

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: P775749

Luminaire Tested: HCDJBL510CSD-HCD62TRH-1000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B056)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD62TRH-1000lm-5000K
Description: 6 INCH ROUND NARROW HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

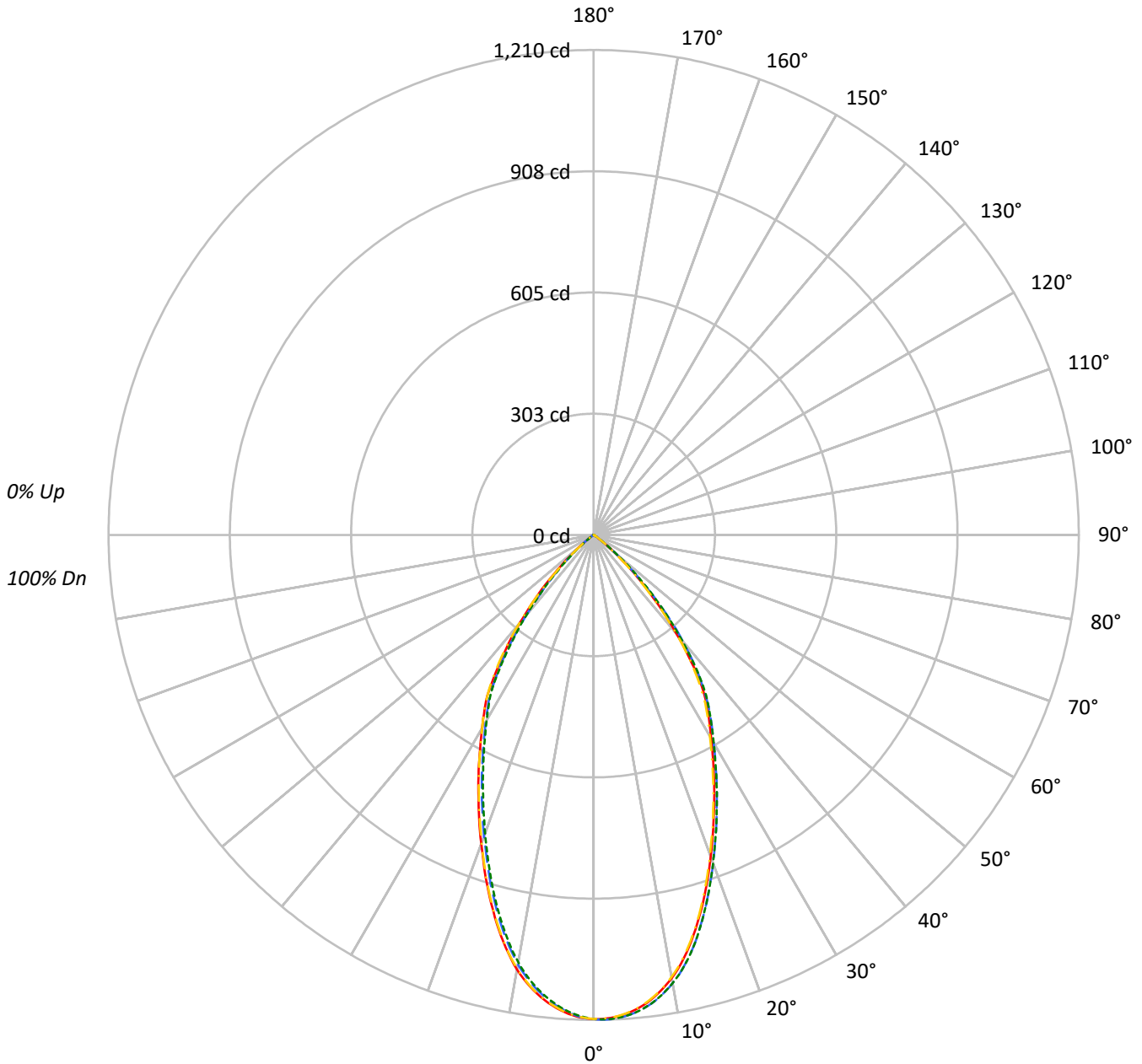
Lumens per Lamp: N/A
Luminaire Lumens: 1123.9 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.82 / 0.91
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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: P775749
CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-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	113	110	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93					93			
2	107	102	98	95	105	101	97	93	97	94	91	94	92	89	92	89	88	86					86			
3	102	95	90	86	100	93	89	85	91	87	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	82	77	85	80	77	83	79	76	81	78	75	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68					68			
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	71	67	64	63					63			
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58					58			
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54					54			
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51					51			
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	66212	66212	66212	66212
5°	65447	65815	64869	64390
10°	62490	63197	61288	60264
15°	56845	57866	55040	53604
20°	49809	50813	47826	46192
25°	43073	43980	41137	39486
30°	37158	37867	35252	33777
35°	31936	32685	29098	27559
40°	23007	24396	20417	18635
45°	13622	15219	11621	10094
50°	5646	6601	3991	3326
55°	956	1262	956	631
60°	395	373	384	318
65°	233	221	233	195
70°	160	160	160	144
75°	106	85	106	85
80°	63	63	63	63
85°	0	63	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 16195 cd/sqm



