

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: P1588832

Luminaire Tested: 24CZSP-A-70VHE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588832
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-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 7500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

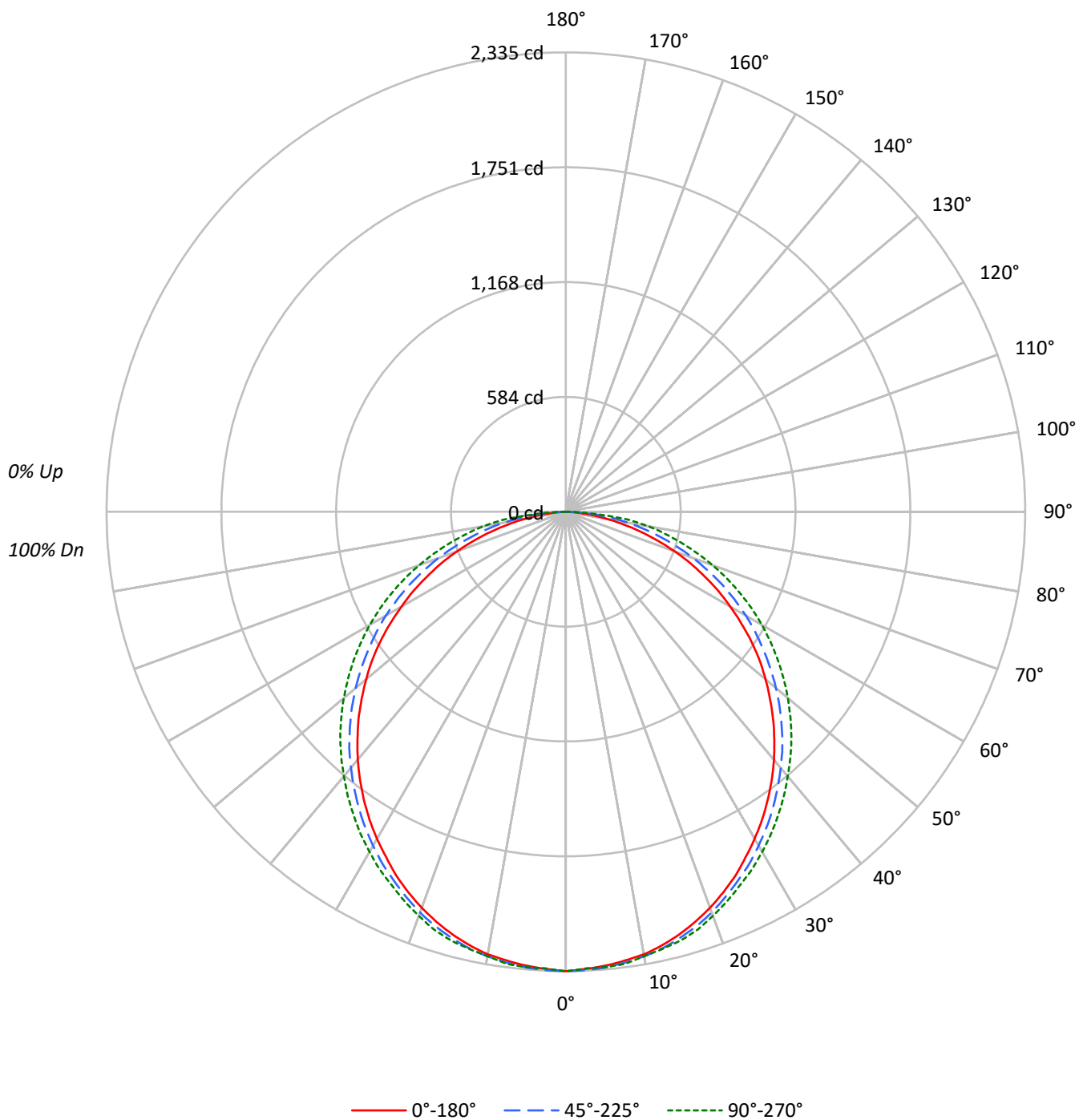
Lumens per Lamp: N/A
Luminaire Lumens: 6818.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3577	3577	3577
5°	3561	3574	3572
10°	3553	3569	3567
15°	3527	3556	3577
20°	3492	3533	3563
25°	3449	3497	3540
30°	3395	3466	3530
35°	3346	3432	3519
40°	3290	3398	3509
45°	3228	3364	3513
50°	3158	3322	3511
55°	3076	3276	3515
60°	2961	3240	3524
65°	2825	3177	3535
70°	2633	3089	3551
75°	2346	2966	3586
80°	1940	2824	3761
85°	1262	2550	3286

