

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: P776709

Luminaire Tested: HCDJBS4050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B013)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K
Description: 6 INCH ROUND MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

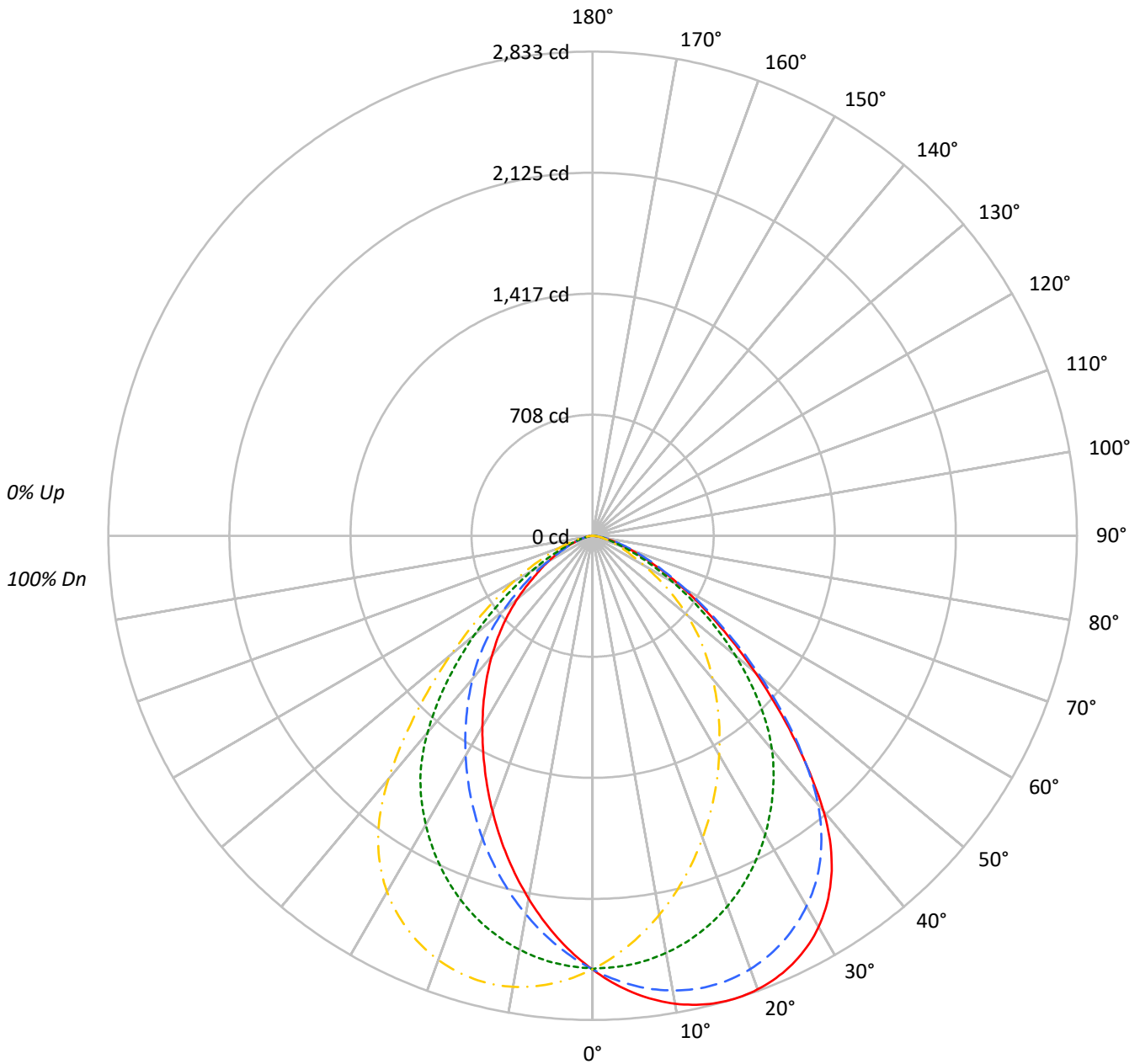
Lumens per Lamp: N/A
Luminaire Lumens: 4986.5 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.17 / 1.23
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89																			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68																			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60																			
5	82	70	63	57	80	69	62	56	67	61	56	66	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	49	58	53	49	47																			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	139046	139046	139046	139046
5°	147589	138642	129903	138108
10°	154751	137946	120004	136866
15°	160534	136590	109898	134887
20°	164759	134575	99969	132049
25°	167248	131633	90435	128251
30°	167317	127766	81614	123525
35°	162951	122958	73421	117570
40°	150310	116790	65551	107480
45°	128370	106732	57580	93180
50°	105779	93106	49013	76842
55°	84852	76738	39712	60031
60°	66683	59447	32782	45029
65°	50693	43571	25632	32182
70°	37426	30582	19058	22167
75°	26518	21287	14191	14594
80°	16700	15185	10102	9187
85°	5472	11888	5221	4592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 131983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.9	4.8
10°-20°	672.6	13.5
20°-30°	983.2	19.7
30°-40°	1105.0	22.2
40°-50°	953.1	19.1
50°-60°	612.1	12.3
60°-70°	296.9	6.0
70°-80°	106.3	2.1
80°-90°	18.4	0.4
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°	1894.8	38.0
0°-40°	2999.7	60.2
0°-60°	4564.9	91.5
0°-90°	4986.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4986.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2536	2536	2536	2536	2536	
5°	2682	2519	2361	2510	2682	259
15°	2829	2407	1936	2377	2829	800
25°	2765	2176	1495	2120	2765	1273
35°	2435	1837	1097	1757	2435	1510
45°	1656	1377	743	1202	1656	1277
55°	888	803	416	628	888	802
65°	391	336	198	248	391	396
75°	125	100	67	69	125	138
85°	9	19	8	7	9	17
90°	0	1	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4
0.5°	2555.3	2553.3	2549.5	2543.6	2530.0	2526.6	2524.7	2523.7	2522.8	2523.3	2526.2
1°	2570.3	2567.9	2560.6	2549.5	2530.0	2520.8	2513.1	2508.7	2505.8	2507.2	2513.5
1.5°	2585.9	2582.5	2571.3	2555.3	2530.0	2513.5	2500.9	2492.7	2488.8	2491.2	2501.4
2°	2600.9	2596.6	2582.0	2561.1	2529.6	2506.7	2488.8	2476.7	2471.8	2475.7	2488.3
2.5°	2615.5	2609.7	2592.7	2566.0	2528.6	2499.5	2475.7	2460.1	2453.8	2458.7	2475.2
3°	2629.6	2622.8	2601.9	2570.8	2527.1	2492.2	2463.1	2443.6	2435.4	2441.7	2461.6
3.5°	2643.2	2635.4	2612.1	2575.7	2525.7	2484.4	2449.5	2426.2	2417.4	2424.7	2448.5
4°	2656.3	2648.5	2620.8	2579.6	2523.7	2476.2	2435.9	2408.7	2398.5	2407.2	2434.4
4.5°	2669.4	2659.7	2630.0	2583.4	2521.8	2467.4	2421.8	2391.2	2379.6	2389.8	2420.3
5°	2682.0	2671.8	2638.3	2586.8	2519.4	2459.2	2407.7	2373.3	2360.6	2371.3	2405.8
5.5°	2693.6	2682.5	2646.5	2590.2	2516.5	2449.5	2393.2	2355.3	2341.2	2353.4	2391.2
