
90°-150°	277.6	4.3
90°-180°	280.0	4.3
0°-180°	6443.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2364	2364	2364	2364	2364	
5°	2387	2423	2382	2270	2253	227
15°	2279	2181	1811	2039	2224	643
25°	2025	1807	3128	3512	2914	929
35°	1650	2033	2430	1647	1517	1021
45°	1078	2715	1014	916	960	849
55°	856	1523	571	721	748	774
65°	637	612	305	374	421	617
75°	167	246	282	406	435	200
85°	24	103	235	288	307	30
90°	2	75	187	231	238	2
95°	1	60	146	170	178	1
105°	1	31	77	91	98	1
115°	2	14	42	60	67	1
125°	2	6	25	39	48	1
135°	2	3	18	38	46	1
145°	2	2	7	14	18	1
155°	2	2	3	4	6	1
165°	2	2	2	1	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2
1°	2384.2	2382.6	2373.0	2368.2	2367.4	2365.8	2366.6	2368.2	2372.2	2372.2	2390.6
2°	2386.6	2385.8	2379.4	2376.2	2376.2	2376.2	2377.8	2382.6	2385.8	2386.6	2414.6
3°	2387.4	2388.2	2384.2	2381.8	2387.4	2387.4	2389.8	2396.2	2407.4	2411.4	2440.2
4°	2389.0	2392.2	2389.8	2389.0	2400.2	2408.2	2413.0	2421.8	2429.0	2429.8	2441.0
5°	2387.4	2391.4	2391.4	2401.0	2416.2	2422.6	2426.6	2432.2	2421.0	2390.6	2381.8
6°	2385.8	2392.2	2396.2	2413.8	2427.4	2433.0	2433.8	2409.0	2379.4	2344.2	2315.4
7°	2381.8	2388.2	2401.0	2424.2	2433.0	2432.2	2418.6	2367.4	2315.4	2270.6	2257.8
8°	2372.2	2381.8	2407.4	2426.6	2420.2	2395.4	2369.8	2313.8	2265.0	2233.0	2235.4
9°	2361.0	2371.4	2407.4	2421.0	2389.8	2354.6	2322.6	2253.0	2221.7	2216.9	2260.2
10°	2349.8	2366.6	2408.2	2409.0	2341.0	2305.0	2261.0	2213.7	2212.9	2239.4	2286.6
11°	2340.2	2360.2	2403.4	2385.0	2299.4	2259.4	2214.5	2200.9	2232.2	2261.8	2301.8
12°	2326.6	2353.8	2393.0	2353.0	2245.8	2207.3	2184.1	2209.7	2247.4	2274.6	2244.2
13°	2310.6	2341.0	2373.0	2305.0	2201.7	2175.3	2184.1	2226.5	2250.6	2234.6	2099.3
14°	2293.8	2333.0	2349.0	2262.6	2161.7	2168.1	2196.1	2229.7	2233.8	2095.3	1925.6
15°	2279.4	2322.6	2323.4	2215.3	2148.1	2180.9	2202.5	2218.5	2155.3	1960.8	1811.2
16°	2262.6	2311.4	2295.4	2181.7	2160.9	2191.3	2203.3	2189.7	2006.5	1816.8	1755.1
17°	2245.8	2295.4	2260.2	2152.1	2176.1	2192.9	2192.1	2106.5	1896.0	1752.7	1782.4
18°	2226.5	2275.4	2228.1	2131.3	2182.5	2183.3	2164.9	2008.9	1785.6	1739.9	1865.6
19°	2204.9	2252.2	2193.7	2118.5	2174.5	2156.9	2108.9	1900.0	1743.1	1788.8	1960.0
20°	2181.7	2225.7	2162.5	2120.1	2154.5	2115.3	2042.5	1815.2	1740.7	1867.2	2056.9
21°	2152.9	2194.5	2132.9	2128.1	2117.7	2048.9	1957.6	1765.6	1779.2	1940.0	2144.9
22°	2121.7	2161.7	2109.7	2128.1	2061.7	1984.8	1881.6	1745.5	1844.8	2016.1	2232.2
23°	2088.1	2131.3	2088.1	2117.7	1992.8	1913.6	1820.0	1763.2	1892.0	2090.5	2428.2
