

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: P1588293

Luminaire Tested: 24CZSP-47-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588293
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-47-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

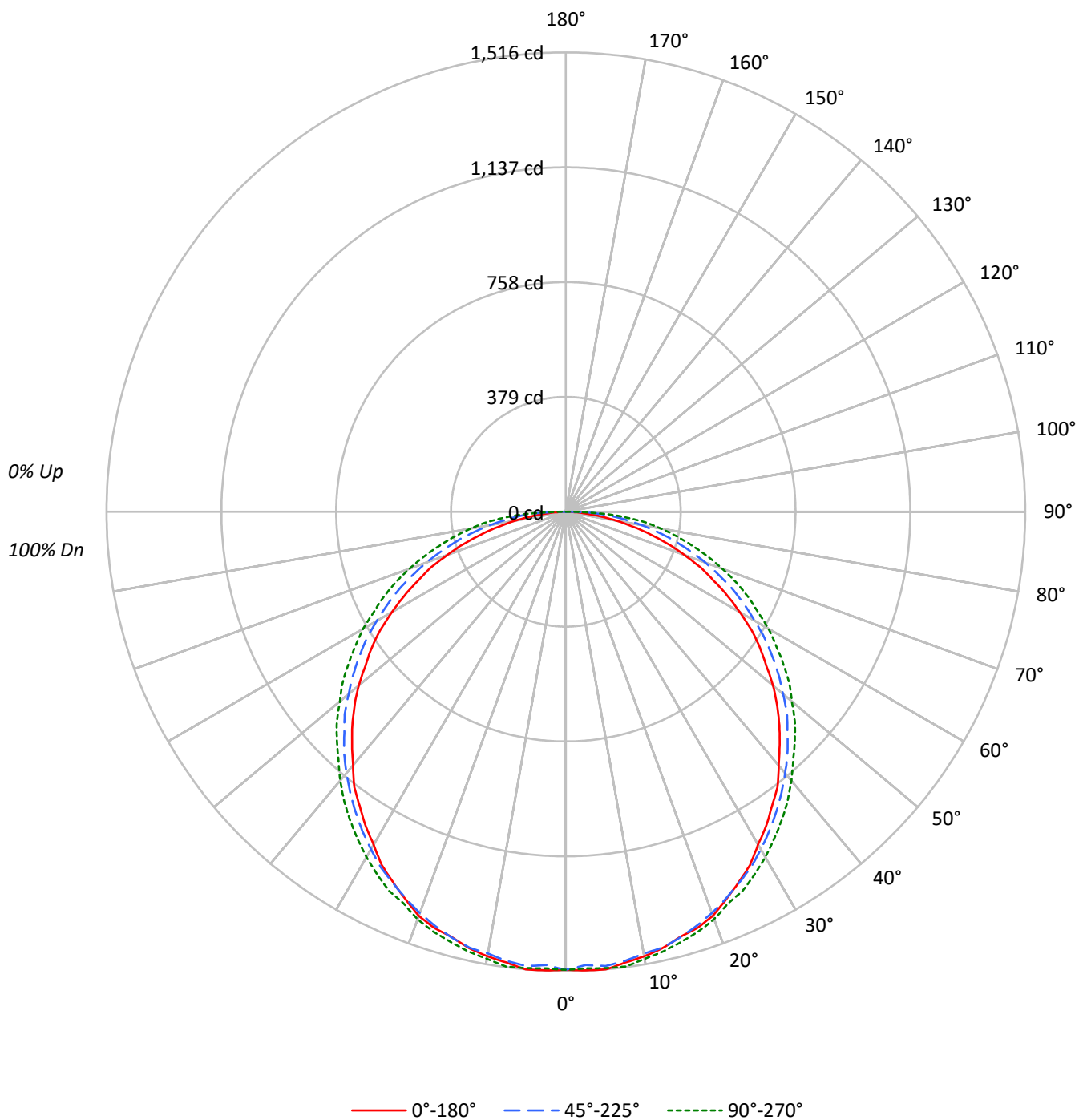
Lumens per Lamp: N/A
Luminaire Lumens: 4614.0 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588293

CATALOG NUMBER: 24CZSP-47-L830

Luminous Intensity Polar Plot



TEST NUMBER: P1588293

CATALOG NUMBER: 24CZSP-47-L830

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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2315	2315	2315
5°	2331	2314	2324
10°	2317	2303	2330
15°	2304	2308	2330
20°	2313	2296	2332
25°	2280	2284	2332
30°	2243	2275	2328
35°	2217	2262	2322
40°	2185	2251	2315
45°	2159	2240	2314
50°	2127	2230	2320
55°	2089	2222	2340
60°	2031	2207	2366
65°	1950	2207	2403
70°	1861	2192	2459
75°	1713	2197	2551
80°	1501	2242	2807
85°	1146	2583	3360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3726 cd/sqm

