

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: P1589781

Luminaire Tested: 24CZSP-SB-47-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589781
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-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

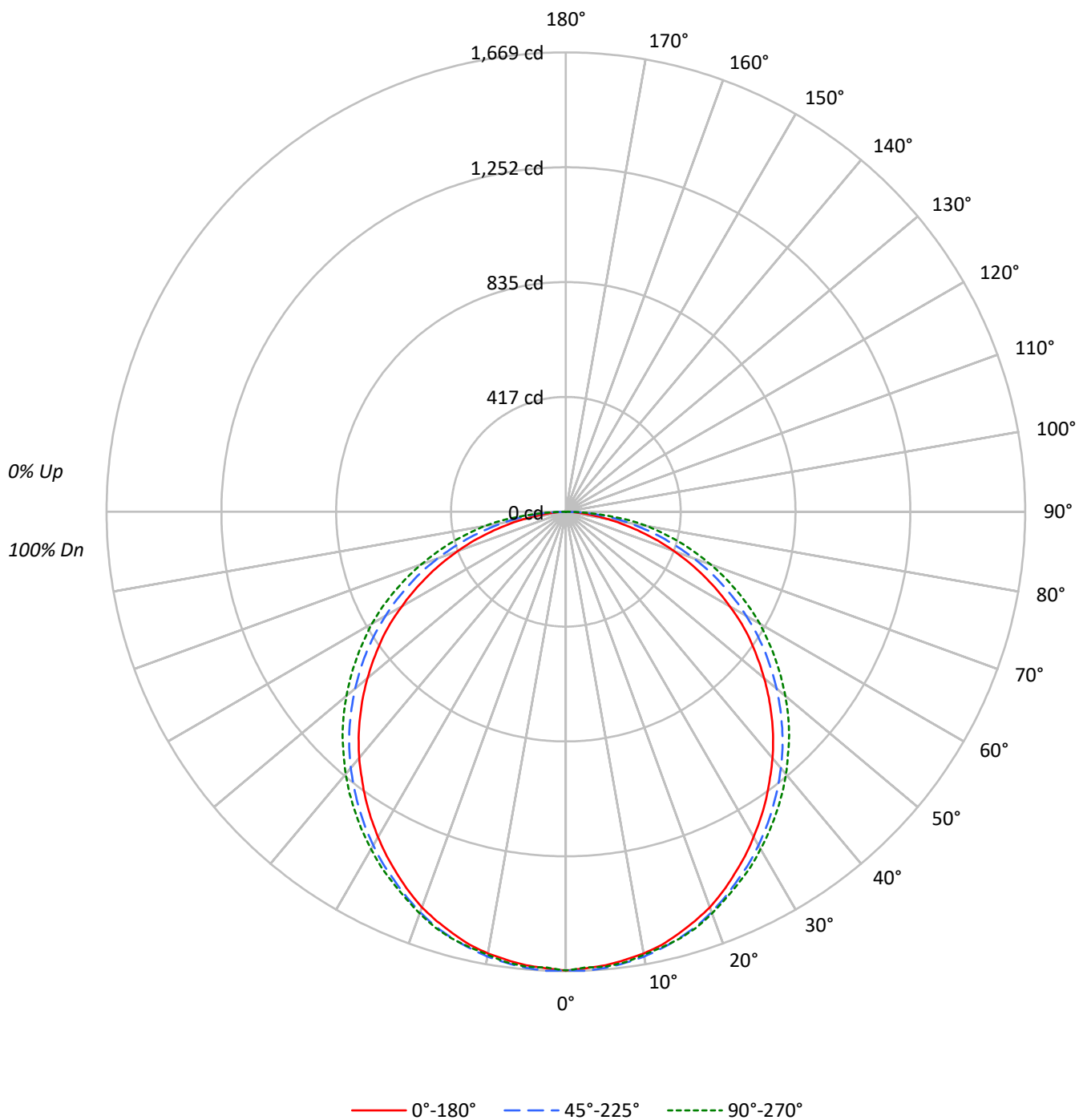
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4863.0 lumens
Efficiency: N/A
Efficacy: 151.0 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: P1589781
CATALOG NUMBER: 24CZSP-SB-47-L850

Luminous Intensity Polar Plot



TEST NUMBER: P1589781

CATALOG NUMBER: 24CZSP-SB-47-L850

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°	2552	2552	2552
5°	2543	2557	2551
10°	2534	2552	2542
15°	2515	2541	2544
20°	2493	2523	2531
25°	2452	2496	2513
30°	2414	2476	2503
35°	2375	2452	2494
40°	2336	2430	2488
45°	2292	2408	2486
50°	2241	2381	2480
55°	2190	2355	2479
60°	2109	2320	2494
65°	2011	2275	2496
70°	1876	2212	2503
75°	1669	2132	2546
80°	1371	2043	2642
85°	905	1917	2388

