

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: P775888

Luminaire Tested: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775888  
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-HCD8TRMW-1000lm-4000K  
Description: 8 INCH ROUND MEDIUM MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

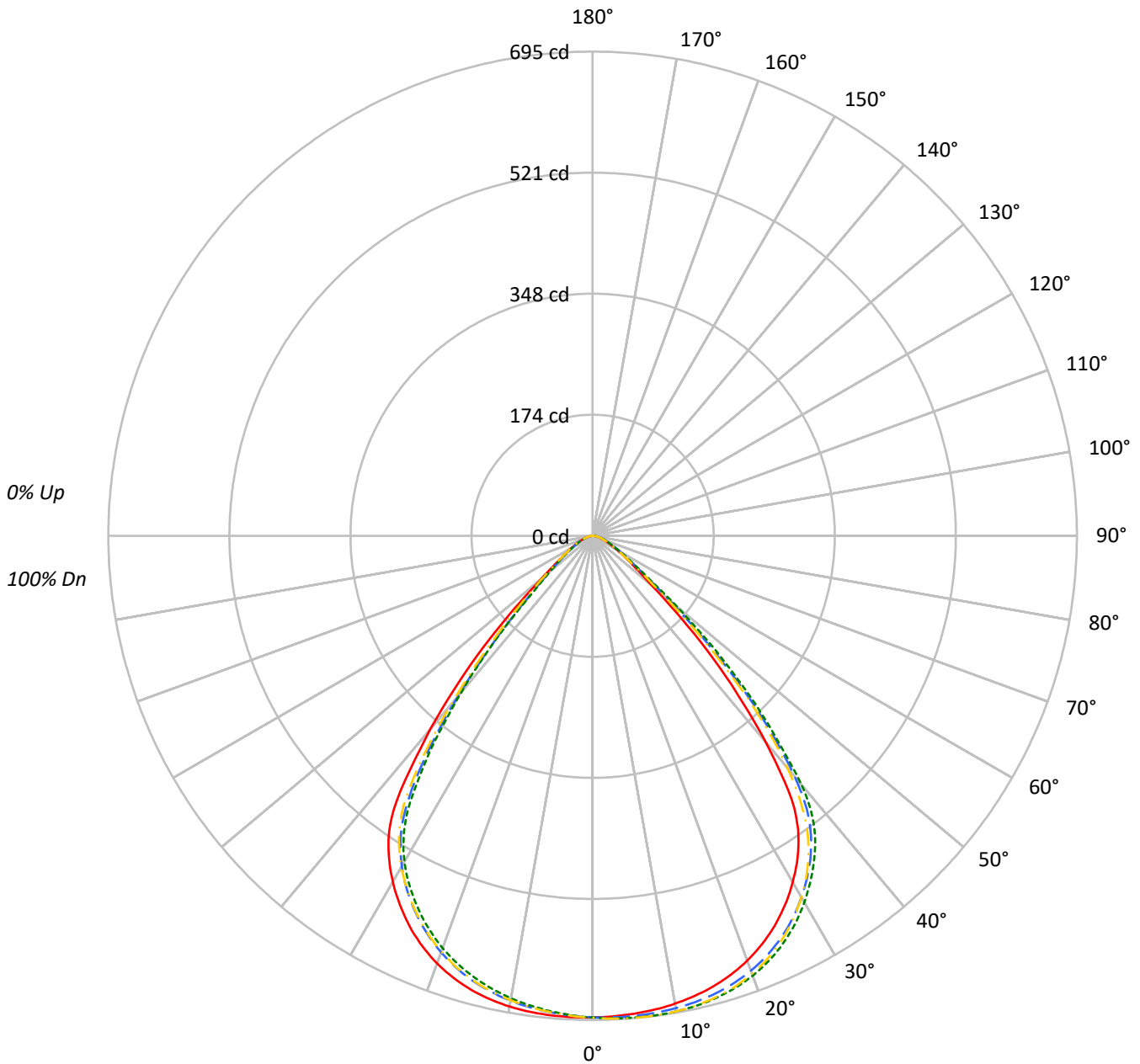
Lumens per Lamp: N/A  
Luminaire Lumens: 1120.1 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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



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CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

### 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
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	84	82			82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	81	78	75	74			74
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66			66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60			60
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55			55
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50			50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42			42
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39			39

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

	0°	90°	180°	270°
0°	21112	21112	21112	21112
5°	21103	21275	21177	20999
10°	21140	21490	21273	20898
15°	21161	21705	21319	20741
20°	21083	21830	21219	20455
25°	20808	21761	20882	19926
30°	20250	21423	20218	19051
35°	19150	20711	18881	16649
40°	15376	18572	14435	11693
45°	9978	13091	8929	6502
50°	5286	7438	4598	3762
55°	3449	3950	2933	2629
60°	2473	2748	2125	1972
65°	1922	2124	1654	1568
70°	1544	1750	1330	1268
75°	1274	1498	1062	1003
80°	1020	1319	791	738
85°	736	1226	455	385

