

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: P776801

Luminaire Tested: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD8TRH-5000lm-3000K
Description: 8 INCH ROUND MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

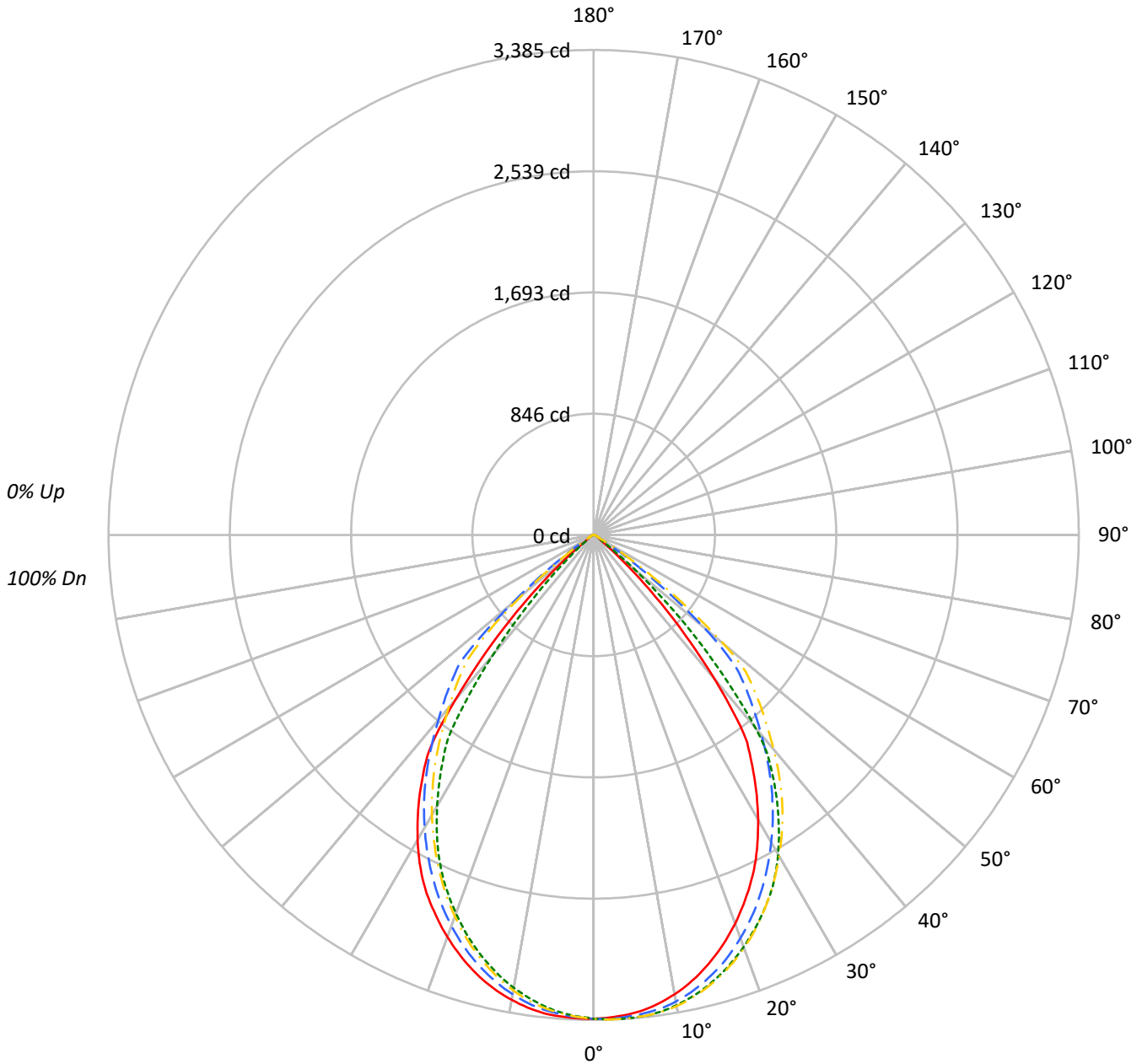
Lumens per Lamp: N/A
Luminaire Lumens: 4680.2 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	92	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	79	74	92	84	78	73	82	76	72	79	75	72	78	74	71	69					69			
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	65	63					63			
6	83	72	66	61	81	72	65	60	70	64	60	68	63	60	67	63	59	57					57			
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	62	58	54	53					53			
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	54	50	48					48			
9	69	58	51	47	68	57	51	47	56	51	46	56	50	46	55	50	46	45					45			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	103092	103092	103092	103092
5°	102575	103599	103087	101904
10°	100909	103327	102162	99511
15°	97979	101911	100151	95998
20°	93788	99415	96985	91296
25°	88417	95942	92907	85398
30°	80889	90746	86568	77007
35°	71321	82797	77795	66994
40°	52237	69953	59606	43649
45°	26312	42593	32909	19252
50°	8032	17669	10810	5514
55°	2965	3337	2965	2571
60°	2271	2497	2271	1954
65°	1777	1914	1748	1510
70°	1410	1535	1366	1205
75°	1156	1262	1097	932
80°	897	1055	897	738
85°	666	981	666	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 70010 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.9	6.8
10°-20°	882.2	18.9
20°-30°	1238.1	26.5
30°-40°	1271.4	27.2
40°-50°	777.3	16.6
50°-60°	151.0	3.2
60°-70°	27.5	0.6
70°-80°	12.2	0.3
80°-90°	2.7	0.1
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°	2438.1	52.1
0°-40°	3709.5	79.3
0°-60°	4637.8	99.1
0°-90°	4680.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4680.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3377	3377	3377	3377	3377	
5°	3347	3380	3364	3325	3347	317
15°	3100	3224	3169	3037	3100	870
25°	2625	2848	2758	2535	2625	1200
35°	1914	2222	2087	1798	1914	1169
45°	609	986	762	446	609	491
55°	56	63	56	48	56	61
65°	25	26	24	21	25	25
75°	10	11	9	8	10	11
85°	2	3	2	1	2	2
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°	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7
0.5°	3375.8	3375.3	3377.6	3379.5	3378.1	3379.5	3380.4	3380.4	3377.1	3374.8	3374.8
1°	3373.9	3374.8	3377.6	3380.9	3379.9	3381.3	3382.3	3381.3	3377.1	3373.4	3373.0
1.5°	3372.0	3373.9	3377.6	3381.8	3381.3	3383.2	3383.6	3381.8	3376.7	3372.0	3370.6
2°	3369.7	3372.5	3377.6	3382.3	3382.7	3384.1	3384.6	3381.8	3375.8	3370.2	3367.9
2.5°	3366.9	3370.6	3376.7	3382.3	3383.2	3385.0	3384.6	3381.8	3374.8	3367.9	3365.1
3°	3363.7	3368.3	3375.3	3381.3	3383.2	3385.0	3384.6	3381.3	3373.0	3365.5	3361.4
3.5°	3360.0	3365.5	3373.4	3379.9	3383.2	3385.0	3384.1	3379.9	3371.1	3362.3	3357.6
