

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: P1588303

Luminaire Tested: 24CZSP-47-L930

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588303
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-L930
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

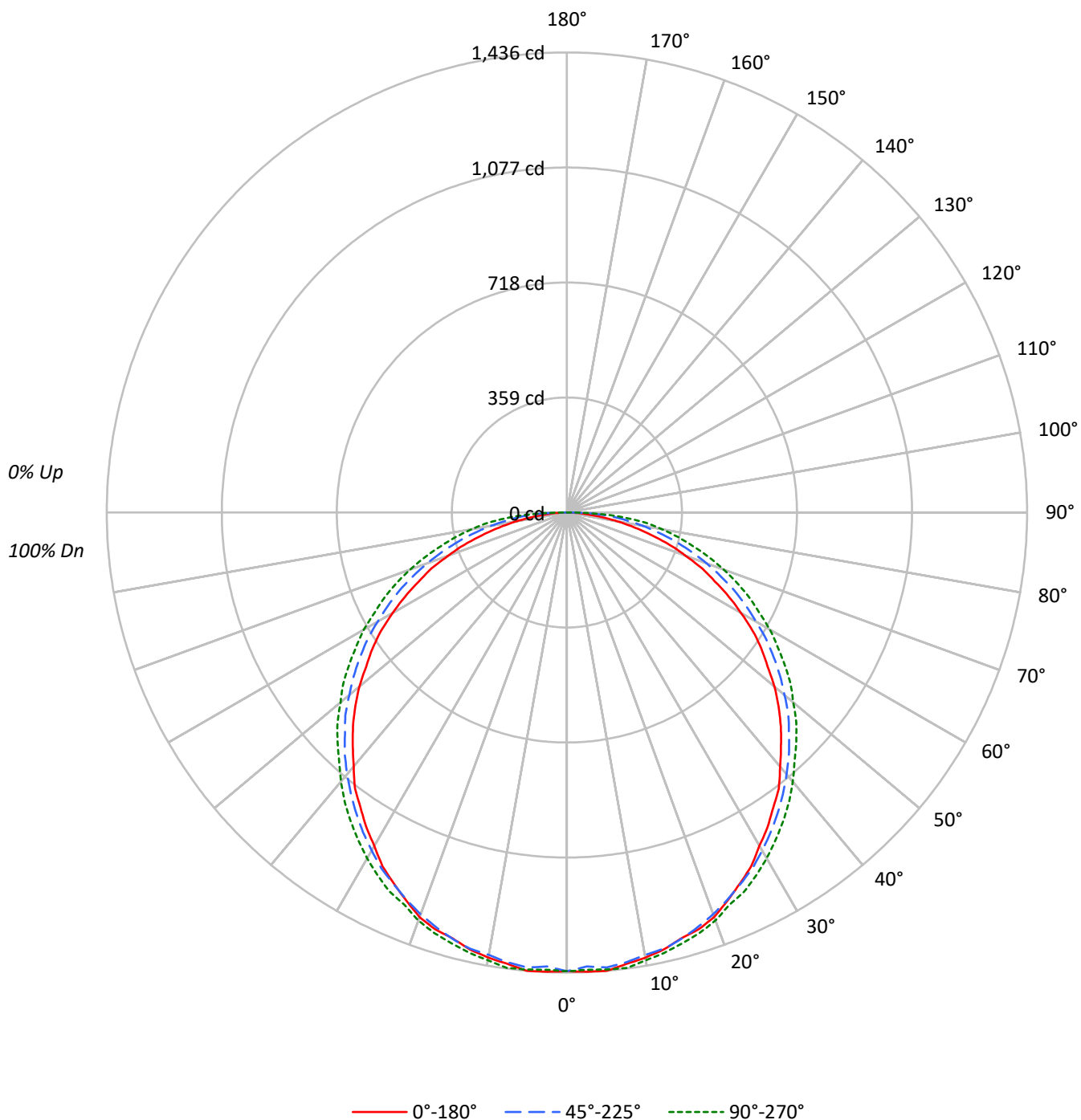
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4370.0 lumens
Efficiency: N/A
Efficacy: 135.7 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: P1588303
CATALOG NUMBER: 24CZSP-47-L930

Luminous Intensity Polar Plot



TEST NUMBER: P1588303

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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	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°	2193	2193	2193
5°	2208	2192	2201
10°	2194	2181	2207
15°	2182	2186	2207
20°	2190	2175	2209
25°	2160	2163	2209
30°	2125	2154	2205
35°	2100	2143	2199
40°	2070	2132	2193
45°	2045	2122	2192
50°	2015	2112	2197
55°	1979	2104	2216
60°	1923	2090	2241
65°	1847	2090	2276
70°	1762	2076	2329
75°	1623	2081	2416
80°	1422	2123	2658
85°	1084	2446	3183

