

DATE : 2008/03/24

CUSTOMER : CLEVO CO.

APPROVAL SHEET

MODEL	M760
DESCRIPTION	PIFA For Bluetooth Antenna 2.4~2.5GHZ / 5.15~5.875GHZ
SUPPLIER P/N	K05007005002
CUSTOMER P/N	6-23-7M76S-051
FILE P/N	

FAVORTRON			CUSTOMER	
Manager	Supervisor	Engineer		
Dominic	Vincent	Kristy		

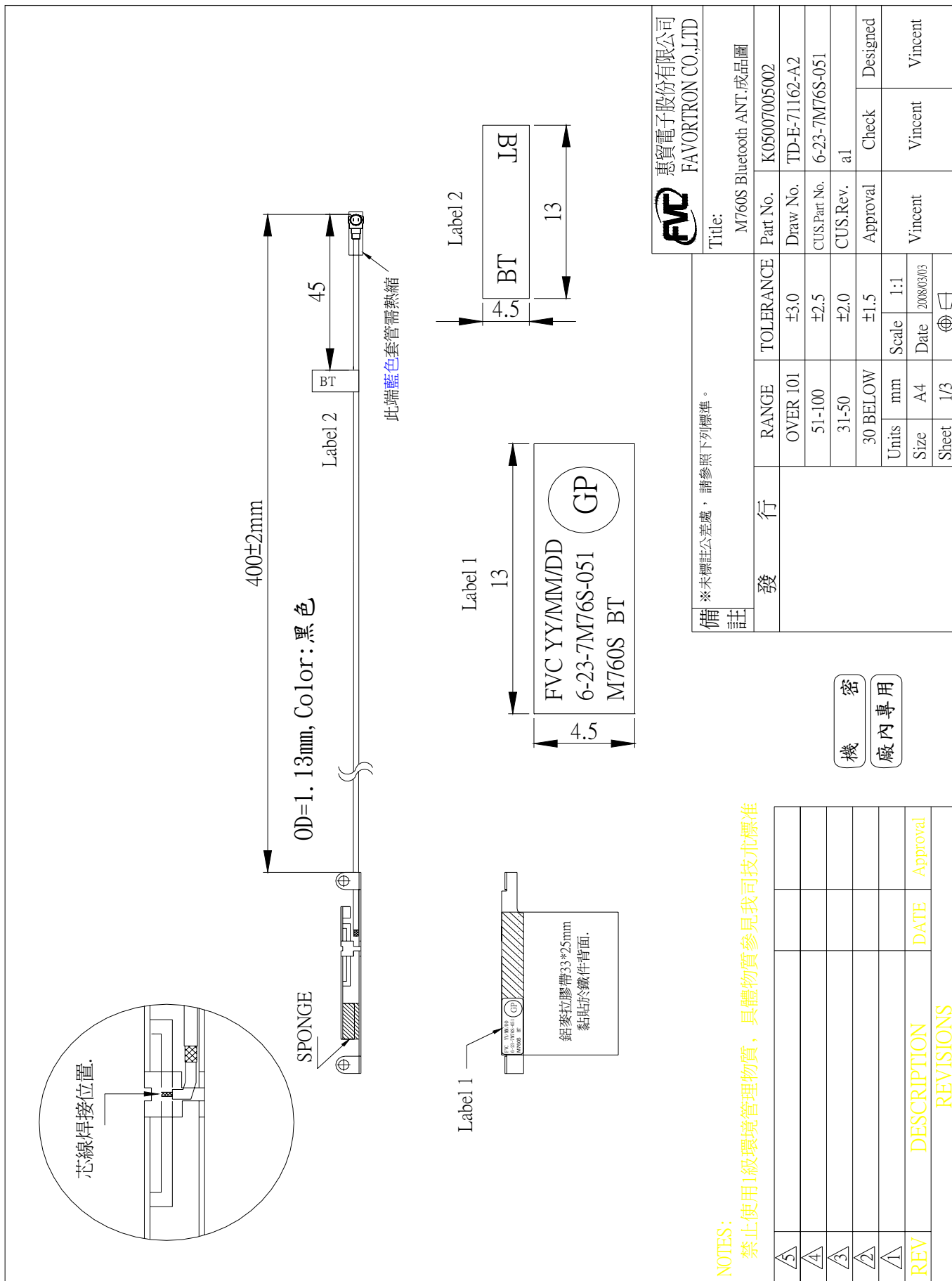


惠貿電子股份有限公司
FAVORTRON CO., LTD

台北縣新店市民權路 108-1 號 4F
4F, No. 108-1, Minchziuan Rd., SHzindian City,
Taipei HZsien 231, Taiwan. R.O.C

TEL: (02) 2218-2189
FAX: (02) 2218-5420
[URL: www.fvc.com.tw](http://www.fvc.com.tw)

1. DRAWING ASSEMBLY



惠質電子股份有限公司 FAVORTRON CO., LTD	
Title:	M760S Bluetooth ANT. 成品圖
Part No.	K05007005002
Draw No.	TD-E-71162-A2
CUS.Part No.	6-23-7M76S-051
CUS.Rev.	a1
Approval	Check
Designed	Vincent

備註		※未標註公差處，請參照下列標準。	
發	行	RANGE	TOLERANCE
		OVER 101	±3.0
		51-100	±2.5
		31-50	±2.0
		30 BELOW	±1.5
Units	mm	Scale	1:1
Size	A4	Date	2008/03/03
Sheet	1/3		

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

⑤			
④			
③			
②			
①			
REV	DESCRIPTION	DATE	Approval
REVISIONS			

BOM

BOM

ITEM	COMPONENT	QTY	DESCRIPTION	FAVORTRON P/N	VENDER
1	M540G-RIGHT- PIFA 鐵件	1	進口馬口鐵t=0.4mm/H	M02007002001	品欣
2	同軸線(含接頭)	1	OD1.13mm/單頭I-PEX419mm/黑色	M04007253001	FVC
3	SPONGE	1	8mm*3mm*t=3.5mm	M01009001002	昊泰
4	藍色熱縮套管	1	OD2.5*20mm(藍色)3.0+0.1/-0.05mm 壁厚0.22±0.08	B02020029121	三聯
5	鋁麥拉膠帶	1	33mm*2.5mm t=0.1(鋁箔面背導電膠33mm*5mm)	M01005001002	隆揚
6	LABEL	2	4.5x13mm 白色	G01013007001	亞識
7					
8					
9					
10					
11					
12					

SUB BOM (M04007253001)

ITEM	COMPONENT	QTY	DESCRIPTION	FAVORTRON P/N	VENDER
1	Connector	1	接頭 MHF PLUG(I-PEX)鍍金(20278-111R-13)	L07001001001	I-PEX
2	同軸線	1	同軸線OD1.13*整卷418(黑色)	M04005019001	昭和



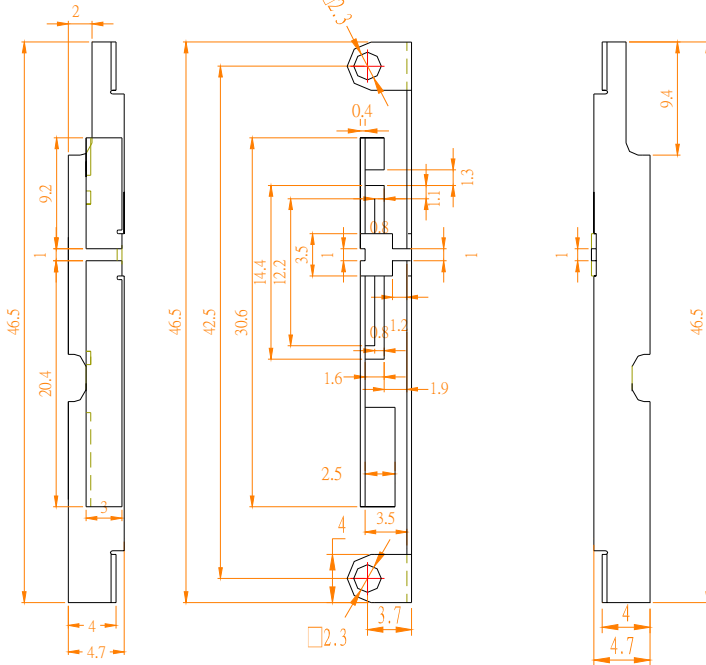
Title:		M760S Bluetooth ANT BOM 表
Part No.	K05007005002	
Draw No.	TD-E-71162-A2	
CUS.Part No.	6-23-7M76S-051	
CUS.Rev.	a1	
Approval	Check	Designed
Vincent	Vincent	Vincent

發行	備註	Date	2008/03/03	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

鐵件



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。

備註
※未標註公差處，請參照下列標準。

發行

RANGE	TOLERANCE
Over 101	±.5
51-100	±.0
31-50	±0.3
30 Below	±0.2
Units	MM
Rev.	A0
Size	A4
Scale	1:1
Sheet	PAGE

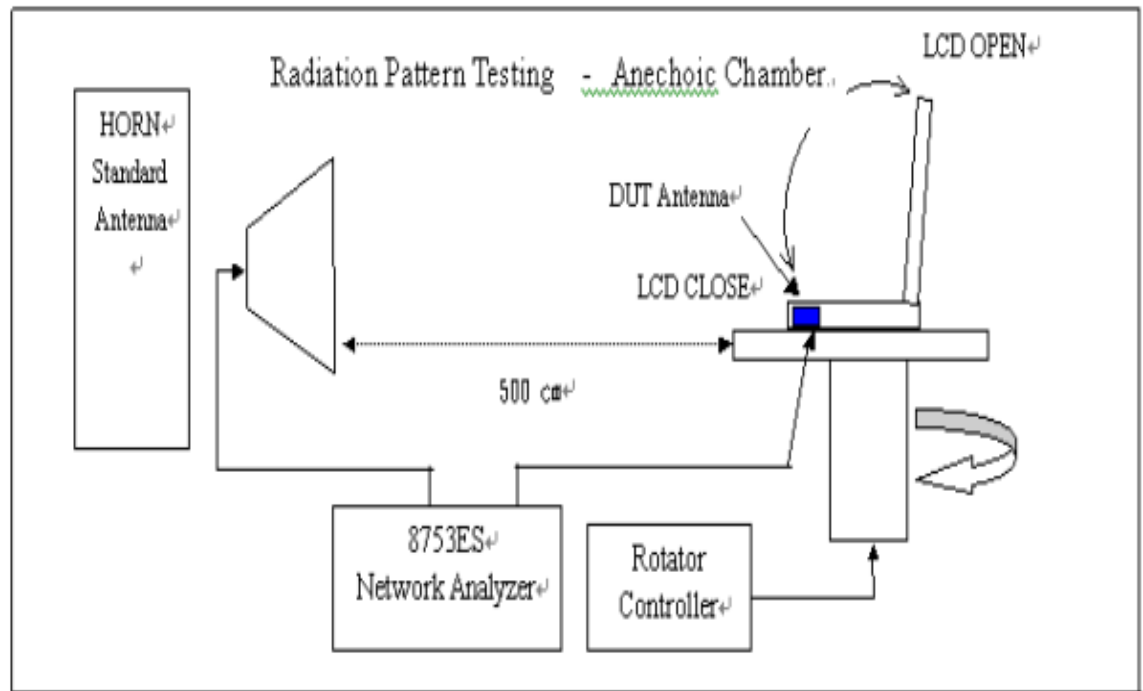
FVR 惠賢電子股份有限公司
FAVORTRON CO.,LTD.

