

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: P1588356

Luminaire Tested: 24CZSP-52HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588356
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-52HE-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

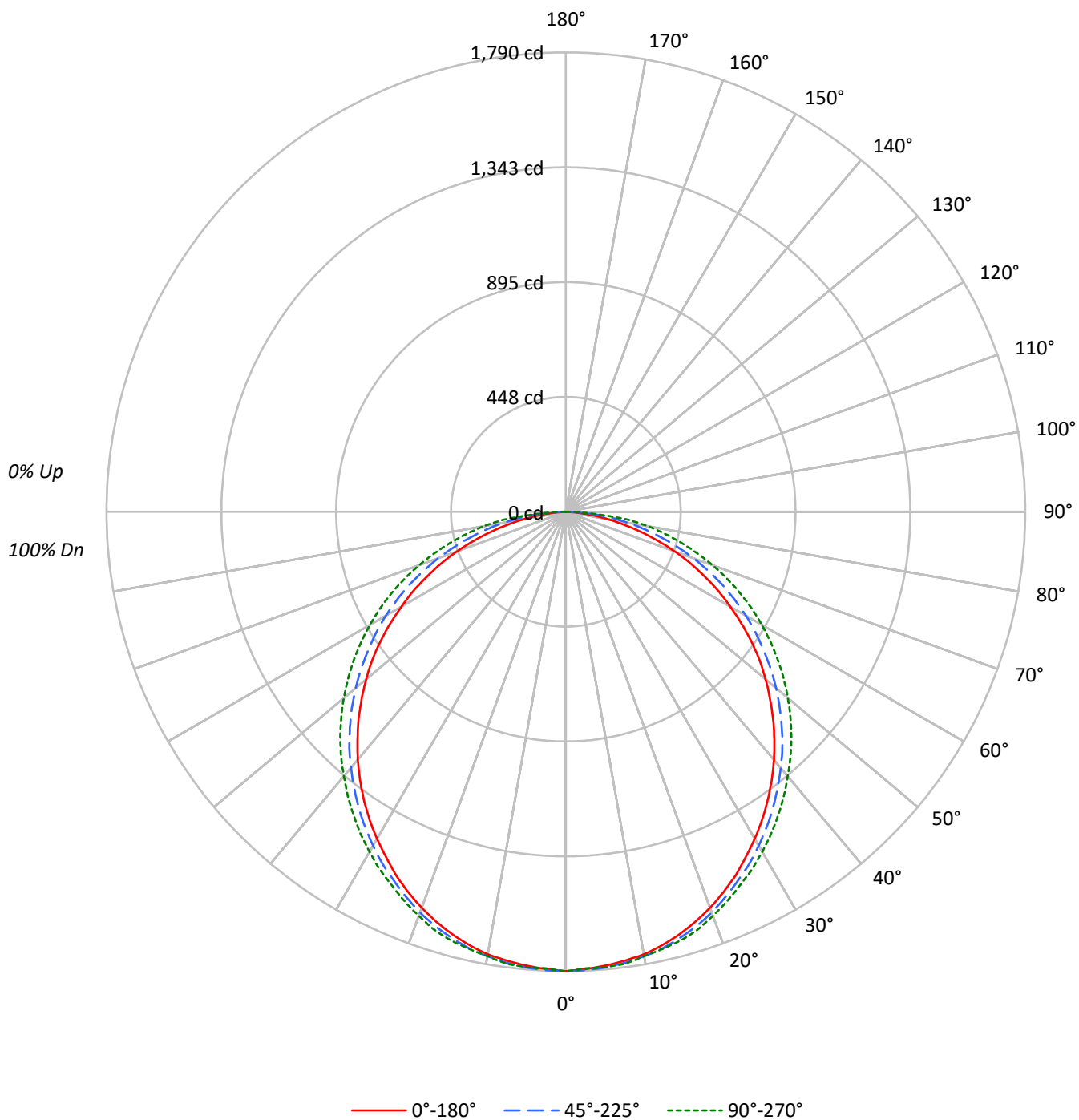
Lumens per Lamp: N/A
Luminaire Lumens: 5227.0 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

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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				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		69
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2742	2742	2742
5°	2730	2740	2739
10°	2724	2736	2735
15°	2704	2726	2743
20°	2677	2709	2731
25°	2644	2681	2714
30°	2602	2657	2706
35°	2565	2631	2698
40°	2522	2605	2690
45°	2474	2579	2693
50°	2421	2547	2692
55°	2358	2511	2695
60°	2270	2484	2702
65°	2166	2436	2710
70°	2019	2368	2722
75°	1798	2274	2749
80°	1487	2164	2883
85°	968	1956	2520

