

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: P1589892

Luminaire Tested: 24CZSP-SB-60VHE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589892
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-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

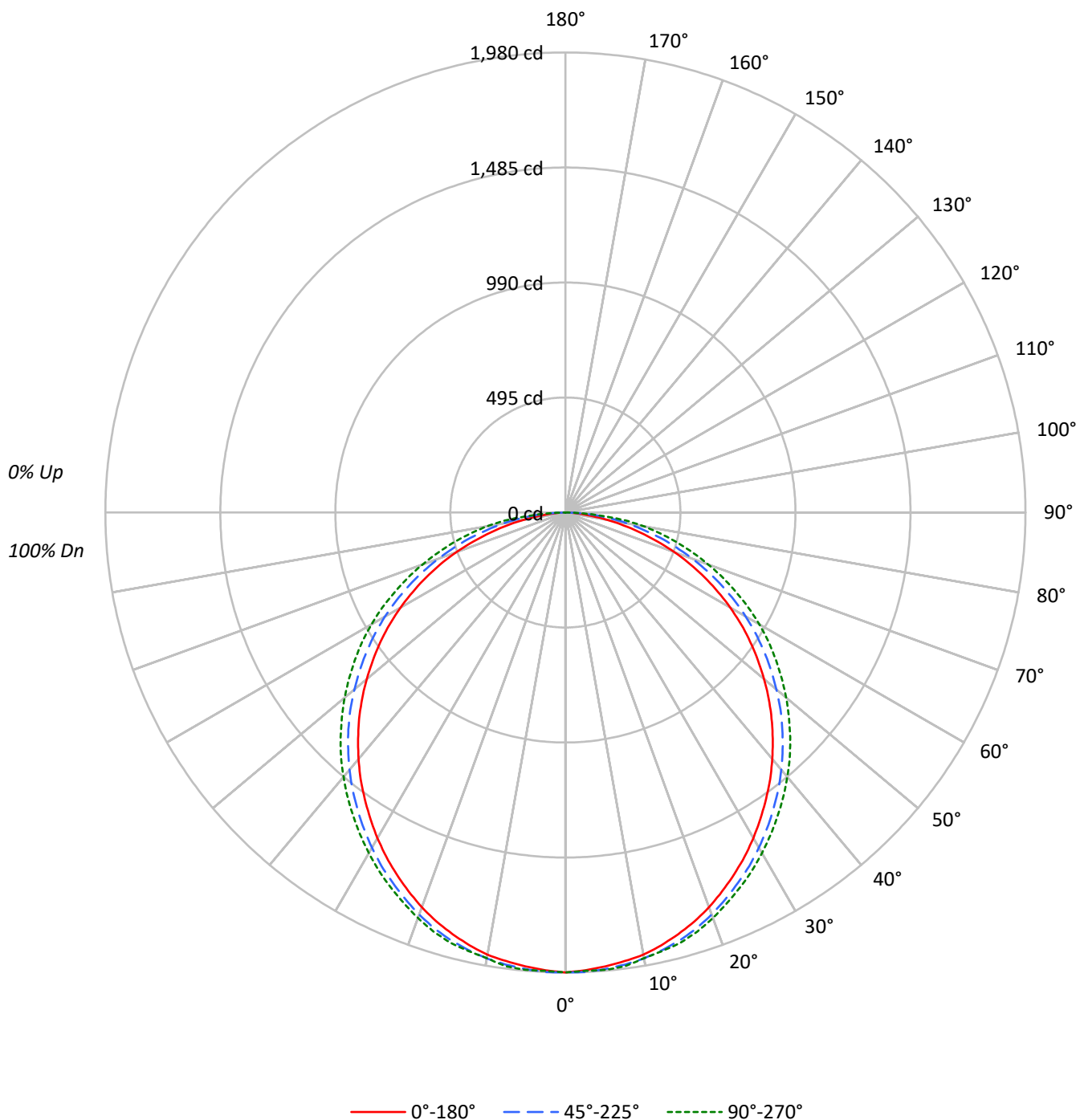
Lumens per Lamp: N/A
Luminaire Lumens: 5759.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3032	3032	3032
5°	3015	3032	3038
10°	3006	3031	3029
15°	2978	3021	3039
20°	2946	3001	3027
25°	2904	2971	3009
30°	2862	2945	2993
35°	2815	2916	2979
40°	2769	2891	2970
45°	2718	2861	2963
50°	2660	2825	2955
55°	2594	2789	2951
60°	2512	2748	2953
65°	2398	2689	2936
70°	2241	2608	2929
75°	1987	2507	2940
80°	1618	2382	3027
85°	1046	2198	2613

