Antenna Test Report

高通
2G , 5G-7G

Version: ***V 1.0 (SGS)***
Released Date: ***2020/01/17***
Prepared By: Stone
Reviewed By: Sky

WHA YU INDUSTRIAL CO., LTD.
TEL : 886-3-5714225 FAX : 886-3-5713853 / 5723600
Website : www.whayu.com
E-mail : market@whayu.com

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Revision History

Released Date	Version	Record
2020/01/08	1.0	Antenna Testing Report (銅管天線)
2020/01/17	1.0	Antenna Testing Report (SGS test Data)

Specification

Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
2G/5G-7G	1	2400~2500(MHz),5150~5825MHz,5925~7125(MHz)	

Requirements of Measurement

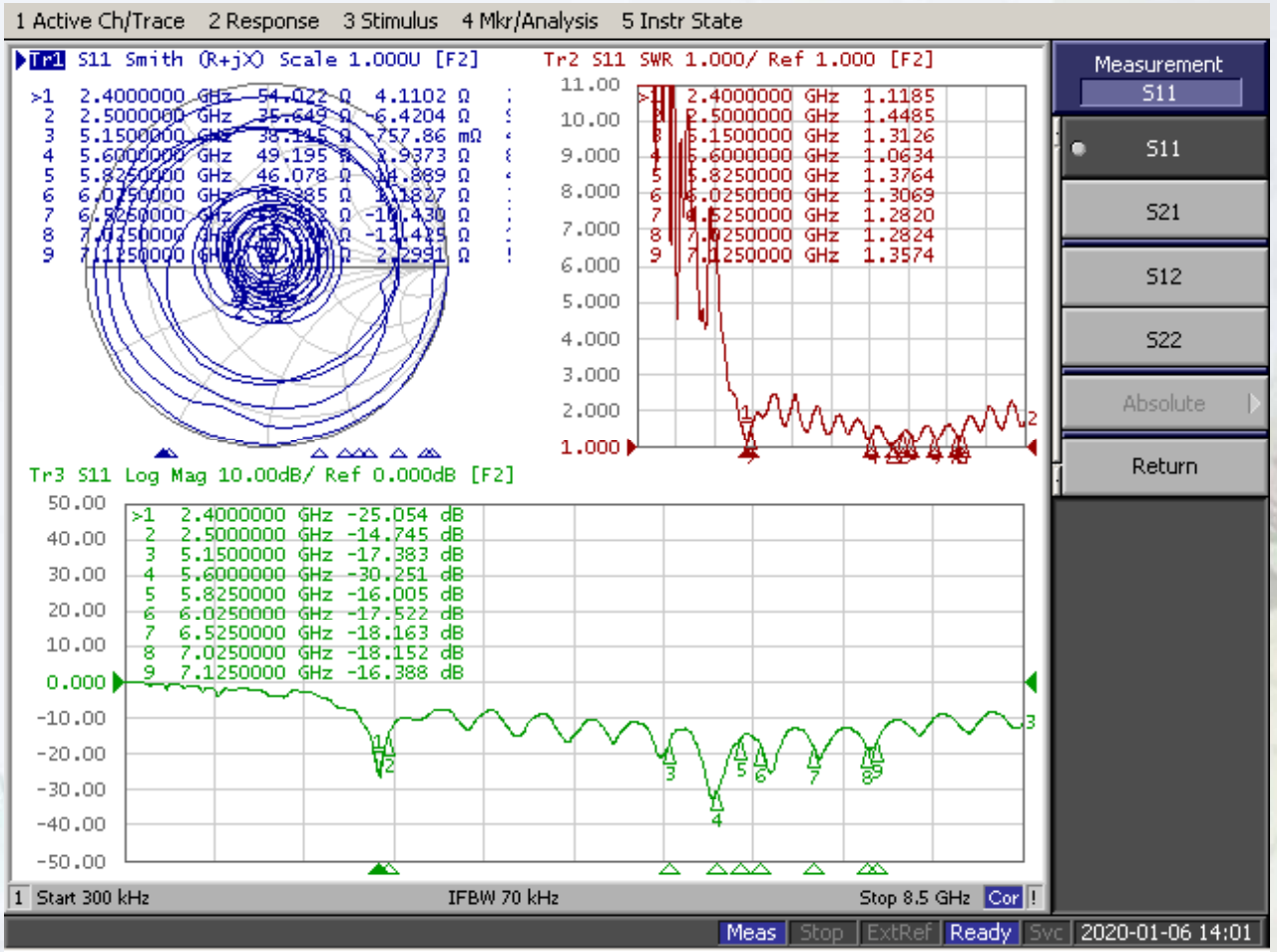
Test Item	Specification	Remark
Return Loss	>10dB	
Isolation	NA	
Peak gain	NA	
Efficiency	>60%	
Radiation pattern	Scale: +10 ~ -40dBi, Angle step size: 2 degree	

