

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: P1589897

Luminaire Tested: 24CZSP-SB-60VHE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589897
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

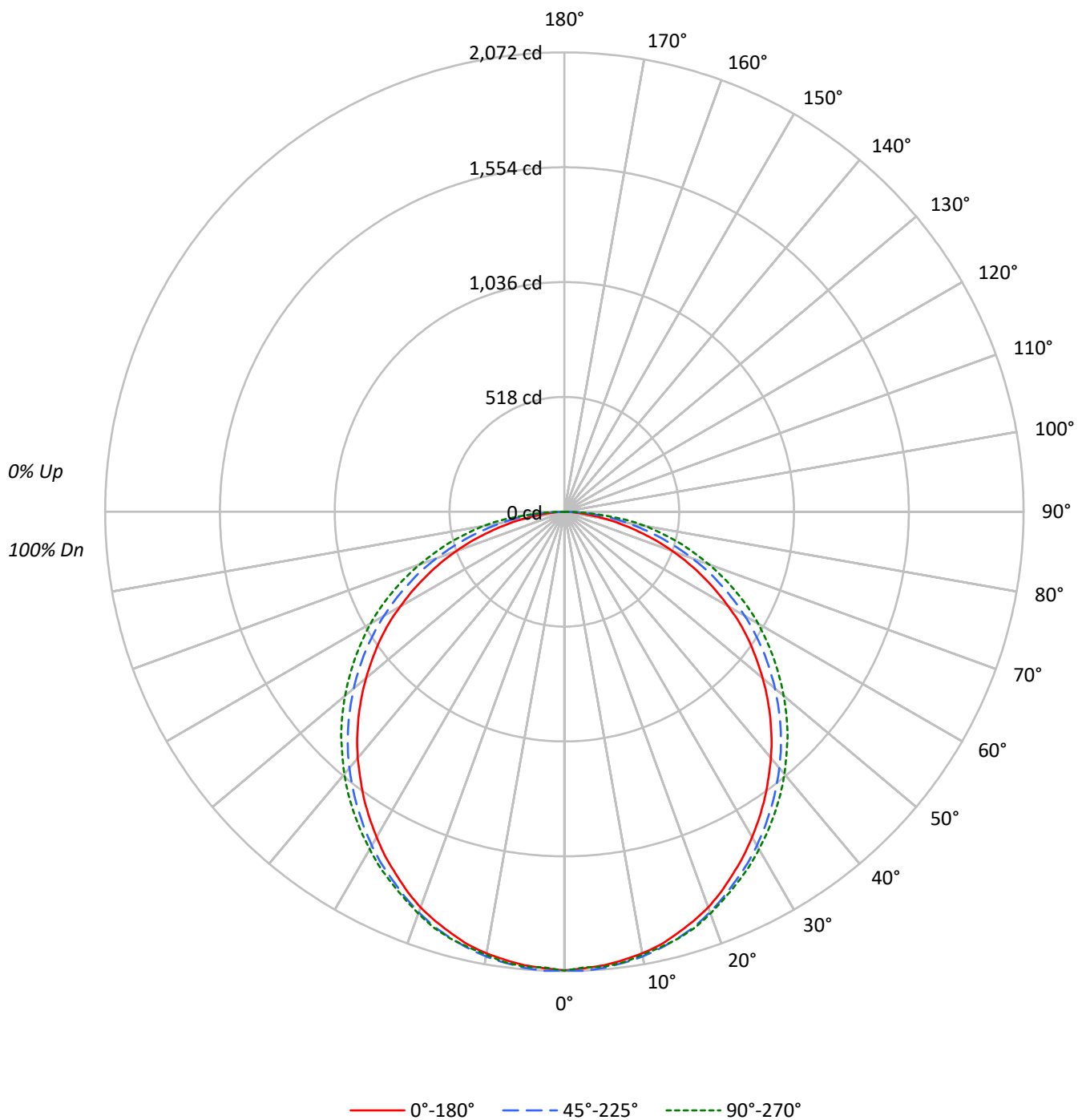
Lumens per Lamp: N/A
Luminaire Lumens: 6037.0 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	3168	3168	3168
5°	3157	3175	3167
10°	3146	3168	3156
15°	3122	3155	3159
20°	3095	3132	3143
25°	3045	3099	3120
30°	2996	3073	3107
35°	2948	3044	3096
40°	2900	3017	3089
45°	2845	2989	3086
50°	2783	2956	3078
55°	2719	2924	3078
60°	2618	2881	3096
65°	2496	2825	3098
70°	2329	2746	3107
75°	2072	2646	3161
80°	1701	2536	3279
85°	1123	2379	2965

