

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: P1589789

Luminaire Tested: 24CZSP-SB-47-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

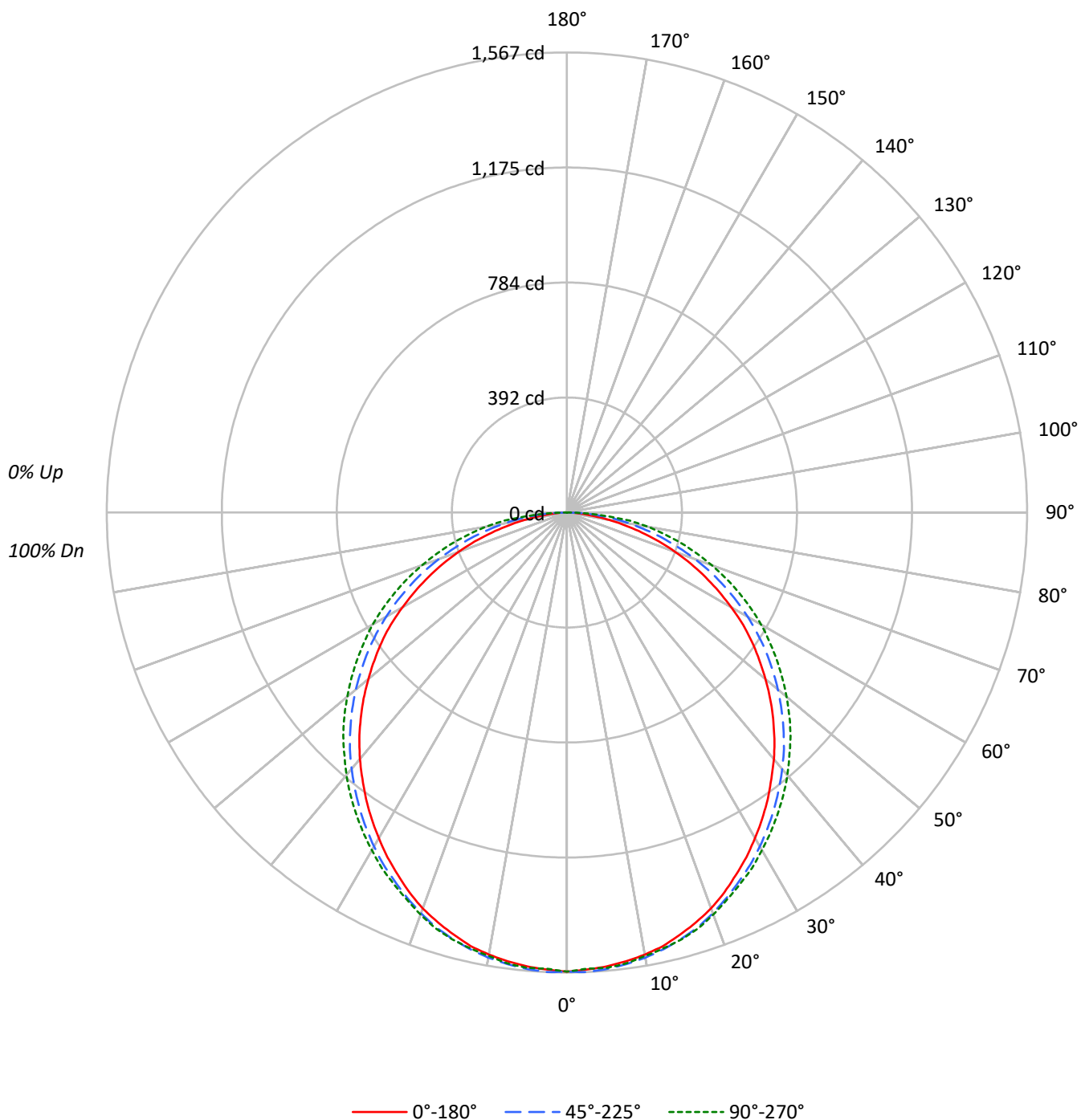
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4564.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 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: P1589789
CATALOG NUMBER: 24CZSP-SB-47-L945

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	68
3	89	79	70	63	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°	2395	2395	2395
5°	2387	2400	2394
10°	2378	2395	2386
15°	2360	2385	2388
20°	2340	2368	2376
25°	2302	2343	2359
30°	2265	2323	2349
35°	2229	2301	2341
40°	2192	2281	2335
45°	2151	2260	2333
50°	2104	2235	2327
55°	2056	2210	2327
60°	1979	2178	2341
65°	1887	2135	2342
70°	1760	2077	2349
75°	1566	2001	2390
80°	1287	1917	2479
85°	849	1800	2241

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2539 cd/sqm

TEST NUMBER: P1589789

CATALOG NUMBER: 24CZSP-SB-47-L945

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	3.2
10°-20°	423.4	9.3
20°-30°	638.2	14.0
30°-40°	768.6	16.8
40°-50°	803.0	17.6
50°-60°	737.7	16.2
60°-70°	580.9	12.7
70°-80°	356.2	7.8
80°-90°	108.0	2.4
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°	1209.6	26.5
0°-40°	1978.2	43.3
0°-60°	3518.9	77.1
0°-90°	4564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1552	1555	1561	1559	1557	147
15°	1489	1494	1504	1510	1506	420
25°	1362	1371	1386	1401	1396	628
35°	1192	1208	1231	1253	1252	746
45°	993	1014	1043	1072	1077	766
55°	770	792	828	864	871	687
65°	521	548	589	629	646	515
75°	265	296	338	379	404	281
85°	48	72	102	114	128	62
90°	0	0	0	0	0	

