

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: P775944

Luminaire Tested: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B031)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K
Description: 4 INCH ROUND SHALLOW-WIDE MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

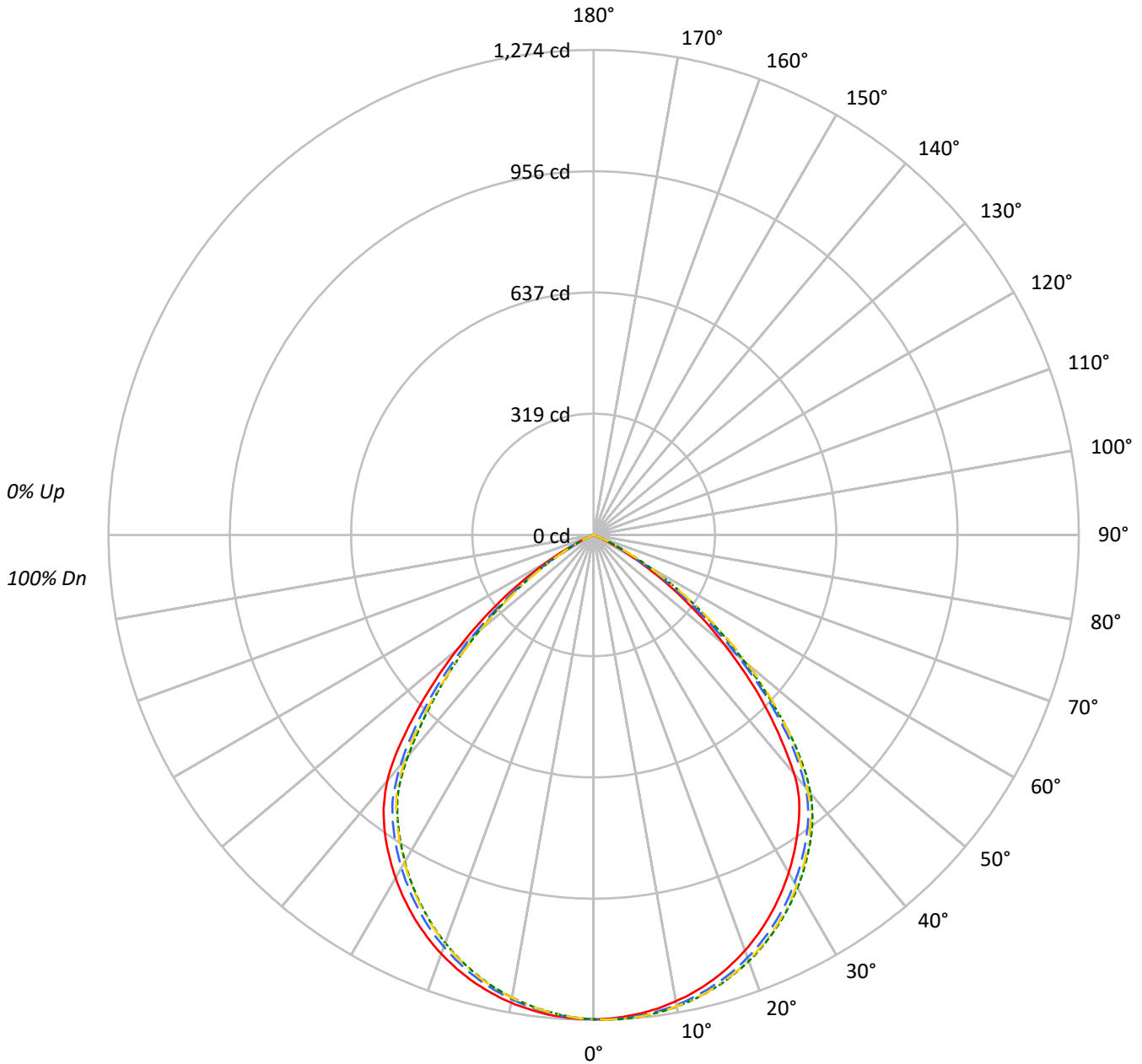
Lumens per Lamp: N/A
Luminaire Lumens: 2357.0 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.26
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P775944
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P775944

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMB-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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90								
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72								
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64								
5	84	74	66	61	82	73	66	60	71	64	60	69	63	59	67	62	59	57								
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51								
7	73	62	54	49	72	61	54	49	59	53	48	58	52	48	57	52	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40	38								
10	60	49	42	37	59	48	41	37	47	41	37	46	41	36	45	40	36	35								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	160156	160156	160156	160156
5°	159783	160705	159985	159139
10°	158960	160774	159458	157682
15°	157637	160451	158445	155578
20°	155596	159573	156774	152730
25°	152663	157925	154412	148969
30°	148850	155520	151175	144040
35°	143878	152129	146859	138010
40°	134467	145540	138410	124462
45°	113426	127450	117341	102213
50°	87791	101281	91433	77062
55°	60273	72560	63257	50926
60°	32620	42764	35288	25724
65°	10006	15455	10988	6909
70°	957	1030	957	957
75°	1021	1021	1021	1021
80°	942	942	725	942
85°	433	722	433	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°

