

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: P1588766

Luminaire Tested: 24CZSP-A-60VHE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588766
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-L940-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 6000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

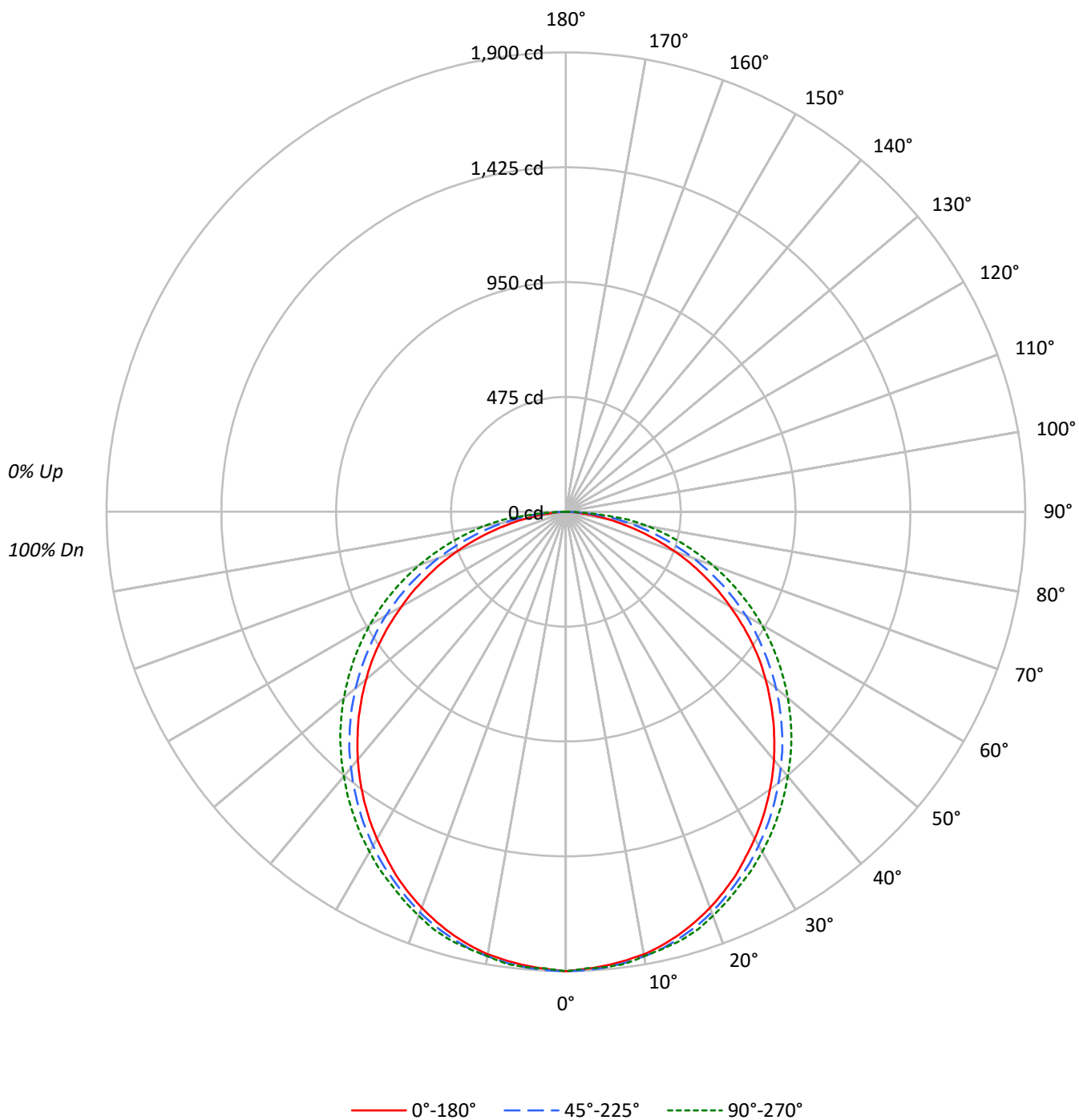
Lumens per Lamp: N/A
Luminaire Lumens: 5548.0 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2911	2911	2911
5°	2897	2909	2907
10°	2891	2904	2903
15°	2871	2894	2911
20°	2841	2875	2899
25°	2806	2845	2880
30°	2762	2821	2872
35°	2722	2793	2864
40°	2677	2765	2855
45°	2626	2737	2858
50°	2570	2704	2857
55°	2503	2666	2861
60°	2409	2637	2868
65°	2299	2585	2876
70°	2142	2513	2889
75°	1909	2413	2917
80°	1579	2298	3061
85°	1026	2075	2675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3157 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	3.2
10°-20°	514.6	9.3
20°-30°	776.1	14.0
30°-40°	934.8	16.8
40°-50°	976.3	17.6
50°-60°	896.6	16.2
60°-70°	706.2	12.7
70°-80°	433.2	7.8
80°-90°	130.4	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°	1470.5	26.5
0°-40°	2405.3	43.4
0°-60°	4278.2	77.1
0°-90°	5548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1900	1900	1900	1900	1900	
5°	1884	1887	1892	1898	1891	179
15°	1810	1814	1825	1836	1836	510
25°	1660	1664	1684	1704	1704	764
35°	1456	1463	1494	1524	1532	911
45°	1212	1226	1264	1308	1320	935
55°	937	954	998	1054	1071	837
65°	634	656	713	773	794	627
75°	323	348	408	472	493	342
85°	58	80	118	150	152	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1900.3	1900.3	1900.3	1900.3	1900.3
2.5°	1893.0	1896.7	1897.9	1899.1	1890.6
5°	1884.5	1886.9	1891.8	1897.9	1890.6
7.5°	1872.3	1874.8	1880.9	1889.4	1885.7
10°	1858.9	1860.2	1867.5	1873.6	1866.3
12.5°	1837.0	1840.7	1849.2	1854.1	1851.6
15°	1810.3	1813.9	1824.9	1835.8	1835.8
17.5°	1778.6	1783.5	1796.9	1811.5	1812.7
20°	1743.3	1746.9	1764.0	1778.6	1778.6
22.5°	1703.1	1708.0	1725.0	1740.9	1743.3
25°	1660.5	1664.2	1683.6	1704.3	1704.3
27.5°	1610.6	1617.9	1642.3	1662.9	1667.8
30°	1561.9	1568.0	1594.8	1620.3	1624.0
