

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P776683

Luminaire Tested: HCDJBS4050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776683
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B061)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K
Description: 6 INCH ROUND NARROW LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5453.8 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.09 / 1.15
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

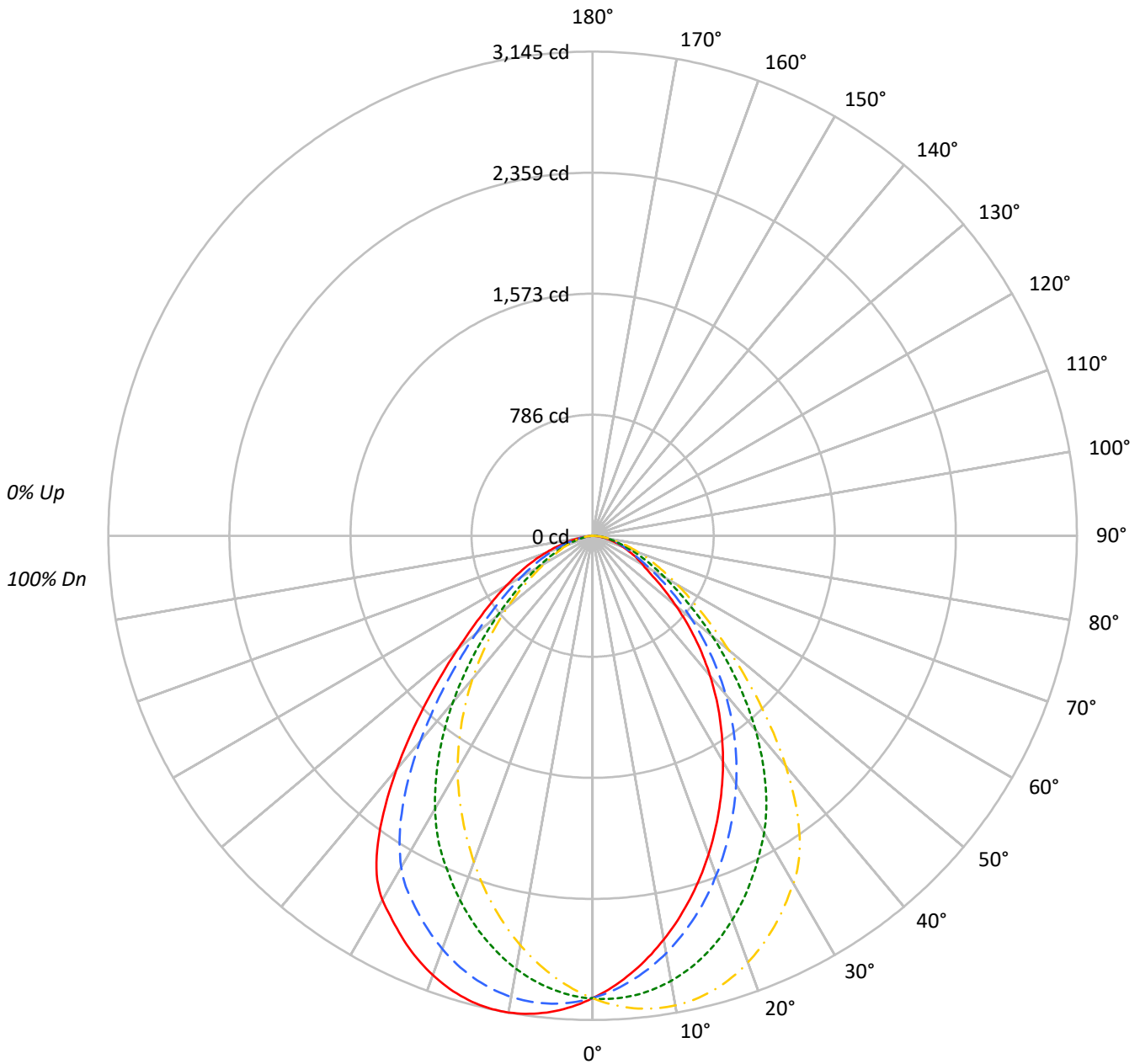
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	77								
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67								
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	60								
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53								
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	48								
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43								
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39								
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36								
10	59	47	40	35	58	46	39	35	45	39	35	44	39	34	44	38	34	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	164674	164674	164674	164674
5°	157038	165039	170828	162799
10°	148227	163435	175041	159037
15°	138639	159978	177135	153622
20°	128414	154813	177139	146890
25°	117841	148279	175389	139308
30°	107156	140977	172862	129558
35°	96255	130861	162549	116393
40°	84923	117685	141644	101011
45°	72798	102352	118222	84327
50°	60211	86402	97498	68654
55°	48553	71682	82062	55549
60°	41269	59469	70904	45150
65°	37475	50070	61978	36671
70°	33275	42010	52445	29284
75°	29187	35457	41642	23002
80°	24151	30654	28097	17205
85°	15033	29500	9938	9624

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°

Vertical Angle: 45°

Luminance: 120741 cd/sqm



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.7	5.2
10°-20°	779.0	14.3
20°-30°	1103.3	20.2
30°-40°	1175.4	21.6
40°-50°	943.4	17.3
50°-60°	612.5	11.2
60°-70°	355.2	6.5
70°-80°	167.0	3.1
80°-90°	36.4	0.7
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°	2164.0	39.7
0°-40°	3339.4	61.2
0°-60°	4895.2	89.8
0°-90°	5453.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5453.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3004	3004	3004	3004	3004	
5°	2854	2999	3104	2958	2854	266
15°	2443	2819	3121	2707	2443	684
25°	1948	2451	2900	2303	1948	894
35°	1438	1955	2429	1739	1438	898
45°	939	1320	1525	1088	939	724
55°	508	750	859	581	508	462
65°	289	386	478	283	289	287
75°	138	167	197	109	138	147
85°	24	47	16	15	24	32
90°	0	7	0	0	0	



