

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: P775660

Luminaire Tested: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775660
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156A001)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD42TRMW-1000lm-2700K
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

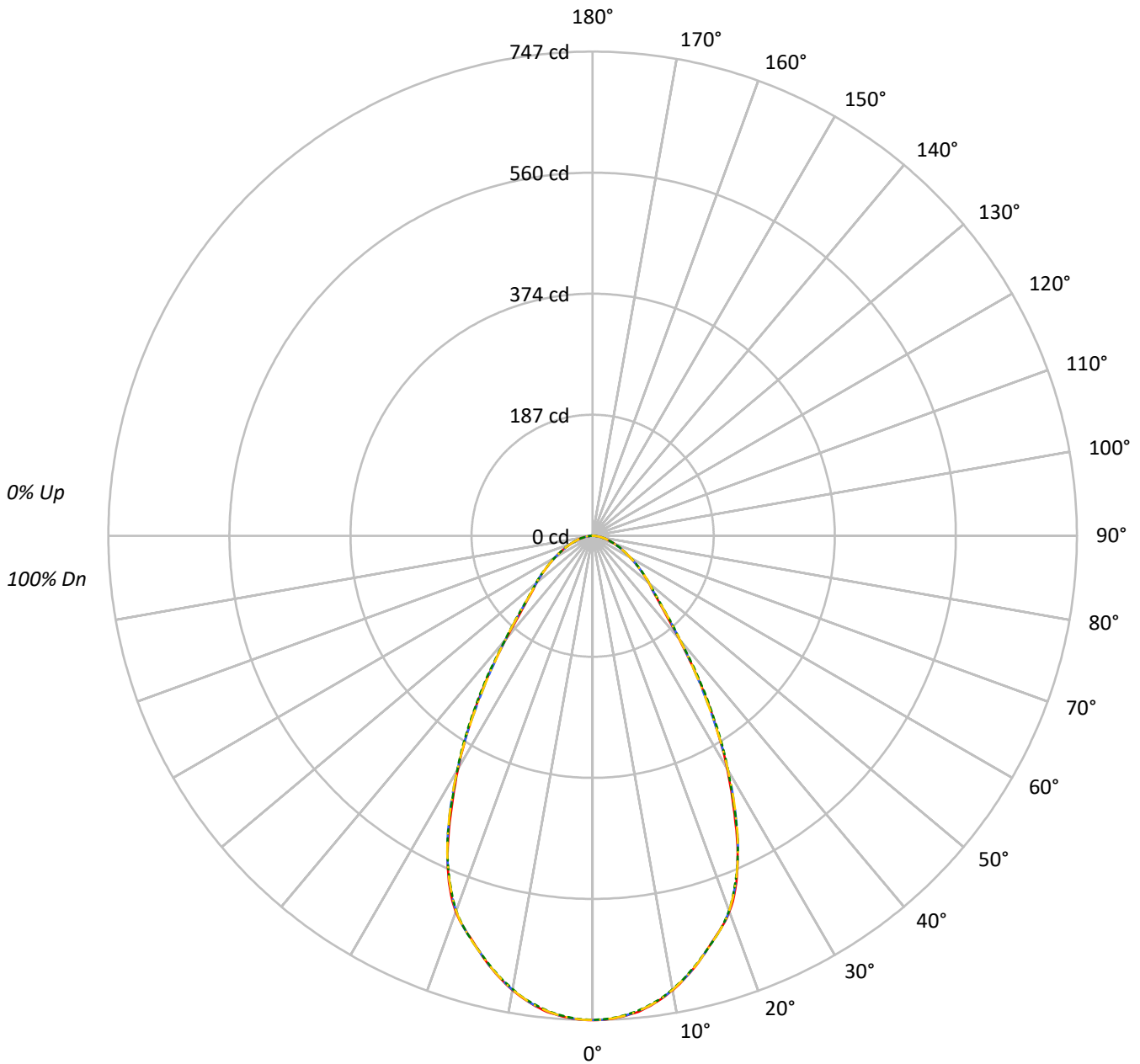
Lumens per Lamp: N/A
Luminaire Lumens: 965.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P775660
CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

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	100	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89	89	89	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80	80	80	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71	71	71	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64	64	64	64
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58	58	58	58
6	80	69	62	57	78	68	61	56	67	60	56	65	60	55	64	59	55	53	53	53	53
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49	49	49	49
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45	45	45	45
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42	42	42	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39	39	39	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	94048	94048	94048	94048
5°	93384	93181	93384	93181
10°	90975	90770	90975	90770
15°	86955	86851	86955	86851
20°	82673	82378	82673	82378
25°	73374	73610	73374	73610
30°	60380	60700	60380	60700
35°	46843	47350	46843	47350
40°	34023	34615	34023	34615
45°	25753	26394	25753	26394
50°	22183	22359	22183	22359
55°	19286	19506	19286	19506
60°	16864	17015	16864	17015
65°	14800	14919	14800	14919
70°	13063	13136	13063	13136
75°	11475	11475	11475	11475
80°	9929	9856	9929	9856
85°	7942	7942	7942	7942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 26394 cd/sqm



