

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P775991

Luminaire Tested: HCDJBS1525CSD-HCD4TRMB-2500lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K
Description: 4 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1564.9 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.94
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

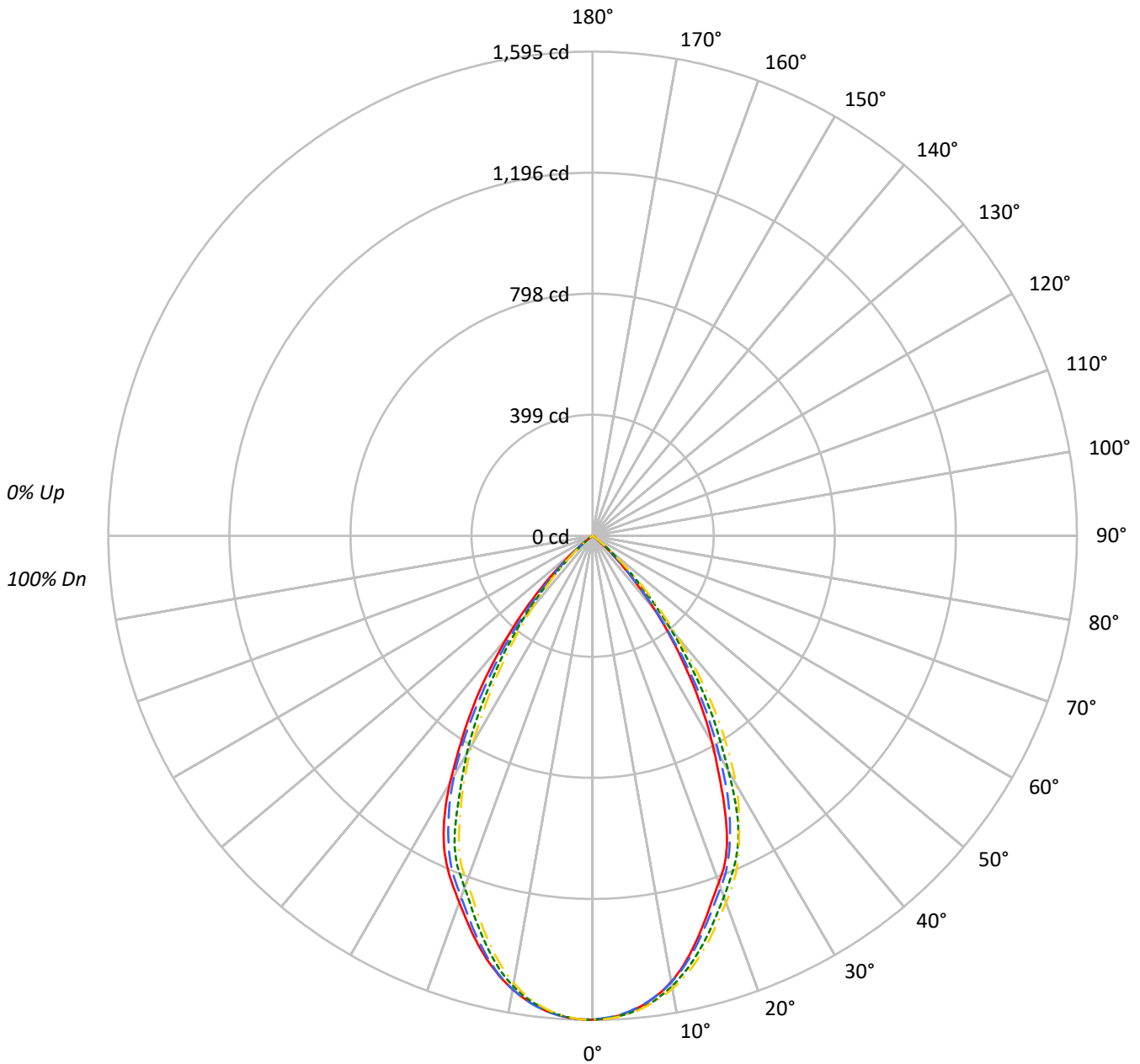
Input Watts (W): 25
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80																			
4	97	89	83	79	95	88	82	78	85	81	77	83	80	76	82	78	76	74																			
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69																			
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64																			
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59																			
8	78	68	62	58	77	67	62	57	66	61	57	65	60	57	64	60	57	55																			
9	74	64	58	54	73	63	58	54	62	57	53	62	57	53	61	56	53	52																			
10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	57	53	50	48																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	200617	200617	200617	200617
5°	197985	198667	199261	198882
10°	190575	192466	193923	192530
15°	176972	181871	184320	179812
20°	162788	169337	172015	165172
25°	144553	156981	160064	149011
30°	114395	129799	136440	120527
35°	83162	98802	105209	88585
40°	52046	65254	72401	57204
45°	23529	34973	40294	26875
50°	6813	10690	13940	8027
55°	1075	1075	1470	1360
60°	428	428	503	428
65°	298	298	298	298
70°	184	258	258	258
75°	97	243	97	243
80°	0	145	145	145
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 40294 cd/sqm



