

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: P775943

Luminaire Tested: HCDJBL1525CSD-HCD41TRMB-2500lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775943
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-4000K
Description: 4 INCH ROUND SHALLOW-WIDE MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

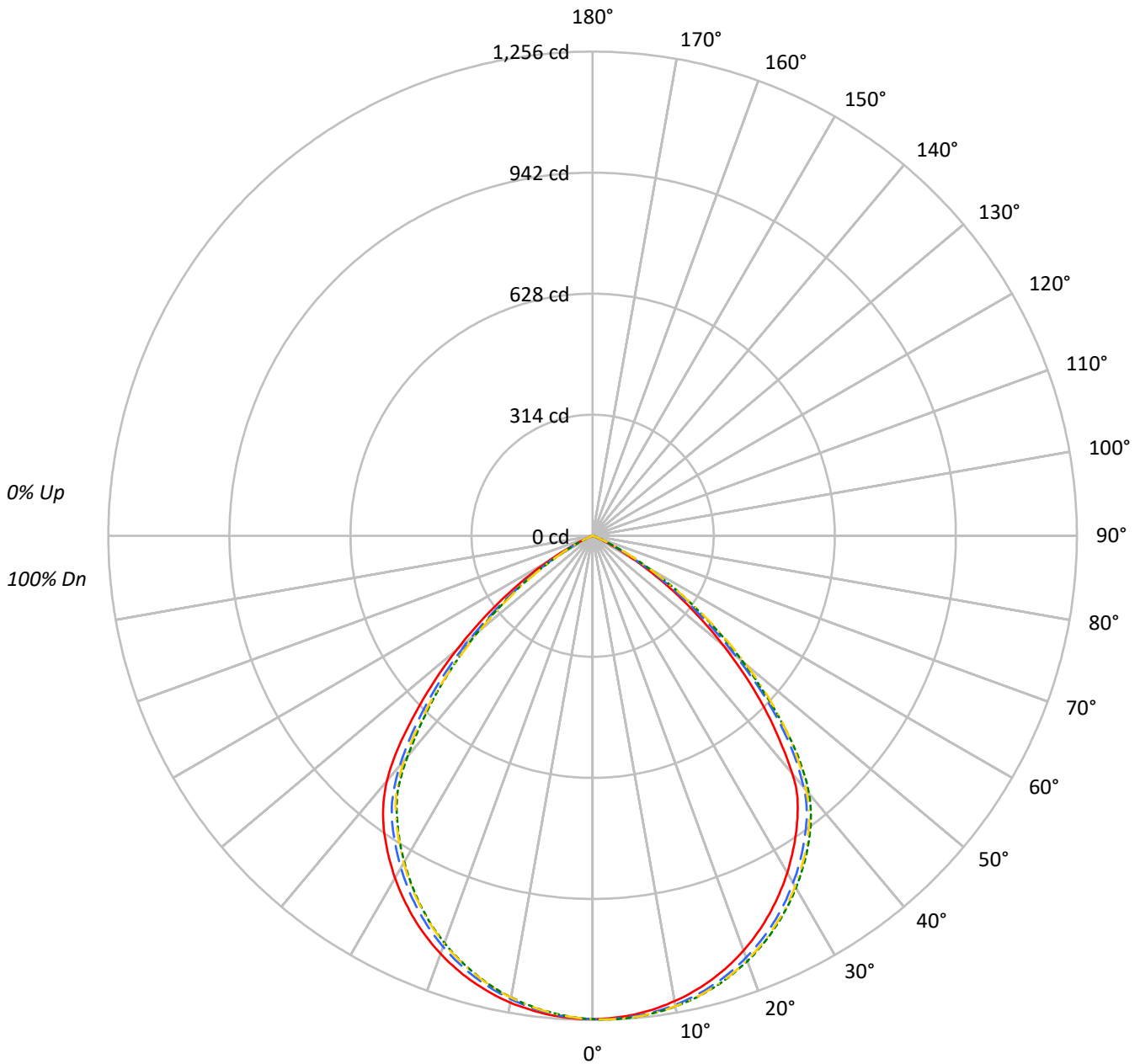
Lumens per Lamp: N/A
Luminaire Lumens: 2322.6 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.26
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P775943
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P775943

