

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: P1588764

Luminaire Tested: 24CZSP-A-60VHE-L935-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588764
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-L935-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

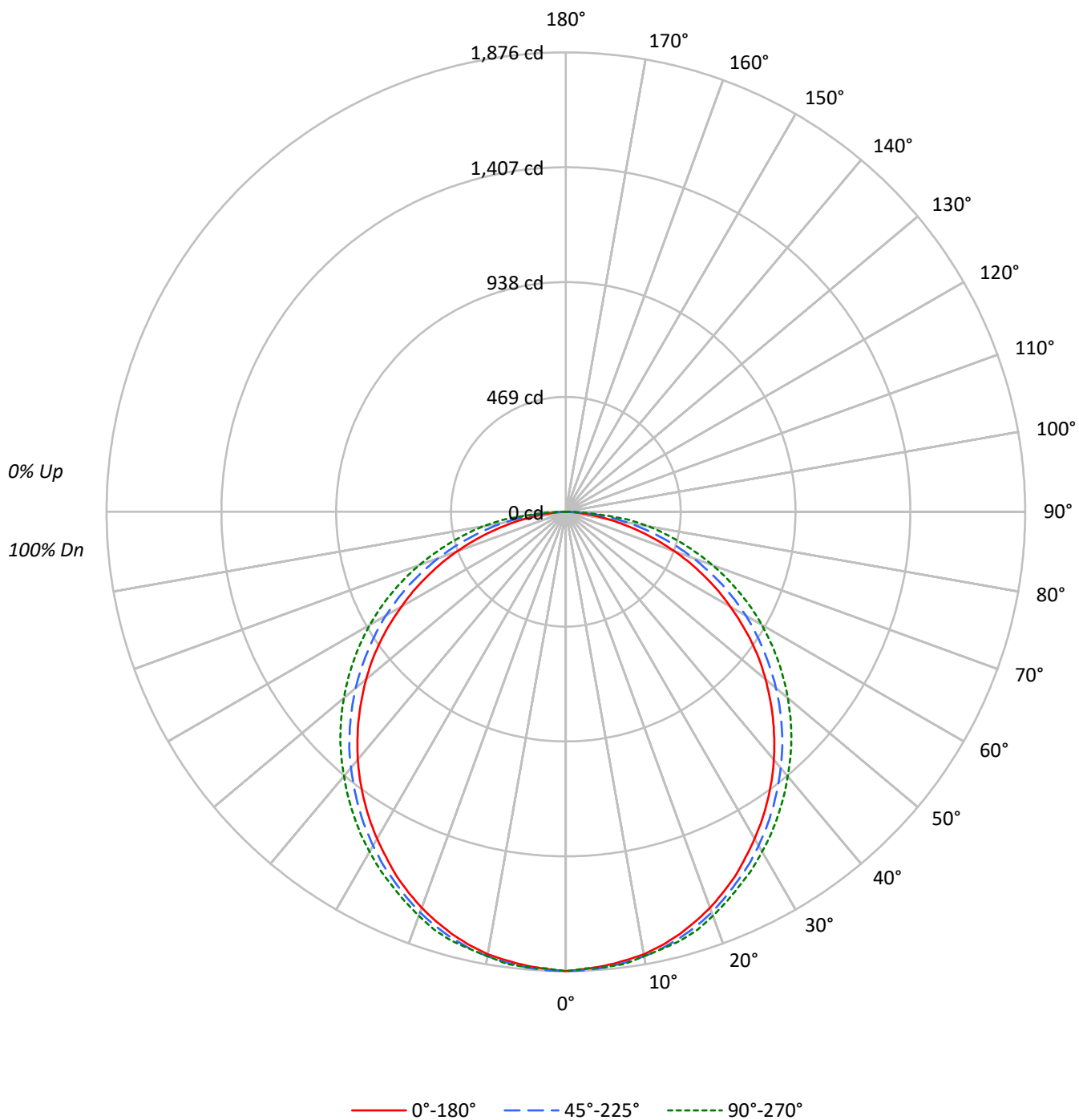
Lumens per Lamp: N/A
Luminaire Lumens: 5477.0 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2873	2873	2873
5°	2860	2871	2870
10°	2854	2867	2865
15°	2834	2857	2874
20°	2805	2838	2862
25°	2770	2809	2843
30°	2727	2784	2835
35°	2688	2757	2827
40°	2643	2730	2819
45°	2593	2702	2822
50°	2537	2669	2821
55°	2471	2632	2824
60°	2378	2603	2831
65°	2269	2552	2840
70°	2115	2481	2853
75°	1885	2382	2880
80°	1559	2269	3021
85°	1014	2049	2640

