

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: P776594

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

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776594  
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-5000K  
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4680.9 lumens  
Efficiency: N/A  
Efficacy: 97.5 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

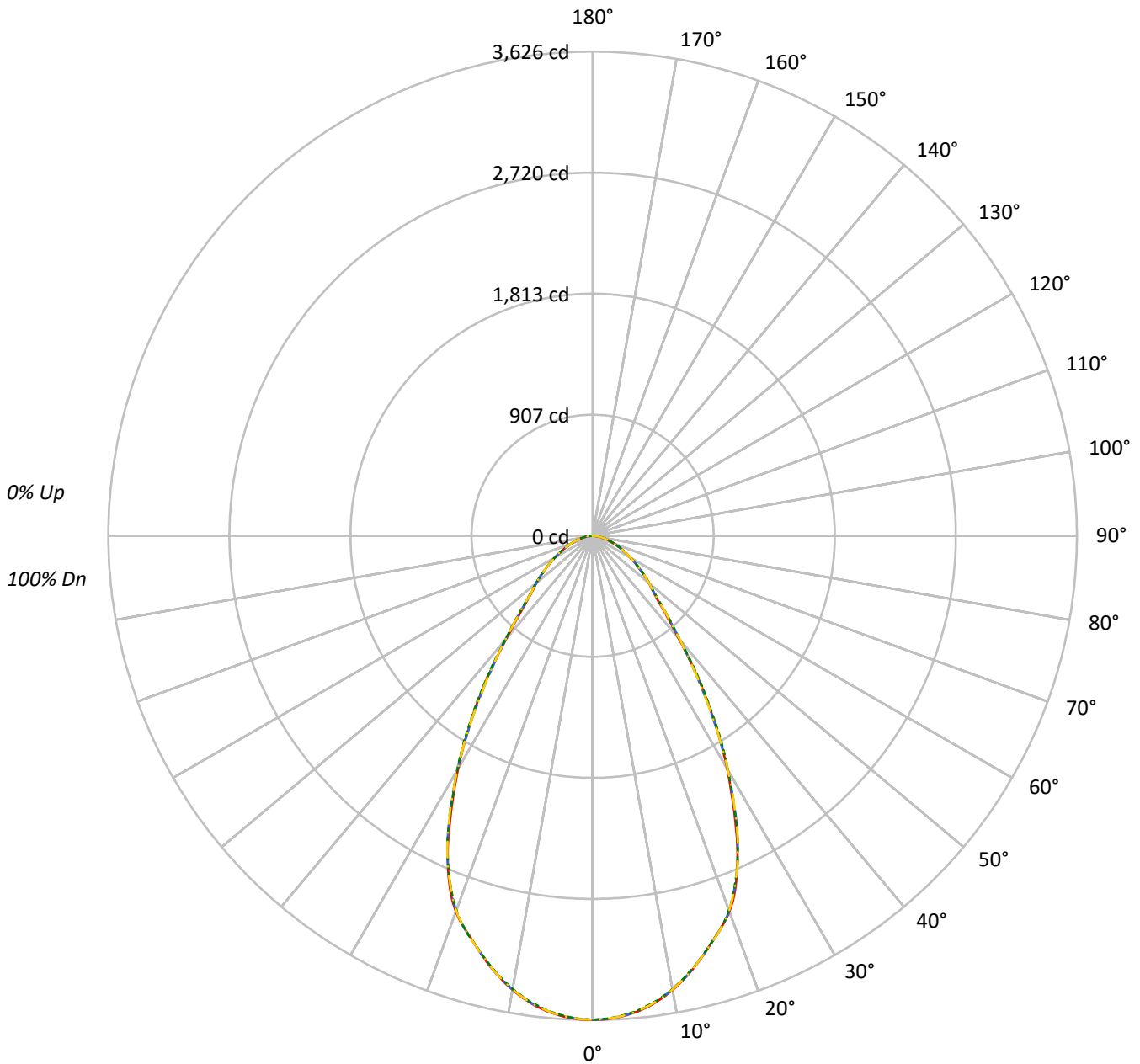
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

### 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°	456205	456205	456205	456205
5°	452983	451998	452983	451998
10°	441289	440292	441289	440292
15°	421759	421264	421759	421264
20°	401030	399597	401030	399597
25°	355940	357092	355940	357092
30°	292846	294401	292846	294401
35°	227194	229652	227194	229652
40°	165008	167883	165008	167883
45°	124941	128056	124941	128056
50°	107605	108447	107605	108447
55°	93514	94589	93514	94589
60°	81752	82482	81752	82482
65°	71856	72422	71856	72422
70°	63400	63767	63400	63767
75°	55724	55724	55724	55724
80°	48195	47833	48195	47833
85°	38554	38554	38554	38554

