

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: P775813

Luminaire Tested: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775813  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2310613A001)  
Test Lab:  
Issue Date: 2/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K  
Description: 6 INCH SQUARE MEDIUM MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

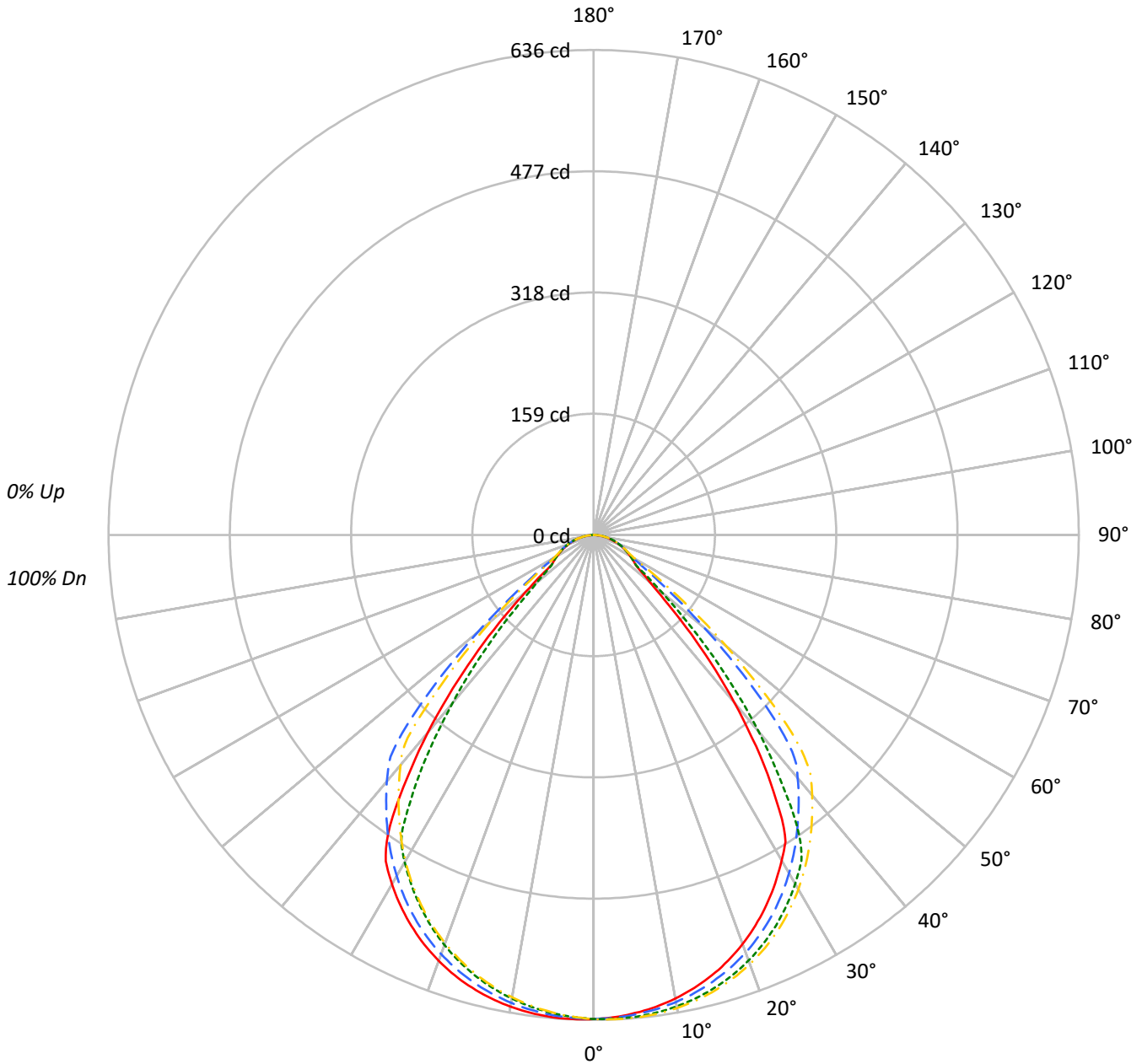
Lumens per Lamp: N/A  
Luminaire Lumens: 1113.8 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P775813  
CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**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								
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89								
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79								
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70								
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63								
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	57								
6	78	67	60	54	77	66	59	54	65	58	54	63	58	53	62	57	53	51								
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46								
8	69	57	50	45	67	57	49	45	55	49	44	54	48	44	53	48	44	42								
9	65	53	46	41	63	52	46	41	51	45	41	50	45	40	49	44	40	39								
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	27332	27332	27332	27332
5°	27198	27415	27432	27203
10°	26988	27447	27465	26997
15°	26656	27395	27409	26687
20°	26158	27212	27226	26218
25°	25445	26856	26875	25535
30°	24510	26275	26295	24634
35°	21613	24373	24451	21692
40°	16103	18891	19003	16159
45°	10479	12945	13024	10540
50°	6457	7710	7797	6497
55°	4984	4999	4999	4984
60°	4788	4762	4762	4788
65°	4554	4605	4554	4625
70°	4318	4456	4356	4482
75°	4009	4309	4109	4292
80°	3446	4141	3719	3992
85°	1927	3754	2816	3211

