

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P584685

Luminaire Tested: **HCC8W45D010SL-HM82555835-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8W45D010SL-HM82555835-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4717.9 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

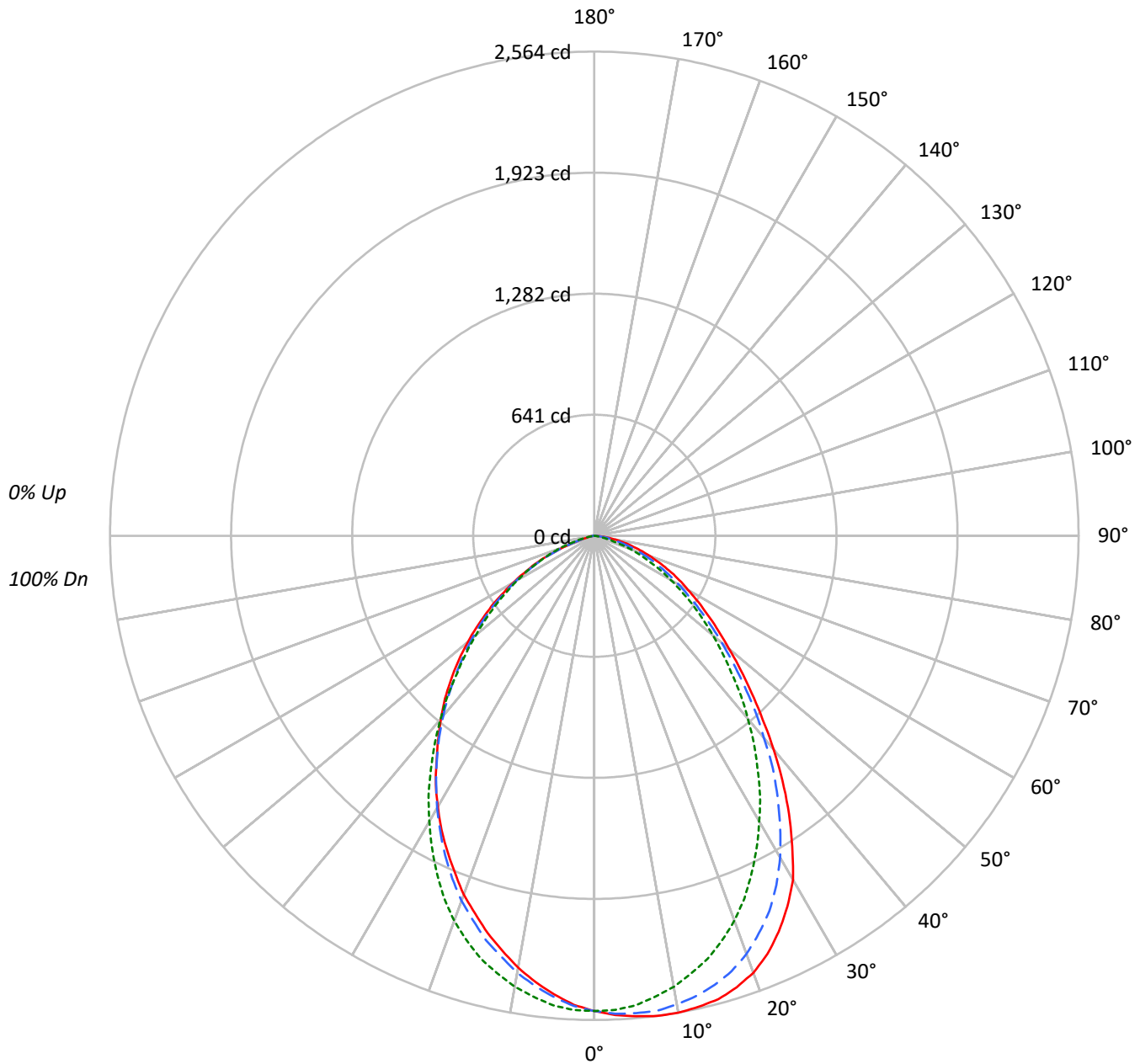
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		69
5	81	70	62	56	79	69	62	56	67	60	55		65	59	55		63
6	76	64	56	50	74	63	55	50	61	54	49		60	54	49		58
7	71	58	51	45	69	58	50	45	56	49	45		55	49	44		54
8	66	54	46	41	65	53	46	41	52	45	40		51	45	40		50
9	62	50	42	37	61	49	42	37	48	41	37		47	41	37		46
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	77606	77606	77606
5°	79063	77265	75472
10°	80297	75919	72716
15°	81103	74029	69566
20°	80795	71173	66356
25°	78667	67062	62655
30°	74917	62169	59011
35°	67654	56741	54817
40°	59439	50929	50788
45°	51306	44765	46692
50°	44663	39261	41875
55°	39595	34096	36483
60°	35332	28813	30281
65°	31849	23393	23889
70°	28292	17527	14137
75°	24377	10163	6088
80°	18770	3623	1811
85°	12065	1203	1203