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMB-2500lm-4000K

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°	157816	157816	157816	157816
5°	157458	158355	157648	156814
10°	156646	158436	157132	155381
15°	155331	158119	156126	153311
20°	153333	157243	154484	150507
25°	150427	155620	152163	146789
30°	146670	153253	148966	141947
35°	141774	149901	144708	135997
40°	132512	143421	136390	122655
45°	111770	125582	115615	100736
50°	86499	99793	90082	75946
55°	59373	71485	62335	50180
60°	32142	42135	34760	25346
65°	9857	15217	10839	6819
70°	920	1030	920	920
75°	972	972	972	972
80°	942	942	725	942
85°	433	722	433	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 126578 cd/sqm



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	5.1
10°-20°	337.0	14.5
20°-30°	501.2	21.6
30°-40°	579.3	24.9
40°-50°	488.8	21.0
50°-60°	248.7	10.7
60°-70°	46.5	2.0
70°-80°	2.0	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°	956.6	41.2
0°-40°	1535.9	66.1
0°-60°	2273.5	97.9
0°-90°	2322.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1254	1254	1254	1254	1254	
5°	1246	1254	1248	1241	1246	118
15°	1192	1214	1198	1177	1192	336
25°	1083	1121	1096	1057	1083	499
35°	923	976	942	885	923	575
45°	628	706	650	566	628	481
55°	271	326	284	229	271	244
65°	33	51	36	23	33	44
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL5125CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0
0.5°	1253.8	1253.8	1254.3	1254.5	1254.8	1254.8	1254.8	1253.8	1253.5	1253.8	1253.5
1°	1253.5	1254.0	1254.5	1254.8	1255.0	1255.3	1255.0	1254.0	1253.5	1253.5	1253.0
1.5°	1253.0	1253.8	1254.5	1255.0	1255.0	1255.5	1255.3	1254.3	1253.3	1252.7	1252.2
2°	1252.5	1253.5	1254.3	1255.3	1255.3	1255.8	1255.5	1254.3	1253.0	1252.2	1251.2
2.5°	1251.5	1252.7	1254.0	1255.3	1255.3	1255.5	1255.0	1254.0	1252.5	1251.5	1250.5
3°	1250.7	1252.2	1253.5	1254.8	1255.3	1255.5	1255.0	1253.3	1252.0	1250.7	1249.2
3.5°	1249.7	1251.5	1253.3	1254.5	1254.8	1255.3	1255.0	1253.0	1251.0	1249.4	1248.2
4°	1248.9	1250.7	1252.5	1254.0	1254.5	1255.0	1254.5	1252.7	1250.2	1248.4	1246.9
4.5°	1247.7	1249.7	1252.0	1253.3	1254.0	1254.5	1253.8	1252.2	1249.2	1246.9	1245.1
5°	1246.4	1248.7	1251.0	1252.7	1253.5	1253.8	1253.0	1251.2	1247.9	1245.6	1243.6
5.5°	1244.9	1247.4	1249.9	1252.0	1252.5	1253.3	1252.5	1250.2	1246.9	1244.4	1241.8
6°	1243.1	1246.1	1249.2	1251.0	1251.7	1252.2	1251.5	1249.2	1245.4	1242.6	1240.0
6.5°	1241.3	1244.6	1247.7	1249.9	1250.7	1251.2	1250.2	1248.2	1243.8	1241.0	1238.2
