

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: P776688

Luminaire Tested: HCDJBS4050CSD-HCD62TRMB-5000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776688
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-4000K
Description: 6 INCH ROUND NARROW MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

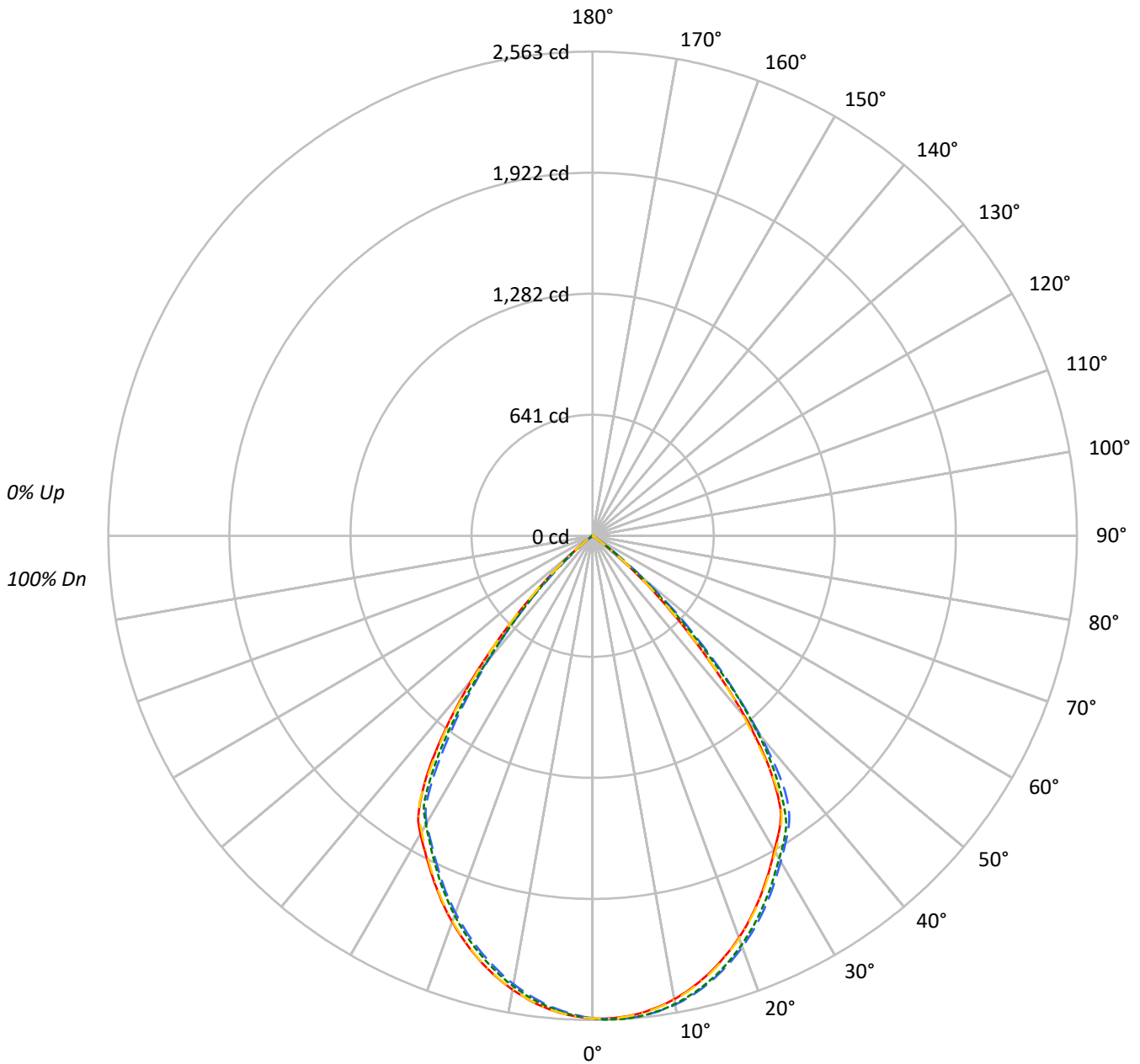
Lumens per Lamp: N/A
Luminaire Lumens: 3336.4 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.11
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): 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	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	98	97	97	95	94	92	92	92	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85	85	85	85
3	101	94	88	84	98	92	87	83	89	85	82	87	83	80	85	82	79	77	77	77	77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	73	79	75	72	71	71	71	71
5	89	80	73	69	87	79	73	68	77	72	68	75	71	67	74	70	66	65	65	65	65
6	84	74	67	63	82	73	67	62	72	66	62	70	65	62	69	64	61	60	60	60	60
7	79	69	62	57	78	68	62	57	67	61	57	65	60	57	64	60	56	55	55	55	55
8	75	64	57	53	73	63	57	53	62	57	52	61	56	52	60	56	52	51	51	51	51
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47	47	47	47
10	67	56	50	45	66	55	49	45	55	49	45	54	49	45	53	48	45	44	44	44	44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	140060	140060	140060	140060
5°	140039	140777	138619	138119
10°	138625	140061	135825	134761
15°	135926	137912	131828	130222
20°	132072	134476	126880	124728
25°	127211	129957	120987	118120
30°	121854	124975	115341	111707
35°	115308	118514	101221	95580
40°	90219	97103	70833	62782
45°	53060	61262	35771	31391
50°	20903	25270	10447	10490
55°	3068	3976	870	1051
60°	680	735	625	526
65°	493	493	441	376
70°	385	385	305	305
75°	297	297	212	212
80°	158	158	158	158
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 67759 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.6	7.2
10°-20°	663.5	19.9
20°-30°	943.4	28.3
30°-40°	974.2	29.2
40°-50°	465.5	14.0
50°-60°	45.0	1.3
60°-70°	3.7	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°	1846.5	55.3
0°-40°	2820.7	84.5
0°-60°	3331.2	99.8
0°-90°	3336.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3336.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2555	2555	2555	2555	2555	
5°	2545	2558	2519	2510	2545	241
15°	2395	2430	2323	2294	2395	674
25°	2103	2148	2000	1953	2103	967
35°	1723	1771	1512	1428	1723	1043
45°	684	790	461	405	684	537
55°	32	42	9	11	32	58
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°	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9
0.5°	2555.4	2555.4	2555.9	2554.9	2558.7	2557.8	2556.3	2555.9	2553.0	2551.5	2549.6
1°	2556.3	2556.8	2557.8	2557.3	2560.6	2558.7	2557.3	2555.4	2551.1	2548.7	2546.8
1.5°	2556.3	2557.8	2559.2	2559.2	2561.6	2559.7	2557.8	2554.4	2548.2	2545.3	2542.4
2°	2556.3	2558.7	2560.6	2561.1	2563.0	2560.6	2557.3	2552.5	2545.8	2541.5	2538.1
2.5°	2555.4	2558.7	2561.6	2562.1	2563.0	2560.6	2556.8	2550.1	2542.4	2537.7	2533.4
3°	2553.9	2558.7	2561.6	2562.6	2563.0	2560.2	2555.4	2548.2	2538.6	2532.9	2528.1