Vertical Angle: 45°

Luminance: 128447 cd/sqm



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL1525CSD-HCD41TRMB-2500lm-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	5.1
10°-20°	341.9	14.5
20°-30°	508.6	21.6
30°-40°	587.9	24.9
40°-50°	496.1	21.0
50°-60°	252.4	10.7
60°-70°	47.2	2.0
70°-80°	2.1	0.1
80°-90°	0.6	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°	970.8	41.2
0°-40°	1558.7	66.1
0°-60°	2307.1	97.9
0°-90°	2357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1273	1273	1273	1273	1273	
5°	1265	1272	1266	1260	1265	120
15°	1210	1232	1216	1194	1210	341
25°	1099	1137	1112	1073	1099	506
35°	936	990	956	898	936	583
45°	637	716	659	574	637	488
55°	275	331	288	232	275	248
65°	34	52	37	23	34	44
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6
0.5°	1272.3	1272.3	1272.8	1273.1	1273.4	1273.4	1273.4	1272.3	1272.1	1272.3	1272.1
1°	1272.1	1272.6	1273.1	1273.4	1273.6	1273.9	1273.6	1272.6	1272.1	1272.1	1271.6
1.5°	1271.6	1272.3	1273.1	1273.6	1273.6	1274.1	1273.9	1272.8	1271.8	1271.3	1270.8
2°	1271.0	1272.1	1272.8	1273.9	1273.9	1274.4	1274.1	1272.8	1271.6	1270.8	1269.7
2.5°	1270.0	1271.3	1272.6	1273.9	1273.9	1274.1	1273.6	1272.6	1271.0	1270.0	1269.0
3°	1269.2	1270.8	1272.1	1273.4	1273.9	1274.1	1273.6	1271.8	1270.5	1269.2	1267.7
3.5°	1268.2	1270.0	1271.8	1273.1	1273.4	1273.9	1273.6	1271.6	1269.5	1267.9	1266.6
4°	1267.4	1269.2	1271.0	1272.6	1273.1	1273.6	1273.1	1271.3	1268.7	1266.9	1265.4
4.5°	1266.1	1268.2	1270.5	1271.8	1272.6	1273.1	1272.3	1270.8	1267.7	1265.4	1263.6
5°	1264.8	1267.2	1269.5	1271.3	1272.1	1272.3	1271.6	1269.7	1266.4	1264.1	1262.0
5.5°	1263.3	1265.9	1268.5	1270.5	1271.0	1271.8	1271.0	1268.7	1265.4	1262.8	1260.2
6°	1261.5	1264.6	1267.7	1269.5	1270.3	1270.8	1270.0	1267.7	1263.8	1261.0	1258.4
6.5°	1259.7	1263.0	1266.1	1268.5	1269.2	1269.7	1268.7	1266.6	1262.3	1259.4	1256.6
7°	1258.1	1261.5	1264.8	1267.4	1267.9	1268.5	1267.4	1265.4	1260.5	1257.1	1254.5
7.5°	1256.1	1259.7	1263.3	1265.9	1266.4	1267.4	1266.1	1263.8	1258.6	1255.3	1252.2
8°	1254.0	1257.9	1261.7	1264.6	1265.1	1265.9	1264.6	1262.0	1256.6	1253.0	1249.9
8.5°	1251.7	1255.8	1259.9	1262.8	1263.6	1264.3	1263.0	1260.2	1254.5	1250.6	1247.3
9°	1249.1	1253.7	1258.1	1261.0	1261.7	1262.8	1261.5	1258.4	1252.5	1248.3	1244.4
9.5°	1246.5	1251.4	1256.1	1259.2	1259.9	1261.0	1259.4	1256.6	1250.4	1245.7	1241.6
10°	1243.9	1249.1	1253.7	1257.4	1258.1	1259.2	1257.6	1254.5	1247.8	1243.2	1238.8
10.5°	1241.1	1246.5	1251.4	1255.0	1256.1	1257.1	1255.3	1252.2	1245.2	1240.3	1235.7
11°	1238.3	1243.7	1249.1	1252.7	1253.7	1254.8	1253.2	1249.9	1242.6	1237.2	1232.6
11.5°	1235.4	1240.8	1246.5	1250.4	1251.4	1252.5	1250.6	1247.3	1239.8	1234.1	1229.2
12°	1231.8	1238.0	1243.7	1247.8	1249.1	1249.9	1248.3	1244.4	1236.7	1231.0	1225.6
12.5°	1228.7	1234.9	1240.8	1245.2	1246.5	1247.3	1245.5	1241.6	1233.4	1227.7	1222.0
13°	1225.1	1231.8	1237.7	1242.6	1243.7	1244.7	1242.9	1239.0	1230.3	1224.1	1218.1
13.5°	1221.7	1228.4	1234.6	1239.5	1240.8	1241.6	1239.8	1235.9	1226.9	1220.4	1214.2
14°	1217.9	1224.8	1231.5	1236.4	1237.7	1239.0	1237.0	1232.6	1223.3	1216.8	1210.4
14.5°	1214.0	1221.2	1227.9	1233.4	1234.6	1235.7	1233.6	1229.2	1219.9	1213.0	1206.0
15°	1209.9	1217.3	1224.3	1230.0	1231.5	1232.6	1230.3	1225.9	1216.1	1208.8	1201.6
15.5°	1205.7	1213.0	1221.0	1226.4	1228.2	1229.0	1226.6	1222.0	1212.2	1204.7	1197.5
16°	1201.3	1209.3	1217.1	1222.8	1224.6	1225.6	1223.0	1218.4	1208.1	1200.3	1193.1
16.5°	1197.0	1205.2	1213.0	1219.2	1220.7	1221.7	1219.4	1214.5	1203.9	1195.9	1188.2
17°	1192.6	1200.8	1209.1	1215.3	1217.1	1217.9	1215.5	1210.6	1199.5	1191.5	1183.3
17.5°	1187.7	1196.2	1205.0	1211.2	1213.0	1213.7	1211.4	1206.5	1194.9	1186.6	1178.1
18°	1182.5	1191.5	1200.3	1207.0	1208.8	1209.6	1207.3	1201.9	1190.2	1181.7	1172.9
18.5°	1177.6	1186.9	1195.7	1202.9	1204.4	1205.7	1202.9	1197.5	1185.9	1176.8	1167.8
19°	1172.4	1181.7	1191.3	1198.2	1200.3	1201.3	1198.2	1193.1	1180.9	1171.7	1162.6
19.5°	1167.3	1176.8	1186.4	1193.9	1195.9	1196.7	1193.6	1188.4	1176.0	1166.5	1156.9
20°	1161.8	1171.7	1181.5	1189.2	1191.5	1192.0	1189.0	1183.5	1170.6	1161.1	1151.3
20.5°	1156.2	1166.5	1176.6	1184.3	1186.6	1187.4	1184.0	1178.6	1165.7	1155.7	1145.3
21°	1150.5	1160.8	1171.4	1179.4	1182.0	1182.8	1179.1	1173.5	1160.0	1149.7	1139.4



