

BT Antenna Test Report

KUNSHAN INNOWAVE COMMUNICATION TECHNOLOGY CO., LTD.

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Date: 2023-06-12

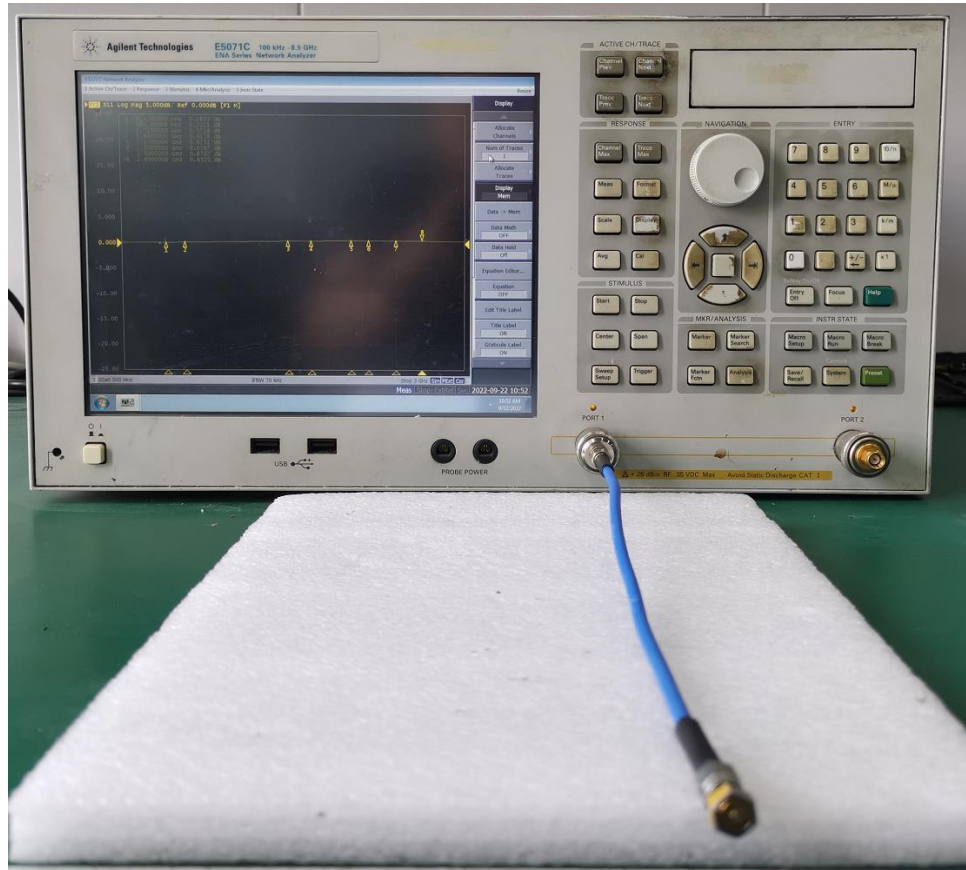
2023



- Test Setup
- Return Loss
- Radiation Pattern
