

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: P1589973

Luminaire Tested: 24CZSP-SB-70VHE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-70VHE-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 7500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

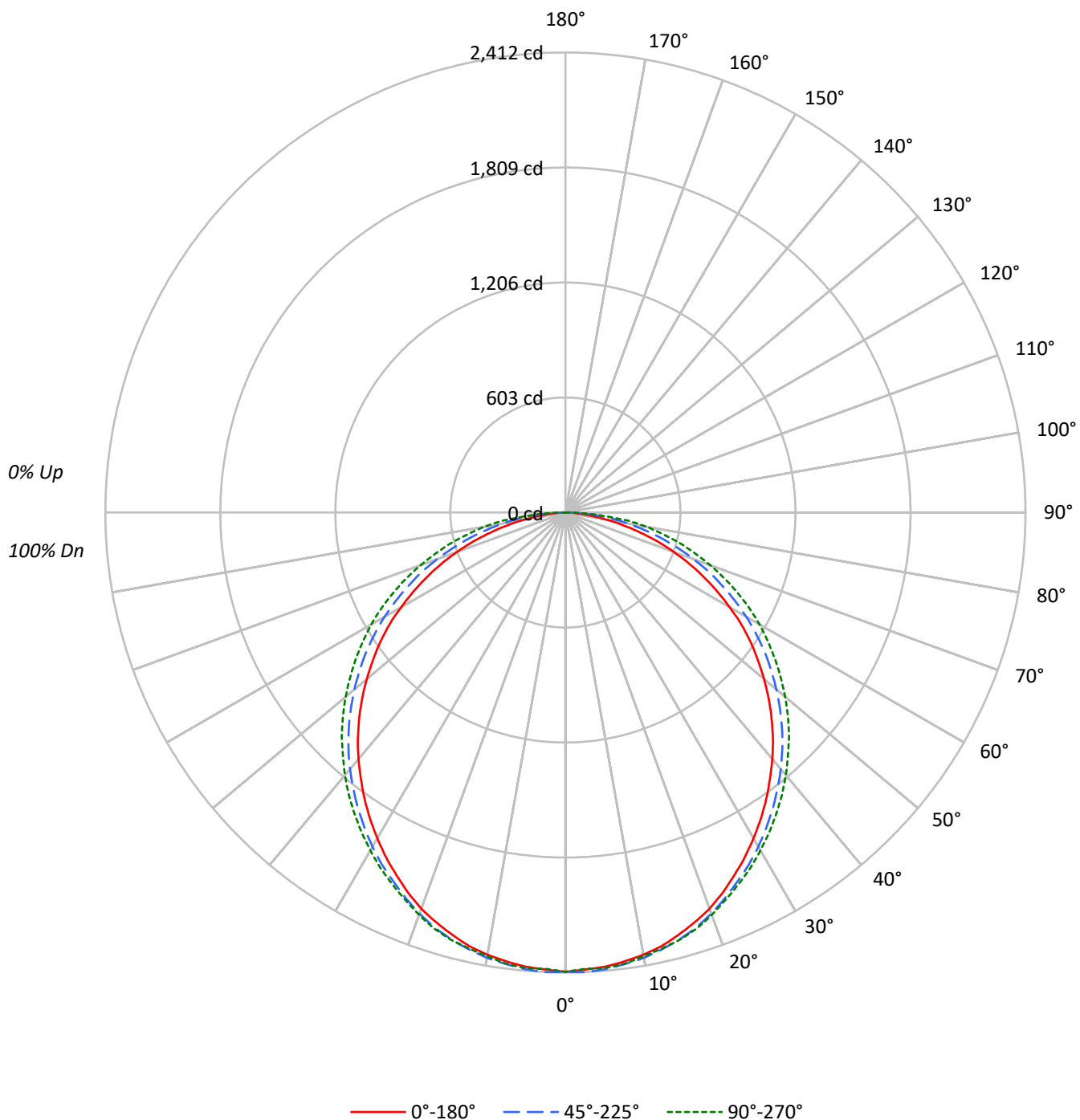
Lumens per Lamp: N/A
Luminaire Lumens: 7027.0 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 53.3
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: 28.75 FT

TEST NUMBER: P1589973

CATALOG NUMBER: 24CZSP-SB-70VHE-L830

Luminous Intensity Polar Plot



TEST NUMBER: P1589973

CATALOG NUMBER: 24CZSP-SB-70VHE-L830

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	68
3	89	79	70	63	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°	3688	3688	3688
5°	3675	3695	3686
10°	3662	3687	3673
15°	3634	3672	3677
20°	3602	3646	3658
25°	3544	3607	3632
30°	3488	3577	3617
35°	3432	3543	3604
40°	3375	3512	3595
45°	3312	3479	3592
50°	3239	3441	3583
55°	3165	3404	3582
60°	3048	3353	3604
65°	2905	3288	3606
70°	2711	3197	3617
75°	2411	3080	3679
80°	1981	2951	3817
85°	1307	2770	3450

