

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: P776710

Luminaire Tested: HCDJBS4050CSD-HCD6TRMB-5000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B001-HCD6TRMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K
Description: 6 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3369.5 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

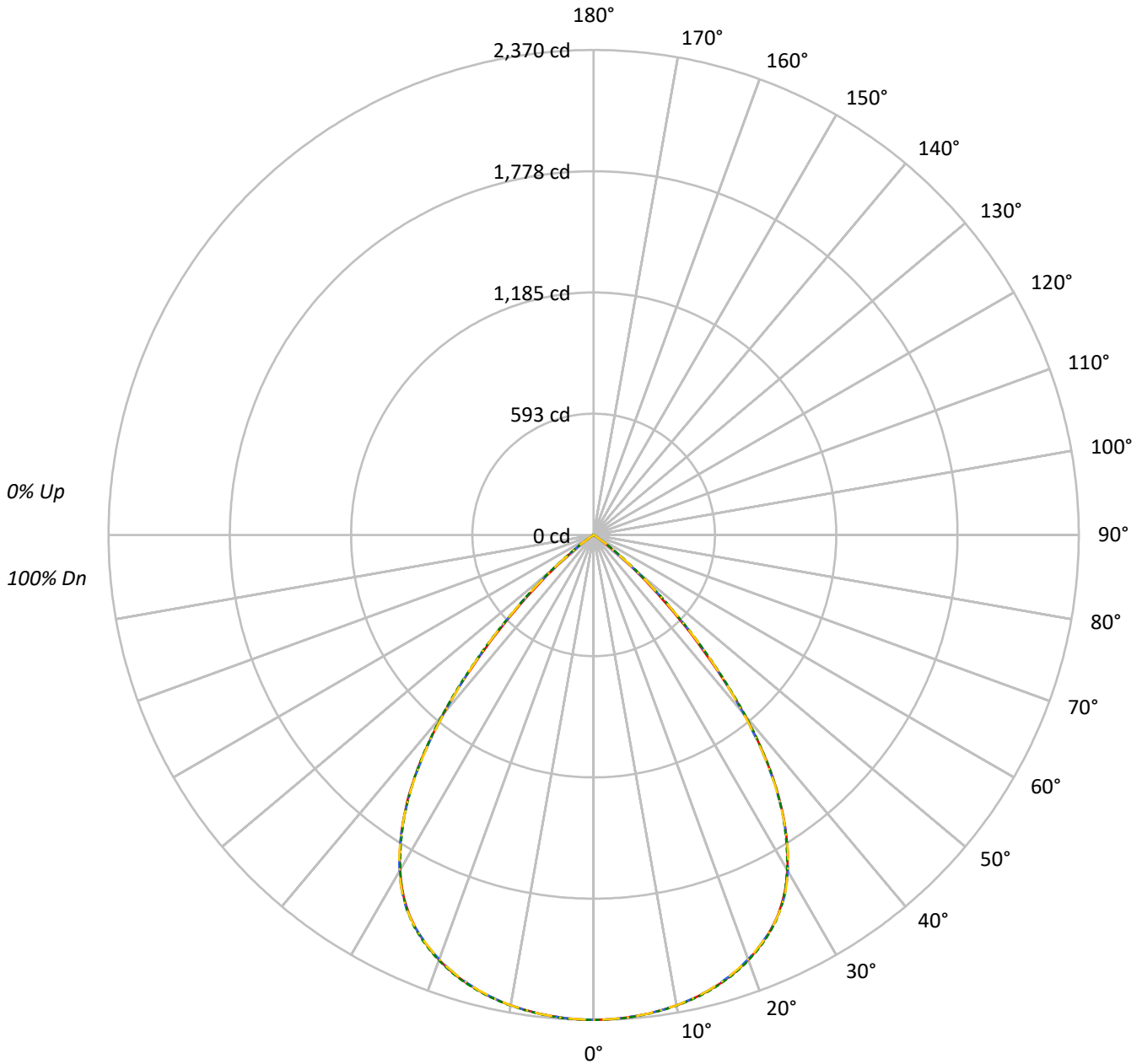
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84	84	84	84
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79	77	77	77	77
4	94	86	80	75	92	85	79	75	83	78	74	80	76	73	79	75	72	70	70	70	70
5	89	79	73	68	87	78	72	68	77	71	67	75	70	66	73	69	66	64	64	64	64
6	83	73	67	62	82	73	66	62	71	65	61	70	65	61	68	64	60	59	59	59	59
7	79	68	61	57	77	67	61	56	66	60	56	65	60	56	64	59	56	54	54	54	54
8	74	63	57	52	73	63	56	52	62	56	52	60	55	51	59	55	51	50	50	50	50
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46	46	46	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42	42	42	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	129902	129902	129902	129902
5°	129897	129947	129897	129947
10°	129930	130030	129930	130030
15°	129779	129938	129779	129938
20°	128887	129050	128887	129050
25°	126419	126667	126419	126667
30°	119759	119582	119759	119582
35°	106160	105825	106160	105825
40°	81875	82555	81875	82555
45°	48935	51377	48935	51377
50°	20238	23266	20238	23266
55°	3919	4616	3919	4616
60°	296	296	296	296
65°	117	117	117	117
70°	80	80	80	80
75°	0	0	0	0
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 51478 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.5	6.7
10°-20°	644.7	19.1
20°-30°	957.4	28.4
30°-40°	970.4	28.8
40°-50°	507.8	15.1
50°-60°	63.5	1.9
60°-70°	1.1	0.0
70°-80°	0.2	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°	1826.6	54.2
0°-40°	2797.0	83.0
0°-60°	3368.2	100.0
0°-90°	3369.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3369.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2370	2370	2370	2370	2370	
5°	2360	2361	2360	2361	2360	224
15°	2287	2290	2287	2290	2287	645
25°	2090	2094	2090	2094	2090	957
35°	1586	1581	1586	1581	1586	972
45°	631	663	631	663	631	495
55°	41	48	41	48	41	59
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°	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6
0.5°	2369.6	2369.2	2369.2	2369.2	2370.1	2369.2	2369.2	2369.2	2369.6	2369.2	2369.2
1°	2369.2	2369.2	2368.7	2368.7	2370.1	2368.7	2368.7	2369.2	2369.2	2369.2	2368.7
1.5°	2368.7	2368.7	2368.3	2368.3	2369.6	2368.3	2368.3	2368.7	2368.7	2368.7	2368.3
2°	2368.3	2367.8	2367.8	2367.8	2368.7	2367.8	2367.8	2367.8	2368.3	2367.8	2367.8
2.5°	2367.4	2366.9	2366.9	2366.9	2368.3	2366.9	2366.9	2366.9	2367.4	2366.9	2366.9
3°	2366.0	2366.0	2366.0	2366.0	2367.4	2366.0	2366.0	2366.0	2366.0	2366.0	2366.0
3.5°	2365.1	2365.1	2365.1	2364.6	2366.0	2364.6	2365.1	2365.1	2365.1	2365.1	2365.1
