



# Commissioning report

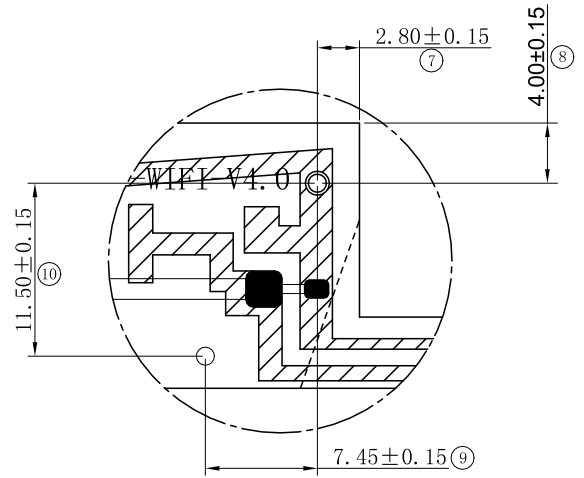
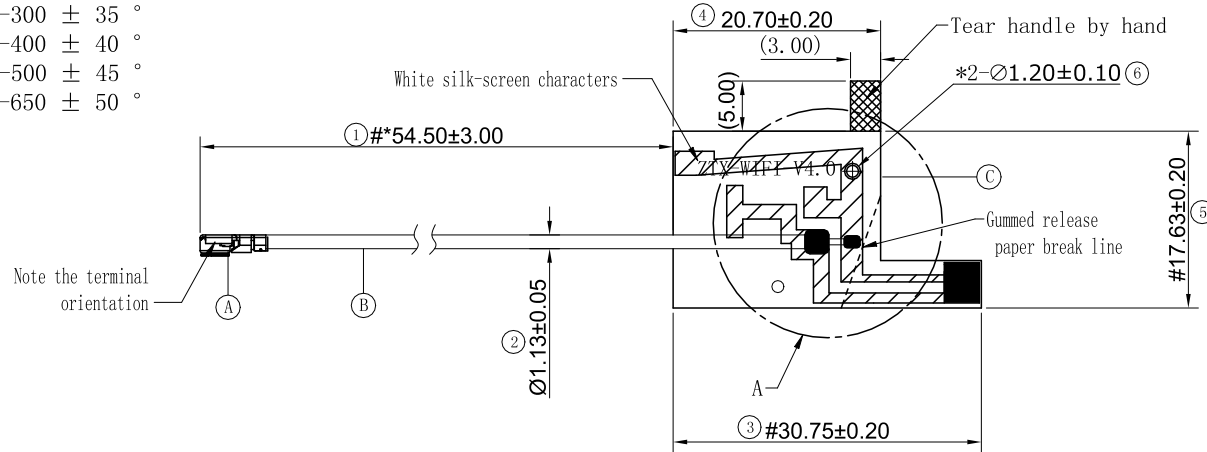
Edition: V1.0

Shenzhen ZTX Communication Technology Co., Ltd			
Radio frequency	Lin Yiqing 13471418468	Structure	Zou Yilin
Examine and verify	Wei Jin	Vocational work	
Company address	No. 34 Shilong Avenue, Shiyan Street, Bao'an District, Shenzhen		
Project information			
Entry name	All-in-one camera	Model version	
Antenna type	FPC+coaxial line	Solution company	
Antenna system	Dual frequency2.4/5G	Date	2022.12.1
Remarks:			

Add:No. 34 Shilong Avenue, Shiyan Street, Bao'an District, Shenzhen  
TEL:0755-27588360 /27572127 FAX:0755-27588320  
Website:www.chinaztx.com

0.81 strip terminals  
 $\leq 50 \pm 35^\circ$   
 $\geq 50$  not controlled  
 1.13 versus 1.37 strip terminals  
 $30-100 \pm 20^\circ$   
 $100-200 \pm 30^\circ$   
 $200-300 \pm 35^\circ$   
 $300-400 \pm 40^\circ$   
 $400-500 \pm 45^\circ$   
 $500-650 \pm 50^\circ$

