

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



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: P776002

Luminaire Tested: HCDJBS1525CSD-HCD4TSQC-2500lm-3500K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776002  
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: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K  
Description: 4 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

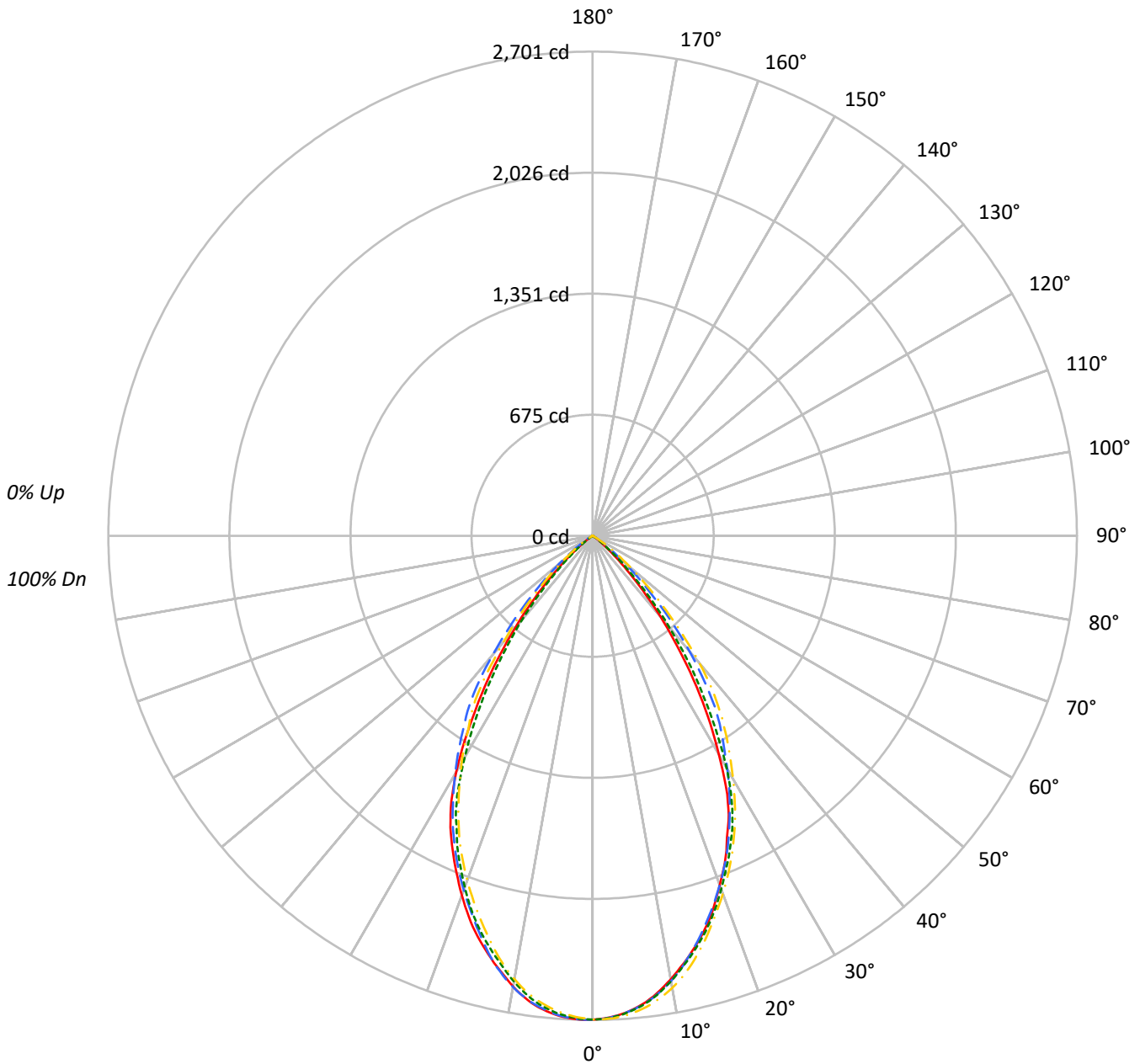
Lumens per Lamp: N/A  
Luminaire Lumens: 2791.8 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.93 / 0.98  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P776002  
CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P776002

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TSQC-2500lm-3500K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93						93													
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86						86													
3	101	95	89	85	99	93	88	84	90	86	83	88	85	82	86	83	80	79						79													
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73						73													
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	69	67						67													
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62						62													
7	81	71	65	60	79	70	64	60	69	64	60	68	63	59	67	62	59	57						57													
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53						53													
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50						50													
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47						47													

