

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: P776682

Luminaire Tested: HCDJBS4050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B061)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS4050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K  
Description: 6 INCH ROUND NARROW LENSED WALLWASH KIT  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5378.4 lumens  
Efficiency: N/A  
Efficacy: 112.1 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.09 / 1.15  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

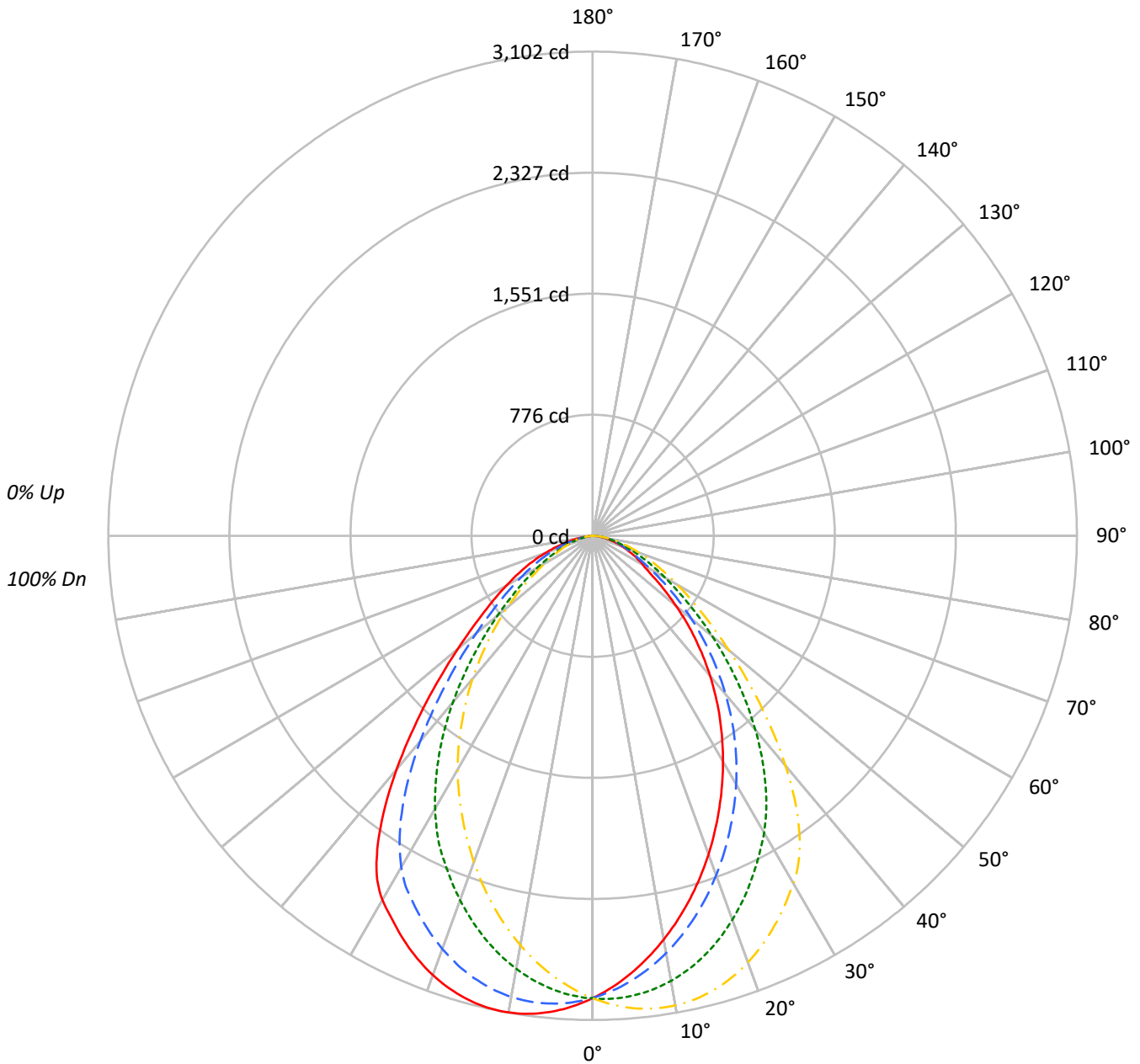
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P776682

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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					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								
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	77								
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67								
4	88	78	70	64	86	76	69	64	74	68	63	72	67	62	70	65	61	60								
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53								
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	48								
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43								
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39								
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36								
10	59	47	40	35	58	46	39	35	45	39	35	44	39	34	44	38	34	33								

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

	0°	90°	180°	270°
0°	162399	162399	162399	162399
5°	154864	162755	168468	160549
10°	146179	161175	172620	156839
15°	136720	157765	174683	151499
20°	126641	152677	174689	144860
25°	116214	146228	172964	137385
30°	105674	139028	170469	127773
35°	94924	129054	160308	114786
40°	83750	116060	139690	99615
45°	71790	100933	116586	83164
50°	59375	85208	96150	67708
55°	47884	70688	80924	54775
60°	40698	58647	69929	44525
65°	36956	49383	61122	36165
70°	32810	41433	51723	28883
75°	28785	34970	41070	22685
80°	23835	30244	27687	16984
85°	14844	29059	9812	9498

