

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: P584583

Luminaire Tested: **HCC8S40D010MW-HM82555927-81RWWH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584583  
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-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**

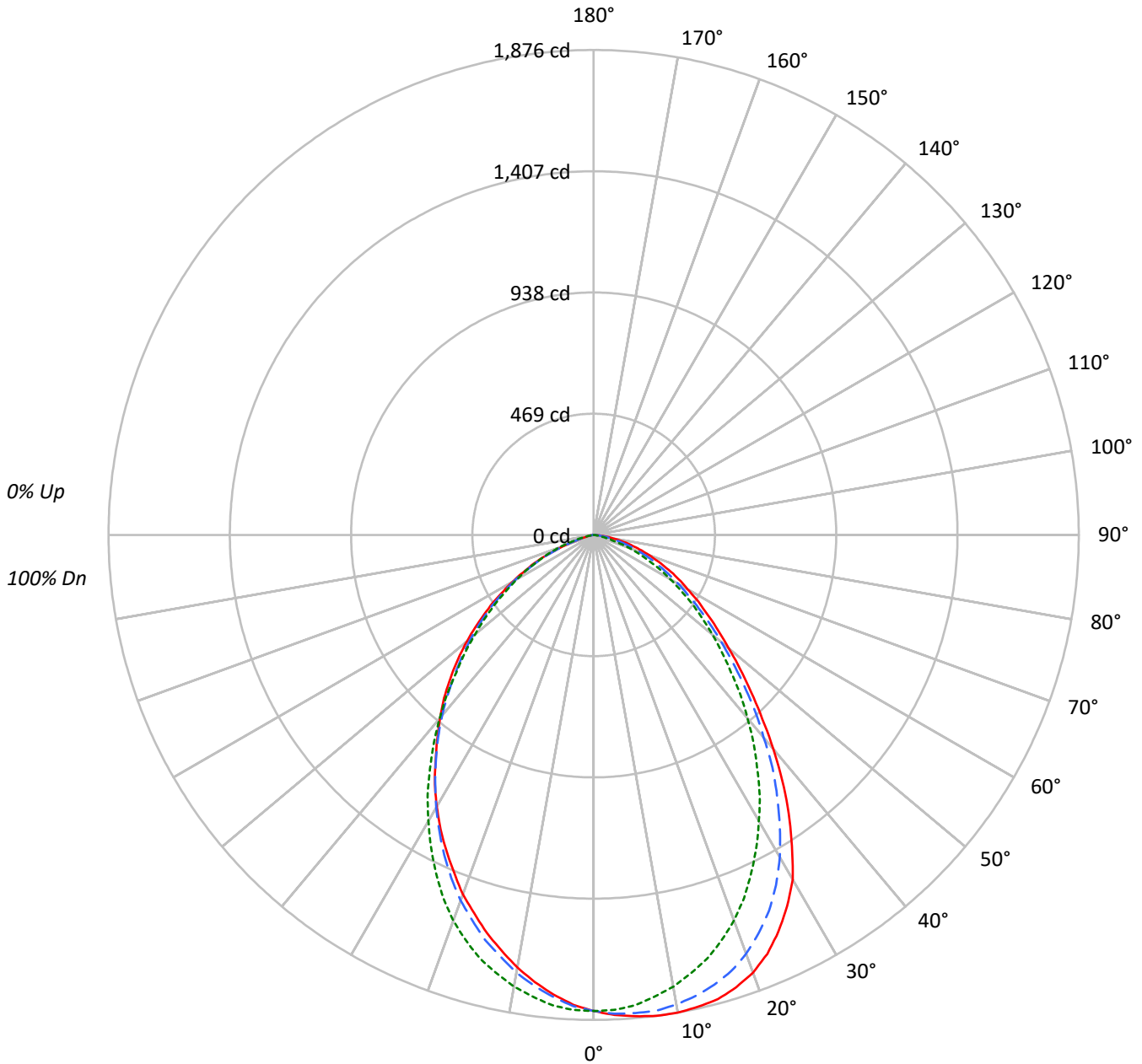
Lumens per Lamp: N/A  
Luminaire Lumens: 3452.2 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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: P584583  
CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

