

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: P1588590

Luminaire Tested: 24CZSP-A-37HE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588590
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-37HE-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 3500 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

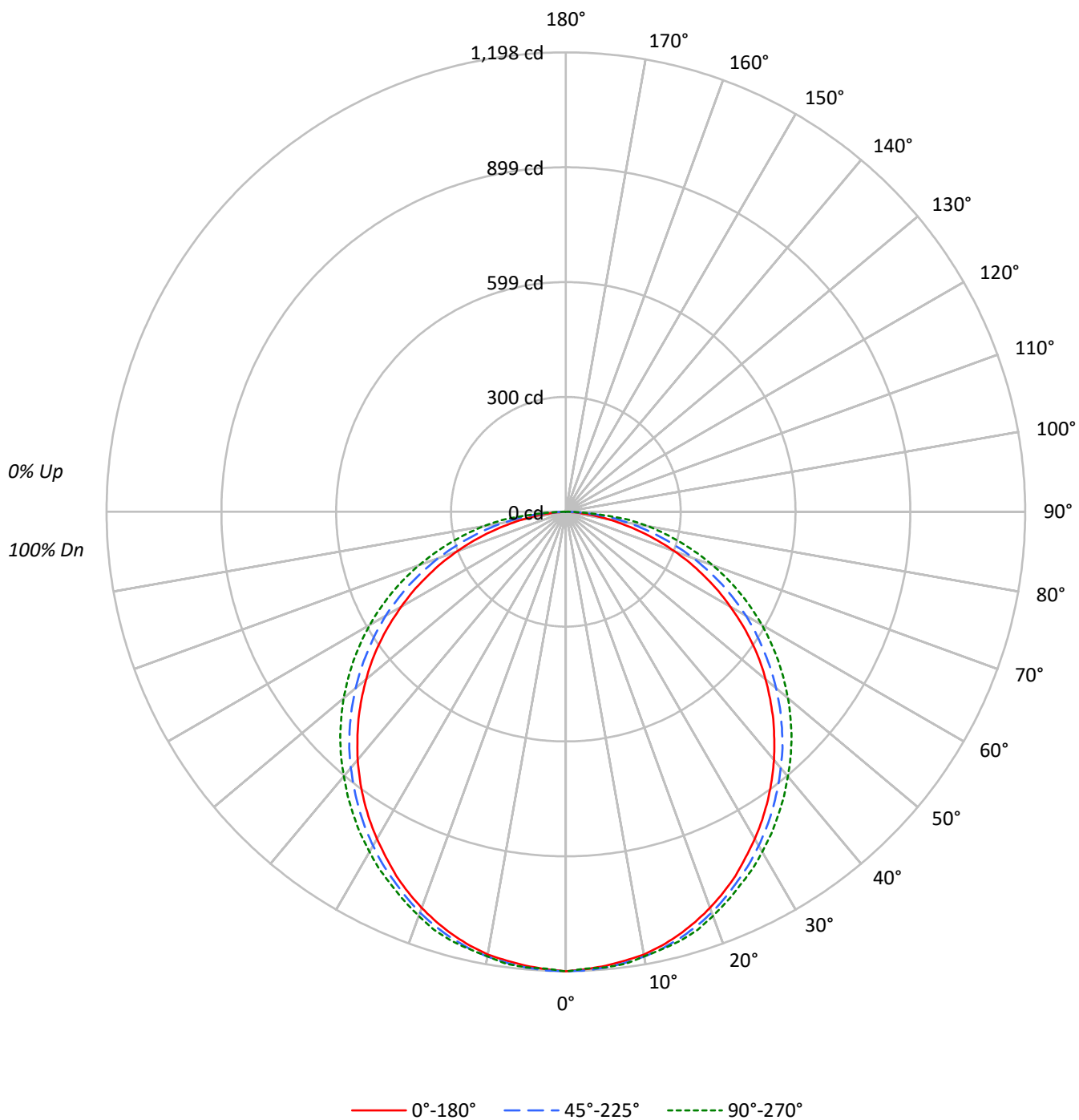
Lumens per Lamp: N/A
Luminaire Lumens: 3499.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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: 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°	1836	1836	1836
5°	1827	1834	1833
10°	1823	1832	1831
15°	1810	1825	1836
20°	1792	1813	1828
25°	1770	1794	1817
30°	1742	1779	1811
35°	1717	1762	1806
40°	1689	1744	1801
45°	1656	1726	1803
50°	1621	1705	1802
55°	1579	1681	1804
60°	1519	1663	1809
65°	1450	1630	1814
70°	1351	1585	1822
75°	1204	1522	1840
80°	996	1449	1930
85°	648	1309	1687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1991 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.2
10°-20°	324.6	9.3
20°-30°	489.5	14.0
30°-40°	589.6	16.8
40°-50°	615.7	17.6
50°-60°	565.5	16.2
60°-70°	445.4	12.7
70°-80°	273.2	7.8
80°-90°	82.2	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°	927.4	26.5
0°-40°	1517.0	43.4
0°-60°	2698.2	77.1
0°-90°	3499.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3499.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1188	1190	1193	1197	1192	113
15°	1142	1144	1151	1158	1158	322
25°	1047	1050	1062	1075	1075	482
35°	918	923	942	961	966	574
45°	765	773	797	825	832	590
55°	591	602	630	665	676	528
65°	400	414	450	488	501	396
75°	204	220	257	298	311	216
85°	37	51	74	94	96	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.5	1198.5	1198.5	1198.5	1198.5
2.5°	1193.9	1196.2	1197.0	1197.7	1192.4
5°	1188.5	1190.1	1193.1	1197.0	1192.4
7.5°	1180.8	1182.4	1186.2	1191.6	1189.3
10°	1172.4	1173.2	1177.8	1181.6	1177.0
12.5°	1158.6	1160.9	1166.3	1169.3	1167.8
15°	1141.7	1144.0	1150.9	1157.8	1157.8
17.5°	1121.7	1124.8	1133.2	1142.5	1143.2
20°	1099.5	1101.8	1112.5	1121.7	1121.7
22.5°	1074.1	1077.2	1087.9	1097.9	1099.5
25°	1047.2	1049.6	1061.8	1074.9	1074.9