3.5°	2552.5	2557.8	2561.6	2563.0	2562.6	2559.2	2553.9	2545.3	2534.8	2528.1	2522.3
4°	2550.6	2556.3	2560.6	2562.6	2561.6	2558.2	2552.0	2541.5	2530.0	2522.3	2516.1
4.5°	2548.2	2554.4	2559.7	2562.1	2560.6	2556.3	2549.6	2537.7	2525.2	2516.1	2509.9
5°	2544.8	2552.0	2558.2	2560.6	2558.2	2553.9	2546.8	2533.4	2519.0	2509.9	2503.2
5.5°	2541.5	2550.1	2556.8	2559.2	2555.9	2551.5	2543.4	2529.0	2512.8	2502.7	2495.5
6°	2537.7	2547.2	2554.4	2556.8	2553.5	2548.7	2539.6	2524.7	2506.6	2496.0	2487.4
6.5°	2532.9	2543.9	2551.5	2554.9	2550.1	2544.8	2535.7	2519.0	2499.9	2488.4	2478.8
7°	2528.1	2539.6	2548.2	2552.0	2546.8	2541.0	2531.0	2513.3	2492.7	2479.7	2470.2
7.5°	2522.8	2535.3	2544.4	2548.7	2542.4	2536.7	2526.2	2507.0	2485.0	2471.1	2461.1
8°	2517.6	2530.5	2540.5	2545.3	2538.6	2531.9	2520.4	2500.3	2476.4	2462.5	2452.0
8.5°	2511.3	2525.2	2535.7	2540.5	2533.4	2526.7	2514.7	2493.2	2467.8	2452.9	2441.9
9°	2504.6	2520.0	2531.0	2536.2	2528.1	2521.4	2508.0	2485.0	2459.6	2443.4	2431.9
9.5°	2497.9	2513.7	2525.7	2531.0	2522.3	2514.7	2501.3	2477.4	2450.1	2433.3	2420.9
10°	2490.3	2507.0	2519.5	2525.2	2516.1	2508.5	2494.1	2468.3	2440.0	2422.8	2410.3
10.5°	2482.6	2499.9	2513.3	2519.5	2509.4	2501.8	2486.4	2459.6	2430.0	2411.3	2398.9
11°	2474.5	2492.7	2507.0	2512.8	2502.2	2494.1	2478.3	2450.6	2419.4	2400.3	2386.9
11.5°	2466.3	2485.0	2499.4	2506.1	2494.6	2486.0	2470.2	2441.0	2408.9	2388.8	2374.5
12°	2457.3	2476.4	2492.2	2498.9	2486.4	2478.3	2461.1	2430.9	2397.4	2377.3	2362.5
12.5°	2447.2	2467.8	2484.1	2491.2	2478.3	2469.7	2451.5	2420.4	2385.9	2364.9	2349.1
13°	2437.6	2458.7	2475.4	2483.1	2469.2	2461.1	2441.9	2409.9	2374.0	2352.0	2336.6
13.5°	2427.6	2449.6	2466.3	2475.0	2460.1	2451.0	2432.4	2397.9	2361.1	2339.5	2323.2
14°	2417.0	2440.0	2457.3	2465.4	2450.6	2441.5	2421.4	2386.9	2348.6	2326.1	2309.4
14.5°	2406.0	2430.0	2447.2	2456.3	2440.0	2430.5	2410.3	2374.9	2335.7	2312.7	2295.0
15°	2395.0	2419.4	2437.6	2446.2	2430.0	2419.4	2399.3	2362.0	2322.8	2298.8	2280.6
15.5°	2383.5	2408.0	2427.6	2435.7	2419.4	2408.0	2387.4	2349.6	2309.4	2284.5	2266.8
16°	2371.1	2396.5	2416.1	2425.2	2408.0	2396.5	2375.4	2336.6	2295.0	2270.1	2251.9
16.5°	2358.7	2385.0	2404.6	2414.2	2396.5	2385.0	2363.4	2323.2	2281.1	2254.8	2237.1
17°	2346.2	2373.0	2392.6	2403.2	2384.0	2373.0	2350.5	2309.8	2266.8	2240.4	2221.3
17.5°	2333.3	2360.6	2381.2	2391.2	2371.6	2360.1	2337.6	2296.4	2251.9	2225.6	2205.5
18°	2320.4	2347.6	2368.7	2378.8	2358.7	2347.2	2324.2	2282.1	2237.1	2209.8	2189.2
18.5°	2307.0	2334.2	2355.8	2366.3	2345.7	2333.3	2309.8	2267.7	2221.8	2194.0	2173.4
19°	2292.1	2321.3	2343.3	2353.9	2332.3	2320.4	2296.4	2252.9	2206.5	2177.7	2157.2
19.5°	2278.2	2307.9	2329.9	2340.5	2318.9	2306.0	2282.6	2238.0	2190.7	2161.9	2139.9
20°	2263.9	2294.0	2316.5	2327.1	2305.1	2292.1	2268.2	2222.2	2174.9	2145.2	2122.7
20.5°	2249.1	2279.7	2302.7	2313.2	2290.7	2277.3	2253.4	2207.4	2158.1	2128.0	2105.5
21°	2234.7	2265.3	2288.3	2299.3	2275.4	2262.9	2238.0	2191.1	2141.4	2111.2	2087.8



