

Hoist Gen2 Dongle Antenna Report



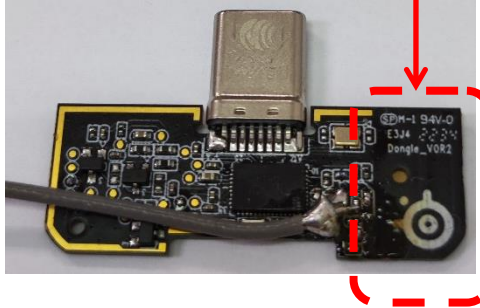
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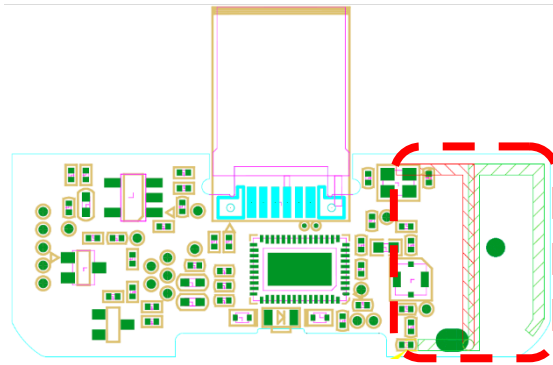
Fax: 886-2-2267-3672

Antenna Placement

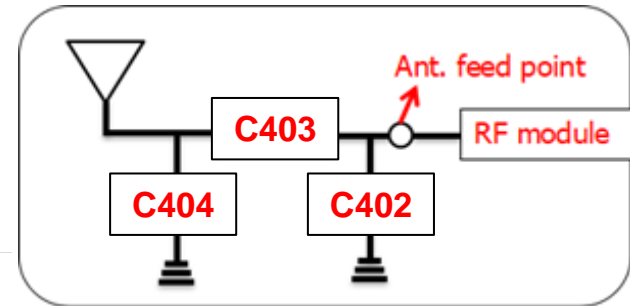


Printed Antenna
7.4 mm(L) x 13 mm(W)

Antenna Pattern



Top side / Bot side



Matching Circuit	
C404	0nH
C403	0pF
C402	N/A

Part name	型號 Type	製造商 Manufacturer	備註
天線 Antenna	PRINTED Antenna	Olympic	HS42TX

Testing Setup(Passive Testing)