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	9.5
10°-20°	388.2	24.8
20°-30°	495.4	31.7
30°-40°	378.8	24.2
40°-50°	141.6	9.0
50°-60°	11.5	0.7
60°-70°	1.0	0.1
70°-80°	0.4	0.0
80°-90°	0.0	0.0
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°	1031.6	65.9
0°-40°	1410.4	90.1
0°-60°	1563.4	99.9
0°-90°	1564.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1564.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1594	1594	1594	1594	1594	
5°	1567	1573	1577	1574	1567	147
15°	1358	1396	1415	1380	1358	380
25°	1041	1130	1153	1073	1041	468
35°	541	643	685	577	541	337
45°	132	196	226	151	132	111
55°	5	5	7	6	5	8
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL1525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1
0.5°	1593.6	1592.4	1592.4	1592.4	1593.6	1593.9	1594.6	1595.1	1594.4	1593.6	1593.6
1°	1592.6	1591.4	1591.1	1591.4	1592.6	1593.1	1593.9	1594.4	1594.1	1593.6	1593.4
1.5°	1591.1	1589.7	1589.4	1589.7	1591.4	1592.1	1592.9	1593.6	1593.1	1592.9	1593.1
2°	1589.2	1587.7	1587.2	1587.7	1589.9	1590.6	1591.4	1592.1	1592.1	1591.9	1592.1
2.5°	1586.7	1585.0	1584.7	1585.5	1587.9	1588.7	1589.4	1590.4	1590.6	1590.4	1590.6
3°	1583.7	1582.0	1581.8	1582.7	1585.5	1586.4	1587.2	1588.2	1588.7	1588.7	1588.9
3.5°	1580.3	1578.3	1578.5	1579.8	1582.7	1583.7	1584.7	1585.7	1586.4	1586.7	1586.7
4°	1576.3	1574.6	1574.6	1576.1	1579.8	1580.8	1581.5	1582.7	1583.7	1584.2	1584.2
4.5°	1571.9	1570.1	1570.4	1572.4	1576.6	1577.6	1578.3	1579.5	1580.8	1581.3	1581.3
5°	1567.2	1565.2	1565.4	1567.9	1572.6	1573.6	1574.3	1575.8	1577.3	1578.0	1577.8
5.5°	1561.7	1559.5	1560.5	1563.0	1568.2	1569.1	1570.1	1571.6	1573.3	1574.1	1573.6
6°	1556.0	1553.8	1554.8	1557.8	1563.5	1564.5	1565.4	1567.2	1569.1	1569.9	1569.1
6.5°	1549.9	1547.9	1549.1	1552.1	1558.0	1559.5	1560.5	1562.2	1564.5	1565.2	1564.5
7°	1543.2	1541.2	1542.7	1545.7	1552.1	1553.8	1555.1	1557.0	1559.0	1560.0	1559.3
7.5°	1536.0	1534.3	1535.5	1538.7	1545.7	1547.6	1549.4	1551.1	1553.1	1554.3	1553.6
8°	1528.4	1526.9	1528.1	1531.6	1538.7	1541.0	1543.2	1545.2	1547.2	1547.9	1547.2
8.5°	1520.0	1519.0	1520.5	1523.7	1531.3	1533.8	1536.8	1538.5	1540.2	1541.5	1540.5
9°	1511.1	1510.3	1512.1	1515.3	1523.4	1526.6	1529.9	1531.6	1533.3	1534.1	1533.3
9.5°	1501.2	1501.2	1503.2	1506.6	1515.0	1518.7	1522.4	1524.7	1525.6	1526.4	1525.6
10°	1491.3	1491.3	1493.5	1497.2	1506.1	1510.6	1514.5	1516.8	1517.5	1518.0	1517.2
10.5°	1480.9	1480.9	1483.4	1487.6	1497.5	1501.7	1506.1	1508.6	1509.1	1509.3	1508.3
11°	1469.1	1469.5	1472.8	1477.0	1487.6	1492.5	1497.5	1499.9	1500.4	1500.2	1499.0
11.5°	1456.9	1457.9	1461.6	1466.1	1477.5	1483.1	1488.6	1490.8	1490.8	1490.6	1488.8
12°	1444.1	1445.6	1449.8	1454.7	1467.3	1473.3	1478.9	1481.4	1481.4	1480.4	1478.7
12.5°	1430.7	1432.5	1437.2	1443.1	1456.2	1462.6	1468.8	1471.5	1471.3	1469.8	1467.8
13°	1416.9	1419.1	1424.6	1431.0	1444.8	1451.8	1458.7	1461.4	1460.6	1458.7	1455.7
13.5°	1402.6	1405.5	1411.2	1418.1	1433.5	1440.6	1447.6	1450.3	1449.8	1447.6	1444.1
14°	1388.0	1391.4	1398.1	1405.5	1420.9	1429.3	1436.2	1439.4	1438.4	1435.4	1431.5
14.5°	1373.2	1377.1	1384.3	1392.4	1408.5	1417.4	1424.3	1427.5	1426.5	1423.3	1418.4
15°	1358.3	1362.5	1370.2	1378.8	1395.9	1405.0	1412.5	1415.7	1414.7	1410.7	1405.3
15.5°	1343.0	1347.9	1355.9	1365.5	1383.3	1392.4	1400.3	1403.3	1402.3	1398.1	1391.7
16°	1327.7	1333.1	1342.0	1351.7	1369.9	1380.1	1388.0	1391.0	1389.7	1385.0	1378.1
16.5°	1312.9	1318.8	1327.9	1338.1	1356.8	1367.2	1374.9	1378.8	1377.1	1371.9	1364.3
17°	1298.0	1304.0	1313.6	1324.5	1343.5	1354.1	1362.3	1365.7	1364.0	1358.3	1350.4
17.5°	1283.2	1289.4	1299.5	1310.9	1329.9	1340.8	1348.9	1352.2	1350.7	1344.7	1336.1
18°	1268.4	1275.0	1285.4	1297.0	1316.6	1327.7	1335.8	1339.5	1337.3	1331.1	1322.2
18.5°	1254.0	1261.4	1271.6	1283.4	1303.0	1314.6	1323.0	1326.2	1323.7	1317.3	1307.9
19°	1240.7	1248.3	1259.0	1270.3	1289.9	1301.7	1309.9	1313.1	1310.4	1303.7	1293.8
19.5°	1228.1	1236.0	1246.1	1257.7	1277.3	1288.9	1297.5	1300.5	1297.8	1290.1	1280.0
20°	1215.5	1223.6	1233.8	1245.4	1264.4	1276.3	1285.7	1288.1	1284.4	1277.3	1266.9
20.5°	1203.1	1211.0	1221.4	1232.8	1252.1	1264.2	1273.3	1276.0	1272.3	1264.4	1254.0
21°	1190.5	1198.7	1208.6	1220.2	1239.7	1252.1	1260.7	1263.9	1260.0	1252.1	1241.4