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 135°  
 Vertical Angle: 45°  
 Luminance: 22371 cd/sqm



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.0	5.4
10°-20°	171.1	15.4
20°-30°	254.0	22.8
30°-40°	280.8	25.2
40°-50°	190.3	17.1
50°-60°	77.6	7.0
60°-70°	45.8	4.1
70°-80°	27.1	2.4
80°-90°	7.1	0.6
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°	485.1	43.6
0°-40°	765.9	68.8
0°-60°	1033.8	92.8
0°-90°	1113.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1113.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	635	635	635	635	635	
5°	629	634	635	629	629	60
15°	598	615	615	599	598	168
25°	536	565	566	538	536	246
35°	411	464	465	413	411	252
45°	172	213	214	173	172	136
55°	66	67	67	66	66	62
65°	45	45	45	45	45	44
75°	24	26	25	26	24	25
85°	4	8	6	6	4	6
90°	0	0	0	0	0	



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8
0.5°	634.8	634.6	634.6	634.8	634.9	635.0	635.2	635.3	635.3	634.9	634.6
1°	634.4	634.4	634.4	634.8	635.1	635.2	635.5	635.5	635.4	634.9	634.6
1.5°	633.9	634.1	634.3	634.7	635.2	635.4	635.7	635.7	635.5	635.0	634.4
2°	633.5	633.7	634.1	634.6	635.2	635.4	635.8	635.8	635.6	634.9	634.3
2.5°	633.0	633.2	633.7	634.5	635.2	635.5	635.9	635.9	635.6	634.8	633.9
3°	632.4	632.7	633.3	634.3	635.1	635.5	635.9	635.9	635.5	634.7	633.6
3.5°	631.7	632.2	632.9	633.9	635.0	635.4	635.9	635.8	635.4	634.5	633.3
4°	631.0	631.5	632.5	633.6	634.8	635.3	635.8	635.7	635.2	634.2	632.9
4.5°	630.2	630.9	632.0	633.2	634.6	635.2	635.6	635.6	635.0	633.8	632.5
5°	629.3	630.2	631.3	632.7	634.3	635.0	635.4	635.4	634.7	633.4	632.0
5.5°	628.5	629.4	630.7	632.3	633.8	634.7	635.2	635.1	634.4	633.0	631.3
6°	627.4	628.5	630.0	631.6	633.4	634.4	634.9	634.8	633.9	632.5	630.7
6.5°	626.5	627.6	629.1	631.0	633.0	633.9	634.5	634.4	633.4	631.8	630.0
7°	625.3	626.6	628.3	630.3	632.5	633.5	634.1	633.8	632.9	631.1	629.1
7.5°	624.2	625.7	627.4	629.5	631.7	633.0	633.5	633.3	632.3	630.4	628.3
8°	622.9	624.5	626.5	628.7	631.1	632.4	633.0	632.7	631.5	629.6	627.4
8.5°	621.6	623.3	625.4	627.9	630.4	631.6	632.4	632.1	630.8	628.8	626.4
9°	620.2	622.0	624.3	626.8	629.5	631.0	631.6	631.2	630.0	627.9	625.3
9.5°	618.8	620.7	623.1	625.9	628.7	630.2	630.9	630.5	629.1	626.9	624.2
10°	617.3	619.4	622.0	624.7	627.8	629.3	630.1	629.5	628.2	626.0	623.0
10.5°	615.7	617.9	620.6	623.6	626.8	628.4	629.1	628.7	627.1	624.8	621.8
11°	614.0	616.3	619.4	622.4	625.7	627.4	628.2	627.6	626.1	623.6	620.5
11.5°	612.2	614.7	617.9	621.1	624.5	626.3	627.1	626.6	624.9	622.3	619.1
12°	610.4	613.0	616.4	619.8	623.3	625.2	626.1	625.4	623.8	621.0	617.7
12.5°	608.5	611.4	614.8	618.4	622.1	624.0	624.8	624.3	622.4	619.7	616.2
13°	606.6	609.6	613.2	616.8	620.7	622.7	623.6	622.9	621.1	618.2	614.6
13.5°	604.6	607.7	611.5	615.3	619.2	621.5	622.3	621.6	619.7	616.7	612.9
14°	602.5	605.7	609.8	613.7	617.8	620.0	620.9	620.2	618.2	615.0	611.3
14.5°	600.3	603.7	607.9	612.0	616.2	618.5	619.5	618.7	616.6	613.5	609.4
15°	598.0	601.6	606.0	610.2	614.6	617.0	618.0	617.1	614.9	611.7	607.6
15.5°	595.7	599.4	603.9	608.3	612.9	615.4	616.4	615.5	613.3	609.9	605.7
16°	593.3	597.1	601.9	606.4	611.2	613.6	614.7	613.8	611.4	608.0	603.6
16.5°	590.8	594.8	599.8	604.5	609.3	611.9	613.0	612.1	609.6	606.1	601.6
17°	588.2	592.4	597.7	602.4	607.3	610.0	611.3	610.2	607.6	604.0	599.4
17.5°	585.5	589.8	595.4	600.2	605.4	608.1	609.4	608.2	605.6	601.9	597.2
18°	582.7	587.2	593.0	598.0	603.2	606.1	607.5	606.2	603.5	599.7	594.9
18.5°	580.0	584.6	590.5	595.7	601.1	604.1	605.4	604.1	601.3	597.5	592.6
19°	577.0	581.9	588.1	593.4	598.8	601.9	603.3	601.9	599.0	595.1	589.9
19.5°	574.0	579.0	585.4	590.9	596.3	599.7	601.2	599.7	596.7	592.8	587.5
20°	570.9	576.2	582.8	588.4	593.9	597.3	598.9	597.4	594.2	590.3	585.0
20.5°	567.8	573.0	580.1	585.6	591.5	594.9	596.6	595.0	591.7	587.7	582.3
21°	564.5	570.0	577.2	582.9	588.8	592.4	594.1	592.5	589.2	585.0	579.5



