

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: P1588851

Luminaire Tested: 24CZSP-A-70VHE-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588851
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-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 7500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

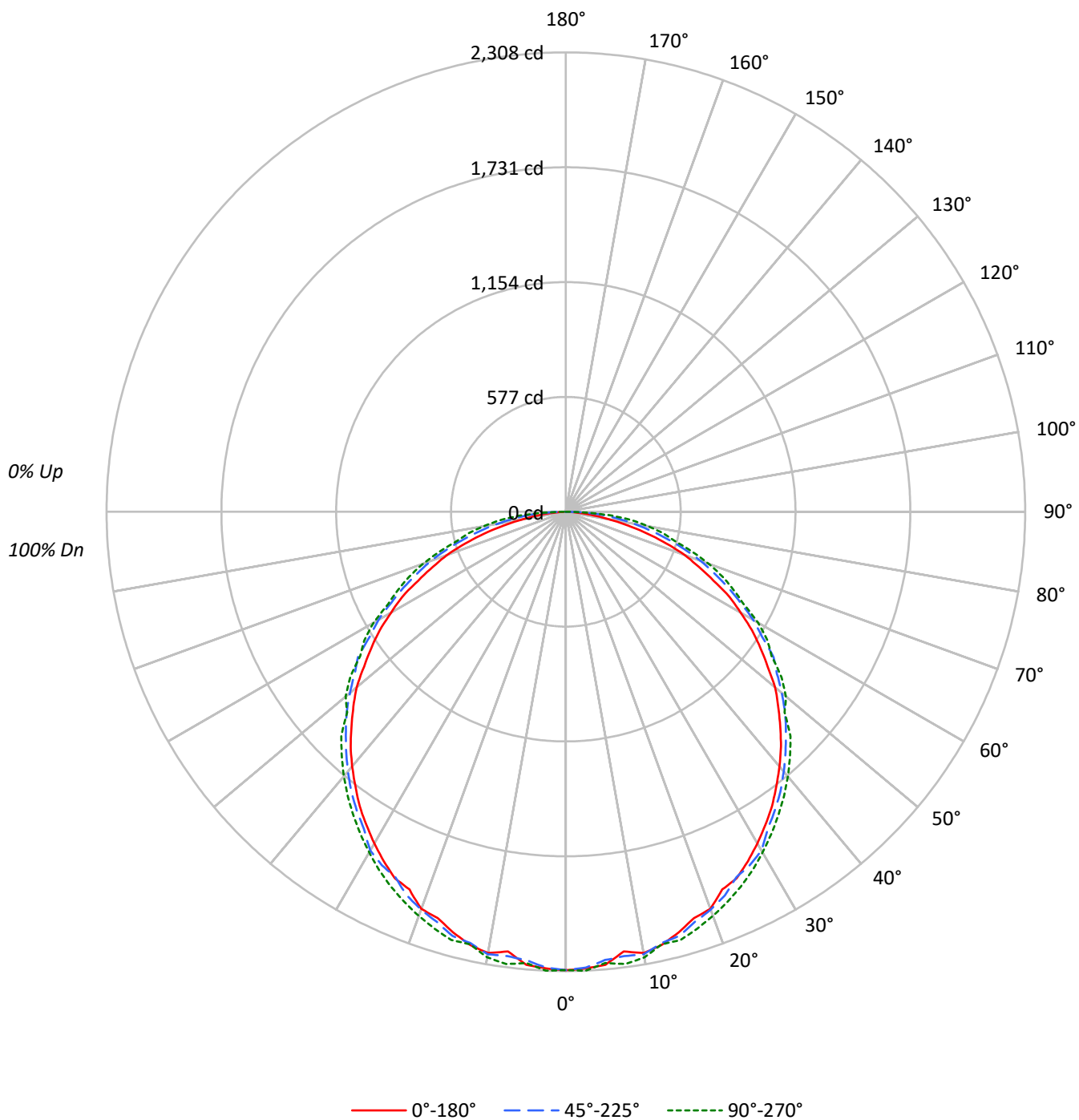
Lumens per Lamp: N/A
Luminaire Lumens: 6875.0 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3527	3527	3527
5°	3512	3476	3499
10°	3502	3511	3535
15°	3469	3497	3532
20°	3461	3467	3522
25°	3433	3424	3512
30°	3403	3476	3495
35°	3377	3424	3480
40°	3340	3405	3469
45°	3298	3387	3456
50°	3271	3374	3441
55°	3189	3404	3369
60°	3107	3331	3417
65°	2967	3259	3371
70°	2845	3231	3420
75°	2520	3135	3351
80°	1989	3062	3706
85°	1216	3272	4226

