

GALTRONICS

WHEN CONNECTIONS COUNT



CIG WF402-UWB Antenna Performance Report

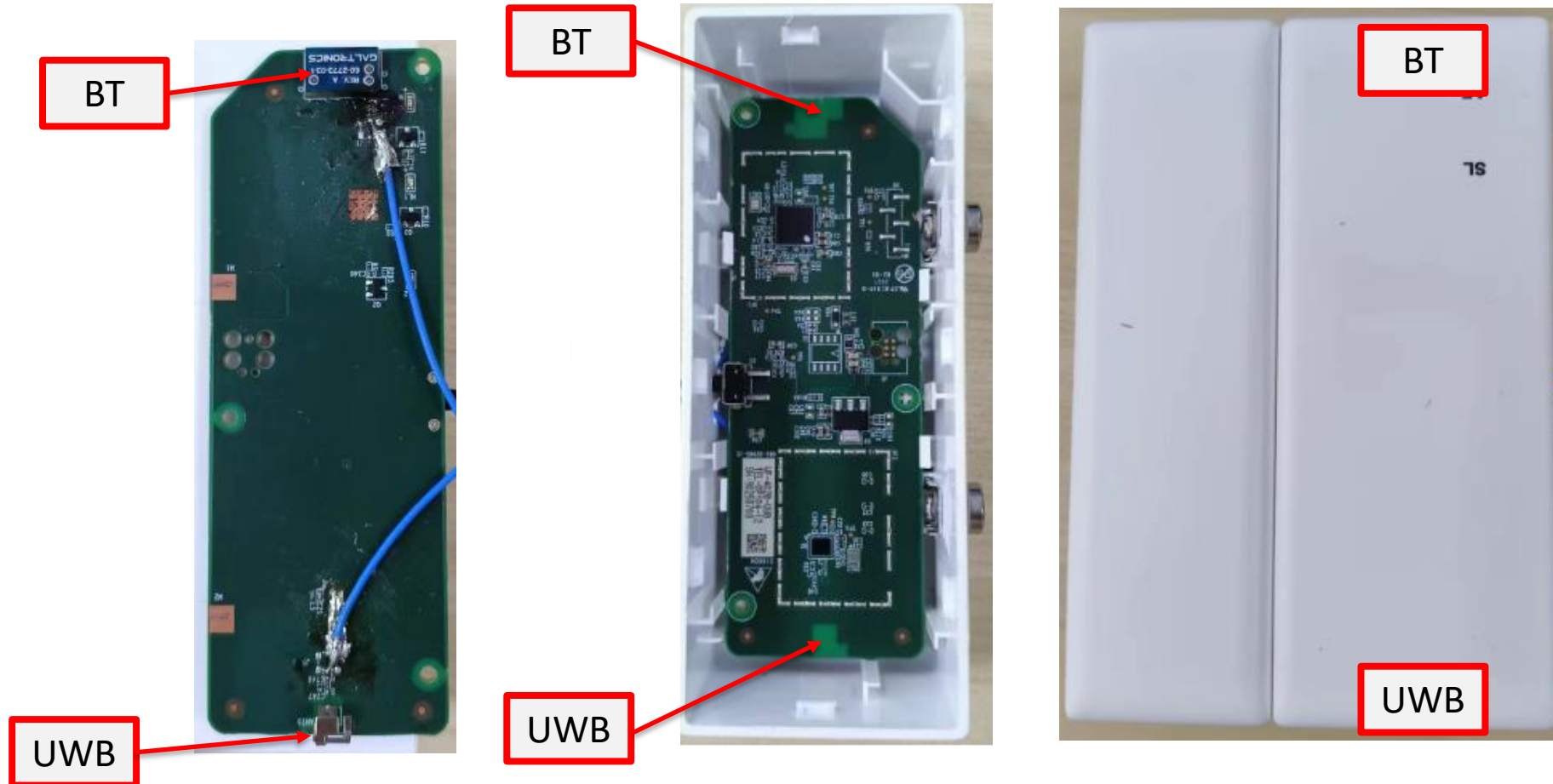
Galtronics Project: TBD

Prepared by Zack
Sep 27^h , 2023

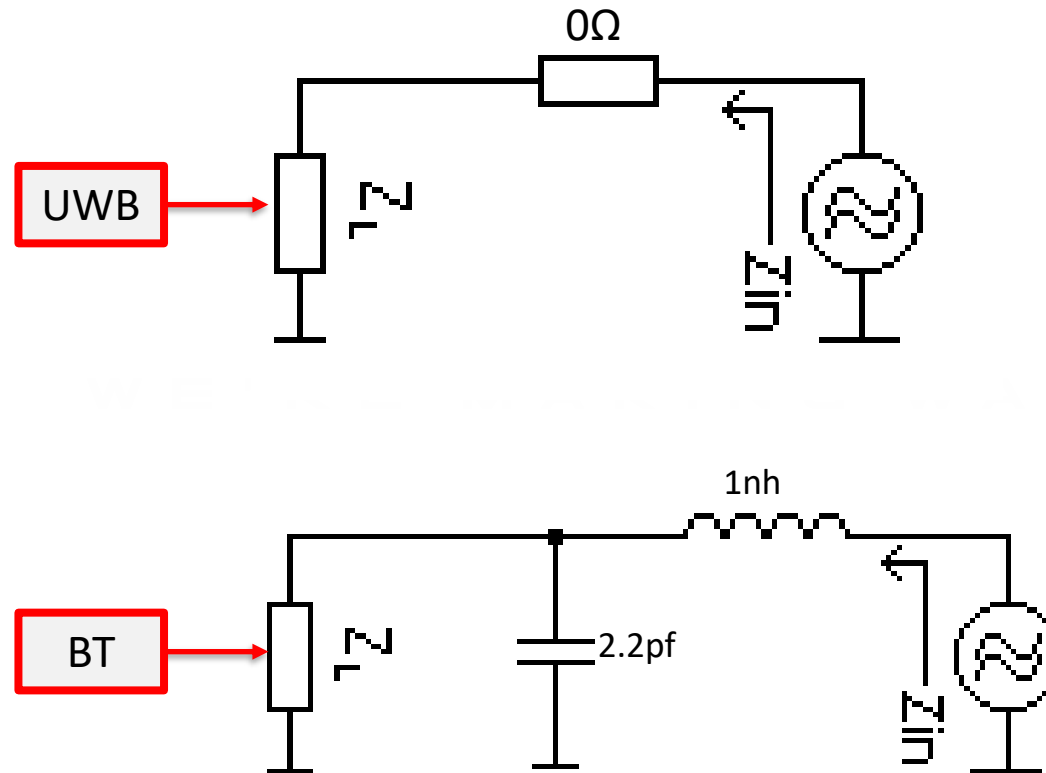
Introduction

- » Galtronics developed an antenna solution for CIG WF402-UWB.
- » There are 2 antennas :
 - Two On-board antennas :- BT and UWB.
- » The operating frequency of the BT is 2.4 GHz-2.5GHz.
- » The operating frequency of the UWB is 6.2396 GHz-6.7396GHz.
- » Measured return loss, isolation, peak gain, efficiency, and gain patterns of the antennas.

