

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: METALUX

Report Number: P1587593

Luminaire Tested: 22CZSP-SB-31-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587593
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-31-L830
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 3000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

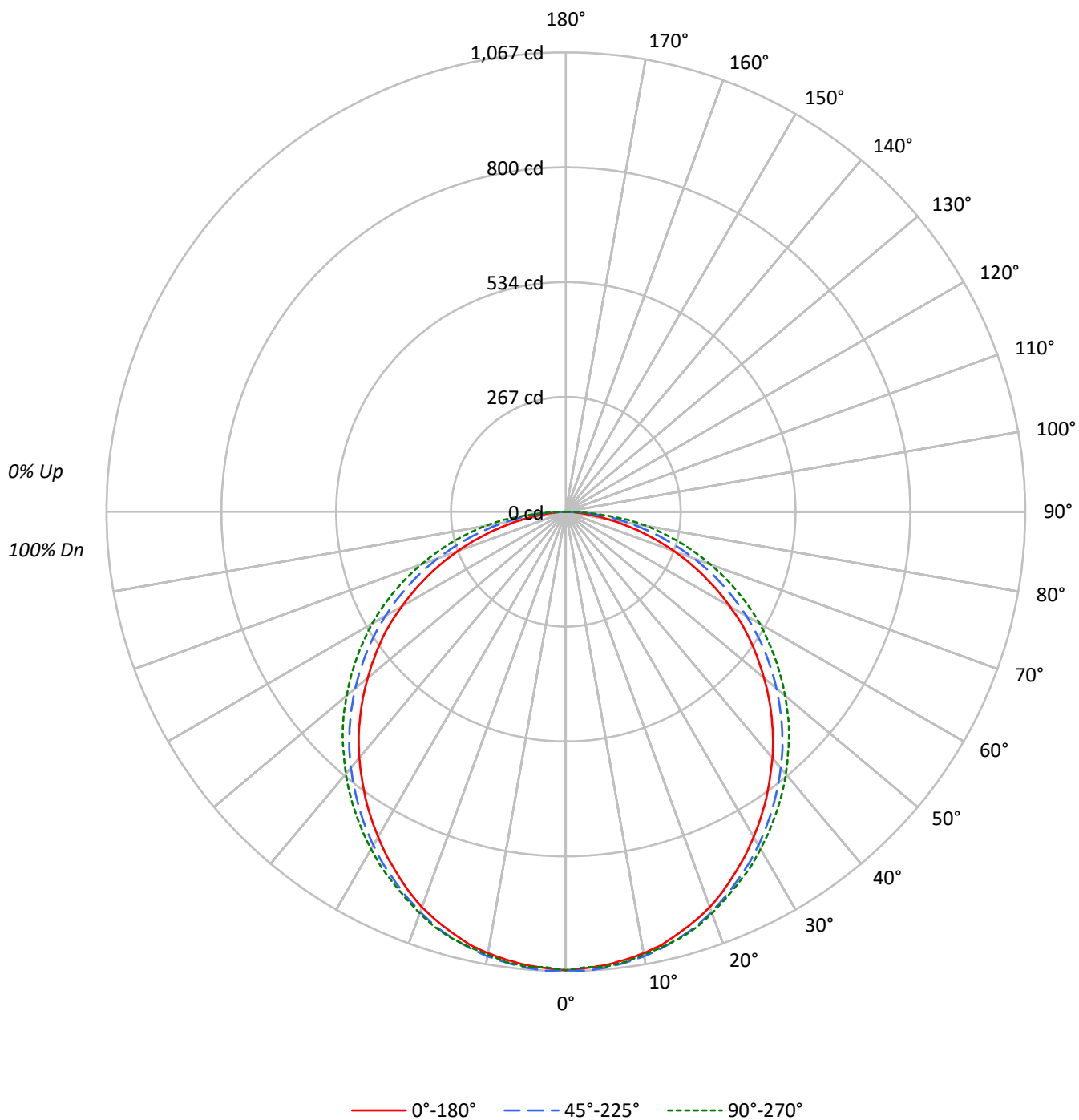
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3108.0 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21
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			
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3335	3335	3335
5°	3323	3341	3333
10°	3311	3334	3321
15°	3286	3320	3324
20°	3257	3297	3308
25°	3205	3262	3284
30°	3154	3235	3270
35°	3103	3203	3259
40°	3052	3176	3251
45°	2994	3146	3248
50°	2929	3111	3240
55°	2862	3077	3239
60°	2756	3032	3258
65°	2627	2973	3261
70°	2451	2890	3270
75°	2180	2785	3327
80°	1791	2669	3451
85°	1182	2504	3119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3534 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	3.2
10°-20°	288.4	9.3
20°-30°	434.6	14.0
30°-40°	523.4	16.8
40°-50°	546.8	17.6
50°-60°	502.4	16.2
60°-70°	395.6	12.7
70°-80°	242.5	7.8
80°-90°	73.5	2.4
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°	823.7	26.5
0°-40°	1347.1	43.3
0°-60°	2396.3	77.1
0°-90°	3108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3108.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1065	1065	1065	1065	1065	
5°	1057	1059	1063	1062	1060	100
15°	1014	1018	1024	1028	1026	286
25°	928	933	944	954	950	428
35°	812	822	838	853	852	508
45°	676	691	710	730	734	522
55°	524	539	564	588	593	468
65°	355	373	401	428	440	351
75°	180	201	230	258	275	192
85°	33	49	70	78	87	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1065.0	1065.0	1065.0	1065.0	1065.0
2.5°	1061.0	1063.7	1067.0	1061.7	1059.1
5°	1057.1	1059.1	1063.0	1061.7	1060.4
7.5°	1049.9	1051.2	1056.4	1056.4	1055.1
10°	1041.3	1043.9	1048.5	1047.9	1044.6
12.5°	1030.1	1032.1	1037.4	1037.4	1035.4
15°	1013.7	1017.6	1024.2	1028.2	1025.5
17.5°	996.6	1000.5	1009.1	1013.0	1011.7
20°	977.5	980.8	989.3	995.3	992.6
22.5°	953.8	957.8	967.6	974.2	971.6
