

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: P1587592

Luminaire Tested: 22CZSP-SB-31-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587592
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-L830-S
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 3000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

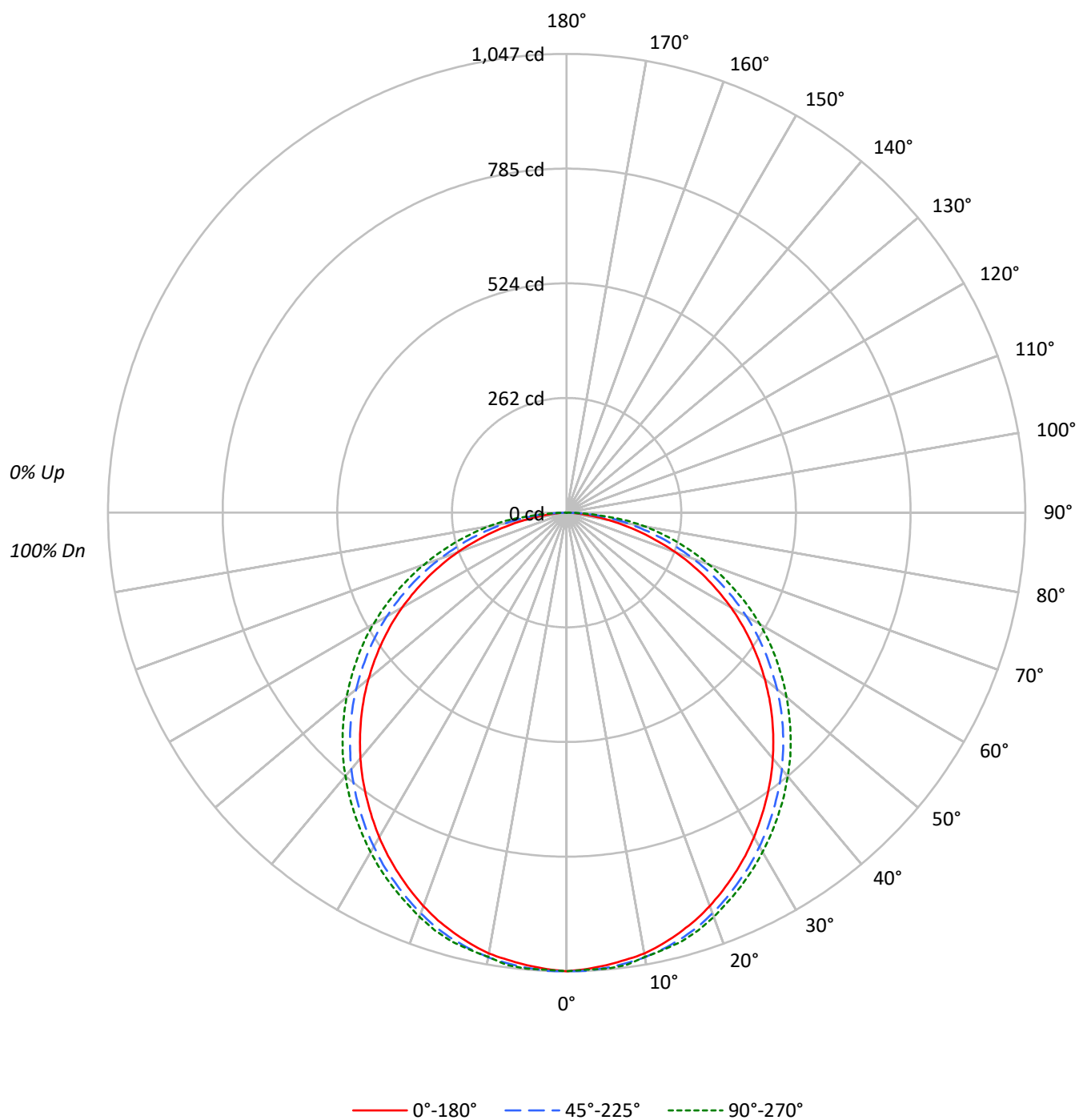
Lumens per Lamp: N/A
Luminaire Lumens: 3045.0 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	3278	3278	3278
5°	3259	3278	3284
10°	3249	3276	3274
15°	3219	3266	3285
20°	3185	3244	3272
25°	3139	3211	3252
30°	3093	3183	3235
35°	3042	3153	3220
40°	2993	3125	3210
45°	2939	3092	3203
50°	2875	3054	3194
55°	2804	3015	3190
60°	2715	2970	3191
65°	2592	2907	3174
70°	2423	2819	3167
75°	2147	2710	3178
80°	1747	2575	3271
85°	1128	2378	2824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3315 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.3
10°-20°	283.7	9.3
20°-30°	427.7	14.0
30°-40°	514.6	16.9
40°-50°	536.8	17.6
50°-60°	492.0	16.2
60°-70°	386.4	12.7
70°-80°	235.2	7.7
80°-90°	69.6	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°	810.4	26.6
0°-40°	1325.1	43.5
0°-60°	2353.9	77.3
0°-90°	3045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1037	1044	1043	1042	1045	99
15°	993	1003	1008	1009	1013	280
25°	909	921	930	935	941	419
35°	796	808	825	836	842	498
45°	664	677	698	715	723	512
55°	514	527	552	574	584	459
65°	350	363	392	419	428	346
75°	178	194	224	251	263	188
85°	31	44	66	74	79	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1046.8	1046.8	1046.8	1046.8	1046.8
2.5°	1042.8	1048.1	1046.8	1042.2	1044.1
5°	1036.9	1043.5	1042.8	1041.5	1044.8
7.5°	1029.7	1036.9	1037.6	1037.6	1041.5
10°	1021.9	1029.1	1030.4	1028.4	1029.7
12.5°	1008.8	1017.3	1019.9	1019.9	1021.9
15°	993.1	1002.9	1007.5	1008.8	1013.4
17.5°	976.0	986.5	992.4	995.7	999.6
20°	955.7	966.8	973.4	977.3	981.9
22.5°	932.8	945.2	952.4	956.4	961.6
25°	908.6	921.0	929.5	935.4	941.3
27.5°	883.0	894.8	906.6	913.8	919.0
30°	855.5	867.9	880.4	889.6	894.8
32.5°	826.0	839.1	853.5	863.4	869.2
