

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: P776810

Luminaire Tested: HCDJBS4050CSD-HCD8TRMB-5000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776810
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: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K
Description: 8 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3360.4 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

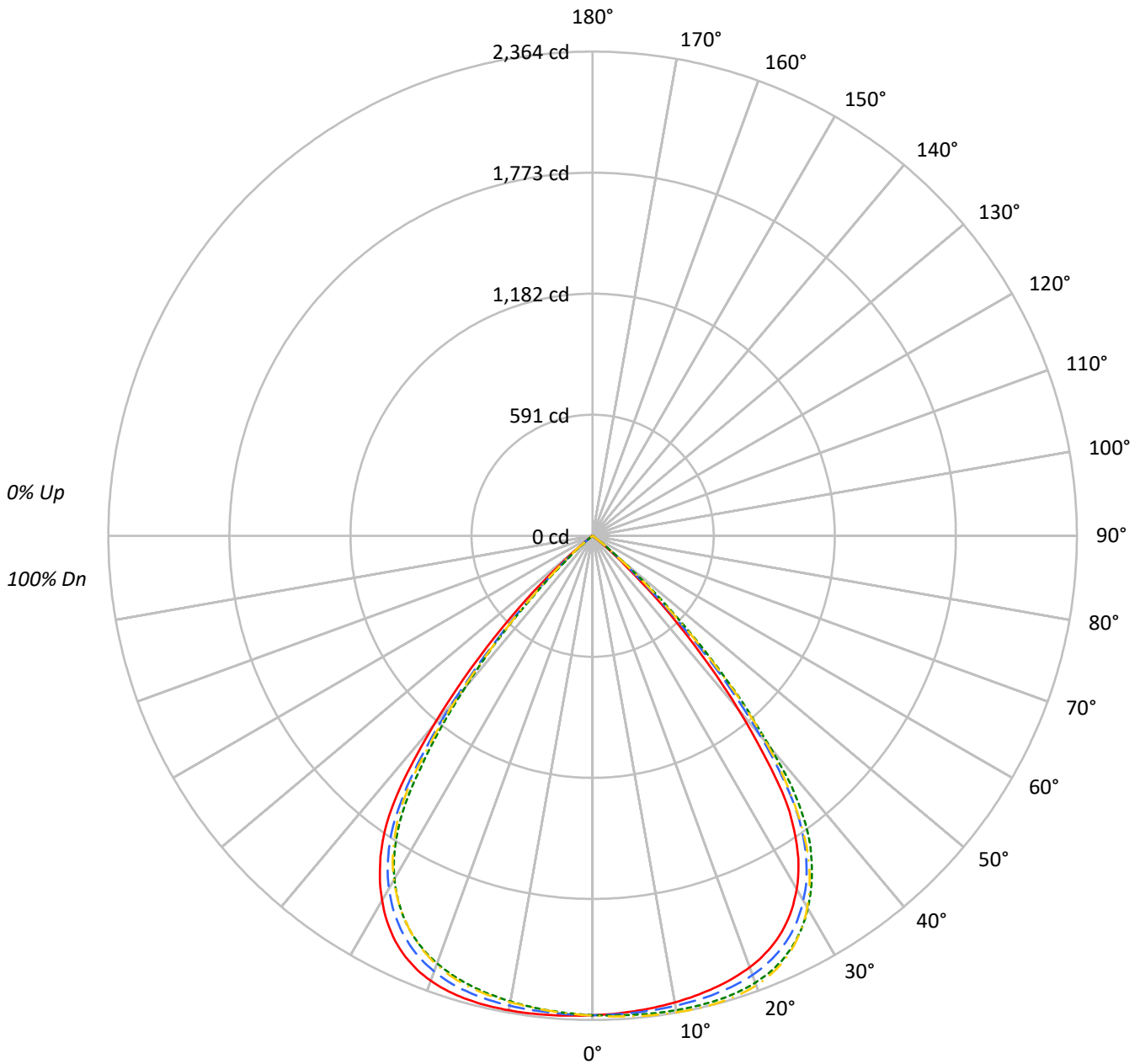
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