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	9.8
10°-20°	273.5	24.3
20°-30°	318.2	28.3
30°-40°	276.7	24.6
40°-50°	127.3	11.3
50°-60°	15.0	1.3
60°-70°	1.8	0.2
70°-80°	0.5	0.0
80°-90°	0.1	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°	702.4	62.5
0°-40°	979.1	87.1
0°-60°	1121.5	99.8
0°-90°	1123.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1208	1208	1208	1208	1208	
5°	1189	1196	1179	1170	1189	111
15°	1002	1020	970	944	1002	278
25°	712	727	680	653	712	327
35°	477	488	435	412	477	290
45°	176	196	150	130	176	138
55°	10	13	10	7	10	17
65°	2	2	2	2	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8
0.5°	1208.3	1209.2	1209.3	1208.3	1208.6	1207.9	1207.5	1207.7	1207.5	1207.6	1207.4
1°	1208.1	1209.3	1209.7	1209.2	1208.9	1207.9	1207.4	1207.0	1206.3	1206.2	1205.8
1.5°	1207.2	1208.9	1209.7	1209.5	1208.9	1207.6	1206.6	1205.7	1204.6	1204.1	1203.4
2°	1206.1	1208.2	1209.2	1209.4	1208.3	1207.0	1205.6	1203.9	1202.5	1201.5	1200.4
2.5°	1204.4	1207.0	1208.1	1208.9	1207.5	1205.6	1203.8	1201.5	1199.8	1198.4	1197.0
3°	1202.3	1205.2	1206.5	1208.0	1206.0	1204.0	1201.5	1199.0	1196.5	1194.8	1193.1
3.5°	1199.8	1203.0	1204.7	1206.6	1204.3	1201.9	1198.9	1195.9	1192.9	1190.5	1188.8
4°	1196.7	1200.3	1202.3	1204.7	1202.2	1199.3	1195.9	1192.0	1188.6	1185.9	1184.0
4.5°	1193.2	1197.3	1199.6	1202.3	1199.4	1196.1	1192.2	1188.0	1183.9	1180.8	1178.7
5°	1189.3	1193.7	1196.1	1199.6	1196.0	1192.6	1188.1	1183.4	1178.8	1175.2	1172.6
5.5°	1185.0	1189.8	1192.5	1196.2	1192.3	1188.3	1183.5	1178.5	1173.4	1169.2	1166.4
6°	1180.0	1185.2	1188.4	1192.6	1188.1	1183.7	1178.6	1172.5	1167.1	1162.6	1159.6
6.5°	1174.8	1180.5	1183.7	1188.3	1183.3	1178.7	1173.0	1166.4	1160.7	1156.0	1152.5
7°	1168.7	1174.9	1178.4	1183.7	1178.3	1173.3	1167.0	1160.0	1153.7	1148.7	1145.0
7.5°	1162.2	1168.9	1172.6	1178.4	1172.4	1166.8	1160.4	1153.3	1146.1	1140.6	1136.8
8°	1155.2	1162.2	1166.0	1172.6	1166.1	1159.9	1153.3	1145.5	1138.2	1132.3	1128.0
8.5°	1147.9	1155.3	1159.3	1166.3	1159.1	1153.1	1145.7	1137.3	1129.6	1123.5	1119.0
9°	1139.9	1147.8	1151.7	1159.2	1151.7	1145.4	1137.8	1128.8	1120.7	1114.0	1109.3
9.5°	1131.5	1139.6	1144.0	1151.7	1143.8	1137.1	1129.0	1120.2	1111.1	1104.2	1099.0
10°	1122.6	1130.8	1135.4	1143.7	1135.3	1128.4	1120.0	1110.0	1101.0	1093.7	1088.1
10.5°	1112.9	1122.1	1126.6	1135.3	1126.7	1119.4	1110.1	1099.9	1090.0	1081.9	1076.1
11°	1102.9	1112.3	1117.0	1126.4	1117.0	1109.4	1100.0	1088.8	1078.4	1069.2	1063.5
11.5°	1092.0	1101.6	1106.6	1116.9	1106.8	1098.9	1089.0	1077.3	1066.0	1056.8	1050.8
12°	1080.3	1090.6	1095.5	1106.4	1096.0	1087.6	1077.1	1064.7	1053.5	1044.1	1037.6
12.5°	1068.2	1078.7	1084.1	1095.3	1084.6	1075.8	1064.8	1052.3	1040.2	1030.5	1023.9
13°	1055.8	1066.5	1072.3	1083.8	1072.6	1063.6	1052.4	1039.3	1026.9	1016.6	1009.8
13.5°	1042.8	1053.9	1059.9	1071.9	1060.1	1050.7	1039.3	1025.9	1013.0	1002.4	995.2
14°	1029.4	1040.9	1046.8	1059.7	1046.9	1037.7	1025.8	1011.9	998.8	988.5	981.0
14.5°	1015.8	1027.4	1033.6	1046.0	1033.4	1023.8	1011.7	997.7	984.6	973.3	966.2
15°	1001.6	1013.6	1019.4	1033.1	1019.6	1009.7	997.6	983.5	969.8	958.8	951.3
15.5°	987.2	999.3	1005.1	1019.2	1005.6	995.5	983.5	969.0	955.1	943.9	936.1
16°	972.8	985.1	990.9	1004.9	991.0	981.0	969.1	954.0	940.3	929.1	921.2
16.5°	958.4	970.7	976.7	990.6	976.4	966.5	954.5	939.5	925.7	913.8	906.1
17°	943.9	955.9	961.7	976.1	961.8	951.7	939.2	924.5	910.5	898.6	890.7
17.5°	928.8	941.1	946.8	961.1	946.7	936.3	924.3	909.8	895.3	883.5	875.0
18°	913.8	926.0	931.8	946.1	931.6	921.3	909.2	894.6	879.9	868.0	859.2
18.5°	898.9	911.2	916.7	930.9	916.4	906.4	894.2	879.0	864.8	852.5	843.8
19°	883.8	896.2	901.2	915.5	901.4	891.3	878.7	863.8	849.2	836.9	828.4
19.5°	868.9	881.1	886.3	900.3	886.1	876.2	863.4	849.1	834.0	822.6	814.0
20°	853.8	865.8	870.9	885.1	871.0	860.8	848.6	833.6	819.8	808.2	799.5
20.5°	838.8	851.1	856.0	869.7	855.6	845.6	833.4	819.5	805.6	793.8	785.0
21°	824.0	836.3	841.4	855.1	840.6	830.8	819.2	805.3	791.4	779.4	770.5



