

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: P775719

Luminaire Tested: HCDJBL510CSD-HCD61TRC-1000lm-5000K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775719
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-5000K
Description: 6 INCH ROUND SHALLOW-WIDE SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

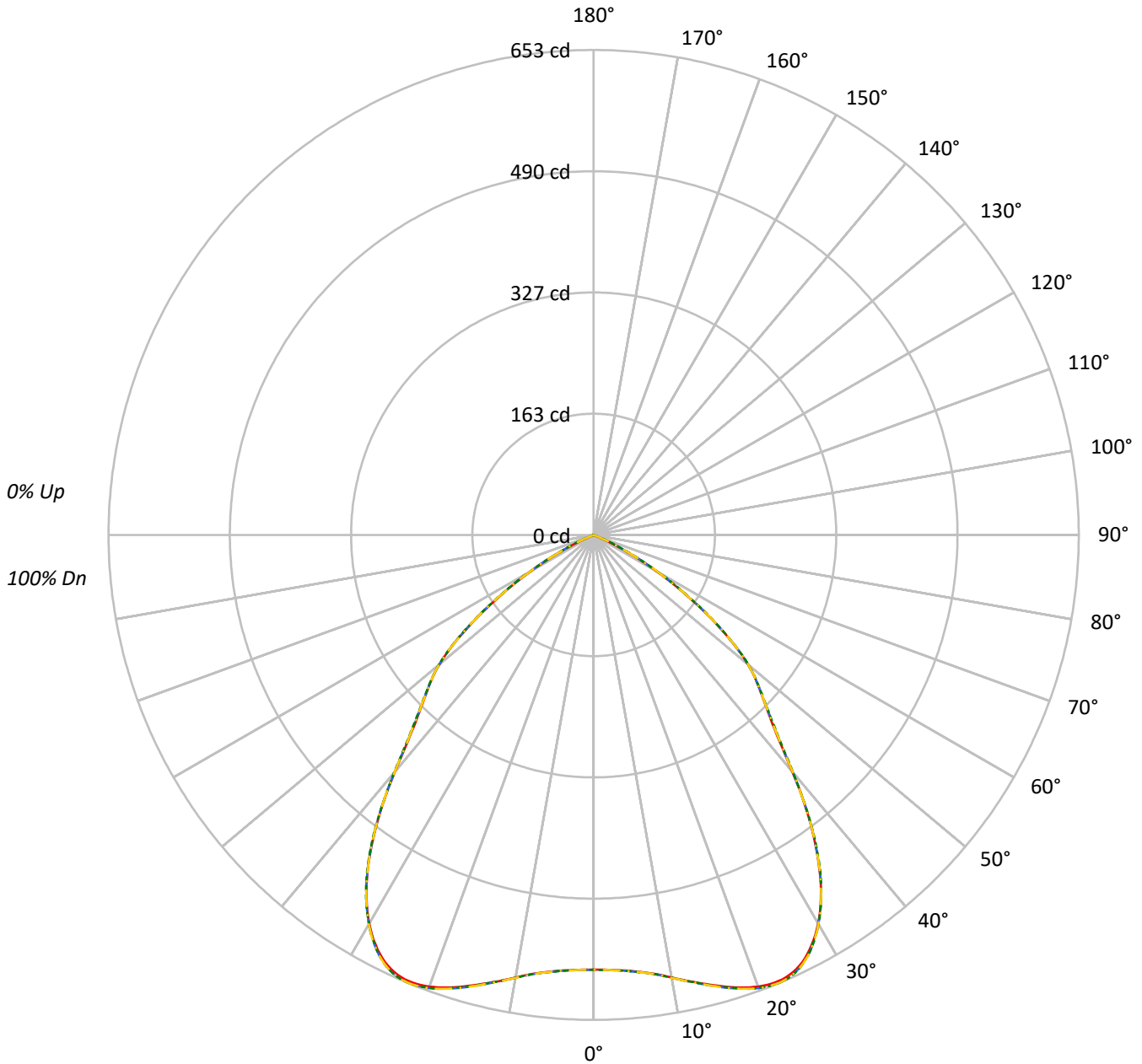
Lumens per Lamp: N/A
Luminaire Lumens: 1315.6 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.39 / 1.3
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (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: P775719
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
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°	32097	32097	32097	32097
5°	32445	32473	32445	32473
10°	33689	33700	33689	33700
15°	35642	35681	35642	35681
20°	37757	37862	37757	37862
25°	39014	39172	39014	39172
30°	38246	38297	38246	38297
35°	35115	35228	35115	35228
40°	29770	29892	29770	29892
45°	25499	25631	25499	25631
50°	23129	23180	23129	23180
55°	17806	17997	17806	17997
60°	10734	11074	10734	11074
65°	3360	4281	3360	4281
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: 25631 cd/sqm