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.9	3.2
10°-20°	632.4	9.3
20°-30°	953.8	14.0
30°-40°	1148.8	16.8
40°-50°	1199.8	17.6
50°-60°	1101.8	16.2
60°-70°	867.8	12.7
70°-80°	532.4	7.8
80°-90°	160.2	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°	1807.1	26.5
0°-40°	2955.9	43.4
0°-60°	5257.5	77.1
0°-90°	6818.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6818.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2335	2335	2335	2335	2335	
5°	2316	2319	2325	2332	2323	220
15°	2225	2229	2243	2256	2256	627
25°	2041	2045	2069	2094	2094	939
35°	1789	1798	1836	1873	1882	1119
45°	1490	1506	1553	1607	1622	1149
55°	1152	1173	1227	1296	1316	1028
65°	779	806	877	950	975	771
75°	396	428	501	580	606	420
85°	72	99	145	184	187	94
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2335.3	2335.3	2335.3	2335.3	2335.3
2.5°	2326.4	2330.9	2332.4	2333.9	2323.4
5°	2315.9	2318.9	2324.9	2332.4	2323.4
7.5°	2300.9	2303.9	2311.4	2321.9	2317.4
10°	2284.5	2286.0	2295.0	2302.4	2293.5
12.5°	2257.6	2262.0	2272.5	2278.5	2275.5
15°	2224.6	2229.1	2242.6	2256.1	2256.1
17.5°	2185.7	2191.7	2208.2	2226.1	2227.6
20°	2142.4	2146.8	2167.8	2185.7	2185.7
22.5°	2093.0	2099.0	2119.9	2139.4	2142.4
25°	2040.6	2045.1	2069.0	2094.5	2094.5
27.5°	1979.3	1988.3	2018.2	2043.6	2049.6
30°	1919.4	1926.9	1959.8	1991.3	1995.7
32.5°	1856.6	1865.6	1900.0	1934.4	1941.9
35°	1789.3	1798.3	1835.7	1873.1	1882.0
37.5°	1719.0	1729.4	1768.3	1811.7	1820.7
40°	1645.7	1657.6	1699.5	1745.9	1754.9
42.5°	1567.9	1584.3	1629.2	1677.1	1690.5
45°	1490.1	1506.5	1552.9	1606.8	1621.7
47.5°	1407.8	1427.2	1475.1	1532.0	1548.4
50°	1325.5	1345.0	1394.3	1455.7	1473.6
52.5°	1241.7	1261.2	1312.0	1376.4	1395.8
55°	1152.0	1172.9	1226.8	1295.6	1316.5
57.5°	1059.2	1086.1	1143.0	1213.3	1234.2
60°	966.5	993.4	1057.7	1126.5	1150.5
62.5°	875.2	900.6	966.5	1039.8	1065.2
65°	779.4	806.4	876.7	950.0	975.4
67.5°	685.2	712.1	782.4	858.7	885.7
70°	588.0	617.9	689.7	766.0	792.9
72.5°	490.7	522.1	595.4	673.2	698.7
75°	396.5	427.9	501.2	580.5	605.9
77.5°	303.7	338.1	409.9	490.7	514.6
80°	219.9	252.8	320.2	399.4	426.4
82.5°	140.6	169.1	236.4	311.2	330.6
85°	71.8	98.7	145.1	184.0	187.0
87.5°	22.4	31.4	47.9	71.8	73.3
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	15.91	17.57	16.27	17.88	18.20	16.74	18.40	17.10	18.71	19.03
	3H	17.66	19.17	18.04	19.49	19.85	18.85	20.36	19.23	20.69	21.05
	4H	18.28	19.70	18.68	20.05	20.42	19.74	21.16	20.14	21.51	21.89
	6H	18.69	20.01	19.10	20.38	20.77	20.52	21.84	20.93	22.21	22.60
	8H	18.80	20.06	19.22	20.45	20.85	20.84	22.11	21.27	22.49	22.89
	12H	18.85	20.06	19.28	20.44	20.87	21.05	22.26	21.48	22.65	23.07
4H	2H	16.68	18.10	17.08	18.45	18.82	17.32	18.75	17.72	19.09	19.47
	3H	18.65	19.85	19.06	20.25	20.65	19.68	20.88	20.09	21.27	21.67
	4H	19.39	20.48	19.82	20.89	21.33	20.73	21.82	21.16	22.23	22.66
	6H	19.92	20.87	20.37	21.31	21.77	21.68	22.64	22.14	23.08	23.53
	8H	20.07	20.96	20.53	21.40	21.86	22.08	22.97	22.54	23.41	23.88
	12H	20.15	20.95	20.63	21.43	21.90	22.36	23.16	22.84	23.64	24.10
8H	4H	19.85	20.74	20.31	21.18	21.65	21.02	21.91	21.48	22.35	22.82
	6H	20.51	21.26	21.00	21.74	22.22	22.13	22.88	22.62	23.36	23.84
	8H	20.72	21.39	21.23	21.90	22.38	22.64	23.31	23.15	23.82	24.30
	12H	20.86	21.45	21.37	21.94	22.50	23.03	23.62	23.53	24.11	24.67
12H	4H	19.94	20.74	20.42	21.22	21.69	21.04	21.85	21.52	22.32	22.79
	6H	20.64	21.31	21.15	21.82	22.30	22.18	22.85	22.69	23.35	23.84
	8H	20.92	21.51	21.43	22.00	22.56	22.76	23.35	23.26	23.84	24.40