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	780.9	792.5	797.2	810.0	797.5	788.0	776.8	762.7	748.4	736.4	727.4
23°	766.8	778.0	782.9	795.5	783.2	773.7	762.6	748.3	734.6	722.1	713.7
23.5°	753.0	763.9	768.7	781.1	769.0	759.4	748.1	734.5	720.6	708.5	699.9
24°	739.0	750.1	754.5	766.6	754.7	745.3	734.0	720.8	707.0	694.8	686.1
24.5°	725.6	736.4	740.4	752.4	740.9	730.8	720.3	707.2	693.3	681.5	672.7
25°	712.1	722.7	726.8	738.7	727.1	717.3	706.4	693.4	680.1	668.1	659.5
25.5°	698.8	709.2	713.3	725.1	713.3	704.1	693.0	680.3	667.1	654.9	646.7
26°	685.6	696.4	699.9	711.3	699.8	691.0	679.9	667.3	654.1	642.1	633.9
26.5°	672.8	682.8	686.8	697.5	686.6	677.4	666.8	654.2	641.1	629.3	620.7
27°	659.8	669.7	673.5	684.4	673.4	664.0	653.6	641.4	628.4	616.8	608.2
27.5°	647.0	657.0	660.5	671.3	660.3	651.7	641.0	628.6	615.8	604.4	595.9
28°	634.6	644.7	647.7	658.4	647.2	638.8	628.2	616.3	603.5	591.9	583.8
28.5°	622.1	632.2	635.1	645.6	634.8	626.0	615.8	603.9	591.2	579.9	571.8
29°	610.2	619.6	622.7	632.7	622.3	613.8	604.0	591.9	579.6	568.2	560.0
29.5°	598.6	607.8	610.4	620.5	610.2	601.8	591.9	580.3	568.0	556.9	548.8
30°	587.0	596.3	598.8	608.6	598.2	590.2	580.3	568.9	556.9	545.6	537.8
30.5°	575.7	584.8	587.4	596.9	586.7	578.6	569.0	557.5	545.7	534.6	527.1
31°	564.7	573.6	576.1	585.2	575.6	567.6	557.8	546.6	534.8	523.9	516.2
31.5°	553.6	562.4	564.9	574.0	564.5	556.7	546.9	535.9	524.2	513.4	506.0
32°	543.3	552.0	554.3	562.9	553.8	545.7	536.6	525.6	513.7	503.0	495.4
32.5°	532.9	541.4	543.6	552.0	543.0	535.2	525.8	514.7	503.3	492.4	485.2
33°	522.6	530.9	533.2	541.5	532.8	524.7	515.2	503.7	492.0	480.8	473.2
33.5°	511.7	520.0	522.1	530.8	522.1	514.3	503.9	491.2	479.3	467.4	459.2
34°	501.0	508.9	510.1	520.0	511.5	503.3	492.0	478.1	465.6	453.4	445.3
34.5°	488.9	496.9	497.2	508.4	500.3	491.8	479.0	464.5	450.2	439.0	430.1
35°	477.2	484.1	484.3	495.6	488.4	479.9	466.0	450.9	434.8	424.3	415.4
35.5°	464.2	470.9	471.4	483.0	476.1	467.7	452.8	436.7	418.7	408.0	401.0
36°	450.3	457.1	458.3	469.9	463.3	454.6	439.5	422.3	403.7	391.8	386.5
36.5°	435.1	442.9	445.2	457.1	449.2	440.3	425.6	407.4	388.8	375.9	370.9
37°	418.5	428.4	432.0	444.0	434.8	425.1	411.3	392.5	374.5	360.2	355.7
37.5°	401.4	413.5	418.4	430.6	419.6	409.9	396.7	376.9	360.0	344.7	339.8
38°	384.7	398.8	404.2	416.8	403.9	394.4	381.8	362.1	345.7	329.6	324.3
38.5°	368.9	383.3	389.7	403.1	387.8	377.9	366.5	347.2	330.8	315.1	307.7
39°	353.2	367.4	375.1	389.1	371.8	361.1	351.2	332.6	316.1	301.1	292.7
39.5°	337.3	351.6	360.4	374.2	356.4	345.0	335.2	317.9	300.8	286.2	277.0
40°	321.5	335.7	345.7	359.2	340.9	329.6	319.1	303.4	285.3	271.3	262.2
40.5°	305.7	319.9	331.0	344.3	325.5	314.1	302.7	288.9	270.2	257.0	246.9
41°	290.7	304.0	316.4	329.4	310.8	299.1	286.4	274.3	256.1	242.7	232.2
41.5°	275.2	288.5	300.9	314.5	296.1	283.4	270.4	259.4	242.2	228.6	217.4
42°	260.5	274.0	285.3	298.8	281.7	268.7	254.8	244.4	228.6	214.6	203.1
42.5°	245.4	259.8	270.0	283.3	267.0	254.2	239.7	229.6	215.5	201.2	189.6
43°	230.7	245.3	254.3	268.3	252.5	239.7	225.1	215.1	202.3	188.7	176.8
43.5°	216.0	230.2	238.5	253.1	238.1	224.9	210.6	200.6	188.8	175.5	163.9



