

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: P593597

Luminaire Tested: **HCC8S20D010BZ-HM80520850-81RWWH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593597
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: HCC8S20D010BZ-HM80520850-81RWWH
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

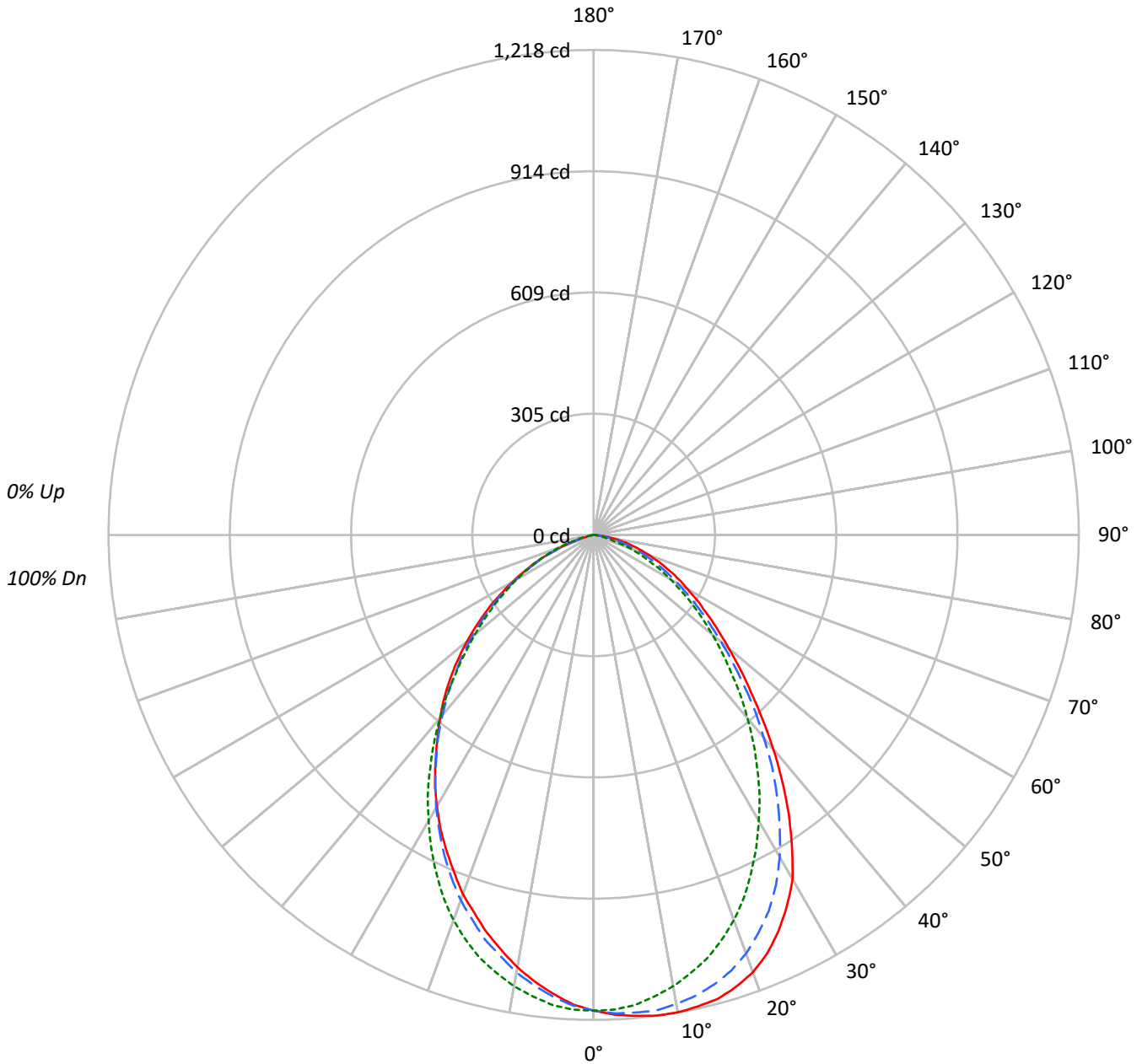
Lumens per Lamp: N/A
Luminaire Lumens: 2239.8 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20
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: P593597
CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

