

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: P1589895

Luminaire Tested: 24CZSP-SB-60VHE-L835

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589895
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-60VHE-L835
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

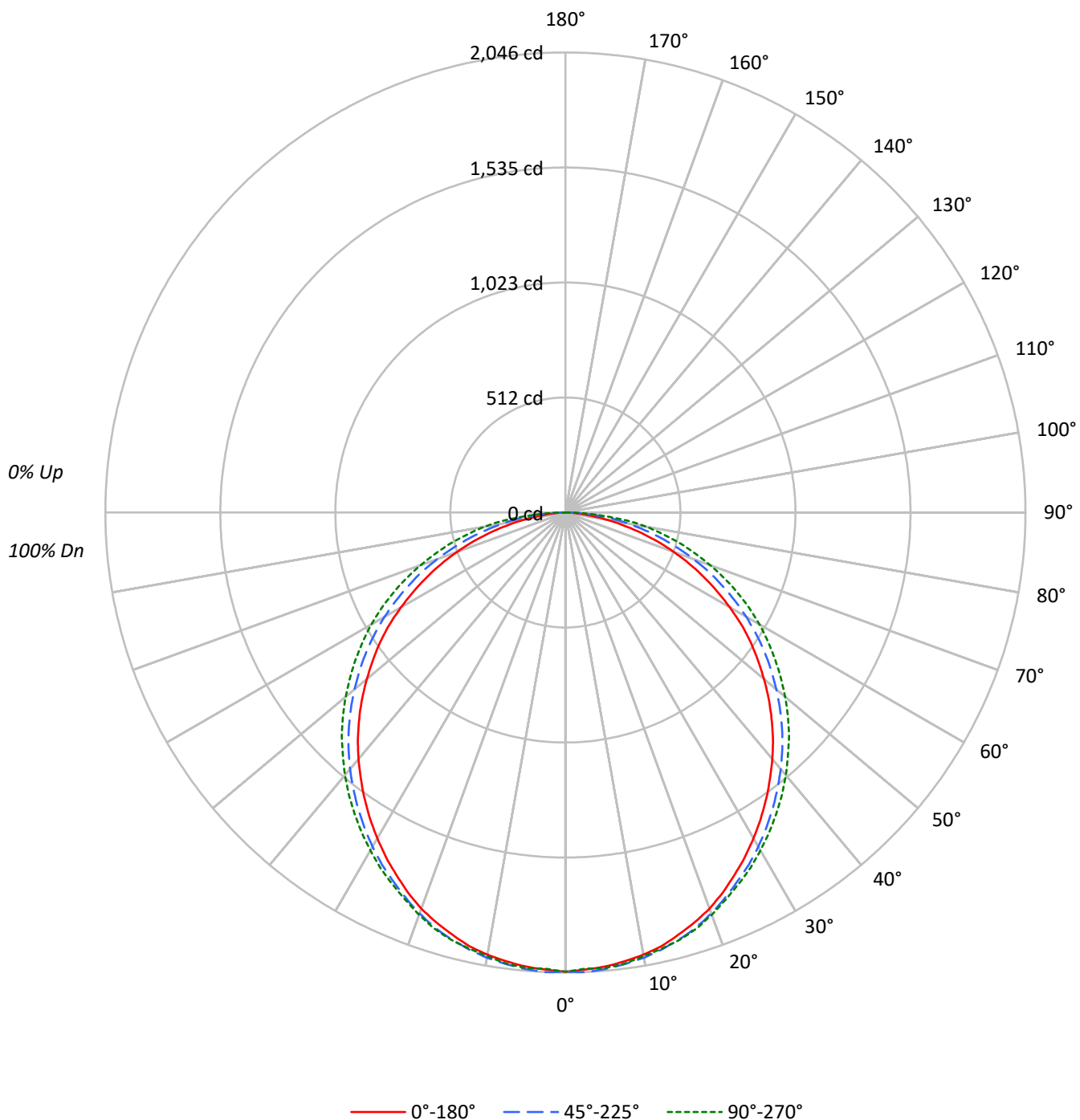
Lumens per Lamp: N/A
Luminaire Lumens: 5960.0 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	93	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	68
3	89	79	70	63	87	77	69	63	74	67	62		71	65	61		69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3128	3128	3128
5°	3117	3134	3126
10°	3106	3127	3115
15°	3082	3114	3118
20°	3055	3092	3103
25°	3006	3059	3080
30°	2958	3034	3068
35°	2910	3005	3057
40°	2863	2978	3049
45°	2809	2951	3047
50°	2747	2918	3039
55°	2685	2887	3038
60°	2585	2844	3057
65°	2464	2789	3058
70°	2299	2712	3068
75°	2045	2613	3120
80°	1680	2503	3238
85°	1109	2350	2926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3316 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.2	3.2
10°-20°	553.0	9.3
20°-30°	833.5	14.0
30°-40°	1003.7	16.8
40°-50°	1048.6	17.6
50°-60°	963.4	16.2
60°-70°	758.6	12.7
70°-80°	465.1	7.8
80°-90°	141.0	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°	1579.6	26.5
0°-40°	2583.3	43.3
0°-60°	4595.2	77.1
0°-90°	5960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2042	2042	2042	2042	2042	
5°	2027	2031	2038	2036	2033	193
15°	1944	1951	1964	1972	1967	549
25°	1779	1790	1810	1829	1823	820
35°	1557	1577	1607	1636	1635	974
45°	1297	1324	1362	1400	1406	1000
55°	1005	1034	1081	1128	1138	897
65°	680	715	770	821	844	672
75°	346	386	442	494	527	367
85°	63	93	134	149	166	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2042.3	2042.3	2042.3	2042.3	2042.3
2.5°	2034.7	2039.7	2046.0	2035.9	2030.9
5°	2027.1	2030.9	2038.5	2035.9	2033.4
7.5°	2013.2	2015.8	2025.9	2025.9	2023.3
10°	1996.8	2001.9	2010.7	2009.5	2003.1
12.5°	1975.4	1979.2	1989.3	1989.3	1985.5
15°	1943.9	1951.4	1964.0	1971.6	1966.6
17.5°	1911.1	1918.6	1935.0	1942.6	1940.1
20°	1874.5	1880.8	1897.2	1908.5	1903.5
