

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: P1588681

Luminaire Tested: 24CZSP-A-52-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-A-52-L850
Description: 2x4 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

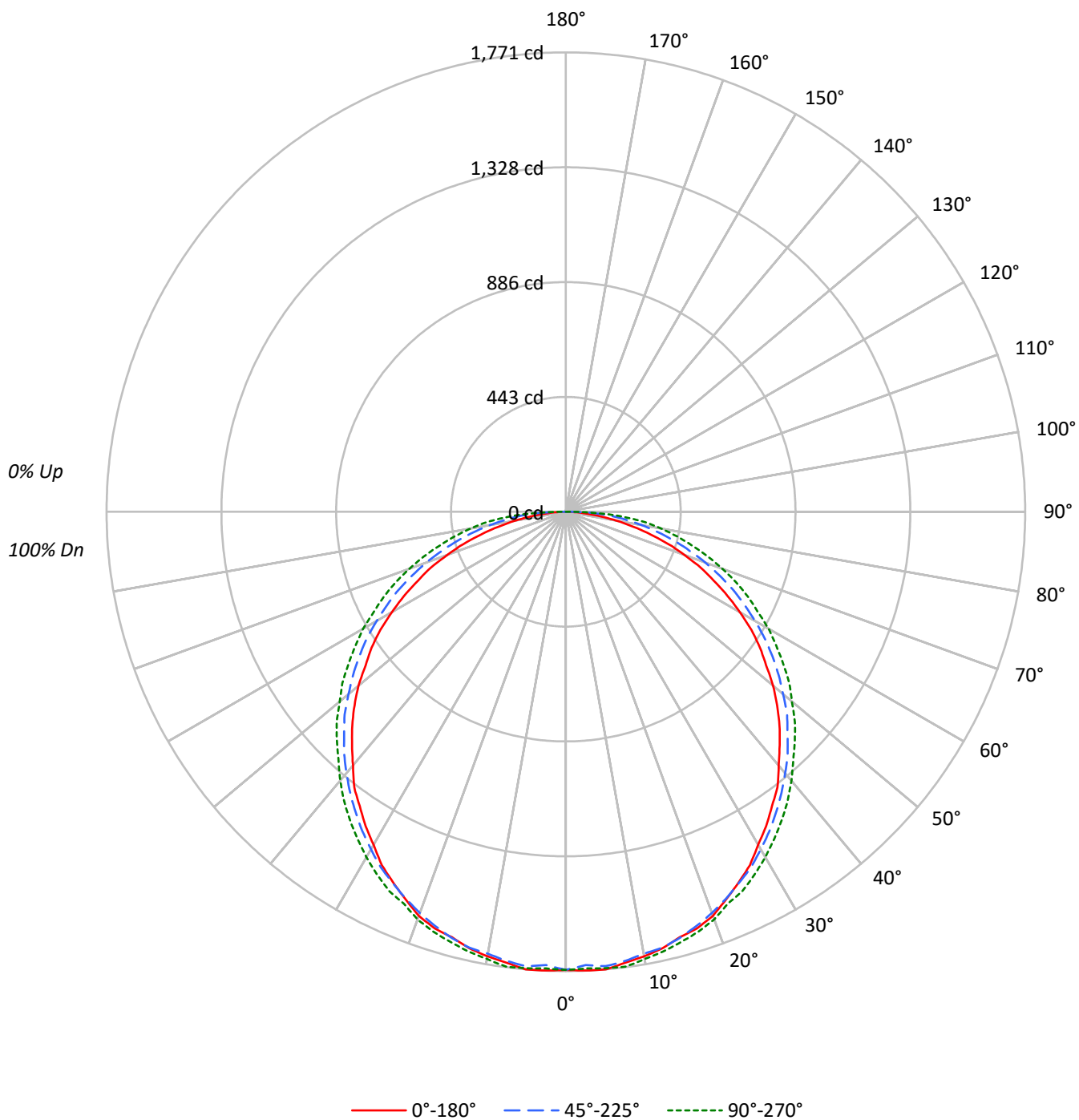
Lumens per Lamp: N/A
Luminaire Lumens: 5391.0 lumens
Efficiency: N/A
Efficacy: 146.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2705	2705	2705
5°	2723	2704	2715
10°	2707	2691	2723
15°	2692	2696	2723
20°	2702	2683	2725
25°	2664	2668	2725
30°	2621	2658	2720
35°	2590	2643	2713
40°	2553	2630	2705
45°	2523	2618	2704
50°	2486	2606	2710
55°	2441	2596	2734
60°	2373	2579	2765
65°	2279	2578	2808
70°	2174	2562	2874
75°	2002	2567	2980
80°	1753	2620	3279
85°	1339	3017	3926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 4351 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.7	3.1
10°-20°	482.0	8.9
20°-30°	732.3	13.6
30°-40°	887.0	16.5
40°-50°	933.2	17.3
50°-60°	867.7	16.1
60°-70°	698.7	13.0
70°-80°	452.6	8.4
80°-90°	169.7	3.1
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°	1382.0	25.6
0°-40°	2269.1	42.1
0°-60°	4070.0	75.5
0°-90°	5391.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5391.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1771	1769	1758	1769	1766	168
15°	1698	1704	1700	1721	1717	481
25°	1576	1575	1579	1606	1613	727
35°	1385	1396	1414	1438	1451	868
45°	1165	1180	1208	1234	1248	898
55°	914	937	972	1011	1024	815
65°	629	657	711	754	775	625
75°	338	372	434	484	504	359
85°	76	112	172	214	223	93
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1766.2	1766.2	1766.2	1766.2	1766.2
2.5°	1770.1	1770.1	1749.4	1771.4	1762.3
5°	1771.4	1768.8	1758.5	1768.8	1766.2
7.5°	1753.3	1755.9	1746.8	1759.8	1768.8
10°	1740.4	1743.0	1730.1	1750.7	1750.7
12.5°	1723.6	1726.2	1721.0	1740.4	1736.5
15°	1697.8	1704.2	1700.4	1721.0	1717.2
17.5°	1683.6	1678.4	1674.5	1690.0	1697.8
20°	1657.8	1646.1	1646.1	1666.8	1672.0
22.5°	1616.4	1612.6	1613.9	1639.7	1634.5
25°	1576.4	1575.1	1579.0	1606.1	1612.6
27.5°	1536.4	1533.8	1545.4	1571.3	1576.4
30°	1482.2	1487.3	1502.8	1531.2	1537.7
32.5°	1437.0	1446.0	1460.2	1487.3	1495.1