Luminous Intensity Polar Plot



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



TEST NUMBER: P593597

CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

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								
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59								
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47								
7	71	58	51	45	69	58	50	45	56	49	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35								
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	36843	36843	36843
5°	37535	36684	35829
10°	38122	36040	34521
15°	38504	35145	33025
20°	38358	33787	31503
25°	37345	31840	29744
30°	35568	29514	28012
35°	32118	26938	26020
40°	28218	24177	24112
45°	24356	21251	22171
50°	21199	18637	19880
55°	18795	16193	17322
60°	16775	13673	14376
65°	15118	11098	11339
70°	13425	8322	6717
75°	11581	4813	2883
80°	8914	1723	852
85°	5732	601	601



TEST NUMBER: P593597

CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	5.0
10°-20°	312.2	13.9
20°-30°	441.6	19.7
30°-40°	465.3	20.8
40°-50°	395.5	17.7
50°-60°	284.8	12.7
60°-70°	164.3	7.3
70°-80°	56.2	2.5
80°-90°	7.7	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°	866.0	38.7
0°-40°	1331.3	59.4
0°-60°	2011.6	89.8
0°-90°	2239.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1195	1195	1195	1195	1195	
5°	1213	1204	1185	1164	1158	116
15°	1206	1169	1101	1052	1034	340
25°	1098	1041	936	887	874	503
35°	853	803	716	690	691	531
45°	558	533	487	490	508	434
55°	350	322	301	312	322	315
65°	207	178	152	149	155	206
75°	97	73	40	26	24	102
85°	16	10	2	2	2	22
90°	0	0	0	0	0	



TEST NUMBER: P593597

CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8
2.5°	1206.1	1207.8	1206.1	1206.1	1204.5	1202.8	1201.3	1199.6	1196.4	1193.1	1193.1
5°	1212.6	1215.8	1212.6	1212.6	1207.8	1204.5	1201.3	1196.4	1189.9	1185.1	1185.1
7.5°	1217.5	1217.5	1217.5	1212.6	1209.3	1204.5	1196.4	1188.3	1180.2	1172.1	1168.9
10°	1217.5	1217.5	1215.8	1209.3	1206.1	1196.4	1188.3	1176.9	1165.6	1154.3	1151.0
12.5°	1212.6	1214.2	1211.0	1204.5	1196.4	1185.1	1173.7	1159.2	1146.2	1133.3	1126.8
15°	1206.1	1204.5	1201.3	1193.1	1183.4	1168.9	1157.5	1141.3	1123.5	1107.3	1100.9
17.5°	1189.9	1189.9	1185.1	1176.9	1164.0	1147.8	1130.0	1112.1	1092.8	1074.9	1066.9
20°	1168.9	1168.9	1162.4	1152.7	1139.7	1118.6	1099.3	1078.2	1055.5	1037.7	1029.6
22.5°	1138.1	1139.7	1131.6	1120.3	1105.8	1081.4	1062.0	1036.1	1013.4	992.4	985.9
