

DATE :Oct.09.2006

CUSTOMER: First International Computer, INC.

# APPROVAL SHEET

<b>MODEL</b>	<b>XTB70</b>
<b>DESCRIPTION</b>	<b>PIFA For Wireless LAN Antenna 2.4~2.5GHZ / 5.15~5.875GHZ</b>
<b>SUPPLIER P/N</b>	<b>K05004002351</b>
<b>CUSTOMER P/N</b>	<b>21-92555-01</b>
<b>FILE P/N</b>	

FAVORTRON			Customer	
Manager	Supervisor	Engineer		
Jesse	Vincent	Kristy		



**惠賢電子股份有限公司**  
**FAVORTRON CO., LTD**

台北縣中和市中正路 866 號 17F TEL: (02) 8227-5669

17<sup>nd</sup> F, no. 866, Zhong Zheng Rd., FAX: (02) 8227-5667  
Zhong He City, Taipei Hsien, Taiwan R.O.C



# BOM

## BOM

ITEM	COMPONENT	QTY	DESCRIPTION	FAVORTRON P/N	VENDER
1	PIFA ANTENNA	1	GT1W" Left/0.4mm/馬口鐵	M02007025001	品欣
2	PIFA ANTENNA	1	GT1W" Right/0.4mm/馬口鐵	M02007024001	品欣
3	同軸線	1	φ 1.13 黑色* 53mm 單邊加 I-PEX Connector	M04007162001	FVC
4	同軸線	1	φ 1.13 灰色* 850mm 單邊加 I-PEX Connector	M04007163001	FVC
5	雙面膠帶	2	10mmx 10mmx0.15(SONY G4000)	M01017023002	隆揚
6	透明套管	2	OD2.5*20mm(透明)內徑3.1±0.2 壁厚0.25±0.1	B02009714999	三聯
7	熱縮套管	1	OD2.0*20mm(黑色)內徑2.6±0.2 壁厚0.2±0.1	<b>B02020004121</b>	三聯
8	熱縮套管	1	OD2.0*15mm(黑色)內徑2.6±0.2 壁厚0.2±0.1	B02020019121	三聯
9	LABLE (M)	1	4.5x13mm 白色	G01013007001	亞識
10	LABLE(A)	1	4.5x13mm 白色	G01013007001	亞識
11					
12					

### SUB BOM (M04007162001)

ITEM	COMPONENT	QTY	DESCRIPTION	FVC P/N	VENDER
1	Connector	1	接頭MHF PLUG(I-PEX) OD= φ 1.13	L07001001001	I-PEX
2	同軸線	1	同軸線OD1.13*整捲52mm(黑色)	M04005009001	日立信電

### SUB BOM (M04007163001)

ITEM	COMPONENT	QTY	DESCRIPTION	FVC P/N	VENDER
1	Connector	1	接頭MHF PLUG(I-PEX) OD= φ 1.13	L07001001001	I-PEX
2	同軸線	1	同軸線OD1.13*整捲849mm(灰色)	M04005008001	日立信電



Title:

大眾XTB70-WLAN Ant BOM表

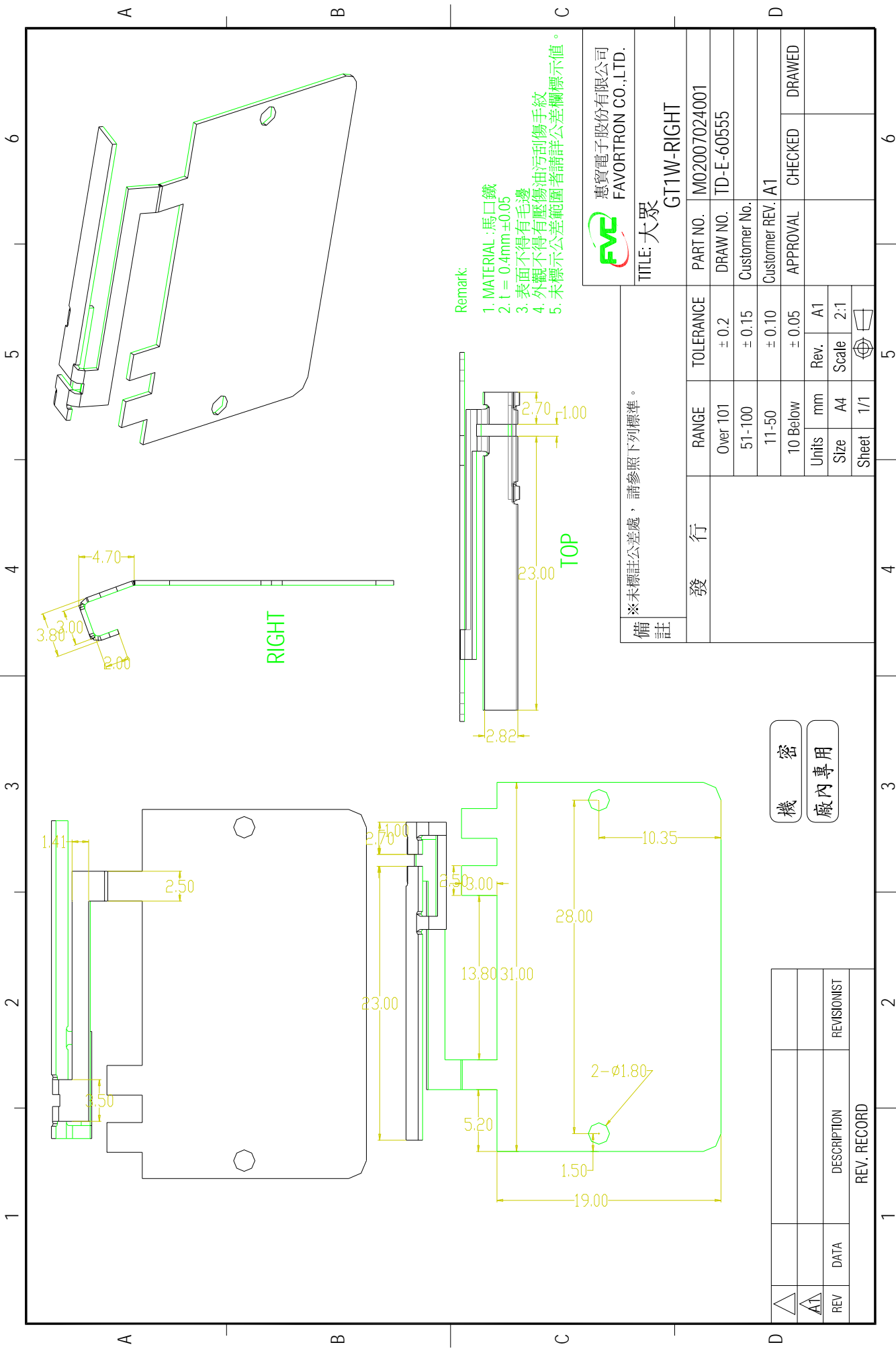
Part No.	K05004002351
Draw No.	TD-E-60895-a1
CUS.Part No.	21-92555-01
CUS.Rev.	a1
Approval	Check
Nick	Vincent
	Designed
發 行 備 註	
Date	2006/09/29
Sheet	2/3

機 密

廠內專用

NOTES:

禁止使用1級環境管理物質，具體物質參見我司技術標準



Remark:

1. MATERIAL :馬口鐵
2. t = 0.4mm ±0.05
3. 表面不得有毛邊
4. 外觀不得有壓傷油污刮傷手紋
5. 未標示公差範圍者請詳公差欄標示值。



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TITLE: 大眾

GT1W-RIGHT

※未標註公差處，請參照下列標準。

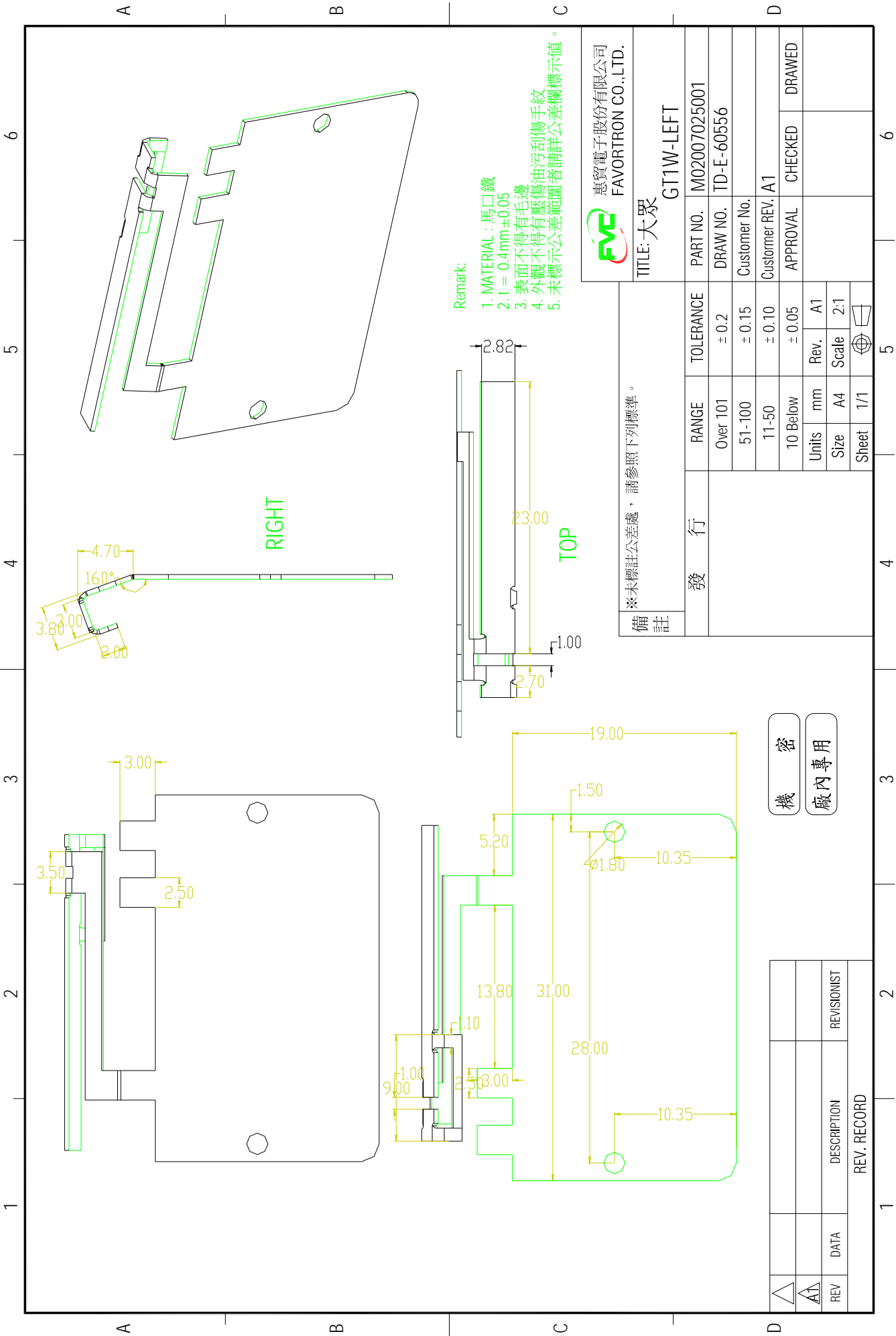
備註

發	行	RANGE	TOLERANCE	PART NO.	Customer No.
		Over 101	± 0.2	M02007024001	
		51-100	± 0.15	TD-E-60555	
		11-50	± 0.10		
		10 Below	± 0.05		
		Units	mm	Rev.	A1
		Size	A4	Scale	2:1
		Sheet	1/1	APPROVAL	CHECKED
					DRAWN

機密  
廠內專用

REV	DATA	DESCRIPTION	REVISIONIST
		REV. RECORD	

ABC



Remark:

1. MATERIAL : 馬口鐵
2. t = 0.4mm ±0.05
3. 表面不得有毛邊
4. 外觀不得有壓傷油污刮傷手紋
5. 未標公差範圍者請詳公差欄標示值。



惠賢電子股份有限公司  
FAVORTRON CO., LTD.

TITLE: 大眾  
GT1W-LEFT

※未標註公差處，請參照下列標準。

備註		發行		TOLERANCE		PART NO.		DRAW NO.	
		RANGE	Over 101	±0.2	M02007025001		TD-E-60556		
			51-100	±0.15	Customer No.		Customer REV. A1		
			11-50	±0.10	APPROVAL		CHECKED		DRAWN
			10 Below	±0.05					
Units	mm	Rev.	A1						
Size	A4	Scale	2:1						
Sheet	1/1								

機密  
廠內專用

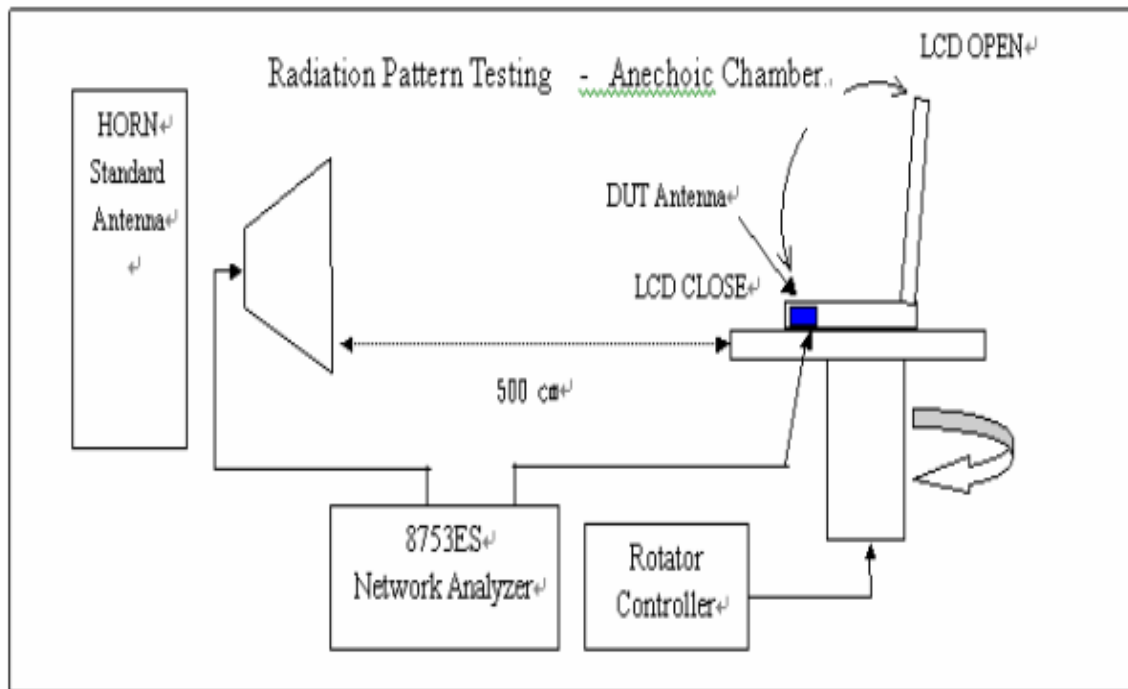
REV	DATA	DESCRIPTION	REVISIONIST

REV. RECORD

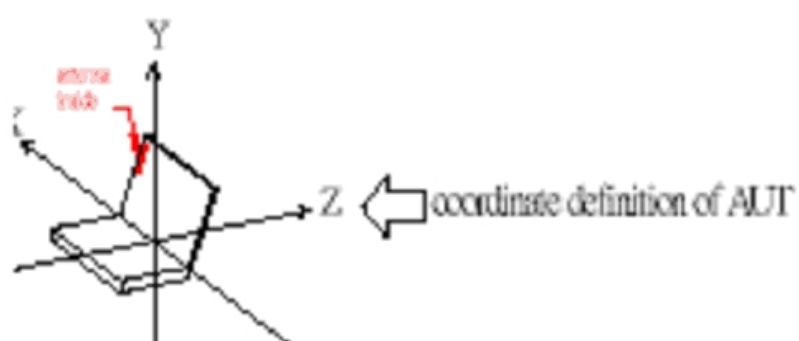
ABC

1.

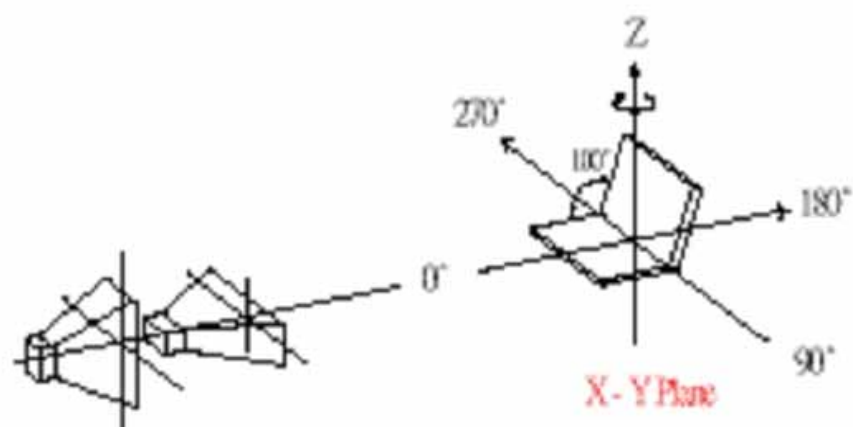
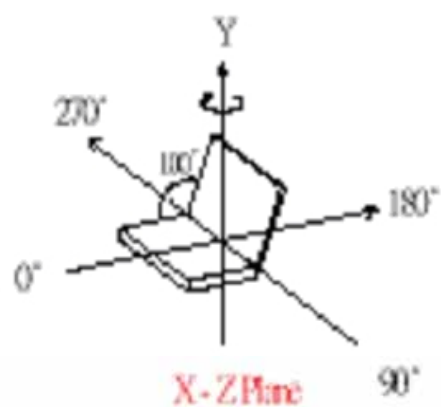
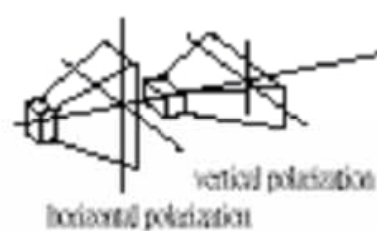
## 天線測試方法



## Coordinate Definition



### **ORN ANTENNA**



## 2. Antenna Spec. For WLAN

### 1. 802.11b Spec.

- a. Frequency range : 2.4 ~ 2.5GHz (Nominal)
- b. Impedance : 50Ω
- c. LCD Panel : Open ( 100° ) / Close ( 0° ).
- d. System Plane : XY plane
- e. VSWR : ≤ 2 ( Main & Aux. Antenna )
- f. Return Loss : ≤ -10dB ( Main & Aux. Antenna )
- g. Band Width : ≥ 130MHz ( 2450MHz±65MHz at least ).
- h. Diversity Sum : ≥ -2.5dBi
- i. Any 30° angle range can't has null depth.
- j. Average gain & Peak gain

Antenna	Peak Gain (dBi)			Average Gain (dBi)		
	Frequency			Frequency		
	2.4GHz	2.45GHz	2.5GHz	2.4GHz	2.45GHz	2.5GHz
<b>Main</b>	≤ 3	≤ 3	≤ 3	≥ -4	≥ -4	≥ -4
<b>Auxiliary</b>	≤ 3	≤ 3	≤ 3	≥ -4.5	≥ -4.5	≥ -4.5