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 119074 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.8	5.2
10°-20°	768.2	14.3
20°-30°	1088.0	20.2
30°-40°	1159.2	21.6
40°-50°	930.3	17.3
50°-60°	604.0	11.2
60°-70°	350.3	6.5
70°-80°	164.7	3.1
80°-90°	35.9	0.7
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°	2134.1	39.7
0°-40°	3293.2	61.2
0°-60°	4827.6	89.8
0°-90°	5378.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5378.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2962	2962	2962	2962	2962	
5°	2814	2958	3061	2918	2814	263
15°	2409	2780	3078	2669	2409	675
25°	1921	2418	2860	2271	1921	882
35°	1418	1928	2395	1715	1418	885
45°	926	1302	1504	1073	926	714
55°	501	740	847	573	501	456
65°	285	381	471	279	285	283
75°	136	165	194	107	136	145
85°	24	46	16	15	24	31
90°	0	7	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°	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4
0.5°	2950.1	2950.1	2953.4	2958.6	2967.1	2969.9	2972.7	2974.2	2975.6	2971.8	2968.5
1°	2936.9	2938.8	2945.4	2954.8	2968.0	2975.6	2982.2	2985.9	2986.9	2982.2	2975.1
1.5°	2923.2	2927.0	2935.9	2950.6	2968.5	2981.2	2991.1	2996.8	2998.2	2991.6	2981.2
2°	2909.1	2914.2	2927.0	2945.4	2969.0	2985.9	2999.6	3007.2	3008.6	3000.6	2986.9
2.5°	2894.0	2901.0	2917.1	2939.7	2968.0	2989.7	3007.6	3017.1	3019.0	3009.1	2992.1
3°	2878.9	2887.8	2906.7	2934.1	2967.1	2993.5	3014.7	3026.5	3028.4	3017.1	2996.3
3.5°	2863.8	2873.7	2895.8	2927.5	2965.7	2996.3	3021.3	3035.5	3037.8	3024.2	3000.6
4°	2847.7	2859.5	2884.5	2920.4	2963.8	2999.2	3027.5	3044.0	3045.9	3031.2	3003.4
4.5°	2831.2	2844.9	2872.7	2912.8	2960.9	3001.0	3033.1	3051.5	3053.9	3037.4	3006.7
5°	2814.2	2829.3	2860.5	2904.3	2957.6	3002.0	3038.3	3059.1	3061.4	3043.0	3008.6
5.5°	2797.3	2813.8	2847.7	2896.3	2953.9	3002.9	3042.6	3065.7	3068.0	3048.2	3010.5
6°	2779.3	2797.7	2835.0	2886.9	2949.6	3002.9	3046.3	3071.3	3074.2	3052.5	3011.4
6.5°	2761.4	2781.2	2821.3	2877.5	2944.4	3002.5	3049.6	3076.5	3079.8	3056.7	3011.9
7°	2743.0	2764.2	2807.2	2867.1	2939.2	3001.5	3052.0	3081.2	3084.5	3059.5	3011.9
7.5°	2724.6	2746.8	2793.0	2856.2	2933.1	3000.1	3053.9	3085.5	3088.8	3062.4	3011.4
8°	2705.7	2729.3	2777.9	2845.4	2926.5	2997.7	3055.3	3088.8	3092.6	3064.3	3010.5
8.5°	2685.9	2711.4	2762.4	2834.1	2919.4	2994.9	3056.2	3092.1	3095.4	3065.7	3008.6
9°	2666.6	2692.5	2746.8	2821.8	2911.9	2991.6	3056.2	3094.0	3098.2	3066.6	3006.2
9.5°	2646.3	2673.7	2730.8	2809.1	2903.9	2987.8	3055.8	3095.9	3099.6	3067.1	3003.4
10°	2626.0	2655.3	2714.2	2795.8	2895.4	2983.1	3054.8	3096.8	3101.0	3066.6	3000.1
10.5°	2605.3	2636.4	2697.3	2782.6	2885.9	2978.4	3053.4	3097.3	3101.5	3065.2	2995.9
11°	2585.0	2616.6	2679.8	2768.5	2876.5	2972.7	3051.0	3096.8	3101.5	3063.8	2991.1
11.5°	2563.3	2596.3	2661.9	2754.3	2865.7	2966.6	3048.2	3095.9	3100.6	3061.4	2985.5
12°	2542.1	2576.5	2644.0	2739.2	2855.3	2959.5	3044.9	3094.4	3099.2	3058.6	2979.8
12.5°	2520.4	2555.3	2625.6	2723.7	2844.4	2952.5	3040.7	3092.1	3097.3	3055.3	2973.7
13°	2498.7	2535.5	2607.2	2708.1	2832.6	2944.4	3035.9	3089.3	3094.4	3051.0	2966.6
13.5°	2476.0	2514.2	2587.8	2692.5	2819.9	2935.9	3030.3	3086.0	3091.1	3046.8	2959.1
14°	2454.3	2493.0	2568.5	2676.0	2807.2	2927.0	3024.6	3081.7	3087.4	3041.6	2951.0
14.5°	2431.2	2470.8	2549.1	2658.6	2794.0	2917.1	3018.0	3077.0	3083.1	3035.5	2942.5
15°	2409.0	2449.6	2528.9	2641.6	2779.8	2906.7	3010.9	3071.8	3077.9	3028.9	2933.6
15.5°	2385.0	2427.0	2508.1	2623.2	2766.1	2896.3	3003.4	3065.7	3071.8	3021.8	2923.7
16°	2362.3	2404.8	2488.3	2605.7	2751.0	2885.0	2994.9	3059.1	3065.7	3014.3	2913.8
16.5°	2339.2	2382.2	2467.5	2586.9	2735.9	2873.2	2985.9	3052.0	3058.6	3006.2	2903.4
17°	2315.6	2360.0	2446.3	2568.0	2719.9	2860.9	2976.5	3044.0	3051.0	2997.7	2892.5
17.5°	2291.6	2336.9	2424.6	2548.7	2704.3	2848.2	2966.6	3035.9	3043.0	2988.3	2880.8
18°	2268.0	2314.2	2403.4	2529.3	2687.4	2834.1	2955.8	3026.5	3034.5	2978.9	2868.5
18.5°	2243.5	2290.6	2381.2	2509.0	2670.4	2820.4	2944.4	3017.1	3025.1	2968.5	2855.8
19°	2219.9	2267.5	2359.5	2488.8	2652.9	2806.2	2933.1	3007.2	3015.2	2957.6	2843.0
19.5°	2195.4	2243.5	2336.9	2468.5	2635.5	2791.6	2920.9	2996.8	3004.8	2946.3	2829.8
20°	2170.8	2220.4	2314.7	2448.2	2617.1	2776.5	2908.1	2985.5	2994.4	2935.0	2816.1
20.5°	2145.8	2196.3	2292.1	2426.5	2598.7	2760.5	2894.9	2973.7	2982.6	2922.7	2801.5
21°	2121.8	2172.2	2268.9	2405.7	2579.3	2744.4	2881.2	2961.9	2970.9	2909.5	2786.9