TEST NUMBER: P775719
 CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	4.3
10°-20°	178.8	13.6
20°-30°	295.6	22.5
30°-40°	324.4	24.7
40°-50°	257.6	19.6
50°-60°	165.9	12.6
60°-70°	36.3	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°	531.2	40.4
0°-40°	855.6	65.0
0°-60°	1279.2	97.2
0°-90°	1315.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1315.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	586	586	586	586	586	
5°	590	590	590	590	590	57
15°	628	629	628	629	628	179
25°	645	648	645	648	645	295
35°	525	526	525	526	525	324
45°	329	331	329	331	329	257
55°	186	188	186	188	186	165
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: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5	585.5
0.5°	585.3	585.5	585.6	585.7	585.6	585.7	585.6	585.5	585.3	585.5	585.6
1°	585.5	585.6	585.7	585.8	585.7	585.8	585.7	585.6	585.5	585.6	585.7
1.5°	585.7	585.8	585.9	586.0	585.9	586.0	585.9	585.8	585.7	585.8	585.9
2°	586.0	586.1	586.2	586.2	586.1	586.2	586.2	586.1	586.0	586.1	586.2
2.5°	586.3	586.4	586.6	586.6	586.5	586.6	586.6	586.4	586.3	586.4	586.6
3°	586.9	587.0	587.1	587.1	587.0	587.1	587.1	587.0	586.9	587.0	587.1
3.5°	587.4	587.5	587.7	587.7	587.6	587.7	587.7	587.5	587.4	587.5	587.7
4°	588.0	588.1	588.4	588.5	588.4	588.5	588.4	588.1	588.0	588.1	588.4
4.5°	588.8	588.9	589.1	589.2	589.1	589.2	589.1	588.9	588.8	588.9	589.1
5°	589.6	589.7	590.0	590.1	590.1	590.1	590.0	589.7	589.6	589.7	590.0
5.5°	590.5	590.7	590.9	591.1	591.0	591.1	590.9	590.7	590.5	590.7	590.9
6°	591.6	591.7	592.0	592.2	592.1	592.2	592.0	591.7	591.6	591.7	592.0
6.5°	592.7	592.8	593.2	593.3	593.2	593.3	593.2	592.8	592.7	592.8	593.2
7°	594.0	594.1	594.4	594.5	594.4	594.5	594.4	594.1	594.0	594.1	594.4
7.5°	595.5	595.6	595.9	595.9	595.8	595.9	595.9	595.6	595.5	595.6	595.9
8°	597.0	597.2	597.5	597.6	597.5	597.6	597.5	597.2	597.0	597.2	597.5
8.5°	598.8	599.0	599.4	599.4	599.3	599.4	599.4	599.0	598.8	599.0	599.4
9°	600.8	601.0	601.4	601.5	601.3	601.5	601.4	601.0	600.8	601.0	601.4
9.5°	603.0	603.2	603.5	603.6	603.3	603.6	603.5	603.2	603.0	603.2	603.5
10°	605.2	605.4	605.7	605.7	605.4	605.7	605.7	605.4	605.2	605.4	605.7
10.5°	607.4	607.6	607.9	607.9	607.6	607.9	607.9	607.6	607.4	607.6	607.9
11°	609.7	610.0	610.2	610.1	609.9	610.1	610.2	610.0	609.7	610.0	610.2
11.5°	612.0	612.2	612.4	612.3	612.1	612.3	612.4	612.2	612.0	612.2	612.4
12°	614.3	614.5	614.7	614.7	614.5	614.7	614.7	614.5	614.3	614.5	614.7
12.5°	616.5	616.8	617.0	617.0	616.8	617.0	617.0	616.8	616.5	616.8	617.0
13°	618.7	619.2	619.4	619.4	619.2	619.4	619.4	619.2	618.7	619.2	619.4
13.5°	621.1	621.5	621.8	621.7	621.5	621.7	621.8	621.5	621.1	621.5	621.8
14°	623.3	623.9	624.3	624.3	623.9	624.3	624.3	623.9	623.3	623.9	624.3
14.5°	625.7	626.2	626.6	626.7	626.3	626.7	626.6	626.2	625.7	626.2	626.6
15°	628.0	628.5	629.1	629.2	628.7	629.2	629.1	628.5	628.0	628.5	629.1
15.5°	630.2	630.9	631.5	631.5	631.0	631.5	631.5	630.9	630.2	630.9	631.5
16°	632.5	633.2	633.9	633.9	633.3	633.9	633.9	633.2	632.5	633.2	633.9
16.5°	634.6	635.4	636.1	636.1	635.6	636.1	636.1	635.4	634.6	635.4	636.1
17°	636.9	637.6	638.4	638.4	637.7	638.4	638.4	637.6	636.9	637.6	638.4
17.5°	638.9	639.7	640.5	640.5	639.8	640.5	640.5	639.7	638.9	639.7	640.5
18°	640.8	641.8	642.5	642.5	642.0	642.5	642.5	641.8	640.8	641.8	642.5
18.5°	642.6	643.7	644.4	644.4	643.9	644.4	644.4	643.7	642.6	643.7	644.4
19°	644.3	645.4	646.2	646.1	645.7	646.1	646.2	645.4	644.3	645.4	646.2
19.5°	645.8	646.9	647.9	647.7	647.4	647.7	647.9	646.9	645.8	646.9	647.9
20°	647.2	648.3	649.4	649.1	649.0	649.1	649.4	648.3	647.2	648.3	649.4
20.5°	648.4	649.4	650.6	650.3	650.3	650.3	650.6	649.4	648.4	649.4	650.6
21°	649.2	650.3	651.6	651.1	651.4	651.1	651.6	650.3	649.2	650.3	651.6



