

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: P1590046

Luminaire Tested: 24CZSP-SB-80-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1590046
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-80-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 8000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

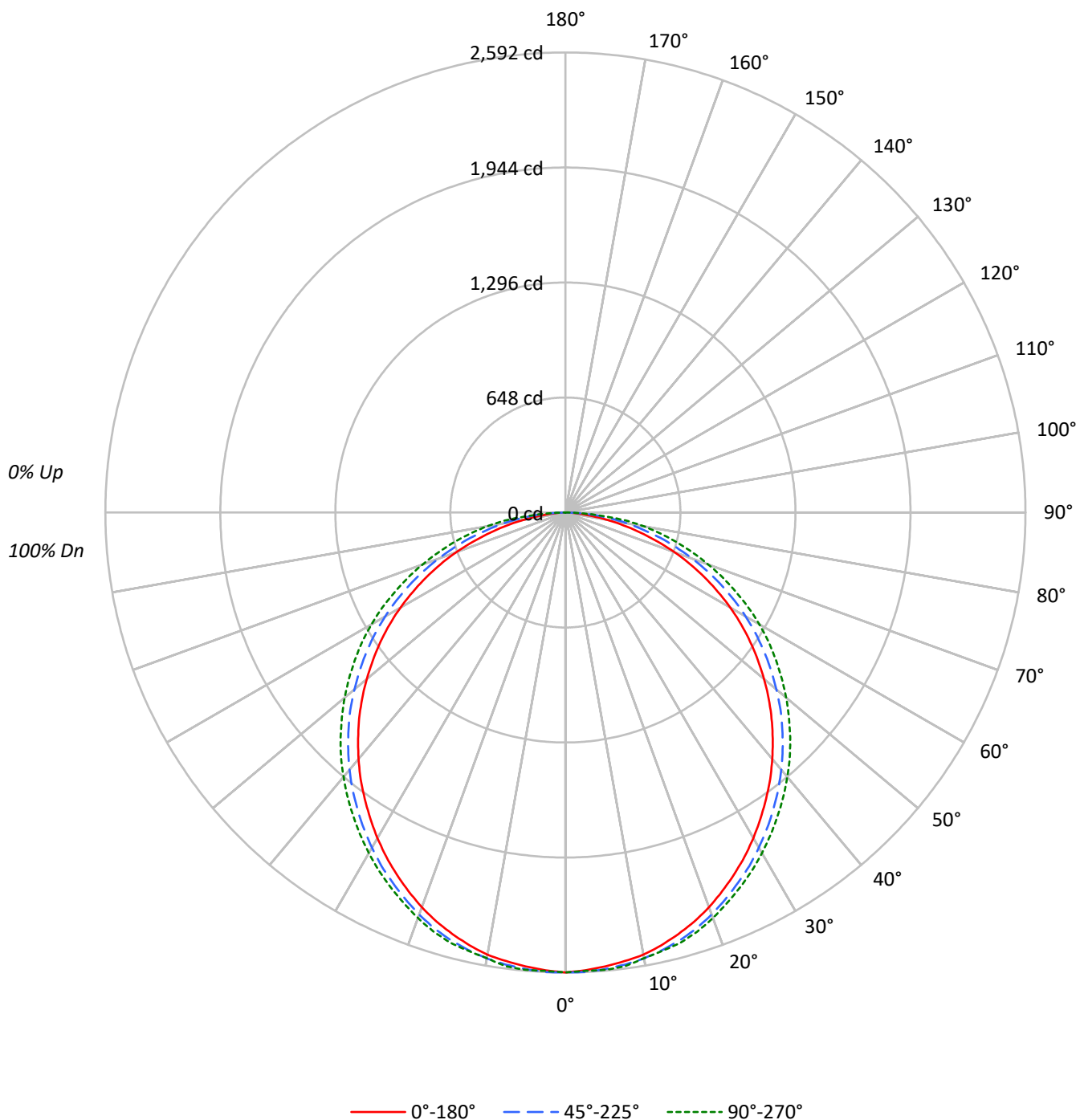
Lumens per Lamp: N/A
Luminaire Lumens: 7539.0 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 62.7
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

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Luminous Intensity Polar Plot



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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°	3969	3969	3969
5°	3947	3970	3977
10°	3935	3968	3965
15°	3899	3955	3978
20°	3857	3928	3963
25°	3801	3889	3938
30°	3746	3855	3918
35°	3684	3818	3900
40°	3625	3784	3888
45°	3559	3745	3878
50°	3482	3698	3868
55°	3395	3651	3863
60°	3289	3597	3865
65°	3139	3521	3844
70°	2934	3413	3835
75°	2601	3283	3848
80°	2117	3119	3962
85°	1367	2879	3420

