

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: P1589989

Luminaire Tested: 24CZSP-SB-70VHE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589989
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-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7500 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

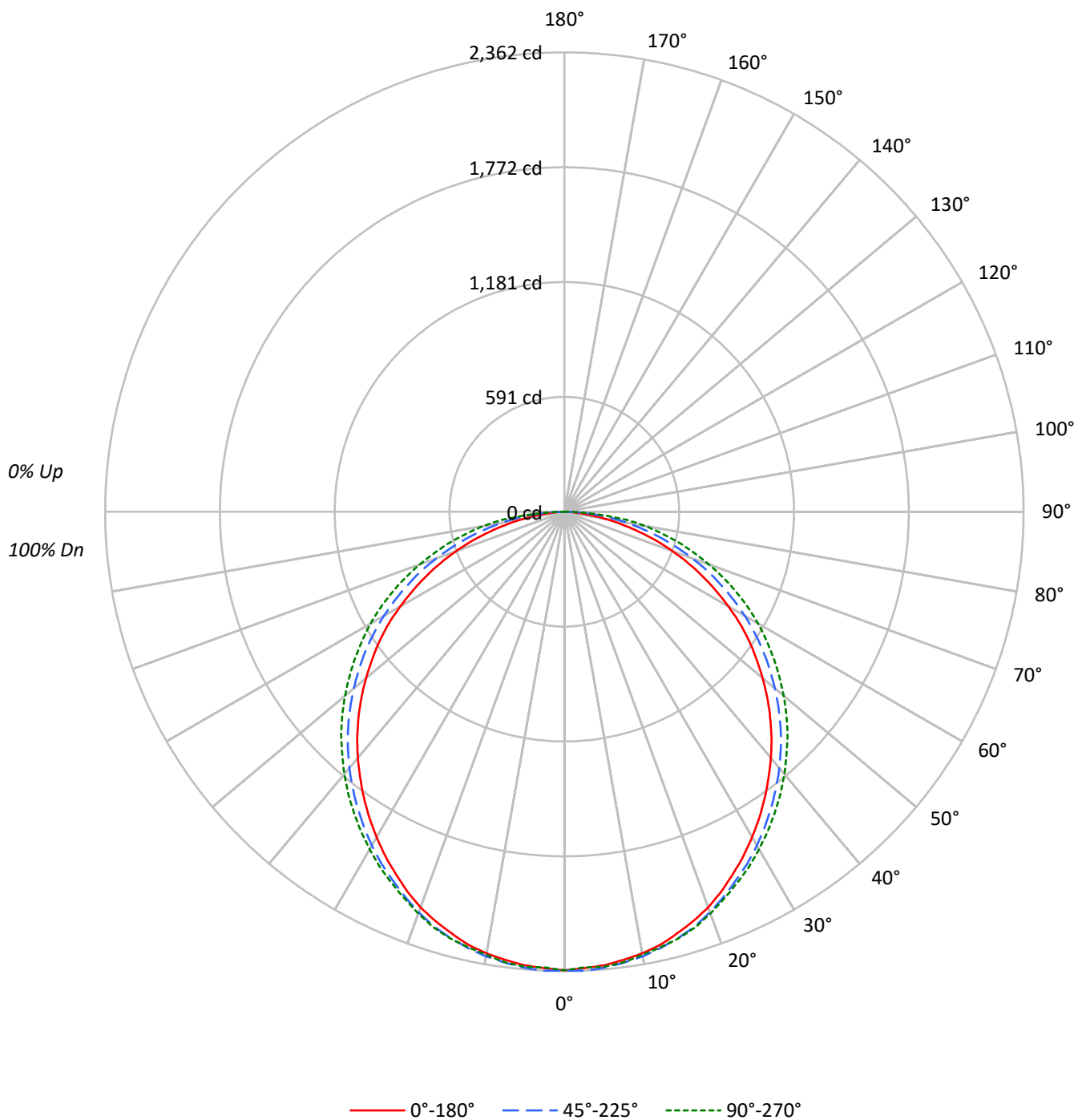
Lumens per Lamp: N/A
Luminaire Lumens: 6881.0 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	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°	3611	3611	3611
5°	3598	3618	3609
10°	3585	3610	3597
15°	3559	3595	3600
20°	3527	3570	3582
25°	3470	3532	3556
30°	3415	3503	3542
35°	3360	3469	3529
40°	3305	3439	3520
45°	3243	3407	3517
50°	3172	3369	3508
55°	3099	3333	3508
60°	2985	3283	3529
65°	2845	3220	3531
70°	2654	3131	3541
75°	2361	3016	3603
80°	1940	2890	3738
85°	1279	2713	3378

