

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: P1586419

Luminaire Tested: 22CZSP-43HE-L845

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586419
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-L845
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

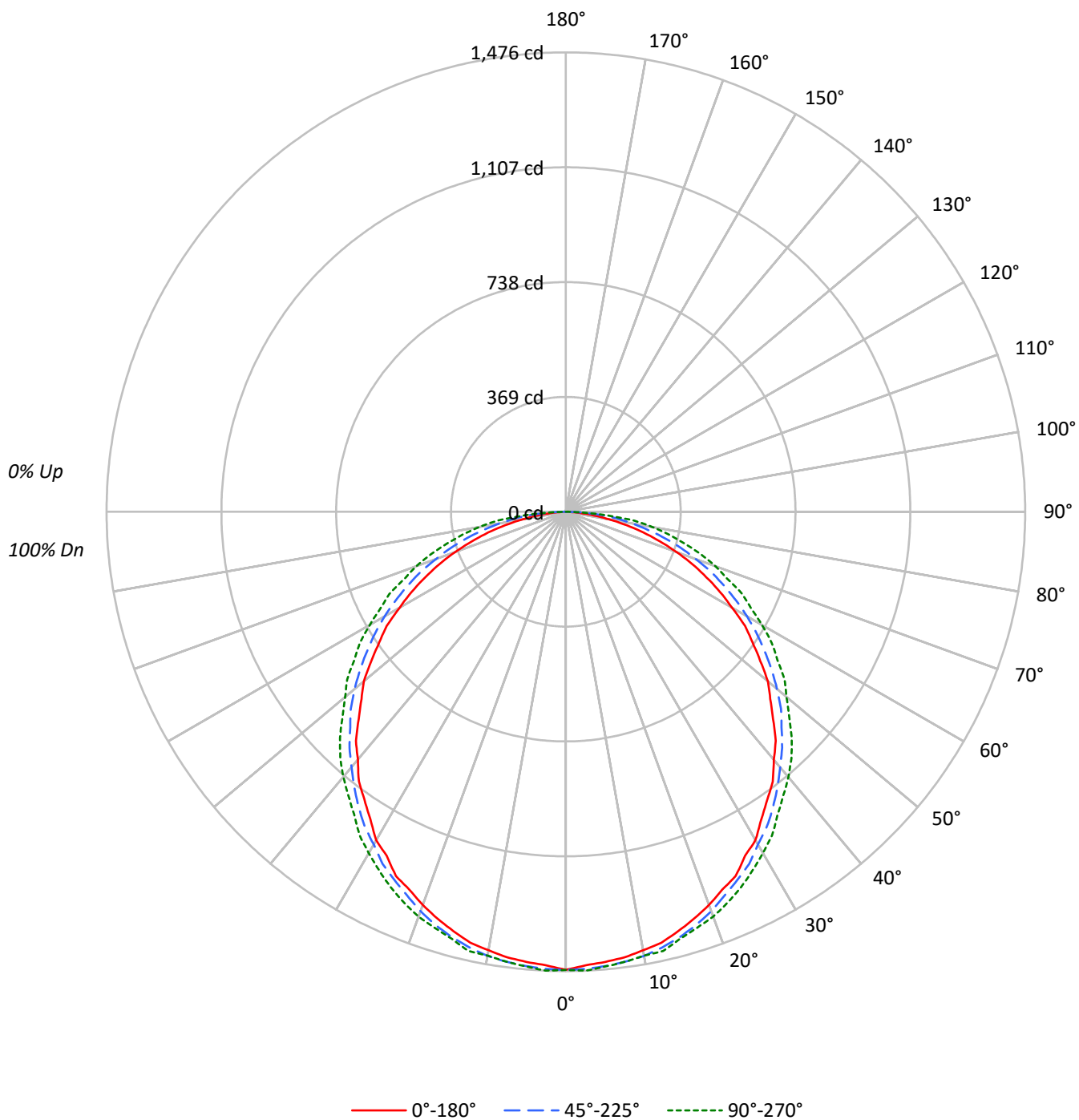
Lumens per Lamp: N/A
Luminaire Lumens: 4335.0 lumens
Efficiency: N/A
Efficacy: 153.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586419

CATALOG NUMBER: 22CZSP-43HE-L845

Luminous Intensity Polar Plot



TEST NUMBER: P1586419

CATALOG NUMBER: 22CZSP-43HE-L845

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4609	4609	4609
5°	4564	4605	4610
10°	4549	4608	4604
15°	4522	4586	4604
20°	4480	4551	4613
25°	4462	4508	4599
30°	4406	4463	4579
35°	4313	4435	4536
40°	4249	4379	4547
45°	4169	4339	4545
50°	4128	4315	4509
55°	3996	4256	4531
60°	3862	4210	4559
65°	3694	4146	4637
70°	3472	4067	4686
75°	3129	3995	4780
80°	2559	3922	5092
85°	1667	3905	4764

