




BT Antenna Test Report Prepared for Mitac Maestro 4700 Project

Author Justin Huang

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Client Information

Client	MAGELLAN 
Engineer of Client	
Project Name	Maestro 4700
Project Stage	<input type="checkbox"/> 2D Drawing <input type="checkbox"/> PCB <input type="checkbox"/> Housing <input type="checkbox"/> CNC(EVT) <input checked="" type="checkbox"/> Soft Tooling <input type="checkbox"/> Hot Tooling(DVT) <input type="checkbox"/> PVT
Antenna Type	PIFA
Antenna Band	BT Antenna
Antenna Engineer	Justin Huang

Tuning Note

Version	Date	Revision Description	Designer
01	2009.03.29	Version 1	Justin
02			
03			
04			
05			
06			
07			

Antenna Info

LNA Name	Material	Dimension	Feed-In Location	PIN Length

Cirocomm Proprietary Information

一.測試內容：

BT Antenna onMaestro 4700 pattern measurement

二.測試項目：

S11 Return Loss 、 Impedance 、 Antenna GAIN 、 Radiation Pattern 、 Efficiency 、 Average Gain

三.測試設定：

Network Analyzer : Agilent E5071C

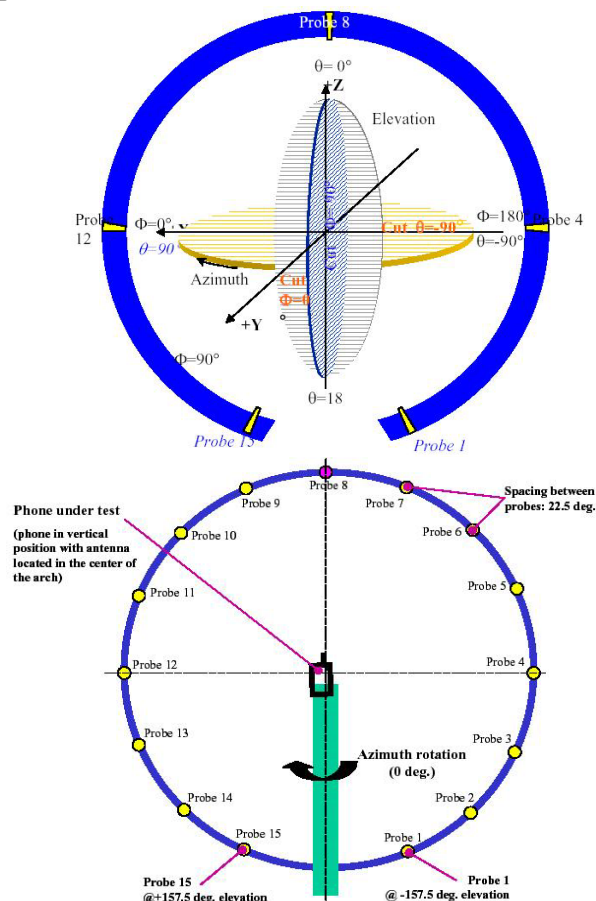
Source Antenna : SATIMO

Test Frequency : 2442MHz

四.測試環境：

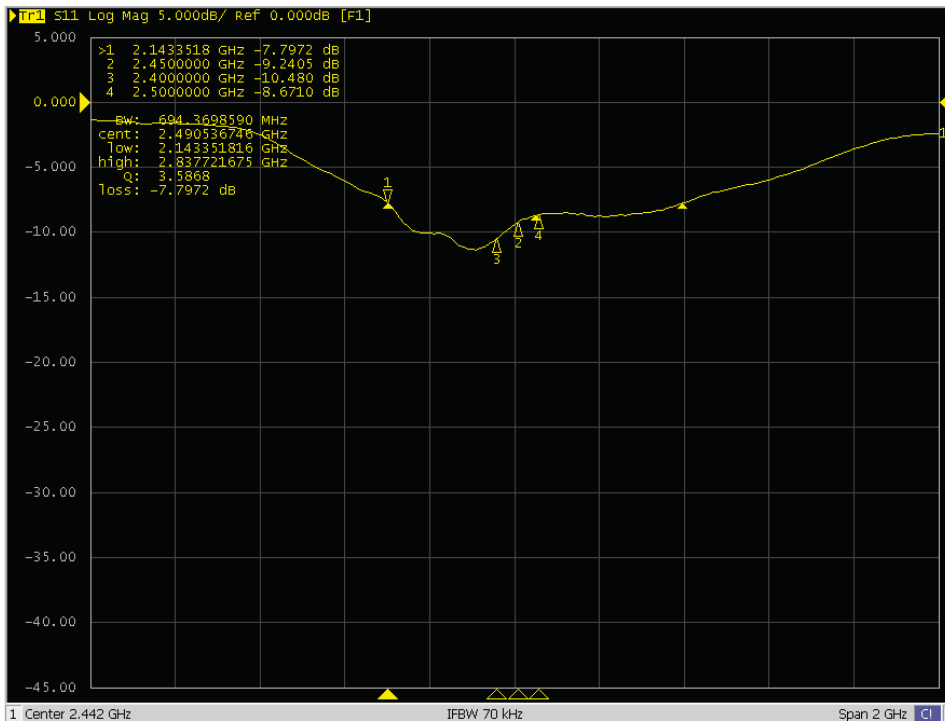
Room temperature : 23.6°C Humidity : 45%

