

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: P1589839

Luminaire Tested: 24CZSP-SB-52HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589839
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-52HE-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

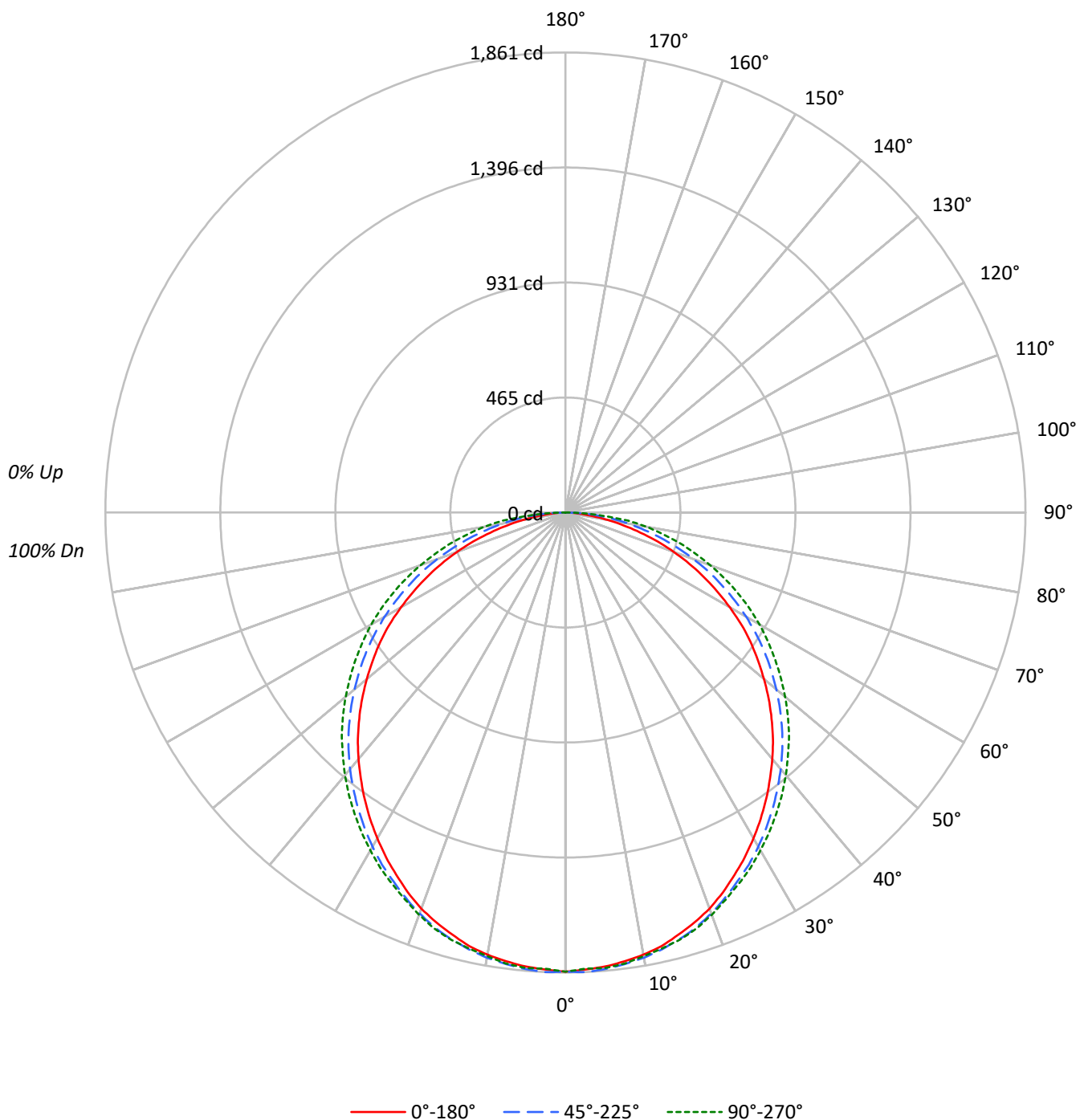
Lumens per Lamp: N/A
Luminaire Lumens: 5421.0 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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: P1589839

CATALOG NUMBER: 24CZSP-SB-52HE-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1589839

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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°	2845	2845	2845
5°	2835	2851	2844
10°	2825	2844	2834
15°	2804	2833	2836
20°	2779	2813	2822
25°	2734	2782	2802
30°	2691	2760	2790
35°	2647	2733	2780
40°	2604	2709	2773
45°	2555	2684	2771
50°	2499	2655	2764
55°	2442	2626	2764
60°	2351	2587	2780
65°	2241	2537	2782
70°	2091	2466	2790
75°	1861	2377	2838
80°	1528	2277	2945
85°	1009	2137	2662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3016 cd/sqm

