

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: P776416

Luminaire Tested: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776416  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2310613A001)  
Test Lab:  
Issue Date: 2/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K  
Description: 6 INCH SQUARE MEDIUM HAZE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3868.8 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.06  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

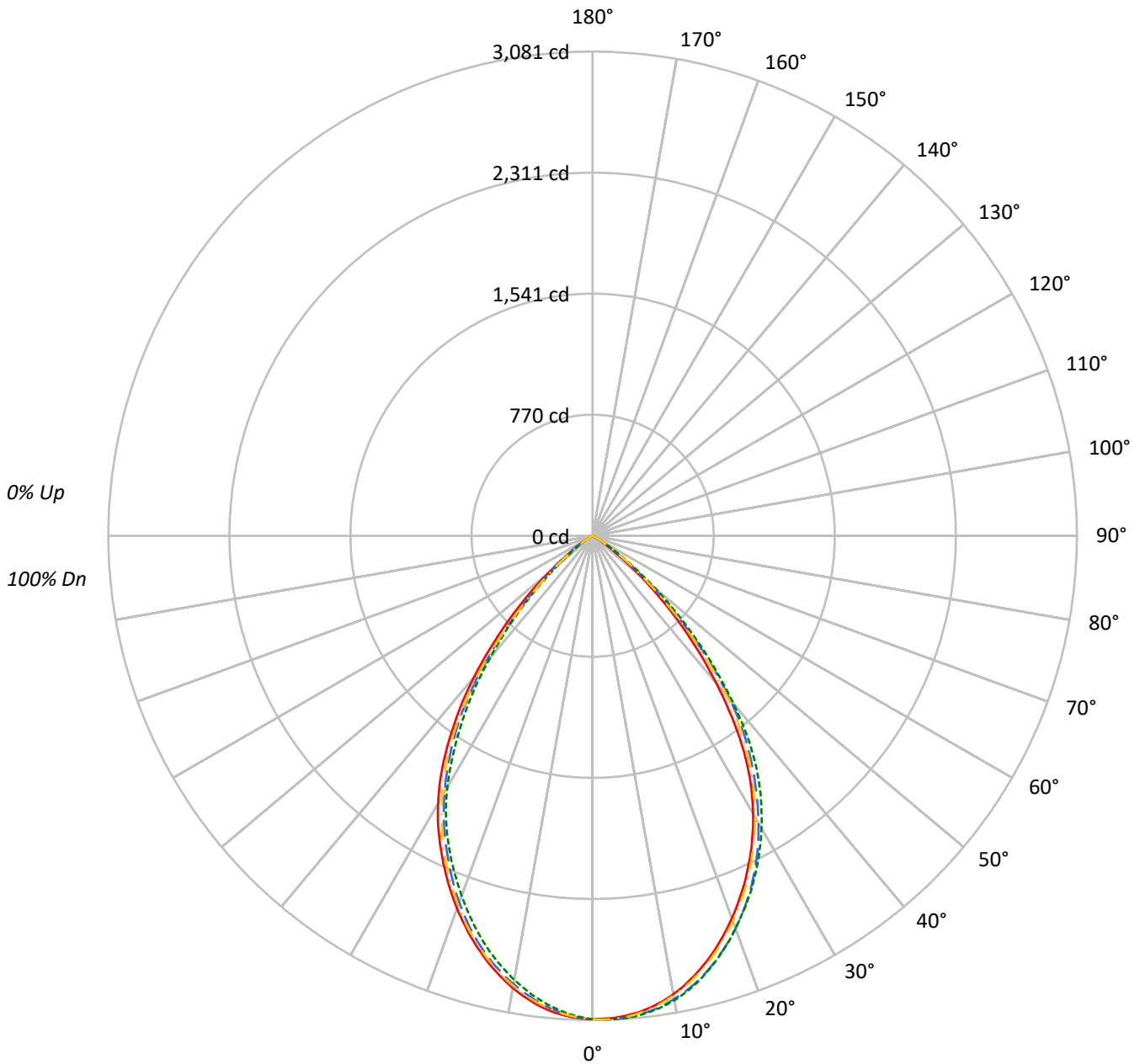
Input Watts (W): 38.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92					92			
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77					77			
4	94	86	80	75	92	85	79	74	82	77	73	80	76	73	78	75	72	70					70			
5	89	79	73	68	87	78	72	68	76	71	67	75	70	66	73	69	66	64					64			
6	83	73	67	62	82	73	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	78	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	55	54					54			
8	74	63	57	52	73	63	56	52	62	56	52	61	55	51	59	55	51	50					50			
9	70	59	53	48	69	59	52	48	58	52	48	57	51	48	56	51	47	46					46			
10	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	48	44	43					43			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	168643	168643	168643	168643
5°	167895	168913	167136	165446
10°	164866	167042	162667	159755
15°	159076	162305	155875	151976
20°	151102	155157	147188	142171
25°	141335	146633	136804	131155
30°	129254	135977	124513	117107
35°	112237	121934	106662	97005
40°	87492	99672	84086	72865
45°	59991	72356	57688	46842
50°	33039	43734	31598	23001
55°	12635	19211	13667	9797
60°	1667	4912	3289	1294
65°	221	389	311	221
70°	48	112	112	112
75°	64	64	64	64
80°	0	0	0	0
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 72356 cd/sqm



