

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: P1586499

Luminaire Tested: 22CZSP-54HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-54HE-L845
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

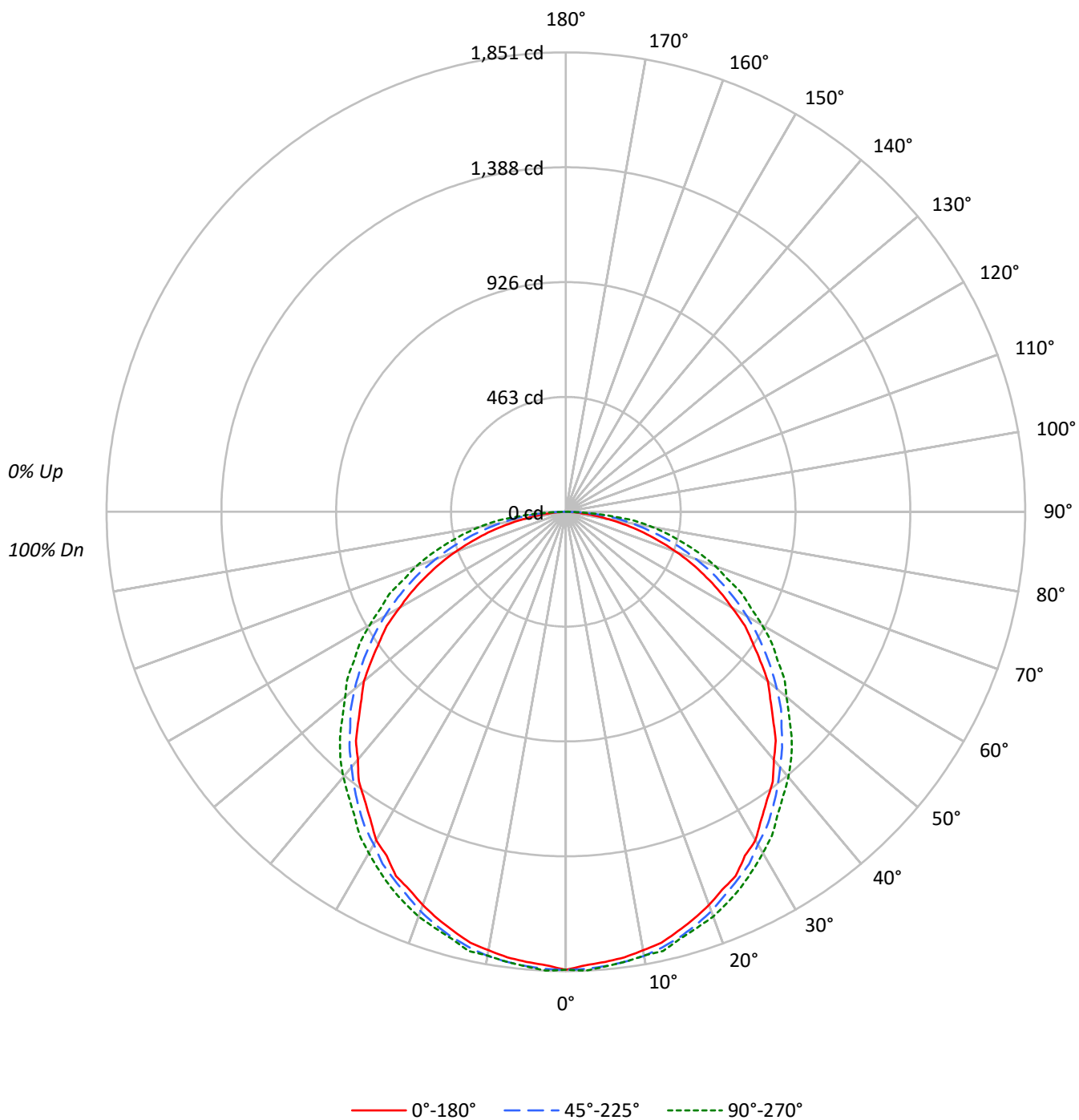
Lumens per Lamp: N/A
Luminaire Lumens: 5436.0 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5779	5779	5779
5°	5723	5775	5780
10°	5704	5778	5773
15°	5670	5751	5773
20°	5618	5707	5784
25°	5595	5653	5767
30°	5525	5597	5741
35°	5409	5561	5688
40°	5328	5491	5702
45°	5228	5441	5699
50°	5176	5411	5653
55°	5011	5338	5682
60°	4842	5279	5717
65°	4632	5199	5815
70°	4353	5100	5876
75°	3922	5009	5995
80°	3208	4917	6387
85°	2091	4897	5975

