

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: P775947

Luminaire Tested: HCDJBS1525CSD-HCD41TRMW-2500lm-3500K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B030)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS1525CSD-HCD41TRMW-2500lm-3500K
Description: 4 INCH ROUND SHALLOW-WIDE MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

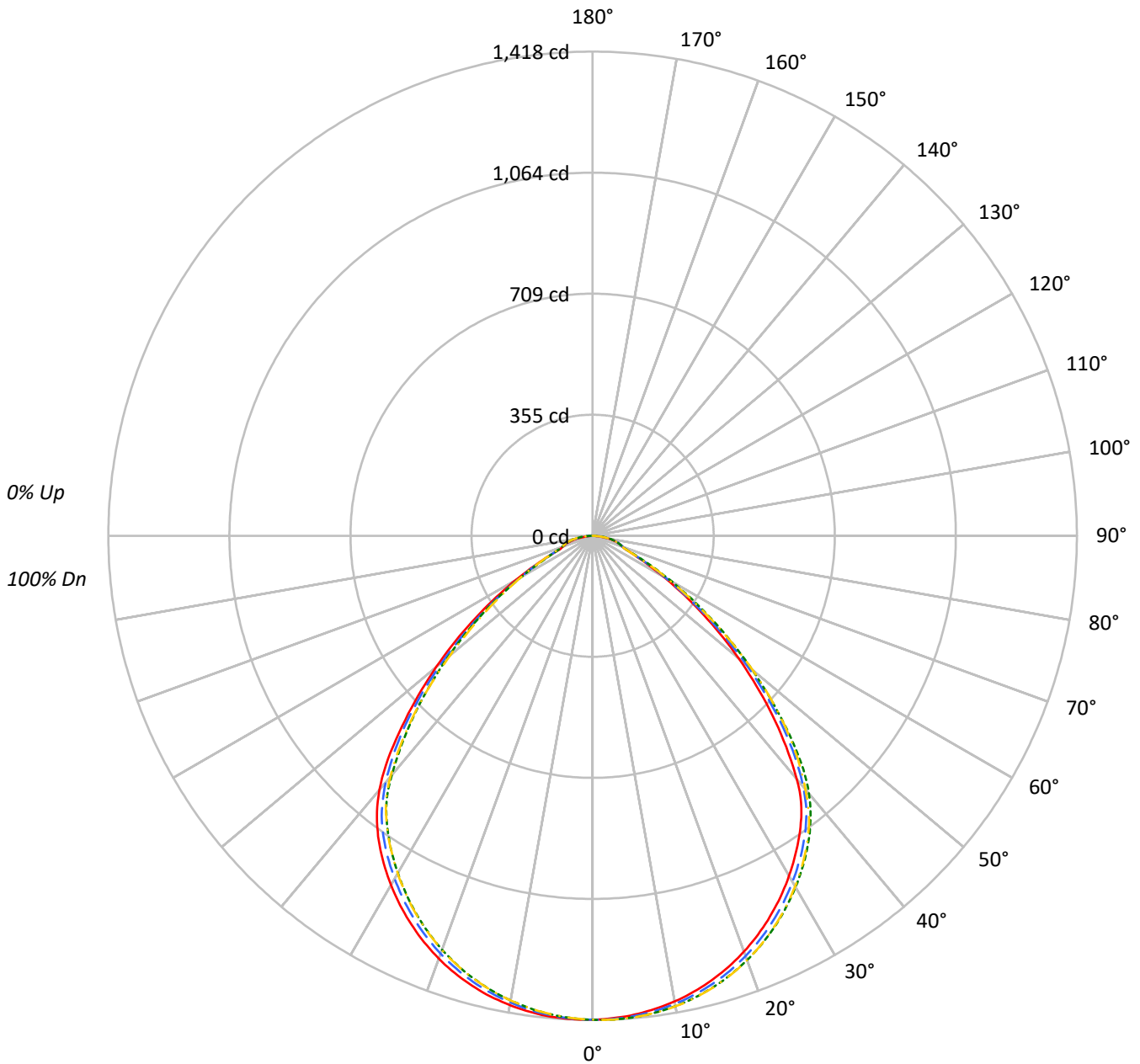
Lumens per Lamp: N/A
Luminaire Lumens: 2959.6 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.28
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P775947
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL5125CSD-HCD41TRMW-2500lm-3500K

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	103	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	81	84	81	79				77
3	95	86	79	73	93	84	78	73	82	76	72	79	74	70	76	73	69				67
4	88	77	70	64	86	76	69	64	74	68	63	72	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	50	45	69	57	50	45	56	49	44	55	49	44	53	48	44				42
8	66	54	46	40	64	53	45	40	52	45	40	50	44	40	49	44	40				38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36				34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33				31

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	178367	178367	178367	178367
5°	177848	178796	178581	177722
10°	176927	178754	178371	176607
15°	175578	178223	177741	174992
20°	173555	177118	176448	172725
25°	170756	175324	174408	169603
30°	167146	172653	171592	165722
35°	162530	169044	167646	160901
40°	152769	161920	159570	150255
45°	132594	143593	140496	130868
50°	109191	119352	116944	108251
55°	84320	93294	91473	84320
60°	60181	67002	65593	60433
65°	40856	43775	42643	40946
70°	34073	33889	34147	34809
75°	35885	36128	34621	37830
80°	33483	37252	30367	40006
85°	18483	34078	12996	38698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 145871 cd/sqm



