

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: P776137

Luminaire Tested: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776137  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B048)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS1525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K  
Description: 8 INCH ROUND SHALLOW-WIDE LENSED WALLWASH KIT  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3077.4 lumens  
Efficiency: N/A  
Efficacy: 123.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.17 / 1.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

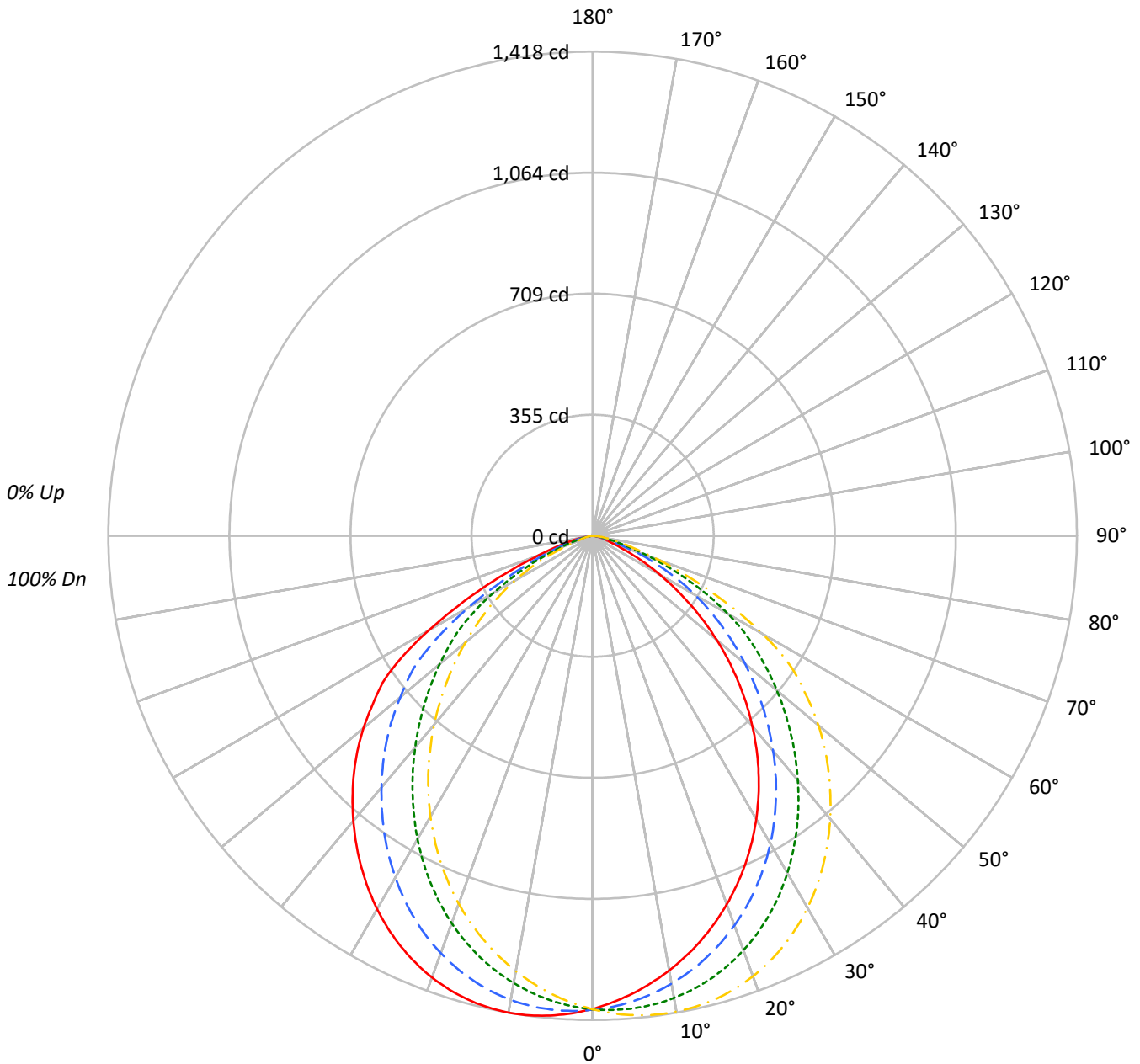
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**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	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	101	98	100	98	95	97	94	92	93	91	90	88				88															
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76				76															
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65				65															
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50				50															
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44				44															
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39				39															
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35				35															
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32															
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29				29															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	42349	42349	42349	42349
5°	41232	42572	43224	41894
10°	40063	42596	43966	41238
15°	38769	42414	44459	40362
20°	37327	41970	44715	39215
25°	35677	41242	44722	37796
30°	33783	40210	44497	36152
35°	31576	38877	44054	34259
40°	28998	37264	43449	32218
45°	26014	35443	42697	30051
50°	22518	33452	41588	27748
55°	18443	31176	39948	25198
60°	13824	27954	33821	20608
65°	8857	22517	24504	14744
70°	5017	15470	15148	8882
75°	3810	9048	9578	4825
80°	2690	4976	5468	2286
85°	1576	2732	1401	981