TITLE:
藍天M540G-RIGHT-PIFA

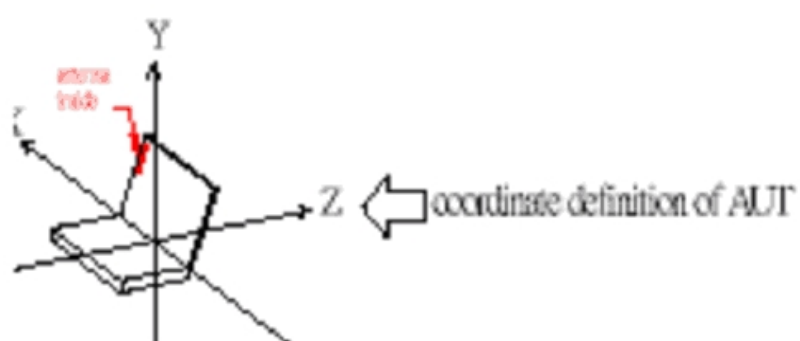
PART NO.	M02007002001
DRAW NO.	TD-E-50656-A1
Customer No.	
Customer REV.	
APPROVAL	CHECKED
	DRAWN
Nick	James
	Kelly

1.

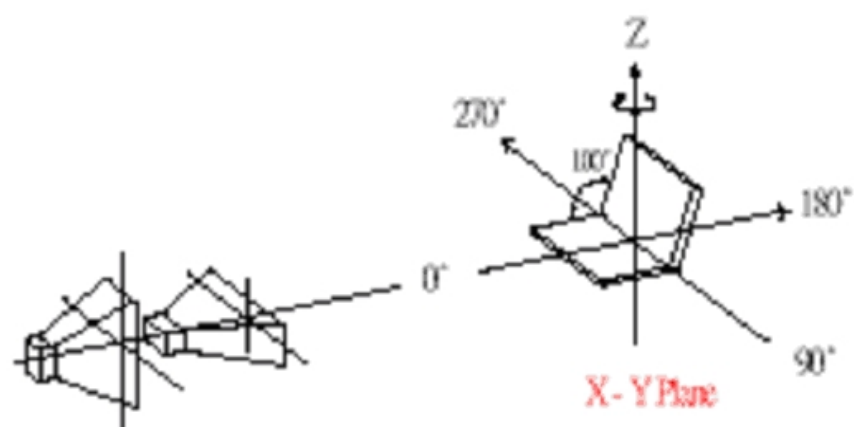
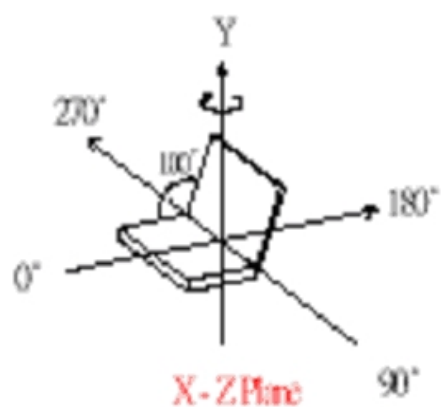
天線測試方法



Coordinate Definition



ORN ANTENNA

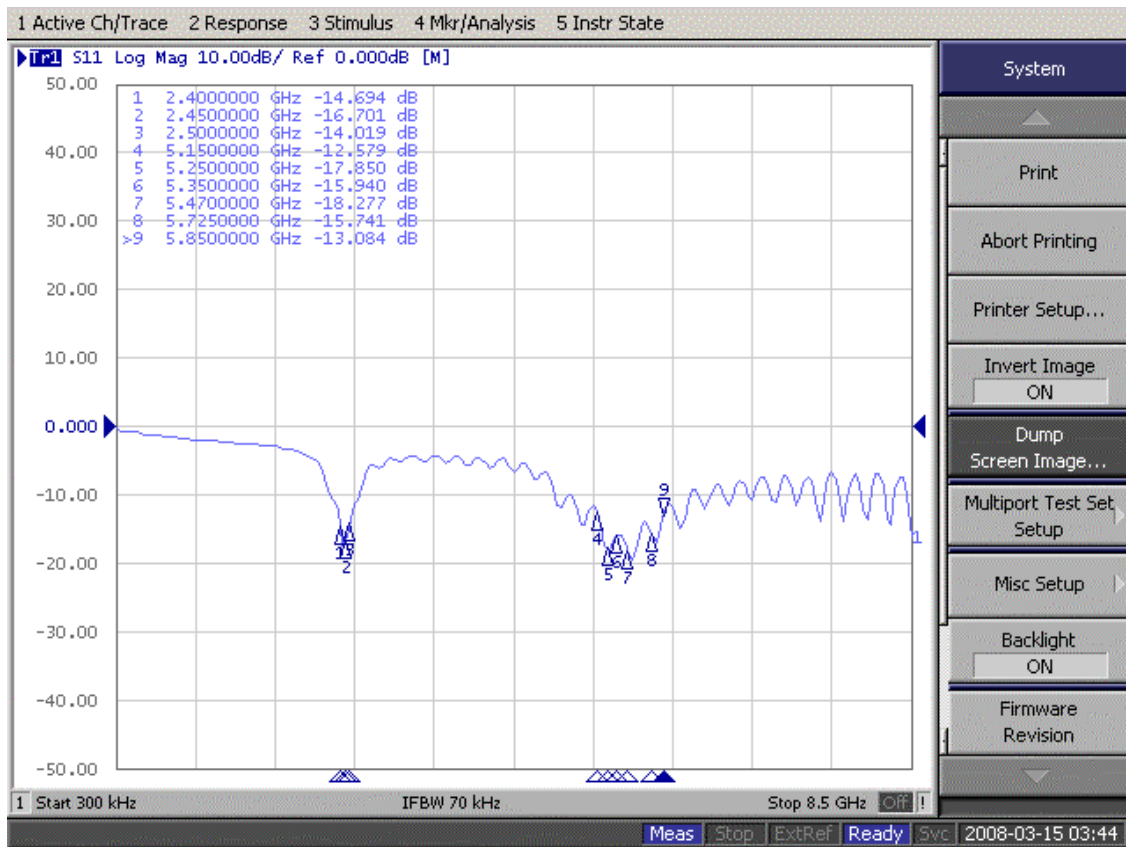


2. Bluetooth.

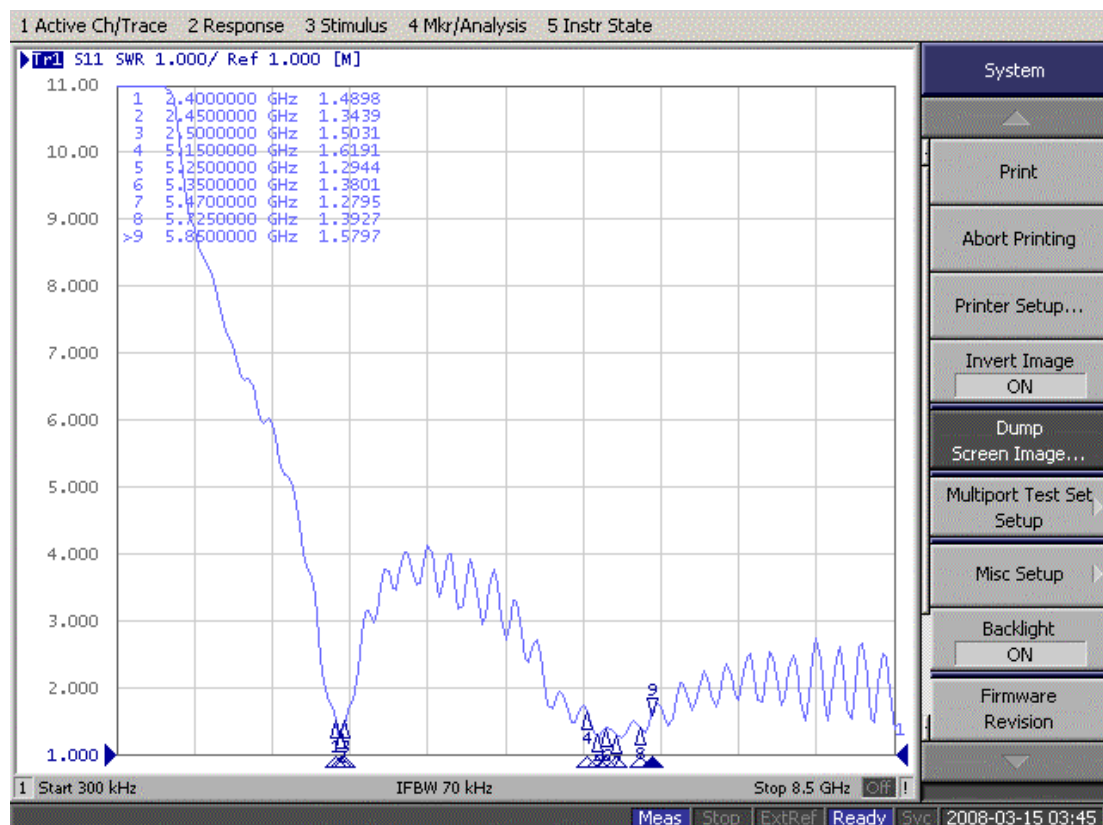
Model No.	M570TU			
Test Mode	Ferq (MHz)	Max Gain(dBi)	Avg. Gain(dBi)	Source Polar
Bluetooth	2.4G	-0.74/122	-3.52	V+H
Bluetooth	2.45G	0.04/68	-3.39	V+H
Bluetooth	2.5G	0.13/63	-3.24	V+H
Bluetooth	4.9G	-1.37/112	-4.68	V+H
Bluetooth	5.075G	-0.26/110	-3.95	V+H
Bluetooth	5.15G	-0.11/111	-4.13	V+H
Bluetooth	5.25G	-0.27/109	-4.15	V+H
Bluetooth	5.35G	-0.13/116	-4.09	V+H
Bluetooth	5.47G	0.29/134	-4.21	V+H
Bluetooth	5.60G	-0.43/130	-4.45	V+H
Bluetooth	5.725G	-0.02/130	-4.59	V+H
Bluetooth	5.785G	0.84/154	-4.12	V+H
Bluetooth	5.85G	-0.02/154	-4.68	V+H
Bluetooth	5.875G	0.05/154	-4.77	V+H