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 13363 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.7	5.9
10°-20°	189.5	16.9
20°-30°	284.3	25.4
30°-40°	307.7	27.5
40°-50°	175.3	15.6
50°-60°	58.2	5.2
60°-70°	25.7	2.3
70°-80°	11.2	1.0
80°-90°	2.5	0.2
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°	539.5	48.2
0°-40°	847.3	75.6
0°-60°	1080.7	96.5
0°-90°	1120.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	692	692	692	692	692	
5°	689	694	691	685	689	66
15°	670	687	674	656	670	189
25°	618	646	620	592	618	284
35°	514	556	507	447	514	313
45°	231	303	207	151	231	180
55°	65	74	55	49	65	60
65°	27	29	23	22	27	27
75°	11	13	9	8	11	12
85°	2	4	1	1	2	3
90°	0	0	0	0	0	



TEST NUMBER: P775888

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5	691.5
0.5°	691.2	691.4	691.4	691.5	691.9	692.2	692.5	692.1	691.5	691.2	690.9
1°	691.1	691.4	691.5	691.7	692.3	692.7	692.9	692.3	691.6	691.1	690.6
1.5°	690.9	691.3	691.7	692.0	692.7	693.1	693.2	692.5	691.6	691.0	690.2
2°	690.7	691.3	691.8	692.3	693.0	693.5	693.5	692.8	691.6	690.8	689.8
2.5°	690.4	691.2	691.9	692.5	693.3	693.7	693.7	692.9	691.6	690.6	689.4
3°	690.1	691.1	691.9	692.8	693.6	694.1	693.9	693.0	691.6	690.2	689.0
3.5°	689.7	691.0	691.9	693.0	693.8	694.3	694.2	693.0	691.4	690.0	688.5
4°	689.4	690.8	691.9	693.1	694.0	694.5	694.3	693.1	691.3	689.7	687.9
4.5°	689.1	690.4	691.8	693.2	694.1	694.8	694.4	693.1	691.2	689.3	687.4
5°	688.6	690.1	691.7	693.2	694.2	694.9	694.5	693.0	691.0	688.9	686.8
5.5°	688.1	689.9	691.6	693.3	694.2	695.0	694.5	692.9	690.8	688.5	686.1
6°	687.6	689.5	691.4	693.3	694.3	695.1	694.6	692.8	690.4	687.9	685.4
6.5°	687.1	689.2	691.2	693.2	694.3	695.1	694.6	692.5	690.1	687.4	684.7
7°	686.6	688.7	691.0	693.1	694.3	695.1	694.5	692.3	689.7	686.8	683.8
7.5°	685.9	688.2	690.7	693.0	694.2	695.1	694.4	692.1	689.3	686.1	683.0
8°	685.2	687.7	690.3	692.8	694.1	695.0	694.2	691.8	688.8	685.5	682.0
8.5°	684.5	687.2	689.9	692.5	693.9	694.9	694.0	691.4	688.2	684.7	681.1
9°	683.7	686.6	689.5	692.2	693.7	694.8	693.8	691.0	687.6	683.9	680.1
9.5°	682.9	685.8	689.1	692.0	693.5	694.4	693.5	690.4	687.0	683.0	678.9
10°	681.9	685.1	688.5	691.6	693.2	694.2	693.1	689.9	686.2	682.0	677.6
10.5°	681.0	684.4	687.9	691.3	692.8	693.8	692.7	689.3	685.4	681.0	676.5
11°	680.1	683.5	687.3	690.8	692.3	693.4	692.1	688.7	684.5	679.8	675.2
11.5°	678.9	682.6	686.7	690.3	691.9	693.0	691.6	687.9	683.5	678.8	673.9
12°	677.7	681.6	685.9	689.8	691.4	692.4	691.0	687.1	682.5	677.5	672.3
12.5°	676.6	680.7	685.1	689.2	690.8	691.9	690.2	686.1	681.3	676.2	670.8
13°	675.2	679.5	684.3	688.5	690.1	691.3	689.5	685.1	680.2	674.7	669.1
13.5°	674.0	678.4	683.3	687.8	689.3	690.6	688.6	684.0	678.9	673.2	667.4
14°	672.6	677.1	682.4	687.0	688.6	689.7	687.6	682.9	677.5	671.6	665.6
14.5°	671.1	675.8	681.3	686.1	687.6	688.9	686.7	681.6	676.1	670.0	663.8
15°	669.5	674.6	680.3	685.2	686.7	687.9	685.6	680.3	674.5	668.1	661.8
15.5°	667.9	673.1	679.0	684.1	685.5	686.9	684.5	678.9	672.8	666.2	659.7
16°	666.1	671.6	677.7	683.0	684.5	685.7	683.2	677.3	671.0	664.2	657.5
16.5°	664.3	670.1	676.4	681.8	683.2	684.6	681.7	675.6	669.1	662.1	655.3
17°	662.3	668.4	675.0	680.6	681.8	683.3	680.3	673.9	667.2	659.9	652.7
17.5°	660.4	666.6	673.4	679.2	680.5	681.9	678.7	672.0	665.1	657.7	650.3
18°	658.3	664.8	671.9	677.6	679.0	680.5	677.0	670.0	662.9	655.2	647.7
18.5°	656.1	662.8	670.1	676.2	677.3	678.8	675.1	668.0	660.6	652.6	645.1
19°	653.7	660.8	668.3	674.5	675.5	677.0	673.2	665.8	658.3	650.0	642.2
19.5°	651.3	658.7	666.4	672.7	673.7	675.3	671.3	663.5	655.7	647.3	639.2
20°	648.9	656.4	664.2	670.8	671.9	673.3	669.2	660.9	653.1	644.3	636.2
20.5°	646.2	654.1	662.2	668.8	669.8	671.2	666.9	658.4	650.3	641.4	633.1
21°	643.5	651.7	660.0	666.8	667.7	669.0	664.5	655.7	647.4	638.3	629.6



