

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: P1586552

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586552
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-A-31-L830-S
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 3000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

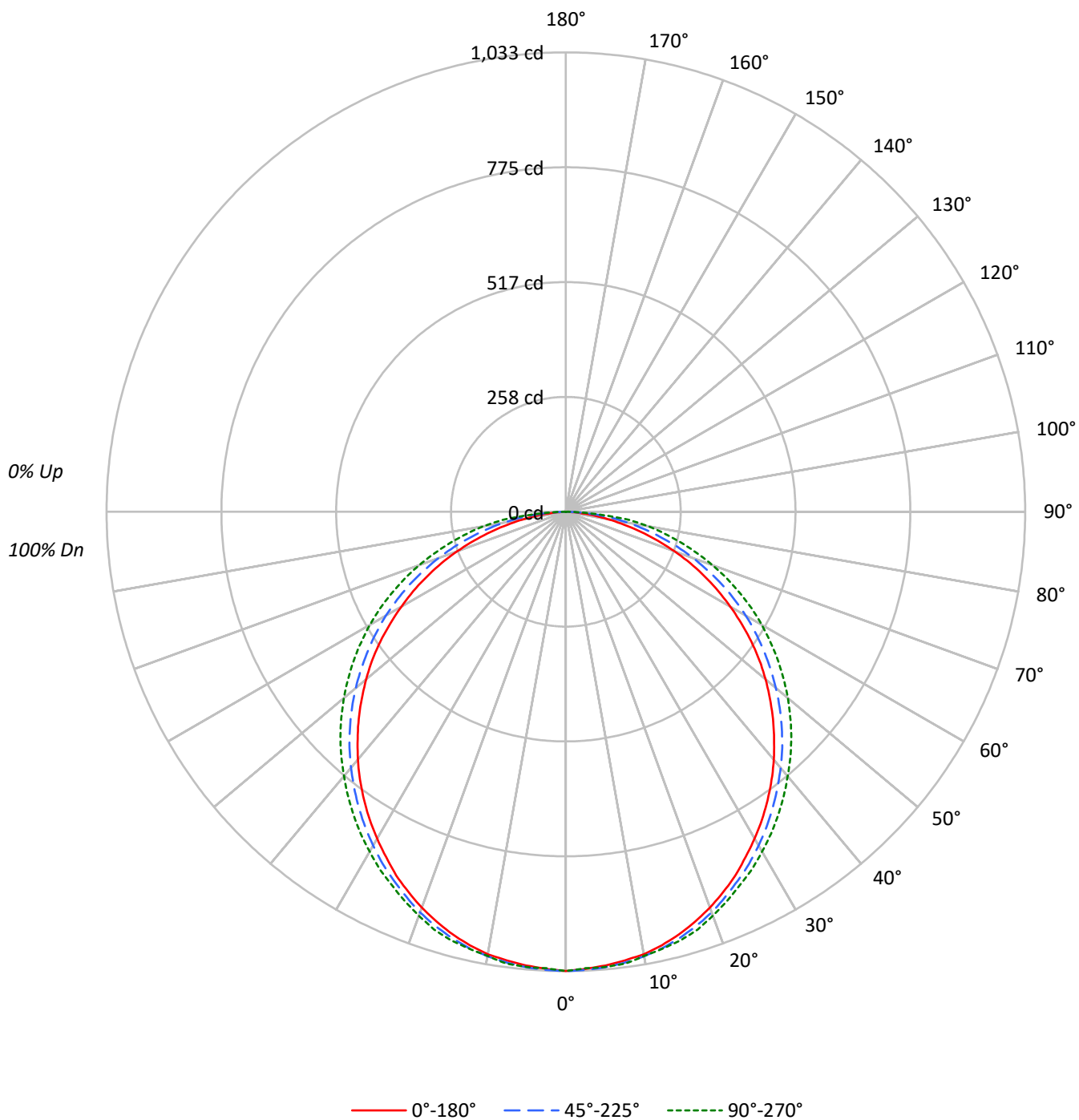
Lumens per Lamp: N/A
Luminaire Lumens: 3015.0 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586552

CATALOG NUMBER: 22CZSP-A-31-L830-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586552

CATALOG NUMBER: 22CZSP-A-31-L830-S

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°	3234	3234	3234
5°	3219	3232	3229
10°	3212	3227	3225
15°	3189	3215	3234
20°	3157	3194	3221
25°	3118	3161	3200
30°	3069	3134	3191
35°	3024	3103	3182
40°	2975	3072	3172
45°	2918	3041	3176
50°	2856	3004	3175
55°	2781	2962	3178
60°	2677	2929	3186
65°	2554	2873	3196
70°	2380	2792	3210
75°	2121	2681	3241
80°	1755	2553	3399
85°	1143	2307	2971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3507 cd/sqm

