

OTA TEST REPORT

Applicant	Telink Semiconductor (Shanghai) Co., Ltd
Product	2.4G IFA PCB ANTENNA
Model	IFAV1P64P46P413P54
Report No.	EFTA26060317-IE-02-T3
Issue Date	July 13, 2026

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **ANSI/IEEE Std 149-2021**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



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1. Test Laboratory

1.1. Notes of the Test Report

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1.2. Test Facility

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
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1.4. Laboratory Environment

Temperature	23.5°C	
Relative humidity	59%	
Shield effect	0.7-6GHz	> 100dB
Ground resistance	<4Ω	

2. General Description of Equipment Under Test

2.1. Applicant and Manufacturer Information

Applicant Name	Telink Semiconductor (Shanghai) Co., Ltd
Applicant address	10&11/F, Building 1, 61 Shengxia Road, PuDong District, Shanghai, China 201203
Manufacturer Name	Telink Semiconductor (Shanghai) Co., Ltd
Manufacturer address	10&11/F, Building 1, 61 Shengxia Road, PuDong District, Shanghai, China 201203

2.2. General Information

EUT Description	
Product Name:	2.4G IFA PCB ANTENNA
Model	IFAV1P64P46P413P54
HW Version:	V1.0
SW Version:	/
Antenna Type:	PCB Antenna
Test Frequency:	2400MHz ~ 2500MHz
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.	

2.3. Test Date

The test is performed on July 2,2026.

2.4. Received Date

The sample was received on July 2,2026.

3. Test Conditions

3.1. Test Configuration

Great-Circle-Cut method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 5m.

3.2. Test Measurement

Spherical coordinate system

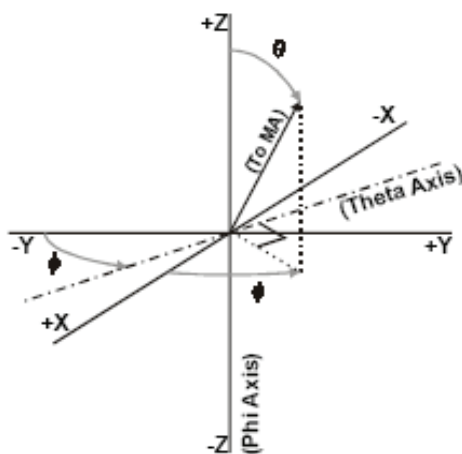
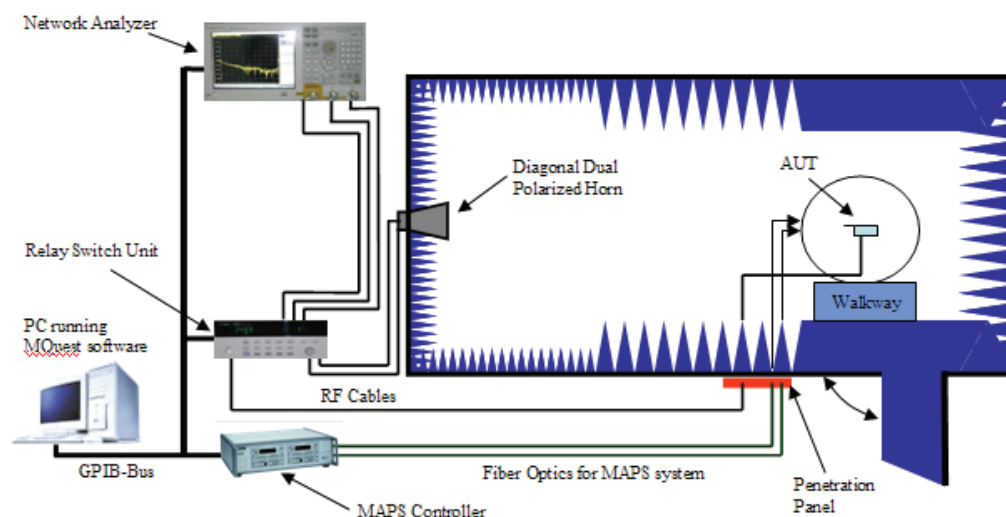


Figure 1 Test coordinate system

Note: Theta is from 0~180 degree. Phi is from 0~360. Rotate the EUT and record the Data, the step of rotation is 15 degree.