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CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	634.7	643.6	652.5	659.8	660.4	661.9	656.6	647.0	638.0	628.3	619.1
23°	631.5	640.8	649.9	657.3	657.9	659.2	653.8	643.7	634.7	624.6	615.3
23.5°	628.2	637.8	647.1	654.6	655.2	656.5	650.6	640.5	631.0	620.8	611.4
24°	624.8	634.7	644.0	651.8	652.2	653.6	647.6	637.0	627.4	616.9	607.4
24.5°	621.2	631.5	641.2	648.9	649.2	650.5	644.3	633.4	623.8	613.1	603.2
25°	617.7	628.1	637.9	645.8	646.0	647.4	641.0	629.8	619.9	608.9	598.9
25.5°	613.9	624.6	634.7	642.7	642.8	644.1	637.4	625.9	615.8	604.4	594.5
26°	609.9	621.0	631.1	639.4	639.5	640.8	633.7	621.9	611.5	600.0	589.8
26.5°	605.9	617.3	627.8	635.9	635.8	637.2	629.9	617.7	607.3	595.7	585.3
27°	601.8	613.5	624.1	632.5	632.3	633.4	626.0	613.5	602.9	591.0	580.4
27.5°	597.6	609.4	620.2	628.8	628.5	629.6	621.9	609.1	598.4	586.3	575.5
28°	593.3	605.4	616.4	625.0	624.6	625.7	617.7	604.7	593.6	581.6	570.3
28.5°	588.7	601.1	612.2	621.0	620.5	621.7	613.3	599.9	588.8	576.4	565.2
29°	584.1	596.8	608.1	617.0	616.4	617.4	608.6	595.1	583.9	571.3	559.6
29.5°	579.2	592.2	603.7	612.9	612.1	612.9	604.0	590.1	578.7	565.9	553.7
30°	574.4	587.6	599.4	608.5	607.7	608.4	599.2	585.0	573.5	560.5	547.6
30.5°	569.2	582.9	594.7	604.2	603.1	603.8	594.4	579.9	567.9	554.7	541.2
31°	564.0	578.0	590.1	599.6	598.4	599.1	589.2	574.3	562.5	548.7	534.7
31.5°	558.8	572.6	585.2	594.9	593.4	594.0	584.0	568.5	556.6	542.6	527.8
32°	553.3	567.7	580.2	590.0	588.8	589.1	578.4	562.5	550.6	536.3	520.5
32.5°	547.5	562.2	575.0	585.1	583.5	583.9	572.5	556.3	544.4	529.4	512.8
33°	541.5	556.7	569.9	580.1	578.3	578.4	566.4	550.0	538.0	522.0	504.4
33.5°	535.0	551.0	564.5	574.8	572.8	572.8	560.3	543.2	530.9	514.0	495.0
34°	528.5	544.9	558.9	569.6	567.4	567.0	553.6	536.2	523.6	505.5	484.5
34.5°	521.4	538.3	552.8	564.0	561.6	560.8	547.0	528.7	515.6	495.0	473.0
35°	513.8	531.6	546.7	558.3	555.7	554.5	539.9	520.7	506.6	484.0	460.3
35.5°	505.3	524.2	540.0	552.4	549.6	547.9	532.4	511.6	496.2	472.0	446.3
36°	496.6	516.4	533.1	546.2	543.4	541.2	524.1	501.5	485.0	458.4	431.5
36.5°	486.6	508.3	525.7	539.9	536.6	533.8	515.3	490.9	472.3	443.6	416.3
37°	475.1	498.7	517.9	532.9	529.5	525.7	505.8	479.9	457.7	428.0	400.7
37.5°	461.4	488.1	509.3	525.3	521.3	516.8	495.4	467.4	441.6	411.7	384.3
38°	446.7	476.1	499.4	516.8	512.5	507.4	484.5	454.7	424.9	394.7	367.6
38.5°	431.4	462.6	488.5	507.4	502.6	497.0	473.4	440.9	408.1	377.5	350.6
39°	416.1	447.8	477.0	496.9	492.0	486.2	461.2	427.1	392.5	360.3	333.7
39.5°	400.9	432.9	464.4	486.0	479.8	473.8	448.5	411.6	377.4	343.6	316.8
40°	385.8	418.4	450.8	473.6	466.0	461.3	434.6	396.3	362.2	327.3	299.8
40.5°	370.0	404.4	436.1	460.3	449.6	447.5	420.8	379.9	346.3	310.9	283.1
41°	354.2	389.7	420.7	445.9	432.6	433.7	406.4	363.7	329.8	294.1	266.6
41.5°	338.3	374.7	404.9	430.5	415.3	418.8	391.8	347.3	313.6	277.4	250.8
42°	322.5	358.9	389.1	414.1	399.0	403.0	376.7	331.6	297.4	261.9	234.6
