

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: P1589816

Luminaire Tested: 24CZSP-SB-52-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-52-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

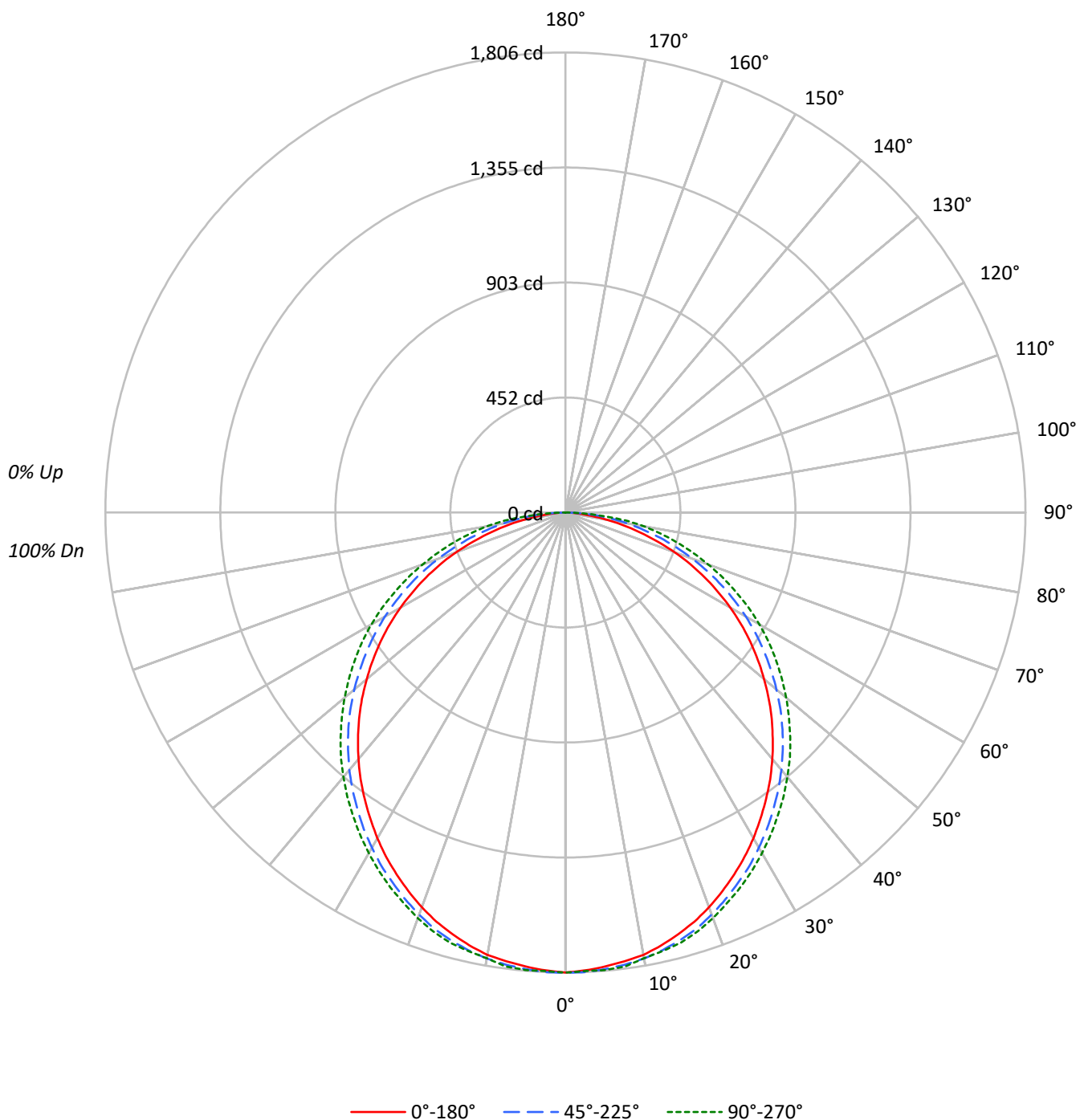
Lumens per Lamp: N/A
Luminaire Lumens: 5254.0 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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: 28.75 FT

TEST NUMBER: P1589816

CATALOG NUMBER: 24CZSP-SB-52-L840-S

Luminous Intensity Polar Plot



TEST NUMBER: P1589816

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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	99	95	106	101	97	93	97	94	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	69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2766	2766	2766
5°	2751	2767	2772
10°	2742	2765	2763
15°	2717	2756	2773
20°	2688	2738	2761
25°	2649	2710	2745
30°	2611	2687	2730
35°	2568	2661	2718
40°	2526	2637	2710
45°	2480	2610	2703
50°	2427	2577	2696
55°	2366	2544	2692
60°	2292	2507	2694
65°	2188	2454	2679
70°	2045	2379	2673
75°	1813	2287	2682
80°	1476	2173	2762
85°	954	2007	2383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2799 cd/sqm