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 128056 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.7	7.2
10°-20°	909.3	19.4
20°-30°	1164.5	24.9
30°-40°	922.8	19.7
40°-50°	565.0	12.1
50°-60°	386.2	8.3
60°-70°	241.8	5.2
70°-80°	122.5	2.6
80°-90°	30.9	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°	2411.6	51.5
0°-40°	3334.4	71.2
0°-60°	4285.6	91.6
0°-90°	4680.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4680.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3625	3625	3625	3625	3625	
5°	3586	3578	3586	3578	3586	338
15°	3237	3233	3237	3233	3237	910
25°	2563	2572	2563	2572	2563	1162
35°	1479	1495	1479	1495	1479	922
45°	702	720	702	720	702	558
55°	426	431	426	431	426	384
65°	241	243	241	243	241	241
75°	115	115	115	115	115	122
85°	27	27	27	27	27	31
90°	0	2	0	2	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°	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0
0.5°	3625.5	3625.0	3624.1	3623.6	3622.1	3623.6	3624.1	3625.0	3625.5	3625.0	3624.1
1°	3624.1	3623.6	3623.1	3622.6	3620.7	3622.6	3623.1	3623.6	3624.1	3623.6	3623.1
1.5°	3622.1	3621.2	3621.2	3620.2	3618.7	3620.2	3621.2	3621.2	3622.1	3621.2	3621.2
2°	3619.2	3618.7	3617.8	3617.3	3615.3	3617.3	3617.8	3618.7	3619.2	3618.7	3617.8
2.5°	3615.8	3614.8	3613.9	3613.4	3611.0	3613.4	3613.9	3614.8	3615.8	3614.8	3613.9
3°	3611.0	3610.0	3609.0	3608.0	3605.6	3608.0	3609.0	3610.0	3611.0	3610.0	3609.0
3.5°	3605.6	3604.6	3603.2	3602.2	3600.8	3602.2	3603.2	3604.6	3605.6	3604.6	3603.2
4°	3599.3	3598.8	3596.9	3595.9	3593.5	3595.9	3596.9	3598.8	3599.3	3598.8	3596.9
4.5°	3592.5	3591.5	3589.6	3588.6	3585.7	3588.6	3589.6	3591.5	3592.5	3591.5	3589.6
5°	3585.7	3584.3	3582.3	3581.3	3577.9	3581.3	3582.3	3584.3	3585.7	3584.3	3582.3
5.5°	3578.4	3575.0	3572.6	3571.6	3568.7	3571.6	3572.6	3575.0	3578.4	3575.0	3572.6
6°	3567.3	3565.3	3562.9	3561.4	3557.6	3561.4	3562.9	3565.3	3567.3	3565.3	3562.9
6.5°	3556.1	3554.6	3551.7	3550.3	3546.4	3550.3	3551.7	3554.6	3556.1	3554.6	3551.7
7°	3544.4	3542.5	3541.0	3538.6	3535.2	3538.6	3541.0	3542.5	3544.4	3542.5	3541.0
7.5°	3531.3	3529.4	3527.5	3526.5	3523.1	3526.5	3527.5	3529.4	3531.3	3529.4	3527.5
8°	3517.3	3515.8	3513.9	3512.4	3510.5	3512.4	3513.9	3515.8	3517.3	3515.8	3513.9
8.5°	3502.7	3500.8	3498.8	3497.4	3495.4	3497.4	3498.8	3500.8	3502.7	3500.8	3498.8
9°	3487.2	3485.7	3483.3	3481.8	3479.9	3481.8	3483.3	3485.7	3487.2	3485.7	3483.3
9.5°	3470.2	3469.2	3466.8	3465.3	3463.4	3465.3	3466.8	3469.2	3470.2	3469.2	3466.8
10°	3453.2	3451.7	3449.8	3447.8	3445.4	3447.8	3449.8	3451.7	3453.2	3451.7	3449.8
10.5°	3434.2	3433.3	3430.8	3429.4	3427.4	3429.4	3430.8	3433.3	3434.2	3433.3	3430.8
11°	3415.3	3414.3	3412.4	3410.5	3408.0	3410.5	3412.4	3414.3	3415.3	3414.3	3412.4
11.5°	3395.4	3394.4	3392.5	3390.6	3388.6	3390.6	3392.5	3394.4	3395.4	3394.4	3392.5
12°	3375.0	3374.0	3372.6	3370.2	3368.2	3370.2	3372.6	3374.0	3375.0	3374.0	3372.6
12.5°	3353.7	3352.7	3351.2	3348.8	3346.4	3348.8	3351.2	3352.7	3353.7	3352.7	3351.2
13°	3331.8	3330.8	3329.4	3327.4	3325.0	3327.4	3329.4	3330.8	3331.8	3330.8	3329.4
13.5°	3309.0	3308.0	3307.1	3305.1	3303.2	3305.1	3307.1	3308.0	3309.0	3308.0	3307.1
14°	3285.7	3285.2	3284.2	3282.3	3280.3	3282.3	3284.2	3285.2	3285.7	3285.2	3284.2
14.5°	3261.4	3260.9	3260.4	3258.5	3256.6	3258.5	3260.4	3260.9	3261.4	3260.9	3260.4
15°	3237.1	3237.1	3236.2	3235.2	3233.3	3235.2	3236.2	3237.1	3237.1	3237.1	3236.2
15.5°	3211.9	3211.9	3212.9	3211.9	3210.9	3211.9	3212.9	3211.9	3211.9	3211.9	3212.9
16°	3187.6	3188.1	3189.6	3189.1	3188.1	3189.1	3189.6	3188.1	3187.6	3188.1	3189.6
16.5°	3163.3	3164.3	3166.3	3166.3	3165.8	3166.3	3166.3	3164.3	3163.3	3164.3	3166.3
17°	3140.5	3141.5	3143.4	3143.0	3143.4	3143.0	3143.4	3141.5	3140.5	3141.5	3143.4
17.5°	3118.2	3119.2	3120.6	3120.1	3119.7	3120.1	3120.6	3119.2	3118.2	3119.2	3120.6
18°	3096.4	3096.8	3097.8	3096.8	3095.9	3096.8	3097.8	3096.8	3096.4	3096.8	3097.8
18.5°	3073.1	3073.1	3073.1	3072.1	3070.6	3072.1	3073.1	3073.1	3073.1	3073.1	3073.1
19°	3049.3	3047.8	3046.8	3045.4	3043.9	3045.4	3046.8	3047.8	3049.3	3047.8	3046.8
19.5°	3023.0	3021.1	3018.2	3017.2	3015.8	3017.2	3018.2	3021.1	3023.0	3021.1	3018.2
20°	2994.4	2992.0	2986.6	2987.1	2983.7	2987.1	2986.6	2992.0	2994.4	2992.0	2986.6
20.5°	2962.8	2959.0	2952.7	2954.6	2950.7	2954.6	2952.7	2959.0	2962.8	2959.0	2952.7
21°	2929.8	2924.0	2916.7	2919.2	2914.3	2919.2	2916.7	2924.0	2929.8	2924.0	2916.7