4°	3356.2	3362.7	3371.1	3378.5	3382.3	3384.1	3383.2	3379.0	3369.2	3359.5	3353.5
4.5°	3352.1	3359.5	3368.3	3376.7	3381.3	3383.2	3381.8	3377.6	3366.9	3356.2	3348.3
5°	3347.0	3355.8	3365.5	3374.8	3380.4	3381.8	3380.4	3375.3	3363.7	3352.1	3343.7
5.5°	3341.4	3351.1	3361.8	3372.5	3378.5	3380.4	3378.5	3372.5	3360.4	3347.9	3338.1
6°	3334.9	3346.0	3358.6	3369.7	3376.7	3378.5	3376.2	3369.7	3355.8	3342.8	3331.6
6.5°	3327.4	3339.5	3354.4	3366.5	3373.9	3376.2	3373.9	3365.5	3350.2	3336.7	3324.7
7°	3319.1	3333.0	3349.7	3362.3	3370.2	3373.0	3371.1	3360.9	3344.2	3330.2	3317.2
7.5°	3310.3	3325.1	3344.6	3357.2	3365.5	3369.2	3367.4	3354.9	3337.7	3322.3	3308.9
8°	3300.0	3316.8	3339.1	3351.6	3360.4	3364.6	3363.2	3349.3	3330.7	3314.9	3299.6
8.5°	3289.4	3307.0	3332.1	3345.6	3354.4	3359.0	3358.1	3342.8	3322.3	3306.1	3289.8
9°	3278.7	3297.7	3324.7	3338.6	3347.9	3353.5	3352.5	3335.3	3314.0	3296.3	3279.1
9.5°	3266.6	3287.0	3316.3	3331.2	3340.9	3346.5	3346.0	3327.4	3304.7	3286.6	3268.0
10°	3255.0	3276.8	3307.0	3323.3	3333.0	3339.5	3338.6	3319.1	3295.4	3276.4	3255.9
10.5°	3242.4	3265.2	3297.3	3314.4	3324.2	3332.1	3331.2	3310.7	3285.6	3265.2	3243.4
11°	3229.0	3253.6	3286.6	3305.2	3315.4	3323.3	3322.8	3301.4	3275.0	3254.1	3230.8
11.5°	3215.0	3241.1	3275.4	3294.9	3306.1	3314.0	3313.5	3291.7	3263.8	3241.5	3216.9
12°	3200.2	3228.5	3263.4	3284.7	3296.3	3304.7	3303.3	3281.5	3252.2	3229.0	3203.0
12.5°	3185.3	3215.0	3251.3	3273.6	3285.6	3294.9	3292.6	3270.8	3239.7	3215.5	3188.1
13°	3169.5	3201.1	3238.3	3262.4	3275.0	3284.7	3281.9	3259.2	3227.1	3201.6	3173.2
13.5°	3152.8	3186.7	3224.3	3250.3	3262.9	3273.6	3270.3	3247.6	3213.2	3187.2	3157.9
14°	3135.6	3171.4	3210.4	3237.8	3250.8	3262.0	3257.8	3235.0	3199.3	3172.3	3141.2
14.5°	3117.5	3154.7	3195.5	3224.3	3237.8	3249.4	3245.2	3221.5	3183.9	3156.1	3124.9
15°	3099.9	3138.4	3180.2	3209.9	3224.3	3236.4	3231.8	3208.1	3168.6	3139.8	3107.8
15.5°	3080.4	3121.2	3164.4	3195.1	3210.4	3222.5	3217.8	3193.7	3152.8	3123.1	3090.1
16°	3060.8	3103.1	3148.2	3180.2	3196.0	3208.5	3203.4	3178.4	3136.1	3105.4	3071.5
16.5°	3041.3	3085.0	3131.0	3164.9	3180.7	3194.1	3189.0	3162.1	3118.9	3087.3	3052.5
17°	3020.9	3066.4	3113.3	3148.6	3164.9	3178.8	3173.2	3146.8	3101.7	3068.3	3032.5
17.5°	2999.5	3046.9	3094.7	3131.0	3148.6	3162.6	3157.0	3129.6	3083.1	3049.2	3012.5
18°	2978.2	3026.5	3076.2	3113.3	3131.9	3146.3	3140.7	3111.9	3064.6	3029.7	2992.1
18.5°	2955.9	3005.6	3056.7	3095.2	3114.3	3129.1	3123.1	3094.3	3045.1	3009.3	2970.3
19°	2933.1	2984.7	3036.7	3076.6	3096.6	3111.0	3105.0	3075.7	3025.5	2988.9	2948.9
19.5°	2910.4	2962.8	3016.3	3057.1	3078.5	3092.9	3086.9	3056.7	3005.6	2967.5	2926.6
20°	2886.7	2940.5	2995.4	3038.1	3059.9	3073.8	3067.8	3037.2	2985.1	2946.1	2903.9
20.5°	2862.1	2916.9	2974.0	3017.6	3040.9	3055.3	3048.3	3016.7	2963.8	2923.4	2880.6
21°	2837.0	2893.2	2952.2	2997.2	3020.9	3035.3	3028.3	2996.3	2942.9	2901.1	2856.9



