

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: P776736

Luminaire Tested: HCDJBS4050CSD-HCD6TSQMB-5000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B015-HCD6TSQMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD6TSQMB-5000lm-3000K
Description: 6 INCH SQUARE MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

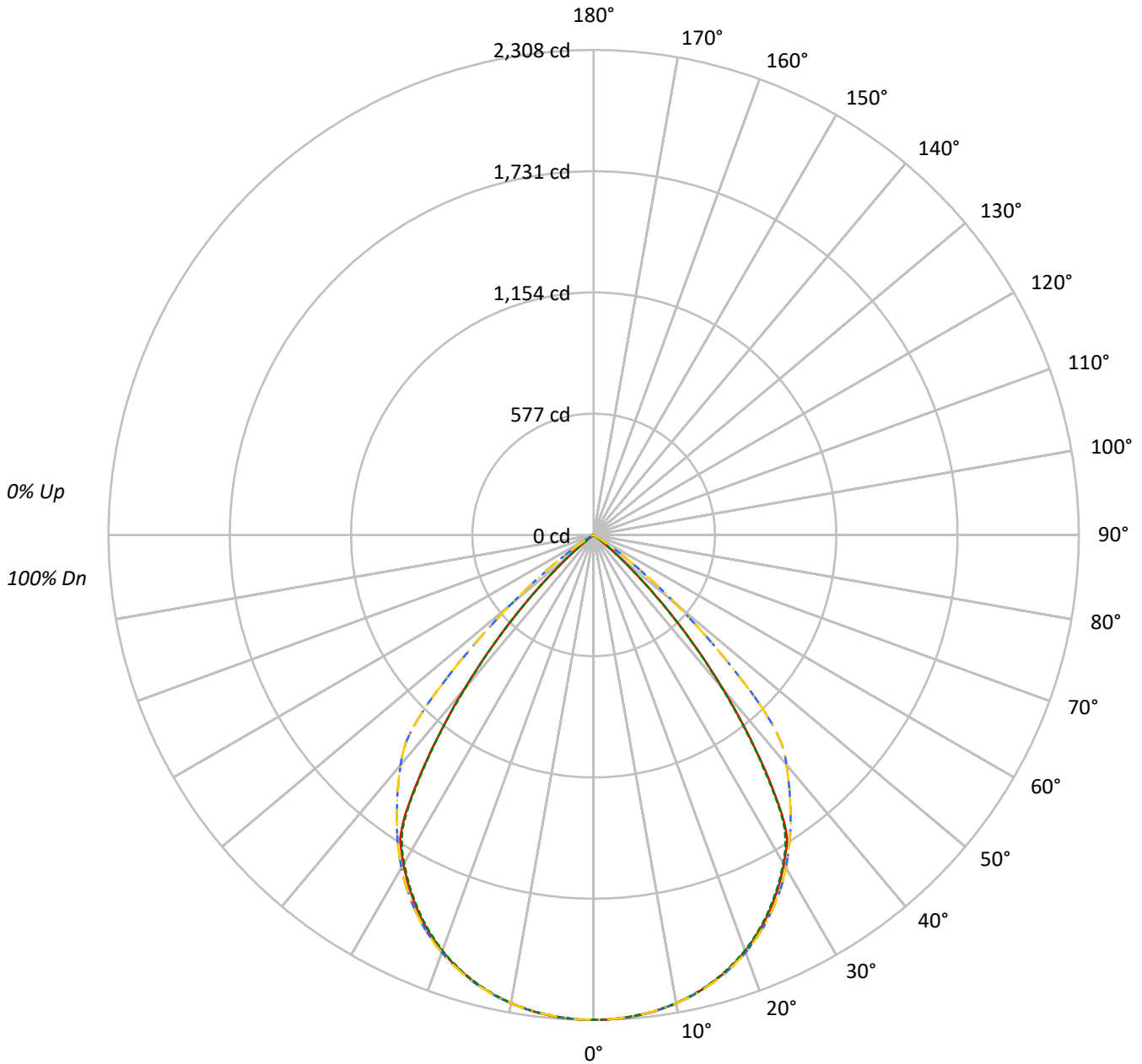
Lumens per Lamp: N/A
Luminaire Lumens: 3329.1 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.23
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P776736
CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-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	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	91	86	82	89	84	81	86	83	80	84	81	78	77					77			
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	69	58	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45					45			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	99334	99334	99334	99334
5°	99290	99251	99290	99251
10°	98956	98894	98956	98894
15°	98113	98033	98113	98033
20°	96554	96426	96554	96426
25°	93906	93659	93906	93659
30°	89952	89678	89952	89678
35°	78732	78222	78732	78222
40°	53760	53417	53760	53417
45°	27991	28015	27991	28015
50°	8158	8065	8158	8065
55°	248	315	248	315
60°	78	78	78	78
65°	51	51	51	51
70°	63	63	63	63
75°	0	83	0	83
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 64720 cd/sqm



TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	6.6
10°-20°	620.4	18.6
20°-30°	910.6	27.4
30°-40°	966.3	29.0
40°-50°	539.5	16.2
50°-60°	73.0	2.2
60°-70°	0.9	0.0
70°-80°	0.3	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°	1749.3	52.5
0°-40°	2715.5	81.6
0°-60°	3327.9	100.0
0°-90°	3329.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3329.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2307	2307	2307	2307	2307	
5°	2297	2296	2297	2296	2297	218
15°	2201	2199	2201	2199	2201	620
25°	1977	1972	1977	1972	1977	908
35°	1498	1488	1498	1488	1498	905
45°	460	460	460	460	460	367
55°	3	4	3	4	3	20
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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1
0.5°	2308.0	2307.1	2307.1	2306.6	2307.1	2306.6	2307.1	2307.1	2308.0	2307.1	2307.1
1°	2307.6	2307.1	2306.6	2306.6	2307.1	2306.6	2306.6	2307.1	2307.6	2307.1	2306.6
1.5°	2307.1	2306.2	2306.2	2306.2	2306.2	2306.2	2306.2	2306.2	2307.1	2306.2	2306.2
2°	2306.2	2305.7	2305.2	2305.2	2305.7	2305.2	2305.2	2305.7	2306.2	2305.7	2305.2
2.5°	2305.2	2304.8	2304.3	2304.3	2304.8	2304.3	2304.3	2304.8	2305.2	2304.8	2304.3
3°	2304.3	2303.4	2303.4	2303.4	2303.4	2303.4	2303.4	2303.4	2304.3	2303.4	2303.4
3.5°	2302.9	2302.5	2302.0	2302.0	2302.0	2302.0	2302.0	2302.5	2302.9	2302.5	2302.0
4°	2301.5	2300.6	2300.1	2300.1	2300.6	2300.1	2300.1	2300.6	2301.5	2300.6	2300.1
4.5°	2299.7	2298.7	2298.7	2298.3	2298.7	2298.3	2298.7	2298.7	2299.7	2298.7	2298.7
5°	2297.3	2296.9	2296.4	2296.4	2296.4	2296.4	2296.4	2296.9	2297.3	2296.9	2296.4
5.5°	2295.0	2294.6	2294.1	2294.1	2294.1	2294.1	2294.1	2294.6	2295.0	2294.6	2294.1
6°	2292.7	2292.2	2291.8	2291.3	2291.8	2291.3	2291.8	2292.2	2292.7	2292.2	2291.8
6.5°	2289.9	2289.4	2289.0	2289.0	2289.0	2289.0	2289.0	2289.4	2289.9	2289.4	2289.0
7°	2287.1	2286.7	2286.2	2285.7	2285.7	2285.7	2286.2	2286.7	2287.1	2286.7	2286.2
7.5°	2283.9	2283.4	2282.9	2282.5	2282.5	2282.5	2282.9	2283.4	2283.9	2283.4	2282.9
8°	2280.1	2279.7	2279.7	2279.2	2279.2	2279.2	2279.7	2279.7	2280.1	2279.7	2279.7
8.5°	2276.4	2276.0	2276.0	2275.5	2275.0	2275.5	2276.0	2276.0	2276.4	2276.0	2276.0
