

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: P593801

Luminaire Tested: **HCC8S50D010MB-HM82555850-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593801
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-HM82555850-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

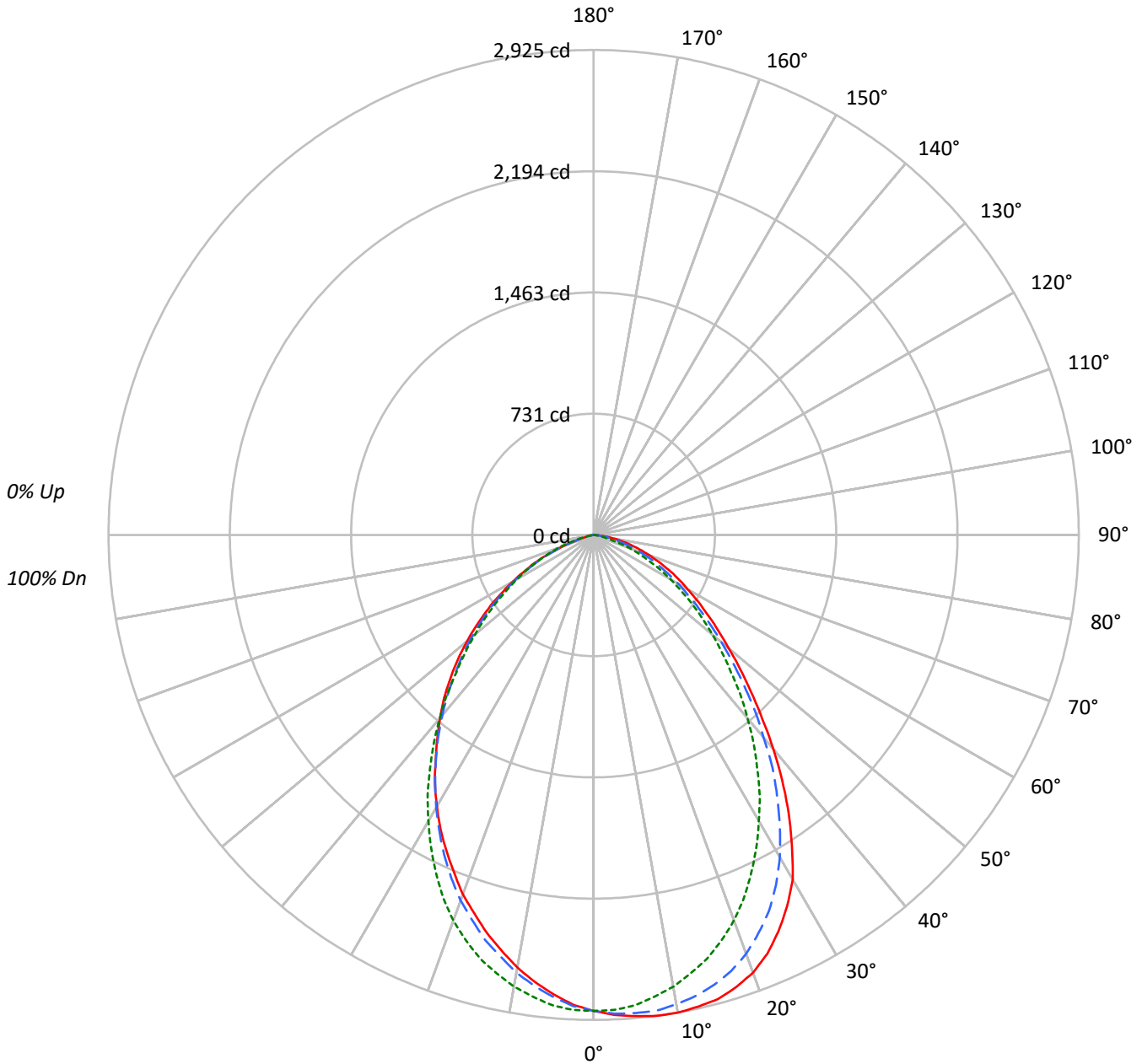
Lumens per Lamp: N/A
Luminaire Lumens: 5382.2 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{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: 25 FT



TEST NUMBER: P593801
CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P593801

CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

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	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°	88528	88528	88528
5°	90191	88148	86099
10°	91600	86609	82952
15°	92522	84449	79360
20°	92172	81192	75702
25°	89742	76507	71474
30°	85467	70918	67318
35°	77178	64729	62531
40°	67804	58094	57942
45°	58528	51066	53269
50°	50947	44792	47776
55°	45176	38902	41617
60°	40309	32865	34549
65°	36337	26683	27252
70°	32268	19997	16139
75°	27808	11593	6946
80°	21416	4155	2078
85°	13763	1380	1380



TEST NUMBER: P593801
 CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	5.0
10°-20°	750.3	13.9
20°-30°	1061.2	19.7
30°-40°	1118.2	20.8
40°-50°	950.3	17.7
50°-60°	684.3	12.7
60°-70°	394.7	7.3
70°-80°	135.1	2.5
80°-90°	18.6	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°	2081.0	38.7
0°-40°	3199.2	59.4
0°-60°	4833.8	89.8
0°-90°	5382.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5382.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2871	2871	2871	2871	2871	
5°	2914	2894	2848	2797	2782	278
15°	2898	2809	2645	2529	2486	816
25°	2638	2501	2249	2132	2101	1210
35°	2050	1930	1720	1657	1661	1277
45°	1342	1280	1171	1179	1222	1043
55°	840	774	724	751	774	756
65°	498	428	366	358	374	495
75°	233	175	97	62	58	246
85°	39	23	4	4	4	52
90°	0	0	0	0	0	



TEST NUMBER: P593801

CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9
2.5°	2898.2	2902.2	2898.2	2898.2	2894.3	2890.5	2886.5	2882.6	2874.9	2867.1	2867.1
5°	2913.7	2921.6	2913.7	2913.7	2902.2	2894.3	2886.5	2874.9	2859.3	2847.7	2847.7
7.5°	2925.4	2925.4	2925.4	2913.7	2906.0	2894.3	2874.9	2855.4	2836.0	2816.5	2808.8
10°	2925.4	2925.4	2921.6	2906.0	2898.2	2874.9	2855.4	2828.2	2800.9	2773.7	2766.0
12.5°	2913.7	2917.7	2909.9	2894.3	2874.9	2847.7	2820.4	2785.4	2754.3	2723.2	2707.6
15°	2898.2	2894.3	2886.5	2867.1	2843.7	2808.8	2781.5	2742.6	2699.8	2660.9	2645.3
17.5°	2859.3	2859.3	2847.7	2828.2	2797.1	2758.1	2715.4	2672.6	2625.9	2583.1	2563.6
20°	2808.8	2808.8	2793.2	2769.8	2738.7	2688.1	2641.5	2590.9	2536.4	2493.6	2474.2
22.5°	2734.9	2738.7	2719.2	2692.1	2657.0	2598.7	2551.9	2489.7	2435.3	2384.8	2369.1
25°	2637.6	2645.3	2625.9	2598.7	2551.9	2501.4	2443.1	2384.8	2322.5	2271.8	2248.6
27.5°	2524.8	2528.7	2509.1	2481.9	2435.3	2380.8	2322.5	2260.3	2201.8	2147.5	2124.1
