

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: P1586318

Luminaire Tested: 22CZSP-31-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586318
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-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

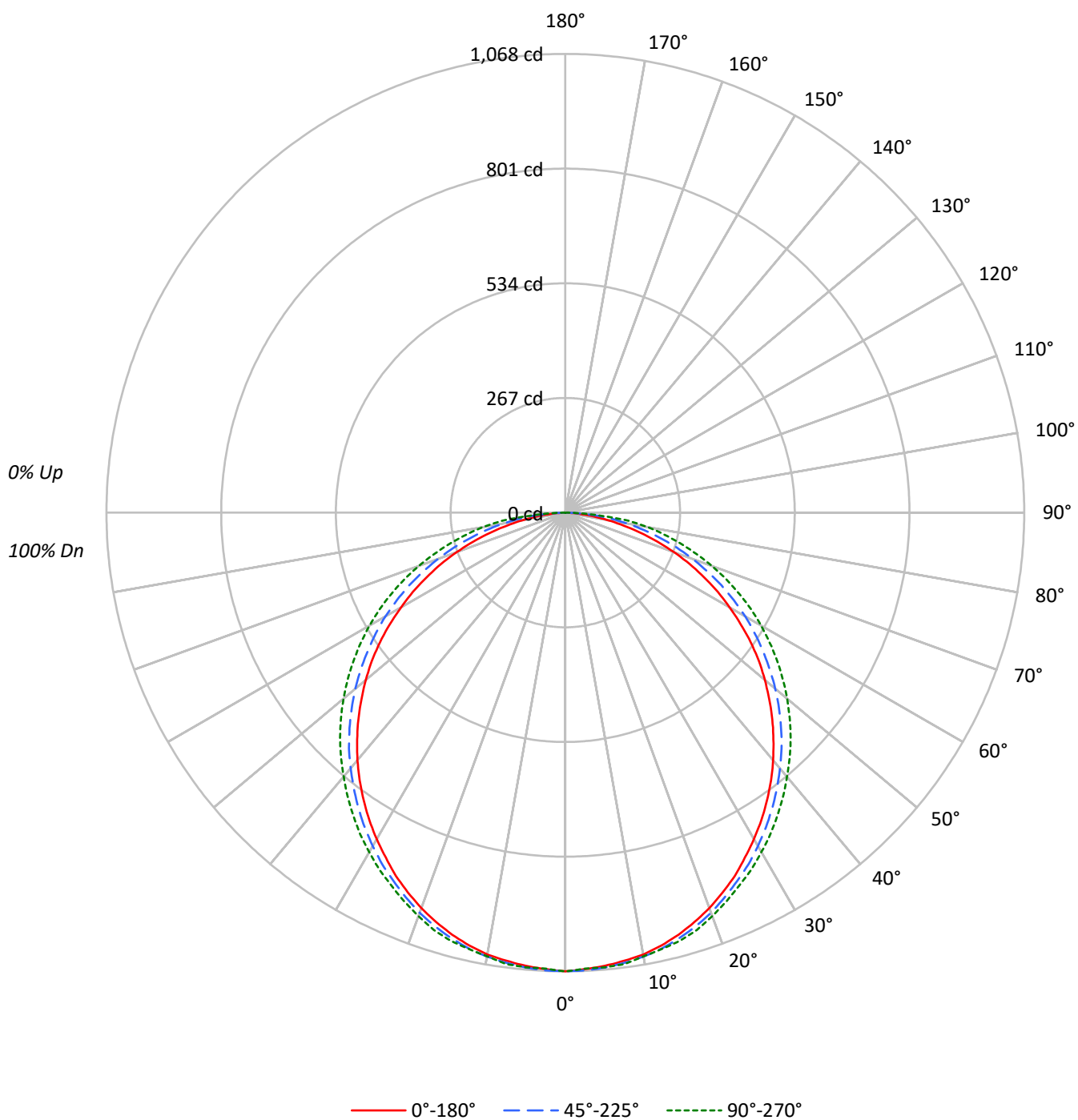
Lumens per Lamp: N/A
Luminaire Lumens: 3118.0 lumens
Efficiency: N/A
Efficacy: 148.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3344	3344	3344
5°	3329	3342	3340
10°	3322	3337	3335
15°	3298	3325	3345
20°	3265	3304	3331
25°	3224	3269	3309
30°	3174	3241	3300
35°	3128	3209	3290
40°	3076	3177	3280
45°	3017	3145	3284
50°	2953	3107	3283
55°	2876	3063	3287
60°	2768	3029	3295
65°	2641	2970	3305
70°	2462	2888	3320
75°	2193	2773	3352
80°	1814	2640	3516
85°	1178	2386	3072

