

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: P1586457

Luminaire Tested: 22CZSP-49HE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586457
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-L840
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

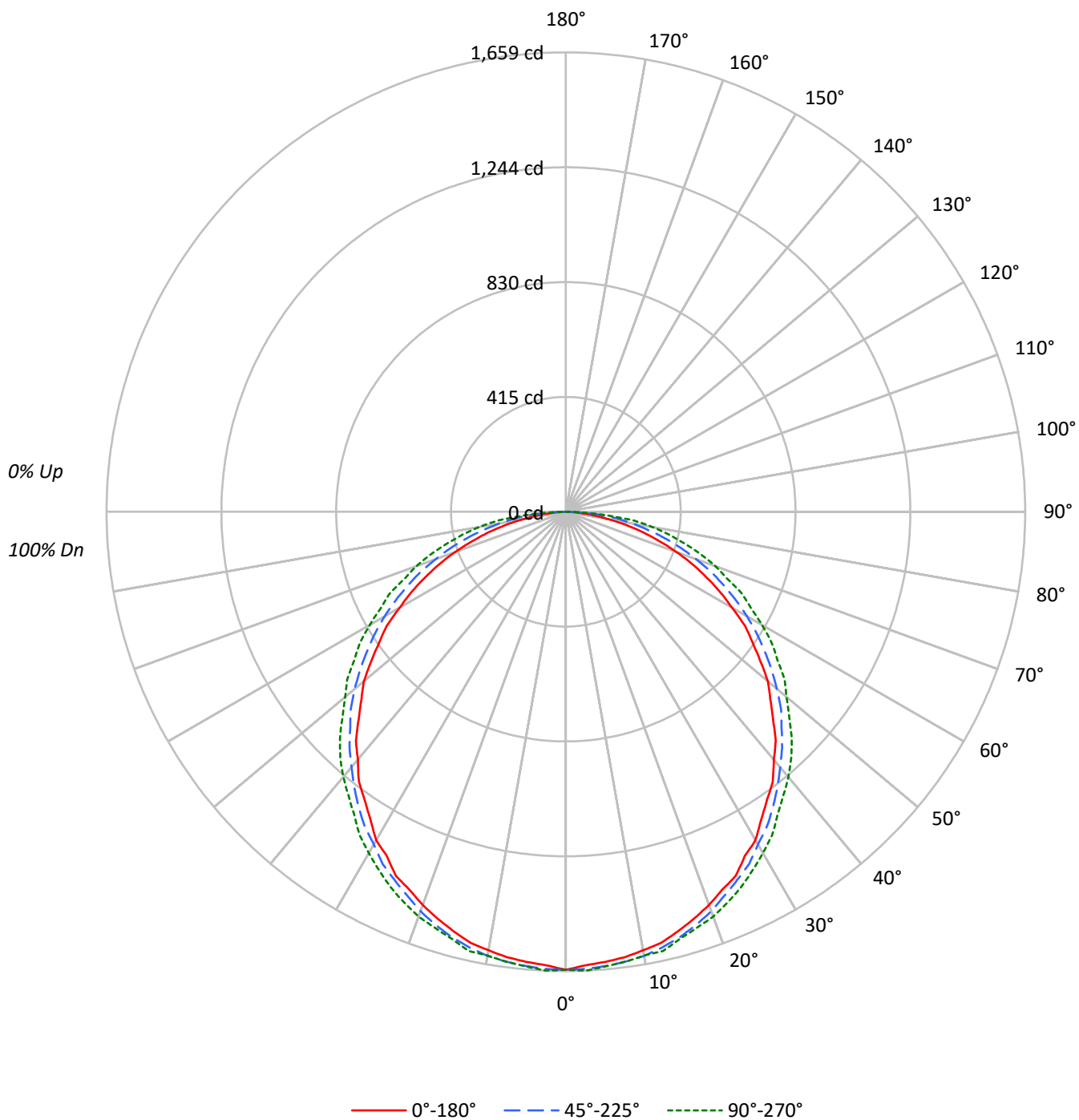
Lumens per Lamp: N/A
Luminaire Lumens: 4872.0 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	5180	5180	5180
5°	5129	5176	5180
10°	5113	5179	5174
15°	5082	5154	5174
20°	5035	5115	5184
25°	5015	5066	5169
30°	4952	5016	5146
35°	4847	4984	5098
40°	4776	4922	5111
45°	4685	4877	5108
50°	4639	4849	5067
55°	4491	4783	5092
60°	4339	4731	5123
65°	4151	4660	5212
70°	3902	4570	5266
75°	3516	4490	5373
80°	2874	4407	5724
85°	1875	4390	5353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6005 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.3	3.2
10°-20°	447.7	9.2
20°-30°	676.6	13.9
30°-40°	816.1	16.8
40°-50°	853.1	17.5
50°-60°	786.7	16.1
60°-70°	623.4	12.8
70°-80°	389.8	8.0
80°-90°	122.3	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°	1280.7	26.3
0°-40°	2096.7	43.0
0°-60°	3736.6	76.7
0°-90°	4872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1632	1639	1647	1653	1648	155
15°	1568	1575	1590	1600	1596	442
25°	1451	1447	1466	1487	1496	666
35°	1268	1283	1304	1326	1334	795
45°	1058	1073	1101	1130	1153	819
55°	823	842	876	924	933	738
65°	560	584	629	678	703	555
75°	291	314	371	423	444	306
85°	52	74	122	143	149	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1654.1	1654.1	1654.1	1654.1	1654.1
2.5°	1639.2	1646.6	1652.6	1651.1	1658.6
5°	1631.7	1639.2	1646.6	1652.6	1648.1
7.5°	1622.8	1630.2	1639.2	1648.1	1639.2
10°	1607.9	1612.4	1628.8	1630.2	1627.3
12.5°	1594.5	1599.0	1610.9	1621.3	1624.3
15°	1567.7	1575.1	1590.0	1600.4	1596.0
17.5°	1540.8	1551.3	1564.7	1575.1	1575.1
20°	1511.0	1518.5	1534.9	1542.3	1555.7
22.5°	1476.8	1485.7	1499.1	1520.0	1527.4
25°	1451.4	1447.0	1466.3	1487.2	1496.1
27.5°	1400.8	1406.7	1433.5	1452.9	1460.4
30°	1369.5	1372.4	1387.3	1414.2	1423.1
32.5°	1314.3	1323.3	1350.1	1369.5	1385.9
