

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: P776590

Luminaire Tested: HCDJBS4050CSD-HCD42TRMW-5000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776590
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156A001)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD42TRMW-5000lm-2700K
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4394.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

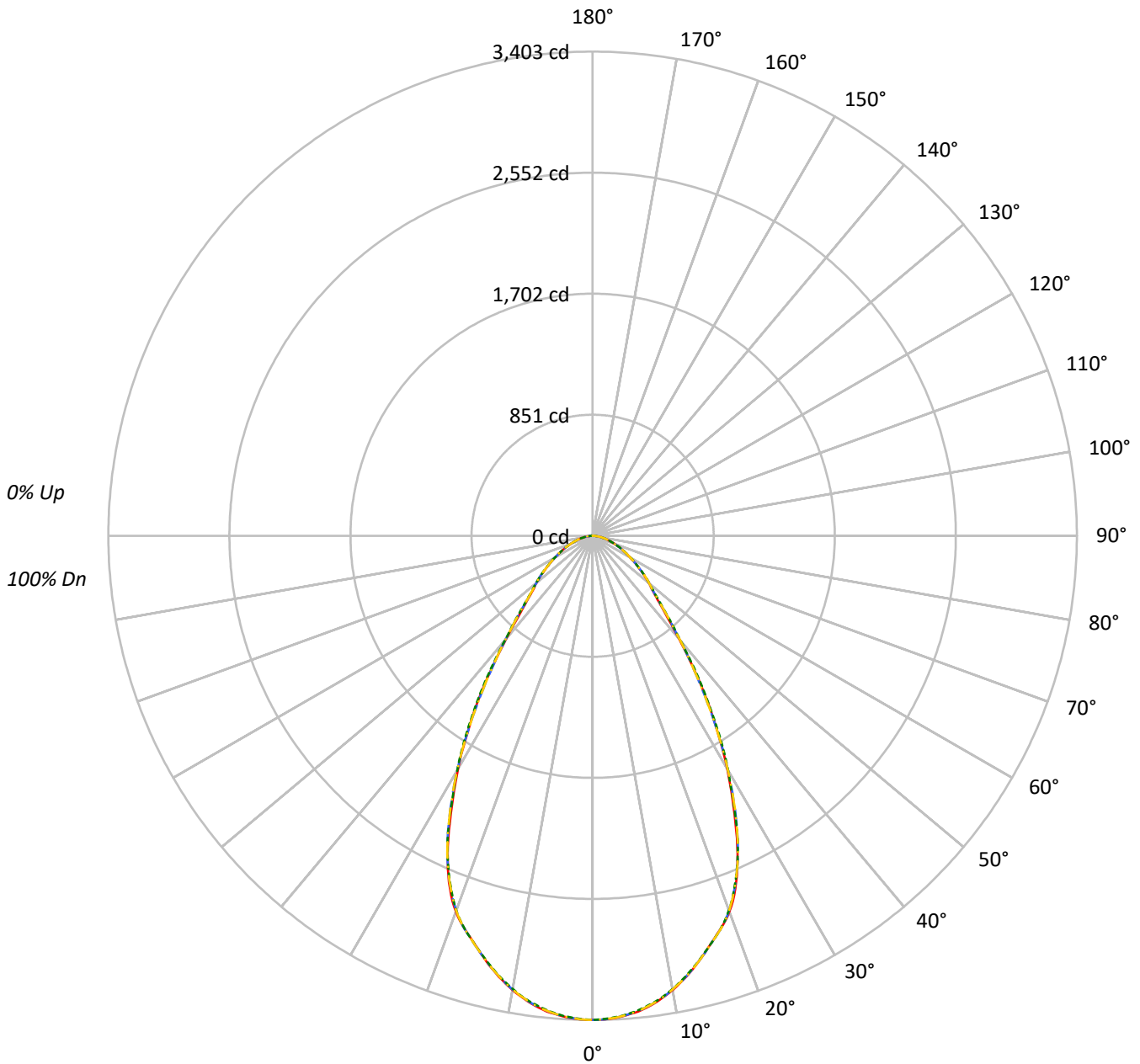
Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
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								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	57	78	68	61	56	67	60	56	65	60	55	64	59	55	53								
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49								
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45								
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42								
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	428254	428254	428254	428254
5°	425229	424306	425229	424306
10°	414248	413315	414248	413315
15°	395923	395441	395923	395441
20°	376454	375115	376454	375115
25°	334125	335208	334125	335208
30°	274900	276353	274900	276353
35°	213260	215580	213260	215580
40°	154905	157599	154905	157599
45°	117288	120207	117288	120207
50°	101007	101810	101007	101810
55°	87787	88796	87787	88796
60°	76743	77423	76743	77423
65°	67449	67985	67449	67985
70°	59536	59867	59536	59867
75°	52320	52320	52320	52320
80°	45224	44934	45224	44934
85°	36244	36244	36244	36244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 120207 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.0	7.2
10°-20°	853.6	19.4
20°-30°	1093.1	24.9
30°-40°	866.2	19.7
40°-50°	530.4	12.1
50°-60°	362.6	8.3
60°-70°	227.0	5.2
70°-80°	115.0	2.6
80°-90°	29.0	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2263.8	51.5
0°-40°	3130.0	71.2
0°-60°	4023.0	91.6
0°-90°	4394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4394.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3403	3403	3403	3403	3403	
5°	3366	3359	3366	3359	3366	317
15°	3039	3035	3039	3035	3039	854
25°	2406	2414	2406	2414	2406	1091
35°	1388	1403	1388	1403	1388	865
45°	659	675	659	675	659	524
55°	400	405	400	405	400	361
65°	226	228	226	228	226	226
75°	108	108	108	108	108	115
85°	25	25	25	25	25	29
90°	0	1	0	1	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°	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9
0.5°	3403.3	3402.9	3402.0	3401.5	3400.1	3401.5	3402.0	3402.9	3403.3	3402.9	3402.0
1°	3402.0	3401.5	3401.1	3400.6	3398.8	3400.6	3401.1	3401.5	3402.0	3401.5	3401.1
1.5°	3400.1	3399.2	3399.2	3398.3	3397.0	3398.3	3399.2	3399.2	3400.1	3399.2	3399.2
2°	3397.4	3397.0	3396.0	3395.6	3393.8	3395.6	3396.0	3397.0	3397.4	3397.0	3396.0
2.5°	3394.2	3393.3	3392.4	3391.9	3389.7	3391.9	3392.4	3393.3	3394.2	3393.3	3392.4
3°	3389.7	3388.8	3387.8	3386.9	3384.6	3386.9	3387.8	3388.8	3389.7	3388.8	3387.8