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2706 cd/sqm

TEST NUMBER: P1589781

CATALOG NUMBER: 24CZSP-SB-47-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.6	3.2
10°-20°	451.2	9.3
20°-30°	680.0	14.0
30°-40°	818.9	16.8
40°-50°	855.6	17.6
50°-60°	786.0	16.2
60°-70°	619.0	12.7
70°-80°	379.5	7.8
80°-90°	115.1	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°	1288.9	26.5
0°-40°	2107.8	43.3
0°-60°	3749.4	77.1
0°-90°	4863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1654	1657	1663	1661	1659	157
15°	1586	1592	1602	1609	1605	448
25°	1451	1460	1477	1492	1487	669
35°	1270	1287	1311	1335	1334	794
45°	1058	1081	1112	1142	1148	816
55°	820	844	882	920	928	732
65°	555	584	628	670	689	548
75°	282	315	360	404	430	300
85°	52	76	109	122	136	66
90°	0	0	0	0	0	

TEST NUMBER: P1589781

CATALOG NUMBER: 24CZSP-SB-47-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1666.4	1666.4	1666.4	1666.4	1666.4
2.5°	1660.2	1664.3	1669.4	1661.2	1657.1
5°	1654.0	1657.1	1663.3	1661.2	1659.2
7.5°	1642.7	1644.7	1653.0	1653.0	1650.9
10°	1629.3	1633.4	1640.6	1639.6	1634.4
12.5°	1611.8	1614.9	1623.1	1623.1	1620.0
15°	1586.1	1592.2	1602.5	1608.7	1604.6
17.5°	1559.3	1565.5	1578.9	1585.0	1583.0
20°	1529.5	1534.6	1548.0	1557.3	1553.1
22.5°	1492.4	1498.6	1514.0	1524.3	1520.2
25°	1451.2	1460.5	1477.0	1492.4	1487.3
27.5°	1410.1	1420.4	1440.9	1456.4	1454.3
30°	1364.8	1378.2	1399.8	1419.3	1415.2
32.5°	1318.5	1333.9	1356.6	1377.1	1376.1
35°	1270.1	1286.6	1311.3	1334.9	1333.9
37.5°	1218.6	1238.2	1263.9	1289.7	1290.7
40°	1168.2	1186.7	1215.5	1243.3	1244.4
42.5°	1114.7	1134.2	1165.1	1193.9	1195.0
45°	1058.1	1080.7	1111.6	1142.5	1147.6
47.5°	1000.4	1024.1	1056.0	1088.9	1095.1
50°	940.7	965.4	999.4	1034.4	1040.6
52.5°	880.0	905.7	940.7	975.7	985.0
55°	820.3	844.0	882.1	920.1	928.4
57.5°	757.5	779.1	820.3	860.5	870.7
60°	688.6	715.3	757.5	797.7	814.1
62.5°	621.7	650.5	693.7	733.9	752.4
65°	554.8	583.6	627.8	670.0	688.6
67.5°	486.8	516.7	564.0	604.2	624.8
70°	418.9	448.8	494.0	537.3	558.9
72.5°	351.0	382.9	427.1	471.4	493.0
75°	282.0	315.0	360.2	403.5	430.2
77.5°	217.2	249.1	294.4	338.6	361.3
80°	155.4	187.3	231.6	275.8	299.5
82.5°	98.8	128.7	171.9	208.9	230.6
85°	51.5	76.2	109.1	121.5	135.9
87.5°	15.4	29.8	42.2	47.3	58.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589781
CATALOG NUMBER: 24CZSP-SB-47-L850

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	14.77	16.43	15.13	16.75	17.06	15.52	17.18	15.88	17.49	17.81
	3H	16.53	18.04	16.91	18.36	18.72	17.61	19.12	17.99	19.44	19.80
	4H	17.16	18.58	17.55	18.93	19.30	18.50	19.92	18.89	20.26	20.64
	6H	17.57	18.89	17.98	19.25	19.64	19.26	20.58	19.67	20.95	21.34
	8H	17.67	18.94	18.10	19.33	19.72	19.57	20.84	20.00	21.23	21.62
	12H	17.73	18.94	18.16	19.32	19.75	19.79	21.00	20.22	21.38	21.81
4H	2H	15.54	16.96	15.94	17.31	17.68	16.12	17.54	16.52	17.89	18.26
	3H	17.53	18.73	17.94	19.13	19.53	18.45	19.65	18.86	20.04	20.44
	4H	18.29	19.37	18.72	19.79	20.22	19.48	20.57	19.91	20.98	21.42
	6H	18.82	19.77	19.28	20.21	20.67	20.41	21.36	20.86	21.80	22.26
	8H	18.97	19.86	19.43	20.30	20.77	20.80	21.69	21.26	22.13	22.59
	12H	19.06	19.86	19.53	20.33	20.80	21.07	21.88	21.55	22.35	22.82
8H	4H	18.74	19.63	19.20	20.07	20.54	19.78	20.67	20.24	21.12	21.58
	6H	19.42	20.16	19.91	20.65	21.12	20.87	21.61	21.36	22.10	22.57
	8H	19.64	20.31	20.14	20.81	21.29	21.35	22.02	21.86	22.53	23.01
	12H	19.78	20.38	20.29	20.87	21.42	21.73	22.32	22.23	22.81	23.37
12H	4H	18.82	19.63	19.30	20.10	20.57	19.81	20.61	20.29	21.09	21.56
	6H	19.54	20.21	20.05	20.72	21.20	20.92	21.59	21.43	22.09	22.58
	8H	19.84	20.43	20.34	20.92	21.48	21.47	22.06	21.98	22.55	23.11