

TEST REPORT

Product Name : FPC Antenna
Model/Type reference : PL04
Report Number : XH20260423001
Date of Issue : April 23, 2026
Test Standards : GB/T 9410-2021
ANSI/IEEE Std149-1979

Compiled by:

Eason

Reviewed by:

Aaron

Approved by:

Jason

Date:

April 23, 2026



Prepared by:
Shenzhen XinHua Technology co.,Ltd
E-mail: jason.chen@htc-cert.com

Version

Version No.	Date	Description
00	April 23, 2026	Original

Contents

1. General Information	3rd
1.1 General information of testing institutions	3rd
1.2 Applicant and Manufacturer	3rd
1.3 Testing principle	3rd
1.4 Test equipment	4th
1.5 Test environment	4th
1.6 Statement	4th
2. Sample Information	5th
2.1 Description of EUT(S)	5th
2.2 EUT appearance	6th
Antenna Dimensions.....	6th
2.3 EUT setup photo of free space OTA testing	7th
3. Test Results	8th
3.1 Test uncertainty	8th
3.2 Test data	9th
3.2.1 VSWR parameters	9th
3.2.2 VSWR data	9th
3.2.3 Typical free space efficiency and gain	10th
3.2.4 Radiation pattern	11th

1.4 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
OTA Test System	RayZone-5000	A0011	GTS	2026.01.19	2027.01.18
Network Analyzer	E5071C	C0017	KEYSIGHT	2026.01.19	2027.01.18

1.5 Test environment

Temperature	24.8°C
Humidity	83%RH
Pressure	100.06kPa

1.6 Statement

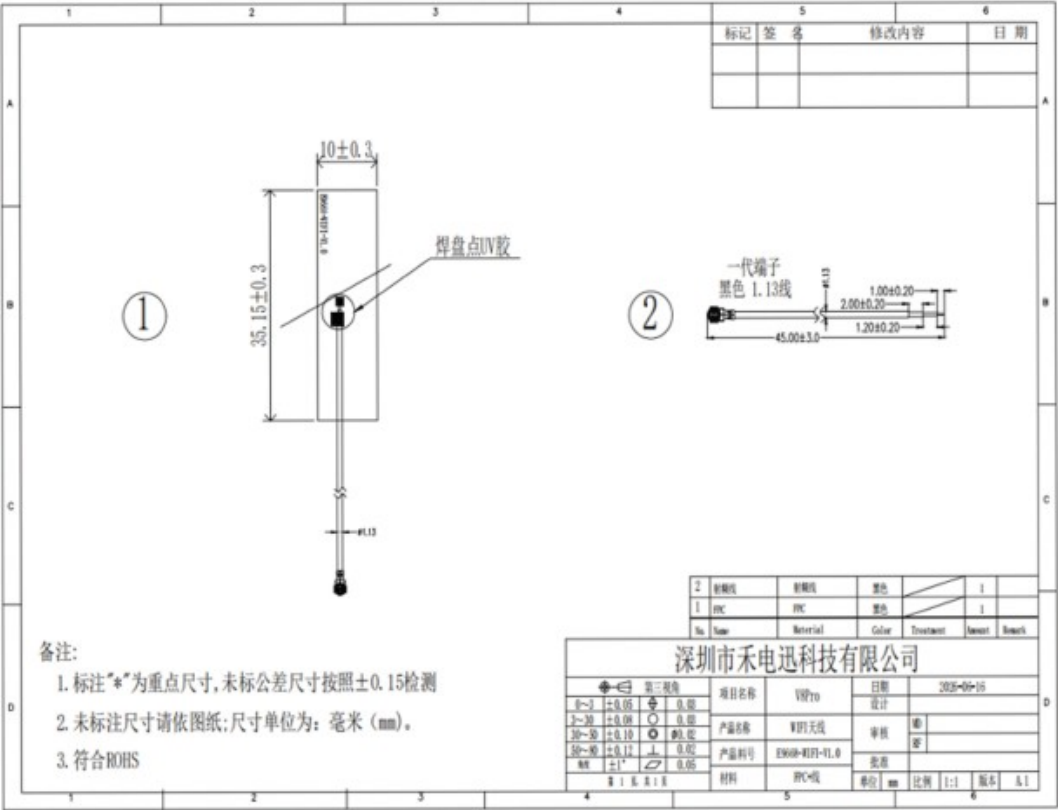
- (1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.
- (2) Only Shenzhen XinHua Technology co.,Ltd have the right to modify the report, and the modification information shall be annotated in the revision form.
- (3) Any objection to this report shall be raised within 30 days after formal confirmation of the report.
- (4) This report is invalid if there is any evidence that the sample information provided is falsified.
- (5) The report is invalid without the signature of the auditor and approver.

