

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: P1588651

Luminaire Tested: 24CZSP-A-47-L950

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588651
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-47-L950
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

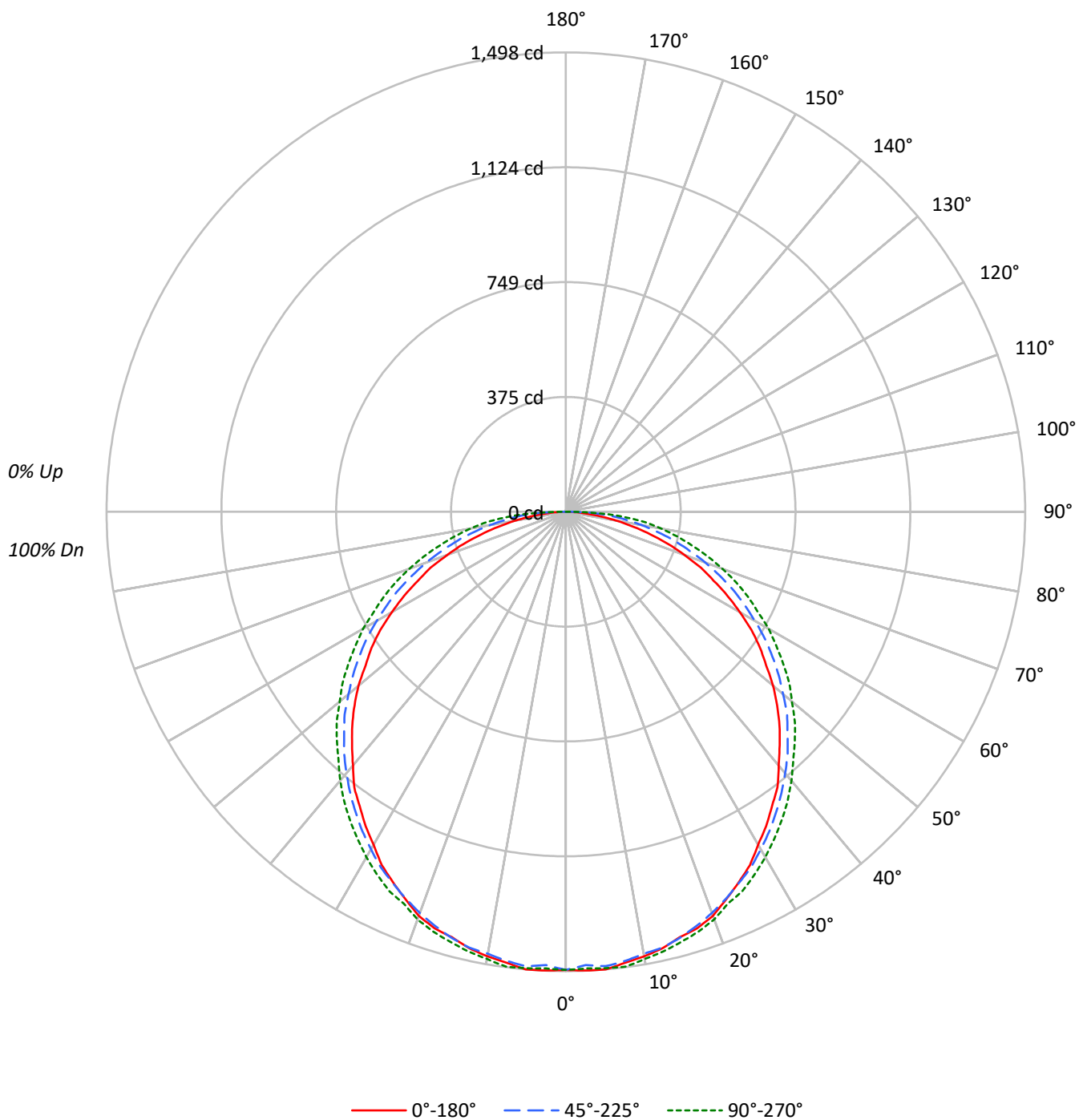
Lumens per Lamp: N/A
Luminaire Lumens: 4560.0 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
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°	2288	2288	2288
5°	2304	2287	2297
10°	2289	2276	2303
15°	2277	2281	2303
20°	2285	2270	2305
25°	2253	2257	2305
30°	2217	2248	2300
35°	2191	2236	2295
40°	2160	2225	2288
45°	2134	2214	2287
50°	2103	2204	2292
55°	2065	2196	2312
60°	2007	2181	2338
65°	1927	2181	2375
70°	1839	2167	2431
75°	1693	2171	2520
80°	1484	2216	2774
85°	1132	2552	3320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.1
10°-20°	407.7	8.9
20°-30°	619.4	13.6
30°-40°	750.3	16.5
40°-50°	789.4	17.3
50°-60°	734.0	16.1
60°-70°	591.0	13.0
70°-80°	382.8	8.4
80°-90°	143.6	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°	1169.0	25.6
0°-40°	1919.3	42.1
0°-60°	3442.6	75.5
0°-90°	4560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1498	1496	1487	1496	1494	142
15°	1436	1442	1438	1456	1452	407
25°	1333	1332	1336	1358	1364	615
35°	1172	1180	1196	1217	1228	734
45°	985	998	1022	1044	1056	759
55°	773	793	822	855	866	690
65°	532	556	602	638	655	529
75°	286	314	367	410	426	304
85°	64	95	145	181	189	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1494.0	1494.0	1494.0	1494.0	1494.0
2.5°	1497.2	1497.2	1479.8	1498.3	1490.7
5°	1498.3	1496.1	1487.4	1496.1	1494.0
7.5°	1483.0	1485.2	1477.6	1488.5	1496.1
10°	1472.1	1474.3	1463.4	1480.9	1480.9
12.5°	1457.9	1460.1	1455.7	1472.1	1468.8
15°	1436.1	1441.5	1438.3	1455.7	1452.5
17.5°	1424.1	1419.7	1416.4	1429.5	1436.1
20°	1402.2	1392.4	1392.4	1409.9	1414.2
22.5°	1367.3	1364.0	1365.1	1386.9	1382.6
25°	1333.4	1332.3	1335.6	1358.5	1364.0
27.5°	1299.6	1297.4	1307.2	1329.1	1333.4
30°	1253.7	1258.1	1271.2	1295.2	1300.7
32.5°	1215.5	1223.1	1235.1	1258.1	1264.6
