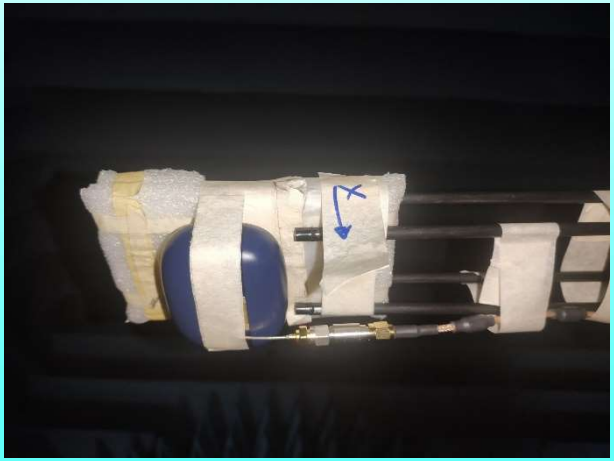
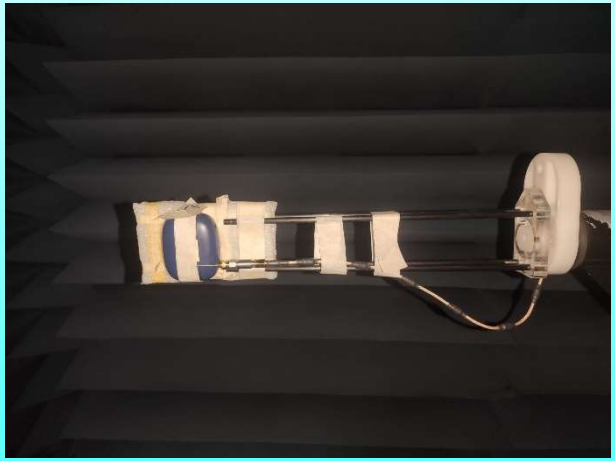
Test Equipment

Passive	
Antenna Manufacturer	Unitech Printed Circuit Board Corp.
Antenna Address	NO.3,Lane 4,Chung-Shan Road,Tucheng Dist.,New Taipei City,Taiwan (R.O.C)
Antenna Type	PCB Antenna
Antenna Model	ACP367
Antenna Gain	Free Space 5.93 dBi
Antenna Polarity	Directionality
Laboratory	Bureau Veritas Consumer Products Services Electrical & Electronic Business Line, Taiwan Branch
Test Equipment	E5071C ENA Vector Network Analyzer – Keysight / Calibration Date: 2023/02/10
Test chamber	ETS-lindgren_AMS-8500 Antenna Measurement System/Calibration Date: 2023/05/11
Testers	Frankie CHANG
Test Software	ETS-Lindgren EMQuest

Antenna Efficiency Measurement Setup

Free Space



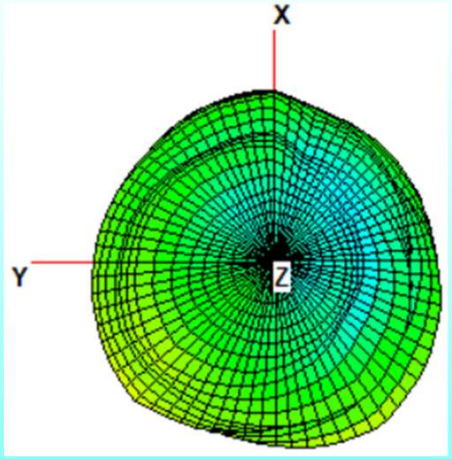


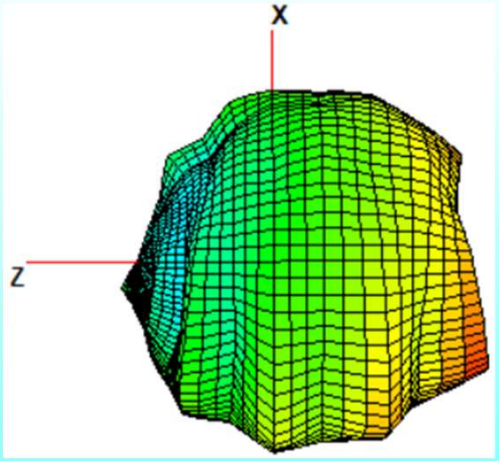
Antenna Efficiency

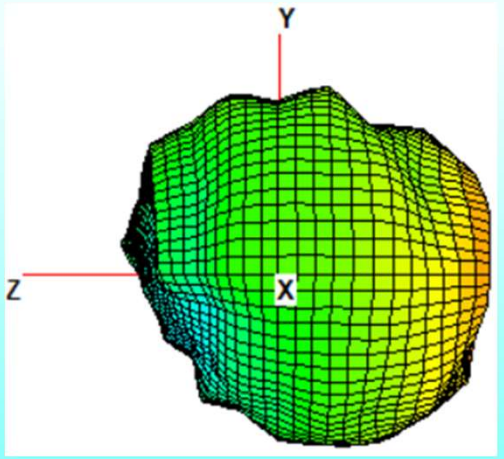
Merry ACP_367_DVT-2_2000~3000MHz											
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dB)	-3.45	-3.18	-2.93	-2.71	-2.49	-2.34	-2.22	-2.24	-2.37	-2.60	-2.95
Efficiency (%)	45.15	48.14	50.91	53.59	56.35	58.34	59.99	59.66	57.90	54.93	50.68
Gain (dBi)	4.68	5.04	5.34	5.58	5.81	5.92	5.93	5.84	5.61	5.36	4.99

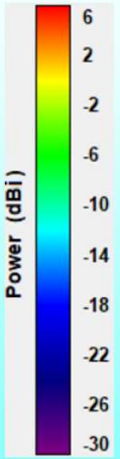
Free Space

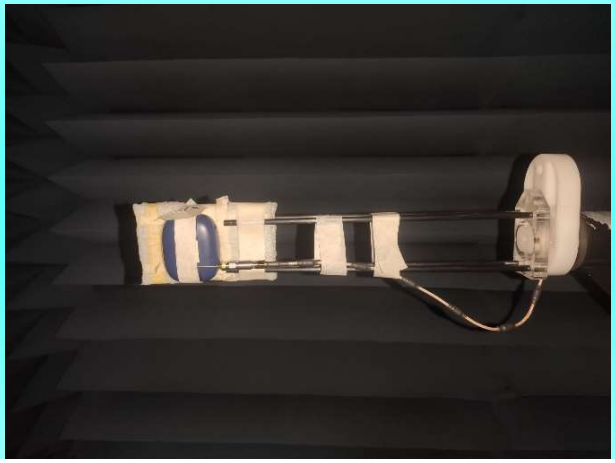
Radiation Pattern











Measurements description

Conducted Measurements

Conducted measurements was done using Network Analyzer – Keysight, the Return Loss of the Antenna was obtained to ensure the efficiency over the operation frequency.

Antenna Radiation Patten Measurements

Radiation Pattern

Measurements was done in the ETS-lindgren anechoic chamber through radiation, the earbud was set to continuous radiation and the AMS-8500 receive the RF power in 360degree angel with rotation of EUT.

Antenna Gain Calculation

The antenna gain was calculated as the difference between the measured Peak EIRP(dBm) and Ant. port input pwr(dBm) in previous page.

Antenna photo