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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°	2759.9	2819.3	2883.0	2932.6	2960.1	2974.0	2965.2	2932.6	2875.1	2830.9	2782.6
23°	2733.4	2792.8	2859.3	2910.4	2938.2	2952.2	2943.3	2910.4	2852.3	2806.8	2757.1
23.5°	2706.9	2767.3	2835.1	2887.6	2915.9	2930.8	2920.6	2887.1	2829.5	2781.7	2731.1
24°	2680.0	2740.4	2809.6	2864.4	2894.1	2908.0	2897.4	2863.9	2806.3	2756.6	2705.1
24.5°	2652.6	2713.9	2784.0	2840.7	2871.3	2884.8	2873.7	2840.7	2782.6	2731.1	2678.1
25°	2624.7	2686.5	2758.0	2816.1	2848.1	2861.1	2850.4	2816.5	2758.0	2705.1	2650.3
25.5°	2595.0	2659.1	2732.0	2791.9	2825.4	2837.9	2825.8	2792.4	2732.5	2679.1	2622.8
26°	2564.3	2631.7	2705.5	2766.8	2802.1	2813.7	2801.2	2768.2	2705.5	2653.0	2595.0
26.5°	2533.2	2603.8	2678.1	2742.2	2777.5	2788.7	2775.7	2743.6	2677.2	2625.6	2566.6
27°	2501.2	2574.5	2650.7	2716.7	2751.5	2763.6	2750.6	2718.1	2647.9	2597.8	2537.9
27.5°	2468.2	2543.9	2622.4	2690.2	2724.6	2739.0	2724.6	2691.6	2617.7	2569.0	2508.1
28°	2434.7	2512.3	2594.1	2663.3	2696.2	2713.4	2698.1	2663.3	2587.1	2537.9	2478.9
28.5°	2400.8	2480.7	2565.7	2636.3	2667.0	2686.5	2671.2	2634.5	2555.5	2507.2	2449.6
29°	2365.1	2447.7	2536.0	2608.0	2637.2	2658.6	2644.7	2605.2	2523.5	2476.1	2419.9
29.5°	2330.2	2415.7	2507.2	2578.7	2606.1	2629.8	2616.8	2575.0	2489.5	2444.0	2389.7
30°	2294.5	2381.8	2477.5	2547.6	2574.1	2600.6	2588.9	2543.0	2455.6	2411.1	2358.6
30.5°	2257.8	2347.9	2448.2	2516.5	2541.1	2569.4	2560.6	2510.9	2421.3	2377.6	2328.4
31°	2221.1	2312.6	2417.6	2484.4	2507.7	2539.2	2532.7	2478.4	2386.4	2343.7	2297.7
31.5°	2183.9	2278.7	2387.8	2451.9	2473.3	2506.7	2503.5	2445.4	2351.1	2309.3	2266.6
32°	2147.2	2242.5	2356.7	2418.5	2438.9	2474.2	2474.7	2412.0	2314.9	2275.0	2235.0
32.5°	2109.6	2208.1	2326.1	2383.6	2404.1	2440.8	2445.4	2377.6	2279.1	2241.1	2203.4
33°	2071.1	2172.3	2294.9	2349.7	2368.3	2407.8	2416.2	2342.3	2242.0	2205.3	2170.9
33.5°	2032.5	2136.1	2263.8	2313.5	2331.6	2373.0	2386.4	2307.0	2204.4	2170.5	2137.5
34°	1994.0	2099.4	2229.9	2279.6	2295.9	2338.6	2356.2	2271.7	2166.3	2135.6	2104.0
34.5°	1954.0	2063.6	2198.3	2243.4	2258.7	2304.2	2325.6	2235.9	2126.3	2099.9	2068.7
35°	1913.6	2026.0	2164.9	2207.6	2221.5	2269.4	2294.5	2199.7	2087.3	2063.2	2034.4
35.5°	1875.5	1988.9	2132.4	2170.9	2182.5	2233.6	2262.4	2163.0	2048.3	2026.9	1999.1
36°	1834.6	1951.7	2098.0	2136.6	2144.0	2198.8	2229.4	2125.9	2009.8	1990.2	1964.2
36.5°	1798.9	1913.6	2064.1	2099.9	2105.0	2163.0	2196.0	2088.2	1968.9	1953.1	1929.4
37°	1740.4	1875.5	2029.3	2063.2	2065.0	2125.4	2162.1	2050.6	1924.3	1915.5	1893.2
37.5°	1681.4	1837.4	1995.4	2025.5	2025.5	2089.2	2127.7	2011.6	1868.6	1878.3	1857.9
38°	1604.3	1799.3	1960.1	1988.4	1983.3	2051.6	2093.4	1973.5	1805.4	1840.7	1823.0
38.5°	1533.2	1761.7	1925.7	1949.8	1940.5	2013.9	2058.5	1935.9	1733.9	1802.6	1789.1
39°	1461.2	1723.2	1889.9	1913.6	1884.3	1976.8	2023.2	1896.9	1656.8	1759.9	1753.8
39.5°	1388.3	1662.8	1855.5	1875.1	1825.4	1938.2	1987.9	1859.3	1575.0	1707.8	1719.5
40°	1310.7	1595.0	1820.7	1837.4	1755.2	1900.6	1952.6	1804.5	1495.6	1648.4	1686.0
40.5°	1234.6	1523.9	1786.3	1799.8	1677.2	1862.5	1917.8	1747.8	1419.4	1580.6	1654.0
41°	1157.0	1454.2	1752.0	1748.7	1597.8	1809.6	1882.0	1682.8	1342.8	1509.5	1621.9
41.5°	1081.3	1385.0	1718.5	1700.0	1517.9	1759.9	1848.6	1611.7	1269.4	1436.1	1590.8
