

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: P1586326

Luminaire Tested: 22CZSP-31-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586326
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-31-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

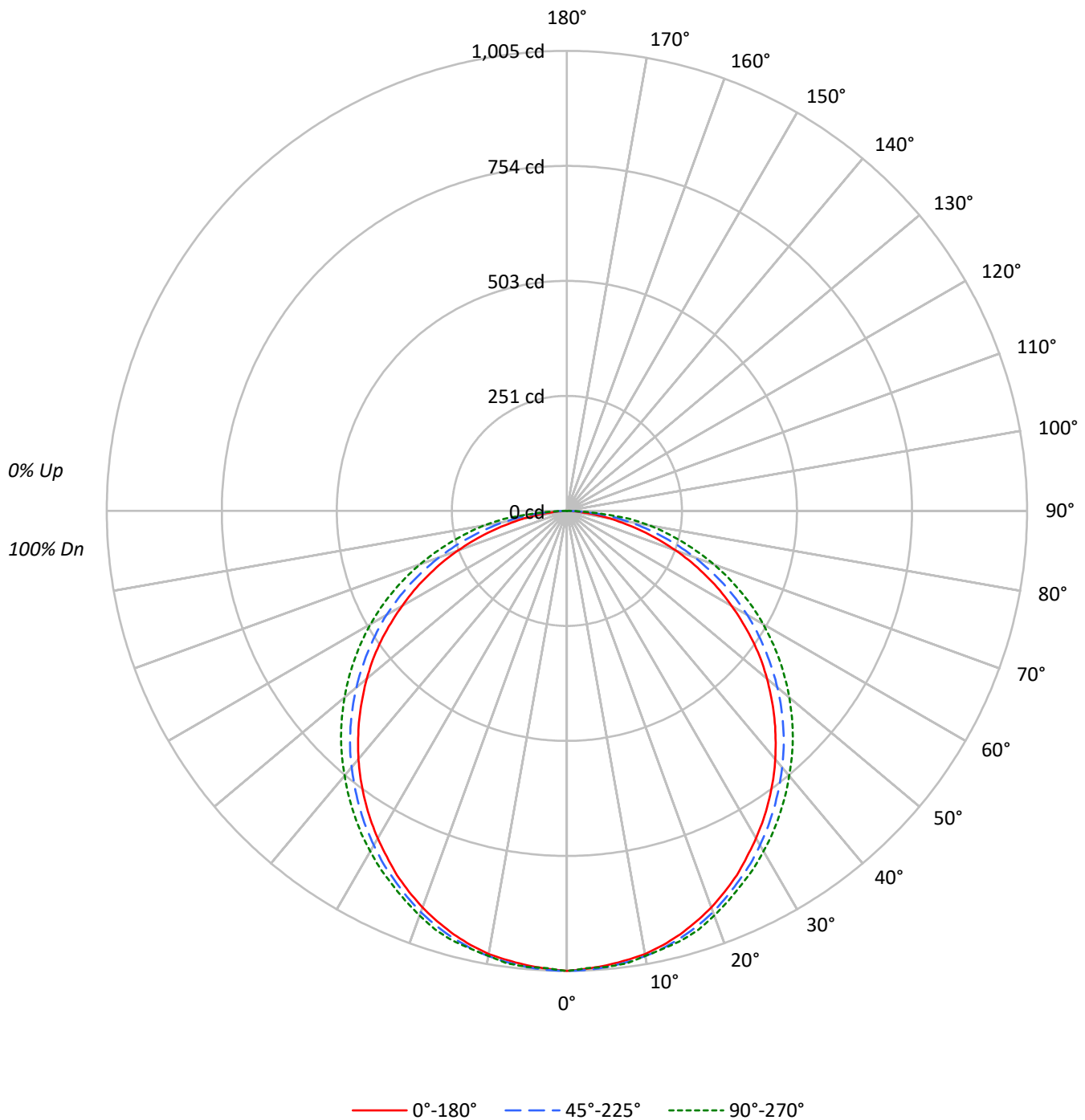
Lumens per Lamp: N/A
Luminaire Lumens: 2934.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	69		
3	89	79	70	64	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°	3147	3147	3147
5°	3133	3145	3143
10°	3126	3140	3138
15°	3103	3129	3147
20°	3072	3109	3134
25°	3034	3076	3114
30°	2987	3050	3105
35°	2943	3020	3096
40°	2895	2990	3087
45°	2839	2959	3091
50°	2779	2923	3089
55°	2706	2882	3093
60°	2605	2851	3101
65°	2485	2796	3110
70°	2316	2717	3124
75°	2064	2610	3154
80°	1706	2485	3309
85°	1110	2242	2892

