

# Hoist Gen2 Headset Antenna Report

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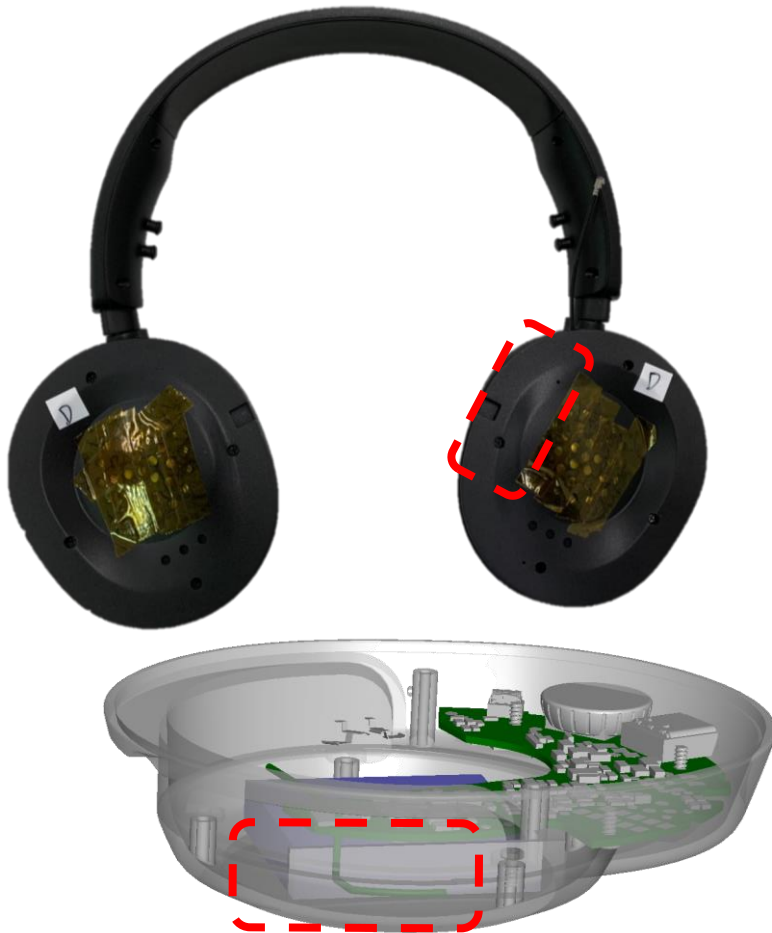
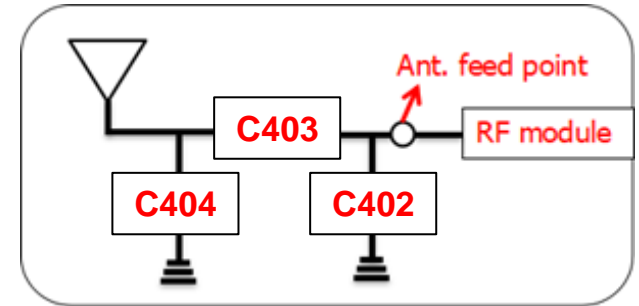
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# Antenna Placement

Free Space



**Metal Antenna**  
15 mm(L) x 12 mm(W) x 6.5 mm(H)

Matching Circuit	
C404	4.7nH
C403	1.5pF
C402	N/A

Part name	型號 Type	製造商 Manufacturer	備註
天線 Antenna	5812-53PE-00A	電連	HS42

# Testing Setup

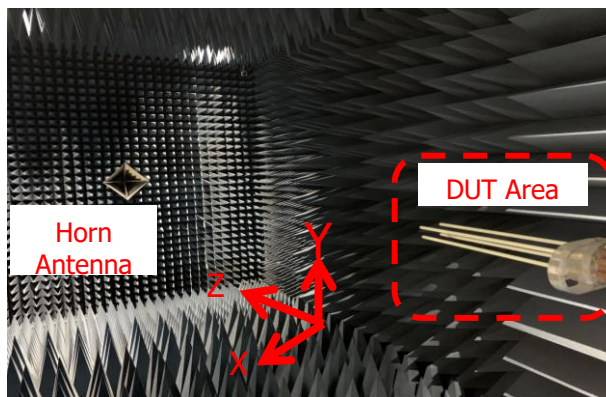
## 1. 1.Equipment Setup - S parameter

- Test Procedure



- 1.1 Set start and stop frequency and Calibrate the NA with 50 ohm calibration kit
- 1.2 Connect the NA cable to DUT antenna via SMA or I-PAX connector.
- 1.3 Measure the DUT antenna performance in the free space and record the s11.

