

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: P1589778

Luminaire Tested: 24CZSP-SB-47-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

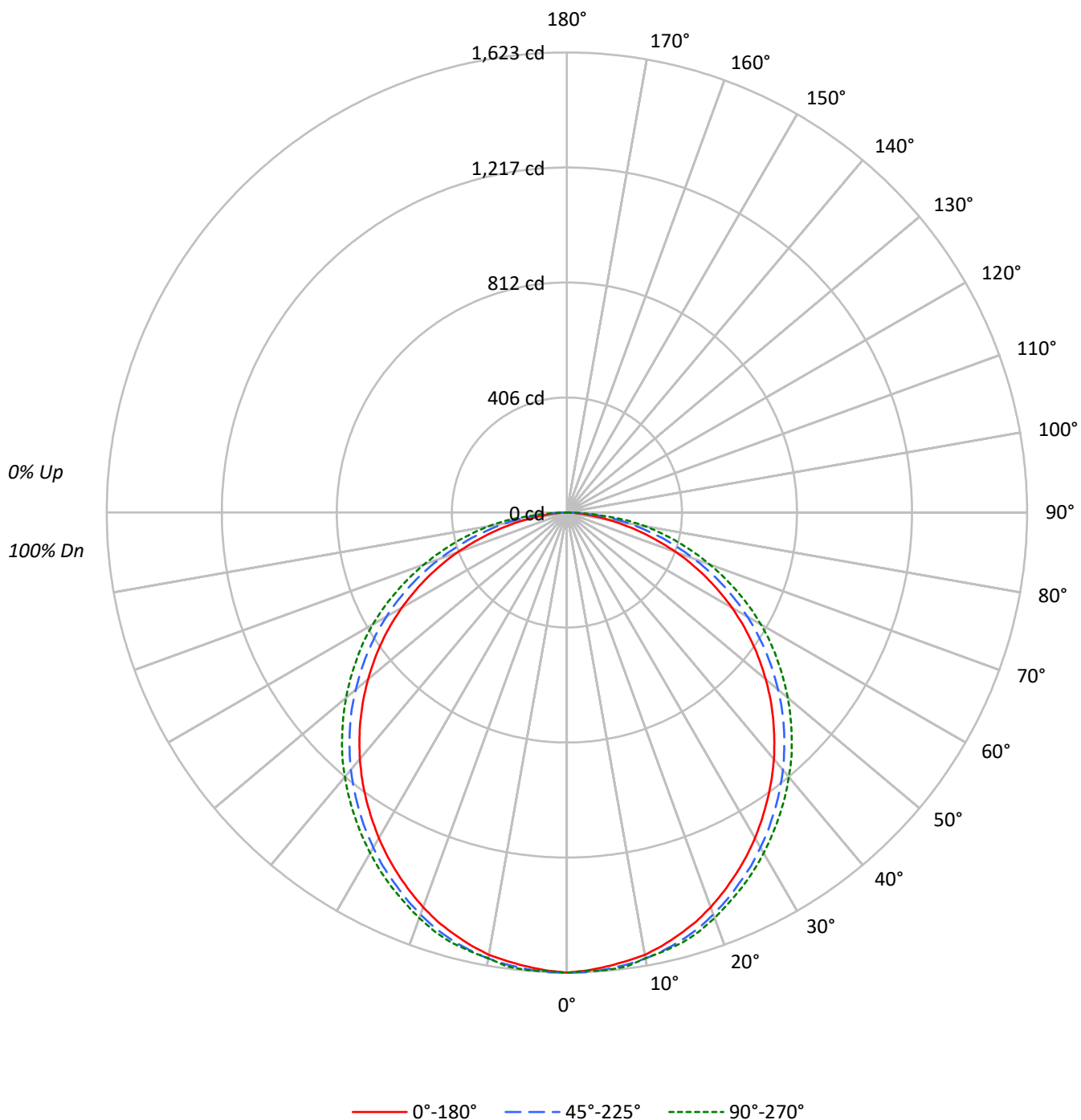
Lumens per Lamp: N/A
Luminaire Lumens: 4722.0 lumens
Efficiency: N/A
Efficacy: 146.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1589778

CATALOG NUMBER: 24CZSP-SB-47-L845-S

Luminous Intensity Polar Plot



TEST NUMBER: P1589778

CATALOG NUMBER: 24CZSP-SB-47-L845-S

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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2486	2486	2486
5°	2472	2486	2491
10°	2465	2485	2483
15°	2442	2477	2492
20°	2416	2460	2482
25°	2381	2436	2467
30°	2346	2414	2454
35°	2308	2391	2442
40°	2271	2370	2435
45°	2229	2346	2429
50°	2181	2316	2423
55°	2127	2287	2420
60°	2060	2253	2421
65°	1966	2205	2408
70°	1838	2138	2402
75°	1629	2056	2410
80°	1326	1953	2482
85°	858	1803	2142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2515 cd/sqm

