

TEST REPORT

Reference No...... : WTX25X09259047W
Applicant..... : SkyCell AG
Address..... : Hardturmstrasse 11, 8005 Zurich, Switzerland
Manufacturer..... : SkyCell AG
Address..... : Hardturmstrasse 11, 8005 Zurich, Switzerland
Product Name..... : MR Logger BLE+Lora Antenna
Model No...... : MR Logger BLE+Lora Antenna
Standards..... : ANSI/ IEEE 149-2021
Date of Receipt sample..... : 2024-04-07
Date of Test..... : 2024-04-07 to 2024-04-12
Date of Issue..... : 2025-09-26
Test Report Form No...... : WTX_IEEE 149
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

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Report version

Version No.	Date of issue	Description
Rev.00	Sep.26, 2025	Original
/	/	/

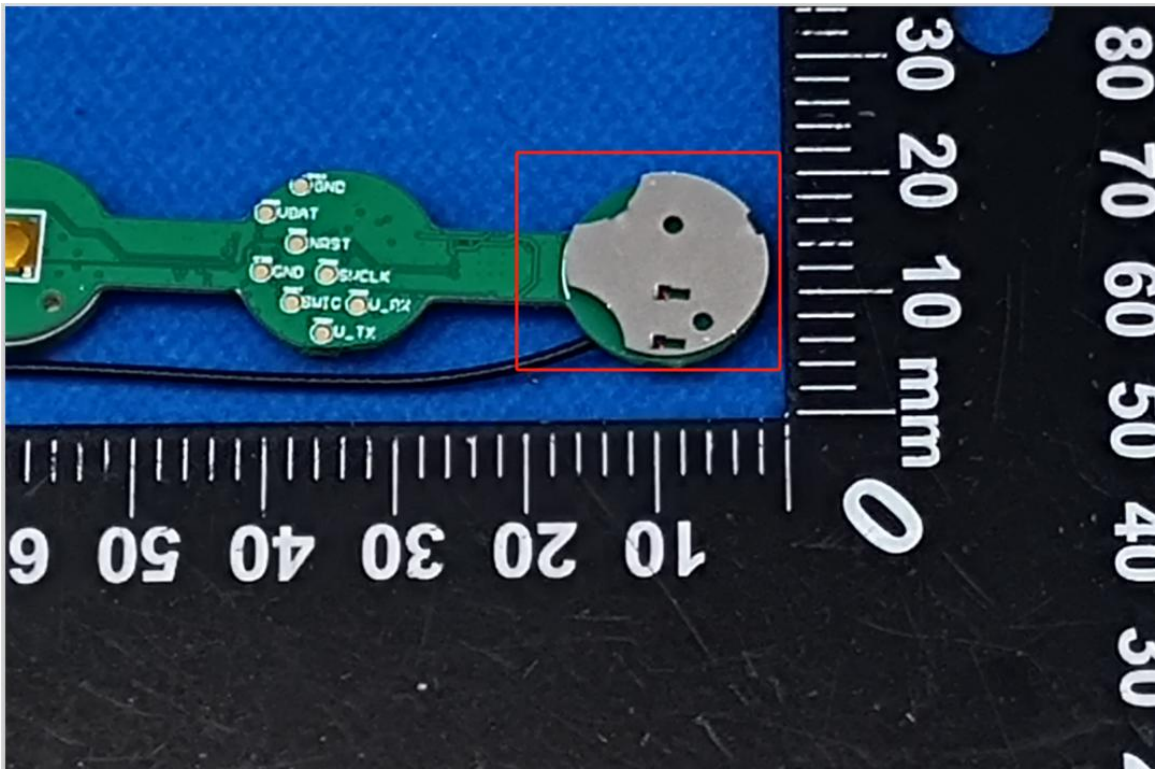
1...GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	MR Logger BLE+Lora Antenna
Trade Name:	/
Model No.:	MR Logger BLE+Lora Antenna
Adding Model(s):	/
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	2400-2500MHz
Gain of Antenna:	1.02dBi (Max.)
Type of Antenna:	Integral Antenna
Size:	9.8*6.8mm

