

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: P1589899

Luminaire Tested: 24CZSP-SB-60VHE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589899
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-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 6000 lumens, 80CRI, Ribbed Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

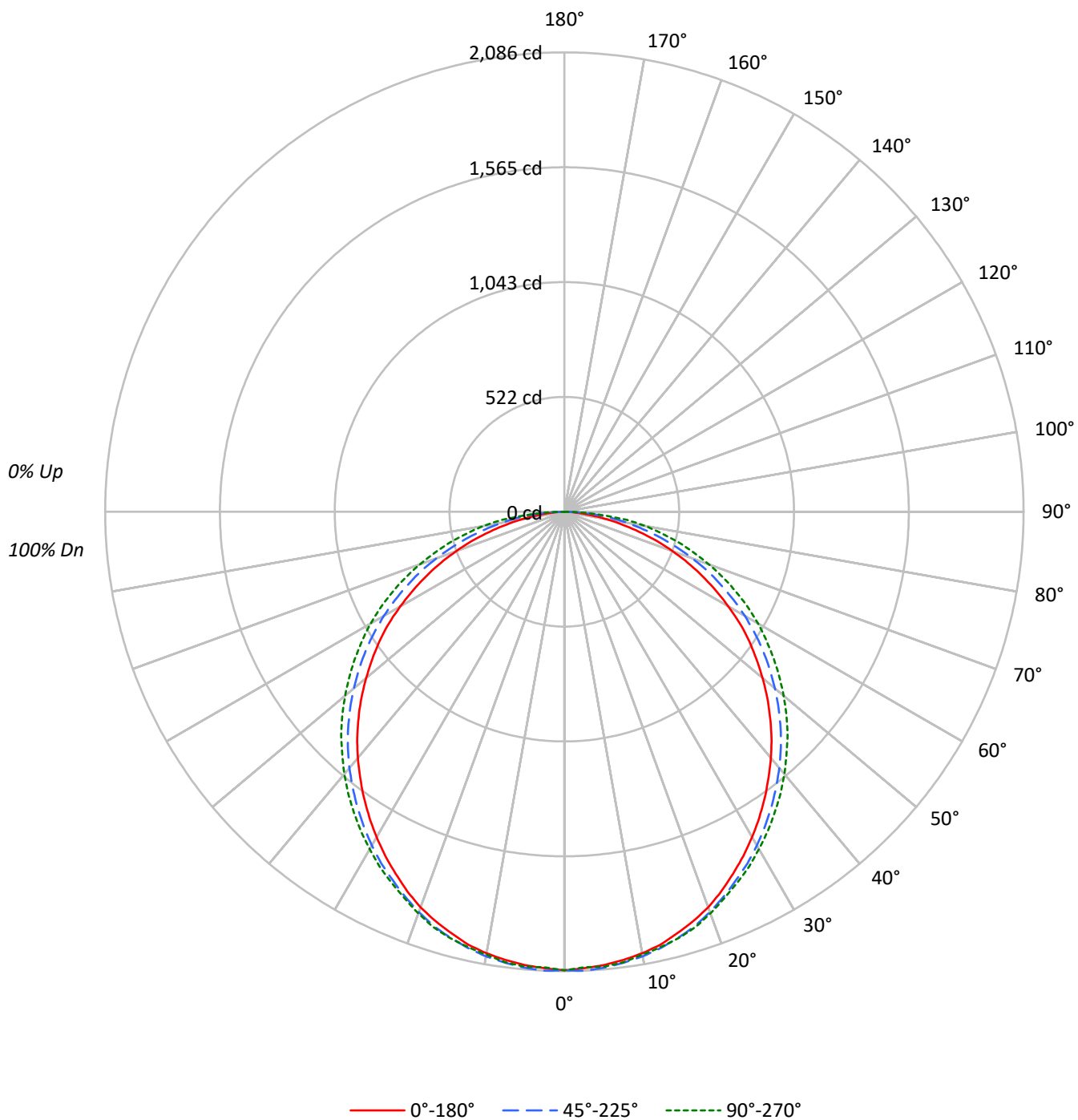
Lumens per Lamp: N/A
Luminaire Lumens: 6076.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			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°	3189	3189	3189
5°	3177	3195	3187
10°	3166	3188	3176
15°	3142	3175	3179
20°	3115	3152	3163
25°	3064	3119	3140
30°	3016	3093	3127
35°	2967	3063	3116
40°	2918	3036	3109
45°	2864	3008	3106
50°	2801	2975	3098
55°	2737	2943	3098
60°	2635	2899	3116
65°	2512	2843	3118
70°	2344	2764	3127
75°	2085	2664	3181
80°	1713	2552	3301
85°	1130	2395	2982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3381 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.0	3.2
10°-20°	563.7	9.3
20°-30°	849.7	14.0
30°-40°	1023.2	16.8
40°-50°	1069.0	17.6
50°-60°	982.1	16.2
60°-70°	773.4	12.7
70°-80°	474.2	7.8
80°-90°	143.8	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°	1610.4	26.5
0°-40°	2633.6	43.3
0°-60°	4684.7	77.1
0°-90°	6076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2082	2082	2082	2082	2082	
5°	2067	2070	2078	2076	2073	196
15°	1982	1989	2002	2010	2005	559
25°	1813	1825	1845	1865	1858	836
35°	1587	1608	1638	1668	1667	993
45°	1322	1350	1389	1427	1434	1020
55°	1025	1054	1102	1150	1160	914
65°	693	729	784	837	860	685
75°	352	394	450	504	538	375
85°	64	95	136	152	170	83
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2082.0	2082.0	2082.0	2082.0	2082.0
2.5°	2074.3	2079.4	2085.9	2075.6	2070.4
5°	2066.6	2070.4	2078.1	2075.6	2073.0
7.5°	2052.4	2055.0	2065.3	2065.3	2062.7
10°	2035.7	2040.9	2049.9	2048.6	2042.1
12.5°	2013.8	2017.7	2028.0	2028.0	2024.1
15°	1981.7	1989.4	2002.3	2010.0	2004.8
17.5°	1948.3	1956.0	1972.7	1980.4	1977.8
20°	1911.0	1917.4	1934.1	1945.7	1940.5