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6700 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	3.2
10°-20°	499.5	9.2
20°-30°	754.9	13.9
30°-40°	910.5	16.8
40°-50°	951.9	17.5
50°-60°	877.8	16.1
60°-70°	695.5	12.8
70°-80°	434.9	8.0
80°-90°	136.4	2.5
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°	1428.9	26.3
0°-40°	2339.5	43.0
0°-60°	4169.2	76.7
0°-90°	5436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1821	1829	1837	1844	1839	173
15°	1749	1758	1774	1786	1781	494
25°	1619	1614	1636	1659	1669	743
35°	1415	1432	1455	1480	1488	887
45°	1180	1197	1229	1260	1287	914
55°	918	939	978	1031	1041	823
65°	625	652	702	756	785	619
75°	324	351	414	472	496	342
85°	58	83	136	160	166	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.6	1845.6	1845.6	1845.6	1845.6
2.5°	1828.9	1837.3	1843.9	1842.2	1850.6
5°	1820.6	1828.9	1837.3	1843.9	1838.9
7.5°	1810.7	1819.0	1828.9	1838.9	1828.9
10°	1794.0	1799.0	1817.3	1819.0	1815.6
12.5°	1779.1	1784.1	1797.4	1809.0	1812.3
15°	1749.1	1757.5	1774.1	1785.7	1780.7
17.5°	1719.2	1730.8	1745.8	1757.5	1757.5
20°	1686.0	1694.3	1712.6	1720.9	1735.8
22.5°	1647.7	1657.7	1672.7	1695.9	1704.2
25°	1619.4	1614.5	1636.1	1659.4	1669.3
27.5°	1562.9	1569.6	1599.5	1621.1	1629.4
30°	1528.0	1531.3	1548.0	1577.9	1587.9
32.5°	1466.5	1476.5	1506.4	1528.0	1546.3
35°	1414.9	1431.6	1454.8	1479.8	1488.1
37.5°	1370.0	1373.4	1400.0	1433.2	1439.9
40°	1303.5	1323.5	1343.4	1385.0	1395.0
42.5°	1252.0	1262.0	1290.2	1330.1	1345.1
45°	1180.5	1197.1	1228.7	1260.3	1286.9
47.5°	1117.3	1133.9	1175.5	1215.4	1220.4
50°	1062.5	1069.1	1110.7	1155.6	1160.5
52.5°	987.6	1004.3	1044.2	1094.0	1110.7
55°	917.8	939.4	977.7	1030.9	1040.8
57.5°	856.3	866.3	911.1	964.4	984.3
60°	773.1	801.4	843.0	894.5	912.8
62.5°	701.7	728.3	773.1	821.4	841.3
65°	625.2	651.8	701.7	756.5	784.8
67.5°	552.0	573.6	633.5	690.0	703.3
70°	475.5	500.5	557.0	615.2	641.8
72.5°	395.7	424.0	487.2	542.0	570.3
75°	324.2	350.8	414.0	472.2	495.5
77.5°	249.4	279.3	340.8	399.0	425.6
80°	177.9	207.8	272.7	330.9	354.2
82.5°	114.7	146.3	207.8	259.4	279.3
85°	58.2	83.1	136.3	159.6	166.3
87.5°	18.3	29.9	46.6	53.2	53.2
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	17.62	19.29	17.98	19.60	19.92	18.41	20.08	18.77	20.39	20.70
	3H	19.40	20.91	19.78	21.24	21.60	20.55	22.07	20.93	22.39	22.75
	4H	20.04	21.47	20.44	21.81	22.19	21.48	22.90	21.87	23.25	23.63
	6H	20.47	21.79	20.88	22.15	22.55	22.30	23.63	22.71	23.99	24.38
	8H	20.58	21.85	21.00	22.23	22.63	22.65	23.92	23.07	24.30	24.70
	12H	20.63	21.85	21.06	22.23	22.66	22.89	24.11	23.32	24.49	24.92
4H	2H	18.39	19.82	18.79	20.17	20.54	19.01	20.43	19.40	20.78	21.16
	3H	20.40	21.61	20.81	22.00	22.40	21.39	22.60	21.80	22.99	23.39
	4H	21.16	22.26	21.59	22.67	23.10	22.48	23.57	22.91	23.98	24.42
	6H	21.71	22.67	22.16	23.11	23.56	23.48	24.44	23.93	24.87	25.33
	8H	21.87	22.76	22.32	23.20	23.67	23.90	24.80	24.36	25.24	25.71
	12H	21.95	22.76	22.43	23.24	23.71	24.22	25.03	24.70	25.50	25.97
8H	4H	21.64	22.54	22.10	22.98	23.45	22.79	23.68	23.24	24.13	24.59
	6H	22.33	23.08	22.82	23.57	24.04	23.95	24.70	24.44	25.19	25.66
	8H	22.56	23.23	23.07	23.74	24.22	24.50	25.17	25.00	25.67	26.16
	12H	22.71	23.31	23.21	23.79	24.35	24.92	25.52	25.43	26.01	26.57
12H	4H	21.74	22.55	22.22	23.02	23.49	22.81	23.62	23.29	24.10	24.57
	6H	22.48	23.16	22.99	23.66	24.15	24.01	24.68	24.51	25.19	25.67
	8H	22.78	23.38	23.29	23.87	24.43	24.62	25.22	25.13	25.71	26.27