

DAV001 PV Stage BT Antenna Measurement Report

Provided by: Benson Hsieh

Date: 2021-04-27

Agenda

- Antenna Vender information
- Antenna Performance
 - Return Loss
 - Radiation Efficiency
 - Radiation Patterns
- Conclusions

Summary

- The measurement results include one BT antenna.
 - ✓ Printed antenna on board
- The antenna measurement results are shown as below:

	Return Loss	Radiation Efficiency
		2.4 GHz
Antenna Spec.	> 10 dB	> 60 %
Printed antenna	> 12 dB	> 64 %

DAV001 Vender Information

Manufacturer	Address	Model Name	Peak gain
Olympic Country Co.,Ltd.	Unit 3,23/F,One Harbour Square,181 Hoi Bun Road,KwunTong,Kowloon,Hong Kong	DAV001	<4.07 dBi @ 2.4GHz band

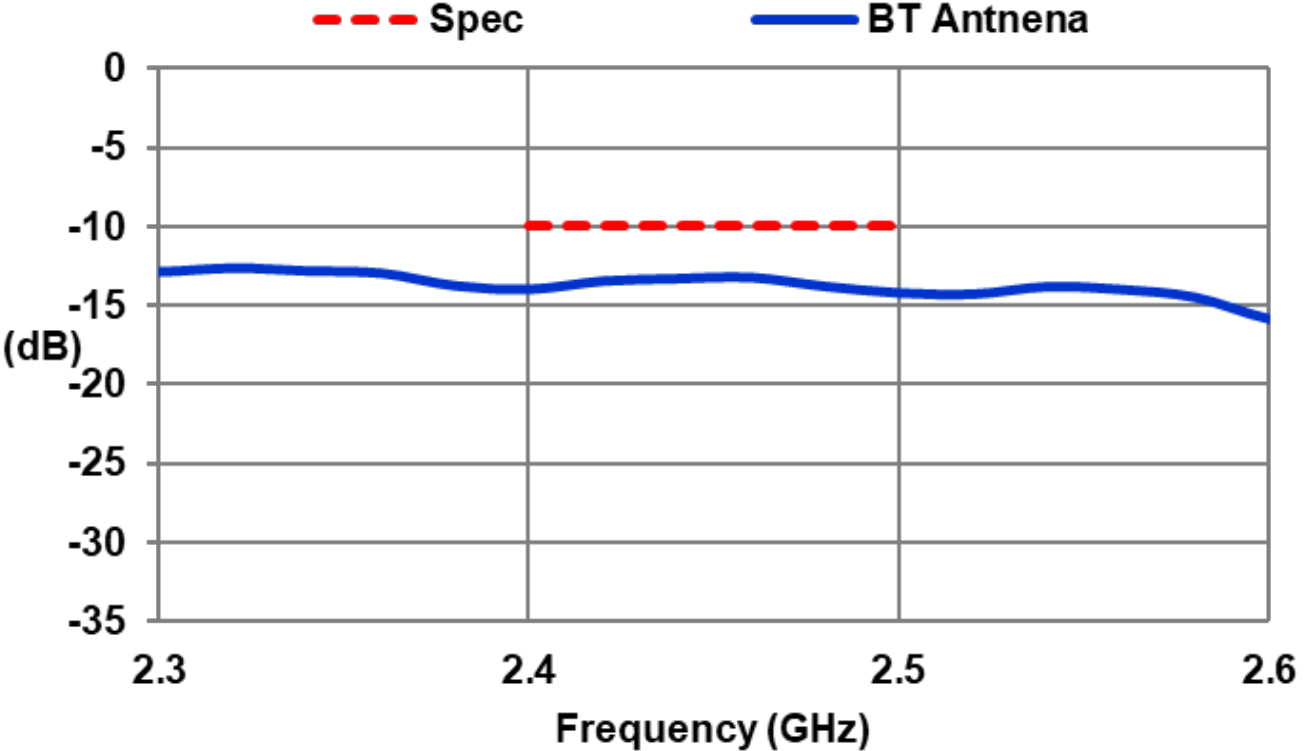
● Antenna Requirement:

➤ BT: Printed antenna on board

● PCBA Dimension:

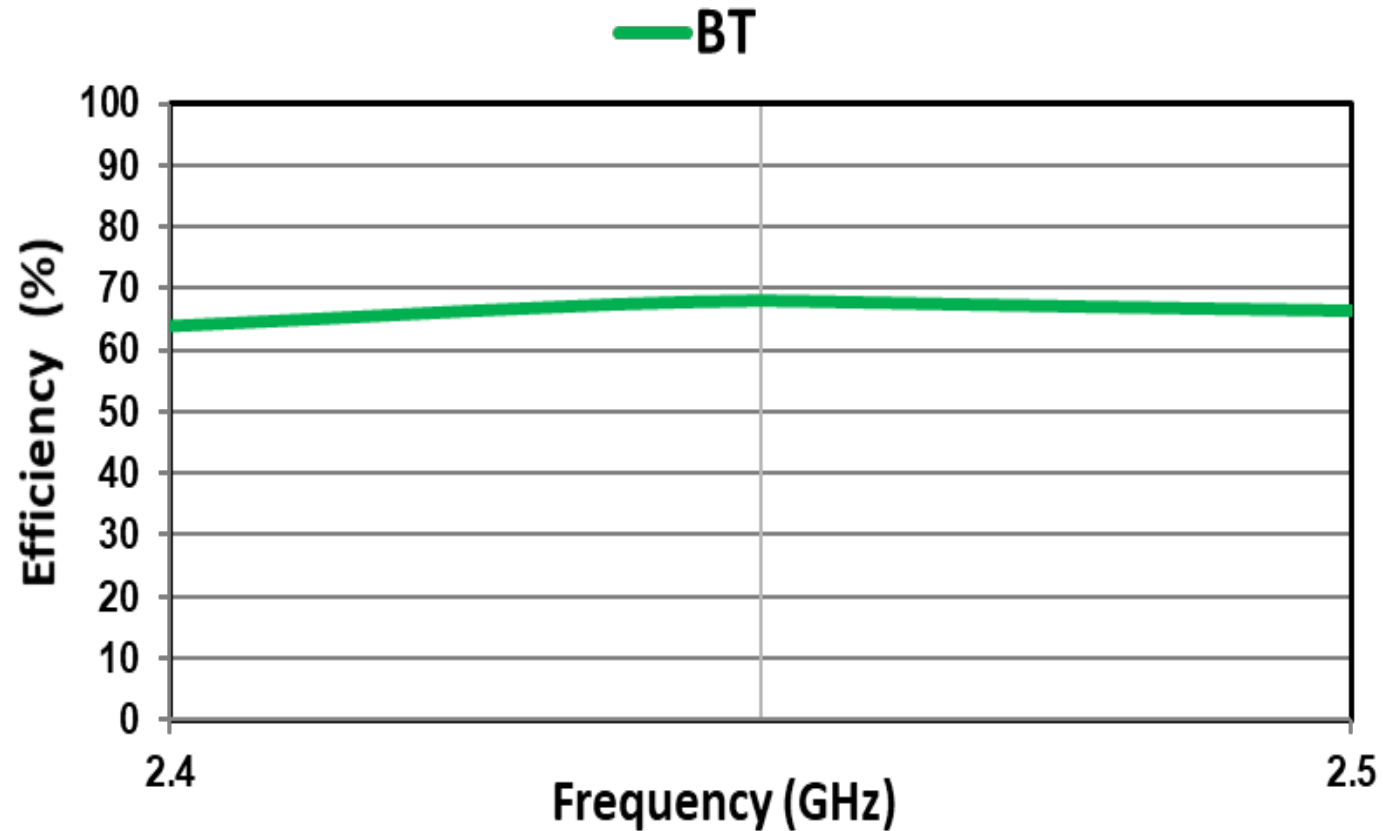
➤ L(318 mm) * W(163 mm) * T(1.2 mm)

