

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: P1588310

Luminaire Tested: 24CZSP-47-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588310
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

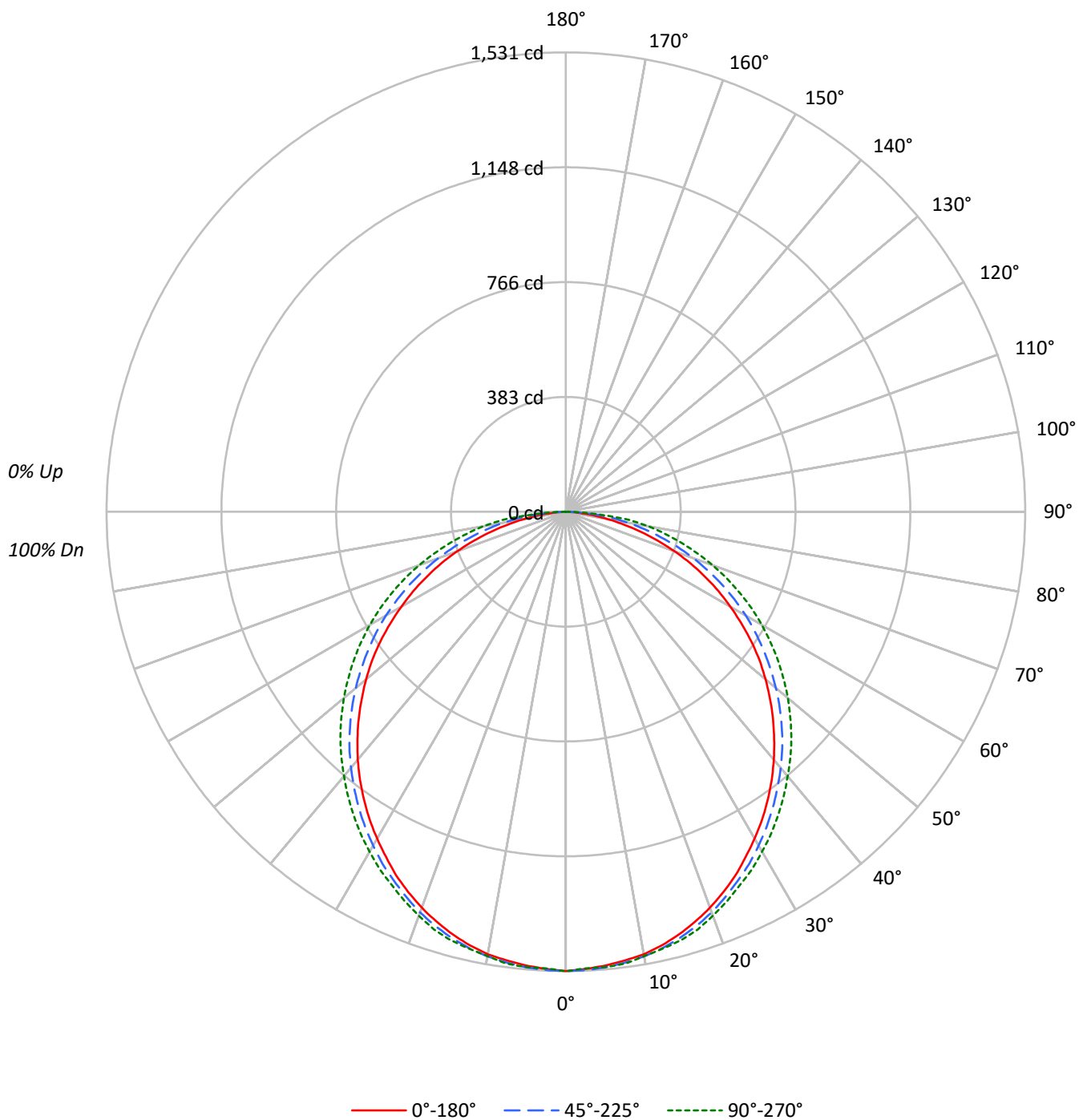
Lumens per Lamp: N/A
Luminaire Lumens: 4469.0 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1588310

CATALOG NUMBER: 24CZSP-47-L950-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588310

CATALOG NUMBER: 24CZSP-47-L950-S

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	30	10	50	30	10
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°	2345	2345	2345
5°	2334	2343	2341
10°	2329	2340	2338
15°	2312	2331	2345
20°	2289	2316	2335
25°	2260	2292	2320
30°	2225	2272	2314
35°	2193	2250	2307
40°	2157	2227	2300
45°	2116	2205	2303
50°	2070	2178	2302
55°	2016	2147	2304
60°	1941	2124	2310
65°	1852	2082	2317
70°	1726	2025	2327
75°	1538	1944	2351
80°	1272	1851	2465
85°	828	1671	2155

