

采购件供应商文件评审

Title	PCB天线模块（1710MHz~2690MHz）
Item*	693185
Description*	ANT-C6512-510039-A_2B(1710~2690)
Project No.	AK07
Supplier	
Security Level.	C
Remark	

					Name	Date
					Draft	白 云 海 2021.09.10
					Check	张 瑞 2021.09.10
					Approval	闵 海 军 2021.09.10
S2	CN AC21-347	YH.B	2021.09.10			
S1	inital	YH.B	2020.12.18			
Rev.	ECN	Name	Date			



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

DONGGUAN AEON TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 羅森伯格

PART NAME: RF Antenna Assembly

PART NO.: 693185

REVISION:

W. Y. P/NO.: C6512-510039-A(SZ2108-049)

REV.: X2

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :	Danzel 8/30/11 [Signature]	
DATE :		

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RF Antenna Assembly

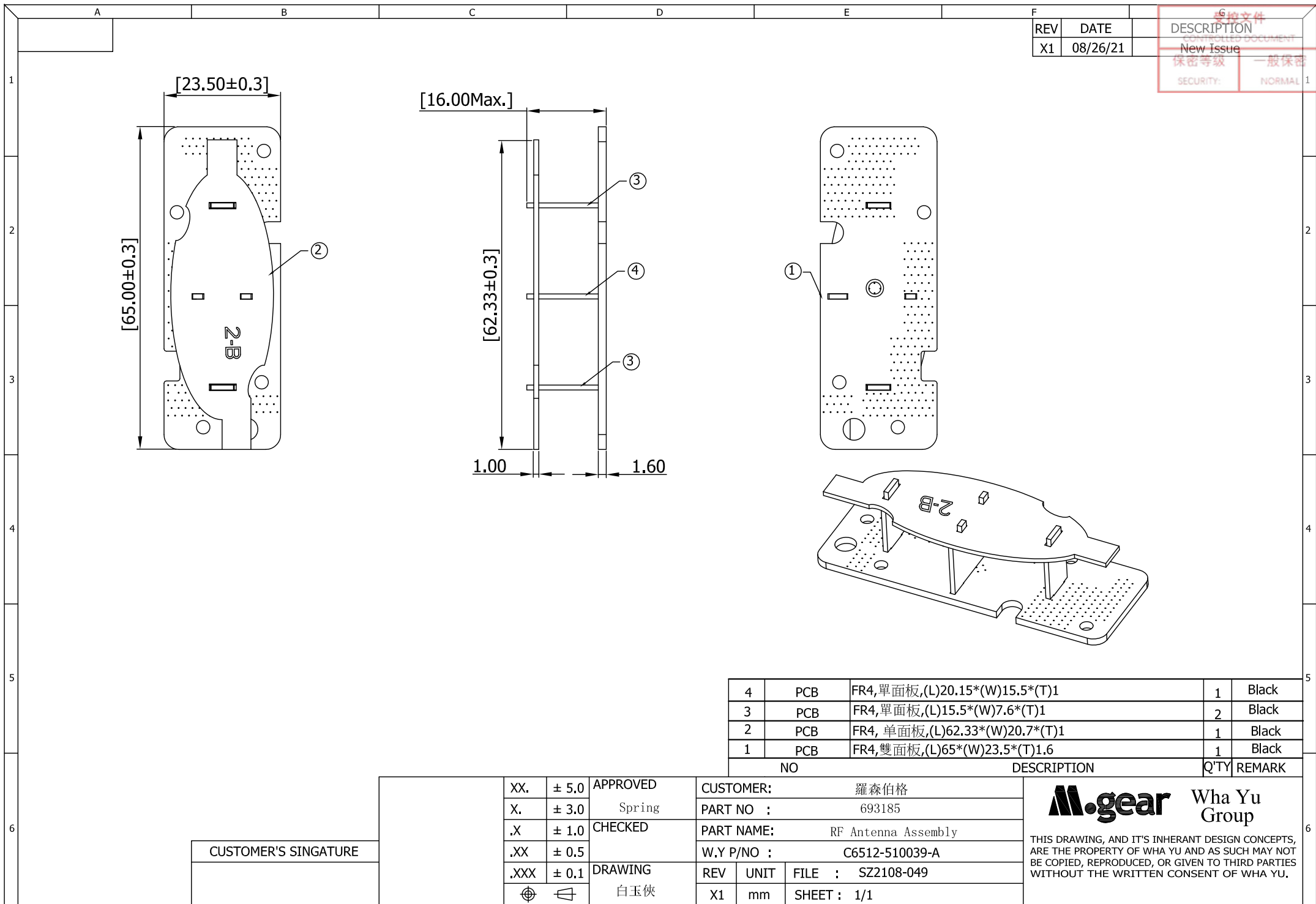
Specification

1. Electrical Properties : With Housing

- 1.1 Frequency Range..... 1.71~2.69 GHz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR 2.5 : 1 Max.
- 1.4 Return Loss 7.3 dB Min.
- 1.5 Radiation Omni-directional
- 1.6 Peak Gain..... 1.5 dBi Min.
- 1.7 Polarization..... Linear
- 1.8 Admitted Power..... 1 W

2. Physical Properties :

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



C6512-510039-A

HG-20019

Version: V 1.02

Released Date: 2021/08/27

Prepared By: Ping xiao dong

Reviewed By: daniel chang

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- Revised History
- Conclusion & Comments
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- Results Summary (return loss, isolation, peak gain, efficiency)

Revision History

Released Date	Version	Record
2021/03/03	1.00	Antenna Test
2021/03/31	1.01	Forecast data update
2021/08/27	1.02	Antenna structure change

Specification

受控文件

CONTROLLED DOCUMENT

保密等级

一般保密

SECURITY:

NORMAL

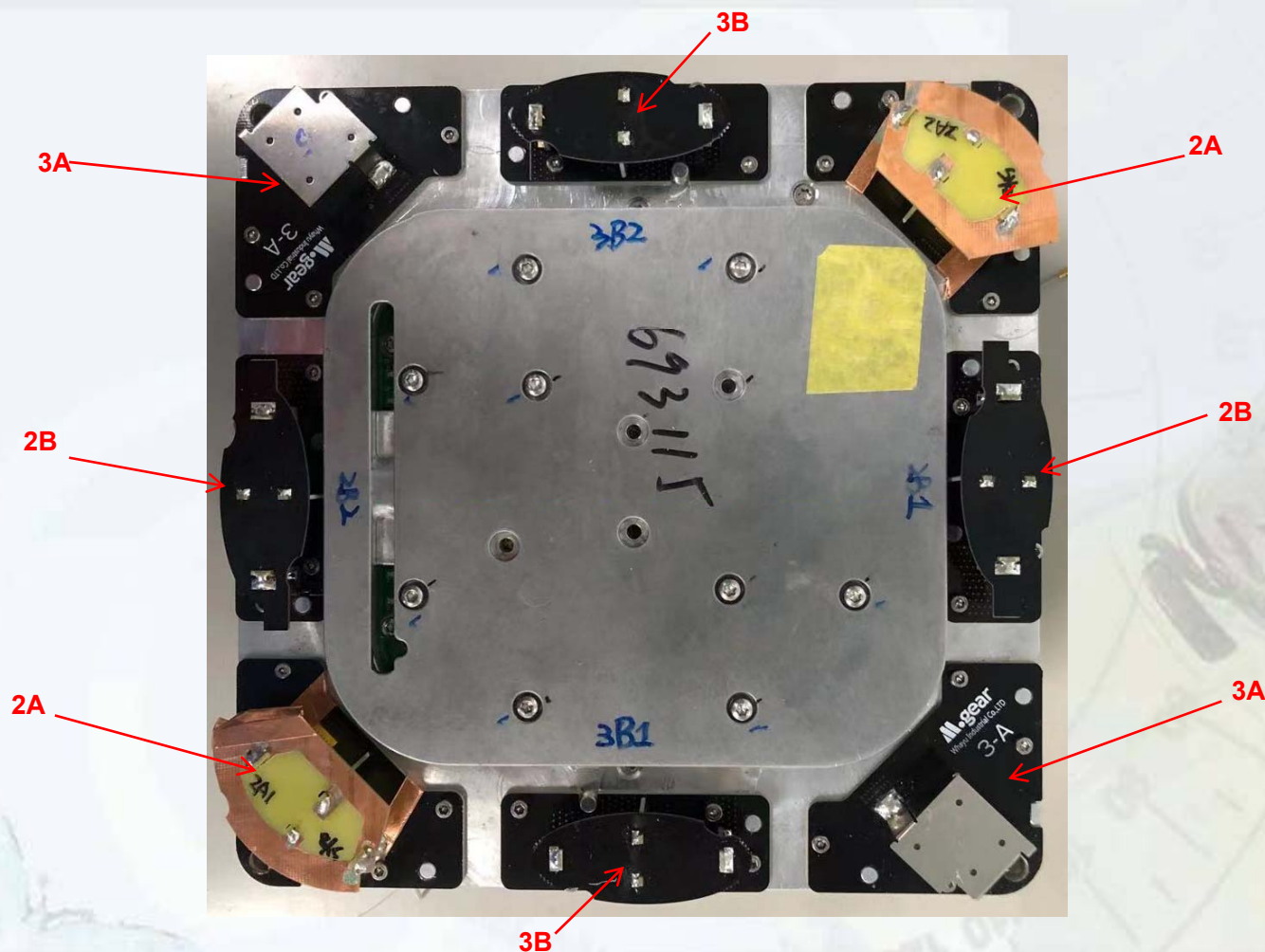
Requirements of Antenna Design

RF Function	LTE	Frequency Band	Remark
LTE	1	1710-2690MHz	

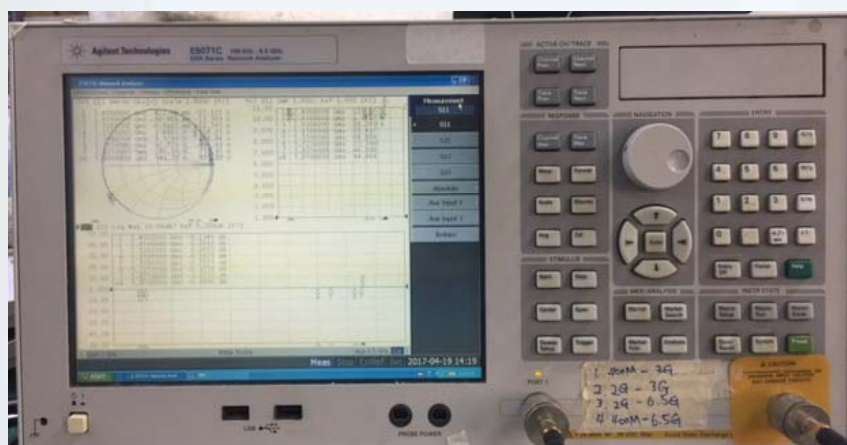
Requirements of Measurement

