

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: P1586320

Luminaire Tested: 22CZSP-31-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586320
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-L850-S
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 3000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

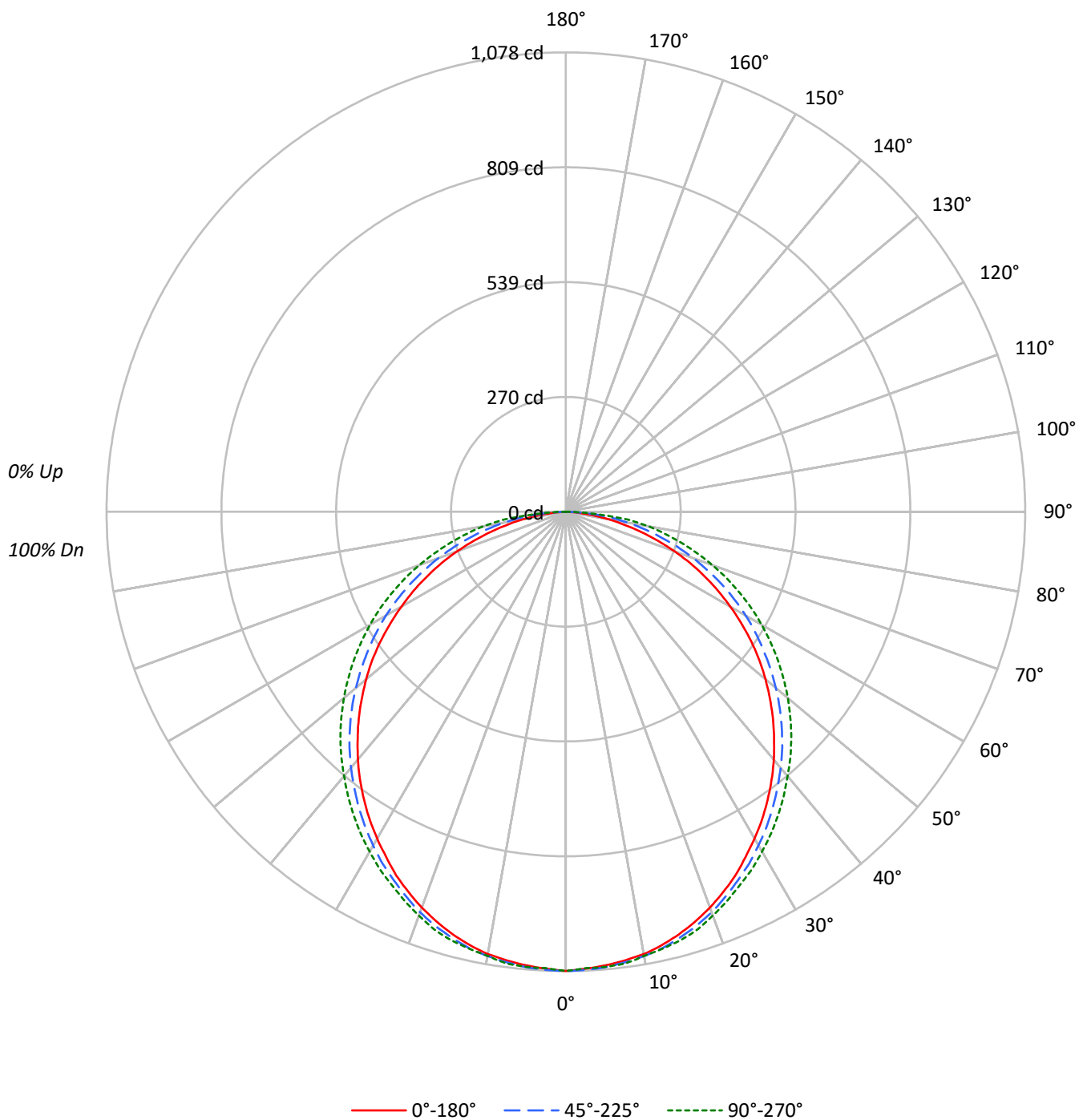
Lumens per Lamp: N/A
Luminaire Lumens: 3146.0 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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			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	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°	3374	3374	3374
5°	3359	3372	3370
10°	3352	3367	3365
15°	3328	3355	3375
20°	3294	3333	3361
25°	3253	3299	3339
30°	3202	3270	3330
35°	3156	3238	3320
40°	3104	3206	3310
45°	3045	3173	3314
50°	2979	3134	3313
55°	2902	3091	3317
60°	2793	3057	3325
65°	2665	2997	3335
70°	2484	2913	3350
75°	2213	2798	3383
80°	1830	2663	3547
85°	1189	2407	3101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3661 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	3.2
10°-20°	291.8	9.3
20°-30°	440.1	14.0
30°-40°	530.1	16.8
40°-50°	553.6	17.6
50°-60°	508.4	16.2
60°-70°	400.4	12.7
70°-80°	245.7	7.8
80°-90°	73.9	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°	833.8	26.5
0°-40°	1363.9	43.4
0°-60°	2426.0	77.1
0°-90°	3146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1069	1070	1073	1076	1072	102
15°	1026	1029	1035	1041	1041	289
25°	942	944	955	966	966	433
35°	826	830	847	864	868	516
45°	688	695	717	741	748	530
55°	532	541	566	598	608	475
65°	360	372	404	438	450	356
75°	183	197	231	268	280	194
85°	33	46	67	85	86	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1077.6	1077.6	1077.6	1077.6	1077.6
2.5°	1073.4	1075.5	1076.2	1076.9	1072.1
5°	1068.6	1070.0	1072.8	1076.2	1072.1
7.5°	1061.7	1063.1	1066.5	1071.4	1069.3
10°	1054.1	1054.8	1059.0	1062.4	1058.3
12.5°	1041.7	1043.8	1048.6	1051.4	1050.0
15°	1026.5	1028.6	1034.8	1041.0	1041.0
17.5°	1008.6	1011.3	1018.9	1027.2	1027.9
20°	988.5	990.6	1000.3	1008.6	1008.6
22.5°	965.8	968.5	978.2	987.2	988.5
25°	941.6	943.7	954.7	966.4	966.4
