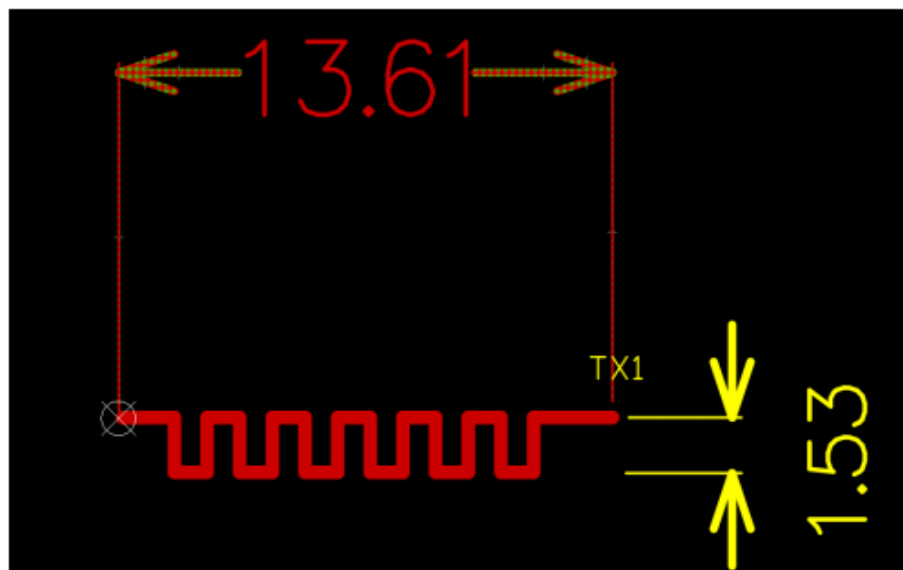


Type_3 Antenna Design Layout Guidelines & Pattern

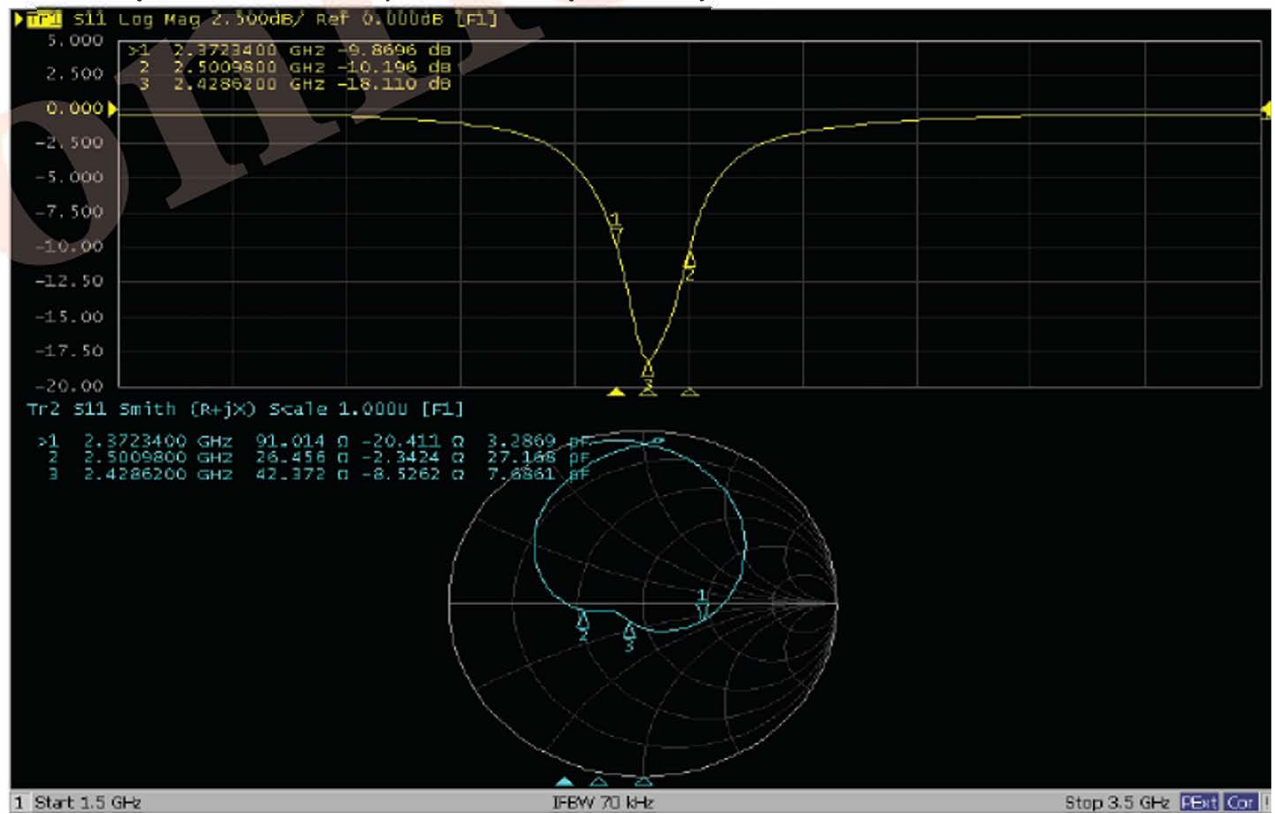
1.天線具體尺寸規格如下(mm):

1.The specific specifications and dimensions of the antenna are as follows



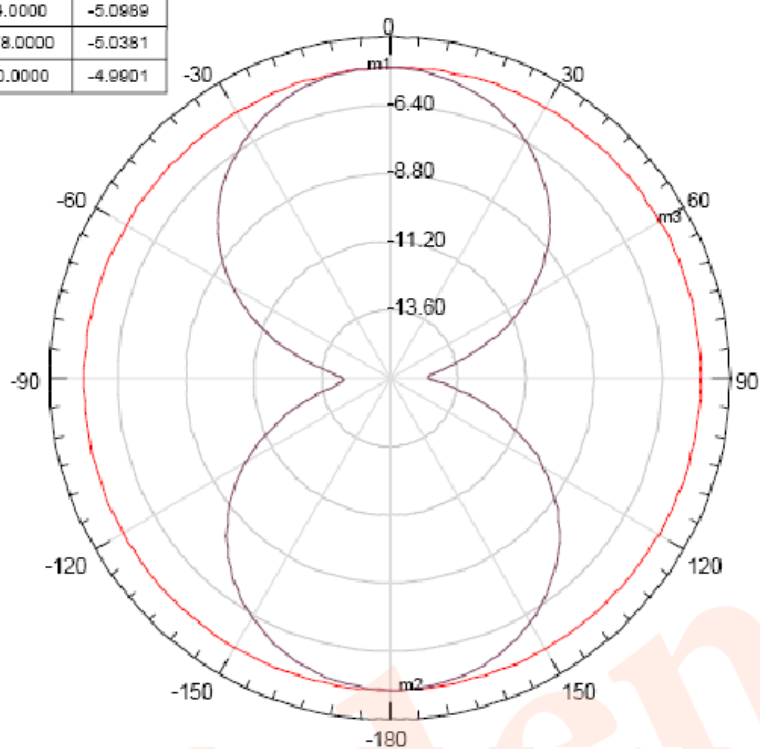
3.天線量測及場形模擬結果如下:

*返回損耗(Return Loss) / 駐波比(VSWR)量測:



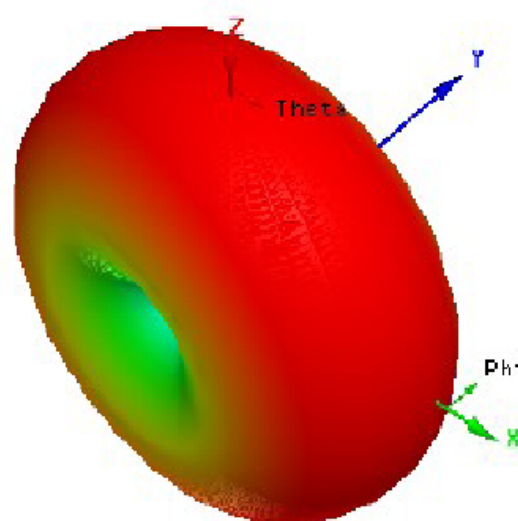
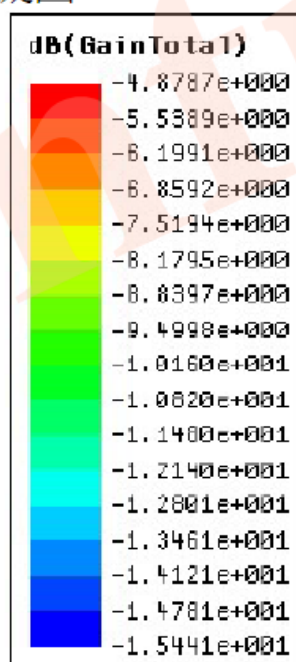
*2D場形模擬圖:

Name	Theta	Ang	Mag
m1	-4.0000	-4.0000	-5.0989
m2	178.0000	178.0000	-5.0381
m3	80.0000	80.0000	-4.9901



Curve Info
— dB(GainTotal)
Setup1 : Sweep1
Phi='0deg'
— dB(GainTotal)
Setup1 : Sweep1
Phi='90deg'

*3D場形模擬圖:



From the above measurement and mold condensation, (圖示五) the gain of this day nickel can only be about -5dBi.

由上面量測及模擬後可得知此款天線的增益約只可達到-5dBi左右。

4.天線實際場形(強)測試如下

Time field strength of antenna:

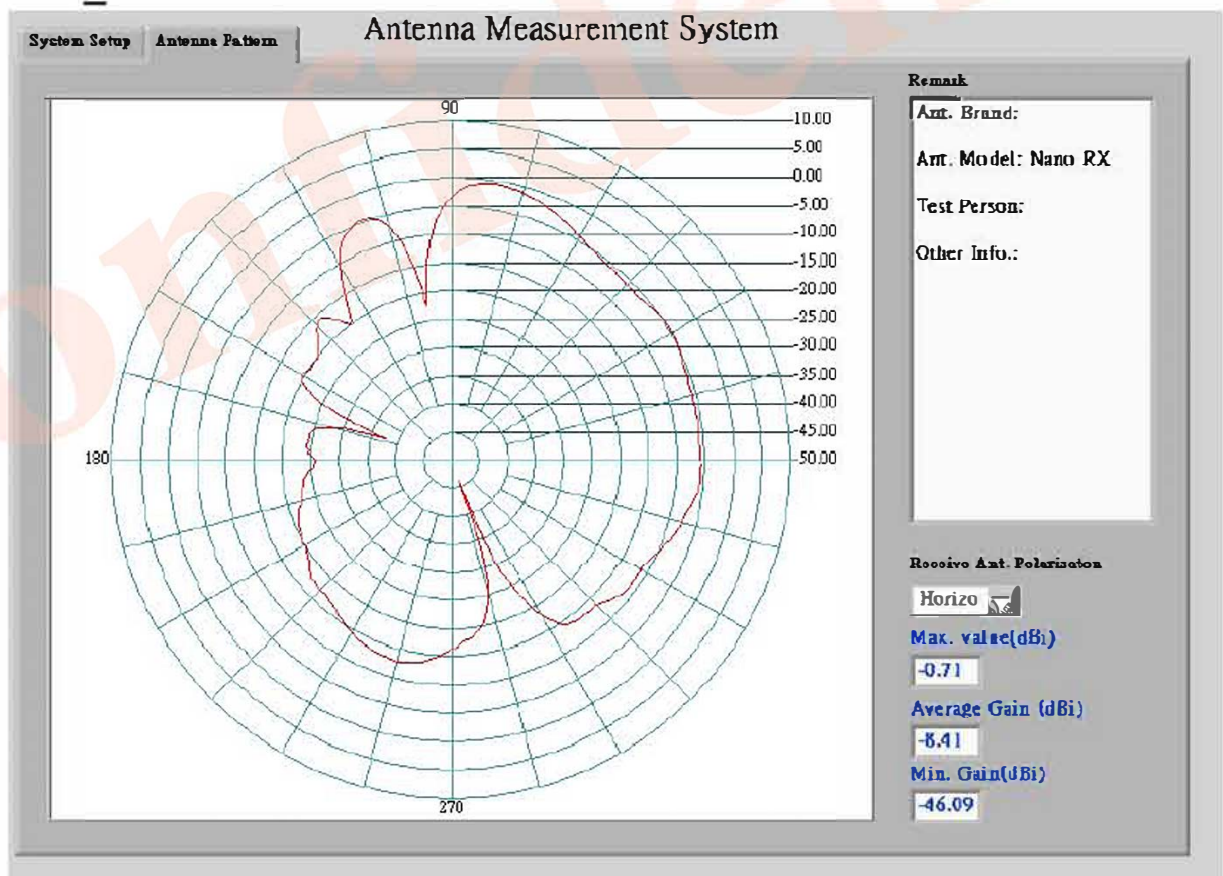
Summary

ITEM	SPEC.	
Antenna Type	Type_2_Single Wiggle Antenna	
Center Frequency	2402 MHz	- 0.71 dBi
	2440 MHz	- 0.84 dBi
	2480 MHz	- 1.75 dBi
Max. GAIN	- 0.71 dBi	
Mini. GAIN	- 55.15 dBi	
AVG GAIN	- 8.4 dBi	
DUT Polarization	Horizontal & Vertical	
TEST Output Power Level	10dBm	
Impedance	50 Ω	