Rev 版本	Description 描述	Designed 制图	Date 日期
A1	For the first time	Kylin	2023.02.16



Detail view A  
 scale: 1.5: 1

- Note:
- 1: The size marked in the figure is the key control size, trial production or mold sample should be measured all, the size with "\*" is the IQC must measure; Unnoted tolerances refer to the tolerance table in the drawing frame for control;
  - 2: all parts can not be assembled into finished products until their dimensions, appearance and performance have been confirmed to meet the standards.
  3. Unmating force after terminal and plate end mating: above 5N at the first mating force.
  - 4: The product welding should be stable, no false welding, welding spot can not have too high and peak phenomenon.
  - 5: the product needs to be packed according to the requirements, the transportation process can not have obvious extrusion deformation phenomenon.
  - 6: not confirmed by ZTX company, Material and process requirements cannot be changed at will.
  - 7: All materials shall meet the requirements of RoHS2.0HF;

Note: size with # is CPK detection size

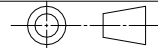
Description of component material:

Serial number	Name of material	Material	Technology	Notes
(A)	RF terminal (Generation 4) no. TX-20565-001R-13	Phosphor bronze	Gold plated	
(B)	Coaxial line, material number: RB113L/50-001D, SY113L/50-001	Silver Tin (low loss)/FEP/black	Dip Tin	
(C)	FPC antenna (T≈0.13mm)	Single panel, electrolytic copper/one-and-a-half	Gold plated	

# ZTX 深圳市中天迅通信技术股份有限公司

## Shenzhen ZTX Communication Technology Co., Ltd

General Tolerance		Date 日期: 2023.02.16	Unit 单位: mm	Rev 版本: A1	Scale 比例:	Project Name 项目名称: 一体相机 (AIWTF07)
Dim Grade	5-10	±0.10	±0.20	Designed 设计: Kylin	Material 材料:	Product Name 产品名称: WIFI antenna components
	10-20	±0.15	±0.30	Checked 审核: Yiqing lin	Process 工艺:	Material Code 物料编码: 2.00005552
	20-40	±0.20	±0.40	Approval 批准: Guohua zou	Third Angle 第三视角	Drawing Number 图纸编号: ZTX-QR-RD-013
	40>	±0.25	±0.50			





- ◇ R&D equipment
- ◇ noun interpretation
- ◇ Assembly instructions
- ◇ Test data
- ◇ Matching circuit
- ◇ Project summary



The company has one set of Satimo SG24 OTA test system, two sets of ETS OTA standard test system, one set of Bluetest reverberation anechoic chamber, and one set of MicroPross NFC test system, which is the most advanced in the communication industry. It can provide customers with accurate test reports quickly and stably, fully in line with the CTIA standard, and supports the active passive test of GSM/CDMA/WCDMA/TD/LTE/WIFI/BT/GPS/MIMO and other systems.

MicroPross NFC system can meet the test requirements of all operators, conduct fast performance test on NFC equipment, and output formal certification test report.

