



深圳合立讯科技有限公司

Shenzhen HeLixun Technology Co., Ltd.

规格书

SPECIFICATION FOR APPROVAL

客户名称 customer Name			
客户项目名 customer project Name	BT-981	合立讯项目名 Helixun project Name	BT-981
客户编码 customer P/N		合立讯料号 Helixun P/N	HLX-BT-981-V2
频段 Band	2400-2500MHZ		
版本号 version	AO		
设计人信息/Designer Information			
射频工程师 RF Engineer		电子工程师 EE Engineer	
结构工程师 ME Engineer			

合立讯审批/Helixun Approval				客户批准/customer Approval	
	制作 prepared BY	审核 checked BY	批准 Approval BY	审核 checked BY	批准 Approval BY
签章 signature					
日期 Date	2026-06-17				

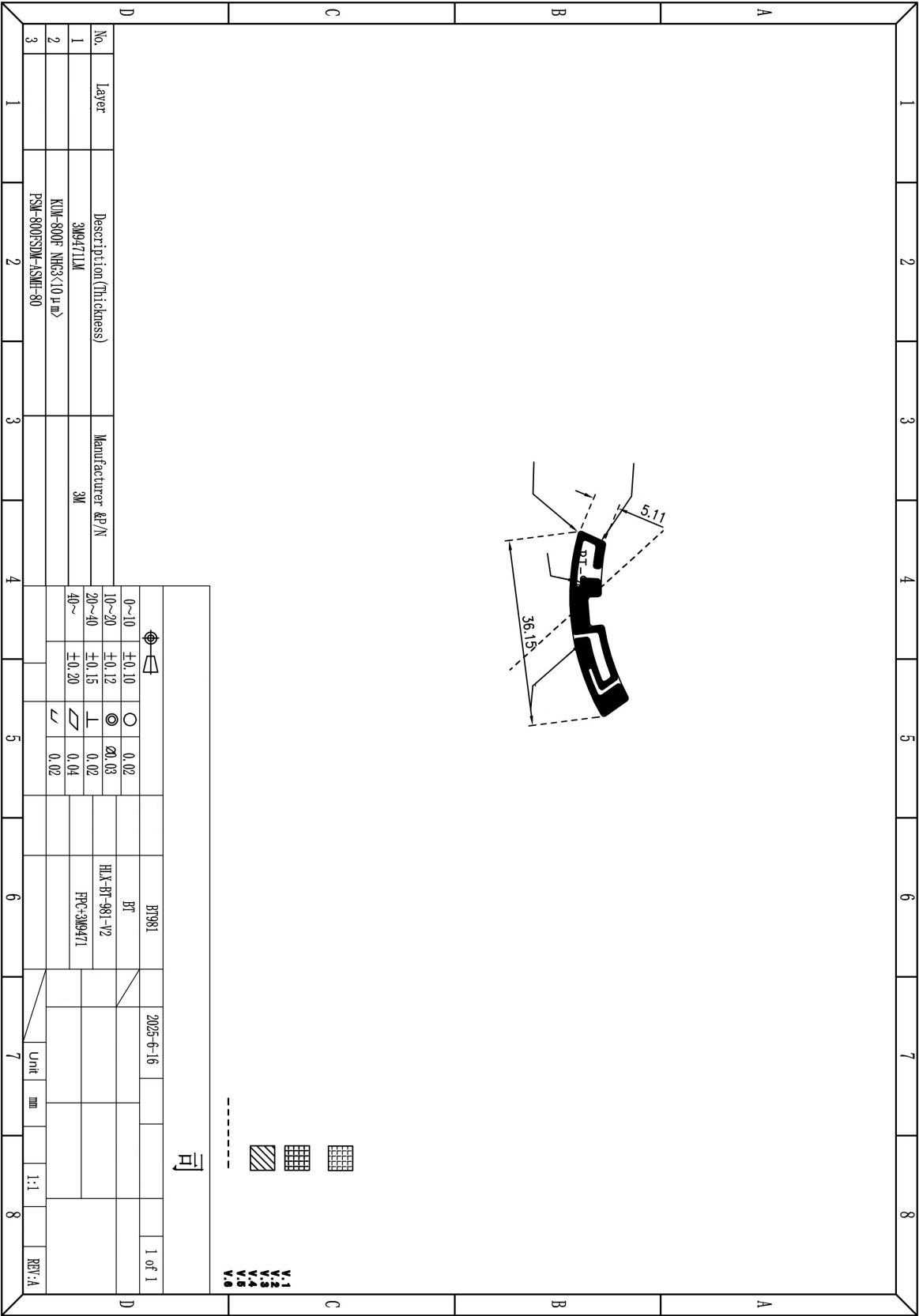
修订履历/change Log				
版本 version	修订内容 change Description	责任人 person in charge	核准 Approval BY	日期 Date