Test Item	Specification	Remark
VSWR	<2.5	
Peak gain	>1.5 dBi	
Efficiency	>55 %	

Antenna Placement & Solution



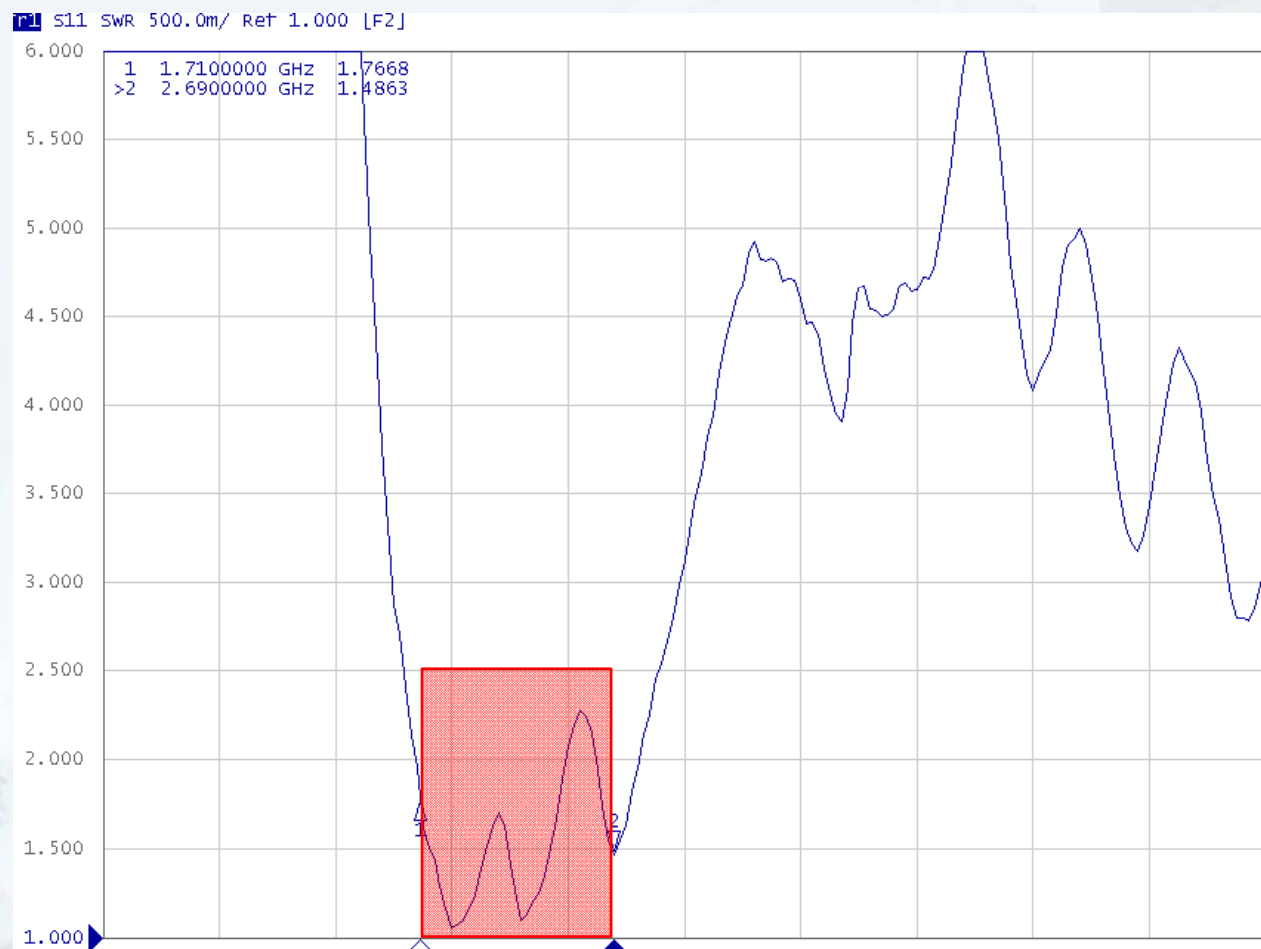
Test Setup for S-parameter Measurement



