

DATE : 2006/9/25

CUSTOMER : CLEVO CO.

APPROVAL SHEET

MODEL	M540S
DESCRIPTION	PIFA For Bluetooth Antenna 2.4~2.5GHZ
SUPPLIER P/N	K05007002851
CUSTOMER P/N	6-23-7M54S-010
FILE P/N	

FAVORTRON			CUSTOMER	
Manager	Supervisor	Engineer		
Nick	Nick	Vincent		

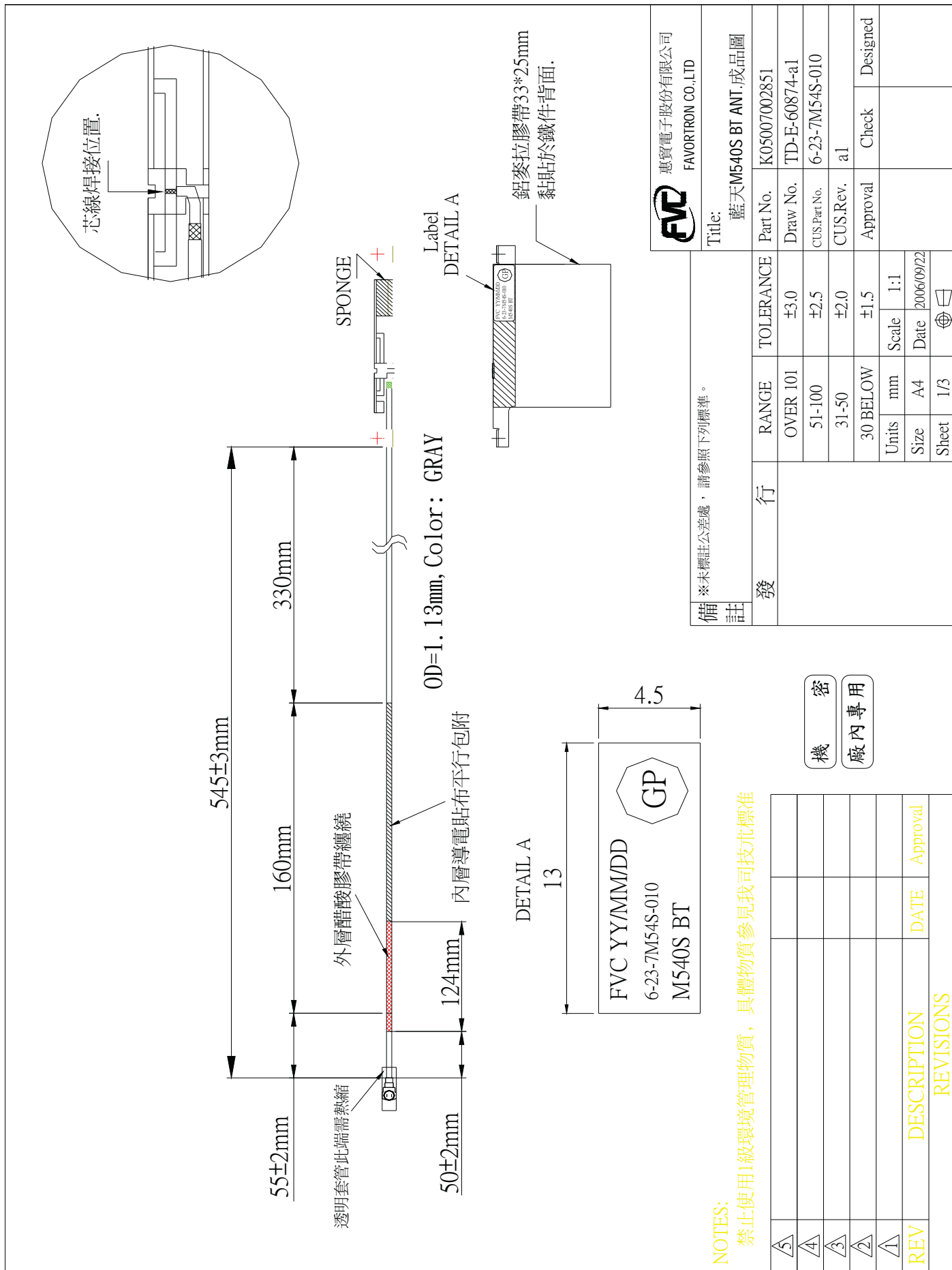


惠寶電子股份有限公司
FAVORTRON CO., LTD

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



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	2006/09/22
Sheet	1/3		

Title: 藍天M540S BT ANT. 成品圖

Part No.	K05007002851
Draw No.	TD-E-60874-a1
CUS.Part No.	6-23-7M54S-010
CUS.Rev.	a1
Approval	Check
	Designed



NOTES:

禁止使用1級環境管理物質, 具體物質參見我司科技龍標准

REV	DESCRIPTION	DATE	Approval
5			
4			
3			
2			
1			
REVISIONS			

機密
廠內專用

BOM

BOM					
ITEM	COMPONENT	Q'TY	DESCRIPTION	FAVORTRON P/N	VENDER
1	同軸線(含接頭)	1	OD1.13mm/單頭I-PEX/570mm/灰色	M04007159001	FVC
2	SPONGE	1	8mm*3mm*t=3.5mm	M01009001002	東鋒
3	導電貼布	1	10*160mm(83530)	G01001163002	嘉得隆
4	M540G-LEFT-PIFA 鐵件	1	馬口鐵t=0.4mm	M02007003001	品欣
5	LABEL	1	4.5x13mm 白色	G01013007001	亞識
6	TUBE	1	OD2.5*20mm(透明)內徑3.1±0.2壁厚0.25±0.1	B02009714999	三聯
7	醋酸膠帶	1	10*200mm/整卷型	G01002001001	強宇
8	鋁麥拉膠帶	1	33mm*25mm t=0.1(鋁箔面背導電膠33mm*5mm)	M01005001002	隆揚
9					
10					
11					
12					
13					
14					
15					
16					
17					

(M04007159001)

ITEM	COMPONENT	Q'TY	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001.13*569mm(灰色)膠捲	M04005008001	日立信電



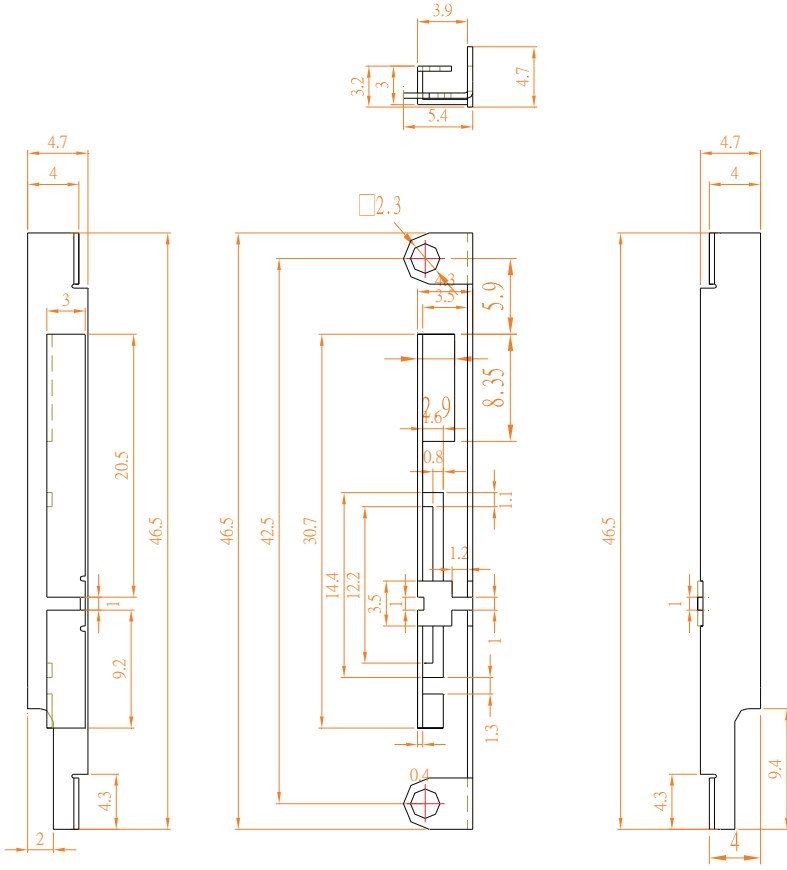
Title: 藍天M540S BT BOM表

Part No.	K05007002851
Draw No.	TD-E-60874-a1
CUS.Part No.	6-23-7M54S-010
CUS.Rev.	a1
Approval	Check
	Designed

發行	備註
Date	2006/09/22
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

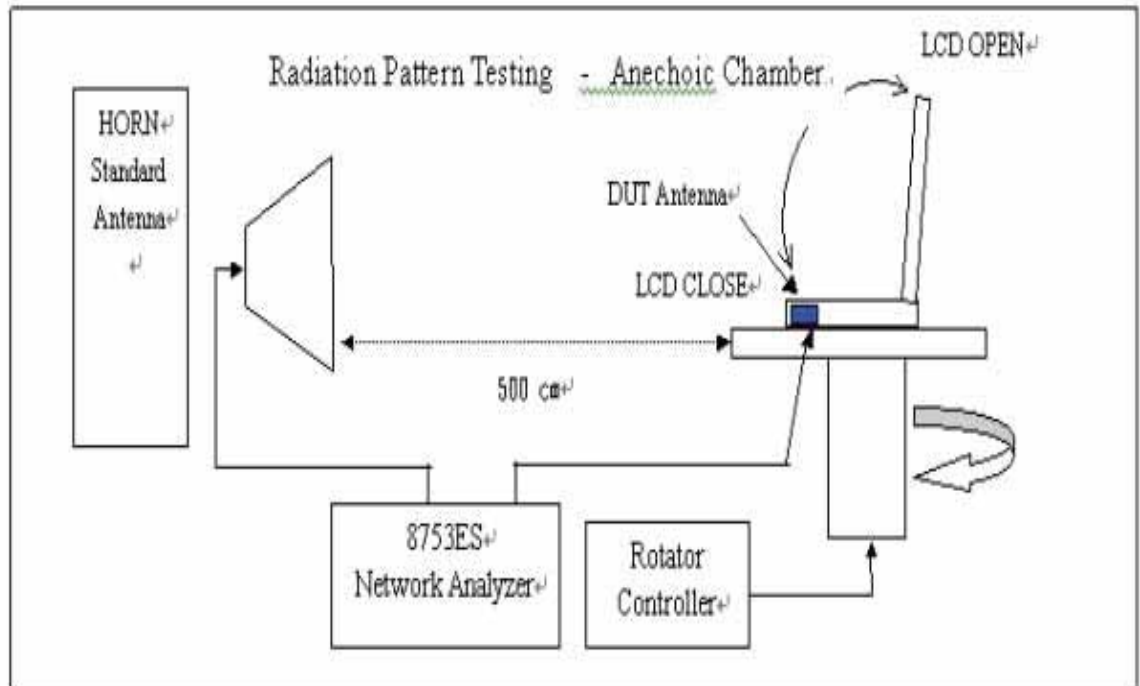


Remark:

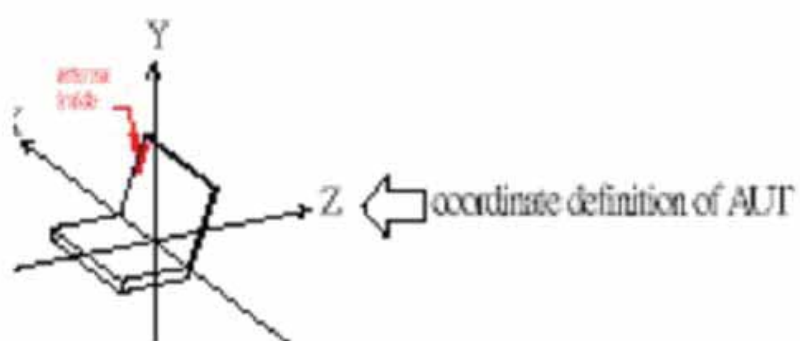
1. MATERIAL : 馬口鐵
2. t = 0.4mm±0.05
3. 表面不得有毛邊
4. 外觀不得有壓傷油污刮傷手紋
5. 未標示公差範圍者請詳公差欄標示值。

備註		※未標註公差處，請參照下列標準。		惠質電子股份有限公司 FAVORTRON CO.,LTD.	
發行		TOLERANCE		TITLE: 藍天M540G-LEFT-PIFA	
RANGE		Over 101	±1.5	PART NO.	M02007003001
51 - 100		31 - 50	±1.0	DRAW NO.	TD-E-50657-A1
30 Below		30 Below	±0.3	Customer No.	
Units		MM	Rev.	APPROVAL	CHECKED
Size		A4	Scale	DRAWN	
Sheet		PAGE	1:1	Nick	James
					Kelly