3.5°	3384.6	3383.7	3382.4	3381.5	3380.1	3381.5	3382.4	3383.7	3384.6	3383.7	3382.4
4°	3378.7	3378.3	3376.4	3375.5	3373.3	3375.5	3376.4	3378.3	3378.7	3378.3	3376.4
4.5°	3372.3	3371.4	3369.6	3368.7	3366.0	3368.7	3369.6	3371.4	3372.3	3371.4	3369.6
5°	3366.0	3364.6	3362.8	3361.9	3358.7	3361.9	3362.8	3364.6	3366.0	3364.6	3362.8
5.5°	3359.1	3355.9	3353.7	3352.7	3350.0	3352.7	3353.7	3355.9	3359.1	3355.9	3353.7
6°	3348.6	3346.8	3344.5	3343.2	3339.5	3343.2	3344.5	3346.8	3348.6	3346.8	3344.5
6.5°	3338.2	3336.8	3334.1	3332.7	3329.1	3332.7	3334.1	3336.8	3338.2	3336.8	3334.1
7°	3327.2	3325.4	3324.0	3321.8	3318.6	3321.8	3324.0	3325.4	3327.2	3325.4	3324.0
7.5°	3314.9	3313.1	3311.3	3310.4	3307.2	3310.4	3311.3	3313.1	3314.9	3313.1	3311.3
8°	3301.7	3300.3	3298.5	3297.2	3295.3	3297.2	3298.5	3300.3	3301.7	3300.3	3298.5
8.5°	3288.0	3286.2	3284.4	3283.0	3281.2	3283.0	3284.4	3286.2	3288.0	3286.2	3284.4
9°	3273.5	3272.1	3269.8	3268.4	3266.6	3268.4	3269.8	3272.1	3273.5	3272.1	3269.8
9.5°	3257.5	3256.6	3254.3	3252.9	3251.1	3252.9	3254.3	3256.6	3257.5	3256.6	3254.3
10°	3241.6	3240.2	3238.4	3236.5	3234.3	3236.5	3238.4	3240.2	3241.6	3240.2	3238.4
10.5°	3223.8	3222.9	3220.6	3219.2	3217.4	3219.2	3220.6	3222.9	3223.8	3222.9	3220.6
11°	3206.0	3205.1	3203.3	3201.4	3199.2	3201.4	3203.3	3205.1	3206.0	3205.1	3203.3
11.5°	3187.3	3186.4	3184.6	3182.8	3180.9	3182.8	3184.6	3186.4	3187.3	3186.4	3184.6
12°	3168.2	3167.3	3165.9	3163.6	3161.8	3163.6	3165.9	3167.3	3168.2	3167.3	3165.9
12.5°	3148.1	3147.2	3145.9	3143.6	3141.3	3143.6	3145.9	3147.2	3148.1	3147.2	3145.9
13°	3127.6	3126.7	3125.3	3123.5	3121.2	3123.5	3125.3	3126.7	3127.6	3126.7	3125.3
13.5°	3106.2	3105.3	3104.4	3102.6	3100.7	3102.6	3104.4	3105.3	3106.2	3105.3	3104.4
14°	3084.3	3083.9	3083.0	3081.1	3079.3	3081.1	3083.0	3083.9	3084.3	3083.9	3083.0
14.5°	3061.5	3061.1	3060.6	3058.8	3057.0	3058.8	3060.6	3061.1	3061.5	3061.1	3060.6
15°	3038.8	3038.8	3037.8	3036.9	3035.1	3036.9	3037.8	3038.8	3038.8	3038.8	3037.8
15.5°	3015.1	3015.1	3016.0	3015.1	3014.1	3015.1	3016.0	3015.1	3015.1	3015.1	3016.0
16°	2992.3	2992.7	2994.1	2993.6	2992.7	2993.6	2994.1	2992.7	2992.3	2992.7	2994.1
16.5°	2969.5	2970.4	2972.2	2972.2	2971.8	2972.2	2972.2	2970.4	2969.5	2970.4	2972.2
17°	2948.1	2949.0	2950.8	2950.3	2950.8	2950.3	2950.8	2949.0	2948.1	2949.0	2950.8
17.5°	2927.1	2928.0	2929.4	2928.9	2928.5	2928.9	2929.4	2928.0	2927.1	2928.0	2929.4
18°	2906.6	2907.1	2908.0	2907.1	2906.1	2907.1	2908.0	2907.1	2906.6	2907.1	2908.0
18.5°	2884.7	2884.7	2884.7	2883.8	2882.4	2883.8	2884.7	2884.7	2884.7	2884.7	2884.7
19°	2862.4	2861.0	2860.1	2858.7	2857.4	2858.7	2860.1	2861.0	2862.4	2861.0	2860.1
19.5°	2837.8	2836.0	2833.2	2832.3	2830.9	2832.3	2833.2	2836.0	2837.8	2836.0	2833.2
20°	2810.9	2808.6	2803.6	2804.1	2800.9	2804.1	2803.6	2808.6	2810.9	2808.6	2803.6
20.5°	2781.3	2777.6	2771.7	2773.5	2769.9	2773.5	2771.7	2777.6	2781.3	2777.6	2771.7
21°	2750.3	2744.8	2738.0	2740.3	2735.7	2740.3	2738.0	2744.8	2750.3	2744.8	2738.0



