

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: P1588839

Luminaire Tested: 24CZSP-A-70VHE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588839
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-70VHE-L845
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 7500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

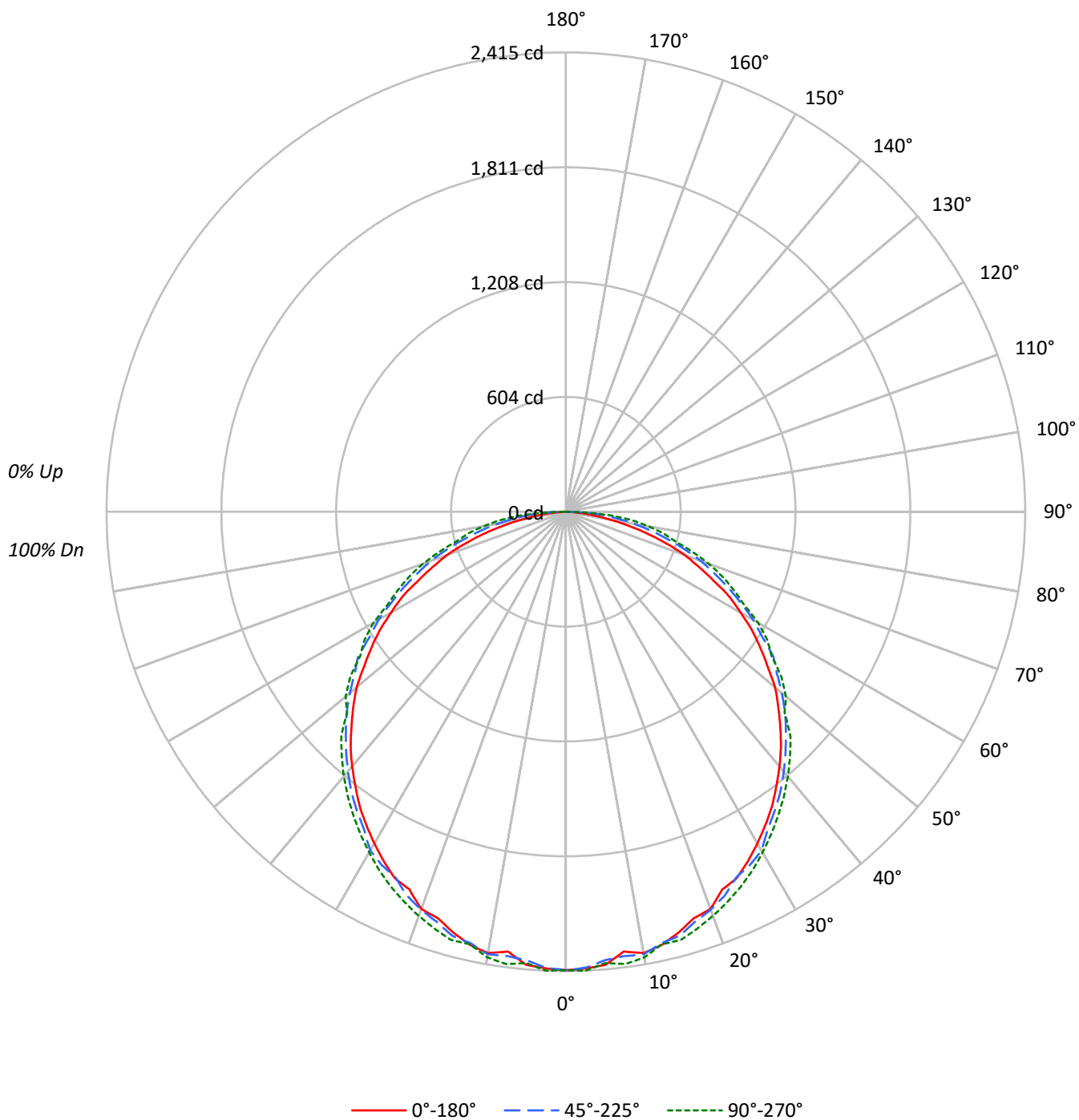
Lumens per Lamp: N/A
Luminaire Lumens: 7194.0 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 53.3
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°	3691	3691	3691
5°	3675	3637	3662
10°	3664	3673	3699
15°	3630	3660	3696
20°	3622	3628	3685
25°	3593	3583	3675
30°	3561	3637	3658
35°	3534	3583	3642
40°	3495	3563	3630
45°	3451	3544	3616
50°	3423	3530	3600
55°	3337	3561	3525
60°	3252	3486	3575
65°	3105	3410	3527
70°	2978	3381	3578
75°	2636	3280	3506
80°	2082	3204	3878
85°	1274	3425	4423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4423 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.6	3.2
10°-20°	650.1	9.0
20°-30°	990.5	13.8
30°-40°	1205.6	16.8
40°-50°	1264.2	17.6
50°-60°	1171.1	16.3
60°-70°	923.4	12.8
70°-80°	571.3	7.9
80°-90°	190.3	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°	1868.2	26.0
0°-40°	3073.8	42.7
0°-60°	5509.0	76.6
0°-90°	7194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2410	2410	2410	2410	2410	
5°	2390	2389	2366	2418	2382	226
15°	2289	2301	2308	2291	2331	646
25°	2126	2138	2120	2179	2175	977
35°	1890	1908	1916	1953	1948	1181
45°	1593	1623	1636	1655	1670	1231
55°	1250	1287	1334	1346	1320	1118
65°	857	890	941	976	973	853
75°	446	481	554	596	592	470
85°	72	123	195	237	252	97
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2409.9	2409.9	2409.9	2409.9	2409.9
2.5°	2403.0	2417.7	2399.1	2414.8	2414.8
5°	2390.3	2389.3	2365.8	2417.7	2381.5
7.5°	2331.5	2372.7	2356.0	2419.7	2398.1
10°	2356.0	2345.2	2361.9	2405.0	2378.5
12.5°	2331.5	2349.2	2322.7	2301.2	2328.6
15°	2289.4	2301.2	2308.0	2291.4	2330.6
17.5°	2239.5	2283.6	2260.1	2252.2	2297.3
20°	2221.9	2223.8	2225.8	2265.9	2261.0
22.5°	2149.4	2188.6	2183.7	2216.0	2219.9
25°	2125.9	2137.6	2120.0	2178.8	2174.9
27.5°	2072.0	2097.5	2094.6	2114.1	2124.9
