

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: P1586388

Luminaire Tested: 22CZSP-37HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586388
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-37HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

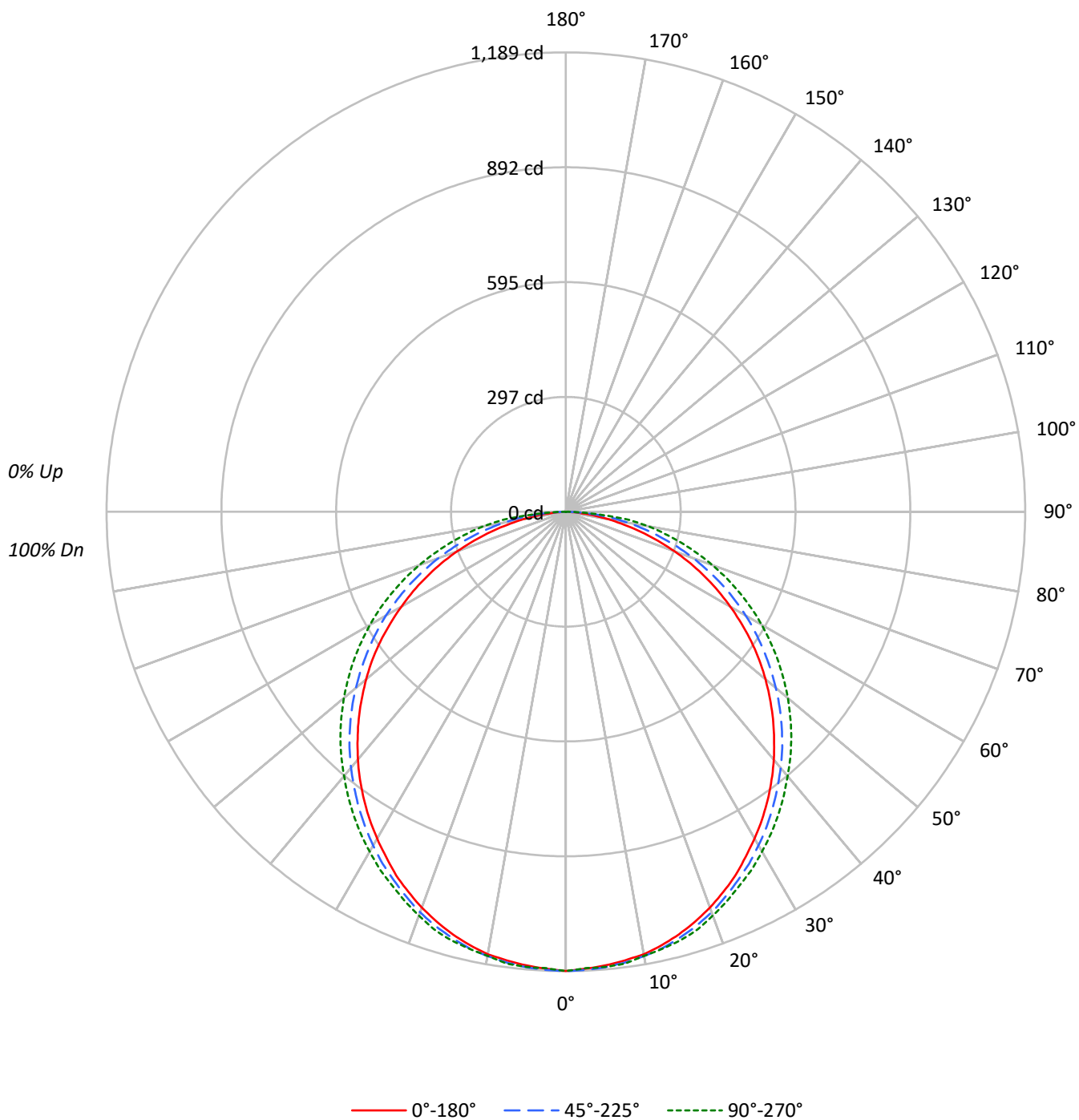
Lumens per Lamp: N/A
Luminaire Lumens: 3470.0 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.1
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	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°	3722	3722	3722
5°	3705	3719	3717
10°	3697	3714	3711
15°	3670	3700	3722
20°	3633	3677	3707
25°	3588	3638	3683
30°	3532	3607	3673
35°	3481	3571	3662
40°	3424	3536	3651
45°	3358	3500	3655
50°	3286	3457	3654
55°	3201	3409	3658
60°	3081	3371	3667
65°	2939	3306	3678
70°	2739	3214	3694
75°	2441	3086	3731
80°	2018	2938	3913
85°	1311	2655	3420