6°	2705.3	2693.2	2654.3	2593.2	2513.5	2440.2	2378.6	2336.4	2320.8	2334.9	2376.2
6.5°	2716.0	2703.3	2661.6	2595.6	2510.1	2431.0	2363.1	2317.9	2301.4	2316.0	2361.1
7°	2726.6	2713.1	2668.4	2598.0	2506.3	2420.8	2348.0	2299.0	2281.0	2297.5	2345.6
7.5°	2736.8	2722.3	2675.2	2599.5	2502.4	2410.6	2332.5	2279.6	2260.6	2278.6	2330.1
8°	2746.1	2731.5	2681.0	2600.9	2498.0	2400.4	2316.5	2260.6	2239.8	2258.7	2314.0
8.5°	2755.3	2740.2	2686.8	2602.4	2493.6	2389.8	2300.0	2240.2	2219.4	2239.3	2298.0
9°	2764.0	2748.0	2692.2	2602.9	2488.8	2378.6	2283.9	2220.8	2198.0	2219.9	2282.0
9.5°	2772.3	2755.8	2697.0	2603.8	2483.4	2367.4	2267.4	2200.9	2176.7	2199.5	2265.0
10°	2780.0	2763.1	2701.4	2603.8	2478.1	2355.8	2250.9	2181.0	2155.8	2179.6	2249.0
10.5°	2787.3	2769.8	2705.8	2603.3	2472.3	2344.1	2233.9	2160.6	2134.9	2159.7	2232.0
11°	2794.1	2775.7	2709.7	2602.9	2466.5	2332.0	2216.5	2139.8	2112.6	2139.3	2215.0
11.5°	2799.9	2781.5	2712.6	2601.9	2459.7	2319.4	2199.0	2119.4	2090.7	2118.9	2197.5
12°	2805.8	2786.4	2715.5	2600.4	2453.3	2307.2	2181.5	2098.5	2069.4	2098.5	2180.5
12.5°	2811.1	2791.2	2717.9	2599.0	2446.1	2294.1	2164.0	2077.6	2047.5	2077.1	2163.1
13°	2815.5	2795.1	2719.8	2597.0	2439.3	2281.5	2146.1	2056.8	2025.2	2056.8	2145.1
13.5°	2819.8	2799.0	2721.3	2594.1	2431.5	2268.4	2128.1	2035.9	2003.4	2035.9	2127.6
14°	2823.2	2801.9	2722.3	2591.7	2423.7	2254.8	2109.7	2014.0	1981.0	2015.0	2109.7
14.5°	2826.2	2804.8	2722.3	2588.3	2415.5	2241.2	2091.2	1992.7	1959.2	1993.2	2091.2
15°	2828.6	2806.7	2722.8	2584.4	2406.7	2227.1	2072.8	1971.3	1936.4	1972.3	2072.8
15.5°	2830.5	2808.2	2722.3	2580.5	2398.5	2213.1	2053.8	1950.4	1914.5	1951.4	2054.3
16°	2832.0	2809.7	2721.3	2576.6	2389.3	2199.0	2035.4	1928.6	1892.2	1930.1	2035.9
16.5°	2833.0	2809.7	2720.3	2571.8	2380.1	2183.9	2016.0	1906.8	1869.9	1908.7	2017.4
17°	2833.4	2809.7	2718.4	2566.5	2370.3	2169.4	1997.5	1885.4	1847.5	1887.3	1998.5
17.5°	2833.0	2809.7	2716.0	2560.6	2360.6	2154.3	1978.1	1863.6	1824.7	1865.5	1979.6
18°	2832.5	2808.7	2713.5	2555.3	2350.4	2139.3	1958.7	1841.7	1802.9	1844.6	1960.6
18.5°	2831.0	2807.2	2709.7	2548.5	2339.8	2123.7	1939.3	1820.4	1780.5	1822.8	1941.2
19°	2829.6	2805.3	2706.3	2542.2	2328.6	2108.2	1919.9	1798.5	1758.2	1800.9	1922.3
19.5°	2827.1	2802.9	2701.9	2534.9	2317.9	2092.7	1900.9	1776.7	1735.9	1780.1	1903.4
20°	2824.2	2799.9	2697.5	2527.1	2306.8	2076.7	1881.5	1755.3	1713.6	1758.7	1883.9
20.5°	2820.8	2796.1	2692.2	2519.4	2294.6	2060.6	1861.1	1733.9	1692.2	1736.9	1864.5
21°	2816.9	2792.2	2686.8	2511.1	2282.5	2044.1	1841.2	1712.1	1669.4	1715.5	1844.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2801.9	2777.1	2667.4	2483.4	2245.1	1994.1	1782.5	1648.0	1603.9	1651.4	1785.9
23°	2795.6	2770.8	2659.7	2473.7	2232.0	1977.1	1762.1	1626.2	1581.5	1630.1	1766.0
23.5°	2789.3	2764.0	2651.9	2463.5	2218.4	1960.2	1742.2	1605.3	1560.2	1608.7	1746.1
24°	2781.5	2756.7	2643.2	2452.4	2204.8	1942.7	1722.3	1583.5	1538.3	1587.3	1726.7
24.5°	2773.7	2749.0	2634.4	2441.7	2190.7	1925.7	1701.9	1562.6	1516.5	1566.0	1706.8
25°	2765.0	2740.7	2624.7	2430.0	2176.2	1908.2	1681.5	1540.7	1495.1	1545.1	1686.9