42.5°	306.7	342.3	372.8	396.9	384.0	386.6	360.4	315.1	281.6	246.4	219.1
43°	291.5	325.8	355.9	379.2	368.8	370.5	343.4	299.0	266.5	231.7	204.7
43.5°	276.4	309.6	339.4	362.0	352.8	354.0	326.6	282.7	251.7	217.5	190.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	231.1	261.8	288.7	309.5	303.2	305.7	275.1	235.5	206.8	177.7	153.6
45.5°	216.6	246.0	271.6	293.2	287.1	289.7	257.7	220.2	192.6	165.0	142.7
46°	202.4	230.4	254.3	276.3	271.7	273.6	242.2	205.2	178.8	153.3	133.0
46.5°	188.6	215.1	238.1	260.6	256.4	257.4	225.7	190.5	165.9	141.6	123.9
47°	175.2	200.2	221.9	245.1	241.2	241.5	210.5	176.6	153.8	131.2	115.6
47.5°	161.7	185.4	207.4	230.3	225.8	225.8	196.0	163.1	142.0	121.6	108.0
48°	149.9	171.8	193.1	215.9	210.5	210.7	182.2	150.4	130.8	112.9	101.1
48.5°	138.5	158.8	179.5	202.4	196.0	195.8	168.2	138.2	120.4	104.7	95.9
49°	128.2	146.5	167.0	188.6	182.1	181.1	155.5	127.2	111.0	98.8	90.5
49.5°	118.9	135.8	155.2	175.7	169.1	167.2	143.7	117.2	102.6	92.9	85.2
50°	111.3	125.6	144.4	163.0	156.6	153.5	132.6	108.3	96.8	87.1	79.8
50.5°	104.5	116.8	134.0	150.8	144.5	141.2	121.8	100.4	91.0	81.2	74.5
51°	98.3	108.9	124.6	139.6	132.4	129.6	112.5	94.4	85.3	75.4	71.1
51.5°	92.6	102.3	116.0	129.2	122.1	119.6	103.9	88.3	79.5	71.8	67.9
52°	87.7	96.1	108.2	119.5	112.3	110.3	97.8	82.2	73.8	68.7	64.9
52.5°	83.0	90.7	101.2	110.8	103.4	102.0	91.7	76.2	70.5	65.6	61.7
53°	78.4	85.7	94.6	103.0	97.6	95.7	85.7	72.4	67.3	62.5	58.8
53.5°	74.3	81.1	88.7	96.0	91.8	89.5	79.6	69.1	64.2	59.4	56.0
54°	71.2	76.7	83.2	89.4	85.9	83.2	73.6	65.9	61.1	56.5	53.3
54.5°	68.0	73.1	78.3	83.7	80.0	77.0	70.1	62.7	58.1	53.8	50.8
55°	64.8	69.7	74.1	78.4	74.2	73.1	66.9	59.5	55.1	51.1	48.4
55.5°	61.7	66.6	70.8	74.1	70.7	69.8	63.6	56.6	52.4	48.7	46.3
56°	58.8	63.4	67.4	70.7	67.5	66.5	60.4	53.7	50.0	46.5	44.2
56.5°	56.0	60.4	64.4	67.4	64.2	63.2	57.3	51.0	47.7	44.4	42.3
57°	53.2	57.4	61.1	64.2	60.9	60.1	54.5	48.6	45.4	42.5	40.5
57.5°	50.8	54.6	58.2	61.0	57.9	56.9	51.8	46.4	43.4	40.7	38.9
58°	48.4	52.0	55.2	57.9	54.9	54.1	49.3	44.2	41.5	39.0	37.3
58.5°	46.3	49.6	52.6	55.0	52.2	51.5	46.9	42.2	39.7	37.4	35.7
59°	44.2	47.4	50.1	52.3	49.7	48.9	44.7	40.3	38.0	35.8	34.2
59.5°	42.4	45.3	47.8	49.8	47.3	46.6	42.6	38.6	36.3	34.3	32.9
60°	40.5	43.3	45.6	47.5	45.0	44.4	40.7	37.1	34.8	33.0	31.6
60.5°	38.7	41.4	43.6	45.3	43.1	42.4	39.1	35.5	33.4	31.6	30.3
61°	37.3	39.7	41.7	43.2	41.2	40.5	37.4	34.0	31.9	30.3	29.2
61.5°	35.8	37.9	39.9	41.3	39.4	38.9	35.8	32.7	30.6	29.2	28.0
62°	34.3	36.5	38.2	39.5	37.7	37.1	34.3	31.3	29.3	27.9	27.0
62.5°	32.9	35.1	36.9	37.7	36.1	35.6	32.9	30.0	28.1	26.9	25.9
63°	31.4	33.7	35.4	36.3	34.5	34.0	31.6	28.9	27.0	25.8	24.9
63.5°	30.1	32.2	34.0	34.9	33.2	32.7	30.3	27.7	25.9	24.8	23.9
64°	28.9	30.9	32.6	33.5	31.8	31.4	29.1	26.6	24.8	23.7	23.0
64.5°	27.7	29.6	31.1	32.1	30.6	30.1	28.0	25.5	23.8	22.9	22.1
65°	26.6	28.4	29.9	30.8	29.4	29.0	26.9	24.5	22.9	21.8	21.2
65.5°	25.4	27.3	28.7	29.6	28.1	27.8	25.8	23.5	21.9	21.0	20.4
66°	24.5	26.1	27.6	28.5	27.1	26.8	24.8	22.6	21.0	20.2	19.5





TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	21.5	23.1	24.5	25.2	24.0	23.7	22.1	20.0	18.5	17.7	17.2
68°	20.6	22.2	23.5	24.3	23.1	22.8	21.2	19.1	17.7	17.0	16.5
68.5°	19.7	21.2	22.6	23.3	22.2	21.8	20.3	18.3	17.0	16.3	15.9
69°	18.9	20.4	21.6	22.4	21.3	21.0	19.5	17.5	16.3	15.5	15.1
69.5°	18.2	19.5	20.8	21.4	20.5	20.2	18.7	16.8	15.5	14.9	14.5
70°	17.3	18.7	20.0	20.6	19.6	19.3	18.0	16.1	14.9	14.2	13.9
70.5°	16.6	18.0	19.1	19.7	18.8	18.6	17.2	15.3	14.2	13.5	13.2
71°	15.9	17.1	18.4	19.0	18.1	17.9	16.5	14.7	13.5	12.9	12.6
71.5°	15.1	16.4	17.6	18.2	17.3	17.1	15.9	14.1	12.9	12.3	12.0
72°	14.5	15.8	16.9	17.4	16.6	16.4	15.1	13.4	12.3	11.7	11.4
72.5°	13.9	15.0	16.2	16.7	16.0	15.6	14.5	12.8	11.8	11.1	10.8
73°	13.2	14.4	15.4	16.1	15.2	15.0	13.9	12.2	11.1	10.6	10.3
73.5°	12.6	13.7	14.8	15.3	14.6	14.4	13.2	11.7	10.6	10.0	9.8
74°	12.0	13.0	14.2	14.7	14.0	13.8	12.6	11.0	10.1	9.5	9.2
74.5°	11.3	12.4	13.4	14.1	13.3	13.1	12.1	10.5	9.6	8.9	8.8
75°	10.8	11.9	12.9	13.4	12.7	12.5	11.4	10.0	9.0	8.5	8.3
75.5°	10.2	11.2	12.3	12.8	12.2	12.0	10.9	9.5	8.5	8.0	7.8
76°	9.7	10.6	11.7	12.3	11.6	11.4	10.4	8.9	8.0	7.5	7.4
76.5°	9.1	10.1	11.1	11.7	11.0	10.8	9.9	8.4	7.6	7.0	6.8
77°	8.6	9.6	10.5	11.1	10.5	10.3	9.3	8.0	7.0	6.5	6.4
77.5°	8.1	9.0	10.0	10.5	10.0	9.8	8.8	7.5	6.6	6.1	5.9
78°	7.7	8.5	9.5	10.0	9.5	9.2	8.3	6.9	6.1	5.7	5.5
78.5°	7.1	8.0	8.9	9.6	8.9	8.8	7.9	6.5	5.7	5.3	5.0
79°	6.7	7.6	8.5	9.0	8.4	8.3	7.4	6.1	5.3	4.8	4.7
79.5°	6.2	7.0	8.0	8.5	8.0	7.9	6.8	5.7	4.9	4.4	4.3
80°	5.8	6.6	7.5	8.0	7.5	7.4	6.4	5.3	4.5	4.0	3.9
80.5°	5.4	6.1	7.0	7.6	7.0	6.8	6.0	4.8	4.1	3.7	3.6
81°	4.9	5.7	6.5	7.0	6.6	6.5	5.6	4.4	3.8	3.3	3.2
81.5°	4.5	5.3	6.1	6.6	6.1	6.0	5.1	4.0	3.4	2.9	2.8
82°	4.2	4.8	5.7	6.2	5.7	5.6	4.8	3.7	3.0	2.6	2.5
82.5°	3.8	4.4	5.3	5.8	5.4	5.3	4.4	3.3	2.7	2.3	2.2
83°	3.5	4.1	4.8	5.4	4.9	4.8	4.0	2.9	2.4	2.0	1.9
83.5°	3.0	3.7	4.5	4.9	4.5	4.4	3.7	2.6	2.1	1.7	1.7
84°	2.7	3.4	4.1	4.6	4.2	4.1	3.4	2.3	1.8	1.4	1.4
84.5°	2.4	2.9	3.8	4.2	3.8	3.7	3.0	2.0	1.5	1.1	1.2
85°	2.1	2.6	3.4	3.9	3.5	3.4	2.6	1.7	1.3	0.8	0.8
85.5°	1.8	2.3	3.0	3.6	3.2	3.0	2.3	1.4	0.9	0.6	0.6
86°	1.5	2.0	2.6	3.2	2.8	2.7	2.1	1.2	0.7	0.5	0.4
86.5°	1.2	1.7	2.3	2.8	2.5	2.4	1.8	0.9	0.5	0.3	0.2
87°	0.9	1.4	2.1	2.5	2.2	2.1	1.5	0.7	0.4	0.2	0.0
87.5°	0.7	1.1	1.8	2.2	1.9	1.8	1.3	0.5	0.2	0.1	0.0
88°	0.5	0.8	1.5	1.9	1.6	1.6	1.1	0.4	0.1	0.0	0.0
88.5°	0.3	0.6	1.3	1.6	1.4	1.3	0.7	0.2	0.0	0.0	0.0



