

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: P1589977

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589977
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7500 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

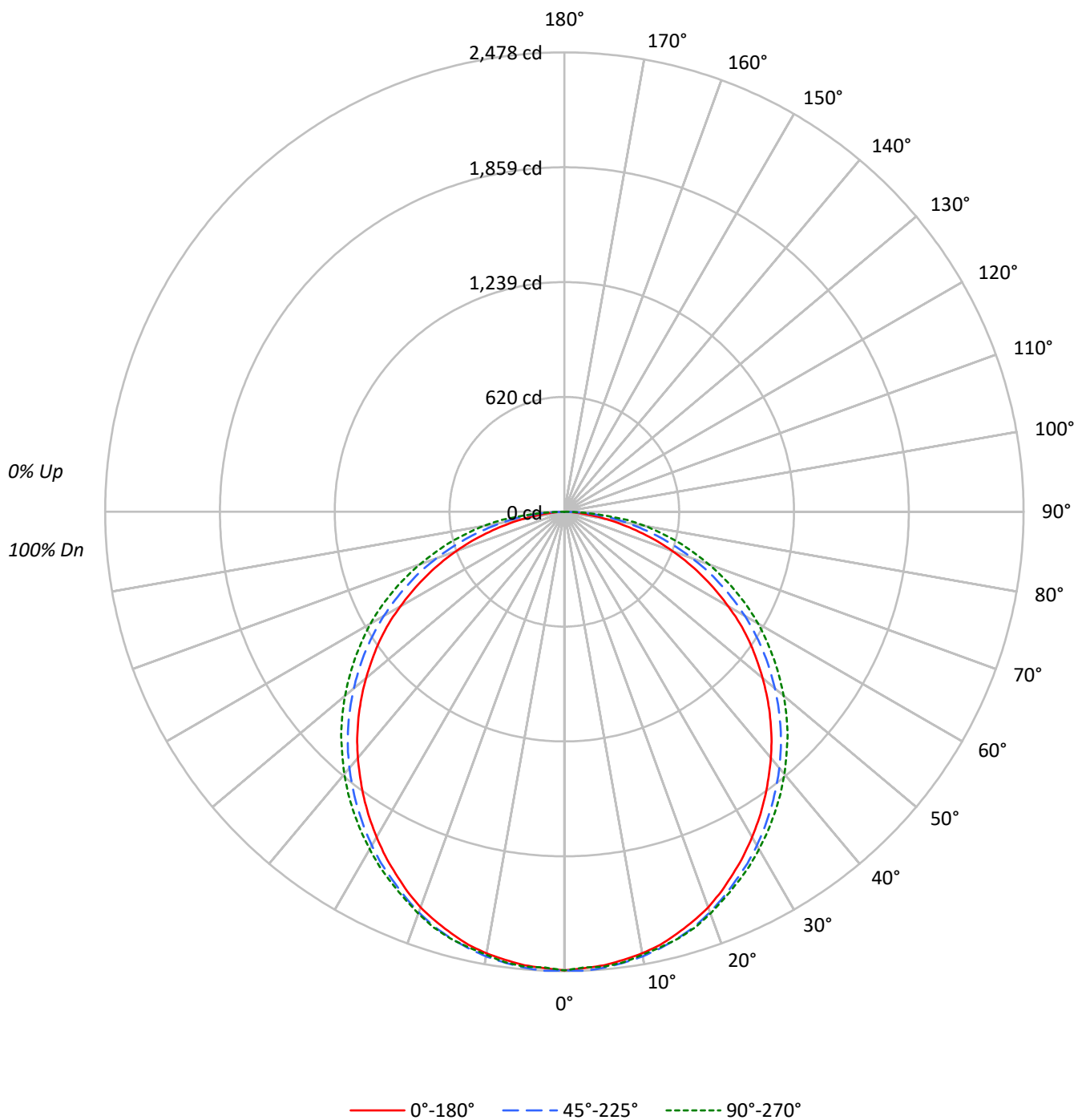
Lumens per Lamp: N/A
Luminaire Lumens: 7219.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1589977

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

Luminous Intensity Polar Plot



TEST NUMBER: P1589977

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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°	3789	3789	3789
5°	3775	3796	3787
10°	3762	3788	3774
15°	3733	3772	3777
20°	3701	3746	3758
25°	3641	3705	3731
30°	3583	3675	3716
35°	3525	3640	3703
40°	3467	3608	3693
45°	3402	3574	3690
50°	3328	3535	3681
55°	3252	3497	3680
60°	3131	3445	3702
65°	2984	3378	3705
70°	2785	3284	3715
75°	2477	3165	3780
80°	2035	3032	3921
85°	1343	2847	3545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4015 cd/sqm

