

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: P1586555

Luminaire Tested: 22CZSP-A-31-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586555
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-L835
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 3000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

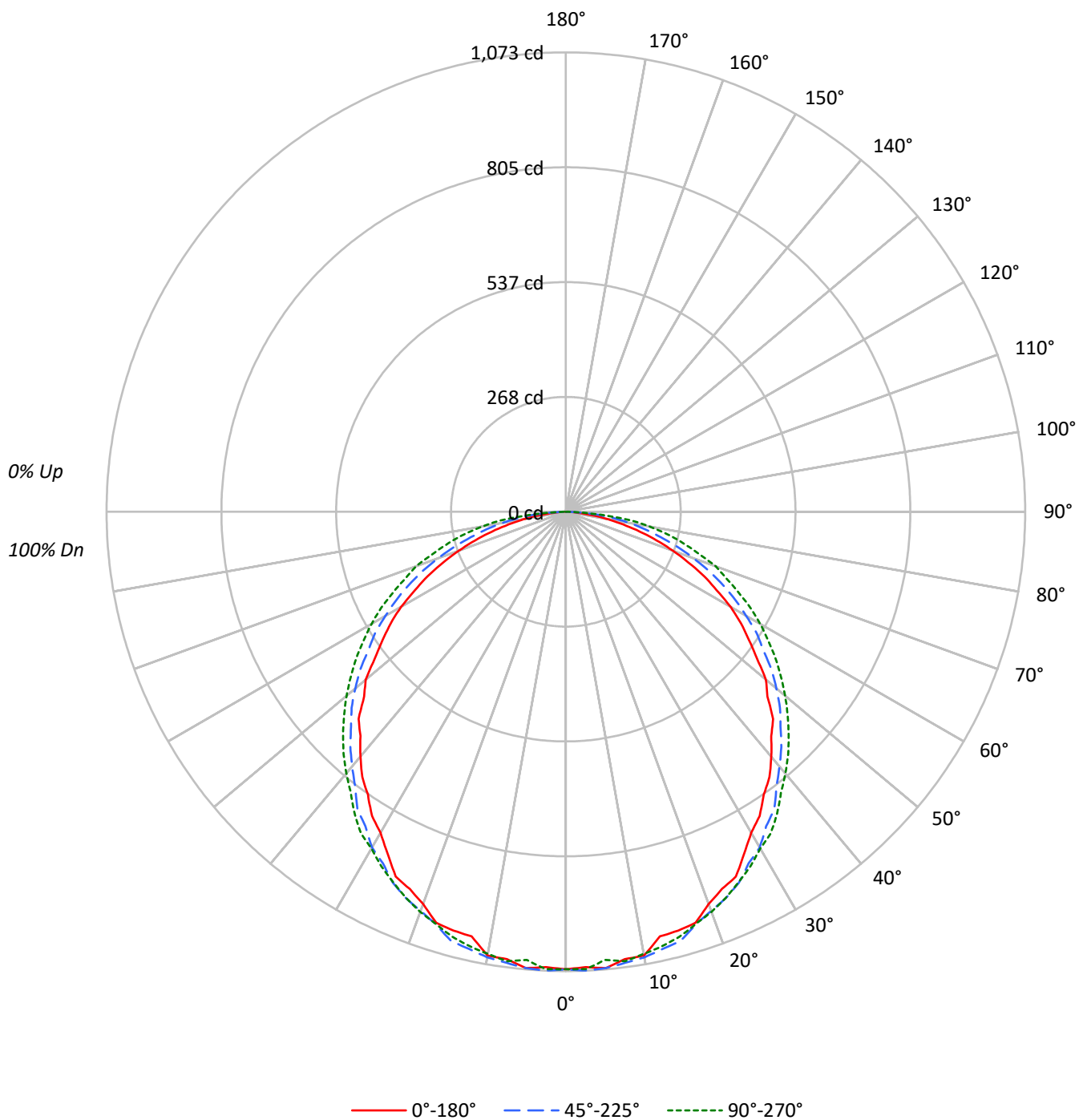
Lumens per Lamp: N/A
Luminaire Lumens: 3120.0 lumens
Efficiency: N/A
Efficacy: 148.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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: P1586555

CATALOG NUMBER: 22CZSP-A-31-L835

Luminous Intensity Polar Plot



TEST NUMBER: P1586555

CATALOG NUMBER: 22CZSP-A-31-L835

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°	3346	3346	3346
5°	3363	3363	3302
10°	3347	3360	3334
15°	3283	3363	3330
20°	3248	3306	3315
25°	3248	3304	3299
30°	3130	3274	3284
35°	3083	3243	3289
40°	3052	3174	3261
45°	3032	3141	3259
50°	2973	3128	3258
55°	2851	3069	3266
60°	2784	3046	3284
65°	2642	3002	3293
70°	2437	2906	3405
75°	2166	2778	3437
80°	1800	2723	3563
85°	1099	2440	3011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3687 cd/sqm

