

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: P1588423

Luminaire Tested: 24CZSP-60VHE-L930

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588423
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-60VHE-L930
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

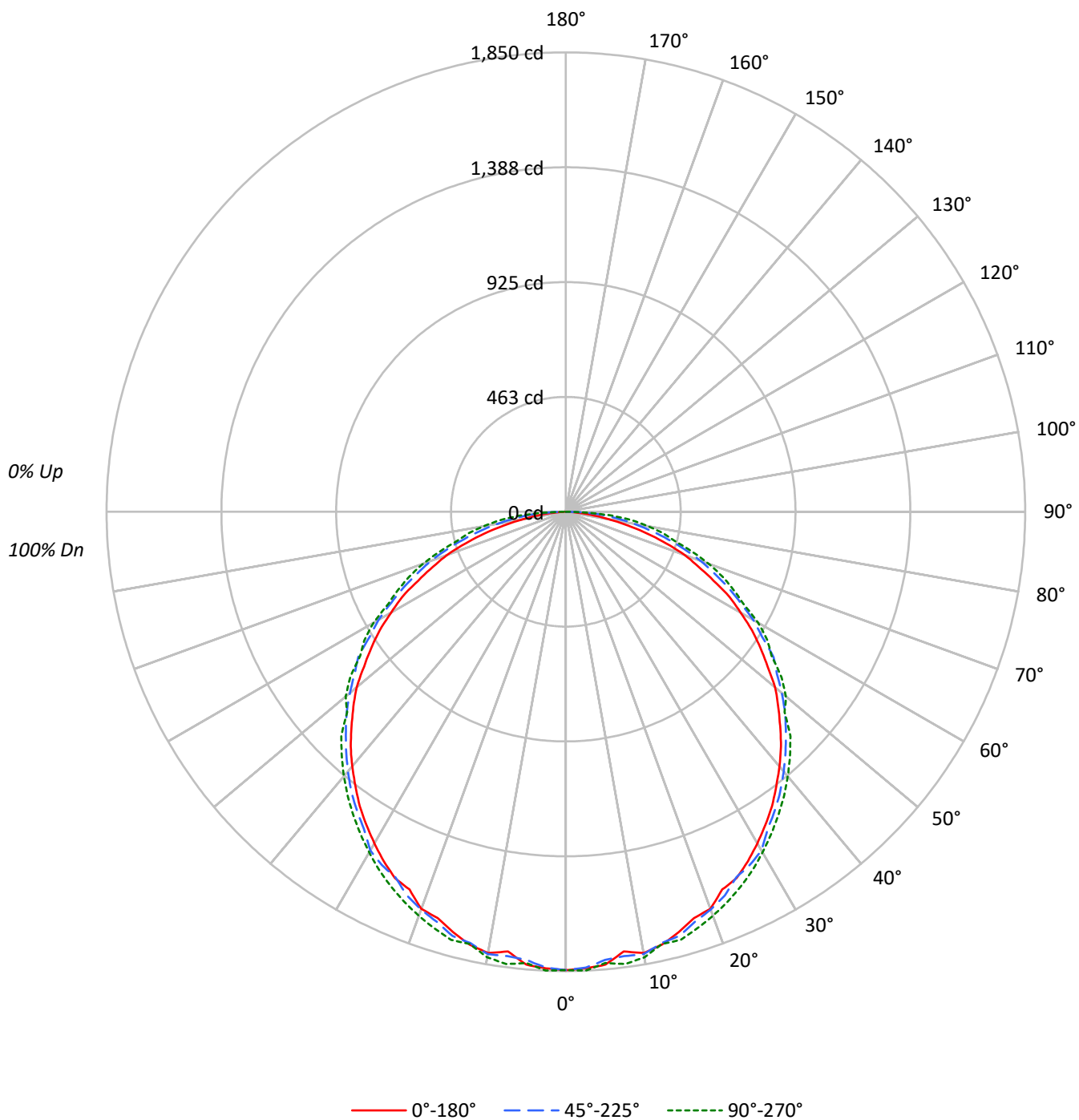
Lumens per Lamp: N/A
Luminaire Lumens: 5510.1 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2827	2827	2827
5°	2815	2786	2804
10°	2806	2813	2833
15°	2780	2803	2830
20°	2774	2779	2823
25°	2752	2744	2815
30°	2727	2785	2801
35°	2706	2744	2789
40°	2677	2729	2780
45°	2643	2715	2770
50°	2622	2704	2758
55°	2555	2728	2700
60°	2490	2670	2739
65°	2379	2612	2702
70°	2281	2590	2741
75°	2020	2512	2685
80°	1595	2455	2971
85°	975	2624	3388