3. Bluetooth

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



2.4~2.5GHZ & 5.15~5.875GHZ / VSWR



4.Gain & Pattern – BT.

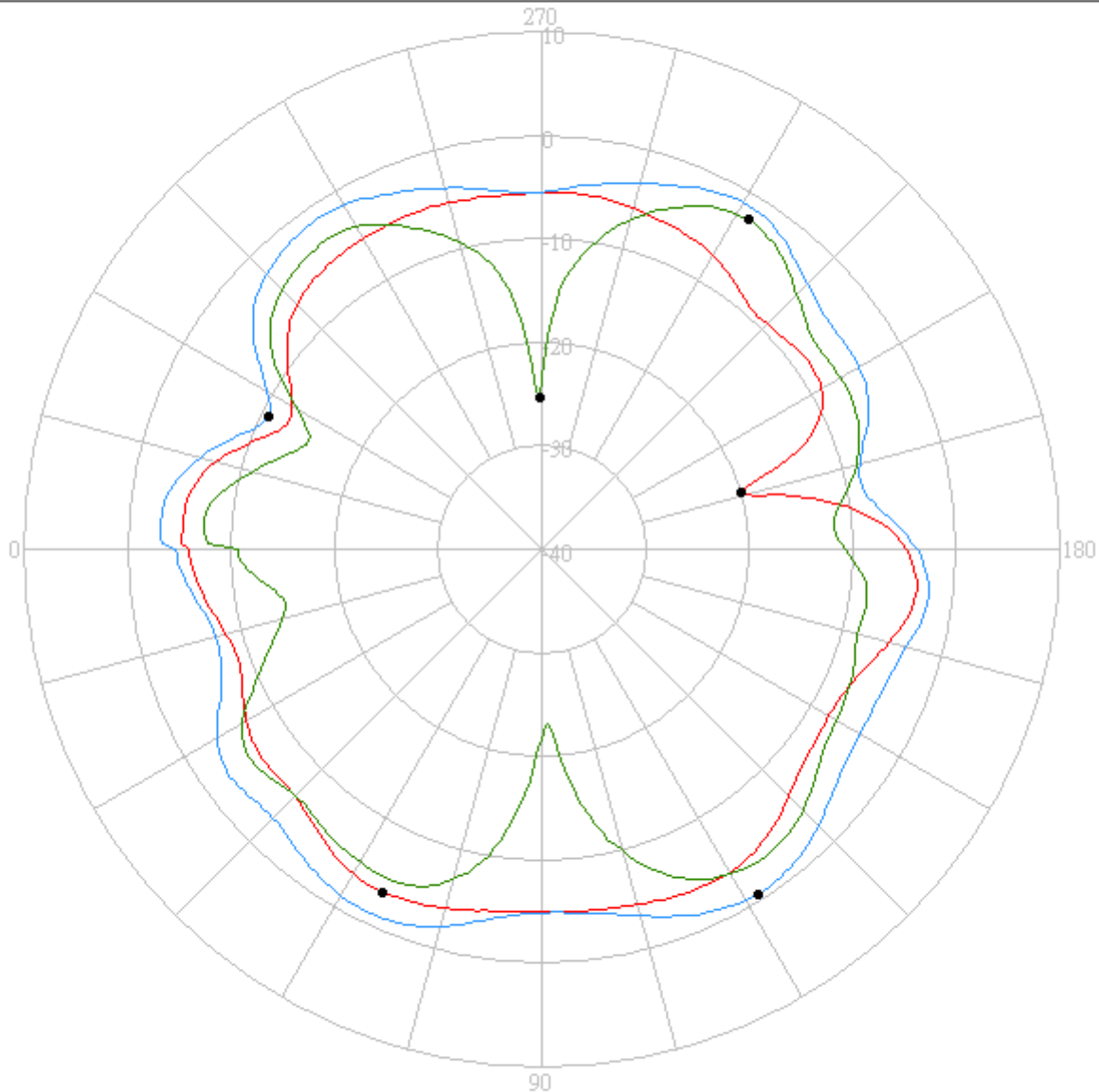
a. 2.4GHz



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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	M760T	BT	2400.00	-3.47 / 65.00	-20.08 / 196.00	-6.17	Ver.	2008/3/14
2	M760T	BT	2400.00	-2.47 / 238.00	-25.32 / 271.00	-6.92	Hor.	2008/3/14
3	M760T	BT	2400.00	-0.74 / 122.00	-10.70 / 334.00	-3.52	V+H	2008/3/14

