

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: P775912

Luminaire Tested: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775912  
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-HCD8TSQMW-1000lm-3500K  
Description: 8 INCH SQUARE MEDIUM MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

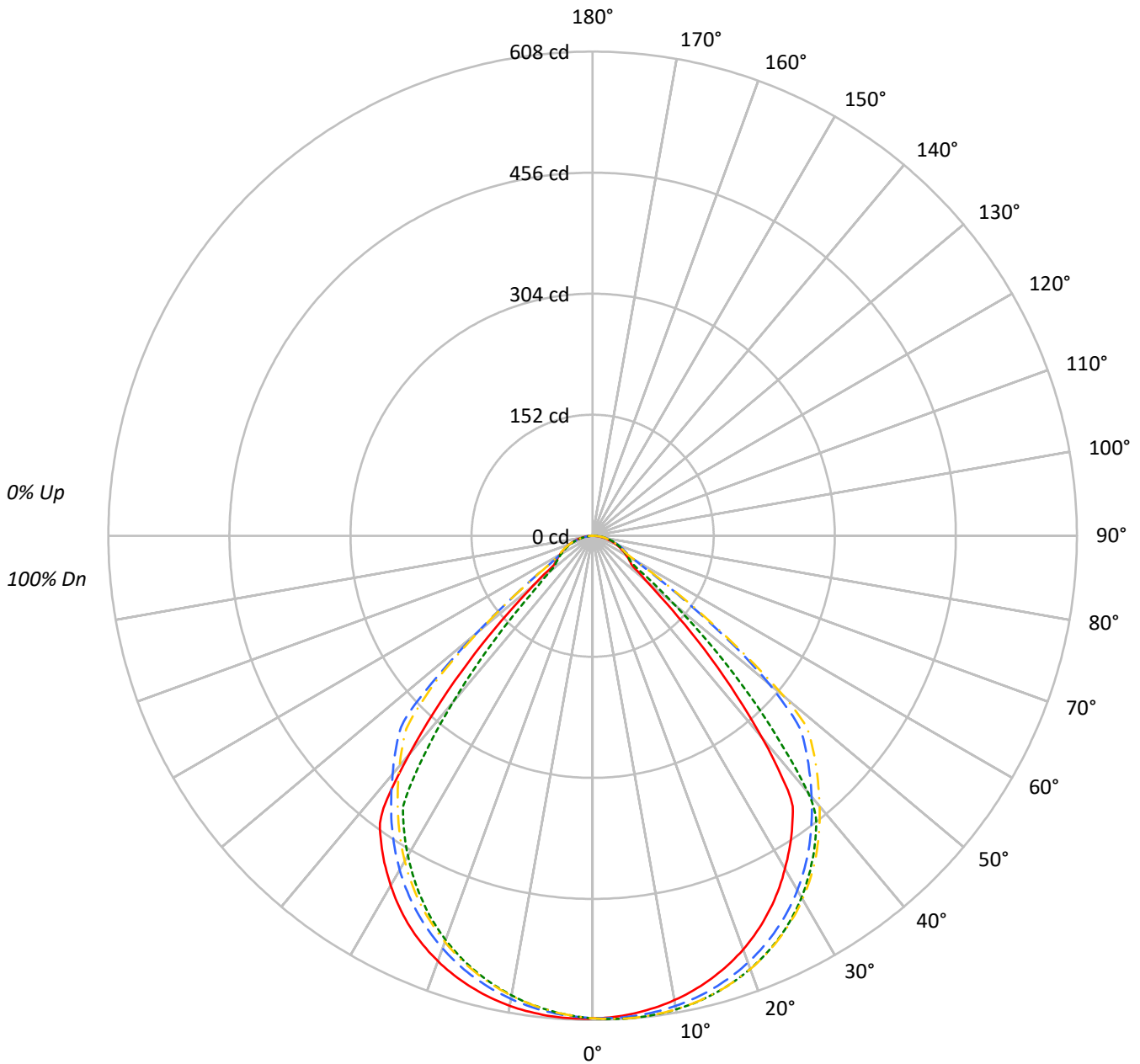
Lumens per Lamp: N/A  
Luminaire Lumens: 1097.3 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.29  
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<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: P775912  
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

### Luminous Intensity Polar Plot





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**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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89	89	89	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79	79	79	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70	70	70	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63	63	63	63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56	56	56	56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51	51	51	51
7	73	62	54	49	72	61	54	49	60	53	48	58	52	48	57	52	48	46	46	46	46
8	69	57	50	44	67	56	49	44	55	49	44	54	48	44	53	48	44	42	42	42	42
9	65	53	45	41	63	52	45	40	51	45	40	50	44	40	49	44	40	38	38	38	38
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35	35	35	35

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

	0°	90°	180°	270°
0°	14529	14529	14529	14529
5°	14490	14625	14577	14416
10°	14414	14704	14594	14268
15°	14294	14761	14572	14060
20°	14109	14772	14499	13779
25°	13808	14705	14340	13377
30°	13376	14525	14035	12842
35°	12810	14179	13582	12145
40°	10380	13153	11190	8520
45°	6321	9051	7101	4683
50°	3242	4935	3622	2645
55°	2421	2529	2358	2266
60°	2340	2407	2273	2182
65°	2264	2366	2201	2105
70°	2194	2335	2124	2012
75°	2085	2344	2038	1871
80°	1878	2375	1878	1616
85°	1348	2531	1486	935