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.2	7.4
10°-20°	778.6	20.1
20°-30°	1053.2	27.2
30°-40°	1011.1	26.1
40°-50°	588.9	15.2
50°-60°	144.9	3.7
60°-70°	4.6	0.1
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	2118.9	54.8
0°-40°	3130.1	80.9
0°-60°	3863.9	99.9
0°-90°	3868.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3868.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3076	3076	3076	3076	3076	
5°	3051	3070	3037	3006	3051	288
15°	2803	2860	2746	2678	2803	786
25°	2337	2424	2262	2168	2337	1071
35°	1677	1822	1594	1450	1677	1032
45°	774	933	744	604	774	598
55°	132	201	143	102	132	136
65°	2	3	2	2	2	3
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3
0.5°	3075.6	3076.0	3078.3	3080.3	3077.3	3078.7	3079.3	3078.0	3074.9	3073.6	3073.9
1°	3074.9	3076.3	3079.7	3082.0	3079.3	3080.0	3080.0	3077.6	3073.6	3070.9	3071.2
1.5°	3073.9	3076.3	3080.0	3083.0	3080.3	3081.0	3079.7	3076.6	3072.2	3068.2	3067.5
2°	3072.2	3076.0	3080.0	3083.0	3081.0	3081.0	3079.3	3074.9	3068.9	3064.8	3063.1
2.5°	3072.2	3074.6	3079.0	3082.4	3080.3	3080.0	3077.6	3072.6	3066.2	3060.4	3057.7
3°	3067.2	3072.6	3078.0	3081.4	3079.7	3079.0	3075.3	3068.9	3061.5	3055.4	3051.7
3.5°	3064.2	3070.2	3076.0	3079.7	3078.0	3076.3	3072.2	3065.2	3056.7	3049.7	3045.9
4°	3060.4	3067.5	3073.3	3077.3	3075.6	3073.9	3068.9	3060.1	3051.3	3043.6	3037.9
4.5°	3055.7	3064.2	3069.9	3074.3	3072.9	3070.6	3064.2	3054.7	3045.3	3035.8	3030.1
5°	3051.0	3059.8	3066.2	3070.9	3069.5	3066.5	3059.1	3048.6	3037.2	3027.7	3021.3
5.5°	3046.6	3054.7	3062.1	3066.5	3065.8	3062.1	3053.0	3041.6	3028.8	3019.0	3011.6
6°	3038.9	3049.0	3057.1	3061.8	3061.5	3056.7	3046.3	3033.1	3020.0	3009.5	3001.4
6.5°	3032.1	3043.3	3051.3	3056.7	3056.1	3050.7	3039.9	3024.0	3010.2	2999.4	2990.0
7°	3024.4	3036.2	3044.6	3051.0	3050.3	3044.6	3031.4	3014.9	3000.1	2988.3	2979.2
7.5°	3015.6	3028.4	3037.5	3043.9	3043.6	3037.5	3023.0	3004.1	2988.3	2976.2	2966.4
8°	3006.2	3020.0	3030.1	3036.2	3036.5	3030.1	3013.9	2993.4	2976.5	2963.7	2953.9
8.5°	2996.4	3010.9	3021.7	3028.1	3028.8	3021.3	3003.8	2981.9	2964.0	2950.9	2940.1
9°	2985.6	3000.8	3012.9	3019.3	3020.0	3012.2	2993.7	2969.7	2950.5	2937.4	2926.9
9.5°	2973.8	2990.7	3002.8	3009.9	3010.9	3002.8	2981.9	2956.6	2937.4	2922.9	2912.1
10°	2961.7	2979.5	2993.0	2999.8	3000.8	2992.0	2970.1	2943.4	2922.2	2908.4	2896.9
10.5°	2948.5	2967.4	2981.9	2989.0	2989.6	2980.9	2957.6	2929.0	2907.4	2893.2	2881.4
11°	2935.0	2955.3	2971.1	2977.5	2978.2	2968.4	2944.5	2914.5	2891.5	2877.4	2865.6
11.5°	2920.9	2942.1	2958.3	2965.0	2965.7	2955.9	2931.0	2899.3	2874.7	2861.2	2849.0
12°	2905.0	2928.3	2946.1	2951.9	2952.6	2942.1	2916.1	2883.4	2858.1	2844.3	2831.8
12.5°	2889.5	2913.8	2932.0	2938.7	2938.7	2927.9	2901.0	2867.3	2841.0	2826.8	2814.7
13°	2873.7	2899.3	2918.5	2925.2	2925.2	2913.4	2886.1	2850.7	2823.4	2808.9	2796.8
13.5°	2856.5	2883.1	2903.7	2909.7	2909.1	2897.3	2869.3	2833.2	2804.5	2790.7	2778.2
14°	2839.6	2867.3	2888.2	2894.6	2893.2	2881.4	2852.8	2815.3	2786.0	2771.5	2759.0
14.5°	2821.4	2850.1	2872.0	2878.7	2876.0	2863.9	2835.6	2796.4	2766.8	2751.3	2739.5
15°	2802.9	2833.2	2855.1	2862.2	2859.8	2846.7	2817.0	2777.6	2746.5	2730.7	2719.2
15.5°	2783.6	2815.0	2837.9	2845.7	2841.6	2828.8	2798.1	2758.0	2726.0	2710.8	2698.3
16°	2764.1	2796.1	2820.0	2827.1	2823.8	2810.3	2779.6	2738.1	2705.4	2689.6	2676.4
16.5°	2743.8	2777.2	2801.2	2808.9	2804.9	2790.7	2759.7	2717.5	2684.2	2667.3	2654.2
17°	2723.3	2757.7	2782.6	2790.4	2785.0	2771.2	2739.8	2696.6	2661.9	2644.4	2631.6
17.5°	2701.7	2737.8	2763.1	2771.5	2765.4	2750.9	2718.9	2674.4	2640.0	2621.5	2607.6
18°	2680.5	2716.9	2743.2	2751.3	2744.5	2730.4	2698.3	2652.8	2616.4	2597.9	2583.4
18.5°	2658.5	2695.6	2722.3	2731.0	2723.6	2709.5	2676.4	2629.9	2593.5	2573.6	2559.4
19°	2636.0	2674.1	2702.0	2710.5	2702.7	2688.2	2654.2	2607.0	2570.2	2550.0	2533.5
19.5°	2613.0	2651.8	2680.1	2689.2	2681.5	2666.0	2631.6	2583.4	2547.3	2524.4	2507.5
20°	2590.1	2629.5	2658.9	2667.6	2659.6	2643.0	2609.3	2560.4	2523.0	2499.1	2481.5
20.5°	2566.2	2605.9	2636.6	2644.4	2636.3	2620.8	2585.7	2536.2	2498.4	2473.4	2455.6
21°	2542.2	2582.3	2614.0	2622.1	2613.7	2597.5	2561.4	2512.2	2474.1	2448.2	2429.6



