

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: P776012

Luminaire Tested: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B009)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K
Description: 4 INCH SQUARE MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2210.3 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.14 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

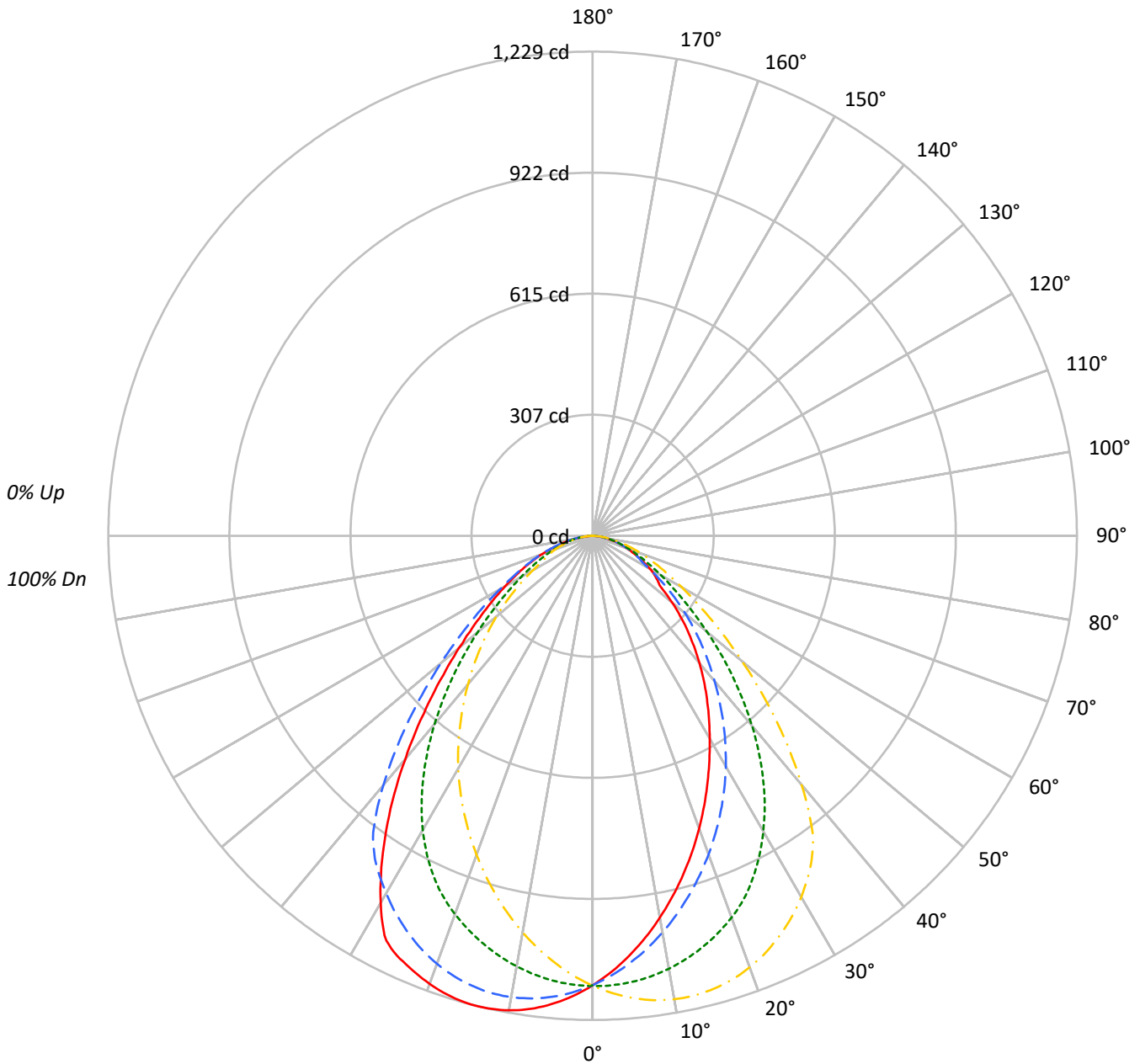
Input Watts (W): 25
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88				88				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76				
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66				
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58				58				
5	81	70	62	56	79	68	61	55	66	60	55	65	59	54	63	58	54	52				52				
6	75	63	55	50	74	62	55	49	61	54	49	59	53	49	58	52	48	46				46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42				42				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	32				32				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	143658	143658	143658	143658
5°	135148	143638	150763	143259
10°	125747	142577	156289	141835
15°	115853	140752	160034	139670
20°	105856	138105	162078	136860
25°	95827	133403	163271	132500
30°	86407	125904	156334	125279
35°	77708	115932	140391	115072
40°	69296	103368	121407	102415
45°	60655	89043	102658	88509
50°	51512	74086	86499	74575
55°	44519	60733	74008	62335
60°	42361	50441	64511	52756
65°	37938	42554	57056	45561
70°	33963	36649	50300	39960
75°	30001	31557	43179	35350
80°	23627	26381	33411	30874
85°	11552	19205	15884	25414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 225°
 Vertical Angle: 45°
 Luminance: 117021 cd/sqm