4°	2363.7	2363.7	2363.7	2363.7	2364.6	2363.7	2363.7	2363.7	2363.7	2363.7	2363.7
4.5°	2361.9	2361.9	2361.9	2361.9	2363.3	2361.9	2361.9	2361.9	2361.9	2361.9	2361.9
5°	2360.5	2360.5	2360.5	2360.5	2361.4	2360.5	2360.5	2360.5	2360.5	2360.5	2360.5
5.5°	2358.7	2358.7	2358.7	2358.7	2360.1	2358.7	2358.7	2358.7	2358.7	2358.7	2358.7
6°	2356.9	2356.4	2356.4	2356.4	2357.8	2356.4	2356.4	2356.4	2356.9	2356.4	2356.4
6.5°	2354.6	2354.1	2354.6	2354.6	2356.0	2354.6	2354.6	2354.1	2354.6	2354.1	2354.6
7°	2352.3	2351.9	2351.9	2352.3	2353.2	2352.3	2351.9	2351.9	2352.3	2351.9	2351.9
7.5°	2349.6	2349.6	2349.6	2349.6	2351.0	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
8°	2346.9	2346.9	2346.9	2346.9	2348.2	2346.9	2346.9	2346.9	2346.9	2346.9	2346.9
8.5°	2344.1	2343.7	2343.7	2344.1	2345.5	2344.1	2343.7	2343.7	2344.1	2343.7	2343.7
9°	2340.9	2340.9	2340.9	2340.9	2342.3	2340.9	2340.9	2340.9	2340.9	2340.9	2340.9
9.5°	2337.8	2337.3	2337.3	2337.8	2339.1	2337.8	2337.3	2337.3	2337.8	2337.3	2337.3
10°	2334.1	2334.1	2333.7	2334.1	2335.9	2334.1	2333.7	2334.1	2334.1	2334.1	2333.7
10.5°	2330.9	2330.0	2330.0	2330.5	2332.3	2330.5	2330.0	2330.0	2330.9	2330.0	2330.0
11°	2326.8	2326.4	2325.9	2326.8	2328.6	2326.8	2325.9	2326.4	2326.8	2326.4	2325.9
11.5°	2322.7	2321.8	2321.8	2322.7	2324.5	2322.7	2321.8	2321.8	2322.7	2321.8	2321.8
12°	2318.2	2317.7	2317.3	2318.2	2320.4	2318.2	2317.3	2317.7	2318.2	2317.7	2317.3
12.5°	2313.6	2312.7	2312.2	2313.6	2315.9	2313.6	2312.2	2312.7	2313.6	2312.7	2312.2
13°	2309.1	2308.1	2307.2	2308.6	2311.3	2308.6	2307.2	2308.1	2309.1	2308.1	2307.2
13.5°	2303.6	2302.7	2302.2	2303.6	2306.3	2303.6	2302.2	2302.7	2303.6	2302.7	2302.2
14°	2298.6	2297.2	2296.3	2298.1	2300.9	2298.1	2296.3	2297.2	2298.6	2297.2	2296.3
14.5°	2292.7	2291.8	2290.8	2292.2	2295.4	2292.2	2290.8	2291.8	2292.7	2291.8	2290.8
15°	2286.7	2285.4	2284.5	2286.3	2289.5	2286.3	2284.5	2285.4	2286.7	2285.4	2284.5
15.5°	2280.4	2279.0	2278.1	2279.9	2283.1	2279.9	2278.1	2279.0	2280.4	2279.0	2278.1
16°	2274.0	2272.6	2271.3	2273.5	2276.7	2273.5	2271.3	2272.6	2274.0	2272.6	2271.3
16.5°	2267.2	2265.3	2264.4	2266.7	2269.9	2266.7	2264.4	2265.3	2267.2	2265.3	2264.4
17°	2259.9	2258.1	2257.1	2259.4	2262.6	2259.4	2257.1	2258.1	2259.9	2258.1	2257.1
17.5°	2252.1	2250.8	2249.4	2251.7	2255.3	2251.7	2249.4	2250.8	2252.1	2250.8	2249.4
18°	2244.4	2242.6	2241.2	2243.9	2247.1	2243.9	2241.2	2242.6	2244.4	2242.6	2241.2
18.5°	2235.7	2234.4	2233.0	2235.7	2238.9	2235.7	2233.0	2234.4	2235.7	2234.4	2233.0
19°	2227.5	2225.7	2224.3	2227.1	2230.3	2227.1	2224.3	2225.7	2227.5	2225.7	2224.3
19.5°	2218.4	2217.1	2215.2	2218.0	2221.6	2218.0	2215.2	2217.1	2218.4	2217.1	2215.2
20°	2209.3	2207.5	2206.1	2208.9	2212.1	2208.9	2206.1	2207.5	2209.3	2207.5	2206.1
20.5°	2199.3	2197.9	2196.6	2199.3	2202.5	2199.3	2196.6	2197.9	2199.3	2197.9	2196.6
21°	2189.3	2187.9	2186.5	2189.3	2192.0	2189.3	2186.5	2187.9	2189.3	2187.9	2186.5