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3117 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	3.2
10°-20°	508.0	9.3
20°-30°	766.2	14.0
30°-40°	922.9	16.8
40°-50°	963.8	17.6
50°-60°	885.1	16.2
60°-70°	697.2	12.7
70°-80°	427.7	7.8
80°-90°	128.7	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°	1451.6	26.5
0°-40°	2374.5	43.4
0°-60°	4223.5	77.1
0°-90°	5477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1876	1876	1876	1876	1876	
5°	1860	1863	1868	1874	1866	177
15°	1787	1791	1802	1812	1812	504
25°	1639	1643	1662	1682	1682	755
35°	1437	1445	1475	1505	1512	899
45°	1197	1210	1248	1291	1303	923
55°	925	942	986	1041	1058	826
65°	626	648	704	763	784	619
75°	318	344	403	466	487	338
85°	58	79	117	148	150	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1876.0	1876.0	1876.0	1876.0	1876.0
2.5°	1868.8	1872.4	1873.6	1874.8	1866.4
5°	1860.4	1862.8	1867.6	1873.6	1866.4
7.5°	1848.4	1850.8	1856.8	1865.2	1861.6
10°	1835.2	1836.4	1843.6	1849.6	1842.4
12.5°	1813.5	1817.1	1825.5	1830.4	1827.9
15°	1787.1	1790.7	1801.5	1812.3	1812.3
17.5°	1755.8	1760.6	1773.9	1788.3	1789.5
20°	1721.0	1724.6	1741.4	1755.8	1755.8
22.5°	1681.3	1686.1	1703.0	1718.6	1721.0
25°	1639.3	1642.9	1662.1	1682.5	1682.5
27.5°	1590.0	1597.2	1621.2	1641.7	1646.5
30°	1541.9	1547.9	1574.4	1599.6	1603.2
32.5°	1491.4	1498.7	1526.3	1553.9	1559.9
35°	1437.4	1444.6	1474.6	1504.7	1511.9
37.5°	1380.9	1389.3	1420.5	1455.4	1462.6
40°	1322.0	1331.6	1365.3	1402.5	1409.7
42.5°	1259.5	1272.7	1308.8	1347.2	1358.0
45°	1197.0	1210.2	1247.5	1290.7	1302.8
47.5°	1130.9	1146.5	1185.0	1230.6	1243.9
50°	1064.8	1080.4	1120.1	1169.4	1183.8
52.5°	997.5	1013.1	1054.0	1105.7	1121.3
55°	925.4	942.2	985.5	1040.8	1057.6
57.5°	850.9	872.5	918.2	974.7	991.5
60°	776.4	798.0	849.7	905.0	924.2
62.5°	703.1	723.5	776.4	835.3	855.7
65°	626.1	647.8	704.3	763.1	783.6
67.5°	550.4	572.1	628.5	689.8	711.5
70°	472.3	496.3	554.0	615.3	637.0
72.5°	394.2	419.4	478.3	540.8	561.2
75°	318.5	343.7	402.6	466.3	486.7
77.5°	244.0	271.6	329.3	394.2	413.4
80°	176.7	203.1	257.2	320.9	342.5
82.5°	113.0	135.8	189.9	250.0	265.6
85°	57.7	79.3	116.6	147.8	150.2
87.5°	18.0	25.2	38.5	57.7	58.9
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	15.14	16.81	15.51	17.12	17.44	15.98	17.64	16.34	17.95	18.27
	3H	16.90	18.41	17.28	18.73	19.09	18.09	19.60	18.47	19.93	20.29
	4H	17.52	18.94	17.92	19.29	19.66	18.98	20.40	19.38	20.75	21.12
	6H	17.93	19.25	18.34	19.61	20.00	19.76	21.08	20.17	21.45	21.84
	8H	18.04	19.30	18.46	19.69	20.09	20.08	21.34	20.51	21.73	22.13
	12H	18.09	19.30	18.52	19.68	20.11	20.29	21.50	20.72	21.89	22.31
4H	2H	15.92	17.34	16.31	17.69	18.06	16.56	17.99	16.96	18.33	18.71
	3H	17.89	19.09	18.30	19.49	19.89	18.92	20.12	19.33	20.51	20.91
	4H	18.63	19.72	19.06	20.13	20.56	19.97	21.06	20.40	21.47	21.90
	6H	19.16	20.11	19.61	20.55	21.01	20.92	21.87	21.38	22.31	22.77
	8H	19.31	20.20	19.76	20.64	21.10	21.32	22.21	21.78	22.65	23.12
	12H	19.39	20.19	19.87	20.67	21.14	21.60	22.40	22.08	22.87	23.34
8H	4H	19.09	19.98	19.55	20.42	20.89	20.26	21.15	20.72	21.59	22.06
	6H	19.75	20.50	20.24	20.98	21.46	21.37	22.12	21.86	22.60	23.08
	8H	19.96	20.63	20.47	21.14	21.62	21.88	22.55	22.39	23.06	23.54
	12H	20.10	20.69	20.61	21.18	21.74	22.27	22.86	22.77	23.35	23.91
12H	4H	19.18	19.98	19.66	20.46	20.93	20.28	21.09	20.76	21.56	22.03
	6H	19.88	20.55	20.39	21.06	21.54	21.42	22.09	21.93	22.59	23.08
	8H	20.16	20.75	20.67	21.24	21.80	22.00	22.59	22.50	23.08	23.64