7°	1239.8	1243.1	1246.4	1248.9	1249.4	1249.9	1248.9	1246.9	1242.1	1238.8	1236.2
7.5°	1237.7	1241.3	1244.9	1247.4	1247.9	1248.9	1247.7	1245.4	1240.3	1237.0	1233.9
8°	1235.7	1239.5	1243.3	1246.1	1246.6	1247.4	1246.1	1243.6	1238.2	1234.7	1231.6
8.5°	1233.4	1237.5	1241.6	1244.4	1245.1	1245.9	1244.6	1241.8	1236.2	1232.4	1229.1
9°	1230.9	1235.4	1239.8	1242.6	1243.3	1244.4	1243.1	1240.0	1234.2	1230.1	1226.3
9.5°	1228.3	1233.2	1237.7	1240.8	1241.6	1242.6	1241.0	1238.2	1232.1	1227.6	1223.5
10°	1225.8	1230.9	1235.4	1239.0	1239.8	1240.8	1239.3	1236.2	1229.6	1225.0	1220.7
10.5°	1223.0	1228.3	1233.2	1236.7	1237.7	1238.8	1237.0	1233.9	1227.1	1222.2	1217.6
11°	1220.2	1225.5	1230.9	1234.4	1235.4	1236.5	1234.9	1231.6	1224.5	1219.2	1214.6
11.5°	1217.4	1222.7	1228.3	1232.1	1233.2	1234.2	1232.4	1229.1	1221.7	1216.1	1211.3
12°	1213.8	1219.9	1225.5	1229.6	1230.9	1231.6	1230.1	1226.3	1218.7	1213.1	1207.7
12.5°	1210.8	1216.9	1222.7	1227.1	1228.3	1229.1	1227.3	1223.5	1215.4	1209.8	1204.2
13°	1207.2	1213.8	1219.7	1224.5	1225.5	1226.5	1224.8	1220.9	1212.3	1206.2	1200.3
13.5°	1203.9	1210.5	1216.6	1221.5	1222.7	1223.5	1221.7	1217.9	1209.0	1202.6	1196.5
14°	1200.1	1207.0	1213.6	1218.4	1219.7	1220.9	1218.9	1214.6	1205.4	1199.1	1192.7
14.5°	1196.3	1203.4	1210.0	1215.4	1216.6	1217.6	1215.6	1211.3	1202.1	1195.3	1188.4
15°	1192.2	1199.6	1206.5	1212.0	1213.6	1214.6	1212.3	1208.0	1198.3	1191.2	1184.1
15.5°	1188.1	1195.3	1203.1	1208.5	1210.3	1211.0	1208.7	1204.2	1194.5	1187.1	1180.0
16°	1183.8	1191.7	1199.3	1204.9	1206.7	1207.7	1205.2	1200.6	1190.4	1182.8	1175.7
16.5°	1179.5	1187.6	1195.3	1201.4	1202.9	1203.9	1201.6	1196.8	1186.4	1178.5	1170.8
17°	1175.2	1183.3	1191.4	1197.5	1199.3	1200.1	1197.8	1193.0	1182.0	1174.1	1166.0
17.5°	1170.3	1178.7	1187.4	1193.5	1195.3	1196.0	1193.7	1188.9	1177.5	1169.3	1160.9
18°	1165.2	1174.1	1182.8	1189.4	1191.2	1192.0	1189.7	1184.3	1172.9	1164.5	1155.8
18.5°	1160.4	1169.6	1178.2	1185.3	1186.9	1188.1	1185.3	1180.0	1168.6	1159.6	1150.7
19°	1155.3	1164.5	1173.9	1180.8	1182.8	1183.8	1180.8	1175.7	1163.7	1154.6	1145.7
19.5°	1150.2	1159.6	1169.1	1176.4	1178.5	1179.2	1176.2	1171.1	1158.9	1149.5	1140.1
20°	1144.9	1154.6	1164.2	1171.9	1174.1	1174.7	1171.6	1166.3	1153.5	1144.1	1134.5
20.5°	1139.3	1149.5	1159.4	1167.0	1169.3	1170.1	1166.8	1161.4	1148.7	1138.8	1128.6
21°	1133.7	1143.9	1154.3	1162.2	1164.7	1165.5	1161.9	1156.3	1143.1	1132.9	1122.8