五.測試設定示意圖：



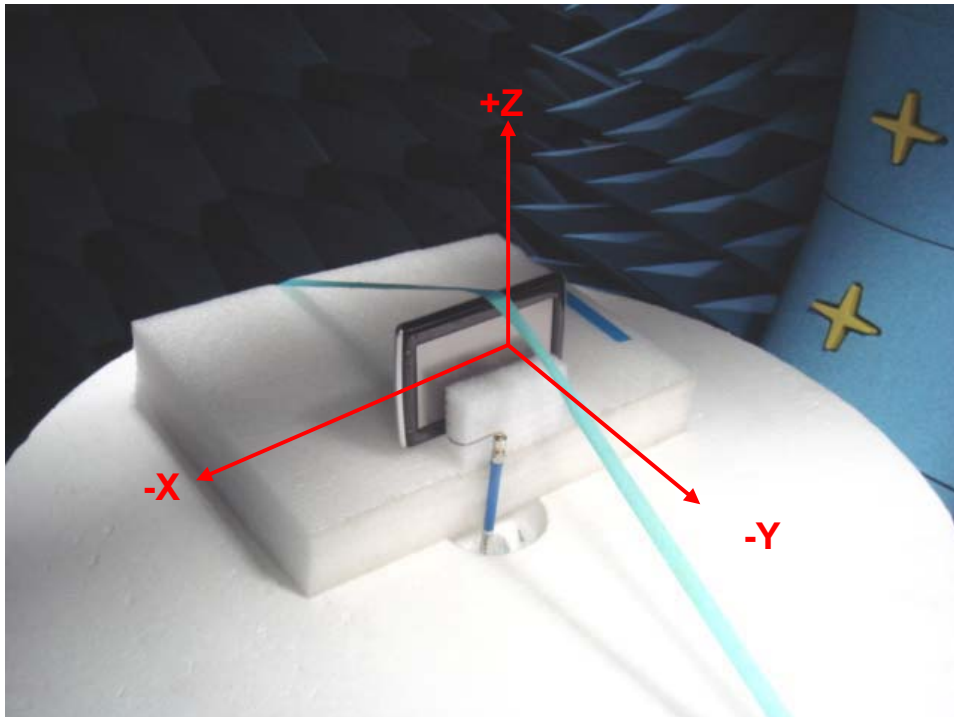
六.測試數據：

BT Antenna on N224 S11 Return Loss & VSWR Measure

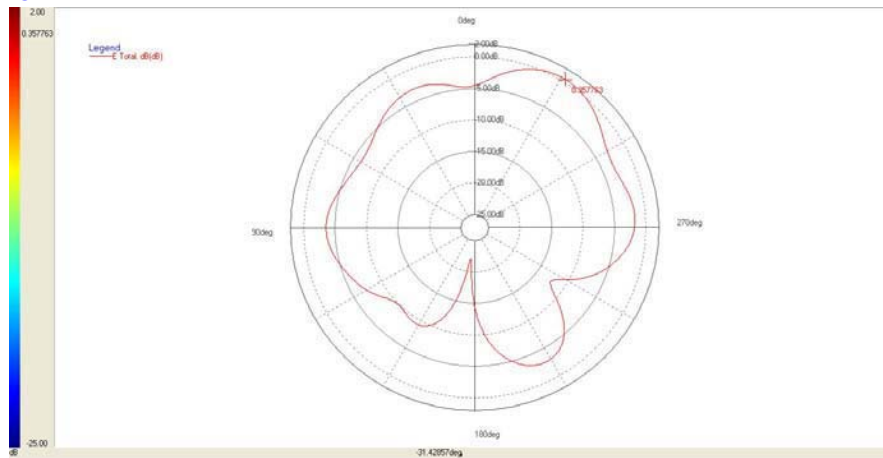