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1146.3	1153.9	1163.6	1178.9	1202.1	1214.2	1222.2	1225.9	1222.9	1214.7	1202.9
23°	1128.5	1136.4	1146.5	1164.6	1189.0	1200.6	1207.6	1212.0	1210.3	1201.6	1188.8
23.5°	1109.2	1117.6	1128.7	1148.3	1175.4	1186.1	1191.5	1196.4	1196.7	1188.3	1173.7
24°	1087.7	1096.6	1109.9	1131.2	1161.6	1170.5	1174.5	1180.6	1182.6	1174.5	1157.9
24.5°	1065.0	1073.9	1089.9	1113.2	1146.5	1154.7	1157.4	1163.6	1168.0	1159.6	1140.6
25°	1041.0	1049.6	1070.4	1094.9	1130.5	1137.6	1139.4	1146.0	1152.7	1144.5	1122.8
25.5°	1015.8	1024.9	1049.9	1074.8	1113.7	1119.6	1120.1	1127.5	1136.4	1128.2	1104.3
26°	989.6	999.7	1029.4	1055.6	1095.4	1100.6	1101.3	1108.7	1118.8	1111.2	1085.5
26.5°	962.9	974.5	1007.1	1035.3	1075.3	1080.8	1082.8	1089.7	1100.1	1092.6	1065.5
27°	936.0	949.8	984.6	1014.3	1053.8	1060.8	1064.2	1070.6	1080.0	1072.4	1045.4
27.5°	910.2	925.3	961.2	992.8	1030.1	1040.2	1045.4	1051.4	1059.5	1051.4	1025.7
28°	884.3	902.1	936.4	969.8	1005.2	1019.2	1026.2	1032.1	1036.8	1028.9	1004.4
28.5°	859.1	879.6	911.2	945.6	978.0	997.0	1006.9	1012.3	1013.8	1005.9	982.9
29°	834.9	857.4	885.8	920.9	950.3	974.5	987.1	992.3	990.3	980.7	960.4
29.5°	810.9	834.9	859.6	894.7	921.9	951.0	965.6	970.8	964.6	955.0	936.7
30°	787.2	811.9	833.6	867.2	893.2	926.3	943.4	949.3	938.9	928.3	911.5
30.5°	763.7	788.2	808.7	838.6	866.0	900.9	919.9	926.1	911.5	900.4	886.3
31°	739.7	763.7	783.2	810.6	839.6	874.7	896.9	903.3	884.8	872.4	860.1
31.5°	715.7	738.5	758.7	781.2	814.1	848.2	872.9	878.6	858.1	844.3	833.9
32°	691.5	713.0	733.5	752.6	790.1	821.3	849.5	853.9	832.6	817.1	806.2
32.5°	667.3	686.1	708.6	724.6	765.7	794.8	825.7	827.9	806.9	790.6	779.8
33°	642.1	659.6	683.1	696.0	742.4	768.6	801.5	802.5	782.5	764.4	751.6
33.5°	616.4	633.2	657.4	667.8	717.7	742.7	776.3	776.8	757.3	738.7	723.2
34°	590.9	608.0	631.0	640.4	693.0	718.0	751.3	751.1	733.8	713.3	694.2
34.5°	566.2	581.8	604.8	613.7	667.5	693.7	725.4	724.4	709.1	688.6	666.8
35°	541.3	557.3	578.6	587.2	643.1	670.5	699.4	698.7	684.8	664.1	638.4
35.5°	517.8	533.8	551.6	561.5	615.9	646.3	672.0	672.7	660.1	639.4	611.7
36°	494.5	510.1	524.7	536.6	589.7	621.8	645.1	646.8	636.4	614.4	585.7
36.5°	471.8	486.9	498.5	512.1	564.0	597.9	617.6	620.6	611.0	589.0	560.5
37°	449.3	463.2	471.1	487.9	538.8	573.9	590.7	593.9	585.7	563.0	535.1
37.5°	427.1	440.2	444.6	464.1	513.6	548.9	563.5	568.7	560.3	537.3	511.4
38°	404.8	416.4	418.7	440.2	489.8	523.7	538.3	543.7	535.3	511.6	487.1
38.5°	382.6	393.0	394.4	416.9	466.1	498.3	512.3	519.3	511.1	486.4	463.2
39°	360.8	370.0	371.2	394.2	443.6	473.5	486.9	494.8	487.4	463.4	439.4
39.5°	338.3	346.0	348.0	372.9	419.9	448.8	461.7	470.6	463.7	438.4	416.2
40°	316.8	323.0	325.2	350.7	397.2	425.1	436.5	445.9	440.7	415.5	393.0
40.5°	295.3	300.5	304.5	329.9	374.9	401.6	411.5	421.9	417.4	393.5	370.0
41°	274.3	278.8	283.7	309.4	353.2	379.1	387.5	397.7	395.9	372.7	346.7
41.5°	253.6	257.8	263.7	289.2	330.7	356.4	364.3	373.2	373.7	350.7	324.8
42°	234.5	237.0	244.2	268.7	308.7	334.6	341.3	349.7	350.7	330.4	302.8
42.5°	215.5	217.7	225.9	250.1	287.9	312.9	318.8	327.2	328.7	309.9	282.0
43°	197.7	199.0	207.6	231.6	267.9	291.1	296.8	305.2	307.5	290.9	262.0
43.5°	179.9	180.9	190.8	213.3	248.6	269.1	276.3	283.7	286.0	270.1	242.7