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.2	5.0
10°-20°	657.7	13.9
20°-30°	930.2	19.7
30°-40°	980.2	20.8
40°-50°	833.0	17.7
50°-60°	599.9	12.7
60°-70°	346.0	7.3
70°-80°	118.4	2.5
80°-90°	16.3	0.3
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°	1824.1	38.7
0°-40°	2804.3	59.4
0°-60°	4237.2	89.8
0°-90°	4717.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4717.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2517	2517	2517	2517	2517	
5°	2554	2537	2496	2452	2438	244
15°	2540	2462	2319	2217	2179	715
25°	2312	2193	1971	1869	1842	1060
35°	1797	1692	1507	1453	1456	1119
45°	1176	1122	1026	1033	1071	914
55°	736	679	634	658	679	663
65°	436	375	321	314	327	434
75°	205	153	85	54	51	216
85°	34	20	3	3	3	46
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7
2.5°	2540.5	2543.9	2540.5	2540.5	2537.1	2533.7	2530.3	2526.9	2520.1	2513.3	2513.3
5°	2554.2	2561.0	2554.2	2554.2	2543.9	2537.1	2530.3	2520.1	2506.5	2496.1	2496.1
7.5°	2564.4	2564.4	2564.4	2554.2	2547.3	2537.1	2520.1	2503.1	2485.9	2468.9	2462.1
10°	2564.4	2564.4	2561.0	2547.3	2540.5	2520.1	2503.1	2479.1	2455.3	2431.4	2424.6
12.5°	2554.2	2557.6	2550.8	2537.1	2520.1	2496.1	2472.3	2441.6	2414.4	2387.1	2373.4
15°	2540.5	2537.1	2530.3	2513.3	2492.7	2462.1	2438.2	2404.1	2366.6	2332.5	2318.9
17.5°	2506.5	2506.5	2496.1	2479.1	2451.8	2417.8	2380.3	2342.7	2301.8	2264.4	2247.2
20°	2462.1	2462.1	2448.4	2428.0	2400.7	2356.3	2315.5	2271.2	2223.4	2185.9	2168.9
22.5°	2397.3	2400.7	2383.7	2359.8	2329.1	2278.0	2237.0	2182.5	2134.7	2090.4	2076.8
25°	2312.1	2318.9	2301.8	2278.0	2237.0	2192.7	2141.5	2090.4	2035.9	1991.5	1971.0
27.5°	2213.1	2216.6	2199.5	2175.7	2134.7	2087.0	2035.9	1981.3	1930.2	1882.4	1861.9
30°	2104.0	2090.4	2083.6	2052.9	2008.5	1967.6	1909.6	1865.3	1810.8	1769.8	1746.0
32.5°	1950.6	1957.4	1937.0	1913.0	1878.9	1831.2	1783.4	1732.3	1681.1	1650.5	1633.4
35°	1797.2	1804.0	1793.8	1769.8	1732.3	1691.5	1643.7	1606.2	1561.8	1524.3	1507.3
37.5°	1636.8	1636.8	1630.0	1616.4	1589.1	1551.6	1503.9	1466.4	1428.8	1398.1	1387.9
40°	1476.6	1469.8	1466.4	1456.2	1432.2	1398.1	1367.5	1336.8	1299.2	1278.8	1265.2
42.5°	1319.7	1319.7	1312.9	1302.6	1278.8	1261.7	1231.1	1196.9	1169.7	1149.2	1149.2
45°	1176.5	1179.9	1169.7	1162.8	1149.2	1122.0	1094.6	1070.7	1046.9	1033.3	1026.5
47.5°	1050.3	1050.3	1040.1	1033.3	1019.6	995.8	971.8	951.4	934.4	924.1	920.7
50°	931.0	931.0	931.0	913.9	896.9	879.8	862.7	838.9	828.6	821.8	818.4
52.5°	828.6	825.2	825.2	811.6	794.6	774.1	757.1	736.5	726.3	719.5	722.9
55°	736.5	736.5	733.1	716.1	699.1	678.6	661.6	644.6	637.6	630.8	634.2
56°	699.1	699.1	695.7	682.0	661.6	644.6	624.0	607.0	596.8	600.2	600.2
57°	671.8	665.0	665.0	648.0	630.8	607.0	589.9	572.9	566.1	562.7	562.7
58°	637.6	634.2	630.8	613.8	596.8	576.3	559.3	542.2	532.0	532.0	528.6
59°	603.6	603.6	596.8	583.1	566.1	545.6	528.6	511.5	501.3	497.8	497.8
60°	572.9	576.3	566.1	552.5	538.8	514.9	494.4	480.8	470.6	467.2	467.2
61°	545.6	545.6	538.8	521.8	504.7	487.6	467.2	450.1	443.3	436.5	436.5
62°	521.8	514.9	511.5	494.4	477.4	457.0	439.9	422.9	412.7	405.9	409.3
63°	491.0	487.6	480.8	467.2	450.1	429.7	409.3	395.5	385.3	375.1	378.5
64°	467.2	463.8	453.6	439.9	422.9	402.3	381.9	368.3	361.5	351.2	347.8
65°	436.5	433.1	429.7	412.7	395.5	375.1	358.1	344.4	334.2	327.4	320.6
66°	409.3	412.7	405.9	392.1	371.7	354.6	330.8	317.2	310.4	300.1	293.2
67°	385.3	385.3	378.5	364.9	344.4	327.4	310.4	293.2	283.0	272.8	269.4
67.5°	371.7	371.7	364.9	347.8	334.2	313.8	296.7	283.0	269.4	262.6	255.7
68°	358.1	358.1	354.6	341.0	324.0	303.5	286.4	269.4	255.7	245.5	242.1
69°	334.2	337.6	330.8	317.2	300.1	279.6	262.6	248.9	235.3	225.1	218.3
70°	313.8	310.4	303.5	289.8	272.8	259.1	242.1	225.1	211.4	197.8	194.4
71°	286.4	286.4	279.6	269.4	252.3	235.3	218.3	204.6	191.0	174.0	170.6
72°	266.0	266.0	259.1	245.5	231.9	214.9	197.8	180.8	170.6	153.4	146.6
72.5°	252.3	255.7	248.9	235.3	221.7	201.2	187.6	174.0	156.8	143.2	136.4
73°	245.5	242.1	238.7	225.1	208.0	194.4	177.4	163.6	146.6	133.0	126.2

