

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: P1589905

Luminaire Tested: 24CZSP-SB-60VHE-L935

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589905
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-L935
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 90CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

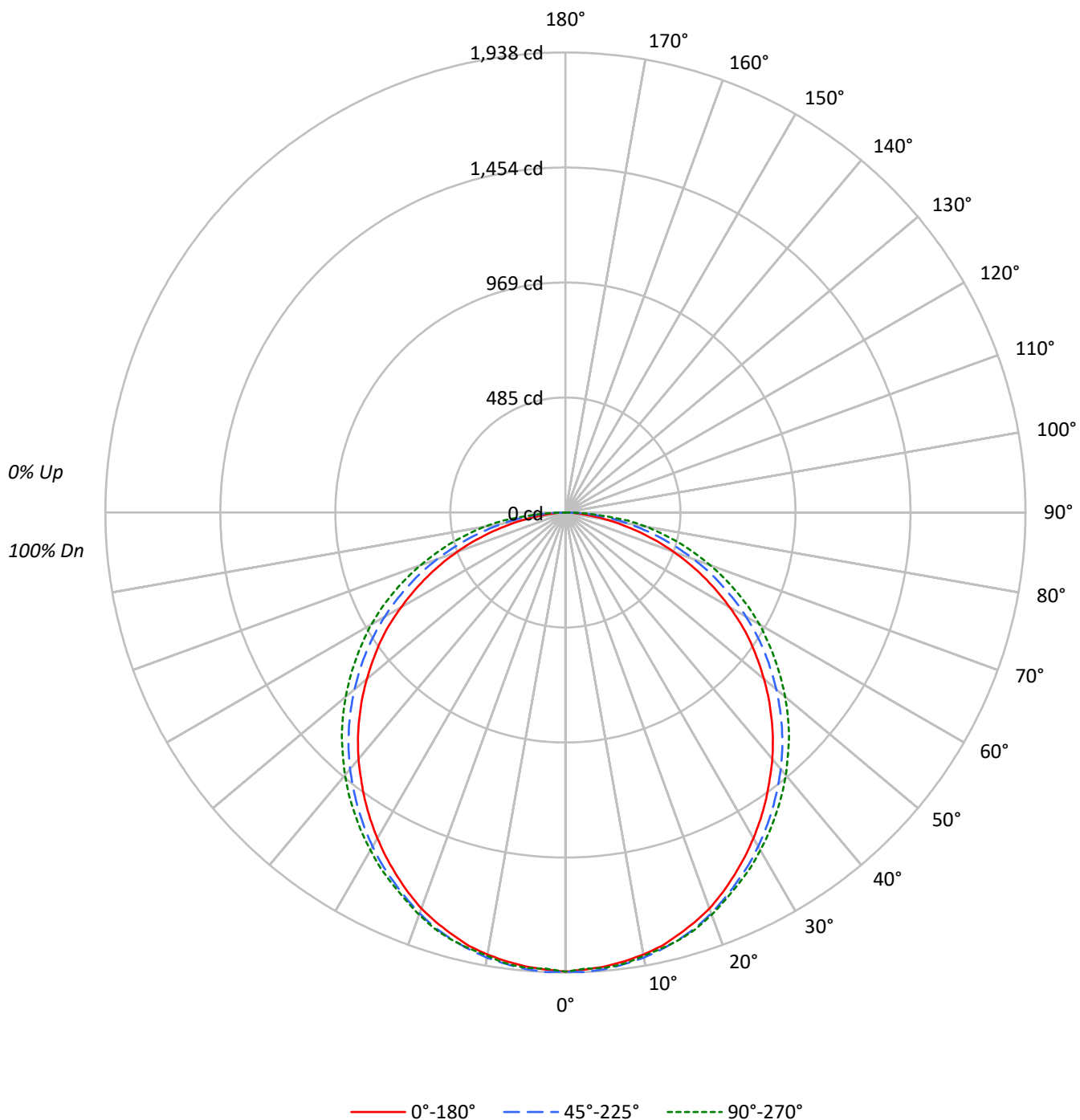
Lumens per Lamp: N/A
Luminaire Lumens: 5644.0 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	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°	2962	2962	2962
5°	2951	2968	2961
10°	2941	2961	2950
15°	2919	2949	2953
20°	2893	2928	2938
25°	2846	2897	2917
30°	2801	2873	2905
35°	2756	2846	2895
40°	2711	2821	2888
45°	2660	2794	2885
50°	2602	2764	2878
55°	2542	2734	2877
60°	2448	2693	2894
65°	2334	2641	2896
70°	2177	2568	2905
75°	1937	2474	2955
80°	1591	2371	3066
85°	1049	2225	2771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3140 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.9	3.2
10°-20°	523.6	9.3
20°-30°	789.3	14.0
30°-40°	950.5	16.8
40°-50°	993.0	17.6
50°-60°	912.3	16.2
60°-70°	718.4	12.7
70°-80°	440.4	7.8
80°-90°	133.5	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°	1495.9	26.5
0°-40°	2446.3	43.3
0°-60°	4351.6	77.1
0°-90°	5644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1920	1923	1930	1928	1926	182
15°	1841	1848	1860	1867	1862	519
25°	1684	1695	1714	1732	1726	776
35°	1474	1493	1522	1549	1548	922
45°	1228	1254	1290	1326	1332	947
55°	952	980	1024	1068	1078	849
65°	644	677	729	778	799	637
75°	327	366	418	468	499	348
85°	60	88	127	141	158	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1934.0	1934.0	1934.0	1934.0	1934.0
2.5°	1926.8	1931.6	1937.6	1928.0	1923.2
5°	1919.6	1923.2	1930.4	1928.0	1925.6
7.5°	1906.5	1908.9	1918.4	1918.4	1916.1
10°	1891.0	1895.7	1904.1	1902.9	1896.9
12.5°	1870.7	1874.2	1883.8	1883.8	1880.2
15°	1840.8	1848.0	1859.9	1867.1	1862.3
17.5°	1809.7	1816.9	1832.4	1839.6	1837.2
20°	1775.1	1781.1	1796.6	1807.4	1802.6
22.5°	1732.1	1739.3	1757.2	1769.1	1764.3
25°	1684.3	1695.1	1714.2	1732.1	1726.1
