

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: P776139

Luminaire Tested: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776139  
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-5000K  
Description: 8 INCH ROUND SHALLOW-WIDE LENSED WALLWASH KIT  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3166.7 lumens  
Efficiency: N/A  
Efficacy: 126.7 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

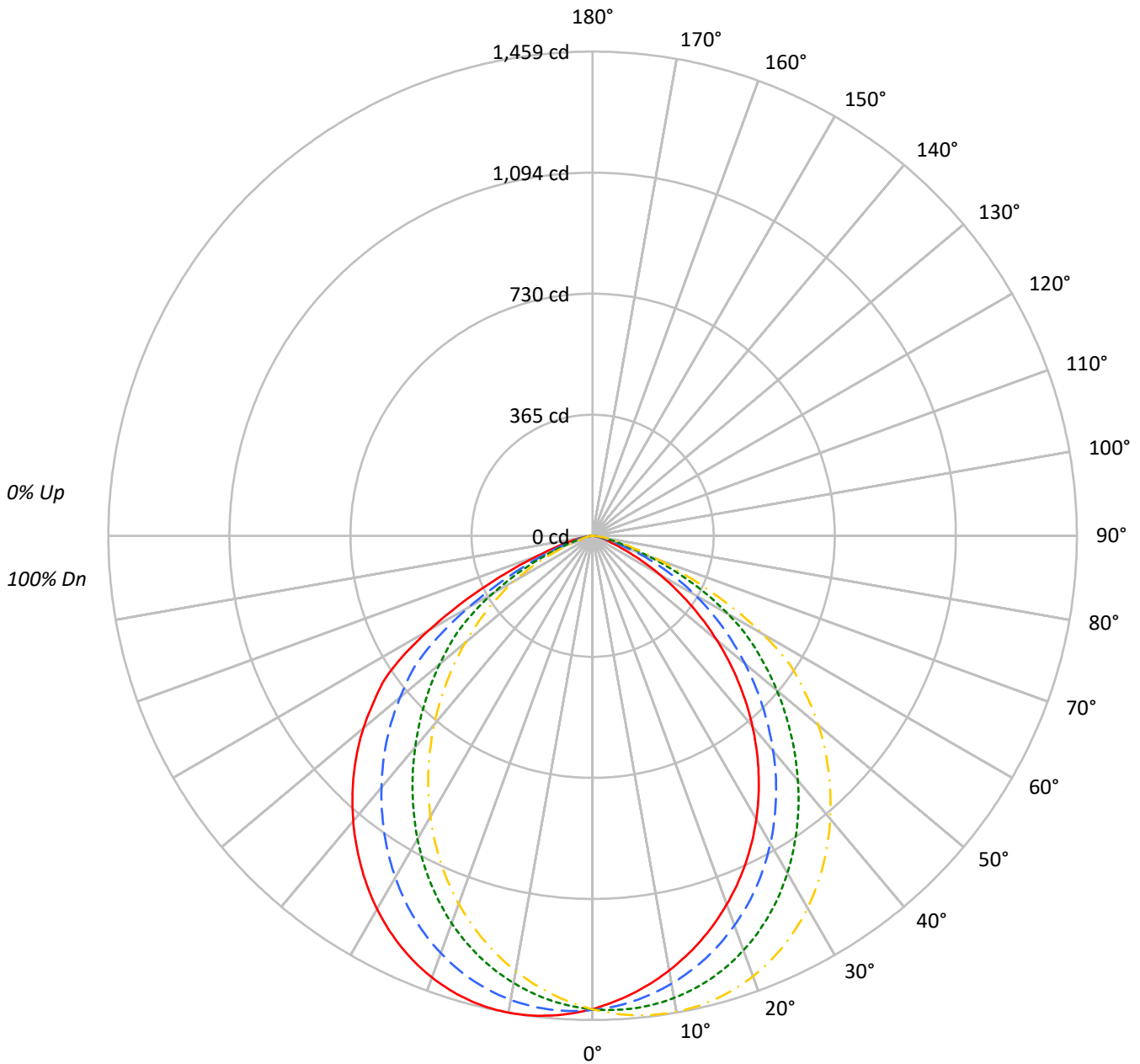
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	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°	43576	43576	43576	43576
5°	42431	43807	44478	43111
10°	41225	43833	45240	42435
15°	39895	43646	45752	41535
20°	38409	43188	46012	40355
25°	36715	42442	46022	38894
30°	34763	41377	45787	37203
35°	32492	40003	45332	35254
40°	29843	38344	44709	33151
45°	26769	36471	43936	30923
50°	23174	34426	42795	28555
55°	18981	32080	41103	25927
60°	14227	28766	34805	21206
65°	9117	23168	25219	15171
70°	5159	15916	15595	9141
75°	3928	9319	9861	4966
80°	2760	5134	5626	2356
85°	1611	2802	1436	981

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°  
 Vertical Angle: 45°  
 Luminance: 44549 cd/sqm