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9
0.5°	2991.4	2991.4	2994.8	3000.0	3008.7	3011.5	3014.4	3015.8	3017.3	3013.4	3010.1
1°	2978.0	2980.0	2986.7	2996.2	3009.6	3017.3	3024.0	3027.8	3028.7	3024.0	3016.8
1.5°	2964.2	2968.0	2977.1	2991.9	3010.1	3023.0	3033.1	3038.8	3040.2	3033.5	3023.0
2°	2949.8	2955.1	2968.0	2986.7	3010.6	3027.8	3041.7	3049.3	3050.8	3042.6	3028.7
2.5°	2934.5	2941.7	2958.0	2980.9	3009.6	3031.6	3049.8	3059.4	3061.3	3051.2	3034.0
3°	2919.2	2928.3	2947.4	2975.2	3008.7	3035.4	3057.0	3068.9	3070.8	3059.4	3038.3
3.5°	2903.9	2914.0	2936.4	2968.5	3007.2	3038.3	3063.7	3078.0	3080.4	3066.5	3042.6
4°	2887.6	2899.6	2925.0	2961.3	3005.3	3041.2	3069.9	3086.6	3088.5	3073.7	3045.5
4.5°	2870.9	2884.8	2913.0	2953.7	3002.4	3043.1	3075.6	3094.3	3096.7	3079.9	3048.8
5°	2853.7	2869.0	2900.6	2945.0	2999.1	3044.1	3080.9	3101.9	3104.3	3085.7	3050.8
5.5°	2836.5	2853.2	2887.6	2936.9	2995.3	3045.0	3085.2	3108.6	3111.0	3090.9	3052.7
6°	2818.3	2836.9	2874.7	2927.3	2991.0	3045.0	3089.0	3114.4	3117.2	3095.2	3053.6
6.5°	2800.1	2820.2	2860.9	2917.8	2985.7	3044.5	3092.4	3119.6	3123.0	3099.5	3054.1
7°	2781.5	2803.0	2846.5	2907.3	2980.4	3043.6	3094.8	3124.4	3127.8	3102.4	3054.1
7.5°	2762.8	2785.3	2832.2	2896.3	2974.2	3042.1	3096.7	3128.7	3132.1	3105.3	3053.6
8°	2743.7	2767.6	2816.9	2885.3	2967.5	3039.8	3098.1	3132.1	3135.9	3107.2	3052.7
8.5°	2723.6	2749.4	2801.1	2873.8	2960.3	3036.9	3099.1	3135.4	3138.8	3108.6	3050.8
9°	2704.0	2730.3	2785.3	2861.3	2952.7	3033.5	3099.1	3137.3	3141.6	3109.6	3048.4
9.5°	2683.4	2711.1	2769.0	2848.4	2944.6	3029.7	3098.6	3139.2	3143.1	3110.1	3045.5
10°	2662.8	2692.5	2752.3	2835.0	2936.0	3024.9	3097.6	3140.2	3144.5	3109.6	3042.1
10.5°	2641.8	2673.4	2735.1	2821.6	2926.4	3020.1	3096.2	3140.7	3145.0	3108.2	3037.8
11°	2621.2	2653.3	2717.4	2807.3	2916.8	3014.4	3093.8	3140.2	3145.0	3106.7	3033.1
11.5°	2599.2	2632.7	2699.2	2792.9	2905.8	3008.2	3090.9	3139.2	3144.0	3104.3	3027.3
12°	2577.7	2612.6	2681.0	2777.6	2895.3	3001.0	3087.6	3137.8	3142.6	3101.5	3021.6
12.5°	2555.7	2591.1	2662.4	2761.8	2884.3	2993.8	3083.3	3135.4	3140.7	3098.1	3015.4
13°	2533.7	2571.0	2643.7	2746.1	2872.3	2985.7	3078.5	3132.5	3137.8	3093.8	3008.2
13.5°	2510.7	2549.5	2624.1	2730.3	2859.4	2977.1	3072.8	3129.2	3134.5	3089.5	3000.5
14°	2488.7	2527.9	2604.5	2713.5	2846.5	2968.0	3067.0	3124.9	3130.6	3084.2	2992.4
14.5°	2465.3	2505.5	2584.9	2695.8	2833.1	2958.0	3060.3	3120.1	3126.3	3078.0	2983.8
15°	2442.8	2483.9	2564.3	2678.6	2818.8	2947.4	3053.1	3114.8	3121.1	3071.3	2974.7
15.5°	2418.4	2461.0	2543.2	2660.0	2804.9	2936.9	3045.5	3108.6	3114.8	3064.1	2964.7
16°	2395.4	2438.5	2523.2	2642.3	2789.6	2925.4	3036.9	3101.9	3108.6	3056.5	2954.6
16.5°	2372.0	2415.5	2502.1	2623.1	2774.3	2913.5	3027.8	3094.8	3101.5	3048.4	2944.1
17°	2348.1	2393.1	2480.6	2604.0	2758.0	2901.0	3018.2	3086.6	3093.8	3039.8	2933.1
17.5°	2323.7	2369.6	2458.6	2584.4	2742.2	2888.1	3008.2	3078.5	3085.7	3030.2	2921.1
18°	2299.8	2346.7	2437.1	2564.8	2725.0	2873.8	2997.2	3068.9	3077.1	3020.6	2908.7
18.5°	2274.9	2322.7	2414.6	2544.2	2707.8	2859.9	2985.7	3059.4	3067.5	3010.1	2895.8
19°	2251.0	2299.3	2392.6	2523.6	2690.1	2845.6	2974.2	3049.3	3057.4	2999.1	2882.9
19.5°	2226.1	2274.9	2369.6	2503.1	2672.4	2830.7	2961.8	3038.8	3046.9	2987.6	2869.5
20°	2201.2	2251.5	2347.1	2482.5	2653.7	2815.4	2948.9	3027.3	3036.4	2976.1	2855.6
20.5°	2175.9	2227.1	2324.2	2460.5	2635.1	2799.2	2935.5	3015.4	3024.4	2963.7	2840.8
21°	2151.5	2202.7	2300.7	2439.5	2615.5	2782.9	2921.6	3003.4	3012.5	2950.3	2825.9



