

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: P775892

Luminaire Tested: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P775892  
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-HCD8TSQC-1000lm-3500K  
Description: 8 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

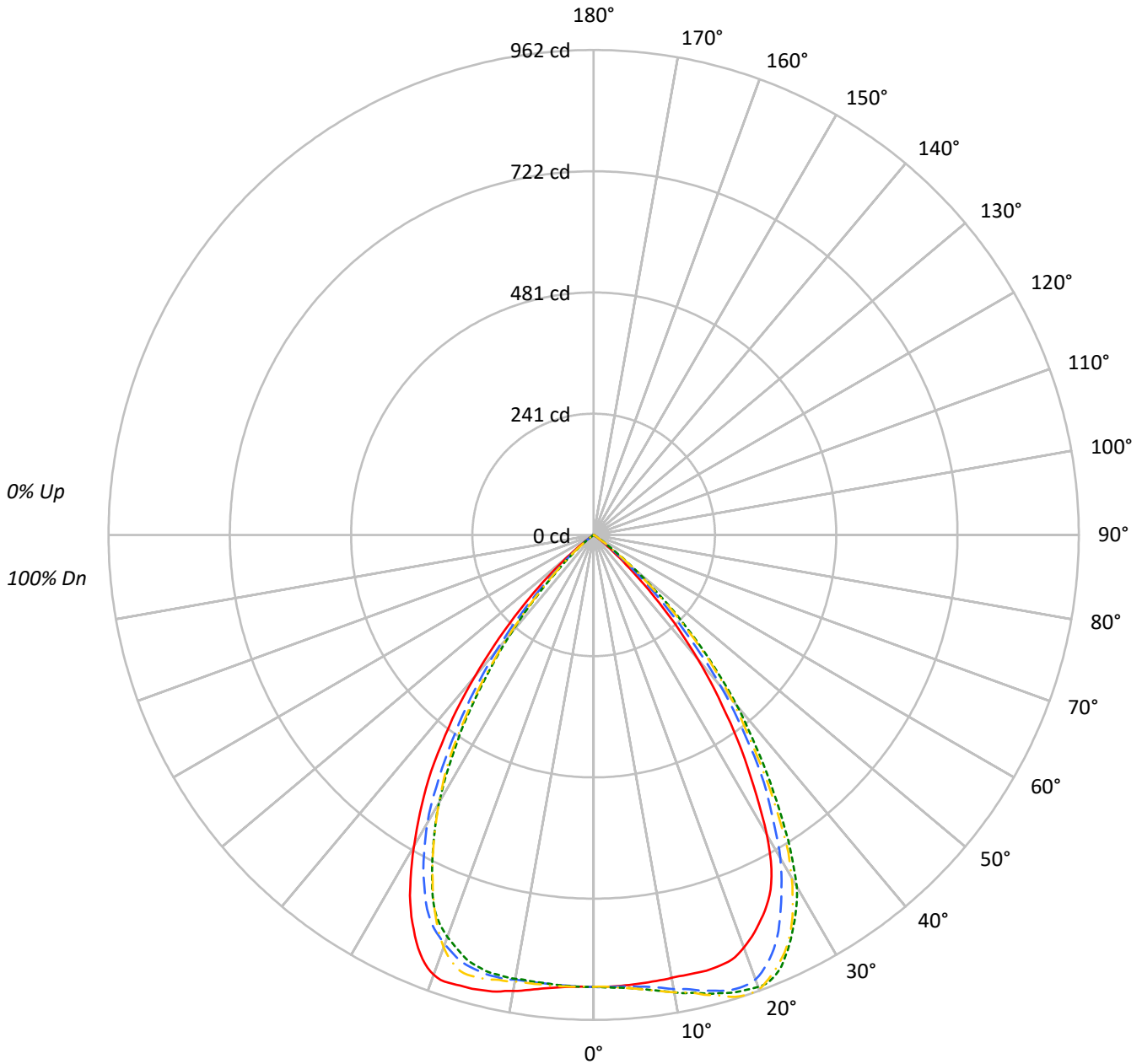
Lumens per Lamp: N/A  
Luminaire Lumens: 1205.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.17 / 1.07  
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93				93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85				85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78				78
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	74	72				72
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66				66
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	62	61				61
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56				56
8	76	65	59	54	74	65	59	54	64	58	54	62	57	54	61	57	53	52				52
9	71	61	55	50	70	61	54	50	60	54	50	59	54	50	58	53	50	48				48
10	68	57	51	47	67	57	51	47	56	50	47	55	50	46	54	50	46	45				45