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 135°  
 Vertical Angle: 45°  
 Luminance: 13371 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.3	5.2
10°-20°	163.9	14.9
20°-30°	245.0	22.3
30°-40°	281.1	25.6
40°-50°	204.1	18.6
50°-60°	74.8	6.8
60°-70°	40.1	3.7
70°-80°	24.2	2.2
80°-90°	6.8	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°	466.2	42.5
0°-40°	747.3	68.1
0°-60°	1026.2	93.5
0°-90°	1097.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	606	606	606	606	606	
5°	602	608	606	599	602	57
15°	576	595	587	566	576	162
25°	522	556	542	506	522	240
35°	438	484	464	415	438	267
45°	186	267	209	138	186	147
55°	58	60	56	54	58	54
65°	40	42	39	37	40	40
75°	22	25	22	20	22	24
85°	5	9	5	3	5	6
90°	0	1	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	605.9	605.9	605.9	605.9	605.9	605.9	605.9	605.9	605.9	605.9	605.9
0.5°	606.1	606.2	605.9	605.8	606.3	606.3	606.3	606.5	606.5	606.2	605.4
1°	605.9	606.1	606.0	606.1	606.7	606.6	606.6	606.7	606.6	606.1	605.1
1.5°	605.6	606.0	606.1	606.3	607.0	606.9	606.9	606.9	606.6	606.0	604.7
2°	605.3	605.8	606.1	606.4	607.2	607.2	607.1	607.0	606.6	605.9	604.4
2.5°	604.7	605.6	606.1	606.6	607.4	607.4	607.3	607.0	606.6	605.7	603.9
3°	604.3	605.3	606.0	606.7	607.6	607.6	607.4	607.0	606.5	605.5	603.5
3.5°	603.9	605.0	605.9	606.7	607.6	607.8	607.5	607.1	606.4	605.2	602.9
4°	603.3	604.5	605.8	606.7	607.6	607.8	607.6	607.0	606.2	604.7	602.3
4.5°	602.7	604.1	605.5	606.5	607.6	607.8	607.5	606.9	605.9	604.3	601.6
5°	602.0	603.6	605.3	606.4	607.6	607.8	607.5	606.7	605.6	603.8	600.9
5.5°	601.2	603.1	604.9	606.2	607.5	607.5	607.3	606.5	605.2	603.2	600.2
6°	600.4	602.5	604.5	606.0	607.3	607.4	607.1	606.2	604.7	602.7	599.4
6.5°	599.7	601.7	604.0	605.7	607.1	607.2	606.9	605.9	604.2	602.1	598.5
7°	598.7	601.0	603.6	605.4	606.8	607.0	606.6	605.5	603.7	601.3	597.5
7.5°	597.7	600.3	603.0	605.0	606.5	606.8	606.3	605.1	603.1	600.6	596.6
8°	596.7	599.5	602.5	604.5	606.1	606.4	605.9	604.5	602.5	599.8	595.4
8.5°	595.6	598.5	601.7	603.9	605.7	606.0	605.5	604.0	601.7	598.8	594.3
9°	594.5	597.6	601.0	603.4	605.2	605.6	605.0	603.4	601.0	597.9	593.1
9.5°	593.3	596.6	600.3	602.8	604.6	605.0	604.4	602.8	600.2	596.9	591.9
10°	592.0	595.4	599.6	602.2	603.9	604.4	603.7	602.0	599.4	595.8	590.7
10.5°	590.7	594.3	598.6	601.4	603.3	603.8	603.1	601.1	598.3	594.8	589.2
11°	589.3	593.1	597.7	600.6	602.6	603.2	602.4	600.3	597.3	593.6	587.8
11.5°	587.9	591.9	596.6	599.8	601.8	602.4	601.5	599.4	596.3	592.4	586.3
12°	586.3	590.6	595.6	598.8	601.0	601.5	600.7	598.4	595.2	591.1	584.9
12.5°	584.7	589.2	594.5	597.9	600.1	600.7	599.9	597.5	594.0	589.6	583.2
13°	583.1	587.7	593.4	596.9	599.2	599.8	598.8	596.4	592.7	588.2	581.6
13.5°	581.3	586.2	592.1	595.8	598.1	598.8	597.8	595.2	591.4	586.7	579.8
14°	579.6	584.6	590.9	594.7	597.0	597.7	596.8	594.0	590.0	585.2	577.9
14.5°	577.7	583.0	589.5	593.6	595.8	596.7	595.6	592.7	588.6	583.6	576.1
15°	575.8	581.2	588.1	592.2	594.6	595.5	594.4	591.4	587.0	581.9	574.2
15.5°	573.8	579.5	586.6	590.9	593.4	594.2	593.3	590.0	585.5	580.2	572.2
16°	571.7	577.5	585.1	589.5	592.0	592.9	591.9	588.6	583.8	578.3	570.2
16.5°	569.6	575.8	583.4	588.1	590.7	591.6	590.5	587.0	582.2	576.5	568.0
17°	567.5	573.8	581.8	586.5	589.1	590.1	589.0	585.5	580.4	574.6	565.8
17.5°	565.2	571.7	580.1	585.0	587.6	588.7	587.5	583.8	578.5	572.6	563.5
18°	562.9	569.6	578.2	583.3	586.0	587.1	586.0	582.0	576.6	570.6	561.3
18.5°	560.4	567.5	576.4	581.7	584.3	585.5	584.3	580.3	574.6	568.4	558.8
19°	557.9	565.2	574.5	579.8	582.6	583.8	582.6	578.3	572.5	566.2	556.3
19.5°	555.5	562.8	572.4	577.9	580.7	582.1	580.8	576.6	570.5	563.9	553.8
20°	552.9	560.4	570.4	576.1	578.9	580.3	579.0	574.4	568.2	561.7	551.2
20.5°	550.1	557.9	568.3	574.1	576.9	578.3	577.1	572.4	565.9	559.3	548.5
21°	547.3	555.5	566.1	572.0	574.9	576.5	575.0	570.3	563.6	556.7	545.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	538.4	547.4	559.0	565.4	568.3	570.1	568.7	563.4	556.2	548.8	537.2
23°	535.3	544.5	556.5	563.1	566.0	567.8	566.5	561.0	553.5	546.0	534.2
23.5°	532.1	541.6	554.0	560.6	563.5	565.5	564.2	558.6	550.7	543.1	531.1
24°	528.7	538.5	551.3	558.1	561.2	563.1	561.7	555.9	548.0	540.2	528.0
24.5°	525.4	535.4	548.6	555.7	558.6	560.6	559.3	553.3	545.0	537.2	524.7
25°	521.9	532.2	545.8	552.9	555.8	558.0	556.7	550.6	542.0	534.1	521.5
25.5°	518.4	528.8	543.0	550.2	553.2	555.4	554.1	547.8	539.0	530.9	518.1
26°	514.9	525.5	540.0	547.4	550.3	552.8	551.4	544.9	535.8	527.7	514.7
26.5°	511.1	522.1	537.1	544.5	547.4	550.0	548.6	541.8	532.5	524.3	511.1
27°	507.4	518.6	534.1	541.6	544.4	546.9	545.8	538.7	529.1	520.9	507.5
27.5°	503.4	515.0	530.9	538.6	541.3	544.0	542.9	535.6	525.6	517.3	503.9
28°	499.5	511.3	527.6	535.4	538.1	541.0	539.9	532.4	522.1	513.7	500.3
28.5°	495.3	507.6	524.4	532.3	534.7	537.7	536.8	528.9	518.5	510.0	496.3
29°	491.5	503.8	521.0	528.8	531.6	534.4	533.7	525.6	514.7	506.3	492.5
