

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: P1588256

Luminaire Tested: 24CZSP-42-L840-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588256
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-42-L840-S
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

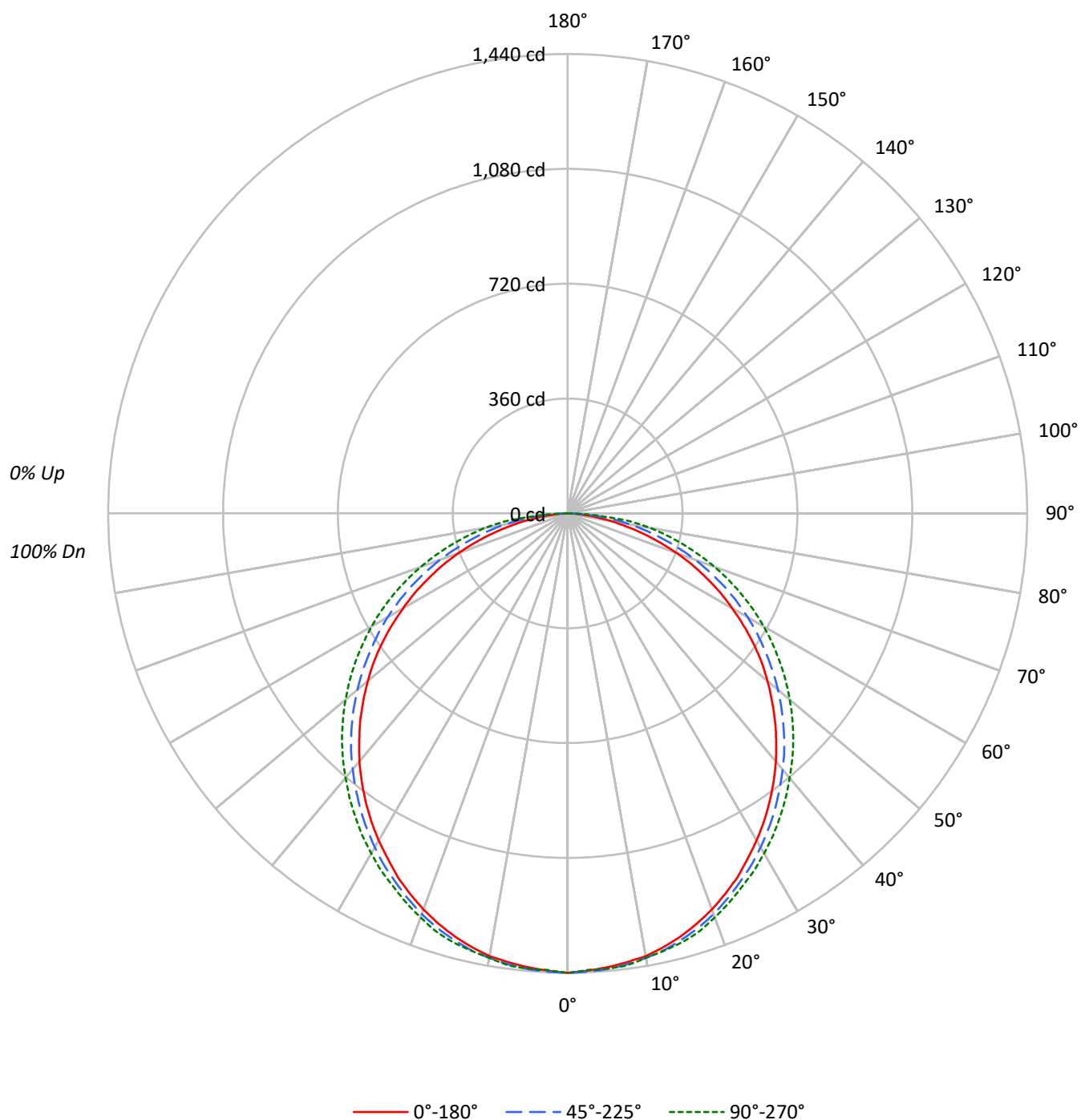
Lumens per Lamp: N/A
Luminaire Lumens: 4205.0 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588256

CATALOG NUMBER: 24CZSP-42-L840-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588256

CATALOG NUMBER: 24CZSP-42-L840-S

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	2206	2206	2206
5°	2196	2205	2203
10°	2191	2201	2200
15°	2176	2193	2206
20°	2154	2179	2197
25°	2127	2157	2183
30°	2094	2138	2177
35°	2063	2117	2170
40°	2029	2096	2164
45°	1991	2075	2166
50°	1948	2049	2166
55°	1897	2020	2168
60°	1826	1998	2174
65°	1742	1960	2180
70°	1624	1905	2190
75°	1447	1829	2211
80°	1196	1742	2320
85°	779	1573	2026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 2393 cd/sqm