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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°	2156.0	2154.7	2154.2	2156.5	2159.2	2156.5	2154.2	2154.7	2156.0	2154.7	2154.2
23°	2143.7	2142.8	2142.4	2145.1	2146.9	2145.1	2142.4	2142.8	2143.7	2142.8	2142.4
23.5°	2131.0	2130.5	2130.5	2132.8	2134.6	2132.8	2130.5	2130.5	2131.0	2130.5	2130.5
24°	2118.2	2117.8	2118.2	2119.6	2121.9	2119.6	2118.2	2117.8	2118.2	2117.8	2118.2
24.5°	2104.6	2104.6	2105.0	2106.4	2108.2	2106.4	2105.0	2104.6	2104.6	2104.6	2105.0
25°	2090.0	2090.5	2091.4	2092.3	2094.1	2092.3	2091.4	2090.5	2090.0	2090.5	2091.4
25.5°	2075.0	2075.4	2076.8	2076.8	2078.6	2076.8	2076.8	2075.4	2075.0	2075.4	2076.8
26°	2058.6	2059.5	2060.8	2060.8	2062.7	2060.8	2060.8	2059.5	2058.6	2059.5	2060.8
26.5°	2041.7	2043.1	2044.9	2044.0	2044.9	2044.0	2044.9	2043.1	2041.7	2043.1	2044.9
27°	2023.5	2025.3	2027.1	2025.8	2026.7	2025.8	2027.1	2025.3	2023.5	2025.3	2027.1
27.5°	2004.4	2006.7	2008.5	2006.7	2006.7	2006.7	2008.5	2006.7	2004.4	2006.7	2008.5
28°	1983.9	1986.6	1988.9	1986.2	1984.8	1986.2	1988.9	1986.6	1983.9	1986.6	1988.9
28.5°	1962.5	1965.7	1967.9	1964.8	1962.5	1964.8	1967.9	1965.7	1962.5	1965.7	1967.9
29°	1940.2	1943.3	1945.6	1942.4	1939.2	1942.4	1945.6	1943.3	1940.2	1943.3	1945.6
29.5°	1916.5	1920.1	1922.4	1918.8	1914.7	1918.8	1922.4	1920.1	1916.5	1920.1	1922.4
30°	1891.9	1894.6	1897.3	1893.2	1889.1	1893.2	1897.3	1894.6	1891.9	1894.6	1897.3
30.5°	1866.4	1869.1	1871.4	1866.8	1862.3	1866.8	1871.4	1869.1	1866.4	1869.1	1871.4
31°	1839.5	1841.8	1844.1	1840.0	1835.0	1840.0	1844.1	1841.8	1839.5	1841.8	1844.1
31.5°	1811.7	1813.1	1815.4	1810.8	1806.3	1810.8	1815.4	1813.1	1811.7	1813.1	1815.4
32°	1783.0	1783.0	1785.3	1780.8	1777.1	1780.8	1785.3	1783.0	1783.0	1783.0	1785.3
32.5°	1753.0	1752.5	1753.9	1749.3	1746.6	1749.3	1753.9	1752.5	1753.0	1752.5	1753.9
33°	1722.0	1720.2	1721.5	1717.0	1716.1	1717.0	1721.5	1720.2	1722.0	1720.2	1721.5
33.5°	1690.6	1687.4	1687.8	1683.7	1683.3	1683.7	1687.8	1687.4	1690.6	1687.4	1687.8
34°	1656.9	1653.2	1653.2	1648.7	1651.0	1648.7	1653.2	1653.2	1656.9	1653.2	1653.2
34.5°	1622.3	1618.2	1617.3	1612.7	1616.8	1612.7	1617.3	1618.2	1622.3	1618.2	1617.3
35°	1586.3	1581.7	1579.9	1576.7	1581.3	1576.7	1579.9	1581.7	1586.3	1581.7	1579.9
35.5°	1548.5	1544.8	1541.7	1539.8	1544.8	1539.8	1541.7	1544.8	1548.5	1544.8	1541.7
36°	1509.3	1506.6	1502.0	1501.1	1507.0	1501.1	1502.0	1506.6	1509.3	1506.6	1502.0
36.5°	1468.8	1466.5	1461.0	1461.5	1468.3	1461.5	1461.0	1466.5	1468.8	1466.5	1461.0
37°	1426.4	1425.1	1418.7	1421.0	1427.3	1421.0	1418.7	1425.1	1426.4	1425.1	1418.7
37.5°	1382.7	1382.2	1374.5	1378.6	1384.5	1378.6	1374.5	1382.2	1382.7	1382.2	1374.5
38°	1338.1	1337.6	1329.0	1334.9	1340.8	1334.9	1329.0	1337.6	1338.1	1337.6	1329.0
38.5°	1291.6	1291.2	1281.6	1289.8	1295.7	1289.8	1281.6	1291.2	1291.6	1291.2	1281.6
39°	1244.3	1242.9	1233.8	1244.3	1249.7	1244.3	1233.8	1242.9	1244.3	1242.9	1233.8
39.5°	1195.5	1193.2	1185.0	1196.9	1202.4	1196.9	1185.0	1193.2	1195.5	1193.2	1185.0
40°	1144.1	1142.2	1135.4	1147.7	1153.6	1147.7	1135.4	1142.2	1144.1	1142.2	1135.4
40.5°	1093.0	1090.8	1086.2	1098.1	1103.1	1098.1	1086.2	1090.8	1093.0	1090.8	1086.2
