

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: P776733

Luminaire Tested: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776733  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B018)  
Test Lab:  
Issue Date: 2/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS4050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K  
Description: 6 INCH SQUARE MEDIUM LENSED WALLWASH KIT  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4244.5 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

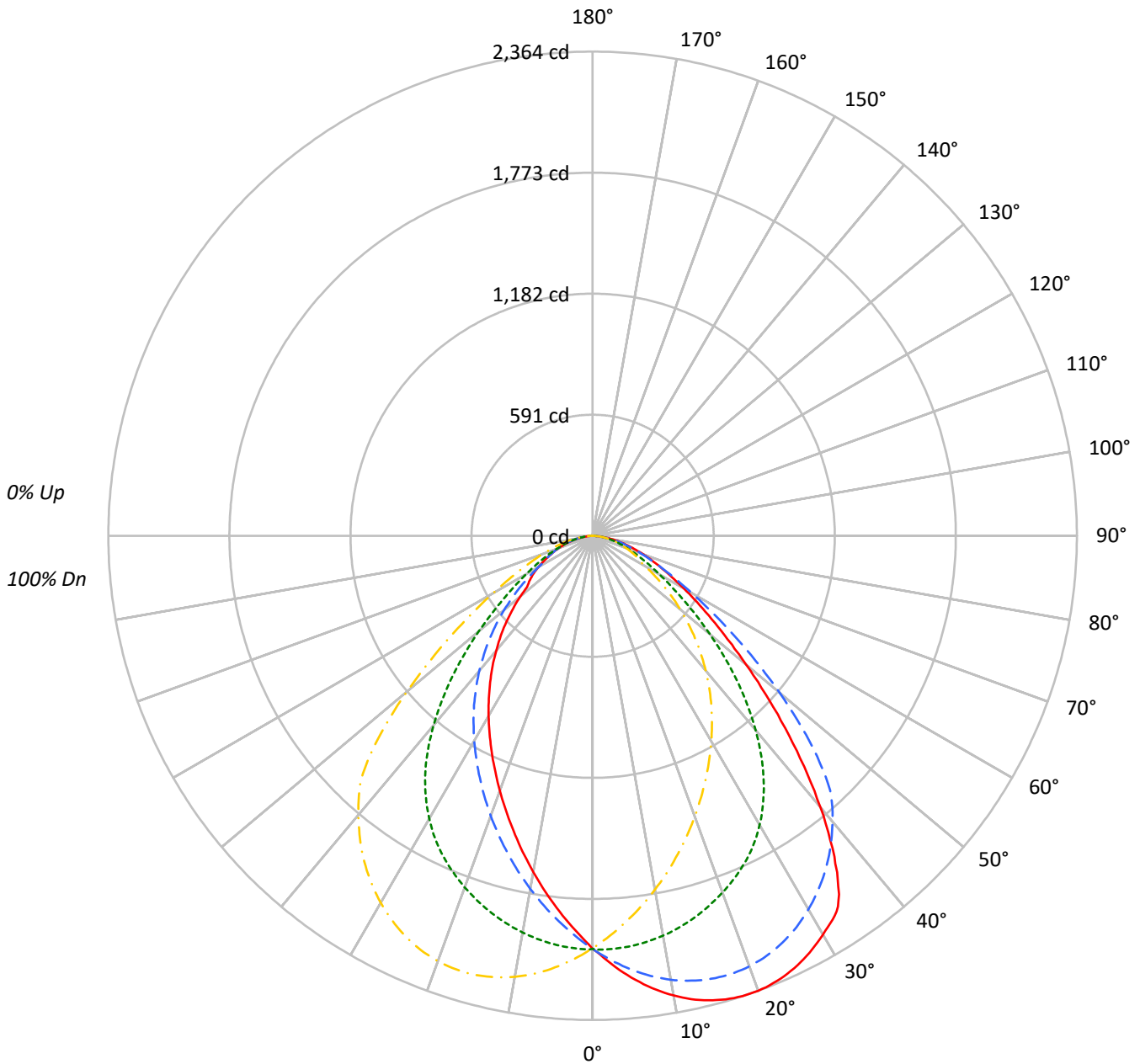
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

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

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100						
	1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87						
	2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	83	80	78	76	76						
	3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66						
	4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58	58						
	5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51	51						
	6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	45	45						
	7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41	41						
	8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37	37						
	9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33	33						
	10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31	31						

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

	0°	90°	180°	270°
0°	86835	86835	86835	86835
5°	93580	87024	79642	86691
10°	99642	86648	72885	86001
15°	104616	85953	66501	84972
20°	108307	84934	60664	83684
25°	110657	83559	55350	82016
30°	111807	81048	50482	79313
35°	109906	76508	45823	74921
40°	97274	69548	41148	67851
45°	81026	60427	36242	58680
50°	65543	50096	30772	48522
55°	53086	40085	27947	39154
60°	44296	32507	26247	32180
65°	37685	27059	23931	27252
70°	32768	23188	22043	23616
75°	28580	20062	19979	20778
80°	23481	17208	16736	18026
85°	15117	13239	9238	14672

