

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: P1588837

Luminaire Tested: 24CZSP-A-70VHE-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588837
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-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 7500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

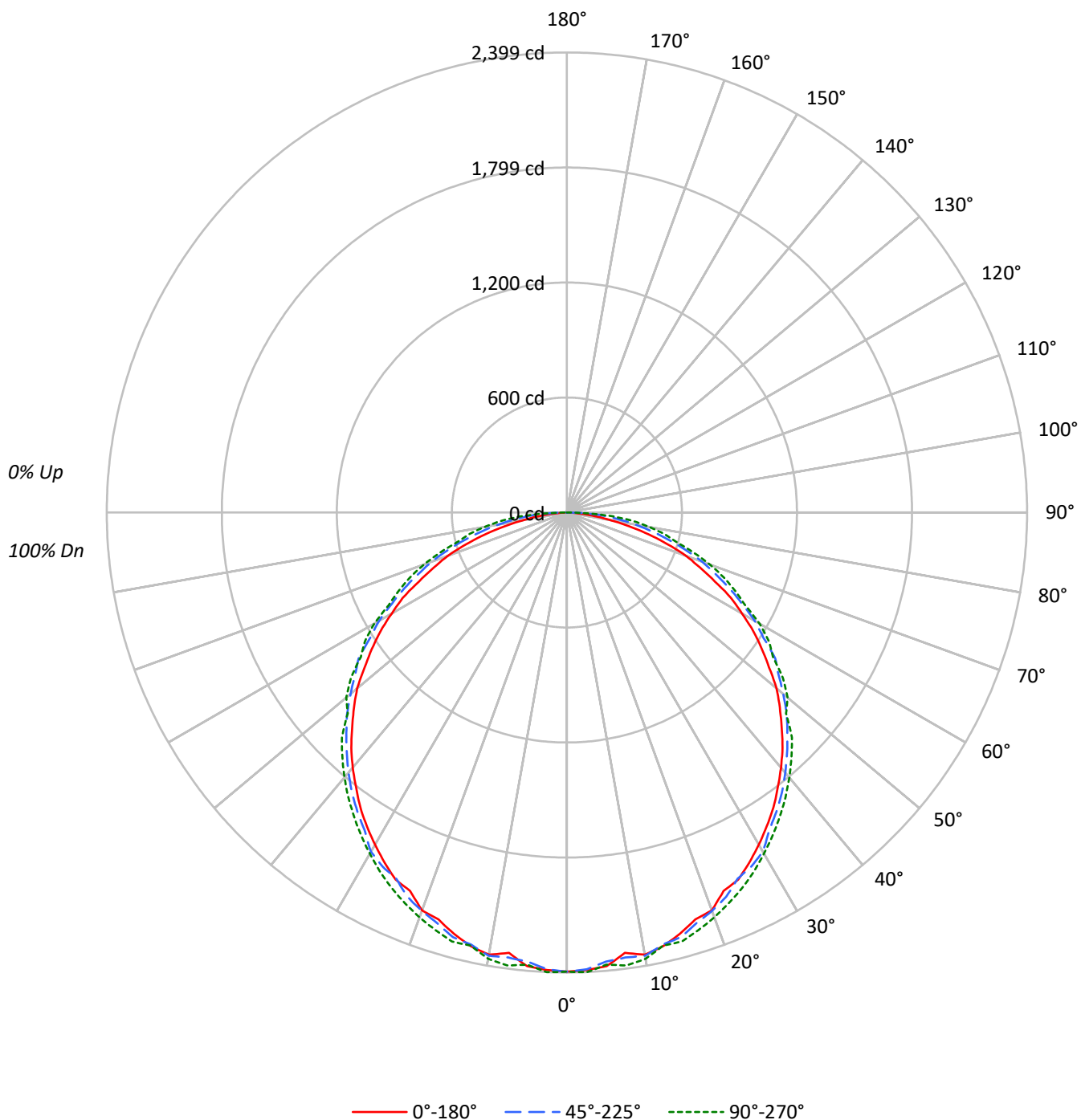
Lumens per Lamp: N/A
Luminaire Lumens: 7148.0 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3667	3667	3667
5°	3652	3614	3638
10°	3641	3650	3676
15°	3607	3636	3672
20°	3598	3605	3662
25°	3570	3560	3652
30°	3538	3614	3634
35°	3511	3560	3618
40°	3472	3541	3607
45°	3429	3522	3593
50°	3401	3508	3577
55°	3315	3539	3502
60°	3231	3463	3553
65°	3085	3389	3505
70°	2958	3360	3555
75°	2620	3259	3483
80°	2068	3184	3854
85°	1265	3402	4395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 4395 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.1	3.2
10°-20°	645.9	9.0
20°-30°	984.2	13.8
30°-40°	1197.9	16.8
40°-50°	1256.1	17.6
50°-60°	1163.6	16.3
60°-70°	917.5	12.8
70°-80°	567.6	7.9
80°-90°	189.0	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°	1856.2	26.0
0°-40°	3054.2	42.7
0°-60°	5473.8	76.6
0°-90°	7148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2394	2394	2394	2394	2394	
5°	2375	2374	2351	2402	2366	224
15°	2275	2286	2293	2277	2316	642
25°	2112	2124	2106	2165	2161	971
35°	1878	1895	1904	1940	1935	1173
45°	1583	1612	1626	1644	1659	1223
55°	1242	1278	1325	1337	1312	1110
65°	851	884	935	970	967	847
75°	443	478	551	592	589	467
85°	72	123	194	236	250	97
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2394.5	2394.5	2394.5	2394.5	2394.5
2.5°	2387.7	2402.2	2383.8	2399.3	2399.3
5°	2375.0	2374.0	2350.7	2402.2	2366.2
7.5°	2316.6	2357.5	2341.0	2404.2	2382.8
10°	2341.0	2330.2	2346.8	2389.6	2363.3
12.5°	2316.6	2334.1	2307.9	2286.5	2313.7
15°	2274.8	2286.5	2293.3	2276.7	2315.7
17.5°	2225.2	2269.0	2245.6	2237.8	2282.6
20°	2207.7	2209.6	2211.5	2251.4	2246.6
22.5°	2135.7	2174.6	2169.7	2201.8	2205.7
25°	2112.3	2124.0	2106.5	2164.8	2161.0
27.5°	2058.8	2084.1	2081.2	2100.6	2111.3
30°	2000.4	2025.7	2043.2	2021.8	2054.9
