

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: P1588698

Luminaire Tested: 24CZSP-A-52HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588698
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-A-52HE-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

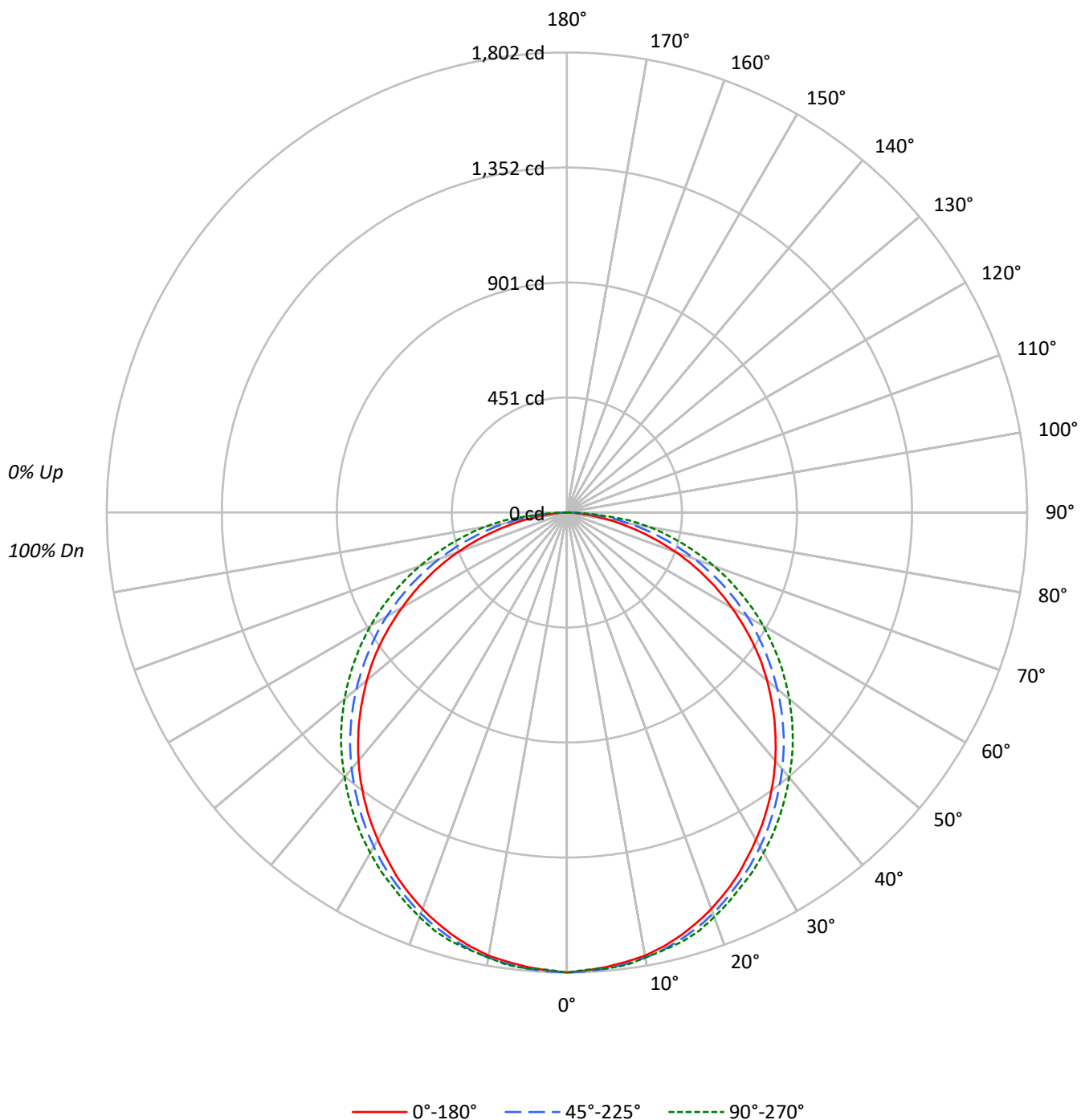
Lumens per Lamp: N/A
Luminaire Lumens: 5260.0 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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				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	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°	2760	2760	2760
5°	2747	2758	2756
10°	2741	2754	2752
15°	2721	2743	2760
20°	2694	2726	2749
25°	2661	2698	2731
30°	2619	2674	2723
35°	2581	2648	2715
40°	2538	2622	2707
45°	2490	2595	2710
50°	2437	2563	2709
55°	2373	2527	2712
60°	2284	2500	2719
65°	2179	2451	2727
70°	2031	2383	2739
75°	1810	2288	2766
80°	1497	2179	2901
85°	974	1968	2536

