

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: P1588770

Luminaire Tested: 24CZSP-A-60VHE-L950-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588770
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-L950-S
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 6000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

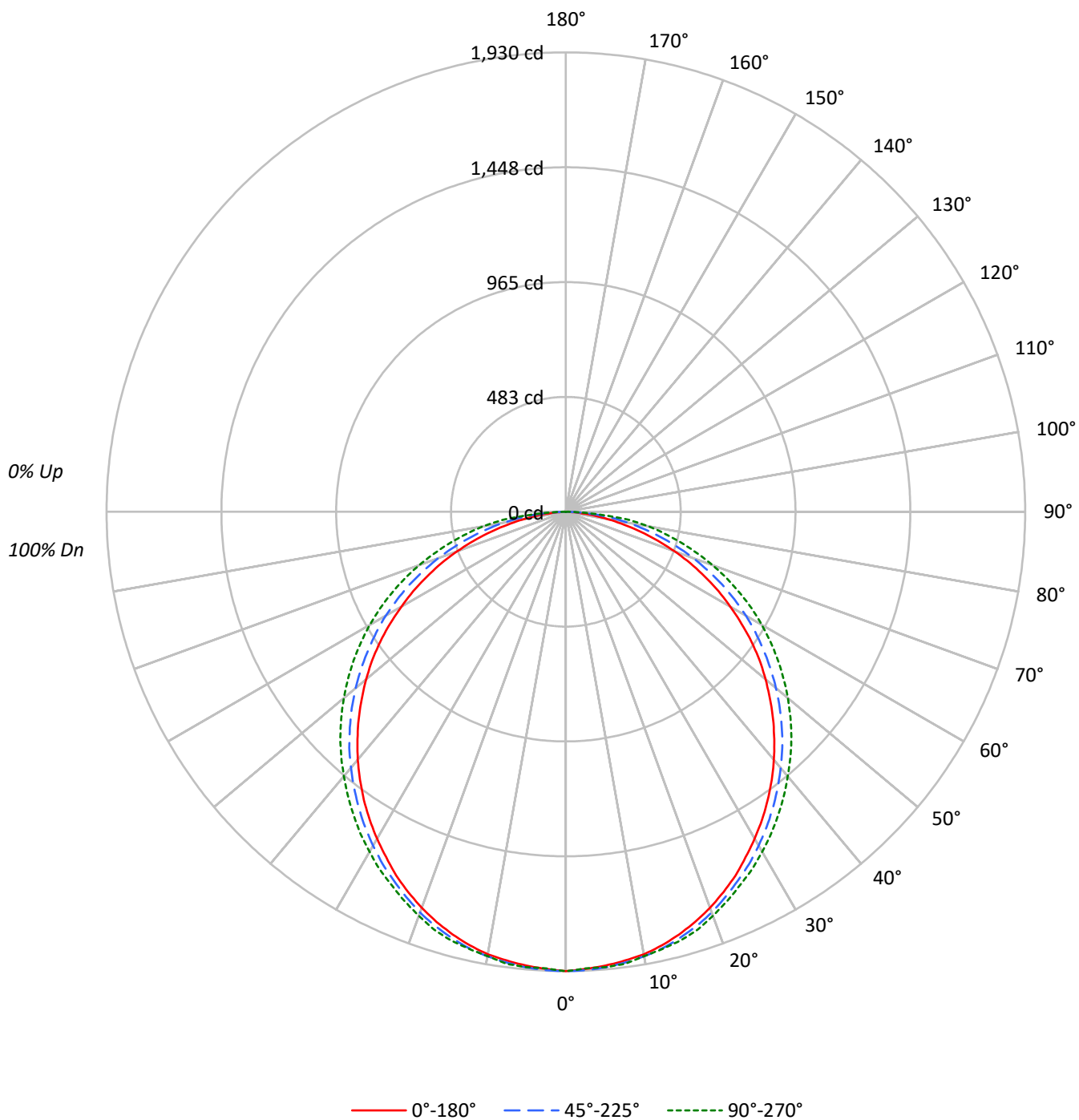
Lumens per Lamp: N/A
Luminaire Lumens: 5635.0 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2956	2956	2956
5°	2943	2954	2952
10°	2936	2950	2948
15°	2915	2939	2957
20°	2886	2920	2944
25°	2850	2890	2925
30°	2806	2865	2917
35°	2765	2837	2908
40°	2719	2808	2900
45°	2667	2780	2903
50°	2610	2746	2902
55°	2542	2707	2906
60°	2447	2678	2913
65°	2335	2626	2922
70°	2176	2553	2935
75°	1939	2451	2964
80°	1604	2334	3108
85°	1044	2107	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3207 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	3.2
10°-20°	522.7	9.3
20°-30°	788.3	14.0
30°-40°	949.5	16.8
40°-50°	991.6	17.6
50°-60°	910.7	16.2
60°-70°	717.3	12.7
70°-80°	440.0	7.8
80°-90°	132.4	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°	1493.5	26.5
0°-40°	2443.0	43.4
0°-60°	4345.3	77.1
0°-90°	5635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1930	1930	1930	1930	1930	
5°	1914	1916	1922	1928	1920	182
15°	1839	1842	1854	1865	1865	518
25°	1687	1690	1710	1731	1731	776
35°	1479	1486	1517	1548	1556	925
45°	1232	1245	1284	1328	1340	950
55°	952	969	1014	1071	1088	850
65°	644	666	725	785	806	637
75°	328	354	414	480	501	347
85°	59	82	120	152	155	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1930.1	1930.1	1930.1	1930.1	1930.1
2.5°	1922.7	1926.4	1927.7	1928.9	1920.2
5°	1914.1	1916.5	1921.5	1927.7	1920.2
7.5°	1901.7	1904.2	1910.4	1919.0	1915.3
10°	1888.1	1889.3	1896.8	1902.9	1895.5
12.5°	1865.8	1869.6	1878.2	1883.2	1880.7
15°	1838.6	1842.3	1853.5	1864.6	1864.6
17.5°	1806.5	1811.4	1825.0	1839.9	1841.1
20°	1770.6	1774.3	1791.7	1806.5	1806.5
22.5°	1729.8	1734.8	1752.1	1768.2	1770.6
25°	1686.6	1690.3	1710.0	1731.1	1731.1
27.5°	1635.9	1643.3	1668.0	1689.0	1694.0
30°	1586.4	1592.6	1619.8	1645.7	1649.5
