

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: P1588697

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588697
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-A-52HE-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

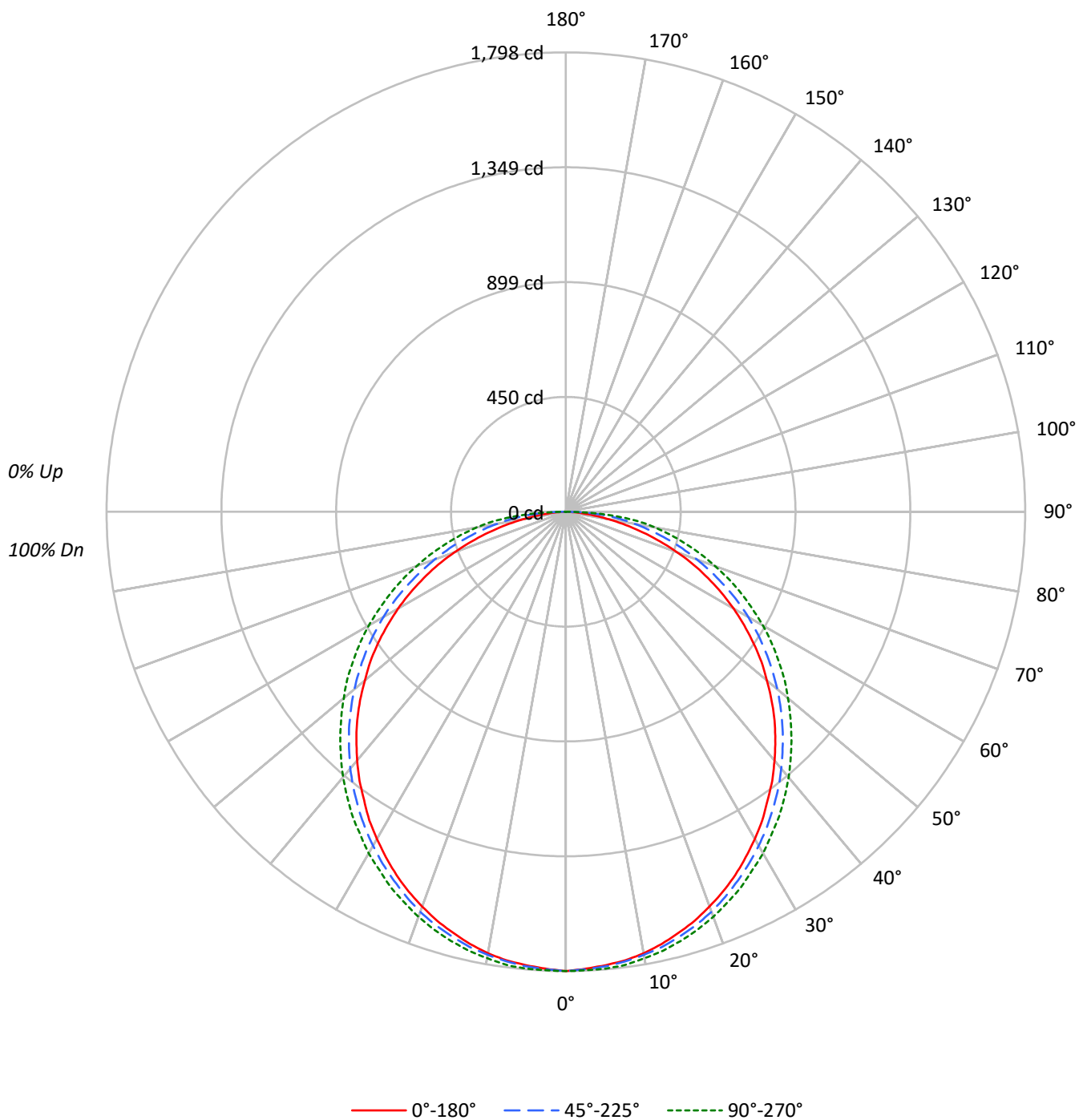
Lumens per Lamp: N/A
Luminaire Lumens: 5333.0 lumens
Efficiency: N/A
Efficacy: 145.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1588697

CATALOG NUMBER: 24CZSP-A-52HE-L840

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	85	85	85	82
2	98	89	82	76	95	87	81	75	84	78	73	81	76	72	77	74	70	70	70	68
3	89	78	70	63	87	77	69	62	74	67	61	71	65	60	68	63	59	59	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	51	51	51	48
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	38	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	34	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	30	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	27	27	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	25	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2754	2754	2754
5°	2739	2746	2759
10°	2729	2739	2759
15°	2706	2729	2757
20°	2680	2716	2750
25°	2652	2691	2741
30°	2616	2671	2730
35°	2575	2647	2721
40°	2541	2624	2712
45°	2503	2599	2705
50°	2448	2574	2704
55°	2396	2550	2712
60°	2324	2527	2731
65°	2225	2487	2750
70°	2082	2446	2783
75°	1852	2411	2874
80°	1523	2421	3124
85°	1037	2698	3450