WF-402AP+WF-402D:Antenna Location

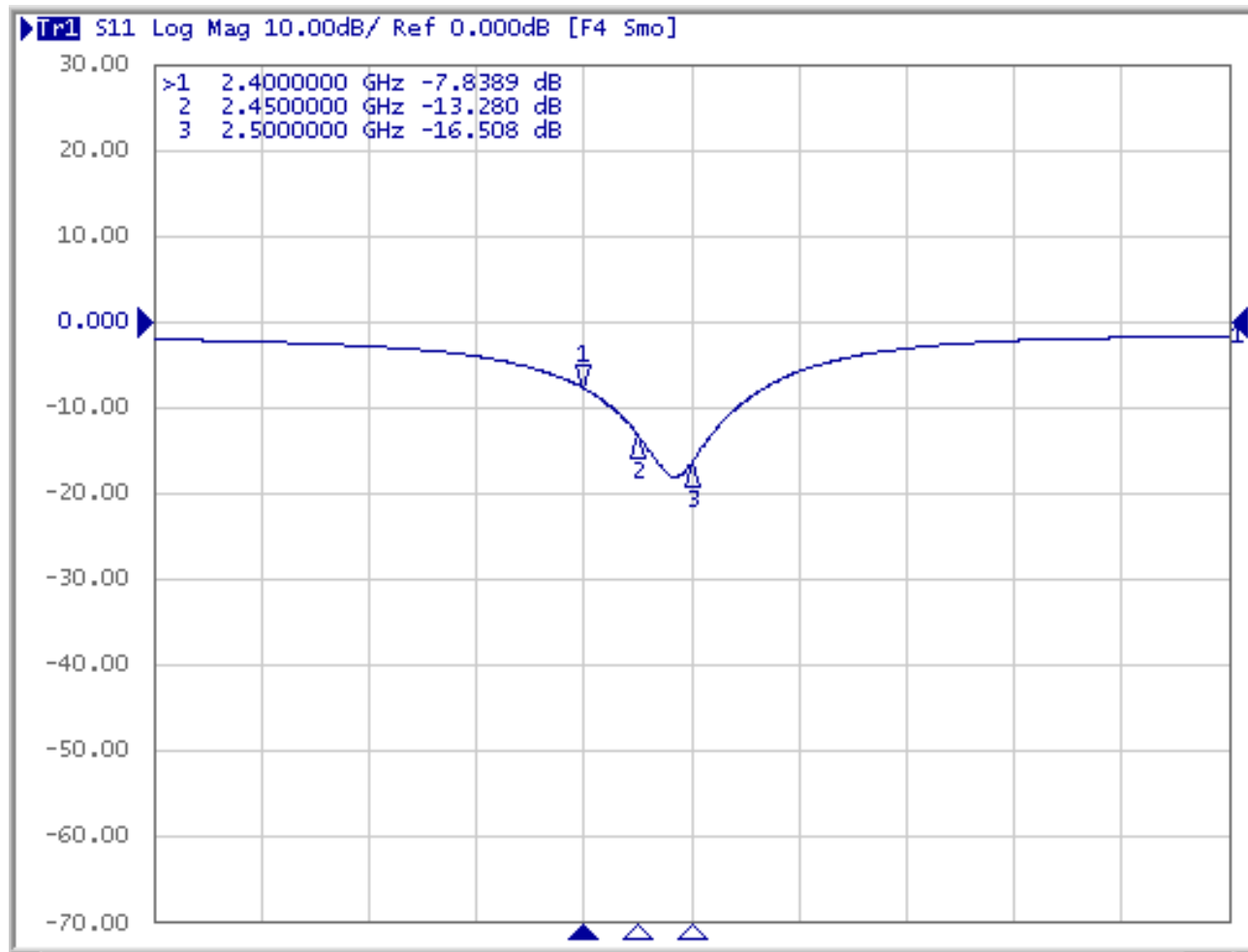


Matching Network for AP



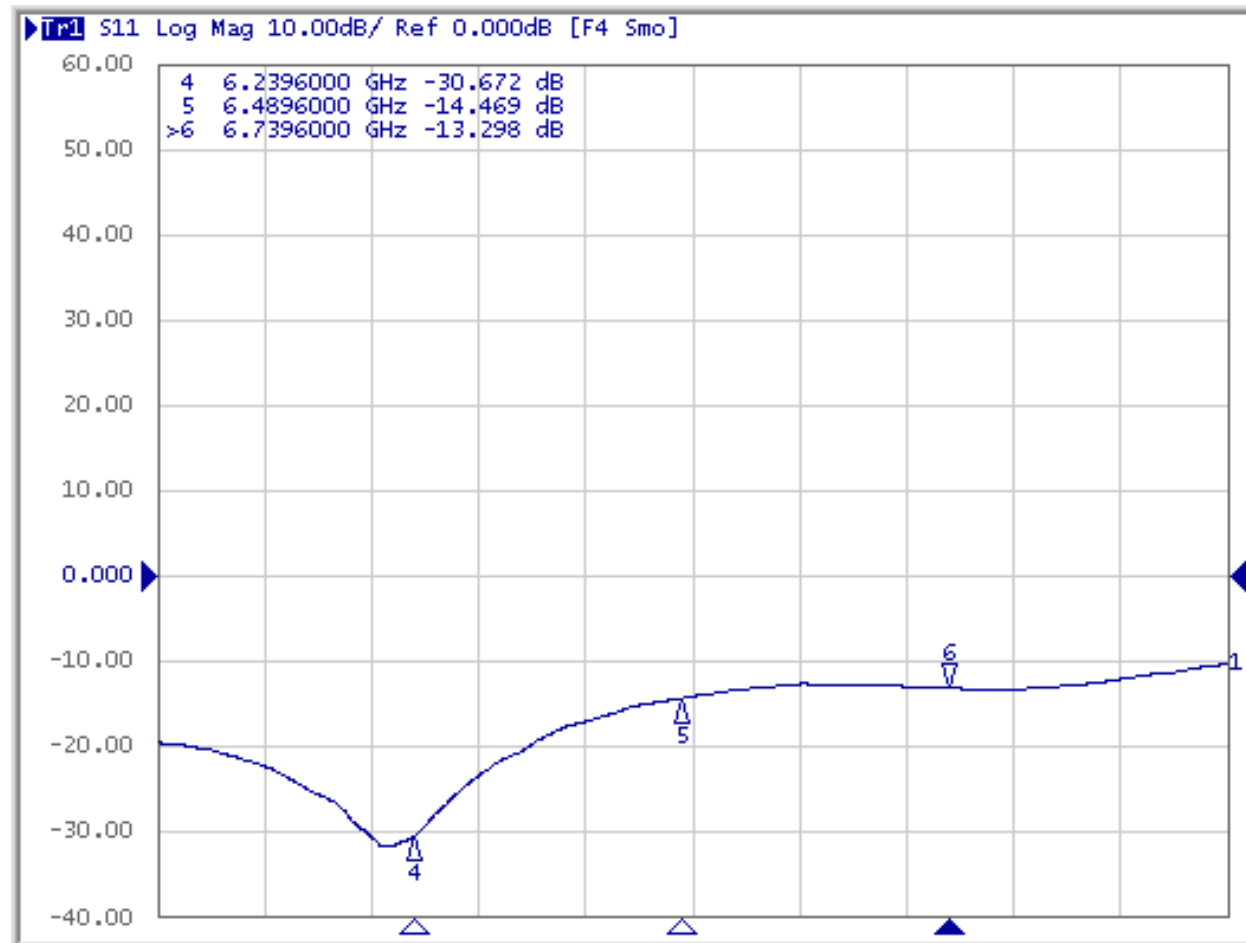
