

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: P775814

Luminaire Tested: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775814  
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-5000K  
Description: 6 INCH SQUARE MEDIUM MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

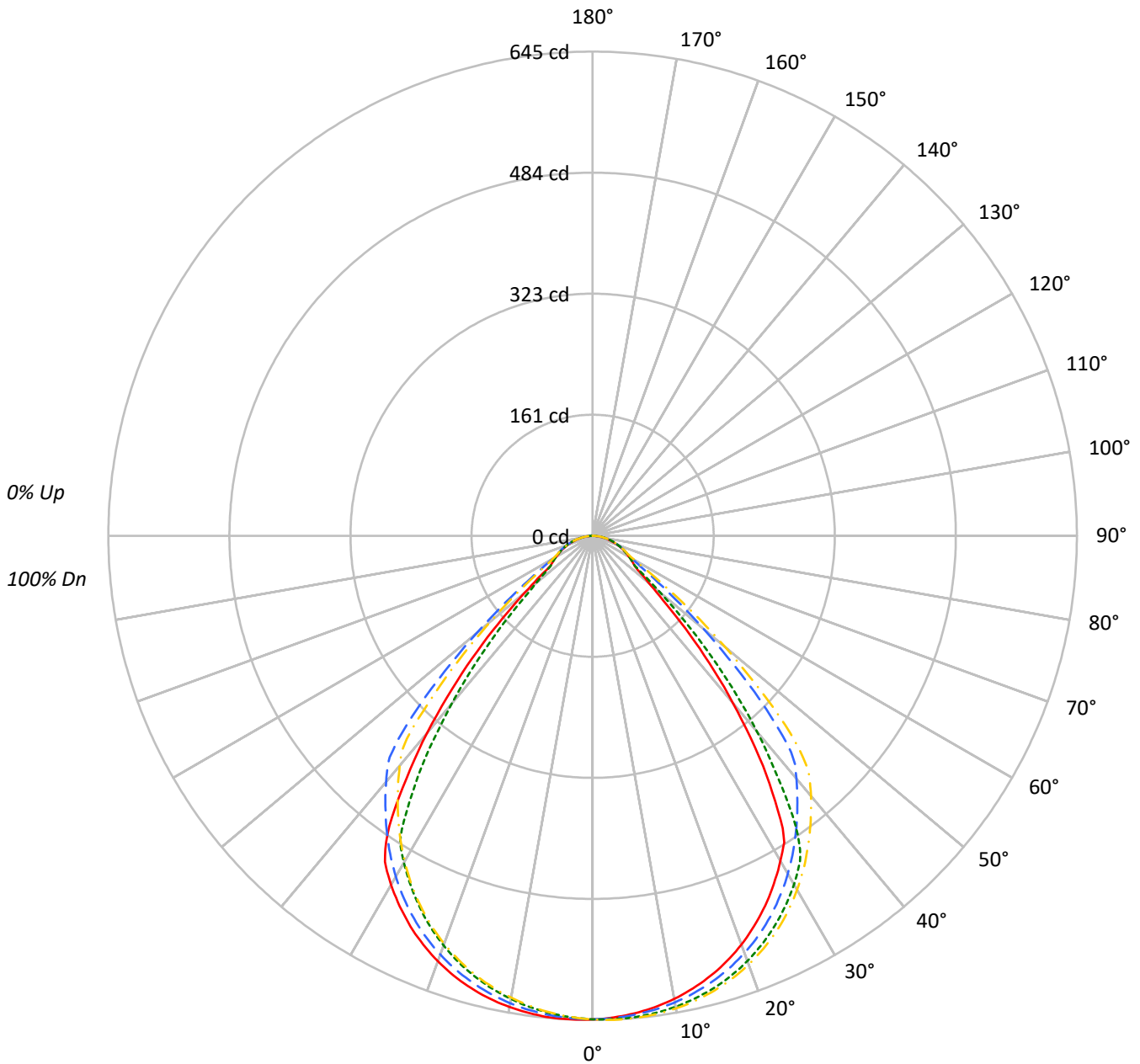
Lumens per Lamp: N/A  
Luminaire Lumens: 1130.3 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot





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**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	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°	27736	27736	27736	27736
5°	27600	27821	27838	27609
10°	27386	27850	27871	27395
15°	27052	27801	27814	27079
20°	26547	27615	27629	26607
25°	25825	27250	27274	25915
30°	24873	26663	26688	25002
35°	21934	24735	24814	22013
40°	16344	19172	19284	16395
45°	10637	13134	13219	10692
50°	6551	7824	7911	6598
55°	5059	5074	5074	5059
60°	4857	4839	4839	4857
65°	4625	4666	4625	4686
70°	4393	4519	4419	4544
75°	4059	4375	4159	4358
80°	3496	4190	3769	4042
85°	1927	3804	2865	3260

