

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: P1589901

Luminaire Tested: 24CZSP-SB-60VHE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589901
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-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

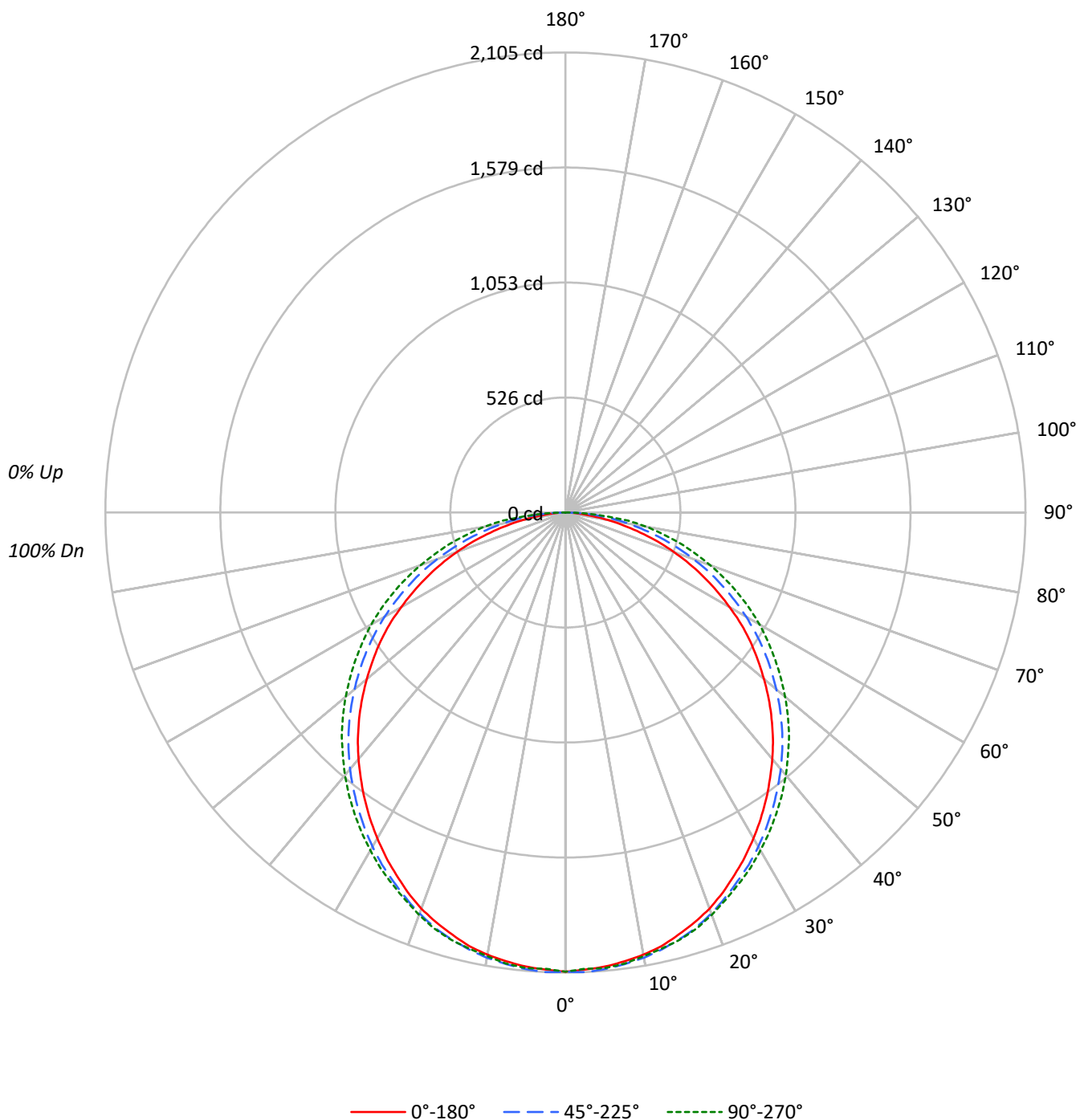
Lumens per Lamp: N/A
Luminaire Lumens: 6132.0 lumens
Efficiency: N/A
Efficacy: 141.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	3218	3218	3218
5°	3207	3225	3217
10°	3195	3217	3205
15°	3171	3204	3208
20°	3143	3181	3192
25°	3092	3147	3169
30°	3044	3122	3156
35°	2994	3091	3145
40°	2945	3064	3137
45°	2890	3036	3134
50°	2826	3003	3126
55°	2762	2970	3126
60°	2660	2926	3145
65°	2535	2869	3147
70°	2365	2790	3156
75°	2104	2688	3210
80°	1729	2576	3331
85°	1141	2418	3010