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 95567 cd/sqm



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.5	4.5
10°-20°	540.8	12.7
20°-30°	802.2	18.9
30°-40°	916.8	21.6
40°-50°	797.0	18.8
50°-60°	518.5	12.2
60°-70°	295.5	7.0
70°-80°	148.0	3.5
80°-90°	35.1	0.8
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°	1533.5	36.1
0°-40°	2450.3	57.7
0°-60°	3765.9	88.7
0°-90°	4244.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4244.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2017	2017	2017	2017	2017	
5°	2165	2014	1843	2006	2165	210
15°	2347	1928	1492	1906	2347	664
25°	2329	1759	1165	1726	2329	1073
35°	2091	1456	872	1425	2091	1283
45°	1331	992	595	964	1331	1028
55°	707	534	372	522	707	644
65°	370	266	235	268	370	371
75°	172	121	120	125	172	182
85°	31	27	19	30	31	40
90°	0	0	0	0	0	



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8
0.5°	2029.3	2029.3	2029.3	2026.9	2021.2	2016.8	2002.0	1996.3	1996.3	1998.7	2004.9
1°	2045.1	2044.1	2040.3	2033.1	2021.2	2010.6	1990.5	1981.0	1979.5	1982.9	1992.9
1.5°	2061.3	2059.4	2051.8	2039.3	2021.2	2003.9	1978.1	1965.6	1962.3	1967.1	1980.5
2°	2077.1	2074.3	2062.8	2045.1	2020.7	1997.2	1966.1	1949.9	1945.6	1951.8	1968.0
2.5°	2092.4	2088.1	2074.3	2050.8	2020.2	1990.0	1954.2	1934.1	1928.3	1935.5	1955.1
3°	2107.8	2102.5	2084.8	2056.1	2019.2	1983.4	1941.2	1918.3	1911.6	1919.7	1942.2
3.5°	2122.6	2116.4	2094.8	2061.3	2018.3	1976.2	1928.8	1902.5	1894.4	1903.4	1929.3
4°	2136.9	2129.8	2105.4	2066.1	2016.4	1968.0	1915.9	1886.7	1877.6	1887.7	1916.4
4.5°	2151.3	2142.7	2114.9	2070.9	2014.9	1960.9	1903.4	1869.9	1859.9	1870.9	1903.4
5°	2165.2	2155.6	2124.5	2075.7	2013.5	1952.7	1890.5	1854.2	1842.7	1854.6	1890.0
5.5°	2178.1	2168.0	2134.1	2079.5	2011.1	1944.6	1877.1	1837.9	1825.4	1838.4	1876.6
6°	2191.0	2180.0	2142.7	2083.4	2008.7	1936.0	1863.7	1821.6	1808.2	1821.6	1862.8
6.5°	2203.9	2191.5	2151.3	2087.2	2006.3	1927.8	1850.8	1805.4	1790.5	1805.4	1849.4
7°	2215.9	2203.0	2159.4	2090.5	2003.4	1919.7	1837.4	1788.6	1772.8	1788.6	1835.5
7.5°	2227.4	2213.5	2167.6	2093.9	2000.6	1910.1	1823.5	1771.9	1755.1	1771.9	1821.6
8°	2238.4	2224.0	2174.7	2096.8	1997.2	1901.5	1809.7	1755.6	1737.9	1755.1	1807.7
8.5°	2249.4	2233.6	2181.9	2099.1	1993.9	1892.0	1796.3	1738.8	1720.2	1738.8	1793.4
9°	2259.9	2243.7	2188.6	2101.1	1990.0	1882.9	1782.4	1722.6	1702.0	1721.6	1779.5
9.5°	2270.0	2252.7	2194.8	2103.0	1986.2	1873.8	1768.5	1705.3	1684.8	1704.9	1765.2
10°	2279.1	2261.4	2201.1	2104.9	1981.9	1863.7	1754.2	1688.6	1667.1	1688.1	1750.8
10.5°	2288.2	2270.0	2206.8	2106.3	1978.1	1854.2	1739.8	1671.9	1649.8	1671.4	1736.4
11°	2296.8	2277.6	2211.6	2107.3	1973.3	1844.1	1725.4	1655.1	1632.1	1654.1	1722.1
11.5°	2304.9	2284.8	2216.9	2108.2	1968.5	1833.6	1711.1	1638.8	1614.0	1637.9	1707.7
12°	2312.6	2292.0	2221.2	2108.2	1963.3	1823.1	1696.7	1621.1	1596.7	1620.7	1692.9
12.5°	2319.7	2298.2	2225.0	2108.7	1958.0	1812.5	1682.4	1604.9	1579.5	1603.9	1678.6
13°	2326.0	2304.4	2228.8	2108.2	1952.7	1802.5	1667.5	1588.1	1561.8	1586.7	1663.7
13.5°	2332.2	2309.7	2232.2	2107.8	1946.5	1791.5	1652.7	1571.4	1544.1	1570.4	1648.9
14°	2337.4	2314.9	2235.0	2107.3	1940.8	1780.5	1638.4	1554.6	1526.9	1553.2	1634.1
14.5°	2342.7	2319.3	2237.4	2106.3	1934.5	1769.5	1623.0	1537.4	1509.2	1536.4	1619.2
15°	2347.0	2323.6	2239.3	2104.9	1928.3	1758.0	1608.2	1520.6	1491.9	1519.7	1604.4
15.5°	2351.3	2326.9	2241.3	2103.0	1921.6	1747.0	1593.4	1504.4	1474.7	1503.4	1589.1
16°	2354.7	2330.3	2242.2	2101.1	1914.9	1735.5	1578.5	1487.6	1457.5	1486.2	1574.2
16.5°	2357.5	2332.7	2243.2	2098.7	1908.2	1724.0	1563.7	1470.9	1440.7	1469.9	1559.4
17°	2359.9	2334.6	2243.7	2095.8	1900.6	1712.0	1548.4	1454.1	1423.5	1453.2	1544.6
17.5°	2361.8	2336.0	2243.7	2092.9	1893.4	1700.6	1533.6	1437.9	1406.8	1436.4	1529.3
18°	2363.3	2337.0	2243.2	2090.1	1885.7	1689.1	1518.7	1421.1	1389.5	1420.2	1513.9
18.5°	2364.2	2337.9	2242.2	2086.2	1878.1	1676.6	1503.4	1404.9	1373.3	1403.9	1499.1
19°	2364.2	2337.9	2240.8	2082.4	1869.9	1664.2	1488.6	1388.6	1357.0	1387.6	1484.3
19.5°	2364.2	2337.4	2239.3	2078.6	1862.3	1652.2	1473.3	1372.3	1340.3	1371.4	1469.5
20°	2363.8	2336.5	2237.0	2073.8	1853.7	1640.3	1458.0	1356.0	1324.0	1355.1	1454.1
20.5°	2362.3	2335.0	2234.6	2069.5	1845.5	1627.8	1443.1	1339.8	1307.2	1339.3	1438.8
21°	2360.9	2333.1	2231.2	2064.2	1836.5	1614.9	1427.8	1324.0	1291.5	1323.0	1424.0



