

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: P584549

Luminaire Tested: **HCC8S40D010BZ-HM82555835-81RWWH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584549  
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: HCC8S40D010BZ-HM82555835-81RWWH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

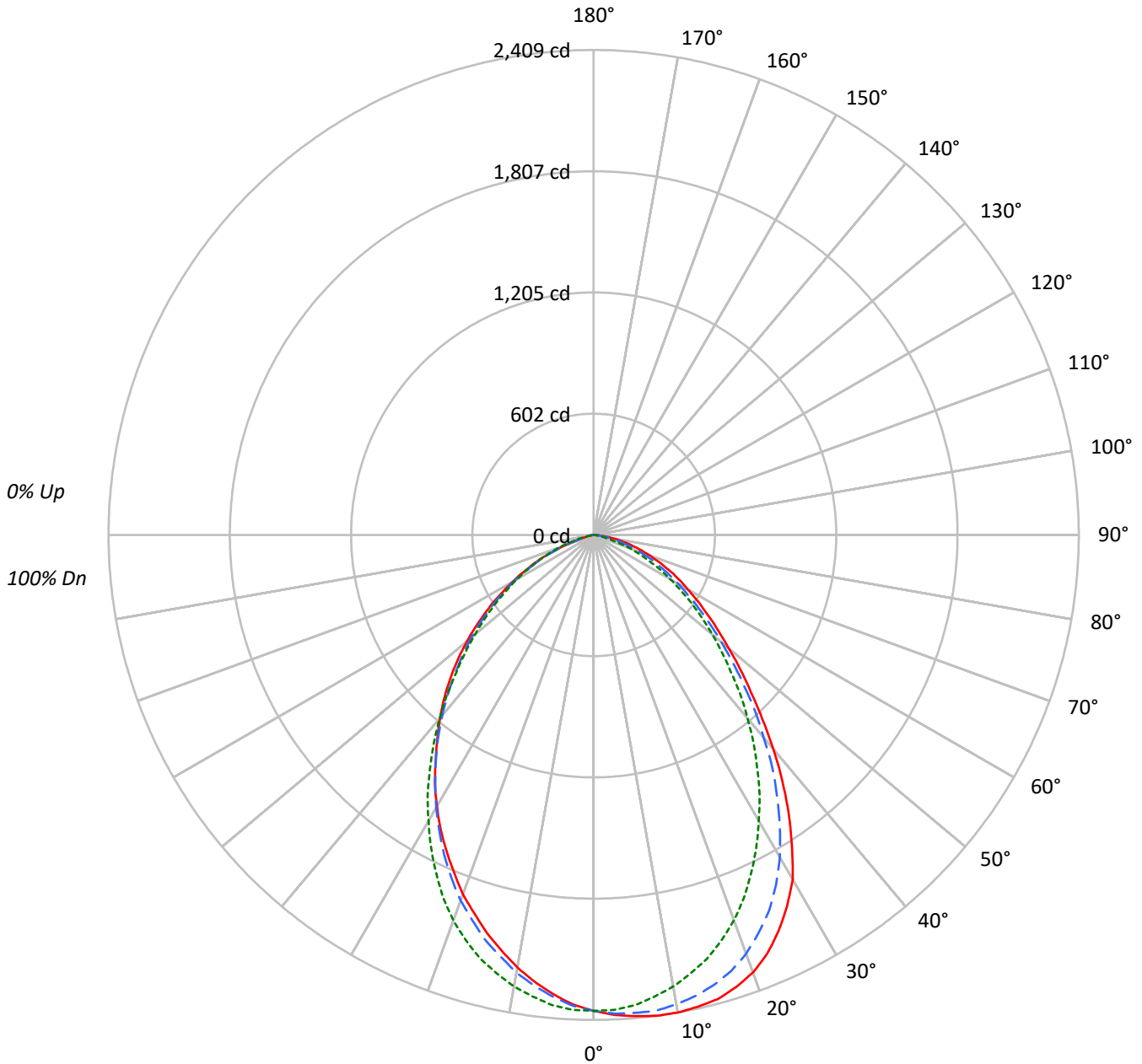
Lumens per Lamp: N/A  
Luminaire Lumens: 4432.0 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 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: P584549  
CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P584549

CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**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°	72903	72903	72903
5°	74271	72584	70900
10°	75431	71319	68307
15°	76187	69540	65349
20°	75899	66858	62336
25°	73900	62999	58858
30°	70377	58402	55436
35°	63555	53304	51493
40°	55836	47842	47709
45°	48197	42052	43866
50°	41952	36886	39338
55°	37203	32031	34273
60°	33192	27068	28443
65°	29923	21970	22437
70°	26579	16454	13280
75°	22899	9543	5731
80°	17651	3427	1705
85°	11322	1132	1132



TEST NUMBER: P584549  
 CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.9	5.0
10°-20°	617.8	13.9
20°-30°	873.8	19.7
30°-40°	920.8	20.8
40°-50°	782.5	17.7
50°-60°	563.5	12.7
60°-70°	325.1	7.3
70°-80°	111.2	2.5
80°-90°	15.3	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°	1713.6	38.7
0°-40°	2634.4	59.4
0°-60°	3980.4	89.8
0°-90°	4432.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4432.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2364	2364	2364	2364	2364	
5°	2399	2383	2345	2303	2290	229
15°	2386	2313	2178	2082	2047	672
25°	2172	2060	1852	1756	1730	996
35°	1688	1589	1416	1365	1368	1051
45°	1105	1054	964	971	1006	859
55°	692	638	596	618	638	623
65°	410	352	301	295	308	408
75°	192	144	80	51	48	203
85°	32	19	3	3	3	43
90°	0	0	0	0	0	



TEST NUMBER: P584549

CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2
2.5°	2386.5	2389.8	2386.5	2386.5	2383.3	2380.1	2376.9	2373.8	2367.4	2361.0	2361.0
5°	2399.4	2405.8	2399.4	2399.4	2389.8	2383.3	2376.9	2367.4	2354.5	2344.9	2344.9
7.5°	2409.0	2409.0	2409.0	2399.4	2393.0	2383.3	2367.4	2351.3	2335.3	2319.3	2312.9
10°	2409.0	2409.0	2405.8	2393.0	2386.5	2367.4	2351.3	2328.9	2306.5	2284.1	2277.7
12.5°	2399.4	2402.6	2396.2	2383.3	2367.4	2344.9	2322.5	2293.7	2268.0	2242.4	2229.6
15°	2386.5	2383.3	2376.9	2361.0	2341.7	2312.9	2290.5	2258.4	2223.2	2191.1	2178.3
17.5°	2354.5	2354.5	2344.9	2328.9	2303.2	2271.2	2236.0	2200.8	2162.3	2127.1	2111.1
20°	2312.9	2312.9	2300.0	2280.9	2255.2	2213.6	2175.1	2133.6	2088.7	2053.5	2037.4
22.5°	2252.1	2255.2	2239.2	2216.7	2187.9	2139.9	2101.4	2050.3	2005.4	1963.7	1950.9
25°	2172.0	2178.3	2162.3	2139.9	2101.4	2059.8	2011.8	1963.7	1912.4	1870.8	1851.6
27.5°	2079.0	2082.3	2066.2	2043.8	2005.4	1960.5	1912.4	1861.2	1813.2	1768.3	1749.1
