

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: P1588298

Luminaire Tested: 24CZSP-47-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588298
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-47-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

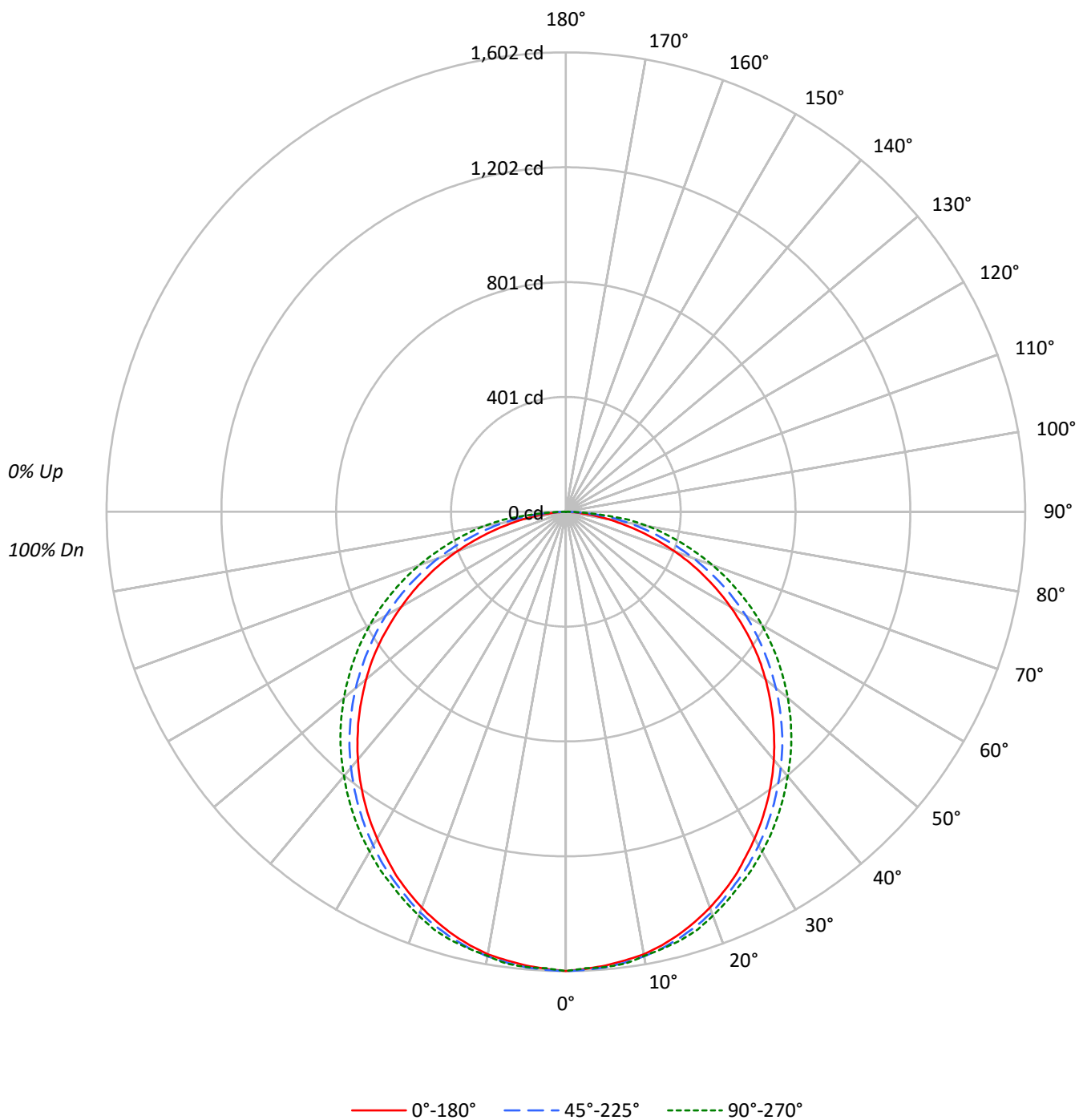
Lumens per Lamp: N/A
Luminaire Lumens: 4676.0 lumens
Efficiency: N/A
Efficacy: 145.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2453	2453	2453
5°	2442	2452	2450
10°	2437	2448	2446
15°	2419	2439	2453
20°	2395	2423	2443
25°	2365	2398	2428
30°	2328	2377	2421
35°	2294	2354	2413
40°	2257	2330	2406
45°	2213	2307	2409
50°	2166	2279	2408
55°	2110	2247	2411
60°	2030	2222	2417
65°	1937	2179	2425
70°	1806	2118	2435
75°	1609	2034	2459
80°	1330	1937	2579
85°	866	1749	2255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2661 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	3.2
10°-20°	433.7	9.3
20°-30°	654.1	14.0
30°-40°	787.9	16.8
40°-50°	822.8	17.6
50°-60°	755.7	16.2
60°-70°	595.2	12.7
70°-80°	365.1	7.8
80°-90°	109.9	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°	1239.4	26.5
0°-40°	2027.2	43.4
0°-60°	3605.8	77.1
0°-90°	4676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1588	1590	1594	1600	1593	151
15°	1526	1529	1538	1547	1547	430
25°	1400	1403	1419	1436	1436	644
35°	1227	1233	1259	1285	1291	768
45°	1022	1033	1065	1102	1112	788
55°	790	804	841	889	903	705
65°	535	553	601	652	669	529
75°	272	293	344	398	416	288
85°	49	68	100	126	128	64
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.7	1601.7	1601.7	1601.7	1601.7
2.5°	1595.5	1598.6	1599.6	1600.6	1593.4
5°	1588.3	1590.4	1594.5	1599.6	1593.4
7.5°	1578.1	1580.1	1585.2	1592.4	1589.3
10°	1566.8	1567.8	1574.0	1579.1	1572.9
12.5°	1548.3	1551.4	1558.6	1562.7	1560.6
15°	1525.7	1528.8	1538.0	1547.3	1547.3
17.5°	1499.1	1503.2	1514.4	1526.8	1527.8
20°	1469.3	1472.4	1486.7	1499.1	1499.1
22.5°	1435.4	1439.5	1453.9	1467.2	1469.3
25°	1399.5	1402.6	1419.0	1436.5	1436.5
27.5°	1357.5	1363.6	1384.1	1401.6	1405.7
30°	1316.4	1321.5	1344.1	1365.7	1368.7
32.5°	1273.3	1279.5	1303.1	1326.7	1331.8
