



Samsara EM31, 010-0031

Antenna Test Report

Date : Dec. 22, 2022

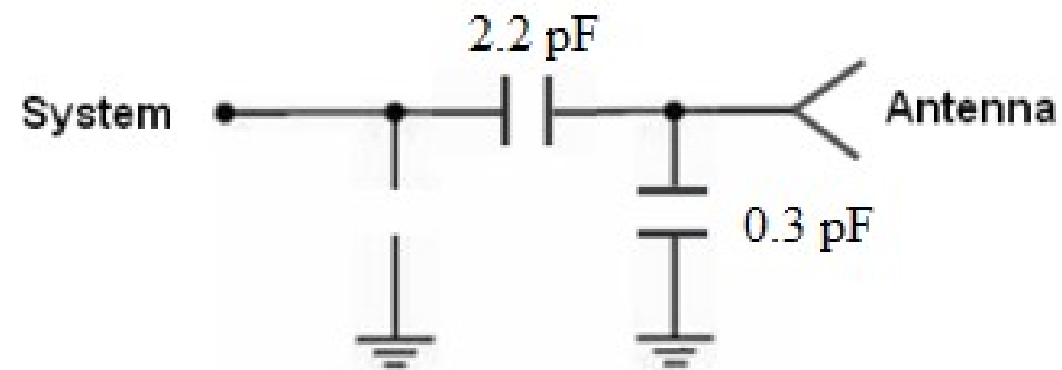
Prepared by : Jerry Ko



Outline

- Antenna Structure & Placement
- Return Loss
- Radiation Pattern
- Peak Gain & Efficiency