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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°	2636.8	2631.3	2626.8	2626.3	2624.0	2626.3	2626.8	2631.3	2636.8	2631.3	2626.8
23°	2593.5	2589.0	2588.0	2584.9	2583.9	2584.9	2588.0	2589.0	2593.5	2589.0	2588.0
23.5°	2549.3	2545.2	2547.5	2542.0	2544.3	2542.0	2547.5	2545.2	2549.3	2545.2	2547.5
24°	2503.3	2500.1	2505.6	2498.3	2502.4	2498.3	2505.6	2500.1	2503.3	2500.1	2505.6
24.5°	2455.9	2454.5	2461.4	2454.1	2459.5	2454.1	2461.4	2454.5	2455.9	2454.5	2461.4
25°	2406.2	2407.1	2415.3	2409.9	2414.0	2409.9	2415.3	2407.1	2406.2	2407.1	2415.3
25.5°	2354.7	2360.6	2367.9	2365.7	2366.6	2365.7	2367.9	2360.6	2354.7	2360.6	2367.9
26°	2301.9	2312.3	2319.2	2319.6	2316.0	2319.6	2319.2	2312.3	2301.9	2312.3	2319.2
26.5°	2247.6	2263.1	2268.6	2271.8	2263.6	2271.8	2268.6	2263.1	2247.6	2263.1	2268.6
27°	2194.8	2212.1	2217.5	2222.6	2210.3	2222.6	2217.5	2212.1	2194.8	2212.1	2217.5
27.5°	2142.8	2159.2	2165.6	2172.0	2156.0	2172.0	2165.6	2159.2	2142.8	2159.2	2165.6
28°	2090.9	2106.3	2112.7	2119.1	2101.8	2119.1	2112.7	2106.3	2090.9	2106.3	2112.7
28.5°	2040.3	2052.6	2059.9	2065.3	2049.4	2065.3	2059.9	2052.6	2040.3	2052.6	2059.9
29°	1990.1	1998.3	2007.0	2010.6	1999.7	2010.6	2007.0	1998.3	1990.1	1998.3	2007.0
29.5°	1940.9	1945.0	1954.6	1956.0	1950.9	1956.0	1954.6	1945.0	1940.9	1945.0	1954.6
30°	1891.7	1890.3	1900.8	1901.3	1901.7	1901.3	1900.8	1890.3	1891.7	1890.3	1900.8
30.5°	1840.7	1837.5	1847.5	1848.4	1855.2	1848.4	1847.5	1837.5	1840.7	1837.5	1847.5
31°	1790.1	1783.2	1793.7	1795.5	1806.0	1795.5	1793.7	1783.2	1790.1	1783.2	1793.7
31.5°	1738.1	1731.3	1739.9	1743.1	1756.4	1743.1	1739.9	1731.3	1738.1	1731.3	1739.9
32°	1685.3	1678.9	1686.6	1691.6	1705.3	1691.6	1686.6	1678.9	1685.3	1678.9	1686.6
32.5°	1634.2	1628.8	1634.2	1640.6	1654.3	1640.6	1634.2	1628.8	1634.2	1628.8	1634.2
33°	1582.7	1578.6	1580.4	1589.6	1602.3	1589.6	1580.4	1578.6	1582.7	1578.6	1580.4
33.5°	1536.7	1528.5	1527.1	1538.5	1549.9	1538.5	1527.1	1528.5	1536.7	1528.5	1527.1
34°	1487.0	1478.4	1474.3	1488.4	1500.2	1488.4	1474.3	1478.4	1487.0	1478.4	1474.3
34.5°	1437.8	1428.7	1422.8	1437.8	1451.0	1437.8	1422.8	1428.7	1437.8	1428.7	1422.8
35°	1388.1	1380.4	1374.0	1389.0	1403.2	1389.0	1374.0	1380.4	1388.1	1380.4	1374.0
35.5°	1339.8	1332.5	1325.7	1340.7	1356.2	1340.7	1325.7	1332.5	1339.8	1332.5	1325.7
36°	1292.4	1284.7	1278.8	1294.3	1310.2	1294.3	1278.8	1284.7	1292.4	1284.7	1278.8
36.5°	1245.5	1238.7	1233.2	1248.2	1263.3	1248.2	1233.2	1238.7	1245.5	1238.7	1233.2
37°	1198.1	1193.1	1188.5	1203.6	1216.8	1203.6	1188.5	1193.1	1198.1	1193.1	1188.5
37.5°	1152.1	1148.9	1145.7	1160.7	1170.3	1160.7	1145.7	1148.9	1152.1	1148.9	1145.7
38°	1106.5	1106.0	1104.7	1118.8	1124.3	1118.8	1104.7	1106.0	1106.5	1106.0	1104.7
38.5°	1063.7	1064.6	1065.5	1077.8	1080.1	1077.8	1065.5	1064.6	1063.7	1064.6	1065.5
39°	1022.2	1024.5	1026.3	1038.1	1037.7	1038.1	1026.3	1024.5	1022.2	1024.5	1026.3
39.5°	981.6	985.7	988.9	998.9	997.6	998.9	988.9	985.7	981.6	985.7	988.9
40°	942.9	947.4	952.9	961.1	959.3	961.1	952.9	947.4	942.9	947.4	952.9
40.5°	906.4	911.0	918.3	924.2	923.7	924.2	918.3	911.0	906.4	911.0	918.3
41°	871.3	875.9	885.5	889.6	890.9	889.6	885.5	875.9	871.3	875.9	885.5
41.5°	838.1	843.1	854.0	856.3	860.4	856.3	854.0	843.1	838.1	843.1	854.0
42°	807.1	812.1	823.9	825.3	830.8	825.3	823.9	812.1	807.1	812.1	823.9