### 2. 802.11a Spec.

- a. Frequency range : 4.9 ~ 5.875GHz (Nominal)
- b. Impedance : 50Ω
- c. LCD Panel : Open ( 100° ) / Close ( 0° ).
- d. System Plane : XY plane
- e. VSWR : ≤ 2 ( Main & Aux. Antenna )
- f. Return Loss : ≤ -10dB ( Main & Aux. Antenna )
- g. Band Width : ≥ 250MHz ( 5250MHz±125MHz at least ).
- h. Diversity Sum : ≥ -3.5dBi
- i. Any 30° angle range can't has null depth.
- j. Average gain & Peak gain

Antenna	Peak Gain (dBi)			Average Gain (dBi)		
	Frequency			Frequency		
	4.9GHz	5.47GHz	5.875GHz	4.9GHz	5.47GHz	5.875GHz
<b>Main</b>	≤ 5	≤ 5	≤ 5	≥ -4.8	≥ -4.8	≥ -4.8
<b>Auxiliary</b>	NA	NA	NA	≥ -4.8	≥ -4.8	≥ -4.8

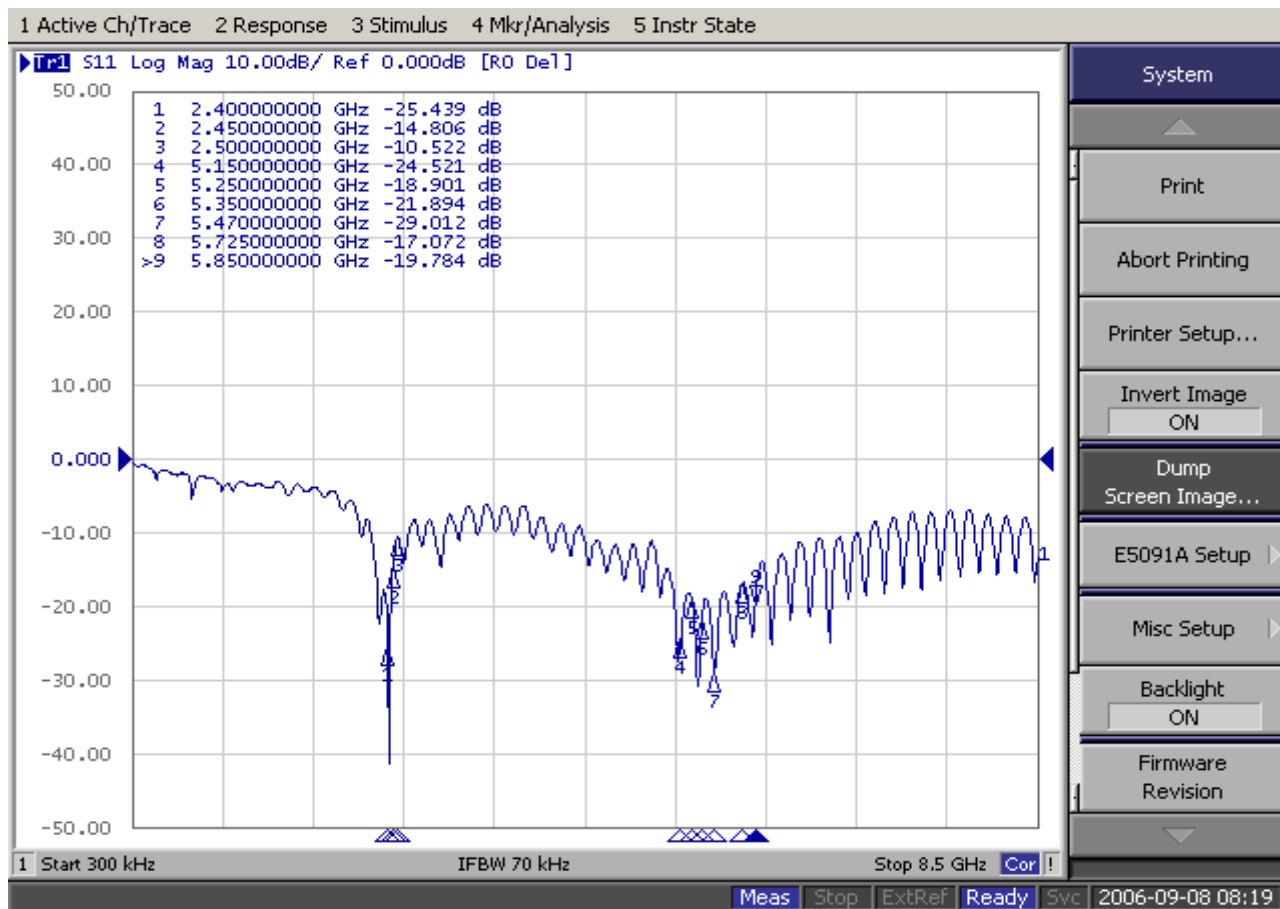
## 3. DESCRIPTION

- a. **FIC Project Name & FIC P/N** : **XTB70**
- & Frequency** : **Daul Band 2.4~2.5 & 4.9~5.875 GHz**
- b. **Vendor's antenna P/N** : **K05004002351**
- c. **Antenna P/N & type & material** : **M02007024001 (R) , M02007025001 (L)**  
**PIFA & Cupronickel**
- d. **Coaxial cable length & diameter(Φ)** : **850mm(Left, Gray) 、553 mm(Right, Black) & 1.13Φ**
- & Cable P/N & Vendor** : **M04007163001(G) M04007162001(B)**
- e. **Connector model no. & vendor** : **L07001001001**

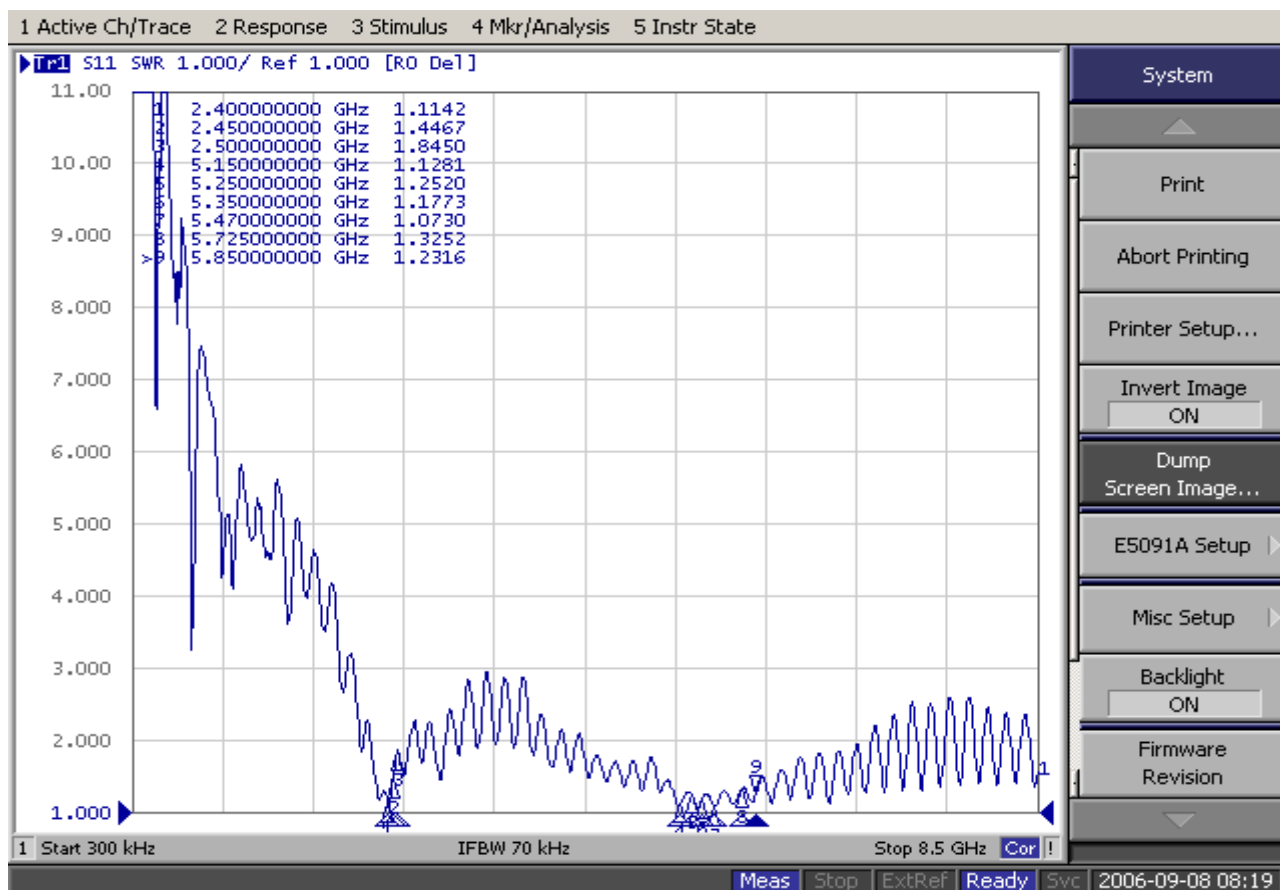


## 5.WLAN.( Right )

### 2.4~2.5GHZ & 5.15~5.875GHZ / Return Loss



### 2.4~2.5GHZ & 5.15~5.875GHZ / VSWR



## 6.Gain & Pattern – WLAN. ( Right )

### a. 2.4GHz



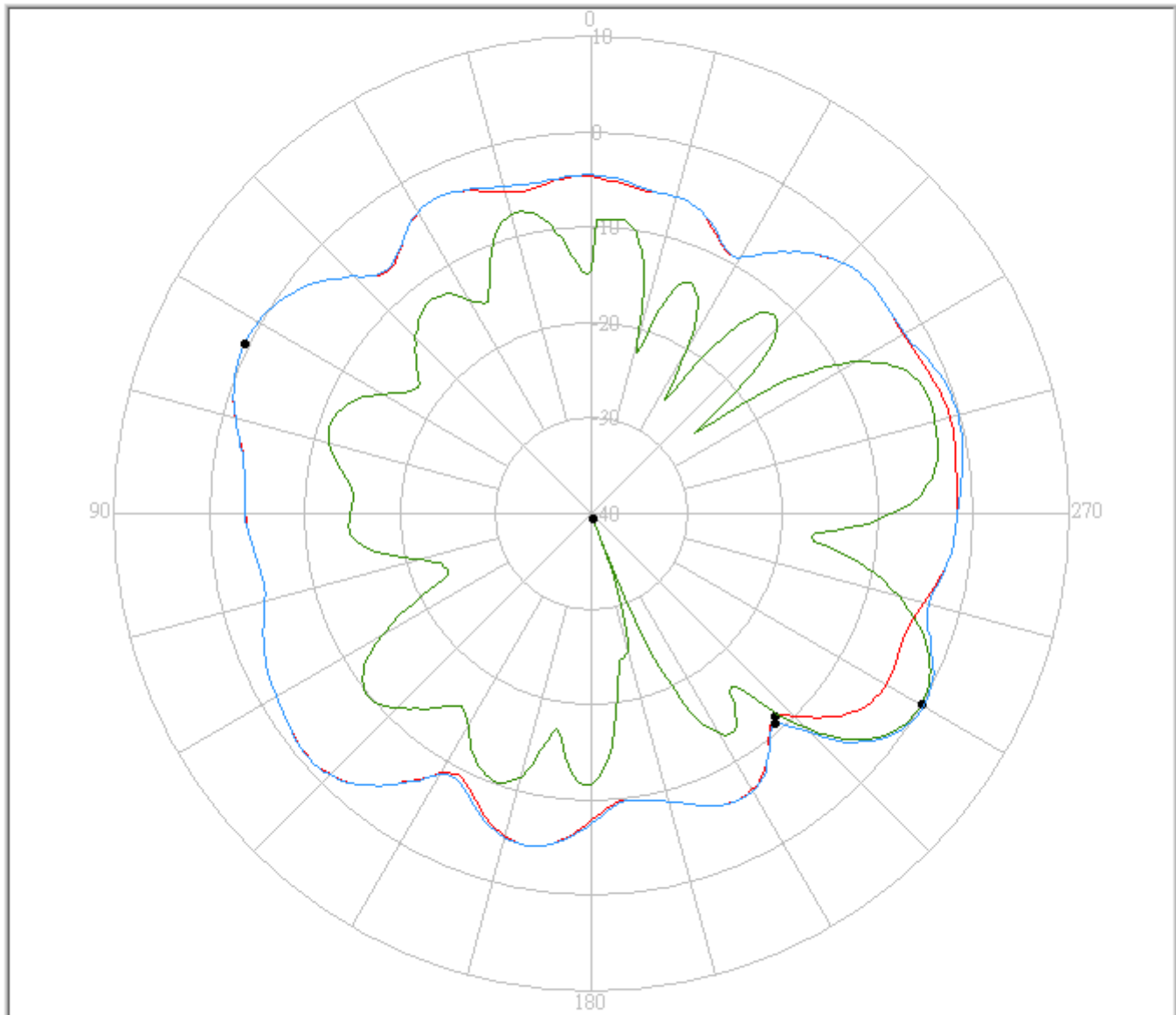
eService for Customer Satisfaction

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**Antenna Pattern Measurement**

4F, No. 108-1, Min Chuan Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C. Tel:886-2-2218-2189,  
Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	2400.00	0.40 / 64.00	-11.32 / 222.00	-3.77	Ver.	2006/9/7
2	XTB70	WLAN-R	2400.00	-0.10 / 240.00	-39.43 / 200.00	-8.93	Hor.	2006/9/7
3	XTB70	WLAN-R	2400.00	0.41 / 64.00	-10.80 / 221.00	-3.30	V+H	2006/9/7

## b. 2.45GHz



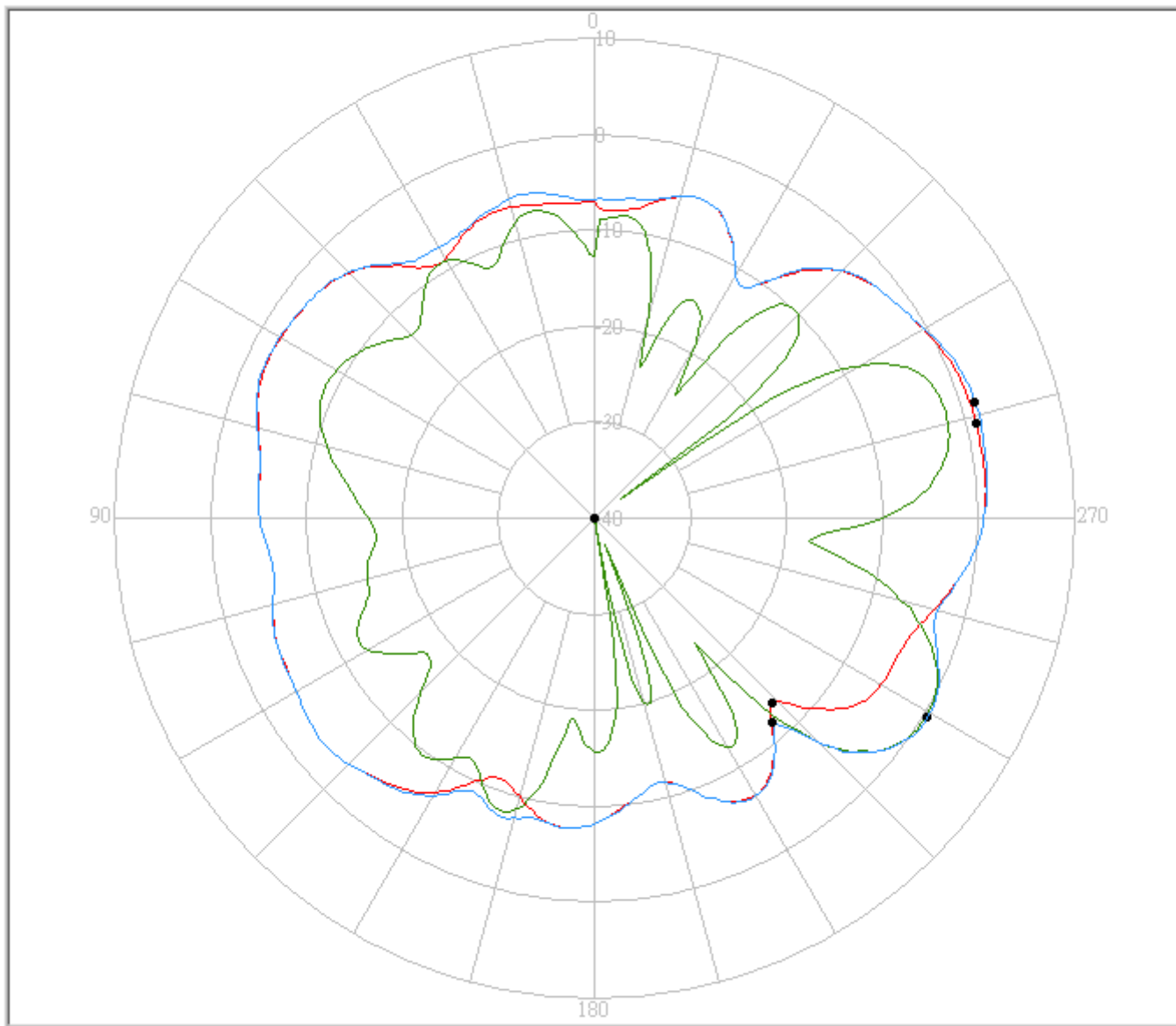
eService for Customer Satisfaction

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	2450.00	0.93 / 284.00	-13.31 / 224.00	-4.28	Ver.	2006/9/7
2	XTB70	WLAN-R	2450.00	0.28 / 239.00	-48.39 / 190.00	-8.27	Hor.	2006/9/7
3	XTB70	WLAN-R	2450.00	1.46 / 287.00	-11.80 / 221.00	-3.61	V+H	2006/9/7

