

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: P1588332

Luminaire Tested: 24CZSP-52-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588332
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-52-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

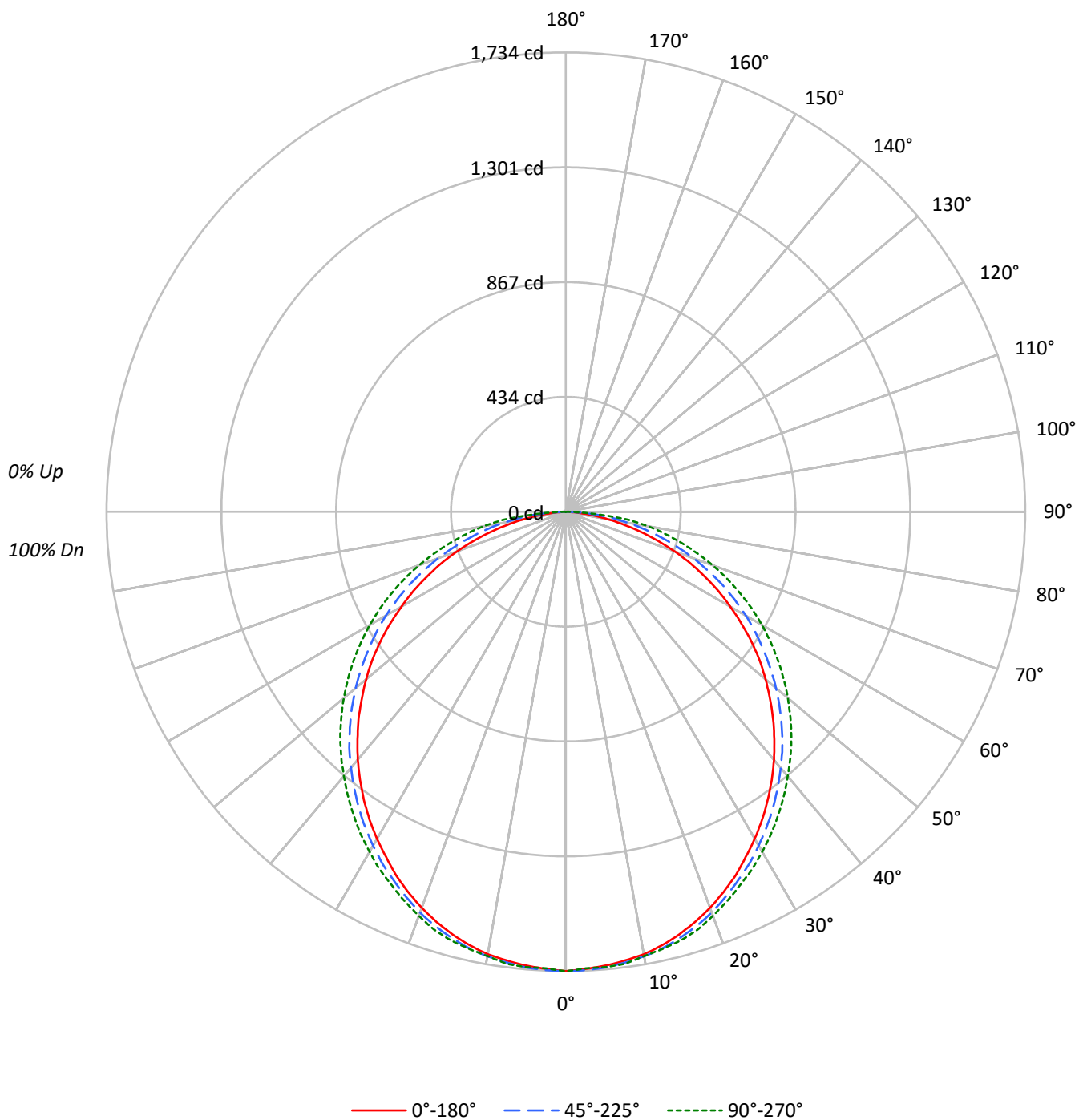
Lumens per Lamp: N/A
Luminaire Lumens: 5063.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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

TEST NUMBER: P1588332

CATALOG NUMBER: 24CZSP-52-L830-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588332

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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°	2656	2656	2656
5°	2644	2654	2653
10°	2638	2650	2649
15°	2620	2641	2656
20°	2593	2624	2646
25°	2561	2597	2628
30°	2521	2574	2621
35°	2484	2549	2613
40°	2443	2523	2606
45°	2397	2498	2609
50°	2345	2467	2607
55°	2284	2433	2610
60°	2198	2406	2617
65°	2098	2359	2625
70°	1955	2294	2637
75°	1742	2203	2662
80°	1440	2097	2793
85°	937	1894	2441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2881 cd/sqm