- Gain, Efficiency

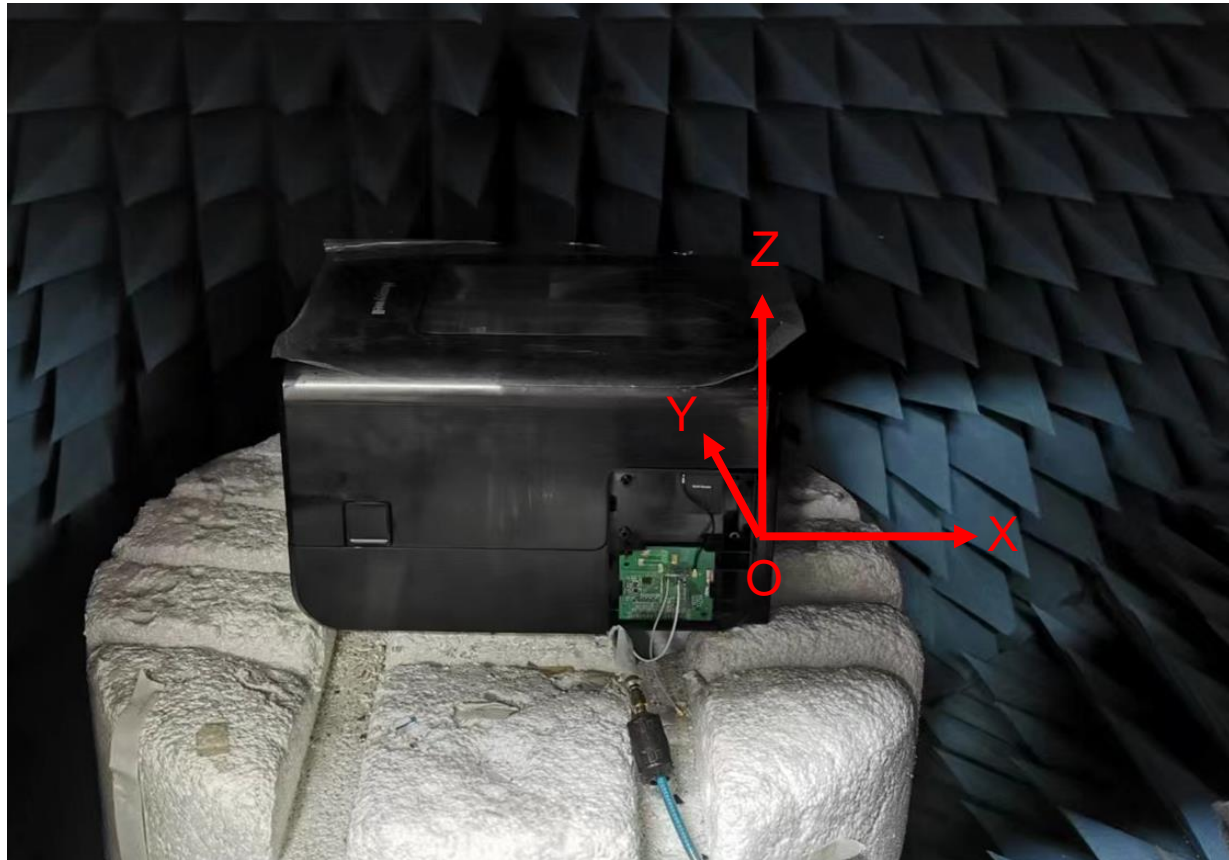
Test Setup

Measurement of S-Parameters



- Test Equipment: E5071C/E5063A
- S parameters were measured by Keysight 2-Port VNA connecting with 2 coaxial cables, which would be calibrated before the test.