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	132.2	131.0	143.6	162.6	196.5	208.8	218.7	224.9	226.4	216.5	190.8
45.5°	117.9	116.4	130.0	147.3	179.2	189.1	200.2	206.4	207.9	199.0	173.5
46°	104.5	103.1	116.9	132.7	161.9	169.3	181.7	187.8	189.3	181.4	157.9
46.5°	91.7	90.5	104.8	119.4	145.8	152.0	163.4	169.5	170.8	164.1	143.3
47°	82.5	81.6	92.9	106.5	130.2	135.7	146.8	152.2	153.5	148.0	129.3
47.5°	73.7	72.4	83.8	94.2	115.4	120.4	131.0	136.2	137.9	133.2	116.2
48°	64.8	63.3	74.6	82.5	101.3	106.3	116.7	120.9	122.8	119.1	104.0
48.5°	55.9	54.4	65.5	72.4	88.2	92.9	102.8	106.8	108.7	104.8	92.7
49°	47.0	45.2	56.3	63.8	75.9	81.1	89.7	93.2	95.2	91.9	81.8
49.5°	40.8	39.3	47.2	55.9	64.5	69.9	77.6	80.8	82.8	80.1	71.9
50°	34.8	33.6	40.0	47.9	54.6	59.8	66.2	69.7	71.2	69.0	62.8
50.5°	29.7	28.7	33.6	40.0	45.7	50.7	56.1	59.6	60.8	59.1	54.1
51°	25.0	24.0	27.7	32.1	37.8	42.3	46.7	50.2	51.2	49.7	46.5
51.5°	20.5	19.8	22.5	26.2	32.9	34.8	38.6	41.5	42.5	41.8	39.3
52°	16.8	16.1	17.8	20.8	27.9	29.7	32.9	34.1	34.8	34.6	32.9
52.5°	13.3	12.6	13.8	15.8	23.0	24.7	27.2	29.2	29.7	29.7	28.2
53°	10.1	9.6	10.4	11.9	18.0	19.5	21.7	24.0	24.7	24.5	23.5
53.5°	8.9	8.4	9.1	8.7	13.1	14.3	16.1	19.0	19.5	19.5	18.8
54°	7.7	6.9	7.7	7.2	8.2	9.4	10.6	13.8	14.3	14.6	13.8
54.5°	6.4	5.4	6.4	6.2	5.9	6.7	7.4	8.9	9.4	9.4	9.4
55°	4.9	4.2	4.9	4.9	4.9	5.2	5.7	6.4	6.7	6.9	6.9
55.5°	3.7	3.7	3.7	4.0	4.2	4.4	4.7	4.9	5.2	5.4	5.2
56°	3.5	3.2	3.2	3.5	3.7	4.0	4.0	4.2	4.4	4.4	4.4
56.5°	3.0	3.0	3.0	3.0	3.2	3.5	3.7	3.7	4.0	4.0	4.0
57°	2.7	2.7	2.7	2.7	3.0	3.0	3.2	3.5	3.5	3.5	3.5
57.5°	2.5	2.5	2.5	2.5	2.7	2.7	3.0	3.0	3.2	3.2	3.2
58°	2.2	2.2	2.2	2.2	2.5	2.5	2.5	2.7	2.7	2.7	2.7
58.5°	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.5	2.5	2.5	2.5
59°	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.2	2.2
59.5°	1.7	1.7	1.7	1.7	1.7	2.0	2.0	2.0	2.0	2.0	2.0
60°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.0	2.0	2.0	2.0
60.5°	1.5	1.5	1.5	1.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7
61°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.7	1.7	1.7
61.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
62°	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.5	1.5
62.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5
63°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
64°	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2
64.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
66°	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
68°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
68.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
69°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
69.5°	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