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2543 cd/sqm

TEST NUMBER: P1588310

CATALOG NUMBER: 24CZSP-47-L950-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.2
10°-20°	414.5	9.3
20°-30°	625.2	14.0
30°-40°	753.0	16.8
40°-50°	786.4	17.6
50°-60°	722.2	16.2
60°-70°	568.9	12.7
70°-80°	349.0	7.8
80°-90°	105.0	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°	1184.5	26.5
0°-40°	1937.5	43.4
0°-60°	3446.1	77.1
0°-90°	4469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4469.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1518	1520	1524	1529	1523	144
15°	1458	1461	1470	1479	1479	411
25°	1338	1340	1356	1373	1373	616
35°	1173	1179	1203	1228	1234	734
45°	977	988	1018	1053	1063	753
55°	755	769	804	849	863	674
65°	511	529	575	623	639	505
75°	260	280	328	380	397	276
85°	47	65	95	121	123	61
90°	0	0	0	0	0	



TEST NUMBER: P1588310

CATALOG NUMBER: 24CZSP-47-L950-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.8	1530.8	1530.8	1530.8	1530.8
2.5°	1524.9	1527.8	1528.8	1529.8	1522.9
5°	1518.0	1520.0	1523.9	1528.8	1522.9
7.5°	1508.2	1510.2	1515.1	1521.9	1519.0
10°	1497.4	1498.4	1504.3	1509.2	1503.3
12.5°	1479.8	1482.7	1489.6	1493.5	1491.5
15°	1458.2	1461.1	1470.0	1478.8	1478.8
17.5°	1432.7	1436.6	1447.4	1459.2	1460.1
20°	1404.3	1407.2	1420.9	1432.7	1432.7
22.5°	1371.9	1375.8	1389.5	1402.3	1404.3
25°	1337.6	1340.5	1356.2	1372.9	1372.9
27.5°	1297.4	1303.2	1322.9	1339.5	1343.5
30°	1258.1	1263.0	1284.6	1305.2	1308.2
32.5°	1217.0	1222.8	1245.4	1267.9	1272.8
35°	1172.8	1178.7	1203.2	1227.7	1233.6
37.5°	1126.7	1133.6	1159.1	1187.5	1193.4
40°	1078.7	1086.5	1114.0	1144.4	1150.3
42.5°	1027.7	1038.5	1067.9	1099.3	1108.1
45°	976.7	987.5	1017.9	1053.2	1063.0
47.5°	922.8	935.5	966.9	1004.2	1014.9
50°	868.8	881.6	913.9	954.1	965.9
52.5°	813.9	826.7	860.0	902.2	914.9
55°	755.1	768.8	804.1	849.2	862.9
57.5°	694.3	711.9	749.2	795.3	809.0
60°	633.5	651.1	693.3	738.4	754.1
62.5°	573.7	590.3	633.5	681.5	698.2
65°	510.9	528.6	574.6	622.7	639.4
67.5°	449.1	466.8	512.9	562.9	580.5
70°	385.4	405.0	452.1	502.1	519.7
72.5°	321.6	342.2	390.3	441.3	458.0
75°	259.9	280.5	328.5	380.5	397.2
77.5°	199.1	221.6	268.7	321.6	337.3
80°	144.2	165.7	209.9	261.8	279.5
82.5°	92.2	110.8	154.9	204.0	216.7
85°	47.1	64.7	95.1	120.6	122.6
87.5°	14.7	20.6	31.4	47.1	48.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588310

CATALOG NUMBER: 24CZSP-47-L950-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	14.44	16.10	14.80	16.41	16.73	15.27	16.93	15.63	17.25	17.56
	3H	16.19	17.70	16.57	18.03	18.39	17.39	18.89	17.76	19.22	19.58
	4H	16.81	18.24	17.21	18.58	18.96	18.27	19.70	18.67	20.04	20.42
	6H	17.22	18.54	17.63	18.91	19.30	19.06	20.38	19.47	20.74	21.13
	8H	17.33	18.59	17.76	18.98	19.38	19.38	20.64	19.80	21.03	21.42
	12H	17.38	18.59	17.81	18.98	19.40	19.59	20.80	20.02	21.18	21.61
4H	2H	15.21	16.63	15.61	16.98	17.35	15.86	17.28	16.25	17.63	18.00
	3H	17.19	18.39	17.60	18.78	19.18	18.21	19.41	18.62	19.81	20.21
	4H	17.92	19.01	18.35	19.42	19.86	19.26	20.35	19.69	20.76	21.20
	6H	18.45	19.41	18.91	19.84	20.30	20.22	21.17	20.67	21.61	22.06
	8H	18.60	19.49	19.06	19.93	20.40	20.61	21.51	21.07	21.95	22.41
	12H	18.68	19.49	19.16	19.96	20.43	20.89	21.69	21.37	22.17	22.64
8H	4H	18.38	19.28	18.84	19.72	20.18	19.55	20.45	20.01	20.89	21.35
	6H	19.04	19.79	19.54	20.28	20.75	20.66	21.41	21.16	21.90	22.37
	8H	19.26	19.92	19.76	20.43	20.91	21.18	21.84	21.68	22.35	22.83
	12H	19.39	19.99	19.90	20.48	21.03	21.56	22.15	22.07	22.64	23.20
12H	4H	18.47	19.28	18.95	19.75	20.22	19.58	20.38	20.06	20.86	21.32
	6H	19.18	19.85	19.68	20.35	20.84	20.71	21.38	21.22	21.89	22.37
	8H	19.45	20.05	19.96	20.54	21.09	21.29	21.88	21.80	22.37	22.93