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 135°  
 Vertical Angle: 45°  
 Luminance: 22700 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.9	5.4
10°-20°	173.6	15.4
20°-30°	257.8	22.8
30°-40°	285.0	25.2
40°-50°	193.1	17.1
50°-60°	78.7	7.0
60°-70°	46.5	4.1
70°-80°	27.5	2.4
80°-90°	7.2	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°	492.3	43.6
0°-40°	777.2	68.8
0°-60°	1049.1	92.8
0°-90°	1130.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1130.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	644	644	644	644	644	
5°	639	644	644	639	639	61
15°	607	624	624	608	607	171
25°	544	574	574	546	544	250
35°	417	471	472	419	417	255
45°	175	216	217	176	175	138
55°	67	68	68	67	67	63
65°	45	46	45	46	45	45
75°	24	26	25	26	24	26
85°	4	8	6	7	4	6
90°	0	0	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°	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2	644.2
0.5°	644.2	644.0	644.0	644.2	644.3	644.4	644.6	644.7	644.7	644.3	644.0
1°	643.8	643.8	643.8	644.2	644.5	644.6	644.9	644.9	644.8	644.3	644.0
1.5°	643.3	643.4	643.7	644.1	644.6	644.8	645.1	645.1	644.9	644.4	643.8
2°	642.9	643.1	643.4	644.0	644.6	644.8	645.3	645.3	645.0	644.3	643.7
2.5°	642.4	642.6	643.1	643.9	644.6	644.9	645.4	645.4	645.0	644.2	643.3
3°	641.7	642.1	642.7	643.7	644.5	644.9	645.4	645.4	644.9	644.1	643.0
3.5°	641.1	641.5	642.3	643.3	644.4	644.8	645.4	645.3	644.8	643.9	642.7
4°	640.4	640.9	641.8	643.0	644.2	644.7	645.3	645.1	644.6	643.6	642.3
4.5°	639.5	640.2	641.3	642.6	644.0	644.6	645.0	645.0	644.4	643.2	641.8
5°	638.6	639.5	640.7	642.1	643.7	644.4	644.8	644.8	644.1	642.8	641.3
5.5°	637.8	638.8	640.0	641.6	643.2	644.1	644.6	644.5	643.8	642.4	640.7
6°	636.7	637.8	639.3	641.0	642.8	643.8	644.3	644.2	643.3	641.8	640.0
6.5°	635.8	636.9	638.4	640.4	642.4	643.3	643.9	643.8	642.8	641.2	639.3
7°	634.6	635.9	637.6	639.6	641.8	642.9	643.4	643.2	642.3	640.5	638.4
7.5°	633.4	634.9	636.7	638.9	641.1	642.4	642.9	642.7	641.6	639.7	637.6
8°	632.1	633.7	635.8	638.0	640.5	641.7	642.4	642.1	640.9	639.0	636.7
8.5°	630.8	632.6	634.7	637.2	639.7	641.0	641.7	641.4	640.1	638.1	635.7
9°	629.4	631.2	633.5	636.1	638.9	640.4	641.0	640.6	639.3	637.2	634.6
9.5°	628.0	629.9	632.4	635.1	638.0	639.5	640.2	639.8	638.4	636.2	633.4
10°	626.4	628.5	631.2	634.0	637.0	638.6	639.4	638.9	637.5	635.2	632.3
10.5°	624.8	627.0	629.8	632.8	636.1	637.7	638.4	638.0	636.4	634.1	631.0
11°	623.1	625.4	628.5	631.6	634.9	636.7	637.5	636.9	635.3	632.8	629.7
11.5°	621.3	623.8	627.0	630.3	633.7	635.6	636.4	635.9	634.2	631.5	628.3
12°	619.5	622.1	625.5	628.9	632.6	634.5	635.3	634.7	633.0	630.2	626.8
12.5°	617.5	620.4	623.9	627.6	631.3	633.2	634.1	633.5	631.6	628.8	625.3
13°	615.6	618.6	622.2	626.0	629.9	631.9	632.8	632.1	630.3	627.3	623.7
13.5°	613.6	616.7	620.5	624.4	628.4	630.7	631.5	630.8	628.8	625.9	622.0
14°	611.5	614.7	618.8	622.8	626.9	629.2	630.1	629.4	627.3	624.2	620.3
14.5°	609.2	612.6	616.9	621.1	625.3	627.7	628.6	627.9	625.8	622.6	618.4
15°	606.9	610.5	615.0	619.2	623.7	626.2	627.1	626.3	624.0	620.7	616.6
15.5°	604.5	608.3	612.9	617.3	622.0	624.5	625.5	624.6	622.3	618.9	614.7
16°	602.1	605.9	610.8	615.4	620.2	622.7	623.8	622.9	620.4	617.0	612.5
16.5°	599.5	603.6	608.7	613.5	618.3	621.0	622.1	621.2	618.6	615.1	610.5
17°	596.9	601.1	606.6	611.4	616.3	619.0	620.3	619.2	616.6	613.0	608.3
17.5°	594.2	598.6	604.2	609.1	614.3	617.1	618.4	617.2	614.6	610.8	606.0
18°	591.3	595.9	601.8	606.9	612.1	615.1	616.5	615.2	612.4	608.6	603.7
18.5°	588.6	593.2	599.2	604.5	610.0	613.1	614.3	613.1	610.2	606.4	601.3
19°	585.6	590.5	596.8	602.2	607.6	610.8	612.2	610.8	607.8	603.9	598.7
19.5°	582.5	587.6	594.1	599.6	605.2	608.6	610.1	608.6	605.5	601.6	596.2
20°	579.4	584.7	591.4	597.1	602.7	606.1	607.7	606.2	603.0	599.0	593.7
20.5°	576.2	581.5	588.7	594.3	600.3	603.7	605.4	603.8	600.5	596.4	590.9
21°	572.9	578.4	585.8	591.5	597.5	601.1	602.9	601.2	597.9	593.7	588.1



