

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: P776839

Luminaire Tested: HCDJBS4050CSD-HCD8TSQMB-5000lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B024-HCD8TSQMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD8TSQMB-5000lm-5000K
Description: 8 INCH SQUARE MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

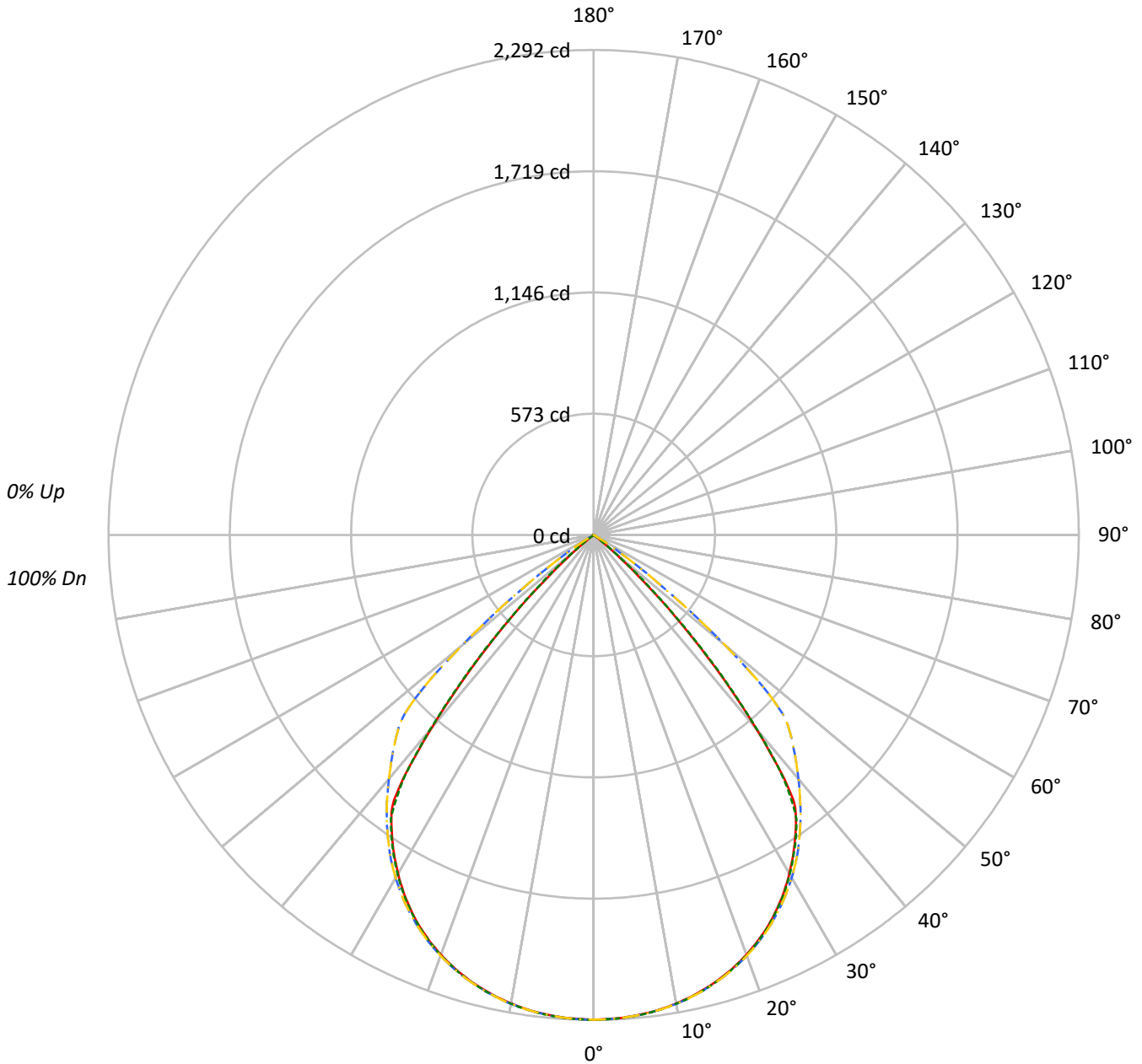
Lumens per Lamp: N/A
Luminaire Lumens: 3560.4 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.28
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	92	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76					76			
4	93	85	78	73	91	84	78	73	81	76	72	79	75	71	77	74	70	69					69			
5	88	78	71	66	86	77	71	66	75	70	65	73	68	65	72	67	64	62					62			
6	82	72	65	60	81	71	64	60	69	64	59	68	63	59	67	62	58	57					57			
7	77	66	59	55	76	66	59	54	64	58	54	63	58	54	62	57	53	52					52			
8	72	62	55	50	71	61	54	50	60	54	50	59	53	49	58	53	49	47					47			
9	68	57	50	46	67	57	50	46	56	50	45	55	49	45	54	49	45	44					44			
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	54937	54937	54937	54937
5°	54880	54913	54880	54913
10°	54745	54781	54745	54781
15°	54430	54477	54430	54477
20°	53870	53918	53870	53918
25°	52862	52925	52862	52925
30°	51167	51275	51167	51275
35°	48756	48896	48756	48896
40°	37368	37687	37368	37687
45°	18532	19007	18532	19007
50°	4074	4961	4074	4961
55°	63	79	63	79
60°	48	72	48	72
65°	57	57	57	57
70°	35	35	35	35
75°	46	46	46	46
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 44386 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.7	6.1
10°-20°	618.9	17.4
20°-30°	921.5	25.9
30°-40°	1042.3	29.3
40°-50°	665.2	18.7
50°-60°	94.4	2.7
60°-70°	1.0	0.0
70°-80°	0.4	0.0
80°-90°	0.0	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°	1757.1	49.4
0°-40°	2799.4	78.6
0°-60°	3559.0	100.0
0°-90°	3560.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3560.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2291	2291	2291	2291	2291	