9°	2272.2	2272.2	2271.8	2271.3	2270.8	2271.3	2271.8	2272.2	2272.2	2272.2	2271.8
9.5°	2268.1	2268.1	2267.6	2267.1	2266.7	2267.1	2267.6	2268.1	2268.1	2268.1	2267.6
10°	2263.4	2263.4	2263.4	2262.5	2262.0	2262.5	2263.4	2263.4	2263.4	2263.4	2263.4
10.5°	2258.8	2258.8	2258.8	2257.8	2257.4	2257.8	2258.8	2258.8	2258.8	2258.8	2258.8
11°	2253.2	2253.7	2253.7	2252.7	2251.8	2252.7	2253.7	2253.7	2253.2	2253.7	2253.7
11.5°	2248.1	2248.5	2248.5	2247.1	2246.2	2247.1	2248.5	2248.5	2248.1	2248.5	2248.5
12°	2242.5	2243.0	2243.0	2241.6	2240.6	2241.6	2243.0	2243.0	2242.5	2243.0	2243.0
12.5°	2236.5	2236.9	2237.4	2235.5	2234.6	2235.5	2237.4	2236.9	2236.5	2236.9	2237.4
13°	2229.9	2230.9	2231.3	2229.5	2228.1	2229.5	2231.3	2230.9	2229.9	2230.9	2231.3
13.5°	2223.4	2224.4	2224.8	2223.0	2221.6	2223.0	2224.8	2224.4	2223.4	2224.4	2224.8
14°	2216.0	2217.4	2218.3	2216.0	2214.6	2216.0	2218.3	2217.4	2216.0	2217.4	2218.3
14.5°	2209.0	2210.4	2211.4	2209.0	2207.2	2209.0	2211.4	2210.4	2209.0	2210.4	2211.4
15°	2201.1	2203.0	2203.9	2201.6	2199.3	2201.6	2203.9	2203.0	2201.1	2203.0	2203.9
15.5°	2193.7	2195.1	2196.5	2193.7	2191.4	2193.7	2196.5	2195.1	2193.7	2195.1	2196.5
16°	2185.3	2187.2	2188.6	2185.8	2183.0	2185.8	2188.6	2187.2	2185.3	2187.2	2188.6
16.5°	2177.0	2178.8	2180.2	2177.4	2174.6	2177.4	2180.2	2178.8	2177.0	2178.8	2180.2
17°	2167.7	2170.5	2171.9	2168.6	2165.3	2168.6	2171.9	2170.5	2167.7	2170.5	2171.9
17.5°	2158.8	2161.2	2163.0	2159.8	2156.1	2159.8	2163.0	2161.2	2158.8	2161.2	2163.0
18°	2149.1	2151.9	2153.7	2150.0	2146.3	2150.0	2153.7	2151.9	2149.1	2151.9	2153.7
18.5°	2139.3	2142.6	2144.4	2140.7	2136.5	2140.7	2144.4	2142.6	2139.3	2142.6	2144.4
19°	2129.1	2132.3	2134.7	2130.0	2125.8	2130.0	2134.7	2132.3	2129.1	2132.3	2134.7
19.5°	2118.4	2122.1	2124.4	2119.8	2115.6	2119.8	2124.4	2122.1	2118.4	2122.1	2124.4
20°	2107.3	2111.4	2114.2	2109.1	2104.5	2109.1	2114.2	2111.4	2107.3	2111.4	2114.2
20.5°	2096.1	2100.7	2103.5	2098.0	2092.8	2098.0	2103.5	2100.7	2096.1	2100.7	2103.5
21°	2084.5	2089.1	2092.4	2086.8	2080.8	2086.8	2092.4	2089.1	2084.5	2089.1	2092.4



TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2046.8	2052.9	2056.6	2050.1	2042.6	2050.1	2056.6	2052.9	2046.8	2052.9	2056.6
23°	2033.8	2039.9	2044.0	2037.1	2029.2	2037.1	2044.0	2039.9	2033.8	2039.9	2044.0
23.5°	2020.3	2026.8	2031.5	2023.6	2015.2	2023.6	2031.5	2026.8	2020.3	2026.8	2031.5
24°	2005.9	2013.4	2018.0	2009.7	2001.3	2009.7	2018.0	2013.4	2005.9	2013.4	2018.0
24.5°	1991.5	1999.0	2004.5	1995.7	1986.9	1995.7	2004.5	1999.0	1991.5	1999.0	2004.5
25°	1976.7	1984.6	1990.1	1980.8	1971.5	1980.8	1990.1	1984.6	1976.7	1984.6	1990.1
25.5°	1961.8	1969.7	1976.2	1966.0	1956.2	1966.0	1976.2	1969.7	1961.8	1969.7	1976.2
26°	1946.4	1954.8	1961.3	1951.1	1940.4	1951.1	1961.3	1954.8	1946.4	1954.8	1961.3
26.5°	1930.6	1939.0	1946.0	1935.3	1924.6	1935.3	1946.0	1939.0	1930.6	1939.0	1946.0
27°	1913.9	1923.7	1930.6	1919.5	1908.3	1919.5	1930.6	1923.7	1913.9	1923.7	1930.6
27.5°	1897.2	1907.4	1914.8	1902.8	1892.1	1902.8	1914.8	1907.4	1897.2	1907.4	1914.8
28°	1880.4	1890.7	1898.6	1886.5	1874.4	1886.5	1898.6	1890.7	1880.4	1890.7	1898.6
28.5°	1863.2	1873.9	1881.8	1869.8	1857.2	1869.8	1881.8	1873.9	1863.2	1873.9	1881.8
29°	1845.6	1857.2	1864.6	1852.6	1839.5	1852.6	1864.6	1857.2	1845.6	1857.2	1864.6
29.5°	1827.9	1839.5	1847.4	1835.4	1821.9	1835.4	1847.4	1839.5	1827.9	1839.5	1847.4
30°	1809.3	1821.9	1829.3	1817.7	1803.8	1817.7	1829.3	1821.9	1809.3	1821.9	1829.3
30.5°	1791.2	1804.2	1811.2	1800.0	1785.2	1800.0	1811.2	1804.2	1791.2	1804.2	1811.2
31°	1772.2	1786.1	1792.6	1781.9	1766.1	1781.9	1792.6	1786.1	1772.2	1786.1	1792.6
31.5°	1753.1	1768.0	1773.5	1763.3	1746.6	1763.3	1773.5	1768.0	1753.1	1768.0	1773.5
32°	1733.6	1748.9	1754.5	1744.7	1722.0	1744.7	1754.5	1748.9	1733.6	1748.9	1754.5
32.5°	1713.1	1729.9	1735.0	1725.7	1696.9	1725.7	1735.0	1729.9	1713.1	1729.9	1735.0
33°	1680.1	1710.8	1715.0	1706.6	1669.4	1706.6	1715.0	1710.8	1680.1	1710.8	1715.0
33.5°	1644.3	1691.8	1695.0	1687.1	1632.3	1687.1	1695.0	1691.8	1644.3	1691.8	1695.0
34°	1600.7	1672.2	1674.6	1663.4	1590.9	1663.4	1674.6	1672.2	1600.7	1672.2	1674.6
34.5°	1550.0	1651.3	1654.1	1637.4	1541.6	1637.4	1654.1	1651.3	1550.0	1651.3	1654.1
35°	1497.9	1620.2	1633.7	1610.9	1488.2	1610.9	1633.7	1620.2	1497.9	1620.2	1633.7
35.5°	1445.9	1589.5	1613.2	1577.4	1434.3	1577.4	1613.2	1589.5	1445.9	1589.5	1613.2
36°	1392.0	1548.1	1592.3	1540.2	1380.8	1540.2	1592.3	1548.1	1392.0	1548.1	1592.3
36.5°	1337.6	1504.4	1571.8	1495.2	1328.3	1495.2	1571.8	1504.4	1337.6	1504.4	1571.8
37°	1282.3	1454.7	1551.4	1447.3	1274.4	1447.3	1551.4	1454.7	1282.3	1454.7	1551.4
37.5°	1228.8	1405.0	1530.5	1396.6	1221.4	1396.6	1530.5	1405.0	1228.8	1405.0	1530.5
38°	1173.1	1353.9	1510.0	1345.0	1168.0	1345.0	1510.0	1353.9	1173.1	1353.9	1510.0
38.5°	1119.2	1302.7	1489.1	1294.4	1114.0	1294.4	1489.1	1302.7	1119.2	1302.7	1489.1
39°	1065.2	1250.7	1469.1	1244.2	1059.2	1244.2	1469.1	1250.7	1065.2	1250.7	1469.1
39.5°	1011.3	1199.6	1448.7	1194.0	1004.8	1194.0	1448.7	1199.6	1011.3	1199.6	1448.7
40°	956.5	1147.5	1428.2	1143.3	950.4	1143.3	1428.2	1147.5	956.5	1147.5	1428.2
40.5°	903.0	1096.4	1407.8	1092.2	897.5	1092.2	1407.8	1096.4	903.0	1096.4	1407.8
41°	851.0	1045.3	1386.9	1041.5	844.9	1041.5	1386.9	1045.3	851.0	1045.3	1386.9
41.5°	798.9	994.1	1363.6	990.0	794.8	990.0	1363.6	994.1	798.9	994.1	1363.6
42°	746.9	943.0	1337.6	938.8	744.1	938.8	1337.6	943.0	746.9	943.0	1337.6
42.5°	697.1	892.8	1303.7	888.2	693.9	888.2	1303.7	892.8	697.1	892.8	1303.7
43°	647.4	842.2	1265.1	838.4	645.1	838.4	1265.1	842.2	647.4	842.2	1265.1
43.5°	599.1	792.9	1223.7	789.6	596.3	789.6	1223.7	792.9	599.1	792.9	1223.7



TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	459.7	649.3	1062.9	647.4	460.1	647.4	1062.9	649.3	459.7	649.3	1062.9
45.5°	417.8	602.8	1002.5	601.4	417.8	601.4	1002.5	602.8	417.8	602.8	1002.5
46°	376.9	557.3	942.5	555.9	376.9	555.9	942.5	557.3	376.9	557.3	942.5
46.5°	336.5	512.6	883.5	511.2	335.6	511.2	883.5	512.6	336.5	512.6	883.5
47°	297.0	468.9	824.5	468.9	295.6	468.9	824.5	468.9	297.0	468.9	824.5
47.5°	258.9	427.6	768.3	428.0	259.3	428.0	768.3	427.6	258.9	427.6	768.3
48°	225.4	387.6	713.9	387.6	225.4	387.6	713.9	387.6	225.4	387.6	713.9
48.5°	194.7	348.6	661.4	348.1	194.3	348.1	661.4	348.6	194.7	348.6	661.4
49°	169.2	310.0	610.2	309.5	165.0	309.5	610.2	310.0	169.2	310.0	610.2
49.5°	145.0	272.8	560.5	272.8	142.2	272.8	560.5	272.8	145.0	272.8	560.5
50°	121.8	238.9	512.2	238.9	120.4	238.9	512.2	238.9	121.8	238.9	512.2
50.5°	100.4	209.1	465.7	206.4	99.5	206.4	465.7	209.1	100.4	209.1	465.7
51°	82.3	180.8	423.9	176.6	82.3	176.6	423.9	180.8	82.3	180.8	423.9
51.5°	66.0	156.2	383.0	152.4	64.6	152.4	383.0	156.2	66.0	156.2	383.0
52°	52.5	132.0	343.0	129.2	49.7	129.2	343.0	132.0	52.5	132.0	343.0
52.5°	39.5	109.7	304.0	106.9	35.3	106.9	304.0	109.7	39.5	109.7	304.0
53°	26.5	89.7	267.7	87.8	21.8	87.8	267.7	89.7	26.5	89.7	267.7
53.5°	17.7	71.6	234.7	68.8	13.0	68.8	234.7	71.6	17.7	71.6	234.7
54°	8.4	57.6	204.0	53.4	7.4	53.4	204.0	57.6	8.4	57.6	204.0
54.5°	5.1	44.2	177.5	39.5	5.6	39.5	177.5	44.2	5.1	44.2	177.5
55°	3.3	30.7	152.4	26.0	4.2	26.0	152.4	30.7	3.3	30.7	152.4
55.5°	1.4	19.5	129.2	17.7	2.8	17.7	129.2	19.5	1.4	19.5	129.2
56°	0.9	8.4	107.8	13.0	1.4	13.0	107.8	8.4	0.9	8.4	107.8
56.5°	0.9	4.2	87.4	7.9	0.9	7.9	87.4	4.2	0.9	4.2	87.4
57°	0.9	2.3	71.1	4.2	0.9	4.2	71.1	2.3	0.9	2.3	71.1
57.5°	0.9	1.9	57.2	1.9	0.9	1.9	57.2	1.9	0.9	1.9	57.2
58°	0.9	0.9	46.0	0.9	0.9	0.9	46.0	0.9	0.9	0.9	46.0
58.5°	0.9	0.9	35.8	0.9	0.9	0.9	35.8	0.9	0.9	0.9	35.8
59°	0.9	0.9	26.5	0.9	0.9	0.9	26.5	0.9	0.9	0.9	26.5
59.5°	0.9	0.9	19.5	0.9	0.9	0.9	19.5	0.9	0.9	0.9	19.5
60°	0.9	0.9	13.5	0.9	0.9	0.9	13.5	0.9	0.9	0.9	13.5
60.5°	0.9	0.9	9.3	0.9	0.9	0.9	9.3	0.9	0.9	0.9	9.3
61°	0.9	0.9	6.0	0.9	0.9	0.9	6.0	0.9	0.9	0.9	6.0
61.5°	0.9	0.9	3.7	0.9	0.9	0.9	3.7	0.9	0.9	0.9	3.7
62°	0.5	0.5	1.9	0.9	0.9	0.9	1.9	0.5	0.5	0.5	1.9
62.5°	0.5	0.5	1.4	0.5	0.5	0.5	1.4	0.5	0.5	0.5	1.4
63°	0.5	0.5	0.9	0.5	0.5	0.5	0.9	0.5	0.5	0.5	0.9
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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

