

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: P1588598

Luminaire Tested: 24CZSP-A-42-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588598
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: 24CZSP-A-42-L845-S
Description: 2x4 CZSP LED Luminaire, 4500K CCT and 3500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

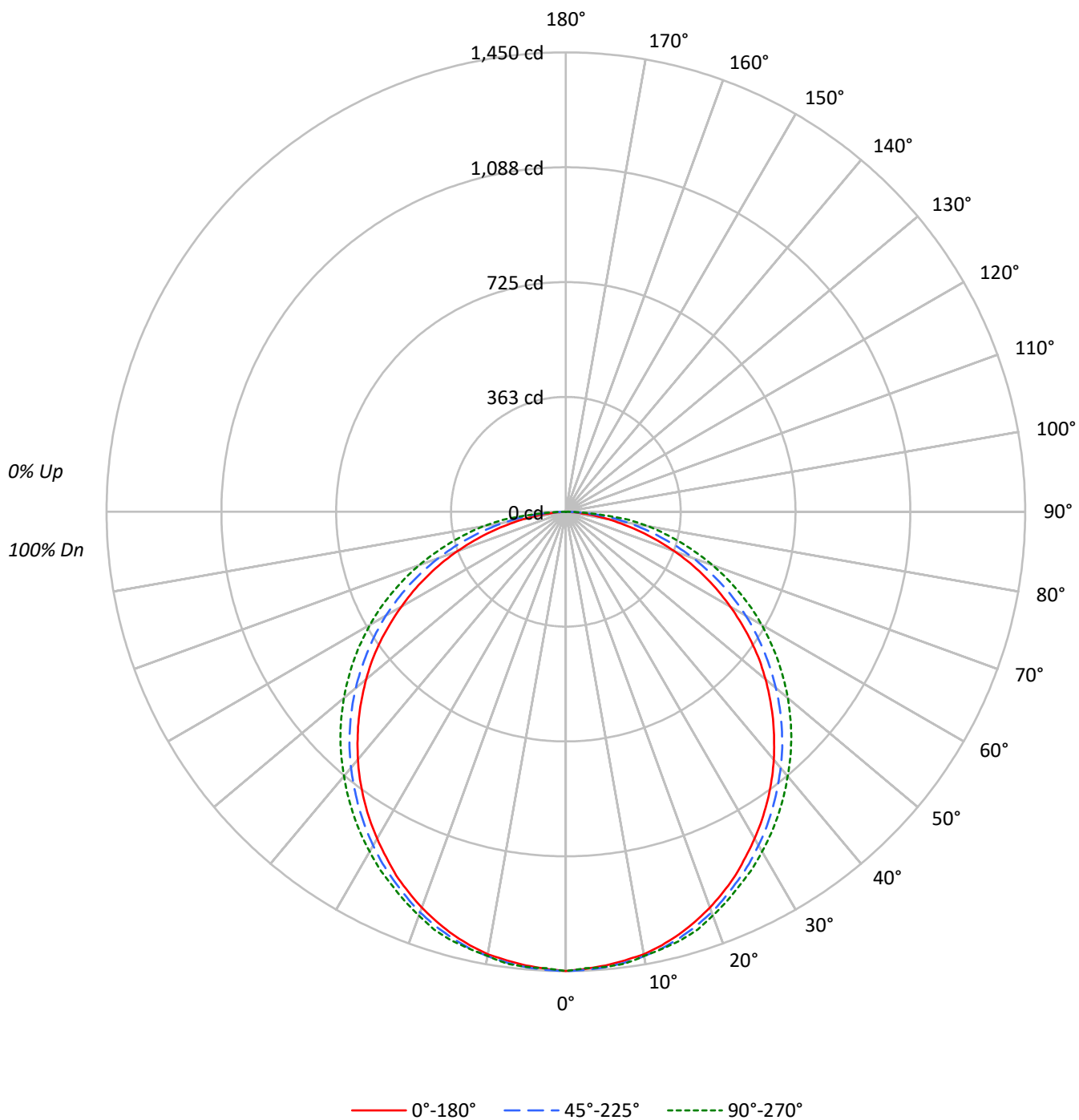
Lumens per Lamp: N/A
Luminaire Lumens: 4232.0 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.7
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: P1588598

CATALOG NUMBER: 24CZSP-A-42-L845-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588598

CATALOG NUMBER: 24CZSP-A-42-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°	2220	2220	2220
5°	2210	2219	2217
10°	2205	2215	2214
15°	2190	2207	2221
20°	2167	2193	2211
25°	2141	2170	2197
30°	2107	2151	2191
35°	2077	2130	2184
40°	2042	2109	2178
45°	2003	2088	2180
50°	1961	2062	2180
55°	1909	2033	2182
60°	1838	2011	2187
65°	1753	1972	2194
70°	1634	1917	2204
75°	1456	1841	2226
80°	1204	1753	2335
85°	784	1583	2040