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2075.4	2129.0	2229.9	2373.0	2557.1	2731.2	2878.1	2963.7	2973.7	2909.6	2779.1
23°	2050.1	2103.7	2206.0	2350.5	2536.1	2713.1	2862.3	2949.8	2959.9	2894.8	2762.3
23.5°	2025.2	2079.3	2182.6	2327.5	2515.5	2695.4	2846.0	2934.5	2945.5	2880.0	2745.6
24°	1999.9	2053.9	2158.2	2305.0	2494.0	2675.7	2829.8	2919.7	2930.7	2864.2	2728.4
24.5°	1974.0	2029.1	2133.8	2281.6	2472.9	2657.1	2813.0	2903.9	2915.4	2848.4	2710.7
25°	1948.2	2004.2	2109.9	2258.2	2451.4	2638.0	2795.3	2888.6	2899.6	2832.2	2692.0
25.5°	1922.9	1978.3	2085.5	2234.3	2429.9	2617.9	2778.1	2871.9	2883.8	2815.4	2674.3
26°	1897.5	1953.5	2060.6	2211.3	2407.4	2598.3	2760.4	2855.1	2867.1	2798.2	2656.1
26.5°	1872.2	1928.1	2036.7	2188.3	2385.9	2578.2	2741.8	2837.4	2849.9	2781.0	2638.0
27°	1846.3	1903.7	2012.3	2164.4	2362.9	2557.6	2722.6	2820.7	2832.6	2763.3	2620.7
27.5°	1820.5	1878.4	1987.9	2140.5	2340.9	2536.6	2704.0	2802.0	2815.4	2747.0	2602.6
28°	1794.7	1852.1	1963.0	2117.1	2318.0	2515.5	2684.8	2784.3	2798.2	2730.3	2583.0
28.5°	1769.8	1826.7	1938.6	2093.6	2296.0	2494.5	2665.2	2766.1	2781.9	2714.0	2560.9
29°	1744.0	1801.8	1913.8	2069.2	2273.0	2473.4	2645.6	2748.5	2766.1	2695.8	2537.0
29.5°	1718.1	1776.5	1888.9	2044.8	2250.5	2453.3	2627.0	2731.2	2748.9	2675.7	2512.2
30°	1692.8	1751.1	1864.0	2020.9	2227.1	2431.3	2608.3	2714.0	2730.8	2653.3	2485.9
30.5°	1667.4	1725.8	1838.7	1996.0	2203.2	2409.3	2587.7	2695.4	2711.1	2628.4	2458.1
31°	1641.6	1700.4	1813.8	1969.7	2178.3	2385.9	2567.2	2675.7	2689.1	2602.1	2428.0
31.5°	1616.3	1675.6	1788.0	1944.9	2152.5	2361.5	2544.2	2652.8	2664.7	2574.3	2397.4
32°	1590.4	1649.3	1762.6	1918.6	2126.6	2335.2	2519.3	2628.9	2638.4	2544.2	2366.3
32.5°	1565.1	1623.9	1737.3	1892.3	2099.4	2307.4	2492.5	2603.0	2609.3	2512.2	2333.3
33°	1540.2	1598.6	1711.0	1865.9	2071.1	2279.2	2465.8	2575.3	2577.7	2477.7	2298.8
33.5°	1514.9	1573.2	1685.6	1838.7	2043.4	2250.5	2436.1	2544.2	2543.2	2441.4	2263.4
34°	1489.5	1547.4	1659.3	1811.4	2014.2	2220.9	2406.0	2511.2	2506.4	2404.5	2228.0
34.5°	1464.2	1522.5	1633.5	1783.2	1985.0	2190.7	2373.9	2475.8	2469.1	2365.8	2189.8
35°	1438.3	1496.7	1607.2	1755.4	1955.4	2158.7	2340.0	2438.5	2428.9	2326.1	2152.0
35.5°	1413.9	1471.3	1580.9	1727.2	1925.3	2127.1	2305.0	2400.2	2387.8	2284.5	2113.2
36°	1389.1	1446.0	1554.6	1699.0	1895.1	2094.6	2269.2	2360.5	2345.7	2242.4	2073.5
36.5°	1363.7	1420.6	1528.2	1670.3	1864.5	2061.6	2231.9	2318.9	2301.7	2200.3	2033.4
37°	1337.9	1394.3	1501.5	1642.1	1833.9	2027.6	2194.1	2276.3	2256.7	2156.3	1991.7
37.5°	1313.0	1369.0	1475.2	1613.9	1802.8	1992.7	2154.4	2233.3	2211.8	2111.8	1950.1
38°	1287.6	1343.6	1447.9	1585.2	1770.8	1959.7	2114.7	2190.2	2165.9	2066.4	1908.5
38.5°	1262.3	1318.3	1422.1	1556.5	1740.1	1922.9	2074.5	2145.8	2119.9	2022.4	1866.9
39°	1237.4	1292.4	1395.8	1528.2	1708.1	1887.5	2033.8	2100.8	2072.6	1976.0	1824.8
39.5°	1212.1	1267.6	1369.0	1499.1	1676.5	1851.1	1991.7	2054.9	2026.2	1931.0	1783.2
40°	1186.7	1242.2	1341.7	1470.4	1644.5	1815.7	1949.6	2009.0	1979.3	1885.1	1739.7
40.5°	1161.8	1216.9	1315.9	1441.7	1611.5	1776.5	1908.0	1963.0	1932.4	1840.6	1697.6
41°	1136.5	1191.5	1289.1	1413.0	1579.4	1740.1	1865.9	1917.1	1885.6	1793.7	1655.5
41.5°	1111.6	1167.1	1262.8	1384.3	1546.9	1702.8	1823.9	1870.2	1838.2	1749.7	1613.9
42°	1086.3	1141.8	1236.5	1355.1	1514.9	1667.0	1780.3	1824.3	1792.3	1703.3	1571.3
42.5°	1061.9	1117.4	1210.6	1326.9	1482.3	1627.7	1738.2	1779.4	1746.8	1659.8	1531.1
43°	1037.0	1092.5	1184.3	1297.2	1449.3	1590.9	1696.1	1734.4	1700.9	1614.8	1489.5
43.5°	1012.1	1067.6	1158.5	1270.4	1416.8	1552.6	1654.5	1689.9	1656.0	1571.8	1448.8

TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	939.0	994.0	1081.0	1184.8	1320.2	1441.7	1530.2	1557.4	1524.9	1444.5	1331.2
45.5°	914.6	970.0	1055.7	1158.5	1287.6	1404.4	1489.5	1516.3	1482.3	1403.9	1293.4
46°	891.1	946.1	1030.8	1130.8	1256.6	1368.0	1449.8	1474.2	1441.2	1363.2	1256.1
46.5°	867.2	922.2	1005.4	1103.0	1224.5	1332.6	1410.6	1434.5	1400.1	1324.0	1219.2
47°	843.3	898.8	980.6	1074.8	1192.9	1297.2	1370.4	1392.9	1360.4	1285.7	1183.4
47.5°	819.8	874.9	956.2	1049.0	1161.8	1261.3	1332.6	1354.6	1321.6	1247.9	1148.9
48°	796.4	851.4	931.8	1022.2	1131.7	1226.9	1295.8	1316.3	1284.3	1211.6	1114.5
48.5°	773.5	828.5	907.4	996.3	1101.1	1193.4	1258.9	1280.0	1247.9	1176.2	1081.5
49°	751.0	805.5	883.9	969.1	1071.4	1160.4	1223.6	1242.2	1211.6	1142.2	1048.5
49.5°	728.5	783.0	860.0	943.7	1041.8	1126.5	1188.6	1207.8	1177.6	1108.3	1017.4
50°	706.0	760.1	836.1	917.9	1013.1	1094.4	1154.2	1172.9	1143.2	1075.8	986.8
50.5°	684.5	737.1	813.2	892.6	983.4	1062.8	1120.2	1139.8	1110.2	1043.7	957.1
51°	663.0	715.6	790.2	867.7	955.7	1031.7	1088.7	1106.8	1078.1	1013.1	927.9
51.5°	641.9	694.0	767.2	842.3	929.4	1001.6	1057.6	1075.3	1048.0	983.9	900.2
52°	621.3	673.0	745.2	817.9	901.6	971.5	1026.0	1044.7	1017.9	955.7	873.4
52.5°	601.3	651.5	722.7	794.0	874.4	941.8	996.3	1016.0	989.2	927.9	846.6
53°	581.6	630.9	701.2	770.1	848.5	914.1	967.2	986.3	961.4	900.7	821.3
53.5°	562.0	610.3	678.7	747.1	822.7	886.3	939.4	958.6	933.7	875.3	796.9
54°	543.9	591.2	658.2	724.2	798.3	859.5	912.2	931.3	907.9	850.5	772.5
54.5°	525.7	572.1	638.1	701.7	773.5	833.2	884.9	905.0	882.5	826.1	749.5
55°	508.0	552.9	617.5	679.7	750.0	807.9	860.0	879.6	858.6	803.1	727.1
55.5°	490.8	534.8	597.4	658.7	726.6	783.5	834.2	854.8	834.2	779.7	705.5
56°	475.0	516.6	578.3	637.1	703.6	759.6	809.8	830.4	810.8	758.6	684.5
56.5°	459.2	498.9	558.7	617.0	681.6	736.1	785.9	806.5	788.3	736.6	663.4
57°	444.4	482.6	539.5	596.9	659.6	713.7	762.4	784.0	766.8	716.1	643.8
57.5°	430.0	465.9	520.4	576.9	639.0	691.2	740.4	761.5	745.2	695.5	624.2
58°	417.6	450.1	503.2	558.2	618.5	670.6	718.4	740.4	724.7	676.4	606.0
58.5°	405.1	434.3	485.5	539.5	598.9	650.0	697.4	719.4	704.6	656.7	587.4
59°	394.1	420.4	468.3	521.9	579.7	629.5	676.8	698.8	684.5	637.6	569.2
59.5°	384.1	406.6	451.5	503.7	560.6	609.4	655.8	678.7	665.3	619.4	552.0
60°	376.4	393.7	436.2	486.5	542.4	590.3	636.2	659.1	646.7	602.2	535.2
60.5°	368.3	381.2	420.4	470.2	524.7	571.6	617.5	640.0	628.5	583.6	518.5
61°	359.7	371.2	405.6	453.9	507.5	553.4	598.9	621.3	609.9	566.3	502.2
61.5°	351.1	361.6	391.7	437.7	490.8	535.7	580.7	603.2	592.6	550.1	486.0
62°	342.0	354.0	378.4	422.8	474.5	519.0	562.5	585.5	575.9	533.8	470.7
62.5°	332.9	345.4	365.0	407.5	458.2	501.8	544.8	567.8	558.7	517.1	454.9
63°	323.8	336.7	353.0	393.2	442.9	485.0	527.6	550.6	541.5	500.8	440.1
63.5°	315.2	328.1	340.6	378.8	427.6	469.7	510.9	533.3	525.2	485.0	425.2
64°	306.1	319.5	329.1	365.9	413.8	453.9	494.6	517.1	509.4	470.2	411.4
64.5°	297.5	310.4	318.1	352.5	399.9	439.1	478.3	501.3	493.2	454.4	397.5
65°	288.9	302.3	308.0	339.6	386.0	423.8	463.0	485.5	477.8	440.1	383.6
65.5°	280.3	294.2	298.0	327.2	372.1	409.9	447.7	469.7	462.1	424.8	369.7
66°	271.7	285.6	288.4	315.2	357.8	396.1	432.4	453.9	446.3	410.4	355.9