TEST NUMBER: P1589816

CATALOG NUMBER: 24CZSP-SB-52-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.9	3.3
10°-20°	489.5	9.3
20°-30°	738.0	14.0
30°-40°	888.0	16.9
40°-50°	926.2	17.6
50°-60°	849.0	16.2
60°-70°	666.7	12.7
70°-80°	405.7	7.7
80°-90°	120.0	2.3
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°	1398.4	26.6
0°-40°	2286.3	43.5
0°-60°	4061.5	77.3
0°-90°	5254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1806	1806	1806	1806	1806	
5°	1789	1800	1799	1797	1803	170
15°	1714	1730	1738	1741	1748	483
25°	1568	1589	1604	1614	1624	722
35°	1373	1395	1423	1443	1454	859
45°	1145	1169	1205	1233	1248	883
55°	886	909	953	991	1008	792
65°	604	626	677	722	739	597
75°	306	335	386	433	453	325
85°	54	77	114	128	136	71
90°	0	0	0	0	0	

TEST NUMBER: P1589816

CATALOG NUMBER: 24CZSP-SB-52-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1806.1	1806.1	1806.1	1806.1	1806.1
2.5°	1799.4	1808.4	1806.1	1798.2	1801.6
5°	1789.2	1800.5	1799.4	1797.1	1802.8
7.5°	1776.8	1789.2	1790.3	1790.3	1797.1
10°	1763.2	1775.6	1777.9	1774.5	1776.8
12.5°	1740.6	1755.3	1759.8	1759.8	1763.2
15°	1713.5	1730.4	1738.3	1740.6	1748.5
17.5°	1684.1	1702.2	1712.3	1718.0	1724.8
20°	1649.0	1668.3	1679.6	1686.3	1694.2
22.5°	1609.5	1631.0	1643.4	1650.2	1659.2
25°	1567.7	1589.1	1603.8	1614.0	1624.2
27.5°	1523.6	1543.9	1564.3	1576.7	1585.7
30°	1476.1	1497.6	1519.1	1534.9	1543.9
32.5°	1425.2	1447.9	1472.7	1489.7	1499.8
35°	1373.3	1394.7	1423.0	1443.3	1453.5
37.5°	1320.1	1342.7	1372.1	1393.6	1406.0
40°	1263.6	1287.4	1319.0	1342.7	1355.2
42.5°	1204.8	1227.5	1262.5	1289.6	1304.3
45°	1144.9	1168.7	1204.8	1233.1	1247.8
47.5°	1082.8	1105.4	1144.9	1177.7	1190.2
50°	1018.4	1039.8	1081.7	1116.7	1131.4
52.5°	952.8	975.4	1017.2	1054.5	1070.3
55°	886.1	908.7	952.8	991.2	1008.2
57.5°	818.3	840.9	886.1	925.7	946.0
60°	748.2	770.8	818.3	859.0	879.3
62.5°	675.9	699.6	748.2	790.0	811.5
65°	603.6	626.2	677.0	722.2	739.2
67.5°	531.2	553.8	603.6	648.8	669.1
70°	456.6	482.6	531.2	578.7	596.8
72.5°	378.6	408.0	456.6	506.4	524.4
75°	306.3	334.6	386.5	432.9	453.2
77.5°	235.1	265.6	314.2	361.7	382.0
80°	167.3	196.7	246.4	291.6	313.1
82.5°	106.2	132.2	182.0	222.7	238.5
85°	54.3	76.9	114.2	127.7	135.6
87.5°	15.8	27.1	40.7	50.9	56.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589816

CATALOG NUMBER: 24CZSP-SB-52-L840-S

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	15.0	16.7	15.4	17.0	17.3	15.8	17.4	16.1	17.7	18.1
	3H	16.8	18.3	17.2	18.6	19.0	17.8	19.4	18.2	19.7	20.0
	4H	17.4	18.8	17.8	19.2	19.6	18.7	20.1	19.1	20.5	20.9
	6H	17.8	19.1	18.2	19.5	19.9	19.5	20.8	19.9	21.1	21.5
	8H	17.9	19.2	18.4	19.6	20.0	19.8	21.0	20.2	21.4	21.8
	12H	18.0	19.2	18.4	19.6	20.0	19.9	21.2	20.4	21.5	22.0
4H	2H	15.8	17.2	16.2	17.6	17.9	16.4	17.8	16.8	18.1	18.5
	3H	17.8	19.0	18.2	19.4	19.8	18.7	19.9	19.1	20.3	20.7
	4H	18.5	19.6	19.0	20.0	20.5	19.7	20.8	20.1	21.2	21.6
	6H	19.1	20.0	19.5	20.5	20.9	20.6	21.6	21.1	22.0	22.5
	8H	19.2	20.1	19.7	20.5	21.0	21.0	21.9	21.4	22.3	22.8
	12H	19.3	20.1	19.8	20.6	21.0	21.2	22.0	21.7	22.5	23.0
8H	4H	19.0	19.9	19.4	20.3	20.8	20.0	20.9	20.5	21.3	21.8
	6H	19.6	20.4	20.1	20.9	21.3	21.1	21.8	21.6	22.3	22.8
	8H	19.9	20.5	20.4	21.0	21.5	21.5	22.2	22.0	22.7	23.2
	12H	20.0	20.6	20.5	21.1	21.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.1	19.9	19.5	20.3	20.8	20.0	20.8	20.5	21.3	21.8
	6H	19.8	20.5	20.3	20.9	21.4	21.1	21.8	21.6	22.3	22.8
	8H	20.0	20.6	20.6	21.1	21.7	21.6	22.2	22.2	22.7	23.3

(END OF REPORT)