

DV6076Z BT Antenna information

Record for version modification

Date	Revision	Modify Content	Author
2022-9-23	V1.0	1 st Version	Tan Zhigang

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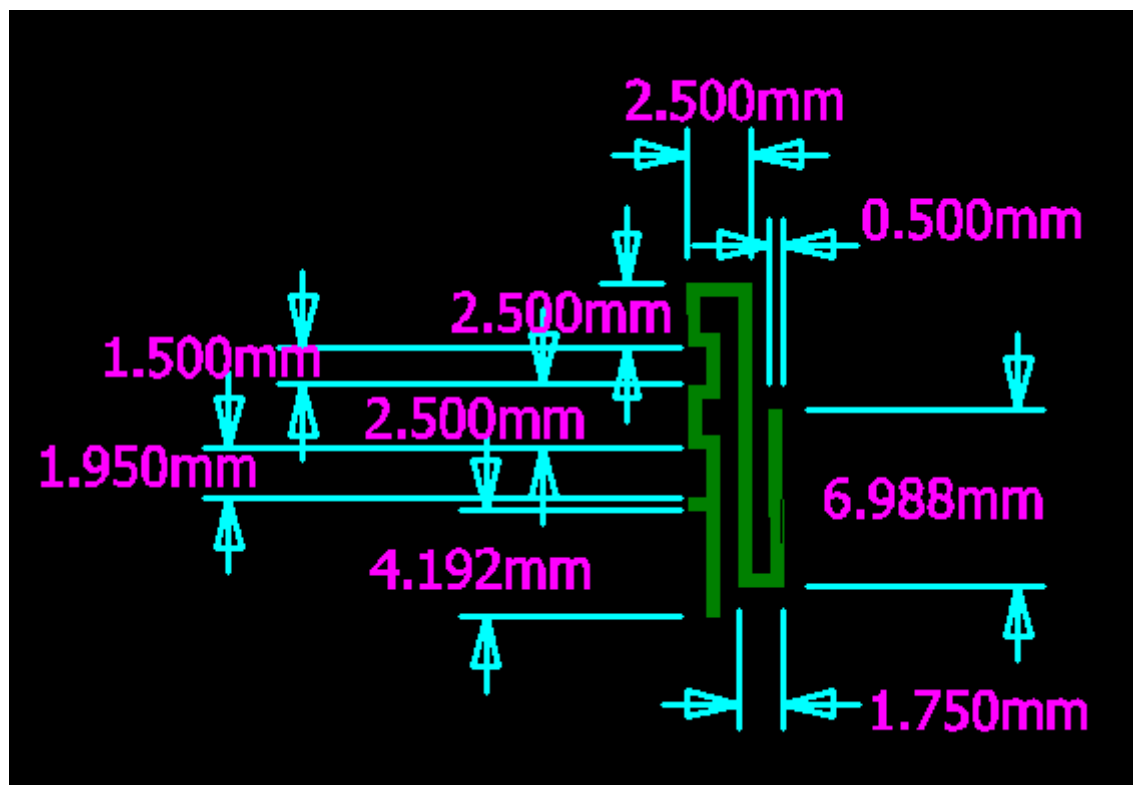
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1. Project information

Model No.	DV6076Z
HW Version	V1
SW Version	
Antenna type	Built-in
Installation mode	
WIFI Model	
Antenna supplier	
Tester	Tan Zhigang
Acceptance	
Reviewer	
Date	2022/9/23

