

采购件供应商文件评审

Title	PCB天线模块（698MHz~960MHz）
Item*	696059
Description*	ANT-C6512-510040-A_1A_L
Project No.	AK07
Supplier	
Security Level.	C
Remark	

S3	CN-AC21-246	YH.B	2021.06.11
S2	CN AC21-150	YH.B	2021.04.07
S1	inital	YH.B	2020.12.18
Rev.	ECN	Name	Date

	Name	Date
Draft	白 云 海	2021.06.11
Check	张 瑞	2021.06.11
Approval	闵 海 军	2021.06.11



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

DONGGUAN AEON TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 羅森伯格

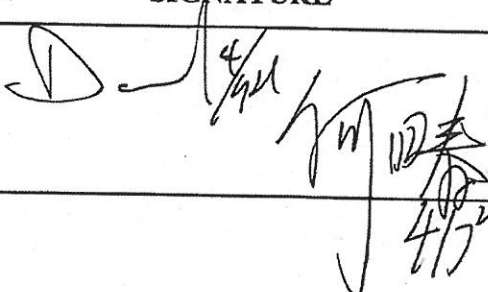
PART NAME: PIFA Antenna

PART NO.: 696059

REVISION:

W. Y. P/NO.: C6512-510040-A(SZ2103-027)

REV.: X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :		

WHA YU GROUP

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PIFA Antenna

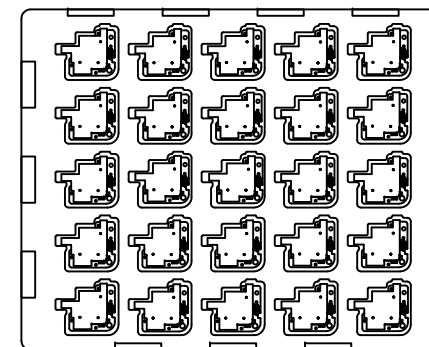
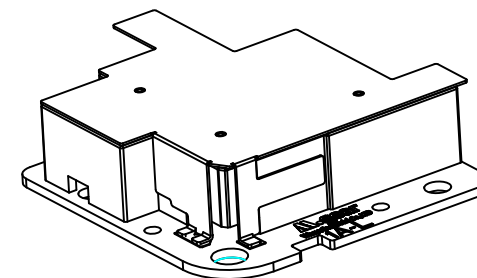
Specification

1. Electrical Properties : With Housing

- 1.1 Frequency Range..... 0.698-0.803 GHz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR 2.5 : 1 Max.
- 1.4 Return Loss 7.36 dB Min.
- 1.5 Radiation Omni-directional
- 1.6 Peak Gain..... 3.06 dBi Max.@0.698-0.803 GHz
- 1.7 Polarization..... Linear

2. Physical Properties :

- 2.1 Operating Temp. -40°C ~ +85°C
- 2.2 Storage Temp. -40°C ~ +85°C



Packing:25PCS/Tray

3	Holder	LCP	1	black
2	PIFA	SUS430;(L)56.11*(W)56.0*(H)14.1*(T)0.4mm	1	
1	PCB	FR4,雙面板: (L)56*(W)56*(T)1.6mm	1	black
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE	XX.	±3.0	APPROVED Spring	CUSTOMER: 羅森伯格			M.gear Wha Yu Group THIS DRAWING, AND IT'S INHERANT DESIGN CONCEPTS, ARE THE PROPERTY OF WHA YU AND AS SUCH MAY NOT BE COPIED, REPRODUCED, OR GIVEN TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF WHA YU.
	X.	±1.0		PART NO : 696059			
	.X	±0.5	CHECKED	PART NAME: RF Antenna Assembly			
	.XX	±0.2		W.Y P/NO : C6512-510040-A			
	.XXX	±0.1	DRAWING 白玉俠	REV	UNIT	FILE : SZ2104-001	
				X2	mm	SHEET : 1/1	

C6512-510040-A

HG-20019

Version: V 1.00

Released Date: 2021/03/16

Prepared By: huanggengen

Reviewed By: Pingxiaodong

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- Revised History
- Conclusion & Comments
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Revision History

Released Date	Version	Record
2021/03/16	1.00	Antenna Test

Specification

受控文件

CONTROLLED DOCUMENT

保密等级

一般保密

SECURITY:

NORMAL

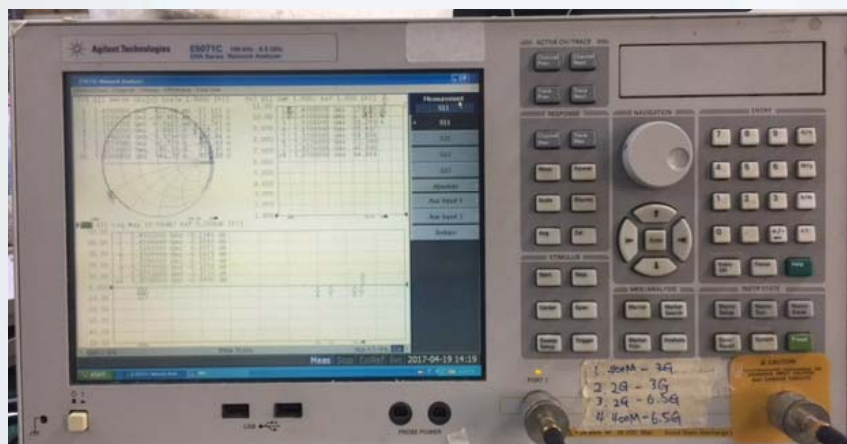
Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
LTE	1	698-803MHz	

Requirements of Measurement

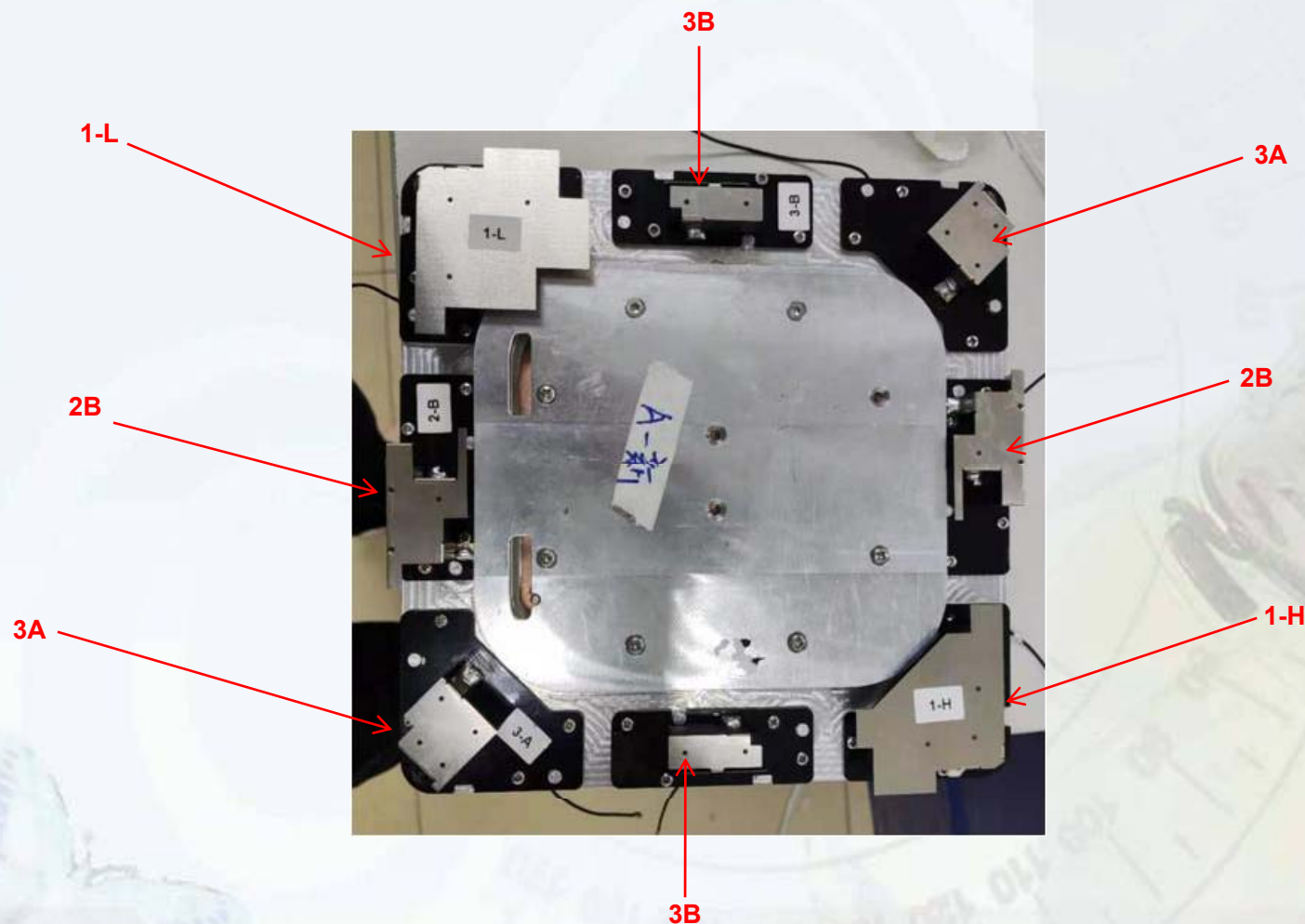
Test Item	Specification	Remark
VSWR	<2.5	
Peak gain	>1dBi	
Efficiency	>50%	

