

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: P584515

Luminaire Tested: **HCC8S40D010MW-HM82555827-81RWWH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584515  
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: HCC8S40D010MW-HM82555827-81RWWH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

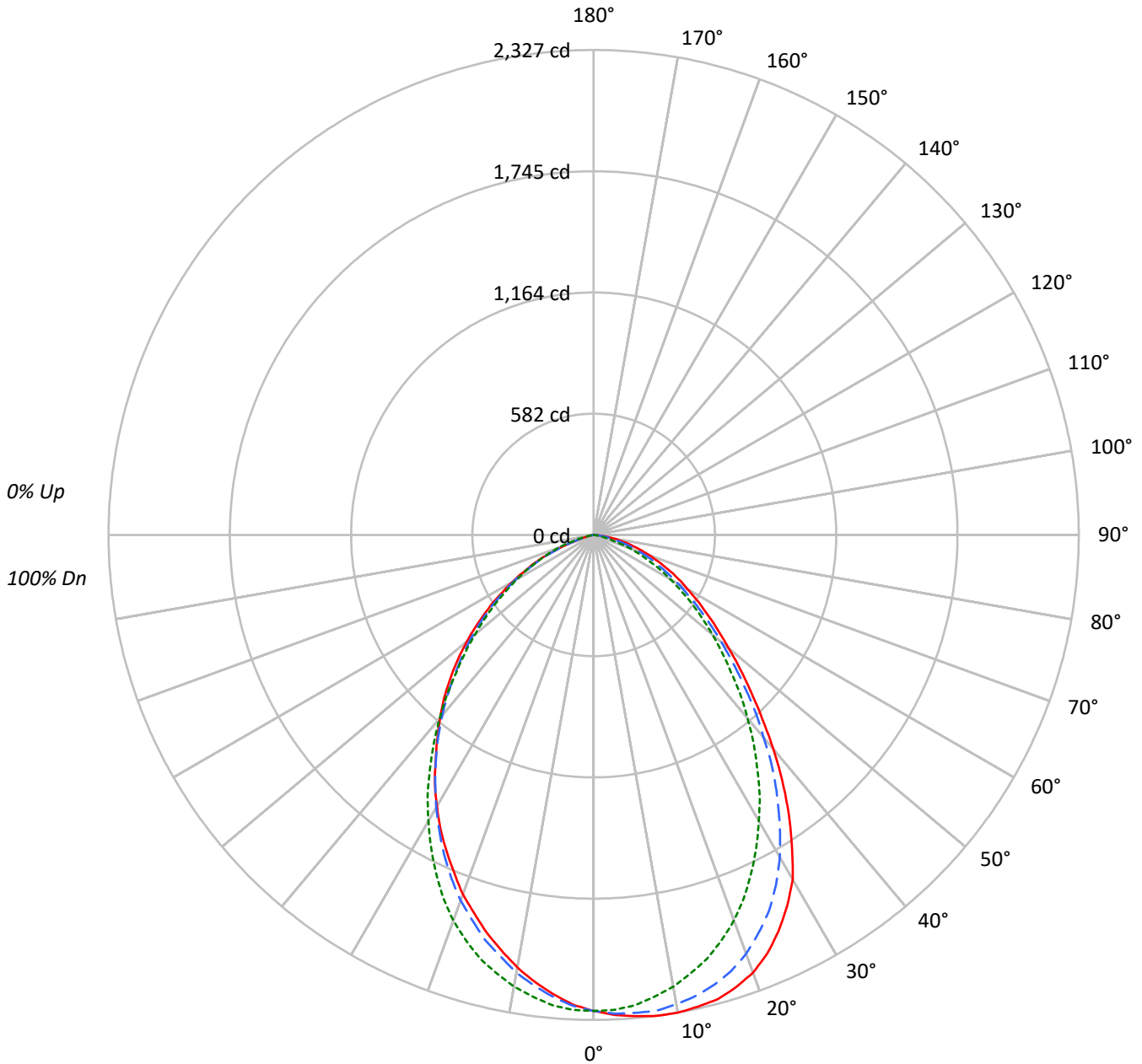
Lumens per Lamp: N/A  
Luminaire Lumens: 4281.6 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
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: P584515  
CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

