

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: P1587749

Luminaire Tested: 22CZSP-SB-49HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-49HE-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

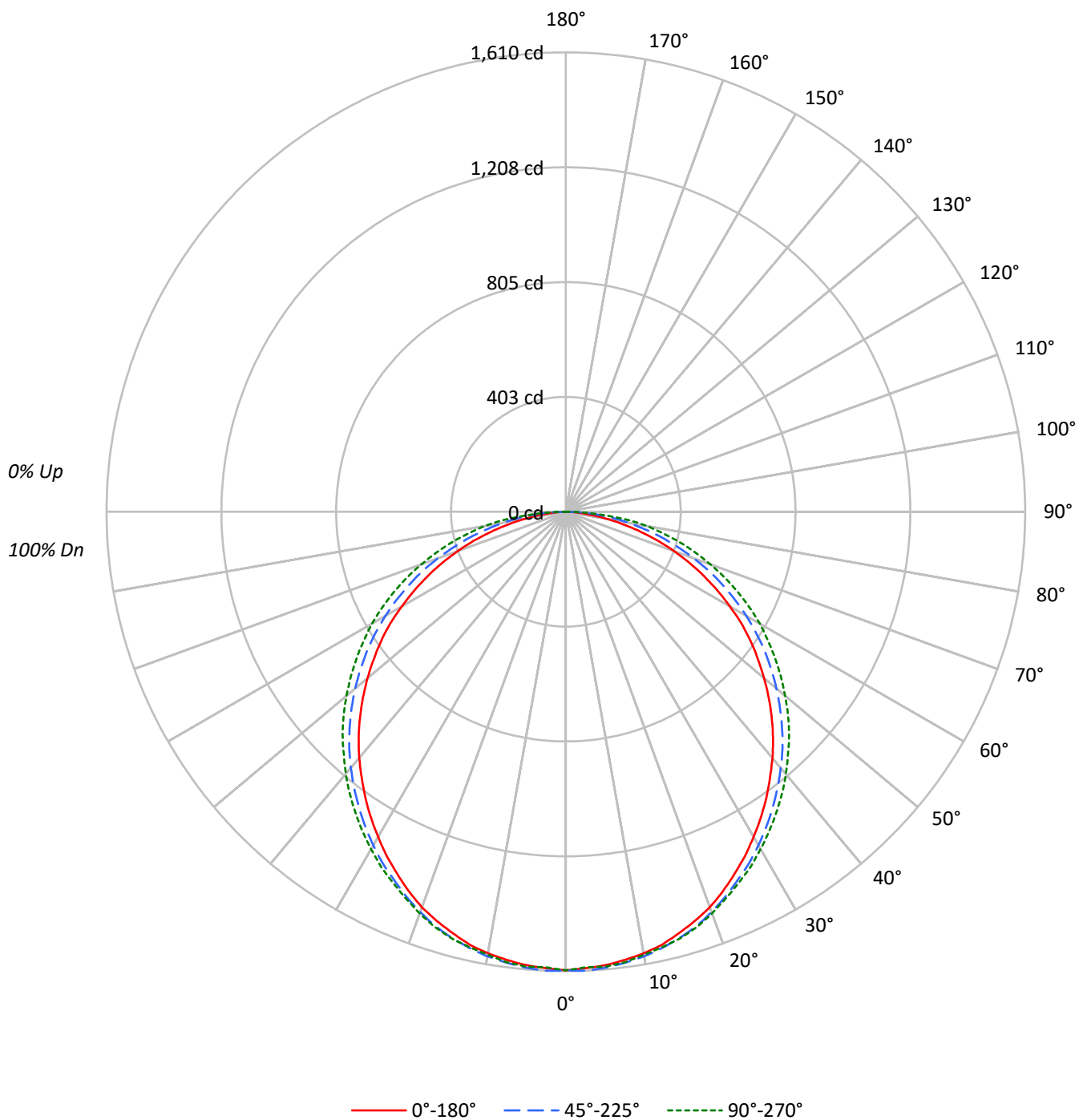
Lumens per Lamp: N/A
Luminaire Lumens: 4690.0 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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
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	93	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	63	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5032	5032	5032
5°	5014	5042	5030
10°	4996	5031	5012
15°	4959	5010	5017
20°	4915	4975	4991
25°	4836	4921	4956
30°	4759	4881	4935
35°	4682	4834	4918
40°	4605	4792	4906
45°	4519	4747	4901
50°	4420	4695	4889
55°	4319	4644	4888
60°	4159	4575	4917
65°	3964	4486	4921
70°	3699	4363	4935
75°	3291	4203	5020
80°	2703	4027	5210
85°	1782	3780	4707