24°	2057.7	2096.9	2073.7	2092.9	1931.2	1853.6	1781.6	1801.6	1936.0	2174.5	2702.0
25°	2024.9	2064.1	2060.9	2052.9	1875.2	1807.2	1773.6	1832.8	1994.4	2380.2	3127.7
26°	1988.8	2028.9	2048.9	1994.4	1832.8	1783.2	1784.8	1856.0	2072.9	2638.7	3511.1
27°	1950.4	1996.1	2025.7	1930.4	1803.2	1780.8	1808.0	1872.8	2254.6	3043.7	3816.8
28°	1912.0	1958.4	1992.8	1866.4	1785.6	1796.8	1817.6	1908.8	2486.7	3391.8	3969.7
29°	1875.2	1923.2	1956.0	1816.8	1783.2	1816.8	1816.0	2015.3	2847.6	3692.0	3945.7
30°	1842.4	1888.0	1913.6	1784.0	1796.0	1819.2	1815.2	2191.3	3155.7	3845.6	3780.0
32.5°	1749.5	1785.6	1786.4	1754.3	1816.8	1812.8	1956.0	2896.4	3671.2	3693.6	3117.3
35°	1650.3	1661.5	1677.5	1775.2	1830.4	2032.9	2510.7	3355.8	3639.2	3070.9	2429.8
37.5°	1527.1	1525.4	1633.5	1790.4	2101.7	2569.9	2951.7	3428.7	3116.5	2377.8	1829.6
40°	1371.8	1389.4	1625.5	1850.4	2541.1	2800.4	2990.9	3213.4	2416.2	1832.8	1603.1
42.5°	1213.3	1293.4	1625.5	2096.1	2626.7	2770.0	2963.7	2683.5	1913.6	1563.1	1311.0
45°	1078.1	1242.9	1637.5	2299.4	2542.7	2714.8	2745.2	2142.5	1586.3	1210.1	1014.0
47.5°	978.0	1195.7	1741.5	2220.1	2454.6	2496.3	2381.8	1788.0	1183.7	889.2	794.7
50°	912.4	1139.7	1786.4	2064.1	2272.2	2220.1	2051.3	1319.0	817.1	719.5	725.9
52.5°	878.0	1127.7	1663.9	1918.4	2041.7	1929.6	1617.5	892.4	658.7	644.3	648.3
55°	856.4	1091.7	1484.6	1719.1	1752.7	1523.0	1194.1	671.5	563.4	555.4	571.4
57.5°	846.0	989.2	1307.8	1457.4	1376.6	1172.5	906.8	512.2	458.6	474.6	522.6
60°	830.0	882.0	1050.0	1146.1	1096.5	928.4	687.5	407.4	398.6	428.2	449.8
62.5°	754.7	757.1	734.7	905.2	897.2	753.1	543.4	348.9	333.7	342.5	347.3
65°	637.1	587.5	508.2	744.3	740.3	611.5	433.0	276.9	269.7	289.7	304.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	505.8	423.4	381.0	595.5	588.3	484.2	346.5	238.5	252.1	272.9	295.3
70°	372.2	311.3	300.1	469.0	463.4	388.2	290.5	220.9	243.3	264.9	288.1
72.5°	253.7	230.5	236.1	353.8	362.6	310.5	246.5	209.7	229.7	254.5	289.7
75°	167.3	168.9	181.7	260.1	277.7	246.5	208.1	195.3	216.9	246.5	282.5
77.5°	114.4	120.1	135.3	186.5	207.3	192.1	176.9	180.1	203.3	237.7	275.3
80°	75.2	80.8	96.8	132.1	153.7	152.9	152.1	167.3	193.7	230.5	267.3
82.5°	45.6	51.2	66.4	93.6	116.0	123.3	132.9	155.3	187.3	228.1	257.7
85°	24.0	29.6	44.0	67.2	90.4	103.2	116.8	145.7	184.1	219.3	235.3
87.5°	9.6	15.2	28.8	48.8	73.6	88.0	104.0	138.5	178.5	201.7	210.5
90°	1.6	7.2	18.4	36.8	60.8	75.2	92.8	132.9	165.7	176.1	187.3
92.5°	0.8	4.0	12.8	28.0	51.2	66.4	84.8	123.3	144.9	155.3	165.7
95°	0.8	2.4	9.6	22.4	44.0	60.0	77.6	108.0	124.1	134.5	146.5
