

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: P1586652

Luminaire Tested: 22CZSP-A-43HE-L830-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586652
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-A-43HE-L830-S
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

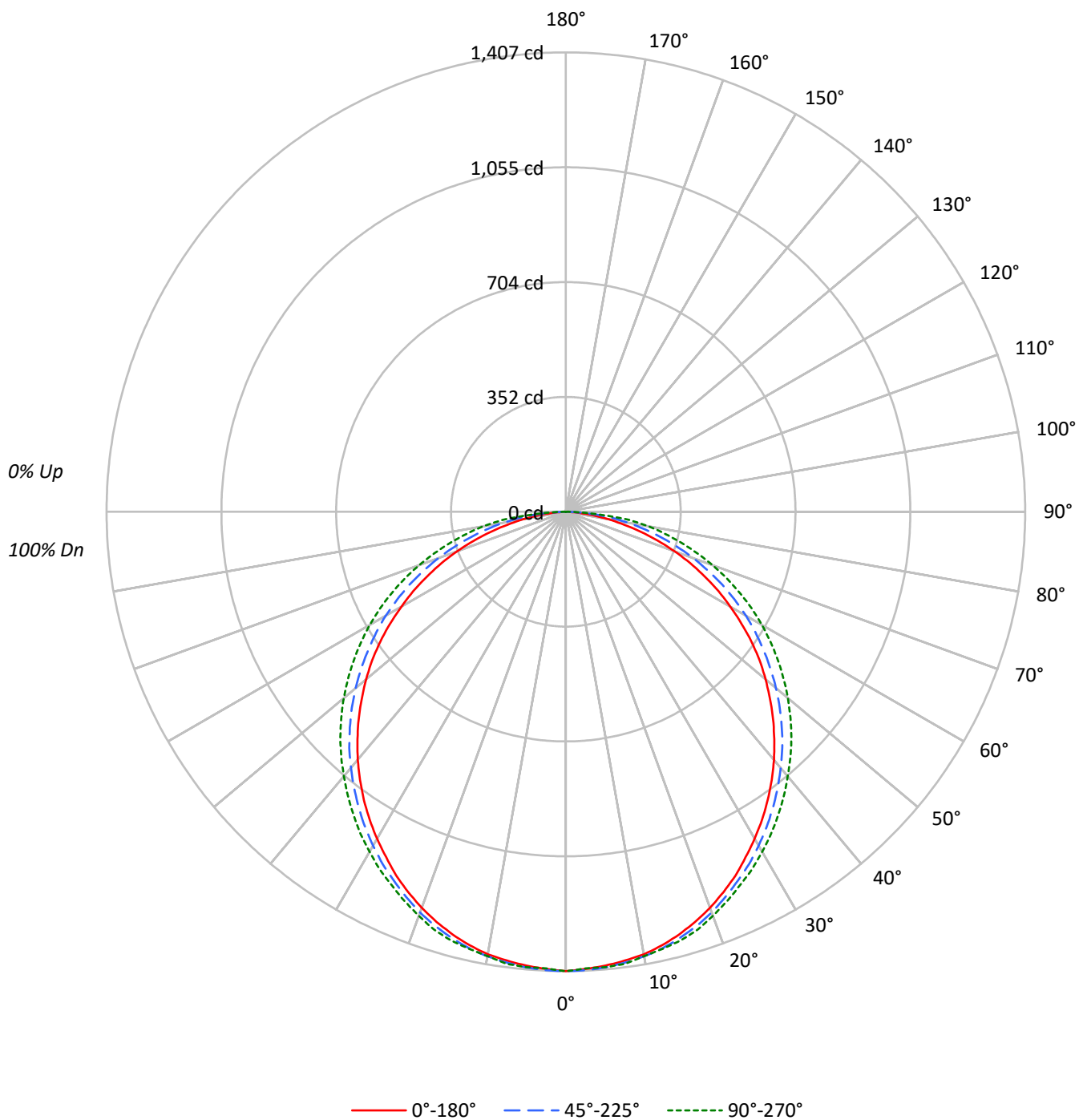
Lumens per Lamp: N/A
Luminaire Lumens: 4108.0 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.2
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

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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	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°	4406	4406	4406
5°	4386	4403	4400
10°	4377	4397	4394
15°	4345	4380	4407
20°	4301	4352	4389
25°	4248	4307	4360
30°	4182	4269	4348
35°	4121	4228	4335
40°	4053	4186	4322
45°	3976	4144	4327
50°	3890	4093	4325
55°	3789	4036	4330
60°	3647	3991	4341
65°	3479	3914	4354
70°	3244	3804	4374
75°	2890	3654	4417
80°	2389	3478	4633
85°	1556	3140	4049