Return Loss : -9.37dB@2442MHz





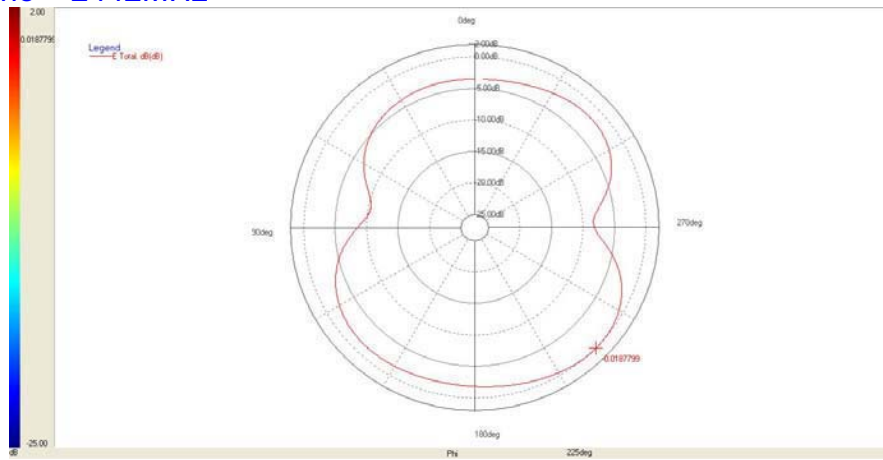
XZ-Plane 2442MHz



YZ-Plane 2442MHz



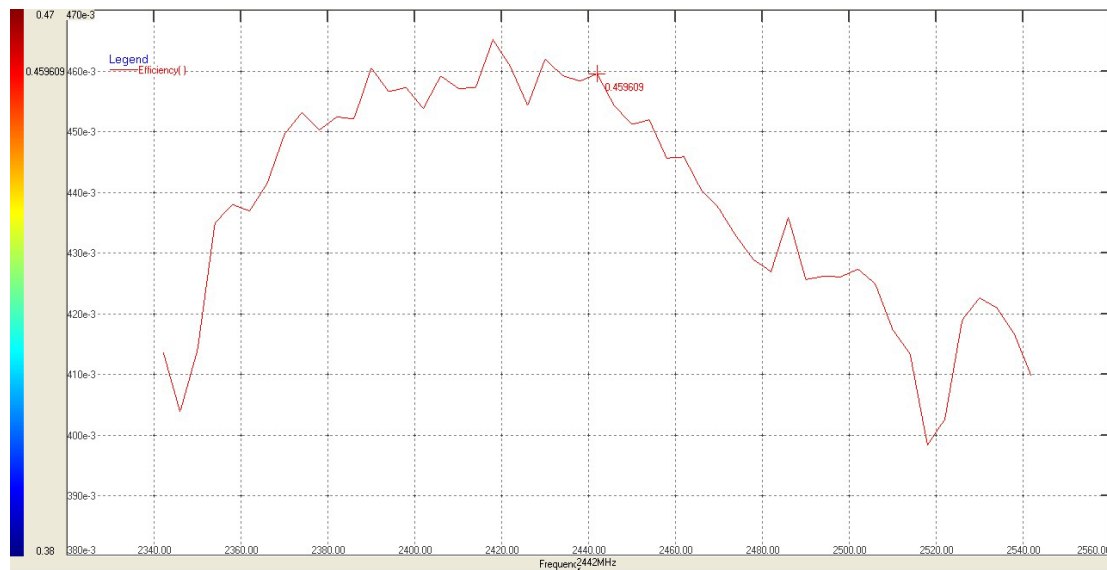
XY-Plane 2442MHz



