

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: P189263

Luminaire Tested: **4SWLED-LD4-56HL-LC-UNV-L840-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P189263
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-LD4-56HL-LC-UNV-L840-CD2-U
Description: [LUMINAIRE]METALUX LED STAIRWELL WITH NARROW CLEAR LENS

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

Summary

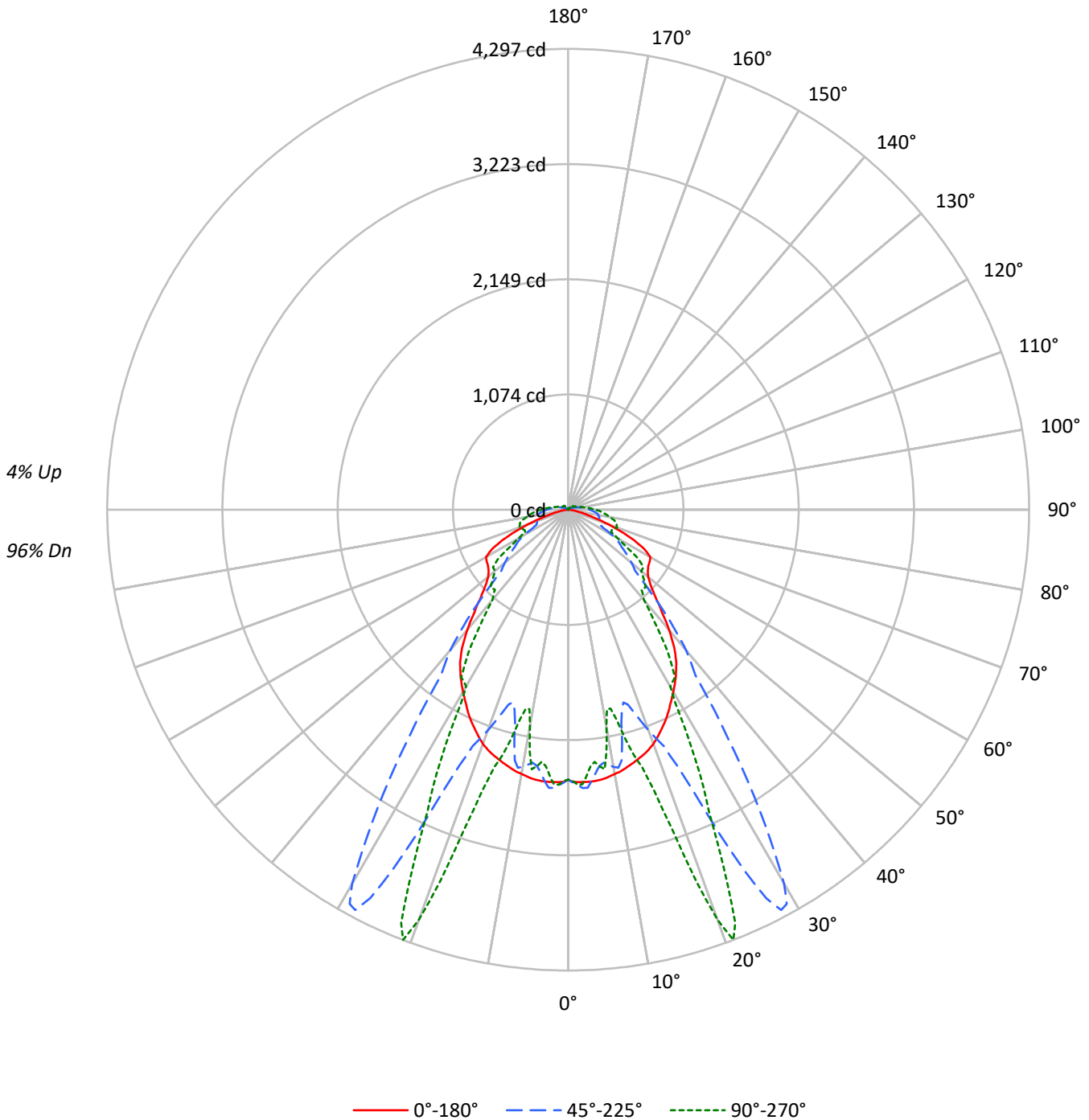
Lumens per Lamp: N/A
Luminaire Lumens: 6862.7 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.15 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.75' x H: 0.17')
CIE Type: Direct

Input Watts (W): 54.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	19273	19273	19273
5°	19461	18918	17746
10°	19299	17840	14769
15°	19010	13989	16773
20°	18625	15849	28531
25°	17843	24227	21711
30°	16908	29661	13369
35°	15928	19468	11517
40°	14073	13224	7996
45°	11899	8687	7665
50°	10989	6520	6921
55°	11444	5437	6499
60°	12564	4587	4608
65°	11219	3378	4157
70°	7904	3523	4870
75°	4518	3886	5158
80°	2820	4239	4888
85°	1491	4445	4728



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.7	3.4
10°-20°	663.0	9.7
20°-30°	1306.3	19.0
30°-40°	1347.8	19.6
40°-50°	1132.6	16.5
50°-60°	835.3	12.2
60°-70°	473.6	6.9
70°-80°	340.0	5.0
80°-90°	230.5	3.4
90°-100°	137.7	2.0
100°-110°	71.9	1.0
110°-120°	40.3	0.6
120°-130°	23.6	0.3
130°-140°	16.3	0.2
140°-150°	5.9	0.1
150°-160°	1.7	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	2204.9	32.1
0°-40°	3552.7	51.8
0°-60°	5520.6	80.4
0°-90°	6564.8	95.7
90°-120°	249.9	3.6
90°-150°	295.7	4.3
90°-180°	298.0	4.3
0°-180°	6862.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2518	2518	2518	2518	2518	
5°	2543	2580	2537	2417	2399	242
15°	2428	2323	1929	2172	2369	684
25°	2156	1925	3331	3740	3104	990
35°	1758	2165	2588	1754	1616	1087
45°	1148	2891	1080	975	1023	904
55°	912	1622	609	768	796	824
65°	678	651	325	398	448	657
75°	178	262	301	432	464	213
85°	26	110	251	307	327	32
90°	2	80	200	246	254	2
95°	1	64	156	181	189	1
105°	1	33	82	97	104	1
115°	2	15	45	64	72	2
125°	2	7	26	42	51	2
135°	2	3	20	40	49	1
145°	2	2	8	14	19	1
155°	3	3	3	4	6	1
165°	3	3	3	1	2	1
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°	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9
1°	2539.2	2537.5	2527.3	2522.1	2521.3	2519.6	2520.4	2522.1	2526.4	2526.4	2546.0