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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°	2187.3	2219.9	2243.8	2254.3	2229.9	2217.0	2191.1	2142.3	2090.1	2058.1	2034.2
23°	2171.0	2203.1	2228.5	2239.5	2214.1	2201.2	2174.9	2125.6	2072.0	2039.9	2015.0
23.5°	2154.3	2187.3	2212.7	2223.2	2197.8	2184.9	2158.6	2108.3	2054.3	2021.7	1996.3
24°	2137.1	2170.6	2196.9	2208.4	2181.6	2168.6	2141.8	2091.1	2036.1	2003.5	1977.2
24.5°	2120.3	2154.8	2180.6	2192.1	2164.8	2151.9	2125.1	2073.9	2018.4	1984.4	1958.5
25°	2103.1	2137.5	2164.3	2175.3	2148.5	2135.1	2107.9	2056.2	2000.2	1966.2	1938.9
25.5°	2085.4	2120.3	2147.1	2158.6	2131.3	2117.9	2090.6	2038.5	1981.5	1947.0	1919.8
26°	2068.1	2104.0	2130.4	2141.8	2114.6	2100.7	2073.4	2020.3	1963.3	1928.4	1900.6
26.5°	2049.9	2086.8	2113.1	2125.1	2097.3	2083.0	2055.7	2002.6	1945.1	1909.2	1882.4
27°	2032.2	2069.6	2095.9	2107.9	2080.1	2065.7	2038.0	1984.4	1926.0	1891.0	1863.3
27.5°	2014.0	2051.4	2078.7	2090.1	2062.4	2048.0	2020.3	1965.7	1908.3	1872.9	1845.1
28°	1996.3	2033.7	2061.0	2072.9	2044.2	2030.8	2002.1	1948.0	1890.6	1855.6	1826.9
28.5°	1977.7	2016.0	2043.7	2054.7	2026.0	2012.6	1984.4	1930.8	1873.8	1837.9	1810.2
29°	1959.5	1998.3	2026.0	2037.5	2008.8	1994.9	1967.1	1913.1	1856.6	1820.2	1792.0
29.5°	1942.3	1980.5	2008.3	2020.3	1991.6	1977.7	1950.4	1896.3	1838.9	1802.5	1774.3
30°	1925.0	1963.3	1991.1	2002.6	1974.3	1960.9	1933.2	1879.1	1822.1	1785.3	1756.5
30.5°	1907.8	1946.1	1973.8	1985.3	1957.6	1943.7	1916.9	1862.8	1804.9	1767.1	1736.9
31°	1891.0	1929.8	1957.6	1968.6	1941.8	1927.4	1900.1	1846.1	1786.7	1747.9	1716.8
31.5°	1873.8	1913.1	1940.8	1952.3	1925.0	1911.1	1883.9	1828.8	1767.6	1724.5	1691.0
32°	1857.1	1896.3	1924.1	1935.6	1908.8	1894.9	1867.1	1810.6	1739.8	1692.9	1656.0
32.5°	1840.3	1879.6	1908.3	1919.8	1892.0	1878.6	1849.9	1791.0	1708.7	1656.0	1615.8
33°	1822.6	1862.8	1891.5	1902.5	1874.8	1859.9	1831.2	1767.6	1673.7	1613.9	1569.9
33.5°	1803.5	1845.6	1874.8	1886.7	1855.1	1841.3	1811.1	1738.8	1636.4	1568.9	1522.5
34°	1782.9	1826.4	1856.1	1868.5	1832.2	1819.2	1788.6	1706.8	1598.1	1521.1	1471.8
34.5°	1755.1	1805.8	1837.0	1848.9	1803.0	1793.4	1763.7	1670.4	1556.5	1474.2	1421.5
35°	1723.0	1781.4	1814.5	1824.5	1770.9	1762.8	1735.0	1632.6	1512.5	1426.8	1369.8
35.5°	1688.1	1754.2	1790.1	1795.8	1736.4	1729.3	1702.5	1591.9	1466.5	1378.9	1320.5
36°	1649.3	1721.1	1760.4	1763.2	1702.0	1692.9	1664.7	1548.8	1416.2	1332.5	1267.9
36.5°	1610.6	1685.7	1728.3	1728.3	1665.1	1653.2	1620.1	1502.4	1365.0	1286.1	1217.6
37°	1568.0	1644.6	1691.0	1691.5	1627.8	1611.5	1569.4	1454.5	1311.9	1235.8	1166.9
37.5°	1523.0	1600.5	1649.3	1654.1	1587.6	1566.5	1514.8	1402.4	1260.7	1186.0	1116.6
38°	1474.6	1550.7	1600.5	1614.4	1546.9	1520.1	1456.0	1347.8	1207.1	1132.9	1064.5
38.5°	1423.9	1498.6	1550.3	1572.3	1501.4	1471.3	1399.5	1289.9	1153.5	1080.3	1011.8
39°	1370.8	1441.6	1495.2	1528.2	1455.5	1419.1	1343.0	1233.4	1098.9	1025.2	960.1
39.5°	1316.7	1385.6	1437.3	1480.9	1406.7	1366.0	1289.9	1173.1	1045.8	971.6	908.9
40°	1260.7	1327.2	1380.4	1432.5	1356.9	1309.0	1236.3	1113.3	989.8	917.5	856.7