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	650.3	651.3	652.7	652.2	652.8	652.2	652.7	651.3	650.3	651.3	652.7
23°	650.1	650.9	652.5	651.9	652.6	651.9	652.5	650.9	650.1	650.9	652.5
23.5°	649.4	650.3	651.9	651.1	652.1	651.1	651.9	650.3	649.4	650.3	651.9
24°	648.4	649.2	650.8	650.2	651.0	650.2	650.8	649.2	648.4	649.2	650.8
24.5°	646.9	647.7	649.3	648.8	649.5	648.8	649.3	647.7	646.9	647.7	649.3
25°	645.0	645.9	647.4	647.0	647.6	647.0	647.4	645.9	645.0	645.9	647.4
25.5°	642.8	643.7	645.2	644.9	645.2	644.9	645.2	643.7	642.8	643.7	645.2
26°	640.2	641.0	642.4	642.3	642.4	642.3	642.4	641.0	640.2	641.0	642.4
26.5°	636.9	637.8	639.2	639.3	639.1	639.3	639.2	637.8	636.9	637.8	639.2
27°	633.4	634.4	635.6	635.9	635.4	635.9	635.6	634.4	633.4	634.4	635.6
27.5°	629.5	630.5	631.5	632.1	631.2	632.1	631.5	630.5	629.5	630.5	631.5
28°	625.1	626.1	626.9	627.8	626.6	627.8	626.9	626.1	625.1	626.1	626.9
28.5°	620.5	621.3	622.1	623.2	621.7	623.2	622.1	621.3	620.5	621.3	622.1
29°	615.4	616.2	616.8	618.1	616.5	618.1	616.8	616.2	615.4	616.2	616.8
29.5°	610.0	610.6	611.4	612.4	611.0	612.4	611.4	610.6	610.0	610.6	611.4
30°	604.2	604.7	605.2	606.5	605.0	606.5	605.2	604.7	604.2	604.7	605.2
30.5°	598.1	598.3	598.9	600.2	598.7	600.2	598.9	598.3	598.1	598.3	598.9
31°	591.3	591.6	592.2	593.4	592.1	593.4	592.2	591.6	591.3	591.6	592.2
31.5°	584.4	584.4	585.2	586.1	585.2	586.1	585.2	584.4	584.4	584.4	585.2
32°	577.1	576.9	577.6	578.5	577.9	578.5	577.6	576.9	577.1	576.9	577.6
32.5°	569.3	569.1	569.9	570.6	570.3	570.6	569.9	569.1	569.3	569.1	569.9
33°	561.2	561.0	561.7	562.2	562.3	562.2	561.7	561.0	561.2	561.0	561.7
33.5°	552.6	552.2	553.2	553.5	553.8	553.5	553.2	552.2	552.6	552.2	553.2
34°	543.8	543.4	544.2	544.3	545.2	544.3	544.2	543.4	543.8	543.4	544.2
34.5°	534.3	534.3	534.8	534.9	535.9	534.9	534.8	534.3	534.3	534.3	534.8
35°	524.7	524.6	525.1	525.3	526.4	525.3	525.1	524.6	524.7	524.6	525.1
35.5°	514.9	514.9	515.3	515.5	516.6	515.5	515.3	514.9	514.9	514.9	515.3
36°	504.9	504.9	505.2	505.5	506.3	505.5	505.2	504.9	504.9	504.9	505.2
36.5°	494.5	494.6	494.9	495.1	495.9	495.1	494.9	494.6	494.5	494.6	494.9
37°	483.8	484.0	484.1	484.4	485.1	484.4	484.1	484.0	483.8	484.0	484.1
37.5°	473.0	473.1	473.3	473.6	474.0	473.6	473.3	473.1	473.0	473.1	473.3
38°	462.0	462.0	462.3	462.6	462.9	462.6	462.3	462.0	462.0	462.0	462.3
38.5°	450.8	450.8	451.2	451.4	451.6	451.4	451.2	450.8	450.8	450.8	451.2
39°	439.4	439.4	439.9	440.2	440.3	440.2	439.9	439.4	439.4	439.4	439.9
39.5°	427.7	427.8	428.2	428.9	429.0	428.9	428.2	427.8	427.7	427.8	428.2
40°	416.0	416.1	416.8	417.4	417.7	417.4	416.8	416.1	416.0	416.1	416.8
40.5°	404.5	404.7	405.6	406.6	406.8	406.6	405.6	404.7	404.5	404.7	405.6
41°	393.6	393.9	394.9	395.9	396.4	395.9	394.9	393.9	393.6	393.9	394.9
41.5°	383.4	383.8	384.6	385.7	386.0	385.7	384.6	383.8	383.4	383.8	384.6
42°	374.0	374.2	375.0	375.8	376.4	375.8	375.0	374.2	374.0	374.2	375.0
42.5°	365.2	365.3	366.4	367.1	367.6	367.1	366.4	365.3	365.2	365.3	366.4
43°	356.7	356.8	358.0	358.8	359.8	358.8	358.0	356.8	356.7	356.8	358.0
43.5°	348.8	349.1	350.0	350.8	351.6	350.8	350.0	349.1	348.8	349.1	350.0



