

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: P1588762

Luminaire Tested: 24CZSP-A-60VHE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588762
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-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 6000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

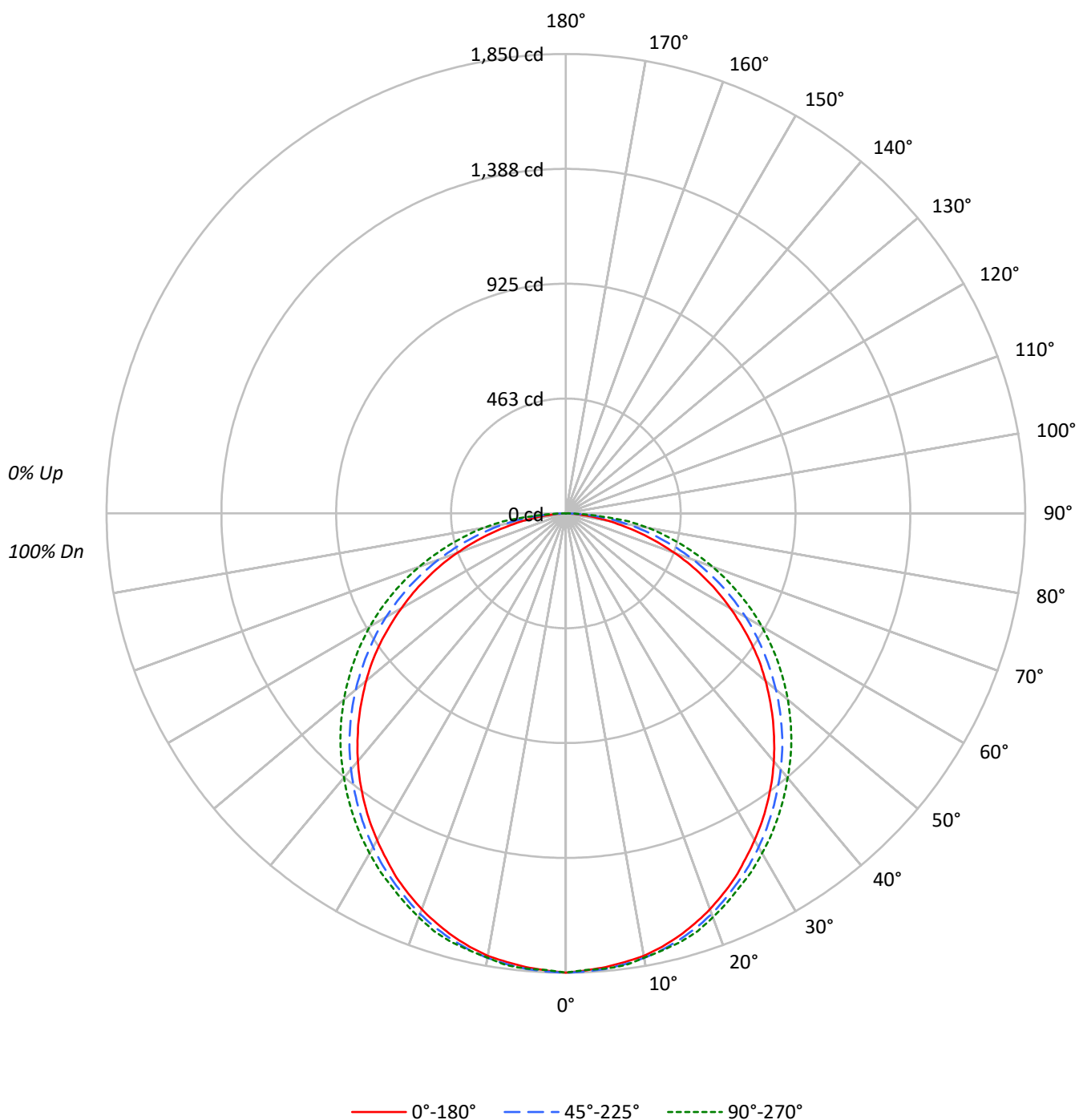
Lumens per Lamp: N/A
Luminaire Lumens: 5400.0 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	2833	2833	2833
5°	2820	2831	2829
10°	2814	2827	2825
15°	2794	2816	2833
20°	2766	2798	2822
25°	2731	2769	2803
30°	2689	2745	2796
35°	2650	2718	2787
40°	2606	2691	2779
45°	2556	2664	2782
50°	2501	2631	2781
55°	2436	2594	2784
60°	2345	2566	2791
65°	2237	2517	2800
70°	2085	2446	2812
75°	1858	2349	2840
80°	1536	2237	2979
85°	1000	2019	2603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3073 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.9	3.2
10°-20°	500.9	9.3
20°-30°	755.4	14.0
30°-40°	909.9	16.8
40°-50°	950.2	17.6
50°-60°	872.7	16.2
60°-70°	687.4	12.7
70°-80°	421.7	7.8
80°-90°	126.9	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°	1431.2	26.5
0°-40°	2341.1	43.4
0°-60°	4164.1	77.1
0°-90°	5400.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5400.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1834	1837	1841	1847	1840	174
15°	1762	1766	1776	1787	1787	497
25°	1616	1620	1639	1659	1659	744
35°	1417	1424	1454	1484	1491	886
45°	1180	1193	1230	1273	1284	910
55°	912	929	972	1026	1043	815
65°	617	639	694	752	773	611
75°	314	339	397	460	480	333
85°	57	78	115	146	148	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1849.6	1849.6	1849.6	1849.6	1849.6
2.5°	1842.5	1846.1	1847.3	1848.5	1840.2
5°	1834.2	1836.6	1841.3	1847.3	1840.2
7.5°	1822.4	1824.8	1830.7	1839.0	1835.4
10°	1809.4	1810.5	1817.7	1823.6	1816.5
12.5°	1788.0	1791.6	1799.9	1804.6	1802.2
15°	1762.0	1765.5	1776.2	1786.8	1786.8
17.5°	1731.2	1735.9	1748.9	1763.1	1764.3
20°	1696.8	1700.3	1716.9	1731.2	1731.2
22.5°	1657.7	1662.4	1679.0	1694.4	1696.8
25°	1616.2	1619.8	1638.7	1658.9	1658.9
27.5°	1567.6	1574.7	1598.4	1618.6	1623.3
30°	1520.2	1526.2	1552.2	1577.1	1580.7