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.1	0.5	0.8	0.5	0.5	0.1	0.0	0.0	0.0	0.0



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	691.5	691.5	691.5	691.5	691.5	691.5
0.5°	690.7	691.2	691.3	691.7	691.6	691.2
1°	690.2	690.7	690.8	691.3	691.3	691.1
1.5°	689.7	690.0	690.2	690.8	690.9	690.9
2°	689.2	689.5	689.6	690.2	690.6	690.7
2.5°	688.6	688.9	689.0	689.7	690.1	690.4
3°	688.0	688.2	688.3	689.1	689.6	690.1
3.5°	687.3	687.5	687.6	688.6	689.2	689.7
4°	686.7	686.8	687.0	687.9	688.8	689.4
4.5°	685.9	686.0	686.1	687.3	688.2	689.1
5°	685.1	685.2	685.3	686.6	687.7	688.6
5.5°	684.3	684.4	684.5	685.9	687.1	688.1
6°	683.3	683.3	683.5	685.1	686.5	687.6
6.5°	682.4	682.5	682.6	684.3	685.7	687.1
7°	681.3	681.4	681.6	683.4	685.1	686.6
7.5°	680.3	680.4	680.5	682.6	684.4	685.9
8°	679.2	679.1	679.4	681.5	683.5	685.2
8.5°	678.0	678.0	678.3	680.6	682.7	684.5
9°	676.8	676.7	677.0	679.5	681.8	683.7
9.5°	675.4	675.5	675.6	678.3	680.9	682.9
10°	674.1	674.1	674.4	677.1	679.8	681.9
10.5°	672.7	672.6	672.9	675.8	678.8	681.0
11°	671.1	671.1	671.4	674.6	677.6	680.1
11.5°	669.5	669.5	669.8	673.2	676.5	678.9
12°	667.9	667.9	668.2	671.8	675.2	677.7
12.5°	666.2	666.1	666.4	670.2	673.7	676.6
13°	664.4	664.3	664.5	668.5	672.4	675.2
13.5°	662.5	662.4	662.7	666.8	670.9	674.0
14°	660.5	660.4	660.7	665.0	669.3	672.6
14.5°	658.4	658.4	658.6	663.1	667.7	671.1
15°	656.3	656.2	656.5	661.1	665.9	669.5
15.5°	654.1	653.9	654.2	658.9	664.1	667.9
16°	651.7	651.7	651.8	656.7	662.1	666.1
16.5°	649.3	649.3	649.4	654.4	660.1	664.3
17°	646.7	646.8	646.9	652.0	657.9	662.3
17.5°	644.1	644.1	644.1	649.6	655.7	660.4
18°	641.3	641.5	641.4	646.9	653.3	658.3
18.5°	638.5	638.6	638.5	644.1	650.9	656.1
19°	635.5	635.6	635.5	641.2	648.2	653.7
19.5°	632.4	632.8	632.5	638.4	645.5	651.3
20°	629.2	629.6	629.1	635.1	642.7	648.9
20.5°	626.0	626.3	625.9	632.1	639.8	646.2
21°	622.5	622.9	622.4	628.7	636.9	643.5