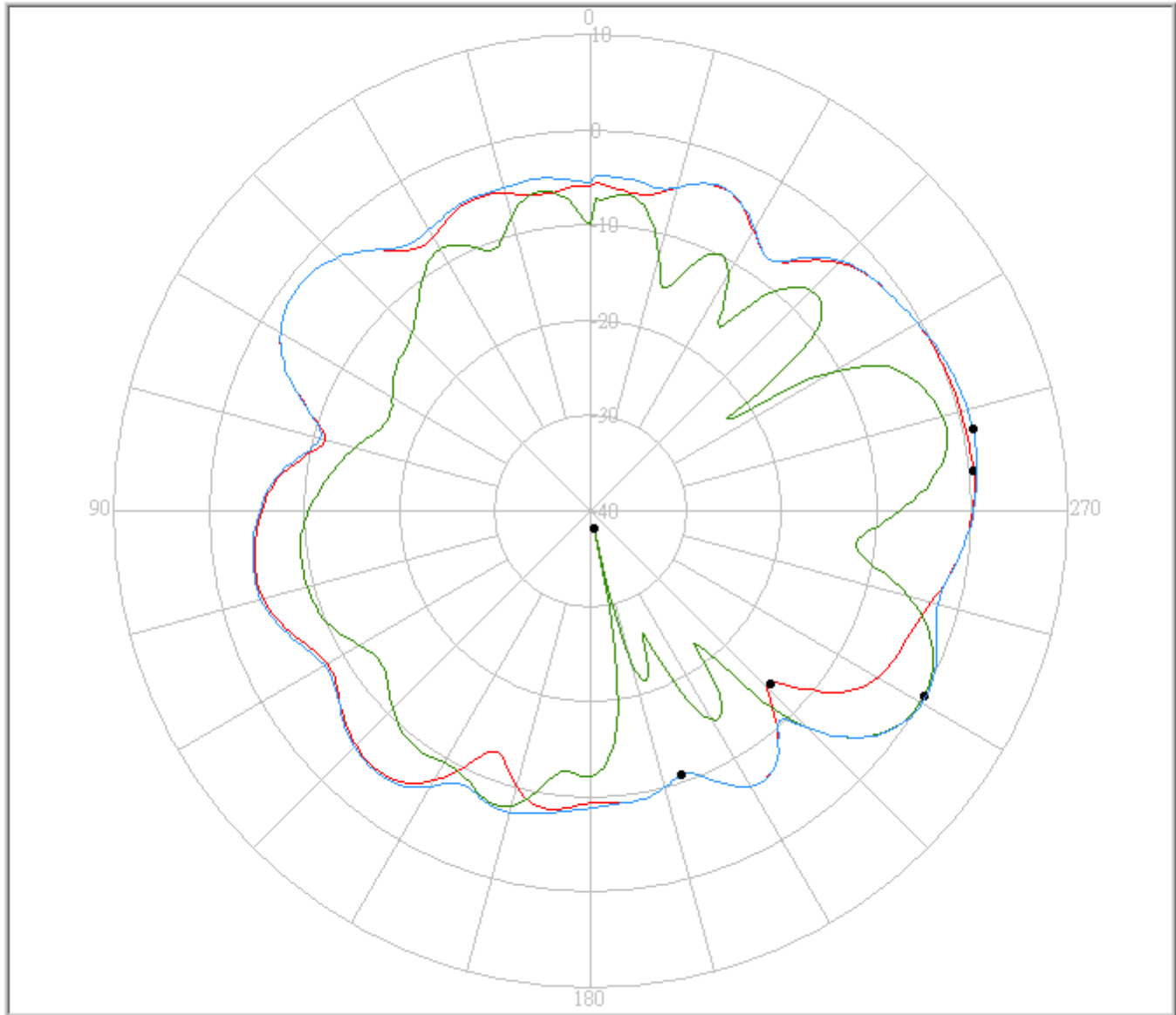
c. 2.5GHz



# FAVORTRON Co. Ltd

## Antenna Pattern Measurement

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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	2500.00	0.36 / 276.00	-13.90 / 226.00	-4.44	Ver.	2006/9/7
2	XTB70	WLAN-R	2500.00	0.02 / 241.00	-38.06 / 192.00	-7.79	Hor.	2006/9/7
3	XTB70	WLAN-R	2500.00	0.97 / 282.00	-10.73 / 199.00	-3.71	V+H	2006/9/7

## d. 4.9GHz



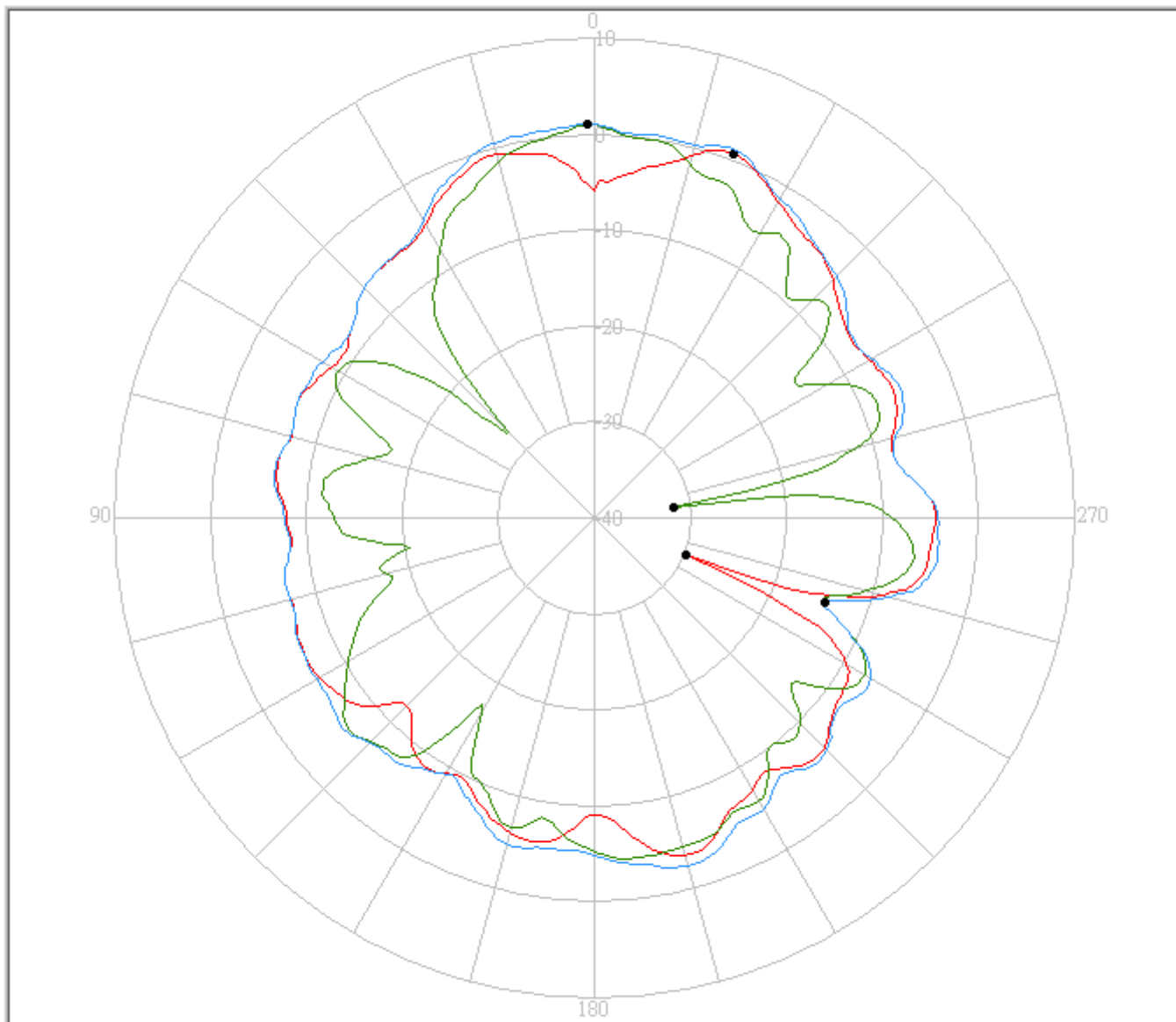
eService for Customer Satisfaction

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	4900.00	0.58 / 339.00	-29.76 / 248.00	-5.44	Ver.	2006/9/7
2	XTB70	WLAN-R	4900.00	0.98 / 1.00	-31.65 / 278.00	-6.52	Hor.	2006/9/7
3	XTB70	WLAN-R	4900.00	1.09 / 1.00	-14.52 / 250.00	-4.14	V+H	2006/9/7

# e. 5.075GHz



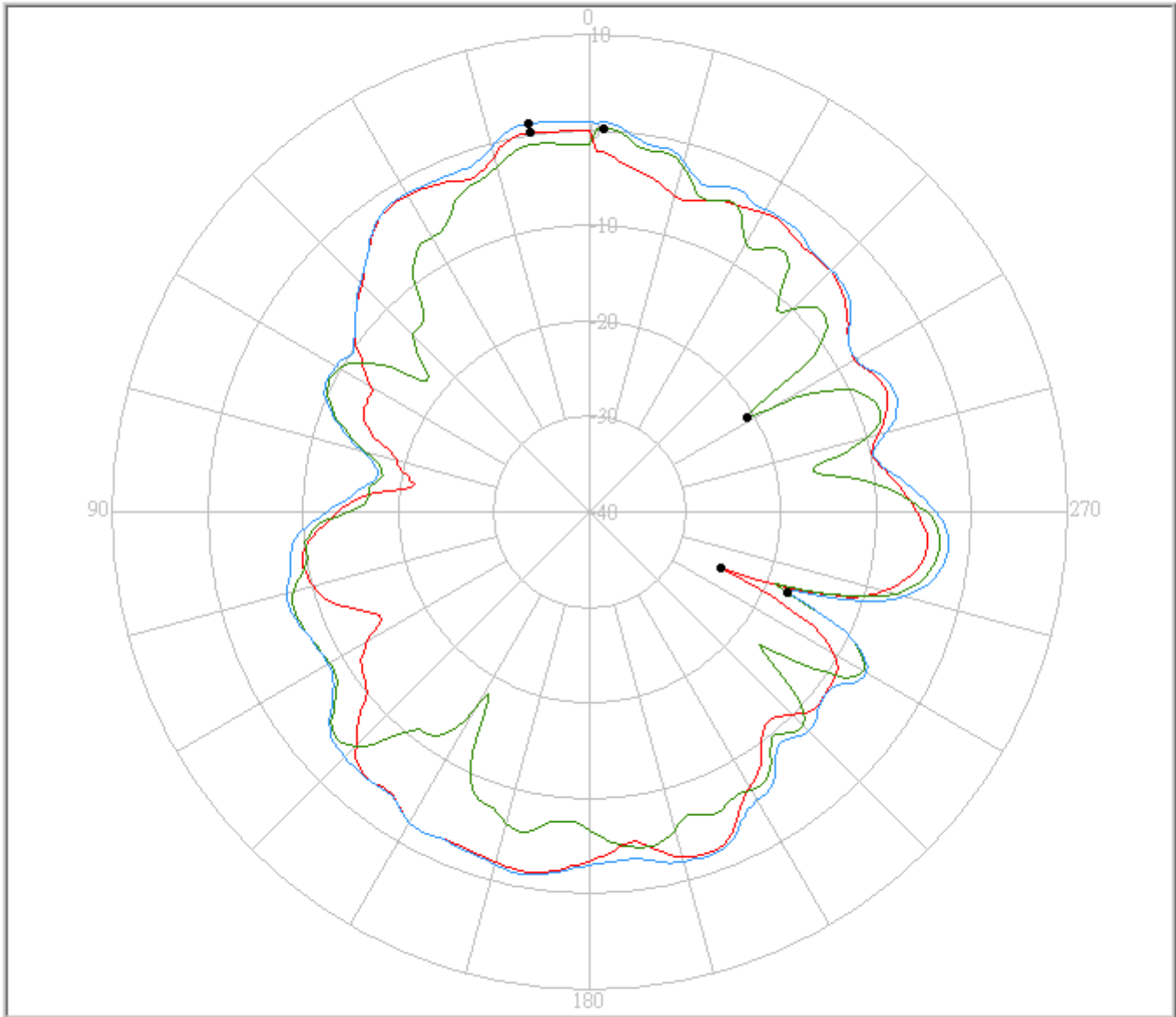
eService for Customer Satisfaction

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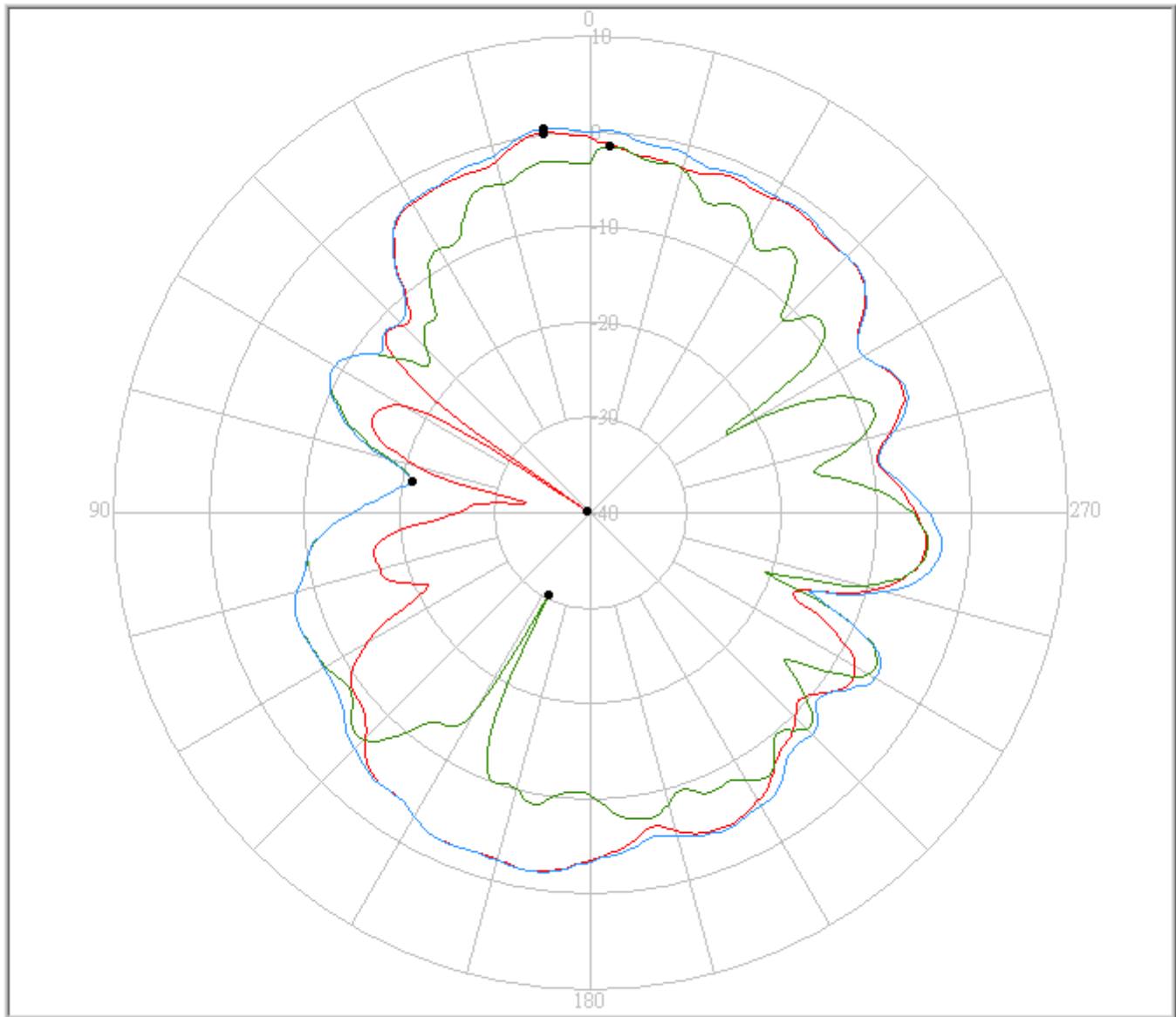
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5075.00	0.22 / 9.00	-25.18 / 247.00	-5.16	Ver.	2006/9/7
2	XTB70	WLAN-R	5075.00	0.20 / 358.00	-20.80 / 301.00	-6.62	Hor.	2006/9/7
3	XTB70	WLAN-R	5075.00	1.16 / 9.00	-17.63 / 248.00	-4.04	V+H	2006/9/7

# f. 5.15GHz



## FAVORTRON Co. Ltd Antenna Pattern Measurement

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5150.00	0.09 / 7.00	-39.54 / 56.00	-4.99	Ver.	2006/9/7
2	XTB70	WLAN-R	5150.00	-1.53 / 357.00	-30.24 / 153.00	-7.77	Hor.	2006/9/7
3	XTB70	WLAN-R	5150.00	0.58 / 7.00	-21.02 / 80.00	-4.24	V+H	2006/9/7

g. 5.25GHz



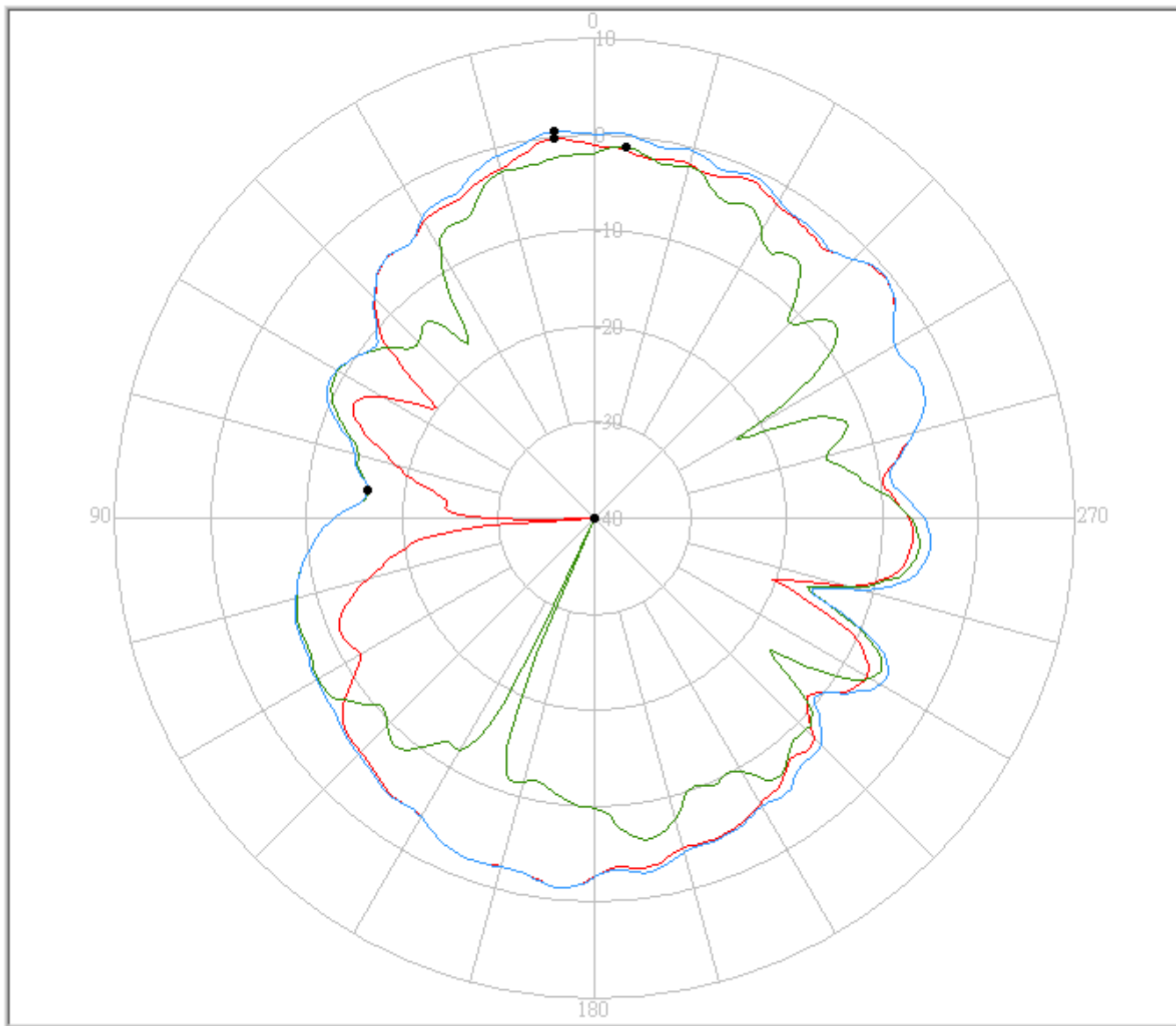
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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5250.00	-0.22 / 6.00	-45.39 / 92.00	-4.81	Ver.	2006/9/7
2	XTB70	WLAN-R	5250.00	-1.27 / 355.00	-45.46 / 156.00	-7.60	Hor.	2006/9/7
3	XTB70	WLAN-R	5250.00	0.49 / 6.00	-16.28 / 83.00	-4.04	V+H	2006/9/7