地址：深圳市宝安区西乡街道铁仔路 56 号金环宇大厦 1004 室

Address: Room 1004, JinhuanYu Building, 56 Tiezi Road, xixiang street, Bao 'an District, Shenzhen

Antenna Type: FPC Antenna

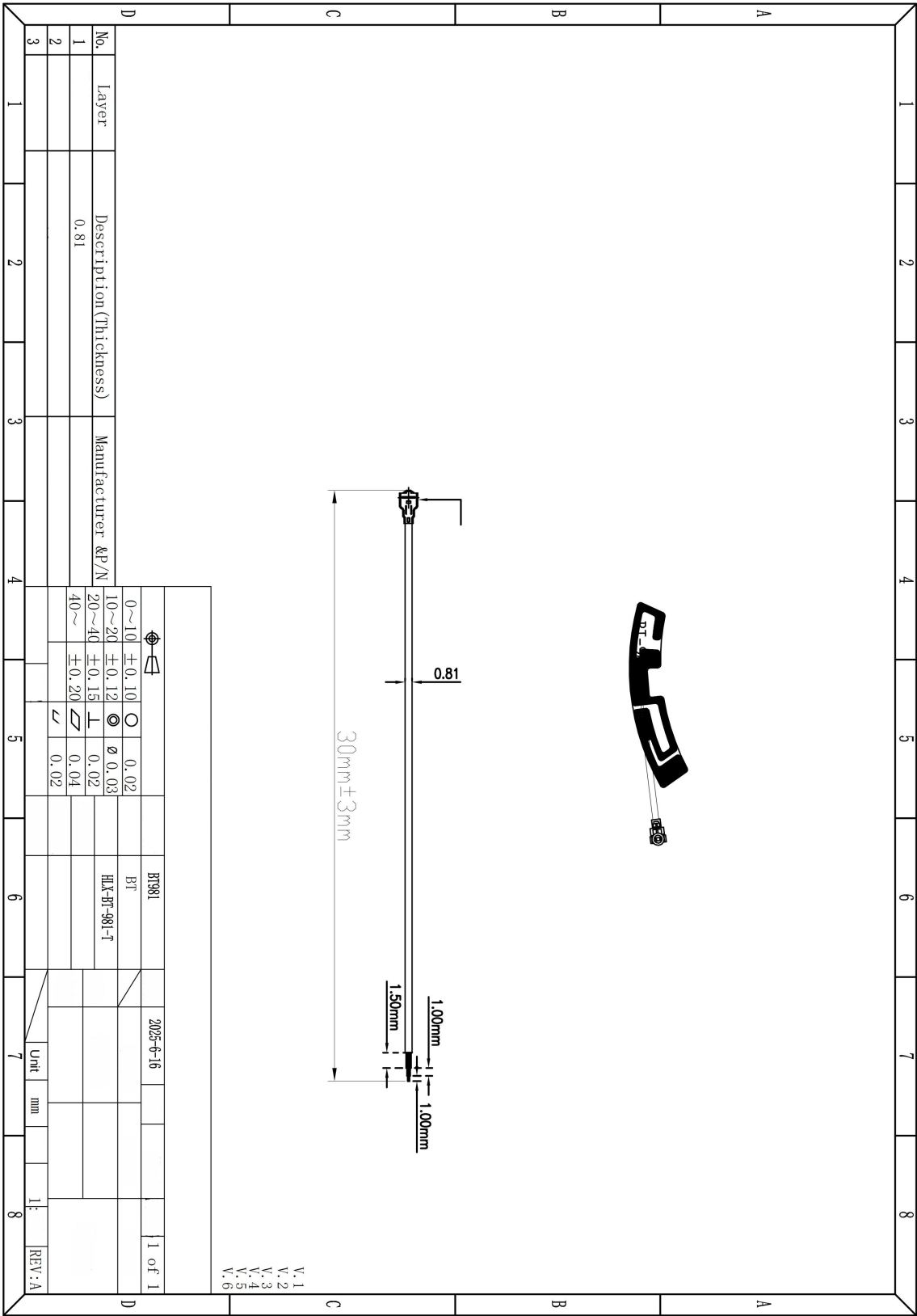
产品图纸或实物图片
Drawing or Product Image



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射频性能测量报告

RF Performance Test Report

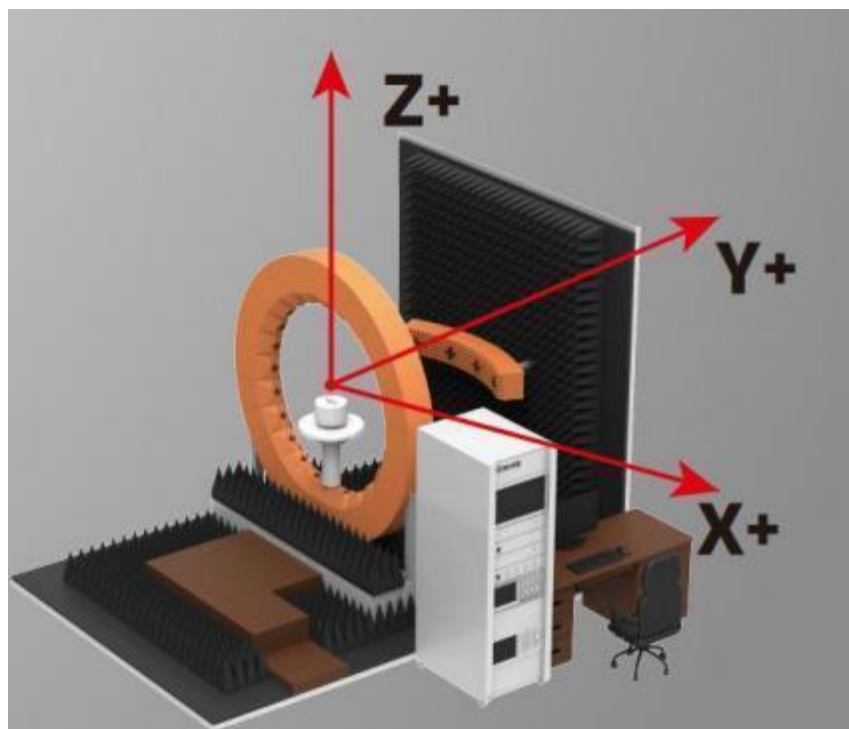
客户名称 customer Name	东莞市晨新电子科技有限公司	项目名称 project Name	BT-981	合立讯料号 Helixun P/N	HLX-BT-981-V2
频段 Band	2400-2500MHZ	测试日期 Test Date	2026-06-17	测试人 Inspector	吴捷

天线测试设备简介

Antenna Test Equipment Introduction

