

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: P1586398

Luminaire Tested: 22CZSP-42-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586398
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-42-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

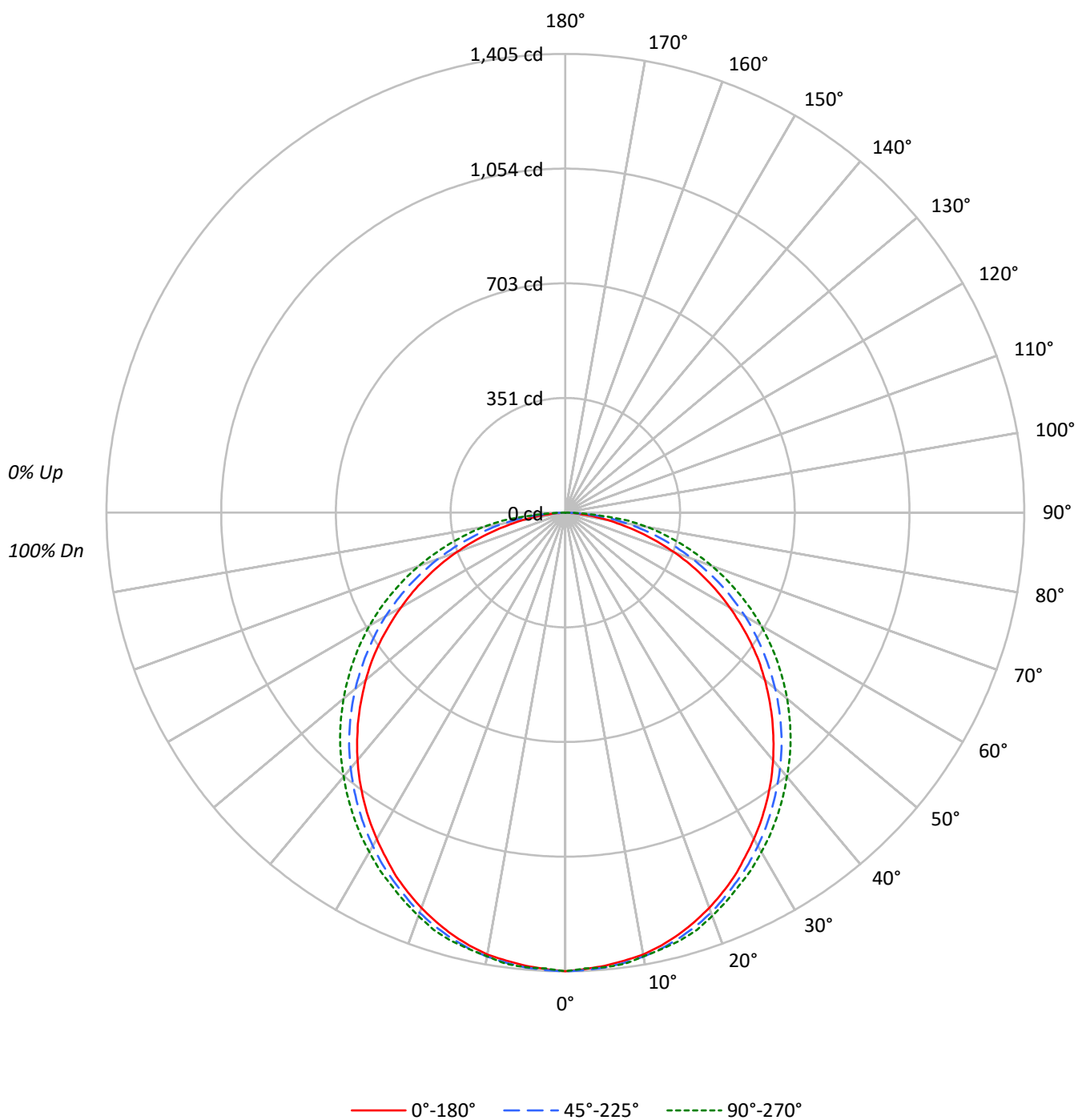
Lumens per Lamp: N/A
Luminaire Lumens: 4101.0 lumens
Efficiency: N/A
Efficacy: 141.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.9
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: P1586398

CATALOG NUMBER: 22CZSP-42-L845-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586398

CATALOG NUMBER: 22CZSP-42-L845-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	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°	4399	4399	4399
5°	4379	4396	4393
10°	4369	4389	4386
15°	4338	4373	4399
20°	4294	4345	4381
25°	4241	4300	4353
30°	4174	4262	4340
35°	4114	4221	4327
40°	4046	4179	4315
45°	3969	4137	4320
50°	3884	4086	4318
55°	3783	4028	4323
60°	3640	3984	4334
65°	3474	3907	4347
70°	3238	3798	4366
75°	2885	3648	4409
80°	2386	3473	4625
85°	1552	3137	4042