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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°	562.4	568.5	576.6	582.9	589.2	593.1	595.1	593.2	589.6	585.4	579.3
23°	558.8	565.1	573.4	579.8	586.2	590.3	592.3	590.5	586.6	582.2	576.1
23.5°	555.2	561.6	570.1	576.6	583.2	587.4	589.5	587.6	583.7	579.1	572.9
24°	551.5	558.1	566.8	573.4	580.0	584.4	586.5	584.6	580.5	576.0	569.6
24.5°	547.5	554.3	563.3	570.1	576.8	581.3	583.4	581.5	577.3	572.8	566.3
25°	543.6	550.6	559.8	566.7	573.6	578.1	580.3	578.3	574.1	569.5	562.8
25.5°	539.5	546.7	556.2	563.2	570.2	574.9	577.3	575.1	570.6	566.1	559.3
26°	535.5	542.8	552.4	559.7	566.7	571.5	574.0	571.7	567.2	562.5	555.8
26.5°	531.3	538.9	548.6	556.0	563.2	568.1	570.5	568.3	563.6	559.0	552.1
27°	527.1	534.8	544.7	552.4	559.6	564.6	567.0	564.8	560.1	555.4	548.3
27.5°	522.7	530.5	540.8	548.7	555.9	561.1	563.6	561.3	556.5	551.8	544.6
28°	518.3	526.3	536.8	544.9	552.0	557.3	559.9	557.5	552.6	547.8	540.6
28.5°	513.9	522.0	532.6	540.8	548.3	553.6	556.2	553.9	548.7	544.1	536.6
29°	509.5	517.8	528.7	536.9	544.3	549.8	552.3	550.0	544.9	540.1	532.5
29.5°	504.9	513.3	524.3	532.8	540.4	545.9	548.6	546.1	540.9	536.3	528.3
30°	500.3	509.0	519.9	528.7	536.3	541.9	544.5	542.2	536.8	532.0	524.2
30.5°	495.6	504.5	515.5	524.5	532.1	537.9	540.5	538.2	532.5	527.9	519.9
31°	490.9	499.9	511.1	520.2	527.7	533.9	536.4	534.0	528.2	523.5	515.5
31.5°	486.2	495.2	506.5	515.9	523.4	529.7	532.3	529.8	524.0	519.3	511.1
32°	481.7	490.5	501.9	511.5	518.7	525.3	527.9	525.7	519.4	515.0	506.6
32.5°	473.4	485.7	497.2	507.0	514.3	521.1	523.8	521.3	514.8	510.5	502.1
33°	464.9	480.9	492.6	502.4	507.8	516.6	519.3	516.8	507.8	506.0	497.4
33.5°	453.6	476.2	487.7	497.7	500.2	512.1	514.8	512.3	500.5	501.6	492.7
34°	441.5	471.6	482.9	492.8	491.6	507.3	510.1	507.8	492.1	496.7	487.9
34.5°	429.1	463.7	478.0	488.2	481.8	502.6	505.6	502.6	482.5	491.6	483.2
35°	417.3	455.2	473.1	481.2	470.6	497.3	501.0	497.1	472.1	485.1	478.3
35.5°	405.5	444.7	468.1	473.8	458.7	489.2	496.4	489.2	460.2	477.7	473.4
36°	393.7	432.8	463.2	465.6	445.5	482.0	491.6	482.2	447.2	469.9	468.5
36.5°	381.5	421.2	458.1	456.0	432.3	472.6	486.9	473.2	434.2	460.7	463.6
37°	368.4	409.6	453.1	445.5	418.1	462.1	482.1	463.3	420.7	450.4	458.4
37.5°	355.1	398.0	448.0	434.2	404.8	450.8	477.1	452.7	407.0	439.7	453.4
38°	341.8	386.3	442.9	421.9	391.6	438.8	472.2	440.9	394.0	427.6	448.4
38.5°	328.7	374.5	437.8	409.1	379.1	426.1	467.2	428.6	381.2	415.1	443.4
39°	315.8	362.4	432.6	396.5	366.4	413.0	462.4	415.7	368.6	402.4	438.2
39.5°	303.2	349.8	427.6	383.8	354.0	399.5	457.2	402.8	356.0	389.6	433.0
40°	290.8	336.6	422.3	371.0	341.1	386.6	452.3	389.9	343.1	376.9	427.9
40.5°	278.8	323.7	417.1	359.0	328.1	374.1	447.1	377.4	330.1	364.5	422.8
41°	266.6	311.2	411.8	347.0	314.6	362.0	442.0	364.9	316.6	352.5	417.5
41.5°	254.5	298.8	406.9	335.1	301.4	349.7	436.6	352.8	303.3	340.6	412.1
42°	242.3	286.6	399.3	323.4	288.4	337.4	431.1	340.6	290.2	328.7	406.5
42.5°	230.3	275.2	391.2	311.3	275.8	325.1	425.9	328.4	277.4	316.4	400.1