30°	2013.3	2038.7	2056.4	2034.8	2068.1
32.5°	1952.6	1995.7	1976.1	2016.2	2009.4
35°	1889.9	1907.5	1916.3	1952.6	1947.7
37.5°	1817.4	1847.8	1852.7	1907.5	1884.0
40°	1747.9	1778.3	1782.2	1814.5	1815.5
42.5°	1674.5	1689.2	1709.7	1746.9	1744.0
45°	1593.2	1622.6	1636.3	1654.9	1669.6
47.5°	1514.9	1546.2	1563.8	1594.2	1559.9
50°	1436.5	1459.0	1481.6	1513.9	1510.9
52.5°	1337.6	1388.5	1399.3	1416.9	1428.7
55°	1249.5	1286.7	1333.7	1345.5	1320.0
57.5°	1160.4	1188.8	1223.1	1259.3	1256.3
60°	1061.5	1095.8	1137.9	1165.3	1167.2
62.5°	971.4	994.9	1035.0	1075.2	1054.6
65°	856.8	890.1	941.0	976.3	973.3
67.5°	755.0	791.2	843.1	889.1	891.1
70°	664.9	684.5	755.0	790.2	799.0
72.5°	554.2	588.5	651.2	690.4	694.3
75°	445.5	480.8	554.2	596.3	592.4
77.5°	334.9	385.8	457.3	507.2	523.9
80°	236.0	282.0	363.3	412.3	439.7
82.5°	148.8	196.8	276.1	336.9	353.5
85°	72.5	123.4	194.9	237.0	251.7
87.5°	18.6	50.9	90.1	110.7	119.5
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	16.34	18.01	16.71	18.33	18.64	16.77	18.44	17.14	18.76	19.07
	3H	18.14	19.66	18.52	19.98	20.34	18.84	20.36	19.22	20.69	21.04
	4H	18.78	20.22	19.18	20.56	20.94	19.69	21.12	20.08	21.46	21.84
	6H	19.19	20.52	19.60	20.89	21.28	20.47	21.80	20.88	22.17	22.56
	8H	19.30	20.57	19.72	20.96	21.35	20.82	22.09	21.24	22.48	22.88
	12H	19.34	20.56	19.77	20.94	21.37	21.12	22.34	21.55	22.72	23.15
4H	2H	17.08	18.51	17.48	18.86	19.23	17.41	18.84	17.81	19.19	19.57
	3H	19.11	20.32	19.52	20.72	21.12	19.73	20.93	20.13	21.33	21.73
	4H	19.88	20.98	20.32	21.39	21.83	20.73	21.83	21.16	22.24	22.67
	6H	20.42	21.38	20.87	21.82	22.27	21.68	22.64	22.14	23.08	23.54
	8H	20.56	21.47	21.02	21.91	22.37	22.11	23.01	22.57	23.45	23.91
	12H	20.65	21.46	21.12	21.93	22.40	22.49	23.30	22.97	23.77	24.24
8H	4H	20.33	21.24	20.79	21.68	22.14	21.07	21.97	21.53	22.41	22.88
	6H	21.01	21.77	21.51	22.25	22.73	22.19	22.94	22.68	23.43	23.90
	8H	21.23	21.91	21.74	22.41	22.90	22.73	23.41	23.24	23.91	24.40
	12H	21.38	21.98	21.88	22.47	23.03	23.25	23.85	23.76	24.34	24.90
12H	4H	20.42	21.23	20.90	21.70	22.17	21.10	21.92	21.58	22.39	22.86
	6H	21.15	21.83	21.65	22.33	22.81	22.25	22.93	22.76	23.43	23.92
	8H	21.44	22.04	21.95	22.53	23.09	22.88	23.48	23.38	23.97	24.52