

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: P1588351

Luminaire Tested: 24CZSP-52-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588351
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-52-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

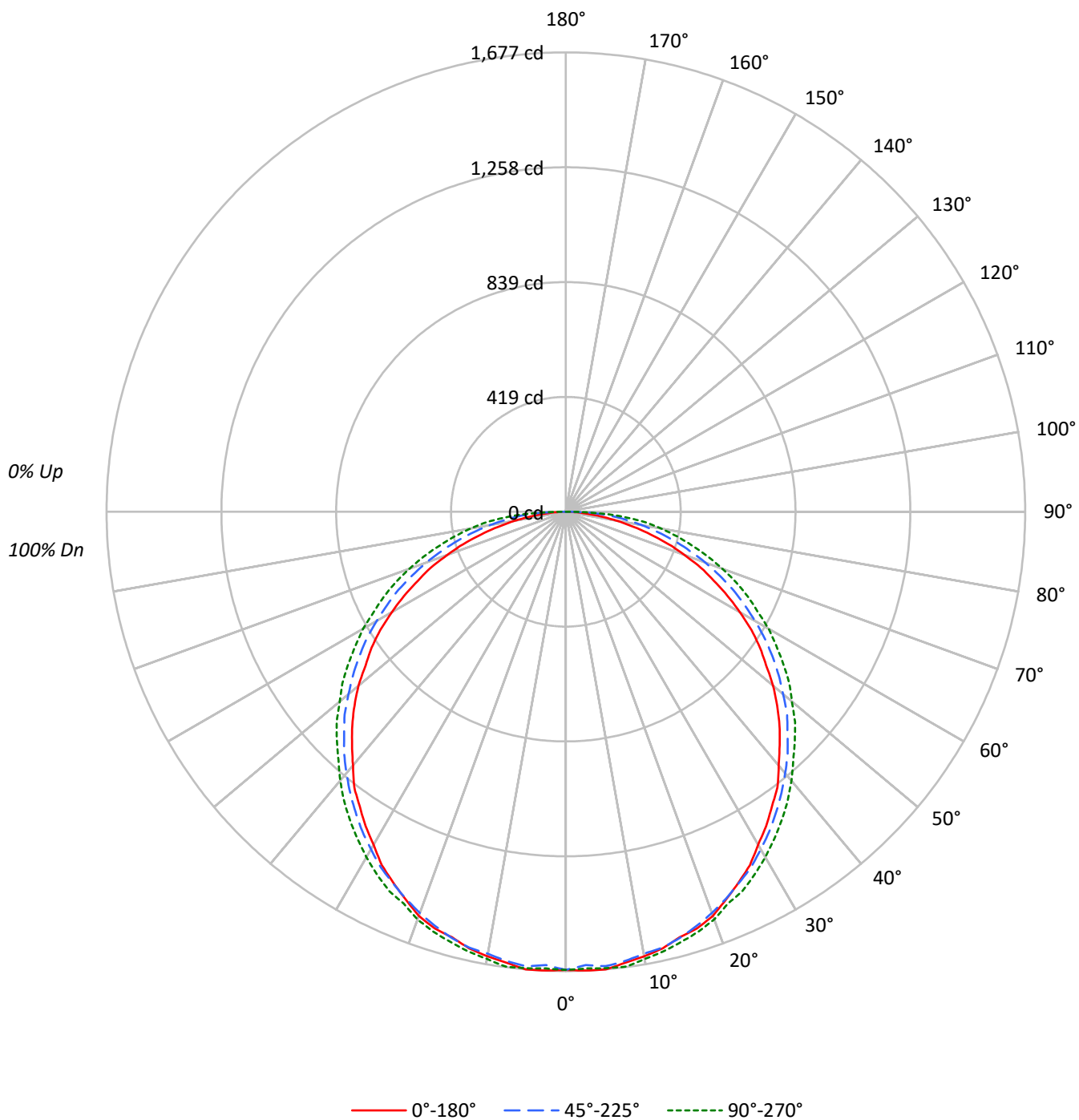
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5105.0 lumens
Efficiency: N/A
Efficacy: 139.1 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	50	30	10
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°	2562	2562	2562
5°	2579	2560	2571
10°	2563	2548	2578
15°	2549	2553	2578
20°	2559	2541	2581
25°	2523	2527	2581
30°	2482	2517	2575
35°	2453	2503	2569
40°	2417	2491	2562
45°	2389	2479	2561
50°	2354	2467	2566
55°	2311	2458	2589
60°	2247	2442	2618
65°	2158	2442	2659
70°	2059	2425	2721
75°	1895	2431	2822
80°	1661	2480	3106
85°	1267	2857	3717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	3.1
10°-20°	456.5	8.9
20°-30°	693.4	13.6
30°-40°	840.0	16.5
40°-50°	883.7	17.3
50°-60°	821.7	16.1
60°-70°	661.6	13.0
70°-80°	428.6	8.4
80°-90°	160.7	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°	1308.7	25.6
0°-40°	2148.7	42.1
0°-60°	3854.1	75.5
0°-90°	5105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1677	1675	1665	1675	1672	159
15°	1608	1614	1610	1630	1626	455
25°	1493	1492	1495	1521	1527	688
35°	1312	1322	1339	1362	1374	822
45°	1103	1118	1144	1169	1182	850
55°	866	888	921	957	970	772
65°	595	622	674	714	734	592
75°	320	352	411	458	477	340
85°	72	106	163	203	212	88
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.5	1672.5	1672.5	1672.5	1672.5
2.5°	1676.2	1676.2	1656.6	1677.4	1668.8
5°	1677.4	1675.0	1665.2	1675.0	1672.5
7.5°	1660.3	1662.7	1654.2	1666.4	1675.0
10°	1648.1	1650.5	1638.3	1657.8	1657.8
12.5°	1632.2	1634.6	1629.7	1648.1	1644.4
15°	1607.7	1613.8	1610.2	1629.7	1626.1
17.5°	1594.3	1589.4	1585.7	1600.4	1607.7
20°	1569.8	1558.8	1558.8	1578.4	1583.3
22.5°	1530.7	1527.0	1528.2	1552.7	1547.8
25°	1492.8	1491.6	1495.2	1520.9	1527.0
27.5°	1454.9	1452.4	1463.4	1487.9	1492.8
30°	1403.5	1408.4	1423.1	1450.0	1456.1
32.5°	1360.8	1369.3	1382.8	1408.4	1415.8
