

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: P1586509

Luminaire Tested: 22CZSP-54HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586509
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-54HE-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

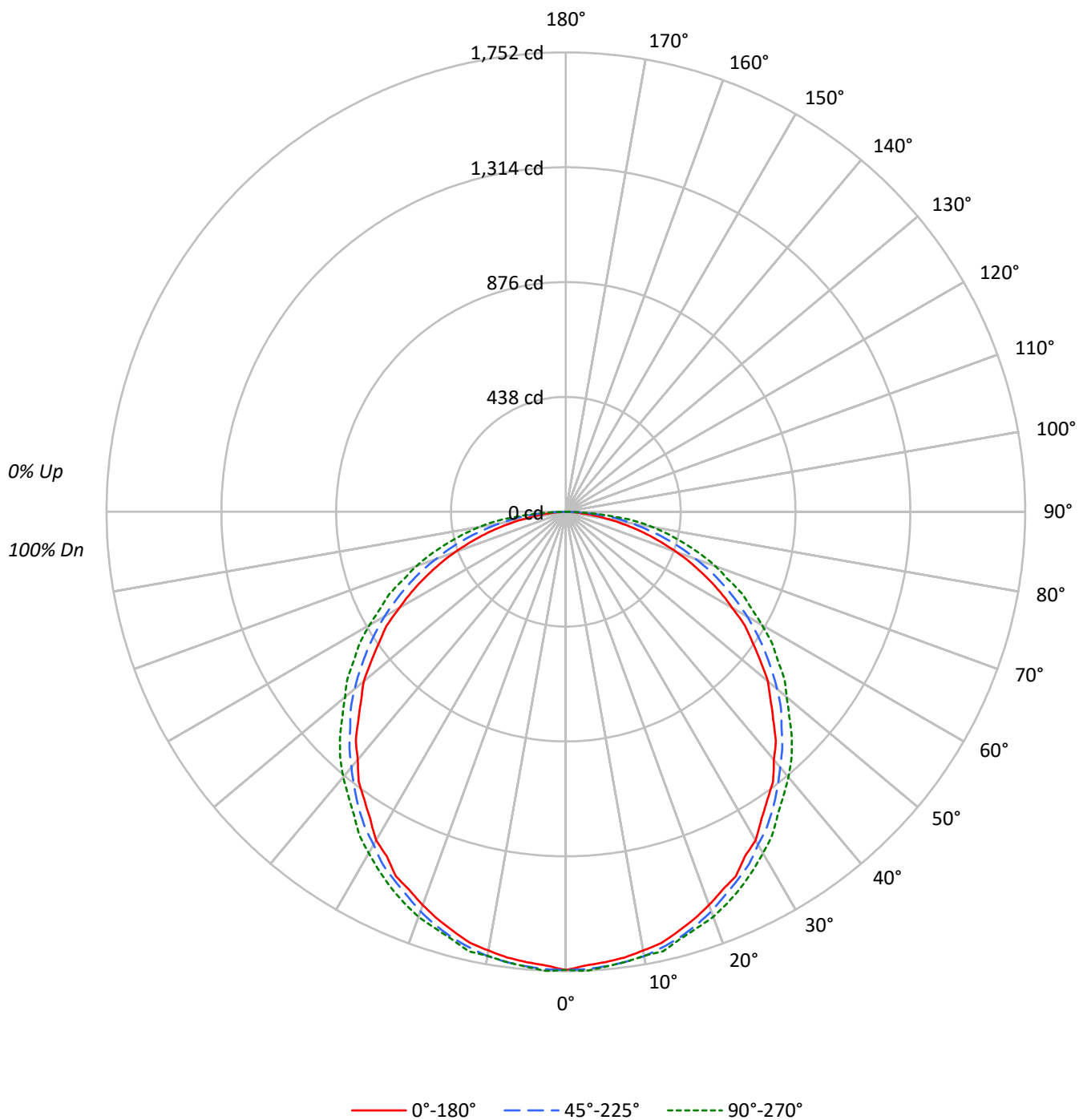
Lumens per Lamp: N/A
Luminaire Lumens: 5148.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.1
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°	5473	5473	5473
5°	5420	5469	5474
10°	5402	5472	5467
15°	5370	5447	5467
20°	5320	5404	5478
25°	5299	5353	5462
30°	5232	5300	5437
35°	5122	5267	5387
40°	5046	5201	5400
45°	4951	5153	5397
50°	4902	5124	5354
55°	4745	5055	5381
60°	4586	4999	5413
65°	4386	4924	5507
70°	4123	4829	5565
75°	3714	4744	5677
80°	3038	4656	6048
85°	1980	4638	5659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6345 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.2	3.2
10°-20°	473.1	9.2
20°-30°	714.9	13.9
30°-40°	862.3	16.8
40°-50°	901.5	17.5
50°-60°	831.3	16.1
60°-70°	658.7	12.8
70°-80°	411.8	8.0
80°-90°	129.2	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°	1353.2	26.3
0°-40°	2215.5	43.0
0°-60°	3948.3	76.7
0°-90°	5148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1748	1748	1748	1748	1748	
5°	1724	1732	1740	1746	1742	164
15°	1656	1664	1680	1691	1686	467
25°	1534	1529	1549	1571	1581	703
35°	1340	1356	1378	1401	1409	840
45°	1118	1134	1164	1194	1219	865
55°	869	890	926	976	986	779
65°	592	617	664	716	743	586
75°	307	332	392	447	469	324
85°	55	79	129	151	158	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1747.8	1747.8	1747.8	1747.8	1747.8
2.5°	1732.0	1739.9	1746.2	1744.6	1752.5
5°	1724.2	1732.0	1739.9	1746.2	1741.5
7.5°	1714.7	1722.6	1732.0	1741.5	1732.0
10°	1699.0	1703.7	1721.0	1722.6	1719.5
12.5°	1684.8	1689.5	1702.1	1713.2	1716.3
15°	1656.5	1664.3	1680.1	1691.1	1686.4
17.5°	1628.1	1639.1	1653.3	1664.3	1664.3
20°	1596.6	1604.5	1621.8	1629.7	1643.9
22.5°	1560.4	1569.9	1584.0	1606.1	1614.0
25°	1533.6	1528.9	1549.4	1571.4	1580.9
27.5°	1480.1	1486.4	1514.8	1535.2	1543.1
30°	1447.0	1450.2	1465.9	1494.3	1503.7