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	111	108	106	103	104	102	100	100	99	97	97	95	94	93					93			
2	107	102	97	94	105	100	96	92	97	93	90	94	91	89	91	89	87	85					85			
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78					78			
4	95	87	81	76	93	85	80	76	83	78	75	81	77	74	79	76	73	71					71			
5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65					65			
6	84	74	68	63	83	74	67	63	72	66	62	70	66	62	69	65	61	60					60			
7	79	69	62	58	78	68	62	58	67	61	57	66	61	57	65	60	57	55					55			
8	75	64	58	53	73	64	57	53	63	57	53	61	56	53	60	56	52	51					51			
9	71	60	53	49	69	59	53	49	58	53	49	57	52	49	57	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	71481	71481	71481	71481
5°	71420	71950	71993	71349
10°	71721	72924	72937	71566
15°	72289	74204	74119	71973
20°	72842	75447	75106	72176
25°	72608	75801	74973	71365
30°	70218	74057	72467	68226
35°	63162	69074	66084	59238
40°	44203	53684	47945	38483
45°	21053	30025	24516	15898
50°	4284	8051	4569	2033
55°	192	293	170	122
60°	55	55	55	55
65°	36	36	36	36
70°	45	45	45	45
75°	0	0	0	0
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 30025 cd/sqm