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1132.4	1143.8	1154.9	1163.7	1166.0	1166.8	1163.1	1157.5	1143.0	1131.9	1120.8
23°	1126.2	1137.8	1149.2	1158.2	1160.6	1161.3	1157.7	1151.8	1137.1	1126.0	1114.4
23.5°	1119.8	1131.4	1143.5	1152.8	1155.1	1155.4	1152.0	1145.8	1131.1	1119.5	1107.4
24°	1113.1	1125.2	1137.6	1146.9	1149.2	1150.0	1146.1	1140.2	1124.9	1113.1	1100.9
24.5°	1106.3	1119.0	1131.4	1140.9	1143.5	1143.8	1140.2	1134.0	1118.7	1106.6	1094.0
25°	1099.4	1112.5	1124.9	1134.7	1137.3	1137.8	1134.0	1127.8	1112.0	1099.6	1087.0
25.5°	1092.4	1105.8	1118.7	1128.8	1131.4	1131.6	1127.8	1121.6	1105.3	1092.9	1079.5
26°	1085.4	1098.9	1112.0	1122.4	1125.2	1125.5	1121.6	1115.1	1098.6	1085.7	1072.3
26.5°	1078.5	1091.9	1105.6	1115.9	1118.7	1118.7	1114.9	1108.4	1091.6	1078.5	1064.8
27°	1071.0	1084.9	1098.6	1109.4	1112.0	1112.3	1108.2	1101.7	1084.7	1071.5	1057.3
27.5°	1063.5	1077.7	1091.9	1103.0	1105.3	1105.6	1101.4	1094.7	1077.7	1064.0	1049.6
28°	1055.8	1070.5	1084.9	1096.0	1098.9	1099.1	1094.7	1087.8	1070.7	1056.5	1041.6
28.5°	1048.0	1062.7	1077.4	1089.1	1091.9	1091.9	1087.8	1080.5	1063.2	1049.0	1033.8
29°	1040.3	1055.2	1070.0	1081.8	1084.9	1084.7	1080.3	1073.6	1055.5	1041.0	1026.1
29.5°	1032.3	1047.5	1062.7	1074.9	1077.7	1077.4	1073.1	1066.3	1048.0	1033.3	1017.6
30°	1024.3	1040.0	1055.2	1067.6	1070.2	1070.2	1065.6	1058.6	1040.3	1025.3	1009.0
30.5°	1016.0	1032.0	1047.5	1060.1	1063.0	1062.2	1058.1	1051.1	1032.5	1017.3	1001.0
31°	1007.7	1024.0	1039.8	1052.1	1055.2	1054.7	1050.1	1043.4	1024.3	1009.0	992.5
31.5°	999.0	1015.7	1031.7	1044.7	1047.5	1047.0	1042.3	1035.6	1016.0	1000.5	983.7
32°	990.4	1007.5	1023.7	1036.9	1039.8	1039.2	1034.6	1027.6	1007.7	992.3	975.2
32.5°	981.7	998.7	1015.5	1028.9	1031.5	1031.0	1026.6	1019.6	999.5	983.5	965.9
33°	972.9	990.2	1007.2	1020.7	1023.7	1022.7	1018.6	1011.4	991.2	975.0	957.2
33.5°	964.1	981.4	998.7	1012.6	1015.5	1014.5	1010.3	1002.8	982.4	966.2	947.9
34°	955.1	972.9	990.4	1004.1	1007.2	1006.5	1001.5	994.6	973.7	956.9	939.1
34.5°	945.8	963.9	981.7	995.9	998.7	997.7	992.8	985.8	964.9	947.9	929.3
35°	936.5	954.8	972.6	986.8	990.2	989.2	984.0	976.8	955.9	938.6	919.7
35.5°	926.7	945.5	963.6	978.3	981.2	980.4	975.2	968.0	946.6	929.0	909.4
36°	917.4	936.2	954.6	969.0	972.4	971.3	965.9	959.0	936.8	918.9	899.3
36.5°	907.3	926.7	945.3	960.0	963.3	962.1	956.6	949.4	926.7	908.6	888.7
37°	897.3	916.9	935.7	950.4	953.5	952.2	946.8	939.6	916.6	898.3	877.6
37.5°	886.4	906.3	925.4	940.4	943.5	942.2	937.0	929.5	905.8	886.9	864.2
38°	875.6	895.7	914.8	930.3	933.1	931.9	926.7	918.9	894.2	874.5	850.3
38.5°	863.2	883.8	904.0	919.5	922.3	920.8	914.8	907.8	882.3	861.1	835.6
39°	849.8	870.7	892.1	908.6	910.7	908.6	901.9	895.7	869.6	846.9	820.6
39.5°	835.1	856.2	878.7	896.7	898.8	895.2	888.2	882.6	856.2	832.5	804.9
40°	818.5	841.0	864.2	884.1	885.9	881.0	874.3	868.4	842.5	817.0	788.8
40.5°	800.2	825.5	849.5	870.7	872.0	866.8	859.6	853.9	827.3	801.2	772.1
41°	782.4	809.5	834.3	856.2	857.5	851.8	844.9	838.9	811.3	785.2	755.3
41.5°	764.3	793.0	818.3	841.0	842.0	836.9	830.1	823.2	793.8	768.5	738.0
42°	746.0	775.4	802.5	824.5	825.5	821.4	815.2	807.2	776.5	751.4	720.2
42.5°	727.9	757.9	785.8	807.4	809.0	805.9	799.7	791.2	757.6	733.9	701.6
43°	710.1	740.1	768.7	790.1	791.7	789.9	783.7	773.6	738.3	715.5	683.0
43.5°	691.8	721.7	751.2	771.8	773.6	773.4	767.2	756.6	718.6	696.7	664.2