27.5°	1636.5	1648.5	1672.4	1690.3	1687.9
30°	1584.0	1599.5	1624.6	1647.3	1642.5
32.5°	1530.2	1548.1	1574.4	1598.3	1597.1
35°	1474.1	1493.2	1521.9	1549.3	1548.1
37.5°	1414.3	1437.0	1466.9	1496.8	1498.0
40°	1355.8	1377.3	1410.8	1443.0	1444.2
42.5°	1293.7	1316.4	1352.2	1385.7	1386.9
45°	1228.0	1254.3	1290.1	1325.9	1331.9
47.5°	1161.1	1188.6	1225.6	1263.8	1271.0
50°	1091.8	1120.5	1159.9	1200.5	1207.7
52.5°	1021.3	1051.2	1091.8	1132.4	1143.2
55°	952.1	979.5	1023.7	1067.9	1077.5
57.5°	879.2	904.3	952.1	998.6	1010.6
60°	799.2	830.2	879.2	925.8	944.9
62.5°	721.5	755.0	805.1	851.7	873.2
65°	643.9	677.3	728.7	777.7	799.2
67.5°	565.0	599.7	654.6	701.2	725.1
70°	486.2	520.8	573.4	623.6	648.6
72.5°	407.3	444.4	495.7	547.1	572.2
75°	327.3	365.5	418.1	468.3	499.3
77.5°	252.0	289.1	341.6	393.0	419.3
80°	180.4	217.4	268.8	320.1	347.6
82.5°	114.7	149.3	199.5	242.5	267.6
85°	59.7	88.4	126.6	141.0	157.7
87.5°	17.9	34.6	49.0	54.9	68.1
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	15.3	16.9	15.7	17.3	17.6	16.0	17.7	16.4	18.0	18.3
	3H	17.0	18.6	17.4	18.9	19.2	18.1	19.6	18.5	20.0	20.3
	4H	17.7	19.1	18.1	19.4	19.8	19.0	20.4	19.4	20.8	21.2
	6H	18.1	19.4	18.5	19.8	20.2	19.8	21.1	20.2	21.5	21.9
	8H	18.2	19.5	18.6	19.8	20.2	20.1	21.4	20.5	21.7	22.1
	12H	18.2	19.5	18.7	19.8	20.3	20.3	21.5	20.7	21.9	22.3
4H	2H	16.1	17.5	16.5	17.8	18.2	16.6	18.1	17.0	18.4	18.8
	3H	18.0	19.2	18.5	19.6	20.0	19.0	20.2	19.4	20.6	21.0
	4H	18.8	19.9	19.2	20.3	20.7	20.0	21.1	20.4	21.5	21.9
	6H	19.3	20.3	19.8	20.7	21.2	20.9	21.9	21.4	22.3	22.8
	8H	19.5	20.4	19.9	20.8	21.3	21.3	22.2	21.8	22.6	23.1
	12H	19.6	20.4	20.1	20.9	21.3	21.6	22.4	22.1	22.9	23.3
8H	4H	19.3	20.1	19.7	20.6	21.1	20.3	21.2	20.8	21.6	22.1
	6H	19.9	20.7	20.4	21.2	21.6	21.4	22.1	21.9	22.6	23.1
	8H	20.2	20.8	20.7	21.3	21.8	21.9	22.5	22.4	23.0	23.5
	12H	20.3	20.9	20.8	21.4	21.9	22.2	22.8	22.8	23.3	23.9
12H	4H	19.3	20.1	19.8	20.6	21.1	20.3	21.1	20.8	21.6	22.1
	6H	20.1	20.7	20.6	21.2	21.7	21.4	22.1	22.0	22.6	23.1
	8H	20.4	20.9	20.9	21.4	22.0	22.0	22.6	22.5	23.1	23.6

(END OF REPORT)