30°	1976.5	1963.7	1957.3	1928.5	1886.9	1848.4	1793.9	1752.3	1701.0	1662.5	1640.2
32.5°	1832.4	1838.8	1819.5	1797.1	1765.1	1720.3	1675.4	1627.3	1579.2	1550.5	1534.5
35°	1688.3	1694.7	1685.0	1662.5	1627.3	1588.9	1544.0	1508.8	1467.2	1431.9	1416.0
37.5°	1537.6	1537.6	1531.3	1518.4	1492.9	1457.5	1412.8	1377.4	1342.2	1313.4	1303.8
40°	1387.1	1380.6	1377.4	1367.9	1345.4	1313.4	1284.6	1255.8	1220.5	1201.3	1188.5
42.5°	1239.7	1239.7	1233.3	1223.7	1201.3	1185.2	1156.4	1124.4	1098.7	1079.6	1079.6
45°	1105.2	1108.4	1098.7	1092.4	1079.6	1054.0	1028.3	1005.9	983.4	970.7	964.3
47.5°	986.6	986.6	977.1	970.7	957.8	935.5	913.0	893.8	877.7	868.1	864.9
50°	874.5	874.5	874.5	858.5	842.5	826.5	810.5	788.0	778.4	772.1	768.9
52.5°	778.4	775.3	775.3	762.4	746.4	727.2	711.1	692.0	682.3	675.9	679.1
55°	692.0	692.0	688.8	672.7	656.8	637.5	621.4	605.5	599.0	592.6	595.8
56°	656.8	656.8	653.5	640.7	621.4	605.5	586.2	570.2	560.6	563.8	563.8
57°	631.1	624.6	624.6	608.7	592.6	570.2	554.2	538.2	531.8	528.6	528.6
58°	599.0	595.8	592.6	576.7	560.6	541.3	525.4	509.3	499.7	499.7	496.6
59°	567.0	567.0	560.6	547.8	531.8	512.5	496.6	480.5	470.9	467.7	467.7
60°	538.2	541.3	531.8	519.0	506.1	483.7	464.5	451.7	442.1	438.9	438.9
61°	512.5	512.5	506.1	490.2	474.1	458.2	438.9	422.8	416.5	410.1	410.1
62°	490.2	483.7	480.5	464.5	448.5	429.2	413.3	397.2	387.6	381.2	384.4
63°	461.2	458.2	451.7	438.9	422.8	403.6	384.4	371.6	362.0	352.4	355.6
64°	438.9	435.7	426.0	413.3	397.2	378.1	358.8	345.9	339.5	330.0	326.8
65°	410.1	406.9	403.6	387.6	371.6	352.4	336.4	323.6	313.9	307.5	301.1
66°	384.4	387.6	381.2	368.4	349.1	333.2	310.7	298.0	291.6	281.9	275.5
67°	362.0	362.0	355.6	342.7	323.6	307.5	291.6	275.5	265.8	256.3	253.1
67.5°	349.1	349.1	342.7	326.8	313.9	294.8	278.7	265.8	253.1	246.7	240.3
68°	336.4	336.4	333.2	320.3	304.3	285.1	269.1	253.1	240.3	230.6	227.4
69°	313.9	317.1	310.7	298.0	281.9	262.6	246.7	233.8	221.0	211.5	205.0
70°	294.8	291.6	285.1	272.3	256.3	243.5	227.4	211.5	198.6	185.8	182.5
71°	269.1	269.1	262.6	253.1	237.0	221.0	205.0	192.2	179.5	163.4	160.2
72°	249.9	249.9	243.5	230.6	217.9	201.8	185.8	169.8	160.2	144.1	137.8
72.5°	237.0	240.3	233.8	221.0	208.2	189.0	176.2	163.4	147.3	134.6	128.2
73°	230.6	227.4	224.2	211.5	195.4	182.5	166.6	153.7	137.8	125.0	118.5