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	637.3	665.7	695.1	713.0	716.1	721.7	716.3	701.9	659.3	638.9	607.6
45.5°	619.0	646.6	675.3	691.8	695.9	703.9	698.2	683.5	639.6	619.0	588.8
46°	600.4	628.0	655.9	671.4	675.8	685.3	680.4	663.9	620.0	598.3	570.0
46.5°	581.6	608.9	635.8	651.0	655.7	667.0	662.6	645.3	600.2	578.0	550.9
47°	562.2	590.1	615.9	630.1	635.0	647.7	643.8	625.2	581.3	557.6	532.3
47.5°	542.8	571.2	595.8	608.9	615.1	628.5	625.5	605.6	562.2	537.4	513.2
48°	523.7	552.1	574.6	588.5	595.5	609.2	606.1	586.0	543.1	517.3	494.6
48.5°	504.4	532.8	553.9	568.1	575.9	589.8	587.5	567.9	524.0	496.6	476.0
49°	485.5	514.2	533.0	548.0	556.0	570.2	567.9	547.5	504.9	476.8	457.2
49.5°	466.7	495.1	512.6	527.9	536.4	550.3	549.0	528.1	485.8	456.9	438.3
50°	448.4	475.7	492.0	508.5	517.3	530.2	529.2	508.8	467.0	437.8	419.5
50.5°	429.8	456.4	471.6	488.1	497.9	510.3	509.6	489.9	448.1	418.2	400.4
51°	412.0	436.8	451.0	468.8	478.6	490.4	489.2	471.3	430.0	399.6	382.0
51.5°	393.6	417.9	431.3	449.1	459.5	470.8	470.3	452.8	411.2	381.0	363.7
52°	376.1	398.6	412.0	430.3	440.6	451.0	450.4	434.2	392.9	362.9	345.4
52.5°	358.8	380.0	393.1	410.4	421.5	431.6	430.8	415.3	375.1	345.1	327.3
53°	341.5	361.4	373.8	392.6	402.9	412.2	411.5	397.3	357.3	327.8	309.5
53.5°	324.2	343.1	355.2	374.0	384.6	393.1	392.4	379.2	339.4	310.5	292.2
54°	307.2	324.5	337.1	355.7	366.3	374.3	373.0	361.4	322.1	294.3	275.4
54.5°	290.7	306.4	319.3	336.9	348.0	355.4	354.2	343.6	305.4	278.8	259.2
55°	274.7	289.1	302.0	320.1	330.7	337.1	335.8	326.3	288.3	262.3	242.9
55.5°	258.6	271.6	284.7	303.0	313.4	319.1	317.0	308.7	271.8	246.3	228.2
56°	242.9	255.0	268.2	285.8	295.8	301.2	298.9	292.2	255.5	231.8	213.2
56.5°	227.4	238.8	251.9	268.5	278.8	283.4	281.4	274.9	240.3	217.3	198.5
57°	212.4	222.5	236.2	253.2	262.3	266.6	264.3	258.6	225.3	203.1	183.5
57.5°	197.7	207.0	220.7	237.2	246.3	249.9	247.5	242.9	210.4	188.7	169.9
58°	183.0	192.0	205.2	221.7	230.8	233.9	231.8	227.4	195.1	174.2	156.4
58.5°	169.3	177.6	190.5	206.8	215.3	217.9	215.8	211.7	180.2	161.3	143.8
59°	155.4	163.9	176.6	192.3	199.8	201.9	200.1	195.9	166.2	147.9	131.6
59.5°	142.5	150.5	162.9	178.4	184.6	185.9	184.3	180.4	153.3	135.8	120.0
60°	129.6	137.3	149.5	164.7	169.9	171.4	169.6	166.2	140.2	123.6	108.9
60.5°	117.7	125.2	136.6	151.8	156.2	157.2	155.7	152.3	127.5	112.3	97.8
61°	105.8	113.1	124.7	138.6	142.5	143.5	141.7	138.4	115.4	100.9	87.8
61.5°	94.7	102.0	112.8	126.2	129.3	130.1	128.5	125.5	104.3	90.6	78.5
62°	85.2	91.1	101.7	114.6	116.7	117.4	116.2	112.8	92.7	80.3	68.9
62.5°	75.9	82.3	91.1	103.0	104.3	105.3	104.0	100.2	82.1	70.7	60.4
63°	66.3	73.6	82.3	92.2	92.7	93.7	92.4	88.3	71.8	61.7	52.4
63.5°	57.0	64.8	73.6	82.6	81.6	82.6	81.3	77.4	62.2	53.4	45.2
64°	47.8	56.0	64.8	73.1	71.0	72.0	71.2	67.1	53.2	45.4	38.2
64.5°	40.3	47.5	56.0	63.8	60.9	62.2	61.4	57.3	44.9	38.2	32.0
65°	33.6	40.3	47.2	54.2	51.9	53.2	52.4	48.3	36.9	33.0	27.4
65.5°	27.9	33.8	40.0	44.9	43.4	44.4	43.9	40.3	31.0	27.6	23.0
66°	22.7	27.6	33.3	37.2	35.6	36.7	36.1	34.3	25.3	22.2	18.6



