

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1588840

Luminaire Tested: 24CZSP-A-70VHE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-70VHE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

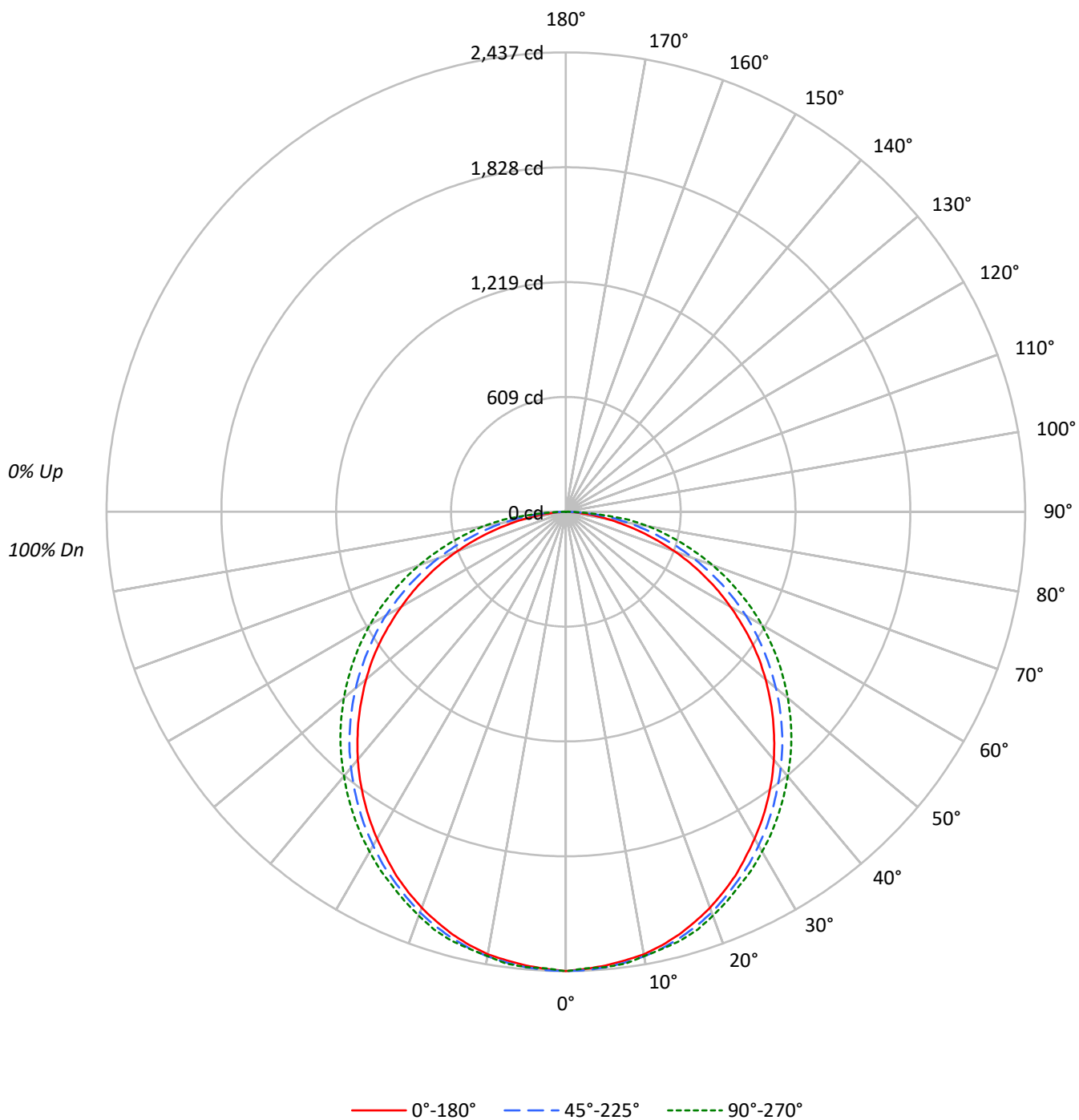
Lumens per Lamp: N/A
Luminaire Lumens: 7114.0 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: 24 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	69
3	89	79	70	64	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°	3732	3732	3732
5°	3715	3730	3727
10°	3707	3724	3722
15°	3681	3710	3733
20°	3644	3687	3717
25°	3598	3648	3693
30°	3542	3617	3683
35°	3491	3581	3672
40°	3433	3546	3661
45°	3368	3510	3665
50°	3296	3467	3664
55°	3210	3418	3668
60°	3089	3381	3677
65°	2948	3315	3689
70°	2747	3222	3705
75°	2448	3094	3741
80°	2024	2947	3924
85°	1316	2661	3429