Test Setup



4. Test Results

4.1. Gain and Efficiency

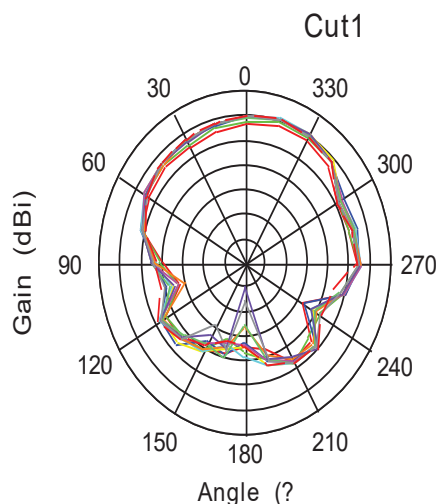
Model	Test Item	Test State	Frequency (MHz)	Efficiency(%)	Gain(dBi)	Note
IFAV1P64P46P413P54	Gain	FS	2400	55.15	1.52	2.4G IFA PCB ANTENNA
			2410	61.13	1.33	
			2420	70.29	2.00	
			2430	76.61	1.87	
			2440	76.21	2.00	
			2450	67.63	1.61	
			2460	62.14	2.00	
			2470	57.93	1.44	
			2480	55.88	1.83	
			2490	53.27	1.37	
			2500	51.69	1.07	

5. Equipment List

• Type of Equipment	Manufacturer	Model	SN	Version	Calibration Date	Expiration Time
Anechoic Chamber	ETS	AMS-8500	CT-001157-1219	/	2025-05-07	2030-05-06
Test Software	ETS	EMQuest™	1464	REV 1.17	/	/
EMCenter_Switch Control System	ETS	7006/7001	00059957/MY42001152	/	/	/
Diagonal Dual Polarized Horn	ETS	ETS 3164-04	00062743	/	2024-03-09	2029-03-08
Network Analyzer	Keysight	E5071B	MY42404014	REV.A.0 6.50	2025-11-24	2026-11-23

