

DV8886 BT Antenna information

Record for version modification

Date	Revision	Modify Content	Author
2022-4-24	V1.0	1 st Version	

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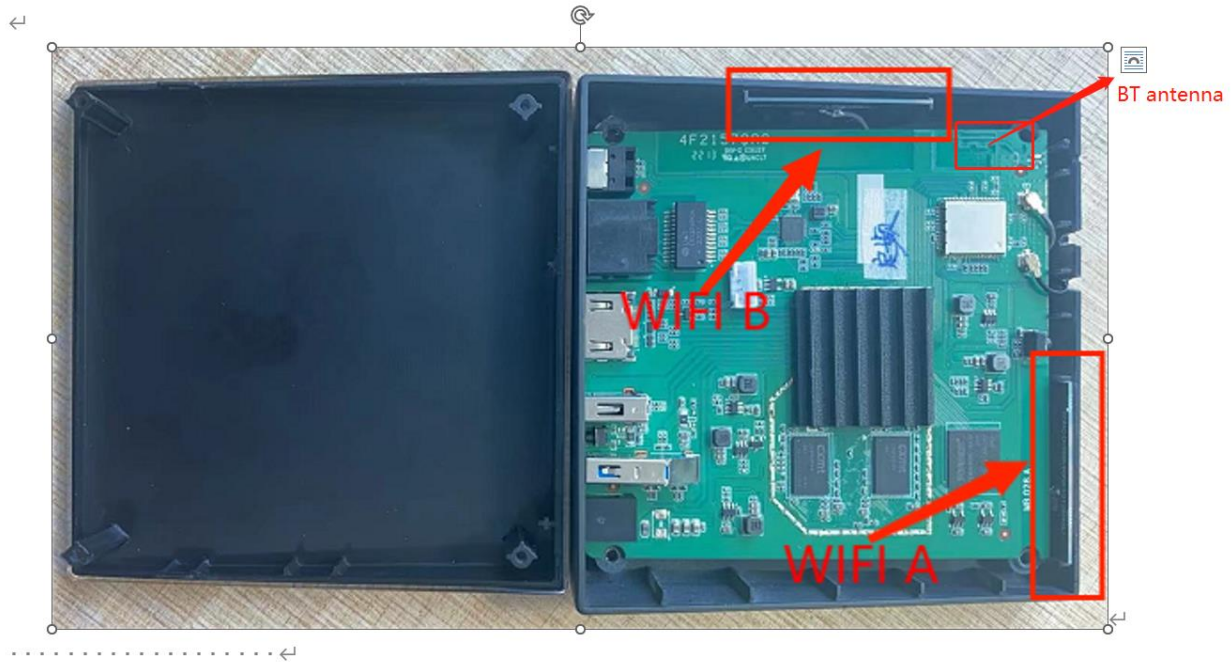
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1. Project information

