

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: P1587598

Luminaire Tested: 22CZSP-SB-31-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587598
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-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

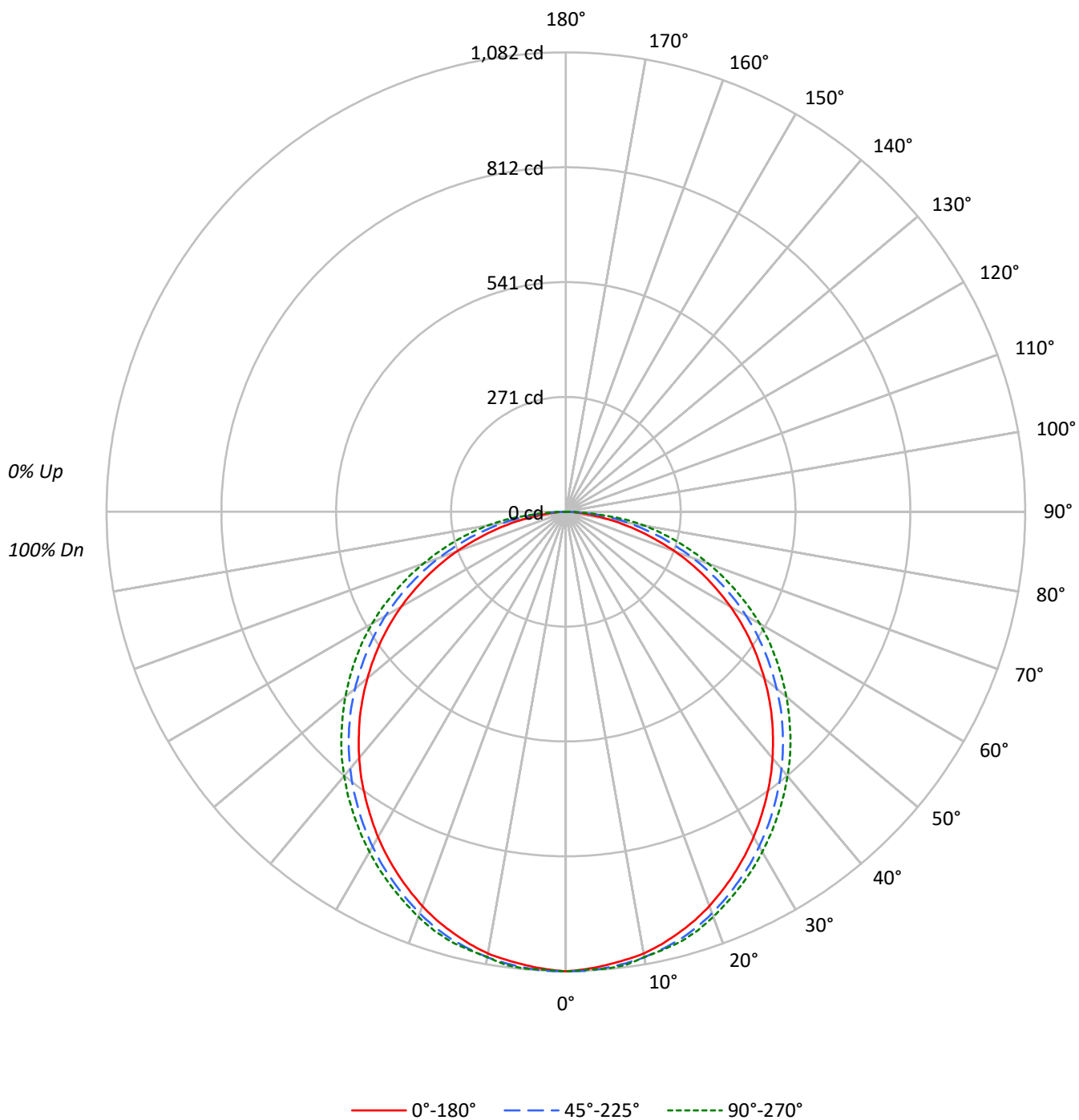
Lumens per Lamp: N/A
Luminaire Lumens: 3149.0 lumens
Efficiency: N/A
Efficacy: 150.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1587598

CATALOG NUMBER: 22CZSP-SB-31-L845-S

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°	3390	3390	3390
5°	3371	3390	3396
10°	3360	3388	3386
15°	3329	3378	3397
20°	3294	3354	3384
25°	3246	3321	3363
30°	3199	3292	3346
35°	3146	3260	3330
40°	3096	3231	3320
45°	3039	3198	3312
50°	2974	3158	3303
55°	2899	3118	3299
60°	2809	3072	3300
65°	2680	3007	3282
70°	2506	2915	3275
75°	2221	2803	3286
80°	1809	2663	3383
85°	1168	2457	2921