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.3	3.2
10°-20°	497.9	9.0
20°-30°	758.6	13.8
30°-40°	923.4	16.8
40°-50°	968.2	17.6
50°-60°	896.9	16.3
60°-70°	707.3	12.8
70°-80°	437.6	7.9
80°-90°	145.7	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°	1430.9	26.0
0°-40°	2354.3	42.7
0°-60°	4219.5	76.6
0°-90°	5510.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5510.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1831	1830	1812	1852	1824	173
15°	1754	1762	1768	1755	1785	495
25°	1628	1637	1624	1669	1666	748
35°	1448	1461	1468	1496	1492	905
45°	1220	1243	1253	1268	1279	943
55°	957	986	1022	1030	1011	856
65°	656	682	721	748	746	653
75°	341	368	424	457	454	360
85°	56	94	149	182	193	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.8	1845.8	1845.8	1845.8	1845.8
2.5°	1840.5	1851.8	1837.5	1849.5	1849.5
5°	1830.8	1830.0	1812.0	1851.8	1824.0
7.5°	1785.8	1817.3	1804.5	1853.3	1836.8
10°	1804.5	1796.3	1809.0	1842.0	1821.8
12.5°	1785.8	1799.3	1779.0	1762.5	1783.5
15°	1753.5	1762.5	1767.8	1755.0	1785.0
17.5°	1715.3	1749.0	1731.0	1725.0	1759.5
20°	1701.8	1703.3	1704.8	1735.5	1731.8
22.5°	1646.3	1676.3	1672.5	1697.3	1700.3
25°	1628.3	1637.3	1623.8	1668.8	1665.8
27.5°	1587.0	1606.5	1604.3	1619.3	1627.5
30°	1542.0	1561.5	1575.0	1558.5	1584.0
32.5°	1495.5	1528.5	1513.5	1544.3	1539.0
35°	1447.5	1461.0	1467.8	1495.5	1491.8
37.5°	1392.0	1415.3	1419.0	1461.0	1443.0
40°	1338.8	1362.0	1365.0	1389.8	1390.5
42.5°	1282.5	1293.8	1309.5	1338.0	1335.8
45°	1220.3	1242.8	1253.3	1267.5	1278.8
47.5°	1160.3	1184.3	1197.8	1221.0	1194.8
50°	1100.3	1117.5	1134.8	1159.5	1157.3
52.5°	1024.5	1063.5	1071.8	1085.3	1094.3
55°	957.0	985.5	1021.5	1030.5	1011.0
57.5°	888.8	910.5	936.8	964.5	962.3
60°	813.0	839.3	871.5	892.5	894.0
62.5°	744.0	762.0	792.8	823.5	807.8
65°	656.3	681.8	720.8	747.8	745.5
67.5°	578.3	606.0	645.8	681.0	682.5
70°	509.3	524.3	578.3	605.3	612.0
72.5°	424.5	450.8	498.8	528.8	531.8
75°	341.3	368.3	424.5	456.8	453.8
77.5°	256.5	295.5	350.3	388.5	401.3
80°	180.8	216.0	278.3	315.8	336.8
82.5°	114.0	150.8	211.5	258.0	270.8
85°	55.5	94.5	149.3	181.5	192.8
87.5°	14.3	39.0	69.0	84.8	91.5
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	15.41	17.08	15.78	17.40	17.71	15.84	17.51	16.21	17.83	18.14
	3H	17.21	18.73	17.59	19.05	19.41	17.92	19.43	18.29	19.76	20.12
	4H	17.86	19.29	18.26	19.64	20.01	18.76	20.19	19.16	20.54	20.91
	6H	18.27	19.60	18.68	19.96	20.35	19.55	20.88	19.96	21.24	21.63
	8H	18.37	19.64	18.79	20.03	20.43	19.89	21.16	20.32	21.55	21.95
	12H	18.42	19.64	18.84	20.02	20.45	20.19	21.41	20.62	21.79	22.22
4H	2H	16.15	17.58	16.55	17.93	18.30	16.49	17.92	16.88	18.26	18.64
	3H	18.19	19.39	18.60	19.79	20.19	18.80	20.01	19.21	20.40	20.80
	4H	18.96	20.05	19.39	20.47	20.90	19.81	20.90	20.24	21.31	21.75
	6H	19.49	20.46	19.95	20.89	21.35	20.76	21.72	21.21	22.16	22.61
	8H	19.64	20.54	20.10	20.98	21.44	21.18	22.08	21.64	22.52	22.99
	12H	19.72	20.53	20.20	21.01	21.47	21.56	22.37	22.04	22.85	23.32
8H	4H	19.41	20.31	19.87	20.75	21.21	20.14	21.05	20.60	21.49	21.95
	6H	20.09	20.84	20.58	21.33	21.80	21.26	22.01	21.75	22.50	22.97
	8H	20.31	20.98	20.81	21.49	21.97	21.81	22.48	22.31	22.99	23.47
	12H	20.45	21.05	20.96	21.54	22.10	22.33	22.93	22.83	23.41	23.97
12H	4H	19.49	20.30	19.97	20.78	21.25	20.18	20.99	20.66	21.46	21.93
	6H	20.22	20.90	20.73	21.40	21.89	21.33	22.00	21.83	22.51	22.99
	8H	20.52	21.12	21.02	21.61	22.16	21.95	22.55	22.45	23.04	23.60