

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: P776694

Luminaire Tested: HCDJBS4050CSD-HCD62TRMW-5000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776694
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B057-HCD62TRMW)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD62TRMW-5000lm-5000K
Description: 6 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

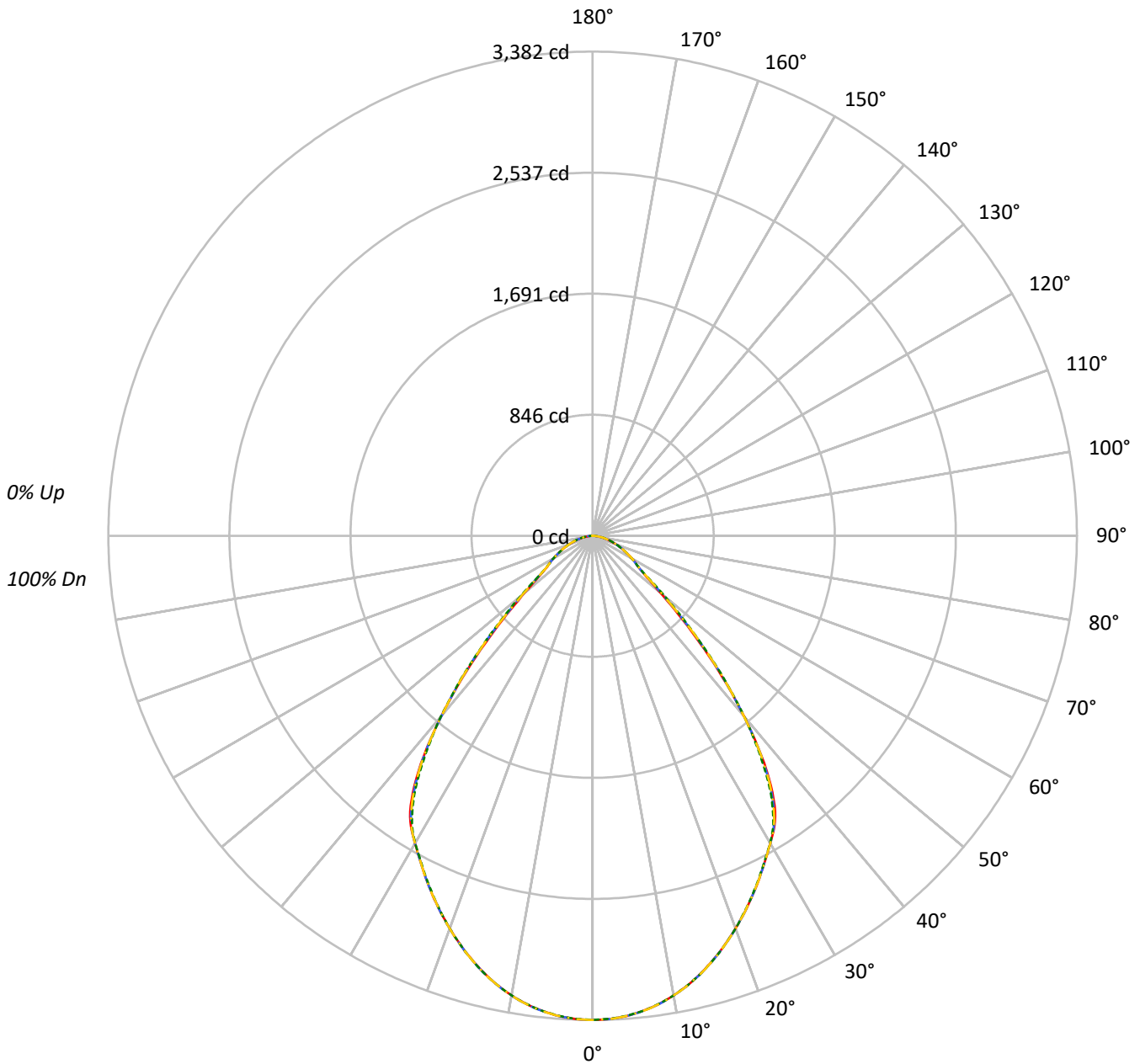
Lumens per Lamp: N/A
Luminaire Lumens: 5384.2 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P776694
CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P776694
 CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	51	45	68	57	50	45	56	50	45	55	49	45	54	49	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	40				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	185413	185413	185413	185413
5°	184437	184355	184437	184355
10°	181493	181493	181493	181493
15°	176528	176613	176528	176613
20°	170272	170220	170272	170220
25°	163515	163249	163515	163249
30°	157081	156841	157081	156841
35°	146488	144346	146488	144346
40°	117577	117721	117577	117721
45°	82272	84761	82272	84761
50°	52595	56032	52595	56032
55°	38259	38861	38259	38861
60°	34745	34581	34745	34581
65°	31223	31093	31223	31093
70°	27681	28082	27681	28082
75°	24146	25396	24146	25396
80°	19920	22509	19920	22509
85°	12202	18618	12202	18618

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 84761 cd/sqm



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.1	5.9
10°-20°	874.7	16.2
20°-30°	1243.9	23.1
30°-40°	1329.7	24.7
40°-50°	840.2	15.6
50°-60°	382.4	7.1
60°-70°	239.5	4.4
70°-80°	125.8	2.3
80°-90°	31.0	0.6
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°	2435.7	45.2
0°-40°	3765.4	69.9
0°-60°	4988.0	92.6
0°-90°	5384.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5384.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3382	3382	3382	3382	3382	
5°	3352	3350	3352	3350	3352	317
15°	3110	3112	3110	3112	3110	874
25°	2703	2699	2703	2699	2703	1244
35°	2189	2157	2189	2157	2189	1335
45°	1061	1093	1061	1093	1061	828
55°	400	407	400	407	400	378
65°	241	240	241	240	241	239
75°	114	120	114	120	114	122
85°	19	30	19	30	19	26
90°	0	2	0	2	0	



