

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: P776593

Luminaire Tested: HCDJBS4050CSD-HCD42TRMW-5000lm-4000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776593  
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-4000K  
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

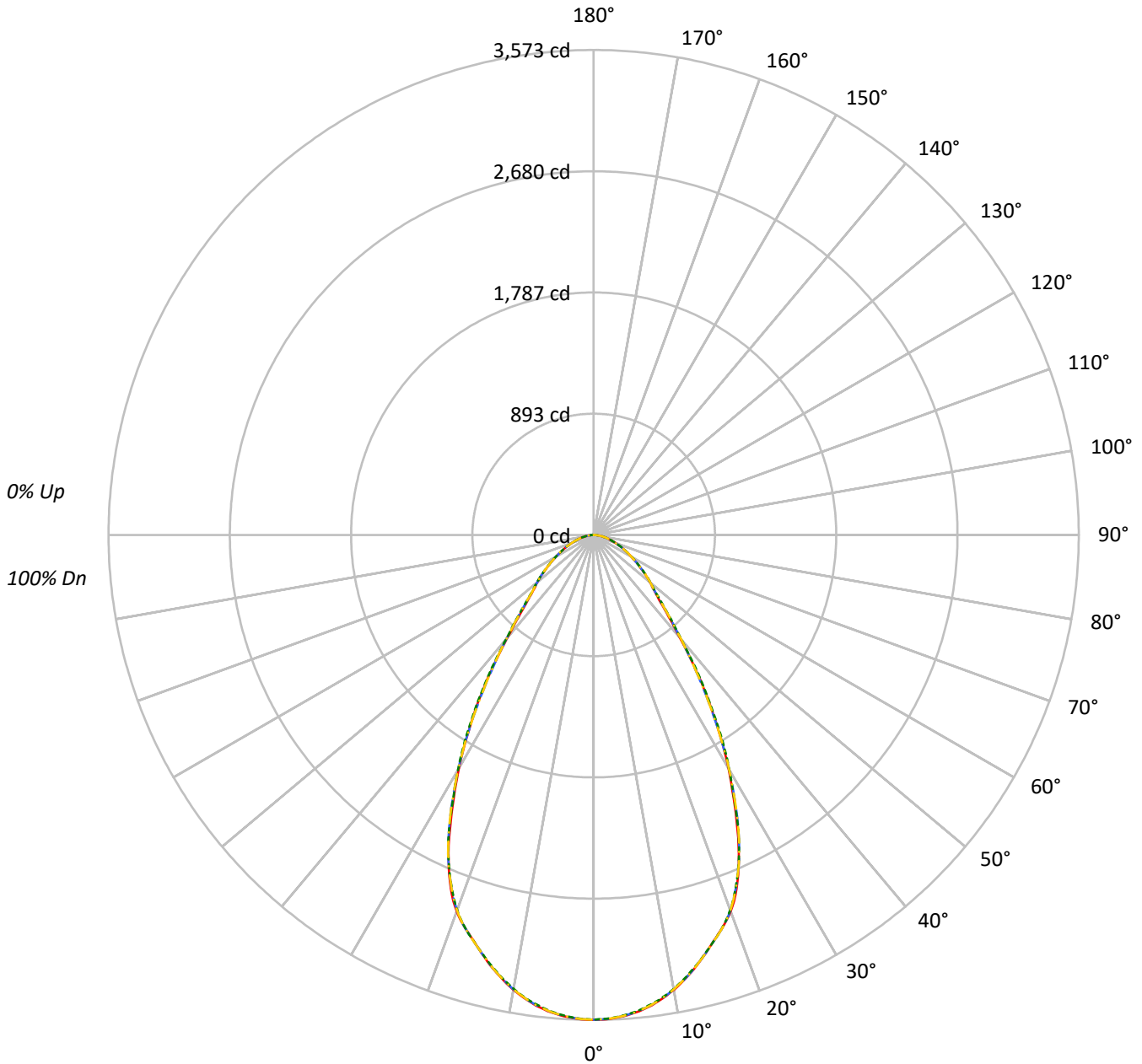
Lumens per Lamp: N/A  
Luminaire Lumens: 4612.6 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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																			
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°	449548	449548	449548	449548
5°	446376	445404	446376	445404
10°	434848	433864	434848	433864
15°	415610	415115	415610	415115
20°	395177	393771	395177	393771
25°	350746	351871	350746	351871
30°	288574	290100	288574	290100
35°	223876	226303	223876	226303
40°	162610	165435	162610	165435
45°	123126	126187	123126	126187
50°	106019	106861	106019	106861
55°	92153	93206	92153	93206
60°	80544	81274	80544	81274
65°	70814	71379	70814	71379
70°	62480	62848	62480	62848
75°	54897	54897	54897	54897
80°	47470	47181	47470	47181
85°	37976	37976	37976	37976

