

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: P1588677

Luminaire Tested: 24CZSP-A-52-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588677
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

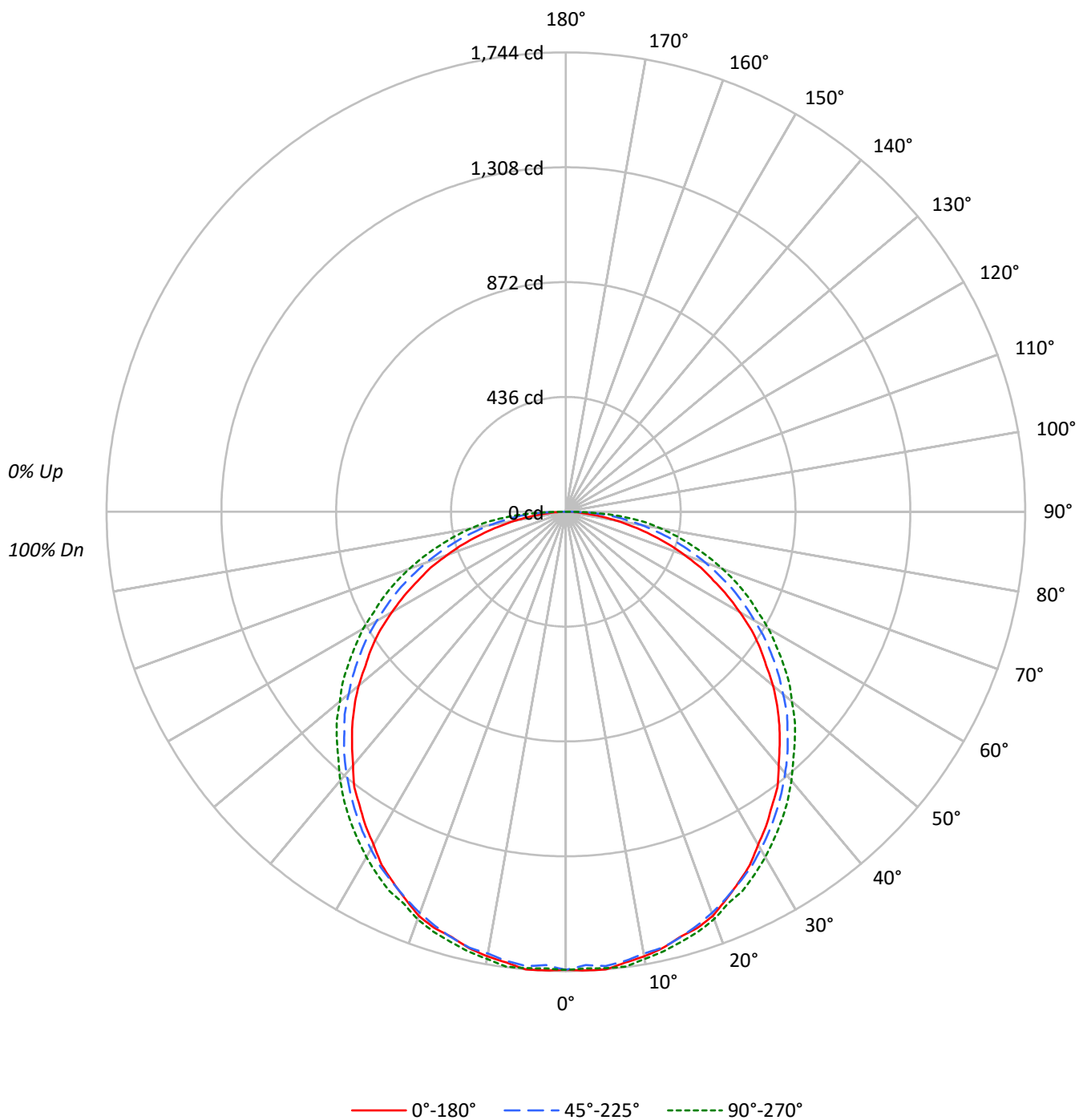
Lumens per Lamp: N/A
Luminaire Lumens: 5308.0 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	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°	2663	2663	2663
5°	2682	2662	2674
10°	2665	2649	2681
15°	2651	2655	2681
20°	2660	2642	2683
25°	2623	2627	2683
30°	2581	2617	2678
35°	2550	2603	2672
40°	2514	2590	2664
45°	2484	2577	2663
50°	2447	2566	2668
55°	2403	2556	2692
60°	2336	2539	2722
65°	2244	2538	2764
70°	2141	2522	2829
75°	1971	2527	2934
80°	1727	2579	3229
85°	1318	2972	3864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4284 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	3.1
10°-20°	474.6	8.9
20°-30°	721.0	13.6
30°-40°	873.4	16.5
40°-50°	918.9	17.3
50°-60°	854.4	16.1
60°-70°	687.9	13.0
70°-80°	445.6	8.4
80°-90°	167.1	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°	1360.7	25.6
0°-40°	2234.1	42.1
0°-60°	4007.4	75.5
0°-90°	5308.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1744	1742	1731	1742	1739	165
15°	1672	1678	1674	1694	1691	474
25°	1552	1551	1555	1581	1588	715
35°	1364	1374	1392	1416	1429	855
45°	1147	1162	1190	1215	1229	884
55°	900	923	957	995	1008	803
65°	619	647	700	742	763	616
75°	333	366	427	477	496	354
85°	75	111	169	211	220	92
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.0	1739.0	1739.0	1739.0	1739.0
2.5°	1742.8	1742.8	1722.5	1744.1	1735.2
5°	1744.1	1741.6	1731.4	1741.6	1739.0
7.5°	1726.3	1728.9	1720.0	1732.7	1741.6
10°	1713.6	1716.1	1703.4	1723.8	1723.8
12.5°	1697.1	1699.6	1694.5	1713.6	1709.8
15°	1671.6	1678.0	1674.2	1694.5	1690.7
17.5°	1657.7	1652.6	1648.8	1664.0	1671.6
20°	1632.2	1620.8	1620.8	1641.1	1646.2
22.5°	1591.6	1587.7	1589.0	1614.4	1609.4
25°	1552.2	1550.9	1554.7	1581.4	1587.7
27.5°	1512.7	1510.2	1521.6	1547.1	1552.2
30°	1459.4	1464.4	1479.7	1507.7	1514.0
32.5°	1414.9	1423.8	1437.7	1464.4	1472.1