41°	1040.7	1039.3	1038.4	1048.4	1053.0	1048.4	1038.4	1039.3	1040.7	1039.3	1038.4
41.5°	988.8	987.4	990.6	998.8	1002.9	998.8	990.6	987.4	988.8	987.4	990.6
42°	935.9	936.4	943.2	948.7	953.7	948.7	943.2	936.4	935.9	936.4	943.2
42.5°	883.5	885.8	895.4	899.9	904.5	899.9	895.4	885.8	883.5	885.8	895.4
43°	831.2	835.7	847.6	851.7	854.9	851.7	847.6	835.7	831.2	835.7	847.6
43.5°	779.7	786.1	799.7	803.8	805.7	803.8	799.7	786.1	779.7	786.1	799.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	631.2	640.3	658.6	664.0	662.7	664.0	658.6	640.3	631.2	640.3	658.6
45.5°	584.3	593.9	613.0	620.3	616.7	620.3	613.0	593.9	584.3	593.9	613.0
46°	538.3	549.7	569.8	577.0	571.6	577.0	569.8	549.7	538.3	549.7	569.8
46.5°	496.4	506.4	526.5	533.3	528.3	533.3	526.5	506.4	496.4	506.4	526.5
47°	454.5	464.1	483.7	491.4	486.0	491.4	483.7	464.1	454.5	464.1	483.7
47.5°	414.0	423.1	441.3	450.0	445.9	450.0	441.3	423.1	414.0	423.1	441.3
48°	373.9	383.5	401.2	410.8	408.1	410.8	401.2	383.5	373.9	383.5	401.2
48.5°	335.7	346.1	363.0	373.5	371.2	373.5	363.0	346.1	335.7	346.1	363.0
49°	300.6	310.6	326.1	337.5	337.9	337.5	326.1	310.6	300.6	310.6	326.1
49.5°	268.3	276.0	290.6	303.3	305.1	303.3	290.6	276.0	268.3	276.0	290.6
50°	237.3	244.1	256.4	270.1	272.8	270.1	256.4	244.1	237.3	244.1	256.4
50.5°	208.1	213.6	224.1	238.2	241.4	238.2	224.1	213.6	208.1	213.6	224.1
51°	181.3	186.3	196.3	208.6	211.8	208.6	196.3	186.3	181.3	186.3	196.3
51.5°	157.1	161.2	169.9	180.8	185.8	180.8	169.9	161.2	157.1	161.2	169.9
52°	134.4	138.0	145.3	154.8	160.3	154.8	145.3	138.0	134.4	138.0	145.3
52.5°	115.2	116.1	121.6	130.7	135.7	130.7	121.6	116.1	115.2	116.1	121.6
53°	97.5	97.0	101.6	110.2	113.9	110.2	101.6	97.0	97.5	97.0	101.6
53.5°	80.2	81.1	84.7	92.5	93.8	92.5	84.7	81.1	80.2	81.1	84.7
54°	65.1	66.5	68.8	75.6	75.6	75.6	68.8	66.5	65.1	66.5	68.8
54.5°	52.4	53.3	54.2	60.1	59.7	60.1	54.2	53.3	52.4	53.3	54.2
55°	41.0	40.5	41.4	46.5	48.3	46.5	41.4	40.5	41.0	40.5	41.4
55.5°	30.1	30.1	31.4	34.6	37.3	34.6	31.4	30.1	30.1	30.1	31.4
56°	20.0	21.4	23.7	26.4	28.7	26.4	23.7	21.4	20.0	21.4	23.7
56.5°	13.7	14.1	17.3	18.7	20.5	18.7	17.3	14.1	13.7	14.1	17.3
57°	10.9	10.0	11.4	12.3	12.3	12.3	11.4	10.0	10.9	10.0	11.4
57.5°	8.7	7.7	8.2	9.1	8.2	9.1	8.2	7.7	8.7	7.7	8.2
58°	6.8	6.4	6.8	7.3	5.9	7.3	6.8	6.4	6.8	6.4	6.8
58.5°	4.6	5.0	5.5	5.9	5.0	5.9	5.5	5.0	4.6	5.0	5.5
59°	4.1	4.1	4.1	4.6	4.1	4.6	4.1	4.1	4.1	4.1	4.1
59.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
60°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
60.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
61°	1.8	1.8	1.8	2.3	1.8	2.3	1.8	1.8	1.8	1.8	1.8
61.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
62°	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.8	1.8
62.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
63°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
63.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
64°	0.9	0.9	0.9	0.9	1.4	0.9	0.9	0.9	0.9	0.9	0.9
64.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
65.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
66°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

