

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: P1588304

Luminaire Tested: 24CZSP-47-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588304
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

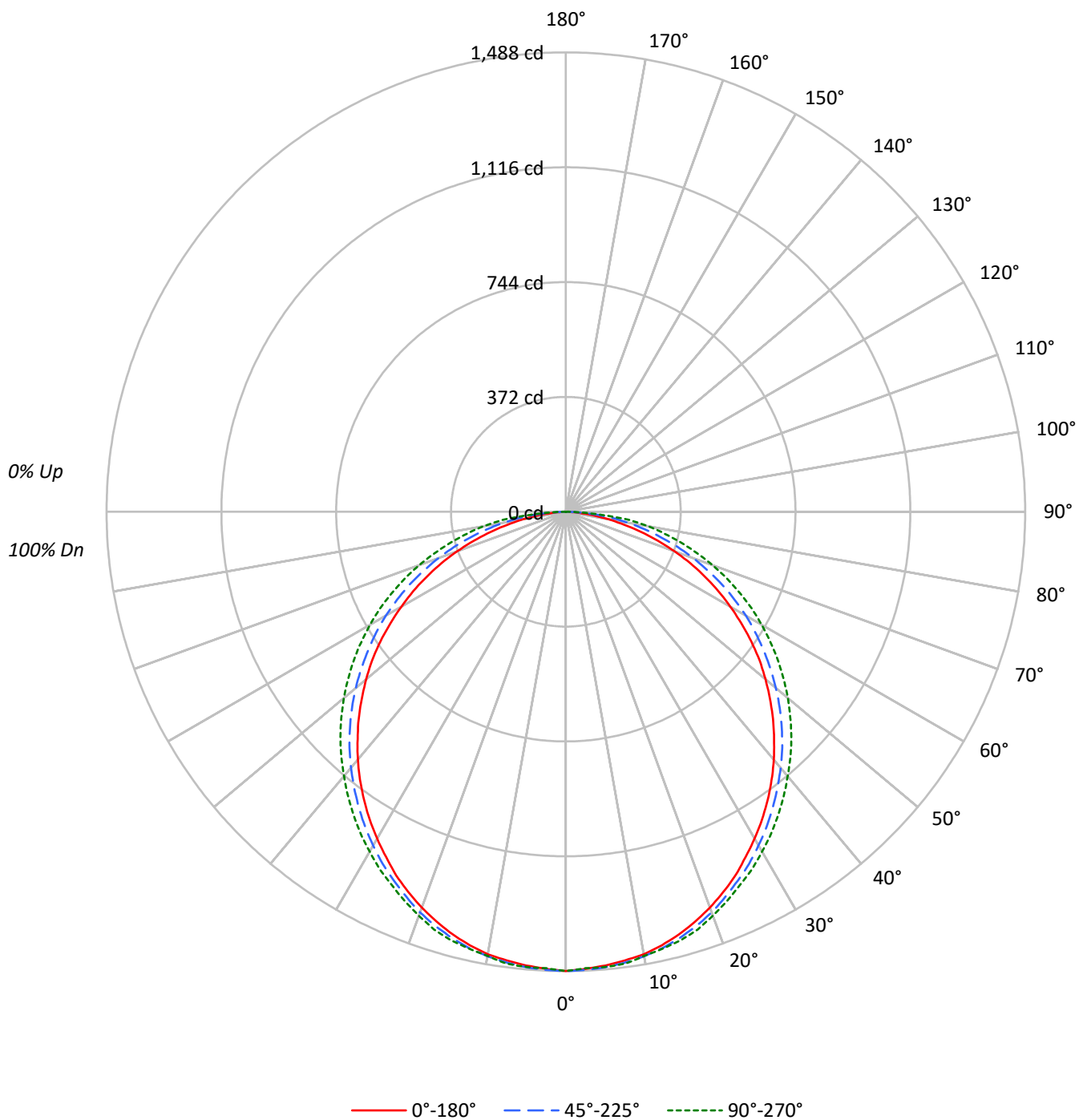
Lumens per Lamp: N/A
Luminaire Lumens: 4343.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588304

CATALOG NUMBER: 24CZSP-47-L935-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588304

CATALOG NUMBER: 24CZSP-47-L935-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	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°	2278	2278	2278
5°	2268	2277	2275
10°	2263	2274	2272
15°	2247	2265	2279
20°	2224	2251	2269
25°	2197	2227	2255
30°	2162	2208	2248
35°	2131	2186	2241
40°	2096	2165	2235
45°	2056	2143	2238
50°	2012	2116	2237
55°	1959	2087	2239
60°	1886	2064	2245
65°	1799	2024	2252
70°	1677	1967	2262
75°	1494	1889	2284
80°	1236	1798	2396
85°	803	1624	2093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2471 cd/sqm