2°	2541.7	2540.9	2534.1	2530.7	2530.7	2530.7	2532.4	2537.5	2540.9	2541.7	2571.6
3°	2542.6	2543.5	2539.2	2536.6	2542.6	2542.6	2545.2	2552.0	2563.9	2568.2	2598.9
4°	2544.3	2547.7	2545.2	2544.3	2556.2	2564.8	2569.9	2579.3	2586.9	2587.8	2599.7
5°	2542.6	2546.9	2546.9	2557.1	2573.3	2580.1	2584.4	2590.3	2578.4	2546.0	2536.6
6°	2540.9	2547.7	2552.0	2570.7	2585.2	2591.2	2592.0	2565.6	2534.1	2496.6	2465.9
7°	2536.6	2543.5	2557.1	2581.8	2591.2	2590.3	2575.8	2521.3	2465.9	2418.2	2404.5
8°	2526.4	2536.6	2563.9	2584.4	2577.5	2551.1	2523.8	2464.2	2412.2	2378.1	2380.7
9°	2514.5	2525.6	2563.9	2578.4	2545.2	2507.7	2473.6	2399.4	2366.2	2361.0	2407.1
10°	2502.5	2520.4	2564.8	2565.6	2493.2	2454.8	2407.9	2357.6	2356.8	2384.9	2435.2
11°	2492.3	2513.6	2559.6	2540.0	2448.8	2406.2	2358.5	2344.0	2377.2	2408.8	2451.4
12°	2477.8	2506.8	2548.6	2505.9	2391.7	2350.8	2326.1	2353.4	2393.4	2422.4	2390.0
13°	2460.8	2493.2	2527.3	2454.8	2344.9	2316.7	2326.1	2371.3	2396.8	2379.8	2235.7
14°	2442.9	2484.6	2501.7	2409.6	2302.2	2309.1	2338.9	2374.7	2378.9	2231.5	2050.8
15°	2427.5	2473.6	2474.4	2359.3	2287.7	2322.7	2345.7	2362.8	2295.4	2088.3	1928.9
16°	2409.6	2461.6	2444.6	2323.5	2301.4	2333.8	2346.6	2332.1	2136.9	1934.9	1869.2
17°	2391.7	2444.6	2407.1	2292.0	2317.6	2335.5	2334.6	2243.4	2019.2	1866.7	1898.2
18°	2371.3	2423.3	2373.0	2269.8	2324.4	2325.2	2305.6	2139.4	1901.6	1853.0	1986.9
19°	2348.3	2398.5	2336.3	2256.2	2315.9	2297.1	2246.0	2023.5	1856.4	1905.0	2087.4
20°	2323.5	2370.4	2303.1	2257.9	2294.6	2252.8	2175.2	1933.2	1853.9	1988.6	2190.6
21°	2292.9	2337.2	2271.5	2266.4	2255.4	2182.0	2084.9	1880.3	1894.8	2066.1	2284.3
22°	2259.6	2302.2	2246.8	2266.4	2195.7	2113.9	2003.9	1859.0	1964.7	2147.1	2377.2
23°	2223.8	2269.8	2223.8	2255.4	2122.4	2038.0	1938.3	1877.8	2015.0	2226.4	2586.1
24°	2191.4	2233.2	2208.5	2228.9	2056.8	1974.1	1897.4	1918.7	2061.9	2315.9	2877.6
25°	2156.5	2198.2	2194.8	2186.3	1997.1	1924.6	1888.8	1951.9	2124.1	2534.9	3331.0
26°	2118.1	2160.7	2182.0	2124.1	1951.9	1899.1	1900.8	1976.6	2207.6	2810.2	3739.3
27°	2077.2	2125.8	2157.3	2055.9	1920.4	1896.5	1925.5	1994.5	2401.1	3241.5	4064.9
28°	2036.3	2085.7	2122.4	1987.7	1901.6	1913.6	1935.7	2032.9	2648.3	3612.3	4227.7
29°	1997.1	2048.2	2083.2	1934.9	1899.1	1934.9	1934.0	2146.3	3032.7	3932.0	4202.1
30°	1962.1	2010.7	2038.0	1899.9	1912.7	1937.4	1933.2	2333.8	3360.9	4095.6	4025.7
32.5°	1863.3	1901.6	1902.5	1868.4	1934.9	1930.6	2083.2	3084.7	3909.8	3933.7	3320.0
