

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: P1588833

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588833
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 7500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

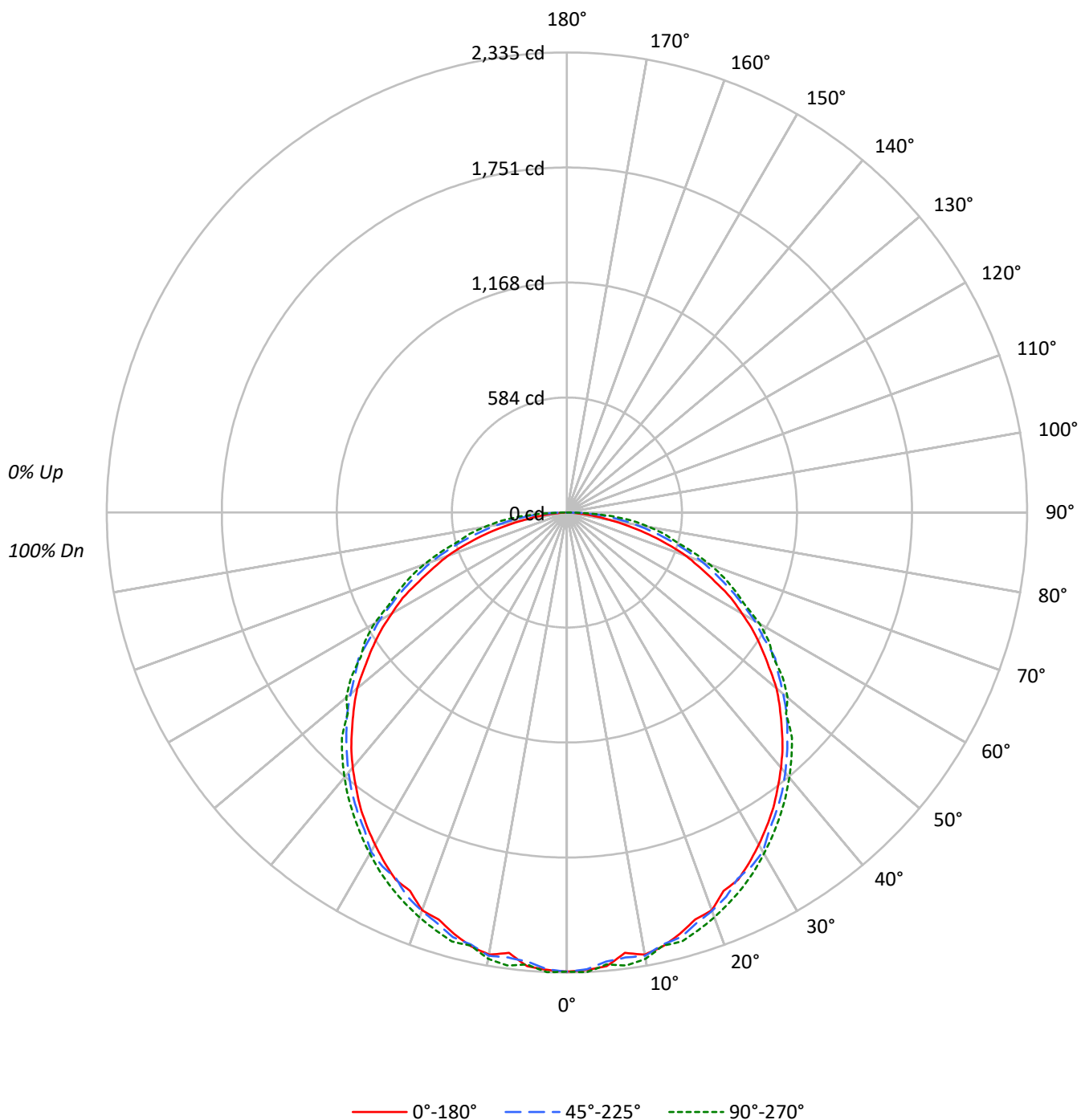
Lumens per Lamp: N/A
Luminaire Lumens: 6957.0 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3569	3569	3569
5°	3554	3518	3541
10°	3543	3552	3577
15°	3511	3539	3574
20°	3502	3508	3564
25°	3474	3465	3554
30°	3443	3517	3537
35°	3417	3465	3522
40°	3380	3446	3510
45°	3337	3428	3497
50°	3310	3414	3482
55°	3227	3444	3409
60°	3144	3371	3458
65°	3003	3298	3411
70°	2879	3270	3460
75°	2550	3172	3390
80°	2013	3099	3750
85°	1232	3311	4277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4277 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.1	3.2
10°-20°	628.7	9.0
20°-30°	957.9	13.8
30°-40°	1165.9	16.8
40°-50°	1222.5	17.6
50°-60°	1132.5	16.3
60°-70°	893.0	12.8
70°-80°	552.5	7.9
80°-90°	184.0	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°	1806.6	26.0
0°-40°	2972.6	42.7
0°-60°	5327.6	76.6
0°-90°	6957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6957.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2330	2330	2330	2330	2330	
5°	2312	2311	2288	2338	2303	218
15°	2214	2225	2232	2216	2254	625
25°	2056	2067	2050	2107	2103	945
35°	1828	1845	1853	1888	1884	1142
45°	1541	1569	1582	1600	1615	1190
55°	1208	1244	1290	1301	1276	1081
65°	829	861	910	944	941	825
75°	431	465	536	577	573	455
85°	70	119	188	229	243	94
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2323.9	2338.1	2320.1	2335.2	2335.2
5°	2311.5	2310.6	2287.9	2338.1	2303.0
7.5°	2254.7	2294.5	2278.4	2340.0	2319.1
10°	2278.4	2268.0	2284.1	2325.7	2300.2
12.5°	2254.7	2271.8	2246.2	2225.4	2251.9
15°	2214.0	2225.4	2232.0	2215.9	2253.8
17.5°	2165.7	2208.3	2185.6	2178.0	2221.6
20°	2148.7	2150.6	2152.5	2191.3	2186.5
22.5°	2078.6	2116.5	2111.7	2143.0	2146.8
25°	2055.9	2067.2	2050.2	2107.0	2103.2
27.5°	2003.8	2028.4	2025.6	2044.5	2054.9
30°	1947.0	1971.6	1988.6	1967.8	2000.0
32.5°	1888.2	1929.9	1911.0	1949.8	1943.2