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	7.2
10°-20°	187.5	19.4
20°-30°	240.1	24.9
30°-40°	190.2	19.7
40°-50°	116.5	12.1
50°-60°	79.6	8.3
60°-70°	49.8	5.2
70°-80°	25.2	2.6
80°-90°	6.4	0.7
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°	497.2	51.5
0°-40°	687.4	71.2
0°-60°	883.5	91.6
0°-90°	965.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	965.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	747	747	747	747	747	
5°	739	738	739	738	739	70
15°	667	667	667	667	667	188
25°	528	530	528	530	528	240
35°	305	308	305	308	305	190
45°	145	148	145	148	145	115
55°	88	89	88	89	88	79
65°	50	50	50	50	50	50
75°	24	24	24	24	24	25
85°	6	6	6	6	6	6
90°	0	0	0	0	0	



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	747.3	747.3	747.3	747.3	747.3	747.3	747.3	747.3	747.3	747.3	747.3
0.5°	747.4	747.3	747.1	747.0	746.7	747.0	747.1	747.3	747.4	747.3	747.1
1°	747.1	747.0	746.9	746.8	746.4	746.8	746.9	747.0	747.1	747.0	746.9
1.5°	746.7	746.5	746.5	746.3	746.0	746.3	746.5	746.5	746.7	746.5	746.5
2°	746.1	746.0	745.8	745.7	745.3	745.7	745.8	746.0	746.1	746.0	745.8
2.5°	745.4	745.2	745.0	744.9	744.4	744.9	745.0	745.2	745.4	745.2	745.0
3°	744.4	744.2	744.0	743.8	743.3	743.8	744.0	744.2	744.4	744.2	744.0
3.5°	743.3	743.1	742.8	742.6	742.3	742.6	742.8	743.1	743.3	743.1	742.8
4°	742.0	741.9	741.5	741.3	740.8	741.3	741.5	741.9	742.0	741.9	741.5
4.5°	740.6	740.4	740.0	739.8	739.2	739.8	740.0	740.4	740.6	740.4	740.0
5°	739.2	738.9	738.5	738.3	737.6	738.3	738.5	738.9	739.2	738.9	738.5
5.5°	737.7	737.0	736.5	736.3	735.7	736.3	736.5	737.0	737.7	737.0	736.5
6°	735.4	735.0	734.5	734.2	733.4	734.2	734.5	735.0	735.4	735.0	734.5
6.5°	733.1	732.8	732.2	731.9	731.1	731.9	732.2	732.8	733.1	732.8	732.2
7°	730.7	730.3	730.0	729.5	728.8	729.5	730.0	730.3	730.7	730.3	730.0
7.5°	728.0	727.6	727.2	727.0	726.3	727.0	727.2	727.6	728.0	727.6	727.2
8°	725.1	724.8	724.4	724.1	723.7	724.1	724.4	724.8	725.1	724.8	724.4
8.5°	722.1	721.7	721.3	721.0	720.6	721.0	721.3	721.7	722.1	721.7	721.3
9°	718.9	718.6	718.1	717.8	717.4	717.8	718.1	718.6	718.9	718.6	718.1
9.5°	715.4	715.2	714.7	714.4	714.0	714.4	714.7	715.2	715.4	715.2	714.7
10°	711.9	711.6	711.2	710.8	710.3	710.8	711.2	711.6	711.9	711.6	711.2
10.5°	708.0	707.8	707.3	707.0	706.6	707.0	707.3	707.8	708.0	707.8	707.3
11°	704.1	703.9	703.5	703.1	702.6	703.1	703.5	703.9	704.1	703.9	703.5
11.5°	700.0	699.8	699.4	699.0	698.6	699.0	699.4	699.8	700.0	699.8	699.4
12°	695.8	695.6	695.3	694.8	694.4	694.8	695.3	695.6	695.8	695.6	695.3
12.5°	691.4	691.2	690.9	690.4	689.9	690.4	690.9	691.2	691.4	691.2	690.9
13°	686.9	686.7	686.4	686.0	685.5	686.0	686.4	686.7	686.9	686.7	686.4
13.5°	682.2	682.0	681.8	681.4	681.0	681.4	681.8	682.0	682.2	682.0	681.8
14°	677.4	677.3	677.1	676.7	676.3	676.7	677.1	677.3	677.4	677.3	677.1
14.5°	672.4	672.3	672.2	671.8	671.4	671.8	672.2	672.3	672.4	672.3	672.2
15°	667.4	667.4	667.2	667.0	666.6	667.0	667.2	667.4	667.4	667.4	667.2
15.5°	662.2	662.2	662.4	662.2	662.0	662.2	662.4	662.2	662.2	662.2	662.4
16°	657.2	657.3	657.6	657.5	657.3	657.5	657.6	657.3	657.2	657.3	657.6
16.5°	652.2	652.4	652.8	652.8	652.7	652.8	652.8	652.4	652.2	652.4	652.8
17°	647.4	647.6	648.0	647.9	648.0	647.9	648.0	647.6	647.4	647.6	648.0
17.5°	642.8	643.0	643.3	643.2	643.1	643.2	643.3	643.0	642.8	643.0	643.3
18°	638.3	638.4	638.6	638.4	638.2	638.4	638.6	638.4	638.3	638.4	638.6
18.5°	633.5	633.5	633.5	633.3	633.0	633.3	633.5	633.5	633.5	633.5	633.5
19°	628.6	628.3	628.1	627.8	627.5	627.8	628.1	628.3	628.6	628.3	628.1
19.5°	623.2	622.8	622.2	622.0	621.7	622.0	622.2	622.8	623.2	622.8	622.2
20°	617.3	616.8	615.7	615.8	615.1	615.8	615.7	616.8	617.3	616.8	615.7
20.5°	610.8	610.0	608.7	609.1	608.3	609.1	608.7	610.0	610.8	610.0	608.7
21°	604.0	602.8	601.3	601.8	600.8	601.8	601.3	602.8	604.0	602.8	601.3