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4048 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.4	3.2
10°-20°	659.9	9.3
20°-30°	995.2	14.0
30°-40°	1198.7	16.8
40°-50°	1251.9	17.6
50°-60°	1149.7	16.2
60°-70°	905.5	12.7
70°-80°	555.5	7.8
80°-90°	167.2	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°	1885.5	26.5
0°-40°	3084.2	43.4
0°-60°	5485.8	77.1
0°-90°	7114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7114.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2416	2420	2426	2434	2424	230
15°	2321	2326	2340	2354	2354	655
25°	2129	2134	2159	2185	2185	980
35°	1867	1876	1915	1954	1964	1168
45°	1555	1572	1620	1676	1692	1199
55°	1202	1224	1280	1352	1374	1073
65°	813	841	915	991	1018	805
75°	414	446	523	606	632	439
85°	75	103	151	192	195	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2436.7	2436.7	2436.7	2436.7	2436.7
2.5°	2427.4	2432.1	2433.6	2435.2	2424.2
5°	2416.4	2419.6	2425.8	2433.6	2424.2
7.5°	2400.8	2404.0	2411.8	2422.7	2418.0
10°	2383.7	2385.2	2394.6	2402.4	2393.0
12.5°	2355.6	2360.2	2371.2	2377.4	2374.3
15°	2321.2	2325.9	2340.0	2354.0	2354.0
17.5°	2280.6	2286.9	2304.0	2322.8	2324.3
20°	2235.4	2240.0	2261.9	2280.6	2280.6
22.5°	2183.9	2190.1	2211.9	2232.2	2235.4
25°	2129.2	2133.9	2158.9	2185.4	2185.4
27.5°	2065.2	2074.6	2105.8	2132.3	2138.6
30°	2002.8	2010.6	2044.9	2077.7	2082.4
32.5°	1937.2	1946.6	1982.5	2018.4	2026.2
35°	1867.0	1876.3	1915.4	1954.4	1963.7
37.5°	1793.6	1804.5	1845.1	1890.4	1899.7
40°	1717.1	1729.6	1773.3	1821.7	1831.1
42.5°	1635.9	1653.1	1699.9	1749.9	1763.9
45°	1554.8	1571.9	1620.3	1676.5	1692.1
47.5°	1468.9	1489.2	1539.2	1598.5	1615.6
50°	1383.1	1403.3	1454.9	1518.9	1537.6
52.5°	1295.6	1315.9	1369.0	1436.1	1456.4
55°	1202.0	1223.8	1280.0	1351.8	1373.7
57.5°	1105.2	1133.3	1192.6	1266.0	1287.8
60°	1008.4	1036.5	1103.6	1175.4	1200.4
62.5°	913.2	939.7	1008.4	1084.9	1111.4
65°	813.3	841.4	914.8	991.2	1017.8
67.5°	714.9	743.0	816.4	896.0	924.1
70°	613.5	644.7	719.6	799.2	827.3
72.5°	512.0	544.8	621.3	702.5	729.0
75°	413.7	446.4	522.9	605.7	632.2
77.5°	316.9	352.8	427.7	512.0	537.0
80°	229.5	263.8	334.1	416.8	444.9
82.5°	146.7	176.4	246.6	324.7	345.0
85°	74.9	103.0	151.4	192.0	195.1
87.5°	23.4	32.8	50.0	74.9	76.5
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	16.05	17.72	16.42	18.03	18.34	16.88	18.55	17.25	18.86	19.17
	3H	17.81	19.32	18.19	19.64	20.00	19.00	20.51	19.38	20.83	21.19
	4H	18.43	19.85	18.83	20.20	20.57	19.89	21.31	20.29	21.66	22.03
	6H	18.84	20.16	19.25	20.52	20.91	20.67	21.99	21.08	22.35	22.75
	8H	18.95	20.21	19.37	20.60	21.00	20.99	22.25	21.41	22.64	23.04
	12H	19.00	20.21	19.43	20.59	21.02	21.20	22.41	21.63	22.79	23.22
4H	2H	16.83	18.25	17.22	18.60	18.97	17.47	18.89	17.87	19.24	19.62
	3H	18.80	20.00	19.21	20.40	20.80	19.83	21.03	20.24	21.42	21.82
	4H	19.54	20.63	19.97	21.04	21.47	20.88	21.97	21.31	22.38	22.81
	6H	20.07	21.02	20.52	21.46	21.91	21.83	22.78	22.28	23.22	23.68
	8H	20.21	21.11	20.67	21.55	22.01	22.23	23.12	22.69	23.56	24.03
	12H	20.30	21.10	20.78	21.58	22.04	22.51	23.31	22.98	23.78	24.25
8H	4H	20.00	20.89	20.46	21.33	21.80	21.17	22.06	21.63	22.50	22.97
	6H	20.66	21.40	21.15	21.89	22.36	22.28	23.02	22.77	23.51	23.98
	8H	20.87	21.54	21.38	22.04	22.53	22.79	23.46	23.30	23.96	24.45
	12H	21.01	21.60	21.51	22.09	22.65	23.18	23.77	23.68	24.26	24.82
12H	4H	20.09	20.89	20.57	21.37	21.83	21.19	22.00	21.67	22.47	22.94
	6H	20.79	21.46	21.30	21.97	22.45	22.33	23.00	22.83	23.50	23.99
	8H	21.07	21.66	21.58	22.15	22.71	22.91	23.50	23.41	23.99	24.55