

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: P775747

Luminaire Tested: HCDJBL510CSD-HCD62TRH-1000lm-3500K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775747
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-3500K
Description: 6 INCH ROUND NARROW HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

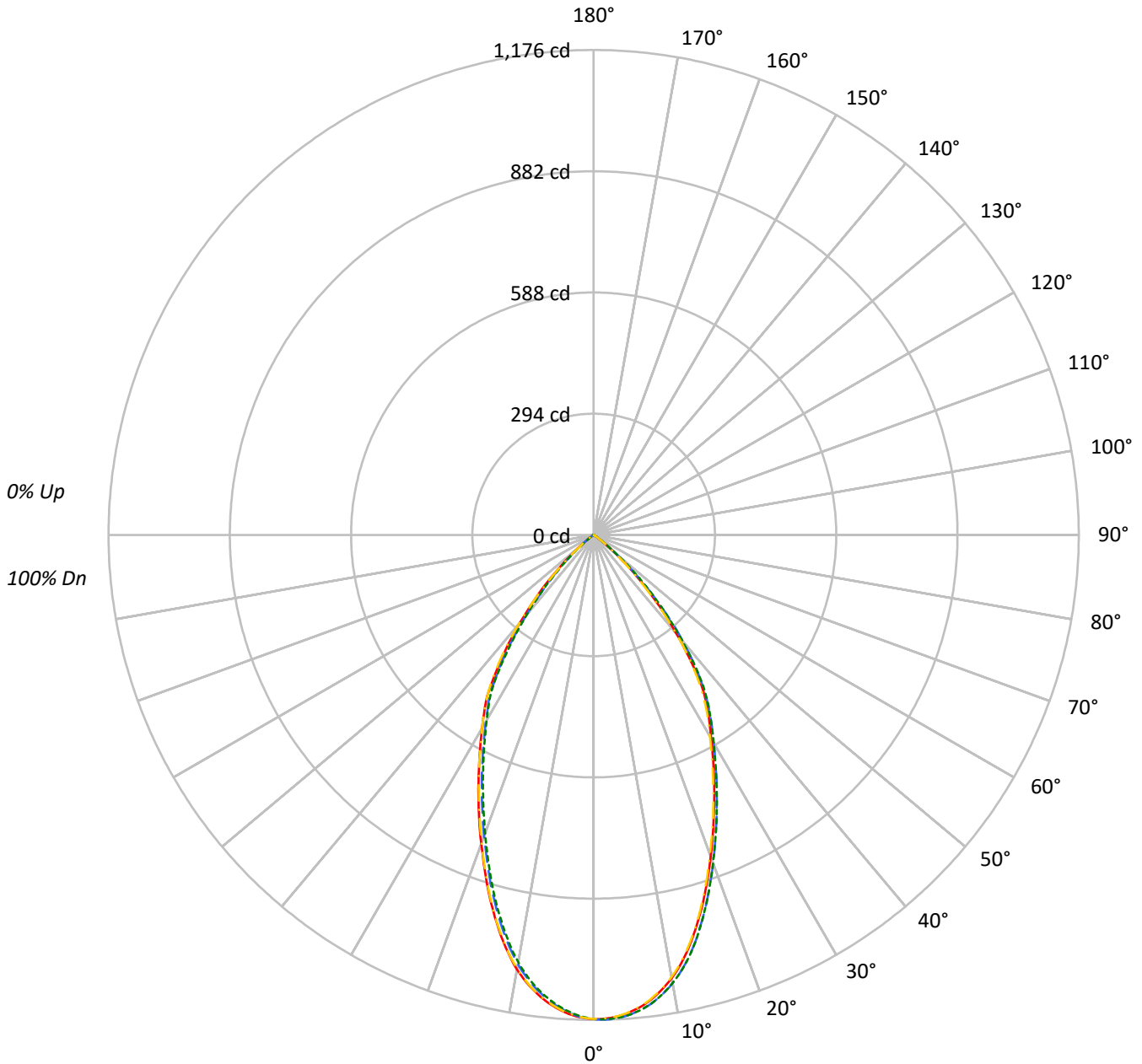
Lumens per Lamp: N/A
Luminaire Lumens: 1092.1 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.82 / 0.91
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (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



