

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: P584719

Luminaire Tested: **HCC8S45D010MW-HM82555927-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584719
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-HM82555927-81RWWH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

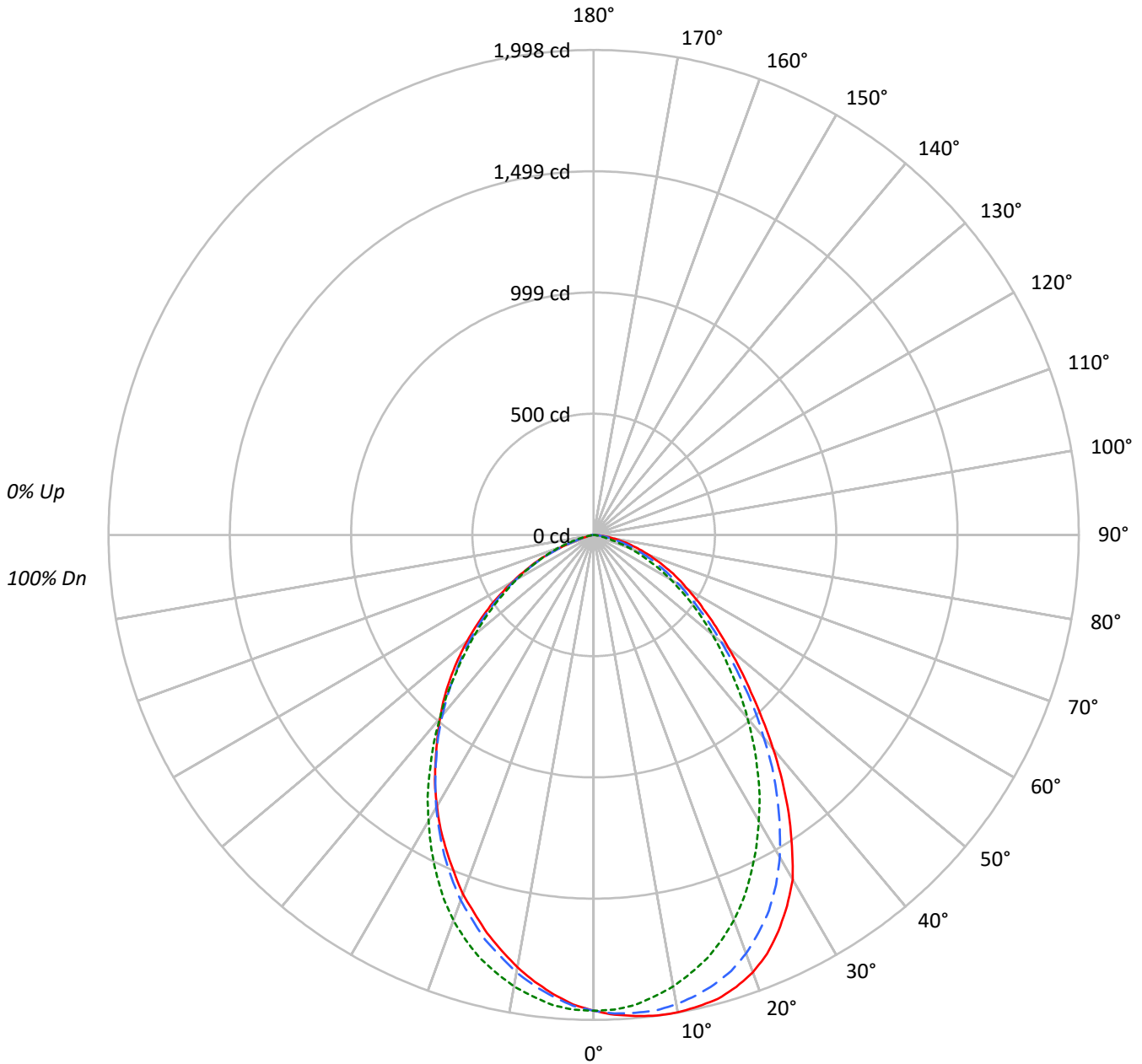
Lumens per Lamp: N/A
Luminaire Lumens: 3674.9 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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: P584719
CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

