

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: P775901

Luminaire Tested: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B027)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K
Description: 8 INCH SQUARE MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

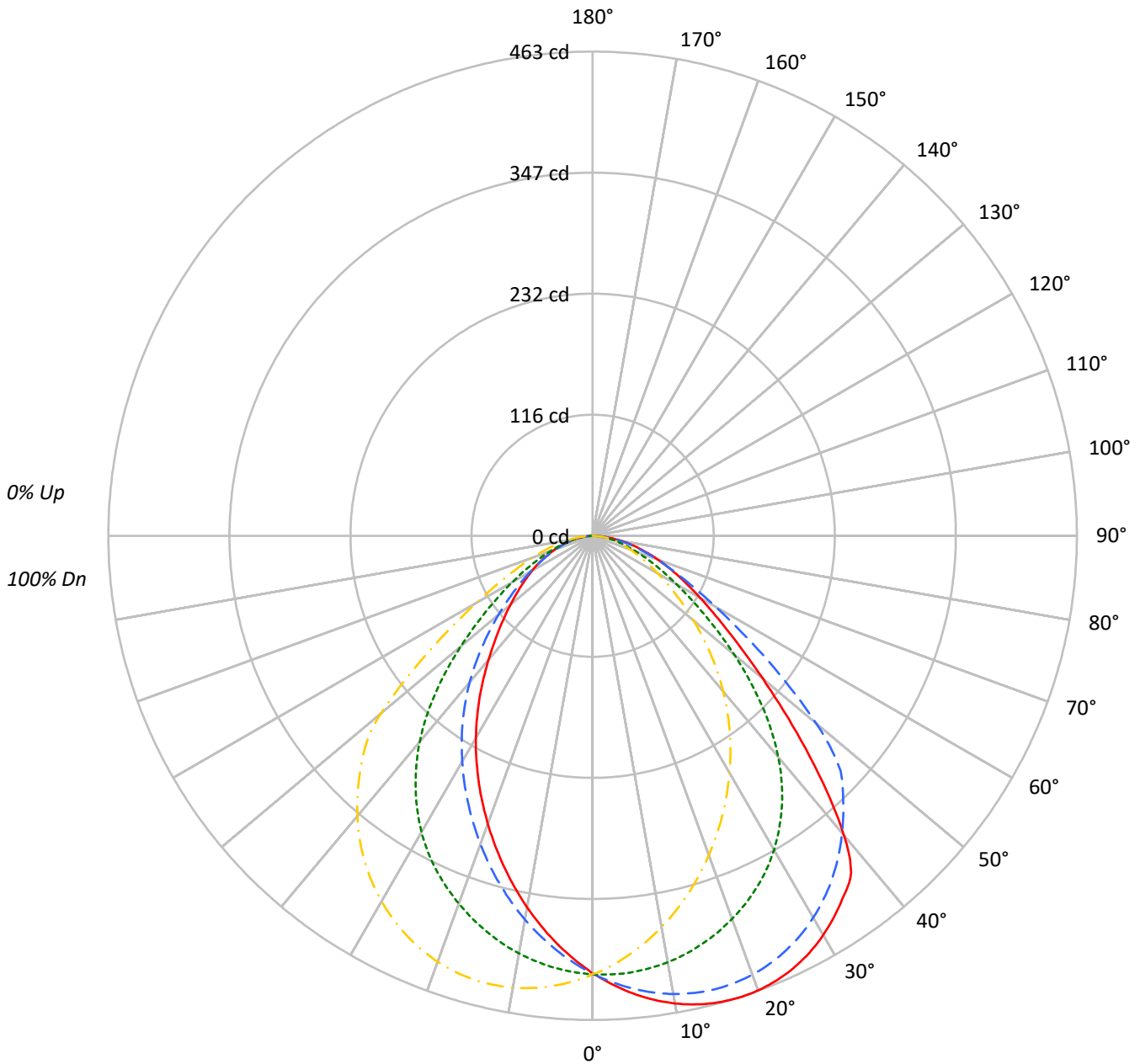
Lumens per Lamp: N/A
Luminaire Lumens: 912.6 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.3
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')

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: P775901
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87																			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																			
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65																			
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57																			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50																			
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44																			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40																			
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	38	36																			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32																			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10042	10042	10042	10042
5°	10572	10088	9423	9982
10°	11057	10083	8782	9871
15°	11469	10034	8127	9729
20°	11804	9947	7477	9549
25°	12057	9821	6829	9342
30°	12205	9602	6180	9057
35°	12274	9235	5509	8635
40°	11704	8642	4842	8048
45°	9776	7742	4280	7199
50°	7931	6592	3820	6136
55°	6572	5405	3470	5100
60°	5692	4436	3208	4249
65°	5101	3705	2956	3580
70°	4641	3127	2671	3029
75°	4225	2631	2427	2557
80°	3784	2168	2127	2099
85°	3081	1678	1376	1541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11462 cd/sqm