70°	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
70.5°	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.5	0.5	0.5	0.7
71°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7
71.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.5
75.5°	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.2	0.2	0.2	0.5
76°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80.5°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
81°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.2
81.5°	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.2
82°	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
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: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1594.1	1594.1	1594.1	1594.1	1594.1	1594.1
0.5°	1593.6	1594.1	1594.4	1594.6	1594.6	1593.6
1°	1593.6	1593.9	1593.9	1594.1	1593.9	1592.6
1.5°	1593.1	1593.1	1593.1	1593.1	1592.6	1591.1
2°	1592.1	1591.9	1591.9	1591.6	1590.6	1589.2
2.5°	1590.6	1590.2	1589.9	1589.7	1588.4	1586.7
3°	1588.9	1587.9	1587.7	1587.2	1586.0	1583.7
3.5°	1586.4	1585.2	1585.0	1584.2	1582.5	1580.3
4°	1583.5	1582.0	1581.8	1580.8	1578.8	1576.3
4.5°	1580.3	1578.3	1577.8	1576.8	1574.8	1571.9
5°	1576.8	1574.3	1573.3	1572.1	1570.1	1567.2
5.5°	1572.6	1569.6	1568.4	1567.2	1564.5	1561.7
6°	1567.9	1564.5	1563.2	1561.5	1559.0	1556.0
6.5°	1563.0	1559.0	1557.5	1555.6	1552.8	1549.9
7°	1557.5	1553.1	1551.1	1548.9	1545.7	1543.2
7.5°	1551.6	1546.7	1544.2	1541.5	1538.3	1536.0
8°	1545.4	1539.7	1536.8	1533.6	1530.8	1528.4
8.5°	1538.5	1532.3	1528.9	1525.2	1522.2	1520.0
9°	1531.1	1524.4	1520.2	1516.0	1513.0	1511.1
9.5°	1523.2	1515.8	1511.1	1506.1	1502.7	1501.2
10°	1514.8	1506.6	1501.2	1496.0	1492.8	1491.3
10.5°	1505.6	1497.0	1490.6	1484.9	1481.9	1480.9
11°	1496.2	1486.6	1479.4	1473.3	1470.0	1469.1
11.5°	1486.1	1475.2	1467.6	1460.9	1457.4	1456.9
12°	1475.0	1463.6	1455.0	1447.8	1444.3	1444.1
12.5°	1463.6	1450.8	1441.6	1434.2	1430.7	1430.7
13°	1451.8	1437.4	1428.0	1420.4	1416.7	1416.9
13.5°	1438.9	1423.8	1413.7	1405.5	1402.6	1402.6
14°	1425.6	1409.7	1399.1	1390.7	1387.0	1388.0
14.5°	1412.0	1394.9	1384.0	1375.9	1371.9	1373.2
15°	1398.1	1380.1	1368.7	1360.6	1356.8	1358.3
15.5°	1383.8	1365.2	1353.4	1345.2	1341.5	1343.0
16°	1369.5	1349.9	1338.1	1329.2	1326.2	1327.7
16.5°	1354.9	1335.1	1322.7	1313.8	1310.9	1312.9
17°	1340.0	1320.0	1306.9	1298.3	1295.3	1298.0
17.5°	1325.2	1304.7	1291.6	1283.2	1280.2	1283.2
18°	1310.6	1289.4	1276.5	1267.6	1265.4	1268.4
18.5°	1296.0	1274.8	1261.2	1252.5	1250.6	1254.0
19°	1281.5	1260.0	1246.6	1238.2	1236.7	1240.7
19.5°	1267.6	1246.4	1233.5	1225.1	1223.4	1228.1
20°	1254.3	1233.3	1219.9	1212.3	1210.5	1215.5
20.5°	1241.4	1220.7	1207.3	1199.4	1198.2	1203.1
21°	1228.6	1208.1	1194.2	1186.3	1185.8	1190.5