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	328.9	328.9	329.6	329.9	330.6	329.9	329.6	328.9	328.9	328.9	329.6
45.5°	322.8	322.8	323.5	323.9	324.2	323.9	323.5	322.8	322.8	322.8	323.5
46°	316.9	317.0	317.6	318.0	318.2	318.0	317.6	317.0	316.9	317.0	317.6
46.5°	311.3	311.3	311.8	312.1	312.6	312.1	311.8	311.3	311.3	311.3	311.8
47°	305.7	305.7	306.2	306.6	306.9	306.6	306.2	305.7	305.7	305.7	306.2
47.5°	300.2	300.2	300.7	301.1	301.2	301.1	300.7	300.2	300.2	300.2	300.7
48°	294.9	294.8	295.3	295.6	295.8	295.6	295.3	294.8	294.9	294.8	295.3
48.5°	289.3	289.3	289.8	290.2	290.3	290.2	289.8	289.3	289.3	289.3	289.8
49°	283.6	283.7	284.1	284.4	284.6	284.4	284.1	283.7	283.6	283.7	284.1
49.5°	277.7	277.6	278.1	278.5	278.6	278.5	278.1	277.6	277.7	277.6	278.1
50°	271.2	271.2	271.5	271.8	271.8	271.8	271.5	271.2	271.2	271.2	271.5
50.5°	264.1	264.1	264.3	264.7	264.7	264.7	264.3	264.1	264.1	264.1	264.3
51°	256.5	256.4	256.7	257.0	257.3	257.0	256.7	256.4	256.5	256.4	256.7
51.5°	248.5	248.4	248.8	249.2	249.3	249.2	248.8	248.4	248.5	248.4	248.8
52°	240.2	240.3	240.6	240.9	241.1	240.9	240.6	240.3	240.2	240.3	240.6
52.5°	231.7	231.5	232.1	232.5	232.6	232.5	232.1	231.5	231.7	231.5	232.1
53°	222.7	222.8	223.3	223.9	223.8	223.9	223.3	222.8	222.7	222.8	223.3
53.5°	213.7	213.8	214.5	214.9	215.1	214.9	214.5	213.8	213.7	213.8	214.5
54°	204.6	204.8	205.4	205.9	206.0	205.9	205.4	204.8	204.6	204.8	205.4
54.5°	195.5	195.5	196.4	196.9	197.1	196.9	196.4	195.5	195.5	195.5	196.4
55°	186.3	186.5	187.4	187.8	188.3	187.8	187.4	186.5	186.3	186.5	187.4
55.5°	177.0	177.2	178.1	178.8	179.2	178.8	178.1	177.2	177.0	177.2	178.1
56°	167.7	168.0	169.1	169.6	170.1	169.6	169.1	168.0	167.7	168.0	169.1
56.5°	158.5	158.8	159.9	160.5	161.1	160.5	159.9	158.8	158.5	158.8	159.9
57°	149.4	149.9	150.8	151.6	152.1	151.6	150.8	149.9	149.4	149.9	150.8
57.5°	140.4	140.9	141.9	142.7	143.3	142.7	141.9	140.9	140.4	140.9	141.9
58°	131.6	132.0	133.0	134.1	134.5	134.1	133.0	132.0	131.6	132.0	133.0
58.5°	122.7	123.3	124.4	125.7	126.0	125.7	124.4	123.3	122.7	123.3	124.4
59°	114.2	114.9	115.8	117.2	117.5	117.2	115.8	114.9	114.2	114.9	115.8
59.5°	106.0	106.5	107.5	108.8	109.2	108.8	107.5	106.5	106.0	106.5	107.5
60°	97.9	98.3	99.2	100.5	101.0	100.5	99.2	98.3	97.9	98.3	99.2
60.5°	89.8	90.2	91.1	92.4	93.1	92.4	91.1	90.2	89.8	90.2	91.1
61°	81.9	82.3	83.5	84.6	85.3	84.6	83.5	82.3	81.9	82.3	83.5
61.5°	73.9	74.7	75.9	77.1	78.0	77.1	75.9	74.7	73.9	74.7	75.9
62°	66.3	67.4	68.5	69.8	70.8	69.8	68.5	67.4	66.3	67.4	68.5
62.5°	58.7	60.1	61.4	62.7	63.7	62.7	61.4	60.1	58.7	60.1	61.4
63°	51.4	53.3	54.5	55.8	56.9	55.8	54.5	53.3	51.4	53.3	54.5
63.5°	44.3	46.8	48.1	49.3	50.5	49.3	48.1	46.8	44.3	46.8	48.1
64°	37.5	40.7	42.2	43.3	44.6	43.3	42.2	40.7	37.5	40.7	42.2
64.5°	31.4	35.2	36.6	37.5	38.8	37.5	36.6	35.2	31.4	35.2	36.6
65°	25.9	29.8	31.2	32.1	33.0	32.1	31.2	29.8	25.9	29.8	31.2
65.5°	20.7	25.2	26.3	26.8	27.6	26.8	26.3	25.2	20.7	25.2	26.3
66°	16.2	20.9	21.7	22.4	22.8	22.4	21.7	20.9	16.2	20.9	21.7