Dimension:



2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
ANSI/ IEEE 149-2021	IEEE Recommended Practice for Antenna Measurements	Compliant

N/A: not applicable

3. Antenna Test Configurations

3.1 Test Location

Name:	Shenzhen Morlab Communications Technology Co.,Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen, GuangDong Province, P.R. China

3.1 Test Environments

Environments Parameter	Temperature	Voltage	Humidit
NTNV	25° C	--	50%

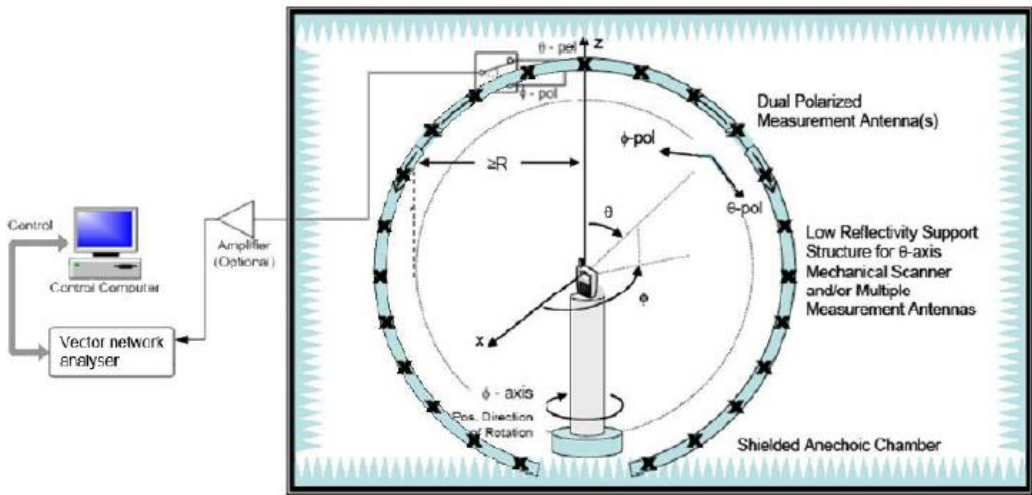
3.2 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Network Analyzer	Agilent	E5071C	MY46110140	2023-06-21	2024-06-20
OTA Chamber	ETS	AMS-8923-150	TJ2235-Q1793	2022-11-30	2025-11-29
Antenna Measurement System	ETS	EMQuest EMQ-100 V1.13 Build 21267	1685	N/A	N/A

3.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the“Guide to the Expression of Uncertainty in Measurement” (GUM) published by ISO. When the test result is a critical value,we will use the measurement uncertainty give the judgment result based on the 95%Confidence intervals.

