

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: P1586438

Luminaire Tested: 22CZSP-47-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586438
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-47-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

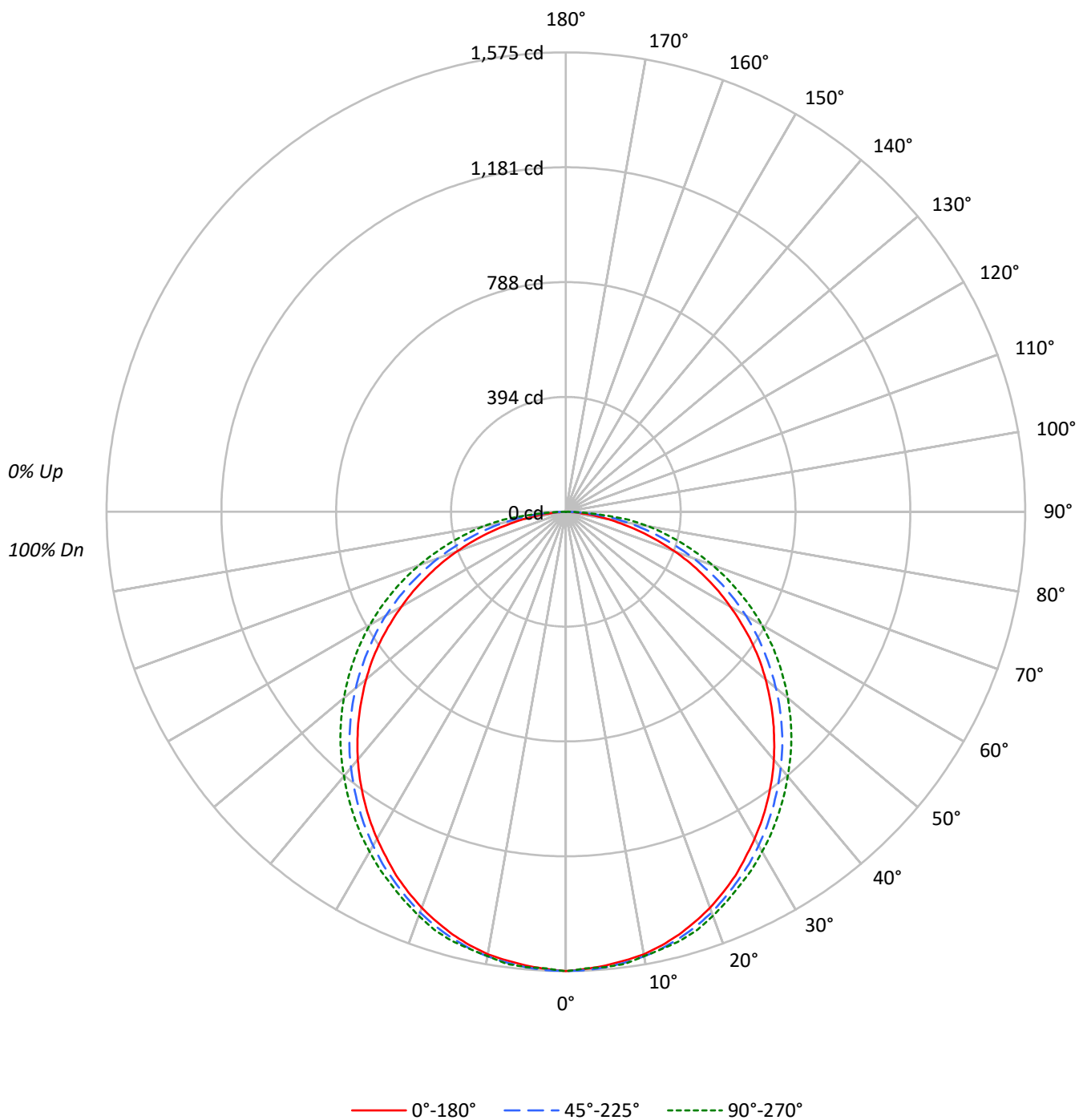
Lumens per Lamp: N/A
Luminaire Lumens: 4598.0 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
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
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	93	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	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		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	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4932	4932	4932
5°	4909	4928	4925
10°	4899	4921	4918
15°	4864	4903	4932
20°	4814	4871	4912
25°	4755	4821	4880
30°	4681	4779	4866
35°	4613	4732	4852
40°	4536	4685	4838
45°	4450	4638	4843
50°	4355	4581	4841
55°	4241	4516	4847
60°	4082	4467	4859
65°	3895	4380	4874
70°	3630	4258	4895
75°	3235	4089	4943
80°	2674	3893	5184
85°	1739	3517	4531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5350 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	3.2
10°-20°	426.5	9.3
20°-30°	643.2	14.0
30°-40°	774.8	16.8
40°-50°	809.1	17.6
50°-60°	743.1	16.2
60°-70°	585.3	12.7
70°-80°	359.1	7.8
80°-90°	108.1	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°	1218.7	26.5
0°-40°	1993.4	43.4
0°-60°	3545.6	77.1
0°-90°	4598.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4598.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1575	1575	1575	1575	1575	
5°	1562	1564	1568	1573	1567	148
15°	1500	1503	1512	1522	1522	423
25°	1376	1379	1395	1412	1412	633
35°	1207	1213	1238	1263	1269	755
45°	1005	1016	1047	1084	1094	775
55°	777	791	827	874	888	694
65°	526	544	591	641	658	520
75°	267	289	338	392	409	283
85°	48	67	98	124	126	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1574.9	1574.9	1574.9	1574.9	1574.9
2.5°	1568.9	1571.9	1572.9	1573.9	1566.9
5°	1561.8	1563.8	1567.9	1572.9	1566.9
7.5°	1551.7	1553.8	1558.8	1565.9	1562.8
10°	1540.6	1541.6	1547.7	1552.7	1546.7
12.5°	1522.5	1525.5	1532.6	1536.6	1534.6
15°	1500.3	1503.3	1512.4	1521.5	1521.5
17.5°	1474.0	1478.1	1489.2	1501.3	1502.3
20°	1444.8	1447.8	1461.9	1474.0	1474.0
