

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: P1586317

Luminaire Tested: 22CZSP-31-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586317
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-772-10)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-31-L840
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

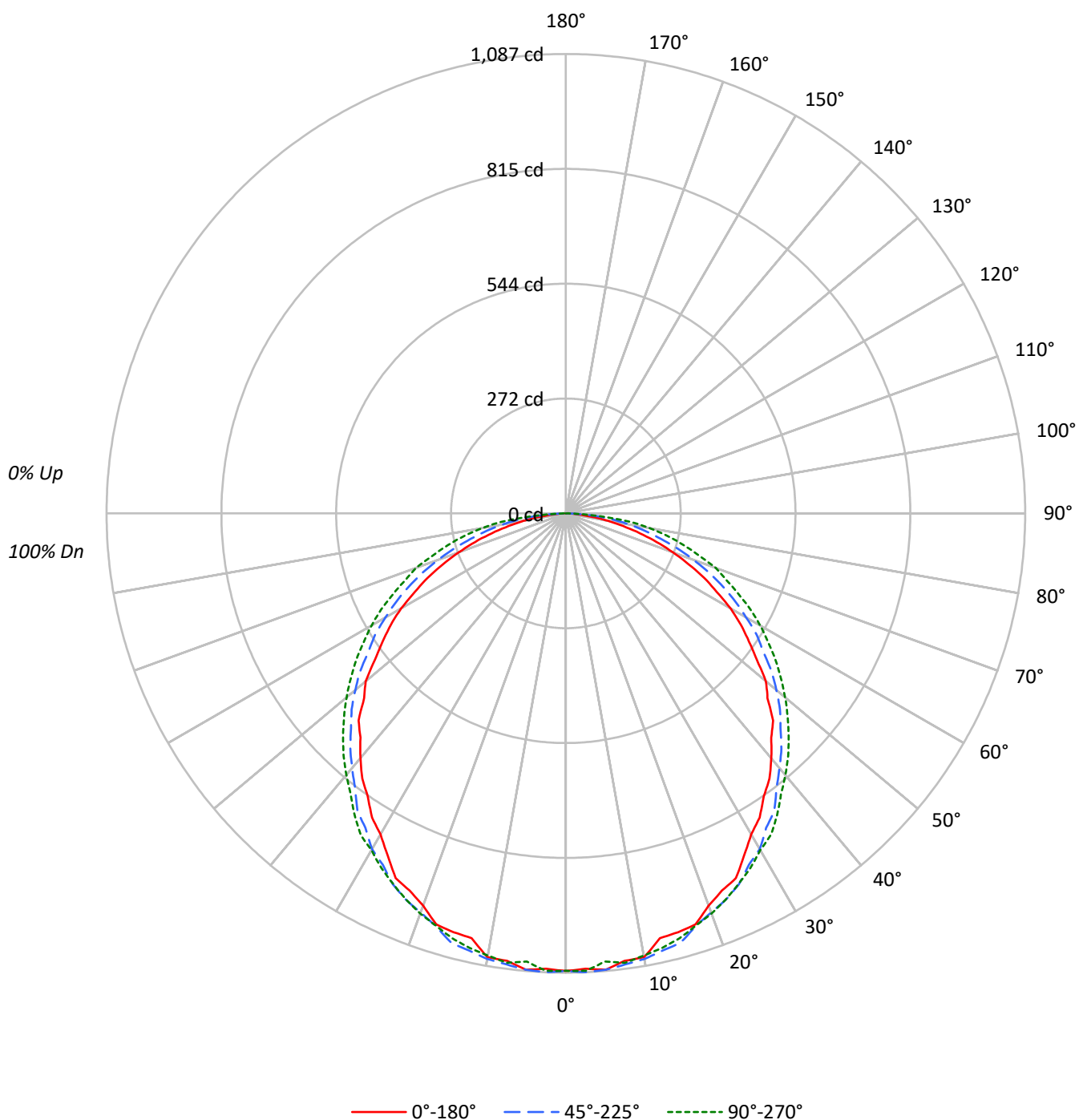
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3161.0 lumens
Efficiency: N/A
Efficacy: 150.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 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			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	31	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°	3390	3390	3390
5°	3407	3407	3346
10°	3391	3404	3378
15°	3326	3407	3374
20°	3291	3349	3358
25°	3291	3347	3342
30°	3171	3317	3327
35°	3123	3286	3332
40°	3092	3216	3304
45°	3072	3182	3302
50°	3012	3169	3300
55°	2889	3110	3308
60°	2820	3086	3327
65°	2677	3042	3336
70°	2468	2944	3450
75°	2193	2814	3483
80°	1823	2759	3610
85°	1114	2472	3050

