

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: P1586618

Luminaire Tested: 22CZSP-A-37HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586618
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-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

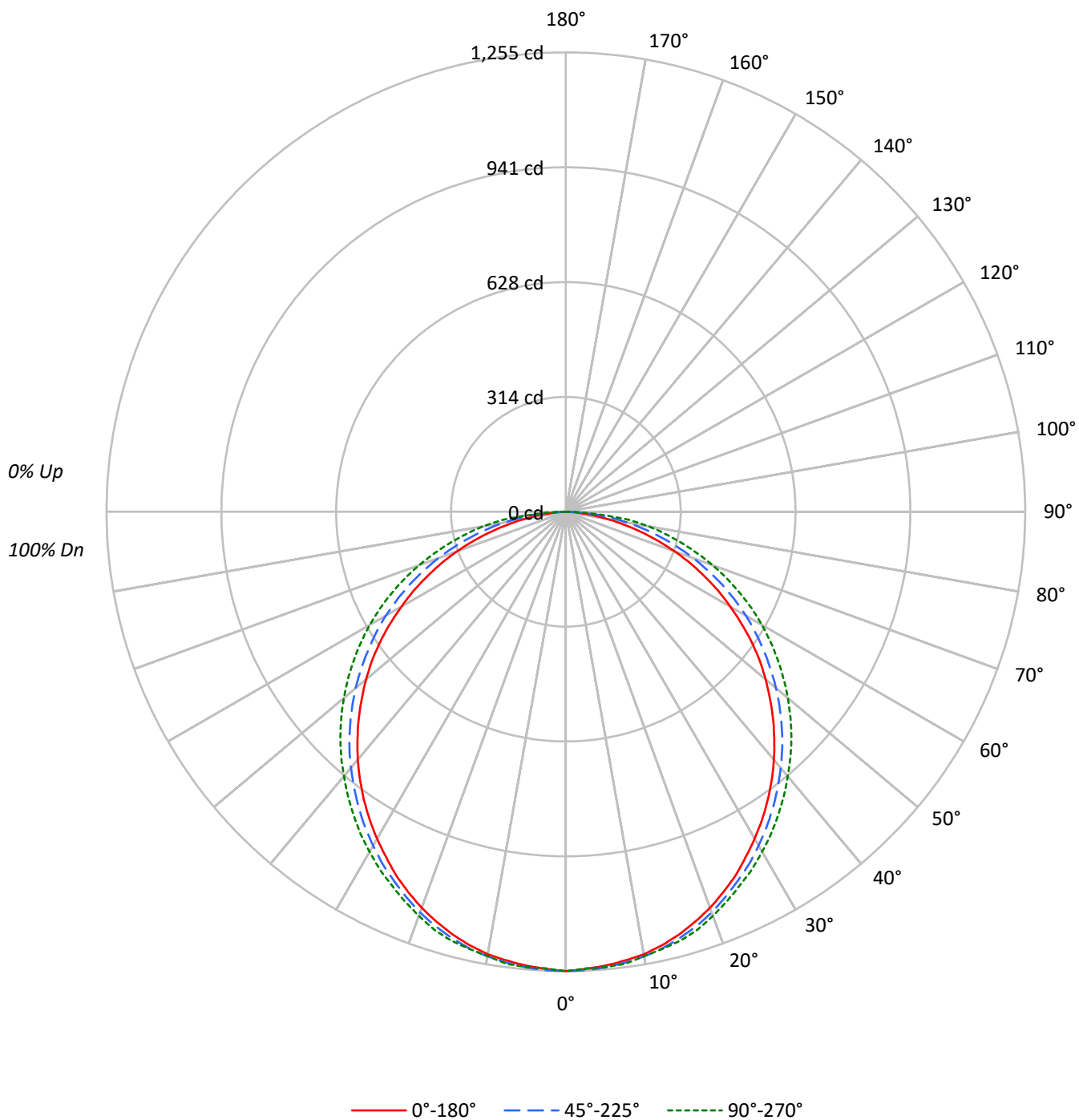
Lumens per Lamp: N/A
Luminaire Lumens: 3664.0 lumens
Efficiency: N/A
Efficacy: 152.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

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: P1586618

CATALOG NUMBER: 22CZSP-A-37HE-L845-S

Luminous Intensity Polar Plot



TEST NUMBER: P1586618

CATALOG NUMBER: 22CZSP-A-37HE-L845-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°	3930	3930	3930
5°	3912	3927	3925
10°	3904	3921	3919
15°	3876	3907	3930
20°	3836	3882	3914
25°	3789	3842	3889
30°	3730	3808	3878
35°	3676	3771	3866
40°	3615	3733	3855
45°	3546	3695	3859
50°	3470	3650	3858
55°	3380	3599	3862
60°	3253	3560	3872
65°	3104	3491	3884
70°	2893	3393	3901
75°	2578	3258	3939
80°	2131	3103	4131
85°	1387	2802	3611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 4263 cd/sqm