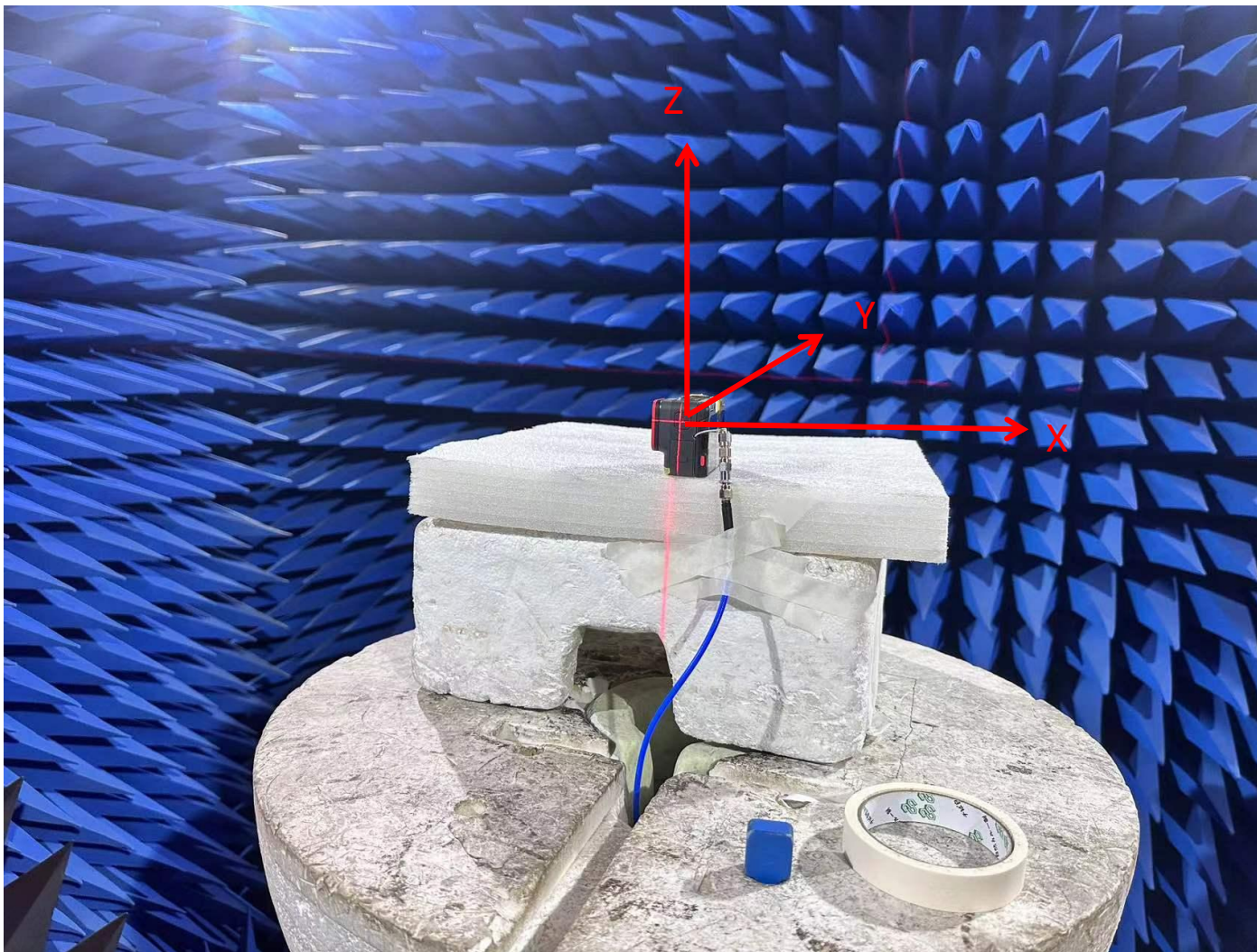


# Noun interpretation

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
PCS	Personal Communication System
PHS	Personal Handy-phone System
SAR	Specific Absorption Rate
PCB	Printed Circuit Board
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access
LTE	Long Term Evolution