Antenna Return Loss of the BT

Port1= BT



Antenna Return Loss of the UWB

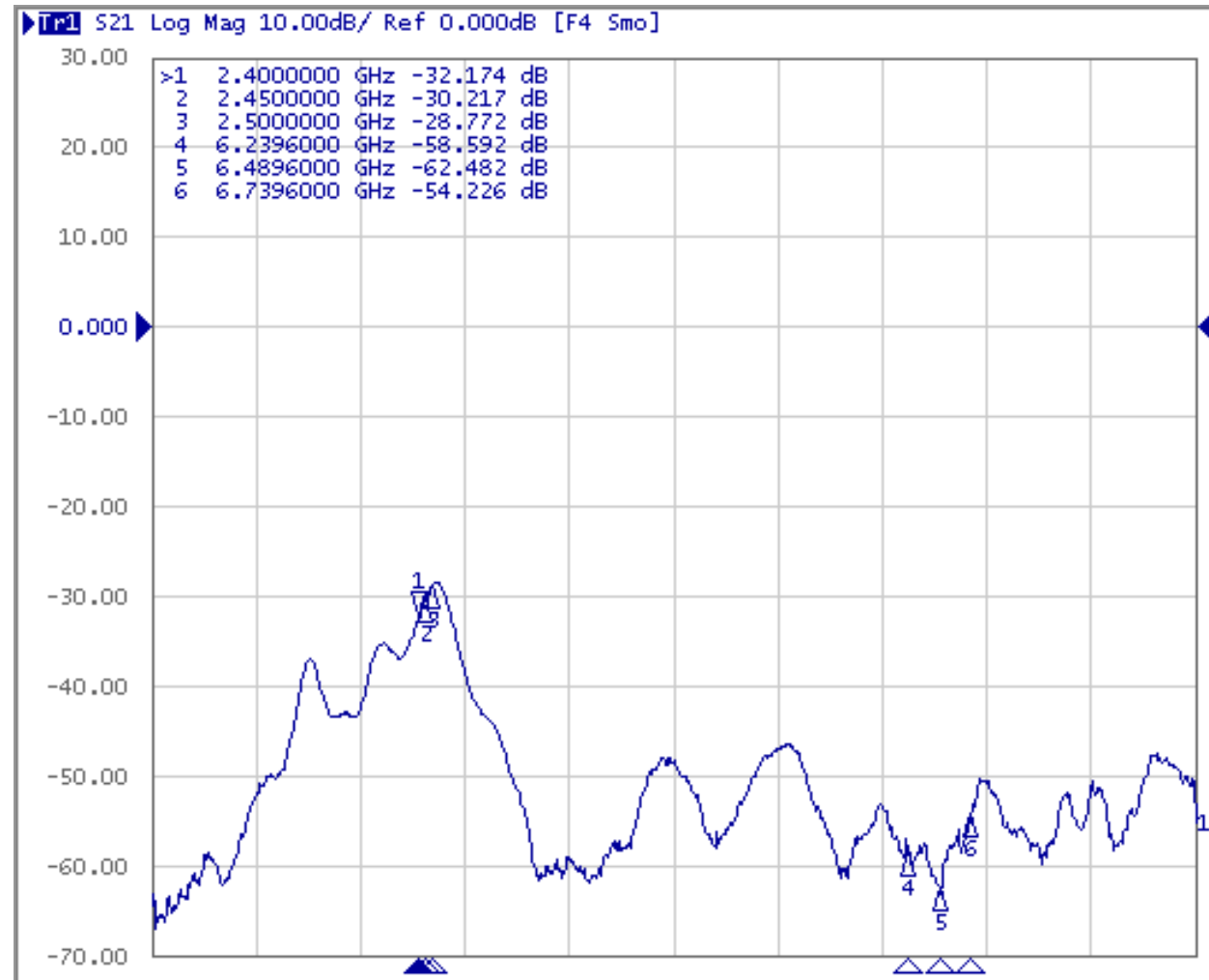
Port1= UWB



Antenna Isolation of BT and UWB

