

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: P775718

Luminaire Tested: HCDJBL510CSD-HCD61TRC-1000lm-4000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B035-HCD61TRC)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD61TRC-1000lm-4000K
Description: 6 INCH ROUND SHALLOW-WIDE SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

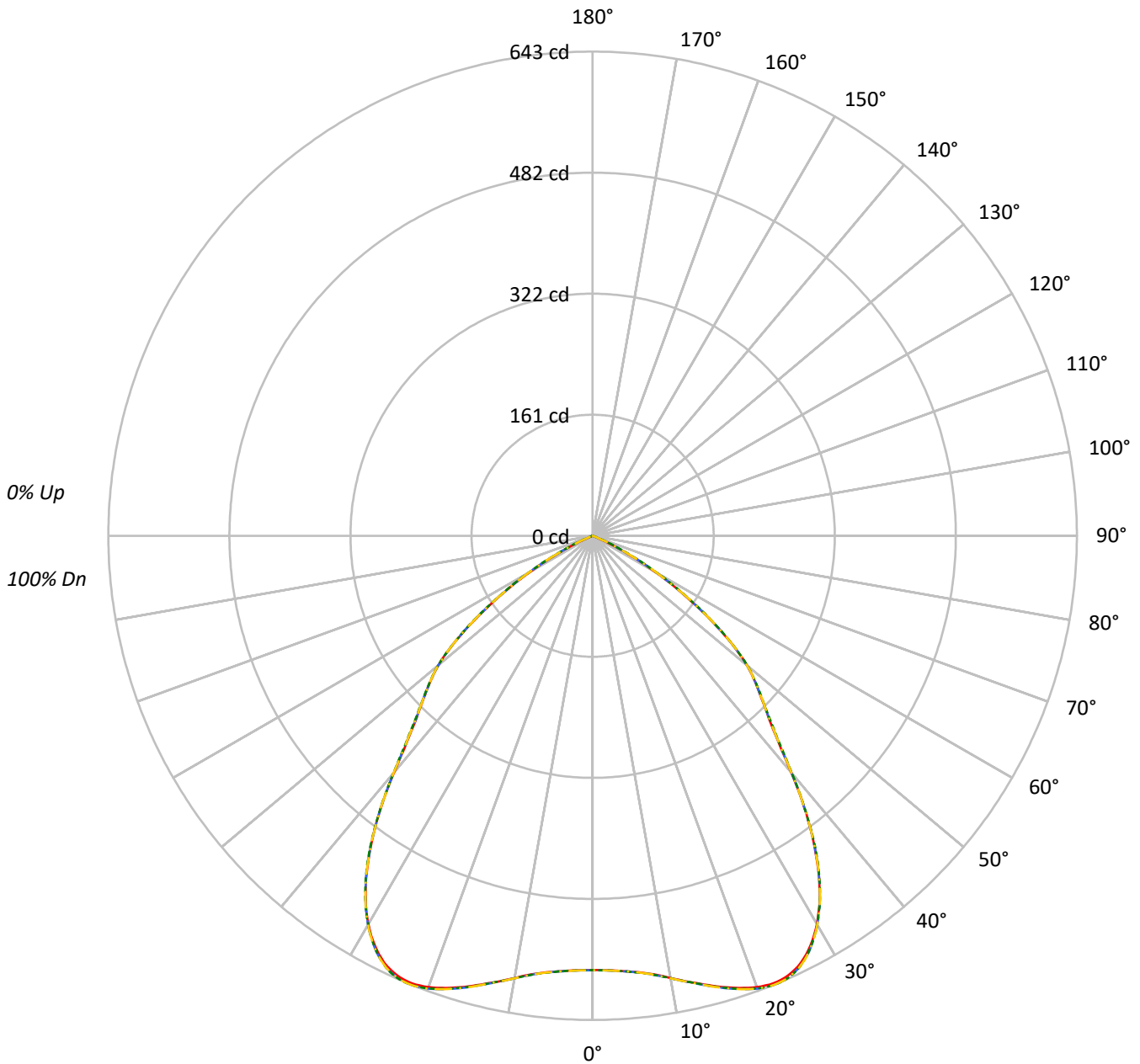
Lumens per Lamp: N/A
Luminaire Lumens: 1296.4 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.39 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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: P775718
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