30°	2400.3	2384.8	2376.9	2341.9	2291.4	2244.7	2178.5	2127.9	2065.7	2019.0	1991.7
32.5°	2225.2	2233.0	2209.6	2182.4	2143.5	2089.0	2034.5	1976.2	1917.9	1882.9	1863.4
35°	2050.2	2057.9	2046.2	2019.0	1976.2	1929.6	1875.1	1832.3	1781.7	1738.9	1719.5
37.5°	1867.4	1867.4	1859.5	1844.0	1812.9	1770.1	1715.6	1672.8	1630.1	1595.0	1583.3
40°	1684.4	1676.7	1672.8	1661.1	1633.9	1595.0	1560.0	1525.0	1482.2	1458.8	1443.2
42.5°	1505.6	1505.6	1497.7	1486.0	1458.8	1439.4	1404.3	1365.5	1334.3	1311.0	1311.0
45°	1342.1	1346.0	1334.3	1326.6	1311.0	1279.9	1248.7	1221.5	1194.3	1178.7	1171.0
47.5°	1198.2	1198.2	1186.5	1178.7	1163.2	1135.9	1108.7	1085.4	1065.9	1054.2	1050.3
50°	1062.0	1062.0	1062.0	1042.6	1023.1	1003.7	984.2	956.9	945.4	937.5	933.7
52.5°	945.4	941.4	941.4	925.8	906.4	883.1	863.7	840.3	828.6	820.9	824.7
55°	840.3	840.3	836.4	816.9	797.5	774.1	754.7	735.3	727.5	719.6	723.6
56°	797.5	797.5	793.6	778.1	754.7	735.3	711.9	692.5	680.8	684.7	684.7
57°	766.4	758.6	758.6	739.2	719.6	692.5	673.0	653.6	645.8	641.9	641.9
58°	727.5	723.6	719.6	700.2	680.8	657.4	638.0	618.5	606.8	606.8	603.0
59°	688.5	688.5	680.8	665.3	645.8	622.5	603.0	583.6	571.9	568.0	568.0
60°	653.6	657.4	645.8	630.2	614.7	587.4	564.0	548.5	536.8	532.9	532.9
61°	622.5	622.5	614.7	595.3	575.7	556.3	532.9	513.5	505.7	498.0	498.0
62°	595.3	587.4	583.6	564.0	544.6	521.3	501.9	482.3	470.8	462.9	466.8
63°	560.2	556.3	548.5	532.9	513.5	490.2	466.8	451.2	439.5	428.0	431.8
64°	532.9	529.1	517.4	501.9	482.3	459.1	435.7	420.1	412.3	400.7	396.8
65°	498.0	494.0	490.2	470.8	451.2	428.0	408.4	392.9	381.2	373.5	365.7
66°	466.8	470.8	462.9	447.4	424.0	404.6	377.4	361.8	354.0	342.3	334.6
67°	439.5	439.5	431.8	416.3	392.9	373.5	354.0	334.6	322.9	311.2	307.3
67.5°	424.0	424.0	416.3	396.8	381.2	357.9	338.4	322.9	307.3	299.5	291.8
68°	408.4	408.4	404.6	389.0	369.5	346.3	326.7	307.3	291.8	280.1	276.2
69°	381.2	385.2	377.4	361.8	342.3	319.0	299.5	284.0	268.4	256.7	249.0
70°	357.9	354.0	346.3	330.7	311.2	295.6	276.2	256.7	241.2	225.6	221.8
71°	326.7	326.7	319.0	307.3	287.9	268.4	249.0	233.4	217.9	198.4	194.5
72°	303.5	303.5	295.6	280.1	264.5	245.1	225.6	206.2	194.5	175.1	167.3
72.5°	287.9	291.8	284.0	268.4	252.9	229.5	213.9	198.4	179.0	163.4	155.6
73°	280.1	276.2	272.3	256.7	237.3	221.8	202.2	186.7	167.3	151.7	143.9