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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	64342	64342	64342	64342
5°	63598	63955	63036	62574
10°	60726	61416	59557	58566
15°	55239	56232	53485	52095
20°	48403	49378	46478	44891
25°	41857	42740	39976	38373
30°	36107	36797	34258	32822
35°	31032	31762	28282	26783
40°	22356	23709	19844	18105
45°	13242	14792	11296	9807
50°	5484	6413	3880	3232
55°	927	1223	927	612
60°	384	362	373	307
65°	233	221	233	195
70°	144	144	144	128
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: 15738 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.5	9.8
10°-20°	265.8	24.3
20°-30°	309.2	28.3
30°-40°	268.9	24.6
40°-50°	123.7	11.3
50°-60°	14.6	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°	682.6	62.5
0°-40°	951.5	87.1
0°-60°	1089.8	99.8
0°-90°	1092.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1092.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1174	1174	1174	1174	1174	
5°	1156	1162	1146	1137	1156	108
15°	973	991	942	918	973	271
25°	692	707	661	634	692	318
35°	464	475	423	400	464	282
45°	171	191	146	126	171	134
55°	10	13	10	6	10	16
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7
0.5°	1174.3	1175.1	1175.2	1174.3	1174.5	1173.8	1173.4	1173.6	1173.4	1173.5	1173.3
1°	1174.0	1175.2	1175.6	1175.1	1174.8	1173.8	1173.3	1172.9	1172.3	1172.2	1171.8
1.5°	1173.1	1174.8	1175.6	1175.4	1174.8	1173.5	1172.6	1171.7	1170.6	1170.1	1169.5
2°	1172.1	1174.1	1175.1	1175.3	1174.3	1172.9	1171.6	1169.9	1168.6	1167.6	1166.6
2.5°	1170.4	1172.9	1174.0	1174.8	1173.4	1171.6	1169.8	1167.6	1166.0	1164.6	1163.3
3°	1168.3	1171.2	1172.5	1173.9	1172.0	1170.0	1167.6	1165.1	1162.8	1161.1	1159.4
3.5°	1166.0	1169.1	1170.7	1172.6	1170.3	1168.0	1165.0	1162.1	1159.2	1156.9	1155.3
4°	1163.0	1166.5	1168.3	1170.7	1168.2	1165.4	1162.1	1158.4	1155.1	1152.5	1150.6
4.5°	1159.5	1163.5	1165.8	1168.3	1165.5	1162.3	1158.6	1154.5	1150.5	1147.5	1145.4
5°	1155.7	1160.1	1162.3	1165.8	1162.2	1158.9	1154.6	1150.0	1145.5	1142.0	1139.5
5.5°	1151.6	1156.2	1158.8	1162.4	1158.7	1154.8	1150.1	1145.2	1140.3	1136.2	1133.5
6°	1146.7	1151.8	1154.9	1158.9	1154.6	1150.3	1145.3	1139.4	1134.2	1129.8	1126.9
6.5°	1141.6	1147.2	1150.3	1154.8	1149.9	1145.4	1140.0	1133.5	1127.9	1123.4	1120.0
7°	1135.7	1141.7	1145.1	1150.3	1145.0	1140.2	1134.0	1127.3	1121.2	1116.3	1112.7
7.5°	1129.4	1135.9	1139.5	1145.1	1139.3	1133.8	1127.6	1120.8	1113.7	1108.5	1104.7
8°	1122.6	1129.4	1133.1	1139.5	1133.2	1127.2	1120.8	1113.2	1106.1	1100.4	1096.2
8.5°	1115.5	1122.8	1126.6	1133.4	1126.4	1120.6	1113.4	1105.2	1097.8	1091.8	1087.4
9°	1107.7	1115.4	1119.2	1126.5	1119.2	1113.1	1105.7	1097.0	1089.1	1082.5	1078.0
9.5°	1099.5	1107.4	1111.8	1119.2	1111.6	1105.0	1097.2	1088.6	1079.7	1073.0	1068.0
10°	1090.9	1098.9	1103.4	1111.5	1103.3	1096.5	1088.5	1078.7	1069.9	1062.9	1057.4
10.5°	1081.5	1090.4	1094.8	1103.3	1094.9	1087.8	1078.8	1068.9	1059.2	1051.4	1045.8
11°	1071.8	1080.9	1085.4	1094.7	1085.4	1078.1	1069.0	1058.1	1047.9	1039.0	1033.5
11.5°	1061.2	1070.5	1075.4	1085.3	1075.6	1067.9	1058.3	1046.9	1035.9	1027.0	1021.2
12°	1049.8	1059.9	1064.6	1075.2	1065.0	1057.0	1046.7	1034.7	1023.8	1014.7	1008.4
12.5°	1038.1	1048.2	1053.5	1064.4	1054.1	1045.4	1034.8	1022.7	1010.8	1001.4	995.0