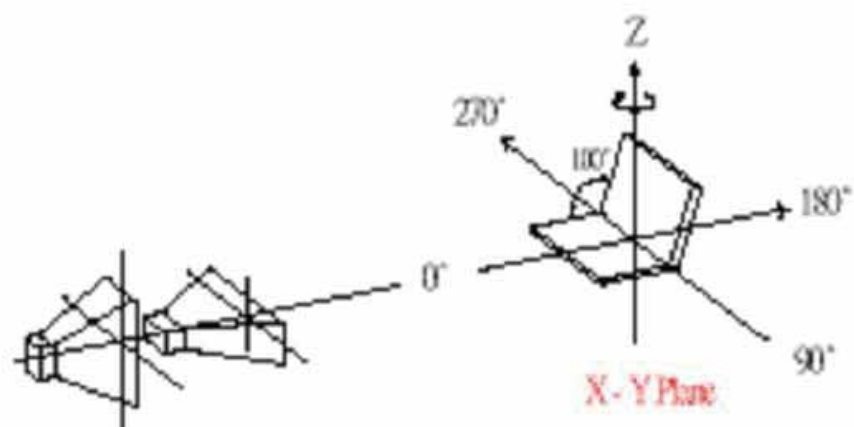
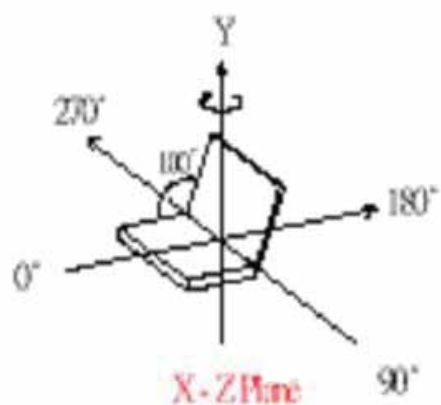
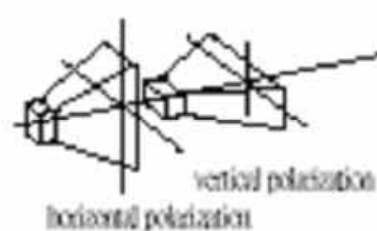
天線測試方法