# Antenna passive test



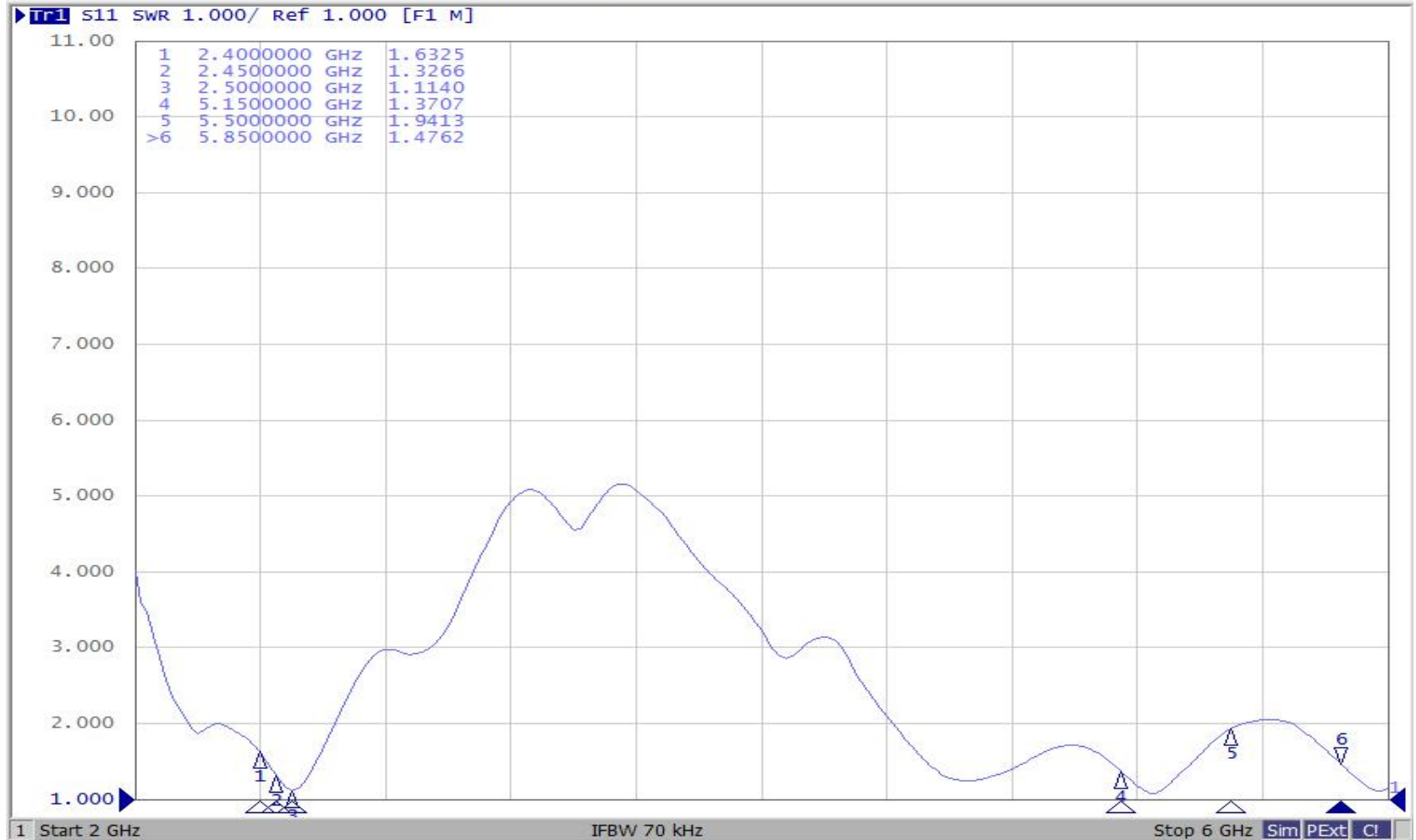
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# Antenna test data:VSWR

E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



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# Antenna test data:Efficiency/Gain

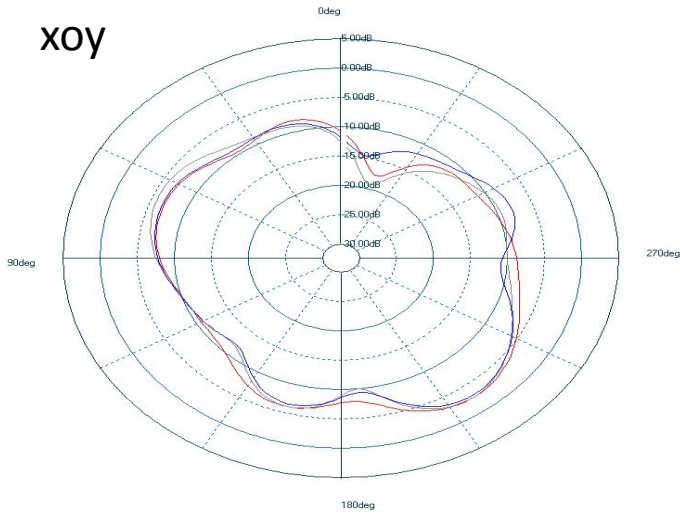
Frequency (MHz)	Efficiency	Efficiency . dE	Gain . dB
2400	40%	-3.98	1.59
2410	40%	-3.99	1.83
2420	41%	-3.85	1.57
2430	40%	-3.96	1.55
2440	41%	-3.89	1.61
2450	42%	-3.80	1.85
2460	41%	-3.86	1.97
2470	42%	-3.79	2.39
2480	41%	-3.84	2.09
2490	42%	-3.78	2.08
2500	43%	-3.63	2.17
5150	42%	-3.77	2.20
5200	42%	-3.78	2.06
5250	43%	-3.71	2.34
5300	43%	-3.72	2.42
5350	42%	-3.80	2.20
5400	41%	-3.89	2.01
5450	42%	-3.80	1.79
5500	43%	-3.68	1.08
5550	41%	-3.92	1.64
5600	41%	-3.90	1.83
5650	42%	-3.81	1.21
5700	43%	-3.70	1.49
5750	44%	-3.61	1.49
5800	45%	-3.50	1.59
5850	45%	-3.50	2.01