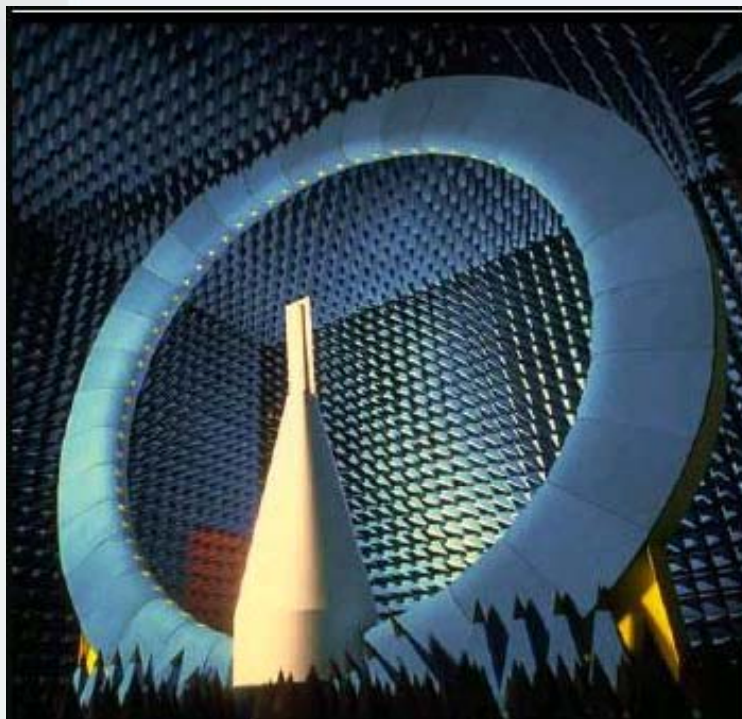
Equipment	Brand	Model	S/N
Network Analyzer	Keysight	E5071C	MY46107744

VSWR

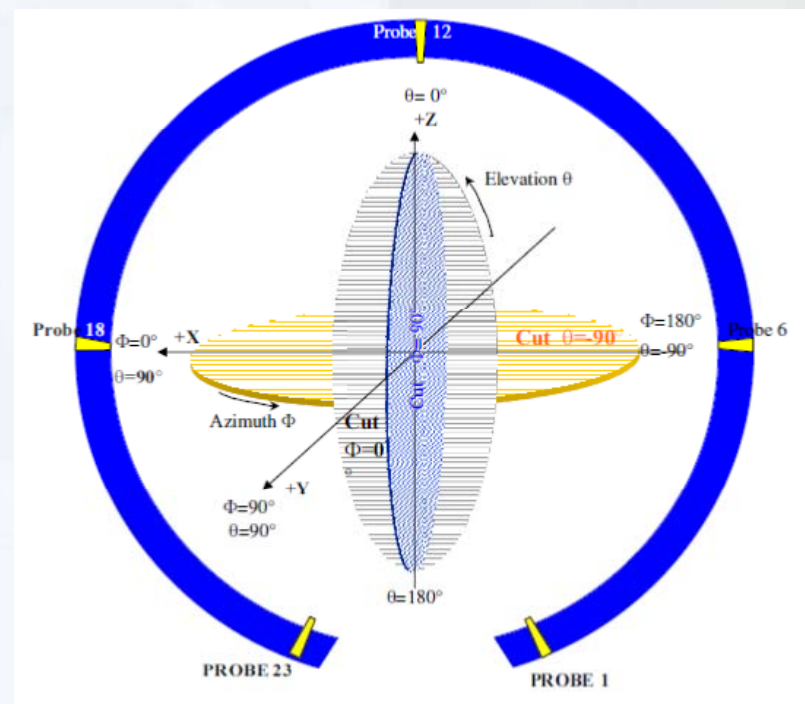
ANT 2B (1710-2690MHz)



