

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: P593767

Luminaire Tested: **HCC8S45D010MW-HM82555850-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593767
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: HCC8S45D010MW-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

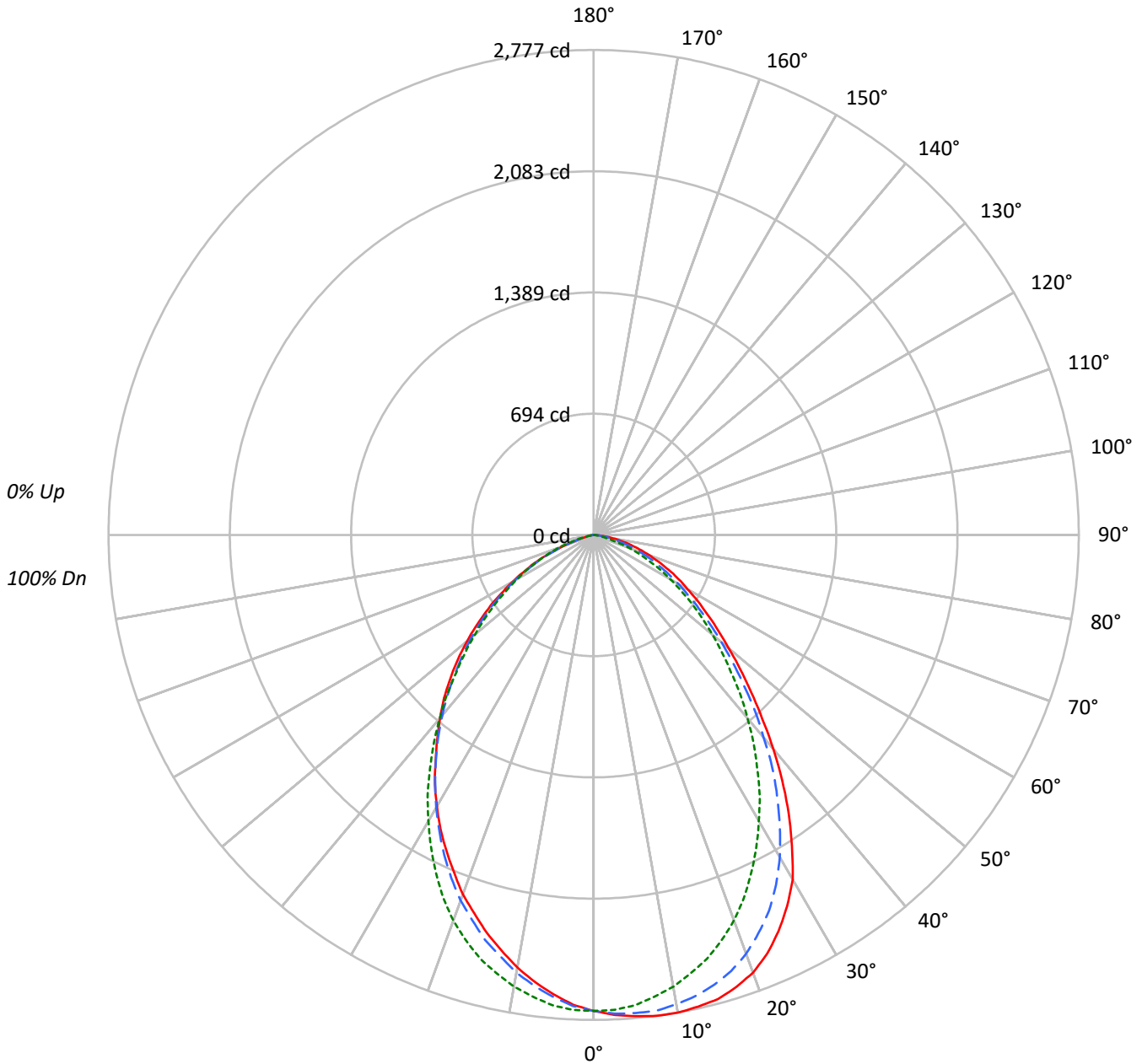
Lumens per Lamp: N/A
Luminaire Lumens: 5109.7 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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: P593767
CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P593767

