

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: P1586681

Luminaire Tested: 22CZSP-A-47-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2605-772-10)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-47-L850
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 4500 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

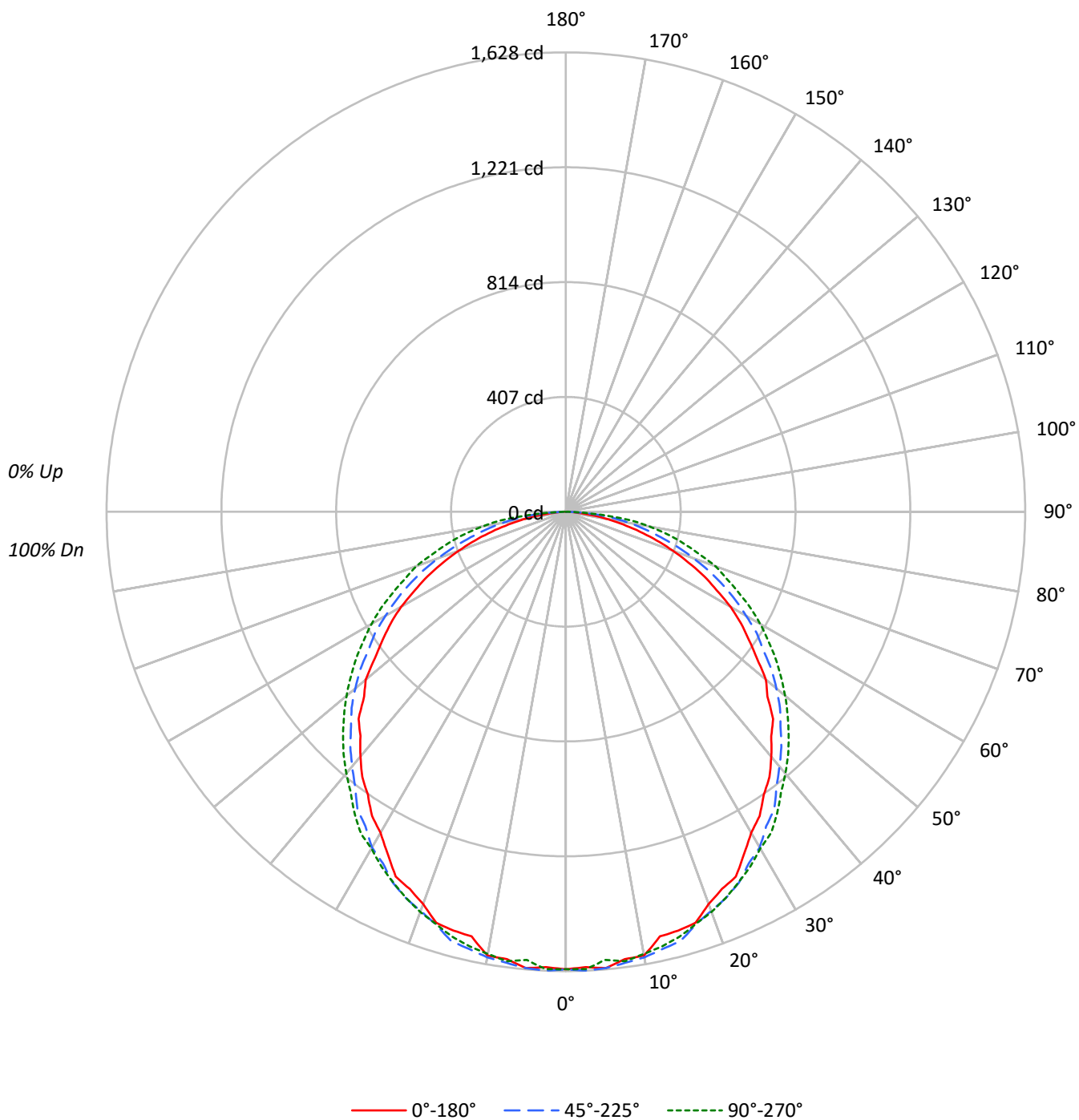
Lumens per Lamp: N/A
Luminaire Lumens: 4734.0 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586681

CATALOG NUMBER: 22CZSP-A-47-L850

Luminous Intensity Polar Plot



TEST NUMBER: P1586681

CATALOG NUMBER: 22CZSP-A-47-L850

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	50	30	10
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	68		
3	89	79	70	63	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	31	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°	5077	5077	5077
5°	5103	5103	5011
10°	5079	5098	5059
15°	4981	5102	5053
20°	4928	5016	5029
25°	4929	5013	5006
30°	4749	4968	4983
35°	4677	4921	4990
40°	4630	4816	4948
45°	4601	4766	4945
50°	4510	4746	4943
55°	4326	4657	4955
60°	4224	4622	4983
65°	4009	4555	4997
70°	3697	4409	5167
75°	3286	4214	5216
80°	2730	4133	5406
85°	1667	3701	4570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5594 cd/sqm