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 126187 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.8	7.2
10°-20°	896.1	19.4
20°-30°	1147.5	24.9
30°-40°	909.3	19.7
40°-50°	556.8	12.1
50°-60°	380.6	8.3
60°-70°	238.3	5.2
70°-80°	120.7	2.6
80°-90°	30.5	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°	2376.4	51.5
0°-40°	3285.7	71.2
0°-60°	4223.1	91.6
0°-90°	4612.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4612.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3572	3572	3572	3572	3572	
5°	3533	3526	3533	3526	3533	333
15°	3190	3186	3190	3186	3190	896
25°	2526	2534	2526	2534	2526	1145
35°	1457	1473	1457	1473	1457	908
45°	692	709	692	709	692	550
55°	420	425	420	425	420	378
65°	238	240	238	240	238	237
75°	113	113	113	113	113	121
85°	26	26	26	26	26	30
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°	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1
0.5°	3572.6	3572.1	3571.2	3570.7	3569.3	3570.7	3571.2	3572.1	3572.6	3572.1	3571.2
1°	3571.2	3570.7	3570.2	3569.7	3567.8	3569.7	3570.2	3570.7	3571.2	3570.7	3570.2
1.5°	3569.3	3568.3	3568.3	3567.4	3565.9	3567.4	3568.3	3568.3	3569.3	3568.3	3568.3
2°	3566.4	3565.9	3565.0	3564.5	3562.6	3564.5	3565.0	3565.9	3566.4	3565.9	3565.0
2.5°	3563.1	3562.1	3561.1	3560.7	3558.3	3560.7	3561.1	3562.1	3563.1	3562.1	3561.1
3°	3558.3	3557.3	3556.4	3555.4	3553.0	3555.4	3556.4	3557.3	3558.3	3557.3	3556.4
3.5°	3553.0	3552.0	3550.6	3549.7	3548.2	3549.7	3550.6	3552.0	3553.0	3552.0	3550.6
4°	3546.8	3546.3	3544.4	3543.4	3541.0	3543.4	3544.4	3546.3	3546.8	3546.3	3544.4
4.5°	3540.1	3539.1	3537.2	3536.3	3533.4	3536.3	3537.2	3539.1	3540.1	3539.1	3537.2
5°	3533.4	3532.0	3530.0	3529.1	3525.7	3529.1	3530.0	3532.0	3533.4	3532.0	3530.0
5.5°	3526.2	3522.9	3520.5	3519.5	3516.6	3519.5	3520.5	3522.9	3526.2	3522.9	3520.5
6°	3515.2	3513.3	3510.9	3509.5	3505.6	3509.5	3510.9	3513.3	3515.2	3513.3	3510.9
6.5°	3504.2	3502.8	3499.9	3498.5	3494.6	3498.5	3499.9	3502.8	3504.2	3502.8	3499.9
7°	3492.7	3490.8	3489.4	3487.0	3483.6	3487.0	3489.4	3490.8	3492.7	3490.8	3489.4
7.5°	3479.8	3477.9	3476.0	3475.0	3471.7	3475.0	3476.0	3477.9	3479.8	3477.9	3476.0
8°	3465.9	3464.5	3462.6	3461.2	3459.2	3461.2	3462.6	3464.5	3465.9	3464.5	3462.6
8.5°	3451.6	3449.7	3447.8	3446.3	3444.4	3446.3	3447.8	3449.7	3451.6	3449.7	3447.8
9°	3436.3	3434.8	3432.5	3431.0	3429.1	3431.0	3432.5	3434.8	3436.3	3434.8	3432.5
9.5°	3419.5	3418.6	3416.2	3414.8	3412.8	3414.8	3416.2	3418.6	3419.5	3418.6	3416.2
10°	3402.8	3401.4	3399.4	3397.5	3395.1	3397.5	3399.4	3401.4	3402.8	3401.4	3399.4
10.5°	3384.1	3383.2	3380.8	3379.3	3377.4	3379.3	3380.8	3383.2	3384.1	3383.2	3380.8
11°	3365.5	3364.5	3362.6	3360.7	3358.3	3360.7	3362.6	3364.5	3365.5	3364.5	3362.6
11.5°	3345.9	3344.9	3343.0	3341.1	3339.2	3341.1	3343.0	3344.9	3345.9	3344.9	3343.0
12°	3325.8	3324.8	3323.4	3321.0	3319.1	3321.0	3323.4	3324.8	3325.8	3324.8	3323.4
12.5°	3304.7	3303.8	3302.3	3299.9	3297.5	3299.9	3302.3	3303.8	3304.7	3303.8	3302.3
13°	3283.2	3282.2	3280.8	3278.9	3276.5	3278.9	3280.8	3282.2	3283.2	3282.2	3280.8
13.5°	3260.7	3259.8	3258.8	3256.9	3255.0	3256.9	3258.8	3259.8	3260.7	3259.8	3258.8
14°	3237.7	3237.3	3236.3	3234.4	3232.5	3234.4	3236.3	3237.3	3237.7	3237.3	3236.3
14.5°	3213.8	3213.3	3212.9	3211.0	3209.0	3211.0	3212.9	3213.3	3213.8	3213.3	3212.9
15°	3189.9	3189.9	3189.0	3188.0	3186.1	3188.0	3189.0	3189.9	3189.9	3189.9	3189.0
15.5°	3165.0	3165.0	3166.0	3165.0	3164.1	3165.0	3166.0	3165.0	3165.0	3165.0	3166.0
16°	3141.1	3141.6	3143.0	3142.5	3141.6	3142.5	3143.0	3141.6	3141.1	3141.6	3143.0
16.5°	3117.2	3118.1	3120.1	3120.1	3119.6	3120.1	3120.1	3118.1	3117.2	3118.1	3120.1
17°	3094.7	3095.7	3097.6	3097.1	3097.6	3097.1	3097.6	3095.7	3094.7	3095.7	3097.6
17.5°	3072.7	3073.7	3075.1	3074.6	3074.1	3074.6	3075.1	3073.7	3072.7	3073.7	3075.1
18°	3051.2	3051.7	3052.6	3051.7	3050.7	3051.7	3052.6	3051.7	3051.2	3051.7	3052.6
18.5°	3028.2	3028.2	3028.2	3027.3	3025.8	3027.3	3028.2	3028.2	3028.2	3028.2	3028.2
19°	3004.8	3003.3	3002.4	3000.9	2999.5	3000.9	3002.4	3003.3	3004.8	3003.3	3002.4
19.5°	2978.9	2977.0	2974.2	2973.2	2971.8	2973.2	2974.2	2977.0	2978.9	2977.0	2974.2
20°	2950.7	2948.3	2943.1	2943.5	2940.2	2943.5	2943.1	2948.3	2950.7	2948.3	2943.1
20.5°	2919.6	2915.8	2909.6	2911.5	2907.7	2911.5	2909.6	2915.8	2919.6	2915.8	2909.6
21°	2887.1	2881.3	2874.2	2876.6	2871.8	2876.6	2874.2	2881.3	2887.1	2881.3	2874.2