测试天线输入特性使用 Agilent E5071c and Agilent 5071c 矢量网络分析仪；辐射特性使用 ETS 三维近场暗室进行测试，并分别使用 CMW500 和 Agilent 5071C 进行了分析。暗房的测试坐标如下：

Test of antenna input characteristics using Agilent E5071c and Agilent 5071c vector network analyzer ; The radiation pattern of the antenna are tested using the ETS star lab 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows :

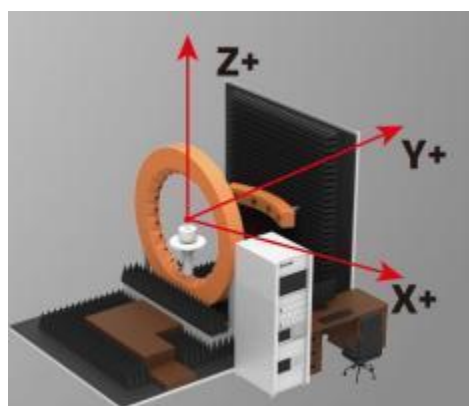
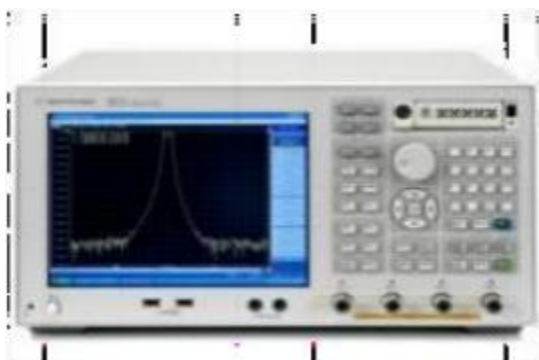


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Testsystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