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

	0°	90°	180°	270°
0°	21494	21494	21494	21494
5°	21550	21738	21699	21552
10°	21719	22435	22364	21772
15°	22156	23377	23136	22014
20°	22233	24346	23678	21641
25°	21465	24063	22486	20065
30°	19013	22297	19719	16964
35°	14595	18193	16129	12690
40°	10029	13826	11485	7991
45°	5276	8980	6575	3744
50°	1768	4055	2525	1212
55°	125	878	276	29
60°	19	24	19	14
65°	11	11	11	6
70°	7	7	7	7
75°	9	9	9	0
80°	0	0	0	0
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 112.5°  
 Vertical Angle: 45°  
 Luminance: 9074 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.1	7.1
10°-20°	258.8	21.5
20°-30°	377.4	31.3
30°-40°	325.2	27.0
40°-50°	143.0	11.9
50°-60°	14.2	1.2
60°-70°	0.2	0.0
70°-80°	0.1	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	722.3	59.9
0°-40°	1047.5	86.9
0°-60°	1204.7	100.0
0°-90°	1205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	896	896	896	896	896	
5°	895	903	902	895	895	85
15°	892	942	932	887	892	252
25°	811	910	850	758	811	368
35°	499	622	551	434	499	309
45°	156	265	194	110	156	124
55°	3	21	7	1	3	10
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
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°	896.4	896.4	896.4	896.4	896.4	896.4	896.4	896.4	896.4	896.4	896.4
0.5°	896.7	897.1	897.3	896.6	896.9	896.3	895.9	896.1	896.4	896.8	896.8
1°	896.7	897.2	897.4	897.1	897.2	896.7	896.0	896.2	896.6	896.8	896.8
1.5°	896.7	897.1	897.3	897.4	897.8	897.2	896.3	896.6	896.6	896.7	896.6
2°	896.4	896.8	897.2	897.7	898.4	897.9	897.2	897.1	896.9	896.7	896.4
2.5°	896.4	896.8	897.3	897.7	898.9	898.9	897.9	897.7	897.5	896.8	896.1
3°	896.1	896.7	897.4	898.0	899.3	899.2	898.9	898.8	897.9	896.9	895.9
3.5°	895.9	896.4	897.7	898.6	899.9	900.0	899.8	899.7	898.5	897.2	895.7
4°	895.6	896.1	898.0	899.3	900.8	901.0	900.8	900.9	899.5	897.4	895.5
4.5°	895.5	896.1	898.5	900.3	901.8	902.2	902.0	901.9	900.5	897.8	895.1
5°	895.3	896.1	899.1	901.5	903.1	903.4	903.5	903.5	901.5	898.2	895.1
5.5°	895.1	896.6	900.0	903.0	904.3	904.7	904.8	905.2	902.9	898.7	895.0
6°	894.8	896.8	900.9	904.3	905.8	906.2	906.5	906.9	904.2	899.5	895.0
6.5°	894.4	897.1	902.1	906.0	907.4	907.6	908.3	908.7	905.9	900.5	895.1
7°	894.0	897.4	903.5	907.8	909.2	909.2	909.9	910.6	907.6	901.4	895.1
7.5°	893.7	897.8	905.0	910.0	910.9	910.9	911.5	912.4	909.4	902.6	895.1
8°	893.5	898.4	906.6	912.2	912.8	912.8	913.5	914.7	911.4	903.6	895.2
8.5°	893.3	899.5	908.4	914.5	914.8	915.0	915.5	916.7	913.3	904.6	895.4
9°	893.1	900.6	910.4	917.1	917.1	917.1	917.4	919.0	915.2	905.8	895.5
9.5°	892.6	901.5	912.7	919.4	919.0	919.2	919.2	921.1	917.0	906.8	895.5
10°	892.0	902.5	914.6	922.0	921.4	921.6	921.3	922.9	918.5	907.8	896.0
10.5°	891.6	903.2	916.2	924.3	923.7	923.9	923.3	924.5	920.1	909.3	897.3
11°	891.6	904.1	917.8	926.1	925.9	926.0	925.0	926.1	921.7	911.4	898.3
11.5°	892.0	905.5	919.4	927.7	927.5	927.7	926.7	927.8	924.2	913.2	898.6
12°	892.2	907.2	921.7	929.6	928.8	929.6	928.8	930.4	926.2	915.0	898.3
12.5°	892.2	909.0	924.5	931.7	930.4	931.6	931.2	932.9	927.7	915.3	897.8
13°	892.1	910.0	927.3	934.2	932.6	933.9	934.4	934.9	928.4	915.8	897.7
13.5°	892.3	910.6	929.9	936.6	935.4	936.6	937.8	936.0	929.0	916.8	897.4
14°	892.7	911.2	931.8	938.3	938.1	939.6	940.6	936.7	929.9	917.9	896.7
14.5°	892.8	911.9	933.8	939.2	940.2	941.9	942.8	937.9	931.0	918.6	895.4
15°	892.5	912.4	936.2	940.0	941.7	943.5	945.3	939.6	932.0	919.1	894.1
15.5°	891.7	912.4	938.6	941.7	943.4	944.6	948.6	941.1	932.2	919.2	892.5
16°	890.9	911.6	940.8	943.2	945.4	946.3	952.4	942.0	932.3	919.6	891.2
16.5°	889.9	910.3	942.2	943.8	947.6	948.2	955.7	942.3	932.5	920.0	889.6
17°	888.9	908.9	943.2	943.8	949.3	949.6	958.2	941.9	932.9	920.3	887.4
17.5°	887.7	907.6	943.7	943.5	950.3	950.2	959.7	941.5	933.3	919.9	884.6
18°	886.1	906.3	943.7	943.1	951.0	950.1	960.6	941.2	933.9	918.0	880.8
18.5°	883.3	904.9	943.3	942.5	951.8	950.1	961.1	940.7	934.1	915.0	876.6
19°	879.7	903.2	942.5	942.1	952.6	950.5	961.5	940.0	933.3	910.3	872.5
19.5°	875.6	900.9	941.2	941.6	953.3	951.2	960.9	938.4	931.1	905.4	868.3
20°	871.3	897.9	938.5	940.8	954.1	952.0	959.2	935.7	927.9	899.9	863.7
20.5°	866.5	894.6	934.5	939.2	954.4	952.2	955.9	932.6	924.4	893.9	859.0
21°	861.3	891.1	929.3	936.6	953.7	951.3	951.3	929.0	919.6	886.8	854.0



