

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: P1587742

Luminaire Tested: 22CZSP-SB-49HE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587742
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-L930-S
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

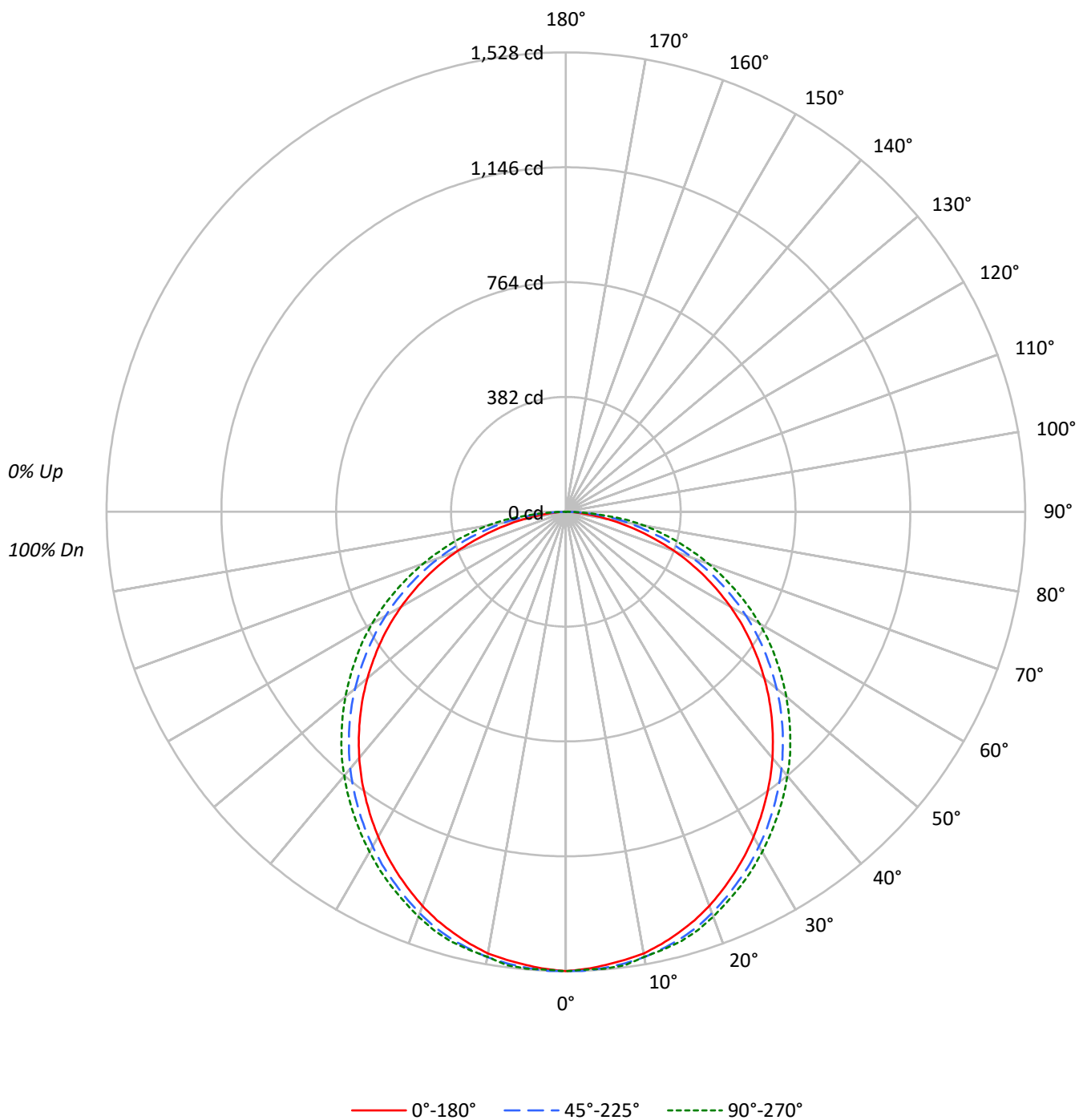
Lumens per Lamp: N/A
Luminaire Lumens: 4445.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4785	4785	4785
5°	4758	4785	4794
10°	4743	4782	4780
15°	4699	4768	4796
20°	4649	4735	4777
25°	4582	4688	4748
30°	4515	4647	4723
35°	4441	4602	4701
40°	4370	4561	4686
45°	4289	4514	4675
50°	4197	4458	4663
55°	4093	4401	4656
60°	3964	4336	4659
65°	3783	4244	4634
70°	3537	4114	4623
75°	3135	3956	4639
80°	2552	3760	4777
85°	1649	3471	4121