Coordinate Definition

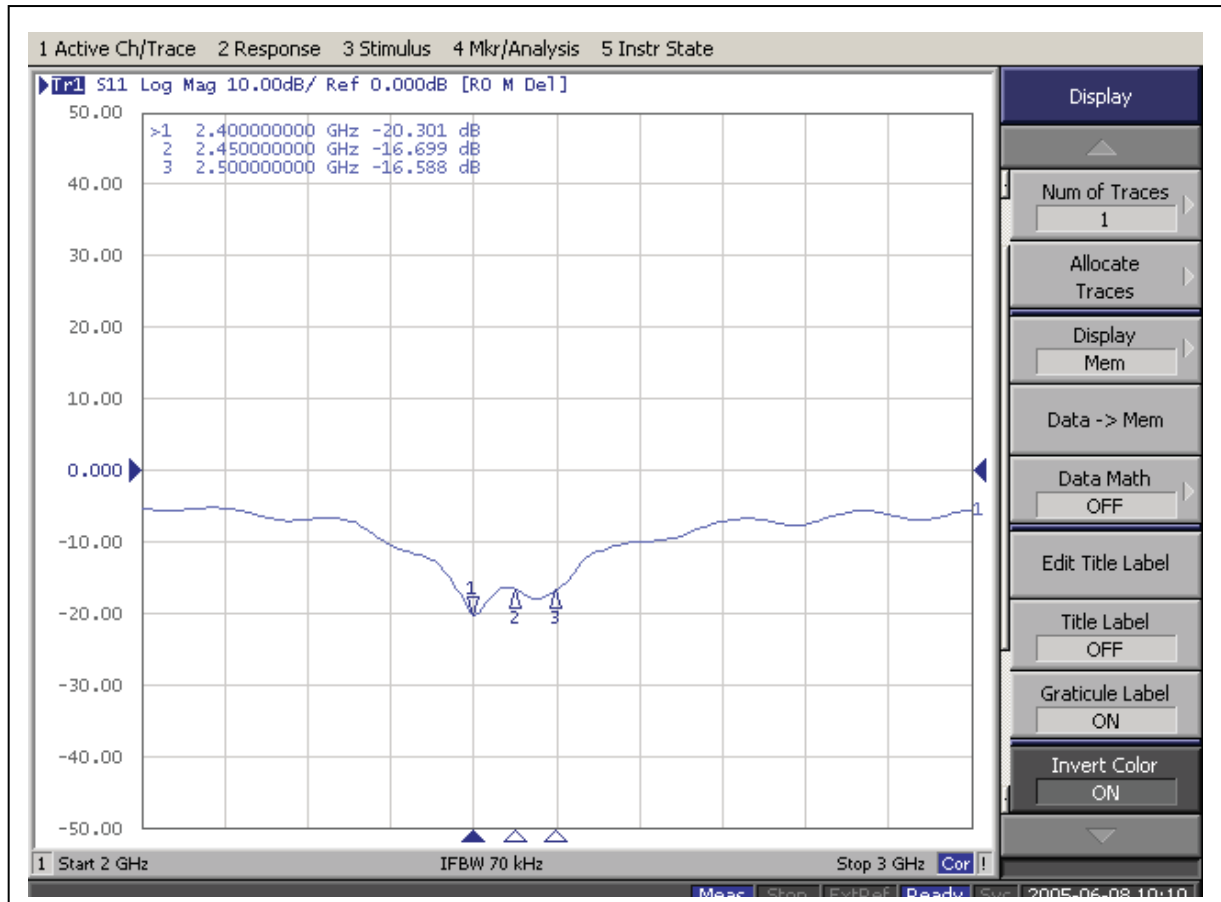


KORN ANTIENNA

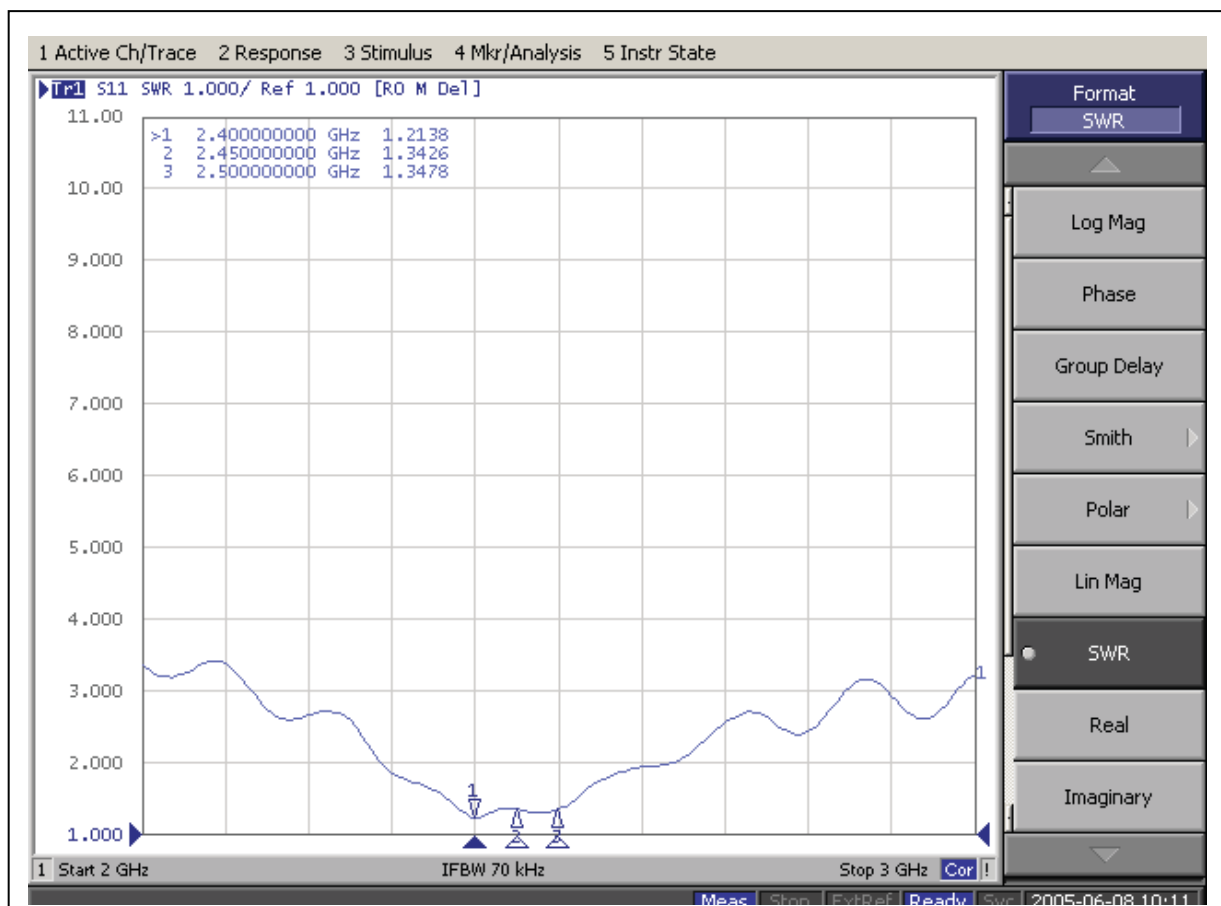


2. Bluetooth Ant./ (Left)

2.4~2.5GHZ / Return Loss

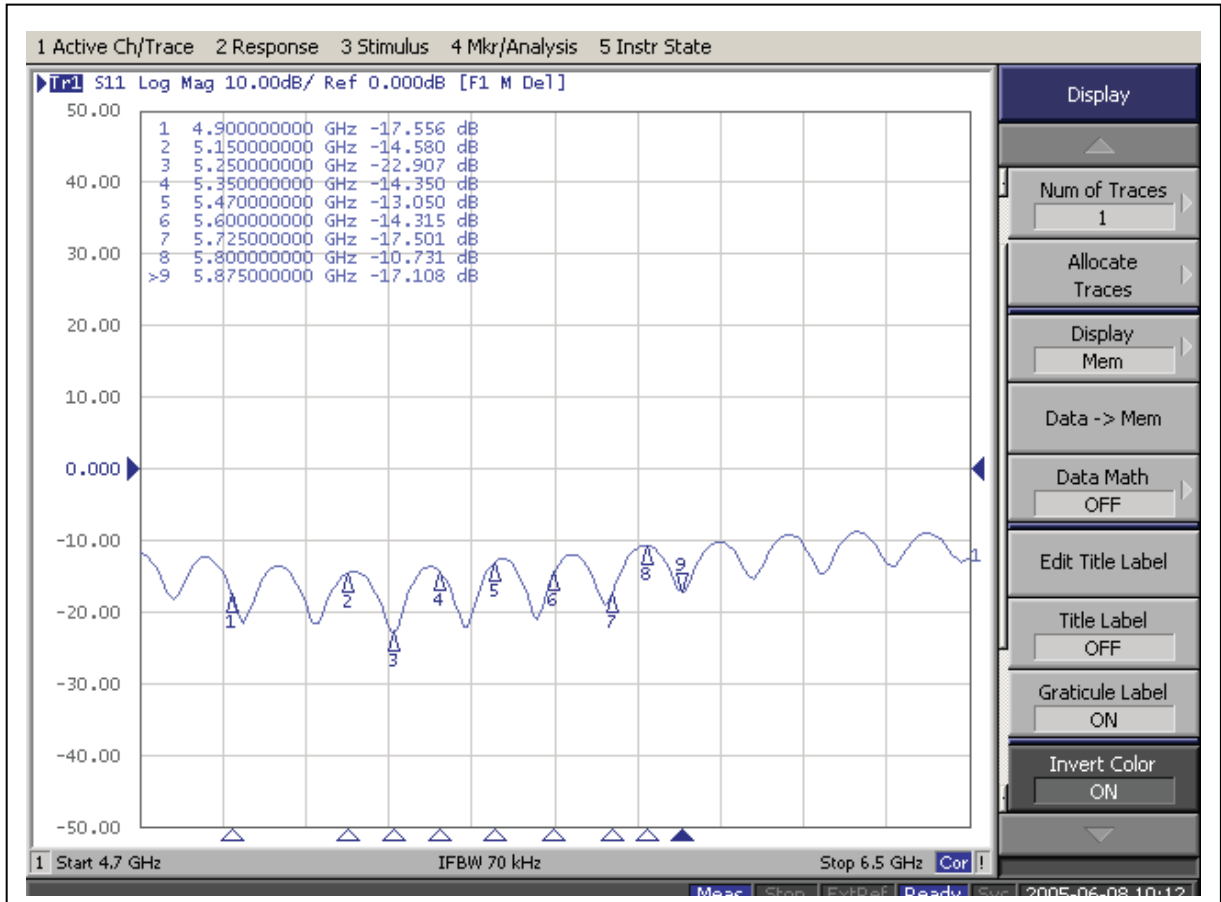


2.4~2.5GHZ / VSWR

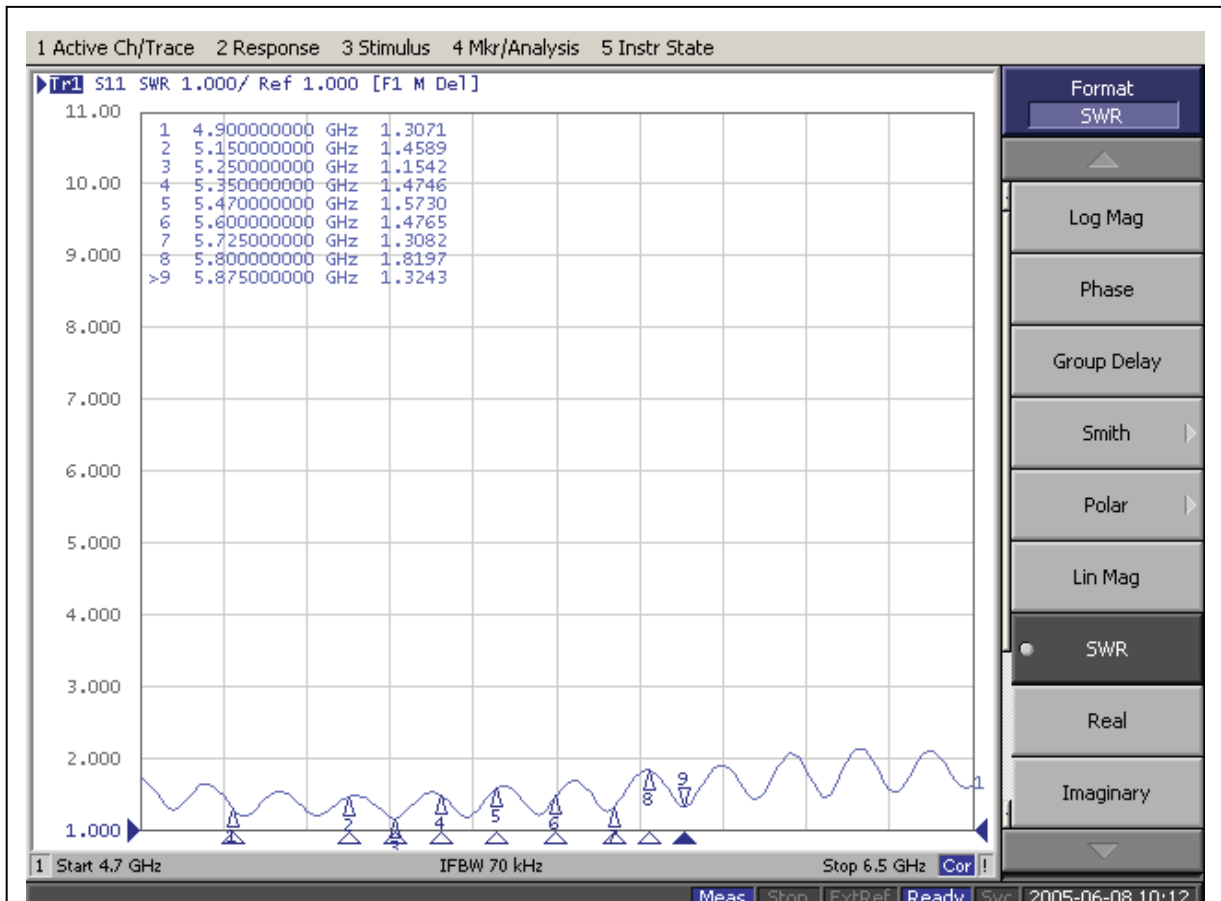


Bluetooth Ant./ (Left)

5.15~5.875GHZ/Return Loss

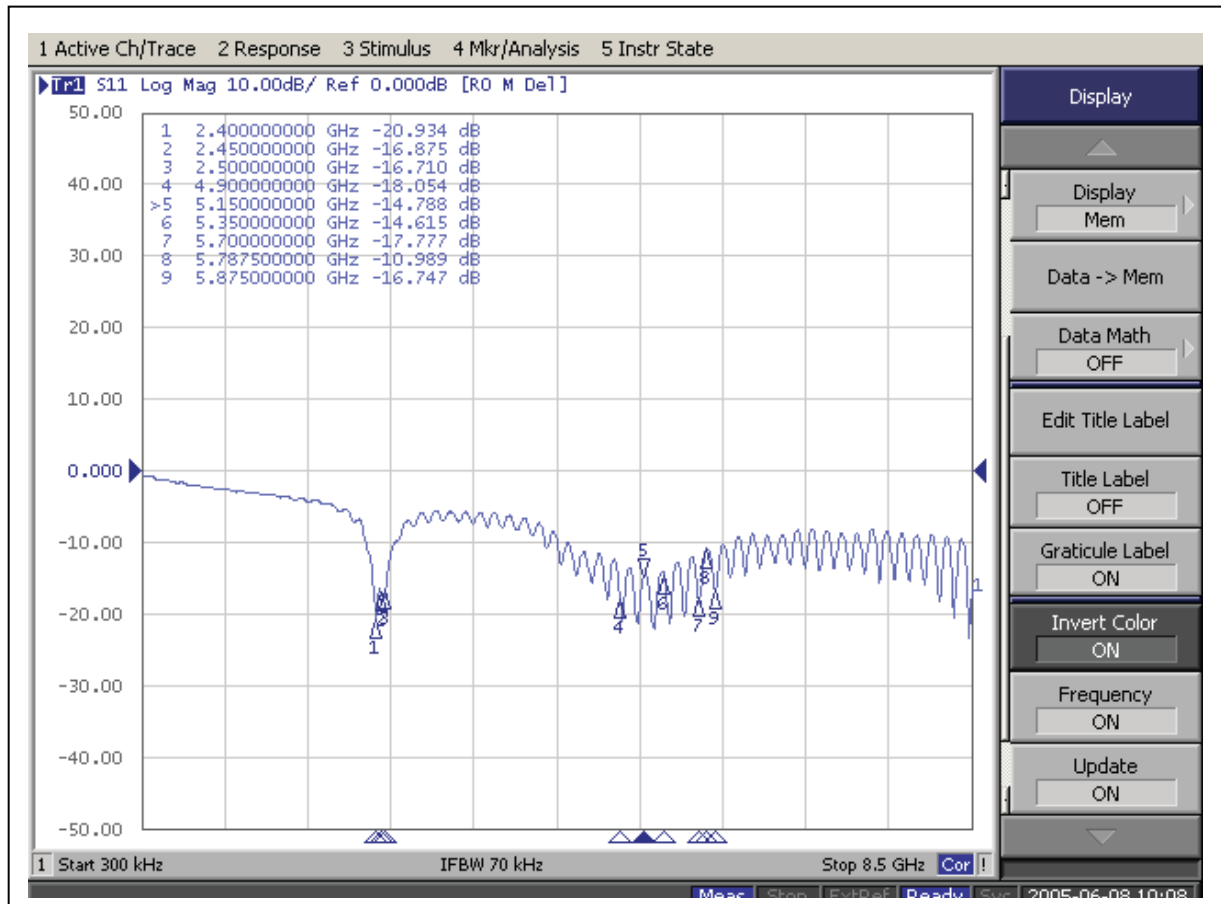


5.15~5.875GHZ/VSWR

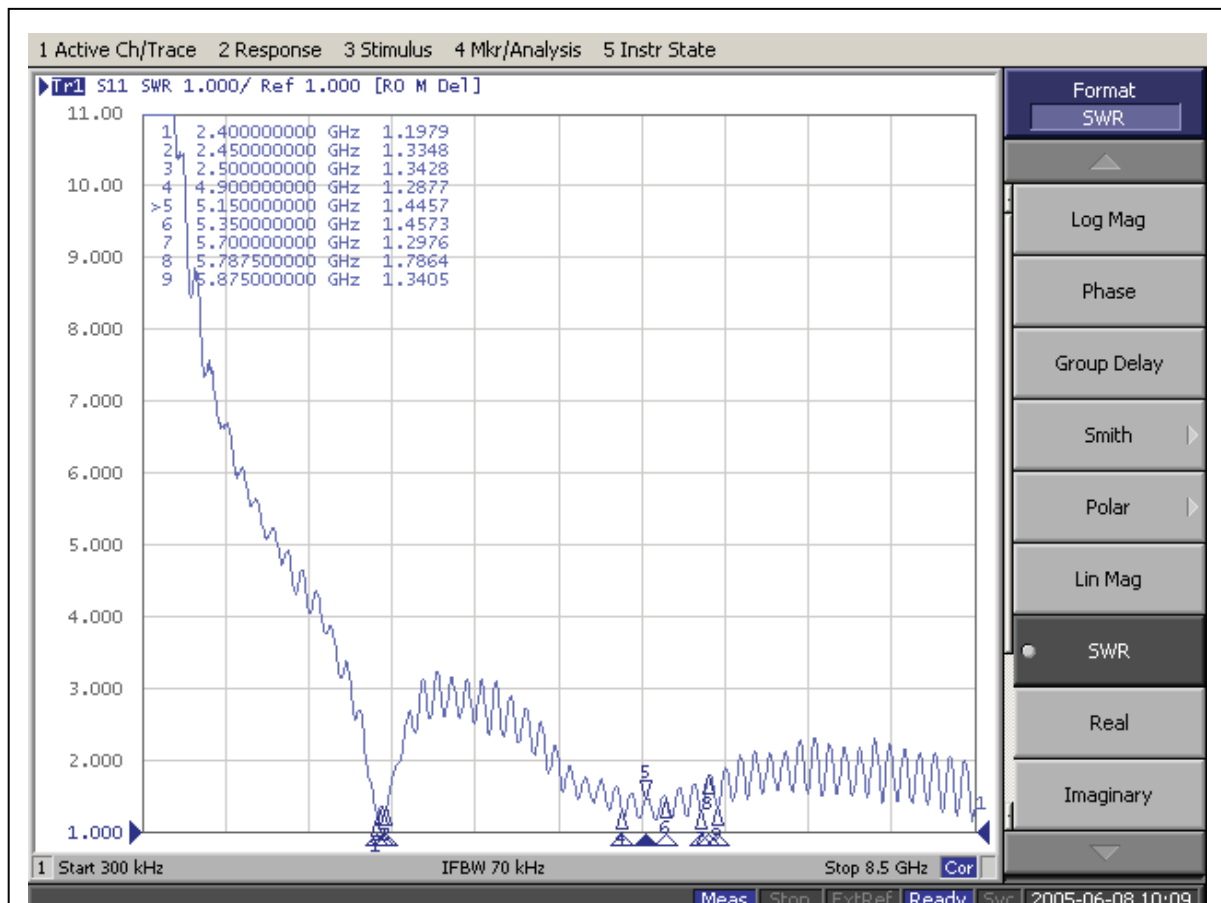


Bluetooth Ant./ (Left)

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



2.4~2.5GHZ & 5.15~5.875GHZ / VSWR



3. Gain & Pattern –Bluetooth

a. 2.4GHz

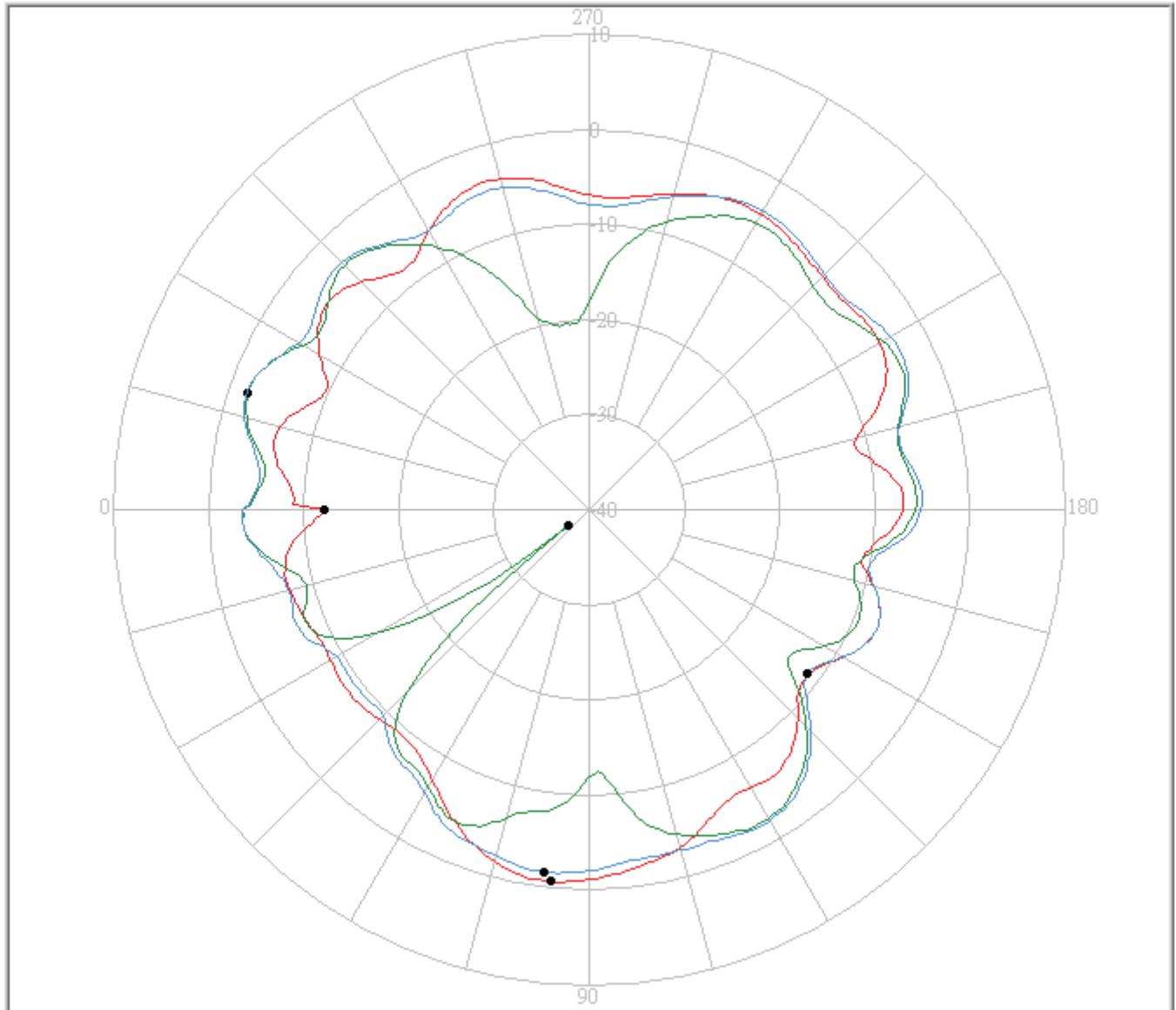


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Antenna Pattern Measurement

4F, No. 108-1, Mn 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	M540G	L	2400.00	-0.71 / 84.00	-12.12 / 0.00	-5.78	Ver.	2005/6/10
2	M540G	L	2400.00	-2.07 / 341.00	-37.28 / 38.00	-6.52	Hor.	2005/6/10
3	M540G	L	2400.00	-1.61 / 83.00	-11.38 / 143.00	-4.78	V+H	2005/6/10