Port1= UWB

Port2= BT

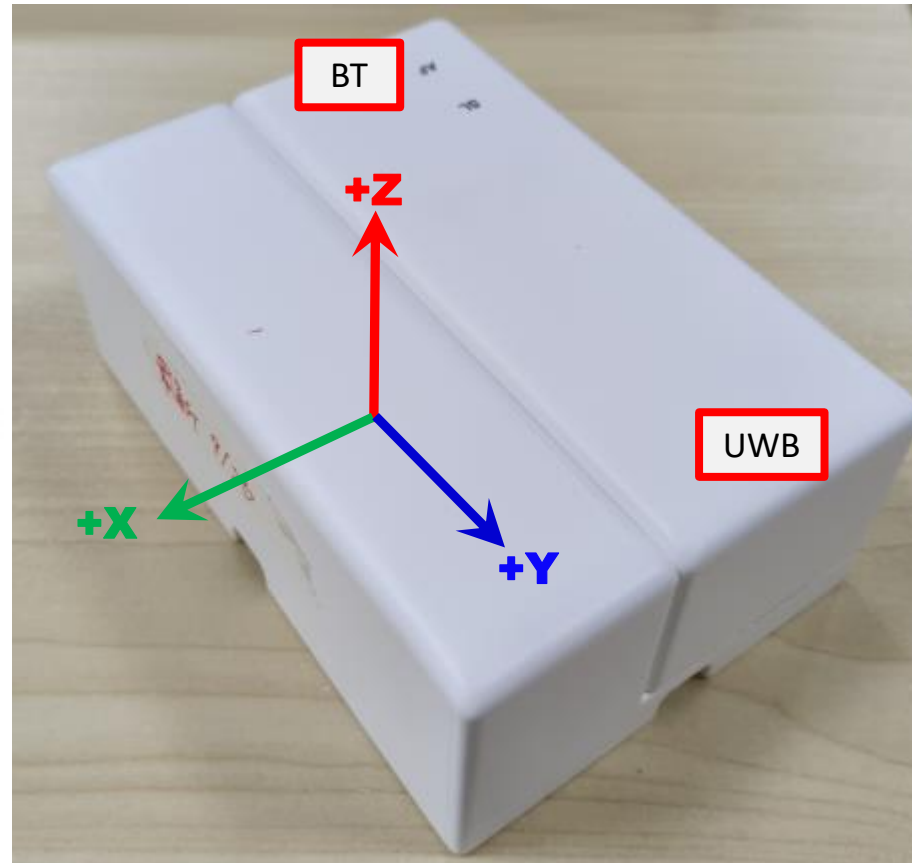


Gain & Efficiency summary

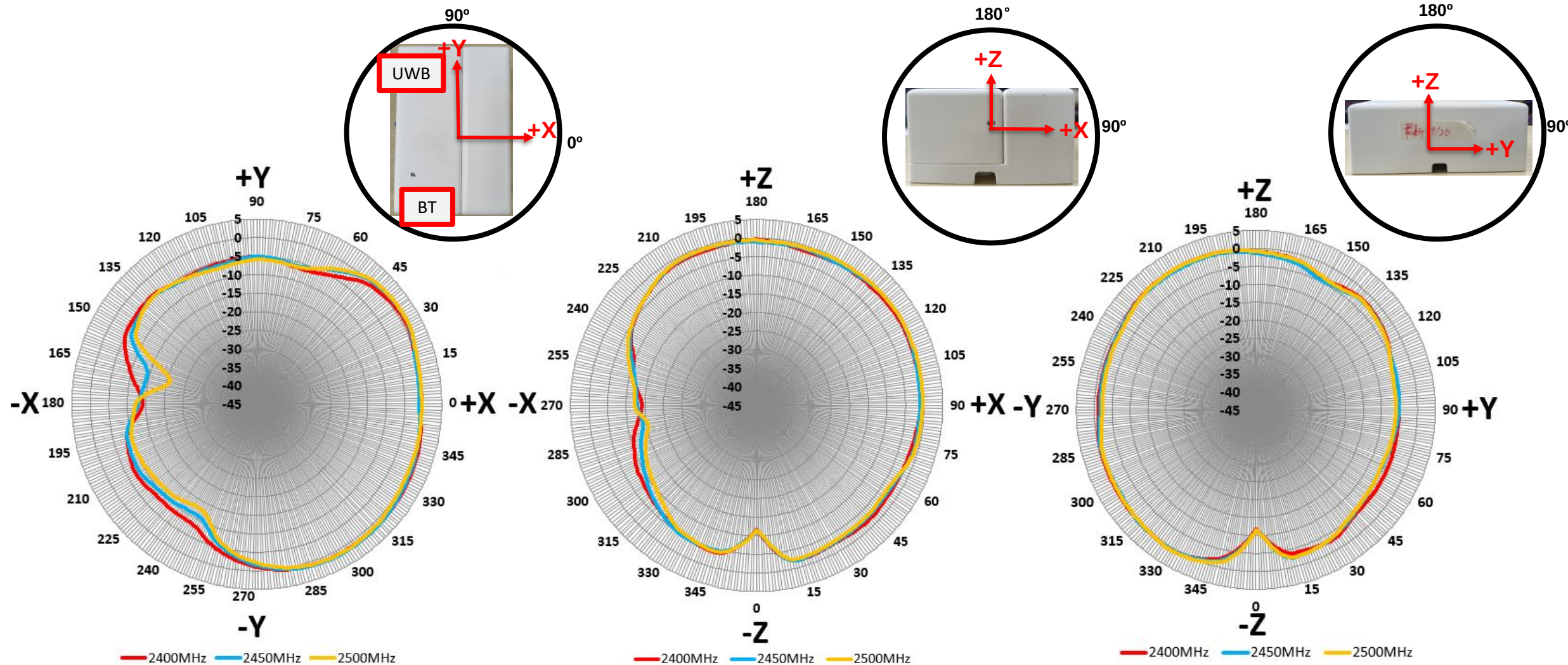
BT	Freq(MHz)	Peak Gain(dBi)	Directivity(dBi)	Efficiency(%)
	2400	1.87	5.38	44.51
	2450	2.36	5.23	51.68
	2500	2.62	5.25	54.52
	Average			50.24

UWB	Freq(MHz)	Peak Gain(dBi)	Directivity(dBi)	Efficiency(%)
	6239.6	3.98	6.08	61.64
	6489.6	4.12	5.97	65.28
	6739.6	4.07	6.36	58.92
	Average			61.95

