

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: P776370

Luminaire Tested: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776370  
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: HCDJBS3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K  
Description: 6 INCH ROUND NARROW LENSED WALLWASH KIT  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4377.2 lumens  
Efficiency: N/A  
Efficacy: 113.7 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

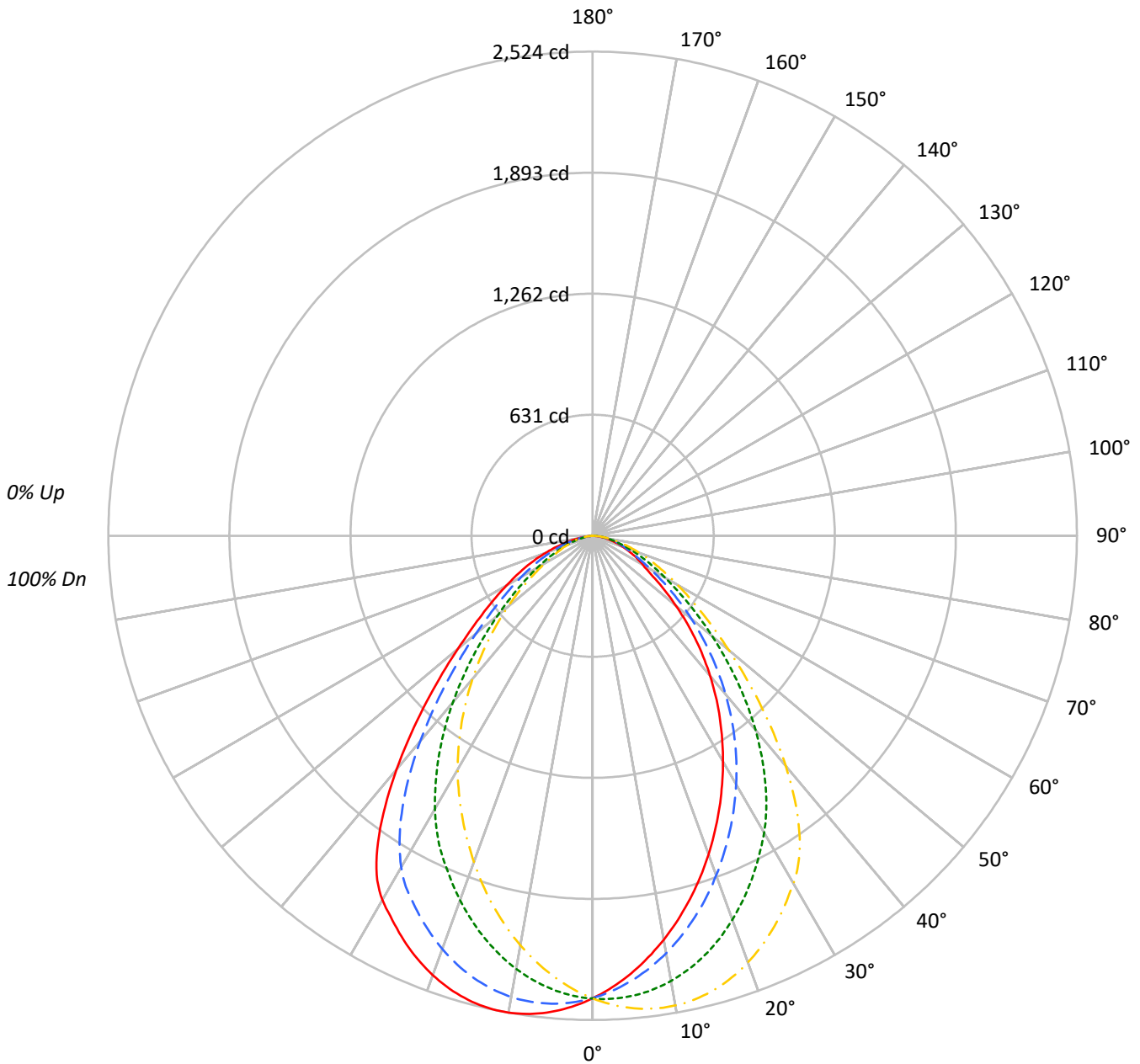
Input Watts (W): 38.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

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

	0°	90°	180°	270°
0°	132166	132166	132166	132166
5°	126034	132456	137106	130662
10°	118969	131171	140484	127642
15°	111272	128395	142163	123298
20°	103066	124255	142171	117890
25°	94578	119009	140766	111811
30°	86001	113144	138737	103984
35°	77256	105029	130460	93418
40°	68163	94448	113684	81073
45°	58425	82148	94886	67681
50°	48323	69345	78249	55103
55°	38966	57537	65861	44577
60°	33122	47726	56903	36236
65°	30081	40186	49746	29432
70°	26703	33724	42090	23498
75°	23426	28467	33423	18449
80°	19384	24593	22541	13828
85°	12077	23650	7988	7737