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

	0°	90°	180°	270°
0°	266765	266765	266765	266765
5°	262903	263349	265125	263805
10°	252102	253156	256307	253437
15°	237546	238805	242223	238191
20°	218145	220648	224372	219354
25°	194967	200191	203343	195731
30°	160905	170458	173665	162731
35°	118383	128037	130498	121171
40°	75753	85688	87379	78772
45°	38315	46870	48309	41152
50°	13455	17930	19083	15269
55°	2499	3240	3671	3636
60°	949	890	791	1087
65°	772	702	655	819
70°	578	578	520	665
75°	496	496	382	573
80°	285	285	285	455
85°	340	340	0	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 135°

Vertical Angle: 45°

Luminance: 77860 cd/sqm



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.8	8.9
10°-20°	653.5	23.4
20°-30°	829.9	29.7
30°-40°	686.3	24.6
40°-50°	314.1	11.2
50°-60°	52.8	1.9
60°-70°	3.7	0.1
70°-80°	1.4	0.1
80°-90°	0.3	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°	1733.2	62.1
0°-40°	2419.5	86.7
0°-60°	2786.3	99.8
0°-90°	2791.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2791.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2699	2699	2699	2699	2699	
5°	2650	2654	2672	2659	2650	249
15°	2321	2334	2367	2328	2321	649
25°	1788	1836	1864	1795	1788	812
35°	981	1061	1082	1004	981	609
45°	274	335	346	294	274	222
55°	14	19	21	21	14	24
65°	3	3	3	4	3	3
75°	1	1	1	2	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9
0.5°	2698.4	2698.6	2698.6	2697.4	2698.4	2698.4	2698.4	2699.4	2700.9	2701.1	2700.6
1°	2695.6	2696.4	2696.6	2695.9	2697.1	2697.6	2698.4	2699.4	2700.9	2700.9	2700.1
1.5°	2692.9	2693.4	2693.9	2693.6	2694.6	2695.6	2697.4	2698.4	2700.1	2700.6	2698.9
2°	2688.6	2689.4	2690.1	2689.9	2691.4	2693.6	2695.6	2696.6	2698.6	2699.4	2697.4
2.5°	2683.8	2684.6	2685.6	2685.6	2687.1	2690.1	2693.6	2693.9	2695.9	2696.6	2695.4
3°	2679.1	2679.6	2680.1	2680.6	2682.3	2685.8	2690.1	2690.6	2692.9	2693.1	2691.4
3.5°	2673.1	2673.3	2674.1	2674.8	2676.6	2681.3	2686.3	2685.6	2688.9	2689.1	2686.8
4°	2666.5	2666.5	2667.0	2668.3	2670.0	2675.6	2681.1	2680.8	2684.1	2684.1	2681.6
4.5°	2658.5	2659.0	2660.0	2661.3	2663.0	2669.5	2675.3	2674.8	2678.8	2678.6	2675.6
5°	2649.7	2650.0	2651.7	2653.2	2654.2	2662.3	2669.0	2668.3	2672.1	2672.6	2668.5
5.5°	2639.9	2640.4	2642.7	2644.5	2645.7	2654.0	2662.0	2661.0	2664.8	2665.3	2661.3
6°	2629.2	2629.7	2632.9	2634.4	2635.7	2645.5	2653.5	2652.5	2656.8	2657.0	2652.7
6.5°	2617.9	2618.1	2621.9	2624.1	2624.9	2635.4	2645.0	2643.5	2648.2	2648.2	2644.5
7°	2605.1	2605.6	2610.1	2612.9	2613.4	2624.4	2635.7	2633.4	2638.2	2638.4	2634.4
7.5°	2592.0	2592.0	2597.8	2600.6	2600.1	2612.6	2625.2	2622.9	2626.7	2627.9	2623.9
8°	2577.7	2578.0	2583.5	2587.5	2586.3	2599.6	2613.9	2610.6	2614.1	2615.4	2612.1
8.5°	2562.4	2563.5	2569.7	2573.2	2571.0	2585.8	2601.8	2597.8	2600.6	2603.1	2599.3
9°	2545.1	2547.2	2554.2	2557.7	2555.4	2571.2	2588.8	2583.5	2585.5	2588.8	2586.5
9.5°	2528.1	2530.3	2538.4	2541.9	2539.1	2555.7	2575.2	2568.2	2570.2	2573.7	2572.2
10°	2511.8	2512.8	2521.3	2525.3	2522.3	2540.1	2560.7	2552.4	2553.7	2557.7	2556.2
10.5°	2493.7	2495.0	2504.0	2507.5	2504.8	2524.1	2544.9	2535.1	2536.4	2540.9	2539.9
11°	2475.9	2477.2	2485.7	2489.7	2487.2	2506.0	2527.6	2517.6	2517.8	2523.8	2523.1
11.5°	2457.4	2458.9	2465.9	2470.7	2468.4	2488.5	2511.0	2498.5	2498.5	2505.3	2505.0
12°	2439.6	2440.1	2445.8	2450.8	2449.8	2470.4	2492.7	2479.4	2479.9	2485.5	2485.0
12.5°	2421.0	2421.0	2423.8	2431.5	2431.5	2451.8	2472.9	2459.4	2462.4	2466.4	2466.1
13°	2401.4	2401.9	2402.9	2411.2	2413.2	2433.3	2452.8	2439.1	2444.3	2447.3	2444.3
13.5°	2381.9	2381.9	2381.4	2390.4	2393.7	2414.5	2433.3	2419.2	2425.3	2426.8	2422.0
14°	2362.1	2361.6	2358.8	2370.1	2373.8	2395.2	2410.2	2399.2	2405.9	2406.7	2398.7
14.5°	2341.7	2341.0	2336.2	2349.0	2354.0	2375.6	2388.1	2378.9	2386.6	2386.9	2375.6
15°	2321.4	2320.4	2314.2	2328.5	2333.7	2355.5	2365.8	2358.5	2367.1	2366.6	2350.3
15.5°	2300.9	2299.1	2290.1	2306.9	2313.2	2335.0	2342.2	2337.0	2346.3	2345.5	2325.4
16°	2278.5	2276.3	2267.0	2284.3	2291.8	2313.9	2317.7	2315.9	2326.2	2324.9	2300.1
16.5°	2256.5	2255.5	2243.2	2261.7	2270.0	2293.6	2293.8	2294.1	2304.6	2303.1	2276.0
17°	2233.4	2233.1	2219.6	2239.2	2247.4	2270.8	2269.3	2272.0	2282.3	2281.0	2250.5
17.5°	2209.1	2209.8	2195.5	2216.1	2223.6	2248.7	2244.9	2248.9	2258.7	2259.0	2225.9
18°	2182.7	2184.0	2171.4	2192.8	2199.0	2225.6	2221.1	2225.4	2234.4	2236.2	2200.5
18.5°	2155.4	2160.2	2147.4	2167.9	2174.5	2202.3	2197.3	2200.8	2209.6	2211.6	2176.2
19°	2127.6	2133.1	2122.8	2142.6	2149.4	2176.7	2173.0	2176.0	2185.0	2186.7	2151.9
19.5°	2101.2	2105.2	2097.7	2116.3	2123.8	2152.6	2148.9	2151.1	2159.4	2160.9	2127.3
20°	2073.9	2077.6	2073.4	2090.7	2097.7	2126.3	2124.3	2124.3	2133.1	2135.1	2102.2
20.5°	2047.3	2050.3	2048.8	2063.9	2071.4	2100.2	2099.5	2097.7	2106.5	2108.5	2076.9
21°	2021.2	2022.7	2023.5	2037.0	2044.5	2073.4	2074.4	2070.9	2079.9	2081.7	2050.8