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1115.9	1127.1	1138.0	1146.7	1149.0	1149.7	1146.2	1140.6	1126.3	1115.4	1104.5
23°	1109.8	1121.2	1132.4	1141.3	1143.6	1144.4	1140.8	1135.0	1120.5	1109.5	1098.1
23.5°	1103.4	1114.9	1126.8	1136.0	1138.3	1138.5	1135.2	1129.1	1114.6	1103.2	1091.2
24°	1096.8	1108.8	1121.0	1130.1	1132.4	1133.2	1129.4	1123.5	1108.5	1096.8	1084.9
24.5°	1090.2	1102.7	1114.9	1124.3	1126.8	1127.1	1123.5	1117.4	1102.4	1090.5	1078.0
25°	1083.3	1096.3	1108.5	1118.2	1120.7	1121.2	1117.4	1111.3	1095.8	1083.6	1071.1
25.5°	1076.5	1089.7	1102.4	1112.3	1114.9	1115.1	1111.3	1105.2	1089.2	1077.0	1063.8
26°	1069.6	1082.8	1095.8	1106.0	1108.8	1109.0	1105.2	1098.9	1082.6	1069.9	1056.6
26.5°	1062.7	1076.0	1089.4	1099.6	1102.4	1102.4	1098.6	1092.2	1075.7	1062.7	1049.3
27°	1055.4	1069.1	1082.6	1093.3	1095.8	1096.1	1092.0	1085.6	1068.8	1055.9	1041.9
27.5°	1048.0	1062.0	1076.0	1086.9	1089.2	1089.4	1085.4	1078.8	1062.0	1048.5	1034.2
28°	1040.4	1054.8	1069.1	1080.0	1082.8	1083.1	1078.8	1071.9	1055.1	1041.1	1026.4
28.5°	1032.7	1047.2	1061.7	1073.2	1076.0	1076.0	1071.9	1064.8	1047.7	1033.7	1018.7
29°	1025.1	1039.8	1054.3	1066.0	1069.1	1068.8	1064.5	1057.9	1040.1	1025.9	1011.1
29.5°	1017.2	1032.2	1047.2	1059.2	1062.0	1061.7	1057.4	1050.8	1032.7	1018.2	1002.7
30°	1009.3	1024.8	1039.8	1052.1	1054.6	1054.6	1050.0	1043.1	1025.1	1010.3	994.3
30.5°	1001.2	1016.9	1032.2	1044.7	1047.5	1046.7	1042.6	1035.8	1017.5	1002.5	986.4
31°	993.0	1009.1	1024.6	1036.8	1039.8	1039.3	1034.8	1028.1	1009.3	994.3	978.0
31.5°	984.4	1000.9	1016.7	1029.4	1032.2	1031.7	1027.1	1020.5	1001.2	985.9	969.4
32°	976.0	992.8	1008.8	1021.8	1024.6	1024.1	1019.5	1012.6	993.0	977.8	961.0
32.5°	967.3	984.1	1000.7	1013.9	1016.4	1015.9	1011.6	1004.7	984.9	969.1	951.8
33°	958.7	975.7	992.5	1005.8	1008.8	1007.8	1003.7	996.6	976.8	960.7	943.2
33.5°	950.1	967.1	984.1	997.9	1000.7	999.7	995.6	988.2	968.1	952.1	934.0
34°	941.1	958.7	976.0	989.5	992.5	991.8	986.9	980.1	959.5	942.9	925.4
34.5°	932.0	949.8	967.3	981.3	984.1	983.1	978.3	971.4	950.8	934.0	915.7
35°	922.8	940.9	958.4	972.4	975.7	974.7	969.6	962.5	941.9	924.9	906.3
35.5°	913.2	931.7	949.5	964.0	966.8	966.1	961.0	953.9	932.8	915.5	896.1
36°	904.0	922.6	940.6	954.9	958.2	957.2	951.8	945.0	923.1	905.5	886.2
36.5°	894.1	913.2	931.5	946.0	949.3	948.0	942.7	935.6	913.2	895.4	875.8
37°	884.2	903.5	922.1	936.6	939.6	938.4	933.0	925.9	903.2	885.2	864.8
37.5°	873.5	893.1	911.9	926.7	929.7	928.4	923.3	916.0	892.6	874.0	851.6
38°	862.8	882.6	901.5	916.7	919.5	918.3	913.2	905.5	881.1	861.8	837.9
38.5°	850.6	870.9	890.8	906.0	908.8	907.3	901.5	894.6	869.4	848.6	823.4
39°	837.4	858.0	879.1	895.4	897.4	895.4	888.7	882.6	857.0	834.6	808.6
39.5°	822.9	843.7	865.9	883.7	885.7	882.1	875.3	869.7	843.7	820.3	793.1
40°	806.6	828.7	851.6	871.2	873.0	868.1	861.5	855.7	830.2	805.1	777.3
40.5°	788.5	813.5	837.1	858.0	859.2	854.2	847.0	841.4	815.2	789.5	760.8
41°	771.0	797.7	822.1	843.7	845.0	839.4	832.5	826.7	799.5	773.8	744.3
41.5°	753.2	781.4	806.3	828.7	829.7	824.6	818.0	811.2	782.2	757.2	727.2
42°	735.1	764.1	790.8	812.4	813.5	809.4	803.3	795.4	765.1	740.5	709.7
42.5°	717.3	746.8	774.3	795.7	797.2	794.1	788.0	779.6	746.6	723.2	691.4
43°	699.8	729.3	757.5	778.6	780.1	778.4	772.3	762.3	727.5	705.1	673.0
43.5°	681.7	711.2	740.2	760.6	762.3	762.1	756.0	745.5	708.2	686.5	654.5