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.0	4.5
10°-20°	382.3	12.9
20°-30°	571.8	19.3
30°-40°	668.6	22.6
40°-50°	591.4	20.0
50°-60°	359.9	12.2
60°-70°	149.9	5.1
70°-80°	77.8	2.6
80°-90°	23.8	0.8
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°	1088.1	36.8
0°-40°	1756.8	59.4
0°-60°	2708.0	91.5
0°-90°	2959.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2959.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1417	1417	1417	1417	1417	
5°	1408	1415	1414	1407	1408	134
15°	1348	1368	1364	1343	1348	380
25°	1230	1263	1256	1221	1230	566
35°	1058	1100	1091	1047	1058	659
45°	745	807	789	735	745	572
55°	384	425	417	384	384	346
65°	137	147	143	138	137	145
75°	74	74	71	78	74	76
85°	13	24	9	27	13	19
90°	0	0	0	0	0	



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL1525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3
0.5°	1417.1	1417.3	1417.6	1417.1	1418.1	1418.3	1417.8	1417.6	1417.6	1417.6	1417.3
1°	1416.6	1417.1	1417.3	1417.3	1418.3	1418.6	1418.3	1417.8	1417.6	1417.6	1417.1
1.5°	1415.8	1416.6	1417.1	1417.3	1418.3	1418.9	1418.3	1417.8	1417.6	1417.3	1416.6
2°	1415.1	1415.8	1416.8	1417.1	1418.3	1418.9	1418.3	1417.8	1417.3	1416.8	1416.1
2.5°	1414.1	1415.1	1416.3	1416.8	1418.1	1418.9	1418.3	1417.6	1417.1	1416.3	1415.3
3°	1413.1	1414.3	1415.6	1416.3	1417.8	1418.6	1417.8	1417.3	1416.6	1415.8	1414.6
3.5°	1412.1	1413.3	1414.8	1415.8	1417.3	1418.3	1417.6	1416.8	1416.1	1414.8	1413.6
4°	1410.8	1412.1	1413.8	1415.1	1416.8	1417.8	1416.8	1416.1	1415.3	1414.1	1412.3
4.5°	1409.3	1410.8	1412.6	1414.1	1416.1	1417.1	1416.3	1415.3	1414.3	1413.1	1411.1
5°	1407.8	1409.6	1411.3	1413.1	1415.3	1416.3	1415.3	1414.6	1413.6	1411.8	1409.6
5.5°	1406.1	1407.8	1410.1	1412.1	1414.1	1415.6	1414.3	1413.3	1412.3	1410.3	1408.1
6°	1404.0	1406.3	1408.6	1410.8	1413.1	1414.3	1413.3	1412.3	1411.1	1409.1	1406.3
6.5°	1402.0	1404.3	1407.1	1409.3	1411.8	1413.3	1412.1	1411.1	1409.8	1407.6	1404.6
7°	1400.0	1402.3	1405.3	1407.8	1410.3	1411.8	1410.6	1409.6	1408.1	1405.8	1402.8
7.5°	1397.8	1400.3	1403.3	1406.1	1408.8	1410.6	1409.1	1408.1	1406.3	1403.8	1400.5
8°	1395.5	1398.0	1401.5	1404.3	1406.8	1408.8	1407.3	1406.3	1404.6	1401.8	1398.3
8.5°	1393.0	1395.8	1399.0	1402.3	1405.1	1407.3	1405.6	1404.3	1402.5	1399.8	1396.0
9°	1390.3	1393.3	1396.8	1400.3	1403.0	1405.3	1403.5	1402.3	1400.5	1397.3	1393.5
9.5°	1387.5	1390.5	1394.5	1397.8	1401.0	1403.3	1401.5	1400.3	1398.3	1395.0	1390.8
10°	1384.5	1387.7	1391.8	1395.5	1398.8	1401.0	1399.3	1398.0	1395.8	1392.5	1388.0
10.5°	1381.5	1385.0	1389.0	1392.8	1396.3	1398.8	1396.8	1395.5	1393.3	1389.8	1385.2
11°	1378.2	1381.7	1386.2	1390.3	1393.8	1396.3	1394.3	1392.8	1390.8	1386.7	1382.0
11.5°	1375.0	1378.7	1383.2	1387.5	1391.0	1393.8	1391.5	1390.3	1387.7	1383.7	1378.7
12°	1371.4	1375.2	1380.0	1384.2	1388.2	1391.0	1388.7	1387.5	1385.0	1380.7	1375.5
12.5°	1367.7	1371.7	1376.7	1381.2	1385.2	1388.2	1385.7	1384.2	1382.0	1377.5	1371.9
13°	1364.2	1368.2	1373.2	1378.0	1382.0	1385.2	1382.5	1381.2	1378.7	1373.9	1368.4
13.5°	1359.9	1364.4	1369.4	1374.7	1378.7	1382.0	1379.2	1378.0	1375.2	1370.4	1364.7
14°	1356.1	1360.7	1365.9	1371.2	1375.2	1378.7	1376.0	1374.4	1371.7	1366.7	1360.7
14.5°	1351.9	1356.6	1361.9	1367.4	1371.7	1375.2	1372.2	1370.7	1367.9	1362.9	1356.6
15°	1347.6	1352.4	1358.1	1363.7	1367.9	1371.7	1368.7	1367.2	1364.2	1358.9	1352.4
15.5°	1343.1	1347.9	1353.9	1359.4	1364.2	1367.7	1364.7	1363.2	1360.1	1354.9	1348.1
16°	1338.3	1343.3	1349.4	1355.4	1360.1	1363.9	1360.4	1359.1	1355.9	1350.4	1343.6
16.5°	1333.6	1338.8	1345.1	1351.1	1355.9	1359.6	1356.4	1354.9	1351.9	1346.1	1338.8
17°	1328.8	1334.1	1340.6	1346.6	1351.6	1355.4	1352.1	1350.4	1347.1	1341.6	1334.1
17.5°	1323.8	1329.0	1335.8	1342.3	1347.1	1351.1	1347.4	1345.9	1342.6	1336.6	1329.0
18°	1318.5	1324.0	1330.8	1337.6	1342.6	1346.4	1342.8	1341.3	1338.1	1331.8	1324.0
18.5°	1313.0	1318.8	1325.8	1332.6	1337.8	1341.6	1338.1	1336.6	1333.1	1326.8	1318.8
19°	1307.5	1313.5	1320.5	1327.5	1332.8	1336.8	1333.1	1331.6	1328.3	1321.8	1313.5
19.5°	1301.7	1308.0	1315.2	1322.5	1327.8	1331.8	1327.8	1326.5	1323.0	1316.2	1308.0
20°	1295.9	1302.2	1309.7	1317.3	1322.5	1326.8	1322.5	1321.0	1317.5	1311.0	1302.2
20.5°	1290.2	1296.4	1304.2	1311.7	1317.3	1321.3	1317.0	1315.5	1312.0	1305.2	1296.2
21°	1283.6	1290.4	1298.2	1306.2	1311.7	1316.0	1311.5	1310.0	1306.5	1299.4	1290.4



