

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: P1588334

Luminaire Tested: 24CZSP-52-L835-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588334
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-52-L835-S
Description: 2x4 CZSP LED Luminaire, 3500K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

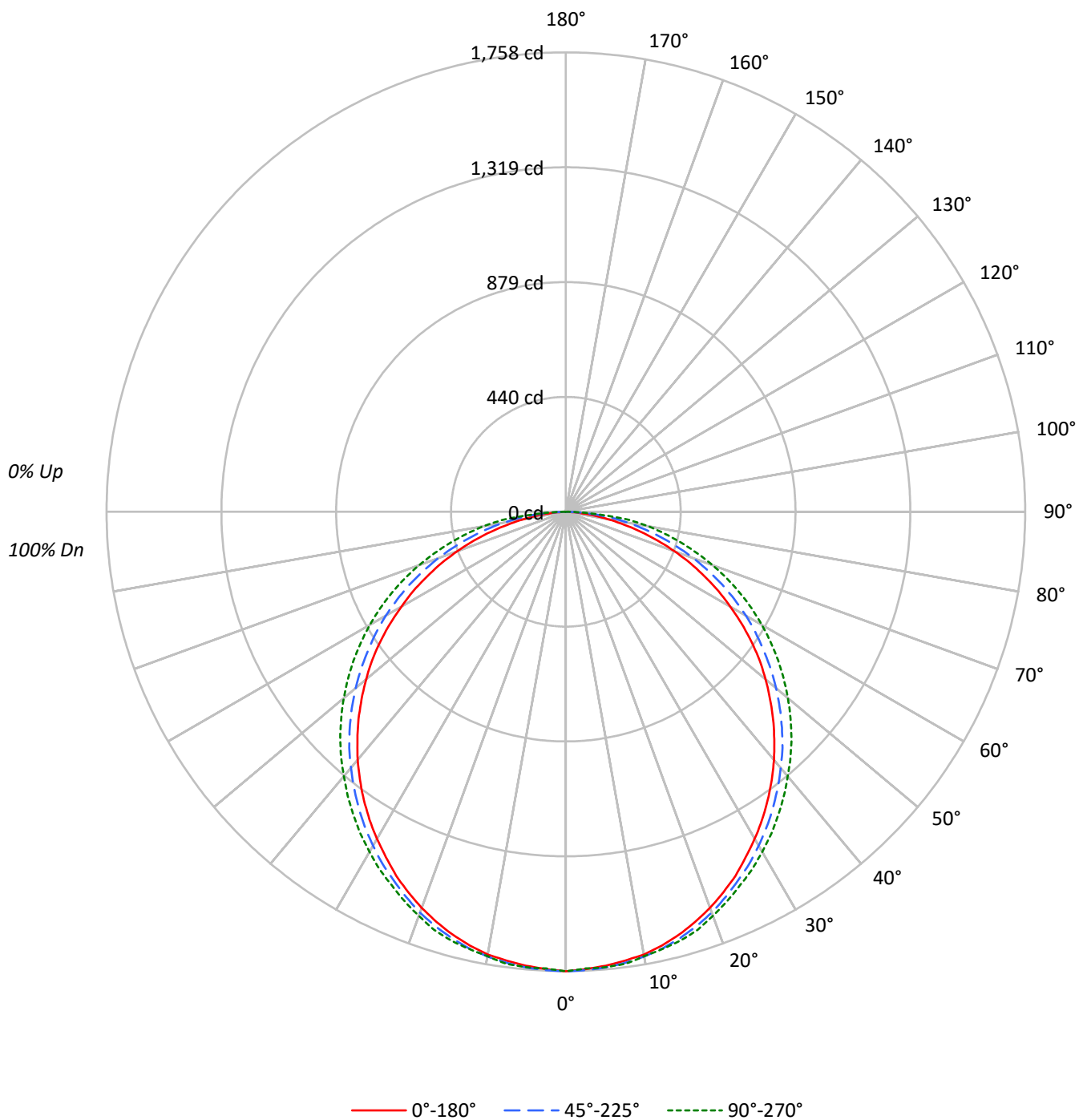
Lumens per Lamp: N/A
Luminaire Lumens: 5134.0 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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: P1588334

CATALOG NUMBER: 24CZSP-52-L835-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588334

CATALOG NUMBER: 24CZSP-52-L835-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	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°	2693	2693	2693
5°	2681	2692	2690
10°	2675	2688	2686
15°	2656	2678	2694
20°	2629	2661	2683
25°	2597	2633	2665
30°	2556	2610	2658
35°	2519	2585	2650
40°	2478	2559	2642
45°	2430	2533	2645
50°	2378	2502	2644
55°	2316	2467	2647
60°	2229	2440	2654
65°	2127	2393	2662
70°	1982	2326	2674
75°	1766	2233	2700
80°	1461	2127	2832
85°	951	1921	2474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2922 cd/sqm