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	175.7	188.5	194.0	208.9	196.3	183.3	170.2	159.0	149.9	138.6	129.2
45.5°	162.7	175.1	179.6	194.8	183.0	170.2	157.2	146.1	137.6	126.8	118.5
46°	150.6	162.0	165.9	180.7	170.4	157.3	144.9	133.6	125.7	115.7	108.4
46.5°	138.4	149.2	152.5	167.1	157.2	144.8	132.9	121.5	114.2	106.1	99.6
47°	126.7	136.9	139.3	153.5	144.3	133.5	121.2	111.1	103.6	96.6	90.8
47.5°	115.3	125.0	126.9	140.8	132.1	122.2	110.3	100.9	93.2	87.0	82.0
48°	104.6	113.2	115.1	128.0	120.6	111.1	100.4	90.6	82.6	77.5	73.1
48.5°	94.4	101.6	103.9	115.7	109.8	101.2	90.6	80.4	72.1	67.9	65.6
49°	84.7	90.8	93.2	104.6	99.0	91.3	80.9	70.2	63.0	60.1	58.4
49.5°	75.4	80.4	82.9	93.3	88.2	81.4	71.1	61.8	54.5	52.6	51.8
50°	66.2	70.5	73.1	83.0	77.4	71.5	62.8	54.2	46.8	46.0	45.6
50.5°	57.8	61.2	64.1	72.9	66.6	62.8	54.8	47.1	40.1	39.7	39.8
51°	49.8	52.8	55.7	63.9	57.7	54.4	47.7	40.6	34.2	34.2	34.4
51.5°	42.3	45.0	47.8	54.9	49.7	46.8	41.3	35.0	29.4	29.3	29.7
52°	35.4	38.2	40.4	47.0	42.1	39.6	35.3	29.6	25.2	25.0	25.4
52.5°	30.5	33.3	35.2	39.8	35.1	33.2	29.9	25.0	21.4	21.0	21.2
53°	25.6	28.4	30.0	34.7	29.0	27.4	24.8	20.9	18.2	17.6	17.6
53.5°	20.7	23.6	24.7	29.5	23.7	22.3	20.6	17.4	15.4	14.6	14.4
54°	15.9	18.7	19.5	24.4	19.1	18.0	16.8	14.3	12.8	12.9	12.7
54.5°	12.6	13.9	14.3	19.3	15.2	14.4	14.6	12.6	11.4	11.2	10.9
55°	10.0	10.9	11.2	14.2	13.2	12.6	12.4	10.9	10.0	9.4	9.1
55.5°	8.0	8.5	8.6	11.1	11.3	10.8	10.2	9.2	8.6	7.7	7.4
56°	6.7	6.9	6.8	8.5	9.3	9.0	8.1	7.6	7.3	6.0	5.5
56.5°	6.0	6.1	6.0	6.7	7.3	7.1	6.0	5.9	5.9	5.4	5.1
57°	5.5	5.5	5.4	5.8	5.3	5.3	5.4	5.4	5.4	5.1	4.8
57.5°	5.2	5.2	5.0	5.2	4.9	4.9	5.0	5.1	5.0	4.8	4.5
58°	4.8	4.8	4.7	4.8	4.6	4.6	4.7	4.8	4.7	4.5	4.2
58.5°	4.5	4.5	4.3	4.5	4.3	4.3	4.4	4.5	4.4	4.2	3.8
59°	4.2	4.2	4.1	4.2	3.9	3.9	4.1	4.2	4.1	3.8	3.6
59.5°	3.9	3.8	3.7	3.8	3.6	3.6	3.7	3.8	3.8	3.6	3.3
60°	3.6	3.6	3.5	3.6	3.4	3.4	3.5	3.5	3.5	3.3	3.1
60.5°	3.4	3.3	3.2	3.3	3.2	3.2	3.2	3.3	3.3	3.1	2.9
61°	3.1	3.1	3.0	3.1	2.9	3.0	3.0	3.1	3.1	2.9	2.7
61.5°	2.9	2.9	2.8	2.9	2.8	2.8	2.8	2.9	2.9	2.7	2.6
62°	2.7	2.7	2.6	2.7	2.6	2.6	2.7	2.7	2.7	2.6	2.3
62.5°	2.6	2.6	2.3	2.5	2.3	2.3	2.5	2.6	2.6	2.3	2.2
63°	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.0
63.5°	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.1	1.9
64°	2.1	2.0	1.9	2.0	1.9	1.9	2.0	2.1	2.1	2.0	1.8
64.5°	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.8	1.7
65°	1.8	1.8	1.7	1.8	1.7	1.7	1.8	1.8	1.8	1.7	1.6
65.5°	1.7	1.7	1.6	1.7	1.6	1.6	1.7	1.7	1.7	1.6	1.5
66°	1.6	1.6	1.5	1.6	1.5	1.5	1.6	1.6	1.6	1.5	1.4