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	579.1	577.9	576.9	576.8	576.3	576.8	576.9	577.9	579.1	577.9	576.9
23°	569.6	568.6	568.4	567.7	567.5	567.7	568.4	568.6	569.6	568.6	568.4
23.5°	559.9	559.0	559.5	558.3	558.8	558.3	559.5	559.0	559.9	559.0	559.5
24°	549.8	549.1	550.3	548.7	549.6	548.7	550.3	549.1	549.8	549.1	550.3
24.5°	539.4	539.1	540.6	539.0	540.2	539.0	540.6	539.1	539.4	539.1	540.6
25°	528.4	528.6	530.4	529.2	530.1	529.2	530.4	528.6	528.4	528.6	530.4
25.5°	517.1	518.4	520.0	519.5	519.7	519.5	520.0	518.4	517.1	518.4	520.0
26°	505.5	507.8	509.3	509.4	508.6	509.4	509.3	507.8	505.5	507.8	509.3
26.5°	493.6	497.0	498.2	498.9	497.1	498.9	498.2	497.0	493.6	497.0	498.2
27°	482.0	485.8	487.0	488.1	485.4	488.1	487.0	485.8	482.0	485.8	487.0
27.5°	470.6	474.2	475.6	477.0	473.5	477.0	475.6	474.2	470.6	474.2	475.6
28°	459.2	462.6	464.0	465.4	461.6	465.4	464.0	462.6	459.2	462.6	464.0
28.5°	448.1	450.8	452.4	453.6	450.1	453.6	452.4	450.8	448.1	450.8	452.4
29°	437.1	438.9	440.8	441.6	439.2	441.6	440.8	438.9	437.1	438.9	440.8
29.5°	426.3	427.2	429.3	429.6	428.5	429.6	429.3	427.2	426.3	427.2	429.3
30°	415.5	415.2	417.5	417.6	417.7	417.6	417.5	415.2	415.5	415.2	417.5
30.5°	404.2	403.5	405.7	405.9	407.4	405.9	405.7	403.5	404.2	403.5	405.7
31°	393.1	391.6	393.9	394.3	396.6	394.3	393.9	391.6	393.1	391.6	393.9
31.5°	381.7	380.2	382.1	382.8	385.7	382.8	382.1	380.2	381.7	380.2	382.1
32°	370.1	368.7	370.4	371.5	374.5	371.5	370.4	368.7	370.1	368.7	370.4
32.5°	358.9	357.7	358.9	360.3	363.3	360.3	358.9	357.7	358.9	357.7	358.9
33°	347.6	346.7	347.1	349.1	351.9	349.1	347.1	346.7	347.6	346.7	347.1
33.5°	337.5	335.7	335.4	337.9	340.4	337.9	335.4	335.7	337.5	335.7	335.4
34°	326.6	324.7	323.8	326.9	329.5	326.9	323.8	324.7	326.6	324.7	323.8
34.5°	315.8	313.8	312.5	315.8	318.7	315.8	312.5	313.8	315.8	313.8	312.5
35°	304.9	303.2	301.8	305.1	308.2	305.1	301.8	303.2	304.9	303.2	301.8
35.5°	294.2	292.6	291.1	294.4	297.9	294.4	291.1	292.6	294.2	292.6	291.1
36°	283.8	282.1	280.8	284.2	287.7	284.2	280.8	282.1	283.8	282.1	280.8
36.5°	273.5	272.0	270.8	274.1	277.4	274.1	270.8	272.0	273.5	272.0	270.8
37°	263.1	262.0	261.0	264.3	267.2	264.3	261.0	262.0	263.1	262.0	261.0
37.5°	253.0	252.3	251.6	254.9	257.0	254.9	251.6	252.3	253.0	252.3	251.6
38°	243.0	242.9	242.6	245.7	246.9	245.7	242.6	242.9	243.0	242.9	242.6
38.5°	233.6	233.8	234.0	236.7	237.2	236.7	234.0	233.8	233.6	233.8	234.0
39°	224.5	225.0	225.4	228.0	227.9	228.0	225.4	225.0	224.5	225.0	225.4
39.5°	215.6	216.5	217.2	219.4	219.1	219.4	217.2	216.5	215.6	216.5	217.2
40°	207.1	208.1	209.3	211.1	210.7	211.1	209.3	208.1	207.1	208.1	209.3
40.5°	199.1	200.1	201.7	203.0	202.9	203.0	201.7	200.1	199.1	200.1	201.7
41°	191.4	192.4	194.5	195.4	195.7	195.4	194.5	192.4	191.4	192.4	194.5
41.5°	184.1	185.2	187.6	188.1	189.0	188.1	187.6	185.2	184.1	185.2	187.6
42°	177.2	178.4	181.0	181.3	182.5	181.3	181.0	178.4	177.2	178.4	181.0
42.5°	170.8	171.9	174.7	174.8	176.1	174.8	174.7	171.9	170.8	171.9	174.7
43°	164.7	165.9	168.6	168.8	170.0	168.8	168.6	165.9	164.7	165.9	168.6
43.5°	159.1	160.3	162.9	163.0	164.1	163.0	162.9	160.3	159.1	160.3	162.9



