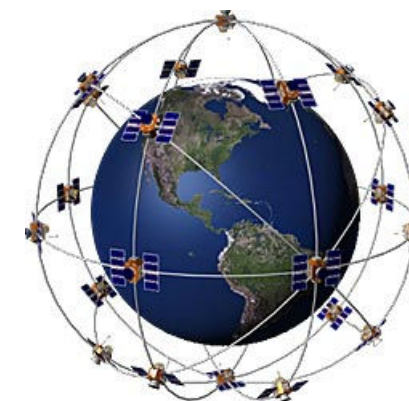


# Hoist Gen2 X Dongle Antenna Report

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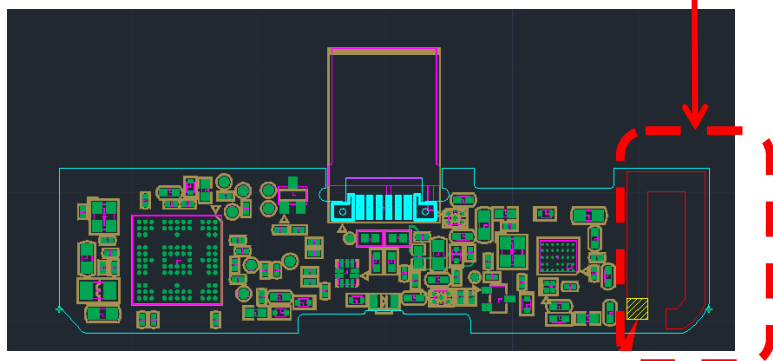
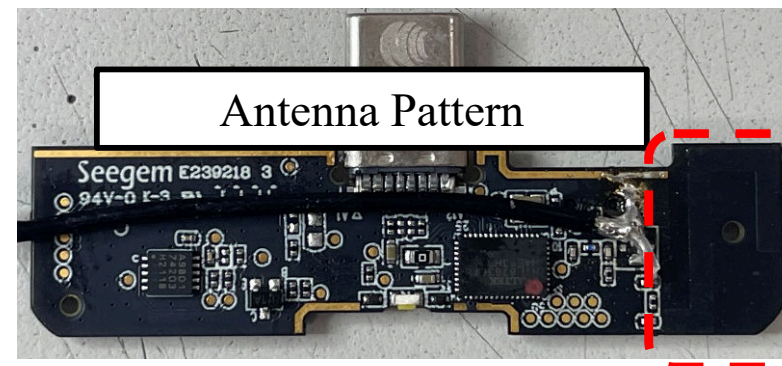
**Cheng Uei Precision Industry Co., LTD.  
RF Technology Center**

No. 18, Chung Shan Rd., Tu Cheng City, New Taipei City, 23680,  
Taiwan, R. O. C.

Tel: 886-2-2269-9888

Fax: 886-2-2267-3672

# Antenna Placement



Printed Antenna  
7.6 mm(L) x 13 mm(W)

Part name	型號 Type	規格 Spec/rating	製造商 Manufacturer	備註
天線 Antenna	PRINTED Antenna	12.5 mm * 8.55 mm (TOP)	Olympic	HS43TX

