

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: P1589978

Luminaire Tested: 24CZSP-SB-70VHE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589978
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-70VHE-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

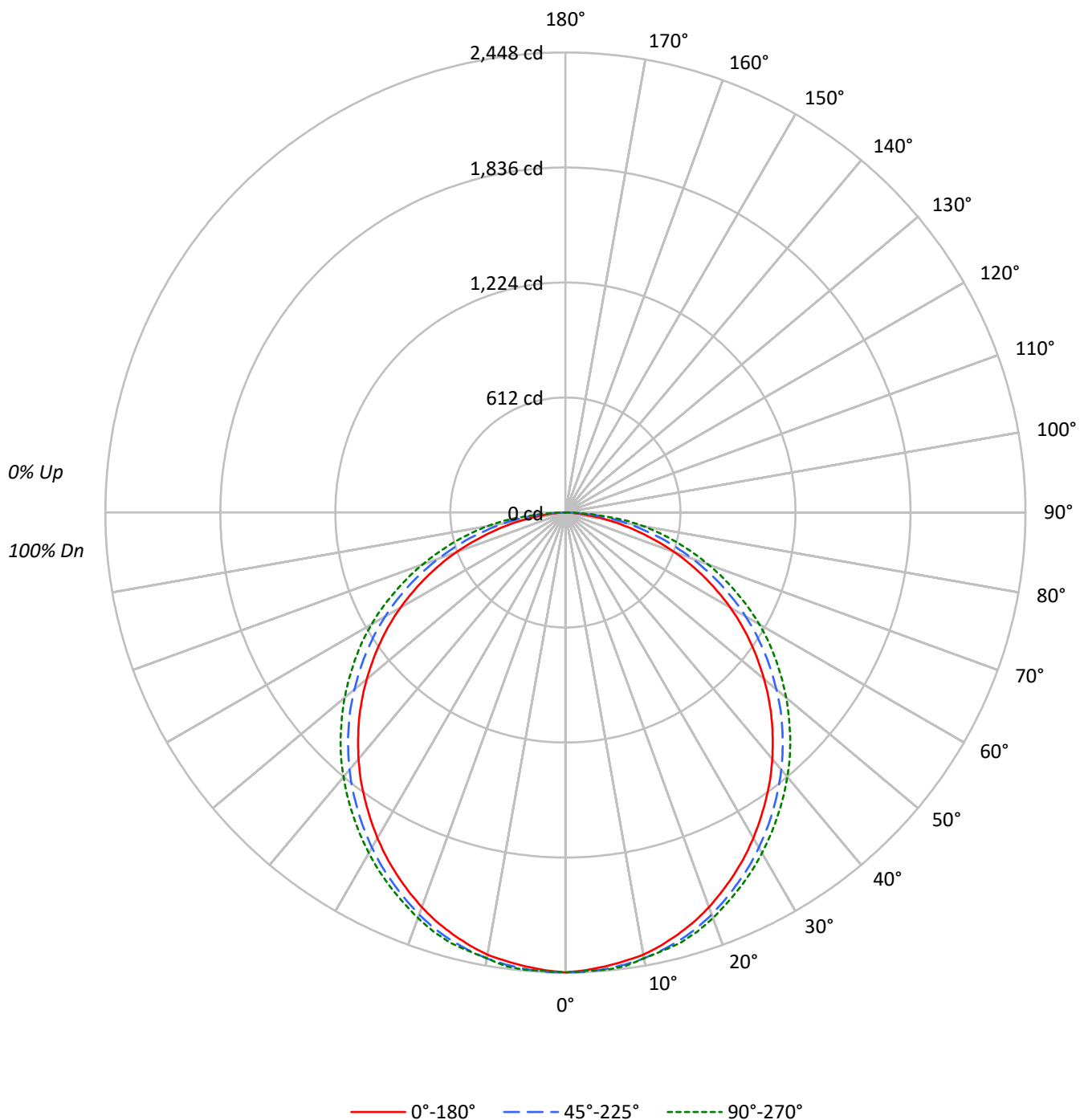
Lumens per Lamp: N/A
Luminaire Lumens: 7120.0 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3749	3749	3749
5°	3728	3749	3756
10°	3716	3747	3745
15°	3682	3735	3757
20°	3642	3710	3742
25°	3590	3673	3720
30°	3538	3641	3700
35°	3480	3606	3683
40°	3424	3574	3672
45°	3361	3537	3663
50°	3288	3493	3653
55°	3207	3448	3648
60°	3106	3397	3650
65°	2964	3325	3630
70°	2771	3224	3621
75°	2456	3100	3635
80°	2000	2945	3742
85°	1292	2719	3230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3793 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.6	3.3
10°-20°	663.3	9.3
20°-30°	1000.1	14.0
30°-40°	1203.3	16.9
40°-50°	1255.2	17.6
50°-60°	1150.5	16.2
60°-70°	903.4	12.7
70°-80°	549.8	7.7
80°-90°	162.7	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°	1895.0	26.6
0°-40°	3098.3	43.5
0°-60°	5504.0	77.3
0°-90°	7120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2448	2448	2448	2448	2448	
5°	2425	2440	2438	2435	2443	230
15°	2322	2345	2356	2359	2370	655
25°	2124	2154	2173	2187	2201	979
35°	1861	1890	1928	1956	1970	1165
45°	1552	1584	1633	1671	1691	1196
55°	1201	1232	1291	1343	1366	1073
65°	818	848	918	979	1002	809
75°	415	453	524	587	614	440
85°	74	104	155	173	184	96
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2447.6	2447.6	2447.6	2447.6	2447.6
2.5°	2438.4	2450.7	2447.6	2436.9	2441.5
5°	2424.6	2440.0	2438.4	2435.4	2443.0
7.5°	2407.8	2424.6	2426.2	2426.2	2435.4
10°	2389.4	2406.3	2409.3	2404.7	2407.8
12.5°	2358.8	2378.7	2384.8	2384.8	2389.4
15°	2322.0	2345.0	2355.7	2358.8	2369.5
17.5°	2282.2	2306.7	2320.5	2328.1	2337.3
20°	2234.7	2260.7	2276.1	2285.3	2296.0
22.5°	2181.1	2210.2	2227.0	2236.2	2248.5
25°	2124.4	2153.5	2173.4	2187.2	2201.0