13°	1026.0	1036.4	1042.0	1053.2	1042.3	1033.6	1022.8	1010.0	997.9	987.9	981.3
13.5°	1013.4	1024.2	1030.0	1041.6	1030.2	1021.1	1010.0	997.0	984.4	974.2	967.1
14°	1000.4	1011.6	1017.3	1029.8	1017.4	1008.5	996.9	983.4	970.6	960.6	953.3
14.5°	987.1	998.4	1004.4	1016.5	1004.2	994.9	983.2	969.6	956.9	945.9	938.9
15°	973.3	985.0	990.6	1004.0	990.8	981.2	969.5	955.7	942.4	931.8	924.4
15.5°	959.3	971.2	976.7	990.4	977.3	967.4	955.7	941.6	928.1	917.3	909.7
16°	945.4	957.3	963.0	976.5	963.1	953.3	941.7	927.1	913.7	902.9	895.2
16.5°	931.4	943.3	949.2	962.7	948.9	939.2	927.5	913.0	899.5	888.0	880.6
17°	917.3	929.0	934.6	948.6	934.7	924.8	912.7	898.4	884.8	873.2	865.6
17.5°	902.6	914.6	920.1	934.0	920.0	909.9	898.2	884.1	870.0	858.6	850.3
18°	888.0	899.9	905.6	919.4	905.4	895.3	883.6	869.4	855.1	843.5	835.0
18.5°	873.5	885.5	890.8	904.6	890.5	880.8	869.0	854.2	840.4	828.5	820.0
19°	858.8	870.9	875.8	889.7	875.9	866.2	854.0	839.4	825.3	813.3	805.0
19.5°	844.4	856.2	861.3	874.9	861.1	851.5	839.0	825.1	810.4	799.3	791.1
20°	829.7	841.4	846.3	860.2	846.4	836.5	824.6	810.1	796.7	785.4	777.0
20.5°	815.1	827.1	831.9	845.1	831.5	821.7	809.9	796.3	782.9	771.4	762.9
21°	800.8	812.7	817.7	831.0	816.9	807.3	796.1	782.6	769.1	757.4	748.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	758.8	770.1	774.7	787.1	775.0	765.8	754.9	741.2	727.3	715.6	706.9
23°	745.2	756.0	760.8	773.0	761.1	751.9	741.1	727.2	713.9	701.7	693.5
23.5°	731.8	742.4	747.0	759.0	747.3	738.0	727.0	713.8	700.3	688.5	680.2
24°	718.1	729.0	733.2	744.9	733.4	724.3	713.3	700.5	687.0	675.2	666.7
24.5°	705.2	715.6	719.6	731.2	720.0	710.2	700.0	687.2	673.8	662.3	653.8
25°	692.0	702.4	706.3	717.9	706.6	697.1	686.5	673.9	660.9	649.3	640.9
25.5°	679.0	689.2	693.1	704.6	693.1	684.2	673.4	661.1	648.3	636.5	628.5
26°	666.3	676.8	680.2	691.3	680.1	671.5	660.7	648.5	635.6	624.0	616.0
26.5°	653.9	663.5	667.4	677.8	667.2	658.3	648.0	635.7	623.0	611.6	603.2
27°	641.2	650.9	654.5	665.1	654.4	645.3	635.2	623.3	610.6	599.4	591.1
27.5°	628.8	638.4	641.8	652.4	641.6	633.3	622.9	610.9	598.4	587.3	579.0
28°	616.7	626.5	629.4	639.9	629.0	620.8	610.4	598.9	586.5	575.2	567.3
28.5°	604.5	614.4	617.2	627.4	616.9	608.4	598.4	586.8	574.5	563.5	555.6
29°	593.0	602.2	605.2	614.9	604.7	596.5	586.9	575.2	563.3	552.2	544.2
29.5°	581.7	590.6	593.1	603.0	593.0	584.8	575.2	563.9	552.0	541.2	533.3
30°	570.4	579.5	581.9	591.5	581.3	573.6	563.9	552.8	541.2	530.2	522.7
30.5°	559.5	568.3	570.9	580.1	570.1	562.3	552.9	541.7	530.3	519.6	512.2
31°	548.8	557.4	559.9	568.7	559.4	551.6	542.1	531.2	519.7	509.1	501.6
31.5°	538.0	546.5	549.0	557.8	548.6	541.0	531.5	520.8	509.4	498.9	491.7
32°	528.0	536.5	538.6	547.0	538.2	530.3	521.4	510.8	499.3	488.8	481.4
32.5°	517.9	526.1	528.3	536.5	527.6	520.1	511.0	500.2	489.1	478.5	471.5
33°	507.9	515.9	518.1	526.2	517.8	509.9	500.7	489.5	478.1	467.2	459.9
33.5°	497.3	505.4	507.3	515.8	507.3	499.8	489.7	477.4	465.8	454.2	446.2
34°	486.8	494.6	495.7	505.4	497.1	489.1	478.1	464.6	452.4	440.6	432.7
34.5°	475.1	482.9	483.2	494.1	486.2	477.9	465.5	451.4	437.5	426.6	418.0
35°	463.7	470.4	470.7	481.6	474.6	466.4	452.8	438.2	422.6	412.3	403.7
35.5°	451.1	457.6	458.1	469.4	462.7	454.5	440.0	424.3	406.9	396.5	389.7
36°	437.6	444.2	445.4	456.7	450.2	441.7	427.1	410.3	392.3	380.7	375.6