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.7	4.3
10°-20°	381.0	12.0
20°-30°	561.0	17.7
30°-40°	643.2	20.3
40°-50°	619.0	19.5
50°-60°	493.6	15.6
60°-70°	256.2	8.1
70°-80°	69.1	2.2
80°-90°	8.9	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1076.7	34.0
0°-40°	1720.0	54.3
0°-60°	2832.6	89.4
0°-90°	3166.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3166.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1427	1427	1427	1427	1427	
5°	1384	1429	1451	1407	1384	130
15°	1262	1381	1448	1314	1262	355
25°	1090	1260	1366	1155	1090	501
35°	872	1073	1216	946	872	544
45°	620	845	1018	716	620	477
55°	357	603	772	487	357	319
65°	126	321	349	210	126	130
75°	33	79	84	42	33	36
85°	5	8	4	3	5	6
90°	0	1	0	0	0	



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3
0.5°	1422.2	1428.4	1427.9	1427.1	1427.9	1429.1	1429.9	1429.9	1428.9	1433.3	1430.2
1°	1418.6	1425.8	1426.3	1426.8	1428.9	1431.5	1433.0	1433.0	1432.0	1435.3	1431.5
1.5°	1414.7	1422.9	1424.5	1426.6	1429.4	1433.0	1435.6	1436.1	1435.1	1437.1	1432.2
2°	1410.8	1420.1	1422.7	1425.8	1429.9	1434.8	1438.2	1439.2	1437.9	1438.9	1433.0
2.5°	1406.7	1417.0	1420.4	1425.3	1430.2	1436.4	1440.8	1442.0	1440.5	1440.8	1433.5
3°	1402.6	1413.7	1418.3	1424.2	1430.4	1437.9	1443.1	1444.6	1442.8	1442.3	1433.8
3.5°	1398.4	1410.3	1416.0	1423.2	1430.4	1439.2	1445.1	1447.2	1445.4	1443.6	1434.0
4°	1393.8	1406.7	1413.4	1421.9	1430.2	1440.2	1446.9	1449.5	1447.5	1444.6	1434.0
4.5°	1389.4	1403.1	1410.6	1420.4	1429.9	1441.0	1448.8	1451.6	1449.5	1445.7	1433.8
5°	1384.5	1399.2	1407.7	1418.8	1429.4	1441.5	1450.3	1453.7	1451.3	1446.4	1433.5
5.5°	1379.9	1395.3	1404.9	1417.0	1428.6	1442.0	1451.6	1455.5	1452.9	1446.9	1432.8
6°	1374.7	1391.2	1401.5	1415.0	1427.9	1442.3	1452.9	1457.0	1454.4	1447.2	1432.2
6.5°	1369.5	1386.8	1398.2	1412.9	1426.6	1442.6	1453.9	1458.3	1455.7	1447.5	1431.5
7°	1364.4	1382.4	1394.8	1410.6	1425.3	1442.6	1454.9	1459.8	1456.7	1447.5	1430.4
7.5°	1359.0	1377.8	1391.2	1408.2	1423.7	1442.3	1455.5	1460.9	1457.5	1447.2	1429.1
8°	1353.3	1373.2	1387.3	1405.4	1422.4	1442.0	1456.0	1461.7	1458.3	1446.9	1427.6
8.5°	1347.6	1368.3	1383.2	1402.6	1420.6	1441.3	1456.5	1462.4	1458.8	1446.2	1426.0
9°	1341.7	1363.3	1379.1	1399.5	1418.6	1440.8	1456.5	1462.9	1459.3	1445.7	1424.2
9.5°	1336.0	1358.2	1375.0	1396.4	1416.5	1439.7	1456.5	1463.2	1459.3	1444.6	1422.2
10°	1329.8	1353.0	1370.3	1393.0	1413.9	1438.4	1456.2	1463.5	1459.3	1443.3	1420.1
10.5°	1323.9	1347.6	1365.7	1389.4	1411.6	1437.4	1456.0	1463.2	1458.8	1442.0	1417.8
11°	1317.4	1341.9	1361.0	1385.5	1408.8	1435.9	1455.2	1462.9	1458.3	1440.5	1415.2
11.5°	1311.0	1336.5	1356.1	1381.9	1405.9	1434.3	1454.4	1462.4	1457.8	1438.9	1412.4
12°	1304.3	1330.6	1351.2	1377.8	1402.8	1432.5	1453.7	1461.9	1456.7	1436.9	1409.5
12.5°	1297.8	1324.6	1345.8	1373.4	1399.7	1430.4	1452.4	1460.9	1455.7	1434.8	1406.4
13°	1290.8	1318.5	1340.6	1369.0	1396.4	1428.4	1451.1	1459.8	1454.4	1432.5	1403.1
13.5°	1283.9	1312.3	1335.0	1364.6	1392.8	1426.0	1449.5	1458.6	1453.1	1430.2	1399.7
14°	1276.9	1306.1	1329.3	1359.7	1388.9	1423.5	1447.7	1457.3	1451.6	1427.3	1395.9
14.5°	1269.4	1299.6	1323.6	1355.1	1385.0	1420.6	1445.9	1455.7	1449.5	1424.5	1392.2
15°	1262.2	1293.2	1317.7	1349.9	1380.9	1417.5	1443.8	1453.7	1447.5	1421.4	1388.1
15.5°	1254.7	1286.2	1311.5	1344.8	1376.5	1414.7	1441.5	1451.6	1445.1	1418.3	1384.0
16°	1247.2	1279.2	1305.0	1339.4	1371.9	1411.3	1438.9	1449.5	1442.8	1414.7	1379.9
16.5°	1239.5	1272.3	1298.6	1333.7	1367.2	1407.7	1436.4	1446.9	1440.2	1411.1	1375.2
17°	1231.5	1265.0	1292.1	1327.7	1362.3	1404.1	1433.5	1444.4	1437.4	1407.2	1370.3
17.5°	1223.5	1257.8	1285.4	1322.1	1357.4	1400.2	1430.4	1441.5	1434.3	1403.1	1365.4
18°	1215.8	1250.3	1278.7	1315.9	1352.0	1396.1	1427.3	1438.4	1430.9	1399.0	1360.3
18.5°	1207.5	1242.9	1271.5	1309.7	1346.6	1391.7	1424.0	1435.3	1427.3	1394.6	1355.1
19°	1198.7	1235.1	1264.3	1303.2	1340.9	1387.6	1420.4	1432.0	1424.0	1390.2	1349.7
19.5°	1190.5	1227.1	1257.0	1296.5	1335.2	1383.0	1416.5	1428.4	1420.1	1385.3	1344.0
20°	1182.2	1219.4	1249.6	1290.1	1329.3	1378.1	1412.6	1424.5	1416.2	1380.4	1338.1
20.5°	1173.4	1211.1	1242.1	1283.1	1322.8	1373.2	1408.5	1420.6	1412.1	1375.2	1332.4
21°	1164.2	1203.1	1234.3	1276.1	1316.6	1368.0	1404.1	1416.5	1407.7	1370.1	1326.2



