

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: P776687

Luminaire Tested: HCDJBS4050CSD-HCD62TRMB-5000lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776687  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B058)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS4050CSD-HCD62TRMB-5000lm-3500K  
Description: 6 INCH ROUND NARROW MATTE BLACK TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

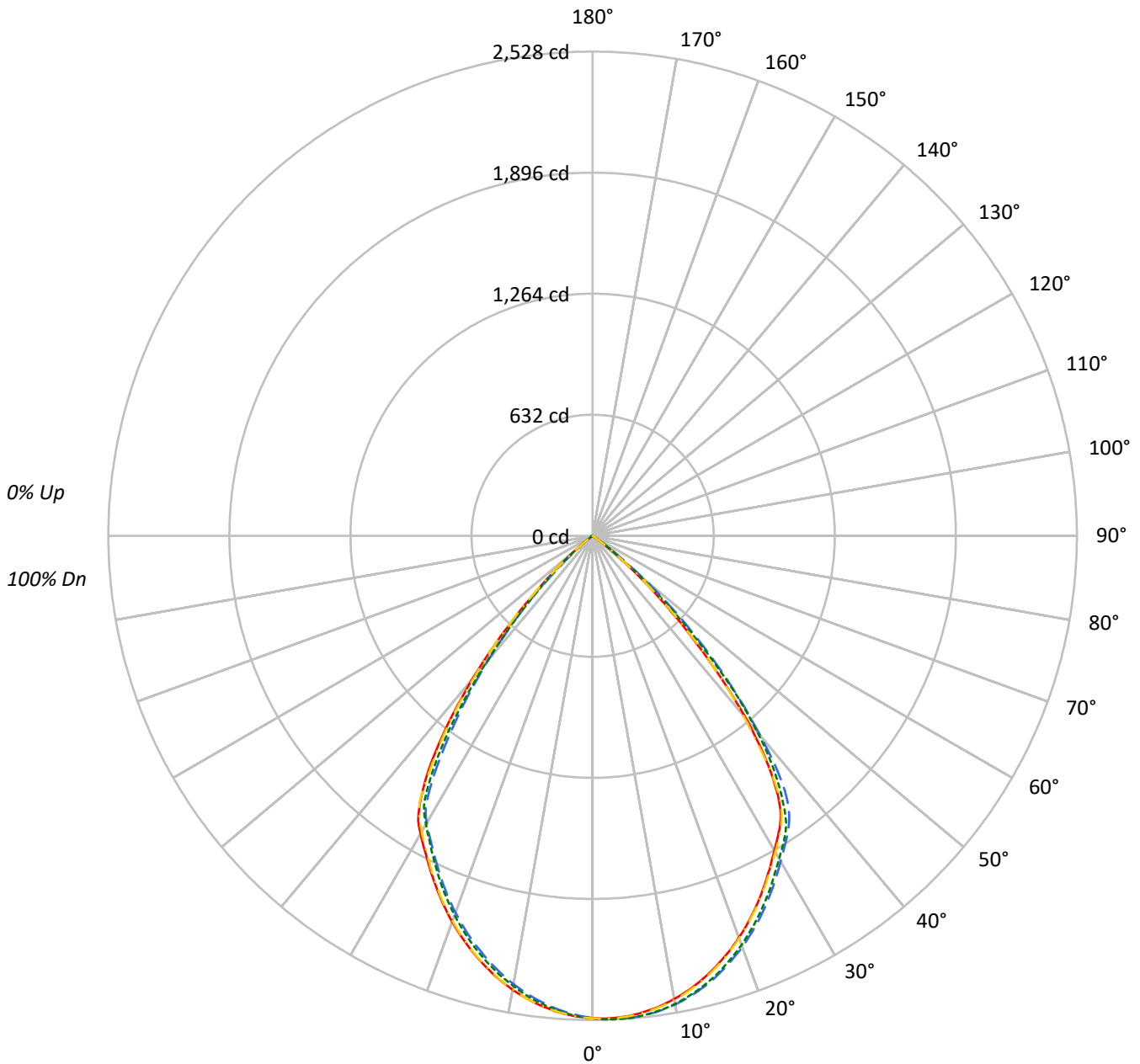
Lumens per Lamp: N/A  
Luminaire Lumens: 3290.2 lumens  
Efficiency: N/A  
Efficacy: 68.5 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.11  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot





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

RF	20				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	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94				92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86				85
3	101	94	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79				77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	72				71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66				65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61				60
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56				55
8	75	64	57	53	73	63	57	53	62	57	52	61	56	52	60	56	52				51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48				47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45				43