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								
1	112	108	105	103	109	106	103	101	102	100	98	98	97	95	95	93	92	90								
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80								
3	97	88	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71								
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63								
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56								
6	78	66	59	53	76	65	58	53	64	57	52	62	56	52	61	56	52	50								
7	72	61	53	48	71	60	53	47	58	52	47	57	51	47	56	51	47	45								
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42	52	46	42	40								
9	63	51	44	39	62	51	44	39	50	43	39	49	43	39	48	42	38	37								
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	31626	31626	31626	31626
5°	31972	31994	31972	31994
10°	33199	33210	33199	33210
15°	35119	35159	35119	35159
20°	37208	37307	37208	37307
25°	38440	38603	38440	38603
30°	37689	37740	37689	37740
35°	34606	34713	34606	34713
40°	29334	29455	29334	29455
45°	25127	25258	25127	25258
50°	22788	22848	22788	22848
55°	17548	17729	17548	17729
60°	10569	10909	10569	10909
65°	3308	4229	3308	4229
70°	16	176	16	176
75°	0	21	0	21
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 25258 cd/sqm



TEST NUMBER: P775718
 CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	4.3
10°-20°	176.2	13.6
20°-30°	291.3	22.5
30°-40°	319.7	24.7
40°-50°	253.9	19.6
50°-60°	163.5	12.6
60°-70°	35.8	2.8
70°-80°	0.1	0.0
80°-90°	0.0	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°	523.4	40.4
0°-40°	843.1	65.0
0°-60°	1260.5	97.2
0°-90°	1296.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1296.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	577	577	577	577	577	
5°	581	581	581	581	581	56
15°	619	620	619	620	619	176
25°	636	638	636	638	636	291
35°	517	519	517	519	517	319
45°	324	326	324	326	324	253
55°	184	186	184	186	184	163
65°	26	33	26	33	26	33
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9
0.5°	576.7	576.9	577.0	577.1	577.0	577.1	577.0	576.9	576.7	576.9	577.0
1°	576.9	577.0	577.1	577.2	577.1	577.2	577.1	577.0	576.9	577.0	577.1
1.5°	577.1	577.2	577.4	577.5	577.4	577.5	577.4	577.2	577.1	577.2	577.4
2°	577.5	577.6	577.7	577.7	577.6	577.7	577.7	577.6	577.5	577.6	577.7
2.5°	577.8	577.9	578.1	578.1	578.0	578.1	578.1	577.9	577.8	577.9	578.1
3°	578.3	578.4	578.5	578.5	578.4	578.5	578.5	578.4	578.3	578.4	578.5
3.5°	578.8	578.9	579.1	579.1	579.0	579.1	579.1	578.9	578.8	578.9	579.1