Return Loss for BT ANT



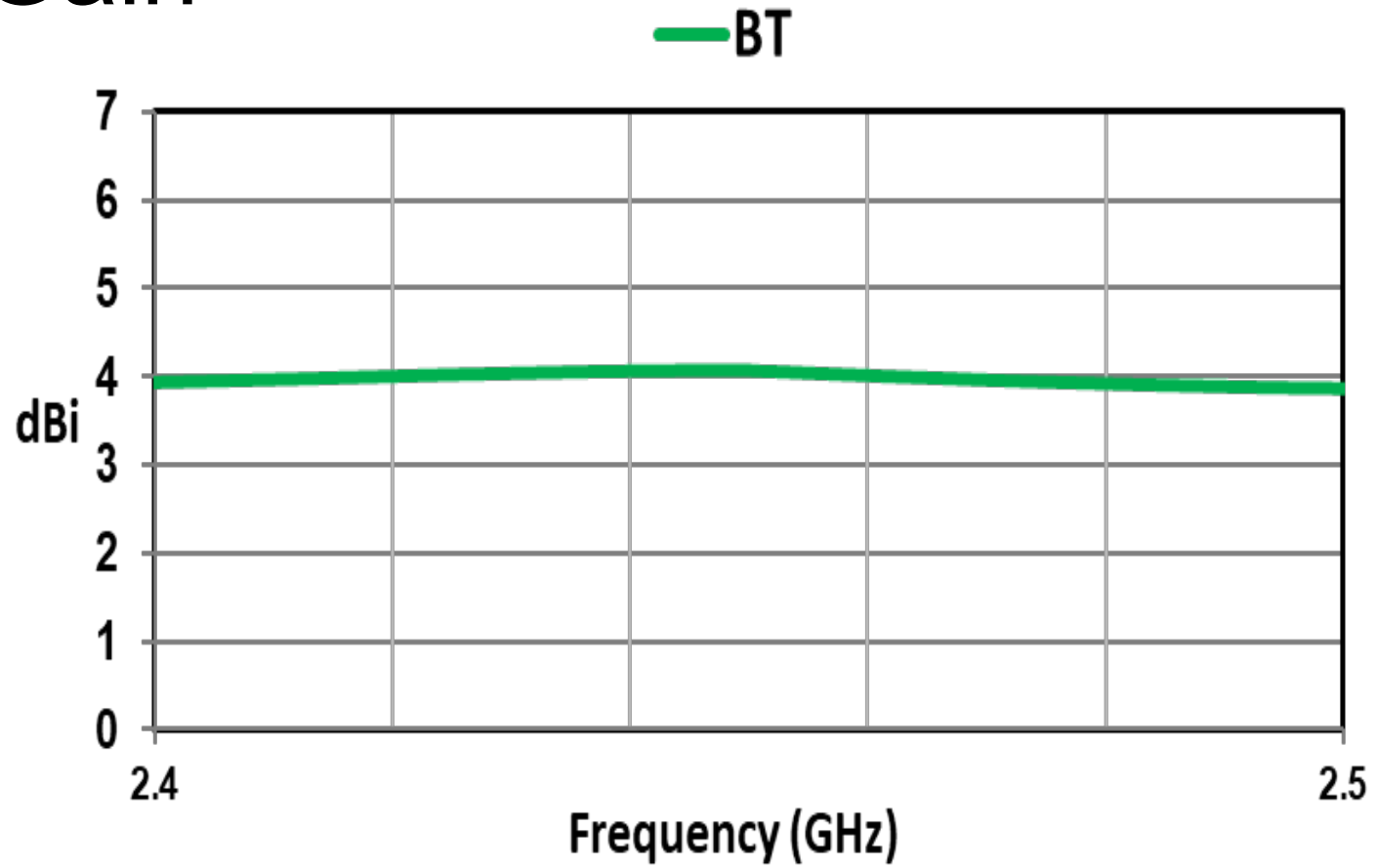
Return Loss > 13 dB

Radiation Efficiency



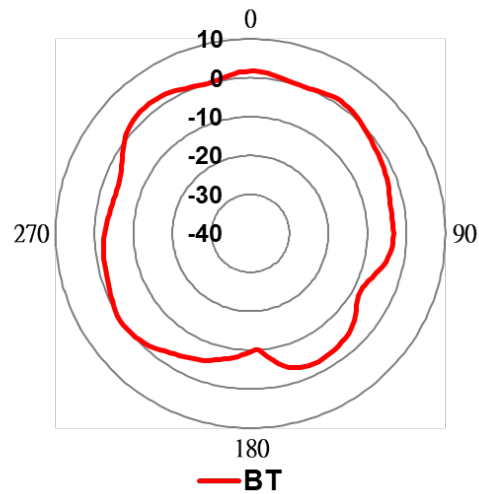
Freq. (GHz)	2.4	2.45	2.5	Avg.
BT	64	68	66	66