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1264.6	1271.6	1280.1	1288.4	1294.4	1298.7	1293.7	1292.4	1288.7	1281.4	1271.6
23°	1257.8	1265.1	1273.6	1282.4	1288.4	1292.7	1287.4	1286.1	1282.4	1275.1	1264.8
23.5°	1251.0	1258.3	1267.1	1275.9	1282.1	1286.4	1281.1	1279.6	1276.1	1268.3	1258.3
24°	1244.0	1251.5	1260.6	1269.6	1275.6	1280.1	1274.6	1273.1	1269.6	1261.8	1251.5
24.5°	1237.0	1244.5	1253.8	1262.8	1269.1	1273.6	1268.1	1266.6	1262.8	1255.0	1244.5
25°	1229.7	1237.2	1246.8	1256.0	1262.6	1266.8	1261.1	1259.8	1256.0	1248.3	1237.5
25.5°	1222.4	1230.2	1239.7	1249.3	1255.8	1260.1	1254.3	1252.8	1249.3	1241.2	1230.2
26°	1214.7	1222.9	1232.5	1242.2	1248.8	1253.3	1247.3	1245.8	1242.2	1234.0	1222.7
26.5°	1207.4	1215.4	1225.2	1235.2	1241.5	1246.3	1240.0	1238.5	1234.7	1226.9	1215.4
27°	1199.6	1207.6	1217.7	1227.7	1234.5	1239.2	1232.5	1231.2	1227.4	1219.4	1207.9
27.5°	1191.6	1200.1	1210.4	1220.4	1226.9	1231.7	1225.2	1223.7	1220.2	1211.6	1200.1
28°	1183.5	1192.1	1202.4	1212.9	1219.4	1224.2	1217.4	1216.2	1212.4	1204.4	1192.1
28.5°	1175.3	1184.0	1194.6	1205.1	1212.1	1216.7	1209.6	1208.4	1204.6	1196.1	1184.0
29°	1167.2	1175.8	1186.6	1197.3	1204.1	1208.9	1201.6	1200.6	1196.8	1188.6	1176.0
29.5°	1158.7	1167.7	1178.5	1189.3	1196.3	1201.1	1193.6	1192.6	1188.8	1180.3	1168.0
30°	1150.2	1159.5	1170.3	1181.3	1188.1	1193.1	1185.6	1184.3	1180.8	1172.3	1159.5
30.5°	1141.4	1150.9	1162.0	1173.3	1180.0	1184.8	1177.3	1176.0	1172.5	1163.7	1150.9
31°	1132.6	1142.2	1153.7	1164.7	1171.8	1176.8	1168.7	1167.5	1164.0	1155.4	1142.4
31.5°	1123.8	1133.6	1144.9	1156.5	1163.2	1168.2	1160.2	1159.0	1155.4	1146.9	1134.1
32°	1115.1	1124.8	1136.1	1147.9	1154.7	1159.7	1151.4	1150.4	1146.9	1138.6	1125.1
32.5°	1105.8	1115.8	1127.6	1139.1	1146.4	1151.2	1142.7	1141.7	1138.1	1129.9	1116.1
33°	1096.7	1106.8	1118.6	1130.4	1137.4	1142.4	1133.6	1132.6	1129.4	1120.8	1107.0
33.5°	1087.5	1097.5	1109.5	1121.6	1128.4	1133.4	1124.6	1123.3	1120.1	1111.5	1097.8
34°	1077.7	1088.2	1100.0	1112.3	1119.3	1124.3	1114.8	1113.8	1110.5	1102.0	1088.2
34.5°	1068.2	1078.4	1090.7	1102.8	1110.0	1114.6	1105.5	1104.3	1101.0	1092.7	1078.7
35°	1057.9	1068.7	1080.9	1093.2	1100.3	1105.0	1095.5	1094.5	1091.2	1083.0	1068.9
35.5°	1047.8	1058.6	1070.9	1083.5	1090.5	1095.2	1085.7	1084.5	1081.4	1072.9	1058.9
36°	1037.5	1048.3	1060.9	1073.4	1080.7	1085.5	1075.2	1073.7	1070.9	1062.4	1048.3
36.5°	1026.8	1037.8	1050.3	1063.4	1070.2	1074.9	1064.1	1062.9	1059.9	1051.6	1037.5
37°	1015.7	1026.8	1039.3	1052.1	1059.1	1063.9	1053.1	1051.8	1048.8	1040.6	1026.5
37.5°	1003.9	1015.5	1028.3	1041.3	1048.1	1052.8	1041.1	1040.3	1037.5	1029.0	1013.7
38°	991.6	1003.4	1017.0	1029.8	1036.5	1041.6	1028.0	1027.8	1025.8	1016.7	1000.4
38.5°	977.8	989.6	1003.4	1018.0	1024.8	1029.3	1014.0	1013.7	1013.0	1004.2	986.9
39°	963.3	974.6	988.9	1004.9	1012.2	1016.2	999.4	999.7	999.7	990.6	972.1
39.5°	947.2	959.3	974.6	991.6	999.2	1002.4	984.9	984.9	985.9	976.3	957.5
40°	929.9	943.0	959.5	976.8	985.6	987.6	969.6	969.1	971.3	961.3	941.7
40.5°	912.1	925.7	943.5	962.0	971.1	972.3	954.3	953.5	955.8	945.5	926.9
41°	894.1	908.4	927.4	946.0	955.8	956.8	939.0	938.0	939.2	929.4	910.1
41.5°	876.0	890.8	910.6	929.7	939.2	941.0	922.9	921.4	922.2	912.9	893.8
42°	856.9	872.5	893.8	912.9	922.2	924.7	906.8	905.3	904.6	895.8	876.7
42.5°	838.6	854.2	876.5	895.8	904.1	907.9	890.0	888.3	886.3	878.0	859.4
43°	820.1	836.1	858.9	878.0	885.5	890.5	873.2	871.0	867.5	859.9	841.4
43.5°	801.5	817.8	840.1	859.9	866.0	873.5	856.2	853.4	847.9	841.4	823.8