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	246.8	260.7	262.6	280.8	320.5	354.0	389.8	409.9	400.8	367.8	317.1
68°	239.2	252.6	254.9	270.7	308.0	341.0	376.0	395.6	386.0	353.5	304.2
68.5°	231.0	244.4	247.3	260.2	296.1	328.1	361.6	381.2	371.2	339.1	292.3
69°	223.4	236.8	240.1	250.2	284.6	315.2	348.2	366.9	355.9	325.3	280.3
69.5°	215.2	229.1	232.9	240.6	273.1	303.3	334.3	352.0	341.5	311.9	268.3
70°	207.6	221.5	225.8	231.5	262.1	290.8	321.4	338.7	327.2	298.0	256.4
70.5°	199.9	213.8	218.6	222.4	251.6	279.3	309.0	324.8	313.3	285.1	245.4
71°	192.8	206.2	211.4	213.8	241.1	267.9	296.6	311.9	299.4	272.6	234.4
71.5°	185.6	199.0	204.7	205.2	231.0	256.9	284.1	298.0	285.6	259.7	222.9
72°	178.4	191.8	197.5	197.5	221.0	245.9	272.2	285.6	272.2	247.3	212.4
72.5°	172.7	184.6	190.9	189.4	211.4	234.9	260.2	272.6	259.3	234.9	201.9
73°	165.5	177.5	184.2	182.2	202.3	224.8	248.7	260.2	246.3	222.9	191.3
73.5°	158.8	172.7	177.5	175.1	193.2	214.3	237.2	248.3	232.9	211.4	181.3
74°	151.6	166.0	173.6	168.4	184.6	204.7	226.2	236.3	221.0	199.9	171.2
74.5°	144.5	158.8	166.5	161.7	176.0	194.7	215.7	224.3	208.5	188.5	161.7
75°	137.8	151.6	159.8	155.5	167.4	185.1	205.2	212.9	196.6	177.5	152.1
75.5°	131.5	144.5	153.1	148.8	159.3	176.0	194.7	201.9	184.6	166.9	143.0
76°	124.8	137.8	145.9	142.5	151.6	167.4	184.2	190.9	172.7	156.4	133.9
76.5°	118.6	131.5	139.7	136.3	144.0	158.3	174.1	179.8	161.7	146.4	124.8
77°	112.4	124.8	133.5	130.6	136.8	149.7	164.5	169.3	150.7	136.3	116.7
77.5°	106.2	118.6	127.7	124.8	129.1	141.6	155.0	159.3	139.7	126.8	108.1
78°	100.0	112.4	121.5	119.6	122.5	133.5	145.9	149.7	129.1	117.2	100.4
78.5°	94.2	106.2	115.8	113.8	115.8	125.8	136.8	139.7	118.6	108.1	92.3
79°	88.0	100.4	110.0	108.6	109.5	118.1	128.2	130.1	108.6	99.5	84.7
79.5°	82.3	94.2	104.3	103.3	102.8	111.0	119.6	121.5	98.5	90.9	77.5
80°	76.5	88.5	98.5	98.1	97.1	103.8	111.4	112.4	89.0	82.3	70.3
80.5°	71.3	82.8	92.8	93.3	91.4	97.1	103.3	103.8	79.9	74.6	63.6
81°	65.5	77.0	87.5	88.0	85.6	90.4	95.7	95.2	70.8	67.0	56.9
81.5°	59.8	71.3	81.8	82.8	80.4	83.7	88.0	86.6	62.2	59.3	50.7
82°	54.5	66.0	76.5	78.0	75.1	77.5	80.4	78.0	54.1	52.6	45.4
82.5°	49.3	60.3	71.3	72.7	69.8	71.3	73.2	69.8	47.4	46.4	39.7
83°	44.0	55.0	66.0	67.9	65.1	66.0	66.5	62.2	40.7	40.2	34.4
83.5°	39.2	49.7	60.7	63.1	60.3	60.3	60.3	55.0	34.0	34.0	29.2
84°	34.0	44.5	56.0	58.4	55.5	54.5	53.6	48.3	27.3	27.7	23.4
84.5°	28.7	39.2	51.2	54.1	51.2	49.7	48.3	41.6	20.6	21.5	19.6
85°	23.9	34.0	46.4	49.3	46.9	45.0	43.0	35.4	15.8	16.7	15.3
85.5°	19.1	29.2	41.6	44.5	42.6	40.2	37.3	28.7	12.4	12.4	12.0
86°	16.3	24.4	37.3	40.2	38.3	35.9	32.0	22.5	9.6	9.1	8.6
86.5°	13.4	20.6	32.5	35.4	34.4	31.1	26.3	17.7	7.7	6.2	5.7
87°	10.5	17.2	28.2	31.1	30.1	26.3	22.0	13.9	5.7	3.8	3.3
87.5°	7.2	14.3	23.9	26.8	26.3	22.5	17.7	10.0	4.3	1.9	1.4
88°	5.3	11.0	19.6	22.5	22.5	18.2	13.9	6.7	2.9	1.0	0.5
88.5°	2.9	8.1	16.3	18.2	18.2	14.8	10.0	4.3	1.4	0.5	0.0