4°	579.5	579.6	579.8	579.9	579.8	579.9	579.8	579.6	579.5	579.6	579.8
4.5°	580.2	580.3	580.5	580.6	580.5	580.6	580.5	580.3	580.2	580.3	580.5
5°	581.0	581.1	581.3	581.4	581.4	581.4	581.3	581.1	581.0	581.1	581.3
5.5°	581.9	582.1	582.3	582.5	582.4	582.5	582.3	582.1	581.9	582.1	582.3
6°	582.9	583.0	583.3	583.6	583.4	583.6	583.3	583.0	582.9	583.0	583.3
6.5°	584.1	584.2	584.5	584.6	584.5	584.6	584.5	584.2	584.1	584.2	584.5
7°	585.3	585.4	585.8	585.9	585.8	585.9	585.8	585.4	585.3	585.4	585.8
7.5°	586.8	586.9	587.2	587.2	587.1	587.2	587.2	586.9	586.8	586.9	587.2
8°	588.3	588.5	588.8	588.9	588.8	588.9	588.8	588.5	588.3	588.5	588.8
8.5°	590.1	590.3	590.7	590.7	590.6	590.7	590.7	590.3	590.1	590.3	590.7
9°	592.1	592.3	592.6	592.7	592.5	592.7	592.6	592.3	592.1	592.3	592.6
9.5°	594.2	594.4	594.7	594.8	594.5	594.8	594.7	594.4	594.2	594.4	594.7
10°	596.4	596.6	596.9	596.9	596.6	596.9	596.9	596.6	596.4	596.6	596.9
10.5°	598.6	598.8	599.0	599.0	598.8	599.0	599.0	598.8	598.6	598.8	599.0
11°	600.8	601.1	601.3	601.2	601.0	601.2	601.3	601.1	600.8	601.1	601.3
11.5°	603.1	603.3	603.5	603.4	603.2	603.4	603.5	603.3	603.1	603.3	603.5
12°	605.3	605.5	605.7	605.7	605.5	605.7	605.7	605.5	605.3	605.5	605.7
12.5°	607.5	607.8	608.0	608.0	607.8	608.0	608.0	607.8	607.5	607.8	608.0
13°	609.7	610.1	610.3	610.3	610.1	610.3	610.3	610.1	609.7	610.1	610.3
13.5°	612.0	612.4	612.8	612.6	612.4	612.6	612.8	612.4	612.0	612.4	612.8
14°	614.2	614.8	615.2	615.2	614.8	615.2	615.2	614.8	614.2	614.8	615.2
14.5°	616.5	617.1	617.5	617.6	617.2	617.6	617.5	617.1	616.5	617.1	617.5
15°	618.8	619.4	619.9	620.0	619.5	620.0	619.9	619.4	618.8	619.4	619.9
15.5°	621.1	621.7	622.3	622.3	621.8	622.3	622.3	621.7	621.1	621.7	622.3
16°	623.3	624.0	624.6	624.6	624.1	624.6	624.6	624.0	623.3	624.0	624.6
16.5°	625.4	626.1	626.8	626.8	626.3	626.8	626.8	626.1	625.4	626.1	626.8
17°	627.6	628.3	629.0	629.0	628.4	629.0	629.0	628.3	627.6	628.3	629.0
17.5°	629.6	630.4	631.1	631.1	630.5	631.1	631.1	630.4	629.6	630.4	631.1
18°	631.5	632.4	633.1	633.1	632.6	633.1	633.1	632.4	631.5	632.4	633.1
18.5°	633.2	634.3	635.0	635.0	634.5	635.0	635.0	634.3	633.2	634.3	635.0
19°	634.9	636.0	636.8	636.7	636.3	636.7	636.8	636.0	634.9	636.0	636.8
19.5°	636.4	637.4	638.5	638.3	638.0	638.3	638.5	637.4	636.4	637.4	638.5
20°	637.8	638.8	640.0	639.6	639.5	639.6	640.0	638.8	637.8	638.8	640.0
20.5°	638.9	640.0	641.1	640.8	640.8	640.8	641.1	640.0	638.9	640.0	641.1
21°	639.8	640.8	642.1	641.6	641.9	641.6	642.1	640.8	639.8	640.8	642.1