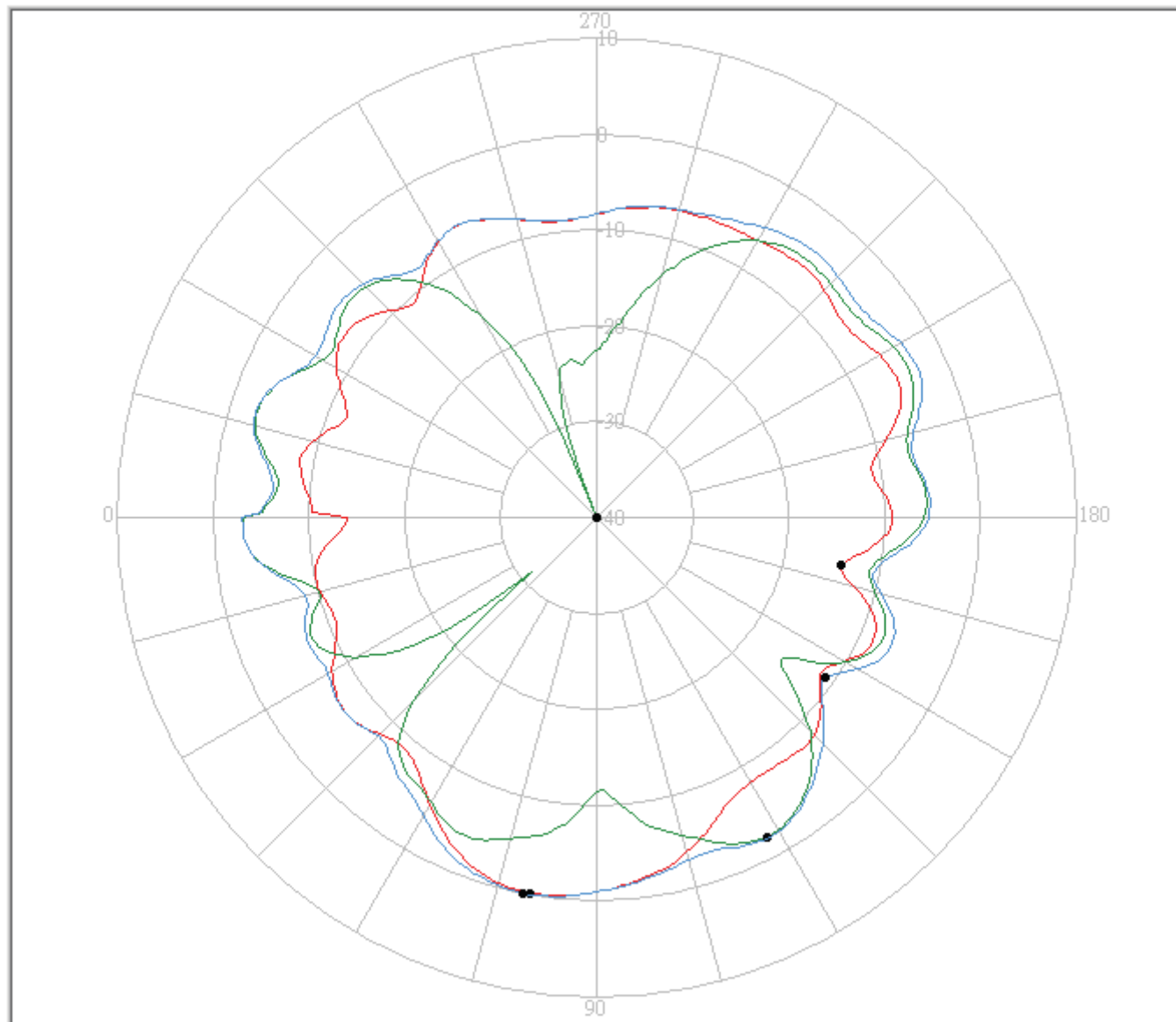
b. 2.45GHz



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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	M540G	L	2450.00	-0.23 / 80.00	-14.13 / 169.00	-6.52	Ver.	2005/6/10
2	M540G	L	2450.00	-2.28 / 118.00	-46.77 / 291.00	-6.94	Hor.	2005/6/10
3	M540G	L	2450.00	-0.07 / 79.00	-10.97 / 145.00	-4.75	V+H	2005/6/10

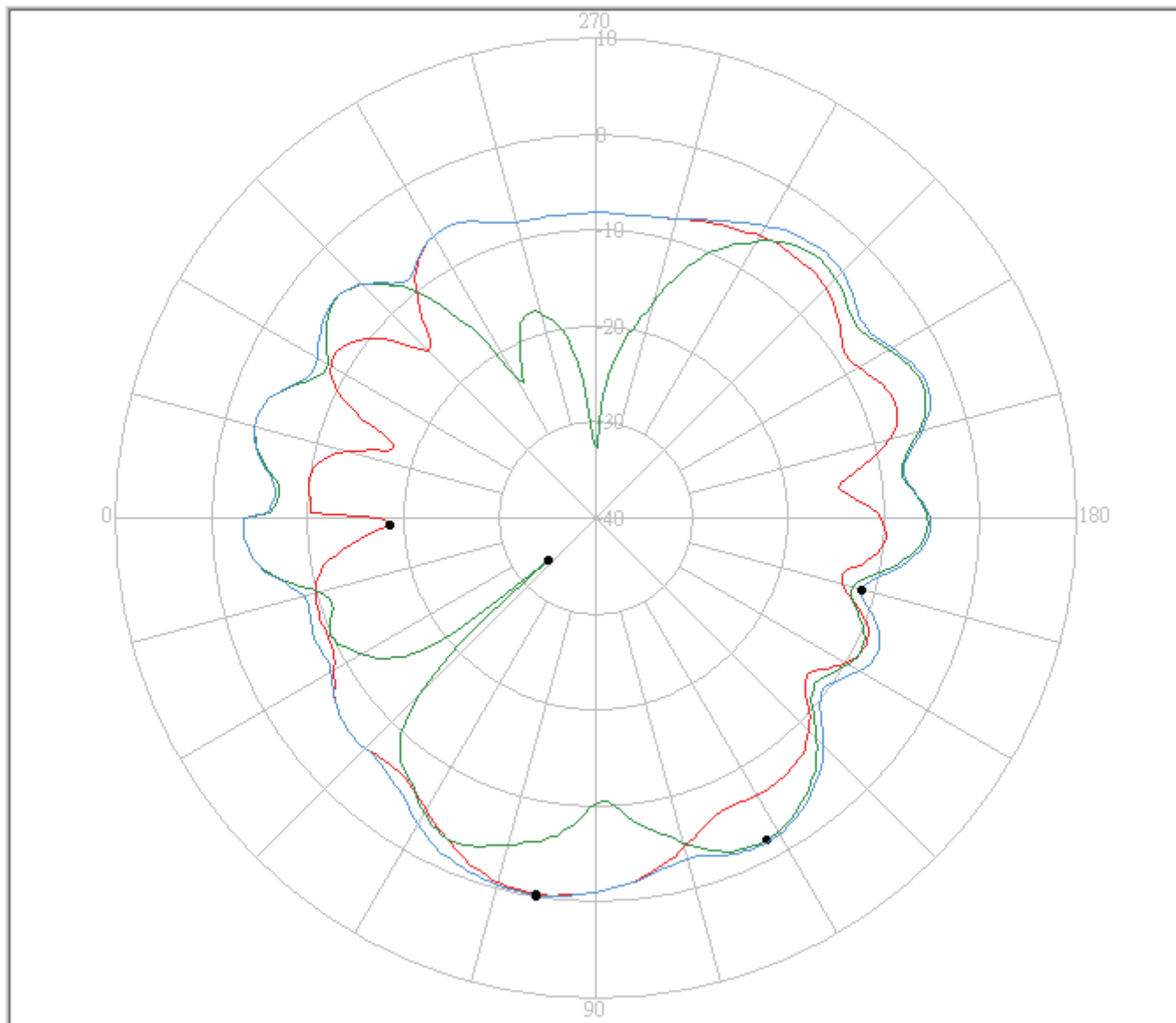
c. 2.5GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	2500.00	-0.32 / 81.00	-18.51 / 2.00	-6.68	Ver.	2005/6/10
2	M540G	L	2500.00	-2.02 / 118.00	-33.42 / 41.00	-6.74	Hor.	2005/6/10
3	M540G	L	2500.00	-0.18 / 81.00	-11.30 / 165.00	-4.73	V+H	2005/6/10

