

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1588760

Luminaire Tested: 24CZSP-A-60VHE-L850-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588760
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-60VHE-L850-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

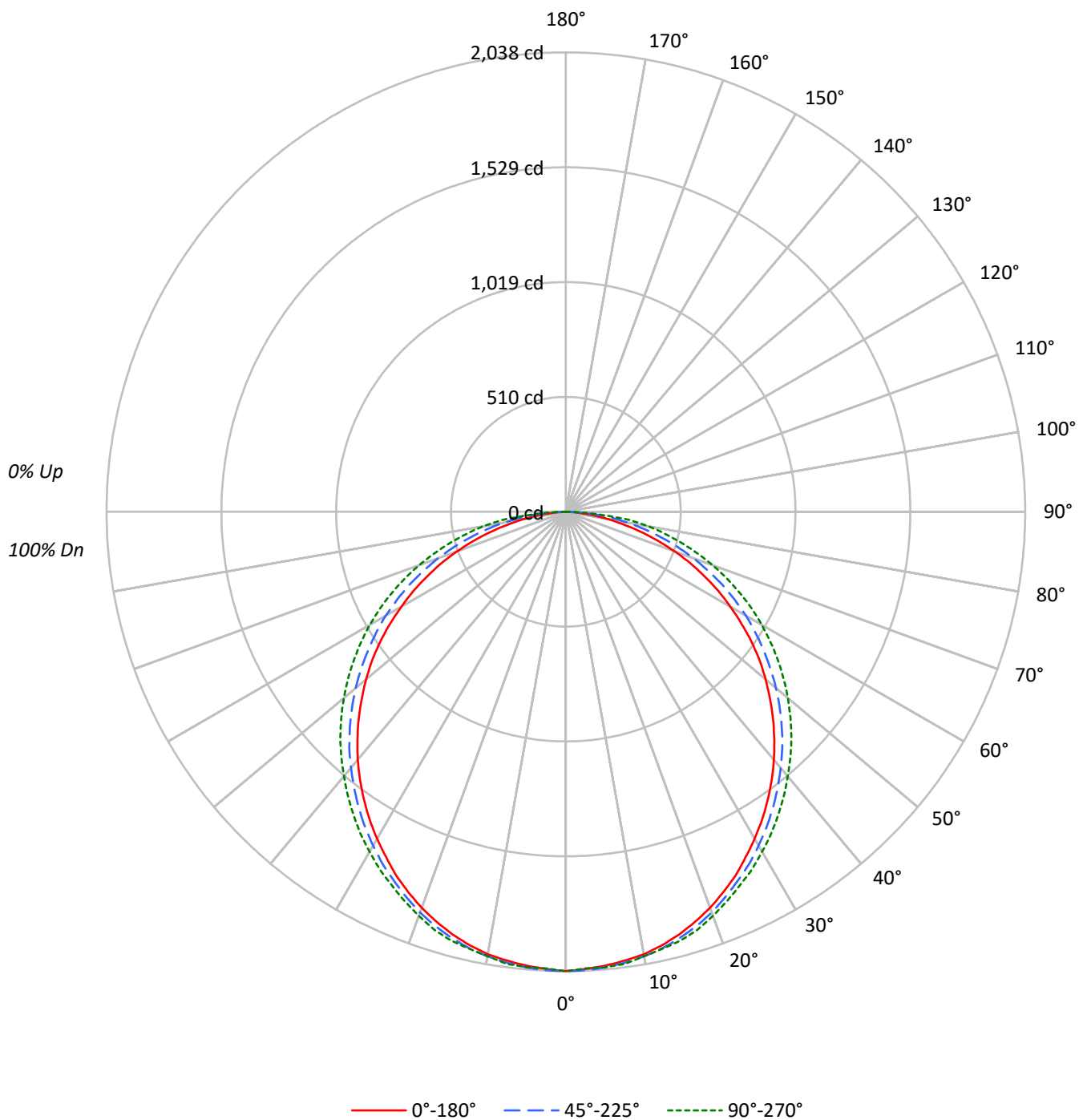
Lumens per Lamp: N/A
Luminaire Lumens: 5950.0 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: 24 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	69
3	89	79	70	64	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°	3121	3121	3121
5°	3107	3119	3117
10°	3101	3115	3113
15°	3078	3103	3122
20°	3047	3083	3109
25°	3009	3051	3089
30°	2963	3025	3080
35°	2920	2995	3071
40°	2872	2966	3062
45°	2817	2935	3066
50°	2756	2899	3064
55°	2684	2859	3068
60°	2584	2828	3076
65°	2465	2773	3085
70°	2298	2695	3099
75°	2048	2588	3129
80°	1693	2464	3282
85°	1102	2225	2868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3385 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.7	3.2
10°-20°	551.9	9.3
20°-30°	832.4	14.0
30°-40°	1002.6	16.8
40°-50°	1047.0	17.6
50°-60°	961.6	16.2
60°-70°	757.4	12.7
70°-80°	464.6	7.8
80°-90°	139.8	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°	1577.0	26.5
0°-40°	2579.6	43.4
0°-60°	4588.2	77.1
0°-90°	5950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5950.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2038	2038	2038	2038	2038	
5°	2021	2024	2029	2035	2028	192
15°	1941	1945	1957	1969	1969	547
25°	1781	1785	1806	1828	1828	820
35°	1562	1569	1602	1635	1642	977
45°	1300	1315	1355	1402	1415	1003
55°	1005	1024	1071	1131	1149	897
65°	680	704	765	829	851	673
75°	346	373	437	507	529	367
85°	63	86	127	161	163	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2038.0	2038.0	2038.0	2038.0	2038.0
2.5°	2030.2	2034.1	2035.4	2036.7	2027.6
5°	2021.1	2023.7	2028.9	2035.4	2027.6
7.5°	2008.0	2010.6	2017.1	2026.3	2022.4
10°	1993.6	1994.9	2002.8	2009.3	2001.5
12.5°	1970.1	1974.1	1983.2	1988.4	1985.8
15°	1941.4	1945.3	1957.1	1968.8	1968.8
17.5°	1907.5	1912.7	1927.1	1942.7	1944.0
20°	1869.6	1873.5	1891.8	1907.5	1907.5
22.5°	1826.5	1831.7	1850.0	1867.0	1869.6
25°	1780.8	1784.7	1805.6	1827.8	1827.8