3.4 Test Setup

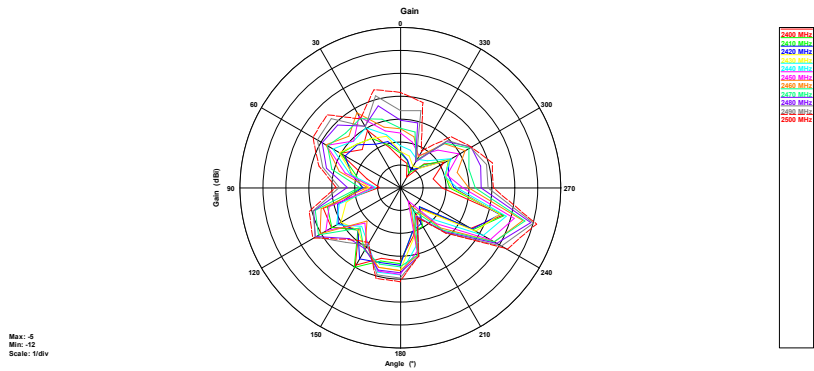


4. Antenna Test Result

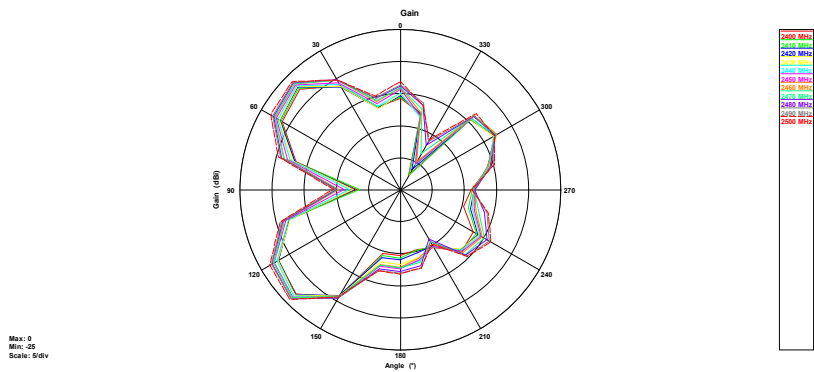
4.1 Gain and Efficiency

Frequency(MHz)	Efficiency (%)	Gain(dBi)
2400	17.18	-0.04
2410	17.60	-0.03
2420	17.49	-0.18
2430	17.72	-0.18
2440	18.58	0.03
2450	19.71	0.33
2460	20.62	0.55
2470	20.89	0.64
2480	21.73	0.76
2490	22.39	0.90
2500	23.41	1.02

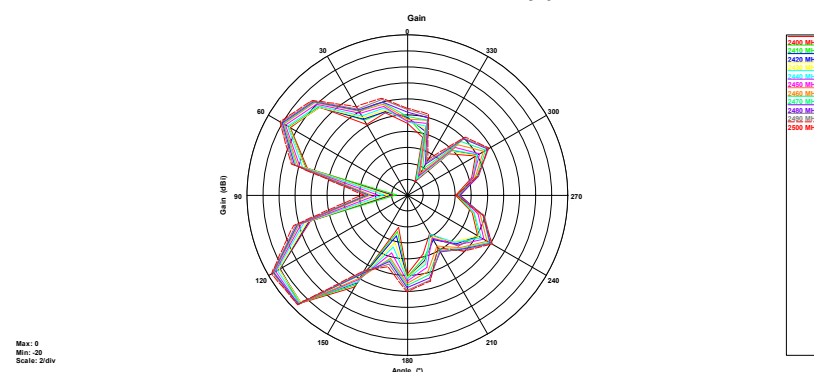
4.2 Radiation Pattern 2D View



PHI=0



PHI=90



THETA=90

A 3D surface plot showing the Total Gain as a function of Azimuth and Elevation. The plot is a wireframe mesh colored according to the gain values. The color scale ranges from 0 (blue) to 8 (red). The plot shows a central peak of high gain (red/orange) and a surrounding region of lower gain (yellow/green). The axes are labeled x, y, and z. The plot is titled "Total Gain".

Azimuth = -16.9
 Elevation = -87.9
 Roll = 183.1

A 3D surface plot titled "Total Gain" showing the gain distribution as a function of Azimuth and Elevation. The plot features a grid of yellow-green surfaces with a central peak. The axes are labeled "x" (horizontal) and "z" (vertical). A color bar on the right indicates the gain values in dB, ranging from -30 to 5.

Axis labels and values:

- Azimuth = -18.8
- Elevation = 87.9
- Gain = 182.1

Total Gain

Azimuth = 16.8
 Elevation = -87.9
 Roll = 152.1

Gain (dB)