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	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
75°	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.5	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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2307.1	2307.1	2307.1	2307.1	2307.1	2307.1
0.5°	2306.6	2307.1	2306.6	2307.1	2307.1	2308.0
1°	2306.6	2307.1	2306.6	2306.6	2307.1	2307.6
1.5°	2306.2	2306.2	2306.2	2306.2	2306.2	2307.1
2°	2305.2	2305.7	2305.2	2305.2	2305.7	2306.2
2.5°	2304.3	2304.8	2304.3	2304.3	2304.8	2305.2
3°	2303.4	2303.4	2303.4	2303.4	2303.4	2304.3
3.5°	2302.0	2302.0	2302.0	2302.0	2302.5	2302.9
4°	2300.1	2300.6	2300.1	2300.1	2300.6	2301.5
4.5°	2298.3	2298.7	2298.3	2298.7	2298.7	2299.7
5°	2296.4	2296.4	2296.4	2296.4	2296.9	2297.3
5.5°	2294.1	2294.1	2294.1	2294.1	2294.6	2295.0
6°	2291.3	2291.8	2291.3	2291.8	2292.2	2292.7
6.5°	2289.0	2289.0	2289.0	2289.0	2289.4	2289.9
7°	2285.7	2285.7	2285.7	2286.2	2286.7	2287.1
7.5°	2282.5	2282.5	2282.5	2282.9	2283.4	2283.9
8°	2279.2	2279.2	2279.2	2279.7	2279.7	2280.1
8.5°	2275.5	2275.0	2275.5	2276.0	2276.0	2276.4
9°	2271.3	2270.8	2271.3	2271.8	2272.2	2272.2
9.5°	2267.1	2266.7	2267.1	2267.6	2268.1	2268.1
10°	2262.5	2262.0	2262.5	2263.4	2263.4	2263.4
10.5°	2257.8	2257.4	2257.8	2258.8	2258.8	2258.8
11°	2252.7	2251.8	2252.7	2253.7	2253.7	2253.2
11.5°	2247.1	2246.2	2247.1	2248.5	2248.5	2248.1
12°	2241.6	2240.6	2241.6	2243.0	2243.0	2242.5
12.5°	2235.5	2234.6	2235.5	2237.4	2236.9	2236.5
13°	2229.5	2228.1	2229.5	2231.3	2230.9	2229.9
13.5°	2223.0	2221.6	2223.0	2224.8	2224.4	2223.4
14°	2216.0	2214.6	2216.0	2218.3	2217.4	2216.0
14.5°	2209.0	2207.2	2209.0	2211.4	2210.4	2209.0
15°	2201.6	2199.3	2201.6	2203.9	2203.0	2201.1
15.5°	2193.7	2191.4	2193.7	2196.5	2195.1	2193.7
16°	2185.8	2183.0	2185.8	2188.6	2187.2	2185.3
16.5°	2177.4	2174.6	2177.4	2180.2	2178.8	2177.0
17°	2168.6	2165.3	2168.6	2171.9	2170.5	2167.7
17.5°	2159.8	2156.1	2159.8	2163.0	2161.2	2158.8
18°	2150.0	2146.3	2150.0	2153.7	2151.9	2149.1
18.5°	2140.7	2136.5	2140.7	2144.4	2142.6	2139.3
19°	2130.0	2125.8	2130.0	2134.7	2132.3	2129.1
19.5°	2119.8	2115.6	2119.8	2124.4	2122.1	2118.4
20°	2109.1	2104.5	2109.1	2114.2	2111.4	2107.3
20.5°	2098.0	2092.8	2098.0	2103.5	2100.7	2096.1
21°	2086.8	2080.8	2086.8	2092.4	2089.1	2084.5

TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2050.1	2042.6	2050.1	2056.6	2052.9	2046.8
23°	2037.1	2029.2	2037.1	2044.0	2039.9	2033.8
23.5°	2023.6	2015.2	2023.6	2031.5	2026.8	2020.3
24°	2009.7	2001.3	2009.7	2018.0	2013.4	2005.9
24.5°	1995.7	1986.9	1995.7	2004.5	1999.0	1991.5
25°	1980.8	1971.5	1980.8	1990.1	1984.6	1976.7
25.5°	1966.0	1956.2	1966.0	1976.2	1969.7	1961.8
26°	1951.1	1940.4	1951.1	1961.3	1954.8	1946.4
26.5°	1935.3	1924.6	1935.3	1946.0	1939.0	1930.6
27°	1919.5	1908.3	1919.5	1930.6	1923.7	1913.9
27.5°	1902.8	1892.1	1902.8	1914.8	1907.4	1897.2
28°	1886.5	1874.4	1886.5	1898.6	1890.7	1880.4
28.5°	1869.8	1857.2	1869.8	1881.8	1873.9	1863.2
29°	1852.6	1839.5	1852.6	1864.6	1857.2	1845.6
29.5°	1835.4	1821.9	1835.4	1847.4	1839.5	1827.9
30°	1817.7	1803.8	1817.7	1829.3	1821.9	1809.3
30.5°	1800.0	1785.2	1800.0	1811.2	1804.2	1791.2
31°	1781.9	1766.1	1781.9	1792.6	1786.1	1772.2
31.5°	1763.3	1746.6	1763.3	1773.5	1768.0	1753.1
32°	1744.7	1722.0	1744.7	1754.5	1748.9	1733.6
32.5°	1725.7	1696.9	1725.7	1735.0	1729.9	1713.1
33°	1706.6	1669.4	1706.6	1715.0	1710.8	1680.1
33.5°	1687.1	1632.3	1687.1	1695.0	1691.8	1644.3
34°	1663.4	1590.9	1663.4	1674.6	1672.2	1600.7
34.5°	1637.4	1541.6	1637.4	1654.1	1651.3	1550.0
35°	1610.9	1488.2	1610.9	1633.7	1620.2	1497.9
35.5°	1577.4	1434.3	1577.4	1613.2	1589.5	1445.9
36°	1540.2	1380.8	1540.2	1592.3	1548.1	1392.0
36.5°	1495.2	1328.3	1495.2	1571.8	1504.4	1337.6
37°	1447.3	1274.4	1447.3	1551.4	1454.7	1282.3
37.5°	1396.6	1221.4	1396.6	1530.5	1405.0	1228.8
38°	1345.0	1168.0	1345.0	1510.0	1353.9	1173.1
38.5°	1294.4	1114.0	1294.4	1489.1	1302.7	1119.2
39°	1244.2	1059.2	1244.2	1469.1	1250.7	1065.2
39.5°	1194.0	1004.8	1194.0	1448.7	1199.6	1011.3
40°	1143.3	950.4	1143.3	1428.2	1147.5	956.5
40.5°	1092.2	897.5	1092.2	1407.8	1096.4	903.0
41°	1041.5	844.9	1041.5	1386.9	1045.3	851.0
41.5°	990.0	794.8	990.0	1363.6	994.1	798.9
42°	938.8	744.1	938.8	1337.6	943.0	746.9
42.5°	888.2	693.9	888.2	1303.7	892.8	697.1
43°	838.4	645.1	838.4	1265.1	842.2	647.4
43.5°	789.6	596.3	789.6	1223.7	792.9	599.1