32.5°	1510.8	1518.1	1546.1	1574.1	1580.2
35°	1456.0	1463.3	1493.7	1524.2	1531.5
37.5°	1398.8	1407.3	1438.9	1474.3	1481.6
40°	1339.1	1348.9	1382.9	1420.7	1428.0
42.5°	1275.8	1289.2	1325.7	1364.7	1375.6
45°	1212.5	1225.9	1263.6	1307.5	1319.6
47.5°	1145.6	1161.4	1200.3	1246.6	1260.0
50°	1078.6	1094.4	1134.6	1184.5	1199.1
52.5°	1010.4	1026.3	1067.6	1120.0	1135.8
55°	937.4	954.4	998.3	1054.3	1071.3
57.5°	861.9	883.8	930.1	987.3	1004.3
60°	786.4	808.3	860.7	916.7	936.2
62.5°	712.2	732.9	786.4	846.1	866.8
65°	634.3	656.2	713.4	773.0	793.7
67.5°	557.6	579.5	636.7	698.8	720.7
70°	478.4	502.8	561.2	623.3	645.2
72.5°	399.3	424.9	484.5	547.8	568.5
75°	322.6	348.2	407.8	472.3	493.0
77.5°	247.1	275.1	333.6	399.3	418.8
80°	179.0	205.7	260.5	325.0	347.0
82.5°	114.4	137.6	192.3	253.2	269.0
85°	58.4	80.3	118.1	149.7	152.2
87.5°	18.3	25.6	39.0	58.4	59.7
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	15.19	16.85	15.55	17.17	17.48	16.02	17.68	16.38	18.00	18.31
	3H	16.95	18.45	17.32	18.78	19.14	18.14	19.64	18.51	19.97	20.33
	4H	17.56	18.99	17.96	19.33	19.71	19.03	20.45	19.42	20.79	21.17
	6H	17.98	19.30	18.39	19.66	20.05	19.81	21.13	20.22	21.49	21.88
	8H	18.08	19.35	18.51	19.73	20.13	20.13	21.39	20.55	21.78	22.18
	12H	18.13	19.34	18.56	19.73	20.15	20.34	21.55	20.77	21.93	22.36
4H	2H	15.96	17.38	16.36	17.73	18.11	16.61	18.03	17.01	18.38	18.75
	3H	17.94	19.14	18.35	19.53	19.93	18.96	20.16	19.37	20.56	20.96
	4H	18.68	19.76	19.11	20.17	20.61	20.01	21.10	20.45	21.51	21.95
	6H	19.20	20.16	19.66	20.60	21.05	20.97	21.92	21.42	22.36	22.81
	8H	19.35	20.24	19.81	20.68	21.15	21.36	22.26	21.82	22.70	23.16
	12H	19.43	20.24	19.91	20.71	21.18	21.64	22.45	22.12	22.92	23.39
8H	4H	19.13	20.03	19.59	20.47	20.93	20.30	21.20	20.76	21.64	22.10
	6H	19.80	20.54	20.29	21.03	21.50	21.42	22.16	21.91	22.65	23.12
	8H	20.01	20.68	20.51	21.18	21.66	21.93	22.60	22.43	23.10	23.59
	12H	20.15	20.74	20.65	21.23	21.79	22.31	22.91	22.82	23.39	23.95
12H	4H	19.22	20.03	19.70	20.50	20.97	20.33	21.13	20.81	21.61	22.07
	6H	19.93	20.60	20.43	21.10	21.59	21.46	22.13	21.97	22.64	23.12
	8H	20.21	20.80	20.71	21.29	21.85	22.04	22.63	22.55	23.12	23.68