

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A0)

CUSTOMER	Hesung Innovation Limited
CS P/N	HS-FPC002-230A
TEST MODEL	DR-HSH006S Warm air blower
PART NAME	WIFI Antenna
FREQUENCY	2400~2500MHz
ZTX NO.	2.00000961
DATE	2024-04-01

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark:

Sign:

Shenzhen ZTX Communication Technology Co., Ltd				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		Le.Qin	Wenqi.Liu	



Shenzhen ZTX Communication Technology Co., Ltd

Address: No.34, Shilong Avenue, Shiyuan Town, Baoan District, Shenzhen, (Tengda Industrial Park) 518000

Tel.: 0755-27588320 Fax: 0755-27588045 <http://www.chinaztx.com>

ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna

Application Date: Apr, 01, 2024

Rev: R:A0

ZTX P/N : HS-FPC002-230A_WIFI Antenna

Editor:

Page 1 of 9

Revision history

Edition	Date	state
A0	2024-04-01	First edition

ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date:Apr,01,2024
Editor:

Rev: R:A0
Page 2 of 9

Index

		Revision history	1
		Index	2
1		Mechanical Specification	3
	1-1	Mechanical Specification(WIFI Antenna)	3
2		Test equipment	4
3		Test Results Summary	5
	3-1	Active Test	5
	3-2	VSWR &S11	5
	3-3	No-source test data	6
	3-4	2D/3D Radiation Pattern Results	7~9

ANTENNA SPECIFICATION

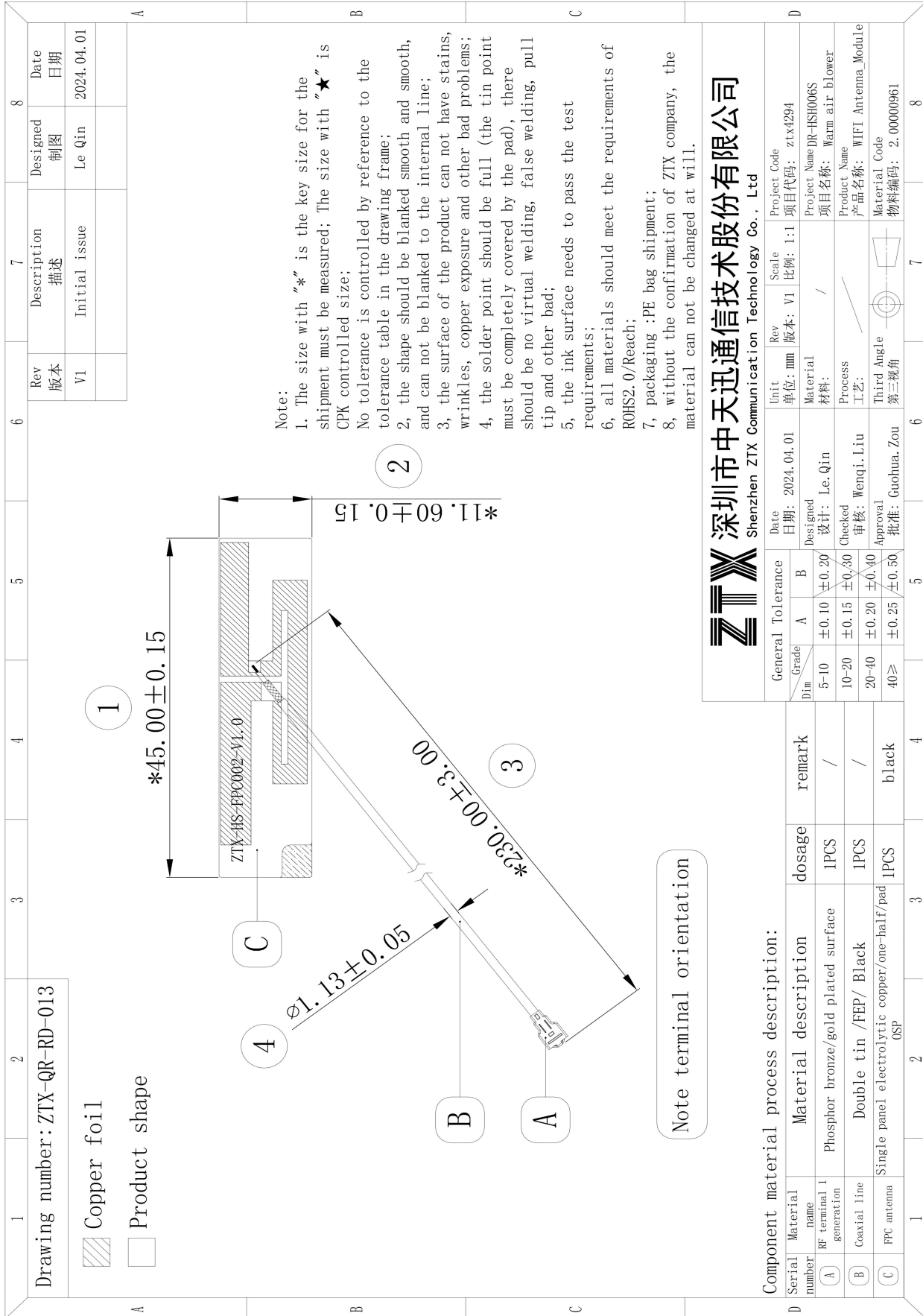
CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date: Apr,01,2024
Editor:

Rev: R:A0
Page 3 of 9

1. Mechanical Specification

1-1 Mechanical Configuration (WIFI Antenna/FPC Antenna)



Note:

- The size with "*" is the key size for the shipment must be measured; The size with "★" is CPK controlled size;
- No tolerance is controlled by reference to the tolerance table in the drawing frame;
- the shape should be blanked smooth and smooth, and can not be blanked to the internal line;
- the surface of the product can not have stains, wrinkles, copper exposure and other bad problems;
- the solder point should be full (the tin point must be completely covered by the pad), there should be no virtual welding, false welding, pull tip and other bad;
- the ink surface needs to pass the test requirements;
- all materials should meet the requirements of ROHS2.0/Reach;
- packaging :PE bag shipment;
- without the confirmation of ZTX company, the material can not be changed at will.

ZTX 深圳市中天迅通信科技股份有限公司
Shenzhen ZTX Communication Technology Co., Ltd

Component material process description:		Material description	dosage	remark
Serial number	Material name			
(A)	RF terminal I generation	Phosphor bronze/gold plated surface	1PCS	/
(B)	Coaxial line	Double tin /FEP/ Black	1PCS	/
(C)	FPC antenna	Single panel electrolytic copper/one-half/pad OSP	1PCS	black

Date	Rev	Scale	Project Code
2024.04.01	版本: V1	比例: 1:1	项目代码: ztx4294
Designed	Material		Project Name DR-HSH006S
设计: Le.Qin	材料: /		项目名称: Warm air blower
Checked	Process		Product Name
审核: Wenqi.Liu	工艺: /		产品名称: WIFI Antenna_Module
Approval	Third Angle		Material Code
批准: Guohua.Zou	第三视角		物料编码: 2.00000961

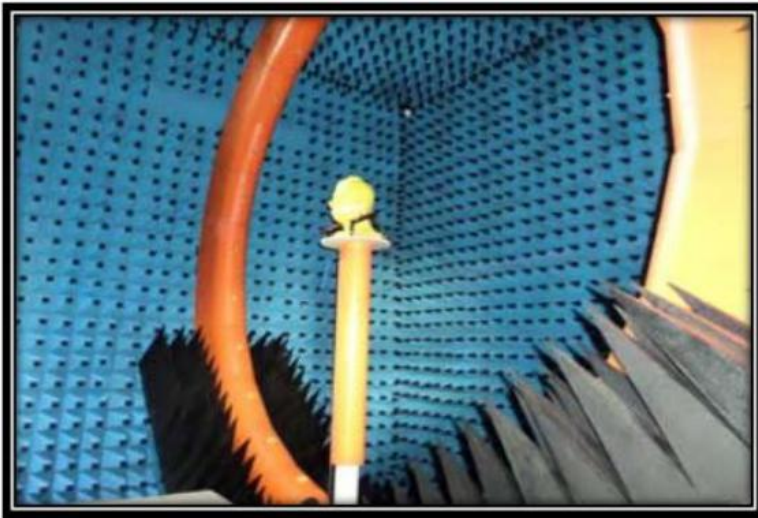
ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date:Apr,01,2024
Editor:

Rev: R:A0
Page 4 of 9

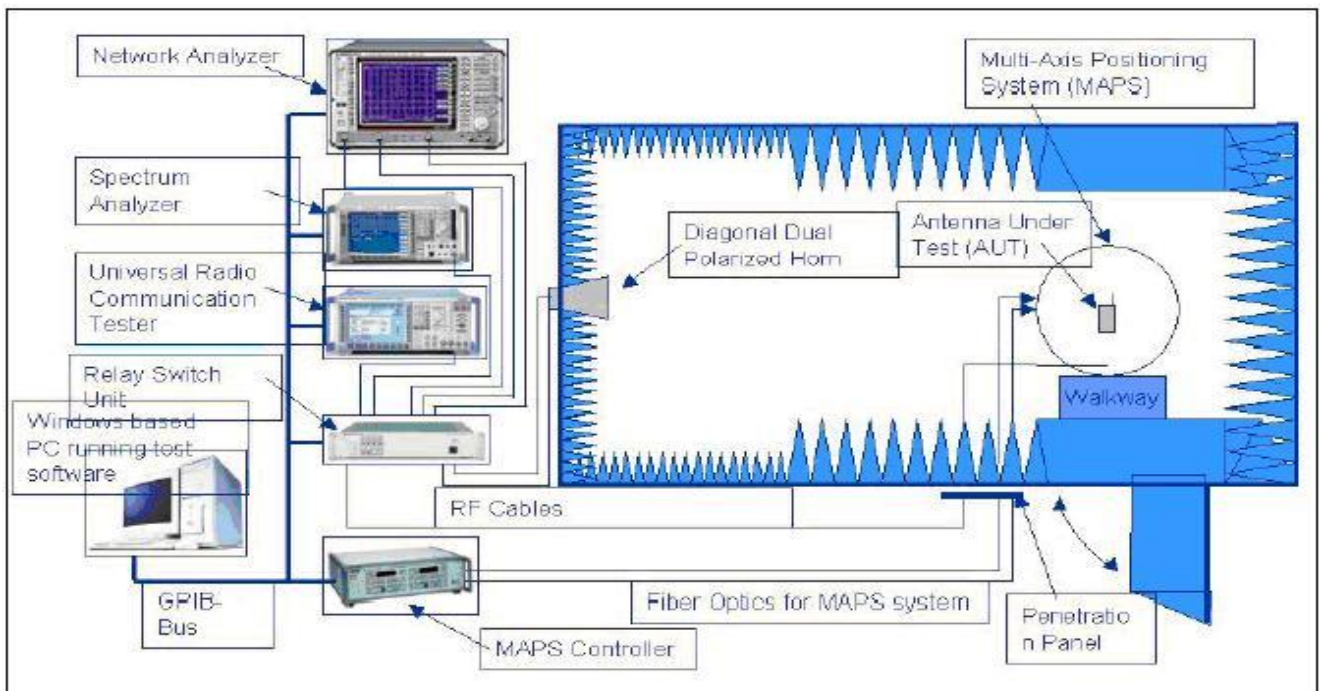
2. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CTIA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT/GPS/MIMO/UWB within 0.4-6G.



ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
 ZTX P/N :HS-FPC002-230A_WIFI Antenna