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2993 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	3.2
10°-20°	487.9	9.3
20°-30°	735.8	14.0
30°-40°	886.3	16.8
40°-50°	925.6	17.6
50°-60°	850.1	16.2
60°-70°	669.5	12.7
70°-80°	410.8	7.8
80°-90°	123.6	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°	1394.1	26.5
0°-40°	2280.4	43.4
0°-60°	4056.1	77.1
0°-90°	5260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1802	1802	1802	1802	1802	
5°	1787	1789	1794	1799	1792	170
15°	1716	1720	1730	1740	1740	484
25°	1574	1578	1596	1616	1616	725
35°	1380	1387	1416	1445	1452	863
45°	1150	1162	1198	1240	1251	886
55°	889	905	946	1000	1016	793
65°	601	622	676	733	752	595
75°	306	330	387	448	467	324
85°	55	76	112	142	144	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1801.7	1801.7	1801.7	1801.7	1801.7
2.5°	1794.8	1798.2	1799.4	1800.5	1792.5
5°	1786.7	1789.0	1793.6	1799.4	1792.5
7.5°	1775.1	1777.5	1783.2	1791.3	1787.8
10°	1762.4	1763.6	1770.5	1776.3	1769.4
12.5°	1741.7	1745.1	1753.2	1757.8	1755.5
15°	1716.3	1719.7	1730.1	1740.5	1740.5
17.5°	1686.3	1690.9	1703.6	1717.4	1718.6
20°	1652.8	1656.3	1672.4	1686.3	1686.3
22.5°	1614.7	1619.3	1635.5	1650.5	1652.8
25°	1574.3	1577.8	1596.2	1615.9	1615.9
27.5°	1527.0	1533.9	1557.0	1576.6	1581.2
30°	1480.8	1486.6	1512.0	1536.2	1539.7
32.5°	1432.3	1439.3	1465.8	1492.4	1498.1
35°	1380.4	1387.3	1416.2	1445.0	1452.0
37.5°	1326.2	1334.2	1364.3	1397.7	1404.6
40°	1269.6	1278.8	1311.2	1346.9	1353.9
42.5°	1209.6	1222.3	1256.9	1293.8	1304.2
45°	1149.6	1162.3	1198.0	1239.6	1251.1
47.5°	1086.1	1101.1	1138.0	1181.9	1194.6
50°	1022.6	1037.6	1075.7	1123.0	1136.9
52.5°	958.0	973.0	1012.2	1061.9	1076.9
55°	888.7	904.9	946.4	999.5	1015.7
57.5°	817.2	837.9	881.8	936.0	952.2
60°	745.6	766.4	816.0	869.1	887.6
62.5°	675.2	694.8	745.6	802.2	821.8
65°	601.3	622.1	676.4	732.9	752.5
67.5°	528.6	549.4	603.6	662.5	683.3
70°	453.6	476.7	532.1	590.9	611.7
72.5°	378.6	402.8	459.4	519.4	539.0
75°	305.9	330.1	386.7	447.8	467.4
77.5°	234.3	260.8	316.2	378.6	397.0
80°	169.7	195.1	247.0	308.2	328.9
82.5°	108.5	130.4	182.4	240.1	255.1
85°	55.4	76.2	112.0	142.0	144.3
87.5°	17.3	24.2	36.9	55.4	56.6
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	15.00	16.67	15.37	16.98	17.30	15.83	17.50	16.20	17.81	18.13
	3H	16.76	18.27	17.14	18.59	18.95	17.95	19.46	18.33	19.78	20.14
	4H	17.38	18.80	17.78	19.15	19.52	18.84	20.26	19.24	20.61	20.98
	6H	17.79	19.11	18.20	19.47	19.86	19.62	20.94	20.03	21.31	21.70
	8H	17.90	19.16	18.32	19.55	19.95	19.94	21.20	20.36	21.59	21.99
	12H	17.95	19.16	18.38	19.54	19.97	20.15	21.36	20.58	21.74	22.17
4H	2H	15.78	17.20	16.17	17.55	17.92	16.42	17.85	16.82	18.19	18.57
	3H	17.75	18.95	18.16	19.35	19.75	18.78	19.98	19.19	20.37	20.77
	4H	18.49	19.58	18.92	19.99	20.42	19.83	20.92	20.26	21.33	21.76
	6H	19.02	19.97	19.47	20.41	20.86	20.78	21.73	21.23	22.17	22.63
	8H	19.17	20.06	19.62	20.50	20.96	21.18	22.07	21.64	22.51	22.98
	12H	19.25	20.05	19.73	20.53	21.00	21.46	22.26	21.94	22.73	23.20
8H	4H	18.95	19.84	19.41	20.28	20.75	20.12	21.01	20.58	21.45	21.92
	6H	19.61	20.36	20.10	20.84	21.32	21.23	21.98	21.72	22.46	22.94
	8H	19.82	20.49	20.33	20.99	21.48	21.74	22.41	22.25	22.92	23.40
	12H	19.96	20.55	20.47	21.04	21.60	22.13	22.72	22.63	23.21	23.77
12H	4H	19.04	19.84	19.52	20.32	20.79	20.14	20.95	20.62	21.42	21.89
	6H	19.74	20.41	20.25	20.92	21.40	21.28	21.95	21.78	22.45	22.94
	8H	20.02	20.61	20.53	21.10	21.66	21.86	22.45	22.36	22.94	23.50