25°	1097.6	1100.9	1092.8	1081.4	1062.0	1041.0	1016.6	992.4	966.5	945.5	935.8
27.5°	1050.7	1052.3	1044.2	1032.8	1013.4	990.8	966.5	940.6	916.3	893.6	883.9
30°	998.9	992.4	989.2	974.6	953.5	934.1	906.6	885.6	859.7	840.2	828.9
32.5°	926.0	929.3	919.6	908.2	892.1	869.4	846.7	822.4	798.1	783.5	775.5
35°	853.2	856.4	851.5	840.2	822.4	802.9	780.4	762.5	741.5	723.6	715.6
37.5°	777.0	777.0	773.9	767.4	754.5	736.6	713.9	696.1	678.3	663.8	658.8
40°	701.0	697.7	696.1	691.2	680.0	663.8	649.2	634.6	616.8	607.1	600.6
42.5°	626.6	626.6	623.3	618.4	607.1	599.0	584.4	568.2	555.3	545.6	545.6
45°	558.5	560.1	555.3	552.0	545.6	532.6	519.7	508.4	497.0	490.5	487.3
47.5°	498.7	498.7	493.7	490.5	484.0	472.7	461.3	451.6	443.6	438.8	437.1
50°	441.9	441.9	441.9	433.9	425.8	417.7	409.6	398.2	393.4	390.2	388.5
52.5°	393.4	391.8	391.8	385.3	377.2	367.5	359.4	349.6	344.8	341.6	343.3
55°	349.6	349.6	348.1	339.9	331.9	322.2	314.1	306.0	302.7	299.5	301.2
56°	331.9	331.9	330.3	323.7	314.1	306.0	296.2	288.2	283.3	285.0	285.0
57°	318.9	315.7	315.7	307.6	299.5	288.2	280.0	272.0	268.8	267.1	267.1
58°	302.7	301.2	299.5	291.4	283.3	273.6	265.5	257.4	252.6	252.6	250.9
59°	286.5	286.5	283.3	276.8	268.8	259.0	250.9	242.8	237.9	236.4	236.4
60°	272.0	273.6	268.8	262.3	255.8	244.4	234.7	228.2	223.4	221.7	221.7
61°	259.0	259.0	255.8	247.7	239.6	231.6	221.7	213.7	210.5	207.2	207.2
62°	247.7	244.4	242.8	234.7	226.7	216.9	208.9	200.7	195.9	192.7	194.3
63°	233.1	231.6	228.2	221.7	213.7	204.0	194.3	187.8	183.0	178.1	179.7
64°	221.7	220.2	215.4	208.9	200.7	191.0	181.3	174.8	171.6	166.8	165.1
65°	207.2	205.5	204.0	195.9	187.8	178.1	170.0	163.5	158.6	155.4	152.1
66°	194.3	195.9	192.7	186.2	176.5	168.3	157.1	150.6	147.3	142.4	139.2
67°	183.0	183.0	179.7	173.3	163.5	155.4	147.3	139.2	134.4	129.5	127.9
67.5°	176.5	176.5	173.3	165.1	158.6	148.9	140.9	134.4	127.9	124.7	121.4
68°	170.0	170.0	168.3	161.9	153.8	144.1	136.0	127.9	121.4	116.5	114.9
69°	158.6	160.3	157.1	150.6	142.4	132.7	124.7	118.2	111.7	106.9	103.7
70°	148.9	147.3	144.1	137.6	129.5	123.0	114.9	106.9	100.4	93.9	92.3
71°	136.0	136.0	132.7	127.9	119.9	111.7	103.7	97.2	90.7	82.6	81.0
72°	126.2	126.2	123.0	116.5	110.0	102.0	93.9	85.8	81.0	72.8	69.6
72.5°	119.9	121.4	118.2	111.7	105.2	95.5	89.0	82.6	74.5	68.0	64.8
73°	116.5	114.9	113.4	106.9	98.7	92.3	84.2	77.7	69.6	63.1	59.9