43°	218.3	263.3	380.1	298.8	263.6	312.4	416.4	315.7	265.1	304.1	389.1
43.5°	207.1	251.5	367.9	286.7	251.3	299.7	407.0	302.8	252.9	291.5	379.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	174.7	216.4	327.4	250.8	215.7	262.4	372.8	265.4	217.1	255.3	339.0
45.5°	164.5	205.1	313.8	239.6	203.8	250.6	359.3	253.1	205.6	243.6	324.8
46°	154.7	194.0	299.4	228.4	192.4	238.9	344.7	241.4	194.1	232.4	310.3
46.5°	145.4	183.5	285.0	217.2	181.4	227.0	329.8	229.8	183.0	221.3	295.8
47°	136.3	172.9	270.6	206.2	170.7	215.5	314.5	218.2	172.5	210.2	281.4
47.5°	128.0	163.0	256.2	195.4	160.5	204.2	299.1	206.8	162.2	199.3	267.2
48°	120.4	153.3	242.3	184.7	150.9	193.1	284.4	195.8	152.5	188.9	253.1
48.5°	113.8	143.9	229.2	174.5	141.6	182.3	269.8	184.6	143.1	178.3	239.5
49°	108.0	134.8	216.6	164.6	132.9	171.4	256.1	173.9	134.3	168.4	226.3
49.5°	102.7	126.6	204.2	155.1	124.6	161.3	242.8	163.7	126.0	158.5	213.5
50°	97.8	118.7	192.2	145.5	116.8	151.3	229.8	153.8	118.1	149.1	201.2
50.5°	93.8	111.7	181.0	136.5	109.6	142.0	217.1	144.1	110.6	139.9	189.5
51°	89.8	105.3	170.1	128.1	102.9	133.1	204.7	135.1	103.9	131.5	177.9
51.5°	86.1	100.0	159.7	120.2	97.6	124.6	192.5	126.6	98.5	123.3	167.2
52°	82.3	95.1	149.5	112.7	92.3	116.7	181.0	118.4	92.9	115.7	156.9
52.5°	78.7	90.8	140.2	105.5	87.1	109.1	169.3	110.7	87.5	108.3	147.0
53°	75.0	86.8	131.2	98.9	81.7	102.4	158.2	103.5	82.0	101.4	137.7
53.5°	72.2	83.0	122.8	92.7	76.5	97.0	147.6	97.8	76.5	95.7	128.8
54°	69.9	79.4	115.0	87.2	72.4	91.4	138.2	92.2	72.4	90.1	120.5
54.5°	68.5	75.9	107.6	82.1	69.3	85.9	128.6	86.5	69.2	84.4	112.9
55°	67.4	72.2	100.9	77.3	67.6	80.4	120.0	80.9	67.6	78.8	105.8
55.5°	66.2	69.2	94.6	72.8	66.3	74.9	111.7	75.2	66.2	74.1	99.2
56°	65.0	66.7	89.1	68.7	65.1	70.6	104.2	70.8	65.0	69.9	94.0
56.5°	63.9	65.3	83.9	65.8	63.9	66.9	98.3	67.0	63.8	66.7	88.8
57°	62.9	64.2	79.2	64.2	62.8	64.7	92.2	64.6	62.8	64.9	83.6
57.5°	61.7	63.0	74.9	63.0	61.7	63.3	86.2	63.2	61.6	63.6	78.3
58°	60.6	61.9	71.4	61.8	60.5	62.1	80.2	62.0	60.5	62.5	74.2
58.5°	59.6	60.8	68.2	60.6	59.5	61.1	74.2	61.0	59.4	61.4	70.7
59°	58.5	59.7	65.3	59.6	58.4	59.9	70.0	59.9	58.3	60.2	67.6
59.5°	57.4	58.6	62.9	58.4	57.3	58.8	66.5	58.7	57.2	59.2	64.8
60°	56.4	57.6	60.8	57.3	56.2	57.8	63.5	57.7	56.2	58.1	62.4
60.5°	55.2	56.5	58.7	56.3	55.1	56.6	61.1	56.6	55.1	56.9	60.2
61°	54.1	55.4	56.9	55.1	54.1	55.5	58.7	55.5	53.9	55.8	58.3
61.5°	53.1	54.4	55.3	54.1	53.1	54.5	56.8	54.5	52.9	54.8	56.5
62°	52.0	53.3	53.8	53.1	52.0	53.5	55.0	53.4	51.8	53.7	54.9
62.5°	50.8	52.2	52.4	51.9	50.9	52.4	53.4	52.3	50.7	52.7	53.5
63°	49.8	51.2	51.3	50.8	49.9	51.4	52.0	51.2	49.6	51.5	52.1
63.5°	48.7	50.0	50.1	49.8	48.9	50.3	50.6	50.1	48.6	50.4	50.9
64°	47.6	48.9	48.9	48.7	47.9	49.2	49.6	49.0	47.5	49.3	49.9
64.5°	46.5	47.9	47.9	47.6	46.9	48.2	48.4	48.0	46.5	48.3	48.7
65°	45.4	46.8	46.8	46.7	45.8	47.2	47.3	46.9	45.4	47.2	47.6
65.5°	44.3	45.6	45.6	45.6	44.9	46.2	46.3	45.8	44.3	46.2	46.6
66°	43.3	44.6	44.6	44.6	43.8	45.1	45.1	44.8	43.3	45.1	45.4