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	628.0	656.0	685.0	702.6	705.6	711.2	705.9	691.6	649.6	629.6	598.8
45.5°	610.0	637.2	665.4	681.7	685.8	693.7	688.1	673.6	630.3	610.0	580.2
46°	591.7	618.9	646.3	661.6	665.9	675.3	670.5	654.2	611.0	589.6	561.6
46.5°	573.1	600.0	626.5	641.5	646.1	657.3	653.0	635.9	591.4	569.5	542.8
47°	554.0	581.5	606.9	620.9	625.7	638.2	634.4	616.1	572.8	549.4	524.5
47.5°	534.9	562.9	587.1	600.0	606.2	619.4	616.3	596.7	554.0	529.6	505.7
48°	516.1	544.1	566.2	580.0	586.8	600.3	597.2	577.4	535.2	509.7	487.4
48.5°	497.0	525.0	545.9	559.9	567.5	581.2	578.9	559.6	516.4	489.4	469.0
49°	478.5	506.7	525.3	540.0	547.9	561.9	559.6	539.5	497.5	469.8	450.5
49.5°	459.9	487.9	505.2	520.2	528.6	542.3	541.0	520.4	478.7	450.2	431.9
50°	441.8	468.8	484.8	501.1	509.7	522.5	521.4	501.4	460.1	431.4	413.3
50.5°	423.5	449.7	464.7	481.0	490.7	502.9	502.1	482.8	441.6	412.1	394.5
51°	406.0	430.4	444.4	461.9	471.6	483.3	482.0	464.5	423.8	393.8	376.5
51.5°	387.9	411.8	425.0	442.6	452.8	464.0	463.5	446.2	405.2	375.4	358.4
52°	370.6	392.7	406.0	424.0	434.2	444.4	443.9	427.8	387.1	357.6	340.3
52.5°	353.6	374.4	387.4	404.4	415.4	425.3	424.5	409.3	369.6	340.1	322.5
53°	336.5	356.1	368.3	386.9	397.1	406.2	405.5	391.5	352.0	323.0	305.0
53.5°	319.5	338.1	350.0	368.6	379.0	387.4	386.6	373.7	334.5	306.0	287.9
54°	302.7	319.7	332.2	350.5	360.9	368.8	367.6	356.1	317.4	290.0	271.4
54.5°	286.4	301.9	314.6	331.9	342.9	350.3	349.0	338.6	300.9	274.7	255.4
55°	270.6	284.9	297.6	315.4	325.8	332.2	330.9	321.5	284.1	258.4	239.4
55.5°	254.9	267.6	280.6	298.6	308.8	314.4	312.4	304.2	267.8	242.7	224.9
56°	239.4	251.3	264.3	281.6	291.5	296.8	294.6	287.9	251.8	228.4	210.1
56.5°	224.1	235.3	248.3	264.5	274.7	279.3	277.3	270.9	236.8	214.2	195.6
57°	209.3	219.3	232.7	249.5	258.4	262.8	260.5	254.9	222.1	200.2	180.9
57.5°	194.8	204.0	217.5	233.8	242.7	246.2	243.9	239.4	207.3	185.9	167.4
58°	180.3	189.2	202.2	218.5	227.4	230.5	228.4	224.1	192.3	171.7	154.1
58.5°	166.9	175.0	187.7	203.7	212.1	214.7	212.6	208.6	177.5	159.0	141.7
59°	153.1	161.5	174.0	189.5	196.9	198.9	197.1	193.1	163.8	145.8	129.7
59.5°	140.4	148.3	160.5	175.8	181.9	183.1	181.6	177.8	151.1	133.8	118.3
60°	127.7	135.3	147.3	162.3	167.4	168.9	167.1	163.8	138.1	121.8	107.3
60.5°	116.0	123.4	134.6	149.6	153.9	154.9	153.4	150.1	125.7	110.6	96.4
61°	104.3	111.4	122.9	136.6	140.4	141.4	139.6	136.3	113.7	99.5	86.5
61.5°	93.4	100.5	111.2	124.4	127.4	128.2	126.7	123.6	102.8	89.3	77.3
62°	83.9	89.8	100.2	112.9	115.0	115.7	114.5	111.2	91.3	79.1	67.9
62.5°	74.8	81.1	89.8	101.5	102.8	103.8	102.5	98.7	80.9	69.7	59.5
63°	65.4	72.5	81.1	90.8	91.3	92.3	91.1	87.0	70.7	60.8	51.6
63.5°	56.2	63.8	72.5	81.4	80.4	81.4	80.1	76.3	61.3	52.7	44.5
64°	47.1	55.2	63.8	72.0	70.0	71.0	70.2	66.1	52.4	44.8	37.6
64.5°	39.7	46.8	55.2	62.8	60.0	61.3	60.5	56.5	44.3	37.6	31.5
65°	33.1	39.7	46.5	53.4	51.1	52.4	51.6	47.6	36.4	32.6	27.0
65.5°	27.5	33.3	39.4	44.3	42.7	43.8	43.2	39.7	30.5	27.2	22.6
66°	22.4	27.2	32.8	36.6	35.1	36.1	35.6	33.8	24.9	21.9	18.3



