

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: P1586668

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

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586668
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-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

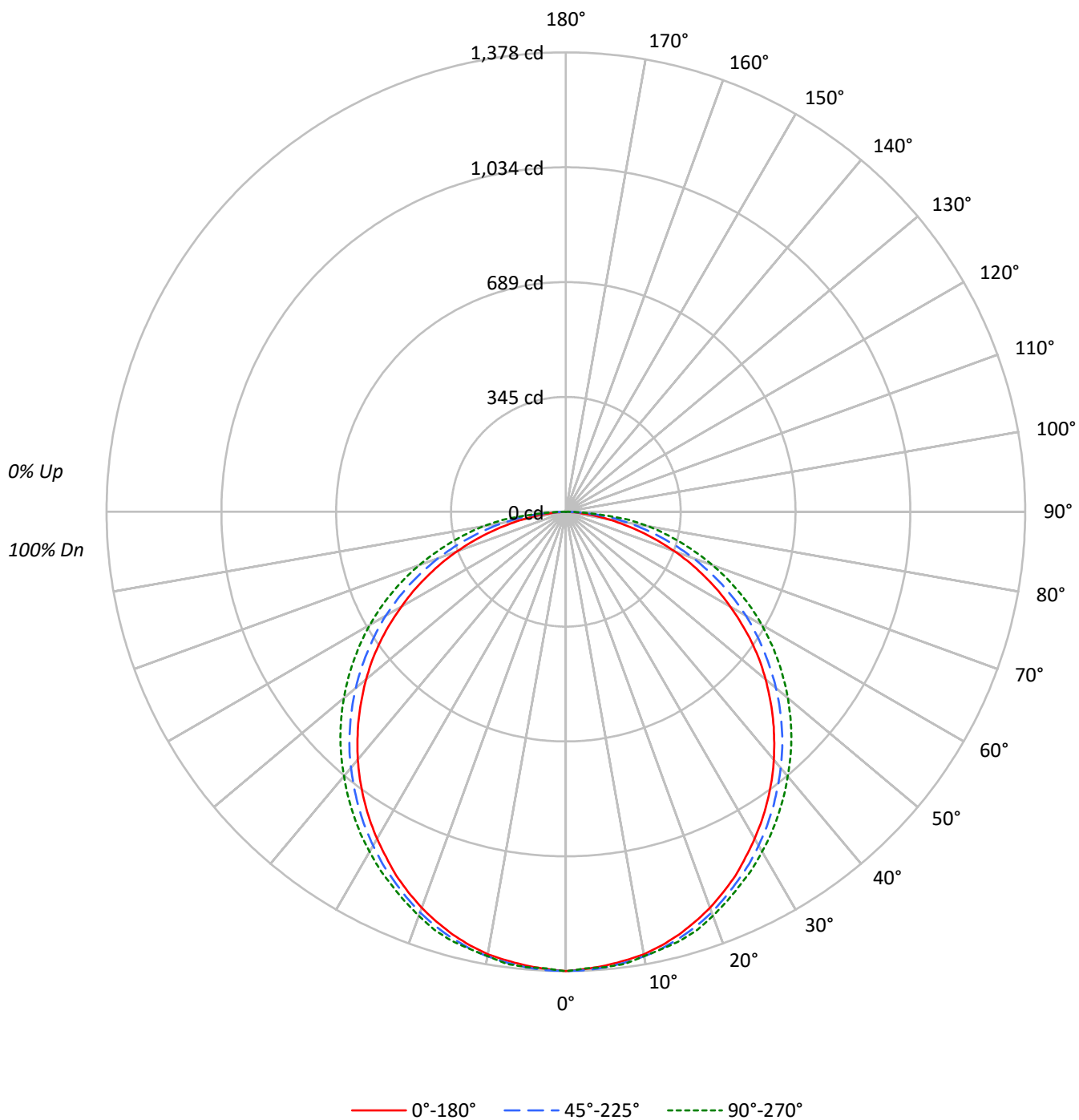
Lumens per Lamp: N/A
Luminaire Lumens: 4023.0 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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
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	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4315	4315	4315
5°	4295	4312	4309
10°	4286	4306	4303
15°	4255	4290	4315
20°	4212	4262	4298
25°	4160	4218	4270
30°	4095	4181	4258
35°	4036	4140	4245
40°	3969	4099	4233
45°	3893	4058	4238
50°	3810	4008	4236
55°	3711	3952	4241
60°	3572	3909	4251
65°	3408	3833	4265
70°	3176	3726	4284
75°	2830	3578	4325
80°	2341	3406	4537
85°	1523	3075	3963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	3.2
10°-20°	373.2	9.3
20°-30°	562.8	14.0
30°-40°	677.9	16.8
40°-50°	707.9	17.6
50°-60°	650.2	16.2
60°-70°	512.1	12.7
70°-80°	314.2	7.8
80°-90°	94.5	2.4
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°	1066.3	26.5
0°-40°	1744.1	43.4
0°-60°	3102.2	77.1
0°-90°	4023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1366	1368	1372	1376	1371	130
15°	1313	1315	1323	1331	1331	370
25°	1204	1207	1221	1236	1236	554
35°	1056	1061	1083	1105	1110	660
45°	879	889	916	948	957	678
55°	680	692	724	764	777	607
65°	460	476	517	561	576	455
75°	234	252	296	342	358	248
85°	42	58	86	109	110	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1378.0	1378.0	1378.0	1378.0	1378.0
2.5°	1372.7	1375.3	1376.2	1377.1	1370.9
5°	1366.5	1368.3	1371.8	1376.2	1370.9
7.5°	1357.7	1359.4	1363.9	1370.0	1367.4
10°	1348.0	1348.9	1354.2	1358.6	1353.3
12.5°	1332.1	1334.7	1340.9	1344.4	1342.7
15°	1312.7	1315.3	1323.3	1331.2	1331.2
17.5°	1289.7	1293.2	1303.0	1313.5	1314.4
20°	1264.1	1266.8	1279.1	1289.7	1289.7
22.5°	1235.0	1238.5	1250.9	1262.3	1264.1
25°	1204.1	1206.7	1220.9	1235.9	1235.9
27.5°	1167.9	1173.2	1190.8	1205.8	1209.4
