

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



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: P584889

Luminaire Tested: **HCC8W50D010SL-HM82555935-81RWWH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584889  
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: HCC8W50D010SL-HM82555935-81RWWH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

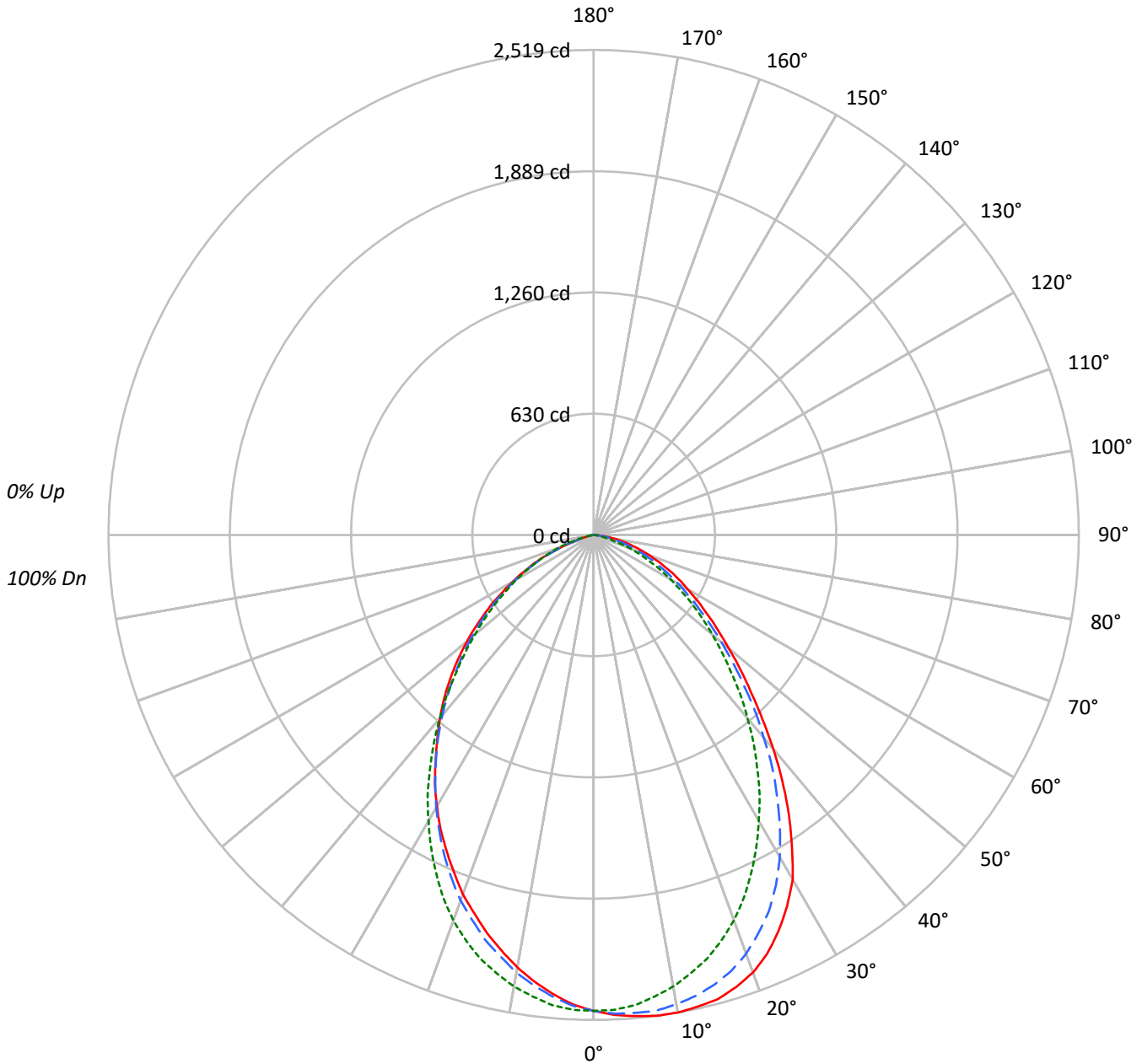
Lumens per Lamp: N/A  
Luminaire Lumens: 4634.3 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: 25 FT



TEST NUMBER: P584889  
CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab  
 1121 Highway 74 South  
 Peachtree City, GA 30269



