

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: P1588687

Luminaire Tested: 24CZSP-A-52-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588687
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-52-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

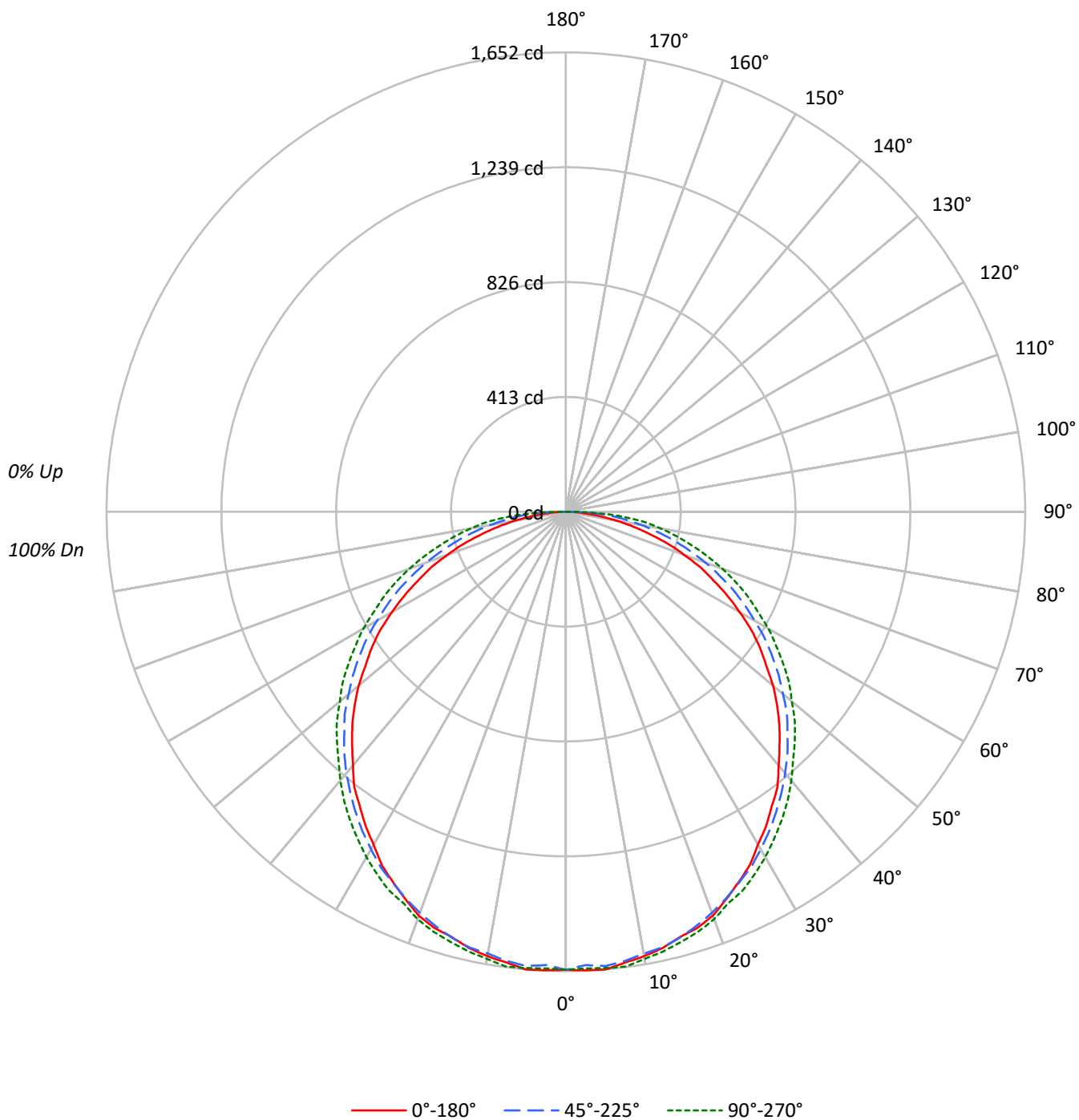
Lumens per Lamp: N/A
Luminaire Lumens: 5027.0 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588687

CATALOG NUMBER: 24CZSP-A-52-L940

Luminous Intensity Polar Plot



TEST NUMBER: P1588687

CATALOG NUMBER: 24CZSP-A-52-L940

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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2523	2523	2523
5°	2540	2521	2532
10°	2524	2509	2539
15°	2510	2514	2539
20°	2520	2502	2541
25°	2484	2488	2541
30°	2444	2478	2536
35°	2415	2465	2530
40°	2381	2453	2523
45°	2352	2441	2522
50°	2318	2430	2527
55°	2276	2421	2549
60°	2213	2405	2578
65°	2125	2404	2618
70°	2027	2388	2679
75°	1866	2394	2778
80°	1635	2442	3058
85°	1248	2814	3661