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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°	844.6	878.1	910.7	925.9	944.2	947.3	936.4	917.7	899.0	863.3	836.4
23°	838.3	872.2	903.7	922.0	939.2	944.7	930.7	912.9	890.4	854.4	829.2
23.5°	831.9	865.4	895.7	917.2	933.2	941.4	924.6	907.6	881.2	845.1	821.3
24°	825.4	857.6	887.0	912.0	926.0	936.8	918.2	901.4	871.0	835.1	812.0
24.5°	818.6	848.7	877.2	906.1	917.8	931.3	911.5	894.3	860.7	824.6	801.9
25°	811.3	839.2	866.8	898.9	909.5	924.4	903.9	885.8	849.9	813.1	790.3
25.5°	803.6	829.0	855.4	890.8	900.7	916.4	895.7	876.4	839.3	801.7	778.8
26°	795.4	818.3	843.6	881.2	891.6	907.3	886.4	865.8	827.4	788.8	767.2
26.5°	786.0	807.0	831.2	870.7	881.8	897.0	876.6	854.1	815.1	775.9	755.6
27°	775.8	794.4	818.5	858.5	872.3	885.6	865.4	841.1	802.6	763.1	744.0
27.5°	763.7	781.3	805.9	845.0	862.7	873.9	853.8	827.8	787.8	750.2	730.2
28°	750.5	767.5	793.3	830.0	852.6	860.2	840.8	813.8	773.0	737.4	716.7
28.5°	736.1	753.3	781.0	814.1	842.3	846.1	827.2	800.5	758.2	723.7	702.9
29°	720.6	739.3	767.8	798.3	831.3	831.5	813.6	785.4	743.4	709.6	688.5
29.5°	703.9	724.8	754.4	782.4	819.1	816.3	800.1	770.2	728.5	695.4	674.0
30°	686.7	710.6	740.2	766.3	805.3	799.9	784.8	755.0	712.2	680.2	659.0
30.5°	667.8	696.5	724.6	750.5	788.0	783.6	769.5	739.9	696.3	665.0	643.3
31°	648.5	682.7	708.1	734.7	770.7	767.2	754.3	722.5	680.9	649.0	625.8
31.5°	628.7	668.1	691.2	719.0	753.4	750.8	738.9	704.9	665.1	633.0	607.4
32°	609.8	651.8	674.4	703.8	736.1	734.4	719.8	686.7	649.6	616.8	588.7
32.5°	590.4	634.6	658.0	688.0	717.4	718.7	700.1	669.0	634.3	600.9	570.3
33°	571.9	616.5	642.4	671.5	697.6	701.9	679.8	651.5	619.0	584.5	551.2
33.5°	553.3	597.3	627.0	654.8	678.1	685.0	659.8	633.1	602.6	567.5	532.8
34°	535.2	577.2	611.9	638.0	658.8	665.9	641.0	614.5	586.2	549.8	514.1
34.5°	517.0	558.1	595.7	620.2	639.9	645.7	622.0	596.3	569.1	530.9	496.2
35°	498.6	539.2	578.5	602.3	621.5	624.5	603.2	578.9	551.0	511.8	477.6
35.5°	481.1	520.7	560.4	584.5	603.1	603.6	583.4	560.9	532.0	492.8	460.0
36°	461.9	502.7	541.0	566.4	584.4	582.1	564.0	543.4	513.3	474.0	441.7
36.5°	442.7	484.4	520.6	548.0	565.3	561.3	543.9	525.3	494.9	456.5	423.7
37°	424.3	465.6	501.2	529.1	546.5	540.8	524.9	507.7	477.1	439.2	405.5
37.5°	406.3	447.7	482.8	511.5	528.1	522.2	506.7	490.5	459.9	421.7	387.5
38°	389.0	430.0	464.9	493.5	509.9	504.9	490.0	474.0	441.8	404.0	370.1
38.5°	372.9	412.0	447.7	476.1	492.3	488.4	473.9	456.3	423.3	386.3	353.2
39°	355.5	393.6	430.0	458.3	475.6	472.7	458.4	438.5	404.5	368.7	336.6
39.5°	338.0	375.6	411.9	439.0	458.9	456.9	442.5	419.4	385.5	350.3	319.7
40°	320.4	357.9	393.1	418.2	441.7	441.6	426.5	401.0	366.9	331.7	302.5
40.5°	302.9	340.3	374.7	398.1	424.2	425.2	409.8	382.5	347.8	312.8	285.0
41°	285.4	322.6	355.4	379.3	406.0	408.7	392.9	364.9	329.9	294.1	267.4
41.5°	268.6	304.9	336.2	361.4	387.8	392.3	375.9	347.4	312.2	276.0	249.8