35°	1757.6	1769.5	1786.6	1890.5	1949.4	2165.0	2673.9	3574.0	3875.7	3270.5	2587.8
37.5°	1626.3	1624.6	1739.7	1906.7	2238.3	2736.9	3143.5	3651.5	3319.1	2532.4	1948.5
40°	1461.0	1479.7	1731.1	1970.7	2706.3	2982.4	3185.3	3422.2	2573.3	1951.9	1707.3
42.5°	1292.2	1377.4	1731.1	2232.3	2797.5	2950.0	3156.3	2858.0	2038.0	1664.7	1396.2
45°	1148.1	1323.7	1743.9	2448.8	2708.0	2891.2	2923.6	2281.8	1689.4	1288.8	1079.9
47.5°	1041.6	1273.4	1854.7	2364.5	2614.2	2658.5	2536.6	1904.2	1260.6	947.0	846.4
50°	971.7	1213.8	1902.5	2198.2	2419.9	2364.5	2184.6	1404.7	870.3	766.3	773.1
52.5°	935.0	1201.0	1772.1	2043.1	2174.4	2055.0	1722.6	950.4	701.5	686.2	690.4
55°	912.0	1162.6	1581.1	1830.9	1866.7	1622.0	1271.7	715.1	600.1	591.5	608.6
57.5°	900.9	1053.5	1392.8	1552.2	1466.1	1248.7	965.7	545.5	488.4	505.5	556.6
60°	883.9	939.3	1118.3	1220.6	1167.7	988.7	732.2	433.9	424.5	456.0	479.0
62.5°	803.8	806.3	782.5	964.0	955.5	802.1	578.8	371.6	355.4	364.8	369.9
65°	678.5	625.6	541.3	792.7	788.4	651.2	461.1	294.9	287.2	308.6	324.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	538.7	450.9	405.7	634.2	626.5	515.7	369.1	254.0	268.5	290.7	314.5
70°	396.3	331.6	319.6	499.5	493.5	413.4	309.4	235.3	259.1	282.1	306.9
72.5°	270.2	245.5	251.4	376.7	386.1	330.7	262.5	223.3	244.6	271.1	308.6
75°	178.1	179.8	193.5	277.0	295.8	262.5	221.6	208.0	231.0	262.5	300.9
77.5°	121.9	127.9	144.0	198.6	220.8	204.6	188.4	191.8	216.5	253.2	293.2
80°	80.1	86.1	103.1	140.6	163.7	162.8	161.9	178.1	206.3	245.5	284.7
82.5°	48.6	54.6	70.7	99.7	123.6	131.3	141.5	165.4	199.5	242.9	274.5
85°	25.6	31.5	46.9	71.6	96.3	110.0	124.4	155.1	196.0	233.5	250.6
87.5°	10.2	16.2	30.7	52.0	78.4	93.8	110.8	147.5	190.1	214.8	224.2
90°	1.7	7.7	19.6	39.2	64.8	80.1	98.9	141.5	176.4	187.5	199.5
92.5°	0.9	4.3	13.6	29.8	54.6	70.7	90.4	131.3	154.3	165.4	176.4
95°	0.9	2.6	10.2	23.9	46.9	63.9	82.7	115.1	132.1	143.2	156.0
97.5°	0.9	2.6	7.7	19.6	42.6	58.0	74.2	97.2	111.7	124.4	135.5
100°	0.9	1.7	6.8	17.0	37.5	49.4	61.4	79.3	92.1	105.7	115.9
102.5°	0.9	1.7	6.0	15.3	32.4	41.8	50.3	63.9	77.6	88.6	98.9
105°	0.9	1.7	5.1	13.6	26.4	33.2	40.1	52.8	64.8	75.0	81.8
107.5°	0.9	1.7	4.3	11.1	21.3	27.3	33.2	44.3	54.6	62.2	69.0
110°	0.9	0.9	3.4	9.4	17.9	23.0	27.3	36.7	45.2	52.8	58.8
112.5°	1.7	1.7	3.4	7.7	14.5	18.8	23.0	30.7	38.4	45.2	51.1
115°	1.7	1.7	2.6	6.0	11.9	15.3	18.8	25.6	32.4	39.2	45.2