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4059 cd/sqm

TEST NUMBER: P1588687

CATALOG NUMBER: 24CZSP-A-52-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.4	3.1
10°-20°	449.5	8.9
20°-30°	682.8	13.6
30°-40°	827.2	16.5
40°-50°	870.2	17.3
50°-60°	809.1	16.1
60°-70°	651.5	13.0
70°-80°	422.0	8.4
80°-90°	158.3	3.1
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°	1288.7	25.6
0°-40°	2115.9	42.1
0°-60°	3795.2	75.5
0°-90°	5027.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5027.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1647	1647	1647	1647	1647	
5°	1652	1649	1640	1649	1647	156
15°	1583	1589	1586	1605	1601	449
25°	1470	1469	1472	1498	1504	678
35°	1292	1301	1318	1341	1353	809
45°	1086	1100	1127	1151	1164	837
55°	852	874	906	943	955	760
65°	586	613	663	703	722	583
75°	315	347	404	452	470	335
85°	71	105	160	200	208	87
90°	0	0	0	0	0	

TEST NUMBER: P1588687

CATALOG NUMBER: 24CZSP-A-52-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1647.0	1647.0	1647.0	1647.0	1647.0
2.5°	1650.6	1650.6	1631.3	1651.8	1643.3
5°	1651.8	1649.4	1639.7	1649.4	1647.0
7.5°	1634.9	1637.3	1628.9	1640.9	1649.4
10°	1622.9	1625.3	1613.2	1632.5	1632.5
12.5°	1607.2	1609.6	1604.8	1622.9	1619.3
15°	1583.2	1589.2	1585.6	1604.8	1601.2
17.5°	1569.9	1565.1	1561.5	1575.9	1583.2
20°	1545.8	1535.0	1535.0	1554.3	1559.1
22.5°	1507.3	1503.7	1504.9	1529.0	1524.2
25°	1470.0	1468.8	1472.4	1497.7	1503.7
27.5°	1432.7	1430.3	1441.1	1465.2	1470.0
30°	1382.1	1386.9	1401.4	1427.8	1433.9
32.5°	1340.0	1348.4	1361.6	1386.9	1394.1
35°	1291.8	1301.4	1318.3	1341.2	1353.2
37.5°	1249.7	1255.7	1273.7	1295.4	1309.9
40°	1190.7	1206.3	1226.8	1258.1	1261.7
42.5°	1137.7	1153.4	1179.8	1213.5	1209.9
45°	1085.9	1100.4	1126.9	1150.9	1164.2
47.5°	1030.6	1043.8	1078.7	1107.6	1117.2
50°	972.8	989.6	1019.7	1049.8	1060.7
52.5°	907.8	925.8	964.3	996.8	1012.5
55°	852.4	874.0	906.5	942.7	954.7
57.5°	791.0	809.0	848.8	884.9	896.9
60°	722.4	744.0	785.0	823.5	841.5
62.5°	656.1	680.2	723.6	763.3	777.7
65°	586.3	612.8	663.4	703.1	722.4
67.5°	526.1	547.8	597.1	641.7	662.2
70°	452.7	481.6	533.3	582.7	598.3
72.5°	387.7	412.9	467.1	516.5	535.7
75°	315.4	346.7	404.5	451.5	469.5
77.5°	249.2	281.7	339.5	388.9	409.3
80°	185.4	216.7	276.9	327.5	346.7
82.5°	125.2	156.5	216.7	266.1	287.7
85°	71.0	104.7	160.1	199.9	208.3
87.5°	31.3	60.2	90.3	108.4	115.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588687

CATALOG NUMBER: 24CZSP-A-52-L940

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	14.90	16.58	15.26	16.89	17.21	15.57	17.26	15.94	17.57	17.88
	3H	16.75	18.28	17.13	18.61	18.97	17.79	19.32	18.17	19.65	20.00
	4H	17.44	18.88	17.84	19.23	19.60	18.76	20.20	19.15	20.55	20.92
	6H	17.93	19.27	18.34	19.64	20.03	19.65	20.99	20.06	21.35	21.74
	8H	18.08	19.36	18.50	19.75	20.15	20.05	21.33	20.47	21.72	22.12
	12H	18.17	19.40	18.60	19.78	20.21	20.41	21.64	20.84	22.02	22.45
4H	2H	15.69	17.14	16.09	17.48	17.86	16.21	17.66	16.61	18.00	18.38
	3H	17.78	19.00	18.19	19.40	19.80	18.67	19.89	19.08	20.29	20.69
	4H	18.60	19.71	19.03	20.12	20.56	19.80	20.91	20.23	21.32	21.76
	6H	19.22	20.20	19.68	20.64	21.09	20.87	21.85	21.32	22.29	22.74
	8H	19.42	20.34	19.88	20.78	21.24	21.36	22.28	21.82	22.72	23.18
	12H	19.56	20.38	20.03	20.86	21.32	21.81	22.64	22.29	23.11	23.58
8H	4H	19.11	20.02	19.57	20.46	20.93	20.14	21.06	20.60	21.50	21.96
	6H	19.89	20.66	20.38	21.15	21.62	21.39	22.16	21.88	22.65	23.12
	8H	20.18	20.87	20.68	21.37	21.85	22.02	22.71	22.52	23.21	23.69
	12H	20.39	21.01	20.90	21.50	22.05	22.63	23.24	23.13	23.73	24.29
12H	4H	19.22	20.04	19.69	20.52	20.98	20.18	21.01	20.66	21.48	21.95
	6H	20.06	20.75	20.57	21.26	21.74	21.47	22.16	21.97	22.66	23.15
	8H	20.43	21.04	20.93	21.53	22.09	22.17	22.79	22.68	23.27	23.83