

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: P1589948

Luminaire Tested: 24CZSP-SB-65-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589948
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-65-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

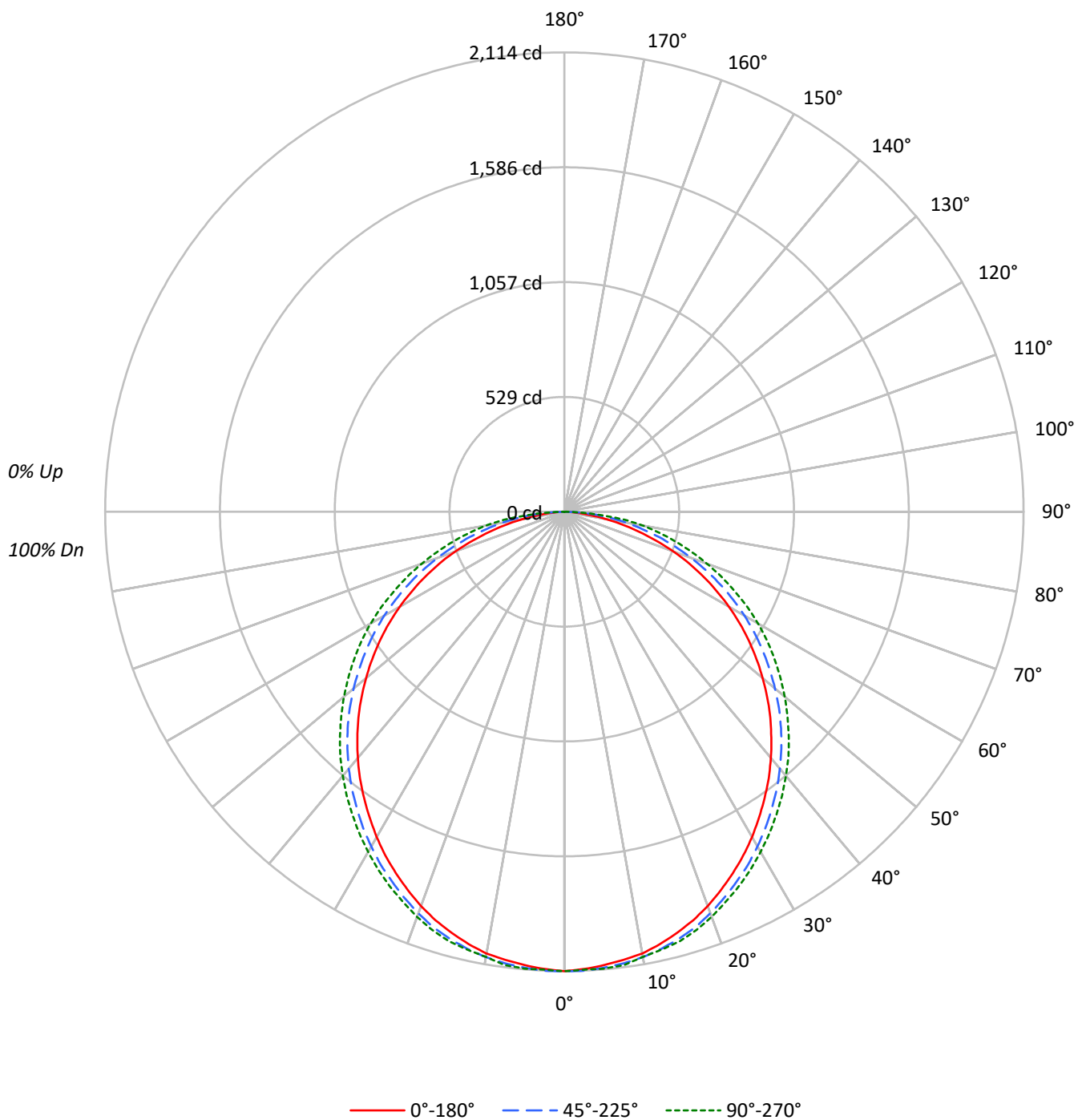
Lumens per Lamp: N/A
Luminaire Lumens: 6150.0 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 47.9
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3238	3238	3238
5°	3220	3238	3244
10°	3210	3237	3235
15°	3180	3226	3245
20°	3146	3204	3232
25°	3101	3173	3213
30°	3056	3145	3196
35°	3005	3114	3181
40°	2957	3087	3172
45°	2903	3055	3164
50°	2840	3017	3156
55°	2770	2978	3151
60°	2683	2934	3153
65°	2560	2872	3136
70°	2394	2785	3128
75°	2122	2678	3139
80°	1727	2544	3233
85°	1116	2348	2791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.1	3.3
10°-20°	572.9	9.3
20°-30°	863.8	14.0
30°-40°	1039.4	16.9
40°-50°	1084.2	17.6
50°-60°	993.8	16.2
60°-70°	780.4	12.7
70°-80°	474.9	7.7
80°-90°	140.5	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°	1636.8	26.6
0°-40°	2676.2	43.5
0°-60°	4754.2	77.3
0°-90°	6150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6150.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2094	2108	2106	2104	2110	199
15°	2006	2026	2035	2037	2047	566
25°	1835	1860	1877	1889	1901	846
35°	1607	1633	1666	1690	1701	1006
45°	1340	1368	1410	1443	1461	1033
55°	1037	1064	1115	1160	1180	927
65°	706	733	792	845	865	699
75°	358	392	452	507	530	380
85°	64	90	134	150	159	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2114.2	2114.2	2114.2	2114.2	2114.2
2.5°	2106.2	2116.8	2114.2	2104.9	2108.9
5°	2094.3	2107.5	2106.2	2103.6	2110.2
7.5°	2079.8	2094.3	2095.6	2095.6	2103.6
10°	2063.9	2078.4	2081.1	2077.1	2079.8
12.5°	2037.4	2054.6	2059.9	2059.9	2063.9
15°	2005.7	2025.5	2034.8	2037.4	2046.7
17.5°	1971.3	1992.4	2004.3	2011.0	2018.9
20°	1930.3	1952.8	1966.0	1973.9	1983.2
22.5°	1884.0	1909.1	1923.6	1931.6	1942.2
25°	1835.0	1860.1	1877.3	1889.2	1901.2