TEST NUMBER: P584889

CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	76230	76230	76230
5°	77661	75899	74135
10°	78875	74573	71426
15°	79667	72717	68330
20°	79361	69910	65184
25°	77269	65874	61543
30°	73588	61066	57964
35°	66453	55732	53842
40°	58384	50028	49891
45°	50399	43971	45864
50°	43871	38565	41137
55°	38896	33499	35837
60°	34709	28302	29745
65°	31287	22969	23466
70°	27778	17211	13894
75°	23948	9972	5993
80°	18433	3569	1794
85°	11888	1203	1203



TEST NUMBER: P584889  
 CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.1	5.0
10°-20°	646.0	13.9
20°-30°	913.7	19.7
30°-40°	962.8	20.8
40°-50°	818.3	17.7
50°-60°	589.2	12.7
60°-70°	339.9	7.3
70°-80°	116.3	2.5
80°-90°	16.0	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°	1791.8	38.7
0°-40°	2754.6	59.4
0°-60°	4162.1	89.8
0°-90°	4634.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4634.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2472	2472	2472	2472	2472	
5°	2509	2492	2452	2408	2395	240
15°	2496	2418	2278	2177	2140	703
25°	2271	2154	1936	1836	1809	1042
35°	1765	1661	1480	1427	1430	1099
45°	1156	1102	1008	1015	1052	898
55°	724	667	623	646	667	651
65°	429	368	315	308	322	427
75°	201	151	84	54	50	212
85°	34	20	3	3	3	45
90°	0	0	0	0	0	



TEST NUMBER: P584889

CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1
2.5°	2495.5	2498.9	2495.5	2495.5	2492.2	2488.8	2485.4	2482.1	2475.4	2468.7	2468.7
5°	2508.9	2515.6	2508.9	2508.9	2498.9	2492.2	2485.4	2475.4	2462.0	2452.0	2452.0
7.5°	2519.0	2519.0	2519.0	2508.9	2502.1	2492.2	2475.4	2458.6	2441.9	2425.1	2418.4
10°	2519.0	2519.0	2515.6	2502.1	2495.5	2475.4	2458.6	2435.1	2411.8	2388.3	2381.6
12.5°	2508.9	2512.2	2505.5	2492.2	2475.4	2452.0	2428.5	2398.3	2371.6	2344.8	2331.3
15°	2495.5	2492.2	2485.4	2468.7	2448.6	2418.4	2395.0	2361.5	2324.7	2291.1	2277.8
17.5°	2462.0	2462.0	2452.0	2435.1	2408.4	2374.9	2338.0	2301.2	2261.0	2224.1	2207.4
20°	2418.4	2418.4	2405.1	2385.0	2358.1	2314.6	2274.4	2230.9	2183.9	2147.1	2130.4
22.5°	2354.8	2358.1	2341.4	2318.0	2287.8	2237.6	2197.4	2143.8	2096.8	2053.3	2039.9
25°	2271.0	2277.8	2261.0	2237.6	2197.4	2153.8	2103.6	2053.3	1999.7	1956.2	1936.1
27.5°	2173.9	2177.3	2160.5	2137.0	2096.8	2050.0	1999.7	1946.2	1895.9	1849.0	1828.9