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2975 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	3.2
10°-20°	484.8	9.3
20°-30°	731.2	14.0
30°-40°	880.7	16.8
40°-50°	919.8	17.6
50°-60°	844.7	16.2
60°-70°	665.3	12.7
70°-80°	408.2	7.8
80°-90°	122.8	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°	1385.4	26.5
0°-40°	2266.1	43.4
0°-60°	4030.7	77.1
0°-90°	5227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1776	1778	1782	1788	1781	169
15°	1706	1709	1719	1730	1730	481
25°	1564	1568	1586	1606	1606	720
35°	1372	1379	1407	1436	1443	858
45°	1142	1155	1190	1232	1243	881
55°	883	899	940	993	1009	788
65°	598	618	672	728	748	591
75°	304	328	384	445	464	322
85°	55	76	111	141	143	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1790.4	1790.4	1790.4	1790.4	1790.4
2.5°	1783.5	1786.9	1788.1	1789.2	1781.2
5°	1775.5	1777.8	1782.4	1788.1	1781.2
7.5°	1764.0	1766.3	1772.0	1780.1	1776.6
10°	1751.4	1752.5	1759.4	1765.2	1758.3
12.5°	1730.7	1734.2	1742.2	1746.8	1744.5
15°	1705.5	1709.0	1719.3	1729.6	1729.6
17.5°	1675.7	1680.3	1692.9	1706.7	1707.8
20°	1642.4	1645.9	1661.9	1675.7	1675.7
22.5°	1604.6	1609.2	1625.2	1640.1	1642.4
25°	1564.4	1567.9	1586.2	1605.7	1605.7
27.5°	1517.4	1524.3	1547.2	1566.7	1571.3
30°	1471.5	1477.3	1502.5	1526.6	1530.0
32.5°	1423.4	1430.2	1456.6	1483.0	1488.7
35°	1371.8	1378.6	1407.3	1436.0	1442.9
37.5°	1317.8	1325.9	1355.7	1389.0	1395.8
40°	1261.6	1270.8	1302.9	1338.5	1345.4
42.5°	1202.0	1214.6	1249.0	1285.7	1296.1
45°	1142.4	1155.0	1190.5	1231.8	1243.3
47.5°	1079.3	1094.2	1130.9	1174.5	1187.1
50°	1016.2	1031.1	1069.0	1116.0	1129.7
52.5°	952.0	966.9	1005.9	1055.2	1070.1
55°	883.2	899.2	940.5	993.3	1009.3
57.5°	812.0	832.7	876.3	930.2	946.2
60°	740.9	761.6	810.9	863.7	882.0
62.5°	671.0	690.5	740.9	797.1	816.6
65°	597.6	618.2	672.1	728.3	747.8
67.5°	525.3	545.9	599.9	658.3	679.0
70°	450.8	473.7	528.7	587.2	607.9
72.5°	376.2	400.3	456.5	516.1	535.6
75°	303.9	328.0	384.2	445.0	464.5
77.5°	232.8	259.2	314.3	376.2	394.6
80°	168.6	193.8	245.4	306.2	326.9
82.5°	107.8	129.6	181.2	238.6	253.5
85°	55.1	75.7	111.3	141.1	143.4
87.5°	17.2	24.1	36.7	55.1	56.2
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	14.98	16.65	15.35	16.96	17.27	15.81	17.48	16.18	17.79	18.10
	3H	16.74	18.25	17.11	18.57	18.93	17.93	19.44	18.31	19.76	20.12
	4H	17.36	18.78	17.75	19.13	19.50	18.82	20.24	19.22	20.59	20.96
	6H	17.77	19.09	18.18	19.45	19.84	19.60	20.92	20.01	21.28	21.67
	8H	17.88	19.14	18.30	19.53	19.92	19.92	21.18	20.34	21.57	21.97
	12H	17.93	19.14	18.36	19.52	19.95	20.13	21.34	20.56	21.72	22.15
4H	2H	15.75	17.18	16.15	17.52	17.90	16.40	17.82	16.80	18.17	18.55
	3H	17.73	18.93	18.14	19.33	19.73	18.76	19.95	19.16	20.35	20.75
	4H	18.47	19.55	18.90	19.97	20.40	19.81	20.89	20.24	21.31	21.74
	6H	19.00	19.95	19.45	20.39	20.84	20.76	21.71	21.21	22.15	22.61
	8H	19.14	20.04	19.60	20.48	20.94	21.16	22.05	21.62	22.49	22.96
	12H	19.23	20.03	19.71	20.50	20.97	21.43	22.24	21.91	22.71	23.18
8H	4H	18.93	19.82	19.39	20.26	20.73	20.10	20.99	20.56	21.43	21.89
	6H	19.59	20.33	20.08	20.82	21.29	21.21	21.95	21.70	22.44	22.91
	8H	19.80	20.47	20.31	20.97	21.46	21.72	22.39	22.23	22.89	23.38
	12H	19.94	20.53	20.44	21.02	21.58	22.11	22.70	22.61	23.19	23.75
12H	4H	19.02	19.82	19.50	20.29	20.76	20.12	20.93	20.60	21.40	21.87
	6H	19.72	20.39	20.23	20.90	21.38	21.26	21.93	21.76	22.43	22.91
	8H	20.00	20.59	20.50	21.08	21.64	21.83	22.43	22.34	22.92	23.47