

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: P1588299

Luminaire Tested: 24CZSP-47-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588299
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-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

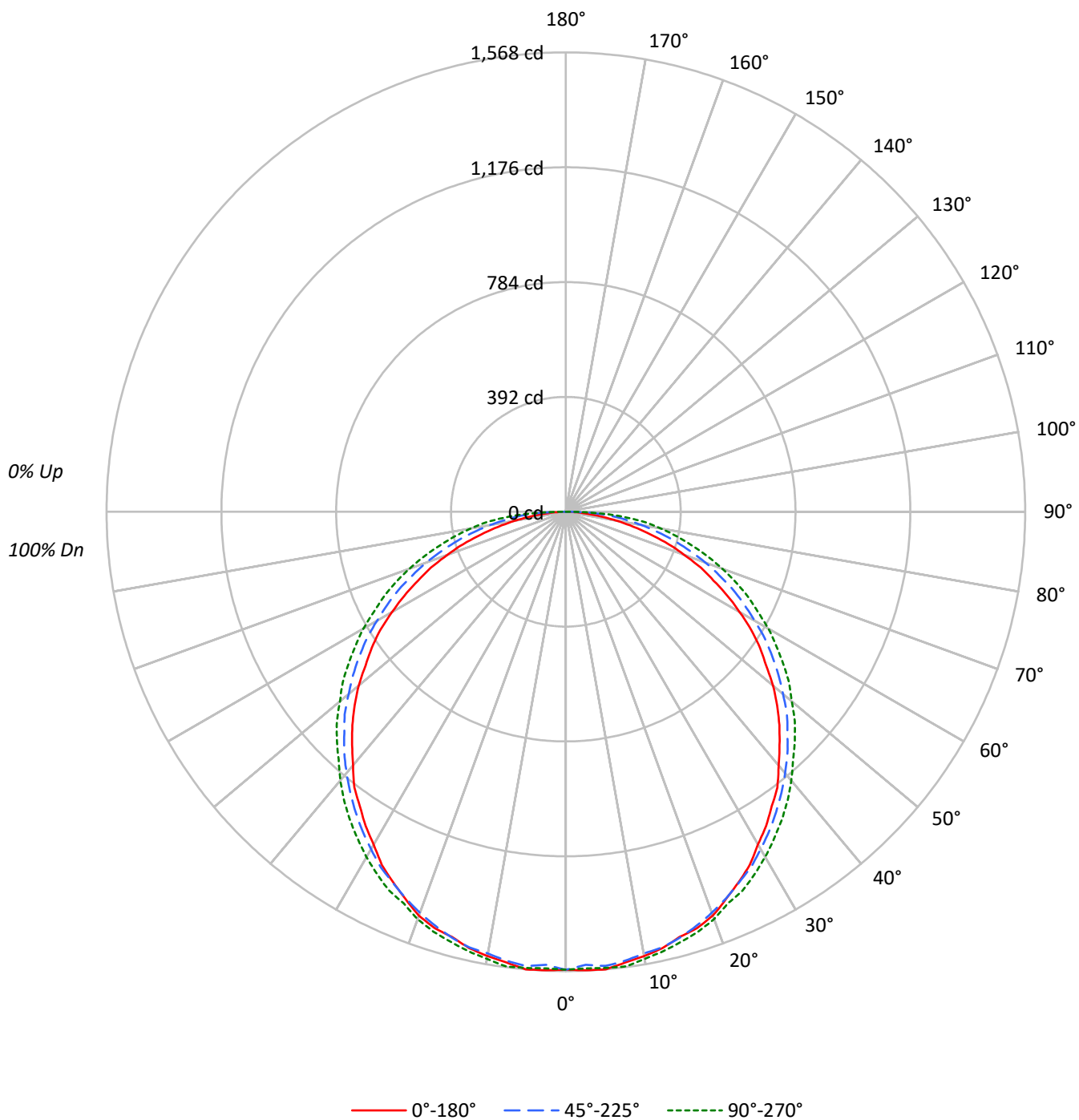
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4771.0 lumens
Efficiency: N/A
Efficacy: 148.2 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: P1588299
CATALOG NUMBER: 24CZSP-47-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1588299

CATALOG NUMBER: 24CZSP-47-L845

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°	2394	2394	2394
5°	2410	2393	2403
10°	2395	2381	2410
15°	2382	2386	2410
20°	2391	2374	2412
25°	2358	2362	2412
30°	2320	2352	2407
35°	2292	2339	2401
40°	2259	2328	2394
45°	2232	2317	2393
50°	2200	2306	2399
55°	2160	2298	2420
60°	2100	2282	2447
65°	2017	2282	2485
70°	1924	2267	2543
75°	1772	2272	2637
80°	1552	2318	2903
85°	1184	2671	3474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3852 cd/sqm

