

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: P1586616

Luminaire Tested: 22CZSP-A-37HE-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586616
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-37HE-L840-S
Description: 2x2 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

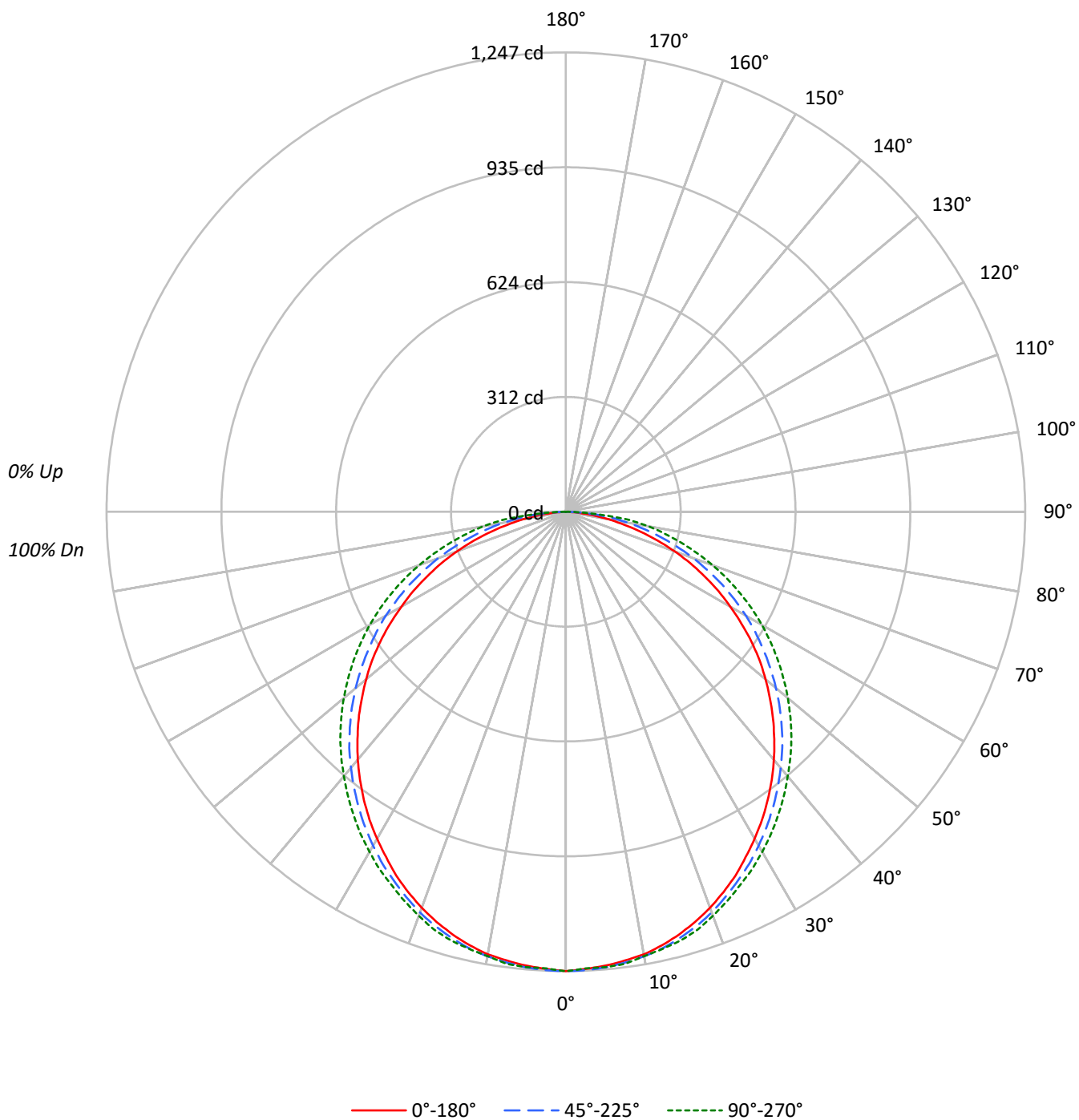
Lumens per Lamp: N/A
Luminaire Lumens: 3641.0 lumens
Efficiency: N/A
Efficacy: 151.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1586616

CATALOG NUMBER: 22CZSP-A-37HE-L840-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586616

CATALOG NUMBER: 22CZSP-A-37HE-L840-S

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°	3905	3905	3905
5°	3888	3902	3900
10°	3879	3897	3894
15°	3851	3882	3906
20°	3812	3858	3889
25°	3765	3817	3864
30°	3706	3784	3854
35°	3653	3747	3842
40°	3592	3710	3831
45°	3524	3672	3835
50°	3449	3627	3834
55°	3359	3576	3838
60°	3232	3537	3848
65°	3084	3469	3860
70°	2875	3372	3876
75°	2561	3238	3915
80°	2117	3084	4106
85°	1376	2784	3589