TEST NUMBER: P1588332

CATALOG NUMBER: 24CZSP-52-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	3.2
10°-20°	469.6	9.3
20°-30°	708.3	14.0
30°-40°	853.1	16.8
40°-50°	890.9	17.6
50°-60°	818.2	16.2
60°-70°	644.5	12.7
70°-80°	395.4	7.8
80°-90°	119.0	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°	1341.9	26.5
0°-40°	2195.0	43.4
0°-60°	3904.2	77.1
0°-90°	5063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1720	1722	1726	1732	1725	163
15°	1652	1655	1665	1675	1675	466
25°	1515	1519	1536	1555	1555	698
35°	1329	1335	1363	1391	1398	831
45°	1106	1119	1153	1193	1204	853
55°	855	871	911	962	978	764
65°	579	599	651	706	724	573
75°	294	318	372	431	450	312
85°	53	73	108	137	139	70
90°	0	0	0	0	0	

TEST NUMBER: P1588332

CATALOG NUMBER: 24CZSP-52-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1734.2	1734.2	1734.2	1734.2	1734.2
2.5°	1727.5	1730.9	1732.0	1733.1	1725.3
5°	1719.8	1722.0	1726.4	1732.0	1725.3
7.5°	1708.7	1710.9	1716.4	1724.2	1720.9
10°	1696.4	1697.6	1704.2	1709.8	1703.1
12.5°	1676.4	1679.8	1687.6	1692.0	1689.8
15°	1652.0	1655.3	1665.3	1675.3	1675.3
17.5°	1623.1	1627.6	1639.8	1653.1	1654.2
20°	1590.9	1594.2	1609.8	1623.1	1623.1
22.5°	1554.2	1558.7	1574.2	1588.7	1590.9
25°	1515.4	1518.7	1536.5	1555.3	1555.3
27.5°	1469.8	1476.5	1498.7	1517.6	1522.0
30°	1425.4	1430.9	1455.4	1478.7	1482.0
32.5°	1378.7	1385.4	1410.9	1436.5	1442.0
35°	1328.7	1335.4	1363.2	1390.9	1397.6
37.5°	1276.5	1284.3	1313.2	1345.4	1352.0
40°	1222.1	1230.9	1262.1	1296.5	1303.2
42.5°	1164.3	1176.5	1209.8	1245.4	1255.4
45°	1106.5	1118.7	1153.2	1193.2	1204.3
47.5°	1045.4	1059.9	1095.4	1137.6	1149.8
50°	984.3	998.8	1035.4	1081.0	1094.3
52.5°	922.1	936.5	974.3	1022.1	1036.5
55°	855.4	871.0	911.0	962.1	977.6
57.5°	786.6	806.6	848.8	901.0	916.5
60°	717.7	737.7	785.5	836.6	854.3
62.5°	649.9	668.8	717.7	772.1	791.0
65°	578.8	598.8	651.0	705.5	724.3
67.5°	508.8	528.8	581.0	637.7	657.7
70°	436.6	458.8	512.2	568.8	588.8
72.5°	364.4	387.7	442.2	499.9	518.8
75°	294.4	317.7	372.2	431.1	449.9
77.5°	225.5	251.1	304.4	364.4	382.2
80°	163.3	187.8	237.7	296.6	316.6
82.5°	104.4	125.5	175.5	231.1	245.5
85°	53.3	73.3	107.8	136.6	138.9
87.5°	16.7	23.3	35.6	53.3	54.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588332

CATALOG NUMBER: 24CZSP-52-L830-S

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	14.87	16.53	15.24	16.85	17.16	15.70	17.36	16.07	17.68	17.99
	3H	16.63	18.14	17.00	18.46	18.82	17.82	19.33	18.20	19.65	20.01
	4H	17.25	18.67	17.64	19.02	19.39	18.71	20.13	19.11	20.48	20.85
	6H	17.66	18.98	18.07	19.34	19.73	19.49	20.81	19.90	21.17	21.56
	8H	17.76	19.03	18.19	19.42	19.81	19.81	21.07	20.23	21.46	21.86
	12H	17.82	19.03	18.25	19.41	19.84	20.02	21.23	20.45	21.61	22.04
4H	2H	15.64	17.07	16.04	17.41	17.79	16.29	17.71	16.69	18.06	18.43
	3H	17.62	18.82	18.03	19.22	19.61	18.65	19.84	19.05	20.24	20.64
	4H	18.36	19.44	18.79	19.86	20.29	19.70	20.78	20.13	21.20	21.63
	6H	18.89	19.84	19.34	20.28	20.73	20.65	21.60	21.10	22.04	22.50
	8H	19.03	19.92	19.49	20.37	20.83	21.05	21.94	21.51	22.38	22.84
	12H	19.12	19.92	19.60	20.39	20.86	21.32	22.13	21.80	22.60	23.07
8H	4H	18.82	19.71	19.28	20.15	20.61	19.99	20.88	20.45	21.32	21.78
	6H	19.48	20.22	19.97	20.71	21.18	21.10	21.84	21.59	22.33	22.80
	8H	19.69	20.36	20.20	20.86	21.35	21.61	22.28	22.12	22.78	23.27
	12H	19.83	20.42	20.33	20.91	21.47	22.00	22.59	22.50	23.08	23.64
12H	4H	18.91	19.71	19.39	20.18	20.65	20.01	20.81	20.49	21.29	21.76
	6H	19.61	20.28	20.12	20.78	21.27	21.15	21.82	21.65	22.32	22.80
	8H	19.89	20.48	20.39	20.97	21.53	21.72	22.32	22.23	22.80	23.36