42°	252.3	287.3	316.8	343.7	369.3	375.4	358.4	330.4	294.6	257.9	232.1
42.5°	236.2	269.4	297.5	326.0	351.2	358.4	340.9	313.0	277.2	240.6	214.8
43°	219.5	251.3	278.3	308.4	333.7	340.6	322.9	295.7	259.6	223.9	198.0
43.5°	203.0	232.9	260.5	290.6	315.9	322.5	304.8	278.2	242.2	207.5	181.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	155.6	181.0	209.5	239.2	264.8	267.6	252.2	228.0	193.9	160.7	136.0
45.5°	140.6	165.4	194.3	222.8	247.5	249.5	234.7	212.0	178.6	146.4	122.6
46°	126.3	150.8	179.0	206.6	230.1	231.6	217.6	196.0	164.6	133.0	110.2
46.5°	112.7	136.6	164.1	190.4	213.5	214.1	200.9	180.1	150.3	120.0	100.1
47°	99.8	123.2	149.9	174.8	197.2	196.7	184.4	164.7	136.9	108.5	90.1
47.5°	87.9	110.8	136.1	159.5	181.3	180.2	168.1	149.6	123.8	98.7	80.0
48°	77.3	99.4	122.6	145.2	165.7	164.6	153.0	135.5	111.4	88.8	69.9
48.5°	68.1	88.8	110.1	131.7	150.0	149.3	138.2	121.8	100.5	78.9	62.1
49°	60.3	78.9	98.6	118.8	134.9	134.6	124.1	110.2	89.6	69.1	55.1
49.5°	53.4	69.9	87.7	106.0	120.5	120.9	112.3	98.6	78.6	60.8	48.8
50°	47.4	61.7	77.6	93.5	108.7	109.2	100.4	87.0	67.7	53.4	42.9
50.5°	41.7	54.1	68.2	81.8	96.9	97.6	88.5	75.4	58.8	46.4	37.0
51°	36.4	46.9	59.4	70.9	85.2	85.9	76.7	63.8	50.8	39.9	31.5
51.5°	31.6	40.8	51.6	61.2	73.4	74.3	64.8	55.1	43.7	33.7	26.6
52°	26.8	34.8	44.2	52.6	61.8	62.6	55.7	47.0	37.0	28.0	21.7
52.5°	22.1	29.8	37.5	44.6	53.0	53.1	47.3	39.9	30.7	22.9	17.6
53°	17.3	24.9	32.1	37.6	44.9	44.9	39.9	33.2	25.1	18.5	13.6
53.5°	12.5	19.8	26.8	32.1	37.8	37.6	33.0	27.2	20.4	14.3	9.4
54°	7.4	14.8	21.5	26.7	31.1	30.8	27.0	22.2	15.8	10.0	5.4
54.5°	3.7	9.5	16.3	21.2	25.1	25.1	21.9	18.0	11.2	5.8	1.4
55°	3.0	5.1	11.0	15.8	21.0	20.4	17.7	13.8	6.6	1.7	1.0
55.5°	2.3	4.2	6.0	10.4	17.1	15.8	13.6	9.6	2.2	1.1	0.8
56°	1.6	3.3	2.7	5.4	13.0	11.3	9.5	5.5	1.2	0.9	0.7
56.5°	0.9	2.5	2.1	2.3	9.1	6.6	5.4	1.3	1.0	0.8	0.6
57°	0.8	1.7	1.7	1.8	5.1	2.1	1.3	1.0	0.8	0.7	0.5
57.5°	0.7	0.8	1.2	1.4	1.1	1.1	1.0	0.9	0.7	0.6	0.5
58°	0.6	0.7	0.7	1.0	0.9	0.9	0.8	0.8	0.6	0.5	0.4
58.5°	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4
59°	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4
59.5°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3
60°	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3
60.5°	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.3	0.3
61°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
61.5°	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3
62°	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2
62.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
63°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
63.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
64°	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2
64.5°	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2
65°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
66°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1