2442MHz	Peak Gain	Average Gain
XZ-plane	0.357	-4.79
YZ-plane	-3.38	-6.60
XY-plane	-0.01	-3.25

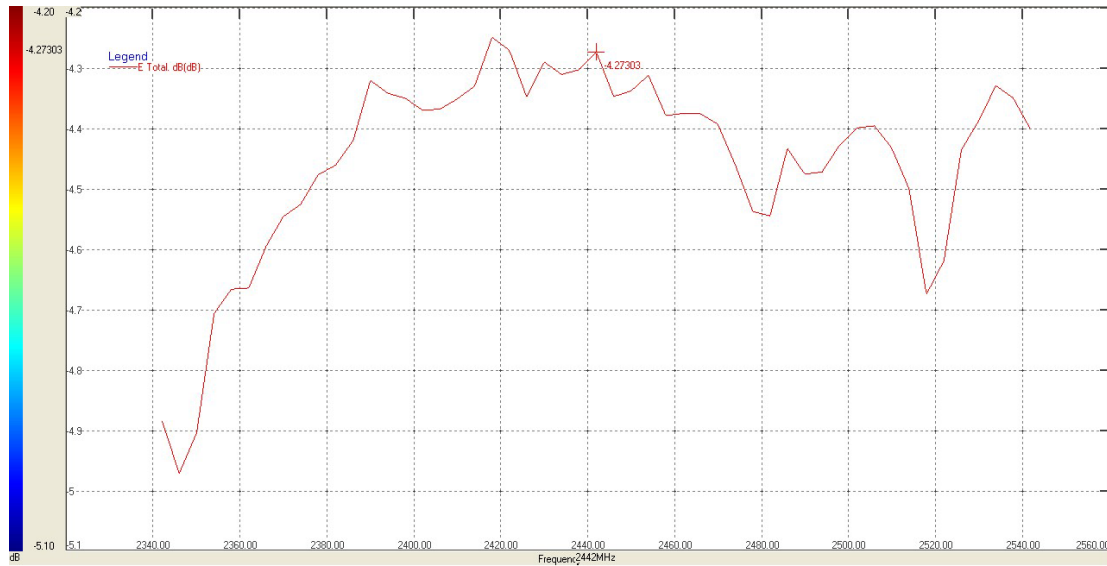
(dBi)

Efficiency :