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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°	2046.8	2099.6	2199.1	2340.2	2521.8	2693.5	2838.3	2922.7	2932.6	2869.4	2740.7
23°	2021.8	2074.6	2175.5	2318.0	2501.0	2675.6	2822.7	2909.1	2919.0	2854.8	2724.1
23.5°	1997.2	2050.5	2152.4	2295.4	2480.7	2658.1	2806.7	2894.0	2904.8	2840.2	2707.6
24°	1972.2	2025.5	2128.4	2273.2	2459.5	2638.8	2790.7	2879.3	2890.2	2824.6	2690.7
24.5°	1946.8	2001.0	2104.3	2250.1	2438.8	2620.4	2774.1	2863.8	2875.1	2809.1	2673.2
25°	1921.3	1976.5	2080.7	2227.0	2417.5	2601.5	2756.7	2848.7	2859.5	2793.0	2654.8
25.5°	1896.3	1951.0	2056.7	2203.4	2396.3	2581.7	2739.7	2832.2	2844.0	2776.5	2637.4
26°	1871.3	1926.5	2032.1	2180.7	2374.1	2562.3	2722.3	2815.7	2827.5	2759.5	2619.4
26.5°	1846.3	1901.5	2008.6	2158.1	2352.9	2542.5	2703.9	2798.2	2810.5	2742.5	2601.5
27°	1820.8	1877.4	1984.5	2134.5	2330.3	2522.3	2685.0	2781.7	2793.5	2725.1	2584.5
27.5°	1795.3	1852.4	1960.4	2110.9	2308.6	2501.5	2666.6	2763.3	2776.5	2709.1	2566.6
28°	1769.9	1826.5	1935.9	2087.8	2285.9	2480.7	2647.7	2745.8	2759.5	2692.5	2547.3
28.5°	1745.3	1801.5	1911.9	2064.7	2264.2	2460.0	2628.4	2727.9	2743.5	2676.5	2525.6
29°	1719.9	1776.9	1887.3	2040.6	2241.6	2439.2	2609.0	2710.5	2727.9	2658.6	2502.0
29.5°	1694.4	1751.9	1862.8	2016.6	2219.4	2419.4	2590.7	2693.5	2710.9	2638.8	2477.4
30°	1669.4	1726.9	1838.3	1993.0	2196.3	2397.7	2572.3	2676.5	2693.0	2616.6	2451.5
30.5°	1644.4	1701.9	1813.3	1968.5	2172.7	2376.0	2552.0	2658.1	2673.7	2592.1	2424.1
31°	1618.9	1676.9	1788.7	1942.5	2148.2	2352.9	2531.7	2638.8	2652.0	2566.1	2394.4
31.5°	1593.9	1652.4	1763.3	1918.0	2122.7	2328.9	2509.0	2616.1	2627.9	2538.8	2364.2
32°	1568.4	1626.5	1738.3	1892.0	2097.2	2302.9	2484.5	2592.5	2602.0	2509.0	2333.6
32.5°	1543.4	1601.5	1713.3	1866.1	2070.4	2275.5	2458.1	2567.1	2573.2	2477.4	2301.0
33°	1518.9	1576.5	1687.3	1840.2	2042.5	2247.7	2431.7	2539.7	2542.1	2443.5	2267.1
33.5°	1493.9	1551.5	1662.3	1813.3	2015.2	2219.4	2402.4	2509.0	2508.1	2407.6	2232.1
34°	1468.9	1526.0	1636.4	1786.4	1986.4	2190.2	2372.7	2476.5	2471.8	2371.3	2197.2
34.5°	1443.9	1501.5	1610.9	1758.5	1957.6	2160.4	2341.1	2441.6	2435.0	2333.1	2159.5
35°	1418.4	1476.0	1585.0	1731.2	1928.4	2128.8	2307.6	2404.8	2395.4	2293.9	2122.2
35.5°	1394.4	1451.0	1559.0	1703.4	1898.6	2097.7	2273.2	2367.1	2354.8	2252.9	2084.0
36°	1369.9	1426.0	1533.1	1675.5	1868.9	2065.6	2237.8	2327.9	2313.3	2211.4	2044.9
36.5°	1344.9	1401.0	1507.1	1647.2	1838.7	2033.1	2201.0	2286.9	2269.9	2169.9	2005.3
37°	1319.4	1375.0	1480.7	1619.4	1808.6	1999.6	2163.8	2244.9	2225.5	2126.5	1964.2
37.5°	1294.9	1350.0	1454.8	1591.6	1777.9	1965.2	2124.6	2202.4	2181.2	2082.6	1923.2
38°	1269.9	1325.0	1427.9	1563.3	1746.3	1932.6	2085.4	2160.0	2135.9	2037.8	1882.1
38.5°	1244.9	1300.0	1402.4	1535.0	1716.1	1896.3	2045.8	2116.1	2090.6	1994.4	1841.1
39°	1220.3	1274.6	1376.5	1507.1	1684.5	1861.4	2005.7	2071.8	2043.9	1948.6	1799.6
39.5°	1195.3	1250.0	1350.0	1478.4	1653.4	1825.5	1964.2	2026.5	1998.2	1904.3	1758.5
40°	1170.3	1225.0	1323.2	1450.0	1621.8	1790.6	1922.7	1981.2	1952.0	1859.0	1715.6
40.5°	1145.8	1200.0	1297.7	1421.7	1589.2	1751.9	1881.7	1935.9	1905.7	1815.2	1674.1
41°	1120.8	1175.0	1271.3	1393.4	1557.6	1716.1	1840.2	1890.6	1859.5	1768.9	1632.6
41.5°	1096.3	1151.0	1245.3	1365.1	1525.5	1679.3	1798.6	1844.4	1812.8	1725.5	1591.6
42°	1071.3	1126.0	1219.4	1336.4	1493.9	1643.9	1755.7	1799.1	1767.5	1679.8	1549.6