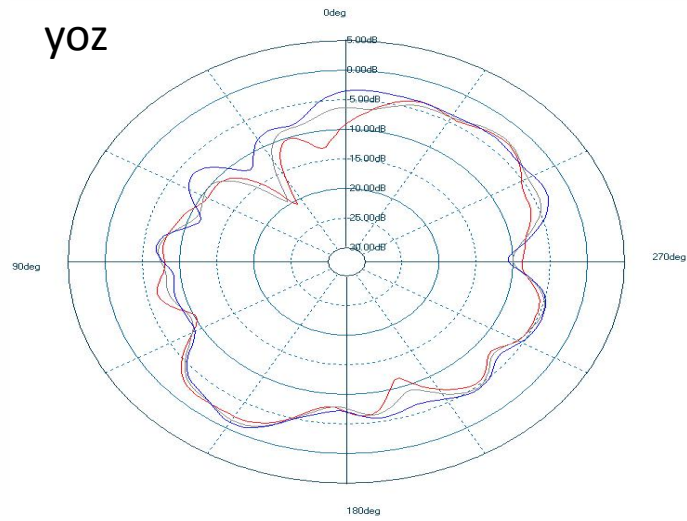


# Antenna test data (WiFi 1) :2.4G Directional diagram

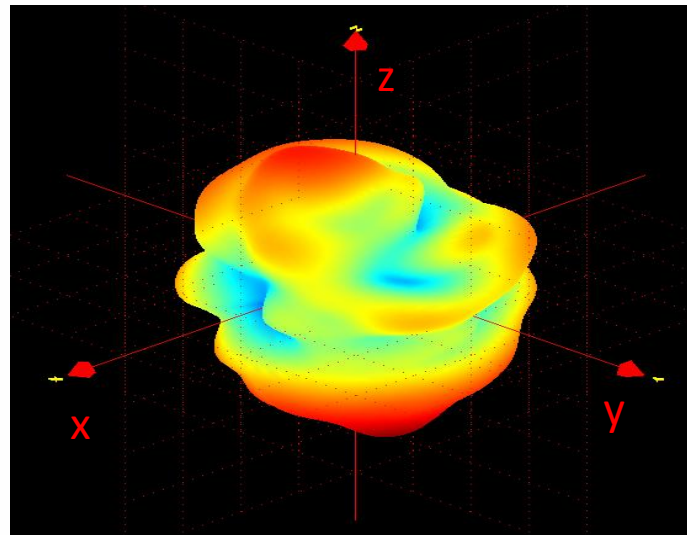
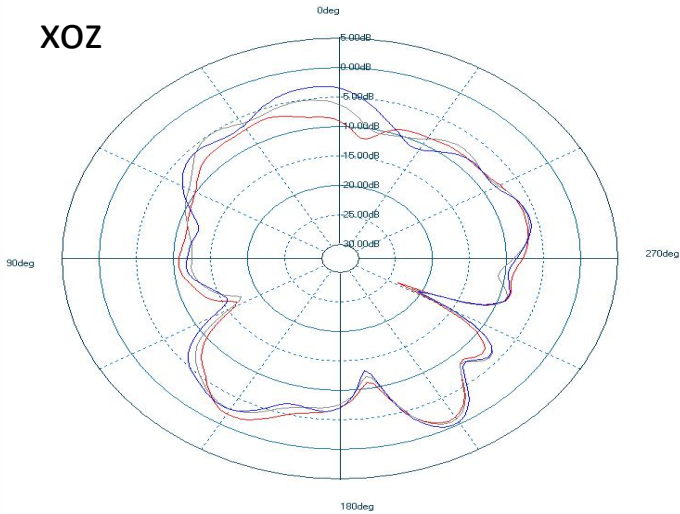
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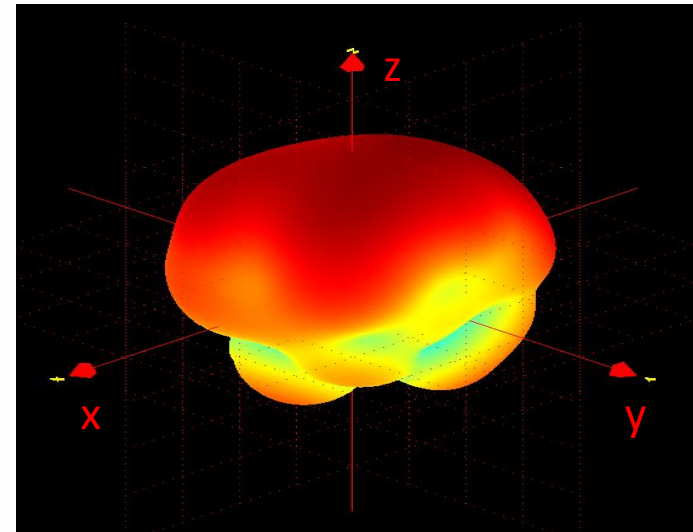
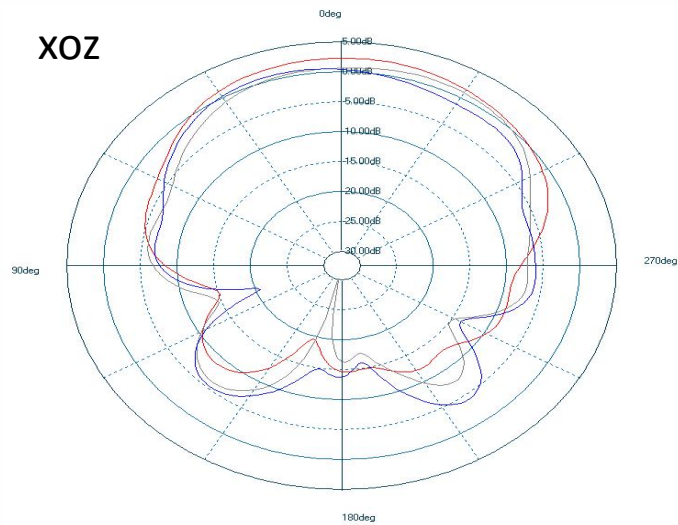