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	4.9
10°-20°	300.2	13.6
20°-30°	433.6	19.6
30°-40°	466.4	21.1
40°-50°	387.1	17.5
50°-60°	260.5	11.8
60°-70°	157.6	7.1
70°-80°	79.7	3.6
80°-90°	17.9	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	841.1	38.1
0°-40°	1307.6	59.2
0°-60°	1955.1	88.5
0°-90°	2210.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2210.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1142	1142	1142	1142	1142	
5°	1070	1137	1193	1134	1070	99
15°	889	1080	1228	1072	889	249
25°	690	961	1176	954	690	317
35°	506	755	914	749	506	316
45°	341	500	577	497	341	263
55°	203	277	337	284	203	185
65°	127	143	192	153	127	127
75°	62	65	89	73	62	65
85°	8	13	11	18	8	12
90°	0	0	0	0	0	



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5
0.5°	1134.7	1134.7	1136.0	1138.5	1143.2	1145.0	1146.5	1147.3	1147.3	1146.3	1144.7
1°	1128.2	1128.7	1131.5	1136.0	1143.2	1147.3	1150.8	1152.8	1153.3	1151.8	1148.8
1.5°	1121.4	1122.4	1126.7	1133.2	1143.0	1149.3	1154.8	1158.0	1159.0	1156.8	1152.5
2°	1114.7	1116.2	1121.7	1130.2	1142.5	1151.3	1158.5	1163.3	1164.6	1161.8	1156.5
2.5°	1107.4	1109.4	1116.4	1127.2	1142.0	1153.0	1162.3	1168.1	1169.8	1166.8	1160.0
3°	1100.4	1102.9	1111.4	1123.9	1141.2	1154.8	1165.8	1172.8	1175.1	1171.3	1163.3
3.5°	1092.8	1095.8	1105.9	1120.7	1140.5	1156.0	1169.1	1177.6	1179.9	1175.8	1166.6
4°	1085.3	1089.1	1100.1	1117.2	1139.2	1157.5	1172.3	1181.9	1184.6	1180.1	1169.6
4.5°	1077.5	1081.6	1094.3	1113.4	1138.2	1158.5	1175.3	1185.9	1189.1	1184.1	1172.1
5°	1069.8	1074.5	1088.6	1109.6	1137.0	1159.5	1178.1	1189.9	1193.4	1187.9	1174.8
5.5°	1061.5	1067.0	1082.3	1105.6	1135.5	1160.3	1180.6	1193.6	1197.4	1191.4	1177.1
6°	1053.5	1059.2	1076.3	1101.6	1134.0	1161.0	1182.9	1197.2	1201.2	1194.9	1179.4
6.5°	1045.4	1051.2	1070.0	1097.4	1132.2	1161.3	1185.1	1200.2	1204.7	1197.9	1181.4
7°	1036.9	1043.7	1063.5	1093.3	1130.2	1161.5	1187.1	1203.2	1208.2	1200.7	1183.1
7.5°	1028.1	1035.4	1056.7	1088.6	1128.2	1161.5	1188.9	1205.9	1211.2	1203.4	1184.6
8°	1019.9	1027.4	1050.2	1084.1	1125.9	1161.5	1190.4	1208.7	1214.0	1205.9	1185.9
8.5°	1011.1	1019.1	1043.4	1079.3	1123.4	1161.3	1191.6	1210.9	1216.7	1207.9	1186.9
9°	1002.1	1010.8	1036.4	1074.5	1120.9	1160.8	1192.9	1213.0	1219.0	1209.9	1187.9
9.5°	993.0	1002.1	1029.1	1069.3	1118.4	1160.0	1193.9	1214.7	1221.0	1211.7	1188.6
10°	984.0	993.5	1022.1	1064.3	1115.7	1159.3	1194.6	1216.5	1223.0	1213.2	1189.1
10.5°	974.7	985.0	1014.9	1059.0	1112.6	1158.3	1195.2	1218.0	1224.5	1214.5	1189.6
11°	965.7	976.2	1007.6	1053.7	1109.6	1157.3	1195.4	1219.0	1226.0	1215.5	1189.6
11.5°	956.4	967.5	1000.1	1048.0	1106.4	1156.0	1195.4	1220.0	1227.0	1216.2	1189.4
12°	946.6	958.7	992.3	1042.4	1103.1	1154.5	1195.4	1220.7	1228.0	1216.7	1189.1
12.5°	937.4	949.4	984.8	1036.7	1099.6	1153.0	1195.2	1221.0	1228.8	1217.2	1188.6
13°	928.1	940.4	977.0	1030.9	1096.1	1151.3	1194.4	1221.2	1229.0	1217.2	1187.9
13.5°	918.3	931.3	969.2	1025.1	1092.3	1149.3	1193.6	1221.2	1229.3	1217.0	1186.9
14°	908.8	922.3	960.9	1019.1	1088.6	1147.0	1192.6	1221.0	1229.3	1216.5	1185.6
14.5°	899.0	913.0	952.9	1012.8	1084.6	1145.0	1191.6	1220.5	1228.8	1215.7	1184.1
15°	889.2	903.3	944.9	1006.6	1080.3	1142.5	1190.1	1219.7	1228.3	1215.0	1182.6
15.5°	879.4	894.0	936.9	1000.3	1076.0	1140.0	1188.6	1218.7	1227.5	1214.0	1180.9
16°	869.7	884.7	928.6	994.0	1071.8	1137.0	1186.9	1217.5	1226.5	1212.7	1178.9
16.5°	860.1	875.2	920.1	987.5	1067.3	1134.2	1184.9	1216.2	1225.2	1211.2	1176.6
17°	850.1	865.9	911.8	980.7	1062.5	1131.0	1182.9	1214.7	1223.7	1209.2	1174.3
17.5°	840.3	855.9	903.3	974.0	1057.5	1127.7	1180.4	1212.7	1222.0	1207.2	1171.6
18°	830.3	846.3	895.0	967.2	1052.5	1123.9	1177.8	1210.4	1220.0	1204.9	1168.8
18.5°	820.5	836.8	886.5	960.2	1047.4	1120.4	1175.1	1208.2	1217.7	1202.4	1165.8
19°	810.5	827.0	877.7	952.9	1042.2	1116.7	1172.1	1205.7	1215.5	1199.9	1162.8
19.5°	800.2	817.2	869.2	945.9	1036.7	1112.4	1168.8	1202.9	1213.0	1196.9	1159.5
20°	790.4	807.7	860.1	938.6	1031.2	1108.4	1165.6	1199.9	1210.2	1193.9	1156.0
20.5°	780.4	797.9	851.6	931.1	1025.4	1103.9	1162.0	1196.7	1207.2	1190.6	1152.0
21°	770.4	788.2	842.8	923.6	1019.4	1099.4	1158.3	1193.4	1204.2	1187.1	1148.3