42.5°	1047.2	1101.9	1193.9	1308.5	1461.8	1605.2	1714.2	1754.8	1722.7	1636.8	1510.0
43°	1022.7	1077.4	1168.0	1279.3	1429.3	1568.9	1672.7	1710.4	1677.4	1592.5	1468.9
43.5°	998.1	1052.9	1142.5	1252.9	1397.2	1531.2	1631.7	1666.6	1633.1	1550.1	1428.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	926.0	980.2	1066.1	1168.4	1301.9	1421.7	1509.0	1535.9	1503.8	1424.6	1312.8
45.5°	901.9	956.6	1041.1	1142.5	1269.9	1385.0	1468.9	1495.3	1461.8	1384.5	1275.5
46°	878.8	933.0	1016.5	1115.1	1239.2	1349.1	1429.8	1453.8	1421.3	1344.4	1238.7
46.5°	855.2	909.5	991.5	1087.8	1207.6	1314.2	1391.1	1414.7	1380.7	1305.7	1202.4
47°	831.6	886.3	967.0	1059.9	1176.5	1279.3	1351.5	1373.6	1341.6	1268.0	1167.0
47.5°	808.5	862.8	943.0	1034.5	1145.8	1243.9	1314.2	1335.9	1303.3	1230.7	1133.1
48°	785.4	839.7	918.9	1008.1	1116.1	1209.9	1277.9	1298.2	1266.6	1194.9	1099.1
48.5°	762.8	817.0	894.8	982.6	1085.9	1176.9	1241.6	1262.3	1230.7	1159.9	1066.5
49°	740.6	794.4	871.7	955.7	1056.6	1144.4	1206.6	1225.0	1194.9	1126.5	1034.0
49.5°	718.4	772.2	848.1	930.7	1027.4	1110.9	1172.2	1191.1	1161.4	1093.0	1003.3
50°	696.2	749.6	824.6	905.2	999.1	1079.3	1138.2	1156.6	1127.4	1060.9	973.1
50.5°	675.0	726.9	801.9	880.2	969.8	1048.1	1104.8	1124.1	1094.8	1029.3	943.9
51°	653.8	705.7	779.3	855.7	942.5	1017.5	1073.6	1091.5	1063.2	999.1	915.1
51.5°	633.0	684.5	756.6	830.7	916.5	987.8	1043.0	1060.4	1033.5	970.3	887.8
52°	612.8	663.7	734.9	806.6	889.2	958.1	1011.8	1030.2	1003.8	942.5	861.3
52.5°	592.9	642.5	712.8	783.0	862.3	928.8	982.6	1001.9	975.5	915.1	834.9
53°	573.6	622.2	691.5	759.5	836.8	901.4	953.8	972.7	948.1	888.2	809.9
53.5°	554.3	601.9	669.4	736.8	811.3	874.1	926.4	945.3	920.8	863.2	785.9
54°	536.3	583.0	649.1	714.2	787.3	847.7	899.6	918.4	895.3	838.7	761.8
54.5°	518.4	564.2	629.3	692.0	762.8	821.7	872.7	892.5	870.3	814.6	739.2
55°	501.0	545.3	609.0	670.3	739.6	796.7	848.1	867.5	846.7	792.0	717.0
55.5°	484.0	527.4	589.2	649.5	716.5	772.7	822.7	843.0	822.7	768.9	695.8
56°	468.4	509.5	570.3	628.3	693.9	749.1	798.6	818.9	799.6	748.1	675.0
56.5°	452.8	492.0	551.0	608.5	672.2	726.0	775.0	795.3	777.4	726.4	654.3
57°	438.2	476.0	532.1	588.7	650.5	703.8	751.9	773.1	756.2	706.2	634.9
57.5°	424.1	459.4	513.2	568.9	630.2	681.6	730.2	751.0	734.9	685.9	615.6
58°	411.8	443.9	496.2	550.5	609.9	661.3	708.5	730.2	714.6	667.0	597.7
58.5°	399.5	428.3	478.8	532.1	590.6	641.1	687.8	709.5	694.8	647.7	579.3
59°	388.7	414.6	461.8	514.6	571.7	620.8	667.5	689.2	675.0	628.8	561.3
59.5°	378.8	401.0	445.3	496.7	552.8	601.0	646.7	669.4	656.2	610.9	544.4
60°	371.2	388.2	430.2	479.7	534.9	582.1	627.4	650.0	637.8	593.9	527.8
60.5°	363.2	376.0	414.6	463.7	517.5	563.7	609.0	631.2	619.8	575.5	511.3
61°	354.7	366.0	400.0	447.7	500.5	545.8	590.6	612.8	601.4	558.5	495.3
61.5°	346.2	356.6	386.3	431.6	484.0	528.3	572.7	594.8	584.5	542.5	479.3
62°	337.3	349.1	373.1	417.0	467.9	511.8	554.7	577.4	567.9	526.4	464.2
62.5°	328.3	340.6	359.9	401.9	451.9	494.8	537.3	559.9	551.0	509.9	448.6
63°	319.4	332.1	348.1	387.7	436.8	478.3	520.3	542.9	534.0	493.9	434.0
63.5°	310.9	323.6	335.9	373.6	421.7	463.2	503.8	526.0	517.9	478.3	419.4
64°	301.9	315.1	324.5	360.9	408.0	447.7	487.8	509.9	502.4	463.7	405.7
64.5°	293.4	306.1	313.7	347.7	394.4	433.0	471.7	494.4	486.3	448.1	392.0
65°	284.9	298.1	303.8	334.9	380.7	417.9	456.6	478.8	471.2	434.0	378.3
65.5°	276.4	290.1	293.9	322.7	367.0	404.3	441.5	463.2	455.7	418.9	364.6
66°	267.9	281.6	284.4	310.9	352.8	390.6	426.4	447.7	440.1	404.7	351.0





TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	243.4	257.1	259.0	276.9	316.0	349.1	384.4	404.3	395.3	362.7	312.7
68°	235.9	249.1	251.4	267.0	303.8	336.3	370.8	390.1	380.7	348.6	300.0
68.5°	227.8	241.0	243.9	256.6	292.0	323.6	356.6	376.0	366.0	334.4	288.2
69°	220.3	233.5	236.8	246.7	280.7	310.9	343.4	361.8	351.0	320.8	276.4
69.5°	212.3	226.0	229.7	237.3	269.3	299.1	329.7	347.2	336.8	307.6	264.6
70°	204.7	218.4	222.6	228.3	258.5	286.8	317.0	334.0	322.7	293.9	252.8
70.5°	197.2	210.9	215.6	219.3	248.1	275.5	304.7	320.3	309.0	281.1	242.0
71°	190.1	203.3	208.5	210.9	237.7	264.2	292.5	307.6	295.3	268.9	231.1
71.5°	183.0	196.2	201.9	202.4	227.8	253.3	280.2	293.9	281.6	256.1	219.8
72°	175.9	189.2	194.8	194.8	217.9	242.5	268.4	281.6	268.4	243.9	209.4
72.5°	170.3	182.1	188.2	186.8	208.5	231.6	256.6	268.9	255.7	231.6	199.1
73°	163.2	175.0	181.6	179.7	199.5	221.7	245.3	256.6	242.9	219.8	188.7
73.5°	156.6	170.3	175.0	172.6	190.6	211.3	234.0	244.8	229.7	208.5	178.8
74°	149.5	163.7	171.2	166.0	182.1	201.9	223.1	233.0	217.9	197.2	168.9
74.5°	142.5	156.6	164.2	159.4	173.6	192.0	212.7	221.2	205.7	185.9	159.4
75°	135.9	149.5	157.6	153.3	165.1	182.6	202.4	209.9	193.9	175.0	150.0
75.5°	129.7	142.5	150.9	146.7	157.1	173.6	192.0	199.1	182.1	164.6	141.0
76°	123.1	135.9	143.9	140.6	149.5	165.1	181.6	188.2	170.3	154.3	132.1
76.5°	117.0	129.7	137.7	134.4	142.0	156.1	171.7	177.4	159.4	144.3	123.1
77°	110.9	123.1	131.6	128.8	134.9	147.6	162.3	167.0	148.6	134.4	115.1
77.5°	104.7	117.0	125.9	123.1	127.4	139.6	152.8	157.1	137.7	125.0	106.6
78°	98.6	110.9	119.8	117.9	120.8	131.6	143.9	147.6	127.4	115.6	99.1
78.5°	92.9	104.7	114.2	112.3	114.2	124.1	134.9	137.7	117.0	106.6	91.0
79°	86.8	99.1	108.5	107.1	108.0	116.5	126.4	128.3	107.1	98.1	83.5
79.5°	81.1	92.9	102.8	101.9	101.4	109.4	117.9	119.8	97.2	89.6	76.4
80°	75.5	87.3	97.2	96.7	95.8	102.4	109.9	110.9	87.7	81.1	69.3
80.5°	70.3	81.6	91.5	92.0	90.1	95.8	101.9	102.4	78.8	73.6	62.7
81°	64.6	75.9	86.3	86.8	84.4	89.2	94.3	93.9	69.8	66.0	56.1
81.5°	59.0	70.3	80.7	81.6	79.2	82.5	86.8	85.4	61.3	58.5	50.0
82°	53.8	65.1	75.5	76.9	74.1	76.4	79.2	76.9	53.3	51.9	44.8
82.5°	48.6	59.4	70.3	71.7	68.9	70.3	72.2	68.9	46.7	45.8	39.2
83°	43.4	54.2	65.1	67.0	64.2	65.1	65.6	61.3	40.1	39.6	34.0
83.5°	38.7	49.1	59.9	62.3	59.4	59.4	59.4	54.2	33.5	33.5	28.8
84°	33.5	43.9	55.2	57.5	54.7	53.8	52.8	47.6	26.9	27.4	23.1
84.5°	28.3	38.7	50.5	53.3	50.5	49.1	47.6	41.0	20.3	21.2	19.3
85°	23.6	33.5	45.8	48.6	46.2	44.3	42.5	34.9	15.6	16.5	15.1
85.5°	18.9	28.8	41.0	43.9	42.0	39.6	36.8	28.3	12.3	12.3	11.8
86°	16.0	24.1	36.8	39.6	37.7	35.4	31.6	22.2	9.4	9.0	8.5
86.5°	13.2	20.3	32.1	34.9	34.0	30.7	25.9	17.5	7.5	6.1	5.7
87°	10.4	17.0	27.8	30.7	29.7	25.9	21.7	13.7	5.7	3.8	3.3
87.5°	7.1	14.2	23.6	26.4	25.9	22.2	17.5	9.9	4.2	1.9	1.4
88°	5.2	10.8	19.3	22.2	22.2	17.9	13.7	6.6	2.8	0.9	0.5
88.5°	2.8	8.0	16.0	17.9	17.9	14.6	9.9	4.2	1.4	0.5	0.0



