KYOCERA AVX Components Corporation
1 AVX Boulevard
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UL2109-19 WIFI Antenna Datasheet

Customer	Anviz
Customer Code	
Project	UL2109-19
PN	4007552
Type	FPC+CABLE
Date	2024-03-14
Version	
Editor	**Quincy Yang Lenny Zhang**
Approve	

Customer Approve

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1. Project Brief

ANTENNA Required Bands

WIFI antenna	2.4~2.483Ghz

2. Antenna Specification

Band	Frequency(MHz)	S11(dB)
824 – 960 MHz	**824**	-1.9
	960	-1.2
1710 – 2170 MHz	**1710**	-2.4
	1990	-2.2
	2170	-2.0
2300 – 2690 MHz	**2300**	-2.4
	2500	-6.0
	2690	-3.8

3. Device Pictures

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4. Test Environment

Agilent E5071C VNA is used to test return loss. Satimo Starlab 3D near filed chamber is used to test antenna efficiency and radiation pattern。The test coordinate system is shown in Figure1.

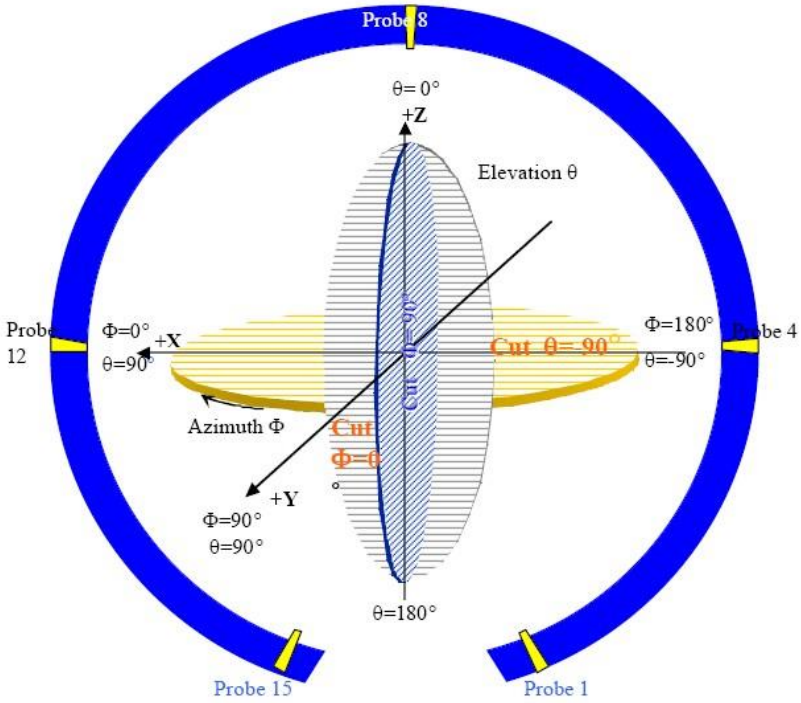

Figure1 Test Coordinate System of 3D Chamber

5. Antenna Picture

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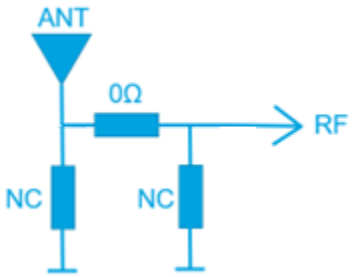
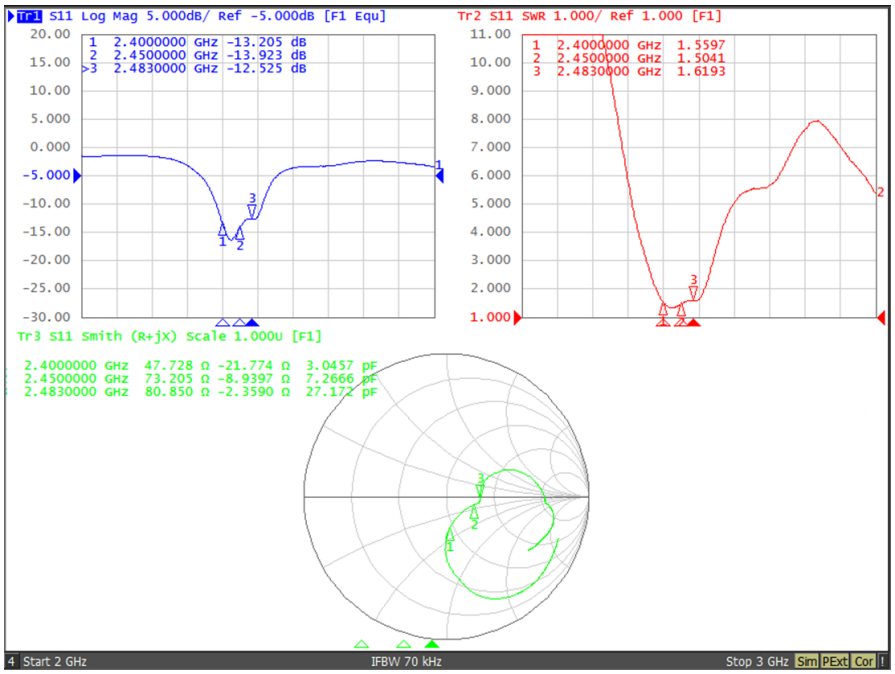
6. Matching Network