Chamber Information

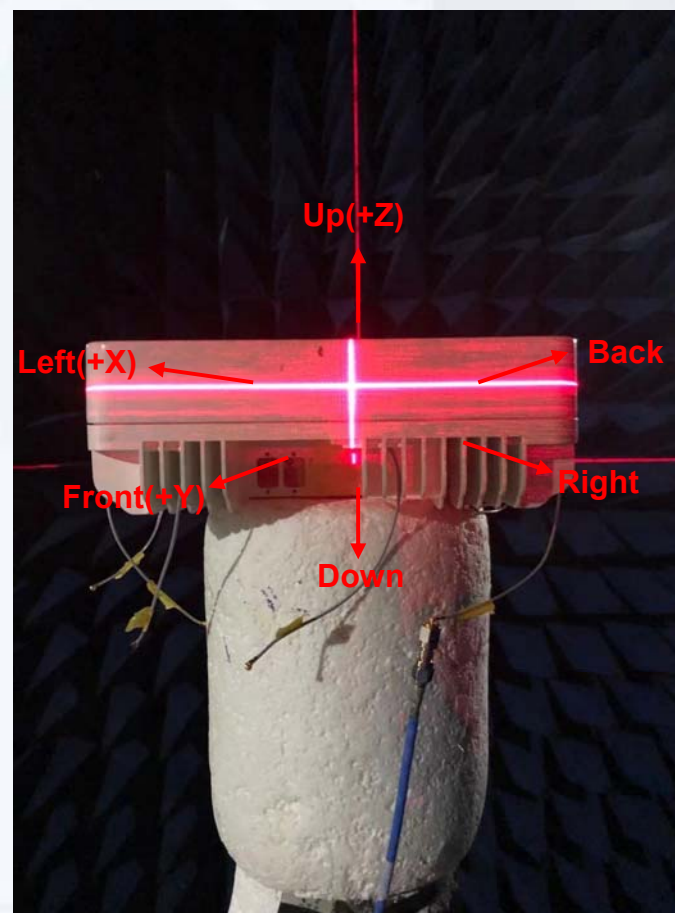
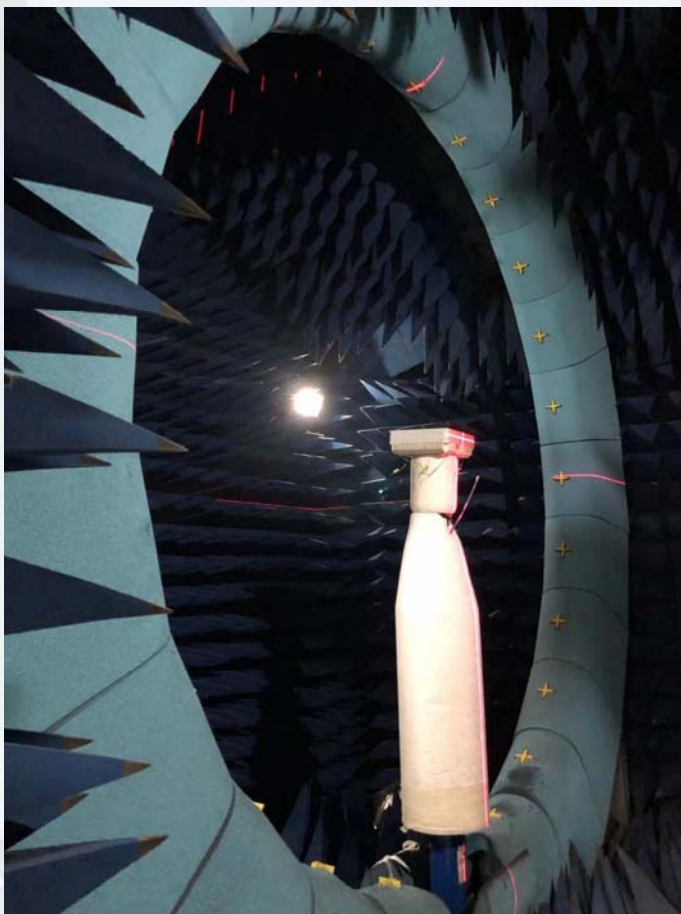