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBLS4050CSD-HCD8TRMB-5000lm-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.1	6.6
10°-20°	654.7	19.5
20°-30°	1002.8	29.8
30°-40°	1043.5	31.1
40°-50°	421.3	12.5
50°-60°	14.4	0.4
60°-70°	0.6	0.0
70°-80°	0.1	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°	1880.6	56.0
0°-40°	2924.1	87.0
0°-60°	3359.8	100.0
0°-90°	3360.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3360.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2341	2341	2341	2341	2341	
5°	2330	2348	2349	2328	2330	222
15°	2287	2348	2345	2277	2287	646
25°	2155	2250	2226	2118	2155	988
35°	1695	1853	1773	1589	1695	1019
45°	488	695	568	368	488	392
55°	4	6	3	2	4	12
65°	0	0	0	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3
0.5°	2340.4	2339.5	2340.4	2340.9	2341.3	2343.6	2344.5	2344.5	2342.2	2340.9	2340.4
1°	2339.5	2339.5	2340.4	2341.3	2342.2	2345.0	2345.9	2345.4	2343.2	2341.3	2340.0
1.5°	2338.6	2338.6	2340.4	2341.8	2343.2	2345.9	2347.3	2346.8	2344.1	2341.3	2340.0
2°	2337.7	2338.1	2340.0	2342.2	2344.1	2346.8	2348.2	2347.7	2344.5	2341.8	2340.0
2.5°	2336.8	2337.2	2340.0	2342.7	2344.5	2347.7	2349.5	2348.6	2345.4	2342.2	2339.5
3°	2335.4	2336.8	2339.5	2342.7	2345.0	2349.1	2350.4	2350.0	2346.3	2342.7	2339.1
3.5°	2334.5	2335.9	2339.5	2342.7	2345.9	2349.5	2351.4	2350.9	2347.3	2342.7	2338.6
4°	2333.1	2335.0	2338.6	2343.2	2346.3	2350.4	2352.7	2351.8	2348.2	2342.7	2338.6
4.5°	2331.8	2334.0	2338.1	2343.2	2346.8	2351.8	2353.6	2352.7	2348.6	2343.2	2337.7
5°	2330.4	2333.1	2337.7	2343.2	2347.7	2352.7	2354.5	2354.1	2349.1	2343.2	2337.2
5.5°	2329.0	2331.8	2337.2	2343.6	2348.2	2353.6	2355.9	2355.0	2350.0	2343.2	2336.8
6°	2327.7	2330.8	2336.8	2343.6	2348.6	2354.5	2356.8	2355.5	2350.4	2343.6	2336.3
6.5°	2326.3	2329.5	2335.9	2343.6	2349.5	2355.5	2357.7	2356.4	2350.9	2343.6	2335.9
7°	2324.9	2328.1	2335.4	2343.6	2350.0	2355.9	2358.6	2357.3	2351.4	2343.2	2335.0
7.5°	2323.1	2326.7	2335.0	2344.1	2350.4	2356.8	2359.6	2358.2	2351.8	2343.2	2334.5
8°	2321.3	2325.4	2334.0	2343.6	2350.9	2357.7	2360.5	2358.6	2352.3	2343.6	2333.6
8.5°	2319.5	2323.6	2333.1	2344.1	2351.4	2358.2	2360.9	2359.6	2352.3	2343.2	2332.7
9°	2317.6	2322.2	2332.2	2343.6	2351.8	2358.6	2361.8	2360.0	2352.7	2342.7	2332.2
9.5°	2315.4	2320.4	2331.3	2343.6	2351.8	2359.1	2362.3	2360.5	2352.7	2342.7	2330.8
10°	2313.5	2318.5	2330.4	2343.2	2352.3	2359.6	2362.7	2360.9	2352.7	2342.2	2329.9
10.5°	2311.3	2316.7	2329.5	2343.2	2352.3	2360.0	2363.2	2360.9	2352.7	2341.8	2328.6
11°	2309.0	2314.9	2328.1	2342.7	2352.3	2360.5	2363.7	2361.4	2352.3	2340.9	2327.2
11.5°	2306.7	2312.6	2326.7	2342.2	2352.3	2360.5	2363.7	2361.4	2352.3	2340.0	2325.8
12°	2304.4	2310.3	2325.8	2341.8	2352.3	2360.5	2364.1	2361.4	2351.8	2339.1	2324.0
12.5°	2301.7	2308.5	2324.5	2341.3	2351.8	2360.5	2364.1	2360.9	2350.9	2338.1	2322.6
13°	2299.0	2305.8	2322.6	2340.4	2351.4	2360.5	2363.7	2360.9	2350.4	2336.8	2320.4
13.5°	2296.2	2303.5	2321.3	2339.5	2350.4	2360.5	2363.2	2360.5	2349.5	2335.0	2318.5
14°	2293.0	2301.2	2319.5	2338.6	2349.5	2359.6	2362.7	2360.0	2348.2	2333.6	2315.8
14.5°	2290.3	2298.5	2317.6	2337.2	2349.1	2359.1	2362.3	2359.1	2346.8	2331.8	2313.5
15°	2287.1	2295.8	2315.4	2335.9	2347.7	2358.2	2361.4	2358.2	2345.0	2329.5	2310.8
15.5°	2283.5	2293.0	2313.1	2334.0	2346.8	2357.3	2360.0	2356.8	2343.2	2327.2	2307.6
16°	2279.8	2289.8	2310.8	2332.2	2345.0	2355.9	2358.6	2355.0	2340.9	2324.5	2304.4
16.5°	2276.2	2286.6	2308.1	2330.4	2343.2	2354.1	2357.3	2353.2	2338.6	2321.3	2300.8
17°	2272.1	2283.0	2305.3	2327.7	2341.3	2352.3	2355.0	2350.4	2335.9	2318.1	2296.7
17.5°	2267.5	2279.4	2302.1	2324.9	2339.1	2350.0	2352.7	2348.2	2333.1	2314.4	2292.1
18°	2263.0	2275.7	2298.5	2321.7	2336.3	2347.3	2350.4	2345.0	2329.5	2310.3	2287.1
18.5°	2258.4	2271.2	2295.3	2318.5	2333.6	2344.1	2347.3	2341.3	2325.8	2305.8	2282.1
19°	2252.9	2267.1	2291.2	2314.9	2329.9	2340.4	2344.1	2337.7	2321.3	2300.8	2276.6
19.5°	2247.5	2262.0	2286.6	2310.3	2326.3	2336.8	2340.4	2333.1	2316.7	2295.3	2270.2
20°	2242.0	2257.0	2282.1	2305.8	2322.2	2332.7	2335.9	2328.6	2311.7	2289.4	2263.4
20.5°	2235.6	2251.6	2276.6	2300.8	2317.6	2327.7	2331.3	2323.1	2305.8	2283.0	2256.1
21°	2228.8	2245.6	2271.2	2295.3	2312.2	2322.2	2325.8	2317.6	2299.9	2275.7	2248.8