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	4.3
10°-20°	111.7	12.2
20°-30°	165.2	18.1
30°-40°	190.4	20.9
40°-50°	173.4	19.0
50°-60°	118.7	13.0
60°-70°	69.7	7.6
70°-80°	35.1	3.9
80°-90°	8.8	1.0
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°	316.4	34.7
0°-40°	506.9	55.5
0°-60°	799.0	87.5
0°-90°	912.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	912.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	419	419	419	419	419	
5°	439	419	392	415	439	42
15°	462	404	327	392	462	131
25°	456	371	258	353	456	210
35°	419	316	188	295	419	261
45°	288	228	126	212	288	223
55°	157	129	83	122	157	143
65°	90	65	52	63	90	90
75°	46	28	26	28	46	49
85°	11	6	5	6	11	13
90°	0	0	0	0	0	



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	418.8	418.8	418.8	418.8	418.8	418.8	418.8	418.8	418.8	418.8	418.8
0.5°	420.4	420.5	420.5	420.0	419.5	418.8	418.2	415.7	415.6	415.8	416.7
1°	422.8	422.7	422.3	421.1	419.6	418.0	416.6	413.5	413.1	413.5	414.8
1.5°	425.0	424.9	423.9	422.1	419.8	417.2	415.0	411.2	410.6	411.0	412.9
2°	427.2	427.1	425.6	423.1	419.8	416.2	413.3	408.9	408.0	408.5	410.8
2.5°	429.4	429.1	427.3	424.0	419.8	415.3	411.5	406.5	405.3	406.0	408.8
3°	431.4	431.0	428.9	424.9	419.8	414.4	409.8	404.0	402.7	403.5	406.7
3.5°	433.5	433.0	430.4	425.7	419.7	413.4	408.0	401.6	399.9	400.8	404.5
4°	435.5	434.9	431.8	426.4	419.6	412.3	406.0	399.1	397.2	398.2	402.3
4.5°	437.4	436.7	433.2	427.2	419.4	411.2	404.2	396.6	394.3	395.4	400.0
5°	439.2	438.5	434.6	427.9	419.1	410.0	402.2	393.8	391.5	392.7	397.7
5.5°	441.0	440.2	435.9	428.5	418.8	408.9	400.1	391.3	388.5	389.9	395.3
6°	442.8	441.8	437.1	429.0	418.5	407.6	398.1	388.5	385.5	387.1	393.0
6.5°	444.4	443.4	438.3	429.5	418.1	406.3	395.9	385.8	382.7	384.2	390.6
7°	446.0	445.0	439.4	429.9	417.7	404.9	393.8	383.0	379.5	381.3	388.1
7.5°	447.6	446.4	440.5	430.4	417.2	403.6	391.6	380.1	376.6	378.4	385.6
8°	449.0	447.9	441.5	430.7	416.6	402.2	389.3	377.3	373.4	375.3	383.1
8.5°	450.3	449.2	442.5	431.0	416.1	400.6	387.0	374.4	370.2	372.4	380.5
9°	451.6	450.4	443.3	431.2	415.5	399.2	384.7	371.6	367.1	369.2	377.9
9.5°	453.0	451.6	444.2	431.4	414.8	397.6	382.4	368.6	363.9	366.3	375.3
10°	454.1	452.8	444.9	431.5	414.1	395.9	379.9	365.5	360.7	363.1	372.7
10.5°	455.2	453.8	445.6	431.6	413.3	394.3	377.5	362.6	357.5	359.9	369.9
11°	456.3	454.8	446.2	431.6	412.5	392.6	374.9	359.5	354.2	356.9	367.2
11.5°	457.2	455.7	446.8	431.6	411.6	390.8	372.5	356.5	351.0	353.6	364.3
12°	458.2	456.5	447.3	431.5	410.7	389.1	369.9	353.4	347.6	350.5	361.6
12.5°	459.0	457.3	447.8	431.4	409.8	387.3	367.4	350.2	344.3	347.3	358.8
13°	459.8	458.1	448.2	431.2	408.8	385.4	364.7	347.1	341.0	343.9	356.0
13.5°	460.4	458.7	448.5	430.9	407.7	383.5	362.1	343.9	337.6	340.7	353.1
14°	461.0	459.3	448.8	430.6	406.5	381.6	359.3	340.7	334.2	337.4	350.1
14.5°	461.6	459.8	449.0	430.3	405.4	379.6	356.7	337.5	330.9	334.1	347.2
15°	462.0	460.2	449.1	429.9	404.2	377.5	353.9	334.1	327.4	330.8	344.2
15.5°	462.4	460.6	449.2	429.4	403.0	375.4	351.2	331.0	324.0	327.5	341.3
16°	462.7	460.9	449.1	428.9	401.7	373.3	348.3	327.7	320.6	324.1	338.3
16.5°	463.1	461.1	449.0	428.3	400.4	371.2	345.5	324.4	317.2	320.9	335.4
17°	463.2	461.2	448.9	427.7	399.0	369.0	342.6	321.1	313.7	317.4	332.2
17.5°	463.3	461.2	448.7	426.9	397.6	366.8	339.6	317.8	310.3	314.1	329.2
18°	463.4	461.3	448.4	426.2	396.1	364.5	336.8	314.6	306.8	310.6	326.2
18.5°	463.3	461.2	448.1	425.4	394.6	362.3	333.8	311.2	303.3	307.3	323.0
19°	463.2	461.0	447.7	424.5	393.0	359.9	330.9	307.8	299.9	303.9	320.0
19.5°	463.0	460.8	447.1	423.6	391.5	357.6	327.9	304.6	296.5	300.6	316.9
20°	462.6	460.5	446.6	422.7	389.8	355.2	325.0	301.2	293.0	297.1	313.6
20.5°	462.3	460.2	446.0	421.6	388.2	352.8	321.9	297.8	289.5	293.6	310.5
21°	461.8	459.7	445.3	420.6	386.5	350.5	318.8	294.4	286.0	290.3	307.4