32.5°	1470.5	1477.6	1504.8	1532.1	1538.0
35°	1417.2	1424.3	1453.9	1483.5	1490.6
37.5°	1361.5	1369.8	1400.6	1434.9	1442.0
40°	1303.4	1312.9	1346.1	1382.8	1389.9
42.5°	1241.8	1254.8	1290.4	1328.3	1338.9
45°	1180.2	1193.2	1229.9	1272.6	1284.4
47.5°	1115.0	1130.4	1168.3	1213.3	1226.4
50°	1049.8	1065.2	1104.3	1152.9	1167.1
52.5°	983.5	998.9	1039.2	1090.1	1105.5
55°	912.4	929.0	971.6	1026.1	1042.7
57.5°	838.9	860.2	905.3	961.0	977.6
60°	765.5	786.8	837.7	892.2	911.2
62.5°	693.2	713.3	765.5	823.5	843.7
65°	617.3	638.7	694.4	752.4	772.6
67.5°	542.7	564.0	619.7	680.1	701.5
70°	465.7	489.4	546.2	606.7	628.0
72.5°	388.7	413.5	471.6	533.2	553.4
75°	314.0	338.9	396.9	459.7	479.9
77.5°	240.5	267.8	324.7	388.7	407.6
80°	174.2	200.2	253.6	316.4	337.7
82.5°	111.4	133.9	187.2	246.5	261.9
85°	56.9	78.2	114.9	145.7	148.1
87.5°	17.8	24.9	37.9	56.9	58.1
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	15.10	16.76	15.46	17.07	17.39	15.93	17.59	16.29	17.90	18.22
	3H	16.85	18.36	17.23	18.68	19.04	18.04	19.55	18.42	19.88	20.24
	4H	17.47	18.89	17.87	19.24	19.61	18.93	20.35	19.33	20.70	21.08
	6H	17.88	19.20	18.29	19.57	19.96	19.71	21.03	20.12	21.40	21.79
	8H	17.99	19.25	18.41	19.64	20.04	20.03	21.30	20.46	21.68	22.08
	12H	18.04	19.25	18.47	19.63	20.06	20.24	21.45	20.67	21.84	22.26
4H	2H	15.87	17.29	16.27	17.64	18.01	16.51	17.94	16.91	18.28	18.66
	3H	17.84	19.04	18.25	19.44	19.84	18.87	20.07	19.28	20.46	20.86
	4H	18.58	19.67	19.01	20.08	20.52	19.92	21.01	20.35	21.42	21.85
	6H	19.11	20.06	19.56	20.50	20.96	20.87	21.83	21.33	22.27	22.72
	8H	19.26	20.15	19.72	20.59	21.05	21.27	22.16	21.73	22.60	23.07
	12H	19.34	20.14	19.82	20.62	21.09	21.55	22.35	22.03	22.83	23.29
8H	4H	19.04	19.93	19.50	20.37	20.84	20.21	21.10	20.67	21.54	22.01
	6H	19.70	20.45	20.19	20.93	21.41	21.32	22.07	21.81	22.55	23.03
	8H	19.91	20.58	20.42	21.09	21.57	21.83	22.50	22.34	23.01	23.49
	12H	20.05	20.64	20.56	21.13	21.69	22.22	22.81	22.72	23.30	23.86
12H	4H	19.13	19.93	19.61	20.41	20.88	20.23	21.04	20.71	21.51	21.98
	6H	19.83	20.50	20.34	21.01	21.49	21.37	22.04	21.88	22.54	23.03
	8H	20.11	20.70	20.62	21.19	21.75	21.95	22.54	22.45	23.03	23.59