Test Setup for S-parameter Measurement



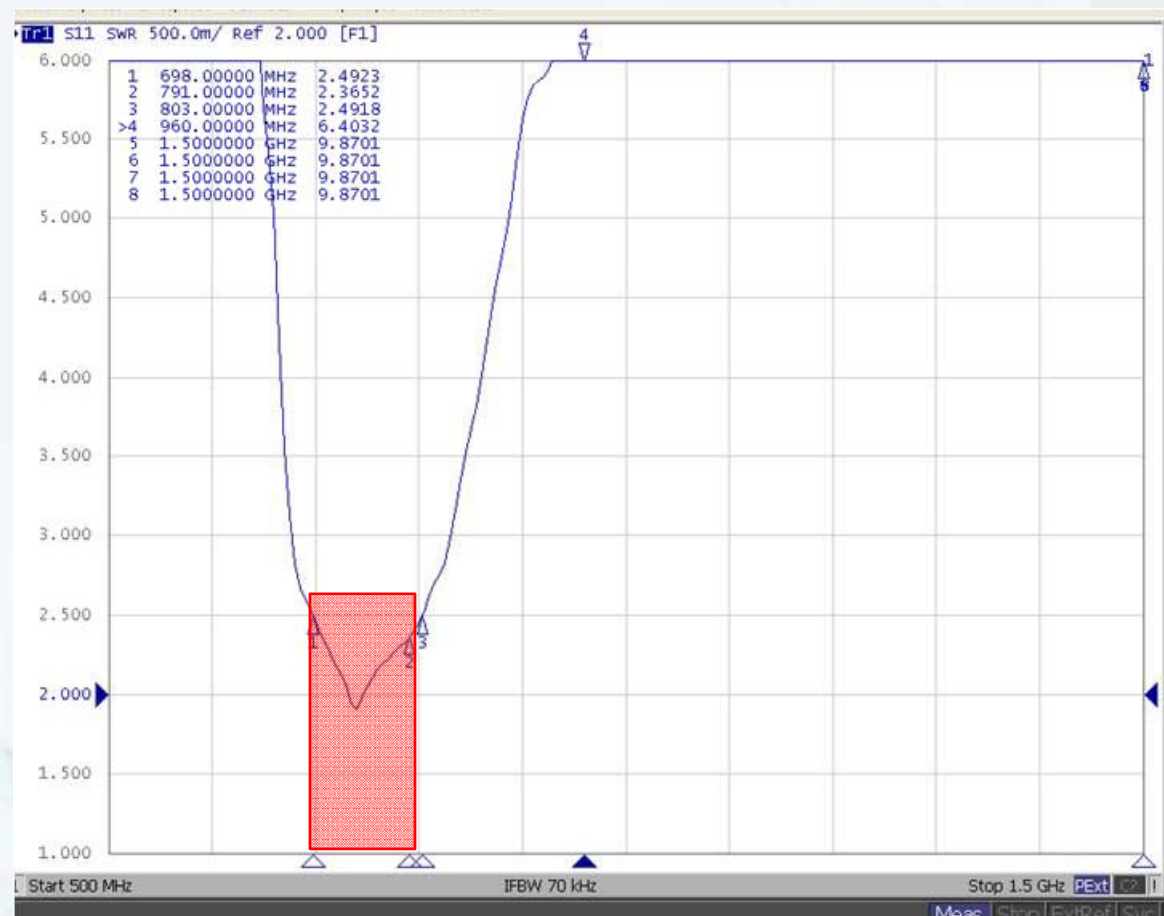
Equipment	Brand	Model	S/N
Network Analyzer	Keysight	E5071C	MY46107744