35°	1171.8	1180.5	1195.8	1216.6	1227.5
37.5°	1133.6	1139.0	1155.4	1175.1	1188.2
40°	1080.1	1094.3	1112.8	1141.2	1144.5
42.5°	1032.0	1046.2	1070.2	1100.8	1097.5
45°	985.1	998.2	1022.2	1044.0	1056.0
47.5°	934.8	946.8	978.5	1004.7	1013.4
50°	882.4	897.7	925.0	952.3	962.1
52.5°	823.4	839.8	874.8	904.2	918.4
55°	773.2	792.8	822.3	855.1	866.0
57.5°	717.5	733.9	769.9	802.7	813.6
60°	655.2	674.9	712.0	747.0	763.4
62.5°	595.2	617.0	656.3	692.4	705.5
65°	531.8	555.9	601.7	637.8	655.2
67.5°	477.2	496.9	541.7	582.1	600.6
70°	410.6	436.8	483.8	528.6	542.8
72.5°	351.6	374.6	423.7	468.5	486.0
75°	286.1	314.5	366.9	409.5	425.9
77.5°	226.1	255.5	308.0	352.7	371.3
80°	168.2	196.6	251.2	297.0	314.5
82.5°	113.6	142.0	196.6	241.3	261.0
85°	64.4	95.0	145.2	181.3	188.9
87.5°	28.4	54.6	81.9	98.3	104.8
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	14.56	16.24	14.92	16.56	16.87	15.24	16.92	15.60	17.23	17.54
	3H	16.41	17.94	16.79	18.27	18.63	17.45	18.98	17.83	19.31	19.67
	4H	17.10	18.54	17.50	18.89	19.27	18.42	19.86	18.81	20.21	20.58
	6H	17.59	18.94	18.00	19.30	19.69	19.31	20.65	19.72	21.01	21.40
	8H	17.74	19.02	18.16	19.41	19.81	19.71	21.00	20.13	21.38	21.78
	12H	17.83	19.06	18.26	19.44	19.87	20.07	21.30	20.50	21.68	22.11
4H	2H	15.35	16.80	15.75	17.14	17.52	15.87	17.32	16.27	17.66	18.04
	3H	17.44	18.66	17.85	19.06	19.46	18.33	19.55	18.74	19.95	20.35
	4H	18.26	19.37	18.69	19.78	20.22	19.46	20.57	19.89	20.98	21.42
	6H	18.89	19.86	19.34	20.30	20.75	20.53	21.51	20.98	21.95	22.40
	8H	19.08	20.00	19.54	20.44	20.90	21.02	21.94	21.48	22.38	22.84
	12H	19.22	20.04	19.70	20.52	20.99	21.47	22.30	21.95	22.77	23.24
8H	4H	18.77	19.68	19.23	20.13	20.59	19.80	20.72	20.26	21.16	21.62
	6H	19.55	20.32	20.05	20.81	21.28	21.05	21.82	21.55	22.31	22.78
	8H	19.84	20.53	20.34	21.03	21.52	21.68	22.37	22.18	22.87	23.35
	12H	20.06	20.67	20.56	21.16	21.71	22.29	22.90	22.79	23.39	23.95
12H	4H	18.88	19.70	19.36	20.18	20.64	19.84	20.67	20.32	21.14	21.61
	6H	19.72	20.41	20.23	20.92	21.40	21.13	21.82	21.63	22.32	22.81
	8H	20.09	20.70	20.60	21.19	21.75	21.83	22.45	22.34	22.94	23.49