

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: P1586437

Luminaire Tested: 22CZSP-47-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586437
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-47-L840
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

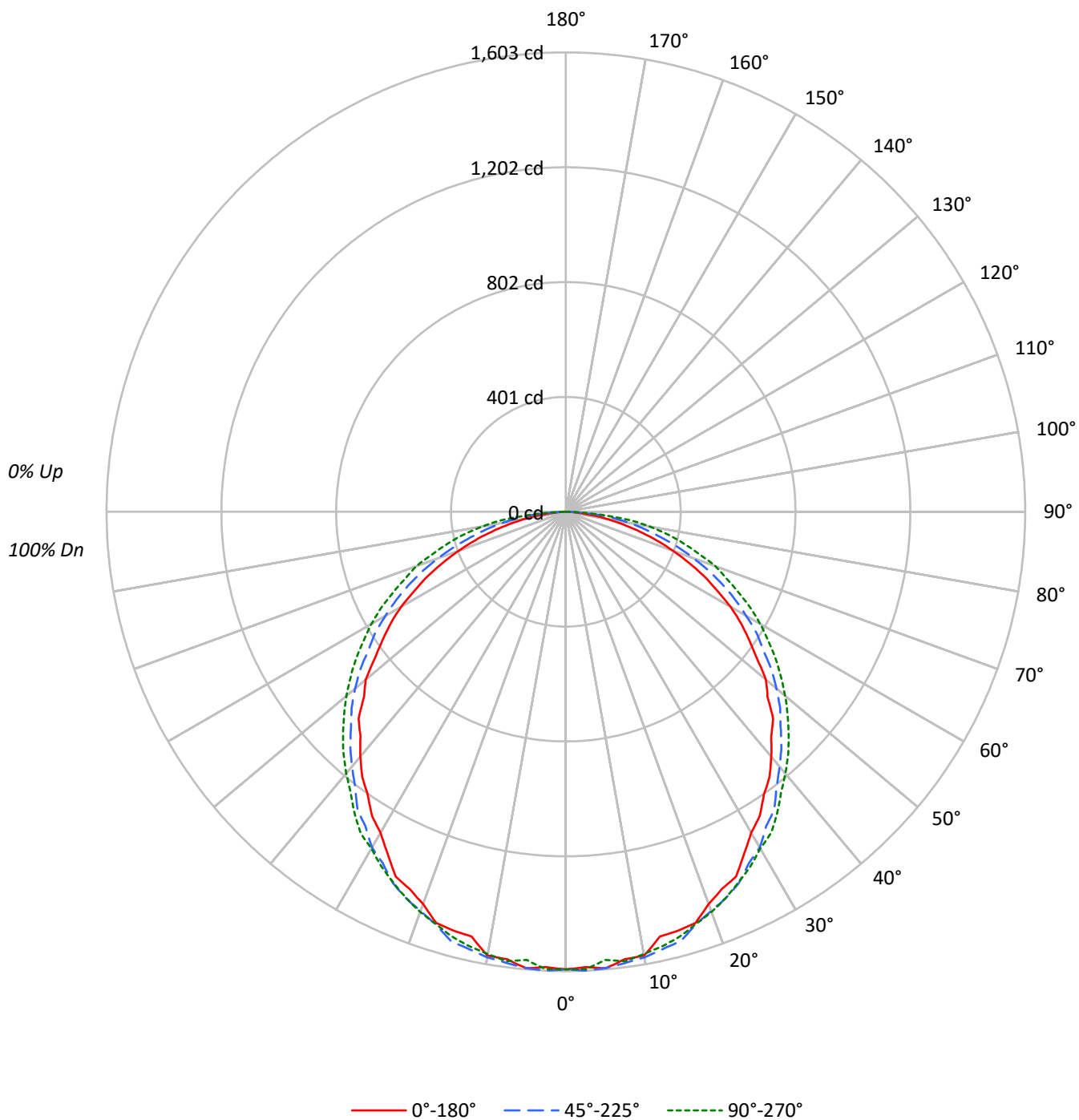
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4662.0 lumens
Efficiency: N/A
Efficacy: 140.8 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

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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			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°	5000	5000	5000
5°	5025	5025	4935
10°	5001	5020	4982
15°	4905	5025	4976
20°	4853	4940	4953
25°	4854	4936	4929
30°	4677	4892	4907
35°	4606	4846	4914
40°	4560	4743	4873
45°	4531	4693	4869
50°	4441	4674	4868
55°	4261	4586	4880
60°	4159	4552	4907
65°	3948	4486	4921
70°	3641	4341	5089
75°	3235	4150	5136
80°	2689	4070	5325
85°	1642	3643	4502