42.5°	777.9	782.9	795.7	796.1	802.1	796.1	795.7	782.9	777.9	782.9	795.7
43°	750.1	755.6	767.9	768.8	774.3	768.8	767.9	755.6	750.1	755.6	767.9
43.5°	724.6	730.1	741.9	742.4	747.4	742.4	741.9	730.1	724.6	730.1	741.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	659.0	663.5	670.8	673.1	675.4	673.1	670.8	663.5	659.0	663.5	670.8
45.5°	639.8	643.5	650.3	652.6	654.4	652.6	650.3	643.5	639.8	643.5	650.3
46°	621.6	624.8	630.7	633.9	634.8	633.9	630.7	624.8	621.6	624.8	630.7
46.5°	604.7	607.5	612.0	615.7	616.6	615.7	612.0	607.5	604.7	607.5	612.0
47°	588.8	590.6	595.2	598.8	600.2	598.8	595.2	590.6	588.8	590.6	595.2
47.5°	573.8	575.1	579.2	583.3	585.1	583.3	579.2	575.1	573.8	575.1	579.2
48°	559.6	561.4	565.6	569.2	571.0	569.2	565.6	561.4	559.6	561.4	565.6
48.5°	548.2	549.1	552.3	556.0	557.3	556.0	552.3	549.1	548.2	549.1	552.3
49°	537.3	537.8	540.5	543.2	544.6	543.2	540.5	537.8	537.3	537.8	540.5
49.5°	526.8	527.3	529.1	531.4	531.8	531.4	529.1	527.3	526.8	527.3	529.1
50°	515.9	516.3	517.7	519.5	520.0	519.5	517.7	516.3	515.9	516.3	517.7
50.5°	504.9	505.4	506.3	508.1	508.1	508.1	506.3	505.4	504.9	505.4	506.3
51°	492.6	493.5	494.9	496.7	496.7	496.7	494.9	493.5	492.6	493.5	494.9
51.5°	480.8	481.2	483.1	485.3	485.8	485.3	483.1	481.2	480.8	481.2	483.1
52°	468.5	469.4	471.2	473.5	474.0	473.5	471.2	469.4	468.5	469.4	471.2
52.5°	456.2	457.1	459.4	461.2	462.1	461.2	459.4	457.1	456.2	457.1	459.4
53°	444.8	445.7	447.5	449.3	450.3	449.3	447.5	445.7	444.8	445.7	447.5
53.5°	432.9	433.8	435.7	437.9	438.9	437.9	435.7	433.8	432.9	433.8	435.7
54°	422.0	422.5	424.3	426.1	427.0	426.1	424.3	422.5	422.0	422.5	424.3
54.5°	411.1	411.5	413.3	415.2	416.1	415.2	413.3	411.5	411.1	411.5	413.3
55°	400.1	401.0	402.9	404.2	404.7	404.2	402.9	401.0	400.1	401.0	402.9
55.5°	389.6	390.6	392.4	393.7	394.2	393.7	392.4	390.6	389.6	390.6	392.4
56°	379.6	380.5	381.9	383.3	383.7	383.3	381.9	380.5	379.6	380.5	381.9
56.5°	369.6	370.5	371.9	373.2	373.7	373.2	371.9	370.5	369.6	370.5	371.9
57°	359.6	360.5	361.8	363.2	363.7	363.2	361.8	360.5	359.6	360.5	361.8
57.5°	349.5	350.9	352.3	353.2	354.1	353.2	352.3	350.9	349.5	350.9	352.3
58°	340.9	341.3	342.7	344.1	344.5	344.1	342.7	341.3	340.9	341.3	342.7
58.5°	331.8	332.2	333.6	334.5	335.0	334.5	333.6	332.2	331.8	332.2	333.6
59°	322.7	323.1	324.0	324.9	325.8	324.9	324.0	323.1	322.7	323.1	324.0
59.5°	313.5	314.0	314.9	316.3	316.7	316.3	314.9	314.0	313.5	314.0	314.9
60°	304.9	305.3	306.2	307.2	307.6	307.2	306.2	305.3	304.9	305.3	306.2
60.5°	296.2	296.7	297.6	298.5	299.0	298.5	297.6	296.7	296.2	296.7	297.6
61°	288.0	288.5	289.4	290.3	290.8	290.3	289.4	288.5	288.0	288.5	289.4
61.5°	279.8	280.3	281.2	282.1	282.5	282.1	281.2	280.3	279.8	280.3	281.2
62°	272.1	272.1	273.0	273.9	273.9	273.9	273.0	272.1	272.1	272.1	273.0
62.5°	263.9	264.3	264.8	265.7	266.1	265.7	264.8	264.3	263.9	264.3	264.8
63°	256.1	256.6	257.0	257.9	257.9	257.9	257.0	256.6	256.1	256.6	257.0
63.5°	248.4	248.8	249.3	250.2	250.6	250.2	249.3	248.8	248.4	248.8	249.3
64°	241.1	241.5	242.0	242.4	242.9	242.4	242.0	241.5	241.1	241.5	242.0
64.5°	233.8	234.2	234.7	235.2	235.6	235.2	234.7	234.2	233.8	234.2	234.7
65°	226.5	226.9	227.4	227.9	228.3	227.9	227.4	226.9	226.5	226.9	227.4
65.5°	219.7	219.7	220.1	221.0	221.0	221.0	220.1	219.7	219.7	219.7	220.1
66°	212.4	212.8	213.3	213.7	214.2	213.7	213.3	212.8	212.4	212.8	213.3