5°	2280	2281	2280	2281	2280	217
15°	2193	2194	2193	2194	2193	618
25°	1998	2000	1998	2000	1998	918
35°	1666	1670	1666	1670	1666	1011
45°	546	560	546	560	546	436
55°	2	2	2	2	2	14
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	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°	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1
0.5°	2290.2	2290.6	2291.1	2291.6	2291.6	2291.6	2291.1	2290.6	2290.2	2290.6	2291.1
1°	2289.7	2290.2	2290.6	2291.1	2291.1	2291.1	2290.6	2290.2	2289.7	2290.2	2290.6
1.5°	2289.2	2289.7	2290.2	2290.6	2290.6	2290.6	2290.2	2289.7	2289.2	2289.7	2290.2
2°	2288.7	2288.7	2289.7	2290.2	2289.7	2290.2	2289.7	2288.7	2288.7	2288.7	2289.7
2.5°	2287.7	2288.2	2288.7	2289.2	2289.2	2289.2	2288.7	2288.2	2287.7	2288.2	2288.7
3°	2286.8	2286.8	2287.7	2288.2	2287.7	2288.2	2287.7	2286.8	2286.8	2286.8	2287.7
3.5°	2285.3	2285.8	2286.3	2286.8	2286.8	2286.8	2286.3	2285.8	2285.3	2285.8	2286.3
4°	2283.8	2284.3	2284.8	2285.3	2284.8	2285.3	2284.8	2284.3	2283.8	2284.3	2284.8
4.5°	2281.9	2282.4	2282.9	2283.4	2283.4	2283.4	2282.9	2282.4	2281.9	2282.4	2282.9
5°	2280.0	2280.4	2281.4	2281.4	2281.4	2281.4	2281.4	2280.4	2280.0	2280.4	2281.4
5.5°	2278.0	2278.5	2279.0	2279.5	2279.0	2279.5	2279.0	2278.5	2278.0	2278.5	2279.0
6°	2275.6	2276.1	2276.6	2277.1	2277.1	2277.1	2276.6	2276.1	2275.6	2276.1	2276.6
6.5°	2273.2	2273.7	2274.1	2274.6	2274.1	2274.6	2274.1	2273.7	2273.2	2273.7	2274.1
7°	2270.3	2270.7	2271.7	2271.7	2271.7	2271.7	2271.7	2270.7	2270.3	2270.7	2271.7
7.5°	2267.3	2267.8	2268.3	2268.8	2268.3	2268.8	2268.3	2267.8	2267.3	2267.8	2268.3
8°	2263.9	2264.4	2265.4	2265.4	2265.4	2265.4	2265.4	2264.4	2263.9	2264.4	2265.4
8.5°	2260.6	2261.0	2262.0	2262.0	2261.5	2262.0	2262.0	2261.0	2260.6	2261.0	2262.0
9°	2256.7	2257.2	2258.1	2258.6	2258.1	2258.6	2258.1	2257.2	2256.7	2257.2	2258.1
9.5°	2252.8	2253.3	2254.2	2254.7	2253.8	2254.7	2254.2	2253.3	2252.8	2253.3	2254.2
