

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: P1590048

Luminaire Tested: 24CZSP-SB-80-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1590048
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-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 8000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

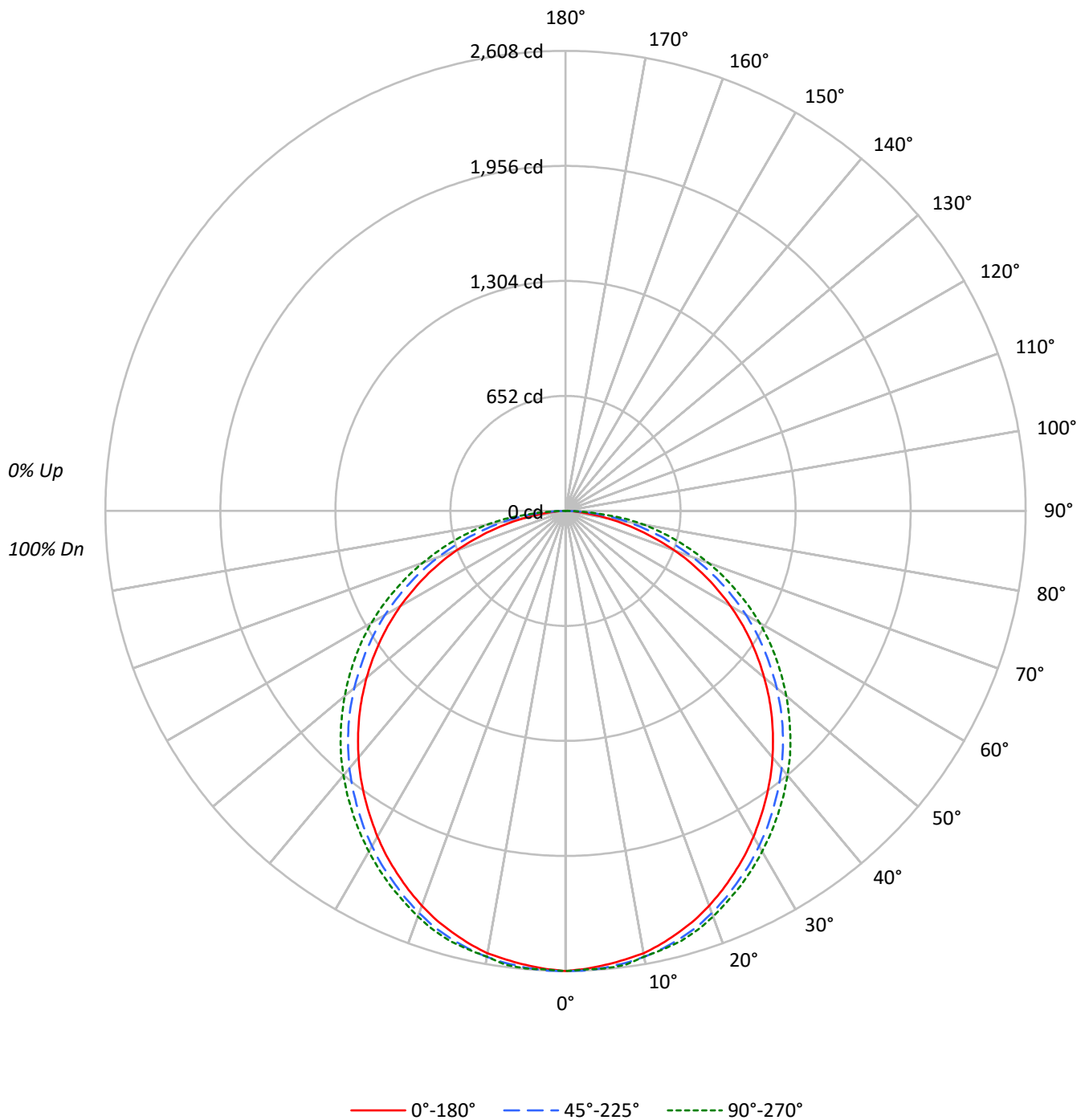
Lumens per Lamp: N/A
Luminaire Lumens: 7588.0 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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°	3995	3995	3995
5°	3973	3995	4003
10°	3960	3993	3991
15°	3924	3981	4004
20°	3882	3954	3988
25°	3826	3914	3964
30°	3770	3880	3944
35°	3708	3843	3925
40°	3649	3809	3913
45°	3582	3769	3903
50°	3504	3722	3893
55°	3417	3675	3888
60°	3310	3620	3890
65°	3159	3544	3869
70°	2953	3436	3860
75°	2618	3304	3874
80°	2131	3139	3989
85°	1378	2898	3443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	3.3
10°-20°	706.9	9.3
20°-30°	1065.8	14.0
30°-40°	1282.4	16.9
40°-50°	1337.7	17.6
50°-60°	1226.2	16.2
60°-70°	962.8	12.7
70°-80°	586.0	7.7
80°-90°	173.4	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°	2019.6	26.6
0°-40°	3302.0	43.5
0°-60°	5865.8	77.3
0°-90°	7588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2608	2608	2608	2608	2608	
5°	2584	2600	2599	2595	2604	245
15°	2475	2499	2511	2514	2525	698
25°	2264	2295	2316	2331	2346	1043
35°	1983	2014	2055	2084	2099	1241
45°	1654	1688	1740	1781	1802	1275
55°	1280	1312	1376	1432	1456	1144
65°	872	904	978	1043	1068	862
75°	442	483	558	625	655	469
85°	78	111	165	184	196	102
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2608.5	2608.5	2608.5	2608.5	2608.5
2.5°	2598.7	2611.8	2608.5	2597.1	2602.0
5°	2584.0	2600.3	2598.7	2595.4	2603.6
7.5°	2566.1	2584.0	2585.6	2585.6	2595.4
10°	2546.5	2564.4	2567.7	2562.8	2566.1
12.5°	2513.8	2535.0	2541.6	2541.6	2546.5
15°	2474.6	2499.1	2510.6	2513.8	2525.2
17.5°	2432.2	2458.3	2473.0	2481.2	2491.0
20°	2381.6	2409.3	2425.7	2435.5	2446.9
22.5°	2324.5	2355.5	2373.4	2383.2	2396.3
25°	2264.1	2295.1	2316.3	2331.0	2345.7
