

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: P593818

Luminaire Tested: **HCC8S50D010MB-HM82555950-81RWWH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P593818  
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: HCC8S50D010MB-HM82555950-81RWWH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

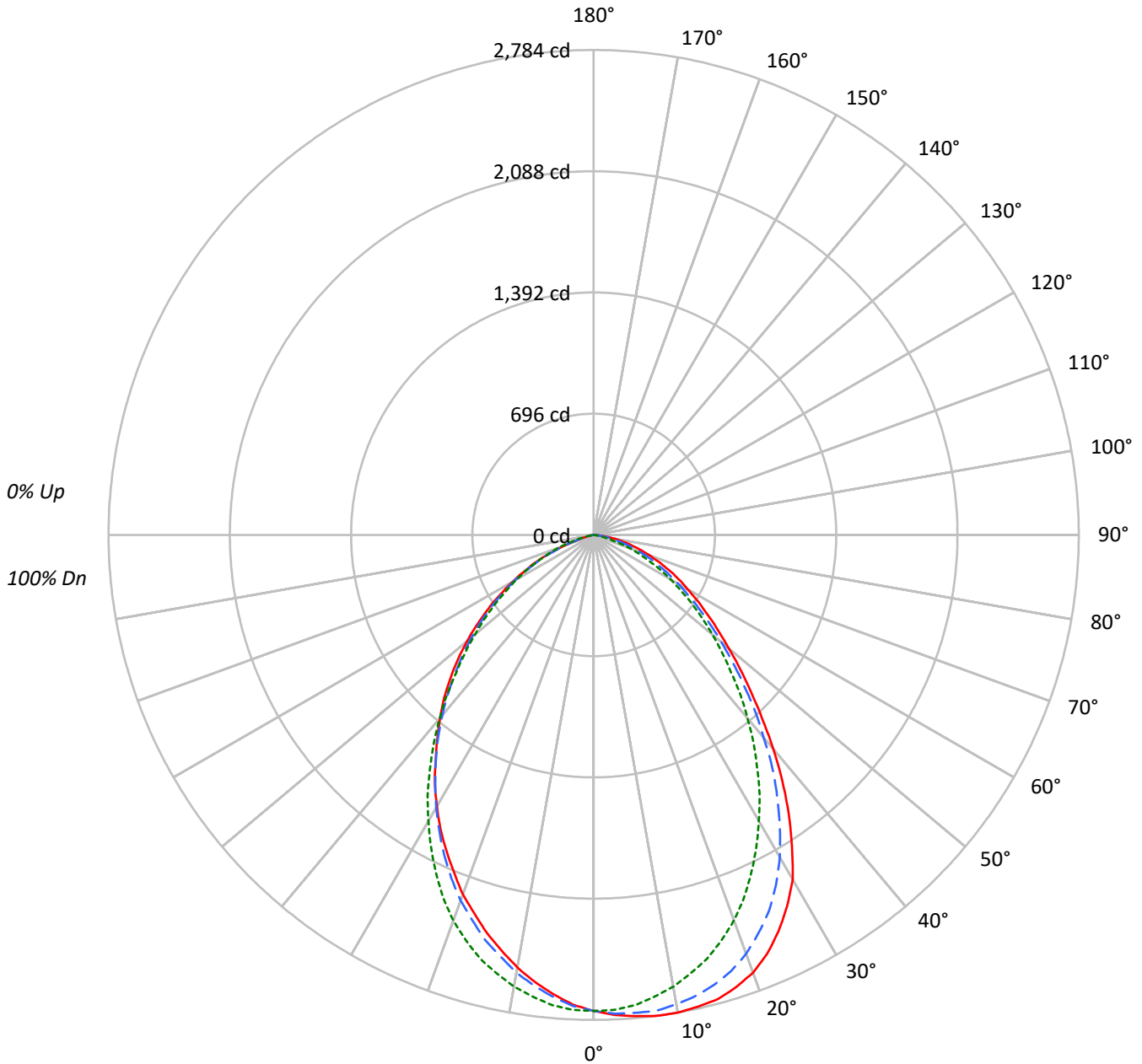
Lumens per Lamp: N/A  
Luminaire Lumens: 5122.5 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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: P593818  
CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