97.5°	0.8	2.4	7.2	18.4	40.0	54.4	69.6	91.2	104.8	116.8	127.3
100°	0.8	1.6	6.4	16.0	35.2	46.4	57.6	74.4	86.4	99.2	108.8
102.5°	0.8	1.6	5.6	14.4	30.4	39.2	47.2	60.0	72.8	83.2	92.8
105°	0.8	1.6	4.8	12.8	24.8	31.2	37.6	49.6	60.8	70.4	76.8
107.5°	0.8	1.6	4.0	10.4	20.0	25.6	31.2	41.6	51.2	58.4	64.8
110°	0.8	0.8	3.2	8.8	16.8	21.6	25.6	34.4	42.4	49.6	55.2
112.5°	1.6	1.6	3.2	7.2	13.6	17.6	21.6	28.8	36.0	42.4	48.0
115°	1.6	1.6	2.4	5.6	11.2	14.4	17.6	24.0	30.4	36.8	42.4
117.5°	1.6	1.6	2.4	4.8	8.8	12.0	14.4	20.0	25.6	32.0	37.6
120°	1.6	1.6	1.6	4.0	8.0	9.6	12.0	16.8	22.4	28.0	32.8
122.5°	1.6	1.6	1.6	3.2	6.4	8.0	9.6	14.4	19.2	24.0	28.8
125°	1.6	1.6	1.6	2.4	4.8	6.4	8.0	12.0	16.0	20.8	24.8
127.5°	1.6	1.6	1.6	2.4	4.0	5.6	6.4	9.6	13.6	16.8	21.6
130°	1.6	1.6	1.6	1.6	3.2	4.0	5.6	8.0	11.2	15.2	19.2
132.5°	1.6	1.6	1.6	1.6	3.2	4.0	4.8	7.2	11.2	14.4	18.4
135°	1.6	1.6	1.6	1.6	2.4	3.2	4.8	7.2	10.4	14.4	18.4
137.5°	1.6	1.6	1.6	1.6	2.4	3.2	4.0	6.4	9.6	13.6	16.8
140°	1.6	1.6	1.6	1.6	1.6	2.4	3.2	5.6	8.0	10.4	13.6
142.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.4	4.0	5.6	8.0	10.4
145°	1.6	1.6	1.6	1.6	1.6	1.6	2.4	3.2	4.0	5.6	7.2
147.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	3.2	4.0	5.6
150°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.2	4.0
152.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2
155°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2
157.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
160°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
162.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
165°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	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):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
180°	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2
1°	2397.0	2393.8	2391.4	2388.2	2385.0	2384.2	2382.6	2381.8	2375.4	2376.2
2°	2420.2	2422.6	2421.0	2417.8	2420.2	2417.0	2415.4	2412.2	2409.8	2410.6
3°	2448.2	2447.4	2440.2	2431.4	2425.8	2425.8	2413.8	2409.0	2394.6	2407.4
4°	2423.4	2406.6	2379.4	2366.6	2354.6	2353.0	2338.6	2325.0	2317.8	2330.6
5°	2356.2	2331.4	2297.0	2283.4	2269.8	2271.4	2259.4	2250.6	2245.0	2253.0
6°	2289.0	2266.6	2242.6	2228.1	2222.5	2218.5	2216.9	2219.3	2220.9	2220.1
7°	2241.8	2237.0	2234.6	2241.0	2246.6	2246.6	2256.2	2264.2	2266.6	2265.0
8°	2250.6	2266.6	2277.0	2281.0	2281.8	2283.4	2298.6	2298.6	2293.8	2295.4
9°	2286.6	2297.8	2309.0	2294.6	2266.6	2261.0	2208.1	2176.9	2132.9	2145.7
10°	2314.6	2293.8	2207.3	2136.1	2088.1	2072.1	1992.0	1956.8	1911.2	1924.0
