

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: P1586669

Luminaire Tested: 22CZSP-A-43HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586669
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-A-43HE-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

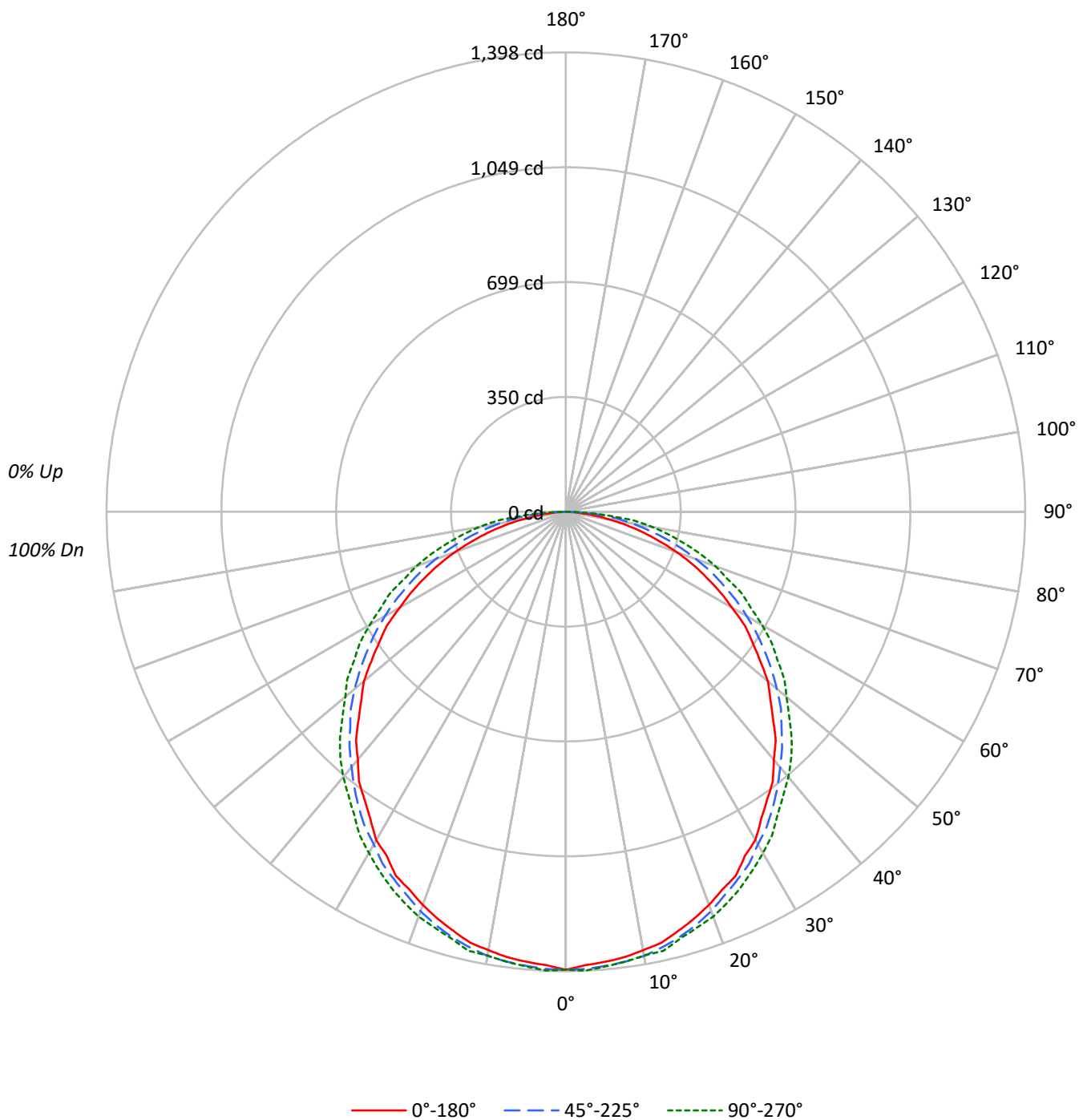
Lumens per Lamp: N/A
Luminaire Lumens: 4105.0 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	4364	4364	4364
5°	4322	4361	4365
10°	4308	4363	4360
15°	4282	4343	4359
20°	4243	4309	4368
25°	4225	4269	4355
30°	4172	4226	4336
35°	4084	4200	4296
40°	4024	4147	4306
45°	3948	4109	4303
50°	3908	4086	4269
55°	3784	4031	4291
60°	3656	3987	4317
65°	3498	3926	4391
70°	3288	3851	4438
75°	2962	3782	4527
80°	2422	3713	4822
85°	1577	3701	4513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5059 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	3.2
10°-20°	377.2	9.2
20°-30°	570.1	13.9
30°-40°	687.6	16.8
40°-50°	718.8	17.5
50°-60°	662.9	16.1
60°-70°	525.2	12.8
70°-80°	328.4	8.0
80°-90°	103.0	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°	1079.1	26.3
0°-40°	1766.7	43.0
0°-60°	3148.4	76.7
0°-90°	4105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1375	1381	1387	1392	1389	131
15°	1321	1327	1340	1348	1345	373
25°	1223	1219	1236	1253	1261	561
35°	1068	1081	1099	1118	1124	670
45°	892	904	928	952	972	690
55°	693	709	738	778	786	621
65°	472	492	530	571	593	468
75°	245	265	313	357	374	258
85°	44	63	103	120	126	57
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.7	1393.7	1393.7	1393.7	1393.7
2.5°	1381.1	1387.4	1392.4	1391.2	1397.5
5°	1374.9	1381.1	1387.4	1392.4	1388.7
7.5°	1367.3	1373.6	1381.1	1388.7	1381.1
10°	1354.8	1358.5	1372.3	1373.6	1371.1
12.5°	1343.5	1347.2	1357.3	1366.1	1368.6
15°	1320.9	1327.1	1339.7	1348.5	1344.7
17.5°	1298.3	1307.1	1318.4	1327.1	1327.1
20°	1273.2	1279.4	1293.2	1299.5	1310.8
22.5°	1244.3	1251.8	1263.1	1280.7	1287.0
25°	1222.9	1219.2	1235.5	1253.1	1260.6
27.5°	1180.2	1185.3	1207.9	1224.2	1230.5
30°	1153.9	1156.4	1168.9	1191.5	1199.1
32.5°	1107.4	1114.9	1137.5	1153.9	1167.7
