

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: P1586418

Luminaire Tested: 22CZSP-43HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586418
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-43HE-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

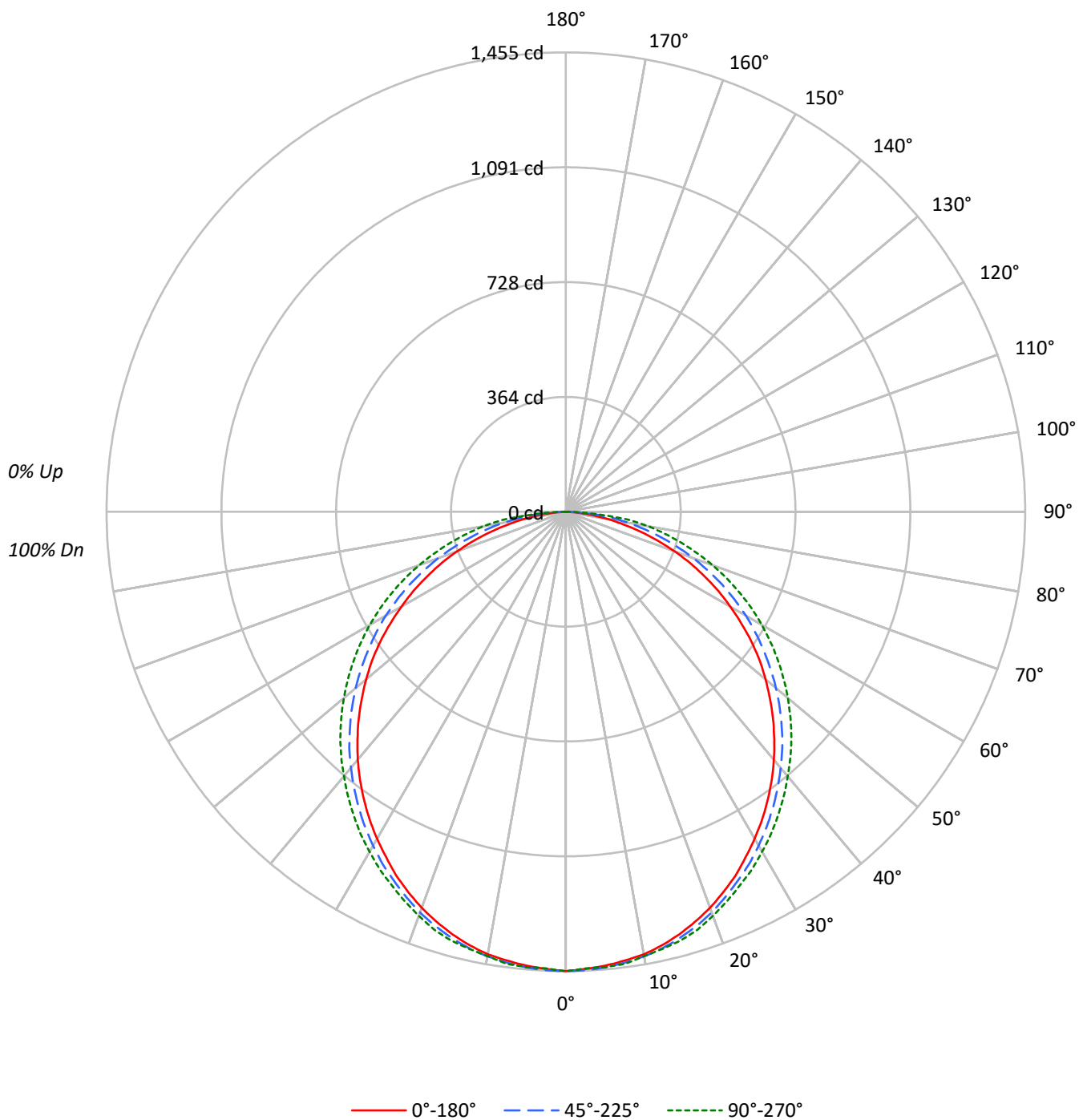
Lumens per Lamp: N/A
Luminaire Lumens: 4248.0 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586418

CATALOG NUMBER: 22CZSP-43HE-L845-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586418

CATALOG NUMBER: 22CZSP-43HE-L845-S

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°	4556	4556	4556
5°	4535	4553	4550
10°	4526	4547	4544
15°	4493	4530	4557
20°	4448	4501	4538
25°	4393	4454	4509
30°	4324	4415	4496
35°	4261	4372	4482
40°	4191	4328	4469
45°	4111	4284	4474
50°	4023	4232	4473
55°	3918	4173	4478
60°	3771	4127	4489
65°	3598	4047	4503
70°	3354	3934	4523
75°	2988	3778	4567
80°	2470	3598	4791
85°	1606	3248	4186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4942 cd/sqm