TEST NUMBER: P775892

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
68°	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
74°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
74.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
75°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
75.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775892  
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775892

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	896.4	896.4	896.4	896.4	896.4	896.4
0.5°	896.2	896.9	896.2	895.9	896.1	896.7
1°	896.2	896.8	896.4	896.0	896.4	896.7
1.5°	896.1	896.8	896.6	896.2	896.4	896.7
2°	895.9	896.7	896.7	896.6	896.6	896.4
2.5°	895.5	896.4	896.9	896.9	896.7	896.4
3°	895.2	896.2	897.1	897.4	896.9	896.1
3.5°	894.8	896.1	897.4	897.5	896.9	895.9
4°	894.4	896.0	897.5	897.9	896.9	895.6
4.5°	893.9	895.6	897.7	898.0	896.8	895.5
5°	893.4	895.4	897.7	898.0	896.7	895.3
5.5°	893.1	895.1	897.5	898.0	896.2	895.1
6°	892.7	894.8	897.4	897.8	896.1	894.8
6.5°	892.0	894.5	897.4	897.8	895.9	894.4
7°	891.5	894.3	897.5	897.9	895.7	894.0
7.5°	890.8	894.0	897.9	898.3	895.6	893.7
8°	890.0	893.9	897.9	898.5	895.7	893.5
8.5°	889.2	893.5	897.8	898.5	895.6	893.3
9°	888.2	893.2	897.9	898.5	895.2	893.1
9.5°	887.3	893.5	898.7	898.7	894.9	892.6
10°	887.0	894.2	899.9	899.8	894.9	892.0
10.5°	887.2	894.6	900.9	901.0	895.4	891.6
11°	887.0	894.4	901.6	901.8	896.1	891.6
11.5°	886.4	893.8	901.9	902.4	896.2	892.0
12°	885.6	893.0	902.5	902.6	895.8	892.2
12.5°	885.5	892.7	903.7	903.8	895.4	892.2
13°	885.5	892.5	905.4	905.4	895.2	892.1
13.5°	885.3	892.0	906.8	906.5	895.2	892.3
14°	884.6	890.8	907.3	907.2	894.6	892.7
14.5°	883.5	888.8	907.6	907.4	893.3	892.8
15°	882.5	886.8	907.7	907.6	891.7	892.5
15.5°	881.2	884.8	907.7	907.7	890.2	891.7
16°	880.0	882.7	907.2	907.6	888.6	890.9
16.5°	878.7	880.0	905.6	906.7	886.9	889.9
17°	876.4	876.3	902.5	904.4	884.6	888.9
17.5°	872.9	871.8	897.9	900.9	881.5	887.7
18°	868.7	867.0	892.2	896.2	877.9	886.1
18.5°	863.7	862.6	885.9	891.0	873.8	883.3
19°	858.7	857.9	878.7	884.8	869.6	879.7
19.5°	853.5	853.2	870.8	878.0	865.6	875.6
20°	847.7	848.1	862.0	870.0	861.4	871.3
20.5°	841.8	843.0	852.3	861.4	857.1	866.5
21°	835.2	837.3	841.8	851.6	852.6	861.3