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3828 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	3.2
10°-20°	638.4	9.3
20°-30°	962.2	14.0
30°-40°	1158.8	16.8
40°-50°	1210.6	17.6
50°-60°	1112.2	16.2
60°-70°	875.9	12.7
70°-80°	537.0	7.8
80°-90°	162.8	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°	1823.7	26.5
0°-40°	2982.5	43.3
0°-60°	5305.3	77.1
0°-90°	6881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2358	2358	2358	2358	2358	
5°	2340	2345	2354	2351	2348	222
15°	2244	2253	2268	2276	2270	633
25°	2054	2067	2090	2112	2104	947
35°	1797	1820	1855	1889	1887	1124
45°	1497	1529	1573	1617	1624	1155
55°	1161	1194	1248	1302	1314	1036
65°	785	826	888	948	974	776
75°	399	446	510	571	609	424
85°	73	108	154	172	192	94
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2357.8	2357.8	2357.8	2357.8	2357.8
2.5°	2349.1	2354.9	2362.2	2350.6	2344.7
5°	2340.4	2344.7	2353.5	2350.6	2347.6
7.5°	2324.3	2327.3	2338.9	2338.9	2336.0
10°	2305.4	2311.2	2321.4	2320.0	2312.7
12.5°	2280.7	2285.0	2296.7	2296.7	2292.3
15°	2244.2	2253.0	2267.5	2276.3	2270.5
17.5°	2206.4	2215.1	2234.1	2242.8	2239.9
20°	2164.1	2171.4	2190.4	2203.5	2197.6
22.5°	2111.7	2120.5	2142.3	2156.9	2151.0
25°	2053.5	2066.6	2089.9	2111.7	2104.4
27.5°	1995.2	2009.8	2038.9	2060.7	2057.8
30°	1931.1	1950.1	1980.6	2008.3	2002.5
32.5°	1865.6	1887.4	1919.5	1948.6	1947.2
35°	1797.1	1820.4	1855.4	1888.9	1887.4
37.5°	1724.3	1752.0	1788.4	1824.8	1826.3
40°	1653.0	1679.2	1720.0	1759.3	1760.7
42.5°	1577.2	1604.9	1648.6	1689.4	1690.8
45°	1497.1	1529.2	1572.9	1616.6	1623.8
47.5°	1415.6	1449.1	1494.2	1540.8	1549.6
50°	1331.1	1366.1	1414.1	1463.6	1472.4
52.5°	1245.2	1281.6	1331.1	1380.6	1393.7
55°	1160.7	1194.2	1248.1	1302.0	1313.6
57.5°	1071.9	1102.5	1160.7	1217.5	1232.1
60°	974.3	1012.2	1071.9	1128.7	1152.0
62.5°	879.6	920.4	981.6	1038.4	1064.6
65°	785.0	825.8	888.4	948.1	974.3
67.5°	688.9	731.1	798.1	854.9	884.0
70°	592.7	635.0	699.1	760.2	790.8
72.5°	496.6	541.8	604.4	667.0	697.6
75°	399.0	445.6	509.7	570.9	608.8
77.5°	307.3	352.4	416.5	479.1	511.2
80°	219.9	265.1	327.7	390.3	423.8
82.5°	139.8	182.0	243.2	295.6	326.2
85°	72.8	107.8	154.4	171.9	192.2
87.5°	21.8	42.2	59.7	67.0	83.0
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	16.0	17.6	16.3	18.0	18.3	16.7	18.4	17.1	18.7	19.0
	3H	17.7	19.2	18.1	19.6	19.9	18.8	20.3	19.2	20.7	21.0
	4H	18.4	19.8	18.8	20.1	20.5	19.7	21.1	20.1	21.5	21.8
	6H	18.8	20.1	19.2	20.5	20.8	20.5	21.8	20.9	22.2	22.5
	8H	18.9	20.1	19.3	20.5	20.9	20.8	22.0	21.2	22.4	22.8
	12H	18.9	20.1	19.4	20.5	21.0	21.0	22.2	21.4	22.6	23.0
4H	2H	16.7	18.2	17.1	18.5	18.9	17.3	18.7	17.7	19.1	19.5
	3H	18.7	19.9	19.1	20.3	20.7	19.7	20.9	20.1	21.2	21.6
	4H	19.5	20.6	19.9	21.0	21.4	20.7	21.8	21.1	22.2	22.6
	6H	20.0	21.0	20.5	21.4	21.9	21.6	22.6	22.1	23.0	23.5
	8H	20.2	21.1	20.6	21.5	22.0	22.0	22.9	22.5	23.3	23.8
	12H	20.3	21.1	20.7	21.5	22.0	22.3	23.1	22.8	23.6	24.0
8H	4H	19.9	20.8	20.4	21.3	21.7	21.0	21.9	21.4	22.3	22.8
	6H	20.6	21.4	21.1	21.9	22.3	22.1	22.8	22.6	23.3	23.8
	8H	20.8	21.5	21.3	22.0	22.5	22.6	23.2	23.1	23.7	24.2
	12H	21.0	21.6	21.5	22.1	22.6	22.9	23.5	23.4	24.0	24.6
12H	4H	20.0	20.8	20.5	21.3	21.8	21.0	21.8	21.5	22.3	22.8
	6H	20.8	21.4	21.3	21.9	22.4	22.1	22.8	22.7	23.3	23.8
	8H	21.0	21.6	21.5	22.1	22.7	22.7	23.3	23.2	23.8	24.3

(END OF REPORT)