TEST NUMBER: P1586418

CATALOG NUMBER: 22CZSP-43HE-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	3.2
10°-20°	394.0	9.3
20°-30°	594.3	14.0
30°-40°	715.8	16.8
40°-50°	747.5	17.6
50°-60°	686.5	16.2
60°-70°	540.7	12.7
70°-80°	331.7	7.8
80°-90°	99.8	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°	1125.9	26.5
0°-40°	1841.7	43.4
0°-60°	3275.7	77.1
0°-90°	4248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4248.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1443	1445	1448	1453	1448	137
15°	1386	1389	1397	1406	1406	391
25°	1271	1274	1289	1305	1305	585
35°	1115	1120	1144	1167	1173	697
45°	928	939	968	1001	1010	716
55°	718	731	764	807	820	641
65°	486	502	546	592	608	480
75°	247	267	312	362	378	262
85°	45	62	90	115	116	58
90°	0	0	0	0	0	

TEST NUMBER: P1586418

CATALOG NUMBER: 22CZSP-43HE-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1455.1	1455.1	1455.1	1455.1	1455.1
2.5°	1449.5	1452.3	1453.2	1454.1	1447.6
5°	1442.9	1444.8	1448.5	1453.2	1447.6
7.5°	1433.6	1435.5	1440.1	1446.7	1443.9
10°	1423.4	1424.3	1429.9	1434.5	1429.0
12.5°	1406.6	1409.4	1415.9	1419.6	1417.8
15°	1386.1	1388.9	1397.3	1405.7	1405.7
17.5°	1361.8	1365.6	1375.8	1387.0	1387.9
20°	1334.8	1337.6	1350.7	1361.8	1361.8
22.5°	1304.0	1307.8	1320.8	1332.9	1334.8
25°	1271.4	1274.2	1289.1	1305.0	1305.0
27.5°	1233.2	1238.8	1257.4	1273.3	1277.0
30°	1195.9	1200.6	1221.1	1240.7	1243.5
32.5°	1156.8	1162.4	1183.8	1205.2	1209.9
35°	1114.8	1120.4	1143.7	1167.0	1172.6
37.5°	1071.0	1077.5	1101.8	1128.8	1134.4
40°	1025.3	1032.8	1058.9	1087.8	1093.4
42.5°	976.9	987.1	1015.1	1044.9	1053.3
45°	928.4	938.7	967.5	1001.1	1010.4
47.5°	877.1	889.3	919.1	954.5	964.8
50°	825.9	838.0	868.7	907.0	918.1
52.5°	773.7	785.8	817.5	857.6	869.7
55°	717.7	730.8	764.3	807.2	820.3
57.5°	659.9	676.7	712.1	756.0	769.0
60°	602.2	618.9	659.0	701.9	716.8
62.5°	545.3	561.1	602.2	647.8	663.7
65°	485.6	502.4	546.2	591.9	607.7
67.5°	426.9	443.7	487.5	535.0	551.8
70°	366.3	385.0	429.7	477.3	494.0
72.5°	305.7	325.3	371.0	419.5	435.3
75°	247.0	266.6	312.3	361.7	377.5
77.5°	189.2	210.7	255.4	305.7	320.7
80°	137.0	157.5	199.5	248.9	265.7
82.5°	87.6	105.3	147.3	193.9	206.0
85°	44.7	61.5	90.4	114.7	116.5
87.5°	14.0	19.6	29.8	44.7	45.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586418

CATALOG NUMBER: 22CZSP-43HE-L845-S

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	16.75	18.41	17.11	18.72	19.04	17.58	19.24	17.94	19.55	19.87
	3H	18.50	20.01	18.88	20.34	20.70	19.69	21.20	20.07	21.53	21.89
	4H	19.12	20.54	19.52	20.89	21.27	20.58	22.00	20.98	22.35	22.73
	6H	19.53	20.85	19.94	21.22	21.61	21.36	22.68	21.77	23.05	23.44
	8H	19.64	20.90	20.06	21.29	21.69	21.68	22.95	22.11	23.34	23.73
	12H	19.69	20.90	20.12	21.28	21.71	21.90	23.11	22.32	23.49	23.92
4H	2H	17.52	18.94	17.92	19.29	19.66	18.17	19.59	18.56	19.93	20.31
	3H	19.50	20.69	19.90	21.09	21.49	20.52	21.72	20.93	22.11	22.51
	4H	20.23	21.32	20.66	21.73	22.17	21.57	22.66	22.00	23.07	23.51
	6H	20.76	21.71	21.21	22.15	22.61	22.52	23.48	22.98	23.92	24.37
	8H	20.91	21.80	21.37	22.24	22.70	22.92	23.81	23.38	24.26	24.72
	12H	20.99	21.79	21.47	22.27	22.74	23.20	24.00	23.68	24.48	24.94
8H	4H	20.69	21.58	21.15	22.03	22.49	21.86	22.75	22.32	23.19	23.66
	6H	21.35	22.10	21.84	22.58	23.06	22.97	23.72	23.47	24.20	24.68
	8H	21.56	22.23	22.07	22.74	23.22	23.49	24.15	23.99	24.66	25.14
	12H	21.70	22.29	22.21	22.78	23.34	23.87	24.46	24.38	24.95	25.51
12H	4H	20.78	21.58	21.26	22.06	22.53	21.89	22.69	22.36	23.16	23.63
	6H	21.48	22.15	21.99	22.66	23.14	23.02	23.69	23.53	24.19	24.68
	8H	21.76	22.35	22.27	22.84	23.40	23.60	24.19	24.10	24.68	25.24