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2408 cd/sqm

TEST NUMBER: P1588598

CATALOG NUMBER: 24CZSP-A-42-L845-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.2
10°-20°	392.6	9.3
20°-30°	592.0	14.0
30°-40°	713.1	16.8
40°-50°	744.7	17.6
50°-60°	683.9	16.2
60°-70°	538.7	12.7
70°-80°	330.5	7.8
80°-90°	99.5	2.3
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°	1121.7	26.5
0°-40°	1834.8	43.4
0°-60°	3263.4	77.1
0°-90°	4232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1438	1439	1443	1448	1442	137
15°	1381	1384	1392	1400	1400	389
25°	1267	1269	1284	1300	1300	583
35°	1111	1116	1139	1163	1168	695
45°	925	935	964	997	1007	713
55°	715	728	762	804	817	638
65°	484	500	544	590	606	479
75°	246	266	311	360	376	261
85°	45	61	90	114	116	58
90°	0	0	0	0	0	

TEST NUMBER: P1588598

CATALOG NUMBER: 24CZSP-A-42-L845-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.6	1449.6	1449.6	1449.6	1449.6
2.5°	1444.0	1446.8	1447.7	1448.6	1442.1
5°	1437.5	1439.4	1443.1	1447.7	1442.1
7.5°	1428.2	1430.1	1434.7	1441.2	1438.4
10°	1418.0	1418.9	1424.5	1429.1	1423.6
12.5°	1401.3	1404.1	1410.6	1414.3	1412.4
15°	1380.9	1383.6	1392.0	1400.4	1400.4
17.5°	1356.7	1360.4	1370.6	1381.8	1382.7
20°	1329.8	1332.6	1345.6	1356.7	1356.7
22.5°	1299.1	1302.9	1315.9	1327.9	1329.8
25°	1266.6	1269.4	1284.3	1300.1	1300.1
27.5°	1228.6	1234.1	1252.7	1268.5	1272.2
30°	1191.4	1196.1	1216.5	1236.0	1238.8
32.5°	1152.4	1158.0	1179.3	1200.7	1205.3
35°	1110.6	1116.2	1139.4	1162.6	1168.2
37.5°	1067.0	1073.5	1097.6	1124.6	1130.1
40°	1021.5	1028.9	1054.9	1083.7	1089.3
42.5°	973.2	983.4	1011.3	1041.0	1049.3
45°	924.9	935.1	963.9	997.3	1006.6
47.5°	873.8	885.9	915.6	950.9	961.1
50°	822.8	834.8	865.5	903.5	914.7
52.5°	770.8	782.8	814.4	854.3	866.4
55°	715.0	728.0	761.5	804.2	817.2
57.5°	657.5	674.2	709.5	753.1	766.1
60°	599.9	616.6	656.5	699.2	714.1
62.5°	543.2	559.0	599.9	645.4	661.2
65°	483.8	500.5	544.2	589.7	605.5
67.5°	425.3	442.0	485.7	533.0	549.7
70°	364.9	383.5	428.1	475.5	492.2
72.5°	304.6	324.1	369.6	417.9	433.7
75°	246.1	265.6	311.1	360.3	376.1
77.5°	188.5	209.9	254.4	304.6	319.4
80°	136.5	156.9	198.7	247.9	264.7
82.5°	87.3	104.9	146.7	193.2	205.2
85°	44.6	61.3	90.1	114.2	116.1
87.5°	13.9	19.5	29.7	44.6	45.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588598

CATALOG NUMBER: 24CZSP-A-42-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	14.25	15.91	14.61	16.23	16.54	15.08	16.74	15.44	17.06	17.37
	3H	16.00	17.51	16.38	17.84	18.20	17.20	18.70	17.57	19.03	19.39
	4H	16.62	18.05	17.02	18.39	18.77	18.08	19.51	18.48	19.85	20.23
	6H	17.03	18.35	17.44	18.72	19.11	18.87	20.19	19.28	20.55	20.94
	8H	17.14	18.40	17.57	18.79	19.19	19.19	20.45	19.61	20.84	21.24
	12H	17.19	18.40	17.62	18.79	19.21	19.40	20.61	19.83	20.99	21.42
4H	2H	15.02	16.44	15.42	16.79	17.17	15.67	17.09	16.06	17.44	17.81
	3H	17.00	18.20	17.41	18.59	18.99	18.02	19.22	18.43	19.62	20.02
	4H	17.74	18.82	18.17	19.23	19.67	19.07	20.16	19.50	20.57	21.01
	6H	18.26	19.22	18.72	19.66	20.11	20.03	20.98	20.48	21.42	21.87
	8H	18.41	19.30	18.87	19.74	20.21	20.42	21.32	20.88	21.76	22.22
	12H	18.49	19.30	18.97	19.77	20.24	20.70	21.50	21.18	21.98	22.45
8H	4H	18.19	19.09	18.65	19.53	19.99	19.36	20.26	19.82	20.70	21.16
	6H	18.86	19.60	19.35	20.09	20.56	20.48	21.22	20.97	21.71	22.18
	8H	19.07	19.73	19.57	20.24	20.72	20.99	21.66	21.49	22.16	22.64
	12H	19.21	19.80	19.71	20.29	20.85	21.37	21.96	21.88	22.45	23.01
12H	4H	18.28	19.09	18.76	19.56	20.03	19.39	20.19	19.87	20.67	21.13
	6H	18.99	19.66	19.49	20.16	20.65	20.52	21.19	21.03	21.70	22.18
	8H	19.27	19.86	19.77	20.35	20.91	21.10	21.69	21.61	22.18	22.74