

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: P1588352

Luminaire Tested: 24CZSP-52HE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588352
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-52HE-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 5000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

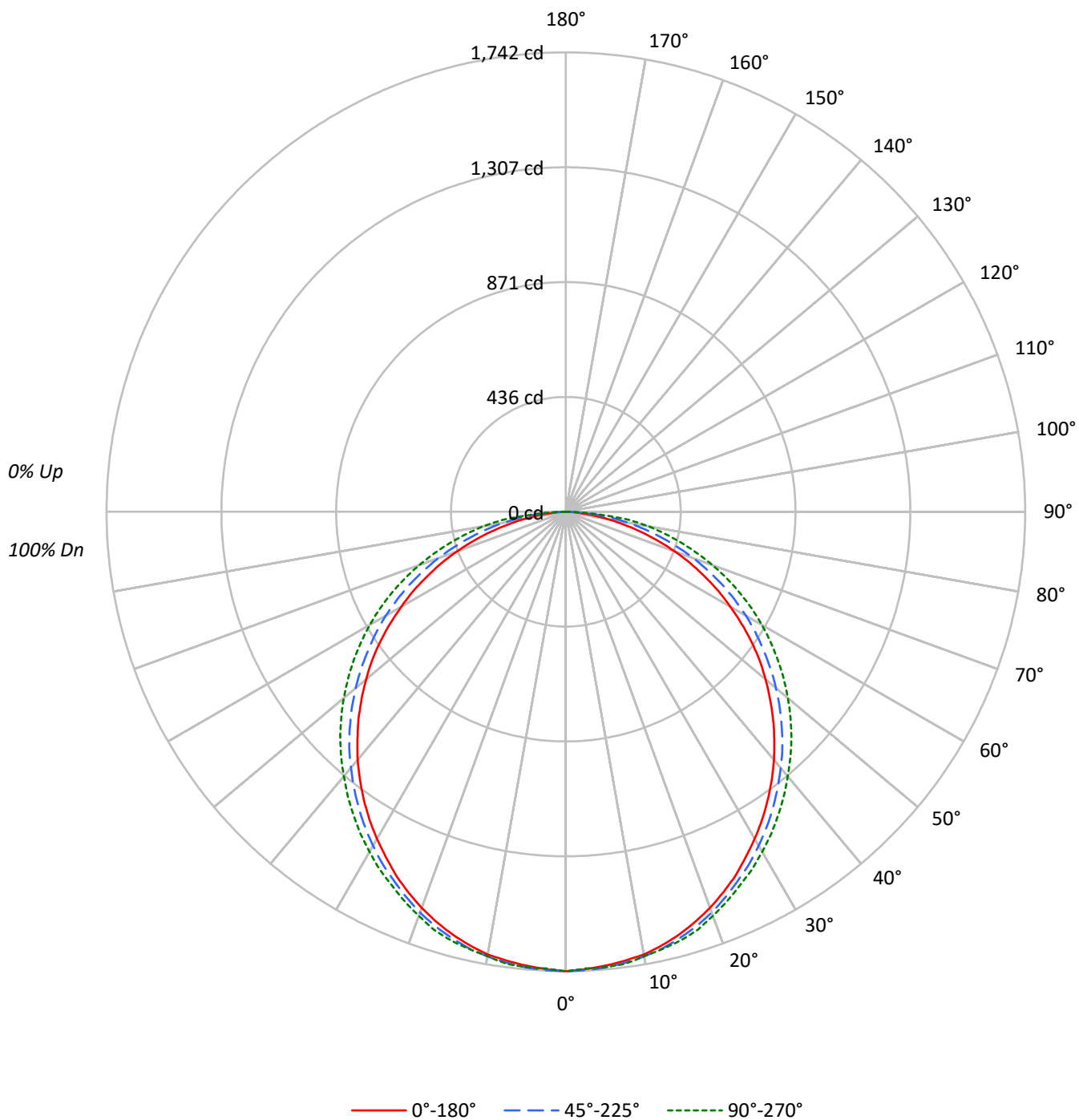
Lumens per Lamp: N/A
Luminaire Lumens: 5087.0 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588352

CATALOG NUMBER: 24CZSP-52HE-L830-S

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°	2669	2669	2669
5°	2657	2667	2665
10°	2651	2663	2661
15°	2632	2653	2669
20°	2605	2636	2658
25°	2573	2609	2641
30°	2533	2586	2633
35°	2496	2561	2626
40°	2455	2535	2618
45°	2408	2510	2621
50°	2357	2479	2620
55°	2295	2444	2623
60°	2209	2418	2629
65°	2108	2371	2638
70°	1965	2304	2649
75°	1750	2213	2675
80°	1447	2107	2806
85°	942	1903	2451