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 43293 cd/sqm



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.9	4.3
10°-20°	370.3	12.0
20°-30°	545.2	17.7
30°-40°	625.1	20.3
40°-50°	601.6	19.5
50°-60°	479.7	15.6
60°-70°	249.0	8.1
70°-80°	67.1	2.2
80°-90°	8.6	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°	1046.3	34.0
0°-40°	1671.4	54.3
0°-60°	2752.7	89.4
0°-90°	3077.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3077.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1387	1387	1387	1387	1387	
5°	1345	1389	1410	1367	1345	127
15°	1227	1342	1407	1277	1227	345
25°	1059	1224	1328	1122	1059	487
35°	847	1043	1182	919	847	528
45°	602	821	989	696	602	463
55°	346	586	750	473	346	310
65°	123	312	339	204	123	127
75°	32	77	81	41	32	35
85°	4	8	4	3	4	6
90°	0	1	0	0	0	



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1
0.5°	1382.1	1388.1	1387.6	1386.8	1387.6	1388.8	1389.6	1389.6	1388.6	1392.8	1389.8
1°	1378.5	1385.6	1386.1	1386.6	1388.6	1391.1	1392.6	1392.6	1391.6	1394.8	1391.1
1.5°	1374.8	1382.8	1384.3	1386.3	1389.1	1392.6	1395.1	1395.1	1394.6	1396.6	1391.8
2°	1371.0	1380.0	1382.6	1385.6	1389.6	1394.3	1397.6	1397.6	1397.4	1398.4	1392.6
2.5°	1367.0	1377.0	1380.3	1385.1	1389.8	1395.8	1400.1	1401.4	1399.9	1400.1	1393.1
3°	1363.0	1373.8	1378.3	1384.1	1390.1	1397.4	1402.4	1403.9	1402.1	1401.6	1393.3
3.5°	1359.0	1370.5	1376.0	1383.1	1390.1	1398.6	1404.4	1406.4	1404.6	1402.9	1393.6
4°	1354.5	1367.0	1373.5	1381.8	1389.8	1399.6	1406.1	1408.6	1406.6	1403.9	1393.6
4.5°	1350.2	1363.5	1370.8	1380.3	1389.6	1400.4	1407.9	1410.6	1408.6	1404.9	1393.3
5°	1345.4	1359.7	1368.0	1378.8	1389.1	1400.9	1409.4	1412.6	1410.4	1405.6	1393.1
5.5°	1340.9	1356.0	1365.3	1377.0	1388.3	1401.4	1410.6	1414.4	1411.9	1406.1	1392.3
6°	1335.9	1352.0	1362.0	1375.0	1387.6	1401.6	1411.9	1415.9	1413.4	1406.4	1391.8
6.5°	1330.9	1347.7	1358.7	1373.0	1386.3	1401.9	1412.9	1417.2	1414.7	1406.6	1391.1
7°	1325.9	1343.4	1355.5	1370.8	1385.1	1401.9	1413.9	1418.7	1415.7	1406.6	1390.1
7.5°	1320.6	1338.9	1352.0	1368.5	1383.6	1401.6	1414.4	1419.7	1416.4	1406.4	1388.8
8°	1315.1	1334.4	1348.2	1365.8	1382.3	1401.4	1414.9	1420.4	1417.2	1406.1	1387.3
8.5°	1309.6	1329.7	1344.2	1363.0	1380.6	1400.6	1415.4	1421.2	1417.7	1405.4	1385.8
9°	1303.8	1324.9	1340.2	1360.0	1378.5	1400.1	1415.4	1421.7	1418.2	1404.9	1384.1
9.5°	1298.3	1319.9	1336.2	1357.0	1376.5	1399.1	1415.4	1421.9	1418.2	1403.9	1382.1
10°	1292.3	1314.9	1331.7	1353.7	1374.0	1397.9	1415.2	1422.2	1418.2	1402.6	1380.0
10.5°	1286.5	1309.6	1327.1	1350.2	1371.8	1396.8	1414.9	1421.9	1417.7	1401.4	1377.8
11°	1280.3	1304.1	1322.6	1346.5	1369.0	1395.3	1414.1	1421.7	1417.2	1399.9	1375.3
11.5°	1274.0	1298.8	1317.9	1342.9	1366.3	1393.8	1413.4	1421.2	1416.7	1398.4	1372.5
12°	1267.5	1293.0	1313.1	1338.9	1363.3	1392.1	1412.6	1420.7	1415.7	1396.3	1369.8
12.5°	1261.2	1287.3	1307.8	1334.7	1360.2	1390.1	1411.4	1419.7	1414.7	1394.3	1366.8
13°	1254.4	1281.3	1302.8	1330.4	1357.0	1388.1	1410.1	1418.7	1413.4	1392.1	1363.5
13.5°	1247.7	1275.2	1297.3	1326.1	1353.5	1385.8	1408.6	1417.4	1412.1	1389.8	1360.2
14°	1240.9	1269.2	1291.8	1321.4	1349.7	1383.3	1406.9	1416.2	1410.6	1387.1	1356.5
14.5°	1233.6	1263.0	1286.3	1316.9	1345.9	1380.6	1405.1	1414.7	1408.6	1384.3	1353.0
15°	1226.6	1256.7	1280.5	1311.8	1341.9	1377.5	1403.1	1412.6	1406.6	1381.3	1349.0
15.5°	1219.3	1249.9	1274.5	1306.8	1337.7	1374.8	1400.9	1410.6	1404.4	1378.3	1344.9
16°	1212.1	1243.1	1268.2	1301.6	1333.2	1371.5	1398.4	1408.6	1402.1	1374.8	1340.9
16.5°	1204.5	1236.4	1262.0	1296.1	1328.6	1368.0	1395.8	1406.1	1399.6	1371.3	1336.4
17°	1196.8	1229.4	1255.7	1290.3	1323.9	1364.5	1393.1	1403.6	1396.8	1367.5	1331.7
17.5°	1189.0	1222.3	1249.2	1284.8	1319.1	1360.7	1390.1	1400.9	1393.8	1363.5	1326.9
18°	1181.5	1215.1	1242.6	1278.8	1313.9	1356.7	1387.1	1397.9	1390.6	1359.5	1321.9
18.5°	1173.4	1207.8	1235.6	1272.7	1308.6	1352.5	1383.8	1394.8	1387.1	1355.2	1316.9
19°	1164.9	1200.3	1228.6	1266.5	1303.1	1348.5	1380.3	1391.6	1383.8	1351.0	1311.6
19.5°	1156.9	1192.5	1221.6	1259.9	1297.6	1343.9	1376.5	1388.1	1380.0	1346.2	1306.1
20°	1148.9	1185.0	1214.3	1253.7	1291.8	1339.2	1372.8	1384.3	1376.3	1341.4	1300.3
20.5°	1140.3	1177.0	1207.0	1246.9	1285.5	1334.4	1368.8	1380.6	1372.3	1336.4	1294.8
21°	1131.3	1169.2	1199.5	1240.1	1279.5	1329.4	1364.5	1376.5	1368.0	1331.4	1288.8