(表一)

Center Frequency _2402MHz

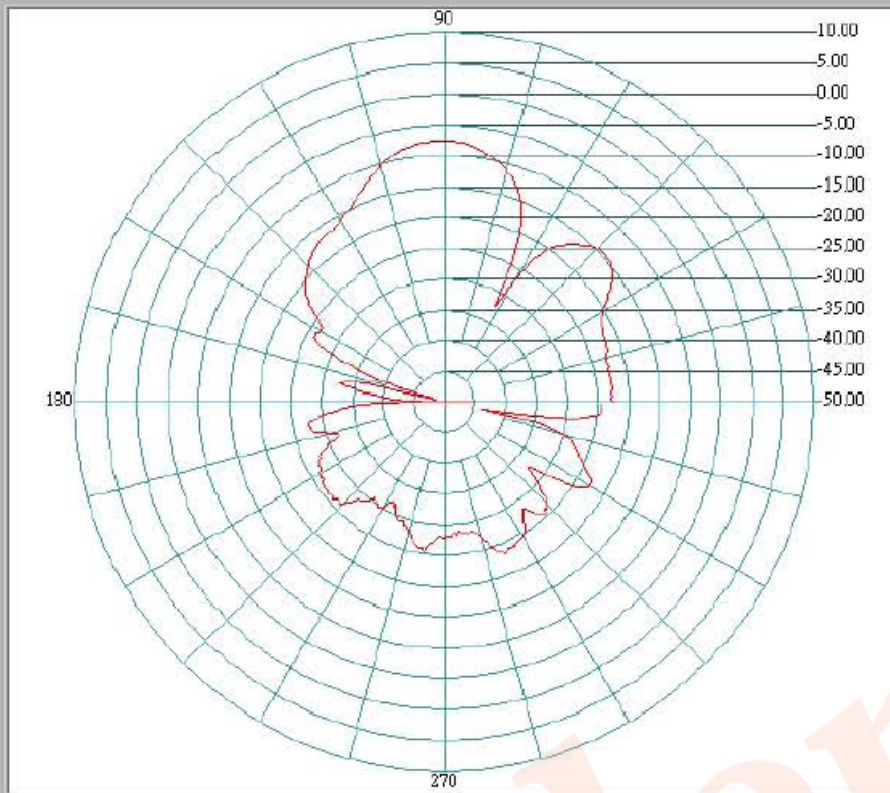
* DUT _Horizontal



Antenna Measurement System

System Setup

Antenna Pattern



Remark

Ant. Brand:

Ant. Model: Nano RX

Test Person:

Other Info.:

Receive Ant. Polarization

Vertical

Max. value(dBi)