TEST NUMBER: P1589789

CATALOG NUMBER: 24CZSP-SB-47-L945

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.9	1563.9	1563.9	1563.9	1563.9
2.5°	1558.1	1562.0	1566.8	1559.1	1555.2
5°	1552.3	1555.2	1561.0	1559.1	1557.1
7.5°	1541.7	1543.6	1551.3	1551.3	1549.4
10°	1529.1	1533.0	1539.8	1538.8	1534.0
12.5°	1512.7	1515.6	1523.3	1523.3	1520.4
15°	1488.6	1494.4	1504.0	1509.8	1505.9
17.5°	1463.4	1469.2	1481.8	1487.6	1485.7
20°	1435.4	1440.3	1452.8	1461.5	1457.6
22.5°	1400.7	1406.4	1420.9	1430.6	1426.7
25°	1362.0	1370.7	1386.2	1400.7	1395.8
27.5°	1323.4	1333.0	1352.4	1366.8	1364.9
30°	1280.9	1293.4	1313.7	1332.1	1328.2
32.5°	1237.4	1251.9	1273.1	1292.5	1291.5
35°	1192.0	1207.5	1230.6	1252.9	1251.9
37.5°	1143.7	1162.1	1186.2	1210.4	1211.3
40°	1096.4	1113.8	1140.8	1166.9	1167.9
42.5°	1046.1	1064.5	1093.5	1120.5	1121.5
45°	993.0	1014.3	1043.2	1072.2	1077.1
47.5°	938.9	961.1	991.1	1022.0	1027.8
50°	882.9	906.1	938.0	970.8	976.6
52.5°	825.9	850.1	882.9	915.7	924.4
55°	769.9	792.1	827.8	863.6	871.3
57.5°	711.0	731.2	769.9	807.5	817.2
60°	646.2	671.3	711.0	748.6	764.1
62.5°	583.4	610.5	651.1	688.7	706.1
65°	520.7	547.7	589.2	628.8	646.2
67.5°	456.9	484.9	529.3	567.0	586.3
70°	393.1	421.2	463.7	504.2	524.5
72.5°	329.4	359.3	400.9	442.4	462.7
75°	264.7	295.6	338.1	378.7	403.8
77.5°	203.8	233.8	276.3	317.8	339.1
80°	145.9	175.8	217.3	258.9	281.1
82.5°	92.7	120.7	161.3	196.1	216.4
85°	48.3	71.5	102.4	114.0	127.5
87.5°	14.5	28.0	39.6	44.4	55.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589789

CATALOG NUMBER: 24CZSP-SB-47-L945

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	14.55	16.21	14.91	16.53	16.84	15.29	16.96	15.66	17.27	17.59
	3H	16.31	17.82	16.69	18.14	18.50	17.39	18.90	17.77	19.22	19.58
	4H	16.94	18.36	17.33	18.71	19.08	18.27	19.70	18.67	20.04	20.42
	6H	17.35	18.67	17.76	19.03	19.42	19.04	20.36	19.45	20.73	21.12
	8H	17.45	18.72	17.88	19.11	19.50	19.35	20.62	19.78	21.00	21.40
	12H	17.51	18.72	17.93	19.10	19.53	19.57	20.78	19.99	21.16	21.59
4H	2H	15.32	16.74	15.72	17.09	17.46	15.90	17.32	16.30	17.67	18.04
	3H	17.31	18.51	17.72	18.91	19.31	18.23	19.42	18.64	19.82	20.22
	4H	18.07	19.15	18.50	19.56	20.00	19.26	20.35	19.69	20.76	21.19
	6H	18.60	19.55	19.05	19.99	20.45	20.19	21.14	20.64	21.58	22.04
	8H	18.75	19.64	19.21	20.08	20.55	20.58	21.47	21.03	21.91	22.37
	12H	18.84	19.64	19.31	20.11	20.58	20.85	21.66	21.33	22.13	22.60
8H	4H	18.52	19.41	18.98	19.85	20.32	19.56	20.45	20.02	20.89	21.36
	6H	19.20	19.94	19.69	20.43	20.90	20.65	21.39	21.14	21.88	22.35
	8H	19.42	20.08	19.92	20.59	21.07	21.13	21.80	21.64	22.31	22.79
	12H	19.56	20.16	20.07	20.65	21.20	21.51	22.10	22.01	22.59	23.15
12H	4H	18.60	19.41	19.08	19.88	20.35	19.59	20.39	20.07	20.87	21.34
	6H	19.32	19.99	19.83	20.50	20.98	20.70	21.37	21.20	21.87	22.36
	8H	19.61	20.21	20.12	20.70	21.25	21.25	21.84	21.76	22.33	22.89