42°	1009.3	1314.4	1685.6	1638.6	1438.9	1695.8	1814.2	1538.8	1192.3	1362.3	1558.8
42.5°	941.9	1240.6	1653.0	1573.2	1361.8	1627.5	1781.2	1461.2	1118.4	1291.7	1528.1
43°	874.6	1166.3	1621.0	1503.0	1287.5	1554.1	1749.2	1389.7	1041.3	1222.0	1496.1
43.5°	805.9	1092.9	1588.0	1429.6	1212.3	1478.4	1716.7	1317.7	968.4	1153.3	1464.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	609.4	888.1	1493.3	1215.5	986.5	1258.7	1621.5	1105.0	762.2	945.2	1371.1
45.5°	549.9	821.6	1461.7	1148.2	915.0	1187.6	1589.4	1033.0	696.2	877.8	1339.5
46°	493.3	756.6	1429.6	1080.4	846.3	1117.0	1556.4	962.8	632.6	811.9	1309.3
46.5°	436.6	692.5	1398.5	1011.6	778.4	1045.1	1525.3	894.1	570.4	750.1	1259.2
47°	384.1	628.4	1360.9	942.4	712.0	972.1	1492.8	826.8	510.5	686.9	1199.7
47.5°	335.8	569.4	1313.1	875.1	646.5	903.4	1459.4	762.2	459.4	627.0	1130.1
48°	291.7	512.3	1256.8	810.0	584.8	836.5	1425.9	699.5	408.7	567.6	1052.9
48.5°	253.6	457.5	1195.5	747.3	524.8	771.0	1379.9	637.2	358.1	511.8	976.3
49°	220.6	405.0	1137.0	686.9	473.8	706.5	1320.9	575.9	307.5	461.2	897.8
49.5°	192.8	355.3	1068.3	626.6	423.1	643.8	1259.6	517.9	265.2	410.6	821.6
50°	169.1	308.4	1001.4	567.1	372.0	581.5	1187.2	468.2	227.6	359.5	746.9
50.5°	150.5	265.7	927.1	509.5	321.4	523.9	1109.6	418.5	193.2	309.3	677.2
51°	131.4	229.4	849.5	454.7	271.2	472.8	1029.3	369.3	163.0	268.0	608.5
51.5°	112.9	198.3	774.3	402.7	232.7	421.7	948.4	319.6	136.6	229.9	545.3
52°	94.3	172.3	701.3	354.9	196.0	370.6	869.9	270.3	111.5	194.6	492.3
52.5°	75.7	152.8	630.3	308.9	163.0	319.6	794.7	230.8	89.2	162.6	439.9
53°	66.0	133.8	566.2	266.1	134.7	268.9	723.2	195.1	71.5	134.7	387.4
53.5°	62.7	114.3	503.5	226.2	109.6	228.5	653.0	164.0	63.6	110.1	334.4
54°	60.4	95.2	445.0	190.9	85.9	191.4	587.1	136.1	60.8	87.8	281.9
54.5°	58.1	76.2	389.2	157.5	68.7	159.8	523.0	111.5	58.5	67.8	241.1
55°	55.7	62.2	340.0	133.3	62.7	130.5	467.3	88.7	55.7	54.3	205.8
55.5°	53.4	56.2	292.6	109.6	60.4	104.5	412.4	68.3	53.4	52.0	174.2
56°	51.1	53.9	250.3	85.5	57.6	81.3	357.2	55.3	51.6	50.2	146.8
56.5°	49.2	51.6	212.7	61.8	54.8	62.2	301.9	52.9	49.2	48.3	122.6
57°	47.4	49.7	179.3	52.9	52.5	53.4	258.2	50.6	47.4	46.4	102.6
57.5°	45.5	47.8	152.3	51.1	50.6	51.1	218.3	48.8	45.5	44.6	86.4
58°	43.7	46.0	132.8	49.2	48.3	49.2	182.1	46.9	43.7	43.2	73.4
58.5°	41.8	44.6	113.3	47.4	46.4	47.4	150.5	45.5	41.8	41.3	63.2
59°	39.9	42.7	93.8	45.5	44.6	45.5	122.6	43.7	39.9	39.9	54.8
59.5°	38.6	41.3	74.3	44.1	42.7	43.7	99.4	42.3	38.6	38.6	48.8
60°	37.2	39.9	64.6	42.3	40.9	42.3	81.7	40.9	37.2	37.2	44.1
60.5°	35.8	38.6	56.2	40.9	39.0	40.9	68.3	39.0	35.3	36.2	39.9
61°	34.4	37.2	49.7	39.5	37.6	39.0	58.1	38.1	33.9	34.8	37.6
61.5°	33.0	35.8	44.1	38.1	36.2	37.6	50.6	36.7	32.5	33.4	36.2
62°	31.6	34.4	40.4	36.7	34.8	36.7	45.1	35.3	31.1	32.5	34.8
62.5°	30.2	33.4	37.6	35.3	33.4	35.3	40.9	33.9	29.7	31.1	33.4
63°	28.8	32.0	36.2	34.4	31.6	33.9	37.6	33.0	28.3	30.2	32.0
63.5°	27.9	31.1	35.3	33.0	30.2	32.5	36.2	31.6	27.4	28.8	31.1
64°	26.5	29.7	33.9	31.6	29.3	31.6	34.8	30.7	26.0	27.9	29.7
64.5°	25.5	28.8	33.0	30.7	27.9	30.2	33.4	29.3	25.1	26.9	28.8
65°	24.6	27.9	31.6	29.7	26.5	29.3	32.0	28.3	24.2	26.0	27.9
65.5°	23.7	26.9	30.7	28.3	25.5	28.3	30.7	27.4	22.8	25.1	26.9
66°	22.3	25.5	29.3	27.4	24.6	26.9	29.7	26.0	21.8	24.2	26.0



