

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: P1586581

Luminaire Tested: 22CZSP-A-33HE-L850

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586581
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-A-33HE-L850
Description: 2x2 CZSP LED Luminaire, 5000K CCT and 3000 lumens, 80CRI, Ribbed Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

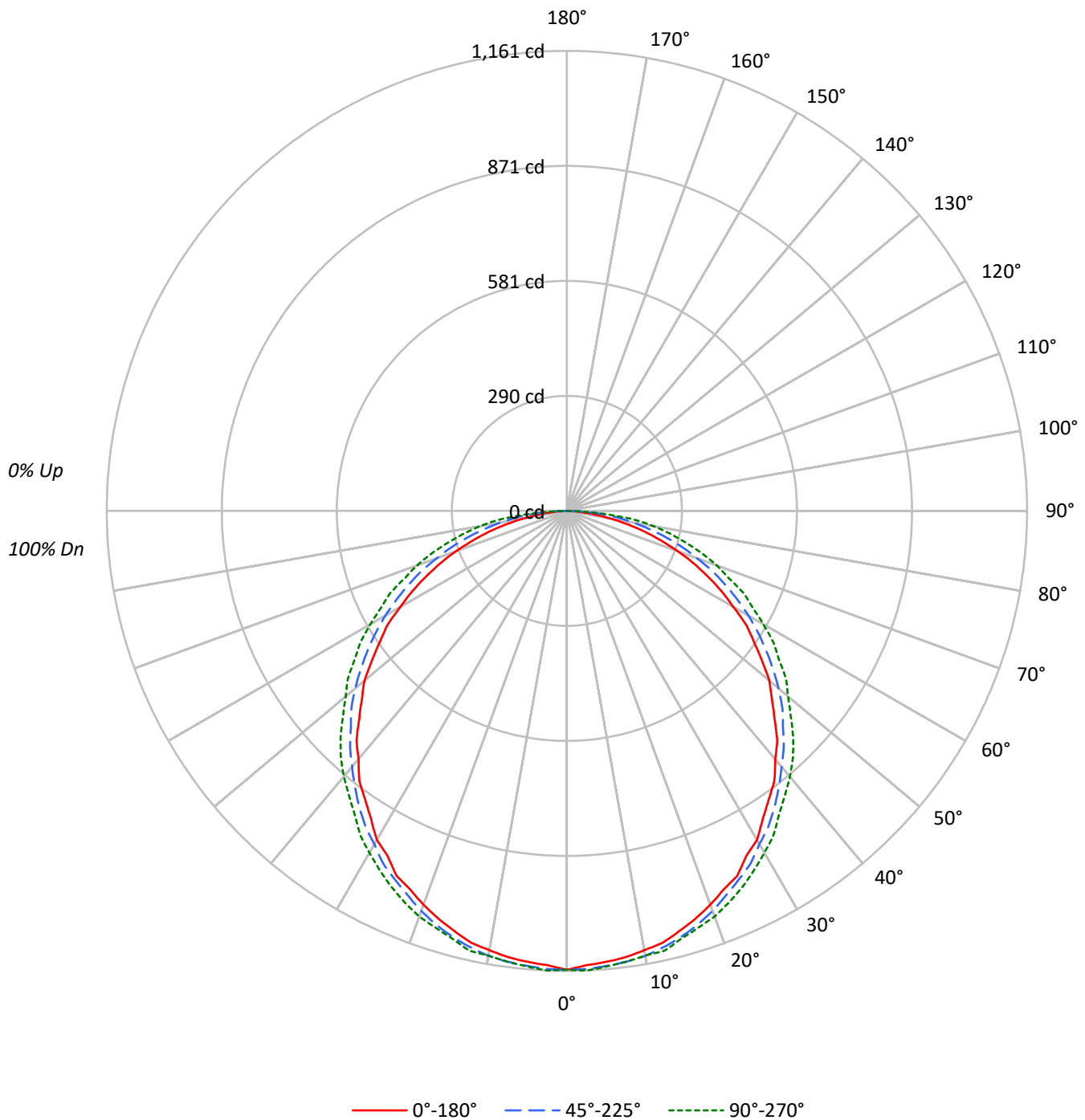
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3411.0 lumens
Efficiency: N/A
Efficacy: 157.2 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

TEST NUMBER: P1586581
CATALOG NUMBER: 22CZSP-A-33HE-L850

Luminous Intensity Polar Plot



TEST NUMBER: P1586581

CATALOG NUMBER: 22CZSP-A-33HE-L850

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°	3626	3626	3626
5°	3591	3624	3627
10°	3579	3626	3623
15°	3558	3609	3622
20°	3525	3581	3630
25°	3511	3547	3619
30°	3467	3512	3603
35°	3394	3490	3570
40°	3343	3446	3578
45°	3280	3414	3576
50°	3248	3395	3547
55°	3144	3349	3565
60°	3038	3313	3587
65°	2907	3262	3648
70°	2732	3200	3687
75°	2461	3143	3761
80°	2012	3085	4007
85°	1311	3075	3747