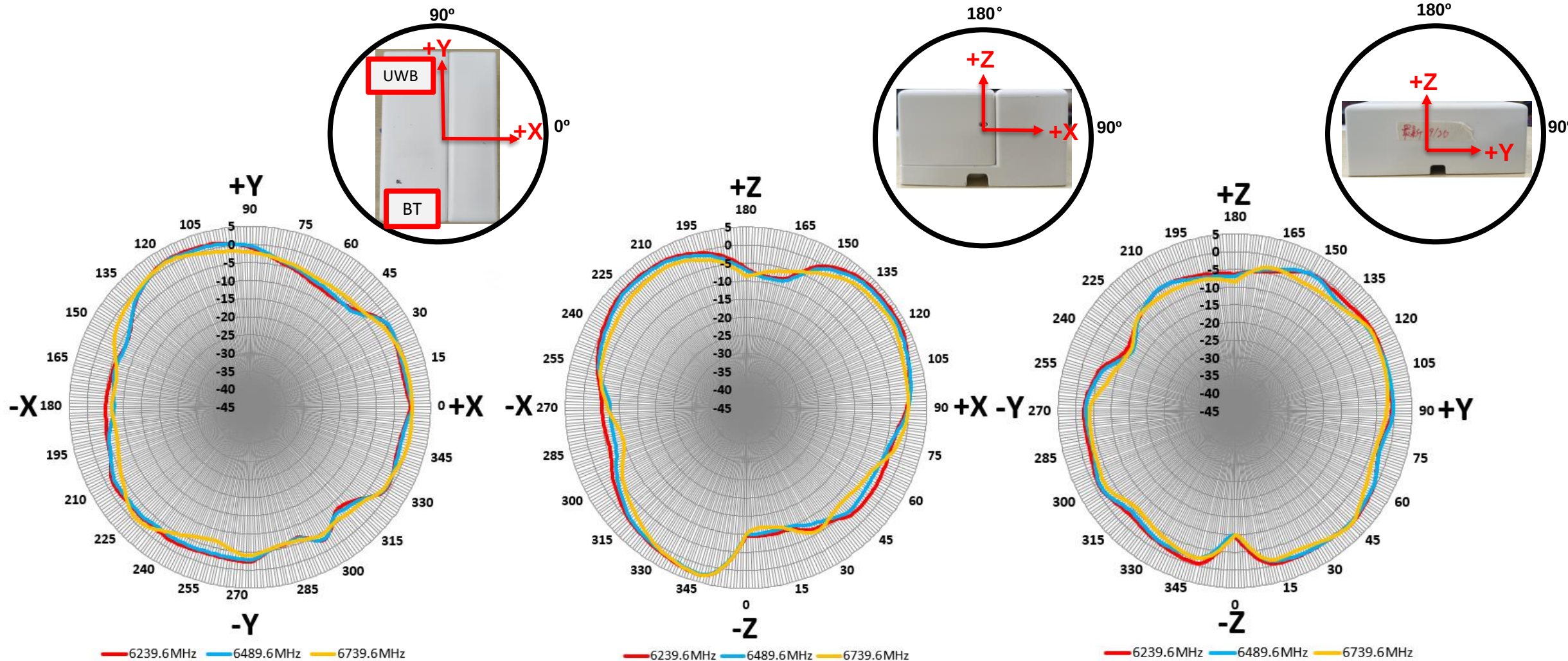
Chamber Coordinates



Power Sum-BT



Power Sum-UWB



WF402-AP Antenna Performance Summary

Antenna	Worst Return loss (dB)	Average Efficiency (%)	Highest Peak Gain (dBi)	Mutual Isolation (dB) 2.4G Band	Mutual Isolation (dB) 6G Band
				BT	UWB
BT	-7.8	50.24	2.62		-54.2
UWB	-13.3	61.95	4.12	-28.8	

Our Contact

WWW.GALTRONICS.COM

Social Media



Contact

- ✉ info@galtronics.com
- 📞 + 1-480-496-5100
- 📍 8930 S. Beck Avenue, Suite # 103
Tempe, Arizona 85284-2891, USA

USA Design Center

Galtronics USA Inc.
8930 South Beck Avenue
Suite #103
Tempe, AZ 85284 USA
Tel: +1-480-496-5100

Ottawa, Canada Design Center

Galtronics Canada Inc.
200 Terence Mathews Crescent,
Unit A
Kanata, ON K2M 2C6 Canada

Suzhou, China Design Center

Galtronics Electronics (Wuxi) Co.
No.28, Jinxing Road, Metallurgical
Industrial Park(Jinfeng Town),
Zhangjiagang City, Jiangsu, China

China Factory

Galtronics Electronics (Wuxi) Co.
No. 1, Xishi Road,
Wuxi New District
Jiangsu Province 214028, China
Tel: +86-510-8866-5500

Corporate Headquarters

Baylin Technologies Inc.,
60 Columbia Way
Suite 205
Markham, ON L3R 0C9 Canada

Korea Design Center

Galtronics Korea Co.
#B214, Innoplex Bldg.,306, Sinwon-ro,
Yeongtong-gu, Suwon-si, Gyeonggi-do,
16675 Korea
Tel: + 82-32-227-0771

Vietnam Factory

Galtronics Vietnam
Lot G1 , G2, Que Vo Industrial
Park, Phuong Lieu commune,
Que Vo district, Bac Ninh
province, Vietnam

Thank You!

We Look Forward To Working Together