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3428 cd/sqm

TEST NUMBER: P1587598

CATALOG NUMBER: 22CZSP-SB-31-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	3.3
10°-20°	293.4	9.3
20°-30°	442.3	14.0
30°-40°	532.2	16.9
40°-50°	555.1	17.6
50°-60°	508.8	16.2
60°-70°	399.6	12.7
70°-80°	243.2	7.7
80°-90°	72.0	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°	838.1	26.6
0°-40°	1370.3	43.5
0°-60°	2434.3	77.3
0°-90°	3149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1072	1079	1078	1077	1080	102
15°	1027	1037	1042	1043	1048	290
25°	940	952	961	967	974	433
35°	823	836	853	865	871	515
45°	686	700	722	739	748	529
55°	531	545	571	594	604	475
65°	362	375	406	433	443	358
75°	184	200	232	260	272	195
85°	32	46	68	76	81	42
90°	0	0	0	0	0	

TEST NUMBER: P1587598

CATALOG NUMBER: 22CZSP-SB-31-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.5	1082.5	1082.5	1082.5	1082.5
2.5°	1078.5	1083.9	1082.5	1077.8	1079.8
5°	1072.4	1079.1	1078.5	1077.1	1080.5
7.5°	1064.9	1072.4	1073.0	1073.0	1077.1
10°	1056.8	1064.2	1065.6	1063.5	1064.9
12.5°	1043.2	1052.0	1054.7	1054.7	1056.8
15°	1027.0	1037.1	1041.9	1043.2	1048.0
17.5°	1009.4	1020.2	1026.3	1029.7	1033.7
20°	988.4	999.9	1006.6	1010.7	1015.5
22.5°	964.6	977.5	985.0	989.0	994.5
25°	939.6	952.5	961.3	967.4	973.5
27.5°	913.2	925.4	937.5	945.0	950.4
30°	884.7	897.6	910.5	919.9	925.4
32.5°	854.2	867.8	882.7	892.8	898.9
35°	823.1	835.9	852.9	865.1	871.2
37.5°	791.2	804.8	822.4	835.3	842.7
40°	757.4	771.6	790.5	804.8	812.2
42.5°	722.1	735.7	756.7	772.9	781.7
45°	686.2	700.5	722.1	739.1	747.9
47.5°	649.0	662.5	686.2	705.9	713.3
50°	610.4	623.2	648.3	669.3	678.1
52.5°	571.1	584.6	609.7	632.0	641.5
55°	531.1	544.6	571.1	594.1	604.3
57.5°	490.5	504.0	531.1	554.8	567.0
60°	448.5	462.0	490.5	514.8	527.0
62.5°	405.1	419.3	448.5	473.5	486.4
65°	361.7	375.3	405.8	432.9	443.0
67.5°	318.4	331.9	361.7	388.8	401.0
70°	273.7	289.3	318.4	346.8	357.7
72.5°	226.9	244.5	273.7	303.5	314.3
75°	183.6	200.5	231.7	259.5	271.6
77.5°	140.9	159.2	188.3	216.8	229.0
80°	100.3	117.9	147.7	174.8	187.6
82.5°	63.7	79.3	109.1	133.5	142.9
85°	32.5	46.1	68.4	76.5	81.3
87.5°	9.5	16.3	24.4	30.5	33.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1587598

CATALOG NUMBER: 22CZSP-SB-31-L845-S

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	15.74	17.40	16.11	17.72	18.03	16.48	18.14	16.84	18.45	18.76
	3H	17.51	19.01	17.89	19.34	19.70	18.55	20.06	18.93	20.39	20.75
	4H	18.13	19.55	18.53	19.90	20.27	19.42	20.84	19.82	21.19	21.56
	6H	18.54	19.86	18.95	20.22	20.61	20.16	21.48	20.58	21.85	22.24
	8H	18.64	19.90	19.06	20.29	20.69	20.46	21.72	20.88	22.11	22.51
	12H	18.69	19.90	19.12	20.28	20.71	20.65	21.86	21.08	22.24	22.67
4H	2H	16.51	17.93	16.91	18.28	18.65	17.08	18.50	17.48	18.85	19.22
	3H	18.50	19.70	18.91	20.09	20.49	19.39	20.59	19.80	20.99	21.38
	4H	19.24	20.33	19.67	20.74	21.17	20.41	21.50	20.84	21.91	22.34
	6H	19.77	20.72	20.22	21.16	21.61	21.32	22.27	21.77	22.71	23.16
	8H	19.91	20.80	20.37	21.24	21.71	21.68	22.57	22.14	23.02	23.48
	12H	19.99	20.80	20.47	21.27	21.74	21.94	22.74	22.42	23.21	23.68
8H	4H	19.69	20.58	20.15	21.02	21.48	20.71	21.60	21.17	22.04	22.50
	6H	20.35	21.09	20.84	21.58	22.05	21.77	22.51	22.26	23.00	23.47
	8H	20.56	21.23	21.07	21.73	22.22	22.24	22.91	22.75	23.41	23.89
	12H	20.70	21.29	21.20	21.78	22.34	22.59	23.18	23.10	23.67	24.23
12H	4H	19.77	20.57	20.25	21.04	21.51	20.74	21.54	21.21	22.01	22.48
	6H	20.48	21.14	20.98	21.65	22.13	21.82	22.49	22.33	22.99	23.48
	8H	20.75	21.34	21.26	21.83	22.39	22.36	22.95	22.86	23.43	23.99