

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: P1589893

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589893
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

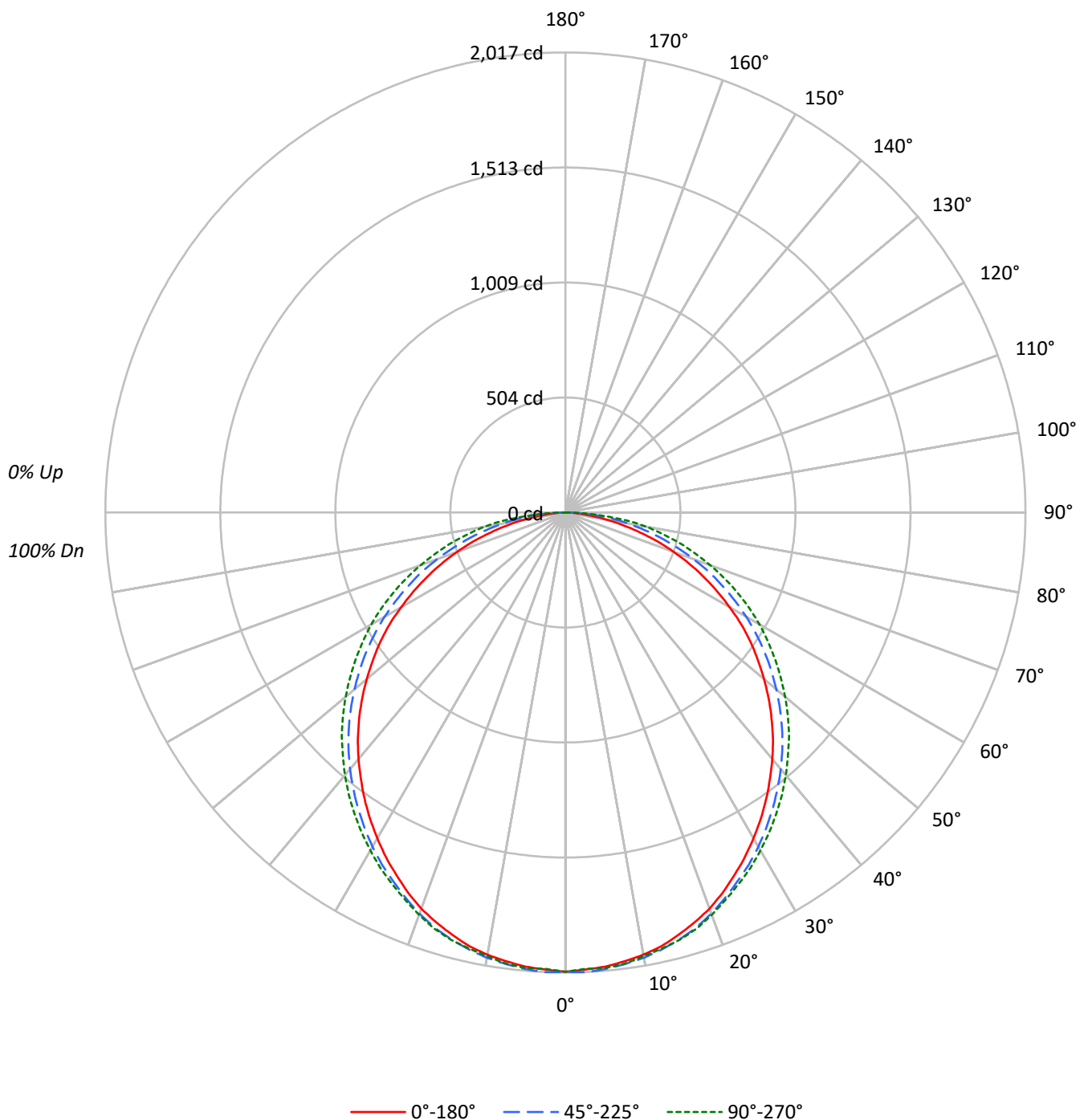
Lumens per Lamp: N/A
Luminaire Lumens: 5876.0 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1589893

CATALOG NUMBER: 24CZSP-SB-60VHE-L830

Luminous Intensity Polar Plot



TEST NUMBER: P1589893

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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°	3084	3084	3084
5°	3073	3090	3082
10°	3062	3083	3071
15°	3039	3070	3074
20°	3012	3049	3059
25°	2963	3016	3037
30°	2917	2991	3024
35°	2870	2962	3014
40°	2822	2937	3006
45°	2769	2909	3004
50°	2709	2877	2996
55°	2647	2846	2996
60°	2549	2804	3013
65°	2429	2749	3015
70°	2267	2673	3024
75°	2017	2576	3076
80°	1656	2468	3192
85°	1093	2316	2886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3269 cd/sqm

