

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: P1589969

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-7)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-SB-65VHE-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

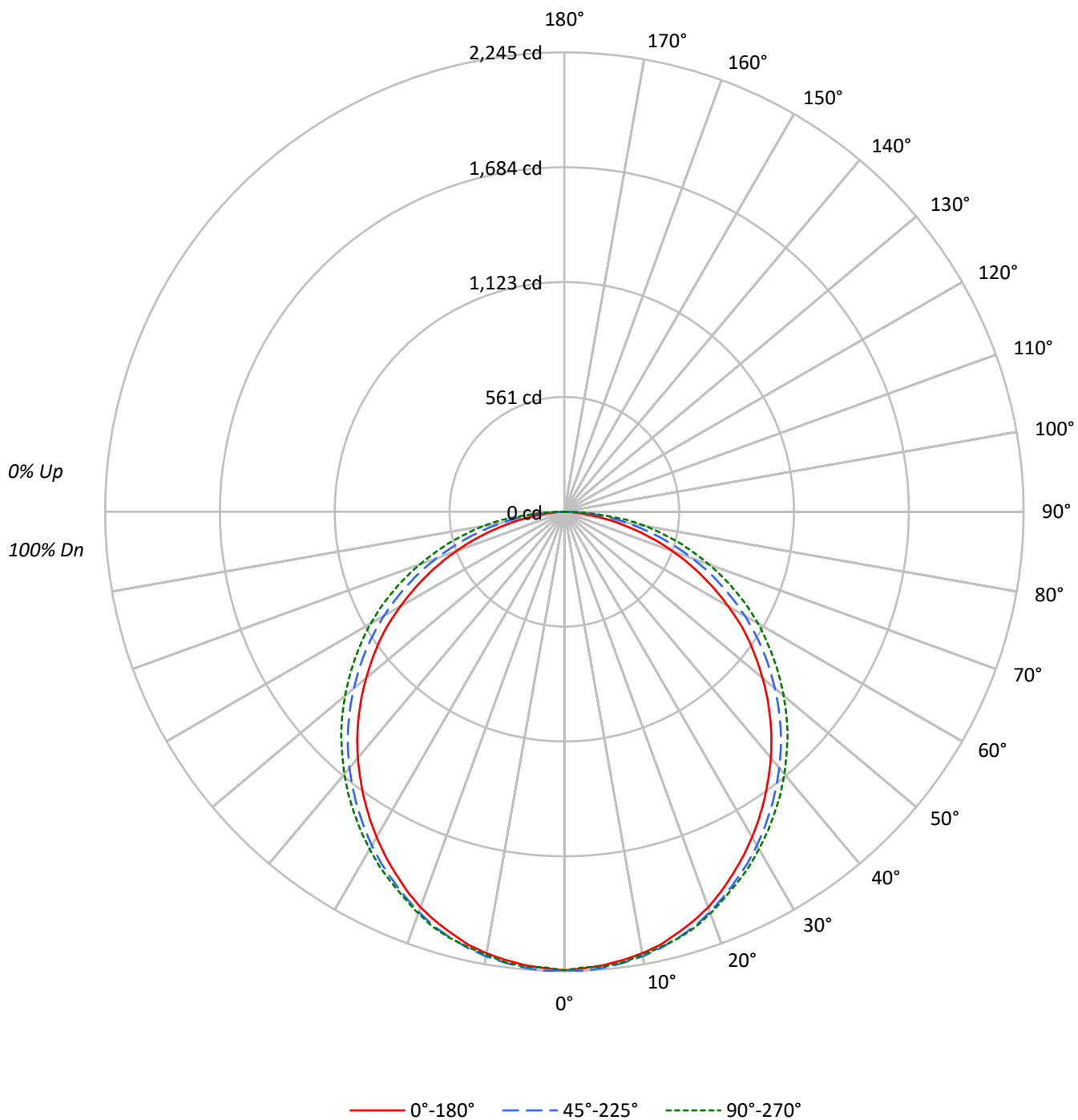
Lumens per Lamp: N/A
Luminaire Lumens: 6539.0 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	93	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	63	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3432	3432	3432
5°	3419	3439	3430
10°	3407	3431	3418
15°	3382	3417	3421
20°	3352	3393	3404
25°	3298	3356	3380
30°	3246	3329	3366
35°	3193	3297	3354
40°	3141	3268	3345
45°	3082	3238	3342
50°	3014	3202	3334
55°	2945	3167	3333
60°	2836	3120	3353
65°	2704	3059	3356
70°	2523	2975	3365
75°	2244	2867	3423
80°	1843	2747	3552
85°	1216	2578	3211

