

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: P1590036

Luminaire Tested: 24CZSP-SB-80-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1590036
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-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 8000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

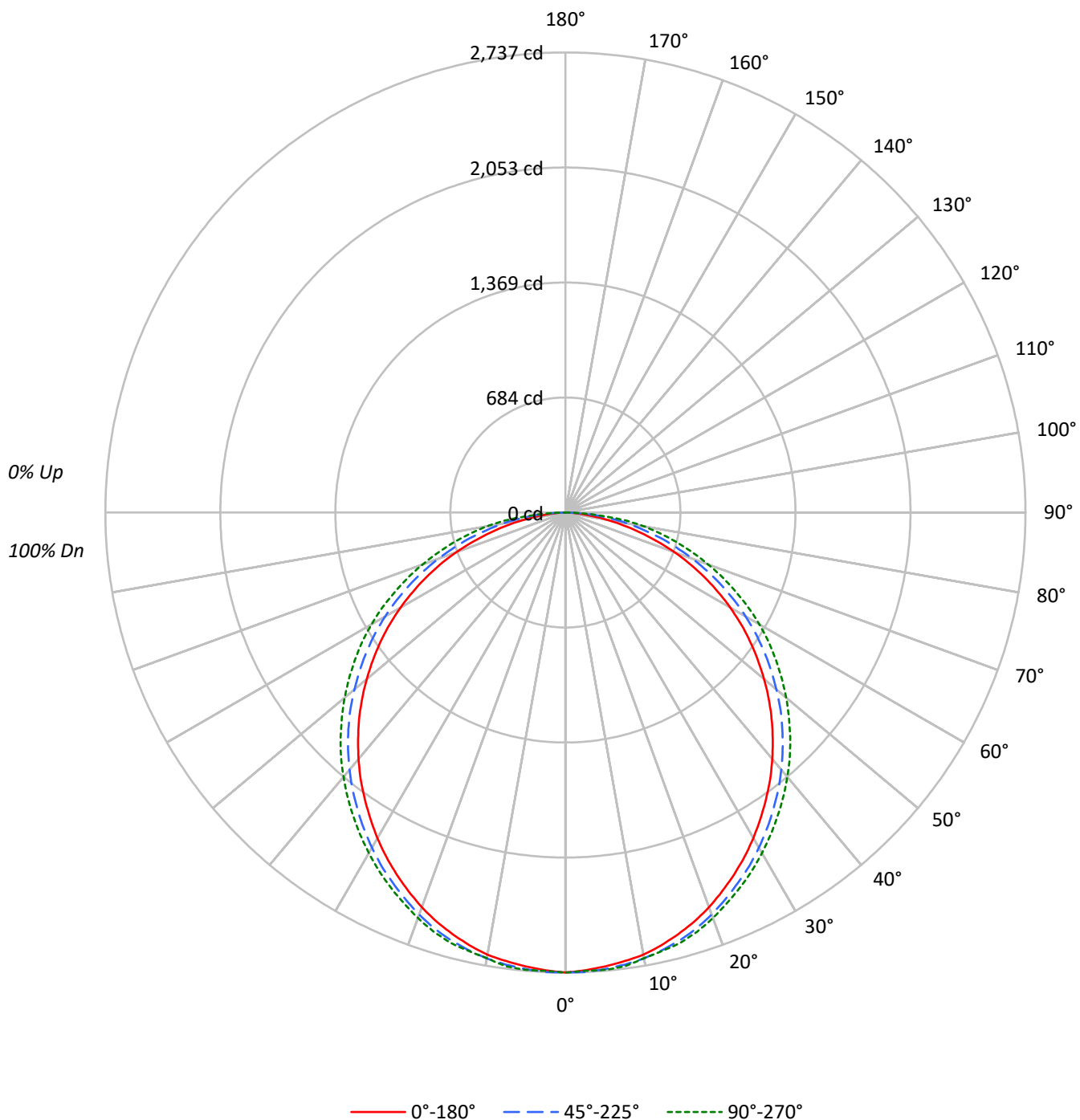
Lumens per Lamp: N/A
Luminaire Lumens: 7961.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1590036

CATALOG NUMBER: 24CZSP-SB-80-L840-S

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°	4192	4192	4192
5°	4168	4192	4200
10°	4155	4190	4187
15°	4117	4177	4201
20°	4073	4148	4184
25°	4014	4107	4159
30°	3956	4071	4137
35°	3891	4031	4118
40°	3828	3996	4106
45°	3758	3954	4095
50°	3677	3905	4085
55°	3585	3855	4079
60°	3473	3798	4081
65°	3314	3718	4059
70°	3098	3604	4049
75°	2746	3466	4064
80°	2236	3293	4184
85°	1445	3040	3611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4241 cd/sqm

TEST NUMBER: P1590036

CATALOG NUMBER: 24CZSP-SB-80-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.0	3.3
10°-20°	741.6	9.3
20°-30°	1118.2	14.0
30°-40°	1345.5	16.9
40°-50°	1403.5	17.6
50°-60°	1286.4	16.2
60°-70°	1010.2	12.7
70°-80°	614.8	7.7
80°-90°	181.9	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°	2118.8	26.6
0°-40°	3464.3	43.5
0°-60°	6154.2	77.3
0°-90°	7961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7961.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2737	2737	2737	2737	2737	
5°	2711	2728	2726	2723	2732	258
15°	2596	2622	2634	2637	2649	732
25°	2375	2408	2430	2446	2461	1095
35°	2081	2113	2156	2187	2202	1302
45°	1735	1771	1826	1868	1891	1338
55°	1343	1377	1444	1502	1528	1200
65°	914	949	1026	1094	1120	905
75°	464	507	586	656	687	492
85°	82	116	173	194	206	107
90°	0	0	0	0	0	