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2468.4	2508.8	2542.9	2550.7	2546.3	2525.0	2487.9	2440.1	2397.2	2368.6	2345.0
23°	2443.1	2483.2	2517.9	2526.0	2522.3	2499.4	2463.7	2414.1	2369.9	2340.9	2316.7
23.5°	2417.5	2456.9	2492.7	2500.8	2498.4	2473.8	2439.1	2388.1	2343.3	2312.6	2287.3
24°	2390.8	2431.0	2466.0	2474.8	2474.5	2448.2	2412.8	2361.8	2316.0	2284.6	2258.3
24.5°	2363.9	2404.3	2439.7	2448.8	2450.5	2426.6	2385.4	2335.2	2289.7	2256.3	2228.7
25°	2336.6	2377.3	2412.8	2422.2	2424.2	2399.9	2357.8	2308.6	2261.7	2228.0	2200.0
25.5°	2309.2	2348.7	2385.4	2394.5	2397.9	2372.6	2330.1	2280.9	2234.1	2199.0	2170.3
26°	2281.9	2321.4	2357.1	2367.6	2372.0	2346.0	2302.2	2253.9	2206.4	2170.3	2141.0
26.5°	2252.9	2293.4	2328.1	2339.6	2345.7	2317.7	2273.2	2226.0	2178.4	2141.3	2111.0
27°	2224.6	2263.7	2299.5	2311.3	2319.0	2290.4	2244.8	2198.3	2149.1	2112.3	2081.3
27.5°	2194.9	2233.7	2269.5	2282.6	2291.0	2261.7	2216.2	2170.0	2121.1	2082.7	2050.6
28°	2165.6	2203.7	2238.4	2252.9	2263.1	2233.4	2187.2	2141.0	2091.8	2051.3	2018.9
28.5°	2135.6	2173.4	2207.4	2223.3	2235.4	2204.4	2157.9	2112.3	2062.4	2019.6	1986.2
29°	2104.9	2142.3	2175.7	2192.9	2207.1	2175.4	2127.5	2082.3	2031.8	1988.3	1953.5
29.5°	2073.6	2110.0	2143.0	2162.2	2177.4	2146.4	2097.2	2051.0	1999.7	1955.6	1918.8
30°	2041.9	2077.3	2110.3	2130.9	2148.1	2116.7	2066.1	2019.6	1967.0	1922.5	1884.4
30.5°	2009.5	2044.2	2077.3	2097.8	2118.1	2086.0	2034.8	1986.9	1934.7	1887.8	1849.3
31°	1976.5	2010.5	2042.2	2066.1	2088.7	2055.4	2002.4	1954.2	1899.9	1853.1	1813.6
31.5°	1942.4	1976.1	2008.8	2032.8	2057.0	2024.3	1969.7	1920.5	1864.5	1818.0	1777.5
32°	1907.0	1940.4	1973.4	1998.7	2025.7	1992.6	1937.0	1886.1	1828.1	1781.9	1740.4
32.5°	1872.3	1906.3	1938.4	1964.0	1994.0	1959.9	1903.3	1851.0	1791.4	1745.2	1704.0
33°	1835.9	1870.3	1903.6	1929.9	1961.6	1926.9	1869.2	1814.3	1753.6	1707.1	1667.6
33.5°	1798.4	1834.2	1869.6	1895.2	1927.6	1893.5	1834.9	1777.2	1714.8	1669.0	1630.9
34°	1759.0	1797.1	1833.5	1860.1	1894.2	1859.1	1799.8	1739.8	1675.7	1631.2	1593.4
34.5°	1718.9	1760.7	1797.4	1824.7	1857.8	1823.1	1765.1	1701.3	1634.2	1590.7	1555.0
35°	1677.1	1722.6	1760.7	1787.6	1822.0	1787.3	1729.3	1661.9	1593.8	1550.3	1516.9
35.5°	1635.2	1684.5	1725.6	1750.9	1784.3	1751.2	1693.6	1622.8	1553.7	1510.2	1477.8
36°	1590.4	1646.0	1687.2	1714.1	1746.5	1714.5	1656.8	1583.3	1513.2	1469.4	1437.3
36.5°	1545.6	1605.2	1651.1	1677.4	1706.1	1676.4	1618.7	1543.2	1472.1	1427.9	1395.5
37°	1499.4	1563.8	1612.7	1638.6	1664.9	1636.9	1579.6	1503.4	1429.6	1386.1	1351.7
37.5°	1453.5	1520.6	1573.2	1598.8	1622.4	1596.5	1540.2	1462.3	1389.5	1343.6	1308.9
38°	1406.0	1476.4	1532.1	1556.0	1578.6	1554.0	1499.0	1421.5	1347.3	1300.1	1263.7
38.5°	1360.8	1432.3	1490.9	1515.9	1532.4	1511.2	1457.2	1380.4	1305.5	1256.3	1218.9
39°	1313.6	1386.4	1447.4	1472.1	1486.9	1467.0	1413.7	1338.9	1262.7	1212.1	1174.0
39.5°	1268.1	1340.6	1403.3	1428.2	1440.0	1421.2	1369.6	1296.1	1220.2	1167.6	1127.5
40°	1222.6	1292.0	1357.1	1382.7	1392.8	1372.9	1324.4	1252.2	1175.0	1121.7	1081.0
40.5°	1177.4	1244.8	1312.6	1336.2	1346.3	1324.7	1279.2	1208.4	1130.9	1076.6	1033.4
41°	1131.5	1200.3	1267.1	1288.6	1299.8	1275.5	1230.7	1164.2	1085.7	1031.7	986.2
41.5°	1086.3	1154.1	1220.5	1241.4	1254.9	1226.9	1183.1	1120.7	1040.5	988.9	939.7
42°	1040.8	1107.6	1172.7	1213.5	1209.1	1178.1	1134.9	1074.5	995.0	944.1	893.8
42.5°	995.3	1061.4	1124.8	1162.2	1164.9	1129.5	1087.4	1029.0	952.8	900.6	849.7
43°	949.1	1014.9	1076.9	1109.9	1120.1	1081.6	1040.2	982.5	909.3	857.4	807.2
43.5°	903.9	970.0	1029.4	1058.0	1072.5	1034.8	993.0	937.3	868.5	814.9	765.4