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.2
68°	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2
68.5°	1.2	1.2	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.1
69°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.0
69.5°	1.1	1.1	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
70.5°	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	0.9	0.9
71°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.7
71.5°	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.7	0.7
72°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
72.5°	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6
73°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
73.5°	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
74.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4
75.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4
76°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
76.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
77°	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
79°	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
79.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
81°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
81.5°	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
82°	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
83°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
83.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
84°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
84.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
85°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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	0.0	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: P775749
CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-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: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1207.8	1207.8	1207.8	1207.8	1207.8	1207.8
0.5°	1205.2	1206.1	1206.1	1206.6	1207.5	1208.3
1°	1203.0	1204.3	1204.5	1205.5	1206.6	1208.1
1.5°	1200.1	1201.6	1202.2	1203.5	1205.5	1207.2
2°	1196.6	1198.7	1199.6	1201.4	1203.8	1206.1
2.5°	1192.7	1195.1	1196.2	1198.7	1201.7	1204.4
3°	1188.2	1191.1	1192.6	1195.4	1199.1	1202.3
3.5°	1183.2	1186.8	1188.4	1191.8	1195.9	1199.8
4°	1177.8	1181.5	1183.8	1187.5	1192.2	1196.7
4.5°	1171.9	1176.1	1178.6	1182.9	1188.2	1193.2
5°	1165.6	1170.1	1172.9	1177.6	1183.7	1189.3
5.5°	1158.5	1163.8	1166.8	1172.0	1178.8	1185.0
6°	1151.4	1157.1	1160.4	1165.9	1173.5	1180.0
6.5°	1143.6	1149.5	1153.4	1159.5	1167.5	1174.8
7°	1135.5	1141.7	1146.0	1152.6	1161.0	1168.7
7.5°	1127.0	1133.3	1137.9	1144.9	1154.0	1162.2
8°	1117.5	1124.4	1129.2	1136.9	1146.4	1155.2
8.5°	1107.6	1115.0	1120.4	1128.2	1138.5	1147.9
9°	1097.2	1104.8	1110.5	1119.0	1129.8	1139.9
9.5°	1086.1	1094.4	1100.2	1109.4	1120.8	1131.5
10°	1074.3	1082.6	1088.8	1099.2	1111.5	1122.6
10.5°	1061.5	1070.8	1077.4	1088.2	1101.3	1112.9
11°	1048.3	1058.4	1065.2	1076.2	1090.4	1102.9
11.5°	1035.2	1044.9	1053.0	1064.1	1078.7	1092.0
12°	1021.4	1031.5	1039.1	1051.7	1066.5	1080.3
12.5°	1007.3	1017.5	1025.5	1038.5	1054.0	1068.2
13°	993.1	1003.4	1012.1	1025.3	1041.4	1055.8
13.5°	978.4	988.9	998.1	1011.1	1027.7	1042.8
14°	963.7	974.6	983.2	996.8	1014.1	1029.4
14.5°	948.5	959.8	968.5	982.9	999.9	1015.8
15°	933.9	944.5	953.7	968.1	985.7	1001.6
15.5°	918.5	929.4	939.0	953.4	971.2	987.2
16°	903.1	914.1	923.7	937.9	956.5	972.8
16.5°	887.8	899.0	908.7	923.4	941.8	958.4
17°	872.2	883.8	893.4	908.4	927.2	943.9
17.5°	857.0	868.2	878.0	893.1	912.1	928.8
18°	840.8	852.5	862.2	877.5	897.0	913.8
18.5°	825.7	836.7	846.8	862.0	881.8	898.9
19°	810.8	821.6	831.3	847.4	866.6	883.8
19.5°	795.9	806.8	816.6	832.7	851.9	868.9
20°	781.0	791.8	802.2	817.6	836.9	853.8
20.5°	766.1	777.3	787.6	802.9	822.3	838.8
21°	753.0	762.3	772.6	788.1	807.3	824.0