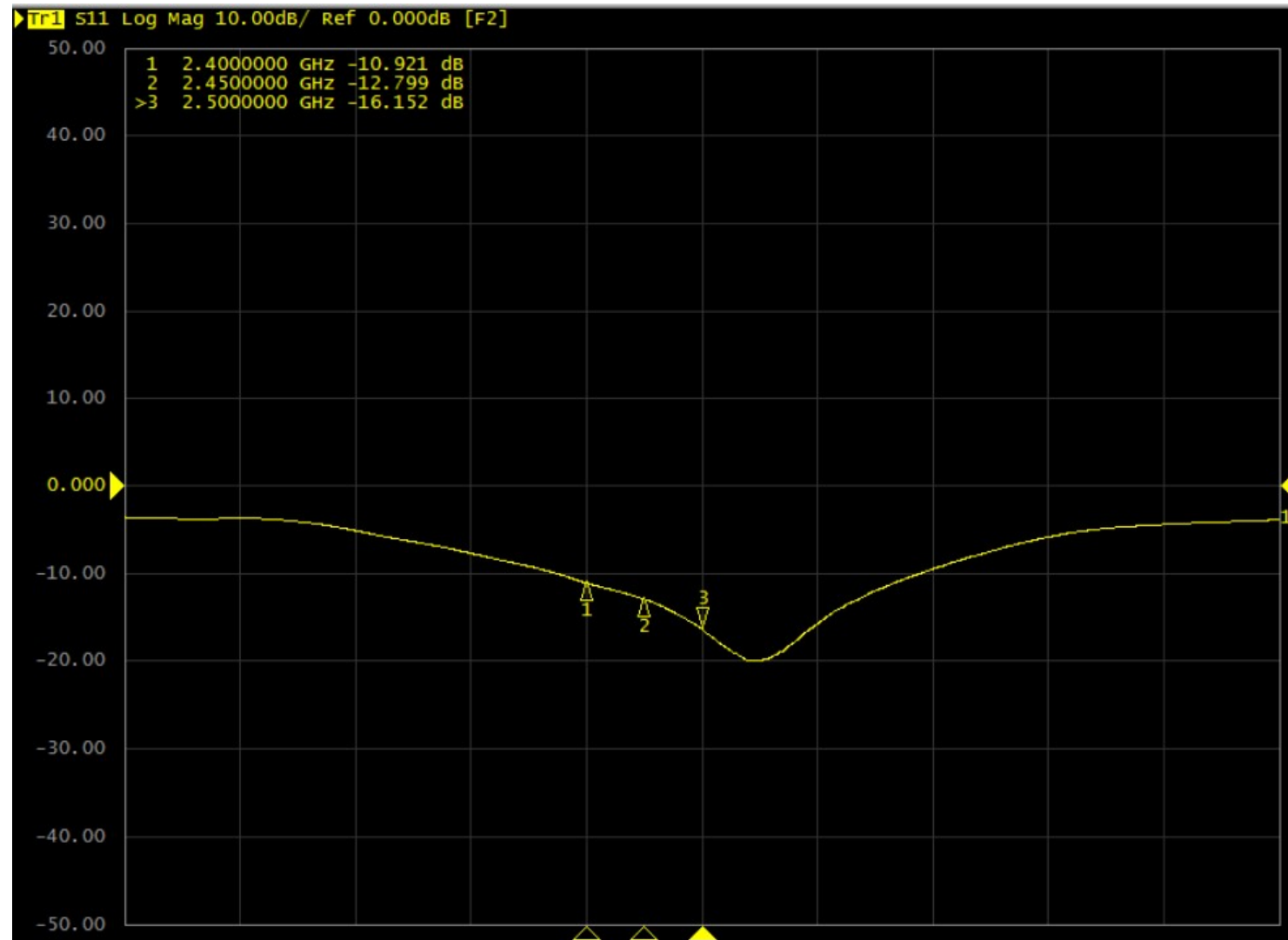
Antenna Structure & Placement



Antenna matching circuit

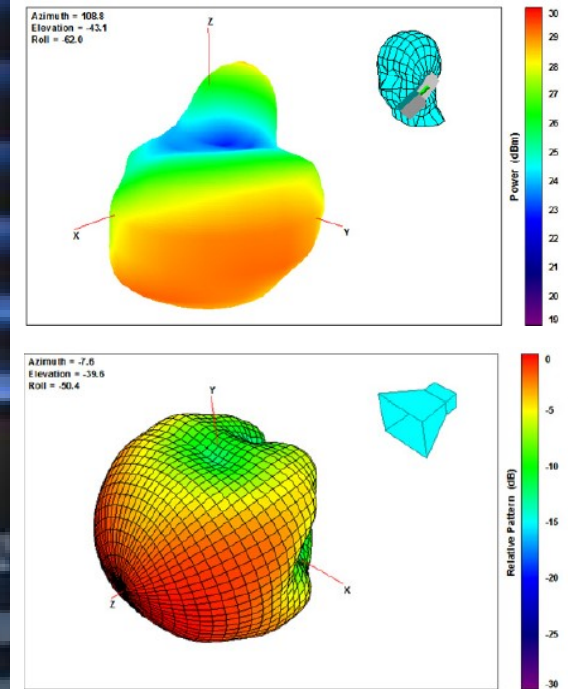
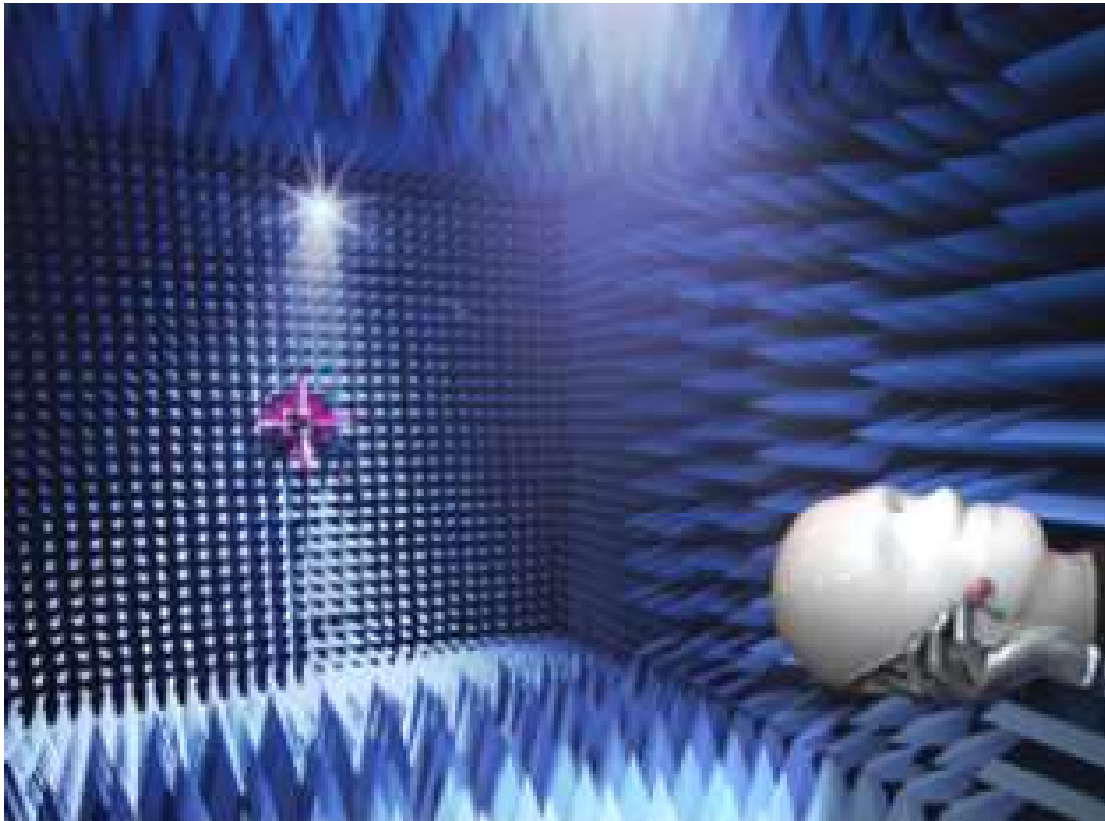
Antenna No.	Operating Frequency	Type	Material	Feeding	Size
BLE Ant	2400 MHz ~ 2500 MHz	PIFA	Printed	Trace	24(L) x 8(W) mm ²