2. Sample Information

2.1 Description of EUT(S)

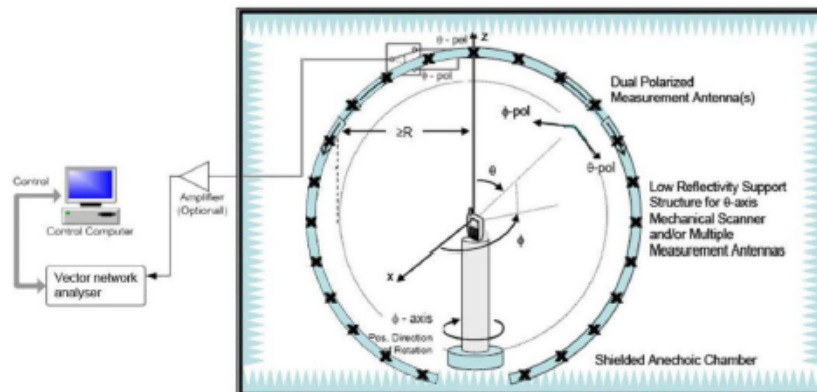
Test Item	VSWR;Antenna gain; Efficiency; Radiation pattern
Frequency Range	2400-480MHz& 5745-5825MHz
Received Date	April 21, 2026
Test Date	April 23, 2026

2.2 EUT appearance



Antenna Dimensions

2.3 EUT setup photo of free space OTA testing



3. Test Results

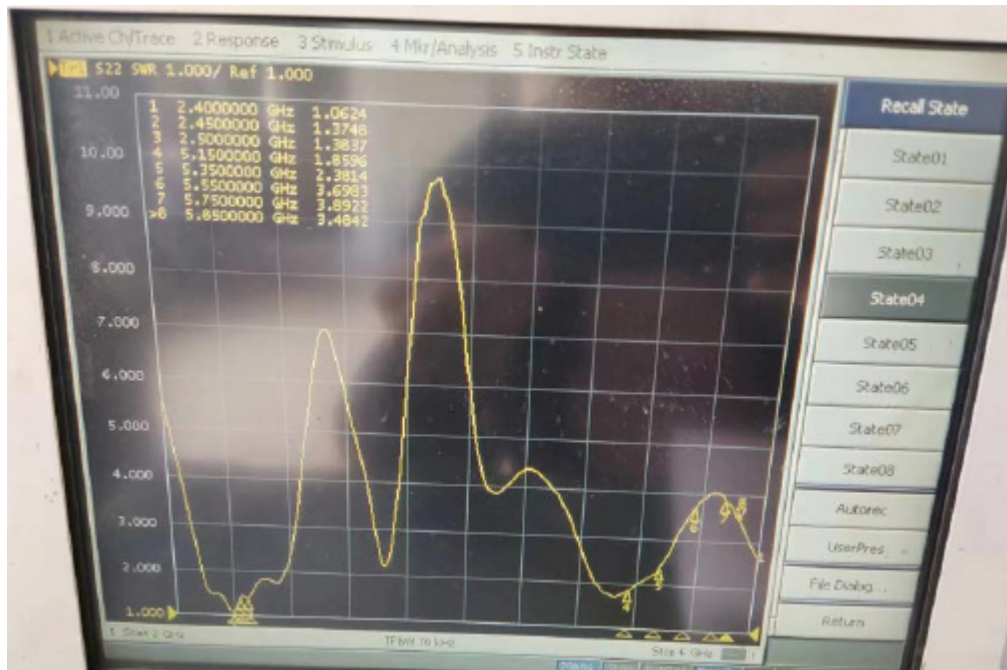
3.1 Test uncertainty

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
VSWR	± 0.3
Antenna gain	$\pm 0.72\text{dB}$
Radiation efficiency	$\pm 0.72\text{dB}$

