

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: P1588609

Luminaire Tested: 24CZSP-A-42-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588609
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-42-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

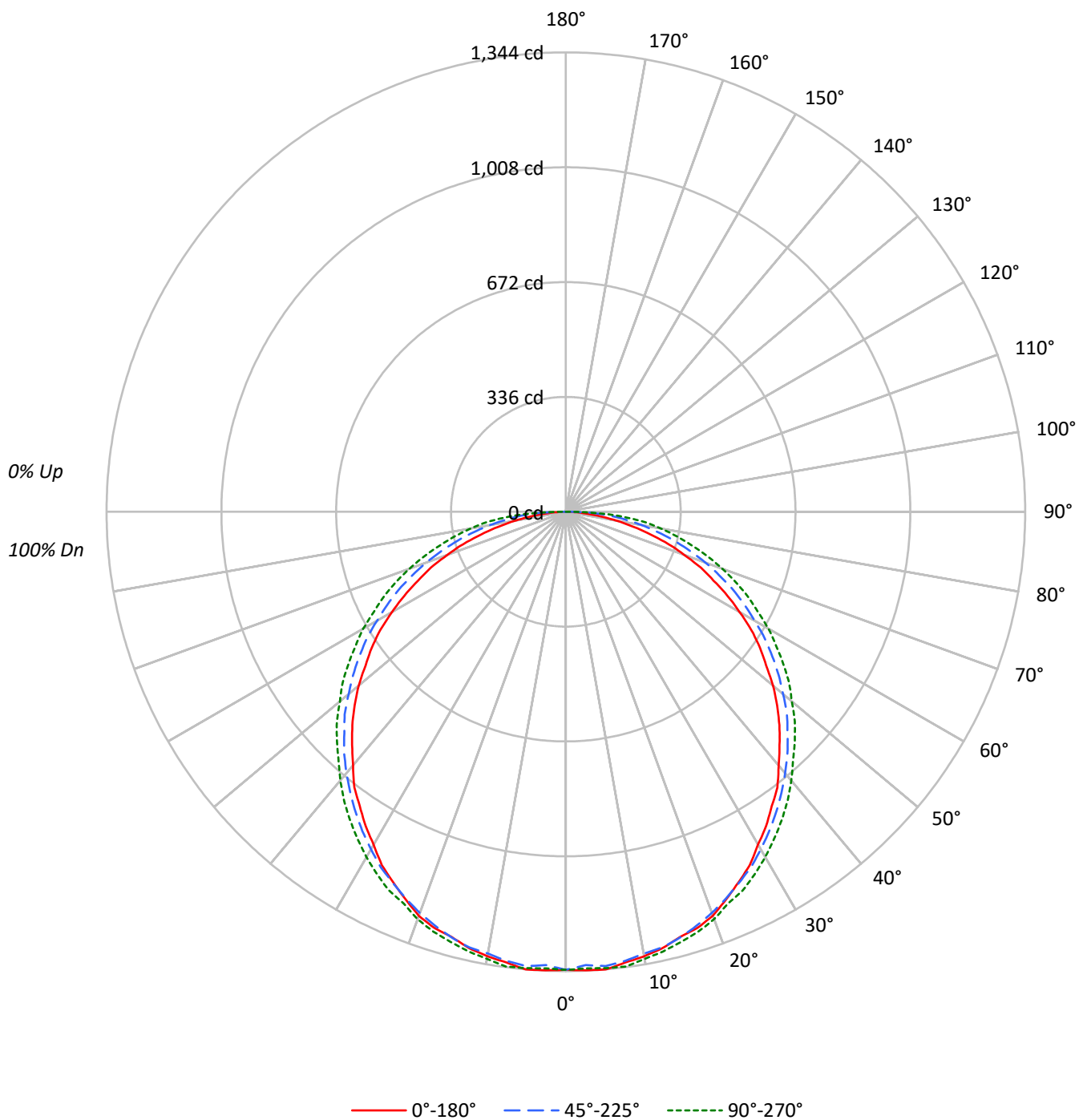
Lumens per Lamp: N/A
Luminaire Lumens: 4090.0 lumens
Efficiency: N/A
Efficacy: 142.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2052	2052	2052
5°	2066	2051	2060
10°	2054	2041	2066
15°	2042	2045	2066
20°	2050	2036	2068
25°	2021	2024	2067
30°	1989	2017	2063
35°	1965	2006	2059
40°	1937	1996	2052
45°	1914	1986	2052
50°	1886	1977	2056
55°	1852	1970	2074
60°	1800	1956	2097
65°	1729	1956	2130
70°	1649	1943	2180
75°	1518	1948	2261
80°	1330	1987	2488
85°	1016	2290	2979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3301 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	3.1
10°-20°	365.7	8.9
20°-30°	555.6	13.6
30°-40°	673.0	16.5
40°-50°	708.0	17.3
50°-60°	658.3	16.1
60°-70°	530.0	13.0
70°-80°	343.4	8.4
80°-90°	128.8	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°	1048.5	25.6
0°-40°	1721.5	42.1
0°-60°	3087.8	75.5
0°-90°	4090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1344	1342	1334	1342	1340	127
15°	1288	1293	1290	1306	1303	365
25°	1196	1195	1198	1218	1223	551
35°	1051	1059	1073	1091	1101	658
45°	884	895	917	936	947	681
55°	694	711	738	767	777	618
65°	477	499	540	572	588	474
75°	257	282	329	367	382	273
85°	58	85	130	163	170	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.0	1340.0	1340.0	1340.0	1340.0
2.5°	1342.9	1342.9	1327.2	1343.9	1337.0
5°	1343.9	1341.9	1334.1	1341.9	1340.0
7.5°	1330.2	1332.1	1325.3	1335.1	1341.9
10°	1320.4	1322.3	1312.6	1328.2	1328.2
12.5°	1307.7	1309.6	1305.7	1320.4	1317.4
15°	1288.1	1293.0	1290.0	1305.7	1302.8
17.5°	1277.3	1273.4	1270.4	1282.2	1288.1
20°	1257.7	1248.9	1248.9	1264.6	1268.5
22.5°	1226.4	1223.4	1224.4	1244.0	1240.1
25°	1196.0	1195.0	1197.9	1218.5	1223.4
27.5°	1165.6	1163.7	1172.5	1192.1	1196.0
30°	1124.5	1128.4	1140.2	1161.7	1166.6
32.5°	1090.2	1097.1	1107.8	1128.4	1134.3
35°	1051.0	1058.9	1072.6	1091.2	1101.0