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2352.3	2324.0	2219.7	2047.5	1809.2	1577.1	1382.8	1276.6	1243.1	1276.1	1378.5
23°	2348.9	2320.2	2214.9	2041.2	1800.1	1564.2	1367.5	1260.8	1227.3	1260.3	1363.7
23.5°	2344.6	2315.9	2209.7	2035.0	1790.0	1551.3	1352.7	1245.0	1211.5	1245.0	1348.9
24°	2339.8	2310.6	2204.4	2027.9	1780.0	1537.9	1337.4	1229.7	1196.2	1229.2	1333.6
24.5°	2334.6	2305.4	2198.2	2021.2	1769.9	1525.0	1322.6	1214.4	1180.9	1213.5	1318.7
25°	2329.3	2299.6	2192.0	2013.5	1758.9	1511.1	1307.7	1198.6	1165.1	1198.1	1303.4
25.5°	2323.1	2292.9	2185.3	2005.8	1748.4	1498.2	1292.4	1183.3	1149.8	1183.3	1289.1
26°	2316.4	2286.7	2178.1	1997.2	1736.9	1484.3	1277.6	1168.0	1134.5	1167.5	1273.7
26.5°	2309.2	2279.1	2170.4	1989.1	1725.4	1470.4	1262.7	1153.2	1119.2	1152.7	1258.9
27°	2302.0	2271.9	2162.8	1980.5	1713.5	1456.5	1247.9	1137.9	1104.4	1137.4	1244.1
27.5°	2294.4	2263.7	2154.2	1970.9	1700.6	1442.7	1232.6	1122.5	1089.5	1122.5	1229.7
28°	2285.8	2255.6	2145.1	1960.9	1687.2	1428.3	1217.8	1107.2	1074.2	1107.2	1214.9
28.5°	2277.1	2246.5	2136.5	1950.8	1674.2	1413.5	1203.4	1092.4	1059.4	1092.4	1200.1
29°	2268.1	2237.0	2126.9	1939.8	1659.9	1398.6	1188.1	1077.6	1045.0	1077.6	1185.2
29.5°	2258.5	2227.4	2116.9	1928.3	1645.5	1383.8	1173.7	1062.7	1030.2	1063.2	1170.4
30°	2248.9	2217.3	2106.8	1916.4	1630.2	1368.0	1158.4	1048.4	1015.4	1047.9	1155.6
30.5°	2238.9	2206.8	2096.3	1903.9	1614.9	1352.2	1143.6	1033.1	1000.5	1033.5	1141.2
31°	2229.3	2196.3	2085.3	1891.0	1599.1	1336.9	1128.8	1018.2	986.2	1019.2	1126.4
31.5°	2219.7	2185.3	2073.8	1876.6	1582.9	1320.6	1113.9	1004.4	971.8	1004.4	1111.5
32°	2210.2	2173.8	2062.3	1862.3	1566.1	1304.4	1099.1	989.5	957.5	990.0	1096.7
32.5°	2198.7	2162.8	2049.9	1847.0	1548.4	1288.1	1084.3	974.7	943.1	975.6	1082.3
33°	2185.8	2151.3	2037.9	1831.2	1530.2	1271.4	1069.4	960.8	928.8	961.3	1067.5
33.5°	2170.0	2140.3	2025.5	1814.9	1512.5	1254.6	1054.6	946.5	914.4	947.4	1052.7
34°	2145.6	2128.8	2012.5	1798.2	1493.9	1237.4	1039.3	932.1	900.5	932.6	1037.8
34.5°	2124.0	2116.4	1998.7	1780.0	1475.2	1220.2	1024.5	917.3	886.2	918.7	1023.0
35°	2091.0	2101.5	1984.8	1761.3	1455.6	1202.5	1009.6	903.4	871.8	904.4	1008.7
35.5°	2060.4	2084.8	1970.4	1742.2	1436.0	1185.2	995.3	889.0	857.9	890.5	993.8
36°	2030.7	2061.3	1955.6	1722.1	1415.4	1167.5	980.0	875.2	844.1	876.6	979.0
36.5°	1992.4	2038.4	1940.3	1702.0	1394.3	1149.8	964.6	860.8	829.7	862.2	963.7
37°	1961.3	2008.2	1924.5	1680.9	1373.3	1131.6	949.8	846.5	815.8	847.9	949.3
37.5°	1923.5	1976.2	1908.2	1658.5	1351.7	1113.5	934.5	832.6	802.0	834.0	934.0
38°	1884.3	1949.4	1892.0	1635.5	1328.8	1095.3	919.7	818.2	788.1	820.1	919.2
38.5°	1848.9	1911.6	1874.7	1612.5	1307.2	1077.1	904.4	804.3	774.2	806.3	904.4
39°	1806.8	1879.5	1858.0	1589.1	1284.3	1058.9	889.0	790.5	759.8	792.4	890.0
39.5°	1770.4	1845.1	1839.8	1564.2	1261.3	1040.2	873.7	776.1	746.0	778.5	874.7
40°	1730.7	1805.4	1821.6	1538.4	1237.4	1021.1	858.4	762.2	732.1	764.6	859.4
40.5°	1686.7	1773.8	1803.0	1512.5	1213.9	1002.4	843.6	748.4	718.7	750.8	844.5
41°	1650.8	1733.1	1785.7	1486.2	1190.0	983.8	827.8	734.5	704.8	736.9	830.2
41.5°	1607.3	1694.8	1766.6	1458.4	1165.6	964.6	812.5	720.6	691.4	723.5	814.4
42°	1568.0	1658.9	1745.5	1430.2	1141.2	946.0	797.6	706.7	677.5	709.6	799.6
42.5°	1528.8	1617.3	1723.1	1402.5	1116.8	926.8	782.8	693.3	663.7	695.7	785.2
43°	1484.3	1582.4	1699.6	1373.8	1091.9	908.2	767.5	679.5	649.8	682.3	770.4
43.5°	1449.8	1542.7	1669.0	1344.1	1067.0	889.0	751.7	665.6	636.4	668.5	755.1