TEST NUMBER: P776682

CATALOG NUMBER: HCDJBS4050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.5	4.7	6.6	7.1	4.7	1.9	0.5	0.0	0.0	0.0



TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2962.4	2962.4	2962.4	2962.4	2962.4	2962.4
0.5°	2964.7	2962.8	2956.7	2952.5	2949.6	2950.1
1°	2967.1	2960.0	2949.2	2941.1	2936.4	2936.9
1.5°	2969.0	2956.7	2941.1	2929.3	2922.7	2923.2
2°	2969.9	2952.5	2932.6	2917.5	2908.6	2909.1
2.5°	2970.9	2948.2	2923.7	2904.8	2894.4	2894.0
3°	2970.9	2943.0	2914.2	2892.1	2879.3	2878.9
3.5°	2969.9	2937.4	2904.3	2878.4	2863.8	2863.8
4°	2969.0	2931.2	2893.5	2864.7	2848.2	2847.7
4.5°	2967.6	2924.6	2882.6	2850.1	2832.2	2831.2
5°	2965.2	2917.5	2870.8	2835.5	2815.2	2814.2
5.5°	2962.4	2910.0	2859.1	2819.9	2797.7	2797.3
6°	2959.1	2901.5	2846.8	2804.3	2780.8	2779.3
6.5°	2955.3	2893.0	2833.6	2787.8	2762.8	2761.4
7°	2951.0	2883.6	2820.4	2771.3	2744.4	2743.0
7.5°	2945.9	2873.7	2806.2	2754.3	2725.6	2724.6
8°	2940.2	2863.3	2791.6	2736.9	2706.7	2705.7
8.5°	2934.1	2852.5	2777.0	2719.0	2687.4	2685.9
9°	2927.9	2841.1	2761.4	2701.0	2668.0	2666.6
9.5°	2920.9	2829.3	2745.8	2682.2	2647.3	2646.3
10°	2913.3	2817.5	2729.8	2663.3	2627.4	2626.0
10.5°	2904.8	2804.3	2713.3	2644.0	2606.7	2605.3
11°	2896.3	2791.1	2695.8	2624.1	2585.9	2585.0
11.5°	2886.9	2777.4	2678.4	2604.3	2564.7	2563.3
12°	2877.0	2763.3	2660.9	2584.0	2543.0	2542.1
12.5°	2867.1	2749.1	2642.5	2563.3	2521.3	2520.4
13°	2856.2	2733.6	2624.1	2542.1	2499.1	2498.7
13.5°	2845.4	2718.0	2605.3	2520.8	2477.4	2476.0
14°	2833.1	2702.4	2585.9	2499.6	2454.8	2454.3
14.5°	2820.8	2686.4	2566.6	2477.9	2432.2	2431.2
15°	2808.1	2669.4	2546.8	2455.7	2409.0	2409.0
15.5°	2794.9	2652.4	2526.5	2433.6	2385.5	2385.0
16°	2781.7	2635.0	2505.3	2410.9	2362.3	2362.3
16.5°	2767.1	2617.1	2484.5	2388.3	2339.2	2339.2
17°	2752.9	2599.1	2463.3	2365.2	2315.2	2315.6
17.5°	2737.8	2580.7	2442.1	2342.1	2291.6	2291.6
18°	2722.3	2561.4	2420.4	2318.9	2267.1	2268.0
18.5°	2706.7	2542.5	2398.2	2294.9	2243.5	2243.5
19°	2690.7	2522.7	2376.5	2271.3	2218.9	2219.9
19.5°	2674.6	2503.4	2353.9	2247.7	2194.4	2195.4
20°	2657.2	2483.1	2331.7	2223.7	2169.9	2170.8
20.5°	2640.2	2462.8	2309.0	2199.6	2144.9	2145.8
21°	2622.3	2442.1	2285.9	2174.6	2120.4	2121.8



TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2567.5	2378.4	2216.1	2102.0	2045.4	2046.8
23°	2548.7	2357.2	2193.0	2077.0	2020.3	2021.8
23.5°	2529.3	2335.5	2169.4	2052.4	1995.3	1997.2
24°	2510.0	2314.2	2146.3	2028.4	1969.9	1972.2
24.5°	2490.2	2292.5	2123.2	2003.8	1944.9	1946.8
25°	2470.8	2271.3	2100.1	1977.9	1919.9	1921.3
25.5°	2451.5	2249.1	2075.5	1954.8	1894.9	1896.3
26°	2432.2	2227.4	2052.4	1928.8	1869.9	1871.3
26.5°	2412.3	2204.8	2028.8	1905.3	1844.4	1846.3
27°	2391.6	2180.3	2004.3	1880.3	1818.9	1820.8
27.5°	2368.9	2153.8	1978.4	1855.7	1793.9	1795.3
28°	2344.4	2128.4	1952.4	1829.8	1768.9	1769.9
28.5°	2318.9	2101.0	1926.0	1805.2	1743.9	1745.3
29°	2293.0	2074.6	1899.6	1779.8	1718.5	1719.9
29.5°	2266.1	2046.8	1873.2	1754.3	1693.5	1694.4
30°	2237.3	2018.5	1845.8	1726.9	1668.9	1669.4
30.5°	2208.6	1989.7	1818.5	1702.4	1643.9	1644.4
31°	2178.8	1960.9	1790.2	1675.5	1618.0	1618.9
31.5°	2148.7	1931.2	1761.9	1649.1	1593.0	1593.9
32°	2117.1	1901.0	1733.5	1621.8	1567.5	1568.4
32.5°	2085.4	1870.3	1705.2	1596.3	1542.0	1543.4
33°	2053.4	1840.2	1676.5	1569.4	1517.0	1518.9
33.5°	2020.8	1809.0	1647.2	1542.5	1491.6	1493.9
34°	1986.9	1778.4	1618.9	1515.6	1466.1	1468.9
34.5°	1952.4	1745.3	1589.2	1488.7	1440.1	1443.9
35°	1918.5	1715.2	1560.9	1461.8	1414.7	1418.4
35.5°	1884.0	1682.6	1531.2	1435.0	1389.7	1394.4
36°	1849.1	1651.0	1503.4	1408.1	1364.2	1369.9
36.5°	1812.8	1618.9	1474.1	1381.6	1338.7	1344.9
37°	1776.0	1586.8	1445.8	1354.8	1313.3	1319.4
37.5°	1739.7	1554.8	1416.1	1328.8	1288.2	1294.9
38°	1702.9	1521.7	1388.3	1301.5	1262.3	1269.9
38.5°	1666.1	1489.2	1359.0	1275.0	1237.3	1244.9
39°	1628.8	1457.1	1330.2	1249.1	1211.8	1220.3
39.5°	1591.6	1425.0	1301.0	1222.7	1186.8	1195.3
40°	1554.3	1392.0	1272.2	1195.3	1161.8	1170.3
40.5°	1517.0	1359.5	1243.0	1168.4	1136.8	1145.8
41°	1480.2	1326.9	1213.7	1142.0	1112.3	1120.8
41.5°	1442.5	1294.9	1184.9	1116.1	1087.3	1096.3
42°	1406.2	1262.8	1157.1	1090.6	1062.8	1071.3
42.5°	1369.4	1230.7	1128.8	1065.6	1038.7	1047.2
43°	1333.1	1198.6	1101.0	1040.1	1014.7	1022.7
43.5°	1296.7	1166.5	1073.6	1015.1	990.6	998.1

TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1192.5	1072.7	993.0	941.1	918.0	926.0
45.5°	1158.5	1042.5	966.1	917.0	893.9	901.9
46°	1125.5	1013.2	940.6	893.4	870.8	878.8
46.5°	1092.0	983.5	914.7	869.4	847.2	855.2
47°	1059.0	955.2	889.2	846.3	824.6	831.6
47.5°	1027.9	926.4	863.7	823.1	802.4	808.5
48°	997.2	898.6	838.2	799.6	780.2	785.4
48.5°	967.0	871.7	813.2	776.9	757.6	762.8
49°	937.8	844.8	789.6	754.7	736.3	740.6
49.5°	908.5	819.8	766.1	732.1	715.1	718.4
50°	881.2	793.9	742.5	710.4	693.4	696.2
50.5°	853.3	768.9	718.9	688.7	672.2	675.0
51°	826.4	744.8	696.2	667.0	652.4	653.8
51.5°	801.4	721.7	674.6	645.8	632.1	633.0
52°	776.9	698.6	653.3	626.0	612.3	612.8
52.5°	751.9	676.0	632.1	605.7	592.5	592.9
53°	728.3	654.3	611.3	585.4	573.1	573.6
53.5°	705.2	633.0	591.1	565.6	553.8	554.3
54°	683.0	612.3	571.2	546.2	534.9	536.3
54.5°	660.9	592.5	552.4	527.4	516.5	518.4
55°	640.6	573.1	534.0	509.0	499.1	501.0
55.5°	619.8	554.3	515.1	491.1	481.1	484.0
56°	600.0	535.9	497.7	473.6	464.6	468.4
56.5°	580.7	517.9	480.2	456.6	447.7	452.8
57°	562.3	500.5	463.2	440.1	431.6	438.2
57.5°	543.9	483.5	447.2	424.1	416.5	424.1
58°	526.4	467.0	431.1	409.0	401.9	411.8
58.5°	509.0	451.4	416.1	393.9	388.2	399.5
59°	492.0	435.9	401.0	379.7	375.0	388.7
59.5°	476.0	420.8	386.8	366.0	362.7	378.8
60°	459.9	406.1	372.7	352.4	351.4	371.2
60.5°	444.8	391.5	358.5	339.6	340.6	363.2
61°	430.2	377.8	345.8	327.4	330.2	354.7
61.5°	415.1	364.2	332.6	315.6	321.2	346.2
62°	401.4	351.4	320.3	304.7	313.2	337.3
62.5°	387.3	338.2	308.5	293.9	305.2	328.3
63°	373.6	325.5	296.2	283.0	297.2	319.4
63.5°	359.4	313.2	284.9	273.1	289.2	310.9
64°	347.2	301.4	274.1	263.7	281.1	301.9
64.5°	334.4	290.1	263.7	254.7	273.1	293.4
65°	321.7	278.8	253.3	245.8	265.6	284.9
65.5°	309.4	267.5	242.9	237.3	258.0	276.4
66°	297.7	256.6	233.5	229.3	250.0	267.9



TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	263.2	226.0	206.1	207.6	227.8	243.4
68°	251.9	216.5	197.6	201.0	220.3	235.9
68.5°	241.5	207.1	189.6	194.8	212.7	227.8
69°	231.1	198.1	181.6	188.2	205.7	220.3
69.5°	220.8	189.2	174.1	182.1	198.1	212.3
70°	210.9	180.2	167.5	175.9	191.5	204.7
70.5°	201.0	172.2	160.4	169.3	184.4	197.2
71°	192.0	164.6	153.8	163.2	177.4	190.1
71.5°	182.6	156.6	147.2	157.6	170.3	183.0
72°	173.1	149.1	140.1	151.9	163.7	175.9
72.5°	164.6	141.5	134.0	146.2	157.6	170.3
73°	156.1	134.0	127.8	140.6	150.9	163.2
73.5°	147.6	126.4	122.2	134.4	144.8	156.6
74°	139.2	119.8	116.5	128.8	138.2	149.5
74.5°	131.6	113.2	111.3	123.1	132.1	142.5
75°	124.1	107.1	106.1	117.5	125.9	135.9
75.5°	116.5	100.9	100.9	112.3	119.8	129.7
76°	109.4	94.8	95.8	106.6	113.7	123.1
76.5°	102.4	89.2	91.0	100.9	108.0	117.0
77°	95.8	83.5	86.3	95.8	101.9	110.9
77.5°	89.2	78.3	81.6	90.6	96.2	104.7
78°	83.0	73.1	76.9	85.4	90.6	98.6
78.5°	76.4	67.9	72.2	80.2	84.9	92.9
79°	70.8	62.7	67.9	75.0	79.2	86.8
79.5°	65.1	58.0	63.2	69.8	73.6	81.1
80°	59.4	53.8	59.0	65.1	68.4	75.5
80.5°	54.2	49.5	54.7	60.4	62.7	70.3
81°	49.1	45.3	50.5	55.7	57.5	64.6
81.5°	44.3	41.0	45.8	50.9	52.4	59.0
82°	40.1	36.8	42.0	46.2	47.2	53.8
82.5°	35.4	33.0	37.7	41.5	42.0	48.6
83°	30.7	29.2	33.5	37.3	36.8	43.4
83.5°	26.4	25.5	29.7	33.0	32.1	38.7
84°	22.2	21.7	25.5	28.8	27.4	33.5
84.5°	18.4	18.4	21.7	25.0	23.1	28.3
85°	15.1	15.1	17.9	20.8	19.3	23.6
85.5°	11.3	11.8	14.2	17.0	16.5	18.9
86°	8.5	8.0	10.4	13.7	13.7	16.0
86.5°	5.7	4.7	7.1	9.9	10.8	13.2
87°	2.8	1.9	3.3	6.6	8.0	10.4
87.5°	0.9	0.5	0.9	2.8	5.2	7.1
88°	0.0	0.0	0.0	0.5	2.8	5.2
88.5°	0.0	0.0	0.0	0.0	0.9	2.8



TEST NUMBER: P776682

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRH-HCD62TRLWW-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

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



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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°	2096.8	2148.2	2245.8	2383.6	2560.5	2727.9	2867.5	2949.2	2958.6	2896.8	2771.8
22°	2072.2	2124.1	2222.7	2362.3	2541.1	2710.5	2852.9	2935.9	2945.9	2883.1	2756.7



44°	974.1	1028.3	1116.5	1224.6	1365.6	1495.3	1590.1	1621.3	1588.7	1506.7	1389.7
44.5°	950.0	1004.8	1091.1	1196.7	1334.0	1457.6	1548.6	1578.4	1546.7	1465.1	1351.5



66.5°	259.4	273.1	275.5	299.1	340.6	376.4	412.3	433.0	424.5	391.1	337.7
67°	251.4	265.1	267.0	288.2	327.8	362.7	398.6	418.9	409.9	376.9	325.5



89°	1.4	5.2	12.3	14.2	14.2	11.3	6.6	2.4	0.5	0.0	0.0
89.5°	0.0	2.8	8.5	10.4	10.8	8.0	4.2	0.9	0.0	0.0	0.0



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21.5°	2604.8	2420.8	2261.9	2150.5	2094.9	2096.8
22°	2585.9	2400.1	2239.7	2126.5	2070.4	2072.2



44°	1261.4	1134.9	1046.7	989.7	966.1	974.1
44.5°	1226.9	1104.3	1019.8	965.6	942.0	950.0



66.5°	285.9	246.2	224.1	221.7	242.5	259.4
67°	274.1	236.3	215.1	214.6	234.9	251.4

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Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.5	1.4
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



(END OF REPORT)