### Luminous Intensity Polar Plot



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



TEST NUMBER: P584583

CATALOG NUMBER: HCC8S40D010MW-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	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°	56785	56785	56785
5°	57853	56538	55228
10°	58754	55554	53209
15°	59347	54169	50903
20°	59117	52078	48554
25°	57562	49073	45844
30°	54820	45491	43180
35°	49506	41518	40110
40°	43490	37263	37162
45°	37539	32755	34168
50°	32679	28726	30645
55°	28977	24951	26698
60°	25853	21086	22159
65°	23305	17110	17475
70°	20701	12821	10350
75°	17836	7434	4468
80°	13745	2664	1332
85°	8845	885	885



TEST NUMBER: P584583  
 CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.9	5.0
10°-20°	481.2	13.9
20°-30°	680.7	19.7
30°-40°	717.2	20.8
40°-50°	609.6	17.7
50°-60°	438.9	12.7
60°-70°	253.2	7.3
70°-80°	86.6	2.5
80°-90°	11.9	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°	1334.8	38.7
0°-40°	2052.0	59.4
0°-60°	3100.5	89.8
0°-90°	3452.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3452.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1842	1842	1842	1842	1842	
5°	1869	1856	1826	1794	1784	179
15°	1859	1802	1697	1622	1594	523
25°	1692	1604	1442	1367	1347	776
35°	1315	1238	1103	1063	1066	819
45°	861	821	751	756	784	669
55°	539	497	464	482	497	485
65°	319	274	234	230	240	318
75°	150	112	62	40	38	158
85°	25	15	2	2	2	34
90°	0	0	0	0	0	



TEST NUMBER: P584583

CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5
2.5°	1859.0	1861.5	1859.0	1859.0	1856.5	1854.0	1851.5	1849.0	1844.0	1839.0	1839.0
5°	1869.0	1873.9	1869.0	1869.0	1861.5	1856.5	1851.5	1844.0	1834.0	1826.5	1826.5
7.5°	1876.4	1876.4	1876.4	1869.0	1864.0	1856.5	1844.0	1831.5	1819.0	1806.5	1801.5
10°	1876.4	1876.4	1873.9	1864.0	1859.0	1844.0	1831.5	1814.0	1796.5	1779.2	1774.2
12.5°	1869.0	1871.5	1866.5	1856.5	1844.0	1826.5	1809.0	1786.7	1766.7	1746.7	1736.7
15°	1859.0	1856.5	1851.5	1839.0	1824.0	1801.5	1784.2	1759.2	1731.7	1706.8	1696.8
17.5°	1834.0	1834.0	1826.5	1814.0	1794.0	1769.2	1741.7	1714.2	1684.3	1656.8	1644.3
20°	1801.5	1801.5	1791.7	1776.7	1756.7	1724.2	1694.3	1661.8	1627.0	1599.5	1587.0
22.5°	1754.2	1756.7	1744.2	1726.7	1704.3	1666.8	1636.8	1597.0	1562.0	1529.6	1519.6
25°	1691.8	1696.8	1684.3	1666.8	1636.8	1604.5	1567.0	1529.6	1489.6	1457.3	1442.3