35°	795.9	808.3	824.7	836.5	842.4
37.5°	765.1	778.2	795.2	807.7	814.9
40°	732.3	746.1	764.4	778.2	785.4
42.5°	698.3	711.4	731.7	747.4	755.9
45°	663.6	677.3	698.3	714.7	723.2
47.5°	627.5	640.6	663.6	682.6	689.8
50°	590.2	602.6	626.9	647.2	655.7
52.5°	552.2	565.3	589.5	611.2	620.3
55°	513.6	526.7	552.2	574.5	584.3
57.5°	474.3	487.4	513.6	536.5	548.3
60°	433.6	446.7	474.3	497.8	509.6
62.5°	391.7	405.5	433.6	457.9	470.3
65°	349.8	362.9	392.4	418.6	428.4
67.5°	307.9	321.0	349.8	376.0	387.8
70°	264.6	279.7	307.9	335.4	345.9
72.5°	219.4	236.5	264.6	293.5	303.9
75°	177.5	193.9	224.0	250.9	262.7
77.5°	136.2	153.9	182.1	209.6	221.4
80°	96.9	114.0	142.8	169.0	181.4
82.5°	61.6	76.6	105.5	129.0	138.2
85°	31.4	44.5	66.2	74.0	78.6
87.5°	9.2	15.7	23.6	29.5	32.8
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	15.62	17.28	15.99	17.60	17.91	16.36	18.02	16.72	18.33	18.65
	3H	17.39	18.90	17.77	19.22	19.58	18.44	19.94	18.82	20.27	20.63
	4H	18.01	19.43	18.41	19.78	20.15	19.30	20.72	19.70	21.07	21.45
	6H	18.42	19.74	18.83	20.10	20.49	20.05	21.37	20.46	21.73	22.12
	8H	18.52	19.78	18.95	20.17	20.57	20.34	21.60	20.77	21.99	22.39
	12H	18.57	19.78	19.00	20.16	20.59	20.54	21.74	20.97	22.13	22.55
4H	2H	16.39	17.81	16.79	18.16	18.53	16.96	18.38	17.36	18.73	19.11
	3H	18.38	19.58	18.79	19.98	20.38	19.28	20.47	19.69	20.87	21.27
	4H	19.13	20.21	19.56	20.62	21.06	20.30	21.38	20.73	21.79	22.23
	6H	19.65	20.60	20.11	21.04	21.50	21.20	22.15	21.65	22.59	23.04
	8H	19.80	20.69	20.26	21.13	21.59	21.57	22.46	22.03	22.90	23.36
	12H	19.88	20.68	20.36	21.15	21.62	21.82	22.62	22.30	23.10	23.57
8H	4H	19.57	20.46	20.03	20.90	21.37	20.59	21.48	21.05	21.92	22.39
	6H	20.24	20.98	20.73	21.46	21.94	21.65	22.39	22.14	22.88	23.35
	8H	20.44	21.11	20.95	21.61	22.10	22.12	22.79	22.63	23.29	23.78
	12H	20.58	21.17	21.09	21.66	22.22	22.47	23.06	22.98	23.55	24.11
12H	4H	19.65	20.45	20.13	20.93	21.40	20.62	21.42	21.10	21.89	22.36
	6H	20.36	21.03	20.87	21.53	22.02	21.70	22.37	22.21	22.87	23.36
	8H	20.64	21.23	21.14	21.71	22.27	22.24	22.83	22.74	23.32	23.88