TEST NUMBER: P775814

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	40.1	41.4	41.4	41.5	40.8	42.0	41.9	41.6	40.2	41.9	42.2
68°	39.0	40.3	40.3	40.4	39.9	41.0	40.8	40.5	39.1	40.7	41.1
68.5°	37.9	39.2	39.2	39.3	38.9	40.0	39.9	39.5	38.1	39.8	40.1
69°	36.9	38.2	38.2	38.8	37.9	39.0	38.8	38.5	37.1	38.7	39.0
69.5°	35.9	37.1	37.1	37.7	37.0	37.9	37.6	37.4	36.0	37.6	37.9
70°	34.9	36.0	36.0	36.7	35.9	37.0	36.7	36.3	35.1	36.6	36.9
70.5°	33.8	35.0	35.0	35.5	35.0	36.0	35.6	35.4	34.0	35.5	35.8
71°	32.8	34.0	33.9	34.4	34.0	35.0	34.5	34.3	33.0	34.4	34.7
71.5°	31.8	32.8	32.9	33.5	33.0	34.0	33.5	33.3	32.0	33.4	33.7
72°	30.7	31.9	31.9	32.4	32.1	32.9	32.4	32.3	31.0	32.4	32.6
72.5°	29.6	30.7	30.8	31.4	31.1	32.0	31.4	31.2	29.9	31.3	31.5
73°	28.6	29.7	29.7	30.4	30.2	31.0	30.4	30.2	29.0	30.3	30.5
73.5°	27.5	28.7	28.7	29.4	29.2	30.1	29.3	29.2	28.0	29.2	29.4
74°	26.4	27.6	27.6	28.4	28.2	29.0	28.4	28.1	27.0	28.2	28.4
74.5°	25.5	26.5	26.5	27.4	27.3	28.0	27.3	27.2	26.0	27.2	27.4
75°	24.4	25.5	25.6	26.4	26.3	27.1	26.3	26.1	25.0	26.1	26.3
75.5°	23.3	24.4	24.5	25.5	25.4	26.1	25.3	25.2	24.0	25.2	25.3
76°	22.4	23.3	23.4	24.4	24.4	25.2	24.2	24.1	23.0	24.1	24.2
76.5°	21.3	22.3	22.4	23.4	23.4	24.2	23.2	23.0	22.1	23.0	23.2
77°	20.3	21.2	21.3	22.5	22.6	23.2	22.3	22.1	21.1	22.1	22.2
77.5°	19.2	20.1	20.4	21.4	21.6	22.3	21.2	21.0	20.1	21.0	21.1
78°	18.2	19.1	19.3	20.5	20.7	21.2	20.3	20.0	19.2	19.9	20.1
78.5°	17.2	18.1	18.2	19.5	19.7	20.3	19.2	19.0	18.1	19.0	19.1
79°	16.1	17.1	17.3	18.4	18.8	19.3	18.2	18.0	17.2	17.9	18.0
79.5°	15.0	16.0	16.2	17.5	17.8	18.3	17.3	16.9	16.3	16.8	17.1
80°	14.1	14.9	15.1	16.4	16.9	17.4	16.2	16.0	15.2	15.9	16.0
80.5°	13.0	13.9	14.2	15.5	16.0	16.4	15.2	14.9	14.3	14.8	15.0
81°	12.0	12.8	13.1	14.5	15.0	15.3	14.3	14.0	13.3	13.9	14.0
81.5°	11.0	11.7	12.2	13.5	14.1	14.4	13.3	12.9	12.4	12.8	13.0
82°	10.0	10.8	11.1	12.6	13.2	13.4	12.4	11.9	11.4	11.7	11.9
82.5°	9.0	9.7	10.1	11.6	12.3	12.6	11.4	10.9	10.4	10.8	11.0
83°	8.0	8.6	9.2	10.7	11.4	11.6	10.6	9.9	9.5	9.7	10.0
83.5°	6.9	7.6	8.3	9.7	10.4	10.7	9.7	9.0	8.5	8.7	9.2
84°	6.0	6.5	7.4	8.7	9.5	9.7	8.8	7.9	7.6	7.7	8.3
84.5°	4.9	5.5	6.5	7.9	8.6	8.8	7.9	6.9	6.6	6.7	7.5
85°	3.9	4.5	5.8	6.9	7.7	7.9	7.0	6.0	5.8	5.6	6.6
85.5°	3.3	3.8	4.9	6.0	6.8	7.0	6.2	5.1	4.8	4.8	5.8
86°	2.7	3.2	4.2	5.1	5.9	6.1	5.4	4.4	3.8	3.9	4.9
86.5°	2.1	2.5	3.4	4.2	5.0	5.1	4.6	3.6	3.1	3.3	4.2
87°	1.5	1.8	2.6	3.3	4.1	4.3	3.8	3.0	2.6	2.7	3.3
87.5°	1.0	1.2	1.8	2.5	3.2	3.4	3.1	2.3	2.0	2.1	2.6
88°	0.4	0.6	1.1	1.6	2.3	2.6	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	1.0	1.0