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.5	4.8	6.7	7.2	4.8	1.9	0.5	0.0	0.0	0.0



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3003.9	3003.9	3003.9	3003.9	3003.9	3003.9
0.5°	3006.3	3004.4	2998.1	2993.8	2991.0	2991.4
1°	3008.7	3001.5	2990.5	2982.4	2977.6	2978.0
1.5°	3010.6	2998.1	2982.4	2970.4	2963.7	2964.2
2°	3011.5	2993.8	2973.7	2958.4	2949.3	2949.8
2.5°	3012.5	2989.5	2964.7	2945.5	2935.0	2934.5
3°	3012.5	2984.3	2955.1	2932.6	2919.7	2919.2
3.5°	3011.5	2978.5	2945.0	2918.7	2903.9	2903.9
4°	3010.6	2972.3	2934.0	2904.9	2888.1	2887.6
4.5°	3009.1	2965.6	2923.0	2890.0	2871.9	2870.9
5°	3006.7	2958.4	2911.1	2875.2	2854.6	2853.7
5.5°	3003.9	2950.8	2899.1	2859.4	2836.9	2836.5
6°	3000.5	2942.2	2886.7	2843.6	2819.7	2818.3
6.5°	2996.7	2933.6	2873.3	2826.9	2801.5	2800.1
7°	2992.4	2924.0	2859.9	2810.2	2782.9	2781.5
7.5°	2987.1	2914.0	2845.6	2792.9	2763.8	2762.8
8°	2981.4	2903.4	2830.7	2775.2	2744.6	2743.7
8.5°	2975.2	2892.4	2815.9	2757.1	2725.0	2723.6
9°	2969.0	2880.9	2800.1	2738.9	2705.4	2704.0
9.5°	2961.8	2869.0	2784.3	2719.8	2684.4	2683.4
10°	2954.1	2857.0	2768.1	2700.6	2664.3	2662.8
10.5°	2945.5	2843.6	2751.3	2681.0	2643.2	2641.8
11°	2936.9	2830.2	2733.6	2660.9	2622.2	2621.2
11.5°	2927.3	2816.4	2715.9	2640.8	2600.6	2599.2
12°	2917.3	2802.0	2698.2	2620.3	2578.6	2577.7
12.5°	2907.3	2787.7	2679.6	2599.2	2556.6	2555.7
13°	2896.3	2771.9	2660.9	2577.7	2534.2	2533.7
13.5°	2885.3	2756.1	2641.8	2556.2	2512.2	2510.7
14°	2872.8	2740.3	2622.2	2534.6	2489.2	2488.7
14.5°	2860.4	2724.1	2602.6	2512.6	2466.2	2465.3
15°	2847.5	2706.8	2582.5	2490.2	2442.8	2442.8
15.5°	2834.1	2689.6	2561.9	2467.7	2418.9	2418.4
16°	2820.7	2671.9	2540.4	2444.7	2395.4	2395.4
16.5°	2805.8	2653.7	2519.3	2421.8	2372.0	2372.0
17°	2791.5	2635.6	2497.8	2398.3	2347.6	2348.1
17.5°	2776.2	2616.9	2476.3	2374.9	2323.7	2323.7
18°	2760.4	2597.3	2454.3	2351.4	2298.8	2299.8
18.5°	2744.6	2578.2	2431.8	2327.0	2274.9	2274.9
19°	2728.4	2558.1	2409.8	2303.1	2250.0	2251.0
19.5°	2712.1	2538.5	2386.8	2279.2	2225.2	2226.1
20°	2694.4	2517.9	2364.4	2254.8	2200.3	2201.2
20.5°	2677.2	2497.3	2341.4	2230.4	2174.9	2175.9
21°	2659.0	2476.3	2318.0	2205.1	2150.1	2151.5

TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2603.5	2411.7	2247.2	2131.4	2074.0	2075.4
23°	2584.4	2390.2	2223.7	2106.1	2048.7	2050.1
23.5°	2564.8	2368.2	2199.8	2081.2	2023.3	2025.2
24°	2545.2	2346.7	2176.4	2056.8	1997.5	1999.9
24.5°	2525.1	2324.7	2152.9	2031.9	1972.1	1974.0
25°	2505.5	2303.1	2129.5	2005.6	1946.8	1948.2
25.5°	2485.9	2280.6	2104.6	1982.2	1921.4	1922.9
26°	2466.2	2258.6	2081.2	1955.9	1896.1	1897.5
26.5°	2446.2	2235.7	2057.3	1932.0	1870.2	1872.2
27°	2425.1	2210.8	2032.4	1906.6	1844.4	1846.3
27.5°	2402.1	2184.0	2006.1	1881.7	1819.1	1820.5
28°	2377.3	2158.2	1979.8	1855.4	1793.7	1794.7
28.5°	2351.4	2130.5	1953.0	1830.5	1768.4	1769.8
29°	2325.1	2103.7	1926.2	1804.7	1742.5	1744.0
29.5°	2297.9	2075.4	1899.4	1778.9	1717.2	1718.1
30°	2268.7	2046.7	1871.7	1751.1	1692.3	1692.8
30.5°	2239.5	2017.6	1843.9	1726.3	1667.0	1667.4
31°	2209.4	1988.4	1815.2	1699.0	1640.7	1641.6
31.5°	2178.8	1958.3	1786.5	1672.2	1615.3	1616.3
32°	2146.7	1927.6	1757.8	1644.5	1589.5	1590.4
32.5°	2114.7	1896.6	1729.1	1618.6	1563.6	1565.1
33°	2082.1	1865.9	1700.0	1591.4	1538.3	1540.2
33.5°	2049.1	1834.4	1670.3	1564.1	1512.5	1514.9
34°	2014.7	1803.3	1641.6	1536.9	1486.6	1489.5
34.5°	1979.8	1769.8	1611.5	1509.6	1460.3	1464.2
35°	1945.3	1739.2	1582.8	1482.3	1434.5	1438.3
35.5°	1910.4	1706.2	1552.6	1455.1	1409.1	1413.9
36°	1875.0	1674.1	1524.4	1427.8	1383.3	1389.1
36.5°	1838.2	1641.6	1494.8	1401.0	1357.5	1363.7
37°	1800.9	1609.1	1466.1	1373.7	1331.7	1337.9
37.5°	1764.1	1576.6	1435.9	1347.4	1306.3	1313.0
38°	1726.8	1543.1	1407.7	1319.7	1280.0	1287.6
38.5°	1689.4	1510.1	1378.1	1292.9	1254.6	1262.3
39°	1651.7	1477.5	1348.9	1266.6	1228.8	1237.4
39.5°	1613.9	1445.0	1319.2	1239.8	1203.5	1212.1
40°	1576.1	1411.5	1290.0	1212.1	1178.1	1186.7
40.5°	1538.3	1378.5	1260.4	1184.8	1152.8	1161.8
41°	1501.0	1345.5	1230.7	1158.0	1127.9	1136.5
41.5°	1462.7	1313.0	1201.6	1131.7	1102.5	1111.6
42°	1425.9	1280.5	1173.3	1105.9	1077.7	1086.3
42.5°	1388.6	1247.9	1144.6	1080.5	1053.3	1061.9
43°	1351.7	1215.4	1116.4	1054.7	1028.9	1037.0
43.5°	1314.9	1182.9	1088.7	1029.4	1004.5	1012.1



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1209.2	1087.7	1006.9	954.3	930.8	939.0
45.5°	1174.8	1057.1	979.6	929.9	906.4	914.6
46°	1141.3	1027.4	953.8	905.9	883.0	891.1
46.5°	1107.3	997.3	927.5	881.6	859.1	867.2
47°	1073.8	968.6	901.6	858.1	836.1	843.3
47.5°	1042.3	939.4	875.8	834.7	813.6	819.8
48°	1011.2	911.2	850.0	810.8	791.1	796.4
48.5°	980.6	883.9	824.6	787.8	768.2	773.5
49°	950.9	856.7	800.7	765.3	746.7	751.0
49.5°	921.3	831.3	776.8	742.4	725.1	728.5
50°	893.5	805.0	752.9	720.4	703.1	706.0
50.5°	865.3	779.7	729.0	698.4	681.6	684.5
51°	838.0	755.3	706.0	676.4	661.5	663.0
51.5°	812.7	731.8	684.0	654.8	641.0	641.9
52°	787.8	708.4	662.5	634.7	620.9	621.3
52.5°	762.4	685.4	641.0	614.2	600.8	601.3
53°	738.5	663.4	619.9	593.6	581.2	581.6
53.5°	715.1	641.9	599.3	573.5	561.6	562.0
54°	692.6	620.9	579.3	553.9	542.4	543.9
54.5°	670.1	600.8	560.1	534.8	523.8	525.7
55°	649.6	581.2	541.5	516.1	506.1	508.0
55.5°	628.5	562.0	522.3	497.9	487.9	490.8
56°	608.4	543.4	504.6	480.2	471.1	475.0
56.5°	588.8	525.2	486.9	463.0	453.9	459.2
57°	570.2	507.5	469.7	446.3	437.7	444.4
57.5°	551.5	490.3	453.5	430.0	422.4	430.0
58°	533.8	473.5	437.2	414.7	407.5	417.6
58.5°	516.1	457.8	421.9	399.4	393.7	405.1
59°	498.9	442.0	406.6	385.1	380.3	394.1
59.5°	482.6	426.7	392.2	371.2	367.8	384.1
60°	466.4	411.8	377.9	357.3	356.4	376.4
60.5°	451.1	397.0	363.5	344.4	345.4	368.3
61°	436.2	383.1	350.6	332.0	334.8	359.7
61.5°	420.9	369.3	337.2	320.0	325.7	351.1
62°	407.1	356.4	324.8	309.0	317.6	342.0
62.5°	392.7	343.0	312.8	298.0	309.5	332.9
63°	378.8	330.0	300.4	287.0	301.3	323.8
63.5°	364.5	317.6	288.9	276.9	293.2	315.2
64°	352.0	305.6	277.9	267.4	285.1	306.1
64.5°	339.1	294.2	267.4	258.3	276.9	297.5
65°	326.2	282.7	256.9	249.2	269.3	288.9
65.5°	313.8	271.2	246.3	240.6	261.6	280.3
66°	301.8	260.2	236.8	232.5	253.5	271.7



