

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: P1584358

Luminaire Tested: 14CZSP-52-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-52-L845-S
Description: 1x4 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

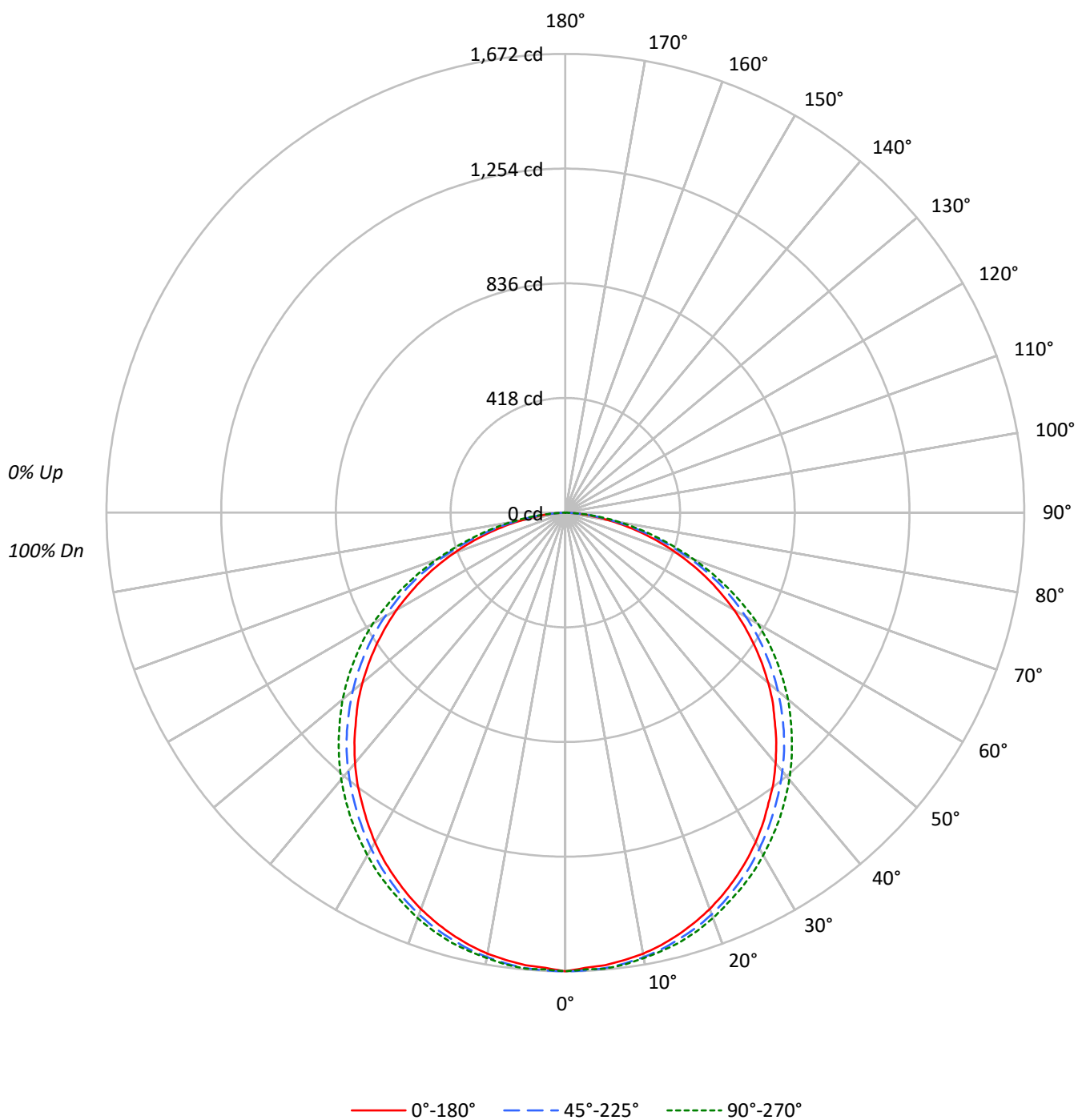
Lumens per Lamp: N/A
Luminaire Lumens: 4833.0 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.9
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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	83	78	96	88	82	77	85	80	75		82	77	73		79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63		72	66	62		69	65	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	58	52		62	56	52	50
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35		47	40	35		46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5633	5633	5633
5°	5602	5638	5643
10°	5586	5627	5640
15°	5554	5611	5651
20°	5515	5589	5640
25°	5459	5546	5623
30°	5397	5502	5611
35°	5311	5454	5601
40°	5241	5410	5585
45°	5143	5363	5563
50°	5057	5299	5552
55°	4935	5224	5516
60°	4785	5120	5461
65°	4572	4980	5235
70°	4261	4702	4913
75°	3807	4242	4482
80°	3120	3574	3920
85°	2092	2614	2915