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3735 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	3.2
10°-20°	293.4	9.3
20°-30°	442.5	14.0
30°-40°	531.5	16.8
40°-50°	554.8	17.6
50°-60°	510.8	16.2
60°-70°	403.4	12.8
70°-80°	248.4	7.9
80°-90°	73.7	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°	838.5	26.5
0°-40°	1370.0	43.3
0°-60°	2435.6	77.1
0°-90°	3161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1083	1083	1083	1083	1083	
5°	1084	1073	1084	1085	1064	102
15°	1026	1040	1051	1046	1041	290
25°	952	959	969	965	967	434
35°	817	832	860	864	872	513
45°	694	699	719	734	746	530
55°	529	543	570	595	606	475
65°	361	374	410	440	450	356
75°	181	199	233	270	288	192
85°	31	44	69	82	85	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.6	1082.6	1082.6	1082.6	1082.6
2.5°	1078.6	1090.1	1086.7	1088.7	1083.3
5°	1084.0	1073.2	1084.0	1085.3	1064.4
7.5°	1067.8	1069.2	1076.6	1078.6	1072.5
10°	1066.5	1070.5	1070.5	1063.8	1062.4
12.5°	1029.4	1049.6	1059.7	1064.4	1053.0
15°	1026.0	1040.2	1051.0	1046.2	1040.8
17.5°	1019.9	1015.9	1023.3	1028.7	1022.6
20°	987.6	994.3	1005.1	1006.5	1007.8
22.5°	966.0	968.0	989.6	991.6	988.9
25°	952.5	959.3	968.7	964.7	967.4
27.5°	912.8	928.9	937.7	945.8	945.8
30°	877.0	895.9	917.5	920.2	920.2
32.5°	853.4	866.2	882.4	887.8	902.7
35°	817.0	831.9	859.5	863.6	871.6
37.5°	791.4	806.3	819.1	833.2	836.6
40°	756.4	771.9	786.7	802.9	808.3
42.5°	719.3	735.5	755.0	771.9	778.6
45°	693.7	699.1	718.6	734.1	745.6
47.5°	647.2	662.7	687.6	707.2	711.9
50°	618.2	624.2	650.5	676.8	677.5
52.5°	569.6	587.8	613.5	638.4	641.8
55°	529.2	543.3	569.6	595.3	606.0
57.5°	491.4	502.2	535.9	561.5	567.6
60°	450.3	461.8	492.8	522.4	531.2
62.5°	402.5	418.6	452.3	480.6	492.8
65°	361.3	374.1	410.5	440.2	450.3
67.5°	314.8	332.3	366.7	399.8	410.5
70°	269.6	287.2	321.6	355.9	376.8
72.5°	225.2	243.4	277.7	317.5	329.0
75°	181.3	198.9	232.6	269.6	287.9
77.5°	138.2	157.1	191.5	228.5	246.1
80°	101.1	115.9	153.0	185.4	200.2
82.5°	62.7	78.2	112.6	142.9	155.7
85°	31.0	44.5	68.8	81.6	84.9
87.5°	9.4	14.2	21.6	28.3	32.4
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	15.71	17.37	16.07	17.68	18.00	16.53	18.19	16.90	18.51	18.82
	3H	17.46	18.97	17.84	19.30	19.65	18.68	20.19	19.05	20.51	20.87
	4H	18.07	19.50	18.47	19.84	20.22	19.59	21.01	19.99	21.36	21.74
	6H	18.48	19.80	18.89	20.16	20.55	20.39	21.71	20.80	22.08	22.47
	8H	18.58	19.84	19.00	20.23	20.63	20.72	21.98	21.14	22.37	22.77
	12H	18.63	19.84	19.06	20.22	20.65	20.92	22.13	21.35	22.51	22.94
4H	2H	16.50	17.92	16.90	18.27	18.64	17.14	18.56	17.53	18.91	19.28
	3H	18.47	19.67	18.88	20.07	20.47	19.52	20.71	19.93	21.11	21.51
	4H	19.20	20.29	19.64	20.70	21.14	20.58	21.67	21.01	22.08	22.52
	6H	19.72	20.68	20.18	21.12	21.57	21.55	22.50	22.00	22.94	23.40
	8H	19.86	20.76	20.32	21.20	21.66	21.95	22.84	22.41	23.28	23.75
	12H	19.94	20.74	20.42	21.22	21.69	22.22	23.02	22.69	23.49	23.96
8H	4H	19.67	20.56	20.13	21.00	21.47	20.87	21.76	21.33	22.21	22.67
	6H	20.33	21.07	20.82	21.56	22.03	22.00	22.74	22.49	23.23	23.70
	8H	20.53	21.20	21.04	21.70	22.19	22.51	23.17	23.01	23.68	24.16
	12H	20.66	21.25	21.16	21.74	22.30	22.87	23.47	23.38	23.96	24.51
12H	4H	19.76	20.57	20.24	21.04	21.51	20.90	21.70	21.38	22.18	22.64
	6H	20.46	21.13	20.97	21.64	22.12	22.05	22.72	22.55	23.22	23.71
	8H	20.74	21.33	21.24	21.82	22.38	22.62	23.21	23.13	23.70	24.26