30°	2066.7	2053.3	2046.7	2016.5	1972.9	1932.7	1875.8	1832.3	1778.6	1738.4	1715.0
32.5°	1916.0	1922.7	1902.5	1879.2	1845.6	1798.7	1751.9	1701.6	1651.3	1621.2	1604.5
35°	1765.3	1772.0	1761.9	1738.4	1701.6	1661.4	1614.5	1577.7	1534.1	1497.3	1480.5
37.5°	1607.8	1607.8	1601.2	1587.7	1561.0	1524.1	1477.1	1440.3	1403.5	1373.3	1363.3
40°	1450.4	1443.7	1440.3	1430.3	1406.9	1373.3	1343.2	1313.0	1276.2	1256.1	1242.8
42.5°	1296.3	1296.3	1289.6	1279.6	1256.1	1239.4	1209.2	1175.8	1148.9	1128.8	1128.8
45°	1155.7	1158.9	1148.9	1142.2	1128.8	1102.0	1075.2	1051.7	1028.4	1014.9	1008.3
47.5°	1031.6	1031.6	1021.6	1014.9	1001.6	978.1	954.6	934.5	917.8	907.7	904.5
50°	914.5	914.5	914.5	897.7	881.0	864.2	847.4	824.0	814.0	807.3	803.9
52.5°	814.0	810.6	810.6	797.3	780.4	760.3	743.6	723.5	713.4	706.8	710.2
55°	723.5	723.5	720.2	703.4	686.7	666.6	649.8	633.1	626.4	619.7	623.1
56°	686.7	686.7	683.3	670.0	649.8	633.1	613.0	596.2	586.1	589.5	589.5
57°	659.9	653.2	653.2	636.4	619.7	596.2	579.5	562.8	556.1	552.7	552.7
58°	626.4	623.1	619.7	603.0	586.1	566.1	549.3	532.6	522.5	522.5	519.2
59°	592.9	592.9	586.1	572.8	556.1	536.0	519.2	502.4	492.4	489.0	489.0
60°	562.8	566.1	556.1	542.6	529.2	505.8	485.7	472.3	462.2	458.9	458.9
61°	536.0	536.0	529.2	512.5	495.8	479.1	458.9	442.1	435.5	428.8	428.8
62°	512.5	505.8	502.4	485.7	469.0	448.9	432.1	415.3	405.3	398.6	401.9
63°	482.3	479.1	472.3	458.9	442.1	422.0	401.9	388.6	378.5	368.5	371.9
64°	458.9	455.6	445.5	432.1	415.3	395.2	375.1	361.8	355.0	345.0	341.7
65°	428.8	425.4	422.0	405.3	388.6	368.5	351.8	338.3	328.3	321.6	314.8
66°	401.9	405.3	398.6	385.2	365.1	348.4	324.9	311.5	304.9	294.8	288.0
67°	378.5	378.5	371.9	358.4	338.3	321.6	304.9	288.0	278.0	267.9	264.7
67.5°	365.1	365.1	358.4	341.7	328.3	308.1	291.4	278.0	264.7	257.9	251.2
68°	351.8	351.8	348.4	334.9	318.2	298.1	281.4	264.7	251.2	241.2	237.8
69°	328.3	331.6	324.9	311.5	294.8	274.7	257.9	244.6	231.1	221.1	214.4
70°	308.1	304.9	298.1	284.8	267.9	254.6	237.8	221.1	207.7	194.3	190.9
71°	281.4	281.4	274.7	264.7	247.8	231.1	214.4	201.0	187.6	170.8	167.5
72°	261.3	261.3	254.6	241.2	227.7	211.0	194.3	177.6	167.5	150.7	144.0
72.5°	247.8	251.2	244.6	231.1	217.8	197.7	184.2	170.8	154.1	140.6	134.0
73°	241.2	237.8	234.5	221.1	204.3	190.9	174.2	160.7	144.0	130.7	123.9



