

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: P1586313

Luminaire Tested: 22CZSP-31-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586313
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-772-10)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-31-L830
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 3000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

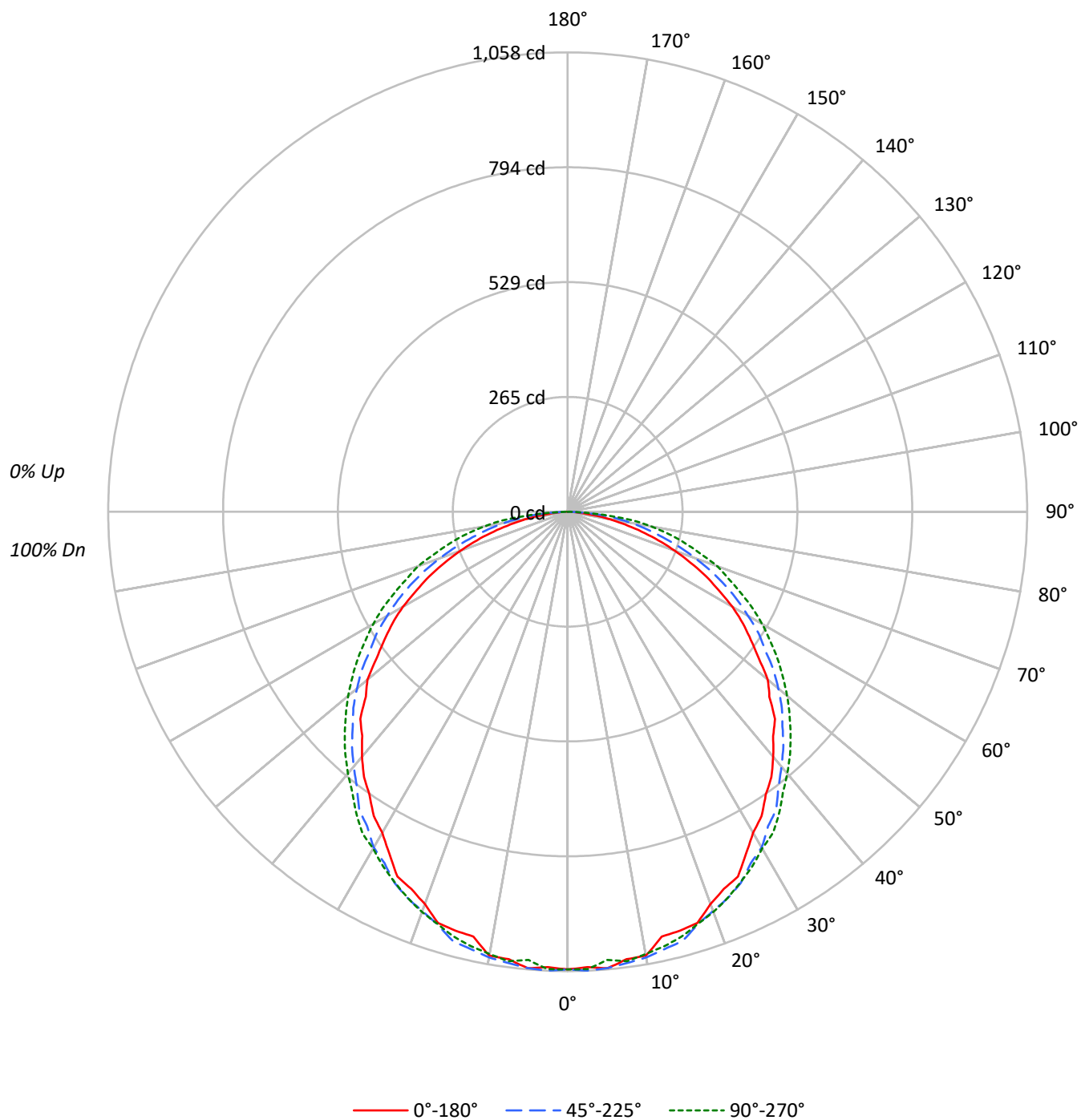
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3077.0 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 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	68
3	89	79	70	63	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	31	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°	3300	3300	3300
5°	3317	3317	3257
10°	3301	3313	3288
15°	3238	3316	3285
20°	3203	3260	3269
25°	3204	3258	3254
30°	3087	3229	3239
35°	3040	3198	3244
40°	3010	3130	3216
45°	2990	3098	3214
50°	2931	3085	3213
55°	2812	3027	3220
60°	2745	3004	3238
65°	2606	2961	3248
70°	2403	2866	3358
75°	2135	2739	3390
80°	1774	2687	3515
85°	1085	2404	2971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3637 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	3.2
10°-20°	285.6	9.3
20°-30°	430.7	14.0
30°-40°	517.4	16.8
40°-50°	540.0	17.6
50°-60°	497.2	16.2
60°-70°	392.6	12.8
70°-80°	241.8	7.9
80°-90°	71.7	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°	816.2	26.5
0°-40°	1333.6	43.3
0°-60°	2370.8	77.1
0°-90°	3077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1055	1045	1055	1056	1036	100
15°	999	1012	1023	1018	1013	282
25°	927	934	943	939	942	422
35°	795	810	837	841	848	500
45°	675	680	700	715	726	516
55°	515	529	554	579	590	462
65°	352	364	400	428	438	346
75°	176	194	226	262	280	187
85°	30	43	67	79	83	41
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.9	1053.9	1053.9	1053.9	1053.9
2.5°	1049.9	1061.1	1057.8	1059.8	1054.5
5°	1055.2	1044.7	1055.2	1056.5	1036.2
7.5°	1039.4	1040.7	1048.0	1049.9	1044.0
10°	1038.1	1042.1	1042.1	1035.5	1034.2
12.5°	1002.0	1021.7	1031.6	1036.2	1025.0
15°	998.8	1012.5	1023.0	1018.4	1013.2
17.5°	992.8	988.9	996.1	1001.4	995.5
20°	961.3	967.9	978.4	979.7	981.0
22.5°	940.3	942.3	963.3	965.3	962.7