TEST NUMBER: P1589778

CATALOG NUMBER: 24CZSP-SB-47-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	3.3
10°-20°	439.9	9.3
20°-30°	663.3	14.0
30°-40°	798.1	16.9
40°-50°	832.4	17.6
50°-60°	763.0	16.2
60°-70°	599.2	12.7
70°-80°	364.7	7.7
80°-90°	107.9	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°	1256.8	26.6
0°-40°	2054.8	43.5
0°-60°	3650.3	77.3
0°-90°	4722.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4722.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1623	1623	1623	1623	1623	
5°	1608	1618	1617	1615	1620	153
15°	1540	1555	1562	1564	1572	434
25°	1409	1428	1441	1451	1460	649
35°	1234	1254	1279	1297	1306	772
45°	1029	1050	1083	1108	1122	794
55°	796	817	856	891	906	712
65°	542	563	608	649	664	537
75°	275	301	347	389	407	292
85°	49	69	103	115	122	64
90°	0	0	0	0	0	

TEST NUMBER: P1589778

CATALOG NUMBER: 24CZSP-SB-47-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1623.3	1623.3	1623.3	1623.3	1623.3
2.5°	1617.2	1625.3	1623.3	1616.1	1619.2
5°	1608.0	1618.2	1617.2	1615.1	1620.2
7.5°	1596.8	1608.0	1609.0	1609.0	1615.1
10°	1584.7	1595.8	1597.9	1594.8	1596.8
12.5°	1564.3	1577.5	1581.6	1581.6	1584.7
15°	1540.0	1555.2	1562.3	1564.3	1571.5
17.5°	1513.6	1529.8	1538.9	1544.0	1550.1
20°	1482.1	1499.3	1509.5	1515.6	1522.7
22.5°	1446.5	1465.8	1477.0	1483.1	1491.2
25°	1408.9	1428.2	1441.4	1450.6	1459.7
27.5°	1369.3	1387.6	1405.9	1417.1	1425.2
30°	1326.6	1345.9	1365.2	1379.5	1387.6
32.5°	1280.9	1301.2	1323.6	1338.8	1348.0
35°	1234.2	1253.5	1278.9	1297.2	1306.3
37.5°	1186.5	1206.8	1233.2	1252.5	1263.7
40°	1135.7	1157.0	1185.4	1206.8	1218.0
42.5°	1082.9	1103.2	1134.7	1159.0	1172.2
45°	1029.0	1050.3	1082.9	1108.2	1121.5
47.5°	973.1	993.5	1029.0	1058.5	1069.6
50°	915.2	934.5	972.1	1003.6	1016.8
52.5°	856.3	876.6	914.2	947.7	962.0
55°	796.4	816.7	856.3	890.9	906.1
57.5°	735.4	755.8	796.4	831.9	850.2
60°	672.5	692.8	735.4	772.0	790.3
62.5°	607.5	628.8	672.5	710.0	729.3
65°	542.4	562.8	608.5	649.1	664.3
67.5°	477.4	497.7	542.4	583.1	601.4
70°	410.4	433.7	477.4	520.1	536.3
72.5°	340.3	366.7	410.4	455.1	471.3
75°	275.3	300.7	347.4	389.1	407.3
77.5°	211.3	238.7	282.4	325.1	343.3
80°	150.3	176.8	221.4	262.1	281.4
82.5°	95.5	118.8	163.5	200.1	214.3
85°	48.8	69.1	102.6	114.8	121.9
87.5°	14.2	24.4	36.6	45.7	50.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589778

CATALOG NUMBER: 24CZSP-SB-47-L845-S

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	14.66	16.32	15.03	16.64	16.95	15.40	17.06	15.76	17.37	17.69
	3H	16.43	17.94	16.81	18.26	18.62	17.48	18.98	17.85	19.31	19.67
	4H	17.05	18.47	17.45	18.82	19.19	18.34	19.76	18.74	20.11	20.49
	6H	17.46	18.78	17.87	19.14	19.53	19.09	20.41	19.50	20.77	21.16
	8H	17.56	18.82	17.99	19.21	19.61	19.38	20.64	19.81	21.03	21.43
	12H	17.61	18.82	18.04	19.20	19.63	19.58	20.78	20.01	21.17	21.59
4H	2H	15.43	16.85	15.83	17.20	17.57	16.00	17.42	16.40	17.77	18.14
	3H	17.42	18.62	17.83	19.02	19.41	18.32	19.51	18.73	19.91	20.31
	4H	18.17	19.25	18.60	19.66	20.10	19.34	20.42	19.77	20.83	21.27
	6H	18.69	19.64	19.15	20.08	20.54	20.24	21.19	20.69	21.63	22.08
	8H	18.84	19.73	19.30	20.17	20.63	20.61	21.50	21.07	21.94	22.40
	12H	18.92	19.72	19.40	20.19	20.66	20.86	21.66	21.34	22.14	22.61
8H	4H	18.61	19.50	19.07	19.94	20.41	19.63	20.52	20.09	20.96	21.43
	6H	19.27	20.02	19.77	20.50	20.98	20.69	21.43	21.18	21.92	22.39
	8H	19.48	20.15	19.99	20.65	21.14	21.16	21.83	21.67	22.33	22.82
	12H	19.62	20.21	20.13	20.70	21.26	21.51	22.10	22.02	22.59	23.15
12H	4H	18.69	19.49	19.17	19.97	20.44	19.66	20.46	20.14	20.93	21.40
	6H	19.40	20.07	19.91	20.57	21.06	20.74	21.41	21.25	21.91	22.40
	8H	19.68	20.27	20.18	20.75	21.31	21.28	21.87	21.78	22.36	22.92