TEST NUMBER: P1588293

CATALOG NUMBER: 24CZSP-47-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.5	3.1
10°-20°	412.6	8.9
20°-30°	626.7	13.6
30°-40°	759.2	16.5
40°-50°	798.7	17.3
50°-60°	742.7	16.1
60°-70°	598.0	13.0
70°-80°	387.3	8.4
80°-90°	145.3	3.1
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°	1182.8	25.6
0°-40°	1942.0	42.1
0°-60°	3483.4	75.5
0°-90°	4614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1516	1514	1505	1514	1512	144
15°	1453	1459	1455	1473	1470	412
25°	1349	1348	1351	1375	1380	622
35°	1186	1194	1210	1231	1242	743
45°	997	1010	1034	1056	1068	768
55°	782	802	832	865	876	698
65°	538	562	609	645	663	535
75°	290	318	371	414	431	308
85°	65	96	147	183	191	80
90°	0	0	0	0	0	

TEST NUMBER: P1588293

CATALOG NUMBER: 24CZSP-47-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1511.7	1511.7	1511.7	1511.7	1511.7
2.5°	1515.0	1515.0	1497.3	1516.1	1508.3
5°	1516.1	1513.9	1505.0	1513.9	1511.7
7.5°	1500.6	1502.8	1495.1	1506.1	1513.9
10°	1489.6	1491.8	1480.7	1498.4	1498.4
12.5°	1475.2	1477.4	1473.0	1489.6	1486.2
15°	1453.1	1458.6	1455.3	1473.0	1469.7
17.5°	1440.9	1436.5	1433.2	1446.5	1453.1
20°	1418.8	1408.9	1408.9	1426.6	1431.0
22.5°	1383.5	1380.2	1381.3	1403.4	1398.9
25°	1349.2	1348.1	1351.4	1374.6	1380.2
27.5°	1315.0	1312.7	1322.7	1344.8	1349.2
30°	1268.5	1273.0	1286.2	1310.5	1316.1
32.5°	1229.9	1237.6	1249.8	1273.0	1279.6
35°	1185.7	1194.5	1210.0	1231.0	1242.0
37.5°	1147.0	1152.5	1169.1	1189.0	1202.2
40°	1092.9	1107.2	1126.0	1154.7	1158.0
42.5°	1044.2	1058.6	1082.9	1113.8	1110.5
45°	996.7	1010.0	1034.3	1056.4	1068.5
47.5°	945.9	958.0	990.1	1016.6	1025.4
50°	892.8	908.3	935.9	963.6	973.5
52.5°	833.2	849.8	885.1	914.9	929.3
55°	782.3	802.2	832.1	865.2	876.3
57.5°	726.0	742.6	779.0	812.2	823.2
60°	663.0	682.9	720.5	755.8	772.4
62.5°	602.2	624.3	664.1	700.6	713.8
65°	538.1	562.4	608.9	645.3	663.0
67.5°	482.9	502.8	548.1	589.0	607.8
70°	415.5	442.0	489.5	534.8	549.2
72.5°	355.8	379.0	428.7	474.0	491.7
75°	289.5	318.2	371.3	414.4	431.0
77.5°	228.7	258.6	311.6	356.9	375.7
80°	170.2	198.9	254.2	300.6	318.2
82.5°	114.9	143.7	198.9	244.2	264.1
85°	65.2	96.1	147.0	183.4	191.2
87.5°	28.7	55.3	82.9	99.5	106.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588293
CATALOG NUMBER: 24CZSP-47-L830

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	14.60	16.28	14.97	16.60	16.91	15.28	16.96	15.64	17.27	17.59
	3H	16.46	17.98	16.83	18.31	18.67	17.49	19.02	17.87	19.35	19.71
	4H	17.14	18.59	17.54	18.93	19.31	18.46	19.90	18.85	20.25	20.62
	6H	17.63	18.98	18.04	19.34	19.73	19.35	20.69	19.76	21.05	21.44
	8H	17.78	19.07	18.20	19.45	19.85	19.75	21.04	20.18	21.43	21.82
	12H	17.87	19.10	18.30	19.48	19.91	20.11	21.34	20.54	21.73	22.15
4H	2H	15.39	16.84	15.79	17.19	17.56	15.91	17.36	16.31	17.71	18.08
	3H	17.48	18.70	17.89	19.10	19.50	18.37	19.60	18.78	19.99	20.39
	4H	18.30	19.41	18.73	19.82	20.26	19.50	20.61	19.93	21.03	21.46
	6H	18.93	19.90	19.38	20.34	20.79	20.57	21.55	21.02	21.99	22.44
	8H	19.12	20.04	19.58	20.48	20.94	21.06	21.98	21.52	22.42	22.88
	12H	19.26	20.09	19.74	20.56	21.03	21.52	22.34	21.99	22.82	23.28
8H	4H	18.81	19.73	19.27	20.17	20.63	19.85	20.76	20.30	21.20	21.67
	6H	19.60	20.36	20.09	20.85	21.32	21.10	21.86	21.59	22.35	22.82
	8H	19.88	20.57	20.38	21.07	21.56	21.72	22.41	22.22	22.91	23.40
	12H	20.10	20.71	20.60	21.20	21.76	22.33	22.94	22.83	23.43	23.99
12H	4H	18.92	19.74	19.40	20.22	20.69	19.88	20.71	20.36	21.18	21.65
	6H	19.76	20.45	20.27	20.96	21.44	21.17	21.86	21.67	22.36	22.85
	8H	20.13	20.75	20.64	21.23	21.79	21.87	22.49	22.38	22.98	23.53