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 96909 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.1	5.2
10°-20°	625.2	14.3
20°-30°	885.5	20.2
30°-40°	943.4	21.6
40°-50°	757.2	17.3
50°-60°	491.6	11.2
60°-70°	285.1	6.5
70°-80°	134.0	3.1
80°-90°	29.2	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°	1736.8	39.7
0°-40°	2680.2	61.2
0°-60°	3928.9	89.8
0°-90°	4377.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4377.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2411	2411	2411	2411	2411	
5°	2290	2407	2492	2374	2290	214
15°	1961	2262	2505	2172	1961	549
25°	1564	1968	2327	1848	1564	718
35°	1154	1569	1949	1396	1154	720
45°	754	1060	1224	873	754	581
55°	408	602	689	466	408	371
65°	232	310	384	227	232	230
75°	111	134	158	87	111	118
85°	19	38	13	12	19	26
90°	0	6	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°	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9
0.5°	2400.9	2400.9	2403.6	2407.8	2414.7	2417.0	2419.3	2420.5	2421.6	2418.6	2415.9
1°	2390.2	2391.7	2397.1	2404.7	2415.5	2421.6	2427.0	2430.1	2430.8	2427.0	2421.2
1.5°	2379.0	2382.1	2389.4	2401.3	2415.9	2426.2	2434.3	2438.9	2440.1	2434.7	2426.2
2°	2367.5	2371.7	2382.1	2397.1	2416.3	2430.1	2441.2	2447.4	2448.5	2442.0	2430.8
2.5°	2355.2	2361.0	2374.0	2392.5	2415.5	2433.1	2447.7	2455.4	2457.0	2448.9	2435.1
3°	2342.9	2350.2	2365.6	2387.8	2414.7	2436.2	2453.5	2463.1	2464.6	2455.4	2438.5
3.5°	2330.6	2338.7	2356.8	2382.5	2413.6	2438.5	2458.9	2470.4	2472.3	2461.2	2442.0
4°	2317.6	2327.2	2347.5	2376.7	2412.0	2440.8	2463.9	2477.3	2478.8	2466.9	2444.3
4.5°	2304.2	2315.3	2337.9	2370.6	2409.7	2442.4	2468.5	2483.4	2485.4	2471.9	2447.0
5°	2290.3	2302.6	2328.0	2363.7	2407.0	2443.1	2472.7	2489.6	2491.5	2476.5	2448.5
5.5°	2276.5	2290.0	2317.6	2357.1	2404.0	2443.9	2476.1	2495.0	2496.9	2480.8	2450.0
6°	2261.9	2276.9	2307.2	2349.5	2400.5	2443.9	2479.2	2499.6	2501.9	2484.2	2450.8
6.5°	2247.3	2263.5	2296.1	2341.8	2396.3	2443.5	2481.9	2503.8	2506.5	2487.7	2451.2
7°	2232.4	2249.6	2284.6	2333.3	2392.1	2442.7	2483.8	2507.6	2510.3	2490.0	2451.2
7.5°	2217.4	2235.4	2273.1	2324.5	2387.1	2441.6	2485.4	2511.1	2513.8	2492.3	2450.8
8°	2202.0	2221.2	2260.8	2315.7	2381.7	2439.7	2486.5	2513.8	2516.8	2493.8	2450.0
8.5°	2185.9	2206.6	2248.1	2306.5	2375.9	2437.4	2487.3	2516.5	2519.1	2495.0	2448.5
9°	2170.2	2191.3	2235.4	2296.5	2369.8	2434.7	2487.3	2518.0	2521.4	2495.7	2446.6
9.5°	2153.7	2175.9	2222.4	2286.1	2363.3	2431.6	2486.9	2519.5	2522.6	2496.1	2444.3
10°	2137.2	2161.0	2209.0	2275.4	2356.4	2427.8	2486.1	2520.3	2523.7	2495.7	2441.6
10.5°	2120.3	2145.6	2195.1	2264.6	2348.7	2423.9	2485.0	2520.7	2524.1	2494.6	2438.1
11°	2103.8	2129.5	2180.9	2253.1	2341.0	2419.3	2483.1	2520.3	2524.1	2493.4	2434.3
11.5°	2086.1	2113.0	2166.3	2241.6	2332.2	2414.3	2480.8	2519.5	2523.4	2491.5	2429.7
12°	2068.8	2096.9	2151.8	2229.3	2323.7	2408.6	2478.1	2518.4	2522.2	2489.2	2425.1
12.5°	2051.2	2079.6	2136.8	2216.6	2314.9	2402.8	2474.6	2516.5	2520.7	2486.5	2420.1
13°	2033.5	2063.5	2121.8	2204.0	2305.3	2396.3	2470.8	2514.2	2518.4	2483.1	2414.3
13.5°	2015.1	2046.2	2106.1	2191.3	2294.9	2389.4	2466.2	2511.5	2515.7	2479.6	2408.2
14°	1997.4	2028.9	2090.3	2177.9	2284.6	2382.1	2461.6	2508.0	2512.6	2475.4	2401.7
14.5°	1978.6	2010.9	2074.6	2163.7	2273.8	2374.0	2456.2	2504.2	2509.2	2470.4	2394.8
15°	1960.6	1993.6	2058.1	2149.8	2262.3	2365.6	2450.4	2499.9	2504.9	2465.0	2387.5
15.5°	1941.0	1975.2	2041.2	2134.9	2251.2	2357.1	2444.3	2495.0	2499.9	2459.3	2379.4
16°	1922.6	1957.1	2025.1	2120.7	2238.9	2347.9	2437.4	2489.6	2495.0	2453.1	2371.3
16.5°	1903.8	1938.7	2008.2	2105.3	2226.6	2338.3	2430.1	2483.8	2489.2	2446.6	2362.9
17°	1884.6	1920.6	1990.9	2089.9	2213.6	2328.3	2422.4	2477.3	2483.1	2439.7	2354.1
17.5°	1865.0	1901.8	1973.2	2074.2	2200.9	2318.0	2414.3	2470.8	2476.5	2432.0	2344.5
18°	1845.8	1883.4	1956.0	2058.5	2187.1	2306.5	2405.5	2463.1	2469.6	2424.3	2334.5
18.5°	1825.8	1864.2	1937.9	2042.0	2173.3	2295.3	2396.3	2455.4	2461.9	2415.9	2324.1
19°	1806.6	1845.4	1920.3	2025.4	2159.0	2283.8	2387.1	2447.4	2453.9	2407.0	2313.8
19.5°	1786.7	1825.8	1901.8	2008.9	2144.8	2271.9	2377.1	2438.9	2445.4	2397.8	2303.0
20°	1766.7	1807.0	1883.8	1992.4	2129.9	2259.6	2366.7	2429.7	2437.0	2388.6	2291.9
20.5°	1746.4	1787.4	1865.4	1974.8	2114.9	2246.6	2356.0	2420.1	2427.4	2378.6	2280.0
21°	1726.8	1767.9	1846.6	1957.9	2099.2	2233.5	2344.9	2410.5	2417.8	2367.9	2268.1



