

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: P1586413

Luminaire Tested: 22CZSP-43HE-L830

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-668-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-43HE-L830
Description: 2x2 CZSP LED Luminaire, 3000K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

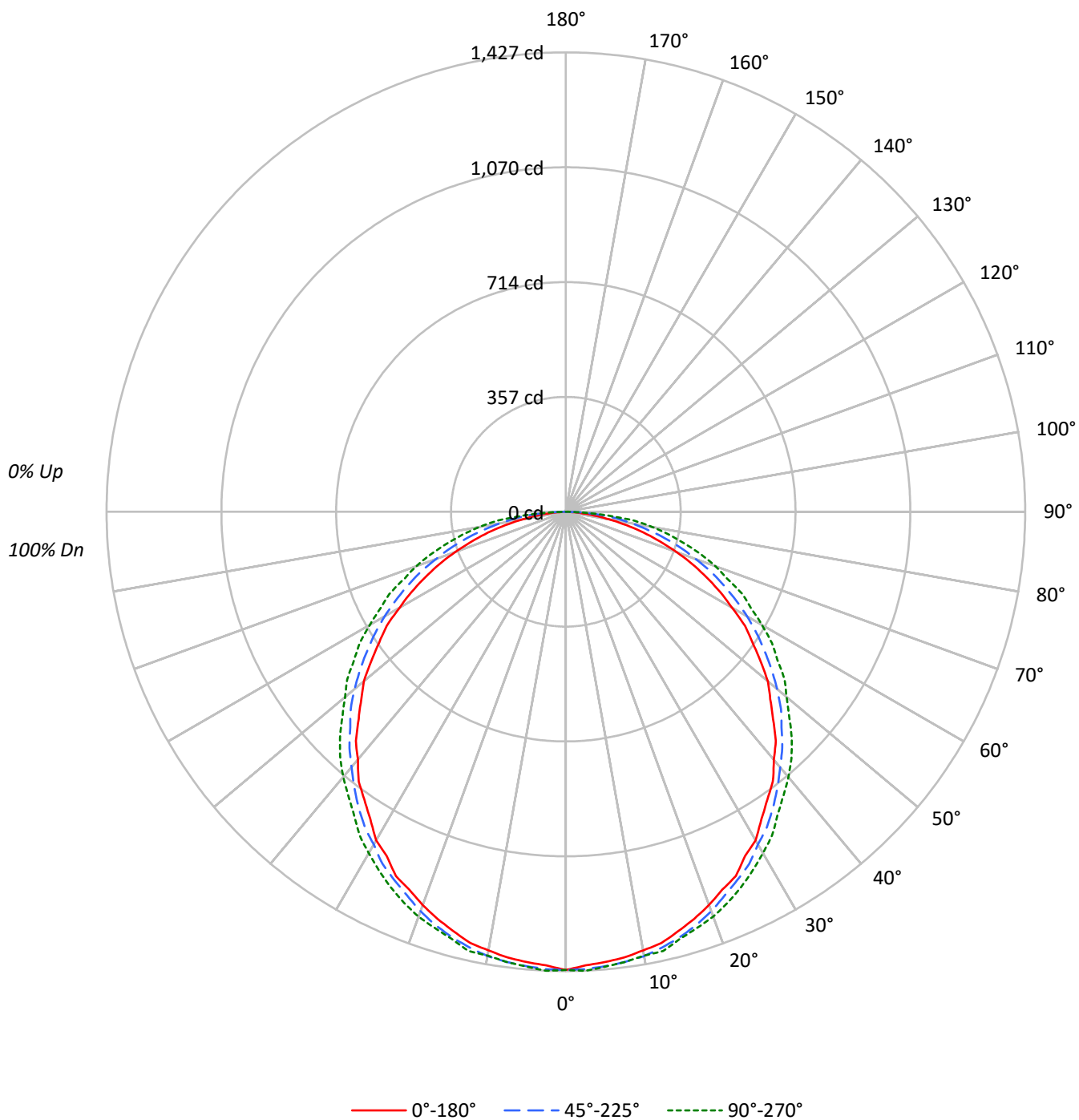
Lumens per Lamp: N/A
Luminaire Lumens: 4192.0 lumens
Efficiency: N/A
Efficacy: 148.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4457	4457	4457
5°	4413	4453	4457
10°	4399	4456	4452
15°	4373	4435	4452
20°	4332	4401	4461
25°	4315	4359	4448
30°	4260	4316	4427
35°	4171	4289	4387
40°	4109	4235	4398
45°	4031	4196	4395
50°	3991	4172	4360
55°	3864	4116	4382
60°	3734	4071	4408
65°	3572	4009	4484
70°	3357	3932	4531
75°	3025	3863	4623
80°	2474	3792	4925
85°	1613	3776	4606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5167 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.2
10°-20°	385.2	9.2
20°-30°	582.2	13.9
30°-40°	702.2	16.8
40°-50°	734.1	17.5
50°-60°	676.9	16.1
60°-70°	536.4	12.8
70°-80°	335.4	8.0
80°-90°	105.2	2.5
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°	1101.9	26.3
0°-40°	1804.1	43.0
0°-60°	3215.1	76.7
0°-90°	4192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1423	1423	1423	1423	1423	
5°	1404	1410	1417	1422	1418	133
15°	1349	1355	1368	1377	1373	381
25°	1249	1245	1262	1280	1287	573
35°	1091	1104	1122	1141	1148	684
45°	910	923	948	972	992	705
55°	708	724	754	795	803	635
65°	482	503	541	583	605	478
75°	250	270	319	364	382	263
85°	45	64	105	123	128	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1423.2	1423.2	1423.2	1423.2	1423.2
2.5°	1410.4	1416.8	1421.9	1420.7	1427.1
5°	1404.0	1410.4	1416.8	1421.9	1418.1
7.5°	1396.3	1402.7	1410.4	1418.1	1410.4
10°	1383.5	1387.3	1401.4	1402.7	1400.1
12.5°	1371.9	1375.8	1386.0	1395.0	1397.6
15°	1348.9	1355.3	1368.1	1377.1	1373.2
17.5°	1325.8	1334.8	1346.3	1355.3	1355.3
20°	1300.1	1306.5	1320.6	1327.1	1338.6
22.5°	1270.6	1278.3	1289.9	1307.8	1314.2
25°	1248.8	1245.0	1261.7	1279.6	1287.3
27.5°	1205.3	1210.4	1233.5	1250.1	1256.5
30°	1178.3	1180.9	1193.7	1216.8	1224.5