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5563 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	3.3
10°-20°	453.9	9.4
20°-30°	687.3	14.2
30°-40°	830.0	17.2
40°-50°	867.4	17.9
50°-60°	794.8	16.4
60°-70°	613.6	12.7
70°-80°	345.1	7.1
80°-90°	82.6	1.7
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°	1299.5	26.9
0°-40°	2129.5	44.1
0°-60°	3791.8	78.5
0°-90°	4833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1656	1668	1667	1668	1668	157
15°	1592	1605	1608	1615	1620	449
25°	1468	1481	1492	1500	1512	677
35°	1291	1308	1326	1344	1362	809
45°	1079	1100	1125	1148	1167	834
55°	840	862	889	917	939	751
65°	573	598	625	650	657	567
75°	292	319	326	339	344	310
85°	54	62	68	74	75	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1671.7	1671.7	1671.7	1671.7	1671.7
2.5°	1660.4	1673.2	1670.3	1674.6	1666.8
5°	1656.1	1668.2	1666.8	1668.2	1668.2
7.5°	1645.4	1658.2	1657.5	1659.6	1661.1
10°	1632.6	1644.7	1644.7	1646.8	1648.3
12.5°	1614.8	1627.6	1629.1	1632.6	1635.5
15°	1592.1	1604.9	1608.4	1614.8	1619.8
17.5°	1566.5	1580.0	1585.7	1592.1	1598.5
20°	1538.0	1550.1	1558.6	1563.6	1572.9
22.5°	1504.6	1518.1	1527.3	1532.3	1542.3
25°	1468.3	1481.1	1491.8	1499.6	1512.4
27.5°	1429.9	1442.7	1455.5	1464.7	1479.7
30°	1387.2	1400.7	1414.2	1428.4	1442.0
32.5°	1340.9	1356.6	1371.5	1387.2	1402.1
35°	1291.2	1307.5	1326.0	1343.8	1361.6
37.5°	1244.9	1259.9	1279.1	1298.3	1316.0
40°	1191.6	1207.9	1230.0	1251.3	1269.8
42.5°	1137.5	1155.3	1179.5	1200.1	1220.0
45°	1079.2	1100.5	1125.4	1148.2	1167.4
47.5°	1025.1	1043.6	1068.5	1093.4	1113.3
50°	964.6	985.3	1010.9	1037.2	1059.2
52.5°	903.5	924.8	951.1	977.4	1000.2
55°	840.1	862.2	889.2	917.0	939.0
57.5°	775.4	798.9	826.6	854.4	876.4
60°	710.0	733.4	759.8	790.3	810.3
62.5°	641.7	668.0	692.9	721.3	733.4
65°	573.4	598.3	624.6	649.5	656.6
67.5°	503.7	529.3	552.7	569.1	578.4
70°	432.5	460.3	477.3	493.0	498.7
72.5°	362.1	389.8	399.8	414.7	420.4
75°	292.4	319.4	325.8	339.3	344.3
77.5°	224.8	249.7	251.8	267.5	271.7
80°	160.8	180.7	184.2	199.2	202.0
82.5°	103.1	117.4	122.4	135.2	139.4
85°	54.1	61.9	67.6	74.0	75.4
87.5°	17.8	22.1	18.5	19.2	17.8
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	17.72	19.37	18.08	19.68	20.00	18.26	19.91	18.62	20.22	20.54
	3H	19.49	20.99	19.87	21.31	21.67	20.12	21.61	20.49	21.93	22.29
	4H	20.12	21.53	20.52	21.88	22.25	20.78	22.19	21.18	22.54	22.91
	6H	20.53	21.83	20.94	22.20	22.59	21.26	22.57	21.67	22.93	23.32
	8H	20.63	21.88	21.06	22.27	22.67	21.41	22.65	21.83	23.04	23.44
	12H	20.68	21.88	21.11	22.26	22.69	21.49	22.68	21.92	23.07	23.49
4H	2H	18.44	19.85	18.84	20.20	20.57	18.86	20.27	19.26	20.62	20.99
	3H	20.44	21.62	20.85	22.01	22.41	20.94	22.12	21.35	22.51	22.91
	4H	21.19	22.26	21.63	22.68	23.11	21.73	22.80	22.16	23.21	23.65
	6H	21.72	22.66	22.18	23.10	23.55	22.34	23.27	22.79	23.71	24.16
	8H	21.86	22.74	22.32	23.18	23.64	22.53	23.40	22.99	23.84	24.31
	12H	21.94	22.73	22.42	23.20	23.67	22.65	23.43	23.13	23.91	24.38
8H	4H	21.53	22.41	21.99	22.85	23.31	22.01	22.88	22.47	23.32	23.79
	6H	22.17	22.90	22.66	23.39	23.86	22.72	23.45	23.21	23.93	24.41
	8H	22.37	23.02	22.88	23.53	24.01	22.98	23.63	23.49	24.14	24.62
	12H	22.50	23.08	23.01	23.57	24.13	23.16	23.74	23.67	24.23	24.79
12H	4H	21.57	22.35	22.05	22.83	23.30	22.03	22.82	22.51	23.29	23.76
	6H	22.23	22.88	22.74	23.38	23.87	22.76	23.41	23.27	23.92	24.40
	8H	22.48	23.05	22.98	23.54	24.10	23.07	23.64	23.57	24.13	24.69