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1105.5	1144.4	1176.0	1218.3	1260.2	1313.4	1350.7	1363.3	1354.0	1315.1	1270.0
23°	1096.5	1135.8	1167.9	1210.8	1253.4	1307.6	1345.7	1358.7	1349.0	1309.1	1263.2
23.5°	1087.2	1127.3	1159.7	1203.3	1246.2	1301.8	1340.7	1353.7	1343.9	1303.3	1256.7
24°	1077.9	1118.5	1151.1	1195.5	1239.1	1295.6	1335.4	1348.7	1338.7	1297.1	1249.7
24.5°	1068.6	1109.8	1142.6	1187.2	1231.9	1289.3	1329.9	1343.4	1333.2	1290.8	1242.6
25°	1059.1	1100.7	1134.1	1179.2	1224.3	1283.0	1324.1	1337.9	1327.6	1284.3	1235.4
25.5°	1049.6	1091.5	1125.3	1170.9	1216.6	1276.2	1318.4	1332.4	1321.6	1277.7	1228.1
26°	1039.8	1082.4	1116.3	1162.4	1208.8	1269.5	1312.4	1326.6	1315.6	1271.0	1220.6
26.5°	1030.0	1073.1	1107.2	1153.6	1200.8	1262.7	1306.3	1320.6	1309.6	1264.0	1213.1
27°	1020.0	1063.9	1098.2	1145.1	1192.8	1255.7	1299.8	1314.4	1303.3	1256.9	1205.0
27.5°	1010.0	1054.3	1088.9	1136.3	1184.5	1248.4	1293.3	1308.3	1296.8	1249.9	1197.3
28°	999.9	1044.6	1079.7	1127.3	1175.7	1240.6	1286.8	1301.8	1290.3	1242.4	1189.0
28.5°	989.4	1034.5	1070.1	1118.0	1167.2	1233.4	1280.0	1295.1	1283.3	1234.9	1181.0
29°	979.1	1024.8	1060.4	1108.5	1158.4	1225.3	1272.7	1288.3	1276.5	1227.1	1172.4
29.5°	968.8	1014.7	1050.8	1099.2	1149.6	1217.6	1265.7	1281.5	1269.2	1219.3	1163.9
30°	958.3	1004.9	1040.8	1089.7	1140.6	1209.5	1258.4	1274.5	1262.2	1211.6	1155.1
30.5°	947.5	994.4	1030.8	1080.2	1131.3	1201.0	1250.9	1267.2	1254.7	1203.3	1146.6
31°	936.7	984.1	1020.7	1070.6	1122.3	1192.8	1243.4	1259.7	1247.2	1195.3	1137.8
31.5°	925.7	973.9	1010.5	1060.4	1112.8	1184.2	1235.4	1252.2	1239.4	1187.0	1128.8
32°	914.9	963.3	1000.2	1050.3	1103.0	1175.4	1227.6	1244.4	1231.6	1178.7	1119.8
32.5°	903.9	952.3	989.7	1040.1	1093.2	1166.7	1219.6	1236.9	1223.6	1169.9	1110.8
33°	892.9	941.8	978.9	1030.0	1083.4	1157.4	1211.3	1229.1	1215.6	1161.4	1101.2
33.5°	881.6	931.0	968.3	1019.5	1073.4	1148.4	1203.0	1220.6	1207.3	1152.4	1092.0
34°	870.1	920.2	957.8	1009.2	1063.6	1139.3	1194.3	1212.3	1199.0	1143.6	1082.4
34.5°	858.8	909.2	947.0	998.4	1053.3	1129.8	1185.7	1204.0	1190.5	1134.8	1072.9
35°	847.2	897.9	936.2	988.1	1043.1	1120.3	1177.0	1195.8	1182.0	1125.6	1063.1
35.5°	835.7	886.6	925.0	977.1	1032.5	1110.8	1167.9	1187.0	1173.4	1116.3	1053.6
36°	823.9	875.3	913.9	966.3	1022.2	1101.0	1159.2	1178.0	1164.4	1106.7	1043.3
36.5°	812.1	864.0	902.6	955.1	1011.7	1091.2	1149.6	1169.2	1155.6	1097.7	1033.3
37°	800.3	852.5	891.6	944.5	1001.2	1080.9	1140.3	1160.4	1146.4	1087.9	1023.5
37.5°	788.6	841.0	880.1	933.5	990.2	1070.9	1130.8	1151.1	1137.3	1078.4	1013.5
38°	776.3	829.4	868.5	922.2	979.4	1060.6	1121.3	1141.9	1128.1	1068.6	1003.2
38.5°	764.2	817.6	857.0	910.4	968.3	1050.3	1111.8	1132.6	1118.8	1059.1	992.9
39°	752.5	805.6	845.5	899.6	957.8	1040.1	1102.0	1123.5	1109.3	1049.1	982.6
39.5°	740.4	794.1	833.9	888.1	946.3	1029.5	1092.0	1113.8	1100.0	1039.0	972.4
40°	727.6	782.3	822.2	876.8	935.0	1018.7	1082.2	1104.0	1090.2	1029.0	961.6
40.5°	715.6	770.3	810.4	865.0	923.7	1008.2	1072.1	1094.2	1080.4	1019.0	951.3
41°	703.1	758.2	798.6	853.8	912.4	997.4	1061.6	1084.7	1070.6	1008.7	940.5
41.5°	690.8	746.2	786.8	842.2	901.1	986.4	1051.6	1074.7	1060.6	998.9	930.0
42°	678.0	734.2	774.5	830.7	889.9	975.4	1041.1	1064.4	1050.6	988.4	919.4
42.5°	666.0	721.9	763.0	819.2	878.6	964.6	1031.0	1054.3	1040.6	977.9	908.4
43°	653.2	709.6	751.0	807.6	867.0	953.5	1020.2	1044.3	1030.5	967.1	897.6
43.5°	640.4	697.3	739.2	795.6	855.5	942.5	1009.7	1034.0	1020.2	956.8	886.9