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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°	2809.0	2803.1	2798.3	2797.8	2795.4	2797.8	2798.3	2803.1	2809.0	2803.1	2798.3
23°	2762.8	2758.0	2757.0	2753.6	2752.6	2753.6	2757.0	2758.0	2762.8	2758.0	2757.0
23.5°	2715.7	2711.4	2713.8	2708.0	2710.4	2708.0	2713.8	2711.4	2715.7	2711.4	2713.8
24°	2666.7	2663.3	2669.1	2661.4	2665.7	2661.4	2669.1	2663.3	2666.7	2663.3	2669.1
24.5°	2616.2	2614.8	2622.0	2614.3	2620.1	2614.3	2622.0	2614.8	2616.2	2614.8	2622.0
25°	2563.3	2564.3	2573.0	2567.2	2571.6	2567.2	2573.0	2564.3	2563.3	2564.3	2573.0
25.5°	2508.4	2514.8	2522.5	2520.1	2521.1	2520.1	2522.5	2514.8	2508.4	2514.8	2522.5
26°	2452.1	2463.3	2470.6	2471.1	2467.2	2471.1	2470.6	2463.3	2452.1	2463.3	2470.6
26.5°	2394.4	2410.9	2416.7	2420.1	2411.4	2420.1	2416.7	2410.9	2394.4	2410.9	2416.7
27°	2338.0	2356.5	2362.3	2367.7	2354.5	2367.7	2362.3	2356.5	2338.0	2356.5	2362.3
27.5°	2282.7	2300.2	2307.0	2313.8	2296.8	2313.8	2307.0	2300.2	2282.7	2300.2	2307.0
28°	2227.4	2243.9	2250.7	2257.5	2239.0	2257.5	2250.7	2243.9	2227.4	2243.9	2250.7
28.5°	2173.5	2186.6	2194.3	2200.2	2183.2	2200.2	2194.3	2186.6	2173.5	2186.6	2194.3
29°	2120.1	2128.8	2138.0	2141.9	2130.3	2141.9	2138.0	2128.8	2120.1	2128.8	2138.0
29.5°	2067.6	2072.0	2082.2	2083.7	2078.3	2083.7	2082.2	2072.0	2067.6	2072.0	2082.2
30°	2015.2	2013.7	2024.9	2025.4	2025.9	2025.4	2024.9	2013.7	2015.2	2013.7	2024.9
30.5°	1960.8	1957.4	1968.1	1969.1	1976.4	1969.1	1968.1	1957.4	1960.8	1957.4	1968.1
31°	1906.9	1899.7	1910.8	1912.8	1923.9	1912.8	1910.8	1899.7	1906.9	1899.7	1910.8
31.5°	1851.6	1844.3	1853.5	1856.9	1871.0	1856.9	1853.5	1844.3	1851.6	1844.3	1853.5
32°	1795.3	1788.5	1796.7	1802.1	1816.6	1802.1	1796.7	1788.5	1795.3	1788.5	1796.7
32.5°	1740.9	1735.1	1740.9	1747.7	1762.3	1747.7	1740.9	1735.1	1740.9	1735.1	1740.9
33°	1686.1	1681.7	1683.6	1693.3	1706.9	1693.3	1683.6	1681.7	1686.1	1681.7	1683.6
33.5°	1637.0	1628.3	1626.8	1639.0	1651.1	1639.0	1626.8	1628.3	1637.0	1628.3	1626.8
34°	1584.1	1574.9	1570.5	1585.6	1598.2	1585.6	1570.5	1574.9	1584.1	1574.9	1570.5
34.5°	1531.7	1522.0	1515.7	1531.7	1545.7	1531.7	1515.7	1522.0	1531.7	1522.0	1515.7
35°	1478.8	1470.5	1463.7	1479.7	1494.8	1479.7	1463.7	1470.5	1478.8	1470.5	1463.7
35.5°	1427.3	1419.5	1412.2	1428.3	1444.8	1428.3	1412.2	1419.5	1427.3	1419.5	1412.2
36°	1376.8	1368.6	1362.2	1378.7	1395.7	1378.7	1362.2	1368.6	1376.8	1368.6	1362.2
36.5°	1326.8	1319.5	1313.7	1329.7	1345.7	1329.7	1313.7	1319.5	1326.8	1319.5	1313.7
37°	1276.3	1271.0	1266.1	1282.1	1296.2	1282.1	1266.1	1271.0	1276.3	1271.0	1266.1
37.5°	1227.3	1223.9	1220.5	1236.5	1246.7	1236.5	1220.5	1223.9	1227.3	1223.9	1220.5
38°	1178.7	1178.2	1176.8	1191.8	1197.7	1191.8	1176.8	1178.2	1178.7	1178.2	1176.8
38.5°	1133.1	1134.1	1135.0	1148.1	1150.6	1148.1	1135.0	1134.1	1133.1	1134.1	1135.0
39°	1088.9	1091.3	1093.3	1105.9	1105.4	1105.9	1093.3	1091.3	1088.9	1091.3	1093.3
39.5°	1045.7	1050.1	1053.5	1064.2	1062.7	1064.2	1053.5	1050.1	1045.7	1050.1	1053.5
40°	1004.4	1009.3	1015.1	1023.9	1021.9	1023.9	1015.1	1009.3	1004.4	1009.3	1015.1
40.5°	965.6	970.5	978.2	984.5	984.1	984.5	978.2	970.5	965.6	970.5	978.2
41°	928.2	933.1	943.3	947.6	949.1	947.6	943.3	933.1	928.2	933.1	943.3
41.5°	892.8	898.1	909.8	912.2	916.6	912.2	909.8	898.1	892.8	898.1	909.8
42°	859.8	865.1	877.7	879.2	885.0	879.2	877.7	865.1	859.8	865.1	877.7
42.5°	828.7	834.0	847.6	848.1	854.4	848.1	847.6	834.0	828.7	834.0	847.6
43°	799.1	804.9	818.0	819.0	824.8	819.0	818.0	804.9	799.1	804.9	818.0
43.5°	771.9	777.7	790.4	790.8	796.2	790.8	790.4	777.7	771.9	777.7	790.4