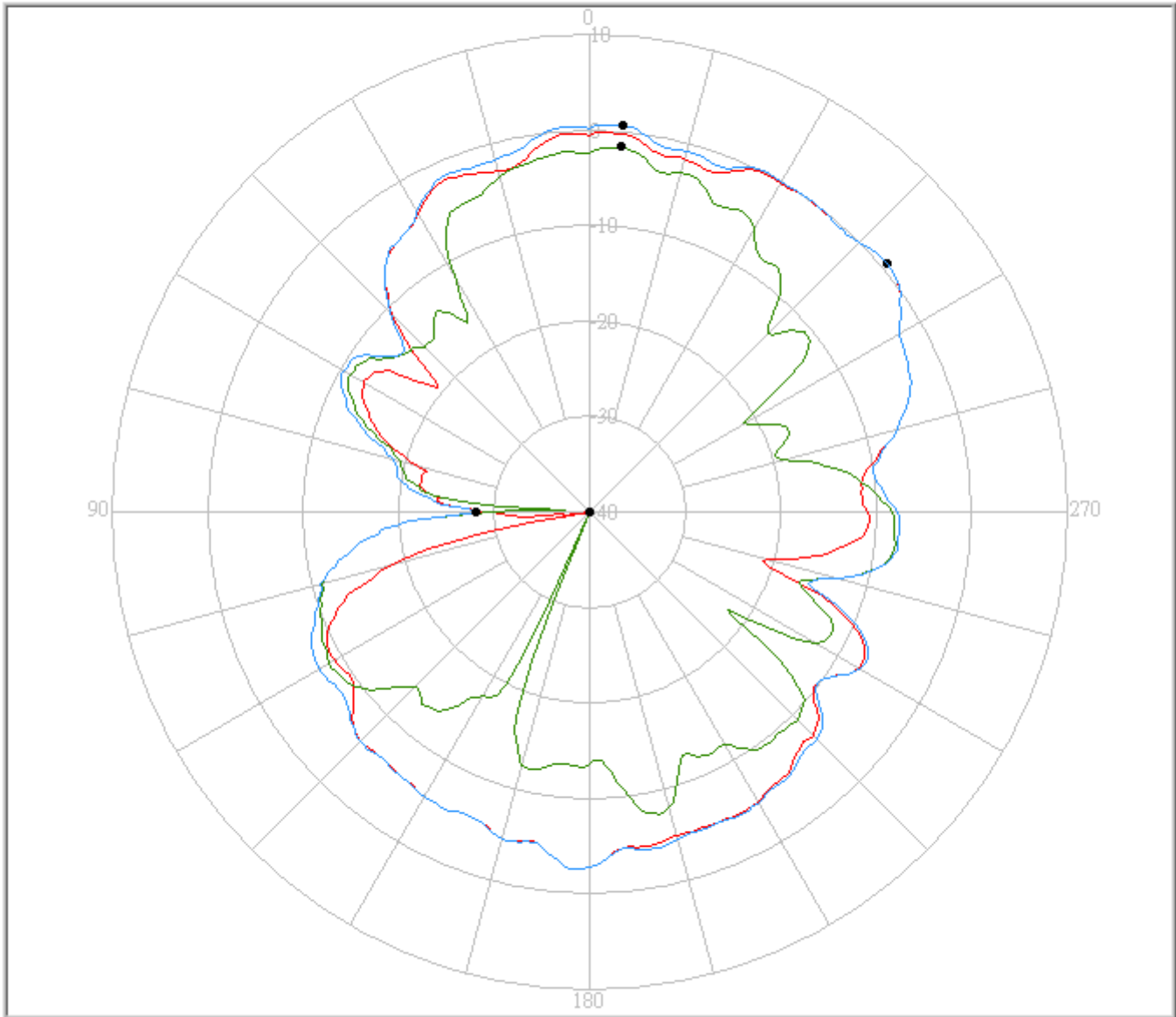
h. 5.35GHz



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## Antenna Pattern Measurement

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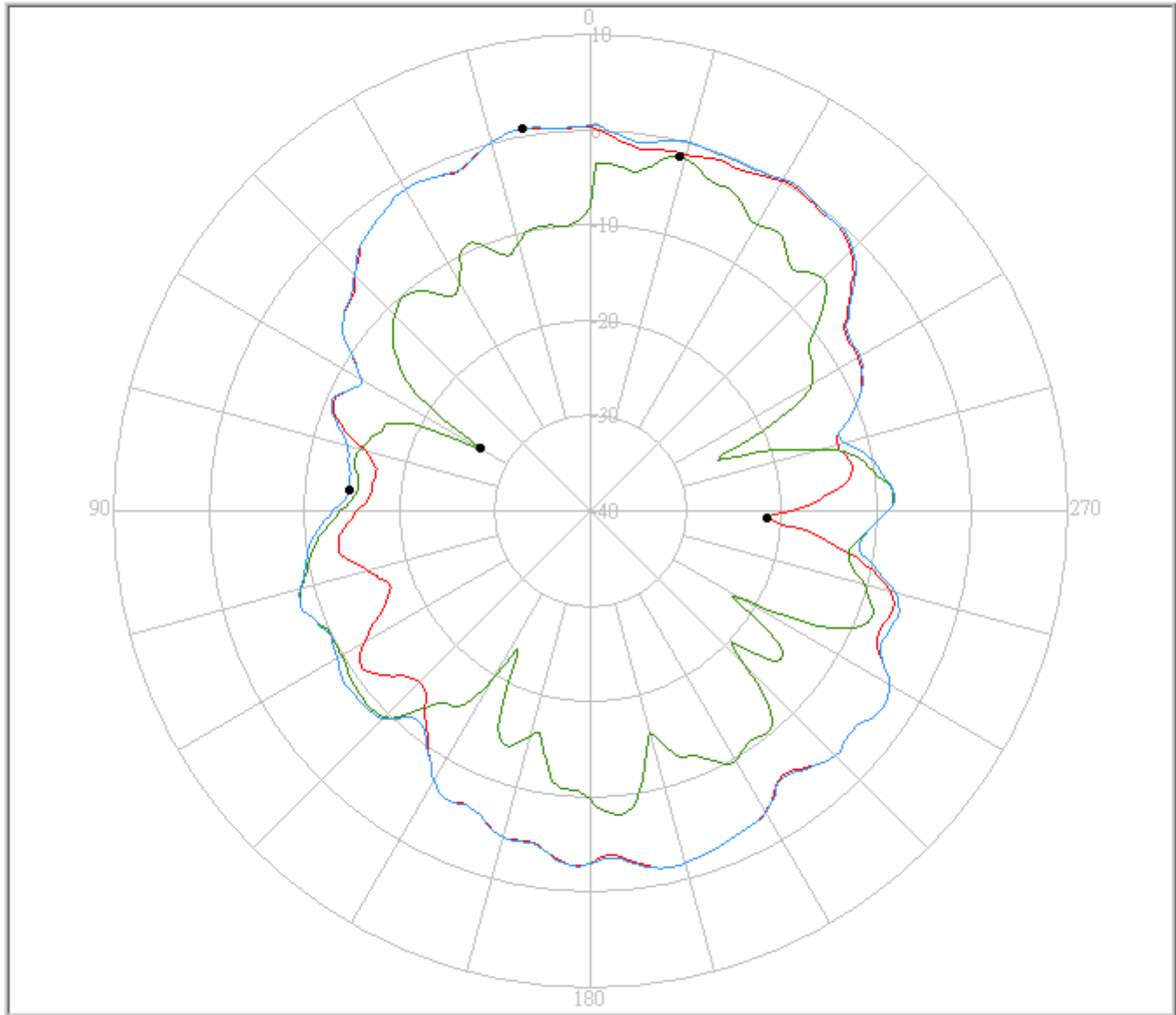
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5350.00	0.55 / 310.00	-42.80 / 97.00	-4.77	Ver.	2006/9/7
2	XTB70	WLAN-R	5350.00	-1.67 / 355.00	-43.82 / 157.00	-9.01	Hor.	2006/9/7
3	XTB70	WLAN-R	5350.00	0.65 / 355.00	-28.01 / 90.00	-4.30	V+H	2006/9/7

# i. 5.47GHz



## FAVORTRON Co. Ltd Antenna Pattern Measurement

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5470.00	0.69 / 10.00	-21.41 / 268.00	-4.37	Ver.	2006/9/7
2	XTB70	WLAN-R	5470.00	-1.61 / 346.00	-26.67 / 60.00	-9.47	Hor.	2006/9/7
3	XTB70	WLAN-R	5470.00	0.71 / 10.00	-14.65 / 85.00	-3.99	V+H	2006/9/7

j. 5.6GHz



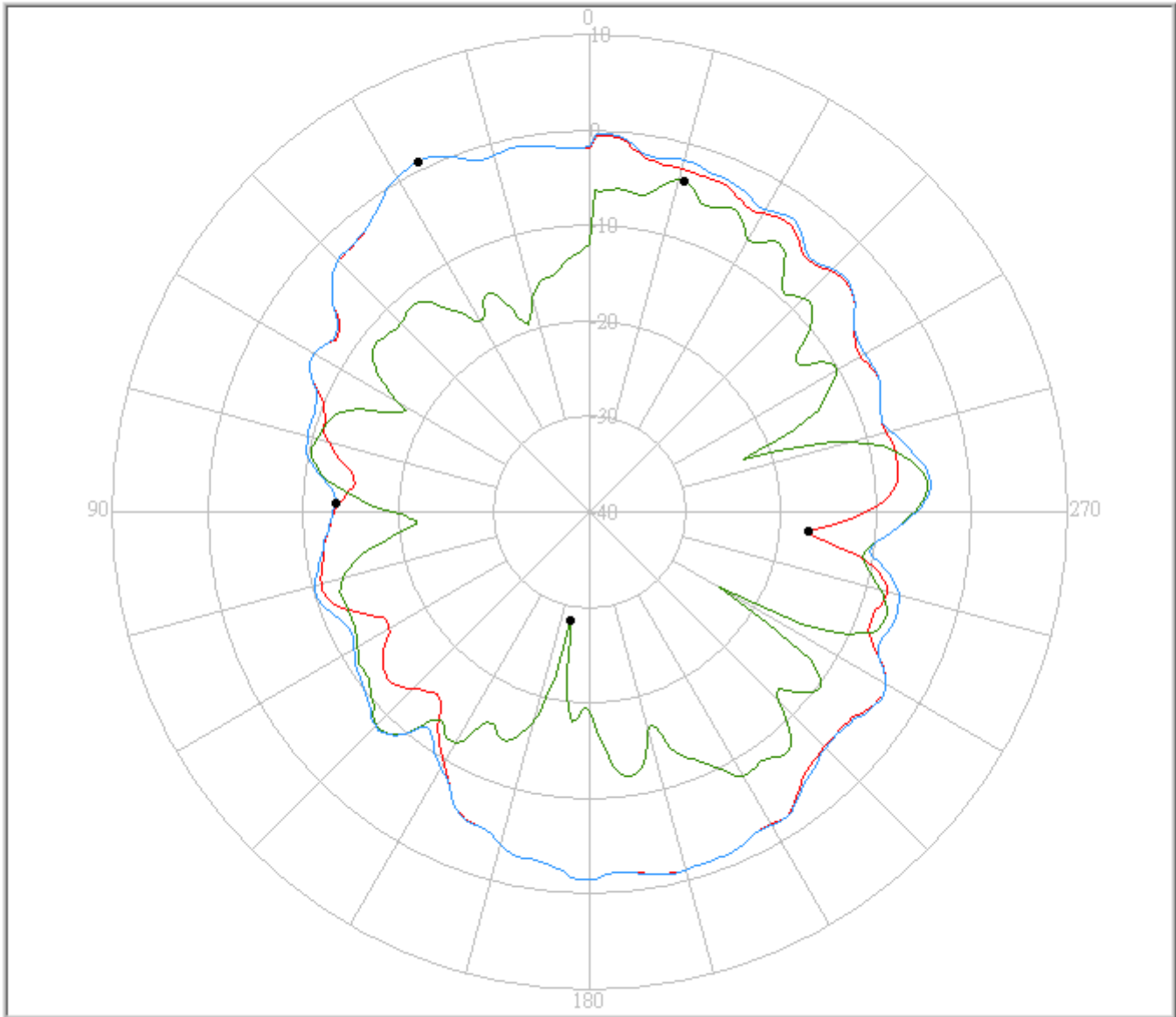
eService for Customer Satisfaction

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5600.00	0.82 / 26.00	-16.94 / 265.00	-4.51	Ver.	2006/9/7
2	XTB70	WLAN-R	5600.00	-4.00 / 344.00	-28.54 / 170.00	-10.20	Hor.	2006/9/7
3	XTB70	WLAN-R	5600.00	0.82 / 26.00	-13.41 / 88.00	-4.15	V+H	2006/9/7

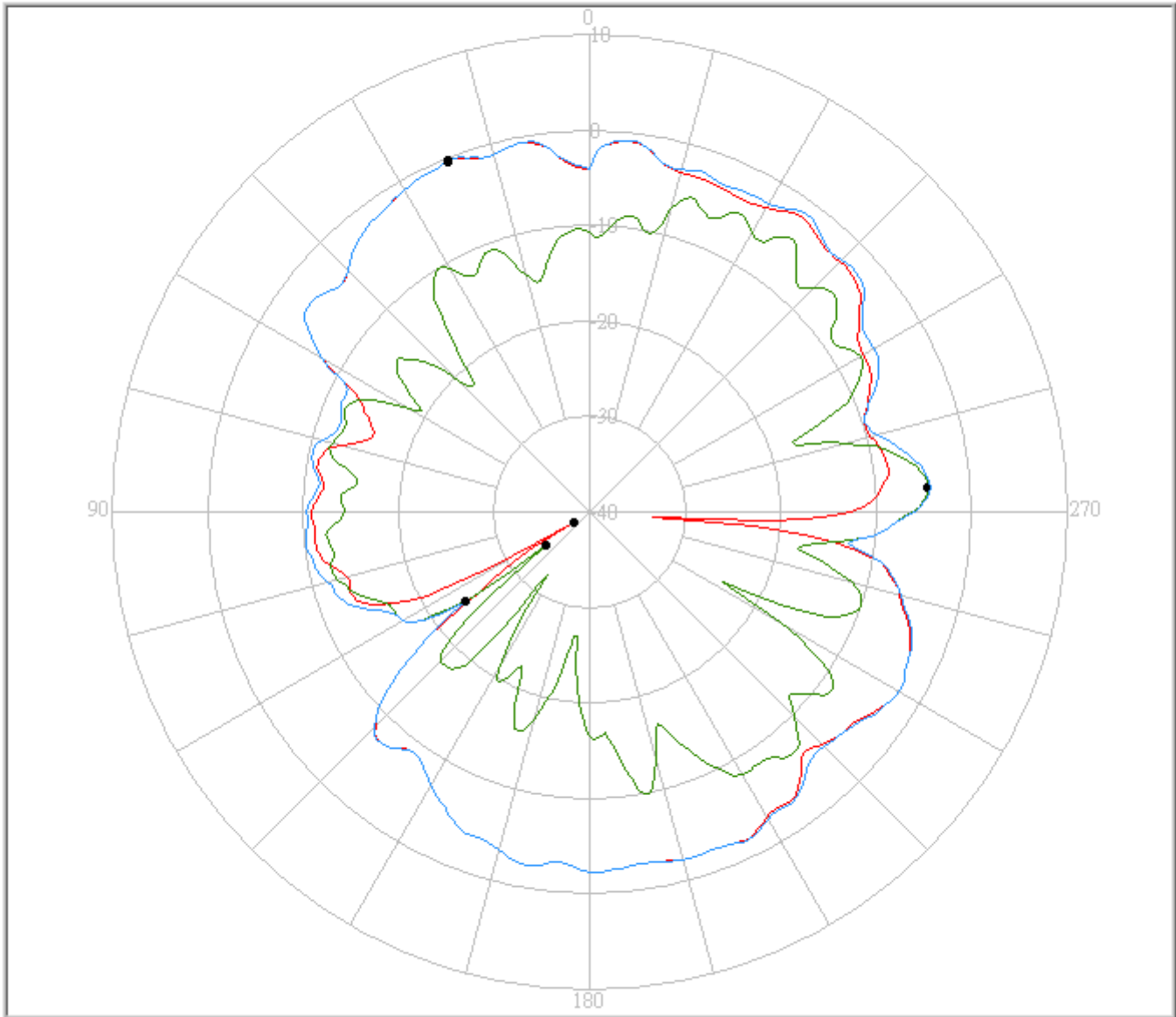
k. 5.725GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5725.00	-0.41 / 22.00	-38.00 / 121.00	-4.53	Ver.	2006/9/7
2	XTB70	WLAN-R	5725.00	-4.48 / 274.00	-34.26 / 128.00	-10.65	Hor.	2006/9/7
3	XTB70	WLAN-R	5725.00	-0.39 / 22.00	-23.98 / 126.00	-4.25	V+H	2006/9/7