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL4050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1330.7	1424.0	1569.5	1255.1	992.4	831.6	706.7	624.4	595.2	627.8	711.0
45.5°	1288.6	1388.6	1536.4	1224.5	967.0	813.0	691.9	610.6	581.8	614.4	696.2
46°	1256.5	1350.3	1498.6	1194.3	942.6	793.8	676.6	597.2	568.0	600.5	681.4
46.5°	1215.4	1309.6	1460.4	1163.2	917.7	775.2	661.8	583.3	554.1	587.1	666.1
47°	1181.4	1276.6	1425.0	1132.1	892.9	756.5	646.4	569.4	540.7	573.2	651.7
47.5°	1146.5	1235.5	1383.8	1101.5	868.0	737.8	631.6	556.0	527.3	560.3	636.9
48°	1107.2	1203.4	1346.5	1070.9	843.6	719.7	617.3	542.1	513.9	546.4	622.0
48.5°	1079.0	1167.0	1308.2	1039.8	819.2	700.5	602.4	528.7	500.5	533.0	607.2
49°	1039.3	1129.7	1267.0	1009.1	794.8	682.3	587.1	514.9	486.6	519.6	592.9
49.5°	1012.5	1099.1	1231.2	978.0	771.3	664.1	572.8	501.5	473.2	506.2	578.0
50°	978.5	1059.9	1191.0	947.4	747.9	646.4	557.9	488.1	459.4	492.8	563.7
50.5°	947.4	1032.1	1152.7	916.8	723.5	628.3	543.6	474.2	446.0	479.4	549.3
51°	920.1	995.7	1115.4	886.2	700.5	610.6	529.2	461.3	433.0	466.1	534.5
51.5°	885.2	967.0	1075.7	856.5	678.5	593.8	514.9	447.4	419.2	452.7	520.6
52°	863.2	936.9	1041.7	826.8	656.5	576.1	500.5	434.0	406.7	439.7	506.2
52.5°	830.7	904.4	1004.4	797.6	634.0	559.4	487.1	420.6	400.5	426.3	492.4
53°	808.2	878.5	968.9	768.9	613.4	542.6	472.8	410.1	394.8	415.3	478.5
53.5°	781.9	844.1	934.0	740.7	592.4	525.9	458.9	399.5	389.0	404.3	464.6
54°	755.5	821.1	898.1	713.0	572.8	510.1	445.5	389.5	383.8	393.3	451.2
54.5°	734.0	790.0	867.0	686.2	553.1	493.8	432.1	379.0	378.0	382.3	438.3
55°	707.2	766.1	832.6	660.3	534.0	478.5	418.7	368.9	372.3	371.3	424.9
55.5°	689.0	740.2	802.9	635.4	515.8	463.7	405.8	363.2	366.0	365.6	412.0
56°	662.2	713.9	770.4	611.0	497.6	448.3	392.8	357.4	359.8	360.3	399.5
56.5°	645.5	691.9	741.7	587.6	480.9	434.0	379.4	351.2	353.6	354.1	387.1
57°	623.0	664.6	713.0	565.1	464.1	419.6	366.5	345.5	346.9	348.3	374.7
57.5°	605.3	645.5	683.8	543.1	448.3	406.7	355.0	339.3	340.2	342.1	361.7
58°	586.2	619.6	657.4	522.5	433.0	393.3	342.6	333.0	333.5	335.9	350.3
58.5°	567.0	601.9	630.7	502.4	418.2	379.9	330.6	326.8	326.3	329.7	337.8
59°	550.3	578.0	606.7	483.8	404.3	367.0	319.2	320.6	319.2	323.5	326.3
59.5°	531.1	561.3	581.4	465.1	390.9	355.0	307.7	313.9	312.0	316.8	315.3
60°	514.4	539.7	558.9	447.9	377.5	343.6	296.7	307.7	304.8	310.1	304.3
60.5°	497.2	523.5	535.9	431.1	363.7	332.1	286.1	300.5	297.6	303.4	293.8
61°	480.9	503.4	515.3	414.9	351.2	321.1	276.6	294.3	290.4	296.7	283.7
61.5°	465.6	487.1	493.8	399.5	339.3	310.1	270.3	287.1	282.8	290.0	274.7
62°	450.7	469.4	475.6	384.7	327.8	300.0	265.1	280.4	275.6	282.8	268.0
62.5°	435.4	454.1	455.5	370.8	316.3	290.0	259.3	273.7	268.4	276.1	262.7
63°	422.0	437.3	438.3	357.4	305.8	280.4	253.6	266.5	261.3	268.9	257.0
63.5°	407.7	423.0	420.6	344.0	295.2	270.8	248.3	259.8	254.6	262.2	251.7
64°	395.2	407.2	404.3	331.6	285.2	261.7	242.6	253.1	247.9	255.0	246.4
64.5°	381.4	393.8	388.1	319.6	275.1	253.1	236.9	246.4	241.2	248.8	240.7
65°	369.9	379.4	373.2	308.1	265.6	244.5	231.1	239.7	234.9	242.1	235.4
65.5°	357.4	367.0	358.9	297.6	256.5	236.4	225.8	233.5	228.7	235.4	229.7
66°	345.9	353.1	345.0	286.6	247.4	228.2	219.6	227.3	222.5	228.7	223.9





TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	311.5	317.2	305.8	256.5	222.0	205.8	202.4	208.6	204.3	210.1	206.7
68°	301.0	305.3	293.3	246.9	213.9	198.6	196.7	202.9	198.6	204.3	201.0
68.5°	290.4	294.3	282.3	237.8	206.2	191.9	190.9	197.1	192.4	198.1	195.2
69°	279.9	283.7	270.3	228.7	199.1	185.2	185.2	190.9	186.6	192.4	189.0
69.5°	269.9	272.7	259.8	220.1	190.9	179.0	179.4	185.2	180.9	186.1	183.3
70°	260.3	262.7	249.8	212.0	184.2	172.3	173.7	179.4	175.1	180.4	177.5
70.5°	250.3	252.2	239.2	203.4	177.0	166.5	168.4	173.7	169.4	174.6	172.3
71°	240.7	242.6	229.7	195.7	170.3	160.3	162.7	168.0	164.1	168.9	166.5
71.5°	231.6	233.0	220.1	188.0	163.6	154.6	156.9	162.7	158.4	163.2	160.8
72°	222.5	223.5	210.5	180.4	156.9	148.8	151.7	156.9	152.6	157.4	155.0
72.5°	213.4	214.4	201.4	173.2	150.7	143.1	146.4	151.2	147.4	151.7	149.8
73°	204.3	204.8	192.8	166.5	144.5	137.8	141.2	145.5	141.6	145.9	144.5
73.5°	195.7	196.2	184.2	159.3	138.3	133.0	135.9	140.2	136.4	140.7	138.8
74°	187.1	187.6	175.6	152.6	132.1	127.8	130.6	134.5	131.1	134.9	133.5
74.5°	178.5	179.0	168.0	145.9	126.3	123.5	125.4	129.2	125.4	129.7	128.2
75°	171.8	171.8	160.3	139.2	120.6	119.1	120.1	123.5	120.1	123.9	123.0
75.5°	163.6	163.6	152.6	133.0	115.3	114.8	114.8	118.2	114.8	118.7	117.7
76°	155.5	155.5	145.0	126.8	109.6	110.5	110.1	112.4	109.6	113.4	112.4
76.5°	146.9	147.4	137.3	120.6	104.3	105.7	104.8	107.2	104.3	107.7	107.2
77°	138.8	139.2	129.7	114.4	99.0	101.4	99.5	101.9	99.0	102.4	101.9
77.5°	131.6	132.1	122.5	108.1	93.8	96.7	94.3	96.7	93.8	97.1	96.7
78°	123.9	124.4	115.8	102.4	88.5	92.3	89.5	90.9	88.0	91.9	91.9
78.5°	116.3	117.2	108.6	96.7	83.7	87.6	84.2	85.7	82.8	86.6	86.6
79°	109.1	109.6	101.9	90.9	79.0	82.8	79.4	80.4	77.5	80.9	81.3
79.5°	101.9	102.9	95.2	85.7	74.2	78.5	74.6	75.1	72.7	75.6	76.1
80°	94.7	95.7	88.5	79.9	69.4	73.7	69.9	69.9	67.5	70.3	71.3
80.5°	88.0	89.0	82.3	74.6	64.6	69.4	65.1	64.1	62.2	65.1	66.5
81°	81.3	82.3	76.1	69.4	60.3	64.6	60.3	59.3	57.4	59.8	61.2
81.5°	74.6	75.6	69.9	64.1	56.0	60.3	55.5	53.6	52.2	54.5	56.5
82°	67.9	68.9	64.1	59.3	51.2	56.0	50.7	48.8	47.4	49.8	52.2
82.5°	61.7	62.7	58.4	54.5	47.4	51.7	46.4	44.0	42.1	45.0	47.4
83°	55.5	56.5	53.1	49.8	43.1	47.4	42.1	39.2	37.3	39.7	43.5
83.5°	48.8	49.8	47.4	45.0	39.2	43.1	37.8	34.9	32.5	34.9	39.2
84°	42.6	43.5	42.6	40.2	34.9	38.8	34.0	30.1	27.8	30.1	35.4
84.5°	36.4	37.8	37.8	35.9	31.1	34.5	29.7	25.4	23.0	25.4	31.1
85°	30.6	32.1	33.5	31.6	26.8	30.1	25.4	21.5	18.7	21.1	27.3
85.5°	24.4	26.3	28.7	27.3	23.0	25.8	21.5	18.2	15.8	17.7	23.4
86°	20.1	22.0	24.4	23.0	19.6	22.0	17.7	15.3	13.4	14.8	19.6
86.5°	16.7	18.2	20.1	19.1	15.8	17.7	13.9	12.4	11.0	12.0	16.3
87°	13.9	14.8	16.3	14.8	12.4	13.9	10.5	9.6	8.1	9.6	12.9
87.5°	10.5	11.0	12.4	11.0	9.1	10.0	6.7	6.2	5.7	6.7	9.1
88°	7.7	7.7	8.6	7.2	5.7	6.2	3.3	3.3	3.3	3.8	5.7
88.5°	4.3	4.3	4.8	3.3	2.4	2.9	1.0	1.0	1.4	1.4	2.4



