

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: P1588369

Luminaire Tested: 24CZSP-52HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2603-711-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-52HE-L945
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

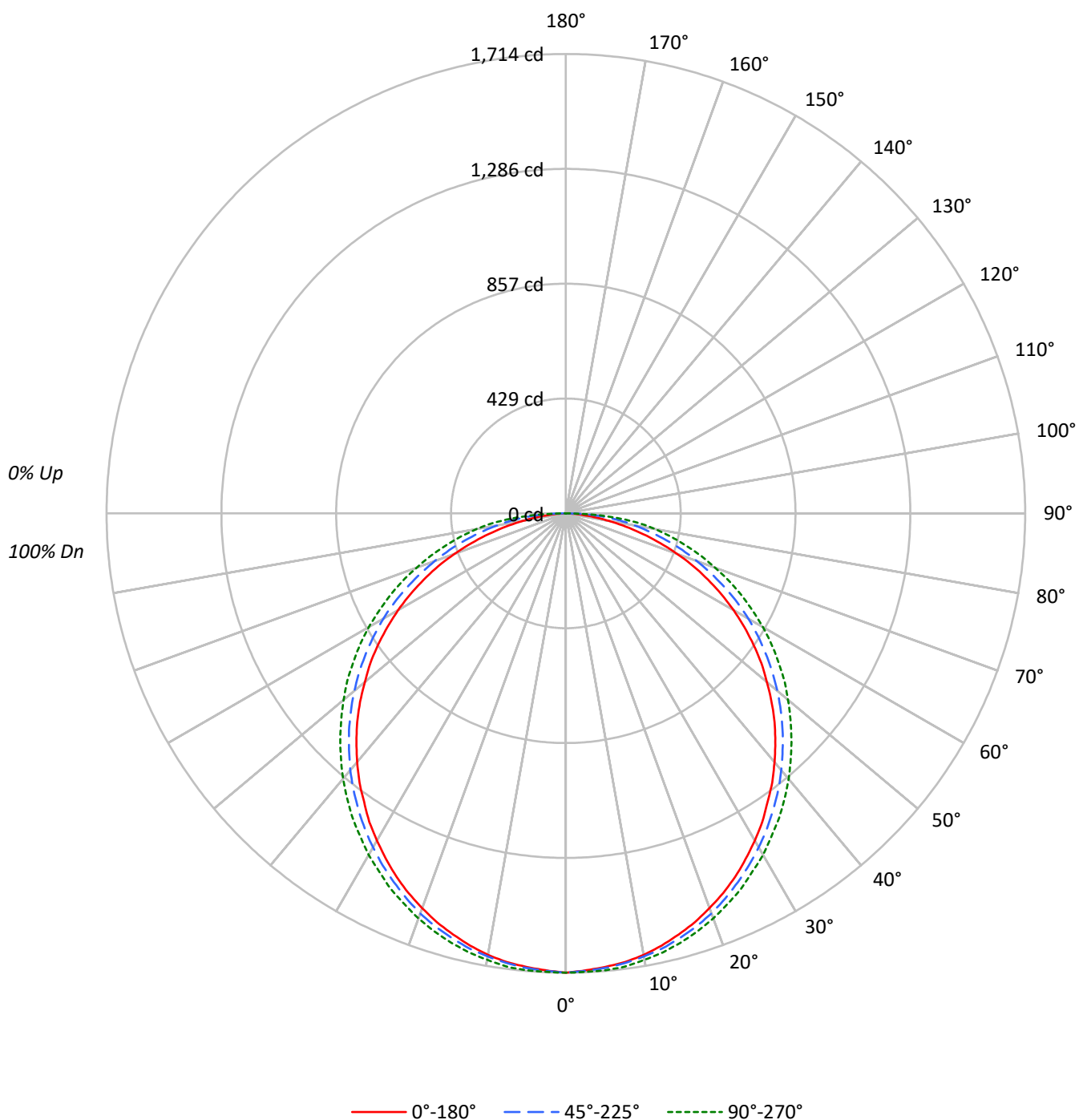
Lumens per Lamp: N/A
Luminaire Lumens: 5084.0 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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	98	94	105	101	97	93	96	93	90		92	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		81	76	72		77	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	29
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°	2625	2625	2625
5°	2611	2618	2631
10°	2602	2611	2630
15°	2579	2602	2628
20°	2555	2589	2621
25°	2528	2566	2613
30°	2494	2546	2603
35°	2455	2523	2594
40°	2422	2501	2585
45°	2386	2478	2578
50°	2333	2454	2578
55°	2284	2431	2585
60°	2215	2410	2603
65°	2121	2371	2621
70°	1985	2331	2653
75°	1765	2298	2739
80°	1452	2308	2979
85°	989	2571	3288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.2	3.2
10°-20°	464.4	9.1
20°-30°	702.2	13.8
30°-40°	847.4	16.7
40°-50°	886.1	17.4
50°-60°	817.5	16.1
60°-70°	650.1	12.8
70°-80°	410.3	8.1
80°-90°	143.8	2.8
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°	1328.8	26.1
0°-40°	2176.3	42.8
0°-60°	3879.8	76.3
0°-90°	5084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1698	1711	1703	1707	1711	161
15°	1627	1645	1641	1653	1658	459
25°	1496	1518	1518	1538	1546	689
35°	1313	1341	1349	1376	1387	823
45°	1102	1126	1144	1178	1190	848
55°	856	881	910	954	968	764
65°	585	612	654	709	723	578
75°	298	332	388	446	463	316
85°	56	93	146	182	187	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.8	1713.8	1713.8	1713.8	1713.8
2.5°	1706.8	1718.1	1708.2	1713.8	1712.4
5°	1698.4	1711.0	1702.6	1706.8	1711.0
7.5°	1688.5	1702.6	1692.7	1699.8	1705.4
10°	1673.0	1687.1	1678.7	1687.1	1691.3
12.5°	1651.9	1668.8	1663.2	1673.0	1677.2
15°	1626.6	1644.9	1640.7	1653.3	1657.5
17.5°	1599.9	1619.6	1616.7	1630.8	1635.0
20°	1567.5	1590.0	1588.6	1602.7	1608.3
22.5°	1533.7	1556.2	1554.8	1570.3	1577.3
25°	1495.7	1518.2	1518.2	1537.9	1546.4
27.5°	1453.5	1478.8	1480.3	1500.0	1507.0