# 1. 5.785GHz



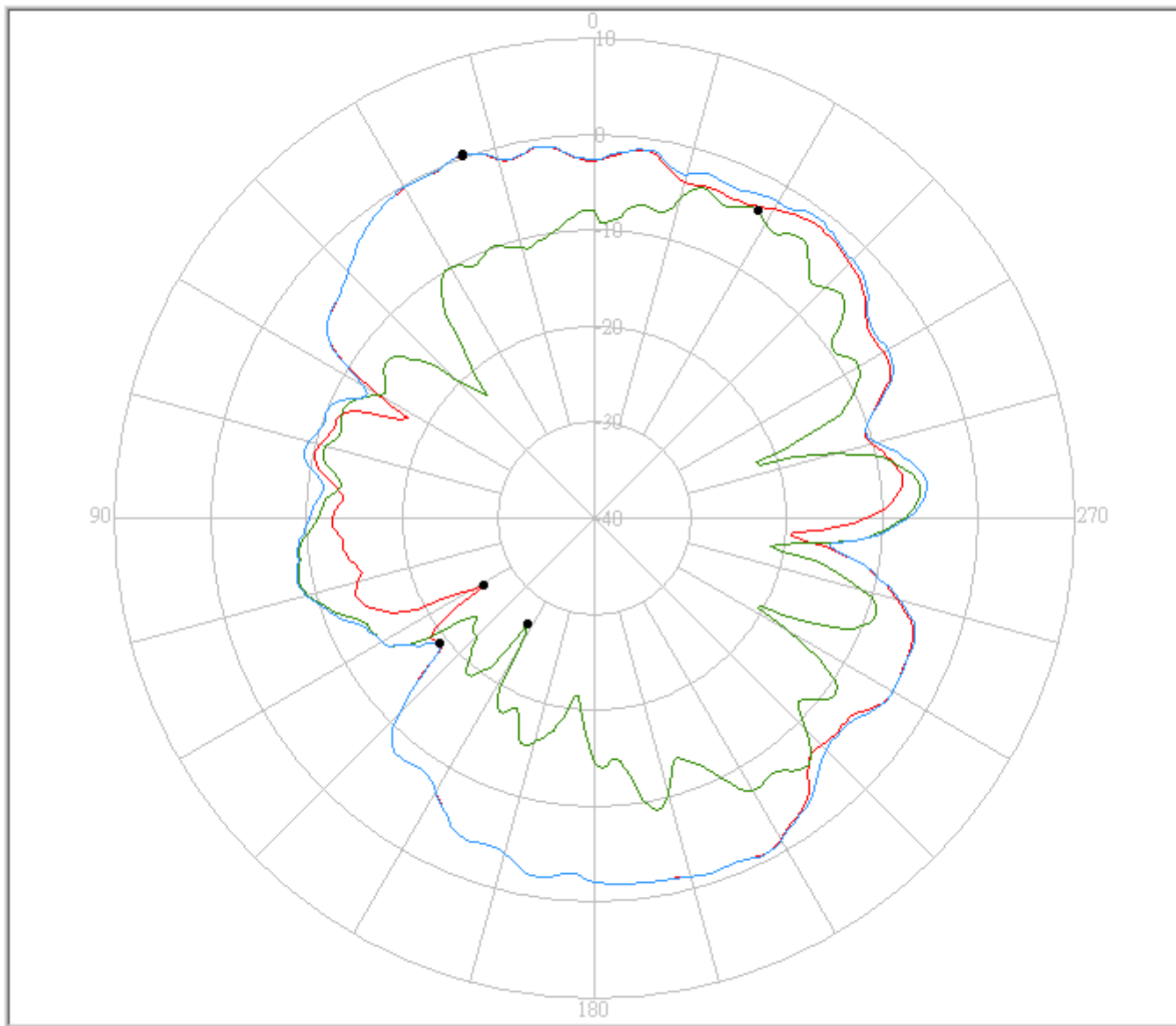
eService for Customer Satisfaction

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5785.00	0.24 / 20.00	-26.62 / 121.00	-4.36	Ver.	2006/9/7
2	XTB70	WLAN-R	5785.00	-3.68 / 332.00	-26.97 / 148.00	-9.77	Hor.	2006/9/7
3	XTB70	WLAN-R	5785.00	0.26 / 20.00	-19.33 / 129.00	-4.01	V+H	2006/9/7

m. 5.85GHz



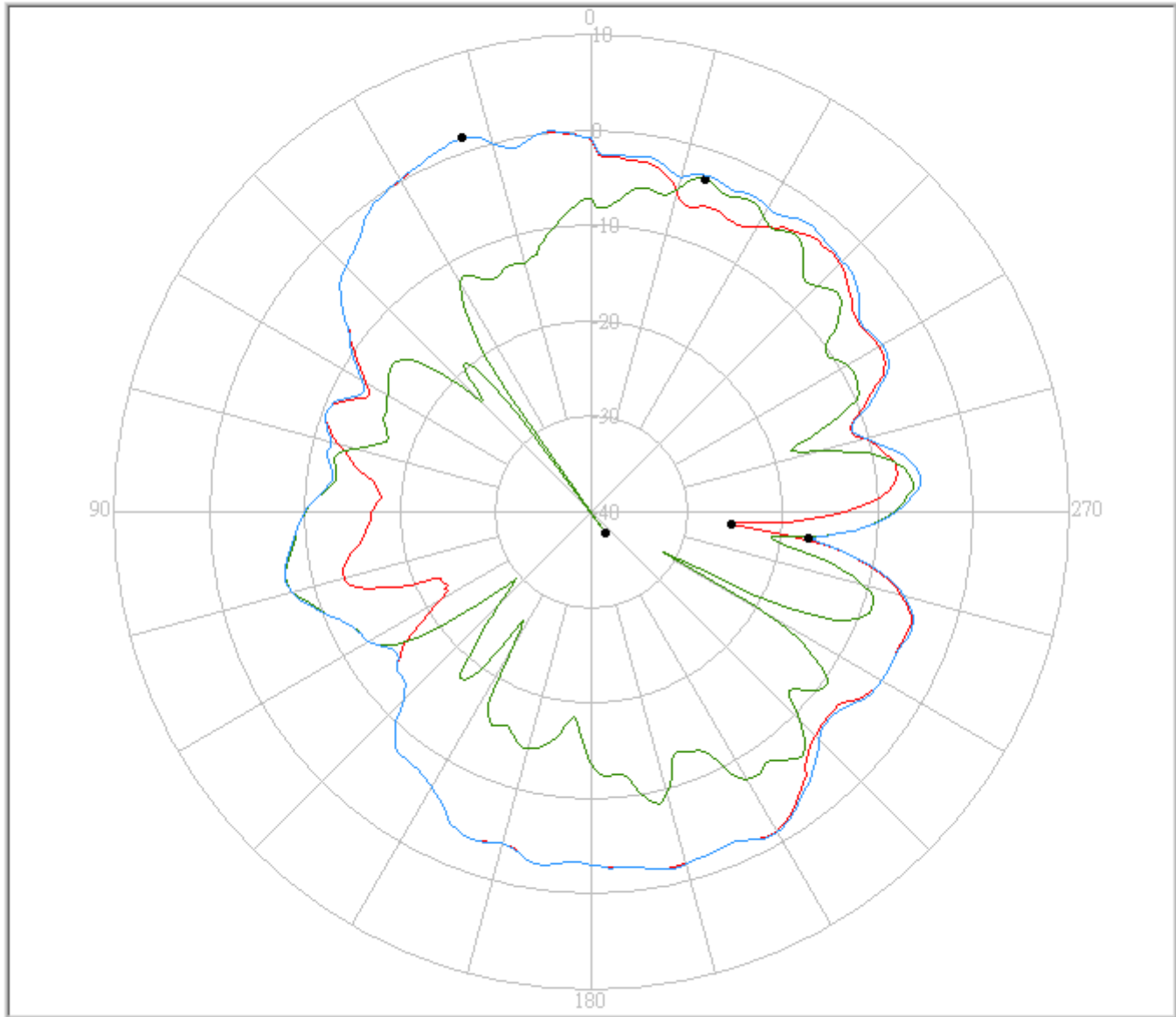
eService for Customer Satisfaction

**FAVORTRON**

**FAVORTRON Co. Ltd**

**Antenna Pattern Measurement**

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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5850.00	1.37 / 19.00	-25.25 / 265.00	-4.61	Ver.	2006/9/7
2	XTB70	WLAN-R	5850.00	-3.17 / 341.00	-42.64 / 36.00	-9.75	Hor.	2006/9/7
3	XTB70	WLAN-R	5850.00	1.37 / 19.00	-17.19 / 263.00	-4.14	V+H	2006/9/7

n. 5.875GHz



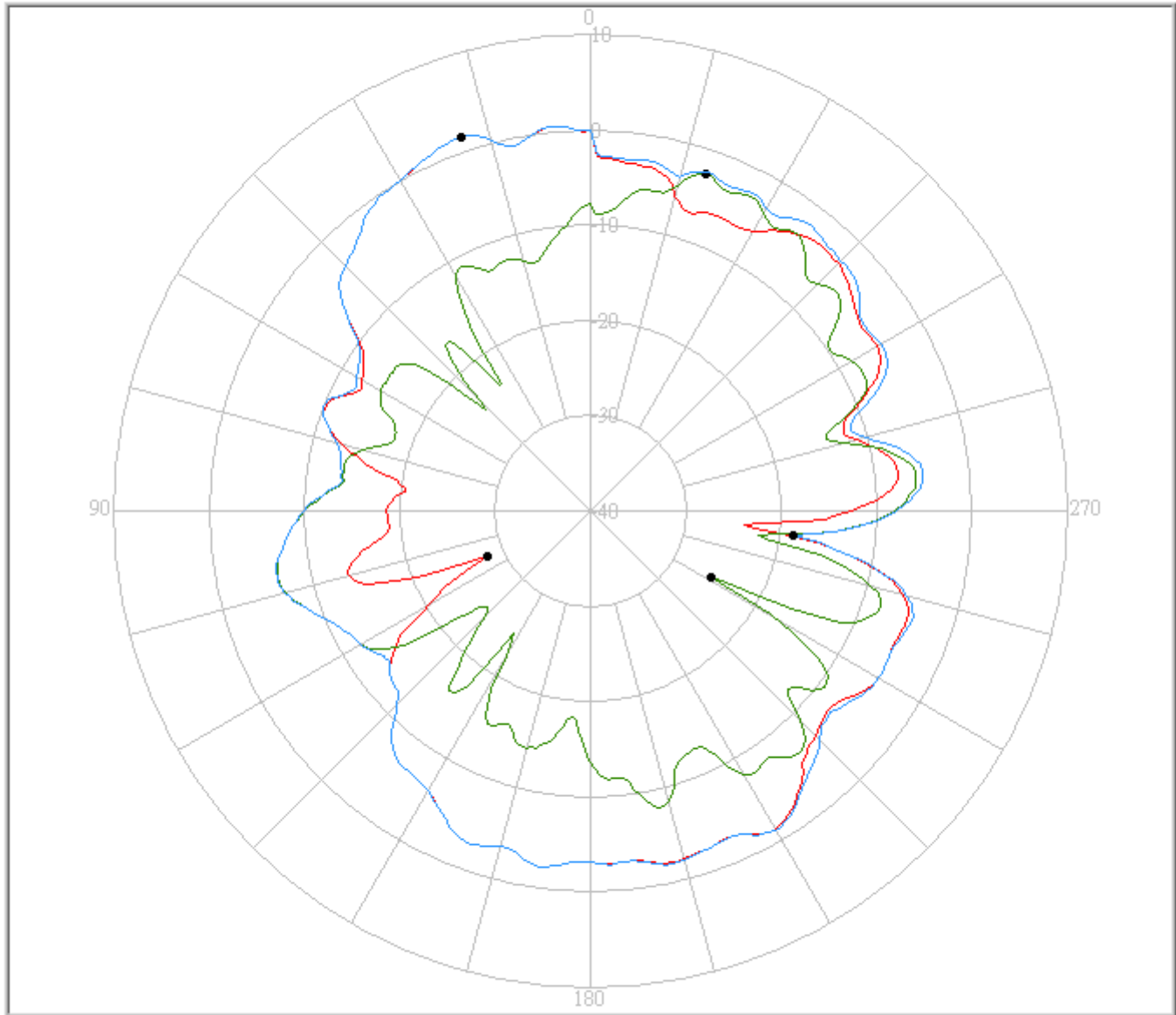
eService for Customer Satisfaction

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**Antenna Pattern Measurement**

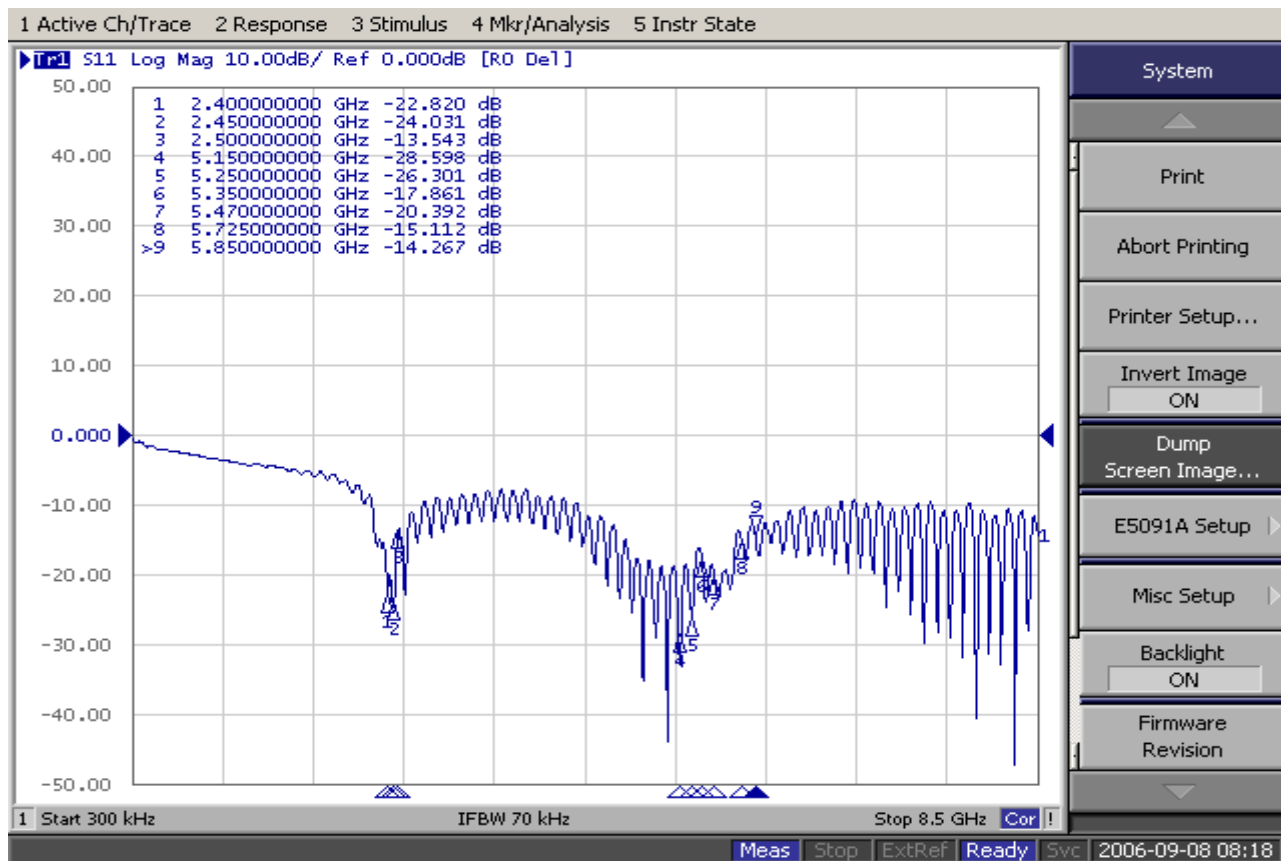
4F, No. 108-1, Min Chuan Rd., Hsin-Tien City, Taipei, Taiwan, R.O.C. Tel:886-2-2218-2189,  
Fax:886-2-2218-5760



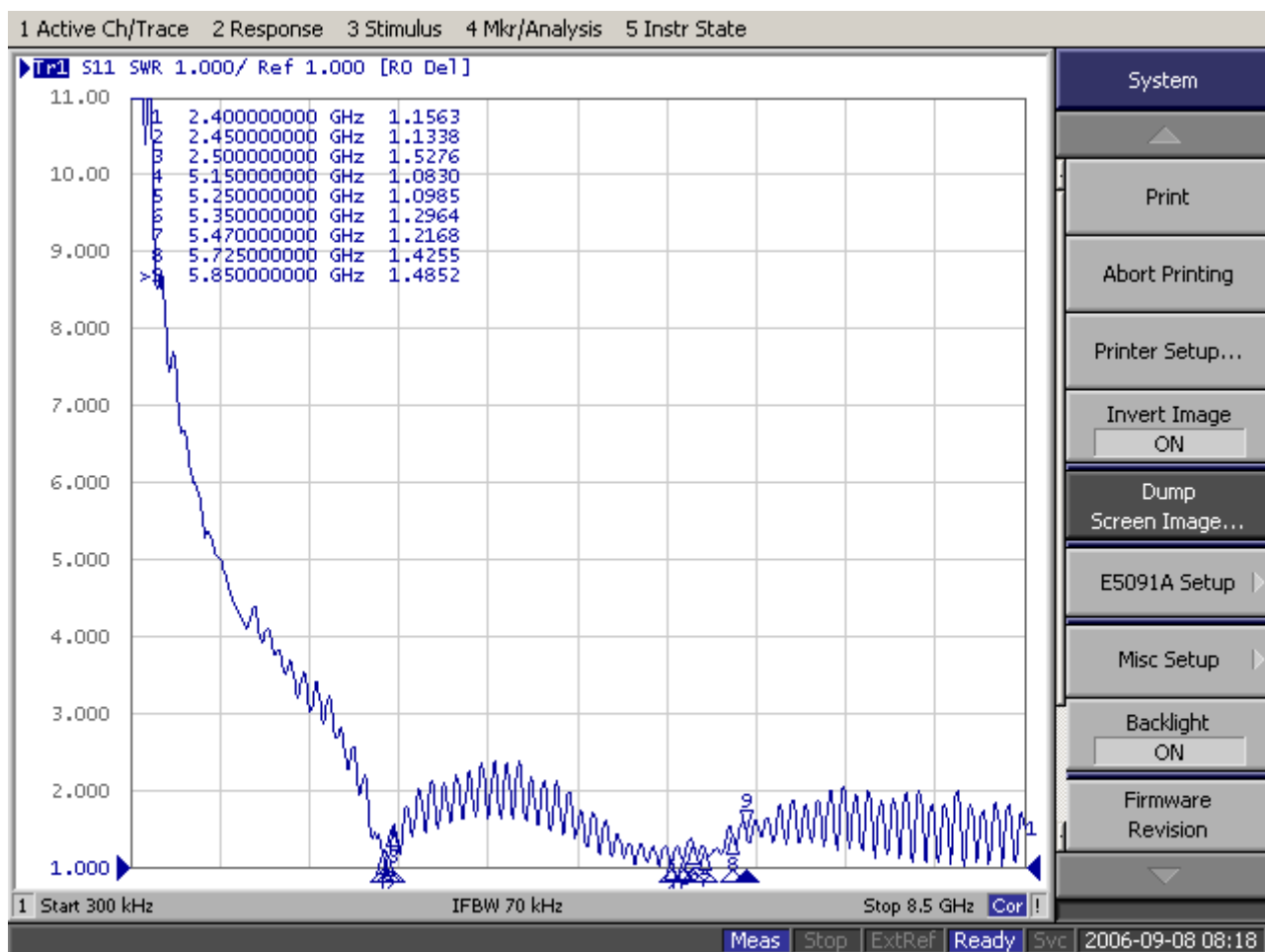
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-R	5875.00	1.45 / 19.00	-28.14 / 114.00	-4.62	Ver.	2006/9/7
2	XTB70	WLAN-R	5875.00	-2.70 / 341.00	-25.52 / 241.00	-9.44	Hor.	2006/9/7
3	XTB70	WLAN-R	5875.00	1.46 / 19.00	-18.51 / 263.00	-4.07	V+H	2006/9/7