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	192.3	192.8	193.2	193.7	193.7	193.7	193.2	192.8	192.3	192.8	193.2
68°	185.9	186.4	186.8	187.3	187.3	187.3	186.8	186.4	185.9	186.4	186.8
68.5°	179.6	180.0	180.5	180.5	180.9	180.5	180.5	180.0	179.6	180.0	180.5
69°	173.6	173.6	173.6	174.5	174.5	174.5	173.6	173.6	173.6	173.6	173.6
69.5°	167.3	167.7	167.7	168.2	168.6	168.2	167.7	167.7	167.3	167.7	167.7
70°	161.8	162.2	161.8	162.2	162.7	162.2	161.8	162.2	161.8	162.2	161.8
70.5°	155.9	156.3	156.3	156.3	156.8	156.3	156.3	156.3	155.9	156.3	156.3
71°	150.4	150.4	150.4	150.4	150.8	150.4	150.4	150.4	150.4	150.4	150.4
71.5°	144.5	144.5	144.9	144.9	144.9	144.9	144.9	144.5	144.5	144.5	144.9
72°	139.0	139.0	139.0	139.5	139.5	139.5	139.0	139.0	139.0	139.0	139.0
72.5°	133.5	133.5	133.5	134.0	134.0	134.0	133.5	133.5	133.5	133.5	133.5
73°	128.1	128.1	128.1	128.5	128.5	128.5	128.1	128.1	128.1	128.1	128.1
73.5°	122.6	122.6	123.0	123.0	123.0	123.0	123.0	122.6	122.6	122.6	123.0
74°	117.6	117.6	117.6	118.0	118.0	118.0	117.6	117.6	117.6	117.6	117.6
74.5°	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6
75°	107.6	107.6	107.6	107.6	107.6	107.6	107.6	107.6	107.6	107.6	107.6
75.5°	102.5	102.5	102.5	102.5	103.0	102.5	102.5	102.5	102.5	102.5	102.5
76°	98.0	97.5	97.5	98.0	98.0	98.0	97.5	97.5	98.0	97.5	97.5
76.5°	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
77°	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
77.5°	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
78°	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
78.5°	75.2	75.2	74.7	74.7	75.2	74.7	74.7	75.2	75.2	75.2	74.7
79°	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
79.5°	66.5	66.5	66.1	66.5	66.5	66.5	66.1	66.5	66.5	66.5	66.1
80°	62.4	62.4	62.0	62.0	62.0	62.0	62.0	62.4	62.4	62.4	62.0
80.5°	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3
81°	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
81.5°	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1
82°	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
82.5°	42.8	42.8	42.8	42.8	42.4	42.8	42.8	42.8	42.8	42.8	42.8
83°	39.2	39.2	39.2	38.7	38.7	38.7	39.2	39.2	39.2	39.2	39.2
83.5°	35.5	35.5	35.5	35.1	35.1	35.1	35.5	35.5	35.5	35.5	35.5
84°	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9
84.5°	28.7	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.7	28.3	28.3
85°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
85.5°	21.9	21.4	21.9	21.4	21.9	21.4	21.9	21.4	21.9	21.4	21.9
86°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
86.5°	15.5	15.0	15.0	15.0	15.5	15.0	15.0	15.0	15.5	15.0	15.0
87°	12.3	12.3	12.3	11.8	12.3	11.8	12.3	12.3	12.3	12.3	12.3
87.5°	9.1	9.1	9.1	9.1	9.6	9.1	9.1	9.1	9.1	9.1	9.1
88°	5.9	6.4	6.4	6.8	6.8	6.8	6.4	6.4	5.9	6.4	6.4
88.5°	3.6	3.6	4.1	4.6	5.5	4.6	4.1	3.6	3.6	3.6	4.1