## 2. Testing Environment - Passive Testing



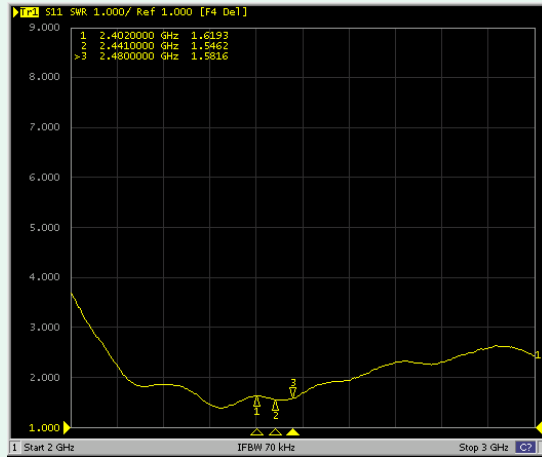
ETS-Lindgren AMS-8500

- Lab standard : 3D Chamber for CTIA standard
- Chamber size : 7.2 \* 3.6 \* 3.6(meter)
- Chamber type: Fully anechoic Chamber
- Chamber usable frequency range : 700~6000MHz
- Measurement instrument : Network Analyzer
- Measurement Software : EMQuest (ETS-Lindgren)
- DUT : **Hoist Gen2 EV Sample**

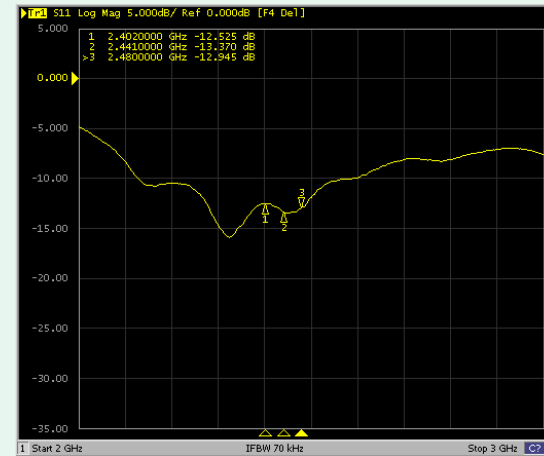
# Antenna S Parameter

## With Head Phantom

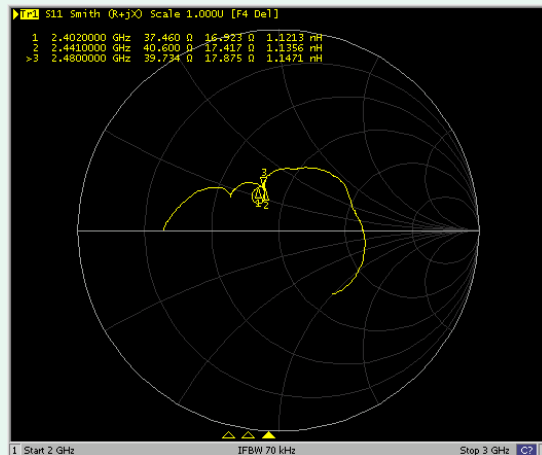
### VSWR



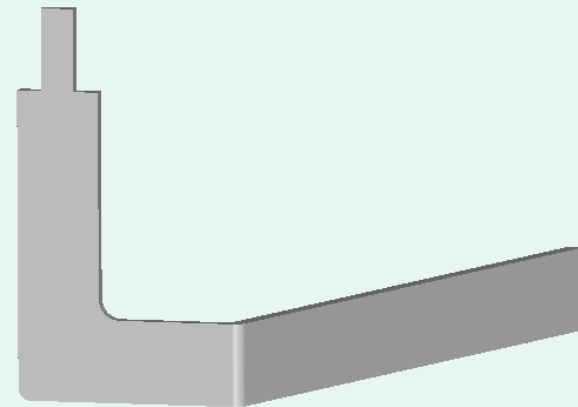
### Return Loss



### Smith Chart

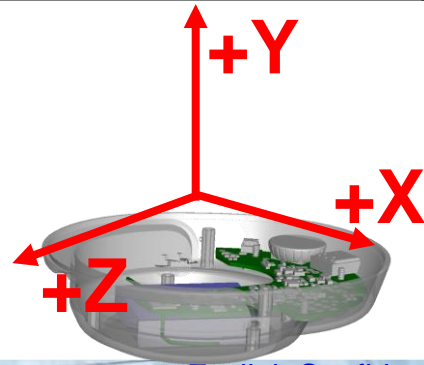


### Antenna



# Antenna Gain table

Frequency (MHz)	2402 MHz	2441 MHz	2480 MHz
<p>2.4GHz</p> <p>With Head Phantom</p>	<p>Azimuth = 0.0 Elevation = -22.5 Roll = 45.0</p>	<p>Azimuth = 0.0 Elevation = -22.5 Roll = 45.0</p>	<p>Azimuth = 0.0 Elevation = -22.5 Roll = 45.0</p>



# Antenna Gain table

HOIST Gen2_Headset												
Frequency (MHz)	2400	2402	2410	2420	2430	2441	2450	2460	2470	2480	2484	2500
Gain(dBi)	2.57	2.62	2.76	2.99	3.27	3.66	3.82	3.96	4.01	3.97	3.96	3.8