

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: P1589898

Luminaire Tested: 24CZSP-SB-60VHE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589898
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-60VHE-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

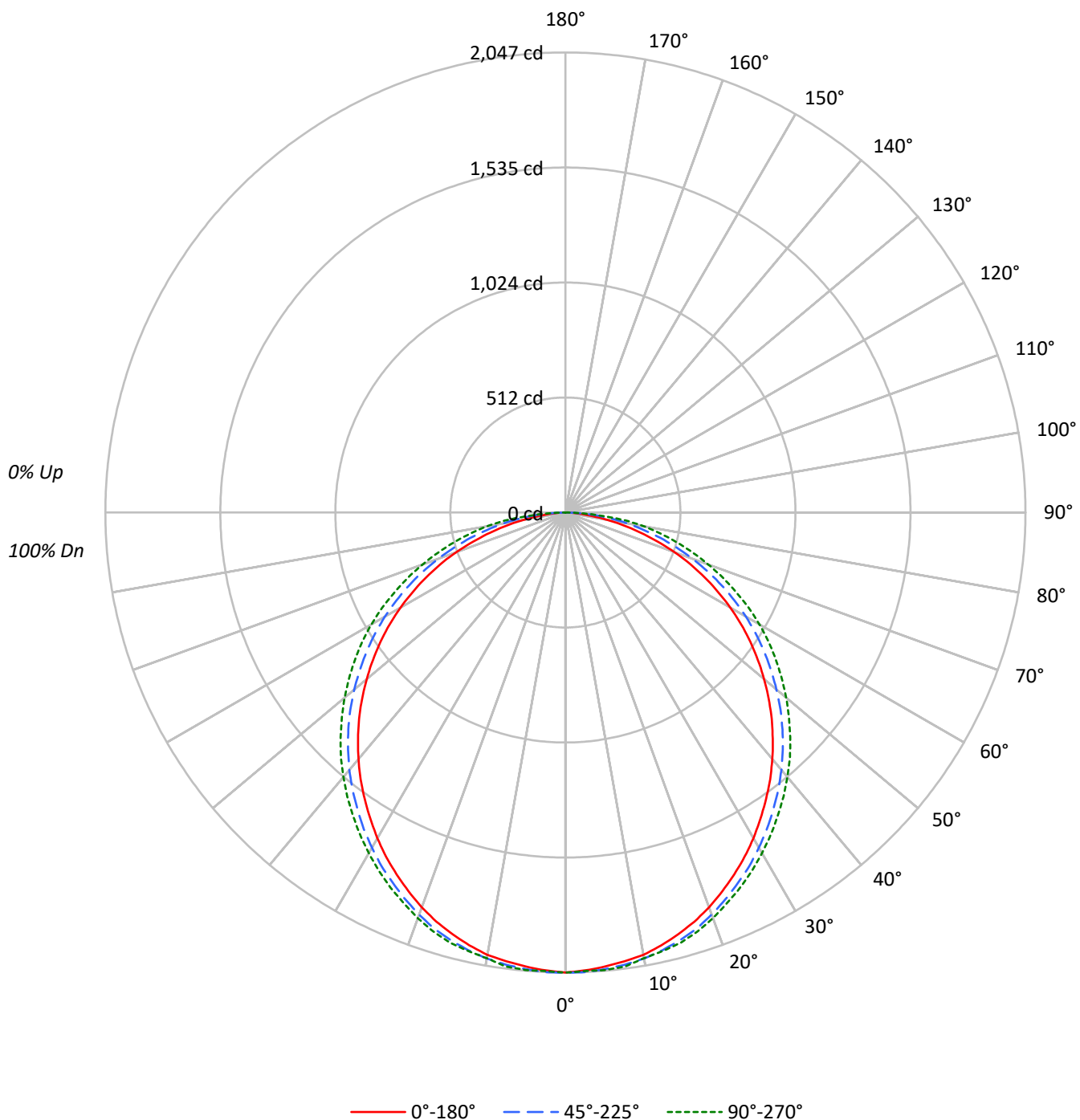
Lumens per Lamp: N/A
Luminaire Lumens: 5955.0 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 43.5
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°	3135	3135	3135
5°	3118	3136	3142
10°	3108	3134	3132
15°	3080	3124	3142
20°	3046	3103	3130
25°	3003	3072	3111
30°	2959	3045	3095
35°	2910	3016	3080
40°	2864	2989	3071
45°	2811	2958	3063
50°	2750	2921	3055
55°	2682	2884	3051
60°	2598	2841	3053
65°	2479	2781	3036
70°	2317	2696	3029
75°	2055	2593	3040
80°	1672	2464	3130
85°	1081	2274	2701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3172 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	3.3
10°-20°	554.8	9.3
20°-30°	836.4	14.0
30°-40°	1006.4	16.9
40°-50°	1049.8	17.6
50°-60°	962.3	16.2
60°-70°	755.6	12.7
70°-80°	459.9	7.7
80°-90°	136.0	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°	1584.9	26.6
0°-40°	2591.4	43.5
0°-60°	4603.4	77.3
0°-90°	5955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5955.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2047	2047	2047	2047	2047	
5°	2028	2041	2039	2037	2043	193
15°	1942	1961	1970	1973	1982	548
25°	1777	1801	1818	1829	1841	819
35°	1556	1581	1613	1636	1647	974
45°	1298	1325	1366	1398	1414	1001
55°	1004	1030	1080	1124	1143	897
65°	684	710	767	819	838	677
75°	347	379	438	491	514	368
85°	62	87	129	145	154	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2047.1	2047.1	2047.1	2047.1	2047.1
2.5°	2039.4	2049.7	2047.1	2038.2	2042.0
5°	2027.9	2040.7	2039.4	2036.9	2043.3
7.5°	2013.8	2027.9	2029.2	2029.2	2036.9
10°	1998.4	2012.5	2015.1	2011.3	2013.8
12.5°	1972.8	1989.5	1994.6	1994.6	1998.4
15°	1942.1	1961.3	1970.3	1972.8	1981.8
17.5°	1908.8	1929.3	1940.8	1947.2	1954.9
20°	1869.1	1890.8	1903.6	1911.3	1920.3
22.5°	1824.2	1848.6	1862.7	1870.3	1880.6