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2
0.5°	3381.7	3382.2	3381.7	3381.7	3380.2	3381.7	3381.7	3382.2	3381.7	3382.2	3381.7
1°	3380.7	3381.2	3381.2	3380.7	3379.2	3380.7	3381.2	3381.2	3380.7	3381.2	3381.2
1.5°	3379.2	3379.7	3379.2	3379.2	3377.8	3379.2	3379.2	3379.7	3379.2	3379.7	3379.2
2°	3377.3	3377.3	3377.3	3377.3	3375.4	3377.3	3377.3	3377.3	3377.3	3377.3	3377.3
2.5°	3374.4	3374.4	3374.9	3374.4	3372.9	3374.4	3374.9	3374.4	3374.4	3374.4	3374.9
3°	3371.0	3371.5	3371.5	3371.5	3369.5	3371.5	3371.5	3371.5	3371.0	3371.5	3371.5
3.5°	3367.1	3367.1	3367.6	3367.6	3365.7	3367.6	3367.6	3367.1	3367.1	3367.1	3367.6
4°	3362.7	3362.7	3362.7	3362.7	3361.3	3362.7	3362.7	3362.7	3362.7	3362.7	3362.7
4.5°	3357.4	3357.9	3357.9	3357.9	3355.9	3357.9	3357.9	3357.9	3357.4	3357.9	3357.9
5°	3351.6	3352.1	3352.1	3352.1	3350.1	3352.1	3352.1	3352.1	3351.6	3352.1	3352.1
5.5°	3345.3	3345.8	3345.8	3345.8	3343.8	3345.8	3345.8	3345.8	3345.3	3345.8	3345.8
6°	3338.5	3338.5	3338.5	3338.5	3337.0	3338.5	3338.5	3338.5	3338.5	3338.5	3338.5
6.5°	3330.7	3330.7	3331.2	3331.2	3329.7	3331.2	3331.2	3330.7	3330.7	3330.7	3331.2
7°	3322.5	3323.0	3323.0	3323.0	3321.5	3323.0	3323.0	3323.0	3322.5	3323.0	3323.0
7.5°	3313.7	3313.7	3314.2	3314.2	3312.8	3314.2	3314.2	3313.7	3313.7	3313.7	3314.2
8°	3304.0	3304.5	3305.0	3305.0	3303.5	3305.0	3305.0	3304.5	3304.0	3304.5	3305.0
8.5°	3293.8	3294.3	3294.8	3294.8	3293.4	3294.8	3294.8	3294.3	3293.8	3294.3	3294.8
9°	3283.2	3283.6	3284.1	3284.6	3283.2	3284.6	3284.1	3283.6	3283.2	3283.6	3284.1
9.5°	3272.0	3272.5	3273.0	3273.5	3272.0	3273.5	3273.0	3272.5	3272.0	3272.5	3273.0
10°	3260.4	3260.4	3260.8	3261.8	3260.4	3261.8	3260.8	3260.4	3260.4	3260.4	3260.8
10.5°	3247.7	3247.7	3248.7	3249.2	3247.7	3249.2	3248.7	3247.7	3247.7	3247.7	3248.7
11°	3234.6	3234.6	3235.6	3236.6	3234.6	3236.6	3235.6	3234.6	3234.6	3234.6	3235.6
11.5°	3220.6	3221.1	3222.0	3223.0	3221.5	3223.0	3222.0	3221.1	3220.6	3221.1	3222.0
12°	3206.5	3207.0	3207.9	3208.9	3207.5	3208.9	3207.9	3207.0	3206.5	3207.0	3207.9
12.5°	3191.9	3192.4	3192.9	3193.9	3192.9	3193.9	3192.9	3192.4	3191.9	3192.4	3192.9
13°	3176.4	3176.9	3177.9	3178.8	3177.9	3178.8	3177.9	3176.9	3176.4	3176.9	3177.9
13.5°	3160.9	3161.4	3162.3	3163.3	3161.9	3163.3	3162.3	3161.4	3160.9	3161.4	3162.3
14°	3144.4	3145.4	3146.3	3146.8	3145.8	3146.8	3146.3	3145.4	3144.4	3145.4	3146.3
14.5°	3127.9	3128.4	3129.3	3130.3	3129.3	3130.3	3129.3	3128.4	3127.9	3128.4	3129.3
15°	3110.4	3111.4	3112.4	3113.3	3111.9	3113.3	3112.4	3111.4	3110.4	3111.4	3112.4
15.5°	3092.9	3093.4	3094.4	3095.4	3093.9	3095.4	3094.4	3093.4	3092.9	3093.4	3094.4
16°	3074.5	3075.5	3076.4	3077.4	3076.0	3077.4	3076.4	3075.5	3074.5	3075.5	3076.4
16.5°	3056.6	3057.0	3058.0	3059.0	3057.5	3059.0	3058.0	3057.0	3056.6	3057.0	3058.0
17°	3037.6	3038.1	3039.1	3040.1	3038.6	3040.1	3039.1	3038.1	3037.6	3038.1	3039.1
17.5°	3018.7	3018.7	3019.7	3020.6	3019.2	3020.6	3019.7	3018.7	3018.7	3018.7	3019.7
18°	2998.8	2999.8	3000.3	3000.8	2999.3	3000.8	3000.3	2999.8	2998.8	2999.8	3000.3
18.5°	2978.9	2979.9	2980.4	2980.9	2979.4	2980.9	2980.4	2979.9	2978.9	2979.9	2980.4
19°	2959.0	2960.0	2960.5	2960.5	2959.5	2960.5	2960.5	2960.0	2959.0	2960.0	2960.5
19.5°	2939.1	2939.6	2940.1	2940.6	2939.1	2940.6	2940.1	2939.6	2939.1	2939.6	2940.1
20°	2918.7	2919.2	2919.7	2919.7	2917.8	2919.7	2919.7	2919.2	2918.7	2919.2	2919.7
20.5°	2898.4	2898.4	2898.4	2898.4	2896.9	2898.4	2898.4	2898.4	2898.4	2898.4	2898.4
21°	2876.5	2877.0	2877.5	2877.0	2875.6	2877.0	2877.5	2877.0	2876.5	2877.0	2877.5