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	144.7	145.7	147.3	147.8	148.3	147.8	147.3	145.7	144.7	145.7	147.3
45.5°	140.5	141.3	142.8	143.3	143.7	143.3	142.8	141.3	140.5	141.3	142.8
46°	136.5	137.2	138.5	139.2	139.4	139.2	138.5	137.2	136.5	137.2	138.5
46.5°	132.8	133.4	134.4	135.2	135.4	135.2	134.4	133.4	132.8	133.4	134.4
47°	129.3	129.7	130.7	131.5	131.8	131.5	130.7	129.7	129.3	129.7	130.7
47.5°	126.0	126.3	127.2	128.1	128.5	128.1	127.2	126.3	126.0	126.3	127.2
48°	122.9	123.3	124.2	125.0	125.4	125.0	124.2	123.3	122.9	123.3	124.2
48.5°	120.4	120.6	121.3	122.1	122.4	122.1	121.3	120.6	120.4	120.6	121.3
49°	118.0	118.1	118.7	119.3	119.6	119.3	118.7	118.1	118.0	118.1	118.7
49.5°	115.7	115.8	116.2	116.7	116.8	116.7	116.2	115.8	115.7	115.8	116.2
50°	113.3	113.4	113.7	114.1	114.2	114.1	113.7	113.4	113.3	113.4	113.7
50.5°	110.9	111.0	111.2	111.6	111.6	111.6	111.2	111.0	110.9	111.0	111.2
51°	108.2	108.4	108.7	109.1	109.1	109.1	108.7	108.4	108.2	108.4	108.7
51.5°	105.6	105.7	106.1	106.6	106.7	106.6	106.1	105.7	105.6	105.7	106.1
52°	102.9	103.1	103.5	104.0	104.1	104.0	103.5	103.1	102.9	103.1	103.5
52.5°	100.2	100.4	100.9	101.3	101.5	101.3	100.9	100.4	100.2	100.4	100.9
53°	97.7	97.9	98.3	98.7	98.9	98.7	98.3	97.9	97.7	97.9	98.3
53.5°	95.1	95.3	95.7	96.2	96.4	96.2	95.7	95.3	95.1	95.3	95.7
54°	92.7	92.8	93.2	93.6	93.8	93.6	93.2	92.8	92.7	92.8	93.2
54.5°	90.3	90.4	90.8	91.2	91.4	91.2	90.8	90.4	90.3	90.4	90.8
55°	87.9	88.1	88.5	88.8	88.9	88.8	88.5	88.1	87.9	88.1	88.5
55.5°	85.6	85.8	86.2	86.5	86.6	86.5	86.2	85.8	85.6	85.8	86.2
56°	83.4	83.6	83.9	84.2	84.3	84.2	83.9	83.6	83.4	83.6	83.9
56.5°	81.2	81.4	81.7	82.0	82.1	82.0	81.7	81.4	81.2	81.4	81.7
57°	79.0	79.2	79.5	79.8	79.9	79.8	79.5	79.2	79.0	79.2	79.5
57.5°	76.8	77.1	77.4	77.6	77.8	77.6	77.4	77.1	76.8	77.1	77.4
58°	74.9	75.0	75.3	75.6	75.7	75.6	75.3	75.0	74.9	75.0	75.3
58.5°	72.9	73.0	73.3	73.5	73.6	73.5	73.3	73.0	72.9	73.0	73.3
59°	70.9	71.0	71.2	71.4	71.6	71.4	71.2	71.0	70.9	71.0	71.2
59.5°	68.9	69.0	69.2	69.5	69.6	69.5	69.2	69.0	68.9	69.0	69.2
60°	67.0	67.1	67.3	67.5	67.6	67.5	67.3	67.1	67.0	67.1	67.3
60.5°	65.1	65.2	65.4	65.6	65.7	65.6	65.4	65.2	65.1	65.2	65.4
61°	63.3	63.4	63.6	63.8	63.9	63.8	63.6	63.4	63.3	63.4	63.6
61.5°	61.5	61.6	61.8	62.0	62.1	62.0	61.8	61.6	61.5	61.6	61.8
62°	59.8	59.8	60.0	60.2	60.2	60.2	60.0	59.8	59.8	59.8	60.0
62.5°	57.9	58.0	58.1	58.3	58.4	58.3	58.1	58.0	57.9	58.0	58.1
63°	56.2	56.3	56.4	56.6	56.6	56.6	56.4	56.3	56.2	56.3	56.4
63.5°	54.5	54.6	54.7	54.9	55.0	54.9	54.7	54.6	54.5	54.6	54.7
64°	52.9	53.0	53.1	53.2	53.3	53.2	53.1	53.0	52.9	53.0	53.1
64.5°	51.3	51.4	51.5	51.6	51.7	51.6	51.5	51.4	51.3	51.4	51.5
65°	49.7	49.8	49.9	50.0	50.1	50.0	49.9	49.8	49.7	49.8	49.9
65.5°	48.2	48.2	48.3	48.5	48.5	48.5	48.3	48.2	48.2	48.2	48.3
66°	46.6	46.7	46.8	46.9	47.0	46.9	46.8	46.7	46.6	46.7	46.8