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	20.0	22.8	26.5	24.6	21.4	24.2	26.9	23.2	19.0	21.4	23.2
68°	19.0	21.8	25.5	23.7	20.4	23.2	25.5	22.3	18.6	20.4	22.3
68.5°	18.1	21.4	24.6	22.8	19.5	22.3	24.6	21.4	17.6	19.5	21.4
69°	17.2	20.4	23.7	21.8	18.6	21.4	23.7	20.9	16.7	19.0	20.4
69.5°	16.7	19.5	22.8	20.9	18.1	20.9	22.8	20.0	16.3	18.1	19.5
70°	15.8	18.6	21.8	20.0	17.2	20.0	21.8	19.0	15.3	17.2	18.6
70.5°	15.3	18.1	20.9	19.5	16.3	19.0	21.4	18.1	14.9	16.7	18.1
71°	14.4	17.2	20.0	18.6	15.8	18.6	20.4	17.6	13.9	15.8	17.2
71.5°	13.9	16.7	19.0	17.6	14.9	17.6	19.5	16.7	13.5	15.3	16.3
72°	13.0	15.8	18.6	17.2	14.4	16.7	18.6	16.3	12.5	14.4	15.8
72.5°	12.5	15.3	17.6	16.3	13.5	16.3	17.6	15.3	12.1	13.9	14.9
73°	12.1	14.4	16.7	15.8	13.0	15.3	17.2	14.9	11.6	13.5	14.4
73.5°	11.1	13.9	16.3	14.9	12.5	14.9	16.3	13.9	11.1	12.5	13.5
74°	10.7	13.0	15.3	14.4	12.1	14.4	15.8	13.5	10.2	12.1	13.0
74.5°	10.2	12.5	14.4	13.5	11.1	13.5	14.9	13.0	9.8	11.6	12.1
75°	9.8	12.1	13.9	13.0	10.7	13.0	14.4	12.1	9.3	10.7	11.6
75.5°	9.3	11.1	13.0	12.5	10.2	12.5	13.5	11.6	8.8	10.2	11.1
76°	8.8	10.7	12.5	12.1	9.8	12.1	13.0	11.1	8.4	9.8	10.2
76.5°	8.4	10.2	12.1	11.1	9.3	11.1	12.1	10.2	7.9	9.3	9.8
77°	7.9	9.8	11.1	10.7	8.8	10.7	11.6	9.8	7.4	8.8	9.3
77.5°	7.4	9.3	10.7	10.2	8.4	10.2	11.1	9.3	7.0	8.4	8.8
78°	7.0	8.8	10.2	9.8	7.9	9.8	10.2	8.8	6.5	7.9	7.9
78.5°	6.5	7.9	9.3	9.3	7.4	9.3	9.8	8.4	6.0	7.0	7.4
79°	6.0	7.4	8.8	8.4	7.0	8.8	9.3	7.9	6.0	6.5	7.0
79.5°	5.6	7.0	8.4	7.9	6.5	8.4	8.8	7.4	5.6	6.0	6.5
80°	5.1	6.5	7.9	7.4	6.0	7.4	7.9	7.0	5.1	5.6	6.0
80.5°	4.6	6.0	7.4	7.0	6.0	7.0	7.4	6.0	4.6	5.1	5.6
81°	4.2	5.6	7.0	6.5	5.6	6.5	7.0	5.6	4.2	4.6	5.1
81.5°	4.2	5.1	6.0	6.0	5.1	6.5	6.5	5.6	4.2	4.6	4.6
82°	3.7	4.6	5.6	5.6	4.6	6.0	6.0	5.1	3.7	4.2	4.2
82.5°	3.3	4.2	5.1	5.1	4.2	5.6	5.6	4.6	3.3	3.7	3.7
83°	2.8	3.7	4.6	4.6	4.2	5.1	5.1	4.2	2.8	3.3	3.3
83.5°	2.8	3.3	4.2	4.2	3.7	4.6	4.6	3.7	2.8	2.8	2.8
84°	2.3	3.3	3.7	4.2	3.3	4.2	4.2	3.3	2.3	2.3	2.3
84.5°	1.9	2.8	3.3	3.7	3.3	3.7	3.7	2.8	1.9	1.9	2.3
85°	1.9	2.3	2.8	3.3	2.8	3.3	3.3	2.3	1.9	1.9	1.9
85.5°	1.4	1.9	2.8	2.8	2.8	3.3	2.8	1.9	1.4	1.4	1.4
86°	0.9	1.4	2.3	2.3	2.3	2.8	2.3	1.9	1.4	0.9	0.9
86.5°	0.9	0.9	1.9	2.3	1.9	2.3	2.3	1.4	0.9	0.9	0.9
87°	0.5	0.9	1.4	1.9	1.9	1.9	1.9	0.9	0.9	0.5	0.5
87.5°	0.5	0.5	1.4	1.4	1.4	1.9	1.4	0.9	0.5	0.5	0.5
88°	0.5	0.5	0.9	1.4	1.4	1.4	1.4	0.5	0.5	0.0	0.0
88.5°	0.0	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.5	0.0	0.0