Return Loss – BLE Ant



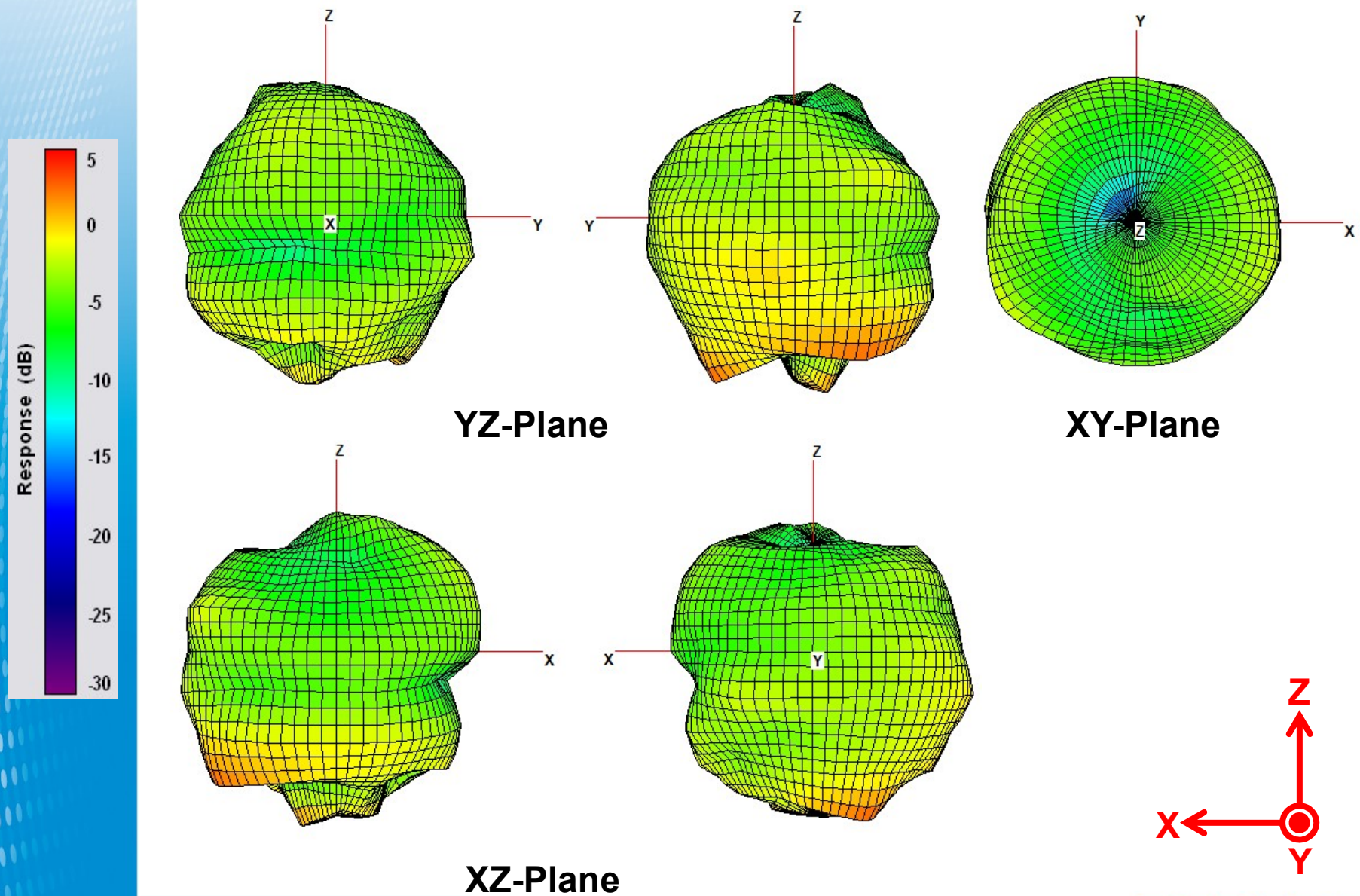
Antenna Measurement Chamber

- ETS AMS-8500 antenna measurement system
- Interior dimensions : 7.32(L)×3.66(W)×3.66(H)m³
- Operating band : 600 MHz – 10 GHz
- Support passive test & active test
- Provide graphic data display



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Radiation Pattern – BLE Ant



Peak Gain & Efficiency

BLE Ant		
Frequency (MHz)	Peak Gain (dBi)	Efficiency (%)
2400	2.0	50
2450	2.3	50
2500	2.6	51

The logo for SERCOMM, featuring the word in a bold, blue, sans-serif typeface. The letters are closely spaced, and the 'M' has a distinctive shape with a horizontal bar at the top.

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