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	611.6	612.0	611.4	618.0	627.1	634.7
23°	607.6	608.2	607.4	614.3	623.6	631.5
23.5°	603.5	604.2	603.5	610.3	620.0	628.2
24°	599.3	600.1	599.3	606.3	616.2	624.8
24.5°	595.1	595.9	595.0	602.3	612.4	621.2
25°	590.6	591.5	590.6	597.9	608.4	617.7
25.5°	586.1	587.1	586.1	593.6	604.4	613.9
26°	581.2	582.5	581.6	589.1	600.2	609.9
26.5°	576.6	577.9	576.7	584.6	596.0	605.9
27°	571.6	572.9	571.8	579.9	591.5	601.8
27.5°	566.5	567.9	566.8	575.0	587.0	597.6
28°	561.3	562.8	561.6	570.0	582.4	593.3
28.5°	555.7	557.6	556.5	565.0	577.7	588.7
29°	549.6	552.0	551.0	559.8	572.7	584.1
29.5°	543.3	546.4	545.3	554.6	567.6	579.2
30°	536.9	540.4	539.2	549.2	562.5	574.4
30.5°	530.1	533.9	532.8	543.5	557.3	569.2
31°	523.0	527.2	525.9	537.4	551.9	564.0
31.5°	515.4	519.8	519.0	531.1	546.4	558.8
32°	507.2	512.0	511.6	524.3	540.3	553.3
32.5°	498.6	503.7	503.9	517.3	534.1	547.5
33°	489.2	494.7	495.8	509.7	527.5	541.5
33.5°	478.3	485.2	486.6	501.8	520.5	535.0
34°	465.9	474.0	476.4	493.2	513.3	528.5
34.5°	452.1	461.2	463.9	483.7	505.4	521.4
35°	437.7	446.7	449.7	472.7	497.1	513.8
35.5°	422.8	431.7	434.3	460.2	487.9	505.3
36°	407.4	417.3	418.0	446.6	477.1	496.6
36.5°	392.7	403.5	401.6	431.9	464.9	486.6
37°	378.0	389.0	385.4	416.8	451.2	475.1
37.5°	363.1	373.0	369.8	400.4	436.2	461.4
38°	347.8	356.4	354.7	383.5	420.7	446.7
38.5°	331.2	339.6	338.7	366.8	404.7	431.4
39°	314.8	323.5	322.8	350.0	388.6	416.1
39.5°	298.0	308.3	306.7	333.4	371.8	400.9
40°	281.8	293.4	291.1	316.1	355.5	385.8
40.5°	265.4	278.7	275.4	299.2	339.0	370.0
41°	249.4	263.4	260.6	282.6	322.9	354.2
41.5°	233.9	247.9	245.9	267.5	307.4	338.3
42°	218.3	232.6	231.1	252.0	291.6	322.5
42.5°	202.9	218.0	217.0	237.4	275.1	306.7
43°	188.1	204.1	203.3	223.4	259.7	291.5
43.5°	174.5	190.2	189.9	209.9	244.7	276.4



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	139.3	150.6	154.2	173.4	202.3	231.1
45.5°	129.5	138.7	143.7	162.6	189.4	216.6
46°	120.4	128.1	133.9	152.4	177.2	202.4
46.5°	112.6	119.1	124.9	142.8	165.9	188.6
47°	105.6	111.3	116.6	133.8	154.9	175.2
47.5°	99.2	104.5	109.1	125.2	144.8	161.7
48°	94.3	98.6	102.4	117.2	135.3	149.9
48.5°	89.5	93.4	96.4	109.9	126.6	138.5
49°	84.5	88.5	90.7	103.1	118.5	128.2
49.5°	79.6	83.7	85.6	96.8	110.8	118.9
50°	74.8	79.2	80.8	90.7	103.9	111.3
50.5°	71.5	75.2	76.4	85.3	97.5	104.5
51°	68.4	71.8	72.8	80.2	91.6	98.3
51.5°	65.3	68.8	69.6	75.7	86.0	92.6
52°	62.3	65.7	66.6	72.1	81.0	87.7
52.5°	59.3	62.7	63.5	69.1	76.6	83.0
53°	56.5	59.6	60.5	65.9	72.9	78.4
53.5°	53.8	56.9	57.5	62.8	69.7	74.3
54°	51.4	54.2	54.8	59.8	66.5	71.2
54.5°	49.0	51.7	52.4	56.9	63.3	68.0
55°	46.8	49.4	50.0	54.2	60.3	64.8
55.5°	44.8	47.1	47.8	51.8	57.4	61.7
56°	42.8	45.0	45.6	49.4	54.7	58.8
56.5°	41.1	43.2	43.7	47.1	52.2	56.0
57°	39.4	41.3	41.8	45.2	49.8	53.2
57.5°	37.8	39.6	40.0	43.2	47.6	50.8
58°	36.1	37.9	38.4	41.4	45.5	48.4
58.5°	34.8	36.4	37.1	39.6	43.5	46.3
59°	33.3	35.1	35.6	37.9	41.6	44.2
59.5°	32.0	33.7	34.2	36.5	39.9	42.4
60°	30.8	32.3	32.9	35.2	38.2	40.5
60.5°	29.5	31.1	31.4	33.8	36.9	38.7
61°	28.4	29.8	30.1	32.4	35.5	37.3
61.5°	27.3	28.7	29.0	31.1	34.0	35.8
62°	26.3	27.6	27.9	29.9	32.7	34.3
62.5°	25.2	26.5	26.8	28.8	31.3	32.9
63°	24.2	25.4	25.7	27.6	30.0	31.4
63.5°	23.2	24.5	24.8	26.5	28.9	30.1
64°	22.4	23.5	23.7	25.5	27.6	28.9
64.5°	21.4	22.6	22.9	24.5	26.6	27.7
65°	20.6	21.7	21.9	23.5	25.5	26.6
65.5°	19.7	20.8	21.1	22.6	24.5	25.4
66°	19.0	20.0	20.2	21.7	23.5	24.5