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2813.4	2813.4	2813.0	2812.5	2810.5	2812.5	2813.0	2813.4	2813.4	2813.4	2813.0
23°	2791.6	2791.6	2791.1	2790.6	2788.7	2790.6	2791.1	2791.6	2791.6	2791.6	2791.1
23.5°	2769.8	2769.8	2769.3	2768.3	2766.9	2768.3	2769.3	2769.8	2769.8	2769.8	2769.3
24°	2747.9	2747.9	2747.5	2746.0	2744.1	2746.0	2747.5	2747.9	2747.9	2747.9	2747.5
24.5°	2726.1	2725.6	2725.1	2723.7	2721.7	2723.7	2725.1	2725.6	2726.1	2725.6	2725.1
25°	2703.3	2703.3	2702.8	2701.4	2698.9	2701.4	2702.8	2703.3	2703.3	2703.3	2702.8
25.5°	2681.0	2681.0	2680.5	2678.5	2676.6	2678.5	2680.5	2681.0	2681.0	2681.0	2680.5
26°	2658.7	2658.7	2658.2	2656.7	2654.3	2656.7	2658.2	2658.7	2658.7	2658.7	2658.2
26.5°	2635.8	2635.8	2635.4	2633.4	2631.5	2633.4	2635.4	2635.8	2635.8	2635.8	2635.4
27°	2613.0	2613.5	2613.0	2611.1	2608.7	2611.1	2613.0	2613.5	2613.0	2613.5	2613.0
27.5°	2590.7	2590.7	2590.2	2588.8	2586.4	2588.8	2590.2	2590.7	2590.7	2590.7	2590.2
28°	2567.4	2568.4	2567.9	2566.5	2564.5	2566.5	2567.9	2568.4	2567.4	2568.4	2567.9
28.5°	2545.6	2546.6	2546.1	2544.6	2542.7	2544.6	2546.1	2546.6	2545.6	2546.6	2546.1
29°	2523.8	2524.7	2524.2	2523.3	2520.8	2523.3	2524.2	2524.7	2523.8	2524.7	2524.2
29.5°	2502.4	2502.9	2502.9	2501.4	2499.5	2501.4	2502.9	2502.9	2502.4	2502.9	2502.9
30°	2481.5	2481.5	2481.5	2479.6	2477.7	2479.6	2481.5	2481.5	2481.5	2481.5	2481.5
30.5°	2460.2	2460.7	2459.7	2458.2	2455.8	2458.2	2459.7	2460.7	2460.2	2460.7	2459.7
31°	2439.3	2439.3	2438.4	2435.9	2433.0	2435.9	2438.4	2439.3	2439.3	2439.3	2438.4
31.5°	2417.0	2417.0	2415.1	2412.6	2408.8	2412.6	2415.1	2417.0	2417.0	2417.0	2415.1
32°	2394.2	2392.7	2389.3	2385.0	2379.6	2385.0	2389.3	2392.7	2394.2	2392.7	2389.3
32.5°	2369.4	2366.1	2360.7	2353.4	2347.1	2353.4	2360.7	2366.1	2369.4	2366.1	2360.7
33°	2341.3	2337.4	2328.2	2320.0	2313.2	2320.0	2328.2	2337.4	2341.3	2337.4	2328.2
33.5°	2308.8	2305.4	2292.8	2284.0	2277.3	2284.0	2292.8	2305.4	2308.8	2305.4	2292.8
34°	2271.9	2270.5	2255.4	2245.7	2239.9	2245.7	2255.4	2270.5	2271.9	2270.5	2255.4
34.5°	2231.6	2229.2	2215.6	2205.0	2199.6	2205.0	2215.6	2229.2	2231.6	2229.2	2215.6
35°	2188.9	2185.1	2173.4	2161.8	2156.9	2161.8	2173.4	2185.1	2188.9	2185.1	2173.4
35.5°	2143.8	2138.5	2129.3	2117.1	2110.8	2117.1	2129.3	2138.5	2143.8	2138.5	2129.3
36°	2095.8	2089.0	2083.2	2071.0	2063.3	2071.0	2083.2	2089.0	2095.8	2089.0	2083.2
36.5°	2045.3	2038.0	2034.1	2022.5	2012.8	2022.5	2034.1	2038.0	2045.3	2038.0	2034.1
37°	1992.4	1985.6	1982.7	1972.0	1962.3	1972.0	1982.7	1985.6	1992.4	1985.6	1982.7
37.5°	1937.1	1932.2	1929.3	1920.6	1910.9	1920.6	1929.3	1932.2	1937.1	1932.2	1929.3
38°	1879.8	1876.9	1874.0	1868.2	1859.9	1868.2	1874.0	1876.9	1879.8	1876.9	1874.0
38.5°	1821.1	1821.1	1816.3	1814.3	1807.0	1814.3	1816.3	1821.1	1821.1	1821.1	1816.3
39°	1762.9	1763.9	1759.0	1758.5	1755.6	1758.5	1759.0	1763.9	1762.9	1763.9	1759.0
39.5°	1703.2	1704.7	1699.8	1701.3	1700.8	1701.3	1699.8	1704.7	1703.2	1704.7	1699.8
40°	1643.0	1645.9	1641.6	1644.0	1645.0	1644.0	1641.6	1645.9	1643.0	1645.9	1641.6
40.5°	1581.9	1586.3	1583.4	1587.2	1588.2	1587.2	1583.4	1586.3	1581.9	1586.3	1583.4
41°	1522.2	1527.1	1526.1	1529.5	1532.9	1529.5	1526.1	1527.1	1522.2	1527.1	1526.1
41.5°	1463.0	1466.4	1469.3	1473.7	1475.1	1473.7	1469.3	1466.4	1463.0	1466.4	1469.3
42°	1403.8	1406.7	1412.5	1416.4	1420.3	1416.4	1412.5	1406.7	1403.8	1406.7	1412.5
42.5°	1345.1	1348.0	1356.3	1361.1	1364.5	1361.1	1356.3	1348.0	1345.1	1348.0	1356.3
43°	1286.4	1290.3	1300.9	1305.3	1308.7	1305.3	1300.9	1290.3	1286.4	1290.3	1300.9
43.5°	1228.6	1232.0	1245.1	1249.5	1252.4	1249.5	1245.1	1232.0	1228.6	1232.0	1245.1