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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°	1665.7	1708.7	1789.7	1904.5	2052.3	2192.1	2309.9	2378.6	2386.7	2335.3	2230.5
23°	1645.4	1688.4	1770.5	1886.5	2035.4	2177.5	2297.2	2367.5	2375.6	2323.4	2217.0
23.5°	1625.4	1668.8	1751.7	1868.1	2018.9	2163.3	2284.2	2355.2	2364.0	2311.5	2203.6
24°	1605.1	1648.5	1732.2	1850.0	2001.6	2147.5	2271.1	2343.3	2352.1	2298.8	2189.8
24.5°	1584.3	1628.5	1712.6	1831.2	1984.8	2132.6	2257.7	2330.6	2339.9	2286.1	2175.6
25°	1563.6	1608.5	1693.4	1812.4	1967.5	2117.2	2243.5	2318.4	2327.2	2273.1	2160.6
25.5°	1543.3	1587.8	1673.8	1793.2	1950.2	2101.1	2229.7	2304.9	2314.5	2259.6	2146.4
26°	1522.9	1567.8	1653.8	1774.8	1932.2	2085.3	2215.5	2291.5	2301.1	2245.8	2131.8
26.5°	1502.6	1547.5	1634.6	1756.3	1914.9	2069.2	2200.5	2277.3	2287.3	2232.0	2117.2
27°	1481.8	1527.9	1615.1	1737.1	1896.5	2052.7	2185.2	2263.9	2273.4	2217.8	2103.4
27.5°	1461.1	1507.6	1595.5	1717.9	1878.8	2035.8	2170.2	2248.9	2259.6	2204.7	2088.8
28°	1440.4	1486.5	1575.5	1699.1	1860.4	2018.9	2154.8	2234.7	2245.8	2191.3	2073.1
28.5°	1420.4	1466.1	1555.9	1680.3	1842.7	2002.0	2139.1	2220.1	2232.8	2178.2	2055.4
29°	1399.7	1446.1	1536.0	1660.7	1824.3	1985.1	2123.3	2205.9	2220.1	2163.7	2036.2
29.5°	1379.0	1425.8	1516.0	1641.2	1806.2	1969.0	2108.4	2192.1	2206.3	2147.5	2016.2
30°	1358.6	1405.5	1496.1	1622.0	1787.4	1951.4	2093.4	2178.2	2191.7	2129.5	1995.1
30.5°	1338.3	1385.1	1475.7	1602.0	1768.2	1933.7	2076.9	2163.3	2175.9	2109.5	1972.9
31°	1317.5	1364.8	1455.7	1580.9	1748.3	1914.9	2060.4	2147.5	2158.3	2088.4	1948.7
31.5°	1297.2	1344.8	1435.0	1560.9	1727.5	1895.3	2042.0	2129.1	2138.7	2066.1	1924.1
32°	1276.5	1323.7	1414.7	1539.8	1706.8	1874.2	2022.0	2109.9	2117.6	2042.0	1899.1
32.5°	1256.1	1303.3	1394.3	1518.7	1684.9	1851.9	2000.5	2089.2	2094.2	2016.2	1872.7
33°	1236.2	1283.0	1373.2	1497.6	1662.3	1829.3	1979.0	2066.9	2068.8	1988.6	1845.0
33.5°	1215.8	1262.6	1352.9	1475.7	1640.0	1806.2	1955.2	2042.0	2041.2	1959.4	1816.6
34°	1195.5	1241.9	1331.7	1453.8	1616.6	1782.4	1931.0	2015.5	2011.6	1929.9	1788.2
34.5°	1175.1	1221.9	1311.0	1431.2	1593.2	1758.3	1905.3	1987.1	1981.7	1898.8	1757.5
35°	1154.4	1201.2	1289.9	1408.9	1569.4	1732.5	1878.0	1957.1	1949.4	1866.9	1727.2
35.5°	1134.8	1180.9	1268.8	1386.3	1545.2	1707.2	1850.0	1926.4	1916.4	1833.5	1696.1
36°	1114.8	1160.5	1247.7	1363.6	1521.0	1681.1	1821.2	1894.5	1882.6	1799.7	1664.2
36.5°	1094.5	1140.2	1226.6	1340.6	1496.4	1654.6	1791.3	1861.1	1847.3	1765.9	1632.0
37°	1073.8	1119.1	1205.1	1317.9	1471.9	1627.3	1760.9	1827.0	1811.2	1730.6	1598.6
37.5°	1053.8	1098.7	1183.9	1295.3	1446.9	1599.3	1729.1	1792.4	1775.1	1694.9	1565.2
38°	1033.5	1078.4	1162.1	1272.2	1421.2	1572.8	1697.2	1757.9	1738.3	1658.4	1531.8
38.5°	1013.1	1058.0	1141.3	1249.2	1396.6	1543.3	1665.0	1722.2	1701.4	1623.1	1498.4
39°	993.1	1037.3	1120.2	1226.6	1370.9	1514.9	1632.3	1686.1	1663.4	1585.9	1464.6
39.5°	972.8	1017.3	1098.7	1203.1	1345.6	1485.7	1598.6	1649.2	1626.2	1549.8	1431.2
40°	952.5	997.0	1076.8	1180.1	1319.8	1457.3	1564.8	1612.4	1588.6	1512.9	1396.2
40.5°	932.5	976.6	1056.1	1157.1	1293.4	1425.8	1531.4	1575.5	1551.0	1477.2	1362.5
41°	912.1	956.3	1034.6	1134.0	1267.6	1396.6	1497.6	1538.7	1513.3	1439.6	1328.7
41.5°	892.2	936.7	1013.5	1111.0	1241.5	1366.7	1463.8	1501.0	1475.3	1404.3	1295.3
42°	871.8	916.4	992.4	1087.6	1215.8	1337.9	1428.9	1464.2	1438.5	1367.1	1261.1