30°	1409.9	1435.2	1439.5	1460.6	1471.8
32.5°	1364.9	1388.8	1395.8	1419.8	1428.2
35°	1312.8	1341.0	1349.4	1376.1	1387.4
37.5°	1265.0	1290.3	1301.6	1329.7	1341.0
40°	1211.5	1238.2	1250.9	1281.9	1293.1
42.5°	1156.6	1183.4	1197.4	1231.2	1242.5
45°	1101.7	1125.7	1144.0	1177.7	1190.4
47.5°	1041.2	1068.0	1087.7	1124.3	1136.9
50°	979.3	1007.5	1030.0	1069.4	1082.1
52.5°	920.2	945.6	970.9	1014.5	1028.6
55°	855.5	880.8	910.4	954.0	968.1
57.5°	789.4	814.7	848.5	894.9	910.4
60°	723.2	748.6	786.6	834.4	849.9
62.5°	654.3	679.6	721.8	771.1	785.2
65°	585.3	612.1	654.3	709.2	723.2
67.5°	515.0	541.7	586.8	644.4	659.9
70°	443.2	472.8	520.6	578.3	592.4
72.5°	368.7	402.4	455.9	512.2	529.1
75°	298.3	332.1	388.4	446.0	462.9
77.5°	229.4	267.3	323.6	384.1	402.4
80°	164.6	202.6	261.7	320.8	337.7
82.5°	105.5	144.9	204.0	260.3	274.4
85°	56.3	92.9	146.3	181.5	187.1
87.5°	18.3	47.8	66.1	87.2	88.6
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	14.91	16.58	15.28	16.90	17.21	15.63	17.30	16.00	17.62	17.93
	3H	16.70	18.21	17.07	18.54	18.90	17.80	19.31	18.17	19.64	20.00
	4H	17.33	18.76	17.72	19.11	19.48	18.73	20.16	19.13	20.51	20.89
	6H	17.75	19.08	18.16	19.45	19.84	19.59	20.92	20.00	21.29	21.68
	8H	17.86	19.14	18.29	19.52	19.92	19.97	21.24	20.39	21.63	22.03
	12H	17.92	19.14	18.35	19.52	19.95	20.28	21.50	20.71	21.88	22.31
4H	2H	15.67	17.11	16.07	17.45	17.83	16.23	17.67	16.63	18.01	18.39
	3H	17.70	18.91	18.11	19.30	19.70	18.65	19.86	19.06	20.25	20.65
	4H	18.46	19.56	18.89	19.97	20.40	19.75	20.85	20.18	21.26	21.69
	6H	19.01	19.98	19.47	20.42	20.87	20.79	21.75	21.24	22.19	22.65
	8H	19.17	20.08	19.63	20.52	20.98	21.25	22.16	21.71	22.60	23.06
	12H	19.27	20.09	19.75	20.56	21.03	21.65	22.47	22.13	22.94	23.41
8H	4H	18.95	19.85	19.41	20.29	20.76	20.07	20.97	20.52	21.41	21.88
	6H	19.66	20.41	20.15	20.90	21.37	21.28	22.04	21.78	22.53	23.00
	8H	19.90	20.58	20.40	21.08	21.57	21.88	22.56	22.39	23.07	23.55
	12H	20.07	20.67	20.57	21.16	21.72	22.42	23.03	22.93	23.52	24.07
12H	4H	19.05	19.87	19.53	20.34	20.81	20.10	20.91	20.58	21.39	21.86
	6H	19.82	20.50	20.32	21.00	21.49	21.35	22.03	21.85	22.53	23.02
	8H	20.14	20.74	20.65	21.23	21.79	22.02	22.63	22.53	23.12	23.67