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL4050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1061.2	1067.1	1081.6	1089.9	1093.3	1089.9	1081.6	1067.1	1061.2	1067.1	1081.6
45.5°	1007.4	1014.6	1029.7	1038.9	1042.3	1038.9	1029.7	1014.6	1007.4	1014.6	1029.7
46°	955.9	964.2	978.7	989.4	993.8	989.4	978.7	964.2	955.9	964.2	978.7
46.5°	906.0	915.2	929.2	941.4	946.2	941.4	929.2	915.2	906.0	915.2	929.2
47°	857.4	867.6	881.2	894.3	899.6	894.3	881.2	867.6	857.4	867.6	881.2
47.5°	811.3	821.0	835.6	849.2	854.0	849.2	835.6	821.0	811.3	821.0	835.6
48°	767.7	777.4	791.9	806.0	811.3	806.0	791.9	777.4	767.7	777.4	791.9
48.5°	726.9	735.1	749.7	764.3	770.1	764.3	749.7	735.1	726.9	735.1	749.7
49°	687.6	695.4	709.4	725.0	730.3	725.0	709.4	695.4	687.6	695.4	709.4
49.5°	650.7	657.5	672.1	686.6	692.9	686.6	672.1	657.5	650.7	657.5	672.1
50°	616.7	621.6	636.6	651.2	657.0	651.2	636.6	621.6	616.7	621.6	636.6
50.5°	585.2	588.6	603.6	617.2	623.1	617.2	603.6	588.6	585.2	588.6	603.6
51°	556.1	559.0	572.6	584.7	591.5	584.7	572.6	559.0	556.1	559.0	572.6
51.5°	528.9	531.3	544.0	555.1	561.4	555.1	544.0	531.3	528.9	531.3	544.0
52°	504.2	506.6	518.2	527.5	532.8	527.5	518.2	506.6	504.2	506.6	518.2
52.5°	481.4	483.3	493.5	501.3	506.1	501.3	493.5	483.3	481.4	483.3	493.5
53°	460.5	463.9	471.2	477.5	481.4	477.5	471.2	463.9	460.5	463.9	471.2
53.5°	444.0	445.9	450.8	456.1	459.0	456.1	450.8	445.9	444.0	445.9	450.8
54°	428.5	429.0	432.4	436.2	438.7	436.2	432.4	429.0	428.5	429.0	432.4
54.5°	414.4	414.4	415.9	418.8	421.7	418.8	415.9	414.4	414.4	414.4	415.9
55°	400.3	400.8	402.8	404.7	406.6	404.7	402.8	400.8	400.3	400.8	402.8
55.5°	387.2	389.2	391.1	392.6	396.0	392.6	391.1	389.2	387.2	389.2	391.1
56°	378.0	379.0	380.4	381.4	385.3	381.4	380.4	379.0	378.0	379.0	380.4
56.5°	370.2	370.2	370.2	371.2	374.6	371.2	370.2	370.2	370.2	370.2	370.2
57°	363.0	363.0	362.0	361.5	363.9	361.5	362.0	363.0	363.0	363.0	362.0
57.5°	356.2	355.7	354.7	353.7	353.3	353.7	354.7	355.7	356.2	355.7	354.7
58°	348.9	348.4	347.4	346.5	345.5	346.5	347.4	348.4	348.9	348.4	347.4
58.5°	341.1	340.6	339.7	338.7	338.2	338.7	339.7	340.6	341.1	340.6	339.7
59°	333.4	332.9	332.4	331.4	330.5	331.4	332.4	332.9	333.4	332.9	332.4
59.5°	325.1	325.1	324.1	323.7	323.2	323.7	324.1	325.1	325.1	325.1	324.1
60°	316.9	316.9	316.4	315.9	315.4	315.9	316.4	316.9	316.9	316.9	316.4
60.5°	308.6	308.6	308.1	307.6	307.2	307.6	308.1	308.6	308.6	308.6	308.1
61°	300.9	300.9	300.4	299.9	299.4	299.9	300.4	300.9	300.9	300.9	300.4
61.5°	293.1	293.1	292.6	292.1	291.6	292.1	292.6	293.1	293.1	293.1	292.6
62°	285.3	285.3	284.8	284.4	283.9	284.4	284.8	285.3	285.3	285.3	284.8
62.5°	277.6	277.6	277.1	276.6	276.1	276.6	277.1	277.6	277.6	277.6	277.1
63°	270.3	269.8	269.8	268.8	268.8	268.8	269.8	269.8	270.3	269.8	269.8
63.5°	262.5	262.5	262.0	261.5	261.5	261.5	262.0	262.5	262.5	262.5	262.0
64°	255.2	255.2	254.8	254.3	253.8	254.3	254.8	255.2	255.2	255.2	254.8
64.5°	248.0	248.0	247.5	247.0	247.0	247.0	247.5	248.0	248.0	248.0	247.5
65°	240.7	241.2	240.7	240.2	239.7	240.2	240.7	241.2	240.7	241.2	240.7
65.5°	233.4	233.9	233.9	233.4	232.9	233.4	233.9	233.9	233.4	233.9	233.9
66°	226.6	227.1	226.6	226.1	226.1	226.1	226.6	227.1	226.6	227.1	226.6