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	10.9	13.5	17.0	18.1	19.1	19.8	19.3	16.8	7.6	8.4	6.9
68°	9.2	10.2	13.0	13.5	13.7	14.2	13.7	11.2	4.6	5.9	4.8
68.5°	7.6	8.1	9.4	9.9	8.6	8.9	8.4	7.6	3.1	3.8	3.6
69°	5.9	6.4	7.6	8.1	5.9	6.1	5.6	5.1	2.8	3.1	2.8
69.5°	4.3	4.6	6.1	6.4	4.1	4.1	3.8	3.6	2.8	2.8	2.8
70°	2.5	2.8	4.3	4.3	2.8	2.8	2.8	2.8	2.5	2.5	2.5
70.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
71°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
71.5°	2.3	2.3	2.3	2.5	2.3	2.3	2.5	2.5	2.5	2.5	2.5
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°	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.0	2.0	2.3
74°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
74.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
75.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	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: P775943
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

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: P775943

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1254.0	1254.0	1254.0	1254.0	1254.0	1254.0
0.5°	1253.3	1253.3	1253.8	1253.5	1253.0	1253.8
1°	1252.5	1252.5	1253.0	1252.7	1252.5	1253.5
1.5°	1251.5	1251.5	1252.0	1252.0	1251.7	1253.0
2°	1250.7	1250.5	1250.7	1251.0	1250.5	1252.5
2.5°	1249.7	1249.2	1249.7	1249.4	1249.4	1251.5
3°	1248.4	1247.9	1248.2	1248.2	1248.4	1250.7
3.5°	1246.9	1246.6	1246.6	1246.9	1247.1	1249.7
4°	1245.4	1245.1	1245.1	1245.4	1245.9	1248.9
4.5°	1243.6	1243.3	1243.3	1243.6	1244.4	1247.7
5°	1241.8	1241.3	1241.3	1241.8	1242.6	1246.4
5.5°	1240.0	1239.5	1239.3	1239.8	1241.0	1244.9
6°	1238.0	1237.2	1237.0	1238.0	1239.0	1243.1
6.5°	1236.0	1235.2	1234.7	1235.7	1237.0	1241.3
7°	1233.7	1232.9	1232.7	1233.4	1234.9	1239.8
7.5°	1231.1	1230.4	1230.1	1230.9	1232.9	1237.7
8°	1228.6	1227.6	1227.6	1228.1	1230.4	1235.7
8.5°	1225.8	1225.0	1224.8	1225.5	1227.6	1233.4
9°	1223.0	1222.0	1221.7	1222.7	1224.8	1230.9
9.5°	1220.2	1218.9	1218.7	1219.7	1222.0	1228.3
10°	1217.1	1215.9	1215.4	1216.6	1218.9	1225.8
10.5°	1213.8	1212.8	1212.3	1213.6	1216.1	1223.0
11°	1210.5	1209.5	1209.0	1210.3	1212.6	1220.2
11.5°	1207.0	1205.7	1205.4	1206.5	1209.2	1217.4
12°	1203.4	1202.1	1201.6	1202.9	1205.9	1213.8
12.5°	1199.8	1198.3	1197.8	1199.1	1202.1	1210.8
13°	1195.8	1194.2	1193.5	1195.3	1198.3	1207.2
13.5°	1191.7	1190.2	1189.4	1191.2	1194.5	1203.9
14°	1187.6	1185.8	1185.3	1187.1	1190.4	1200.1
14.5°	1183.3	1181.5	1180.8	1182.8	1186.4	1196.3
15°	1178.7	1176.7	1176.2	1178.0	1181.8	1192.2
15.5°	1174.1	1172.1	1171.6	1173.4	1177.2	1188.1
16°	1169.3	1167.3	1167.0	1168.8	1172.6	1183.8
16.5°	1164.7	1162.4	1161.9	1164.0	1167.8	1179.5
17°	1159.6	1157.1	1156.6	1158.9	1163.0	1175.2
17.5°	1154.6	1152.0	1151.5	1153.8	1157.9	1170.3
18°	1149.2	1146.7	1146.2	1148.2	1153.0	1165.2
18.5°	1143.6	1141.1	1140.6	1142.9	1147.7	1160.4
19°	1138.3	1135.5	1134.7	1137.3	1141.8	1155.3
19.5°	1132.4	1129.6	1129.1	1131.4	1136.5	1150.2
20°	1126.6	1123.8	1123.3	1125.6	1131.2	1144.9
20.5°	1120.7	1117.7	1116.9	1119.5	1125.1	1139.3
21°	1114.6	1111.3	1110.8	1113.4	1118.9	1133.7