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	710.9	720.0	730.4	746.1	764.5	780.9
23°	697.2	706.2	716.3	731.8	750.5	766.8
23.5°	683.6	692.6	703.0	718.5	736.8	753.0
24°	670.6	679.3	689.7	704.6	723.3	739.0
24.5°	657.1	666.1	676.3	691.6	709.5	725.6
25°	644.4	652.8	663.1	677.9	696.3	712.1
25.5°	631.3	640.1	650.4	665.2	683.2	698.8
26°	618.6	627.4	637.8	652.4	670.3	685.6
26.5°	606.2	615.0	625.3	639.8	657.4	672.8
27°	593.7	602.6	612.7	627.3	644.7	659.8
27.5°	581.5	590.5	600.3	614.8	632.1	647.0
28°	569.7	578.4	588.3	602.3	619.7	634.6
28.5°	558.3	566.6	576.7	590.5	607.6	622.1
29°	547.2	555.4	565.4	579.2	595.9	610.2
29.5°	535.8	544.4	553.8	567.7	584.1	598.6
30°	524.9	533.6	543.1	556.6	573.0	587.0
30.5°	514.5	522.9	532.3	545.5	561.9	575.7
31°	504.3	512.5	522.1	535.2	551.1	564.7
31.5°	493.8	502.1	511.8	524.8	540.2	553.6
32°	483.3	491.9	501.3	514.4	529.8	543.3
32.5°	471.7	481.7	491.0	504.3	519.7	532.9
33°	458.8	469.6	479.5	492.8	509.5	522.6
33.5°	444.8	456.3	466.7	480.4	498.2	511.7
34°	429.5	442.2	453.0	467.1	485.8	501.0
34.5°	414.4	427.1	437.9	454.2	473.2	488.9
35°	399.5	411.8	422.7	440.2	460.0	477.2
35.5°	384.6	395.7	407.4	426.4	446.4	464.2
36°	369.4	378.1	392.6	412.0	432.2	450.3
36.5°	353.5	363.2	383.2	397.3	417.8	435.1
37°	337.7	348.5	367.6	382.7	403.1	418.5
37.5°	322.2	333.8	351.8	367.3	387.6	401.4
38°	306.1	318.9	336.0	352.0	371.4	384.7
38.5°	290.6	304.5	320.2	336.6	355.2	368.9
39°	275.6	289.8	305.4	321.3	339.0	353.2
39.5°	261.0	275.1	289.9	305.9	322.8	337.3
40°	246.3	260.4	274.6	290.8	306.5	321.5
40.5°	232.2	246.0	259.4	275.9	290.1	305.7
41°	218.2	231.8	244.5	260.9	273.8	290.7
41.5°	203.9	217.6	230.2	245.6	257.5	275.2
42°	189.9	204.6	216.4	231.2	242.4	260.5
42.5°	177.1	191.1	203.1	216.1	227.2	245.4
43°	164.0	179.0	189.9	201.4	213.3	230.7
43.5°	151.7	166.3	176.6	186.4	198.9	216.0