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2206.0	2225.6	2251.1	2275.7	2294.4	2302.6	2305.8	2296.2	2277.1	2251.6	2221.9
23°	2197.3	2217.8	2243.4	2268.0	2287.1	2294.8	2298.0	2288.0	2268.4	2242.0	2211.9
23.5°	2187.8	2209.6	2235.2	2259.3	2278.4	2286.2	2289.4	2278.4	2258.9	2231.5	2201.4
24°	2177.7	2200.5	2226.0	2250.6	2270.7	2277.1	2280.3	2268.9	2248.8	2221.0	2190.0
24.5°	2167.3	2191.4	2216.5	2240.6	2261.6	2267.1	2269.3	2258.4	2237.4	2209.2	2177.7
25°	2155.4	2180.9	2206.4	2230.1	2250.2	2256.6	2258.9	2247.0	2225.6	2196.9	2165.0
25.5°	2143.6	2170.0	2195.1	2219.2	2239.7	2244.7	2246.5	2234.7	2212.8	2183.7	2151.8
26°	2130.3	2157.7	2183.2	2207.4	2228.3	2232.4	2233.8	2221.5	2199.2	2169.5	2137.2
26.5°	2116.7	2145.4	2170.9	2194.6	2215.6	2218.3	2219.7	2207.4	2184.6	2154.5	2121.7
27°	2101.6	2131.3	2157.2	2181.4	2201.0	2204.2	2204.6	2192.3	2169.1	2139.0	2105.7
27.5°	2085.7	2117.1	2142.6	2167.3	2187.3	2189.1	2189.1	2176.4	2152.7	2122.1	2088.0
28°	2068.8	2101.2	2127.2	2151.8	2171.8	2172.3	2172.7	2159.1	2135.4	2104.4	2070.2
28.5°	2051.1	2084.3	2111.2	2136.3	2155.4	2155.0	2154.5	2140.8	2116.7	2085.2	2051.5
29°	2031.9	2066.5	2093.9	2119.4	2138.1	2136.7	2136.3	2121.7	2097.5	2066.1	2031.5
29.5°	2012.8	2048.3	2076.1	2101.6	2120.3	2117.1	2116.2	2101.6	2077.0	2045.6	2010.5
30°	1991.8	2028.3	2057.0	2083.4	2100.7	2096.6	2095.3	2080.7	2055.6	2024.6	1988.6
30.5°	1970.4	2007.3	2036.9	2063.8	2081.1	2075.2	2073.4	2058.3	2033.3	2002.3	1965.8
31°	1946.7	1984.5	2016.0	2042.9	2059.7	2052.0	2049.7	2034.7	2010.0	1978.6	1941.2
31.5°	1922.1	1961.3	1994.1	2021.4	2037.4	2028.7	2026.0	2010.0	1985.9	1954.0	1915.3
32°	1896.1	1935.8	1969.9	1999.6	2014.6	2004.1	1999.1	1984.1	1959.9	1928.5	1887.5
32.5°	1868.3	1908.4	1944.4	1975.4	1991.4	1977.2	1971.3	1956.3	1932.6	1901.6	1856.9
33°	1837.8	1879.7	1917.5	1950.8	1965.4	1949.4	1942.6	1926.7	1904.3	1872.9	1825.9
33.5°	1806.4	1848.3	1888.4	1924.8	1939.4	1920.7	1911.6	1896.1	1875.2	1842.8	1792.7
34°	1771.3	1816.4	1859.2	1897.5	1912.1	1890.7	1879.3	1863.3	1843.7	1810.5	1757.1
34.5°	1734.4	1781.3	1826.4	1868.8	1883.4	1857.8	1844.2	1828.7	1809.5	1774.9	1718.4
35°	1694.7	1743.0	1792.7	1837.3	1853.3	1822.8	1806.4	1791.3	1773.1	1735.3	1673.7
35.5°	1653.7	1701.5	1755.3	1803.6	1820.0	1783.6	1766.7	1750.8	1733.0	1691.1	1626.8
36°	1608.6	1657.3	1716.6	1766.7	1784.9	1743.5	1724.8	1707.5	1689.2	1644.6	1576.7
36.5°	1555.7	1609.5	1672.8	1724.8	1746.2	1698.4	1679.7	1662.4	1641.8	1593.1	1521.1
37°	1495.1	1553.9	1625.0	1681.5	1702.5	1653.7	1634.1	1615.0	1590.4	1537.5	1462.8
37.5°	1430.0	1491.9	1573.5	1633.2	1656.9	1604.0	1586.7	1566.2	1532.9	1474.6	1399.9
38°	1365.2	1429.0	1518.8	1585.3	1608.6	1553.0	1538.9	1514.7	1470.1	1407.6	1337.0
38.5°	1298.7	1367.5	1460.9	1529.3	1555.7	1497.4	1488.7	1461.9	1403.5	1339.3	1270.9
39°	1234.9	1309.2	1400.3	1473.7	1491.9	1440.9	1435.9	1405.8	1335.6	1267.7	1202.1
39.5°	1172.0	1249.5	1336.5	1411.7	1419.5	1379.8	1376.6	1346.6	1267.7	1197.6	1131.9
40°	1109.1	1191.2	1270.9	1348.8	1347.0	1316.5	1318.3	1283.7	1203.0	1128.3	1062.2
40.5°	1044.0	1126.9	1205.8	1278.7	1277.8	1249.5	1261.3	1220.3	1140.1	1059.9	987.9
41°	977.9	1059.9	1140.1	1207.6	1214.4	1183.9	1198.5	1155.6	1076.3	993.4	915.9
41.5°	913.7	990.7	1072.7	1136.0	1151.5	1115.5	1134.2	1088.2	1011.6	925.5	845.8
42°	848.9	925.0	1006.2	1063.1	1087.3	1051.7	1068.1	1021.2	944.6	858.5	781.5
42.5°	786.5	860.3	939.2	989.8	1022.6	987.5	1000.2	954.7	879.9	791.5	712.2
43°	726.4	796.1	871.3	920.0	952.8	923.7	929.6	885.9	813.4	724.1	649.4
43.5°	664.9	733.2	801.6	848.9	884.9	858.5	861.7	819.3	751.0	660.3	586.5