27.5°	913.3	917.4	931.2	943.0	945.7
30°	885.7	889.1	904.3	918.8	920.9
32.5°	856.7	860.8	876.7	892.6	896.0
35°	825.6	829.8	847.0	864.3	868.4
37.5°	793.2	798.0	816.0	836.0	840.1
40°	759.4	764.9	784.2	805.6	809.7
42.5°	723.5	731.0	751.8	773.8	780.1
45°	687.6	695.2	716.6	741.4	748.3
47.5°	649.6	658.6	680.7	706.9	714.5
50°	611.6	620.6	643.4	671.7	680.0
52.5°	573.0	581.9	605.4	635.1	644.1
55°	531.5	541.2	566.1	597.8	607.5
57.5°	488.7	501.2	527.4	559.8	569.5
60°	445.9	458.4	488.1	519.8	530.9
62.5°	403.8	415.6	445.9	479.8	491.5
65°	359.7	372.1	404.5	438.4	450.1
67.5°	316.2	328.6	361.0	396.2	408.7
70°	271.3	285.1	318.2	353.4	365.9
72.5°	226.4	240.9	274.7	310.6	322.4
75°	182.9	197.4	231.3	267.8	279.6
77.5°	140.1	156.0	189.1	226.4	237.5
80°	101.5	116.7	147.7	184.3	196.7
82.5°	64.9	78.0	109.1	143.6	152.6
85°	33.1	45.6	67.0	84.9	86.3
87.5°	10.4	14.5	22.1	33.1	33.8
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	15.70	17.37	16.07	17.68	17.99	16.53	18.20	16.90	18.51	18.82
	3H	17.46	18.97	17.84	19.29	19.65	18.65	20.16	19.03	20.48	20.84
	4H	18.08	19.50	18.48	19.85	20.22	19.54	20.96	19.94	21.31	21.68
	6H	18.49	19.81	18.90	20.17	20.56	20.32	21.64	20.73	22.00	22.39
	8H	18.60	19.86	19.02	20.25	20.65	20.64	21.90	21.06	22.29	22.69
	12H	18.65	19.86	19.08	20.24	20.67	20.85	22.06	21.28	22.44	22.87
4H	2H	16.48	17.90	16.87	18.24	18.62	17.12	18.54	17.52	18.89	19.27
	3H	18.45	19.65	18.86	20.05	20.45	19.48	20.67	19.89	21.07	21.47
	4H	19.19	20.28	19.62	20.69	21.12	20.53	21.61	20.96	22.03	22.46
	6H	19.72	20.67	20.17	21.11	21.56	21.48	22.43	21.93	22.87	23.33
	8H	19.86	20.76	20.32	21.20	21.66	21.88	22.77	22.34	23.21	23.68
	12H	19.95	20.75	20.43	21.23	21.69	22.15	22.96	22.63	23.43	23.90
8H	4H	19.65	20.54	20.11	20.98	21.45	20.82	21.71	21.28	22.15	22.62
	6H	20.31	21.05	20.80	21.54	22.01	21.93	22.67	22.42	23.16	23.63
	8H	20.52	21.19	21.03	21.69	22.18	22.44	23.11	22.95	23.61	24.10
	12H	20.66	21.25	21.16	21.74	22.30	22.83	23.42	23.33	23.91	24.47
12H	4H	19.74	20.54	20.22	21.02	21.48	20.84	21.65	21.32	22.12	22.59
	6H	20.44	21.11	20.95	21.62	22.10	21.98	22.65	22.48	23.15	23.64
	8H	20.72	21.31	21.22	21.80	22.36	22.55	23.15	23.06	23.64	24.19