11°	2266.6	2154.5	2024.1	1935.2	1889.6	1863.2	1811.2	1789.6	1780.8	1778.4
12°	2088.1	1957.6	1840.8	1789.6	1768.8	1760.7	1755.1	1761.6	1776.0	1780.0
13°	1925.6	1817.6	1764.0	1768.0	1778.4	1791.2	1836.0	1862.4	1888.0	1888.8
14°	1794.4	1761.6	1804.8	1859.2	1890.4	1910.4	1972.8	2016.1	2063.3	2072.1
15°	1759.9	1814.4	1916.8	2000.1	2039.3	2081.7	2164.1	2199.3	2225.7	2224.1
16°	1819.2	1912.8	2055.3	2152.9	2192.9	2220.9	2273.8	2305.8	2337.0	2341.8
17°	1918.4	2061.7	2192.9	2268.2	2297.0	2329.0	2426.6	2493.9	2550.7	2569.1
18°	2022.5	2172.9	2277.0	2398.6	2474.7	2537.1	2673.1	2797.2	2916.4	2938.9
19°	2138.5	2269.8	2443.4	2652.3	2746.0	2886.0	3128.5	3279.8	3400.6	3439.9
20°	2214.5	2421.8	2691.5	3084.5	3216.6	3371.8	3603.9	3719.2	3802.4	3820.8
21°	2348.2	2688.3	3151.7	3539.9	3673.6	3760.0	3913.7	3986.5	4007.3	4034.5
22°	2569.9	3110.9	3587.1	3869.6	3959.3	4008.9	4025.7	3971.3	3922.5	3903.3
23°	2976.5	3527.1	3875.3	4032.1	4023.3	3962.5	3825.6	3696.8	3612.7	3577.5
24°	3418.3	3847.2	4019.3	3886.5	3810.4	3680.8	3506.3	3376.6	3287.0	3243.8
25°	3730.4	4005.7	3860.0	3608.7	3511.9	3377.4	3166.1	3042.1	2954.1	2914.0
26°	3964.1	3928.9	3591.1	3303.0	3189.4	3059.7	2874.0	2804.4	2739.6	2701.2
27°	3985.7	3700.0	3305.4	2987.7	2886.0	2794.0	2654.7	2554.7	2486.7	2450.6
28°	3812.0	3432.7	3001.3	2746.8	2664.3	2552.3	2394.6	2296.2	2248.2	2193.7
29°	3590.3	3126.1	2748.4	2483.5	2393.8	2281.0	2124.1	1994.4	1963.2	1929.6
30°	3292.6	2846.8	2497.1	2201.7	2116.1	1994.4	1874.4	1832.0	1811.2	1784.8
32.5°	2592.3	2144.9	1853.6	1741.5	1715.9	1704.7	1748.7	1755.9	1754.3	1739.9
35°	1940.0	1695.9	1685.5	1668.7	1647.1	1626.3	1585.5	1562.3	1542.3	1517.4
37.5°	1656.7	1588.7	1493.4	1411.0	1374.2	1346.2	1303.8	1280.5	1261.3	1246.9
40°	1451.8	1311.8	1216.5	1158.9	1138.9	1106.1	1079.7	1065.3	1050.8	1031.6
42.5°	1171.7	1046.8	971.6	930.8	918.8	906.0	916.4	933.2	941.2	950.0
45°	902.0	845.2	862.8	900.4	915.6	931.6	954.8	959.6	961.2	960.4
47.5°	785.9	826.8	847.6	859.6	857.2	863.6	882.8	895.6	903.6	896.4
50°	746.7	752.3	781.1	810.7	815.5	807.5	811.5	822.0	833.2	834.8
52.5°	675.5	699.5	721.9	741.9	759.5	777.1	805.9	820.3	829.2	829.2
55°	606.7	650.7	681.9	709.9	721.1	725.9	740.3	745.9	751.5	747.5
57.5°	563.4	584.2	605.1	601.1	592.3	579.4	587.5	597.1	601.1	598.7
60°	455.4	456.2	458.6	465.0	475.4	485.0	494.6	497.0	501.0	500.2
62.5°	360.2	368.2	381.0	401.8	407.4	407.4	417.0	424.2	426.6	423.4
65°	323.3	339.3	361.8	373.8	373.8	376.2	393.8	414.6	422.6	421.0



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CATALOG NUMBER: 4SWLED-LD4-52HL-LC-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