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	745.0	762.9	783.9	802.7	806.8	819.6	802.5	799.0	789.4	783.2	767.9
45.5°	726.2	744.3	764.6	782.9	786.4	800.2	784.7	780.2	769.6	763.1	749.1
46°	707.7	725.7	745.0	762.6	765.9	781.4	765.6	760.6	750.1	743.0	729.2
46.5°	688.9	706.9	725.5	742.3	746.1	762.1	746.8	741.5	730.5	723.0	709.7
47°	669.5	688.4	705.9	721.7	726.5	742.3	728.0	722.5	711.4	702.9	690.4
47.5°	650.7	669.3	685.6	701.4	706.7	722.5	709.4	702.7	692.4	683.3	671.0
48°	631.9	650.0	666.3	680.8	687.1	702.7	689.9	683.1	673.1	663.0	651.0
48.5°	613.1	631.2	646.2	660.3	667.8	682.8	671.0	663.3	654.0	643.4	631.9
49°	594.5	612.1	626.6	640.2	648.2	663.3	651.0	644.0	635.2	623.6	612.1
49.5°	576.0	592.5	607.1	619.9	628.6	643.2	631.2	624.4	616.1	604.3	592.8
50°	557.7	573.7	587.3	599.8	609.6	623.6	611.8	604.8	597.3	584.7	573.5
50.5°	539.3	554.4	567.7	579.7	590.5	604.1	591.5	585.8	578.2	565.9	554.1
51°	521.0	535.6	548.4	560.2	571.2	584.2	572.5	566.9	559.9	547.4	535.3
51.5°	503.5	517.3	529.3	540.6	552.4	565.7	552.4	547.9	541.6	528.6	516.8
52°	485.7	498.7	510.2	521.8	533.8	546.4	532.3	528.8	523.8	509.7	498.2
52.5°	468.4	480.4	491.4	503.0	515.0	527.1	513.3	510.2	505.2	491.7	479.4
53°	451.0	462.3	472.4	484.4	496.7	508.0	493.9	491.9	486.9	473.4	461.3
53.5°	434.0	444.5	454.1	466.1	478.1	489.7	475.1	473.4	468.9	456.1	443.5
54°	417.2	427.0	435.5	448.3	460.6	471.1	455.6	455.3	452.0	438.2	426.5
54.5°	400.6	409.1	417.9	430.5	443.0	453.0	437.2	437.7	434.5	421.2	409.4
55°	384.3	392.3	400.6	413.4	425.2	435.5	418.9	420.2	416.9	404.1	392.1
55.5°	368.5	375.8	383.1	396.4	407.9	417.7	400.9	402.9	399.9	387.8	375.5
56°	353.0	359.5	366.0	380.0	390.8	399.6	383.3	385.3	383.8	371.3	359.7
56.5°	337.4	343.2	349.9	363.7	374.3	382.6	366.0	368.8	367.0	355.5	343.9
57°	322.4	327.6	333.9	347.9	357.7	366.0	349.2	352.2	350.7	340.2	328.6
57.5°	307.6	312.1	318.1	332.1	341.7	349.2	332.9	336.1	334.9	325.1	313.3
58°	293.0	297.0	302.5	317.3	325.6	332.6	317.1	320.3	319.8	310.3	299.0
58.5°	279.0	282.5	288.0	302.3	310.8	316.8	301.5	304.3	304.3	296.0	285.0
59°	265.4	268.4	274.2	288.5	295.3	301.3	286.5	289.0	289.2	282.0	270.9
59.5°	252.1	254.6	260.4	273.9	280.5	286.0	271.7	274.4	274.7	268.2	257.9
60°	239.1	241.3	247.3	260.4	266.2	270.9	257.4	259.9	260.6	254.9	245.1
60.5°	226.8	228.5	234.6	247.1	252.4	256.6	244.1	245.6	246.8	242.1	232.5
61°	214.5	216.2	222.3	234.3	238.8	243.1	231.8	232.3	233.5	230.3	221.5
61.5°	202.9	204.7	210.7	221.5	226.5	230.5	219.2	220.0	221.3	218.5	210.7
62°	191.9	193.7	199.4	209.7	214.2	217.7	207.0	207.5	209.0	206.7	199.7
62.5°	181.4	182.9	188.6	197.9	202.2	205.2	194.7	194.9	196.7	194.9	188.6
63°	171.3	172.6	178.4	186.6	189.9	192.4	182.4	182.6	184.6	183.1	177.6
63.5°	162.1	163.1	168.6	175.9	177.6	179.9	171.1	171.6	173.8	172.6	167.8
64°	153.0	154.3	159.3	165.3	167.1	168.8	160.8	160.8	163.3	162.8	158.5
64.5°	144.5	145.7	150.5	155.8	156.8	158.5	151.3	151.3	153.3	153.3	150.0
65°	137.2	138.0	142.2	146.8	147.0	148.8	142.0	142.2	143.2	144.5	142.0
65.5°	130.2	130.9	134.7	138.2	138.0	139.5	133.5	133.7	133.7	136.5	134.5
66°	123.4	124.4	127.7	130.2	129.4	131.2	125.7	125.9	124.7	128.4	127.4



