

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: P1587628

Luminaire Tested: 22CZSP-SB-33HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-33HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

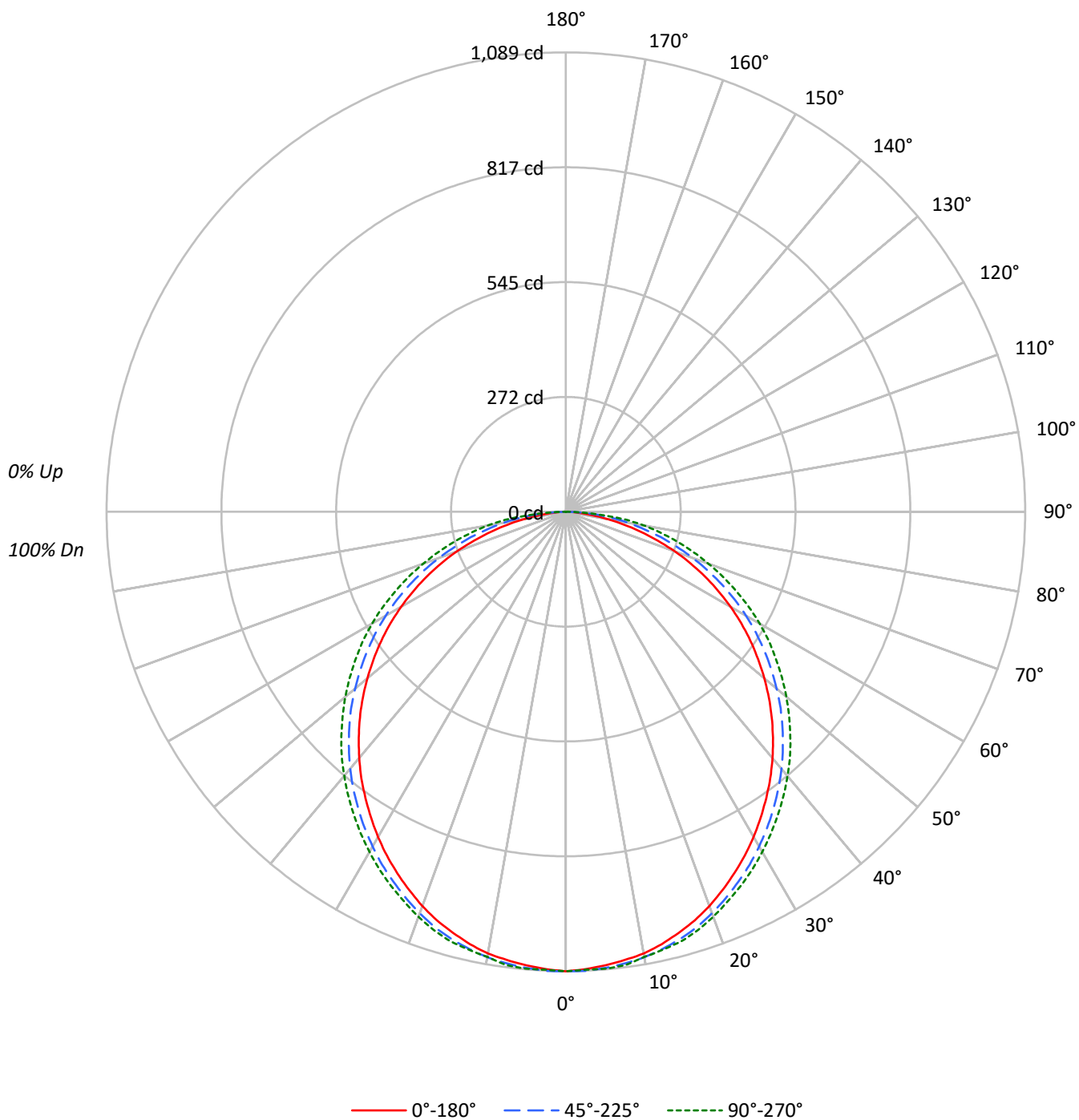
Lumens per Lamp: N/A
Luminaire Lumens: 3169.0 lumens
Efficiency: N/A
Efficacy: 146.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.7
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	94	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	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3411	3411	3411
5°	3392	3411	3418
10°	3382	3410	3408
15°	3350	3399	3419
20°	3314	3376	3405
25°	3267	3342	3385
30°	3219	3313	3367
35°	3166	3281	3351
40°	3116	3252	3341
45°	3058	3218	3333
50°	2992	3178	3324
55°	2918	3137	3320
60°	2826	3091	3322
65°	2697	3026	3303
70°	2521	2933	3295
75°	2235	2820	3308
80°	1819	2680	3405
85°	1175	2475	2939

