

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: P1588765

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-776-5)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-60VHE-L935
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 6000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

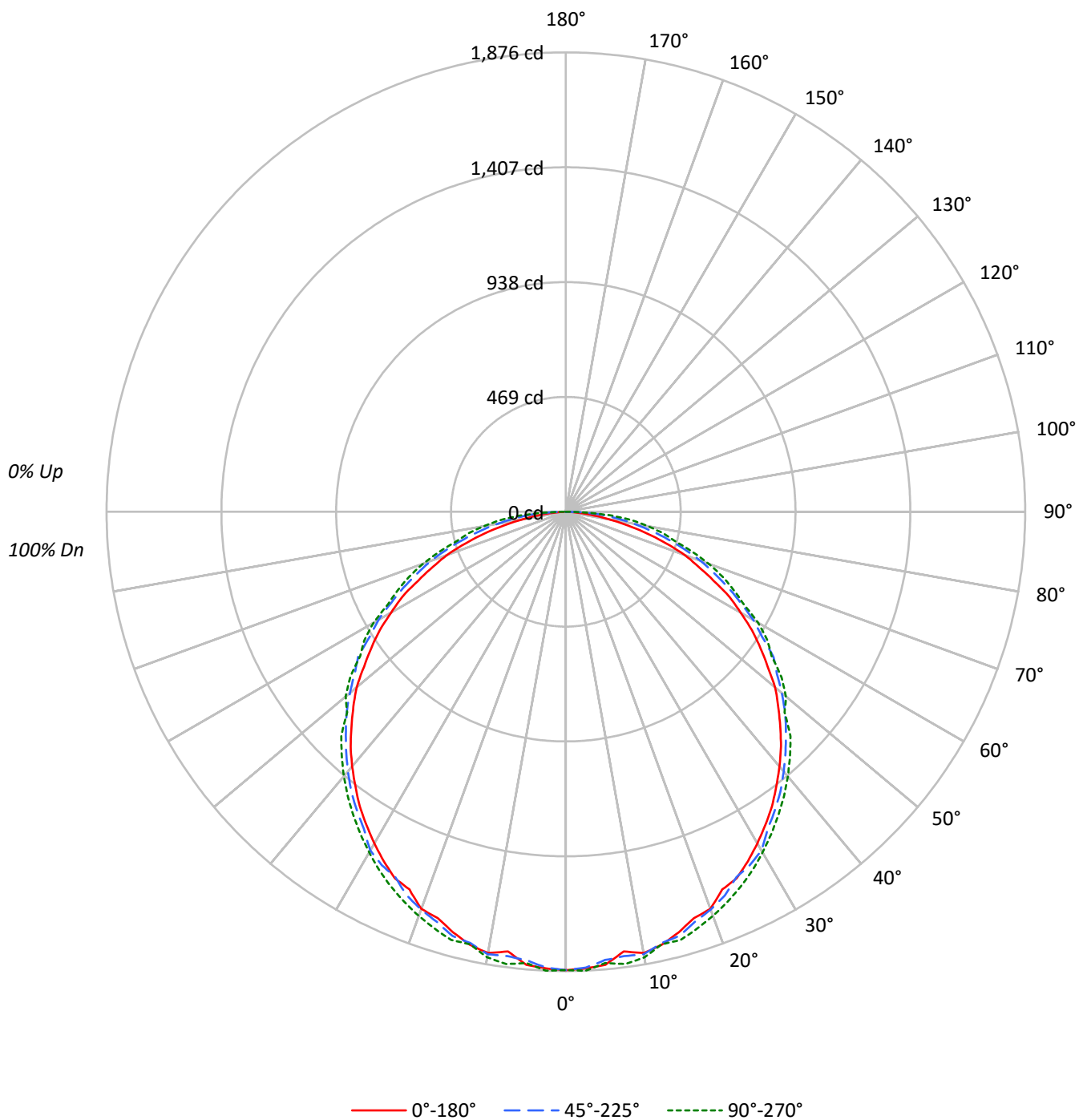
Lumens per Lamp: N/A
Luminaire Lumens: 5588.0 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	46	73	60	52	45	58	51	45		56	50	44		54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35		46	39	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		42	36	31		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2867	2867	2867
5°	2855	2825	2844
10°	2846	2853	2873
15°	2820	2843	2871
20°	2813	2818	2863
25°	2791	2783	2855
30°	2766	2825	2841
35°	2745	2783	2829
40°	2715	2768	2820
45°	2680	2753	2809
50°	2659	2742	2796
55°	2592	2766	2738
60°	2526	2707	2777
65°	2412	2649	2740
70°	2313	2626	2780
75°	2048	2548	2723
80°	1617	2489	3012
85°	989	2661	3436