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	740.3	758.8	816.0	900.5	999.6	1084.6	1146.0	1182.1	1193.9	1175.6	1135.2
23°	730.0	748.8	806.7	892.2	992.5	1078.8	1141.5	1178.1	1190.4	1171.6	1130.7
23.5°	720.2	739.3	797.9	884.2	984.8	1073.0	1136.7	1173.8	1186.6	1167.3	1125.9
24°	710.2	729.2	788.7	875.2	977.0	1066.8	1131.5	1169.8	1183.1	1163.1	1120.9
24.5°	699.9	719.4	779.6	866.6	969.0	1060.0	1126.4	1165.3	1179.6	1158.3	1115.7
25°	690.1	709.7	770.1	857.6	960.7	1053.0	1121.2	1160.8	1175.8	1153.8	1110.4
25.5°	680.3	699.6	761.1	848.6	952.4	1045.7	1115.9	1156.5	1170.8	1149.3	1104.6
26°	670.5	689.9	751.8	839.1	943.6	1038.4	1110.1	1152.3	1165.3	1145.0	1099.1
26.5°	660.8	680.3	742.5	830.0	934.6	1030.4	1104.4	1147.8	1159.5	1140.2	1093.1
27°	651.0	670.3	733.2	820.5	925.3	1022.1	1098.4	1143.0	1153.5	1135.5	1087.1
27.5°	641.5	660.8	724.0	811.0	915.8	1013.8	1092.3	1136.7	1144.0	1129.2	1081.1
28°	631.7	651.0	714.4	801.2	906.3	1005.1	1086.1	1130.5	1131.0	1122.7	1074.8
28.5°	622.4	641.5	705.2	791.4	896.5	996.0	1079.5	1124.2	1117.7	1116.2	1068.3
29°	613.1	631.7	695.4	781.4	886.7	986.8	1072.8	1117.2	1105.4	1109.1	1061.5
29.5°	603.6	622.7	685.8	771.6	876.4	977.0	1065.8	1106.4	1090.6	1098.4	1054.7
30°	594.6	613.4	676.1	761.3	866.4	967.0	1058.7	1092.8	1075.8	1085.3	1048.0
30.5°	585.3	603.8	666.3	751.3	855.6	957.2	1051.2	1079.8	1061.0	1072.0	1040.9
31°	576.3	593.8	656.5	741.0	845.3	947.1	1043.4	1067.3	1045.9	1059.2	1033.9
31.5°	567.2	585.3	646.5	730.7	834.3	936.4	1035.4	1052.5	1029.4	1044.9	1026.6
32°	558.2	576.0	636.7	720.5	823.5	925.8	1027.6	1037.7	1013.6	1030.4	1019.4
32.5°	549.4	567.2	626.9	710.2	812.5	914.8	1019.9	1022.6	997.8	1016.1	1012.1
33°	540.7	558.2	617.1	699.6	801.2	903.8	1011.6	1008.1	981.2	1001.1	1004.6
33.5°	531.9	549.4	607.4	689.4	789.4	892.5	1003.1	992.3	964.4	986.0	996.8
34°	523.3	540.7	597.3	678.6	778.4	880.9	994.0	976.7	947.4	970.0	988.0
34.5°	514.3	531.6	587.3	668.0	766.3	868.7	984.0	960.4	930.6	954.7	978.5
35°	505.8	522.3	577.5	657.3	754.6	857.1	974.0	944.9	913.8	938.9	968.5
35.5°	497.3	514.3	567.7	646.7	742.5	844.6	963.2	928.3	896.5	923.3	958.7
36°	489.0	505.5	558.2	635.9	730.0	832.3	952.2	912.0	878.9	907.0	948.4
36.5°	480.5	497.0	548.2	625.4	717.7	819.8	938.6	895.2	862.1	890.7	935.9
37°	471.9	488.5	538.6	614.6	705.7	806.7	922.8	878.9	844.6	874.9	920.6
37.5°	463.4	479.7	528.9	603.6	692.9	793.4	907.0	862.1	826.8	858.6	905.8
38°	454.9	471.2	519.3	592.8	680.1	780.1	891.7	845.3	808.7	842.1	890.7
38.5°	446.6	462.7	510.1	581.8	667.3	766.8	875.9	827.8	792.2	825.3	875.7
39°	438.6	454.4	500.5	571.0	654.8	753.3	859.1	812.0	774.9	809.5	859.1
39.5°	430.1	446.1	491.0	560.0	642.0	739.5	842.3	794.7	757.1	793.2	842.8
40°	421.8	437.3	481.7	548.9	629.2	725.5	825.5	777.4	739.0	776.4	826.0
40.5°	413.5	429.1	472.4	538.1	615.9	711.7	808.7	760.3	723.5	759.3	809.5
41°	405.2	420.8	463.4	527.1	603.1	697.6	791.4	744.5	706.7	744.0	792.9
41.5°	397.2	412.5	454.1	516.3	590.1	683.6	774.4	727.7	688.9	727.7	775.4
42°	388.9	404.2	445.1	505.3	577.3	669.5	757.1	710.2	672.6	710.7	758.6
42.5°	380.9	396.0	436.1	494.8	564.5	655.0	740.3	694.4	657.0	695.1	741.3
43°	372.9	387.7	427.1	484.0	551.4	641.0	723.2	678.6	640.7	679.6	724.7
43.5°	364.6	379.7	418.0	473.2	538.4	626.7	706.2	661.5	622.7	663.3	707.4