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	640.8	641.7	643.2	642.7	643.3	642.7	643.2	641.7	640.8	641.7	643.2
23°	640.6	641.4	643.0	642.4	643.1	642.4	643.0	641.4	640.6	641.4	643.0
23.5°	640.0	640.8	642.4	641.6	642.6	641.6	642.4	640.8	640.0	640.8	642.4
24°	638.9	639.8	641.3	640.7	641.5	640.7	641.3	639.8	638.9	639.8	641.3
24.5°	637.4	638.3	639.9	639.3	640.1	639.3	639.9	638.3	637.4	638.3	639.9
25°	635.5	636.5	638.0	637.5	638.2	637.5	638.0	636.5	635.5	636.5	638.0
25.5°	633.4	634.3	635.8	635.4	635.8	635.4	635.8	634.3	633.4	634.3	635.8
26°	630.8	631.7	633.0	632.9	633.0	632.9	633.0	631.7	630.8	631.7	633.0
26.5°	627.6	628.5	629.9	630.0	629.8	630.0	629.9	628.5	627.6	628.5	629.9
27°	624.2	625.1	626.3	626.6	626.1	626.6	626.3	625.1	624.2	625.1	626.3
27.5°	620.3	621.3	622.3	622.8	622.0	622.8	622.3	621.3	620.3	621.3	622.3
28°	616.0	617.0	617.8	618.6	617.5	618.6	617.8	617.0	616.0	617.0	617.8
28.5°	611.5	612.2	613.1	614.1	612.6	614.1	613.1	612.2	611.5	612.2	613.1
29°	606.5	607.2	607.8	609.1	607.5	609.1	607.8	607.2	606.5	607.2	607.8
29.5°	601.1	601.7	602.5	603.5	602.0	603.5	602.5	601.7	601.1	601.7	602.5
30°	595.4	595.8	596.4	597.6	596.2	597.6	596.4	595.8	595.4	595.8	596.4
30.5°	589.3	589.5	590.2	591.4	590.0	591.4	590.2	589.5	589.3	589.5	590.2
31°	582.7	582.9	583.6	584.7	583.4	584.7	583.6	582.9	582.7	582.9	583.6
31.5°	575.9	575.9	576.6	577.6	576.6	577.6	576.6	575.9	575.9	575.9	576.6
32°	568.6	568.5	569.2	570.1	569.5	570.1	569.2	568.5	568.6	568.5	569.2
32.5°	561.0	560.8	561.6	562.2	562.0	562.2	561.6	560.8	561.0	560.8	561.6
33°	553.0	552.8	553.5	554.0	554.1	554.0	553.5	552.8	553.0	552.8	553.5
33.5°	544.6	544.2	545.1	545.4	545.7	545.4	545.1	544.2	544.6	544.2	545.1
34°	535.9	535.4	536.3	536.4	537.2	536.4	536.3	535.4	535.9	535.4	536.3
34.5°	526.5	526.5	527.0	527.1	528.1	527.1	527.0	526.5	526.5	526.5	527.0
35°	517.1	516.9	517.5	517.7	518.7	517.7	517.5	516.9	517.1	516.9	517.5
35.5°	507.4	507.4	507.8	508.0	509.1	508.0	507.8	507.4	507.4	507.4	507.8
36°	497.5	497.5	497.8	498.1	498.9	498.1	497.8	497.5	497.5	497.5	497.8
36.5°	487.3	487.4	487.6	487.9	488.7	487.9	487.6	487.4	487.3	487.4	487.6
37°	476.7	476.9	477.0	477.3	478.0	477.3	477.0	476.9	476.7	476.9	477.0
37.5°	466.1	466.2	466.4	466.7	467.1	466.7	466.4	466.2	466.1	466.2	466.4
38°	455.3	455.3	455.6	455.8	456.1	455.8	455.6	455.3	455.3	455.3	455.6
38.5°	444.3	444.3	444.6	444.8	445.0	444.8	444.6	444.3	444.3	444.3	444.6
39°	433.0	433.0	433.4	433.7	433.9	433.7	433.4	433.0	433.0	433.0	433.4
39.5°	421.5	421.6	422.0	422.6	422.7	422.6	422.0	421.6	421.5	421.6	422.0
40°	409.9	410.0	410.7	411.3	411.6	411.3	410.7	410.0	409.9	410.0	410.7
40.5°	398.6	398.8	399.7	400.7	400.9	400.7	399.7	398.8	398.6	398.8	399.7
41°	387.8	388.2	389.1	390.2	390.6	390.2	389.1	388.2	387.8	388.2	389.1
41.5°	377.8	378.2	379.0	380.1	380.4	380.1	379.0	378.2	377.8	378.2	379.0
42°	368.5	368.7	369.6	370.3	370.9	370.3	369.6	368.7	368.5	368.7	369.6
42.5°	359.9	360.0	361.1	361.8	362.2	361.8	361.1	360.0	359.9	360.0	361.1
43°	351.5	351.6	352.8	353.6	354.5	353.6	352.8	351.6	351.5	351.6	352.8
43.5°	343.7	344.0	344.9	345.7	346.5	345.7	344.9	344.0	343.7	344.0	344.9