Antenna Placement & Solution

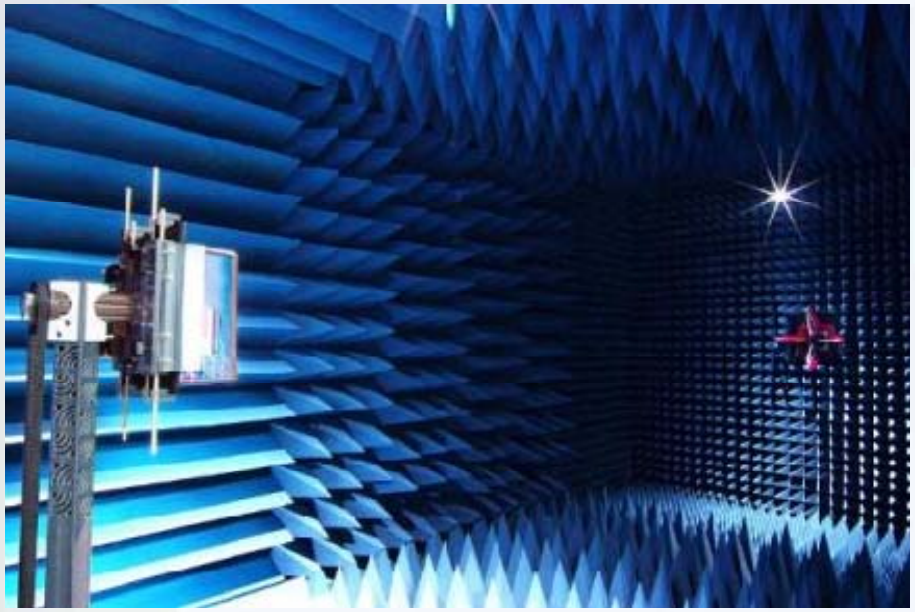
Antenna	ANT Type	Size (L * W * H) mm³	Cable Length (mm)	Cable Type
ANT1	PCB	3銅管		SMA

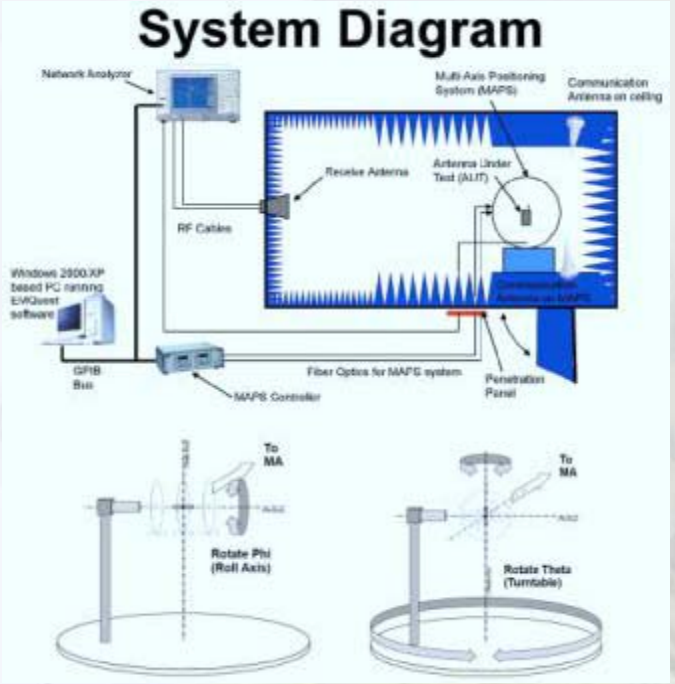
Return Loss Results

2G/5G-7G_ANT1 (2400MHz – 2500MHz, 5150MHz – 7125MHz) (Criterion:>10 dB)