TEST NUMBER: P776801
CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

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	0.5	0.0	0.5	0.0	0.0	0.0	0.0



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3376.7	3376.7	3376.7	3376.7	3376.7	3376.7
0.5°	3375.8	3372.5	3373.9	3375.8	3376.7	3375.8
1°	3373.0	3369.2	3370.6	3372.5	3374.4	3373.9
1.5°	3369.7	3365.5	3366.9	3369.2	3371.1	3372.0
2°	3366.5	3361.8	3362.7	3365.5	3367.9	3369.7
2.5°	3362.7	3357.6	3358.6	3361.4	3364.1	3366.9
3°	3359.0	3352.5	3353.9	3356.2	3360.4	3363.7
3.5°	3353.9	3347.0	3347.9	3351.6	3355.8	3360.0
4°	3348.8	3340.5	3341.8	3346.0	3351.6	3356.2
4.5°	3342.8	3333.0	3334.4	3339.5	3346.5	3352.1
5°	3335.8	3325.1	3326.5	3333.0	3340.5	3347.0
5.5°	3328.4	3315.8	3317.7	3326.1	3334.4	3341.4
6°	3320.0	3307.0	3308.9	3318.2	3327.4	3334.9
6.5°	3311.2	3296.3	3298.7	3309.3	3320.0	3327.4
7°	3301.9	3285.6	3288.0	3300.0	3311.2	3319.1
7.5°	3291.2	3274.0	3276.4	3289.8	3301.9	3310.3
8°	3280.5	3262.4	3264.7	3279.1	3291.7	3300.0
8.5°	3269.4	3249.9	3252.7	3267.5	3280.1	3289.4
9°	3257.8	3236.9	3240.1	3255.0	3268.5	3278.7
9.5°	3245.7	3223.4	3226.7	3242.0	3255.9	3266.6
10°	3233.6	3209.9	3213.2	3228.1	3243.4	3255.0
10.5°	3220.2	3195.1	3198.8	3213.7	3229.9	3242.4
11°	3206.7	3179.7	3183.9	3198.3	3216.0	3229.0
11.5°	3192.8	3164.4	3168.6	3183.0	3201.1	3215.0
12°	3177.9	3147.7	3152.3	3166.7	3185.8	3200.2
12.5°	3162.1	3130.5	3135.6	3149.6	3169.5	3185.3
13°	3146.3	3112.9	3118.4	3132.4	3153.3	3169.5
13.5°	3129.1	3094.3	3100.3	3115.2	3136.1	3152.8
14°	3111.9	3075.7	3081.3	3096.6	3118.4	3135.6
14.5°	3094.3	3057.1	3062.2	3077.6	3099.4	3117.5
15°	3075.7	3037.2	3042.3	3058.5	3080.8	3099.9
15.5°	3057.1	3016.3	3022.3	3038.1	3060.8	3080.4
16°	3037.6	2995.8	3001.4	3017.6	3040.4	3060.8
16.5°	3017.6	2974.9	2980.5	2996.7	3020.0	3041.3
17°	2996.7	2953.1	2958.2	2974.5	2999.1	3020.9
17.5°	2975.8	2930.8	2935.9	2952.2	2976.8	2999.5
18°	2954.0	2907.1	2912.7	2928.9	2954.9	2978.2
18.5°	2931.7	2883.9	2889.5	2905.7	2931.7	2955.9
19°	2909.4	2859.7	2865.3	2882.0	2908.5	2933.1
19.5°	2885.7	2835.1	2840.2	2857.9	2884.8	2910.4
20°	2862.5	2810.0	2815.6	2832.8	2860.7	2886.7
20.5°	2837.9	2784.9	2789.6	2807.7	2836.0	2862.1
21°	2812.8	2759.4	2763.6	2782.2	2810.0	2837.0