## 7.WLAN.( Left )

### 2.4~2.5GHZ & 5.15~5.875GHZ / Return Loss



### 2.4~2.5GHZ & 5.15~5.875GHZ / VSWR





## 8. Gain & Pattern – WLAN. ( Left )

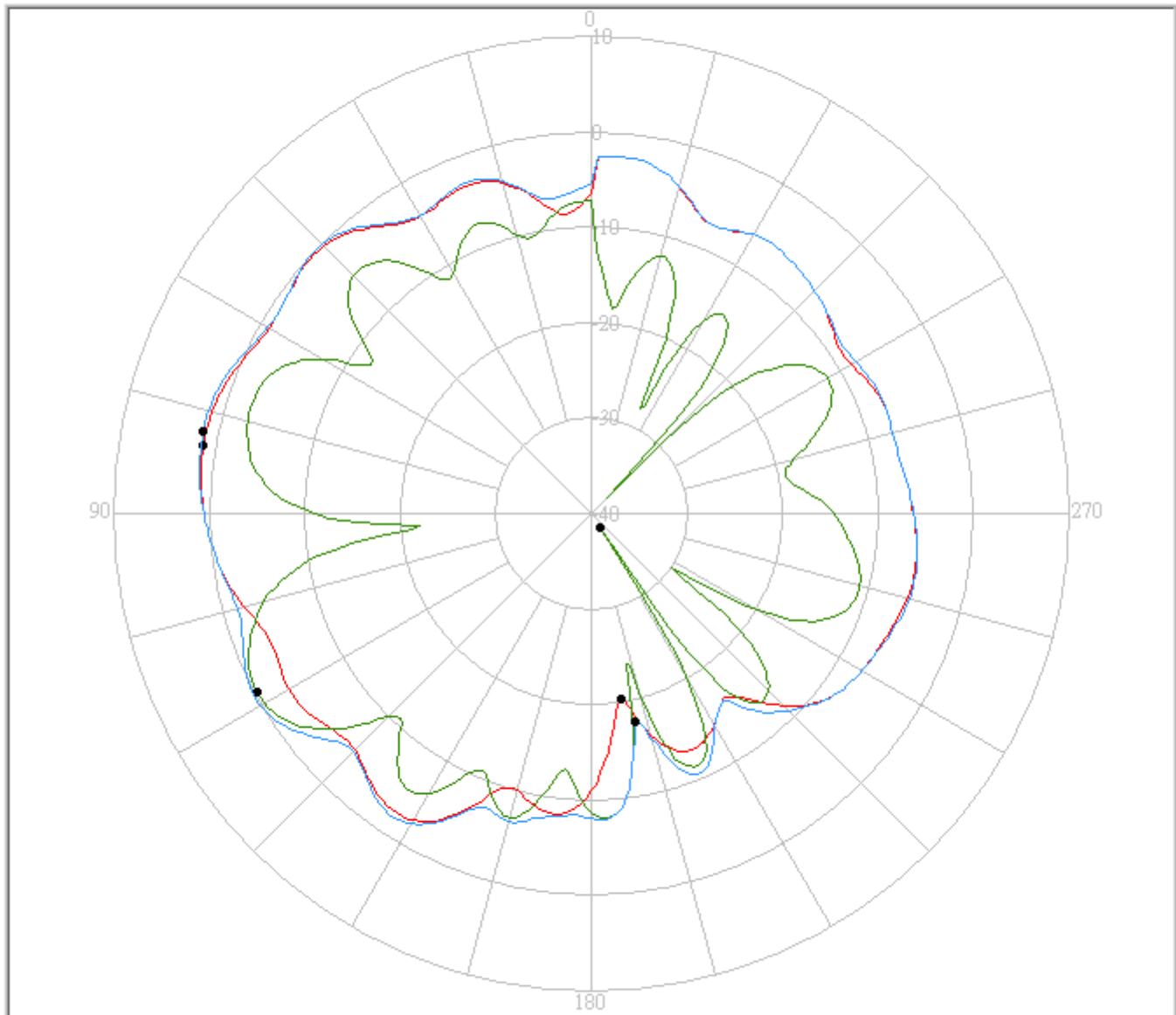
### a. 2.4GHz



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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	2400.00	1.26 / 80.00	-20.31 / 189.00	-4.17	Ver.	2006/9/7
2	XTB70	WLAN-L	2400.00	-0.34 / 118.00	-38.34 / 213.00	-8.20	Hor.	2006/9/7
3	XTB70	WLAN-L	2400.00	1.50 / 78.00	-17.63 / 192.00	-3.63	V+H	2006/9/7

## b. 2.45GHz



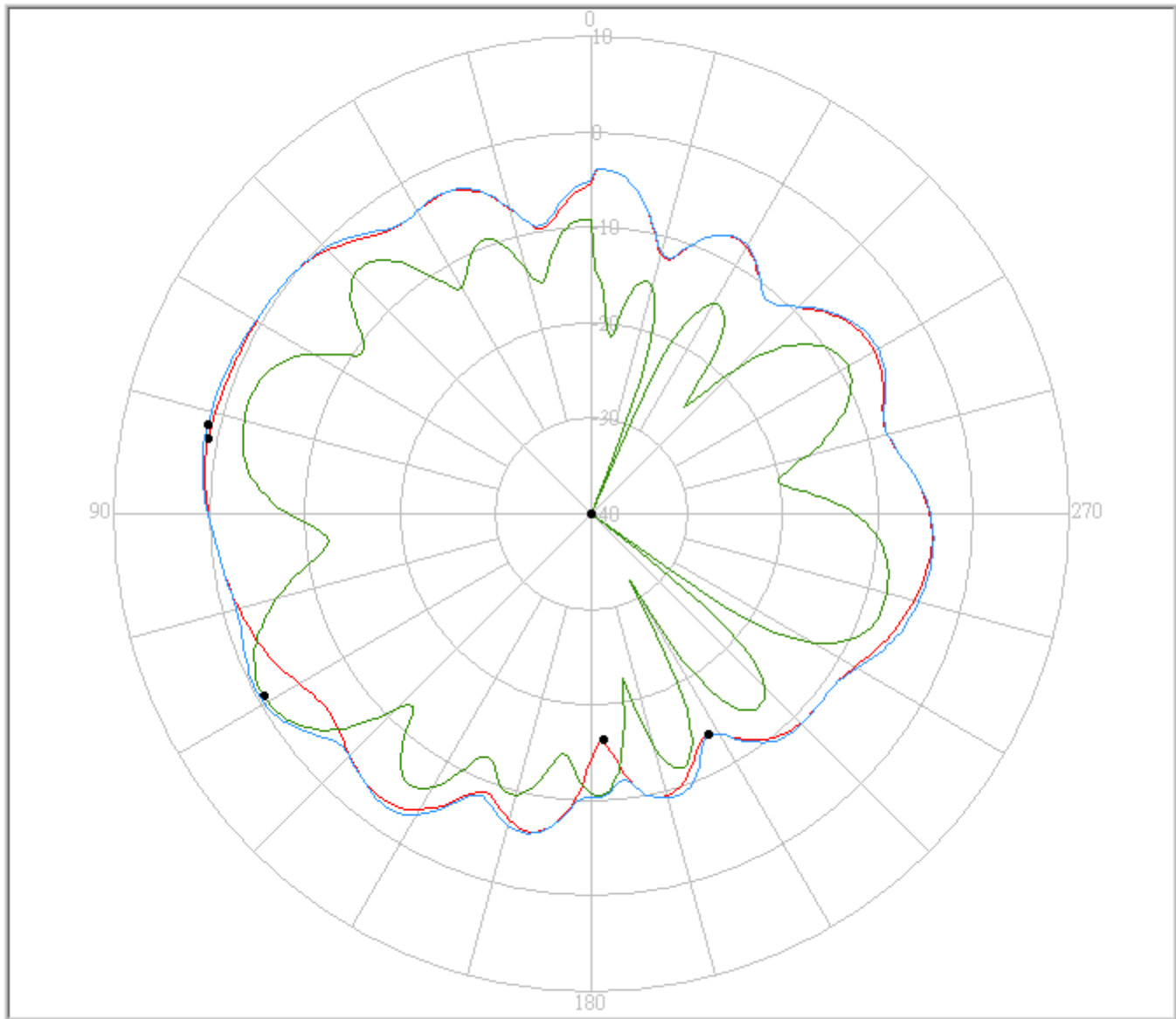
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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	2450.00	0.86 / 79.00	-16.36 / 183.00	-4.27	Ver.	2006/9/7
2	XTB70	WLAN-L	2450.00	-0.76 / 119.00	-42.73 / 233.00	-8.29	Hor.	2006/9/7
3	XTB70	WLAN-L	2450.00	1.24 / 77.00	-13.84 / 208.00	-3.78	V+H	2006/9/7

c. 2.5GHz



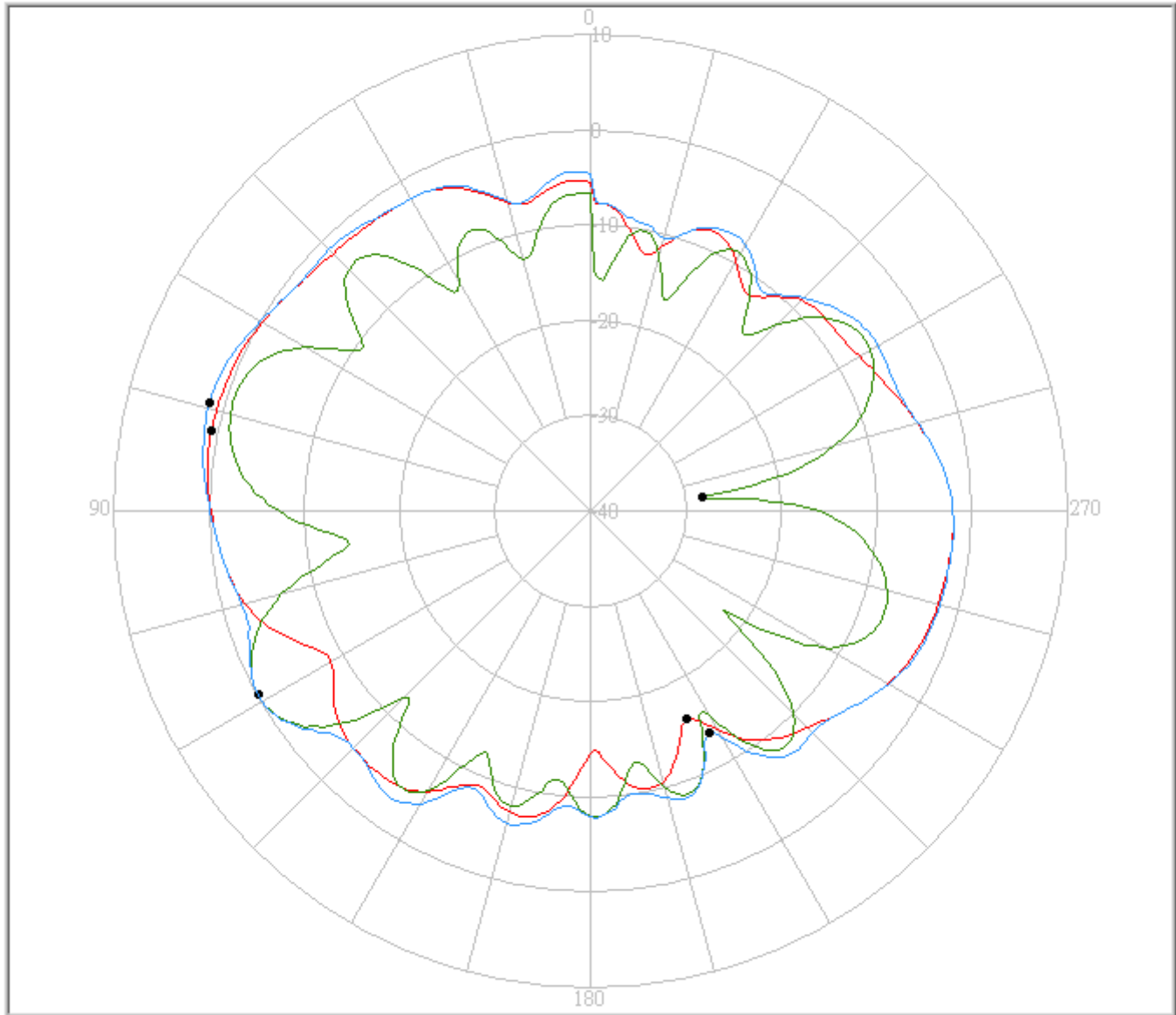
eService for Customer Satisfaction

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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	2500.00	0.62 / 78.00	-15.99 / 205.00	-4.24	Ver.	2006/9/7
2	XTB70	WLAN-L	2500.00	-0.21 / 119.00	-28.11 / 277.00	-7.10	Hor.	2006/9/7
3	XTB70	WLAN-L	2500.00	1.48 / 74.00	-13.61 / 208.00	-3.43	V+H	2006/9/7

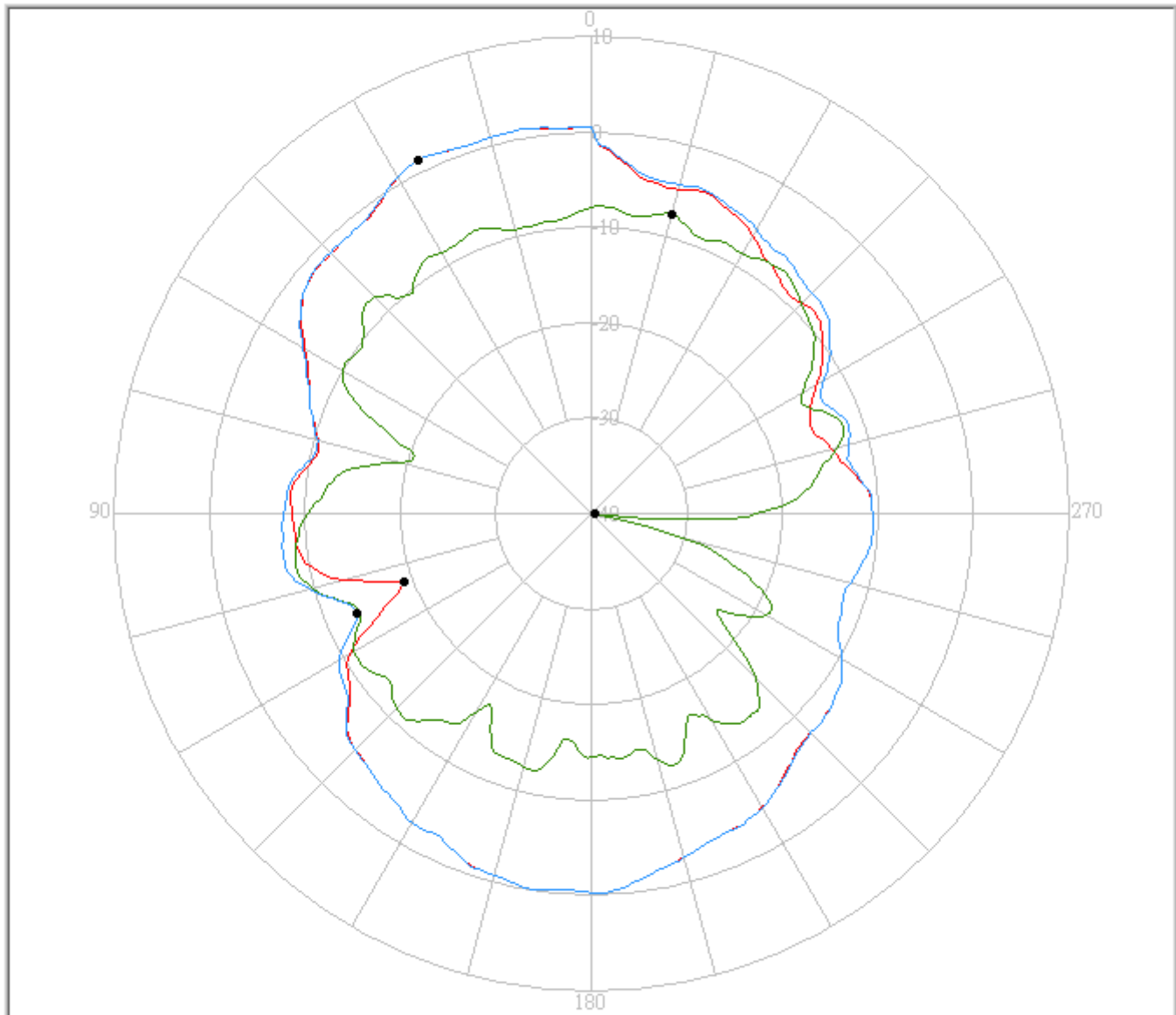
## d. 4.9GHZ



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	4900.00	1.16 / 26.00	-19.21 / 110.00	-4.14	Ver.	2006/9/7
2	XTB70	WLAN-L	4900.00	-7.54 / 345.00	-39.62 / 260.00	-11.38	Hor.	2006/9/7
3	XTB70	WLAN-L	4900.00	1.19 / 26.00	-13.35 / 113.00	-3.97	V+H	2006/9/7

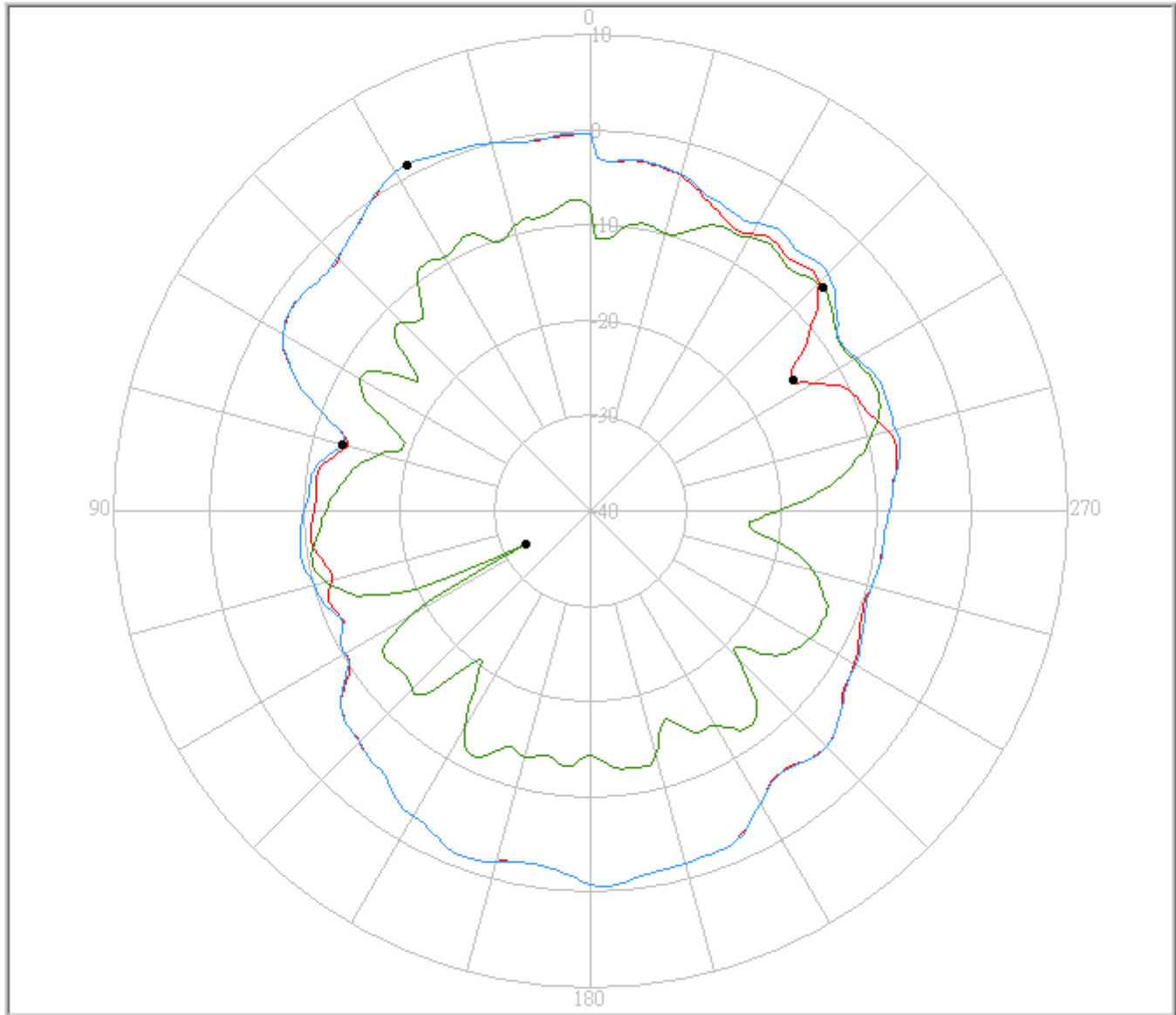
e. 5.075GHZ



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5075.00	1.08 / 28.00	-14.77 / 303.00	-4.16	Ver.	2006/9/7
2	XTB70	WLAN-L	5075.00	-6.24 / 314.00	-32.47 / 117.00	-11.20	Hor.	2006/9/7
3	XTB70	WLAN-L	5075.00	1.10 / 28.00	-13.16 / 75.00	-3.95	V+H	2006/9/7