TEST NUMBER: P1590036

CATALOG NUMBER: 24CZSP-SB-80-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2736.7	2736.7	2736.7	2736.7	2736.7
2.5°	2726.4	2740.1	2736.7	2724.7	2729.9
5°	2711.0	2728.2	2726.4	2723.0	2731.6
7.5°	2692.2	2711.0	2712.7	2712.7	2723.0
10°	2671.6	2690.5	2693.9	2688.8	2692.2
12.5°	2637.4	2659.6	2666.5	2666.5	2671.6
15°	2596.3	2622.0	2634.0	2637.4	2649.4
17.5°	2551.8	2579.2	2594.6	2603.1	2613.4
20°	2498.7	2527.8	2544.9	2555.2	2567.2
22.5°	2438.7	2471.3	2490.1	2500.4	2514.1
25°	2375.4	2407.9	2430.2	2445.6	2461.0
27.5°	2308.6	2339.4	2370.2	2389.1	2402.8
30°	2236.6	2269.2	2301.7	2325.7	2339.4
32.5°	2159.6	2193.8	2231.5	2257.2	2272.6
35°	2080.8	2113.3	2156.1	2187.0	2202.4
37.5°	2000.3	2034.6	2079.1	2111.6	2130.5
40°	1914.7	1950.6	1998.6	2034.6	2053.4
42.5°	1825.6	1859.9	1913.0	1954.1	1976.3
45°	1734.9	1770.8	1825.6	1868.4	1890.7
47.5°	1640.7	1674.9	1734.9	1784.5	1803.4
50°	1543.0	1575.6	1638.9	1692.0	1714.3
52.5°	1443.7	1478.0	1541.3	1597.8	1621.8
55°	1342.7	1376.9	1443.7	1501.9	1527.6
57.5°	1239.9	1274.2	1342.7	1402.6	1433.4
60°	1133.7	1168.0	1239.9	1301.6	1332.4
62.5°	1024.1	1060.1	1133.7	1197.1	1229.6
65°	914.5	948.8	1025.8	1094.3	1120.0
67.5°	804.9	839.2	914.5	983.0	1013.9
70°	691.9	731.3	804.9	876.8	904.2
72.5°	573.7	618.2	691.9	767.2	794.6
75°	464.1	506.9	585.7	655.9	686.7
77.5°	356.2	402.5	476.1	548.0	578.9
80°	253.5	298.0	373.3	441.8	474.4
82.5°	161.0	200.4	275.7	337.4	361.4
85°	82.2	116.5	173.0	193.5	205.5
87.5°	24.0	41.1	61.7	77.1	85.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1590036

CATALOG NUMBER: 24CZSP-SB-80-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	16.5	18.1	16.8	18.5	18.8	17.2	18.9	17.6	19.2	19.5
	3H	18.2	19.8	18.6	20.1	20.4	19.3	20.8	19.7	21.1	21.5
	4H	18.9	20.3	19.3	20.6	21.0	20.2	21.6	20.6	21.9	22.3
	6H	19.3	20.6	19.7	21.0	21.3	20.9	22.2	21.3	22.6	23.0
	8H	19.4	20.6	19.8	21.0	21.4	21.2	22.5	21.6	22.8	23.2
	12H	19.4	20.6	19.9	21.0	21.4	21.4	22.6	21.8	23.0	23.4
4H	2H	17.2	18.7	17.6	19.0	19.4	17.8	19.2	18.2	19.6	20.0
	3H	19.2	20.4	19.6	20.8	21.2	20.1	21.3	20.5	21.7	22.1
	4H	20.0	21.1	20.4	21.5	21.9	21.1	22.2	21.6	22.6	23.1
	6H	20.5	21.5	21.0	21.9	22.4	22.1	23.0	22.5	23.4	23.9
	8H	20.7	21.5	21.1	22.0	22.4	22.4	23.3	22.9	23.8	24.2
	12H	20.7	21.5	21.2	22.0	22.5	22.7	23.5	23.2	24.0	24.4
8H	4H	20.4	21.3	20.9	21.8	22.2	21.4	22.3	21.9	22.8	23.2
	6H	21.1	21.8	21.6	22.3	22.8	22.5	23.2	23.0	23.7	24.2
	8H	21.3	22.0	21.8	22.5	23.0	23.0	23.6	23.5	24.1	24.6
	12H	21.4	22.0	21.9	22.5	23.1	23.3	23.9	23.8	24.4	25.0
12H	4H	20.5	21.3	21.0	21.8	22.3	21.5	22.3	22.0	22.7	23.2
	6H	21.2	21.9	21.7	22.4	22.9	22.6	23.2	23.1	23.7	24.2
	8H	21.5	22.1	22.0	22.6	23.1	23.1	23.7	23.6	24.2	24.7

(END OF REPORT)