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	340.8	355.3	391.7	441.3	500.3	583.8	655.3	614.6	576.8	617.6	657.5
45.5°	332.8	347.3	382.9	430.8	487.5	569.7	637.9	597.3	562.0	601.1	641.0
46°	325.2	339.5	374.4	420.5	475.0	555.7	621.1	582.5	548.7	585.5	624.4
46.5°	317.0	331.5	365.6	410.0	462.4	541.4	605.1	568.5	533.6	572.7	608.9
47°	309.2	323.5	357.1	400.0	449.9	527.4	588.8	552.7	517.3	557.7	592.6
47.5°	301.4	315.5	348.3	389.7	437.6	513.3	572.2	536.1	505.8	541.4	576.8
48°	293.9	307.7	340.3	379.7	425.3	499.5	555.7	523.9	493.3	528.6	561.0
48.5°	285.9	299.7	331.8	369.6	413.5	486.0	540.9	509.8	478.5	515.8	546.7
49°	278.4	292.1	323.5	360.1	401.7	472.4	525.6	494.0	465.4	501.0	531.4
49.5°	270.8	284.4	315.2	350.3	390.2	459.2	509.8	480.2	454.4	486.5	516.3
50°	263.1	276.6	306.9	340.5	378.4	445.4	494.5	467.9	441.8	475.0	501.3
50.5°	255.3	268.8	298.9	331.0	367.4	432.6	480.7	454.1	427.8	462.2	488.2
51°	248.0	261.3	290.9	322.0	356.3	419.3	465.9	439.3	418.3	446.9	473.9
51.5°	240.5	253.8	282.9	312.7	345.8	407.0	451.4	429.1	408.0	436.6	459.9
52°	233.2	246.3	275.1	303.7	335.0	394.0	438.6	417.0	394.7	425.0	446.4
52.5°	225.9	238.7	267.3	294.9	324.5	381.9	425.3	402.7	385.2	412.0	434.8
53°	219.2	231.2	259.8	286.1	314.5	369.4	411.3	392.4	375.9	399.7	420.8
53.5°	212.6	223.9	252.0	277.6	304.9	357.6	398.5	382.2	365.1	390.2	407.7
54°	208.6	216.9	244.5	269.1	295.2	345.6	386.4	370.1	354.6	378.7	396.2
54.5°	205.9	209.9	237.2	260.8	285.9	334.0	374.1	359.1	346.6	366.4	384.9
55°	202.9	203.4	230.0	253.0	276.8	323.0	361.6	350.1	337.3	357.8	372.4
55.5°	200.1	197.1	222.9	245.2	268.1	311.7	351.1	339.8	327.0	348.1	361.1
56°	196.9	193.8	215.7	237.7	259.5	301.2	339.5	329.0	319.7	336.3	350.6
56.5°	193.6	191.1	208.6	230.2	251.3	291.1	328.0	320.7	311.5	328.0	339.5
57°	190.6	188.1	201.9	222.9	243.0	281.1	318.0	311.5	301.9	319.5	328.5
57.5°	187.1	185.1	195.1	215.7	235.5	271.3	307.9	301.4	295.2	309.2	319.5
58°	183.8	181.8	188.8	208.9	227.7	262.3	297.2	294.1	287.6	300.9	309.2
58.5°	180.1	178.8	182.3	202.4	220.7	253.3	288.1	285.9	278.9	293.4	299.2
59°	176.0	175.3	176.0	195.8	213.9	244.7	278.9	276.3	271.6	284.4	290.4
59.5°	172.3	172.0	169.8	189.3	207.1	236.2	269.3	269.6	263.8	276.3	281.4
60°	168.3	168.5	164.0	183.3	200.4	228.2	260.8	262.1	256.3	269.3	271.8
60.5°	164.0	164.8	158.0	177.0	193.6	220.4	252.5	253.5	249.3	260.8	263.8
61°	160.0	161.0	152.5	171.5	186.8	213.2	243.7	247.0	242.0	253.3	255.8
61.5°	156.0	157.2	147.7	165.8	180.8	206.1	236.2	239.5	235.2	246.3	247.3
62°	151.7	153.2	142.9	160.2	175.0	198.9	228.7	231.7	228.4	238.5	239.7
62.5°	147.7	149.2	140.2	155.0	169.3	191.6	220.7	225.2	222.2	231.7	232.5
63°	143.7	145.4	137.2	149.7	163.5	185.3	213.9	218.4	216.2	225.2	224.4
63.5°	139.7	141.4	134.4	144.7	158.2	179.0	207.1	211.6	209.9	217.7	217.9
64°	135.4	137.7	131.7	139.9	153.0	173.0	200.6	205.1	203.9	211.4	211.4
64.5°	131.4	133.7	128.6	134.9	147.7	167.0	193.8	198.6	197.6	205.1	204.6
65°	127.4	129.9	125.6	130.4	142.9	161.5	187.1	192.1	191.6	198.9	198.1
65.5°	123.4	125.9	122.6	126.1	137.9	156.0	180.8	186.8	185.6	192.6	191.3
66°	119.4	122.1	119.6	121.6	133.2	150.5	174.8	180.3	179.8	186.6	185.1

TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	108.8	110.6	109.8	109.3	119.9	135.2	157.0	163.5	163.0	169.3	167.3
68°	105.3	107.1	106.3	105.6	115.6	130.4	151.5	158.0	157.7	163.5	161.5
68.5°	102.1	103.6	103.1	101.8	111.3	125.9	145.9	152.5	152.2	158.0	155.7
69°	98.8	100.1	100.1	98.0	107.3	121.4	140.4	147.2	147.2	152.5	150.2
69.5°	95.5	96.8	96.8	94.5	103.3	116.6	135.4	141.9	141.9	147.2	144.7
70°	92.3	93.5	93.3	91.3	99.6	112.3	130.1	136.7	136.7	141.9	139.7
70.5°	89.3	89.8	90.3	88.0	95.5	108.1	125.1	131.9	131.9	136.7	134.4
71°	86.3	87.0	87.3	85.0	92.0	104.1	120.4	126.6	126.9	131.9	129.4
71.5°	83.3	84.0	84.0	81.7	88.3	99.8	115.4	121.9	121.9	126.6	124.4
72°	80.0	81.0	80.7	78.7	84.8	95.8	110.6	116.9	116.9	121.6	119.6
72.5°	77.0	78.0	77.7	75.5	81.2	92.0	106.1	112.1	112.1	116.6	114.6
73°	74.0	75.0	74.5	72.7	78.0	88.0	101.6	107.6	107.3	112.1	110.1
73.5°	70.7	72.0	71.5	70.0	74.5	84.3	97.0	102.8	102.6	107.1	105.3
74°	67.7	68.7	68.2	67.5	71.2	80.7	92.5	98.0	97.8	102.3	100.8
74.5°	64.7	65.7	65.4	65.2	68.0	77.0	88.3	93.5	93.3	97.8	96.3
75°	61.7	62.7	62.7	62.7	64.9	73.5	84.0	89.3	88.8	93.3	92.0
75.5°	58.7	59.7	59.7	60.2	61.7	70.2	79.7	84.8	84.3	88.5	87.5
76°	55.7	56.7	56.7	57.4	58.7	66.7	76.0	80.2	79.7	84.3	83.3
76.5°	52.7	53.7	53.9	54.9	55.7	63.2	71.7	75.7	75.2	79.7	79.0
77°	49.9	50.7	51.2	52.4	52.9	59.9	68.0	71.7	71.2	75.5	75.0
77.5°	46.9	47.6	48.4	49.7	49.9	56.7	63.9	67.5	66.7	71.0	71.0
78°	44.1	44.6	45.6	47.1	47.1	53.4	60.2	63.4	62.4	67.0	67.0
78.5°	41.1	41.9	42.9	44.6	44.4	50.2	56.4	59.2	58.4	62.7	63.2
79°	38.4	38.9	40.4	41.9	41.6	47.1	52.9	55.2	54.2	58.4	59.2
79.5°	35.4	35.9	37.6	39.4	39.1	44.1	49.4	50.9	50.2	54.4	55.4
80°	32.6	32.9	34.9	36.9	36.4	41.1	45.9	46.9	46.1	50.4	51.9
80.5°	29.8	30.1	32.3	34.4	33.9	38.1	42.4	43.1	42.1	46.4	48.1
81°	27.1	27.1	29.8	31.8	31.3	35.4	39.1	39.1	38.1	42.4	44.6
81.5°	24.3	24.3	27.3	29.3	29.1	32.6	35.9	35.4	34.4	38.6	41.4
82°	21.6	21.6	25.1	27.1	26.6	29.8	32.6	32.1	30.6	34.9	37.9
82.5°	18.8	19.3	22.6	24.6	24.3	27.3	29.6	28.6	27.1	31.3	34.9
83°	16.3	16.8	20.3	22.3	22.1	24.6	26.8	25.6	23.6	27.8	31.6
83.5°	13.5	14.5	18.3	20.1	19.8	22.3	24.1	22.8	20.1	25.1	28.6
84°	11.0	12.5	16.0	17.6	17.6	19.8	21.6	19.8	16.6	22.1	25.8
84.5°	9.0	10.5	14.0	15.3	15.3	17.3	18.8	16.8	13.0	19.3	23.3
85°	8.0	9.0	12.0	13.0	13.3	14.8	16.3	13.8	11.0	16.6	20.6
85.5°	6.8	7.8	10.0	10.8	11.0	12.3	13.5	11.8	9.5	13.5	18.1
86°	5.5	6.3	8.3	8.5	9.0	10.0	11.3	9.8	8.0	11.5	15.3
86.5°	4.5	5.0	6.3	6.5	7.0	7.8	8.8	8.0	6.8	9.8	12.8
87°	3.3	3.5	4.5	4.5	5.0	5.5	6.5	6.0	5.3	8.0	10.3
87.5°	2.3	2.3	2.5	2.8	3.0	3.5	4.3	4.3	4.0	6.0	8.0
88°	1.3	1.0	1.0	0.8	1.3	1.8	2.3	2.8	2.8	4.3	5.8
88.5°	0.5	0.3	0.3	0.3	0.3	0.5	0.8	1.3	1.3	2.5	3.5