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2895 cd/sqm

TEST NUMBER: P1588352

CATALOG NUMBER: 24CZSP-52HE-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.8	3.2
10°-20°	471.9	9.3
20°-30°	711.6	14.0
30°-40°	857.1	16.8
40°-50°	895.2	17.6
50°-60°	822.1	16.2
60°-70°	647.5	12.7
70°-80°	397.2	7.8
80°-90°	119.5	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°	1348.3	26.5
0°-40°	2205.4	43.4
0°-60°	3922.7	77.1
0°-90°	5087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5087.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1742	1742	1742	1742	1742	
5°	1728	1730	1735	1740	1734	164
15°	1660	1663	1673	1683	1683	468
25°	1522	1526	1544	1563	1563	701
35°	1335	1342	1370	1398	1404	835
45°	1112	1124	1159	1199	1210	857
55°	860	875	915	967	982	767
65°	582	602	654	709	728	575
75°	296	319	374	433	452	314
85°	54	74	108	137	140	70
90°	0	0	0	0	0	



TEST NUMBER: P1588352

CATALOG NUMBER: 24CZSP-52HE-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1742.4	1742.4	1742.4	1742.4	1742.4
2.5°	1735.7	1739.1	1740.2	1741.3	1733.5
5°	1727.9	1730.2	1734.6	1740.2	1733.5
7.5°	1716.8	1719.0	1724.6	1732.4	1729.0
10°	1704.5	1705.6	1712.3	1717.9	1711.2
12.5°	1684.4	1687.7	1695.6	1700.0	1697.8
15°	1659.8	1663.2	1673.2	1683.3	1683.3
17.5°	1630.8	1635.3	1647.6	1660.9	1662.1
20°	1598.4	1601.8	1617.4	1630.8	1630.8
22.5°	1561.6	1566.1	1581.7	1596.2	1598.4
25°	1522.5	1525.9	1543.7	1562.7	1562.7
27.5°	1476.8	1483.5	1505.8	1524.8	1529.2
30°	1432.1	1437.7	1462.3	1485.7	1489.0
32.5°	1385.2	1391.9	1417.6	1443.3	1448.9
35°	1335.0	1341.7	1369.6	1397.5	1404.2
37.5°	1282.5	1290.4	1319.4	1351.8	1358.5
40°	1227.9	1236.8	1268.0	1302.6	1309.3
42.5°	1169.8	1182.1	1215.6	1251.3	1261.3
45°	1111.8	1124.0	1158.6	1198.8	1210.0
47.5°	1050.4	1064.9	1100.6	1143.0	1155.3
50°	989.0	1003.5	1040.3	1086.1	1099.5
52.5°	926.5	941.0	978.9	1026.9	1041.4
55°	859.5	875.1	915.3	966.7	982.3
57.5°	790.3	810.4	852.8	905.3	920.9
60°	721.1	741.2	789.2	840.5	858.4
62.5°	653.0	672.0	721.1	775.8	794.8
65°	581.6	601.6	654.1	708.8	727.8
67.5°	511.2	531.3	583.8	640.7	660.8
70°	438.7	461.0	514.6	571.5	591.6
72.5°	366.1	389.6	444.3	502.3	521.3
75°	295.8	319.2	373.9	433.1	452.1
77.5°	226.6	252.3	305.8	366.1	384.0
80°	164.1	188.6	238.9	298.0	318.1
82.5°	104.9	126.1	176.4	232.2	246.7
85°	53.6	73.7	108.3	137.3	139.5
87.5°	16.7	23.4	35.7	53.6	54.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588352

CATALOG NUMBER: 24CZSP-52HE-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	14.89	16.55	15.25	16.87	17.18	15.72	17.38	16.08	17.70	18.01
	3H	16.64	18.15	17.02	18.48	18.84	17.84	19.34	18.21	19.67	20.03
	4H	17.26	18.69	17.66	19.03	19.41	18.72	20.15	19.12	20.49	20.87
	6H	17.67	18.99	18.08	19.36	19.75	19.51	20.83	19.92	21.19	21.58
	8H	17.78	19.04	18.20	19.43	19.83	19.83	21.09	20.25	21.48	21.87
	12H	17.83	19.04	18.26	19.42	19.85	20.04	21.25	20.47	21.63	22.06
4H	2H	15.66	17.08	16.06	17.43	17.80	16.31	17.73	16.70	18.08	18.45
	3H	17.64	18.84	18.05	19.23	19.63	18.66	19.86	19.07	20.26	20.66
	4H	18.37	19.46	18.80	19.87	20.31	19.71	20.80	20.14	21.21	21.65
	6H	18.90	19.86	19.36	20.29	20.75	20.67	21.62	21.12	22.06	22.51
	8H	19.05	19.94	19.51	20.38	20.85	21.06	21.96	21.52	22.40	22.86
	12H	19.13	19.94	19.61	20.41	20.88	21.34	22.14	21.82	22.62	23.09
8H	4H	18.83	19.73	19.29	20.17	20.63	20.00	20.89	20.46	21.34	21.80
	6H	19.49	20.24	19.99	20.73	21.20	21.11	21.86	21.61	22.35	22.82
	8H	19.71	20.37	20.21	20.88	21.36	21.63	22.29	22.13	22.80	23.28
	12H	19.84	20.44	20.35	20.93	21.48	22.01	22.60	22.52	23.09	23.65
12H	4H	18.92	19.73	19.40	20.20	20.67	20.03	20.83	20.51	21.30	21.77
	6H	19.63	20.30	20.13	20.80	21.29	21.16	21.83	21.67	22.34	22.82
	8H	19.90	20.50	20.41	20.99	21.54	21.74	22.33	22.25	22.82	23.38