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	487.6	543.2	593.8	653.5	695.4	663.9	653.9	627.0	567.8	492.6	422.4
45.5°	430.2	482.6	530.0	591.5	633.9	601.5	590.6	563.2	509.9	440.7	370.0
46°	377.8	424.7	470.3	535.0	573.3	540.4	525.9	502.6	455.2	389.2	317.6
46.5°	326.3	369.1	413.8	478.9	511.3	484.9	472.1	447.5	400.6	337.7	265.7
47°	277.5	316.7	360.4	425.2	458.4	428.8	418.3	392.8	345.9	285.7	225.1
47.5°	231.9	265.7	312.1	373.2	405.6	372.8	364.6	338.1	291.2	241.1	188.2
48°	191.8	220.1	266.6	322.2	352.7	316.7	310.8	283.0	244.2	200.0	155.4
48.5°	155.8	179.1	225.6	275.2	299.8	260.7	257.0	236.5	201.0	162.7	125.8
49°	134.0	145.8	189.1	232.4	254.3	212.8	215.1	192.3	161.3	129.0	100.7
49.5°	112.1	123.0	154.9	193.7	210.1	172.3	174.1	154.0	126.7	99.8	78.4
50°	90.2	100.3	132.1	158.1	169.5	136.7	136.7	120.3	96.2	82.9	64.7
50.5°	67.9	77.5	109.8	134.0	132.6	104.8	104.8	90.2	79.3	65.6	51.5
51°	46.5	55.1	87.5	110.3	100.3	86.6	86.1	74.3	62.4	48.8	37.8
51.5°	33.7	41.5	65.2	86.6	82.9	67.9	67.9	58.3	45.6	31.4	24.2
52°	23.2	29.6	42.8	62.9	65.6	49.7	49.2	42.4	28.7	14.1	10.9
52.5°	14.6	19.6	29.2	39.2	47.8	31.4	30.5	26.4	12.3	9.1	7.3
53°	12.3	16.9	18.2	25.1	30.5	13.7	12.3	10.0	8.2	6.8	5.9
53.5°	9.6	13.7	15.0	14.6	13.7	8.7	8.2	7.3	6.4	5.5	4.6
54°	6.8	10.5	11.4	11.8	8.7	6.8	6.4	5.9	5.0	4.1	3.6
54.5°	4.6	7.3	8.2	9.1	6.8	5.5	5.0	4.6	3.6	3.2	2.7
55°	3.6	4.1	5.0	6.8	5.5	4.1	4.1	3.6	3.2	2.7	2.3
55.5°	2.7	3.2	3.6	4.1	4.1	3.2	3.2	2.7	2.3	2.3	1.8
56°	2.3	2.7	3.2	3.2	3.2	2.3	2.3	2.3	1.8	1.8	1.8
56.5°	1.8	2.3	2.3	2.7	2.3	1.8	1.8	1.8	1.8	1.4	1.4
57°	1.8	1.8	1.8	2.3	1.8	1.8	1.8	1.8	1.4	1.4	1.4
57.5°	1.4	1.4	1.8	1.8	1.8	1.4	1.4	1.4	1.4	1.4	1.4
58°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9
58.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9
59°	0.9	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9
59.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
60°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
60.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
61°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
61.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
62°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
62.5°	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.5
63°	0.5	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
63.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
64°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
64.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
66°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
71.5°	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
72°	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	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	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: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