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3627 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	3.2
10°-20°	289.2	9.3
20°-30°	436.2	14.0
30°-40°	525.4	16.8
40°-50°	548.7	17.6
50°-60°	503.9	16.2
60°-70°	396.9	12.7
70°-80°	243.5	7.8
80°-90°	73.3	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°	826.4	26.5
0°-40°	1351.8	43.4
0°-60°	2404.4	77.1
0°-90°	3118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1059	1060	1063	1067	1062	101
15°	1017	1019	1026	1032	1032	287
25°	933	935	946	958	958	430
35°	818	822	840	857	861	512
45°	681	689	710	735	742	525
55°	527	536	561	592	602	470
65°	356	369	401	434	446	353
75°	181	196	229	266	277	192
85°	33	45	66	84	86	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1068.0	1068.0	1068.0	1068.0	1068.0
2.5°	1063.9	1065.9	1066.6	1067.3	1062.5
5°	1059.1	1060.5	1063.2	1066.6	1062.5
7.5°	1052.3	1053.6	1057.1	1061.8	1059.8
10°	1044.7	1045.4	1049.5	1052.9	1048.8
12.5°	1032.4	1034.5	1039.3	1042.0	1040.6
15°	1017.4	1019.4	1025.6	1031.7	1031.7
17.5°	999.6	1002.3	1009.8	1018.1	1018.7
20°	979.7	981.8	991.4	999.6	999.6
22.5°	957.2	959.9	969.5	978.4	979.7
25°	933.2	935.3	946.2	957.8	957.8
27.5°	905.2	909.3	923.0	934.6	937.3
30°	877.8	881.2	896.3	910.6	912.7
32.5°	849.1	853.2	868.9	884.6	888.1
35°	818.3	822.4	839.5	856.6	860.7
37.5°	786.1	790.9	808.7	828.5	832.6
40°	752.6	758.1	777.2	798.4	802.5
42.5°	717.0	724.5	745.1	767.0	773.1
45°	681.4	689.0	710.2	734.8	741.6
47.5°	643.8	652.7	674.6	700.6	708.1
50°	606.2	615.1	637.7	665.7	673.9
52.5°	567.9	576.8	600.0	629.4	638.3
55°	526.8	536.4	561.0	592.5	602.1
57.5°	484.4	496.7	522.7	554.9	564.4
60°	442.0	454.3	483.7	515.2	526.1
62.5°	400.2	411.9	442.0	475.5	487.1
65°	356.5	368.8	400.9	434.5	446.1
67.5°	313.4	325.7	357.8	392.7	405.0
70°	268.9	282.6	315.4	350.3	362.6
72.5°	224.4	238.8	272.3	307.9	319.5
75°	181.3	195.7	229.2	265.5	277.1
77.5°	138.9	154.6	187.5	224.4	235.4
80°	100.6	115.6	146.4	182.7	195.0
82.5°	64.3	77.3	108.1	142.3	151.2
85°	32.8	45.2	66.4	84.2	85.5
87.5°	10.3	14.4	21.9	32.8	33.5
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	15.67	17.33	16.04	17.65	17.96	16.50	18.16	16.87	18.48	18.79
	3H	17.43	18.94	17.80	19.26	19.62	18.62	20.13	19.00	20.45	20.81
	4H	18.05	19.47	18.44	19.82	20.19	19.51	20.93	19.91	21.28	21.65
	6H	18.46	19.78	18.87	20.14	20.53	20.29	21.61	20.70	21.97	22.36
	8H	18.57	19.83	18.99	20.22	20.61	20.61	21.87	21.03	22.26	22.66
	12H	18.62	19.83	19.05	20.21	20.64	20.82	22.03	21.25	22.41	22.84
4H	2H	16.44	17.87	16.84	18.21	18.59	17.09	18.51	17.49	18.86	19.23
	3H	18.42	19.62	18.83	20.02	20.42	19.45	20.64	19.85	21.04	21.44
	4H	19.16	20.24	19.59	20.66	21.09	20.50	21.58	20.93	22.00	22.43
	6H	19.69	20.64	20.14	21.08	21.53	21.45	22.40	21.90	22.84	23.30
	8H	19.83	20.73	20.29	21.17	21.63	21.85	22.74	22.31	23.18	23.65
	12H	19.92	20.72	20.40	21.19	21.66	22.12	22.93	22.60	23.40	23.87
8H	4H	19.62	20.51	20.08	20.95	21.42	20.79	21.68	21.25	22.12	22.58
	6H	20.28	21.02	20.77	21.51	21.98	21.90	22.64	22.39	23.13	23.60
	8H	20.49	21.16	21.00	21.66	22.15	22.41	23.08	22.92	23.58	24.07
	12H	20.63	21.22	21.13	21.71	22.27	22.80	23.39	23.30	23.88	24.44
12H	4H	19.71	20.51	20.19	20.98	21.45	20.81	21.61	21.29	22.09	22.56
	6H	20.41	21.08	20.92	21.58	22.07	21.95	22.62	22.45	23.12	23.60
	8H	20.69	21.28	21.19	21.77	22.33	22.52	23.12	23.03	23.61	24.16

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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