40.5°	1203.7	1266.9	1323.9	1382.3	1304.7	1252.6	1185.1	1053.9	935.2	866.8	806.5
41°	1143.4	1206.6	1268.4	1328.7	1253.5	1197.0	1131.9	995.5	879.7	814.1	756.7
41.5°	1083.6	1150.6	1214.3	1274.1	1198.5	1142.0	1078.3	937.1	823.7	764.4	707.9
42°	1022.3	1094.1	1159.2	1216.7	1143.0	1087.9	1022.8	881.1	766.8	713.6	659.1
42.5°	963.5	1037.7	1106.1	1160.7	1084.1	1034.3	965.9	826.6	711.2	663.4	610.2
43°	904.6	981.2	1051.1	1102.7	1025.7	980.2	910.3	773.0	656.7	612.2	562.9
43.5°	848.6	925.7	997.0	1046.3	965.4	926.6	856.3	719.8	604.5	563.3	516.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	684.4	760.1	831.4	874.0	790.2	763.9	699.7	573.4	461.4	425.5	388.2
45.5°	634.2	706.9	779.7	818.9	732.3	710.8	649.0	527.4	418.3	381.5	345.1
46°	583.0	655.7	727.0	763.4	677.3	658.6	599.2	485.3	375.2	337.0	302.0
46.5°	533.2	606.9	676.8	709.8	622.2	607.9	550.9	443.2	332.2	292.9	265.2
47°	485.3	560.0	626.5	656.7	569.6	557.1	501.6	401.1	295.8	256.1	229.7
47.5°	439.4	514.0	577.7	604.0	518.3	507.8	458.5	359.0	260.8	220.6	197.7
48°	395.8	469.5	529.8	552.3	473.8	461.4	415.4	316.8	228.3	187.1	168.5
48.5°	354.2	426.9	481.5	502.6	429.3	415.0	372.4	279.0	198.6	158.4	142.2
49°	314.9	385.3	435.5	453.3	384.8	368.5	329.8	244.1	170.9	132.6	118.7
49.5°	278.6	345.6	391.0	407.8	340.3	322.1	292.9	212.5	146.0	109.6	98.6
50°	245.1	307.3	348.0	363.3	296.3	280.0	255.1	181.9	122.5	90.5	80.9
50.5°	213.9	269.9	307.8	320.7	257.5	241.2	220.2	154.1	101.9	74.7	66.5
51°	184.3	234.5	267.6	281.4	222.1	204.4	187.1	129.7	83.3	64.1	57.0
51.5°	158.9	200.5	230.7	243.1	189.5	172.3	157.5	107.2	71.8	53.1	47.4
52°	137.4	169.9	197.2	208.7	158.4	142.6	127.8	87.1	60.3	42.6	37.8
52.5°	115.8	147.4	164.6	175.7	130.2	115.8	102.4	74.7	48.8	32.1	28.2
53°	94.3	124.4	141.7	151.7	104.3	92.9	80.4	62.2	37.3	21.5	18.7
53.5°	72.8	101.5	118.7	127.8	81.8	73.7	67.5	50.3	25.8	15.8	13.4
54°	57.4	78.5	95.7	104.3	68.4	61.3	54.6	38.3	14.4	11.5	10.1
54.5°	43.6	56.0	72.8	80.4	55.0	49.3	42.1	25.8	10.5	9.1	8.6
55°	32.1	40.7	49.8	57.0	41.6	37.3	29.2	13.9	9.1	8.1	8.1
55.5°	22.0	29.2	35.9	41.6	27.8	25.4	16.3	10.1	8.1	8.1	7.7
56°	14.8	19.6	24.4	29.2	14.4	13.4	11.5	8.6	8.1	7.7	7.2
56.5°	12.9	17.2	16.3	19.1	10.5	10.1	9.1	8.1	7.7	7.2	7.2
57°	11.0	14.8	14.4	16.3	9.1	8.6	8.6	8.1	7.2	7.2	6.7
57.5°	9.1	12.4	12.0	13.4	8.6	8.1	8.1	7.7	7.2	6.7	6.2
58°	7.7	10.1	10.1	11.0	8.1	8.1	7.7	7.2	6.7	6.2	6.2
58.5°	7.2	7.7	8.1	8.1	7.7	7.7	7.7	7.2	6.2	6.2	5.7
59°	6.7	7.2	7.7	7.7	7.2	7.2	7.2	6.7	6.2	5.7	5.7
59.5°	6.7	7.2	7.2	7.7	7.2	7.2	6.7	6.2	5.7	5.7	5.3
60°	6.2	6.7	7.2	7.2	6.7	6.7	6.7	6.2	5.7	5.3	5.3
60.5°	5.7	6.2	6.7	6.7	6.2	6.2	6.2	5.7	5.3	5.3	4.8
61°	5.7	6.2	6.2	6.7	6.2	6.2	5.7	5.3	4.8	4.8	4.8
61.5°	5.3	5.7	6.2	6.2	5.7	5.7	5.7	5.3	4.8	4.8	4.3
62°	5.3	5.3	5.7	5.7	5.3	5.3	5.3	4.8	4.3	4.3	4.3
62.5°	4.8	5.3	5.3	5.7	5.3	5.3	5.3	4.8	4.3	4.3	3.8
63°	4.8	4.8	5.3	5.3	4.8	4.8	4.8	4.3	4.3	3.8	3.8
63.5°	4.3	4.8	4.8	5.3	4.8	4.8	4.8	4.3	3.8	3.8	3.8
64°	4.3	4.3	4.8	4.8	4.3	4.3	4.3	3.8	3.8	3.8	3.4
64.5°	3.8	4.3	4.3	4.8	4.3	4.3	4.3	3.8	3.4	3.4	3.4
65°	3.8	3.8	4.3	4.3	3.8	3.8	3.8	3.8	3.4	3.4	3.4
65.5°	3.4	3.8	3.8	4.3	3.8	3.8	3.8	3.4	3.4	3.4	2.9
66°	3.4	3.8	3.8	3.8	3.8	3.8	3.4	3.4	2.9	2.9	2.9