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	153.4	153.4	150.0	136.4	122.8	109.1	95.5	81.9	68.2	54.5	47.7
80°	105.7	109.1	102.3	95.5	85.3	71.7	57.9	47.7	34.1	27.3	20.4
82.5°	68.2	68.2	64.7	57.9	51.1	40.9	34.1	23.9	17.0	13.6	10.2
85°	34.1	37.5	34.1	30.7	23.9	20.4	17.0	10.2	6.8	3.4	3.4
87.5°	13.6	13.6	13.6	10.2	10.2	6.8	3.4	3.4	3.4	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7	2516.7
2.5°	2506.5	2506.5	2499.5	2496.1	2492.7	2489.3	2485.9	2482.5	2482.5	2485.9
5°	2485.9	2479.1	2465.5	2462.1	2451.8	2448.4	2441.6	2438.2	2441.6	2438.2
7.5°	2455.3	2441.6	2424.6	2417.8	2404.1	2397.3	2387.1	2387.1	2380.3	2383.7
10°	2414.4	2393.9	2373.4	2359.8	2349.5	2339.3	2332.5	2325.7	2322.3	2322.3
12.5°	2363.2	2339.3	2318.9	2298.4	2281.4	2274.6	2260.8	2260.8	2254.0	2250.6
15°	2305.2	2274.6	2250.6	2230.2	2216.6	2202.9	2192.7	2185.9	2179.1	2179.1
17.5°	2230.2	2202.9	2179.1	2155.2	2134.7	2124.5	2114.2	2104.0	2104.0	2097.2
20°	2148.3	2117.6	2097.2	2073.4	2056.3	2039.3	2025.7	2025.7	2018.7	2022.1
22.5°	2056.3	2018.7	1998.3	1981.3	1964.2	1950.6	1937.0	1937.0	1933.6	1930.2
25°	1954.0	1923.3	1899.4	1878.9	1868.7	1855.1	1851.7	1844.9	1841.5	1841.5
27.5°	1844.9	1821.0	1790.3	1780.0	1766.4	1759.6	1759.6	1756.2	1749.4	1752.8
30°	1728.9	1701.7	1684.5	1677.7	1664.1	1664.1	1660.7	1653.9	1653.9	1657.3
32.5°	1616.4	1589.1	1575.5	1572.1	1558.4	1558.4	1555.0	1558.4	1558.4	1561.8
35°	1493.6	1469.8	1466.4	1456.2	1452.6	1452.6	1452.6	1459.6	1466.4	1456.2
37.5°	1377.7	1360.7	1350.4	1347.0	1350.4	1350.4	1353.8	1364.1	1360.7	1357.2
40°	1258.3	1244.7	1237.9	1237.9	1244.7	1251.5	1251.5	1261.7	1265.2	1261.7
42.5°	1139.0	1128.8	1128.8	1132.2	1139.0	1142.4	1152.6	1162.8	1166.2	1169.7
45°	1026.5	1026.5	1026.5	1029.9	1033.3	1040.1	1053.7	1063.9	1067.3	1070.7
47.5°	917.3	913.9	924.1	927.5	937.8	941.2	951.4	965.0	968.4	971.8
50°	815.0	821.8	825.2	835.5	842.3	842.3	855.9	862.7	872.9	872.9
52.5°	719.5	729.7	733.1	743.4	746.8	750.3	757.1	767.3	774.1	774.1
55°	634.2	637.6	644.6	648.0	658.2	661.6	668.4	671.8	682.0	678.6
56°	596.8	603.6	607.0	613.8	620.6	624.0	630.8	634.2	641.0	644.6
