

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: P1588552

Luminaire Tested: 24CZSP-80-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588552
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-80-L830-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 8000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

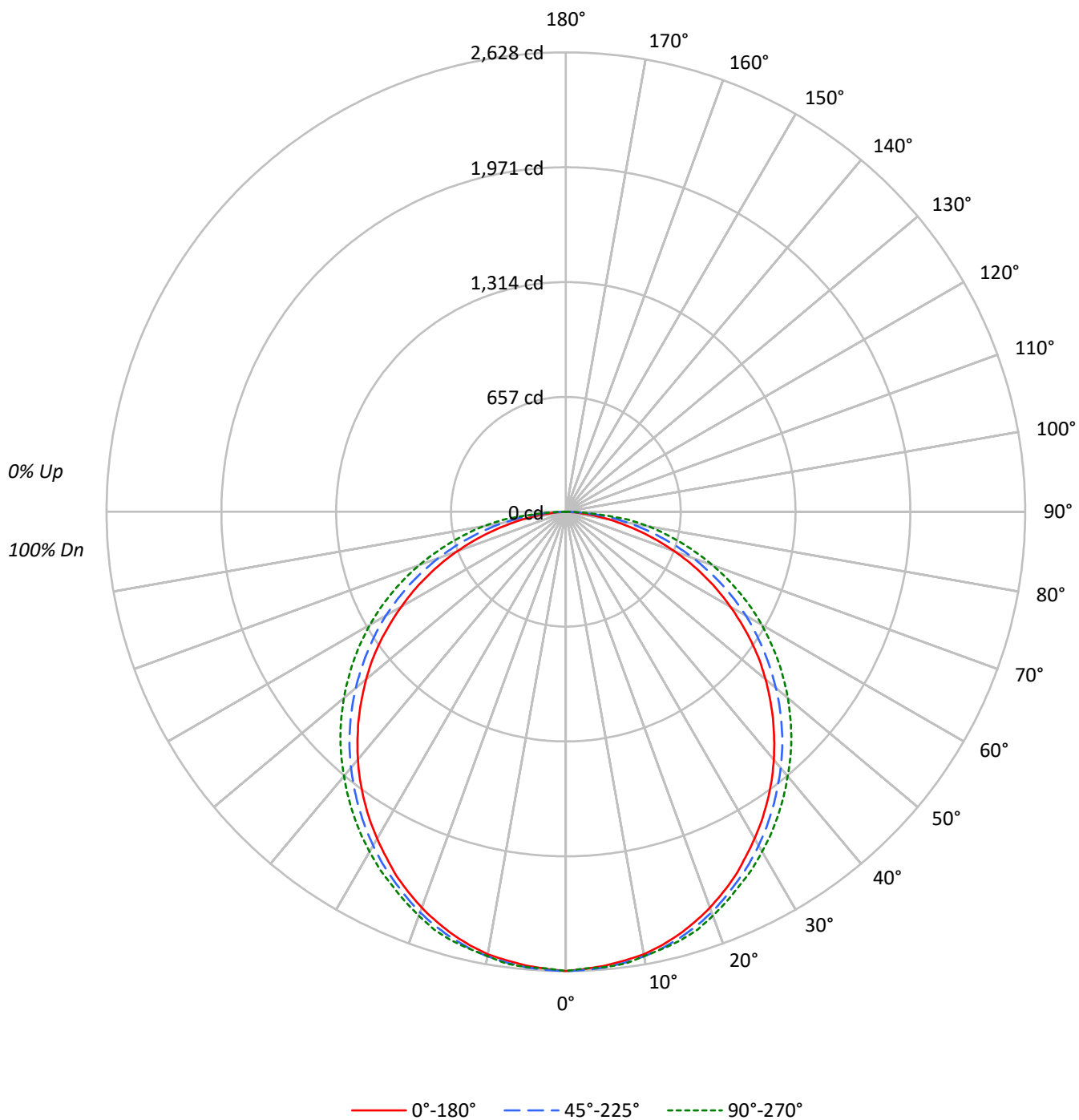
Lumens per Lamp: N/A
Luminaire Lumens: 7671.0 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588552

CATALOG NUMBER: 24CZSP-80-L830-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588552

CATALOG NUMBER: 24CZSP-80-L830-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°	4024	4024	4024
5°	4006	4022	4019
10°	3997	4016	4013
15°	3969	4001	4025
20°	3929	3975	4008
25°	3880	3934	3982
30°	3819	3900	3971
35°	3764	3862	3959
40°	3702	3823	3948
45°	3631	3785	3952
50°	3553	3738	3951
55°	3461	3686	3955
60°	3331	3645	3965
65°	3178	3575	3977
70°	2962	3475	3995
75°	2640	3337	4034
80°	2182	3177	4231
85°	1420	2870	3697