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5345 cd/sqm

TEST NUMBER: P1586419

CATALOG NUMBER: 22CZSP-43HE-L845

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.2
10°-20°	398.4	9.2
20°-30°	602.0	13.9
30°-40°	726.1	16.8
40°-50°	759.1	17.5
50°-60°	700.0	16.1
60°-70°	554.7	12.8
70°-80°	346.8	8.0
80°-90°	108.8	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°	1139.5	26.3
0°-40°	1865.6	43.0
0°-60°	3324.7	76.7
0°-90°	4335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1452	1458	1465	1470	1466	138
15°	1395	1402	1415	1424	1420	394
25°	1291	1288	1305	1323	1331	592
35°	1128	1142	1160	1180	1187	708
45°	941	955	980	1005	1026	729
55°	732	749	780	822	830	656
65°	498	520	560	603	626	494
75°	259	280	330	377	395	272
85°	46	66	109	127	133	61
90°	0	0	0	0	0	

TEST NUMBER: P1586419

CATALOG NUMBER: 22CZSP-43HE-L845

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.8	1471.8	1471.8	1471.8	1471.8
2.5°	1458.5	1465.1	1470.4	1469.1	1475.8
5°	1451.9	1458.5	1465.1	1470.4	1466.5
7.5°	1443.9	1450.6	1458.5	1466.5	1458.5
10°	1430.7	1434.6	1449.2	1450.6	1447.9
12.5°	1418.7	1422.7	1433.3	1442.6	1445.3
15°	1394.9	1401.5	1414.8	1424.0	1420.1
17.5°	1371.0	1380.3	1392.2	1401.5	1401.5
20°	1344.5	1351.1	1365.7	1372.3	1384.3
22.5°	1314.0	1321.9	1333.9	1352.4	1359.1
25°	1291.4	1287.5	1304.7	1323.3	1331.2
27.5°	1246.4	1251.7	1275.5	1292.8	1299.4
30°	1218.5	1221.2	1234.4	1258.3	1266.3
32.5°	1169.5	1177.4	1201.3	1218.5	1233.1
35°	1128.4	1141.6	1160.2	1180.1	1186.7
37.5°	1092.6	1095.2	1116.4	1142.9	1148.2
40°	1039.5	1055.4	1071.3	1104.5	1112.4
42.5°	998.4	1006.4	1028.9	1060.7	1072.7
45°	941.4	954.7	979.9	1005.0	1026.3
47.5°	891.0	904.3	937.4	969.2	973.2
50°	847.3	852.6	885.7	921.5	925.5
52.5°	787.6	800.9	832.7	872.5	885.7
55°	731.9	749.1	779.6	822.1	830.0
57.5°	682.8	690.8	726.6	769.0	784.9
60°	616.6	639.1	672.2	713.3	727.9
62.5°	559.5	580.8	616.6	655.0	670.9
65°	498.5	519.8	559.5	603.3	625.8
67.5°	440.2	457.4	505.2	550.3	560.9
70°	379.2	399.1	444.2	490.6	511.8
72.5°	315.6	338.1	388.5	432.3	454.8
75°	258.6	279.8	330.2	376.6	395.1
77.5°	198.9	222.8	271.8	318.2	339.4
80°	141.9	165.7	217.5	263.9	282.4
82.5°	91.5	116.7	165.7	206.8	222.8
85°	46.4	66.3	108.7	127.3	132.6
87.5°	14.6	23.9	37.1	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586419

CATALOG NUMBER: 22CZSP-43HE-L845

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	16.83	18.50	17.20	18.81	19.13	17.62	19.29	17.99	19.60	19.92
	3H	18.61	20.13	18.99	20.45	20.81	19.77	21.28	20.14	21.61	21.96
	4H	19.25	20.68	19.65	21.03	21.40	20.69	22.12	21.09	22.47	22.84
	6H	19.68	21.01	20.09	21.37	21.76	21.52	22.84	21.93	23.21	23.60
	8H	19.79	21.06	20.22	21.45	21.85	21.86	23.13	22.29	23.52	23.92
	12H	19.85	21.06	20.27	21.44	21.87	22.10	23.32	22.53	23.70	24.13
4H	2H	17.61	19.03	18.00	19.38	19.76	18.22	19.65	18.62	19.99	20.37
	3H	19.62	20.82	20.02	21.22	21.62	20.61	21.81	21.01	22.21	22.60
	4H	20.38	21.47	20.81	21.88	22.32	21.69	22.79	22.12	23.20	23.63
	6H	20.92	21.88	21.38	22.32	22.78	22.69	23.65	23.14	24.09	24.54
	8H	21.08	21.98	21.54	22.42	22.88	23.12	24.02	23.58	24.46	24.92
	12H	21.17	21.98	21.65	22.45	22.92	23.43	24.24	23.91	24.71	25.18
8H	4H	20.86	21.75	21.32	22.20	22.66	22.00	22.90	22.46	23.34	23.80
	6H	21.55	22.30	22.04	22.78	23.26	23.16	23.91	23.66	24.40	24.87
	8H	21.78	22.45	22.28	22.95	23.44	23.71	24.38	24.22	24.89	25.37
	12H	21.92	22.52	22.43	23.01	23.57	24.14	24.74	24.64	25.22	25.78
12H	4H	20.95	21.76	21.43	22.24	22.71	22.03	22.84	22.51	23.31	23.78
	6H	21.70	22.37	22.20	22.87	23.36	23.22	23.90	23.73	24.40	24.89
	8H	22.00	22.60	22.50	23.08	23.64	23.84	24.43	24.34	24.92	25.48