

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: P1586738

Luminaire Tested: 22CZSP-A-54HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586738
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-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

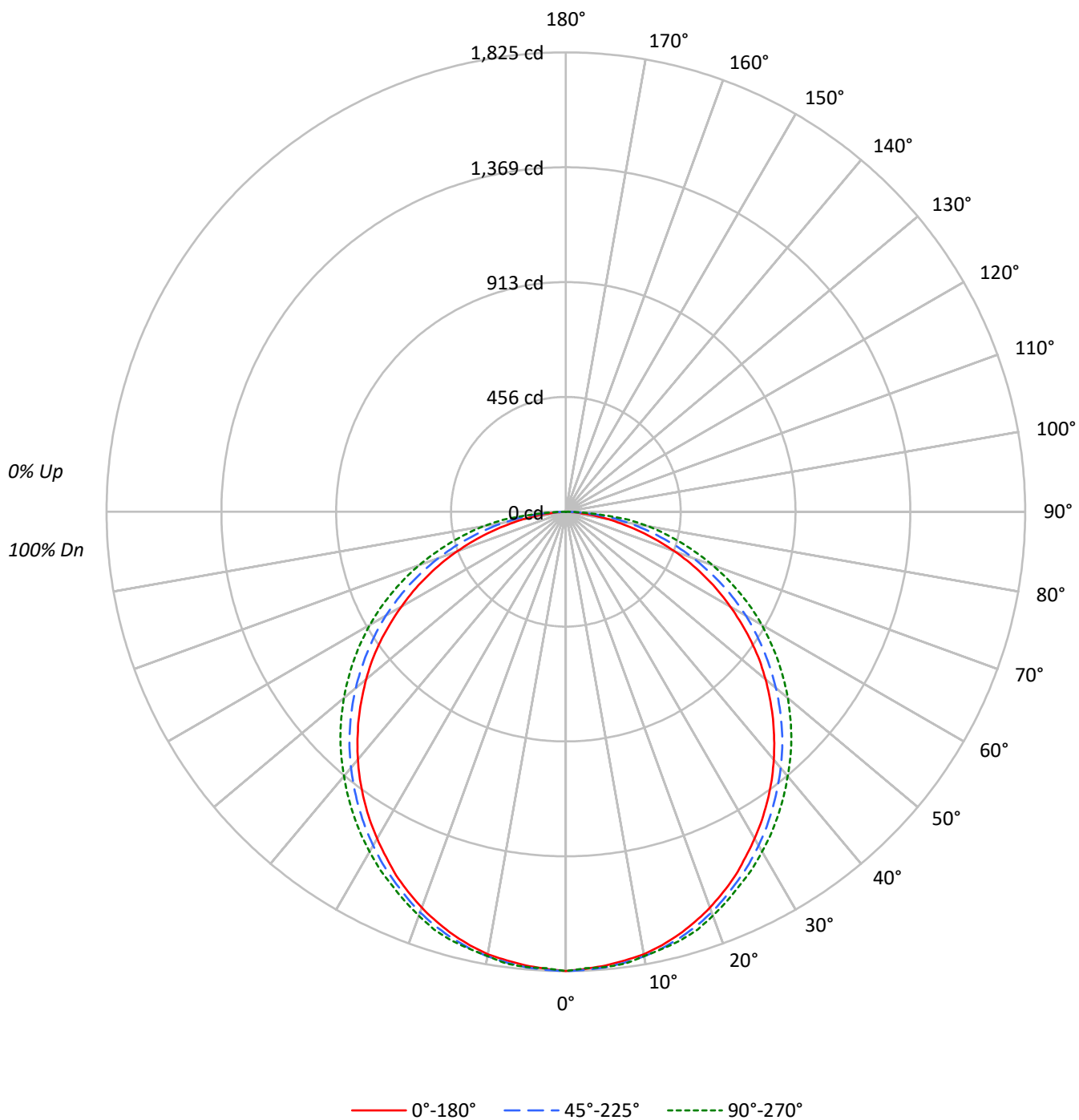
Lumens per Lamp: N/A
Luminaire Lumens: 5327.0 lumens
Efficiency: N/A
Efficacy: 147.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	5713	5713	5713
5°	5687	5710	5706
10°	5675	5701	5698
15°	5635	5680	5714
20°	5578	5644	5691
25°	5509	5585	5654
30°	5423	5536	5638
35°	5344	5482	5621
40°	5256	5428	5605
45°	5156	5373	5611
50°	5045	5307	5609
55°	4913	5233	5615
60°	4729	5175	5629
65°	4512	5075	5647
70°	4206	4934	5672
75°	3748	4738	5727
80°	3098	4510	6007
85°	2016	4074	5249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6197 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	3.2
10°-20°	494.1	9.3
20°-30°	745.2	14.0
30°-40°	897.6	16.8
40°-50°	937.4	17.6
50°-60°	860.9	16.2
60°-70°	678.1	12.7
70°-80°	416.0	7.8
80°-90°	125.2	2.3
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°	1411.9	26.5
0°-40°	2309.5	43.4
0°-60°	4107.8	77.1
0°-90°	5327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1825	1825	1825	1825	1825	
5°	1809	1812	1816	1822	1815	172
15°	1738	1742	1752	1763	1763	490
25°	1594	1598	1617	1636	1636	734
35°	1398	1405	1434	1464	1470	874
45°	1164	1177	1213	1255	1267	898
55°	900	916	958	1012	1029	803
65°	609	630	685	742	762	602
75°	310	334	392	454	473	328
85°	56	77	113	144	146	73
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1824.6	1824.6	1824.6	1824.6	1824.6
2.5°	1817.6	1821.1	1822.3	1823.5	1815.3
5°	1809.4	1811.8	1816.5	1822.3	1815.3
7.5°	1797.8	1800.1	1805.9	1814.1	1810.6
10°	1784.9	1786.1	1793.1	1798.9	1791.9
12.5°	1763.9	1767.4	1775.5	1780.2	1777.9
15°	1738.1	1741.6	1752.2	1762.7	1762.7
17.5°	1707.8	1712.4	1725.3	1739.3	1740.5
20°	1673.9	1677.4	1693.7	1707.8	1707.8
22.5°	1635.3	1640.0	1656.3	1671.5	1673.9
25°	1594.4	1597.9	1616.6	1636.4	1636.4
27.5°	1546.4	1553.5	1576.8	1596.7	1601.4
30°	1499.7	1505.5	1531.2	1555.8	1559.3
