

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: P1588841

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-70VHE-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

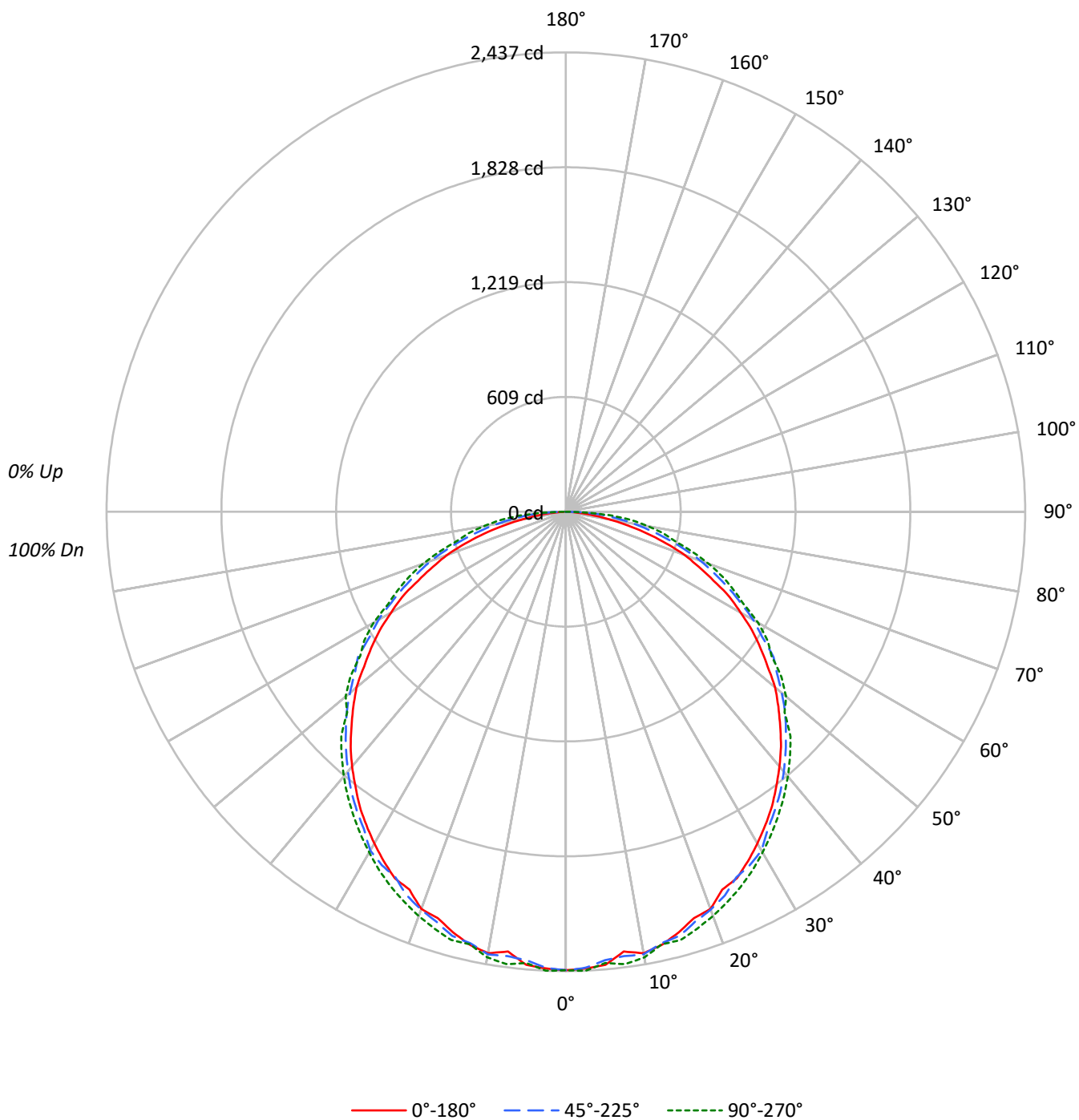
Lumens per Lamp: N/A
Luminaire Lumens: 7260.0 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3709	3671	3695
10°	3698	3707	3733
15°	3663	3693	3729
20°	3655	3661	3719
25°	3626	3616	3709
30°	3593	3670	3691
35°	3566	3616	3675
40°	3527	3596	3663
45°	3483	3577	3650
50°	3454	3563	3633
55°	3367	3594	3557
60°	3281	3518	3608
65°	3134	3442	3560
70°	3005	3412	3611
75°	2661	3310	3538
80°	2101	3234	3914
85°	1285	3457	4464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4464 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.7	3.2
10°-20°	656.0	9.0
20°-30°	999.6	13.8
30°-40°	1216.7	16.8
40°-50°	1275.8	17.6
50°-60°	1181.8	16.3
60°-70°	931.9	12.8
70°-80°	576.5	7.9
80°-90°	192.0	2.6
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°	1885.3	26.0
0°-40°	3102.0	42.7
0°-60°	5559.6	76.6
0°-90°	7260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2432	2432	2432	2432	2432	
5°	2412	2411	2388	2440	2403	228
15°	2310	2322	2329	2312	2352	652
25°	2145	2157	2140	2199	2195	986
35°	1907	1925	1934	1970	1966	1192
45°	1608	1638	1651	1670	1685	1242
55°	1261	1298	1346	1358	1332	1128
65°	865	898	950	985	982	860
75°	450	485	559	602	598	475
85°	73	124	197	239	254	98
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2432.0	2432.0	2432.0	2432.0	2432.0
2.5°	2425.1	2439.9	2421.1	2436.9	2436.9
5°	2412.2	2411.2	2387.5	2439.9	2403.3
7.5°	2352.9	2394.4	2377.6	2441.9	2420.1
10°	2377.6	2366.8	2383.6	2427.0	2400.4
12.5°	2352.9	2370.7	2344.0	2322.3	2350.0
15°	2310.4	2322.3	2329.2	2312.4	2351.9
17.5°	2260.0	2304.5	2280.8	2272.9	2318.3
20°	2242.2	2244.2	2246.2	2286.7	2281.8
22.5°	2169.1	2208.6	2203.7	2236.3	2240.3
25°	2145.4	2157.3	2139.5	2198.8	2194.8
27.5°	2091.0	2116.7	2113.8	2133.5	2144.4
30°	2031.8	2057.5	2075.2	2053.5	2087.1
32.5°	1970.5	2014.0	1994.2	2034.7	2027.8
35°	1907.2	1925.0	1933.9	1970.5	1965.5