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	5.0	9.7	10.4	11.1	11.7	11.1	10.4	9.7	5.0	9.7	10.4
68°	3.0	6.8	7.5	8.3	9.6	8.3	7.5	6.8	3.0	6.8	7.5
68.5°	1.8	4.5	5.3	5.9	7.5	5.9	5.3	4.5	1.8	4.5	5.3
69°	1.1	2.7	3.3	3.7	5.3	3.7	3.3	2.7	1.1	2.7	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	0.9	1.1	1.1	1.1	1.1	1.1	0.9	0.1	0.9	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: P775719
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	585.5	585.5	585.5	585.5	585.5	585.5
0.5°	585.7	585.6	585.7	585.6	585.5	585.3
1°	585.8	585.7	585.8	585.7	585.6	585.5
1.5°	586.0	585.9	586.0	585.9	585.8	585.7
2°	586.2	586.1	586.2	586.2	586.1	586.0
2.5°	586.6	586.5	586.6	586.6	586.4	586.3
3°	587.1	587.0	587.1	587.1	587.0	586.9
3.5°	587.7	587.6	587.7	587.7	587.5	587.4
4°	588.5	588.4	588.5	588.4	588.1	588.0
4.5°	589.2	589.1	589.2	589.1	588.9	588.8
5°	590.1	590.1	590.1	590.0	589.7	589.6
5.5°	591.1	591.0	591.1	590.9	590.7	590.5
6°	592.2	592.1	592.2	592.0	591.7	591.6
6.5°	593.3	593.2	593.3	593.2	592.8	592.7
7°	594.5	594.4	594.5	594.4	594.1	594.0
7.5°	595.9	595.8	595.9	595.9	595.6	595.5
8°	597.6	597.5	597.6	597.5	597.2	597.0
8.5°	599.4	599.3	599.4	599.4	599.0	598.8
9°	601.5	601.3	601.5	601.4	601.0	600.8
9.5°	603.6	603.3	603.6	603.5	603.2	603.0
10°	605.7	605.4	605.7	605.7	605.4	605.2
10.5°	607.9	607.6	607.9	607.9	607.6	607.4
11°	610.1	609.9	610.1	610.2	610.0	609.7
11.5°	612.3	612.1	612.3	612.4	612.2	612.0
12°	614.7	614.5	614.7	614.7	614.5	614.3
12.5°	617.0	616.8	617.0	617.0	616.8	616.5
13°	619.4	619.2	619.4	619.4	619.2	618.7
13.5°	621.7	621.5	621.7	621.8	621.5	621.1
14°	624.3	623.9	624.3	624.3	623.9	623.3
14.5°	626.7	626.3	626.7	626.6	626.2	625.7
15°	629.2	628.7	629.2	629.1	628.5	628.0
15.5°	631.5	631.0	631.5	631.5	630.9	630.2
16°	633.9	633.3	633.9	633.9	633.2	632.5
16.5°	636.1	635.6	636.1	636.1	635.4	634.6
17°	638.4	637.7	638.4	638.4	637.6	636.9
17.5°	640.5	639.8	640.5	640.5	639.7	638.9
18°	642.5	642.0	642.5	642.5	641.8	640.8
18.5°	644.4	643.9	644.4	644.4	643.7	642.6
19°	646.1	645.7	646.1	646.2	645.4	644.3
19.5°	647.7	647.4	647.7	647.9	646.9	645.8
20°	649.1	649.0	649.1	649.4	648.3	647.2
20.5°	650.3	650.3	650.3	650.6	649.4	648.4
21°	651.1	651.4	651.1	651.6	650.3	649.2



