

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: P1587609

Luminaire Tested: 22CZSP-SB-31-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587609
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-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

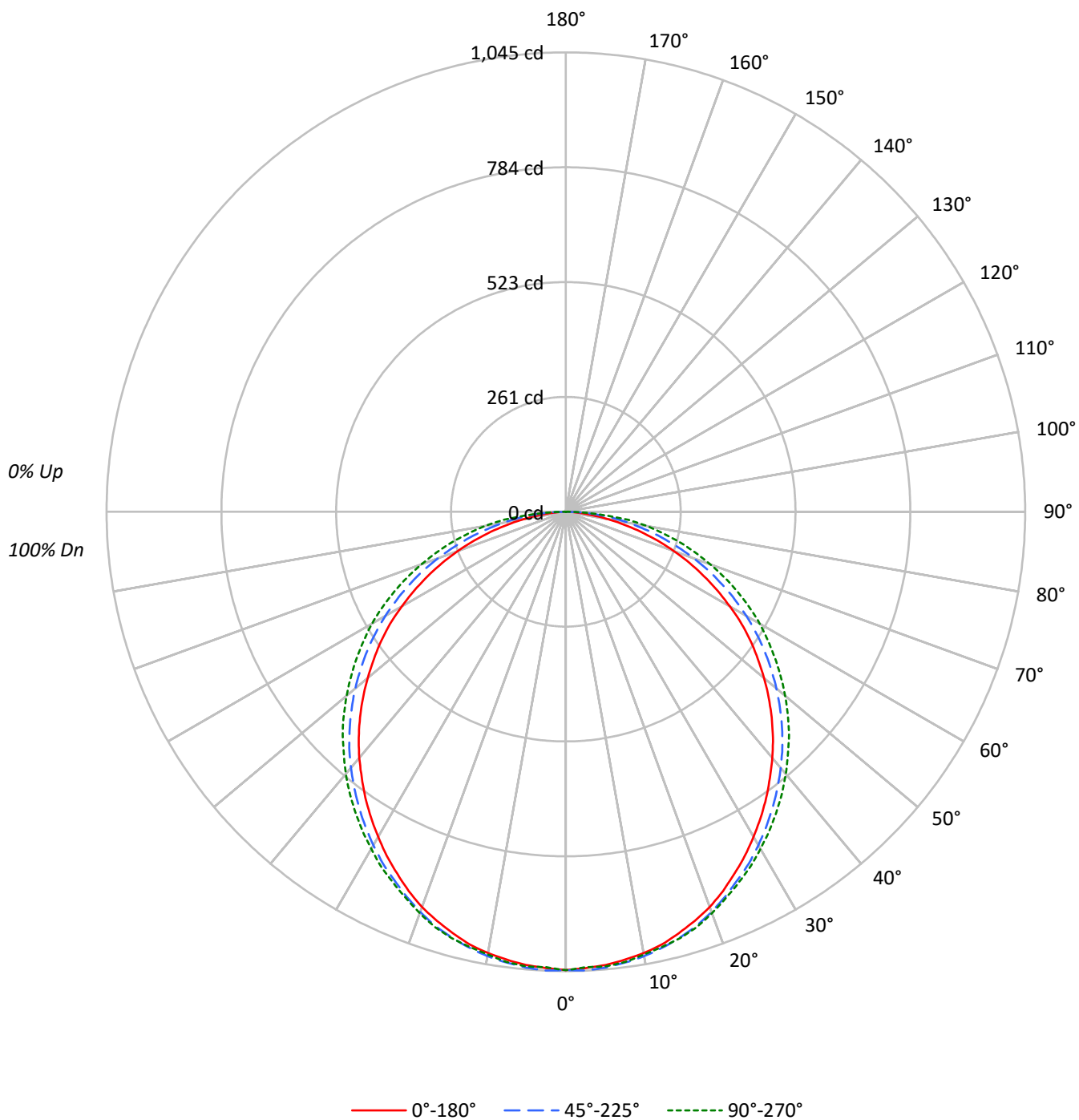
Lumens per Lamp: N/A
Luminaire Lumens: 3043.0 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	3265	3265	3265
5°	3253	3272	3263
10°	3242	3264	3252
15°	3217	3251	3255
20°	3189	3228	3239
25°	3138	3193	3215
30°	3088	3167	3202
35°	3038	3136	3191
40°	2988	3109	3183
45°	2932	3080	3180
50°	2868	3047	3172
55°	2802	3013	3171
60°	2699	2968	3190
65°	2572	2911	3193
70°	2400	2830	3202
75°	2135	2727	3257
80°	1755	2613	3379
85°	1157	2454	3054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3462 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.6	3.2
10°-20°	282.3	9.3
20°-30°	425.5	14.0
30°-40°	512.5	16.8
40°-50°	535.4	17.6
50°-60°	491.9	16.2
60°-70°	387.3	12.7
70°-80°	237.5	7.8
80°-90°	72.0	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°	806.5	26.5
0°-40°	1318.9	43.3
0°-60°	2346.2	77.1
0°-90°	3043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1035	1037	1041	1040	1038	98
15°	992	996	1003	1007	1004	280
25°	908	914	924	934	931	419
35°	795	805	820	835	835	497
45°	662	676	696	715	718	511
55°	513	528	552	576	581	458
65°	347	365	393	419	431	343
75°	176	197	225	252	269	188
85°	32	48	68	76	85	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.7	1042.7	1042.7	1042.7	1042.7
2.5°	1038.9	1041.4	1044.6	1039.5	1036.9
5°	1035.0	1036.9	1040.8	1039.5	1038.2
7.5°	1027.9	1029.2	1034.3	1034.3	1033.1
10°	1019.5	1022.1	1026.6	1026.0	1022.7
12.5°	1008.6	1010.5	1015.7	1015.7	1013.7
15°	992.5	996.3	1002.8	1006.6	1004.1
17.5°	975.7	979.6	988.0	991.8	990.5
20°	957.1	960.3	968.6	974.4	971.9
22.5°	933.9	937.7	947.4	953.8	951.3
25°	908.1	913.9	924.2	933.9	930.6
27.5°	882.3	888.8	901.7	911.3	910.0
30°	854.0	862.4	875.9	888.1	885.6
32.5°	825.0	834.7	848.9	861.7	861.1
35°	794.8	805.1	820.5	835.3	834.7