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4038 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.2
10°-20°	321.9	9.3
20°-30°	485.4	14.0
30°-40°	584.7	16.8
40°-50°	610.6	17.6
50°-60°	560.8	16.2
60°-70°	441.7	12.7
70°-80°	271.0	7.8
80°-90°	81.6	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°	919.7	26.5
0°-40°	1504.4	43.4
0°-60°	2675.8	77.1
0°-90°	3470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1189	1189	1189	1189	1189	
5°	1179	1180	1183	1187	1182	112
15°	1132	1134	1141	1148	1148	319
25°	1039	1041	1053	1066	1066	478
35°	911	915	934	953	958	570
45°	758	767	790	818	825	585
55°	586	597	624	659	670	523
65°	397	410	446	484	496	392
75°	202	218	255	295	308	214
85°	36	50	74	94	95	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1188.6	1188.6	1188.6	1188.6	1188.6
2.5°	1184.0	1186.3	1187.0	1187.8	1182.5
5°	1178.7	1180.2	1183.2	1187.0	1182.5
7.5°	1171.1	1172.6	1176.4	1181.7	1179.4
10°	1162.7	1163.4	1168.0	1171.8	1167.2
12.5°	1149.0	1151.3	1156.6	1159.6	1158.1
15°	1132.2	1134.5	1141.4	1148.2	1148.2
17.5°	1112.4	1115.5	1123.8	1133.0	1133.7
20°	1090.3	1092.6	1103.3	1112.4	1112.4
22.5°	1065.2	1068.3	1078.9	1088.8	1090.3
25°	1038.6	1040.9	1053.0	1066.0	1066.0
27.5°	1007.4	1011.9	1027.1	1040.1	1043.1
30°	976.9	980.7	997.5	1013.4	1015.7
32.5°	944.9	949.5	967.0	984.5	988.3
35°	910.7	915.2	934.3	953.3	957.9
37.5°	874.9	880.2	900.0	922.1	926.6
40°	837.6	843.6	865.0	888.6	893.1
42.5°	798.0	806.3	829.2	853.5	860.4
45°	758.4	766.7	790.3	817.8	825.4
47.5°	716.5	726.4	750.8	779.7	788.1
50°	674.6	684.5	709.6	740.9	750.0
52.5°	632.0	641.9	667.8	700.5	710.4
55°	586.3	596.9	624.4	659.4	670.0
57.5°	539.1	552.8	581.7	617.5	628.2
60°	491.9	505.6	538.3	573.3	585.5
62.5°	445.4	458.4	491.9	529.2	542.1
65°	396.7	410.4	446.2	483.5	496.4
67.5°	348.7	362.4	398.2	437.1	450.8
70°	299.2	314.5	351.0	389.8	403.5
72.5°	249.7	265.7	303.0	342.6	355.6
75°	201.8	217.8	255.1	295.4	308.4
77.5°	154.6	172.1	208.6	249.7	261.9
80°	111.9	128.7	162.9	203.3	217.0
82.5°	71.6	86.0	120.3	158.4	168.3
85°	36.5	50.3	73.9	93.7	95.2
87.5°	11.4	16.0	24.4	36.5	37.3
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	16.04	17.71	16.41	18.02	18.33	16.87	18.54	17.24	18.85	19.16
	3H	17.80	19.31	18.18	19.63	19.99	18.99	20.50	19.37	20.82	21.18
	4H	18.42	19.84	18.82	20.19	20.56	19.88	21.30	20.28	21.65	22.02
	6H	18.83	20.15	19.24	20.51	20.90	20.66	21.98	21.07	22.34	22.74
	8H	18.94	20.20	19.36	20.59	20.99	20.98	22.24	21.40	22.63	23.03
	12H	18.99	20.20	19.42	20.58	21.01	21.19	22.40	21.62	22.78	23.21
4H	2H	16.82	18.24	17.21	18.59	18.96	17.46	18.88	17.86	19.23	19.61
	3H	18.79	19.99	19.20	20.39	20.79	19.82	21.02	20.23	21.41	21.81
	4H	19.53	20.62	19.96	21.03	21.46	20.87	21.96	21.30	22.37	22.80
	6H	20.06	21.01	20.51	21.45	21.90	21.82	22.77	22.27	23.21	23.67
	8H	20.20	21.10	20.66	21.54	22.00	22.22	23.11	22.68	23.55	24.02
	12H	20.29	21.09	20.77	21.57	22.03	22.50	23.30	22.97	23.77	24.24
8H	4H	19.99	20.88	20.45	21.32	21.79	21.16	22.05	21.62	22.49	22.96
	6H	20.65	21.39	21.14	21.88	22.35	22.27	23.01	22.76	23.50	23.97
	8H	20.86	21.53	21.37	22.03	22.52	22.78	23.45	23.29	23.96	24.44
	12H	21.00	21.59	21.51	22.08	22.64	23.17	23.76	23.67	24.25	24.81
12H	4H	20.08	20.88	20.56	21.36	21.82	21.18	21.99	21.66	22.46	22.93
	6H	20.78	21.45	21.29	21.96	22.44	22.32	22.99	22.82	23.49	23.98
	8H	21.06	21.65	21.57	22.14	22.70	22.90	23.49	23.40	23.98	24.54