35°	1268.1	1283.0	1303.9	1326.3	1333.7
37.5°	1227.9	1230.9	1254.7	1284.5	1290.5
40°	1168.3	1186.2	1204.1	1241.3	1250.3
42.5°	1122.1	1131.0	1156.4	1192.1	1205.5
45°	1058.0	1072.9	1101.2	1129.5	1153.4
47.5°	1001.4	1016.3	1053.6	1089.3	1093.8
50°	952.2	958.2	995.4	1035.7	1040.1
52.5°	885.2	900.1	935.8	980.5	995.4
55°	822.6	841.9	876.2	923.9	932.8
57.5°	767.4	776.4	816.6	864.3	882.2
60°	692.9	718.3	755.5	801.7	818.1
62.5°	628.9	652.7	692.9	736.1	754.0
65°	560.3	584.1	628.9	678.0	703.4
67.5°	494.7	514.1	567.8	618.4	630.3
70°	426.2	448.5	499.2	551.4	575.2
72.5°	354.7	380.0	436.6	485.8	511.1
75°	290.6	314.4	371.1	423.2	444.1
77.5°	223.5	250.3	305.5	357.6	381.5
80°	159.4	186.3	244.4	296.5	317.4
82.5°	102.8	131.1	186.3	232.5	250.3
85°	52.2	74.5	122.2	143.1	149.0
87.5°	16.4	26.8	41.7	47.7	47.7
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	17.24	18.91	17.60	19.22	19.54	18.03	19.70	18.39	20.01	20.32
	3H	19.02	20.53	19.40	20.86	21.22	20.17	21.69	20.55	22.01	22.37
	4H	19.66	21.09	20.06	21.43	21.81	21.10	22.52	21.49	22.87	23.25
	6H	20.08	21.41	20.49	21.77	22.16	21.92	23.25	22.33	23.61	24.00
	8H	20.20	21.47	20.62	21.85	22.25	22.27	23.54	22.69	23.92	24.32
	12H	20.25	21.47	20.68	21.85	22.28	22.51	23.73	22.94	24.11	24.54
4H	2H	18.01	19.44	18.41	19.79	20.16	18.63	20.05	19.02	20.40	20.77
	3H	20.02	21.23	20.43	21.62	22.02	21.01	22.22	21.42	22.61	23.01
	4H	20.78	21.88	21.21	22.29	22.72	22.10	23.19	22.53	23.60	24.04
	6H	21.33	22.29	21.78	22.73	23.18	23.10	24.05	23.55	24.49	24.95
	8H	21.49	22.38	21.94	22.82	23.29	23.52	24.42	23.98	24.86	25.33
	12H	21.57	22.38	22.05	22.86	23.32	23.84	24.65	24.32	25.12	25.59
8H	4H	21.26	22.16	21.72	22.60	23.07	22.41	23.30	22.86	23.74	24.21
	6H	21.95	22.70	22.44	23.19	23.66	23.57	24.32	24.06	24.81	25.28
	8H	22.18	22.85	22.69	23.36	23.84	24.11	24.79	24.62	25.29	25.78
	12H	22.33	22.92	22.83	23.41	23.97	24.54	25.14	25.05	25.63	26.19
12H	4H	21.36	22.17	21.84	22.64	23.11	22.43	23.24	22.91	23.72	24.19
	6H	22.10	22.78	22.61	23.28	23.76	23.63	24.30	24.13	24.81	25.29
	8H	22.40	23.00	22.91	23.49	24.05	24.24	24.84	24.75	25.33	25.89