

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: P1589968

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589968
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-65VHE-L945-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

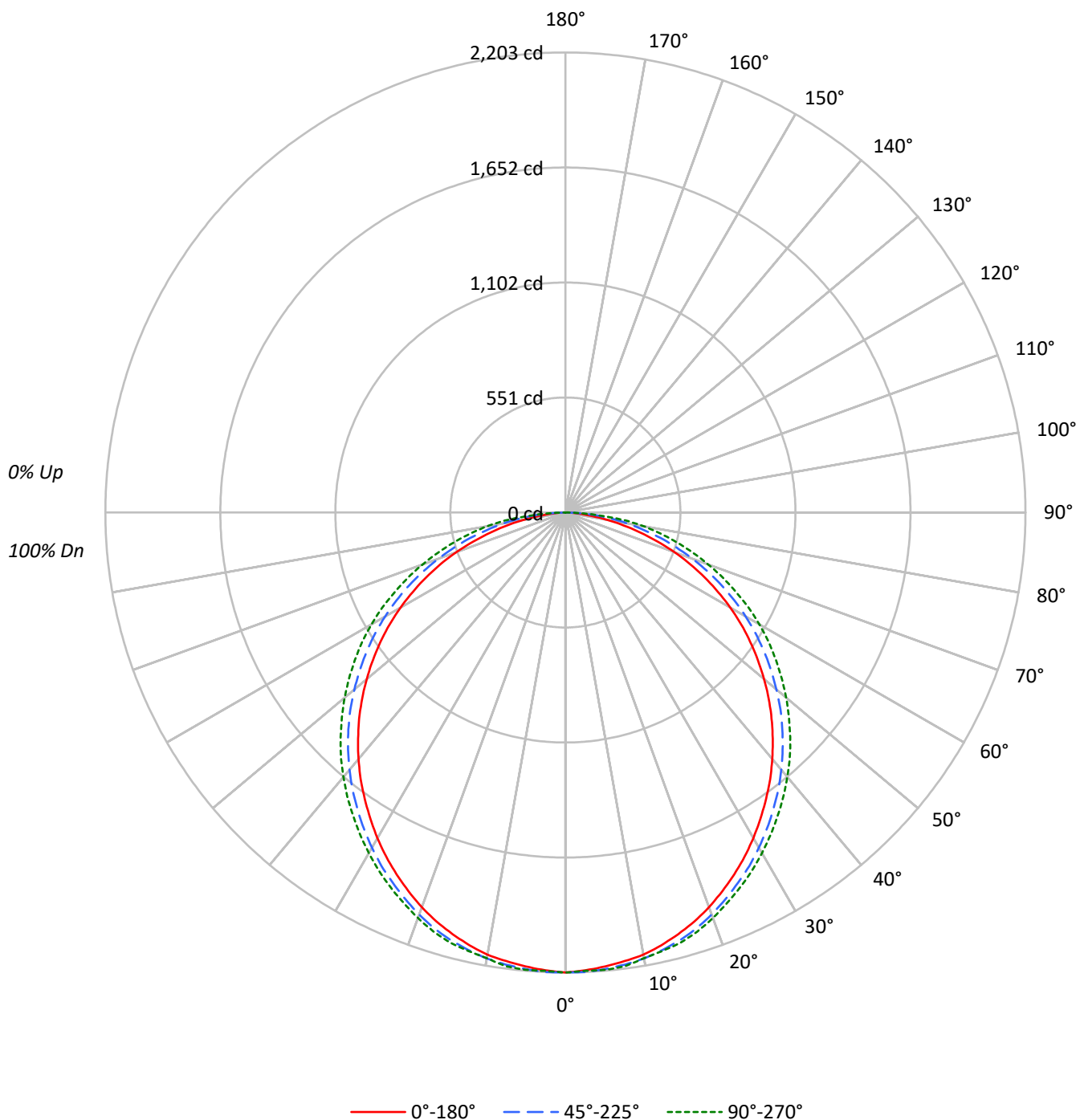
Lumens per Lamp: N/A
Luminaire Lumens: 6408.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 50.1
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: P1589968

CATALOG NUMBER: 24CZSP-SB-65VHE-L945-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°	3374	3374	3374
5°	3355	3374	3380
10°	3345	3372	3370
15°	3314	3362	3381
20°	3278	3339	3368
25°	3231	3306	3348
30°	3184	3277	3330
35°	3132	3245	3315
40°	3081	3216	3305
45°	3025	3183	3297
50°	2959	3143	3288
55°	2886	3103	3283
60°	2796	3057	3285
65°	2668	2992	3267
70°	2494	2901	3259
75°	2211	2790	3271
80°	1799	2650	3368
85°	1163	2446	2907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3413 cd/sqm

TEST NUMBER: P1589968

CATALOG NUMBER: 24CZSP-SB-65VHE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.5	3.3
10°-20°	597.0	9.3
20°-30°	900.1	14.0
30°-40°	1083.0	16.9
40°-50°	1129.7	17.6
50°-60°	1035.4	16.2
60°-70°	813.1	12.7
70°-80°	494.9	7.7
80°-90°	146.4	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°	1705.5	26.6
0°-40°	2788.5	43.5
0°-60°	4953.6	77.3
0°-90°	6408.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6408.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2203	2203	2203	2203	2203	
5°	2182	2196	2195	2192	2199	207
15°	2090	2110	2120	2123	2132	590
25°	1912	1938	1956	1968	1981	881
35°	1675	1701	1736	1760	1773	1048
45°	1396	1425	1470	1504	1522	1077
55°	1081	1108	1162	1209	1230	966
65°	736	764	826	881	902	728
75°	374	408	471	528	553	396
85°	66	94	139	156	165	86
90°	0	0	0	0	0	