# f. 5.15GHZ



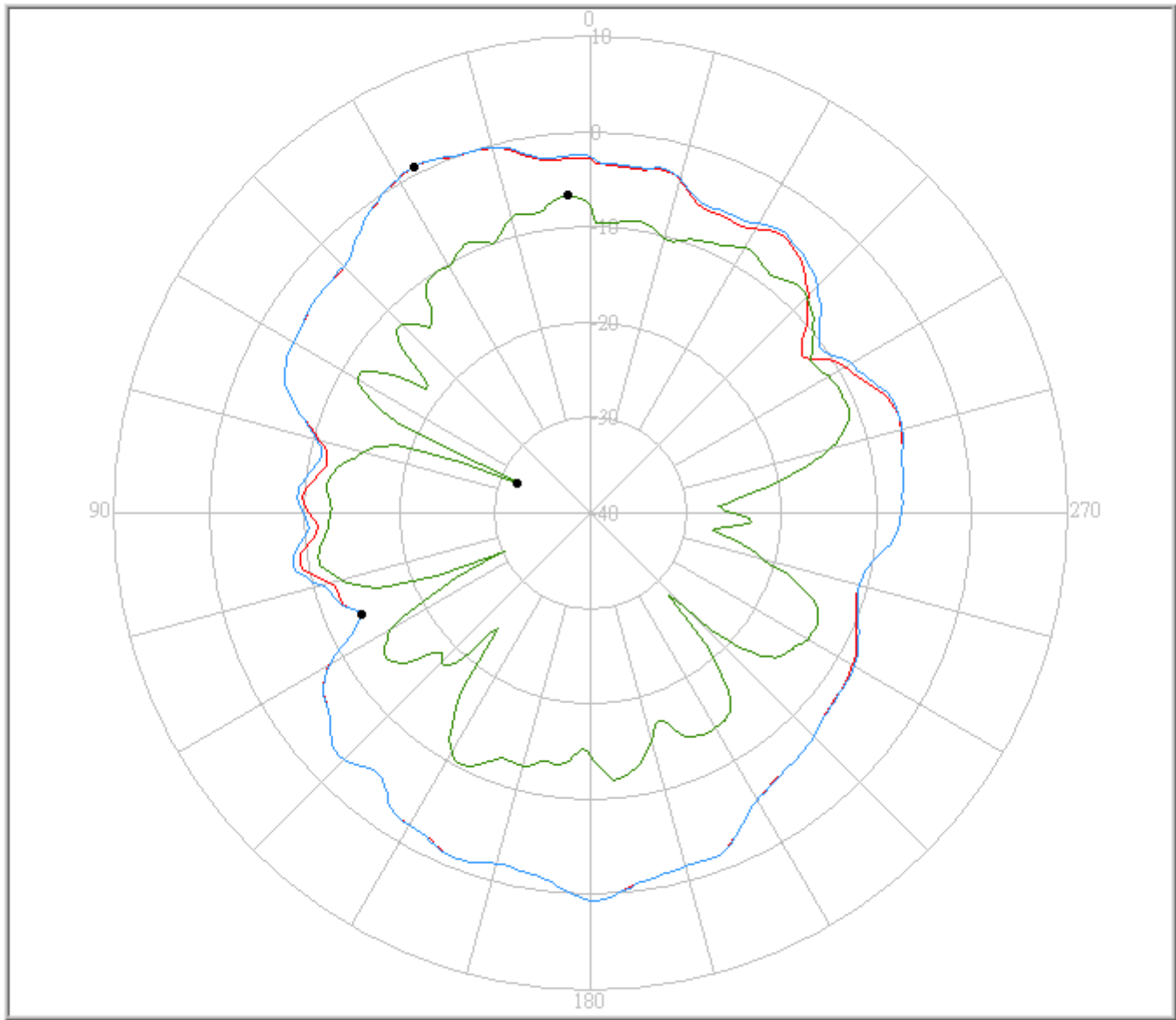
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5150.00	0.72 / 27.00	-13.81 / 114.00	-4.17	Ver.	2006/9/7
2	XTB70	WLAN-L	5150.00	-6.66 / 4.00	-31.74 / 68.00	-12.12	Hor.	2006/9/7
3	XTB70	WLAN-L	5150.00	0.74 / 27.00	-13.81 / 114.00	-4.06	V+H	2006/9/7

g. 5.25GHz



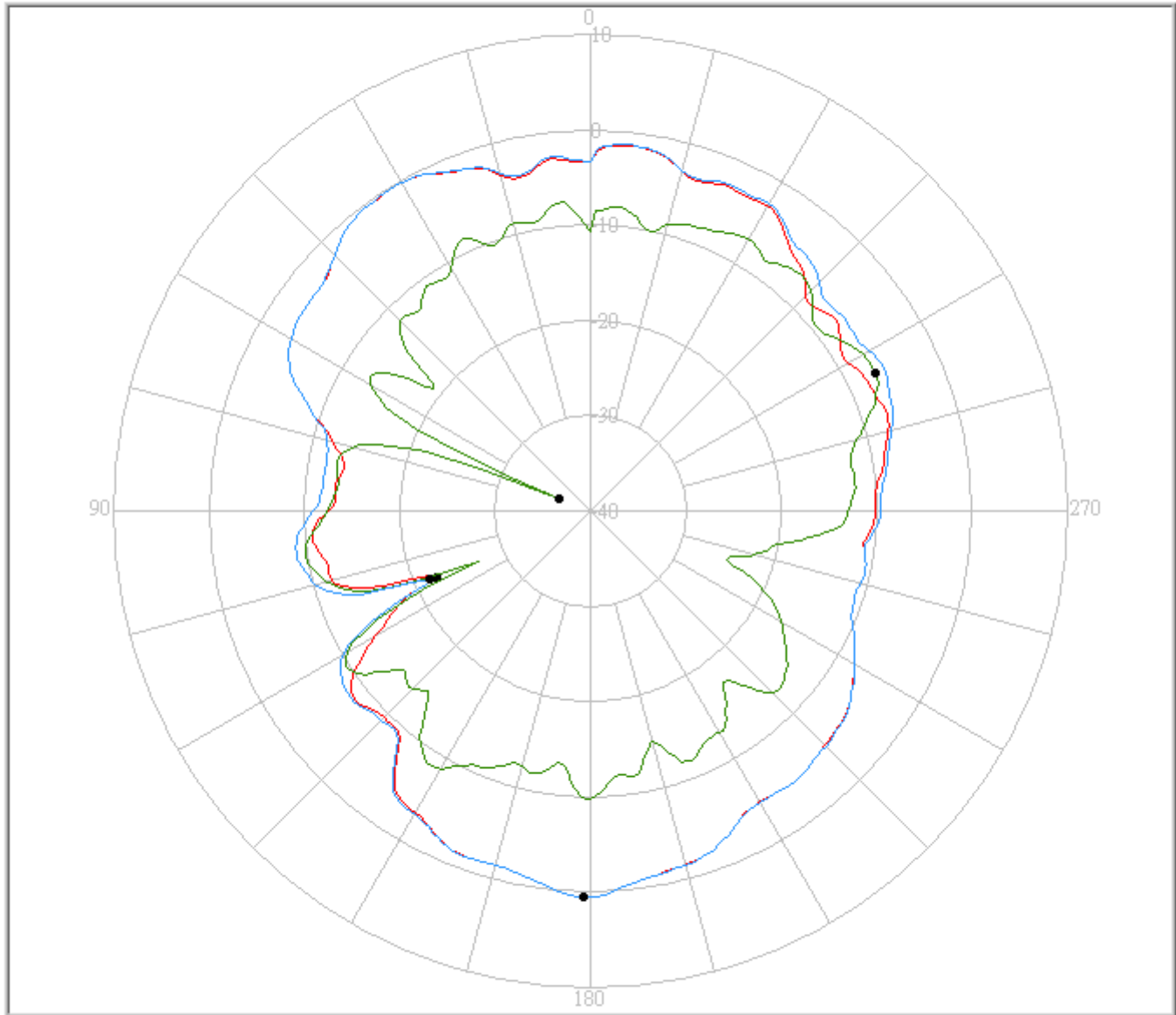
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5250.00	0.55 / 179.00	-22.41 / 113.00	-4.35	Ver.	2006/9/7
2	XTB70	WLAN-L	5250.00	-6.79 / 296.00	-36.39 / 68.00	-10.96	Hor.	2006/9/7
3	XTB70	WLAN-L	5250.00	0.57 / 179.00	-21.76 / 113.00	-4.15	V+H	2006/9/7

h. 5.35GHz



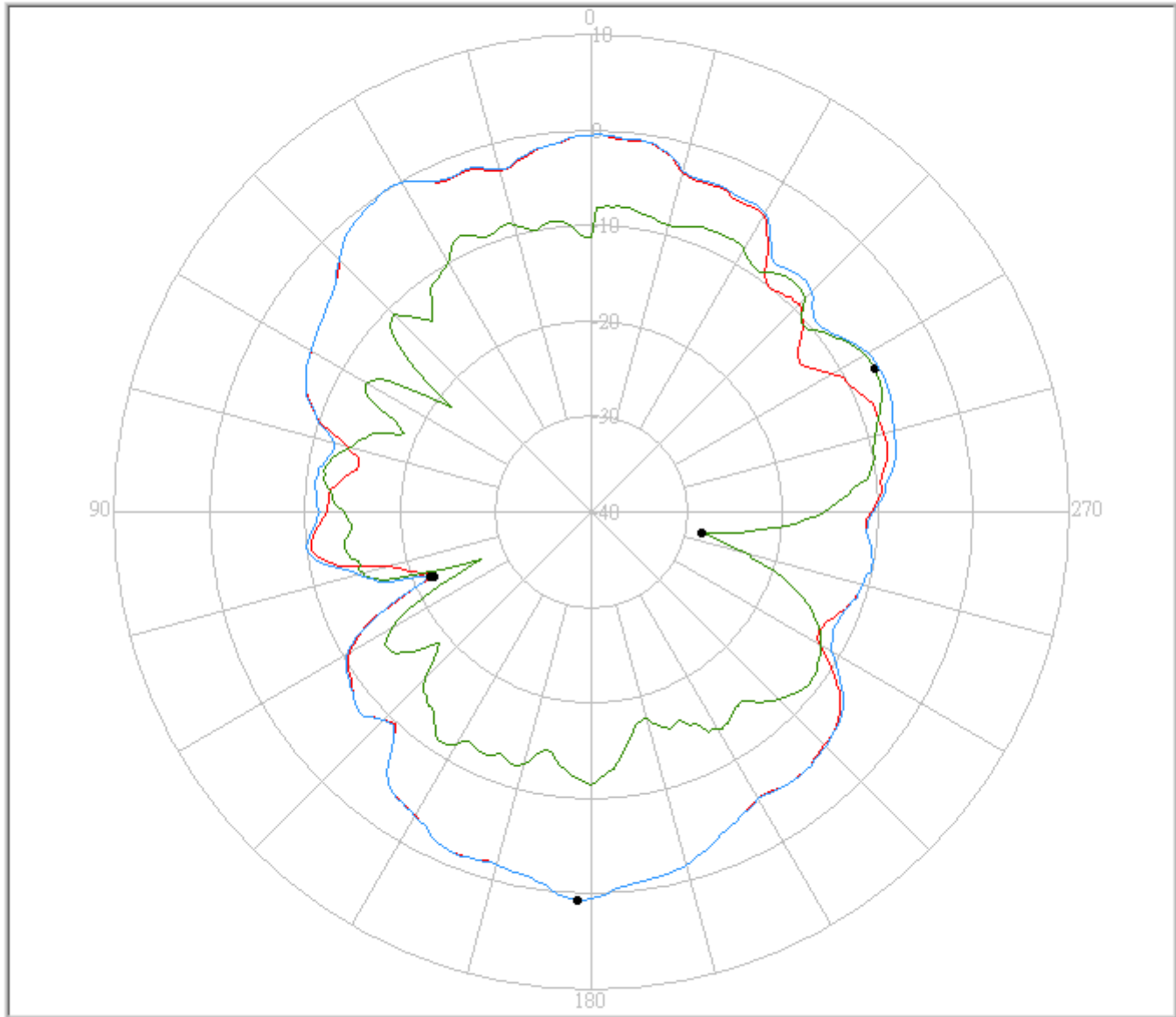
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5350.00	0.73 / 178.00	-22.15 / 112.00	-4.56	Ver.	2006/9/7
2	XTB70	WLAN-L	5350.00	-6.78 / 297.00	-28.16 / 259.00	-11.47	Hor.	2006/9/7
3	XTB70	WLAN-L	5350.00	0.73 / 178.00	-21.74 / 112.00	-4.35	V+H	2006/9/7



## i. 5.47GHz



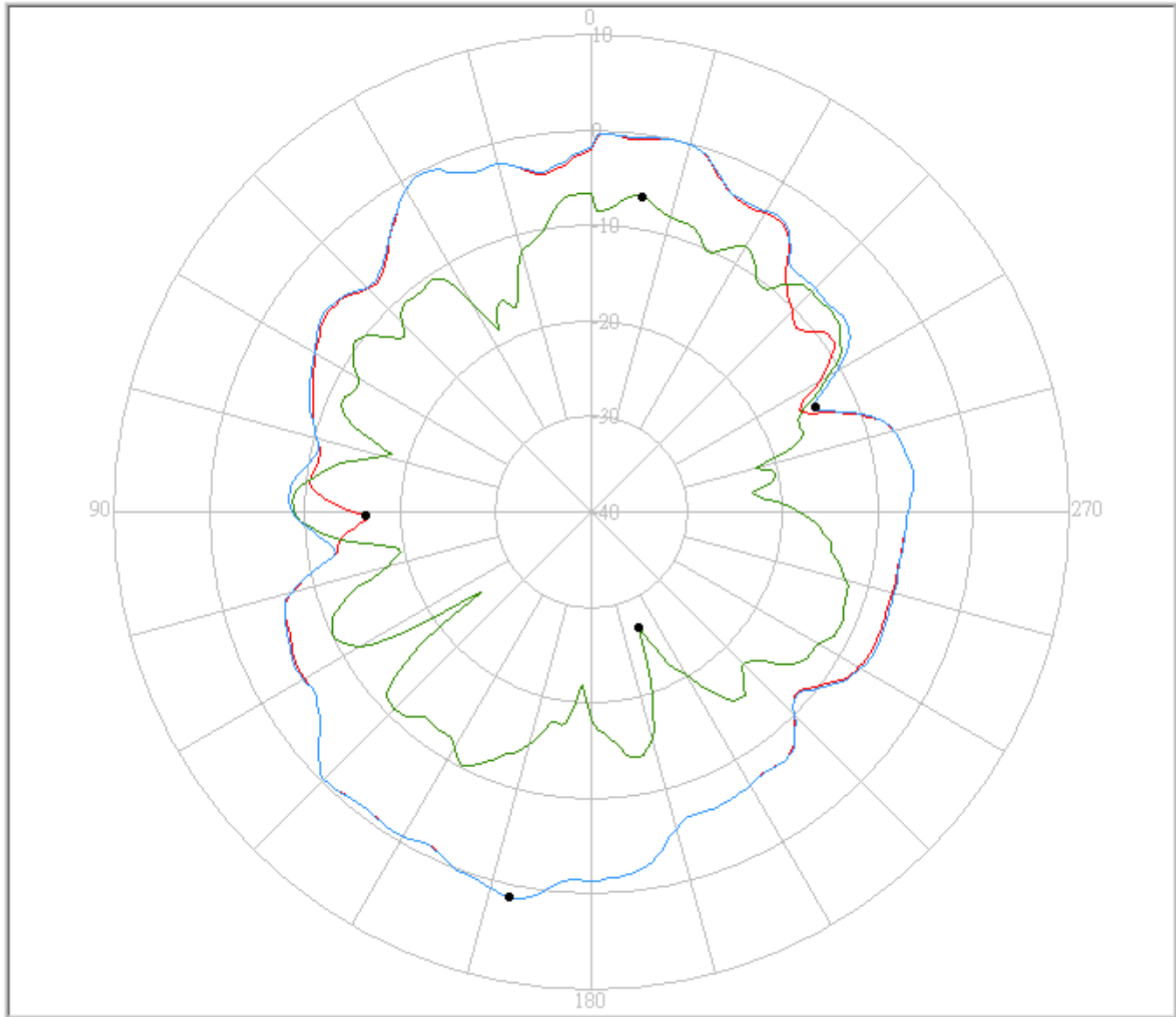
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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5470.00	1.28 / 168.00	-16.41 / 91.00	-4.16	Ver.	2006/9/7
2	XTB70	WLAN-L	5470.00	-6.55 / 351.00	-26.96 / 202.00	-11.73	Hor.	2006/9/7
3	XTB70	WLAN-L	5470.00	1.28 / 168.00	-14.06 / 295.00	-3.99	V+H	2006/9/7

