

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: P1589776

Luminaire Tested: 24CZSP-SB-47-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

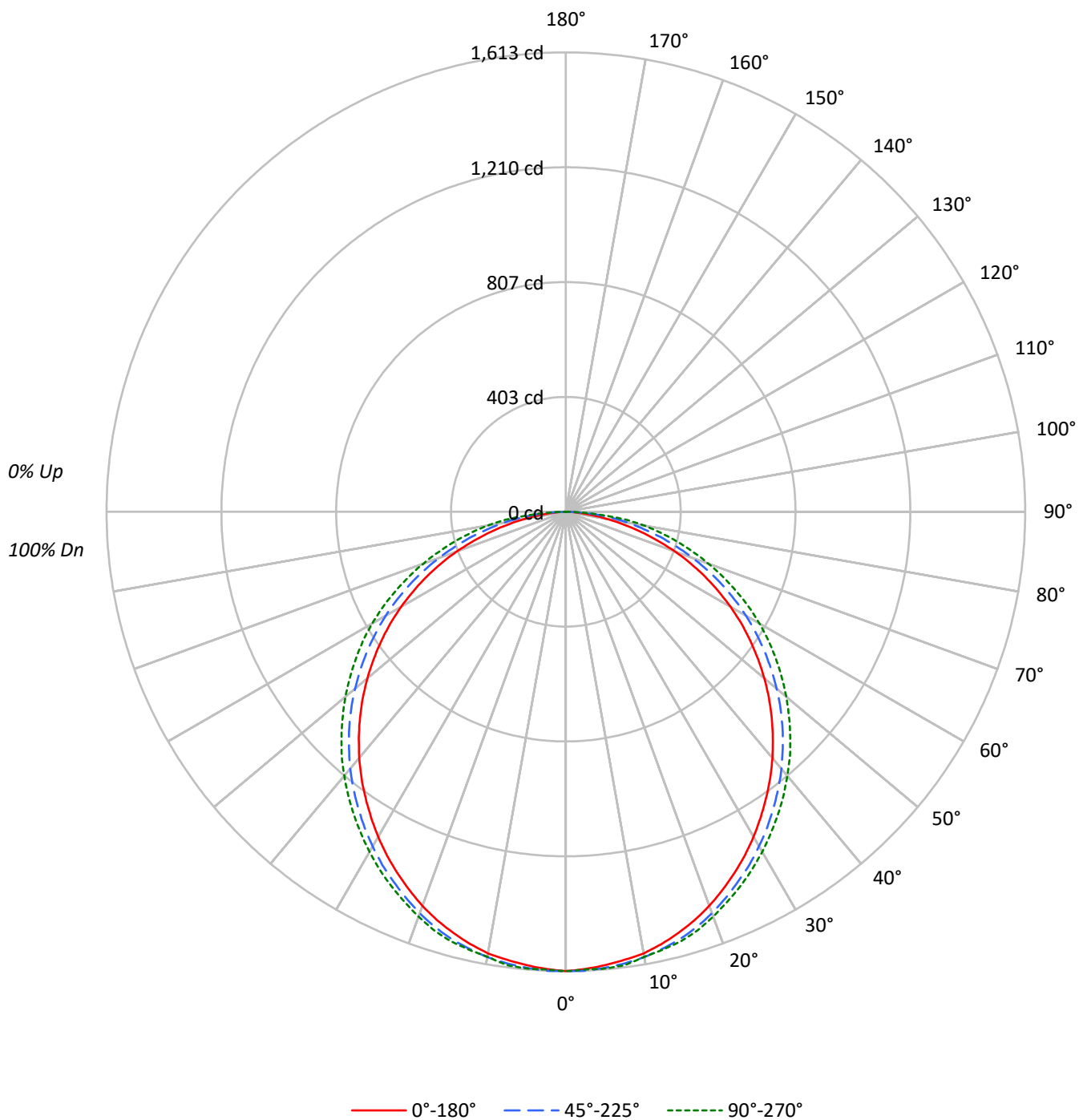
Lumens per Lamp: N/A
Luminaire Lumens: 4692.0 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	94	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	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	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	45	39	50	44	39	37		
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	33		
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2470	2470	2470
5°	2457	2471	2475
10°	2449	2469	2468
15°	2426	2462	2476
20°	2400	2445	2466
25°	2366	2421	2451
30°	2331	2399	2439
35°	2293	2376	2427
40°	2256	2355	2420
45°	2215	2331	2414
50°	2167	2302	2408
55°	2113	2272	2404
60°	2047	2239	2406
65°	1953	2191	2392
70°	1826	2124	2386
75°	1619	2043	2396
80°	1318	1940	2466
85°	851	1791	2128