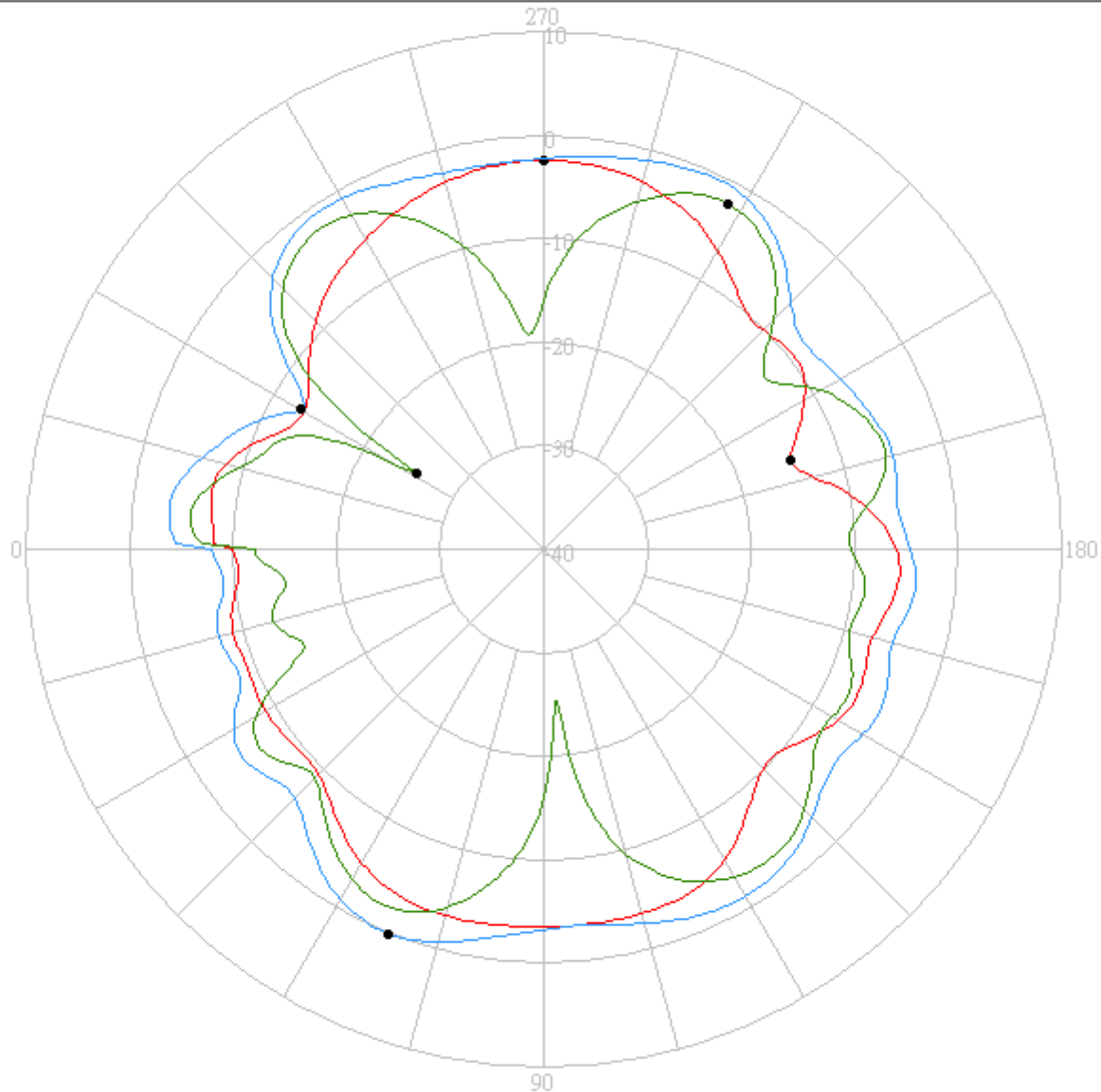
b. 2.45GHz



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Fax:886-2-2218-5760



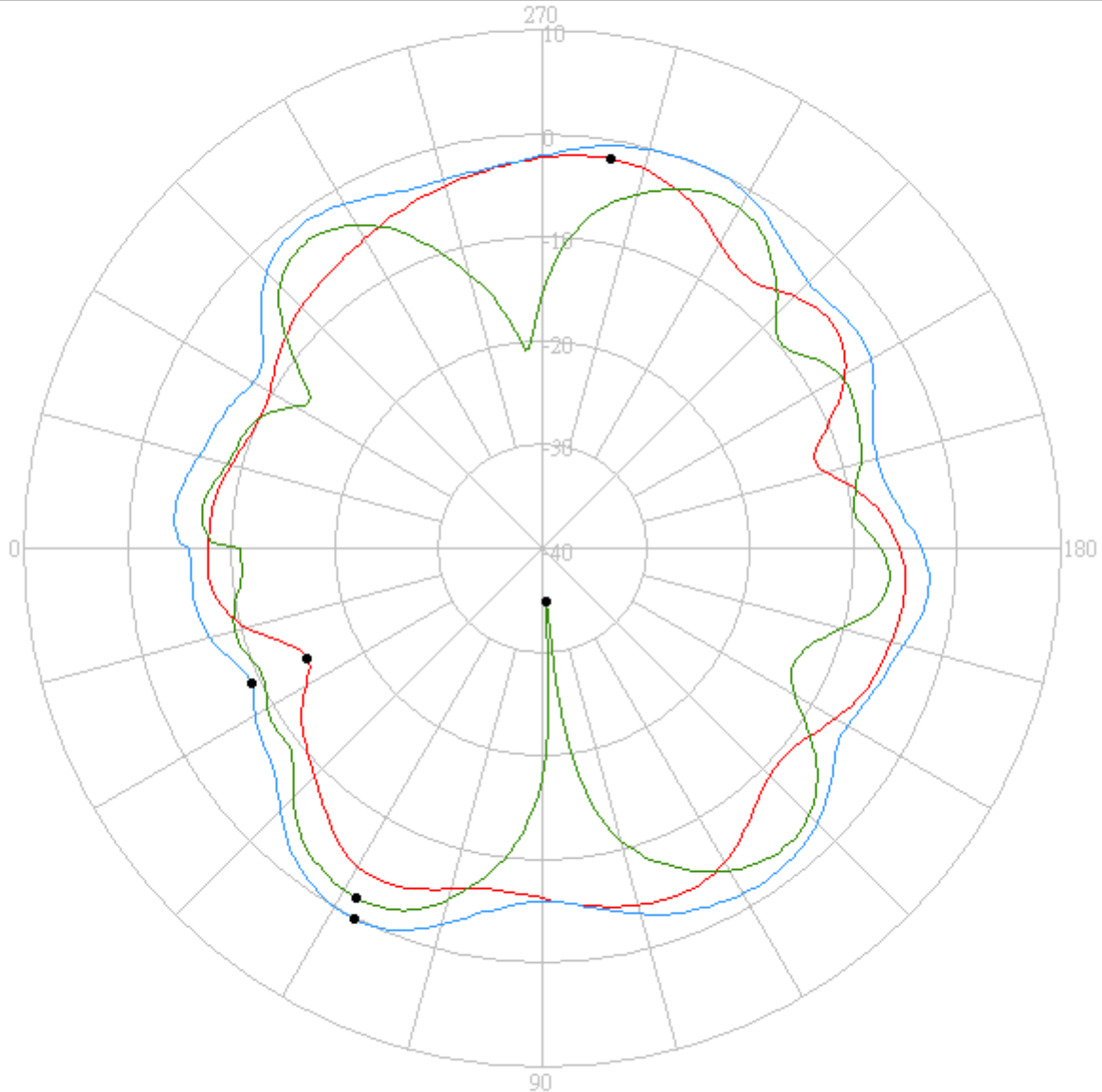
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	2450.00	-2.44 / 270.00	-14.68 / 200.00	-6.20	Ver.	2008/3/14
2	M760T	BT	2450.00	-2.21 / 242.00	-25.61 / 329.00	-6.61	Hor.	2008/3/14
3	M760T	BT	2450.00	0.04 / 68.00	-13.03 / 330.00	-3.39	V+H	2008/3/14

c. 2.5GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	2500.00	-1.84 / 260.00	-15.01 / 25.00	-6.02	Ver.	2008/3/14
2	M760T	BT	2500.00	-1.78 / 62.00	-34.80 / 94.00	-6.50	Hor.	2008/3/14
3	M760T	BT	2500.00	0.13 / 63.00	-9.08 / 25.00	-3.24	V+H	2008/3/14