22.5°	1829.1	1836.6	1855.6	1868.2	1863.1
25°	1778.6	1790.0	1810.2	1829.1	1822.8
27.5°	1728.2	1740.8	1766.0	1784.9	1782.4
30°	1672.7	1689.1	1715.5	1739.5	1734.5
32.5°	1615.9	1634.8	1662.6	1687.8	1686.5
35°	1556.6	1576.8	1607.1	1636.1	1634.8
37.5°	1493.5	1517.5	1549.0	1580.6	1581.8
40°	1431.7	1454.4	1489.7	1523.8	1525.1
42.5°	1366.1	1390.1	1427.9	1463.3	1464.5
45°	1296.7	1324.5	1362.3	1400.2	1406.5
47.5°	1226.1	1255.1	1294.2	1334.6	1342.2
50°	1152.9	1183.2	1224.8	1267.7	1275.3
52.5°	1078.5	1110.1	1152.9	1195.8	1207.2
55°	1005.4	1034.4	1081.0	1127.7	1137.8
57.5°	928.4	954.9	1005.4	1054.6	1067.2
60°	843.9	876.7	928.4	977.6	997.8
62.5°	761.9	797.2	850.2	899.4	922.1
65°	679.9	715.2	769.5	821.2	843.9
67.5°	596.7	633.2	691.3	740.5	765.7
70°	513.4	550.0	605.5	658.5	685.0
72.5°	430.1	469.3	523.5	577.7	604.2
75°	345.6	386.0	441.5	494.5	527.3
77.5°	266.2	305.3	360.8	415.0	442.8
80°	190.5	229.6	283.8	338.1	367.1
82.5°	121.1	157.7	210.7	256.1	282.6
85°	63.1	93.3	133.7	148.8	166.5
87.5°	18.9	36.6	51.7	58.0	71.9
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	15.5	17.1	15.8	17.5	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	20.2	20.5
	4H	17.9	19.3	18.3	19.6	20.0	19.2	20.6	19.6	21.0	21.3
	6H	18.3	19.6	18.7	20.0	20.3	20.0	21.3	20.4	21.7	22.0
	8H	18.4	19.6	18.8	20.0	20.4	20.3	21.5	20.7	21.9	22.3
	12H	18.4	19.6	18.9	20.0	20.5	20.5	21.7	20.9	22.1	22.5
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	19.2	20.4	19.6	20.7	21.1
	4H	19.0	20.1	19.4	20.5	20.9	20.2	21.3	20.6	21.7	22.1
	6H	19.5	20.5	20.0	20.9	21.4	21.1	22.1	21.6	22.5	23.0
	8H	19.7	20.6	20.1	21.0	21.5	21.5	22.4	22.0	22.8	23.3
	12H	19.8	20.6	20.2	21.0	21.5	21.8	22.6	22.3	23.1	23.5
8H	4H	19.4	20.3	19.9	20.8	21.2	20.5	21.4	20.9	21.8	22.3
	6H	20.1	20.9	20.6	21.4	21.8	21.6	22.3	22.1	22.8	23.3
	8H	20.3	21.0	20.9	21.5	22.0	22.1	22.7	22.6	23.2	23.7
	12H	20.5	21.1	21.0	21.6	22.1	22.4	23.0	22.9	23.5	24.1
12H	4H	19.5	20.3	20.0	20.8	21.3	20.5	21.3	21.0	21.8	22.3
	6H	20.3	20.9	20.8	21.4	21.9	21.6	22.3	22.2	22.8	23.3
	8H	20.5	21.1	21.0	21.6	22.2	22.2	22.8	22.7	23.3	23.8

(END OF REPORT)