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1939.7	1941.0	1945.5	1954.5	1968.5	1991.4	1998.4	1987.6	2000.4	1998.9	1973.8
23°	1908.1	1913.9	1918.1	1926.7	1942.7	1963.8	1972.6	1959.3	1974.6	1971.1	1947.0
23.5°	1874.7	1885.0	1889.8	1896.8	1915.9	1937.7	1946.5	1930.9	1947.7	1943.0	1921.4
24°	1842.9	1853.9	1861.5	1870.2	1889.0	1908.6	1919.6	1902.6	1919.6	1914.6	1893.1
24.5°	1815.3	1821.3	1832.1	1843.6	1862.5	1879.8	1891.6	1874.5	1892.1	1886.3	1864.5
25°	1787.7	1787.2	1802.5	1816.6	1835.6	1850.9	1863.5	1846.2	1864.5	1857.7	1836.1
25.5°	1760.4	1756.1	1772.7	1785.7	1808.8	1821.8	1835.4	1817.8	1837.1	1829.4	1807.8
26°	1731.5	1727.8	1743.1	1754.9	1778.4	1793.0	1807.3	1789.7	1809.5	1801.0	1780.7
26.5°	1695.7	1700.4	1713.5	1723.5	1746.6	1766.7	1779.9	1757.1	1777.2	1768.4	1750.4
27°	1661.1	1672.4	1684.4	1695.9	1715.7	1739.8	1749.6	1728.0	1746.1	1740.8	1719.5
27.5°	1625.5	1643.3	1654.8	1669.6	1681.4	1711.0	1719.5	1700.9	1712.5	1711.0	1688.7
28°	1582.6	1606.4	1626.0	1643.0	1647.0	1677.4	1687.9	1671.6	1677.6	1677.6	1656.6
28.5°	1538.4	1571.3	1595.6	1610.9	1610.2	1645.3	1657.6	1639.5	1640.0	1646.5	1625.5
29°	1495.3	1536.2	1565.5	1579.6	1573.0	1611.9	1627.0	1609.1	1602.1	1612.4	1594.1
29.5°	1452.6	1495.5	1533.7	1548.5	1534.2	1576.8	1596.6	1575.8	1561.7	1576.8	1563.0
30°	1409.8	1452.9	1502.1	1515.6	1493.5	1540.4	1567.3	1541.2	1521.6	1540.7	1531.7
30.5°	1366.9	1410.0	1469.2	1480.7	1450.4	1502.3	1536.9	1506.1	1479.0	1503.1	1501.3
31°	1324.2	1367.9	1438.1	1444.9	1407.5	1464.7	1505.3	1469.7	1434.1	1465.2	1471.5
31.5°	1282.4	1326.0	1407.5	1408.5	1363.1	1425.3	1473.5	1432.6	1389.4	1425.1	1441.6
32°	1241.0	1285.4	1380.2	1371.1	1318.5	1385.2	1441.4	1393.5	1345.1	1384.9	1410.3
32.5°	1198.8	1244.0	1352.1	1332.0	1273.1	1343.8	1412.8	1353.3	1298.9	1343.3	1377.2
33°	1155.4	1203.4	1324.5	1292.6	1229.7	1300.4	1384.7	1312.7	1254.8	1301.4	1346.3
33.5°	1112.6	1163.7	1295.9	1251.8	1185.3	1257.5	1356.6	1271.1	1208.4	1257.5	1317.0
34°	1069.7	1123.3	1266.1	1210.4	1143.2	1214.6	1326.5	1228.2	1165.7	1212.9	1286.9
34.5°	1025.5	1082.7	1234.7	1168.5	1101.0	1172.0	1294.1	1185.3	1122.6	1169.7	1256.8
35°	981.1	1041.8	1207.1	1126.9	1061.1	1130.1	1266.8	1144.2	1081.5	1129.1	1229.9
35.5°	937.2	1000.2	1175.5	1085.0	1020.3	1089.2	1240.0	1102.3	1038.1	1086.0	1202.8
36°	892.6	959.1	1137.9	1044.1	980.4	1049.1	1206.9	1061.4	997.4	1045.1	1170.0
36.5°	853.2	917.2	1101.0	1004.7	941.0	1009.7	1174.5	1021.3	956.6	1003.7	1134.6
37°	813.9	878.3	1065.2	965.6	900.4	970.9	1143.7	981.4	916.9	966.3	1102.5
37.5°	774.5	839.4	1026.8	927.0	859.2	932.7	1109.0	943.0	875.6	926.7	1065.7
38°	734.9	800.6	988.7	886.6	819.4	895.1	1074.4	905.1	833.7	889.3	1027.0
38.5°	697.2	761.4	950.8	851.0	779.5	857.2	1040.1	868.0	793.3	851.7	987.7
39°	660.4	722.8	913.4	815.1	740.4	821.6	1002.5	830.9	754.9	814.6	947.8
39.5°	623.0	686.7	875.8	779.5	701.7	783.5	964.8	793.0	715.3	777.0	906.9
40°	587.1	651.6	838.4	743.9	664.1	746.1	927.5	756.4	677.2	740.6	867.3
40.5°	550.5	616.0	801.1	708.3	627.8	709.0	888.8	720.1	639.5	704.0	827.6
41°	515.1	582.6	763.7	673.2	592.4	673.9	849.7	683.9	604.7	668.4	789.0
41.5°	480.5	548.5	726.3	638.8	558.0	638.3	809.8	648.3	569.1	632.3	750.9
42°	446.9	515.9	689.0	604.2	523.4	604.4	770.5	614.2	535.5	598.7	713.5
42.5°	414.6	483.8	652.3	572.3	491.1	570.3	732.6	581.1	501.9	566.1	676.9
43°	384.2	451.9	615.5	540.7	458.0	539.7	695.0	549.0	468.2	533.5	642.1
43.5°	354.9	420.3	578.9	510.1	425.9	507.1	658.9	517.9	436.4	502.1	607.4