In order to assure the best performance of the antenna, the matching will be evaluated in free space and in talk position. The antenna will comply with the Electrical Specification requirements, as set out below, while mounted on the handset containing the PCB. The handset and PCB are to be provided by the customer and should be representative of the latest design version of all parts. Any modifications in the handset or PCB can affect the performance of the antenna and should be discussed with Ethertronics to determine the effect of such changes on the antenna performance and delivery requirements.



7. Return Loss, VSWR, Smith Chart



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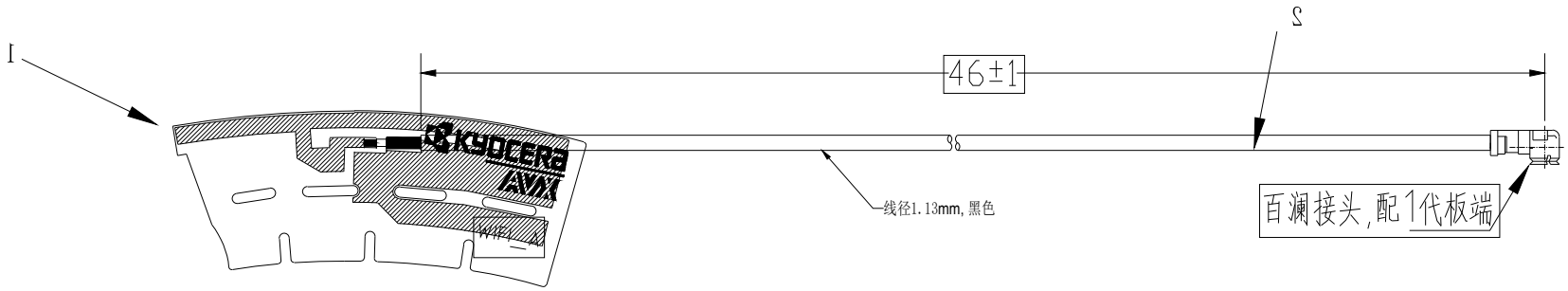
8. Efficiency

Frequency	Efficiency	Efficiency. dB	Gain . dB
2400	55.0%	-2.60	1.95
2410	56.7%	-2.47	2.11
2420	56.8%	-2.46	2.30
2430	54.7%	-2.62	2.17
2440	54.5%	-2.63	2.15
2450	49.8%	-3.03	1.93
2460	54.8%	-2.61	2.49
2470	53.4%	-2.72	2.41
2480	52.7%	-2.78	2.18
2490	54.5%	-2.64	2.34
2500	51.9%	-2.85	1.84
AVG	54.1%	-2.67	2.17

9. Drawing

REVISION	ECO#	REVISION NOTE	AUTHOR	DATE



ITEM	PART NAME	DESCRIPTION	O'TY	Revision
2	4007553	ANS001_WIFI_ANT_CABLE	1	A
1	4007554	ANS001_WIFI_ANT_FPC	1	A

注:
1. 组件应当符合所有3d数据;
2. 组件:参考图档标识;
3. 组装后无明显外观不良;
4. 需通过ET品质部门要求的各项测试;
5. 零件标记:按指定位置;
6. 尺寸要求:
   6.1. ST尺寸:测量最小量为500中选取的任意35个产品的尺寸作cpk分析;
   6.2. * 尺寸为重点管控尺寸;
7. 首批样品:随机挑选5pcs做全尺寸测量, 报告及样品需转递ET品质部;
8. 任何用料上的修改必须通过ET工程部门的书面同意;
9. 产品必须符合EU DIRECTIVE 2002/95/EC (RoHS)的要求,及无卤素要求;

GENERAL TOLERENCE TABLE			
LINEAR		ANGULAR	
DIVISION	TOLERENCE	DIVISION	TOLERENCE
0-10	±0.05	0-5°	±0.5°
10-50	±0.10	5-20°	±1°
50-80	±0.15	20-90°	±1.5°
>80	±0.2		

THIRD ANGEL PROJECTION

UNIT	SCALE	SIZE
MM	1:1	A4

ETHERTRONICS

FLOOR 7,NO.3065,JINSHAJIANG RD, SHANGHAI 201824

MECHANICAL ENGINEER: Lenny	DATE: 2024.03.15	TITLE: ANS001_WIFI_FPC_ANT_ASM
RF ENGINEER	DATE	
QC ENGINEER: Tony Pan	DATE: 2024.03.15	DWG #: 4007552
ME TEAM LEADER	DATE	NUMBER OF SHEETS: 1 of 1 / REVISION: A / RELEASE LEVEL: WIP