35°	1227.1	1233.3	1259.0	1284.6	1290.8
37.5°	1178.9	1186.1	1212.8	1242.5	1248.7
40°	1128.6	1136.9	1165.6	1197.4	1203.5
42.5°	1075.3	1086.6	1117.4	1150.2	1159.4
45°	1021.9	1033.2	1065.0	1102.0	1112.2
47.5°	965.5	978.8	1011.7	1050.7	1062.0
50°	909.1	922.4	956.3	998.3	1010.7
52.5°	851.6	865.0	899.8	944.0	957.3
55°	790.1	804.4	841.4	888.6	902.9
57.5°	726.4	744.9	783.9	832.1	846.5
60°	662.8	681.3	725.4	772.6	789.0
62.5°	600.2	617.7	662.8	713.1	730.5
65°	534.6	553.0	601.3	651.5	669.0
67.5°	469.9	488.4	536.6	588.9	607.4
70°	403.2	423.8	473.0	525.3	543.8
72.5°	336.5	358.1	408.4	461.7	479.2
75°	271.9	293.4	343.7	398.1	415.5
77.5°	208.3	231.9	281.1	336.5	353.0
80°	150.8	173.4	219.6	274.0	292.4
82.5°	96.4	115.9	162.1	213.4	226.8
85°	49.3	67.7	99.5	126.2	128.3
87.5°	15.4	21.5	32.8	49.3	50.3
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	14.60	16.26	14.96	16.57	16.89	15.43	17.09	15.79	17.40	17.72
	3H	16.35	17.86	16.73	18.18	18.54	17.54	19.05	17.92	19.38	19.74
	4H	16.97	18.39	17.37	18.74	19.11	18.43	19.85	18.83	20.20	20.58
	6H	17.38	18.70	17.79	19.06	19.46	19.21	20.53	19.62	20.90	21.29
	8H	17.49	18.75	17.91	19.14	19.54	19.53	20.80	19.96	21.18	21.58
	12H	17.54	18.75	17.97	19.13	19.56	19.74	20.95	20.17	21.34	21.76
4H	2H	15.37	16.79	15.77	17.14	17.51	16.01	17.44	16.41	17.78	18.16
	3H	17.34	18.54	17.75	18.94	19.34	18.37	19.57	18.78	19.96	20.36
	4H	18.08	19.17	18.51	19.58	20.02	19.42	20.51	19.85	20.92	21.35
	6H	18.61	19.56	19.06	20.00	20.46	20.37	21.33	20.83	21.77	22.22
	8H	18.76	19.65	19.22	20.09	20.55	20.77	21.66	21.23	22.10	22.57
	12H	18.84	19.64	19.32	20.12	20.59	21.05	21.85	21.53	22.33	22.79
8H	4H	18.54	19.43	19.00	19.87	20.34	19.71	20.60	20.17	21.04	21.51
	6H	19.20	19.95	19.69	20.43	20.91	20.82	21.57	21.31	22.05	22.53
	8H	19.41	20.08	19.92	20.59	21.07	21.33	22.00	21.84	22.51	22.99
	12H	19.55	20.14	20.06	20.63	21.19	21.72	22.31	22.22	22.80	23.36
12H	4H	18.63	19.43	19.11	19.91	20.38	19.73	20.54	20.21	21.01	21.48
	6H	19.33	20.00	19.84	20.51	20.99	20.87	21.54	21.38	22.04	22.53
	8H	19.61	20.20	20.12	20.69	21.25	21.45	22.04	21.95	22.53	23.09