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	652.2	652.8	652.2	652.7	651.3	650.3
23°	651.9	652.6	651.9	652.5	650.9	650.1
23.5°	651.1	652.1	651.1	651.9	650.3	649.4
24°	650.2	651.0	650.2	650.8	649.2	648.4
24.5°	648.8	649.5	648.8	649.3	647.7	646.9
25°	647.0	647.6	647.0	647.4	645.9	645.0
25.5°	644.9	645.2	644.9	645.2	643.7	642.8
26°	642.3	642.4	642.3	642.4	641.0	640.2
26.5°	639.3	639.1	639.3	639.2	637.8	636.9
27°	635.9	635.4	635.9	635.6	634.4	633.4
27.5°	632.1	631.2	632.1	631.5	630.5	629.5
28°	627.8	626.6	627.8	626.9	626.1	625.1
28.5°	623.2	621.7	623.2	622.1	621.3	620.5
29°	618.1	616.5	618.1	616.8	616.2	615.4
29.5°	612.4	611.0	612.4	611.4	610.6	610.0
30°	606.5	605.0	606.5	605.2	604.7	604.2
30.5°	600.2	598.7	600.2	598.9	598.3	598.1
31°	593.4	592.1	593.4	592.2	591.6	591.3
31.5°	586.1	585.2	586.1	585.2	584.4	584.4
32°	578.5	577.9	578.5	577.6	576.9	577.1
32.5°	570.6	570.3	570.6	569.9	569.1	569.3
33°	562.2	562.3	562.2	561.7	561.0	561.2
33.5°	553.5	553.8	553.5	553.2	552.2	552.6
34°	544.3	545.2	544.3	544.2	543.4	543.8
34.5°	534.9	535.9	534.9	534.8	534.3	534.3
35°	525.3	526.4	525.3	525.1	524.6	524.7
35.5°	515.5	516.6	515.5	515.3	514.9	514.9
36°	505.5	506.3	505.5	505.2	504.9	504.9
36.5°	495.1	495.9	495.1	494.9	494.6	494.5
37°	484.4	485.1	484.4	484.1	484.0	483.8
37.5°	473.6	474.0	473.6	473.3	473.1	473.0
38°	462.6	462.9	462.6	462.3	462.0	462.0
38.5°	451.4	451.6	451.4	451.2	450.8	450.8
39°	440.2	440.3	440.2	439.9	439.4	439.4
39.5°	428.9	429.0	428.9	428.2	427.8	427.7
40°	417.4	417.7	417.4	416.8	416.1	416.0
40.5°	406.6	406.8	406.6	405.6	404.7	404.5
41°	395.9	396.4	395.9	394.9	393.9	393.6
41.5°	385.7	386.0	385.7	384.6	383.8	383.4
42°	375.8	376.4	375.8	375.0	374.2	374.0
42.5°	367.1	367.6	367.1	366.4	365.3	365.2
43°	358.8	359.8	358.8	358.0	356.8	356.7
43.5°	350.8	351.6	350.8	350.0	349.1	348.8