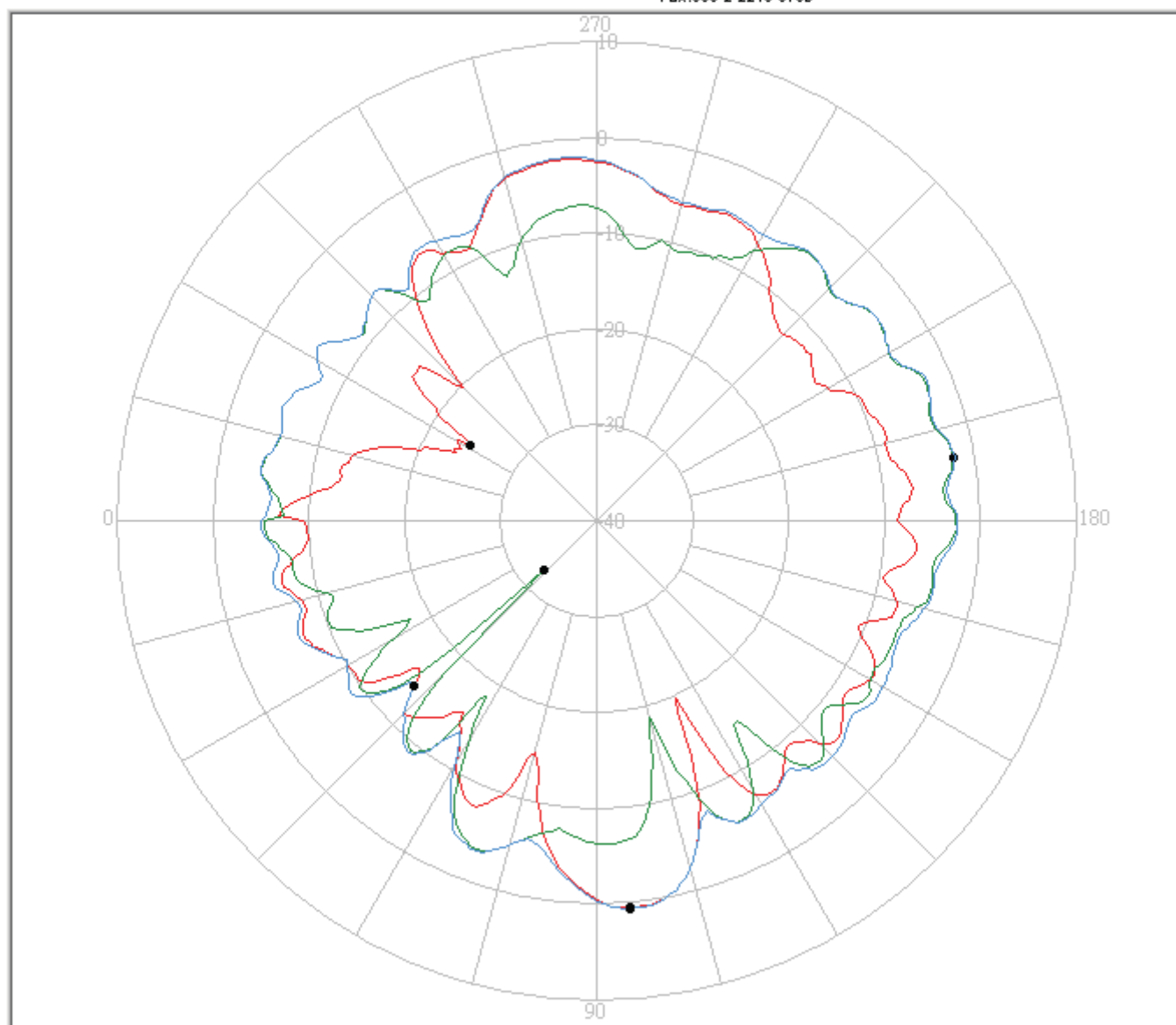
d. 4.9GHz



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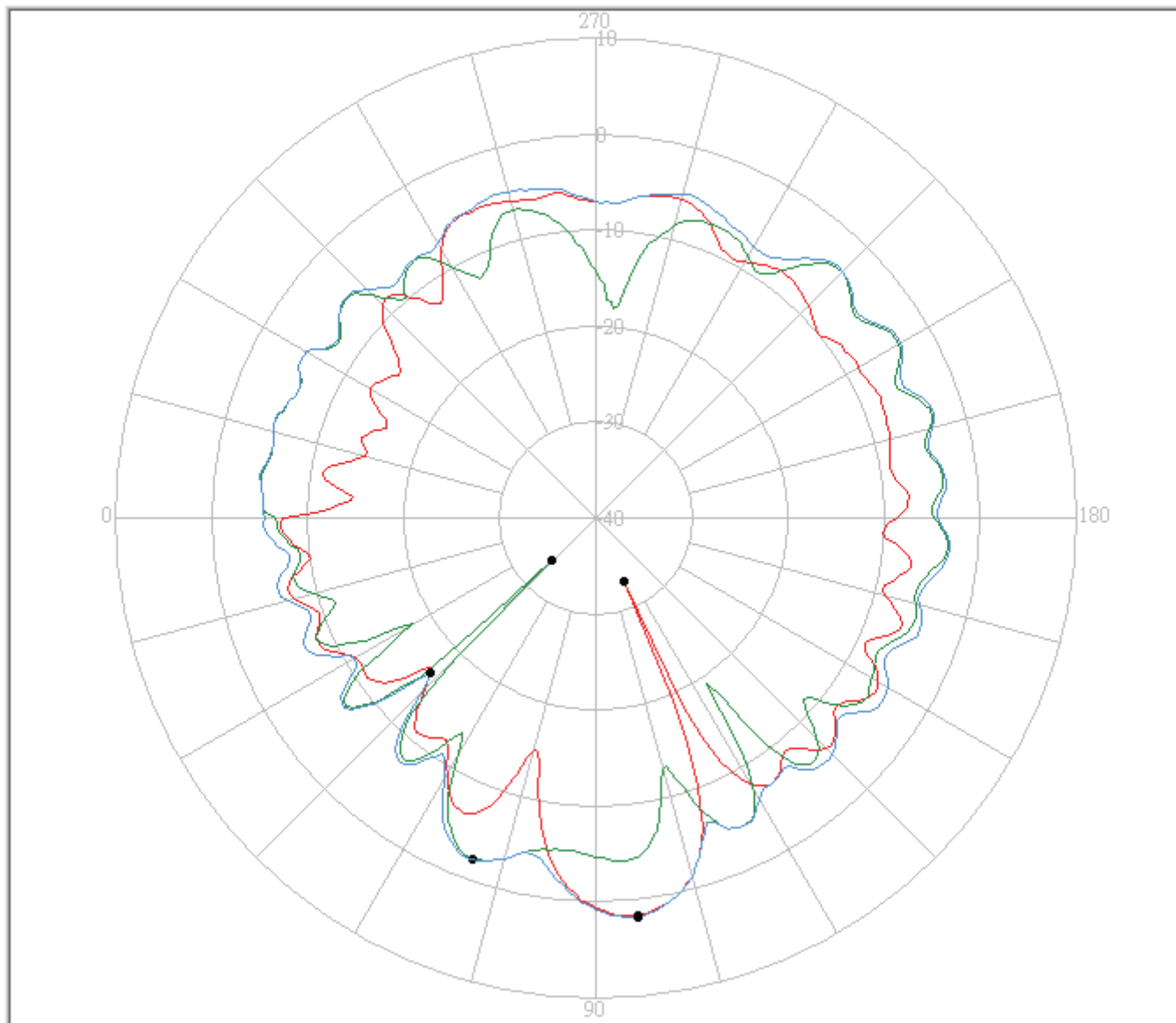
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	4900.00	0.50 / 95.00	-24.62 / 329.00	-6.90	Ver.	2005/6/10
2	M540G	L	4900.00	-2.26 / 190.00	-32.43 / 43.00	-6.73	Hor.	2005/6/10
3	M540G	L	4900.00	0.59 / 95.00	-14.32 / 42.00	-4.74	V+H	2005/6/10

e. 5.075GHz



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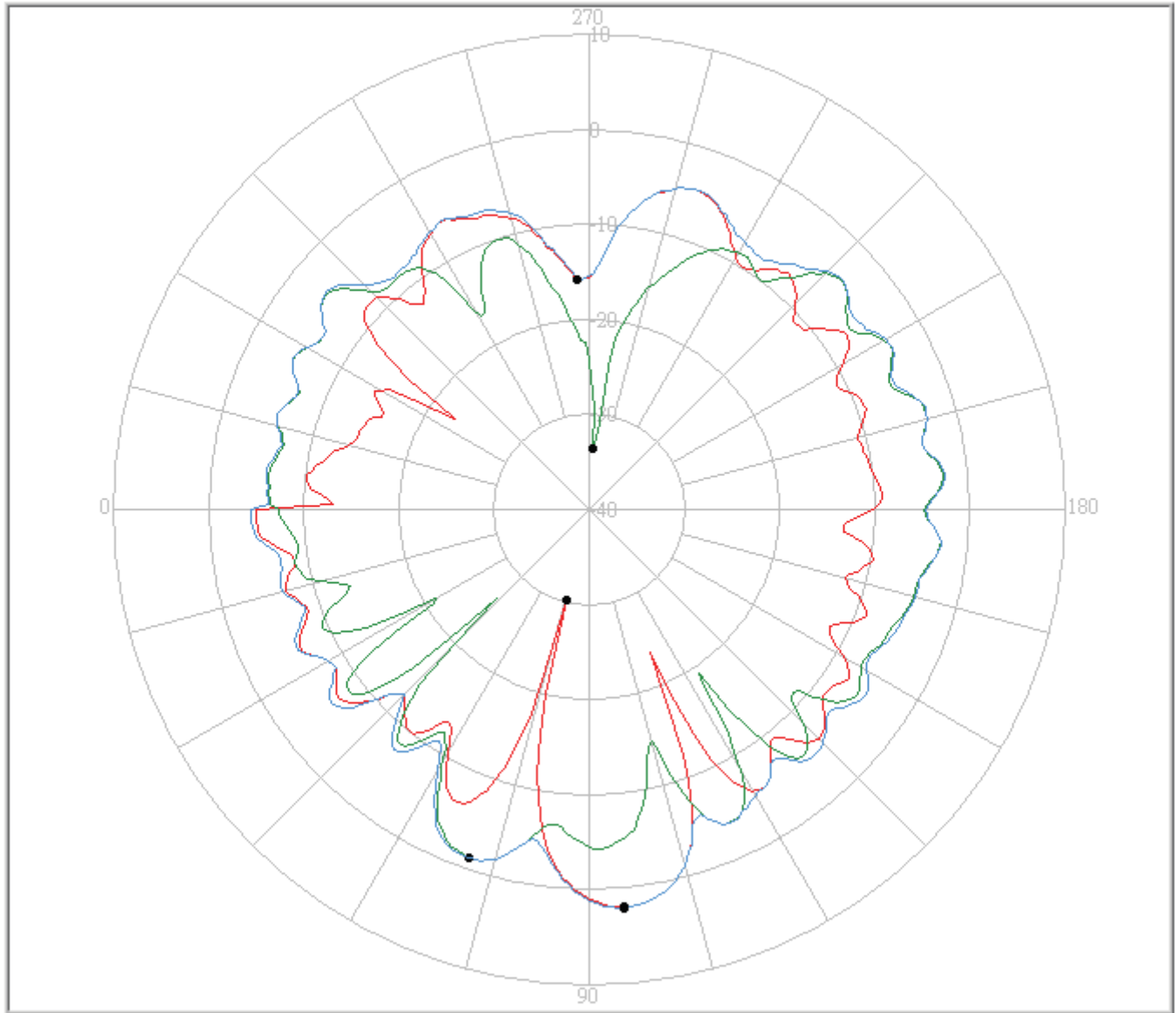
Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5075.00	1.61 / 96.00	-32.78 / 114.00	-6.91	Ver.	2005/6/10
2	M540G	L	5075.00	-2.29 / 70.00	-33.71 / 44.00	-6.53	Hor.	2005/6/10
3	M540G	L	5075.00	1.75 / 96.00	-16.47 / 43.00	-4.76	V+H	2005/6/10

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	M540G	L	5150.00	1.94 / 95.00	-30.12 / 76.00	-7.03	Ver.	2005/6/10
2	M540G	L	5150.00	-1.21 / 71.00	-33.55 / 266.00	-6.77	Hor.	2005/6/10
3	M540G	L	5150.00	2.03 / 95.00	-15.82 / 273.00	-4.78	V+H	2005/6/10

g. 5.25GHz

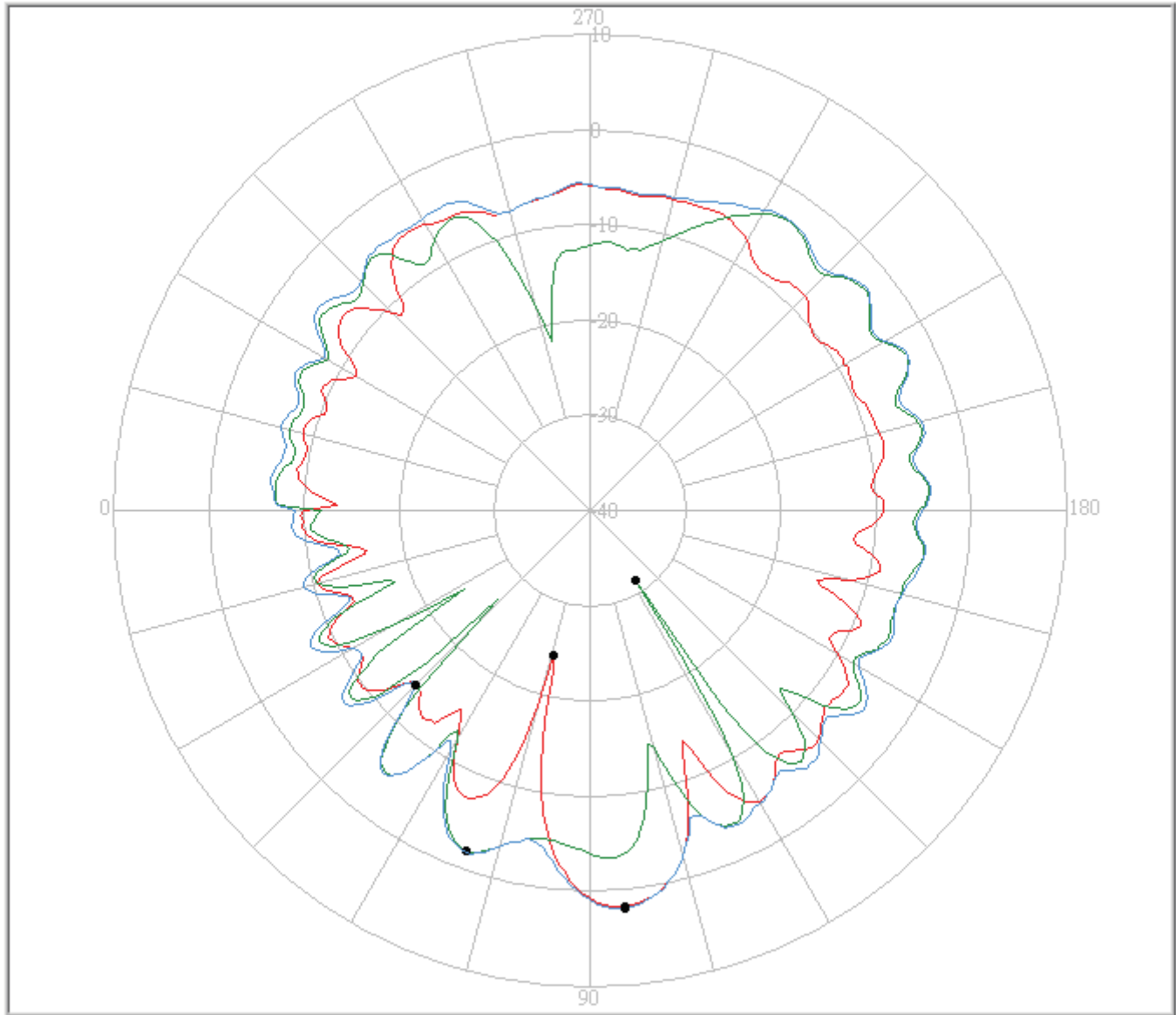


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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5250.00	1.71 / 95.00	-24.41 / 76.00	-7.00	Ver.	2005/6/10
2	M540G	L	5250.00	-1.99 / 70.00	-31.32 / 123.00	-6.57	Hor.	2005/6/10
3	M540G	L	5250.00	1.89 / 95.00	-14.22 / 45.00	-4.81	V+H	2005/6/10