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: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2341.3	2341.3	2341.3	2341.3	2341.3	2341.3
0.5°	2340.0	2339.5	2341.3	2342.2	2342.2	2340.4
1°	2339.5	2338.6	2340.0	2340.9	2340.9	2339.5
1.5°	2338.6	2337.2	2338.6	2339.5	2339.5	2338.6
2°	2337.7	2336.3	2337.2	2338.1	2338.1	2337.7
2.5°	2337.2	2335.0	2336.3	2336.8	2337.2	2336.8
3°	2336.3	2334.0	2335.0	2335.4	2335.4	2335.4
3.5°	2335.0	2332.7	2333.1	2334.0	2334.0	2334.5
4°	2334.5	2331.3	2331.8	2332.7	2332.7	2333.1
4.5°	2333.1	2329.5	2330.4	2331.3	2331.3	2331.8
5°	2332.2	2328.1	2328.6	2329.5	2330.4	2330.4
5.5°	2330.8	2326.7	2327.2	2328.1	2328.6	2329.0
6°	2329.9	2324.9	2325.4	2326.7	2327.2	2327.7
6.5°	2328.6	2323.1	2324.0	2324.9	2325.8	2326.3
7°	2326.7	2321.3	2322.2	2323.6	2324.5	2324.9
7.5°	2325.4	2319.5	2320.4	2321.7	2322.6	2323.1
8°	2324.0	2317.6	2318.5	2320.4	2321.3	2321.3
8.5°	2322.2	2315.4	2316.3	2318.5	2319.5	2319.5
9°	2320.4	2313.1	2314.4	2316.7	2317.6	2317.6
9.5°	2319.0	2310.8	2312.2	2314.9	2315.8	2315.4
10°	2316.7	2308.5	2309.9	2313.1	2314.0	2313.5
10.5°	2314.9	2305.8	2307.6	2310.8	2311.7	2311.3
11°	2312.6	2303.5	2305.3	2309.0	2309.9	2309.0
11.5°	2310.3	2300.3	2302.6	2306.7	2307.6	2306.7
12°	2308.1	2297.6	2299.9	2304.4	2305.3	2304.4
12.5°	2305.3	2294.8	2296.7	2301.7	2303.1	2301.7
13°	2302.6	2291.7	2293.5	2299.0	2300.3	2299.0
13.5°	2299.4	2288.5	2290.7	2296.2	2297.1	2296.2
14°	2296.7	2284.8	2287.1	2293.0	2294.4	2293.0
14.5°	2293.0	2281.2	2283.5	2289.4	2291.2	2290.3
15°	2289.8	2277.1	2279.8	2285.7	2287.6	2287.1
15.5°	2286.2	2273.0	2275.3	2282.1	2283.9	2283.5
16°	2281.6	2268.4	2271.2	2277.5	2279.8	2279.8
16.5°	2277.5	2263.9	2266.6	2273.0	2275.7	2276.2
17°	2273.0	2258.9	2261.1	2268.0	2271.2	2272.1
17.5°	2268.0	2253.4	2256.1	2262.5	2266.1	2267.5
18°	2262.5	2247.5	2250.2	2256.6	2260.7	2263.0
18.5°	2256.6	2242.0	2244.3	2250.2	2254.7	2258.4
19°	2250.6	2235.6	2237.9	2243.4	2248.8	2252.9
19.5°	2244.3	2228.3	2231.1	2236.1	2242.0	2247.5
20°	2237.0	2221.5	2223.8	2228.3	2234.7	2242.0
20.5°	2229.7	2213.7	2216.0	2220.1	2227.0	2235.6
21°	2221.5	2205.5	2207.8	2211.0	2219.2	2228.8