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4841 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	3.3
10°-20°	414.1	9.3
20°-30°	624.3	14.0
30°-40°	751.2	16.9
40°-50°	783.6	17.6
50°-60°	718.3	16.2
60°-70°	564.0	12.7
70°-80°	343.3	7.7
80°-90°	101.6	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°	1183.0	26.6
0°-40°	1934.3	43.5
0°-60°	3436.2	77.3
0°-90°	4445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1514	1523	1522	1520	1525	144
15°	1450	1464	1471	1473	1479	409
25°	1326	1344	1357	1366	1374	611
35°	1162	1180	1204	1221	1230	727
45°	969	989	1019	1043	1056	747
55°	750	769	806	839	853	670
65°	511	530	573	611	625	505
75°	259	283	327	366	383	275
85°	46	65	97	108	115	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.0	1528.0	1528.0	1528.0	1528.0
2.5°	1522.3	1529.9	1528.0	1521.3	1524.2
5°	1513.7	1523.3	1522.3	1520.4	1525.2
7.5°	1503.2	1513.7	1514.6	1514.6	1520.4
10°	1491.7	1502.2	1504.1	1501.3	1503.2
12.5°	1472.6	1485.0	1488.8	1488.8	1491.7
15°	1449.6	1464.0	1470.7	1472.6	1479.3
17.5°	1424.8	1440.1	1448.7	1453.5	1459.2
20°	1395.1	1411.4	1420.9	1426.7	1433.4
22.5°	1361.7	1379.8	1390.3	1396.1	1403.7
25°	1326.3	1344.4	1356.9	1365.5	1374.1
27.5°	1289.0	1306.2	1323.4	1333.9	1341.6
30°	1248.8	1267.0	1285.2	1298.5	1306.2
32.5°	1205.8	1224.9	1246.0	1260.3	1268.9
35°	1161.8	1180.0	1203.9	1221.1	1229.7
37.5°	1116.9	1136.0	1160.8	1179.0	1189.5
40°	1069.1	1089.1	1115.9	1136.0	1146.5
42.5°	1019.3	1038.5	1068.1	1091.0	1103.5
45°	968.6	988.7	1019.3	1043.2	1055.7
47.5°	916.1	935.2	968.6	996.4	1006.9
50°	861.6	879.7	915.1	944.7	957.2
52.5°	806.1	825.2	860.6	892.2	905.5
55°	749.7	768.8	806.1	838.6	852.9
57.5°	692.3	711.4	749.7	783.1	800.4
60°	633.0	652.1	692.3	726.7	743.9
62.5°	571.8	591.9	633.0	668.4	686.6
65°	510.6	529.7	572.8	611.0	625.4
67.5°	449.4	468.5	510.6	548.9	566.1
70°	386.3	408.3	449.4	489.6	504.9
72.5°	320.3	345.2	386.3	428.4	443.7
75°	259.1	283.0	327.0	366.2	383.4
77.5°	198.9	224.7	265.8	306.0	323.2
80°	141.5	166.4	208.5	246.7	264.9
82.5°	89.9	111.9	154.0	188.4	201.8
85°	45.9	65.0	96.6	108.1	114.7
87.5°	13.4	22.9	34.4	43.0	47.8
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	16.94	18.60	17.30	18.91	19.23	17.67	19.33	18.04	19.65	19.96
	3H	18.71	20.21	19.08	20.54	20.90	19.75	21.26	20.13	21.58	21.94
	4H	19.33	20.75	19.72	21.09	21.47	20.62	22.04	21.02	22.38	22.76
	6H	19.73	21.05	20.14	21.42	21.81	21.36	22.68	21.77	23.04	23.43
	8H	19.84	21.10	20.26	21.49	21.88	21.66	22.92	22.08	23.31	23.70
	12H	19.89	21.09	20.32	21.48	21.90	21.85	23.06	22.28	23.44	23.87
4H	2H	17.71	19.13	18.10	19.47	19.85	18.28	19.70	18.68	20.04	20.42
	3H	19.70	20.89	20.11	21.29	21.69	20.59	21.79	21.00	22.18	22.58
	4H	20.44	21.52	20.87	21.94	22.37	21.61	22.69	22.04	23.11	23.54
	6H	20.97	21.92	21.42	22.36	22.81	22.52	23.46	22.97	23.90	24.36
	8H	21.11	22.00	21.57	22.44	22.91	22.88	23.77	23.34	24.21	24.68
	12H	21.19	21.99	21.67	22.47	22.94	23.14	23.94	23.62	24.41	24.88
8H	4H	20.89	21.78	21.34	22.22	22.68	21.91	22.80	22.37	23.24	23.70
	6H	21.55	22.29	22.04	22.78	23.25	22.96	23.71	23.46	24.19	24.67
	8H	21.76	22.42	22.27	22.93	23.41	23.44	24.10	23.94	24.61	25.09
	12H	21.90	22.48	22.40	22.97	23.53	23.79	24.38	24.29	24.87	25.43
12H	4H	20.97	21.77	21.45	22.24	22.71	21.93	22.73	22.41	23.21	23.68
	6H	21.67	22.34	22.18	22.85	23.33	23.02	23.68	23.52	24.19	24.67
	8H	21.95	22.54	22.46	23.03	23.59	23.55	24.14	24.06	24.63	25.19