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

	0°	90°	180°	270°
0°	138125	138125	138125	138125
5°	138108	138834	136704	136209
10°	136710	138129	133949	132897
15°	134047	136005	130006	128423
20°	130246	132615	125124	123007
25°	125451	128161	119311	116487
30°	120170	123247	113745	110163
35°	113716	116874	99816	94261
40°	88974	95758	69852	61916
45°	52331	60417	35275	30957
50°	20613	24920	10302	10345
55°	3020	3928	860	1042
60°	669	724	625	515
65°	493	493	428	363
70°	385	385	305	305
75°	297	297	191	191
80°	158	158	158	158
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°  
 Vertical Angle: 45°  
 Luminance: 66821 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.3	7.2
10°-20°	654.3	19.9
20°-30°	930.3	28.3
30°-40°	960.7	29.2
40°-50°	459.1	14.0
50°-60°	44.4	1.3
60°-70°	3.6	0.1
70°-80°	1.3	0.0
80°-90°	0.2	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1821.0	55.3
0°-40°	2781.7	84.5
0°-60°	3285.2	99.8
0°-90°	3290.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3290.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2520	2520	2520	2520	2520	
5°	2510	2523	2484	2475	2510	238
15°	2362	2396	2291	2263	2362	664
25°	2074	2119	1972	1926	2074	954
35°	1699	1746	1492	1408	1699	1029
45°	675	779	455	399	675	529
55°	32	41	9	11	32	57
65°	4	4	3	3	4	4
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	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°	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6
0.5°	2520.1	2520.1	2520.5	2519.6	2523.4	2522.4	2521.0	2520.5	2517.7	2516.3	2514.4
1°	2521.0	2521.5	2522.4	2521.9	2525.2	2523.4	2521.9	2520.1	2515.8	2513.4	2511.6
1.5°	2521.0	2522.4	2523.8	2523.8	2526.2	2524.3	2522.4	2519.1	2513.0	2510.1	2507.3
2°	2521.0	2523.4	2525.2	2525.7	2527.6	2525.2	2521.9	2517.2	2510.6	2506.4	2503.1
2.5°	2520.1	2523.4	2526.2	2526.7	2527.6	2525.2	2521.5	2514.9	2507.3	2502.6	2498.3
3°	2518.6	2523.4	2526.2	2527.1	2527.6	2524.8	2520.1	2513.0	2503.5	2497.9	2493.2
3.5°	2517.2	2522.4	2526.2	2527.6	2527.1	2523.8	2518.6	2510.1	2499.8	2493.2	2487.5
4°	2515.3	2521.0	2525.2	2527.1	2526.2	2522.9	2516.8	2506.4	2495.0	2487.5	2481.4
4.5°	2513.0	2519.1	2524.3	2526.7	2525.2	2521.0	2514.4	2502.6	2490.3	2481.4	2475.2
5°	2509.7	2516.8	2522.9	2525.2	2522.9	2518.6	2511.6	2498.3	2484.2	2475.2	2468.6
5.5°	2506.4	2514.9	2521.5	2523.8	2520.5	2516.3	2508.3	2494.1	2478.0	2468.1	2461.1
6°	2502.6	2512.0	2519.1	2521.5	2518.2	2513.4	2504.5	2489.8	2471.9	2461.5	2453.0
6.5°	2497.9	2508.7	2516.3	2519.6	2514.9	2509.7	2500.7	2484.2	2465.3	2454.0	2444.5
7°	2493.2	2504.5	2513.0	2516.8	2511.6	2505.9	2496.0	2478.5	2458.2	2445.5	2436.0
7.5°	2488.0	2500.2	2509.2	2513.4	2507.3	2501.6	2491.3	2472.4	2450.7	2437.0	2427.1
8°	2482.8	2495.5	2505.4	2510.1	2503.5	2496.9	2485.6	2465.8	2442.2	2428.5	2418.1
8.5°	2476.6	2490.3	2500.7	2505.4	2498.3	2491.7	2479.9	2458.7	2433.7	2419.0	2408.2
9°	2470.0	2485.1	2496.0	2501.2	2493.2	2486.5	2473.3	2450.7	2425.7	2409.6	2398.3
9.5°	2463.4	2479.0	2490.8	2496.0	2487.5	2479.9	2466.7	2443.1	2416.2	2399.7	2387.4
10°	2455.9	2472.4	2484.7	2490.3	2481.4	2473.8	2459.6	2434.2	2406.3	2389.3	2377.0
10.5°	2448.3	2465.3	2478.5	2484.7	2474.7	2467.2	2452.1	2425.7	2396.4	2378.0	2365.7
11°	2440.3	2458.2	2472.4	2478.0	2467.7	2459.6	2444.1	2416.7	2386.0	2367.1	2353.9
11.5°	2432.3	2450.7	2464.8	2471.4	2460.1	2451.6	2436.0	2407.2	2375.6	2355.8	2341.6
12°	2423.3	2442.2	2457.8	2464.4	2452.1	2444.1	2427.1	2397.3	2364.3	2344.5	2329.8
12.5°	2413.4	2433.7	2449.7	2456.8	2444.1	2435.6	2417.6	2386.9	2353.0	2332.2	2316.6
13°	2403.9	2424.7	2441.2	2448.8	2435.1	2427.1	2408.2	2376.6	2341.2	2319.5	2304.3
13.5°	2394.0	2415.7	2432.3	2440.8	2426.1	2417.2	2398.7	2364.8	2328.4	2307.2	2291.1
14°	2383.6	2406.3	2423.3	2431.3	2416.7	2407.7	2387.9	2353.9	2316.1	2294.0	2277.4
14.5°	2372.8	2396.4	2413.4	2422.3	2406.3	2396.9	2377.0	2342.1	2303.4	2280.7	2263.3
15°	2361.9	2386.0	2403.9	2412.4	2396.4	2386.0	2366.2	2329.4	2290.7	2267.1	2249.1
15.5°	2350.6	2374.7	2394.0	2402.1	2386.0	2374.7	2354.4	2317.1	2277.4	2252.9	2235.4
16°	2338.3	2363.3	2382.7	2391.7	2374.7	2363.3	2342.6	2304.3	2263.3	2238.7	2220.8
16.5°	2326.1	2352.0	2371.4	2380.8	2363.3	2352.0	2330.8	2291.1	2249.6	2223.6	2206.2
17°	2313.8	2340.2	2359.6	2370.0	2351.1	2340.2	2318.0	2277.9	2235.4	2209.5	2190.6
17.5°	2301.0	2327.9	2348.2	2358.2	2338.8	2327.5	2305.3	2264.7	2220.8	2194.8	2175.0
18°	2288.3	2315.2	2336.0	2345.9	2326.1	2314.7	2292.1	2250.5	2206.2	2179.3	2159.0
18.5°	2275.1	2302.0	2323.2	2333.6	2313.3	2301.0	2277.9	2236.4	2191.1	2163.7	2143.4
19°	2260.5	2289.2	2311.0	2321.3	2300.1	2288.3	2264.7	2221.7	2176.0	2147.6	2127.3
19.5°	2246.8	2276.0	2297.7	2308.1	2286.9	2274.1	2251.0	2207.1	2160.4	2132.1	2110.4
20°	2232.6	2262.3	2284.5	2294.9	2273.2	2260.5	2236.9	2191.5	2144.8	2115.5	2093.4
20.5°	2218.0	2248.2	2270.8	2281.2	2259.0	2245.8	2222.2	2176.9	2128.3	2098.6	2076.4
21°	2203.8	2234.0	2256.7	2267.5	2243.9	2231.7	2207.1	2160.9	2111.8	2082.0	2058.9