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4779 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.2
10°-20°	381.0	9.3
20°-30°	574.7	14.0
30°-40°	692.2	16.8
40°-50°	722.9	17.6
50°-60°	663.9	16.2
60°-70°	522.9	12.7
70°-80°	320.8	7.8
80°-90°	96.5	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°	1088.8	26.5
0°-40°	1781.0	43.4
0°-60°	3167.8	77.1
0°-90°	4108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4108.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1407	1407	1407	1407	1407	
5°	1395	1397	1401	1405	1400	133
15°	1340	1343	1351	1359	1359	378
25°	1230	1232	1247	1262	1262	566
35°	1078	1084	1106	1129	1134	674
45°	898	908	936	968	977	692
55°	694	707	739	781	793	620
65°	470	486	528	572	588	465
75°	239	258	302	350	365	253
85°	43	60	87	111	113	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1407.1	1407.1	1407.1	1407.1	1407.1
2.5°	1401.7	1404.4	1405.3	1406.2	1399.9
5°	1395.4	1397.2	1400.8	1405.3	1399.9
7.5°	1386.4	1388.2	1392.7	1399.0	1396.3
10°	1376.5	1377.4	1382.8	1387.3	1381.9
12.5°	1360.2	1362.9	1369.2	1372.8	1371.0
15°	1340.4	1343.1	1351.2	1359.3	1359.3
17.5°	1317.0	1320.6	1330.5	1341.3	1342.2
20°	1290.8	1293.5	1306.1	1317.0	1317.0
22.5°	1261.1	1264.7	1277.3	1289.0	1290.8
25°	1229.5	1232.2	1246.6	1262.0	1262.0
27.5°	1192.6	1198.0	1216.0	1231.3	1234.9
30°	1156.5	1161.0	1180.8	1199.8	1202.5
32.5°	1118.6	1124.1	1144.8	1165.5	1170.0
35°	1078.1	1083.5	1106.0	1128.6	1134.0
37.5°	1035.7	1042.0	1065.5	1091.6	1097.0
40°	991.6	998.8	1024.0	1051.9	1057.4
42.5°	944.7	954.6	981.6	1010.5	1018.6
45°	897.8	907.7	935.7	968.1	977.1
47.5°	848.2	859.9	888.8	923.0	933.0
50°	798.6	810.4	840.1	877.1	887.9
52.5°	748.2	759.9	790.5	829.3	841.0
55°	694.1	706.7	739.2	780.6	793.2
57.5°	638.2	654.4	688.7	731.0	743.7
60°	582.3	598.5	637.3	678.8	693.2
62.5°	527.3	542.6	582.3	626.5	641.8
65°	469.6	485.9	528.2	572.4	587.7
67.5°	412.8	429.1	471.4	517.4	533.6
70°	354.3	372.3	415.5	461.5	477.7
72.5°	295.7	314.6	358.8	405.6	421.0
75°	238.9	257.8	302.0	349.7	365.1
77.5°	183.0	203.7	247.0	295.7	310.1
80°	132.5	152.3	192.9	240.7	256.9
82.5°	84.7	101.9	142.4	187.5	199.2
85°	43.3	59.5	87.4	110.9	112.7
87.5°	13.5	18.9	28.8	43.3	44.2
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	16.63	18.29	16.99	18.61	18.92	17.46	19.12	17.83	19.44	19.75
	3H	18.39	19.89	18.76	20.22	20.58	19.58	21.08	19.95	21.41	21.77
	4H	19.00	20.43	19.40	20.77	21.15	20.47	21.89	20.86	22.24	22.61
	6H	19.42	20.74	19.83	21.10	21.49	21.25	22.57	21.66	22.93	23.32
	8H	19.52	20.79	19.95	21.17	21.57	21.57	22.83	21.99	23.22	23.62
	12H	19.57	20.79	20.00	21.17	21.60	21.78	22.99	22.21	23.37	23.80
4H	2H	17.40	18.82	17.80	19.17	19.55	18.05	19.47	18.45	19.82	20.19
	3H	19.38	20.58	19.79	20.97	21.37	20.40	21.60	20.81	22.00	22.40
	4H	20.12	21.20	20.55	21.62	22.05	21.46	22.54	21.89	22.95	23.39
	6H	20.64	21.60	21.10	22.04	22.49	22.41	23.36	22.86	23.80	24.25
	8H	20.79	21.68	21.25	22.12	22.59	22.81	23.70	23.26	24.14	24.60
	12H	20.88	21.68	21.35	22.15	22.62	23.08	23.89	23.56	24.36	24.83
8H	4H	20.58	21.47	21.03	21.91	22.37	21.74	22.64	22.20	23.08	23.54
	6H	21.24	21.98	21.73	22.47	22.94	22.86	23.60	23.35	24.09	24.56
	8H	21.45	22.12	21.95	22.62	23.11	23.37	24.04	23.88	24.54	25.03
	12H	21.59	22.18	22.09	22.67	23.23	23.75	24.35	24.26	24.84	25.39
12H	4H	20.66	21.47	21.14	21.94	22.41	21.77	22.57	22.25	23.05	23.52
	6H	21.37	22.04	21.88	22.54	23.03	22.90	23.57	23.41	24.08	24.56
	8H	21.65	22.24	22.15	22.73	23.29	23.48	24.07	23.99	24.56	25.12