117.5°	1.7	1.7	2.6	5.1	9.4	12.8	15.3	21.3	27.3	34.1	40.1
120°	1.7	1.7	1.7	4.3	8.5	10.2	12.8	17.9	23.9	29.8	34.9
122.5°	1.7	1.7	1.7	3.4	6.8	8.5	10.2	15.3	20.5	25.6	30.7
125°	1.7	1.7	1.7	2.6	5.1	6.8	8.5	12.8	17.0	22.2	26.4
127.5°	1.7	1.7	1.7	2.6	4.3	6.0	6.8	10.2	14.5	17.9	23.0
130°	1.7	1.7	1.7	1.7	3.4	4.3	6.0	8.5	11.9	16.2	20.5
132.5°	1.7	1.7	1.7	1.7	3.4	4.3	5.1	7.7	11.9	15.3	19.6
135°	1.7	1.7	1.7	1.7	2.6	3.4	5.1	7.7	11.1	15.3	19.6
137.5°	1.7	1.7	1.7	1.7	2.6	3.4	4.3	6.8	10.2	14.5	17.9
140°	1.7	1.7	1.7	1.7	1.7	2.6	3.4	6.0	8.5	11.1	14.5
142.5°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	4.3	6.0	8.5	11.1
145°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	3.4	4.3	6.0	7.7
147.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.6	3.4	4.3	6.0
150°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	3.4	4.3
152.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.4	3.4
155°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.4
157.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
160°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
162.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
165°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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°	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9	2517.9
1°	2552.8	2549.4	2546.9	2543.5	2540.0	2539.2	2537.5	2536.6	2529.8	2530.7
2°	2577.5	2580.1	2578.4	2575.0	2577.5	2574.1	2572.4	2569.0	2566.5	2567.3
3°	2607.4	2606.5	2598.9	2589.5	2583.5	2583.5	2570.7	2565.6	2550.3	2563.9
4°	2581.0	2563.1	2534.1	2520.4	2507.7	2505.9	2490.6	2476.1	2468.4	2482.1
5°	2509.4	2482.9	2446.3	2431.8	2417.3	2419.0	2406.2	2396.8	2390.9	2399.4
6°	2437.8	2413.9	2388.3	2373.0	2367.0	2362.8	2361.0	2363.6	2365.3	2364.5
7°	2387.5	2382.4	2379.8	2386.6	2392.6	2392.6	2402.8	2411.3	2413.9	2412.2
8°	2396.8	2413.9	2425.0	2429.2	2430.1	2431.8	2448.0	2448.0	2442.9	2444.6
9°	2435.2	2447.1	2459.1	2443.7	2413.9	2407.9	2351.7	2318.4	2271.5	2285.2
10°	2465.0	2442.9	2350.8	2275.0	2223.8	2206.8	2121.5	2084.0	2035.4	2049.1
11°	2413.9	2294.6	2155.6	2061.0	2012.4	1984.3	1928.9	1905.9	1896.5	1894.0
12°	2223.8	2084.9	1960.4	1905.9	1883.7	1875.2	1869.2	1876.1	1891.4	1895.7
13°	2050.8	1935.7	1878.6	1882.9	1894.0	1907.6	1955.3	1983.4	2010.7	2011.6
14°	1911.0	1876.1	1922.1	1980.0	2013.3	2034.6	2101.1	2147.1	2197.4	2206.8