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	602.5	659.9	702.8	760.5	820.9	908.7	977.4	1002.7	988.9	924.2	853.5
45.5°	589.7	647.7	691.0	748.9	809.4	897.4	966.3	992.2	978.4	912.9	842.2
46°	576.9	635.1	678.7	736.9	797.8	886.1	955.3	981.1	967.6	901.9	830.9
46.5°	564.2	622.6	667.0	725.1	786.3	874.6	944.3	970.3	956.8	890.6	819.4
47°	551.6	610.3	654.7	713.3	774.8	863.0	932.7	959.3	945.5	879.1	807.9
47.5°	538.6	597.8	642.6	701.6	762.7	851.5	921.7	948.0	934.2	867.5	795.8
48°	525.3	585.2	630.3	690.0	751.2	840.0	910.2	936.7	923.2	855.3	784.1
48.5°	512.8	572.4	618.3	678.0	739.7	828.4	898.6	925.2	911.7	843.2	772.0
49°	500.0	560.1	606.0	666.2	727.9	816.4	886.9	913.7	899.9	830.9	759.7
49.5°	487.2	547.6	594.2	654.4	715.9	804.6	875.3	901.9	887.6	818.4	747.4
50°	474.1	535.1	582.5	642.4	704.3	792.8	863.0	889.9	875.6	805.9	735.2
50.5°	461.1	522.5	570.2	630.9	692.5	780.8	850.7	877.6	863.0	792.8	723.1
51°	448.3	509.7	558.1	619.1	680.7	768.8	838.5	865.0	850.5	780.3	711.1
51.5°	435.8	497.2	546.1	607.3	669.0	756.7	825.9	852.3	837.7	768.0	699.3
52°	422.7	484.9	534.1	595.5	656.9	744.2	813.1	839.2	824.7	756.2	688.0
52.5°	410.2	472.4	522.0	583.7	644.9	731.9	800.3	826.2	811.6	744.7	676.2
53°	397.2	459.8	510.2	571.9	632.9	719.1	787.3	813.6	799.3	732.4	664.4
53.5°	384.4	447.6	498.2	560.4	621.1	706.6	774.3	800.3	787.3	719.6	650.7
54°	371.8	435.3	486.4	548.1	609.0	694.0	761.7	788.3	775.5	705.1	636.6
54.5°	359.3	423.0	474.4	536.6	597.3	682.0	749.4	776.8	763.2	689.0	620.6
55°	346.5	410.7	462.6	524.8	585.7	670.0	737.7	765.0	750.5	671.0	604.0
55.5°	334.2	398.2	451.1	513.5	574.4	658.4	725.4	751.7	735.2	653.4	586.7
56°	321.7	386.4	439.0	502.0	562.9	646.4	712.6	736.9	718.4	633.9	568.9
56.5°	309.4	374.3	427.5	490.4	551.4	633.6	698.3	720.4	700.8	614.3	551.1
57°	297.1	362.1	416.2	479.4	538.8	619.8	683.0	703.6	682.0	594.2	533.1
57.5°	284.8	350.3	404.9	468.1	526.3	606.0	666.7	684.8	661.7	574.4	513.8
58°	273.3	338.5	393.2	456.8	513.0	591.0	649.9	665.5	641.1	552.9	494.7
58.5°	261.3	327.0	381.6	444.8	500.0	575.7	632.4	644.9	620.3	531.3	475.6
59°	249.5	315.4	370.3	432.8	485.9	559.9	613.3	624.1	598.5	510.2	456.6
59.5°	237.7	303.9	358.8	420.5	472.1	543.3	594.2	601.8	576.2	489.4	437.3
60°	226.4	292.1	347.3	408.2	457.8	527.0	574.7	580.2	553.9	467.6	418.5
60.5°	215.1	280.8	335.2	395.9	444.1	510.2	554.9	557.9	531.6	446.6	399.7
61°	204.1	269.8	323.7	383.1	429.3	493.2	534.3	536.3	509.5	425.7	381.1
61.5°	192.8	258.3	311.9	370.8	414.7	475.9	513.5	514.0	486.9	404.4	362.6
62°	182.3	247.0	300.1	358.1	400.4	458.3	493.4	492.4	465.1	383.9	344.0
62.5°	171.8	235.7	288.6	345.5	385.4	440.8	472.4	470.6	442.8	363.8	326.2
63°	161.5	224.7	276.6	333.0	370.6	422.7	451.8	448.8	421.5	345.0	308.9
63.5°	150.9	213.6	265.0	319.7	355.8	404.9	431.5	427.3	400.2	326.0	291.9
64°	141.4	203.1	253.5	307.2	341.3	387.4	412.0	406.4	379.6	307.9	275.3
64.5°	131.9	192.3	242.0	294.4	326.5	369.6	391.9	385.9	359.6	290.4	259.3
65°	122.6	181.5	230.7	281.8	311.7	352.0	372.8	365.8	339.2	273.3	244.0
65.5°	113.6	171.3	219.1	269.0	296.9	334.7	353.8	346.0	319.4	257.3	230.4
66°	105.1	161.2	207.9	256.5	282.1	317.7	335.0	326.7	299.9	241.7	217.1





TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	83.0	131.9	174.3	219.1	239.5	268.8	281.6	272.8	244.5	201.1	177.0
68°	76.7	122.6	163.5	206.9	226.2	253.2	264.8	256.0	228.9	187.3	165.2
68.5°	70.7	113.6	152.9	194.6	212.9	237.9	248.2	239.7	213.4	173.8	154.5
69°	64.4	104.6	142.2	182.5	199.6	223.9	233.9	225.2	197.8	162.2	144.2
69.5°	59.7	95.8	131.6	170.2	186.5	210.1	219.6	210.9	182.5	151.4	134.4
70°	56.2	88.0	121.4	159.0	173.3	196.1	205.6	196.3	169.7	141.2	125.4
70.5°	53.9	80.5	111.3	147.4	161.5	182.0	191.3	182.0	157.7	131.6	116.8
71°	51.4	73.2	101.8	136.1	150.2	170.0	177.0	169.7	146.4	122.6	108.6
71.5°	48.9	65.9	92.5	125.4	139.2	157.7	164.7	158.0	135.9	114.1	101.0
72°	46.4	58.7	85.0	115.1	128.6	146.4	152.9	146.9	126.4	106.3	94.0
72.5°	43.9	53.4	77.7	105.3	118.3	135.6	142.2	136.7	117.3	98.8	87.0
73°	41.4	49.6	70.5	96.3	108.8	125.6	132.1	126.9	109.1	91.8	80.7
73.5°	39.1	47.1	63.2	87.5	100.0	116.1	122.6	117.8	101.5	85.3	74.7
74°	36.9	44.6	55.7	80.5	91.8	107.3	113.6	109.6	94.3	79.0	69.0
74.5°	34.6	42.4	50.4	73.2	83.7	99.0	105.3	101.8	87.5	73.2	63.7
75°	32.3	40.1	45.6	66.2	76.7	91.3	97.5	94.5	81.2	67.7	58.4
75.5°	30.3	37.9	41.9	59.2	70.0	84.0	90.3	87.8	75.0	62.2	53.7
76°	28.3	35.6	38.4	53.4	63.7	77.2	83.5	81.2	69.2	57.2	48.9
76.5°	26.6	33.6	35.4	48.1	57.7	70.7	77.2	75.5	63.7	52.4	44.6
77°	24.8	31.3	32.8	43.6	52.7	65.2	71.2	69.7	58.2	47.9	40.4
77.5°	23.1	29.3	30.6	39.4	47.6	59.4	65.7	64.4	53.2	43.4	36.4
78°	21.3	27.6	28.8	35.6	43.1	54.2	60.2	59.2	48.4	39.4	32.6
78.5°	19.8	25.8	26.8	32.3	38.9	49.4	55.2	54.2	43.6	35.6	29.1
79°	18.3	24.1	25.3	29.3	35.1	44.9	50.4	49.6	39.1	31.8	25.8
79.5°	16.8	22.3	23.6	26.6	31.6	40.6	45.9	45.1	35.1	28.6	23.3
80°	15.3	20.6	22.1	24.1	28.3	36.6	41.6	40.9	31.1	25.8	20.6
80.5°	14.0	19.1	20.3	21.8	25.3	33.1	37.6	37.1	27.3	22.8	17.8
81°	12.8	17.6	19.1	19.8	23.1	29.3	33.8	33.3	24.3	20.1	15.3
81.5°	11.5	16.3	17.6	18.1	20.6	26.3	30.1	29.8	21.3	17.3	12.5
82°	10.3	14.8	16.3	16.3	18.3	23.6	26.8	26.3	18.3	14.5	10.5
82.5°	9.3	13.5	14.8	14.8	15.8	21.1	24.1	23.6	15.0	11.8	8.8
83°	8.0	12.0	13.5	13.3	13.5	18.6	21.3	20.8	12.0	9.8	7.0
83.5°	7.0	11.0	12.5	12.3	11.8	15.8	18.6	18.1	9.8	7.8	5.5
84°	6.3	9.8	11.3	11.0	10.3	13.3	15.8	15.3	7.5	6.0	4.3
84.5°	5.3	8.8	10.0	10.0	9.0	11.5	13.0	12.5	5.8	4.5	3.3
85°	4.5	7.8	9.0	9.0	7.8	9.8	11.0	10.3	4.0	3.0	2.3
85.5°	3.8	6.8	8.3	8.0	6.5	8.0	9.0	8.3	2.5	2.0	1.5
86°	3.0	5.8	7.3	7.3	5.8	6.8	7.3	6.5	1.5	1.3	0.8
86.5°	2.3	4.8	6.3	6.3	4.8	5.5	5.8	4.8	1.0	0.5	0.3
87°	1.8	4.0	5.3	5.5	4.0	4.3	4.5	3.5	0.8	0.3	0.0
87.5°	1.3	3.3	4.5	4.8	3.3	3.5	3.3	2.5	0.5	0.0	0.0
88°	1.0	2.5	3.8	4.0	2.8	2.5	2.3	1.5	0.3	0.0	0.0
88.5°	0.5	2.0	3.0	3.3	2.0	1.8	1.5	0.8	0.3	0.0	0.0