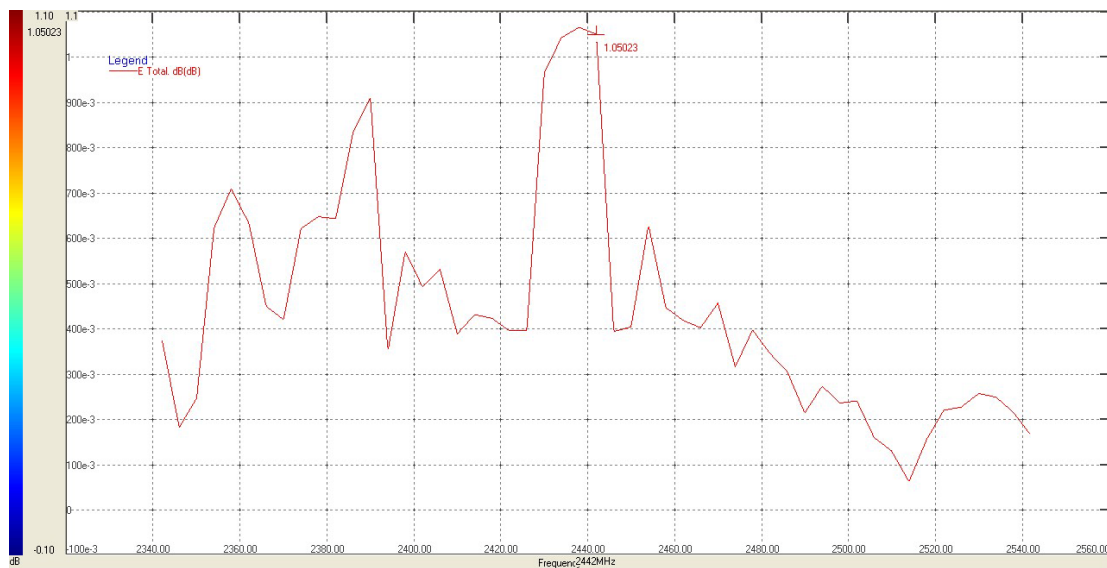
Efficiency : 45.96%@2442MHz

Average Gain :



Average Gain : -4.27dBi@2450MHz

Peak Gain :



Average Gain : 1.05dBi@2450MHz

3D Radiation Pattern :

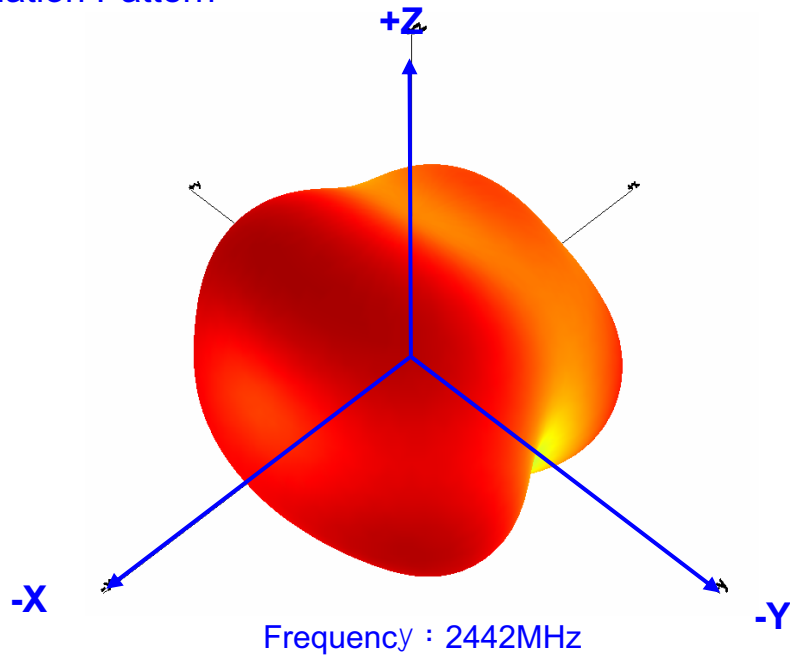


Photo :

Antenna Outline (Golden Sample)	Antenna Environment
	
Housing Outline	
	

七.測試結果：

上述測試資料顯示，BT 天線於 Seeker 500 整機中，此 BT 天線的中心頻率為 2385MHz，輻射效率達 40% 以上之頻寬約為 100MHz，45% 以上之頻寬約為 85MHz，以上量測數據供客戶評估參考。