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1189.8	1168.8	1153.2	1143.3	1140.8	1146.3
23°	1174.5	1153.2	1136.4	1124.8	1122.3	1128.5
23.5°	1158.6	1136.1	1118.3	1104.8	1103.3	1109.2
24°	1141.3	1116.9	1097.6	1082.8	1081.8	1087.7
24.5°	1123.0	1095.9	1077.1	1060.0	1059.0	1065.0
25°	1103.5	1073.1	1054.3	1036.0	1035.6	1041.0
25.5°	1083.5	1048.7	1030.9	1012.6	1011.8	1015.8
26°	1062.2	1022.9	1005.6	989.6	986.6	989.6
26.5°	1040.2	996.0	980.4	966.4	962.2	962.9
27°	1017.8	970.1	953.5	943.6	937.2	936.0
27.5°	994.0	944.4	925.1	919.4	911.7	910.2
28°	969.8	920.4	897.6	895.2	886.5	884.3
28.5°	945.6	896.9	871.0	870.0	861.3	859.1
29°	920.6	874.2	845.2	843.8	835.1	834.9
29.5°	895.7	852.2	820.3	816.6	809.2	810.9
30°	871.4	829.4	795.6	789.4	782.5	787.2
30.5°	846.7	806.0	771.6	761.2	755.3	763.7
31°	822.8	782.0	747.6	732.8	728.6	739.7
31.5°	799.5	756.5	723.7	705.9	701.4	715.7
32°	775.8	730.6	699.2	678.9	675.7	691.5
32.5°	752.3	704.4	675.2	652.5	651.0	667.3
33°	728.8	677.7	650.5	627.0	626.5	642.1
33.5°	705.4	651.0	625.5	601.1	602.3	616.4
34°	680.4	625.3	600.6	575.9	578.1	590.9
34.5°	655.2	600.8	574.9	550.6	553.6	566.2
35°	628.7	576.6	549.9	525.4	529.1	541.3
35.5°	603.3	553.9	525.9	500.5	504.7	517.8
36°	575.1	531.9	502.0	476.7	480.0	494.5
36.5°	548.7	509.1	479.5	454.0	455.0	471.8
37°	521.5	486.9	456.5	431.5	431.0	449.3
37.5°	495.8	464.4	434.0	409.5	407.8	427.1
38°	469.8	440.9	411.7	387.8	385.3	404.8
38.5°	445.6	417.4	389.8	366.5	363.8	382.6
39°	420.9	394.4	368.7	346.3	343.5	360.8
39.5°	396.9	371.2	346.7	325.5	323.5	338.3
40°	372.9	348.2	325.7	306.2	304.0	316.8
40.5°	350.5	326.0	305.2	286.7	284.7	295.3
41°	327.5	305.0	285.0	268.4	266.7	274.3
41.5°	305.5	284.0	265.4	250.9	248.4	253.6
42°	284.0	264.2	246.4	234.5	231.1	234.5
42.5°	263.0	244.4	228.1	218.0	214.3	215.5
43°	242.7	225.4	210.6	202.7	198.5	197.7
43.5°	224.7	205.6	194.0	187.3	182.6	179.9