TEST NUMBER: P1586618

CATALOG NUMBER: 22CZSP-A-37HE-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	3.2
10°-20°	339.9	9.3
20°-30°	512.6	14.0
30°-40°	617.4	16.8
40°-50°	644.8	17.6
50°-60°	592.1	16.2
60°-70°	466.4	12.7
70°-80°	286.1	7.8
80°-90°	86.1	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°	971.1	26.5
0°-40°	1588.5	43.4
0°-60°	2825.4	77.1
0°-90°	3664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1245	1246	1249	1253	1249	118
15°	1196	1198	1205	1212	1212	337
25°	1097	1099	1112	1126	1126	505
35°	962	966	986	1007	1011	601
45°	801	810	834	864	872	617
55°	619	630	659	696	708	553
65°	419	433	471	510	524	414
75°	213	230	269	312	326	226
85°	39	53	78	99	100	50
90°	0	0	0	0	0	

TEST NUMBER: P1586618

CATALOG NUMBER: 22CZSP-A-37HE-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1255.0	1255.0	1255.0	1255.0	1255.0
2.5°	1250.2	1252.6	1253.4	1254.2	1248.6
5°	1244.6	1246.2	1249.4	1253.4	1248.6
7.5°	1236.5	1238.1	1242.2	1247.8	1245.4
10°	1227.7	1228.5	1233.3	1237.3	1232.5
12.5°	1213.2	1215.6	1221.3	1224.5	1222.9
15°	1195.5	1197.9	1205.2	1212.4	1212.4
17.5°	1174.6	1177.8	1186.7	1196.3	1197.1
20°	1151.3	1153.7	1165.0	1174.6	1174.6
22.5°	1124.8	1128.0	1139.2	1149.7	1151.3
25°	1096.6	1099.0	1111.9	1125.6	1125.6
27.5°	1063.7	1068.5	1084.6	1098.2	1101.5
30°	1031.5	1035.5	1053.2	1070.1	1072.5
32.5°	997.7	1002.6	1021.1	1039.6	1043.6
35°	961.6	966.4	986.5	1006.6	1011.4
37.5°	923.8	929.4	950.3	973.6	978.4
40°	884.4	890.8	913.3	938.2	943.1
42.5°	842.6	851.4	875.5	901.3	908.5
45°	800.8	809.6	834.5	863.5	871.5
47.5°	756.5	767.0	792.7	823.3	832.1
50°	712.3	722.8	749.3	782.3	791.9
52.5°	667.3	677.8	705.1	739.7	750.1
55°	619.1	630.3	659.3	696.2	707.5
57.5°	569.2	583.7	614.2	652.0	663.3
60°	519.4	533.8	568.4	605.4	618.3
62.5°	470.3	484.0	519.4	558.8	572.4
65°	418.9	433.3	471.1	510.5	524.2
67.5°	368.2	382.7	420.5	461.5	476.0
70°	316.0	332.0	370.6	411.6	426.1
72.5°	263.7	280.6	320.0	361.8	375.5
75°	213.1	229.9	269.3	311.9	325.6
77.5°	163.2	181.7	220.3	263.7	276.6
80°	118.2	135.9	172.1	214.7	229.1
82.5°	75.6	90.9	127.0	167.2	177.7
85°	38.6	53.1	78.0	98.9	100.5
87.5°	12.1	16.9	25.7	38.6	39.4
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1586618

CATALOG NUMBER: 22CZSP-A-37HE-L845-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	16.23	17.90	16.60	18.21	18.52	17.06	18.73	17.43	19.04	19.35
	3H	17.99	19.50	18.36	19.82	20.18	19.18	20.69	19.56	21.01	21.37
	4H	18.61	20.03	19.00	20.38	20.75	20.07	21.49	20.47	21.84	22.21
	6H	19.02	20.34	19.43	20.70	21.09	20.85	22.17	21.26	22.53	22.92
	8H	19.13	20.39	19.55	20.78	21.18	21.17	22.43	21.59	22.82	23.22
	12H	19.18	20.39	19.61	20.77	21.20	21.38	22.59	21.81	22.97	23.40
4H	2H	17.00	18.43	17.40	18.77	19.15	17.65	19.07	18.05	19.42	19.80
	3H	18.98	20.18	19.39	20.58	20.98	20.01	21.20	20.41	21.60	22.00
	4H	19.72	20.81	20.15	21.22	21.65	21.06	22.14	21.49	22.56	22.99
	6H	20.25	21.20	20.70	21.64	22.09	22.01	22.96	22.46	23.40	23.86
	8H	20.39	21.29	20.85	21.73	22.19	22.41	23.30	22.87	23.74	24.21
	12H	20.48	21.28	20.96	21.76	22.22	22.68	23.49	23.16	23.96	24.43
8H	4H	20.18	21.07	20.64	21.51	21.98	21.35	22.24	21.81	22.68	23.14
	6H	20.84	21.58	21.33	22.07	22.54	22.46	23.20	22.95	23.69	24.16
	8H	21.05	21.72	21.56	22.22	22.71	22.97	23.64	23.48	24.14	24.63
	12H	21.19	21.78	21.69	22.27	22.83	23.36	23.95	23.86	24.44	25.00
12H	4H	20.27	21.07	20.75	21.55	22.01	21.37	22.18	21.85	22.65	23.12
	6H	20.97	21.64	21.48	22.15	22.63	22.51	23.18	23.01	23.68	24.17
	8H	21.25	21.84	21.75	22.33	22.89	23.08	23.68	23.59	24.17	24.72