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	42.2	42.3	42.4	42.5	42.5	42.5	42.4	42.3	42.2	42.3	42.4
68°	40.8	40.9	41.0	41.1	41.1	41.1	41.0	40.9	40.8	40.9	41.0
68.5°	39.4	39.5	39.6	39.6	39.7	39.6	39.6	39.5	39.4	39.5	39.6
69°	38.1	38.1	38.1	38.3	38.3	38.3	38.1	38.1	38.1	38.1	38.1
69.5°	36.7	36.8	36.8	36.9	37.0	36.9	36.8	36.8	36.7	36.8	36.8
70°	35.5	35.6	35.5	35.6	35.7	35.6	35.5	35.6	35.5	35.6	35.5
70.5°	34.2	34.3	34.3	34.3	34.4	34.3	34.3	34.3	34.2	34.3	34.3
71°	33.0	33.0	33.0	33.0	33.1	33.0	33.0	33.0	33.0	33.0	33.0
71.5°	31.7	31.7	31.8	31.8	31.8	31.8	31.8	31.7	31.7	31.7	31.8
72°	30.5	30.5	30.5	30.6	30.6	30.6	30.5	30.5	30.5	30.5	30.5
72.5°	29.3	29.3	29.3	29.4	29.4	29.4	29.3	29.3	29.3	29.3	29.3
73°	28.1	28.1	28.1	28.2	28.2	28.2	28.1	28.1	28.1	28.1	28.1
73.5°	26.9	26.9	27.0	27.0	27.0	27.0	27.0	26.9	26.9	26.9	27.0
74°	25.8	25.8	25.8	25.9	25.9	25.9	25.8	25.8	25.8	25.8	25.8
74.5°	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7
75°	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
75.5°	22.5	22.5	22.5	22.5	22.6	22.5	22.5	22.5	22.5	22.5	22.5
76°	21.5	21.4	21.4	21.5	21.5	21.5	21.4	21.4	21.5	21.4	21.4
76.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
77°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
77.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
78°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
78.5°	16.5	16.5	16.4	16.4	16.5	16.4	16.4	16.5	16.5	16.5	16.4
79°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
79.5°	14.6	14.6	14.5	14.6	14.6	14.6	14.5	14.6	14.6	14.6	14.5
80°	13.7	13.7	13.6	13.6	13.6	13.6	13.6	13.7	13.7	13.7	13.6
80.5°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
81°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
81.5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
82°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
82.5°	9.4	9.4	9.4	9.4	9.3	9.4	9.4	9.4	9.4	9.4	9.4
83°	8.6	8.6	8.6	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.6
83.5°	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.8	7.8	7.8
84°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
84.5°	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.3	6.2	6.2
85°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
85.5°	4.8	4.7	4.8	4.7	4.8	4.7	4.8	4.7	4.8	4.7	4.8
86°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
86.5°	3.4	3.3	3.3	3.3	3.4	3.3	3.3	3.3	3.4	3.3	3.3
87°	2.7	2.7	2.7	2.6	2.7	2.6	2.7	2.7	2.7	2.7	2.7
87.5°	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0
88°	1.3	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.4	1.4
88.5°	0.8	0.8	0.9	1.0	1.2	1.0	0.9	0.8	0.8	0.8	0.9