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL4050CSD-HCD42TRMW-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	0.5	0.9	1.4	0.9	0.5	0.0	0.0	0.0	0.5



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3402.9	3402.9	3402.9	3402.9	3402.9	3402.9
0.5°	3401.5	3400.1	3401.5	3402.0	3402.9	3403.3
1°	3400.6	3398.8	3400.6	3401.1	3401.5	3402.0
1.5°	3398.3	3397.0	3398.3	3399.2	3399.2	3400.1
2°	3395.6	3393.8	3395.6	3396.0	3397.0	3397.4
2.5°	3391.9	3389.7	3391.9	3392.4	3393.3	3394.2
3°	3386.9	3384.6	3386.9	3387.8	3388.8	3389.7
3.5°	3381.5	3380.1	3381.5	3382.4	3383.7	3384.6
4°	3375.5	3373.3	3375.5	3376.4	3378.3	3378.7
4.5°	3368.7	3366.0	3368.7	3369.6	3371.4	3372.3
5°	3361.9	3358.7	3361.9	3362.8	3364.6	3366.0
5.5°	3352.7	3350.0	3352.7	3353.7	3355.9	3359.1
6°	3343.2	3339.5	3343.2	3344.5	3346.8	3348.6
6.5°	3332.7	3329.1	3332.7	3334.1	3336.8	3338.2
7°	3321.8	3318.6	3321.8	3324.0	3325.4	3327.2
7.5°	3310.4	3307.2	3310.4	3311.3	3313.1	3314.9
8°	3297.2	3295.3	3297.2	3298.5	3300.3	3301.7
8.5°	3283.0	3281.2	3283.0	3284.4	3286.2	3288.0
9°	3268.4	3266.6	3268.4	3269.8	3272.1	3273.5
9.5°	3252.9	3251.1	3252.9	3254.3	3256.6	3257.5
10°	3236.5	3234.3	3236.5	3238.4	3240.2	3241.6
10.5°	3219.2	3217.4	3219.2	3220.6	3222.9	3223.8
11°	3201.4	3199.2	3201.4	3203.3	3205.1	3206.0
11.5°	3182.8	3180.9	3182.8	3184.6	3186.4	3187.3
12°	3163.6	3161.8	3163.6	3165.9	3167.3	3168.2
12.5°	3143.6	3141.3	3143.6	3145.9	3147.2	3148.1
13°	3123.5	3121.2	3123.5	3125.3	3126.7	3127.6
13.5°	3102.6	3100.7	3102.6	3104.4	3105.3	3106.2
14°	3081.1	3079.3	3081.1	3083.0	3083.9	3084.3
14.5°	3058.8	3057.0	3058.8	3060.6	3061.1	3061.5
15°	3036.9	3035.1	3036.9	3037.8	3038.8	3038.8
15.5°	3015.1	3014.1	3015.1	3016.0	3015.1	3015.1
16°	2993.6	2992.7	2993.6	2994.1	2992.7	2992.3
16.5°	2972.2	2971.8	2972.2	2972.2	2970.4	2969.5
17°	2950.3	2950.8	2950.3	2950.8	2949.0	2948.1
17.5°	2928.9	2928.5	2928.9	2929.4	2928.0	2927.1
18°	2907.1	2906.1	2907.1	2908.0	2907.1	2906.6
18.5°	2883.8	2882.4	2883.8	2884.7	2884.7	2884.7
19°	2858.7	2857.4	2858.7	2860.1	2861.0	2862.4
19.5°	2832.3	2830.9	2832.3	2833.2	2836.0	2837.8
20°	2804.1	2800.9	2804.1	2803.6	2808.6	2810.9
20.5°	2773.5	2769.9	2773.5	2771.7	2777.6	2781.3
21°	2740.3	2735.7	2740.3	2738.0	2744.8	2750.3

TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2626.3	2624.0	2626.3	2626.8	2631.3	2636.8
23°	2584.9	2583.9	2584.9	2588.0	2589.0	2593.5
23.5°	2542.0	2544.3	2542.0	2547.5	2545.2	2549.3
24°	2498.3	2502.4	2498.3	2505.6	2500.1	2503.3
24.5°	2454.1	2459.5	2454.1	2461.4	2454.5	2455.9
25°	2409.9	2414.0	2409.9	2415.3	2407.1	2406.2
25.5°	2365.7	2366.6	2365.7	2367.9	2360.6	2354.7
26°	2319.6	2316.0	2319.6	2319.2	2312.3	2301.9
26.5°	2271.8	2263.6	2271.8	2268.6	2263.1	2247.6
27°	2222.6	2210.3	2222.6	2217.5	2212.1	2194.8
27.5°	2172.0	2156.0	2172.0	2165.6	2159.2	2142.8
28°	2119.1	2101.8	2119.1	2112.7	2106.3	2090.9
28.5°	2065.3	2049.4	2065.3	2059.9	2052.6	2040.3
29°	2010.6	1999.7	2010.6	2007.0	1998.3	1990.1
29.5°	1956.0	1950.9	1956.0	1954.6	1945.0	1940.9
30°	1901.3	1901.7	1901.3	1900.8	1890.3	1891.7
30.5°	1848.4	1855.2	1848.4	1847.5	1837.5	1840.7
31°	1795.5	1806.0	1795.5	1793.7	1783.2	1790.1
31.5°	1743.1	1756.4	1743.1	1739.9	1731.3	1738.1
32°	1691.6	1705.3	1691.6	1686.6	1678.9	1685.3
32.5°	1640.6	1654.3	1640.6	1634.2	1628.8	1634.2
33°	1589.6	1602.3	1589.6	1580.4	1578.6	1582.7
33.5°	1538.5	1549.9	1538.5	1527.1	1528.5	1536.7
34°	1488.4	1500.2	1488.4	1474.3	1478.4	1487.0
34.5°	1437.8	1451.0	1437.8	1422.8	1428.7	1437.8
35°	1389.0	1403.2	1389.0	1374.0	1380.4	1388.1
35.5°	1340.7	1356.2	1340.7	1325.7	1332.5	1339.8
36°	1294.3	1310.2	1294.3	1278.8	1284.7	1292.4
36.5°	1248.2	1263.3	1248.2	1233.2	1238.7	1245.5
37°	1203.6	1216.8	1203.6	1188.5	1193.1	1198.1
37.5°	1160.7	1170.3	1160.7	1145.7	1148.9	1152.1
38°	1118.8	1124.3	1118.8	1104.7	1106.0	1106.5
38.5°	1077.8	1080.1	1077.8	1065.5	1064.6	1063.7
39°	1038.1	1037.7	1038.1	1026.3	1024.5	1022.2
39.5°	998.9	997.6	998.9	988.9	985.7	981.6
40°	961.1	959.3	961.1	952.9	947.4	942.9
40.5°	924.2	923.7	924.2	918.3	911.0	906.4
41°	889.6	890.9	889.6	885.5	875.9	871.3
41.5°	856.3	860.4	856.3	854.0	843.1	838.1
42°	825.3	830.8	825.3	823.9	812.1	807.1
42.5°	796.1	802.1	796.1	795.7	782.9	777.9
43°	768.8	774.3	768.8	767.9	755.6	750.1
43.5°	742.4	747.4	742.4	741.9	730.1	724.6



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	673.1	675.4	673.1	670.8	663.5	659.0
45.5°	652.6	654.4	652.6	650.3	643.5	639.8
46°	633.9	634.8	633.9	630.7	624.8	621.6
46.5°	615.7	616.6	615.7	612.0	607.5	604.7
47°	598.8	600.2	598.8	595.2	590.6	588.8
47.5°	583.3	585.1	583.3	579.2	575.1	573.8
48°	569.2	571.0	569.2	565.6	561.4	559.6
48.5°	556.0	557.3	556.0	552.3	549.1	548.2
49°	543.2	544.6	543.2	540.5	537.8	537.3
49.5°	531.4	531.8	531.4	529.1	527.3	526.8
50°	519.5	520.0	519.5	517.7	516.3	515.9
50.5°	508.1	508.1	508.1	506.3	505.4	504.9
51°	496.7	496.7	496.7	494.9	493.5	492.6
51.5°	485.3	485.8	485.3	483.1	481.2	480.8
52°	473.5	474.0	473.5	471.2	469.4	468.5
52.5°	461.2	462.1	461.2	459.4	457.1	456.2
53°	449.3	450.3	449.3	447.5	445.7	444.8
53.5°	437.9	438.9	437.9	435.7	433.8	432.9
54°	426.1	427.0	426.1	424.3	422.5	422.0
54.5°	415.2	416.1	415.2	413.3	411.5	411.1
55°	404.2	404.7	404.2	402.9	401.0	400.1
55.5°	393.7	394.2	393.7	392.4	390.6	389.6
56°	383.3	383.7	383.3	381.9	380.5	379.6
56.5°	373.2	373.7	373.2	371.9	370.5	369.6
57°	363.2	363.7	363.2	361.8	360.5	359.6
57.5°	353.2	354.1	353.2	352.3	350.9	349.5
58°	344.1	344.5	344.1	342.7	341.3	340.9
58.5°	334.5	335.0	334.5	333.6	332.2	331.8
59°	324.9	325.8	324.9	324.0	323.1	322.7
59.5°	316.3	316.7	316.3	314.9	314.0	313.5
60°	307.2	307.6	307.2	306.2	305.3	304.9
60.5°	298.5	299.0	298.5	297.6	296.7	296.2
61°	290.3	290.8	290.3	289.4	288.5	288.0
61.5°	282.1	282.5	282.1	281.2	280.3	279.8
62°	273.9	273.9	273.9	273.0	272.1	272.1
62.5°	265.7	266.1	265.7	264.8	264.3	263.9
63°	257.9	257.9	257.9	257.0	256.6	256.1
63.5°	250.2	250.6	250.2	249.3	248.8	248.4
64°	242.4	242.9	242.4	242.0	241.5	241.1
64.5°	235.2	235.6	235.2	234.7	234.2	233.8
65°	227.9	228.3	227.9	227.4	226.9	226.5
65.5°	221.0	221.0	221.0	220.1	219.7	219.7
66°	213.7	214.2	213.7	213.3	212.8	212.4



