

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: P1588257

Luminaire Tested: 24CZSP-42-L840

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-42-L840
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 3500 lumens, 80CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

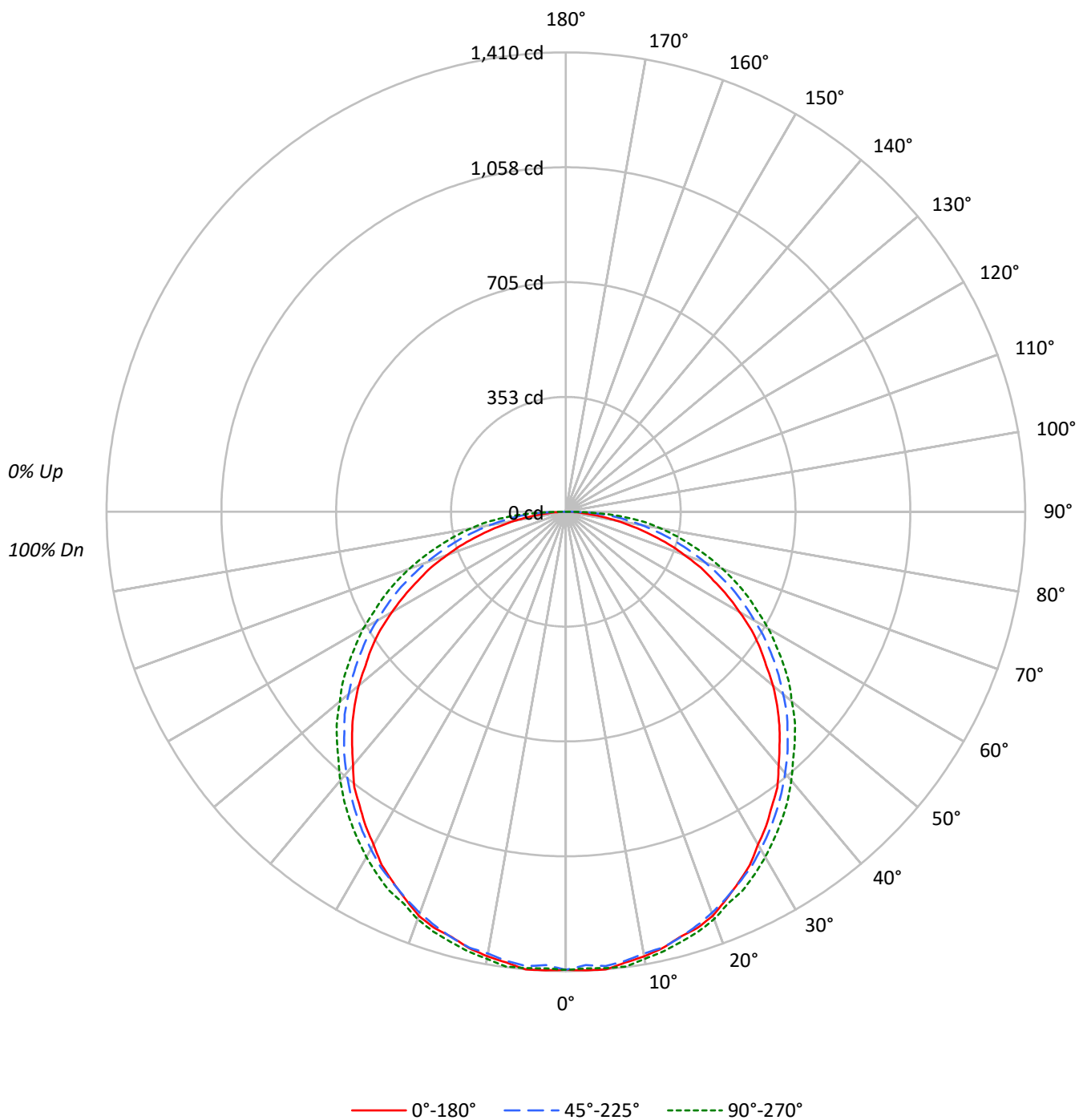
Lumens per Lamp: N/A
Luminaire Lumens: 4291.0 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1588257

CATALOG NUMBER: 24CZSP-42-L840

Luminous Intensity Polar Plot



TEST NUMBER: P1588257

CATALOG NUMBER: 24CZSP-42-L840

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	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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82		
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67		
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56		
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48		
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41		
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36		
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32		
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28		
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25		
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2153	2153	2153
5°	2168	2152	2161
10°	2154	2142	2167
15°	2143	2146	2167
20°	2151	2136	2169
25°	2121	2124	2169
30°	2086	2116	2165
35°	2062	2104	2160
40°	2032	2094	2153
45°	2008	2084	2152
50°	1978	2074	2157
55°	1943	2066	2176
60°	1889	2052	2200
65°	1814	2052	2235
70°	1730	2039	2287
75°	1593	2043	2372
80°	1396	2085	2611
85°	1065	2402	3125