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-1000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	16.7	17.6	17.9	19.2	20.7	21.5
68°	16.1	16.9	17.1	18.4	19.8	20.6
68.5°	15.3	16.2	16.4	17.6	19.0	19.7
69°	14.7	15.5	15.8	16.9	18.2	18.9
69.5°	14.1	14.8	15.0	16.2	17.4	18.2
70°	13.4	14.2	14.4	15.5	16.7	17.3
70.5°	12.8	13.5	13.8	14.8	16.0	16.6
71°	12.2	12.9	13.1	14.2	15.2	15.9
71.5°	11.7	12.4	12.5	13.5	14.6	15.1
72°	11.1	11.8	11.9	12.9	13.9	14.5
72.5°	10.5	11.2	11.3	12.3	13.2	13.9
73°	10.0	10.6	10.8	11.8	12.6	13.2
73.5°	9.6	10.1	10.2	11.1	12.0	12.6
74°	8.9	9.6	9.7	10.6	11.4	12.0
74.5°	8.5	9.0	9.1	10.0	10.8	11.3
75°	8.0	8.5	8.7	9.5	10.3	10.8
75.5°	7.6	8.1	8.2	8.9	9.7	10.2
76°	7.0	7.6	7.7	8.5	9.2	9.7
76.5°	6.6	7.1	7.2	8.0	8.7	9.1
77°	6.2	6.6	6.7	7.5	8.2	8.6
77.5°	5.7	6.2	6.3	7.0	7.7	8.1
78°	5.4	5.8	5.9	6.5	7.1	7.7
78.5°	4.9	5.4	5.5	6.1	6.7	7.1
79°	4.5	4.9	5.0	5.7	6.2	6.7
79.5°	4.2	4.6	4.6	5.3	5.8	6.2
80°	3.8	4.2	4.3	4.8	5.4	5.8
80.5°	3.5	3.9	3.9	4.4	4.9	5.4
81°	3.0	3.5	3.6	4.1	4.5	4.9
81.5°	2.7	3.2	3.3	3.7	4.1	4.5
82°	2.4	2.8	2.9	3.4	3.8	4.2
82.5°	2.1	2.5	2.6	3.0	3.4	3.8
83°	1.8	2.2	2.2	2.6	3.0	3.5
83.5°	1.6	1.9	1.9	2.3	2.6	3.0
84°	1.3	1.6	1.7	2.0	2.3	2.7
84.5°	0.9	1.3	1.4	1.8	2.0	2.4
85°	0.7	1.1	1.1	1.5	1.7	2.1
85.5°	0.4	0.7	0.8	1.2	1.4	1.8
86°	0.2	0.5	0.5	0.9	1.2	1.5
86.5°	0.0	0.2	0.2	0.6	0.9	1.2
87°	0.0	0.0	0.0	0.4	0.7	0.9
87.5°	0.0	0.0	0.0	0.2	0.5	0.7
88°	0.0	0.0	0.0	0.0	0.3	0.5
88.5°	0.0	0.0	0.0	0.0	0.2	0.3



TEST NUMBER: P775888

CATALOG NUMBER: HCDJBL510CSD-HCD8TRMW-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



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

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21.5°	640.7	649.1	657.6	664.6	665.3	666.7	662.0	653.0	644.3	635.1	626.3
22°	637.6	646.4	655.1	662.3	662.9	664.4	659.4	649.9	641.3	631.6	622.8



44°	261.3	293.5	322.8	344.2	336.3	338.0	309.7	267.1	236.8	204.4	177.5
44.5°	245.9	277.6	306.0	327.4	319.5	322.2	292.4	251.1	221.8	190.5	165.2



66.5°	23.4	25.1	26.6	27.3	26.0	25.6	23.8	21.6	20.2	19.3	18.8
67°	22.5	24.0	25.4	26.3	25.0	24.7	22.9	20.8	19.3	18.5	18.0



89°	0.1	0.5	0.9	1.4	1.1	1.1	0.5	0.1	0.0	0.0	0.0
89.5°	0.0	0.3	0.7	1.1	0.8	0.7	0.3	0.0	0.0	0.0	0.0



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21.5°	619.0	619.4	618.8	625.1	633.7	640.7
22°	615.3	615.8	615.2	621.8	630.4	637.6



44°	162.1	176.6	177.3	196.9	229.8	261.3
44.5°	150.3	163.2	165.1	185.0	215.7	245.9



66.5°	18.2	19.2	19.4	20.8	22.5	23.4
67°	17.4	18.4	18.6	20.1	21.6	22.5

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89°	0.0	0.0	0.0	0.0	0.0	0.1
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report



(END OF REPORT)