

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: P1589779

Luminaire Tested: 24CZSP-SB-47-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-47-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

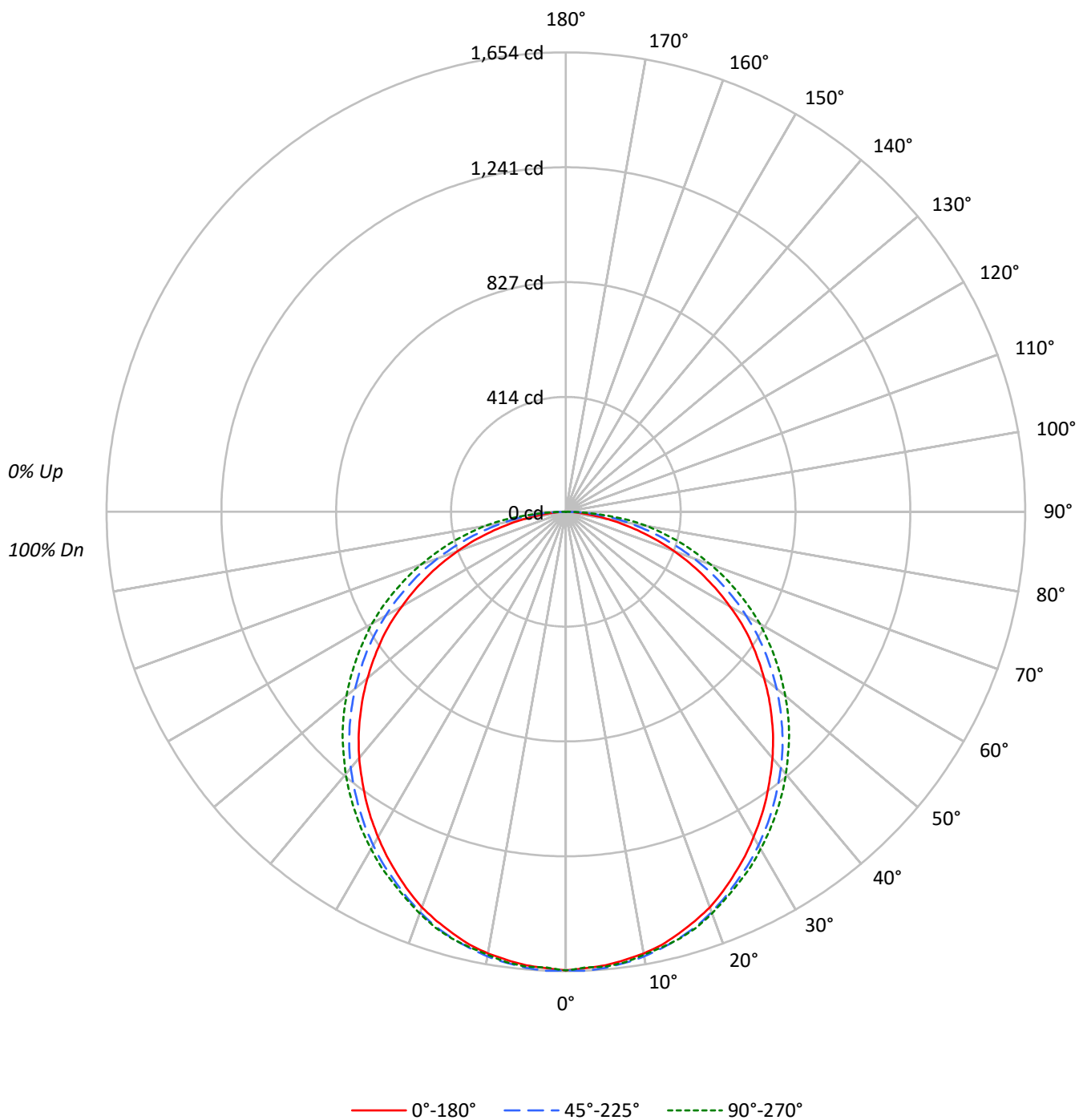
Lumens per Lamp: N/A
Luminaire Lumens: 4819.0 lumens
Efficiency: N/A
Efficacy: 149.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1589779

CATALOG NUMBER: 24CZSP-SB-47-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1589779

CATALOG NUMBER: 24CZSP-SB-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	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	68
3	89	79	70	63	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°	2529	2529	2529
5°	2520	2534	2528
10°	2511	2529	2519
15°	2492	2518	2521
20°	2470	2500	2509
25°	2430	2473	2491
30°	2392	2453	2480
35°	2353	2430	2471
40°	2315	2408	2465
45°	2271	2386	2463
50°	2221	2360	2457
55°	2171	2334	2457
60°	2090	2300	2471
65°	1992	2255	2473
70°	1859	2193	2480
75°	1654	2113	2523
80°	1358	2024	2618
85°	896	1900	2365