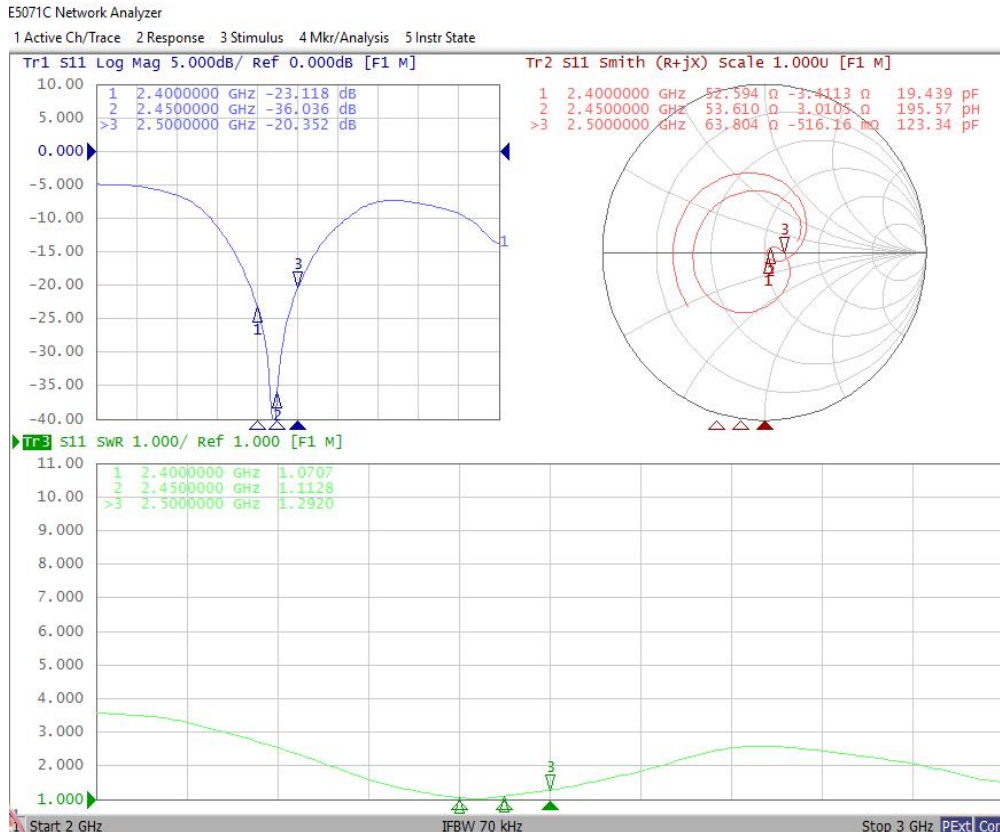
Application Date:Apr,01,2024
 Editor:

Rev: R:A0
 Page 5 of 9

3.Test Results Summary 3-1 Active Test

FPC sample		
frequency	TRP	TIS
2. 4G-11B	16. 46	-83. 52
	16. 66	-83. 43
	16. 56	-83. 13
2. 4G-11G	15. 02	-70. 07
	15. 39	-70. 63
	15. 22	-70. 40
2. 4G-11N	15. 12	-66. 39
	15. 18	-66. 12
	15. 21	-65. 57

3-2 VSWR & S11



ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna

Application Date: Apr, 01, 2024

Rev: R:A0

ZTX P/N : HS-FPC002-230A_WIFI Antenna

Editor:

Page 6 of 9

3-3 No-source test data

Frequency	Efficiency	Efficiency	Gain . dB
2.4E+09	66%	-1.7828	3.308108474
2.41E+09	66%	-1.82494	3.416641229
2.42E+09	63%	-2.00097	3.371648217
2.43E+09	65%	-1.86037	3.608702609
2.44E+09	63%	-1.97914	3.420210511
2.45E+09	64%	-1.95141	3.698445056
2.46E+09	63%	-2.00356	3.798410062
2.47E+09	60%	-2.23694	3.823760722
2.48E+09	65%	-1.8687	4.355508636
2.49E+09	64%	-1.92422	4.453610315
2.5E+09	67%	-1.70794	4.664413639