TEST NUMBER: P1588334

CATALOG NUMBER: 24CZSP-52-L835-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	3.2
10°-20°	476.2	9.3
20°-30°	718.2	14.0
30°-40°	865.1	16.8
40°-50°	903.4	17.6
50°-60°	829.7	16.2
60°-70°	653.5	12.7
70°-80°	400.9	7.8
80°-90°	120.7	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°	1360.7	26.5
0°-40°	2225.8	43.4
0°-60°	3959.0	77.1
0°-90°	5134.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1744	1746	1751	1756	1750	166
15°	1675	1678	1689	1699	1699	472
25°	1537	1540	1558	1577	1577	707
35°	1347	1354	1382	1410	1417	843
45°	1122	1134	1169	1210	1221	865
55°	867	883	924	976	991	774
65°	587	607	660	715	734	581
75°	298	322	377	437	456	317
85°	54	74	109	139	141	71
90°	0	0	0	0	0	

TEST NUMBER: P1588334

CATALOG NUMBER: 24CZSP-52-L835-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.5	1758.5	1758.5	1758.5	1758.5
2.5°	1751.8	1755.2	1756.3	1757.4	1749.5
5°	1743.9	1746.1	1750.6	1756.3	1749.5
7.5°	1732.6	1734.9	1740.5	1748.4	1745.0
10°	1720.2	1721.4	1728.1	1733.7	1727.0
12.5°	1700.0	1703.3	1711.2	1715.7	1713.5
15°	1675.2	1678.5	1688.7	1698.8	1698.8
17.5°	1645.9	1650.4	1662.8	1676.3	1677.4
20°	1613.2	1616.6	1632.4	1645.9	1645.9
22.5°	1576.0	1580.5	1596.3	1611.0	1613.2
25°	1536.6	1540.0	1558.0	1577.2	1577.2
27.5°	1490.4	1497.2	1519.7	1538.9	1543.4
30°	1445.4	1451.0	1475.8	1499.4	1502.8
32.5°	1398.0	1404.8	1430.7	1456.6	1462.3
35°	1347.3	1354.1	1382.3	1410.4	1417.2
37.5°	1294.4	1302.3	1331.6	1364.2	1371.0
40°	1239.2	1248.2	1279.8	1314.7	1321.4
42.5°	1180.6	1193.0	1226.8	1262.9	1273.0
45°	1122.0	1134.4	1169.4	1209.9	1221.2
47.5°	1060.1	1074.7	1110.8	1153.6	1166.0
50°	998.1	1012.8	1049.9	1096.1	1109.6
52.5°	935.0	949.7	988.0	1036.4	1051.1
55°	867.4	883.2	923.8	975.6	991.4
57.5°	797.6	817.9	860.7	913.6	929.4
60°	727.7	748.0	796.5	848.3	866.3
62.5°	659.0	678.2	727.7	782.9	802.1
65°	586.9	607.2	660.2	715.4	734.5
67.5°	516.0	536.2	589.2	646.6	666.9
70°	442.7	465.3	519.3	576.8	597.1
72.5°	369.5	393.2	448.4	506.9	526.1
75°	298.5	322.2	377.4	437.1	456.2
77.5°	228.7	254.6	308.7	369.5	387.5
80°	165.6	190.4	241.1	300.8	321.1
82.5°	105.9	127.3	178.0	234.3	249.0
85°	54.1	74.4	109.3	138.6	140.8
87.5°	16.9	23.7	36.0	54.1	55.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588334

CATALOG NUMBER: 24CZSP-52-L835-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	14.92	16.58	15.29	16.90	17.21	15.75	17.41	16.12	17.73	18.04
	3H	16.68	18.18	17.05	18.51	18.87	17.87	19.37	18.24	19.70	20.06
	4H	17.29	18.72	17.69	19.06	19.44	18.76	20.18	19.15	20.53	20.90
	6H	17.71	19.03	18.12	19.39	19.78	19.54	20.86	19.95	21.22	21.61
	8H	17.81	19.08	18.24	19.46	19.86	19.86	21.12	20.28	21.51	21.91
	12H	17.87	19.08	18.29	19.46	19.89	20.07	21.28	20.50	21.66	22.09
4H	2H	15.69	17.11	16.09	17.46	17.84	16.34	17.76	16.74	18.11	18.48
	3H	17.67	18.87	18.08	19.26	19.66	18.69	19.89	19.10	20.29	20.69
	4H	18.41	19.49	18.84	19.91	20.34	19.75	20.83	20.18	21.24	21.68
	6H	18.94	19.89	19.39	20.33	20.78	20.70	21.65	21.15	22.09	22.54
	8H	19.08	19.97	19.54	20.41	20.88	21.10	21.99	21.55	22.43	22.89
	12H	19.17	19.97	19.64	20.44	20.91	21.37	22.18	21.85	22.65	23.12
8H	4H	18.87	19.76	19.32	20.20	20.66	20.03	20.93	20.49	21.37	21.83
	6H	19.53	20.27	20.02	20.76	21.23	21.15	21.89	21.64	22.38	22.85
	8H	19.74	20.41	20.24	20.91	21.40	21.66	22.33	22.17	22.83	23.32
	12H	19.88	20.47	20.38	20.96	21.52	22.04	22.64	22.55	23.13	23.68
12H	4H	18.95	19.76	19.43	20.23	20.70	20.06	20.86	20.54	21.34	21.81
	6H	19.66	20.33	20.17	20.83	21.32	21.19	21.86	21.70	22.37	22.85
	8H	19.94	20.53	20.44	21.02	21.58	21.77	22.36	22.28	22.85	23.41