### Luminous Intensity Polar Plot





TEST NUMBER: P584515

CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**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°	70430	70430	70430
5°	71752	70123	68495
10°	72872	68899	65990
15°	73604	67181	63130
20°	73326	64590	60223
25°	71389	60862	56858
30°	67991	56419	53552
35°	61394	51493	49747
40°	53944	46216	46091
45°	46561	40622	42379
50°	40532	35634	38009
55°	35934	30945	33106
60°	32064	26149	27487
65°	28909	21233	21678
70°	25677	15904	12830
75°	22113	9222	5528
80°	17030	3303	1651
85°	10933	1097	1097



TEST NUMBER: P584515  
 CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.4	5.0
10°-20°	596.9	13.9
20°-30°	844.2	19.7
30°-40°	889.6	20.8
40°-50°	756.0	17.7
50°-60°	544.4	12.7
60°-70°	314.0	7.3
70°-80°	107.4	2.5
80°-90°	14.8	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°	1655.4	38.7
0°-40°	2545.0	59.4
0°-60°	3845.4	89.8
0°-90°	4281.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4281.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2284	2284	2284	2284	2284	
5°	2318	2302	2265	2225	2213	222
15°	2306	2234	2104	2012	1978	649
25°	2098	1990	1789	1696	1671	962
35°	1631	1535	1368	1318	1322	1016
45°	1068	1018	932	938	972	829
55°	668	616	576	597	616	602
65°	396	340	291	285	297	394
75°	186	139	77	50	46	196
85°	31	19	3	3	3	42
90°	0	0	0	0	0	



TEST NUMBER: P584515

CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0
2.5°	2305.6	2308.7	2305.6	2305.6	2302.5	2299.4	2296.3	2293.2	2287.1	2280.9	2280.9
5°	2318.0	2324.2	2318.0	2318.0	2308.7	2302.5	2296.3	2287.1	2274.7	2265.4	2265.4
7.5°	2327.3	2327.3	2327.3	2318.0	2311.8	2302.5	2287.1	2271.6	2256.1	2240.7	2234.5
10°	2327.3	2327.3	2324.2	2311.8	2305.6	2287.1	2271.6	2249.9	2228.3	2206.6	2200.4
12.5°	2318.0	2321.1	2314.9	2302.5	2287.1	2265.4	2243.7	2215.9	2191.0	2166.3	2153.9
15°	2305.6	2302.5	2296.3	2280.9	2262.3	2234.5	2212.8	2181.7	2147.7	2116.8	2104.4
17.5°	2274.7	2274.7	2265.4	2249.9	2225.2	2194.1	2160.1	2126.1	2088.9	2054.9	2039.4
20°	2234.5	2234.5	2222.1	2203.5	2178.7	2138.4	2101.3	2061.1	2017.8	1983.7	1968.3
22.5°	2175.6	2178.7	2163.2	2141.5	2113.7	2067.3	2030.1	1980.6	1937.3	1897.1	1884.7
25°	2098.2	2104.4	2088.9	2067.3	2030.1	1989.9	1943.5	1897.1	1847.6	1807.4	1788.8
27.5°	2008.5	2011.6	1996.1	1974.4	1937.3	1894.0	1847.6	1798.1	1751.7	1708.2	1689.7