-7.73

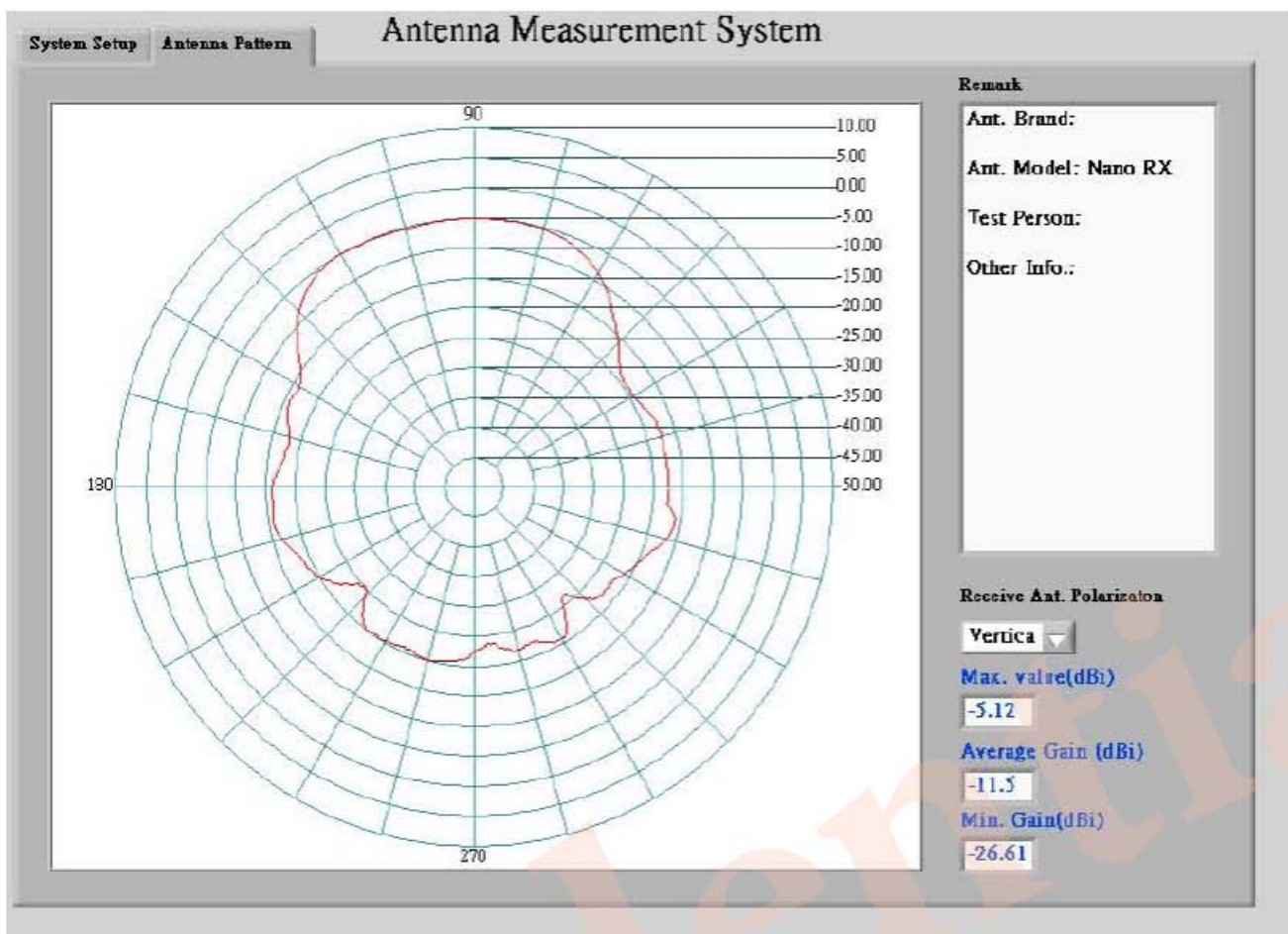
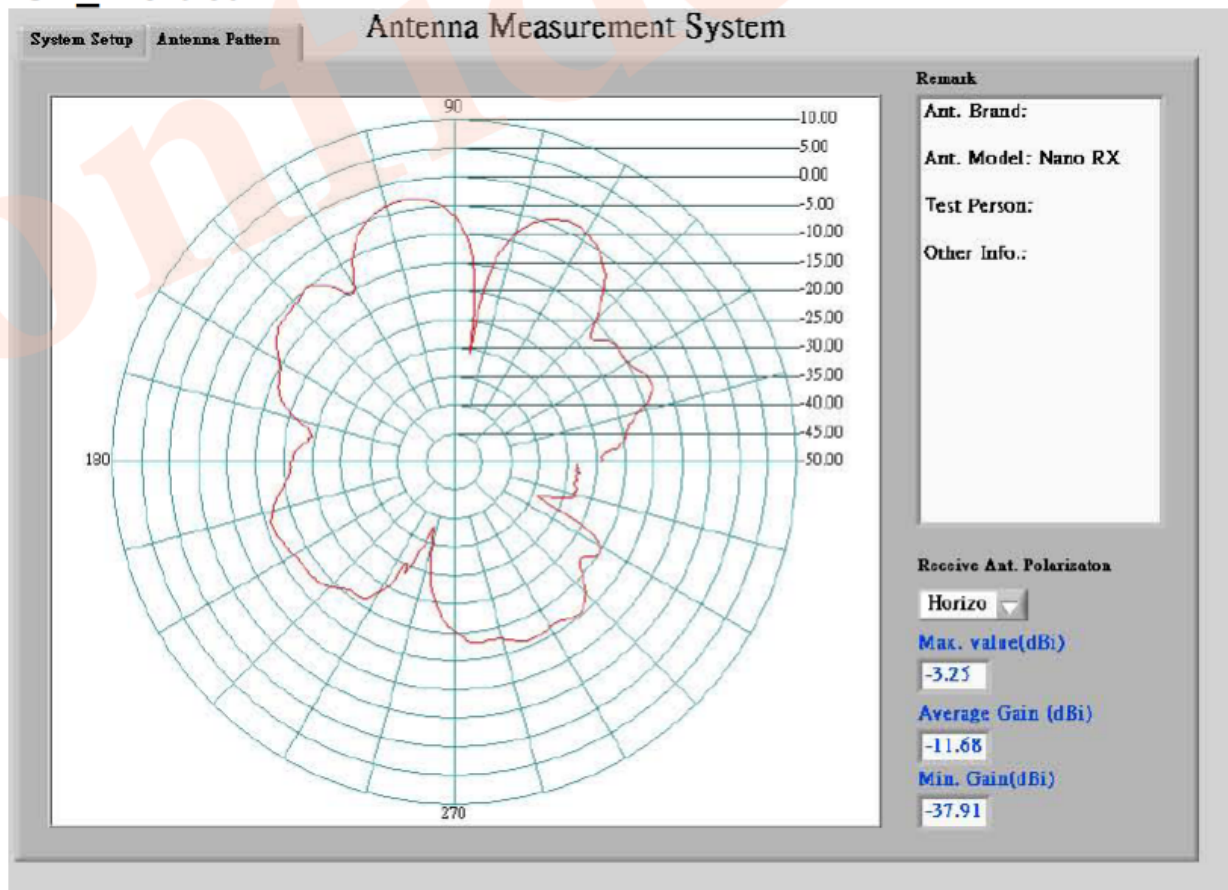
Average Gain (dBi)

-17.19

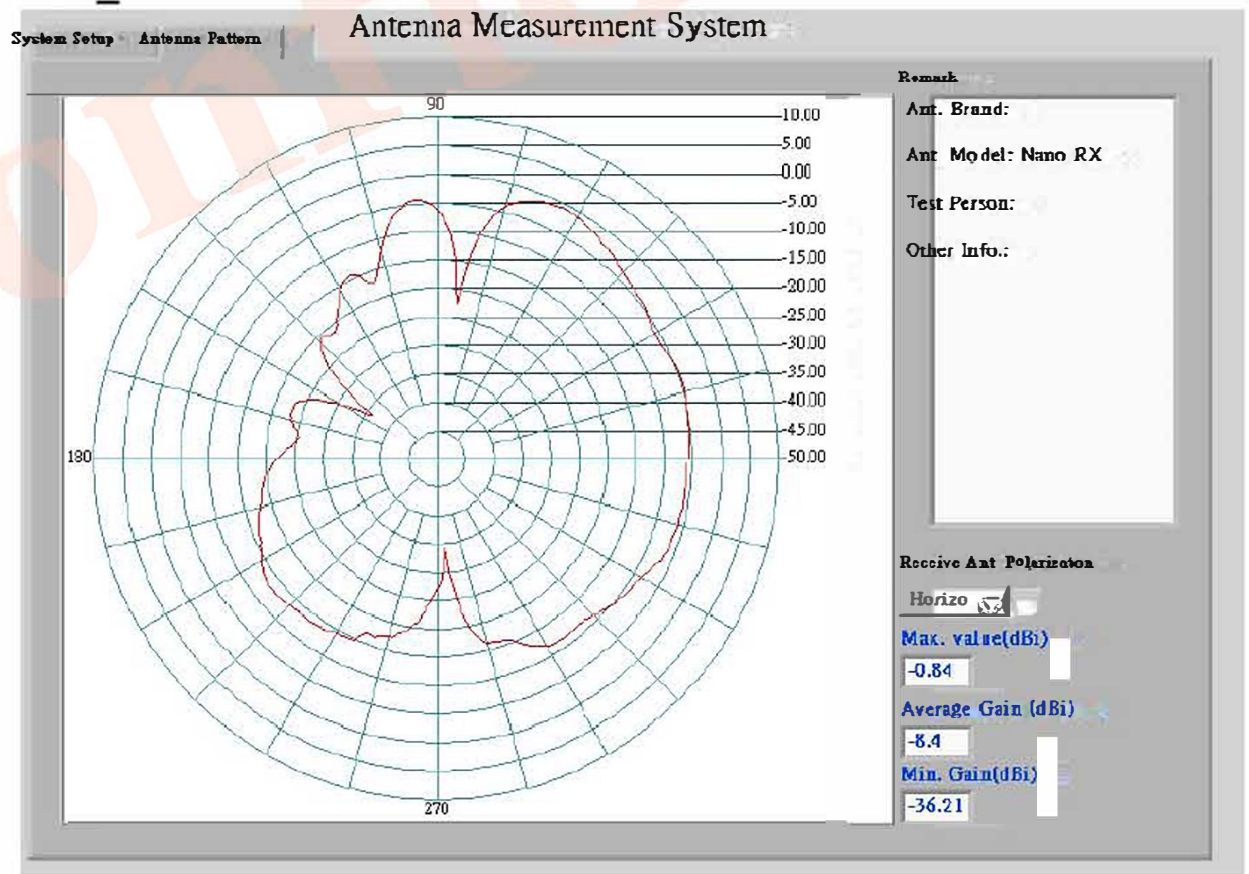
Min. Gain(dBi)