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	460.1	457.9	442.9	417.1	381.2	342.9	309.6	284.4	275.6	280.1	297.8
23°	459.4	457.1	441.9	415.7	379.2	340.4	306.5	280.9	272.1	276.6	294.7
23.5°	458.6	456.3	440.9	414.4	377.3	337.8	303.4	277.4	268.7	273.2	291.5
24°	457.6	455.4	439.9	413.1	375.3	335.2	300.3	274.1	265.2	269.8	288.2
24.5°	456.7	454.4	438.7	411.6	373.3	332.5	297.1	270.7	261.6	266.4	285.0
25°	455.7	453.4	437.5	410.1	371.2	329.8	293.9	267.3	258.1	262.9	281.8
25.5°	454.5	452.2	436.1	408.5	369.0	327.0	290.8	264.0	254.8	259.5	278.6
26°	453.3	451.0	434.9	407.0	366.9	324.2	287.6	260.5	251.2	256.1	275.3
26.5°	452.0	449.7	433.5	405.2	364.6	321.5	284.5	257.0	247.6	252.6	272.1
27°	450.7	448.4	431.9	403.6	362.3	318.6	281.2	253.6	244.2	249.3	268.9
27.5°	449.3	446.9	430.4	401.8	359.8	315.8	278.0	250.2	240.8	245.7	265.6
28°	447.7	445.4	428.8	399.8	357.4	312.8	274.8	246.8	237.2	242.3	262.3
28.5°	446.1	443.8	427.2	397.9	354.8	309.9	271.6	243.4	233.7	238.9	259.2
29°	444.4	442.0	425.4	395.9	352.3	306.8	268.3	239.9	230.2	235.4	255.8
29.5°	442.7	440.3	423.7	393.9	349.5	303.8	265.1	236.5	226.7	231.9	252.5
30°	440.8	438.6	421.7	391.8	346.8	300.7	261.8	233.0	223.2	228.5	249.3
30.5°	439.0	436.6	419.8	389.5	343.9	297.5	258.7	229.6	219.6	225.0	246.0
31°	436.9	434.7	417.9	387.2	341.1	294.3	255.3	226.0	216.1	221.6	242.7
31.5°	434.9	432.7	415.8	384.8	338.1	291.1	251.9	222.7	212.7	218.2	239.5
32°	432.9	430.6	413.7	382.3	335.1	287.8	248.7	219.2	209.2	214.7	236.2
32.5°	430.6	428.4	411.4	379.7	331.9	284.4	245.3	215.7	205.6	211.2	233.0
33°	428.5	426.2	409.2	377.2	328.7	281.0	242.0	212.1	202.3	207.8	229.7
33.5°	426.2	423.9	406.9	374.4	325.6	277.6	238.7	208.9	198.7	204.4	226.4
34°	423.9	421.6	404.6	371.7	322.2	274.3	235.3	205.3	195.1	200.9	223.0
34.5°	421.5	419.2	402.1	368.8	318.8	270.8	231.9	201.8	191.6	197.5	219.7
35°	419.3	416.7	399.6	365.9	315.5	267.3	228.6	198.4	188.2	194.1	216.4
35.5°	417.1	414.3	397.0	362.7	311.9	263.8	225.1	195.0	184.7	190.6	213.1
36°	414.9	411.8	394.4	359.6	308.3	260.4	221.7	191.5	181.2	187.2	209.7
36.5°	412.5	409.3	391.8	356.4	304.6	256.8	218.4	188.0	177.8	183.7	206.3
37°	409.6	406.9	388.9	353.1	300.9	253.1	214.9	184.5	174.4	180.2	203.0
37.5°	406.0	404.4	386.2	349.8	297.0	249.5	211.3	181.1	171.0	176.9	199.6
38°	400.8	402.1	383.2	346.4	292.9	245.9	208.0	177.7	167.7	173.5	196.2
38.5°	395.4	399.3	380.2	342.8	288.9	242.2	204.5	174.2	164.4	170.0	192.9
39°	388.9	396.2	377.3	339.0	284.8	238.6	201.0	170.8	161.2	166.8	189.5
39.5°	381.7	391.9	374.2	335.4	280.6	234.8	197.6	167.5	157.9	163.4	186.0
40°	373.9	387.1	371.1	331.5	276.1	231.0	194.1	164.1	154.7	160.1	182.7
40.5°	365.4	380.9	368.0	327.4	271.7	227.3	190.6	160.7	151.7	156.9	179.3
41°	357.4	374.6	364.7	323.1	267.2	223.5	187.1	157.6	148.6	153.8	175.8
41.5°	348.6	366.7	361.5	318.8	262.6	219.7	183.6	154.3	145.6	150.5	172.4
42°	340.3	359.4	358.1	314.2	257.9	215.8	180.1	151.2	142.7	147.5	169.0
42.5°	331.5	351.1	354.7	309.6	253.1	212.0	176.7	148.0	139.8	144.4	165.6
43°	322.8	343.3	351.5	304.7	248.4	208.2	173.2	144.9	137.0	141.5	162.3
43.5°	313.9	334.6	348.0	300.0	243.5	204.2	169.7	141.8	134.1	138.4	158.8

TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	288.3	309.5	338.0	284.0	228.3	192.6	159.3	133.0	126.2	129.9	148.8
45.5°	279.5	300.8	334.6	278.5	223.2	188.6	155.8	130.1	123.5	127.2	145.5
46°	271.7	292.6	330.8	272.9	218.1	184.7	152.4	127.3	121.1	124.4	142.2
46.5°	263.0	283.9	326.8	267.1	212.9	180.7	149.0	124.5	118.5	121.8	138.9
47°	255.8	276.1	321.1	261.2	207.7	176.9	145.5	121.9	116.1	119.2	135.8
47.5°	247.2	267.5	315.7	255.1	202.4	172.9	142.2	119.3	113.7	116.7	132.6
48°	240.5	260.1	308.7	248.9	197.4	169.0	138.8	116.6	111.4	114.2	129.5
48.5°	232.4	251.5	302.2	242.6	192.1	165.1	135.4	114.0	109.0	111.8	126.4
49°	226.1	244.6	294.4	236.4	186.9	161.3	132.2	111.6	106.8	109.3	123.3
49.5°	218.5	236.5	287.0	230.1	181.8	157.4	128.9	109.1	104.6	107.0	120.4
50°	212.6	229.9	278.6	223.8	176.7	153.5	125.7	106.7	102.4	104.6	117.4
50.5°	205.4	222.4	270.6	217.2	171.4	149.6	122.5	104.3	100.3	102.4	114.4
51°	199.9	215.8	262.2	210.7	166.5	145.9	119.4	102.0	98.3	100.3	111.6
51.5°	193.3	208.9	254.2	204.3	161.5	142.2	116.4	99.6	96.3	98.0	108.8
52°	188.0	202.8	245.6	198.0	156.6	138.4	113.3	97.5	94.2	95.9	106.1
52.5°	182.1	196.4	237.7	191.6	151.7	134.6	110.4	95.3	92.2	93.8	103.3
53°	177.1	190.4	229.5	185.2	147.1	131.0	107.5	93.1	90.3	91.7	100.7
53.5°	171.6	184.5	221.7	178.9	142.4	127.4	104.6	91.0	88.4	89.8	98.0
54°	166.7	178.7	213.7	172.7	137.9	123.8	101.8	89.0	86.6	87.8	95.6
54.5°	161.8	173.4	206.1	166.7	133.4	120.3	99.0	87.1	84.9	86.0	93.0
55°	157.2	167.8	198.8	160.6	129.3	116.8	96.4	85.1	83.0	84.0	90.6
55.5°	152.8	163.4	191.3	154.9	125.0	113.3	93.7	83.1	81.3	82.2	88.1
56°	148.3	157.8	184.5	149.3	121.0	109.9	91.1	81.2	79.5	80.4	85.9
56.5°	144.4	153.8	177.5	143.9	117.0	106.7	88.6	79.2	77.9	78.5	83.6
57°	139.9	148.6	171.1	138.6	113.2	103.4	86.2	77.6	76.3	76.8	81.4
57.5°	136.6	144.9	164.4	133.6	109.4	100.3	83.8	75.9	74.7	75.1	79.1
58°	132.4	140.1	158.4	128.6	105.9	97.2	81.4	74.1	73.0	73.3	76.9
58.5°	129.3	136.4	152.5	124.0	102.4	94.1	79.0	72.4	71.4	71.7	74.8
59°	125.2	132.2	146.7	119.5	98.9	91.2	76.6	70.7	69.9	70.1	72.6
59.5°	122.5	128.5	141.4	115.3	95.7	88.4	74.4	69.1	68.3	68.4	70.6
60°	118.7	124.6	135.9	111.1	92.5	85.7	72.1	67.4	66.9	66.9	68.5
60.5°	115.7	120.8	131.2	107.1	89.3	82.9	70.1	65.8	65.4	65.4	66.6
61°	112.4	117.5	125.9	103.2	86.5	80.2	67.9	64.2	64.0	63.8	64.7
61.5°	109.3	113.6	121.6	99.6	83.6	77.4	65.8	62.6	62.5	62.4	62.8
62°	106.4	110.7	117.0	96.2	80.7	74.8	63.8	61.2	61.1	60.9	60.9
62.5°	103.4	107.2	112.5	92.8	77.8	72.3	61.9	59.7	59.6	59.5	59.2
63°	100.6	104.1	108.6	89.6	75.3	69.8	60.0	58.2	58.0	58.0	57.4
63.5°	97.8	101.0	104.5	86.5	72.6	67.4	58.0	56.8	56.6	56.6	55.7
64°	95.2	97.8	100.9	83.3	70.2	65.1	56.2	55.4	55.1	55.2	54.1
64.5°	92.4	95.1	97.2	80.5	67.7	62.8	54.5	54.0	53.5	53.6	52.4
65°	89.9	92.1	93.5	77.7	65.3	60.6	52.7	52.5	52.1	52.2	50.8
65.5°	87.3	89.4	90.4	75.0	62.9	58.4	51.1	51.0	50.7	50.8	49.3
66°	84.8	86.7	87.0	72.3	60.7	56.3	49.5	49.6	49.3	49.5	47.7



