

MK104 Keyless (NE3-21085) Antenna Test Report

Version: V 2.02

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Revision History

Released Date	Version	Record
2021/06/01	1.0	Antenna Testing Report
2021/12/02	2.01	Antenna Testing Report(PCBA微調)
2022/07/01	2.02	Antenna Testing Report(PCBA驗證)

Specification

Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
BT	1	2400~2500 (MHz)	

Requirements of Measurement

Test Item	Specification	Remark
Return Loss	10dB	
Isolation	N/A	
Peak gain	N/A	
Efficiency	N/A	
Radiation pattern	Scale: +10 ~ -40dBi, Angle step size: 2 degree	

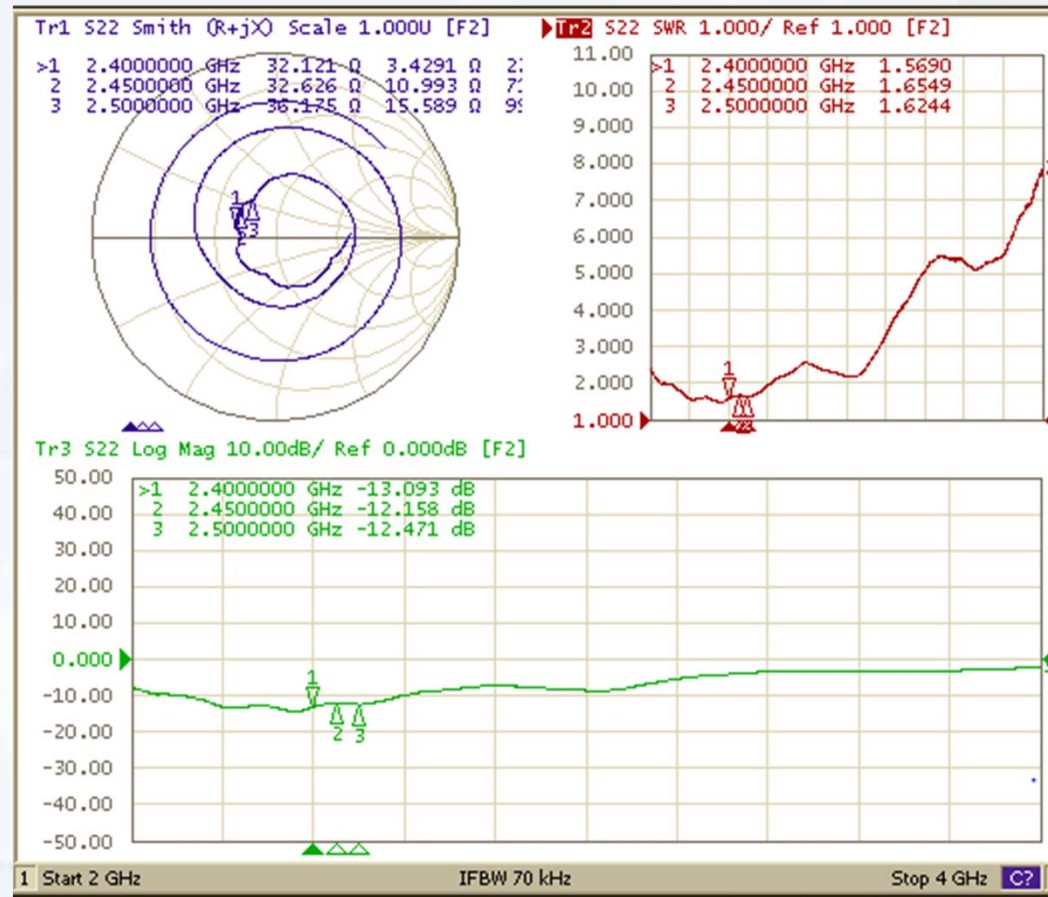
Antenna Placement & Solution



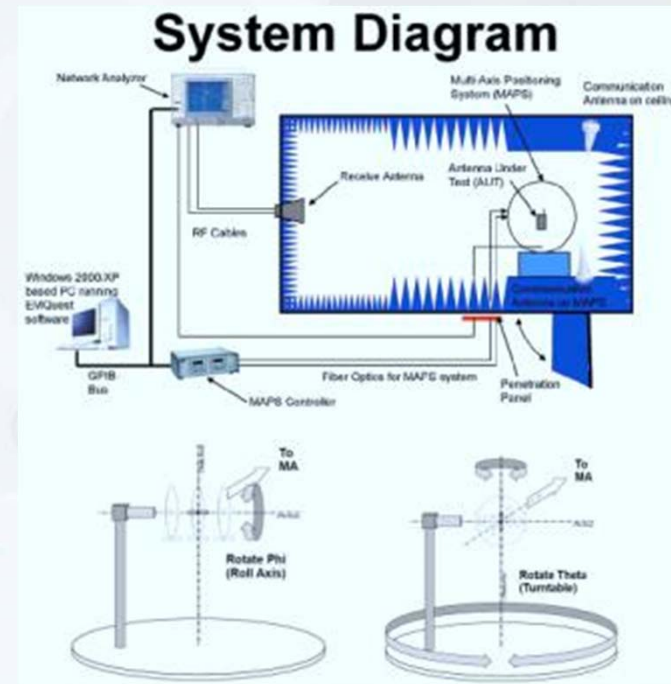
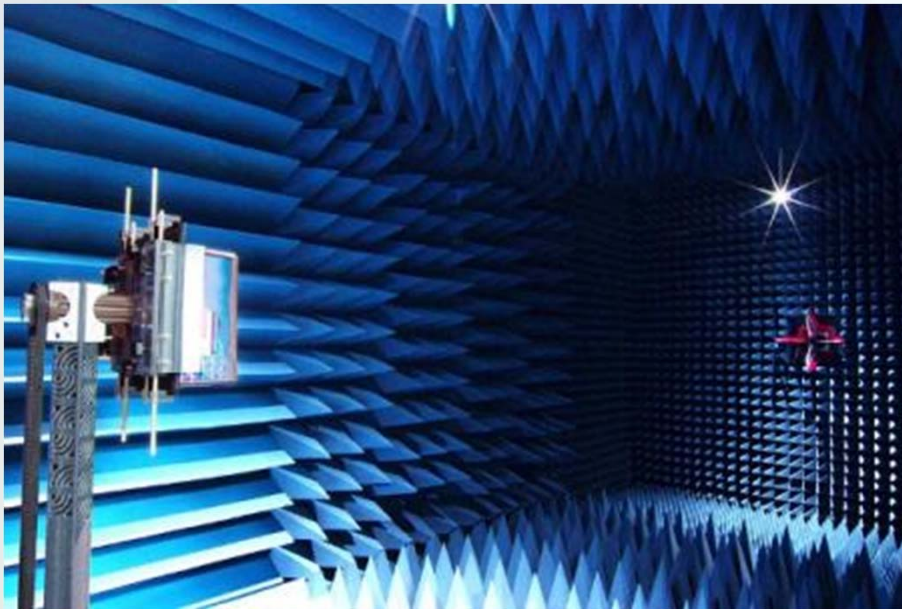
BT

Return Loss Results

BT_ANT1 (2400 – 2500 MHz)(V2.02)