ANNEX A: 2-D Pattern Plots

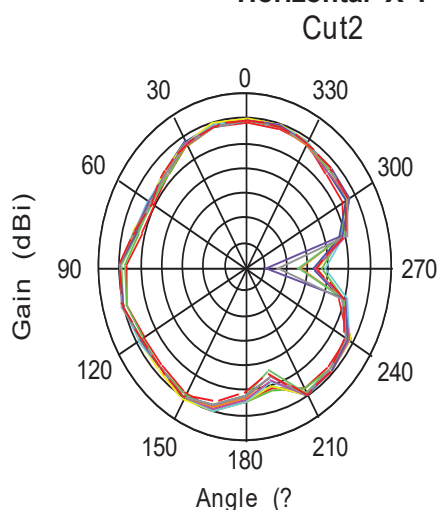
Max: 10
Min: -60
Scale: 10/div



Horizontal X-Y

2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

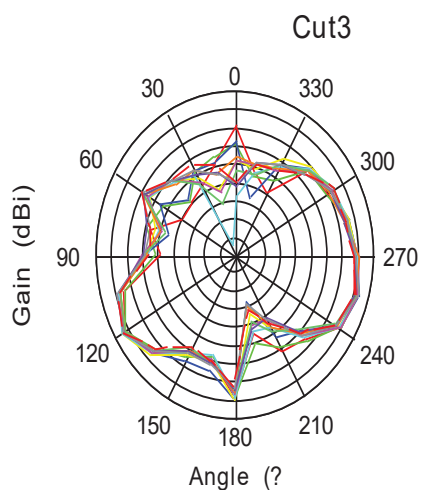
Max: 10
Min: -60
Scale: 10/div



Horizontal X-Z

2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

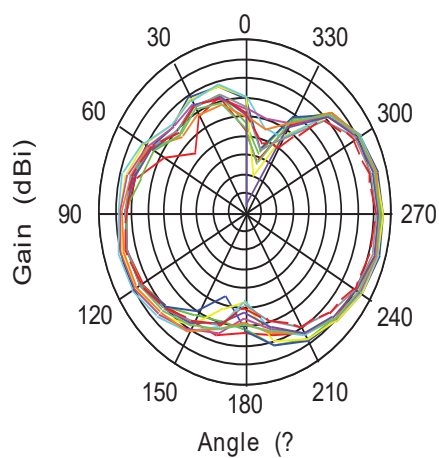
Max: 0
Min: -45
Scale: 5/div



2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

Horizontal Y-Z

Cut1

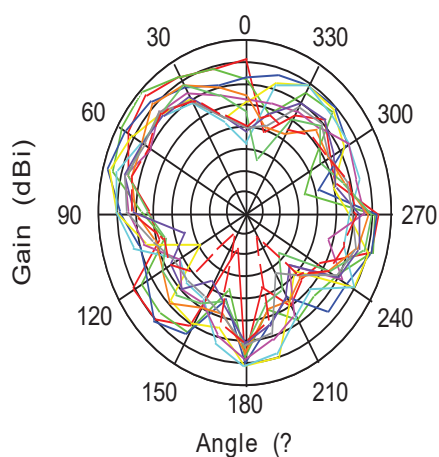


Max: 5
Min: -40
Scale: 5/div

2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

Vertical X-Y

Cut2

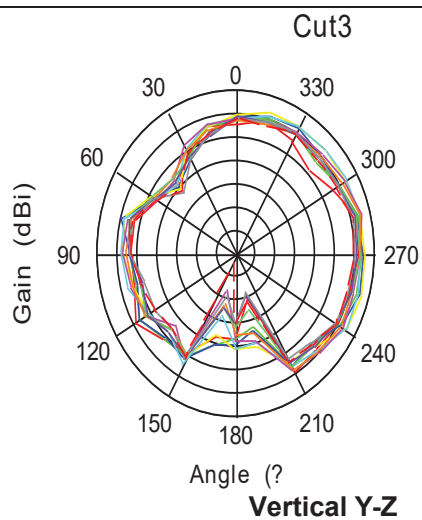


Max: -5
Min: -45
Scale: 5/div

2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

Vertical X-Z

Max: 5
Min: -30
Scale: 5/div

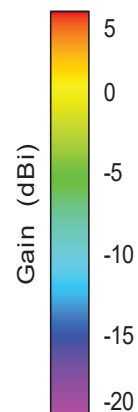
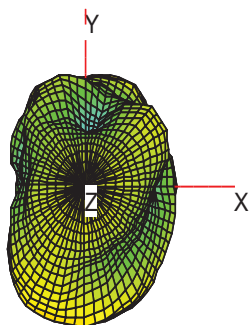


2400 MHz	2500 MHz
2410 MHz	
2420 MHz	
2430 MHz	
2440 MHz	
2450 MHz	
2460 MHz	
2470 MHz	
2480 MHz	
2490 MHz	

ANNEX B: 3-D Pattern Plots

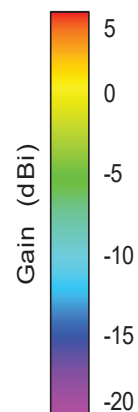
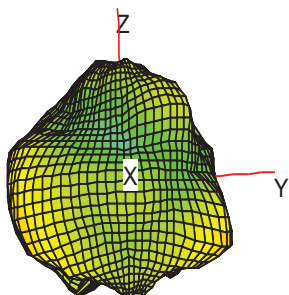
Total

Azimuth = 0.0
Elevation = 0.0
Roll = 0.0



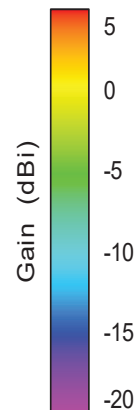
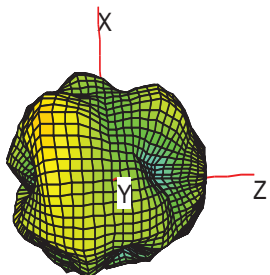
Total

Azimuth = 87.2
Elevation = 0.2
Roll = -95.2



Total

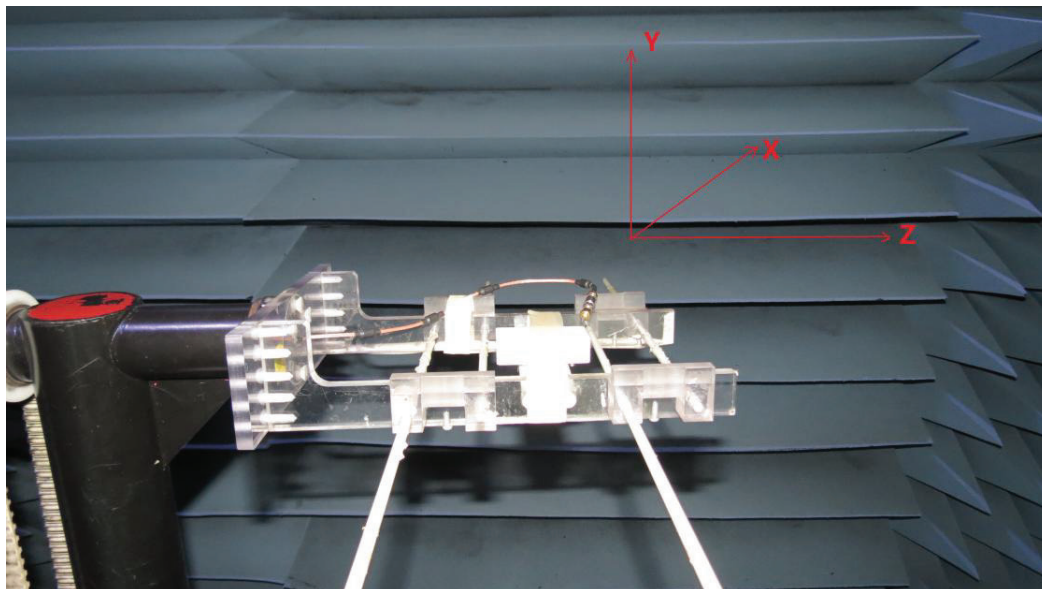
Azimuth = 69.7
Elevation = -86.2
Roll = 162.7



3D Gain

ANNEX C: The EUT Appearance and Test Configuration

C.1 Test Configuration



Picture 1 Test Setup

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