2. Appearance and specification



3. Performance parameter

3.1 Antenna passive test

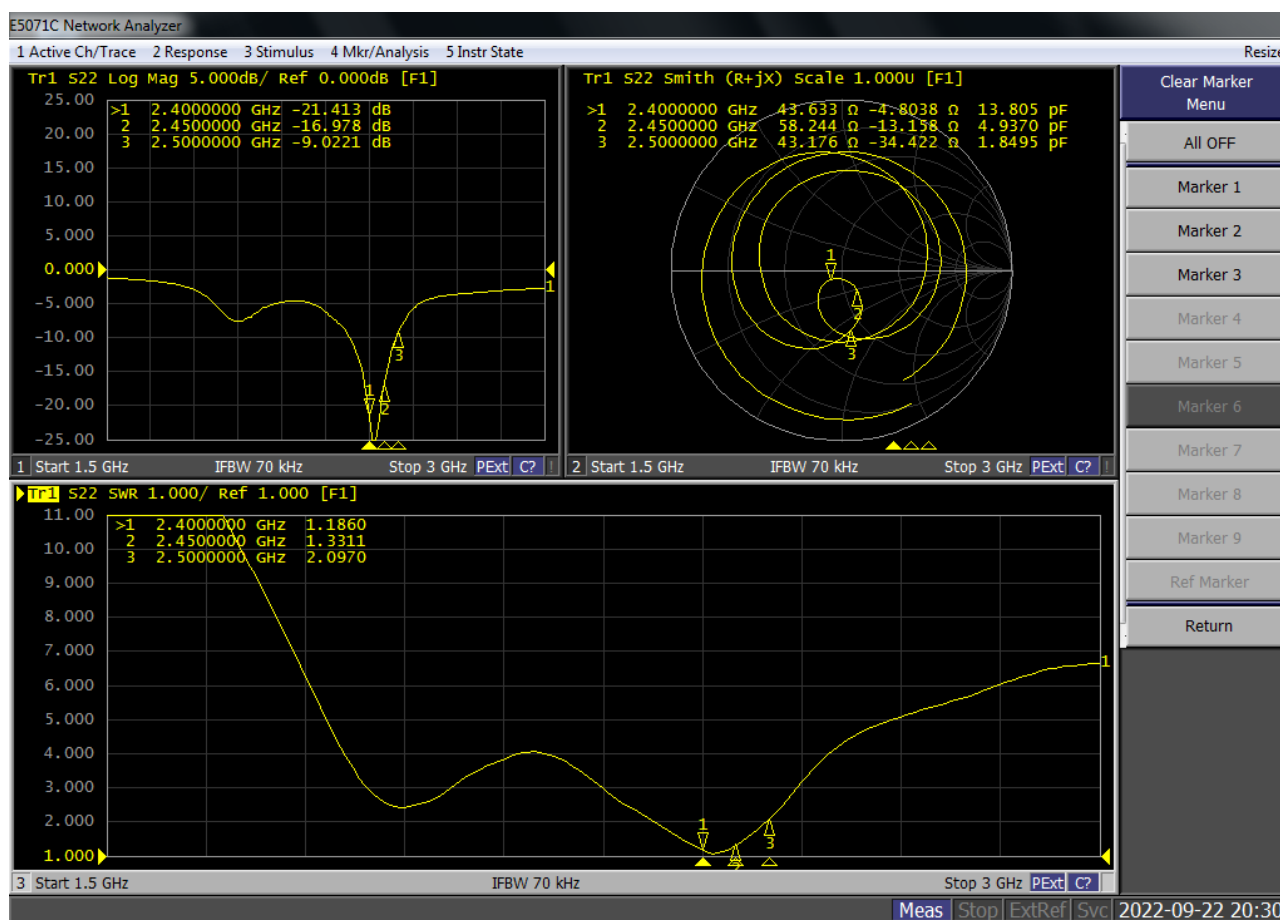
Frequency	2400Mhz~2483.5Mhz
Impedance	50Ω
MAX Antenna Gain	-1.14dBi
Power capacity	<12w
Radiation	Omni-directional

3.1.1 Reflection loss&V.S.W.R

Test tools: network analyzer

Standard: Reflection loss $\leq$ -10db V.S.W.R $\leq$ 2

Antenna-BT



V.S.W.R

Freq/GHz	2.4	2.45	2.5
VSWR	1.1	1.3	2

3.1.2 Gain & Efficiency

Test tools: Microwave Anechoic Chamber+Agilent Technologies E5071C

Standard: 2.4G $1.5\text{dBi} \leq \text{Gain} \leq 6\text{dBi}$ Efficiency $\geq 50\%$

