

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: P1586349

Luminaire Tested: 22CZSP-33HE-L945

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586349
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-33HE-L945
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

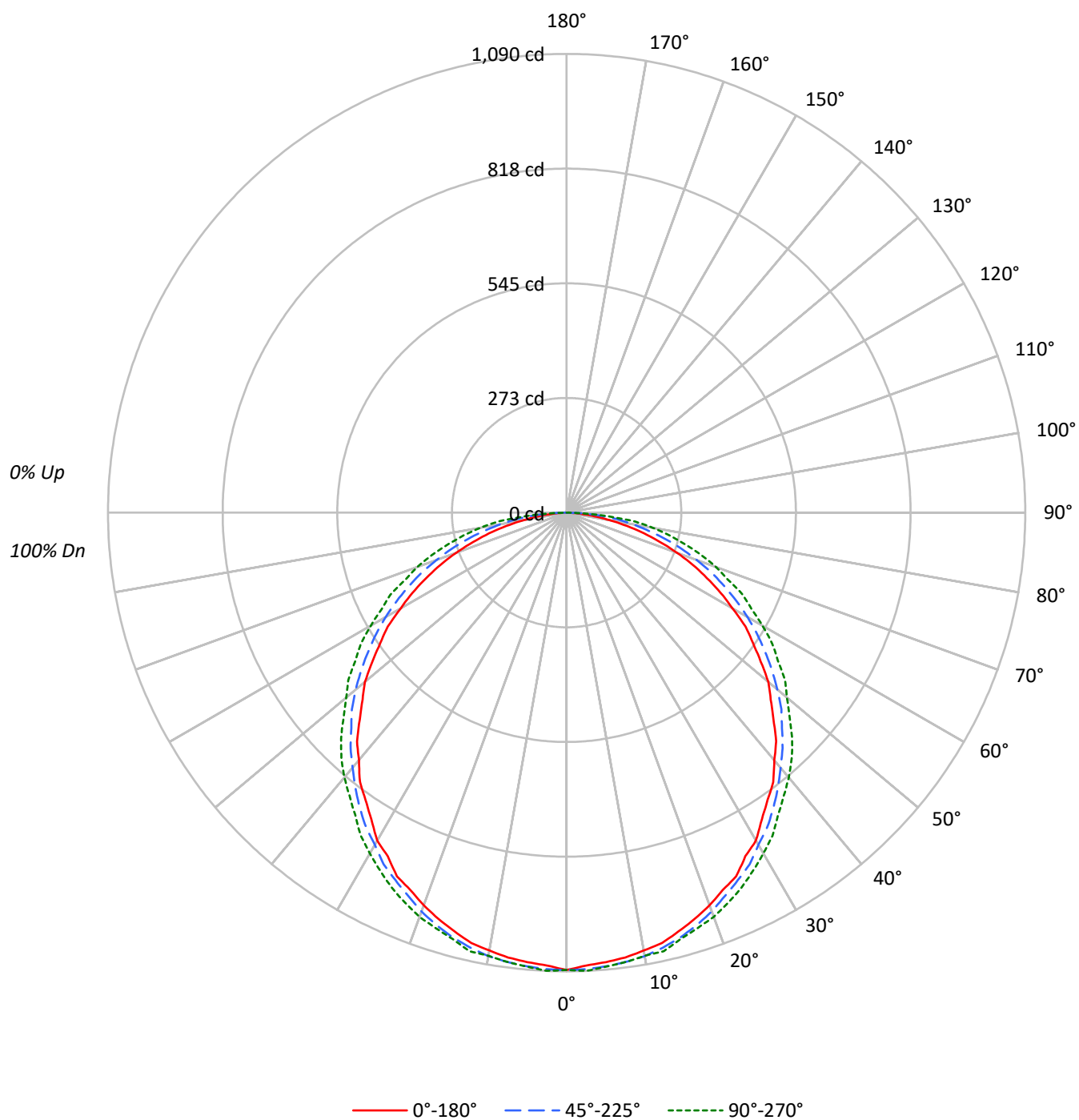
Lumens per Lamp: N/A
Luminaire Lumens: 3201.0 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.38
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35		46	40	34		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3403	3403	3403
5°	3370	3401	3404
10°	3359	3403	3399
15°	3339	3387	3399
20°	3308	3360	3406
25°	3295	3329	3396
30°	3253	3296	3381
35°	3185	3275	3350
40°	3138	3234	3358
45°	3078	3204	3356
50°	3048	3186	3329
55°	2950	3143	3346
60°	2851	3109	3366
65°	2727	3062	3424
70°	2564	3003	3460
75°	2310	2950	3530
80°	1890	2896	3760
85°	1232	2885	3517