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	554.2	560.2	568.2	574.4	580.6	584.5	586.4	584.6	581.0	576.8	570.8
23°	550.7	556.9	565.1	571.4	577.7	581.6	583.6	581.9	578.1	573.7	567.7
23.5°	547.1	553.4	561.8	568.2	574.7	578.8	580.9	579.0	575.1	570.6	564.5
24°	543.4	549.9	558.5	565.1	571.6	575.9	578.0	576.1	572.0	567.6	561.3
24.5°	539.5	546.3	555.1	561.8	568.4	572.8	574.9	573.0	568.8	564.4	558.0
25°	535.6	542.6	551.6	558.4	565.3	569.7	571.9	569.9	565.7	561.2	554.5
25.5°	531.7	538.7	548.0	555.0	561.9	566.5	568.8	566.7	562.3	557.8	551.2
26°	527.7	534.9	544.4	551.5	558.4	563.2	565.6	563.4	559.0	554.3	547.7
26.5°	523.6	531.0	540.6	547.9	555.0	559.8	562.2	560.0	555.4	550.9	544.0
27°	519.4	527.0	536.8	544.4	551.4	556.3	558.7	556.5	551.9	547.3	540.3
27.5°	515.1	522.7	532.9	540.7	547.8	552.9	555.4	553.1	548.4	543.7	536.7
28°	510.8	518.6	528.9	536.9	543.9	549.2	551.7	549.4	544.6	539.8	532.7
28.5°	506.4	514.4	524.8	532.9	540.3	545.5	548.0	545.8	540.7	536.2	528.8
29°	502.0	510.2	520.9	529.0	536.4	541.7	544.3	541.9	536.9	532.2	524.7
29.5°	497.5	505.8	516.6	525.0	532.5	538.0	540.6	538.2	533.0	528.5	520.6
30°	493.0	501.6	512.3	520.9	528.5	534.0	536.6	534.3	528.9	524.2	516.5
30.5°	488.4	497.1	508.0	516.8	524.3	530.1	532.6	530.4	524.7	520.2	512.3
31°	483.8	492.6	503.6	512.6	520.0	526.1	528.6	526.2	520.5	515.9	508.0
31.5°	479.1	488.0	499.1	508.3	515.8	522.0	524.5	522.1	516.3	511.7	503.6
32°	474.6	483.3	494.6	504.0	511.2	517.7	520.2	518.0	511.8	507.5	499.2
32.5°	466.5	478.6	490.0	499.6	506.8	513.5	516.1	513.7	507.3	503.1	494.8
33°	458.1	473.9	485.4	495.1	500.4	509.1	511.7	509.3	500.4	498.6	490.2
33.5°	447.0	469.3	480.6	490.5	492.9	504.7	507.3	504.9	493.2	494.3	485.5
34°	435.0	464.7	475.9	485.7	484.4	499.9	502.7	500.4	484.9	489.4	480.8
34.5°	422.8	457.0	471.1	481.0	474.7	495.3	498.3	495.3	475.5	484.4	476.2
35°	411.2	448.6	466.2	474.2	463.7	490.1	493.7	489.9	465.2	478.0	471.4
35.5°	399.6	438.2	461.3	466.9	452.0	482.1	489.1	482.1	453.5	470.7	466.5
36°	388.0	426.5	456.5	458.8	439.0	474.9	484.4	475.1	440.7	463.1	461.7
36.5°	375.9	415.1	451.4	449.3	426.0	465.7	479.8	466.3	427.9	453.9	456.9
37°	363.0	403.6	446.5	439.0	412.0	455.4	475.0	456.6	414.5	443.8	451.7
37.5°	350.0	392.2	441.4	427.9	398.9	444.3	470.1	446.1	401.1	433.2	446.8
38°	336.8	380.6	436.4	415.7	385.9	432.4	465.3	434.5	388.3	421.4	441.9
38.5°	323.9	369.1	431.5	403.1	373.6	419.9	460.3	422.3	375.7	409.1	436.9
39°	311.2	357.1	426.3	390.7	361.1	407.0	455.6	409.6	363.2	396.5	431.8
39.5°	298.8	344.7	421.4	378.2	348.8	393.6	450.6	396.9	350.8	383.9	426.7
40°	286.5	331.7	416.1	365.6	336.1	380.9	445.7	384.2	338.1	371.4	421.7
40.5°	274.8	319.0	411.0	353.7	323.3	368.6	440.6	371.9	325.3	359.2	416.6
41°	262.7	306.7	405.8	342.0	310.0	356.7	435.6	359.6	311.9	347.3	411.4
41.5°	250.8	294.4	401.0	330.2	297.0	344.6	430.2	347.6	298.9	335.7	406.0
42°	238.7	282.4	393.4	318.7	284.2	332.5	424.8	335.7	286.0	323.9	400.6
42.5°	227.0	271.2	385.5	306.8	271.8	320.3	419.7	323.6	273.4	311.8	394.3
43°	215.1	259.4	374.5	294.4	259.7	307.8	410.3	311.1	261.2	299.6	383.5
43.5°	204.1	247.9	362.6	282.5	247.7	295.3	401.1	298.4	249.2	287.3	374.1