30°	1909.5	1897.1	1890.9	1863.1	1822.8	1785.7	1733.1	1692.8	1643.3	1606.1	1584.5
32.5°	1770.2	1776.4	1757.9	1736.2	1705.2	1661.8	1618.5	1572.1	1525.7	1497.9	1482.4
35°	1630.9	1637.1	1627.8	1606.1	1572.1	1535.0	1491.7	1457.6	1417.4	1383.4	1367.9
37.5°	1485.5	1485.5	1479.3	1466.9	1442.2	1408.1	1364.8	1330.8	1296.7	1268.9	1259.6
40°	1340.1	1333.9	1330.8	1321.5	1299.8	1268.9	1241.1	1213.1	1179.1	1160.5	1148.1
42.5°	1197.6	1197.6	1191.4	1182.1	1160.5	1145.0	1117.2	1086.2	1061.5	1042.9	1042.9
45°	1067.7	1070.8	1061.5	1055.3	1042.9	1018.2	993.4	971.8	950.1	937.7	931.5
47.5°	953.2	953.2	943.9	937.7	925.3	903.7	882.0	863.5	848.0	838.7	835.6
50°	844.9	844.9	844.9	829.4	814.0	798.5	783.0	761.4	752.1	745.9	742.8
52.5°	752.1	749.0	749.0	736.6	721.0	702.5	687.0	668.4	659.1	653.0	656.0
55°	668.4	668.4	665.3	649.9	634.4	615.8	600.4	584.9	578.7	572.5	575.6
56°	634.4	634.4	631.3	618.9	600.4	584.9	566.3	550.9	541.6	544.7	544.7
57°	609.6	603.4	603.4	588.0	572.5	550.9	535.4	519.9	513.7	510.6	510.6
58°	578.7	575.6	572.5	557.0	541.6	523.0	507.5	492.1	482.8	482.8	479.7
59°	547.8	547.8	541.6	529.2	513.7	495.2	479.7	464.2	454.9	451.8	451.8
60°	519.9	523.0	513.7	501.3	489.0	467.3	448.7	436.4	427.1	424.0	424.0
61°	495.2	495.2	489.0	473.5	458.0	442.6	424.0	408.5	402.3	396.2	396.2
62°	473.5	467.3	464.2	448.7	433.3	414.7	399.2	383.8	374.5	368.3	371.4
63°	445.7	442.6	436.4	424.0	408.5	390.0	371.4	359.0	349.7	340.5	343.6
64°	424.0	420.9	411.6	399.2	383.8	365.2	346.6	334.3	328.1	318.8	315.7
65°	396.2	393.1	390.0	374.5	359.0	340.5	325.0	312.6	303.3	297.1	291.0
66°	371.4	374.5	368.3	355.9	337.4	321.9	300.2	287.9	281.7	272.4	266.2
67°	349.7	349.7	343.6	331.2	312.6	297.1	281.7	266.2	256.9	247.6	244.5
67.5°	337.4	337.4	331.2	315.7	303.3	284.8	269.3	256.9	244.5	238.2	232.0
68°	325.0	325.0	321.9	309.5	294.0	275.5	260.0	244.5	232.0	222.8	219.7
69°	303.3	306.4	300.2	287.9	272.4	253.8	238.2	225.9	213.5	204.2	198.0
70°	284.8	281.7	275.5	263.1	247.6	235.1	219.7	204.2	191.8	179.5	176.4
71°	260.0	260.0	253.8	244.5	229.0	213.5	198.0	185.6	173.3	157.8	154.7
72°	241.3	241.3	235.1	222.8	210.4	194.9	179.5	164.0	154.7	139.2	133.0
72.5°	229.0	232.0	225.9	213.5	201.1	182.5	170.2	157.8	142.3	129.9	123.8
73°	222.8	219.7	216.6	204.2	188.7	176.4	160.9	148.5	133.0	120.7	114.5