10°	2248.4	2249.4	2250.4	2250.4	2249.9	2250.4	2250.4	2249.4	2248.4	2249.4	2250.4
10.5°	2244.0	2245.0	2246.0	2246.0	2245.5	2246.0	2246.0	2245.0	2244.0	2245.0	2246.0
11°	2239.2	2240.2	2241.6	2241.1	2240.7	2241.1	2241.6	2240.2	2239.2	2240.2	2241.6
11.5°	2234.3	2235.3	2236.8	2236.3	2235.8	2236.3	2236.8	2235.3	2234.3	2235.3	2236.8
12°	2229.0	2230.0	2231.4	2231.4	2230.5	2231.4	2231.4	2230.0	2229.0	2230.0	2231.4
12.5°	2223.7	2224.6	2226.1	2226.1	2225.1	2226.1	2226.1	2224.6	2223.7	2224.6	2226.1
13°	2217.8	2219.3	2220.8	2220.8	2219.8	2220.8	2220.8	2219.3	2217.8	2219.3	2220.8
13.5°	2212.0	2213.5	2214.9	2214.9	2214.0	2214.9	2214.9	2213.5	2212.0	2213.5	2214.9
14°	2205.7	2207.2	2208.6	2208.6	2207.7	2208.6	2208.6	2207.2	2205.7	2207.2	2208.6
14.5°	2199.4	2200.9	2202.3	2202.3	2201.3	2202.3	2202.3	2200.9	2199.4	2200.9	2202.3
15°	2192.6	2194.1	2196.0	2195.5	2194.5	2195.5	2196.0	2194.1	2192.6	2194.1	2196.0
15.5°	2185.8	2187.3	2189.2	2188.7	2187.8	2188.7	2189.2	2187.3	2185.8	2187.3	2189.2
16°	2178.5	2180.0	2181.9	2181.9	2180.5	2181.9	2181.9	2180.0	2178.5	2180.0	2181.9
16.5°	2171.3	2172.7	2174.7	2174.7	2173.2	2174.7	2174.7	2172.7	2171.3	2172.7	2174.7
17°	2163.0	2164.9	2167.4	2166.9	2165.4	2166.9	2167.4	2164.9	2163.0	2164.9	2167.4
17.5°	2155.2	2157.2	2159.1	2159.1	2157.7	2159.1	2159.1	2157.2	2155.2	2157.2	2159.1
18°	2147.0	2148.9	2151.4	2150.9	2148.9	2150.9	2151.4	2148.9	2147.0	2148.9	2151.4
18.5°	2138.3	2140.7	2142.6	2142.1	2140.2	2142.1	2142.6	2140.7	2138.3	2140.7	2142.6
19°	2129.5	2131.9	2133.9	2133.4	2131.5	2133.4	2133.9	2131.9	2129.5	2131.9	2133.9
19.5°	2120.3	2122.7	2125.2	2124.7	2122.7	2124.7	2125.2	2122.7	2120.3	2122.7	2125.2
20°	2111.1	2113.5	2115.9	2115.4	2113.0	2115.4	2115.9	2113.5	2111.1	2113.5	2115.9
20.5°	2100.9	2103.8	2106.7	2105.7	2103.3	2105.7	2106.7	2103.8	2100.9	2103.8	2106.7
21°	2090.7	2094.1	2097.0	2096.0	2093.1	2096.0	2097.0	2094.1	2090.7	2094.1	2097.0