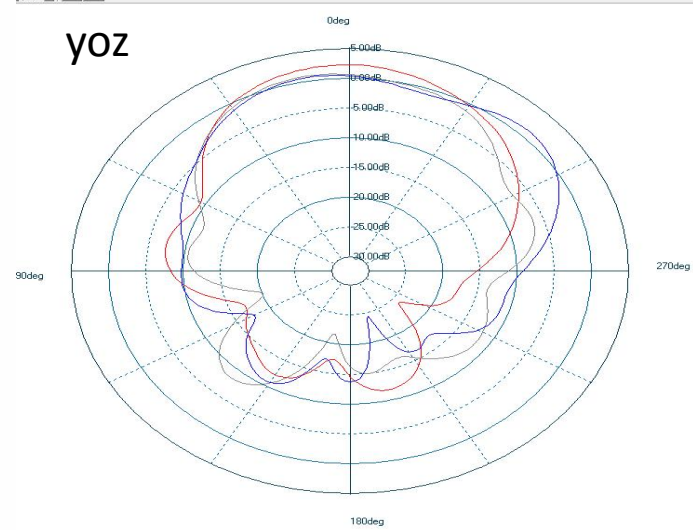
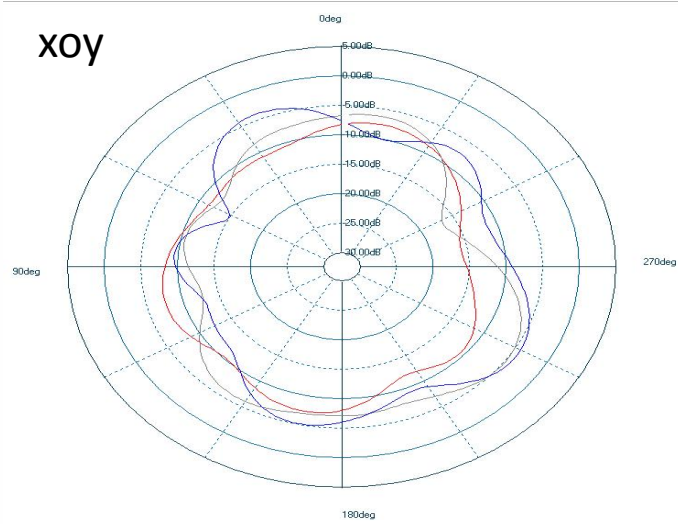
XOZ



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# Antenna test data (WiFi 1) :5G Directional diagram



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Thank you!

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