Passive Measurement



DUT setup in an anechoic chamber

Antenna Placement

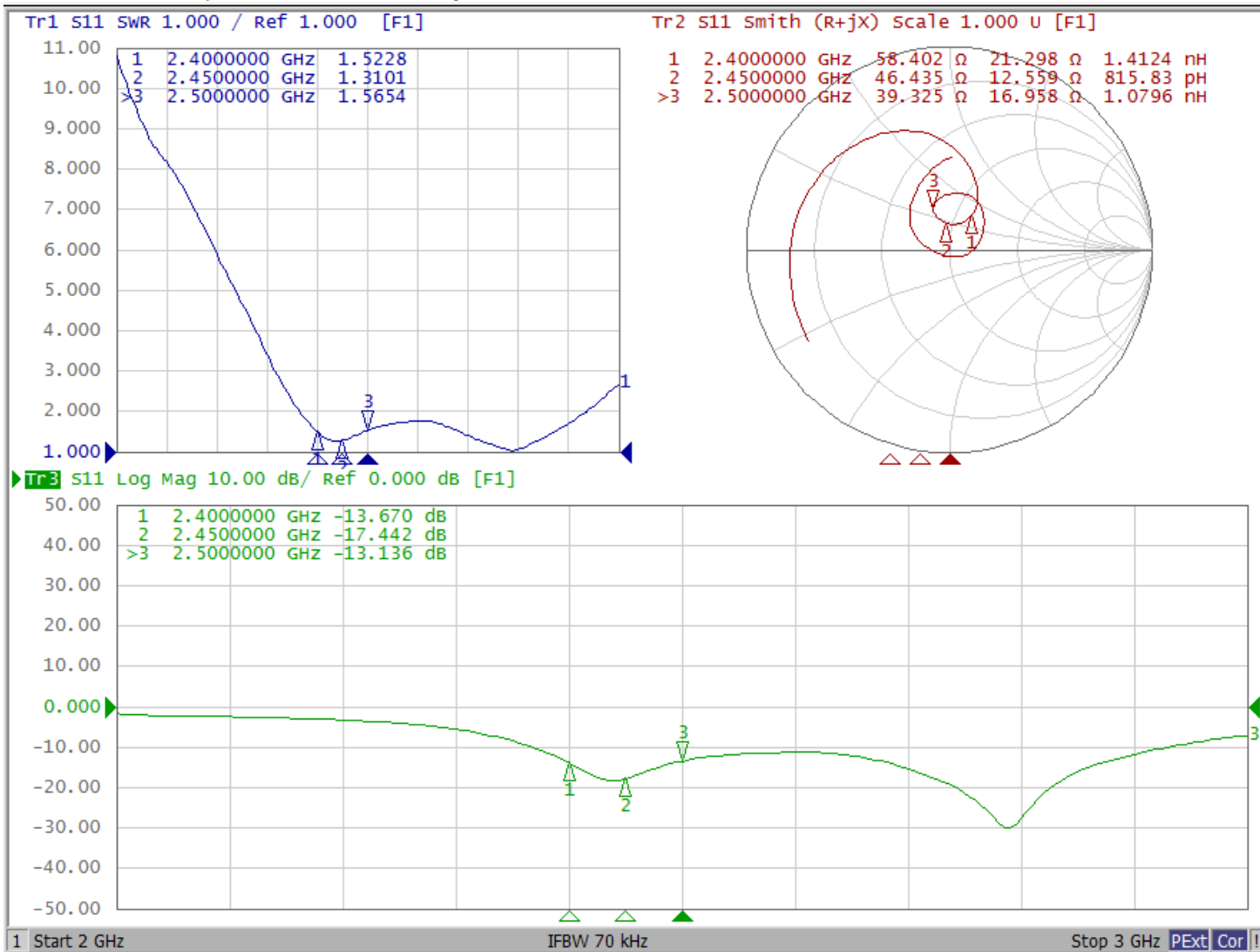


BT Antenna

S11_BT Antenna_2.4GHz

E5063A Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



Display

Data Hold Off

Equation Editor... Equation OFF

Edit Title Label Title Label OFF

Graticule Label ON

Invert Color ON