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	77.5	78.7	77.9	64.9	54.3	50.2	44.8	45.5	45.1	45.4	43.4
68°	75.3	76.3	75.1	62.6	52.2	48.3	43.3	44.2	43.7	44.1	42.1
68.5°	72.9	73.8	72.4	60.4	50.3	46.5	41.9	42.9	42.3	42.7	40.7
69°	70.7	71.5	69.7	58.1	48.3	44.7	40.5	41.6	40.9	41.4	39.4
69.5°	68.5	69.2	67.1	56.0	46.4	42.8	39.2	40.3	39.6	40.2	38.1
70°	66.2	66.8	64.7	53.9	44.6	41.1	37.8	39.1	38.1	38.9	36.8
70.5°	64.1	64.5	62.2	51.8	42.7	39.5	36.6	37.8	36.9	37.6	35.6
71°	61.9	62.2	59.9	49.9	41.0	37.9	35.3	36.5	35.5	36.3	34.4
71.5°	59.8	60.1	57.5	47.9	39.3	36.3	34.1	35.3	34.3	35.0	33.1
72°	57.7	57.9	55.3	46.0	37.6	34.7	32.8	34.0	33.0	33.8	32.0
72.5°	55.7	55.8	53.1	44.1	36.0	33.3	31.6	32.7	31.9	32.5	30.9
73°	53.6	53.8	51.0	42.3	34.4	31.7	30.5	31.5	30.8	31.4	29.8
73.5°	51.5	51.6	48.9	40.5	32.8	30.3	29.4	30.4	29.6	30.2	28.7
74°	49.6	49.6	46.8	38.8	31.3	28.9	28.3	29.3	28.5	29.1	27.5
74.5°	47.6	47.5	44.8	37.0	29.9	27.5	27.1	28.0	27.3	27.8	26.4
75°	45.6	45.6	42.8	35.5	28.4	26.2	26.1	27.0	26.2	26.7	25.3
75.5°	43.8	43.7	40.9	33.9	26.9	24.9	25.0	25.8	25.1	25.6	24.3
76°	41.8	41.7	39.1	32.3	25.6	23.7	24.0	24.7	24.0	24.5	23.2
76.5°	39.9	39.8	37.2	30.7	24.3	22.4	22.9	23.6	22.9	23.4	22.0
77°	38.0	37.9	35.5	29.2	22.9	21.2	21.9	22.4	21.8	22.2	21.1
77.5°	36.3	36.1	33.8	27.6	21.6	20.1	20.8	21.3	20.8	21.1	20.0
78°	34.6	34.4	32.0	26.1	20.4	19.0	19.8	20.2	19.7	20.0	19.0
78.5°	32.7	32.6	30.3	24.7	19.2	17.8	18.8	19.2	18.7	19.0	18.0
79°	31.0	30.8	28.6	23.3	18.1	16.8	17.8	18.1	17.5	17.8	16.9
79.5°	29.2	29.1	26.8	21.8	16.8	15.8	16.8	16.9	16.5	16.8	15.9
80°	27.4	27.3	25.2	20.5	15.7	14.8	15.8	15.8	15.4	15.8	14.9
80.5°	25.7	25.6	23.6	19.1	14.6	13.9	14.9	14.7	14.4	14.7	13.9
81°	24.1	24.0	22.0	17.8	13.6	13.0	13.9	13.6	13.4	13.7	13.0
81.5°	22.3	22.2	20.5	16.5	12.5	12.0	12.9	12.4	12.2	12.5	11.9
82°	20.7	20.7	19.0	15.3	11.5	11.1	11.8	11.4	11.2	11.5	11.0
82.5°	19.1	19.1	17.4	14.1	10.5	10.3	10.9	10.3	10.2	10.5	10.0
83°	17.4	17.4	16.0	12.9	9.7	9.5	9.9	9.3	9.1	9.4	9.1
83.5°	15.8	15.9	14.5	11.6	8.8	8.7	9.0	8.2	8.1	8.4	8.2
84°	14.3	14.4	13.1	10.6	7.9	7.9	8.1	7.1	7.0	7.3	7.2
84.5°	12.7	12.9	11.7	9.5	6.9	7.0	7.2	6.1	6.0	6.3	6.4
85°	11.2	11.3	10.4	8.5	6.1	6.2	6.3	5.0	5.0	5.2	5.5
85.5°	9.7	9.8	9.2	7.3	5.2	5.4	5.4	4.1	4.0	4.3	4.7
86°	8.2	8.4	8.0	6.4	4.4	4.7	4.6	3.3	3.2	3.4	3.9
86.5°	6.6	6.9	6.8	5.4	3.7	3.9	3.8	2.5	2.4	2.7	3.1
87°	5.2	5.6	5.6	4.5	3.0	3.1	3.0	1.8	1.8	2.0	2.3
87.5°	4.2	4.5	4.5	3.5	2.2	2.3	2.2	1.2	1.2	1.3	1.5
88°	3.4	3.5	3.5	2.7	1.5	1.6	1.4	0.6	0.6	0.7	0.8
88.5°	2.5	2.7	2.7	1.8	0.9	0.8	0.7	0.2	0.2	0.2	0.2