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1137.6	1177.6	1210.1	1253.7	1296.8	1351.5	1389.9	1402.8	1393.3	1353.3	1306.8
23°	1128.3	1168.8	1201.8	1246.0	1289.8	1345.5	1384.8	1398.2	1388.1	1347.1	1299.9
23.5°	1118.8	1160.0	1193.3	1238.2	1282.3	1339.6	1379.6	1393.0	1383.0	1341.2	1293.2
24°	1109.2	1151.0	1184.5	1230.2	1275.1	1333.2	1374.2	1387.9	1377.5	1334.7	1285.9
24.5°	1099.7	1142.0	1175.8	1221.7	1267.6	1326.7	1368.5	1382.4	1371.9	1328.3	1278.7
25°	1089.9	1132.7	1167.0	1213.4	1259.9	1320.3	1362.6	1376.8	1366.2	1321.5	1271.2
25.5°	1080.0	1123.1	1158.0	1204.9	1251.9	1313.3	1356.6	1371.1	1360.0	1314.8	1263.8
26°	1070.0	1113.8	1148.7	1196.2	1243.9	1306.3	1350.4	1365.2	1353.8	1307.9	1256.0
26.5°	1059.9	1104.3	1139.4	1187.1	1235.6	1299.4	1344.3	1359.0	1347.6	1300.7	1248.3
27°	1049.6	1094.8	1130.1	1178.4	1227.4	1292.1	1337.5	1352.5	1341.2	1293.4	1240.0
27.5°	1039.3	1085.0	1120.6	1169.3	1218.9	1284.7	1330.8	1346.3	1334.5	1286.2	1232.0
28°	1029.0	1074.9	1111.0	1160.0	1209.8	1276.7	1324.1	1339.6	1327.7	1278.5	1223.5
28.5°	1018.1	1064.6	1101.2	1150.5	1201.1	1269.2	1317.2	1332.6	1320.5	1270.7	1215.2
29°	1007.5	1054.5	1091.1	1140.7	1192.0	1260.9	1309.7	1325.7	1313.6	1262.7	1206.5
29.5°	997.0	1044.2	1081.3	1131.1	1183.0	1252.9	1302.5	1318.7	1306.1	1254.7	1197.7
30°	986.1	1034.1	1071.0	1121.3	1173.7	1244.7	1295.0	1311.5	1298.8	1246.7	1188.7
30.5°	975.0	1023.3	1060.7	1111.5	1164.2	1235.9	1287.2	1304.0	1291.1	1238.2	1179.9
31°	963.9	1012.7	1050.4	1101.7	1154.9	1227.4	1279.5	1296.3	1283.4	1230.0	1170.9
31.5°	952.6	1002.1	1039.8	1091.1	1145.1	1218.6	1271.2	1288.5	1275.4	1221.4	1161.6
32°	941.5	991.3	1029.2	1080.8	1135.0	1209.6	1263.2	1280.5	1267.4	1212.9	1152.3
32.5°	930.1	979.9	1018.4	1070.2	1124.9	1200.5	1255.0	1272.8	1259.1	1203.9	1143.0
33°	918.8	969.1	1007.3	1059.9	1114.9	1191.0	1246.5	1264.8	1250.9	1195.1	1133.2
33.5°	907.2	958.0	996.5	1049.1	1104.6	1181.7	1238.0	1256.0	1242.3	1185.8	1123.7
34°	895.3	946.9	985.6	1038.5	1094.5	1172.4	1228.9	1247.5	1233.8	1176.8	1113.8
34.5°	883.7	935.6	974.5	1027.4	1083.9	1162.6	1220.2	1239.0	1225.1	1167.8	1104.0
35°	871.8	923.9	963.4	1016.8	1073.3	1152.8	1211.1	1230.5	1216.3	1158.2	1094.0
35.5°	860.0	912.3	951.8	1005.5	1062.5	1143.0	1201.8	1221.4	1207.5	1148.7	1084.2
36°	847.8	900.7	940.5	994.4	1051.9	1132.9	1192.8	1212.2	1198.2	1138.9	1073.6
36.5°	835.7	889.1	928.9	982.8	1041.1	1122.9	1183.0	1203.1	1189.2	1129.6	1063.3
37°	823.6	877.2	917.5	971.9	1030.3	1112.3	1173.4	1194.1	1179.6	1119.5	1053.2
37.5°	811.5	865.4	905.6	960.6	1018.9	1102.0	1163.6	1184.5	1170.4	1109.7	1042.9
38°	798.8	853.5	893.8	949.0	1007.8	1091.4	1153.8	1175.0	1160.8	1099.7	1032.3
38.5°	786.4	841.4	881.9	936.9	996.5	1080.8	1144.0	1165.5	1151.3	1089.9	1021.7
39°	774.3	829.0	870.0	925.8	985.6	1070.2	1134.0	1156.2	1141.5	1079.5	1011.2
39.5°	761.9	817.1	858.2	913.9	973.7	1059.4	1123.7	1146.1	1131.9	1069.2	1000.6
40°	748.8	805.0	846.0	902.3	962.1	1048.3	1113.6	1136.0	1121.8	1058.9	989.5
40.5°	736.4	792.6	833.9	890.1	950.5	1037.5	1103.3	1126.0	1111.8	1048.6	978.9
41°	723.5	780.2	821.8	878.5	938.9	1026.4	1092.4	1116.2	1101.7	1038.0	967.8
41.5°	710.8	767.9	809.6	866.7	927.3	1015.0	1082.1	1105.8	1091.4	1027.9	957.0
42°	697.7	755.5	797.0	854.8	915.7	1003.7	1071.3	1095.3	1081.1	1017.1	946.1
42.5°	685.3	742.8	785.1	842.9	904.1	992.6	1061.0	1085.0	1070.8	1006.3	934.8
43°	672.1	730.2	772.8	831.1	892.2	981.2	1049.9	1074.6	1060.4	995.2	923.7
43.5°	659.0	717.5	760.6	818.7	880.3	969.9	1039.0	1064.1	1049.9	984.6	912.6

TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	620.0	679.1	723.2	782.6	844.7	935.0	1005.7	1031.8	1017.6	951.0	878.3
45.5°	606.8	666.5	711.1	770.7	832.9	923.4	994.4	1021.0	1006.8	939.4	866.7
46°	593.7	653.6	698.4	758.3	821.0	911.8	983.0	1009.6	995.7	928.1	855.1
46.5°	580.5	640.6	686.3	746.2	809.1	900.0	971.7	998.5	984.6	916.5	843.2
47°	567.6	628.0	673.7	734.1	797.3	888.1	959.8	987.2	973.0	904.6	831.3
47.5°	554.2	615.1	661.3	721.9	784.9	876.2	948.5	975.6	961.4	892.7	818.9
48°	540.5	602.2	648.6	710.1	773.0	864.3	936.6	963.9	950.0	880.1	806.8
48.5°	527.6	589.0	636.3	697.7	761.1	852.5	924.7	952.1	938.1	867.7	794.4
49°	514.5	576.4	623.6	685.5	749.0	840.1	912.6	940.2	926.0	855.1	781.8
49.5°	501.3	563.5	611.5	673.4	736.6	828.0	900.7	928.1	913.4	842.2	769.1
50°	487.9	550.6	599.4	661.0	724.8	815.8	888.1	915.7	901.0	829.3	756.5
50.5°	474.5	537.7	586.7	649.2	712.6	803.5	875.4	903.1	888.1	815.8	744.1
51°	461.3	524.5	574.3	637.0	700.5	791.1	862.8	890.1	875.2	802.9	731.7
51.5°	448.4	511.6	562.0	624.9	688.4	778.7	849.9	877.0	862.0	790.3	719.6
52°	435.0	499.0	549.6	612.8	676.0	765.8	836.7	863.6	848.6	778.2	708.0
52.5°	422.1	486.1	537.2	600.7	663.6	753.1	823.6	850.2	835.2	766.3	695.9
53°	408.7	473.2	525.1	588.5	651.2	740.0	810.2	837.3	822.5	753.7	683.7
53.5°	395.5	460.6	512.7	576.7	639.1	727.1	796.7	823.6	810.2	740.5	669.5
54°	382.6	447.9	500.5	564.0	626.7	714.2	783.8	811.2	798.0	725.5	655.1
54.5°	369.7	435.3	488.2	552.2	614.6	701.8	771.2	799.3	785.4	709.0	638.6
55°	356.6	422.6	476.0	540.0	602.7	689.4	759.1	787.2	772.2	690.4	621.6
55.5°	343.9	409.7	464.2	528.4	591.1	677.5	746.4	773.5	756.5	672.4	603.8
56°	331.0	397.6	451.8	516.5	579.2	665.2	733.3	758.3	739.2	652.3	585.4
56.5°	318.4	385.2	439.9	504.7	567.4	652.0	718.6	741.3	721.2	632.1	567.1
57°	305.7	372.6	428.3	493.3	554.5	637.8	702.8	724.0	701.8	611.5	548.5
57.5°	293.1	360.4	416.7	481.7	541.6	623.6	686.1	704.6	680.9	591.1	528.7
58°	281.2	348.3	404.6	470.1	527.9	608.1	668.8	684.8	659.7	568.9	509.1
58.5°	268.9	336.5	392.7	457.7	514.5	592.4	650.7	663.6	638.3	546.7	489.5
59°	256.7	324.6	381.1	445.3	500.0	576.1	631.1	642.2	615.9	525.1	469.8
59.5°	244.6	312.7	369.2	432.7	485.8	559.1	611.5	619.2	592.9	503.6	450.0
60°	233.0	300.6	357.3	420.0	471.1	542.3	591.4	597.0	570.0	481.2	430.6
60.5°	221.4	289.0	345.0	407.4	456.9	525.1	571.0	574.1	547.0	459.5	411.3
61°	210.0	277.6	333.1	394.2	441.7	507.5	549.8	551.9	524.3	438.1	392.2
61.5°	198.4	265.8	321.0	381.6	426.8	489.7	528.4	528.9	501.1	416.2	373.1
62°	187.6	254.1	308.8	368.4	412.0	471.7	507.8	506.7	478.6	395.0	354.0
62.5°	176.7	242.5	297.0	355.5	396.6	453.6	486.1	484.3	455.7	374.4	335.7
63°	166.2	231.2	284.6	342.6	381.3	435.0	464.9	461.8	433.7	355.0	317.9
63.5°	155.3	219.8	272.7	329.0	366.1	416.7	444.0	439.7	411.8	335.4	300.3
64°	145.5	209.0	260.9	316.1	351.2	398.6	423.9	418.2	390.6	316.8	283.3
64.5°	135.7	197.9	249.0	302.9	335.9	380.3	403.3	397.1	370.0	298.8	266.8
65°	126.2	186.8	237.4	290.0	320.7	362.3	383.7	376.4	349.1	281.2	251.0
65.5°	116.9	176.2	225.5	276.8	305.5	344.4	364.1	356.1	328.7	264.7	237.1
66°	108.1	165.9	213.9	263.9	290.3	326.9	344.7	336.2	308.6	248.7	223.4





TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	85.4	135.7	179.3	225.5	246.4	276.6	289.8	280.7	251.6	206.9	182.2
68°	79.0	126.2	168.2	212.9	232.7	260.6	272.5	263.4	235.6	192.7	170.0
68.5°	72.8	116.9	157.4	200.2	219.1	244.9	255.4	246.7	219.6	178.8	158.9
69°	66.3	107.6	146.3	187.8	205.4	230.4	240.7	231.7	203.6	166.9	148.4
69.5°	61.4	98.6	135.5	175.2	192.0	216.2	226.0	217.0	187.8	155.8	138.3
70°	57.8	90.6	124.9	163.6	178.3	201.8	211.6	202.0	174.7	145.3	129.0
70.5°	55.5	82.8	114.6	151.7	166.2	187.3	196.9	187.3	162.3	135.5	120.2
71°	52.9	75.3	104.8	140.1	154.6	174.9	182.2	174.7	150.7	126.2	111.7
71.5°	50.3	67.9	95.2	129.0	143.2	162.3	169.5	162.5	139.8	117.4	104.0
72°	47.7	60.4	87.5	118.4	132.4	150.7	157.4	151.2	130.0	109.4	96.8
72.5°	45.2	55.0	80.0	108.4	121.8	139.6	146.3	140.6	120.8	101.7	89.5
73°	42.6	51.1	72.5	99.1	112.0	129.3	136.0	130.6	112.2	94.4	83.1
73.5°	40.3	48.5	65.0	90.0	102.9	119.5	126.2	121.3	104.5	87.7	76.9
74°	37.9	45.9	57.3	82.8	94.4	110.4	116.9	112.8	97.0	81.3	71.0
74.5°	35.6	43.6	51.9	75.3	86.2	101.9	108.4	104.8	90.0	75.3	65.5
75°	33.3	41.3	47.0	68.1	79.0	93.9	100.4	97.3	83.6	69.7	60.1
75.5°	31.2	39.0	43.1	60.9	72.0	86.4	92.9	90.3	77.1	64.0	55.2
76°	29.2	36.6	39.5	55.0	65.5	79.5	85.9	83.6	71.2	58.8	50.3
76.5°	27.3	34.6	36.4	49.5	59.3	72.8	79.5	77.7	65.5	53.9	45.9
77°	25.5	32.3	33.8	44.9	54.2	67.1	73.3	71.7	59.9	49.3	41.5
77.5°	23.7	30.2	31.5	40.5	49.0	61.1	67.6	66.3	54.7	44.6	37.4
78°	21.9	28.4	29.7	36.6	44.4	55.7	61.9	60.9	49.8	40.5	33.5
78.5°	20.4	26.6	27.6	33.3	40.0	50.8	56.8	55.7	44.9	36.6	29.9
79°	18.8	24.8	26.1	30.2	36.1	46.2	51.9	51.1	40.3	32.8	26.6
79.5°	17.3	23.0	24.3	27.3	32.5	41.8	47.2	46.4	36.1	29.4	24.0
80°	15.7	21.2	22.7	24.8	29.2	37.7	42.8	42.1	32.0	26.6	21.2
80.5°	14.4	19.6	20.9	22.4	26.1	34.1	38.7	38.2	28.1	23.5	18.3
81°	13.2	18.1	19.6	20.4	23.7	30.2	34.8	34.3	25.0	20.6	15.7
81.5°	11.9	16.8	18.1	18.6	21.2	27.1	31.0	30.7	21.9	17.8	12.9
82°	10.6	15.2	16.8	16.8	18.8	24.3	27.6	27.1	18.8	15.0	10.8
82.5°	9.5	13.9	15.2	15.2	16.3	21.7	24.8	24.3	15.5	12.1	9.0
83°	8.3	12.4	13.9	13.7	13.9	19.1	21.9	21.4	12.4	10.1	7.2
83.5°	7.2	11.4	12.9	12.6	12.1	16.3	19.1	18.6	10.1	8.0	5.7
84°	6.5	10.1	11.6	11.4	10.6	13.7	16.3	15.7	7.7	6.2	4.4
84.5°	5.4	9.0	10.3	10.3	9.3	11.9	13.4	12.9	5.9	4.6	3.4
85°	4.6	8.0	9.3	9.3	8.0	10.1	11.4	10.6	4.1	3.1	2.3
85.5°	3.9	7.0	8.5	8.3	6.7	8.3	9.3	8.5	2.6	2.1	1.5
86°	3.1	5.9	7.5	7.5	5.9	7.0	7.5	6.7	1.5	1.3	0.8
86.5°	2.3	4.9	6.5	6.5	4.9	5.7	5.9	4.9	1.0	0.5	0.3
87°	1.8	4.1	5.4	5.7	4.1	4.4	4.6	3.6	0.8	0.3	0.0
87.5°	1.3	3.4	4.6	4.9	3.4	3.6	3.4	2.6	0.5	0.0	0.0
88°	1.0	2.6	3.9	4.1	2.8	2.6	2.3	1.5	0.3	0.0	0.0
88.5°	0.5	2.1	3.1	3.4	2.1	1.8	1.5	0.8	0.3	0.0	0.0