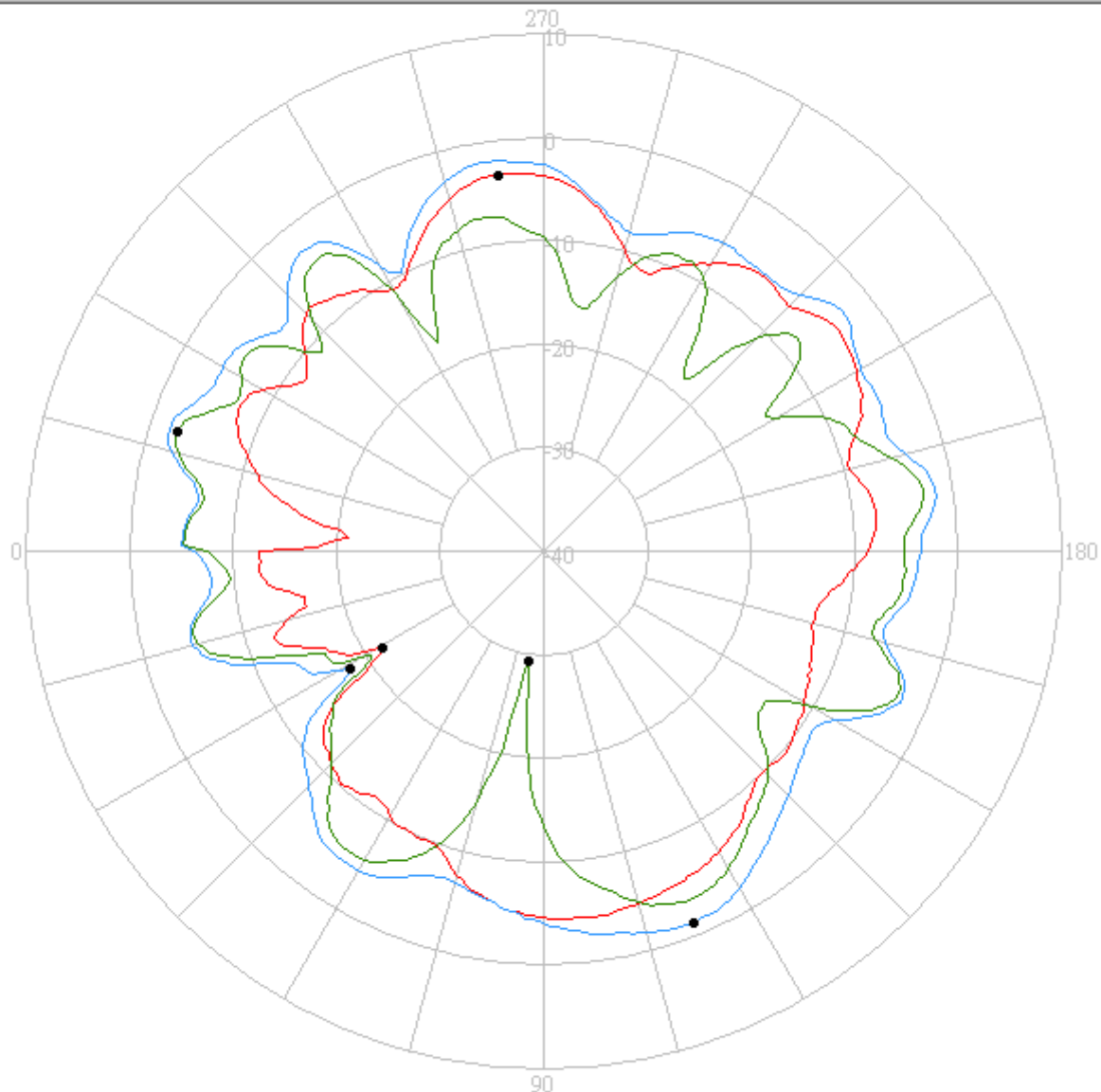
d. 4.9GHz



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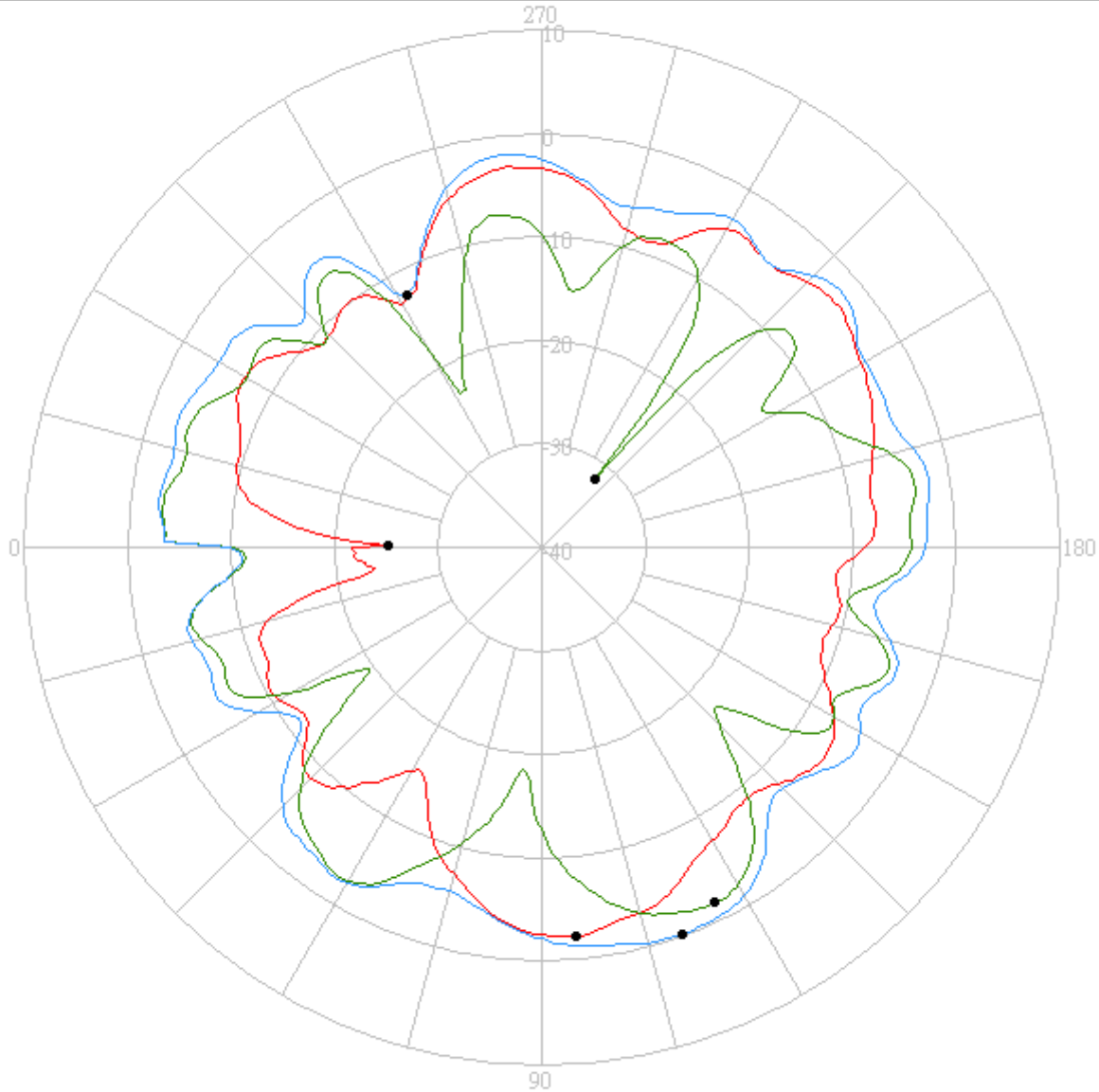
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	4900.00	-3.39 / 277.00	-21.79 / 31.00	-7.92	Ver.	2008/3/14
2	M760T	BT	4900.00	-2.76 / 342.00	-29.34 / 82.00	-7.47	Hor.	2008/3/14
3	M760T	BT	4900.00	-1.37 / 112.00	-18.10 / 31.00	-4.68	V+H	2008/3/14

e. 5.075GHz



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Fax:886-2-2218-6760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5075.00	-2.31 / 95.00	-25.09 / 359.00	-6.93	Ver.	2008/3/14
2	M760T	BT	5075.00	-1.82 / 116.00	-31.53 / 232.00	-6.98	Hor.	2008/3/14
3	M760T	BT	5075.00	-0.26 / 110.00	-12.35 / 298.00	-3.95	V+H	2008/3/14

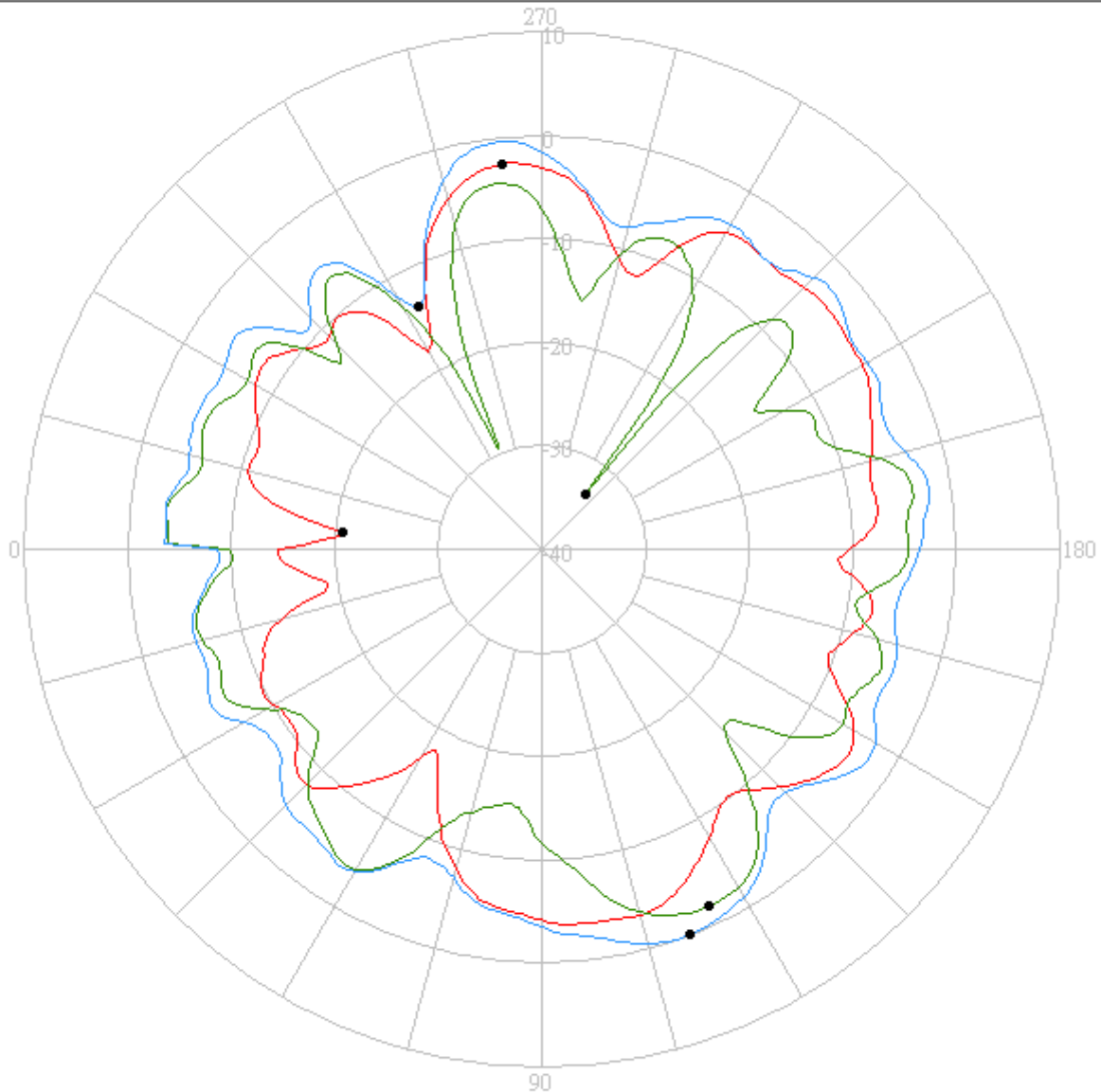
f. 5.15GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5150.00	-2.55 / 276.00	-20.64 / 355.00	-7.14	Ver.	2008/3/14
2	M760T	BT	5150.00	-1.93 / 115.00	-33.20 / 232.00	-7.15	Hor.	2008/3/14
3	M760T	BT	5150.00	-0.11 / 111.00	-13.73 / 297.00	-4.13	V+H	2008/3/14

