

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: P1589976

Luminaire Tested: 24CZSP-SB-70VHE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589976
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-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

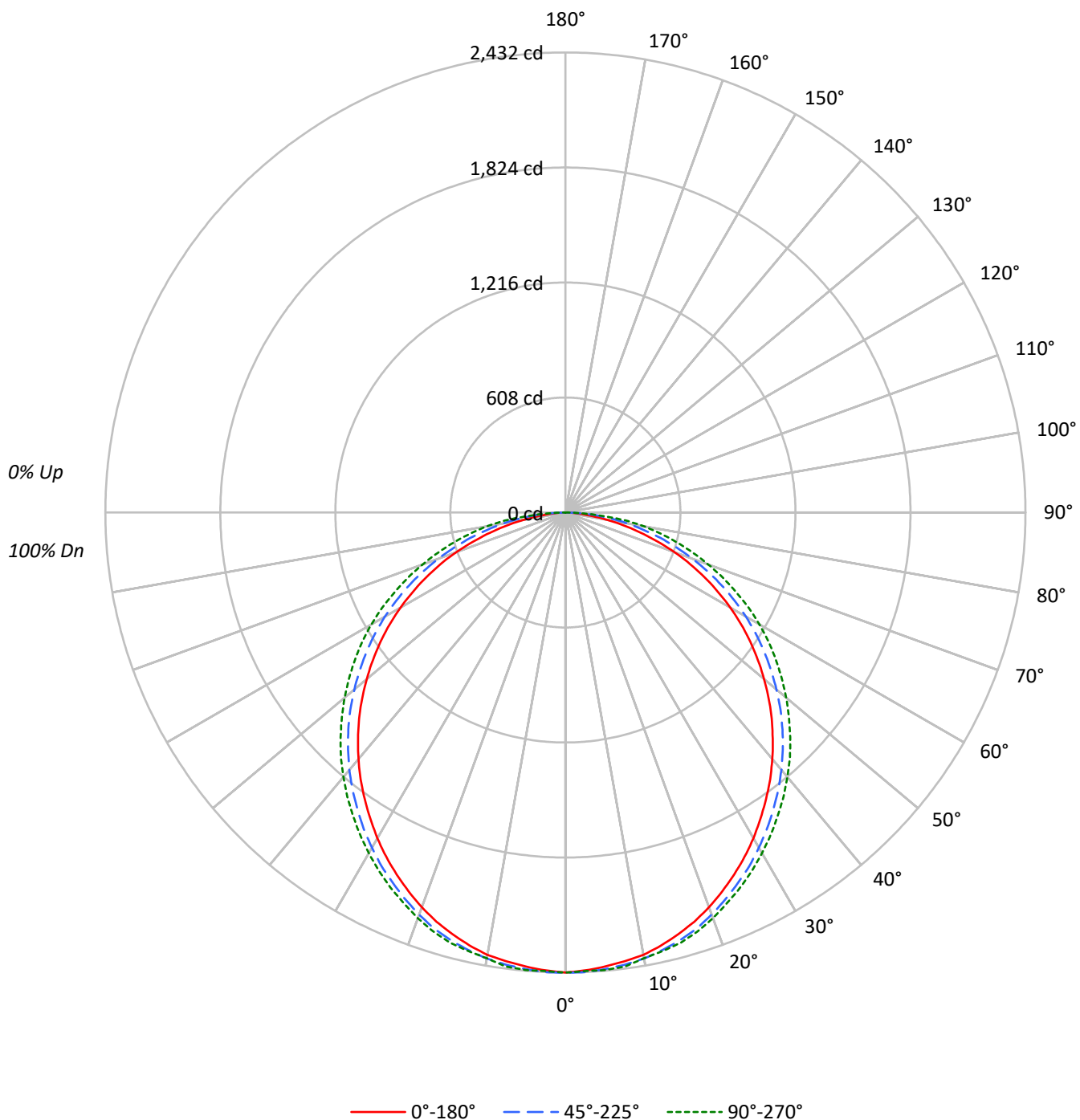
Lumens per Lamp: N/A
Luminaire Lumens: 7075.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1589976

CATALOG NUMBER: 24CZSP-SB-70VHE-L840-S

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°	3725	3725	3725
5°	3704	3725	3732
10°	3693	3723	3721
15°	3659	3712	3733
20°	3619	3686	3719
25°	3568	3650	3696
30°	3515	3618	3677
35°	3458	3583	3660
40°	3402	3551	3649
45°	3340	3514	3640
50°	3268	3471	3630
55°	3186	3426	3625
60°	3087	3375	3627
65°	2945	3304	3607
70°	2754	3203	3599
75°	2441	3080	3612
80°	1987	2927	3719
85°	1285	2701	3209