Luminous Intensity Polar Plot





TEST NUMBER: P584719

CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

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°	60448	60448	60448
5°	61583	60187	58788
10°	62546	59133	56640
15°	63175	57665	54185
20°	62937	55438	51687
25°	61274	52237	48801
30°	58356	48425	45965
35°	52698	44198	42696
40°	46296	39666	39566
45°	39959	34866	36370
50°	34785	30583	32621
55°	30843	26564	28418
60°	27518	22443	23590
65°	24815	18219	18606
70°	22026	13650	11017
75°	18991	7911	4754
80°	14615	2841	1421
85°	9376	955	955



TEST NUMBER: P584719

CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.0	5.0
10°-20°	512.3	13.9
20°-30°	724.6	19.7
30°-40°	763.5	20.8
40°-50°	648.9	17.7
50°-60°	467.2	12.7
60°-70°	269.5	7.3
70°-80°	92.2	2.5
80°-90°	12.7	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°	1420.9	38.7
0°-40°	2184.4	59.4
0°-60°	3300.5	89.8
0°-90°	3674.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3674.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1960	1960	1960	1960	1960	
5°	1990	1976	1944	1910	1899	190
15°	1979	1918	1806	1726	1697	557
25°	1801	1708	1535	1456	1434	826
35°	1400	1318	1174	1132	1134	872
45°	916	874	800	805	834	712
55°	574	529	494	513	529	516
65°	340	292	250	244	255	338
75°	159	120	66	42	40	168
85°	26	16	3	3	3	36
90°	0	0	0	0	0	



TEST NUMBER: P584719

CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3
2.5°	1978.9	1981.5	1978.9	1978.9	1976.3	1973.6	1970.9	1968.3	1963.0	1957.6	1957.6
5°	1989.5	1994.8	1989.5	1989.5	1981.5	1976.3	1970.9	1963.0	1952.3	1944.4	1944.4
7.5°	1997.5	1997.5	1997.5	1989.5	1984.2	1976.3	1963.0	1949.6	1931.1	1912.5	1893.9
10°	1997.5	1997.5	1994.8	1984.2	1978.9	1963.0	1949.6	1931.1	1912.5	1893.9	1888.5
12.5°	1989.5	1992.2	1986.8	1976.3	1963.0	1944.4	1925.8	1901.9	1880.7	1859.3	1848.8
15°	1978.9	1976.3	1970.9	1957.6	1941.7	1917.9	1899.2	1872.7	1843.5	1816.9	1806.3
17.5°	1952.3	1952.3	1944.4	1931.1	1909.9	1883.3	1854.0	1824.8	1792.9	1763.7	1750.5
20°	1917.9	1917.9	1907.2	1891.2	1870.0	1835.5	1803.6	1769.0	1731.8	1702.6	1689.4
22.5°	1867.3	1870.0	1856.7	1838.1	1814.2	1774.4	1742.5	1700.0	1662.8	1628.2	1617.7
25°	1800.9	1806.3	1792.9	1774.4	1742.5	1708.0	1668.1	1628.2	1585.8	1551.3	1535.3
27.5°	1724.0	1726.5	1713.3	1694.6	1662.8	1625.7	1585.8	1543.3	1503.4	1466.2	1450.3
