

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: P1587788

Luminaire Tested: 22CZSP-SB-54HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-8)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-SB-54HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 5000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

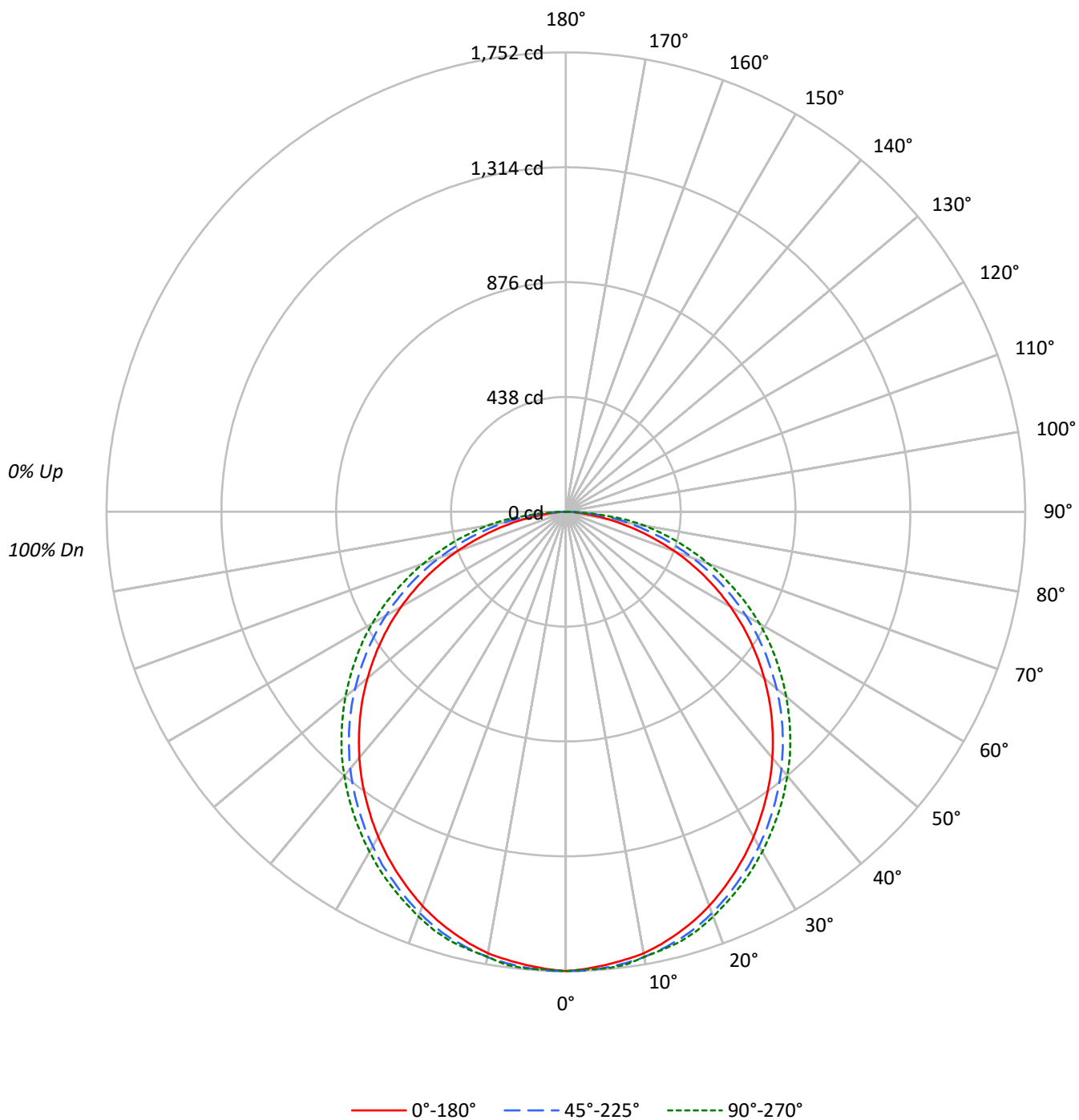
Lumens per Lamp: N/A
Luminaire Lumens: 5096.0 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1587788

CATALOG NUMBER: 22CZSP-SB-54HE-L945-S

Luminous Intensity Polar Plot



TEST NUMBER: P1587788

CATALOG NUMBER: 22CZSP-SB-54HE-L945-S

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	94	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	66	61		69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53		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	45	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5485	5485	5485
5°	5455	5486	5496
10°	5438	5483	5479
15°	5388	5466	5498
20°	5330	5428	5476
25°	5253	5375	5443
30°	5177	5327	5415
35°	5092	5276	5389
40°	5010	5229	5373
45°	4918	5175	5360
50°	4812	5111	5346
55°	4692	5045	5339
60°	4545	4971	5341
65°	4337	4866	5313
70°	4055	4717	5299
75°	3594	4536	5319
80°	2925	4310	5476
85°	1890	3977	4728