35°	1364.0	1374.2	1392.0	1416.1	1428.8
37.5°	1319.5	1325.9	1344.9	1367.8	1383.1
40°	1257.2	1273.8	1295.4	1328.4	1332.2
42.5°	1201.3	1217.8	1245.8	1281.4	1277.6
45°	1146.6	1161.9	1189.9	1215.3	1229.3
47.5°	1088.2	1102.1	1139.0	1169.5	1179.7
50°	1027.1	1044.9	1076.7	1108.5	1119.9
52.5°	958.5	977.6	1018.2	1052.6	1069.1
55°	900.0	922.9	957.2	995.4	1008.1
57.5°	835.2	854.3	896.2	934.3	947.1
60°	762.7	785.6	828.8	869.5	888.6
62.5°	692.8	718.2	764.0	805.9	821.2
65°	619.1	647.0	700.4	742.4	762.7
67.5°	555.5	578.4	630.5	677.6	699.2
70°	478.0	508.5	563.1	615.3	631.8
72.5°	409.3	436.0	493.2	545.4	565.7
75°	333.1	366.1	427.1	476.7	495.8
77.5°	263.1	297.5	358.5	410.6	432.2
80°	195.8	228.8	292.4	345.8	366.1
82.5°	132.2	165.3	228.8	280.9	303.8
85°	75.0	110.6	169.1	211.0	219.9
87.5°	33.1	63.6	95.3	114.4	122.0
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	15.09	16.77	15.45	17.08	17.40	15.76	17.44	16.13	17.76	18.07
	3H	16.94	18.47	17.32	18.80	19.16	17.98	19.51	18.36	19.83	20.19
	4H	17.63	19.07	18.03	19.42	19.79	18.94	20.39	19.34	20.74	21.11
	6H	18.12	19.46	18.53	19.83	20.22	19.84	21.18	20.25	21.54	21.93
	8H	18.27	19.55	18.69	19.94	20.34	20.24	21.52	20.66	21.91	22.31
	12H	18.36	19.59	18.79	19.97	20.40	20.60	21.83	21.03	22.21	22.64
4H	2H	15.88	17.33	16.28	17.67	18.05	16.40	17.84	16.80	18.19	18.57
	3H	17.97	19.19	18.38	19.59	19.99	18.86	20.08	19.27	20.48	20.88
	4H	18.79	19.90	19.22	20.31	20.74	19.99	21.10	20.42	21.51	21.95
	6H	19.41	20.39	19.87	20.83	21.28	21.06	22.04	21.51	22.47	22.93
	8H	19.61	20.53	20.07	20.97	21.43	21.55	22.47	22.01	22.91	23.37
	12H	19.75	20.57	20.22	21.05	21.51	22.00	22.83	22.48	23.30	23.77
8H	4H	19.30	20.21	19.75	20.65	21.12	20.33	21.25	20.79	21.69	22.15
	6H	20.08	20.85	20.57	21.33	21.81	21.58	22.35	22.07	22.84	23.31
	8H	20.37	21.06	20.87	21.56	22.04	22.21	22.90	22.71	23.40	23.88
	12H	20.58	21.20	21.09	21.68	22.24	22.82	23.43	23.32	23.92	24.47
12H	4H	19.40	20.23	19.88	20.70	21.17	20.37	21.20	20.85	21.67	22.14
	6H	20.25	20.94	20.75	21.44	21.93	21.66	22.35	22.16	22.85	23.34
	8H	20.62	21.23	21.12	21.72	22.28	22.36	22.97	22.87	23.46	24.02