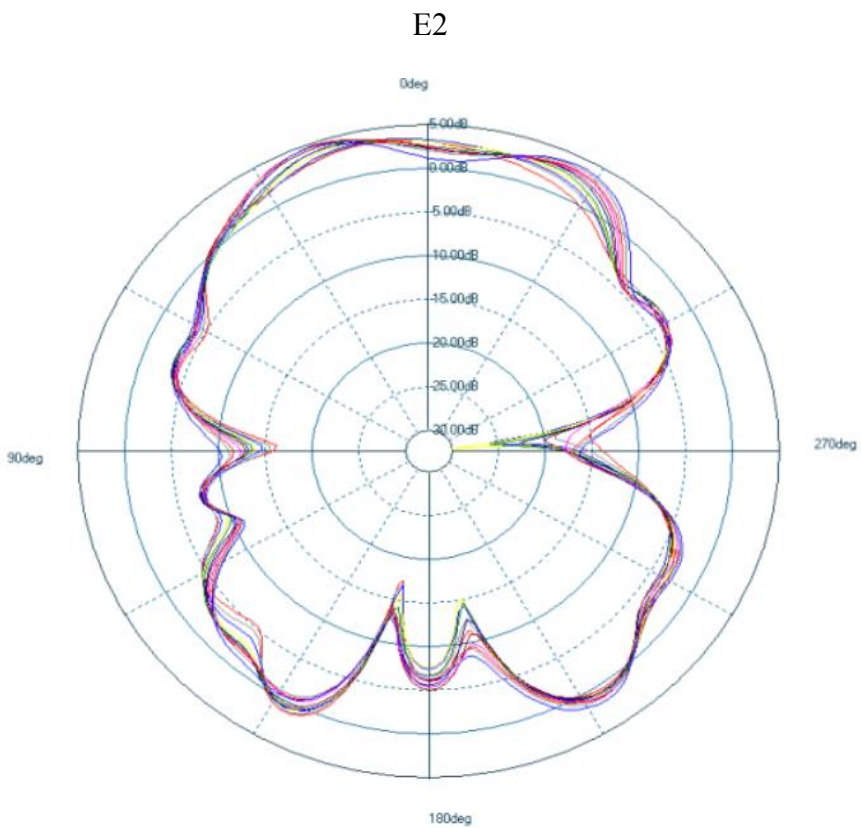
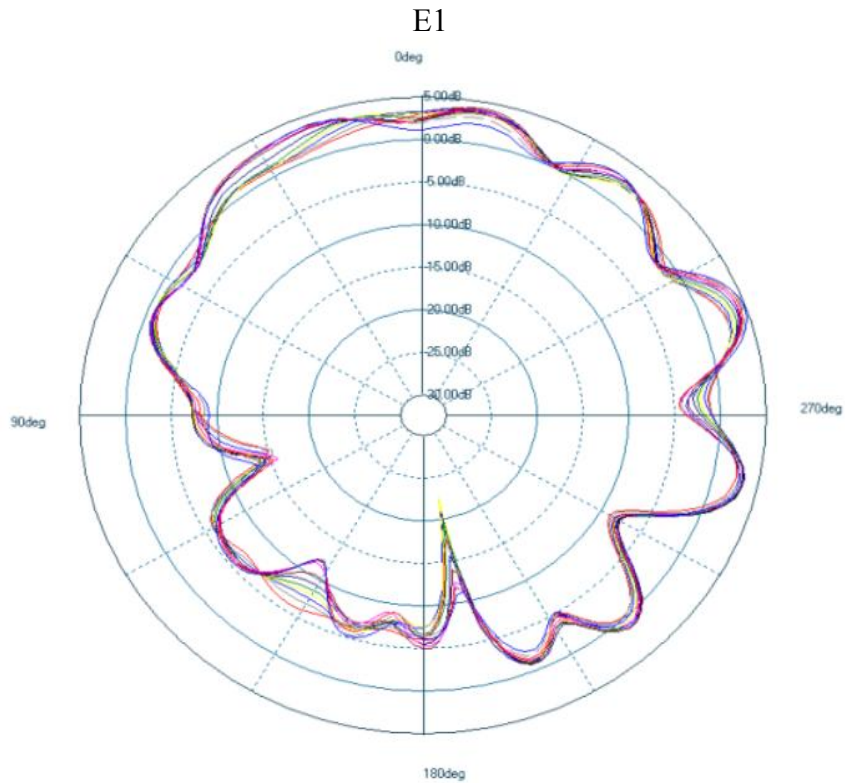
ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date:Apr,01,2024
Editor:

Rev: R:A0
Page 7 of 9

3-4 2D/3D Radiation Pattern Results

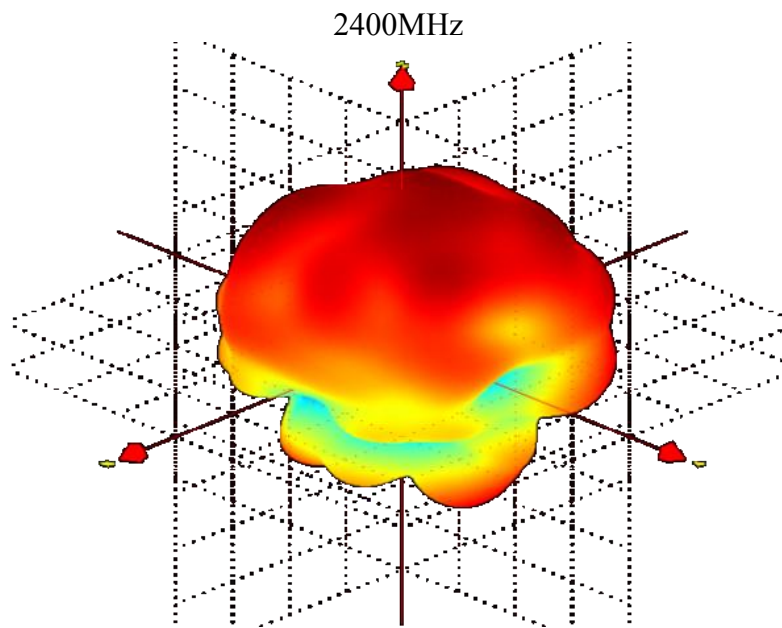
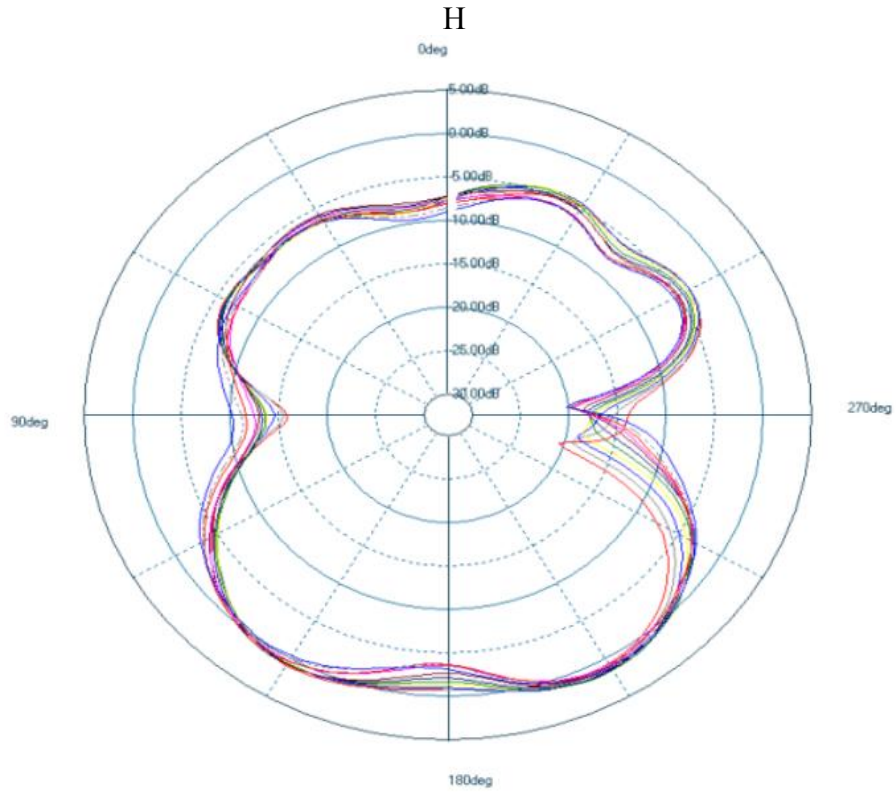


ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date:Apr,01,2024
Editor:

Rev: R:A0
Page 8 of 9



ANTENNA SPECIFICATION

CUS P/N: HS-FPC002-230A_WIFI Antenna
ZTX P/N :HS-FPC002-230A_WIFI Antenna

Application Date:Apr,01,2024
Editor:

Rev: R:A0
Page 9 of 9