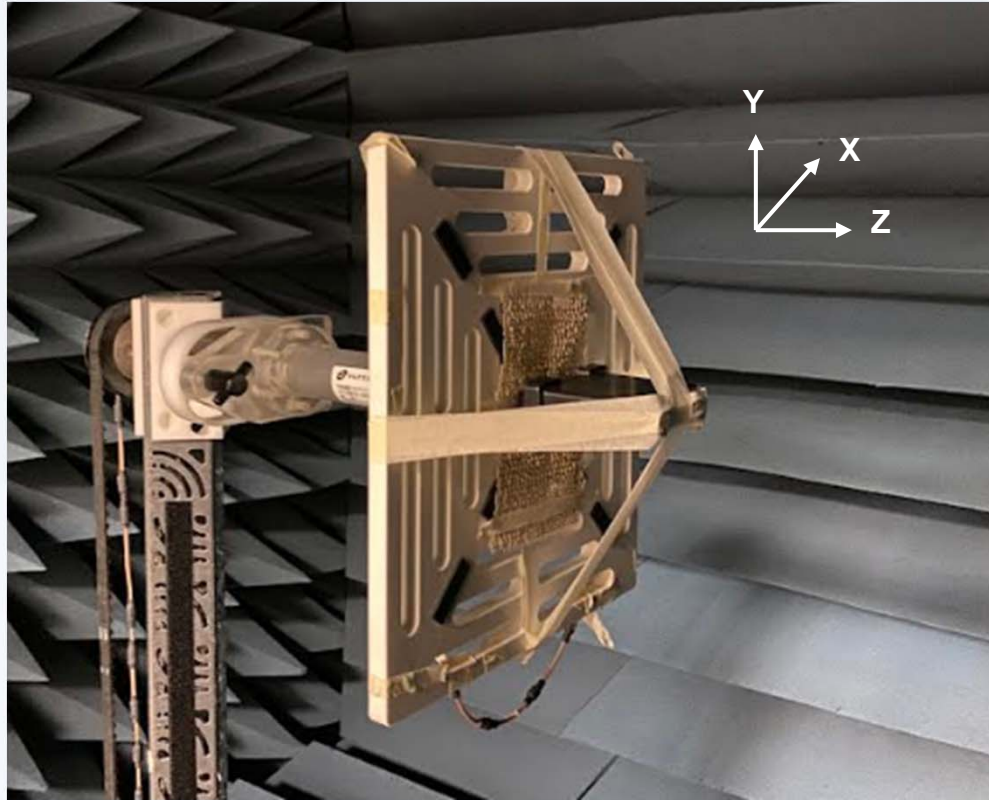
Chamber Information



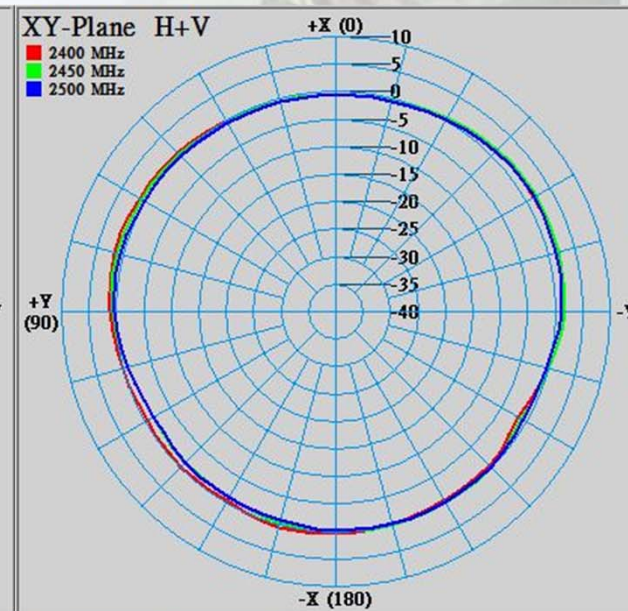
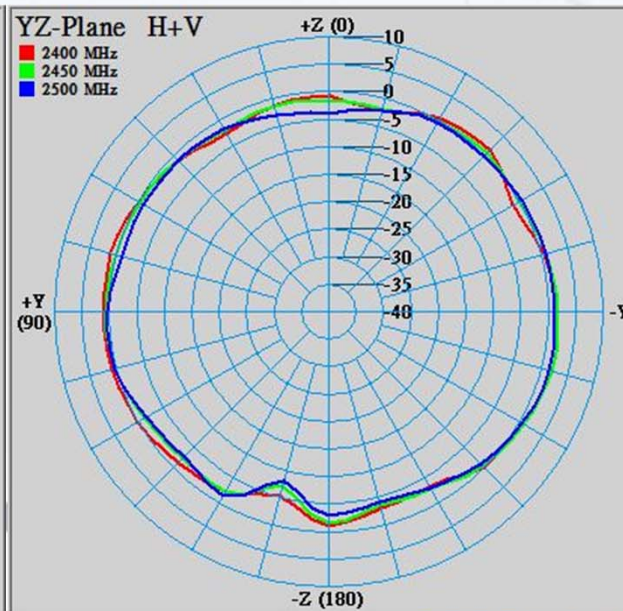
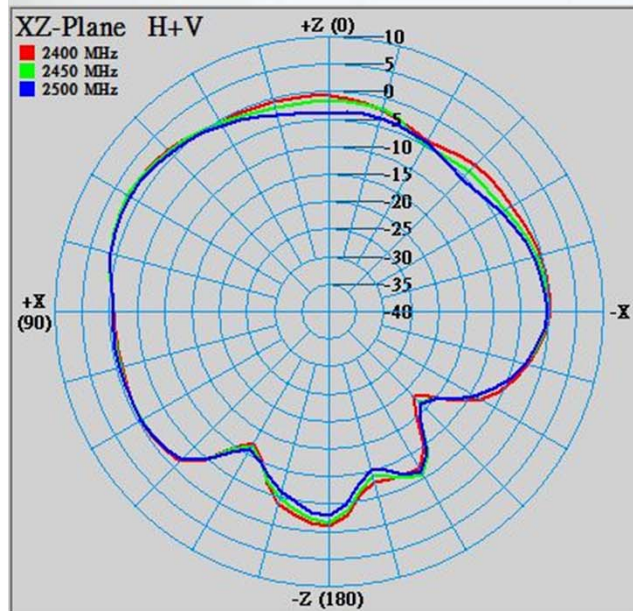
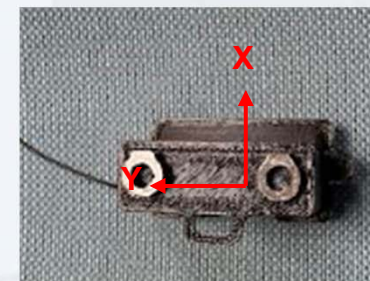
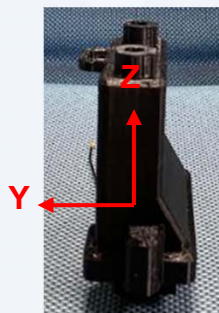
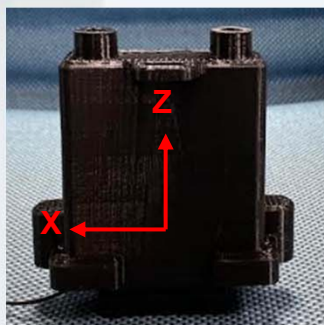
Chamber	Brand	Model	Location
ETS	ETS	AMS-8200	Taiwan HsinChu

	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



Results Summary

Return Loss (Criterion: >10dB) V2.02

Frequency (MHz)	ANT1 (dB)
2400	13
2450	12
2500	12

Results Summary

V2.02

	BT	
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	2.5	82
2450	2.9	84
2500	2.7	78