42.5°	852.3	896.8	971.6	1064.9	1189.7	1306.4	1395.1	1428.1	1402.0	1332.1	1228.9
43°	832.3	876.8	950.5	1041.1	1163.2	1276.8	1361.3	1392.0	1365.1	1296.0	1195.5
43.5°	812.3	856.9	929.8	1019.6	1137.1	1246.1	1327.9	1356.3	1329.1	1261.5	1162.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	753.6	797.7	867.6	950.9	1059.6	1157.1	1228.1	1250.0	1223.9	1159.4	1068.4
45.5°	734.0	778.5	847.3	929.8	1033.5	1127.1	1195.5	1217.0	1189.7	1126.7	1038.1
46°	715.2	759.4	827.3	907.5	1008.5	1098.0	1163.6	1183.2	1156.7	1094.1	1008.1
46.5°	696.0	740.2	807.0	885.3	982.8	1069.5	1132.1	1151.3	1123.7	1062.6	978.6
47°	676.8	721.3	787.0	862.6	957.4	1041.1	1099.9	1117.9	1091.8	1031.9	949.8
47.5°	658.0	702.2	767.4	841.9	932.5	1012.3	1069.5	1087.2	1060.7	1001.6	922.1
48°	639.2	683.3	747.8	820.4	908.3	984.7	1040.0	1056.5	1030.8	972.4	894.5
48.5°	620.8	664.9	728.3	799.7	883.7	957.8	1010.4	1027.3	1001.6	944.0	868.0
49°	602.7	646.5	709.4	777.8	859.9	931.3	982.0	997.0	972.4	916.8	841.5
49.5°	584.7	628.4	690.2	757.4	836.1	904.1	954.0	969.3	945.2	889.5	816.6
50°	566.6	610.0	671.1	736.7	813.1	878.4	926.3	941.3	917.5	863.4	792.0
50.5°	549.4	591.6	652.6	716.4	789.3	853.0	899.1	914.8	891.0	837.7	768.2
51°	532.1	574.3	634.2	696.4	767.0	828.1	873.8	888.3	865.3	813.1	744.8
51.5°	515.2	557.0	615.8	676.0	745.9	803.9	848.8	863.0	841.1	789.7	722.5
52°	498.7	540.1	598.1	656.5	723.6	779.7	823.5	838.4	816.9	767.0	701.0
52.5°	482.6	522.9	580.1	637.3	701.8	755.9	799.7	815.4	793.9	744.8	679.5
53°	466.8	506.4	562.8	618.1	681.0	733.6	776.2	791.6	771.6	722.9	659.2
53.5°	451.1	489.9	544.8	599.6	660.3	711.4	754.0	769.3	749.4	702.5	639.6
54°	436.5	474.5	528.2	581.2	640.7	689.9	732.1	747.5	728.6	682.6	620.0
54.5°	421.9	459.1	512.1	563.2	620.8	668.8	710.2	726.3	708.3	663.0	601.6
55°	407.7	443.8	495.6	545.5	602.0	648.4	690.2	706.0	689.1	644.6	583.5
55.5°	393.9	429.2	479.5	528.6	583.1	628.8	669.5	686.0	669.5	625.8	566.3
56°	381.2	414.6	464.1	511.4	564.7	609.6	649.9	666.4	650.7	608.9	549.4
56.5°	368.5	400.4	448.4	495.2	547.1	590.8	630.7	647.3	632.7	591.2	532.5
57°	356.6	387.4	433.0	479.1	529.4	572.8	611.9	629.2	615.4	574.7	516.7
57.5°	345.1	373.9	417.7	463.0	512.9	554.7	594.3	611.2	598.1	558.2	501.0
58°	335.1	361.2	403.9	448.0	496.4	538.2	576.6	594.3	581.6	542.8	486.4
58.5°	325.2	348.6	389.7	433.0	480.6	521.7	559.7	577.4	565.5	527.1	471.4
59°	316.3	337.4	375.8	418.8	465.3	505.2	543.2	560.9	549.4	511.7	456.8
59.5°	308.3	326.3	362.4	404.2	449.9	489.1	526.3	544.8	534.0	497.1	443.0
60°	302.1	315.9	350.1	390.4	435.3	473.7	510.6	529.0	519.0	483.3	429.6
60.5°	295.6	306.0	337.4	377.4	421.1	458.8	495.6	513.7	504.4	468.4	416.1
61°	288.7	297.9	325.5	364.3	407.3	444.2	480.6	498.7	489.5	454.5	403.1
61.5°	281.8	290.2	314.4	351.3	393.9	430.0	466.1	484.1	475.7	441.5	390.0
62°	274.5	284.1	303.7	339.4	380.8	416.5	451.5	469.9	462.2	428.4	377.8
62.5°	267.2	277.2	292.9	327.1	367.8	402.7	437.3	455.7	448.4	415.0	365.1
63°	259.9	270.3	283.3	315.6	355.5	389.3	423.4	441.9	434.6	401.9	353.2
63.5°	253.0	263.4	273.3	304.0	343.2	377.0	410.0	428.0	421.5	389.3	341.3
64°	245.7	256.4	264.1	293.7	332.1	364.3	397.0	415.0	408.9	377.4	330.2
64.5°	238.8	249.2	255.3	282.9	320.9	352.4	383.9	402.3	395.8	364.7	319.0
65°	231.9	242.6	247.2	272.6	309.8	340.1	371.6	389.7	383.5	353.2	307.9
65.5°	225.0	236.1	239.2	262.6	298.7	329.0	359.3	377.0	370.8	340.9	296.8
66°	218.1	229.2	231.5	253.0	287.2	317.9	347.0	364.3	358.2	329.4	285.6





TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	198.1	209.2	210.8	225.3	257.2	284.1	312.9	329.0	321.7	295.2	254.5
68°	191.9	202.7	204.6	217.3	247.2	273.7	301.7	317.5	309.8	283.7	244.2
68.5°	185.4	196.2	198.5	208.8	237.6	263.4	290.2	306.0	297.9	272.2	234.6
69°	179.3	190.0	192.7	200.8	228.4	253.0	279.5	294.5	285.6	261.1	225.0
69.5°	172.8	183.9	187.0	193.1	219.2	243.4	268.3	282.5	274.1	250.3	215.4
70°	166.6	177.7	181.2	185.8	210.4	233.4	258.0	271.8	262.6	239.2	205.8
70.5°	160.5	171.6	175.4	178.5	201.9	224.2	248.0	260.7	251.5	228.8	196.9
71°	154.7	165.5	169.7	171.6	193.5	215.0	238.0	250.3	240.3	218.8	188.1
71.5°	149.0	159.7	164.3	164.7	185.4	206.2	228.0	239.2	229.2	208.5	178.9
72°	143.2	153.9	158.6	158.6	177.4	197.3	218.4	229.2	218.4	198.5	170.5
72.5°	138.6	148.2	153.2	152.0	169.7	188.5	208.8	218.8	208.1	188.5	162.0
73°	132.8	142.4	147.8	146.3	162.4	180.4	199.6	208.8	197.7	178.9	153.6
73.5°	127.5	138.6	142.4	140.5	155.1	172.0	190.4	199.2	187.0	169.7	145.5
74°	121.7	133.2	139.4	135.1	148.2	164.3	181.6	189.6	177.4	160.5	137.4
74.5°	115.9	127.5	133.6	129.8	141.3	156.2	173.1	180.0	167.4	151.3	129.8
75°	110.6	121.7	128.2	124.8	134.4	148.6	164.7	170.8	157.8	142.4	122.1
75.5°	105.6	115.9	122.8	119.4	127.8	141.3	156.2	162.0	148.2	134.0	114.8
76°	100.2	110.6	117.1	114.4	121.7	134.4	147.8	153.2	138.6	125.5	107.5
76.5°	95.2	105.6	112.1	109.4	115.6	127.1	139.7	144.3	129.8	117.5	100.2
77°	90.2	100.2	107.1	104.8	109.8	120.2	132.1	135.9	120.9	109.4	93.7
77.5°	85.2	95.2	102.5	100.2	103.7	113.6	124.4	127.8	112.1	101.7	86.8
78°	80.2	90.2	97.5	96.0	98.3	107.1	117.1	120.2	103.7	94.1	80.6
78.5°	75.6	85.2	92.9	91.4	92.9	101.0	109.8	112.1	95.2	86.8	74.1
79°	70.6	80.6	88.3	87.1	87.9	94.8	102.9	104.4	87.1	79.9	68.0
79.5°	66.0	75.6	83.7	82.9	82.5	89.1	96.0	97.5	79.1	72.9	62.2
80°	61.4	71.0	79.1	78.7	77.9	83.3	89.4	90.2	71.4	66.0	56.4
80.5°	57.2	66.4	74.5	74.9	73.3	77.9	82.9	83.3	64.1	59.9	51.1
81°	52.6	61.8	70.3	70.6	68.7	72.6	76.8	76.4	56.8	53.7	45.7
81.5°	48.0	57.2	65.6	66.4	64.5	67.2	70.6	69.5	49.9	47.6	40.7
82°	43.8	53.0	61.4	62.6	60.3	62.2	64.5	62.6	43.4	42.2	36.5
82.5°	39.5	48.4	57.2	58.4	56.0	57.2	58.7	56.0	38.0	37.2	31.9
83°	35.3	44.1	53.0	54.5	52.2	53.0	53.4	49.9	32.6	32.2	27.6
83.5°	31.5	39.9	48.8	50.7	48.4	48.4	48.4	44.1	27.3	27.3	23.4
84°	27.3	35.7	44.9	46.8	44.5	43.8	43.0	38.8	21.9	22.3	18.8
84.5°	23.0	31.5	41.1	43.4	41.1	39.9	38.8	33.4	16.5	17.3	15.7
85°	19.2	27.3	37.2	39.5	37.6	36.1	34.6	28.4	12.7	13.4	12.3
85.5°	15.4	23.4	33.4	35.7	34.2	32.2	29.9	23.0	10.0	10.0	9.6
86°	13.1	19.6	29.9	32.2	30.7	28.8	25.7	18.0	7.7	7.3	6.9
86.5°	10.7	16.5	26.1	28.4	27.6	25.0	21.1	14.2	6.1	5.0	4.6
87°	8.4	13.8	22.7	25.0	24.2	21.1	17.7	11.1	4.6	3.1	2.7
87.5°	5.8	11.5	19.2	21.5	21.1	18.0	14.2	8.1	3.5	1.5	1.2
88°	4.2	8.8	15.7	18.0	18.0	14.6	11.1	5.4	2.3	0.8	0.4
88.5°	2.3	6.5	13.1	14.6	14.6	11.9	8.1	3.5	1.2	0.4	0.0



TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.4	3.8	5.4	5.8	3.8	1.5	0.4	0.0	0.0	0.0



TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9
0.5°	2412.8	2411.3	2406.3	2402.8	2400.5	2400.9
1°	2414.7	2409.0	2400.1	2393.6	2389.8	2390.2
1.5°	2416.3	2406.3	2393.6	2384.0	2378.6	2379.0
2°	2417.0	2402.8	2386.7	2374.4	2367.1	2367.5
2.5°	2417.8	2399.4	2379.4	2364.0	2355.6	2355.2
3°	2417.8	2395.1	2371.7	2353.7	2343.3	2342.9
3.5°	2417.0	2390.5	2363.7	2342.5	2330.6	2330.6
4°	2416.3	2385.5	2354.8	2331.4	2318.0	2317.6
4.5°	2415.1	2380.2	2346.0	2319.5	2304.9	2304.2
5°	2413.2	2374.4	2336.4	2307.6	2291.1	2290.3
5.5°	2410.9	2368.3	2326.8	2294.9	2276.9	2276.5
6°	2408.2	2361.4	2316.8	2282.3	2263.1	2261.9
6.5°	2405.1	2354.5	2306.1	2268.8	2248.5	2247.3
7°	2401.7	2346.8	2295.3	2255.4	2233.5	2232.4
7.5°	2397.4	2338.7	2283.8	2241.6	2218.2	2217.4
8°	2392.8	2330.3	2271.9	2227.4	2202.8	2202.0
8.5°	2387.8	2321.4	2260.0	2212.8	2187.1	2185.9
9°	2382.9	2312.2	2247.3	2198.2	2171.3	2170.2
9.5°	2377.1	2302.6	2234.7	2182.8	2154.4	2153.7
10°	2371.0	2293.0	2221.6	2167.5	2138.3	2137.2
10.5°	2364.0	2282.3	2208.2	2151.8	2121.4	2120.3
11°	2357.1	2271.5	2194.0	2135.6	2104.5	2103.8
11.5°	2349.5	2260.4	2179.8	2119.5	2087.3	2086.1
12°	2341.4	2248.9	2165.6	2103.0	2069.6	2068.8
12.5°	2333.3	2237.4	2150.6	2086.1	2051.9	2051.2
13°	2324.5	2224.7	2135.6	2068.8	2033.9	2033.5
13.5°	2315.7	2212.0	2120.3	2051.6	2016.2	2015.1
14°	2305.7	2199.4	2104.5	2034.3	1997.8	1997.4
14.5°	2295.7	2186.3	2088.8	2016.6	1979.4	1978.6
15°	2285.3	2172.5	2072.7	1998.6	1960.6	1960.6
15.5°	2274.6	2158.7	2056.2	1980.5	1941.4	1941.0
16°	2263.9	2144.5	2038.9	1962.1	1922.6	1922.6
16.5°	2251.9	2129.9	2022.0	1943.7	1903.8	1903.8
17°	2240.4	2115.3	2004.7	1924.9	1884.2	1884.6
17.5°	2228.1	2100.3	1987.4	1906.1	1865.0	1865.0
18°	2215.5	2084.6	1969.8	1887.2	1845.0	1845.8
18.5°	2202.8	2069.2	1951.7	1867.7	1825.8	1825.8
19°	2189.8	2053.1	1934.1	1848.5	1805.9	1806.6
19.5°	2176.7	2037.4	1915.7	1829.3	1785.9	1786.7
20°	2162.5	2020.8	1897.6	1809.7	1765.9	1766.7
20.5°	2148.7	2004.3	1879.2	1790.1	1745.6	1746.4
21°	2134.1	1987.4	1860.4	1769.8	1725.6	1726.8

TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2089.6	1935.6	1803.6	1710.7	1664.6	1665.7
23°	2074.2	1918.3	1784.7	1690.3	1644.2	1645.4
23.5°	2058.5	1900.7	1765.5	1670.3	1623.9	1625.4
24°	2042.7	1883.4	1746.7	1650.8	1603.2	1605.1
24.5°	2026.6	1865.7	1727.9	1630.8	1582.8	1584.3
25°	2010.9	1848.5	1709.1	1609.7	1562.5	1563.6
25.5°	1995.1	1830.4	1689.2	1590.9	1542.1	1543.3
26°	1979.4	1812.8	1670.3	1569.8	1521.8	1522.9
26.5°	1963.3	1794.3	1651.1	1550.6	1501.0	1502.6
27°	1946.4	1774.4	1631.2	1530.2	1480.3	1481.8
27.5°	1927.9	1752.9	1610.1	1510.3	1460.0	1461.1
28°	1908.0	1732.2	1589.0	1489.1	1439.6	1440.4
28.5°	1887.2	1709.9	1567.5	1469.2	1419.3	1420.4
29°	1866.1	1688.4	1546.0	1448.4	1398.5	1399.7
29.5°	1844.2	1665.7	1524.5	1427.7	1378.2	1379.0
30°	1820.8	1642.7	1502.2	1405.5	1358.2	1358.6
30.5°	1797.4	1619.3	1479.9	1385.5	1337.9	1338.3
31°	1773.2	1595.9	1456.9	1363.6	1316.8	1317.5
31.5°	1748.7	1571.7	1433.9	1342.1	1296.4	1297.2
32°	1722.9	1547.1	1410.8	1319.8	1275.7	1276.5
32.5°	1697.2	1522.2	1387.8	1299.1	1255.0	1256.1
33°	1671.1	1497.6	1364.4	1277.2	1234.6	1236.2
33.5°	1644.6	1472.3	1340.6	1255.3	1213.9	1215.8
34°	1617.0	1447.3	1317.5	1233.5	1193.2	1195.5
34.5°	1589.0	1420.4	1293.4	1211.6	1172.0	1175.1
35°	1561.3	1395.9	1270.3	1189.7	1151.3	1154.4
35.5°	1533.3	1369.4	1246.1	1167.8	1131.0	1134.8
36°	1504.9	1343.6	1223.5	1145.9	1110.2	1114.8
36.5°	1475.3	1317.5	1199.7	1124.4	1089.5	1094.5
37°	1445.4	1291.4	1176.6	1102.6	1068.8	1073.8
37.5°	1415.8	1265.3	1152.5	1081.4	1048.4	1053.8
38°	1385.9	1238.5	1129.8	1059.2	1027.3	1033.5
38.5°	1355.9	1212.0	1106.0	1037.7	1007.0	1013.1
39°	1325.6	1185.9	1082.6	1016.6	986.2	993.1
39.5°	1295.3	1159.8	1058.8	995.1	965.9	972.8
40°	1264.9	1132.9	1035.4	972.8	945.5	952.5
40.5°	1234.6	1106.4	1011.6	950.9	925.2	932.5
41°	1204.7	1079.9	987.8	929.4	905.2	912.1
41.5°	1174.0	1053.8	964.4	908.3	884.9	892.2
42°	1144.4	1027.7	941.7	887.6	864.9	871.8
42.5°	1114.5	1001.6	918.7	867.2	845.3	852.3
43°	1084.9	975.5	896.0	846.5	825.8	832.3
43.5°	1055.3	949.4	873.8	826.1	806.2	812.3

TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	970.5	873.0	808.1	765.9	747.1	753.6
45.5°	942.9	848.4	786.2	746.3	727.5	734.0
46°	916.0	824.6	765.5	727.1	708.7	715.2
46.5°	888.7	800.4	744.4	707.5	689.5	696.0
47°	861.9	777.4	723.6	688.7	671.1	676.8
47.5°	836.5	754.0	702.9	669.9	653.0	658.0
48°	811.6	731.3	682.2	650.7	635.0	639.2
48.5°	787.0	709.4	661.8	632.3	616.5	620.8
49°	763.2	687.6	642.6	614.2	599.3	602.7
49.5°	739.4	667.2	623.5	595.8	582.0	584.7
50°	717.1	646.1	604.3	578.2	564.3	566.6
50.5°	694.5	625.8	585.1	560.5	547.1	549.4
51°	672.6	606.2	566.6	542.8	530.9	532.1
51.5°	652.2	587.4	549.0	525.6	514.4	515.2
52°	632.3	568.6	531.7	509.4	498.3	498.7
52.5°	611.9	550.1	514.4	492.9	482.2	482.6
53°	592.7	532.5	497.5	476.4	466.4	466.8
53.5°	573.9	515.2	481.0	460.3	450.7	451.1
54°	555.9	498.3	464.9	444.6	435.3	436.5
54.5°	537.8	482.2	449.5	429.2	420.4	421.9
55°	521.3	466.4	434.6	414.2	406.2	407.7
55.5°	504.4	451.1	419.2	399.6	391.6	393.9
56°	488.3	436.1	405.0	385.4	378.1	381.2
56.5°	472.6	421.5	390.8	371.6	364.3	368.5
57°	457.6	407.3	377.0	358.2	351.3	356.6
57.5°	442.6	393.5	363.9	345.1	339.0	345.1
58°	428.4	380.1	350.9	332.8	327.1	335.1
58.5°	414.2	367.4	338.6	320.6	315.9	325.2
59°	400.4	354.7	326.3	309.0	305.2	316.3
59.5°	387.4	342.4	314.8	297.9	295.2	308.3
60°	374.3	330.5	303.3	286.8	286.0	302.1
60.5°	362.0	318.6	291.8	276.4	277.2	295.6
61°	350.1	307.5	281.4	266.4	268.7	288.7
61.5°	337.8	296.4	270.6	256.8	261.4	281.8
62°	326.7	286.0	260.7	248.0	254.9	274.5
62.5°	315.2	275.3	251.1	239.2	248.4	267.2
63°	304.0	264.9	241.1	230.3	241.9	259.9
63.5°	292.5	254.9	231.9	222.3	235.3	253.0
64°	282.5	245.3	223.0	214.6	228.8	245.7
64.5°	272.2	236.1	214.6	207.3	222.3	238.8
65°	261.8	226.9	206.2	200.0	216.1	231.9
65.5°	251.8	217.7	197.7	193.1	210.0	225.0
66°	242.2	208.8	190.0	186.6	203.5	218.1



TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	214.2	183.9	167.8	168.9	185.4	198.1
68°	205.0	176.2	160.9	163.5	179.3	191.9
68.5°	196.6	168.5	154.3	158.6	173.1	185.4
69°	188.1	161.2	147.8	153.2	167.4	179.3
69.5°	179.7	153.9	141.7	148.2	161.2	172.8
70°	171.6	146.6	136.3	143.2	155.9	166.6
70.5°	163.5	140.1	130.5	137.8	150.1	160.5
71°	156.2	134.0	125.2	132.8	144.3	154.7
71.5°	148.6	127.5	119.8	128.2	138.6	149.0
72°	140.9	121.3	114.0	123.6	133.2	143.2
72.5°	134.0	115.2	109.0	119.0	128.2	138.6
73°	127.1	109.0	104.0	114.4	122.8	132.8
73.5°	120.2	102.9	99.4	109.4	117.9	127.5
74°	113.3	97.5	94.8	104.8	112.5	121.7
74.5°	107.1	92.1	90.6	100.2	107.5	115.9
75°	101.0	87.1	86.4	95.6	102.5	110.6
75.5°	94.8	82.2	82.2	91.4	97.5	105.6
76°	89.1	77.2	77.9	86.8	92.5	100.2
76.5°	83.3	72.6	74.1	82.2	87.9	95.2
77°	77.9	68.0	70.3	77.9	82.9	90.2
77.5°	72.6	63.7	66.4	73.7	78.3	85.2
78°	67.6	59.5	62.6	69.5	73.7	80.2
78.5°	62.2	55.3	58.7	65.3	69.1	75.6
79°	57.6	51.1	55.3	61.0	64.5	70.6
79.5°	53.0	47.2	51.4	56.8	59.9	66.0
80°	48.4	43.8	48.0	53.0	55.7	61.4
80.5°	44.1	40.3	44.5	49.1	51.1	57.2
81°	39.9	36.9	41.1	45.3	46.8	52.6
81.5°	36.1	33.4	37.2	41.5	42.6	48.0
82°	32.6	29.9	34.2	37.6	38.4	43.8
82.5°	28.8	26.9	30.7	33.8	34.2	39.5
83°	25.0	23.8	27.3	30.3	29.9	35.3
83.5°	21.5	20.7	24.2	26.9	26.1	31.5
84°	18.0	17.7	20.7	23.4	22.3	27.3
84.5°	15.0	15.0	17.7	20.3	18.8	23.0
85°	12.3	12.3	14.6	16.9	15.7	19.2
85.5°	9.2	9.6	11.5	13.8	13.4	15.4
86°	6.9	6.5	8.4	11.1	11.1	13.1
86.5°	4.6	3.8	5.8	8.1	8.8	10.7
87°	2.3	1.5	2.7	5.4	6.5	8.4
87.5°	0.8	0.4	0.8	2.3	4.2	5.8
88°	0.0	0.0	0.0	0.4	2.3	4.2
88.5°	0.0	0.0	0.0	0.0	0.8	2.3



TEST NUMBER: P776370

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRH-HCD62TRLWW-4000lm-2700K

**CANDELA DISTRIBUTION (continued):**

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



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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°	1706.4	1748.3	1827.7	1939.8	2083.8	2220.1	2333.7	2400.1	2407.8	2357.5	2255.8
22°	1686.5	1728.7	1808.9	1922.6	2068.1	2205.9	2321.8	2389.4	2397.4	2346.4	2243.5



44°	792.8	836.9	908.7	996.6	1111.4	1217.0	1294.1	1319.5	1293.0	1226.2	1131.0
44.5°	773.2	817.7	888.0	974.0	1085.7	1186.2	1260.3	1284.5	1258.8	1192.4	1099.9



66.5°	211.1	222.3	224.2	243.4	277.2	306.4	335.5	352.4	345.5	318.3	274.9
67°	204.6	215.8	217.3	234.6	266.8	295.2	324.4	340.9	333.6	306.7	264.9



89°	1.2	4.2	10.0	11.5	11.5	9.2	5.4	1.9	0.4	0.0	0.0
89.5°	0.0	2.3	6.9	8.4	8.8	6.5	3.5	0.8	0.0	0.0	0.0



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21.5°	2119.9	1970.2	1840.8	1750.2	1704.9	1706.4
22°	2104.5	1953.3	1822.8	1730.6	1684.9	1686.5



44°	1026.5	923.7	851.9	805.4	786.2	792.8
44.5°	998.5	898.7	830.0	785.8	766.6	773.2



66.5°	232.6	200.4	182.4	180.4	197.3	211.1
67°	223.0	192.3	175.1	174.7	191.2	204.6

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Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.4	1.2
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)