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	205.7	206.7	206.7	206.2	206.2	206.2	206.7	206.7	205.7	206.7	206.7
68°	199.0	199.9	200.4	199.9	199.9	199.9	200.4	199.9	199.0	199.9	200.4
68.5°	192.6	193.6	194.1	193.6	193.6	193.6	194.1	193.6	192.6	193.6	194.1
69°	185.8	187.3	187.8	187.8	187.3	187.8	187.8	187.3	185.8	187.3	187.8
69.5°	179.1	181.0	182.0	181.5	181.5	181.5	182.0	181.0	179.1	181.0	182.0
70°	172.7	174.2	175.7	175.7	175.2	175.7	175.7	174.2	172.7	174.2	175.7
70.5°	166.4	168.4	169.8	169.4	169.4	169.4	169.8	168.4	166.4	168.4	169.8
71°	160.6	162.6	164.0	164.0	163.5	164.0	164.0	162.6	160.6	162.6	164.0
71.5°	154.3	156.2	158.2	158.2	157.7	158.2	158.2	156.2	154.3	156.2	158.2
72°	148.5	150.4	152.4	152.4	151.9	152.4	152.4	150.4	148.5	150.4	152.4
72.5°	142.7	144.6	147.0	146.5	146.5	146.5	147.0	144.6	142.7	144.6	147.0
73°	136.4	138.8	141.2	141.2	140.7	141.2	141.2	138.8	136.4	138.8	141.2
73.5°	130.5	133.0	135.9	135.9	135.4	135.9	135.9	133.0	130.5	133.0	135.9
74°	125.2	127.1	130.0	130.5	130.0	130.5	130.0	127.1	125.2	127.1	130.0
74.5°	119.4	121.8	124.7	125.2	124.7	125.2	124.7	121.8	119.4	121.8	124.7
75°	114.0	116.0	119.4	119.9	119.9	119.9	119.4	116.0	114.0	116.0	119.4
75.5°	108.7	110.6	114.5	114.5	114.5	114.5	114.5	110.6	108.7	110.6	114.5
76°	103.4	105.3	109.2	109.7	109.7	109.7	109.2	105.3	103.4	105.3	109.2
76.5°	98.0	100.0	103.8	104.8	104.3	104.8	103.8	100.0	98.0	100.0	103.8
77°	92.7	95.1	99.0	100.0	99.5	100.0	99.0	95.1	92.7	95.1	99.0
77.5°	87.3	89.8	94.1	95.1	94.6	95.1	94.1	89.8	87.3	89.8	94.1
78°	82.5	84.9	88.8	90.3	89.8	90.3	88.8	84.9	82.5	84.9	88.8
78.5°	77.6	79.6	83.9	85.4	85.4	85.4	83.9	79.6	77.6	79.6	83.9
79°	72.8	74.7	79.1	80.6	80.6	80.6	79.1	74.7	72.8	74.7	79.1
79.5°	67.9	69.9	74.7	76.2	76.2	76.2	74.7	69.9	67.9	69.9	74.7
80°	63.1	65.0	69.9	71.3	71.3	71.3	69.9	65.0	63.1	65.0	69.9
80.5°	58.7	60.7	65.5	67.0	67.0	67.0	65.5	60.7	58.7	60.7	65.5
81°	53.9	55.8	60.7	62.6	62.6	62.6	60.7	55.8	53.9	55.8	60.7
81.5°	49.5	51.0	56.3	58.2	58.2	58.2	56.3	51.0	49.5	51.0	56.3
82°	45.1	46.6	51.9	53.9	53.9	53.9	51.9	46.6	45.1	46.6	51.9
82.5°	40.3	42.2	47.6	50.0	50.0	50.0	47.6	42.2	40.3	42.2	47.6
83°	35.9	37.8	43.2	45.6	45.6	45.6	43.2	37.8	35.9	37.8	43.2
83.5°	31.5	33.5	39.3	41.7	41.2	41.7	39.3	33.5	31.5	33.5	39.3
84°	27.7	29.1	35.4	37.4	37.4	37.4	35.4	29.1	27.7	29.1	35.4
84.5°	23.3	24.7	31.5	33.5	33.5	33.5	31.5	24.7	23.3	24.7	31.5
85°	19.4	20.9	27.7	29.6	29.6	29.6	27.7	20.9	19.4	20.9	27.7
85.5°	15.5	17.5	23.8	25.7	25.7	25.7	23.8	17.5	15.5	17.5	23.8
86°	12.6	14.1	20.4	21.8	21.8	21.8	20.4	14.1	12.6	14.1	20.4
86.5°	10.2	11.6	16.5	18.0	18.4	18.0	16.5	11.6	10.2	11.6	16.5
87°	7.8	9.2	13.6	14.6	14.6	14.6	13.6	9.2	7.8	9.2	13.6
87.5°	5.8	6.8	10.2	11.2	11.2	11.2	10.2	6.8	5.8	6.8	10.2
88°	3.9	4.9	7.3	7.8	8.2	7.8	7.3	4.9	3.9	4.9	7.3
88.5°	1.9	2.9	4.9	5.8	6.3	5.8	4.9	2.9	1.9	2.9	4.9