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	172.1	213.2	322.6	247.1	212.6	258.6	367.4	261.5	213.9	251.5	334.1
45.5°	162.1	202.1	309.2	236.1	200.8	246.9	354.0	249.4	202.6	240.1	320.0
46°	152.4	191.2	295.0	225.1	189.6	235.4	339.7	237.9	191.3	229.0	305.7
46.5°	143.3	180.9	280.8	214.0	178.8	223.7	325.0	226.4	180.3	218.0	291.5
47°	134.3	170.4	266.7	203.2	168.3	212.4	309.9	215.0	169.9	207.1	277.3
47.5°	126.1	160.6	252.5	192.5	158.2	201.2	294.7	203.8	159.9	196.4	263.3
48°	118.7	151.0	238.7	182.0	148.7	190.3	280.2	192.9	150.3	186.1	249.4
48.5°	112.2	141.8	225.8	171.9	139.6	179.6	265.8	181.9	141.1	175.7	236.0
49°	106.4	132.9	213.4	162.2	131.0	168.9	252.4	171.4	132.3	165.9	223.0
49.5°	101.2	124.8	201.2	152.8	122.8	158.9	239.3	161.3	124.1	156.2	210.4
50°	96.4	117.0	189.4	143.4	115.1	149.1	226.4	151.6	116.4	146.9	198.3
50.5°	92.4	110.1	178.3	134.5	108.0	139.9	213.9	142.0	109.0	137.9	186.7
51°	88.5	103.8	167.6	126.2	101.4	131.2	201.8	133.2	102.4	129.6	175.3
51.5°	84.9	98.5	157.3	118.5	96.2	122.8	189.7	124.8	97.0	121.5	164.8
52°	81.1	93.7	147.4	111.0	91.0	115.0	178.3	116.7	91.6	114.1	154.6
52.5°	77.5	89.5	138.1	104.0	85.8	107.5	166.8	109.1	86.2	106.7	144.8
53°	73.9	85.5	129.3	97.5	80.6	100.9	155.9	102.0	80.8	99.9	135.7
53.5°	71.1	81.8	121.0	91.4	75.4	95.6	145.5	96.4	75.4	94.3	126.9
54°	68.9	78.2	113.3	85.9	71.3	90.1	136.2	90.8	71.3	88.7	118.8
54.5°	67.5	74.8	106.1	80.9	68.3	84.7	126.8	85.3	68.2	83.2	111.2
55°	66.4	71.1	99.5	76.1	66.6	79.2	118.3	79.7	66.6	77.6	104.3
55.5°	65.2	68.2	93.3	71.7	65.3	73.8	110.1	74.1	65.2	73.0	97.8
56°	64.1	65.7	87.8	67.7	64.2	69.5	102.7	69.7	64.1	68.9	92.6
56.5°	63.0	64.4	82.7	64.8	63.0	66.0	96.8	66.1	62.9	65.7	87.5
57°	62.0	63.2	78.0	63.2	61.9	63.8	90.8	63.6	61.9	64.0	82.3
57.5°	60.8	62.1	73.8	62.1	60.8	62.4	85.0	62.3	60.7	62.7	77.2
58°	59.8	61.0	70.4	60.9	59.7	61.2	79.0	61.1	59.7	61.5	73.1
58.5°	58.7	59.9	67.2	59.8	58.6	60.2	73.1	60.1	58.5	60.5	69.6
59°	57.7	58.8	64.4	58.7	57.6	59.0	69.0	59.0	57.5	59.3	66.6
59.5°	56.6	57.8	62.0	57.6	56.5	58.0	65.5	57.9	56.4	58.3	63.9
60°	55.6	56.7	59.9	56.5	55.3	56.9	62.6	56.8	55.3	57.2	61.4
60.5°	54.4	55.7	57.9	55.5	54.3	55.8	60.2	55.8	54.3	56.1	59.3
61°	53.4	54.6	56.1	54.3	53.4	54.7	57.9	54.7	53.1	55.0	57.5
61.5°	52.3	53.6	54.5	53.4	52.3	53.7	56.0	53.7	52.1	54.0	55.7
62°	51.3	52.5	53.0	52.3	51.3	52.7	54.2	52.6	51.0	52.9	54.1
62.5°	50.1	51.5	51.7	51.1	50.2	51.7	52.6	51.6	50.0	51.9	52.7
63°	49.0	50.4	50.5	50.1	49.2	50.6	51.3	50.4	48.8	50.7	51.4
63.5°	48.0	49.3	49.4	49.0	48.2	49.6	49.9	49.4	47.9	49.7	50.2
64°	46.9	48.2	48.2	48.0	47.2	48.5	48.8	48.3	46.8	48.6	49.2
64.5°	45.8	47.2	47.2	46.9	46.2	47.5	47.7	47.3	45.8	47.6	48.0
65°	44.7	46.1	46.1	46.0	45.2	46.5	46.6	46.2	44.7	46.5	46.9
65.5°	43.7	45.0	45.0	45.0	44.2	45.5	45.6	45.2	43.7	45.5	45.9
66°	42.6	43.9	43.9	43.9	43.2	44.4	44.4	44.1	42.6	44.4	44.7





TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	39.5	40.8	40.8	40.9	40.2	41.4	41.3	41.0	39.6	41.3	41.6
68°	38.4	39.7	39.7	39.8	39.3	40.4	40.2	39.9	38.5	40.1	40.5
68.5°	37.4	38.7	38.7	38.8	38.3	39.4	39.3	39.0	37.5	39.2	39.5
69°	36.3	37.6	37.6	38.2	37.4	38.4	38.2	37.9	36.5	38.1	38.4
69.5°	35.4	36.5	36.5	37.2	36.4	37.4	37.1	36.9	35.5	37.1	37.4
70°	34.3	35.5	35.5	36.1	35.4	36.4	36.1	35.8	34.6	36.0	36.3
70.5°	33.3	34.4	34.4	35.0	34.4	35.5	35.1	34.9	33.5	35.0	35.3
71°	32.3	33.5	33.4	33.9	33.5	34.4	34.0	33.8	32.6	33.9	34.2
71.5°	31.3	32.3	32.5	33.0	32.6	33.5	33.0	32.8	31.5	32.9	33.2
72°	30.2	31.4	31.4	31.9	31.6	32.5	31.9	31.8	30.6	31.9	32.1
72.5°	29.2	30.2	30.4	31.0	30.7	31.5	31.0	30.8	29.5	30.9	31.1
73°	28.1	29.3	29.3	29.9	29.7	30.6	29.9	29.7	28.6	29.8	30.0
73.5°	27.1	28.3	28.3	29.0	28.8	29.6	28.9	28.8	27.6	28.8	29.0
74°	26.0	27.2	27.2	27.9	27.8	28.6	27.9	27.7	26.6	27.8	27.9
74.5°	25.1	26.2	26.2	27.0	26.9	27.6	26.9	26.8	25.6	26.8	27.0
75°	24.1	25.1	25.2	26.0	25.9	26.7	25.9	25.7	24.7	25.7	25.9
75.5°	23.0	24.1	24.2	25.1	25.0	25.7	24.9	24.8	23.6	24.8	24.9
76°	22.1	23.0	23.1	24.1	24.1	24.8	23.8	23.7	22.7	23.7	23.8
76.5°	21.0	22.0	22.1	23.1	23.1	23.8	22.9	22.7	21.7	22.7	22.9
77°	20.0	20.9	21.0	22.2	22.3	22.9	22.0	21.7	20.8	21.7	21.8
77.5°	18.9	19.9	20.1	21.1	21.3	22.0	20.9	20.7	19.9	20.7	20.8
78°	18.0	18.8	19.0	20.2	20.4	20.9	20.0	19.7	18.9	19.6	19.9
78.5°	16.9	17.9	18.0	19.2	19.4	20.0	18.9	18.7	17.9	18.7	18.8
79°	15.9	16.8	17.0	18.2	18.5	19.0	18.0	17.7	16.9	17.6	17.7
79.5°	14.8	15.8	16.0	17.2	17.5	18.1	17.0	16.7	16.1	16.6	16.8
80°	13.9	14.7	14.9	16.2	16.7	17.1	16.0	15.8	15.0	15.6	15.8
80.5°	12.8	13.7	14.0	15.2	15.8	16.2	15.0	14.7	14.1	14.6	14.8
81°	11.9	12.6	12.9	14.3	14.8	15.1	14.1	13.8	13.1	13.7	13.8
81.5°	10.8	11.6	12.0	13.3	13.9	14.2	13.1	12.7	12.2	12.6	12.8
82°	9.9	10.6	10.9	12.4	13.0	13.2	12.2	11.8	11.2	11.6	11.8
82.5°	8.8	9.6	10.0	11.4	12.1	12.4	11.2	10.7	10.3	10.6	10.8
83°	7.9	8.5	9.0	10.5	11.2	11.4	10.4	9.8	9.3	9.6	9.9
83.5°	6.8	7.5	8.2	9.6	10.3	10.5	9.6	8.8	8.4	8.6	9.0
84°	5.9	6.4	7.2	8.6	9.3	9.6	8.7	7.8	7.5	7.6	8.2
84.5°	4.8	5.5	6.4	7.8	8.5	8.7	7.8	6.8	6.5	6.6	7.4
85°	3.9	4.4	5.7	6.8	7.6	7.8	6.9	5.9	5.7	5.6	6.5
85.5°	3.3	3.8	4.8	5.9	6.7	6.9	6.1	5.0	4.7	4.7	5.7
86°	2.6	3.2	4.1	5.0	5.8	6.0	5.4	4.3	3.8	3.9	4.8
86.5°	2.1	2.4	3.4	4.1	4.9	5.0	4.5	3.6	3.0	3.3	4.1
87°	1.5	1.8	2.5	3.3	4.0	4.2	3.8	2.9	2.5	2.6	3.3
87.5°	0.9	1.2	1.8	2.4	3.2	3.4	3.0	2.3	2.0	2.1	2.5
88°	0.4	0.6	1.1	1.6	2.3	2.5	2.3	1.8	1.6	1.6	1.8
88.5°	0.1	0.2	0.4	0.7	1.5	1.6	1.6	1.3	1.1	0.9	0.9