25°	927.5	933.4	944.0	953.8	950.5
27.5°	901.2	907.8	920.9	930.8	929.5
30°	872.3	880.8	894.6	907.1	904.5
32.5°	842.6	852.5	867.0	880.1	879.5
35°	811.7	822.3	838.0	853.2	852.5
37.5°	778.8	791.3	807.8	824.2	824.9
40°	746.6	758.4	776.9	794.6	795.3
42.5°	712.4	724.9	744.6	763.1	763.7
45°	676.2	690.7	710.4	730.2	733.5
47.5°	639.4	654.5	674.9	696.0	699.9
50°	601.2	617.0	638.7	661.1	665.0
52.5°	562.4	578.9	601.2	623.6	629.5
55°	524.3	539.4	563.7	588.1	593.3
57.5°	484.1	498.0	524.3	549.9	556.5
60°	440.1	457.2	484.1	509.8	520.3
62.5°	397.3	415.7	443.4	469.0	480.9
65°	354.6	373.0	401.3	428.2	440.1
67.5°	311.1	330.2	360.5	386.1	399.3
70°	267.7	286.8	315.7	343.4	357.2
72.5°	224.3	244.7	273.0	301.3	315.1
75°	180.2	201.3	230.2	257.9	275.0
77.5°	138.8	159.2	188.1	216.4	230.9
80°	99.3	119.7	148.0	176.3	191.4
82.5°	63.1	82.2	109.9	133.5	147.3
85°	32.9	48.7	69.7	77.6	86.8
87.5°	9.9	19.1	27.0	30.3	37.5
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.70	17.36	16.06	17.68	17.99	16.44	18.11	16.81	18.42	18.73
	3H	17.46	18.97	17.84	19.29	19.65	18.54	20.05	18.92	20.37	20.73
	4H	18.09	19.51	18.48	19.85	20.23	19.42	20.85	19.82	21.19	21.57
	6H	18.50	19.82	18.91	20.18	20.57	20.19	21.51	20.60	21.88	22.27
	8H	18.60	19.87	19.03	20.25	20.65	20.50	21.77	20.93	22.15	22.55
	12H	18.66	19.87	19.08	20.25	20.68	20.72	21.93	21.14	22.31	22.74
4H	2H	16.47	17.89	16.87	18.24	18.61	17.05	18.47	17.45	18.82	19.19
	3H	18.46	19.66	18.87	20.06	20.46	19.38	20.57	19.79	20.97	21.37
	4H	19.22	20.30	19.65	20.71	21.15	20.41	21.50	20.84	21.91	22.34
	6H	19.75	20.70	20.20	21.14	21.60	21.34	22.29	21.79	22.73	23.19
	8H	19.90	20.79	20.36	21.23	21.70	21.73	22.62	22.18	23.06	23.52
	12H	19.98	20.79	20.46	21.26	21.73	22.00	22.80	22.48	23.28	23.75
8H	4H	19.67	20.56	20.13	21.00	21.47	20.71	21.60	21.17	22.04	22.51
	6H	20.34	21.09	20.84	21.58	22.05	21.79	22.54	22.29	23.03	23.50
	8H	20.57	21.23	21.07	21.74	22.22	22.28	22.95	22.79	23.46	23.94
	12H	20.71	21.31	21.22	21.79	22.35	22.66	23.25	23.16	23.74	24.30
12H	4H	19.75	20.55	20.23	21.03	21.50	20.74	21.54	21.22	22.02	22.49
	6H	20.47	21.14	20.98	21.65	22.13	21.85	22.52	22.35	23.02	23.51
	8H	20.76	21.36	21.27	21.85	22.40	22.40	22.99	22.91	23.48	24.04