

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: P1589894

Luminaire Tested: 24CZSP-SB-60VHE-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1589894
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-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 80CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

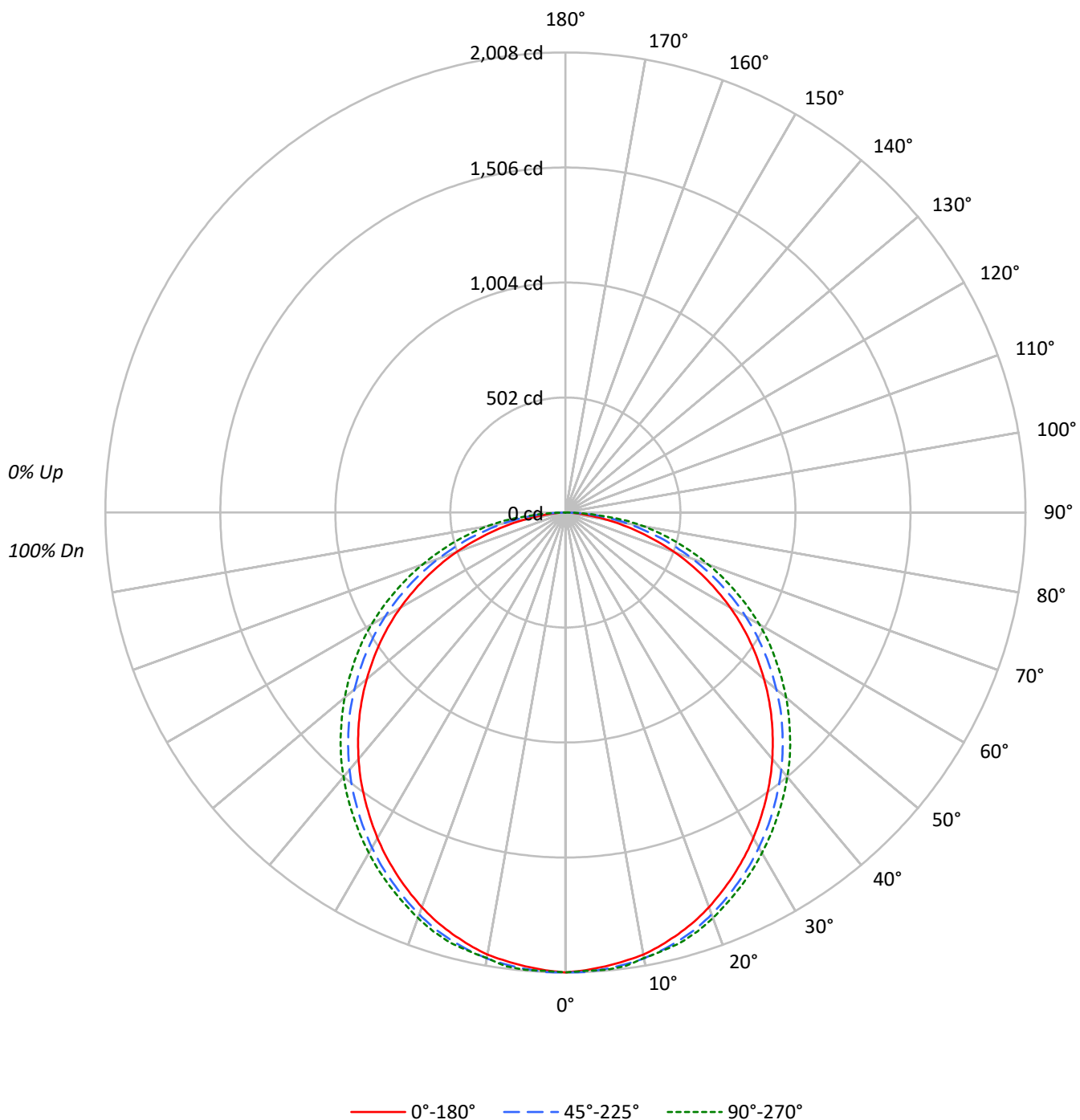
Lumens per Lamp: N/A
Luminaire Lumens: 5840.0 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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			
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°	3075	3075	3075
5°	3058	3075	3081
10°	3048	3073	3071
15°	3020	3064	3082
20°	2988	3043	3069
25°	2945	3013	3051
30°	2902	2986	3035
35°	2854	2957	3021
40°	2808	2931	3012
45°	2757	2901	3004
50°	2697	2865	2997
55°	2630	2828	2992
60°	2548	2786	2994
65°	2431	2727	2978
70°	2273	2644	2970
75°	2015	2543	2981
80°	1640	2416	3069
85°	1060	2230	2650

MAXIMUM LUMINANCE 45°-90°:

Luminance: 3111 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.0	3.3
10°-20°	544.0	9.3
20°-30°	820.3	14.0
30°-40°	987.0	16.9
40°-50°	1029.5	17.6
50°-60°	943.7	16.2
60°-70°	741.0	12.7
70°-80°	451.0	7.7
80°-90°	133.4	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°	1554.3	26.6
0°-40°	2541.3	43.5
0°-60°	4514.5	77.3
0°-90°	5840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2008	2008	2008	2008	2008	
5°	1989	2001	2000	1998	2004	189
15°	1905	1923	1932	1935	1944	537
25°	1742	1766	1783	1794	1805	803
35°	1526	1550	1582	1604	1616	955
45°	1273	1299	1339	1371	1387	981
55°	985	1010	1059	1102	1121	880
65°	671	696	752	803	822	664
75°	340	372	430	481	504	361
85°	60	85	127	142	151	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2007.6	2007.6	2007.6	2007.6	2007.6
2.5°	2000.1	2010.1	2007.6	1998.8	2002.6
5°	1988.7	2001.3	2000.1	1997.5	2003.8
7.5°	1974.9	1988.7	1990.0	1990.0	1997.5
10°	1959.8	1973.7	1976.2	1972.4	1974.9
12.5°	1934.7	1951.1	1956.1	1956.1	1959.8
15°	1904.6	1923.4	1932.2	1934.7	1943.5
17.5°	1871.9	1892.0	1903.3	1909.6	1917.1
20°	1833.0	1854.3	1866.9	1874.4	1883.2
22.5°	1789.0	1812.9	1826.7	1834.2	1844.3
25°	1742.5	1766.4	1782.7	1794.0	1805.3
27.5°	1693.5	1716.1	1738.7	1752.6	1762.6
30°	1640.7	1664.6	1688.5	1706.1	1716.1
32.5°	1584.2	1609.3	1637.0	1655.8	1667.1
35°	1526.4	1550.3	1581.7	1604.3	1615.6
37.5°	1467.4	1492.5	1525.2	1549.0	1562.9
40°	1404.6	1430.9	1466.1	1492.5	1506.3
42.5°	1339.2	1364.4	1403.3	1433.5	1449.8
45°	1272.6	1299.0	1339.2	1370.6	1387.0
47.5°	1203.5	1228.7	1272.6	1309.1	1322.9
50°	1131.9	1155.8	1202.3	1241.2	1257.6
52.5°	1059.1	1084.2	1130.7	1172.1	1189.7
55°	985.0	1010.1	1059.1	1101.8	1120.6
57.5°	909.6	934.7	985.0	1028.9	1051.5
60°	831.7	856.8	909.6	954.8	977.4
62.5°	751.3	777.7	831.7	878.2	902.0
65°	670.9	696.0	752.5	802.8	821.6
67.5°	590.5	615.6	670.9	721.1	743.7
70°	507.6	536.4	590.5	643.2	663.3
72.5°	420.9	453.5	507.6	562.8	582.9
75°	340.5	371.9	429.7	481.2	503.8
77.5°	261.3	295.2	349.3	402.0	424.6
80°	185.9	218.6	273.9	324.1	348.0
82.5°	118.1	147.0	202.3	247.5	265.1
85°	60.3	85.4	126.9	142.0	150.8
87.5°	17.6	30.2	45.2	56.5	62.8
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	15.4	17.1	15.8	17.4	17.7	16.1	17.8	16.5	18.1	18.4
	3H	17.2	18.7	17.5	19.0	19.4	18.2	19.7	18.6	20.0	20.4
	4H	17.8	19.2	18.2	19.6	19.9	19.1	20.5	19.5	20.8	21.2
	6H	18.2	19.5	18.6	19.9	20.3	19.8	21.1	20.2	21.5	21.9
	8H	18.3	19.6	18.7	20.0	20.3	20.1	21.4	20.5	21.8	22.2
	12H	18.4	19.6	18.8	19.9	20.4	20.3	21.5	20.7	21.9	22.3
4H	2H	16.2	17.6	16.6	17.9	18.3	16.7	18.2	17.1	18.5	18.9
	3H	18.2	19.4	18.6	19.8	20.2	19.1	20.3	19.5	20.6	21.0
	4H	18.9	20.0	19.3	20.4	20.8	20.1	21.2	20.5	21.6	22.0
	6H	19.4	20.4	19.9	20.8	21.3	21.0	21.9	21.4	22.4	22.8
	8H	19.6	20.5	20.0	20.9	21.4	21.3	22.2	21.8	22.7	23.1
	12H	19.7	20.5	20.1	20.9	21.4	21.6	22.4	22.1	22.9	23.3
8H	4H	19.3	20.2	19.8	20.7	21.1	20.4	21.3	20.8	21.7	22.2
	6H	20.0	20.8	20.5	21.2	21.7	21.4	22.2	21.9	22.7	23.1
	8H	20.2	20.9	20.7	21.4	21.9	21.9	22.6	22.4	23.1	23.6
	12H	20.4	20.9	20.9	21.4	22.0	22.3	22.8	22.8	23.3	23.9
12H	4H	19.4	20.2	19.9	20.7	21.2	20.4	21.2	20.9	21.7	22.1
	6H	20.2	20.8	20.7	21.3	21.8	21.5	22.2	22.0	22.6	23.2
	8H	20.4	21.0	20.9	21.5	22.1	22.0	22.6	22.5	23.1	23.7

(END OF REPORT)