TEST NUMBER: P584549  
 CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	144.1	144.1	140.9	128.2	115.3	102.5	89.7	76.9	64.0	51.3	44.9
80°	99.4	102.5	96.2	89.7	80.1	67.2	54.5	44.9	32.0	25.6	19.3
82.5°	64.0	64.0	60.8	54.5	48.1	38.4	32.0	22.4	16.1	12.9	9.6
85°	32.0	35.2	32.0	28.8	22.4	19.3	16.1	9.6	6.4	3.2	3.2
87.5°	12.9	12.9	12.9	9.6	9.6	6.4	3.2	3.2	3.2	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: P584549

CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2	2364.2
2.5°	2354.5	2354.5	2348.1	2344.9	2341.7	2338.5	2335.3	2332.2	2332.2	2335.3
5°	2335.3	2328.9	2316.1	2312.9	2303.2	2300.0	2293.7	2290.5	2293.7	2290.5
7.5°	2306.5	2293.7	2277.7	2271.2	2258.4	2252.1	2242.4	2242.4	2236.0	2239.2
10°	2268.0	2248.9	2229.6	2216.7	2207.2	2197.6	2191.1	2184.7	2181.5	2181.5
12.5°	2219.9	2197.6	2178.3	2159.1	2143.1	2136.6	2123.9	2123.9	2117.5	2114.3
15°	2165.6	2136.6	2114.3	2095.1	2082.3	2069.4	2059.8	2053.5	2047.0	2047.0
17.5°	2095.1	2069.4	2047.0	2024.5	2005.4	1995.7	1986.1	1976.5	1976.5	1970.2
20°	2018.1	1989.3	1970.2	1947.7	1931.7	1915.7	1902.8	1902.8	1896.4	1899.6
22.5°	1931.7	1896.4	1877.2	1861.2	1845.2	1832.4	1819.5	1819.5	1816.3	1813.2
25°	1835.6	1806.8	1784.3	1765.1	1755.5	1742.6	1739.4	1733.1	1729.9	1729.9
27.5°	1733.1	1710.6	1681.8	1672.2	1659.3	1653.0	1653.0	1649.8	1643.4	1646.6
30°	1624.1	1598.5	1582.5	1576.2	1563.3	1563.3	1560.1	1553.7	1553.7	1556.9
32.5°	1518.4	1492.9	1480.0	1476.8	1463.9	1463.9	1460.7	1463.9	1463.9	1467.2
35°	1403.1	1380.6	1377.4	1367.9	1364.7	1364.7	1364.7	1371.1	1377.4	1367.9
37.5°	1294.2	1278.2	1268.5	1265.3	1268.5	1268.5	1271.8	1281.4	1278.2	1275.0
40°	1182.0	1169.3	1162.9	1162.9	1169.3	1175.7	1175.7	1185.2	1188.5	1185.2
42.5°	1069.9	1060.3	1060.3	1063.5	1069.9	1073.1	1082.8	1092.4	1095.6	1098.7
45°	964.3	964.3	964.3	967.5	970.7	977.1	989.8	999.5	1002.7	1005.9
47.5°	861.7	858.5	868.1	871.3	881.0	884.2	893.8	906.5	909.8	913.0
50°	765.6	772.1	775.3	784.8	791.2	791.2	804.1	810.5	820.0	820.0
52.5°	675.9	685.6	688.8	698.4	701.5	704.7	711.1	720.8	727.2	727.2
55°	595.8	599.0	605.5	608.7	618.3	621.4	627.8	631.1	640.7	637.5
56°	560.6	567.0	570.2	576.7	583.0	586.2	592.6	595.8	602.3	605.5
57°	528.6	531.8	541.3	544.5	551.0	551.0	554.2	563.8	563.8	567.0
58°	496.6	502.9	506.1	509.3	515.7	519.0	525.4	528.6	531.8	528.6
59°	467.7	470.9	474.1	474.1	480.5	480.5	490.2	496.6	499.7	499.7
60°	438.9	438.9	442.1	445.3	451.7	454.9	454.9	461.2	461.2	461.2
61°	410.1	410.1	413.3	416.5	419.6	419.6	426.0	426.0	429.2	432.4
62°	384.4	381.2	381.2	384.4	384.4	390.8	394.0	397.2	400.4	397.2
63°	355.6	352.4	352.4	352.4	352.4	358.8	358.8	362.0	368.4	365.2
64°	323.6	323.6	323.6	323.6	326.8	326.8	333.2	336.4	339.5	342.7
65°	301.1	294.8	291.6	291.6	294.8	298.0	301.1	304.3	307.5	307.5
66°	275.5	269.1	265.8	265.8	265.8	265.8	272.3	272.3	278.7	278.7
67°	246.7	240.3	237.0	233.8	233.8	233.8	243.5	240.3	240.3	240.3
67.5°	237.0	227.4	224.2	221.0	217.9	224.2	221.0	224.2	224.2	221.0
68°	224.2	217.9	211.5	205.0	205.0	205.0	208.2	211.5	208.2	205.0
69°	198.6	195.4	185.8	179.5	176.2	179.5	176.2	179.5	176.2	179.5
70°	176.2	166.6	157.0	153.7	150.5	150.5	150.5	147.3	150.5	147.3
71°	153.7	144.1	134.6	128.2	125.0	125.0	121.7	125.0	121.7	125.0
72°	131.4	121.7	108.9	102.5	102.5	102.5	102.5	99.4	102.5	99.4
72.5°	121.7	108.9	99.4	92.9	89.7	89.7	89.7	89.7	86.5	89.7
73°	112.1	99.4	86.5	83.3	83.3	83.3	80.1	76.9	80.1	80.1





TEST NUMBER: P584549  
CATALOG NUMBER: HCC8S40D010BZ-HM82555835-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	38.4	28.8	25.6	25.6	25.6	25.6	25.6	25.6	22.4	22.4
80°	16.1	12.9	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
82.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
85°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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°	208.2	208.2	201.8	192.2	176.2	160.2	147.3	134.6	118.5	102.5	96.2
75°	192.2	189.0	182.5	173.0	160.2	144.1	131.4	115.3	102.5	86.5	80.1

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°	92.9	76.9	70.4	64.0	64.0	64.0	60.8	60.8	60.8	64.0
75°	73.7	60.8	54.5	48.1	51.3	48.1	51.3	48.1	48.1	48.1

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

Scaled Data Report



(END OF REPORT)