15°	1874.3	1932.3	2041.4	2130.1	2171.8	2217.0	2304.8	2342.3	2370.4	2368.7
16°	1937.4	2037.1	2188.9	2292.9	2335.5	2365.3	2421.6	2455.7	2488.9	2494.0
17°	2043.1	2195.7	2335.5	2415.6	2446.3	2480.4	2584.4	2656.0	2716.5	2736.1
18°	2153.9	2314.2	2425.0	2554.5	2635.5	2702.0	2846.9	2979.0	3106.0	3129.9
19°	2277.5	2417.3	2602.3	2824.7	2924.5	3073.6	3331.9	3493.0	3621.7	3663.5
20°	2358.5	2579.3	2866.5	3285.0	3425.6	3591.0	3838.2	3960.9	4049.6	4069.2
21°	2500.8	2863.1	3356.6	3770.0	3912.3	4004.4	4168.1	4245.6	4267.8	4296.8
22°	2736.9	3313.1	3820.3	4121.2	4216.6	4269.5	4287.4	4229.4	4177.4	4157.0
23°	3169.9	3756.4	4127.1	4294.2	4284.8	4220.0	4074.3	3937.1	3847.6	3810.1
24°	3640.4	4097.3	4280.6	4139.1	4058.1	3920.0	3734.2	3596.1	3500.7	3454.6
25°	3972.9	4266.1	4110.9	3843.3	3740.2	3597.0	3371.9	3239.8	3146.1	3103.5
26°	4221.8	4184.3	3824.6	3517.7	3396.7	3258.6	3060.8	2986.7	2917.6	2876.7
27°	4244.8	3940.5	3520.3	3181.9	3073.6	2975.6	2827.3	2720.7	2648.3	2609.9
28°	4059.8	3655.8	3196.4	2925.3	2837.5	2718.2	2550.3	2445.4	2394.3	2336.3
29°	3823.7	3329.3	2927.0	2644.9	2549.4	2429.2	2262.2	2124.1	2090.8	2055.0
30°	3506.6	3031.9	2659.4	2344.9	2253.6	2124.1	1996.2	1951.1	1928.9	1900.8
32.5°	2760.8	2284.3	1974.1	1854.7	1827.5	1815.5	1862.4	1870.1	1868.4	1853.0
35°	2066.1	1806.2	1795.1	1777.2	1754.2	1732.0	1688.5	1663.8	1642.5	1616.1
37.5°	1764.4	1691.9	1590.5	1502.7	1463.5	1433.7	1388.5	1363.8	1343.3	1328.0
40°	1546.2	1397.0	1295.6	1234.2	1212.9	1178.0	1149.8	1134.5	1119.2	1098.7
42.5°	1247.9	1114.9	1034.8	991.3	978.5	964.9	976.0	993.9	1002.4	1011.8
45°	960.6	900.1	918.8	958.9	975.1	992.2	1016.9	1022.0	1023.7	1022.8
47.5°	837.0	880.5	902.7	915.4	912.9	919.7	940.2	953.8	962.3	954.6
50°	795.3	801.2	831.9	863.4	868.6	860.0	864.3	875.4	887.3	889.0
52.5°	719.4	745.0	768.8	790.1	808.9	827.6	858.3	873.7	883.0	883.0
55°	646.1	693.0	726.2	756.0	768.0	773.1	788.4	794.4	800.4	796.1
57.5°	600.1	622.2	644.4	640.1	630.7	617.1	625.6	635.9	640.1	637.6
60°	485.0	485.8	488.4	495.2	506.3	516.5	526.8	529.3	533.6	532.7
62.5°	383.6	392.1	405.7	427.9	433.9	433.9	444.1	451.8	454.3	450.9
65°	344.4	361.4	385.3	398.1	398.1	400.6	419.4	441.5	450.0	448.3



TEST NUMBER: P189263

CATALOG NUMBER: 4SWLED-LD4-56HL-LC-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
67.5°	336.7	366.5	378.4	396.3	410.0	423.6	442.4	455.2	462.8	465.4
70°	341.8	364.0	387.8	412.5	423.6	435.6	457.7	475.6	482.4	483.3