25.5°	2755.8	2731.5	2615.0	2418.4	2162.1	1890.3	1662.1	1520.4	1474.2	1524.2	1667.0
26°	2746.5	2722.3	2604.8	2405.8	2147.0	1872.3	1642.2	1499.0	1453.4	1503.4	1646.6
26.5°	2735.9	2712.1	2593.6	2393.6	2132.0	1854.3	1621.8	1478.1	1432.0	1482.0	1626.7
27°	2725.2	2701.4	2582.0	2380.1	2116.9	1836.4	1601.4	1457.3	1411.1	1461.6	1606.8
27.5°	2713.5	2690.2	2570.3	2366.9	2100.9	1817.9	1581.5	1437.4	1390.3	1440.7	1586.9
28°	2701.4	2678.1	2557.7	2352.9	2084.9	1799.5	1561.6	1416.5	1369.9	1420.4	1567.0
28.5°	2688.3	2666.0	2544.6	2338.8	2068.9	1781.0	1541.7	1396.1	1349.5	1400.0	1547.1
29°	2674.2	2652.9	2531.0	2323.7	2052.4	1762.6	1521.3	1375.2	1329.6	1379.6	1526.7
29.5°	2659.2	2638.8	2517.4	2309.2	2035.9	1743.7	1501.4	1355.8	1309.2	1358.7	1506.8
30°	2643.2	2624.2	2502.9	2294.1	2018.4	1725.2	1481.0	1335.4	1289.3	1338.8	1486.4
30.5°	2626.6	2608.7	2487.8	2277.6	2001.4	1706.3	1461.6	1315.5	1269.4	1318.4	1466.5
31°	2609.7	2592.2	2472.3	2261.6	1984.4	1686.9	1441.7	1296.1	1250.0	1298.5	1446.6
31.5°	2591.2	2574.7	2456.3	2245.1	1966.0	1667.9	1421.8	1276.2	1230.1	1278.6	1426.2
32°	2572.8	2556.3	2439.3	2228.1	1948.5	1649.0	1401.9	1256.8	1211.1	1258.7	1406.8
32.5°	2552.4	2536.8	2421.3	2210.6	1930.5	1629.6	1382.0	1237.4	1191.7	1239.3	1386.9
33°	2530.0	2516.9	2402.9	2193.2	1912.1	1609.7	1362.1	1218.4	1172.8	1219.9	1366.0
33.5°	2506.7	2496.1	2383.4	2175.2	1894.1	1590.3	1342.7	1199.5	1153.9	1200.0	1346.1
34°	2484.4	2474.7	2363.1	2156.3	1875.2	1570.8	1322.8	1180.1	1134.9	1181.5	1326.7
34.5°	2459.7	2451.4	2341.7	2136.9	1856.3	1551.4	1303.4	1161.1	1115.5	1162.1	1306.8
35°	2434.9	2427.6	2319.9	2117.4	1837.3	1532.0	1284.0	1142.2	1097.1	1142.7	1286.9
35.5°	2408.2	2403.4	2297.0	2097.0	1818.4	1512.1	1264.5	1123.8	1078.6	1124.2	1267.0
36°	2379.6	2377.1	2273.7	2076.2	1799.0	1492.7	1245.6	1105.3	1060.7	1105.3	1247.5
36.5°	2350.4	2350.4	2249.5	2053.8	1778.6	1472.8	1226.2	1086.4	1041.7	1086.4	1227.6
37°	2319.4	2322.3	2224.2	2031.5	1759.2	1453.4	1206.8	1067.9	1023.8	1067.5	1208.2
37.5°	2287.3	2292.7	2198.0	2007.7	1738.8	1433.0	1187.8	1050.0	1005.3	1049.0	1188.3
38°	2253.8	2262.6	2170.8	1983.9	1717.9	1413.1	1168.4	1031.5	987.4	1030.6	1168.9
38.5°	2217.9	2231.0	2142.7	1959.2	1697.1	1393.7	1149.5	1013.6	969.9	1012.1	1149.5
39°	2181.5	2198.0	2113.6	1933.5	1676.2	1373.3	1131.0	995.1	951.9	993.7	1130.6
39.5°	2142.2	2162.1	2083.5	1906.8	1654.3	1353.9	1112.1	977.7	934.0	975.2	1111.6
40°	2100.4	2124.7	2051.4	1879.1	1632.0	1333.5	1092.7	959.7	916.0	957.3	1092.2
40.5°	2057.2	2086.4	2017.4	1850.9	1608.7	1313.6	1074.3	941.7	898.5	939.3	1073.3
41°	2013.6	2046.6	1982.5	1821.3	1585.4	1294.1	1055.3	923.8	881.1	920.9	1054.8
41.5°	1969.4	2003.8	1946.6	1791.2	1561.1	1274.2	1036.9	905.8	863.1	903.4	1035.4
42°	1923.3	1961.6	1910.2	1760.2	1536.9	1254.3	1017.9	888.3	846.1	885.4	1016.0
42.5°	1878.6	1918.9	1872.8	1729.1	1511.1	1234.0	1000.0	870.9	828.6	867.9	996.1
43°	1833.9	1875.7	1834.4	1697.1	1484.4	1213.1	981.5	853.4	811.1	850.5	975.7
43.5°	1788.8	1832.5	1795.1	1664.5	1458.2	1191.7	963.6	835.9	794.2	833.0	955.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1655.8	1702.4	1679.1	1565.0	1376.7	1125.2	909.7	784.0	742.7	781.1	893.2