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4237 cd/sqm

TEST NUMBER: P1586616

CATALOG NUMBER: 22CZSP-A-37HE-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	3.2
10°-20°	337.7	9.3
20°-30°	509.3	14.0
30°-40°	613.5	16.8
40°-50°	640.7	17.6
50°-60°	588.4	16.2
60°-70°	463.5	12.7
70°-80°	284.3	7.8
80°-90°	85.6	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°	965.0	26.5
0°-40°	1578.5	43.4
0°-60°	2807.7	77.1
0°-90°	3641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3641.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1237	1238	1242	1246	1241	118
15°	1188	1190	1198	1205	1205	335
25°	1090	1092	1105	1118	1118	502
35°	956	960	980	1000	1005	598
45°	796	804	829	858	866	614
55°	615	626	655	692	703	549
65°	416	431	468	507	521	412
75°	212	228	268	310	324	224
85°	38	53	78	98	100	50
90°	0	0	0	0	0	

TEST NUMBER: P1586616

CATALOG NUMBER: 22CZSP-A-37HE-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.1	1247.1	1247.1	1247.1	1247.1
2.5°	1242.3	1244.7	1245.5	1246.3	1240.7
5°	1236.8	1238.4	1241.5	1245.5	1240.7
7.5°	1228.8	1230.4	1234.4	1239.9	1237.6
10°	1220.0	1220.8	1225.6	1229.6	1224.8
12.5°	1205.6	1208.0	1213.6	1216.8	1215.2
15°	1188.0	1190.4	1197.6	1204.8	1204.8
17.5°	1167.2	1170.4	1179.2	1188.8	1189.6
20°	1144.1	1146.5	1157.7	1167.2	1167.2
22.5°	1117.7	1120.9	1132.1	1142.5	1144.1
25°	1089.7	1092.1	1104.9	1118.5	1118.5
27.5°	1057.0	1061.8	1077.8	1091.3	1094.5
30°	1025.0	1029.0	1046.6	1063.4	1065.8
32.5°	991.5	996.3	1014.6	1033.0	1037.0
35°	955.5	960.3	980.3	1000.3	1005.1
37.5°	918.0	923.6	944.3	967.5	972.3
40°	878.8	885.2	907.6	932.4	937.2
42.5°	837.3	846.1	870.0	895.6	902.8
45°	795.7	804.5	829.3	858.1	866.0
47.5°	751.8	762.2	787.8	818.1	826.9
50°	707.9	718.2	744.6	777.4	787.0
52.5°	663.1	673.5	700.7	735.0	745.4
55°	615.2	626.4	655.1	691.9	703.1
57.5°	565.6	580.0	610.4	647.9	659.1
60°	516.1	530.5	564.8	601.6	614.4
62.5°	467.4	481.0	516.1	555.3	568.8
65°	416.2	430.6	468.2	507.3	520.9
67.5°	365.9	380.3	417.8	458.6	473.0
70°	314.0	330.0	368.3	409.1	423.4
72.5°	262.1	278.8	318.0	359.5	373.1
75°	211.7	228.5	267.6	310.0	323.6
77.5°	162.2	180.6	218.9	262.1	274.8
80°	117.4	135.0	171.0	213.3	227.7
82.5°	75.1	90.3	126.2	166.2	176.6
85°	38.3	52.7	77.5	98.3	99.9
87.5°	12.0	16.8	25.6	38.3	39.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586616

CATALOG NUMBER: 22CZSP-A-37HE-L840-S

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	16.21	17.87	16.58	18.19	18.50	17.04	18.70	17.41	19.02	19.33
	3H	17.97	19.47	18.34	19.80	20.16	19.16	20.67	19.53	20.99	21.35
	4H	18.59	20.01	18.98	20.35	20.73	20.05	21.47	20.44	21.82	22.19
	6H	19.00	20.32	19.41	20.68	21.07	20.83	22.15	21.24	22.51	22.90
	8H	19.10	20.37	19.53	20.75	21.15	21.15	22.41	21.57	22.80	23.20
	12H	19.16	20.37	19.58	20.75	21.18	21.36	22.57	21.79	22.95	23.38
4H	2H	16.98	18.41	17.38	18.75	19.13	17.63	19.05	18.03	19.40	19.77
	3H	18.96	20.16	19.37	20.55	20.95	19.98	21.18	20.39	21.58	21.98
	4H	19.70	20.78	20.13	21.20	21.63	21.04	22.12	21.47	22.54	22.97
	6H	20.23	21.18	20.68	21.62	22.07	21.99	22.94	22.44	23.38	23.83
	8H	20.37	21.26	20.83	21.71	22.17	22.39	23.28	22.85	23.72	24.18
	12H	20.46	21.26	20.93	21.73	22.20	22.66	23.47	23.14	23.94	24.41
8H	4H	20.16	21.05	20.61	21.49	21.95	21.33	22.22	21.78	22.66	23.12
	6H	20.82	21.56	21.31	22.05	22.52	22.44	23.18	22.93	23.67	24.14
	8H	21.03	21.70	21.54	22.20	22.69	22.95	23.62	23.46	24.12	24.61
	12H	21.17	21.76	21.67	22.25	22.81	23.34	23.93	23.84	24.42	24.98
12H	4H	20.25	21.05	20.72	21.52	21.99	21.35	22.15	21.83	22.63	23.10
	6H	20.95	21.62	21.46	22.12	22.61	22.48	23.15	22.99	23.66	24.14
	8H	21.23	21.82	21.73	22.31	22.87	23.06	23.65	23.57	24.14	24.70