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2016.8	2016.8	2016.8	2016.8	2016.8	2016.8
0.5°	2013.5	2020.7	2028.3	2025.0	2026.9	2029.3
1°	2006.3	2019.7	2033.6	2036.5	2041.2	2045.1
1.5°	1999.1	2018.8	2039.3	2047.0	2056.1	2061.3
2°	1991.5	2017.8	2044.1	2057.5	2070.4	2077.1
2.5°	1984.3	2016.4	2048.9	2068.0	2084.3	2092.4
3°	1976.2	2014.5	2053.2	2078.1	2098.2	2107.8
3.5°	1968.0	2012.5	2057.5	2088.1	2112.1	2122.6
4°	1959.9	2010.6	2061.3	2097.7	2125.0	2136.9
4.5°	1951.3	2008.2	2065.7	2106.8	2137.9	2151.3
5°	1942.7	2005.8	2069.0	2115.9	2150.3	2165.2
5.5°	1934.1	2002.5	2072.4	2124.5	2162.8	2178.1
6°	1925.0	1999.6	2075.2	2133.1	2174.3	2191.0
6.5°	1915.9	1996.3	2077.6	2140.8	2185.3	2203.9
7°	1906.8	1992.9	2080.5	2148.4	2196.3	2215.9
7.5°	1897.2	1989.1	2082.4	2155.6	2206.8	2227.4
8°	1887.7	1985.3	2084.3	2162.8	2216.9	2238.4
8.5°	1878.1	1981.0	2085.7	2169.0	2226.4	2249.4
9°	1868.0	1976.7	2087.2	2175.2	2235.5	2259.9
9.5°	1858.0	1971.9	2088.1	2181.0	2244.6	2270.0
10°	1847.9	1967.1	2088.6	2186.7	2252.7	2279.1
10.5°	1837.4	1961.8	2089.1	2191.5	2260.4	2288.2
11°	1826.9	1956.6	2089.1	2196.3	2268.1	2296.8
11.5°	1816.4	1951.3	2088.6	2200.1	2275.2	2304.9
12°	1805.8	1945.1	2088.1	2203.9	2281.5	2312.6
12.5°	1794.8	1939.3	2087.7	2207.8	2287.7	2319.7
13°	1783.8	1933.1	2086.2	2210.6	2293.4	2326.0
13.5°	1772.3	1926.9	2084.8	2213.5	2298.7	2332.2
14°	1760.9	1920.2	2082.9	2215.9	2303.0	2337.4
14.5°	1749.4	1913.5	2081.0	2217.3	2307.3	2342.7
15°	1737.9	1906.3	2078.6	2219.2	2311.1	2347.0
15.5°	1726.4	1899.1	2076.2	2220.2	2314.0	2351.3
16°	1714.9	1892.0	2072.8	2220.7	2316.9	2354.7
16.5°	1703.0	1884.3	2069.5	2220.7	2318.8	2357.5
17°	1690.5	1876.6	2066.1	2220.2	2320.2	2359.9
17.5°	1678.6	1868.5	2062.3	2219.7	2321.6	2361.8
18°	1666.6	1860.4	2058.0	2218.8	2322.1	2363.3
18.5°	1654.1	1852.2	2053.2	2217.3	2322.1	2364.2
19°	1642.2	1843.6	2048.9	2214.9	2322.1	2364.2
19.5°	1629.3	1835.0	2043.6	2212.5	2321.2	2364.2
20°	1616.8	1826.4	2038.4	2210.2	2319.7	2363.8
20.5°	1604.4	1817.3	2032.6	2206.8	2317.8	2362.3
21°	1591.5	1807.7	2026.9	2203.0	2315.4	2360.9

TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1552.7	1779.0	2007.3	2189.6	2305.4	2352.3
23°	1539.8	1769.0	2000.1	2184.3	2301.1	2348.9
23.5°	1526.4	1758.9	1992.4	2178.6	2296.3	2344.6
24°	1513.5	1748.4	1984.8	2172.4	2291.0	2339.8
24.5°	1499.6	1737.4	1976.7	2166.1	2285.3	2334.6
25°	1486.2	1726.4	1968.5	2159.0	2279.1	2329.3
25.5°	1472.8	1714.9	1959.4	2151.8	2272.4	2323.1
26°	1458.9	1703.4	1950.8	2143.6	2265.2	2316.4
26.5°	1445.0	1691.5	1941.2	2136.0	2257.5	2309.2
27°	1431.2	1679.0	1931.7	2127.4	2250.3	2302.0
27.5°	1416.8	1665.6	1921.1	2118.3	2241.7	2294.4
28°	1402.0	1652.7	1910.6	2109.2	2233.1	2285.8
28.5°	1387.6	1638.8	1899.6	2099.6	2223.6	2277.1
29°	1372.8	1624.5	1887.7	2089.6	2214.5	2268.1
29.5°	1357.5	1610.1	1875.7	2079.5	2204.4	2258.5
30°	1341.7	1595.3	1862.8	2068.5	2194.4	2248.9
30.5°	1326.4	1579.5	1849.4	2057.5	2183.4	2238.9
31°	1310.6	1564.2	1835.5	2046.0	2172.4	2229.3
31.5°	1294.8	1547.9	1821.1	2034.5	2161.4	2219.7
32°	1279.0	1531.7	1806.3	2022.1	2149.4	2210.2
32.5°	1262.3	1514.4	1790.5	2009.7	2137.9	2198.7
33°	1246.0	1497.7	1774.7	1997.2	2125.9	2185.8
33.5°	1229.7	1480.5	1758.0	1984.3	2114.0	2170.0
34°	1213.0	1462.3	1740.8	1970.9	2103.0	2145.6
34.5°	1195.8	1444.1	1723.5	1957.0	2091.0	2124.0
35°	1179.0	1425.4	1705.3	1942.7	2076.7	2091.0
35.5°	1162.3	1405.3	1686.2	1928.3	2061.3	2060.4
36°	1144.6	1385.7	1667.1	1913.0	2040.8	2030.7
36.5°	1127.3	1364.7	1647.4	1897.7	2015.9	1992.4
37°	1110.1	1343.6	1626.4	1881.9	1992.0	1961.3
37.5°	1092.4	1321.6	1604.9	1865.6	1958.5	1923.5
38°	1074.7	1299.1	1581.9	1848.9	1930.2	1884.3
38.5°	1055.6	1276.6	1558.0	1831.2	1898.2	1848.9
39°	1037.4	1253.7	1534.0	1814.4	1861.3	1806.8
39.5°	1019.2	1230.7	1508.7	1797.2	1832.6	1770.4
40°	1000.5	1207.2	1481.9	1779.0	1794.8	1730.7
40.5°	981.9	1183.3	1455.1	1759.9	1758.5	1686.7
41°	962.7	1158.9	1427.8	1742.2	1725.0	1650.8
41.5°	944.1	1135.9	1400.5	1724.0	1685.3	1607.3
42°	925.4	1111.5	1372.3	1704.9	1649.8	1568.0
42.5°	906.3	1086.7	1344.1	1685.3	1612.0	1528.8
43°	887.6	1062.3	1314.9	1664.2	1571.8	1484.3
43.5°	868.5	1037.8	1285.7	1641.2	1537.9	1449.8

TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	812.0	963.7	1196.2	1554.6	1424.0	1330.7
45.5°	792.9	939.3	1166.6	1518.3	1382.4	1288.6
46°	773.7	914.9	1135.9	1484.8	1349.3	1256.5
46.5°	755.1	890.5	1105.8	1449.8	1310.6	1215.4
47°	736.9	866.5	1075.7	1410.1	1275.2	1181.4
47.5°	718.7	841.7	1045.0	1374.7	1239.8	1146.5
48°	700.0	817.7	1014.9	1336.0	1200.1	1107.2
48.5°	681.9	794.3	985.2	1296.2	1170.4	1079.0
49°	664.1	770.4	955.1	1260.3	1132.1	1039.3
49.5°	646.9	747.4	924.9	1219.7	1101.5	1012.5
50°	628.7	724.4	895.3	1181.9	1069.0	978.5
50.5°	610.6	701.5	865.6	1145.0	1032.6	947.4
51°	593.8	679.5	836.4	1106.3	1004.8	920.1
51.5°	577.1	657.4	808.2	1071.3	968.5	885.2
52°	560.3	636.9	780.4	1033.5	943.1	863.2
52.5°	543.1	616.3	752.7	997.7	912.0	830.7
53°	527.3	595.7	724.9	964.2	882.3	808.2
53.5°	511.5	576.1	699.6	927.8	855.5	781.9
54°	495.7	557.4	673.7	895.7	823.5	755.5
54.5°	480.9	539.7	649.3	861.8	801.0	734.0
55°	465.6	521.6	625.4	830.7	769.9	707.2
55.5°	451.2	504.3	602.9	800.0	748.4	689.0
56°	437.3	487.6	580.9	768.5	720.6	662.2
56.5°	423.5	472.3	559.8	741.2	698.1	645.5
57°	411.0	456.5	539.3	712.0	674.7	623.0
57.5°	398.1	441.2	520.1	685.7	650.3	605.3
58°	385.7	426.8	501.5	657.9	630.2	586.2
58.5°	373.2	412.9	483.3	633.5	606.2	567.0
59°	360.3	399.5	466.5	609.1	588.5	550.3
59.5°	348.8	386.1	450.3	585.2	566.1	531.1
60°	337.8	373.7	434.5	562.7	549.8	514.4
60.5°	327.3	361.3	419.2	540.2	528.3	497.2
61°	316.8	349.3	404.3	520.1	512.9	480.9
61.5°	306.7	338.3	390.4	499.1	493.3	465.6
62°	296.7	327.3	377.1	480.9	478.5	450.7
62.5°	287.1	316.3	364.1	462.2	460.3	435.4
63°	278.0	305.8	351.7	444.5	446.0	422.0
63.5°	268.9	295.7	339.3	427.3	429.7	407.7
64°	260.3	286.1	327.3	411.5	415.8	395.2
64.5°	252.2	276.6	316.3	395.2	400.0	381.4
65°	244.0	267.5	305.3	380.4	387.6	369.9
65.5°	235.9	258.4	294.8	366.0	372.7	357.4
66°	228.2	249.8	284.2	352.2	361.3	345.9



