

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: P1586710

Luminaire Tested: 22CZSP-A-49HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-49HE-L950-S
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

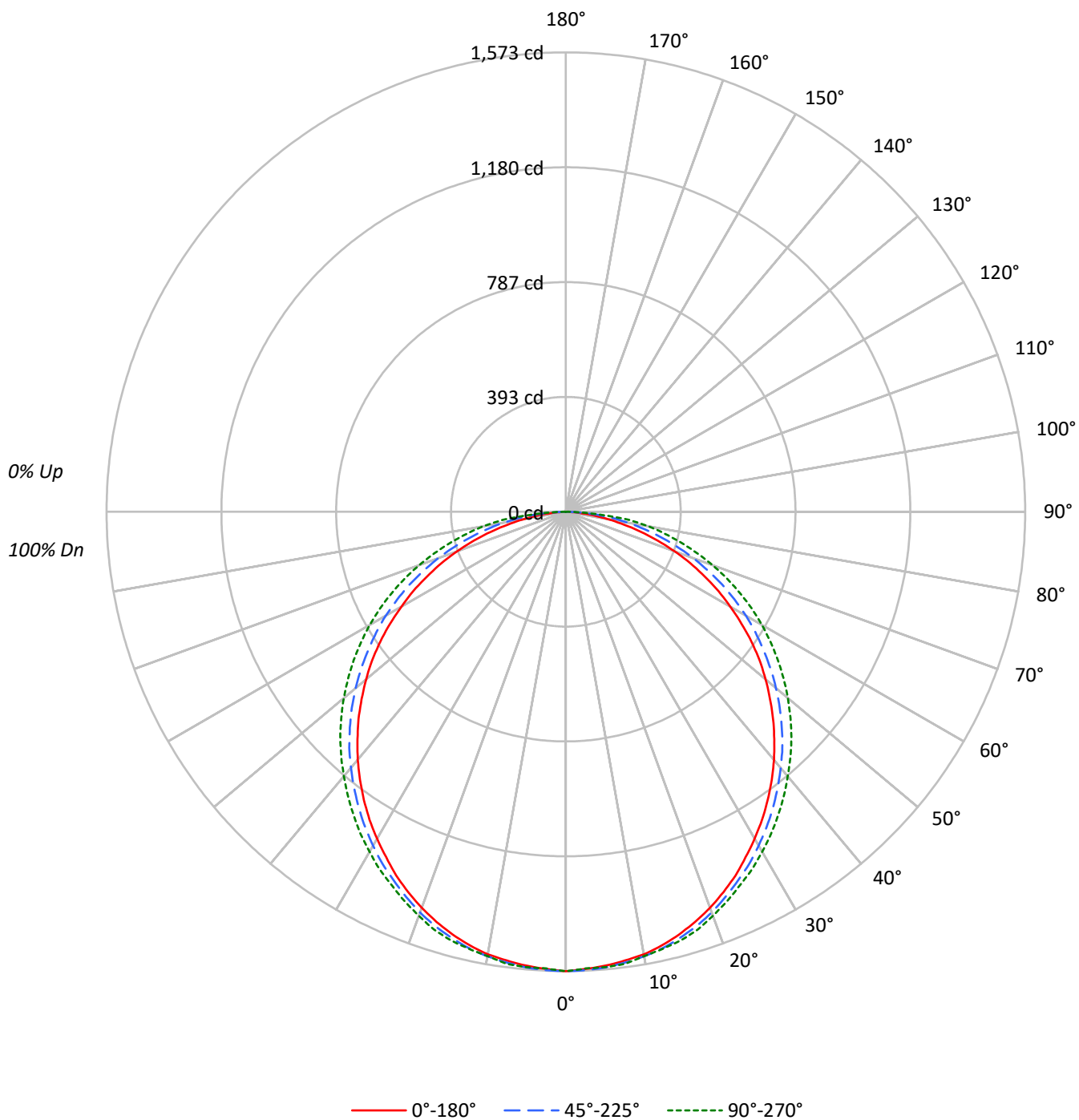
Lumens per Lamp: N/A
Luminaire Lumens: 4593.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	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	69
3	89	79	70	64	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	32	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°	4926	4926	4926
5°	4904	4923	4920
10°	4893	4916	4913
15°	4858	4897	4927
20°	4809	4866	4906
25°	4750	4816	4875
30°	4675	4774	4861
35°	4608	4727	4847
40°	4532	4680	4832
45°	4445	4633	4838
50°	4350	4576	4836
55°	4236	4512	4842
60°	4078	4462	4854
65°	3891	4376	4869
70°	3626	4254	4891
75°	3232	4084	4939
80°	2672	3890	5179
85°	1739	3514	4527