TEST NUMBER: P1589893

CATALOG NUMBER: 24CZSP-SB-60VHE-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.5	3.2
10°-20°	545.2	9.3
20°-30°	821.7	14.0
30°-40°	989.5	16.8
40°-50°	1033.8	17.6
50°-60°	949.8	16.2
60°-70°	747.9	12.7
70°-80°	458.6	7.8
80°-90°	139.0	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°	1557.3	26.5
0°-40°	2546.9	43.3
0°-60°	4530.5	77.1
0°-90°	5876.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5876.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2014	2014	2014	2014	2014	
5°	1998	2002	2010	2007	2005	190
15°	1916	1924	1936	1944	1939	541
25°	1754	1765	1785	1803	1797	808
35°	1535	1555	1584	1613	1612	960
45°	1278	1306	1343	1380	1387	986
55°	991	1020	1066	1112	1122	884
65°	670	705	759	810	832	663
75°	341	381	435	488	520	362
85°	62	92	132	147	164	80
90°	0	0	0	0	0	

TEST NUMBER: P1589893

CATALOG NUMBER: 24CZSP-SB-60VHE-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2013.5	2013.5	2013.5	2013.5	2013.5
2.5°	2006.0	2011.0	2017.2	2007.3	2002.3
5°	1998.5	2002.3	2009.7	2007.3	2004.8
7.5°	1984.9	1987.4	1997.3	1997.3	1994.8
10°	1968.7	1973.7	1982.4	1981.1	1974.9
12.5°	1947.6	1951.3	1961.2	1961.2	1957.5
15°	1916.5	1923.9	1936.4	1943.8	1938.9
17.5°	1884.1	1891.6	1907.8	1915.2	1912.7
20°	1848.1	1854.3	1870.5	1881.6	1876.7
22.5°	1803.3	1810.8	1829.4	1841.8	1836.9
25°	1753.5	1764.7	1784.6	1803.3	1797.1
27.5°	1703.8	1716.2	1741.1	1759.8	1757.3
30°	1649.1	1665.2	1691.4	1715.0	1710.0
32.5°	1593.1	1611.8	1639.1	1664.0	1662.8
35°	1534.7	1554.6	1584.4	1613.0	1611.8
37.5°	1472.5	1496.1	1527.2	1558.3	1559.5
40°	1411.5	1433.9	1468.8	1502.3	1503.6
42.5°	1346.9	1370.5	1407.8	1442.6	1443.9
45°	1278.5	1305.8	1343.1	1380.5	1386.7
47.5°	1208.8	1237.4	1276.0	1315.8	1323.2
50°	1136.7	1166.5	1207.6	1249.9	1257.3
52.5°	1063.3	1094.4	1136.7	1179.0	1190.2
55°	991.2	1019.8	1065.8	1111.8	1121.8
57.5°	915.3	941.4	991.2	1039.7	1052.1
60°	832.0	864.3	915.3	963.8	983.7
62.5°	751.2	786.0	838.2	886.7	909.1
65°	670.3	705.1	758.6	809.6	832.0
67.5°	588.2	624.3	681.5	730.0	754.9
70°	506.2	542.2	597.0	649.2	675.3
72.5°	424.1	462.6	516.1	569.6	595.7
75°	340.8	380.6	435.3	487.5	519.8
77.5°	262.4	301.0	355.7	409.2	436.5
80°	187.8	226.3	279.8	333.3	361.9
82.5°	119.4	155.5	207.7	252.5	278.6
85°	62.2	92.0	131.8	146.8	164.2
87.5°	18.7	36.1	51.0	57.2	70.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589893

CATALOG NUMBER: 24CZSP-SB-60VHE-L830

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	17.1	15.8	17.4	17.7	16.2	17.8	16.5	18.1	18.5
	3H	17.2	18.7	17.6	19.0	19.4	18.3	19.8	18.6	20.1	20.5
	4H	17.8	19.2	18.2	19.6	20.0	19.2	20.6	19.5	20.9	21.3
	6H	18.2	19.5	18.6	19.9	20.3	19.9	21.2	20.3	21.6	22.0
	8H	18.3	19.6	18.8	20.0	20.4	20.2	21.5	20.7	21.9	22.3
	12H	18.4	19.6	18.8	20.0	20.4	20.4	21.7	20.9	22.0	22.5
4H	2H	16.2	17.6	16.6	18.0	18.3	16.8	18.2	17.2	18.5	18.9
	3H	18.2	19.4	18.6	19.8	20.2	19.1	20.3	19.5	20.7	21.1
	4H	18.9	20.0	19.4	20.4	20.9	20.1	21.2	20.6	21.6	22.1
	6H	19.5	20.4	19.9	20.9	21.3	21.1	22.0	21.5	22.5	22.9
	8H	19.6	20.5	20.1	21.0	21.4	21.5	22.3	21.9	22.8	23.3
	12H	19.7	20.5	20.2	21.0	21.5	21.7	22.5	22.2	23.0	23.5
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	22.3	22.0	22.8	23.2
	8H	20.3	21.0	20.8	21.5	22.0	22.0	22.7	22.5	23.2	23.7
	12H	20.4	21.0	20.9	21.5	22.1	22.4	23.0	22.9	23.5	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	22.3	22.1	22.7	23.3
	8H	20.5	21.1	21.0	21.6	22.1	22.1	22.7	22.6	23.2	23.8

(END OF REPORT)