TEST NUMBER: P1588299

CATALOG NUMBER: 24CZSP-47-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.4	3.1
10°-20°	426.6	8.9
20°-30°	648.1	13.6
30°-40°	785.0	16.5
40°-50°	825.9	17.3
50°-60°	767.9	16.1
60°-70°	618.3	13.0
70°-80°	400.5	8.4
80°-90°	150.2	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°	1223.1	25.6
0°-40°	2008.1	42.1
0°-60°	3601.9	75.5
0°-90°	4771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1563	1563	1563	1563	1563	
5°	1568	1565	1556	1565	1563	148
15°	1502	1508	1505	1523	1520	426
25°	1395	1394	1397	1421	1427	643
35°	1226	1235	1251	1273	1284	768
45°	1031	1044	1070	1092	1105	795
55°	809	830	860	895	906	721
65°	556	582	630	667	686	553
75°	299	329	384	428	446	318
85°	67	99	152	190	198	83
90°	0	0	0	0	0	

TEST NUMBER: P1588299

CATALOG NUMBER: 24CZSP-47-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.1	1563.1	1563.1	1563.1	1563.1
2.5°	1566.5	1566.5	1548.2	1567.7	1559.7
5°	1567.7	1565.4	1556.2	1565.4	1563.1
7.5°	1551.7	1553.9	1545.9	1557.4	1565.4
10°	1540.2	1542.5	1531.1	1549.4	1549.4
12.5°	1525.4	1527.7	1523.1	1540.2	1536.8
15°	1502.5	1508.2	1504.8	1523.1	1519.7
17.5°	1490.0	1485.4	1482.0	1495.7	1502.5
20°	1467.1	1456.8	1456.8	1475.1	1479.7
22.5°	1430.5	1427.1	1428.3	1451.1	1446.5
25°	1395.1	1394.0	1397.4	1421.4	1427.1
27.5°	1359.7	1357.4	1367.7	1390.6	1395.1
30°	1311.7	1316.3	1330.0	1355.1	1360.8
32.5°	1271.7	1279.7	1292.3	1316.3	1323.1
35°	1226.0	1235.2	1251.2	1272.9	1284.3
37.5°	1186.0	1191.7	1208.9	1229.4	1243.2
40°	1130.0	1144.9	1164.3	1194.0	1197.5
42.5°	1079.8	1094.6	1119.8	1151.7	1148.3
45°	1030.6	1044.3	1069.5	1092.3	1104.9
47.5°	978.1	990.6	1023.8	1051.2	1060.3
50°	923.2	939.2	967.8	996.4	1006.6
52.5°	861.5	878.7	915.2	946.1	960.9
55°	809.0	829.5	860.4	894.7	906.1
57.5°	750.7	767.8	805.5	839.8	851.2
60°	685.6	706.1	745.0	781.5	798.7
62.5°	622.7	645.6	686.7	724.4	738.1
65°	556.5	581.6	629.6	667.3	685.6
67.5°	499.3	519.9	566.7	609.0	628.4
70°	429.6	457.0	506.2	553.0	567.9
72.5°	367.9	391.9	443.3	490.2	508.5
75°	299.4	329.1	383.9	428.5	445.6
77.5°	236.5	267.4	322.2	369.1	388.5
80°	176.0	205.7	262.8	310.8	329.1
82.5°	118.8	148.5	205.7	252.5	273.1
85°	67.4	99.4	152.0	189.7	197.7
87.5°	29.7	57.1	85.7	102.8	109.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588299

CATALOG NUMBER: 24CZSP-47-L845

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	14.72	16.40	15.08	16.71	17.03	15.39	17.07	15.76	17.39	17.70
	3H	16.57	18.10	16.95	18.43	18.78	17.61	19.14	17.99	19.46	19.82
	4H	17.26	18.70	17.66	19.05	19.42	18.57	20.02	18.97	20.36	20.74
	6H	17.75	19.09	18.16	19.46	19.85	19.47	20.81	19.88	21.17	21.56
	8H	17.90	19.18	18.32	19.57	19.97	19.87	21.15	20.29	21.54	21.94
	12H	17.99	19.22	18.42	19.60	20.03	20.23	21.46	20.66	21.84	22.27
4H	2H	15.51	16.95	15.91	17.30	17.68	16.03	17.47	16.43	17.82	18.20
	3H	17.60	18.82	18.01	19.22	19.61	18.49	19.71	18.90	20.11	20.51
	4H	18.42	19.53	18.85	19.94	20.37	19.62	20.73	20.05	21.14	21.58
	6H	19.04	20.02	19.49	20.46	20.91	20.69	21.67	21.14	22.10	22.56
	8H	19.24	20.16	19.70	20.60	21.06	21.18	22.10	21.64	22.54	23.00
	12H	19.38	20.20	19.85	20.67	21.14	21.63	22.46	22.11	22.93	23.40
8H	4H	18.93	19.84	19.38	20.28	20.75	19.96	20.88	20.42	21.32	21.78
	6H	19.71	20.48	20.20	20.96	21.44	21.21	21.98	21.70	22.46	22.94
	8H	20.00	20.69	20.50	21.19	21.67	21.83	22.53	22.34	23.03	23.51
	12H	20.21	20.83	20.72	21.31	21.87	22.45	23.06	22.95	23.55	24.10
12H	4H	19.03	19.86	19.51	20.33	20.80	20.00	20.83	20.48	21.30	21.77
	6H	19.88	20.57	20.38	21.07	21.56	21.29	21.98	21.79	22.48	22.96
	8H	20.25	20.86	20.75	21.35	21.91	21.99	22.60	22.50	23.09	23.65