

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: P1588646

Luminaire Tested: 24CZSP-A-47-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588646
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-A-47-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

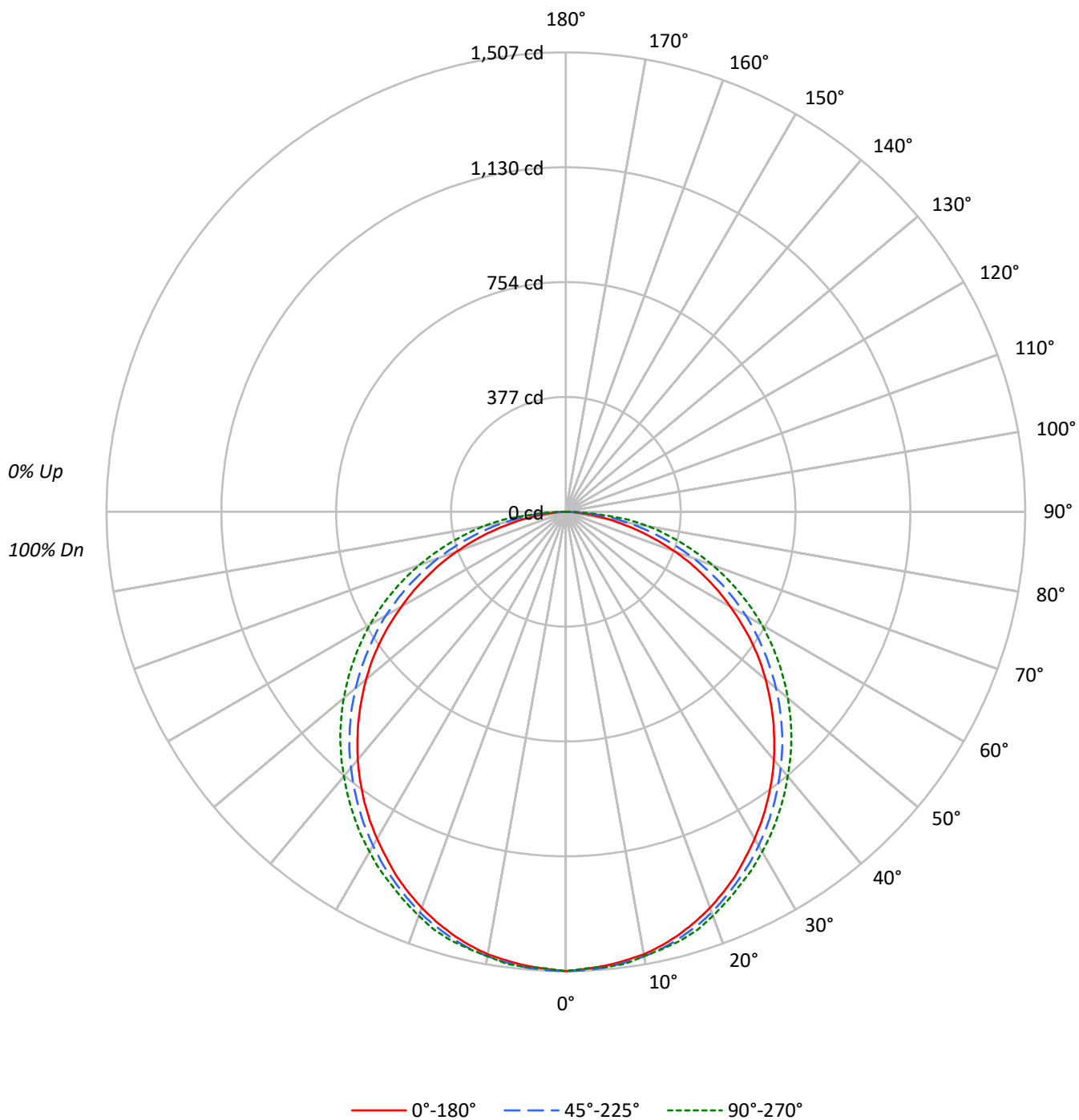
Lumens per Lamp: N/A
Luminaire Lumens: 4400.0 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588646

CATALOG NUMBER: 24CZSP-A-47-L940-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588646

CATALOG NUMBER: 24CZSP-A-47-L940-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2308	2308	2308
5°	2298	2307	2305
10°	2293	2303	2302
15°	2277	2295	2309
20°	2254	2280	2299
25°	2226	2257	2284
30°	2191	2237	2278
35°	2159	2215	2271
40°	2123	2193	2264
45°	2083	2171	2267
50°	2038	2144	2266
55°	1985	2114	2269
60°	1911	2091	2274
65°	1823	2051	2281
70°	1699	1993	2291
75°	1514	1914	2314
80°	1252	1822	2427
85°	814	1647	2121