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	11.1	13.7	17.3	18.3	19.4	20.1	19.6	17.0	7.7	8.5	7.0
68°	9.3	10.3	13.2	13.7	13.9	14.5	13.9	11.4	4.6	5.9	4.9
68.5°	7.7	8.3	9.6	10.1	8.8	9.0	8.5	7.7	3.1	3.9	3.6
69°	5.9	6.5	7.7	8.3	5.9	6.2	5.7	5.2	2.8	3.1	2.8
69.5°	4.4	4.6	6.2	6.5	4.1	4.1	3.9	3.6	2.8	2.8	2.8
70°	2.6	2.8	4.4	4.4	2.8	2.8	2.8	2.8	2.6	2.6	2.6
70.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
71°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
71.5°	2.3	2.3	2.3	2.6	2.3	2.3	2.6	2.6	2.6	2.6	2.6
72°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
73°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
73.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.1	2.1	2.3
74°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
74.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.1	1.8	1.8	1.8
76°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
76.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
78°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
78.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.3	1.5
79°	1.3	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.3	1.3
79.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.3
80.5°	1.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.3
81°	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.0
81.5°	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0	0.8	0.8	1.0
82°	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.8	1.0
82.5°	0.8	0.8	1.0	1.0	1.0	1.0	1.0	0.8	0.5	0.8	0.8
83°	0.8	0.8	1.0	1.0	1.0	1.0	1.0	0.8	0.5	0.5	0.8
83.5°	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.8
84°	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.5	0.3	0.3	0.5
84.5°	0.3	0.5	0.8	0.8	0.8	0.8	0.8	0.5	0.3	0.3	0.5
85°	0.3	0.5	0.5	0.8	0.5	0.8	0.5	0.5	0.3	0.3	0.5
85.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.0	0.3	0.5
86°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.0	0.3	0.3
86.5°	0.0	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.0	0.3	0.3
87°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
87.5°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0
88°	0.0	0.0	0.3	0.3	0.0	0.3	0.3	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: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1272.6	1272.6	1272.6	1272.6	1272.6	1272.6
0.5°	1271.8	1271.8	1272.3	1272.1	1271.6	1272.3
1°	1271.0	1271.0	1271.6	1271.3	1271.0	1272.1
1.5°	1270.0	1270.0	1270.5	1270.5	1270.3	1271.6
2°	1269.2	1269.0	1269.2	1269.5	1269.0	1271.0
2.5°	1268.2	1267.7	1268.2	1267.9	1267.9	1270.0
3°	1266.9	1266.4	1266.6	1266.6	1266.9	1269.2
3.5°	1265.4	1265.1	1265.1	1265.4	1265.6	1268.2
4°	1263.8	1263.6	1263.6	1263.8	1264.3	1267.4
4.5°	1262.0	1261.7	1261.7	1262.0	1262.8	1266.1
5°	1260.2	1259.7	1259.7	1260.2	1261.0	1264.8
5.5°	1258.4	1257.9	1257.6	1258.1	1259.4	1263.3
6°	1256.3	1255.5	1255.3	1256.3	1257.4	1261.5
6.5°	1254.3	1253.5	1253.0	1254.0	1255.3	1259.7
7°	1251.9	1251.2	1250.9	1251.7	1253.2	1258.1
7.5°	1249.4	1248.6	1248.3	1249.1	1251.2	1256.1
8°	1246.8	1245.7	1245.7	1246.3	1248.6	1254.0
8.5°	1243.9	1243.2	1242.9	1243.7	1245.7	1251.7
9°	1241.1	1240.1	1239.8	1240.8	1242.9	1249.1
9.5°	1238.3	1237.0	1236.7	1237.7	1240.1	1246.5
10°	1235.2	1233.9	1233.4	1234.6	1237.0	1243.9
10.5°	1231.8	1230.8	1230.3	1231.5	1234.1	1241.1
11°	1228.4	1227.4	1226.9	1228.2	1230.5	1238.3
11.5°	1224.8	1223.5	1223.3	1224.3	1227.2	1235.4
12°	1221.2	1219.9	1219.4	1220.7	1223.8	1231.8
12.5°	1217.6	1216.1	1215.5	1216.8	1219.9	1228.7
13°	1213.5	1211.9	1211.2	1213.0	1216.1	1225.1
13.5°	1209.3	1207.8	1207.0	1208.8	1212.2	1221.7
14°	1205.2	1203.4	1202.9	1204.7	1208.1	1217.9
14.5°	1200.8	1199.0	1198.2	1200.3	1203.9	1214.0
15°	1196.2	1194.1	1193.6	1195.4	1199.3	1209.9
15.5°	1191.5	1189.5	1189.0	1190.8	1194.6	1205.7
16°	1186.6	1184.6	1184.3	1186.1	1190.0	1201.3
16.5°	1182.0	1179.7	1179.1	1181.2	1185.1	1197.0
17°	1176.8	1174.2	1173.7	1176.0	1180.2	1192.6
17.5°	1171.7	1169.1	1168.6	1170.9	1175.0	1187.7
18°	1166.2	1163.7	1163.1	1165.2	1170.1	1182.5
18.5°	1160.6	1158.0	1157.5	1159.8	1164.7	1177.6
19°	1155.1	1152.3	1151.5	1154.1	1158.8	1172.4
19.5°	1149.2	1146.4	1145.8	1148.2	1153.3	1167.3
20°	1143.3	1140.4	1139.9	1142.2	1147.9	1161.8
20.5°	1137.3	1134.2	1133.5	1136.0	1141.7	1156.2
21°	1131.1	1127.8	1127.3	1129.8	1135.5	1150.5



