

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: P1586565

Luminaire Tested: 22CZSP-A-31-L935

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586565
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-A-31-L935
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 3000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

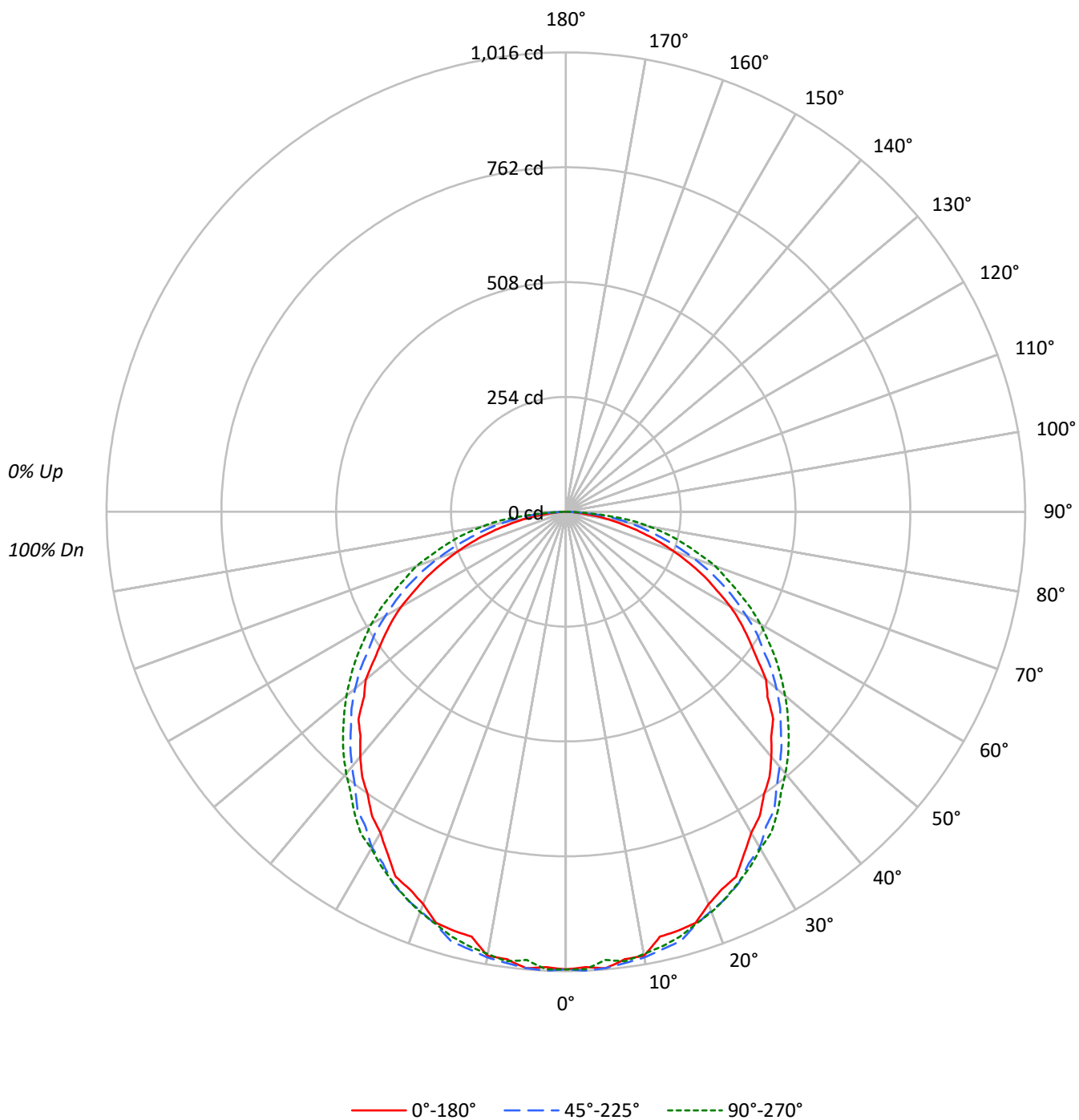
Lumens per Lamp: N/A
Luminaire Lumens: 2955.0 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586565

CATALOG NUMBER: 22CZSP-A-31-L935

Luminous Intensity Polar Plot



TEST NUMBER: P1586565

CATALOG NUMBER: 22CZSP-A-31-L935

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°	3169	3169	3169
5°	3185	3185	3128
10°	3170	3182	3158
15°	3110	3185	3154
20°	3076	3131	3139
25°	3077	3129	3124
30°	2965	3101	3110
35°	2920	3071	3115
40°	2890	3006	3089
45°	2872	2975	3087
50°	2815	2962	3085
55°	2701	2907	3093
60°	2637	2885	3110
65°	2503	2844	3119
70°	2308	2752	3225
75°	2051	2630	3256
80°	1704	2580	3376
85°	1042	2310	2853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3493 cd/sqm