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3067 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.3	3.3
10°-20°	536.5	9.3
20°-30°	808.9	14.0
30°-40°	973.3	16.9
40°-50°	1015.3	17.6
50°-60°	930.6	16.2
60°-70°	730.8	12.7
70°-80°	444.7	7.7
80°-90°	131.6	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°	1532.8	26.6
0°-40°	2506.1	43.5
0°-60°	4451.9	77.3
0°-90°	5759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1961	1974	1972	1970	1976	186
15°	1878	1897	1905	1908	1917	530
25°	1718	1742	1758	1769	1780	792
35°	1505	1529	1560	1582	1593	942
45°	1255	1281	1321	1352	1368	968
55°	971	996	1044	1086	1105	868
65°	662	686	742	792	810	654
75°	336	367	424	474	497	356
85°	60	84	125	140	149	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1979.7	1979.7	1979.7	1979.7	1979.7
2.5°	1972.3	1982.2	1979.7	1971.1	1974.8
5°	1961.2	1973.6	1972.3	1969.8	1976.0
7.5°	1947.5	1961.2	1962.4	1962.4	1969.8
10°	1932.7	1946.3	1948.8	1945.1	1947.5
12.5°	1907.9	1924.0	1929.0	1929.0	1932.7
15°	1878.2	1896.7	1905.4	1907.9	1916.6
17.5°	1845.9	1865.8	1876.9	1883.1	1890.5
20°	1807.5	1828.6	1841.0	1848.4	1857.1
22.5°	1764.2	1787.7	1801.3	1808.8	1818.7
25°	1718.3	1741.9	1758.0	1769.1	1780.3
27.5°	1670.0	1692.3	1714.6	1728.3	1738.2
30°	1618.0	1641.5	1665.1	1682.4	1692.3
32.5°	1562.2	1587.0	1614.3	1632.9	1644.0
35°	1505.3	1528.8	1559.8	1582.1	1593.2
37.5°	1447.0	1471.8	1504.0	1527.6	1541.2
40°	1385.1	1411.1	1445.8	1471.8	1485.4
42.5°	1320.7	1345.4	1383.8	1413.6	1429.7
45°	1255.0	1281.0	1320.7	1351.6	1367.7
47.5°	1186.9	1211.6	1255.0	1290.9	1304.6
50°	1116.2	1139.8	1185.6	1224.0	1240.1
52.5°	1044.4	1069.2	1115.0	1155.9	1173.2
55°	971.3	996.1	1044.4	1086.5	1105.1
57.5°	897.0	921.7	971.3	1014.7	1037.0
60°	820.1	844.9	897.0	941.6	963.9
62.5°	740.9	766.9	820.1	866.0	889.5
65°	661.6	686.3	742.1	791.7	810.2
67.5°	582.3	607.1	661.6	711.1	733.4
70°	500.5	529.0	582.3	634.3	654.1
72.5°	415.0	447.2	500.5	555.0	574.8
75°	335.7	366.7	423.7	474.5	496.8
77.5°	257.7	291.1	344.4	396.4	418.7
80°	183.4	215.6	270.1	319.6	343.2
82.5°	116.5	145.0	199.5	244.1	261.4
85°	59.5	84.2	125.1	140.0	148.7
87.5°	17.3	29.7	44.6	55.8	61.9
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	15.4	17.0	15.7	17.3	17.6	16.1	17.7	16.5	18.1	18.4
	3H	17.1	18.6	17.5	19.0	19.3	18.2	19.7	18.5	20.0	20.4
	4H	17.7	19.2	18.1	19.5	19.9	19.0	20.5	19.4	20.8	21.2
	6H	18.2	19.5	18.6	19.8	20.2	19.8	21.1	20.2	21.5	21.8
	8H	18.3	19.5	18.7	19.9	20.3	20.1	21.3	20.5	21.7	22.1
	12H	18.3	19.5	18.7	19.9	20.3	20.3	21.5	20.7	21.9	22.3
4H	2H	16.1	17.5	16.5	17.9	18.3	16.7	18.1	17.1	18.5	18.8
	3H	18.1	19.3	18.5	19.7	20.1	19.0	20.2	19.4	20.6	21.0
	4H	18.9	19.9	19.3	20.4	20.8	20.0	21.1	20.5	21.5	22.0
	6H	19.4	20.3	19.8	20.8	21.2	20.9	21.9	21.4	22.3	22.8
	8H	19.5	20.4	20.0	20.9	21.3	21.3	22.2	21.8	22.6	23.1
	12H	19.6	20.4	20.1	20.9	21.4	21.6	22.4	22.0	22.8	23.3
8H	4H	19.3	20.2	19.8	20.6	21.1	20.3	21.2	20.8	21.7	22.1
	6H	20.0	20.7	20.5	21.2	21.7	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	22.7	23.3	23.8
12H	4H	19.4	20.2	19.9	20.7	21.1	20.3	21.1	20.8	21.6	22.1
	6H	20.1	20.8	20.6	21.2	21.8	21.4	22.1	22.0	22.6	23.1
	8H	20.4	21.0	20.9	21.4	22.0	22.0	22.6	22.5	23.0	23.6

(END OF REPORT)