32.5°	1534.5	1541.9	1570.3	1598.8	1604.9
35°	1478.8	1486.2	1517.2	1548.1	1555.5
37.5°	1420.7	1429.4	1461.5	1497.4	1504.8
40°	1360.1	1370.0	1404.6	1443.0	1450.4
42.5°	1295.8	1309.4	1346.5	1386.1	1397.2
45°	1231.5	1245.1	1283.5	1328.0	1340.3
47.5°	1163.5	1179.6	1219.2	1266.2	1279.8
50°	1095.5	1111.6	1152.4	1203.1	1217.9
52.5°	1026.3	1042.3	1084.4	1137.6	1153.6
55°	952.1	969.4	1013.9	1070.8	1088.1
57.5°	875.4	897.7	944.7	1002.8	1020.1
60°	798.8	821.0	874.2	931.1	950.8
62.5°	723.3	744.4	798.8	859.4	880.4
65°	644.2	666.5	724.6	785.2	806.2
67.5°	566.3	588.6	646.7	709.7	732.0
70°	485.9	510.7	570.0	633.1	655.3
72.5°	405.6	431.5	492.1	556.4	577.4
75°	327.7	353.6	414.2	479.8	500.8
77.5°	251.0	279.4	338.8	405.6	425.3
80°	181.8	209.0	264.6	330.1	352.4
82.5°	116.2	139.7	195.4	257.2	273.3
85°	59.4	81.6	119.9	152.1	154.6
87.5°	18.5	26.0	39.6	59.4	60.6
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	15.24	16.91	15.61	17.22	17.53	16.07	17.74	16.44	18.05	18.36
	3H	17.00	18.51	17.38	18.83	19.19	18.19	19.70	18.57	20.02	20.38
	4H	17.62	19.04	18.02	19.39	19.76	19.08	20.50	19.48	20.85	21.22
	6H	18.03	19.35	18.44	19.71	20.10	19.86	21.18	20.27	21.54	21.94
	8H	18.14	19.40	18.56	19.79	20.19	20.18	21.44	20.60	21.83	22.23
	12H	18.19	19.40	18.62	19.78	20.21	20.39	21.60	20.82	21.98	22.41
4H	2H	16.02	17.44	16.41	17.79	18.16	16.66	18.08	17.06	18.43	18.81
	3H	17.99	19.19	18.40	19.59	19.99	19.02	20.22	19.43	20.61	21.01
	4H	18.73	19.82	19.16	20.23	20.66	20.07	21.16	20.50	21.57	22.00
	6H	19.26	20.21	19.71	20.65	21.10	21.02	21.97	21.47	22.41	22.87
	8H	19.40	20.30	19.86	20.74	21.20	21.42	22.31	21.88	22.75	23.22
	12H	19.49	20.29	19.97	20.77	21.23	21.70	22.50	22.17	22.97	23.44
8H	4H	19.19	20.08	19.65	20.52	20.99	20.36	21.25	20.82	21.69	22.16
	6H	19.85	20.59	20.34	21.08	21.55	21.47	22.21	21.96	22.70	23.17
	8H	20.06	20.73	20.57	21.23	21.72	21.98	22.65	22.49	23.16	23.64
	12H	20.20	20.79	20.71	21.28	21.84	22.37	22.96	22.87	23.45	24.01
12H	4H	19.28	20.08	19.76	20.56	21.02	20.38	21.19	20.86	21.66	22.13
	6H	19.98	20.65	20.49	21.16	21.64	21.52	22.19	22.02	22.69	23.18
	8H	20.26	20.85	20.77	21.34	21.90	22.10	22.69	22.60	23.18	23.74