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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°	2058.7	2062.5	2065.9	2064.5	2061.1	2064.5	2065.9	2062.5	2058.7	2062.5	2065.9
23°	2047.0	2051.4	2055.3	2053.3	2049.4	2053.3	2055.3	2051.4	2047.0	2051.4	2055.3
23.5°	2035.4	2040.2	2044.1	2041.7	2037.8	2041.7	2044.1	2040.2	2035.4	2040.2	2044.1
24°	2023.7	2028.1	2032.5	2030.0	2025.7	2030.0	2032.5	2028.1	2023.7	2028.1	2032.5
24.5°	2011.1	2016.0	2020.8	2017.9	2013.5	2017.9	2020.8	2016.0	2011.1	2016.0	2020.8
25°	1998.0	2003.8	2008.7	2005.3	2000.4	2005.3	2008.7	2003.8	1998.0	2003.8	2008.7
25.5°	1984.4	1991.2	1996.5	1992.7	1987.3	1992.7	1996.5	1991.2	1984.4	1991.2	1996.5
26°	1971.3	1978.1	1983.9	1979.6	1974.2	1979.6	1983.9	1978.1	1971.3	1978.1	1983.9
26.5°	1956.7	1964.5	1970.8	1966.0	1960.1	1966.0	1970.8	1964.5	1956.7	1964.5	1970.8
27°	1942.7	1950.4	1957.7	1951.9	1945.6	1951.9	1957.7	1950.4	1942.7	1950.4	1957.7
27.5°	1928.1	1936.4	1944.1	1937.8	1931.0	1937.8	1944.1	1936.4	1928.1	1936.4	1944.1
28°	1912.6	1921.8	1930.1	1923.3	1916.0	1923.3	1930.1	1921.8	1912.6	1921.8	1930.1
28.5°	1897.1	1906.8	1916.0	1908.7	1900.5	1908.7	1916.0	1906.8	1897.1	1906.8	1916.0
29°	1881.0	1891.2	1901.4	1893.2	1884.9	1893.2	1901.4	1891.2	1881.0	1891.2	1901.4
29.5°	1865.0	1875.7	1886.4	1877.6	1868.4	1877.6	1886.4	1875.7	1865.0	1875.7	1886.4
30°	1848.0	1859.7	1871.3	1862.1	1851.9	1862.1	1871.3	1859.7	1848.0	1859.7	1871.3
30.5°	1831.1	1843.7	1855.8	1845.6	1835.4	1845.6	1855.8	1843.7	1831.1	1843.7	1855.8
31°	1814.1	1826.7	1839.8	1829.1	1818.4	1829.1	1839.8	1826.7	1814.1	1826.7	1839.8
31.5°	1796.6	1810.2	1823.8	1812.6	1800.5	1812.6	1823.8	1810.2	1796.6	1810.2	1823.8
32°	1779.1	1793.2	1807.3	1795.6	1783.0	1795.6	1807.3	1793.2	1779.1	1793.2	1807.3
32.5°	1761.2	1775.7	1790.3	1778.2	1765.1	1778.2	1790.3	1775.7	1761.2	1775.7	1790.3
33°	1742.7	1758.3	1773.3	1760.7	1747.1	1760.7	1773.3	1758.3	1742.7	1758.3	1773.3
33.5°	1723.8	1740.3	1755.3	1743.2	1728.7	1743.2	1755.3	1740.3	1723.8	1740.3	1755.3
34°	1704.4	1722.8	1737.4	1725.3	1709.7	1725.3	1737.4	1722.8	1704.4	1722.8	1737.4
34.5°	1685.0	1704.4	1719.4	1706.8	1690.3	1706.8	1719.4	1704.4	1685.0	1704.4	1719.4
35°	1665.6	1685.9	1700.5	1688.4	1670.4	1688.4	1700.5	1685.9	1665.6	1685.9	1700.5
35.5°	1645.2	1667.5	1682.1	1669.9	1650.0	1669.9	1682.1	1667.5	1645.2	1667.5	1682.1
36°	1624.8	1648.6	1663.1	1651.0	1617.5	1651.0	1663.1	1648.6	1624.8	1648.6	1663.1
36.5°	1600.5	1628.7	1643.7	1631.6	1581.6	1631.6	1643.7	1628.7	1600.5	1628.7	1643.7
37°	1567.0	1608.8	1624.3	1612.2	1539.4	1612.2	1624.3	1608.8	1567.0	1608.8	1624.3
37.5°	1516.1	1588.9	1604.4	1591.8	1498.6	1591.8	1604.4	1588.9	1516.1	1588.9	1604.4
38°	1460.8	1569.0	1584.5	1569.0	1452.0	1569.0	1584.5	1569.0	1460.8	1569.0	1584.5
38.5°	1395.3	1547.6	1564.6	1536.5	1398.6	1536.5	1564.6	1547.6	1395.3	1547.6	1564.6
39°	1328.8	1519.5	1545.2	1498.6	1339.0	1498.6	1545.2	1519.5	1328.8	1519.5	1545.2
39.5°	1261.3	1481.2	1524.8	1459.3	1272.5	1459.3	1524.8	1481.2	1261.3	1481.2	1524.8
40°	1193.8	1431.6	1504.4	1416.6	1204.0	1416.6	1504.4	1431.6	1193.8	1431.6	1504.4