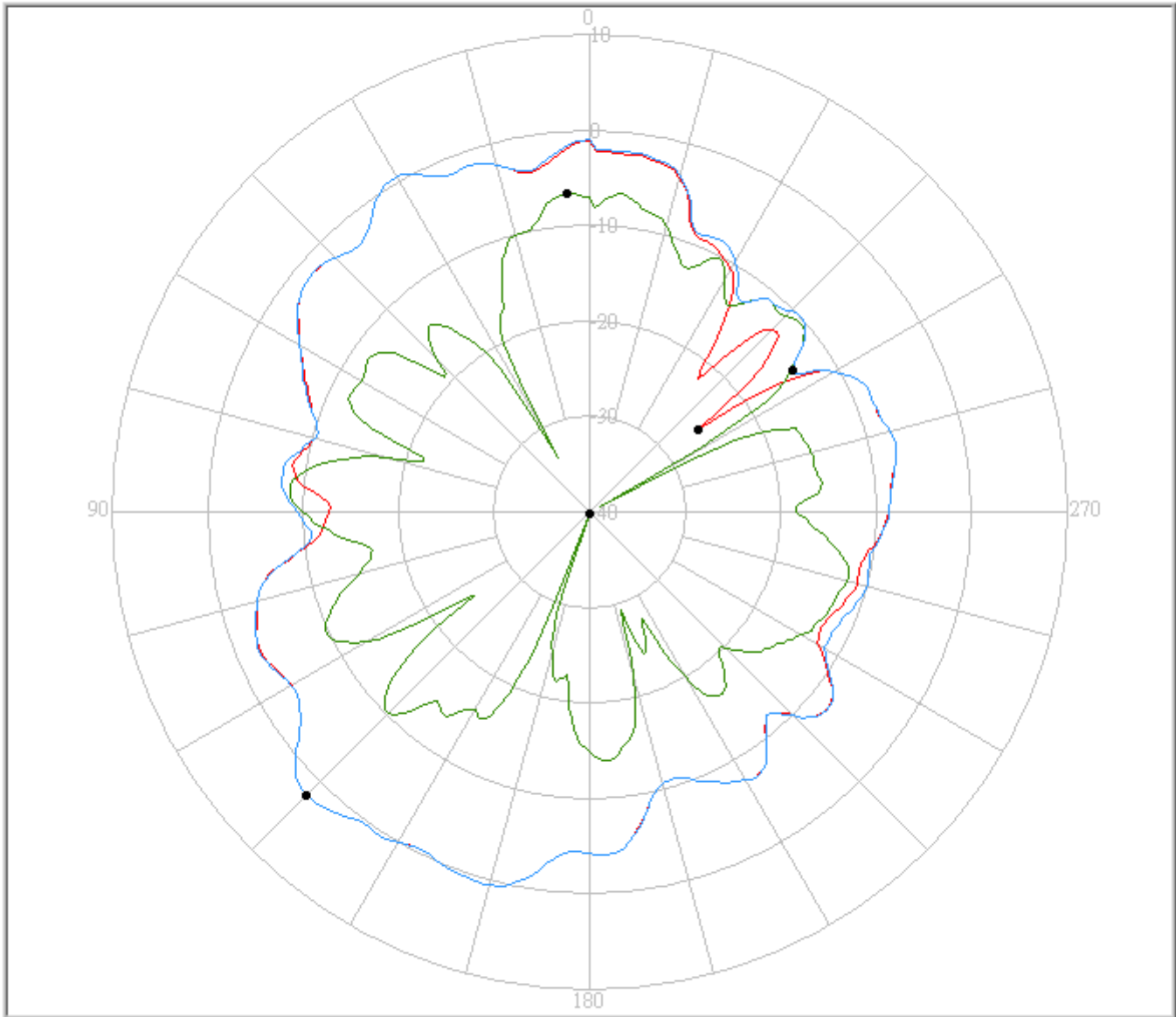
j. 5.6GHz



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## Antenna Pattern Measurement

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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5600.00	1.86 / 135.00	-25.71 / 307.00	-4.20	Ver.	2006/9/7
2	XTB70	WLAN-L	5600.00	-6.55 / 4.00	-39.81 / 160.00	-13.01	Hor.	2006/9/7
3	XTB70	WLAN-L	5600.00	1.87 / 135.00	-14.10 / 305.00	-4.08	V+H	2006/9/7

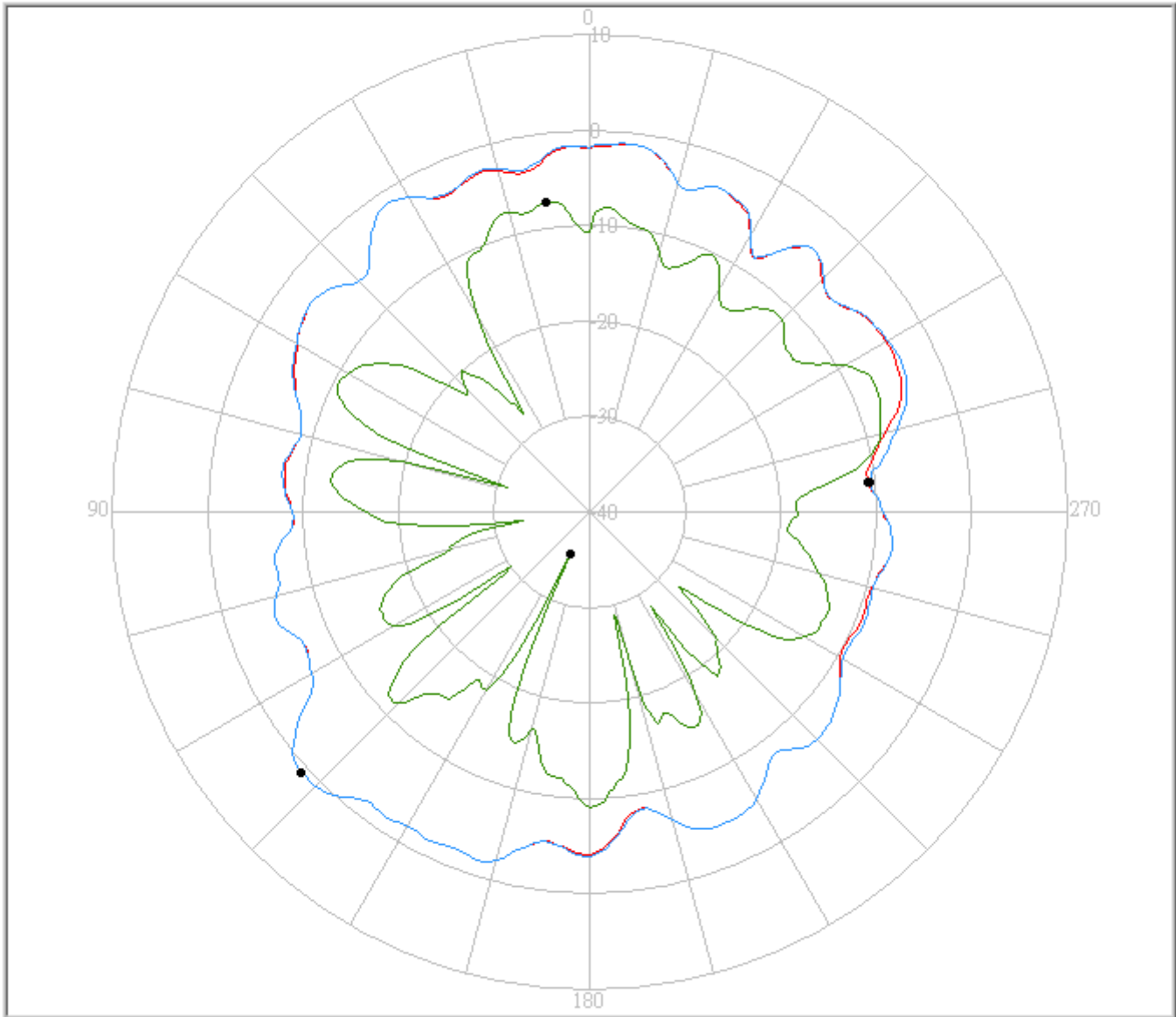
k. 5.725GHz



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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5725.00	0.69 / 132.00	-10.73 / 276.00	-4.52	Ver.	2006/9/7
2	XTB70	WLAN-L	5725.00	-7.21 / 8.00	-35.11 / 155.00	-12.87	Hor.	2006/9/7
3	XTB70	WLAN-L	5725.00	0.70 / 132.00	-10.54 / 276.00	-4.43	V+H	2006/9/7

# 1. 5.785GHz



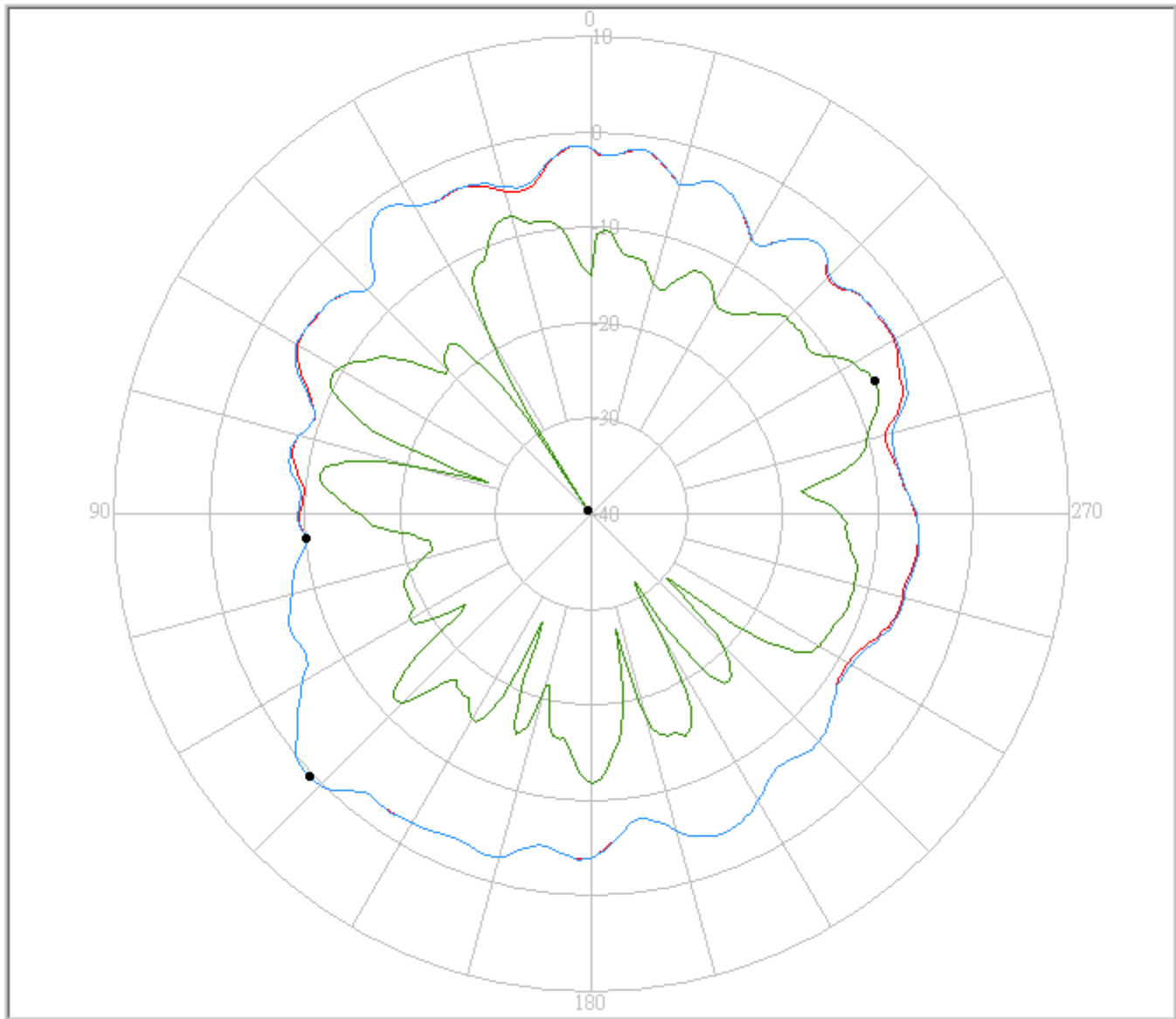
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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5785.00	0.38 / 133.00	-10.08 / 95.00	-4.55	Ver.	2006/9/7
2	XTB70	WLAN-L	5785.00	-7.25 / 295.00	-39.48 / 33.00	-13.25	Hor.	2006/9/7
3	XTB70	WLAN-L	5785.00	0.39 / 133.00	-10.05 / 95.00	-4.47	V+H	2006/9/7

m. 5.85GHz



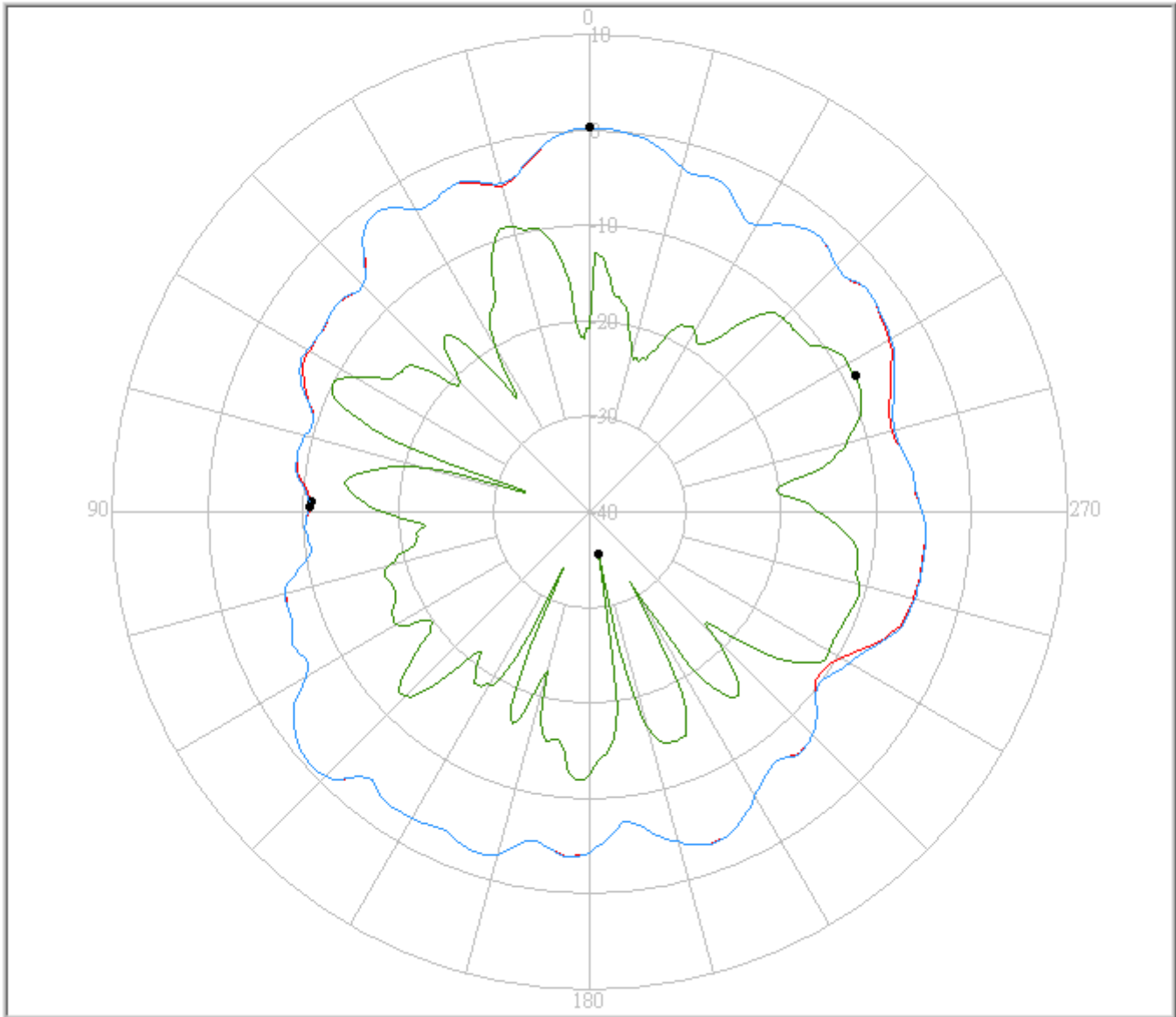
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5850.00	0.21 / 0.00	-10.84 / 88.00	-4.28	Ver.	2006/9/7
2	XTB70	WLAN-L	5850.00	-8.73 / 297.00	-35.50 / 191.00	-14.31	Hor.	2006/9/7
3	XTB70	WLAN-L	5850.00	0.21 / 0.00	-10.71 / 89.00	-4.23	V+H	2006/9/7

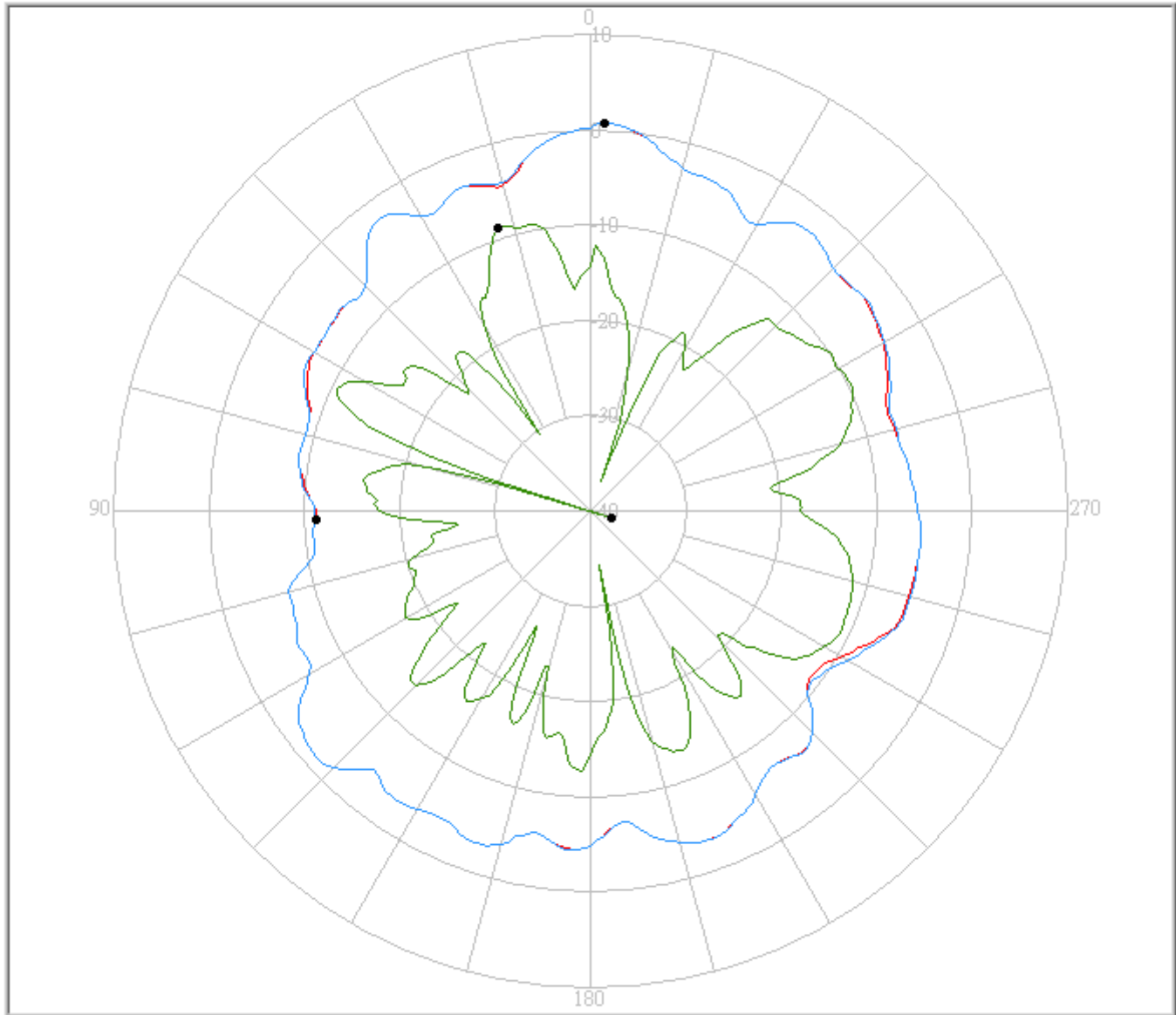
n. 5.875GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	XTB70	WLAN-L	5875.00	0.67 / 358.00	-11.27 / 92.00	-4.61	Ver.	2006/9/7
2	XTB70	WLAN-L	5875.00	-8.78 / 18.00	-42.26 / 73.00	-14.80	Hor.	2006/9/7
3	XTB70	WLAN-L	5875.00	0.68 / 358.00	-11.23 / 92.00	-4.57	V+H	2006/9/7