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	324.1	324.1	324.8	325.1	325.8	325.1	324.8	324.1	324.1	324.1	324.8
45.5°	318.1	318.1	318.8	319.1	319.5	319.1	318.8	318.1	318.1	318.1	318.8
46°	312.3	312.4	312.9	313.4	313.6	313.4	312.9	312.4	312.3	312.4	312.9
46.5°	306.7	306.7	307.3	307.6	308.0	307.6	307.3	306.7	306.7	306.7	307.3
47°	301.3	301.3	301.7	302.1	302.4	302.1	301.7	301.3	301.3	301.3	301.7
47.5°	295.8	295.8	296.3	296.7	296.8	296.7	296.3	295.8	295.8	295.8	296.3
48°	290.6	290.5	291.0	291.3	291.5	291.3	291.0	290.5	290.6	290.5	291.0
48.5°	285.1	285.1	285.5	285.9	286.0	285.9	285.5	285.1	285.1	285.1	285.5
49°	279.4	279.5	280.0	280.3	280.5	280.3	280.0	279.5	279.4	279.5	280.0
49.5°	273.7	273.5	274.1	274.4	274.5	274.4	274.1	273.5	273.7	273.5	274.1
50°	267.2	267.2	267.6	267.9	267.9	267.9	267.6	267.2	267.2	267.2	267.6
50.5°	260.2	260.2	260.4	260.8	260.8	260.8	260.4	260.2	260.2	260.2	260.4
51°	252.7	252.6	253.0	253.3	253.6	253.3	253.0	252.6	252.7	252.6	253.0
51.5°	244.9	244.8	245.2	245.6	245.7	245.6	245.2	244.8	244.9	244.8	245.2
52°	236.7	236.8	237.1	237.4	237.6	237.4	237.1	236.8	236.7	236.8	237.1
52.5°	228.3	228.2	228.7	229.1	229.2	229.1	228.7	228.2	228.3	228.2	228.7
53°	219.4	219.6	220.1	220.6	220.5	220.6	220.1	219.6	219.4	219.6	220.1
53.5°	210.6	210.7	211.4	211.8	212.0	211.8	211.4	210.7	210.6	210.7	211.4
54°	201.6	201.8	202.4	202.9	203.0	202.9	202.4	201.8	201.6	201.8	202.4
54.5°	192.7	192.7	193.5	194.0	194.2	194.0	193.5	192.7	192.7	192.7	193.5
55°	183.6	183.7	184.7	185.1	185.5	185.1	184.7	183.7	183.6	183.7	184.7
55.5°	174.4	174.6	175.5	176.2	176.6	176.2	175.5	174.6	174.4	174.6	175.5
56°	165.2	165.6	166.6	167.1	167.7	167.1	166.6	165.6	165.2	165.6	166.6
56.5°	156.2	156.5	157.6	158.2	158.7	158.2	157.6	156.5	156.2	156.5	157.6
57°	147.2	147.7	148.6	149.4	149.9	149.4	148.6	147.7	147.2	147.7	148.6
57.5°	138.4	138.9	139.8	140.7	141.2	140.7	139.8	138.9	138.4	138.9	139.8
58°	129.6	130.1	131.1	132.2	132.6	132.2	131.1	130.1	129.6	130.1	131.1
58.5°	120.9	121.5	122.6	123.9	124.2	123.9	122.6	121.5	120.9	121.5	122.6
59°	112.5	113.2	114.1	115.4	115.8	115.4	114.1	113.2	112.5	113.2	114.1
59.5°	104.4	104.9	105.9	107.3	107.6	107.3	105.9	104.9	104.4	104.9	105.9
60°	96.4	96.9	97.8	99.1	99.5	99.1	97.8	96.9	96.4	96.9	97.8
60.5°	88.5	88.9	89.8	91.1	91.7	91.1	89.8	88.9	88.5	88.9	89.8
61°	80.7	81.1	82.3	83.4	84.0	83.4	82.3	81.1	80.7	81.1	82.3
61.5°	72.8	73.6	74.8	76.0	76.9	76.0	74.8	73.6	72.8	73.6	74.8
62°	65.3	66.4	67.5	68.8	69.8	68.8	67.5	66.4	65.3	66.4	67.5
62.5°	57.9	59.2	60.5	61.8	62.8	61.8	60.5	59.2	57.9	59.2	60.5
63°	50.6	52.5	53.7	54.9	56.1	54.9	53.7	52.5	50.6	52.5	53.7
63.5°	43.7	46.1	47.4	48.5	49.8	48.5	47.4	46.1	43.7	46.1	47.4
64°	37.0	40.1	41.6	42.7	43.9	42.7	41.6	40.1	37.0	40.1	41.6
64.5°	31.0	34.7	36.0	37.0	38.2	37.0	36.0	34.7	31.0	34.7	36.0
65°	25.5	29.4	30.8	31.6	32.6	31.6	30.8	29.4	25.5	29.4	30.8
65.5°	20.4	24.8	25.9	26.4	27.2	26.4	25.9	24.8	20.4	24.8	25.9
66°	16.0	20.6	21.4	22.1	22.5	22.1	21.4	20.6	16.0	20.6	21.4