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CATALOG NUMBER: HCDJBL4050CSD-HCD42TRMW-5000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	702.0	706.9	714.6	717.0	719.5	717.0	714.6	706.9	702.0	706.9	714.6
45.5°	681.6	685.5	692.8	695.2	697.1	695.2	692.8	685.5	681.6	685.5	692.8
46°	662.2	665.6	671.9	675.3	676.3	675.3	671.9	665.6	662.2	665.6	671.9
46.5°	644.2	647.1	652.0	655.9	656.8	655.9	652.0	647.1	644.2	647.1	652.0
47°	627.2	629.2	634.0	637.9	639.4	637.9	634.0	629.2	627.2	629.2	634.0
47.5°	611.2	612.7	617.0	621.4	623.3	621.4	617.0	612.7	611.2	612.7	617.0
48°	596.2	598.1	602.5	606.4	608.3	606.4	602.5	598.1	596.2	598.1	602.5
48.5°	584.0	585.0	588.4	592.3	593.7	592.3	588.4	585.0	584.0	585.0	588.4
49°	572.4	572.9	575.8	578.7	580.1	578.7	575.8	572.9	572.4	572.9	575.8
49.5°	561.2	561.7	563.6	566.1	566.5	566.1	563.6	561.7	561.2	561.7	563.6
50°	549.6	550.0	551.5	553.4	553.9	553.4	551.5	550.0	549.6	550.0	551.5
50.5°	537.9	538.4	539.4	541.3	541.3	541.3	539.4	538.4	537.9	538.4	539.4
51°	524.8	525.8	527.2	529.2	529.2	529.2	527.2	525.8	524.8	525.8	527.2
51.5°	512.2	512.7	514.6	517.0	517.5	517.0	514.6	512.7	512.2	512.7	514.6
52°	499.1	500.0	502.0	504.4	504.9	504.4	502.0	500.0	499.1	500.0	502.0
52.5°	486.0	486.9	489.4	491.3	492.3	491.3	489.4	486.9	486.0	486.9	489.4
53°	473.8	474.8	476.7	478.7	479.6	478.7	476.7	474.8	473.8	474.8	476.7
53.5°	461.2	462.2	464.1	466.5	467.5	466.5	464.1	462.2	461.2	462.2	464.1
54°	449.5	450.0	452.0	453.9	454.9	453.9	452.0	450.0	449.5	450.0	452.0
54.5°	437.9	438.4	440.3	442.3	443.2	442.3	440.3	438.4	437.9	438.4	440.3
55°	426.2	427.2	429.2	430.6	431.1	430.6	429.2	427.2	426.2	427.2	429.2
55.5°	415.1	416.1	418.0	419.4	419.9	419.4	418.0	416.1	415.1	416.1	418.0
56°	404.4	405.4	406.8	408.3	408.8	408.3	406.8	405.4	404.4	405.4	406.8
56.5°	393.7	394.7	396.1	397.6	398.1	397.6	396.1	394.7	393.7	394.7	396.1
57°	383.0	384.0	385.5	386.9	387.4	386.9	385.5	384.0	383.0	384.0	385.5
57.5°	372.4	373.8	375.3	376.2	377.2	376.2	375.3	373.8	372.4	373.8	375.3
58°	363.1	363.6	365.1	366.5	367.0	366.5	365.1	363.6	363.1	363.6	365.1
58.5°	353.4	353.9	355.4	356.3	356.8	356.3	355.4	353.9	353.4	353.9	355.4
59°	343.7	344.2	345.2	346.1	347.1	346.1	345.2	344.2	343.7	344.2	345.2
59.5°	334.0	334.5	335.5	336.9	337.4	336.9	335.5	334.5	334.0	334.5	335.5
60°	324.8	325.3	326.2	327.2	327.7	327.2	326.2	325.3	324.8	325.3	326.2
60.5°	315.6	316.0	317.0	318.0	318.5	318.0	317.0	316.0	315.6	316.0	317.0
61°	306.8	307.3	308.3	309.2	309.7	309.2	308.3	307.3	306.8	307.3	308.3
61.5°	298.1	298.6	299.5	300.5	301.0	300.5	299.5	298.6	298.1	298.6	299.5
62°	289.8	289.8	290.8	291.8	291.8	291.8	290.8	289.8	289.8	289.8	290.8
62.5°	281.1	281.6	282.1	283.0	283.5	283.0	282.1	281.6	281.1	281.6	282.1
63°	272.8	273.3	273.8	274.8	274.8	274.8	273.8	273.3	272.8	273.3	273.8
63.5°	264.6	265.1	265.6	266.5	267.0	266.5	265.6	265.1	264.6	265.1	265.6
64°	256.8	257.3	257.8	258.3	258.8	258.3	257.8	257.3	256.8	257.3	257.8
64.5°	249.0	249.5	250.0	250.5	251.0	250.5	250.0	249.5	249.0	249.5	250.0
65°	241.3	241.8	242.3	242.7	243.2	242.7	242.3	241.8	241.3	241.8	242.3
65.5°	234.0	234.0	234.5	235.5	235.5	235.5	234.5	234.0	234.0	234.0	234.5
66°	226.2	226.7	227.2	227.7	228.2	227.7	227.2	226.7	226.2	226.7	227.2