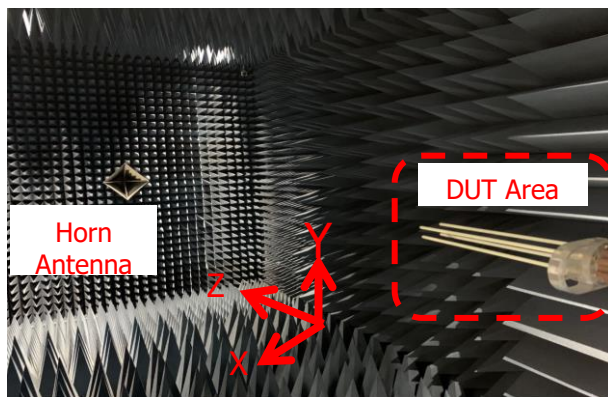
1. 1.Equipment Setup - S parameter

- 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

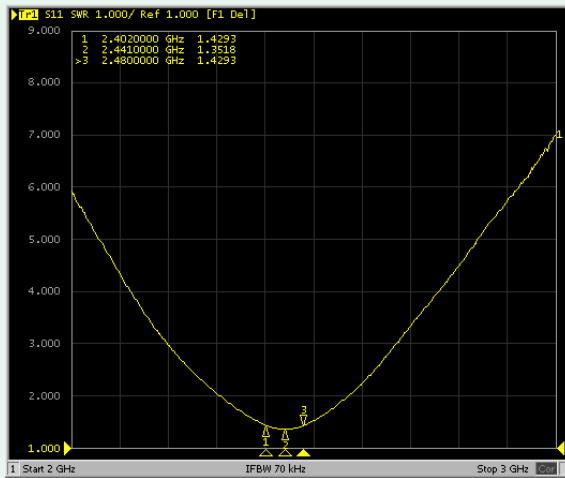


ETS-Lindgren AMS-8500

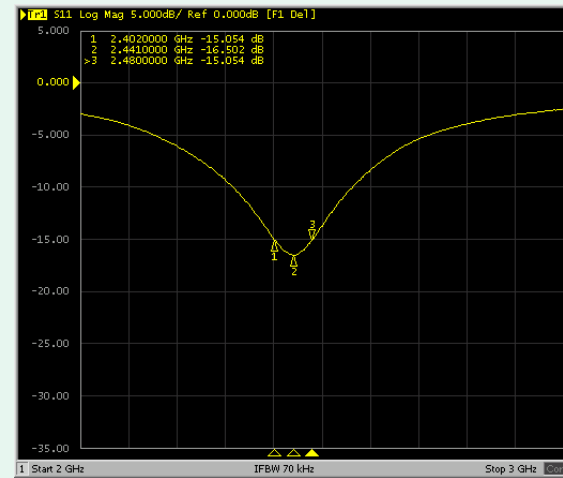
- Lab standard : 3D Chamber for CTIA standard
- Chamber size : 7.2 * 3.6 * 3.6(meter)
- Chamber type: Fully anechoic Chamber
- Chamber usable frequency range : 700~6000MHz
- Measurement instrument : Network Analyzer
- Measurement Software : EMQuest (ETS-Lindgren)
- DUT : **Hoist Gen2 Dongle V2R7 Sample**

Antenna S Parameter

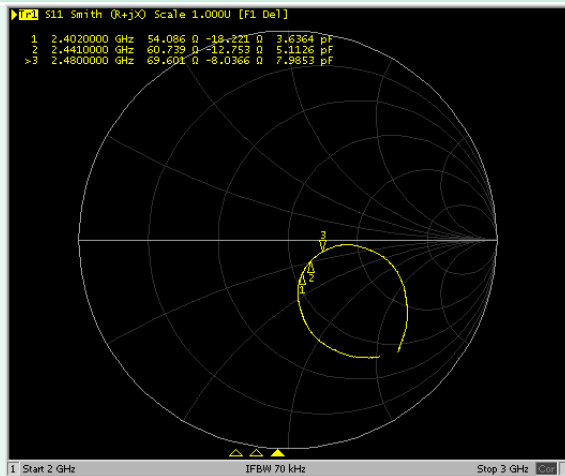
VSWR



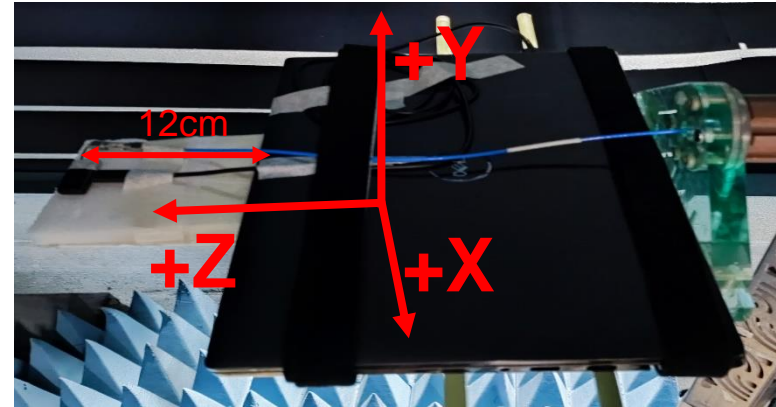
Return Loss



Smith Chart



Antenna Gain table & 3D Pattern



Frequency (MHz)		2402	2441	2480
2.4GHz	Efficiency(%)	63.14	66.91	63.47
	Average Efficiency (%)	64.50		

Frequency (MHz)	2402 MHz	2441 MHz	2480 MHz
2.4GHz	<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_Dongle												
Frequency (MHz)	2400	2402	2410	2420	2430	2441	2450	2460	2470	2480	2484	2500
Gain(dBi)	2.32	2.32	2.2	1.96	1.79	2.26	2.51	2.65	2.84	3.05	2.98	2.71