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°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
73.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5
74°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	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: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

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: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2369.6	2369.6	2369.6	2369.6	2369.6	2369.6
0.5°	2369.2	2370.1	2369.2	2369.2	2369.2	2369.6
1°	2368.7	2370.1	2368.7	2368.7	2369.2	2369.2
1.5°	2368.3	2369.6	2368.3	2368.3	2368.7	2368.7
2°	2367.8	2368.7	2367.8	2367.8	2367.8	2368.3
2.5°	2366.9	2368.3	2366.9	2366.9	2366.9	2367.4
3°	2366.0	2367.4	2366.0	2366.0	2366.0	2366.0
3.5°	2364.6	2366.0	2364.6	2365.1	2365.1	2365.1
4°	2363.7	2364.6	2363.7	2363.7	2363.7	2363.7
4.5°	2361.9	2363.3	2361.9	2361.9	2361.9	2361.9
5°	2360.5	2361.4	2360.5	2360.5	2360.5	2360.5
5.5°	2358.7	2360.1	2358.7	2358.7	2358.7	2358.7
6°	2356.4	2357.8	2356.4	2356.4	2356.4	2356.9
6.5°	2354.6	2356.0	2354.6	2354.6	2354.1	2354.6
7°	2352.3	2353.2	2352.3	2351.9	2351.9	2352.3
7.5°	2349.6	2351.0	2349.6	2349.6	2349.6	2349.6
8°	2346.9	2348.2	2346.9	2346.9	2346.9	2346.9
8.5°	2344.1	2345.5	2344.1	2343.7	2343.7	2344.1
9°	2340.9	2342.3	2340.9	2340.9	2340.9	2340.9
9.5°	2337.8	2339.1	2337.8	2337.3	2337.3	2337.8
10°	2334.1	2335.9	2334.1	2333.7	2334.1	2334.1
10.5°	2330.5	2332.3	2330.5	2330.0	2330.0	2330.9
11°	2326.8	2328.6	2326.8	2325.9	2326.4	2326.8
11.5°	2322.7	2324.5	2322.7	2321.8	2321.8	2322.7
12°	2318.2	2320.4	2318.2	2317.3	2317.7	2318.2
12.5°	2313.6	2315.9	2313.6	2312.2	2312.7	2313.6
13°	2308.6	2311.3	2308.6	2307.2	2308.1	2309.1
13.5°	2303.6	2306.3	2303.6	2302.2	2302.7	2303.6
14°	2298.1	2300.9	2298.1	2296.3	2297.2	2298.6
14.5°	2292.2	2295.4	2292.2	2290.8	2291.8	2292.7
15°	2286.3	2289.5	2286.3	2284.5	2285.4	2286.7
15.5°	2279.9	2283.1	2279.9	2278.1	2279.0	2280.4
16°	2273.5	2276.7	2273.5	2271.3	2272.6	2274.0
16.5°	2266.7	2269.9	2266.7	2264.4	2265.3	2267.2
17°	2259.4	2262.6	2259.4	2257.1	2258.1	2259.9
17.5°	2251.7	2255.3	2251.7	2249.4	2250.8	2252.1
18°	2243.9	2247.1	2243.9	2241.2	2242.6	2244.4
18.5°	2235.7	2238.9	2235.7	2233.0	2234.4	2235.7
19°	2227.1	2230.3	2227.1	2224.3	2225.7	2227.5
19.5°	2218.0	2221.6	2218.0	2215.2	2217.1	2218.4
20°	2208.9	2212.1	2208.9	2206.1	2207.5	2209.3
20.5°	2199.3	2202.5	2199.3	2196.6	2197.9	2199.3
21°	2189.3	2192.0	2189.3	2186.5	2187.9	2189.3