TEST NUMBER: P776594

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

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	204.9	205.4	205.8	206.3	206.3	206.3	205.8	205.4	204.9	205.4	205.8
68°	198.1	198.6	199.0	199.5	199.5	199.5	199.0	198.6	198.1	198.6	199.0
68.5°	191.3	191.8	192.2	192.2	192.7	192.2	192.2	191.8	191.3	191.8	192.2
69°	185.0	185.0	185.0	185.9	185.9	185.9	185.0	185.0	185.0	185.0	185.0
69.5°	178.2	178.7	178.7	179.1	179.6	179.1	178.7	178.7	178.2	178.7	178.7
70°	172.3	172.8	172.3	172.8	173.3	172.8	172.3	172.8	172.3	172.8	172.3
70.5°	166.0	166.5	166.5	166.5	167.0	166.5	166.5	166.5	166.0	166.5	166.5
71°	160.2	160.2	160.2	160.2	160.7	160.2	160.2	160.2	160.2	160.2	160.2
71.5°	153.9	153.9	154.4	154.4	154.4	154.4	154.4	153.9	153.9	153.9	154.4
72°	148.1	148.1	148.1	148.6	148.6	148.6	148.1	148.1	148.1	148.1	148.1
72.5°	142.2	142.2	142.2	142.7	142.7	142.7	142.2	142.2	142.2	142.2	142.2
73°	136.4	136.4	136.4	136.9	136.9	136.9	136.4	136.4	136.4	136.4	136.4
73.5°	130.6	130.6	131.1	131.1	131.1	131.1	131.1	130.6	130.6	130.6	131.1
74°	125.3	125.3	125.3	125.7	125.7	125.7	125.3	125.3	125.3	125.3	125.3
74.5°	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
75°	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6
75.5°	109.2	109.2	109.2	109.2	109.7	109.2	109.2	109.2	109.2	109.2	109.2
76°	104.4	103.9	103.9	104.4	104.4	104.4	103.9	103.9	104.4	103.9	103.9
76.5°	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
77°	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
77.5°	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
78°	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
78.5°	80.1	80.1	79.6	79.6	80.1	79.6	79.6	80.1	80.1	80.1	79.6
79°	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
79.5°	70.9	70.9	70.4	70.9	70.9	70.9	70.4	70.9	70.9	70.9	70.4
80°	66.5	66.5	66.0	66.0	66.0	66.0	66.0	66.5	66.5	66.5	66.0
80.5°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
81°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
81.5°	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
82°	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
82.5°	45.6	45.6	45.6	45.6	45.1	45.6	45.6	45.6	45.6	45.6	45.6
83°	41.8	41.8	41.8	41.3	41.3	41.3	41.8	41.8	41.8	41.8	41.8
83.5°	37.9	37.9	37.9	37.4	37.4	37.4	37.9	37.9	37.9	37.9	37.9
84°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
84.5°	30.6	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.6	30.1	30.1
85°	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7
85.5°	23.3	22.8	23.3	22.8	23.3	22.8	23.3	22.8	23.3	22.8	23.3
86°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
86.5°	16.5	16.0	16.0	16.0	16.5	16.0	16.0	16.0	16.5	16.0	16.0
87°	13.1	13.1	13.1	12.6	13.1	12.6	13.1	13.1	13.1	13.1	13.1
87.5°	9.7	9.7	9.7	9.7	10.2	9.7	9.7	9.7	9.7	9.7	9.7
88°	6.3	6.8	6.8	7.3	7.3	7.3	6.8	6.8	6.3	6.8	6.8
88.5°	3.9	3.9	4.4	4.9	5.8	4.9	4.4	3.9	3.9	3.9	4.4