CATALOG NUMBER: HCC8S45D010MW-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°	84051	84051	84051
5°	85628	83684	81744
10°	86966	82225	78753
15°	87839	80177	75344
20°	87505	77080	71869
25°	85200	72631	67861
30°	81141	67332	63910
35°	73271	61454	59369
40°	64378	55156	55007
45°	55567	48480	50574
50°	48371	42523	45353
55°	42891	36929	39515
60°	38268	31206	32798
65°	34491	25333	25873
70°	30636	18988	15318
75°	26402	10997	6600
80°	20333	3942	1953
85°	13055	1274	1274



TEST NUMBER: P593767

CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.9	5.0
10°-20°	712.3	13.9
20°-30°	1007.5	19.7
30°-40°	1061.6	20.8
40°-50°	902.2	17.7
50°-60°	649.7	12.7
60°-70°	374.8	7.3
70°-80°	128.2	2.5
80°-90°	17.6	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°	1975.6	38.7
0°-40°	3037.2	59.4
0°-60°	4589.1	89.8
0°-90°	5109.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5109.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2726	2726	2726	2726	2726	
5°	2766	2748	2704	2656	2641	264
15°	2752	2667	2512	2401	2360	775
25°	2504	2375	2135	2024	1994	1148
35°	1946	1832	1632	1573	1577	1212
45°	1274	1215	1112	1119	1160	990
55°	798	735	687	713	735	718
65°	473	406	347	340	355	470
75°	222	166	92	59	55	234
85°	37	22	4	4	4	50
90°	0	0	0	0	0	



TEST NUMBER: P593767

CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7
2.5°	2751.5	2755.3	2751.5	2751.5	2747.9	2744.1	2740.5	2736.7	2729.3	2721.9	2721.9
5°	2766.3	2773.7	2766.3	2766.3	2755.3	2747.9	2740.5	2729.3	2714.6	2703.5	2703.5
7.5°	2777.4	2777.4	2777.4	2766.3	2758.9	2747.9	2729.3	2710.9	2692.4	2674.0	2666.6
10°	2777.4	2777.4	2773.7	2758.9	2751.5	2729.3	2710.9	2685.0	2659.2	2633.4	2626.0
12.5°	2766.3	2770.0	2762.6	2747.9	2729.3	2703.5	2677.6	2644.4	2614.9	2585.3	2570.5
15°	2751.5	2747.9	2740.5	2721.9	2699.8	2666.6	2640.8	2603.8	2563.1	2526.3	2511.5
17.5°	2714.6	2714.6	2703.5	2685.0	2655.6	2618.6	2577.9	2537.3	2493.0	2452.4	2433.9
20°	2666.6	2666.6	2651.8	2629.6	2600.1	2552.1	2507.8	2459.8	2408.1	2367.5	2348.9
22.5°	2596.4	2600.1	2581.7	2555.7	2522.5	2467.2	2422.8	2363.7	2312.0	2264.0	2249.2
25°	2504.1	2511.5	2493.0	2467.2	2422.8	2374.9	2319.4	2264.0	2204.9	2156.9	2134.7
27.5°	2397.0	2400.7	2382.2	2356.3	2312.0	2260.4	2204.9	2145.8	2090.4	2038.7	2016.5