22.5°	1864.7	1872.4	1891.7	1904.5	1899.4
25°	1813.2	1824.8	1845.4	1864.7	1858.2
27.5°	1761.8	1774.7	1800.4	1819.7	1817.1
30°	1705.2	1721.9	1748.9	1773.4	1768.2
32.5°	1647.3	1666.6	1694.9	1720.6	1719.4
35°	1586.9	1607.5	1638.3	1667.9	1666.6
37.5°	1522.6	1547.0	1579.2	1611.3	1612.6
40°	1459.6	1482.7	1518.7	1553.5	1554.8
42.5°	1392.7	1417.2	1455.7	1491.7	1493.0
45°	1322.0	1350.3	1388.9	1427.4	1433.9
47.5°	1250.0	1279.6	1319.4	1360.6	1368.3
50°	1175.4	1206.2	1248.7	1292.4	1300.1
52.5°	1099.5	1131.7	1175.4	1219.1	1230.7
55°	1024.9	1054.5	1102.1	1149.7	1160.0
57.5°	946.5	973.5	1024.9	1075.1	1087.9
60°	860.3	893.8	946.5	996.6	1017.2
62.5°	776.7	812.7	866.8	916.9	940.1
65°	693.1	729.2	784.4	837.2	860.3
67.5°	608.3	645.6	704.7	754.9	780.6
70°	523.4	560.7	617.3	671.3	698.3
72.5°	438.5	478.4	533.7	589.0	616.0
75°	352.4	393.5	450.1	504.1	537.5
77.5°	271.3	311.2	367.8	423.1	451.4
80°	194.2	234.0	289.3	344.6	374.2
82.5°	123.5	160.7	214.8	261.1	288.1
85°	64.3	95.2	136.3	151.7	169.7
87.5°	19.3	37.3	52.7	59.2	73.3
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	18.0	16.7	18.3	18.6
	3H	17.3	18.8	17.7	19.1	19.5	18.4	19.9	18.8	20.2	20.6
	4H	17.9	19.4	18.3	19.7	20.1	19.3	20.7	19.7	21.0	21.4
	6H	18.3	19.7	18.8	20.0	20.4	20.0	21.4	20.4	21.7	22.1
	8H	18.4	19.7	18.9	20.1	20.5	20.3	21.6	20.8	22.0	22.4
	12H	18.5	19.7	18.9	20.1	20.5	20.6	21.8	21.0	22.2	22.6
4H	2H	16.3	17.7	16.7	18.1	18.5	16.9	18.3	17.3	18.7	19.0
	3H	18.3	19.5	18.7	19.9	20.3	19.2	20.4	19.6	20.8	21.2
	4H	19.1	20.1	19.5	20.6	21.0	20.3	21.3	20.7	21.8	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	21.6	22.5	22.0	22.9	23.4
	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	20.0	20.8	21.3	20.6	21.4	21.0	21.9	22.4
	6H	20.2	20.9	20.7	21.4	21.9	21.6	22.4	22.1	22.9	23.3
	8H	20.4	21.1	20.9	21.6	22.1	22.1	22.8	22.6	23.3	23.8
	12H	20.6	21.1	21.1	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	21.1	21.9	22.3
	6H	20.3	21.0	20.8	21.5	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	22.8	23.3	23.9

(END OF REPORT)