TEST NUMBER: P776594  
CATALOG NUMBER: HCDJBL4050CSD-HCD42TRMW-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	0.5	1.0	1.5	1.0	0.5	0.0	0.0	0.0	0.5



TEST NUMBER: P776594

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

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3625.0	3625.0	3625.0	3625.0	3625.0	3625.0
0.5°	3623.6	3622.1	3623.6	3624.1	3625.0	3625.5
1°	3622.6	3620.7	3622.6	3623.1	3623.6	3624.1
1.5°	3620.2	3618.7	3620.2	3621.2	3621.2	3622.1
2°	3617.3	3615.3	3617.3	3617.8	3618.7	3619.2
2.5°	3613.4	3611.0	3613.4	3613.9	3614.8	3615.8
3°	3608.0	3605.6	3608.0	3609.0	3610.0	3611.0
3.5°	3602.2	3600.8	3602.2	3603.2	3604.6	3605.6
4°	3595.9	3593.5	3595.9	3596.9	3598.8	3599.3
4.5°	3588.6	3585.7	3588.6	3589.6	3591.5	3592.5
5°	3581.3	3577.9	3581.3	3582.3	3584.3	3585.7
5.5°	3571.6	3568.7	3571.6	3572.6	3575.0	3578.4
6°	3561.4	3557.6	3561.4	3562.9	3565.3	3567.3
6.5°	3550.3	3546.4	3550.3	3551.7	3554.6	3556.1
7°	3538.6	3535.2	3538.6	3541.0	3542.5	3544.4
7.5°	3526.5	3523.1	3526.5	3527.5	3529.4	3531.3
8°	3512.4	3510.5	3512.4	3513.9	3515.8	3517.3
8.5°	3497.4	3495.4	3497.4	3498.8	3500.8	3502.7
9°	3481.8	3479.9	3481.8	3483.3	3485.7	3487.2
9.5°	3465.3	3463.4	3465.3	3466.8	3469.2	3470.2
10°	3447.8	3445.4	3447.8	3449.8	3451.7	3453.2
10.5°	3429.4	3427.4	3429.4	3430.8	3433.3	3434.2
11°	3410.5	3408.0	3410.5	3412.4	3414.3	3415.3
11.5°	3390.6	3388.6	3390.6	3392.5	3394.4	3395.4
12°	3370.2	3368.2	3370.2	3372.6	3374.0	3375.0
12.5°	3348.8	3346.4	3348.8	3351.2	3352.7	3353.7
13°	3327.4	3325.0	3327.4	3329.4	3330.8	3331.8
13.5°	3305.1	3303.2	3305.1	3307.1	3308.0	3309.0
14°	3282.3	3280.3	3282.3	3284.2	3285.2	3285.7
14.5°	3258.5	3256.6	3258.5	3260.4	3260.9	3261.4
15°	3235.2	3233.3	3235.2	3236.2	3237.1	3237.1
15.5°	3211.9	3210.9	3211.9	3212.9	3211.9	3211.9
16°	3189.1	3188.1	3189.1	3189.6	3188.1	3187.6
16.5°	3166.3	3165.8	3166.3	3166.3	3164.3	3163.3
17°	3143.0	3143.4	3143.0	3143.4	3141.5	3140.5
17.5°	3120.1	3119.7	3120.1	3120.6	3119.2	3118.2
18°	3096.8	3095.9	3096.8	3097.8	3096.8	3096.4
18.5°	3072.1	3070.6	3072.1	3073.1	3073.1	3073.1
19°	3045.4	3043.9	3045.4	3046.8	3047.8	3049.3
19.5°	3017.2	3015.8	3017.2	3018.2	3021.1	3023.0
20°	2987.1	2983.7	2987.1	2986.6	2992.0	2994.4
20.5°	2954.6	2950.7	2954.6	2952.7	2959.0	2962.8
21°	2919.2	2914.3	2919.2	2916.7	2924.0	2929.8