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5343 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.2
10°-20°	426.0	9.3
20°-30°	642.5	14.0
30°-40°	773.9	16.8
40°-50°	808.2	17.6
50°-60°	742.3	16.2
60°-70°	584.6	12.7
70°-80°	358.7	7.8
80°-90°	107.9	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°	1217.4	26.5
0°-40°	1991.3	43.4
0°-60°	3541.8	77.1
0°-90°	4593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4593.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1573	1573	1573	1573	1573	
5°	1560	1562	1566	1571	1565	148
15°	1499	1502	1511	1520	1520	423
25°	1375	1378	1394	1411	1411	633
35°	1205	1211	1237	1262	1268	754
45°	1004	1015	1046	1082	1092	774
55°	776	790	826	873	887	693
65°	525	543	591	640	657	519
75°	267	288	338	391	408	283
85°	48	66	98	124	126	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1573.2	1573.2	1573.2	1573.2	1573.2
2.5°	1567.2	1570.2	1571.2	1572.2	1565.2
5°	1560.1	1562.1	1566.2	1571.2	1565.2
7.5°	1550.0	1552.1	1557.1	1564.2	1561.1
10°	1539.0	1540.0	1546.0	1551.1	1545.0
12.5°	1520.8	1523.8	1530.9	1534.9	1532.9
15°	1498.6	1501.7	1510.7	1519.8	1519.8
17.5°	1472.4	1476.5	1487.6	1499.7	1500.7
20°	1443.2	1446.2	1460.3	1472.4	1472.4
22.5°	1410.0	1414.0	1428.1	1441.2	1443.2
25°	1374.7	1377.7	1393.8	1411.0	1411.0
27.5°	1333.4	1339.4	1359.6	1376.7	1380.7
30°	1293.0	1298.1	1320.3	1341.4	1344.4
32.5°	1250.7	1256.8	1279.9	1303.1	1308.2
35°	1205.4	1211.4	1236.6	1261.8	1267.9
37.5°	1158.0	1165.1	1191.3	1220.5	1226.5
40°	1108.6	1116.7	1144.9	1176.1	1182.2
42.5°	1056.2	1067.3	1097.5	1129.8	1138.8
45°	1003.8	1014.9	1046.1	1082.4	1092.5
47.5°	948.4	961.5	993.7	1032.0	1043.1
50°	892.9	906.0	939.3	980.6	992.7
52.5°	836.5	849.6	883.9	927.2	940.3
55°	776.0	790.1	826.4	872.8	886.9
57.5°	713.5	731.7	770.0	817.4	831.5
60°	651.1	669.2	712.5	758.9	775.0
62.5°	589.6	606.7	651.1	700.4	717.6
65°	525.1	543.2	590.6	640.0	657.1
67.5°	461.6	479.7	527.1	578.5	596.6
70°	396.1	416.2	464.6	516.0	534.2
72.5°	330.6	351.7	401.1	453.5	470.7
75°	267.1	288.2	337.6	391.0	408.2
77.5°	204.6	227.8	276.1	330.6	346.7
80°	148.2	170.3	215.7	269.1	287.2
82.5°	94.7	113.9	159.2	209.6	222.7
85°	48.4	66.5	97.8	124.0	126.0
87.5°	15.1	21.2	32.3	48.4	49.4
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	17.02	18.68	17.38	18.99	19.31	17.85	19.51	18.21	19.83	20.14
	3H	18.77	20.28	19.15	20.61	20.97	19.97	21.47	20.34	21.80	22.16
	4H	19.39	20.81	19.79	21.16	21.54	20.85	22.28	21.25	22.62	23.00
	6H	19.80	21.12	20.21	21.49	21.88	21.64	22.96	22.05	23.32	23.71
	8H	19.91	21.17	20.33	21.56	21.96	21.96	23.22	22.38	23.61	24.00
	12H	19.96	21.17	20.39	21.55	21.98	22.17	23.38	22.60	23.76	24.19
4H	2H	17.79	19.21	18.19	19.56	19.93	18.44	19.86	18.83	20.21	20.58
	3H	19.77	20.97	20.18	21.36	21.76	20.79	21.99	21.20	22.39	22.79
	4H	20.50	21.59	20.93	22.00	22.44	21.84	22.93	22.27	23.34	23.78
	6H	21.03	21.98	21.49	22.42	22.88	22.80	23.75	23.25	24.19	24.64
	8H	21.18	22.07	21.64	22.51	22.98	23.19	24.09	23.65	24.53	24.99
	12H	21.26	22.07	21.74	22.54	23.01	23.47	24.27	23.95	24.75	25.22
8H	4H	20.96	21.85	21.42	22.30	22.76	22.13	23.02	22.59	23.47	23.93
	6H	21.62	22.37	22.12	22.85	23.33	23.24	23.99	23.74	24.48	24.95
	8H	21.84	22.50	22.34	23.01	23.49	23.76	24.42	24.26	24.93	25.41
	12H	21.97	22.57	22.48	23.06	23.61	24.14	24.73	24.65	25.22	25.78
12H	4H	21.05	21.86	21.53	22.33	22.80	22.16	22.96	22.64	23.43	23.90
	6H	21.76	22.43	22.26	22.93	23.42	23.29	23.96	23.80	24.47	24.95
	8H	22.03	22.63	22.54	23.12	23.67	23.87	24.46	24.37	24.95	25.51