

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: P1586346

Luminaire Tested: 22CZSP-33HE-L940-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586346
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-33HE-L940-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3000 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

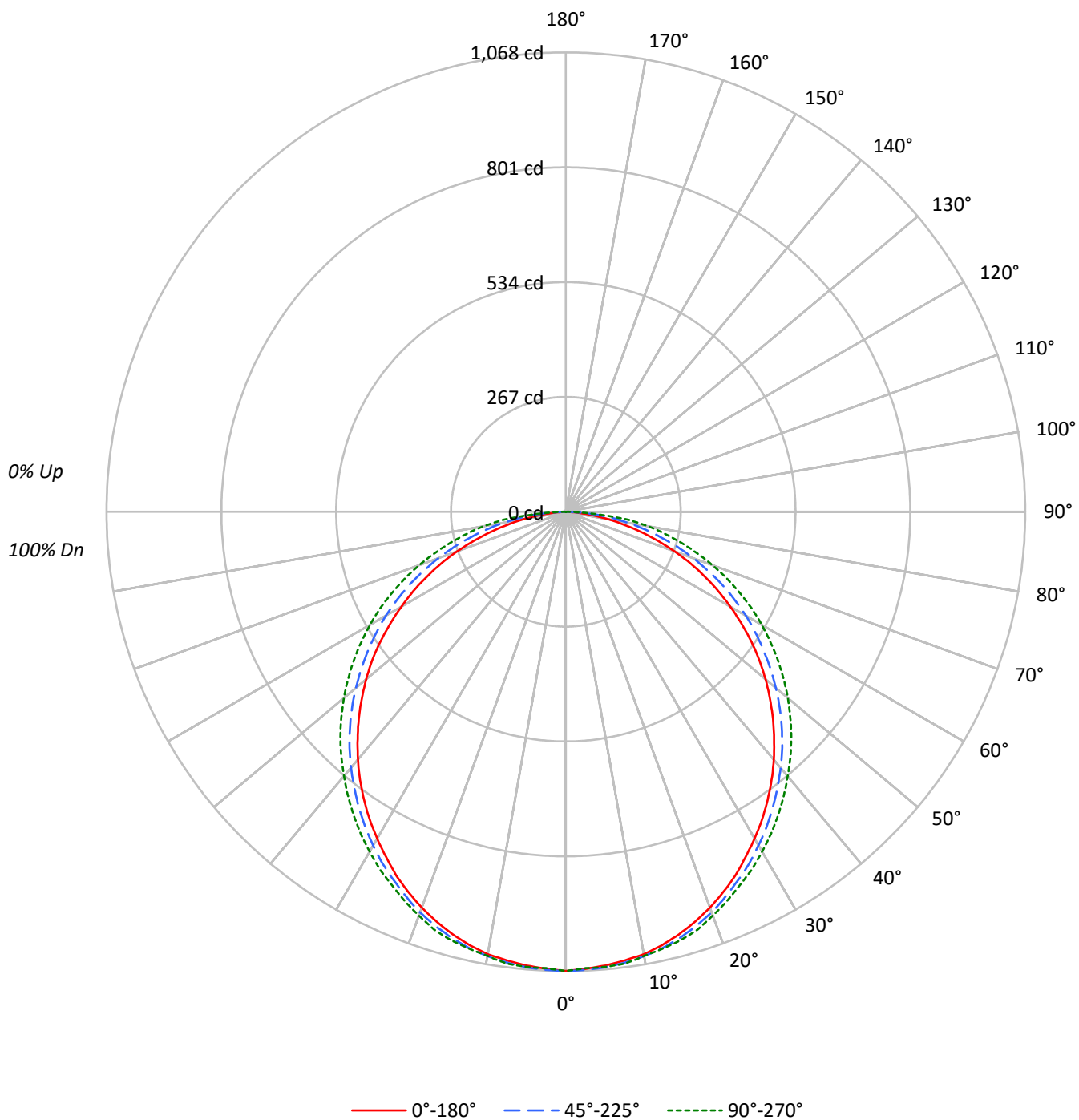
Lumens per Lamp: N/A
Luminaire Lumens: 3117.0 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.7
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°	3343	3343	3343
5°	3328	3341	3339
10°	3321	3336	3334
15°	3297	3324	3344
20°	3264	3303	3330
25°	3223	3268	3308
30°	3173	3240	3299
35°	3127	3208	3289
40°	3076	3176	3280
45°	3017	3144	3283
50°	2952	3105	3282
55°	2875	3062	3286
60°	2767	3029	3294
65°	2640	2970	3304
70°	2461	2887	3319
75°	2192	2772	3351
80°	1812	2640	3515
85°	1178	2382	3072