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.7	3.2
10°-20°	560.1	9.3
20°-30°	844.2	14.0
30°-40°	1016.6	16.8
40°-50°	1062.1	17.6
50°-60°	975.8	16.2
60°-70°	768.4	12.7
70°-80°	471.1	7.8
80°-90°	142.9	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°	1600.0	26.5
0°-40°	2616.7	43.3
0°-60°	4654.6	77.1
0°-90°	6037.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6037.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2069	2069	2069	2069	2069	
5°	2053	2057	2065	2062	2060	195
15°	1969	1977	1989	1997	1992	556
25°	1802	1813	1834	1853	1846	831
35°	1577	1597	1628	1657	1656	986
45°	1314	1342	1380	1418	1425	1013
55°	1018	1048	1095	1142	1152	909
65°	689	724	779	832	855	681
75°	350	391	447	501	534	372
85°	64	95	135	151	169	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2068.6	2068.6	2068.6	2068.6	2068.6
2.5°	2061.0	2066.1	2072.5	2062.2	2057.1
5°	2053.3	2057.1	2064.8	2062.2	2059.7
7.5°	2039.3	2041.8	2052.0	2052.0	2049.5
10°	2022.6	2027.8	2036.7	2035.4	2029.0
12.5°	2000.9	2004.8	2015.0	2015.0	2011.1
15°	1969.0	1976.6	1989.4	1997.1	1992.0
17.5°	1935.8	1943.4	1960.0	1967.7	1965.1
20°	1898.7	1905.1	1921.7	1933.2	1928.1
22.5°	1852.7	1860.4	1879.5	1892.3	1887.2
25°	1801.6	1813.1	1833.5	1852.7	1846.3
27.5°	1750.5	1763.3	1788.8	1808.0	1805.4
30°	1694.3	1710.9	1737.7	1762.0	1756.9
32.5°	1636.8	1655.9	1684.0	1709.6	1708.3
35°	1576.7	1597.2	1627.8	1657.2	1655.9
37.5°	1512.8	1537.1	1569.0	1601.0	1602.3
40°	1450.2	1473.2	1509.0	1543.5	1544.8
42.5°	1383.8	1408.1	1446.4	1482.2	1483.4
45°	1313.5	1341.6	1379.9	1418.3	1424.7
47.5°	1241.9	1271.3	1310.9	1351.8	1359.5
50°	1167.8	1198.5	1240.7	1284.1	1291.8
52.5°	1092.5	1124.4	1167.8	1211.3	1222.8
55°	1018.3	1047.7	1095.0	1142.3	1152.5
57.5°	940.4	967.2	1018.3	1068.2	1081.0
60°	854.8	888.0	940.4	990.2	1010.7
62.5°	771.7	807.5	861.2	911.0	934.0
65°	688.7	724.5	779.4	831.8	854.8
67.5°	604.4	641.4	700.2	750.0	775.6
70°	520.0	557.1	613.3	667.0	693.8
72.5°	435.7	475.3	530.3	585.2	612.0
75°	350.1	391.0	447.2	500.9	534.1
77.5°	269.6	309.2	365.4	420.4	448.5
80°	192.9	232.5	287.5	342.4	371.8
82.5°	122.7	159.7	213.4	259.4	286.2
85°	63.9	94.6	135.4	150.8	168.7
87.5°	19.2	37.1	52.4	58.8	72.8
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	15.5	17.2	15.9	17.5	17.8	16.3	17.9	16.6	18.2	18.6
	3H	17.3	18.8	17.7	19.1	19.5	18.4	19.9	18.7	20.2	20.6
	4H	17.9	19.3	18.3	19.7	20.1	19.2	20.7	19.6	21.0	21.4
	6H	18.3	19.6	18.7	20.0	20.4	20.0	21.3	20.4	21.7	22.1
	8H	18.4	19.7	18.8	20.1	20.5	20.3	21.6	20.7	22.0	22.4
	12H	18.5	19.7	18.9	20.1	20.5	20.5	21.7	21.0	22.1	22.6
4H	2H	16.3	17.7	16.7	18.1	18.4	16.9	18.3	17.3	18.6	19.0
	3H	18.3	19.5	18.7	19.9	20.3	19.2	20.4	19.6	20.8	21.2
	4H	19.0	20.1	19.5	20.5	21.0	20.2	21.3	20.7	21.7	22.2
	6H	19.6	20.5	20.0	21.0	21.4	21.2	22.1	21.6	22.6	23.0
	8H	19.7	20.6	20.2	21.1	21.5	21.5	22.4	22.0	22.9	23.3
	12H	19.8	20.6	20.3	21.1	21.6	21.8	22.6	22.3	23.1	23.6
8H	4H	19.5	20.4	19.9	20.8	21.3	20.5	21.4	21.0	21.9	22.3
	6H	20.2	20.9	20.7	21.4	21.9	21.6	22.4	22.1	22.8	23.3
	8H	20.4	21.1	20.9	21.6	22.0	22.1	22.8	22.6	23.3	23.8
	12H	20.5	21.1	21.0	21.6	22.2	22.5	23.1	23.0	23.6	24.1
12H	4H	19.6	20.4	20.1	20.9	21.3	20.6	21.4	21.0	21.8	22.3
	6H	20.3	21.0	20.8	21.4	22.0	21.7	22.4	22.2	22.8	23.4
	8H	20.6	21.2	21.1	21.7	22.2	22.2	22.8	22.7	23.3	23.9

(END OF REPORT)