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2194.6	2177.7	2179.6	2180.9	2191.0	2206.0
23°	2184.6	2167.3	2169.1	2169.5	2180.5	2197.3
23.5°	2173.2	2156.3	2157.7	2158.1	2169.1	2187.8
24°	2161.8	2144.5	2146.3	2145.8	2157.2	2177.7
24.5°	2149.5	2131.7	2133.5	2132.6	2144.9	2167.3
25°	2136.3	2118.5	2120.3	2118.5	2131.7	2155.4
25.5°	2122.6	2104.4	2105.7	2104.4	2117.6	2143.6
26°	2107.6	2089.8	2090.7	2088.9	2103.5	2130.3
26.5°	2092.1	2073.8	2075.2	2073.4	2088.0	2116.7
27°	2075.7	2056.5	2058.8	2056.5	2072.0	2101.6
27.5°	2057.9	2038.8	2041.5	2039.2	2054.7	2085.7
28°	2039.2	2020.1	2023.3	2020.1	2036.9	2068.8
28.5°	2019.6	2000.0	2004.1	2001.8	2017.8	2051.1
29°	1999.6	1979.5	1984.1	1981.3	1998.2	2031.9
29.5°	1978.1	1957.6	1963.6	1961.3	1978.6	2012.8
30°	1955.4	1935.3	1941.2	1939.4	1957.6	1991.8
30.5°	1930.8	1910.2	1918.9	1918.0	1935.8	1970.4
31°	1903.9	1884.7	1894.3	1893.8	1912.5	1946.7
31.5°	1875.6	1856.0	1868.3	1869.2	1887.5	1922.1
32°	1845.5	1826.4	1839.6	1841.0	1860.1	1896.1
32.5°	1812.7	1793.6	1810.0	1811.8	1831.0	1868.3
33°	1779.5	1759.4	1777.2	1779.9	1800.0	1837.8
33.5°	1742.1	1722.5	1744.8	1748.5	1769.0	1806.4
34°	1703.8	1681.5	1709.7	1714.3	1735.3	1771.3
34.5°	1661.9	1637.7	1671.9	1676.5	1698.8	1734.4
35°	1615.9	1589.4	1630.9	1635.0	1658.7	1694.7
35.5°	1563.9	1536.1	1584.0	1590.4	1615.0	1653.7
36°	1509.2	1476.9	1531.6	1539.8	1567.1	1608.6
36.5°	1447.7	1414.9	1472.8	1484.2	1512.9	1555.7
37°	1385.8	1354.8	1408.5	1423.6	1452.7	1495.1
37.5°	1320.6	1296.4	1339.3	1360.7	1387.6	1430.0
38°	1259.1	1236.3	1269.1	1293.2	1321.5	1365.2
38.5°	1195.7	1176.6	1202.6	1225.8	1254.5	1298.7
39°	1134.7	1106.9	1138.3	1153.8	1186.6	1234.9
39.5°	1071.8	1036.7	1076.8	1085.0	1117.8	1172.0
40°	1007.1	965.6	1012.5	1015.7	1047.2	1109.1
40.5°	939.6	904.1	945.6	946.0	980.2	1044.0
41°	870.4	843.0	879.5	876.7	915.0	977.9
41.5°	800.6	783.8	814.8	807.5	849.9	913.7
42°	733.7	721.4	751.9	742.3	785.2	848.9
42.5°	666.2	658.5	690.8	680.3	719.1	786.5
43°	600.1	596.5	631.6	620.2	656.2	726.4
43.5°	536.8	535.0	572.8	562.3	595.1	664.9



