

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: P1586461

Luminaire Tested: 22CZSP-49HE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-49HE-L850
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

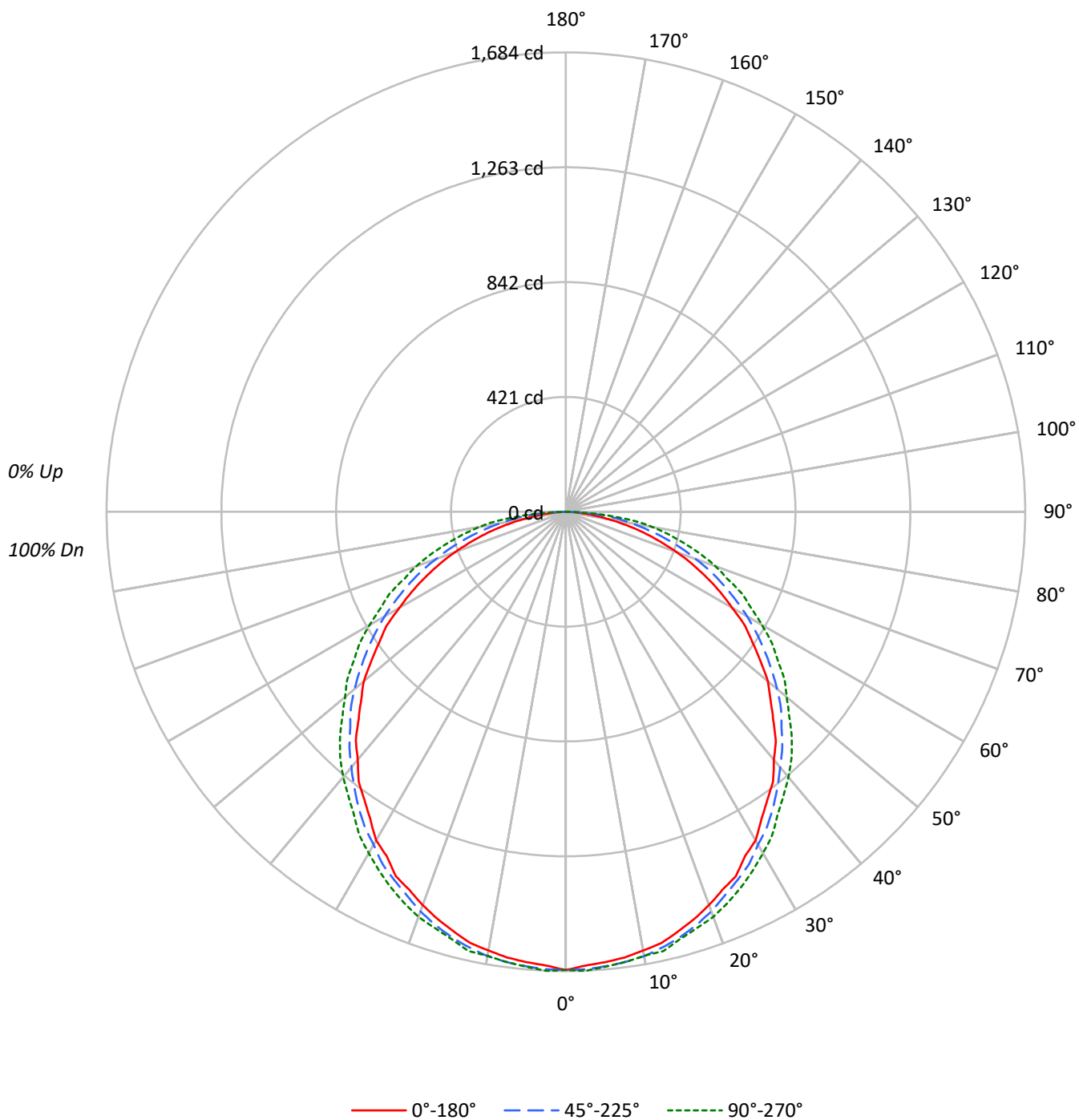
Lumens per Lamp: N/A
Luminaire Lumens: 4948.0 lumens
Efficiency: N/A
Efficacy: 153.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5260	5260	5260
5°	5209	5257	5261
10°	5192	5260	5255
15°	5161	5235	5255
20°	5114	5194	5265
25°	5093	5145	5250
30°	5029	5095	5226
35°	4923	5062	5178
40°	4850	4998	5191
45°	4758	4953	5187
50°	4711	4925	5146
55°	4561	4858	5172
60°	4407	4805	5204
65°	4216	4732	5292
70°	3962	4642	5349
75°	3570	4559	5456
80°	2919	4476	5814
85°	1904	4459	5436