# Testing Setup(Passive Testing)

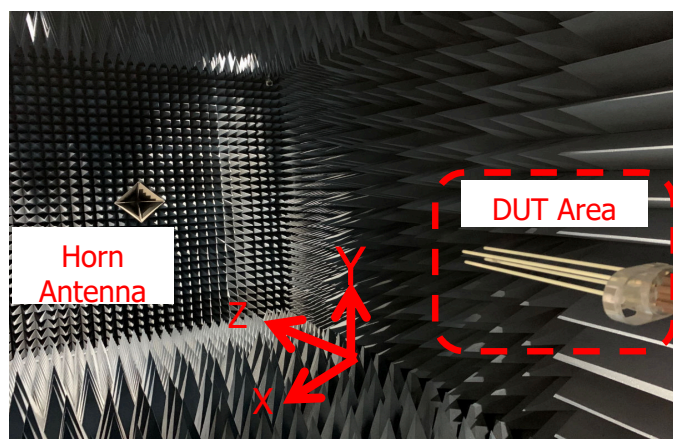
## 1. Equipment Setup - S parameter

- 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

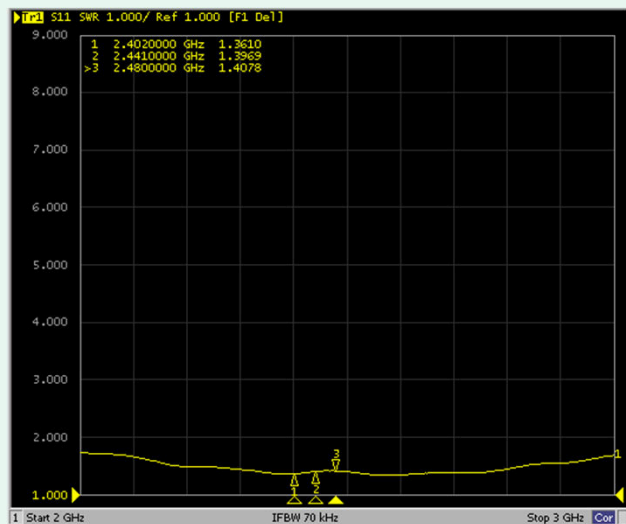


ETS-Lindgren AMS-8500

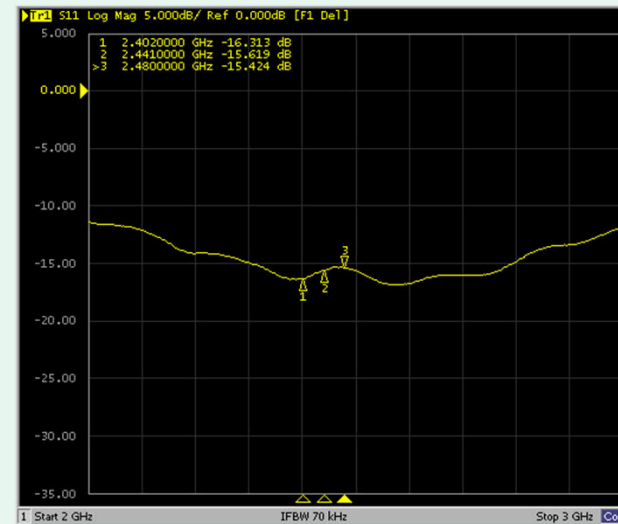
- Lab standard : 3D Chamber for CTIA standard
- Chamber size : 7.2 \* 3.6 \* 3.6(meter)
- Chamber type: Fully anechoic Chamber
- Chamber usable frequency range : 700~6000MHz
- Measurement instrument : Network Analyzer
- Measurement Software : EMQuest (ETS-Lindgren)
- DUT : **Hoist Gen2 X Dongle EV Sample**

# Antenna S Parameter

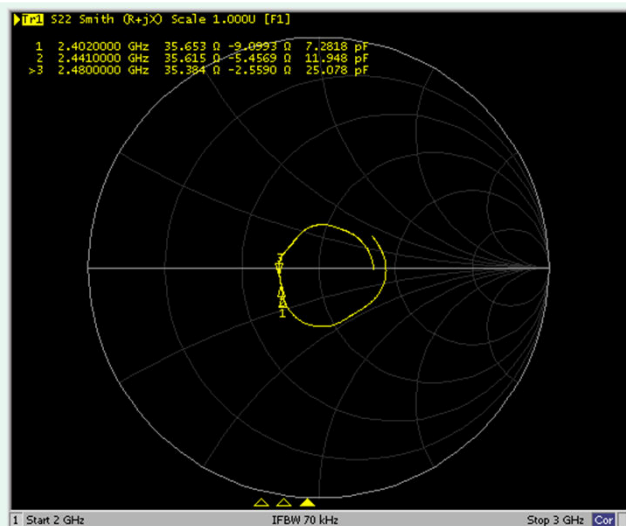
## VSWR



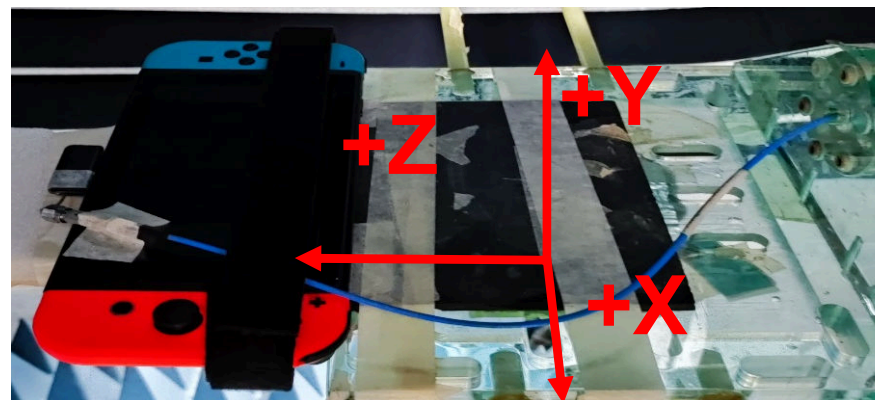
## Return Loss



## Smith Chart



# Antenna Gain table & 3D Pattern



Frequency (MHz)		2402	2441	2480
2.4GHz	Efficiency(%)	68.55	67.64	66.39
	Average Efficiency (%)	67.52		

Frequency (MHz)	2402 MHz	2441 MHz	2480 MHz
2.4GHz			

# Antenna Gain table

HOIST Gen2X_Dongle										
Frequency (MHz)	2400	2402	2410	2420	2430	2441	2450	2460	2470	2480
Gain(dBi)	2.93	2.97	3.07	2.89	2.67	2.65	2.73	2.94	3.15	3.3