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5549 cd/sqm

TEST NUMBER: P1587788

CATALOG NUMBER: 22CZSP-SB-54HE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.8	3.3
10°-20°	474.7	9.3
20°-30°	715.8	14.0
30°-40°	861.3	16.9
40°-50°	898.4	17.6
50°-60°	823.5	16.2
60°-70°	646.6	12.7
70°-80°	393.5	7.7
80°-90°	116.4	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°	1356.3	26.6
0°-40°	2217.6	43.5
0°-60°	3939.4	77.3
0°-90°	5096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1752	1752	1752	1752	1752	
5°	1735	1746	1745	1743	1748	165
15°	1662	1678	1686	1688	1696	469
25°	1520	1541	1556	1566	1575	701
35°	1332	1353	1380	1400	1410	834
45°	1110	1134	1169	1196	1210	856
55°	860	881	924	961	978	768
65°	585	607	657	700	717	579
75°	297	324	375	420	440	315
85°	53	74	111	124	132	69
90°	0	0	0	0	0	

TEST NUMBER: P1587788

CATALOG NUMBER: 22CZSP-SB-54HE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1751.8	1751.8	1751.8	1751.8	1751.8
2.5°	1745.3	1754.0	1751.8	1744.2	1747.4
5°	1735.4	1746.3	1745.3	1743.1	1748.5
7.5°	1723.3	1735.4	1736.5	1736.5	1743.1
10°	1710.2	1722.2	1724.4	1721.1	1723.3
12.5°	1688.2	1702.5	1706.9	1706.9	1710.2
15°	1661.9	1678.4	1686.1	1688.2	1695.9
17.5°	1633.4	1651.0	1660.8	1666.3	1672.9
20°	1599.4	1618.1	1629.0	1635.6	1643.3
22.5°	1561.1	1581.9	1594.0	1600.5	1609.3
25°	1520.5	1541.3	1555.6	1565.5	1575.3
27.5°	1477.8	1497.5	1517.2	1529.3	1538.1
30°	1431.7	1452.5	1473.4	1488.7	1497.5
32.5°	1382.4	1404.3	1428.4	1444.9	1454.7
35°	1332.0	1352.8	1380.2	1399.9	1409.8
37.5°	1280.4	1302.4	1330.9	1351.7	1363.8
40°	1225.6	1248.6	1279.3	1302.4	1314.4
42.5°	1168.6	1190.5	1224.5	1250.8	1265.1
45°	1110.5	1133.5	1168.6	1196.0	1210.3
47.5°	1050.2	1072.1	1110.5	1142.3	1154.4
50°	987.7	1008.6	1049.1	1083.1	1097.4
52.5°	924.1	946.1	986.6	1022.8	1038.2
55°	859.5	881.4	924.1	961.4	977.9
57.5°	793.7	815.6	859.5	897.8	917.6
60°	725.7	747.7	793.7	833.2	852.9
62.5°	655.6	678.6	725.7	766.3	787.1
65°	585.4	607.3	656.7	700.5	717.0
67.5°	515.2	537.2	585.4	629.3	649.0
70°	442.9	468.1	515.2	561.3	578.8
72.5°	367.2	395.8	442.9	491.1	508.7
75°	297.1	324.5	374.9	419.9	439.6
77.5°	228.0	257.6	304.8	350.8	370.5
80°	162.2	190.7	239.0	282.8	303.7
82.5°	103.0	128.3	176.5	216.0	231.3
85°	52.6	74.5	110.7	123.9	131.6
87.5°	15.3	26.3	39.5	49.3	54.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1587788

CATALOG NUMBER: 22CZSP-SB-54HE-L945-S

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	17.41	19.07	17.78	19.39	19.70	18.15	19.81	18.51	20.12	20.44
	3H	19.18	20.69	19.56	21.01	21.37	20.23	21.73	20.60	22.06	22.42
	4H	19.80	21.22	20.20	21.57	21.94	21.09	22.51	21.49	22.86	23.23
	6H	20.21	21.53	20.62	21.89	22.28	21.84	23.16	22.25	23.52	23.91
	8H	20.31	21.57	20.74	21.96	22.36	22.13	23.39	22.56	23.78	24.18
	12H	20.36	21.57	20.79	21.95	22.38	22.33	23.53	22.76	23.92	24.34
4H	2H	18.18	19.60	18.58	19.95	20.32	18.75	20.17	19.15	20.52	20.89
	3H	20.17	21.37	20.58	21.76	22.16	21.07	22.26	21.47	22.66	23.06
	4H	20.92	22.00	21.35	22.41	22.85	22.08	23.17	22.52	23.58	24.02
	6H	21.44	22.39	21.90	22.83	23.29	22.99	23.94	23.44	24.38	24.83
	8H	21.59	22.48	22.04	22.92	23.38	23.36	24.25	23.82	24.69	25.15
	12H	21.67	22.47	22.15	22.94	23.41	23.61	24.41	24.09	24.89	25.35
8H	4H	21.36	22.25	21.82	22.69	23.16	22.38	23.27	22.84	23.71	24.18
	6H	22.02	22.77	22.52	23.25	23.73	23.44	24.18	23.93	24.67	25.14
	8H	22.23	22.90	22.74	23.40	23.89	23.91	24.58	24.42	25.08	25.57
	12H	22.37	22.96	22.88	23.45	24.01	24.26	24.85	24.77	25.34	25.90
12H	4H	21.44	22.24	21.92	22.72	23.19	22.41	23.21	22.89	23.68	24.15
	6H	22.15	22.82	22.65	23.32	23.80	23.49	24.16	24.00	24.66	25.15
	8H	22.42	23.01	22.93	23.50	24.06	24.03	24.62	24.53	25.11	25.67