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2504 cd/sqm

TEST NUMBER: P1588646

CATALOG NUMBER: 24CZSP-A-47-L940-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	3.2
10°-20°	408.1	9.3
20°-30°	615.5	14.0
30°-40°	741.4	16.8
40°-50°	774.3	17.6
50°-60°	711.1	16.2
60°-70°	560.1	12.7
70°-80°	343.6	7.8
80°-90°	103.4	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°	1166.2	26.5
0°-40°	1907.6	43.4
0°-60°	3392.9	77.1
0°-90°	4400.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4400.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1495	1496	1500	1505	1499	142
15°	1436	1439	1447	1456	1456	405
25°	1317	1320	1335	1352	1352	606
35°	1155	1160	1185	1209	1215	722
45°	962	972	1002	1037	1047	741
55°	743	757	792	836	850	664
65°	503	520	566	613	630	498
75°	256	276	323	375	391	271
85°	46	64	94	119	121	61
90°	0	0	0	0	0	

TEST NUMBER: P1588646

CATALOG NUMBER: 24CZSP-A-47-L940-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.1	1507.1	1507.1	1507.1	1507.1
2.5°	1501.3	1504.2	1505.2	1506.2	1499.4
5°	1494.6	1496.5	1500.4	1505.2	1499.4
7.5°	1484.9	1486.8	1491.7	1498.4	1495.5
10°	1474.3	1475.3	1481.0	1485.9	1480.1
12.5°	1456.9	1459.8	1466.6	1470.4	1468.5
15°	1435.7	1438.6	1447.3	1455.9	1455.9
17.5°	1410.6	1414.4	1425.1	1436.6	1437.6
20°	1382.6	1385.5	1399.0	1410.6	1410.6
22.5°	1350.7	1354.6	1368.1	1380.6	1382.6
25°	1316.9	1319.8	1335.3	1351.7	1351.7
27.5°	1277.3	1283.1	1302.4	1318.8	1322.7
30°	1238.7	1243.5	1264.8	1285.1	1288.0
32.5°	1198.2	1204.0	1226.2	1248.4	1253.2
35°	1154.7	1160.5	1184.6	1208.8	1214.6
37.5°	1109.3	1116.1	1141.2	1169.2	1175.0
40°	1062.0	1069.8	1096.8	1126.7	1132.5
42.5°	1011.8	1022.4	1051.4	1082.3	1091.0
45°	961.6	972.2	1002.2	1036.9	1046.6
47.5°	908.5	921.1	952.0	988.7	999.3
50°	855.4	868.0	899.8	939.4	951.0
52.5°	801.4	813.9	846.7	888.2	900.8
55°	743.4	756.9	791.7	836.1	849.6
57.5°	683.6	700.9	737.6	783.0	796.5
60°	623.7	641.1	682.6	727.0	742.5
62.5°	564.8	581.2	623.7	671.0	687.4
65°	503.0	520.4	565.8	613.1	629.5
67.5°	442.2	459.6	504.9	554.2	571.6
70°	379.4	398.7	445.1	494.3	511.7
72.5°	316.7	337.0	384.3	434.5	450.9
75°	255.9	276.1	323.4	374.6	391.0
77.5°	196.0	218.2	264.5	316.7	332.1
80°	141.9	163.2	206.6	257.8	275.2
82.5°	90.8	109.1	152.5	200.8	213.4
85°	46.3	63.7	93.7	118.8	120.7
87.5°	14.5	20.3	30.9	46.3	47.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588646

CATALOG NUMBER: 24CZSP-A-47-L940-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	14.38	16.05	14.75	16.36	16.67	15.21	16.88	15.58	17.19	17.51
	3H	16.14	17.65	16.52	17.97	18.33	17.33	18.84	17.71	19.16	19.52
	4H	16.76	18.18	17.16	18.53	18.90	18.22	19.64	18.62	19.99	20.36
	6H	17.17	18.49	17.58	18.85	19.24	19.00	20.32	19.41	20.69	21.08
	8H	17.28	18.54	17.70	18.93	19.33	19.32	20.58	19.75	20.97	21.37
	12H	17.33	18.54	17.76	18.92	19.35	19.53	20.74	19.96	21.12	21.55
4H	2H	15.16	16.58	15.55	16.93	17.30	15.80	17.22	16.20	17.57	17.95
	3H	17.13	18.33	17.54	18.73	19.13	18.16	19.36	18.57	19.75	20.15
	4H	17.87	18.96	18.30	19.37	19.80	19.21	20.30	19.64	20.71	21.14
	6H	18.40	19.35	18.85	19.79	20.24	20.16	21.11	20.61	21.55	22.01
	8H	18.55	19.44	19.00	19.88	20.34	20.56	21.45	21.02	21.89	22.36
	12H	18.63	19.43	19.11	19.91	20.38	20.84	21.64	21.32	22.11	22.58
8H	4H	18.33	19.22	18.79	19.66	20.13	19.50	20.39	19.96	20.83	21.30
	6H	18.99	19.73	19.48	20.22	20.70	20.61	21.35	21.10	21.84	22.32
	8H	19.20	19.87	19.71	20.37	20.86	21.12	21.79	21.63	22.30	22.78
	12H	19.34	19.93	19.85	20.42	20.98	21.51	22.10	22.01	22.59	23.15
12H	4H	18.42	19.22	18.90	19.70	20.16	19.52	20.33	20.00	20.80	21.27
	6H	19.12	19.79	19.63	20.30	20.78	20.66	21.33	21.16	21.83	22.32
	8H	19.40	19.99	19.91	20.48	21.04	21.24	21.83	21.74	22.32	22.88