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	266.9	229.1	209.0	210.5	231.0	246.8
68°	255.4	219.6	200.4	203.8	223.4	239.2
68.5°	244.9	210.0	192.3	197.5	215.7	231.0
69°	234.4	200.9	184.2	190.9	208.5	223.4
69.5°	223.9	191.8	176.5	184.6	200.9	215.2
70°	213.8	182.7	169.8	178.4	194.2	207.6
70.5°	203.8	174.6	162.6	171.7	187.0	199.9
71°	194.7	166.9	155.9	165.5	179.8	192.8
71.5°	185.1	158.8	149.2	159.8	172.7	185.6
72°	175.5	151.2	142.1	154.0	166.0	178.4
72.5°	166.9	143.5	135.8	148.3	159.8	172.7
73°	158.3	135.8	129.6	142.5	153.1	165.5
73.5°	149.7	128.2	123.9	136.3	146.8	158.8
74°	141.1	121.5	118.1	130.6	140.1	151.6
74.5°	133.5	114.8	112.9	124.8	133.9	144.5
75°	125.8	108.6	107.6	119.1	127.7	137.8
75.5°	118.1	102.4	102.4	113.8	121.5	131.5
76°	111.0	96.1	97.1	108.1	115.3	124.8
76.5°	103.8	90.4	92.3	102.4	109.5	118.6
77°	97.1	84.7	87.5	97.1	103.3	112.4
77.5°	90.4	79.4	82.8	91.8	97.6	106.2
78°	84.2	74.1	78.0	86.6	91.8	100.0
78.5°	77.5	68.9	73.2	81.3	86.1	94.2
79°	71.7	63.6	68.9	76.1	80.4	88.0
79.5°	66.0	58.8	64.1	70.8	74.6	82.3
80°	60.3	54.5	59.8	66.0	69.4	76.5
80.5°	55.0	50.2	55.5	61.2	63.6	71.3
81°	49.7	45.9	51.2	56.4	58.4	65.5
81.5°	45.0	41.6	46.4	51.7	53.1	59.8
82°	40.7	37.3	42.6	46.9	47.8	54.5
82.5°	35.9	33.5	38.3	42.1	42.6	49.3
83°	31.1	29.7	34.0	37.8	37.3	44.0
83.5°	26.8	25.8	30.1	33.5	32.5	39.2
84°	22.5	22.0	25.8	29.2	27.7	34.0
84.5°	18.7	18.7	22.0	25.4	23.4	28.7
85°	15.3	15.3	18.2	21.0	19.6	23.9
85.5°	11.5	12.0	14.3	17.2	16.7	19.1
86°	8.6	8.1	10.5	13.9	13.9	16.3
86.5°	5.7	4.8	7.2	10.0	11.0	13.4
87°	2.9	1.9	3.3	6.7	8.1	10.5
87.5°	1.0	0.5	1.0	2.9	5.3	7.2
88°	0.0	0.0	0.0	0.5	2.9	5.3
88.5°	0.0	0.0	0.0	0.0	1.0	2.9



TEST NUMBER: P776683

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	2126.2	2178.3	2277.3	2417.0	2596.3	2766.1	2907.7	2990.5	3000.0	2937.4	2810.6
22°	2101.3	2153.9	2253.9	2395.4	2576.7	2748.5	2892.9	2977.1	2987.1	2923.5	2795.3



44°	987.7	1042.7	1132.2	1241.7	1384.7	1516.3	1612.4	1644.0	1611.0	1527.8	1409.1
44.5°	963.3	1018.8	1106.4	1213.5	1352.7	1478.0	1570.3	1600.5	1568.4	1485.7	1370.4



66.5°	263.1	276.9	279.3	303.3	345.4	381.7	418.1	439.1	430.5	396.5	342.5
67°	254.9	268.8	270.7	292.3	332.4	367.8	404.2	424.8	415.7	382.2	330.0



89°	1.4	5.3	12.4	14.3	14.3	11.5	6.7	2.4	0.5	0.0	0.0
89.5°	0.0	2.9	8.6	10.5	11.0	8.1	4.3	1.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	2641.3	2454.8	2293.6	2180.7	2124.2	2126.2
22°	2622.2	2433.7	2271.1	2156.3	2099.4	2101.3



44°	1279.0	1150.8	1061.4	1003.5	979.6	987.7
44.5°	1244.1	1119.8	1034.1	979.1	955.2	963.3



66.5°	289.9	249.7	227.2	224.8	245.9	263.1
67°	277.9	239.6	218.1	217.6	238.2	254.9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.5	1.4
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)