

Testing Report

Customer Name: Shanghai Qiwei Cultural Technology Co., Ltd

Product Name: Remote Controller Antenna

Sample Model: XHYKZB

Reference Standard: *GB/T 9410-2008; ANSI/IEEE Std 149-1979*

Issue Date: 2024.2.7

Version

Version No.	Date	Description	Formulate	Approval
A0	2024.2.7	For the first time, formulate		

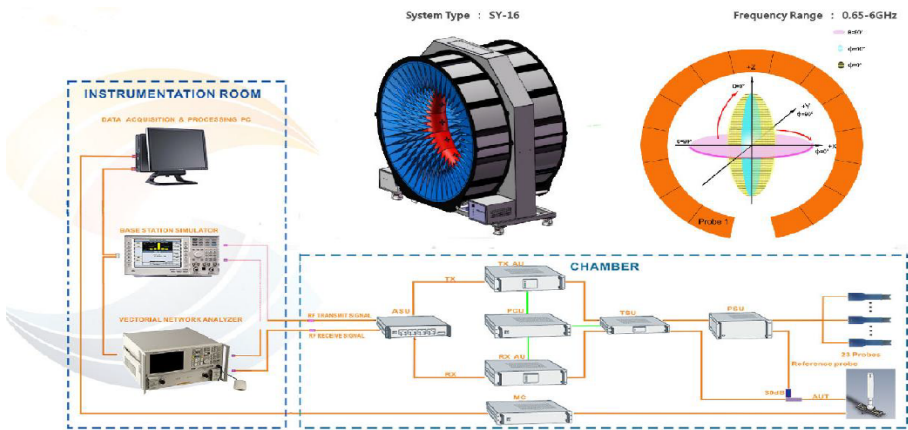
1.General Information

1.1 General information of testing institutions

Name	Yinghuada (Nanjing) Technology Co., Ltd
Address	133 Jiangjun Avenue, Jiangning District, Nanjing City
Tel	025-52262313 18913802852
E-mail	ji. jian-lin@iac.com.tw

1.2 Testing principle

Multi-Probe OTA Measurement System



1.3 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
16 probe microwave chamber	3*3*2.5	RFI-LAB- RF -A00	SUNYIELD	2023.3.15	2024.3.14
Network Analyzer	E5071C	RFI-LAB- RF -A02	Agilent	2023.5.13	2024.5.12

1.4 Test environment

Temperature	24.6℃
Humidity	59%RH
Pressure	100.19kPa

1.5 Statement

(1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.

(2) Any objection to this report shall be raised within 30 days after formal confirmation of the report.

(3) This report is invalid if there is any evidence that the sample information provided is falsified.

(4) The report is invalid without the signature of the auditor and approver.

2. Sample Information

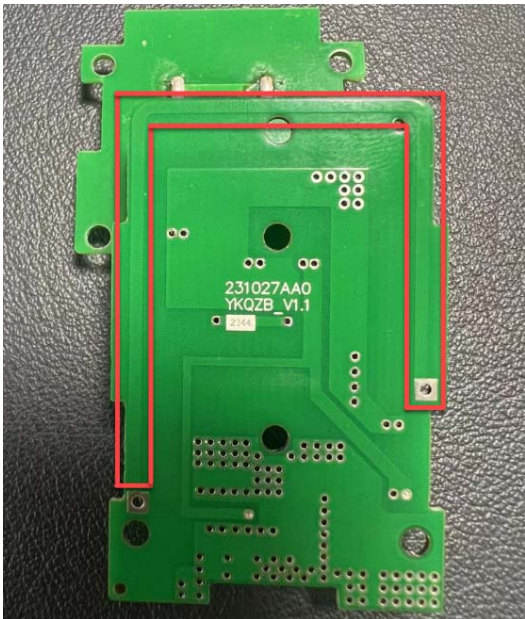
2.1 Client information

Name	Shanghai Qiwei Cultural Technology Co., Ltd
Address	
Contacts	
Tel	
E-mail	

2.2 Description of EUT(S)

Product Name	Remote Controller Antenna
Sample Model	XHYKZB
Test Item	Antenna gain; Radiation pattern and efficiency
Frequency Range	400MHz-480MHz
Test Date	2024.2.7
Remark	

2.3 EUT appearance



3.Test Results

3.1 Test standard

Name	Parameter	Method	Standard no.
Mobile communication antenna	Antenna gain	Generic specification for antennas used in the mobile communications	GB/T9410-2008
	Radiation pattern		
Antenna	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979
	Gain and directivity		

3.2 Test uncertainty

The uncertainty was calculated on the basis of the GUM published by ISO, using the inclusion factor of K=2 and the 95% confidence level to express the extended uncertainty.