TEST NUMBER: P775660
CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.1



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	747.3	747.3	747.3	747.3	747.3	747.3
0.5°	747.0	746.7	747.0	747.1	747.3	747.4
1°	746.8	746.4	746.8	746.9	747.0	747.1
1.5°	746.3	746.0	746.3	746.5	746.5	746.7
2°	745.7	745.3	745.7	745.8	746.0	746.1
2.5°	744.9	744.4	744.9	745.0	745.2	745.4
3°	743.8	743.3	743.8	744.0	744.2	744.4
3.5°	742.6	742.3	742.6	742.8	743.1	743.3
4°	741.3	740.8	741.3	741.5	741.9	742.0
4.5°	739.8	739.2	739.8	740.0	740.4	740.6
5°	738.3	737.6	738.3	738.5	738.9	739.2
5.5°	736.3	735.7	736.3	736.5	737.0	737.7
6°	734.2	733.4	734.2	734.5	735.0	735.4
6.5°	731.9	731.1	731.9	732.2	732.8	733.1
7°	729.5	728.8	729.5	730.0	730.3	730.7
7.5°	727.0	726.3	727.0	727.2	727.6	728.0
8°	724.1	723.7	724.1	724.4	724.8	725.1
8.5°	721.0	720.6	721.0	721.3	721.7	722.1
9°	717.8	717.4	717.8	718.1	718.6	718.9
9.5°	714.4	714.0	714.4	714.7	715.2	715.4
10°	710.8	710.3	710.8	711.2	711.6	711.9
10.5°	707.0	706.6	707.0	707.3	707.8	708.0
11°	703.1	702.6	703.1	703.5	703.9	704.1
11.5°	699.0	698.6	699.0	699.4	699.8	700.0
12°	694.8	694.4	694.8	695.3	695.6	695.8
12.5°	690.4	689.9	690.4	690.9	691.2	691.4
13°	686.0	685.5	686.0	686.4	686.7	686.9
13.5°	681.4	681.0	681.4	681.8	682.0	682.2
14°	676.7	676.3	676.7	677.1	677.3	677.4
14.5°	671.8	671.4	671.8	672.2	672.3	672.4
15°	667.0	666.6	667.0	667.2	667.4	667.4
15.5°	662.2	662.0	662.2	662.4	662.2	662.2
16°	657.5	657.3	657.5	657.6	657.3	657.2
16.5°	652.8	652.7	652.8	652.8	652.4	652.2
17°	647.9	648.0	647.9	648.0	647.6	647.4
17.5°	643.2	643.1	643.2	643.3	643.0	642.8
18°	638.4	638.2	638.4	638.6	638.4	638.3
18.5°	633.3	633.0	633.3	633.5	633.5	633.5
19°	627.8	627.5	627.8	628.1	628.3	628.6
19.5°	622.0	621.7	622.0	622.2	622.8	623.2
20°	615.8	615.1	615.8	615.7	616.8	617.3
20.5°	609.1	608.3	609.1	608.7	610.0	610.8
21°	601.8	600.8	601.8	601.3	602.8	604.0

TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	576.8	576.3	576.8	576.9	577.9	579.1
23°	567.7	567.5	567.7	568.4	568.6	569.6
23.5°	558.3	558.8	558.3	559.5	559.0	559.9
24°	548.7	549.6	548.7	550.3	549.1	549.8
24.5°	539.0	540.2	539.0	540.6	539.1	539.4
25°	529.2	530.1	529.2	530.4	528.6	528.4
25.5°	519.5	519.7	519.5	520.0	518.4	517.1
26°	509.4	508.6	509.4	509.3	507.8	505.5
26.5°	498.9	497.1	498.9	498.2	497.0	493.6
27°	488.1	485.4	488.1	487.0	485.8	482.0
27.5°	477.0	473.5	477.0	475.6	474.2	470.6
28°	465.4	461.6	465.4	464.0	462.6	459.2
28.5°	453.6	450.1	453.6	452.4	450.8	448.1
29°	441.6	439.2	441.6	440.8	438.9	437.1
29.5°	429.6	428.5	429.6	429.3	427.2	426.3
30°	417.6	417.7	417.6	417.5	415.2	415.5
30.5°	405.9	407.4	405.9	405.7	403.5	404.2
31°	394.3	396.6	394.3	393.9	391.6	393.1
31.5°	382.8	385.7	382.8	382.1	380.2	381.7
32°	371.5	374.5	371.5	370.4	368.7	370.1
32.5°	360.3	363.3	360.3	358.9	357.7	358.9
33°	349.1	351.9	349.1	347.1	346.7	347.6
33.5°	337.9	340.4	337.9	335.4	335.7	337.5
34°	326.9	329.5	326.9	323.8	324.7	326.6
34.5°	315.8	318.7	315.8	312.5	313.8	315.8
35°	305.1	308.2	305.1	301.8	303.2	304.9
35.5°	294.4	297.9	294.4	291.1	292.6	294.2
36°	284.2	287.7	284.2	280.8	282.1	283.8
36.5°	274.1	277.4	274.1	270.8	272.0	273.5
37°	264.3	267.2	264.3	261.0	262.0	263.1
37.5°	254.9	257.0	254.9	251.6	252.3	253.0
38°	245.7	246.9	245.7	242.6	242.9	243.0
38.5°	236.7	237.2	236.7	234.0	233.8	233.6
39°	228.0	227.9	228.0	225.4	225.0	224.5
39.5°	219.4	219.1	219.4	217.2	216.5	215.6
40°	211.1	210.7	211.1	209.3	208.1	207.1
40.5°	203.0	202.9	203.0	201.7	200.1	199.1
41°	195.4	195.7	195.4	194.5	192.4	191.4
41.5°	188.1	189.0	188.1	187.6	185.2	184.1
42°	181.3	182.5	181.3	181.0	178.4	177.2
42.5°	174.8	176.1	174.8	174.7	171.9	170.8
43°	168.8	170.0	168.8	168.6	165.9	164.7
43.5°	163.0	164.1	163.0	162.9	160.3	159.1



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	147.8	148.3	147.8	147.3	145.7	144.7
45.5°	143.3	143.7	143.3	142.8	141.3	140.5
46°	139.2	139.4	139.2	138.5	137.2	136.5
46.5°	135.2	135.4	135.2	134.4	133.4	132.8
47°	131.5	131.8	131.5	130.7	129.7	129.3
47.5°	128.1	128.5	128.1	127.2	126.3	126.0
48°	125.0	125.4	125.0	124.2	123.3	122.9
48.5°	122.1	122.4	122.1	121.3	120.6	120.4
49°	119.3	119.6	119.3	118.7	118.1	118.0
49.5°	116.7	116.8	116.7	116.2	115.8	115.7
50°	114.1	114.2	114.1	113.7	113.4	113.3
50.5°	111.6	111.6	111.6	111.2	111.0	110.9
51°	109.1	109.1	109.1	108.7	108.4	108.2
51.5°	106.6	106.7	106.6	106.1	105.7	105.6
52°	104.0	104.1	104.0	103.5	103.1	102.9
52.5°	101.3	101.5	101.3	100.9	100.4	100.2
53°	98.7	98.9	98.7	98.3	97.9	97.7
53.5°	96.2	96.4	96.2	95.7	95.3	95.1
54°	93.6	93.8	93.6	93.2	92.8	92.7
54.5°	91.2	91.4	91.2	90.8	90.4	90.3
55°	88.8	88.9	88.8	88.5	88.1	87.9
55.5°	86.5	86.6	86.5	86.2	85.8	85.6
56°	84.2	84.3	84.2	83.9	83.6	83.4
56.5°	82.0	82.1	82.0	81.7	81.4	81.2
57°	79.8	79.9	79.8	79.5	79.2	79.0
57.5°	77.6	77.8	77.6	77.4	77.1	76.8
58°	75.6	75.7	75.6	75.3	75.0	74.9
58.5°	73.5	73.6	73.5	73.3	73.0	72.9
59°	71.4	71.6	71.4	71.2	71.0	70.9
59.5°	69.5	69.6	69.5	69.2	69.0	68.9
60°	67.5	67.6	67.5	67.3	67.1	67.0
60.5°	65.6	65.7	65.6	65.4	65.2	65.1
61°	63.8	63.9	63.8	63.6	63.4	63.3
61.5°	62.0	62.1	62.0	61.8	61.6	61.5
62°	60.2	60.2	60.2	60.0	59.8	59.8
62.5°	58.3	58.4	58.3	58.1	58.0	57.9
63°	56.6	56.6	56.6	56.4	56.3	56.2
63.5°	54.9	55.0	54.9	54.7	54.6	54.5
64°	53.2	53.3	53.2	53.1	53.0	52.9
64.5°	51.6	51.7	51.6	51.5	51.4	51.3
65°	50.0	50.1	50.0	49.9	49.8	49.7
65.5°	48.5	48.5	48.5	48.3	48.2	48.2
66°	46.9	47.0	46.9	46.8	46.7	46.6