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1141.5	1141.5	1141.5	1141.5	1141.5	1141.5
0.5°	1143.2	1142.7	1140.0	1137.5	1135.7	1134.7
1°	1145.2	1142.5	1137.2	1132.7	1129.7	1128.2
1.5°	1147.3	1142.0	1134.5	1127.7	1123.4	1121.4
2°	1149.0	1141.2	1131.2	1122.9	1116.9	1114.7
2.5°	1150.5	1140.5	1127.9	1117.4	1110.1	1107.4
3°	1152.0	1139.5	1124.7	1112.1	1103.6	1100.4
3.5°	1153.3	1138.2	1121.2	1106.6	1096.9	1092.8
4°	1154.3	1137.0	1117.4	1101.1	1089.6	1085.3
4.5°	1155.0	1135.5	1113.7	1094.8	1082.3	1077.5
5°	1155.8	1134.0	1109.9	1089.1	1074.8	1069.8
5.5°	1156.3	1132.0	1105.9	1082.8	1067.5	1061.5
6°	1156.8	1130.2	1101.6	1076.5	1059.7	1053.5
6.5°	1157.0	1128.2	1097.1	1070.0	1052.0	1045.4
7°	1157.0	1125.9	1092.6	1064.0	1044.2	1036.9
7.5°	1156.8	1123.7	1088.1	1057.2	1036.2	1028.1
8°	1156.5	1121.2	1083.3	1050.5	1027.9	1019.9
8.5°	1156.0	1118.4	1078.5	1043.7	1019.6	1011.1
9°	1155.3	1115.7	1073.5	1036.7	1011.1	1002.1
9.5°	1154.5	1112.9	1068.3	1029.4	1002.8	993.0
10°	1153.5	1109.9	1063.0	1022.1	994.3	984.0
10.5°	1152.3	1106.6	1057.7	1015.1	985.8	974.7
11°	1151.0	1103.4	1052.2	1007.6	977.0	965.7
11.5°	1149.5	1099.9	1046.7	1000.1	968.0	956.4
12°	1147.8	1096.1	1040.9	992.5	959.2	946.6
12.5°	1146.0	1092.6	1035.2	984.8	950.2	937.4
13°	1144.0	1088.8	1029.4	977.0	941.1	928.1
13.5°	1141.5	1084.8	1023.4	969.2	932.1	918.3
14°	1139.5	1080.8	1017.6	961.4	922.8	908.8
14.5°	1137.0	1076.5	1011.3	953.4	913.5	899.0
15°	1134.2	1072.0	1005.1	945.1	904.3	889.2
15.5°	1131.5	1067.8	998.8	937.1	894.7	879.4
16°	1128.4	1063.2	992.5	928.8	885.5	869.7
16.5°	1125.4	1058.5	986.0	920.8	876.2	860.1
17°	1121.9	1053.7	979.5	912.5	866.6	850.1
17.5°	1118.4	1048.7	972.7	904.0	857.1	840.3
18°	1114.9	1043.7	966.2	895.5	847.6	830.3
18.5°	1111.1	1038.4	959.2	887.2	837.8	820.5
19°	1107.1	1032.9	952.2	878.4	828.3	810.5
19.5°	1103.1	1027.6	945.1	870.2	819.0	800.2
20°	1098.9	1021.9	938.1	861.6	809.2	790.4
20.5°	1094.1	1016.1	930.8	852.9	799.7	780.4
21°	1089.6	1010.1	923.3	844.1	789.9	770.4

TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1074.5	991.3	900.8	818.0	760.8	740.3
23°	1069.3	984.5	892.7	809.2	750.8	730.0
23.5°	1063.5	977.5	885.2	800.4	741.5	720.2
24°	1057.7	969.7	877.2	791.4	731.7	710.2
24.5°	1051.7	962.4	868.9	782.6	722.0	699.9
25°	1045.4	954.2	860.4	773.6	711.9	690.1
25.5°	1038.9	946.1	852.1	764.6	702.6	680.3
26°	1031.9	937.4	843.3	755.6	692.9	670.5
26.5°	1024.6	928.8	834.3	746.5	683.1	660.8
27°	1017.1	920.3	825.3	737.5	673.6	651.0
27.5°	1009.1	911.0	816.0	728.2	664.0	641.5
28°	1000.6	901.3	806.5	718.9	654.2	631.7
28.5°	992.0	892.2	797.2	709.9	644.7	622.4
29°	983.3	882.4	787.7	700.9	635.4	613.1
29.5°	974.0	872.4	778.1	691.6	626.2	603.6
30°	964.9	862.1	768.1	682.1	616.9	594.6
30.5°	955.4	851.6	758.6	672.8	607.6	585.3
31°	945.4	840.8	748.3	663.3	598.3	576.3
31.5°	934.9	829.8	738.3	653.7	589.0	567.2
32°	924.3	819.0	728.0	644.5	580.3	558.2
32.5°	913.5	807.7	717.9	634.7	571.2	549.4
33°	902.3	795.9	707.4	625.2	562.2	540.7
33.5°	891.0	784.4	696.9	615.6	553.4	531.9
34°	878.9	772.9	686.3	605.9	544.7	523.3
34.5°	867.1	760.8	675.8	596.1	536.1	514.3
35°	855.1	749.0	665.0	586.3	527.4	505.8
35.5°	842.8	736.5	654.5	576.8	518.8	497.3
36°	830.3	724.7	643.7	567.5	510.1	489.0
36.5°	817.2	712.4	632.9	558.0	501.8	480.5
37°	804.5	699.6	622.2	548.4	493.3	471.9
37.5°	791.4	687.3	611.4	538.6	485.0	463.4
38°	778.1	674.3	600.6	529.1	476.2	454.9
38.5°	764.6	661.8	589.6	519.8	467.9	446.6
39°	751.3	649.0	578.8	510.6	459.9	438.6
39.5°	737.8	636.4	568.0	501.5	451.6	430.1
40°	724.0	623.4	557.2	492.0	442.9	421.8
40.5°	709.9	610.6	546.2	482.7	434.8	413.5
41°	695.9	597.8	535.4	473.7	426.8	405.2
41.5°	682.1	585.0	524.4	464.4	418.3	397.2
42°	667.8	572.5	513.6	455.4	410.3	388.9
42.5°	654.2	559.7	502.8	446.4	402.0	380.9
43°	640.0	546.9	492.3	437.3	394.2	372.9
43.5°	625.7	534.4	481.5	428.3	385.7	364.6

TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	584.0	497.3	450.1	402.0	362.1	340.8
45.5°	570.2	485.0	439.6	393.5	353.8	332.8
46°	556.2	472.9	429.8	384.9	346.3	325.2
46.5°	542.7	460.9	419.3	376.1	338.3	317.0
47°	528.9	449.1	409.3	367.6	330.5	309.2
47.5°	515.6	437.3	399.2	359.1	322.5	301.4
48°	502.0	425.8	389.7	350.8	315.0	293.9
48.5°	489.0	414.3	379.9	342.5	307.2	285.9
49°	475.7	403.2	370.1	334.3	299.4	278.4
49.5°	462.9	392.2	360.6	326.0	291.6	270.8
50°	449.9	380.9	351.6	317.7	284.1	263.1
50.5°	437.3	370.4	342.0	309.7	276.6	255.3
51°	425.0	359.8	333.0	301.7	268.8	248.0
51.5°	413.0	349.6	324.0	293.9	261.3	240.5
52°	400.7	339.5	315.2	285.9	254.0	233.2
52.5°	388.4	329.5	306.4	278.4	246.8	225.9
53°	376.7	320.0	298.2	270.6	239.2	219.2
53.5°	365.4	310.7	289.4	263.1	231.7	212.6
54°	353.8	301.4	281.1	255.5	224.7	208.6
54.5°	343.0	292.6	273.3	248.3	217.7	205.9
55°	332.5	284.1	265.3	241.0	210.9	202.9
55.5°	322.0	275.6	257.8	234.0	204.1	200.1
56°	312.0	267.6	250.0	226.9	197.9	196.9
56.5°	302.2	259.5	242.7	219.9	194.3	193.6
57°	292.9	251.8	235.5	213.2	191.6	190.6
57.5°	283.6	244.2	228.7	206.4	188.6	187.1
58°	274.8	237.0	221.9	199.9	185.6	183.8
58.5°	266.3	230.0	215.2	193.6	182.3	180.1
59°	257.8	223.2	208.6	187.3	179.0	176.0
59.5°	249.8	216.4	202.4	181.1	176.0	172.3
60°	242.0	209.6	196.1	175.0	172.5	168.3
60.5°	234.5	203.4	190.1	169.3	169.0	164.0
61°	227.2	197.1	184.1	163.5	165.5	160.0
61.5°	219.9	191.3	178.5	158.2	161.7	156.0
62°	213.4	185.3	173.0	153.0	157.7	151.7
62.5°	206.9	179.5	167.8	148.0	154.0	147.7
63°	200.4	174.0	162.2	143.4	150.2	143.7
63.5°	193.8	168.5	157.2	139.9	146.4	139.7
64°	187.3	163.0	152.0	137.2	142.4	135.4
64.5°	181.1	158.0	147.2	134.4	138.7	131.4
65°	175.3	153.0	142.4	131.7	134.9	127.4
65.5°	169.5	148.2	137.9	128.6	131.2	123.4
66°	164.0	143.2	133.4	125.6	127.1	119.4