27.5°	2200.4	2229.8	2259.2	2277.1	2290.2
30°	2131.8	2162.9	2193.9	2216.7	2229.8
32.5°	2058.4	2091.0	2126.9	2151.4	2166.1
35°	1983.3	2014.3	2055.1	2084.5	2099.2
37.5°	1906.6	1939.2	1981.7	2012.7	2030.6
40°	1825.0	1859.2	1904.9	1939.2	1957.2
42.5°	1740.1	1772.7	1823.3	1862.5	1883.7
45°	1653.6	1687.8	1740.1	1780.9	1802.1
47.5°	1563.8	1596.4	1653.6	1700.9	1718.9
50°	1470.7	1501.8	1562.2	1612.8	1634.0
52.5°	1376.1	1408.7	1469.1	1523.0	1545.8
55°	1279.8	1312.4	1376.1	1431.6	1456.1
57.5°	1181.8	1214.5	1279.8	1336.9	1366.3
60°	1080.6	1113.3	1181.8	1240.6	1270.0
62.5°	976.1	1010.4	1080.6	1141.0	1172.0
65°	871.7	904.3	977.8	1043.1	1067.6
67.5°	767.2	799.9	871.7	937.0	966.3
70°	659.5	697.0	767.2	835.8	861.9
72.5°	546.8	589.3	659.5	731.3	757.4
75°	442.4	483.2	558.3	625.2	654.6
77.5°	339.5	383.6	453.8	522.4	551.7
80°	241.6	284.0	355.9	421.1	452.2
82.5°	153.4	191.0	262.8	321.6	344.4
85°	78.4	111.0	164.9	184.5	195.9
87.5°	22.9	39.2	58.8	73.5	81.6
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	18.0	16.7	18.3	18.6	17.0	18.7	17.4	19.0	19.3
	3H	18.1	19.6	18.5	19.9	20.3	19.1	20.6	19.5	21.0	21.3
	4H	18.7	20.1	19.1	20.5	20.8	20.0	21.4	20.4	21.8	22.1
	6H	19.1	20.4	19.5	20.8	21.2	20.7	22.1	21.1	22.4	22.8
	8H	19.2	20.5	19.6	20.9	21.3	21.0	22.3	21.5	22.7	23.1
	12H	19.3	20.5	19.7	20.8	21.3	21.2	22.4	21.7	22.8	23.2
4H	2H	17.1	18.5	17.5	18.8	19.2	17.7	19.1	18.0	19.4	19.8
	3H	19.1	20.3	19.5	20.7	21.1	20.0	21.2	20.4	21.6	22.0
	4H	19.8	20.9	20.2	21.3	21.7	21.0	22.1	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	22.3	23.1	22.7	23.6	24.1
	12H	20.6	21.4	21.0	21.8	22.3	22.5	23.3	23.0	23.8	24.3
8H	4H	20.3	21.1	20.7	21.6	22.1	21.3	22.2	21.7	22.6	23.1
	6H	20.9	21.7	21.4	22.2	22.6	22.3	23.1	22.8	23.6	24.0
	8H	21.1	21.8	21.6	22.3	22.8	22.8	23.5	23.3	24.0	24.5
	12H	21.3	21.9	21.8	22.3	22.9	23.2	23.8	23.7	24.2	24.8
12H	4H	20.3	21.1	20.8	21.6	22.1	21.3	22.1	21.8	22.6	23.1
	6H	21.1	21.7	21.6	22.2	22.7	22.4	23.1	22.9	23.5	24.1
	8H	21.3	21.9	21.8	22.4	23.0	22.9	23.5	23.4	24.0	24.6

(END OF REPORT)