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3411 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.8	3.2
10°-20°	568.9	9.3
20°-30°	857.5	14.0
30°-40°	1032.6	16.8
40°-50°	1078.9	17.6
50°-60°	991.2	16.2
60°-70°	780.5	12.7
70°-80°	478.5	7.8
80°-90°	145.1	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°	1625.2	26.5
0°-40°	2657.8	43.3
0°-60°	4727.8	77.1
0°-90°	6132.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6132.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2101	2101	2101	2101	2101	
5°	2086	2090	2097	2095	2092	198
15°	2000	2008	2021	2028	2023	564
25°	1830	1842	1862	1882	1875	844
35°	1602	1622	1653	1683	1682	1002
45°	1334	1363	1402	1441	1447	1029
55°	1034	1064	1112	1160	1171	923
65°	700	736	792	845	868	692
75°	356	397	454	509	542	378
85°	65	96	138	153	171	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2101.2	2101.2	2101.2	2101.2	2101.2
2.5°	2093.4	2098.6	2105.1	2094.7	2089.5
5°	2085.6	2089.5	2097.3	2094.7	2092.1
7.5°	2071.3	2073.9	2084.3	2084.3	2081.7
10°	2054.5	2059.7	2068.7	2067.4	2061.0
12.5°	2032.4	2036.3	2046.7	2046.7	2042.8
15°	2000.0	2007.7	2020.7	2028.5	2023.3
17.5°	1966.2	1974.0	1990.9	1998.7	1996.1
20°	1928.6	1935.1	1951.9	1963.6	1958.4
22.5°	1881.9	1889.6	1909.1	1922.1	1916.9
25°	1829.9	1841.6	1862.4	1881.9	1875.4
27.5°	1778.0	1791.0	1817.0	1836.4	1833.8
30°	1720.9	1737.8	1765.1	1789.7	1784.5
32.5°	1662.5	1682.0	1710.5	1736.5	1735.2
35°	1601.5	1622.3	1653.4	1683.3	1682.0
37.5°	1536.6	1561.3	1593.7	1626.2	1627.5
40°	1473.0	1496.4	1532.7	1567.8	1569.1
42.5°	1405.6	1430.2	1469.1	1505.5	1506.8
45°	1334.2	1362.7	1401.7	1440.6	1447.1
47.5°	1261.5	1291.3	1331.6	1373.1	1380.9
50°	1186.2	1217.4	1260.2	1304.3	1312.1
52.5°	1109.6	1142.1	1186.2	1230.3	1242.0
55°	1034.4	1064.2	1112.2	1160.3	1170.6
57.5°	955.2	982.5	1034.4	1085.0	1098.0
60°	868.3	902.0	955.2	1005.8	1026.6
62.5°	783.9	820.2	874.7	925.4	948.7
65°	699.5	735.9	791.7	844.9	868.3
67.5°	613.9	651.5	711.2	761.8	787.8
70°	528.2	565.9	623.0	677.5	704.7
72.5°	442.6	482.8	538.6	594.4	621.7
75°	355.6	397.1	454.2	508.8	542.5
77.5°	273.8	314.1	371.2	427.0	455.5
80°	196.0	236.2	292.0	347.8	377.7
82.5°	124.6	162.2	216.7	263.5	290.7
85°	64.9	96.0	137.6	153.1	171.3
87.5°	19.5	37.6	53.2	59.7	74.0
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	17.3	18.8	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	21.1	21.4
	6H	18.4	19.7	18.8	20.1	20.4	20.1	21.4	20.5	21.8	22.1
	8H	18.5	19.7	18.9	20.1	20.5	20.4	21.6	20.8	22.0	22.4
	12H	18.5	19.7	19.0	20.1	20.6	20.6	21.8	21.0	22.2	22.6
4H	2H	16.3	17.8	16.7	18.1	18.5	16.9	18.3	17.3	18.7	19.1
	3H	18.3	19.5	18.7	19.9	20.3	19.3	20.5	19.7	20.8	21.2
	4H	19.1	20.2	19.5	20.6	21.0	20.3	21.4	20.7	21.8	22.2
	6H	19.6	20.6	20.1	21.0	21.5	21.2	22.2	21.7	22.6	23.1
	8H	19.8	20.7	20.2	21.1	21.6	21.6	22.5	22.1	22.9	23.4
	12H	19.9	20.7	20.3	21.1	21.6	21.9	22.7	22.4	23.2	23.6
8H	4H	19.5	20.4	20.0	20.9	21.3	20.6	21.5	21.0	21.9	22.4
	6H	20.2	21.0	20.7	21.5	21.9	21.7	22.4	22.2	22.9	23.4
	8H	20.4	21.1	20.9	21.6	22.1	22.2	22.8	22.7	23.3	23.8
	12H	20.6	21.2	21.1	21.7	22.2	22.5	23.1	23.0	23.6	24.2
12H	4H	19.6	20.4	20.1	20.9	21.4	20.6	21.4	21.1	21.9	22.4
	6H	20.4	21.0	20.9	21.5	22.0	21.7	22.4	22.3	22.9	23.4
	8H	20.6	21.2	21.1	21.7	22.3	22.3	22.9	22.8	23.4	23.9

(END OF REPORT)