TEST NUMBER: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.9	2.9	3.4	3.4	3.4	3.4	2.9	2.9	2.4	2.4	2.4
68°	2.9	2.9	3.4	3.4	2.9	2.9	2.9	2.9	2.4	2.4	2.4
68.5°	2.4	2.9	2.9	2.9	2.9	2.9	2.9	2.4	2.4	2.4	2.4
69°	2.4	2.9	2.9	2.9	2.9	2.9	2.9	2.4	2.4	2.4	1.9
69.5°	2.4	2.4	2.9	2.9	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	1.0	1.0
74.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0
75.5°	1.0	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0
76°	1.0	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0
76.5°	1.0	1.0	1.4	1.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0
78°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
78.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
79°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
79.5°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
80°	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	1.0	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: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2554.9	2554.9	2554.9	2554.9	2554.9	2554.9
0.5°	2548.7	2553.9	2553.5	2553.5	2555.4	2555.4
1°	2544.8	2550.6	2550.6	2551.5	2554.4	2556.3
1.5°	2540.5	2547.2	2547.2	2549.1	2553.0	2556.3
2°	2535.7	2543.4	2543.9	2546.3	2551.5	2556.3
2.5°	2530.5	2538.6	2539.6	2542.4	2549.6	2555.4
3°	2525.2	2533.8	2535.3	2538.6	2546.8	2553.9
3.5°	2519.0	2528.6	2530.0	2534.3	2543.4	2552.5
4°	2512.3	2522.8	2524.7	2529.5	2540.1	2550.6
4.5°	2505.6	2516.6	2519.0	2524.3	2536.2	2548.2
5°	2498.9	2509.9	2512.8	2518.5	2531.9	2544.8
5.5°	2490.8	2503.2	2506.1	2512.8	2526.7	2541.5
6°	2482.6	2495.5	2498.4	2506.1	2521.4	2537.7
6.5°	2474.0	2487.9	2491.2	2498.9	2516.1	2532.9
7°	2465.4	2479.7	2483.6	2491.7	2509.9	2528.1
7.5°	2455.8	2471.1	2475.0	2484.1	2503.2	2522.8
8°	2445.8	2462.0	2466.3	2475.4	2496.0	2517.6
8.5°	2435.7	2452.0	2456.8	2467.3	2488.8	2511.3
9°	2424.7	2441.9	2447.2	2458.2	2481.2	2504.6
9.5°	2413.7	2431.9	2437.2	2448.2	2473.0	2497.9
10°	2403.2	2420.9	2426.6	2438.6	2464.0	2490.3
10.5°	2391.2	2410.3	2416.1	2428.1	2454.9	2482.6
11°	2379.2	2398.4	2404.6	2418.0	2444.8	2474.5
11.5°	2366.8	2386.9	2393.1	2407.0	2435.7	2466.3
12°	2353.9	2374.9	2381.2	2395.5	2425.7	2457.3
12.5°	2340.9	2362.0	2369.2	2383.5	2414.7	2447.2
13°	2327.5	2349.6	2356.7	2371.6	2403.2	2437.6
13.5°	2313.7	2336.2	2343.8	2359.1	2392.6	2427.6
14°	2299.8	2322.8	2330.9	2346.7	2380.7	2417.0
14.5°	2285.9	2308.9	2317.5	2333.8	2369.2	2406.0
15°	2271.1	2294.5	2303.1	2320.4	2356.3	2395.0
15.5°	2256.2	2280.6	2289.3	2306.5	2343.8	2383.5
16°	2241.4	2265.8	2274.4	2292.6	2330.9	2371.1
16.5°	2225.6	2250.5	2259.6	2278.7	2317.5	2358.7
17°	2210.3	2235.7	2244.7	2264.4	2303.6	2346.2
17.5°	2194.0	2219.9	2229.4	2249.1	2289.7	2333.3
18°	2177.7	2204.1	2214.1	2234.2	2275.9	2320.4
18.5°	2161.9	2187.8	2197.8	2218.4	2261.0	2307.0
19°	2144.7	2171.5	2181.6	2202.6	2246.2	2292.1
19.5°	2127.5	2154.8	2165.3	2186.8	2231.3	2278.2
20°	2109.8	2138.0	2148.1	2170.6	2215.5	2263.9
20.5°	2092.5	2120.3	2131.3	2154.3	2200.2	2249.1
21°	2074.8	2102.6	2113.6	2137.1	2184.0	2234.7