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	118.1	130.2	138.1	145.2	159.7	175.7
45.5°	108.1	118.9	125.9	132.9	147.3	162.7
46°	99.2	107.7	114.2	120.9	135.5	150.6
46.5°	90.2	96.9	102.8	109.7	124.1	138.4
47°	81.3	87.0	92.1	99.2	113.1	126.7
47.5°	72.3	77.6	82.0	89.0	102.5	115.3
48°	64.7	68.6	72.5	79.5	92.3	104.6
48.5°	57.6	60.2	63.6	70.7	82.6	94.4
49°	50.6	52.7	55.1	62.6	73.4	84.7
49.5°	44.5	45.6	47.5	55.1	64.8	75.4
50°	38.8	39.0	40.6	48.0	56.7	66.2
50.5°	33.5	34.8	36.1	41.6	49.4	57.8
51°	28.7	30.4	31.7	35.7	42.7	49.8
51.5°	24.2	26.1	27.2	31.2	36.4	42.3
52°	20.4	21.9	22.7	26.9	31.7	35.4
52.5°	16.8	17.5	18.2	22.4	27.0	30.5
53°	13.8	14.6	15.4	18.0	22.4	25.6
53.5°	12.0	11.9	12.7	14.8	17.8	20.7
54°	10.4	9.8	10.4	11.9	14.3	15.9
54.5°	8.7	8.0	8.5	9.6	11.4	12.6
55°	7.0	6.6	6.9	7.7	9.1	10.0
55.5°	5.3	5.7	5.9	6.4	7.3	8.0
56°	4.9	5.1	5.3	5.7	6.3	6.7
56.5°	4.6	4.8	4.9	5.2	5.7	6.0
57°	4.3	4.5	4.6	4.9	5.2	5.5
57.5°	4.1	4.2	4.3	4.5	4.9	5.2
58°	3.7	3.9	4.1	4.2	4.6	4.8
58.5°	3.4	3.6	3.7	3.9	4.3	4.5
59°	3.2	3.4	3.5	3.6	3.9	4.2
59.5°	3.0	3.1	3.2	3.4	3.7	3.9
60°	2.8	2.9	3.0	3.1	3.4	3.6
60.5°	2.6	2.7	2.8	2.9	3.2	3.4
61°	2.5	2.6	2.6	2.7	2.9	3.1
61.5°	2.2	2.3	2.5	2.6	2.8	2.9
62°	2.1	2.2	2.2	2.3	2.6	2.7
62.5°	2.0	2.0	2.1	2.2	2.3	2.6
63°	1.9	1.9	2.0	2.0	2.2	2.3
63.5°	1.8	1.8	1.8	1.9	2.1	2.2
64°	1.7	1.7	1.7	1.8	2.0	2.1
64.5°	1.6	1.6	1.6	1.7	1.8	1.9
65°	1.5	1.5	1.5	1.6	1.7	1.8
65.5°	1.4	1.4	1.5	1.5	1.6	1.7
66°	1.3	1.4	1.4	1.4	1.5	1.6