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4015 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.2	3.3
10°-20°	702.3	9.3
20°-30°	1058.9	14.0
30°-40°	1274.1	16.9
40°-50°	1329.1	17.6
50°-60°	1218.2	16.2
60°-70°	956.6	12.7
70°-80°	582.2	7.7
80°-90°	172.2	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°	2006.5	26.6
0°-40°	3280.6	43.5
0°-60°	5827.9	77.3
0°-90°	7539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2592	2592	2592	2592	2592	
5°	2567	2584	2582	2579	2587	244
15°	2459	2483	2494	2498	2509	694
25°	2249	2280	2301	2316	2330	1037
35°	1970	2001	2042	2071	2086	1233
45°	1643	1677	1729	1769	1790	1267
55°	1272	1304	1367	1422	1447	1136
65°	866	898	972	1036	1061	857
75°	440	480	555	621	650	466
85°	78	110	164	183	195	101
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2591.6	2591.6	2591.6	2591.6	2591.6
2.5°	2581.9	2594.9	2591.6	2580.3	2585.2
5°	2567.3	2583.5	2581.9	2578.7	2586.8
7.5°	2549.5	2567.3	2568.9	2568.9	2578.7
10°	2530.0	2547.9	2551.1	2546.2	2549.5
12.5°	2497.6	2518.7	2525.2	2525.2	2530.0
15°	2458.7	2483.0	2494.3	2497.6	2508.9
17.5°	2416.5	2442.4	2457.0	2465.1	2474.9
20°	2366.2	2393.8	2410.0	2419.7	2431.1
22.5°	2309.5	2340.3	2358.1	2367.8	2380.8
25°	2249.4	2280.3	2301.3	2315.9	2330.5
27.5°	2186.2	2215.4	2244.6	2262.4	2275.4
30°	2118.1	2148.9	2179.7	2202.4	2215.4
32.5°	2045.1	2077.5	2113.2	2137.5	2152.1
35°	1970.5	2001.3	2041.9	2071.0	2085.6
37.5°	1894.3	1926.7	1968.9	1999.7	2017.5
40°	1813.2	1847.2	1892.6	1926.7	1944.5
42.5°	1728.8	1761.3	1811.6	1850.5	1871.6
45°	1642.9	1676.9	1728.8	1769.4	1790.5
47.5°	1553.7	1586.1	1642.9	1689.9	1707.8
50°	1461.2	1492.1	1552.1	1602.3	1623.4
52.5°	1367.2	1399.6	1459.6	1513.1	1535.9
55°	1271.5	1303.9	1367.2	1422.3	1446.7
57.5°	1174.2	1206.6	1271.5	1328.3	1357.5
60°	1073.6	1106.1	1174.2	1232.6	1261.8
62.5°	969.8	1003.9	1073.6	1133.6	1164.5
65°	866.0	898.5	971.5	1036.3	1060.7
67.5°	762.2	794.7	866.0	930.9	960.1
70°	655.2	692.5	762.2	830.4	856.3
72.5°	543.3	585.5	655.2	726.6	752.5
75°	439.5	480.1	554.7	621.2	650.3
77.5°	337.3	381.1	450.9	519.0	548.2
80°	240.0	282.2	353.6	418.4	449.2
82.5°	152.4	189.8	261.1	319.5	342.2
85°	77.8	110.3	163.8	183.3	194.6
87.5°	22.7	38.9	58.4	73.0	81.1
90°	0.0	0.0	0.0	0.0	0.0

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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	16.3	17.9	16.7	18.3	18.6	17.0	18.7	17.4	19.0	19.3
	3H	18.1	19.6	18.4	19.9	20.2	19.1	20.6	19.5	20.9	21.3
	4H	18.7	20.1	19.1	20.4	20.8	20.0	21.4	20.4	21.7	22.1
	6H	19.1	20.4	19.5	20.8	21.2	20.7	22.0	21.1	22.4	22.8
	8H	19.2	20.4	19.6	20.8	21.2	21.0	22.3	21.4	22.7	23.1
	12H	19.2	20.4	19.7	20.8	21.3	21.2	22.4	21.6	22.8	23.2
4H	2H	17.1	18.5	17.5	18.8	19.2	17.6	19.0	18.0	19.4	19.8
	3H	19.0	20.2	19.5	20.6	21.0	19.9	21.1	20.4	21.5	21.9
	4H	19.8	20.9	20.2	21.3	21.7	21.0	22.0	21.4	22.5	22.9
	6H	20.3	21.3	20.8	21.7	22.2	21.9	22.8	22.3	23.3	23.7
	8H	20.5	21.4	20.9	21.8	22.3	22.2	23.1	22.7	23.6	24.0
	12H	20.5	21.3	21.0	21.8	22.3	22.5	23.3	23.0	23.8	24.2
8H	4H	20.2	21.1	20.7	21.6	22.0	21.3	22.1	21.7	22.6	23.1
	6H	20.9	21.6	21.4	22.1	22.6	22.3	23.1	22.8	23.5	24.0
	8H	21.1	21.8	21.6	22.3	22.8	22.8	23.5	23.3	24.0	24.4
	12H	21.2	21.8	21.8	22.3	22.9	23.1	23.7	23.6	24.2	24.8
12H	4H	20.3	21.1	20.8	21.6	22.1	21.3	22.1	21.8	22.6	23.0
	6H	21.0	21.7	21.6	22.2	22.7	22.4	23.1	22.9	23.5	24.0
	8H	21.3	21.9	21.8	22.4	22.9	22.9	23.5	23.4	24.0	24.5

(END OF REPORT)