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4226 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.5	3.2
10°-20°	621.3	9.0
20°-30°	946.6	13.8
30°-40°	1152.2	16.8
40°-50°	1208.1	17.6
50°-60°	1119.1	16.3
60°-70°	882.5	12.8
70°-80°	545.9	7.9
80°-90°	181.8	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°	1785.3	26.0
0°-40°	2937.5	42.7
0°-60°	5264.7	76.6
0°-90°	6875.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6875.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2303	2303	2303	2303	2303	
5°	2284	2283	2261	2310	2276	216
15°	2188	2199	2206	2190	2227	618
25°	2032	2043	2026	2082	2078	934
35°	1806	1823	1831	1866	1861	1129
45°	1523	1551	1564	1582	1596	1176
55°	1194	1230	1275	1286	1262	1068
65°	819	851	899	933	930	815
75°	426	460	530	570	566	450
85°	69	118	186	226	240	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2303.0	2303.0	2303.0	2303.0	2303.0
2.5°	2296.5	2310.5	2292.7	2307.7	2307.7
5°	2284.3	2283.4	2260.9	2310.5	2275.9
7.5°	2228.1	2267.5	2251.5	2312.4	2291.8
10°	2251.5	2241.2	2257.2	2298.3	2273.1
12.5°	2228.1	2245.0	2219.7	2199.1	2225.3
15°	2187.9	2199.1	2205.7	2189.8	2227.2
17.5°	2140.2	2182.3	2159.8	2152.3	2195.4
20°	2123.3	2125.2	2127.1	2165.4	2160.8
22.5°	2054.1	2091.5	2086.8	2117.7	2121.5
25°	2031.6	2042.9	2026.0	2082.2	2078.4
27.5°	1980.2	2004.5	2001.7	2020.4	2030.7
30°	1924.0	1948.3	1965.2	1944.6	1976.4
32.5°	1866.0	1907.2	1888.5	1926.8	1920.3
35°	1806.1	1822.9	1831.4	1866.0	1861.3
37.5°	1736.9	1765.9	1770.5	1822.9	1800.5
40°	1670.4	1699.4	1703.2	1734.0	1735.0
42.5°	1600.2	1614.3	1633.9	1669.5	1666.7
45°	1522.6	1550.6	1563.7	1581.5	1595.5
47.5°	1447.7	1477.6	1494.5	1523.5	1490.7
50°	1372.8	1394.3	1415.9	1446.8	1443.9
52.5°	1278.3	1327.0	1337.3	1354.1	1365.3
55°	1194.1	1229.6	1274.6	1285.8	1261.5
57.5°	1108.9	1136.1	1168.8	1203.4	1200.6
60°	1014.4	1047.2	1087.4	1113.6	1115.5
62.5°	928.3	950.8	989.1	1027.5	1007.9
65°	818.8	850.6	899.3	933.0	930.2
67.5°	721.5	756.1	805.7	849.7	851.6
70°	635.4	654.1	721.5	755.2	763.6
72.5°	529.7	562.4	622.3	659.7	663.5
75°	425.8	459.5	529.7	569.9	566.2
77.5°	320.0	368.7	437.0	484.7	500.7
80°	225.5	269.5	347.2	394.0	420.2
82.5°	142.2	188.1	263.9	321.9	337.8
85°	69.2	117.9	186.2	226.5	240.5
87.5°	17.8	48.7	86.1	105.7	114.2
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	16.18	17.85	16.55	18.17	18.48	16.61	18.28	16.98	18.60	18.91
	3H	17.98	19.50	18.36	19.82	20.18	18.69	20.20	19.06	20.53	20.89
	4H	18.63	20.06	19.02	20.41	20.78	19.53	20.96	19.93	21.31	21.68
	6H	19.04	20.37	19.45	20.73	21.12	20.32	21.65	20.73	22.01	22.40
	8H	19.14	20.41	19.56	20.80	21.20	20.66	21.93	21.08	22.32	22.72
	12H	19.18	20.40	19.61	20.79	21.21	20.96	22.18	21.39	22.56	22.99
4H	2H	16.92	18.35	17.32	18.70	19.07	17.25	18.69	17.65	19.03	19.41
	3H	18.96	20.16	19.36	20.56	20.96	19.57	20.78	19.98	21.17	21.57
	4H	19.73	20.82	20.16	21.23	21.67	20.57	21.67	21.00	22.08	22.52
	6H	20.26	21.22	20.72	21.66	22.12	21.53	22.49	21.98	22.93	23.38
	8H	20.41	21.31	20.87	21.75	22.21	21.95	22.85	22.41	23.29	23.76
	12H	20.49	21.30	20.97	21.77	22.24	22.33	23.14	22.81	23.62	24.08
8H	4H	20.18	21.08	20.64	21.52	21.98	20.91	21.81	21.37	22.26	22.72
	6H	20.86	21.61	21.35	22.10	22.57	22.03	22.78	22.52	23.27	23.74
	8H	21.07	21.75	21.58	22.26	22.74	22.58	23.25	23.08	23.76	24.24
	12H	21.22	21.82	21.73	22.31	22.87	23.09	23.69	23.60	24.18	24.74
12H	4H	20.26	21.07	20.74	21.55	22.01	20.95	21.76	21.43	22.23	22.70
	6H	20.99	21.67	21.50	22.17	22.66	22.09	22.77	22.60	23.28	23.76
	8H	21.29	21.88	21.79	22.37	22.93	22.72	23.32	23.22	23.81	24.37