Antenna Placement & Solution

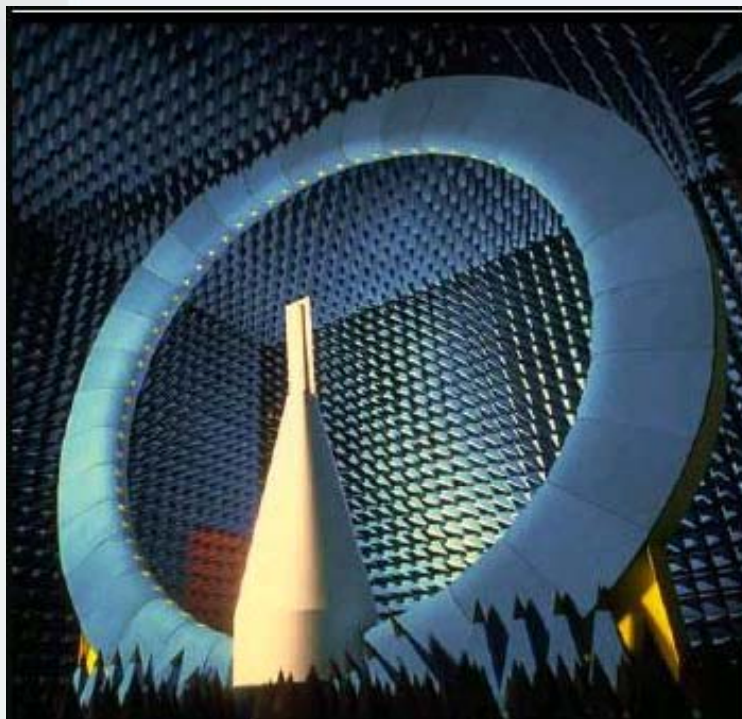


VSWR

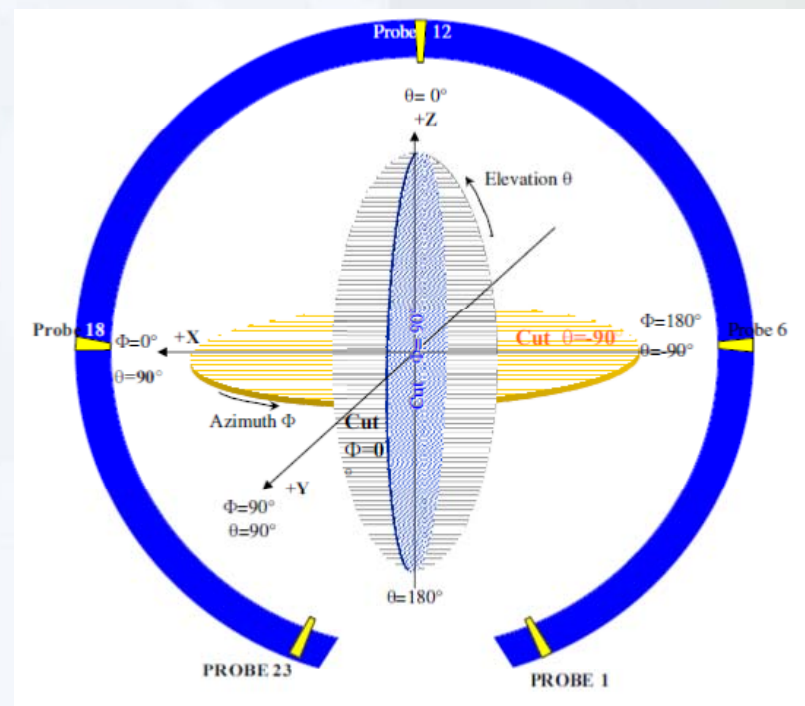
ANT 1-L (698-803MHz)