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**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: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1427.3	1427.3	1427.3	1427.3	1427.3	1427.3
0.5°	1427.1	1425.8	1424.5	1423.7	1422.7	1422.2
1°	1426.8	1424.2	1421.9	1420.4	1418.8	1418.6
1.5°	1426.3	1422.7	1419.1	1416.5	1415.0	1414.7
2°	1425.8	1420.9	1416.2	1412.9	1410.8	1410.8
2.5°	1424.8	1418.8	1413.1	1409.0	1406.7	1406.7
3°	1423.7	1416.8	1409.8	1404.9	1402.3	1402.6
3.5°	1422.7	1414.7	1406.4	1400.8	1397.9	1398.4
4°	1421.1	1412.1	1402.8	1396.4	1393.0	1393.8
4.5°	1419.9	1409.5	1399.0	1391.7	1388.4	1389.4
5°	1418.0	1406.7	1395.1	1387.1	1383.2	1384.5
5.5°	1416.2	1403.6	1391.0	1382.2	1378.3	1379.9
6°	1414.2	1400.5	1386.6	1377.3	1373.2	1374.7
6.5°	1411.9	1397.1	1382.2	1372.1	1367.7	1369.5
7°	1409.5	1393.8	1377.5	1367.0	1362.3	1364.4
7.5°	1407.0	1389.9	1372.9	1361.5	1356.6	1359.0
8°	1404.1	1386.1	1368.0	1355.9	1351.0	1353.3
8.5°	1401.3	1381.9	1362.8	1350.2	1345.0	1347.6
9°	1397.9	1377.8	1357.7	1344.3	1338.8	1341.7
9.5°	1394.8	1373.4	1352.3	1338.3	1332.6	1336.0
10°	1391.2	1368.8	1346.6	1332.1	1326.5	1329.8
10.5°	1387.6	1364.4	1340.9	1325.7	1320.0	1323.9
11°	1383.7	1359.2	1335.0	1319.5	1313.6	1317.4
11.5°	1379.9	1354.1	1328.8	1312.8	1306.8	1311.0
12°	1375.5	1348.9	1322.6	1306.1	1299.9	1304.3
12.5°	1371.1	1343.5	1316.1	1299.1	1292.9	1297.8
13°	1366.4	1338.1	1309.7	1292.1	1285.9	1290.8
13.5°	1361.8	1332.1	1303.0	1284.9	1279.0	1283.9
14°	1356.9	1326.2	1296.0	1277.9	1271.5	1276.9
14.5°	1352.0	1320.3	1289.3	1270.5	1264.0	1269.4
15°	1346.6	1314.1	1282.1	1262.7	1256.5	1262.2
15.5°	1341.2	1307.6	1274.6	1255.0	1248.5	1254.7
16°	1335.5	1300.9	1267.4	1247.2	1241.0	1247.2
16.5°	1329.8	1294.2	1259.6	1239.2	1233.1	1239.5
17°	1323.9	1287.2	1251.9	1231.2	1225.1	1231.5
17.5°	1317.7	1280.0	1243.9	1222.7	1216.8	1223.5
18°	1311.2	1272.8	1235.9	1214.7	1208.5	1215.8
18.5°	1304.8	1265.3	1227.6	1206.0	1199.8	1207.5
19°	1298.3	1257.8	1219.1	1197.7	1191.5	1198.7
19.5°	1291.4	1250.1	1210.6	1188.7	1182.7	1190.5
20°	1284.4	1242.1	1201.8	1179.9	1174.0	1182.2
20.5°	1277.2	1234.1	1193.1	1170.6	1165.2	1173.4
21°	1269.9	1225.8	1184.0	1161.6	1155.9	1164.2

TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1247.2	1200.3	1156.4	1133.2	1128.0	1137.6
23°	1239.2	1191.5	1147.1	1123.7	1118.5	1128.3
23.5°	1231.2	1182.5	1137.6	1114.1	1108.9	1118.8
24°	1222.7	1173.2	1127.8	1104.3	1099.1	1109.2
24.5°	1214.5	1164.2	1118.0	1094.0	1089.3	1099.7
25°	1206.0	1154.6	1107.7	1083.9	1079.3	1089.9
25.5°	1197.2	1145.6	1097.9	1073.9	1069.2	1080.0
26°	1188.4	1135.8	1087.8	1063.5	1059.1	1070.0
26.5°	1179.4	1126.2	1077.5	1053.0	1048.8	1059.9
27°	1170.4	1116.2	1067.1	1042.4	1038.5	1049.6
27.5°	1161.1	1106.4	1056.6	1031.8	1027.9	1039.3
28°	1151.8	1096.3	1046.0	1021.2	1017.1	1029.0
28.5°	1142.2	1086.0	1035.4	1010.4	1006.5	1018.1
29°	1132.7	1075.9	1024.6	999.3	995.9	1007.5
29.5°	1122.9	1065.6	1013.7	988.2	984.8	997.0
30°	1113.1	1055.3	1002.9	977.4	973.7	986.1
30.5°	1103.3	1044.4	991.8	966.0	962.9	975.0
31°	1093.5	1033.9	980.7	954.9	951.6	963.9
31.5°	1083.1	1023.0	969.4	943.6	940.5	952.6
32°	1073.1	1012.2	958.0	931.9	928.9	941.5
32.5°	1062.5	1001.4	946.9	920.6	917.5	930.1
33°	1052.2	990.5	935.6	909.0	905.9	918.8
33.5°	1041.6	979.2	924.2	897.4	894.3	907.2
34°	1031.0	968.3	912.3	885.8	882.4	895.3
34.5°	1020.7	957.0	901.0	874.2	870.8	883.7
35°	1009.9	945.9	889.1	862.3	858.7	871.8
35.5°	999.0	934.8	877.5	850.2	847.1	860.0
36°	988.2	923.2	866.2	838.5	834.7	847.8
36.5°	977.4	912.1	854.3	826.7	823.1	835.7
37°	966.3	900.7	842.7	814.6	810.7	823.6
37.5°	955.2	889.4	831.1	802.4	798.6	811.5
38°	944.1	877.8	819.2	790.3	786.2	798.8
38.5°	933.0	866.2	807.6	778.4	774.0	786.4
39°	922.1	854.8	795.5	766.3	761.7	774.3
39.5°	910.8	843.4	783.8	754.2	749.3	761.9
40°	899.4	831.8	772.0	742.0	736.9	748.8
40.5°	888.3	820.2	760.4	729.9	724.5	736.4
41°	877.0	808.4	748.5	717.8	711.6	723.5
41.5°	865.9	797.3	736.4	705.7	699.2	710.8
42°	854.5	785.9	724.8	693.3	686.8	697.7
42.5°	842.9	774.0	713.2	681.2	674.2	685.3
43°	831.6	762.4	701.5	668.8	661.3	672.1
43.5°	820.2	751.1	689.4	656.9	648.9	659.0

TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	785.7	716.2	654.3	620.3	610.5	620.0
45.5°	774.0	705.2	642.5	608.4	598.1	606.8
46°	762.7	693.8	631.1	596.3	585.4	593.7
46.5°	750.8	681.9	619.2	584.1	572.5	580.5
47°	739.0	670.3	607.9	572.0	559.9	567.6
47.5°	727.1	659.0	595.8	559.9	547.0	554.2
48°	715.0	647.4	584.7	548.0	534.3	540.5
48.5°	703.1	635.7	572.8	535.9	521.7	527.6
49°	691.0	624.4	561.4	524.0	509.1	514.5
49.5°	678.6	612.8	549.8	511.9	496.7	501.3
50°	666.7	601.2	538.2	500.0	483.8	487.9
50.5°	654.8	589.3	526.6	488.4	471.1	474.5
51°	643.2	577.7	515.3	476.6	458.7	461.3
51.5°	631.6	566.6	503.9	464.4	446.4	448.4
52°	620.8	555.8	492.8	453.1	434.0	435.0
52.5°	609.2	544.9	481.7	441.5	421.3	422.1
53°	597.0	534.1	471.1	430.1	409.0	408.7
53.5°	584.1	523.0	460.0	418.5	396.8	395.5
54°	570.2	511.4	449.2	407.1	384.4	382.6
54.5°	556.3	499.5	438.1	396.3	372.3	369.7
55°	540.8	487.1	426.8	385.2	360.4	356.6
55.5°	525.3	474.0	414.9	373.6	348.6	343.9
56°	509.1	460.8	403.3	362.5	337.0	331.0
56.5°	493.1	447.4	391.4	350.9	325.1	318.4
57°	476.0	433.5	379.5	339.5	313.5	305.7
57.5°	459.5	419.3	367.4	327.9	301.9	293.1
58°	442.5	405.1	355.5	316.8	290.5	281.2
58.5°	425.5	390.9	342.9	305.5	279.2	268.9
59°	408.7	376.2	330.8	294.1	267.8	256.7
59.5°	391.9	361.7	318.4	282.8	256.5	244.6
60°	374.9	347.3	305.7	271.7	245.1	233.0
60.5°	358.4	332.8	293.1	260.1	234.0	221.4
61°	342.1	318.4	280.5	249.0	222.9	210.0
61.5°	325.6	304.2	267.8	237.9	212.1	198.4
62°	309.4	290.0	255.4	226.8	201.5	187.6
62.5°	293.9	276.1	242.8	215.4	190.7	176.7
63°	278.4	262.4	230.1	204.3	180.4	166.2
63.5°	263.4	248.7	218.0	192.7	170.0	155.3
64°	249.2	235.3	205.9	181.6	160.2	145.5
64.5°	235.6	222.7	194.0	170.5	150.4	135.7
65°	221.9	210.0	182.2	160.0	140.9	126.2
65.5°	208.5	197.1	171.1	148.9	131.1	116.9
66°	194.8	184.7	159.5	138.0	122.0	108.1