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBLS1525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1095.3	1092.2	1091.2	1093.8	1100.4	1115.9
23°	1088.7	1085.6	1084.6	1087.4	1093.5	1109.8
23.5°	1081.8	1078.5	1077.7	1080.5	1086.6	1103.4
24°	1074.9	1071.4	1070.4	1073.7	1080.0	1096.8
24.5°	1067.8	1064.3	1063.2	1066.3	1073.2	1090.2
25°	1060.7	1057.1	1056.1	1059.2	1066.3	1083.3
25.5°	1053.3	1049.5	1048.5	1051.5	1058.9	1076.5
26°	1045.9	1041.9	1040.9	1044.2	1051.5	1069.6
26.5°	1038.1	1034.2	1033.2	1036.8	1043.9	1062.7
27°	1030.7	1026.4	1025.6	1028.9	1036.3	1055.4
27.5°	1022.5	1018.5	1017.5	1021.0	1028.7	1048.0
28°	1014.7	1010.1	1009.3	1012.9	1020.8	1040.4
28.5°	1006.5	1002.2	1001.2	1005.0	1012.6	1032.7
29°	998.4	994.1	992.8	996.6	1004.7	1025.1
29.5°	989.7	985.7	984.4	988.5	996.6	1017.2
30°	981.6	976.8	976.0	979.8	988.5	1009.3
30.5°	972.7	968.4	967.1	971.4	979.8	1001.2
31°	964.0	959.5	958.2	962.3	971.2	993.0
31.5°	955.4	950.8	949.3	953.9	962.8	984.4
32°	946.5	941.7	940.1	945.2	954.1	976.0
32.5°	937.3	932.8	931.5	936.1	945.5	967.3
33°	927.9	923.6	922.3	926.7	936.3	958.7
33.5°	918.8	914.2	912.9	917.7	926.9	950.1
34°	909.4	904.5	903.5	908.6	917.7	941.1
34.5°	899.9	895.1	893.8	898.9	908.6	932.0
35°	890.0	885.2	884.2	889.0	898.7	922.8
35.5°	879.6	875.3	874.3	879.3	889.5	913.2
36°	869.4	864.6	863.8	869.4	879.6	904.0
36.5°	858.5	853.6	853.1	859.0	868.9	894.1
37°	846.5	842.2	841.9	847.5	858.2	884.2
37.5°	832.5	829.0	829.5	836.4	847.5	873.5
38°	817.5	814.2	815.0	822.6	834.1	862.8
38.5°	802.0	797.9	799.7	807.6	819.8	850.6
39°	785.2	781.7	783.7	792.1	805.1	837.4
39.5°	767.9	764.4	766.9	775.6	789.3	822.9
40°	750.4	746.6	749.4	758.5	772.8	806.6
40.5°	732.6	728.2	731.3	741.2	755.0	788.5
41°	715.3	710.2	713.5	723.9	736.9	771.0
41.5°	697.7	691.4	694.9	705.6	717.8	753.2
42°	680.2	674.1	676.6	687.5	699.2	735.1
42.5°	663.1	655.8	658.0	669.2	680.4	717.3
43°	645.8	638.2	639.0	650.4	660.8	699.8
43.5°	628.8	619.4	619.9	631.3	641.8	681.7