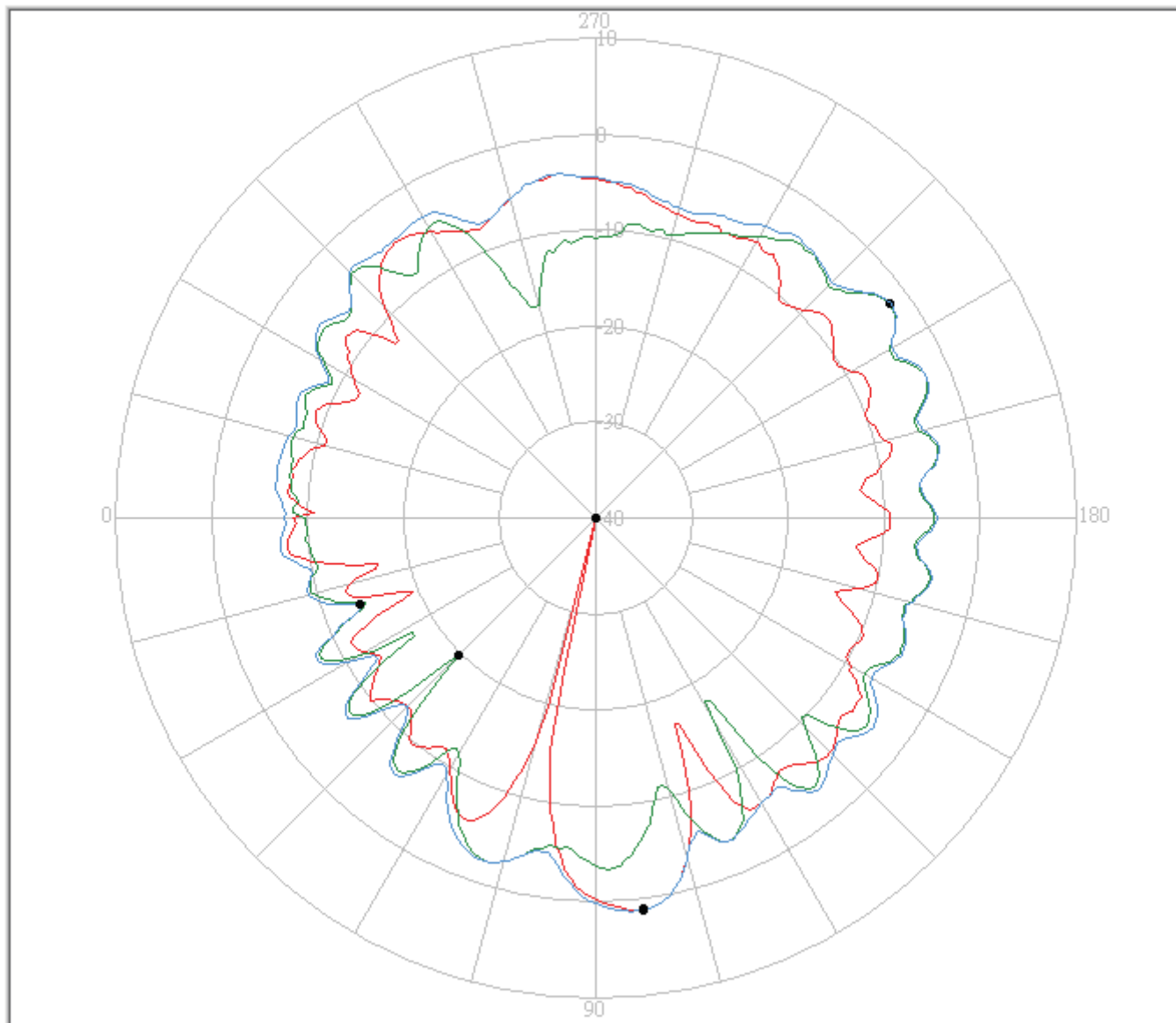
h. 5.35GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5350.00	1.05 / 97.00	-48.26 / 77.00	-7.03	Ver.	2005/6/20
2	M540G	L	5350.00	-2.13 / 216.00	-19.85 / 45.00	-6.45	Hor.	2005/6/20
3	M540G	L	5350.00	1.15 / 97.00	-13.89 / 20.00	-4.79	V+H	2005/6/20

i. 5.47GHz



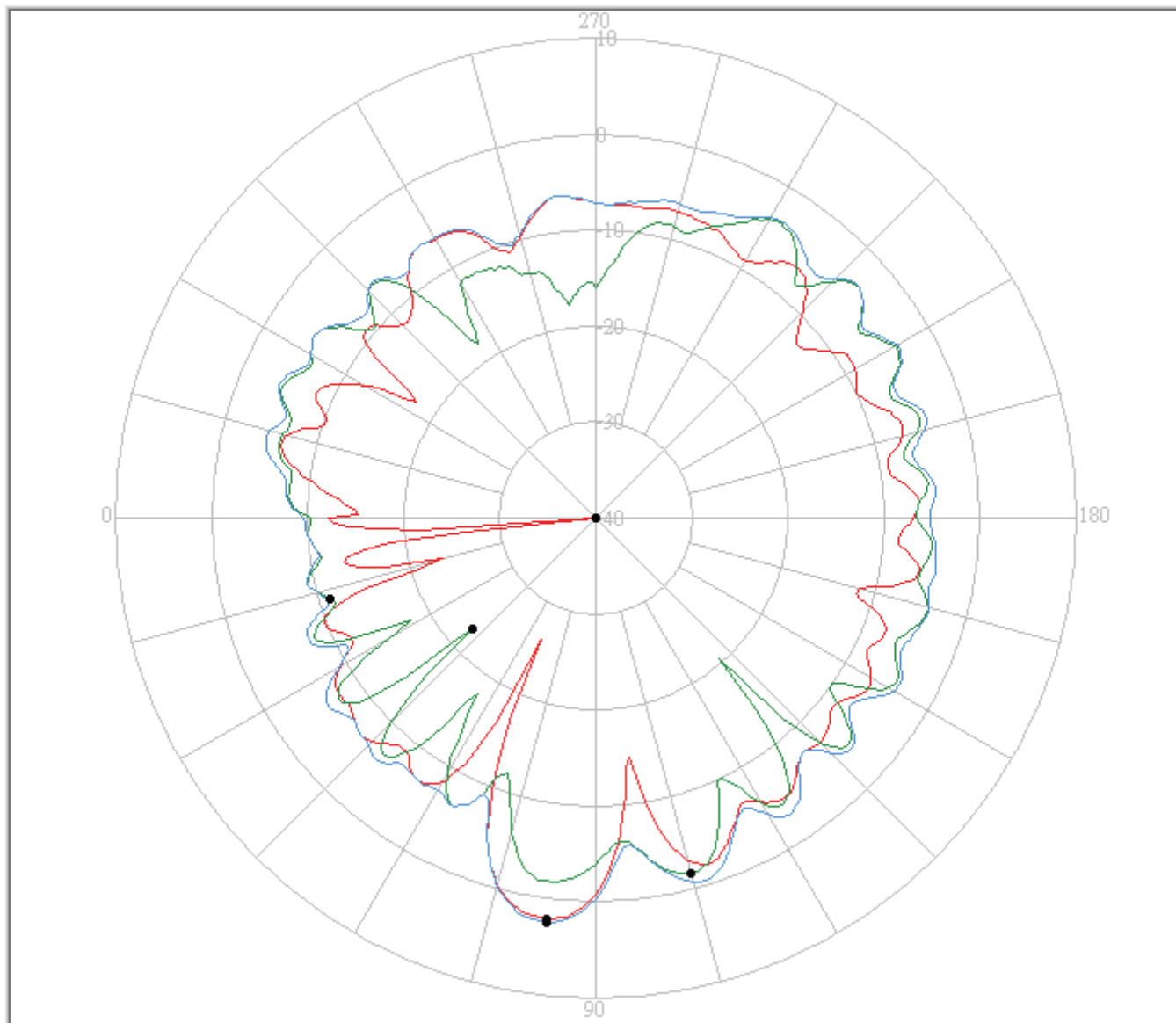
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5470.00	2.03 / 83.00	-38.07 / 5.00	-6.64	Ver.	2005/6/10
2	M540G	L	5470.00	-1.69 / 105.00	-22.72 / 42.00	-6.69	Hor.	2005/6/10
3	M540G	L	5470.00	2.38 / 83.00	-11.17 / 17.00	-4.83	V+H	2005/6/10

j. 5.597GHz

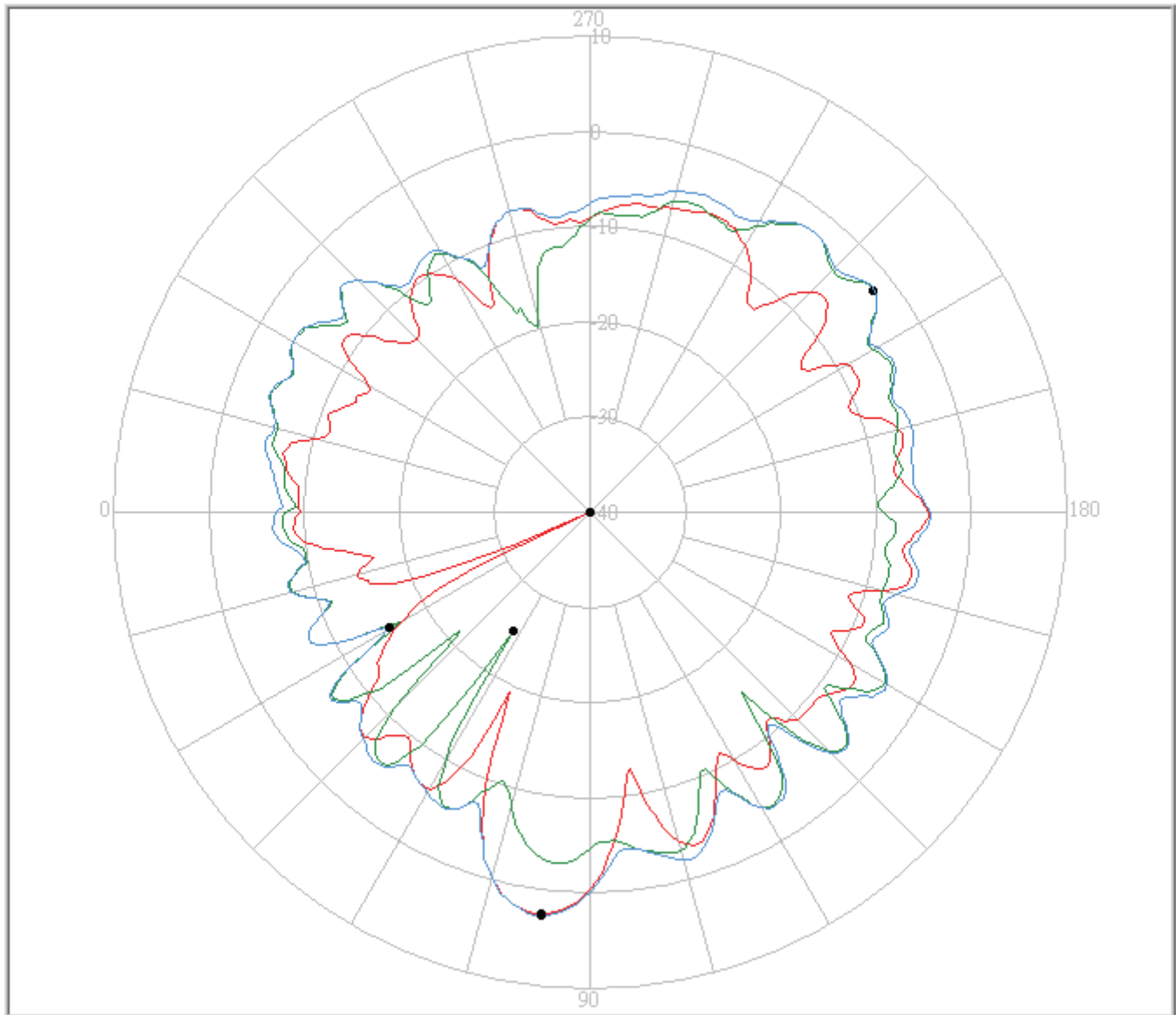


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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5597.50	2.53 / 83.00	-37.99 / 24.00	-6.98	Ver.	2005/6/10
2	M540G	L	5597.50	-2.23 / 218.00	-25.13 / 57.00	-6.55	Hor.	2005/6/10
3	M540G	L	5597.50	2.69 / 83.00	-15.77 / 30.00	-4.82	V+H	2005/6/10