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3414 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	3.2
10°-20°	272.2	9.3
20°-30°	410.4	14.0
30°-40°	494.4	16.8
40°-50°	516.3	17.6
50°-60°	474.2	16.2
60°-70°	373.5	12.7
70°-80°	229.1	7.8
80°-90°	68.9	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°	777.6	26.5
0°-40°	1272.0	43.4
0°-60°	2262.5	77.1
0°-90°	2934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	997	998	1000	1004	1000	95
15°	957	959	965	971	971	270
25°	878	880	890	901	901	404
35°	770	774	790	806	810	482
45°	641	648	668	691	698	494
55°	496	505	528	558	566	443
65°	335	347	377	409	420	332
75°	171	184	216	250	261	181
85°	31	42	62	79	80	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.0	1005.0	1005.0	1005.0	1005.0
2.5°	1001.1	1003.0	1003.7	1004.3	999.8
5°	996.6	997.9	1000.5	1003.7	999.8
7.5°	990.2	991.5	994.7	999.2	997.2
10°	983.1	983.7	987.6	990.8	986.9
12.5°	971.5	973.4	977.9	980.5	979.2
15°	957.3	959.3	965.1	970.9	970.9
17.5°	940.6	943.2	950.3	958.0	958.6
20°	921.9	923.9	932.9	940.6	940.6
22.5°	900.7	903.3	912.3	920.6	921.9
25°	878.1	880.1	890.4	901.3	901.3
27.5°	851.7	855.6	868.5	879.4	882.0
30°	826.0	829.2	843.4	856.9	858.8
32.5°	799.0	802.8	817.6	832.4	835.7
35°	770.0	773.8	789.9	806.0	809.9
37.5°	739.7	744.2	761.0	779.6	783.5
40°	708.2	713.3	731.4	751.3	755.2
42.5°	674.7	681.8	701.1	721.7	727.5
45°	641.2	648.3	668.3	691.4	697.9
47.5°	605.8	614.2	634.8	659.3	666.3
50°	570.4	578.8	600.0	626.4	634.1
52.5°	534.4	542.7	564.6	592.3	600.7
55°	495.7	504.7	527.9	557.5	566.5
57.5°	455.8	467.4	491.9	522.1	531.1
60°	415.9	427.5	455.2	484.8	495.1
62.5°	376.6	387.6	415.9	447.4	458.4
65°	335.4	347.0	377.3	408.8	419.8
67.5°	294.9	306.4	336.7	369.5	381.1
70°	253.0	265.9	296.8	329.6	341.2
72.5°	211.2	224.7	256.2	289.7	300.7
75°	170.6	184.1	215.7	249.8	260.7
77.5°	130.7	145.5	176.4	211.2	221.5
80°	94.6	108.8	137.8	171.9	183.5
82.5°	60.5	72.7	101.7	133.9	142.3
85°	30.9	42.5	62.4	79.2	80.5
87.5°	9.7	13.5	20.6	30.9	31.5
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	15.46	17.12	15.83	17.44	17.75	16.29	17.95	16.66	18.27	18.58
	3H	17.22	18.72	17.59	19.05	19.41	18.41	19.91	18.78	20.24	20.60
	4H	17.84	19.26	18.23	19.60	19.98	19.30	20.72	19.69	21.07	21.44
	6H	18.25	19.57	18.66	19.93	20.32	20.08	21.40	20.49	21.76	22.15
	8H	18.35	19.62	18.78	20.00	20.40	20.40	21.66	20.82	22.05	22.45
	12H	18.41	19.62	18.83	20.00	20.43	20.61	21.82	21.04	22.20	22.63
4H	2H	16.23	17.66	16.63	18.00	18.38	16.88	18.30	17.28	18.65	19.02
	3H	18.21	19.41	18.62	19.80	20.20	19.23	20.43	19.64	20.83	21.23
	4H	18.95	20.03	19.38	20.45	20.88	20.29	21.37	20.72	21.78	22.22
	6H	19.48	20.43	19.93	20.87	21.32	21.24	22.19	21.69	22.63	23.08
	8H	19.62	20.51	20.08	20.96	21.42	21.64	22.53	22.09	22.97	23.43
	12H	19.71	20.51	20.18	20.98	21.45	21.91	22.72	22.39	23.19	23.66
8H	4H	19.41	20.30	19.86	20.74	21.20	20.58	21.47	21.03	21.91	22.37
	6H	20.07	20.81	20.56	21.30	21.77	21.69	22.43	22.18	22.92	23.39
	8H	20.28	20.95	20.78	21.45	21.94	22.20	22.87	22.71	23.37	23.86
	12H	20.42	21.01	20.92	21.50	22.06	22.58	23.18	23.09	23.67	24.22
12H	4H	19.50	20.30	19.97	20.77	21.24	20.60	21.40	21.08	21.88	22.35
	6H	20.20	20.87	20.71	21.37	21.86	21.73	22.40	22.24	22.91	23.39
	8H	20.48	21.07	20.98	21.56	22.12	22.31	22.90	22.82	23.39	23.95

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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