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5335 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.0	3.2
10°-20°	435.1	9.3
20°-30°	655.9	14.0
30°-40°	789.8	16.8
40°-50°	825.1	17.6
50°-60°	758.1	16.2
60°-70°	597.0	12.7
70°-80°	366.0	7.8
80°-90°	111.0	2.4
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°	1243.0	26.5
0°-40°	2032.8	43.3
0°-60°	3616.1	77.1
0°-90°	4690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4690.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1595	1598	1604	1602	1600	151
15°	1530	1536	1546	1552	1548	432
25°	1400	1408	1424	1439	1434	645
35°	1225	1241	1265	1287	1286	766
45°	1020	1042	1072	1102	1107	787
55°	791	814	851	887	895	706
65°	535	563	606	646	664	529
75°	272	304	347	389	415	289
85°	50	74	105	117	131	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1607.1	1607.1	1607.1	1607.1	1607.1
2.5°	1601.1	1605.1	1610.1	1602.1	1598.1
5°	1595.2	1598.1	1604.1	1602.1	1600.1
7.5°	1584.2	1586.2	1594.2	1594.2	1592.2
10°	1571.3	1575.3	1582.3	1581.3	1576.3
12.5°	1554.5	1557.4	1565.4	1565.4	1562.4
15°	1529.6	1535.6	1545.5	1551.5	1547.5
17.5°	1503.8	1509.8	1522.7	1528.7	1526.7
20°	1475.1	1480.0	1492.9	1501.9	1497.9
22.5°	1439.3	1445.3	1460.2	1470.1	1466.1
25°	1399.6	1408.5	1424.4	1439.3	1434.4
27.5°	1359.9	1369.8	1389.7	1404.6	1402.6
30°	1316.2	1329.1	1350.0	1368.8	1364.9
32.5°	1271.6	1286.5	1308.3	1328.1	1327.2
35°	1224.9	1240.8	1264.6	1287.4	1286.5
37.5°	1175.3	1194.1	1219.0	1243.8	1244.8
40°	1126.6	1144.5	1172.3	1199.1	1200.1
42.5°	1075.0	1093.9	1123.7	1151.5	1152.4
45°	1020.4	1042.3	1072.0	1101.8	1106.8
47.5°	964.8	987.7	1018.4	1050.2	1056.2
50°	907.3	931.1	963.8	997.6	1003.6
52.5°	848.7	873.5	907.3	941.0	950.0
55°	791.1	814.0	850.7	887.4	895.4
57.5°	730.6	751.4	791.1	829.8	839.8
60°	664.1	689.9	730.6	769.3	785.2
62.5°	599.6	627.3	669.0	707.7	725.6
65°	535.0	562.8	605.5	646.2	664.1
67.5°	469.5	498.3	544.0	582.7	602.5
70°	404.0	432.8	476.5	518.2	539.0
72.5°	338.5	369.3	411.9	454.6	475.5
75°	272.0	303.7	347.4	389.1	414.9
77.5°	209.4	240.2	283.9	326.6	348.4
80°	149.9	180.7	223.3	266.0	288.9
82.5°	95.3	124.1	165.8	201.5	222.4
85°	49.6	73.5	105.2	117.1	131.0
87.5°	14.9	28.8	40.7	45.7	56.6
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	17.13	18.79	17.49	19.10	19.42	17.87	19.54	18.24	19.85	20.16
	3H	18.89	20.40	19.27	20.72	21.08	19.97	21.48	20.35	21.80	22.16
	4H	19.51	20.94	19.91	21.28	21.66	20.85	22.28	21.25	22.62	23.00
	6H	19.93	21.25	20.34	21.61	22.00	21.62	22.94	22.03	23.31	23.70
	8H	20.03	21.30	20.46	21.68	22.08	21.93	23.20	22.36	23.58	23.98
	12H	20.08	21.30	20.51	21.68	22.11	22.15	23.36	22.57	23.74	24.17
4H	2H	17.90	19.32	18.30	19.67	20.04	18.48	19.90	18.87	20.25	20.62
	3H	19.89	21.09	20.30	21.49	21.89	20.81	22.00	21.21	22.40	22.80
	4H	20.64	21.73	21.08	22.14	22.58	21.84	22.93	22.27	23.34	23.77
	6H	21.18	22.13	21.63	22.57	23.03	22.77	23.72	23.22	24.16	24.62
	8H	21.33	22.22	21.79	22.66	23.13	23.15	24.05	23.61	24.49	24.95
	12H	21.41	22.22	21.89	22.69	23.16	23.43	24.23	23.91	24.71	25.18
8H	4H	21.10	21.99	21.56	22.43	22.89	22.14	23.03	22.60	23.47	23.94
	6H	21.77	22.52	22.27	23.01	23.48	23.22	23.97	23.72	24.46	24.93
	8H	22.00	22.66	22.50	23.17	23.65	23.71	24.38	24.22	24.89	25.37
	12H	22.14	22.73	22.65	23.22	23.78	24.09	24.68	24.59	25.17	25.73
12H	4H	21.18	21.98	21.66	22.46	22.93	22.17	22.97	22.65	23.45	23.91
	6H	21.90	22.57	22.41	23.08	23.56	23.28	23.95	23.78	24.45	24.94
	8H	22.19	22.79	22.70	23.28	23.83	23.83	24.42	24.34	24.91	25.47