TEST NUMBER: P776594

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

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2797.8	2795.4	2797.8	2798.3	2803.1	2809.0
23°	2753.6	2752.6	2753.6	2757.0	2758.0	2762.8
23.5°	2708.0	2710.4	2708.0	2713.8	2711.4	2715.7
24°	2661.4	2665.7	2661.4	2669.1	2663.3	2666.7
24.5°	2614.3	2620.1	2614.3	2622.0	2614.8	2616.2
25°	2567.2	2571.6	2567.2	2573.0	2564.3	2563.3
25.5°	2520.1	2521.1	2520.1	2522.5	2514.8	2508.4
26°	2471.1	2467.2	2471.1	2470.6	2463.3	2452.1
26.5°	2420.1	2411.4	2420.1	2416.7	2410.9	2394.4
27°	2367.7	2354.5	2367.7	2362.3	2356.5	2338.0
27.5°	2313.8	2296.8	2313.8	2307.0	2300.2	2282.7
28°	2257.5	2239.0	2257.5	2250.7	2243.9	2227.4
28.5°	2200.2	2183.2	2200.2	2194.3	2186.6	2173.5
29°	2141.9	2130.3	2141.9	2138.0	2128.8	2120.1
29.5°	2083.7	2078.3	2083.7	2082.2	2072.0	2067.6
30°	2025.4	2025.9	2025.4	2024.9	2013.7	2015.2
30.5°	1969.1	1976.4	1969.1	1968.1	1957.4	1960.8
31°	1912.8	1923.9	1912.8	1910.8	1899.7	1906.9
31.5°	1856.9	1871.0	1856.9	1853.5	1844.3	1851.6
32°	1802.1	1816.6	1802.1	1796.7	1788.5	1795.3
32.5°	1747.7	1762.3	1747.7	1740.9	1735.1	1740.9
33°	1693.3	1706.9	1693.3	1683.6	1681.7	1686.1
33.5°	1639.0	1651.1	1639.0	1626.8	1628.3	1637.0
34°	1585.6	1598.2	1585.6	1570.5	1574.9	1584.1
34.5°	1531.7	1545.7	1531.7	1515.7	1522.0	1531.7
35°	1479.7	1494.8	1479.7	1463.7	1470.5	1478.8
35.5°	1428.3	1444.8	1428.3	1412.2	1419.5	1427.3
36°	1378.7	1395.7	1378.7	1362.2	1368.6	1376.8
36.5°	1329.7	1345.7	1329.7	1313.7	1319.5	1326.8
37°	1282.1	1296.2	1282.1	1266.1	1271.0	1276.3
37.5°	1236.5	1246.7	1236.5	1220.5	1223.9	1227.3
38°	1191.8	1197.7	1191.8	1176.8	1178.2	1178.7
38.5°	1148.1	1150.6	1148.1	1135.0	1134.1	1133.1
39°	1105.9	1105.4	1105.9	1093.3	1091.3	1088.9
39.5°	1064.2	1062.7	1064.2	1053.5	1050.1	1045.7
40°	1023.9	1021.9	1023.9	1015.1	1009.3	1004.4
40.5°	984.5	984.1	984.5	978.2	970.5	965.6
41°	947.6	949.1	947.6	943.3	933.1	928.2
41.5°	912.2	916.6	912.2	909.8	898.1	892.8
42°	879.2	885.0	879.2	877.7	865.1	859.8
42.5°	848.1	854.4	848.1	847.6	834.0	828.7
43°	819.0	824.8	819.0	818.0	804.9	799.1
43.5°	790.8	796.2	790.8	790.4	777.7	771.9

TEST NUMBER: P776594

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

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	717.0	719.5	717.0	714.6	706.9	702.0
45.5°	695.2	697.1	695.2	692.8	685.5	681.6
46°	675.3	676.3	675.3	671.9	665.6	662.2
46.5°	655.9	656.8	655.9	652.0	647.1	644.2
47°	637.9	639.4	637.9	634.0	629.2	627.2
47.5°	621.4	623.3	621.4	617.0	612.7	611.2
48°	606.4	608.3	606.4	602.5	598.1	596.2
48.5°	592.3	593.7	592.3	588.4	585.0	584.0
49°	578.7	580.1	578.7	575.8	572.9	572.4
49.5°	566.1	566.5	566.1	563.6	561.7	561.2
50°	553.4	553.9	553.4	551.5	550.0	549.6
50.5°	541.3	541.3	541.3	539.4	538.4	537.9
51°	529.2	529.2	529.2	527.2	525.8	524.8
51.5°	517.0	517.5	517.0	514.6	512.7	512.2
52°	504.4	504.9	504.4	502.0	500.0	499.1
52.5°	491.3	492.3	491.3	489.4	486.9	486.0
53°	478.7	479.6	478.7	476.7	474.8	473.8
53.5°	466.5	467.5	466.5	464.1	462.2	461.2
54°	453.9	454.9	453.9	452.0	450.0	449.5
54.5°	442.3	443.2	442.3	440.3	438.4	437.9
55°	430.6	431.1	430.6	429.2	427.2	426.2
55.5°	419.4	419.9	419.4	418.0	416.1	415.1
56°	408.3	408.8	408.3	406.8	405.4	404.4
56.5°	397.6	398.1	397.6	396.1	394.7	393.7
57°	386.9	387.4	386.9	385.5	384.0	383.0
57.5°	376.2	377.2	376.2	375.3	373.8	372.4
58°	366.5	367.0	366.5	365.1	363.6	363.1
58.5°	356.3	356.8	356.3	355.4	353.9	353.4
59°	346.1	347.1	346.1	345.2	344.2	343.7
59.5°	336.9	337.4	336.9	335.5	334.5	334.0
60°	327.2	327.7	327.2	326.2	325.3	324.8
60.5°	318.0	318.5	318.0	317.0	316.0	315.6
61°	309.2	309.7	309.2	308.3	307.3	306.8
61.5°	300.5	301.0	300.5	299.5	298.6	298.1
62°	291.8	291.8	291.8	290.8	289.8	289.8
62.5°	283.0	283.5	283.0	282.1	281.6	281.1
63°	274.8	274.8	274.8	273.8	273.3	272.8
63.5°	266.5	267.0	266.5	265.6	265.1	264.6
64°	258.3	258.8	258.3	257.8	257.3	256.8
64.5°	250.5	251.0	250.5	250.0	249.5	249.0
65°	242.7	243.2	242.7	242.3	241.8	241.3
65.5°	235.5	235.5	235.5	234.5	234.0	234.0
66°	227.7	228.2	227.7	227.2	226.7	226.2