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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°	2768.0	2762.2	2757.4	2757.0	2754.6	2757.0	2757.4	2762.2	2768.0	2762.2	2757.4
23°	2722.5	2717.7	2716.8	2713.4	2712.5	2713.4	2716.8	2717.7	2722.5	2717.7	2716.8
23.5°	2676.1	2671.8	2674.2	2668.5	2670.9	2668.5	2674.2	2671.8	2676.1	2671.8	2674.2
24°	2627.8	2624.4	2630.2	2622.5	2626.8	2622.5	2630.2	2624.4	2627.8	2624.4	2630.2
24.5°	2578.0	2576.6	2583.8	2576.1	2581.9	2576.1	2583.8	2576.6	2578.0	2576.6	2583.8
25°	2525.9	2526.9	2535.5	2529.7	2534.0	2529.7	2535.5	2526.9	2525.9	2526.9	2535.5
25.5°	2471.8	2478.1	2485.7	2483.3	2484.3	2483.3	2485.7	2478.1	2471.8	2478.1	2485.7
26°	2416.3	2427.4	2434.5	2435.0	2431.2	2435.0	2434.5	2427.4	2416.3	2427.4	2434.5
26.5°	2359.4	2375.7	2381.4	2384.8	2376.2	2384.8	2381.4	2375.7	2359.4	2375.7	2381.4
27°	2303.9	2322.1	2327.8	2333.1	2320.2	2333.1	2327.8	2322.1	2303.9	2322.1	2327.8
27.5°	2249.4	2266.6	2273.3	2280.0	2263.3	2280.0	2273.3	2266.6	2249.4	2266.6	2273.3
28°	2194.9	2211.1	2217.8	2224.5	2206.3	2224.5	2217.8	2211.1	2194.9	2211.1	2217.8
28.5°	2141.8	2154.7	2162.3	2168.1	2151.3	2168.1	2162.3	2154.7	2141.8	2154.7	2162.3
29°	2089.1	2097.7	2106.8	2110.7	2099.2	2110.7	2106.8	2097.7	2089.1	2097.7	2106.8
29.5°	2037.5	2041.8	2051.8	2053.3	2048.0	2053.3	2051.8	2041.8	2037.5	2041.8	2051.8
30°	1985.8	1984.4	1995.4	1995.8	1996.3	1995.8	1995.4	1984.4	1985.8	1984.4	1995.4
30.5°	1932.2	1928.9	1939.4	1940.4	1947.5	1940.4	1939.4	1928.9	1932.2	1928.9	1939.4
31°	1879.1	1871.9	1882.9	1884.9	1895.9	1884.9	1882.9	1871.9	1879.1	1871.9	1882.9
31.5°	1824.6	1817.4	1826.5	1829.8	1843.7	1829.8	1826.5	1817.4	1824.6	1817.4	1826.5
32°	1769.1	1762.4	1770.5	1775.8	1790.1	1775.8	1770.5	1762.4	1769.1	1762.4	1770.5
32.5°	1715.5	1709.8	1715.5	1722.2	1736.6	1722.2	1715.5	1709.8	1715.5	1709.8	1715.5
33°	1661.4	1657.1	1659.1	1668.6	1682.0	1668.6	1659.1	1657.1	1661.4	1657.1	1659.1
33.5°	1613.1	1604.5	1603.1	1615.0	1627.0	1615.0	1603.1	1604.5	1613.1	1604.5	1603.1
34°	1561.0	1551.9	1547.6	1562.4	1574.9	1562.4	1547.6	1551.9	1561.0	1551.9	1547.6
34.5°	1509.3	1499.8	1493.5	1509.3	1523.2	1509.3	1493.5	1499.8	1509.3	1499.8	1493.5
35°	1457.2	1449.0	1442.3	1458.1	1473.0	1458.1	1442.3	1449.0	1457.2	1449.0	1442.3
35.5°	1406.5	1398.8	1391.6	1407.4	1423.7	1407.4	1391.6	1398.8	1406.5	1398.8	1391.6
36°	1356.7	1348.6	1342.4	1358.6	1375.4	1358.6	1342.4	1348.6	1356.7	1348.6	1342.4
36.5°	1307.4	1300.3	1294.5	1310.3	1326.1	1310.3	1294.5	1300.3	1307.4	1300.3	1294.5
37°	1257.7	1252.4	1247.6	1263.4	1277.3	1263.4	1247.6	1252.4	1257.7	1252.4	1247.6
37.5°	1209.4	1206.0	1202.7	1218.5	1228.5	1218.5	1202.7	1206.0	1209.4	1206.0	1202.7
38°	1161.5	1161.1	1159.6	1174.4	1180.2	1174.4	1159.6	1161.1	1161.5	1161.1	1159.6
38.5°	1116.6	1117.5	1118.5	1131.4	1133.8	1131.4	1118.5	1117.5	1116.6	1117.5	1118.5
39°	1073.0	1075.4	1077.3	1089.8	1089.3	1089.8	1077.3	1075.4	1073.0	1075.4	1077.3
39.5°	1030.5	1034.8	1038.1	1048.6	1047.2	1048.6	1038.1	1034.8	1030.5	1034.8	1038.1
40°	989.8	994.6	1000.3	1008.9	1007.0	1008.9	1000.3	994.6	989.8	994.6	1000.3
40.5°	951.5	956.3	964.0	970.2	969.7	970.2	964.0	956.3	951.5	956.3	964.0
41°	914.7	919.5	929.5	933.8	935.3	933.8	929.5	919.5	914.7	919.5	929.5
41.5°	879.8	885.0	896.5	898.9	903.2	898.9	896.5	885.0	879.8	885.0	896.5
42°	847.2	852.5	864.9	866.4	872.1	866.4	864.9	852.5	847.2	852.5	864.9