32.5°	1388.8	1398.2	1426.6	1447.0	1464.4
35°	1340.0	1355.7	1377.8	1401.4	1409.3
37.5°	1297.5	1300.6	1325.8	1357.3	1363.6
40°	1234.5	1253.4	1272.3	1311.6	1321.1
42.5°	1185.7	1195.1	1221.9	1259.7	1273.8
45°	1118.0	1133.7	1163.6	1193.5	1218.7
47.5°	1058.1	1073.9	1113.2	1151.0	1155.7
50°	1006.2	1012.5	1051.8	1094.3	1099.1
52.5°	935.3	951.1	988.8	1036.1	1051.8
55°	869.2	889.6	925.9	976.2	985.7
57.5°	810.9	820.4	862.9	913.3	932.2
60°	732.2	759.0	798.3	847.1	864.4
62.5°	664.5	689.7	732.2	777.8	796.7
65°	592.0	617.2	664.5	716.4	743.2
67.5°	522.8	543.2	599.9	653.5	666.1
70°	450.3	474.0	527.5	582.6	607.8
72.5°	374.8	401.5	461.4	513.3	540.1
75°	307.0	332.2	392.1	447.2	469.2
77.5°	236.2	264.5	322.8	377.9	403.1
80°	168.5	196.8	258.2	313.3	335.4
82.5°	108.6	138.6	196.8	245.6	264.5
85°	55.1	78.7	129.1	151.2	157.5
87.5°	17.3	28.3	44.1	50.4	50.4
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	17.43	19.10	17.80	19.41	19.73	18.22	19.89	18.59	20.20	20.52
	3H	19.21	20.73	19.59	21.05	21.41	20.36	21.88	20.74	22.20	22.56
	4H	19.85	21.28	20.25	21.62	22.00	21.29	22.72	21.69	23.06	23.44
	6H	20.28	21.60	20.69	21.97	22.36	22.11	23.44	22.52	23.80	24.19
	8H	20.39	21.66	20.81	22.05	22.44	22.46	23.73	22.88	24.12	24.51
	12H	20.44	21.66	20.87	22.04	22.47	22.70	23.92	23.13	24.30	24.73
4H	2H	18.20	19.63	18.60	19.98	20.35	18.82	20.24	19.21	20.59	20.97
	3H	20.21	21.42	20.62	21.81	22.21	21.20	22.41	21.61	22.80	23.20
	4H	20.97	22.07	21.40	22.48	22.91	22.29	23.38	22.72	23.79	24.23
	6H	21.52	22.48	21.97	22.92	23.37	23.29	24.25	23.74	24.69	25.14
	8H	21.68	22.57	22.14	23.02	23.48	23.71	24.61	24.17	25.05	25.52
	12H	21.77	22.57	22.24	23.05	23.52	24.03	24.84	24.51	25.31	25.78
8H	4H	21.45	22.35	21.91	22.79	23.26	22.60	23.50	23.06	23.94	24.40
	6H	22.14	22.89	22.64	23.38	23.85	23.76	24.51	24.25	25.00	25.47
	8H	22.37	23.05	22.88	23.55	24.03	24.31	24.98	24.81	25.48	25.97
	12H	22.52	23.12	23.02	23.61	24.16	24.74	25.33	25.24	25.82	26.38
12H	4H	21.55	22.36	22.03	22.83	23.30	22.63	23.43	23.10	23.91	24.38
	6H	22.29	22.97	22.80	23.47	23.96	23.82	24.49	24.33	25.00	25.48
	8H	22.60	23.19	23.10	23.68	24.24	24.43	25.03	24.94	25.52	26.08