

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: P1587606

Luminaire Tested: 22CZSP-SB-31-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587606
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-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

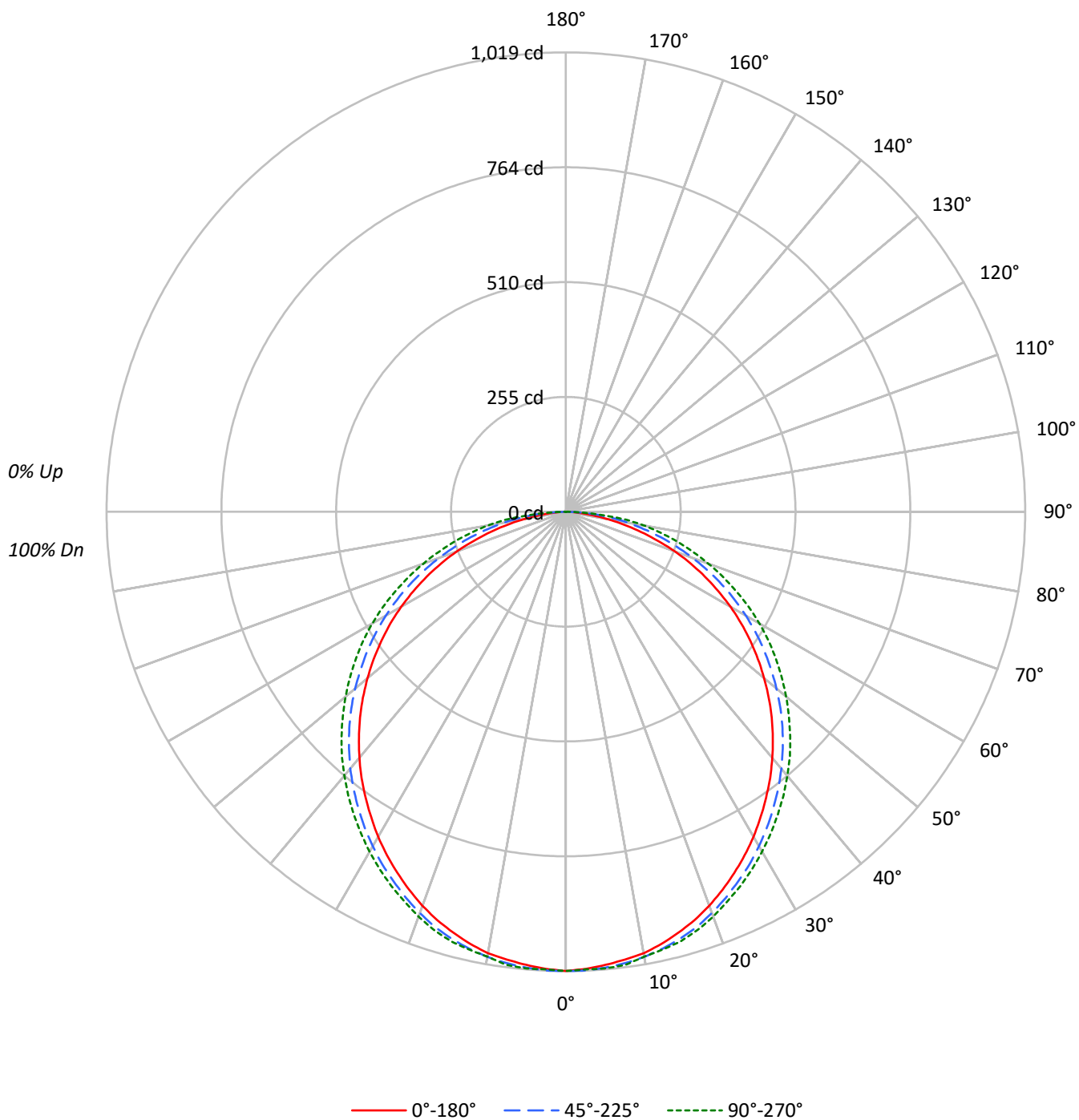
Lumens per Lamp: N/A
Luminaire Lumens: 2963.0 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	3190	3190	3190
5°	3172	3190	3196
10°	3162	3188	3186
15°	3133	3178	3197
20°	3099	3156	3184
25°	3055	3125	3165
30°	3010	3098	3148
35°	2960	3068	3133
40°	2913	3041	3124
45°	2859	3009	3116
50°	2798	2972	3108
55°	2728	2933	3104
60°	2643	2890	3106
65°	2522	2829	3089
70°	2358	2743	3082
75°	2089	2637	3092
80°	1700	2507	3185
85°	1099	2314	2748