Chamber Information

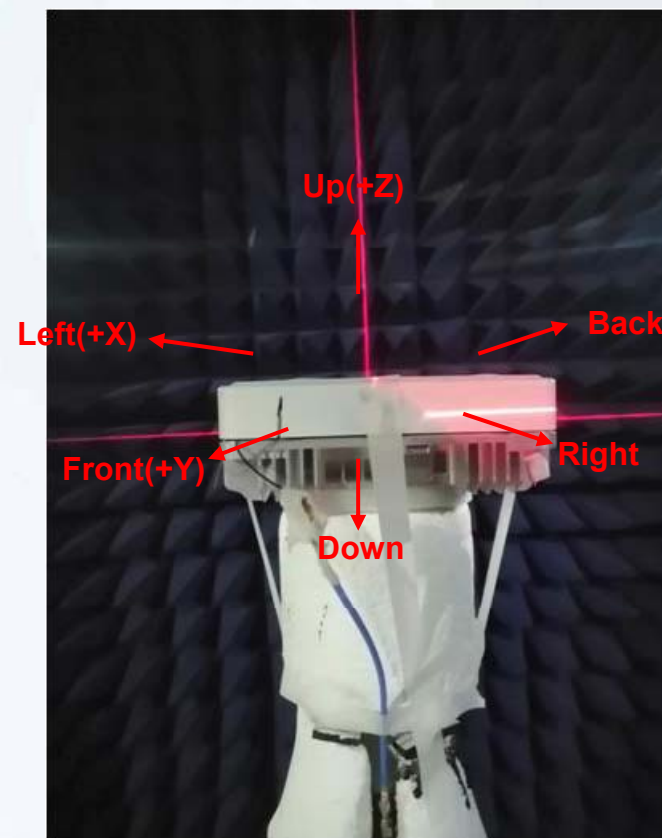


Chamber	Brand	Model	Location
SATIMO	SATIMO	SG-24	Suzhou HG



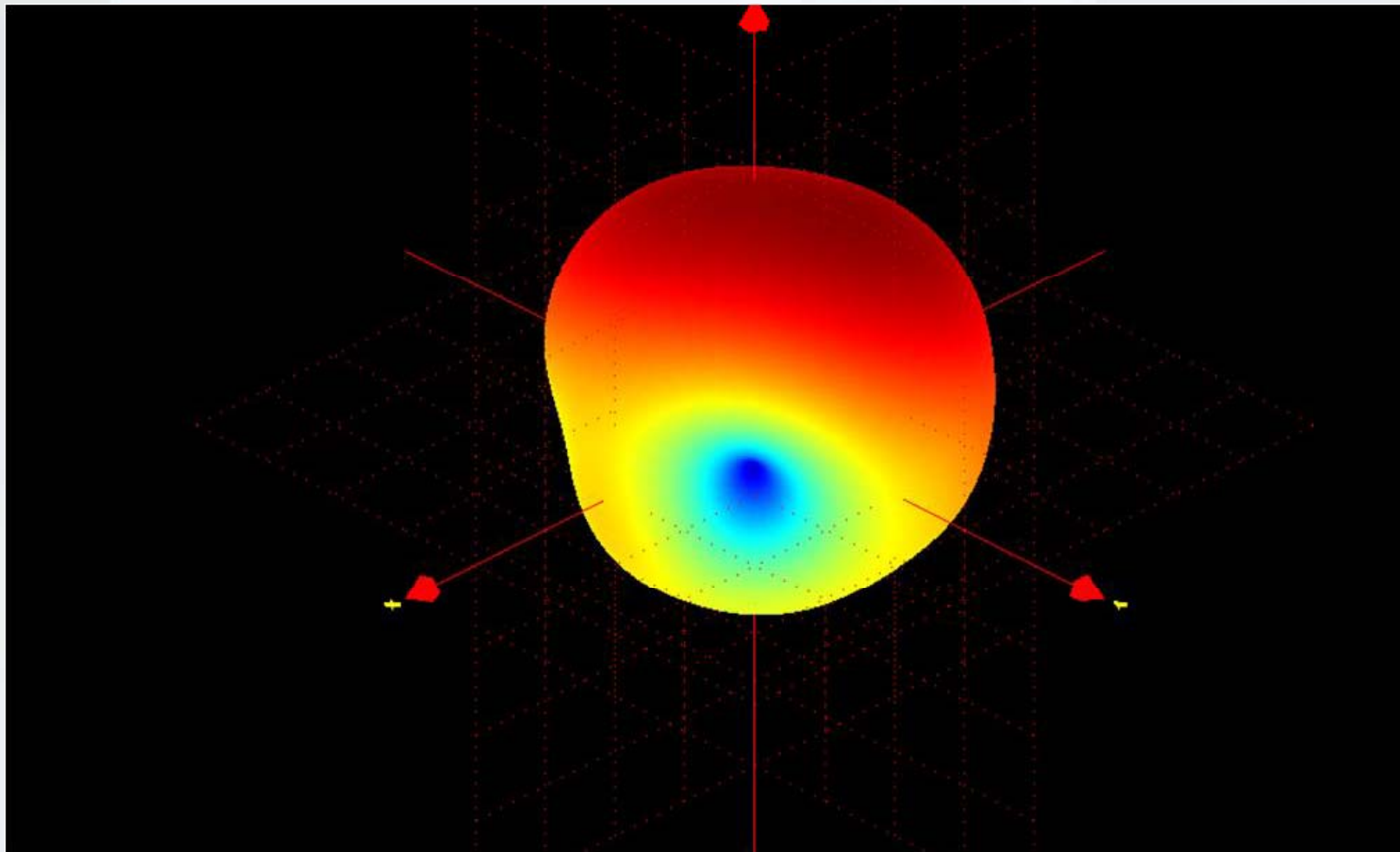
	θ	ϕ
Total angle	175°	360°
How many angle scan one point	5°	5°
Total scan point	36	73