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1111.5	1108.4	1107.4	1110.0	1116.7	1132.4
23°	1104.8	1101.7	1100.7	1103.5	1109.7	1126.2
23.5°	1097.8	1094.5	1093.7	1096.5	1102.7	1119.8
24°	1090.9	1087.2	1086.2	1089.6	1096.0	1113.1
24.5°	1083.6	1080.0	1079.0	1082.1	1089.1	1106.3
25°	1076.4	1072.8	1071.8	1074.9	1082.1	1099.4
25.5°	1068.9	1065.0	1064.0	1067.1	1074.6	1092.4
26°	1061.4	1057.3	1056.3	1059.6	1067.1	1085.4
26.5°	1053.4	1049.6	1048.5	1052.1	1059.4	1078.5
27°	1045.9	1041.6	1040.8	1044.1	1051.6	1071.0
27.5°	1037.7	1033.6	1032.5	1036.1	1043.9	1063.5
28°	1029.7	1025.0	1024.3	1027.9	1035.9	1055.8
28.5°	1021.4	1017.0	1016.0	1019.9	1027.6	1048.0
29°	1013.2	1008.8	1007.5	1011.4	1019.6	1040.3
29.5°	1004.4	1000.3	999.0	1003.1	1011.4	1032.3
30°	996.1	991.2	990.4	994.3	1003.1	1024.3
30.5°	987.1	982.7	981.4	985.8	994.3	1016.0
31°	978.3	973.7	972.4	976.5	985.5	1007.7
31.5°	969.5	964.9	963.3	968.0	977.0	999.0
32°	960.5	955.6	954.1	959.2	968.2	990.4
32.5°	951.2	946.6	945.3	949.9	959.5	981.7
33°	941.7	937.3	936.0	940.4	950.2	972.9
33.5°	932.4	927.7	926.4	931.3	940.6	964.1
34°	922.8	917.9	916.9	922.0	931.3	955.1
34.5°	913.3	908.4	907.1	912.2	922.0	945.8
35°	903.2	898.3	897.3	902.2	912.0	936.5
35.5°	892.6	888.2	887.2	892.4	902.7	926.7
36°	882.3	877.4	876.6	882.3	892.6	917.4
36.5°	871.2	866.3	865.8	871.7	881.8	907.3
37°	859.1	854.7	854.4	860.1	870.9	897.3
37.5°	844.9	841.2	841.8	848.7	860.1	886.4
38°	829.6	826.3	827.1	834.8	846.4	875.6
38.5°	813.9	809.8	811.6	819.6	832.0	863.2
39°	796.9	793.2	795.3	803.8	817.0	849.8
39.5°	779.3	775.7	778.3	787.0	801.0	835.1
40°	761.5	757.6	760.5	769.7	784.2	818.5
40.5°	743.4	739.0	742.1	752.2	766.1	800.2
41°	725.9	720.7	724.1	734.6	747.8	782.4
41.5°	708.1	701.6	705.2	716.1	728.4	764.3
42°	690.2	684.0	686.6	697.7	709.6	746.0
42.5°	672.9	665.5	667.8	679.1	690.5	727.9
43°	655.4	647.7	648.4	660.0	670.6	710.1
43.5°	638.1	628.5	629.1	640.7	651.3	691.8