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2681 cd/sqm

TEST NUMBER: P1589779

CATALOG NUMBER: 24CZSP-SB-47-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	3.2
10°-20°	447.1	9.3
20°-30°	673.9	14.0
30°-40°	811.5	16.8
40°-50°	847.8	17.6
50°-60°	778.9	16.2
60°-70°	613.4	12.7
70°-80°	376.1	7.8
80°-90°	114.0	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°	1277.2	26.5
0°-40°	2088.7	43.3
0°-60°	3715.5	77.1
0°-90°	4819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4819.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1651	1651	1651	1651	1651	
5°	1639	1642	1648	1646	1644	156
15°	1572	1578	1588	1594	1590	444
25°	1438	1447	1464	1479	1474	663
35°	1259	1275	1299	1323	1322	787
45°	1048	1071	1102	1132	1137	809
55°	813	836	874	912	920	725
65°	550	578	622	664	682	543
75°	280	312	357	400	426	297
85°	51	76	108	120	135	66
90°	0	0	0	0	0	

TEST NUMBER: P1589779

CATALOG NUMBER: 24CZSP-SB-47-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1651.3	1651.3	1651.3	1651.3	1651.3
2.5°	1645.2	1649.2	1654.3	1646.2	1642.1
5°	1639.0	1642.1	1648.2	1646.2	1644.1
7.5°	1627.8	1629.9	1638.0	1638.0	1636.0
10°	1614.6	1618.6	1625.8	1624.8	1619.7
12.5°	1597.2	1600.3	1608.4	1608.4	1605.4
15°	1571.7	1577.8	1588.0	1594.2	1590.1
17.5°	1545.2	1551.3	1564.6	1570.7	1568.7
20°	1515.6	1520.7	1534.0	1543.2	1539.1
22.5°	1478.9	1485.0	1500.3	1510.5	1506.4
25°	1438.1	1447.3	1463.6	1478.9	1473.8
27.5°	1397.3	1407.5	1427.9	1443.2	1441.2
30°	1352.4	1365.7	1387.1	1406.5	1402.4
32.5°	1306.5	1321.8	1344.3	1364.7	1363.7
35°	1258.6	1274.9	1299.4	1322.9	1321.8
37.5°	1207.6	1227.0	1252.5	1278.0	1279.0
40°	1157.6	1176.0	1204.5	1232.1	1233.1
42.5°	1104.6	1124.0	1154.6	1183.1	1184.1
45°	1048.5	1070.9	1101.5	1132.1	1137.2
47.5°	991.4	1014.8	1046.5	1079.1	1085.2
50°	932.2	956.7	990.4	1025.0	1031.2
52.5°	872.0	897.5	932.2	966.9	976.1
55°	812.9	836.3	874.1	911.8	920.0
57.5°	750.7	772.1	812.9	852.7	862.9
60°	682.3	708.9	750.7	790.5	806.8
62.5°	616.0	644.6	687.4	727.2	745.6
65°	549.7	578.3	622.2	664.0	682.3
67.5°	482.4	512.0	558.9	598.7	619.1
70°	415.1	444.7	489.6	532.4	553.8
72.5°	347.8	379.4	423.3	467.1	488.5
75°	279.5	312.1	357.0	399.8	426.3
77.5°	215.2	246.8	291.7	335.6	358.0
80°	154.0	185.6	229.5	273.3	296.8
82.5°	97.9	127.5	170.3	207.0	228.5
85°	51.0	75.5	108.1	120.4	134.6
87.5°	15.3	29.6	41.8	46.9	58.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589779

CATALOG NUMBER: 24CZSP-SB-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	14.74	16.40	15.10	16.71	17.03	15.48	17.15	15.85	17.46	17.77
	3H	16.50	18.01	16.88	18.33	18.69	17.58	19.09	17.96	19.41	19.77
	4H	17.12	18.55	17.52	18.89	19.27	18.46	19.89	18.86	20.23	20.61
	6H	17.54	18.86	17.95	19.22	19.61	19.23	20.55	19.64	20.91	21.31
	8H	17.64	18.91	18.07	19.29	19.69	19.54	20.80	19.97	21.19	21.59
	12H	17.69	18.91	18.12	19.29	19.72	19.75	20.97	20.18	21.35	21.78
4H	2H	15.51	16.93	15.91	17.28	17.65	16.09	17.51	16.49	17.86	18.23
	3H	17.50	18.70	17.91	19.10	19.49	18.42	19.61	18.82	20.01	20.41
	4H	18.25	19.34	18.69	19.75	20.19	19.45	20.54	19.88	20.95	21.38
	6H	18.79	19.74	19.24	20.18	20.64	20.38	21.33	20.83	21.77	22.23
	8H	18.94	19.83	19.40	20.27	20.74	20.76	21.66	21.22	22.10	22.56
	12H	19.02	19.83	19.50	20.30	20.77	21.04	21.84	21.52	22.32	22.79
8H	4H	18.71	19.60	19.17	20.04	20.50	19.75	20.64	20.21	21.08	21.55
	6H	19.38	20.13	19.88	20.62	21.09	20.83	21.58	21.33	22.07	22.54
	8H	19.61	20.27	20.11	20.78	21.26	21.32	21.99	21.83	22.50	22.98
	12H	19.75	20.34	20.26	20.83	21.39	21.70	22.29	22.20	22.78	23.34
12H	4H	18.79	19.59	19.27	20.07	20.54	19.78	20.58	20.26	21.06	21.52
	6H	19.51	20.18	20.02	20.69	21.17	20.89	21.56	21.39	22.06	22.55
	8H	19.80	20.40	20.31	20.88	21.44	21.44	22.03	21.95	22.52	23.08