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	329.9	330.6	329.9	329.6	328.9	328.9
45.5°	323.9	324.2	323.9	323.5	322.8	322.8
46°	318.0	318.2	318.0	317.6	317.0	316.9
46.5°	312.1	312.6	312.1	311.8	311.3	311.3
47°	306.6	306.9	306.6	306.2	305.7	305.7
47.5°	301.1	301.2	301.1	300.7	300.2	300.2
48°	295.6	295.8	295.6	295.3	294.8	294.9
48.5°	290.2	290.3	290.2	289.8	289.3	289.3
49°	284.4	284.6	284.4	284.1	283.7	283.6
49.5°	278.5	278.6	278.5	278.1	277.6	277.7
50°	271.8	271.8	271.8	271.5	271.2	271.2
50.5°	264.7	264.7	264.7	264.3	264.1	264.1
51°	257.0	257.3	257.0	256.7	256.4	256.5
51.5°	249.2	249.3	249.2	248.8	248.4	248.5
52°	240.9	241.1	240.9	240.6	240.3	240.2
52.5°	232.5	232.6	232.5	232.1	231.5	231.7
53°	223.9	223.8	223.9	223.3	222.8	222.7
53.5°	214.9	215.1	214.9	214.5	213.8	213.7
54°	205.9	206.0	205.9	205.4	204.8	204.6
54.5°	196.9	197.1	196.9	196.4	195.5	195.5
55°	187.8	188.3	187.8	187.4	186.5	186.3
55.5°	178.8	179.2	178.8	178.1	177.2	177.0
56°	169.6	170.1	169.6	169.1	168.0	167.7
56.5°	160.5	161.1	160.5	159.9	158.8	158.5
57°	151.6	152.1	151.6	150.8	149.9	149.4
57.5°	142.7	143.3	142.7	141.9	140.9	140.4
58°	134.1	134.5	134.1	133.0	132.0	131.6
58.5°	125.7	126.0	125.7	124.4	123.3	122.7
59°	117.2	117.5	117.2	115.8	114.9	114.2
59.5°	108.8	109.2	108.8	107.5	106.5	106.0
60°	100.5	101.0	100.5	99.2	98.3	97.9
60.5°	92.4	93.1	92.4	91.1	90.2	89.8
61°	84.6	85.3	84.6	83.5	82.3	81.9
61.5°	77.1	78.0	77.1	75.9	74.7	73.9
62°	69.8	70.8	69.8	68.5	67.4	66.3
62.5°	62.7	63.7	62.7	61.4	60.1	58.7
63°	55.8	56.9	55.8	54.5	53.3	51.4
63.5°	49.3	50.5	49.3	48.1	46.8	44.3
64°	43.3	44.6	43.3	42.2	40.7	37.5
64.5°	37.5	38.8	37.5	36.6	35.2	31.4
65°	32.1	33.0	32.1	31.2	29.8	25.9
65.5°	26.8	27.6	26.8	26.3	25.2	20.7
66°	22.4	22.8	22.4	21.7	20.9	16.2