37.5°	1834.1	1864.7	1869.7	1925.0	1901.3
40°	1764.0	1794.6	1798.5	1831.2	1832.1
42.5°	1689.8	1704.7	1725.4	1763.0	1760.0
45°	1607.8	1637.5	1651.3	1670.1	1684.9
47.5°	1528.8	1560.4	1578.2	1608.8	1574.2
50°	1449.7	1472.4	1495.2	1527.8	1524.8
52.5°	1349.9	1401.3	1412.2	1429.9	1441.8
55°	1261.0	1298.5	1345.9	1357.8	1332.1
57.5°	1171.0	1199.7	1234.3	1270.8	1267.9
60°	1071.2	1105.8	1148.3	1176.0	1177.9
62.5°	980.3	1004.0	1044.5	1085.1	1064.3
65°	864.7	898.3	949.7	985.2	982.3
67.5°	761.9	798.5	850.8	897.3	899.3
70°	671.0	690.8	761.9	797.5	806.4
72.5°	559.3	593.9	657.2	696.7	700.6
75°	449.6	485.2	559.3	601.8	597.9
77.5°	338.0	389.4	461.5	511.9	528.7
80°	238.2	284.6	366.6	416.0	443.7
82.5°	150.2	198.6	278.7	339.9	356.7
85°	73.1	124.5	196.7	239.1	254.0
87.5°	18.8	51.4	90.9	111.7	120.6
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	16.37	18.04	16.74	18.36	18.67	16.80	18.47	17.17	18.79	19.10
	3H	18.17	19.69	18.55	20.01	20.37	18.87	20.39	19.25	20.72	21.08
	4H	18.82	20.25	19.21	20.59	20.97	19.72	21.15	20.11	21.50	21.87
	6H	19.23	20.56	19.64	20.92	21.31	20.51	21.84	20.92	22.20	22.59
	8H	19.33	20.60	19.75	20.99	21.39	20.85	22.12	21.27	22.51	22.91
	12H	19.37	20.59	19.80	20.98	21.40	21.15	22.37	21.58	22.75	23.18
4H	2H	17.11	18.54	17.51	18.89	19.26	17.44	18.88	17.84	19.22	19.60
	3H	19.15	20.35	19.55	20.75	21.15	19.76	20.97	20.17	21.36	21.76
	4H	19.92	21.01	20.35	21.42	21.86	20.76	21.86	21.19	22.27	22.71
	6H	20.45	21.41	20.90	21.85	22.31	21.72	22.68	22.17	23.12	23.57
	8H	20.60	21.50	21.05	21.94	22.40	22.14	23.04	22.60	23.48	23.94
	12H	20.68	21.49	21.16	21.96	22.43	22.52	23.33	23.00	23.80	24.27
8H	4H	20.37	21.27	20.82	21.71	22.17	21.10	22.00	21.56	22.44	22.91
	6H	21.05	21.80	21.54	22.28	22.76	22.22	22.97	22.71	23.46	23.93
	8H	21.26	21.94	21.77	22.44	22.93	22.76	23.44	23.27	23.95	24.43
	12H	21.41	22.01	21.92	22.50	23.06	23.28	23.88	23.79	24.37	24.93
12H	4H	20.45	21.26	20.93	21.74	22.20	21.14	21.95	21.62	22.42	22.89
	6H	21.18	21.86	21.69	22.36	22.85	22.28	22.96	22.79	23.47	23.95
	8H	21.47	22.07	21.98	22.56	23.12	22.91	23.51	23.41	24.00	24.55