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3946 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	3.2
10°-20°	294.2	9.2
20°-30°	444.5	13.9
30°-40°	536.2	16.8
40°-50°	560.5	17.5
50°-60°	516.9	16.1
60°-70°	409.6	12.8
70°-80°	256.1	8.0
80°-90°	80.3	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°	841.4	26.3
0°-40°	1377.6	43.0
0°-60°	2455.0	76.7
0°-90°	3201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1072	1077	1082	1086	1083	102
15°	1030	1035	1045	1052	1049	291
25°	954	951	963	977	983	437
35°	833	843	857	871	876	523
45°	695	705	724	742	758	538
55°	540	553	576	607	613	485
65°	368	384	413	446	462	365
75°	191	207	244	278	292	201
85°	34	49	80	94	98	45
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086.8	1086.8	1086.8	1086.8	1086.8
2.5°	1077.0	1081.9	1085.8	1084.8	1089.7
5°	1072.1	1077.0	1081.9	1085.8	1082.9
7.5°	1066.2	1071.1	1077.0	1082.9	1077.0
10°	1056.4	1059.4	1070.1	1071.1	1069.1
12.5°	1047.6	1050.5	1058.4	1065.2	1067.2
15°	1030.0	1034.9	1044.7	1051.5	1048.6
17.5°	1012.4	1019.2	1028.0	1034.9	1034.9
20°	992.8	997.7	1008.4	1013.3	1022.2
22.5°	970.3	976.1	984.9	998.7	1003.5
25°	953.6	950.7	963.4	977.1	983.0
27.5°	920.3	924.2	941.9	954.6	959.5
30°	899.8	901.7	911.5	929.1	935.0
32.5°	863.5	869.4	887.0	899.8	910.5
35°	833.2	843.0	856.7	871.4	876.3
37.5°	806.8	808.7	824.4	844.0	847.9
40°	767.6	779.3	791.1	815.6	821.4
42.5°	737.2	743.1	759.8	783.3	792.1
45°	695.1	704.9	723.5	742.1	757.8
47.5°	657.9	667.7	692.2	715.7	718.6
50°	625.6	629.5	654.0	680.5	683.4
52.5°	581.6	591.4	614.9	644.2	654.0
55°	540.4	553.2	575.7	607.0	612.9
57.5°	504.2	510.1	536.5	567.9	579.6
60°	455.3	471.9	496.4	526.7	537.5
62.5°	413.2	428.8	455.3	483.7	495.4
65°	368.1	383.8	413.2	445.5	462.1
67.5°	325.1	337.8	373.0	406.3	414.1
70°	280.0	294.7	328.0	362.3	377.9
72.5°	233.0	249.7	286.9	319.2	335.8
75°	190.9	206.6	243.8	278.1	291.8
77.5°	146.9	164.5	200.7	235.0	250.6
80°	104.8	122.4	160.6	194.8	208.5
82.5°	67.6	86.2	122.4	152.7	164.5
85°	34.3	49.0	80.3	94.0	97.9
87.5°	10.8	17.6	27.4	31.3	31.3
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	15.78	17.45	16.14	17.76	18.08	16.57	18.24	16.93	18.55	18.87
	3H	17.56	19.07	17.94	19.40	19.76	18.71	20.23	19.09	20.55	20.91
	4H	18.20	19.63	18.60	19.97	20.35	19.64	21.06	20.03	21.41	21.79
	6H	18.63	19.95	19.04	20.32	20.71	20.46	21.79	20.87	22.15	22.54
	8H	18.74	20.01	19.16	20.39	20.79	20.81	22.08	21.23	22.46	22.86
	12H	18.79	20.01	19.22	20.39	20.82	21.05	22.27	21.48	22.65	23.08
4H	2H	16.55	17.98	16.95	18.33	18.70	17.17	18.59	17.56	18.94	19.32
	3H	18.56	19.77	18.97	20.16	20.56	19.55	20.76	19.96	21.15	21.55
	4H	19.32	20.42	19.75	20.83	21.26	20.64	21.73	21.07	22.14	22.58
	6H	19.87	20.83	20.32	21.27	21.72	21.64	22.60	22.09	23.03	23.49
	8H	20.03	20.92	20.48	21.37	21.83	22.06	22.96	22.52	23.40	23.87
	12H	20.12	20.92	20.59	21.40	21.87	22.38	23.19	22.86	23.66	24.13
8H	4H	19.80	20.70	20.26	21.14	21.61	20.95	21.84	21.41	22.29	22.75
	6H	20.49	21.24	20.99	21.73	22.20	22.11	22.86	22.60	23.35	23.82
	8H	20.72	21.40	21.23	21.90	22.38	22.66	23.33	23.16	23.83	24.32
	12H	20.87	21.47	21.37	21.96	22.51	23.08	23.68	23.59	24.17	24.73
12H	4H	19.90	20.71	20.38	21.18	21.65	20.98	21.78	21.45	22.26	22.73
	6H	20.64	21.32	21.15	21.82	22.31	22.17	22.84	22.67	23.35	23.83
	8H	20.95	21.54	21.45	22.03	22.59	22.78	23.38	23.29	23.87	24.43