k. 5.725GHz



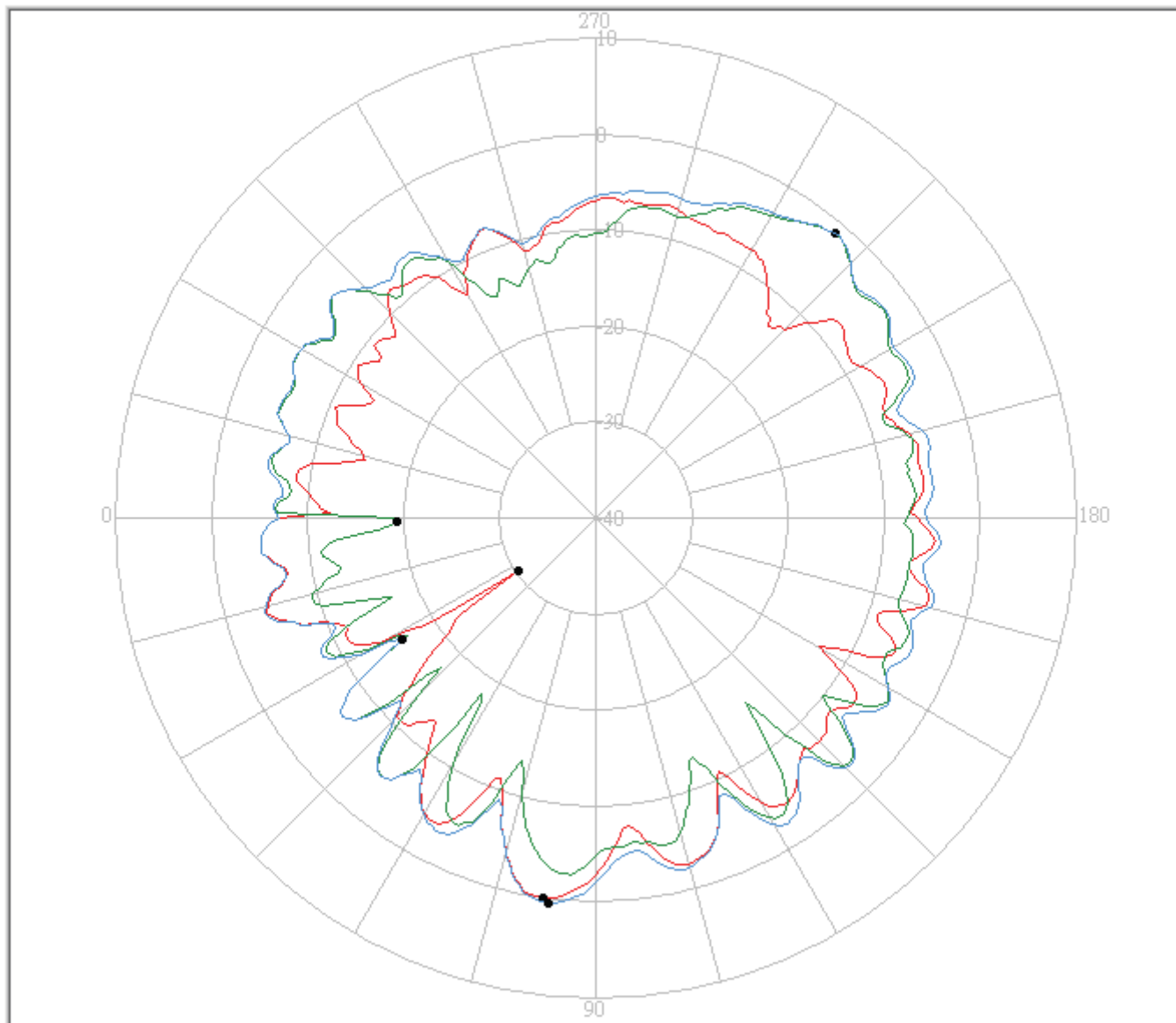
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Fax:886-2-2218-5760



Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5725.00	-0.03 / 82.00	-30.23 / 34.00	-7.03	Ver.	2005/6/10
2	M540G	L	5725.00	-1.26 / 230.00	-19.31 / 1.00	-6.46	Hor.	2005/6/10
3	M540G	L	5725.00	0.37 / 83.00	-16.18 / 32.00	-4.86	V+H	2005/6/10

1. 5.785GHz



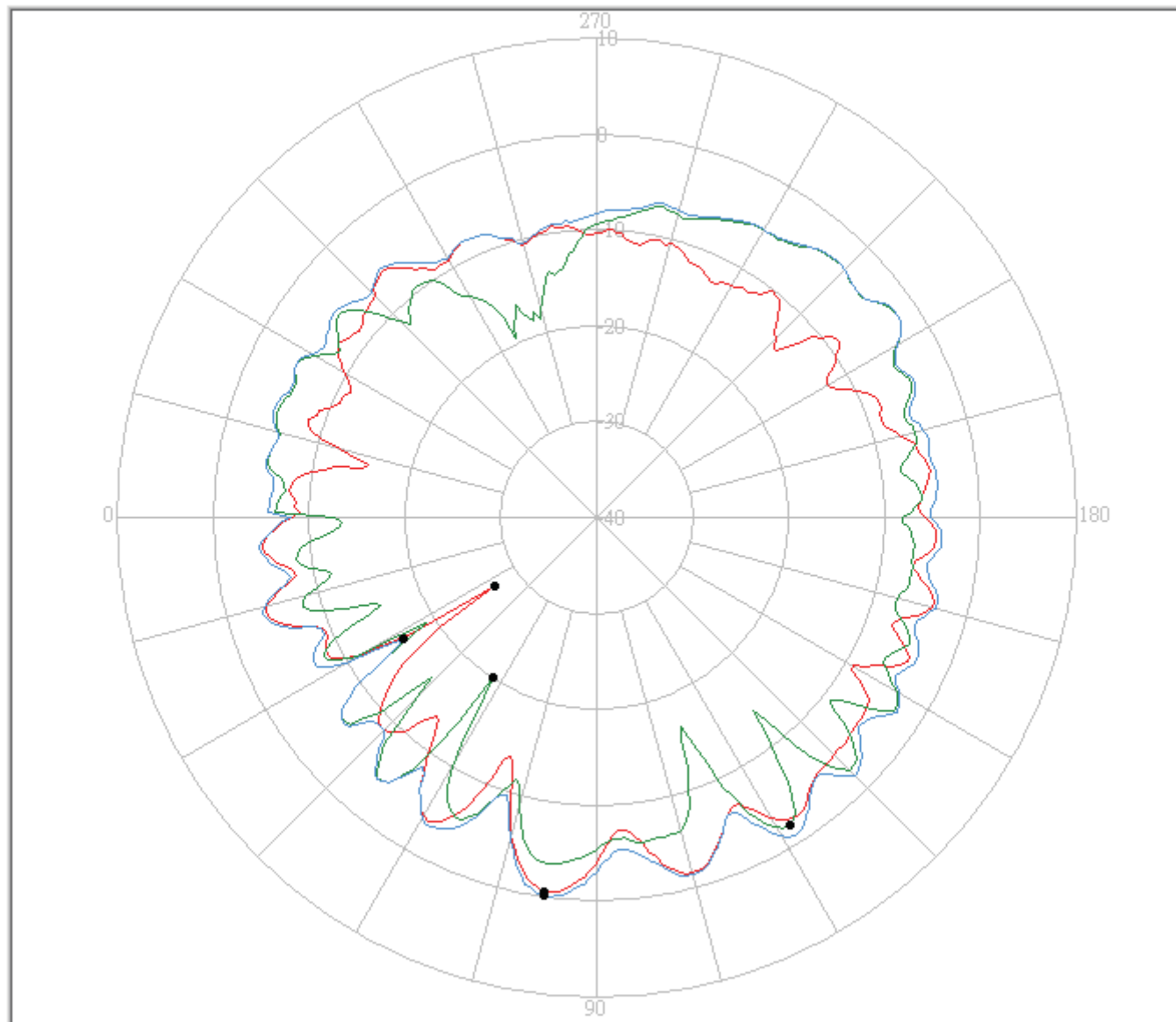
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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5785.00	-0.65 / 82.00	-27.26 / 34.00	-6.81	Ver.	2005/6/10
2	M540G	L	5785.00	-2.14 / 122.00	-20.19 / 57.00	-6.63	Hor.	2005/6/10
3	M540G	L	5785.00	-0.15 / 82.00	-16.27 / 32.00	-4.86	V+H	2005/6/10

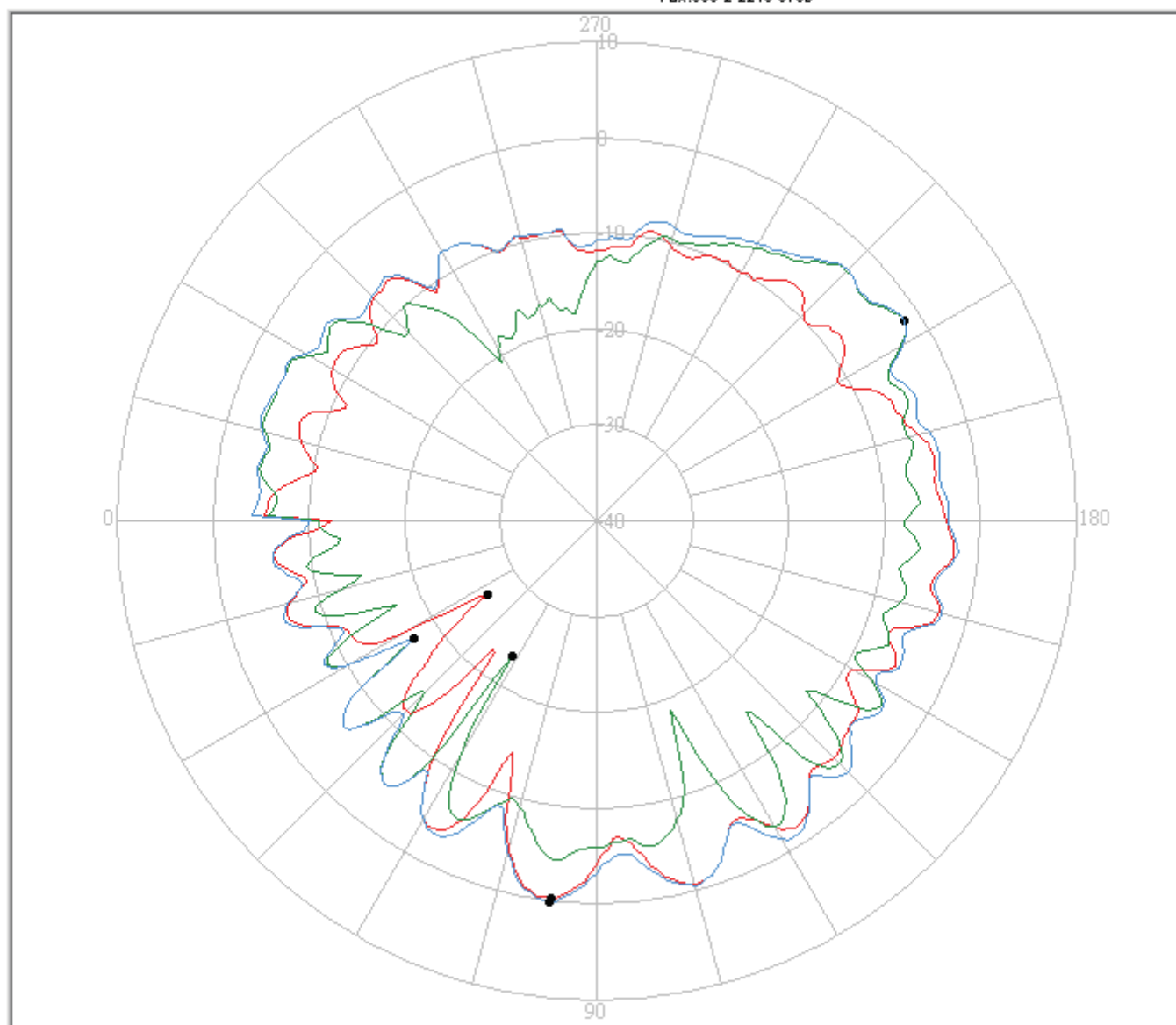
m. 5.85GHz



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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	M540G	L	5850.00	-0.30 / 83.00	-26.31 / 34.00	-6.40	Ver.	2005/6/10
2	M540G	L	5850.00	-1.76 / 213.00	-23.39 / 58.00	-7.19	Hor.	2005/6/10
3	M540G	L	5850.00	0.02 / 83.00	-17.34 / 33.00	-4.88	V+H	2005/6/10

