

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: P1588353

Luminaire Tested: 24CZSP-52HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-52HE-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 5000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

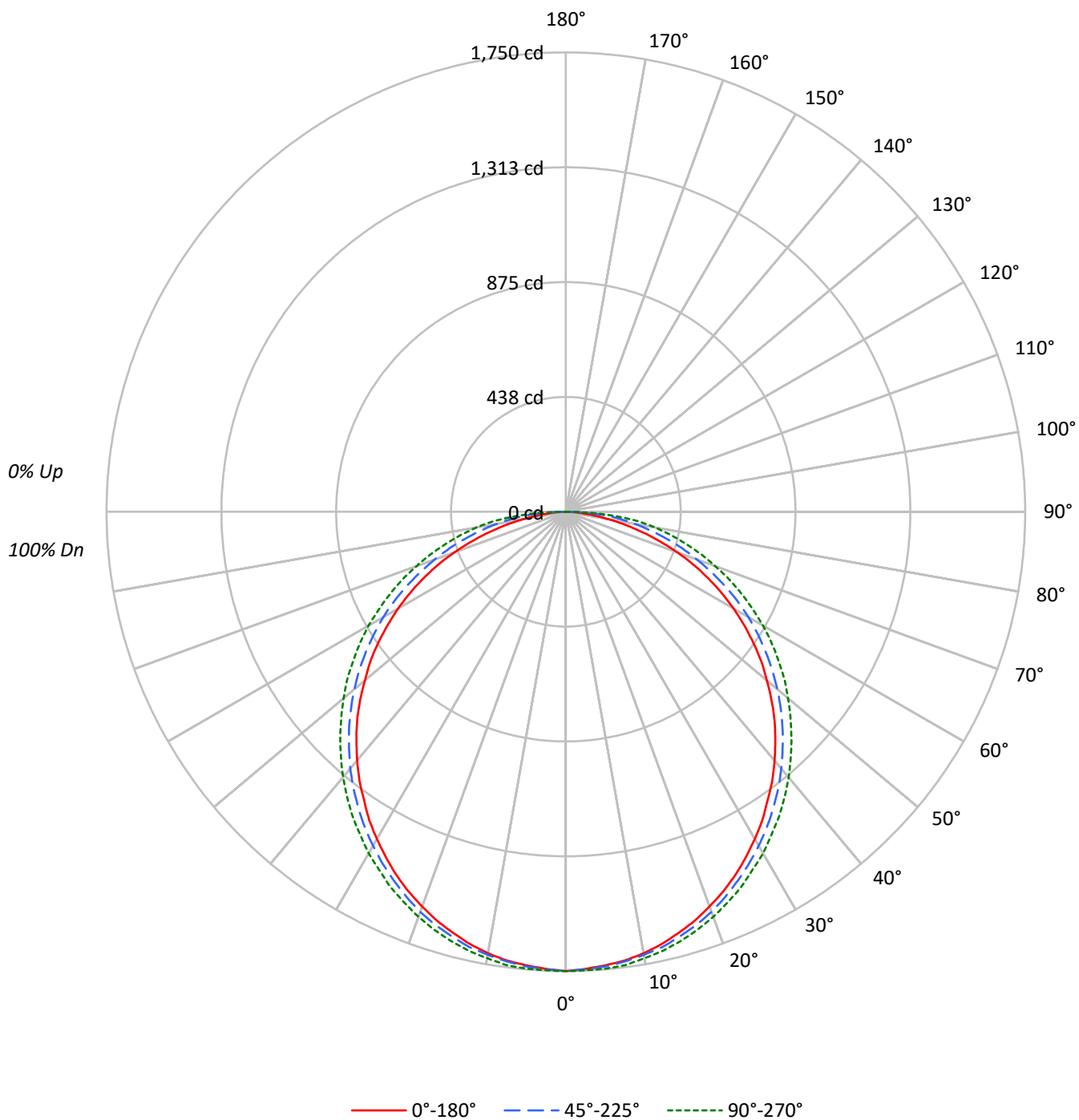
Lumens per Lamp: N/A
Luminaire Lumens: 5191.0 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588353

CATALOG NUMBER: 24CZSP-52HE-L830

Luminous Intensity Polar Plot



TEST NUMBER: P1588353

CATALOG NUMBER: 24CZSP-52HE-L830

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	101	97	93	96	93	90		92	90	87		89
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2680	2680	2680
5°	2666	2673	2686
10°	2657	2666	2686
15°	2633	2656	2684
20°	2609	2644	2677
25°	2581	2620	2668
30°	2546	2599	2658
35°	2506	2576	2649
40°	2473	2554	2640
45°	2437	2530	2633
50°	2383	2506	2633
55°	2333	2482	2640
60°	2262	2460	2658
65°	2166	2421	2676
70°	2027	2381	2709
75°	1803	2346	2797
80°	1483	2357	3041
85°	1010	2625	3358