-55.15

* DUT_Veritical



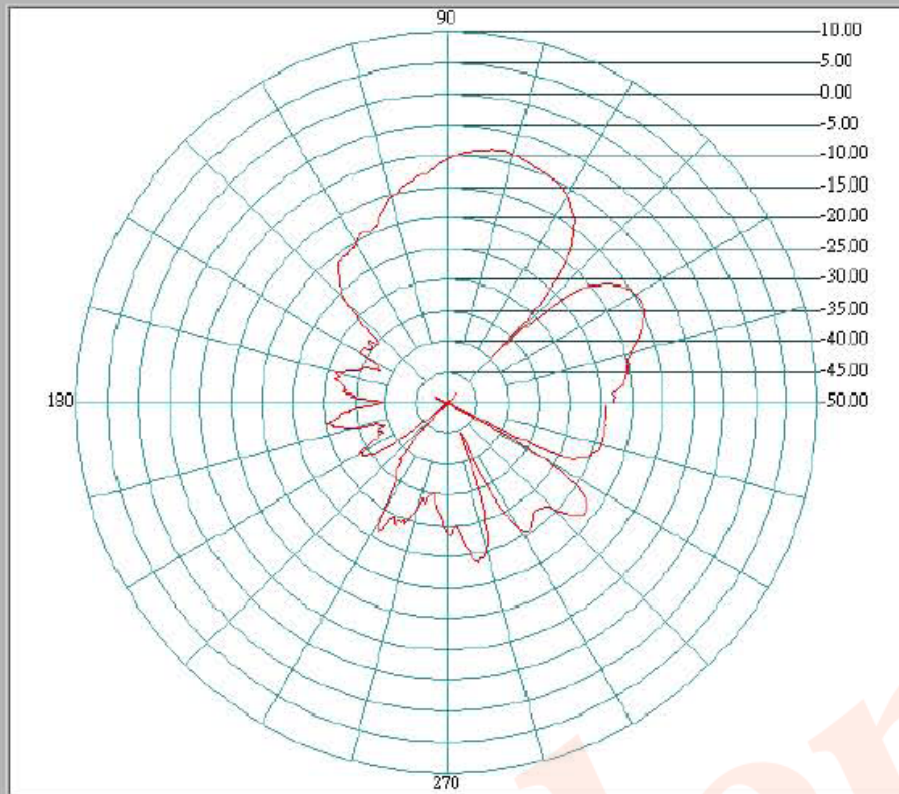
Center Frequency 2440 MHz
*DUT Horizontal



System Setup

Antenna Pattern

Antenna Measurement System



Remark

Ant. Brand:

Ant. Model: Nano RX

Test Person:

Other Info.:

Receive Ant. Polarization

Vertical

Max. value(dBi)

-8.3

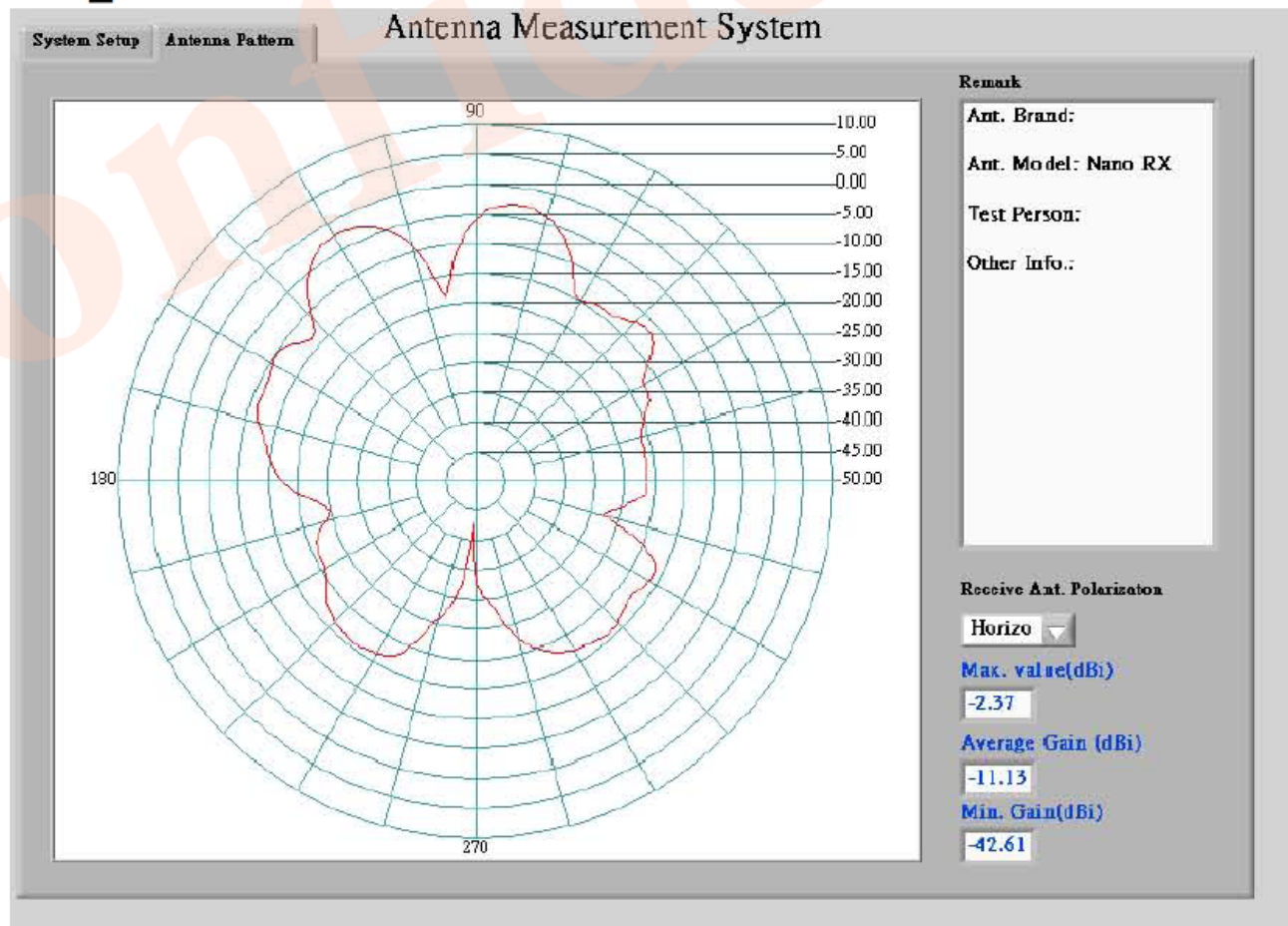
Average Gain (dBi)