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	575.9	566.0	562.4	572.6	585.5	628.0
45.5°	557.8	547.6	543.3	553.0	566.5	610.0
46°	539.5	530.1	525.3	533.4	548.2	591.7
46.5°	520.7	511.3	506.4	513.8	529.6	573.1
47°	502.4	494.0	487.9	494.2	511.3	554.0
47.5°	484.1	475.2	469.0	474.9	492.4	534.9
48°	465.5	458.1	451.5	455.8	474.1	516.1
48.5°	447.4	439.8	432.9	436.5	455.8	497.0
49°	429.6	422.5	415.4	418.2	437.8	478.5
49.5°	411.6	405.2	397.3	399.9	419.7	459.9
50°	393.8	387.9	379.8	381.5	401.6	441.8
50.5°	377.0	370.9	362.2	363.7	384.1	423.5
51°	359.9	353.8	345.4	346.7	366.8	406.0
51.5°	342.9	337.5	328.4	329.7	349.2	387.9
52°	325.8	321.3	312.1	313.1	332.7	370.6
52.5°	309.8	305.2	295.6	296.6	315.9	353.6
53°	293.3	289.0	280.1	281.1	299.6	336.5
53.5°	277.0	273.4	264.0	265.8	283.4	319.5
54°	261.0	257.9	249.0	250.5	267.6	302.7
54.5°	246.0	243.2	234.5	236.1	252.1	286.4
55°	231.2	228.7	220.3	222.1	237.3	270.6
55.5°	216.7	213.9	206.5	208.3	222.3	254.9
56°	202.2	199.7	192.8	195.1	207.8	239.4
56.5°	187.7	185.9	179.6	182.1	193.6	224.1
57°	173.2	172.5	167.1	169.4	180.3	209.3
57.5°	160.0	159.5	154.9	157.2	166.9	194.8
58°	146.8	146.5	143.2	145.8	154.4	180.3
58.5°	134.1	134.3	132.0	134.6	141.7	166.9
59°	121.8	122.6	121.1	123.6	130.2	153.1
59.5°	110.1	111.4	110.9	113.2	119.0	140.4
60°	99.2	100.7	101.0	103.5	108.4	127.7
60.5°	88.8	89.8	91.3	93.6	97.7	116.0
61°	78.9	81.1	83.2	85.7	87.8	104.3
61.5°	69.2	72.7	75.0	77.6	79.4	93.4
62°	60.3	64.1	66.9	69.4	70.7	83.9
62.5°	52.4	55.5	58.8	61.3	62.1	74.8
63°	44.8	47.1	50.6	53.2	53.7	65.4
63.5°	37.9	39.9	43.8	46.3	46.3	56.2
64°	31.5	33.6	37.4	39.9	39.7	47.1
64.5°	27.2	28.0	31.5	33.8	33.1	39.7
65°	23.1	22.9	26.5	28.2	27.7	33.1
65.5°	18.8	18.6	21.6	23.1	22.6	27.5
66°	14.8	14.8	17.0	18.8	18.1	22.4



TEST NUMBER: P775943

CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	5.9	7.4	8.1	8.1	8.1	10.9
68°	4.3	5.9	6.4	6.9	5.9	9.2
68.5°	3.3	4.3	4.6	5.3	5.3	7.6
69°	2.8	2.8	2.8	4.1	4.6	5.9
69.5°	2.8	2.8	2.5	2.8	3.8	4.3
70°	2.5	2.5	2.5	2.5	3.1	2.5
70.5°	2.5	2.5	2.5	2.5	2.5	2.5
71°	2.5	2.5	2.5	2.5	2.3	2.5
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	2.0	2.3
73.5°	2.0	2.0	2.0	2.0	2.0	2.0
74°	2.0	2.0	2.0	2.0	2.0	2.0
74.5°	2.0	2.0	2.0	2.0	2.0	2.0
75°	2.0	2.0	2.0	2.0	1.8	2.0
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: P775943
CATALOG NUMBER: HCDJBL51525CSD-HCD41TRMB-2500lm-4000K

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°	1127.9	1138.5	1149.2	1157.1	1159.4	1160.2	1156.6	1151.3	1137.8	1127.3	1116.9
22°	1122.0	1132.9	1143.6	1152.0	1154.3	1154.8	1151.8	1146.2	1131.9	1121.7	1110.8



44°	664.1	693.1	722.1	741.5	744.3	745.5	739.7	728.0	688.8	667.7	636.2
44.5°	646.1	674.3	703.3	722.1	724.7	728.8	723.4	710.9	669.0	648.9	617.6



66.5°	17.8	22.1	27.0	29.8	29.8	30.8	30.0	28.2	19.1	16.8	13.7
67°	14.2	17.6	21.6	23.4	24.4	25.2	24.7	22.4	13.5	11.4	9.4



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°	1108.3	1105.2	1104.2	1107.0	1112.6	1127.9
22°	1101.9	1098.9	1097.8	1100.4	1106.5	1122.0



44°	611.0	601.8	600.6	611.7	622.9	664.1
44.5°	593.7	583.5	581.5	592.2	604.4	646.1



66.5°	10.7	11.7	13.2	14.8	14.0	17.8
67°	8.1	8.9	9.9	11.2	10.9	14.2

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)