

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: P1587708

Luminaire Tested: 22CZSP-SB-43HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1587708
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-43HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Smooth Lens, SB housing
Light Source: -
Ballast/Driver: -

Summary

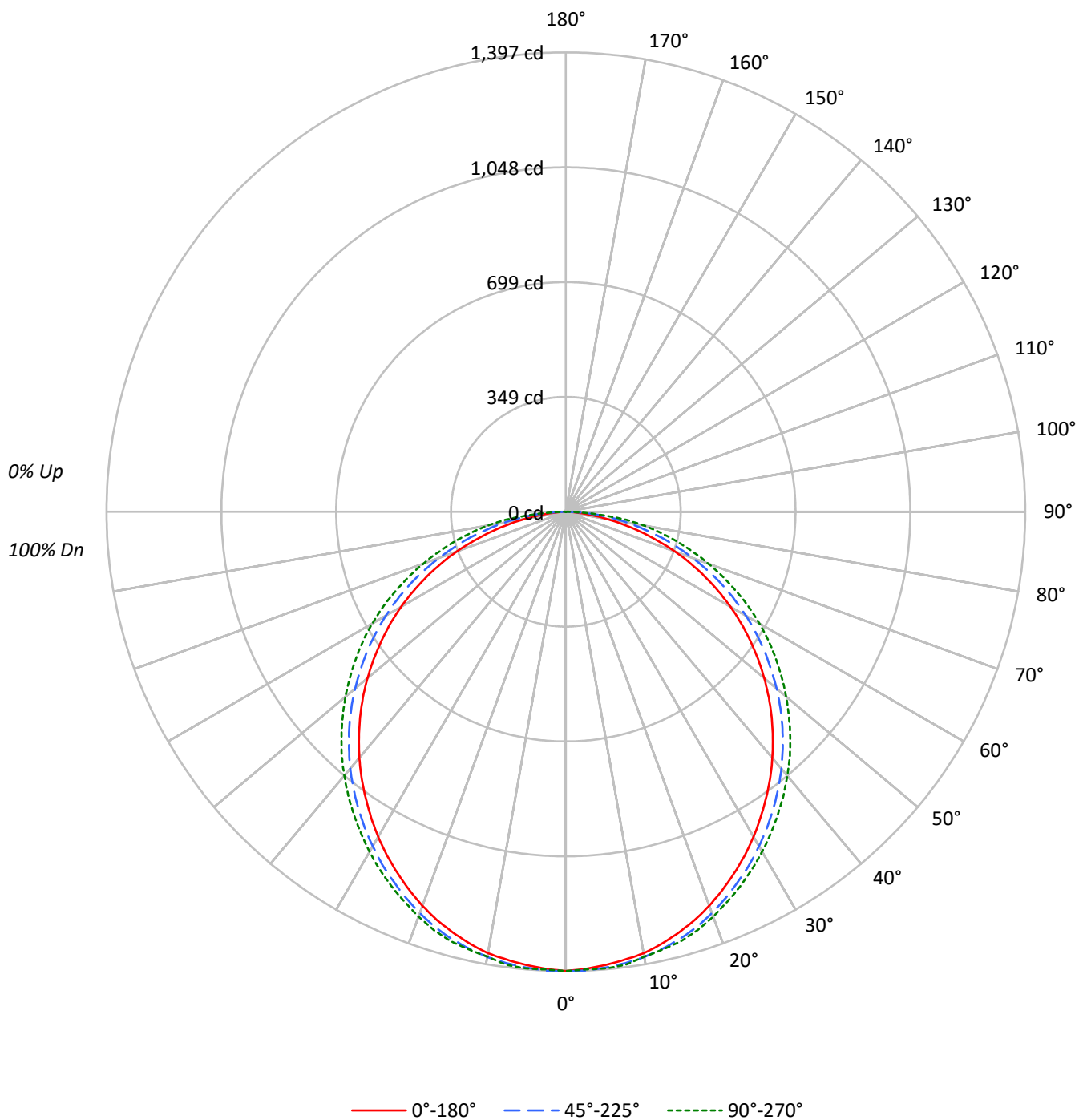
Lumens per Lamp: N/A
Luminaire Lumens: 4063.0 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
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: P1587708

CATALOG NUMBER: 22CZSP-SB-43HE-L945-S

Luminous Intensity Polar Plot



TEST NUMBER: P1587708

CATALOG NUMBER: 22CZSP-SB-43HE-L945-S

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	45	39		50
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4374	4374	4374
5°	4349	4374	4382
10°	4335	4372	4369
15°	4295	4358	4383
20°	4249	4328	4366
25°	4189	4285	4340
30°	4127	4247	4317
35°	4060	4206	4297
40°	3994	4169	4284
45°	3921	4126	4273
50°	3836	4075	4262
55°	3741	4022	4256
60°	3624	3963	4259
65°	3458	3880	4235
70°	3233	3761	4225
75°	2866	3616	4241
80°	2333	3435	4366
85°	1509	3172	3769