-17.74

Min. Gain(dBi)

-52.24

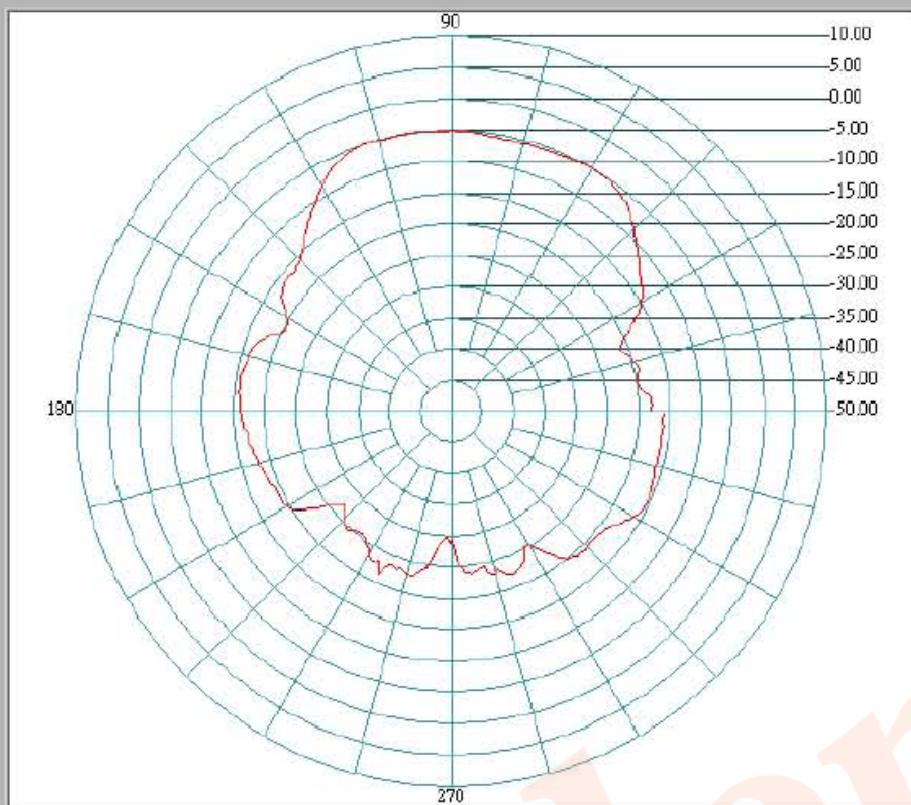
* DUT_ Vertical



System Setup

Antenna Pattern

Antenna Measurement System



Remark

Ant. Brand:

Ant. Model: Nano RX

Test Person:

Other Info.:

Receive Ant. Polarization

Vertical

Max. value(dBi)

