

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: P1586736

Luminaire Tested: 22CZSP-A-54HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586736
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: 22CZSP-A-54HE-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 5000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

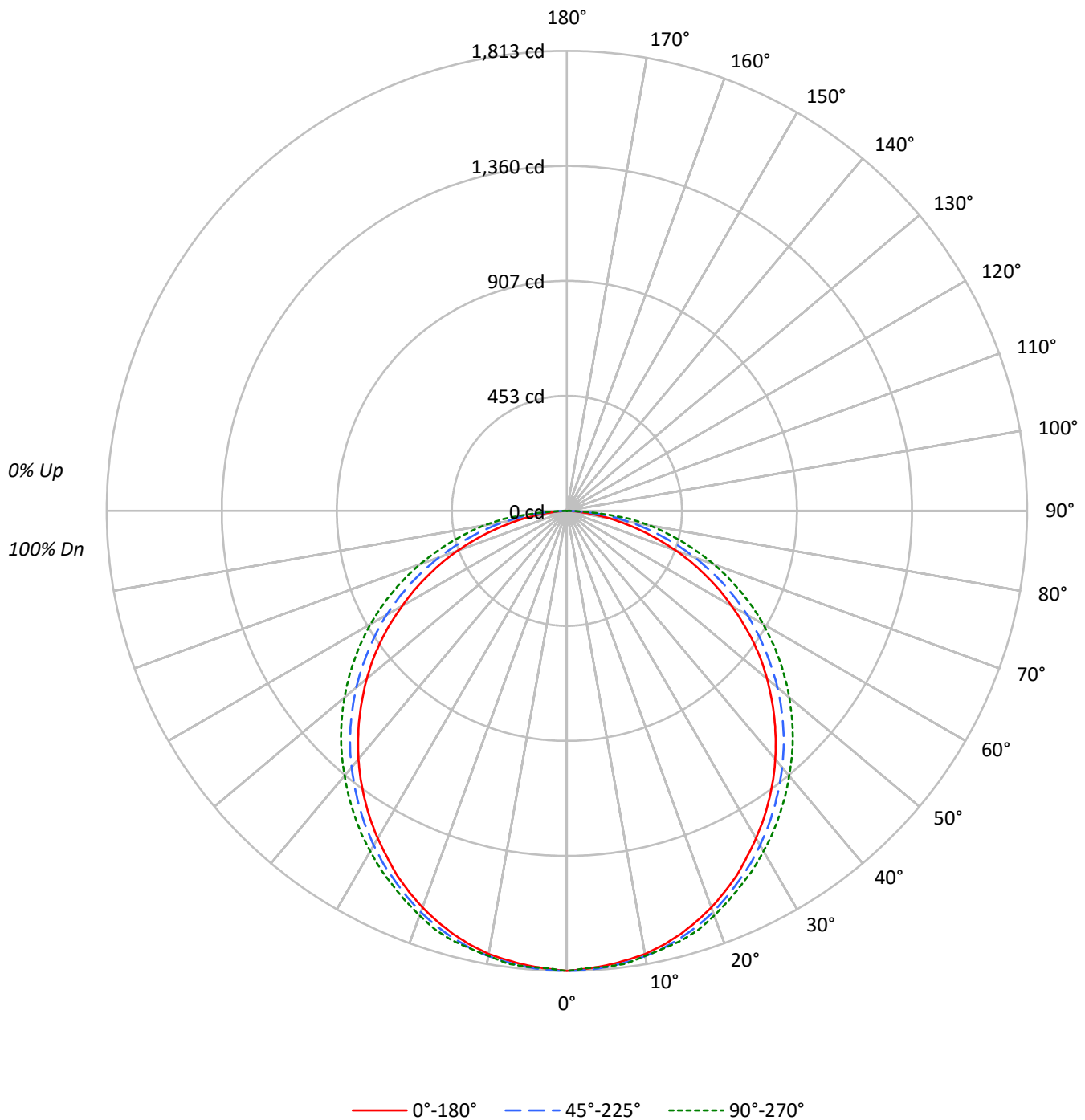
Lumens per Lamp: N/A
Luminaire Lumens: 5293.0 lumens
Efficiency: N/A
Efficacy: 146.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 36.1
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°	5677	5677	5677
5°	5651	5673	5670
10°	5639	5665	5661
15°	5599	5644	5678
20°	5542	5608	5655
25°	5473	5550	5618
30°	5388	5501	5602
35°	5310	5448	5585
40°	5222	5393	5569
45°	5123	5339	5575
50°	5013	5273	5573
55°	4882	5199	5580
60°	4699	5142	5593
65°	4483	5043	5611
70°	4179	4902	5636
75°	3724	4708	5691
80°	3078	4481	5969
85°	2001	4049	5217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6158 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.5	3.2
10°-20°	491.0	9.3
20°-30°	740.5	14.0
30°-40°	891.9	16.8
40°-50°	931.4	17.6
50°-60°	855.4	16.2
60°-70°	673.7	12.7
70°-80°	413.3	7.8
80°-90°	124.4	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°	1402.9	26.5
0°-40°	2294.7	43.4
0°-60°	4081.6	77.1
0°-90°	5293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5293.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1813	1813	1813	1813	1813	
5°	1798	1800	1805	1811	1804	171
15°	1727	1730	1741	1751	1751	487
25°	1584	1588	1606	1626	1626	729
35°	1389	1396	1425	1454	1461	869
45°	1157	1170	1206	1247	1259	892
55°	894	911	952	1006	1022	798
65°	605	626	681	738	757	599
75°	308	332	389	451	470	326
85°	56	77	113	143	145	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1813.0	1813.0	1813.0	1813.0	1813.0
2.5°	1806.0	1809.5	1810.7	1811.8	1803.7
5°	1797.9	1800.2	1804.9	1810.7	1803.7
7.5°	1786.3	1788.6	1794.4	1802.5	1799.1
10°	1773.5	1774.7	1781.6	1787.4	1780.5
12.5°	1752.6	1756.1	1764.2	1768.9	1766.5
15°	1727.0	1730.5	1741.0	1751.4	1751.4
17.5°	1696.9	1701.5	1714.3	1728.2	1729.4
20°	1663.2	1666.7	1682.9	1696.9	1696.9
22.5°	1624.8	1629.5	1645.7	1660.8	1663.2
25°	1584.2	1587.7	1606.3	1626.0	1626.0