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4772 cd/sqm

TEST NUMBER: P1586398

CATALOG NUMBER: 22CZSP-42-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.8	3.2
10°-20°	380.4	9.3
20°-30°	573.7	14.0
30°-40°	691.0	16.8
40°-50°	721.7	17.6
50°-60°	662.8	16.2
60°-70°	522.0	12.7
70°-80°	320.3	7.8
80°-90°	96.4	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°	1086.9	26.5
0°-40°	1777.9	43.4
0°-60°	3162.4	77.1
0°-90°	4101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1393	1395	1398	1403	1398	132
15°	1338	1341	1349	1357	1357	377
25°	1227	1230	1244	1260	1260	565
35°	1076	1082	1104	1127	1132	673
45°	896	906	934	966	976	691
55°	693	706	738	779	792	619
65°	469	485	527	571	587	464
75°	238	257	302	349	364	253
85°	43	59	87	111	112	56
90°	0	0	0	0	0	

TEST NUMBER: P1586398

CATALOG NUMBER: 22CZSP-42-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1404.7	1404.7	1404.7	1404.7	1404.7
2.5°	1399.3	1402.0	1402.9	1403.8	1397.5
5°	1393.0	1394.8	1398.4	1402.9	1397.5
7.5°	1384.0	1385.8	1390.3	1396.6	1393.9
10°	1374.1	1375.0	1380.4	1384.9	1379.5
12.5°	1357.9	1360.6	1366.9	1370.5	1368.7
15°	1338.1	1340.8	1348.9	1357.0	1357.0
17.5°	1314.7	1318.3	1328.2	1339.0	1339.9
20°	1288.6	1291.3	1303.9	1314.7	1314.7
22.5°	1258.9	1262.5	1275.1	1286.8	1288.6
25°	1227.4	1230.1	1244.5	1259.8	1259.8
27.5°	1190.5	1195.9	1213.9	1229.2	1232.8
30°	1154.5	1159.0	1178.8	1197.7	1200.4
32.5°	1116.7	1122.1	1142.8	1163.5	1168.0
35°	1076.2	1081.6	1104.1	1126.6	1132.0
37.5°	1034.0	1040.3	1063.7	1089.7	1095.1
40°	989.9	997.1	1022.3	1050.2	1055.6
42.5°	943.1	953.0	980.0	1008.8	1016.9
45°	896.3	906.2	934.1	966.5	975.5
47.5°	846.8	858.5	887.3	921.5	931.4
50°	797.3	809.0	838.7	875.6	886.4
52.5°	746.9	758.6	789.2	827.9	839.6
55°	692.9	705.5	737.9	779.3	791.9
57.5°	637.1	653.3	687.5	729.8	742.4
60°	581.3	597.5	636.2	677.6	692.0
62.5°	526.4	541.7	581.3	625.4	640.7
65°	468.8	485.0	527.3	571.4	586.7
67.5°	412.1	428.3	470.6	516.5	532.7
70°	353.7	371.6	414.8	460.7	476.9
72.5°	295.2	314.1	358.1	404.9	420.2
75°	238.5	257.4	301.5	349.2	364.4
77.5°	182.7	203.4	246.6	295.2	309.6
80°	132.3	152.1	192.6	240.3	256.5
82.5°	84.6	101.7	142.2	187.2	198.9
85°	43.2	59.4	87.3	110.7	112.5
87.5°	13.5	18.9	28.8	43.2	44.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586398

CATALOG NUMBER: 22CZSP-42-L845-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	16.62	18.29	16.99	18.60	18.92	17.45	19.12	17.82	19.43	19.75
	3H	18.38	19.89	18.76	20.21	20.57	19.57	21.08	19.95	21.40	21.76
	4H	19.00	20.42	19.40	20.77	21.14	20.46	21.88	20.86	22.23	22.60
	6H	19.41	20.73	19.82	21.09	21.48	21.24	22.56	21.65	22.93	23.32
	8H	19.52	20.78	19.94	21.17	21.57	21.56	22.82	21.99	23.21	23.61
	12H	19.57	20.78	20.00	21.16	21.59	21.77	22.98	22.20	23.36	23.79
4H	2H	17.40	18.82	17.79	19.17	19.54	18.04	19.46	18.44	19.81	20.19
	3H	19.37	20.57	19.78	20.97	21.37	20.40	21.60	20.81	21.99	22.39
	4H	20.11	21.20	20.54	21.61	22.04	21.45	22.54	21.88	22.95	23.38
	6H	20.64	21.59	21.09	22.03	22.48	22.40	23.35	22.85	23.79	24.25
	8H	20.79	21.68	21.24	22.12	22.58	22.80	23.69	23.26	24.13	24.60
	12H	20.87	21.67	21.35	22.15	22.62	23.08	23.88	23.56	24.35	24.82
8H	4H	20.57	21.46	21.03	21.90	22.37	21.74	22.63	22.20	23.07	23.54
	6H	21.23	21.98	21.72	22.46	22.94	22.85	23.60	23.34	24.08	24.56
	8H	21.44	22.11	21.95	22.61	23.10	23.36	24.03	23.87	24.54	25.02
	12H	21.58	22.17	22.09	22.66	23.22	23.75	24.34	24.25	24.83	25.39
12H	4H	20.66	21.46	21.14	21.94	22.41	21.76	22.57	22.24	23.04	23.51
	6H	21.36	22.03	21.87	22.54	23.02	22.90	23.57	23.40	24.07	24.56
	8H	21.64	22.23	22.15	22.72	23.28	23.48	24.07	23.98	24.56	25.12