Model No.	DV8886
HW Version	V1
SW Version	N/A
Antenna type	PCB
Date	2022/4/24

2. Appearance and specification



3. Performance parameter

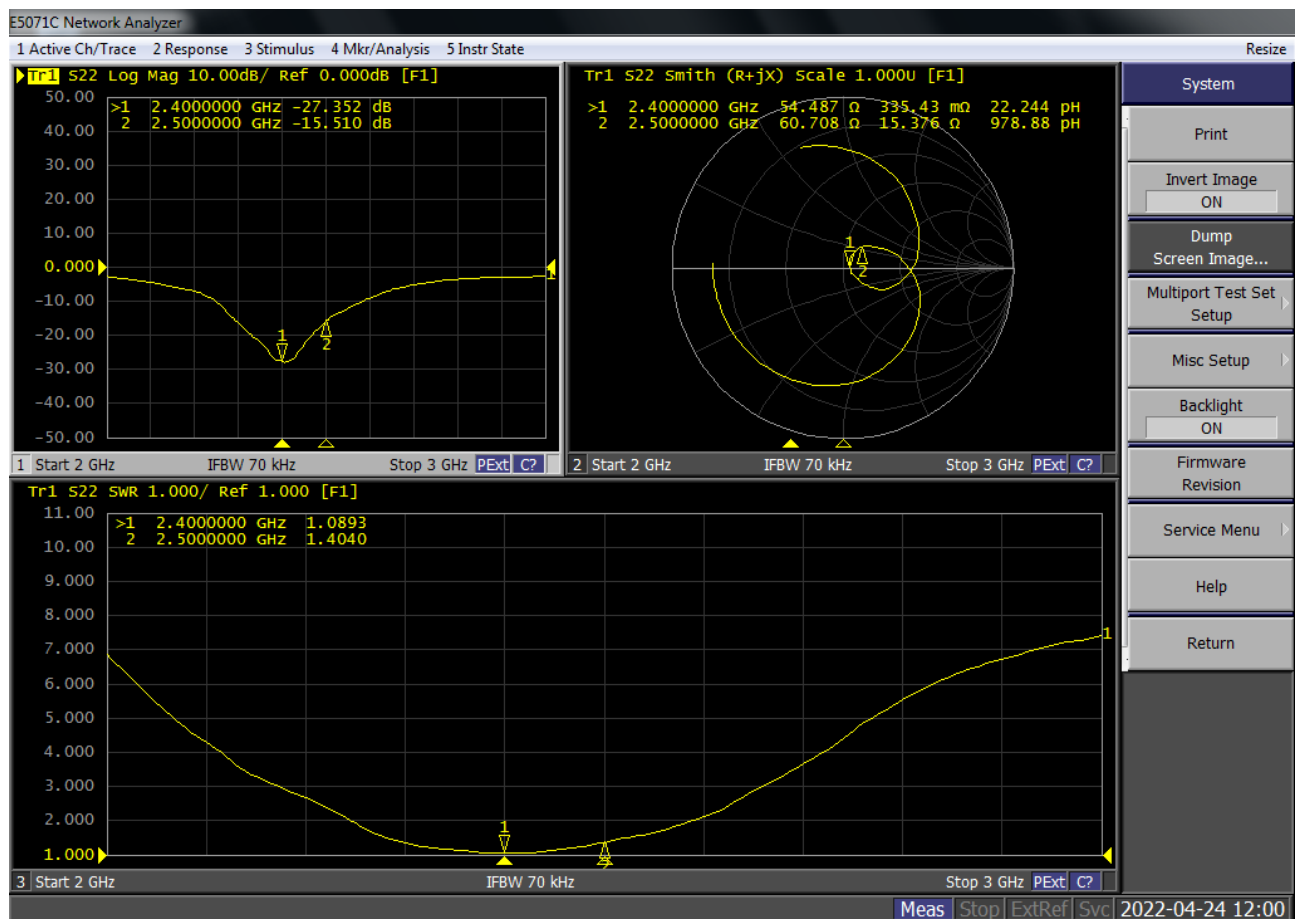
3.1 Antenna passive test

Frequency	2400Mhz~2500Mhz
Impedance	50Ω
Max Antenna Gain	2.88dBi
Power capacity	<12w
Radiation	Omni-directional

3.1.1 Reflection loss&V.S.W.R

Test tools: network analyzer

Standard: Reflection loss≤-10db V.S.W.R≤2



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V.S.W.R

Freq/GHz	2.4	2.45	2.5
VSWR	1.0	1.6	1.4

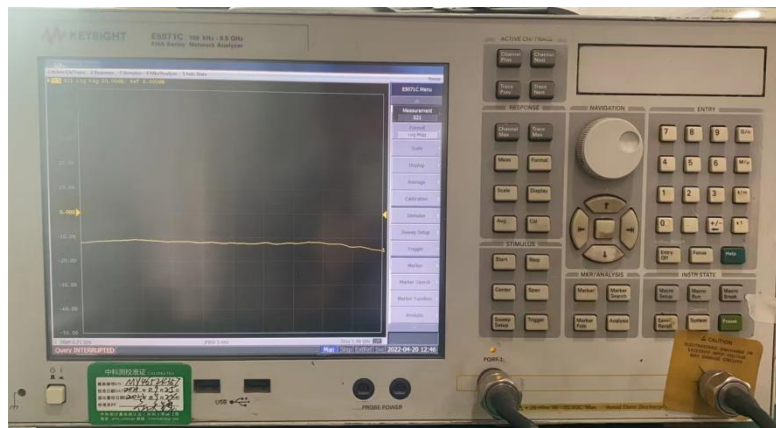
3.1.2 Gain & Efficiency

Test tools: Microwave Anechoic Chamber+Agiilent 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