TEST NUMBER: P1589977

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.0	3.2
10°-20°	669.8	9.3
20°-30°	1009.5	14.0
30°-40°	1215.7	16.8
40°-50°	1270.1	17.6
50°-60°	1166.9	16.2
60°-70°	918.9	12.7
70°-80°	563.4	7.8
80°-90°	170.8	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°	1913.3	26.5
0°-40°	3129.0	43.3
0°-60°	5566.0	77.1
0°-90°	7219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7219.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2474	2474	2474	2474	2474	
5°	2455	2460	2469	2466	2463	233
15°	2354	2364	2379	2388	2382	664
25°	2154	2168	2192	2215	2208	993
35°	1885	1910	1946	1982	1980	1179
45°	1571	1604	1650	1696	1704	1212
55°	1218	1253	1309	1366	1378	1086
65°	824	866	932	995	1022	814
75°	419	468	535	599	639	445
85°	76	113	162	180	202	98
90°	0	0	0	0	0	

TEST NUMBER: P1589977

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2473.7	2473.7	2473.7	2473.7	2473.7
2.5°	2464.5	2470.6	2478.2	2466.0	2459.9
5°	2455.3	2459.9	2469.1	2466.0	2463.0
7.5°	2438.5	2441.6	2453.8	2453.8	2450.7
10°	2418.7	2424.8	2435.5	2433.9	2426.3
12.5°	2392.7	2397.3	2409.5	2409.5	2404.9
15°	2354.5	2363.7	2378.9	2388.1	2382.0
17.5°	2314.8	2323.9	2343.8	2353.0	2349.9
20°	2270.5	2278.1	2298.0	2311.7	2305.6
22.5°	2215.4	2224.6	2247.5	2262.8	2256.7
25°	2154.3	2168.1	2192.5	2215.4	2207.8
27.5°	2093.2	2108.5	2139.1	2162.0	2158.9
30°	2026.0	2045.9	2077.9	2107.0	2100.9
32.5°	1957.2	1980.2	2013.8	2044.3	2042.8
35°	1885.4	1909.9	1946.5	1981.7	1980.2
37.5°	1809.0	1838.1	1876.3	1914.5	1916.0
40°	1734.2	1761.7	1804.4	1845.7	1847.2
42.5°	1654.7	1683.7	1729.6	1772.4	1773.9
45°	1570.7	1604.3	1650.1	1696.0	1703.6
47.5°	1485.1	1520.3	1567.6	1616.5	1625.7
50°	1396.5	1433.2	1483.6	1535.5	1544.7
52.5°	1306.4	1344.5	1396.5	1448.4	1462.2
55°	1217.7	1252.9	1309.4	1365.9	1378.2
57.5°	1124.5	1156.6	1217.7	1277.3	1292.6
60°	1022.2	1061.9	1124.5	1184.1	1208.6
62.5°	922.8	965.6	1029.8	1089.4	1116.9
65°	823.5	866.3	932.0	994.7	1022.2
67.5°	722.7	767.0	837.3	896.9	927.4
70°	621.9	666.2	733.4	797.6	829.6
72.5°	521.0	568.4	634.1	699.8	731.9
75°	418.6	467.5	534.8	598.9	638.7
77.5°	322.4	369.8	437.0	502.7	536.3
80°	230.7	278.1	343.8	409.5	444.6
82.5°	146.7	191.0	255.2	310.2	342.2
85°	76.4	113.1	162.0	180.3	201.7
87.5°	22.9	44.3	62.6	70.3	87.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589977

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

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	16.9	18.5	17.3	18.9	19.2
	3H	17.9	19.4	18.3	19.7	20.1	19.0	20.5	19.4	20.8	21.2
	4H	18.5	20.0	18.9	20.3	20.7	19.9	21.3	20.3	21.6	22.0
	6H	18.9	20.3	19.4	20.6	21.0	20.6	22.0	21.0	22.3	22.7
	8H	19.0	20.3	19.5	20.7	21.1	20.9	22.2	21.4	22.6	23.0
	12H	19.1	20.3	19.5	20.7	21.1	21.2	22.4	21.6	22.8	23.2
4H	2H	16.9	18.3	17.3	18.7	19.1	17.5	18.9	17.9	19.3	19.6
	3H	18.9	20.1	19.3	20.5	20.9	19.8	21.0	20.2	21.4	21.8
	4H	19.7	20.7	20.1	21.2	21.6	20.9	21.9	21.3	22.4	22.8
	6H	20.2	21.1	20.6	21.6	22.0	21.8	22.7	22.2	23.2	23.6
	8H	20.3	21.2	20.8	21.7	22.1	22.2	23.1	22.6	23.5	24.0
	12H	20.4	21.2	20.9	21.7	22.2	22.4	23.2	22.9	23.7	24.2
8H	4H	20.1	21.0	20.6	21.4	21.9	21.2	22.0	21.6	22.5	23.0
	6H	20.8	21.5	21.3	22.0	22.5	22.2	23.0	22.7	23.5	23.9
	8H	21.0	21.7	21.5	22.2	22.7	22.7	23.4	23.2	23.9	24.4
	12H	21.2	21.7	21.7	22.2	22.8	23.1	23.7	23.6	24.2	24.7
12H	4H	20.2	21.0	20.7	21.5	21.9	21.2	22.0	21.7	22.5	22.9
	6H	20.9	21.6	21.4	22.1	22.6	22.3	23.0	22.8	23.4	24.0
	8H	21.2	21.8	21.7	22.3	22.8	22.8	23.4	23.3	23.9	24.5

(END OF REPORT)