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3627 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	3.2
10°-20°	289.1	9.3
20°-30°	436.0	14.0
30°-40°	525.2	16.8
40°-50°	548.5	17.6
50°-60°	503.7	16.2
60°-70°	396.8	12.7
70°-80°	243.4	7.8
80°-90°	73.3	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°	826.1	26.5
0°-40°	1351.4	43.4
0°-60°	2403.6	77.1
0°-90°	3117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1059	1060	1063	1066	1062	101
15°	1017	1019	1025	1031	1031	287
25°	933	935	946	958	958	429
35°	818	822	839	856	860	512
45°	681	689	710	735	741	525
55°	527	536	561	592	602	470
65°	356	369	401	434	446	353
75°	181	196	229	265	277	192
85°	33	45	66	84	86	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.7	1067.7	1067.7	1067.7	1067.7
2.5°	1063.6	1065.6	1066.3	1067.0	1062.2
5°	1058.8	1060.1	1062.9	1066.3	1062.2
7.5°	1051.9	1053.3	1056.7	1061.5	1059.4
10°	1044.4	1045.1	1049.2	1052.6	1048.5
12.5°	1032.1	1034.1	1038.9	1041.7	1040.3
15°	1017.0	1019.1	1025.3	1031.4	1031.4
17.5°	999.3	1002.0	1009.5	1017.7	1018.4
20°	979.4	981.5	991.1	999.3	999.3
22.5°	956.9	959.6	969.2	978.1	979.4
25°	932.9	935.0	945.9	957.5	957.5
27.5°	904.9	909.0	922.7	934.3	937.0
30°	877.5	880.9	896.0	910.3	912.4
32.5°	848.8	852.9	868.6	884.4	887.8
35°	818.0	822.1	839.2	856.3	860.4
37.5°	785.9	790.7	808.4	828.3	832.4
40°	752.4	757.8	777.0	798.2	802.3
42.5°	716.8	724.3	744.8	766.7	772.9
45°	681.2	688.7	709.9	734.6	741.4
47.5°	643.6	652.5	674.4	700.4	707.9
50°	606.0	614.9	637.4	665.5	673.7
52.5°	567.7	576.6	599.8	629.2	638.1
55°	526.6	536.2	560.8	592.3	601.9
57.5°	484.2	496.6	522.5	554.7	564.3
60°	441.8	454.1	483.6	515.0	526.0
62.5°	400.1	411.7	441.8	475.3	487.0
65°	356.3	368.7	400.8	434.3	445.9
67.5°	313.3	325.6	357.7	392.6	404.9
70°	268.8	282.5	315.3	350.2	362.5
72.5°	224.3	238.7	272.2	307.8	319.4
75°	181.2	195.6	229.1	265.4	277.0
77.5°	138.8	154.6	187.4	224.3	235.3
80°	100.5	115.6	146.4	182.6	194.9
82.5°	64.3	77.3	108.1	142.3	151.2
85°	32.8	45.1	66.3	84.1	85.5
87.5°	10.3	14.4	21.9	32.8	33.5
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	15.67	17.33	16.04	17.65	17.96	16.50	18.16	16.87	18.48	18.79
	3H	17.43	18.93	17.80	19.26	19.62	18.62	20.13	18.99	20.45	20.81
	4H	18.05	19.47	18.44	19.82	20.19	19.51	20.93	19.90	21.28	21.65
	6H	18.46	19.78	18.87	20.14	20.53	20.29	21.61	20.70	21.97	22.36
	8H	18.56	19.83	18.99	20.22	20.61	20.61	21.87	21.03	22.26	22.66
	12H	18.62	19.83	19.04	20.21	20.64	20.82	22.03	21.25	22.41	22.84
4H	2H	16.44	17.87	16.84	18.21	18.59	17.09	18.51	17.49	18.86	19.23
	3H	18.42	19.62	18.83	20.02	20.41	19.44	20.64	19.85	21.04	21.44
	4H	19.16	20.24	19.59	20.66	21.09	20.50	21.58	20.93	22.00	22.43
	6H	19.69	20.64	20.14	21.08	21.53	21.45	22.40	21.90	22.84	23.29
	8H	19.83	20.72	20.29	21.17	21.63	21.85	22.74	22.31	23.18	23.64
	12H	19.92	20.72	20.39	21.19	21.66	22.12	22.93	22.60	23.40	23.87
8H	4H	19.62	20.51	20.08	20.95	21.41	20.79	21.68	21.24	22.12	22.58
	6H	20.28	21.02	20.77	21.51	21.98	21.90	22.64	22.39	23.13	23.60
	8H	20.49	21.16	21.00	21.66	22.15	22.41	23.08	22.92	23.58	24.07
	12H	20.63	21.22	21.13	21.71	22.27	22.80	23.39	23.30	23.88	24.44
12H	4H	19.71	20.51	20.18	20.98	21.45	20.81	21.61	21.29	22.09	22.56
	6H	20.41	21.08	20.92	21.58	22.07	21.94	22.61	22.45	23.12	23.60
	8H	20.69	21.28	21.19	21.77	22.33	22.52	23.11	23.03	23.60	24.16