

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: P1586314

Luminaire Tested: 22CZSP-31-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586314
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-L835-S
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 3000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

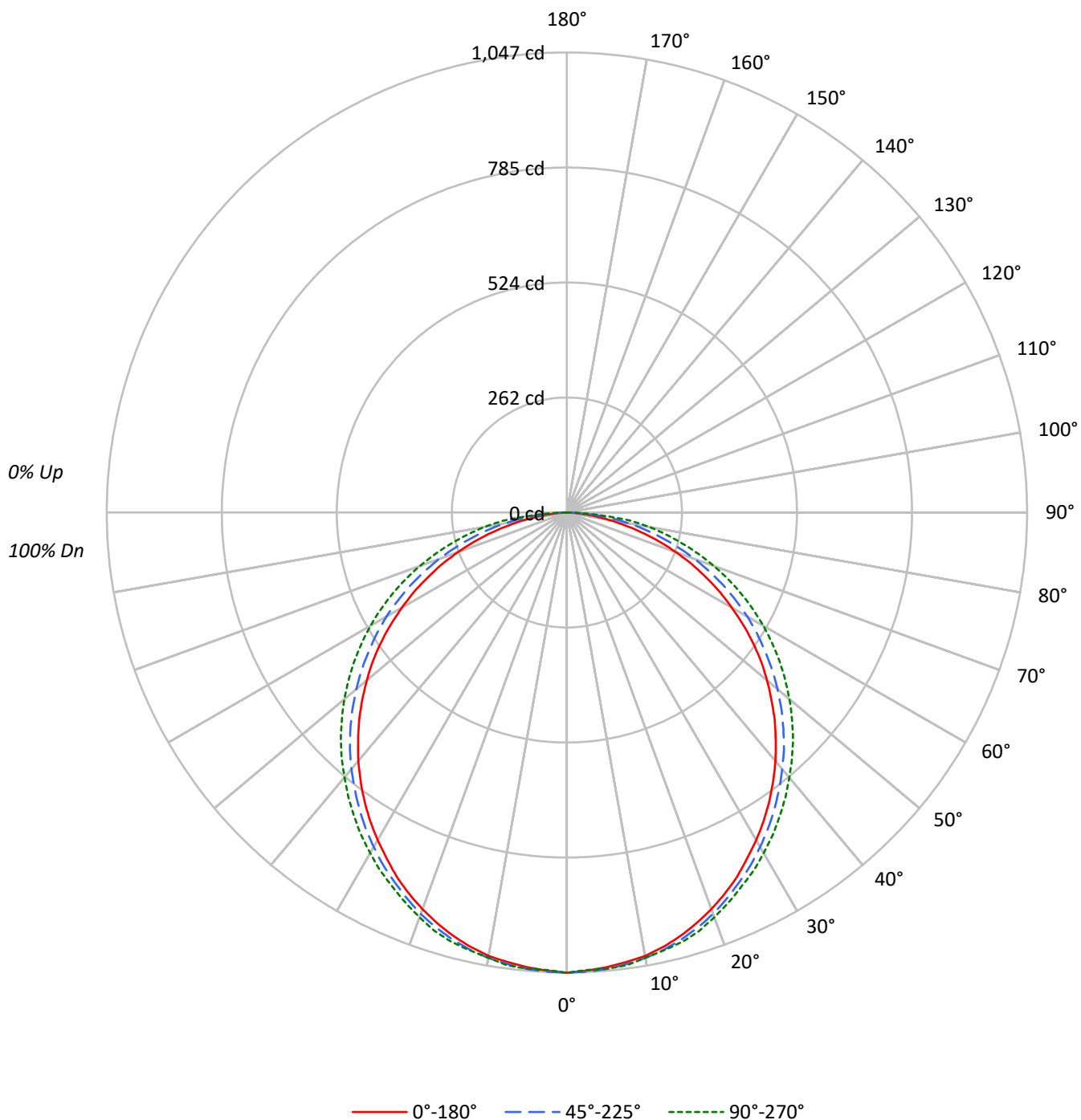
Lumens per Lamp: N/A
Luminaire Lumens: 3058.0 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

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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°	3280	3280	3280
5°	3265	3278	3276
10°	3258	3273	3271
15°	3235	3261	3280
20°	3202	3240	3267
25°	3162	3206	3246
30°	3113	3178	3236
35°	3068	3147	3227
40°	3017	3116	3217
45°	2959	3084	3221
50°	2896	3047	3220
55°	2821	3004	3224
60°	2715	2971	3232
65°	2590	2913	3242
70°	2414	2832	3256
75°	2151	2720	3288
80°	1778	2589	3448
85°	1157	2339	3014