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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°	2157.1	2189.2	2212.8	2223.2	2199.1	2186.3	2160.9	2112.7	2061.3	2029.6	2006.0
23°	2141.0	2172.7	2197.7	2208.5	2183.5	2170.8	2144.8	2096.2	2043.3	2011.7	1987.2
23.5°	2124.5	2157.1	2182.1	2192.5	2167.5	2154.7	2128.8	2079.2	2025.9	1993.8	1968.7
24°	2107.5	2140.6	2166.5	2177.8	2151.4	2138.7	2112.2	2062.2	2007.9	1975.8	1949.9
24.5°	2091.0	2125.0	2150.5	2161.8	2134.9	2122.2	2095.7	2045.2	1990.5	1956.9	1931.5
25°	2074.0	2108.0	2134.4	2145.3	2118.8	2105.6	2078.7	2027.8	1972.5	1939.0	1912.1
25.5°	2056.5	2091.0	2117.4	2128.8	2101.9	2088.6	2061.7	2010.3	1954.1	1920.1	1893.2
26°	2039.6	2075.0	2100.9	2112.2	2085.3	2071.6	2044.7	1992.3	1936.2	1901.7	1874.3
26.5°	2021.6	2058.0	2083.9	2095.7	2068.3	2054.2	2027.3	1974.9	1918.2	1882.8	1856.4
27°	2004.1	2041.0	2066.9	2078.7	2051.4	2037.2	2009.8	1956.9	1899.4	1864.9	1837.5
27.5°	1986.2	2023.0	2049.9	2061.3	2033.9	2019.7	1992.3	1938.5	1881.9	1847.0	1819.6
28°	1968.7	2005.6	2032.5	2044.3	2016.0	2002.7	1974.4	1921.1	1864.4	1830.0	1801.7
28.5°	1950.3	1988.1	2015.5	2026.3	1998.0	1984.8	1956.9	1904.1	1847.9	1812.5	1785.1
29°	1932.4	1970.6	1998.0	2009.3	1981.0	1967.3	1940.0	1886.6	1830.9	1795.0	1767.2
29.5°	1915.4	1953.2	1980.5	1992.3	1964.0	1950.3	1923.4	1870.1	1813.5	1777.6	1749.7
30°	1898.4	1936.2	1963.6	1974.9	1947.0	1933.8	1906.4	1853.1	1796.9	1760.6	1732.3
30.5°	1881.4	1919.2	1946.6	1957.9	1930.5	1916.8	1890.4	1837.1	1779.9	1742.7	1712.9
31°	1864.9	1903.1	1930.5	1941.4	1914.9	1900.8	1873.9	1820.5	1762.0	1723.8	1693.1
31.5°	1847.9	1886.6	1914.0	1925.3	1898.4	1884.7	1857.8	1803.5	1743.1	1700.6	1667.6
32°	1831.4	1870.1	1897.5	1908.8	1882.4	1868.7	1841.3	1785.6	1715.8	1669.5	1633.2
32.5°	1814.9	1853.6	1881.9	1893.2	1865.9	1852.6	1824.3	1766.3	1685.1	1633.2	1593.5
33°	1797.4	1837.1	1865.4	1876.2	1848.9	1834.2	1805.9	1743.1	1650.6	1591.6	1548.2
33.5°	1778.5	1820.1	1848.9	1860.7	1829.5	1815.8	1786.1	1714.8	1613.8	1547.2	1501.5
34°	1758.2	1801.2	1830.5	1842.7	1806.9	1794.1	1763.9	1683.2	1576.0	1500.0	1451.4
34.5°	1730.9	1780.9	1811.6	1823.4	1778.1	1768.6	1739.4	1647.3	1535.0	1453.8	1401.9
35°	1699.2	1756.8	1789.4	1799.3	1746.4	1738.4	1711.0	1610.0	1491.5	1407.1	1350.9
35.5°	1664.8	1729.9	1765.3	1771.0	1712.4	1705.4	1678.9	1569.9	1446.2	1359.9	1302.3
36°	1626.5	1697.3	1736.0	1738.9	1678.5	1669.5	1641.6	1527.4	1396.7	1314.1	1250.4
36.5°	1588.3	1662.4	1704.4	1704.4	1642.1	1630.3	1597.8	1481.6	1346.2	1268.3	1200.8
37°	1546.3	1621.8	1667.6	1668.1	1605.3	1589.3	1547.7	1434.4	1293.8	1218.7	1150.8
37.5°	1501.9	1578.4	1626.5	1631.3	1565.7	1544.9	1493.9	1383.0	1243.3	1169.6	1101.2
38°	1454.3	1529.3	1578.4	1592.1	1525.5	1499.1	1435.9	1329.2	1190.4	1117.2	1049.7
38.5°	1404.2	1477.9	1528.8	1550.5	1480.7	1451.0	1380.2	1272.1	1137.5	1065.3	997.8
39°	1351.8	1421.7	1474.6	1507.1	1435.4	1399.5	1324.5	1216.4	1083.7	1011.0	946.8
39.5°	1298.5	1366.5	1417.4	1460.4	1387.2	1347.1	1272.1	1156.9	1031.3	958.2	896.3
40°	1243.3	1308.9	1361.3	1412.7	1338.1	1290.9	1219.2	1097.9	976.1	904.8	844.9