Test Setup for Radiation Pattern Measurement



3D

Ant 1-L (698-803MHz)



受控文件

CONTROLLED DOCUMENT

保密等级

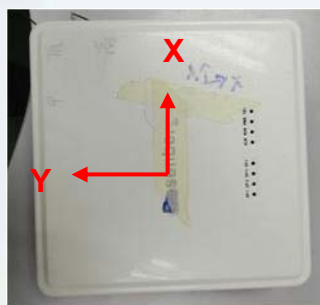
一般保密

SECURITY:

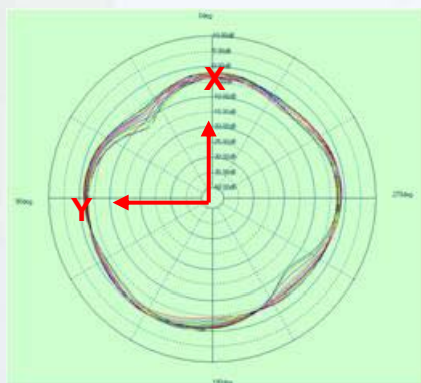
NORMAL

2D Radiation Pattern Results

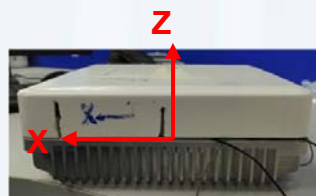
Ant 1-L (698-803MHz)



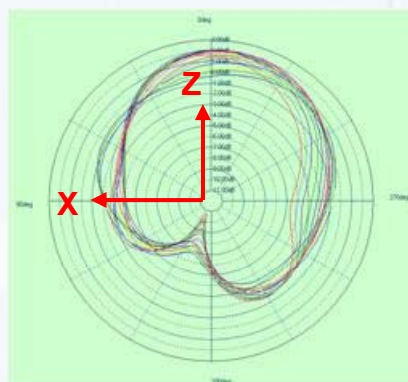
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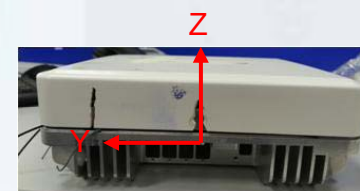
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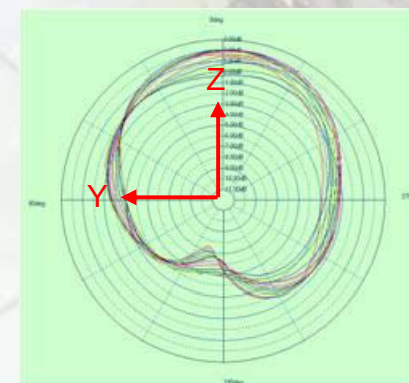
90



0



90



0

Results Summary

VSWR

Ant 1-L (698~803MHz)

Frequency	
698MHz	2.49
803MHz	2.49

Results Summary

Peak gain & Efficiency

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
Frequency	E Total. dB(dB)	Efficiency()
698MHz	1.97	55%
706MHz	2.37	56%
714MHz	2.34	57%
722MHz	3.06	56%
730MHz	2.78	54%
738MHz	2.49	53%
746MHz	2.19	55%
754MHz	1.89	56%
762MHz	2.00	57%
770MHz	1.69	57%
778MHz	1.64	58%
786MHz	1.64	60%
794MHz	1.50	60%
803MHz	1.36	61%