37.5°	762.6	774.8	790.9	807.0	807.6
40°	731.0	742.6	760.6	778.0	778.7
42.5°	697.5	709.7	729.1	747.1	747.7
45°	662.1	676.3	695.6	714.9	718.1
47.5°	626.0	640.8	660.8	681.4	685.3
50°	588.7	604.1	625.4	647.3	651.1
52.5°	550.7	566.8	588.7	610.6	616.4
55°	513.3	528.1	551.9	575.8	580.9
57.5°	474.0	487.5	513.3	538.4	544.9
60°	430.9	447.6	474.0	499.1	509.4
62.5°	389.0	407.0	434.1	459.2	470.8
65°	347.1	365.2	392.9	419.3	430.9
67.5°	304.6	323.3	352.9	378.1	390.9
70°	262.1	280.8	309.1	336.2	349.7
72.5°	219.6	239.6	267.3	295.0	308.5
75°	176.5	197.1	225.4	252.5	269.2
77.5°	135.9	155.9	184.2	211.9	226.1
80°	97.3	117.2	144.9	172.6	187.4
82.5°	61.8	80.5	107.6	130.7	144.3
85°	32.2	47.7	68.3	76.0	85.0
87.5°	9.7	18.7	26.4	29.6	36.7
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	15.62	17.29	15.99	17.60	17.92	16.37	18.03	16.74	18.35	18.66
	3H	17.39	18.89	17.76	19.22	19.58	18.47	19.97	18.84	20.30	20.66
	4H	18.01	19.43	18.41	19.78	20.16	19.35	20.77	19.75	21.12	21.50
	6H	18.42	19.74	18.83	20.11	20.50	20.12	21.44	20.53	21.80	22.19
	8H	18.53	19.79	18.95	20.18	20.58	20.43	21.69	20.85	22.08	22.48
	12H	18.58	19.79	19.01	20.17	20.60	20.64	21.85	21.07	22.23	22.66
4H	2H	16.39	17.82	16.79	18.16	18.54	16.97	18.40	17.37	18.74	19.12
	3H	18.39	19.59	18.80	19.98	20.38	19.30	20.50	19.71	20.90	21.30
	4H	19.14	20.23	19.57	20.64	21.08	20.34	21.42	20.77	21.84	22.27
	6H	19.68	20.63	20.13	21.07	21.52	21.27	22.22	21.72	22.66	23.11
	8H	19.83	20.72	20.28	21.16	21.62	21.65	22.54	22.11	22.99	23.45
	12H	19.91	20.72	20.39	21.19	21.66	21.93	22.73	22.41	23.21	23.67
8H	4H	19.59	20.49	20.05	20.93	21.39	20.64	21.53	21.10	21.97	22.44
	6H	20.27	21.02	20.76	21.50	21.98	21.72	22.47	22.21	22.95	23.43
	8H	20.49	21.16	21.00	21.67	22.15	22.21	22.88	22.72	23.38	23.87
	12H	20.64	21.23	21.14	21.72	22.28	22.58	23.18	23.09	23.67	24.22
12H	4H	19.68	20.48	20.16	20.96	21.42	20.67	21.47	21.14	21.94	22.41
	6H	20.40	21.07	20.91	21.57	22.06	21.77	22.44	22.28	22.95	23.43
	8H	20.69	21.28	21.20	21.77	22.33	22.33	22.92	22.83	23.41	23.97