30°	1638.9	1628.2	1623.0	1599.0	1564.5	1532.6	1487.5	1453.0	1410.4	1378.6	1360.0
32.5°	1519.4	1524.7	1508.7	1490.2	1463.6	1426.4	1389.2	1349.4	1309.5	1285.6	1272.4
35°	1399.9	1405.1	1397.2	1378.6	1349.4	1317.5	1280.3	1251.1	1216.5	1187.3	1174.1
37.5°	1275.1	1275.1	1269.7	1259.1	1237.9	1208.5	1171.4	1142.2	1112.9	1089.0	1081.0
40°	1150.1	1144.8	1142.2	1134.2	1115.6	1089.0	1065.2	1041.3	1012.1	996.1	985.4
42.5°	1028.0	1028.0	1022.6	1014.6	996.1	982.9	958.9	932.3	911.1	895.1	895.1
45°	916.3	919.0	911.1	905.8	895.1	873.9	852.7	834.0	815.5	804.8	799.5
47.5°	818.2	818.2	810.2	804.8	794.2	775.6	757.1	741.1	727.8	719.9	717.2
50°	725.1	725.1	725.1	711.9	698.6	685.3	672.0	653.5	645.5	640.1	637.5
52.5°	645.5	642.8	642.8	632.1	618.9	602.9	589.7	573.7	565.7	560.5	563.2
55°	573.7	573.7	571.1	557.8	544.5	528.6	515.3	502.0	496.8	491.4	494.1
56°	544.5	544.5	541.9	531.3	515.3	502.0	486.1	472.8	464.9	467.4	467.4
57°	523.3	518.0	518.0	504.7	491.4	472.8	459.6	446.2	440.9	438.2	438.2
58°	496.8	494.1	491.4	478.1	464.9	448.9	435.7	422.4	414.4	414.4	411.7
59°	470.1	470.1	464.9	454.2	440.9	425.0	411.7	398.5	390.5	387.8	387.8
60°	446.2	448.9	440.9	430.3	419.7	401.0	385.2	374.5	366.6	363.9	363.9
61°	425.0	425.0	419.7	406.4	393.1	379.8	363.9	350.6	345.3	340.1	340.1
62°	406.4	401.0	398.5	385.2	371.8	355.9	342.6	329.4	321.4	316.1	318.7
63°	382.5	379.8	374.5	363.9	350.6	334.7	318.7	308.1	300.2	292.2	294.9
64°	363.9	361.3	353.3	342.6	329.4	313.4	297.5	286.9	281.5	273.5	271.0
65°	340.1	337.4	334.7	321.4	308.1	292.2	278.9	268.3	260.3	255.0	249.7
66°	318.7	321.4	316.1	305.4	289.5	276.2	257.7	247.0	241.8	233.8	228.4
67°	300.2	300.2	294.9	284.2	268.3	255.0	241.8	228.4	220.5	212.5	209.8
67.5°	289.5	289.5	284.2	271.0	260.3	244.3	231.1	220.5	209.8	204.6	199.2
68°	278.9	278.9	276.2	265.6	252.3	236.4	223.1	209.8	199.2	191.2	188.6
69°	260.3	263.0	257.7	247.0	233.8	217.8	204.6	193.9	183.2	175.4	170.0
70°	244.3	241.8	236.4	225.8	212.5	201.9	188.6	175.4	164.7	154.0	151.4
71°	223.1	223.1	217.8	209.8	196.6	183.2	170.0	159.4	148.7	135.5	132.8
72°	207.2	207.2	201.9	191.2	180.6	167.4	154.0	140.8	132.8	119.5	114.3
72.5°	196.6	199.2	193.9	183.2	172.7	156.7	146.0	135.5	122.2	111.6	106.3
73°	191.2	188.6	185.9	175.4	162.0	151.4	138.2	127.5	114.3	103.6	98.3