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2499 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	3.3
10°-20°	437.1	9.3
20°-30°	659.0	14.0
30°-40°	793.0	16.9
40°-50°	827.2	17.6
50°-60°	758.2	16.2
60°-70°	595.4	12.7
70°-80°	362.4	7.7
80°-90°	107.2	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°	1248.8	26.6
0°-40°	2041.8	43.5
0°-60°	3627.1	77.3
0°-90°	4692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1598	1608	1607	1605	1610	152
15°	1530	1545	1552	1554	1562	432
25°	1400	1419	1432	1441	1450	645
35°	1226	1246	1271	1289	1298	767
45°	1022	1044	1076	1101	1114	788
55°	791	812	851	885	900	707
65°	539	559	605	645	660	533
75°	274	299	345	387	405	290
85°	48	69	102	114	121	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1612.9	1612.9	1612.9	1612.9	1612.9
2.5°	1606.9	1615.0	1612.9	1605.9	1608.9
5°	1597.8	1607.9	1606.9	1604.9	1609.9
7.5°	1586.7	1597.8	1598.8	1598.8	1604.9
10°	1574.6	1585.7	1587.7	1584.7	1586.7
12.5°	1554.4	1567.5	1571.6	1571.6	1574.6
15°	1530.2	1545.3	1552.4	1554.4	1561.5
17.5°	1503.9	1520.1	1529.2	1534.2	1540.3
20°	1472.6	1489.8	1499.9	1506.0	1513.0
22.5°	1437.3	1456.5	1467.6	1473.7	1481.7
25°	1400.0	1419.2	1432.3	1441.4	1450.4
27.5°	1360.6	1378.8	1396.9	1408.0	1416.1
30°	1318.2	1337.4	1356.6	1370.7	1378.8
32.5°	1272.8	1293.0	1315.2	1330.3	1339.4
35°	1226.4	1245.5	1270.8	1288.9	1298.0
37.5°	1178.9	1199.1	1225.4	1244.5	1255.6
40°	1128.5	1149.7	1177.9	1199.1	1210.2
42.5°	1076.0	1096.2	1127.4	1151.7	1164.8
45°	1022.5	1043.7	1076.0	1101.2	1114.3
47.5°	967.0	987.1	1022.5	1051.7	1062.8
50°	909.4	928.6	966.0	997.2	1010.4
52.5°	850.9	871.1	908.4	941.7	955.9
55°	791.3	811.5	850.9	885.2	900.3
57.5°	730.8	751.0	791.3	826.7	844.8
60°	668.2	688.4	730.8	767.1	785.3
62.5°	603.6	624.8	668.2	705.5	724.7
65°	539.0	559.2	604.6	645.0	660.1
67.5°	474.4	494.6	539.0	579.4	597.5
70°	407.8	431.0	474.4	516.8	532.9
72.5°	338.1	364.4	407.8	452.2	468.3
75°	273.5	298.8	345.2	386.6	404.8
77.5°	209.9	237.2	280.6	323.0	341.2
80°	149.4	175.6	220.0	260.4	279.6
82.5°	94.9	118.1	162.5	198.8	213.0
85°	48.4	68.6	101.9	114.1	121.1
87.5°	14.1	24.2	36.3	45.4	50.5
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	14.64	16.30	15.01	16.62	16.93	15.38	17.04	15.74	17.35	17.67
	3H	16.41	17.92	16.79	18.24	18.60	17.46	18.96	17.83	19.29	19.65
	4H	17.03	18.45	17.43	18.80	19.17	18.32	19.74	18.72	20.09	20.46
	6H	17.44	18.76	17.85	19.12	19.51	19.07	20.38	19.48	20.75	21.14
	8H	17.54	18.80	17.97	19.19	19.59	19.36	20.62	19.78	21.01	21.41
	12H	17.59	18.80	18.02	19.18	19.61	19.55	20.76	19.98	21.14	21.57
4H	2H	15.41	16.83	15.81	17.18	17.55	15.98	17.40	16.38	17.75	18.12
	3H	17.40	18.60	17.81	18.99	19.39	18.29	19.49	18.70	19.89	20.29
	4H	18.14	19.23	18.57	19.64	20.07	19.31	20.40	19.74	20.81	21.24
	6H	18.67	19.62	19.13	20.06	20.52	20.22	21.17	20.67	21.61	22.06
	8H	18.81	19.70	19.27	20.15	20.61	20.59	21.47	21.04	21.92	22.38
	12H	18.89	19.70	19.37	20.17	20.64	20.84	21.64	21.32	22.11	22.58
8H	4H	18.59	19.48	19.05	19.92	20.38	19.61	20.50	20.07	20.94	21.41
	6H	19.25	19.99	19.74	20.48	20.96	20.67	21.41	21.16	21.90	22.37
	8H	19.46	20.13	19.97	20.63	21.12	21.14	21.81	21.65	22.31	22.80
	12H	19.60	20.19	20.10	20.68	21.24	21.49	22.08	22.00	22.57	23.13
12H	4H	18.67	19.47	19.15	19.95	20.41	19.64	20.44	20.12	20.91	21.38
	6H	19.38	20.04	19.88	20.55	21.03	20.72	21.39	21.23	21.89	22.38
	8H	19.65	20.24	20.16	20.73	21.29	21.26	21.85	21.76	22.34	22.89