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL5125CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	107.1	108.4	109.9	110.6	109.1	110.9	106.6	107.6	104.9	109.6	110.4
68°	102.9	104.1	105.1	105.6	104.1	105.6	102.1	103.1	100.6	105.1	105.9
68.5°	98.8	100.6	101.1	101.1	99.8	101.1	98.6	99.3	98.1	101.1	101.8
69°	96.1	97.6	97.3	97.3	96.6	97.6	95.8	96.3	96.3	98.1	98.6
69.5°	94.3	94.8	94.6	94.3	93.8	94.6	93.8	94.3	94.6	95.6	96.3
70°	92.6	92.6	92.6	92.3	92.1	92.8	92.3	92.6	92.8	93.8	94.6
70.5°	90.8	91.1	91.6	90.8	90.6	91.3	90.8	90.8	91.1	92.1	93.1
71°	89.1	89.3	89.8	89.1	88.8	89.6	89.1	88.8	89.1	90.3	91.6
71.5°	87.5	87.5	88.3	87.5	87.3	88.1	87.3	87.0	87.3	88.3	89.8
72°	85.8	85.8	86.5	86.0	85.5	86.3	85.5	85.0	85.0	86.3	88.1
72.5°	84.3	84.3	84.8	84.5	83.8	84.5	83.8	83.0	83.0	84.3	86.3
73°	82.3	82.3	83.0	82.8	82.0	82.8	81.8	80.8	80.8	82.3	84.3
73.5°	80.3	80.3	81.3	80.8	80.3	80.8	79.8	78.5	78.5	80.0	82.3
74°	78.0	78.3	79.3	79.0	78.3	79.0	77.8	76.3	76.3	77.8	80.3
74.5°	75.8	76.0	77.3	77.3	76.3	77.0	75.8	74.0	73.8	75.5	78.3
75°	73.8	73.8	75.3	75.3	74.3	75.0	73.5	71.5	71.2	73.0	76.0
75.5°	71.2	71.5	73.3	73.3	72.2	73.0	71.2	69.0	68.7	70.5	73.8
76°	68.7	69.0	71.0	71.2	70.2	71.0	69.0	66.5	66.0	68.0	71.5
76.5°	66.5	66.7	68.7	69.0	68.0	68.7	66.5	64.0	63.5	65.2	69.2
77°	63.7	64.2	66.5	67.0	65.7	66.5	64.2	61.2	60.5	62.5	67.0
77.5°	61.0	61.5	64.2	64.7	63.5	64.2	61.7	58.4	57.4	59.5	64.2
78°	58.2	59.0	61.7	62.5	61.2	62.0	59.0	55.4	54.4	56.7	61.7
78.5°	55.4	56.2	59.2	60.2	58.7	59.5	56.4	52.4	51.4	53.7	59.0
79°	52.4	53.2	56.7	57.7	56.4	56.9	53.7	49.4	48.4	50.7	56.4
79.5°	49.4	50.4	54.2	55.2	53.9	54.7	50.9	46.4	45.2	47.4	53.7
80°	46.2	47.2	51.4	52.7	51.4	51.9	48.2	43.4	41.9	44.2	50.7
80.5°	43.1	44.2	48.7	50.2	48.7	49.4	45.4	40.1	38.6	41.1	47.9
81°	40.1	41.1	45.9	47.7	46.2	46.7	42.6	36.9	35.1	37.6	44.9
81.5°	36.6	37.9	43.1	44.9	43.4	43.9	39.6	33.6	31.9	34.4	41.9
82°	33.4	34.6	40.1	42.1	40.6	41.4	36.9	30.4	28.3	31.1	39.1
82.5°	30.1	31.4	37.4	39.4	37.9	38.4	34.1	27.3	25.1	27.6	36.1
83°	26.6	28.1	34.6	36.6	35.1	35.6	31.4	24.6	21.6	24.8	33.4
83.5°	23.1	24.8	31.9	33.9	32.4	32.9	28.6	21.8	18.3	22.1	30.4
84°	19.6	21.6	29.1	31.1	29.6	30.1	25.8	19.1	14.8	19.3	27.8
84.5°	16.1	18.6	26.3	28.1	26.6	27.1	23.1	16.6	11.3	16.3	25.1
85°	12.8	16.1	23.8	25.3	23.6	24.1	20.3	13.8	9.0	13.5	22.3
85.5°	9.8	14.0	21.1	22.3	20.6	21.1	17.3	11.8	7.8	12.0	19.8
86°	8.5	12.3	18.3	19.3	17.6	18.1	14.5	10.0	6.8	10.3	17.1
86.5°	7.3	10.3	15.3	16.3	14.5	15.1	11.8	8.3	5.5	8.8	14.3
87°	6.0	8.5	12.5	13.0	11.5	11.8	9.0	6.3	4.5	7.0	11.5
87.5°	4.5	6.8	9.5	10.0	8.5	8.8	6.0	4.5	3.3	5.5	8.8
88°	3.3	5.0	7.3	7.5	5.5	6.0	3.5	2.8	2.0	3.8	6.0
88.5°	2.3	3.3	5.0	5.0	3.0	3.3	1.3	1.3	1.3	2.3	3.5