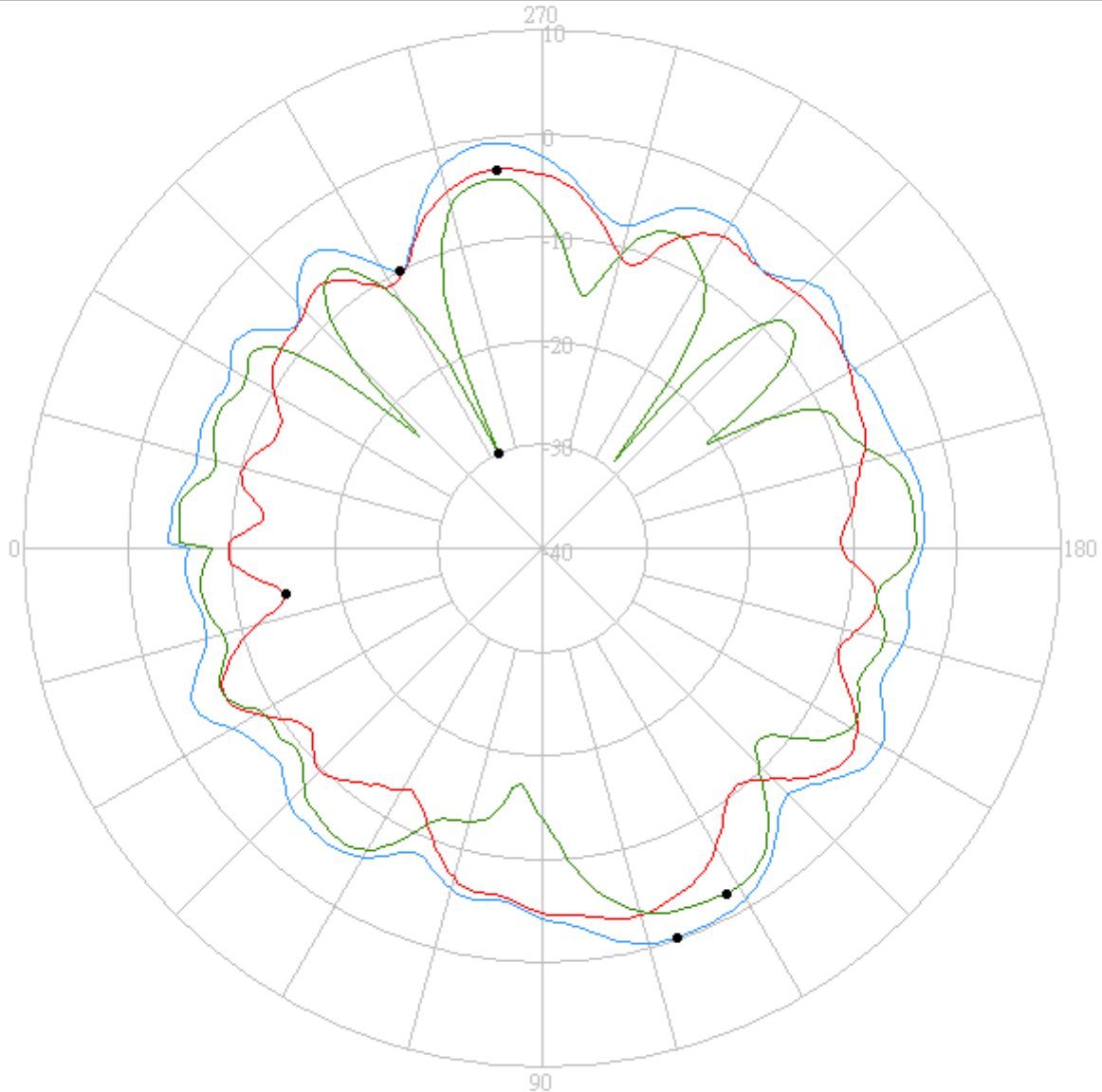
g. 5.25GHz



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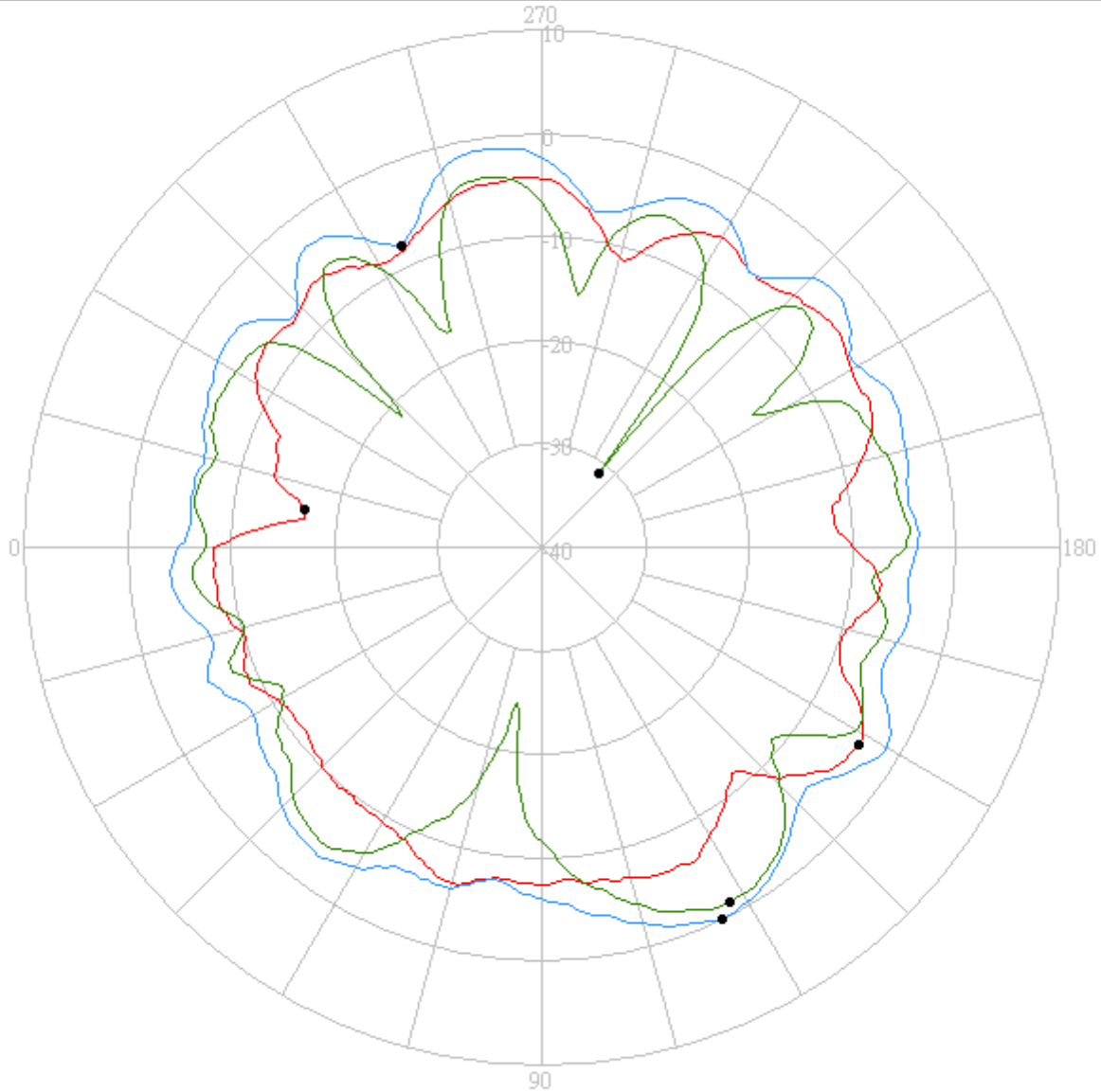
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5250.00	-3.20 / 277.00	-14.85 / 10.00	-7.16	Ver.	2008/3/14
2	M760T	BT	5250.00	-2.31 / 118.00	-29.90 / 295.00	-7.17	Hor.	2008/3/14
3	M760T	BT	5250.00	-0.27 / 109.00	-9.90 / 297.00	-4.15	V+H	2008/3/14

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	M760T	BT	5350.00	-3.91 / 148.00	-16.90 / 351.00	-7.50	Ver.	2008/3/14
2	M760T	BT	5350.00	-1.25 / 118.00	-31.01 / 233.00	-6.74	Hor.	2008/3/14
3	M760T	BT	5350.00	-0.13 / 116.00	-7.88 / 295.00	-4.09	V+H	2008/3/14

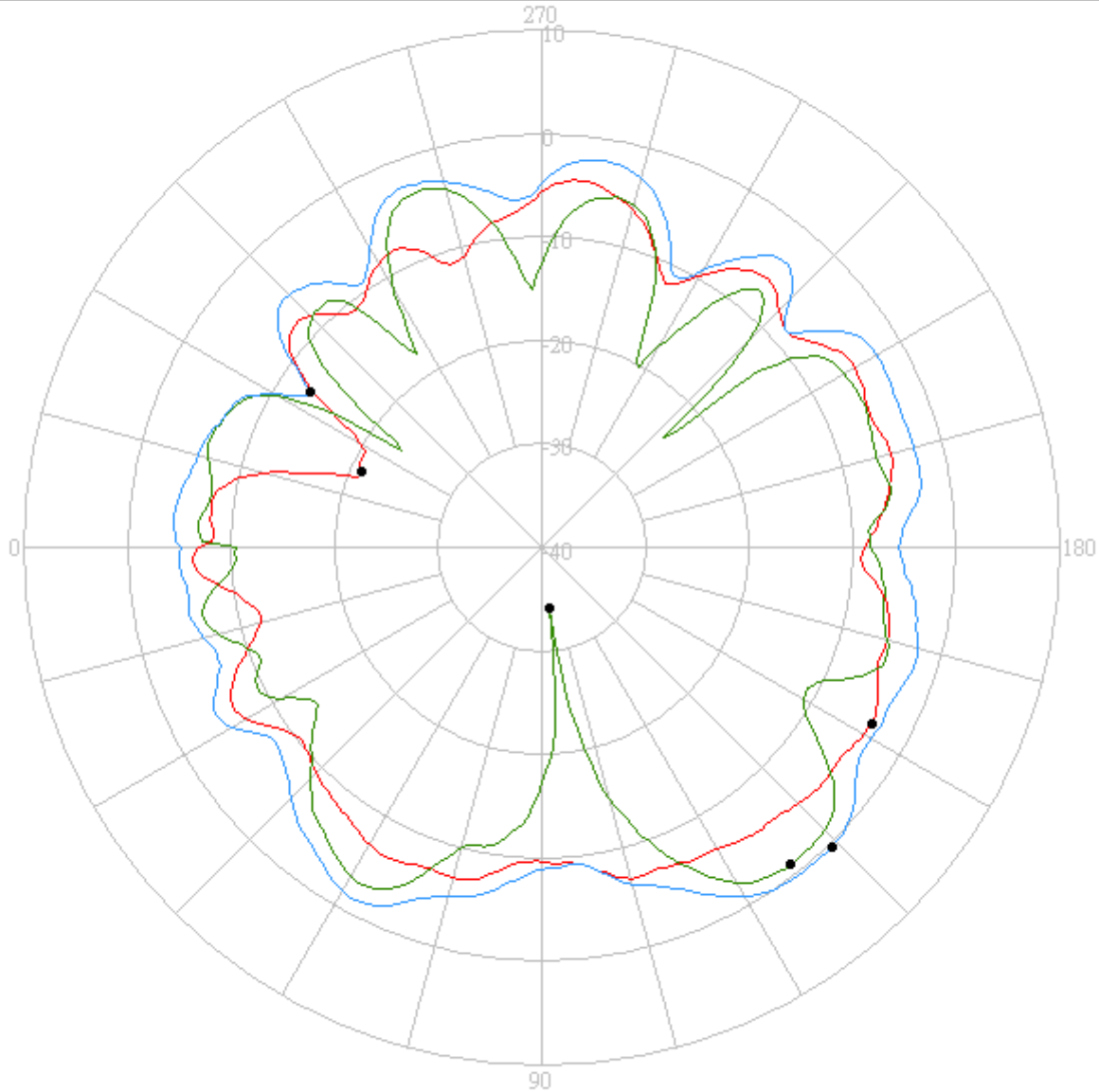
i. 5.47GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5470.00	-3.85 / 152.00	-21.16 / 337.00	-7.35	Ver.	2008/3/14
2	M760T	BT	5470.00	-1.08 / 128.00	-34.11 / 97.00	-7.10	Hor.	2008/3/14
3	M760T	BT	5470.00	0.29 / 134.00	-13.08 / 326.00	-4.21	V+H	2008/3/14