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	418.8	418.8	418.8	418.8	418.8	418.8
0.5°	417.8	419.1	420.1	421.2	420.0	420.4
1°	416.5	418.8	420.7	422.7	422.1	422.8
1.5°	415.3	418.4	421.3	424.0	424.0	425.0
2°	414.0	418.1	421.8	425.3	425.9	427.2
2.5°	412.7	417.6	422.4	426.6	427.9	429.4
3°	411.2	417.2	422.8	427.8	429.8	431.4
3.5°	409.8	416.5	423.1	429.0	431.5	433.5
4°	408.4	416.0	423.4	430.1	433.3	435.5
4.5°	406.9	415.4	423.7	431.1	434.9	437.4
5°	405.2	414.7	423.9	432.0	436.5	439.2
5.5°	403.7	414.0	424.1	433.0	438.0	441.0
6°	402.1	413.3	424.2	433.9	439.5	442.8
6.5°	400.3	412.5	424.2	434.7	440.9	444.4
7°	398.6	411.5	424.2	435.5	442.2	446.0
7.5°	396.8	410.7	424.2	436.1	443.6	447.6
8°	394.9	409.7	424.1	436.7	444.8	449.0
8.5°	393.1	408.8	424.0	437.4	445.9	450.3
9°	391.3	407.7	423.7	437.9	447.0	451.6
9.5°	389.3	406.7	423.5	438.3	448.1	453.0
10°	387.3	405.4	423.2	438.7	449.0	454.1
10.5°	385.3	404.3	422.9	439.0	449.9	455.2
11°	383.3	403.1	422.5	439.3	450.7	456.3
11.5°	381.2	401.9	422.0	439.5	451.4	457.2
12°	379.0	400.5	421.4	439.7	452.1	458.2
12.5°	376.9	399.2	420.9	439.8	452.8	459.0
13°	374.7	397.8	420.2	439.8	453.3	459.8
13.5°	372.5	396.3	419.6	439.7	453.8	460.4
14°	370.2	394.9	418.9	439.6	454.2	461.0
14.5°	367.9	393.4	418.1	439.5	454.5	461.6
15°	365.5	391.9	417.3	439.2	454.7	462.0
15.5°	363.2	390.2	416.3	438.9	454.9	462.4
16°	360.9	388.6	415.4	438.6	455.1	462.7
16.5°	358.4	387.0	414.5	438.2	455.1	463.1
17°	356.0	385.2	413.5	437.7	455.1	463.2
17.5°	353.4	383.5	412.4	437.1	455.0	463.3
18°	351.0	381.7	411.2	436.5	454.8	463.4
18.5°	348.4	379.8	410.1	435.8	454.6	463.3
19°	345.9	378.0	408.9	435.1	454.3	463.2
19.5°	343.3	376.2	407.6	434.3	453.9	463.0
20°	340.7	374.2	406.3	433.5	453.4	462.6
20.5°	338.0	372.3	404.9	432.6	452.9	462.3
21°	335.4	370.2	403.5	431.4	452.2	461.8

TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	327.3	364.1	399.0	428.2	450.0	460.1
23°	324.5	362.0	397.5	426.9	449.1	459.4
23.5°	321.8	359.8	395.8	425.6	448.2	458.6
24°	319.0	357.7	394.2	424.3	447.1	457.6
24.5°	316.2	355.5	392.5	422.9	446.0	456.7
25°	313.4	353.1	390.7	421.4	444.8	455.7
25.5°	310.6	350.8	388.9	419.9	443.5	454.5
26°	307.7	348.4	387.1	418.3	442.2	453.3
26.5°	304.8	346.0	385.1	416.6	440.8	452.0
27°	301.9	343.5	383.2	414.9	439.3	450.7
27.5°	298.9	341.0	381.2	413.2	437.8	449.3
28°	296.0	338.3	379.0	411.3	436.1	447.7
28.5°	292.8	335.7	376.9	409.5	434.4	446.1
29°	289.9	332.9	374.6	407.6	432.7	444.4
29.5°	286.7	330.1	372.4	405.6	430.7	442.7
30°	283.5	327.1	369.9	403.6	428.9	440.8
30.5°	280.4	324.1	367.4	401.6	426.9	439.0
31°	277.1	321.2	364.9	399.3	424.9	436.9
31.5°	274.0	318.0	362.3	397.2	422.8	434.9
32°	270.7	314.9	359.5	394.9	420.6	432.9
32.5°	267.3	311.7	356.7	392.6	418.4	430.6
33°	264.1	308.4	353.8	390.2	416.0	428.5
33.5°	260.6	305.2	350.9	387.7	413.7	426.2
34°	257.1	301.7	347.8	385.2	411.3	423.9
34.5°	253.8	298.4	344.6	382.7	408.9	421.5
35°	250.5	295.0	341.5	380.0	406.3	419.3
35.5°	246.9	291.5	338.2	377.4	403.8	417.1
36°	243.5	287.8	334.9	374.6	401.2	414.9
36.5°	240.0	284.3	331.5	371.8	398.6	412.5
37°	236.6	280.6	328.0	368.8	395.9	409.6
37.5°	233.1	276.8	324.4	365.9	393.3	406.0
38°	229.6	272.9	320.8	362.8	390.7	400.8
38.5°	226.0	269.1	317.0	359.6	388.2	395.4
39°	222.7	265.2	313.2	356.5	385.7	388.9
39.5°	218.9	261.3	309.1	353.2	382.8	381.7
40°	215.4	257.1	305.2	349.8	379.7	373.9
40.5°	211.8	252.9	301.0	346.5	374.9	365.4
41°	208.3	248.8	296.6	343.1	370.2	357.4
41.5°	204.7	244.5	292.1	339.5	364.1	348.6
42°	201.1	240.1	287.6	336.0	357.8	340.3
42.5°	197.6	235.6	282.9	332.4	350.4	331.5
43°	194.0	231.0	278.0	328.8	343.4	322.8
43.5°	190.3	226.4	272.9	325.1	335.5	313.9

TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	179.4	212.3	256.7	313.5	312.1	288.3
45.5°	175.6	207.4	251.1	309.6	303.9	279.5
46°	172.0	202.7	245.2	305.8	296.1	271.7
46.5°	168.3	197.9	239.4	301.7	288.0	263.0
47°	164.6	193.0	233.4	297.8	280.3	255.8
47.5°	161.0	188.2	227.4	293.4	272.1	247.2
48°	157.3	183.4	221.4	288.9	264.6	240.5
48.5°	153.7	178.6	215.3	284.0	256.7	232.4
49°	150.0	173.9	209.3	277.5	249.5	226.1
49.5°	146.5	169.3	203.4	271.4	241.9	218.5
50°	142.9	164.5	197.4	264.2	235.1	212.6
50.5°	139.2	159.9	191.3	256.8	227.7	205.4
51°	135.8	155.3	185.3	249.2	220.9	199.9
51.5°	132.2	151.0	179.5	241.2	214.2	193.3
52°	128.7	146.5	173.8	233.2	208.0	188.0
52.5°	125.2	142.2	168.2	225.6	201.3	182.1
53°	121.8	138.0	162.5	217.8	195.0	177.1
53.5°	118.5	133.9	157.1	210.1	189.3	171.6
54°	115.2	129.7	151.9	202.5	183.3	166.7
54.5°	111.9	125.9	146.8	195.2	177.9	161.8
55°	108.6	122.0	141.9	188.2	171.9	157.2
55.5°	105.5	118.3	137.0	181.0	167.1	152.8
56°	102.3	114.6	132.3	174.4	161.4	148.3
56.5°	99.3	111.1	127.9	167.8	157.0	144.4
57°	96.3	107.5	123.5	161.6	151.5	139.9
57.5°	93.3	104.1	119.3	155.4	147.4	136.6
58°	90.5	100.9	115.3	149.6	142.4	132.4
58.5°	87.8	97.7	111.5	144.0	138.4	129.3
59°	85.2	94.7	107.8	138.4	134.0	125.2
59.5°	82.5	91.6	104.2	133.5	129.9	122.5
60°	79.9	88.6	100.7	128.4	126.1	118.7
60.5°	77.1	85.7	97.4	123.6	122.2	115.7
61°	74.6	82.9	94.1	118.9	118.7	112.4
61.5°	72.2	80.3	91.1	114.5	114.8	109.3
62°	69.8	77.6	88.1	110.4	111.8	106.4
62.5°	67.4	75.0	85.3	106.4	108.2	103.4
63°	65.1	72.5	82.3	102.5	105.1	100.6
63.5°	62.9	70.1	79.7	98.8	101.9	97.8
64°	60.8	67.6	77.0	95.1	98.6	95.2
64.5°	58.6	65.3	74.5	91.8	95.8	92.4
65°	56.5	63.1	71.9	88.4	92.7	89.9
65.5°	54.5	60.8	69.5	85.4	90.1	87.3
66°	52.5	58.6	67.1	82.2	87.2	84.8



