

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: P1586588

Luminaire Tested: 22CZSP-A-33HE-L945-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586588
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-33HE-L945-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3000 lumens, 90CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

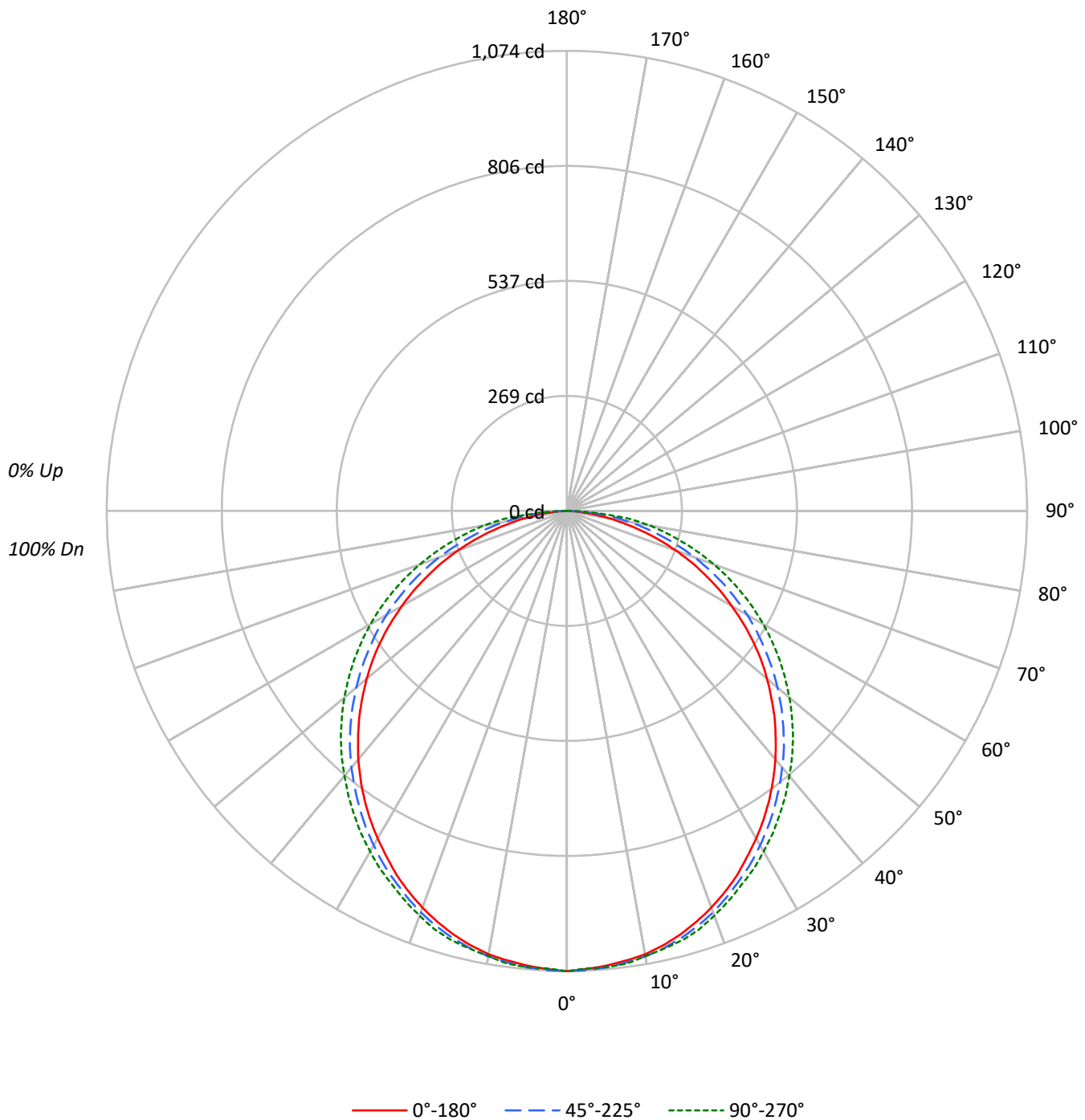
Lumens per Lamp: N/A
Luminaire Lumens: 3137.0 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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°	3365	3365	3365
5°	3349	3362	3360
10°	3342	3357	3355
15°	3318	3345	3365
20°	3285	3324	3351
25°	3244	3289	3330
30°	3193	3260	3320
35°	3147	3229	3310
40°	3095	3197	3300
45°	3036	3164	3304
50°	2971	3125	3303
55°	2893	3081	3307
60°	2785	3048	3315
65°	2657	2989	3325
70°	2477	2905	3340
75°	2207	2790	3373
80°	1825	2656	3538
85°	1186	2400	3090