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	274.1	335.6	478.3	423.4	335.3	418.1	557.0	429.1	345.6	414.3	508.9
45.5°	249.0	309.0	447.9	396.0	307.7	389.2	524.9	401.3	317.8	386.7	478.0
46°	225.7	284.9	417.8	368.7	281.4	361.7	494.3	374.4	291.2	359.7	447.4
46.5°	203.4	261.6	390.0	342.6	256.6	335.1	464.2	347.4	265.9	333.3	417.6
47°	182.1	238.3	362.7	316.8	234.5	309.5	435.9	321.8	244.3	308.5	389.2
47.5°	162.5	216.4	336.6	292.7	212.4	284.2	407.1	297.7	222.7	284.4	361.9
48°	144.5	195.6	311.0	269.6	190.6	261.1	380.2	273.6	201.1	261.3	335.8
48.5°	127.9	176.1	286.9	247.3	168.8	240.8	353.4	251.3	179.8	241.5	311.0
49°	113.1	157.3	263.6	226.7	150.0	220.2	328.3	231.5	158.3	221.7	287.4
49.5°	99.6	140.4	241.5	207.4	132.9	199.9	303.0	211.7	140.7	202.1	264.3
50°	87.5	124.9	219.7	188.6	116.6	179.6	279.4	191.9	124.1	182.3	244.8
50.5°	78.5	110.4	200.4	169.5	101.8	159.3	256.8	172.1	109.1	162.5	225.5
51°	69.5	97.1	181.3	152.5	88.5	142.5	237.0	154.2	95.6	146.5	205.9
51.5°	60.4	85.5	164.0	136.2	76.2	126.9	216.9	137.9	82.8	130.9	186.3
52°	51.4	76.7	147.5	121.1	65.2	112.6	196.9	122.4	70.7	116.4	167.0
52.5°	44.4	68.0	132.7	106.8	54.9	98.6	176.8	108.3	59.9	102.6	150.7
53°	37.9	58.9	117.6	93.3	45.9	85.8	159.8	94.6	50.4	89.8	135.4
53.5°	31.6	50.4	105.3	82.8	37.6	74.2	144.0	82.3	41.6	77.7	121.4
54°	25.8	43.6	92.8	72.2	31.4	63.5	128.4	70.5	34.9	66.7	107.8
54.5°	19.8	37.4	83.3	61.9	25.1	53.7	113.9	60.2	28.1	57.2	95.6
55°	14.5	31.6	74.2	51.4	18.8	45.1	100.8	50.4	21.3	47.9	84.3
55.5°	10.5	25.8	65.0	41.1	12.8	36.6	88.3	41.6	14.5	39.6	74.0
56°	9.5	20.1	55.7	33.4	6.5	30.6	76.7	34.9	7.8	33.1	64.7
56.5°	8.5	15.0	46.4	26.3	6.0	24.3	66.0	28.3	5.5	26.6	55.9
57°	7.5	10.5	39.1	20.1	5.8	18.3	56.4	21.8	5.3	20.3	48.2
57.5°	6.5	9.3	33.4	13.8	5.5	12.3	47.7	15.3	5.0	13.8	41.4
58°	5.5	8.3	28.1	9.0	5.3	6.0	39.9	8.8	4.8	7.3	35.4
58.5°	5.3	7.3	23.6	8.0	5.0	5.3	33.4	5.3	4.5	5.3	29.8
59°	5.0	6.3	19.6	7.0	4.8	5.0	29.1	4.8	4.3	4.8	26.3
59.5°	5.0	5.0	16.3	6.0	4.5	4.8	24.8	4.5	4.0	4.8	22.8
60°	4.8	4.8	13.8	4.8	4.5	4.5	20.8	4.3	4.0	4.5	19.1
60.5°	4.5	4.8	11.5	4.8	4.3	4.5	16.6	4.3	3.8	4.3	15.5
61°	4.3	4.5	9.5	4.5	4.0	4.3	12.3	4.0	3.8	4.0	12.0
61.5°	4.3	4.3	8.3	4.3	4.0	4.0	10.0	3.8	3.5	4.0	9.8
62°	4.0	4.3	7.0	4.0	3.8	4.0	8.3	3.8	3.3	3.8	8.3
62.5°	3.8	4.0	5.8	4.0	3.8	3.8	6.8	3.5	3.3	3.8	6.8
63°	3.8	3.8	4.5	3.8	3.5	3.5	5.5	3.5	3.0	3.5	5.5
63.5°	3.5	3.8	4.0	3.8	3.3	3.5	4.5	3.3	3.0	3.3	4.8
64°	3.5	3.5	3.8	3.5	3.3	3.3	3.8	3.3	3.0	3.3	4.0
64.5°	3.3	3.5	3.5	3.5	3.0	3.3	3.5	3.0	2.8	3.0	3.5
65°	3.3	3.3	3.5	3.3	3.0	3.0	3.3	3.0	2.8	3.0	3.5
65.5°	3.0	3.3	3.3	3.3	3.0	3.0	3.0	2.8	2.5	3.0	3.3
66°	3.0	3.0	3.0	3.0	2.8	2.8	3.0	2.8	2.5	2.8	3.0





TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.5	2.8	2.8	2.8	2.5	2.5	2.8	2.5	2.3	2.5	2.8
68°	2.5	2.5	2.8	2.5	2.3	2.5	2.5	2.3	2.0	2.5	2.5
68.5°	2.3	2.5	2.5	2.5	2.3	2.3	2.5	2.3	2.0	2.3	2.5
69°	2.3	2.3	2.5	2.3	2.3	2.3	2.3	2.0	2.0	2.3	2.5
69.5°	2.3	2.3	2.3	2.3	2.0	2.3	2.3	2.0	1.8	2.0	2.3
70°	2.0	2.3	2.3	2.3	2.0	2.0	2.3	2.0	1.8	2.0	2.3
70.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	2.0	2.0
71°	1.8	2.0	2.0	2.0	1.8	2.0	2.0	1.8	1.8	1.8	2.0
71.5°	1.8	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.5	1.8	2.0
72°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.8	1.8
72.5°	1.5	1.8	1.8	1.8	1.5	1.8	1.8	1.5	1.5	1.5	1.8
73°	1.5	1.5	1.8	1.8	1.5	1.5	1.5	1.5	1.3	1.5	1.8
73.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.5	1.5
74°	1.3	1.5	1.5	1.5	1.3	1.5	1.5	1.3	1.3	1.5	1.5
74.5°	1.3	1.3	1.5	1.5	1.3	1.3	1.5	1.3	1.3	1.3	1.5
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.3	1.3
76°	1.0	1.3	1.3	1.3	1.0	1.3	1.3	1.0	1.0	1.0	1.3
76.5°	1.0	1.0	1.3	1.3	1.0	1.0	1.3	1.0	1.0	1.0	1.3
77°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.8	1.0	1.0
78°	0.8	0.8	1.0	1.0	0.8	1.0	1.0	0.8	0.8	0.8	1.0
78.5°	0.8	0.8	1.0	0.8	0.8	0.8	1.0	0.8	0.8	0.8	1.0
79°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.8	0.8
80°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
80.5°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
81°	0.5	0.5	0.8	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.5	0.5
82°	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
82.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
83°	0.3	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.3	0.3	0.5
83.5°	0.3	0.3	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3
85°	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
85.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86.5°	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.3
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: P776002