5G $1.7\text{dBi} \leq \text{Gain} \leq 6\text{dBi}$ Efficiency $\geq 50\%$

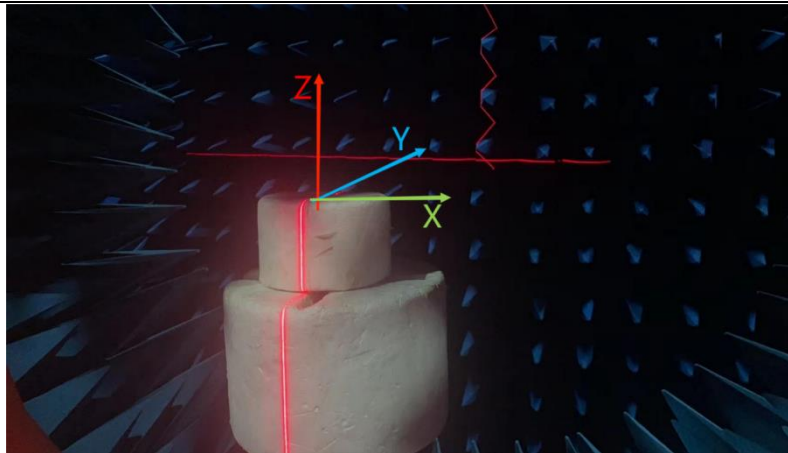
Testing Environment: As shown in the figure