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3768 cd/sqm

TEST NUMBER: P1589976

CATALOG NUMBER: 24CZSP-SB-70VHE-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.2	3.3
10°-20°	659.1	9.3
20°-30°	993.8	14.0
30°-40°	1195.7	16.9
40°-50°	1247.3	17.6
50°-60°	1143.2	16.2
60°-70°	897.7	12.7
70°-80°	546.4	7.7
80°-90°	161.6	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°	1883.0	26.6
0°-40°	3078.7	43.5
0°-60°	5469.2	77.3
0°-90°	7075.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7075.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2432	2432	2432	2432	2432	
5°	2409	2424	2423	2420	2428	229
15°	2307	2330	2341	2344	2354	651
25°	2111	2140	2160	2173	2187	973
35°	1849	1878	1916	1944	1957	1157
45°	1542	1574	1622	1660	1680	1189
55°	1193	1224	1283	1335	1358	1066
65°	813	843	912	973	995	804
75°	412	450	520	583	610	437
85°	73	104	154	172	183	95
90°	0	0	0	0	0	

TEST NUMBER: P1589976

CATALOG NUMBER: 24CZSP-SB-70VHE-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2432.1	2432.1	2432.1	2432.1	2432.1
2.5°	2423.0	2435.2	2432.1	2421.5	2426.1
5°	2409.3	2424.5	2423.0	2420.0	2427.6
7.5°	2392.6	2409.3	2410.8	2410.8	2420.0
10°	2374.3	2391.0	2394.1	2389.5	2392.6
12.5°	2343.9	2363.7	2369.7	2369.7	2374.3
15°	2307.3	2330.2	2340.8	2343.9	2354.5
17.5°	2267.8	2292.1	2305.8	2313.4	2322.6
20°	2220.6	2246.5	2261.7	2270.8	2281.5
22.5°	2167.3	2196.2	2213.0	2222.1	2234.3
25°	2111.0	2139.9	2159.7	2173.4	2187.1
27.5°	2051.6	2079.0	2106.4	2123.2	2135.4
30°	1987.7	2016.6	2045.6	2066.9	2079.0
32.5°	1919.2	1949.7	1983.2	2006.0	2019.7
35°	1849.2	1878.1	1916.2	1943.6	1957.3
37.5°	1777.7	1808.1	1847.7	1876.6	1893.4
40°	1701.6	1733.5	1776.2	1808.1	1824.9
42.5°	1622.4	1652.9	1700.1	1736.6	1756.4
45°	1541.8	1573.7	1622.4	1660.5	1680.3
47.5°	1458.1	1488.5	1541.8	1585.9	1602.7
50°	1371.3	1400.2	1456.5	1503.7	1523.5
52.5°	1283.0	1313.5	1369.8	1420.0	1441.3
55°	1193.2	1223.7	1283.0	1334.8	1357.6
57.5°	1101.9	1132.4	1193.2	1246.5	1273.9
60°	1007.6	1038.0	1101.9	1156.7	1184.1
62.5°	910.2	942.1	1007.6	1063.9	1092.8
65°	812.7	843.2	911.7	972.6	995.4
67.5°	715.3	745.8	812.7	873.6	901.0
70°	614.9	649.9	715.3	779.3	803.6
72.5°	509.9	549.4	614.9	681.9	706.2
75°	412.5	450.5	520.5	582.9	610.3
77.5°	316.6	357.7	423.1	487.0	514.4
80°	225.3	264.8	331.8	392.7	421.6
82.5°	143.1	178.1	245.0	299.8	321.1
85°	73.1	103.5	153.7	172.0	182.6
87.5°	21.3	36.5	54.8	68.5	76.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589976

CATALOG NUMBER: 24CZSP-SB-70VHE-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	16.1	17.7	16.4	18.0	18.4	16.8	18.5	17.2	18.8	19.1
	3H	17.8	19.3	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	19.7	21.2	20.1	21.5	21.9
	6H	18.9	20.2	19.3	20.5	20.9	20.5	21.8	20.9	22.2	22.6
	8H	19.0	20.2	19.4	20.6	21.0	20.8	22.0	21.2	22.4	22.8
	12H	19.0	20.2	19.4	20.6	21.0	21.0	22.2	21.4	22.6	23.0
4H	2H	16.8	18.3	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	20.7	21.8	21.2	22.2	22.7
	6H	20.1	21.0	20.6	21.5	21.9	21.6	22.6	22.1	23.0	23.5
	8H	20.2	21.1	20.7	21.6	22.0	22.0	22.9	22.5	23.3	23.8
	12H	20.3	21.1	20.8	21.6	22.1	22.3	23.1	22.7	23.5	24.0
8H	4H	20.0	20.9	20.5	21.3	21.8	21.0	21.9	21.5	22.4	22.8
	6H	20.7	21.4	21.2	21.9	22.4	22.1	22.8	22.6	23.3	23.8
	8H	20.9	21.6	21.4	22.1	22.5	22.6	23.2	23.1	23.7	24.2
	12H	21.0	21.6	21.5	22.1	22.7	22.9	23.5	23.4	24.0	24.6
12H	4H	20.1	20.9	20.6	21.4	21.8	21.1	21.9	21.5	22.3	22.8
	6H	20.8	21.5	21.3	21.9	22.5	22.2	22.8	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)