Chamber Information

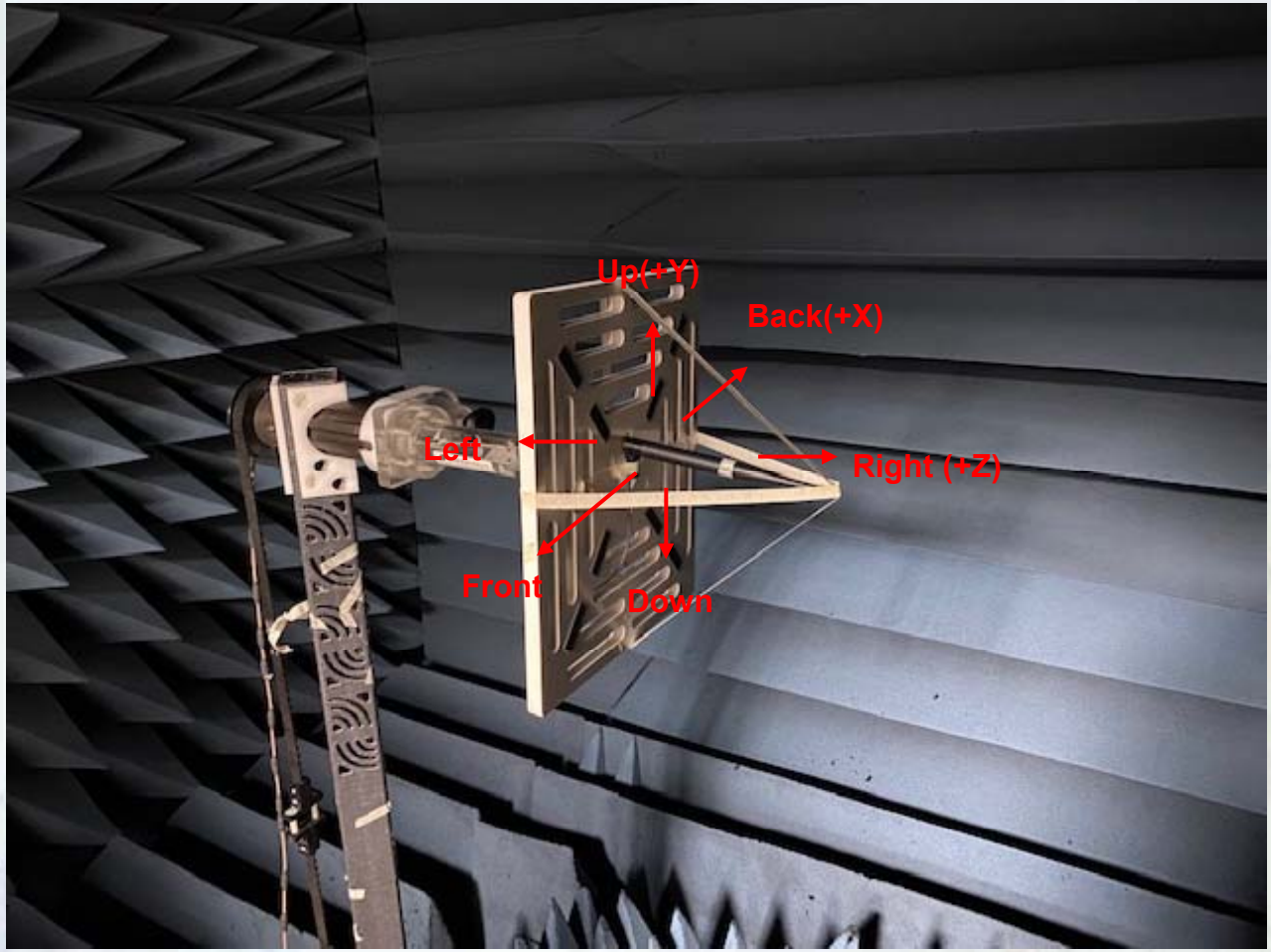




Chamber	Brand	Model	Location
ETS	ETS	AMS-8200	Taiwan HsinChu

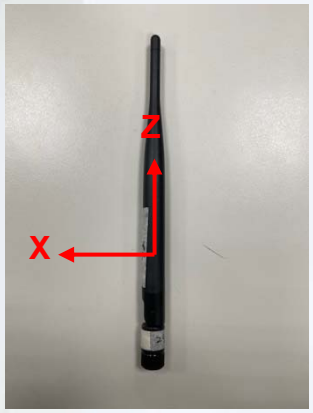
	θ	φ
Total angle	180˚	360˚
How many angle scan one point	5˚	5˚
Total scan point	36	72

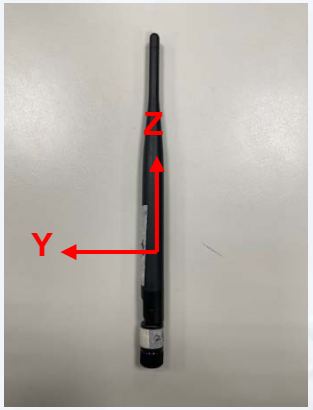
Test Setup for Radiation Pattern Measurement