67.5°	316.1	344.1	355.4	372.2	385.0	397.8	415.4	427.4	434.6	437.0
70°	320.9	341.7	364.2	387.4	397.8	409.0	429.8	446.6	453.0	453.8
72.5°	320.1	347.3	369.8	397.8	409.8	420.2	435.4	441.8	444.2	444.2
75°	317.7	344.9	376.2	396.2	405.8	416.2	425.0	429.8	433.8	435.4
77.5°	307.3	336.9	352.1	370.6	377.0	381.8	393.0	401.0	406.6	407.4
80°	294.5	308.1	319.3	334.5	339.3	346.5	357.8	362.6	366.6	366.6
82.5°	269.7	279.3	291.3	307.3	316.1	323.3	332.1	335.3	337.7	338.5
85°	243.3	252.9	268.1	281.7	288.1	294.5	302.5	307.3	308.9	307.3
87.5°	219.3	232.9	247.3	257.7	260.1	263.3	269.7	273.7	275.3	276.9
90°	197.7	211.3	222.5	231.3	231.3	234.5	237.7	238.5	236.9	238.5
92.5°	178.5	187.3	193.7	197.7	197.7	200.1	204.1	205.7	204.9	205.7
95°	155.3	161.7	164.9	167.3	169.7	172.9	176.1	176.9	176.9	177.7
97.5°	134.5	139.3	142.5	144.9	145.7	148.1	148.1	148.9	148.9	149.7
100°	116.0	120.9	121.7	120.9	121.7	122.5	123.3	124.9	125.7	126.5
102.5°	98.4	102.4	104.0	104.8	105.6	107.2	108.8	109.6	111.2	111.2
105°	81.6	86.4	89.6	91.2	91.2	92.8	94.4	96.0	96.8	97.6
107.5°	69.6	74.4	78.4	80.0	81.6	82.4	84.0	85.6	86.4	87.2
110°	60.0	64.8	69.6	72.8	73.6	75.2	76.8	78.4	79.2	80.0
112.5°	53.6	57.6	61.6	64.8	66.4	68.0	69.6	71.2	72.8	72.8
115°	47.2	52.0	55.2	58.4	60.0	60.8	63.2	65.6	66.4	67.2
117.5°	42.4	46.4	49.6	52.8	54.4	56.0	57.6	59.2	60.8	60.8
120°	37.6	41.6	44.8	47.2	48.8	49.6	52.0	53.6	54.4	55.2
122.5°	32.8	36.8	39.2	42.4	43.2	44.8	47.2	48.8	49.6	50.4
125°	28.8	32.0	35.2	38.4	39.2	40.8	44.0	45.6	47.2	48.0
127.5°	25.6	28.8	32.8	36.0	37.6	40.0	43.2	45.6	47.2	48.0
130°	23.2	28.0	32.0	36.0	38.4	40.0	44.0	47.2	48.8	48.8
132.5°	23.2	28.0	32.8	36.8	39.2	40.8	44.8	48.0	49.6	50.4
135°	22.4	26.4	31.2	35.2	37.6	39.2	42.4	44.8	46.4	46.4
137.5°	20.0	23.2	26.4	29.6	32.0	33.6	36.0	37.6	39.2	39.2
140°	16.0	18.4	20.8	23.2	24.8	26.4	28.8	29.6	31.2	31.2
142.5°	12.0	13.6	16.0	17.6	18.4	20.0	21.6	23.2	24.0	24.0
145°	8.8	10.4	11.2	12.8	13.6	14.4	16.0	16.8	17.6	17.6
147.5°	6.4	7.2	8.0	9.6	9.6	10.4	12.0	12.8	12.8	12.8
150°	4.8	5.6	6.4	6.4	7.2	7.2	8.8	9.6	9.6	9.6
152.5°	4.0	4.0	4.8	4.8	5.6	5.6	6.4	7.2	7.2	7.2
155°	3.2	3.2	3.2	3.2	4.0	4.0	4.8	4.8	5.6	5.6
157.5°	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2	4.0	4.0
160°	2.4	2.4	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
162.5°	2.4	1.6	1.6	1.6	0.8	1.6	1.6	1.6	1.6	1.6
165°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P189257

CATALOG NUMBER: 4SWLED-LD4-52HL-LC-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)