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3909 cd/sqm

TEST NUMBER: P1589973

CATALOG NUMBER: 24CZSP-SB-70VHE-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.8	3.2
10°-20°	652.0	9.3
20°-30°	982.7	14.0
30°-40°	1183.4	16.8
40°-50°	1236.3	17.6
50°-60°	1135.8	16.2
60°-70°	894.4	12.7
70°-80°	548.4	7.8
80°-90°	166.3	2.4
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°	1862.4	26.5
0°-40°	3045.8	43.3
0°-60°	5417.9	77.1
0°-90°	7027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7027.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2408	2408	2408	2408	2408	
5°	2390	2394	2403	2400	2398	227
15°	2292	2301	2316	2325	2319	647
25°	2097	2110	2134	2156	2149	967
35°	1835	1859	1895	1929	1928	1148
45°	1529	1562	1606	1651	1658	1179
55°	1185	1220	1275	1330	1342	1058
65°	802	843	907	968	995	793
75°	408	455	520	583	622	433
85°	74	110	158	176	196	96
90°	0	0	0	0	0	

TEST NUMBER: P1589973

CATALOG NUMBER: 24CZSP-SB-70VHE-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2407.9	2407.9	2407.9	2407.9	2407.9
2.5°	2398.9	2404.9	2412.3	2400.4	2394.5
5°	2390.0	2394.5	2403.4	2400.4	2397.5
7.5°	2373.7	2376.6	2388.5	2388.5	2385.6
10°	2354.3	2360.3	2370.7	2369.2	2361.8
12.5°	2329.0	2333.5	2345.4	2345.4	2340.9
15°	2291.9	2300.8	2315.7	2324.6	2318.6
17.5°	2253.2	2262.1	2281.5	2290.4	2287.4
20°	2210.1	2217.5	2236.8	2250.2	2244.3
22.5°	2156.5	2165.4	2187.8	2202.6	2196.7
25°	2097.0	2110.4	2134.2	2156.5	2149.1
27.5°	2037.5	2052.4	2082.2	2104.5	2101.5
30°	1972.1	1991.4	2022.7	2050.9	2045.0
32.5°	1905.2	1927.5	1960.2	1990.0	1988.5
35°	1835.3	1859.1	1894.8	1929.0	1927.5
37.5°	1760.9	1789.2	1826.4	1863.5	1865.0
40°	1688.0	1714.8	1756.5	1796.6	1798.1
42.5°	1610.7	1639.0	1683.6	1725.2	1726.7
45°	1528.9	1561.6	1606.2	1650.9	1658.3
47.5°	1445.6	1479.8	1525.9	1573.5	1582.4
50°	1359.4	1395.0	1444.1	1494.7	1503.6
52.5°	1271.6	1308.8	1359.4	1409.9	1423.3
55°	1185.3	1219.6	1274.6	1329.6	1341.5
57.5°	1094.6	1125.9	1185.3	1243.3	1258.2
60°	995.0	1033.6	1094.6	1152.6	1176.4
62.5°	898.3	939.9	1002.4	1060.4	1087.2
65°	801.6	843.3	907.2	968.2	995.0
67.5°	703.5	746.6	815.0	873.0	902.8
70°	605.3	648.4	713.9	776.3	807.6
72.5°	507.2	553.3	617.2	681.2	712.4
75°	407.5	455.1	520.5	583.0	621.7
77.5°	313.8	359.9	425.4	489.3	522.0
80°	224.6	270.7	334.6	398.6	432.8
82.5°	142.8	185.9	248.4	301.9	333.1
85°	74.4	110.1	157.6	175.5	196.3
87.5°	22.3	43.1	61.0	68.4	84.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589973

CATALOG NUMBER: 24CZSP-SB-70VHE-L830

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	16.0	17.7	16.4	18.0	18.3	16.8	18.5	17.2	18.8	19.1
	3H	17.8	19.3	18.2	19.6	20.0	18.9	20.4	19.3	20.7	21.1
	4H	18.4	19.9	18.8	20.2	20.6	19.8	21.2	20.2	21.5	21.9
	6H	18.8	20.2	19.3	20.5	20.9	20.5	21.9	21.0	22.2	22.6
	8H	19.0	20.2	19.4	20.6	21.0	20.9	22.1	21.3	22.5	22.9
	12H	19.0	20.2	19.4	20.6	21.0	21.1	22.3	21.5	22.7	23.1
4H	2H	16.8	18.2	17.2	18.6	19.0	17.4	18.8	17.8	19.2	19.5
	3H	18.8	20.0	19.2	20.4	20.8	19.7	20.9	20.1	21.3	21.7
	4H	19.6	20.7	20.0	21.1	21.5	20.8	21.8	21.2	22.3	22.7
	6H	20.1	21.1	20.6	21.5	21.9	21.7	22.6	22.1	23.1	23.5
	8H	20.2	21.1	20.7	21.6	22.0	22.1	23.0	22.5	23.4	23.9
	12H	20.3	21.1	20.8	21.6	22.1	22.4	23.2	22.8	23.6	24.1
8H	4H	20.0	20.9	20.5	21.4	21.8	21.1	22.0	21.5	22.4	22.9
	6H	20.7	21.4	21.2	21.9	22.4	22.1	22.9	22.6	23.4	23.8
	8H	20.9	21.6	21.4	22.1	22.6	22.6	23.3	23.1	23.8	24.3
	12H	21.1	21.7	21.6	22.1	22.7	23.0	23.6	23.5	24.1	24.6
12H	4H	20.1	20.9	20.6	21.4	21.8	21.1	21.9	21.6	22.4	22.8
	6H	20.8	21.5	21.4	22.0	22.5	22.2	22.9	22.7	23.3	23.9
	8H	21.1	21.7	21.6	22.2	22.8	22.8	23.3	23.3	23.8	24.4

(END OF REPORT)