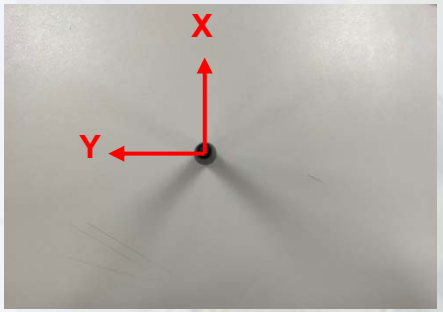


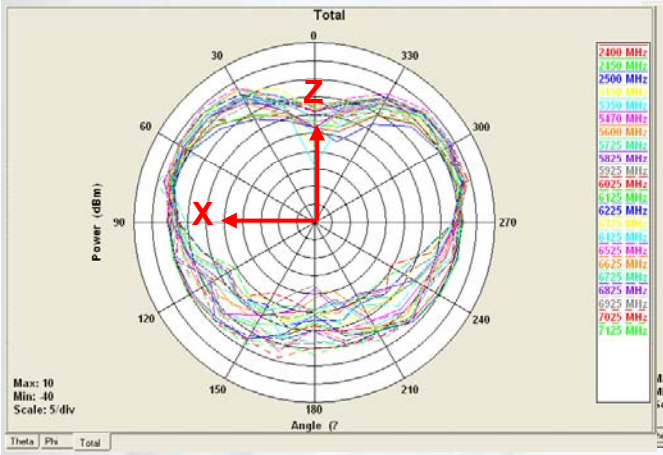
2D Radiation Pattern Results

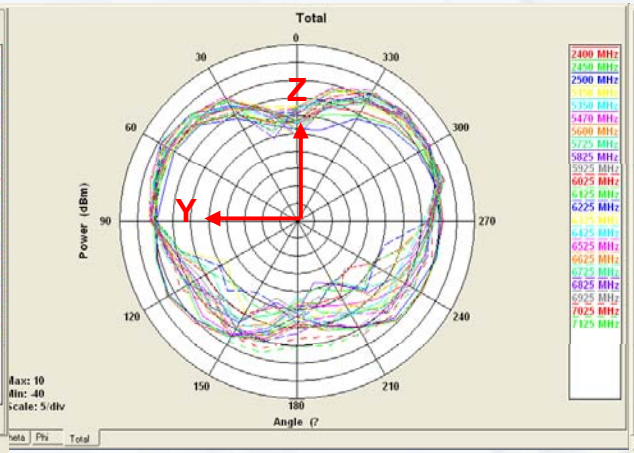
2G/5G ANT 1

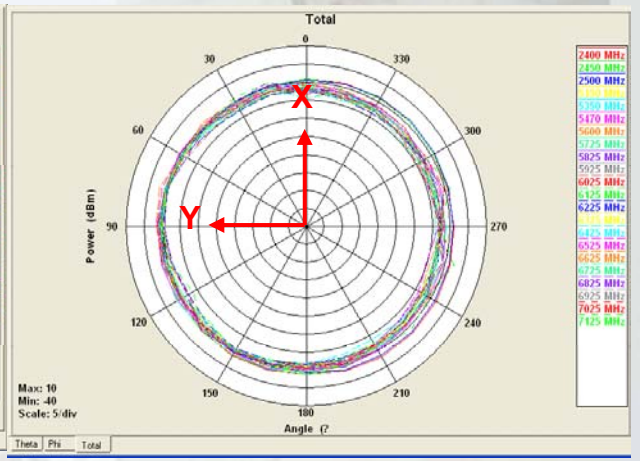












Results Summary

Return Loss (Criterion: >10dB)

Frequency (MHz)	ANT1 (dB)
2400	25
2500	14
5150	17
5600	30
5825	16
6025	17
6525	18
7025	18
7125	16

Results Summary (SGS Data)

	2G/5G-7G Ant1			2G/5G-7G Ant1	
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)	Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	3.44	73	6125	3.40	74
2450	3.82	74	6225	3.38	77
2500	3.60	78	6325	3.44	77
5150	2.10	75	6425	3.50	76
5350	3.54	76	6525	3.56	72
5470	2.78	77	6625	3.58	71
5600	3.13	75	6725	3.34	74
5725	3.76	72	6825	3.86	72
5825	3.77	78	6925	3.60	74
5925	4.38	76	7025	3.67	77
6025	3.53	75	7125	3.95	75

Conclusion & Comments

Antenna Performance Summary

1. Have reached customer demand

Comments for Further Improvement

Customer confirmation