

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: P1588896

Luminaire Tested: 24CZSP-A-80-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588896
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-80-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 8000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

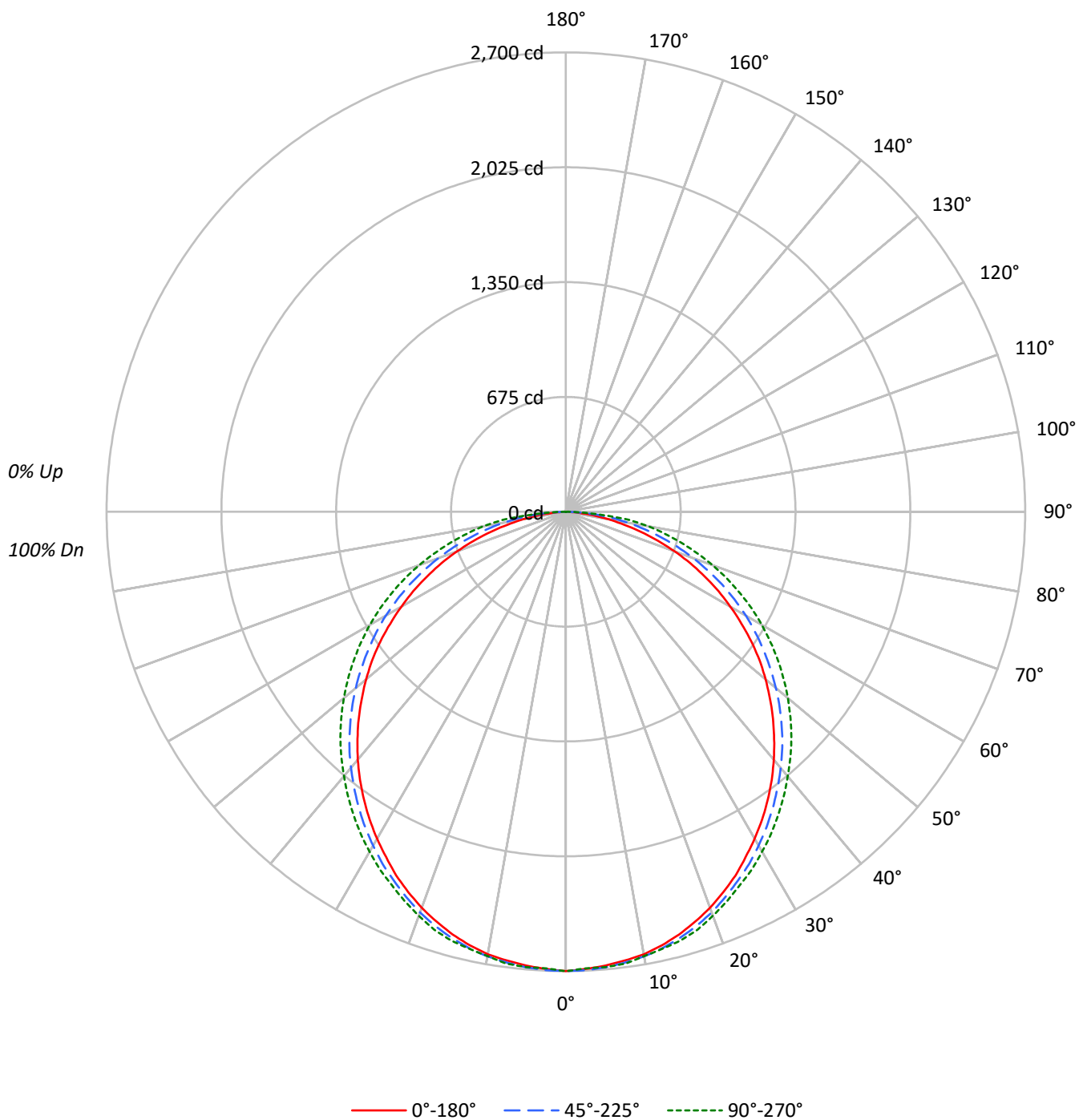
Lumens per Lamp: N/A
Luminaire Lumens: 7882.0 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 62.7
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

TEST NUMBER: P1588896

CATALOG NUMBER: 24CZSP-A-80-L840-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588896

CATALOG NUMBER: 24CZSP-A-80-L840-S

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	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°	4135	4135	4135
5°	4116	4132	4130
10°	4107	4126	4124
15°	4078	4111	4136
20°	4037	4085	4118
25°	3987	4042	4092
30°	3924	4007	4080
35°	3868	3968	4068
40°	3804	3928	4056
45°	3731	3889	4061
50°	3651	3841	4059
55°	3556	3787	4064
60°	3423	3746	4074
65°	3266	3673	4087
70°	3044	3570	4105
75°	2712	3429	4145
80°	2242	3264	4348
85°	1459	2949	3799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4485 cd/sqm