27.5°	1783.4	1807.2	1831.0	1845.6	1856.2
30°	1727.8	1753.0	1778.1	1796.6	1807.2
32.5°	1668.3	1694.8	1723.9	1743.7	1755.6
35°	1607.4	1632.6	1665.7	1689.5	1701.4
37.5°	1545.3	1571.7	1606.1	1631.3	1645.8
40°	1479.1	1506.9	1543.9	1571.7	1586.3
42.5°	1410.3	1436.8	1477.8	1509.5	1526.7
45°	1340.2	1368.0	1410.3	1443.4	1460.6
47.5°	1267.4	1293.9	1340.2	1378.6	1393.1
50°	1192.0	1217.2	1266.1	1307.1	1324.3
52.5°	1115.3	1141.8	1190.7	1234.4	1252.9
55°	1037.2	1063.7	1115.3	1160.3	1180.1
57.5°	957.9	984.3	1037.2	1083.5	1107.4
60°	875.8	902.3	957.9	1005.5	1029.3
62.5°	791.2	818.9	875.8	924.8	949.9
65°	706.5	732.9	792.5	845.4	865.2
67.5°	621.8	648.3	706.5	759.4	783.2
70°	534.5	564.9	621.8	677.4	698.5
72.5°	443.2	477.6	534.5	592.7	613.9
75°	358.5	391.6	452.5	506.7	530.5
77.5°	275.2	310.9	367.8	423.4	447.2
80°	195.8	230.2	288.4	341.3	366.5
82.5°	124.4	154.8	213.0	260.6	279.2
85°	63.5	90.0	133.6	149.5	158.8
87.5°	18.5	31.8	47.6	59.5	66.2
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	15.6	17.2	15.9	17.6	17.9	16.3	18.0	16.7	18.3	18.6
	3H	17.4	18.9	17.7	19.2	19.5	18.4	19.9	18.8	20.2	20.6
	4H	18.0	19.4	18.4	19.7	20.1	19.3	20.7	19.7	21.0	21.4
	6H	18.4	19.7	18.8	20.1	20.5	20.0	21.3	20.4	21.7	22.1
	8H	18.5	19.7	18.9	20.1	20.5	20.3	21.6	20.7	21.9	22.3
	12H	18.5	19.7	19.0	20.1	20.5	20.5	21.7	20.9	22.1	22.5
4H	2H	16.4	17.8	16.7	18.1	18.5	16.9	18.3	17.3	18.7	19.1
	3H	18.3	19.5	18.8	19.9	20.3	19.2	20.4	19.6	20.8	21.2
	4H	19.1	20.2	19.5	20.6	21.0	20.3	21.3	20.7	21.7	22.2
	6H	19.6	20.6	20.1	21.0	21.5	21.2	22.1	21.6	22.5	23.0
	8H	19.8	20.6	20.2	21.1	21.5	21.5	22.4	22.0	22.9	23.3
	12H	19.8	20.6	20.3	21.1	21.6	21.8	22.6	22.3	23.1	23.5
8H	4H	19.5	20.4	20.0	20.9	21.3	20.6	21.4	21.0	21.9	22.3
	6H	20.2	20.9	20.7	21.4	21.9	21.6	22.4	22.1	22.8	23.3
	8H	20.4	21.1	20.9	21.6	22.1	22.1	22.7	22.6	23.3	23.7
	12H	20.5	21.1	21.0	21.6	22.2	22.4	23.0	22.9	23.5	24.1
12H	4H	19.6	20.4	20.1	20.9	21.4	20.6	21.4	21.1	21.9	22.3
	6H	20.3	21.0	20.8	21.5	22.0	21.7	22.3	22.2	22.8	23.3
	8H	20.6	21.2	21.1	21.7	22.2	22.2	22.8	22.7	23.3	23.8

(END OF REPORT)