### Luminous Intensity Polar Plot





TEST NUMBER: P593818

CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

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

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

	0°	90°	180°
0°	84260	84260	84260
5°	85842	83892	81945
10°	87182	82429	78950
15°	88059	80379	75529
20°	87725	77274	72049
25°	85411	72815	68024
30°	81344	67500	64071
35°	73455	61605	59515
40°	64535	55297	55148
45°	55706	48602	50700
50°	48491	42629	45469
55°	42993	37026	39611
60°	38360	31280	32884
65°	34578	25392	25939
70°	30708	19024	15354
75°	26462	11033	6612
80°	20386	3942	1971
85°	13126	1309	1309



TEST NUMBER: P593818

CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.5	5.0
10°-20°	714.1	13.9
20°-30°	1010.0	19.7
30°-40°	1064.2	20.8
40°-50°	904.5	17.7
50°-60°	651.3	12.7
60°-70°	375.7	7.3
70°-80°	128.6	2.5
80°-90°	17.7	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°	1980.6	38.7
0°-40°	3044.8	59.4
0°-60°	4600.6	89.8
0°-90°	5122.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5122.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2732	2732	2732	2732	2732	
5°	2773	2755	2710	2662	2647	265
15°	2758	2673	2518	2407	2366	777
25°	2510	2381	2140	2029	1999	1151
35°	1951	1836	1636	1577	1581	1215
45°	1277	1218	1114	1122	1163	992
55°	800	737	689	715	737	720
65°	474	407	348	341	356	471
75°	222	167	93	59	56	234
85°	37	22	4	4	4	50
90°	0	0	0	0	0	



TEST NUMBER: P593818

CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5
2.5°	2758.4	2762.1	2758.4	2758.4	2754.7	2751.0	2747.3	2743.6	2736.2	2728.8	2728.8
5°	2773.2	2780.6	2773.2	2773.2	2762.1	2754.7	2747.3	2736.2	2721.4	2710.2	2710.2
7.5°	2784.3	2784.3	2784.3	2773.2	2765.9	2754.7	2736.2	2717.7	2699.1	2680.6	2673.3
10°	2784.3	2784.3	2780.6	2765.9	2758.4	2736.2	2717.7	2691.7	2665.8	2640.0	2632.5
12.5°	2773.2	2777.0	2769.5	2754.7	2736.2	2710.2	2684.4	2651.1	2621.4	2591.8	2576.9
15°	2758.4	2754.7	2747.3	2728.8	2706.6	2673.3	2647.3	2610.3	2569.6	2532.5	2517.8
17.5°	2721.4	2721.4	2710.2	2691.7	2662.2	2625.1	2584.4	2543.6	2499.2	2458.5	2439.9
20°	2673.3	2673.3	2658.4	2636.2	2606.6	2558.5	2514.1	2465.9	2414.1	2373.3	2354.8
22.5°	2602.9	2606.6	2588.0	2562.2	2528.9	2473.3	2428.8	2369.7	2317.8	2269.6	2254.9
25°	2510.3	2517.8	2499.2	2473.3	2428.8	2380.8	2325.3	2269.6	2210.5	2162.3	2140.1