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBLS4050CSD-HCD8TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2736.2	2680.9	2683.2	2702.3	2731.5	2759.9
23°	2710.2	2653.5	2655.4	2675.3	2703.7	2733.4
23.5°	2683.7	2626.1	2628.9	2647.9	2676.3	2706.9
24°	2657.2	2596.8	2600.1	2619.6	2648.9	2680.0
24.5°	2629.4	2567.1	2572.2	2590.8	2620.5	2652.6
25°	2601.9	2535.1	2543.0	2561.5	2592.2	2624.7
25.5°	2573.6	2503.0	2513.2	2532.7	2562.9	2595.0
26°	2544.8	2470.0	2481.7	2503.5	2534.1	2564.3
26.5°	2513.2	2436.6	2450.5	2473.8	2504.9	2533.2
27°	2481.7	2401.8	2417.6	2442.6	2474.7	2501.2
27.5°	2449.6	2366.9	2384.1	2412.0	2443.6	2468.2
28°	2416.2	2330.7	2349.3	2381.3	2411.1	2434.7
28.5°	2382.3	2294.5	2315.4	2349.3	2378.1	2400.8
29°	2347.9	2257.3	2280.5	2319.1	2345.1	2365.1
29.5°	2314.0	2221.5	2245.2	2288.0	2311.7	2330.2
30°	2278.2	2184.4	2209.0	2255.9	2275.9	2294.5
30.5°	2242.5	2146.3	2173.2	2223.4	2241.5	2257.8
31°	2206.2	2107.8	2136.6	2192.3	2206.2	2221.1
31.5°	2169.5	2070.6	2099.9	2159.3	2170.9	2183.9
32°	2133.3	2032.0	2062.7	2126.3	2134.2	2147.2
32.5°	2097.5	1993.0	2026.5	2092.0	2099.4	2109.6
33°	2060.4	1954.0	1989.3	2059.5	2063.6	2071.1
33.5°	2022.8	1913.6	1952.2	2025.5	2026.9	2032.5
34°	1985.1	1875.1	1914.1	1991.2	1990.7	1994.0
34.5°	1947.5	1835.1	1875.5	1955.9	1954.5	1954.0
35°	1909.9	1797.5	1837.9	1920.6	1917.8	1913.6
35.5°	1872.7	1752.4	1799.8	1885.7	1882.0	1875.5
36°	1834.2	1692.5	1761.3	1850.4	1844.4	1834.6
36.5°	1796.6	1621.0	1723.6	1815.1	1807.2	1798.9
37°	1758.9	1547.1	1687.4	1779.4	1770.1	1740.4
37.5°	1721.3	1475.1	1647.5	1744.1	1732.9	1681.4
38°	1686.9	1399.4	1589.9	1709.2	1695.8	1604.3
38.5°	1628.9	1324.7	1522.5	1674.9	1657.2	1533.2
39°	1565.3	1247.1	1453.8	1641.4	1624.2	1461.2
39.5°	1496.1	1169.5	1386.0	1607.1	1566.2	1388.3
40°	1426.8	1095.2	1317.7	1573.6	1506.7	1310.7
40.5°	1358.1	1021.8	1248.0	1541.1	1438.0	1234.6
41°	1286.6	952.2	1175.1	1509.1	1370.6	1157.0
41.5°	1214.6	884.3	1102.6	1477.0	1306.1	1081.3
42°	1140.3	816.5	1032.5	1445.0	1241.1	1009.3
42.5°	1069.2	748.3	966.1	1414.3	1173.2	941.9
43°	999.5	682.8	901.1	1383.2	1103.1	874.6
43.5°	933.1	620.1	836.5	1352.5	1033.0	805.9



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	738.5	445.9	648.4	1259.6	839.3	609.4
45.5°	675.3	393.4	588.5	1213.2	776.6	549.9
46°	612.6	342.8	533.2	1163.5	714.8	493.3
46.5°	554.6	298.7	477.5	1105.4	654.0	436.6
47°	499.3	258.7	424.5	1052.5	594.5	384.1
47.5°	448.7	224.3	373.0	987.9	537.9	335.8
48°	398.5	195.5	326.1	922.4	483.0	291.7
48.5°	347.9	171.9	283.3	846.7	430.6	253.6
49°	297.7	153.3	244.8	776.6	380.4	220.6
49.5°	256.4	134.7	210.9	706.9	332.6	192.8
50°	221.1	116.1	183.5	642.8	288.4	169.1
50.5°	190.0	97.5	158.8	580.6	248.0	150.5
51°	164.9	79.0	140.7	523.9	213.7	131.4
51.5°	143.5	66.4	122.6	467.7	184.9	112.9
52°	124.9	62.2	104.5	417.1	159.3	94.3
52.5°	107.3	59.5	86.4	367.4	140.7	75.7
53°	89.6	57.1	70.1	322.3	121.7	66.0
53.5°	72.9	54.8	57.6	280.1	103.1	62.7
54°	59.9	52.5	53.4	243.4	84.1	60.4
54.5°	53.4	50.2	51.6	209.0	67.8	58.1
55°	51.6	48.3	49.7	179.3	56.2	55.7
55.5°	49.7	46.4	47.8	158.4	52.9	53.4
56°	47.8	44.6	46.0	137.9	51.1	51.1
56.5°	46.0	42.7	44.1	117.5	49.2	49.2
57°	44.6	40.9	42.7	96.6	47.4	47.4
57.5°	42.7	39.0	40.9	76.6	45.5	45.5
58°	41.3	37.6	39.5	66.0	44.1	43.7
58.5°	39.9	36.2	38.1	57.1	42.7	41.8
59°	38.6	34.8	36.7	50.2	41.3	39.9
59.5°	37.2	33.4	35.3	44.6	39.9	38.6
60°	35.8	32.0	34.4	40.4	38.6	37.2
60.5°	34.8	30.7	33.0	38.1	37.2	35.8
61°	33.4	29.3	32.0	36.7	35.8	34.4
61.5°	32.0	28.3	30.7	35.3	34.4	33.0
62°	31.1	26.9	29.7	33.9	33.4	31.6
62.5°	29.7	26.0	28.3	33.0	32.0	30.2
63°	28.8	24.6	27.4	31.6	31.1	28.8
63.5°	27.9	23.7	26.5	30.7	29.7	27.9
64°	26.5	22.8	25.5	29.7	28.8	26.5
64.5°	25.5	21.8	24.6	28.3	27.9	25.5
65°	24.6	20.9	23.7	27.4	26.9	24.6
65.5°	23.7	20.0	22.8	26.5	25.5	23.7
66°	22.8	19.0	21.8	25.5	24.6	22.3