TEST NUMBER: P775947
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1417.3	1417.3	1417.3	1417.3	1417.3	1417.3
0.5°	1416.6	1417.3	1417.3	1417.1	1416.8	1417.1
1°	1416.1	1416.8	1416.3	1416.6	1416.3	1416.6
1.5°	1415.6	1416.1	1415.6	1415.6	1415.6	1415.8
2°	1414.6	1415.1	1414.6	1414.8	1414.6	1415.1
2.5°	1413.8	1414.1	1413.6	1413.8	1413.6	1414.1
3°	1412.8	1412.8	1412.1	1412.6	1412.3	1413.1
3.5°	1411.6	1411.6	1410.8	1411.3	1411.3	1412.1
4°	1410.3	1410.3	1409.1	1409.8	1409.8	1410.8
4.5°	1408.8	1408.6	1407.6	1408.3	1408.3	1409.3
5°	1407.1	1406.8	1405.8	1406.6	1406.6	1407.8
5.5°	1405.3	1405.1	1403.8	1404.6	1404.8	1406.1
6°	1403.5	1403.0	1401.5	1402.8	1402.8	1404.0
6.5°	1401.5	1401.0	1399.3	1400.5	1400.8	1402.0
7°	1399.5	1398.8	1397.0	1398.3	1398.5	1400.0
7.5°	1397.0	1396.3	1394.5	1395.8	1396.0	1397.8
8°	1394.8	1393.8	1391.8	1393.3	1393.8	1395.5
8.5°	1392.0	1390.8	1389.2	1390.8	1391.0	1393.0
9°	1389.5	1388.0	1386.2	1388.0	1388.5	1390.3
9.5°	1386.5	1385.0	1383.2	1385.0	1385.5	1387.5
10°	1383.5	1382.0	1380.0	1381.7	1382.5	1384.5
10.5°	1380.5	1378.7	1376.5	1378.7	1379.5	1381.5
11°	1377.0	1375.5	1372.9	1375.2	1376.2	1378.2
11.5°	1373.7	1371.9	1369.4	1371.7	1372.7	1375.0
12°	1370.2	1368.2	1365.7	1368.2	1368.9	1371.4
12.5°	1366.4	1364.2	1361.7	1364.4	1365.4	1367.7
13°	1362.7	1360.4	1357.6	1360.4	1361.4	1364.2
13.5°	1358.4	1356.1	1353.6	1356.4	1357.4	1359.9
14°	1354.4	1352.1	1349.4	1352.4	1353.1	1356.1
14.5°	1350.1	1347.6	1344.8	1347.9	1348.9	1351.9
15°	1345.6	1343.1	1340.1	1343.6	1344.6	1347.6
15.5°	1341.1	1338.6	1335.6	1338.8	1339.8	1343.1
16°	1336.3	1333.6	1330.5	1334.1	1335.1	1338.3
16.5°	1331.6	1328.8	1325.5	1329.0	1330.3	1333.6
17°	1326.5	1323.5	1320.3	1324.0	1325.3	1328.8
17.5°	1321.3	1318.3	1315.0	1318.8	1320.0	1323.8
18°	1316.0	1312.7	1309.2	1313.5	1314.7	1318.5
18.5°	1310.5	1307.2	1303.7	1308.0	1309.2	1313.0
19°	1305.0	1301.4	1297.9	1302.2	1303.5	1307.5
19.5°	1299.2	1295.7	1291.9	1296.4	1297.7	1301.7
20°	1293.4	1289.7	1285.9	1290.4	1291.9	1295.9
20.5°	1287.1	1283.4	1279.4	1284.1	1286.1	1290.2
21°	1280.9	1276.9	1272.9	1278.1	1279.9	1283.6