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.5	0.5	1.0	1.5	1.0	0.5	0.5	0.0	0.5	0.5



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3382.2	3382.2	3382.2	3382.2	3382.2	3382.2
0.5°	3381.7	3380.2	3381.7	3381.7	3382.2	3381.7
1°	3380.7	3379.2	3380.7	3381.2	3381.2	3380.7
1.5°	3379.2	3377.8	3379.2	3379.2	3379.7	3379.2
2°	3377.3	3375.4	3377.3	3377.3	3377.3	3377.3
2.5°	3374.4	3372.9	3374.4	3374.9	3374.4	3374.4
3°	3371.5	3369.5	3371.5	3371.5	3371.5	3371.0
3.5°	3367.6	3365.7	3367.6	3367.6	3367.1	3367.1
4°	3362.7	3361.3	3362.7	3362.7	3362.7	3362.7
4.5°	3357.9	3355.9	3357.9	3357.9	3357.9	3357.4
5°	3352.1	3350.1	3352.1	3352.1	3352.1	3351.6
5.5°	3345.8	3343.8	3345.8	3345.8	3345.8	3345.3
6°	3338.5	3337.0	3338.5	3338.5	3338.5	3338.5
6.5°	3331.2	3329.7	3331.2	3331.2	3330.7	3330.7
7°	3323.0	3321.5	3323.0	3323.0	3323.0	3322.5
7.5°	3314.2	3312.8	3314.2	3314.2	3313.7	3313.7
8°	3305.0	3303.5	3305.0	3305.0	3304.5	3304.0
8.5°	3294.8	3293.4	3294.8	3294.8	3294.3	3293.8
9°	3284.6	3283.2	3284.6	3284.1	3283.6	3283.2
9.5°	3273.5	3272.0	3273.5	3273.0	3272.5	3272.0
10°	3261.8	3260.4	3261.8	3260.8	3260.4	3260.4
10.5°	3249.2	3247.7	3249.2	3248.7	3247.7	3247.7
11°	3236.6	3234.6	3236.6	3235.6	3234.6	3234.6
11.5°	3223.0	3221.5	3223.0	3222.0	3221.1	3220.6
12°	3208.9	3207.5	3208.9	3207.9	3207.0	3206.5
12.5°	3193.9	3192.9	3193.9	3192.9	3192.4	3191.9
13°	3178.8	3177.9	3178.8	3177.9	3176.9	3176.4
13.5°	3163.3	3161.9	3163.3	3162.3	3161.4	3160.9
14°	3146.8	3145.8	3146.8	3146.3	3145.4	3144.4
14.5°	3130.3	3129.3	3130.3	3129.3	3128.4	3127.9
15°	3113.3	3111.9	3113.3	3112.4	3111.4	3110.4
15.5°	3095.4	3093.9	3095.4	3094.4	3093.4	3092.9
16°	3077.4	3076.0	3077.4	3076.4	3075.5	3074.5
16.5°	3059.0	3057.5	3059.0	3058.0	3057.0	3056.6
17°	3040.1	3038.6	3040.1	3039.1	3038.1	3037.6
17.5°	3020.6	3019.2	3020.6	3019.7	3018.7	3018.7
18°	3000.8	2999.3	3000.8	3000.3	2999.8	2998.8
18.5°	2980.9	2979.4	2980.9	2980.4	2979.9	2978.9
19°	2960.5	2959.5	2960.5	2960.5	2960.0	2959.0
19.5°	2940.6	2939.1	2940.6	2940.1	2939.6	2939.1
20°	2919.7	2917.8	2919.7	2919.7	2919.2	2918.7
20.5°	2898.4	2896.9	2898.4	2898.4	2898.4	2898.4
21°	2877.0	2875.6	2877.0	2877.5	2877.0	2876.5