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3450 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	3.3
10°-20°	295.2	9.3
20°-30°	445.1	14.0
30°-40°	535.6	16.9
40°-50°	558.7	17.6
50°-60°	512.1	16.2
60°-70°	402.1	12.7
70°-80°	244.7	7.7
80°-90°	72.4	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°	843.4	26.6
0°-40°	1379.0	43.5
0°-60°	2449.8	77.3
0°-90°	3169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3169.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1079	1086	1085	1084	1087	103
15°	1034	1044	1048	1050	1055	292
25°	946	958	967	974	980	436
35°	828	841	858	871	877	518
45°	691	705	727	744	753	533
55°	534	548	575	598	608	478
65°	364	378	408	436	446	360
75°	185	202	233	261	273	196
85°	33	46	69	77	82	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.4	1089.4	1089.4	1089.4	1089.4
2.5°	1085.3	1090.8	1089.4	1084.6	1086.7
5°	1079.2	1086.0	1085.3	1083.9	1087.3
7.5°	1071.7	1079.2	1079.8	1079.8	1083.9
10°	1063.5	1071.0	1072.3	1070.3	1071.7
12.5°	1049.9	1058.7	1061.4	1061.4	1063.5
15°	1033.5	1043.7	1048.5	1049.9	1054.6
17.5°	1015.8	1026.7	1032.8	1036.2	1040.3
20°	994.6	1006.2	1013.0	1017.1	1021.9
22.5°	970.8	983.7	991.2	995.3	1000.8
25°	945.5	958.5	967.4	973.5	979.6
27.5°	919.0	931.2	943.5	951.0	956.5
30°	890.3	903.3	916.2	925.8	931.2
32.5°	859.7	873.3	888.3	898.5	904.6
35°	828.3	841.2	858.3	870.6	876.7
37.5°	796.3	809.9	827.6	840.6	848.1
40°	762.2	776.5	795.6	809.9	817.4
42.5°	726.7	740.4	761.5	777.8	786.7
45°	690.6	704.9	726.7	743.8	752.6
47.5°	653.1	666.7	690.6	710.4	717.9
50°	614.2	627.2	652.4	673.5	682.4
52.5°	574.7	588.3	613.6	636.0	645.6
55°	534.5	548.1	574.7	597.9	608.1
57.5°	493.6	507.2	534.5	558.3	570.6
60°	451.3	464.9	493.6	518.1	530.4
62.5°	407.7	422.0	451.3	476.5	489.5
65°	364.0	377.7	408.4	435.6	445.8
67.5°	320.4	334.0	364.0	391.3	403.6
70°	275.4	291.1	320.4	349.0	359.9
72.5°	228.4	246.1	275.4	305.4	316.3
75°	184.7	201.8	233.1	261.1	273.4
77.5°	141.8	160.2	189.5	218.2	230.4
80°	100.9	118.6	148.6	175.9	188.8
82.5°	64.1	79.8	109.8	134.3	143.8
85°	32.7	46.4	68.9	77.0	81.8
87.5°	9.5	16.4	24.5	30.7	34.1
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	15.76	17.42	16.13	17.74	18.05	16.50	18.16	16.86	18.47	18.79
	3H	17.53	19.04	17.91	19.36	19.72	18.58	20.08	18.95	20.41	20.77
	4H	18.15	19.57	18.55	19.92	20.29	19.44	20.86	19.84	21.21	21.58
	6H	18.56	19.88	18.97	20.24	20.63	20.19	21.50	20.60	21.87	22.26
	8H	18.66	19.92	19.09	20.31	20.71	20.48	21.74	20.91	22.13	22.53
	12H	18.71	19.92	19.14	20.30	20.73	20.68	21.88	21.10	22.26	22.69
4H	2H	16.53	17.95	16.93	18.30	18.67	17.10	18.52	17.50	18.87	19.24
	3H	18.52	19.72	18.93	20.11	20.51	19.42	20.61	19.82	21.01	21.41
	4H	19.26	20.35	19.70	20.76	21.20	20.43	21.52	20.86	21.93	22.36
	6H	19.79	20.74	20.25	21.18	21.64	21.34	22.29	21.79	22.73	23.18
	8H	19.94	20.82	20.39	21.27	21.73	21.71	22.60	22.17	23.04	23.50
	12H	20.02	20.82	20.49	21.29	21.76	21.96	22.76	22.44	23.24	23.70
8H	4H	19.71	20.60	20.17	21.04	21.51	20.73	21.62	21.19	22.06	22.53
	6H	20.37	21.12	20.87	21.60	22.08	21.79	22.53	22.28	23.02	23.49
	8H	20.58	21.25	21.09	21.75	22.24	22.26	22.93	22.77	23.43	23.92
	12H	20.72	21.31	21.22	21.80	22.36	22.61	23.20	23.12	23.69	24.25
12H	4H	19.79	20.59	20.27	21.07	21.53	20.76	21.56	21.24	22.03	22.50
	6H	20.50	21.16	21.00	21.67	22.15	21.84	22.51	22.35	23.01	23.50
	8H	20.77	21.36	21.28	21.85	22.41	22.38	22.97	22.88	23.46	24.02