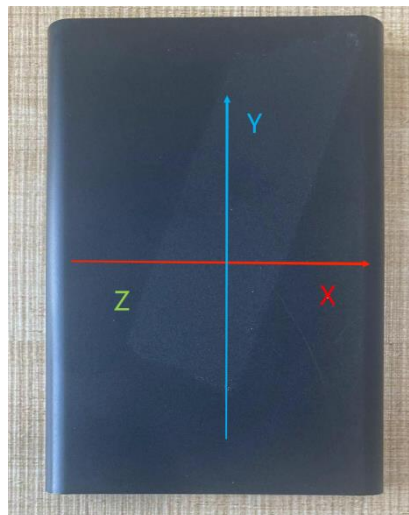
Agilent Technologies E5071C



ROHDE&SCHWARZ CMW500



Microwave Anechoic Chamber



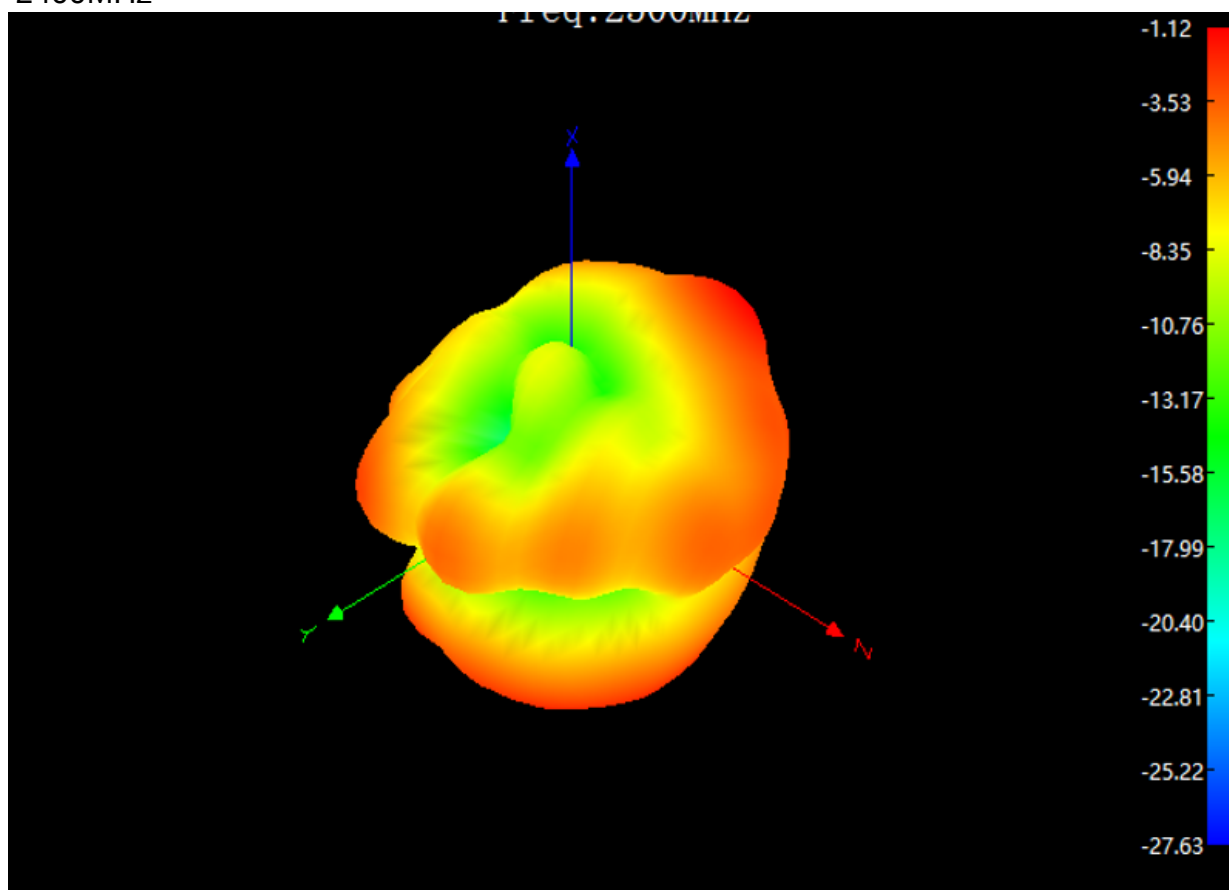
Antenna test data

Unit: dBm

BT		
Frequency / MHz	Gain/ dBi	Efficiency / %
2400	-1.14	39.21
2410	-1.25	39.32
2420	-1.41	39.35
2430	-1.46	39.56
2440	-1.62	39.19
2450	-1.68	39.21
2460	-1.78	38.74
2470	-1.91	38.05
2480	-2.26	36.46
2490	-2.53	35.18
2500	-3.17	32.69

3D directional diagram (maximum)