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-3500K

**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: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2698.9	2698.9	2698.9	2698.9	2698.9	2698.9
0.5°	2698.4	2698.4	2696.9	2695.4	2697.1	2698.4
1°	2697.4	2697.1	2694.9	2692.9	2695.1	2695.6
1.5°	2695.6	2695.4	2692.6	2689.9	2691.9	2692.9
2°	2693.4	2692.6	2689.4	2685.6	2688.4	2688.6
2.5°	2689.9	2688.9	2684.8	2681.1	2683.8	2683.8
3°	2685.8	2684.6	2679.6	2675.1	2679.1	2679.1
3.5°	2681.3	2679.3	2673.8	2669.3	2673.6	2673.1
4°	2675.8	2673.8	2667.3	2662.0	2667.0	2666.5
4.5°	2669.3	2666.5	2659.8	2654.7	2659.5	2658.5
5°	2662.3	2658.8	2651.7	2646.0	2651.5	2649.7
5.5°	2654.0	2650.2	2642.5	2636.7	2642.0	2639.9
6°	2645.0	2640.7	2632.4	2627.2	2631.9	2629.2
6.5°	2634.7	2629.9	2621.6	2615.6	2620.6	2617.9
7°	2623.6	2618.1	2609.3	2603.3	2608.6	2605.1
7.5°	2611.1	2605.6	2596.8	2590.5	2596.1	2592.0
8°	2598.3	2591.5	2582.3	2576.5	2582.3	2577.7
8.5°	2584.0	2576.5	2567.2	2561.7	2568.2	2562.4
9°	2568.7	2559.7	2551.2	2546.1	2552.2	2545.1
9.5°	2552.4	2542.6	2534.1	2529.8	2535.6	2528.1
10°	2535.4	2525.1	2515.8	2511.0	2518.3	2511.8
10.5°	2517.8	2506.3	2496.7	2494.5	2501.0	2493.7
11°	2499.2	2487.7	2477.9	2474.9	2483.2	2475.9
11.5°	2480.7	2467.6	2458.1	2454.1	2464.6	2457.4
12°	2460.6	2447.8	2437.5	2432.0	2445.3	2439.6
12.5°	2441.1	2428.5	2416.7	2410.7	2426.0	2421.0
13°	2421.0	2408.7	2395.7	2387.9	2406.7	2401.4
13.5°	2400.7	2389.1	2375.1	2364.8	2386.6	2381.9
14°	2380.1	2369.1	2353.5	2340.5	2365.8	2362.1
14.5°	2359.3	2349.3	2333.0	2316.9	2345.3	2341.7
15°	2338.7	2327.7	2311.1	2292.3	2323.9	2321.4
15.5°	2317.7	2306.4	2288.8	2268.0	2301.9	2300.9
16°	2295.8	2285.1	2266.0	2243.4	2280.0	2278.5
16.5°	2273.5	2263.0	2243.7	2219.1	2257.7	2256.5
17°	2250.2	2239.7	2220.4	2194.3	2234.4	2233.4
17.5°	2227.6	2216.6	2196.5	2169.9	2211.1	2209.1
18°	2203.6	2191.3	2171.7	2145.4	2187.0	2182.7
18.5°	2179.5	2165.2	2146.9	2120.3	2161.9	2155.4
19°	2154.1	2139.6	2120.8	2095.5	2135.3	2127.6
19.5°	2127.8	2113.0	2094.2	2070.4	2107.7	2101.2
20°	2101.5	2085.4	2067.6	2043.8	2079.7	2073.9
20.5°	2073.9	2058.6	2039.5	2018.2	2051.6	2047.3
21°	2046.5	2030.7	2011.9	1992.1	2022.5	2021.2

TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1962.5	1947.7	1925.4	1913.1	1936.7	1939.7
23°	1932.9	1920.1	1896.1	1886.0	1908.1	1908.1
23.5°	1904.1	1891.8	1866.7	1858.4	1880.3	1874.7
24°	1875.0	1860.0	1837.9	1829.6	1850.7	1842.9
24.5°	1845.9	1826.3	1808.3	1799.3	1819.3	1815.3
25°	1817.1	1794.7	1777.4	1769.2	1786.2	1787.7
25.5°	1788.0	1767.4	1745.3	1739.1	1752.9	1760.4
26°	1754.4	1740.6	1711.5	1708.5	1719.0	1731.5
26.5°	1720.5	1707.2	1679.6	1676.6	1689.7	1695.7
27°	1688.9	1671.1	1651.3	1646.0	1661.1	1661.1
27.5°	1659.6	1638.2	1622.7	1613.9	1633.2	1625.5
28°	1631.2	1596.6	1589.1	1582.6	1603.9	1582.6
28.5°	1598.9	1554.2	1552.5	1551.7	1570.8	1538.4
29°	1561.2	1510.8	1519.6	1521.9	1534.9	1495.3
29.5°	1528.1	1468.2	1479.7	1491.8	1501.8	1452.6
30°	1487.5	1425.8	1437.9	1461.7	1462.9	1409.8
30.5°	1447.6	1384.2	1395.0	1430.6	1422.8	1366.9
31°	1404.5	1342.3	1353.3	1398.7	1381.4	1324.2
31.5°	1363.1	1300.4	1312.2	1363.9	1339.5	1282.4
32°	1322.7	1259.5	1271.8	1329.8	1298.4	1241.0
32.5°	1283.1	1218.9	1230.7	1297.4	1257.8	1198.8
33°	1241.5	1177.5	1192.3	1268.1	1218.9	1155.4
33.5°	1203.1	1134.9	1153.2	1243.0	1179.3	1112.6
34°	1163.2	1091.5	1114.6	1218.6	1140.1	1069.7
34.5°	1125.6	1047.9	1074.2	1186.5	1100.3	1025.5
35°	1085.0	1004.2	1035.6	1157.0	1061.9	981.1
35.5°	1046.3	961.3	994.9	1126.6	1022.5	937.2
36°	1005.7	918.7	955.1	1087.5	983.9	892.6
36.5°	967.3	878.8	914.4	1050.6	944.0	853.2
37°	925.7	838.9	876.1	1011.7	905.6	813.9
37.5°	885.3	799.3	837.7	969.9	867.5	774.5
38°	845.2	759.4	799.6	927.7	829.2	734.9
38.5°	806.3	719.8	761.4	885.1	791.0	697.2
39°	768.2	683.4	723.3	847.5	752.9	660.4
39.5°	731.6	647.3	687.4	810.1	714.8	623.0
40°	695.2	610.5	653.8	772.5	680.2	587.1
40.5°	660.6	573.6	619.5	735.1	645.6	550.5
41°	627.0	539.2	586.6	699.7	612.5	515.1
41.5°	593.9	502.4	553.8	665.4	578.9	480.5
42°	561.3	470.3	521.4	631.8	547.0	446.9
42.5°	528.7	437.7	489.6	599.4	515.4	414.6
43°	496.8	407.3	458.0	566.8	485.3	384.2
43.5°	466.0	376.0	427.6	535.2	454.7	354.9



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	378.2	294.4	343.6	443.4	367.9	274.1
45.5°	351.1	268.4	318.0	415.1	341.6	249.0
46°	325.3	244.8	293.7	387.0	315.8	225.7
46.5°	300.5	221.7	270.1	361.2	291.7	203.4
47°	276.6	199.6	247.5	335.8	268.1	182.1
47.5°	254.1	178.6	225.2	312.0	245.0	162.5
48°	233.5	160.5	204.4	288.7	224.0	144.5
48.5°	212.9	142.7	184.8	267.6	203.2	127.9
49°	192.4	126.9	166.3	247.0	183.6	113.1
49.5°	172.1	112.6	149.2	228.0	164.5	99.6
50°	154.2	99.3	132.9	208.7	148.5	87.5
50.5°	137.7	87.3	118.1	191.1	132.7	78.5
51°	123.1	78.5	104.8	173.8	117.6	69.5
51.5°	109.1	69.7	93.0	158.3	103.6	60.4
52°	96.1	61.2	84.3	143.5	91.8	51.4
52.5°	84.5	52.4	75.5	129.2	82.8	44.4
53°	74.2	45.4	66.7	115.6	73.7	37.9
53.5°	65.2	38.9	57.9	103.6	64.7	31.6
54°	56.9	32.6	49.2	92.3	55.7	25.8
54.5°	49.7	26.8	42.9	83.3	46.6	19.8
55°	43.1	21.1	36.6	74.5	40.1	14.5
55.5°	36.9	15.5	30.8	65.5	34.4	10.5
56°	32.1	11.5	24.8	56.7	28.6	9.5
56.5°	27.3	8.3	19.6	47.7	23.3	8.5
57°	22.6	7.8	14.3	40.9	18.3	7.5
57.5°	17.8	7.3	10.3	35.1	13.5	6.5
58°	13.0	7.0	9.3	29.8	9.5	5.5
58.5°	8.3	6.5	8.3	25.1	8.5	5.3
59°	6.5	6.3	7.5	21.1	7.5	5.0
59.5°	6.0	6.0	6.5	17.6	6.3	5.0
60°	5.8	5.5	5.8	14.5	5.3	4.8
60.5°	5.5	5.3	5.5	12.0	5.0	4.5
61°	5.3	5.0	5.3	10.0	4.8	4.3
61.5°	5.0	4.8	5.0	8.8	4.5	4.3
62°	4.8	4.8	4.8	7.5	4.3	4.0
62.5°	4.5	4.5	4.5	6.3	4.3	3.8
63°	4.3	4.3	4.3	5.0	4.0	3.8
63.5°	4.0	4.0	4.0	4.3	3.8	3.5
64°	4.0	3.8	4.0	3.8	3.8	3.5
64.5°	3.8	3.8	3.8	3.8	3.5	3.3
65°	3.5	3.5	3.5	3.5	3.5	3.3
65.5°	3.5	3.5	3.5	3.5	3.3	3.0
66°	3.3	3.3	3.3	3.3	3.3	3.0