36.5°	422.8	430.4	432.6	444.2	436.6	427.9	413.6	395.9	377.8	365.3	360.4
37°	406.7	416.4	419.8	431.5	422.6	413.1	399.7	381.4	363.9	350.0	345.7
37.5°	390.0	401.8	406.6	418.4	407.8	398.3	385.5	366.3	349.8	335.0	330.2
38°	373.9	387.5	392.8	405.1	392.5	383.3	371.1	351.9	335.9	320.3	315.1
38.5°	358.5	372.5	378.7	391.7	376.9	367.2	356.2	337.4	321.4	306.2	299.1
39°	343.2	357.1	364.5	378.1	361.3	350.9	341.3	323.2	307.1	292.6	284.4
39.5°	327.8	341.6	350.2	363.6	346.3	335.2	325.8	308.9	292.3	278.1	269.2
40°	312.4	326.2	335.9	349.1	331.3	320.3	310.1	294.8	277.3	263.6	254.8
40.5°	297.1	310.9	321.6	334.6	316.4	305.3	294.2	280.7	262.6	249.7	239.9
41°	282.5	295.4	307.4	320.1	302.1	290.7	278.3	266.5	248.9	235.8	225.7
41.5°	267.5	280.4	292.4	305.6	287.8	275.4	262.8	252.1	235.3	222.2	211.3
42°	253.2	266.3	277.3	290.4	273.8	261.1	247.7	237.5	222.2	208.6	197.4
42.5°	238.4	252.4	262.4	275.3	259.5	247.0	232.9	223.1	209.4	195.5	184.2
43°	224.2	238.3	247.1	260.7	245.4	232.9	218.7	209.0	196.6	183.4	171.8
43.5°	209.9	223.7	231.8	246.0	231.4	218.5	204.7	194.9	183.5	170.6	159.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	170.8	183.2	188.5	203.0	190.8	178.1	165.4	154.5	145.7	134.7	125.6
45.5°	158.1	170.1	174.5	189.3	177.8	165.4	152.7	142.0	133.7	123.2	115.1
46°	146.3	157.4	161.2	175.6	165.6	152.8	140.8	129.8	122.2	112.4	105.4
46.5°	134.5	145.0	148.2	162.4	152.7	140.7	129.1	118.0	111.0	103.1	96.8
47°	123.1	133.1	135.3	149.2	140.2	129.7	117.8	108.0	100.7	93.9	88.3
47.5°	112.0	121.4	123.3	136.8	128.4	118.8	107.1	98.0	90.6	84.6	79.7
48°	101.7	110.0	111.8	124.3	117.2	108.0	97.6	88.1	80.3	75.3	71.1
48.5°	91.7	98.8	100.9	112.4	106.7	98.3	88.1	78.1	70.0	66.0	63.7
49°	82.3	88.3	90.6	101.7	96.2	88.7	78.6	68.2	61.2	58.4	56.8
49.5°	73.3	78.1	80.5	90.7	85.7	79.1	69.1	60.1	53.0	51.1	50.4
50°	64.3	68.5	71.1	80.6	75.2	69.5	61.0	52.6	45.5	44.7	44.4
50.5°	56.2	59.5	62.3	70.9	64.8	61.0	53.3	45.8	39.0	38.5	38.7
51°	48.4	51.3	54.1	62.1	56.1	52.8	46.3	39.5	33.3	33.3	33.5
51.5°	41.1	43.7	46.4	53.4	48.3	45.5	40.1	34.0	28.6	28.5	28.9
52°	34.4	37.1	39.3	45.7	40.9	38.4	34.3	28.8	24.5	24.2	24.7
52.5°	29.6	32.3	34.2	38.7	34.1	32.2	29.0	24.2	20.8	20.4	20.6
53°	24.9	27.6	29.1	33.7	28.2	26.6	24.1	20.3	17.7	17.1	17.1
53.5°	20.1	22.9	24.0	28.7	23.0	21.7	20.0	16.9	14.9	14.2	14.0
54°	15.4	18.1	19.0	23.7	18.5	17.5	16.4	13.9	12.4	12.5	12.3
54.5°	12.2	13.5	13.9	18.8	14.8	14.0	14.2	12.2	11.1	10.9	10.6
55°	9.7	10.6	10.9	13.8	12.8	12.2	12.0	10.6	9.7	9.1	8.8
55.5°	7.8	8.3	8.4	10.8	11.0	10.5	9.9	8.9	8.4	7.5	7.1
56°	6.5	6.7	6.6	8.3	9.0	8.7	7.9	7.4	7.0	5.8	5.4
56.5°	5.8	5.9	5.8	6.5	7.0	6.9	5.8	5.7	5.7	5.3	5.0
57°	5.4	5.4	5.3	5.6	5.2	5.2	5.3	5.3	5.3	5.0	4.7
57.5°	5.1	5.1	4.9	5.1	4.8	4.8	4.9	5.0	4.9	4.7	4.4
58°	4.7	4.7	4.6	4.7	4.5	4.5	4.6	4.7	4.6	4.4	4.0
58.5°	4.4	4.4	4.1	4.4	4.1	4.1	4.2	4.4	4.2	4.0	3.7
59°	4.0	4.0	3.9	4.0	3.8	3.8	3.9	4.0	3.9	3.7	3.5
59.5°	3.8	3.7	3.6	3.7	3.5	3.5	3.6	3.7	3.7	3.5	3.2
60°	3.5	3.5	3.4	3.5	3.3	3.3	3.4	3.4	3.4	3.2	3.0
60.5°	3.3	3.2	3.1	3.2	3.1	3.1	3.1	3.2	3.2	3.0	2.8
61°	3.0	3.0	2.9	3.0	2.8	2.9	2.9	3.0	3.0	2.8	2.6
61.5°	2.8	2.8	2.7	2.8	2.7	2.7	2.7	2.8	2.8	2.6	2.5
62°	2.6	2.6	2.5	2.6	2.5	2.5	2.6	2.6	2.6	2.5	2.3
62.5°	2.5	2.5	2.3	2.4	2.3	2.3	2.4	2.5	2.5	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	1.3