TEST NUMBER: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2019.3	2048.5	2060.0	2084.9	2135.1	2187.3
23°	2000.2	2029.8	2041.8	2067.2	2117.4	2171.0
23.5°	1981.5	2010.7	2023.1	2049.0	2100.2	2154.3
24°	1961.9	1991.6	2004.5	2030.8	2082.5	2137.1
24.5°	1943.2	1972.4	1985.8	2012.1	2065.3	2120.3
25°	1923.6	1952.8	1966.2	1993.0	2047.1	2103.1
25.5°	1904.0	1933.6	1947.5	1974.3	2028.9	2085.4
26°	1884.8	1914.0	1927.9	1955.7	2010.7	2068.1
26.5°	1865.7	1894.9	1908.8	1936.5	1992.0	2049.9
27°	1846.5	1875.2	1889.6	1917.4	1973.8	2032.2
27.5°	1828.3	1856.1	1870.5	1899.2	1955.2	2014.0
28°	1810.2	1837.0	1851.3	1880.5	1937.0	1996.3
28.5°	1792.0	1818.8	1833.1	1862.3	1918.3	1977.7
29°	1774.3	1801.1	1815.4	1844.6	1900.6	1959.5
29.5°	1756.1	1782.9	1797.2	1827.4	1883.4	1942.3
30°	1737.9	1764.7	1779.5	1810.2	1865.7	1925.0
30.5°	1718.3	1746.0	1761.3	1792.0	1848.9	1907.8
31°	1697.7	1727.8	1743.1	1773.8	1832.2	1891.0
31.5°	1667.5	1708.2	1723.5	1755.6	1814.9	1873.8
32°	1632.1	1685.2	1701.0	1735.5	1796.8	1857.1
32.5°	1592.4	1651.7	1669.4	1710.6	1778.1	1840.3
33°	1546.4	1611.0	1633.1	1679.0	1757.5	1822.6
33.5°	1498.6	1566.5	1592.9	1638.3	1728.3	1803.5
34°	1449.3	1522.5	1547.9	1589.5	1694.8	1782.9
34.5°	1400.0	1476.1	1499.0	1540.2	1656.5	1755.1
35°	1349.2	1428.2	1445.4	1490.0	1613.9	1723.0
35.5°	1295.6	1379.9	1391.4	1440.7	1570.8	1688.1
36°	1241.1	1326.7	1338.2	1392.3	1525.4	1649.3
36.5°	1185.1	1273.1	1283.7	1344.0	1476.6	1610.6
37°	1130.0	1216.7	1230.5	1295.6	1426.8	1568.0
37.5°	1074.5	1161.1	1178.4	1244.9	1375.1	1523.0
38°	1021.4	1103.2	1124.8	1190.3	1323.9	1474.6
38.5°	968.3	1047.7	1072.6	1135.8	1271.2	1423.9
39°	915.6	991.7	1019.9	1080.3	1221.4	1370.8
39.5°	863.4	935.2	966.3	1024.7	1169.8	1316.7
40°	810.8	877.3	912.7	969.2	1118.1	1260.7
40.5°	758.1	822.3	859.6	918.0	1062.5	1203.7
41°	706.4	769.1	807.0	866.3	1008.5	1143.4
41.5°	656.7	717.5	755.7	816.5	951.0	1083.6
42°	605.9	668.2	706.0	767.7	894.1	1022.3
42.5°	559.5	618.4	656.7	717.9	837.6	963.5
43°	515.0	572.9	608.8	666.7	782.1	904.6
43.5°	475.8	527.4	561.9	616.5	727.0	848.6