TEST NUMBER: P775814

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



TEST NUMBER: P775814

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	644.2	644.2	644.2	644.2	644.2	644.2
0.5°	644.0	643.8	643.8	644.0	644.0	644.2
1°	643.8	643.4	643.3	643.6	643.6	643.8
1.5°	643.4	643.0	642.8	642.9	643.1	643.3
2°	643.1	642.5	642.3	642.4	642.6	642.9
2.5°	642.8	642.1	641.7	641.7	642.0	642.4
3°	642.4	641.5	641.0	641.0	641.3	641.7
3.5°	641.8	641.0	640.4	640.4	640.6	641.1
4°	641.3	640.2	639.6	639.5	639.7	640.4
4.5°	640.7	639.5	638.8	638.6	638.9	639.5
5°	640.0	638.8	637.8	637.7	638.0	638.6
5.5°	639.3	637.8	636.9	636.6	637.0	637.8
6°	638.5	636.7	636.0	635.7	636.0	636.7
6.5°	637.7	635.8	634.8	634.6	634.8	635.8
7°	636.7	634.7	633.6	633.3	633.6	634.6
7.5°	635.7	633.5	632.5	632.0	632.5	633.4
8°	634.6	632.3	631.2	630.8	631.1	632.1
8.5°	633.5	631.0	629.8	629.4	629.8	630.8
9°	632.3	629.6	628.3	627.9	628.3	629.4
9.5°	631.0	628.1	626.8	626.4	626.7	628.0
10°	629.7	626.6	625.2	624.8	625.2	626.4
10.5°	628.2	625.0	623.7	623.2	623.6	624.8
11°	626.7	623.4	621.9	621.5	621.8	623.1
11.5°	625.2	621.7	620.1	619.7	620.1	621.3
12°	623.6	619.9	618.4	617.8	618.2	619.5
12.5°	621.9	618.1	616.5	615.8	616.3	617.5
13°	620.1	616.1	614.5	613.8	614.1	615.6
13.5°	618.3	614.0	612.4	611.8	612.1	613.6
14°	616.5	611.9	610.3	609.7	610.0	611.5
14.5°	614.5	609.8	608.1	607.5	607.7	609.2
15°	612.3	607.5	605.8	605.2	605.4	606.9
15.5°	610.2	605.2	603.5	602.8	603.0	604.5
16°	608.0	602.7	601.0	600.4	600.5	602.1
16.5°	605.6	600.3	598.5	597.9	597.9	599.5
17°	603.3	597.7	595.9	595.3	595.4	596.9
17.5°	600.8	595.2	593.2	592.6	592.7	594.2
18°	598.4	592.4	590.5	589.8	589.8	591.3
18.5°	595.7	589.6	587.7	587.0	587.0	588.6
19°	593.0	586.6	584.7	584.1	584.0	585.6
19.5°	590.3	583.7	581.7	581.1	581.0	582.5
20°	587.4	580.7	578.6	578.2	577.9	579.4
20.5°	584.5	577.5	575.4	575.0	574.7	576.2
21°	581.4	574.4	572.2	571.8	571.4	572.9

