

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: P1586459

Luminaire Tested: 22CZSP-49HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586459
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-L845
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

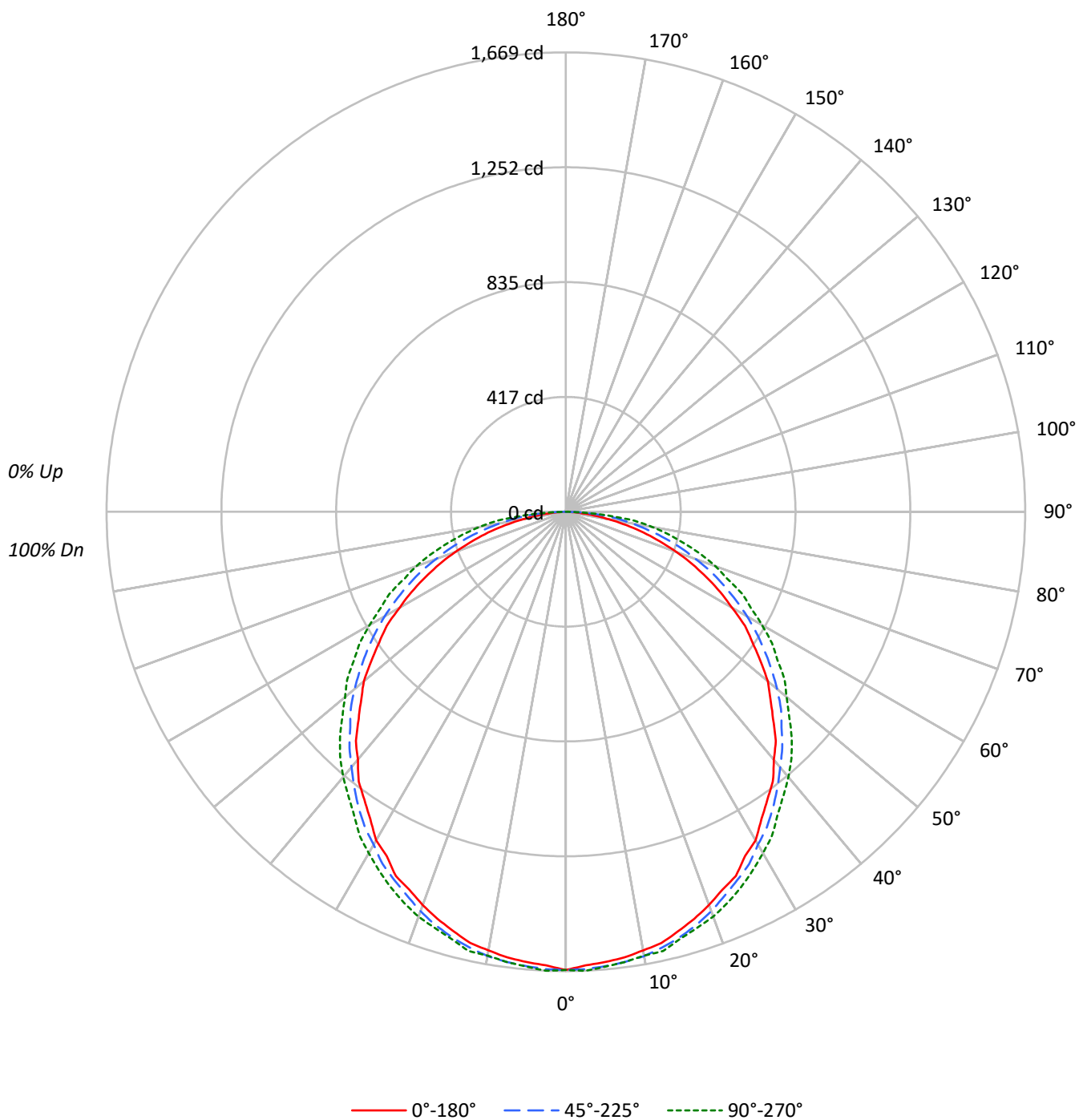
Lumens per Lamp: N/A
Luminaire Lumens: 4903.0 lumens
Efficiency: N/A
Efficacy: 152.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	5212	5212	5212
5°	5162	5209	5213
10°	5145	5212	5207
15°	5114	5187	5207
20°	5067	5147	5217
25°	5047	5099	5202
30°	4983	5048	5178
35°	4878	5016	5131
40°	4806	4953	5143
45°	4715	4908	5140
50°	4668	4880	5099
55°	4519	4814	5125
60°	4367	4761	5156
65°	4178	4689	5244
70°	3927	4600	5300
75°	3538	4518	5407
80°	2894	4434	5760
85°	1886	4419	5389