22.5°	1411.5	1415.5	1429.7	1442.8	1444.8
25°	1376.2	1379.2	1395.3	1412.5	1412.5
27.5°	1334.8	1340.9	1361.0	1378.2	1382.2
30°	1294.5	1299.5	1321.7	1342.9	1345.9
32.5°	1252.1	1258.1	1281.3	1304.5	1309.6
35°	1206.7	1212.7	1238.0	1263.2	1269.2
37.5°	1159.3	1166.3	1192.6	1221.8	1227.9
40°	1109.8	1117.9	1146.1	1177.4	1183.5
42.5°	1057.4	1068.5	1098.7	1131.0	1140.1
45°	1004.9	1016.0	1047.3	1083.6	1093.7
47.5°	949.4	962.5	994.8	1033.1	1044.2
50°	893.9	907.0	940.3	981.7	993.8
52.5°	837.4	850.5	884.8	928.2	941.3
55°	776.9	791.0	827.3	873.7	887.9
57.5°	714.3	732.5	770.8	818.2	832.4
60°	651.8	669.9	713.3	759.7	775.9
62.5°	590.2	607.4	651.8	701.2	718.4
65°	525.7	543.8	591.2	640.7	657.8
67.5°	462.1	480.3	527.7	579.1	597.3
70°	396.5	416.7	465.1	516.6	534.7
72.5°	330.9	352.1	401.6	454.0	471.2
75°	267.4	288.6	338.0	391.5	408.6
77.5°	204.8	228.0	276.4	330.9	347.1
80°	148.3	170.5	215.9	269.4	287.5
82.5°	94.8	114.0	159.4	209.9	223.0
85°	48.4	66.6	97.9	124.1	126.1
87.5°	15.1	21.2	32.3	48.4	49.4
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	17.02	18.68	17.39	19.00	19.31	17.85	19.51	18.22	19.83	20.14
	3H	18.78	20.29	19.15	20.61	20.97	19.97	21.48	20.34	21.80	22.16
	4H	19.40	20.82	19.79	21.17	21.54	20.86	22.28	21.26	22.63	23.00
	6H	19.81	21.13	20.22	21.49	21.88	21.64	22.96	22.05	23.32	23.71
	8H	19.91	21.18	20.34	21.57	21.96	21.96	23.22	22.38	23.61	24.01
	12H	19.97	21.18	20.40	21.56	21.99	22.17	23.38	22.60	23.76	24.19
4H	2H	17.79	19.22	18.19	19.56	19.94	18.44	19.86	18.84	20.21	20.58
	3H	19.77	20.97	20.18	21.37	21.76	20.79	21.99	21.20	22.39	22.79
	4H	20.51	21.59	20.94	22.01	22.44	21.85	22.93	22.28	23.35	23.78
	6H	21.04	21.99	21.49	22.43	22.88	22.80	23.75	23.25	24.19	24.65
	8H	21.18	22.07	21.64	22.52	22.98	23.20	24.09	23.66	24.53	24.99
	12H	21.27	22.07	21.75	22.54	23.01	23.47	24.28	23.95	24.75	25.22
8H	4H	20.97	21.86	21.43	22.30	22.76	22.14	23.03	22.60	23.47	23.93
	6H	21.63	22.37	22.12	22.86	23.33	23.25	23.99	23.74	24.48	24.95
	8H	21.84	22.51	22.35	23.01	23.50	23.76	24.43	24.27	24.93	25.42
	12H	21.98	22.57	22.48	23.06	23.62	24.15	24.74	24.65	25.23	25.79
12H	4H	21.06	21.86	21.54	22.33	22.80	22.16	22.96	22.64	23.44	23.91
	6H	21.76	22.43	22.27	22.93	23.42	23.30	23.96	23.80	24.47	24.95
	8H	22.04	22.63	22.54	23.12	23.68	23.87	24.47	24.38	24.95	25.51