TEST NUMBER: P1589839

CATALOG NUMBER: 24CZSP-SB-52HE-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	3.2
10°-20°	503.0	9.3
20°-30°	758.1	14.0
30°-40°	912.9	16.8
40°-50°	953.8	17.6
50°-60°	876.2	16.2
60°-70°	690.0	12.7
70°-80°	423.1	7.8
80°-90°	128.3	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°	1436.7	26.5
0°-40°	2349.7	43.3
0°-60°	4179.7	77.1
0°-90°	5421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1844	1847	1854	1852	1850	175
15°	1768	1775	1786	1793	1789	499
25°	1618	1628	1646	1664	1658	746
35°	1416	1434	1462	1488	1487	886
45°	1180	1205	1239	1274	1279	910
55°	914	941	983	1026	1035	816
65°	618	650	700	747	768	611
75°	314	351	402	450	480	334
85°	57	85	122	135	152	74
90°	0	0	0	0	0	

TEST NUMBER: P1589839

CATALOG NUMBER: 24CZSP-SB-52HE-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1857.6	1857.6	1857.6	1857.6	1857.6
2.5°	1850.7	1855.3	1861.0	1851.8	1847.2
5°	1843.8	1847.2	1854.1	1851.8	1849.5
7.5°	1831.2	1833.5	1842.6	1842.6	1840.3
10°	1816.3	1820.8	1828.9	1827.7	1822.0
12.5°	1796.8	1800.2	1809.4	1809.4	1805.9
15°	1768.1	1775.0	1786.4	1793.3	1788.7
17.5°	1738.2	1745.1	1760.0	1766.9	1764.6
20°	1705.0	1710.7	1725.6	1735.9	1731.4
22.5°	1663.7	1670.5	1687.8	1699.2	1694.6
25°	1617.8	1628.1	1646.4	1663.7	1657.9
27.5°	1571.9	1583.3	1606.3	1623.5	1621.2
30°	1521.4	1536.3	1560.4	1582.2	1577.6
32.5°	1469.8	1487.0	1512.2	1535.2	1534.0
35°	1415.8	1434.2	1461.7	1488.1	1487.0
37.5°	1358.5	1380.3	1408.9	1437.6	1438.8
40°	1302.2	1322.9	1355.0	1386.0	1387.1
42.5°	1242.6	1264.4	1298.8	1330.9	1332.1
45°	1179.5	1204.7	1239.1	1273.6	1279.3
47.5°	1115.2	1141.6	1177.2	1213.9	1220.8
50°	1048.7	1076.2	1114.1	1153.1	1160.0
52.5°	981.0	1009.7	1048.7	1087.7	1098.0
55°	914.4	940.8	983.3	1025.7	1034.9
57.5°	844.4	868.5	914.4	959.2	970.7
60°	767.6	797.4	844.4	889.2	907.6
62.5°	693.0	725.1	773.3	818.1	838.7
65°	618.4	650.5	699.9	746.9	767.6
67.5°	542.7	576.0	628.7	673.5	696.4
70°	467.0	500.2	550.7	598.9	623.0
72.5°	391.2	426.8	476.2	525.5	549.6
75°	314.4	351.1	401.6	449.8	479.6
77.5°	242.1	277.7	328.1	377.5	402.7
80°	173.2	208.8	258.2	307.5	333.9
82.5°	110.1	143.4	191.6	232.9	257.0
85°	57.4	84.9	121.6	135.4	151.5
87.5°	17.2	33.3	47.0	52.8	65.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1589839

CATALOG NUMBER: 24CZSP-SB-52HE-L845

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	15.1	16.8	15.5	17.1	17.4	15.9	17.6	16.3	17.9	18.2
	3H	16.9	18.4	17.3	18.7	19.1	18.0	19.5	18.4	19.8	20.2
	4H	17.5	19.0	17.9	19.3	19.7	18.9	20.3	19.3	20.6	21.0
	6H	17.9	19.3	18.4	19.6	20.0	19.6	21.0	20.0	21.3	21.7
	8H	18.1	19.3	18.5	19.7	20.1	20.0	21.2	20.4	21.6	22.0
	12H	18.1	19.3	18.5	19.7	20.1	20.2	21.4	20.6	21.8	22.2
4H	2H	15.9	17.3	16.3	17.7	18.1	16.5	17.9	16.9	18.3	18.6
	3H	17.9	19.1	18.3	19.5	19.9	18.8	20.0	19.2	20.4	20.8
	4H	18.7	19.8	19.1	20.2	20.6	19.9	20.9	20.3	21.4	21.8
	6H	19.2	20.2	19.7	20.6	21.0	20.8	21.7	21.2	22.2	22.6
	8H	19.3	20.2	19.8	20.7	21.1	21.2	22.1	21.6	22.5	23.0
	12H	19.4	20.2	19.9	20.7	21.2	21.4	22.3	21.9	22.7	23.2
8H	4H	19.1	20.0	19.6	20.4	20.9	20.2	21.1	20.6	21.5	22.0
	6H	19.8	20.5	20.3	21.0	21.5	21.2	22.0	21.7	22.5	22.9
	8H	20.0	20.7	20.5	21.2	21.7	21.7	22.4	22.2	22.9	23.4
	12H	20.2	20.8	20.7	21.2	21.8	22.1	22.7	22.6	23.2	23.7
12H	4H	19.2	20.0	19.7	20.5	20.9	20.2	21.0	20.7	21.5	21.9
	6H	19.9	20.6	20.5	21.1	21.6	21.3	22.0	21.8	22.4	23.0
	8H	20.2	20.8	20.7	21.3	21.9	21.8	22.4	22.4	22.9	23.5

(END OF REPORT)