30°	2278.8	2264.0	2256.6	2223.4	2175.3	2131.1	2068.2	2020.3	1961.1	1916.8	1891.0
32.5°	2112.6	2120.0	2097.8	2072.0	2035.0	1983.3	1931.6	1876.2	1820.8	1787.5	1769.1
35°	1946.4	1953.7	1942.7	1916.8	1876.2	1831.9	1780.1	1739.6	1691.6	1650.9	1632.5
37.5°	1772.8	1772.8	1765.4	1750.6	1721.1	1680.4	1628.7	1588.1	1547.5	1514.2	1503.2
40°	1599.3	1591.9	1588.1	1577.1	1551.2	1514.2	1481.0	1447.8	1407.1	1385.0	1370.2
42.5°	1429.3	1429.3	1421.9	1410.9	1385.0	1366.5	1333.3	1296.4	1266.8	1244.7	1244.7
45°	1274.2	1277.9	1266.8	1259.5	1244.7	1215.1	1185.6	1159.7	1133.8	1119.0	1111.7
47.5°	1137.6	1137.6	1126.4	1119.0	1104.3	1078.5	1052.7	1030.5	1011.9	1000.9	997.2
50°	1008.3	1008.3	1008.3	989.8	971.4	952.8	934.4	908.6	897.5	890.1	886.4
52.5°	897.5	893.8	893.8	879.0	860.5	838.3	819.9	797.8	786.7	779.3	783.0
55°	797.8	797.8	794.1	775.6	757.2	735.0	716.5	698.1	690.7	683.3	686.9
56°	757.2	757.2	753.4	738.6	716.5	698.1	675.9	657.5	646.3	650.1	650.1
57°	727.6	720.2	720.2	701.7	683.3	657.5	638.9	620.5	613.1	609.4	609.4
58°	690.7	686.9	683.3	664.9	646.3	624.2	605.7	587.2	576.2	576.2	572.4
59°	653.7	653.7	646.3	631.5	613.1	591.0	572.4	554.0	542.9	539.2	539.2
60°	620.5	624.2	613.1	598.3	583.6	557.6	535.5	520.8	509.7	506.0	506.0
61°	591.0	591.0	583.6	565.0	546.6	528.2	506.0	487.5	480.1	472.7	472.7
62°	565.0	557.6	554.0	535.5	517.1	494.9	476.5	457.9	446.9	439.5	443.2
63°	531.8	528.2	520.8	506.0	487.5	465.3	443.2	428.4	417.4	406.2	410.0
64°	506.0	502.3	491.3	476.5	457.9	435.8	413.6	398.9	391.5	380.4	376.8
65°	472.7	469.1	465.3	446.9	428.4	406.2	387.8	373.0	362.0	354.6	347.2
66°	443.2	446.9	439.5	424.7	402.6	384.2	358.2	343.5	336.1	325.0	317.6
67°	417.4	417.4	410.0	395.2	373.0	354.6	336.1	317.6	306.5	295.5	291.7
67.5°	402.6	402.6	395.2	376.8	362.0	339.8	321.3	306.5	291.7	284.3	276.9
68°	387.8	387.8	384.2	369.4	350.8	328.7	310.3	291.7	276.9	265.9	262.3
69°	362.0	365.6	358.2	343.5	325.0	302.9	284.3	269.6	254.9	243.7	236.4
70°	339.8	336.1	328.7	313.9	295.5	280.7	262.3	243.7	229.0	214.2	210.6
71°	310.3	310.3	302.9	291.7	273.3	254.9	236.4	221.6	206.8	188.4	184.6
72°	288.1	288.1	280.7	265.9	251.1	232.7	214.2	195.8	184.6	166.2	158.8
72.5°	273.3	276.9	269.6	254.9	240.1	217.9	203.2	188.4	169.9	155.1	147.7
73°	265.9	262.3	258.5	243.7	225.3	210.6	192.0	177.2	158.8	144.0	136.7