27.5°	1619.5	1622.0	1609.5	1592.0	1562.0	1527.1	1489.6	1449.8	1412.3	1377.4	1362.4
30°	1539.6	1529.6	1524.6	1502.1	1469.8	1439.8	1397.3	1364.9	1324.9	1295.1	1277.6
32.5°	1427.3	1432.3	1417.3	1399.8	1374.9	1339.9	1305.1	1267.6	1230.2	1207.7	1195.2
35°	1315.1	1319.9	1312.6	1295.1	1267.6	1237.6	1202.7	1175.2	1142.9	1115.4	1102.9
37.5°	1197.7	1197.7	1192.7	1182.7	1162.7	1135.4	1100.4	1073.0	1045.5	1023.0	1015.5
40°	1080.4	1075.5	1073.0	1065.5	1048.0	1023.0	1000.6	978.2	950.7	935.7	925.7
42.5°	965.7	965.7	960.7	953.2	935.7	923.2	900.8	875.8	855.8	840.9	840.9
45°	860.8	863.3	855.8	850.8	840.9	821.0	801.0	783.5	766.0	756.1	751.1
47.5°	768.5	768.5	761.0	756.1	746.1	728.6	711.1	696.2	683.7	676.3	673.8
50°	681.2	681.2	681.2	668.8	656.3	643.8	631.3	613.8	606.3	601.3	598.8
52.5°	606.3	603.8	603.8	593.9	581.4	566.4	553.9	539.0	531.5	526.5	529.0
55°	539.0	539.0	536.5	524.0	511.6	496.6	484.1	471.6	466.6	461.6	464.1
56°	511.6	511.6	509.1	499.1	484.1	471.6	456.6	444.1	436.7	439.1	439.1
57°	491.6	486.6	486.6	474.1	461.6	444.1	431.7	419.2	414.2	411.7	411.7
58°	466.6	464.1	461.6	449.1	436.7	421.7	409.2	396.7	389.2	389.2	386.8
59°	441.6	441.6	436.7	426.7	414.2	399.2	386.8	374.3	366.8	364.3	364.3
60°	419.2	421.7	414.2	404.2	394.2	376.8	361.8	351.9	344.4	341.9	341.9
61°	399.2	399.2	394.2	381.8	369.3	356.9	341.9	329.4	324.4	319.4	319.4
62°	381.8	376.8	374.3	361.8	349.4	334.4	321.9	309.4	301.9	296.9	299.4
63°	359.3	356.9	351.9	341.9	329.4	314.4	299.4	289.4	281.9	274.5	277.0
64°	341.9	339.4	331.9	321.9	309.4	294.4	279.4	269.5	264.5	257.0	254.5
65°	319.4	316.9	314.4	301.9	289.4	274.5	262.0	252.0	244.5	239.5	234.5
66°	299.4	301.9	296.9	286.9	272.0	259.5	242.0	232.0	227.1	219.6	214.6
67°	281.9	281.9	277.0	267.0	252.0	239.5	227.1	214.6	207.1	199.6	197.2
67.5°	272.0	272.0	267.0	254.5	244.5	229.6	217.1	207.1	197.2	192.2	187.2
68°	262.0	262.0	259.5	249.5	237.0	222.1	209.6	197.2	187.2	179.7	177.2
69°	244.5	247.0	242.0	232.0	219.6	204.6	192.2	182.2	172.2	164.7	159.7
70°	229.6	227.1	222.1	212.1	199.6	189.7	177.2	164.7	154.7	144.7	142.2
71°	209.6	209.6	204.6	197.2	184.7	172.2	159.7	149.7	139.7	127.2	124.7
72°	194.7	194.7	189.7	179.7	169.7	157.2	144.7	132.2	124.7	112.3	107.3
72.5°	184.7	187.2	182.2	172.2	162.2	147.2	137.2	127.2	114.8	104.8	99.8
73°	179.7	177.2	174.7	164.7	152.2	142.2	129.7	119.7	107.3	97.3	92.3