27.5°	1727.3	1735.1	1761.2	1783.4	1788.7
30°	1675.1	1681.6	1710.3	1737.7	1741.7
32.5°	1620.2	1628.1	1658.1	1688.1	1694.7
35°	1561.5	1569.3	1602.0	1634.6	1642.4
37.5°	1500.1	1509.3	1543.2	1581.1	1588.9
40°	1436.2	1446.6	1483.2	1523.6	1531.5
42.5°	1368.3	1382.6	1421.8	1463.6	1475.3
45°	1300.4	1314.7	1355.2	1402.2	1415.3
47.5°	1228.6	1245.5	1287.3	1336.9	1351.3
50°	1156.8	1173.7	1216.8	1270.3	1286.0
52.5°	1083.6	1100.6	1145.0	1201.1	1218.1
55°	1005.3	1023.6	1070.6	1130.6	1148.9
57.5°	924.4	947.9	997.5	1058.8	1077.1
60°	843.4	866.9	923.1	983.1	1004.0
62.5°	763.8	786.0	843.4	907.4	929.6
65°	680.2	703.7	765.1	829.1	851.2
67.5°	598.0	621.5	682.8	749.4	772.9
70°	513.1	539.2	601.9	668.5	692.0
72.5°	428.2	455.7	519.6	587.5	609.7
75°	346.0	373.4	437.4	506.6	528.8
77.5°	265.0	295.1	357.7	428.2	449.1
80°	191.9	220.6	279.4	348.6	372.1
82.5°	122.7	147.5	206.3	271.6	288.5
85°	62.7	86.2	126.6	160.6	163.2
87.5°	19.6	27.4	41.8	62.7	64.0
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	15.43	17.10	15.80	17.41	17.72	16.26	17.93	16.63	18.24	18.55
	3H	17.19	18.70	17.57	19.02	19.38	18.38	19.89	18.76	20.21	20.57
	4H	17.81	19.23	18.21	19.58	19.95	19.27	20.69	19.67	21.04	21.41
	6H	18.22	19.54	18.63	19.90	20.29	20.05	21.37	20.46	21.73	22.12
	8H	18.33	19.59	18.75	19.98	20.37	20.37	21.63	20.79	22.02	22.42
	12H	18.38	19.59	18.81	19.97	20.40	20.58	21.79	21.01	22.17	22.60
4H	2H	16.21	17.63	16.60	17.97	18.35	16.85	18.27	17.25	18.62	19.00
	3H	18.18	19.38	18.59	19.78	20.18	19.21	20.40	19.61	20.80	21.20
	4H	18.92	20.01	19.35	20.42	20.85	20.26	21.34	20.69	21.76	22.19
	6H	19.45	20.40	19.90	20.84	21.29	21.21	22.16	21.66	22.60	23.06
	8H	19.59	20.49	20.05	20.93	21.39	21.61	22.50	22.07	22.94	23.41
	12H	19.68	20.48	20.16	20.96	21.42	21.88	22.69	22.36	23.16	23.63
8H	4H	19.38	20.27	19.84	20.71	21.18	20.55	21.44	21.01	21.88	22.34
	6H	20.04	20.78	20.53	21.27	21.74	21.66	22.40	22.15	22.89	23.36
	8H	20.25	20.92	20.76	21.42	21.91	22.17	22.84	22.68	23.34	23.83
	12H	20.39	20.98	20.89	21.47	22.03	22.56	23.15	23.06	23.64	24.20
12H	4H	19.47	20.27	19.95	20.75	21.21	20.57	21.38	21.05	21.85	22.32
	6H	20.17	20.84	20.68	21.35	21.83	21.71	22.38	22.21	22.88	23.37
	8H	20.45	21.04	20.95	21.53	22.09	22.28	22.88	22.79	23.37	23.92