TEST NUMBER: P593767
 CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	166.2	166.2	162.5	147.7	133.0	118.2	103.5	88.7	73.9	59.1	51.7
80°	114.5	118.2	110.8	103.5	92.3	77.5	62.8	51.7	36.9	29.6	22.2
82.5°	73.9	73.9	70.1	62.8	55.4	44.3	36.9	25.8	18.4	14.8	11.0
85°	36.9	40.6	36.9	33.2	25.8	22.2	18.4	11.0	7.4	3.6	3.6
87.5°	14.8	14.8	14.8	11.0	11.0	7.4	3.6	3.6	3.6	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: P593767

CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7	2725.7
2.5°	2714.6	2714.6	2707.2	2703.5	2699.8	2696.1	2692.4	2688.8	2688.8	2692.4
5°	2692.4	2685.0	2670.2	2666.6	2655.6	2651.8	2644.4	2640.8	2644.4	2640.8
7.5°	2659.2	2644.4	2626.0	2618.6	2603.8	2596.4	2585.3	2585.3	2577.9	2581.7
10°	2614.9	2592.7	2570.5	2555.7	2544.7	2533.7	2526.3	2518.9	2515.1	2515.1
12.5°	2559.5	2533.7	2511.5	2489.3	2470.8	2463.4	2448.6	2448.6	2441.2	2437.6
15°	2496.7	2463.4	2437.6	2415.4	2400.7	2385.9	2374.9	2367.5	2360.1	2360.1
17.5°	2415.4	2385.9	2360.1	2334.2	2312.0	2301.0	2289.8	2278.8	2278.8	2271.4
20°	2326.8	2293.6	2271.4	2245.6	2227.1	2208.6	2193.9	2193.9	2186.5	2190.1
22.5°	2227.1	2186.5	2164.3	2145.8	2127.4	2112.6	2097.8	2097.8	2094.2	2090.4
25°	2116.3	2083.0	2057.2	2035.0	2023.9	2009.1	2005.5	1998.1	1994.5	1994.5
27.5°	1998.1	1972.3	1939.0	1927.9	1913.2	1905.8	1905.8	1902.0	1894.6	1898.4
30°	1872.5	1843.0	1824.5	1817.1	1802.3	1802.3	1798.7	1791.3	1791.3	1794.9
32.5°	1750.6	1721.1	1706.4	1702.6	1687.8	1687.8	1684.2	1687.8	1687.8	1691.6
35°	1617.7	1591.9	1588.1	1577.1	1573.3	1573.3	1573.3	1580.7	1588.1	1577.1
37.5°	1492.1	1473.6	1462.6	1458.9	1462.6	1462.6	1466.2	1477.3	1473.6	1469.9
40°	1362.8	1348.0	1340.6	1340.6	1348.0	1355.4	1355.4	1366.5	1370.2	1366.5
42.5°	1233.5	1222.5	1222.5	1226.1	1233.5	1237.3	1248.3	1259.5	1263.1	1266.8
45°	1111.7	1111.7	1111.7	1115.4	1119.0	1126.4	1141.2	1152.4	1156.0	1159.7
47.5°	993.5	989.8	1000.9	1004.6	1015.7	1019.3	1030.5	1045.3	1048.9	1052.7
50°	882.7	890.1	893.8	904.9	912.2	912.2	927.0	934.4	945.4	945.4
52.5°	779.3	790.4	794.1	805.1	808.8	812.5	819.9	831.0	838.3	838.3
55°	686.9	690.7	698.1	701.7	712.8	716.5	723.9	727.6	738.6	735.0
56°	646.3	653.7	657.5	664.9	672.1	675.9	683.3	686.9	694.3	698.1
57°	609.4	613.1	624.2	627.9	635.3	635.3	638.9	650.1	650.1	653.7
58°	572.4	579.8	583.6	587.2	594.6	598.3	605.7	609.4	613.1	609.4
59°	539.2	542.9	546.6	546.6	554.0	554.0	565.0	572.4	576.2	576.2
60°	506.0	506.0	509.7	513.4	520.8	524.4	524.4	531.8	531.8	531.8
61°	472.7	472.7	476.5	480.1	483.9	483.9	491.3	491.3	494.9	498.6
62°	443.2	439.5	439.5	443.2	443.2	450.5	454.3	457.9	461.7	457.9
63°	410.0	406.2	406.2	406.2	406.2	413.6	413.6	417.4	424.7	421.0
64°	373.0	373.0	373.0	373.0	376.8	376.8	384.2	387.8	391.5	395.2
65°	347.2	339.8	336.1	336.1	339.8	343.5	347.2	350.8	354.6	354.6
66°	317.6	310.3	306.5	306.5	306.5	306.5	313.9	313.9	321.3	321.3
67°	284.3	276.9	273.3	269.6	269.6	269.6	280.7	276.9	276.9	276.9
67.5°	273.3	262.3	258.5	254.9	251.1	258.5	254.9	258.5	258.5	254.9
68°	258.5	251.1	243.7	236.4	236.4	236.4	240.1	243.7	240.1	236.4
69°	229.0	225.3	214.2	206.8	203.2	206.8	203.2	206.8	203.2	206.8
70°	203.2	192.0	181.0	177.2	173.6	173.6	173.6	169.9	173.6	169.9
71°	177.2	166.2	155.1	147.7	144.0	144.0	140.3	144.0	140.3	144.0
72°	151.4	140.3	125.6	118.2	118.2	118.2	118.2	114.5	118.2	114.5
72.5°	140.3	125.6	114.5	107.1	103.5	103.5	103.5	103.5	99.7	103.5
73°	129.3	114.5	99.7	96.1	96.1	96.1	92.3	88.7	92.3	92.3



TEST NUMBER: P593767
CATALOG NUMBER: HCC8S45D010MW-HM82555850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	44.3	33.2	29.6	29.6	29.6	29.6	29.6	29.6	25.8	25.8
80°	18.4	14.8	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
85°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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°	240.1	240.1	232.7	221.6	203.2	184.6	169.9	155.1	136.7	118.2	110.8
75°	221.6	217.9	210.6	199.4	184.6	166.2	151.4	133.0	118.2	99.7	92.3

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°	107.1	88.7	81.3	73.9	73.9	73.9	70.1	70.1	70.1	73.9
75°	84.9	70.1	62.8	55.4	59.1	55.4	59.1	55.4	55.4	55.4

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

Scaled Data Report



(END OF REPORT)