

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: P1588242

Luminaire Tested: 24CZSP-37HE-L930-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588242
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-37HE-L930-S
Description: 2x4 CZSP LED Luminaire, 3000K CCT and 3500 lumens, 90CRI, Smooth Lens
Light Source: -
Ballast/Driver: -

Summary

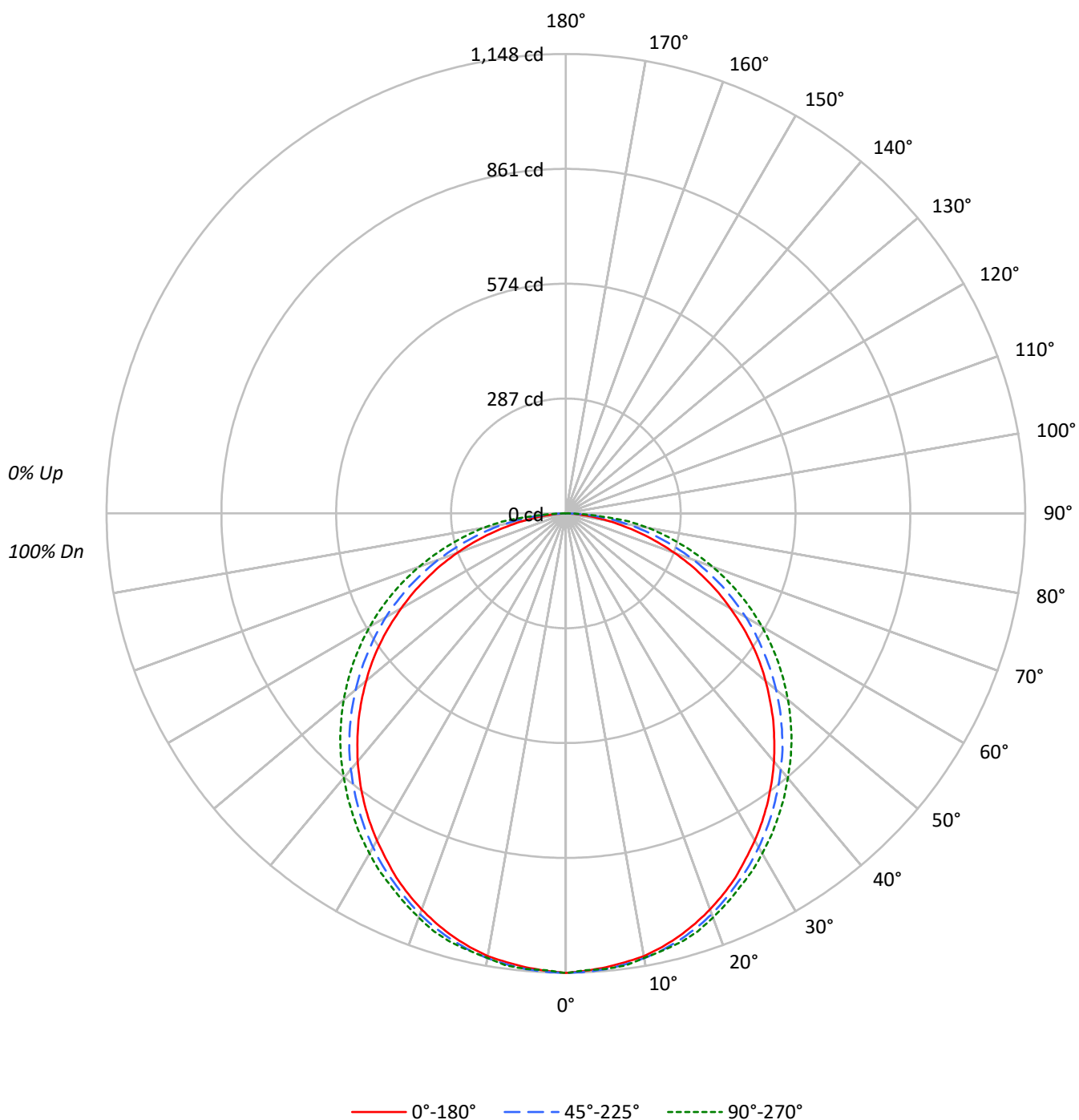
Lumens per Lamp: N/A
Luminaire Lumens: 3353.0 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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: P1588242

CATALOG NUMBER: 24CZSP-37HE-L930-S

Luminous Intensity Polar Plot



TEST NUMBER: P1588242

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	1759	1759	1759
5°	1751	1758	1757
10°	1747	1755	1754
15°	1735	1749	1759
20°	1717	1738	1752
25°	1696	1720	1741
30°	1670	1705	1736
35°	1645	1688	1731
40°	1618	1671	1725
45°	1587	1654	1727
50°	1553	1634	1727
55°	1513	1611	1729
60°	1456	1594	1733
65°	1389	1562	1738
70°	1295	1519	1746
75°	1154	1459	1763
80°	954	1388	1850
85°	620	1255	1617