TEST NUMBER: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.1
68°	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.1
68.5°	1.1	1.1	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.0
69°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	0.9
69.5°	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8
70.5°	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.8
71°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7
71.5°	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	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: P775747
CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

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: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1173.7	1173.7	1173.7	1173.7	1173.7	1173.7
0.5°	1171.2	1172.1	1172.1	1172.6	1173.4	1174.3
1°	1169.1	1170.3	1170.5	1171.5	1172.6	1174.0
1.5°	1166.3	1167.7	1168.2	1169.6	1171.5	1173.1
2°	1162.9	1164.9	1165.8	1167.5	1169.8	1172.1
2.5°	1159.0	1161.4	1162.4	1164.9	1167.8	1170.4
3°	1154.7	1157.5	1158.9	1161.7	1165.2	1168.3
3.5°	1149.8	1153.3	1154.9	1158.2	1162.1	1166.0
4°	1144.6	1148.1	1150.4	1154.0	1158.6	1163.0
4.5°	1138.8	1143.0	1145.3	1149.5	1154.7	1159.5
5°	1132.7	1137.1	1139.9	1144.4	1150.3	1155.7
5.5°	1125.9	1130.9	1133.8	1138.9	1145.5	1151.6
6°	1118.9	1124.4	1127.6	1133.0	1140.4	1146.7
6.5°	1111.4	1117.1	1120.9	1126.8	1134.6	1141.6
7°	1103.5	1109.5	1113.6	1120.1	1128.2	1135.7
7.5°	1095.2	1101.3	1105.8	1112.6	1121.4	1129.4
8°	1086.0	1092.7	1097.4	1104.8	1114.0	1122.6
8.5°	1076.3	1083.6	1088.8	1096.3	1106.4	1115.5
9°	1066.3	1073.6	1079.1	1087.4	1097.9	1107.7
9.5°	1055.5	1063.5	1069.2	1078.1	1089.2	1099.5
10°	1044.0	1052.1	1058.1	1068.1	1080.2	1090.9
10.5°	1031.6	1040.6	1047.0	1057.5	1070.2	1081.5
11°	1018.7	1028.6	1035.2	1045.9	1059.6	1071.8
11.5°	1006.0	1015.4	1023.3	1034.1	1048.2	1061.2
12°	992.6	1002.4	1009.8	1022.0	1036.4	1049.8
12.5°	978.9	988.8	996.5	1009.2	1024.3	1038.1
13°	965.0	975.1	983.6	996.3	1012.0	1026.0
13.5°	950.8	961.0	969.9	982.6	998.7	1013.4
14°	936.5	947.1	955.5	968.7	985.5	1000.4
14.5°	921.7	932.7	941.2	955.2	971.7	987.1
15°	907.5	917.9	926.8	940.8	957.9	973.3
15.5°	892.6	903.2	912.5	926.5	943.8	959.3
16°	877.6	888.4	897.7	911.5	929.5	945.4
16.5°	862.8	873.6	883.1	897.4	915.2	931.4
17°	847.6	858.8	868.2	882.8	901.0	917.3
17.5°	832.8	843.7	853.2	867.9	886.4	902.6
18°	817.1	828.5	837.9	852.7	871.7	888.0
18.5°	802.5	813.1	822.9	837.7	857.0	873.5
19°	787.9	798.4	807.8	823.5	842.1	858.8
19.5°	773.4	784.0	793.5	809.2	827.8	844.4
20°	758.9	769.5	779.6	794.6	813.3	829.7
20.5°	744.5	755.4	765.4	780.3	799.1	815.1
21°	731.8	740.8	750.9	765.9	784.5	800.8