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3358 cd/sqm

TEST NUMBER: P1588353

CATALOG NUMBER: 24CZSP-52HE-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	3.2
10°-20°	474.2	9.1
20°-30°	717.0	13.8
30°-40°	865.2	16.7
40°-50°	904.7	17.4
50°-60°	834.7	16.1
60°-70°	663.7	12.8
70°-80°	418.9	8.1
80°-90°	146.9	2.8
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°	1356.8	26.1
0°-40°	2222.0	42.8
0°-60°	3961.5	76.3
0°-90°	5191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5191.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1750	1750	1750	1750	1750	
5°	1734	1747	1738	1743	1747	165
15°	1661	1680	1675	1688	1692	469
25°	1527	1550	1550	1570	1579	703
35°	1340	1369	1378	1405	1417	840
45°	1125	1149	1168	1202	1216	866
55°	874	899	930	974	988	780
65°	598	625	668	724	738	591
75°	305	339	396	455	473	323
85°	58	95	149	185	191	73
90°	0	0	0	0	0	

TEST NUMBER: P1588353

CATALOG NUMBER: 24CZSP-52HE-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1749.9	1749.9	1749.9	1749.9	1749.9
2.5°	1742.7	1754.2	1744.2	1749.9	1748.5
5°	1734.1	1747.0	1738.4	1742.7	1747.0
7.5°	1724.0	1738.4	1728.4	1735.5	1741.3
10°	1708.2	1722.6	1714.0	1722.6	1726.9
12.5°	1686.7	1703.9	1698.2	1708.2	1712.5
15°	1660.8	1679.5	1675.2	1688.1	1692.4
17.5°	1633.5	1653.6	1650.8	1665.1	1669.4
20°	1600.5	1623.5	1622.0	1636.4	1642.2
22.5°	1566.0	1589.0	1587.6	1603.4	1610.5
25°	1527.2	1550.2	1550.2	1570.3	1578.9
27.5°	1484.1	1510.0	1511.4	1531.5	1538.7
30°	1439.6	1465.4	1469.7	1491.3	1502.8
32.5°	1393.6	1418.0	1425.2	1449.6	1458.3
35°	1340.4	1369.2	1377.8	1405.1	1416.6
37.5°	1291.6	1317.5	1328.9	1357.7	1369.2
40°	1237.0	1264.3	1277.2	1308.8	1320.3
42.5°	1181.0	1208.3	1222.6	1257.1	1268.6
45°	1124.9	1149.4	1168.0	1202.5	1215.5
47.5°	1063.2	1090.5	1110.6	1147.9	1160.9
50°	999.9	1028.7	1051.7	1091.9	1104.8
52.5°	939.6	965.5	991.3	1035.9	1050.2
55°	873.5	899.4	929.5	974.1	988.5
57.5°	806.0	831.9	866.3	913.7	929.5
60°	738.5	764.3	803.1	852.0	867.8
62.5°	668.1	693.9	737.0	787.3	801.7
65°	597.7	625.0	668.1	724.1	738.5
67.5°	525.8	553.1	599.1	658.0	673.8
70°	452.6	482.7	531.6	590.5	604.9
72.5°	376.4	410.9	465.5	523.0	540.2
75°	304.6	339.1	396.5	455.4	472.7
77.5°	234.2	273.0	330.4	392.2	410.9
80°	168.1	206.9	267.2	327.6	344.8
82.5°	107.8	148.0	208.3	265.8	280.2
85°	57.5	94.8	149.4	185.3	191.1
87.5°	18.7	48.8	67.5	89.1	90.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588353

CATALOG NUMBER: 24CZSP-52HE-L830

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	14.98	16.65	15.35	16.97	17.28	15.70	17.37	16.07	17.69	18.00
	3H	16.77	18.29	17.15	18.61	18.97	17.87	19.39	18.25	19.71	20.07
	4H	17.40	18.83	17.80	19.18	19.55	18.80	20.24	19.20	20.58	20.96
	6H	17.82	19.15	18.23	19.52	19.91	19.66	20.99	20.07	21.36	21.75
	8H	17.94	19.21	18.36	19.60	19.99	20.04	21.31	20.46	21.70	22.10
	12H	17.99	19.22	18.42	19.60	20.02	20.35	21.57	20.78	21.95	22.38
4H	2H	15.75	17.18	16.14	17.53	17.90	16.31	17.74	16.70	18.09	18.46
	3H	17.77	18.98	18.18	19.37	19.77	18.72	19.93	19.13	20.32	20.72
	4H	18.53	19.63	18.96	20.04	20.48	19.82	20.92	20.25	21.33	21.77
	6H	19.09	20.05	19.54	20.49	20.94	20.86	21.83	21.32	22.27	22.72
	8H	19.24	20.15	19.70	20.59	21.05	21.33	22.23	21.79	22.67	23.14
	12H	19.34	20.16	19.82	20.63	21.10	21.72	22.54	22.20	23.01	23.48
8H	4H	19.02	19.92	19.48	20.36	20.83	20.14	21.04	20.60	21.48	21.95
	6H	19.73	20.48	20.22	20.97	21.44	21.36	22.11	21.85	22.60	23.07
	8H	19.97	20.65	20.48	21.15	21.64	21.95	22.63	22.46	23.14	23.62
	12H	20.14	20.74	20.65	21.23	21.79	22.50	23.10	23.00	23.59	24.15
12H	4H	19.12	19.94	19.60	20.41	20.88	20.17	20.99	20.65	21.46	21.93
	6H	19.89	20.57	20.39	21.07	21.56	21.42	22.10	21.93	22.61	23.09
	8H	20.21	20.82	20.72	21.31	21.86	22.10	22.70	22.60	23.19	23.75

END OF REPORT