25°	1776.8	1801.2	1817.8	1829.3	1840.9
27.5°	1726.9	1749.9	1773.0	1787.1	1797.3
30°	1673.1	1697.4	1721.7	1739.7	1749.9
32.5°	1615.4	1641.0	1669.2	1688.4	1700.0
35°	1556.5	1580.8	1612.8	1635.9	1647.4
37.5°	1496.3	1521.9	1555.2	1579.5	1593.6
40°	1432.2	1459.1	1495.0	1521.9	1536.0
42.5°	1365.6	1391.2	1430.9	1461.7	1478.3
45°	1297.7	1324.6	1365.6	1397.6	1414.3
47.5°	1227.2	1252.9	1297.7	1334.9	1348.9
50°	1154.2	1178.6	1226.0	1265.7	1282.3
52.5°	1079.9	1105.5	1152.9	1195.2	1213.2
55°	1004.3	1030.0	1079.9	1123.5	1142.7
57.5°	927.5	953.1	1004.3	1049.2	1072.2
60°	848.1	873.7	927.5	973.6	996.7
62.5°	766.1	793.0	848.1	895.5	919.8
65°	684.1	709.7	767.4	818.6	837.8
67.5°	602.1	627.7	684.1	735.3	758.4
70°	517.5	547.0	602.1	655.9	676.4
72.5°	429.2	462.5	517.5	573.9	594.4
75°	347.2	379.2	438.1	490.6	513.7
77.5°	266.5	301.0	356.1	409.9	433.0
80°	189.6	222.9	279.3	330.5	354.9
82.5°	120.4	149.9	206.2	252.4	270.3
85°	61.5	87.1	129.4	144.8	153.7
87.5°	17.9	30.7	46.1	57.6	64.1
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	15.5	17.1	15.8	17.4	17.8	16.2	17.9	16.6	18.2	18.5
	3H	17.2	18.7	17.6	19.1	19.4	18.3	19.8	18.7	20.1	20.5
	4H	17.9	19.3	18.3	19.6	20.0	19.1	20.6	19.5	20.9	21.3
	6H	18.3	19.6	18.7	19.9	20.3	19.9	21.2	20.3	21.6	22.0
	8H	18.4	19.6	18.8	20.0	20.4	20.2	21.4	20.6	21.8	22.2
	12H	18.4	19.6	18.8	20.0	20.4	20.4	21.6	20.8	22.0	22.4
4H	2H	16.2	17.7	16.6	18.0	18.4	16.8	18.2	17.2	18.6	19.0
	3H	18.2	19.4	18.6	19.8	20.2	19.1	20.3	19.5	20.7	21.1
	4H	19.0	20.1	19.4	20.5	20.9	20.1	21.2	20.6	21.6	22.1
	6H	19.5	20.5	20.0	20.9	21.3	21.0	22.0	21.5	22.4	22.9
	8H	19.6	20.5	20.1	21.0	21.4	21.4	22.3	21.9	22.7	23.2
	12H	19.7	20.5	20.2	21.0	21.5	21.7	22.5	22.1	22.9	23.4
8H	4H	19.4	20.3	19.9	20.7	21.2	20.4	21.3	20.9	21.8	22.2
	6H	20.1	20.8	20.6	21.3	21.8	21.5	22.2	22.0	22.7	23.2
	8H	20.3	21.0	20.8	21.5	21.9	22.0	22.6	22.5	23.1	23.6
	12H	20.4	21.0	20.9	21.5	22.1	22.3	22.9	22.8	23.4	24.0
12H	4H	19.5	20.3	20.0	20.8	21.2	20.5	21.3	20.9	21.7	22.2
	6H	20.2	20.9	20.7	21.3	21.9	21.6	22.2	22.1	22.7	23.2
	8H	20.5	21.1	21.0	21.6	22.1	22.1	22.7	22.6	23.2	23.7

(END OF REPORT)