TEST NUMBER: P1588256

CATALOG NUMBER: 24CZSP-42-L840-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	3.2
10°-20°	390.0	9.3
20°-30°	588.3	14.0
30°-40°	708.5	16.8
40°-50°	740.0	17.6
50°-60°	679.6	16.2
60°-70°	535.2	12.7
70°-80°	328.4	7.8
80°-90°	98.8	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°	1114.5	26.5
0°-40°	1823.0	43.4
0°-60°	3242.6	77.1
0°-90°	4205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4205.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1428	1430	1434	1438	1433	136
15°	1372	1375	1383	1391	1391	387
25°	1259	1261	1276	1292	1292	579
35°	1104	1109	1132	1155	1161	690
45°	919	929	958	991	1000	709
55°	710	723	757	799	812	634
65°	481	497	541	586	602	476
75°	244	264	309	358	374	259
85°	44	61	90	114	115	58
90°	0	0	0	0	0	

TEST NUMBER: P1588256

CATALOG NUMBER: 24CZSP-42-L840-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.3	1440.3	1440.3	1440.3	1440.3
2.5°	1434.8	1437.6	1438.5	1439.4	1432.9
5°	1428.3	1430.2	1433.9	1438.5	1432.9
7.5°	1419.1	1420.9	1425.6	1432.0	1429.3
10°	1409.0	1409.9	1415.4	1420.0	1414.5
12.5°	1392.3	1395.1	1401.6	1405.3	1403.4
15°	1372.0	1374.8	1383.1	1391.4	1391.4
17.5°	1348.1	1351.7	1361.9	1373.0	1373.9
20°	1321.3	1324.1	1337.0	1348.1	1348.1
22.5°	1290.8	1294.5	1307.5	1319.5	1321.3
25°	1258.6	1261.3	1276.1	1291.8	1291.8
27.5°	1220.7	1226.3	1244.7	1260.4	1264.1
30°	1183.8	1188.4	1208.7	1228.1	1230.9
32.5°	1145.1	1150.6	1171.8	1193.0	1197.7
35°	1103.5	1109.1	1132.1	1155.2	1160.7
37.5°	1060.2	1066.6	1090.6	1117.4	1122.9
40°	1015.0	1022.3	1048.2	1076.8	1082.3
42.5°	967.0	977.1	1004.8	1034.3	1042.6
45°	919.0	929.2	957.8	991.0	1000.2
47.5°	868.3	880.2	909.8	944.8	955.0
50°	817.5	829.5	860.0	897.8	908.9
52.5°	765.8	777.8	809.2	848.9	860.9
55°	710.5	723.4	756.6	799.1	812.0
57.5°	653.3	669.9	704.9	748.3	761.2
60°	596.1	612.7	652.3	694.8	709.6
62.5°	539.8	555.5	596.1	641.3	657.0
65°	480.7	497.3	540.7	585.9	601.6
67.5°	422.6	439.2	482.6	529.6	546.2
70°	362.6	381.1	425.4	472.4	489.0
72.5°	302.6	322.0	367.2	415.2	430.9
75°	244.5	263.9	309.1	358.0	373.7
77.5°	187.3	208.5	252.8	302.6	317.4
80°	135.6	155.9	197.5	246.4	263.0
82.5°	86.7	104.3	145.8	191.9	203.9
85°	44.3	60.9	89.5	113.5	115.3
87.5°	13.8	19.4	29.5	44.3	45.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588256

CATALOG NUMBER: 24CZSP-42-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	14.23	15.89	14.59	16.20	16.52	15.06	16.72	15.42	17.03	17.35
	3H	15.98	17.49	16.36	17.82	18.18	17.17	18.68	17.55	19.01	19.37
	4H	16.60	18.02	17.00	18.37	18.75	18.06	19.48	18.46	19.83	20.21
	6H	17.01	18.33	17.42	18.70	19.09	18.84	20.16	19.25	20.53	20.92
	8H	17.12	18.38	17.54	18.77	19.17	19.16	20.43	19.59	20.81	21.21
	12H	17.17	18.38	17.60	18.76	19.19	19.37	20.59	19.80	20.97	21.40
4H	2H	15.00	16.42	15.40	16.77	17.14	15.65	17.07	16.04	17.41	17.79
	3H	16.98	18.17	17.38	18.57	18.97	18.00	19.20	18.41	19.59	19.99
	4H	17.71	18.80	18.14	19.21	19.65	19.05	20.14	19.48	20.55	20.99
	6H	18.24	19.19	18.69	19.63	20.09	20.00	20.96	20.46	21.40	21.85
	8H	18.39	19.28	18.85	19.72	20.19	20.40	21.29	20.86	21.74	22.20
	12H	18.47	19.28	18.95	19.75	20.22	20.68	21.48	21.16	21.96	22.42
8H	4H	18.17	19.06	18.63	19.51	19.97	19.34	20.23	19.80	20.67	21.14
	6H	18.83	19.58	19.32	20.06	20.54	20.45	21.20	20.94	21.68	22.16
	8H	19.04	19.71	19.55	20.22	20.70	20.96	21.63	21.47	22.14	22.62
	12H	19.18	19.77	19.69	20.26	20.82	21.35	21.94	21.86	22.43	22.99
12H	4H	18.26	19.06	18.74	19.54	20.01	19.37	20.17	19.84	20.64	21.11
	6H	18.96	19.63	19.47	20.14	20.62	20.50	21.17	21.01	21.67	22.16
	8H	19.24	19.83	19.75	20.32	20.88	21.08	21.67	21.58	22.16	22.72