TEST NUMBER: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	690.9	699.7	709.8	725.0	743.0	758.8
23°	677.5	686.3	696.1	711.2	729.3	745.2
23.5°	664.3	673.0	683.2	698.2	716.0	731.8
24°	651.7	660.2	670.2	684.7	702.9	718.1
24.5°	638.5	647.3	657.2	672.1	689.5	705.2
25°	626.2	634.4	644.4	658.7	676.7	692.0
25.5°	613.4	622.0	632.1	646.4	663.9	679.0
26°	601.1	609.7	619.8	634.0	651.4	666.3
26.5°	589.1	597.7	607.6	621.7	638.8	653.9
27°	577.0	585.6	595.4	609.6	626.5	641.2
27.5°	565.1	573.9	583.4	597.5	614.3	628.8
28°	553.7	562.0	571.7	585.3	602.3	616.7
28.5°	542.6	550.7	560.4	573.9	590.4	604.5
29°	531.8	539.8	549.4	562.9	579.0	593.0
29.5°	520.7	529.0	538.2	551.7	567.6	581.7
30°	510.1	518.5	527.8	540.9	556.9	570.4
30.5°	500.0	508.2	517.3	530.1	546.1	559.5
31°	490.0	498.0	507.3	520.1	535.5	548.8
31.5°	479.9	488.0	497.4	510.0	525.0	538.0
32°	469.6	478.0	487.1	499.9	514.9	528.0
32.5°	458.4	468.1	477.2	490.0	505.1	517.9
33°	445.9	456.4	466.0	478.9	495.1	507.9
33.5°	432.2	443.4	453.6	466.8	484.1	497.3
34°	417.4	429.7	440.2	454.0	472.1	486.8
34.5°	402.7	415.0	425.6	441.4	459.9	475.1
35°	388.3	400.2	410.8	427.8	447.0	463.7
35.5°	373.8	384.5	395.9	414.4	433.8	451.1
36°	358.9	367.4	381.5	400.4	420.0	437.6
36.5°	343.5	352.9	372.4	386.1	406.0	422.8
37°	328.2	338.6	357.2	371.9	391.7	406.7
37.5°	313.1	324.3	341.9	357.0	376.7	390.0
38°	297.5	309.9	326.5	342.1	360.9	373.9
38.5°	282.4	295.9	311.2	327.1	345.2	358.5
39°	267.9	281.6	296.8	312.2	329.4	343.2
39.5°	253.7	267.3	281.8	297.3	313.7	327.8
40°	239.4	253.0	266.8	282.6	297.8	312.4
40.5°	225.7	239.1	252.1	268.1	282.0	297.1
41°	212.0	225.3	237.6	253.6	266.1	282.5
41.5°	198.1	211.5	223.7	238.6	250.2	267.5
42°	184.6	198.9	210.3	224.7	235.5	253.2
42.5°	172.1	185.7	197.4	210.0	220.8	238.4
43°	159.4	174.0	184.6	195.7	207.2	224.2
43.5°	147.5	161.7	171.6	181.1	193.3	209.9