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4365 cd/sqm

TEST NUMBER: P1588552

CATALOG NUMBER: 24CZSP-80-L830-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.5	3.2
10°-20°	711.5	9.3
20°-30°	1073.1	14.0
30°-40°	1292.5	16.8
40°-50°	1349.9	17.6
50°-60°	1239.7	16.2
60°-70°	976.4	12.7
70°-80°	599.0	7.8
80°-90°	180.3	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°	2033.2	26.5
0°-40°	3325.7	43.4
0°-60°	5915.3	77.1
0°-90°	7671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2628	2628	2628	2628	2628	
5°	2606	2609	2616	2624	2614	248
15°	2503	2508	2523	2538	2538	706
25°	2296	2301	2328	2356	2356	1057
35°	2013	2023	2065	2107	2118	1259
45°	1676	1695	1747	1808	1825	1293
55°	1296	1320	1380	1458	1481	1157
65°	877	907	986	1069	1098	868
75°	446	481	564	653	682	473
85°	81	111	163	207	210	105
90°	0	0	0	0	0	

TEST NUMBER: P1588552

CATALOG NUMBER: 24CZSP-80-L830-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2627.5	2627.5	2627.5	2627.5	2627.5
2.5°	2617.4	2622.5	2624.2	2625.8	2614.1
5°	2605.6	2609.0	2615.7	2624.2	2614.1
7.5°	2588.8	2592.2	2600.6	2612.4	2607.3
10°	2570.3	2572.0	2582.1	2590.5	2580.4
12.5°	2540.0	2545.0	2556.8	2563.6	2560.2
15°	2503.0	2508.0	2523.2	2538.3	2538.3
17.5°	2459.2	2465.9	2484.4	2504.6	2506.3
20°	2410.4	2415.4	2439.0	2459.2	2459.2
22.5°	2354.8	2361.6	2385.1	2407.0	2410.4
25°	2295.9	2301.0	2327.9	2356.5	2356.5
27.5°	2226.9	2237.0	2270.7	2299.3	2306.0
30°	2159.6	2168.0	2205.0	2240.4	2245.4
32.5°	2088.9	2099.0	2137.7	2176.4	2184.8
35°	2013.1	2023.2	2065.3	2107.4	2117.5
37.5°	1934.0	1945.8	1989.6	2038.4	2048.5
40°	1851.6	1865.0	1912.1	1964.3	1974.4
42.5°	1764.0	1782.5	1833.0	1886.9	1902.1
45°	1676.5	1695.0	1747.2	1807.8	1824.6
47.5°	1583.9	1605.8	1659.7	1723.6	1742.1
50°	1491.3	1513.2	1568.8	1637.8	1658.0
52.5°	1397.1	1419.0	1476.2	1548.6	1570.5
55°	1296.1	1319.7	1380.2	1457.7	1481.2
57.5°	1191.7	1222.0	1286.0	1365.1	1388.7
60°	1087.4	1117.7	1190.0	1267.5	1294.4
62.5°	984.7	1013.3	1087.4	1169.8	1198.5
65°	877.0	907.3	986.4	1068.9	1097.5
67.5°	770.9	801.2	880.3	966.2	996.5
70°	661.5	695.2	776.0	861.8	892.1
72.5°	552.1	587.4	669.9	757.5	786.1
75°	446.1	481.4	563.9	653.1	681.7
77.5°	341.7	380.4	461.2	552.1	579.0
80°	247.4	284.5	360.2	449.4	479.7
82.5°	158.2	190.2	266.0	350.1	372.0
85°	80.8	111.1	163.3	207.0	210.4
87.5°	25.2	35.3	53.9	80.8	82.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588552

CATALOG NUMBER: 24CZSP-80-L830-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	16.32	17.98	16.68	18.29	18.61	17.15	18.81	17.51	19.12	19.44
	3H	18.07	19.58	18.45	19.90	20.26	19.26	20.77	19.64	21.10	21.46
	4H	18.69	20.11	19.09	20.46	20.83	20.15	21.57	20.55	21.92	22.30
	6H	19.10	20.42	19.51	20.78	21.18	20.93	22.25	21.34	22.62	23.01
	8H	19.21	20.47	19.63	20.86	21.26	21.25	22.51	21.68	22.90	23.30
	12H	19.26	20.47	19.69	20.85	21.28	21.46	22.67	21.89	23.06	23.48
4H	2H	17.09	18.51	17.49	18.86	19.23	17.73	19.16	18.13	19.50	19.88
	3H	19.06	20.26	19.47	20.66	21.06	20.09	21.29	20.50	21.68	22.08
	4H	19.80	20.89	20.23	21.30	21.73	21.14	22.23	21.57	22.64	23.07
	6H	20.33	21.28	20.78	21.72	22.18	22.09	23.05	22.55	23.49	23.94
	8H	20.48	21.37	20.94	21.81	22.27	22.49	23.38	22.95	23.82	24.29
	12H	20.56	21.36	21.04	21.84	22.31	22.77	23.57	23.25	24.04	24.51
8H	4H	20.26	21.15	20.72	21.59	22.06	21.43	22.32	21.89	22.76	23.23
	6H	20.92	21.67	21.41	22.15	22.63	22.54	23.29	23.03	23.77	24.25
	8H	21.13	21.80	21.64	22.31	22.79	23.05	23.72	23.56	24.23	24.71
	12H	21.27	21.86	21.78	22.35	22.91	23.44	24.03	23.94	24.52	25.08
12H	4H	20.35	21.15	20.83	21.63	22.10	21.45	22.26	21.93	22.73	23.20
	6H	21.05	21.72	21.56	22.23	22.71	22.59	23.26	23.10	23.76	24.25
	8H	21.33	21.92	21.84	22.41	22.97	23.17	23.76	23.67	24.25	24.81