TEST NUMBER: P775947

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1261.6	1257.3	1252.8	1258.3	1260.3	1264.6
23°	1254.8	1250.5	1245.8	1251.5	1253.5	1257.8
23.5°	1248.0	1243.8	1238.7	1244.5	1246.5	1251.0
24°	1241.0	1236.2	1231.5	1237.2	1239.2	1244.0
24.5°	1233.7	1229.0	1224.2	1230.2	1232.2	1237.0
25°	1226.4	1221.4	1216.7	1222.7	1224.9	1229.7
25.5°	1218.9	1213.9	1208.6	1215.2	1217.4	1222.4
26°	1211.4	1206.1	1201.1	1207.6	1209.9	1214.7
26.5°	1203.6	1198.6	1193.3	1199.6	1202.1	1207.4
27°	1195.8	1190.6	1185.1	1191.8	1194.3	1199.6
27.5°	1188.1	1182.5	1177.0	1183.8	1186.3	1191.6
28°	1180.0	1174.0	1168.7	1175.5	1178.0	1183.5
28.5°	1171.8	1166.0	1160.2	1167.0	1170.0	1175.3
29°	1163.5	1157.7	1151.9	1158.5	1161.5	1167.2
29.5°	1154.9	1149.2	1142.9	1150.2	1152.9	1158.7
30°	1146.7	1140.4	1134.6	1141.4	1144.4	1150.2
30.5°	1137.9	1131.6	1125.6	1132.6	1135.6	1141.4
31°	1129.4	1122.8	1116.8	1124.1	1126.9	1132.6
31.5°	1120.6	1114.1	1107.3	1114.8	1117.8	1123.8
32°	1111.5	1104.8	1098.5	1105.8	1108.8	1115.1
32.5°	1102.5	1095.7	1089.2	1096.5	1099.8	1105.8
33°	1093.2	1086.5	1079.9	1087.2	1090.5	1096.7
33.5°	1084.0	1076.9	1070.2	1077.9	1081.2	1087.5
34°	1074.2	1067.4	1060.4	1068.2	1071.4	1077.7
34.5°	1064.4	1057.4	1050.6	1058.4	1061.6	1068.2
35°	1054.6	1047.3	1040.3	1048.1	1051.6	1057.9
35.5°	1044.3	1037.0	1029.8	1037.8	1041.3	1047.8
36°	1033.8	1026.5	1019.2	1027.8	1031.0	1037.5
36.5°	1023.0	1015.7	1008.4	1016.7	1020.0	1026.8
37°	1011.7	1004.4	997.2	1005.7	1008.9	1015.7
37.5°	998.9	992.4	985.1	994.4	997.7	1003.9
38°	984.6	979.1	971.3	982.6	985.4	991.6
38.5°	970.1	964.8	956.3	968.8	970.8	977.8
39°	954.8	949.2	941.5	953.5	956.3	963.3
39.5°	939.0	932.2	925.4	937.7	940.7	947.2
40°	922.7	914.6	908.1	921.1	924.4	929.9
40.5°	906.1	897.1	890.8	904.1	906.8	912.1
41°	889.0	879.3	872.7	886.8	889.3	894.1
41.5°	871.5	860.9	854.4	869.5	871.0	876.0
42°	853.7	843.4	836.1	851.4	852.4	856.9
42.5°	835.9	825.8	817.0	833.3	833.6	838.6
43°	817.8	808.0	798.2	815.0	815.0	820.1
43.5°	800.0	789.7	778.9	796.2	795.7	801.5



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	745.8	735.3	722.5	738.5	737.8	745.0
45.5°	727.7	717.0	703.7	719.0	718.2	726.2
46°	709.7	699.1	685.1	699.4	698.9	707.7
46.5°	691.6	680.3	666.3	680.3	679.6	688.9
47°	672.8	661.8	648.0	660.3	660.3	669.5
47.5°	654.7	643.4	629.2	640.7	641.2	650.7
48°	636.4	625.1	610.8	620.6	622.4	631.9
48.5°	617.9	606.6	592.0	601.8	603.6	613.1
49°	599.0	588.8	574.5	582.0	585.0	594.5
49.5°	580.5	571.0	556.7	563.2	566.4	576.0
50°	561.9	552.9	538.3	543.9	548.1	557.7
50.5°	543.6	535.1	520.5	525.5	529.8	539.3
51°	525.5	518.0	503.0	507.0	511.5	521.0
51.5°	507.2	500.5	485.7	489.2	493.4	503.5
52°	489.2	483.4	468.4	471.4	475.9	485.7
52.5°	471.4	466.3	451.0	454.6	458.6	468.4
53°	453.8	449.5	434.2	437.2	441.5	451.0
53.5°	436.5	433.0	417.9	420.4	424.5	434.0
54°	419.2	416.2	401.4	404.4	407.6	417.2
54.5°	402.4	400.1	385.6	388.6	391.3	400.6
55°	385.8	384.3	370.0	372.8	375.8	384.3
55.5°	369.5	368.5	354.7	358.0	360.2	368.5
56°	353.5	352.7	339.4	343.2	344.7	353.0
56.5°	337.9	337.7	324.9	328.9	329.9	337.4
57°	322.4	322.6	310.6	314.8	315.6	322.4
57.5°	307.3	308.1	296.5	301.0	301.5	307.6
58°	293.0	293.8	283.2	288.2	287.7	293.0
58.5°	278.7	280.0	270.2	275.4	274.9	279.0
59°	264.9	266.2	257.4	262.9	261.9	265.4
59.5°	251.4	252.9	245.3	250.9	249.9	252.1
60°	238.6	240.1	233.3	239.6	237.8	239.1
60.5°	227.3	227.5	221.8	228.3	226.5	226.8
61°	215.7	215.5	210.7	217.5	215.2	214.5
61.5°	204.2	203.9	200.4	207.0	204.7	202.9
62°	192.9	192.7	190.4	197.2	194.4	191.9
62.5°	181.4	182.1	180.6	187.6	184.6	181.4
63°	171.6	172.1	171.3	178.4	175.1	171.3
63.5°	162.6	162.3	162.6	169.6	166.3	162.1
64°	153.5	153.3	154.3	161.1	157.8	153.0
64.5°	145.2	145.0	146.5	153.0	149.8	144.5
65°	137.7	137.5	139.0	145.2	141.7	137.2
65.5°	130.7	130.7	132.0	138.2	135.2	130.2
66°	124.2	124.4	125.7	131.4	128.4	123.4