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	584.4	574.3	570.7	581.1	594.2	637.3
45.5°	566.1	555.8	551.4	561.2	574.9	619.0
46°	547.5	537.9	533.0	541.3	556.3	600.4
46.5°	528.4	518.8	513.9	521.4	537.4	581.6
47°	509.8	501.3	495.1	501.5	518.8	562.2
47.5°	491.2	482.2	476.0	481.9	499.7	542.8
48°	472.4	464.9	458.2	462.6	481.2	523.7
48.5°	454.1	446.3	439.3	443.0	462.6	504.4
49°	436.0	428.8	421.5	424.4	444.2	485.5
49.5°	417.7	411.2	403.2	405.8	425.9	466.7
50°	399.6	393.6	385.4	387.2	407.6	448.4
50.5°	382.6	376.4	367.6	369.1	389.8	429.8
51°	365.3	359.1	350.5	351.8	372.2	412.0
51.5°	348.0	342.5	333.2	334.5	354.4	393.6
52°	330.7	326.0	316.7	317.8	337.6	376.1
52.5°	314.4	309.8	299.9	301.0	320.6	358.8
53°	297.6	293.2	284.2	285.2	304.1	341.5
53.5°	281.1	277.5	267.9	269.7	287.6	324.2
54°	264.8	261.7	252.7	254.3	271.6	307.2
54.5°	249.6	246.8	238.0	239.5	255.8	290.7
55°	234.6	232.1	223.5	225.3	240.8	274.7
55.5°	219.9	217.1	209.6	211.4	225.6	258.6
56°	205.2	202.6	195.7	198.0	210.9	242.9
56.5°	190.5	188.7	182.2	184.8	196.4	227.4
57°	175.8	175.0	169.6	171.9	183.0	212.4
57.5°	162.4	161.8	157.2	159.5	169.3	197.7
58°	148.9	148.7	145.3	147.9	156.7	183.0
58.5°	136.0	136.3	134.0	136.6	143.8	169.3
59°	123.6	124.4	122.9	125.5	132.2	155.4
59.5°	111.8	113.1	112.5	114.9	120.8	142.5
60°	100.7	102.2	102.5	105.1	110.0	129.6
60.5°	90.1	91.1	92.7	95.0	99.1	117.7
61°	80.0	82.3	84.4	87.0	89.1	105.8
61.5°	70.2	73.8	76.1	78.7	80.5	94.7
62°	61.2	65.0	67.9	70.5	71.8	85.2
62.5°	53.2	56.3	59.6	62.2	63.0	75.9
63°	45.4	47.8	51.4	53.9	54.5	66.3
63.5°	38.5	40.5	44.4	47.0	47.0	57.0
64°	32.0	34.1	37.9	40.5	40.3	47.8
64.5°	27.6	28.4	32.0	34.3	33.6	40.3
65°	23.5	23.2	26.8	28.7	28.1	33.6
65.5°	19.1	18.8	21.9	23.5	23.0	27.9
66°	15.0	15.0	17.3	19.1	18.3	22.7