27.5°	2403.0	2406.6	2388.2	2362.2	2317.8	2266.0	2210.5	2151.2	2095.7	2043.8	2021.6
30°	2284.5	2269.6	2262.2	2228.9	2180.8	2136.3	2073.5	2025.3	1966.0	1921.6	1895.7
32.5°	2117.9	2125.2	2103.0	2077.1	2040.1	1988.2	1936.4	1880.9	1825.4	1792.1	1773.5
35°	1951.3	1958.7	1947.6	1921.6	1880.9	1836.5	1784.6	1743.9	1695.8	1655.1	1636.5
37.5°	1777.2	1777.2	1769.9	1755.0	1725.4	1684.6	1632.9	1592.1	1551.4	1518.1	1507.0
40°	1603.2	1595.8	1592.1	1581.0	1555.1	1518.1	1484.7	1451.4	1410.6	1388.4	1373.7
42.5°	1432.8	1432.8	1425.5	1414.4	1388.4	1370.0	1336.6	1299.6	1270.0	1247.8	1247.8
45°	1277.4	1281.1	1270.0	1262.5	1247.8	1218.1	1188.5	1162.6	1136.7	1121.9	1114.5
47.5°	1140.4	1140.4	1129.3	1121.9	1107.0	1081.1	1055.3	1033.0	1014.5	1003.4	999.7
50°	1010.8	1010.8	1010.8	992.2	973.8	955.3	936.7	910.9	899.7	892.3	888.6
52.5°	899.7	896.0	896.0	881.2	862.7	840.5	821.9	799.7	788.6	781.2	785.0
55°	799.7	799.7	796.1	777.5	759.0	736.8	718.4	699.8	692.4	684.9	688.7
56°	759.0	759.0	755.3	740.6	718.4	699.8	677.6	659.1	648.0	651.6	651.6
57°	729.5	722.0	722.0	703.5	684.9	659.1	640.5	622.0	614.7	610.9	610.9
58°	692.4	688.7	684.9	666.4	648.0	625.8	607.2	588.7	577.6	577.6	573.9
59°	655.3	655.3	648.0	633.1	614.7	592.4	573.9	555.4	544.3	540.5	540.5
60°	622.0	625.8	614.7	599.8	585.0	559.1	536.9	522.1	511.0	507.2	507.2
61°	592.4	592.4	585.0	566.5	548.0	529.4	507.2	488.8	481.3	473.9	473.9
62°	566.5	559.1	555.4	536.9	518.3	496.1	477.7	459.1	448.0	440.6	444.3
63°	533.2	529.4	522.1	507.2	488.8	466.5	444.3	429.5	418.4	407.3	411.0
64°	507.2	503.6	492.4	477.7	459.1	436.9	414.6	399.9	392.4	381.3	377.7
65°	473.9	470.2	466.5	448.0	429.5	407.3	388.8	374.0	362.9	355.5	348.0
66°	444.3	448.0	440.6	425.7	403.5	385.1	359.1	344.4	336.9	325.8	318.4
67°	418.4	418.4	411.0	396.2	374.0	355.5	336.9	318.4	307.3	296.2	292.5
67.5°	403.5	403.5	396.2	377.7	362.9	340.6	322.2	307.3	292.5	285.1	277.6
68°	388.8	388.8	385.1	370.2	351.8	329.5	311.1	292.5	277.6	266.5	262.9
69°	362.9	366.6	359.1	344.4	325.8	303.6	285.1	270.3	255.4	244.3	237.0
70°	340.6	336.9	329.5	314.7	296.2	281.4	262.9	244.3	229.6	214.7	211.0
71°	311.1	311.1	303.6	292.5	274.0	255.4	237.0	222.1	207.4	188.8	185.2
72°	288.7	288.7	281.4	266.5	251.8	233.2	214.7	196.3	185.2	166.6	159.2
72.5°	274.0	277.6	270.3	255.4	240.7	218.5	203.6	188.8	170.3	155.5	148.1
73°	266.5	262.9	259.2	244.3	225.9	211.0	192.5	177.7	159.2	144.4	137.0