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5511 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	3.2
10°-20°	432.7	9.3
20°-30°	652.6	14.0
30°-40°	783.8	16.8
40°-50°	818.2	17.6
50°-60°	753.4	16.2
60°-70°	594.9	12.8
70°-80°	366.4	7.9
80°-90°	108.6	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°	1236.7	26.5
0°-40°	2020.5	43.3
0°-60°	3592.1	77.1
0°-90°	4662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4662.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1599	1583	1599	1601	1570	151
15°	1513	1534	1550	1543	1535	428
25°	1405	1415	1429	1423	1427	640
35°	1205	1227	1268	1274	1286	757
45°	1023	1031	1060	1083	1100	782
55°	780	801	840	878	894	701
65°	533	552	606	649	664	525
75°	267	293	343	398	424	284
85°	46	66	101	120	125	62
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1596.7	1596.7	1596.7	1596.7	1596.7
2.5°	1590.8	1607.7	1602.7	1605.7	1597.7
5°	1598.7	1582.8	1598.7	1600.7	1569.9
7.5°	1574.9	1576.8	1587.8	1590.8	1581.8
10°	1572.9	1578.8	1578.8	1568.9	1566.9
12.5°	1518.2	1548.0	1562.9	1569.9	1553.0
15°	1513.2	1534.1	1550.0	1543.0	1535.1
17.5°	1504.3	1498.3	1509.2	1517.2	1508.2
20°	1456.5	1466.5	1482.4	1484.4	1486.4
22.5°	1424.7	1427.7	1459.5	1462.5	1458.5
25°	1404.8	1414.8	1428.7	1422.7	1426.7
27.5°	1346.2	1370.0	1383.0	1394.9	1394.9
30°	1293.5	1321.3	1353.1	1357.1	1357.1
32.5°	1258.7	1277.6	1301.4	1309.4	1331.3
35°	1205.0	1226.9	1267.6	1273.6	1285.5
37.5°	1167.2	1189.1	1208.0	1228.9	1233.8
40°	1115.5	1138.4	1160.3	1184.1	1192.1
42.5°	1060.8	1084.7	1113.5	1138.4	1148.3
45°	1023.1	1031.0	1059.8	1082.7	1099.6
47.5°	954.5	977.3	1014.1	1042.9	1049.9
50°	911.7	920.7	959.4	998.2	999.2
52.5°	840.1	867.0	904.7	941.5	946.5
55°	780.5	801.3	840.1	877.9	893.8
57.5°	724.8	740.7	790.4	828.2	837.1
60°	664.1	681.0	726.8	770.5	783.5
62.5°	593.6	617.4	667.1	708.9	726.8
65°	532.9	551.8	605.5	649.2	664.1
67.5°	464.3	490.2	540.9	589.6	605.5
70°	397.7	423.5	474.2	525.0	555.8
72.5°	332.1	358.9	409.6	468.3	485.2
75°	267.4	293.3	343.0	397.7	424.5
77.5°	203.8	231.7	282.4	337.0	362.9
80°	149.1	171.0	225.7	273.4	295.3
82.5°	92.5	115.3	166.0	210.8	229.7
85°	45.7	65.6	101.4	120.3	125.3
87.5°	13.9	20.9	31.8	41.8	47.7
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	17.06	18.72	17.42	19.03	19.35	17.88	19.54	18.25	19.86	20.17
	3H	18.81	20.32	19.19	20.65	21.01	20.03	21.54	20.41	21.86	22.22
	4H	19.42	20.85	19.82	21.19	21.57	20.94	22.36	21.34	22.71	23.09
	6H	19.83	21.15	20.24	21.51	21.90	21.74	23.06	22.15	23.43	23.82
	8H	19.93	21.19	20.35	21.58	21.98	22.07	23.33	22.49	23.72	24.12
	12H	19.98	21.19	20.41	21.57	22.00	22.27	23.48	22.70	23.86	24.29
4H	2H	17.85	19.27	18.25	19.62	19.99	18.49	19.91	18.88	20.26	20.63
	3H	19.82	21.02	20.23	21.42	21.82	20.87	22.07	21.28	22.46	22.86
	4H	20.55	21.64	20.99	22.05	22.49	21.93	23.02	22.36	23.43	23.87
	6H	21.07	22.03	21.53	22.47	22.92	22.90	23.85	23.35	24.29	24.75
	8H	21.21	22.11	21.67	22.55	23.01	23.30	24.19	23.76	24.63	25.10
	12H	21.29	22.09	21.77	22.57	23.04	23.57	24.37	24.04	24.84	25.31
8H	4H	21.02	21.91	21.48	22.35	22.82	22.22	23.12	22.68	23.56	24.02
	6H	21.68	22.42	22.17	22.91	23.38	23.35	24.09	23.84	24.58	25.05
	8H	21.88	22.55	22.39	23.05	23.54	23.86	24.52	24.36	25.03	25.51
	12H	22.01	22.60	22.51	23.09	23.65	24.22	24.82	24.73	25.31	25.86
12H	4H	21.11	21.92	21.59	22.39	22.86	22.25	23.05	22.73	23.53	23.99
	6H	21.81	22.48	22.32	22.99	23.47	23.40	24.07	23.90	24.57	25.06
	8H	22.09	22.68	22.59	23.17	23.73	23.97	24.56	24.48	25.05	25.61