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	46.9	52.4	60.4	73.8	79.1	77.5
68°	45.2	50.6	58.1	71.0	76.7	75.3
68.5°	43.4	48.7	56.1	68.5	74.3	72.9
69°	41.8	46.8	54.1	66.0	71.7	70.7
69.5°	40.1	45.0	52.1	63.5	69.4	68.5
70°	38.6	43.2	50.2	61.2	67.0	66.2
70.5°	36.9	41.4	48.2	58.9	64.7	64.1
71°	35.4	39.8	46.3	56.6	62.5	61.9
71.5°	34.0	38.0	44.6	54.4	60.3	59.8
72°	32.5	36.6	42.7	52.2	58.0	57.7
72.5°	31.1	35.1	41.0	50.2	55.9	55.7
73°	29.7	33.6	39.3	48.0	53.8	53.6
73.5°	28.4	32.0	37.5	46.1	51.7	51.5
74°	27.0	30.5	36.0	44.2	49.7	49.6
74.5°	25.8	29.1	34.5	42.1	47.6	47.6
75°	24.6	27.6	32.9	40.3	45.6	45.6
75.5°	23.4	26.2	31.3	38.5	43.7	43.8
76°	22.1	24.9	29.8	36.3	41.8	41.8
76.5°	21.0	23.6	28.3	34.7	39.9	39.9
77°	20.0	22.3	26.8	33.0	37.9	38.0
77.5°	19.0	21.0	25.4	31.4	36.1	36.3
78°	17.8	19.8	24.0	29.7	34.4	34.6
78.5°	16.8	18.7	22.6	28.0	32.6	32.7
79°	15.9	17.4	21.2	26.4	30.9	31.0
79.5°	15.0	16.3	19.9	24.8	29.1	29.2
80°	14.1	15.2	18.6	23.2	27.3	27.4
80.5°	13.2	14.2	17.3	21.6	25.6	25.7
81°	12.2	13.1	16.1	20.1	24.0	24.1
81.5°	11.3	12.0	14.9	18.6	22.3	22.3
82°	10.5	11.1	13.7	17.0	20.6	20.7
82.5°	9.6	10.1	12.5	15.6	19.1	19.1
83°	8.8	9.2	11.4	14.2	17.4	17.4
83.5°	8.0	8.3	10.3	12.7	15.9	15.8
84°	7.1	7.3	9.2	11.4	14.3	14.3
84.5°	6.3	6.5	8.2	10.1	12.7	12.7
85°	5.5	5.6	7.1	8.9	11.3	11.2
85.5°	4.7	4.9	6.1	7.8	9.8	9.7
86°	3.9	4.1	5.2	6.5	8.4	8.2
86.5°	3.2	3.4	4.3	5.4	7.0	6.6
87°	2.3	2.7	3.5	4.4	5.8	5.2
87.5°	1.5	1.9	2.7	3.3	4.7	4.2
88°	0.8	1.2	1.8	2.4	3.7	3.4
88.5°	0.2	0.5	1.0	1.6	2.8	2.5



TEST NUMBER: P775901

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQH-HCD8TSQLWW-1000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.1	0.1



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°	461.3	459.2	444.6	419.5	384.7	347.9	315.8	291.0	282.6	286.9	304.2
22°	460.8	458.6	443.8	418.3	383.0	345.5	312.7	287.6	279.1	283.5	301.0



44°	305.4	326.3	344.6	294.8	238.5	200.3	166.3	138.9	131.5	135.6	155.4
44.5°	296.6	317.7	341.3	289.5	233.5	196.4	162.8	135.9	128.7	132.7	152.2



66.5°	82.4	83.9	83.8	69.8	58.5	54.2	47.8	48.2	47.8	48.0	46.3
67°	80.0	81.4	80.9	67.3	56.4	52.2	46.3	46.9	46.4	46.7	44.9



89°	1.7	1.7	1.7	1.0	0.3	0.2	0.2	0.1	0.0	0.1	0.1
89.5°	0.9	0.9	0.9	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0

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

Scaled Data Report





21.5°	332.7	368.2	402.1	430.4	451.6	461.3
22°	330.1	366.2	400.5	429.4	450.8	460.8



44°	186.6	221.7	267.7	321.3	328.0	305.4
44.5°	183.1	217.0	262.3	317.4	319.9	296.6



66.5°	50.7	56.6	64.8	79.4	84.5	82.4
67°	48.8	54.6	62.5	76.5	81.9	80.0

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

Scaled Data Report



89°	0.0	0.1	0.2	0.8	1.8	1.7
89.5°	0.0	0.0	0.0	0.1	1.0	0.9

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

Scaled Data Report



(END OF REPORT)