TEST NUMBER: P584889  
 CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	150.7	150.7	147.4	134.0	120.6	107.2	93.8	80.4	67.0	53.5	46.9
80°	103.8	107.2	100.5	93.8	83.7	70.4	56.9	46.9	33.6	26.8	20.1
82.5°	67.0	67.0	63.6	56.9	50.3	40.2	33.6	23.5	16.7	13.4	10.1
85°	33.6	36.8	33.6	30.2	23.5	20.1	16.7	10.1	6.7	3.4	3.4
87.5°	13.4	13.4	13.4	10.1	10.1	6.7	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



TEST NUMBER: P584889

CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1	2472.1
2.5°	2462.0	2462.0	2455.3	2452.0	2448.6	2445.2	2441.9	2438.5	2438.5	2441.9
5°	2441.9	2435.1	2421.8	2418.4	2408.4	2405.1	2398.3	2395.0	2398.3	2395.0
7.5°	2411.8	2398.3	2381.6	2374.9	2361.5	2354.8	2344.8	2344.8	2338.0	2341.4
10°	2371.6	2351.4	2331.3	2318.0	2308.0	2297.9	2291.1	2284.5	2281.1	2281.1
12.5°	2321.3	2297.9	2277.8	2257.7	2240.9	2234.2	2220.9	2220.9	2214.1	2210.8
15°	2264.4	2234.2	2210.8	2190.7	2177.3	2163.8	2153.8	2147.1	2140.4	2140.4
17.5°	2190.7	2163.8	2140.4	2116.9	2096.8	2086.8	2076.7	2066.7	2066.7	2060.0
20°	2110.3	2080.1	2060.0	2036.6	2019.8	2003.1	1989.6	1989.6	1983.0	1986.4
22.5°	2019.8	1983.0	1962.9	1946.2	1929.4	1916.0	1902.5	1902.5	1899.3	1895.9
25°	1919.4	1889.2	1865.7	1845.6	1835.6	1822.2	1818.8	1812.2	1808.8	1808.8
27.5°	1812.2	1788.7	1758.5	1748.5	1735.1	1728.4	1728.4	1725.1	1718.3	1721.7
30°	1698.3	1671.4	1654.7	1648.1	1634.6	1634.6	1631.2	1624.6	1624.6	1627.9
32.5°	1587.7	1561.0	1547.5	1544.1	1530.8	1530.8	1527.4	1530.8	1530.8	1534.1
35°	1467.1	1443.7	1440.3	1430.3	1427.0	1427.0	1427.0	1433.7	1440.3	1430.3
37.5°	1353.2	1336.5	1326.5	1323.1	1326.5	1326.5	1329.9	1339.9	1336.5	1333.1
40°	1236.0	1222.7	1215.9	1215.9	1222.7	1229.3	1229.3	1239.4	1242.8	1239.4
42.5°	1118.7	1108.7	1108.7	1112.1	1118.7	1122.1	1132.2	1142.2	1145.6	1148.9
45°	1008.3	1008.3	1008.3	1011.5	1014.9	1021.6	1035.0	1045.1	1048.5	1051.7
47.5°	901.1	897.7	907.7	911.1	921.2	924.4	934.5	947.9	951.3	954.6
50°	800.5	807.3	810.6	820.6	827.4	827.4	840.7	847.4	857.5	857.5
52.5°	706.8	716.8	720.2	730.3	733.5	736.9	743.6	753.7	760.3	760.3
55°	623.1	626.4	633.1	636.4	646.5	649.8	656.5	659.9	670.0	666.6
56°	586.1	592.9	596.2	603.0	609.6	613.0	619.7	623.1	629.7	633.1
57°	552.7	556.1	566.1	569.4	576.1	576.1	579.5	589.5	589.5	592.9
58°	519.2	525.9	529.2	532.6	539.3	542.6	549.3	552.7	556.1	552.7
59°	489.0	492.4	495.8	495.8	502.4	502.4	512.5	519.2	522.5	522.5
60°	458.9	458.9	462.2	465.6	472.3	475.7	475.7	482.3	482.3	482.3
61°	428.8	428.8	432.1	435.5	438.8	438.8	445.5	445.5	448.9	452.2
62°	401.9	398.6	398.6	401.9	401.9	408.7	412.0	415.3	418.7	415.3
63°	371.9	368.5	368.5	368.5	368.5	375.1	375.1	378.5	385.2	381.9
64°	338.3	338.3	338.3	338.3	341.7	341.7	348.4	351.8	355.0	358.4
65°	314.8	308.1	304.9	304.9	308.1	311.5	314.8	318.2	321.6	321.6
66°	288.0	281.4	278.0	278.0	278.0	278.0	284.8	284.8	291.4	291.4
67°	257.9	251.2	247.8	244.6	244.6	244.6	254.6	251.2	251.2	251.2
67.5°	247.8	237.8	234.5	231.1	227.7	234.5	231.1	234.5	234.5	231.1
68°	234.5	227.7	221.1	214.4	214.4	214.4	217.8	221.1	217.8	214.4
69°	207.7	204.3	194.3	187.6	184.2	187.6	184.2	187.6	184.2	187.6
70°	184.2	174.2	164.1	160.7	157.5	157.5	157.5	154.1	157.5	154.1
71°	160.7	150.7	140.6	134.0	130.7	130.7	127.3	130.7	127.3	130.7
72°	137.4	127.3	113.9	107.2	107.2	107.2	107.2	103.8	107.2	103.8
72.5°	127.3	113.9	103.8	97.1	93.8	93.8	93.8	93.8	90.5	93.8
73°	117.3	103.8	90.5	87.1	87.1	87.1	83.7	80.4	83.7	83.7





TEST NUMBER: P584889  
CATALOG NUMBER: HCC8W50D010SL-HM82555935-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	40.2	30.2	26.8	26.8	26.8	26.8	26.8	26.8	23.5	23.5
80°	16.7	13.4	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
82.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
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  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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



— 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



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

Scaled Data Report



74°	217.8	217.8	211.0	201.0	184.2	167.5	154.1	140.6	123.9	107.2	100.5
75°	201.0	197.7	190.9	180.8	167.5	150.7	137.4	120.6	107.2	90.5	83.7

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



74°	97.1	80.4	73.6	67.0	67.0	67.0	63.6	63.6	63.6	67.0
75°	77.0	63.6	56.9	50.3	53.5	50.3	53.5	50.3	50.3	50.3

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

Scaled Data Report



(END OF REPORT)