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 85°

Luminance: 3450 cd/sqm

TEST NUMBER: P1588697

CATALOG NUMBER: 24CZSP-A-52HE-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.1	3.2
10°-20°	487.1	9.1
20°-30°	736.6	13.8
30°-40°	888.9	16.7
40°-50°	929.5	17.4
50°-60°	857.5	16.1
60°-70°	681.9	12.8
70°-80°	430.3	8.1
80°-90°	150.9	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°	1393.9	26.1
0°-40°	2282.8	42.8
0°-60°	4069.8	76.3
0°-90°	5333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5333.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1798	1798	1798	1798	1798	
5°	1782	1795	1786	1790	1795	169
15°	1706	1725	1721	1734	1739	482
25°	1569	1593	1593	1613	1622	723
35°	1377	1407	1416	1444	1455	863
45°	1156	1181	1200	1235	1249	890
55°	897	924	955	1001	1016	801
65°	614	642	686	744	759	607
75°	313	348	407	468	486	332
85°	59	97	154	190	196	75
90°	0	0	0	0	0	

TEST NUMBER: P1588697

CATALOG NUMBER: 24CZSP-A-52HE-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1797.8	1797.8	1797.8	1797.8	1797.8
2.5°	1790.4	1802.2	1791.9	1797.8	1796.3
5°	1781.5	1794.8	1786.0	1790.4	1794.8
7.5°	1771.2	1786.0	1775.6	1783.0	1788.9
10°	1755.0	1769.7	1760.9	1769.7	1774.2
12.5°	1732.8	1750.5	1744.6	1755.0	1759.4
15°	1706.3	1725.4	1721.0	1734.3	1738.7
17.5°	1678.2	1698.9	1695.9	1710.7	1715.1
20°	1644.3	1667.9	1666.4	1681.2	1687.1
22.5°	1608.8	1632.5	1631.0	1647.2	1654.6
25°	1569.0	1592.6	1592.6	1613.3	1622.1
27.5°	1524.7	1551.3	1552.8	1573.4	1580.8
30°	1479.0	1505.5	1510.0	1532.1	1543.9
32.5°	1431.7	1456.8	1464.2	1489.3	1498.1
35°	1377.1	1406.6	1415.5	1443.5	1455.3
37.5°	1326.9	1353.5	1365.3	1394.8	1406.6
40°	1270.8	1298.9	1312.2	1344.6	1356.4
42.5°	1213.3	1241.3	1256.1	1291.5	1303.3
45°	1155.7	1180.8	1200.0	1235.4	1248.7
47.5°	1092.2	1120.3	1141.0	1179.3	1192.6
50°	1027.3	1056.8	1080.4	1121.8	1135.0
52.5°	965.3	991.9	1018.4	1064.2	1079.0
55°	897.4	924.0	955.0	1000.7	1015.5
57.5°	828.0	854.6	890.0	938.7	955.0
60°	758.7	785.2	825.1	875.3	891.5
62.5°	686.3	712.9	757.2	808.8	823.6
65°	614.0	642.1	686.3	743.9	758.7
67.5°	540.2	568.3	615.5	676.0	692.2
70°	464.9	495.9	546.1	606.6	621.4
72.5°	386.7	422.1	478.2	537.3	555.0
75°	312.9	348.3	407.4	467.9	485.6
77.5°	240.6	280.4	339.5	402.9	422.1
80°	172.7	212.5	274.5	336.5	354.2
82.5°	110.7	152.0	214.0	273.1	287.8
85°	59.0	97.4	153.5	190.4	196.3
87.5°	19.2	50.2	69.4	91.5	93.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588697

CATALOG NUMBER: 24CZSP-A-52HE-L840

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	15.08	16.75	15.44	17.06	17.38	15.80	17.47	16.16	17.78	18.10
	3H	16.86	18.38	17.24	18.71	19.07	17.96	19.48	18.34	19.81	20.17
	4H	17.49	18.93	17.89	19.27	19.65	18.90	20.33	19.29	20.68	21.05
	6H	17.92	19.25	18.33	19.61	20.00	19.76	21.09	20.17	21.45	21.84
	8H	18.03	19.30	18.45	19.69	20.09	20.13	21.41	20.56	21.80	22.19
	12H	18.09	19.31	18.52	19.69	20.12	20.44	21.67	20.87	22.05	22.48
4H	2H	15.84	17.27	16.24	17.62	17.99	16.40	17.83	16.80	18.18	18.55
	3H	17.86	19.07	18.27	19.47	19.87	18.81	20.02	19.22	20.42	20.82
	4H	18.63	19.72	19.06	20.14	20.57	19.92	21.01	20.35	21.43	21.86
	6H	19.18	20.14	19.63	20.58	21.04	20.96	21.92	21.41	22.36	22.81
	8H	19.34	20.24	19.80	20.68	21.15	21.42	22.32	21.88	22.77	23.23
	12H	19.44	20.25	19.91	20.72	21.19	21.82	22.63	22.30	23.11	23.57
8H	4H	19.11	20.02	19.57	20.46	20.92	20.23	21.14	20.69	21.58	22.04
	6H	19.82	20.58	20.31	21.06	21.54	21.45	22.21	21.94	22.69	23.17
	8H	20.06	20.74	20.57	21.25	21.73	22.05	22.73	22.55	23.23	23.72
	12H	20.23	20.84	20.74	21.33	21.88	22.59	23.19	23.09	23.68	24.24
12H	4H	19.22	20.03	19.70	20.51	20.97	20.26	21.08	20.74	21.55	22.02
	6H	19.98	20.66	20.49	21.17	21.65	21.51	22.20	22.02	22.70	23.18
	8H	20.31	20.91	20.81	21.40	21.96	22.19	22.79	22.69	23.28	23.84