TEST NUMBER: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	114.8	126.5	134.2	141.1	155.2	170.8
45.5°	105.1	115.5	122.4	129.1	143.1	158.1
46°	96.4	104.7	111.0	117.5	131.7	146.3
46.5°	87.7	94.2	99.9	106.6	120.6	134.5
47°	79.0	84.6	89.5	96.4	109.9	123.1
47.5°	70.3	75.4	79.7	86.5	99.6	112.0
48°	62.9	66.6	70.5	77.3	89.7	101.7
48.5°	56.0	58.5	61.8	68.7	80.3	91.7
49°	49.2	51.2	53.6	60.8	71.3	82.3
49.5°	43.2	44.4	46.1	53.6	63.0	73.3
50°	37.7	37.9	39.5	46.6	55.1	64.3
50.5°	32.5	33.8	35.1	40.4	48.0	56.2
51°	27.9	29.5	30.8	34.7	41.4	48.4
51.5°	23.5	25.4	26.4	30.4	35.3	41.1
52°	19.8	21.2	22.1	26.1	30.8	34.4
52.5°	16.4	17.0	17.7	21.8	26.2	29.6
53°	13.4	14.2	14.9	17.5	21.8	24.9
53.5°	11.7	11.6	12.3	14.4	17.3	20.1
54°	10.2	9.5	10.2	11.6	13.9	15.4
54.5°	8.5	7.8	8.3	9.3	11.1	12.2
55°	6.8	6.4	6.7	7.5	8.8	9.7
55.5°	5.2	5.5	5.7	6.2	7.0	7.8
56°	4.8	5.0	5.2	5.5	6.1	6.5
56.5°	4.5	4.7	4.8	5.1	5.5	5.8
57°	4.1	4.4	4.5	4.8	5.1	5.4
57.5°	3.9	4.0	4.1	4.4	4.8	5.1
58°	3.6	3.8	3.9	4.0	4.5	4.7
58.5°	3.3	3.5	3.6	3.8	4.1	4.4
59°	3.1	3.3	3.4	3.5	3.8	4.0
59.5°	2.9	3.0	3.1	3.3	3.6	3.8
60°	2.7	2.8	2.9	3.0	3.3	3.5
60.5°	2.5	2.6	2.7	2.8	3.1	3.3
61°	2.4	2.5	2.5	2.6	2.8	3.0
61.5°	2.2	2.3	2.4	2.5	2.7	2.8
62°	2.1	2.2	2.2	2.3	2.5	2.6
62.5°	2.0	2.0	2.1	2.2	2.3	2.5
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°	1.3	1.3	1.5	1.5	1.6	1.7
66°	1.2	1.3	1.3	1.3	1.5	1.6