Frequency ON

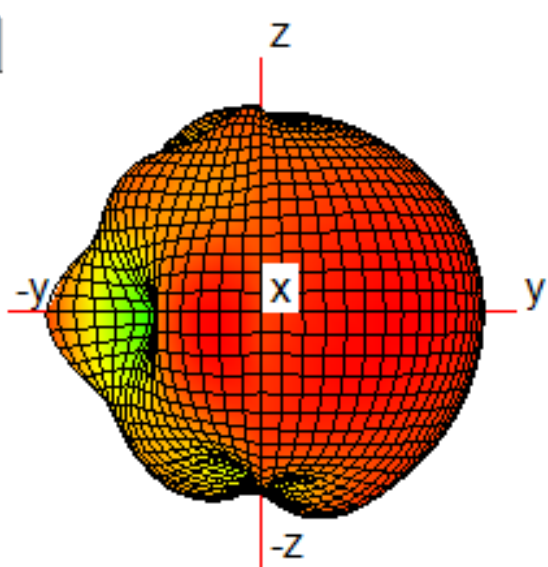
Update ON

Minimize E5063A

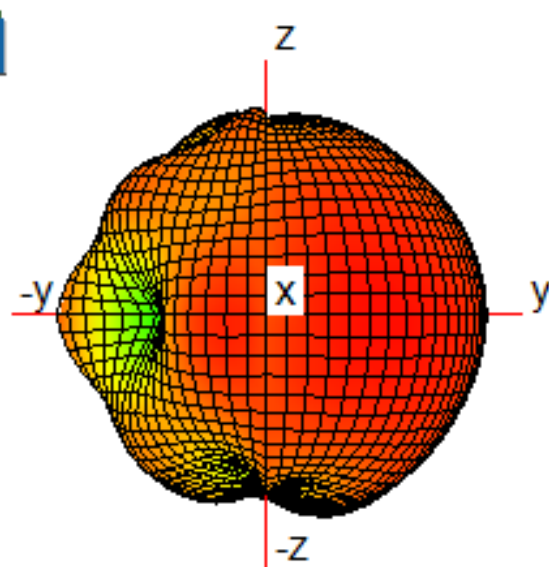
E5063A Title bar ON

Return

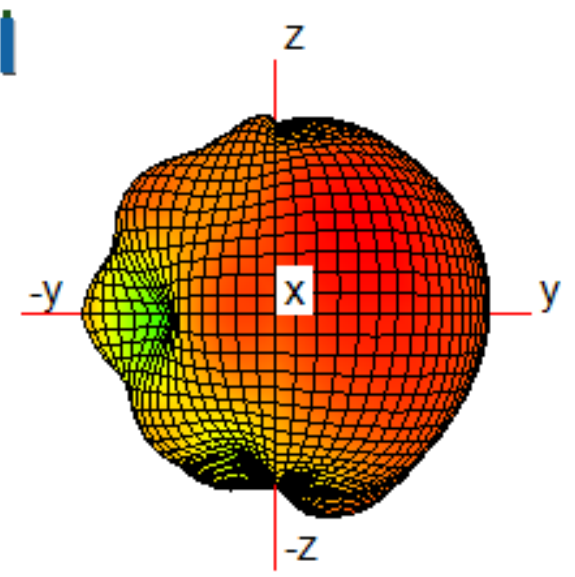
Radiation Pattern



2.4GHz

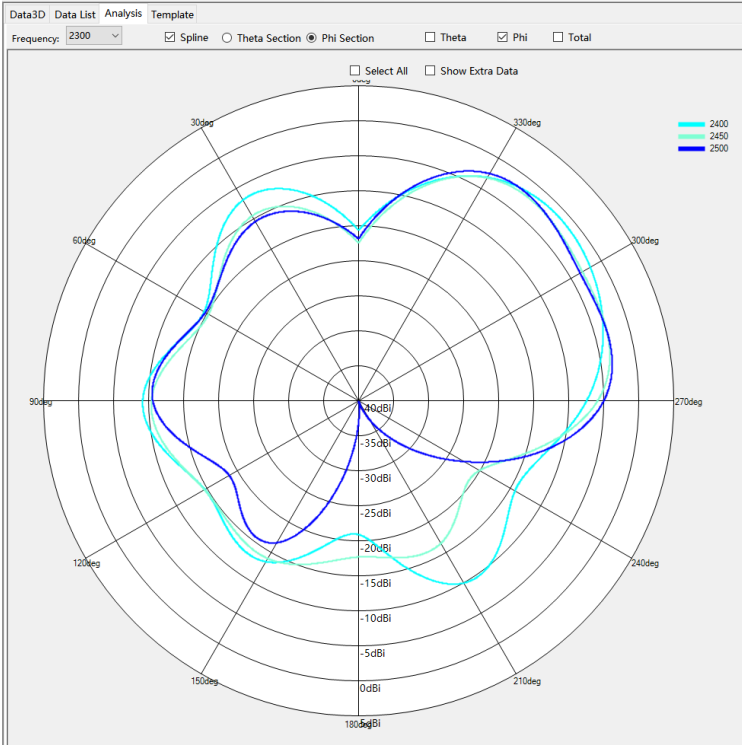
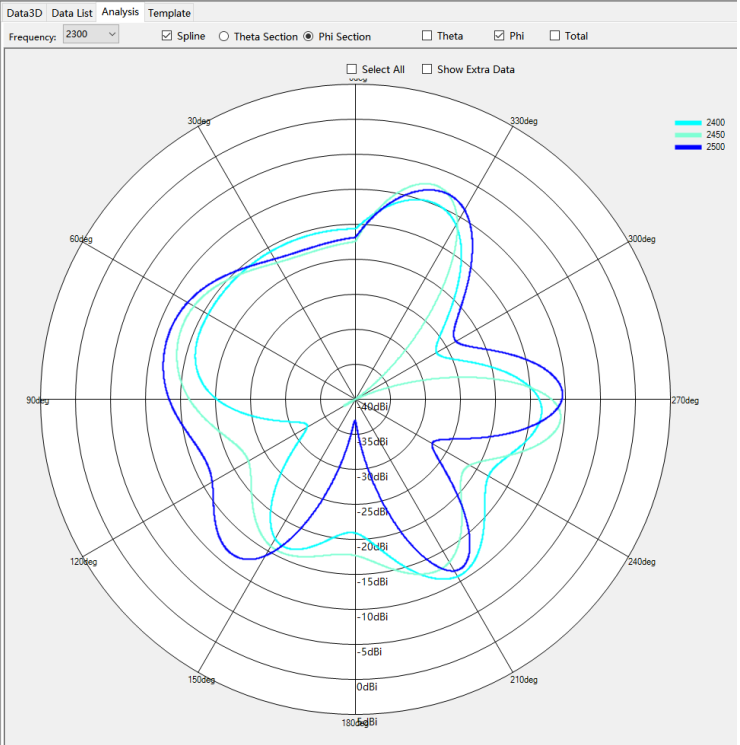
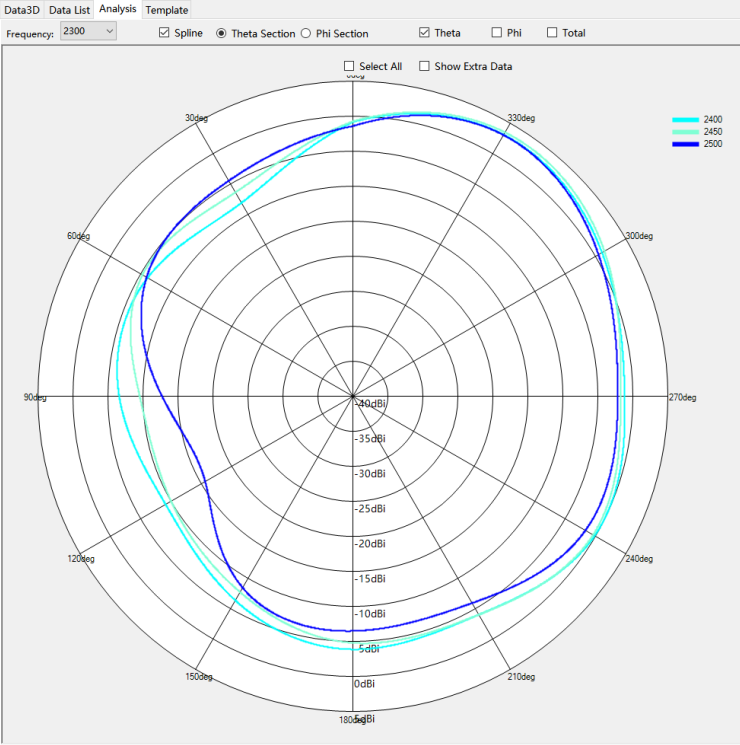


2.45GHz



2.5GHz

BT Antenna



Gain, Efficiency

Antenna Gain, Efficiency



Freq.	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2400	-2.6	3.8	55.4
2410	-2.6	4.0	55.5
2420	-2.6	4.0	55.4
2430	-2.4	4.2	57.5
2440	-2.5	4.2	56.7
2450	-2.7	4.1	54.0
2460	-2.7	3.9	53.8
2470	-2.9	3.6	51.3
2480	-2.9	3.6	51.8
2490	-3.0	3.5	49.8
2500	-2.9	3.6	51.3



Thanks