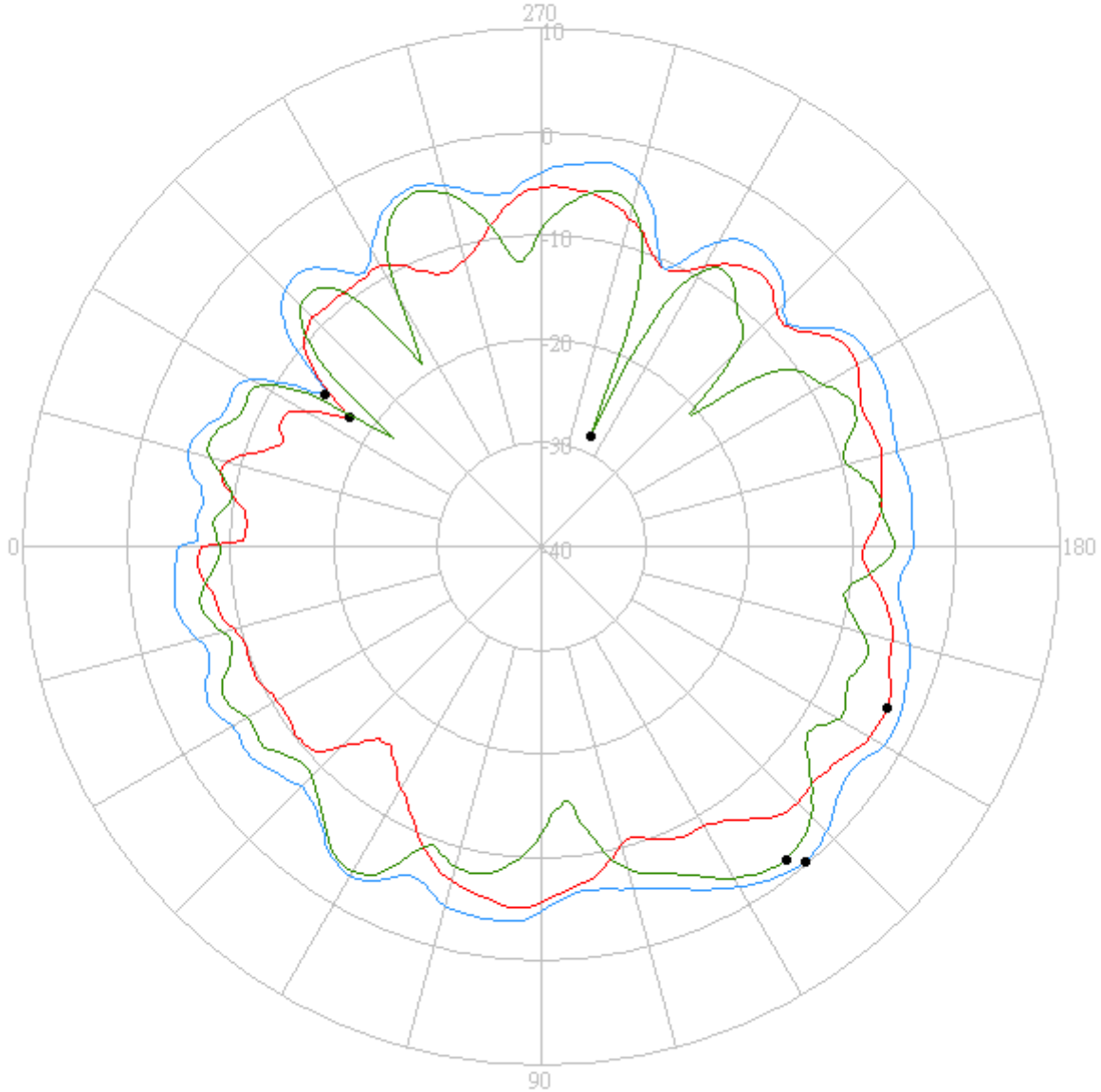
j. 5.6GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5600.00	-3.12 / 155.00	-17.68 / 326.00	-7.62	Ver.	2008/3/14
2	M760T	BT	5600.00	-1.71 / 128.00	-28.43 / 246.00	-7.30	Hor.	2008/3/14
3	M760T	BT	5600.00	-0.43 / 130.00	-14.56 / 325.00	-4.45	V+H	2008/3/14

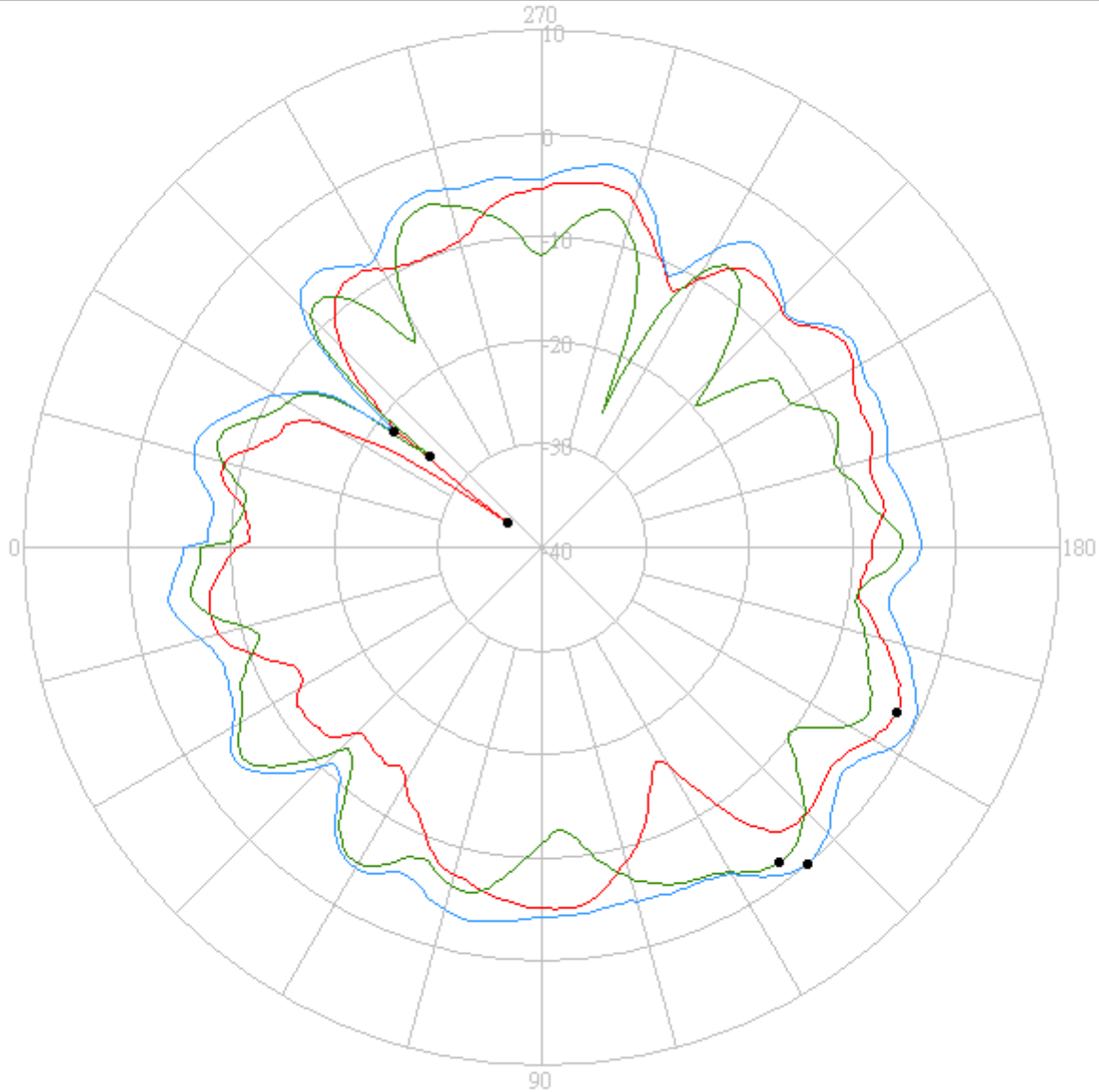
k. 5.725GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5725.00	-2.16 / 155.00	-35.87 / 324.00	-7.55	Ver.	2008/3/14
2	M760T	BT	5725.00	-1.87 / 127.00	-25.99 / 321.00	-7.65	Hor.	2008/3/14
3	M760T	BT	5725.00	-0.02 / 130.00	-21.91 / 322.00	-4.59	V+H	2008/3/14

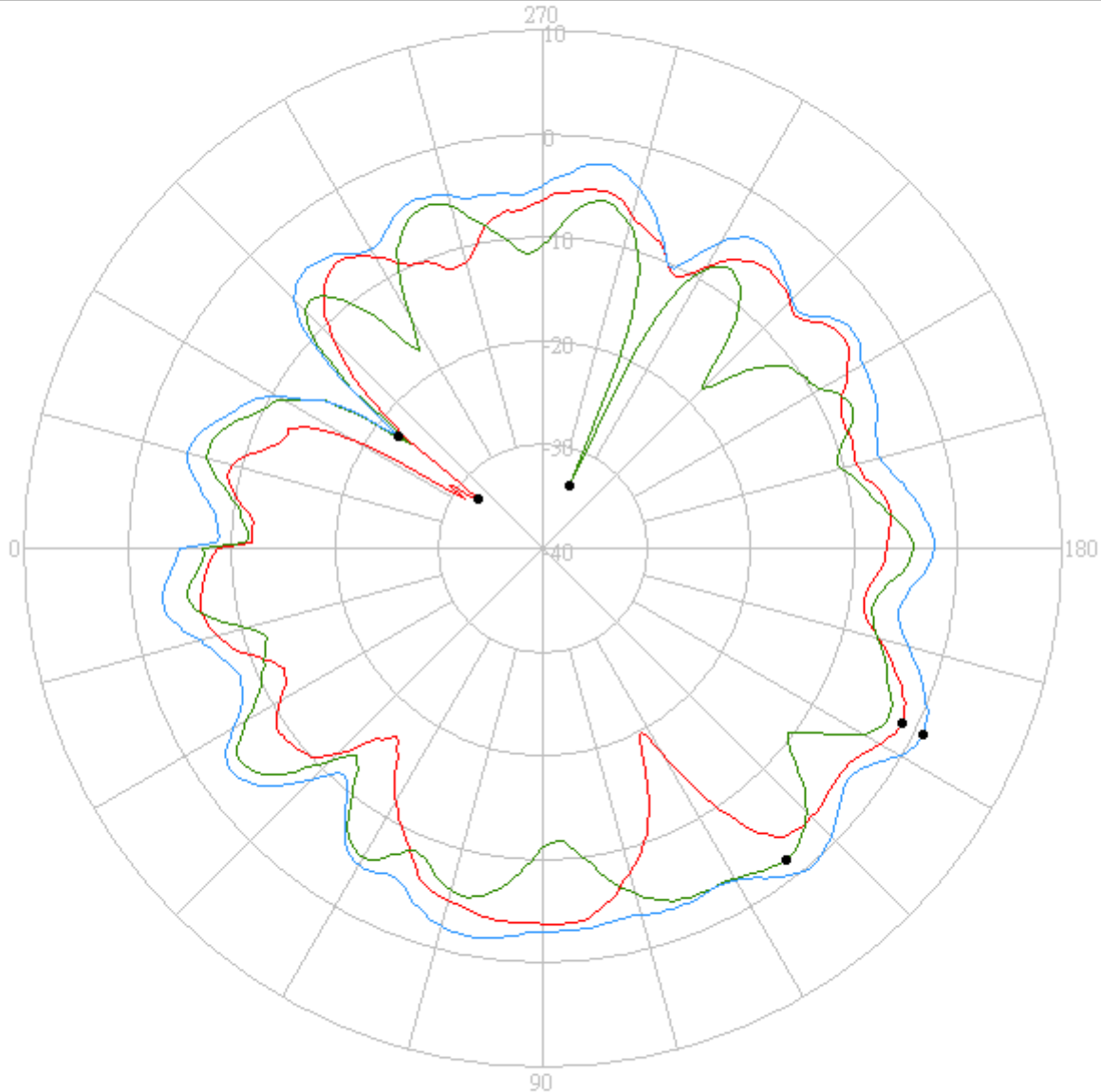
1. 5.785GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5785.00	-1.55 / 154.00	-32.15 / 323.00	-7.07	Ver.	2008/3/14
2	M760T	BT	5785.00	-1.99 / 128.00	-33.40 / 247.00	-7.19	Hor.	2008/3/14
3	M760T	BT	5785.00	0.84 / 154.00	-22.42 / 322.00	-4.12	V+H	2008/3/14