32.5°	1940.1	1982.9	1963.4	2003.3	1996.5
35°	1877.8	1895.3	1904.1	1940.1	1935.2
37.5°	1805.8	1836.0	1840.8	1895.3	1872.0
40°	1736.7	1766.9	1770.8	1802.9	1803.9
42.5°	1663.8	1678.4	1698.8	1735.8	1732.8
45°	1583.0	1612.2	1625.8	1644.3	1658.9
47.5°	1505.2	1536.3	1553.8	1584.0	1549.9
50°	1427.3	1449.7	1472.1	1504.2	1501.3
52.5°	1329.1	1379.7	1390.4	1407.9	1419.6
55°	1241.5	1278.5	1325.2	1336.9	1311.6
57.5°	1153.0	1181.2	1215.2	1251.2	1248.3
60°	1054.7	1088.7	1130.6	1157.8	1159.8
62.5°	965.2	988.5	1028.4	1068.3	1047.9
65°	851.3	884.4	935.0	970.0	967.1
67.5°	750.2	786.2	837.7	883.5	885.4
70°	660.6	680.1	750.2	785.2	793.9
72.5°	550.7	584.8	647.0	685.9	689.8
75°	442.7	477.7	550.7	592.5	588.6
77.5°	332.8	383.3	454.4	504.0	520.5
80°	234.5	280.2	361.0	409.6	436.9
82.5°	147.9	195.6	274.4	334.7	351.2
85°	72.0	122.6	193.6	235.5	250.1
87.5°	18.5	50.6	89.5	109.9	118.7
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	16.32	17.99	16.68	18.30	18.62	16.75	18.42	17.11	18.73	19.05
	3H	18.12	19.63	18.49	19.96	20.32	18.82	20.34	19.20	20.66	21.02
	4H	18.76	20.19	19.16	20.54	20.92	19.66	21.09	20.06	21.44	21.82
	6H	19.17	20.50	19.58	20.87	21.26	20.45	21.78	20.86	22.15	22.54
	8H	19.27	20.55	19.70	20.93	21.33	20.80	22.07	21.22	22.46	22.85
	12H	19.32	20.54	19.75	20.92	21.35	21.09	22.31	21.52	22.70	23.12
4H	2H	17.06	18.49	17.45	18.83	19.21	17.39	18.82	17.79	19.17	19.54
	3H	19.09	20.30	19.50	20.69	21.09	19.70	20.91	20.11	21.31	21.71
	4H	19.86	20.96	20.29	21.37	21.80	20.71	21.81	21.14	22.22	22.65
	6H	20.40	21.36	20.85	21.80	22.25	21.66	22.62	22.11	23.06	23.51
	8H	20.54	21.44	21.00	21.88	22.35	22.08	22.99	22.54	23.43	23.89
	12H	20.62	21.44	21.10	21.91	22.38	22.46	23.28	22.94	23.75	24.22
8H	4H	20.31	21.21	20.77	21.65	22.12	21.05	21.95	21.51	22.39	22.85
	6H	20.99	21.74	21.48	22.23	22.70	22.16	22.92	22.66	23.40	23.88
	8H	21.21	21.89	21.72	22.39	22.88	22.71	23.39	23.22	23.89	24.38
	12H	21.36	21.96	21.86	22.45	23.00	23.23	23.83	23.73	24.32	24.88
12H	4H	20.40	21.21	20.87	21.68	22.15	21.08	21.89	21.56	22.37	22.84
	6H	21.13	21.80	21.63	22.31	22.79	22.23	22.91	22.74	23.41	23.90
	8H	21.42	22.02	21.93	22.51	23.07	22.85	23.45	23.36	23.94	24.50