

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: P1586324

Luminaire Tested: 22CZSP-31-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586324
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-L935-S
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 3000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

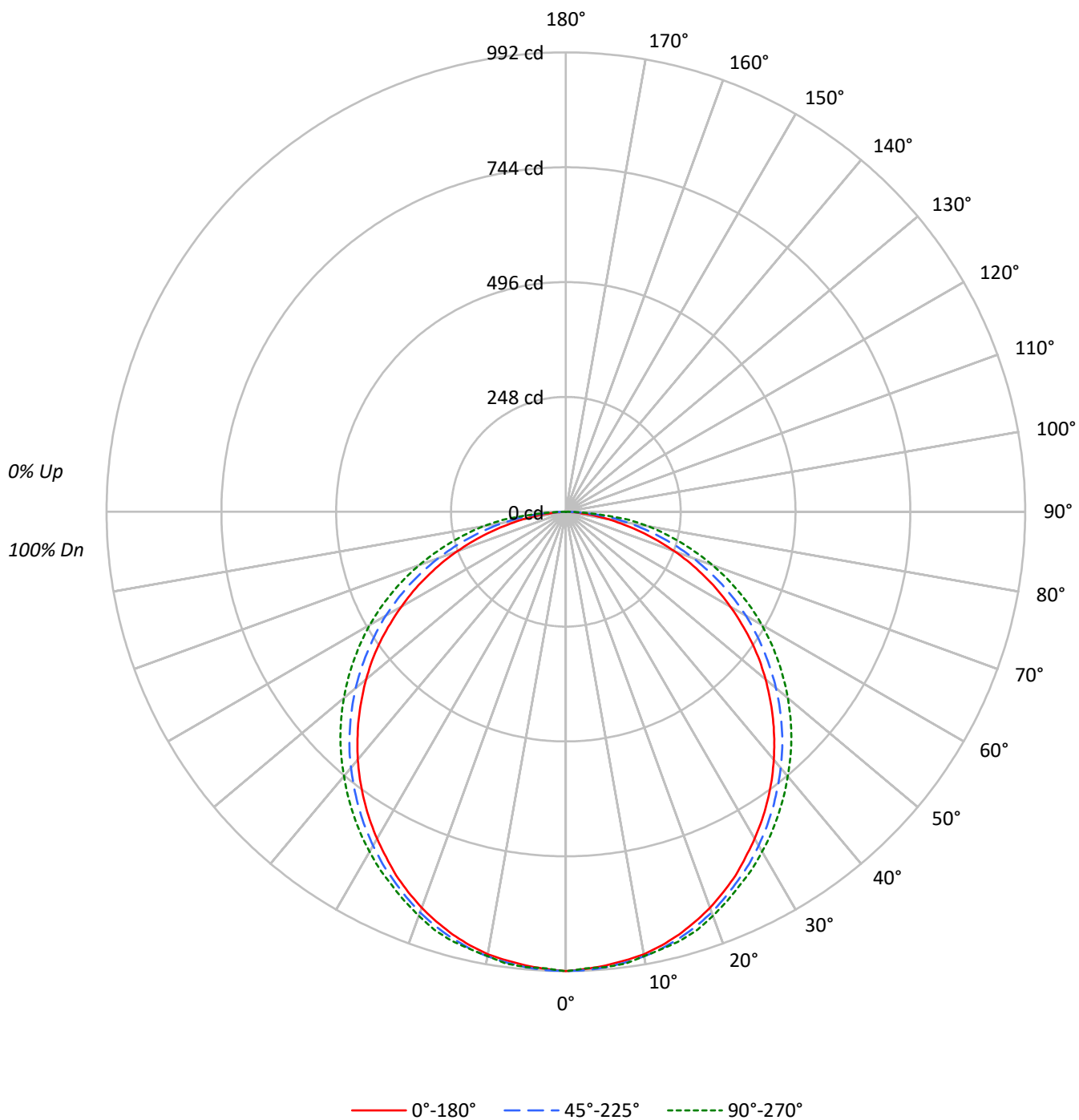
Lumens per Lamp: N/A
Luminaire Lumens: 2896.0 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
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°	3106	3106	3106
5°	3092	3104	3102
10°	3086	3100	3098
15°	3063	3088	3107
20°	3032	3068	3094
25°	2995	3036	3074
30°	2948	3010	3065
35°	2905	2981	3056
40°	2857	2951	3047
45°	2803	2921	3050
50°	2743	2885	3049
55°	2671	2845	3053
60°	2571	2814	3061
65°	2453	2759	3070
70°	2286	2682	3084
75°	2037	2576	3114
80°	1684	2452	3266
85°	1096	2213	2853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3368 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	3.2
10°-20°	268.6	9.3
20°-30°	405.1	14.0
30°-40°	488.0	16.8
40°-50°	509.6	17.6
50°-60°	468.0	16.2
60°-70°	368.6	12.7
70°-80°	226.1	7.8
80°-90°	68.0	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°	767.6	26.5
0°-40°	1255.5	43.4
0°-60°	2233.2	77.1
0°-90°	2896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	984	985	988	991	987	93
15°	945	947	953	958	958	266
25°	867	869	879	890	890	399
35°	760	764	780	796	799	475
45°	633	640	660	682	689	488
55°	489	498	521	550	559	437
65°	331	342	372	404	414	328
75°	168	182	213	247	257	179
85°	30	42	62	78	79	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.0	992.0	992.0	992.0	992.0
2.5°	988.1	990.1	990.7	991.3	986.9
5°	983.7	985.0	987.5	990.7	986.9
7.5°	977.3	978.6	981.8	986.2	984.3
10°	970.4	971.0	974.8	978.0	974.2
12.5°	958.9	960.8	965.3	967.8	966.5
15°	944.9	946.8	952.6	958.3	958.3
17.5°	928.4	931.0	937.9	945.6	946.2
20°	910.0	911.9	920.8	928.4	928.4
22.5°	889.0	891.6	900.5	908.7	910.0
25°	866.8	868.7	878.8	889.6	889.6
27.5°	840.7	844.5	857.2	868.0	870.6
30°	815.3	818.5	832.5	845.8	847.7
32.5°	788.6	792.4	807.0	821.7	824.8