TEST NUMBER: P775719

CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	11.1	11.7	11.1	10.4	9.7	5.0
68°	8.3	9.6	8.3	7.5	6.8	3.0
68.5°	5.9	7.5	5.9	5.3	4.5	1.8
69°	3.7	5.3	3.7	3.3	2.7	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	0.9	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: P775719
CATALOG NUMBER: HCDJBL510CSD-HCD61TRC-1000lm-5000K

CANDELA DISTRIBUTION (continued):

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

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°	650.0	650.9	652.3	651.8	652.2	651.8	652.3	650.9	650.0	650.9	652.3
22°	650.3	651.3	652.7	652.1	652.6	652.1	652.7	651.3	650.3	651.3	652.7



44°	341.7	341.9	342.7	343.3	344.1	343.3	342.7	341.9	341.7	341.9	342.7
44.5°	335.2	335.3	336.0	336.4	337.0	336.4	336.0	335.3	335.2	335.3	336.0



66.5°	11.8	16.6	17.7	18.3	18.4	18.3	17.7	16.6	11.8	16.6	17.7
67°	8.2	13.1	13.8	14.4	14.5	14.4	13.8	13.1	8.2	13.1	13.8



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



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

Scaled Data Report



21.5°	651.8	652.2	651.8	652.3	650.9	650.0
22°	652.1	652.6	652.1	652.7	651.3	650.3



44°	343.3	344.1	343.3	342.7	341.9	341.7
44.5°	336.4	337.0	336.4	336.0	335.3	335.2



66.5°	18.3	18.4	18.3	17.7	16.6	11.8
67°	14.4	14.5	14.4	13.8	13.1	8.2

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)