TEST NUMBER: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	647.4	460.1	647.4	1062.9	649.3	459.7
45.5°	601.4	417.8	601.4	1002.5	602.8	417.8
46°	555.9	376.9	555.9	942.5	557.3	376.9
46.5°	511.2	335.6	511.2	883.5	512.6	336.5
47°	468.9	295.6	468.9	824.5	468.9	297.0
47.5°	428.0	259.3	428.0	768.3	427.6	258.9
48°	387.6	225.4	387.6	713.9	387.6	225.4
48.5°	348.1	194.3	348.1	661.4	348.6	194.7
49°	309.5	165.0	309.5	610.2	310.0	169.2
49.5°	272.8	142.2	272.8	560.5	272.8	145.0
50°	238.9	120.4	238.9	512.2	238.9	121.8
50.5°	206.4	99.5	206.4	465.7	209.1	100.4
51°	176.6	82.3	176.6	423.9	180.8	82.3
51.5°	152.4	64.6	152.4	383.0	156.2	66.0
52°	129.2	49.7	129.2	343.0	132.0	52.5
52.5°	106.9	35.3	106.9	304.0	109.7	39.5
53°	87.8	21.8	87.8	267.7	89.7	26.5
53.5°	68.8	13.0	68.8	234.7	71.6	17.7
54°	53.4	7.4	53.4	204.0	57.6	8.4
54.5°	39.5	5.6	39.5	177.5	44.2	5.1
55°	26.0	4.2	26.0	152.4	30.7	3.3
55.5°	17.7	2.8	17.7	129.2	19.5	1.4
56°	13.0	1.4	13.0	107.8	8.4	0.9
56.5°	7.9	0.9	7.9	87.4	4.2	0.9
57°	4.2	0.9	4.2	71.1	2.3	0.9
57.5°	1.9	0.9	1.9	57.2	1.9	0.9
58°	0.9	0.9	0.9	46.0	0.9	0.9
58.5°	0.9	0.9	0.9	35.8	0.9	0.9
59°	0.9	0.9	0.9	26.5	0.9	0.9
59.5°	0.9	0.9	0.9	19.5	0.9	0.9
60°	0.9	0.9	0.9	13.5	0.9	0.9
60.5°	0.9	0.9	0.9	9.3	0.9	0.9
61°	0.9	0.9	0.9	6.0	0.9	0.9
61.5°	0.9	0.9	0.9	3.7	0.9	0.9
62°	0.9	0.9	0.9	1.9	0.5	0.5
62.5°	0.5	0.5	0.5	1.4	0.5	0.5
63°	0.5	0.5	0.5	0.9	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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-3000K

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°	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.5	0.0	0.5	0.5
75°	0.5	0.5	0.5	0.0	0.0	0.0
75.5°	0.5	0.5	0.5	0.0	0.0	0.0
76°	0.0	0.5	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: P776736

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQMB-5000lm-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°	2072.4	2077.5	2080.8	2074.7	2068.2	2074.7	2080.8	2077.5	2072.4	2077.5	2080.8
22°	2059.8	2065.4	2068.7	2062.6	2055.7	2062.6	2068.7	2065.4	2059.8	2065.4	2068.7



44°	551.2	743.6	1173.5	741.3	548.9	741.3	1173.5	743.6	551.2	743.6	1173.5
44.5°	505.2	696.2	1119.2	694.4	503.3	694.4	1119.2	696.2	505.2	696.2	1119.2



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°	2074.7	2068.2	2074.7	2080.8	2077.5	2072.4
22°	2062.6	2055.7	2062.6	2068.7	2065.4	2059.8



44°	741.3	548.9	741.3	1173.5	743.6	551.2
44.5°	694.4	503.3	694.4	1119.2	696.2	505.2

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)