TEST NUMBER: P1586555

CATALOG NUMBER: 22CZSP-A-31-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	3.2
10°-20°	289.6	9.3
20°-30°	436.7	14.0
30°-40°	524.6	16.8
40°-50°	547.6	17.6
50°-60°	504.2	16.2
60°-70°	398.1	12.8
70°-80°	245.2	7.9
80°-90°	72.7	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°	827.6	26.5
0°-40°	1352.2	43.3
0°-60°	2404.0	77.1
0°-90°	3120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1070	1059	1070	1071	1051	101
15°	1013	1027	1037	1033	1027	286
25°	940	947	956	952	955	428
35°	806	821	848	852	860	507
45°	685	690	709	725	736	524
55°	522	536	562	588	598	469
65°	357	369	405	434	444	351
75°	179	196	230	266	284	190
85°	31	44	68	80	84	41
90°	0	0	0	0	0	

TEST NUMBER: P1586555

CATALOG NUMBER: 22CZSP-A-31-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1068.6	1068.6	1068.6	1068.6	1068.6
2.5°	1064.6	1075.9	1072.6	1074.6	1069.3
5°	1069.9	1059.3	1069.9	1071.3	1050.6
7.5°	1054.0	1055.3	1062.6	1064.6	1058.6
10°	1052.6	1056.6	1056.6	1050.0	1048.6
12.5°	1016.0	1036.0	1046.0	1050.6	1039.3
15°	1012.7	1026.7	1037.3	1032.7	1027.3
17.5°	1006.7	1002.7	1010.0	1015.4	1009.4
20°	974.8	981.4	992.1	993.4	994.7
22.5°	953.5	955.5	976.8	978.8	976.1
25°	940.2	946.8	956.2	952.2	954.8
27.5°	900.9	916.9	925.5	933.5	933.5
30°	865.7	884.3	905.6	908.2	908.2
32.5°	842.4	855.0	871.0	876.3	890.9
35°	806.4	821.1	848.4	852.4	860.3
37.5°	781.2	795.8	808.4	822.4	825.7
40°	746.6	761.9	776.5	792.5	797.8
42.5°	710.0	725.9	745.2	761.9	768.5
45°	684.7	690.0	709.3	724.6	735.9
47.5°	638.8	654.1	678.7	698.0	702.6
50°	610.2	616.1	642.1	668.0	668.7
52.5°	562.2	580.2	605.5	630.1	633.4
55°	522.3	536.3	562.2	587.5	598.2
57.5°	485.1	495.7	529.0	554.3	560.2
60°	444.5	455.8	486.4	515.7	524.3
62.5°	397.2	413.2	446.5	474.4	486.4
65°	356.6	369.3	405.2	434.5	444.5
67.5°	310.7	328.0	362.0	394.6	405.2
70°	266.2	283.5	317.4	351.3	371.9
72.5°	222.2	240.2	274.1	313.4	324.7
75°	179.0	196.3	229.6	266.2	284.1
77.5°	136.4	155.0	189.0	225.6	242.9
80°	99.8	114.4	151.0	183.0	197.6
82.5°	61.9	77.2	111.1	141.1	153.7
85°	30.6	43.9	67.9	80.5	83.8
87.5°	9.3	14.0	21.3	27.9	31.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586555

CATALOG NUMBER: 22CZSP-A-31-L835

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	15.66	17.32	16.03	17.64	17.95	16.49	18.15	16.85	18.46	18.78
	3H	17.42	18.92	17.79	19.25	19.61	18.63	20.14	19.01	20.47	20.83
	4H	18.03	19.45	18.43	19.80	20.17	19.55	20.97	19.94	21.32	21.69
	6H	18.43	19.75	18.84	20.12	20.51	20.35	21.67	20.76	22.03	22.42
	8H	18.54	19.80	18.96	20.19	20.59	20.67	21.93	21.09	22.32	22.72
	12H	18.58	19.79	19.01	20.17	20.60	20.88	22.09	21.30	22.47	22.90
4H	2H	16.45	17.88	16.85	18.22	18.60	17.09	18.51	17.49	18.86	19.24
	3H	18.43	19.63	18.84	20.02	20.42	19.47	20.67	19.88	21.07	21.47
	4H	19.16	20.25	19.59	20.66	21.09	20.54	21.62	20.97	22.04	22.47
	6H	19.68	20.63	20.13	21.07	21.52	21.51	22.46	21.96	22.90	23.35
	8H	19.82	20.71	20.28	21.15	21.62	21.90	22.80	22.36	23.24	23.70
	12H	19.90	20.70	20.37	21.17	21.64	22.17	22.97	22.65	23.45	23.92
8H	4H	19.62	20.52	20.08	20.96	21.42	20.83	21.72	21.29	22.16	22.63
	6H	20.28	21.02	20.77	21.51	21.98	21.95	22.70	22.44	23.18	23.66
	8H	20.49	21.15	20.99	21.66	22.14	22.46	23.13	22.97	23.63	24.12
	12H	20.61	21.21	21.12	21.70	22.25	22.83	23.42	23.33	23.91	24.47
12H	4H	19.72	20.52	20.20	20.99	21.46	20.85	21.66	21.33	22.13	22.60
	6H	20.42	21.09	20.92	21.59	22.08	22.00	22.67	22.51	23.18	23.66
	8H	20.69	21.28	21.20	21.77	22.33	22.58	23.17	23.08	23.66	24.22