Item	Uncertainty
Antenna gain	$\pm 1\text{dB}$
Radiation efficiency	$\pm 10\%$

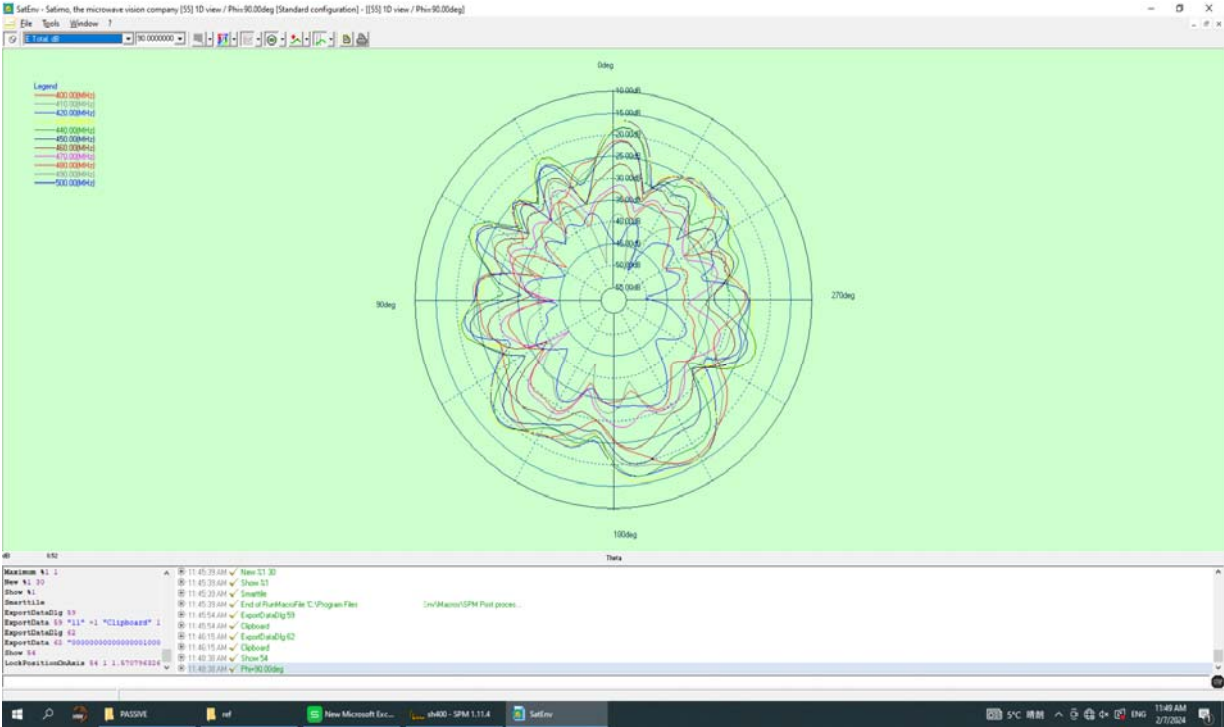
3.3 Test data

3.3.1 Typical free space efficiency and gain

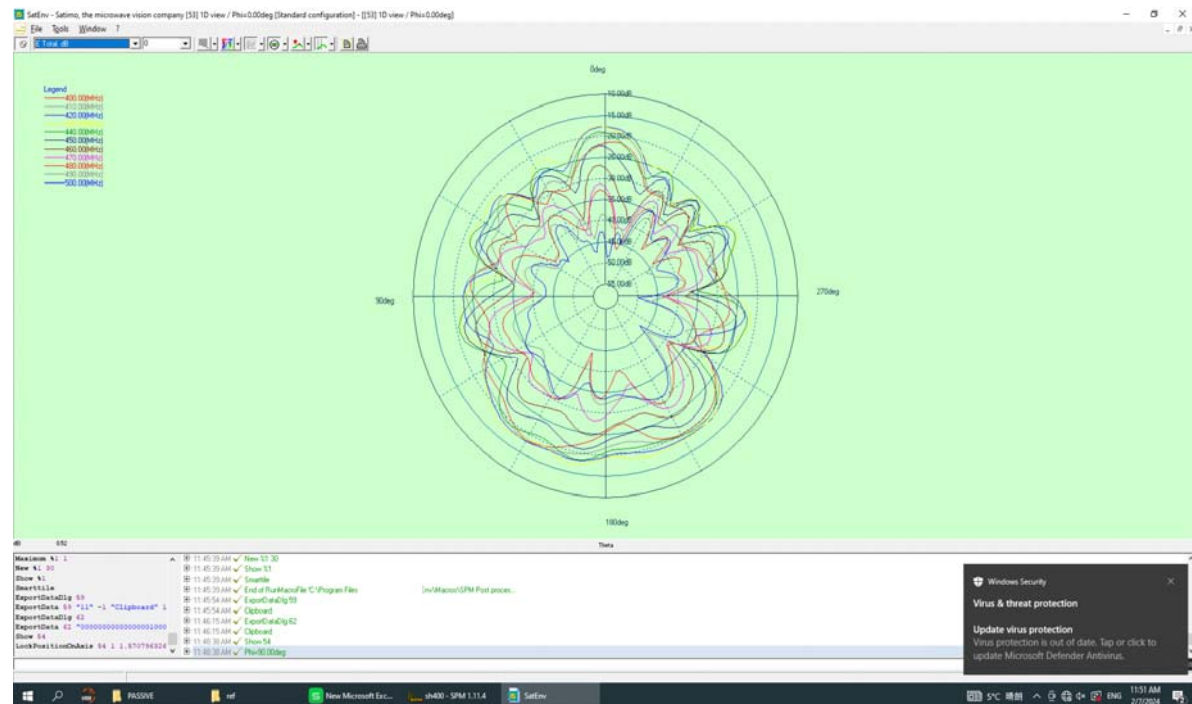
Frequency/MHz	400	410	420	430	440	450	460	470	480
Peak Gain/dB	-16.7	-16.1	-15.9	-15.5	-17.0	-19.8	-23.4	-26.7	-28.1
Efficiency/%	-25.1	-24	-23.1	-22.3	-23.5	-25.8	-29.0	-32.4	-34.6

3.3.2 Typical free space radiation pattern

phi=90deg



phi=0deg



Theta=90deg