40.5°	1125.9	1373.9	1485.0	1368.6	1134.2	1368.6	1485.0	1373.9	1125.9	1373.9	1485.0
41°	1057.0	1311.3	1465.1	1315.2	1067.2	1315.2	1465.1	1311.3	1057.0	1311.3	1465.1
41.5°	990.5	1248.2	1445.7	1256.5	1001.2	1256.5	1445.7	1248.2	990.5	1248.2	1445.7
42°	923.0	1184.6	1426.3	1192.9	936.6	1192.9	1426.3	1184.6	923.0	1184.6	1426.3
42.5°	858.0	1121.5	1406.9	1128.3	872.6	1128.3	1406.9	1121.5	858.0	1121.5	1406.9
43°	793.0	1057.0	1387.5	1062.8	807.5	1062.8	1387.5	1057.0	793.0	1057.0	1387.5
43.5°	729.4	992.4	1367.6	999.7	743.0	999.7	1367.6	992.4	729.4	992.4	1367.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	546.5	803.2	1308.9	815.3	560.5	815.3	1308.9	803.2	546.5	803.2	1308.9
45.5°	488.7	742.5	1289.0	753.7	504.2	753.7	1289.0	742.5	488.7	742.5	1289.0
46°	434.3	682.8	1263.2	694.0	450.4	694.0	1263.2	682.8	434.3	682.8	1263.2
46.5°	381.4	623.6	1233.2	635.3	397.9	635.3	1233.2	623.6	381.4	623.6	1233.2
47°	329.0	565.4	1190.9	577.5	351.8	577.5	1190.9	565.4	329.0	565.4	1190.9
47.5°	279.1	508.6	1143.9	521.7	312.5	521.7	1143.9	508.6	279.1	508.6	1143.9
48°	235.4	455.2	1087.1	467.8	273.7	467.8	1087.1	455.2	235.4	455.2	1087.1
48.5°	195.6	403.8	1025.0	416.4	234.9	416.4	1025.0	403.8	195.6	403.8	1025.0
49°	165.0	352.8	954.6	367.4	196.1	367.4	954.6	352.8	165.0	352.8	954.6
49.5°	136.4	303.3	883.3	321.8	161.6	321.8	883.3	303.3	136.4	303.3	883.3
50°	109.2	256.7	809.5	282.0	133.0	282.0	809.5	256.7	109.2	256.7	809.5
50.5°	86.9	215.0	737.2	244.6	104.8	244.6	737.2	215.0	86.9	215.0	737.2
51°	65.0	179.6	666.8	208.7	79.6	208.7	666.8	179.6	65.0	179.6	666.8
51.5°	46.6	150.0	601.3	175.2	62.6	175.2	601.3	150.0	46.6	150.0	601.3
52°	28.1	121.8	537.2	144.6	50.0	144.6	537.2	121.8	28.1	121.8	537.2
52.5°	10.2	98.0	475.6	117.0	37.4	117.0	475.6	98.0	10.2	98.0	475.6
53°	5.8	76.2	416.9	93.2	25.2	93.2	416.9	76.2	5.8	76.2	416.9
53.5°	4.4	56.3	364.9	70.9	14.6	70.9	364.9	56.3	4.4	56.3	364.9
54°	2.9	38.8	315.9	51.9	3.9	51.9	315.9	38.8	2.9	38.8	315.9
54.5°	1.5	21.4	270.3	38.8	1.9	38.8	270.3	21.4	1.5	21.4	270.3
55°	1.5	7.3	229.1	26.2	1.9	26.2	229.1	7.3	1.5	7.3	229.1
55.5°	1.5	4.4	189.8	16.0	1.9	16.0	189.8	4.4	1.5	4.4	189.8
56°	1.5	3.4	155.3	9.7	1.5	9.7	155.3	3.4	1.5	3.4	155.3
56.5°	1.5	1.9	128.1	3.9	1.5	3.9	128.1	1.9	1.5	1.9	128.1
57°	1.5	1.5	102.4	2.4	1.5	2.4	102.4	1.5	1.5	1.5	102.4
57.5°	1.5	1.5	79.6	1.5	1.5	1.5	79.6	1.5	1.5	1.5	79.6
58°	1.5	1.5	59.2	1.5	1.5	1.5	59.2	1.5	1.5	1.5	59.2
58.5°	1.0	1.0	42.7	1.5	1.5	1.5	42.7	1.0	1.0	1.0	42.7
59°	1.0	1.0	32.5	1.0	1.5	1.0	32.5	1.0	1.0	1.0	32.5
59.5°	1.0	1.0	23.8	1.0	1.5	1.0	23.8	1.0	1.0	1.0	23.8
60°	1.0	1.0	15.5	1.0	1.5	1.0	15.5	1.0	1.0	1.0	15.5
60.5°	1.0	1.0	9.2	1.0	1.0	1.0	9.2	1.0	1.0	1.0	9.2
61°	1.0	1.0	5.8	1.0	1.0	1.0	5.8	1.0	1.0	1.0	5.8
61.5°	1.0	1.0	3.4	1.0	1.0	1.0	3.4	1.0	1.0	1.0	3.4
62°	1.0	1.0	1.5	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.5
62.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
64°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
64.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	0.5	1.0	1.0	1.0	0.5	1.0	1.0	1.0	0.5
65.5°	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5
66°	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5