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.0	3.2
10°-20°	606.7	9.3
20°-30°	914.4	14.0
30°-40°	1101.2	16.8
40°-50°	1150.5	17.6
50°-60°	1057.0	16.2
60°-70°	832.3	12.7
70°-80°	510.3	7.8
80°-90°	154.7	2.4
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°	1733.1	26.5
0°-40°	2834.3	43.3
0°-60°	5041.7	77.1
0°-90°	6539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2224	2228	2236	2234	2231	211
15°	2133	2141	2155	2163	2158	602
25°	1951	1964	1986	2007	2000	900
35°	1708	1730	1763	1795	1794	1068
45°	1423	1453	1495	1536	1543	1097
55°	1103	1135	1186	1237	1248	984
65°	746	785	844	901	926	737
75°	379	424	484	542	578	403
85°	69	102	147	163	183	89
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2240.7	2240.7	2240.7	2240.7	2240.7
2.5°	2232.3	2237.9	2244.8	2233.7	2228.2
5°	2224.0	2228.2	2236.5	2233.7	2231.0
7.5°	2208.8	2211.6	2222.7	2222.7	2219.9
10°	2190.8	2196.4	2206.1	2204.7	2197.8
12.5°	2167.3	2171.5	2182.5	2182.5	2178.4
15°	2132.7	2141.0	2154.8	2163.2	2157.6
17.5°	2096.7	2105.0	2123.0	2131.3	2128.6
20°	2056.6	2063.5	2081.5	2094.0	2088.4
22.5°	2006.8	2015.1	2035.8	2049.7	2044.1
25°	1951.4	1963.9	1986.0	2006.8	1999.8
27.5°	1896.0	1909.9	1937.6	1958.3	1955.6
30°	1835.1	1853.1	1882.2	1908.5	1903.0
32.5°	1772.9	1793.6	1824.1	1851.8	1850.4
35°	1707.8	1730.0	1763.2	1795.0	1793.6
37.5°	1638.6	1664.9	1699.5	1734.1	1735.5
40°	1570.8	1595.7	1634.5	1671.8	1673.2
42.5°	1498.8	1525.1	1566.7	1605.4	1606.8
45°	1422.7	1453.2	1494.7	1536.2	1543.1
47.5°	1345.2	1377.1	1420.0	1464.2	1472.5
50°	1265.0	1298.2	1343.8	1390.9	1399.2
52.5°	1183.3	1217.9	1265.0	1312.0	1324.5
55°	1103.0	1134.9	1186.1	1237.3	1248.3
57.5°	1018.6	1047.7	1103.0	1157.0	1170.8
60°	925.9	961.9	1018.6	1072.6	1094.7
62.5°	835.9	874.7	932.8	986.8	1011.7
65°	746.0	784.7	844.2	901.0	925.9
67.5°	654.6	694.8	758.4	812.4	840.1
70°	563.3	603.4	664.3	722.4	751.5
72.5°	471.9	514.8	574.3	633.9	662.9
75°	379.2	423.5	484.4	542.5	578.5
77.5°	292.0	334.9	395.8	455.3	485.8
80°	209.0	251.9	311.4	370.9	402.7
82.5°	132.9	173.0	231.1	280.9	310.0
85°	69.2	102.4	146.7	163.3	182.7
87.5°	20.8	40.1	56.7	63.7	78.9
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	15.8	17.5	16.2	17.8	18.1	16.5	18.2	16.9	18.5	18.8
	3H	17.6	19.1	17.9	19.4	19.8	18.6	20.1	19.0	20.5	20.8
	4H	18.2	19.6	18.6	20.0	20.3	19.5	20.9	19.9	21.3	21.7
	6H	18.6	19.9	19.0	20.3	20.7	20.3	21.6	20.7	22.0	22.4
	8H	18.7	20.0	19.1	20.4	20.8	20.6	21.9	21.0	22.3	22.7
	12H	18.8	20.0	19.2	20.3	20.8	20.8	22.0	21.2	22.4	22.8
4H	2H	16.6	18.0	17.0	18.3	18.7	17.1	18.6	17.5	18.9	19.3
	3H	18.6	19.8	19.0	20.2	20.6	19.5	20.7	19.9	21.1	21.5
	4H	19.3	20.4	19.7	20.8	21.2	20.5	21.6	20.9	22.0	22.4
	6H	19.9	20.8	20.3	21.2	21.7	21.4	22.4	21.9	22.8	23.3
	8H	20.0	20.9	20.5	21.3	21.8	21.8	22.7	22.3	23.2	23.6
	12H	20.1	20.9	20.6	21.4	21.8	22.1	22.9	22.6	23.4	23.8
8H	4H	19.8	20.7	20.2	21.1	21.6	20.8	21.7	21.3	22.1	22.6
	6H	20.4	21.2	20.9	21.7	22.1	21.9	22.6	22.4	23.1	23.6
	8H	20.7	21.3	21.2	21.8	22.3	22.4	23.1	22.9	23.6	24.0
	12H	20.8	21.4	21.3	21.9	22.5	22.8	23.3	23.3	23.8	24.4
12H	4H	19.9	20.7	20.3	21.1	21.6	20.8	21.6	21.3	22.1	22.6
	6H	20.6	21.3	21.1	21.7	22.3	22.0	22.6	22.5	23.1	23.6
	8H	20.9	21.5	21.4	21.9	22.5	22.5	23.1	23.0	23.6	24.1

(END OF REPORT)