29.5°	487.1	499.8	517.6	525.5	527.9	531.1	530.5	522.0	510.9	502.2	488.5
30°	483.1	495.8	514.0	522.1	524.6	527.7	527.1	518.5	506.9	498.4	484.5
30.5°	478.6	491.8	510.5	518.6	520.7	524.2	523.8	514.8	503.1	494.4	480.3
31°	474.5	487.7	506.8	514.9	517.2	520.7	520.2	511.0	499.0	490.2	476.1
31.5°	470.0	483.4	503.0	511.2	513.1	516.8	516.7	507.2	495.0	486.1	471.9
32°	465.7	479.1	499.1	507.4	509.2	513.2	513.0	503.3	490.8	481.9	467.5
32.5°	461.0	474.9	495.2	503.5	505.2	509.3	509.3	499.3	486.6	477.7	463.0
33°	456.7	470.6	491.0	499.5	501.3	505.4	505.4	495.3	482.2	473.4	458.5
33.5°	452.0	466.2	487.1	495.6	497.1	501.4	501.5	491.3	477.9	469.2	454.0
34°	447.3	461.8	482.9	491.5	492.8	497.3	497.5	487.0	473.4	464.8	449.3
34.5°	442.3	457.3	478.6	487.3	488.6	493.1	493.4	482.9	468.7	460.4	444.7
35°	437.6	452.7	474.3	483.1	484.4	489.1	489.3	478.6	464.0	455.8	439.9
35.5°	432.7	448.1	469.9	478.8	479.8	484.8	484.9	474.4	459.3	451.2	435.1
36°	427.7	443.4	465.4	474.5	475.3	480.5	480.6	469.9	454.4	446.5	430.3
36.5°	422.4	438.5	460.9	470.2	470.5	476.2	476.1	465.4	449.0	441.8	425.3
37°	413.5	433.7	456.4	465.8	465.8	471.7	471.7	460.7	441.1	436.8	420.4
37.5°	402.8	428.8	451.7	461.2	460.9	467.1	467.0	456.0	431.3	431.9	415.3
38°	388.5	423.7	447.0	456.7	455.9	462.4	462.5	451.2	419.1	426.6	410.4
38.5°	374.2	418.6	442.2	452.0	450.4	457.7	457.7	446.4	404.7	420.7	405.5
39°	360.4	410.8	437.4	447.3	442.4	452.8	453.0	441.4	389.5	411.1	400.5
39.5°	346.3	400.4	432.6	442.5	432.5	447.9	448.2	435.9	373.5	400.4	395.6
40°	331.6	386.9	427.8	437.5	420.2	442.8	443.2	426.7	357.5	387.7	390.7
40.5°	316.2	372.7	422.9	432.4	406.2	437.3	438.2	417.5	342.2	373.5	385.9
41°	300.6	359.1	417.9	427.4	390.4	428.7	433.5	405.4	327.6	359.4	381.1
41.5°	285.2	345.5	413.1	421.9	374.3	419.2	428.5	391.9	312.7	343.6	376.2
42°	270.5	331.2	408.1	414.5	358.2	407.6	423.6	377.3	297.7	329.1	371.2
42.5°	256.5	316.2	403.1	405.0	342.9	393.8	418.8	362.0	282.2	315.0	366.4
43°	242.1	301.4	398.3	393.7	328.0	378.9	413.8	347.1	266.9	301.6	361.4
43.5°	227.8	286.5	393.2	381.0	312.9	363.2	409.0	332.6	251.6	286.9	356.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	186.4	243.3	378.3	337.2	266.9	318.0	394.3	289.4	209.4	244.4	340.4
45.5°	173.2	229.7	373.2	322.6	251.3	303.6	389.3	274.6	195.4	229.6	332.0
46°	160.9	215.9	368.0	308.8	236.9	288.9	384.2	259.9	182.1	216.4	322.0
46.5°	148.8	201.9	362.8	295.0	222.8	273.7	379.1	245.0	169.0	202.9	308.2
47°	137.0	188.4	357.5	280.8	208.8	258.5	373.9	230.9	156.5	190.6	291.1
47.5°	126.3	175.4	347.9	266.5	194.9	243.6	368.5	217.3	144.4	177.3	274.0
48°	116.1	162.9	338.0	252.3	181.1	229.6	363.0	204.0	133.6	165.3	256.5
48.5°	107.0	150.9	325.6	237.9	168.1	215.8	354.4	190.4	122.9	153.1	239.6
49°	99.2	139.1	313.4	224.6	155.4	201.9	342.4	177.3	113.2	141.2	223.4
49.5°	92.6	128.1	300.9	210.8	143.5	188.5	329.3	164.5	104.0	130.6	207.3
50°	86.9	117.5	288.9	198.4	132.3	175.0	313.2	152.2	97.1	120.6	191.5
50.5°	82.1	107.9	275.9	185.6	122.0	162.1	296.2	140.6	90.4	110.8	176.5
51°	77.7	99.4	260.7	172.8	112.0	149.7	278.1	129.2	83.7	101.8	162.5
51.5°	73.2	92.6	245.4	160.0	103.0	137.9	260.0	119.0	76.9	94.6	149.4
52°	68.9	86.6	229.4	148.4	95.9	126.9	242.4	109.4	70.2	87.5	136.8
52.5°	65.0	81.5	212.9	136.9	88.6	116.5	225.1	101.9	64.9	80.5	125.3
53°	62.2	76.8	197.0	126.3	81.5	106.8	209.2	94.4	61.2	73.3	114.8
53.5°	60.9	72.6	181.5	116.0	74.4	99.4	194.0	87.0	59.5	67.6	105.2
54°	59.7	68.2	166.9	106.9	69.0	92.1	179.0	79.5	58.4	62.5	98.0
54.5°	58.8	64.1	152.8	97.8	63.9	84.7	164.4	72.1	57.4	58.8	90.8
55°	57.9	60.8	140.4	89.9	60.5	77.4	150.5	66.8	56.4	57.2	83.8
55.5°	56.9	58.8	128.6	82.6	58.9	70.0	137.3	61.7	55.4	56.0	76.6
56°	55.9	57.7	117.1	76.1	57.9	64.5	125.1	57.8	54.5	55.1	69.6
56.5°	55.0	56.7	106.8	70.1	56.9	59.7	114.5	56.1	53.5	54.1	64.9
57°	54.1	55.7	97.5	64.6	55.8	56.9	105.8	55.0	52.6	53.1	61.0
57.5°	53.1	54.8	89.2	59.7	54.9	55.6	97.1	54.1	51.8	52.2	57.7
58°	52.3	53.8	81.7	56.6	54.0	54.7	88.3	53.0	50.8	51.3	55.0
58.5°	51.4	52.9	75.3	55.4	53.0	53.6	79.6	52.2	50.0	50.4	52.7
59°	50.5	52.0	69.6	54.4	52.1	52.7	71.0	51.3	49.1	49.5	50.7
59.5°	49.6	51.2	65.0	53.3	51.2	51.8	65.2	50.3	48.3	48.7	49.1
60°	48.8	50.2	61.2	52.4	50.2	50.8	60.7	49.5	47.4	47.8	47.6
60.5°	47.8	49.4	58.1	51.5	49.3	49.9	57.2	48.6	46.6	47.0	46.5
61°	47.0	48.6	55.5	50.5	48.5	49.0	54.1	47.7	45.8	46.2	45.6
61.5°	46.1	47.7	53.1	49.7	47.6	48.2	51.8	46.9	44.8	45.4	44.6
62°	45.3	46.8	51.2	48.8	46.8	47.3	49.7	46.1	44.0	44.5	43.6
62.5°	44.3	46.0	49.4	47.9	46.0	46.5	48.0	45.3	43.1	43.7	42.7
63°	43.4	45.1	48.0	47.0	45.0	45.7	46.5	44.4	42.2	42.8	41.7
63.5°	42.6	44.3	47.0	46.2	44.2	44.8	45.4	43.6	41.4	41.9	40.9
64°	41.6	43.5	46.0	45.4	43.4	44.0	44.3	42.8	40.5	41.0	40.0
64.5°	40.8	42.6	45.0	44.4	42.6	43.2	43.4	41.9	39.7	40.2	39.0
65°	39.9	41.7	44.1	43.6	41.7	42.4	42.5	41.1	38.8	39.4	38.1
65.5°	38.9	40.9	43.1	42.8	40.8	41.5	41.5	40.3	37.9	38.4	37.3
66°	38.1	40.0	42.1	41.9	40.0	40.7	40.6	39.4	37.1	37.6	36.3





TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	35.5	37.8	39.5	39.4	37.5	38.2	37.9	36.8	34.6	35.0	33.7
68°	34.7	36.9	38.5	38.4	36.7	37.4	37.0	35.9	33.8	34.1	32.7
68.5°	33.9	35.9	37.4	37.5	35.8	36.5	36.1	35.1	32.9	33.2	31.8
69°	33.0	34.9	36.6	36.7	35.0	35.6	35.2	34.2	32.1	32.3	31.0
69.5°	32.1	34.0	35.7	35.8	34.2	34.8	34.4	33.3	31.3	31.5	30.0
70°	31.3	33.1	34.8	35.1	33.3	34.0	33.4	32.5	30.3	30.7	29.1
70.5°	30.3	32.2	34.0	34.3	32.6	33.1	32.6	31.7	29.5	29.7	28.3
71°	29.5	31.4	33.0	33.3	31.8	32.3	31.7	30.8	28.7	28.9	27.3
71.5°	28.6	30.5	32.2	32.5	31.0	31.5	30.9	29.9	27.9	28.1	26.4
72°	27.8	29.6	31.3	31.7	30.1	30.7	29.9	29.1	27.0	27.1	25.6
72.5°	26.8	28.7	30.3	30.9	29.4	29.8	29.1	28.3	26.2	26.3	24.6
73°	26.0	27.9	29.4	29.9	28.6	29.0	28.2	27.3	25.4	25.5	23.8
73.5°	25.1	26.9	28.6	29.1	27.8	28.2	27.3	26.5	24.5	24.5	22.9
74°	24.2	26.1	27.6	28.3	26.9	27.3	26.5	25.7	23.7	23.7	22.0
74.5°	23.3	25.2	26.7	27.4	26.1	26.5	25.6	24.9	22.8	22.8	21.1
75°	22.5	24.3	25.9	26.6	25.3	25.7	24.7	23.9	22.0	22.0	20.2
75.5°	21.5	23.4	25.0	25.8	24.5	24.9	23.9	23.1	21.1	21.0	19.3
76°	20.6	22.5	24.0	24.9	23.7	24.0	23.0	22.2	20.3	20.1	18.4
76.5°	19.8	21.5	23.2	24.0	22.9	23.2	22.2	21.3	19.5	19.3	17.5
77°	18.8	20.7	22.3	23.2	22.1	22.4	21.3	20.5	18.5	18.4	16.7
77.5°	18.0	19.8	21.3	22.3	21.2	21.5	20.4	19.6	17.7	17.5	15.7
78°	17.1	18.8	20.5	21.4	20.4	20.7	19.6	18.7	16.9	16.7	14.9
78.5°	16.3	18.0	19.6	20.6	19.6	19.9	18.7	17.8	16.1	15.7	14.0
79°	15.3	17.1	18.7	19.7	18.8	19.1	17.8	17.0	15.2	14.9	13.2
79.5°	14.5	16.2	17.8	18.8	18.0	18.2	17.0	16.2	14.4	14.0	12.2
80°	13.6	15.3	16.9	18.0	17.2	17.3	16.2	15.2	13.6	13.2	11.4
80.5°	12.7	14.4	16.1	17.1	16.4	16.6	15.3	14.4	12.7	12.2	10.6
81°	11.9	13.5	15.2	16.3	15.6	15.7	14.5	13.6	11.9	11.4	9.6
81.5°	11.0	12.5	14.3	15.4	14.8	14.8	13.6	12.7	11.1	10.5	8.8
82°	10.1	11.7	13.4	14.5	14.0	14.1	12.7	11.8	10.3	9.6	8.0
82.5°	9.2	10.8	12.5	13.7	13.2	13.2	11.9	11.0	9.4	8.7	7.0
83°	8.4	9.9	11.7	12.8	12.4	12.3	11.1	10.1	8.6	7.9	6.2
83.5°	7.5	9.0	10.8	12.0	11.6	11.5	10.3	9.2	7.8	6.9	5.5
84°	6.6	8.1	9.9	11.2	10.8	10.7	9.4	8.4	6.9	6.1	4.8
84.5°	5.8	7.2	9.0	10.3	10.0	9.8	8.6	7.6	6.1	5.3	4.0
85°	4.9	6.3	8.2	9.4	9.2	9.1	7.8	6.6	5.4	4.3	3.3
85.5°	4.0	5.5	7.4	8.6	8.4	8.3	6.9	5.8	4.6	3.5	2.6
86°	3.4	4.6	6.4	7.8	7.7	7.5	6.1	5.0	3.8	2.8	2.0
86.5°	2.7	3.6	5.7	7.0	6.8	6.6	5.4	4.0	3.0	2.2	1.2
87°	2.1	3.0	5.0	6.2	6.0	5.8	4.7	3.3	2.3	1.7	0.6
87.5°	1.4	2.4	4.2	5.4	5.3	5.1	3.9	2.7	1.8	1.1	0.1
88°	0.8	1.8	3.6	4.7	4.5	4.2	3.3	2.1	1.2	0.6	0.0
88.5°	0.3	1.1	2.9	3.8	3.7	3.5	2.6	1.6	0.7	0.1	0.0



TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.8	1.6	1.4	1.2	0.6	0.1	0.0	0.0	0.0



TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	605.9	605.9	605.9	605.9	605.9	605.9
0.5°	605.1	605.5	605.4	605.5	605.8	606.1
1°	604.6	605.0	604.7	605.0	605.4	605.9
1.5°	604.1	604.4	604.1	604.3	605.0	605.6
2°	603.6	603.8	603.5	603.8	604.4	605.3
2.5°	603.0	603.1	602.9	603.1	603.8	604.7
3°	602.4	602.5	602.1	602.5	603.2	604.3
3.5°	601.6	601.6	601.3	601.6	602.6	603.9
4°	600.9	600.8	600.4	600.8	601.8	603.3
4.5°	600.1	599.9	599.6	600.0	601.1	602.7
5°	599.3	598.9	598.5	598.9	600.2	602.0
5.5°	598.3	597.9	597.5	598.0	599.4	601.2
6°	597.3	596.9	596.4	597.0	598.4	600.4
6.5°	596.3	595.7	595.2	595.8	597.5	599.7
7°	595.1	594.5	594.0	594.7	596.4	598.7
7.5°	594.0	593.3	592.6	593.5	595.3	597.7
8°	592.7	591.9	591.3	592.2	594.1	596.7
8.5°	591.4	590.6	589.9	590.9	592.8	595.6
9°	590.0	589.0	588.5	589.4	591.6	594.5
9.5°	588.6	587.6	586.9	588.0	590.3	593.3
10°	587.1	586.0	585.3	586.4	588.8	592.0
10.5°	585.5	584.3	583.6	584.9	587.4	590.7
11°	583.9	582.6	582.0	583.2	585.8	589.3
11.5°	582.2	580.8	580.2	581.6	584.2	587.9
12°	580.5	579.0	578.2	579.7	582.5	586.3
12.5°	578.7	577.0	576.4	577.9	580.7	584.7
13°	576.8	575.0	574.3	576.0	579.1	583.1
13.5°	574.8	573.0	572.3	574.1	577.2	581.3
14°	572.9	570.9	570.2	572.0	575.2	579.6
14.5°	570.8	568.7	568.0	570.0	573.3	577.7
15°	568.6	566.4	565.6	567.8	571.2	575.8
15.5°	566.4	564.2	563.4	565.6	569.0	573.8
16°	564.2	561.7	561.0	563.2	567.0	571.7
16.5°	561.9	559.3	558.6	560.9	564.7	569.6
17°	559.4	556.8	556.0	558.5	562.4	567.5
17.5°	556.9	554.1	553.4	556.1	560.0	565.2
18°	554.4	551.4	550.8	553.5	557.5	562.9
18.5°	551.7	548.6	548.1	550.8	555.0	560.4
19°	549.0	545.8	545.1	548.2	552.5	557.9
19.5°	546.3	543.0	542.3	545.4	549.9	555.5
20°	543.5	540.0	539.4	542.6	547.1	552.9
20.5°	540.5	536.9	536.4	539.8	544.3	550.1
21°	537.6	533.8	533.3	536.7	541.4	547.3



TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	528.2	523.9	523.6	527.5	532.3	538.4
23°	525.0	520.4	520.1	524.3	529.2	535.3
23.5°	521.6	516.9	516.7	521.1	525.9	532.1
24°	518.2	513.2	513.2	517.7	522.6	528.7
24.5°	514.7	509.5	509.5	514.2	519.2	525.4
25°	511.0	505.6	505.8	510.7	515.8	521.9
25.5°	507.4	501.8	502.0	507.2	512.2	518.4
26°	503.6	497.9	498.2	503.5	508.7	514.9
26.5°	499.7	493.9	494.3	499.7	504.9	511.1
27°	495.9	489.8	490.2	496.0	501.2	507.4
27.5°	491.9	485.6	486.2	492.2	497.3	503.4
28°	487.8	481.3	481.9	488.1	493.3	499.5
28.5°	483.7	477.0	477.8	484.2	489.4	495.3
29°	479.6	472.6	473.5	480.1	485.5	491.5
29.5°	475.3	468.3	469.2	475.9	481.2	487.1
30°	471.0	463.8	464.7	471.8	477.1	483.1
30.5°	466.6	459.3	460.4	467.4	472.8	478.6
31°	462.3	454.7	455.9	463.2	468.5	474.5
31.5°	457.8	450.0	451.3	458.7	464.1	470.0
32°	453.4	445.3	446.7	454.3	459.7	465.7
32.5°	448.9	440.5	442.3	449.6	455.2	461.0
33°	444.2	435.6	437.6	445.2	450.8	456.7
33.5°	439.6	430.7	432.7	440.5	446.1	452.0
34°	434.8	425.7	428.1	435.9	441.8	447.3
34.5°	430.2	420.4	423.1	430.9	437.1	442.3
35°	425.3	414.9	418.2	426.2	432.4	437.6
35.5°	420.4	404.0	413.2	421.5	427.8	432.7
36°	415.5	391.4	408.2	416.5	423.0	427.7
36.5°	410.4	377.3	402.7	411.6	418.0	422.4
37°	405.0	363.3	395.1	406.8	413.2	413.5
37.5°	398.7	348.8	384.2	401.8	408.2	402.8
38°	388.0	333.9	370.8	396.8	403.1	388.5
38.5°	375.2	318.5	357.0	391.8	398.2	374.2
39°	361.6	302.8	344.1	387.0	392.8	360.4
39.5°	347.9	286.9	330.1	382.0	384.3	346.3
40°	334.3	272.2	315.8	377.1	374.0	331.6
40.5°	319.9	257.6	300.8	372.1	360.8	316.2
41°	305.1	243.6	286.2	367.1	347.5	300.6
41.5°	289.9	229.1	271.6	362.1	334.7	285.2
42°	275.2	215.2	257.4	357.3	321.4	270.5
42.5°	260.7	200.9	243.9	352.3	308.2	256.5
43°	246.7	187.3	230.8	347.3	294.2	242.1
43.5°	233.1	174.3	217.3	342.1	280.0	227.8

TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	192.5	138.1	177.5	317.6	238.9	186.4
45.5°	179.5	126.9	165.2	306.0	226.1	173.2
46°	166.8	116.6	153.5	294.1	213.0	160.9
46.5°	154.7	107.5	141.9	282.8	200.0	148.8
47°	143.0	99.9	130.6	271.1	186.9	137.0
47.5°	131.8	93.5	120.2	259.1	174.5	126.3
48°	120.8	88.2	110.6	244.6	162.5	116.1
48.5°	111.2	83.6	102.3	229.6	150.9	107.0
49°	102.3	79.3	95.3	213.7	139.5	99.2
49.5°	96.6	75.1	89.2	198.8	128.9	92.6
50°	91.1	70.9	84.1	184.6	118.4	86.9
50.5°	85.6	66.7	79.6	171.3	108.8	82.1
51°	80.0	63.4	75.5	158.1	100.1	77.7
51.5°	74.6	61.2	71.3	146.3	92.8	73.2
52°	70.3	60.0	67.2	134.9	86.4	68.9
52.5°	66.3	58.9	63.3	123.7	80.9	65.0
53°	62.2	58.0	60.3	113.7	76.1	62.2
53.5°	59.0	57.1	58.8	104.6	71.8	60.9
54°	57.3	56.0	57.7	95.9	67.4	59.7
54.5°	56.2	55.1	56.7	88.7	63.4	58.8
55°	55.2	54.2	55.7	81.8	60.0	57.9
55.5°	54.3	53.2	54.8	75.8	57.9	56.9
56°	53.3	52.4	53.8	70.3	56.9	55.9
56.5°	52.4	51.5	52.9	66.1	55.8	55.0
57°	51.6	50.6	52.0	62.2	54.9	54.1
57.5°	50.6	49.7	51.2	59.1	54.0	53.1
58°	49.8	48.9	50.3	56.4	53.0	52.3
58.5°	49.0	48.0	49.4	54.3	52.1	51.4
59°	48.0	47.2	48.6	52.2	51.3	50.5
59.5°	47.2	46.4	47.7	50.4	50.3	49.6
60°	46.4	45.5	46.8	49.1	49.4	48.8
60.5°	45.6	44.6	46.1	48.0	48.6	47.8
61°	44.7	43.8	45.3	47.1	47.6	47.0
61.5°	43.8	43.0	44.4	46.2	46.8	46.1
62°	43.0	42.0	43.5	45.1	45.9	45.3
62.5°	42.1	41.2	42.7	44.2	45.0	44.3
63°	41.2	40.4	41.8	43.3	44.1	43.4
63.5°	40.4	39.5	40.9	42.4	43.2	42.6
64°	39.6	38.6	40.1	41.4	42.2	41.6
64.5°	38.6	37.9	39.1	40.5	41.3	40.8
65°	37.8	37.1	38.3	39.6	40.5	39.9
65.5°	36.9	36.2	37.3	38.7	39.6	38.9
66°	36.0	35.4	36.6	37.8	38.6	38.1



