

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: P1588296

Luminaire Tested: 24CZSP-47-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-47-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

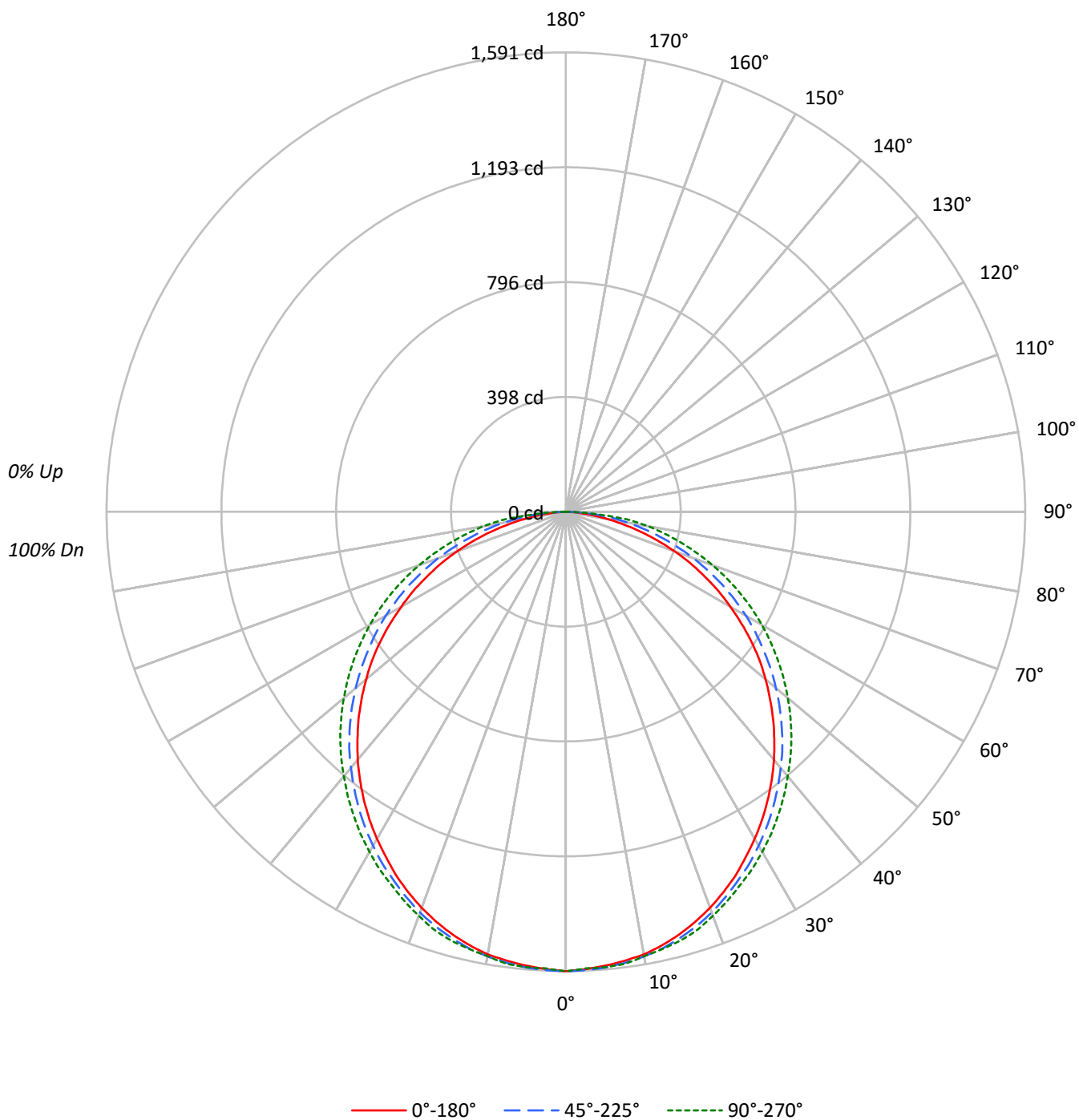
Lumens per Lamp: N/A
Luminaire Lumens: 4646.0 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1588296

CATALOG NUMBER: 24CZSP-47-L840-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588296

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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	93	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	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2437	2437	2437
5°	2426	2436	2434
10°	2421	2432	2431
15°	2404	2423	2438
20°	2380	2408	2428
25°	2350	2383	2412
30°	2313	2362	2405
35°	2280	2339	2398
40°	2242	2316	2391
45°	2199	2292	2394
50°	2152	2264	2393
55°	2096	2232	2396
60°	2017	2208	2402
65°	1925	2165	2409
70°	1794	2105	2420
75°	1599	2021	2443
80°	1322	1925	2562
85°	859	1738	2239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2644 cd/sqm