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	4.9	9.6	10.3	10.9	11.6	10.9	10.3	9.6	4.9	9.6	10.3
68°	2.9	6.7	7.4	8.2	9.5	8.2	7.4	6.7	2.9	6.7	7.4
68.5°	1.8	4.4	5.3	5.8	7.4	5.8	5.3	4.4	1.8	4.4	5.3
69°	1.1	2.6	3.3	3.7	5.3	3.7	3.3	2.6	1.1	2.6	3.3
69.5°	0.6	1.7	1.9	1.9	3.2	1.9	1.9	1.7	0.6	1.7	1.9
70°	0.1	0.8	1.1	1.1	1.1	1.1	1.1	0.8	0.1	0.8	1.1
70.5°	0.1	0.3	0.6	0.6	0.4	0.6	0.6	0.3	0.1	0.3	0.6
71°	0.1	0.1	0.3	0.3	0.1	0.3	0.3	0.1	0.1	0.1	0.3
71.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
75.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	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	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: P775718
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

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: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	576.9	576.9	576.9	576.9	576.9	576.9
0.5°	577.1	577.0	577.1	577.0	576.9	576.7
1°	577.2	577.1	577.2	577.1	577.0	576.9
1.5°	577.5	577.4	577.5	577.4	577.2	577.1
2°	577.7	577.6	577.7	577.7	577.6	577.5
2.5°	578.1	578.0	578.1	578.1	577.9	577.8
3°	578.5	578.4	578.5	578.5	578.4	578.3
3.5°	579.1	579.0	579.1	579.1	578.9	578.8
4°	579.9	579.8	579.9	579.8	579.6	579.5
4.5°	580.6	580.5	580.6	580.5	580.3	580.2
5°	581.4	581.4	581.4	581.3	581.1	581.0
5.5°	582.5	582.4	582.5	582.3	582.1	581.9
6°	583.6	583.4	583.6	583.3	583.0	582.9
6.5°	584.6	584.5	584.6	584.5	584.2	584.1
7°	585.9	585.8	585.9	585.8	585.4	585.3
7.5°	587.2	587.1	587.2	587.2	586.9	586.8
8°	588.9	588.8	588.9	588.8	588.5	588.3
8.5°	590.7	590.6	590.7	590.7	590.3	590.1
9°	592.7	592.5	592.7	592.6	592.3	592.1
9.5°	594.8	594.5	594.8	594.7	594.4	594.2
10°	596.9	596.6	596.9	596.9	596.6	596.4
10.5°	599.0	598.8	599.0	599.0	598.8	598.6
11°	601.2	601.0	601.2	601.3	601.1	600.8
11.5°	603.4	603.2	603.4	603.5	603.3	603.1
12°	605.7	605.5	605.7	605.7	605.5	605.3
12.5°	608.0	607.8	608.0	608.0	607.8	607.5
13°	610.3	610.1	610.3	610.3	610.1	609.7
13.5°	612.6	612.4	612.6	612.8	612.4	612.0
14°	615.2	614.8	615.2	615.2	614.8	614.2
14.5°	617.6	617.2	617.6	617.5	617.1	616.5
15°	620.0	619.5	620.0	619.9	619.4	618.8
15.5°	622.3	621.8	622.3	622.3	621.7	621.1
16°	624.6	624.1	624.6	624.6	624.0	623.3
16.5°	626.8	626.3	626.8	626.8	626.1	625.4
17°	629.0	628.4	629.0	629.0	628.3	627.6
17.5°	631.1	630.5	631.1	631.1	630.4	629.6
18°	633.1	632.6	633.1	633.1	632.4	631.5
18.5°	635.0	634.5	635.0	635.0	634.3	633.2
19°	636.7	636.3	636.7	636.8	636.0	634.9
19.5°	638.3	638.0	638.3	638.5	637.4	636.4
20°	639.6	639.5	639.6	640.0	638.8	637.8
20.5°	640.8	640.8	640.8	641.1	640.0	638.9
21°	641.6	641.9	641.6	642.1	640.8	639.8

TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	642.7	643.3	642.7	643.2	641.7	640.8
23°	642.4	643.1	642.4	643.0	641.4	640.6
23.5°	641.6	642.6	641.6	642.4	640.8	640.0
24°	640.7	641.5	640.7	641.3	639.8	638.9
24.5°	639.3	640.1	639.3	639.9	638.3	637.4
25°	637.5	638.2	637.5	638.0	636.5	635.5
25.5°	635.4	635.8	635.4	635.8	634.3	633.4
26°	632.9	633.0	632.9	633.0	631.7	630.8
26.5°	630.0	629.8	630.0	629.9	628.5	627.6
27°	626.6	626.1	626.6	626.3	625.1	624.2
27.5°	622.8	622.0	622.8	622.3	621.3	620.3
28°	618.6	617.5	618.6	617.8	617.0	616.0
28.5°	614.1	612.6	614.1	613.1	612.2	611.5
29°	609.1	607.5	609.1	607.8	607.2	606.5
29.5°	603.5	602.0	603.5	602.5	601.7	601.1
30°	597.6	596.2	597.6	596.4	595.8	595.4
30.5°	591.4	590.0	591.4	590.2	589.5	589.3
31°	584.7	583.4	584.7	583.6	582.9	582.7
31.5°	577.6	576.6	577.6	576.6	575.9	575.9
32°	570.1	569.5	570.1	569.2	568.5	568.6
32.5°	562.2	562.0	562.2	561.6	560.8	561.0
33°	554.0	554.1	554.0	553.5	552.8	553.0
33.5°	545.4	545.7	545.4	545.1	544.2	544.6
34°	536.4	537.2	536.4	536.3	535.4	535.9
34.5°	527.1	528.1	527.1	527.0	526.5	526.5
35°	517.7	518.7	517.7	517.5	516.9	517.1
35.5°	508.0	509.1	508.0	507.8	507.4	507.4
36°	498.1	498.9	498.1	497.8	497.5	497.5
36.5°	487.9	488.7	487.9	487.6	487.4	487.3
37°	477.3	478.0	477.3	477.0	476.9	476.7
37.5°	466.7	467.1	466.7	466.4	466.2	466.1
38°	455.8	456.1	455.8	455.6	455.3	455.3
38.5°	444.8	445.0	444.8	444.6	444.3	444.3
39°	433.7	433.9	433.7	433.4	433.0	433.0
39.5°	422.6	422.7	422.6	422.0	421.6	421.5
40°	411.3	411.6	411.3	410.7	410.0	409.9
40.5°	400.7	400.9	400.7	399.7	398.8	398.6
41°	390.2	390.6	390.2	389.1	388.2	387.8
41.5°	380.1	380.4	380.1	379.0	378.2	377.8
42°	370.3	370.9	370.3	369.6	368.7	368.5
42.5°	361.8	362.2	361.8	361.1	360.0	359.9
43°	353.6	354.5	353.6	352.8	351.6	351.5
43.5°	345.7	346.5	345.7	344.9	344.0	343.7