TEST NUMBER: P1588304

CATALOG NUMBER: 24CZSP-47-L935-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.7	3.2
10°-20°	402.8	9.3
20°-30°	607.6	14.0
30°-40°	731.8	16.8
40°-50°	764.2	17.6
50°-60°	701.9	16.2
60°-70°	552.8	12.7
70°-80°	339.1	7.8
80°-90°	102.1	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°	1151.1	26.5
0°-40°	1882.9	43.4
0°-60°	3349.0	77.1
0°-90°	4343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1475	1477	1481	1486	1480	140
15°	1417	1420	1428	1437	1437	400
25°	1300	1303	1318	1334	1334	598
35°	1140	1146	1169	1193	1199	713
45°	949	960	989	1024	1033	732
55°	734	747	781	825	839	655
65°	496	514	558	605	621	491
75°	252	273	319	370	386	268
85°	46	63	92	117	119	60
90°	0	0	0	0	0	

TEST NUMBER: P1588304

CATALOG NUMBER: 24CZSP-47-L935-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.6	1487.6	1487.6	1487.6	1487.6
2.5°	1481.9	1484.7	1485.7	1486.6	1480.0
5°	1475.2	1477.1	1480.9	1485.7	1480.0
7.5°	1465.7	1467.6	1472.3	1479.0	1476.2
10°	1455.2	1456.1	1461.9	1466.6	1460.9
12.5°	1438.0	1440.9	1447.6	1451.4	1449.5
15°	1417.1	1419.9	1428.5	1437.1	1437.1
17.5°	1392.3	1396.1	1406.6	1418.0	1419.0
20°	1364.7	1367.5	1380.9	1392.3	1392.3
22.5°	1333.2	1337.0	1350.4	1362.8	1364.7
25°	1299.9	1302.7	1318.0	1334.2	1334.2
27.5°	1260.8	1266.5	1285.6	1301.8	1305.6
30°	1222.7	1227.4	1248.4	1268.4	1271.3
32.5°	1182.6	1188.4	1210.3	1232.2	1237.0
35°	1139.8	1145.5	1169.3	1193.1	1198.8
37.5°	1095.0	1101.6	1126.4	1154.1	1159.8
40°	1048.3	1055.9	1082.6	1112.1	1117.8
42.5°	998.7	1009.2	1037.8	1068.3	1076.9
45°	949.2	959.6	989.2	1023.5	1033.0
47.5°	896.7	909.1	939.6	975.8	986.3
50°	844.3	856.7	888.2	927.2	938.7
52.5°	791.0	803.4	835.8	876.7	889.1
55°	733.8	747.1	781.4	825.3	838.6
57.5°	674.7	691.9	728.1	772.9	786.2
60°	615.6	632.8	673.8	717.6	732.8
62.5°	557.5	573.7	615.6	662.3	678.5
65°	496.5	513.7	558.4	605.1	621.3
67.5°	436.5	453.6	498.4	547.0	564.2
70°	374.5	393.6	439.3	487.9	505.1
72.5°	312.6	332.6	379.3	428.8	445.0
75°	252.5	272.6	319.2	369.8	386.0
77.5°	193.5	215.4	261.1	312.6	327.8
80°	140.1	161.1	203.9	254.4	271.6
82.5°	89.6	107.7	150.6	198.2	210.6
85°	45.7	62.9	92.4	117.2	119.1
87.5°	14.3	20.0	30.5	45.7	46.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588304

CATALOG NUMBER: 24CZSP-47-L935-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	14.34	16.00	14.70	16.32	16.63	15.17	16.83	15.53	17.15	17.46
	3H	16.09	17.60	16.47	17.93	18.29	17.29	18.79	17.66	19.12	19.48
	4H	16.71	18.14	17.11	18.48	18.86	18.17	19.60	18.57	19.94	20.32
	6H	17.12	18.45	17.53	18.81	19.20	18.96	20.28	19.37	20.64	21.03
	8H	17.23	18.49	17.66	18.88	19.28	19.28	20.54	19.70	20.93	21.33
	12H	17.28	18.49	17.71	18.88	19.30	19.49	20.70	19.92	21.08	21.51
4H	2H	15.11	16.53	15.51	16.88	17.26	15.76	17.18	16.15	17.53	17.90
	3H	17.09	18.29	17.50	18.68	19.08	18.11	19.31	18.52	19.71	20.11
	4H	17.83	18.91	18.26	19.32	19.76	19.16	20.25	19.59	20.66	21.10
	6H	18.35	19.31	18.81	19.75	20.20	20.12	21.07	20.57	21.51	21.96
	8H	18.50	19.39	18.96	19.83	20.30	20.51	21.41	20.97	21.85	22.31
	12H	18.58	19.39	19.06	19.86	20.33	20.79	21.59	21.27	22.07	22.54
8H	4H	18.28	19.18	18.74	19.62	20.08	19.45	20.35	19.91	20.79	21.25
	6H	18.95	19.69	19.44	20.18	20.65	20.57	21.31	21.06	21.80	22.27
	8H	19.16	19.82	19.66	20.33	20.81	21.08	21.75	21.58	22.25	22.73
	12H	19.30	19.89	19.80	20.38	20.94	21.46	22.05	21.97	22.54	23.10
12H	4H	18.37	19.18	18.85	19.65	20.12	19.48	20.28	19.96	20.76	21.22
	6H	19.08	19.75	19.58	20.25	20.74	20.61	21.28	21.12	21.79	22.27
	8H	19.36	19.95	19.86	20.44	21.00	21.19	21.78	21.70	22.27	22.83