30°	1132.6	1137.0	1156.4	1175.0	1177.6
32.5°	1095.5	1100.8	1121.1	1141.4	1145.8
35°	1055.8	1061.1	1083.1	1105.2	1110.5
37.5°	1014.3	1020.5	1043.4	1069.0	1074.3
40°	971.0	978.1	1002.8	1030.2	1035.5
42.5°	925.1	934.8	961.3	989.6	997.5
45°	879.2	888.9	916.3	948.1	956.9
47.5°	830.7	842.2	870.4	903.9	913.7
50°	782.1	793.6	822.7	858.9	869.5
52.5°	732.7	744.2	774.2	812.1	823.6
55°	679.7	692.1	723.9	764.5	776.8
57.5°	625.0	640.9	674.4	715.9	728.3
60°	570.3	586.2	624.1	664.7	678.8
62.5°	516.4	531.4	570.3	613.5	628.5
65°	459.9	475.8	517.3	560.6	575.6
67.5°	404.3	420.2	461.7	506.7	522.6
70°	346.9	364.6	407.0	452.0	467.9
72.5°	289.5	308.1	351.3	397.2	412.2
75°	233.9	252.5	295.7	342.5	357.5
77.5°	179.2	199.5	241.9	289.5	303.7
80°	129.8	149.2	188.9	235.7	251.6
82.5°	83.0	99.8	139.5	183.6	195.1
85°	42.4	58.3	85.6	108.6	110.3
87.5°	13.2	18.5	28.2	42.4	43.3
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	16.56	18.22	16.92	18.53	18.85	17.39	19.05	17.75	19.36	19.68
	3H	18.31	19.82	18.69	20.15	20.51	19.50	21.01	19.88	21.34	21.70
	4H	18.93	20.35	19.33	20.70	21.08	20.39	21.82	20.79	22.16	22.54
	6H	19.34	20.66	19.75	21.03	21.42	21.17	22.50	21.58	22.86	23.25
	8H	19.45	20.71	19.87	21.10	21.50	21.49	22.76	21.92	23.15	23.54
	12H	19.50	20.71	19.93	21.09	21.52	21.71	22.92	22.13	23.30	23.73
4H	2H	17.33	18.75	17.73	19.10	19.47	17.98	19.40	18.37	19.75	20.12
	3H	19.31	20.51	19.72	20.90	21.30	20.33	21.53	20.74	21.93	22.32
	4H	20.04	21.13	20.47	21.54	21.98	21.38	22.47	21.81	22.88	23.32
	6H	20.57	21.52	21.03	21.96	22.42	22.34	23.29	22.79	23.73	24.18
	8H	20.72	21.61	21.18	22.05	22.52	22.73	23.62	23.19	24.07	24.53
	12H	20.80	21.61	21.28	22.08	22.55	23.01	23.81	23.49	24.29	24.76
8H	4H	20.50	21.39	20.96	21.84	22.30	21.67	22.56	22.13	23.01	23.47
	6H	21.16	21.91	21.66	22.39	22.87	22.78	23.53	23.28	24.01	24.49
	8H	21.38	22.04	21.88	22.55	23.03	23.30	23.96	23.80	24.47	24.95
	12H	21.51	22.11	22.02	22.60	23.15	23.68	24.27	24.19	24.76	25.32
12H	4H	20.59	21.40	21.07	21.87	22.34	21.70	22.50	22.18	22.97	23.44
	6H	21.30	21.97	21.80	22.47	22.96	22.83	23.50	23.34	24.01	24.49
	8H	21.57	22.17	22.08	22.66	23.21	23.41	24.00	23.91	24.49	25.05