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3558 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.2
10°-20°	283.7	9.3
20°-30°	427.8	14.0
30°-40°	515.3	16.8
40°-50°	538.1	17.6
50°-60°	494.2	16.2
60°-70°	389.2	12.7
70°-80°	238.8	7.8
80°-90°	71.9	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°	810.5	26.5
0°-40°	1325.8	43.4
0°-60°	2358.1	77.1
0°-90°	3058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1039	1040	1043	1046	1042	99
15°	998	1000	1006	1012	1012	281
25°	915	917	928	939	939	421
35°	802	807	823	840	844	502
45°	668	676	696	721	727	515
55°	517	526	550	581	590	461
65°	350	362	393	426	438	346
75°	178	192	225	260	272	189
85°	32	44	65	82	84	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1047.4	1047.4	1047.4	1047.4	1047.4
2.5°	1043.4	1045.4	1046.1	1046.8	1042.1
5°	1038.7	1040.1	1042.7	1046.1	1042.1
7.5°	1032.0	1033.4	1036.7	1041.4	1039.4
10°	1024.6	1025.3	1029.3	1032.7	1028.7
12.5°	1012.6	1014.6	1019.3	1021.9	1020.6
15°	997.8	999.8	1005.8	1011.9	1011.9
17.5°	980.3	983.0	990.4	998.5	999.1
20°	960.9	962.9	972.3	980.3	980.3
22.5°	938.7	941.4	950.8	959.5	960.9
25°	915.3	917.3	928.0	939.4	939.4
27.5°	887.7	891.8	905.2	916.6	919.3
30°	860.9	864.3	879.0	893.1	895.1
32.5°	832.7	836.7	852.2	867.6	871.0
35°	802.5	806.6	823.3	840.1	844.1
37.5°	771.0	775.7	793.1	812.6	816.6
40°	738.1	743.5	762.3	783.1	787.1
42.5°	703.2	710.6	730.7	752.2	758.2
45°	668.3	675.7	696.5	720.7	727.4
47.5°	631.4	640.1	661.6	687.1	694.5
50°	594.5	603.2	625.4	652.9	660.9
52.5°	556.9	565.7	588.5	617.3	626.1
55°	516.7	526.1	550.2	581.1	590.5
57.5°	475.1	487.2	512.7	544.2	553.6
60°	433.5	445.6	474.4	505.3	516.0
62.5°	392.5	403.9	433.5	466.4	477.8
65°	349.6	361.7	393.2	426.1	437.5
67.5°	307.3	319.4	350.9	385.2	397.2
70°	263.7	277.1	309.3	343.6	355.6
72.5°	220.1	234.2	267.1	302.0	313.4
75°	177.8	191.9	224.8	260.4	271.8
77.5°	136.2	151.6	183.9	220.1	230.8
80°	98.6	113.4	143.6	179.2	191.2
82.5°	63.1	75.8	106.0	139.6	148.3
85°	32.2	44.3	65.1	82.5	83.9
87.5°	10.1	14.1	21.5	32.2	32.9
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	15.61	17.27	15.97	17.58	17.90	16.44	18.10	16.80	18.41	18.73
	3H	17.36	18.87	17.74	19.19	19.55	18.55	20.06	18.93	20.39	20.74
	4H	17.98	19.40	18.38	19.75	20.12	19.44	20.86	19.84	21.21	21.59
	6H	18.39	19.71	18.80	20.07	20.46	20.22	21.54	20.63	21.91	22.30
	8H	18.50	19.76	18.92	20.15	20.55	20.54	21.80	20.97	22.19	22.59
	12H	18.55	19.76	18.98	20.14	20.57	20.75	21.96	21.18	22.35	22.77
4H	2H	16.38	17.80	16.77	18.15	18.52	17.02	18.45	17.42	18.79	19.17
	3H	18.35	19.55	18.76	19.95	20.35	19.38	20.58	19.79	20.97	21.37
	4H	19.09	20.18	19.52	20.59	21.02	20.43	21.52	20.86	21.93	22.36
	6H	19.62	20.57	20.07	21.01	21.46	21.38	22.33	21.84	22.77	23.23
	8H	19.77	20.66	20.22	21.10	21.56	21.78	22.67	22.24	23.11	23.58
	12H	19.85	20.65	20.33	21.13	21.60	22.06	22.86	22.54	23.33	23.80
8H	4H	19.55	20.44	20.01	20.88	21.35	20.72	21.61	21.18	22.05	22.52
	6H	20.21	20.96	20.70	21.44	21.92	21.83	22.58	22.32	23.06	23.54
	8H	20.42	21.09	20.93	21.59	22.08	22.34	23.01	22.85	23.52	24.00
	12H	20.56	21.15	21.07	21.64	22.20	22.73	23.32	23.23	23.81	24.37
12H	4H	19.64	20.44	20.12	20.92	21.39	20.74	21.55	21.22	22.02	22.49
	6H	20.34	21.01	20.85	21.52	22.00	21.88	22.55	22.39	23.05	23.54
	8H	20.62	21.21	21.13	21.70	22.26	22.46	23.05	22.96	23.54	24.10