TEST NUMBER: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2156.5	2159.2	2156.5	2154.2	2154.7	2156.0
23°	2145.1	2146.9	2145.1	2142.4	2142.8	2143.7
23.5°	2132.8	2134.6	2132.8	2130.5	2130.5	2131.0
24°	2119.6	2121.9	2119.6	2118.2	2117.8	2118.2
24.5°	2106.4	2108.2	2106.4	2105.0	2104.6	2104.6
25°	2092.3	2094.1	2092.3	2091.4	2090.5	2090.0
25.5°	2076.8	2078.6	2076.8	2076.8	2075.4	2075.0
26°	2060.8	2062.7	2060.8	2060.8	2059.5	2058.6
26.5°	2044.0	2044.9	2044.0	2044.9	2043.1	2041.7
27°	2025.8	2026.7	2025.8	2027.1	2025.3	2023.5
27.5°	2006.7	2006.7	2006.7	2008.5	2006.7	2004.4
28°	1986.2	1984.8	1986.2	1988.9	1986.6	1983.9
28.5°	1964.8	1962.5	1964.8	1967.9	1965.7	1962.5
29°	1942.4	1939.2	1942.4	1945.6	1943.3	1940.2
29.5°	1918.8	1914.7	1918.8	1922.4	1920.1	1916.5
30°	1893.2	1889.1	1893.2	1897.3	1894.6	1891.9
30.5°	1866.8	1862.3	1866.8	1871.4	1869.1	1866.4
31°	1840.0	1835.0	1840.0	1844.1	1841.8	1839.5
31.5°	1810.8	1806.3	1810.8	1815.4	1813.1	1811.7
32°	1780.8	1777.1	1780.8	1785.3	1783.0	1783.0
32.5°	1749.3	1746.6	1749.3	1753.9	1752.5	1753.0
33°	1717.0	1716.1	1717.0	1721.5	1720.2	1722.0
33.5°	1683.7	1683.3	1683.7	1687.8	1687.4	1690.6
34°	1648.7	1651.0	1648.7	1653.2	1653.2	1656.9
34.5°	1612.7	1616.8	1612.7	1617.3	1618.2	1622.3
35°	1576.7	1581.3	1576.7	1579.9	1581.7	1586.3
35.5°	1539.8	1544.8	1539.8	1541.7	1544.8	1548.5
36°	1501.1	1507.0	1501.1	1502.0	1506.6	1509.3
36.5°	1461.5	1468.3	1461.5	1461.0	1466.5	1468.8
37°	1421.0	1427.3	1421.0	1418.7	1425.1	1426.4
37.5°	1378.6	1384.5	1378.6	1374.5	1382.2	1382.7
38°	1334.9	1340.8	1334.9	1329.0	1337.6	1338.1
38.5°	1289.8	1295.7	1289.8	1281.6	1291.2	1291.6
39°	1244.3	1249.7	1244.3	1233.8	1242.9	1244.3
39.5°	1196.9	1202.4	1196.9	1185.0	1193.2	1195.5
40°	1147.7	1153.6	1147.7	1135.4	1142.2	1144.1
40.5°	1098.1	1103.1	1098.1	1086.2	1090.8	1093.0
41°	1048.4	1053.0	1048.4	1038.4	1039.3	1040.7
41.5°	998.8	1002.9	998.8	990.6	987.4	988.8
42°	948.7	953.7	948.7	943.2	936.4	935.9
42.5°	899.9	904.5	899.9	895.4	885.8	883.5
43°	851.7	854.9	851.7	847.6	835.7	831.2
43.5°	803.8	805.7	803.8	799.7	786.1	779.7