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	42.5	42.5	42.5	42.4	42.3	42.2
68°	41.1	41.1	41.1	41.0	40.9	40.8
68.5°	39.6	39.7	39.6	39.6	39.5	39.4
69°	38.3	38.3	38.3	38.1	38.1	38.1
69.5°	36.9	37.0	36.9	36.8	36.8	36.7
70°	35.6	35.7	35.6	35.5	35.6	35.5
70.5°	34.3	34.4	34.3	34.3	34.3	34.2
71°	33.0	33.1	33.0	33.0	33.0	33.0
71.5°	31.8	31.8	31.8	31.8	31.7	31.7
72°	30.6	30.6	30.6	30.5	30.5	30.5
72.5°	29.4	29.4	29.4	29.3	29.3	29.3
73°	28.2	28.2	28.2	28.1	28.1	28.1
73.5°	27.0	27.0	27.0	27.0	26.9	26.9
74°	25.9	25.9	25.9	25.8	25.8	25.8
74.5°	24.7	24.7	24.7	24.7	24.7	24.7
75°	23.6	23.6	23.6	23.6	23.6	23.6
75.5°	22.5	22.6	22.5	22.5	22.5	22.5
76°	21.5	21.5	21.5	21.4	21.4	21.5
76.5°	20.4	20.4	20.4	20.4	20.4	20.4
77°	19.4	19.4	19.4	19.4	19.4	19.4
77.5°	18.4	18.4	18.4	18.4	18.4	18.4
78°	17.4	17.4	17.4	17.4	17.4	17.4
78.5°	16.4	16.5	16.4	16.4	16.5	16.5
79°	15.5	15.5	15.5	15.5	15.5	15.5
79.5°	14.6	14.6	14.6	14.5	14.6	14.6
80°	13.6	13.6	13.6	13.6	13.7	13.7
80.5°	12.8	12.8	12.8	12.8	12.8	12.8
81°	11.9	11.9	11.9	11.9	11.9	11.9
81.5°	11.0	11.0	11.0	11.0	11.0	11.0
82°	10.2	10.2	10.2	10.2	10.2	10.2
82.5°	9.4	9.3	9.4	9.4	9.4	9.4
83°	8.5	8.5	8.5	8.6	8.6	8.6
83.5°	7.7	7.7	7.7	7.8	7.8	7.8
84°	7.0	7.0	7.0	7.0	7.0	7.0
84.5°	6.2	6.2	6.2	6.2	6.2	6.3
85°	5.5	5.5	5.5	5.5	5.5	5.5
85.5°	4.7	4.8	4.7	4.8	4.7	4.8
86°	4.0	4.0	4.0	4.0	4.0	4.0
86.5°	3.3	3.4	3.3	3.3	3.3	3.4
87°	2.6	2.7	2.6	2.7	2.7	2.7
87.5°	2.0	2.1	2.0	2.0	2.0	2.0
88°	1.5	1.5	1.5	1.4	1.4	1.3
88.5°	1.0	1.2	1.0	0.9	0.8	0.8



TEST NUMBER: P775660

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.3	0.2	0.1	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°	596.1	595.1	593.4	593.9	592.9	593.9	593.4	595.1	596.1	595.1	593.4
22°	587.8	586.8	585.3	585.5	584.5	585.5	585.3	586.8	587.8	586.8	585.3



44°	153.9	155.1	157.4	157.6	158.6	157.6	157.4	155.1	153.9	155.1	157.4
44.5°	149.1	150.3	152.3	152.6	153.3	152.6	152.3	150.3	149.1	150.3	152.3



66.5°	45.1	45.2	45.3	45.4	45.5	45.4	45.3	45.2	45.1	45.2	45.3
67°	43.7	43.7	43.8	43.9	44.0	43.9	43.8	43.7	43.7	43.7	43.8



89°	0.3	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.3	0.4	0.6
89.5°	0.0	0.1	0.3	0.4	0.5	0.4	0.3	0.1	0.0	0.1	0.3

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

Scaled Data Report





21.5°	593.9	592.9	593.9	593.4	595.1	596.1
22°	585.5	584.5	585.5	585.3	586.8	587.8



44°	157.6	158.6	157.6	157.4	155.1	153.9
44.5°	152.6	153.3	152.6	152.3	150.3	149.1



66.5°	45.4	45.5	45.4	45.3	45.2	45.1
67°	43.9	44.0	43.9	43.8	43.7	43.7



89°	0.7	0.8	0.7	0.6	0.4	0.3
89.5°	0.4	0.5	0.4	0.3	0.1	0.0

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

Scaled Data Report



(END OF REPORT)