35°	1385.3	1395.7	1413.7	1438.3	1451.2
37.5°	1340.2	1346.6	1366.0	1389.2	1404.7
40°	1276.9	1293.7	1315.6	1349.2	1353.1
42.5°	1220.1	1236.9	1265.3	1301.4	1297.5
45°	1164.6	1180.1	1208.5	1234.3	1248.5
47.5°	1105.2	1119.4	1156.8	1187.8	1198.1
50°	1043.2	1061.3	1093.6	1125.8	1137.5
52.5°	973.5	992.8	1034.2	1069.0	1085.8
55°	914.1	937.3	972.2	1010.9	1023.8
57.5°	848.2	867.6	910.2	949.0	961.9
60°	774.7	797.9	841.8	883.1	902.5
62.5°	703.6	729.5	775.9	818.6	834.0
65°	628.8	657.2	711.4	754.0	774.7
67.5°	564.2	587.4	640.4	688.2	710.1
70°	485.5	516.4	572.0	624.9	641.7
72.5°	415.7	442.8	500.9	553.9	574.5
75°	338.3	371.8	433.8	484.2	503.5
77.5°	267.3	302.1	364.1	417.0	439.0
80°	198.8	232.4	297.0	351.2	371.8
82.5°	134.3	167.8	232.4	285.3	308.6
85°	76.2	112.3	171.7	214.3	223.4
87.5°	33.6	64.6	96.8	116.2	123.9
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	15.14	16.82	15.51	17.14	17.45	15.82	17.50	16.18	17.81	18.13
	3H	17.00	18.52	17.37	18.85	19.21	18.03	19.56	18.41	19.89	20.25
	4H	17.68	19.13	18.08	19.47	19.85	19.00	20.44	19.40	20.79	21.16
	6H	18.17	19.52	18.58	19.88	20.27	19.89	21.23	20.30	21.60	21.99
	8H	18.32	19.61	18.74	19.99	20.39	20.29	21.58	20.72	21.97	22.36
	12H	18.41	19.64	18.84	20.02	20.45	20.65	21.89	21.08	22.27	22.69
4H	2H	15.94	17.38	16.33	17.73	18.10	16.46	17.90	16.85	18.25	18.62
	3H	18.02	19.24	18.43	19.64	20.04	18.92	20.14	19.32	20.53	20.93
	4H	18.84	19.95	19.27	20.36	20.80	20.04	21.15	20.47	21.57	22.00
	6H	19.47	20.44	19.92	20.88	21.33	21.11	22.09	21.57	22.53	22.98
	8H	19.66	20.58	20.12	21.02	21.48	21.60	22.52	22.06	22.96	23.42
	12H	19.80	20.63	20.28	21.10	21.57	22.06	22.88	22.53	23.36	23.82
8H	4H	19.35	20.27	19.81	20.71	21.17	20.39	21.30	20.84	21.74	22.21
	6H	20.14	20.90	20.63	21.39	21.86	21.64	22.40	22.13	22.89	23.36
	8H	20.42	21.11	20.93	21.61	22.10	22.26	22.95	22.76	23.45	23.94
	12H	20.64	21.25	21.14	21.74	22.30	22.87	23.48	23.37	23.97	24.53
12H	4H	19.46	20.29	19.94	20.76	21.23	20.42	21.25	20.90	21.72	22.19
	6H	20.30	20.99	20.81	21.50	21.98	21.71	22.40	22.22	22.91	23.39
	8H	20.67	21.29	21.18	21.77	22.33	22.42	23.03	22.92	23.52	24.07