TEST NUMBER: P775892

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	815.5	816.2	808.0	819.2	836.9	844.6
23°	808.3	806.8	795.6	807.2	830.3	838.3
23.5°	801.0	796.2	783.3	794.7	822.8	831.9
24°	793.3	784.4	770.4	782.1	813.8	825.4
24.5°	785.8	772.0	757.3	769.1	803.4	818.6
25°	776.2	758.4	743.6	755.9	791.6	811.3
25.5°	766.6	744.5	730.7	742.7	779.1	803.6
26°	757.1	730.5	717.8	728.9	765.7	795.4
26.5°	747.3	716.3	703.5	715.2	752.0	786.0
27°	733.7	701.7	689.5	701.2	737.7	775.8
27.5°	719.0	687.4	675.6	686.8	723.3	763.7
28°	702.2	673.2	661.3	672.1	708.8	750.5
28.5°	685.4	659.0	646.3	657.9	694.3	736.1
29°	668.3	644.2	631.0	643.5	679.5	720.6
29.5°	651.3	629.4	615.8	628.6	663.6	703.9
30°	633.4	612.7	601.1	613.8	647.6	686.7
30.5°	615.1	595.5	586.3	598.4	630.7	667.8
31°	596.6	577.9	571.4	583.7	613.3	648.5
31.5°	578.1	560.3	556.4	568.9	595.0	628.7
32°	559.7	541.4	541.0	553.5	576.6	609.8
32.5°	541.1	523.5	525.6	537.2	558.0	590.4
33°	522.6	505.9	508.9	520.1	539.4	571.9
33.5°	505.0	488.6	490.5	502.5	520.6	553.3
34°	487.2	471.0	471.1	484.1	503.8	535.2
34.5°	469.1	453.0	451.1	465.0	486.1	517.0
35°	450.4	433.5	432.6	445.7	468.2	498.6
35.5°	431.5	414.4	413.8	426.7	449.5	481.1
36°	413.3	395.4	396.0	408.1	430.9	461.9
36.5°	395.4	376.1	377.5	390.0	410.8	442.7
37°	378.5	359.0	359.3	372.4	392.5	424.3
37.5°	362.2	341.8	341.1	354.3	374.6	406.3
38°	345.2	324.5	322.9	336.2	357.5	389.0
38.5°	327.5	307.3	304.8	318.0	340.3	372.9
39°	309.0	290.1	286.6	299.9	323.1	355.5
39.5°	291.6	272.7	269.3	281.8	305.9	338.0
40°	274.4	255.3	252.0	264.9	288.7	320.4
40.5°	258.5	239.2	234.7	248.0	271.3	302.9
41°	242.4	223.5	218.9	231.4	255.2	285.4
41.5°	226.8	207.7	202.5	215.0	238.5	268.6
42°	210.4	192.6	187.9	199.3	222.7	252.3
42.5°	194.5	177.8	173.4	184.0	206.9	236.2
43°	178.8	163.1	159.8	169.6	191.9	219.5
43.5°	163.6	148.6	146.9	156.0	176.7	203.0