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2812.5	2810.5	2812.5	2813.0	2813.4	2813.4
23°	2790.6	2788.7	2790.6	2791.1	2791.6	2791.6
23.5°	2768.3	2766.9	2768.3	2769.3	2769.8	2769.8
24°	2746.0	2744.1	2746.0	2747.5	2747.9	2747.9
24.5°	2723.7	2721.7	2723.7	2725.1	2725.6	2726.1
25°	2701.4	2698.9	2701.4	2702.8	2703.3	2703.3
25.5°	2678.5	2676.6	2678.5	2680.5	2681.0	2681.0
26°	2656.7	2654.3	2656.7	2658.2	2658.7	2658.7
26.5°	2633.4	2631.5	2633.4	2635.4	2635.8	2635.8
27°	2611.1	2608.7	2611.1	2613.0	2613.5	2613.0
27.5°	2588.8	2586.4	2588.8	2590.2	2590.7	2590.7
28°	2566.5	2564.5	2566.5	2567.9	2568.4	2567.4
28.5°	2544.6	2542.7	2544.6	2546.1	2546.6	2545.6
29°	2523.3	2520.8	2523.3	2524.2	2524.7	2523.8
29.5°	2501.4	2499.5	2501.4	2502.9	2502.9	2502.4
30°	2479.6	2477.7	2479.6	2481.5	2481.5	2481.5
30.5°	2458.2	2455.8	2458.2	2459.7	2460.7	2460.2
31°	2435.9	2433.0	2435.9	2438.4	2439.3	2439.3
31.5°	2412.6	2408.8	2412.6	2415.1	2417.0	2417.0
32°	2385.0	2379.6	2385.0	2389.3	2392.7	2394.2
32.5°	2353.4	2347.1	2353.4	2360.7	2366.1	2369.4
33°	2320.0	2313.2	2320.0	2328.2	2337.4	2341.3
33.5°	2284.0	2277.3	2284.0	2292.8	2305.4	2308.8
34°	2245.7	2239.9	2245.7	2255.4	2270.5	2271.9
34.5°	2205.0	2199.6	2205.0	2215.6	2229.2	2231.6
35°	2161.8	2156.9	2161.8	2173.4	2185.1	2188.9
35.5°	2117.1	2110.8	2117.1	2129.3	2138.5	2143.8
36°	2071.0	2063.3	2071.0	2083.2	2089.0	2095.8
36.5°	2022.5	2012.8	2022.5	2034.1	2038.0	2045.3
37°	1972.0	1962.3	1972.0	1982.7	1985.6	1992.4
37.5°	1920.6	1910.9	1920.6	1929.3	1932.2	1937.1
38°	1868.2	1859.9	1868.2	1874.0	1876.9	1879.8
38.5°	1814.3	1807.0	1814.3	1816.3	1821.1	1821.1
39°	1758.5	1755.6	1758.5	1759.0	1763.9	1762.9
39.5°	1701.3	1700.8	1701.3	1699.8	1704.7	1703.2
40°	1644.0	1645.0	1644.0	1641.6	1645.9	1643.0
40.5°	1587.2	1588.2	1587.2	1583.4	1586.3	1581.9
41°	1529.5	1532.9	1529.5	1526.1	1527.1	1522.2
41.5°	1473.7	1475.1	1473.7	1469.3	1466.4	1463.0
42°	1416.4	1420.3	1416.4	1412.5	1406.7	1403.8
42.5°	1361.1	1364.5	1361.1	1356.3	1348.0	1345.1
43°	1305.3	1308.7	1305.3	1300.9	1290.3	1286.4
43.5°	1249.5	1252.4	1249.5	1245.1	1232.0	1228.6



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1089.9	1093.3	1089.9	1081.6	1067.1	1061.2
45.5°	1038.9	1042.3	1038.9	1029.7	1014.6	1007.4
46°	989.4	993.8	989.4	978.7	964.2	955.9
46.5°	941.4	946.2	941.4	929.2	915.2	906.0
47°	894.3	899.6	894.3	881.2	867.6	857.4
47.5°	849.2	854.0	849.2	835.6	821.0	811.3
48°	806.0	811.3	806.0	791.9	777.4	767.7
48.5°	764.3	770.1	764.3	749.7	735.1	726.9
49°	725.0	730.3	725.0	709.4	695.4	687.6
49.5°	686.6	692.9	686.6	672.1	657.5	650.7
50°	651.2	657.0	651.2	636.6	621.6	616.7
50.5°	617.2	623.1	617.2	603.6	588.6	585.2
51°	584.7	591.5	584.7	572.6	559.0	556.1
51.5°	555.1	561.4	555.1	544.0	531.3	528.9
52°	527.5	532.8	527.5	518.2	506.6	504.2
52.5°	501.3	506.1	501.3	493.5	483.3	481.4
53°	477.5	481.4	477.5	471.2	463.9	460.5
53.5°	456.1	459.0	456.1	450.8	445.9	444.0
54°	436.2	438.7	436.2	432.4	429.0	428.5
54.5°	418.8	421.7	418.8	415.9	414.4	414.4
55°	404.7	406.6	404.7	402.8	400.8	400.3
55.5°	392.6	396.0	392.6	391.1	389.2	387.2
56°	381.4	385.3	381.4	380.4	379.0	378.0
56.5°	371.2	374.6	371.2	370.2	370.2	370.2
57°	361.5	363.9	361.5	362.0	363.0	363.0
57.5°	353.7	353.3	353.7	354.7	355.7	356.2
58°	346.5	345.5	346.5	347.4	348.4	348.9
58.5°	338.7	338.2	338.7	339.7	340.6	341.1
59°	331.4	330.5	331.4	332.4	332.9	333.4
59.5°	323.7	323.2	323.7	324.1	325.1	325.1
60°	315.9	315.4	315.9	316.4	316.9	316.9
60.5°	307.6	307.2	307.6	308.1	308.6	308.6
61°	299.9	299.4	299.9	300.4	300.9	300.9
61.5°	292.1	291.6	292.1	292.6	293.1	293.1
62°	284.4	283.9	284.4	284.8	285.3	285.3
62.5°	276.6	276.1	276.6	277.1	277.6	277.6
63°	268.8	268.8	268.8	269.8	269.8	270.3
63.5°	261.5	261.5	261.5	262.0	262.5	262.5
64°	254.3	253.8	254.3	254.8	255.2	255.2
64.5°	247.0	247.0	247.0	247.5	248.0	248.0
65°	240.2	239.7	240.2	240.7	241.2	240.7
65.5°	233.4	232.9	233.4	233.9	233.9	233.4
66°	226.1	226.1	226.1	226.6	227.1	226.6