TEST NUMBER: P1588296

CATALOG NUMBER: 24CZSP-47-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	3.2
10°-20°	431.0	9.3
20°-30°	649.9	14.0
30°-40°	782.9	16.8
40°-50°	817.6	17.6
50°-60°	750.9	16.2
60°-70°	591.4	12.7
70°-80°	362.8	7.8
80°-90°	109.2	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°	1231.4	26.5
0°-40°	2014.2	43.4
0°-60°	3582.7	77.1
0°-90°	4646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1591	1591	1591	1591	1591	
5°	1578	1580	1584	1589	1583	150
15°	1516	1519	1528	1537	1537	427
25°	1390	1394	1410	1427	1427	640
35°	1219	1225	1251	1276	1282	763
45°	1015	1027	1058	1095	1105	783
55°	785	799	836	883	897	701
65°	531	550	597	647	665	525
75°	270	292	342	396	413	286
85°	49	67	99	125	127	64
90°	0	0	0	0	0	

TEST NUMBER: P1588296

CATALOG NUMBER: 24CZSP-47-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1591.4	1591.4	1591.4	1591.4	1591.4
2.5°	1585.3	1588.3	1589.3	1590.4	1583.2
5°	1578.1	1580.2	1584.2	1589.3	1583.2
7.5°	1567.9	1570.0	1575.1	1582.2	1579.1
10°	1556.7	1557.7	1563.9	1569.0	1562.8
12.5°	1538.4	1541.4	1548.6	1552.6	1550.6
15°	1515.9	1519.0	1528.2	1537.3	1537.3
17.5°	1489.4	1493.5	1504.7	1517.0	1518.0
20°	1459.9	1462.9	1477.2	1489.4	1489.4
22.5°	1426.2	1430.3	1444.6	1457.8	1459.9
25°	1390.5	1393.6	1409.9	1427.2	1427.2
27.5°	1348.7	1354.9	1375.3	1392.6	1396.7
30°	1308.0	1313.1	1335.5	1356.9	1360.0
32.5°	1265.2	1271.3	1294.7	1318.2	1323.3
35°	1219.3	1225.4	1250.9	1276.4	1282.5
37.5°	1171.4	1178.5	1205.0	1234.6	1240.7
40°	1121.4	1129.6	1158.1	1189.7	1195.8
42.5°	1068.4	1079.6	1110.2	1142.8	1152.0
45°	1015.4	1026.6	1058.2	1094.9	1105.1
47.5°	959.3	972.6	1005.2	1043.9	1055.1
50°	903.2	916.5	950.1	991.9	1004.2
52.5°	846.2	859.4	894.1	937.9	951.2
55°	785.0	799.3	836.0	882.9	897.1
57.5°	721.8	740.1	778.9	826.8	841.1
60°	658.6	676.9	720.8	767.7	784.0
62.5°	596.4	613.7	658.6	708.5	725.9
65°	531.1	549.5	597.4	647.4	664.7
67.5°	466.9	485.3	533.2	585.2	603.5
70°	400.6	421.0	470.0	522.0	540.3
72.5°	334.4	355.8	405.7	458.8	476.1
75°	270.2	291.6	341.5	395.6	412.9
77.5°	207.0	230.4	279.3	334.4	350.7
80°	149.9	172.3	218.2	272.2	290.5
82.5°	95.8	115.2	161.1	212.0	225.3
85°	48.9	67.3	98.9	125.4	127.4
87.5°	15.3	21.4	32.6	48.9	50.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588296

CATALOG NUMBER: 24CZSP-47-L840-S

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	14.57	16.24	14.94	16.55	16.86	15.40	17.07	15.77	17.38	17.69
	3H	16.33	17.84	16.71	18.16	18.52	17.52	19.03	17.90	19.35	19.71
	4H	16.95	18.37	17.35	18.72	19.09	18.41	19.83	18.81	20.18	20.55
	6H	17.36	18.68	17.77	19.04	19.43	19.19	20.51	19.60	20.87	21.26
	8H	17.47	18.73	17.89	19.12	19.52	19.51	20.77	19.93	21.16	21.56
	12H	17.52	18.73	17.95	19.11	19.54	19.72	20.93	20.15	21.31	21.74
4H	2H	15.35	16.77	15.74	17.11	17.49	15.99	17.41	16.39	17.76	18.14
	3H	17.32	18.52	17.73	18.92	19.32	18.35	19.54	18.76	19.94	20.34
	4H	18.06	19.15	18.49	19.56	19.99	19.40	20.49	19.83	20.90	21.33
	6H	18.59	19.54	19.04	19.98	20.43	20.35	21.30	20.80	21.74	22.20
	8H	18.73	19.63	19.19	20.07	20.53	20.75	21.64	21.21	22.08	22.55
	12H	18.82	19.62	19.30	20.10	20.56	21.03	21.83	21.50	22.30	22.77
8H	4H	18.52	19.41	18.98	19.85	20.32	19.69	20.58	20.15	21.02	21.49
	6H	19.18	19.92	19.67	20.41	20.88	20.80	21.54	21.29	22.03	22.50
	8H	19.39	20.06	19.90	20.56	21.05	21.31	21.98	21.82	22.48	22.97
	12H	19.53	20.12	20.03	20.61	21.17	21.70	22.29	22.20	22.78	23.34
12H	4H	18.61	19.41	19.09	19.89	20.35	19.71	20.52	20.19	20.99	21.46
	6H	19.31	19.98	19.82	20.49	20.97	20.85	21.52	21.35	22.02	22.51
	8H	19.59	20.18	20.09	20.67	21.23	21.42	22.02	21.93	22.51	23.06