Peak Gain

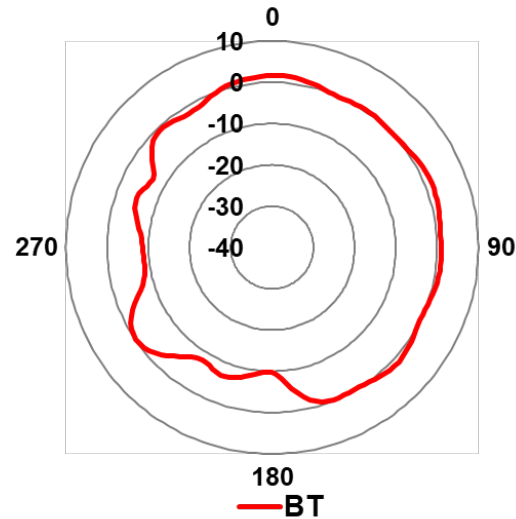


Freq. (GHz)	2.4	2.45	2.5	Avg.
BT	3.94	4.07	3.87	3.96

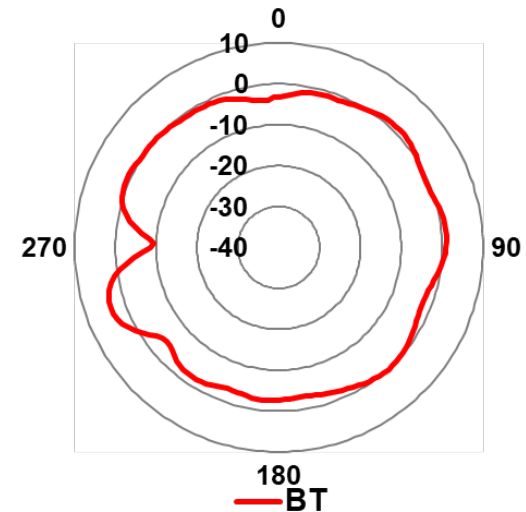
Radiation Patterns for BT ANT @ 2.45 GHz



X-Z Plane



Y-Z Plane

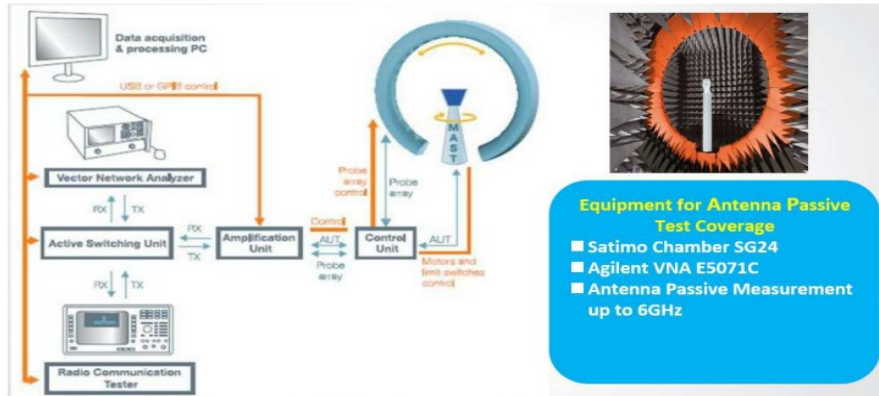
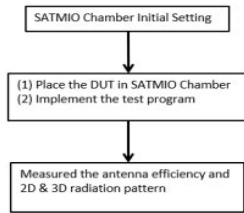


X-Y Plane

Applicable Test Method

1. This test report is prepared for host antenna testing under a full anechoic chamber
2. System description
 - a) Test setup
 - b) Equipment list

Diagram



Item	Equipment	Manufacturer	Model	Cal.date	Cal.date
1	Satmio chamber		SG24	2021-04-26	2022-04-26
2	Network analyzer	Rohde-schwarz	E5080A	2021-11-13	2022-11-13

c) Commercial software:
Wave Studio

Conclusions

- According to the antenna measurement results, the following performance could meet specs..
- Printed antenna (on-board)
 - Return Loss: greater than 13 dB in 2.4-GHz band
 - Radiation Efficiency: at least 64 % in 2.4-GHz band