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	171.0	151.0	147.8	145.6	140.6	132.2
45.5°	155.2	134.4	133.7	132.7	127.8	117.9
46°	140.4	119.1	120.6	120.9	116.2	104.5
46.5°	126.3	104.8	108.0	109.5	104.5	91.7
47°	113.2	92.2	95.9	98.4	93.7	82.5
47.5°	101.1	83.0	84.8	88.2	84.8	73.7
48°	89.5	73.9	76.1	79.8	76.1	64.8
48.5°	79.1	65.0	67.2	71.4	67.2	55.9
49°	69.4	56.1	58.6	63.0	58.3	47.0
49.5°	60.6	47.2	49.9	54.6	49.4	40.8
50°	52.4	41.0	42.8	46.2	42.5	34.8
50.5°	45.2	35.6	36.6	39.3	35.6	29.7
51°	38.6	30.4	31.1	33.1	29.9	25.0
51.5°	32.9	26.0	26.0	27.4	24.7	20.5
52°	28.4	21.7	21.3	22.2	19.8	16.8
52.5°	24.2	17.8	17.3	17.5	15.6	13.3
53°	19.8	14.3	13.6	13.3	11.9	10.1
53.5°	15.6	11.1	10.4	9.9	8.7	8.9
54°	11.1	8.4	8.9	8.4	7.4	7.7
54.5°	8.4	7.2	7.7	6.9	6.2	6.4
55°	6.4	6.2	6.4	5.4	4.9	4.9
55.5°	4.9	4.9	4.9	4.0	4.0	3.7
56°	4.4	4.0	3.7	3.7	3.5	3.5
56.5°	3.7	3.5	3.2	3.2	3.2	3.0
57°	3.5	3.0	3.0	3.0	2.7	2.7
57.5°	3.0	2.7	2.7	2.7	2.5	2.5
58°	2.7	2.5	2.5	2.5	2.2	2.2
58.5°	2.5	2.2	2.2	2.2	2.2	2.0
59°	2.2	2.0	2.0	2.0	2.0	2.0
59.5°	2.0	2.0	2.0	2.0	1.7	1.7
60°	2.0	1.7	1.7	1.7	1.7	1.7
60.5°	1.7	1.7	1.7	1.7	1.7	1.5
61°	1.7	1.5	1.5	1.5	1.5	1.5
61.5°	1.5	1.5	1.5	1.5	1.5	1.5
62°	1.5	1.5	1.5	1.5	1.2	1.2
62.5°	1.5	1.2	1.2	1.2	1.2	1.2
63°	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	1.2	1.2	1.2	1.2	1.2	1.2
64°	1.2	1.2	1.2	1.2	1.0	1.0
64.5°	1.2	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0	1.0
65.5°	1.0	1.0	1.0	1.0	1.0	1.0
66°	1.0	1.0	1.0	1.0	1.0	0.7