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL5125CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	148.2	129.6	120.6	116.6	115.9	108.8
68°	142.9	125.1	116.6	113.3	112.1	105.3
68.5°	138.2	120.9	112.8	110.3	108.6	102.1
69°	133.4	116.6	108.8	107.1	105.1	98.8
69.5°	128.6	112.6	105.1	103.8	101.6	95.5
70°	124.1	108.6	101.6	100.6	98.3	92.3
70.5°	119.6	104.8	98.0	97.3	95.0	89.3
71°	115.4	100.8	94.3	94.0	91.8	86.3
71.5°	110.8	97.0	91.3	90.8	88.8	83.3
72°	106.8	93.3	88.0	87.8	85.5	80.0
72.5°	102.6	90.3	84.8	84.5	82.5	77.0
73°	98.6	86.8	81.7	81.5	79.2	74.0
73.5°	94.5	83.3	78.5	78.2	76.2	70.7
74°	90.8	79.5	75.5	75.2	73.0	67.7
74.5°	86.8	76.0	72.5	72.2	70.0	64.7
75°	83.0	72.7	69.7	69.2	66.7	61.7
75.5°	79.5	69.5	67.0	66.5	63.7	58.7
76°	75.7	66.2	64.4	63.4	60.4	55.7
76.5°	72.2	63.2	61.9	60.4	57.4	52.7
77°	68.7	59.9	59.4	57.7	54.4	49.9
77.5°	65.2	56.9	56.9	54.7	51.4	46.9
78°	61.9	53.9	54.2	51.9	48.4	44.1
78.5°	58.4	51.2	51.7	49.2	45.4	41.1
79°	55.2	48.1	48.9	46.4	42.4	38.4
79.5°	51.9	45.4	46.4	43.6	39.4	35.4
80°	48.6	42.6	43.6	40.9	36.4	32.6
80.5°	45.6	39.9	41.1	38.1	33.6	29.8
81°	42.6	37.1	38.4	35.6	30.6	27.1
81.5°	39.6	34.6	35.9	32.9	27.8	24.3
82°	36.6	32.1	33.4	30.3	25.3	21.6
82.5°	33.9	29.6	30.8	27.8	22.6	18.8
83°	31.1	27.1	28.3	25.6	20.1	16.3
83.5°	28.3	24.6	25.8	23.1	17.6	13.5
84°	25.6	22.3	23.6	20.8	15.3	11.0
84.5°	23.1	19.8	21.1	18.6	13.3	9.0
85°	20.6	17.6	18.6	16.3	11.3	8.0
85.5°	18.1	15.3	16.3	14.0	9.8	6.8
86°	15.5	13.3	13.8	12.0	8.3	5.5
86.5°	12.8	11.0	11.5	9.8	6.8	4.5
87°	10.5	9.0	9.3	7.8	5.3	3.3
87.5°	8.3	7.0	7.0	6.0	3.8	2.3
88°	6.0	5.0	5.0	4.0	2.5	1.3
88.5°	3.8	3.0	3.0	2.0	1.3	0.5



TEST NUMBER: P776012

CATALOG NUMBER: HCDJBL51525CSD-HCD4TQSH-HCD4TSQLWW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°

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

Scaled Data Report



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

Scaled Data Report





21.5°	760.1	778.4	833.8	916.0	1013.1	1094.6	1154.3	1189.6	1200.9	1183.4	1144.0
22°	750.3	768.6	824.8	908.3	1006.6	1089.6	1150.3	1186.1	1197.4	1179.6	1140.0



44°	356.8	371.6	409.3	462.7	525.6	612.4	688.4	644.5	608.6	646.2	690.1
44.5°	348.8	363.6	400.5	451.9	512.8	598.3	671.8	630.2	593.6	632.4	673.6



66.5°	115.9	118.4	116.1	117.4	128.6	145.2	168.5	174.8	174.0	180.6	179.0
67°	112.1	114.3	112.8	113.3	124.1	140.2	162.7	169.0	168.5	175.0	172.8



89°	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3	1.0	1.5
89.5°	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.5

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°	1084.8	1004.1	915.8	835.6	780.1	760.1
22°	1079.8	997.5	908.3	826.8	770.4	750.3

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

Scaled Data Report



44°	611.6	522.1	470.9	419.5	378.2	356.8
44.5°	598.1	509.6	460.4	410.8	369.9	348.8

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

Scaled Data Report



66.5°	158.5	138.7	129.1	122.9	123.4	115.9
67°	153.2	133.9	124.9	119.9	119.6	112.1

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

Scaled Data Report



89°	1.8	1.0	1.0	0.8	0.3	0.0
89.5°	0.5	0.3	0.3	0.3	0.3	0.0

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

Scaled Data Report



(END OF REPORT)