TEST NUMBER: P593801
 CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	175.1	175.1	171.1	155.6	140.0	124.5	109.0	93.4	77.9	62.2	54.5
80°	120.6	124.5	116.7	109.0	97.3	81.7	66.2	54.5	38.9	31.1	23.4
82.5°	77.9	77.9	73.9	66.2	58.3	46.6	38.9	27.2	19.4	15.5	11.7
85°	38.9	42.8	38.9	35.1	27.2	23.4	19.4	11.7	7.8	3.9	3.9
87.5°	15.5	15.5	15.5	11.7	11.7	7.8	3.9	3.9	3.9	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: P593801

CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9	2870.9
2.5°	2859.3	2859.3	2851.5	2847.7	2843.7	2839.9	2836.0	2832.1	2832.1	2836.0
5°	2836.0	2828.2	2812.6	2808.8	2797.1	2793.2	2785.4	2781.5	2785.4	2781.5
7.5°	2800.9	2785.4	2766.0	2758.1	2742.6	2734.9	2723.2	2723.2	2715.4	2719.2
10°	2754.3	2730.9	2707.6	2692.1	2680.4	2668.7	2660.9	2653.2	2649.2	2649.2
12.5°	2695.9	2668.7	2645.3	2622.1	2602.5	2594.8	2579.2	2579.2	2571.4	2567.6
15°	2629.8	2594.8	2567.6	2544.2	2528.7	2513.1	2501.4	2493.6	2485.9	2485.9
17.5°	2544.2	2513.1	2485.9	2458.6	2435.3	2423.6	2411.9	2400.3	2400.3	2392.5
20°	2450.8	2415.9	2392.5	2365.2	2345.8	2326.3	2310.8	2310.8	2303.0	2306.9
22.5°	2345.8	2303.0	2279.7	2260.3	2240.7	2225.2	2209.6	2209.6	2205.8	2201.8
25°	2229.0	2194.1	2166.9	2143.5	2131.8	2116.2	2112.4	2104.7	2100.7	2100.7
27.5°	2104.7	2077.4	2042.4	2030.7	2015.1	2007.4	2007.4	2003.4	1995.7	1999.6
30°	1972.3	1941.2	1921.7	1914.0	1898.5	1898.5	1894.5	1886.8	1886.8	1890.6
32.5°	1844.0	1812.9	1797.3	1793.4	1777.8	1777.8	1774.0	1777.8	1777.8	1781.7
35°	1703.9	1676.7	1672.8	1661.1	1657.3	1657.3	1657.3	1665.0	1672.8	1661.1
37.5°	1571.6	1552.2	1540.5	1536.7	1540.5	1540.5	1544.4	1556.1	1552.2	1548.3
40°	1435.5	1420.0	1412.2	1412.2	1420.0	1427.7	1427.7	1439.4	1443.2	1439.4
42.5°	1299.3	1287.7	1287.7	1291.5	1299.3	1303.2	1314.9	1326.6	1330.4	1334.3
45°	1171.0	1171.0	1171.0	1174.8	1178.7	1186.5	1202.1	1213.8	1217.6	1221.5
47.5°	1046.5	1042.6	1054.2	1058.2	1069.9	1073.7	1085.4	1101.0	1104.8	1108.7
50°	929.7	937.5	941.4	953.1	960.9	960.9	976.5	984.2	995.9	995.9
52.5°	820.9	832.6	836.4	848.1	852.0	855.8	863.7	875.3	883.1	883.1
55°	723.6	727.5	735.3	739.2	750.8	754.7	762.5	766.4	778.1	774.1
56°	680.8	688.5	692.5	700.2	708.1	711.9	719.6	723.6	731.3	735.3
57°	641.9	645.8	657.4	661.3	669.1	669.1	673.0	684.7	684.7	688.5
58°	603.0	610.8	614.7	618.5	626.4	630.2	638.0	641.9	645.8	641.9
59°	568.0	571.9	575.7	575.7	583.6	583.6	595.3	603.0	606.8	606.8
60°	532.9	532.9	536.8	540.8	548.5	552.5	552.5	560.2	560.2	560.2
61°	498.0	498.0	501.9	505.7	509.6	509.6	517.4	517.4	521.3	525.2
62°	466.8	462.9	462.9	466.8	466.8	474.6	478.5	482.3	486.3	482.3
63°	431.8	428.0	428.0	428.0	428.0	435.7	435.7	439.5	447.4	443.5
64°	392.9	392.9	392.9	392.9	396.8	396.8	404.6	408.4	412.3	416.3
65°	365.7	357.9	354.0	354.0	357.9	361.8	365.7	369.5	373.5	373.5
66°	334.6	326.7	322.9	322.9	322.9	322.9	330.7	330.7	338.4	338.4
67°	299.5	291.8	287.9	284.0	284.0	284.0	295.6	291.8	291.8	291.8
67.5°	287.9	276.2	272.3	268.4	264.5	272.3	268.4	272.3	272.3	268.4
68°	272.3	264.5	256.7	249.0	249.0	249.0	252.9	256.7	252.9	249.0
69°	241.2	237.3	225.6	217.9	213.9	217.9	213.9	217.9	213.9	217.9
70°	213.9	202.2	190.7	186.7	182.8	182.8	182.8	179.0	182.8	179.0
71°	186.7	175.1	163.4	155.6	151.7	151.7	147.9	151.7	147.9	151.7
72°	159.5	147.9	132.2	124.5	124.5	124.5	124.5	120.6	124.5	120.6
72.5°	147.9	132.2	120.6	112.8	109.0	109.0	109.0	109.0	105.1	109.0
73°	136.2	120.6	105.1	101.1	101.1	101.1	97.3	93.4	97.3	97.3



TEST NUMBER: P593801
CATALOG NUMBER: HCC8S50D010MB-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	46.6	35.1	31.1	31.1	31.1	31.1	31.1	31.1	27.2	27.2
80°	19.4	15.5	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
82.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
85°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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

Scaled Data Report

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



74°	252.9	252.9	245.1	233.4	213.9	194.5	179.0	163.4	143.9	124.5	116.7
75°	233.4	229.5	221.8	210.1	194.5	175.1	159.5	140.0	124.5	105.1	97.3

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°	112.8	93.4	85.6	77.9	77.9	77.9	73.9	73.9	73.9	77.9
75°	89.4	73.9	66.2	58.3	62.2	58.3	62.2	58.3	58.3	58.3

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

Scaled Data Report



(END OF REPORT)