35°	1068.5	1081.0	1098.6	1117.5	1123.7
37.5°	1034.6	1037.1	1057.2	1082.3	1087.3
40°	984.4	999.4	1014.5	1045.9	1053.4
42.5°	945.4	953.0	974.3	1004.5	1015.8
45°	891.5	904.0	927.9	951.7	971.8
47.5°	843.7	856.3	887.7	917.8	921.6
50°	802.3	807.3	838.7	872.6	876.4
52.5°	745.8	758.4	788.5	826.2	838.7
55°	693.1	709.4	738.3	778.5	786.0
57.5°	646.6	654.2	688.1	728.2	743.3
60°	583.8	605.2	636.6	675.5	689.3
62.5°	529.9	549.9	583.8	620.3	635.3
65°	472.1	492.2	529.9	571.3	592.6
67.5°	416.9	433.2	478.4	521.1	531.1
70°	359.1	377.9	420.6	464.6	484.7
72.5°	298.8	320.2	367.9	409.3	430.7
75°	244.8	264.9	312.6	356.6	374.2
77.5°	188.3	210.9	257.4	301.3	321.4
80°	134.3	156.9	205.9	249.9	267.4
82.5°	86.6	110.5	156.9	195.9	210.9
85°	43.9	62.8	103.0	120.5	125.6
87.5°	13.8	22.6	35.2	40.2	40.2
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	16.64	18.31	17.01	18.63	18.94	17.43	19.10	17.80	19.41	19.73
	3H	18.43	19.94	18.80	20.26	20.62	19.58	21.09	19.95	21.42	21.78
	4H	19.06	20.49	19.46	20.84	21.21	20.50	21.93	20.90	22.28	22.65
	6H	19.49	20.82	19.90	21.18	21.57	21.33	22.65	21.74	23.02	23.41
	8H	19.60	20.87	20.03	21.26	21.66	21.67	22.94	22.10	23.33	23.73
	12H	19.66	20.87	20.08	21.25	21.68	21.92	23.13	22.34	23.51	23.94
4H	2H	17.42	18.84	17.81	19.19	19.57	18.03	19.46	18.43	19.80	20.18
	3H	19.43	20.63	19.84	21.03	21.43	20.42	21.62	20.82	22.02	22.42
	4H	20.19	21.28	20.62	21.69	22.13	21.50	22.60	21.93	23.01	23.44
	6H	20.74	21.69	21.19	22.13	22.59	22.50	23.46	22.95	23.90	24.35
	8H	20.89	21.79	21.35	22.23	22.69	22.93	23.83	23.39	24.27	24.73
	12H	20.98	21.79	21.46	22.26	22.73	23.24	24.05	23.72	24.52	24.99
8H	4H	20.67	21.57	21.13	22.01	22.47	21.81	22.71	22.27	23.15	23.61
	6H	21.36	22.11	21.85	22.59	23.07	22.97	23.73	23.47	24.21	24.68
	8H	21.59	22.26	22.09	22.76	23.25	23.52	24.19	24.03	24.70	25.18
	12H	21.73	22.33	22.24	22.82	23.38	23.95	24.55	24.45	25.04	25.59
12H	4H	20.76	21.57	21.24	22.05	22.52	21.84	22.65	22.32	23.12	23.59
	6H	21.51	22.18	22.01	22.68	23.17	23.03	23.71	23.54	24.21	24.70
	8H	21.81	22.41	22.31	22.89	23.45	23.65	24.25	24.15	24.73	25.29