27.5°	1015.8	1020.4	1035.7	1048.8	1051.9
30°	985.1	988.9	1005.8	1021.9	1024.2
32.5°	952.8	957.4	975.1	992.7	996.6
35°	918.3	922.9	942.1	961.3	965.9
37.5°	882.2	887.6	907.5	929.8	934.4
40°	844.6	850.7	872.2	896.0	900.6
42.5°	804.6	813.1	836.1	860.7	867.6
45°	764.7	773.2	797.0	824.6	832.3
47.5°	722.5	732.5	757.0	786.2	794.6
50°	680.3	690.2	715.6	747.0	756.3
52.5°	637.3	647.2	673.3	706.4	716.3
55°	591.2	601.9	629.6	664.9	675.6
57.5°	543.6	557.4	586.6	622.7	633.4
60°	496.0	509.8	542.8	578.1	590.4
62.5°	449.1	462.2	496.0	533.6	546.7
65°	400.0	413.8	449.9	487.5	500.6
67.5°	351.6	365.5	401.5	440.7	454.5
70°	301.7	317.1	353.9	393.1	406.9
72.5°	251.8	268.0	305.6	345.5	358.6
75°	203.5	219.6	257.2	297.9	310.9
77.5°	155.9	173.5	210.4	251.8	264.1
80°	112.9	129.8	164.3	205.0	218.8
82.5°	72.2	86.8	121.3	159.7	169.7
85°	36.9	50.7	74.5	94.4	96.0
87.5°	11.5	16.1	24.6	36.9	37.6
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	13.59	15.25	13.95	15.56	15.88	14.42	16.08	14.78	16.40	16.71
	3H	15.34	16.85	15.72	17.18	17.54	16.54	18.04	16.91	18.37	18.73
	4H	15.96	17.38	16.36	17.73	18.11	17.42	18.85	17.82	19.19	19.57
	6H	16.37	17.69	16.78	18.06	18.45	18.21	19.53	18.62	19.89	20.28
	8H	16.48	17.74	16.91	18.13	18.53	18.53	19.79	18.95	20.18	20.57
	12H	16.53	17.74	16.96	18.13	18.55	18.74	19.95	19.17	20.33	20.76
4H	2H	14.36	15.78	14.76	16.13	16.50	15.01	16.43	15.40	16.78	17.15
	3H	16.34	17.54	16.75	17.93	18.33	17.36	18.56	17.77	18.96	19.36
	4H	17.07	18.16	17.50	18.57	19.01	18.41	19.50	18.84	19.91	20.35
	6H	17.60	18.56	18.06	18.99	19.45	19.37	20.32	19.82	20.76	21.21
	8H	17.75	18.64	18.21	19.08	19.55	19.76	20.66	20.22	21.10	21.56
	12H	17.83	18.64	18.31	19.11	19.58	20.04	20.84	20.52	21.32	21.79
8H	4H	17.53	18.43	17.99	18.87	19.33	18.70	19.59	19.16	20.04	20.50
	6H	18.19	18.94	18.69	19.43	19.90	19.81	20.56	20.31	21.05	21.52
	8H	18.41	19.07	18.91	19.58	20.06	20.33	20.99	20.83	21.50	21.98
	12H	18.54	19.14	19.05	19.63	20.18	20.71	21.30	21.22	21.79	22.35
12H	4H	17.62	18.43	18.10	18.90	19.37	18.73	19.53	19.21	20.00	20.47
	6H	18.33	19.00	18.83	19.50	19.99	19.86	20.53	20.37	21.04	21.52
	8H	18.61	19.20	19.11	19.69	20.25	20.44	21.03	20.94	21.52	22.08