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3466 cd/sqm

TEST NUMBER: P1588257

CATALOG NUMBER: 24CZSP-42-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.1
10°-20°	383.7	8.9
20°-30°	582.9	13.6
30°-40°	706.1	16.5
40°-50°	742.8	17.3
50°-60°	690.7	16.1
60°-70°	556.1	13.0
70°-80°	360.2	8.4
80°-90°	135.1	3.1
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°	1100.0	25.6
0°-40°	1806.1	42.1
0°-60°	3239.6	75.5
0°-90°	4291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1410	1408	1400	1408	1406	134
15°	1351	1356	1353	1370	1367	383
25°	1255	1254	1257	1278	1284	578
35°	1103	1111	1125	1145	1155	691
45°	927	939	962	982	994	715
55°	728	746	774	805	815	649
65°	500	523	566	600	617	498
75°	269	296	345	385	401	286
85°	61	89	137	171	178	74
90°	0	0	0	0	0	

TEST NUMBER: P1588257

CATALOG NUMBER: 24CZSP-42-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.8	1405.8	1405.8	1405.8	1405.8
2.5°	1408.9	1408.9	1392.5	1409.9	1402.7
5°	1409.9	1407.9	1399.7	1407.9	1405.8
7.5°	1395.6	1397.6	1390.4	1400.7	1407.9
10°	1385.3	1387.3	1377.1	1393.5	1393.5
12.5°	1371.9	1374.0	1369.9	1385.3	1382.2
15°	1351.4	1356.5	1353.4	1369.9	1366.8
17.5°	1340.1	1335.9	1332.9	1345.2	1351.4
20°	1319.5	1310.3	1310.3	1326.7	1330.8
22.5°	1286.6	1283.5	1284.6	1305.1	1301.0
25°	1254.8	1253.7	1256.8	1278.4	1283.5
27.5°	1222.9	1220.9	1230.1	1250.7	1254.8
30°	1179.7	1183.9	1196.2	1218.8	1223.9
32.5°	1143.8	1151.0	1162.3	1183.9	1190.0
35°	1102.7	1110.9	1125.3	1144.8	1155.1
37.5°	1066.7	1071.8	1087.3	1105.8	1118.1
40°	1016.3	1029.7	1047.2	1073.9	1077.0
42.5°	971.1	984.5	1007.1	1035.9	1032.8
45°	926.9	939.3	961.9	982.4	993.7
47.5°	879.7	891.0	920.8	945.4	953.7
50°	830.3	844.7	870.4	896.1	905.4
52.5°	774.9	790.3	823.1	850.9	864.3
55°	727.6	746.1	773.8	804.7	814.9
57.5°	675.2	690.6	724.5	755.3	765.6
60°	616.6	635.1	670.0	702.9	718.3
62.5°	560.1	580.6	617.6	651.5	663.9
65°	500.5	523.1	566.2	600.1	616.6
67.5°	449.1	467.6	509.7	547.7	565.2
70°	386.4	411.1	455.3	497.4	510.7
72.5°	330.9	352.5	398.7	440.9	457.3
75°	269.2	296.0	345.3	385.4	400.8
77.5°	212.7	240.5	289.8	331.9	349.4
80°	158.3	185.0	236.4	279.5	296.0
82.5°	106.9	133.6	185.0	227.1	245.6
85°	60.6	89.4	136.7	170.6	177.8
87.5°	26.7	51.4	77.1	92.5	98.7
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588257
CATALOG NUMBER: 24CZSP-42-L840

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	14.35	16.03	14.71	16.34	16.66	15.02	16.70	15.39	17.02	17.33
	3H	16.20	17.73	16.58	18.06	18.42	17.24	18.77	17.62	19.10	19.45
	4H	16.89	18.33	17.29	18.68	19.05	18.20	19.65	18.60	20.00	20.37
	6H	17.38	18.72	17.79	19.09	19.48	19.10	20.44	19.51	20.80	21.19
	8H	17.53	18.81	17.95	19.20	19.60	19.50	20.78	19.92	21.17	21.57
	12H	17.62	18.85	18.05	19.23	19.66	19.86	21.09	20.29	21.47	21.90
4H	2H	15.14	16.59	15.54	16.93	17.31	15.66	17.11	16.06	17.45	17.83
	3H	17.23	18.45	17.64	18.85	19.25	18.12	19.34	18.53	19.74	20.14
	4H	18.05	19.16	18.48	19.57	20.01	19.25	20.36	19.68	20.77	21.21
	6H	18.67	19.65	19.13	20.09	20.54	20.32	21.30	20.77	21.74	22.19
	8H	18.87	19.79	19.33	20.23	20.69	20.81	21.73	21.27	22.17	22.63
	12H	19.01	19.83	19.49	20.31	20.77	21.26	22.09	21.74	22.56	23.03
8H	4H	18.56	19.47	19.02	19.91	20.38	19.59	20.51	20.05	20.95	21.41
	6H	19.34	20.11	19.83	20.60	21.07	20.84	21.61	21.33	22.10	22.57
	8H	19.63	20.32	20.13	20.82	21.30	21.47	22.16	21.97	22.66	23.14
	12H	19.84	20.46	20.35	20.95	21.50	22.08	22.69	22.58	23.18	23.74
12H	4H	18.67	19.49	19.14	19.97	20.43	19.63	20.46	20.11	20.93	21.40
	6H	19.51	20.20	20.02	20.71	21.19	20.92	21.61	21.42	22.11	22.60
	8H	19.88	20.49	20.38	20.98	21.54	21.62	22.24	22.13	22.72	23.28