TEST NUMBER: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	664.0	662.7	664.0	658.6	640.3	631.2
45.5°	620.3	616.7	620.3	613.0	593.9	584.3
46°	577.0	571.6	577.0	569.8	549.7	538.3
46.5°	533.3	528.3	533.3	526.5	506.4	496.4
47°	491.4	486.0	491.4	483.7	464.1	454.5
47.5°	450.0	445.9	450.0	441.3	423.1	414.0
48°	410.8	408.1	410.8	401.2	383.5	373.9
48.5°	373.5	371.2	373.5	363.0	346.1	335.7
49°	337.5	337.9	337.5	326.1	310.6	300.6
49.5°	303.3	305.1	303.3	290.6	276.0	268.3
50°	270.1	272.8	270.1	256.4	244.1	237.3
50.5°	238.2	241.4	238.2	224.1	213.6	208.1
51°	208.6	211.8	208.6	196.3	186.3	181.3
51.5°	180.8	185.8	180.8	169.9	161.2	157.1
52°	154.8	160.3	154.8	145.3	138.0	134.4
52.5°	130.7	135.7	130.7	121.6	116.1	115.2
53°	110.2	113.9	110.2	101.6	97.0	97.5
53.5°	92.5	93.8	92.5	84.7	81.1	80.2
54°	75.6	75.6	75.6	68.8	66.5	65.1
54.5°	60.1	59.7	60.1	54.2	53.3	52.4
55°	46.5	48.3	46.5	41.4	40.5	41.0
55.5°	34.6	37.3	34.6	31.4	30.1	30.1
56°	26.4	28.7	26.4	23.7	21.4	20.0
56.5°	18.7	20.5	18.7	17.3	14.1	13.7
57°	12.3	12.3	12.3	11.4	10.0	10.9
57.5°	9.1	8.2	9.1	8.2	7.7	8.7
58°	7.3	5.9	7.3	6.8	6.4	6.8
58.5°	5.9	5.0	5.9	5.5	5.0	4.6
59°	4.6	4.1	4.6	4.1	4.1	4.1
59.5°	3.2	3.2	3.2	3.2	3.2	3.2
60°	2.7	2.7	2.7	2.7	2.7	2.7
60.5°	2.3	2.3	2.3	2.3	2.3	2.3
61°	2.3	1.8	2.3	1.8	1.8	1.8
61.5°	1.8	1.8	1.8	1.8	1.8	1.8
62°	1.8	1.8	1.8	1.8	1.8	1.4
62.5°	1.4	1.4	1.4	1.4	1.4	1.4
63°	1.4	1.4	1.4	1.4	1.4	1.4
63.5°	1.4	1.4	1.4	1.4	1.4	1.4
64°	0.9	1.4	0.9	0.9	0.9	0.9
64.5°	0.9	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9	0.9
65.5°	0.9	0.9	0.9	0.9	0.9	0.9
66°	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-2700K