TEST NUMBER: P776839

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
77°	0.5	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.0
77.5°	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.5	0.0
78°	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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	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: P776839
CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P776839

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2291.1	2291.1	2291.1	2291.1	2291.1	2291.1
0.5°	2291.6	2291.6	2291.6	2291.1	2290.6	2290.2
1°	2291.1	2291.1	2291.1	2290.6	2290.2	2289.7
1.5°	2290.6	2290.6	2290.6	2290.2	2289.7	2289.2
2°	2290.2	2289.7	2290.2	2289.7	2288.7	2288.7
2.5°	2289.2	2289.2	2289.2	2288.7	2288.2	2287.7
3°	2288.2	2287.7	2288.2	2287.7	2286.8	2286.8
3.5°	2286.8	2286.8	2286.8	2286.3	2285.8	2285.3
4°	2285.3	2284.8	2285.3	2284.8	2284.3	2283.8
4.5°	2283.4	2283.4	2283.4	2282.9	2282.4	2281.9
5°	2281.4	2281.4	2281.4	2281.4	2280.4	2280.0
5.5°	2279.5	2279.0	2279.5	2279.0	2278.5	2278.0
6°	2277.1	2277.1	2277.1	2276.6	2276.1	2275.6
6.5°	2274.6	2274.1	2274.6	2274.1	2273.7	2273.2
7°	2271.7	2271.7	2271.7	2271.7	2270.7	2270.3
7.5°	2268.8	2268.3	2268.8	2268.3	2267.8	2267.3
8°	2265.4	2265.4	2265.4	2265.4	2264.4	2263.9
8.5°	2262.0	2261.5	2262.0	2262.0	2261.0	2260.6
9°	2258.6	2258.1	2258.6	2258.1	2257.2	2256.7
9.5°	2254.7	2253.8	2254.7	2254.2	2253.3	2252.8
10°	2250.4	2249.9	2250.4	2250.4	2249.4	2248.4
10.5°	2246.0	2245.5	2246.0	2246.0	2245.0	2244.0
11°	2241.1	2240.7	2241.1	2241.6	2240.2	2239.2
11.5°	2236.3	2235.8	2236.3	2236.8	2235.3	2234.3
12°	2231.4	2230.5	2231.4	2231.4	2230.0	2229.0
12.5°	2226.1	2225.1	2226.1	2226.1	2224.6	2223.7
13°	2220.8	2219.8	2220.8	2220.8	2219.3	2217.8
13.5°	2214.9	2214.0	2214.9	2214.9	2213.5	2212.0
14°	2208.6	2207.7	2208.6	2208.6	2207.2	2205.7
14.5°	2202.3	2201.3	2202.3	2202.3	2200.9	2199.4
15°	2195.5	2194.5	2195.5	2196.0	2194.1	2192.6
15.5°	2188.7	2187.8	2188.7	2189.2	2187.3	2185.8
16°	2181.9	2180.5	2181.9	2181.9	2180.0	2178.5
16.5°	2174.7	2173.2	2174.7	2174.7	2172.7	2171.3
17°	2166.9	2165.4	2166.9	2167.4	2164.9	2163.0
17.5°	2159.1	2157.7	2159.1	2159.1	2157.2	2155.2
18°	2150.9	2148.9	2150.9	2151.4	2148.9	2147.0
18.5°	2142.1	2140.2	2142.1	2142.6	2140.7	2138.3
19°	2133.4	2131.5	2133.4	2133.9	2131.9	2129.5
19.5°	2124.7	2122.7	2124.7	2125.2	2122.7	2120.3
20°	2115.4	2113.0	2115.4	2115.9	2113.5	2111.1
20.5°	2105.7	2103.3	2105.7	2106.7	2103.8	2100.9
21°	2096.0	2093.1	2096.0	2097.0	2094.1	2090.7