TEST NUMBER: P584515  
 CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	139.2	139.2	136.1	123.8	111.4	99.0	86.6	74.3	61.9	49.5	43.3
80°	95.9	99.0	92.8	86.6	77.4	65.0	52.6	43.3	30.9	24.8	18.6
82.5°	61.9	61.9	58.8	52.6	46.4	37.1	30.9	21.7	15.5	12.4	9.3
85°	30.9	34.0	30.9	27.8	21.7	18.6	15.5	9.3	6.2	3.1	3.1
87.5°	12.4	12.4	12.4	9.3	9.3	6.2	3.1	3.1	3.1	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: P584515

CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0	2284.0
2.5°	2274.7	2274.7	2268.5	2265.4	2262.3	2259.2	2256.1	2253.0	2253.0	2256.1
5°	2256.1	2249.9	2237.6	2234.5	2225.2	2222.1	2215.9	2212.8	2215.9	2212.8
7.5°	2228.3	2215.9	2200.4	2194.1	2181.7	2175.6	2166.3	2166.3	2160.1	2163.2
10°	2191.0	2172.5	2153.9	2141.5	2132.2	2123.0	2116.8	2110.6	2107.5	2107.5
12.5°	2144.6	2123.0	2104.4	2085.8	2070.4	2064.2	2051.8	2051.8	2045.6	2042.5
15°	2092.0	2064.2	2042.5	2024.0	2011.6	1999.2	1989.9	1983.7	1977.5	1977.5
17.5°	2024.0	1999.2	1977.5	1955.9	1937.3	1928.0	1918.8	1909.5	1909.5	1903.3
20°	1949.7	1921.8	1903.3	1881.6	1866.2	1850.7	1838.3	1838.3	1832.1	1835.2
22.5°	1866.2	1832.1	1813.6	1798.1	1782.6	1770.2	1757.9	1757.9	1754.8	1751.7
25°	1773.3	1745.5	1723.8	1705.2	1695.9	1683.5	1680.4	1674.2	1671.1	1671.1
27.5°	1674.2	1652.6	1624.7	1615.4	1603.0	1596.9	1596.9	1593.8	1587.6	1590.7
30°	1569.0	1544.3	1528.8	1522.6	1510.2	1510.2	1507.1	1500.9	1500.9	1504.0
32.5°	1466.9	1442.2	1429.8	1426.7	1414.3	1414.3	1411.2	1414.3	1414.3	1417.4
35°	1355.5	1333.9	1330.8	1321.5	1318.4	1318.4	1318.4	1324.6	1330.8	1321.5
37.5°	1250.3	1234.9	1225.6	1222.5	1225.6	1225.6	1228.7	1238.0	1234.9	1231.8
40°	1141.9	1129.5	1123.4	1123.4	1129.5	1135.7	1135.7	1145.0	1148.1	1145.0
42.5°	1033.6	1024.4	1024.4	1027.4	1033.6	1036.7	1046.0	1055.3	1058.4	1061.5
45°	931.5	931.5	931.5	934.6	937.7	943.9	956.3	965.6	968.7	971.8
47.5°	832.5	829.4	838.7	841.8	851.1	854.2	863.5	875.8	878.9	882.0
50°	739.7	745.9	749.0	758.3	764.5	764.5	776.8	783.0	792.3	792.3
52.5°	653.0	662.2	665.3	674.6	677.7	680.8	687.0	696.3	702.5	702.5
55°	575.6	578.7	584.9	588.0	597.3	600.4	606.5	609.6	618.9	615.8
56°	541.6	547.8	550.9	557.0	563.2	566.3	572.5	575.6	581.8	584.9
57°	510.6	513.7	523.0	526.1	532.3	532.3	535.4	544.7	544.7	547.8
58°	479.7	485.9	489.0	492.1	498.3	501.3	507.5	510.6	513.7	510.6
59°	451.8	454.9	458.0	458.0	464.2	464.2	473.5	479.7	482.8	482.8
60°	424.0	424.0	427.1	430.2	436.4	439.5	439.5	445.7	445.7	445.7
61°	396.2	396.2	399.2	402.3	405.4	405.4	411.6	411.6	414.7	417.8
62°	371.4	368.3	368.3	371.4	371.4	377.6	380.7	383.8	386.9	383.8
63°	343.6	340.5	340.5	340.5	340.5	346.6	346.6	349.7	355.9	352.8
64°	312.6	312.6	312.6	312.6	315.7	315.7	321.9	325.0	328.1	331.2
65°	291.0	284.8	281.7	281.7	284.8	287.9	291.0	294.0	297.1	297.1
66°	266.2	260.0	256.9	256.9	256.9	256.9	263.1	263.1	269.3	269.3
67°	238.2	232.0	229.0	225.9	225.9	225.9	235.1	232.0	232.0	232.0
67.5°	229.0	219.7	216.6	213.5	210.4	216.6	213.5	216.6	216.6	213.5
68°	216.6	210.4	204.2	198.0	198.0	198.0	201.1	204.2	201.1	198.0
69°	191.8	188.7	179.5	173.3	170.2	173.3	170.2	173.3	170.2	173.3
70°	170.2	160.9	151.6	148.5	145.4	145.4	145.4	142.3	145.4	142.3
71°	148.5	139.2	129.9	123.8	120.7	120.7	117.6	120.7	117.6	120.7
72°	126.9	117.6	105.2	99.0	99.0	99.0	99.0	95.9	99.0	95.9
72.5°	117.6	105.2	95.9	89.7	86.6	86.6	86.6	86.6	83.5	86.6
73°	108.3	95.9	83.5	80.4	80.4	80.4	77.4	74.3	77.4	77.4





TEST NUMBER: P584515  
CATALOG NUMBER: HCC8S40D010MW-HM82555827-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	37.1	27.8	24.8	24.8	24.8	24.8	24.8	24.8	21.7	21.7
80°	15.5	12.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
82.5°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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°	201.1	201.1	194.9	185.6	170.2	154.7	142.3	129.9	114.5	99.0	92.8
75°	185.6	182.5	176.4	167.1	154.7	139.2	126.9	111.4	99.0	83.5	77.4

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°	89.7	74.3	68.1	61.9	61.9	61.9	58.8	58.8	58.8	61.9
75°	71.2	58.8	52.6	46.4	49.5	46.4	49.5	46.4	46.4	46.4

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

Scaled Data Report



(END OF REPORT)