35°	1311.8	1321.6	1338.7	1362.0	1374.2
37.5°	1269.1	1275.2	1293.5	1315.5	1330.2
40°	1209.1	1225.0	1245.8	1277.6	1281.3
42.5°	1155.4	1171.2	1198.1	1232.4	1228.7
45°	1102.8	1117.5	1144.4	1168.8	1182.3
47.5°	1046.5	1060.0	1095.4	1124.8	1134.6
50°	987.9	1005.0	1035.5	1066.1	1077.1
52.5°	921.8	940.2	979.3	1012.3	1028.2
55°	865.6	887.6	920.6	957.3	969.5
57.5°	803.2	821.6	861.9	898.6	910.8
60°	733.6	755.6	797.1	836.3	854.6
62.5°	666.3	690.8	734.8	775.1	789.8
65°	595.4	622.3	673.7	714.0	733.6
67.5°	534.3	556.3	606.4	651.6	672.4
70°	459.7	489.0	541.6	591.7	607.6
72.5°	393.7	419.4	474.4	524.5	544.1
75°	320.3	352.1	410.8	458.5	476.8
77.5°	253.1	286.1	344.8	394.9	415.7
80°	188.3	220.1	281.2	332.5	352.1
82.5°	127.2	158.9	220.1	270.2	292.2
85°	72.1	106.4	162.6	203.0	211.5
87.5°	31.8	61.1	91.7	110.0	117.4
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	14.95	16.63	15.32	16.95	17.26	15.63	17.31	15.99	17.62	17.94
	3H	16.81	18.33	17.18	18.66	19.02	17.84	19.37	18.22	19.70	20.06
	4H	17.49	18.94	17.89	19.28	19.66	18.81	20.25	19.21	20.60	20.97
	6H	17.99	19.33	18.40	19.69	20.08	19.70	21.04	20.11	21.41	21.80
	8H	18.13	19.42	18.56	19.81	20.20	20.10	21.39	20.53	21.78	22.17
	12H	18.22	19.45	18.65	19.84	20.26	20.46	21.70	20.89	22.08	22.51
4H	2H	15.75	17.19	16.14	17.54	17.91	16.27	17.71	16.66	18.06	18.43
	3H	17.83	19.05	18.24	19.45	19.85	18.73	19.95	19.13	20.34	20.74
	4H	18.65	19.76	19.08	20.18	20.61	19.85	20.96	20.28	21.38	21.81
	6H	19.28	20.25	19.73	20.69	21.15	20.92	21.90	21.38	22.34	22.79
	8H	19.48	20.39	19.93	20.83	21.30	21.41	22.33	21.87	22.77	23.23
	12H	19.61	20.44	20.09	20.91	21.38	21.87	22.69	22.35	23.17	23.63
8H	4H	19.16	20.08	19.62	20.52	20.98	20.20	21.11	20.65	21.55	22.02
	6H	19.95	20.71	20.44	21.20	21.67	21.45	22.21	21.94	22.70	23.17
	8H	20.23	20.92	20.74	21.42	21.91	22.07	22.76	22.58	23.26	23.75
	12H	20.45	21.06	20.95	21.55	22.11	22.68	23.29	23.18	23.78	24.34
12H	4H	19.27	20.10	19.75	20.57	21.04	20.24	21.06	20.71	21.53	22.00
	6H	20.11	20.81	20.62	21.31	21.79	21.52	22.21	22.03	22.72	23.20
	8H	20.48	21.10	20.99	21.59	22.14	22.23	22.84	22.73	23.33	23.88