

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: P1587600

Luminaire Tested: 22CZSP-SB-31-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587600
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-L850-S
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 3000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

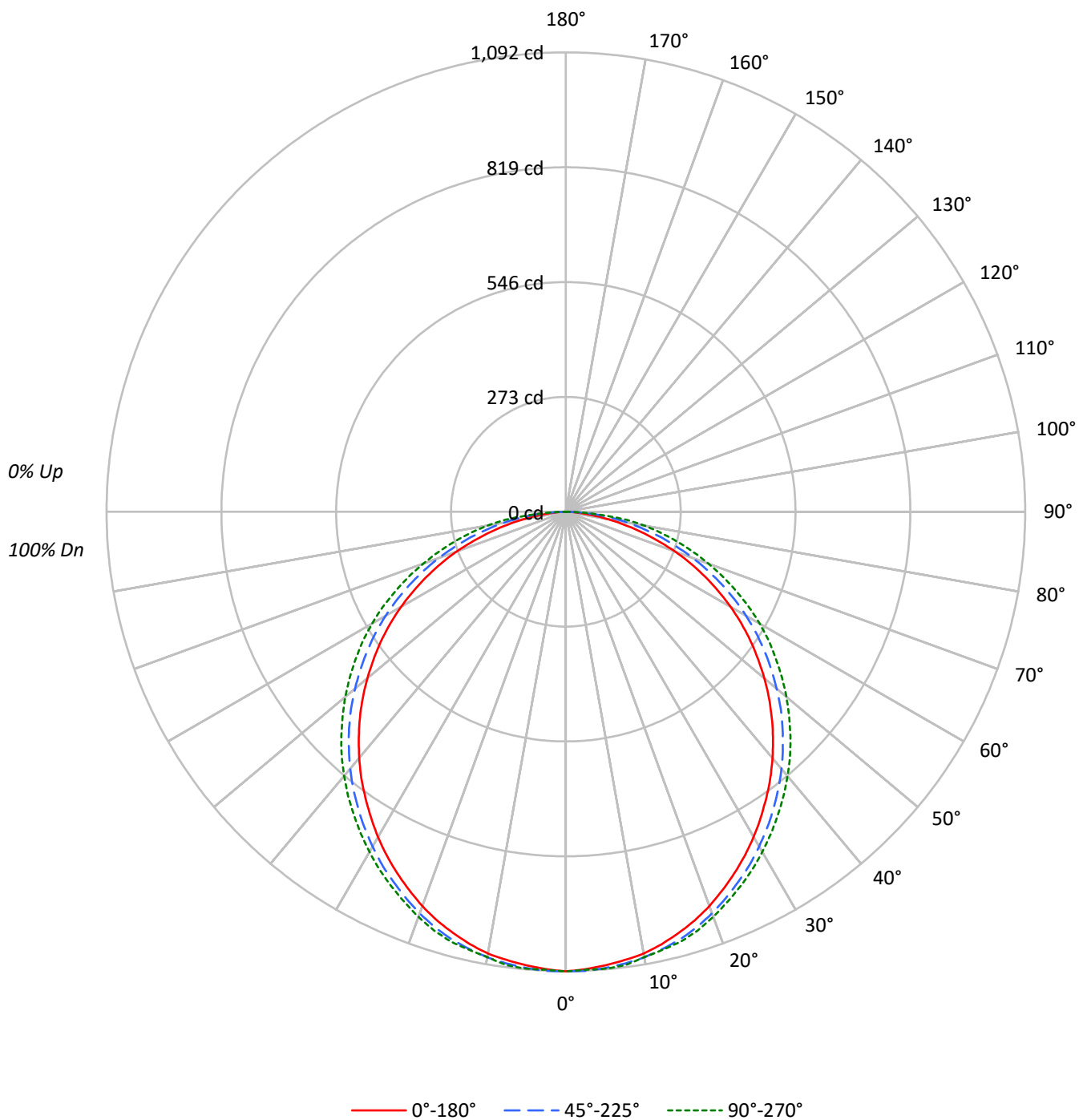
Lumens per Lamp: N/A
Luminaire Lumens: 3178.0 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	3421	3421	3421
5°	3402	3421	3427
10°	3391	3419	3417
15°	3360	3409	3429
20°	3324	3385	3415
25°	3276	3352	3394
30°	3228	3322	3377
35°	3175	3290	3361
40°	3124	3261	3351
45°	3067	3227	3343
50°	3001	3187	3334
55°	2926	3146	3329
60°	2834	3100	3331
65°	2705	3034	3313
70°	2529	2942	3305
75°	2242	2829	3316
80°	1825	2687	3415
85°	1178	2479	2946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3462 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	3.3
10°-20°	296.1	9.3
20°-30°	446.4	14.0
30°-40°	537.1	16.9
40°-50°	560.3	17.6
50°-60°	513.5	16.2
60°-70°	403.3	12.7
70°-80°	245.4	7.7
80°-90°	72.6	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°	845.8	26.6
0°-40°	1382.9	43.5
0°-60°	2456.7	77.3
0°-90°	3178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3178.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1082	1089	1088	1087	1090	103
15°	1036	1047	1052	1053	1058	292
25°	948	961	970	976	982	437
35°	831	844	861	873	879	520
45°	692	707	729	746	755	534
55°	536	550	576	600	610	479
65°	365	379	410	437	447	361
75°	185	202	234	262	274	196
85°	33	46	69	77	82	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1092.5	1092.5	1092.5	1092.5	1092.5
2.5°	1088.4	1093.9	1092.5	1087.7	1089.8
5°	1082.2	1089.1	1088.4	1087.0	1090.4
7.5°	1074.7	1082.2	1082.9	1082.9	1087.0
10°	1066.5	1074.0	1075.4	1073.3	1074.7
12.5°	1052.8	1061.7	1064.5	1064.5	1066.5
15°	1036.4	1046.7	1051.5	1052.8	1057.6
17.5°	1018.7	1029.6	1035.7	1039.2	1043.3
20°	997.5	1009.1	1015.9	1020.0	1024.8
22.5°	973.5	986.5	994.0	998.1	1003.6
25°	948.2	961.2	970.1	976.3	982.4
27.5°	921.6	933.9	946.2	953.7	959.2
30°	892.9	905.8	918.8	928.4	933.9