TEST NUMBER: P775944

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	5.9	7.5	8.3	8.3	8.3	11.1
68°	4.4	5.9	6.5	7.0	5.9	9.3
68.5°	3.4	4.4	4.6	5.4	5.4	7.7
69°	2.8	2.8	2.8	4.1	4.6	5.9
69.5°	2.8	2.8	2.6	2.8	3.9	4.4
70°	2.6	2.6	2.6	2.6	3.1	2.6
70.5°	2.6	2.6	2.6	2.6	2.6	2.6
71°	2.6	2.6	2.6	2.6	2.3	2.6
71.5°	2.3	2.3	2.3	2.3	2.3	2.3
72°	2.3	2.3	2.3	2.3	2.3	2.3
72.5°	2.3	2.3	2.3	2.3	2.3	2.3
73°	2.3	2.3	2.3	2.3	2.1	2.3
73.5°	2.1	2.1	2.1	2.1	2.1	2.1
74°	2.1	2.1	2.1	2.1	2.1	2.1
74.5°	2.1	2.1	2.1	2.1	2.1	2.1
75°	2.1	2.1	2.1	2.1	1.8	2.1
75.5°	1.8	1.8	1.8	1.8	1.8	1.8
76°	1.8	1.8	1.8	1.8	1.8	1.8
76.5°	1.8	1.8	1.8	1.8	1.8	1.8
77°	1.8	1.8	1.8	1.8	1.5	1.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5
78°	1.5	1.5	1.5	1.5	1.5	1.5
78.5°	1.5	1.5	1.5	1.5	1.3	1.5
79°	1.5	1.5	1.5	1.3	1.3	1.3
79.5°	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.0	1.3
80.5°	1.3	1.3	1.3	1.3	1.0	1.0
81°	1.0	1.3	1.3	1.0	1.0	1.0
81.5°	1.0	1.0	1.0	1.0	0.8	1.0
82°	1.0	1.0	1.0	1.0	0.8	0.8
82.5°	1.0	1.0	1.0	0.8	0.8	0.8
83°	0.8	0.8	0.8	0.8	0.5	0.8
83.5°	0.8	0.8	0.8	0.8	0.5	0.5
84°	0.8	0.8	0.8	0.8	0.5	0.5
84.5°	0.5	0.5	0.5	0.5	0.3	0.3
85°	0.5	0.5	0.5	0.5	0.3	0.3
85.5°	0.5	0.5	0.5	0.5	0.3	0.3
86°	0.3	0.3	0.3	0.3	0.3	0.3
86.5°	0.3	0.3	0.3	0.3	0.3	0.0
87°	0.3	0.3	0.3	0.3	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: P775944
CATALOG NUMBER: HCDJBL1525CSD-HCD41TRMB-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°	1144.6	1155.4	1166.2	1174.2	1176.6	1177.3	1173.7	1168.3	1154.6	1144.0	1133.5
22°	1138.6	1149.7	1160.6	1169.1	1171.4	1171.9	1168.8	1163.1	1148.7	1138.4	1127.3



44°	674.0	703.4	732.8	752.5	755.3	756.6	750.6	738.8	699.0	677.6	645.6
44.5°	655.7	684.3	713.7	732.8	735.4	739.5	734.1	721.5	678.9	658.5	626.7



66.5°	18.1	22.5	27.4	30.2	30.2	31.2	30.5	28.7	19.4	17.0	13.9
67°	14.5	17.8	21.9	23.7	24.8	25.6	25.0	22.7	13.7	11.6	9.6



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°	1124.7	1121.6	1120.5	1123.4	1129.1	1144.6
22°	1118.2	1115.1	1114.1	1116.7	1122.9	1138.6



44°	620.0	610.7	609.4	620.8	632.2	674.0
44.5°	602.5	592.2	590.1	600.9	613.3	655.7



66.5°	10.8	11.9	13.4	15.0	14.2	18.1
67°	8.3	9.0	10.1	11.4	11.1	14.5

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)