Chamber	Brand	Model	Location
SATIMO	SATIMO	SG-24	TLSZ



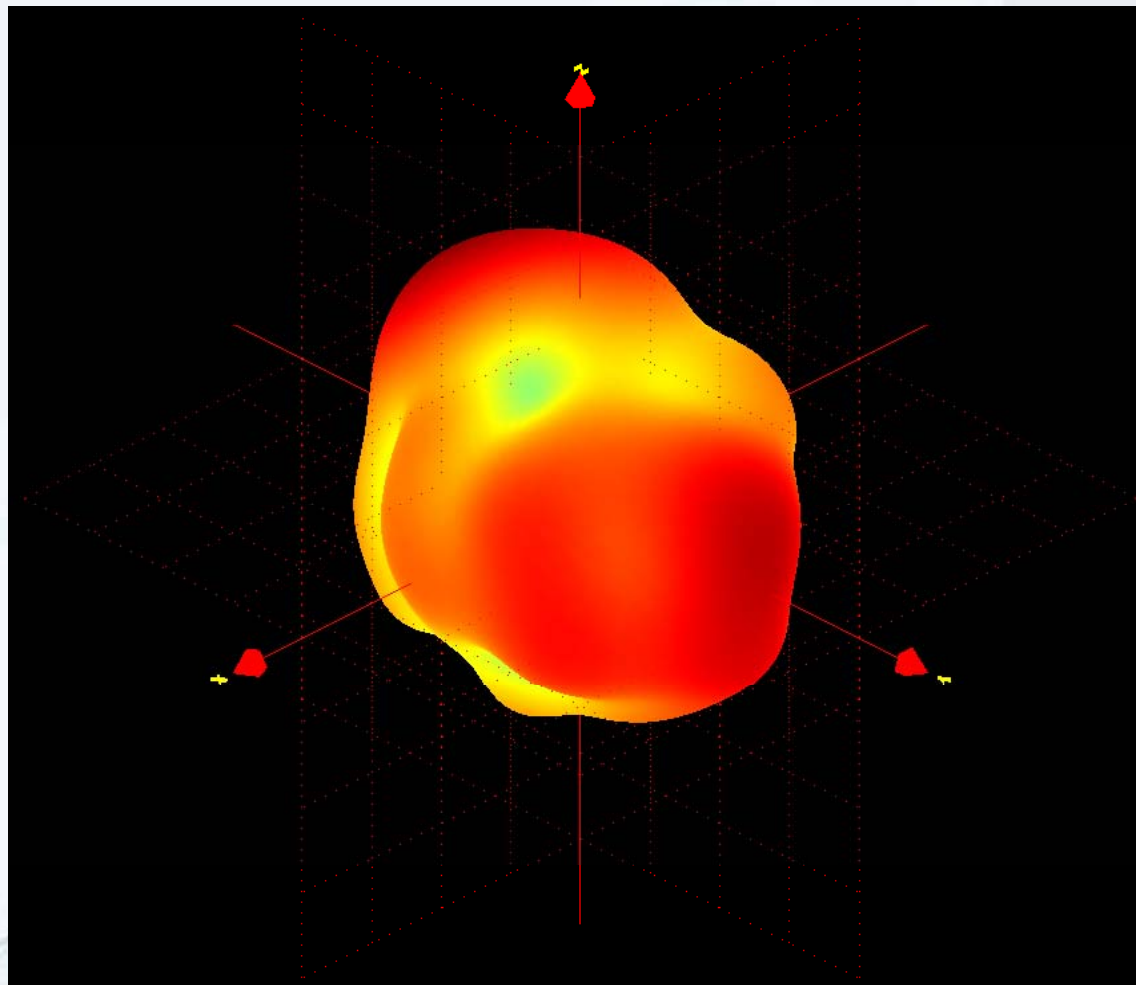
	θ	ϕ
Total angle	175°	360°
How many angle scan one point	5°	5°
Total scan point	36	73

Test Setup for Radiation Pattern Measurement



3D

ANT 2B (1710-2690MHz)