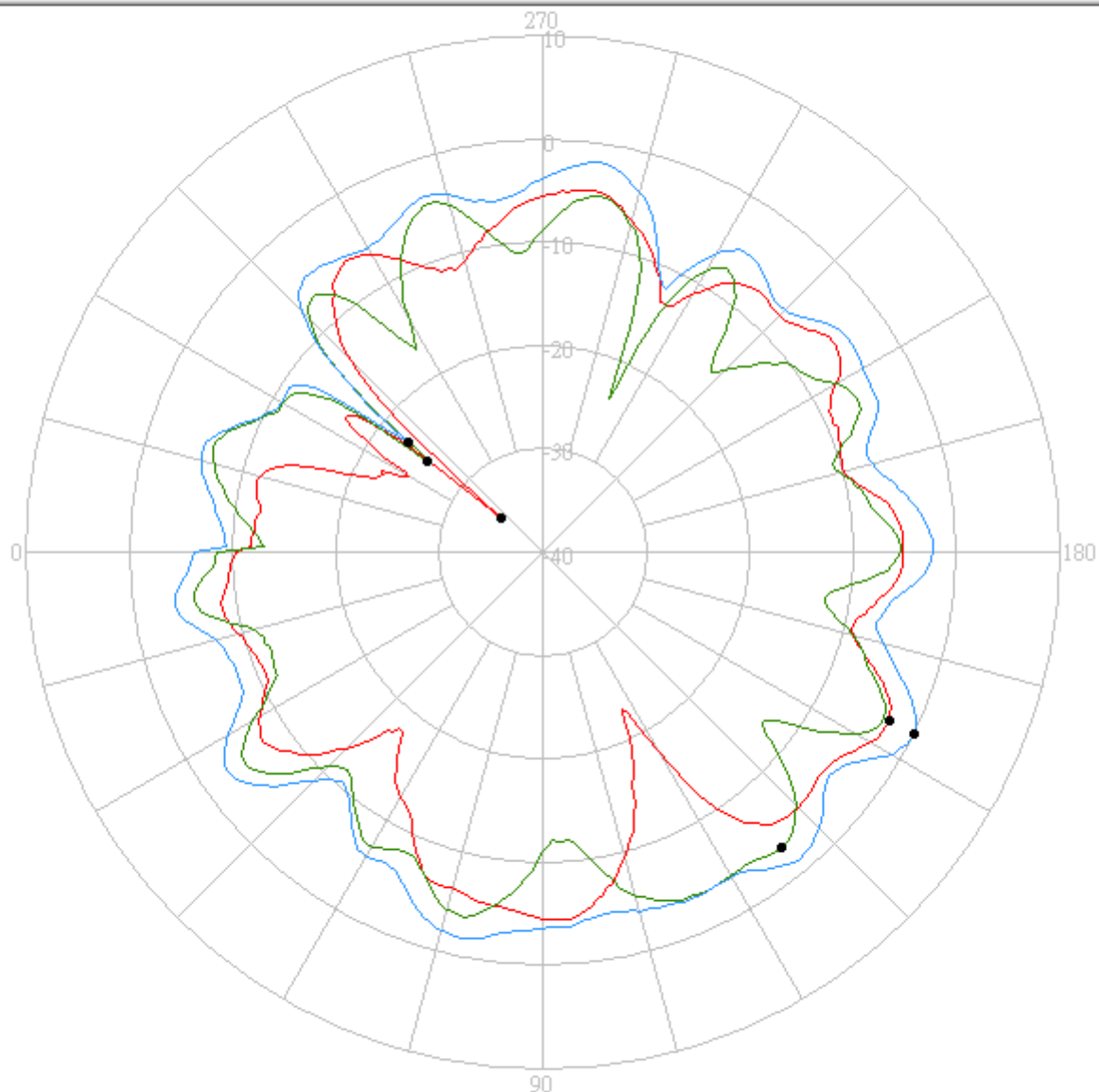
m. 5.85GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5850.00	-2.80 / 154.00	-34.86 / 320.00	-7.88	Ver.	2008/3/14
2	M760T	BT	5850.00	-3.21 / 129.00	-25.78 / 322.00	-7.50	Hor.	2008/3/14
3	M760T	BT	5850.00	-0.02 / 154.00	-23.18 / 321.00	-4.68	V+H	2008/3/14

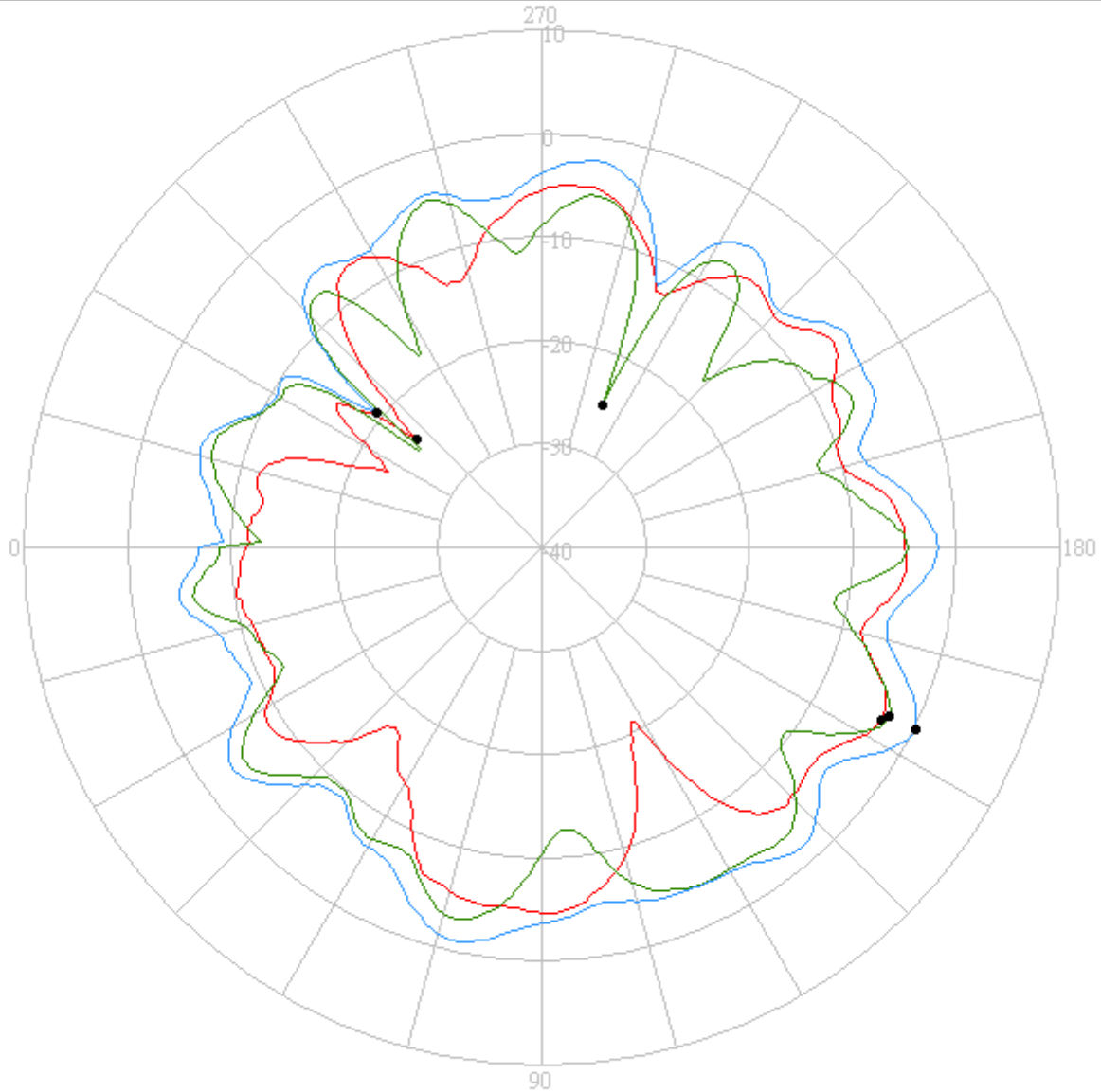
n. 5.875GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M760T	BT	5875.00	-3.28 / 153.00	-24.04 / 319.00	-8.15	Ver.	2008/3/14
2	M760T	BT	5875.00	-2.66 / 154.00	-25.15 / 247.00	-7.44	Hor.	2008/3/14
3	M760T	BT	5875.00	0.05 / 154.00	-19.41 / 321.00	-4.77	V+H	2008/3/14