TEST NUMBER: P775749

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.1	1.1	1.2	1.2	1.3	1.4
68°	1.1	1.1	1.1	1.1	1.2	1.3
68.5°	1.0	1.0	1.0	1.1	1.2	1.2
69°	0.9	1.0	1.0	1.0	1.1	1.1
69.5°	0.9	0.9	0.9	1.0	1.0	1.1
70°	0.7	0.9	0.9	0.9	1.0	1.0
70.5°	0.7	0.7	0.7	0.9	0.9	1.0
71°	0.7	0.7	0.7	0.7	0.9	0.9
71.5°	0.6	0.6	0.6	0.7	0.7	0.9
72°	0.6	0.6	0.6	0.6	0.7	0.7
72.5°	0.5	0.6	0.6	0.6	0.6	0.7
73°	0.5	0.5	0.5	0.6	0.6	0.6
73.5°	0.5	0.5	0.5	0.5	0.6	0.6
74°	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.4	0.4	0.4	0.5	0.5	0.5
75°	0.4	0.4	0.4	0.4	0.4	0.5
75.5°	0.4	0.4	0.4	0.4	0.4	0.4
76°	0.3	0.4	0.4	0.4	0.4	0.4
76.5°	0.3	0.3	0.3	0.3	0.4	0.4
77°	0.3	0.3	0.3	0.3	0.3	0.4
77.5°	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.2	0.2	0.2	0.2	0.3	0.3
79°	0.2	0.2	0.2	0.2	0.2	0.3
79.5°	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2
80.5°	0.2	0.2	0.2	0.2	0.2	0.2
81°	0.1	0.2	0.2	0.2	0.2	0.2
81.5°	0.1	0.1	0.1	0.1	0.1	0.2
82°	0.1	0.1	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.1	0.1	0.1
83°	0.1	0.1	0.1	0.1	0.1	0.1
83.5°	0.1	0.1	0.1	0.1	0.1	0.1
84°	0.1	0.1	0.1	0.1	0.1	0.1
84.5°	0.1	0.1	0.1	0.1	0.0	0.1
85°	0.0	0.0	0.1	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	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: P775749
CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-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°	809.6	821.1	826.6	840.4	826.0	816.5	805.1	791.1	777.1	765.0	756.1
22°	794.9	806.4	811.5	825.1	811.8	802.3	791.0	776.9	762.9	750.4	741.7



44°	202.4	216.0	223.7	238.1	223.8	210.1	196.6	186.3	175.5	162.9	151.8
44.5°	189.2	202.2	208.7	223.2	209.8	196.5	183.3	172.2	162.5	150.3	140.2



66.5°	1.5	1.5	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.4
67°	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.5	1.4	1.3



89°	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

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

Scaled Data Report





21.5°	739.1	748.1	758.7	774.1	793.0	809.6
22°	724.8	733.8	744.1	759.6	778.8	794.9



44°	139.8	154.0	163.5	172.3	185.2	202.4
44.5°	128.8	141.8	150.7	158.1	172.2	189.2



66.5°	1.2	1.3	1.3	1.4	1.5	1.5
67°	1.2	1.2	1.2	1.3	1.4	1.4

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)