72.5°	340.9	369.9	393.8	423.6	436.4	447.5	463.7	470.5	473.1	473.1
75°	338.4	367.4	400.6	421.9	432.1	443.2	452.6	457.7	462.0	463.7
77.5°	327.3	358.8	375.0	394.6	401.5	406.6	418.5	427.0	433.0	433.9
80°	313.7	328.2	340.1	356.3	361.4	369.1	381.0	386.1	390.4	390.4
82.5°	287.2	297.5	310.3	327.3	336.7	344.4	353.7	357.1	359.7	360.5
85°	259.1	269.3	285.5	300.0	306.9	313.7	322.2	327.3	329.0	327.3
87.5°	233.5	248.0	263.4	274.5	277.0	280.4	287.2	291.5	293.2	294.9
90°	210.5	225.0	237.0	246.3	246.3	249.7	253.2	254.0	252.3	254.0
92.5°	190.1	199.5	206.3	210.5	210.5	213.1	217.4	219.1	218.2	219.1
95°	165.4	172.2	175.6	178.1	180.7	184.1	187.5	188.4	188.4	189.2
97.5°	143.2	148.3	151.7	154.3	155.1	157.7	157.7	158.5	158.5	159.4
100°	123.6	128.7	129.6	128.7	129.6	130.4	131.3	133.0	133.8	134.7
102.5°	104.8	109.1	110.8	111.7	112.5	114.2	115.9	116.8	118.5	118.5
105°	86.9	92.1	95.5	97.2	97.2	98.9	100.6	102.3	103.1	104.0
107.5°	74.2	79.3	83.5	85.2	86.9	87.8	89.5	91.2	92.1	92.9
110°	63.9	69.0	74.2	77.6	78.4	80.1	81.8	83.5	84.4	85.2
112.5°	57.1	61.4	65.6	69.0	70.7	72.5	74.2	75.9	77.6	77.6
115°	50.3	55.4	58.8	62.2	63.9	64.8	67.3	69.9	70.7	71.6
117.5°	45.2	49.4	52.8	56.3	58.0	59.7	61.4	63.1	64.8	64.8
120°	40.1	44.3	47.7	50.3	52.0	52.8	55.4	57.1	58.0	58.8
122.5°	34.9	39.2	41.8	45.2	46.0	47.7	50.3	52.0	52.8	53.7
125°	30.7	34.1	37.5	40.9	41.8	43.5	46.9	48.6	50.3	51.1
127.5°	27.3	30.7	34.9	38.4	40.1	42.6	46.0	48.6	50.3	51.1
130°	24.7	29.8	34.1	38.4	40.9	42.6	46.9	50.3	52.0	52.0
132.5°	24.7	29.8	34.9	39.2	41.8	43.5	47.7	51.1	52.8	53.7
135°	23.9	28.1	33.2	37.5	40.1	41.8	45.2	47.7	49.4	49.4
137.5°	21.3	24.7	28.1	31.5	34.1	35.8	38.4	40.1	41.8	41.8
140°	17.0	19.6	22.2	24.7	26.4	28.1	30.7	31.5	33.2	33.2
142.5°	12.8	14.5	17.0	18.8	19.6	21.3	23.0	24.7	25.6	25.6
145°	9.4	11.1	11.9	13.6	14.5	15.3	17.0	17.9	18.8	18.8
147.5°	6.8	7.7	8.5	10.2	10.2	11.1	12.8	13.6	13.6	13.6
150°	5.1	6.0	6.8	6.8	7.7	7.7	9.4	10.2	10.2	10.2
152.5°	4.3	4.3	5.1	5.1	6.0	6.0	6.8	7.7	7.7	7.7
155°	3.4	3.4	3.4	3.4	4.3	4.3	5.1	5.1	6.0	6.0
157.5°	2.6	2.6	2.6	2.6	2.6	2.6	3.4	3.4	4.3	4.3
160°	2.6	2.6	1.7	1.7	1.7	1.7	2.6	2.6	2.6	2.6
162.5°	2.6	1.7	1.7	1.7	0.9	1.7	1.7	1.7	1.7	1.7
165°	1.7	1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	1.7
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: P189263

CATALOG NUMBER: 4SWLED-LD4-56HL-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)