TEST NUMBER: P1588896

CATALOG NUMBER: 24CZSP-A-80-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.3	3.2
10°-20°	731.1	9.3
20°-30°	1102.6	14.0
30°-40°	1328.1	16.8
40°-50°	1387.0	17.6
50°-60°	1273.8	16.2
60°-70°	1003.3	12.7
70°-80°	615.5	7.8
80°-90°	185.2	2.3
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°	2089.1	26.5
0°-40°	3417.2	43.4
0°-60°	6078.0	77.1
0°-90°	7882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7882.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2700	2700	2700	2700	2700	
5°	2677	2681	2688	2696	2686	254
15°	2572	2577	2593	2608	2608	725
25°	2359	2364	2392	2421	2421	1086
35°	2068	2079	2122	2165	2176	1294
45°	1723	1742	1795	1858	1875	1328
55°	1332	1356	1418	1498	1522	1189
65°	901	932	1014	1098	1128	891
75°	458	495	579	671	700	486
85°	83	114	168	213	216	108
90°	0	0	0	0	0	

TEST NUMBER: P1588896

CATALOG NUMBER: 24CZSP-A-80-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2699.8	2699.8	2699.8	2699.8	2699.8
2.5°	2689.4	2694.6	2696.3	2698.1	2686.0
5°	2677.3	2680.8	2687.7	2696.3	2686.0
7.5°	2660.0	2663.5	2672.1	2684.2	2679.0
10°	2641.0	2642.7	2653.1	2661.7	2651.4
12.5°	2609.9	2615.0	2627.2	2634.1	2630.6
15°	2571.8	2577.0	2592.6	2608.1	2608.1
17.5°	2526.8	2533.8	2552.8	2573.5	2575.3
20°	2476.7	2481.9	2506.1	2526.8	2526.8
22.5°	2419.6	2426.5	2450.7	2473.2	2476.7
25°	2359.1	2364.3	2391.9	2421.3	2421.3
27.5°	2288.2	2298.5	2333.1	2362.5	2369.5
30°	2219.0	2227.6	2265.7	2302.0	2307.2
32.5°	2146.3	2156.7	2196.5	2236.3	2244.9
35°	2068.5	2078.9	2122.1	2165.4	2175.7
37.5°	1987.2	1999.3	2044.3	2094.5	2104.8
40°	1902.5	1916.3	1964.7	2018.4	2028.7
42.5°	1812.5	1831.6	1883.5	1938.8	1954.4
45°	1722.6	1741.6	1795.3	1857.5	1874.8
47.5°	1627.5	1650.0	1705.3	1771.0	1790.1
50°	1532.4	1554.8	1611.9	1682.8	1703.6
52.5°	1435.5	1458.0	1516.8	1591.2	1613.7
55°	1331.7	1356.0	1418.2	1497.8	1522.0
57.5°	1224.5	1255.6	1321.4	1402.6	1426.9
60°	1117.3	1148.4	1222.8	1302.3	1330.0
62.5°	1011.8	1041.2	1117.3	1202.0	1231.4
65°	901.1	932.2	1013.5	1098.3	1127.7
67.5°	792.1	823.3	904.5	992.7	1023.9
70°	679.7	714.3	797.3	885.5	916.7
72.5°	567.3	603.6	688.4	778.3	807.7
75°	458.3	494.6	579.4	671.1	700.5
77.5°	351.1	390.9	473.9	567.3	595.0
80°	254.2	292.3	370.1	461.8	492.9
82.5°	162.6	195.4	273.3	359.7	382.2
85°	83.0	114.1	167.8	212.7	216.2
87.5°	25.9	36.3	55.3	83.0	84.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588896

CATALOG NUMBER: 24CZSP-A-80-L840-S

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	16.41	18.07	16.77	18.39	18.70	17.24	18.90	17.60	19.22	19.53
	3H	18.17	19.67	18.54	20.00	20.36	19.36	20.86	19.73	21.19	21.55
	4H	18.78	20.21	19.18	20.55	20.93	20.25	21.67	20.64	22.02	22.39
	6H	19.19	20.52	19.61	20.88	21.27	21.03	22.35	21.44	22.71	23.10
	8H	19.30	20.57	19.73	20.95	21.35	21.35	22.61	21.77	23.00	23.40
	12H	19.35	20.56	19.78	20.95	21.37	21.56	22.77	21.99	23.15	23.58
4H	2H	17.18	18.60	17.58	18.95	19.33	17.83	19.25	18.23	19.60	19.97
	3H	19.16	20.36	19.57	20.75	21.15	20.18	21.38	20.59	21.78	22.18
	4H	19.90	20.98	20.33	21.39	21.83	21.24	22.32	21.67	22.73	23.17
	6H	20.42	21.38	20.88	21.82	22.27	22.19	23.14	22.64	23.58	24.03
	8H	20.57	21.46	21.03	21.90	22.37	22.58	23.48	23.04	23.92	24.38
	12H	20.65	21.46	21.13	21.93	22.40	22.86	23.67	23.34	24.14	24.61
8H	4H	20.35	21.25	20.81	21.69	22.15	21.52	22.42	21.98	22.86	23.32
	6H	21.02	21.76	21.51	22.25	22.72	22.64	23.38	23.13	23.87	24.34
	8H	21.23	21.90	21.73	22.40	22.88	23.15	23.82	23.66	24.32	24.81
	12H	21.37	21.96	21.87	22.45	23.01	23.53	24.13	24.04	24.61	25.17
12H	4H	20.44	21.25	20.92	21.72	22.19	21.55	22.35	22.03	22.83	23.29
	6H	21.15	21.82	21.65	22.32	22.81	22.68	23.35	23.19	23.86	24.34
	8H	21.43	22.02	21.93	22.51	23.07	23.26	23.85	23.77	24.34	24.90