TEST NUMBER: P775814

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	571.9	564.3	562.1	561.7	561.1	562.4
23°	568.6	560.6	558.6	558.2	557.4	558.8
23.5°	565.2	557.0	554.9	554.6	553.8	555.2
24°	561.7	553.3	551.2	550.8	550.0	551.5
24.5°	558.2	549.4	547.5	547.0	546.1	547.5
25°	554.6	545.5	543.8	543.3	542.3	543.6
25.5°	550.8	541.5	539.6	539.3	538.4	539.5
26°	547.0	537.6	535.8	535.4	534.3	535.5
26.5°	543.1	533.6	531.7	531.3	530.1	531.3
27°	539.1	529.4	527.6	527.3	526.0	527.1
27.5°	535.0	525.0	523.4	523.0	521.7	522.7
28°	531.0	520.8	519.1	518.6	517.5	518.3
28.5°	526.9	516.3	514.7	514.3	513.0	513.9
29°	522.6	511.9	510.3	509.9	508.6	509.5
29.5°	518.3	507.4	505.8	505.4	504.1	504.9
30°	513.8	502.9	501.4	500.8	499.6	500.3
30.5°	509.4	498.1	496.7	496.1	495.0	495.6
31°	504.8	493.3	492.1	491.5	490.3	490.9
31.5°	500.4	488.3	487.2	486.7	485.5	486.2
32°	495.7	483.6	482.4	481.9	480.8	481.7
32.5°	491.0	475.6	477.6	477.0	476.0	473.4
33°	486.2	467.0	472.7	472.2	471.1	464.9
33.5°	481.3	455.3	467.4	467.2	466.1	453.6
34°	476.2	443.2	462.7	462.1	461.5	441.5
34.5°	471.4	430.9	453.9	457.0	456.0	429.1
35°	463.9	418.8	445.6	451.9	446.6	417.3
35.5°	455.4	406.9	433.7	446.8	437.8	405.5
36°	444.6	395.1	422.8	441.7	426.7	393.7
36.5°	432.5	382.7	411.0	436.6	414.8	381.5
37°	421.1	369.8	399.6	431.2	403.3	368.4
37.5°	409.2	356.6	388.0	426.0	392.2	355.1
38°	397.4	342.9	376.7	420.8	381.0	341.8
38.5°	385.8	329.6	365.0	415.6	369.5	328.7
39°	374.4	316.7	353.0	410.3	358.1	315.8
39.5°	361.7	304.0	340.3	405.0	346.0	303.2
40°	349.1	291.7	327.9	399.7	333.6	290.8
40.5°	336.0	279.8	315.4	394.4	321.1	278.8
41°	323.5	267.6	302.8	389.1	308.7	266.6
41.5°	310.5	255.3	290.5	383.5	296.7	254.5
42°	298.1	243.0	279.5	375.3	285.1	242.3
42.5°	286.2	231.2	268.2	366.4	273.9	230.3
43°	274.8	219.1	256.5	353.4	262.4	218.3
43.5°	262.6	207.9	245.4	340.6	251.0	207.1

TEST NUMBER: P775814

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	228.0	175.6	211.0	297.6	216.9	174.7
45.5°	216.0	165.2	200.6	284.3	206.2	164.5
46°	204.9	155.4	189.8	271.4	195.6	154.7
46.5°	193.9	145.9	179.7	258.8	185.1	145.4
47°	183.3	137.0	169.5	246.2	175.0	136.3
47.5°	173.0	128.6	159.9	233.6	165.3	128.0
48°	163.0	121.0	150.3	221.2	155.5	120.4
48.5°	153.3	114.3	141.2	209.4	146.3	113.8
49°	143.9	108.3	132.8	198.0	137.6	108.0
49.5°	135.0	103.1	124.9	187.1	129.4	102.7
50°	126.5	98.5	117.2	176.3	121.3	97.8
50.5°	118.6	94.1	110.7	166.6	114.3	93.8
51°	111.6	90.2	104.7	157.2	107.9	89.8
51.5°	105.4	86.4	99.4	148.2	102.2	86.1
52°	100.0	82.8	94.8	139.6	97.1	82.3
52.5°	95.2	79.1	90.6	131.4	92.6	78.7
53°	91.2	75.5	86.8	123.6	88.5	75.0
53.5°	87.3	72.4	82.9	116.4	84.6	72.2
54°	83.3	70.0	79.3	109.5	80.9	69.9
54.5°	79.5	68.5	75.7	103.1	77.4	68.5
55°	75.9	67.4	72.2	97.2	73.8	67.4
55.5°	72.2	66.2	69.3	91.7	70.5	66.2
56°	69.1	65.1	67.0	86.7	67.8	65.0
56.5°	66.6	63.9	65.8	82.2	66.2	63.9
57°	65.1	62.9	64.6	77.9	64.9	62.9
57.5°	63.9	61.7	63.4	74.1	63.7	61.7
58°	62.9	60.6	62.4	70.7	62.7	60.6
58.5°	61.7	59.6	61.2	67.6	61.5	59.6
59°	60.6	58.5	60.1	65.0	60.4	58.5
59.5°	59.6	57.4	59.0	62.7	59.4	57.4
60°	58.5	56.4	58.0	60.5	58.2	56.4
60.5°	57.4	55.3	56.9	58.7	57.1	55.2
61°	56.4	54.3	55.8	57.0	56.1	54.1
61.5°	55.3	53.3	54.8	55.4	55.0	53.1
62°	54.3	52.2	53.7	54.0	53.8	52.0
62.5°	53.2	51.2	52.7	52.8	52.8	50.8
63°	52.1	50.2	51.6	51.7	51.7	49.8
63.5°	51.1	49.1	50.5	50.5	50.5	48.7
64°	50.0	48.1	49.5	49.5	49.5	47.6
64.5°	48.9	47.1	48.4	48.3	48.3	46.5
65°	48.0	46.0	47.3	47.2	47.2	45.4
65.5°	46.9	45.1	46.3	46.0	46.0	44.3
66°	45.8	44.0	45.2	45.0	45.0	43.3