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.7	0.7	0.7	0.7	0.7	0.7
68°	0.7	0.7	0.7	0.7	0.7	0.7
68.5°	0.7	0.7	0.7	0.7	0.7	0.7
69°	0.7	0.7	0.7	0.7	0.7	0.7
69.5°	0.7	0.7	0.7	0.7	0.7	0.5
70°	0.7	0.7	0.7	0.7	0.5	0.5
70.5°	0.7	0.7	0.7	0.5	0.5	0.5
71°	0.7	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.2
74.5°	0.5	0.5	0.5	0.5	0.2	0.2
75°	0.5	0.5	0.5	0.5	0.2	0.2
75.5°	0.5	0.5	0.5	0.2	0.2	0.2
76°	0.5	0.2	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2
78°	0.2	0.2	0.2	0.2	0.2	0.2
78.5°	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.2	0.2	0.2	0.2	0.2	0.2
79.5°	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.0
80.5°	0.2	0.2	0.2	0.2	0.0	0.0
81°	0.2	0.2	0.2	0.2	0.0	0.0
81.5°	0.2	0.2	0.2	0.2	0.0	0.0
82°	0.2	0.2	0.2	0.0	0.0	0.0
82.5°	0.2	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775991

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°

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

Scaled Data Report



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

Scaled Data Report





21.5°	1177.4	1185.3	1194.7	1207.3	1227.3	1240.2	1249.3	1251.8	1247.6	1239.2	1228.8
22°	1162.6	1170.2	1179.6	1194.0	1215.0	1227.3	1236.2	1239.5	1235.5	1226.8	1216.5



44°	163.6	163.4	174.0	195.2	231.3	248.1	255.8	262.7	264.9	251.6	225.4
44.5°	146.8	146.8	158.4	178.9	214.0	228.4	237.3	243.4	244.9	234.0	208.1



66.5°	0.7	0.7	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report





21.5°	1216.0	1195.7	1182.1	1174.2	1172.2	1177.4
22°	1203.6	1182.6	1168.0	1159.6	1157.4	1162.6



44°	206.9	186.8	177.9	172.8	167.8	163.6
44.5°	188.8	168.6	162.6	158.7	154.0	146.8

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

Scaled Data Report



66.5°	1.0	1.0	1.0	1.0	0.7	0.7
67°	1.0	1.0	0.7	0.7	0.7	0.7

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

Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



(END OF REPORT)