TEST NUMBER: P775892

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	121.6	110.4	112.0	118.9	133.0	155.6
45.5°	110.2	99.1	101.7	108.1	119.9	140.6
46°	98.9	88.5	92.1	97.9	107.5	126.3
46.5°	87.6	78.9	82.7	88.2	95.6	112.7
47°	76.3	70.2	74.4	79.3	84.8	99.8
47.5°	65.0	62.2	66.3	70.6	75.1	87.9
48°	58.0	55.1	58.8	62.8	66.4	77.3
48.5°	51.9	48.8	51.8	55.4	58.7	68.1
49°	46.4	43.1	45.1	48.6	52.0	60.3
49.5°	41.1	37.6	38.8	42.3	45.8	53.4
50°	36.1	32.5	33.7	36.0	40.2	47.4
50.5°	31.1	27.5	28.5	31.0	34.9	41.7
51°	26.2	22.5	23.2	25.9	30.2	36.4
51.5°	21.7	17.5	18.0	20.8	25.5	31.6
52°	17.6	12.4	12.8	15.8	20.8	26.8
52.5°	13.6	7.1	7.7	10.8	16.1	22.1
53°	9.5	3.4	3.7	5.9	10.7	17.3
53.5°	5.4	2.7	3.0	2.6	6.0	12.5
54°	1.4	2.0	2.2	2.2	2.8	7.4
54.5°	1.0	1.3	1.4	1.7	2.3	3.7
55°	0.8	0.7	0.7	1.2	1.8	3.0
55.5°	0.7	0.6	0.6	0.7	1.3	2.3
56°	0.6	0.5	0.6	0.7	0.8	1.6
56.5°	0.5	0.5	0.5	0.6	0.7	0.9
57°	0.5	0.4	0.5	0.5	0.6	0.8
57.5°	0.4	0.4	0.4	0.5	0.6	0.7
58°	0.4	0.4	0.4	0.5	0.5	0.6
58.5°	0.4	0.3	0.4	0.4	0.5	0.6
59°	0.3	0.3	0.3	0.4	0.5	0.5
59.5°	0.3	0.3	0.3	0.4	0.4	0.5
60°	0.3	0.3	0.3	0.3	0.4	0.4
60.5°	0.3	0.3	0.3	0.3	0.4	0.4
61°	0.3	0.2	0.3	0.3	0.3	0.4
61.5°	0.2	0.2	0.2	0.3	0.3	0.3
62°	0.2	0.2	0.2	0.3	0.3	0.3
62.5°	0.2	0.2	0.2	0.2	0.3	0.3
63°	0.2	0.2	0.2	0.2	0.3	0.3
63.5°	0.2	0.2	0.2	0.2	0.2	0.3
64°	0.2	0.2	0.2	0.2	0.2	0.2
64.5°	0.2	0.2	0.2	0.2	0.2	0.2
65°	0.2	0.1	0.2	0.2	0.2	0.2
65.5°	0.1	0.1	0.1	0.2	0.2	0.2
66°	0.1	0.1	0.1	0.2	0.2	0.2



TEST NUMBER: P775892

CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-1000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.1	0.1	0.1	0.1	0.1	0.2
68°	0.1	0.1	0.1	0.1	0.1	0.2
68.5°	0.1	0.1	0.1	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.0	0.0	0.1	0.1	0.1	0.1
74°	0.0	0.0	0.0	0.1	0.1	0.1
74.5°	0.0	0.0	0.0	0.1	0.1	0.1
75°	0.0	0.0	0.0	0.0	0.1	0.1
75.5°	0.0	0.0	0.0	0.0	0.0	0.1
76°	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775892  
CATALOG NUMBER: HCDJBL510CSD-HCD8TSQC-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

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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°	856.0	887.4	923.5	933.0	951.5	950.2	946.7	925.7	913.9	879.4	848.6
22°	850.5	883.2	917.4	929.5	948.2	948.9	941.7	921.9	906.9	871.6	842.9



44°	186.7	215.0	242.9	272.8	298.9	304.4	287.0	261.1	225.7	191.4	165.6
44.5°	171.0	197.5	226.0	255.6	282.0	286.0	269.3	244.0	209.5	175.5	150.4



66.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
67°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1



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



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21.5°	828.9	831.0	831.2	841.1	847.8	856.0
22°	822.1	824.1	819.6	830.4	842.6	850.5



44°	149.3	135.0	134.5	143.0	161.4	186.7
44.5°	135.4	122.5	122.9	130.6	147.0	171.0

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66.5°	0.1	0.1	0.1	0.2	0.2	0.2
67°	0.1	0.1	0.1	0.1	0.2	0.2

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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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(END OF REPORT)