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	206.2	224.9	255.5	313.9	323.5	311.5
68°	199.5	216.8	245.9	301.9	312.5	301.0
68.5°	192.8	209.1	237.3	290.4	301.0	290.4
69°	186.1	201.9	228.7	279.4	290.0	279.9
69.5°	179.9	194.7	220.1	268.4	279.4	269.9
70°	173.7	187.6	212.0	257.9	268.4	260.3
70.5°	167.5	180.4	203.8	247.9	258.4	250.3
71°	161.7	173.2	196.2	237.8	248.3	240.7
71.5°	156.0	167.0	188.5	228.2	238.8	231.6
72°	150.2	160.8	180.9	218.7	229.2	222.5
72.5°	144.5	154.6	173.7	210.1	219.6	213.4
73°	139.2	148.8	167.0	201.0	211.0	204.3
73.5°	134.0	142.6	160.3	191.9	201.4	195.7
74°	129.2	136.4	153.6	183.7	192.8	187.1
74.5°	123.9	130.6	146.9	175.1	184.2	178.5
75°	119.6	124.9	140.2	167.5	175.6	171.8
75.5°	115.3	119.1	134.0	159.8	168.0	163.6
76°	111.0	113.4	127.3	152.2	159.8	155.5
76.5°	106.2	108.1	121.5	144.5	152.2	146.9
77°	101.9	102.9	115.3	136.8	144.0	138.8
77.5°	97.1	97.6	109.6	129.7	136.4	131.6
78°	92.3	92.3	103.8	122.5	128.7	123.9
78.5°	88.0	87.6	97.6	115.3	121.5	116.3
79°	83.3	82.3	92.3	108.1	113.9	109.1
79.5°	78.5	77.5	86.6	101.4	106.7	101.9
80°	74.2	72.7	81.3	94.7	99.5	94.7
80.5°	69.4	67.9	76.1	88.5	92.8	88.0
81°	64.6	63.6	70.8	82.3	85.7	81.3
81.5°	60.3	58.9	65.6	76.1	79.0	74.6
82°	56.0	54.5	60.3	69.9	72.3	67.9
82.5°	51.7	50.2	55.5	64.1	66.0	61.7
83°	47.4	45.9	50.7	58.4	59.8	55.5
83.5°	43.1	41.6	45.9	53.1	53.1	48.8
84°	38.8	37.8	41.2	47.8	46.9	42.6
84.5°	34.5	33.5	36.8	42.6	41.2	36.4
85°	30.1	29.7	32.1	37.8	35.9	30.6
85.5°	25.8	25.8	27.8	33.0	30.6	24.4
86°	21.5	22.0	23.4	28.7	25.8	20.1
86.5°	17.7	18.2	19.1	23.9	21.5	16.7
87°	13.9	14.4	15.3	19.6	17.7	13.9
87.5°	10.0	11.0	11.5	15.8	13.9	10.5
88°	6.2	7.2	7.7	12.0	10.0	7.7
88.5°	2.9	3.8	3.3	8.1	6.7	4.3



TEST NUMBER: P776733

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQH-HCD6TSQLWW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

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



Report Generated By 670245859 / DESKTOP-T8S5UU9



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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report





21.5°	2358.5	2330.3	2227.9	2059.0	1827.8	1602.0	1413.0	1308.2	1275.2	1307.2	1408.7
22°	2355.6	2327.4	2224.0	2053.2	1818.7	1590.0	1397.7	1292.4	1259.4	1291.5	1393.8



44°	1406.8	1501.0	1639.3	1315.4	1042.2	869.9	736.9	651.7	623.0	654.6	740.2
44.5°	1369.4	1465.6	1606.3	1284.8	1017.3	850.8	722.0	637.8	609.1	641.2	725.4



66.5°	334.0	341.6	331.1	276.1	238.8	220.6	213.9	221.1	216.3	222.5	218.2
67°	323.0	328.7	318.2	266.0	230.2	212.9	208.1	214.8	210.1	216.3	212.5



89°	1.4	1.0	1.0	1.0	0.5	0.5	0.0	0.5	0.0	0.5	0.5
89.5°	0.0	0.5	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°	1578.5	1798.7	2020.2	2199.2	2312.6	2358.5
22°	1565.6	1789.1	2014.0	2194.8	2309.2	2355.6



44°	849.3	1013.4	1255.6	1613.5	1496.7	1406.8
44.5°	831.1	989.0	1225.9	1582.9	1460.8	1369.4

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

Scaled Data Report



66.5°	220.6	241.2	274.7	339.3	347.4	334.0
67°	213.4	233.0	264.6	325.9	336.4	323.0

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

Scaled Data Report



89°	0.5	1.0	1.0	4.3	2.9	1.4
89.5°	0.0	0.0	0.0	1.0	0.5	0.0

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

Scaled Data Report



(END OF REPORT)