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3. Test Result

BT

3.1 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	1.48	1.31	1.50	1.73

3. Test Result

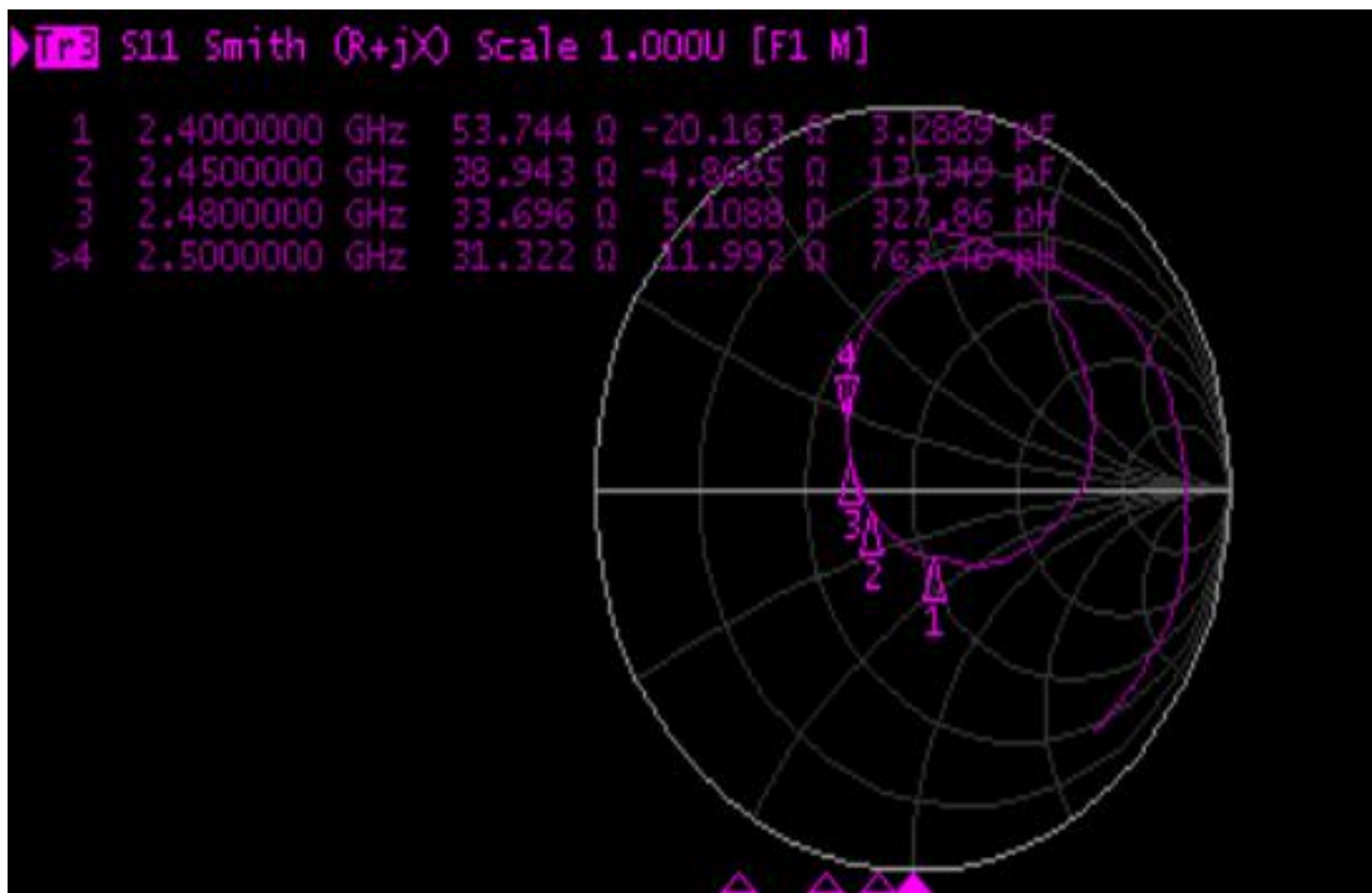
3.1 S11 Parameter-Log Mag



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-14.57	-18.03	-14.11	-11.59

3. Test Result

3.1 S11 Parameter-Smith



Frequency (MHz)	2400	2450	2480	2500
Smith(Ω)	53.74	38.94	33.69	31.32

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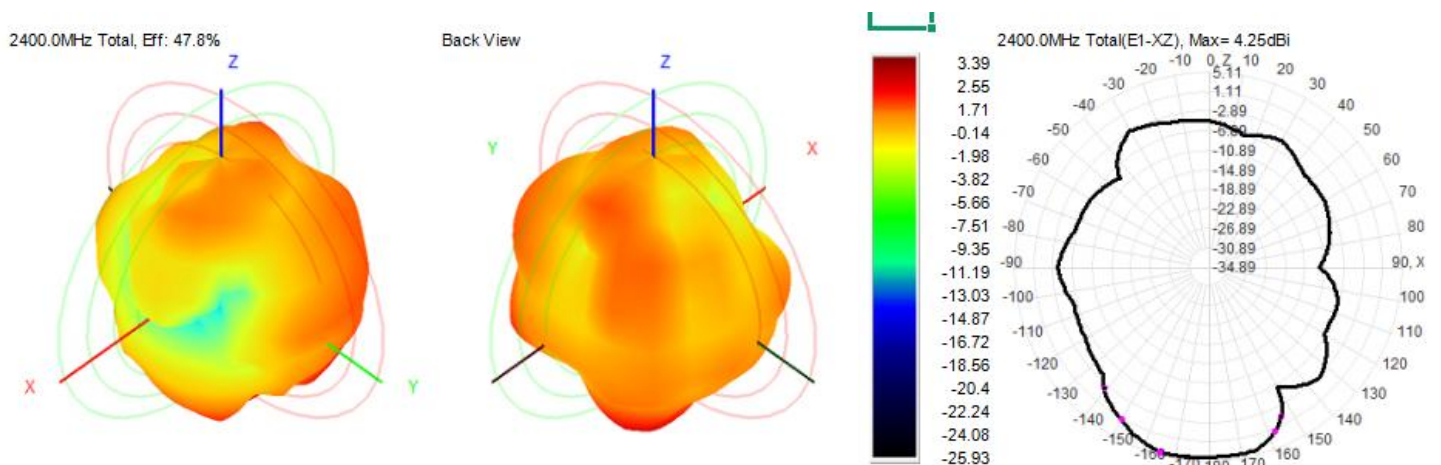