TEST NUMBER: P1586565

CATALOG NUMBER: 22CZSP-A-31-L935

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.0	3.2
10°-20°	274.2	9.3
20°-30°	413.7	14.0
30°-40°	496.8	16.8
40°-50°	518.6	17.6
50°-60°	477.5	16.2
60°-70°	377.1	12.8
70°-80°	232.2	7.9
80°-90°	68.9	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°	783.9	26.5
0°-40°	1280.7	43.3
0°-60°	2276.9	77.1
0°-90°	2955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2955.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1013	1003	1013	1015	995	96
15°	959	972	982	978	973	271
25°	890	897	906	902	904	406
35°	764	778	804	807	815	480
45°	648	654	672	686	697	496
55°	495	508	532	556	566	444
65°	338	350	384	412	421	333
75°	170	186	217	252	269	180
85°	29	42	64	76	79	39
90°	0	0	0	0	0	

TEST NUMBER: P1586565

CATALOG NUMBER: 22CZSP-A-31-L935

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.1	1012.1	1012.1	1012.1	1012.1
2.5°	1008.3	1019.0	1015.9	1017.8	1012.7
5°	1013.3	1003.3	1013.3	1014.6	995.1
7.5°	998.2	999.5	1006.4	1008.3	1002.6
10°	997.0	1000.7	1000.7	994.4	993.2
12.5°	962.3	981.2	990.7	995.1	984.4
15°	959.2	972.4	982.5	978.1	973.0
17.5°	953.5	949.7	956.6	961.7	956.0
20°	923.2	929.5	939.6	940.9	942.1
22.5°	903.1	905.0	925.1	927.0	924.5
25°	890.5	896.8	905.6	901.8	904.3
27.5°	853.3	868.4	876.6	884.2	884.2
30°	819.9	837.5	857.7	860.2	860.2
32.5°	797.8	809.8	824.9	830.0	843.8
35°	763.8	777.7	803.5	807.3	814.8
37.5°	739.8	753.7	765.7	778.9	782.1
40°	707.1	721.6	735.4	750.6	755.6
42.5°	672.4	687.5	705.8	721.6	727.9
45°	648.5	653.5	671.8	686.3	697.0
47.5°	605.0	619.5	642.8	661.1	665.5
50°	577.9	583.6	608.1	632.7	633.3
52.5°	532.5	549.5	573.5	596.8	599.9
55°	494.7	507.9	532.5	556.5	566.5
57.5°	459.4	469.5	501.0	524.9	530.6
60°	421.0	431.7	460.7	488.4	496.6
62.5°	376.2	391.3	422.9	449.3	460.7
65°	337.8	349.8	383.8	411.5	421.0
67.5°	294.3	310.7	342.8	373.7	383.8
70°	252.1	268.5	300.6	332.7	352.3
72.5°	210.5	227.5	259.6	296.8	307.5
75°	169.5	185.9	217.4	252.1	269.1
77.5°	129.2	146.8	179.0	213.6	230.0
80°	94.5	108.4	143.1	173.3	187.2
82.5°	58.6	73.1	105.2	133.6	145.6
85°	29.0	41.6	64.3	76.3	79.4
87.5°	8.8	13.2	20.2	26.5	30.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586565

CATALOG NUMBER: 22CZSP-A-31-L935

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	15.47	17.14	15.84	17.45	17.76	16.30	17.96	16.66	18.27	18.59
	3H	17.23	18.74	17.60	19.06	19.42	18.44	19.95	18.82	20.28	20.64
	4H	17.84	19.26	18.24	19.61	19.99	19.36	20.78	19.76	21.13	21.50
	6H	18.24	19.57	18.65	19.93	20.32	20.16	21.48	20.57	21.84	22.23
	8H	18.35	19.61	18.77	20.00	20.40	20.48	21.74	20.91	22.13	22.53
	12H	18.39	19.60	18.82	19.98	20.41	20.69	21.90	21.12	22.28	22.71
4H	2H	16.27	17.69	16.66	18.04	18.41	16.90	18.32	17.30	18.67	19.05
	3H	18.24	19.44	18.65	19.83	20.23	19.28	20.48	19.69	20.88	21.28
	4H	18.97	20.06	19.40	20.47	20.90	20.35	21.44	20.78	21.85	22.28
	6H	19.49	20.44	19.94	20.88	21.34	21.32	22.27	21.77	22.71	23.16
	8H	19.63	20.52	20.09	20.96	21.43	21.71	22.61	22.17	23.05	23.51
	12H	19.71	20.51	20.19	20.98	21.45	21.98	22.79	22.46	23.26	23.73
8H	4H	19.44	20.33	19.89	20.77	21.23	20.64	21.53	21.10	21.97	22.44
	6H	20.09	20.84	20.58	21.32	21.80	21.76	22.51	22.26	22.99	23.47
	8H	20.30	20.97	20.80	21.47	21.95	22.27	22.94	22.78	23.44	23.93
	12H	20.43	21.02	20.93	21.51	22.07	22.64	23.23	23.15	23.72	24.28
12H	4H	19.53	20.33	20.01	20.81	21.27	20.66	21.47	21.14	21.94	22.41
	6H	20.23	20.90	20.74	21.40	21.89	21.81	22.48	22.32	22.99	23.47
	8H	20.50	21.10	21.01	21.58	22.14	22.39	22.98	22.89	23.47	24.03