32.5°	1450.6	1457.6	1484.5	1511.4	1517.2
35°	1398.0	1405.0	1434.2	1463.5	1470.5
37.5°	1343.1	1351.2	1381.6	1415.5	1422.5
40°	1285.8	1295.1	1327.9	1364.1	1371.1
42.5°	1225.0	1237.9	1272.9	1310.3	1320.8
45°	1164.2	1177.1	1213.3	1255.4	1267.1
47.5°	1099.9	1115.1	1152.5	1196.9	1209.8
50°	1035.6	1050.8	1089.4	1137.3	1151.4
52.5°	970.2	985.4	1025.1	1075.4	1090.6
55°	900.0	916.4	958.5	1012.3	1028.6
57.5°	827.6	848.6	893.0	948.0	964.3
60°	755.1	776.1	826.4	880.2	898.9
62.5°	683.8	703.7	755.1	812.4	832.3
65°	609.0	630.0	685.0	742.2	762.1
67.5°	535.4	556.4	611.3	670.9	692.0
70°	459.4	482.8	538.9	598.5	619.5
72.5°	383.4	407.9	465.2	526.0	545.9
75°	309.8	334.3	391.6	453.5	473.4
77.5°	237.3	264.2	320.3	383.4	402.1
80°	171.8	197.5	250.1	312.1	333.1
82.5°	109.9	132.1	184.7	243.1	258.3
85°	56.1	77.1	113.4	143.8	146.1
87.5°	17.5	24.5	37.4	56.1	57.3
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	17.53	19.20	17.90	19.51	19.82	18.36	20.03	18.73	20.34	20.65
	3H	19.29	20.80	19.67	21.12	21.48	20.48	21.99	20.86	22.31	22.67
	4H	19.91	21.33	20.31	21.68	22.05	21.37	22.79	21.77	23.14	23.51
	6H	20.32	21.64	20.73	22.00	22.39	22.15	23.47	22.56	23.83	24.22
	8H	20.43	21.69	20.85	22.08	22.48	22.47	23.73	22.89	24.12	24.52
	12H	20.48	21.69	20.91	22.07	22.50	22.68	23.89	23.11	24.27	24.70
4H	2H	18.31	19.73	18.70	20.07	20.45	18.95	20.37	19.35	20.72	21.10
	3H	20.28	21.48	20.69	21.88	22.28	21.31	22.50	21.72	22.90	23.30
	4H	21.02	22.11	21.45	22.52	22.95	22.36	23.44	22.79	23.86	24.29
	6H	21.55	22.50	22.00	22.94	23.39	23.31	24.26	23.76	24.70	25.16
	8H	21.69	22.59	22.15	23.03	23.49	23.71	24.60	24.17	25.04	25.51
	12H	21.78	22.58	22.26	23.06	23.52	23.98	24.79	24.46	25.26	25.73
8H	4H	21.48	22.37	21.94	22.81	23.28	22.65	23.54	23.11	23.98	24.45
	6H	22.14	22.88	22.63	23.37	23.84	23.76	24.50	24.25	24.99	25.46
	8H	22.35	23.02	22.86	23.52	24.01	24.27	24.94	24.78	25.44	25.93
	12H	22.49	23.08	22.99	23.57	24.13	24.66	25.25	25.16	25.74	26.30
12H	4H	21.57	22.37	22.05	22.85	23.31	22.67	23.48	23.15	23.95	24.42
	6H	22.27	22.94	22.78	23.45	23.93	23.81	24.48	24.31	24.98	25.47
	8H	22.55	23.14	23.05	23.63	24.19	24.38	24.98	24.89	25.47	26.02