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 3649 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	3.2
10°-20°	291.0	9.3
20°-30°	438.8	14.0
30°-40°	528.6	16.8
40°-50°	552.0	17.6
50°-60°	507.0	16.2
60°-70°	399.3	12.7
70°-80°	245.0	7.8
80°-90°	73.7	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°	831.4	26.5
0°-40°	1360.0	43.4
0°-60°	2419.0	77.1
0°-90°	3137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1066	1067	1070	1073	1069	101
15°	1024	1026	1032	1038	1038	289
25°	939	941	952	964	964	432
35°	823	827	845	862	866	515
45°	686	693	714	739	746	529
55°	530	540	564	596	606	473
65°	359	371	403	437	449	355
75°	182	197	231	267	279	193
85°	33	45	67	85	86	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.5	1074.5	1074.5	1074.5	1074.5
2.5°	1070.4	1072.4	1073.1	1073.8	1069.0
5°	1065.6	1066.9	1069.7	1073.1	1069.0
7.5°	1058.7	1060.1	1063.5	1068.3	1066.2
10°	1051.1	1051.8	1055.9	1059.4	1055.2
12.5°	1038.7	1040.8	1045.6	1048.3	1047.0
15°	1023.6	1025.6	1031.8	1038.0	1038.0
17.5°	1005.7	1008.4	1016.0	1024.3	1024.9
20°	985.7	987.8	997.4	1005.7	1005.7
22.5°	963.0	965.7	975.4	984.3	985.7
25°	938.9	941.0	952.0	963.7	963.7
27.5°	910.7	914.8	928.6	940.3	943.0
30°	883.1	886.6	901.7	916.2	918.3
32.5°	854.2	858.4	874.2	890.0	893.5
35°	823.3	827.4	844.6	861.8	865.9
37.5°	790.9	795.7	813.6	833.6	837.7
40°	757.2	762.7	782.0	803.3	807.4
42.5°	721.4	729.0	749.6	771.6	777.8
45°	685.6	693.2	714.5	739.3	746.2
47.5°	647.7	656.7	678.7	704.9	712.4
50°	609.9	618.8	641.5	669.8	678.0
52.5°	571.3	580.3	603.7	633.3	642.2
55°	530.0	539.7	564.4	596.1	605.7
57.5°	487.3	499.7	525.9	558.2	567.9
60°	444.7	457.1	486.7	518.3	529.3
62.5°	402.7	414.4	444.7	478.4	490.1
65°	358.6	371.0	403.4	437.1	448.8
67.5°	315.3	327.7	360.0	395.1	407.5
70°	270.5	284.3	317.3	352.4	364.8
72.5°	225.8	240.2	274.0	309.8	321.5
75°	182.4	196.9	230.6	267.1	278.8
77.5°	139.7	155.6	188.6	225.8	236.8
80°	101.2	116.3	147.3	183.8	196.2
82.5°	64.7	77.8	108.8	143.2	152.1
85°	33.0	45.4	66.8	84.7	86.0
87.5°	10.3	14.5	22.0	33.0	33.7
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	15.69	17.36	16.06	17.67	17.98	16.52	18.19	16.89	18.50	18.81
	3H	17.45	18.96	17.83	19.28	19.64	18.64	20.15	19.02	20.47	20.83
	4H	18.07	19.49	18.47	19.84	20.21	19.53	20.95	19.93	21.30	21.67
	6H	18.48	19.80	18.89	20.16	20.55	20.31	21.63	20.72	21.99	22.38
	8H	18.59	19.85	19.01	20.24	20.64	20.63	21.89	21.05	22.28	22.68
	12H	18.64	19.85	19.07	20.23	20.66	20.84	22.05	21.27	22.43	22.86
4H	2H	16.47	17.89	16.86	18.23	18.61	17.11	18.53	17.51	18.88	19.26
	3H	18.44	19.64	18.85	20.04	20.44	19.47	20.66	19.88	21.06	21.46
	4H	19.18	20.27	19.61	20.68	21.11	20.52	21.61	20.95	22.02	22.45
	6H	19.71	20.66	20.16	21.10	21.55	21.47	22.42	21.92	22.86	23.32
	8H	19.85	20.75	20.31	21.19	21.65	21.87	22.76	22.33	23.20	23.67
	12H	19.94	20.74	20.42	21.22	21.68	22.15	22.95	22.62	23.42	23.89
8H	4H	19.64	20.53	20.10	20.97	21.44	20.81	21.70	21.27	22.14	22.61
	6H	20.30	21.04	20.79	21.53	22.00	21.92	22.66	22.41	23.15	23.62
	8H	20.51	21.18	21.02	21.68	22.17	22.43	23.10	22.94	23.60	24.09
	12H	20.65	21.24	21.15	21.73	22.29	22.82	23.41	23.32	23.90	24.46
12H	4H	19.73	20.53	20.21	21.01	21.47	20.83	21.64	21.31	22.11	22.58
	6H	20.43	21.10	20.94	21.61	22.09	21.97	22.64	22.47	23.14	23.63
	8H	20.71	21.30	21.22	21.79	22.35	22.55	23.14	23.05	23.63	24.19