TEST NUMBER: P1586681

CATALOG NUMBER: 22CZSP-A-47-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.2
10°-20°	439.3	9.3
20°-30°	662.7	14.0
30°-40°	795.9	16.8
40°-50°	830.8	17.6
50°-60°	765.0	16.2
60°-70°	604.1	12.8
70°-80°	372.0	7.9
80°-90°	110.3	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°	1255.8	26.5
0°-40°	2051.7	43.3
0°-60°	3647.6	77.1
0°-90°	4734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4734.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1621	1621	1621	1621	1621	
5°	1623	1607	1623	1625	1594	153
15°	1537	1558	1574	1567	1559	434
25°	1426	1437	1451	1445	1449	650
35°	1224	1246	1287	1293	1305	769
45°	1039	1047	1076	1099	1117	794
55°	792	814	853	892	908	712
65°	541	560	615	659	674	533
75°	272	298	348	404	431	288
85°	46	67	103	122	127	63
90°	0	0	0	0	0	

TEST NUMBER: P1586681

CATALOG NUMBER: 22CZSP-A-47-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1621.4	1621.4	1621.4	1621.4	1621.4
2.5°	1615.3	1632.5	1627.5	1630.5	1622.4
5°	1623.4	1607.3	1623.4	1625.4	1594.1
7.5°	1599.2	1601.2	1612.3	1615.3	1606.3
10°	1597.2	1603.2	1603.2	1593.1	1591.1
12.5°	1541.6	1571.9	1587.1	1594.1	1577.0
15°	1536.6	1557.8	1573.9	1566.9	1558.8
17.5°	1527.5	1521.4	1532.6	1540.6	1531.5
20°	1479.0	1489.1	1505.3	1507.3	1509.3
22.5°	1446.7	1449.8	1482.1	1485.1	1481.1
25°	1426.5	1436.6	1450.8	1444.7	1448.8
27.5°	1367.0	1391.2	1404.3	1416.4	1416.4
30°	1313.5	1341.7	1374.0	1378.1	1378.1
32.5°	1278.1	1297.3	1321.5	1329.6	1351.8
35°	1223.6	1245.8	1287.2	1293.3	1305.4
37.5°	1185.3	1207.5	1226.6	1247.8	1252.9
40°	1132.8	1156.0	1178.2	1202.4	1210.5
42.5°	1077.2	1101.5	1130.7	1156.0	1166.1
45°	1038.9	1046.9	1076.2	1099.4	1116.6
47.5°	969.2	992.4	1029.8	1059.1	1066.1
50°	925.8	934.9	974.2	1013.6	1014.6
52.5°	853.1	880.4	918.7	956.1	961.1
55°	792.5	813.7	853.1	891.5	907.6
57.5°	736.0	752.1	802.6	841.0	850.1
60°	674.4	691.6	738.0	782.4	795.6
62.5°	602.7	627.0	677.4	719.8	738.0
65°	541.1	560.3	614.8	659.3	674.4
67.5°	471.5	497.7	549.2	598.7	614.8
70°	403.8	430.1	481.6	533.1	564.4
72.5°	337.2	364.5	415.9	475.5	492.7
75°	271.6	297.8	348.3	403.8	431.1
77.5°	207.0	235.2	286.7	342.2	368.5
80°	151.4	173.6	229.2	277.6	299.8
82.5°	93.9	117.1	168.6	214.0	233.2
85°	46.4	66.6	103.0	122.2	127.2
87.5°	14.1	21.2	32.3	42.4	48.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586681

CATALOG NUMBER: 22CZSP-A-47-L850

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	17.11	18.77	17.48	19.09	19.40	17.93	19.60	18.30	19.91	20.23
	3H	18.86	20.37	19.24	20.70	21.06	20.08	21.59	20.46	21.92	22.28
	4H	19.48	20.90	19.88	21.25	21.62	21.00	22.42	21.39	22.77	23.14
	6H	19.88	21.20	20.29	21.57	21.96	21.80	23.12	22.21	23.48	23.87
	8H	19.98	21.25	20.41	21.64	22.03	22.12	23.38	22.54	23.77	24.17
	12H	20.03	21.24	20.46	21.62	22.05	22.32	23.53	22.75	23.92	24.34
4H	2H	17.90	19.33	18.30	19.67	20.05	18.54	19.96	18.94	20.31	20.68
	3H	19.88	21.07	20.29	21.47	21.87	20.92	22.12	21.33	22.51	22.91
	4H	20.61	21.70	21.04	22.11	22.54	21.99	23.07	22.42	23.49	23.92
	6H	21.13	22.08	21.58	22.52	22.97	22.95	23.91	23.41	24.35	24.80
	8H	21.27	22.16	21.73	22.60	23.07	23.35	24.24	23.81	24.68	25.15
	12H	21.34	22.15	21.82	22.62	23.09	23.62	24.42	24.10	24.90	25.36
8H	4H	21.07	21.97	21.53	22.41	22.87	22.28	23.17	22.73	23.61	24.07
	6H	21.73	22.47	22.22	22.96	23.43	23.40	24.15	23.89	24.63	25.11
	8H	21.93	22.60	22.44	23.11	23.59	23.91	24.58	24.42	25.08	25.57
	12H	22.06	22.65	22.57	23.14	23.70	24.28	24.87	24.78	25.36	25.92
12H	4H	21.16	21.97	21.64	22.44	22.91	22.30	23.10	22.78	23.58	24.05
	6H	21.87	22.54	22.37	23.04	23.53	23.45	24.12	23.96	24.62	25.11
	8H	22.14	22.73	22.65	23.22	23.78	24.02	24.62	24.53	25.10	25.66