TEST NUMBER: P776839

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2064.5	2061.1	2064.5	2065.9	2062.5	2058.7
23°	2053.3	2049.4	2053.3	2055.3	2051.4	2047.0
23.5°	2041.7	2037.8	2041.7	2044.1	2040.2	2035.4
24°	2030.0	2025.7	2030.0	2032.5	2028.1	2023.7
24.5°	2017.9	2013.5	2017.9	2020.8	2016.0	2011.1
25°	2005.3	2000.4	2005.3	2008.7	2003.8	1998.0
25.5°	1992.7	1987.3	1992.7	1996.5	1991.2	1984.4
26°	1979.6	1974.2	1979.6	1983.9	1978.1	1971.3
26.5°	1966.0	1960.1	1966.0	1970.8	1964.5	1956.7
27°	1951.9	1945.6	1951.9	1957.7	1950.4	1942.7
27.5°	1937.8	1931.0	1937.8	1944.1	1936.4	1928.1
28°	1923.3	1916.0	1923.3	1930.1	1921.8	1912.6
28.5°	1908.7	1900.5	1908.7	1916.0	1906.8	1897.1
29°	1893.2	1884.9	1893.2	1901.4	1891.2	1881.0
29.5°	1877.6	1868.4	1877.6	1886.4	1875.7	1865.0
30°	1862.1	1851.9	1862.1	1871.3	1859.7	1848.0
30.5°	1845.6	1835.4	1845.6	1855.8	1843.7	1831.1
31°	1829.1	1818.4	1829.1	1839.8	1826.7	1814.1
31.5°	1812.6	1800.5	1812.6	1823.8	1810.2	1796.6
32°	1795.6	1783.0	1795.6	1807.3	1793.2	1779.1
32.5°	1778.2	1765.1	1778.2	1790.3	1775.7	1761.2
33°	1760.7	1747.1	1760.7	1773.3	1758.3	1742.7
33.5°	1743.2	1728.7	1743.2	1755.3	1740.3	1723.8
34°	1725.3	1709.7	1725.3	1737.4	1722.8	1704.4
34.5°	1706.8	1690.3	1706.8	1719.4	1704.4	1685.0
35°	1688.4	1670.4	1688.4	1700.5	1685.9	1665.6
35.5°	1669.9	1650.0	1669.9	1682.1	1667.5	1645.2
36°	1651.0	1617.5	1651.0	1663.1	1648.6	1624.8
36.5°	1631.6	1581.6	1631.6	1643.7	1628.7	1600.5
37°	1612.2	1539.4	1612.2	1624.3	1608.8	1567.0
37.5°	1591.8	1498.6	1591.8	1604.4	1588.9	1516.1
38°	1569.0	1452.0	1569.0	1584.5	1569.0	1460.8
38.5°	1536.5	1398.6	1536.5	1564.6	1547.6	1395.3
39°	1498.6	1339.0	1498.6	1545.2	1519.5	1328.8
39.5°	1459.3	1272.5	1459.3	1524.8	1481.2	1261.3
40°	1416.6	1204.0	1416.6	1504.4	1431.6	1193.8
40.5°	1368.6	1134.2	1368.6	1485.0	1373.9	1125.9
41°	1315.2	1067.2	1315.2	1465.1	1311.3	1057.0
41.5°	1256.5	1001.2	1256.5	1445.7	1248.2	990.5
42°	1192.9	936.6	1192.9	1426.3	1184.6	923.0
42.5°	1128.3	872.6	1128.3	1406.9	1121.5	858.0
43°	1062.8	807.5	1062.8	1387.5	1057.0	793.0
43.5°	999.7	743.0	999.7	1367.6	992.4	729.4