TEST NUMBER: P1589968

CATALOG NUMBER: 24CZSP-SB-65VHE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2202.8	2202.8	2202.8	2202.8	2202.8
2.5°	2194.6	2205.6	2202.8	2193.2	2197.3
5°	2182.2	2196.0	2194.6	2191.8	2198.7
7.5°	2167.0	2182.2	2183.5	2183.5	2191.8
10°	2150.5	2165.6	2168.4	2164.3	2167.0
12.5°	2122.9	2140.8	2146.3	2146.3	2150.5
15°	2089.8	2110.5	2120.1	2122.9	2132.5
17.5°	2054.0	2076.0	2088.4	2095.3	2103.6
20°	2011.2	2034.7	2048.5	2056.7	2066.4
22.5°	1963.0	1989.2	2004.3	2012.6	2023.6
25°	1912.0	1938.2	1956.1	1968.5	1980.9
27.5°	1858.2	1883.0	1907.8	1923.0	1934.0
30°	1800.3	1826.5	1852.7	1872.0	1883.0
32.5°	1738.3	1765.9	1796.2	1816.9	1829.3
35°	1674.9	1701.1	1735.5	1760.3	1772.8
37.5°	1610.1	1637.7	1673.5	1699.7	1714.9
40°	1541.2	1570.1	1608.7	1637.7	1652.8
42.5°	1469.5	1497.1	1539.8	1572.9	1590.8
45°	1396.4	1425.4	1469.5	1503.9	1521.9
47.5°	1320.6	1348.2	1396.4	1436.4	1451.6
50°	1242.0	1268.2	1319.2	1362.0	1379.9
52.5°	1162.1	1189.6	1240.7	1286.1	1305.4
55°	1080.7	1108.3	1162.1	1208.9	1229.6
57.5°	998.0	1025.6	1080.7	1129.0	1153.8
60°	912.6	940.1	998.0	1047.7	1072.5
62.5°	824.3	853.3	912.6	963.6	989.8
65°	736.1	763.7	825.7	880.9	901.5
67.5°	647.9	675.5	736.1	791.3	816.1
70°	556.9	588.6	647.9	705.8	727.8
72.5°	461.8	497.6	556.9	617.6	639.6
75°	373.6	408.0	471.4	528.0	552.8
77.5°	286.7	323.9	383.2	441.1	465.9
80°	204.0	239.9	300.5	355.7	381.8
82.5°	129.6	161.3	221.9	271.6	290.9
85°	66.2	93.7	139.2	155.8	165.4
87.5°	19.3	33.1	49.6	62.0	68.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589968

CATALOG NUMBER: 24CZSP-SB-65VHE-L945-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	15.7	17.4	16.1	17.7	18.0	16.5	18.1	16.8	18.4	18.7
	3H	17.5	19.0	17.9	19.3	19.7	18.5	20.0	18.9	20.4	20.7
	4H	18.1	19.5	18.5	19.9	20.3	19.4	20.8	19.8	21.2	21.5
	6H	18.5	19.8	18.9	20.2	20.6	20.1	21.5	20.6	21.8	22.2
	8H	18.6	19.9	19.0	20.3	20.7	20.4	21.7	20.9	22.1	22.5
	12H	18.7	19.9	19.1	20.3	20.7	20.6	21.8	21.1	22.2	22.7
4H	2H	16.5	17.9	16.9	18.3	18.6	17.1	18.5	17.5	18.8	19.2
	3H	18.5	19.7	18.9	20.1	20.5	19.4	20.6	19.8	21.0	21.4
	4H	19.2	20.3	19.7	20.7	21.2	20.4	21.5	20.8	21.9	22.3
	6H	19.8	20.7	20.2	21.1	21.6	21.3	22.3	21.8	22.7	23.1
	8H	19.9	20.8	20.4	21.2	21.7	21.7	22.6	22.1	23.0	23.5
	12H	20.0	20.8	20.5	21.3	21.7	21.9	22.7	22.4	23.2	23.7
8H	4H	19.7	20.6	20.1	21.0	21.5	20.7	21.6	21.2	22.0	22.5
	6H	20.3	21.1	20.8	21.6	22.0	21.8	22.5	22.2	23.0	23.5
	8H	20.5	21.2	21.1	21.7	22.2	22.2	22.9	22.7	23.4	23.9
	12H	20.7	21.3	21.2	21.8	22.3	22.6	23.2	23.1	23.7	24.2
12H	4H	19.8	20.6	20.2	21.0	21.5	20.7	21.5	21.2	22.0	22.5
	6H	20.5	21.1	21.0	21.6	22.1	21.8	22.5	22.3	22.9	23.5
	8H	20.7	21.3	21.2	21.8	22.4	22.3	22.9	22.8	23.4	24.0

(END OF REPORT)