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	193.7	193.7	193.7	193.2	192.8	192.3
68°	187.3	187.3	187.3	186.8	186.4	185.9
68.5°	180.5	180.9	180.5	180.5	180.0	179.6
69°	174.5	174.5	174.5	173.6	173.6	173.6
69.5°	168.2	168.6	168.2	167.7	167.7	167.3
70°	162.2	162.7	162.2	161.8	162.2	161.8
70.5°	156.3	156.8	156.3	156.3	156.3	155.9
71°	150.4	150.8	150.4	150.4	150.4	150.4
71.5°	144.9	144.9	144.9	144.9	144.5	144.5
72°	139.5	139.5	139.5	139.0	139.0	139.0
72.5°	134.0	134.0	134.0	133.5	133.5	133.5
73°	128.5	128.5	128.5	128.1	128.1	128.1
73.5°	123.0	123.0	123.0	123.0	122.6	122.6
74°	118.0	118.0	118.0	117.6	117.6	117.6
74.5°	112.6	112.6	112.6	112.6	112.6	112.6
75°	107.6	107.6	107.6	107.6	107.6	107.6
75.5°	102.5	103.0	102.5	102.5	102.5	102.5
76°	98.0	98.0	98.0	97.5	97.5	98.0
76.5°	93.0	93.0	93.0	93.0	93.0	93.0
77°	88.4	88.4	88.4	88.4	88.4	88.4
77.5°	83.9	83.9	83.9	83.9	83.9	83.9
78°	79.3	79.3	79.3	79.3	79.3	79.3
78.5°	74.7	75.2	74.7	74.7	75.2	75.2
79°	70.6	70.6	70.6	70.6	70.6	70.6
79.5°	66.5	66.5	66.5	66.1	66.5	66.5
80°	62.0	62.0	62.0	62.0	62.4	62.4
80.5°	58.3	58.3	58.3	58.3	58.3	58.3
81°	54.2	54.2	54.2	54.2	54.2	54.2
81.5°	50.1	50.1	50.1	50.1	50.1	50.1
82°	46.5	46.5	46.5	46.5	46.5	46.5
82.5°	42.8	42.4	42.8	42.8	42.8	42.8
83°	38.7	38.7	38.7	39.2	39.2	39.2
83.5°	35.1	35.1	35.1	35.5	35.5	35.5
84°	31.9	31.9	31.9	31.9	31.9	31.9
84.5°	28.3	28.3	28.3	28.3	28.3	28.7
85°	25.1	25.1	25.1	25.1	25.1	25.1
85.5°	21.4	21.9	21.4	21.9	21.4	21.9
86°	18.2	18.2	18.2	18.2	18.2	18.2
86.5°	15.0	15.5	15.0	15.0	15.0	15.5
87°	11.8	12.3	11.8	12.3	12.3	12.3
87.5°	9.1	9.6	9.1	9.1	9.1	9.1
88°	6.8	6.8	6.8	6.4	6.4	5.9
88.5°	4.6	5.5	4.6	4.1	3.6	3.6



TEST NUMBER: P776590

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.9	1.4	0.9	0.5	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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Scaled Data Report





21.5°	2714.3	2709.7	2702.0	2704.3	2699.7	2704.3	2702.0	2709.7	2714.3	2709.7	2702.0
22°	2676.5	2671.9	2665.1	2666.0	2661.4	2666.0	2665.1	2671.9	2676.5	2671.9	2665.1



44°	700.9	706.4	716.9	717.8	722.3	717.8	716.9	706.4	700.9	706.4	716.9
44.5°	679.0	684.5	693.6	695.0	698.2	695.0	693.6	684.5	679.0	684.5	693.6



66.5°	205.5	206.0	206.4	206.9	207.4	206.9	206.4	206.0	205.5	206.0	206.4
67°	199.2	199.2	199.6	200.1	200.5	200.1	199.6	199.2	199.2	199.2	199.6



89°	1.4	1.8	2.7	3.2	3.6	3.2	2.7	1.8	1.4	1.8	2.7
89.5°	0.0	0.5	1.4	1.8	2.3	1.8	1.4	0.5	0.0	0.5	1.4

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21.5°	2704.3	2699.7	2704.3	2702.0	2709.7	2714.3
22°	2666.0	2661.4	2666.0	2665.1	2671.9	2676.5



44°	717.8	722.3	717.8	716.9	706.4	700.9
44.5°	695.0	698.2	695.0	693.6	684.5	679.0

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Scaled Data Report



66.5°	206.9	207.4	206.9	206.4	206.0	205.5
67°	200.1	200.5	200.1	199.6	199.2	199.2



89°	3.2	3.6	3.2	2.7	1.8	1.4
89.5°	1.8	2.3	1.8	1.4	0.5	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)