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4205 cd/sqm

TEST NUMBER: P1586581

CATALOG NUMBER: 22CZSP-A-33HE-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	3.2
10°-20°	313.5	9.2
20°-30°	473.7	13.9
30°-40°	571.4	16.8
40°-50°	597.3	17.5
50°-60°	550.8	16.1
60°-70°	436.4	12.8
70°-80°	272.9	8.0
80°-90°	85.6	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°	896.6	26.3
0°-40°	1468.0	43.0
0°-60°	2616.1	76.7
0°-90°	3411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1142	1148	1153	1157	1154	109
15°	1098	1103	1113	1120	1117	310
25°	1016	1013	1027	1041	1048	466
35°	888	898	913	928	934	557
45°	741	751	771	791	808	573
55°	576	590	614	647	653	516
65°	392	409	440	475	492	389
75°	203	220	260	296	311	214
85°	36	52	86	100	104	48
90°	0	0	0	0	0	

TEST NUMBER: P1586581

CATALOG NUMBER: 22CZSP-A-33HE-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.1	1158.1	1158.1	1158.1	1158.1
2.5°	1147.6	1152.8	1157.0	1156.0	1161.2
5°	1142.4	1147.6	1152.8	1157.0	1153.9
7.5°	1136.2	1141.4	1147.6	1153.9	1147.6
10°	1125.7	1128.9	1140.3	1141.4	1139.3
12.5°	1116.3	1119.5	1127.8	1135.1	1137.2
15°	1097.6	1102.8	1113.2	1120.5	1117.4
17.5°	1078.8	1086.1	1095.5	1102.8	1102.8
20°	1057.9	1063.1	1074.6	1079.8	1089.2
22.5°	1033.9	1040.2	1049.6	1064.2	1069.4
25°	1016.2	1013.0	1026.6	1041.2	1047.5
27.5°	980.7	984.9	1003.7	1017.2	1022.4
30°	958.8	960.9	971.3	990.1	996.4
32.5°	920.2	926.5	945.2	958.8	970.3
35°	887.9	898.3	912.9	928.5	933.8
37.5°	859.7	861.8	878.5	899.3	903.5
40°	817.9	830.5	843.0	869.1	875.3
42.5°	785.6	791.9	809.6	834.6	844.0
45°	740.7	751.2	771.0	790.8	807.5
47.5°	701.1	711.5	737.6	762.7	765.8
50°	666.7	670.8	696.9	725.1	728.2
52.5°	619.7	630.2	655.2	686.5	696.9
55°	575.9	589.5	613.5	646.8	653.1
57.5°	537.3	543.6	571.7	605.1	617.6
60°	485.1	502.9	529.0	561.3	572.8
62.5°	440.3	457.0	485.1	515.4	527.9
65°	392.3	409.0	440.3	474.7	492.4
67.5°	346.4	359.9	397.5	433.0	441.3
70°	298.4	314.0	349.5	386.0	402.7
72.5°	248.3	266.0	305.7	340.1	357.9
75°	203.4	220.1	259.8	296.3	310.9
77.5°	156.5	175.3	213.9	250.4	267.1
80°	111.6	130.4	171.1	207.6	222.2
82.5°	72.0	91.8	130.4	162.8	175.3
85°	36.5	52.2	85.6	100.2	104.3
87.5°	11.5	18.8	29.2	33.4	33.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586581

CATALOG NUMBER: 22CZSP-A-33HE-L850

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	16.00	17.67	16.37	17.98	18.30	16.79	18.46	17.15	18.77	19.09
	3H	17.78	19.30	18.16	19.62	19.98	18.93	20.45	19.31	20.77	21.13
	4H	18.42	19.85	18.82	20.19	20.57	19.86	21.29	20.25	21.63	22.01
	6H	18.85	20.17	19.26	20.54	20.93	20.68	22.01	21.09	22.37	22.76
	8H	18.96	20.23	19.38	20.62	21.01	21.03	22.30	21.45	22.69	23.08
	12H	19.01	20.23	19.44	20.61	21.04	21.27	22.49	21.70	22.87	23.30
4H	2H	16.77	18.20	17.17	18.55	18.92	17.39	18.81	17.78	19.16	19.54
	3H	18.78	19.99	19.19	20.38	20.78	19.77	20.98	20.18	21.37	21.77
	4H	19.54	20.64	19.97	21.05	21.48	20.86	21.95	21.29	22.36	22.80
	6H	20.09	21.05	20.54	21.49	21.94	21.86	22.82	22.31	23.26	23.71
	8H	20.25	21.14	20.71	21.59	22.05	22.28	23.18	22.74	23.62	24.09
	12H	20.33	21.14	20.81	21.62	22.09	22.60	23.41	23.08	23.88	24.35
8H	4H	20.02	20.92	20.48	21.36	21.83	21.17	22.06	21.63	22.51	22.97
	6H	20.71	21.46	21.21	21.95	22.42	22.33	23.08	22.82	23.57	24.04
	8H	20.94	21.62	21.45	22.12	22.60	22.88	23.55	23.38	24.05	24.54
	12H	21.09	21.69	21.59	22.18	22.73	23.31	23.90	23.81	24.39	24.95
12H	4H	20.12	20.93	20.60	21.40	21.87	21.20	22.00	21.67	22.48	22.95
	6H	20.86	21.54	21.37	22.04	22.53	22.39	23.06	22.90	23.57	24.05
	8H	21.17	21.76	21.67	22.25	22.81	23.01	23.60	23.51	24.09	24.65