

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: P1588608

Luminaire Tested: 24CZSP-A-42-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-42-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

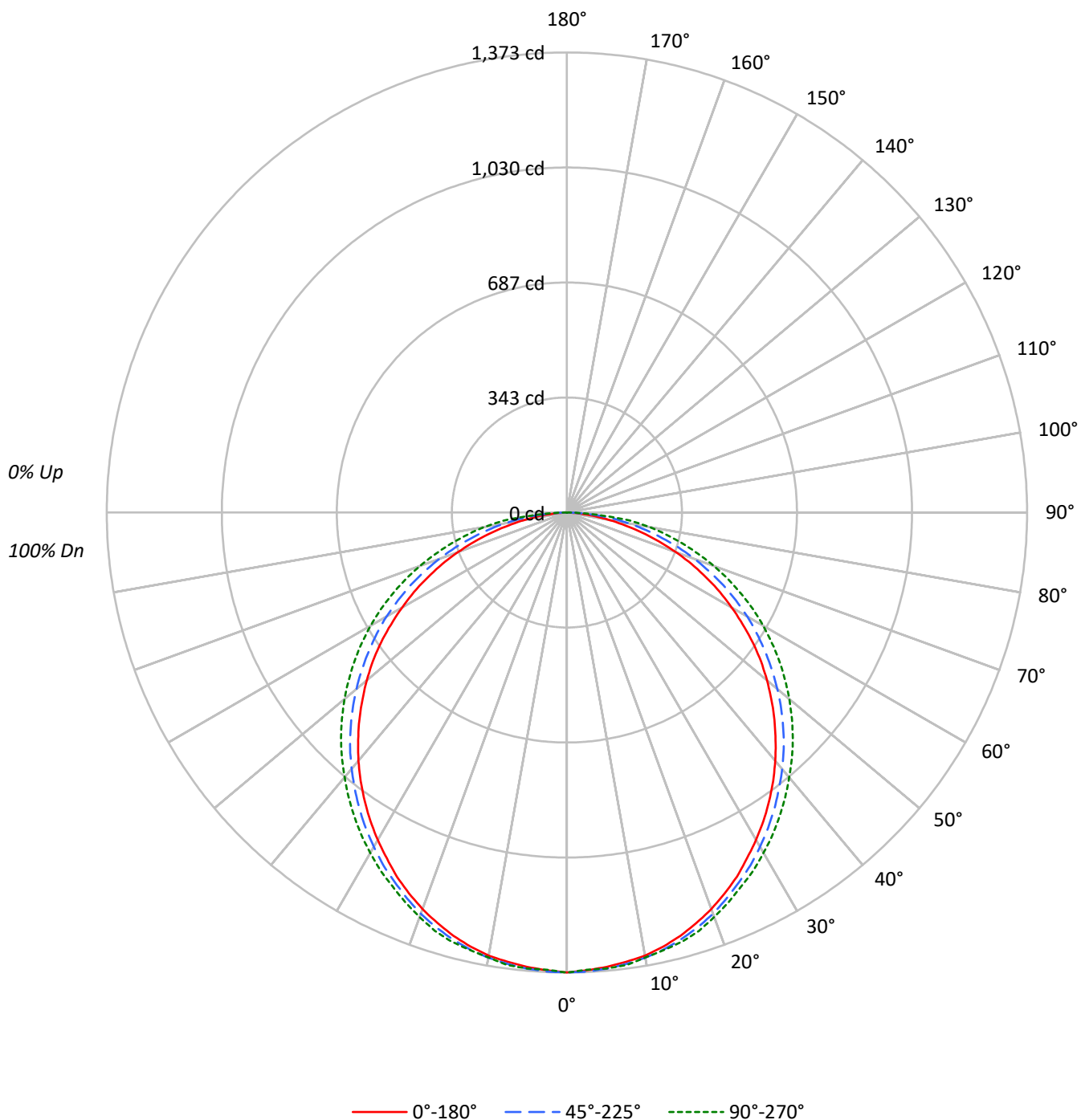
Lumens per Lamp: N/A
Luminaire Lumens: 4008.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.7
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	99	95	106	101	97	93	97	93	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2103	2103	2103
5°	2093	2101	2100
10°	2089	2098	2097
15°	2074	2090	2103
20°	2053	2077	2094
25°	2027	2056	2081
30°	1996	2038	2075
35°	1967	2018	2069
40°	1934	1998	2063
45°	1897	1977	2065
50°	1857	1953	2064
55°	1808	1926	2067
60°	1740	1905	2072
65°	1661	1868	2078
70°	1548	1815	2087
75°	1379	1743	2108
80°	1140	1660	2210
85°	742	1499	1931

