

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: P1587596

Luminaire Tested: 22CZSP-SB-31-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-31-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

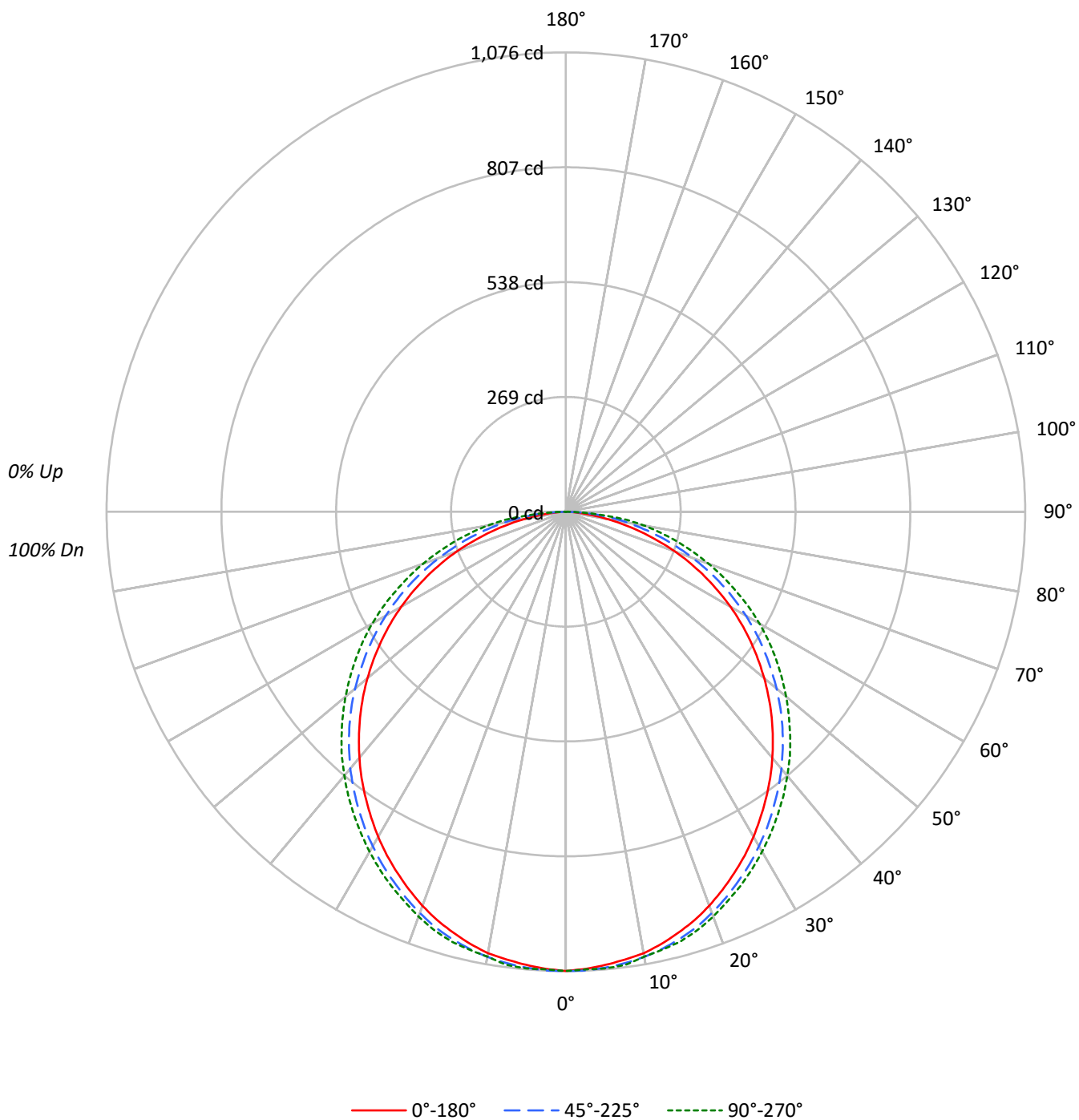
Lumens per Lamp: N/A
Luminaire Lumens: 3129.0 lumens
Efficiency: N/A
Efficacy: 149.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	94	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	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3368	3368	3368
5°	3349	3368	3375
10°	3339	3367	3364
15°	3308	3356	3376
20°	3273	3333	3362
25°	3226	3300	3342
30°	3179	3271	3325
35°	3126	3240	3309
40°	3076	3211	3299
45°	3020	3177	3291
50°	2955	3138	3282
55°	2881	3098	3278
60°	2791	3052	3280
65°	2663	2987	3262
70°	2489	2897	3254
75°	2207	2785	3265
80°	1796	2645	3363
85°	1160	2443	2903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3407 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	3.3
10°-20°	291.5	9.3
20°-30°	439.5	14.0
30°-40°	528.8	16.9
40°-50°	551.6	17.6
50°-60°	505.6	16.2
60°-70°	397.0	12.7
70°-80°	241.6	7.7
80°-90°	71.5	2.3
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°	832.8	26.6
0°-40°	1361.6	43.5
0°-60°	2418.8	77.3
0°-90°	3129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1066	1072	1072	1070	1074	101
15°	1020	1030	1035	1037	1041	288
25°	934	946	955	961	967	430
35°	818	831	848	860	866	512
45°	682	696	718	734	743	526
55°	528	541	567	590	600	472
65°	359	373	403	430	440	356
75°	182	199	230	258	270	193
85°	32	46	68	76	81	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1075.6	1075.6	1075.6	1075.6	1075.6
2.5°	1071.6	1077.0	1075.6	1070.9	1072.9
5°	1065.5	1072.3	1071.6	1070.3	1073.6
7.5°	1058.1	1065.5	1066.2	1066.2	1070.3
10°	1050.1	1057.5	1058.8	1056.8	1058.1
12.5°	1036.6	1045.4	1048.0	1048.0	1050.1
15°	1020.4	1030.5	1035.3	1036.6	1041.3
17.5°	1002.9	1013.7	1019.8	1023.1	1027.2
20°	982.1	993.5	1000.3	1004.3	1009.0
22.5°	958.5	971.3	978.7	982.8	988.1
25°	933.6	946.4	955.2	961.2	967.3
27.5°	907.4	919.5	931.6	939.0	944.4
30°	879.1	891.9	904.7	914.1	919.5