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	773.8	835.5	885.4	913.0	933.3	895.8	852.7	802.1	744.1	690.9	647.0
45.5°	732.7	790.7	838.2	868.2	887.4	849.3	806.8	760.0	703.3	651.4	609.9
46°	690.2	747.2	791.3	823.4	843.2	804.8	762.3	716.5	663.5	612.3	573.9
46.5°	648.4	704.0	744.8	778.9	800.4	761.0	717.5	674.3	623.1	576.2	539.1
47°	607.6	661.2	700.3	734.0	757.6	718.2	674.3	631.5	584.0	538.8	505.1
47.5°	567.8	619.0	657.5	690.5	715.1	676.4	632.2	591.1	546.2	504.4	473.0
48°	529.0	578.2	615.3	647.7	673.3	636.9	591.4	550.3	509.8	470.7	442.4
48.5°	491.9	538.8	573.9	606.2	632.2	598.8	552.3	511.5	474.1	439.3	413.4
49°	455.5	500.0	534.7	565.4	591.4	560.7	513.8	473.4	438.3	408.0	385.4
49.5°	420.4	462.3	496.3	526.0	550.9	524.0	478.4	437.3	403.9	378.3	357.7
50°	387.4	424.8	459.2	486.2	512.8	487.2	443.4	402.9	370.5	350.3	332.4
50.5°	354.7	388.4	422.8	448.4	475.4	452.5	410.3	370.2	339.2	325.7	309.2
51°	324.0	354.7	389.1	412.0	439.0	418.4	379.0	339.5	311.9	301.4	285.9
51.5°	293.7	322.7	356.0	377.6	404.9	386.1	349.0	313.6	284.9	276.8	263.0
52°	265.3	292.7	325.0	344.9	371.9	354.4	324.0	287.6	257.6	252.5	239.7
52.5°	238.4	263.7	294.7	312.9	339.9	327.4	298.7	261.3	230.6	228.3	218.1
53°	213.4	237.4	266.7	282.9	311.2	300.1	273.4	235.3	209.4	207.4	198.9
53.5°	189.8	213.1	239.4	254.9	282.5	273.1	248.2	213.4	190.2	188.5	180.0
54°	168.9	190.5	214.8	229.3	253.5	245.8	222.9	193.5	173.0	170.6	162.9
54.5°	149.7	169.3	190.5	205.0	225.2	218.8	202.3	175.3	157.5	153.4	145.3
55°	132.2	150.4	168.9	183.1	201.0	197.9	182.7	159.1	143.0	137.9	129.5
55.5°	115.3	131.8	148.4	162.5	179.0	176.3	164.2	143.0	128.8	122.4	114.0
56°	102.2	115.0	130.1	143.3	158.8	157.5	146.3	128.5	115.3	108.2	99.8
56.5°	88.7	101.5	114.3	125.1	140.3	139.2	129.5	114.6	102.5	94.7	86.3
57°	75.5	88.3	100.5	110.6	123.1	122.4	114.0	101.1	90.0	82.3	74.2
57.5°	62.4	74.9	86.3	96.4	106.5	106.2	99.1	88.3	78.6	70.8	62.7
58°	49.9	61.4	72.5	81.9	91.7	91.4	85.6	76.5	67.4	59.0	50.2
58.5°	37.8	48.2	58.7	67.8	78.2	77.9	73.2	65.1	55.6	50.2	42.8
59°	27.6	36.4	45.5	53.6	65.1	65.7	60.7	52.6	47.2	41.5	35.1
59.5°	20.2	26.6	33.4	40.1	55.0	56.6	51.2	44.5	38.8	32.4	27.6
60°	15.2	19.2	24.3	29.3	44.8	47.5	42.1	36.4	30.0	23.6	20.2
60.5°	11.1	14.5	17.5	20.9	34.7	38.4	32.7	28.3	21.6	14.8	12.5
61°	9.4	12.5	13.1	15.5	24.6	29.3	23.3	20.2	13.5	11.5	9.8
61.5°	7.8	10.5	11.1	11.5	14.5	20.2	14.2	12.1	10.1	9.1	7.8
62°	6.1	8.4	9.1	9.8	10.8	11.1	10.8	9.1	7.8	7.1	6.4
62.5°	4.4	6.4	7.1	8.1	8.4	8.4	8.1	7.4	6.1	5.7	5.1
63°	3.7	4.7	5.4	6.4	6.7	6.7	6.4	5.7	5.1	4.7	4.4
63.5°	3.0	3.7	4.4	4.7	5.4	5.4	5.1	4.7	4.0	4.0	3.7
64°	2.4	3.0	3.7	4.0	4.4	4.4	4.4	4.0	3.4	3.4	3.0
64.5°	2.0	2.7	3.0	3.4	3.7	3.7	3.4	3.4	2.7	2.7	2.7
65°	1.7	2.4	2.7	2.7	3.0	3.0	3.0	2.7	2.4	2.4	2.4
65.5°	1.7	2.0	2.0	2.4	2.7	2.4	2.4	2.4	2.0	2.0	2.0
66°	1.3	1.7	2.0	2.0	2.0	2.0	2.0	2.0	1.7	1.7	1.7





TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0
68°	0.7	1.0	1.0	1.0	1.3	1.0	1.3	1.0	1.0	1.0	1.0
68.5°	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
69°	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7
69.5°	0.7	0.7	0.7	0.7	1.0	0.7	0.7	0.7	0.7	0.7	0.7
70°	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
70.5°	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
71°	0.3	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
71.5°	0.3	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3
72°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
72.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
73°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
73.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
74°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
74.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75.5°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
76°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
76.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
77°	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3076.3	3076.3	3076.3	3076.3	3076.3	3076.3
0.5°	3075.3	3071.6	3073.6	3075.3	3076.3	3075.6
1°	3071.9	3067.5	3069.9	3072.6	3074.3	3074.9
1.5°	3067.5	3062.8	3065.8	3068.9	3072.6	3073.9
2°	3062.1	3057.1	3060.4	3064.8	3068.9	3072.2
2.5°	3056.4	3050.7	3054.0	3060.1	3065.5	3072.2
3°	3049.7	3043.3	3047.6	3054.0	3062.1	3067.2
3.5°	3042.2	3035.2	3039.9	3048.3	3057.4	3064.2
4°	3034.5	3026.7	3031.8	3041.6	3052.7	3060.4
4.5°	3025.7	3017.0	3023.0	3034.1	3046.6	3055.7
5°	3015.9	3006.5	3013.2	3025.7	3040.2	3051.0
5.5°	3005.5	2996.0	3002.8	3017.0	3032.8	3046.6
6°	2994.4	2984.6	2992.3	3007.8	3025.4	3038.9
6.5°	2982.6	2971.8	2980.5	2997.4	3017.0	3032.1
7°	2970.4	2959.6	2968.4	2986.6	3008.2	3024.4
7.5°	2957.3	2945.8	2955.6	2975.8	2998.4	3015.6
8°	2944.1	2931.3	2942.4	2963.7	2988.0	3006.2
8.5°	2930.0	2916.5	2928.3	2950.9	2976.2	2996.4
9°	2915.8	2901.6	2913.4	2937.7	2964.4	2985.6
9.5°	2900.0	2885.8	2898.6	2923.6	2951.5	2973.8
10°	2884.4	2869.9	2882.8	2909.4	2938.4	2961.7
10.5°	2867.9	2852.4	2866.9	2894.2	2924.6	2948.5
11°	2851.1	2834.9	2850.1	2878.0	2910.1	2935.0
11.5°	2833.9	2817.4	2832.5	2861.5	2894.9	2920.9
12°	2815.7	2798.5	2814.7	2844.7	2878.7	2905.0
12.5°	2797.5	2779.9	2796.4	2826.8	2862.2	2889.5
13°	2778.2	2760.4	2777.2	2808.9	2845.7	2873.7
13.5°	2758.7	2740.5	2757.3	2790.0	2827.8	2856.5
14°	2738.1	2720.2	2737.1	2771.5	2809.9	2839.6
14.5°	2717.2	2699.3	2716.5	2751.9	2791.1	2821.4
15°	2695.6	2677.8	2695.3	2731.7	2772.8	2802.9
15.5°	2674.7	2655.2	2673.4	2710.8	2752.3	2783.6
16°	2652.1	2633.3	2651.5	2690.2	2732.4	2764.1
16.5°	2629.5	2609.7	2628.5	2669.3	2712.2	2743.8
17°	2605.9	2586.7	2605.6	2647.4	2691.3	2723.3
17.5°	2583.0	2562.5	2582.0	2624.2	2668.7	2701.7
18°	2559.4	2537.8	2558.4	2601.2	2646.4	2680.5
18.5°	2534.8	2512.9	2534.5	2577.6	2623.8	2658.5
19°	2510.5	2488.6	2509.2	2553.3	2600.2	2636.0
19.5°	2485.9	2463.3	2484.9	2529.4	2576.6	2613.0
20°	2461.3	2437.0	2460.3	2504.1	2552.3	2590.1
20.5°	2437.0	2411.4	2435.0	2478.5	2527.1	2566.2
21°	2410.7	2385.4	2409.4	2452.9	2501.8	2542.2