32.5°	862.1	875.8	890.8	901.1	907.2
35°	830.6	843.6	860.7	873.0	879.2
37.5°	798.5	812.2	830.0	843.0	850.5
40°	764.3	778.7	797.8	812.2	819.7
42.5°	728.8	742.5	763.6	780.1	788.9
45°	692.5	706.9	728.8	745.9	754.8
47.5°	654.9	668.6	692.5	712.4	719.9
50°	616.0	629.0	654.3	675.5	684.3
52.5°	576.3	590.0	615.3	637.9	647.4
55°	536.0	549.7	576.3	599.6	609.8
57.5°	495.0	508.6	536.0	559.9	572.2
60°	452.6	466.3	495.0	519.6	531.9
62.5°	408.8	423.2	452.6	477.9	490.9
65°	365.1	378.7	409.5	436.9	447.1
67.5°	321.3	335.0	365.1	392.4	404.7
70°	276.2	291.9	321.3	350.0	361.0
72.5°	229.0	246.8	276.2	306.3	317.2
75°	185.3	202.4	233.8	261.8	274.1
77.5°	142.2	160.7	190.1	218.8	231.1
80°	101.2	119.0	149.0	176.4	189.4
82.5°	64.3	80.0	110.1	134.7	144.3
85°	32.8	46.5	69.0	77.3	82.0
87.5°	9.6	16.4	24.6	30.8	34.2
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	15.77	17.43	16.14	17.75	18.06	16.51	18.17	16.87	18.48	18.80
	3H	17.54	19.05	17.92	19.37	19.73	18.59	20.09	18.96	20.42	20.78
	4H	18.16	19.58	18.56	19.93	20.30	19.45	20.87	19.85	21.22	21.59
	6H	18.57	19.89	18.98	20.25	20.64	20.20	21.51	20.61	21.88	22.27
	8H	18.67	19.93	19.10	20.32	20.72	20.49	21.75	20.92	22.14	22.54
	12H	18.72	19.93	19.15	20.31	20.74	20.69	21.89	21.11	22.27	22.70
4H	2H	16.54	17.96	16.94	18.31	18.68	17.11	18.53	17.51	18.88	19.25
	3H	18.53	19.73	18.94	20.12	20.52	19.43	20.62	19.83	21.02	21.42
	4H	19.27	20.36	19.71	20.77	21.21	20.44	21.53	20.87	21.94	22.37
	6H	19.80	20.75	20.26	21.19	21.65	21.35	22.30	21.80	22.74	23.19
	8H	19.95	20.83	20.40	21.28	21.74	21.72	22.61	22.18	23.05	23.51
	12H	20.03	20.83	20.51	21.30	21.77	21.97	22.77	22.45	23.25	23.71
8H	4H	19.72	20.61	20.18	21.05	21.52	20.74	21.63	21.20	22.07	22.54
	6H	20.38	21.13	20.88	21.61	22.09	21.80	22.54	22.29	23.03	23.50
	8H	20.59	21.26	21.10	21.76	22.25	22.27	22.94	22.78	23.44	23.93
	12H	20.73	21.32	21.24	21.81	22.37	22.62	23.21	23.13	23.70	24.26
12H	4H	19.80	20.60	20.28	21.08	21.54	20.77	21.57	21.25	22.04	22.51
	6H	20.51	21.17	21.01	21.68	22.16	21.85	22.52	22.36	23.02	23.51
	8H	20.78	21.37	21.29	21.86	22.42	22.39	22.98	22.89	23.47	24.03

END OF REPORT