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.8	1.3	1.5	0.8	0.5	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1387.1	1387.1	1387.1	1387.1	1387.1	1387.1
0.5°	1386.8	1385.6	1384.3	1383.6	1382.6	1382.1
1°	1386.6	1384.1	1381.8	1380.3	1378.8	1378.5
1.5°	1386.1	1382.6	1379.0	1376.5	1375.0	1374.8
2°	1385.6	1380.8	1376.3	1373.0	1371.0	1371.0
2.5°	1384.6	1378.8	1373.3	1369.3	1367.0	1367.0
3°	1383.6	1376.8	1370.0	1365.3	1362.7	1363.0
3.5°	1382.6	1374.8	1366.8	1361.2	1358.5	1359.0
4°	1381.1	1372.3	1363.3	1357.0	1353.7	1354.5
4.5°	1379.8	1369.8	1359.5	1352.5	1349.2	1350.2
5°	1378.0	1367.0	1355.7	1348.0	1344.2	1345.4
5.5°	1376.3	1364.0	1351.7	1343.2	1339.4	1340.9
6°	1374.3	1361.0	1347.5	1338.4	1334.4	1335.9
6.5°	1372.0	1357.7	1343.2	1333.4	1329.2	1330.9
7°	1369.8	1354.5	1338.7	1328.4	1323.9	1325.9
7.5°	1367.3	1350.7	1334.2	1323.1	1318.4	1320.6
8°	1364.5	1347.0	1329.4	1317.6	1312.9	1315.1
8.5°	1361.7	1342.9	1324.4	1312.1	1307.1	1309.6
9°	1358.5	1338.9	1319.4	1306.3	1301.1	1303.8
9.5°	1355.5	1334.7	1314.1	1300.6	1295.1	1298.3
10°	1352.0	1330.2	1308.6	1294.5	1289.0	1292.3
10.5°	1348.5	1325.9	1303.1	1288.3	1282.8	1286.5
11°	1344.7	1320.9	1297.3	1282.3	1276.5	1280.3
11.5°	1340.9	1315.9	1291.3	1275.7	1270.0	1274.0
12°	1336.7	1310.8	1285.3	1269.2	1263.2	1267.5
12.5°	1332.4	1305.6	1279.0	1262.5	1256.4	1261.2
13°	1327.9	1300.3	1272.7	1255.7	1249.7	1254.4
13.5°	1323.4	1294.5	1266.2	1248.7	1242.9	1247.7
14°	1318.6	1288.8	1259.4	1241.9	1235.6	1240.9
14.5°	1313.9	1283.0	1252.9	1234.6	1228.4	1233.6
15°	1308.6	1277.0	1245.9	1227.1	1221.1	1226.6
15.5°	1303.3	1270.7	1238.6	1219.6	1213.3	1219.3
16°	1297.8	1264.2	1231.6	1212.1	1206.0	1212.1
16.5°	1292.3	1257.7	1224.1	1204.3	1198.3	1204.5
17°	1286.5	1250.9	1216.6	1196.5	1190.5	1196.8
17.5°	1280.5	1243.9	1208.8	1188.2	1182.5	1189.0
18°	1274.2	1236.9	1201.0	1180.5	1174.4	1181.5
18.5°	1268.0	1229.6	1193.0	1171.9	1165.9	1173.4
19°	1261.7	1222.3	1184.7	1163.9	1157.9	1164.9
19.5°	1254.9	1214.8	1176.5	1155.1	1149.4	1156.9
20°	1248.2	1207.0	1167.9	1146.6	1140.8	1148.9
20.5°	1241.1	1199.3	1159.4	1137.6	1132.3	1140.3
21°	1234.1	1191.2	1150.6	1128.8	1123.3	1131.3

TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1212.1	1166.4	1123.8	1101.2	1096.2	1105.5
23°	1204.3	1157.9	1114.8	1092.0	1086.9	1096.5
23.5°	1196.5	1149.1	1105.5	1082.7	1077.7	1087.2
24°	1188.2	1140.1	1096.0	1073.1	1068.1	1077.9
24.5°	1180.2	1131.3	1086.4	1063.1	1058.6	1068.6
25°	1171.9	1122.0	1076.4	1053.3	1048.8	1059.1
25.5°	1163.4	1113.3	1066.9	1043.6	1039.0	1049.6
26°	1154.9	1103.7	1057.1	1033.5	1029.3	1039.8
26.5°	1146.1	1094.5	1047.1	1023.3	1019.2	1030.0
27°	1137.3	1084.7	1037.0	1013.0	1009.2	1020.0
27.5°	1128.3	1075.2	1026.8	1002.7	998.9	1010.0
28°	1119.3	1065.4	1016.5	992.4	988.4	999.9
28.5°	1110.0	1055.3	1006.2	981.9	978.1	989.4
29°	1100.7	1045.6	995.7	971.1	967.8	979.1
29.5°	1091.2	1035.5	985.1	960.3	957.1	968.8
30°	1081.7	1025.5	974.6	949.8	946.3	958.3
30.5°	1072.1	1015.0	963.8	938.8	935.7	947.5
31°	1062.6	1004.7	953.0	928.0	924.7	936.7
31.5°	1052.6	994.2	942.0	916.9	913.9	925.7
32°	1042.8	983.6	931.0	905.7	902.6	914.9
32.5°	1032.5	973.1	920.2	894.6	891.6	903.9
33°	1022.5	962.6	909.2	883.3	880.3	892.9
33.5°	1012.2	951.5	898.1	872.1	869.1	881.6
34°	1001.9	941.0	886.6	860.8	857.5	870.1
34.5°	991.9	930.0	875.6	849.5	846.2	858.8
35°	981.4	919.2	864.0	838.0	834.4	847.2
35.5°	970.8	908.4	852.8	826.2	823.2	835.7
36°	960.3	897.1	841.7	814.9	811.1	823.9
36.5°	949.8	886.4	830.2	803.4	799.8	812.1
37°	939.0	875.3	818.9	791.6	787.8	800.3
37.5°	928.2	864.3	807.6	779.8	776.0	788.6
38°	917.4	853.0	796.1	768.0	764.0	776.3
38.5°	906.7	841.7	784.8	756.5	752.2	764.2
39°	896.1	830.7	773.0	744.7	740.2	752.5
39.5°	885.1	819.7	761.7	732.9	728.1	740.4
40°	874.1	808.4	750.2	721.1	716.1	727.6
40.5°	863.3	797.1	738.9	709.3	704.1	715.6
41°	852.3	785.6	727.4	697.5	691.5	703.1
41.5°	841.5	774.8	715.6	685.8	679.5	690.8
42°	830.4	763.7	704.3	673.7	667.5	678.0
42.5°	819.2	752.2	693.0	661.9	655.2	666.0
43°	808.1	740.9	681.8	649.9	642.6	653.2
43.5°	797.1	729.9	670.0	638.4	630.6	640.4



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	763.5	696.0	635.9	602.8	593.2	602.5
45.5°	752.2	685.3	624.3	591.2	581.2	589.7
46°	741.2	674.2	613.3	579.5	568.9	576.9
46.5°	729.6	662.7	601.8	567.7	556.4	564.2
47°	718.1	651.4	590.7	555.9	544.1	551.6
47.5°	706.6	640.4	578.9	544.1	531.6	538.6
48°	694.8	629.1	568.2	532.6	519.3	525.3
48.5°	683.3	617.8	556.6	520.8	507.0	512.8
49°	671.5	606.8	545.6	509.2	494.7	500.0
49.5°	659.4	595.5	534.3	497.5	482.7	487.2
50°	647.9	584.2	523.0	485.9	470.1	474.1
50.5°	636.4	572.7	511.8	474.6	457.8	461.1
51°	625.1	561.4	500.7	463.1	445.8	448.3
51.5°	613.8	550.6	489.7	451.3	433.8	435.8
52°	603.3	540.1	478.9	440.3	421.7	422.7
52.5°	592.0	529.6	468.1	429.0	409.5	410.2
53°	580.2	519.0	457.8	418.0	397.4	397.2
53.5°	567.7	508.2	447.1	406.7	385.6	384.4
54°	554.1	497.0	436.5	395.7	373.6	371.8
54.5°	540.6	485.4	425.7	385.1	361.8	359.3
55°	525.5	473.4	414.7	374.3	350.3	346.5
55.5°	510.5	460.6	403.2	363.1	338.7	334.2
56°	494.7	447.8	391.9	352.3	327.5	321.7
56.5°	479.2	434.8	380.4	341.0	315.9	309.4
57°	462.6	421.2	368.8	330.0	304.6	297.1
57.5°	446.6	407.4	357.0	318.7	293.4	284.8
58°	430.0	393.7	345.5	307.9	282.3	273.3
58.5°	413.5	379.9	333.2	296.9	271.3	261.3
59°	397.2	365.6	321.4	285.8	260.3	249.5
59.5°	380.9	351.5	309.4	274.8	249.2	237.7
60°	364.3	337.5	297.1	264.0	238.2	226.4
60.5°	348.3	323.4	284.8	252.7	227.4	215.1
61°	332.5	309.4	272.5	242.0	216.6	204.1
61.5°	316.4	295.6	260.3	231.2	206.1	192.8
62°	300.6	281.8	248.2	220.4	195.8	182.3
62.5°	285.6	268.3	235.9	209.4	185.3	171.8
63°	270.5	255.0	223.7	198.6	175.3	161.5
63.5°	256.0	241.7	211.9	187.3	165.2	150.9
64°	242.2	228.7	200.1	176.5	155.7	141.4
64.5°	228.9	216.4	188.6	165.7	146.2	131.9
65°	215.6	204.1	177.0	155.5	136.9	122.6
65.5°	202.6	191.6	166.2	144.7	127.4	113.6
66°	189.3	179.5	155.0	134.1	118.6	105.1