4.2 Test Result

1 Gain & Efficiency——ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	47.76	3.39
2410	46.80	3.27
2420	46.03	3.20
2430	45.17	2.95
2440	44.57	2.87
2450	44.88	2.84
2460	44.41	3.03
2470	43.81	3.07
2480	42.67	2.92

4.2 Test Result

1 2D Pattern——BTANT

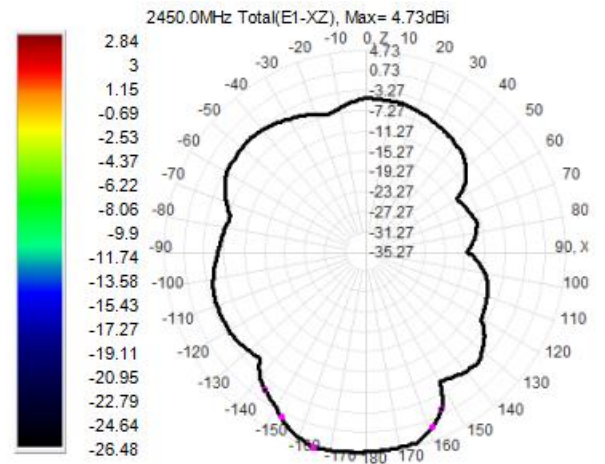
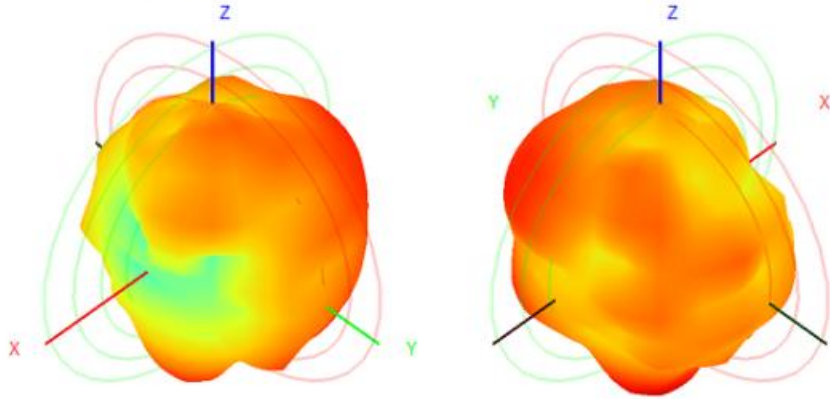


4.2 Test Result

1 2D Pattern——BTANT

2450.0MHz Total, Eff: 44.9%

Back View



2480.0MHz Total, Eff: 42.7%

Back View