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2330.1	2306.5	2330.1	2371.6	2422.5	2468.4
23°	2302.5	2279.2	2302.5	2344.0	2395.2	2443.1
23.5°	2275.2	2252.3	2276.2	2316.3	2367.6	2417.5
24°	2246.9	2224.6	2247.9	2288.0	2339.3	2390.8
24.5°	2218.5	2197.0	2220.6	2259.0	2311.6	2363.9
25°	2190.2	2168.3	2191.9	2230.0	2283.3	2336.6
25.5°	2161.2	2140.0	2163.6	2201.0	2254.3	2309.2
26°	2132.9	2111.3	2133.6	2170.3	2225.6	2281.9
26.5°	2103.2	2081.7	2103.2	2141.0	2196.3	2252.9
27°	2072.9	2051.3	2072.6	2109.0	2166.6	2224.6
27.5°	2041.9	2021.0	2040.9	2077.6	2136.3	2194.9
28°	2010.2	1987.6	2007.5	2045.6	2105.3	2165.6
28.5°	1977.1	1954.5	1975.8	2013.2	2073.9	2135.6
29°	1944.1	1920.5	1941.7	1980.5	2042.2	2104.9
29.5°	1910.4	1886.1	1907.0	1946.5	2009.8	2073.6
30°	1875.3	1850.0	1871.6	1912.7	1977.5	2041.9
30.5°	1839.6	1811.6	1835.9	1878.0	1943.4	2009.5
31°	1803.2	1773.2	1798.1	1843.3	1909.4	1976.5
31.5°	1766.1	1734.0	1760.3	1808.9	1875.0	1942.4
32°	1728.6	1693.9	1720.9	1771.8	1840.2	1907.0
32.5°	1689.5	1654.1	1681.8	1736.4	1804.8	1872.3
33°	1649.7	1612.7	1641.7	1700.0	1767.8	1835.9
33.5°	1609.3	1571.9	1601.5	1663.2	1731.0	1798.4
34°	1568.5	1531.1	1561.7	1625.1	1692.9	1759.0
34.5°	1526.7	1489.9	1521.0	1585.0	1654.8	1718.9
35°	1485.5	1449.5	1479.5	1544.9	1614.3	1677.1
35.5°	1444.1	1408.7	1439.7	1503.8	1574.2	1635.2
36°	1401.6	1368.6	1399.2	1461.9	1530.7	1590.4
36.5°	1359.4	1327.8	1358.4	1419.1	1486.6	1545.6
37°	1316.6	1286.3	1317.0	1371.9	1441.0	1499.4
37.5°	1273.5	1243.8	1274.8	1327.8	1396.5	1453.5
38°	1230.0	1202.0	1231.3	1280.9	1348.0	1406.0
38.5°	1185.1	1156.1	1186.1	1235.7	1300.1	1360.8
39°	1141.6	1110.3	1141.0	1209.7	1250.5	1313.6
39.5°	1097.1	1064.1	1095.8	1157.1	1194.6	1268.1
40°	1052.3	1018.2	1050.3	1104.2	1148.0	1222.6
40.5°	1007.8	974.1	1005.1	1051.6	1101.5	1177.4
41°	963.6	931.6	957.9	999.0	1055.3	1131.5
41.5°	921.5	889.4	912.4	952.5	1008.8	1086.3
42°	877.0	848.6	867.9	905.6	961.9	1040.8
42.5°	834.1	807.2	825.0	859.4	916.1	995.3
43°	792.0	766.4	782.6	813.6	869.2	949.1
43.5°	749.2	725.2	739.1	768.7	824.0	903.9

TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	630.2	604.2	614.0	638.9	696.2	773.8
45.5°	592.1	566.4	572.8	598.5	656.8	732.7
46°	555.0	529.3	533.7	559.7	617.7	690.2
46.5°	520.6	491.9	495.3	522.3	580.6	648.4
47°	484.8	456.5	458.9	485.9	542.8	607.6
47.5°	452.1	421.8	424.2	451.5	507.8	567.8
48°	420.8	388.4	390.4	418.4	472.0	529.0
48.5°	390.4	355.7	359.1	387.1	438.0	491.9
49°	361.8	325.7	329.1	357.4	404.3	455.5
49.5°	334.5	296.7	300.8	328.7	372.9	420.4
50°	310.2	269.7	275.1	302.1	341.5	387.4
50.5°	286.3	245.5	250.5	276.5	312.6	354.7
51°	262.0	223.5	228.6	252.9	285.2	324.0
51.5°	238.0	203.6	208.0	229.9	259.3	293.7
52°	217.5	185.8	189.5	209.4	235.0	265.3
52.5°	197.6	169.6	172.0	189.8	212.1	238.4
53°	178.7	154.1	156.4	170.9	190.2	213.4
53.5°	161.8	139.9	141.3	153.1	169.9	189.8
54°	145.7	126.4	127.1	136.9	151.4	168.9
54.5°	130.1	114.3	115.0	121.4	134.2	149.7
55°	116.0	102.5	102.8	108.6	117.0	132.2
55.5°	101.8	90.7	91.0	95.8	103.8	115.3
56°	89.0	78.9	78.9	82.9	90.7	102.2
56.5°	77.2	67.1	66.8	70.5	77.5	88.7
57°	66.1	55.0	54.6	57.7	64.4	75.5
57.5°	53.9	42.8	42.8	45.2	51.9	62.4
58°	45.9	32.7	32.4	34.4	39.8	49.9
58.5°	37.8	24.6	23.9	25.3	29.7	37.8
59°	29.7	18.2	17.9	18.9	21.9	27.6
59.5°	21.6	13.8	13.5	14.2	16.2	20.2
60°	13.5	11.8	11.5	12.1	12.1	15.2
60.5°	10.5	9.4	9.4	10.1	10.5	11.1
61°	8.4	7.4	7.1	8.4	8.4	9.4
61.5°	6.7	5.4	5.1	6.4	6.7	7.8
62°	5.4	4.4	4.4	4.4	5.1	6.1
62.5°	4.4	3.7	3.4	3.7	4.0	4.4
63°	3.7	3.0	3.0	3.0	3.4	3.7
63.5°	3.0	2.7	2.4	2.4	2.7	3.0
64°	2.7	2.4	2.0	2.0	2.4	2.4
64.5°	2.4	2.0	1.7	1.7	2.0	2.0
65°	2.0	1.7	1.3	1.7	1.7	1.7
65.5°	1.7	1.3	1.3	1.3	1.3	1.7
66°	1.3	1.3	1.0	1.0	1.3	1.3