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	108.9	109.9	109.6	113.9	111.6	107.1
68°	105.1	105.9	105.6	109.1	106.9	102.9
68.5°	101.6	102.3	101.8	104.9	102.9	98.8
69°	98.6	99.3	98.6	100.8	99.3	96.1
69.5°	96.1	96.6	95.8	97.6	96.3	94.3
70°	94.6	94.6	93.8	95.1	94.1	92.6
70.5°	93.1	93.1	92.3	93.3	92.1	90.8
71°	91.3	91.3	90.8	91.8	90.3	89.1
71.5°	89.8	89.8	89.3	90.1	88.8	87.5
72°	88.1	88.1	87.5	88.6	87.0	85.8
72.5°	86.3	86.5	85.8	86.8	85.3	84.3
73°	84.5	85.0	84.3	85.3	83.5	82.3
73.5°	82.8	83.3	82.5	83.8	81.5	80.3
74°	81.0	81.5	81.0	81.8	79.5	78.0
74.5°	79.0	79.8	79.0	79.8	77.3	75.8
75°	77.0	77.8	77.0	78.0	75.3	73.8
75.5°	75.0	75.8	75.0	75.8	72.7	71.2
76°	73.0	73.8	73.0	73.8	70.5	68.7
76.5°	70.7	71.5	71.0	71.5	68.0	66.5
77°	68.5	69.5	68.7	69.2	65.5	63.7
77.5°	66.2	67.2	66.7	67.0	63.0	61.0
78°	64.0	65.0	64.5	64.7	60.2	58.2
78.5°	61.5	62.7	62.0	62.2	57.4	55.4
79°	59.0	60.2	59.7	59.7	54.7	52.4
79.5°	56.4	57.7	57.2	56.9	51.7	49.4
80°	53.9	55.2	54.4	54.4	48.7	46.2
80.5°	51.2	52.4	51.9	51.7	45.7	43.1
81°	48.7	49.9	49.4	48.9	42.6	40.1
81.5°	45.9	47.2	46.7	46.2	39.4	36.6
82°	42.9	44.4	43.9	43.1	36.1	33.4
82.5°	40.1	41.6	41.1	40.4	32.9	30.1
83°	37.4	38.6	38.1	37.6	29.9	26.6
83.5°	34.4	35.9	35.4	34.9	26.6	23.1
84°	31.4	32.9	32.6	31.9	23.3	19.6
84.5°	28.3	29.9	29.6	29.1	20.3	16.1
85°	25.3	26.8	26.6	26.6	17.6	12.8
85.5°	22.3	23.8	23.6	23.8	15.3	9.8
86°	19.1	20.8	20.6	21.1	13.3	8.5
86.5°	16.1	17.6	17.3	18.3	11.5	7.3
87°	13.0	14.5	14.3	15.3	9.5	6.0
87.5°	9.8	11.3	11.0	12.5	7.8	4.5
88°	6.8	8.3	8.0	9.5	6.0	3.3
88.5°	4.0	6.3	6.0	7.3	4.3	2.3



TEST NUMBER: P775947

CATALOG NUMBER: HCDJBL1525CSD-HCD41TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.3	0.3	0.3	0.3	0.0



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°	1277.6	1284.1	1292.4	1300.4	1306.2	1310.2	1305.7	1304.2	1300.4	1293.4	1284.1
22°	1271.1	1278.1	1286.4	1294.4	1300.2	1304.5	1299.7	1298.4	1294.7	1287.4	1277.9



44°	782.7	799.7	821.8	841.4	846.4	855.7	838.9	835.9	828.6	822.3	805.3
44.5°	763.6	781.2	803.0	822.1	826.6	837.6	820.6	817.3	809.0	803.2	786.7



66.5°	117.4	118.4	121.2	123.2	121.7	123.7	118.4	119.2	117.2	121.4	121.2
67°	112.1	112.9	115.1	116.4	114.9	116.9	112.1	112.9	110.4	115.1	115.4



89°	1.3	1.5	2.5	2.8	0.5	0.8	0.0	0.3	0.3	0.8	1.5
89.5°	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0

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

Scaled Data Report





21.5°	1274.6	1270.6	1266.3	1271.6	1273.4	1277.6
22°	1268.3	1264.1	1259.8	1265.1	1266.8	1271.1



44°	781.7	771.4	760.1	777.2	776.2	782.7
44.5°	763.9	753.3	741.0	757.8	756.8	763.6



66.5°	118.7	119.2	119.9	125.2	122.2	117.4
67°	113.4	113.9	114.4	119.4	116.6	112.1

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

Scaled Data Report



89°	1.8	4.3	4.0	5.0	2.5	1.3
89.5°	0.0	2.3	2.3	2.8	1.0	0.3

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

Scaled Data Report



(END OF REPORT)