

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: P1588413

Luminaire Tested: 24CZSP-60VHE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588413
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-L830
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

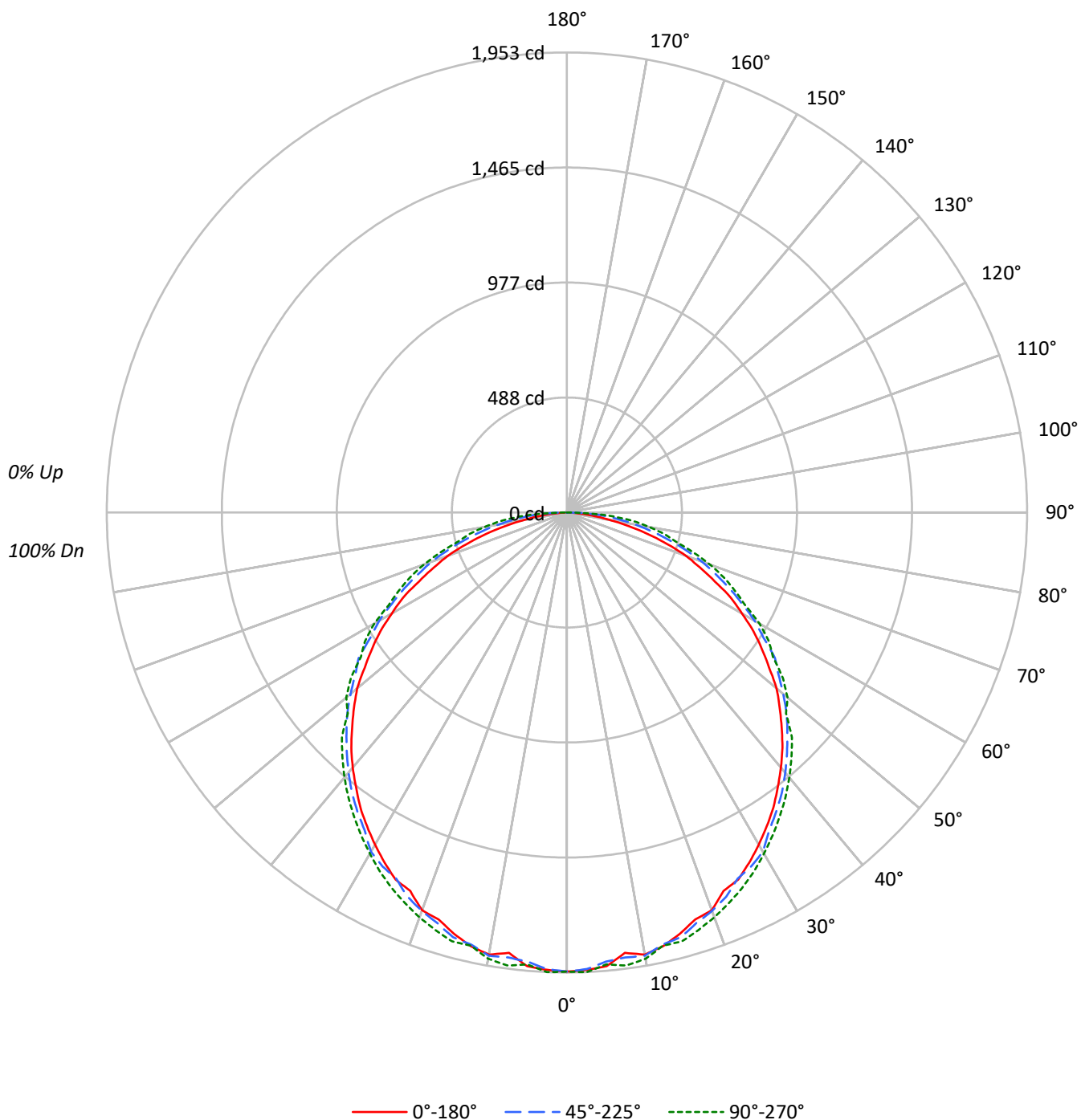
Lumens per Lamp: N/A
Luminaire Lumens: 5818.0 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	2985	2985	2985
5°	2972	2942	2961
10°	2963	2971	2992
15°	2936	2960	2989
20°	2929	2934	2980
25°	2906	2897	2972
30°	2880	2941	2958
35°	2858	2898	2945
40°	2826	2882	2936
45°	2791	2866	2925
50°	2768	2855	2912
55°	2698	2880	2851
60°	2630	2819	2892
65°	2511	2758	2853
70°	2408	2734	2894
75°	2132	2652	2835
80°	1684	2591	3136
85°	1030	2770	3576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3576 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	3.2
10°-20°	525.7	9.0
20°-30°	801.0	13.8
30°-40°	975.0	16.8
40°-50°	1022.4	17.6
50°-60°	947.1	16.3
60°-70°	746.8	12.8
70°-80°	462.0	7.9
80°-90°	153.9	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°	1510.8	26.0
0°-40°	2485.9	42.7
0°-60°	4455.3	76.6
0°-90°	5818.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5818.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1933	1932	1913	1955	1926	182
15°	1852	1861	1867	1853	1885	523
25°	1719	1729	1714	1762	1759	790
35°	1528	1543	1550	1579	1575	955
45°	1288	1312	1323	1338	1350	995
55°	1010	1041	1079	1088	1068	904
65°	693	720	761	790	787	690
75°	360	389	448	482	479	380
85°	59	100	158	192	204	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	1943.4	1955.3	1940.2	1952.9	1952.9
5°	1933.1	1932.3	1913.3	1955.3	1926.0
7.5°	1885.6	1918.8	1905.4	1956.9	1939.4
10°	1905.4	1896.7	1910.1	1945.0	1923.6
12.5°	1885.6	1899.8	1878.5	1861.0	1883.2
15°	1851.5	1861.0	1866.6	1853.1	1884.8
17.5°	1811.1	1846.8	1827.8	1821.4	1857.9
20°	1796.9	1798.5	1800.1	1832.5	1828.6
22.5°	1738.3	1770.0	1766.0	1792.1	1795.3
25°	1719.3	1728.8	1714.5	1762.0	1758.9
27.5°	1675.7	1696.3	1693.9	1709.8	1718.5
30°	1628.2	1648.8	1663.0	1645.6	1672.6
32.5°	1579.1	1613.9	1598.1	1630.6	1625.0