32.5°	1130.9	1138.6	1161.7	1178.3	1192.4
35°	1091.1	1104.0	1121.9	1141.1	1147.6
37.5°	1056.5	1059.1	1079.6	1105.2	1110.4
40°	1005.2	1020.6	1036.0	1068.1	1075.8
42.5°	965.5	973.2	995.0	1025.7	1037.3
45°	910.3	923.2	947.5	971.9	992.4
47.5°	861.6	874.4	906.5	937.3	941.1
50°	819.3	824.4	856.5	891.1	895.0
52.5°	761.6	774.4	805.2	843.7	856.5
55°	707.8	724.4	753.9	795.0	802.6
57.5°	660.3	668.0	702.6	743.7	759.1
60°	596.2	618.0	650.1	689.8	703.9
62.5°	541.1	561.6	596.2	633.4	648.8
65°	482.1	502.6	541.1	583.4	605.2
67.5°	425.7	442.4	488.5	532.1	542.4
70°	366.7	385.9	429.5	474.4	494.9
72.5°	305.2	327.0	375.7	418.0	439.8
75°	250.0	270.5	319.3	364.1	382.1
77.5°	192.3	215.4	262.8	307.7	328.2
80°	137.2	160.3	210.3	255.2	273.1
82.5°	88.5	112.8	160.3	200.0	215.4
85°	44.9	64.1	105.1	123.1	128.2
87.5°	14.1	23.1	35.9	41.0	41.0
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	16.72	18.38	17.08	18.70	19.01	17.51	19.17	17.87	19.49	19.80
	3H	18.50	20.01	18.87	20.34	20.70	19.65	21.16	20.03	21.49	21.85
	4H	19.14	20.56	19.53	20.91	21.29	20.57	22.00	20.97	22.35	22.72
	6H	19.56	20.89	19.97	21.25	21.64	21.40	22.73	21.81	23.09	23.48
	8H	19.67	20.94	20.10	21.33	21.73	21.75	23.01	22.17	23.40	23.80
	12H	19.73	20.95	20.16	21.33	21.76	21.99	23.20	22.42	23.59	24.01
4H	2H	17.49	18.92	17.89	19.26	19.64	18.10	19.53	18.50	19.88	20.25
	3H	19.50	20.70	19.91	21.10	21.50	20.49	21.69	20.90	22.09	22.49
	4H	20.26	21.35	20.69	21.77	22.20	21.58	22.67	22.01	23.08	23.52
	6H	20.81	21.77	21.26	22.21	22.66	22.57	23.53	23.03	23.97	24.43
	8H	20.96	21.86	21.42	22.30	22.77	23.00	23.90	23.46	24.34	24.80
	12H	21.05	21.86	21.53	22.33	22.80	23.31	24.12	23.79	24.60	25.07
8H	4H	20.74	21.64	21.20	22.08	22.54	21.88	22.78	22.34	23.22	23.69
	6H	21.43	22.18	21.92	22.67	23.14	23.05	23.80	23.54	24.28	24.76
	8H	21.66	22.33	22.17	22.84	23.32	23.59	24.27	24.10	24.77	25.26
	12H	21.81	22.40	22.31	22.89	23.45	24.02	24.62	24.53	25.11	25.67
12H	4H	20.84	21.65	21.32	22.12	22.59	21.91	22.72	22.39	23.19	23.66
	6H	21.58	22.25	22.09	22.76	23.24	23.10	23.78	23.61	24.28	24.77
	8H	21.88	22.48	22.39	22.97	23.53	23.72	24.32	24.23	24.81	25.37