37.5°	1016.7	1021.6	1036.3	1054.0	1065.7
40°	968.7	981.5	998.1	1023.6	1026.5
42.5°	925.6	938.4	959.9	987.4	984.4
45°	883.5	895.3	916.8	936.4	947.2
47.5°	838.5	849.2	877.6	901.2	909.0
50°	791.4	805.2	829.6	854.1	863.0
52.5°	738.6	753.2	784.6	811.0	823.8
55°	693.5	711.1	737.6	767.0	776.8
57.5°	643.5	658.2	690.6	719.9	729.7
60°	587.7	605.3	638.6	670.0	684.7
62.5°	533.8	553.4	588.7	621.0	632.8
65°	477.0	498.6	539.7	572.0	587.7
67.5°	428.0	445.7	485.8	522.1	538.7
70°	368.3	391.8	433.9	474.1	486.8
72.5°	315.4	336.0	380.1	420.2	435.9
75°	256.6	282.1	329.1	367.3	382.0
77.5°	202.8	229.2	276.2	316.4	333.0
80°	150.8	176.3	225.3	266.4	282.1
82.5°	101.9	127.3	176.3	216.5	234.1
85°	57.8	85.2	130.3	162.6	169.5
87.5°	25.5	49.0	73.5	88.2	94.0
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	14.18	15.86	14.55	16.18	16.49	14.86	16.54	15.22	16.85	17.17
	3H	16.04	17.56	16.41	17.89	18.25	17.07	18.60	17.45	18.93	19.29
	4H	16.72	18.17	17.12	18.51	18.89	18.04	19.48	18.44	19.83	20.20
	6H	17.21	18.56	17.62	18.92	19.31	18.93	20.27	19.34	20.64	21.03
	8H	17.36	18.65	17.79	19.04	19.43	19.33	20.62	19.76	21.01	21.40
	12H	17.45	18.68	17.88	19.06	19.49	19.69	20.93	20.12	21.31	21.74
4H	2H	14.98	16.42	15.37	16.77	17.14	15.50	16.94	15.89	17.29	17.66
	3H	17.06	18.28	17.47	18.68	19.08	17.96	19.18	18.36	19.57	19.97
	4H	17.88	18.99	18.31	19.40	19.84	19.08	20.19	19.51	20.61	21.04
	6H	18.51	19.48	18.96	19.92	20.38	20.15	21.13	20.61	21.57	22.02
	8H	18.71	19.62	19.16	20.06	20.52	20.64	21.56	21.10	22.00	22.46
	12H	18.84	19.67	19.32	20.14	20.61	21.10	21.92	21.58	22.40	22.86
8H	4H	18.39	19.31	18.85	19.75	20.21	19.43	20.34	19.88	20.78	21.25
	6H	19.18	19.94	19.67	20.43	20.90	20.68	21.44	21.17	21.93	22.40
	8H	19.46	20.15	19.97	20.65	21.14	21.30	21.99	21.81	22.49	22.98
	12H	19.68	20.29	20.18	20.78	21.34	21.91	22.52	22.41	23.01	23.57
12H	4H	18.50	19.33	18.98	19.80	20.27	19.46	20.29	19.94	20.76	21.23
	6H	19.34	20.04	19.85	20.54	21.02	20.75	21.44	21.26	21.95	22.43
	8H	19.71	20.33	20.22	20.81	21.37	21.46	22.07	21.96	22.56	23.11

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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