35°	1528.4	1542.7	1549.8	1579.1	1575.1
37.5°	1469.8	1494.4	1498.3	1542.7	1523.7
40°	1413.6	1438.1	1441.3	1467.4	1468.2
42.5°	1354.2	1366.1	1382.7	1412.8	1410.4
45°	1288.5	1312.2	1323.3	1338.4	1350.2
47.5°	1225.1	1250.5	1264.7	1289.3	1261.5
50°	1161.8	1180.0	1198.2	1224.3	1221.9
52.5°	1081.8	1123.0	1131.7	1145.9	1155.4
55°	1010.5	1040.6	1078.6	1088.1	1067.5
57.5°	938.4	961.4	989.1	1018.4	1016.0
60°	858.5	886.2	920.2	942.4	944.0
62.5°	785.6	804.6	837.1	869.5	852.9
65°	692.9	719.9	761.0	789.6	787.2
67.5°	610.6	639.9	681.9	719.1	720.7
70°	537.7	553.6	610.6	639.1	646.2
72.5°	448.2	475.9	526.6	558.3	561.5
75°	360.3	388.8	448.2	482.3	479.1
77.5°	270.8	312.0	369.8	410.2	423.7
80°	190.9	228.1	293.8	333.4	355.6
82.5°	120.4	159.2	223.3	272.4	285.9
85°	58.6	99.8	157.6	191.6	203.5
87.5°	15.0	41.2	72.9	89.5	96.6
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	15.60	17.27	15.97	17.59	17.90	16.03	17.70	16.40	18.02	18.33
	3H	17.40	18.92	17.78	19.24	19.60	18.11	19.62	18.48	19.95	20.31
	4H	18.05	19.48	18.44	19.83	20.20	18.95	20.38	19.35	20.73	21.10
	6H	18.46	19.79	18.87	20.15	20.54	19.74	21.07	20.15	21.43	21.82
	8H	18.56	19.83	18.98	20.22	20.62	20.08	21.35	20.50	21.74	22.14
	12H	18.60	19.82	19.03	20.21	20.63	20.38	21.60	20.81	21.98	22.41
4H	2H	16.34	17.77	16.74	18.12	18.49	16.67	18.11	17.07	18.45	18.83
	3H	18.38	19.58	18.78	19.98	20.38	18.99	20.20	19.40	20.59	20.99
	4H	19.15	20.24	19.58	20.65	21.09	19.99	21.09	20.42	21.50	21.94
	6H	19.68	20.64	20.14	21.08	21.54	20.95	21.91	21.40	22.35	22.80
	8H	19.83	20.73	20.29	21.17	21.63	21.37	22.27	21.83	22.71	23.18
	12H	19.91	20.72	20.39	21.19	21.66	21.75	22.56	22.23	23.04	23.50
8H	4H	19.60	20.50	20.06	20.94	21.40	20.33	21.23	20.79	21.68	22.14
	6H	20.28	21.03	20.77	21.52	21.99	21.45	22.20	21.94	22.69	23.16
	8H	20.49	21.17	21.00	21.68	22.16	22.00	22.67	22.50	23.18	23.66
	12H	20.64	21.24	21.15	21.73	22.29	22.51	23.11	23.02	23.60	24.16
12H	4H	19.68	20.49	20.16	20.97	21.43	20.37	21.18	20.85	21.65	22.12
	6H	20.41	21.09	20.92	21.59	22.08	21.51	22.19	22.02	22.70	23.18
	8H	20.71	21.30	21.21	21.79	22.35	22.14	22.74	22.64	23.23	23.79