TEST NUMBER: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	359.0	404.9	426.9	473.4	568.6	684.4
45.5°	320.2	368.1	386.2	429.3	518.3	634.2
46°	283.8	332.6	348.0	386.7	470.0	583.0
46.5°	252.7	299.1	310.6	344.1	423.1	533.2
47°	223.5	268.5	276.2	303.9	377.6	485.3
47.5°	196.7	238.8	243.1	265.2	336.0	439.4
48°	170.9	211.1	213.0	227.3	296.7	395.8
48.5°	146.9	185.2	184.7	193.4	260.8	354.2
49°	125.4	162.7	161.3	161.8	227.3	314.9
49.5°	105.8	142.6	140.7	140.2	196.7	278.6
50°	88.1	123.0	119.7	119.2	168.0	245.1
50.5°	72.3	102.9	99.1	97.6	147.4	213.9
51°	61.3	83.3	78.0	76.6	126.8	184.3
51.5°	50.3	68.0	63.2	62.7	106.3	158.9
52°	39.7	54.6	50.7	50.7	85.2	137.4
52.5°	28.7	42.1	39.2	40.7	65.1	115.8
53°	17.7	31.1	29.7	31.6	51.7	94.3
53.5°	12.0	22.0	21.5	23.5	40.2	72.8
54°	9.1	14.8	14.8	16.8	30.2	57.4
54.5°	8.1	12.9	12.9	14.4	22.0	43.6
55°	7.7	11.0	11.0	12.0	15.3	32.1
55.5°	7.2	9.1	9.1	9.6	13.4	22.0
56°	7.2	7.2	7.2	7.7	11.5	14.8
56.5°	6.7	7.2	6.7	7.2	9.1	12.9
57°	6.2	6.7	6.7	6.7	7.2	11.0
57.5°	6.2	6.2	6.2	6.7	7.2	9.1
58°	5.7	6.2	6.2	6.2	6.7	7.7
58.5°	5.7	5.7	5.7	5.7	6.7	7.2
59°	5.3	5.7	5.3	5.7	6.2	6.7
59.5°	5.3	5.3	5.3	5.3	5.7	6.7
60°	4.8	4.8	4.8	4.8	5.7	6.2
60.5°	4.8	4.8	4.8	4.8	5.3	5.7
61°	4.3	4.3	4.3	4.3	4.8	5.7
61.5°	4.3	4.3	4.3	4.3	4.8	5.3
62°	3.8	4.3	3.8	4.3	4.3	5.3
62.5°	3.8	3.8	3.8	3.8	4.3	4.8
63°	3.4	3.8	3.8	3.8	3.8	4.8
63.5°	3.4	3.4	3.4	3.4	3.8	4.3
64°	3.4	3.4	3.4	3.4	3.8	4.3
64.5°	2.9	3.4	2.9	3.4	3.4	3.8
65°	2.9	2.9	2.9	2.9	3.4	3.8
65.5°	2.9	2.9	2.9	2.9	3.4	3.4
66°	2.9	2.9	2.9	2.9	2.9	3.4