3.2 Test data

3.2.1 VSWR parameters



3.2.2 VSWR data

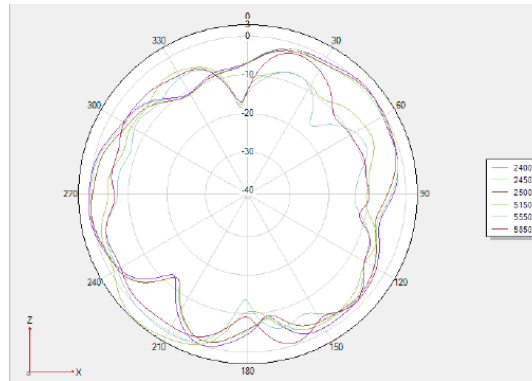
Frequency/MHz	2400	2450	2500	5500	5750	5850
VSWR	1.0624	1.3748	1.3837	3.6983	3.8922	3.4842

3.2.3 Typical free space efficiency and gain

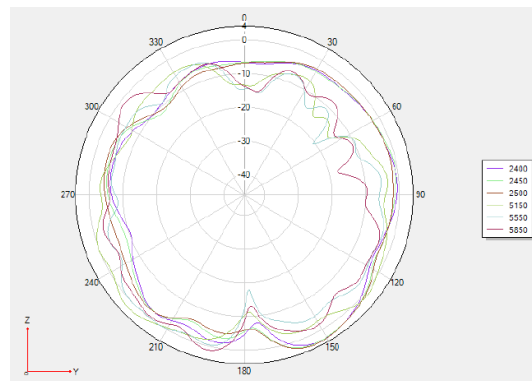
Frequency/Mhz	Efficiency / %	MaxGain/dBi
2400	42.46	2.86
2410	40.74	2.4
2420	42.66	2.91
2430	43.25	3.18
2440	41.98	2.79
2450	42.56	3.05
2460	42.46	3.41
2470	41.02	3.09
2480	41.98	3.25
2490	42.46	3.67
2500	39.81	3.18
5150	40.28	3.18
5200	41.28	3.21
5250	39.31	3.34
5300	40.59	3.15
5350	41.32	2.85
5400	42.96	2.44
5450	41.65	2.23
5500	40.58	2.25
5550	39.98	2.15
5600	41.49	2.03
5650	42.3	2.74
5700	41.99	2.17
5750	42.85	2.03
5800	42.21	2.31
5850	43.27	2.25

3.2.4 Radiation pattern

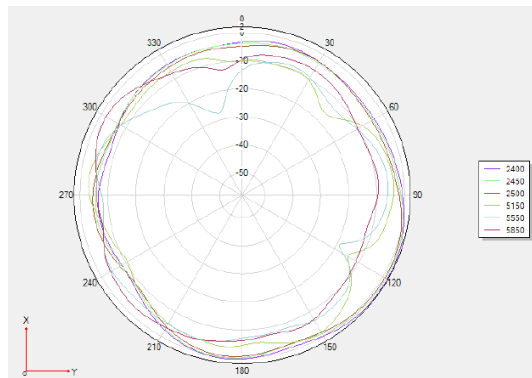
(1) XY-Plane Total:



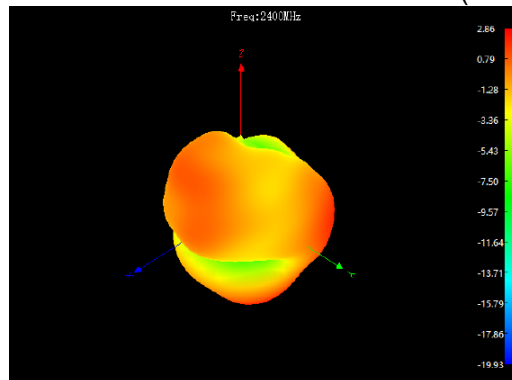
(2) ZY-Plane Total:



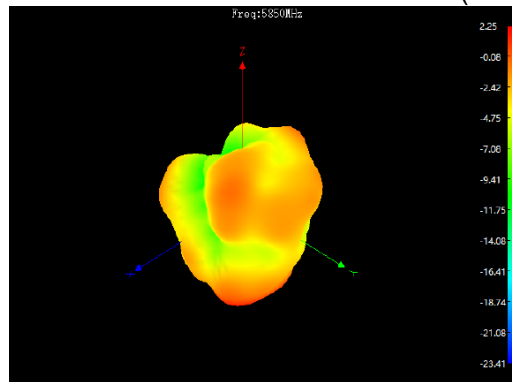
(3) ZX-Plane Total:



(4) Typical Free Space 3D Radiation Pattern at 2400MHz(unit:dBi)



(5) Typical Free Space 3D Radiation Pattern at 5800MHz(unit:dBi)



-----End-----