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6101 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	3.2
10°-20°	454.7	9.2
20°-30°	687.2	13.9
30°-40°	828.8	16.8
40°-50°	866.4	17.5
50°-60°	799.0	16.1
60°-70°	633.1	12.8
70°-80°	395.8	8.0
80°-90°	124.2	2.5
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°	1300.7	26.3
0°-40°	2129.5	43.0
0°-60°	3794.9	76.7
0°-90°	4948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1680	1680	1680	1680	1680	
5°	1657	1665	1672	1678	1674	158
15°	1592	1600	1615	1625	1621	449
25°	1474	1470	1489	1510	1520	676
35°	1288	1303	1324	1347	1354	808
45°	1074	1090	1118	1147	1171	832
55°	835	855	890	938	947	749
65°	569	593	639	689	714	564
75°	295	319	377	430	451	311
85°	53	76	124	145	151	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1679.9	1679.9	1679.9	1679.9	1679.9
2.5°	1664.8	1672.3	1678.4	1676.9	1684.4
5°	1657.2	1664.8	1672.3	1678.4	1673.8
7.5°	1648.1	1655.7	1664.8	1673.8	1664.8
10°	1633.0	1637.5	1654.2	1655.7	1652.7
12.5°	1619.4	1623.9	1636.0	1646.6	1649.6
15°	1592.1	1599.7	1614.8	1625.4	1620.9
17.5°	1564.9	1575.5	1589.1	1599.7	1599.7
20°	1534.6	1542.2	1558.8	1566.4	1580.0
22.5°	1499.8	1508.9	1522.5	1543.7	1551.3
25°	1474.1	1469.5	1489.2	1510.4	1519.5
27.5°	1422.6	1428.7	1455.9	1475.6	1483.1
30°	1390.8	1393.9	1409.0	1436.2	1445.3
32.5°	1334.8	1343.9	1371.2	1390.8	1407.5
35°	1287.9	1303.1	1324.2	1346.9	1354.5
37.5°	1247.1	1250.1	1274.3	1304.6	1310.6
40°	1186.5	1204.7	1222.8	1260.7	1269.8
42.5°	1139.6	1148.7	1174.4	1210.7	1224.4
45°	1074.5	1089.7	1118.4	1147.2	1171.4
47.5°	1017.0	1032.1	1070.0	1106.3	1110.8
50°	967.1	973.1	1011.0	1051.8	1056.4
52.5°	899.0	914.1	950.4	995.8	1011.0
55°	835.4	855.1	889.9	938.3	947.4
57.5°	779.4	788.5	829.4	877.8	895.9
60°	703.7	729.5	767.3	814.2	830.9
62.5°	638.7	662.9	703.7	747.6	765.8
65°	569.0	593.3	638.7	688.6	714.3
67.5°	502.5	522.1	576.6	628.1	640.2
70°	432.8	455.5	507.0	560.0	584.2
72.5°	360.2	385.9	443.4	493.4	519.1
75°	295.1	319.3	376.8	429.8	451.0
77.5°	227.0	254.3	310.3	363.2	387.4
80°	161.9	189.2	248.2	301.2	322.4
82.5°	104.4	133.2	189.2	236.1	254.3
85°	53.0	75.7	124.1	145.3	151.3
87.5°	16.6	27.2	42.4	48.4	48.4
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	17.29	18.96	17.66	19.27	19.59	18.08	19.75	18.45	20.06	20.38
	3H	19.07	20.59	19.45	20.91	21.27	20.23	21.74	20.60	22.06	22.42
	4H	19.71	21.14	20.11	21.49	21.86	21.15	22.58	21.55	22.92	23.30
	6H	20.14	21.46	20.55	21.83	22.22	21.98	23.30	22.39	23.66	24.05
	8H	20.25	21.52	20.67	21.91	22.31	22.32	23.59	22.75	23.98	24.38
	12H	20.31	21.52	20.73	21.90	22.33	22.56	23.78	22.99	24.16	24.59
4H	2H	18.07	19.49	18.46	19.84	20.22	18.68	20.11	19.08	20.45	20.83
	3H	20.08	21.28	20.48	21.68	22.08	21.07	22.27	21.47	22.67	23.06
	4H	20.84	21.93	21.27	22.34	22.78	22.15	23.24	22.58	23.66	24.09
	6H	21.38	22.34	21.84	22.78	23.24	23.15	24.11	23.60	24.55	25.00
	8H	21.54	22.44	22.00	22.88	23.34	23.58	24.47	24.04	24.92	25.38
	12H	21.63	22.44	22.11	22.91	23.38	23.89	24.70	24.37	25.17	25.64
8H	4H	21.32	22.21	21.77	22.66	23.12	22.46	23.36	22.92	23.80	24.26
	6H	22.01	22.76	22.50	23.24	23.72	23.62	24.37	24.12	24.86	25.33
	8H	22.23	22.91	22.74	23.41	23.90	24.17	24.84	24.68	25.35	25.83
	12H	22.38	22.98	22.89	23.47	24.03	24.60	25.19	25.10	25.68	26.24
12H	4H	21.41	22.22	21.89	22.70	23.16	22.49	23.30	22.97	23.77	24.24
	6H	22.15	22.83	22.66	23.33	23.82	23.68	24.36	24.19	24.86	25.34
	8H	22.46	23.05	22.96	23.54	24.10	24.30	24.89	24.80	25.38	25.94