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4424 cd/sqm

TEST NUMBER: P1587708

CATALOG NUMBER: 22CZSP-SB-43HE-L945-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.2	3.3
10°-20°	378.5	9.3
20°-30°	570.7	14.0
30°-40°	686.7	16.9
40°-50°	716.3	17.6
50°-60°	656.5	16.2
60°-70°	515.5	12.7
70°-80°	313.8	7.7
80°-90°	92.8	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°	1081.4	26.6
0°-40°	1768.1	43.5
0°-60°	3140.9	77.3
0°-90°	4063.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4063.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1397	1397	1397	1397	1397	
5°	1384	1392	1392	1390	1394	131
15°	1325	1338	1344	1346	1352	374
25°	1212	1229	1240	1248	1256	559
35°	1062	1079	1100	1116	1124	665
45°	885	904	932	954	965	683
55°	685	703	737	766	780	612
65°	467	484	524	558	572	462
75°	237	259	299	335	350	251
85°	42	59	88	99	105	55
90°	0	0	0	0	0	

TEST NUMBER: P1587708

CATALOG NUMBER: 22CZSP-SB-43HE-L945-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.7	1396.7	1396.7	1396.7	1396.7
2.5°	1391.5	1398.5	1396.7	1390.6	1393.2
5°	1383.6	1392.3	1391.5	1389.7	1394.1
7.5°	1374.0	1383.6	1384.5	1384.5	1389.7
10°	1363.5	1373.1	1374.9	1372.2	1374.0
12.5°	1346.0	1357.4	1360.9	1360.9	1363.5
15°	1325.0	1338.2	1344.3	1346.0	1352.1
17.5°	1302.3	1316.3	1324.2	1328.5	1333.8
20°	1275.2	1290.1	1298.8	1304.1	1310.2
22.5°	1244.6	1261.2	1270.9	1276.1	1283.1
25°	1212.3	1228.9	1240.3	1248.1	1256.0
27.5°	1178.2	1193.9	1209.7	1219.3	1226.3
30°	1141.5	1158.1	1174.7	1186.9	1193.9
32.5°	1102.2	1119.6	1138.9	1152.0	1159.9
35°	1062.0	1078.6	1100.4	1116.2	1124.0
37.5°	1020.9	1038.4	1061.1	1077.7	1087.3
40°	977.2	995.5	1020.0	1038.4	1048.0
42.5°	931.7	949.2	976.3	997.3	1008.6
45°	885.4	903.8	931.7	953.6	964.9
47.5°	837.3	854.8	885.4	910.8	920.4
50°	787.5	804.1	836.5	863.6	874.9
52.5°	736.8	754.3	786.6	815.5	827.7
55°	685.2	702.7	736.8	766.5	779.6
57.5°	632.8	650.3	685.2	715.8	731.6
60°	578.6	596.1	632.8	664.3	680.0
62.5°	522.7	541.0	578.6	611.0	627.6
65°	466.7	484.2	523.6	558.5	571.6
67.5°	410.8	428.3	466.7	501.7	517.4
70°	353.1	373.2	410.8	447.5	461.5
72.5°	292.8	315.5	353.1	391.6	405.6
75°	236.9	258.7	298.9	334.8	350.5
77.5°	181.8	205.4	243.0	279.7	295.4
80°	129.4	152.1	190.5	225.5	242.1
82.5°	82.2	102.3	140.7	172.2	184.4
85°	42.0	59.4	88.3	98.8	104.9
87.5°	12.2	21.0	31.5	39.3	43.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1587708

CATALOG NUMBER: 22CZSP-SB-43HE-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	16.63	18.29	16.99	18.60	18.91	17.36	19.02	17.73	19.34	19.65
	3H	18.39	19.90	18.77	20.23	20.59	19.44	20.95	19.82	21.27	21.63
	4H	19.01	20.43	19.41	20.78	21.16	20.31	21.73	20.70	22.07	22.45
	6H	19.42	20.74	19.83	21.10	21.49	21.05	22.37	21.46	22.73	23.12
	8H	19.53	20.79	19.95	21.17	21.57	21.35	22.61	21.77	22.99	23.39
	12H	19.57	20.78	20.00	21.16	21.59	21.54	22.75	21.97	23.13	23.56
4H	2H	17.39	18.81	17.79	19.16	19.54	17.97	19.39	18.36	19.73	20.11
	3H	19.39	20.58	19.79	20.98	21.38	20.28	21.47	20.69	21.87	22.27
	4H	20.13	21.21	20.56	21.62	22.06	21.30	22.38	21.73	22.79	23.23
	6H	20.66	21.61	21.11	22.05	22.50	22.20	23.15	22.66	23.59	24.05
	8H	20.80	21.69	21.26	22.13	22.59	22.57	23.46	23.03	23.90	24.36
	12H	20.88	21.68	21.36	22.15	22.62	22.82	23.62	23.30	24.10	24.57
8H	4H	20.57	21.46	21.03	21.90	22.37	21.60	22.48	22.05	22.93	23.39
	6H	21.24	21.98	21.73	22.47	22.94	22.65	23.39	23.14	23.88	24.36
	8H	21.45	22.11	21.95	22.62	23.10	23.12	23.79	23.63	24.30	24.78
	12H	21.58	22.17	22.09	22.66	23.22	23.48	24.07	23.98	24.56	25.11
12H	4H	20.65	21.46	21.13	21.93	22.40	21.62	22.42	22.10	22.90	23.36
	6H	21.36	22.03	21.87	22.53	23.02	22.70	23.37	23.21	23.88	24.36
	8H	21.64	22.23	22.14	22.72	23.28	23.24	23.83	23.75	24.32	24.88