25°	927.2	933.8	943.0	939.0	941.7
27.5°	888.5	904.3	912.8	920.7	920.7
30°	853.7	872.1	893.1	895.7	895.7
32.5°	830.8	843.2	859.0	864.2	878.7
35°	795.3	809.8	836.7	840.6	848.5
37.5°	770.4	784.8	797.3	811.1	814.4
40°	736.3	751.4	765.8	781.5	786.8
42.5°	700.2	715.9	735.0	751.4	757.9
45°	675.2	680.5	699.5	714.6	725.8
47.5°	630.0	645.1	669.3	688.4	693.0
50°	601.7	607.6	633.2	658.8	659.5
52.5°	554.5	572.2	597.2	621.4	624.7
55°	515.1	528.9	554.5	579.4	589.9
57.5°	478.4	488.9	521.7	546.6	552.5
60°	438.3	449.5	479.7	508.6	517.1
62.5°	391.8	407.5	440.3	467.9	479.7
65°	351.7	364.2	399.6	428.5	438.3
67.5°	306.4	323.5	357.0	389.1	399.6
70°	262.5	279.5	313.0	346.5	366.8
72.5°	219.2	236.9	270.4	309.1	320.2
75°	176.5	193.6	226.4	262.5	280.2
77.5°	134.5	152.9	186.4	222.5	239.5
80°	98.4	112.9	149.0	180.5	194.9
82.5°	61.0	76.1	109.6	139.1	151.6
85°	30.2	43.3	66.9	79.4	82.7
87.5°	9.2	13.8	21.0	27.6	31.5
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	15.61	17.28	15.98	17.59	17.91	16.44	18.10	16.80	18.41	18.73
	3H	17.37	18.88	17.74	19.20	19.56	18.58	20.09	18.96	20.42	20.78
	4H	17.98	19.40	18.38	19.75	20.13	19.50	20.92	19.90	21.27	21.64
	6H	18.38	19.71	18.80	20.07	20.46	20.30	21.62	20.71	21.98	22.37
	8H	18.49	19.75	18.91	20.14	20.54	20.62	21.89	21.05	22.27	22.67
	12H	18.53	19.74	18.96	20.12	20.55	20.83	22.04	21.26	22.42	22.85
4H	2H	16.41	17.83	16.80	18.18	18.55	17.04	18.47	17.44	18.81	19.19
	3H	18.38	19.58	18.79	19.97	20.37	19.42	20.62	19.83	21.02	21.42
	4H	19.11	20.20	19.54	20.61	21.05	20.49	21.58	20.92	21.99	22.42
	6H	19.63	20.58	20.08	21.02	21.48	21.46	22.41	21.91	22.85	23.30
	8H	19.77	20.66	20.23	21.10	21.57	21.85	22.75	22.31	23.19	23.65
	12H	19.85	20.65	20.33	21.12	21.59	22.12	22.93	22.60	23.40	23.87
8H	4H	19.58	20.47	20.04	20.91	21.37	20.78	21.67	21.24	22.11	22.58
	6H	20.23	20.98	20.72	21.46	21.94	21.90	22.65	22.40	23.14	23.61
	8H	20.44	21.11	20.94	21.61	22.10	22.41	23.08	22.92	23.59	24.07
	12H	20.57	21.16	21.07	21.65	22.21	22.78	23.37	23.29	23.86	24.42
12H	4H	19.67	20.47	20.15	20.95	21.41	20.80	21.61	21.28	22.08	22.55
	6H	20.37	21.04	20.88	21.54	22.03	21.95	22.62	22.46	23.13	23.61
	8H	20.64	21.24	21.15	21.73	22.28	22.53	23.12	23.03	23.61	24.17