TEST NUMBER: P776002

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	3.0	2.8	3.0	2.8	2.8	2.5
68°	2.8	2.8	2.8	2.8	2.8	2.5
68.5°	2.8	2.5	2.8	2.5	2.5	2.3
69°	2.5	2.5	2.5	2.5	2.5	2.3
69.5°	2.5	2.5	2.5	2.5	2.3	2.3
70°	2.3	2.3	2.3	2.3	2.3	2.0
70.5°	2.3	2.3	2.3	2.3	2.3	2.0
71°	2.0	2.0	2.0	2.0	2.0	1.8
71.5°	2.0	2.0	2.0	2.0	2.0	1.8
72°	2.0	2.0	2.0	2.0	1.8	1.8
72.5°	1.8	1.8	1.8	1.8	1.8	1.5
73°	1.8	1.8	1.8	1.8	1.8	1.5
73.5°	1.8	1.8	1.8	1.8	1.5	1.5
74°	1.5	1.5	1.5	1.5	1.5	1.3
74.5°	1.5	1.5	1.5	1.5	1.5	1.3
75°	1.5	1.5	1.5	1.5	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3
76°	1.3	1.3	1.3	1.3	1.3	1.0
76.5°	1.3	1.3	1.3	1.3	1.3	1.0
77°	1.3	1.0	1.3	1.3	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0
78°	1.0	1.0	1.0	1.0	1.0	0.8
78.5°	1.0	1.0	1.0	1.0	0.8	0.8
79°	0.8	0.8	1.0	1.0	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.5
80.5°	0.8	0.8	0.8	0.8	0.5	0.5
81°	0.8	0.8	0.8	0.8	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.3	0.3
83°	0.5	0.5	0.5	0.5	0.3	0.3
83.5°	0.5	0.5	0.5	0.5	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.3	0.0	0.3
85.5°	0.3	0.3	0.3	0.3	0.0	0.0
86°	0.3	0.3	0.3	0.3	0.0	0.0
86.5°	0.3	0.3	0.3	0.3	0.0	0.0
87°	0.0	0.3	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: P776002

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-3500K

**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°	1995.6	1995.4	1997.1	2009.4	2018.2	2046.8	2049.3	2043.5	2053.3	2054.3	2025.7
22°	1968.8	1967.0	1971.6	1982.3	1993.6	2019.0	2023.5	2017.0	2027.0	2026.5	1999.9



44°	326.5	391.0	543.7	479.8	394.8	477.0	623.0	486.8	405.5	471.5	574.3
44.5°	299.2	362.7	509.9	451.7	364.2	446.9	589.1	457.7	375.5	442.7	541.0



66.5°	2.8	3.0	3.0	3.0	2.8	2.8	2.8	2.5	2.5	2.8	3.0
67°	2.8	2.8	2.8	2.8	2.5	2.8	2.8	2.5	2.3	2.5	2.8



89°	0.0	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	0.0



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

Scaled Data Report





21.5°	2019.0	2002.2	1983.3	1965.5	1994.1	1995.6
22°	1990.6	1975.1	1954.8	1939.7	1965.5	1968.8

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

Scaled Data Report



44°	435.9	348.1	398.5	503.6	424.1	326.5
44.5°	406.0	321.0	370.9	473.5	395.0	299.2

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

Scaled Data Report



66.5°	3.3	3.0	3.3	3.0	3.0	2.8
67°	3.0	3.0	3.0	3.0	3.0	2.8

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)