

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: P1587736

Luminaire Tested: 22CZSP-SB-49HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587736
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-49HE-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

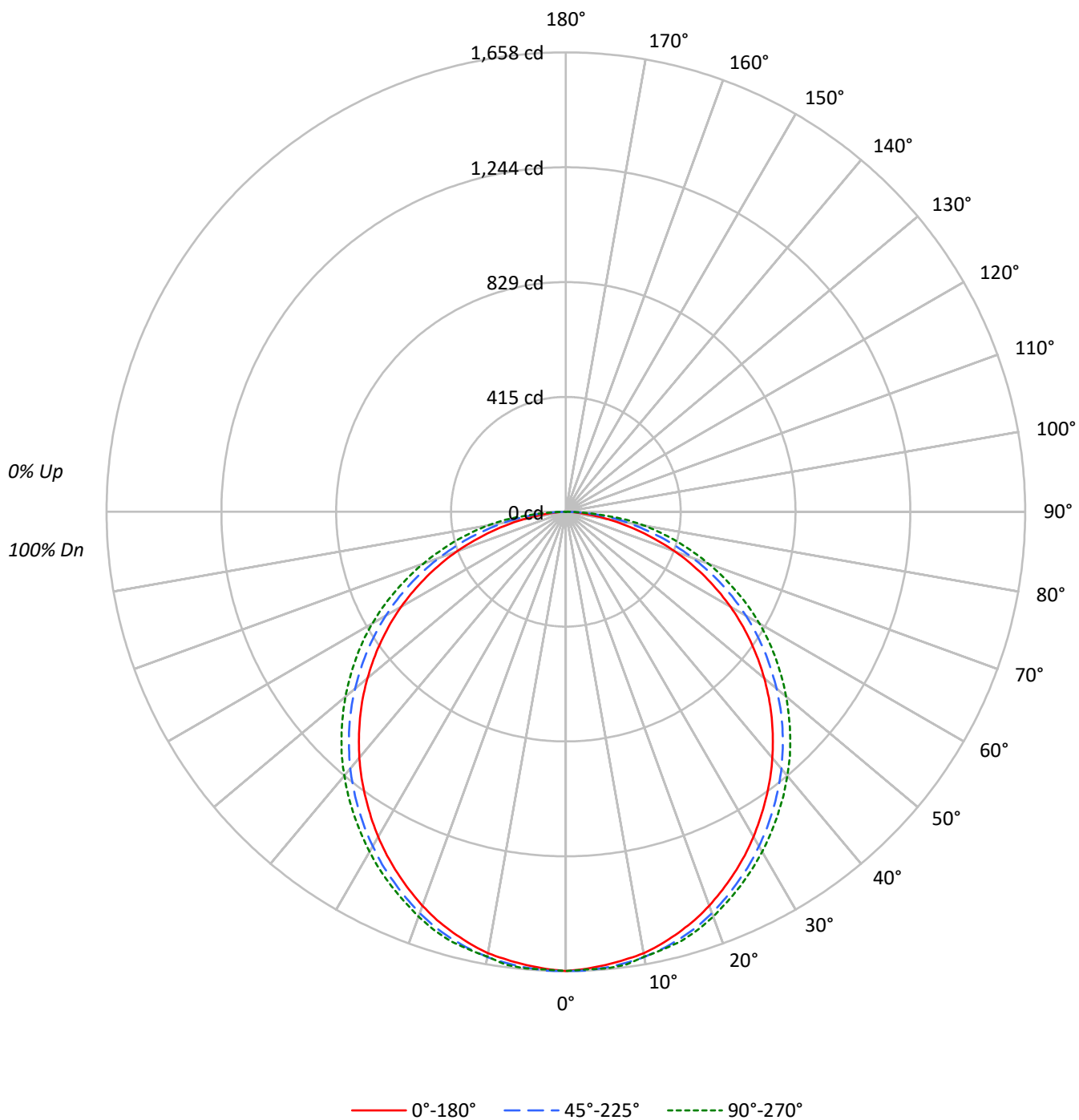
Lumens per Lamp: N/A
Luminaire Lumens: 4822.0 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5190	5190	5190
5°	5162	5191	5201
10°	5145	5188	5185
15°	5098	5172	5202
20°	5043	5137	5181
25°	4971	5086	5150
30°	4898	5041	5124
35°	4818	4992	5099
40°	4740	4949	5084
45°	4653	4897	5071
50°	4553	4836	5059
55°	4440	4774	5051
60°	4301	4703	5054
65°	4104	4604	5027
70°	3837	4463	5014
75°	3401	4293	5033
80°	2768	4077	5181
85°	1789	3765	4473