TEST NUMBER: P776594

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

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	206.3	206.3	206.3	205.8	205.4	204.9
68°	199.5	199.5	199.5	199.0	198.6	198.1
68.5°	192.2	192.7	192.2	192.2	191.8	191.3
69°	185.9	185.9	185.9	185.0	185.0	185.0
69.5°	179.1	179.6	179.1	178.7	178.7	178.2
70°	172.8	173.3	172.8	172.3	172.8	172.3
70.5°	166.5	167.0	166.5	166.5	166.5	166.0
71°	160.2	160.7	160.2	160.2	160.2	160.2
71.5°	154.4	154.4	154.4	154.4	153.9	153.9
72°	148.6	148.6	148.6	148.1	148.1	148.1
72.5°	142.7	142.7	142.7	142.2	142.2	142.2
73°	136.9	136.9	136.9	136.4	136.4	136.4
73.5°	131.1	131.1	131.1	131.1	130.6	130.6
74°	125.7	125.7	125.7	125.3	125.3	125.3
74.5°	119.9	119.9	119.9	119.9	119.9	119.9
75°	114.6	114.6	114.6	114.6	114.6	114.6
75.5°	109.2	109.7	109.2	109.2	109.2	109.2
76°	104.4	104.4	104.4	103.9	103.9	104.4
76.5°	99.0	99.0	99.0	99.0	99.0	99.0
77°	94.2	94.2	94.2	94.2	94.2	94.2
77.5°	89.3	89.3	89.3	89.3	89.3	89.3
78°	84.5	84.5	84.5	84.5	84.5	84.5
78.5°	79.6	80.1	79.6	79.6	80.1	80.1
79°	75.2	75.2	75.2	75.2	75.2	75.2
79.5°	70.9	70.9	70.9	70.4	70.9	70.9
80°	66.0	66.0	66.0	66.0	66.5	66.5
80.5°	62.1	62.1	62.1	62.1	62.1	62.1
81°	57.8	57.8	57.8	57.8	57.8	57.8
81.5°	53.4	53.4	53.4	53.4	53.4	53.4
82°	49.5	49.5	49.5	49.5	49.5	49.5
82.5°	45.6	45.1	45.6	45.6	45.6	45.6
83°	41.3	41.3	41.3	41.8	41.8	41.8
83.5°	37.4	37.4	37.4	37.9	37.9	37.9
84°	34.0	34.0	34.0	34.0	34.0	34.0
84.5°	30.1	30.1	30.1	30.1	30.1	30.6
85°	26.7	26.7	26.7	26.7	26.7	26.7
85.5°	22.8	23.3	22.8	23.3	22.8	23.3
86°	19.4	19.4	19.4	19.4	19.4	19.4
86.5°	16.0	16.5	16.0	16.0	16.0	16.5
87°	12.6	13.1	12.6	13.1	13.1	13.1
87.5°	9.7	10.2	9.7	9.7	9.7	9.7
88°	7.3	7.3	7.3	6.8	6.8	6.3
88.5°	4.9	5.8	4.9	4.4	3.9	3.9



TEST NUMBER: P776594  
CATALOG NUMBER: HCDJBL4050CSD-HCD42TRMW-5000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	1.0	1.5	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



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°	2891.5	2886.6	2878.4	2880.8	2875.9	2880.8	2878.4	2886.6	2891.5	2886.6	2878.4
22°	2851.2	2846.3	2839.1	2840.0	2835.2	2840.0	2839.1	2846.3	2851.2	2846.3	2839.1



44°	746.7	752.5	763.7	764.6	769.5	764.6	763.7	752.5	746.7	752.5	763.7
44.5°	723.4	729.2	738.9	740.3	743.7	740.3	738.9	729.2	723.4	729.2	738.9



66.5°	218.9	219.4	219.9	220.4	220.9	220.4	219.9	219.4	218.9	219.4	219.9
67°	212.2	212.2	212.6	213.1	213.6	213.1	212.6	212.2	212.2	212.2	212.6



89°	1.5	1.9	2.9	3.4	3.9	3.4	2.9	1.9	1.5	1.9	2.9
89.5°	0.0	0.5	1.5	1.9	2.4	1.9	1.5	0.5	0.0	0.5	1.5



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Scaled Data Report



21.5°	2880.8	2875.9	2880.8	2878.4	2886.6	2891.5
22°	2840.0	2835.2	2840.0	2839.1	2846.3	2851.2



44°	764.6	769.5	764.6	763.7	752.5	746.7
44.5°	740.3	743.7	740.3	738.9	729.2	723.4



66.5°	220.4	220.9	220.4	219.9	219.4	218.9
67°	213.1	213.6	213.1	212.6	212.2	212.2

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89°	3.4	3.9	3.4	2.9	1.9	1.5
89.5°	1.9	2.4	1.9	1.5	0.5	0.0

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)