45.5°	1613.6	1659.7	1638.8	1531.0	1348.0	1101.9	891.7	767.0	725.7	764.1	871.8
46°	1570.4	1616.5	1599.0	1497.5	1320.4	1079.1	873.3	749.5	708.7	746.6	850.5
46.5°	1525.7	1572.8	1559.2	1462.6	1291.7	1055.8	854.8	732.5	691.2	729.1	830.1
47°	1484.4	1530.1	1519.4	1428.1	1263.1	1032.5	835.4	715.5	674.7	711.2	808.7
47.5°	1440.7	1487.8	1478.6	1392.7	1234.4	1008.7	816.5	698.5	657.8	693.7	786.9
48°	1400.0	1446.1	1438.8	1358.2	1206.3	985.4	797.6	682.0	641.2	675.7	765.5
48.5°	1360.2	1405.3	1399.0	1322.8	1177.2	962.1	778.1	664.5	624.3	657.8	744.6
49°	1318.9	1364.5	1359.2	1288.3	1148.5	938.3	758.7	647.6	607.3	639.8	723.3
49.5°	1280.1	1323.8	1320.8	1252.9	1119.4	914.5	739.3	631.1	590.8	621.8	701.9
50°	1240.3	1283.5	1280.6	1217.5	1091.7	890.8	720.4	614.6	574.7	604.4	680.6
50.5°	1200.5	1244.2	1242.7	1182.0	1062.1	866.5	700.5	597.1	558.2	585.9	660.2
51°	1164.1	1205.3	1204.8	1148.0	1032.5	842.2	680.6	579.6	541.3	567.5	638.8
51.5°	1126.7	1167.5	1167.5	1113.6	1003.9	819.4	661.2	563.1	525.2	550.0	618.9
52°	1089.3	1130.1	1130.6	1079.6	975.2	795.6	641.7	546.6	509.2	532.0	598.0
52.5°	1055.3	1093.2	1094.2	1044.6	945.6	771.8	621.8	529.1	492.7	514.6	577.7
53°	1018.9	1057.7	1058.2	1011.6	916.5	748.0	602.9	512.1	476.7	496.6	557.3
53.5°	985.4	1022.3	1023.3	978.6	887.8	724.7	583.5	495.6	460.2	479.1	537.4
54°	951.0	987.4	988.8	946.1	859.7	701.4	563.6	478.6	444.7	461.6	517.5
54.5°	917.9	953.9	955.8	913.6	831.1	678.6	544.6	461.6	428.6	444.7	498.0
55°	887.8	920.9	921.8	881.5	802.9	656.3	525.7	445.6	415.5	428.6	478.6
55.5°	855.8	888.8	889.8	850.5	774.7	633.0	506.8	429.1	402.9	412.1	460.2
56°	826.7	857.3	858.2	819.9	747.1	610.2	487.9	414.1	389.8	396.1	441.3
56.5°	796.1	826.7	827.2	789.3	720.4	588.3	469.4	399.0	376.7	380.1	423.8
57°	767.9	796.6	797.1	759.7	693.7	566.0	451.4	384.0	367.5	364.1	406.3
57.5°	740.3	767.5	767.0	731.1	667.5	543.7	433.5	368.9	356.3	348.5	388.3
58°	712.6	739.3	738.3	702.9	640.8	522.8	416.5	360.2	344.7	334.0	370.9
58.5°	686.4	711.6	710.7	675.7	615.5	501.4	399.0	350.0	333.0	321.4	353.4
59°	659.7	684.5	683.5	648.5	590.8	480.6	382.0	338.8	321.4	311.6	336.9
59.5°	634.5	659.2	657.3	622.3	566.0	460.2	365.0	327.2	310.2	301.5	320.9
60°	608.2	633.5	631.1	597.1	542.2	440.3	348.1	316.0	299.0	291.3	305.3
60.5°	583.5	608.2	605.8	571.8	518.4	420.9	332.0	304.4	287.9	280.6	290.8
61°	560.2	583.5	581.5	548.0	496.1	401.9	316.5	293.2	277.2	269.9	276.7
61.5°	536.9	560.2	557.8	524.3	474.3	382.5	302.4	282.0	267.0	259.7	262.6
62°	514.1	536.9	535.4	501.4	452.9	363.6	288.3	271.4	256.8	249.5	250.0
62.5°	491.7	514.6	513.1	479.6	433.0	346.6	274.8	261.2	246.6	239.8	237.4
63°	470.9	492.7	491.3	458.2	413.1	329.1	261.6	251.0	236.4	230.1	225.2
63.5°	450.0	471.8	470.4	437.4	393.2	312.6	251.0	241.3	226.7	220.9	214.1
64°	429.1	451.0	450.0	416.5	373.3	296.6	241.7	231.5	217.0	211.6	203.4
64.5°	409.2	432.0	430.6	397.1	353.9	281.1	232.5	222.3	207.3	202.4	193.2
65°	390.8	412.6	411.2	378.1	335.9	266.5	223.3	213.1	197.6	193.2	184.0
65.5°	372.8	394.2	392.7	360.2	318.9	251.9	214.6	204.4	188.8	184.5	175.2
66°	354.4	375.7	374.7	342.7	301.9	237.9	205.3	195.1	180.1	175.7	167.5



TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	305.3	325.7	324.8	293.7	255.8	201.0	180.6	170.4	154.9	151.0	146.6
68°	289.8	310.2	309.2	278.1	241.7	189.8	172.8	162.6	147.1	143.2	140.3
68.5°	275.2	295.1	293.7	263.6	227.7	179.1	165.0	154.9	139.8	135.9	134.0
69°	260.7	281.1	279.1	249.5	215.0	169.4	157.8	147.6	132.5	128.6	127.7
69.5°	246.6	267.0	265.5	235.9	202.4	159.7	151.0	140.3	125.7	121.8	121.8
70°	233.5	252.9	251.5	222.8	190.8	151.0	144.2	133.5	118.9	115.0	115.5
70.5°	220.9	240.3	238.8	210.7	179.1	142.7	137.9	127.2	113.1	108.7	109.7
71°	208.2	227.7	226.2	198.5	168.9	134.9	131.6	120.9	106.8	102.9	104.4
71.5°	196.1	216.0	214.1	187.4	158.7	127.2	125.2	114.6	101.0	97.1	99.0
72°	184.9	203.9	202.4	176.7	149.0	120.4	118.9	108.7	95.6	91.7	93.2
72.5°	172.8	192.7	191.3	167.5	139.8	113.6	113.6	103.4	90.3	86.9	88.3
73°	163.1	181.5	180.1	157.8	131.1	107.3	107.8	98.1	85.4	81.6	83.5
73.5°	153.4	173.8	170.9	148.5	122.8	101.5	102.4	92.7	80.6	77.2	78.6
74°	143.7	163.6	161.2	138.8	115.0	96.1	97.1	87.9	75.7	72.3	73.8
74.5°	134.0	153.9	151.9	129.1	107.8	90.8	92.2	83.0	71.4	68.0	69.4
75°	125.2	144.2	142.2	120.9	100.5	85.9	86.9	78.2	67.0	64.1	65.0
75.5°	116.0	134.5	133.0	113.1	93.7	81.6	82.5	73.8	63.1	59.7	61.2
76°	107.8	125.7	124.3	105.3	87.4	77.2	78.2	69.4	58.7	55.8	57.3
76.5°	100.0	117.5	116.0	98.1	81.6	72.8	73.8	65.5	54.9	51.9	53.4
77°	92.2	109.7	108.3	91.3	75.7	68.9	69.4	61.2	51.5	48.5	50.0
77.5°	84.9	102.4	100.5	84.9	70.4	65.0	65.5	57.3	48.1	45.1	46.6
78°	78.2	95.1	93.2	78.6	65.0	61.2	61.6	53.4	44.7	41.7	43.2
78.5°	71.4	88.3	86.4	72.3	60.2	57.8	57.8	49.5	41.3	38.8	40.3
79°	65.0	82.0	79.6	67.0	55.8	54.4	53.9	46.1	38.3	35.9	37.4
79.5°	58.7	75.7	73.3	61.6	51.5	51.0	50.5	42.7	35.4	32.5	34.5
80°	52.9	69.9	67.5	56.3	48.1	47.6	47.1	39.8	32.0	29.6	31.1
80.5°	47.6	64.1	62.1	51.9	44.2	44.7	43.7	36.4	29.1	26.7	28.2
81°	42.2	58.7	56.8	47.6	41.3	41.7	40.8	33.0	26.7	24.3	25.7
81.5°	36.9	53.4	51.5	43.2	37.9	38.8	37.4	29.6	23.8	21.8	23.3
82°	32.0	48.5	46.6	39.3	35.0	35.4	34.5	26.7	21.4	19.4	20.9
82.5°	27.7	43.7	42.2	35.9	31.6	32.5	31.1	24.3	18.9	17.0	18.4
83°	23.3	39.3	37.9	32.5	28.6	29.6	28.2	21.4	16.5	14.6	16.5
83.5°	18.9	35.0	34.0	29.1	26.2	27.2	25.2	18.9	14.6	12.6	14.6
84°	15.5	30.6	30.1	25.7	23.3	24.8	22.8	16.5	12.6	10.2	12.6
84.5°	12.1	26.7	26.7	22.8	21.4	22.3	20.4	14.1	10.2	8.7	10.7
85°	8.7	22.8	23.3	20.4	18.9	19.9	18.0	12.1	8.3	6.8	9.2
85.5°	5.3	18.9	19.9	17.5	16.5	17.5	15.5	10.2	6.8	5.8	7.3
86°	3.9	16.5	17.5	15.5	14.6	15.5	13.6	8.7	5.3	4.9	5.8
86.5°	2.9	13.6	15.0	13.1	12.6	13.1	11.7	7.3	4.4	3.9	4.4
87°	2.4	10.7	12.1	10.7	10.7	11.2	9.7	5.8	3.4	2.9	2.9
87.5°	1.5	8.3	9.7	8.7	8.7	9.2	7.8	4.9	2.4	1.9	1.5
88°	1.0	5.8	7.3	6.8	7.3	7.3	6.3	3.4	1.5	1.0	0.5
88.5°	0.5	3.4	4.9	4.9	5.8	5.3	4.4	2.4	1.0	0.5	0.0



TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

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	0.5	1.0	1.0	0.5	0.0	0.0	0.0	0.0



TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2536.4	2536.4	2536.4	2536.4	2536.4	2536.4
0.5°	2530.5	2529.1	2538.3	2546.6	2553.3	2555.3
1°	2523.7	2528.6	2543.6	2557.7	2567.9	2570.3
1.5°	2516.5	2527.1	2548.5	2567.4	2581.5	2585.9
2°	2508.7	2525.7	2553.3	2577.6	2595.1	2600.9
2.5°	2500.9	2523.7	2557.2	2587.3	2607.7	2615.5
3°	2493.2	2521.8	2561.1	2596.1	2620.8	2629.6
3.5°	2484.4	2519.4	2565.0	2604.8	2632.5	2643.2
4°	2475.7	2516.5	2567.9	2613.1	2644.6	2656.3
4.5°	2466.5	2513.1	2570.8	2620.8	2655.8	2669.4
5°	2457.2	2509.7	2573.3	2628.6	2666.9	2682.0
5.5°	2448.0	2506.3	2575.7	2635.4	2677.6	2693.6
6°	2437.8	2502.4	2577.6	2642.2	2687.3	2705.3
6.5°	2428.1	2498.0	2578.6	2648.5	2697.0	2716.0
7°	2417.9	2493.2	2579.6	2654.3	2705.8	2726.6
7.5°	2407.2	2488.3	2580.5	2659.7	2714.5	2736.8
8°	2396.6	2483.0	2580.5	2664.5	2722.8	2746.1
8.5°	2385.4	2477.1	2580.5	2668.9	2730.5	2755.3
9°	2374.2	2471.8	2580.0	2672.8	2737.8	2764.0
9.5°	2362.6	2465.0	2579.1	2676.6	2744.6	2772.3
10°	2350.9	2458.7	2577.6	2679.6	2750.9	2780.0
10.5°	2339.3	2452.4	2576.2	2682.0	2756.7	2787.3
11°	2326.7	2445.1	2573.7	2684.4	2762.1	2794.1
11.5°	2314.5	2437.3	2571.3	2685.9	2766.5	2799.9
12°	2301.4	2429.6	2568.4	2687.3	2770.8	2805.8
12.5°	2288.3	2421.3	2565.0	2687.8	2774.7	2811.1
13°	2275.2	2413.1	2561.6	2688.3	2777.6	2815.5
13.5°	2262.1	2404.8	2557.2	2687.8	2780.0	2819.8
14°	2248.5	2395.6	2552.9	2687.3	2782.5	2823.2
14.5°	2234.4	2386.4	2548.0	2685.9	2783.9	2826.2
15°	2220.3	2376.7	2542.2	2684.4	2784.9	2828.6
15.5°	2206.3	2366.5	2536.4	2682.0	2785.4	2830.5
16°	2191.7	2356.7	2530.5	2679.6	2785.4	2832.0
16.5°	2177.1	2346.1	2524.2	2676.2	2784.9	2833.0
17°	2162.1	2335.4	2516.9	2672.8	2783.9	2833.4
17.5°	2147.0	2324.2	2509.7	2668.4	2782.5	2833.0
18°	2131.5	2312.6	2501.9	2664.0	2780.5	2832.5
18.5°	2116.0	2300.9	2493.6	2658.7	2777.6	2831.0
19°	2100.4	2288.8	2484.9	2653.3	2774.7	2829.6
19.5°	2084.4	2276.7	2476.2	2647.0	2770.8	2827.1
20°	2068.4	2263.5	2466.5	2640.7	2766.9	2824.2
20.5°	2052.4	2250.9	2456.7	2633.4	2762.1	2820.8
21°	2035.4	2237.8	2446.6	2626.2	2756.7	2816.9

TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1985.4	2195.6	2413.5	2600.9	2737.8	2801.9
23°	1967.9	2181.5	2401.4	2591.2	2730.5	2795.6
23.5°	1951.4	2166.9	2389.3	2581.5	2722.8	2789.3
24°	1933.5	2151.9	2376.7	2571.3	2714.0	2781.5
24.5°	1915.5	2136.9	2363.5	2560.1	2704.8	2773.7
25°	1898.0	2120.3	2350.0	2548.5	2695.1	2765.0
25.5°	1880.5	2104.8	2336.4	2536.4	2684.4	2755.8
26°	1862.6	2088.8	2322.3	2524.2	2674.2	2746.5
26.5°	1843.7	2073.3	2308.2	2511.1	2662.6	2735.9
27°	1825.7	2055.8	2293.2	2497.5	2650.9	2725.2
27.5°	1807.2	2038.3	2277.6	2483.9	2638.3	2713.5
28°	1788.8	2022.3	2261.6	2469.4	2624.7	2701.4
28.5°	1769.9	2004.8	2245.6	2454.3	2610.6	2688.3
29°	1750.9	1987.3	2229.1	2438.8	2596.1	2674.2
29.5°	1732.5	1969.9	2211.6	2422.3	2580.0	2659.2
30°	1713.1	1951.4	2195.1	2405.3	2563.5	2643.2
30.5°	1693.7	1933.5	2176.7	2387.3	2545.6	2626.6
31°	1674.7	1914.5	2159.2	2368.9	2527.1	2609.7
31.5°	1655.3	1897.0	2140.2	2349.0	2507.2	2591.2
32°	1635.9	1876.7	2120.8	2328.6	2487.3	2572.8
32.5°	1616.5	1857.7	2100.4	2307.7	2466.5	2552.4
33°	1596.6	1837.8	2079.1	2285.4	2445.1	2530.0
33.5°	1577.2	1818.9	2058.2	2262.6	2422.3	2506.7
34°	1557.3	1798.5	2034.9	2237.8	2397.0	2484.4
34.5°	1537.8	1777.6	2011.1	2212.6	2370.8	2459.7
35°	1517.4	1756.8	1986.9	2186.8	2344.1	2434.9
35.5°	1498.0	1734.4	1961.6	2160.2	2316.9	2408.2
36°	1478.1	1711.1	1935.9	2132.0	2288.3	2379.6
36.5°	1457.7	1688.3	1909.2	2102.9	2258.2	2350.4
37°	1437.4	1664.0	1880.5	2071.8	2226.2	2319.4
37.5°	1416.5	1637.8	1851.9	2039.8	2192.7	2287.3
38°	1396.1	1612.1	1820.4	2006.8	2157.2	2253.8
38.5°	1375.2	1585.9	1789.8	1971.8	2120.8	2217.9
39°	1353.9	1558.7	1756.3	1934.9	2082.5	2181.5
39.5°	1331.5	1530.1	1724.2	1896.1	2041.7	2142.2
40°	1308.7	1501.9	1689.3	1856.3	1999.0	2100.4
40.5°	1284.4	1472.8	1655.3	1817.9	1956.3	2057.2
41°	1260.7	1443.7	1620.8	1777.1	1912.6	2013.6
41.5°	1235.9	1415.0	1585.9	1736.9	1868.4	1969.4
42°	1210.7	1384.4	1551.4	1696.6	1823.3	1923.3
42.5°	1186.4	1354.3	1516.0	1656.3	1780.1	1878.6
43°	1161.1	1324.2	1479.6	1615.0	1736.9	1833.9
43.5°	1135.9	1294.6	1444.1	1574.2	1692.7	1788.8



TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1059.7	1201.9	1335.9	1453.4	1564.0	1655.8
45.5°	1034.4	1172.3	1300.0	1414.0	1522.3	1613.6
46°	1008.7	1141.2	1264.1	1373.8	1480.1	1570.4
46.5°	983.5	1111.6	1229.1	1335.9	1439.8	1525.7
47°	957.3	1081.0	1194.2	1297.5	1398.5	1484.4
47.5°	931.0	1050.0	1157.7	1260.2	1357.7	1440.7
48°	905.8	1019.9	1123.3	1222.8	1317.9	1400.0
48.5°	880.6	989.8	1089.8	1187.4	1279.6	1360.2
49°	854.4	961.1	1056.8	1150.9	1240.8	1318.9
49.5°	829.6	930.6	1023.3	1115.5	1203.9	1280.1
50°	804.4	901.0	989.8	1081.0	1165.5	1240.3
50.5°	779.1	871.3	959.2	1046.6	1130.1	1200.5
51°	754.4	842.7	927.2	1013.6	1094.2	1164.1
51.5°	731.1	813.6	897.1	980.6	1058.7	1126.7
52°	705.3	786.4	867.5	949.0	1024.7	1089.3
52.5°	681.1	759.2	837.8	917.9	991.2	1055.3
53°	657.3	731.1	808.7	886.9	958.2	1018.9
53.5°	634.0	704.4	780.6	857.3	926.7	985.4
54°	610.2	679.1	753.4	827.2	894.6	951.0
54.5°	587.9	653.4	726.2	799.5	864.5	917.9
55°	565.0	628.1	700.0	770.9	834.9	887.8
55.5°	542.2	604.4	674.7	744.2	805.8	855.8
56°	520.4	580.6	649.0	717.5	777.7	826.7
56.5°	499.0	557.3	624.7	691.7	749.0	796.1
57°	478.1	534.9	600.5	666.0	722.3	767.9
57.5°	457.8	512.6	577.7	641.2	696.1	740.3
58°	437.9	491.3	554.8	617.9	670.9	712.6
58.5°	419.4	469.9	532.0	594.2	645.6	686.4
59°	400.5	450.0	511.6	571.3	621.3	659.7
59.5°	381.5	430.1	489.3	549.0	598.5	634.5
60°	363.1	410.7	469.9	527.7	575.2	608.2
60.5°	346.1	392.2	450.0	506.3	553.9	583.5
61°	329.6	373.8	430.6	485.4	531.1	560.2
61.5°	313.1	356.3	412.1	466.5	510.2	536.9
62°	297.1	339.3	394.2	447.1	489.8	514.1
62.5°	282.0	322.8	376.2	428.1	469.4	491.7
63°	267.5	306.3	359.2	409.7	449.5	470.9
63.5°	253.4	290.8	342.2	392.7	430.1	450.0
64°	239.8	276.2	326.2	375.2	411.2	429.1
64.5°	227.2	261.6	311.2	358.7	393.7	409.2
65°	215.0	248.1	296.1	342.2	375.7	390.8
65.5°	202.9	234.9	281.5	327.2	358.7	372.8
66°	191.7	221.8	267.0	312.1	341.7	354.4