受控文件

CONTROLLED DOCUMENT

保密等级

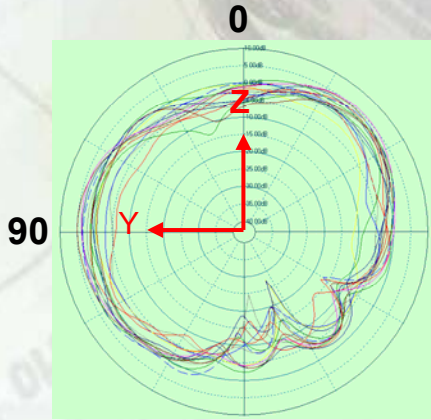
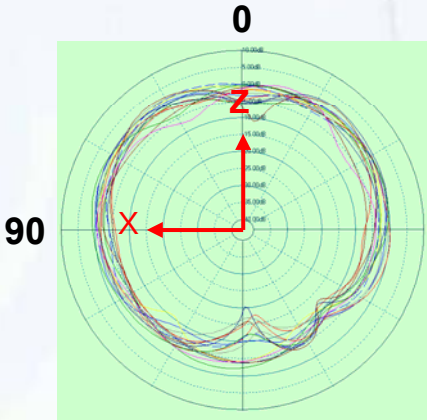
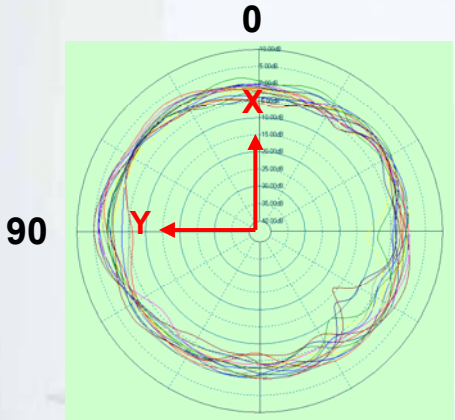
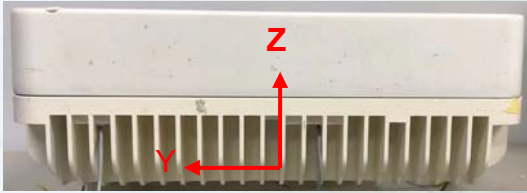
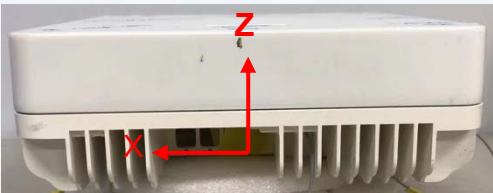
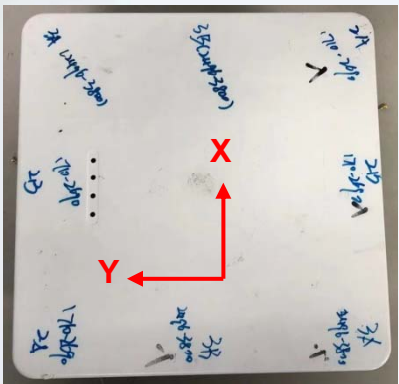
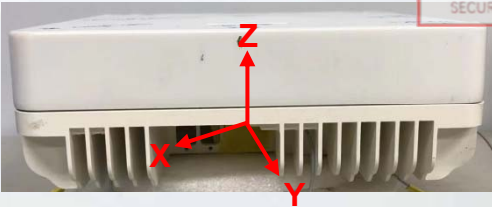
一般保密

SECURITY:

NORMAL

2D Radiation Pattern Results

ANT 2B (1710-2690MHz)



Results Summary

VSWR

ANT 2B (1710-2690MHz)

Frequency	Ant.1
2496MHz	1.76
3800MHz	1.48

Results Summary

Peak gain & Efficiency & X-Z/Y-Z Beam Width

Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)	Beam Width X-Z (°)	Beam Width Y-Z (°)
1710MHz	1.95	57	57.29	38.95
1780MHz	2.07	66	109.16	45.98
1850MHz	1.86	66	105.66	42.41
1920MHz	1.61	57	106.19	175.31
1990MHz	1.59	59	92.36	50.27
2060MHz	3.65	68	65.69	87.4
2130MHz	5.07	72	68.47	63.72
2200MHz	5.43	76	40.03	49.25
2270MHz	3.71	78	128.27	41.55
2340MHz	3.47	79	69.01	42.44
2410MHz	4.49	77	82.46	53.53
2480MHz	5.14	75	166.15	61.48
2550MHz	3.63	72	65.4	74.05
2620MHz	3.37	70	67.11	109.69
2690MHz	4.63	70	43.61	43.73