TEST NUMBER: P584719
 CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	<i>119.5</i>	119.5	116.8	106.3	95.6	85.0	74.4	63.7	53.1	42.5	37.2
80°	<i>82.3</i>	85.0	79.6	74.4	66.4	55.8	45.2	37.2	26.5	21.2	16.0
82.5°	<i>53.1</i>	53.1	50.4	45.2	39.9	31.9	26.5	18.7	13.3	10.7	8.0
85°	<i>26.5</i>	29.2	26.5	23.9	18.7	16.0	13.3	8.0	5.3	2.7	2.7
87.5°	<i>10.7</i>	10.7	10.7	8.0	8.0	5.3	2.7	2.7	2.7	0.0	0.0
90°	<i>0.0</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P584719

CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3	1960.3
2.5°	1952.3	1952.3	1947.1	1944.4	1941.7	1939.1	1936.4	1933.7	1933.7	1936.4
5°	1936.4	1931.1	1920.4	1917.9	1909.9	1907.2	1901.9	1899.2	1901.9	1899.2
7.5°	1912.5	1901.9	1888.5	1883.3	1872.7	1867.3	1859.3	1859.3	1854.0	1856.7
10°	1880.7	1864.7	1848.8	1838.1	1830.1	1822.1	1816.9	1811.6	1808.9	1808.9
12.5°	1840.8	1822.1	1806.3	1790.3	1777.0	1771.7	1761.1	1761.1	1755.7	1753.2
15°	1795.6	1771.7	1753.2	1737.2	1726.5	1716.0	1708.0	1702.6	1697.3	1697.3
17.5°	1737.2	1716.0	1697.3	1678.8	1662.8	1654.9	1646.9	1638.9	1638.9	1633.6
20°	1673.4	1649.5	1633.6	1615.0	1601.7	1588.5	1577.8	1577.8	1572.5	1575.1
22.5°	1601.7	1572.5	1556.6	1543.3	1529.9	1519.4	1508.7	1508.7	1506.1	1503.4
25°	1522.1	1498.2	1479.5	1463.6	1455.6	1445.0	1442.3	1437.0	1434.3	1434.3
27.5°	1437.0	1418.4	1394.6	1386.6	1375.9	1370.7	1370.7	1368.0	1362.7	1365.3
30°	1346.7	1325.5	1312.2	1306.8	1296.3	1296.3	1293.6	1288.3	1288.3	1290.9
32.5°	1259.1	1237.9	1227.2	1224.5	1213.9	1213.9	1211.2	1213.9	1213.9	1216.5
35°	1163.4	1144.8	1142.2	1134.2	1131.6	1131.6	1131.6	1136.9	1142.2	1134.2
37.5°	1073.2	1059.8	1051.8	1049.2	1051.8	1051.8	1054.5	1062.5	1059.8	1057.2
40°	980.2	969.5	964.2	964.2	969.5	974.9	974.9	982.9	985.4	982.9
42.5°	887.1	879.2	879.2	881.9	887.1	889.8	897.8	905.8	908.5	911.1
45°	799.5	799.5	799.5	802.2	804.8	810.2	820.7	828.7	831.4	834.0
47.5°	714.5	711.9	719.9	722.5	730.4	733.1	741.1	751.7	754.4	757.1
50°	634.8	640.1	642.8	650.8	656.1	656.1	666.7	672.0	680.0	680.0
52.5°	560.5	568.4	571.1	579.1	581.7	584.4	589.7	597.6	602.9	602.9
55°	494.1	496.8	502.0	504.7	512.6	515.3	520.6	523.3	531.3	528.6
56°	464.9	470.1	472.8	478.1	483.4	486.1	491.4	494.1	499.3	502.0
57°	438.2	440.9	448.9	451.6	456.9	456.9	459.6	467.4	467.4	470.1
58°	411.7	417.0	419.7	422.4	427.7	430.3	435.7	438.2	440.9	438.2
59°	387.8	390.5	393.1	393.1	398.5	398.5	406.4	411.7	414.4	414.4
60°	363.9	363.9	366.6	369.3	374.5	377.2	377.2	382.5	382.5	382.5
61°	340.1	340.1	342.6	345.3	347.9	347.9	353.3	353.3	355.9	358.6
62°	318.7	316.1	316.1	318.7	318.7	324.1	326.7	329.4	332.1	329.4
63°	294.9	292.2	292.2	292.2	292.2	297.5	297.5	300.2	305.4	302.9
64°	268.3	268.3	268.3	268.3	271.0	271.0	276.2	278.9	281.5	284.2
65°	249.7	244.3	241.8	241.8	244.3	247.0	249.7	252.3	255.0	255.0
66°	228.4	223.1	220.5	220.5	220.5	220.5	225.8	225.8	231.1	231.1
67°	204.6	199.2	196.6	193.9	193.9	193.9	201.9	199.2	199.2	199.2
67.5°	196.6	188.6	185.9	183.2	180.6	185.9	183.2	185.9	185.9	183.2
68°	185.9	180.6	175.4	170.0	170.0	170.0	172.7	175.4	172.7	170.0
69°	164.7	162.0	154.0	148.7	146.0	148.7	146.0	148.7	146.0	148.7
70°	146.0	138.2	130.2	127.5	124.8	124.8	124.8	122.2	124.8	122.2
71°	127.5	119.5	111.6	106.3	103.6	103.6	101.0	103.6	101.0	103.6
72°	108.9	101.0	90.3	85.0	85.0	85.0	85.0	82.3	85.0	82.3
72.5°	101.0	90.3	82.3	77.1	74.4	74.4	74.4	74.4	71.7	74.4
73°	93.0	82.3	71.7	69.1	69.1	69.1	66.4	63.7	66.4	66.4



TEST NUMBER: P584719
 CATALOG NUMBER: HCC8S45D010MW-HM82555927-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	31.9	23.9	21.2	21.2	21.2	21.2	21.2	21.2	18.7	18.7
80°	13.3	10.7	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
82.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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°	172.7	172.7	167.4	159.4	146.0	132.8	122.2	111.6	98.3	85.0	79.6
75°	159.4	156.7	151.4	143.5	132.8	119.5	108.9	95.6	85.0	71.7	66.4

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°	77.1	63.7	58.4	53.1	53.1	53.1	50.4	50.4	50.4	53.1
75°	61.1	50.4	45.2	39.9	42.5	39.9	42.5	39.9	39.9	39.9

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

Scaled Data Report



(END OF REPORT)