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6043 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.2
10°-20°	450.6	9.2
20°-30°	680.9	13.9
30°-40°	821.3	16.8
40°-50°	858.5	17.5
50°-60°	791.7	16.1
60°-70°	627.3	12.8
70°-80°	392.2	8.0
80°-90°	123.0	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°	1288.8	26.3
0°-40°	2110.1	43.0
0°-60°	3760.4	76.7
0°-90°	4903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4903.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1665	1665	1665	1665	1665	
5°	1642	1650	1657	1663	1659	156
15°	1578	1585	1600	1611	1606	445
25°	1461	1456	1476	1497	1506	670
35°	1276	1291	1312	1335	1342	800
45°	1065	1080	1108	1137	1161	824
55°	828	847	882	930	939	742
65°	564	588	633	682	708	559
75°	292	316	373	426	447	308
85°	52	75	123	144	150	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1664.6	1664.6	1664.6	1664.6	1664.6
2.5°	1649.6	1657.1	1663.1	1661.6	1669.1
5°	1642.1	1649.6	1657.1	1663.1	1658.6
7.5°	1633.1	1640.6	1649.6	1658.6	1649.6
10°	1618.1	1622.6	1639.1	1640.6	1637.6
12.5°	1604.6	1609.1	1621.1	1631.6	1634.6
15°	1577.6	1585.1	1600.1	1610.6	1606.1
17.5°	1550.6	1561.1	1574.6	1585.1	1585.1
20°	1520.6	1528.1	1544.6	1552.1	1565.6
22.5°	1486.2	1495.2	1508.7	1529.6	1537.1
25°	1460.7	1456.2	1475.7	1496.7	1505.7
27.5°	1409.7	1415.7	1442.7	1462.2	1469.7
30°	1378.2	1381.2	1396.2	1423.2	1432.2
32.5°	1322.7	1331.7	1358.7	1378.2	1394.7
35°	1276.2	1291.2	1312.2	1334.7	1342.2
37.5°	1235.7	1238.7	1262.7	1292.7	1298.7
40°	1175.7	1193.7	1211.7	1249.2	1258.2
42.5°	1129.2	1138.2	1163.7	1199.7	1213.2
45°	1064.8	1079.7	1108.2	1136.7	1160.7
47.5°	1007.8	1022.8	1060.3	1096.2	1100.7
50°	958.3	964.3	1001.8	1042.3	1046.8
52.5°	890.8	905.8	941.8	986.8	1001.8
55°	827.8	847.3	881.8	929.8	938.8
57.5°	772.3	781.3	821.8	869.8	887.8
60°	697.3	722.8	760.3	806.8	823.3
62.5°	632.9	656.8	697.3	740.8	758.8
65°	563.9	587.9	632.9	682.3	707.8
67.5°	497.9	517.4	571.4	622.4	634.4
70°	428.9	451.4	502.4	554.9	578.9
72.5°	356.9	382.4	439.4	488.9	514.4
75°	292.4	316.4	373.4	425.9	446.9
77.5°	224.9	251.9	307.4	359.9	383.9
80°	160.5	187.5	245.9	298.4	319.4
82.5°	103.5	132.0	187.5	233.9	251.9
85°	52.5	75.0	123.0	144.0	150.0
87.5°	16.5	27.0	42.0	48.0	48.0
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	17.26	18.93	17.63	19.24	19.56	18.05	19.72	18.42	20.03	20.35
	3H	19.04	20.56	19.42	20.88	21.24	20.19	21.71	20.57	22.03	22.39
	4H	19.68	21.11	20.08	21.45	21.83	21.12	22.55	21.52	22.89	23.27
	6H	20.11	21.43	20.52	21.80	22.19	21.94	23.27	22.35	23.63	24.02
	8H	20.22	21.49	20.64	21.88	22.27	22.29	23.56	22.71	23.95	24.34
	12H	20.27	21.49	20.70	21.87	22.30	22.53	23.75	22.96	24.13	24.56
4H	2H	18.03	19.46	18.43	19.81	20.18	18.65	20.08	19.04	20.42	20.80
	3H	20.04	21.25	20.45	21.64	22.04	21.03	22.24	21.44	22.63	23.03
	4H	20.80	21.90	21.24	22.31	22.74	22.12	23.21	22.55	23.63	24.06
	6H	21.35	22.31	21.80	22.75	23.20	23.12	24.08	23.57	24.52	24.97
	8H	21.51	22.40	21.97	22.85	23.31	23.54	24.44	24.00	24.88	25.35
	12H	21.60	22.41	22.07	22.88	23.35	23.86	24.67	24.34	25.14	25.61
8H	4H	21.28	22.18	21.74	22.62	23.09	22.43	23.33	22.89	23.77	24.23
	6H	21.97	22.72	22.47	23.21	23.68	23.59	24.34	24.08	24.83	25.30
	8H	22.20	22.88	22.71	23.38	23.87	24.14	24.81	24.64	25.31	25.80
	12H	22.35	22.95	22.86	23.44	23.99	24.57	25.16	25.07	25.65	26.21
12H	4H	21.38	22.19	21.86	22.66	23.13	22.46	23.27	22.94	23.74	24.21
	6H	22.12	22.80	22.63	23.30	23.79	23.65	24.32	24.16	24.83	25.31
	8H	22.43	23.02	22.93	23.51	24.07	24.27	24.86	24.77	25.35	25.91