TEST NUMBER: P776688

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	2.4	2.4	2.4	2.4	2.4	2.9
68°	2.4	2.4	1.9	2.4	2.4	2.9
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°	1.0	1.0	1.0	1.0	1.4	1.4
74°	1.0	1.0	1.0	1.0	1.4	1.4
74.5°	1.0	1.0	1.0	1.0	1.0	1.4
75°	1.0	1.0	1.0	1.0	1.0	1.4
75.5°	1.0	1.0	1.0	1.0	1.0	1.0
76°	1.0	1.0	1.0	1.0	1.0	1.0
76.5°	1.0	1.0	1.0	1.0	1.0	1.0
77°	1.0	1.0	0.5	0.5	1.0	1.0
77.5°	0.5	0.5	0.5	0.5	1.0	1.0
78°	0.5	0.5	0.5	0.5	0.5	1.0
78.5°	0.5	0.5	0.5	0.5	0.5	1.0
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: P776688
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMB-5000lm-4000K

CANDELA DISTRIBUTION (continued):

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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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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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21.5°	2218.9	2249.5	2273.0	2284.5	2260.5	2248.1	2222.7	2174.9	2124.1	2094.0	2070.0
22°	2202.6	2234.7	2259.1	2269.6	2245.2	2232.3	2206.9	2158.6	2107.4	2076.3	2051.9



44°	792.6	869.7	941.5	988.4	907.5	872.5	803.1	669.6	554.2	514.0	474.3
44.5°	738.5	814.1	886.9	930.9	848.1	818.4	751.4	621.3	504.9	470.0	431.2



66.5°	3.4	3.4	3.8	3.8	3.4	3.4	3.4	3.4	2.9	2.9	2.9
67°	2.9	3.4	3.4	3.4	3.4	3.4	3.4	2.9	2.9	2.9	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°	2056.6	2084.4	2096.4	2119.8	2168.2	2218.9
22°	2037.5	2065.7	2078.2	2102.6	2151.4	2202.6



44°	437.0	484.8	515.0	567.2	673.9	792.6
44.5°	397.7	443.7	471.0	520.3	620.3	738.5

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66.5°	2.4	2.4	2.4	2.4	2.9	3.4
67°	2.4	2.4	2.4	2.4	2.9	2.9

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Peachtree City, GA 30269

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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Scaled Data Report



(END OF REPORT)