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3529 cd/sqm

TEST NUMBER: P1588303

CATALOG NUMBER: 24CZSP-47-L930

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	3.1
10°-20°	390.8	8.9
20°-30°	593.6	13.6
30°-40°	719.1	16.5
40°-50°	756.5	17.3
50°-60°	703.4	16.1
60°-70°	566.3	13.0
70°-80°	366.9	8.4
80°-90°	137.6	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°	1120.3	25.6
0°-40°	1839.3	42.1
0°-60°	3299.2	75.5
0°-90°	4370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4370.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1432	1432	1432	1432	1432	
5°	1436	1434	1425	1434	1432	136
15°	1376	1382	1378	1395	1392	390
25°	1278	1277	1280	1302	1307	589
35°	1123	1131	1146	1166	1176	704
45°	944	957	980	1000	1012	728
55°	741	760	788	820	830	661
65°	510	533	577	611	628	507
75°	274	301	352	392	408	291
85°	62	91	139	174	181	76
90°	0	0	0	0	0	

TEST NUMBER: P1588303

CATALOG NUMBER: 24CZSP-47-L930

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1431.7	1431.7	1431.7	1431.7	1431.7
2.5°	1434.9	1434.9	1418.1	1435.9	1428.6
5°	1435.9	1433.8	1425.4	1433.8	1431.7
7.5°	1421.2	1423.3	1416.0	1426.5	1433.8
10°	1410.8	1412.9	1402.4	1419.2	1419.2
12.5°	1397.2	1399.3	1395.1	1410.8	1407.6
15°	1376.2	1381.5	1378.3	1395.1	1391.9
17.5°	1364.7	1360.5	1357.4	1370.0	1376.2
20°	1343.8	1334.4	1334.4	1351.1	1355.3
22.5°	1310.3	1307.2	1308.2	1329.1	1325.0
25°	1277.9	1276.8	1280.0	1301.9	1307.2
27.5°	1245.4	1243.3	1252.7	1273.7	1277.9
30°	1201.5	1205.7	1218.2	1241.2	1246.5
32.5°	1164.8	1172.2	1183.7	1205.7	1211.9
35°	1123.0	1131.3	1146.0	1165.9	1176.3
37.5°	1086.3	1091.6	1107.3	1126.1	1138.7
40°	1035.1	1048.7	1066.5	1093.7	1096.8
42.5°	989.0	1002.6	1025.6	1054.9	1051.8
45°	944.0	956.6	979.6	1000.5	1012.0
47.5°	895.9	907.4	937.7	962.8	971.2
50°	845.6	860.3	886.4	912.6	922.0
52.5°	789.1	804.8	838.3	866.6	880.2
55°	741.0	759.8	788.1	819.5	829.9
57.5°	687.6	703.3	737.8	769.2	779.7
60°	627.9	646.8	682.4	715.9	731.6
62.5°	570.4	591.3	629.0	663.5	676.1
65°	509.7	532.7	576.7	611.2	627.9
67.5°	457.4	476.2	519.1	557.8	575.6
70°	393.5	418.6	463.6	506.5	520.1
72.5°	337.0	359.0	406.1	449.0	465.7
75°	274.2	301.4	351.6	392.5	408.2
77.5°	216.6	244.9	295.1	338.0	355.8
80°	161.2	188.4	240.7	284.7	301.4
82.5°	108.8	136.1	188.4	231.3	250.1
85°	61.7	91.1	139.2	173.7	181.1
87.5°	27.2	52.3	78.5	94.2	100.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588303
CATALOG NUMBER: 24CZSP-47-L930

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	14.41	16.09	14.78	16.41	16.72	15.09	16.77	15.45	17.08	17.40
	3H	16.27	17.79	16.64	18.12	18.48	17.30	18.83	17.68	19.16	19.52
	4H	16.95	18.40	17.35	18.74	19.12	18.27	19.71	18.67	20.06	20.43
	6H	17.44	18.79	17.85	19.15	19.54	19.16	20.50	19.57	20.87	21.26
	8H	17.59	18.88	18.02	19.27	19.66	19.56	20.85	19.99	21.24	21.63
	12H	17.68	18.91	18.11	19.30	19.72	19.92	21.16	20.35	21.54	21.97
4H	2H	15.21	16.65	15.60	17.00	17.37	15.73	17.17	16.12	17.52	17.89
	3H	17.29	18.51	17.70	18.91	19.31	18.19	19.41	18.59	19.80	20.20
	4H	18.11	19.22	18.54	19.64	20.07	19.31	20.42	19.74	20.84	21.27
	6H	18.74	19.71	19.19	20.15	20.61	20.38	21.36	20.84	21.80	22.25
	8H	18.94	19.85	19.39	20.29	20.76	20.87	21.79	21.33	22.23	22.69
	12H	19.07	19.90	19.55	20.37	20.84	21.33	22.15	21.81	22.63	23.09
8H	4H	18.62	19.54	19.08	19.98	20.44	19.66	20.57	20.11	21.01	21.48
	6H	19.41	20.17	19.90	20.66	21.13	20.91	21.67	21.40	22.16	22.63
	8H	19.69	20.38	20.20	20.88	21.37	21.53	22.22	22.04	22.72	23.21
	12H	19.91	20.52	20.41	21.01	21.57	22.14	22.75	22.64	23.24	23.80
12H	4H	18.73	19.56	19.21	20.03	20.50	19.69	20.52	20.17	20.99	21.46
	6H	19.57	20.27	20.08	20.77	21.25	20.98	21.67	21.49	22.18	22.66
	8H	19.94	20.56	20.45	21.05	21.60	21.69	22.30	22.19	22.79	23.34