TEST NUMBER: P593818  
 CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	166.6	166.6	163.0	148.1	133.3	118.5	103.7	88.8	74.0	59.3	51.8
80°	114.8	118.5	111.1	103.7	92.6	77.7	62.9	51.8	37.1	29.6	22.2
82.5°	74.0	74.0	70.4	62.9	55.5	44.4	37.1	26.0	18.5	14.8	11.1
85°	37.1	40.7	37.1	33.3	26.0	22.2	18.5	11.1	7.4	3.7	3.7
87.5°	14.8	14.8	14.8	11.1	11.1	7.4	3.7	3.7	3.7	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: P593818

CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5	2732.5
2.5°	2721.4	2721.4	2714.0	2710.2	2706.6	2702.8	2699.1	2695.5	2695.5	2699.1
5°	2699.1	2691.7	2676.9	2673.3	2662.2	2658.4	2651.1	2647.3	2651.1	2647.3
7.5°	2665.8	2651.1	2632.5	2625.1	2610.3	2602.9	2591.8	2591.8	2584.4	2588.0
10°	2621.4	2599.2	2576.9	2562.2	2551.1	2540.0	2532.5	2525.2	2521.4	2521.4
12.5°	2565.8	2540.0	2517.8	2495.5	2477.0	2469.6	2454.8	2454.8	2447.4	2443.7
15°	2502.9	2469.6	2443.7	2421.5	2406.6	2391.9	2380.8	2373.3	2365.9	2365.9
17.5°	2421.5	2391.9	2365.9	2340.0	2317.8	2306.7	2295.6	2284.5	2284.5	2277.1
20°	2332.6	2299.3	2277.1	2251.1	2232.7	2214.1	2199.4	2199.4	2191.9	2195.6
22.5°	2232.7	2191.9	2169.7	2151.2	2132.7	2117.9	2103.0	2103.0	2099.3	2095.7
25°	2121.6	2088.2	2062.3	2040.1	2029.0	2014.2	2010.4	2003.1	1999.3	1999.3
27.5°	2003.1	1977.1	1943.8	1932.7	1918.0	1910.5	1910.5	1906.8	1899.4	1903.1
30°	1877.2	1847.6	1829.0	1821.7	1806.8	1806.8	1803.2	1795.7	1795.7	1799.4
32.5°	1755.0	1725.4	1710.6	1706.9	1692.0	1692.0	1688.4	1692.0	1692.0	1695.8
35°	1621.8	1595.8	1592.1	1581.0	1577.3	1577.3	1577.3	1584.7	1592.1	1581.0
37.5°	1495.9	1477.3	1466.2	1462.5	1466.2	1466.2	1469.9	1481.0	1477.3	1473.6
40°	1366.2	1351.5	1344.0	1344.0	1351.5	1358.8	1358.8	1370.0	1373.7	1370.0
42.5°	1236.7	1225.6	1225.6	1229.2	1236.7	1240.3	1251.4	1262.5	1266.3	1270.0
45°	1114.5	1114.5	1114.5	1118.1	1121.9	1129.3	1144.1	1155.2	1158.9	1162.6
47.5°	996.0	992.2	1003.4	1007.1	1018.2	1021.9	1033.0	1047.8	1051.5	1055.3
50°	884.9	892.3	896.0	907.1	914.5	914.5	929.4	936.7	947.8	947.8
52.5°	781.2	792.3	796.1	807.2	810.8	814.6	821.9	833.0	840.5	840.5
55°	688.7	692.4	699.8	703.5	714.6	718.4	725.7	729.5	740.6	736.8
56°	648.0	655.3	659.1	666.4	673.8	677.6	684.9	688.7	696.0	699.8
57°	610.9	614.7	625.8	629.4	636.9	636.9	640.5	651.6	651.6	655.3
58°	573.9	581.3	585.0	588.7	596.1	599.8	607.2	610.9	614.7	610.9
59°	540.5	544.3	548.0	548.0	555.4	555.4	566.5	573.9	577.6	577.6
60°	507.2	507.2	511.0	514.7	522.1	525.8	525.8	533.2	533.2	533.2
61°	473.9	473.9	477.7	481.3	485.0	485.0	492.4	492.4	496.1	499.9
62°	444.3	440.6	440.6	444.3	444.3	451.7	455.4	459.1	462.8	459.1
63°	411.0	407.3	407.3	407.3	407.3	414.6	414.6	418.4	425.7	422.1
64°	374.0	374.0	374.0	374.0	377.7	377.7	385.1	388.8	392.4	396.2
65°	348.0	340.6	336.9	336.9	340.6	344.4	348.0	351.8	355.5	355.5
66°	318.4	311.1	307.3	307.3	307.3	307.3	314.7	314.7	322.2	322.2
67°	285.1	277.6	274.0	270.3	270.3	270.3	281.4	277.6	277.6	277.6
67.5°	274.0	262.9	259.2	255.4	251.8	259.2	255.4	259.2	259.2	255.4
68°	259.2	251.8	244.3	237.0	237.0	237.0	240.7	244.3	240.7	237.0
69°	229.6	225.9	214.7	207.4	203.6	207.4	203.6	207.4	203.6	207.4
70°	203.6	192.5	181.4	177.7	174.1	174.1	174.1	170.3	174.1	170.3
71°	177.7	166.6	155.5	148.1	144.4	144.4	140.7	144.4	140.7	144.4
72°	151.9	140.7	125.9	118.5	118.5	118.5	118.5	114.8	118.5	114.8
72.5°	140.7	125.9	114.8	107.4	103.7	103.7	103.7	103.7	99.9	103.7
73°	129.6	114.8	99.9	96.2	96.2	96.2	92.6	88.8	92.6	92.6





TEST NUMBER: P593818  
 CATALOG NUMBER: HCC8S50D010MB-HM82555950-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	44.4	33.3	29.6	29.6	29.6	29.6	29.6	29.6	26.0	26.0
80°	18.5	14.8	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
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°	240.7	240.7	233.2	222.1	203.6	185.2	170.3	155.5	137.0	118.5	111.1
75°	222.1	218.5	211.0	199.9	185.2	166.6	151.9	133.3	118.5	99.9	92.6

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°	107.4	88.8	81.5	74.0	74.0	74.0	70.4	70.4	70.4	74.0
75°	85.1	70.4	62.9	55.5	59.3	55.5	59.3	55.5	55.5	55.5

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

Scaled Data Report



(END OF REPORT)