TEST NUMBER: P584583  
 CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	<i>112.3</i>	112.3	109.8	99.8	89.8	79.8	69.9	59.9	49.9	39.9	35.0
80°	<i>77.4</i>	79.8	74.9	69.9	62.4	52.4	42.4	35.0	25.0	20.0	15.0
82.5°	<i>49.9</i>	49.9	47.4	42.4	37.5	30.0	25.0	17.5	12.5	10.0	7.5
85°	<i>25.0</i>	27.5	25.0	22.5	17.5	15.0	12.5	7.5	5.0	2.5	2.5
87.5°	<i>10.0</i>	10.0	10.0	7.5	7.5	5.0	2.5	2.5	2.5	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

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



TEST NUMBER: P584583

CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5	1841.5
2.5°	1834.0	1834.0	1829.0	1826.5	1824.0	1821.5	1819.0	1816.5	1816.5	1819.0
5°	1819.0	1814.0	1804.0	1801.5	1794.0	1791.7	1786.7	1784.2	1786.7	1784.2
7.5°	1796.5	1786.7	1774.2	1769.2	1759.2	1754.2	1746.7	1746.7	1741.7	1744.2
10°	1766.7	1751.7	1736.7	1726.7	1719.2	1711.8	1706.8	1701.8	1699.3	1699.3
12.5°	1729.2	1711.8	1696.8	1681.8	1669.3	1664.3	1654.3	1654.3	1649.3	1646.8
15°	1686.8	1664.3	1646.8	1632.0	1622.0	1612.0	1604.5	1599.5	1594.5	1594.5
17.5°	1632.0	1612.0	1594.5	1577.0	1562.0	1554.5	1547.1	1539.6	1539.6	1534.6
20°	1572.0	1549.6	1534.6	1517.1	1504.6	1492.1	1482.1	1482.1	1477.1	1479.6
22.5°	1504.6	1477.1	1462.3	1449.8	1437.3	1427.3	1417.3	1417.3	1414.8	1412.3
25°	1429.8	1407.3	1389.9	1374.9	1367.4	1357.4	1354.9	1349.9	1347.4	1347.4
27.5°	1349.9	1332.4	1310.1	1302.6	1292.6	1287.6	1287.6	1285.1	1280.1	1282.6
30°	1265.1	1245.1	1232.7	1227.7	1217.7	1217.7	1215.2	1210.2	1210.2	1212.7
32.5°	1182.7	1162.7	1152.9	1150.4	1140.4	1140.4	1137.9	1140.4	1140.4	1142.9
35°	1092.9	1075.5	1073.0	1065.5	1063.0	1063.0	1063.0	1068.0	1073.0	1065.5
37.5°	1008.0	995.7	988.2	985.7	988.2	988.2	990.7	998.1	995.7	993.2
40°	920.7	910.8	905.8	905.8	910.8	915.8	915.8	923.2	925.7	923.2
42.5°	833.5	826.0	826.0	828.5	833.5	836.0	843.4	850.8	853.3	855.8
45°	751.1	751.1	751.1	753.6	756.1	761.0	771.0	778.5	781.0	783.5
47.5°	671.3	668.8	676.3	678.7	686.2	688.7	696.2	706.1	708.6	711.1
50°	596.4	601.3	603.8	611.3	616.3	616.3	626.3	631.3	638.8	638.8
52.5°	526.5	534.0	536.5	543.9	546.4	548.9	553.9	561.4	566.4	566.4
55°	464.1	466.6	471.6	474.1	481.6	484.1	489.1	491.6	499.1	496.6
56°	436.7	441.6	444.1	449.1	454.1	456.6	461.6	464.1	469.1	471.6
57°	411.7	414.2	421.7	424.2	429.2	429.2	431.7	439.1	439.1	441.6
58°	386.8	391.7	394.2	396.7	401.7	404.2	409.2	411.7	414.2	411.7
59°	364.3	366.8	369.3	369.3	374.3	374.3	381.8	386.8	389.2	389.2
60°	341.9	341.9	344.4	346.9	351.9	354.4	354.4	359.3	359.3	359.3
61°	319.4	319.4	321.9	324.4	326.9	326.9	331.9	331.9	334.4	336.9
62°	299.4	296.9	296.9	299.4	299.4	304.4	306.9	309.4	311.9	309.4
63°	277.0	274.5	274.5	274.5	274.5	279.4	279.4	281.9	286.9	284.4
64°	252.0	252.0	252.0	252.0	254.5	254.5	259.5	262.0	264.5	267.0
65°	234.5	229.6	227.1	227.1	229.6	232.0	234.5	237.0	239.5	239.5
66°	214.6	209.6	207.1	207.1	207.1	207.1	212.1	212.1	217.1	217.1
67°	192.2	187.2	184.7	182.2	182.2	182.2	189.7	187.2	187.2	187.2
67.5°	184.7	177.2	174.7	172.2	169.7	174.7	172.2	174.7	174.7	172.2
68°	174.7	169.7	164.7	159.7	159.7	159.7	162.2	164.7	162.2	159.7
69°	154.7	152.2	144.7	139.7	137.2	139.7	137.2	139.7	137.2	139.7
70°	137.2	129.7	122.2	119.7	117.3	117.3	117.3	114.8	117.3	114.8
71°	119.7	112.3	104.8	99.8	97.3	97.3	94.8	97.3	94.8	97.3
72°	102.3	94.8	84.8	79.8	79.8	79.8	79.8	77.4	79.8	77.4
72.5°	94.8	84.8	77.4	72.4	69.9	69.9	69.9	69.9	67.4	69.9
73°	87.3	77.4	67.4	64.9	64.9	64.9	62.4	59.9	62.4	62.4





TEST NUMBER: P584583  
 CATALOG NUMBER: HCC8S40D010MW-HM82555927-81RWWH

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	30.0	22.5	20.0	20.0	20.0	20.0	20.0	20.0	17.5	17.5
80°	12.5	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
82.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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°	162.2	162.2	157.2	149.7	137.2	124.7	114.8	104.8	92.3	79.8	74.9
75°	149.7	147.2	142.2	134.7	124.7	112.3	102.3	89.8	79.8	67.4	62.4

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°	72.4	59.9	54.9	49.9	49.9	49.9	47.4	47.4	47.4	49.9
75°	57.4	47.4	42.4	37.5	39.9	37.5	39.9	37.5	37.5	37.5

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

Scaled Data Report



(END OF REPORT)