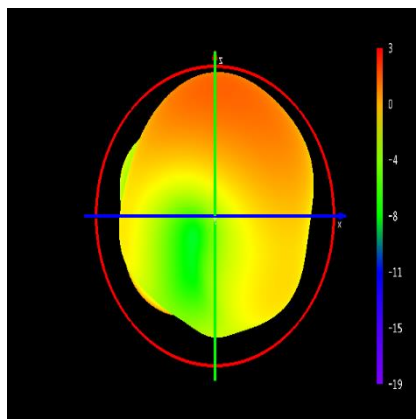
ROHDE&SCHWARZ CMW500

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BT		
Frequency / MHz	Gain/ dBi	Efficiency / %
2400	2.63	64.74
2410	2.45	63.03
2420	2.31	61.67
2430	2.26	59.72
2440	2.26	59.16
2450	2.26	57.57
2460	2.41	56.6
2470	2.6	56.59
2480	2.67	54.99
2490	2.88	53.85
2500	2.81	51.13

3D directional diagram (Maximum):

2490MHz
(unit: dBi)

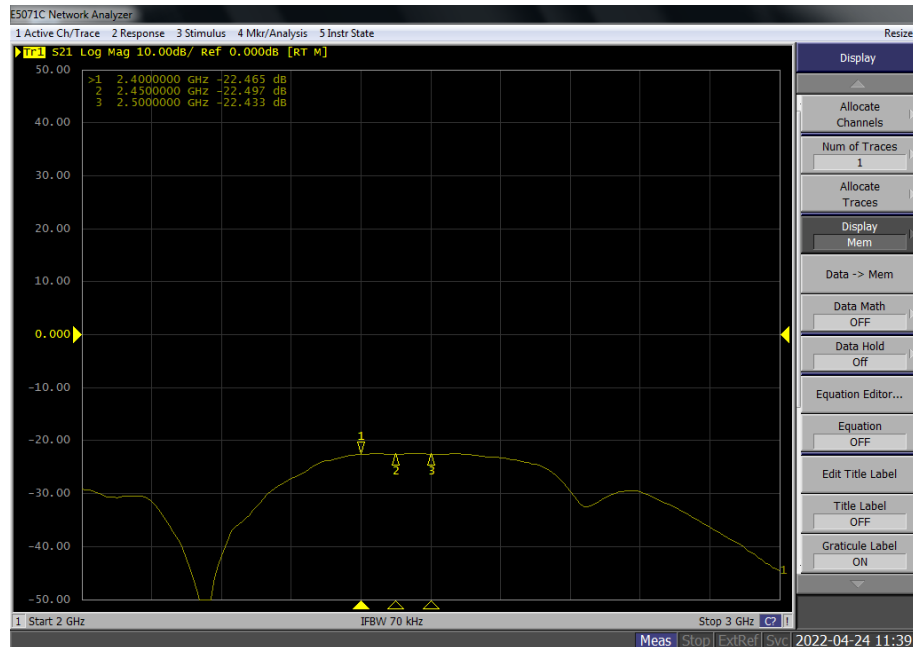


3.1.3 Antenna isolation

Test tools: network analyzer

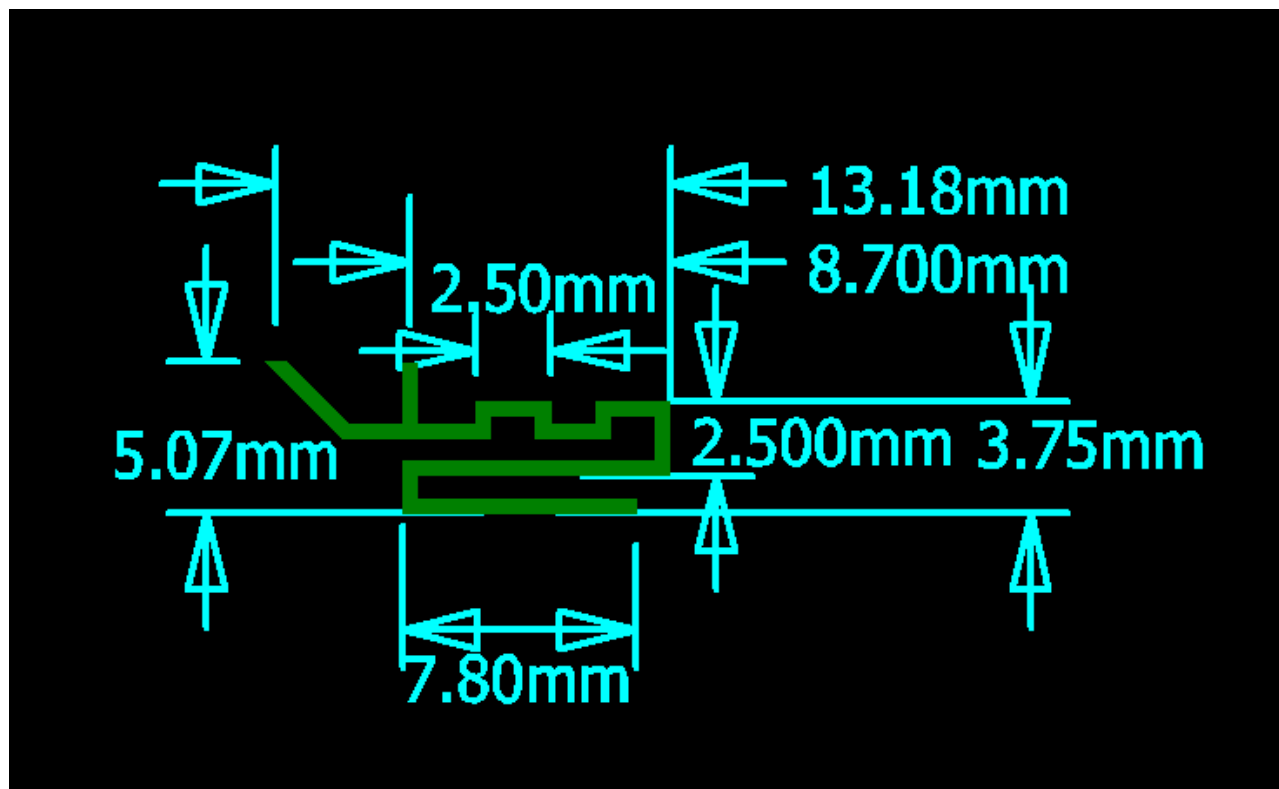
Standard: Isolation $\leq$ -20dB

Isolation of BT antenna



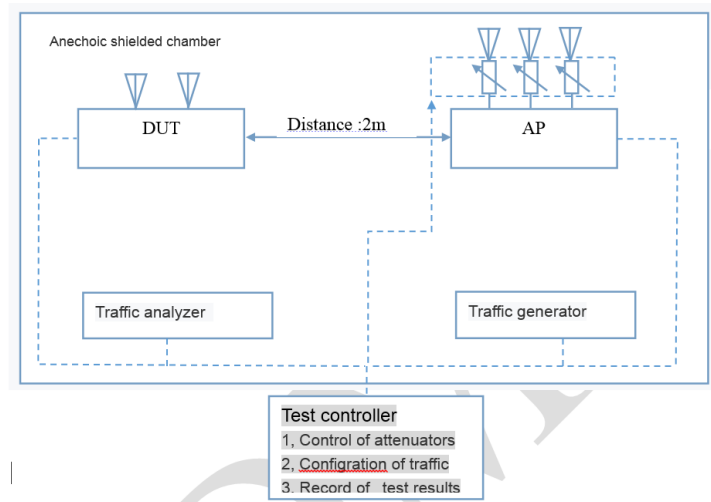
Isolation of BT antenna

3.1.4 Drawing 产品结构图(BT Antenna)



4.Throughput Test

4.1 Test Setup



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.