TEST NUMBER: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.0	1.0	1.1	1.1	1.2	1.3
68°	1.0	1.0	1.0	1.0	1.1	1.2
68.5°	0.9	0.9	0.9	1.0	1.1	1.1
69°	0.8	0.9	0.9	0.9	1.0	1.0
69.5°	0.8	0.8	0.8	0.9	0.9	1.0
70°	0.7	0.8	0.8	0.8	0.9	0.9
70.5°	0.7	0.7	0.7	0.8	0.8	0.9
71°	0.7	0.7	0.7	0.7	0.8	0.8
71.5°	0.6	0.6	0.6	0.7	0.7	0.8
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: P775747

CATALOG NUMBER: HCDJBL510CSD-HCD62TRH-1000lm-3500K

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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





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

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21.5°	786.8	797.9	803.3	816.7	802.7	793.4	782.4	768.8	755.2	743.4	734.8
22°	772.5	783.7	788.6	801.8	788.9	779.7	768.7	755.0	741.4	729.2	720.8



44°	196.7	209.9	217.4	231.4	217.5	204.1	191.1	181.0	170.6	158.3	147.6
44.5°	183.8	196.5	202.8	216.9	203.9	191.0	178.1	167.4	157.9	146.1	136.3



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



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

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21.5°	718.2	727.0	737.3	752.3	770.6	786.8
22°	704.3	713.1	723.1	738.2	756.9	772.5



44°	135.8	149.6	158.9	167.5	180.0	196.7
44.5°	125.2	137.8	146.4	153.7	167.4	183.8



66.5°	1.1	1.2	1.2	1.3	1.5	1.5
67°	1.1	1.1	1.1	1.2	1.3	1.3

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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

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Scaled Data Report



(END OF REPORT)