-5.09

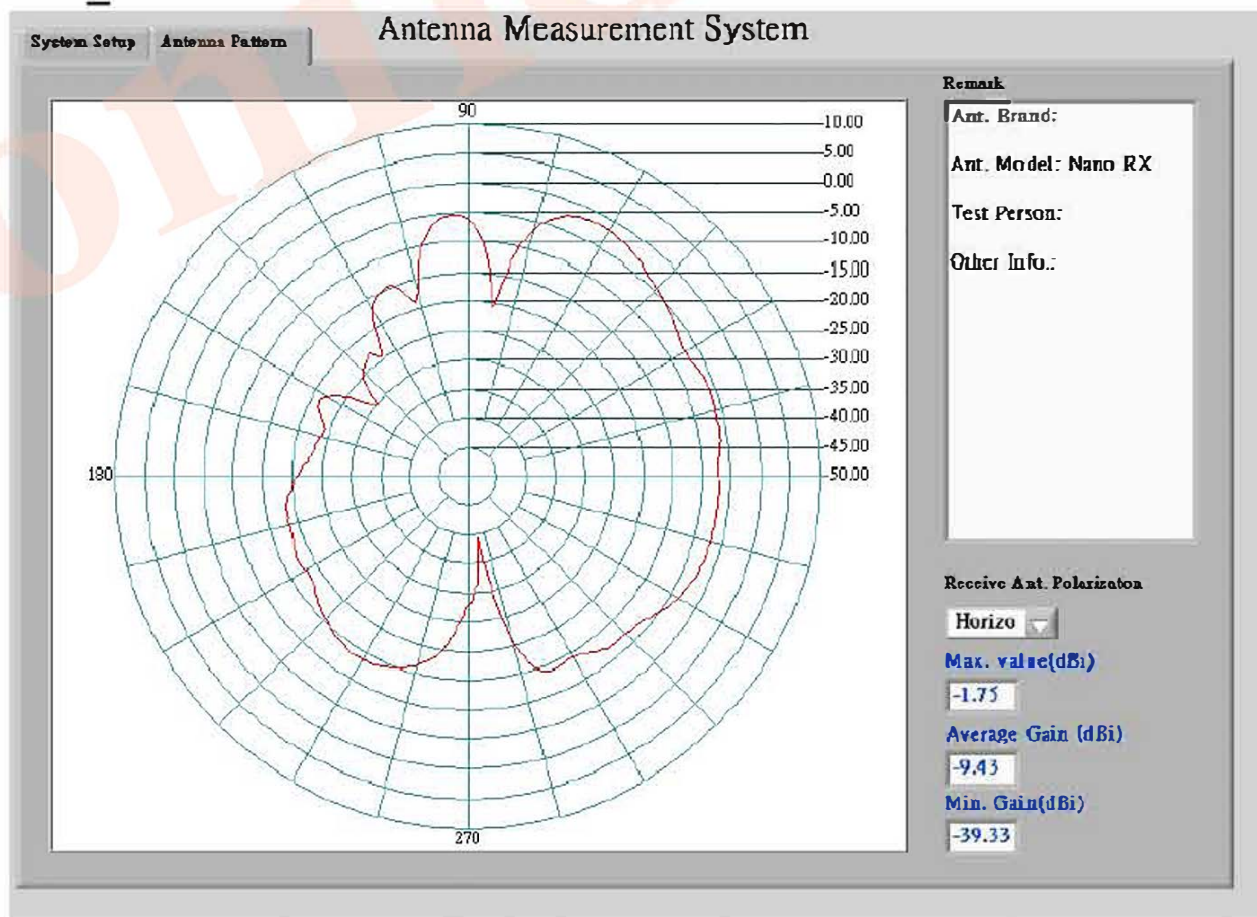
Average Gain (dBi)

-11.46

Min. Gain(dBi)

-29.87

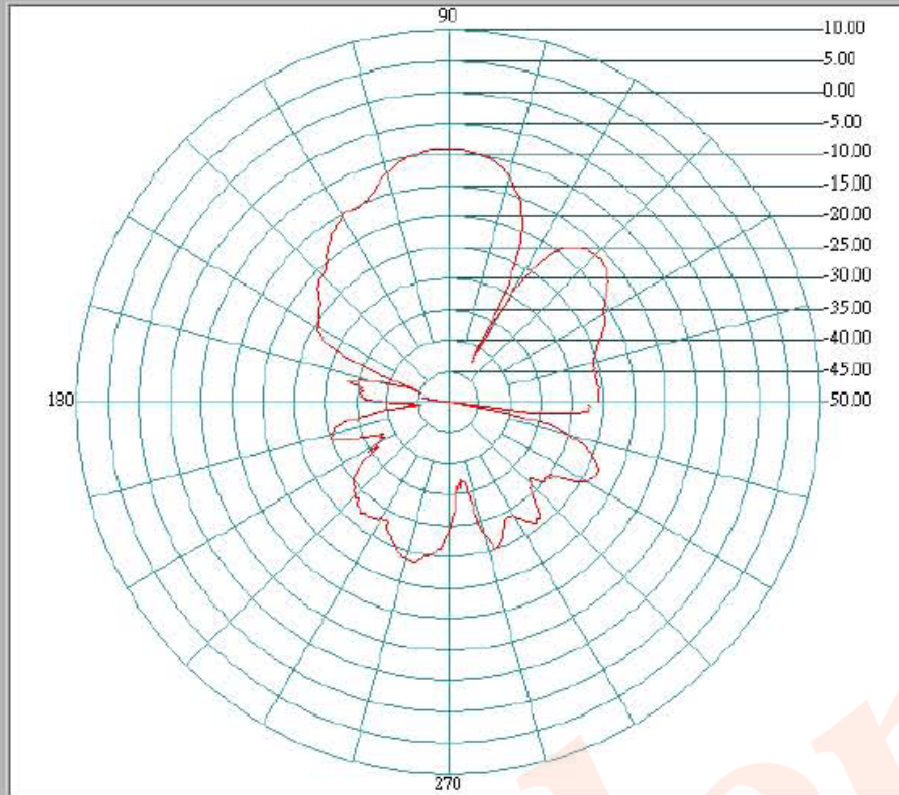
Center Frequency _2480MHz
* DUT_ Horizontal



System Setup

Antenna Pattern

Antenna Measurement System



Remark

Ant. Brand:

Ant. Model: Nano RX

Test Person:

Other Info.:

Receive Ant. Polarization

Vertical

Max. value(dBi)