TEST NUMBER: P775912

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	33.4	32.8	34.2	35.0	35.9	35.5
68°	32.6	32.0	33.2	34.2	35.0	34.7
68.5°	31.7	31.2	32.4	33.2	34.1	33.9
69°	30.9	30.3	31.6	32.3	33.2	33.0
69.5°	29.9	29.5	30.7	31.4	32.3	32.1
70°	29.1	28.7	29.8	30.4	31.4	31.3
70.5°	28.3	27.9	28.9	29.5	30.4	30.3
71°	27.4	27.0	28.1	28.6	29.6	29.5
71.5°	26.5	26.2	27.2	27.6	28.7	28.6
72°	25.7	25.3	26.3	26.7	27.8	27.8
72.5°	24.7	24.4	25.4	25.8	26.8	26.8
73°	23.9	23.6	24.5	25.0	25.9	26.0
73.5°	23.0	22.7	23.6	24.0	25.0	25.1
74°	22.2	21.8	22.8	23.1	24.1	24.2
74.5°	21.2	21.0	21.8	22.2	23.2	23.3
75°	20.4	20.2	20.9	21.2	22.3	22.5
75.5°	19.5	19.3	20.1	20.3	21.2	21.5
76°	18.6	18.4	19.2	19.4	20.4	20.6
76.5°	17.7	17.6	18.3	18.4	19.5	19.8
77°	16.9	16.8	17.4	17.6	18.5	18.8
77.5°	15.9	15.9	16.6	16.7	17.6	18.0
78°	15.1	15.1	15.6	15.7	16.7	17.1
78.5°	14.2	14.2	14.8	14.8	15.7	16.3
79°	13.4	13.4	13.9	13.9	14.8	15.3
79.5°	12.4	12.5	12.9	12.9	13.9	14.5
80°	11.6	11.7	12.1	12.1	12.9	13.6
80.5°	10.7	10.9	11.2	11.2	12.0	12.7
81°	9.8	10.0	10.4	10.3	11.1	11.9
81.5°	9.0	9.2	9.5	9.4	10.1	11.0
82°	8.2	8.4	8.6	8.6	9.2	10.1
82.5°	7.4	7.5	7.8	7.8	8.4	9.2
83°	6.4	6.6	6.9	6.9	7.5	8.4
83.5°	5.6	5.8	6.0	6.1	6.4	7.5
84°	4.8	5.0	5.2	5.4	5.6	6.6
84.5°	4.0	4.2	4.3	4.6	4.7	5.8
85°	3.2	3.4	3.5	3.8	3.9	4.9
85.5°	2.4	2.6	2.8	3.1	3.3	4.0
86°	1.6	1.9	2.0	2.4	2.7	3.4
86.5°	0.8	1.0	1.1	1.7	2.0	2.7
87°	0.2	0.3	0.4	0.8	1.3	2.1
87.5°	0.0	0.0	0.1	0.3	0.8	1.4
88°	0.0	0.0	0.0	0.0	0.3	0.8
88.5°	0.0	0.0	0.0	0.0	0.0	0.3



TEST NUMBER: P775912  
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQMW-1000lm-3500K

**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



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Cooper Lighting Solutions Photometric Lab  
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Scaled Data Report





— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°

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21.5°	544.4	552.9	563.7	570.0	572.8	574.4	573.1	568.1	561.3	554.1	543.0
22°	541.4	550.2	561.5	567.7	570.6	572.3	571.0	565.8	558.8	551.4	540.1



44°	213.7	271.7	388.1	366.6	297.6	347.6	404.2	318.5	237.0	272.7	351.3
44.5°	199.9	257.3	383.0	351.9	282.3	332.4	399.3	303.8	222.8	257.6	346.2



66.5°	37.3	39.1	41.2	41.0	39.1	39.9	39.7	38.5	36.2	36.7	35.4
67°	36.5	38.2	40.3	40.2	38.3	39.0	38.8	37.7	35.4	35.8	34.6



89°	0.0	0.6	2.2	3.1	2.9	2.7	2.0	0.9	0.3	0.0	0.0
89.5°	0.0	0.1	1.6	2.3	2.2	2.0	1.2	0.4	0.0	0.0	0.0



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21.5°	534.5	530.5	530.2	533.7	538.5	544.4
22°	531.4	527.2	526.8	530.7	535.5	541.4



44°	219.7	162.0	203.7	336.6	266.0	213.7
44.5°	206.2	149.5	190.2	327.4	252.3	199.9



66.5°	35.2	34.6	35.7	36.9	37.7	37.3
67°	34.4	33.8	34.9	35.9	36.8	36.5

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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

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Scaled Data Report



(END OF REPORT)