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3436 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	3.2
10°-20°	505.0	9.0
20°-30°	769.4	13.8
30°-40°	936.5	16.8
40°-50°	981.9	17.6
50°-60°	909.6	16.3
60°-70°	717.3	12.8
70°-80°	443.7	7.9
80°-90°	147.8	2.6
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°	1451.1	26.0
0°-40°	2387.6	42.7
0°-60°	4279.2	76.6
0°-90°	5588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1857	1856	1838	1878	1850	175
15°	1778	1788	1793	1780	1810	502
25°	1651	1660	1647	1692	1689	759
35°	1468	1482	1488	1517	1513	917
45°	1238	1260	1271	1285	1297	956
55°	971	1000	1036	1045	1025	868
65°	666	691	731	758	756	662
75°	346	374	430	463	460	365
85°	56	96	151	184	196	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1871.9	1871.9	1871.9	1871.9	1871.9
2.5°	1866.6	1878.0	1863.5	1875.7	1875.7
5°	1856.7	1855.9	1837.7	1878.0	1849.8
7.5°	1811.0	1843.0	1830.1	1879.5	1862.8
10°	1830.1	1821.7	1834.6	1868.1	1847.5
12.5°	1811.0	1824.7	1804.2	1787.5	1808.8
15°	1778.3	1787.5	1792.8	1779.9	1810.3
17.5°	1739.5	1773.8	1755.5	1749.4	1784.4
20°	1725.8	1727.4	1728.9	1760.1	1756.3
22.5°	1669.6	1700.0	1696.2	1721.3	1724.3
25°	1651.3	1660.4	1646.7	1692.4	1689.3
27.5°	1609.5	1629.3	1627.0	1642.2	1650.5
30°	1563.8	1583.6	1597.3	1580.6	1606.4
32.5°	1516.7	1550.1	1534.9	1566.1	1560.8
35°	1468.0	1481.7	1488.5	1516.7	1512.9
37.5°	1411.7	1435.3	1439.1	1481.7	1463.4
40°	1357.7	1381.3	1384.3	1409.4	1410.2
42.5°	1300.7	1312.1	1328.0	1356.9	1354.7
45°	1237.5	1260.3	1271.0	1285.4	1296.9
47.5°	1176.7	1201.0	1214.7	1238.3	1211.7
50°	1115.8	1133.3	1150.8	1175.9	1173.6
52.5°	1039.0	1078.6	1086.9	1100.6	1109.7
55°	970.6	999.5	1036.0	1045.1	1025.3
57.5°	901.3	923.4	950.0	978.2	975.9
60°	824.5	851.1	883.8	905.1	906.7
62.5°	754.5	772.8	804.0	835.2	819.2
65°	665.5	691.4	731.0	758.3	756.1
67.5°	586.4	614.6	654.9	690.6	692.2
70°	516.5	531.7	586.4	613.8	620.7
72.5°	430.5	457.1	505.8	536.2	539.3
75°	346.1	373.5	430.5	463.2	460.2
77.5°	260.1	299.7	355.2	394.0	406.9
80°	183.3	219.1	282.2	320.2	341.5
82.5°	115.6	152.9	214.5	261.7	274.6
85°	56.3	95.8	151.4	184.1	195.5
87.5°	14.5	39.6	70.0	86.0	92.8
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	15.46	17.13	15.83	17.45	17.76	15.89	17.56	16.26	17.88	18.19
	3H	17.26	18.78	17.64	19.10	19.46	17.97	19.48	18.34	19.81	20.17
	4H	17.91	19.34	18.30	19.69	20.06	18.81	20.24	19.21	20.59	20.96
	6H	18.32	19.65	18.73	20.01	20.40	19.60	20.93	20.01	21.29	21.68
	8H	18.42	19.69	18.84	20.08	20.48	19.94	21.21	20.36	21.60	22.00
	12H	18.46	19.68	18.89	20.07	20.49	20.24	21.46	20.67	21.84	22.27
4H	2H	16.20	17.63	16.60	17.98	18.35	16.53	17.97	16.93	18.31	18.69
	3H	18.24	19.44	18.64	19.84	20.24	18.85	20.06	19.26	20.45	20.85
	4H	19.01	20.10	19.44	20.51	20.95	19.85	20.95	20.28	21.36	21.80
	6H	19.54	20.50	20.00	20.94	21.40	20.81	21.77	21.26	22.21	22.66
	8H	19.69	20.59	20.15	21.03	21.49	21.23	22.13	21.69	22.57	23.04
	12H	19.77	20.58	20.25	21.05	21.52	21.61	22.42	22.09	22.90	23.36
8H	4H	19.46	20.36	19.92	20.80	21.26	20.19	21.09	20.65	21.54	22.00
	6H	20.14	20.89	20.63	21.38	21.85	21.31	22.06	21.80	22.55	23.02
	8H	20.35	21.03	20.86	21.54	22.02	21.86	22.53	22.36	23.04	23.52
	12H	20.50	21.10	21.01	21.59	22.15	22.37	22.97	22.88	23.46	24.02
12H	4H	19.54	20.35	20.02	20.83	21.29	20.23	21.04	20.71	21.51	21.98
	6H	20.27	20.95	20.78	21.45	21.94	21.37	22.05	21.88	22.56	23.04
	8H	20.57	21.16	21.07	21.65	22.21	22.00	22.60	22.50	23.09	23.65