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	325.1	325.8	325.1	324.8	324.1	324.1
45.5°	319.1	319.5	319.1	318.8	318.1	318.1
46°	313.4	313.6	313.4	312.9	312.4	312.3
46.5°	307.6	308.0	307.6	307.3	306.7	306.7
47°	302.1	302.4	302.1	301.7	301.3	301.3
47.5°	296.7	296.8	296.7	296.3	295.8	295.8
48°	291.3	291.5	291.3	291.0	290.5	290.6
48.5°	285.9	286.0	285.9	285.5	285.1	285.1
49°	280.3	280.5	280.3	280.0	279.5	279.4
49.5°	274.4	274.5	274.4	274.1	273.5	273.7
50°	267.9	267.9	267.9	267.6	267.2	267.2
50.5°	260.8	260.8	260.8	260.4	260.2	260.2
51°	253.3	253.6	253.3	253.0	252.6	252.7
51.5°	245.6	245.7	245.6	245.2	244.8	244.9
52°	237.4	237.6	237.4	237.1	236.8	236.7
52.5°	229.1	229.2	229.1	228.7	228.2	228.3
53°	220.6	220.5	220.6	220.1	219.6	219.4
53.5°	211.8	212.0	211.8	211.4	210.7	210.6
54°	202.9	203.0	202.9	202.4	201.8	201.6
54.5°	194.0	194.2	194.0	193.5	192.7	192.7
55°	185.1	185.5	185.1	184.7	183.7	183.6
55.5°	176.2	176.6	176.2	175.5	174.6	174.4
56°	167.1	167.7	167.1	166.6	165.6	165.2
56.5°	158.2	158.7	158.2	157.6	156.5	156.2
57°	149.4	149.9	149.4	148.6	147.7	147.2
57.5°	140.7	141.2	140.7	139.8	138.9	138.4
58°	132.2	132.6	132.2	131.1	130.1	129.6
58.5°	123.9	124.2	123.9	122.6	121.5	120.9
59°	115.4	115.8	115.4	114.1	113.2	112.5
59.5°	107.3	107.6	107.3	105.9	104.9	104.4
60°	99.1	99.5	99.1	97.8	96.9	96.4
60.5°	91.1	91.7	91.1	89.8	88.9	88.5
61°	83.4	84.0	83.4	82.3	81.1	80.7
61.5°	76.0	76.9	76.0	74.8	73.6	72.8
62°	68.8	69.8	68.8	67.5	66.4	65.3
62.5°	61.8	62.8	61.8	60.5	59.2	57.9
63°	54.9	56.1	54.9	53.7	52.5	50.6
63.5°	48.5	49.8	48.5	47.4	46.1	43.7
64°	42.7	43.9	42.7	41.6	40.1	37.0
64.5°	37.0	38.2	37.0	36.0	34.7	31.0
65°	31.6	32.6	31.6	30.8	29.4	25.5
65.5°	26.4	27.2	26.4	25.9	24.8	20.4
66°	22.1	22.5	22.1	21.4	20.6	16.0



TEST NUMBER: P775718

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	10.9	11.6	10.9	10.3	9.6	4.9
68°	8.2	9.5	8.2	7.4	6.7	2.9
68.5°	5.8	7.4	5.8	5.3	4.4	1.8
69°	3.7	5.3	3.7	3.3	2.6	1.1
69.5°	1.9	3.2	1.9	1.9	1.7	0.6
70°	1.1	1.1	1.1	1.1	0.8	0.1
70.5°	0.6	0.4	0.6	0.6	0.3	0.1
71°	0.3	0.1	0.3	0.3	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.1	0.1	0.1	0.1
75°	0.1	0.1	0.1	0.1	0.0	0.0
75.5°	0.1	0.1	0.1	0.0	0.0	0.0
76°	0.0	0.1	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	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: P775718
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-4000K

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

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°	640.5	641.4	642.8	642.3	642.7	642.3	642.8	641.4	640.5	641.4	642.8
22°	640.8	641.7	643.2	642.6	643.1	642.6	643.2	641.7	640.8	641.7	643.2



44°	336.7	336.9	337.7	338.3	339.1	338.3	337.7	336.9	336.7	336.9	337.7
44.5°	330.3	330.4	331.1	331.5	332.1	331.5	331.1	330.4	330.3	330.4	331.1



66.5°	11.7	16.4	17.4	18.1	18.2	18.1	17.4	16.4	11.7	16.4	17.4
67°	8.1	12.9	13.6	14.2	14.3	14.2	13.6	12.9	8.1	12.9	13.6



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°	642.3	642.7	642.3	642.8	641.4	640.5
22°	642.6	643.1	642.6	643.2	641.7	640.8



44°	338.3	339.1	338.3	337.7	336.9	336.7
44.5°	331.5	332.1	331.5	331.1	330.4	330.3



66.5°	18.1	18.2	18.1	17.4	16.4	11.7
67°	14.2	14.3	14.2	13.6	12.9	8.1

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)