TEST NUMBER: P775813  
CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-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	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	634.8	634.8	634.8	634.8	634.8	634.8
0.5°	634.6	634.4	634.4	634.6	634.6	634.8
1°	634.4	634.1	633.9	634.2	634.2	634.4
1.5°	634.1	633.6	633.4	633.5	633.7	633.9
2°	633.7	633.1	632.9	633.0	633.2	633.5
2.5°	633.4	632.7	632.4	632.4	632.6	633.0
3°	633.0	632.2	631.6	631.6	632.0	632.4
3.5°	632.5	631.6	631.0	631.0	631.2	631.7
4°	632.0	630.9	630.3	630.2	630.4	631.0
4.5°	631.3	630.2	629.4	629.3	629.5	630.2
5°	630.7	629.4	628.5	628.4	628.7	629.3
5.5°	630.0	628.5	627.6	627.3	627.8	628.5
6°	629.2	627.4	626.7	626.4	626.7	627.4
6.5°	628.4	626.5	625.5	625.3	625.5	626.5
7°	627.4	625.4	624.4	624.1	624.4	625.3
7.5°	626.4	624.3	623.2	622.8	623.2	624.2
8°	625.3	623.0	622.0	621.6	621.9	622.9
8.5°	624.3	621.8	620.6	620.2	620.6	621.6
9°	623.0	620.4	619.1	618.7	619.1	620.2
9.5°	621.8	618.9	617.7	617.3	617.6	618.8
10°	620.5	617.5	616.1	615.7	616.1	617.3
10.5°	619.0	615.9	614.6	614.1	614.5	615.7
11°	617.6	614.3	612.8	612.4	612.7	614.0
11.5°	616.1	612.6	611.1	610.6	611.1	612.2
12°	614.5	610.8	609.4	608.7	609.2	610.4
12.5°	612.8	609.1	607.5	606.9	607.3	608.5
13°	611.1	607.1	605.5	604.9	605.2	606.6
13.5°	609.3	605.1	603.5	602.9	603.2	604.6
14°	607.5	603.0	601.4	600.8	601.1	602.5
14.5°	605.5	600.9	599.2	598.7	598.9	600.3
15°	603.4	598.7	597.0	596.3	596.6	598.0
15.5°	601.3	596.3	594.7	594.0	594.2	595.7
16°	599.1	593.9	592.3	591.6	591.7	593.3
16.5°	596.8	591.5	589.7	589.2	589.2	590.8
17°	594.5	589.0	587.2	586.6	586.7	588.2
17.5°	592.0	586.5	584.6	584.0	584.1	585.5
18°	589.6	583.7	581.9	581.2	581.2	582.7
18.5°	587.0	581.0	579.1	578.4	578.4	580.0
19°	584.4	578.1	576.2	575.6	575.4	577.0
19.5°	581.6	575.1	573.2	572.6	572.5	574.0
20°	578.8	572.2	570.2	569.8	569.5	570.9
20.5°	576.0	569.0	567.0	566.6	566.3	567.8
21°	572.9	566.0	563.9	563.5	563.1	564.5

TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	563.6	556.0	553.9	553.5	552.9	554.2
23°	560.3	552.4	550.5	550.0	549.3	550.7
23.5°	557.0	548.9	546.8	546.5	545.7	547.1
24°	553.5	545.2	543.2	542.8	541.9	543.4
24.5°	550.0	541.4	539.5	539.0	538.2	539.5
25°	546.5	537.5	535.9	535.3	534.4	535.6
25.5°	542.8	533.6	531.8	531.4	530.5	531.7
26°	539.0	529.8	528.0	527.6	526.5	527.7
26.5°	535.2	525.8	524.0	523.6	522.4	523.6
27°	531.2	521.7	519.9	519.6	518.3	519.4
27.5°	527.2	517.4	515.8	515.4	514.1	515.1
28°	523.3	513.2	511.5	511.1	509.9	510.8
28.5°	519.3	508.8	507.2	506.8	505.5	506.4
29°	515.0	504.5	502.9	502.5	501.2	502.0
29.5°	510.8	500.0	498.5	498.0	496.8	497.5
30°	506.3	495.5	494.1	493.5	492.3	493.0
30.5°	501.9	490.8	489.4	488.9	487.8	488.4
31°	497.4	486.1	484.9	484.3	483.1	483.8
31.5°	493.1	481.1	480.1	479.6	478.4	479.1
32°	488.5	476.5	475.4	474.8	473.8	474.6
32.5°	483.9	468.6	470.6	470.0	469.1	466.5
33°	479.1	460.2	465.8	465.3	464.2	458.1
33.5°	474.3	448.7	460.5	460.3	459.3	447.0
34°	469.3	436.7	455.9	455.4	454.8	435.0
34.5°	464.5	424.6	447.3	450.4	449.3	422.8
35°	457.1	412.7	439.1	445.3	440.1	411.2
35.5°	448.8	401.0	427.4	440.3	431.5	399.6
36°	438.1	389.3	416.6	435.2	420.4	388.0
36.5°	426.2	377.2	405.0	430.2	408.8	375.9
37°	415.0	364.4	393.8	424.9	397.4	363.0
37.5°	403.2	351.4	382.3	419.8	386.5	350.0
38°	391.6	337.9	371.2	414.7	375.5	336.8
38.5°	380.2	324.7	359.7	409.5	364.1	323.9
39°	369.0	312.0	347.9	404.4	352.9	311.2
39.5°	356.5	299.5	335.4	399.1	340.9	298.8
40°	344.0	287.5	323.1	393.9	328.7	286.5
40.5°	331.0	275.7	310.8	388.6	316.4	274.8
41°	318.8	263.7	298.4	383.5	304.2	262.7
41.5°	305.9	251.5	286.3	377.9	292.4	250.8
42°	293.8	239.5	275.4	369.8	281.0	238.7
42.5°	282.0	227.8	264.3	361.1	269.9	227.0
43°	270.8	215.9	252.8	348.3	258.6	215.1
43.5°	258.8	204.9	241.8	335.7	247.3	204.1



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	224.7	173.1	208.0	293.2	213.7	172.1
45.5°	212.9	162.8	197.7	280.1	203.2	162.1
46°	201.9	153.1	187.1	267.4	192.7	152.4
46.5°	191.0	143.8	177.1	255.0	182.4	143.3
47°	180.6	135.0	167.0	242.6	172.5	134.3
47.5°	170.5	126.8	157.5	230.2	162.9	126.1
48°	160.6	119.2	148.1	217.9	153.2	118.7
48.5°	151.0	112.6	139.2	206.4	144.2	112.2
49°	141.8	106.7	130.9	195.1	135.6	106.4
49.5°	133.1	101.6	123.1	184.3	127.5	101.2
50°	124.7	97.0	115.5	173.7	119.5	96.4
50.5°	116.9	92.7	109.1	164.2	112.6	92.4
51°	110.0	88.9	103.1	154.9	106.3	88.5
51.5°	103.9	85.2	98.0	146.0	100.7	84.9
52°	98.5	81.6	93.4	137.6	95.7	81.1
52.5°	93.8	77.9	89.3	129.5	91.3	77.5
53°	89.9	74.4	85.5	121.8	87.2	73.9
53.5°	86.0	71.3	81.7	114.7	83.4	71.1
54°	82.1	69.0	78.1	107.9	79.7	68.9
54.5°	78.4	67.5	74.6	101.6	76.3	67.5
55°	74.8	66.4	71.1	95.8	72.7	66.4
55.5°	71.1	65.2	68.3	90.3	69.4	65.2
56°	68.1	64.2	66.1	85.4	66.8	64.1
56.5°	65.6	63.0	64.8	81.0	65.2	63.0
57°	64.2	62.0	63.6	76.8	64.0	62.0
57.5°	63.0	60.8	62.5	73.0	62.8	60.8
58°	62.0	59.8	61.4	69.6	61.8	59.8
58.5°	60.8	58.7	60.3	66.6	60.6	58.7
59°	59.8	57.7	59.2	64.1	59.6	57.7
59.5°	58.7	56.6	58.2	61.8	58.5	56.6
60°	57.7	55.6	57.1	59.7	57.3	55.6
60.5°	56.6	54.5	56.1	57.9	56.3	54.4
61°	55.6	53.5	55.0	56.2	55.2	53.4
61.5°	54.5	52.5	54.0	54.6	54.2	52.3
62°	53.5	51.5	52.9	53.2	53.0	51.3
62.5°	52.4	50.4	51.9	52.0	52.0	50.1
63°	51.4	49.5	50.8	50.9	50.9	49.0
63.5°	50.3	48.4	49.8	49.8	49.8	48.0
64°	49.3	47.4	48.7	48.7	48.7	46.9
64.5°	48.2	46.4	47.7	47.6	47.6	45.8
65°	47.3	45.4	46.6	46.5	46.5	44.7
65.5°	46.2	44.4	45.6	45.4	45.4	43.7
66°	45.2	43.4	44.5	44.3	44.3	42.6

TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	42.1	40.4	41.5	41.2	41.1	39.5
68°	41.1	39.4	40.4	40.1	39.9	38.4
68.5°	40.0	38.4	39.4	39.0	38.9	37.4
69°	39.0	37.5	38.4	37.7	38.3	36.3
69.5°	38.0	36.5	37.4	36.8	37.2	35.4
70°	37.0	35.6	36.4	35.7	36.0	34.3
70.5°	35.9	34.6	35.4	34.8	34.8	33.3
71°	35.0	33.6	34.3	33.8	33.6	32.3
71.5°	33.9	32.7	33.4	32.7	32.6	31.3
72°	33.0	31.7	32.3	31.6	31.5	30.2
72.5°	31.9	30.7	31.4	30.6	30.5	29.2
73°	30.9	29.7	30.4	29.5	29.3	28.1
73.5°	29.9	28.7	29.3	28.5	28.3	27.1
74°	28.9	27.7	28.3	27.4	27.2	26.0
74.5°	27.9	26.8	27.3	26.4	26.2	25.1
75°	26.9	25.8	26.3	25.3	25.1	24.1
75.5°	25.9	24.8	25.2	24.3	24.1	23.0
76°	24.9	23.8	24.3	23.2	22.9	22.1
76.5°	23.9	22.9	23.2	22.2	21.8	21.0
77°	22.9	22.0	22.3	21.1	20.8	20.0
77.5°	22.0	20.9	21.2	20.1	19.7	18.9
78°	20.9	20.0	20.2	19.0	18.7	18.0
78.5°	20.0	19.0	19.2	18.0	17.6	16.9
79°	18.9	18.0	18.2	16.9	16.6	15.9
79.5°	17.9	17.0	17.1	15.9	15.5	14.8
80°	16.9	16.1	16.1	14.9	14.4	13.9
80.5°	15.9	15.1	15.1	13.9	13.3	12.8
81°	14.9	14.2	14.1	12.9	12.3	11.9
81.5°	13.9	13.2	13.1	11.9	11.2	10.8
82°	12.9	12.2	12.1	10.9	10.2	9.9
82.5°	12.0	11.2	11.1	10.0	9.1	8.8
83°	11.0	10.3	10.2	9.0	8.1	7.9
83.5°	10.1	9.3	9.1	8.1	7.0	6.8
84°	9.0	8.4	8.2	7.2	6.1	5.9
84.5°	8.1	7.5	7.2	6.3	5.3	4.8
85°	7.1	6.5	6.3	5.5	4.4	3.9
85.5°	6.2	5.6	5.3	4.6	3.7	3.3
86°	5.3	4.6	4.3	3.8	3.0	2.6
86.5°	4.3	3.7	3.5	2.9	2.4	2.1
87°	3.5	2.8	2.6	2.1	1.7	1.5
87.5°	2.5	2.0	1.8	1.4	1.1	0.9
88°	1.7	1.1	0.9	0.5	0.4	0.4
88.5°	0.7	0.2	0.1	0.1	0.1	0.1



TEST NUMBER: P775813

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.1	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°	561.1	566.8	574.3	580.2	586.1	589.8	591.5	589.8	586.5	582.3	576.7
22°	557.7	563.6	571.2	577.3	583.3	587.2	589.0	587.3	583.7	579.5	573.8



44°	192.9	236.0	349.6	270.4	235.7	282.6	391.4	285.8	237.3	275.1	361.3
44.5°	182.4	224.7	336.5	258.8	224.0	270.4	379.7	273.5	225.6	263.2	347.9



66.5°	41.6	42.9	42.9	42.9	42.2	43.4	43.4	43.1	41.6	43.4	43.7
67°	40.5	41.8	41.8	41.9	41.3	42.4	42.3	42.0	40.5	42.3	42.6



89°	0.0	0.1	0.1	0.2	0.6	0.8	0.8	0.6	0.5	0.4	0.3
89.5°	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1



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

Scaled Data Report





21.5°	569.9	562.7	560.6	560.2	559.7	561.1
22°	566.8	559.4	557.3	557.0	556.4	557.7



44°	247.2	193.7	230.3	320.5	236.1	192.9
44.5°	235.8	183.4	219.2	307.0	225.0	182.4

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

Scaled Data Report



66.5°	44.1	42.4	43.5	43.3	43.2	41.6
67°	43.1	41.4	42.5	42.2	42.1	40.5

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

Scaled Data Report



89°	0.2	0.0	0.1	0.1	0.1	0.0
89.5°	0.0	0.0	0.0	0.1	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)