57°	562.7	566.1	576.3	579.7	586.5	586.5	589.9	600.2	600.2	603.6
58°	528.6	535.4	538.8	542.2	549.1	552.5	559.3	562.7	566.1	562.7
59°	497.8	501.3	504.7	504.7	511.5	511.5	521.8	528.6	532.0	532.0
60°	467.2	467.2	470.6	474.0	480.8	484.2	484.2	491.0	491.0	491.0
61°	436.5	436.5	439.9	443.3	446.7	446.7	453.6	453.6	457.0	460.4
62°	409.3	405.9	405.9	409.3	409.3	416.1	419.5	422.9	426.3	422.9
63°	378.5	375.1	375.1	375.1	375.1	381.9	381.9	385.3	392.1	388.7
64°	344.4	344.4	344.4	344.4	347.8	347.8	354.6	358.1	361.5	364.9
65°	320.6	313.8	310.4	310.4	313.8	317.2	320.6	324.0	327.4	327.4
66°	293.2	286.4	283.0	283.0	283.0	283.0	289.8	289.8	296.7	296.7
67°	262.6	255.7	252.3	248.9	248.9	248.9	259.1	255.7	255.7	255.7
67.5°	252.3	242.1	238.7	235.3	231.9	238.7	235.3	238.7	238.7	235.3
68°	238.7	231.9	225.1	218.3	218.3	218.3	221.7	225.1	221.7	218.3
69°	211.4	208.0	197.8	191.0	187.6	191.0	187.6	191.0	187.6	191.0
70°	187.6	177.4	167.2	163.6	160.2	160.2	160.2	156.8	160.2	156.8
71°	163.6	153.4	143.2	136.4	133.0	133.0	129.6	133.0	129.6	133.0
72°	139.8	129.6	115.9	109.1	109.1	109.1	109.1	105.7	109.1	105.7
72.5°	129.6	115.9	105.7	98.9	95.5	95.5	95.5	95.5	92.1	95.5
73°	119.4	105.7	92.1	88.7	88.7	88.7	85.3	81.9	85.3	85.3



TEST NUMBER: P584685

CATALOG NUMBER: HCC8W45D010SL-HM82555835-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	40.9	30.7	27.3	27.3	27.3	27.3	27.3	27.3	23.9	23.9
80°	17.0	13.6	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
82.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
85°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



— 0°-180° - - 45°-225° - - - 90°-270°

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report





74°	221.7	221.7	214.9	204.6	187.6	170.6	156.8	143.2	126.2	109.1	102.3
75°	204.6	201.2	194.4	184.2	170.6	153.4	139.8	122.8	109.1	92.1	85.3

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report





74°	98.9	81.9	75.1	68.2	68.2	68.2	64.7	64.7	64.7	68.2
75°	78.5	64.7	57.9	51.1	54.5	51.1	54.5	51.1	51.1	51.1

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)