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5251 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.9	3.3
10°-20°	449.2	9.3
20°-30°	677.3	14.0
30°-40°	815.0	16.9
40°-50°	850.1	17.6
50°-60°	779.2	16.2
60°-70°	611.9	12.7
70°-80°	372.4	7.7
80°-90°	110.2	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°	1283.4	26.6
0°-40°	2098.3	43.5
0°-60°	3727.6	77.3
0°-90°	4822.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4822.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1642	1652	1651	1649	1654	156
15°	1573	1588	1595	1598	1605	444
25°	1439	1458	1472	1481	1491	663
35°	1260	1280	1306	1325	1334	789
45°	1051	1073	1106	1132	1145	810
55°	813	834	874	910	925	727
65°	554	575	621	663	678	548
75°	281	307	355	397	416	298
85°	50	70	105	117	124	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.6	1657.6	1657.6	1657.6	1657.6
2.5°	1651.4	1659.7	1657.6	1650.4	1653.5
5°	1642.1	1652.4	1651.4	1649.3	1654.5
7.5°	1630.7	1642.1	1643.1	1643.1	1649.3
10°	1618.2	1629.6	1631.7	1628.6	1630.7
12.5°	1597.5	1611.0	1615.1	1615.1	1618.2
15°	1572.6	1588.1	1595.4	1597.5	1604.7
17.5°	1545.6	1562.2	1571.5	1576.7	1582.9
20°	1513.4	1531.1	1541.5	1547.7	1554.9
22.5°	1477.1	1496.9	1508.3	1514.5	1522.8
25°	1438.8	1458.5	1472.0	1481.3	1490.6
27.5°	1398.3	1417.0	1435.7	1447.1	1455.4
30°	1354.7	1374.4	1394.2	1408.7	1417.0
32.5°	1308.1	1328.8	1351.6	1367.2	1376.5
35°	1260.3	1280.1	1306.0	1324.7	1334.0
37.5°	1211.6	1232.3	1259.3	1279.0	1290.4
40°	1159.7	1181.5	1210.6	1232.3	1243.7
42.5°	1105.8	1126.5	1158.7	1183.6	1197.1
45°	1050.8	1072.6	1105.8	1131.7	1145.2
47.5°	993.8	1014.5	1050.8	1080.9	1092.3
50°	934.6	954.3	992.7	1024.9	1038.4
52.5°	874.5	895.2	933.6	967.8	982.3
55°	813.3	834.0	874.5	909.7	925.3
57.5°	751.0	771.8	813.3	849.6	868.2
60°	686.7	707.5	751.0	788.4	807.0
62.5°	620.3	642.1	686.7	725.1	744.8
65°	553.9	574.7	621.4	662.8	678.4
67.5°	487.5	508.3	553.9	595.4	614.1
70°	419.1	442.9	487.5	531.1	547.7
72.5°	347.5	374.5	419.1	464.7	481.3
75°	281.1	307.0	354.8	397.3	416.0
77.5°	215.8	243.8	288.4	331.9	350.6
80°	153.5	180.5	226.1	267.6	287.3
82.5°	97.5	121.4	167.0	204.4	218.9
85°	49.8	70.5	104.8	117.2	124.5
87.5°	14.5	24.9	37.3	46.7	51.9
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	17.22	18.88	17.59	19.20	19.51	17.96	19.62	18.32	19.93	20.24
	3H	18.99	20.49	19.37	20.82	21.18	20.04	21.54	20.41	21.87	22.23
	4H	19.61	21.03	20.01	21.38	21.75	20.90	22.32	21.30	22.67	23.04
	6H	20.02	21.34	20.43	21.70	22.09	21.65	22.96	22.06	23.33	23.72
	8H	20.12	21.38	20.54	21.77	22.17	21.94	23.20	22.36	23.59	23.99
	12H	20.17	21.38	20.60	21.76	22.19	22.13	23.34	22.56	23.72	24.15
4H	2H	17.99	19.41	18.39	19.76	20.13	18.56	19.98	18.96	20.33	20.70
	3H	19.98	21.18	20.39	21.57	21.97	20.87	22.07	21.28	22.47	22.87
	4H	20.72	21.81	21.15	22.22	22.65	21.89	22.98	22.32	23.39	23.82
	6H	21.25	22.20	21.70	22.64	23.10	22.80	23.75	23.25	24.19	24.64
	8H	21.39	22.28	21.85	22.72	23.19	23.16	24.05	23.62	24.50	24.96
	12H	21.47	22.28	21.95	22.75	23.22	23.42	24.22	23.90	24.69	25.16
8H	4H	21.17	22.06	21.63	22.50	22.96	22.19	23.08	22.65	23.52	23.99
	6H	21.83	22.57	22.32	23.06	23.53	23.25	23.99	23.74	24.48	24.95
	8H	22.04	22.71	22.55	23.21	23.70	23.72	24.39	24.23	24.89	25.38
	12H	22.18	22.77	22.68	23.26	23.82	24.07	24.66	24.58	25.15	25.71
12H	4H	21.25	22.05	21.73	22.52	22.99	22.22	23.02	22.70	23.49	23.96
	6H	21.96	22.62	22.46	23.13	23.61	23.30	23.97	23.81	24.47	24.96
	8H	22.23	22.82	22.74	23.31	23.87	23.84	24.43	24.34	24.92	25.47