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2281 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.8	3.2
10°-20°	371.8	9.3
20°-30°	560.7	14.0
30°-40°	675.3	16.8
40°-50°	705.3	17.6
50°-60°	647.7	16.2
60°-70°	510.2	12.7
70°-80°	313.0	7.8
80°-90°	94.2	2.3
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°	1062.3	26.5
0°-40°	1737.6	43.4
0°-60°	3090.7	77.1
0°-90°	4008.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4008.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1361	1363	1367	1371	1366	129
15°	1308	1310	1318	1326	1326	369
25°	1200	1202	1216	1231	1231	552
35°	1052	1057	1079	1101	1106	658
45°	876	886	913	944	953	675
55°	677	690	721	762	774	605
65°	458	474	515	558	573	453
75°	233	252	295	341	356	247
85°	42	58	85	108	110	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.8	1372.8	1372.8	1372.8	1372.8
2.5°	1367.6	1370.2	1371.1	1372.0	1365.8
5°	1361.4	1363.2	1366.7	1371.1	1365.8
7.5°	1352.6	1354.4	1358.8	1364.9	1362.3
10°	1342.9	1343.8	1349.1	1353.5	1348.2
12.5°	1327.1	1329.8	1335.9	1339.4	1337.7
15°	1307.8	1310.4	1318.3	1326.2	1326.2
17.5°	1284.9	1288.4	1298.1	1308.6	1309.5
20°	1259.4	1262.0	1274.3	1284.9	1284.9
22.5°	1230.4	1233.9	1246.2	1257.6	1259.4
25°	1199.6	1202.2	1216.3	1231.3	1231.3
27.5°	1163.5	1168.8	1186.4	1201.4	1204.9
30°	1128.4	1132.8	1152.1	1170.6	1173.2
32.5°	1091.4	1096.7	1116.9	1137.2	1141.5
35°	1051.8	1057.1	1079.1	1101.1	1106.4
37.5°	1010.5	1016.7	1039.5	1065.0	1070.3
40°	967.4	974.4	999.1	1026.3	1031.6
42.5°	921.7	931.4	957.7	985.9	993.8
45°	875.9	885.6	912.9	944.5	953.3
47.5°	827.6	839.0	867.2	900.6	910.2
50°	779.2	790.6	819.7	855.7	866.3
52.5°	730.0	741.4	771.3	809.1	820.5
55°	677.2	689.5	721.2	761.6	773.9
57.5°	622.7	638.5	671.9	713.2	725.6
60°	568.1	584.0	621.8	662.2	676.3
62.5°	514.5	529.4	568.1	611.2	626.2
65°	458.2	474.0	515.4	558.5	573.4
67.5°	402.8	418.6	460.0	504.8	520.6
70°	345.6	363.2	405.4	450.3	466.1
72.5°	288.5	306.9	350.0	395.8	410.7
75°	233.1	251.5	294.6	341.2	356.2
77.5°	178.5	198.8	241.0	288.5	302.5
80°	129.3	148.6	188.2	234.8	250.6
82.5°	82.7	99.4	139.0	182.9	194.4
85°	42.2	58.0	85.3	108.2	109.9
87.5°	13.2	18.5	28.1	42.2	43.1
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	14.06	15.72	14.43	16.04	16.35	14.89	16.55	15.25	16.87	17.18
	3H	15.82	17.32	16.19	17.65	18.01	17.01	18.51	17.38	18.84	19.20
	4H	16.43	17.86	16.83	18.20	18.58	17.90	19.32	18.29	19.67	20.04
	6H	16.85	18.17	17.26	18.53	18.92	18.68	20.00	19.09	20.36	20.75
	8H	16.95	18.22	17.38	18.60	19.00	19.00	20.26	19.42	20.65	21.05
	12H	17.00	18.22	17.43	18.60	19.03	19.21	20.42	19.64	20.80	21.23
4H	2H	14.83	16.25	15.23	16.60	16.98	15.48	16.90	15.88	17.25	17.62
	3H	16.81	18.01	17.22	18.40	18.80	17.83	19.03	18.24	19.43	19.83
	4H	17.55	18.63	17.98	19.04	19.48	18.89	19.97	19.32	20.38	20.82
	6H	18.07	19.03	18.53	19.47	19.92	19.84	20.79	20.29	21.23	21.68
	8H	18.22	19.11	18.68	19.55	20.02	20.23	21.13	20.69	21.57	22.03
	12H	18.30	19.11	18.78	19.58	20.05	20.51	21.32	20.99	21.79	22.26
8H	4H	18.01	18.90	18.46	19.34	19.80	19.17	20.07	19.63	20.51	20.97
	6H	18.67	19.41	19.16	19.90	20.37	20.29	21.03	20.78	21.52	21.99
	8H	18.88	19.55	19.38	20.05	20.53	20.80	21.47	21.31	21.97	22.46
	12H	19.02	19.61	19.52	20.10	20.66	21.18	21.78	21.69	22.26	22.82
12H	4H	18.09	18.90	18.57	19.37	19.84	19.20	20.00	19.68	20.48	20.94
	6H	18.80	19.47	19.31	19.97	20.46	20.33	21.00	20.84	21.51	21.99
	8H	19.08	19.67	19.58	20.16	20.72	20.91	21.50	21.42	21.99	22.55