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3227 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	3.3
10°-20°	276.0	9.3
20°-30°	416.2	14.0
30°-40°	500.8	16.9
40°-50°	522.4	17.6
50°-60°	478.8	16.2
60°-70°	376.0	12.7
70°-80°	228.8	7.7
80°-90°	67.7	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°	788.6	26.6
0°-40°	1289.4	43.5
0°-60°	2290.5	77.3
0°-90°	2963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1009	1015	1015	1014	1017	96
15°	966	976	980	982	986	273
25°	884	896	904	910	916	407
35°	774	787	802	814	820	485
45°	646	659	680	695	704	498
55°	500	512	537	559	569	447
65°	340	353	382	407	417	337
75°	173	189	218	244	256	183
85°	31	43	64	72	76	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1018.6	1018.6	1018.6	1018.6	1018.6
2.5°	1014.8	1019.9	1018.6	1014.1	1016.0
5°	1009.0	1015.4	1014.8	1013.5	1016.7
7.5°	1002.0	1009.0	1009.7	1009.7	1013.5
10°	994.4	1001.4	1002.6	1000.7	1002.0
12.5°	981.6	989.9	992.4	992.4	994.4
15°	966.3	975.9	980.3	981.6	986.1
17.5°	949.7	959.9	965.7	968.9	972.7
20°	930.0	940.8	947.2	951.0	955.5
22.5°	907.7	919.8	926.8	930.6	935.7
25°	884.1	896.2	904.5	910.2	916.0
27.5°	859.2	870.7	882.2	889.2	894.3
30°	832.5	844.6	856.7	865.6	870.7
32.5°	803.8	816.5	830.5	840.1	845.8
35°	774.4	786.6	802.5	814.0	819.7
37.5°	744.5	757.2	773.8	785.9	792.9
40°	712.6	726.0	743.9	757.2	764.3
42.5°	679.5	692.2	712.0	727.3	735.6
45°	645.7	659.1	679.5	695.4	703.7
47.5°	610.6	623.4	645.7	664.2	671.2
50°	574.3	586.4	610.0	629.8	638.0
52.5°	537.3	550.1	573.7	594.7	603.6
55°	499.7	512.5	537.3	559.0	568.6
57.5°	461.5	474.2	499.7	522.0	533.5
60°	422.0	434.7	461.5	484.4	495.9
62.5°	381.2	394.6	422.0	445.5	457.7
65°	340.4	353.1	381.8	407.3	416.9
67.5°	299.6	312.3	340.4	365.9	377.3
70°	257.5	272.2	299.6	326.4	336.6
72.5°	213.5	230.1	257.5	285.6	295.8
75°	172.7	188.7	218.0	244.1	255.6
77.5°	132.6	149.8	177.2	204.0	215.4
80°	94.3	110.9	139.0	164.5	176.6
82.5°	59.9	74.6	102.6	125.6	134.5
85°	30.6	43.3	64.4	72.0	76.5
87.5°	8.9	15.3	22.9	28.7	31.9
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	15.53	17.19	15.89	17.50	17.82	16.26	17.92	16.63	18.24	18.55
	3H	17.30	18.80	17.67	19.13	19.49	18.34	19.85	18.72	20.17	20.53
	4H	17.92	19.34	18.31	19.68	20.06	19.21	20.63	19.61	20.98	21.35
	6H	18.33	19.64	18.74	20.01	20.40	19.95	21.27	20.36	21.63	22.03
	8H	18.43	19.69	18.85	20.08	20.48	20.25	21.51	20.67	21.90	22.30
	12H	18.48	19.69	18.91	20.07	20.49	20.44	21.65	20.87	22.03	22.46
4H	2H	16.30	17.72	16.70	18.06	18.44	16.87	18.29	17.27	18.64	19.01
	3H	18.29	19.48	18.70	19.88	20.28	19.18	20.38	19.59	20.77	21.17
	4H	19.03	20.11	19.46	20.53	20.96	20.20	21.28	20.63	21.70	22.13
	6H	19.56	20.51	20.01	20.95	21.40	21.11	22.06	21.56	22.50	22.95
	8H	19.70	20.59	20.16	21.03	21.50	21.47	22.36	21.93	22.80	23.27
	12H	19.78	20.58	20.26	21.06	21.53	21.73	22.53	22.21	23.00	23.47
8H	4H	19.48	20.37	19.94	20.81	21.27	20.50	21.39	20.96	21.83	22.29
	6H	20.14	20.88	20.63	21.37	21.84	21.56	22.30	22.05	22.78	23.26
	8H	20.35	21.02	20.86	21.52	22.00	22.03	22.69	22.54	23.20	23.68
	12H	20.49	21.08	20.99	21.57	22.12	22.38	22.97	22.89	23.46	24.02
12H	4H	19.56	20.36	20.04	20.83	21.30	20.52	21.33	21.00	21.80	22.27
	6H	20.26	20.93	20.77	21.44	21.92	21.61	22.27	22.11	22.78	23.26
	8H	20.54	21.13	21.05	21.62	22.18	22.14	22.73	22.65	23.22	23.78