32.5°	848.8	862.3	877.1	887.2	893.2
35°	817.8	830.6	847.5	859.6	865.6
37.5°	786.2	799.7	817.2	830.0	837.4
40°	752.5	766.7	785.5	799.7	807.1
42.5°	717.5	731.0	751.9	768.0	776.8
45°	681.9	696.0	717.5	734.4	743.1
47.5°	644.8	658.3	681.9	701.4	708.8
50°	606.5	619.3	644.2	665.0	673.8
52.5°	567.4	580.9	605.8	628.0	637.4
55°	527.7	541.2	567.4	590.3	600.4
57.5°	487.3	500.8	527.7	551.3	563.4
60°	445.6	459.1	487.3	511.6	523.7
62.5°	402.5	416.7	445.6	470.5	483.3
65°	359.4	372.9	403.2	430.1	440.2
67.5°	316.4	329.8	359.4	386.4	398.5
70°	271.9	287.4	316.4	344.6	355.4
72.5°	225.5	243.0	271.9	301.6	312.3
75°	182.4	199.2	230.2	257.8	269.9
77.5°	140.0	158.2	187.1	215.4	227.5
80°	99.6	117.1	146.7	173.7	186.5
82.5°	63.3	78.8	108.4	132.6	142.0
85°	32.3	45.8	68.0	76.1	80.8
87.5°	9.4	16.2	24.2	30.3	33.7
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	15.72	17.38	16.08	17.69	18.01	16.45	18.11	16.82	18.43	18.74
	3H	17.49	18.99	17.86	19.32	19.68	18.53	20.04	18.91	20.36	20.72
	4H	18.11	19.53	18.50	19.87	20.25	19.40	20.82	19.80	21.17	21.54
	6H	18.51	19.83	18.93	20.20	20.59	20.14	21.46	20.55	21.82	22.21
	8H	18.62	19.88	19.04	20.27	20.66	20.44	21.70	20.86	22.09	22.48
	12H	18.67	19.87	19.10	20.26	20.68	20.63	21.84	21.06	22.22	22.65
4H	2H	16.49	17.91	16.88	18.25	18.63	17.06	18.48	17.46	18.83	19.20
	3H	18.48	19.67	18.89	20.07	20.47	19.37	20.57	19.78	20.96	21.36
	4H	19.22	20.30	19.65	20.72	21.15	20.39	21.47	20.82	21.89	22.32
	6H	19.75	20.70	20.20	21.14	21.59	21.30	22.25	21.75	22.68	23.14
	8H	19.89	20.78	20.35	21.22	21.69	21.66	22.55	22.12	22.99	23.46
	12H	19.97	20.77	20.45	21.25	21.72	21.92	22.72	22.40	23.19	23.66
8H	4H	19.67	20.56	20.12	21.00	21.46	20.69	21.58	21.15	22.02	22.48
	6H	20.33	21.07	20.82	21.56	22.03	21.75	22.49	22.24	22.97	23.45
	8H	20.54	21.20	21.05	21.71	22.19	22.22	22.88	22.72	23.39	23.87
	12H	20.68	21.26	21.18	21.75	22.31	22.57	23.16	23.07	23.65	24.21
12H	4H	19.75	20.55	20.23	21.02	21.49	20.71	21.51	21.19	21.99	22.46
	6H	20.45	21.12	20.96	21.63	22.11	21.80	22.46	22.30	22.97	23.45
	8H	20.73	21.32	21.24	21.81	22.37	22.33	22.92	22.84	23.41	23.97