TEST NUMBER: P775814

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	42.7	41.0	42.1	41.8	41.7	40.1
68°	41.7	40.0	41.0	40.7	40.5	39.0
68.5°	40.6	39.0	40.0	39.5	39.4	37.9
69°	39.5	38.1	39.0	38.3	38.9	36.9
69.5°	38.6	37.1	37.9	37.3	37.7	35.9
70°	37.5	36.1	37.0	36.2	36.6	34.9
70.5°	36.5	35.1	35.9	35.3	35.3	33.8
71°	35.5	34.1	34.9	34.3	34.1	32.8
71.5°	34.4	33.1	33.9	33.1	33.0	31.8
72°	33.5	32.2	32.8	32.1	32.0	30.7
72.5°	32.4	31.1	31.9	31.0	30.9	29.6
73°	31.3	30.2	30.8	29.9	29.7	28.6
73.5°	30.4	29.1	29.7	28.9	28.7	27.5
74°	29.3	28.1	28.7	27.8	27.6	26.4
74.5°	28.4	27.2	27.7	26.8	26.5	25.5
75°	27.3	26.2	26.6	25.7	25.5	24.4
75.5°	26.3	25.2	25.6	24.6	24.4	23.3
76°	25.3	24.2	24.6	23.6	23.2	22.4
76.5°	24.3	23.2	23.6	22.5	22.2	21.3
77°	23.2	22.3	22.6	21.4	21.1	20.3
77.5°	22.3	21.2	21.5	20.4	20.0	19.2
78°	21.2	20.3	20.5	19.3	19.0	18.2
78.5°	20.3	19.3	19.5	18.2	17.9	17.2
79°	19.2	18.2	18.4	17.2	16.8	16.1
79.5°	18.1	17.3	17.4	16.1	15.8	15.0
80°	17.2	16.3	16.3	15.1	14.6	14.1
80.5°	16.1	15.3	15.3	14.1	13.5	13.0
81°	15.1	14.4	14.3	13.1	12.5	12.0
81.5°	14.1	13.4	13.3	12.0	11.4	11.0
82°	13.1	12.4	12.3	11.1	10.3	10.0
82.5°	12.2	11.4	11.3	10.1	9.3	9.0
83°	11.2	10.4	10.3	9.2	8.2	8.0
83.5°	10.2	9.5	9.3	8.2	7.1	6.9
84°	9.2	8.5	8.3	7.4	6.2	6.0
84.5°	8.2	7.6	7.4	6.4	5.3	4.9
85°	7.2	6.6	6.4	5.5	4.5	3.9
85.5°	6.3	5.6	5.3	4.7	3.7	3.3
86°	5.3	4.7	4.4	3.8	3.1	2.7
86.5°	4.4	3.7	3.5	3.0	2.5	2.1
87°	3.5	2.9	2.7	2.1	1.7	1.5
87.5°	2.6	2.0	1.8	1.4	1.1	1.0
88°	1.7	1.1	1.0	0.5	0.4	0.4
88.5°	0.7	0.2	0.1	0.1	0.1	0.1



TEST NUMBER: P775814  
CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMW-1000lm-5000K

**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



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Scaled Data Report





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

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21.5°	569.4	575.2	582.8	588.8	594.7	598.6	600.3	598.6	595.2	590.9	585.2
22°	566.0	571.9	579.7	585.9	592.0	595.9	597.7	596.0	592.4	588.1	582.3



44°	195.8	239.5	354.8	274.5	239.2	286.8	397.2	290.0	240.8	279.1	366.6
44.5°	185.1	228.0	341.5	262.6	227.3	274.5	385.3	277.5	228.9	267.1	353.0



66.5°	42.2	43.5	43.5	43.5	42.8	44.0	44.0	43.7	42.2	44.0	44.3
67°	41.1	42.4	42.4	42.5	41.9	43.1	43.0	42.6	41.1	43.0	43.3



89°	0.0	0.1	0.1	0.2	0.6	0.9	0.9	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



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21.5°	578.3	571.1	568.9	568.5	568.0	569.4
22°	575.2	567.7	565.5	565.2	564.7	566.0



44°	250.9	196.5	233.7	325.3	239.6	195.8
44.5°	239.3	186.1	222.4	311.5	228.3	185.1



66.5°	44.8	43.1	44.1	43.9	43.8	42.2
67°	43.7	42.0	43.2	42.8	42.7	41.1

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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

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Scaled Data Report



(END OF REPORT)