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	153.5	146.7	124.4	105.6	92.5	83.0
68°	143.2	136.1	114.6	96.5	85.5	76.7
68.5°	133.1	126.1	105.3	87.5	78.5	70.7
69°	123.6	116.8	96.5	80.7	71.7	64.4
69.5°	114.8	108.1	87.8	74.0	64.7	59.7
70°	106.8	99.5	81.0	66.9	57.7	56.2
70.5°	98.8	91.8	74.5	60.2	52.7	53.9
71°	91.3	85.3	67.7	54.4	49.1	51.4
71.5°	84.5	78.7	60.9	49.6	46.6	48.9
72°	77.7	72.5	55.4	45.4	44.4	46.4
72.5°	72.0	65.9	50.4	41.6	42.1	43.9
73°	66.2	59.7	45.6	38.4	39.9	41.4
73.5°	60.7	54.2	41.4	35.4	37.6	39.1
74°	55.7	49.4	37.6	32.8	35.4	36.9
74.5°	50.6	44.9	34.4	30.8	33.3	34.6
75°	46.1	40.9	31.1	28.8	31.3	32.3
75.5°	41.9	36.9	28.3	27.1	29.3	30.3
76°	38.1	33.3	25.6	25.3	27.3	28.3
76.5°	34.1	29.8	23.3	23.8	25.6	26.6
77°	30.8	26.8	21.3	22.1	23.8	24.8
77.5°	27.6	24.1	19.3	20.8	22.1	23.1
78°	24.8	21.6	17.6	19.3	20.6	21.3
78.5°	22.3	19.1	16.0	17.8	19.1	19.8
79°	19.6	17.1	14.5	16.5	17.6	18.3
79.5°	17.1	15.0	13.3	15.0	16.0	16.8
80°	14.5	13.0	12.0	13.8	14.5	15.3
80.5°	12.5	11.5	11.0	12.5	13.3	14.0
81°	10.8	10.0	10.0	11.5	12.0	12.8
81.5°	9.0	9.0	9.0	10.3	10.8	11.5
82°	7.5	8.0	8.0	9.3	9.5	10.3
82.5°	6.3	6.8	7.0	8.3	8.5	9.3
83°	5.0	5.8	6.3	7.3	7.5	8.0
83.5°	4.0	4.8	5.3	6.3	6.5	7.0
84°	3.3	4.0	4.5	5.3	5.5	6.3
84.5°	2.3	3.3	4.0	4.5	4.5	5.3
85°	1.8	2.8	3.3	3.8	3.8	4.5
85.5°	1.3	2.0	2.5	3.3	3.0	3.8
86°	0.8	1.5	2.0	2.5	2.5	3.0
86.5°	0.3	1.0	1.3	1.8	2.0	2.3
87°	0.0	0.5	0.8	1.3	1.5	1.8
87.5°	0.0	0.3	0.3	0.8	1.0	1.3
88°	0.0	0.0	0.0	0.3	0.5	1.0
88.5°	0.0	0.0	0.0	0.0	0.3	0.5



TEST NUMBER: P776137

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-3500K

**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



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°	1122.8	1160.9	1191.7	1232.9	1273.2	1324.1	1360.0	1372.3	1363.5	1326.1	1282.8
22°	1114.3	1152.9	1184.0	1225.6	1267.0	1318.9	1355.5	1367.8	1359.0	1320.6	1276.2



44°	627.8	685.0	726.9	784.1	844.0	931.0	998.7	1023.5	1010.0	946.0	875.8
44.5°	615.3	672.5	715.1	772.5	832.4	919.9	988.1	1013.0	999.7	935.2	864.8



66.5°	97.0	151.2	196.8	244.0	267.8	301.1	316.7	308.2	280.6	228.2	203.6
67°	89.0	141.2	185.8	231.4	253.7	284.6	299.1	290.4	262.5	214.6	190.3



89°	0.3	1.5	2.5	2.8	1.5	1.3	0.8	0.3	0.0	0.0	0.0
89.5°	0.0	1.0	1.8	2.0	1.0	0.8	0.3	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°	1226.9	1183.0	1141.9	1119.8	1114.3	1122.8
22°	1219.3	1174.7	1133.1	1110.5	1105.5	1114.3



44°	786.1	718.9	658.4	626.3	618.3	627.8
44.5°	774.5	707.3	647.1	614.8	605.8	615.3



66.5°	176.3	168.5	144.4	124.4	109.6	97.0
67°	164.2	157.2	133.9	114.6	100.8	89.0

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	0.3
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)