-9.14

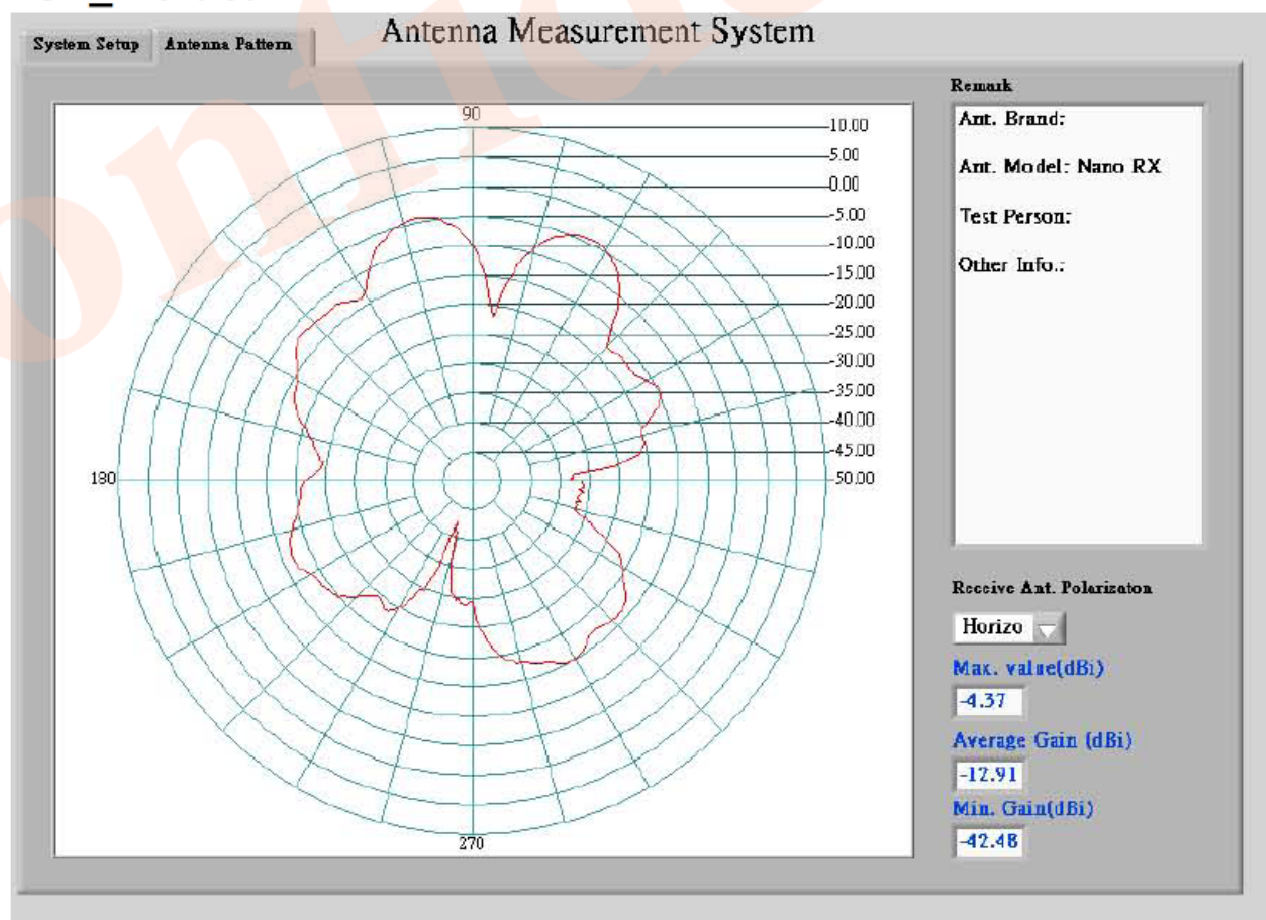
Average Gain (dBi)

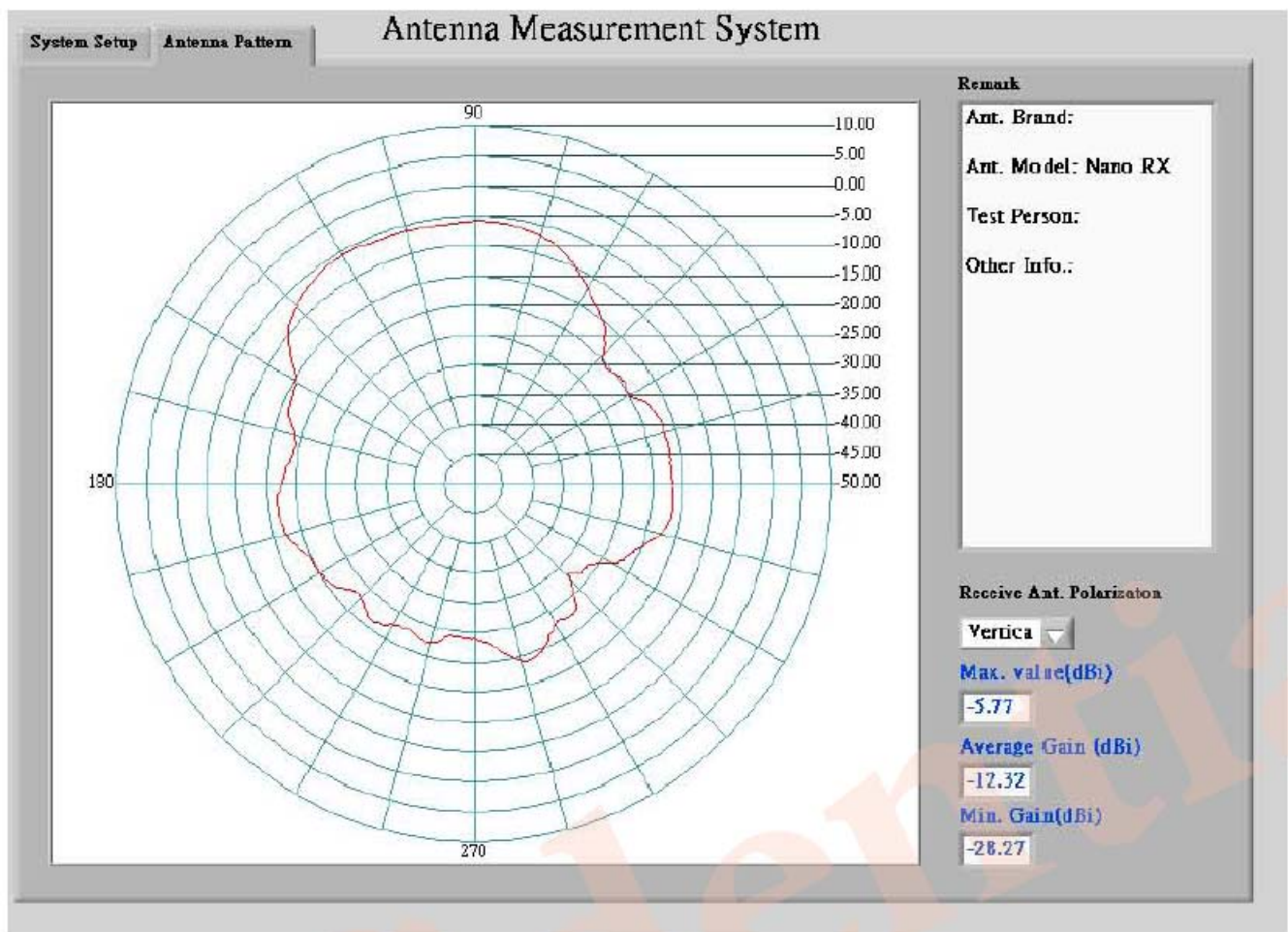
-18.54

Min. Gain(dBi)

-54.11

* DUT_ Vertical





5.結論

經由上面的綜合量測後可得知此款天線的增益確實只可達到-5dBi左右其最大的增益約在-0.71dBi.

5. Oracles

After the above reed combined measurement, we can know that the gain of this celestial gland can only go to about-5dBi, and its biggest gain is about-0.71dBi.