42.5°	816.6	821.9	835.3	835.7	842.0	835.7	835.3	821.9	816.6	821.9	835.3
43°	787.4	793.2	806.1	807.0	812.8	807.0	806.1	793.2	787.4	793.2	806.1
43.5°	760.6	766.4	778.8	779.3	784.6	779.3	778.8	766.4	760.6	766.4	778.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	691.8	696.5	704.2	706.6	709.0	706.6	704.2	696.5	691.8	696.5	704.2
45.5°	671.7	675.5	682.7	685.1	687.0	685.1	682.7	675.5	671.7	675.5	682.7
46°	652.5	655.9	662.1	665.4	666.4	665.4	662.1	655.9	652.5	655.9	662.1
46.5°	634.8	637.7	642.5	646.3	647.3	646.3	642.5	637.7	634.8	637.7	642.5
47°	618.1	620.0	624.8	628.6	630.0	628.6	624.8	620.0	618.1	620.0	624.8
47.5°	602.3	603.7	608.0	612.3	614.3	612.3	608.0	603.7	602.3	603.7	608.0
48°	587.5	589.4	593.7	597.5	599.4	597.5	593.7	589.4	587.5	589.4	593.7
48.5°	575.5	576.5	579.8	583.6	585.1	583.6	579.8	576.5	575.5	576.5	579.8
49°	564.0	564.5	567.4	570.2	571.7	570.2	567.4	564.5	564.0	564.5	567.4
49.5°	553.0	553.5	555.4	557.8	558.3	557.8	555.4	553.5	553.0	553.5	555.4
50°	541.5	542.0	543.5	545.4	545.8	545.4	543.5	542.0	541.5	542.0	543.5
50.5°	530.1	530.5	531.5	533.4	533.4	533.4	531.5	530.5	530.1	530.5	531.5
51°	517.1	518.1	519.5	521.4	521.4	521.4	519.5	518.1	517.1	518.1	519.5
51.5°	504.7	505.2	507.1	509.5	510.0	509.5	507.1	505.2	504.7	505.2	507.1
52°	491.8	492.7	494.7	497.0	497.5	497.0	494.7	492.7	491.8	492.7	494.7
52.5°	478.9	479.8	482.2	484.1	485.1	484.1	482.2	479.8	478.9	479.8	482.2
53°	466.9	467.9	469.8	471.7	472.6	471.7	469.8	467.9	466.9	467.9	469.8
53.5°	454.5	455.4	457.3	459.7	460.7	459.7	457.3	455.4	454.5	455.4	457.3
54°	443.0	443.5	445.4	447.3	448.3	447.3	445.4	443.5	443.0	443.5	445.4
54.5°	431.5	432.0	433.9	435.8	436.8	435.8	433.9	432.0	431.5	432.0	433.9
55°	420.0	421.0	422.9	424.3	424.8	424.3	422.9	421.0	420.0	421.0	422.9
55.5°	409.0	410.0	411.9	413.3	413.8	413.3	411.9	410.0	409.0	410.0	411.9
56°	398.5	399.5	400.9	402.3	402.8	402.3	400.9	399.5	398.5	399.5	400.9
56.5°	388.0	388.9	390.4	391.8	392.3	391.8	390.4	388.9	388.0	388.9	390.4
57°	377.5	378.4	379.8	381.3	381.8	381.3	379.8	378.4	377.5	378.4	379.8
57.5°	366.9	368.4	369.8	370.8	371.7	370.8	369.8	368.4	366.9	368.4	369.8
58°	357.8	358.3	359.7	361.2	361.7	361.2	359.7	358.3	357.8	358.3	359.7
58.5°	348.3	348.7	350.2	351.1	351.6	351.1	350.2	348.7	348.3	348.7	350.2
59°	338.7	339.2	340.1	341.1	342.0	341.1	340.1	339.2	338.7	339.2	340.1
59.5°	329.1	329.6	330.6	332.0	332.5	332.0	330.6	329.6	329.1	329.6	330.6
60°	320.0	320.5	321.5	322.4	322.9	322.4	321.5	320.5	320.0	320.5	321.5
60.5°	311.0	311.4	312.4	313.3	313.8	313.3	312.4	311.4	311.0	311.4	312.4
61°	302.3	302.8	303.8	304.7	305.2	304.7	303.8	302.8	302.3	302.8	303.8
61.5°	293.7	294.2	295.2	296.1	296.6	296.1	295.2	294.2	293.7	294.2	295.2
62°	285.6	285.6	286.6	287.5	287.5	287.5	286.6	285.6	285.6	285.6	286.6
62.5°	277.0	277.5	277.9	278.9	279.4	278.9	277.9	277.5	277.0	277.5	277.9
63°	268.9	269.3	269.8	270.8	270.8	270.8	269.8	269.3	268.9	269.3	269.8
63.5°	260.7	261.2	261.7	262.6	263.1	262.6	261.7	261.2	260.7	261.2	261.7
64°	253.1	253.5	254.0	254.5	255.0	254.5	254.0	253.5	253.1	253.5	254.0
64.5°	245.4	245.9	246.4	246.8	247.3	246.8	246.4	245.9	245.4	245.9	246.4
65°	237.8	238.2	238.7	239.2	239.7	239.2	238.7	238.2	237.8	238.2	238.7
65.5°	230.6	230.6	231.1	232.0	232.0	232.0	231.1	230.6	230.6	230.6	231.1
66°	222.9	223.4	223.9	224.4	224.8	224.4	223.9	223.4	222.9	223.4	223.9





TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	201.9	202.4	202.8	203.3	203.3	203.3	202.8	202.4	201.9	202.4	202.8
68°	195.2	195.7	196.1	196.6	196.6	196.6	196.1	195.7	195.2	195.7	196.1
68.5°	188.5	189.0	189.4	189.4	189.9	189.4	189.4	189.0	188.5	189.0	189.4
69°	182.3	182.3	182.3	183.2	183.2	183.2	182.3	182.3	182.3	182.3	182.3
69.5°	175.6	176.0	176.0	176.5	177.0	176.5	176.0	176.0	175.6	176.0	176.0
70°	169.8	170.3	169.8	170.3	170.8	170.3	169.8	170.3	169.8	170.3	169.8
70.5°	163.6	164.1	164.1	164.1	164.6	164.1	164.1	164.1	163.6	164.1	164.1
71°	157.9	157.9	157.9	157.9	158.3	157.9	157.9	157.9	157.9	157.9	157.9
71.5°	151.6	151.6	152.1	152.1	152.1	152.1	152.1	151.6	151.6	151.6	152.1
72°	145.9	145.9	145.9	146.4	146.4	146.4	145.9	145.9	145.9	145.9	145.9
72.5°	140.2	140.2	140.2	140.6	140.6	140.6	140.2	140.2	140.2	140.2	140.2
73°	134.4	134.4	134.4	134.9	134.9	134.9	134.4	134.4	134.4	134.4	134.4
73.5°	128.7	128.7	129.2	129.2	129.2	129.2	129.2	128.7	128.7	128.7	129.2
74°	123.4	123.4	123.4	123.9	123.9	123.9	123.4	123.4	123.4	123.4	123.4
74.5°	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2
75°	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9
75.5°	107.6	107.6	107.6	107.6	108.1	107.6	107.6	107.6	107.6	107.6	107.6
76°	102.9	102.4	102.4	102.9	102.9	102.9	102.4	102.4	102.9	102.4	102.4
76.5°	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
77°	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
77.5°	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
78°	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
78.5°	78.9	78.9	78.5	78.5	78.9	78.5	78.5	78.9	78.9	78.9	78.5
79°	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
79.5°	69.8	69.8	69.4	69.8	69.8	69.8	69.4	69.8	69.8	69.8	69.4
80°	65.5	65.5	65.1	65.1	65.1	65.1	65.1	65.5	65.5	65.5	65.1
80.5°	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
81°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
81.5°	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
82°	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
82.5°	45.0	45.0	45.0	45.0	44.5	45.0	45.0	45.0	45.0	45.0	45.0
83°	41.1	41.1	41.1	40.7	40.7	40.7	41.1	41.1	41.1	41.1	41.1
83.5°	37.3	37.3	37.3	36.8	36.8	36.8	37.3	37.3	37.3	37.3	37.3
84°	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5
84.5°	30.1	29.7	29.7	29.7	29.7	29.7	29.7	29.7	30.1	29.7	29.7
85°	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3
85.5°	23.0	22.5	23.0	22.5	23.0	22.5	23.0	22.5	23.0	22.5	23.0
86°	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
86.5°	16.3	15.8	15.8	15.8	16.3	15.8	15.8	15.8	16.3	15.8	15.8
87°	12.9	12.9	12.9	12.4	12.9	12.4	12.9	12.9	12.9	12.9	12.9
87.5°	9.6	9.6	9.6	9.6	10.0	9.6	9.6	9.6	9.6	9.6	9.6
88°	6.2	6.7	6.7	7.2	7.2	7.2	6.7	6.7	6.2	6.7	6.7
88.5°	3.8	3.8	4.3	4.8	5.7	4.8	4.3	3.8	3.8	3.8	4.3



TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-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	0.5	1.0	1.4	1.0	0.5	0.0	0.0	0.0	0.5



TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3572.1	3572.1	3572.1	3572.1	3572.1	3572.1
0.5°	3570.7	3569.3	3570.7	3571.2	3572.1	3572.6
1°	3569.7	3567.8	3569.7	3570.2	3570.7	3571.2
1.5°	3567.4	3565.9	3567.4	3568.3	3568.3	3569.3
2°	3564.5	3562.6	3564.5	3565.0	3565.9	3566.4
2.5°	3560.7	3558.3	3560.7	3561.1	3562.1	3563.1
3°	3555.4	3553.0	3555.4	3556.4	3557.3	3558.3
3.5°	3549.7	3548.2	3549.7	3550.6	3552.0	3553.0
4°	3543.4	3541.0	3543.4	3544.4	3546.3	3546.8
4.5°	3536.3	3533.4	3536.3	3537.2	3539.1	3540.1
5°	3529.1	3525.7	3529.1	3530.0	3532.0	3533.4
5.5°	3519.5	3516.6	3519.5	3520.5	3522.9	3526.2
6°	3509.5	3505.6	3509.5	3510.9	3513.3	3515.2
6.5°	3498.5	3494.6	3498.5	3499.9	3502.8	3504.2
7°	3487.0	3483.6	3487.0	3489.4	3490.8	3492.7
7.5°	3475.0	3471.7	3475.0	3476.0	3477.9	3479.8
8°	3461.2	3459.2	3461.2	3462.6	3464.5	3465.9
8.5°	3446.3	3444.4	3446.3	3447.8	3449.7	3451.6
9°	3431.0	3429.1	3431.0	3432.5	3434.8	3436.3
9.5°	3414.8	3412.8	3414.8	3416.2	3418.6	3419.5
10°	3397.5	3395.1	3397.5	3399.4	3401.4	3402.8
10.5°	3379.3	3377.4	3379.3	3380.8	3383.2	3384.1
11°	3360.7	3358.3	3360.7	3362.6	3364.5	3365.5
11.5°	3341.1	3339.2	3341.1	3343.0	3344.9	3345.9
12°	3321.0	3319.1	3321.0	3323.4	3324.8	3325.8
12.5°	3299.9	3297.5	3299.9	3302.3	3303.8	3304.7
13°	3278.9	3276.5	3278.9	3280.8	3282.2	3283.2
13.5°	3256.9	3255.0	3256.9	3258.8	3259.8	3260.7
14°	3234.4	3232.5	3234.4	3236.3	3237.3	3237.7
14.5°	3211.0	3209.0	3211.0	3212.9	3213.3	3213.8
15°	3188.0	3186.1	3188.0	3189.0	3189.9	3189.9
15.5°	3165.0	3164.1	3165.0	3166.0	3165.0	3165.0
16°	3142.5	3141.6	3142.5	3143.0	3141.6	3141.1
16.5°	3120.1	3119.6	3120.1	3120.1	3118.1	3117.2
17°	3097.1	3097.6	3097.1	3097.6	3095.7	3094.7
17.5°	3074.6	3074.1	3074.6	3075.1	3073.7	3072.7
18°	3051.7	3050.7	3051.7	3052.6	3051.7	3051.2
18.5°	3027.3	3025.8	3027.3	3028.2	3028.2	3028.2
19°	3000.9	2999.5	3000.9	3002.4	3003.3	3004.8
19.5°	2973.2	2971.8	2973.2	2974.2	2977.0	2978.9
20°	2943.5	2940.2	2943.5	2943.1	2948.3	2950.7
20.5°	2911.5	2907.7	2911.5	2909.6	2915.8	2919.6
21°	2876.6	2871.8	2876.6	2874.2	2881.3	2887.1



TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2757.0	2754.6	2757.0	2757.4	2762.2	2768.0
23°	2713.4	2712.5	2713.4	2716.8	2717.7	2722.5
23.5°	2668.5	2670.9	2668.5	2674.2	2671.8	2676.1
24°	2622.5	2626.8	2622.5	2630.2	2624.4	2627.8
24.5°	2576.1	2581.9	2576.1	2583.8	2576.6	2578.0
25°	2529.7	2534.0	2529.7	2535.5	2526.9	2525.9
25.5°	2483.3	2484.3	2483.3	2485.7	2478.1	2471.8
26°	2435.0	2431.2	2435.0	2434.5	2427.4	2416.3
26.5°	2384.8	2376.2	2384.8	2381.4	2375.7	2359.4
27°	2333.1	2320.2	2333.1	2327.8	2322.1	2303.9
27.5°	2280.0	2263.3	2280.0	2273.3	2266.6	2249.4
28°	2224.5	2206.3	2224.5	2217.8	2211.1	2194.9
28.5°	2168.1	2151.3	2168.1	2162.3	2154.7	2141.8
29°	2110.7	2099.2	2110.7	2106.8	2097.7	2089.1
29.5°	2053.3	2048.0	2053.3	2051.8	2041.8	2037.5
30°	1995.8	1996.3	1995.8	1995.4	1984.4	1985.8
30.5°	1940.4	1947.5	1940.4	1939.4	1928.9	1932.2
31°	1884.9	1895.9	1884.9	1882.9	1871.9	1879.1
31.5°	1829.8	1843.7	1829.8	1826.5	1817.4	1824.6
32°	1775.8	1790.1	1775.8	1770.5	1762.4	1769.1
32.5°	1722.2	1736.6	1722.2	1715.5	1709.8	1715.5
33°	1668.6	1682.0	1668.6	1659.1	1657.1	1661.4
33.5°	1615.0	1627.0	1615.0	1603.1	1604.5	1613.1
34°	1562.4	1574.9	1562.4	1547.6	1551.9	1561.0
34.5°	1509.3	1523.2	1509.3	1493.5	1499.8	1509.3
35°	1458.1	1473.0	1458.1	1442.3	1449.0	1457.2
35.5°	1407.4	1423.7	1407.4	1391.6	1398.8	1406.5
36°	1358.6	1375.4	1358.6	1342.4	1348.6	1356.7
36.5°	1310.3	1326.1	1310.3	1294.5	1300.3	1307.4
37°	1263.4	1277.3	1263.4	1247.6	1252.4	1257.7
37.5°	1218.5	1228.5	1218.5	1202.7	1206.0	1209.4
38°	1174.4	1180.2	1174.4	1159.6	1161.1	1161.5
38.5°	1131.4	1133.8	1131.4	1118.5	1117.5	1116.6
39°	1089.8	1089.3	1089.8	1077.3	1075.4	1073.0
39.5°	1048.6	1047.2	1048.6	1038.1	1034.8	1030.5
40°	1008.9	1007.0	1008.9	1000.3	994.6	989.8
40.5°	970.2	969.7	970.2	964.0	956.3	951.5
41°	933.8	935.3	933.8	929.5	919.5	914.7
41.5°	898.9	903.2	898.9	896.5	885.0	879.8
42°	866.4	872.1	866.4	864.9	852.5	847.2
42.5°	835.7	842.0	835.7	835.3	821.9	816.6
43°	807.0	812.8	807.0	806.1	793.2	787.4
43.5°	779.3	784.6	779.3	778.8	766.4	760.6



TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	706.6	709.0	706.6	704.2	696.5	691.8
45.5°	685.1	687.0	685.1	682.7	675.5	671.7
46°	665.4	666.4	665.4	662.1	655.9	652.5
46.5°	646.3	647.3	646.3	642.5	637.7	634.8
47°	628.6	630.0	628.6	624.8	620.0	618.1
47.5°	612.3	614.3	612.3	608.0	603.7	602.3
48°	597.5	599.4	597.5	593.7	589.4	587.5
48.5°	583.6	585.1	583.6	579.8	576.5	575.5
49°	570.2	571.7	570.2	567.4	564.5	564.0
49.5°	557.8	558.3	557.8	555.4	553.5	553.0
50°	545.4	545.8	545.4	543.5	542.0	541.5
50.5°	533.4	533.4	533.4	531.5	530.5	530.1
51°	521.4	521.4	521.4	519.5	518.1	517.1
51.5°	509.5	510.0	509.5	507.1	505.2	504.7
52°	497.0	497.5	497.0	494.7	492.7	491.8
52.5°	484.1	485.1	484.1	482.2	479.8	478.9
53°	471.7	472.6	471.7	469.8	467.9	466.9
53.5°	459.7	460.7	459.7	457.3	455.4	454.5
54°	447.3	448.3	447.3	445.4	443.5	443.0
54.5°	435.8	436.8	435.8	433.9	432.0	431.5
55°	424.3	424.8	424.3	422.9	421.0	420.0
55.5°	413.3	413.8	413.3	411.9	410.0	409.0
56°	402.3	402.8	402.3	400.9	399.5	398.5
56.5°	391.8	392.3	391.8	390.4	388.9	388.0
57°	381.3	381.8	381.3	379.8	378.4	377.5
57.5°	370.8	371.7	370.8	369.8	368.4	366.9
58°	361.2	361.7	361.2	359.7	358.3	357.8
58.5°	351.1	351.6	351.1	350.2	348.7	348.3
59°	341.1	342.0	341.1	340.1	339.2	338.7
59.5°	332.0	332.5	332.0	330.6	329.6	329.1
60°	322.4	322.9	322.4	321.5	320.5	320.0
60.5°	313.3	313.8	313.3	312.4	311.4	311.0
61°	304.7	305.2	304.7	303.8	302.8	302.3
61.5°	296.1	296.6	296.1	295.2	294.2	293.7
62°	287.5	287.5	287.5	286.6	285.6	285.6
62.5°	278.9	279.4	278.9	277.9	277.5	277.0
63°	270.8	270.8	270.8	269.8	269.3	268.9
63.5°	262.6	263.1	262.6	261.7	261.2	260.7
64°	254.5	255.0	254.5	254.0	253.5	253.1
64.5°	246.8	247.3	246.8	246.4	245.9	245.4
65°	239.2	239.7	239.2	238.7	238.2	237.8
65.5°	232.0	232.0	232.0	231.1	230.6	230.6
66°	224.4	224.8	224.4	223.9	223.4	222.9

TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	203.3	203.3	203.3	202.8	202.4	201.9
68°	196.6	196.6	196.6	196.1	195.7	195.2
68.5°	189.4	189.9	189.4	189.4	189.0	188.5
69°	183.2	183.2	183.2	182.3	182.3	182.3
69.5°	176.5	177.0	176.5	176.0	176.0	175.6
70°	170.3	170.8	170.3	169.8	170.3	169.8
70.5°	164.1	164.6	164.1	164.1	164.1	163.6
71°	157.9	158.3	157.9	157.9	157.9	157.9
71.5°	152.1	152.1	152.1	152.1	151.6	151.6
72°	146.4	146.4	146.4	145.9	145.9	145.9
72.5°	140.6	140.6	140.6	140.2	140.2	140.2
73°	134.9	134.9	134.9	134.4	134.4	134.4
73.5°	129.2	129.2	129.2	129.2	128.7	128.7
74°	123.9	123.9	123.9	123.4	123.4	123.4
74.5°	118.2	118.2	118.2	118.2	118.2	118.2
75°	112.9	112.9	112.9	112.9	112.9	112.9
75.5°	107.6	108.1	107.6	107.6	107.6	107.6
76°	102.9	102.9	102.9	102.4	102.4	102.9
76.5°	97.6	97.6	97.6	97.6	97.6	97.6
77°	92.8	92.8	92.8	92.8	92.8	92.8
77.5°	88.0	88.0	88.0	88.0	88.0	88.0
78°	83.2	83.2	83.2	83.2	83.2	83.2
78.5°	78.5	78.9	78.5	78.5	78.9	78.9
79°	74.2	74.2	74.2	74.2	74.2	74.2
79.5°	69.8	69.8	69.8	69.4	69.8	69.8
80°	65.1	65.1	65.1	65.1	65.5	65.5
80.5°	61.2	61.2	61.2	61.2	61.2	61.2
81°	56.9	56.9	56.9	56.9	56.9	56.9
81.5°	52.6	52.6	52.6	52.6	52.6	52.6
82°	48.8	48.8	48.8	48.8	48.8	48.8
82.5°	45.0	44.5	45.0	45.0	45.0	45.0
83°	40.7	40.7	40.7	41.1	41.1	41.1
83.5°	36.8	36.8	36.8	37.3	37.3	37.3
84°	33.5	33.5	33.5	33.5	33.5	33.5
84.5°	29.7	29.7	29.7	29.7	29.7	30.1
85°	26.3	26.3	26.3	26.3	26.3	26.3
85.5°	22.5	23.0	22.5	23.0	22.5	23.0
86°	19.1	19.1	19.1	19.1	19.1	19.1
86.5°	15.8	16.3	15.8	15.8	15.8	16.3
87°	12.4	12.9	12.4	12.9	12.9	12.9
87.5°	9.6	10.0	9.6	9.6	9.6	9.6
88°	7.2	7.2	7.2	6.7	6.7	6.2
88.5°	4.8	5.7	4.8	4.3	3.8	3.8



TEST NUMBER: P776593

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	1.0	1.4	1.0	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



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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°	2849.3	2844.5	2836.4	2838.8	2834.0	2838.8	2836.4	2844.5	2849.3	2844.5	2836.4
22°	2809.6	2804.8	2797.6	2798.6	2793.8	2798.6	2797.6	2804.8	2809.6	2804.8	2797.6



44°	735.8	741.5	752.5	753.5	758.2	753.5	752.5	741.5	735.8	741.5	752.5
44.5°	712.8	718.5	728.1	729.5	732.9	729.5	728.1	718.5	712.8	718.5	728.1



66.5°	215.8	216.2	216.7	217.2	217.7	217.2	216.7	216.2	215.8	216.2	216.7
67°	209.1	209.1	209.5	210.0	210.5	210.0	209.5	209.1	209.1	209.1	209.5



89°	1.4	1.9	2.9	3.3	3.8	3.3	2.9	1.9	1.4	1.9	2.9
89.5°	0.0	0.5	1.4	1.9	2.4	1.9	1.4	0.5	0.0	0.5	1.4



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Scaled Data Report



21.5°	2838.8	2834.0	2838.8	2836.4	2844.5	2849.3
22°	2798.6	2793.8	2798.6	2797.6	2804.8	2809.6



44°	753.5	758.2	753.5	752.5	741.5	735.8
44.5°	729.5	732.9	729.5	728.1	718.5	712.8

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66.5°	217.2	217.7	217.2	216.7	216.2	215.8
67°	210.0	210.5	210.0	209.5	209.1	209.1



89°	3.3	3.8	3.3	2.9	1.9	1.4
89.5°	1.9	2.4	1.9	1.4	0.5	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)