35°	1827.6	1844.7	1853.2	1888.2	1883.5
37.5°	1757.6	1786.9	1791.7	1844.7	1822.0
40°	1690.3	1719.7	1723.5	1754.7	1755.7
42.5°	1619.3	1633.5	1653.4	1689.4	1686.5
45°	1540.7	1569.1	1582.4	1600.4	1614.6
47.5°	1465.0	1495.3	1512.3	1541.7	1508.5
50°	1389.2	1411.0	1432.8	1464.0	1461.2
52.5°	1293.6	1342.8	1353.2	1370.3	1381.6
55°	1208.3	1244.3	1289.8	1301.1	1276.5
57.5°	1122.2	1149.6	1182.8	1217.8	1215.0
60°	1026.5	1059.7	1100.4	1126.9	1128.8
62.5°	939.4	962.1	1000.9	1039.8	1019.9
65°	828.6	860.8	910.0	944.1	941.3
67.5°	730.1	765.1	815.3	859.8	861.7
70°	643.0	661.9	730.1	764.2	772.7
72.5°	536.0	569.1	629.7	667.6	671.4
75°	430.9	465.0	536.0	576.7	572.9
77.5°	323.9	373.1	442.2	490.5	506.6
80°	228.2	272.7	351.3	398.7	425.2
82.5°	143.9	190.3	267.0	325.8	341.9
85°	70.1	119.3	188.4	229.2	243.4
87.5°	18.0	49.2	87.1	107.0	115.5
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	16.22	17.89	16.59	18.21	18.52	16.65	18.33	17.02	18.64	18.95
	3H	18.02	19.54	18.40	19.86	20.22	18.73	20.24	19.10	20.57	20.93
	4H	18.67	20.10	19.07	20.45	20.82	19.57	21.00	19.97	21.35	21.72
	6H	19.08	20.41	19.49	20.77	21.16	20.36	21.69	20.77	22.05	22.44
	8H	19.18	20.45	19.60	20.84	21.24	20.70	21.97	21.13	22.36	22.76
	12H	19.23	20.45	19.65	20.83	21.26	21.00	22.22	21.43	22.60	23.03
4H	2H	16.96	18.39	17.36	18.74	19.11	17.30	18.73	17.69	19.07	19.45
	3H	19.00	20.20	19.41	20.60	21.00	19.61	20.82	20.02	21.21	21.61
	4H	19.77	20.86	20.20	21.28	21.71	20.62	21.71	21.05	22.12	22.56
	6H	20.30	21.27	20.76	21.70	22.16	21.57	22.53	22.02	22.97	23.42
	8H	20.45	21.35	20.91	21.79	22.25	21.99	22.89	22.45	23.33	23.80
	12H	20.53	21.34	21.01	21.82	22.28	22.37	23.18	22.85	23.66	24.12
8H	4H	20.22	21.12	20.68	21.56	22.02	20.95	21.86	21.41	22.30	22.76
	6H	20.90	21.65	21.39	22.14	22.61	22.07	22.82	22.56	23.31	23.78
	8H	21.12	21.79	21.62	22.30	22.78	22.62	23.29	23.12	23.80	24.28
	12H	21.26	21.86	21.77	22.35	22.91	23.14	23.74	23.64	24.22	24.78
12H	4H	20.30	21.11	20.78	21.59	22.06	20.99	21.80	21.47	22.27	22.74
	6H	21.03	21.71	21.54	22.21	22.70	22.14	22.81	22.64	23.32	23.80
	8H	21.33	21.93	21.83	22.42	22.97	22.76	23.36	23.26	23.85	24.41