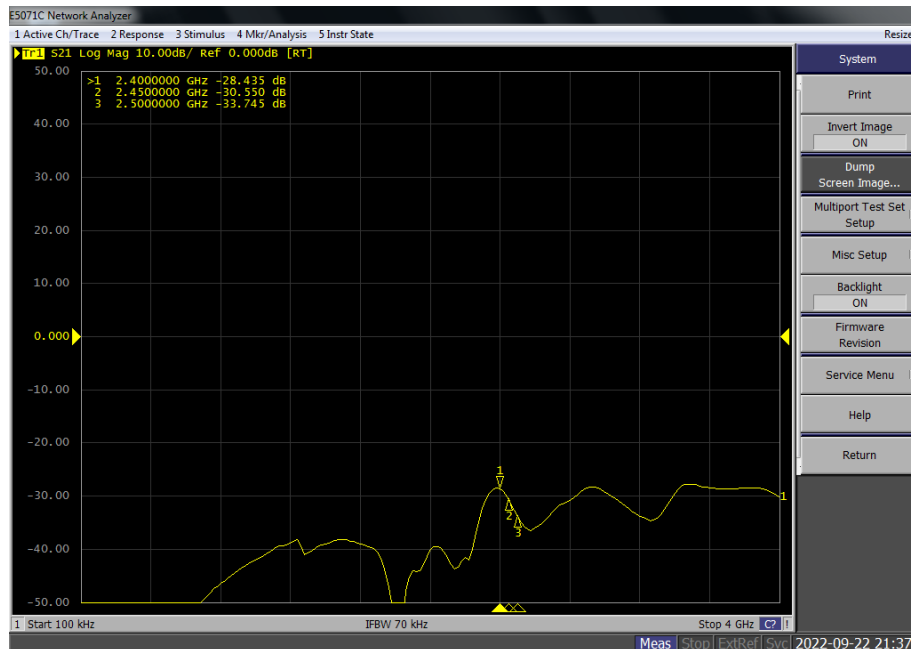
Unit: dBi
2400MHz



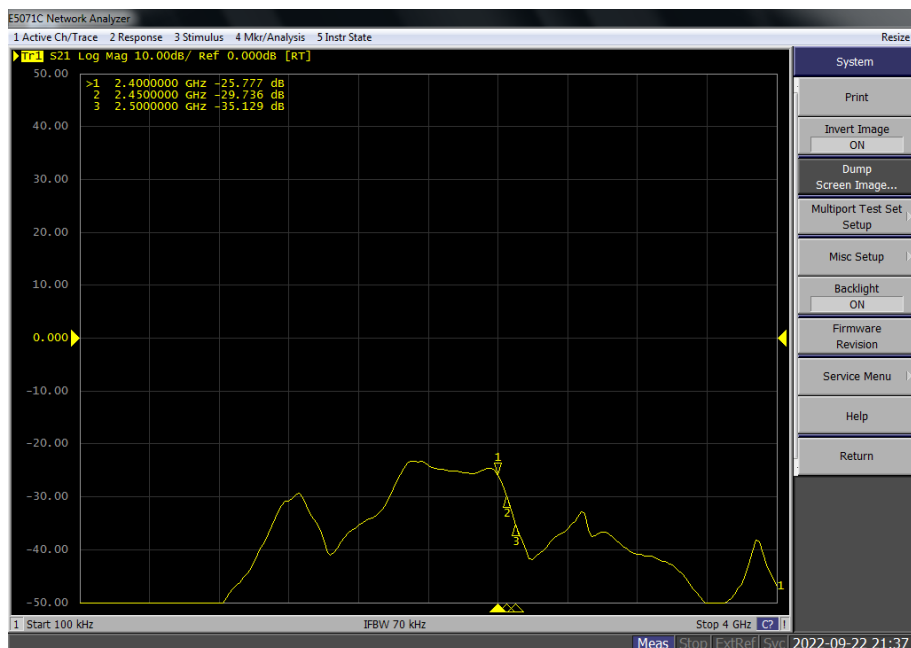
3.1.3 Antenna isolation

Test tools: network analyzer

Standard: Isolation ≤ -20 dB



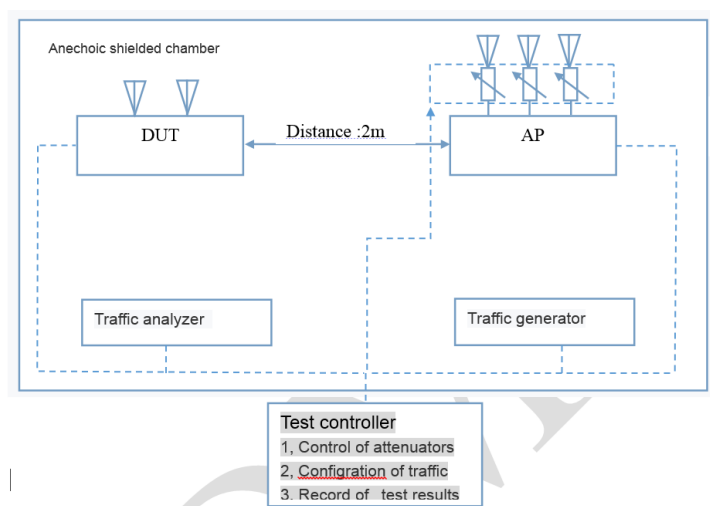
Isolation of antenna A and BT antenna



Isolation of antenna B and BT antenna

4.Throughput Test

4.1 Test Setup(根据自己实际情况，描述下组网情况)



1. The test setup SHALL locate in the anechoic shielded chamber.
2. A Traffic Generator/Analyzer, sending the Ethernet packets, connects to the LAN interface of the AP. The peer AP antenna is located in 2 meter to the DUT.
3. Additional attenuation is added in each RF chain of AP to simulate the incremental distance.
4. The host SHALL send the Ethernet packet at the maximum rate which the DUT can achieve theoretically.
5. TCP connection SHALL be used for Ethernet packet transmission in the test.

4.2 Testing Environment(附环境照片)