35°	760.0	763.8	779.7	795.6	799.4
37.5°	730.1	734.6	751.1	769.5	773.4
40°	699.0	704.1	721.9	741.6	745.4
42.5°	666.0	673.0	692.0	712.4	718.1
45°	632.9	639.9	659.6	682.5	688.8
47.5°	598.0	606.2	626.6	650.7	657.7
50°	563.0	571.3	592.3	618.3	625.9
52.5°	527.4	535.7	557.3	584.6	592.9
55°	489.3	498.2	521.1	550.3	559.2
57.5°	449.9	461.3	485.5	515.4	524.3
60°	410.5	421.9	449.3	478.5	488.7
62.5°	371.7	382.5	410.5	441.6	452.4
65°	331.1	342.5	372.4	403.5	414.3
67.5°	291.0	302.5	332.3	364.8	376.2
70°	249.7	262.4	292.9	325.4	336.8
72.5°	208.4	221.8	252.9	286.0	296.8
75°	168.4	181.7	212.9	246.6	257.4
77.5°	129.0	143.6	174.1	208.4	218.6
80°	93.4	107.4	136.0	169.7	181.1
82.5°	59.7	71.8	100.4	132.2	140.4
85°	30.5	41.9	61.6	78.2	79.4
87.5°	9.5	13.3	20.3	30.5	31.1
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	15.42	17.08	15.78	17.39	17.71	16.25	17.91	16.61	18.22	18.54
	3H	17.17	18.68	17.55	19.00	19.36	18.36	19.87	18.74	20.20	20.56
	4H	17.79	19.21	18.19	19.56	19.93	19.25	20.67	19.65	21.02	21.40
	6H	18.20	19.52	18.61	19.88	20.27	20.03	21.35	20.44	21.72	22.11
	8H	18.31	19.57	18.73	19.96	20.36	20.35	21.62	20.78	22.00	22.40
	12H	18.36	19.57	18.79	19.95	20.38	20.56	21.77	20.99	22.16	22.58
4H	2H	16.19	17.61	16.58	17.96	18.33	16.83	18.26	17.23	18.60	18.98
	3H	18.16	19.36	18.57	19.76	20.16	19.19	20.39	19.60	20.78	21.18
	4H	18.90	19.99	19.33	20.40	20.83	20.24	21.33	20.67	21.74	22.18
	6H	19.43	20.38	19.88	20.82	21.28	21.19	22.15	21.65	22.59	23.04
	8H	19.58	20.47	20.03	20.91	21.37	21.59	22.48	22.05	22.92	23.39
	12H	19.66	20.46	20.14	20.94	21.41	21.87	22.67	22.35	23.15	23.61
8H	4H	19.36	20.25	19.82	20.69	21.16	20.53	21.42	20.99	21.86	22.33
	6H	20.02	20.77	20.51	21.25	21.73	21.64	22.39	22.13	22.87	23.35
	8H	20.23	20.90	20.74	21.41	21.89	22.15	22.82	22.66	23.33	23.81
	12H	20.37	20.96	20.88	21.45	22.01	22.54	23.13	23.04	23.62	24.18
12H	4H	19.45	20.25	19.93	20.73	21.20	20.56	21.36	21.03	21.83	22.30
	6H	20.15	20.82	20.66	21.33	21.81	21.69	22.36	22.20	22.86	23.35
	8H	20.43	21.02	20.94	21.51	22.07	22.27	22.86	22.77	23.35	23.91