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	373.2	368.2	405.1	403.7	430.2	487.6
45.5°	318.5	315.8	354.1	358.2	380.5	430.2
46°	263.8	263.8	307.1	315.3	334.9	377.8
46.5°	221.5	217.8	263.8	274.8	292.6	326.3
47°	184.6	175.4	223.3	237.4	252.5	277.5
47.5°	151.3	151.3	185.9	202.3	216.0	231.9
48°	123.0	127.6	152.7	171.8	182.7	191.8
48.5°	98.0	103.9	129.4	148.1	152.2	155.8
49°	77.5	80.2	106.6	124.9	129.4	134.0
49.5°	64.3	56.5	84.3	102.1	106.6	112.1
50°	51.5	42.8	61.5	78.8	83.4	90.2
50.5°	38.7	31.4	45.6	55.6	61.1	67.9
51°	26.0	21.9	33.3	40.6	44.7	46.5
51.5°	13.2	13.7	22.3	27.3	31.0	33.7
52°	8.7	10.9	14.1	16.9	20.1	23.2
52.5°	6.4	8.7	11.4	13.7	16.9	14.6
53°	5.5	6.8	9.1	10.5	13.7	12.3
53.5°	4.1	4.6	6.8	7.7	10.5	9.6
54°	3.2	3.6	4.6	4.6	7.3	6.8
54.5°	2.7	2.7	3.6	3.6	4.1	4.6
55°	2.3	2.3	2.7	2.7	3.2	3.6
55.5°	1.8	1.8	2.3	2.3	2.7	2.7
56°	1.8	1.8	1.8	1.8	2.3	2.3
56.5°	1.4	1.4	1.8	1.8	1.8	1.8
57°	1.4	1.4	1.4	1.4	1.4	1.8
57.5°	1.4	1.4	1.4	1.4	1.4	1.4
58°	0.9	0.9	1.4	1.4	1.4	1.4
58.5°	0.9	0.9	0.9	1.4	1.4	1.4
59°	0.9	0.9	0.9	0.9	0.9	0.9
59.5°	0.9	0.9	0.9	0.9	0.9	0.9
60°	0.9	0.9	0.9	0.9	0.9	0.9
60.5°	0.9	0.9	0.9	0.9	0.9	0.9
61°	0.9	0.9	0.9	0.9	0.9	0.9
61.5°	0.9	0.9	0.9	0.9	0.9	0.9
62°	0.5	0.9	0.9	0.9	0.9	0.9
62.5°	0.5	0.5	0.9	0.9	0.9	0.9
63°	0.5	0.5	0.5	0.5	0.5	0.5
63.5°	0.5	0.5	0.5	0.5	0.5	0.5
64°	0.5	0.5	0.5	0.5	0.5	0.5
64.5°	0.5	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5	0.5
65.5°	0.5	0.5	0.5	0.5	0.5	0.5
66°	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5
71.5°	0.0	0.5	0.5	0.5	0.5	0.5
72°	0.0	0.0	0.5	0.5	0.5	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0
73°	0.0	0.0	0.0	0.0	0.0	0.0
73.5°	0.0	0.0	0.0	0.0	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	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: P776810

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRMB-5000lm-2700K

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°	2221.9	2239.7	2265.2	2289.4	2306.7	2316.3	2319.9	2310.8	2293.0	2268.4	2240.6
22°	2214.2	2232.9	2258.4	2282.5	2301.2	2309.9	2313.1	2304.0	2285.3	2260.2	2232.0



44°	604.2	670.8	730.5	782.0	819.3	793.4	789.7	755.5	689.5	600.1	526.8
44.5°	545.0	607.0	660.3	715.4	755.5	728.2	723.6	690.8	629.3	544.1	474.4



66.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
67°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5



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°	2213.3	2196.9	2199.2	2201.9	2210.1	2221.9
22°	2204.2	2187.8	2189.6	2191.9	2201.0	2214.2



44°	482.1	476.7	515.8	505.4	536.8	604.2
44.5°	427.9	422.0	458.9	453.0	482.1	545.0

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

Scaled Data Report



66.5°	0.5	0.5	0.5	0.5	0.5	0.5
67°	0.5	0.5	0.5	0.5	0.5	0.5

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)