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.0	1.0	0.7	0.7	1.0	1.0
68°	1.0	0.7	0.7	0.7	0.7	0.7
68.5°	0.7	0.7	0.7	0.7	0.7	0.7
69°	0.7	0.7	0.7	0.7	0.7	0.7
69.5°	0.7	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.3	0.3	0.3	0.3
70.5°	0.7	0.3	0.3	0.3	0.3	0.3
71°	0.3	0.3	0.3	0.3	0.3	0.3
71.5°	0.3	0.3	0.3	0.3	0.3	0.3
72°	0.3	0.3	0.3	0.3	0.3	0.3
72.5°	0.3	0.3	0.3	0.3	0.3	0.3
73°	0.3	0.3	0.3	0.3	0.3	0.3
73.5°	0.3	0.3	0.3	0.3	0.3	0.3
74°	0.3	0.3	0.3	0.3	0.3	0.3
74.5°	0.3	0.3	0.3	0.3	0.3	0.3
75°	0.3	0.3	0.3	0.0	0.0	0.3
75.5°	0.3	0.0	0.0	0.0	0.0	0.0
76°	0.3	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776416

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-4000lm-3000K

**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°	2517.6	2558.1	2591.1	2598.9	2591.4	2573.9	2537.2	2488.3	2449.8	2422.9	2401.6
22°	2493.3	2533.8	2566.8	2574.9	2568.5	2550.7	2512.6	2464.0	2423.2	2395.9	2374.0



44°	859.1	924.8	981.5	1005.4	1025.7	988.6	945.1	890.8	825.4	772.1	724.9
44.5°	815.9	880.3	933.3	959.2	979.1	942.4	899.6	846.3	785.9	732.0	686.5



66.5°	1.0	1.3	1.7	1.7	1.7	1.7	1.7	1.7	1.3	1.3	1.3
67°	1.0	1.3	1.3	1.3	1.7	1.7	1.7	1.3	1.3	1.3	1.3



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	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





21.5°	2383.8	2359.5	2383.1	2425.9	2475.5	2517.6
22°	2357.1	2332.8	2356.8	2399.3	2449.2	2493.3



44°	708.7	683.8	696.6	724.6	780.9	859.1
44.5°	669.6	643.3	655.4	681.4	738.4	815.9

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

Scaled Data Report



66.5°	1.3	1.0	1.0	1.0	1.0	1.0
67°	1.0	1.0	1.0	1.0	1.0	1.0

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	0.0	0.0
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)