EXHIBIT 1 - EUT PHOTOGRAPHS

EUT View 1

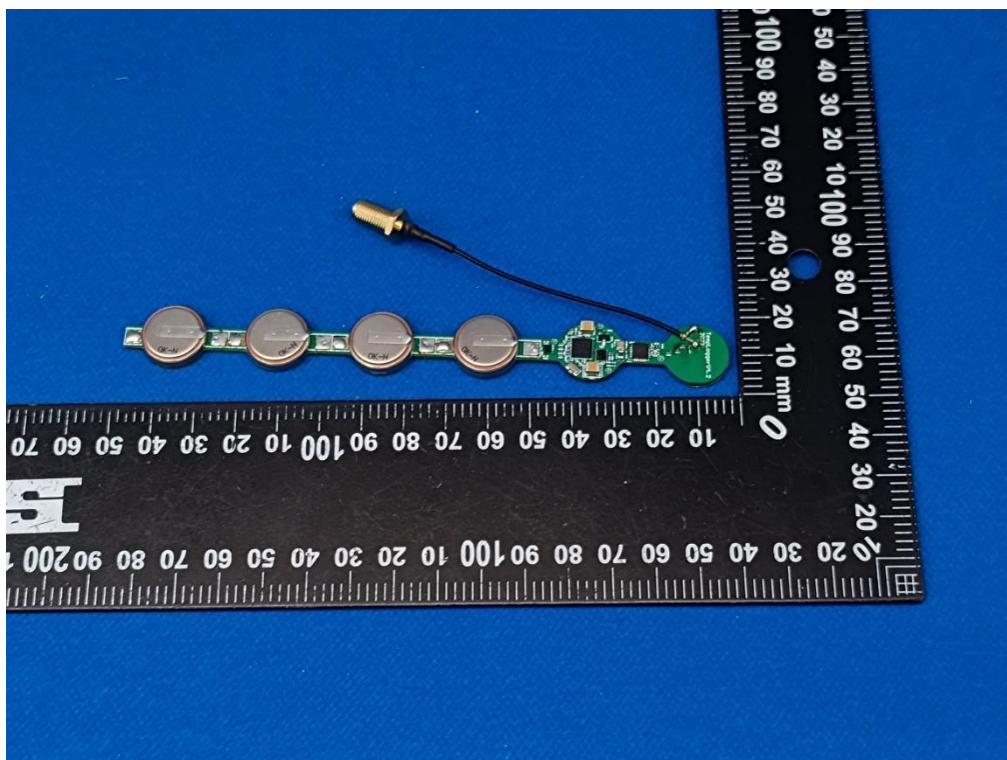
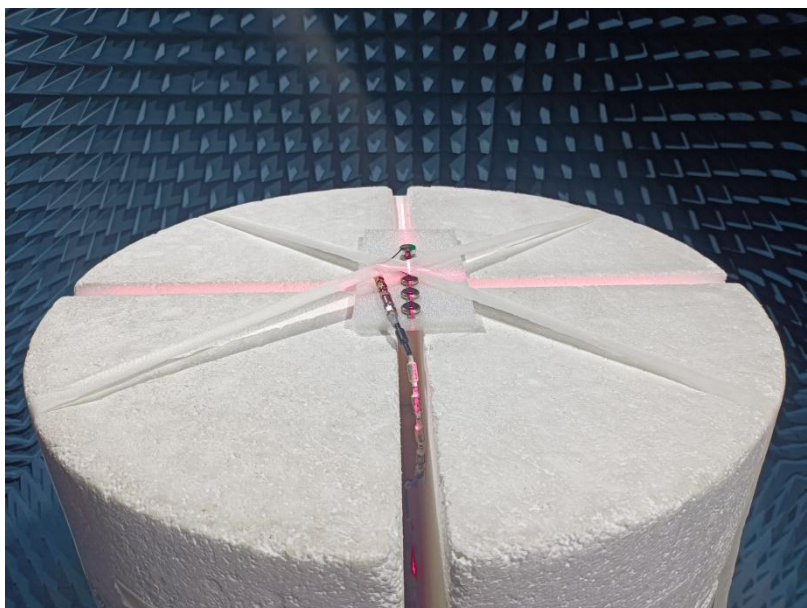


EXHIBIT 2 - TEST SETUP PHOTOGRAPHS

OTA Test View 1:



OTA Test View 2:



***** END OF REPORT *****