TEST NUMBER: P1586552

CATALOG NUMBER: 22CZSP-A-31-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.2
10°-20°	279.7	9.3
20°-30°	421.8	14.0
30°-40°	508.0	16.8
40°-50°	530.5	17.6
50°-60°	487.2	16.2
60°-70°	383.8	12.7
70°-80°	235.4	7.8
80°-90°	70.9	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°	799.1	26.5
0°-40°	1307.1	43.4
0°-60°	2324.9	77.1
0°-90°	3015.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3015.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1024	1025	1028	1031	1027	97
15°	984	986	992	998	998	277
25°	902	904	915	926	926	415
35°	791	795	812	828	832	495
45°	659	666	687	710	717	508
55°	509	519	542	573	582	455
65°	345	357	388	420	431	341
75°	175	189	222	257	268	186
85°	32	44	64	81	83	41
90°	0	0	0	0	0	

TEST NUMBER: P1586552

CATALOG NUMBER: 22CZSP-A-31-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1032.7	1032.7	1032.7	1032.7	1032.7
2.5°	1028.7	1030.7	1031.4	1032.1	1027.4
5°	1024.1	1025.4	1028.1	1031.4	1027.4
7.5°	1017.5	1018.8	1022.1	1026.8	1024.8
10°	1010.2	1010.9	1014.9	1018.2	1014.2
12.5°	998.3	1000.3	1004.9	1007.6	1006.3
15°	983.8	985.7	991.7	997.7	997.7
17.5°	966.6	969.2	976.5	984.4	985.1
20°	947.4	949.4	958.6	966.6	966.6
22.5°	925.5	928.2	937.5	946.1	947.4
25°	902.4	904.4	915.0	926.2	926.2
27.5°	875.3	879.2	892.5	903.7	906.4
30°	848.8	852.1	866.7	880.6	882.5
32.5°	821.0	825.0	840.2	855.4	858.7
35°	791.2	795.2	811.8	828.3	832.3
37.5°	760.1	764.8	782.0	801.2	805.1
40°	727.7	733.0	751.5	772.1	776.0
42.5°	693.3	700.6	720.5	741.6	747.6
45°	658.9	666.2	686.7	710.5	717.1
47.5°	622.5	631.1	652.3	677.5	684.7
50°	586.2	594.8	616.6	643.7	651.7
52.5°	549.1	557.7	580.2	608.6	617.2
55°	509.4	518.7	542.5	572.9	582.2
57.5°	468.4	480.3	505.4	536.5	545.8
60°	427.4	439.3	467.7	498.2	508.8
62.5°	387.0	398.3	427.4	459.8	471.0
65°	344.7	356.6	387.7	420.1	431.3
67.5°	303.0	314.9	346.0	379.7	391.7
70°	260.0	273.2	305.0	338.7	350.6
72.5°	217.0	230.9	263.3	297.7	309.0
75°	175.3	189.2	221.6	256.7	267.9
77.5°	134.3	149.5	181.3	217.0	227.6
80°	97.3	111.8	141.6	176.6	188.5
82.5°	62.2	74.8	104.5	137.6	146.2
85°	31.8	43.7	64.2	81.4	82.7
87.5°	9.9	13.9	21.2	31.8	32.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586552

CATALOG NUMBER: 22CZSP-A-31-L830-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	15.56	17.22	15.92	17.53	17.85	16.39	18.05	16.75	18.36	18.68
	3H	17.31	18.82	17.69	19.14	19.50	18.50	20.01	18.88	20.34	20.70
	4H	17.93	19.35	18.33	19.70	20.07	19.39	20.81	19.79	21.16	21.54
	6H	18.34	19.66	18.75	20.02	20.42	20.17	21.49	20.58	21.86	22.25
	8H	18.45	19.71	18.87	20.10	20.50	20.49	21.75	20.92	22.14	22.54
	12H	18.50	19.71	18.93	20.09	20.52	20.70	21.91	21.13	22.30	22.72
4H	2H	16.33	17.75	16.73	18.10	18.47	16.97	18.40	17.37	18.74	19.12
	3H	18.30	19.50	18.71	19.90	20.30	19.33	20.53	19.74	20.92	21.32
	4H	19.04	20.13	19.47	20.54	20.97	20.38	21.47	20.81	21.88	22.31
	6H	19.57	20.52	20.02	20.96	21.42	21.33	22.29	21.79	22.72	23.18
	8H	19.72	20.61	20.18	21.05	21.51	21.73	22.62	22.19	23.06	23.53
	12H	19.80	20.60	20.28	21.08	21.55	22.01	22.81	22.49	23.28	23.75
8H	4H	19.50	20.39	19.96	20.83	21.30	20.67	21.56	21.13	22.00	22.47
	6H	20.16	20.91	20.65	21.39	21.87	21.78	22.53	22.27	23.01	23.49
	8H	20.37	21.04	20.88	21.55	22.03	22.29	22.96	22.80	23.47	23.95
	12H	20.51	21.10	21.02	21.59	22.15	22.68	23.27	23.18	23.76	24.32
12H	4H	19.59	20.39	20.07	20.87	21.34	20.69	21.50	21.17	21.97	22.44
	6H	20.29	20.96	20.80	21.47	21.95	21.83	22.50	22.34	23.00	23.49
	8H	20.57	21.16	21.08	21.65	22.21	22.41	23.00	22.91	23.49	24.05

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

7 of 7