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	206.2	206.2	206.2	206.7	206.7	205.7
68°	199.9	199.9	199.9	200.4	199.9	199.0
68.5°	193.6	193.6	193.6	194.1	193.6	192.6
69°	187.8	187.3	187.8	187.8	187.3	185.8
69.5°	181.5	181.5	181.5	182.0	181.0	179.1
70°	175.7	175.2	175.7	175.7	174.2	172.7
70.5°	169.4	169.4	169.4	169.8	168.4	166.4
71°	164.0	163.5	164.0	164.0	162.6	160.6
71.5°	158.2	157.7	158.2	158.2	156.2	154.3
72°	152.4	151.9	152.4	152.4	150.4	148.5
72.5°	146.5	146.5	146.5	147.0	144.6	142.7
73°	141.2	140.7	141.2	141.2	138.8	136.4
73.5°	135.9	135.4	135.9	135.9	133.0	130.5
74°	130.5	130.0	130.5	130.0	127.1	125.2
74.5°	125.2	124.7	125.2	124.7	121.8	119.4
75°	119.9	119.9	119.9	119.4	116.0	114.0
75.5°	114.5	114.5	114.5	114.5	110.6	108.7
76°	109.7	109.7	109.7	109.2	105.3	103.4
76.5°	104.8	104.3	104.8	103.8	100.0	98.0
77°	100.0	99.5	100.0	99.0	95.1	92.7
77.5°	95.1	94.6	95.1	94.1	89.8	87.3
78°	90.3	89.8	90.3	88.8	84.9	82.5
78.5°	85.4	85.4	85.4	83.9	79.6	77.6
79°	80.6	80.6	80.6	79.1	74.7	72.8
79.5°	76.2	76.2	76.2	74.7	69.9	67.9
80°	71.3	71.3	71.3	69.9	65.0	63.1
80.5°	67.0	67.0	67.0	65.5	60.7	58.7
81°	62.6	62.6	62.6	60.7	55.8	53.9
81.5°	58.2	58.2	58.2	56.3	51.0	49.5
82°	53.9	53.9	53.9	51.9	46.6	45.1
82.5°	50.0	50.0	50.0	47.6	42.2	40.3
83°	45.6	45.6	45.6	43.2	37.8	35.9
83.5°	41.7	41.2	41.7	39.3	33.5	31.5
84°	37.4	37.4	37.4	35.4	29.1	27.7
84.5°	33.5	33.5	33.5	31.5	24.7	23.3
85°	29.6	29.6	29.6	27.7	20.9	19.4
85.5°	25.7	25.7	25.7	23.8	17.5	15.5
86°	21.8	21.8	21.8	20.4	14.1	12.6
86.5°	18.0	18.4	18.0	16.5	11.6	10.2
87°	14.6	14.6	14.6	13.6	9.2	7.8
87.5°	11.2	11.2	11.2	10.2	6.8	5.8
88°	7.8	8.2	7.8	7.3	4.9	3.9
88.5°	5.8	6.3	5.8	4.9	2.9	1.9



TEST NUMBER: P776694

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	1.0	1.5	1.0	0.5	0.5	0.0



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°

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

Scaled Data Report



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

Scaled Data Report





21.5°	2855.7	2856.1	2855.7	2855.7	2854.2	2855.7	2855.7	2856.1	2855.7	2856.1	2855.7
22°	2834.8	2834.8	2834.8	2833.8	2832.4	2833.8	2834.8	2834.8	2834.8	2834.8	2834.8



44°	1171.4	1174.8	1189.3	1195.6	1198.6	1195.6	1189.3	1174.8	1171.4	1174.8	1189.3
44.5°	1115.1	1120.4	1134.5	1142.3	1145.2	1142.3	1134.5	1120.4	1115.1	1120.4	1134.5



66.5°	219.3	220.3	220.3	219.8	219.3	219.8	220.3	220.3	219.3	220.3	220.3
67°	212.5	213.5	213.5	213.0	212.5	213.0	213.5	213.5	212.5	213.5	213.5



89°	1.0	1.5	2.9	3.9	4.4	3.9	2.9	1.5	1.0	1.5	2.9
89.5°	0.5	0.5	1.5	2.4	2.9	2.4	1.5	0.5	0.5	0.5	1.5

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

Scaled Data Report





21.5°	2855.7	2854.2	2855.7	2855.7	2856.1	2855.7
22°	2833.8	2832.4	2833.8	2834.8	2834.8	2834.8



44°	1195.6	1198.6	1195.6	1189.3	1174.8	1171.4
44.5°	1142.3	1145.2	1142.3	1134.5	1120.4	1115.1

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

Scaled Data Report



66.5°	219.8	219.3	219.8	220.3	220.3	219.3
67°	213.0	212.5	213.0	213.5	213.5	212.5



89°	3.9	4.4	3.9	2.9	1.5	1.0
89.5°	2.4	2.9	2.4	1.5	0.5	0.5

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

Scaled Data Report



(END OF REPORT)