40.5°	1187.1	1249.4	1305.6	1363.2	1286.7	1235.2	1168.7	1039.4	922.3	854.8	795.3
41°	1127.6	1189.9	1250.8	1310.3	1236.2	1180.5	1116.3	981.8	867.6	802.9	746.2
41.5°	1068.6	1134.7	1197.5	1256.5	1181.9	1126.2	1063.4	924.2	812.3	753.8	698.1
42°	1008.2	1079.0	1143.2	1199.8	1127.2	1072.9	1008.7	869.0	756.2	703.8	650.0
42.5°	950.2	1023.3	1090.8	1144.6	1069.1	1020.0	952.5	815.2	701.4	654.2	601.8
43°	892.1	967.6	1036.5	1087.5	1011.5	966.7	897.8	762.3	647.6	603.7	555.1
43.5°	836.9	912.9	983.2	1031.8	952.0	913.8	844.4	709.9	596.1	555.6	509.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	675.0	749.6	819.9	861.9	779.3	753.3	690.1	565.5	455.0	419.6	382.8
45.5°	625.4	697.2	768.9	807.6	722.2	700.9	640.0	520.2	412.5	376.2	340.3
46°	574.9	646.7	717.0	752.9	667.9	649.5	591.0	478.6	370.1	332.3	297.8
46.5°	525.8	598.5	667.4	700.0	613.6	599.5	543.3	437.1	327.6	288.9	261.5
47°	478.6	552.3	617.9	647.6	561.7	549.4	494.7	395.5	291.7	252.5	226.6
47.5°	433.3	506.9	569.7	595.7	511.2	500.8	452.2	354.0	257.2	217.6	194.9
48°	390.4	463.0	522.5	544.7	467.3	455.0	409.7	312.5	225.1	184.6	166.1
48.5°	349.3	421.0	474.8	495.6	423.4	409.2	367.2	275.2	195.9	156.2	140.2
49°	310.6	380.0	429.5	447.0	379.5	363.4	325.2	240.7	168.5	130.7	117.1
49.5°	274.7	340.8	385.6	402.2	335.6	317.7	288.9	209.6	144.0	108.1	97.2
50°	241.7	303.0	343.2	358.3	292.2	276.1	251.6	179.4	120.8	89.2	79.8
50.5°	211.0	266.2	303.5	316.2	253.9	237.9	217.1	152.0	100.5	73.6	65.6
51°	181.7	231.3	263.9	277.5	219.0	201.5	184.6	127.9	82.1	63.2	56.2
51.5°	156.7	197.8	227.5	239.8	186.9	169.9	155.3	105.7	70.8	52.4	46.7
52°	135.5	167.6	194.5	205.8	156.2	140.7	126.0	85.9	59.5	42.0	37.3
52.5°	114.2	145.4	162.4	173.2	128.4	114.2	101.0	73.6	48.1	31.6	27.8
53°	93.0	122.7	139.7	149.6	102.9	91.6	79.3	61.4	36.8	21.2	18.4
53.5°	71.7	100.1	117.1	126.0	80.7	72.7	66.6	49.6	25.5	15.6	13.2
54°	56.6	77.4	94.4	102.9	67.5	60.4	53.8	37.8	14.2	11.3	9.9
54.5°	43.0	55.2	71.7	79.3	54.3	48.6	41.5	25.5	10.4	9.0	8.5
55°	31.6	40.1	49.1	56.2	41.1	36.8	28.8	13.7	9.0	8.0	8.0
55.5°	21.7	28.8	35.4	41.1	27.4	25.0	16.0	9.9	8.0	8.0	7.6
56°	14.6	19.4	24.1	28.8	14.2	13.2	11.3	8.5	8.0	7.6	7.1
56.5°	12.7	17.0	16.0	18.9	10.4	9.9	9.0	8.0	7.6	7.1	7.1
57°	10.9	14.6	14.2	16.0	9.0	8.5	8.5	8.0	7.1	7.1	6.6
57.5°	9.0	12.3	11.8	13.2	8.5	8.0	8.0	7.6	7.1	6.6	6.1
58°	7.6	9.9	9.9	10.9	8.0	8.0	7.6	7.1	6.6	6.1	6.1
58.5°	7.1	7.6	8.0	8.0	7.6	7.6	7.6	7.1	6.1	6.1	5.7
59°	6.6	7.1	7.6	7.6	7.1	7.1	7.1	6.6	6.1	5.7	5.7
59.5°	6.6	7.1	7.1	7.6	7.1	7.1	6.6	6.1	5.7	5.7	5.2
60°	6.1	6.6	7.1	7.1	6.6	6.6	6.6	6.1	5.7	5.2	5.2
60.5°	5.7	6.1	6.6	6.6	6.1	6.1	6.1	5.7	5.2	5.2	4.7
61°	5.7	6.1	6.1	6.6	6.1	6.1	5.7	5.2	4.7	4.7	4.7
61.5°	5.2	5.7	6.1	6.1	5.7	5.7	5.7	5.2	4.7	4.7	4.2
62°	5.2	5.2	5.7	5.7	5.2	5.2	5.2	4.7	4.2	4.2	4.2
62.5°	4.7	5.2	5.2	5.7	5.2	5.2	5.2	4.7	4.2	4.2	3.8
63°	4.7	4.7	5.2	5.2	4.7	4.7	4.7	4.2	4.2	3.8	3.8
63.5°	4.2	4.7	4.7	5.2	4.7	4.7	4.7	4.2	3.8	3.8	3.8
64°	4.2	4.2	4.7	4.7	4.2	4.2	4.2	3.8	3.8	3.8	3.3
64.5°	3.8	4.2	4.2	4.7	4.2	4.2	4.2	3.8	3.3	3.3	3.3
65°	3.8	3.8	4.2	4.2	3.8	3.8	3.8	3.8	3.3	3.3	3.3
65.5°	3.3	3.8	3.8	4.2	3.8	3.8	3.8	3.3	3.3	3.3	2.8
66°	3.3	3.8	3.8	3.8	3.8	3.8	3.3	3.3	2.8	2.8	2.8





TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.8	2.8	3.3	3.3	3.3	3.3	2.8	2.8	2.4	2.4	2.4
68°	2.8	2.8	3.3	3.3	2.8	2.8	2.8	2.8	2.4	2.4	2.4
68.5°	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.4	2.4	2.4	2.4
69°	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.4	2.4	2.4	1.9
69.5°	2.4	2.4	2.8	2.8	2.4	2.4	2.4	2.4	1.9	1.9	1.9
70°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9
70.5°	1.9	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9	1.9
71°	1.9	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9	1.9	1.9
71.5°	1.9	1.9	2.4	2.4	1.9	1.9	1.9	1.9	1.4	1.4	1.4
72°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4
72.5°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.4
73°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.4
73.5°	1.4	1.4	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
74°	1.4	1.4	1.4	1.9	1.4	1.4	1.4	1.4	1.4	0.9	0.9
74.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9
75.5°	0.9	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.9
76°	0.9	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.9
76.5°	0.9	0.9	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9
77°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.9
78°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
78.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
79°	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
79.5°	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
83°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
83.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
84°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2519.6	2519.6	2519.6	2519.6	2519.6	2519.6
0.5°	2513.4	2518.6	2518.2	2518.2	2520.1	2520.1
1°	2509.7	2515.3	2515.3	2516.3	2519.1	2521.0
1.5°	2505.4	2512.0	2512.0	2513.9	2517.7	2521.0
2°	2500.7	2508.3	2508.7	2511.1	2516.3	2521.0
2.5°	2495.5	2503.5	2504.5	2507.3	2514.4	2520.1
3°	2490.3	2498.8	2500.2	2503.5	2511.6	2518.6
3.5°	2484.2	2493.6	2495.0	2499.3	2508.3	2517.2
4°	2477.6	2488.0	2489.8	2494.6	2505.0	2515.3
4.5°	2471.0	2481.8	2484.2	2489.4	2501.2	2513.0
5°	2464.4	2475.2	2478.0	2483.7	2496.9	2509.7
5.5°	2456.3	2468.6	2471.4	2478.0	2491.7	2506.4
6°	2448.3	2461.1	2463.9	2471.4	2486.5	2502.6
6.5°	2439.8	2453.5	2456.8	2464.4	2481.4	2497.9
7°	2431.3	2445.5	2449.3	2457.3	2475.2	2493.2
7.5°	2421.9	2437.0	2440.8	2449.7	2468.6	2488.0
8°	2412.0	2428.0	2432.3	2441.2	2461.5	2482.8
8.5°	2402.1	2418.1	2422.8	2433.2	2454.4	2476.6
9°	2391.2	2408.2	2413.4	2424.2	2446.9	2470.0
9.5°	2380.3	2398.3	2403.5	2414.3	2438.9	2463.4
10°	2370.0	2387.4	2393.1	2404.9	2429.9	2455.9
10.5°	2358.2	2377.0	2382.7	2394.5	2420.9	2448.3
11°	2346.4	2365.2	2371.4	2384.6	2411.0	2440.3
11.5°	2334.1	2353.9	2360.0	2373.7	2402.1	2432.3
12°	2321.3	2342.1	2348.2	2362.4	2392.1	2423.3
12.5°	2308.6	2329.4	2336.4	2350.6	2381.3	2413.4
13°	2295.4	2317.1	2324.2	2338.8	2370.0	2403.9
13.5°	2281.7	2303.9	2311.4	2326.5	2359.6	2394.0
14°	2268.0	2290.7	2298.7	2314.3	2347.8	2383.6
14.5°	2254.3	2277.0	2285.5	2301.5	2336.4	2372.8
15°	2239.7	2262.8	2271.3	2288.3	2323.7	2361.9
15.5°	2225.1	2249.1	2257.6	2274.6	2311.4	2350.6
16°	2210.4	2234.5	2243.0	2260.9	2298.7	2338.3
16.5°	2194.8	2219.4	2228.4	2247.2	2285.5	2326.1
17°	2179.7	2204.8	2213.7	2233.1	2271.8	2313.8
17.5°	2163.7	2189.2	2198.6	2218.0	2258.1	2301.0
18°	2147.6	2173.6	2183.5	2203.3	2244.4	2288.3
18.5°	2132.1	2157.6	2167.5	2187.8	2229.8	2275.1
19°	2115.1	2141.5	2151.4	2172.2	2215.1	2260.5
19.5°	2098.1	2125.0	2135.4	2156.6	2200.5	2246.8
20°	2080.6	2108.5	2118.4	2140.6	2184.9	2232.6
20.5°	2063.6	2091.0	2101.9	2124.5	2169.8	2218.0
21°	2046.2	2073.5	2084.4	2107.5	2153.8	2203.8

TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1991.4	2020.2	2031.5	2056.1	2105.6	2157.1
23°	1972.5	2001.8	2013.6	2038.6	2088.2	2141.0
23.5°	1954.1	1982.9	1995.2	2020.7	2071.2	2124.5
24°	1934.8	1964.0	1976.8	2002.7	2053.7	2107.5
24.5°	1916.4	1945.1	1958.4	1984.3	2036.7	2091.0
25°	1897.0	1925.8	1939.0	1965.4	2018.8	2074.0
25.5°	1877.7	1906.9	1920.6	1947.0	2000.8	2056.5
26°	1858.8	1887.6	1901.3	1928.6	1982.9	2039.6
26.5°	1839.9	1868.7	1882.4	1909.7	1964.5	2021.6
27°	1821.0	1849.3	1863.5	1890.9	1946.6	2004.1
27.5°	1803.1	1830.5	1844.6	1872.9	1928.2	1986.2
28°	1785.1	1811.6	1825.7	1854.5	1910.2	1968.7
28.5°	1767.2	1793.6	1807.8	1836.6	1891.8	1950.3
29°	1749.7	1776.2	1790.3	1819.1	1874.3	1932.4
29.5°	1731.8	1758.2	1772.4	1802.1	1857.4	1915.4
30°	1713.9	1740.3	1754.9	1785.1	1839.9	1898.4
30.5°	1694.5	1721.9	1737.0	1767.2	1823.4	1881.4
31°	1674.2	1704.0	1719.1	1749.3	1806.9	1864.9
31.5°	1644.5	1684.6	1699.7	1731.3	1789.9	1847.9
32°	1609.6	1661.9	1677.5	1711.5	1771.9	1831.4
32.5°	1570.4	1628.9	1646.4	1687.0	1753.5	1814.9
33°	1525.1	1588.8	1610.5	1655.8	1733.2	1797.4
33.5°	1477.9	1544.9	1570.8	1615.7	1704.4	1778.5
34°	1429.2	1501.5	1526.5	1567.5	1671.4	1758.2
34.5°	1380.6	1455.7	1478.3	1518.9	1633.6	1730.9
35°	1330.6	1408.5	1425.5	1469.4	1591.6	1699.2
35.5°	1277.7	1360.8	1372.1	1420.7	1549.1	1664.8
36°	1223.9	1308.4	1319.7	1373.1	1504.3	1626.5
36.5°	1168.7	1255.5	1265.9	1325.4	1456.1	1588.3
37°	1114.4	1199.8	1213.5	1277.7	1407.1	1546.3
37.5°	1059.7	1145.1	1162.1	1227.7	1356.1	1501.9
38°	1007.3	1088.0	1109.2	1173.9	1305.6	1454.3
38.5°	954.9	1033.2	1057.8	1120.1	1253.7	1404.2
39°	903.0	978.0	1005.9	1065.3	1204.6	1351.8
39.5°	851.5	922.3	953.0	1010.6	1153.6	1298.5
40°	799.6	865.2	900.1	955.8	1102.6	1243.3
40.5°	747.7	810.9	847.7	905.3	1047.9	1187.1
41°	696.7	758.5	795.8	854.3	994.5	1127.6
41.5°	647.6	707.5	745.3	805.2	937.9	1068.6
42°	597.6	658.9	696.2	757.1	881.7	1008.2
42.5°	551.8	609.8	647.6	708.0	826.0	950.2
43°	507.9	565.0	600.4	657.5	771.3	892.1
43.5°	469.2	520.2	554.1	607.9	717.0	836.9



TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	354.0	399.3	421.0	466.8	560.7	675.0
45.5°	315.8	363.0	380.9	423.4	511.2	625.4
46°	279.9	328.0	343.2	381.4	463.5	574.9
46.5°	249.2	295.0	306.3	339.4	417.3	525.8
47°	220.4	264.8	272.3	299.7	372.4	478.6
47.5°	194.0	235.5	239.8	261.5	331.4	433.3
48°	168.5	208.2	210.0	224.2	292.6	390.4
48.5°	144.9	182.7	182.2	190.7	257.2	349.3
49°	123.7	160.5	159.1	159.5	224.2	310.6
49.5°	104.3	140.7	138.8	138.3	194.0	274.7
50°	86.8	121.3	118.0	117.5	165.7	241.7
50.5°	71.3	101.5	97.7	96.3	145.4	211.0
51°	60.4	82.1	76.9	75.5	125.1	181.7
51.5°	49.6	67.0	62.3	61.8	104.8	156.7
52°	39.2	53.8	50.0	50.0	84.0	135.5
52.5°	28.3	41.5	38.7	40.1	64.2	114.2
53°	17.5	30.7	29.3	31.2	51.0	93.0
53.5°	11.8	21.7	21.2	23.1	39.6	71.7
54°	9.0	14.6	14.6	16.5	29.7	56.6
54.5°	8.0	12.7	12.7	14.2	21.7	43.0
55°	7.6	10.9	10.9	11.8	15.1	31.6
55.5°	7.1	9.0	9.0	9.4	13.2	21.7
56°	7.1	7.1	7.1	7.6	11.3	14.6
56.5°	6.6	7.1	6.6	7.1	9.0	12.7
57°	6.1	6.6	6.6	6.6	7.1	10.9
57.5°	6.1	6.1	6.1	6.6	7.1	9.0
58°	5.7	6.1	6.1	6.1	6.6	7.6
58.5°	5.7	5.7	5.7	5.7	6.6	7.1
59°	5.2	5.7	5.2	5.7	6.1	6.6
59.5°	5.2	5.2	5.2	5.2	5.7	6.6
60°	4.7	4.7	4.7	4.7	5.7	6.1
60.5°	4.7	4.7	4.7	4.7	5.2	5.7
61°	4.2	4.2	4.2	4.2	4.7	5.7
61.5°	4.2	4.2	4.2	4.2	4.7	5.2
62°	3.8	4.2	3.8	4.2	4.2	5.2
62.5°	3.8	3.8	3.8	3.8	4.2	4.7
63°	3.3	3.8	3.8	3.8	3.8	4.7
63.5°	3.3	3.3	3.3	3.3	3.8	4.2
64°	3.3	3.3	3.3	3.3	3.8	4.2
64.5°	2.8	3.3	2.8	3.3	3.3	3.8
65°	2.8	2.8	2.8	2.8	3.3	3.8
65.5°	2.8	2.8	2.8	2.8	3.3	3.3
66°	2.8	2.8	2.8	2.8	2.8	3.3



TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	2.4	2.4	2.4	2.4	2.4	2.8
68°	2.4	2.4	1.9	2.4	2.4	2.8
68.5°	1.9	1.9	1.9	1.9	2.4	2.4
69°	1.9	1.9	1.9	1.9	2.4	2.4
69.5°	1.9	1.9	1.9	1.9	1.9	2.4
70°	1.9	1.9	1.9	1.9	1.9	2.4
70.5°	1.4	1.9	1.4	1.4	1.9	1.9
71°	1.4	1.4	1.4	1.4	1.9	1.9
71.5°	1.4	1.4	1.4	1.4	1.4	1.9
72°	1.4	1.4	1.4	1.4	1.4	1.9
72.5°	1.4	1.4	1.4	1.4	1.4	1.4
73°	1.4	1.4	1.4	1.4	1.4	1.4
73.5°	0.9	0.9	0.9	0.9	1.4	1.4
74°	0.9	0.9	0.9	0.9	1.4	1.4
74.5°	0.9	0.9	0.9	0.9	0.9	1.4
75°	0.9	0.9	0.9	0.9	0.9	1.4
75.5°	0.9	0.9	0.9	0.9	0.9	0.9
76°	0.9	0.9	0.9	0.9	0.9	0.9
76.5°	0.9	0.9	0.9	0.9	0.9	0.9
77°	0.9	0.9	0.5	0.5	0.9	0.9
77.5°	0.5	0.5	0.5	0.5	0.9	0.9
78°	0.5	0.5	0.5	0.5	0.5	0.9
78.5°	0.5	0.5	0.5	0.5	0.5	0.9
79°	0.5	0.5	0.5	0.5	0.5	0.5
79.5°	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.5	0.5	0.0	0.5	0.5
83°	0.0	0.0	0.0	0.0	0.0	0.5
83.5°	0.0	0.0	0.0	0.0	0.0	0.5
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776687

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-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

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

Scaled Data Report



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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°	2188.2	2218.4	2241.6	2252.9	2229.3	2217.0	2192.0	2144.8	2094.8	2065.0	2041.4
22°	2172.2	2203.8	2227.9	2238.3	2214.2	2201.4	2176.4	2128.8	2078.3	2047.6	2023.5



44°	781.6	857.6	928.4	974.7	894.9	860.5	792.0	660.3	546.6	506.9	467.8
44.5°	728.3	802.9	874.6	918.1	836.4	807.1	741.1	612.7	498.0	463.5	425.3



66.5°	3.3	3.3	3.8	3.8	3.3	3.3	3.3	3.3	2.8	2.8	2.8
67°	2.8	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8	2.8	2.4



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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21.5°	2028.2	2055.6	2067.4	2090.5	2138.2	2188.2
22°	2009.3	2037.2	2049.5	2073.5	2121.7	2172.2



44°	430.9	478.1	507.9	559.3	664.6	781.6
44.5°	392.2	437.6	464.5	513.1	611.7	728.3



66.5°	2.4	2.4	2.4	2.4	2.8	3.3
67°	2.4	2.4	2.4	2.4	2.8	2.8

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Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)