27.5°	1536.6	1543.5	1566.8	1586.5	1591.2
30°	1490.1	1495.9	1521.5	1545.9	1549.3
32.5°	1441.3	1448.3	1475.0	1501.7	1507.5
35°	1389.1	1396.0	1425.1	1454.1	1461.1
37.5°	1334.5	1342.6	1372.8	1406.5	1413.5
40°	1277.6	1286.9	1319.4	1355.4	1362.4
42.5°	1217.2	1230.0	1264.8	1302.0	1312.4
45°	1156.8	1169.6	1205.6	1247.4	1259.0
47.5°	1092.9	1108.0	1145.2	1189.3	1202.1
50°	1029.0	1044.1	1082.5	1130.1	1144.0
52.5°	964.0	979.1	1018.6	1068.5	1083.6
55°	894.3	910.6	952.4	1005.8	1022.1
57.5°	822.3	843.2	887.3	941.9	958.2
60°	750.3	771.2	821.1	874.6	893.1
62.5°	679.4	699.2	750.3	807.2	826.9
65°	605.1	626.0	680.6	737.5	757.3
67.5°	531.9	552.8	607.4	666.7	687.6
70°	456.4	479.7	535.4	594.7	615.6
72.5°	380.9	405.3	462.2	522.6	542.4
75°	307.8	332.2	389.1	450.6	470.4
77.5°	235.8	262.5	318.2	380.9	399.5
80°	170.7	196.3	248.5	310.1	331.0
82.5°	109.2	131.2	183.5	241.6	256.7
85°	55.7	76.7	112.7	142.9	145.2
87.5°	17.4	24.4	37.2	55.7	56.9
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	17.51	19.17	17.88	19.49	19.80	18.34	20.00	18.71	20.32	20.63
	3H	19.27	20.77	19.64	21.10	21.46	20.46	21.97	20.83	22.29	22.65
	4H	19.89	21.31	20.28	21.65	22.03	21.35	22.77	21.74	23.12	23.49
	6H	20.30	21.62	20.71	21.98	22.37	22.13	23.45	22.54	23.81	24.20
	8H	20.40	21.67	20.83	22.05	22.45	22.45	23.71	22.87	24.10	24.50
	12H	20.46	21.67	20.88	22.05	22.48	22.66	23.87	23.09	24.25	24.68
4H	2H	18.28	19.71	18.68	20.05	20.43	18.93	20.35	19.33	20.70	21.07
	3H	20.26	21.46	20.67	21.85	22.25	21.28	22.48	21.69	22.88	23.28
	4H	21.00	22.08	21.43	22.50	22.93	22.34	23.42	22.77	23.83	24.27
	6H	21.53	22.48	21.98	22.92	23.37	23.29	24.24	23.74	24.68	25.13
	8H	21.67	22.56	22.13	23.01	23.47	23.69	24.58	24.14	25.02	25.48
	12H	21.76	22.56	22.23	23.03	23.50	23.96	24.77	24.44	25.24	25.71
8H	4H	21.46	22.35	21.91	22.79	23.25	22.63	23.52	23.08	23.96	24.42
	6H	22.12	22.86	22.61	23.35	23.82	23.74	24.48	24.23	24.97	25.44
	8H	22.33	23.00	22.84	23.50	23.99	24.25	24.92	24.76	25.42	25.91
	12H	22.47	23.06	22.97	23.55	24.11	24.63	25.23	25.14	25.72	26.27
12H	4H	21.55	22.35	22.02	22.82	23.29	22.65	23.45	23.13	23.93	24.40
	6H	22.25	22.92	22.76	23.42	23.91	23.78	24.45	24.29	24.96	25.44
	8H	22.53	23.12	23.03	23.61	24.17	24.36	24.95	24.87	25.44	26.00