27.5°	2064.7	2092.3	2119.8	2136.7	2148.9
30°	2000.4	2029.5	2058.6	2080.0	2092.3
32.5°	1931.4	1962.1	1995.8	2018.7	2032.5
35°	1861.0	1890.1	1928.4	1955.9	1969.7
37.5°	1789.0	1819.6	1859.4	1888.5	1905.4
40°	1712.4	1744.6	1787.5	1819.6	1836.5
42.5°	1632.8	1663.4	1710.9	1747.6	1767.5
45°	1551.6	1583.7	1632.8	1671.1	1691.0
47.5°	1467.3	1498.0	1551.6	1596.0	1612.8
50°	1380.0	1409.1	1465.8	1513.3	1533.2
52.5°	1291.2	1321.8	1378.5	1429.0	1450.5
55°	1200.8	1231.5	1291.2	1343.3	1366.3
57.5°	1108.9	1139.6	1200.8	1254.4	1282.0
60°	1014.0	1044.6	1108.9	1164.1	1191.6
62.5°	915.9	948.1	1014.0	1070.6	1099.7
65°	817.9	848.5	917.5	978.7	1001.7
67.5°	719.9	750.5	817.9	879.2	906.7
70°	618.8	654.0	719.9	784.2	808.7
72.5°	513.1	552.9	618.8	686.2	710.7
75°	415.1	453.4	523.8	586.6	614.2
77.5°	318.6	359.9	425.8	490.1	517.7
80°	226.7	266.5	333.9	395.2	424.3
82.5°	144.0	179.2	246.6	301.7	323.2
85°	73.5	104.2	154.7	173.1	183.8
87.5°	21.4	36.8	55.1	68.9	76.6
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	16.1	17.8	16.5	18.1	18.4	16.8	18.5	17.2	18.8	19.1
	3H	17.9	19.4	18.2	19.7	20.0	18.9	20.4	19.3	20.7	21.1
	4H	18.5	19.9	18.9	20.2	20.6	19.8	21.2	20.2	21.5	21.9
	6H	18.9	20.2	19.3	20.6	21.0	20.5	21.8	20.9	22.2	22.6
	8H	19.0	20.3	19.4	20.6	21.0	20.8	22.1	21.2	22.5	22.9
	12H	19.0	20.2	19.5	20.6	21.1	21.0	22.2	21.4	22.6	23.0
4H	2H	16.9	18.3	17.3	18.6	19.0	17.4	18.8	17.8	19.2	19.6
	3H	18.9	20.0	19.3	20.4	20.8	19.7	20.9	20.2	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	22.0	21.7	22.6	22.1	23.1	23.5
	8H	20.3	21.2	20.7	21.6	22.1	22.0	22.9	22.5	23.4	23.8
	12H	20.3	21.1	20.8	21.6	22.1	22.3	23.1	22.8	23.6	24.0
8H	4H	20.0	20.9	20.5	21.4	21.8	21.1	21.9	21.5	22.4	22.9
	6H	20.7	21.4	21.2	21.9	22.4	22.1	22.9	22.6	23.3	23.8
	8H	20.9	21.6	21.4	22.1	22.6	22.6	23.3	23.1	23.8	24.2
	12H	21.0	21.6	21.6	22.1	22.7	22.9	23.5	23.4	24.0	24.6
12H	4H	20.1	20.9	20.6	21.4	21.9	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	23.8
	8H	21.1	21.7	21.6	22.2	22.7	22.7	23.3	23.2	23.8	24.3

(END OF REPORT)