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	20.4	16.7	19.5	22.8	21.8	20.0
68°	19.5	15.8	18.6	21.8	20.9	19.0
68.5°	18.6	15.3	18.1	20.9	20.4	18.1
69°	18.1	14.4	17.2	20.0	19.5	17.2
69.5°	17.2	13.9	16.7	19.5	18.6	16.7
70°	16.7	13.5	15.8	18.6	17.6	15.8
70.5°	15.8	12.5	15.3	17.6	17.2	15.3
71°	15.3	12.1	14.4	17.2	16.3	14.4
71.5°	14.4	11.6	13.9	16.3	15.8	13.9
72°	13.9	11.1	13.5	15.3	14.9	13.0
72.5°	13.5	10.2	12.5	14.9	14.4	12.5
73°	12.5	9.8	12.1	13.9	13.5	12.1
73.5°	12.1	9.3	11.6	13.5	13.0	11.1
74°	11.6	8.8	11.1	12.5	12.1	10.7
74.5°	10.7	8.4	10.2	12.1	11.6	10.2
75°	10.2	7.9	9.8	11.6	11.1	9.8
75.5°	9.8	7.4	9.3	10.7	10.7	9.3
76°	9.3	7.0	8.8	10.2	9.8	8.8
76.5°	8.8	7.0	8.4	9.8	9.3	8.4
77°	8.4	6.5	7.9	8.8	8.8	7.9
77.5°	7.9	6.0	7.4	8.4	8.4	7.4
78°	7.4	5.6	7.0	7.9	7.9	7.0
78.5°	7.0	5.1	6.5	7.4	7.0	6.5
79°	6.5	4.6	6.0	7.0	6.5	6.0
79.5°	6.0	4.6	5.6	6.5	6.0	5.6
80°	5.6	4.2	5.1	5.6	5.6	5.1
80.5°	5.1	3.7	4.6	5.1	5.1	4.6
81°	4.6	3.7	4.2	4.6	4.6	4.2
81.5°	4.2	3.3	3.7	4.2	4.2	4.2
82°	3.7	2.8	3.7	3.7	3.7	3.7
82.5°	3.3	2.8	3.3	3.7	3.3	3.3
83°	2.8	2.3	2.8	3.3	2.8	2.8
83.5°	2.8	1.9	2.3	2.8	2.3	2.8
84°	2.3	1.9	1.9	2.3	1.9	2.3
84.5°	1.9	1.4	1.9	1.9	1.9	1.9
85°	1.4	1.4	1.4	1.9	1.4	1.9
85.5°	1.4	0.9	0.9	1.4	0.9	1.4
86°	0.9	0.5	0.9	0.9	0.9	0.9
86.5°	0.5	0.5	0.5	0.9	0.5	0.9
87°	0.5	0.0	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.5	0.5
88°	0.0	0.0	0.0	0.0	0.0	0.5
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776801

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRH-5000lm-3000K

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

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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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°	2811.4	2869.0	2929.4	2976.3	3000.9	3015.3	3007.4	2975.4	2920.6	2877.8	2832.8
22°	2785.9	2844.4	2906.2	2954.9	2980.5	2994.9	2987.0	2954.0	2898.3	2855.1	2808.2



44°	736.6	1021.8	1556.0	1357.2	1137.5	1403.6	1684.6	1247.1	896.4	1083.6	1432.4
44.5°	672.1	954.0	1524.4	1285.6	1061.8	1329.3	1653.0	1174.2	829.5	1014.4	1402.2



66.5°	21.4	24.6	28.3	26.5	23.2	26.0	28.8	25.1	20.9	23.2	24.6
67°	20.4	23.7	27.4	25.5	22.3	25.1	27.9	24.2	20.0	22.3	23.7



89°	0.0	0.0	0.5	0.5	0.9	0.9	0.5	0.5	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0

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21.5°	2787.3	2733.4	2737.1	2756.2	2784.0	2811.4
22°	2762.2	2706.9	2710.2	2729.7	2757.5	2785.9



44°	866.2	558.8	772.9	1321.9	964.7	736.6
44.5°	802.1	503.0	710.2	1290.8	902.0	672.1



66.5°	21.8	18.1	20.9	24.6	23.7	21.4
67°	21.4	17.6	20.4	23.7	22.8	20.4

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Peachtree City, GA 30269

Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)