TEST NUMBER: P776139

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	157.9	150.9	128.0	108.6	95.2	85.4
68°	147.3	140.1	117.9	99.3	88.0	79.0
68.5°	137.0	129.8	108.4	90.0	80.8	72.8
69°	127.2	120.2	99.3	83.1	73.8	66.3
69.5°	118.2	111.2	90.3	76.1	66.6	61.4
70°	109.9	102.4	83.3	68.9	59.3	57.8
70.5°	101.7	94.4	76.6	61.9	54.2	55.5
71°	93.9	87.7	69.7	56.0	50.6	52.9
71.5°	87.0	81.0	62.7	51.1	48.0	50.3
72°	80.0	74.6	57.0	46.7	45.7	47.7
72.5°	74.1	67.9	51.9	42.8	43.3	45.2
73°	68.1	61.4	47.0	39.5	41.0	42.6
73.5°	62.4	55.7	42.6	36.4	38.7	40.3
74°	57.3	50.8	38.7	33.8	36.4	37.9
74.5°	52.1	46.2	35.3	31.7	34.3	35.6
75°	47.5	42.1	32.0	29.7	32.3	33.3
75.5°	43.1	37.9	29.2	27.9	30.2	31.2
76°	39.2	34.3	26.3	26.1	28.1	29.2
76.5°	35.1	30.7	24.0	24.5	26.3	27.3
77°	31.7	27.6	21.9	22.7	24.5	25.5
77.5°	28.4	24.8	19.9	21.4	22.7	23.7
78°	25.5	22.2	18.1	19.9	21.2	21.9
78.5°	23.0	19.6	16.5	18.3	19.6	20.4
79°	20.1	17.5	15.0	17.0	18.1	18.8
79.5°	17.5	15.5	13.7	15.5	16.5	17.3
80°	15.0	13.4	12.4	14.2	15.0	15.7
80.5°	12.9	11.9	11.4	12.9	13.7	14.4
81°	11.1	10.3	10.3	11.9	12.4	13.2
81.5°	9.3	9.3	9.3	10.6	11.1	11.9
82°	7.7	8.3	8.3	9.5	9.8	10.6
82.5°	6.5	7.0	7.2	8.5	8.8	9.5
83°	5.2	5.9	6.5	7.5	7.7	8.3
83.5°	4.1	4.9	5.4	6.5	6.7	7.2
84°	3.4	4.1	4.6	5.4	5.7	6.5
84.5°	2.3	3.4	4.1	4.6	4.6	5.4
85°	1.8	2.8	3.4	3.9	3.9	4.6
85.5°	1.3	2.1	2.6	3.4	3.1	3.9
86°	0.8	1.5	2.1	2.6	2.6	3.1
86.5°	0.3	1.0	1.3	1.8	2.1	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: P776139

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRH-HCD81TRLWW-2500lm-5000K

**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°	1155.4	1194.6	1226.3	1268.7	1310.2	1362.6	1399.5	1412.1	1403.1	1364.6	1320.0
22°	1146.6	1186.4	1218.3	1261.2	1303.7	1357.2	1394.8	1407.5	1398.4	1359.0	1313.3



44°	646.1	704.9	748.0	806.8	868.5	958.0	1027.7	1053.2	1039.3	973.5	901.2
44.5°	633.2	692.0	735.9	794.9	856.6	946.7	1016.8	1042.4	1028.7	962.4	889.9



66.5°	99.9	155.6	202.5	251.0	275.6	309.9	325.9	317.1	288.7	234.8	209.5
67°	91.6	145.3	191.2	238.1	261.1	292.8	307.8	298.8	270.1	220.9	195.8



89°	0.3	1.5	2.6	2.8	1.5	1.3	0.8	0.3	0.0	0.0	0.0
89.5°	0.0	1.0	1.8	2.1	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



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

Scaled Data Report



21.5°	1262.5	1217.3	1175.0	1152.3	1146.6	1155.4
22°	1254.7	1208.8	1166.0	1142.7	1137.6	1146.6



44°	808.9	739.7	677.5	644.5	636.3	646.1
44.5°	797.0	727.9	665.9	632.7	623.4	633.2

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

Scaled Data Report



66.5°	181.4	173.4	148.6	128.0	112.8	99.9
67°	169.0	161.8	137.8	117.9	103.7	91.6

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)