TEST NUMBER: P776839

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	815.3	560.5	815.3	1308.9	803.2	546.5
45.5°	753.7	504.2	753.7	1289.0	742.5	488.7
46°	694.0	450.4	694.0	1263.2	682.8	434.3
46.5°	635.3	397.9	635.3	1233.2	623.6	381.4
47°	577.5	351.8	577.5	1190.9	565.4	329.0
47.5°	521.7	312.5	521.7	1143.9	508.6	279.1
48°	467.8	273.7	467.8	1087.1	455.2	235.4
48.5°	416.4	234.9	416.4	1025.0	403.8	195.6
49°	367.4	196.1	367.4	954.6	352.8	165.0
49.5°	321.8	161.6	321.8	883.3	303.3	136.4
50°	282.0	133.0	282.0	809.5	256.7	109.2
50.5°	244.6	104.8	244.6	737.2	215.0	86.9
51°	208.7	79.6	208.7	666.8	179.6	65.0
51.5°	175.2	62.6	175.2	601.3	150.0	46.6
52°	144.6	50.0	144.6	537.2	121.8	28.1
52.5°	117.0	37.4	117.0	475.6	98.0	10.2
53°	93.2	25.2	93.2	416.9	76.2	5.8
53.5°	70.9	14.6	70.9	364.9	56.3	4.4
54°	51.9	3.9	51.9	315.9	38.8	2.9
54.5°	38.8	1.9	38.8	270.3	21.4	1.5
55°	26.2	1.9	26.2	229.1	7.3	1.5
55.5°	16.0	1.9	16.0	189.8	4.4	1.5
56°	9.7	1.5	9.7	155.3	3.4	1.5
56.5°	3.9	1.5	3.9	128.1	1.9	1.5
57°	2.4	1.5	2.4	102.4	1.5	1.5
57.5°	1.5	1.5	1.5	79.6	1.5	1.5
58°	1.5	1.5	1.5	59.2	1.5	1.5
58.5°	1.5	1.5	1.5	42.7	1.0	1.0
59°	1.0	1.5	1.0	32.5	1.0	1.0
59.5°	1.0	1.5	1.0	23.8	1.0	1.0
60°	1.0	1.5	1.0	15.5	1.0	1.0
60.5°	1.0	1.0	1.0	9.2	1.0	1.0
61°	1.0	1.0	1.0	5.8	1.0	1.0
61.5°	1.0	1.0	1.0	3.4	1.0	1.0
62°	1.0	1.0	1.0	1.5	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0	1.0
63°	1.0	1.0	1.0	1.0	1.0	1.0
63.5°	1.0	1.0	1.0	1.0	1.0	1.0
64°	1.0	1.0	1.0	1.0	1.0	1.0
64.5°	1.0	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	0.5	1.0	1.0
65.5°	0.5	1.0	0.5	0.5	0.5	0.5
66°	0.5	1.0	0.5	0.5	0.5	0.5



TEST NUMBER: P776839
 CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.5	0.5	0.5	0.5	0.5	0.5
68°	0.5	0.5	0.5	0.5	0.5	0.5
68.5°	0.5	0.5	0.5	0.5	0.5	0.5
69°	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5
70.5°	0.5	0.5	0.5	0.5	0.5	0.5
71°	0.5	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.5	0.5	0.5	0.0	0.5	0.5
77°	0.5	0.5	0.5	0.0	0.5	0.5
77.5°	0.5	0.5	0.5	0.0	0.5	0.0
78°	0.0	0.5	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
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: P776839

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQMB-5000lm-5000K

CANDELA DISTRIBUTION (continued):

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



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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2080.5	2083.9	2086.8	2085.8	2082.9	2085.8	2086.8	2083.9	2080.5	2083.9	2086.8
22°	2069.8	2073.2	2076.6	2075.2	2072.3	2075.2	2076.6	2073.2	2069.8	2073.2	2076.6



44°	666.3	928.9	1348.2	937.6	680.4	937.6	1348.2	928.9	666.3	928.9	1348.2
44.5°	605.7	865.8	1328.8	876.0	619.7	876.0	1328.8	865.8	605.7	865.8	1328.8



66.5°	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
67°	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5



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°	2085.8	2082.9	2085.8	2086.8	2083.9	2080.5
22°	2075.2	2072.3	2075.2	2076.6	2073.2	2069.8



44°	937.6	680.4	937.6	1348.2	928.9	666.3
44.5°	876.0	619.7	876.0	1328.8	865.8	605.7

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Scaled Data Report



66.5°	0.5	1.0	0.5	0.5	0.5	0.5
67°	0.5	1.0	0.5	0.5	0.5	0.5

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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)