TEST NUMBER: P776709

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	161.2	186.4	228.6	269.9	295.6	305.3
68°	151.9	176.2	216.0	256.3	281.5	289.8
68.5°	142.7	166.5	204.4	243.7	267.5	275.2
69°	134.9	157.3	193.2	231.1	254.4	260.7
69.5°	126.7	148.1	182.5	219.4	240.8	246.6
70°	119.4	138.3	172.8	207.8	228.6	233.5
70.5°	112.1	129.1	163.1	196.6	216.5	220.9
71°	105.8	121.4	153.9	185.9	205.3	208.2
71.5°	99.0	113.6	144.7	175.7	193.7	196.1
72°	93.2	105.8	134.9	166.5	183.0	184.9
72.5°	87.4	99.0	126.7	157.3	172.3	172.8
73°	82.0	92.2	118.4	148.1	163.1	163.1
73.5°	76.7	86.4	111.2	138.8	153.9	153.4
74°	71.8	80.1	103.9	129.6	144.2	143.7
74.5°	67.0	74.3	97.1	121.4	134.9	134.0
75°	62.6	68.9	89.8	113.6	126.7	125.2
75.5°	58.7	63.6	83.5	105.8	118.4	116.0
76°	54.9	58.7	77.2	98.5	110.2	107.8
76.5°	51.5	53.9	71.4	91.3	102.4	100.0
77°	48.1	50.0	66.0	84.5	95.6	92.2
77.5°	44.7	46.1	60.7	78.2	88.8	84.9
78°	41.7	42.2	55.8	72.3	82.0	78.2
78.5°	38.8	38.8	51.0	66.5	75.7	71.4
79°	36.4	35.4	46.6	60.7	69.4	65.0
79.5°	33.5	32.0	42.7	55.3	63.6	58.7
80°	30.6	29.1	38.3	50.5	58.3	52.9
80.5°	28.2	26.7	35.0	45.6	52.9	47.6
81°	25.7	23.8	31.1	41.3	47.6	42.2
81.5°	23.3	21.4	28.2	36.9	42.7	36.9
82°	20.9	18.9	24.8	32.5	38.3	32.0
82.5°	18.9	17.0	21.8	29.1	34.0	27.7
83°	16.5	15.0	18.9	25.2	30.1	23.3
83.5°	14.6	12.6	16.5	21.8	26.2	18.9
84°	12.6	10.7	14.1	18.9	22.8	15.5
84.5°	10.7	8.7	11.7	16.0	19.4	12.1
85°	8.7	7.3	9.2	13.6	17.0	8.7
85.5°	6.8	5.3	7.3	10.7	14.1	5.3
86°	5.3	3.9	5.3	7.8	11.2	3.9
86.5°	3.9	2.4	3.4	5.3	8.7	2.9
87°	1.9	1.0	1.5	3.4	5.8	2.4
87.5°	1.0	0.5	0.5	1.5	3.4	1.5
88°	0.0	0.0	0.0	0.0	1.5	1.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.5



TEST NUMBER: P776709
CATALOG NUMBER: HCDJBL54050CSD-HCD6TRH-HCD6TRLWW-5000lm-5000K

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



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Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report





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

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Scaled Data Report



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Scaled Data Report





21.5°	2812.6	2787.8	2681.0	2502.4	2270.3	2027.6	1821.8	1690.7	1647.5	1693.7	1825.2
22°	2807.7	2782.5	2674.2	2493.2	2258.2	2011.1	1801.9	1668.9	1625.2	1672.8	1805.3



44°	1744.6	1789.3	1756.3	1631.5	1431.0	1169.9	945.6	818.4	776.7	815.5	934.4
44.5°	1700.9	1745.6	1718.4	1598.5	1403.9	1148.0	927.7	801.0	759.2	798.0	914.1



66.5°	336.9	358.7	357.8	325.2	285.9	225.2	196.6	186.4	170.9	167.0	160.2
67°	320.9	342.2	340.3	309.2	270.9	212.6	188.3	178.6	162.6	159.2	153.4



89°	0.0	1.5	2.9	2.9	3.9	3.9	2.9	1.5	0.0	0.0	0.0
89.5°	0.0	0.5	1.0	1.5	2.4	2.4	1.5	0.5	0.0	0.0	0.0

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21.5°	2019.4	2223.3	2435.9	2617.9	2751.4	2812.6
22°	2001.9	2210.6	2424.7	2609.7	2744.6	2807.7



44°	1110.2	1264.1	1408.2	1533.5	1649.0	1744.6
44.5°	1084.9	1233.0	1372.3	1493.2	1606.8	1700.9



66.5°	180.6	209.7	253.9	297.6	326.2	336.9
67°	170.4	197.6	240.8	283.0	310.7	320.9

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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

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Scaled Data Report



(END OF REPORT)