TEST NUMBER: P593597
 CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
77.5°	72.8	72.8	71.3	64.8	58.3	51.8	45.4	38.9	32.4	25.9	22.7
80°	50.2	51.8	48.6	45.4	40.4	34.0	27.5	22.7	16.2	13.0	9.7
82.5°	32.4	32.4	30.7	27.5	24.2	19.4	16.2	11.3	8.0	6.5	4.8
85°	16.2	17.8	16.2	14.5	11.3	9.7	8.0	4.8	3.2	1.7	1.7
87.5°	6.5	6.5	6.5	4.8	4.8	3.2	1.7	1.7	1.7	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: P593597

CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8	1194.8
2.5°	1189.9	1189.9	1186.6	1185.1	1183.4	1181.8	1180.2	1178.6	1178.6	1180.2
5°	1180.2	1176.9	1170.5	1168.9	1164.0	1162.4	1159.2	1157.5	1159.2	1157.5
7.5°	1165.6	1159.2	1151.0	1147.8	1141.3	1138.1	1133.3	1133.3	1130.0	1131.6
10°	1146.2	1136.5	1126.8	1120.3	1115.5	1110.6	1107.3	1104.1	1102.5	1102.5
12.5°	1122.0	1110.6	1100.9	1091.1	1083.1	1079.9	1073.4	1073.4	1070.1	1068.5
15°	1094.4	1079.9	1068.5	1058.7	1052.3	1045.8	1041.0	1037.7	1034.5	1034.5
17.5°	1058.7	1045.8	1034.5	1023.1	1013.4	1008.6	1003.8	998.9	998.9	995.6
20°	1019.9	1005.3	995.6	984.3	976.2	968.1	961.7	961.7	958.4	960.0
22.5°	976.2	958.4	948.7	940.6	932.5	926.0	919.6	919.6	917.9	916.3
25°	927.6	913.1	901.7	892.1	887.2	880.7	879.1	875.9	874.2	874.2
27.5°	875.9	864.5	850.0	845.1	838.6	835.3	835.3	833.8	830.5	832.1
30°	820.8	807.9	799.7	796.5	790.0	790.0	788.4	785.2	785.2	786.7
32.5°	767.4	754.5	748.0	746.3	739.8	739.8	738.3	739.8	739.8	741.5
35°	709.1	697.7	696.1	691.2	689.7	689.7	689.7	692.9	696.1	691.2
37.5°	654.0	646.0	641.1	639.5	641.1	641.1	642.7	647.6	646.0	644.3
40°	597.4	590.9	587.7	587.7	590.9	594.2	594.2	599.0	600.6	599.0
42.5°	540.8	535.9	535.9	537.5	540.8	542.3	547.1	552.0	553.6	555.3
45°	487.3	487.3	487.3	488.9	490.5	493.7	500.2	505.1	506.7	508.4
47.5°	435.4	433.9	438.8	440.3	445.3	446.8	451.6	458.1	459.8	461.3
50°	386.9	390.2	391.8	396.7	399.9	399.9	406.4	409.6	414.4	414.4
52.5°	341.6	346.4	348.1	352.9	354.6	356.1	359.4	364.3	367.5	367.5
55°	301.2	302.7	306.0	307.6	312.4	314.1	317.4	318.9	323.7	322.2
56°	283.3	286.5	288.2	291.4	294.7	296.2	299.5	301.2	304.4	306.0
57°	267.1	268.8	273.6	275.2	278.5	278.5	280.0	285.0	285.0	286.5
58°	250.9	254.1	255.8	257.4	260.6	262.3	265.5	267.1	268.8	267.1
59°	236.4	237.9	239.6	239.6	242.8	242.8	247.7	250.9	252.6	252.6
60°	221.7	221.7	223.4	225.1	228.2	229.9	229.9	233.1	233.1	233.1
61°	207.2	207.2	208.9	210.5	212.1	212.1	215.4	215.4	216.9	218.6
62°	194.3	192.7	192.7	194.3	194.3	197.5	199.2	200.7	202.4	200.7
63°	179.7	178.1	178.1	178.1	178.1	181.3	181.3	183.0	186.2	184.5
64°	163.5	163.5	163.5	163.5	165.1	165.1	168.3	170.0	171.6	173.3
65°	152.1	148.9	147.3	147.3	148.9	150.6	152.1	153.8	155.4	155.4
66°	139.2	136.0	134.4	134.4	134.4	134.4	137.6	137.6	140.9	140.9
67°	124.7	121.4	119.9	118.2	118.2	118.2	123.0	121.4	121.4	121.4
67.5°	119.9	114.9	113.4	111.7	110.0	113.4	111.7	113.4	113.4	111.7
68°	113.4	110.0	106.9	103.7	103.7	103.7	105.2	106.9	105.2	103.7
69°	100.4	98.7	93.9	90.7	89.0	90.7	89.0	90.7	89.0	90.7
70°	89.0	84.2	79.3	77.7	76.1	76.1	76.1	74.5	76.1	74.5
71°	77.7	72.8	68.0	64.8	63.1	63.1	61.5	63.1	61.5	63.1
72°	66.4	61.5	55.1	51.8	51.8	51.8	51.8	50.2	51.8	50.2
72.5°	61.5	55.1	50.2	46.9	45.4	45.4	45.4	45.4	43.7	45.4
73°	56.6	50.2	43.7	42.1	42.1	42.1	40.4	38.9	40.4	40.4



TEST NUMBER: P593597

CATALOG NUMBER: HCC8S20D010BZ-HM80520850-81RWWH

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
77.5°	19.4	14.5	13.0	13.0	13.0	13.0	13.0	13.0	11.3	11.3
80°	8.0	6.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
82.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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°	105.2	105.2	102.0	97.2	89.0	81.0	74.5	68.0	59.9	51.8	48.6
75°	97.2	95.5	92.3	87.5	81.0	72.8	66.4	58.3	51.8	43.7	40.4

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°	46.9	38.9	35.6	32.4	32.4	32.4	30.7	30.7	30.7	32.4
75°	37.2	30.7	27.5	24.2	25.9	24.2	25.9	24.2	24.2	24.2

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

Scaled Data Report



(END OF REPORT)