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	0.0
73.5°	0.5	0.5	0.5	0.5	0.0	0.0
74°	0.0	0.0	0.0	0.0	0.0	0.0
74.5°	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	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
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: P776710

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMB-5000lm-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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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°	2178.8	2177.0	2176.1	2178.8	2181.5	2178.8	2176.1	2177.0	2178.8	2177.0	2176.1
22°	2167.4	2166.5	2165.1	2167.9	2170.2	2167.9	2165.1	2166.5	2167.4	2166.5	2165.1



44°	728.7	736.9	751.9	756.5	757.4	756.5	751.9	736.9	728.7	736.9	751.9
44.5°	679.5	688.2	705.0	710.0	709.6	710.0	705.0	688.2	679.5	688.2	705.0



66.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
67°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9



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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Scaled Data Report





21.5°	2178.8	2181.5	2178.8	2176.1	2177.0	2178.8
22°	2167.9	2170.2	2167.9	2165.1	2166.5	2167.4



44°	756.5	757.4	756.5	751.9	736.9	728.7
44.5°	710.0	709.6	710.0	705.0	688.2	679.5

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Peachtree City, GA 30269

Scaled Data Report



66.5°	0.9	0.9	0.9	0.9	0.9	0.9
67°	0.9	0.9	0.9	0.9	0.5	0.5

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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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Scaled Data Report



(END OF REPORT)