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 1908 cd/sqm

TEST NUMBER: P1588242

CATALOG NUMBER: 24CZSP-37HE-L930-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	3.2
10°-20°	311.0	9.3
20°-30°	469.1	14.0
30°-40°	565.0	16.8
40°-50°	590.0	17.6
50°-60°	541.9	16.2
60°-70°	426.8	12.7
70°-80°	261.8	7.8
80°-90°	78.8	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°	888.7	26.5
0°-40°	1453.7	43.4
0°-60°	2585.6	77.1
0°-90°	3353.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3353.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1139	1140	1143	1147	1143	108
15°	1094	1096	1103	1110	1110	309
25°	1004	1006	1018	1030	1030	462
35°	880	884	903	921	926	550
45°	733	741	764	790	798	565
55°	566	577	603	637	648	506
65°	383	397	431	467	480	379
75°	195	210	246	286	298	207
85°	35	49	71	90	92	46
90°	0	0	0	0	0	

TEST NUMBER: P1588242

CATALOG NUMBER: 24CZSP-37HE-L930-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.5	1148.5	1148.5	1148.5	1148.5
2.5°	1144.1	1146.3	1147.0	1147.8	1142.6
5°	1138.9	1140.4	1143.3	1147.0	1142.6
7.5°	1131.6	1133.0	1136.7	1141.9	1139.7
10°	1123.5	1124.2	1128.6	1132.3	1127.9
12.5°	1110.2	1112.4	1117.6	1120.5	1119.1
15°	1094.0	1096.3	1102.9	1109.5	1109.5
17.5°	1074.9	1077.9	1086.0	1094.8	1095.5
20°	1053.6	1055.8	1066.1	1074.9	1074.9
22.5°	1029.3	1032.2	1042.5	1052.1	1053.6
25°	1003.6	1005.8	1017.5	1030.0	1030.0
27.5°	973.4	977.8	992.5	1005.0	1008.0
30°	944.0	947.6	963.8	979.3	981.5
32.5°	913.1	917.5	934.4	951.3	955.0
35°	879.9	884.4	902.8	921.1	925.6
37.5°	845.4	850.5	869.6	891.0	895.4
40°	809.3	815.2	835.8	858.6	863.0
42.5°	771.1	779.1	801.2	824.8	831.4
45°	732.8	740.9	763.7	790.2	797.5
47.5°	692.3	701.9	725.4	753.4	761.5
50°	651.9	661.4	685.7	715.9	724.7
52.5°	610.7	620.2	645.2	676.9	686.4
55°	566.5	576.8	603.3	637.2	647.5
57.5°	520.9	534.1	562.1	596.7	607.0
60°	475.3	488.5	520.2	554.0	565.8
62.5°	430.4	442.9	475.3	511.3	523.8
65°	383.3	396.6	431.1	467.2	479.7
67.5°	337.0	350.2	384.8	422.3	435.6
70°	289.1	303.9	339.2	376.7	389.9
72.5°	241.3	256.8	292.8	331.1	343.6
75°	195.0	210.4	246.5	285.5	298.0
77.5°	149.4	166.3	201.6	241.3	253.1
80°	108.2	124.3	157.4	196.4	209.7
82.5°	69.2	83.1	116.2	153.0	162.6
85°	35.3	48.6	71.4	90.5	92.0
87.5°	11.0	15.5	23.5	35.3	36.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1588242

CATALOG NUMBER: 24CZSP-37HE-L930-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	13.44	15.10	13.80	15.42	15.73	14.27	15.93	14.64	16.25	16.56
	3H	15.20	16.70	15.57	17.03	17.39	16.39	17.89	16.76	18.22	18.58
	4H	15.81	17.24	16.21	17.58	17.96	17.28	18.70	17.67	19.05	19.42
	6H	16.23	17.55	16.64	17.91	18.30	18.06	19.38	18.47	19.74	20.13
	8H	16.33	17.60	16.76	17.98	18.38	18.38	19.64	18.80	20.03	20.43
	12H	16.38	17.60	16.81	17.98	18.41	18.59	19.80	19.02	20.18	20.61
4H	2H	14.21	15.63	14.61	15.98	16.36	14.86	16.28	15.26	16.63	17.00
	3H	16.19	17.39	16.60	17.78	18.18	17.21	18.41	17.62	18.81	19.21
	4H	16.93	18.01	17.36	18.42	18.86	18.27	19.35	18.70	19.76	20.20
	6H	17.45	18.41	17.91	18.85	19.30	19.22	20.17	19.67	20.61	21.06
	8H	17.60	18.49	18.06	18.93	19.40	19.62	20.51	20.07	20.95	21.41
	12H	17.68	18.49	18.16	18.96	19.43	19.89	20.70	20.37	21.17	21.64
8H	4H	17.39	18.28	17.84	18.72	19.18	18.55	19.45	19.01	19.89	20.35
	6H	18.05	18.79	18.54	19.28	19.75	19.67	20.41	20.16	20.90	21.37
	8H	18.26	18.93	18.76	19.43	19.91	20.18	20.85	20.69	21.35	21.84
	12H	18.40	18.99	18.90	19.48	20.04	20.56	21.16	21.07	21.65	22.20
12H	4H	17.47	18.28	17.95	18.75	19.22	18.58	19.38	19.06	19.86	20.33
	6H	18.18	18.85	18.68	19.35	19.84	19.71	20.38	20.22	20.89	21.37
	8H	18.46	19.05	18.96	19.54	20.10	20.29	20.88	20.80	21.37	21.93