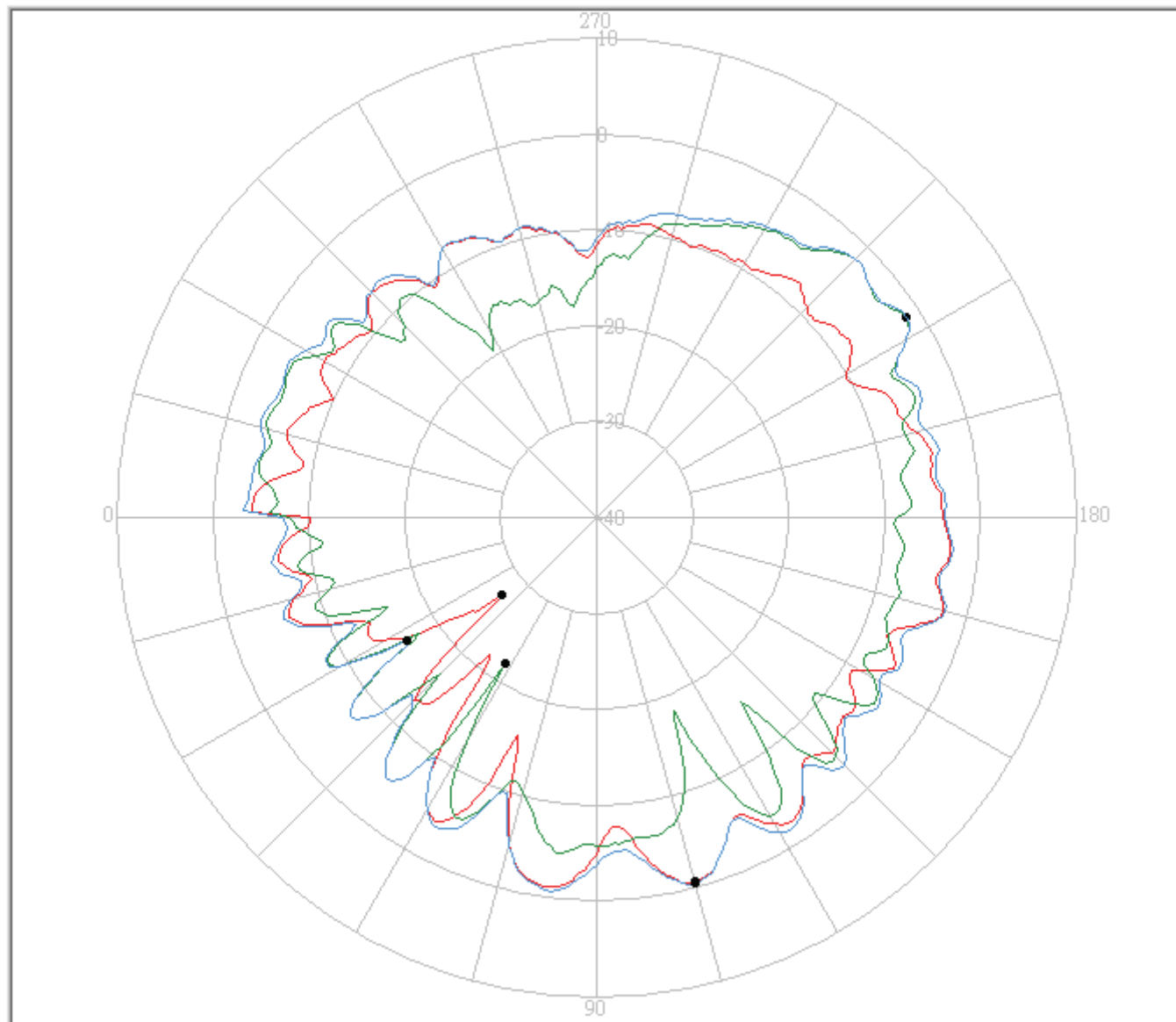
n. 5.875GHz



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Pattern	Model No.	Test Mode	Freq(MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.	Date
1	M540G	L	5875.00	-0.67 / 105.00	-27.26 / 39.00	-6.49	Ver.	2005/6/10
2	M540G	L	5875.00	-1.60 / 213.00	-22.14 / 58.00	-7.14	Hor.	2005/6/10
3	M540G	L	5875.00	-0.59 / 105.00	-16.41 / 33.00	-4.90	V+H	2005/6/10

4. SPECIFICATIONS:

Electrical Properties

Frequency Range : 2.4~2.5GHz & 4.9~5.875GHz

Impedance : 50 ohm

VSWR : ≤ 2.0

Peak Gain : $\leq 3\text{dBi}$

Average Gain : $> -5\text{dBi}$

5. Coaxial Cable Specification :



HITACHI SHIN DIN CABLE , LTD.

Unit 4101-11, 41/F., Metroplaza Tower 1,
223 Hing Fong Road, Kwai Fong, N.T.
Hong Kong
Tel No.: (852)-2741 0121
Fax No.:(852)-2785-4021

Customer:

P/N:

SPH-3-0805A

SPECIFICATION FOR UL1354 RF-1.13 COAXIAL CABLE

Prepared	Checked	Approved
Z. Yin Mar.22.2002	Barry Wong Mar.22.2002	Barry Wong Mar.22.2002

Issue and Revision Record

Rev. No.	Date	Revised Items	Prepared	Checked	Approved
0	Mar.22,2002	-----	Z. Yin	B. Wong	B. Wong
A	Nov.11,2003	Add UL style to the specification	Z. Yin	B. Wong	B. Wong

1. SCOPE:

This specification covers FEP insulated High-Frequency coaxial cable for internal wiring of electronic equipment.

[UL STYLE 1354 80°C /30V]

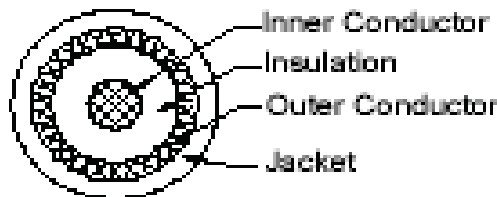
USE: Internal wiring of Class 2 Circuits of Electronic Equipment.

2. Construction :

Item	Unit	Spec. Value
Inner Conductor	Material	--- Silver plated copper
	construction	No./mm 7/0.08
	Dia.(approx)	mm 0.24
Insulation	Material	--- FEP
	Nom. Thickness	mm 0.22
	Dia.(approx)	mm 0.68±0.05
	Color	--- Natural
Outer Conductor	Type	--- Braid
	Material	--- Silver plated copper
	Coverage	% >93
	Dia.(approx)	mm 0.93
Jacket	Material	--- FEP
	Nom. Thickness	mm 0.10
	Color	--- Upon your request
	Dia.(approx)	mm 1.13 +0.10/-0.08

3. Characteristics :

Test Item	Unit	Specified Value	Note
Appearance	-	Faultless in visible	-
Temperature rating	°C	150	-
Voltage rating	V	250	-
Inner conductor resistance(at 20°C)	Ω /km	Max.597	At 20°C
Insulation resistance 1> (at 20°C)	MΩ·km	Min.1500	At 20°C
Dielectric strength	-	Dielectric core : No breakdown at AC1.5KV for 0.15sec.	Spark test
		Jacket : No breakdown at AC 1.5KV for 0.15sec.	Spark test
		No breakdown at AC 500V for 1min	Outer conductor to inner conductor
Capacitance	pF/m	Nom.98	At 1KHz
Characteristic impedance (at D-TDR)	Ω	50±2	TDR method
Attenuation	dB/m	2.0	1.0GHz
		2.9	2.0GHz
		3.6	3.0GHz
		4.2	4.0GHz
		4.7	5.0GHz
		5.2	6.0GHz



Cross-section of cable

AVLV2

February 4, 2003

Appliance Winding Material - Component

HITACHI SHIN DIN CABLE LTD

41ST FL, UNIT #101-II METROPLAZA TOWER 1 223 HING FONG
RD, KWAI FONG N T HONG KONG

E81015

FAX IN
94 6.-9

日信電 Cable UL 件



Table of Recognized Styles

Single-conductor, thermoplastic insulation.		Multiple-conductors, thermoplastic insulation.	
1007	1041	2547	2641
1011	1045	2560	2651
1015	1165	2562	2703
1032	1195	2640	2706
	1533	2575	2725
	1569	2789	2841
	1571	2831	2859
	1569	2835	2866
	1647	2846	2876
	1618	2900	2926
	1631	2919	2937
	1645	2940	2951
	1777	2980	2976
	18120	3026	3039
10272	1869	3046	3051
10360	10099	3047	3067
	10064	2071	20816
	10120	2076	2076
		2026	2064

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper, and use.

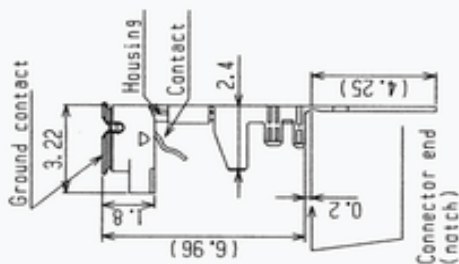
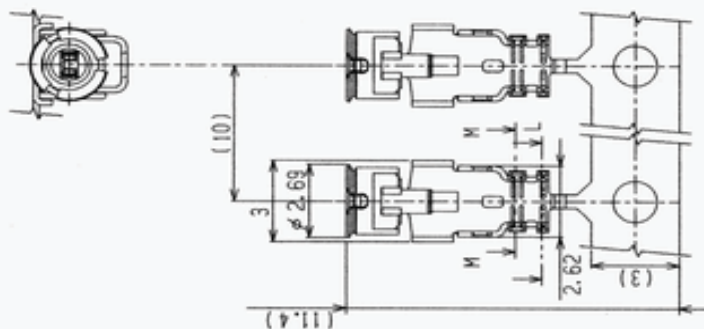
4/29/2003

Underwriters Laboratories Inc.

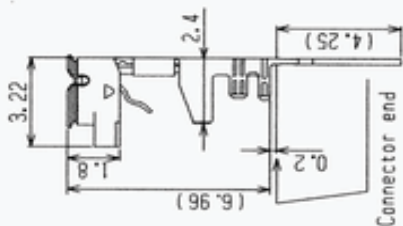
6. I-PEX Connector

Specifications

PART NO.
20278-111R-11



Part No. 20278-101R-11
For hand tool
(with notch)



Part No. 20278-111R-11
For semi auto
termination machine
(without notch)

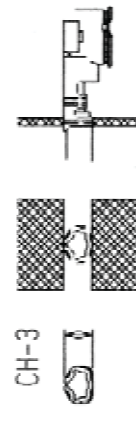
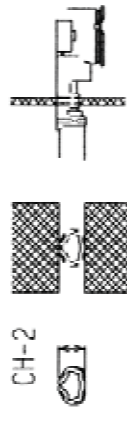
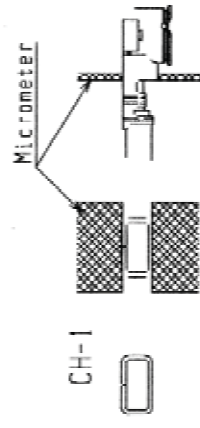
GENERAL TOLERANCE	
6 MAX.	±0.2
6 OVER MAX.	±0.3
30 OVER MAX.	±0.5
ANGLE	±2°

FORM REV. 4

DESIGN'D BY		DATE		DESIGN'D BY		DATE		TITLE	
4	Z2023	K.O	JUN/30/02	E.K	K.O	JUN/13/01		I-PEX	Interconnect and Packaging Electronics TOKYO, JAPAN
3	Z1256	K.O	NOV/14/01	K.K	K.				
2	Z1197	K.O	AUG/27/01	K.K	K.K				
1	Z1118	K.O	JUN/26/01	K.K	K.K				
0	Z1109	K.O	JUN/13/01						
68	Z2145	K.O	JUN/24/02	K.K	APP	JUN/13/01			MF series micro coaxial connector plug vertical
58	Z2117	A.H	MAY/17/02	K.K	REV				SCALE (UNIT) Dwg. No. 20278
		BY	DATE	APP	REV. RECORD				6/1 mmφ
					2814				CUSTOMER COPY
									SHEET REV. 1/3 58

WAS T

Part No.	20278-101R-08 20278-111R-08	20278-101R-13 20278-111R-13	20278-101R-32 20278-111R-32	20278-101R-18 20278-111R-18
Jacket Outer conductor Silver or tin plating Dielectric core Inner conductor Silver plating Applicable cable nominal dimension				
Braided shield of Outer conductor 外皮導体の編組	Single / 1股編組	Single / 1股編組	Double / 2股編組	Single / 1股編組
P/N of hand Tool	<Under developing>	90187-013	<Under developing>	<Under developing>
P/N of semi auto termination machine		90213-013		
Sect. M-M				
Sect. L-L				
Crimp Height	CH-1 Under developing	1.34~1.40	Under developing	Under developing
	CH-2 Under developing	1.06~1.14	Under developing	Under developing
	CH-3 Under developing	1.15~1.35	Under developing	Under developing



Crimp Height

I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN

DESIGN'D BY DATE
CHK'D BY DATE
APP'D BY DATE

TITLE MHF series micro coaxial connector plug vertical

CUSTOMER COPY UNIT 6/1 m.p. PROJECTION SCALE UNIT 20278 SHEET REV. 2/3 68

GENERAL TOLERANCE
6 MAX. ±0.2
6 OVER MAX. 30 ±0.3
30 OVER MAX. 120 ±0.5
ANGLE ±2°

Notes

1. Material
 (1) Housing : PBT , UL94V-0 , black
 (2) Contact
 Phosphor bronze
 gold plating
 (3) Ground contact
 Phosphor bronze , gold plating
 2. Packing : reel
 3. Mating Partner Part No.
 : 20279-001E-01

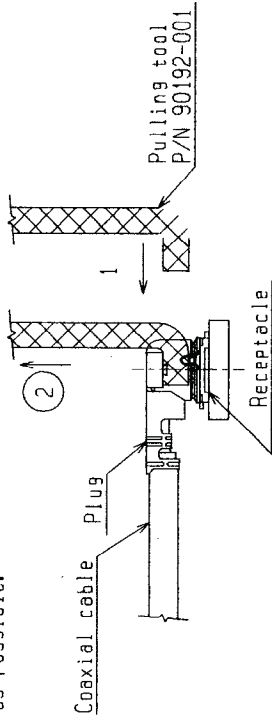
1. 材料
 (1) ハウジング:PBT, UL94V-0, 黒色
 (2) コンタクト
 :りん銅
 :金メッキ
 (3) グランドコンタクト
 :りん青銅, 金メッキ
 2. 梱包 : リール
 3. かん合相手 part No.
 : 20279-001E-01

5-2 Unmating.

5-2 コネクタ抜き時

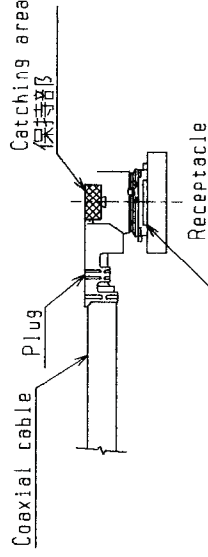
- (1) In case of unmating by pulling tool.
 Please use the pulling tool as the following drawing, and please pull plug to vertical direction as directly as possible.

- (1) 抜き工具を用いる場合
 下図のようにできるだけ垂直に引き抜いて下さい。



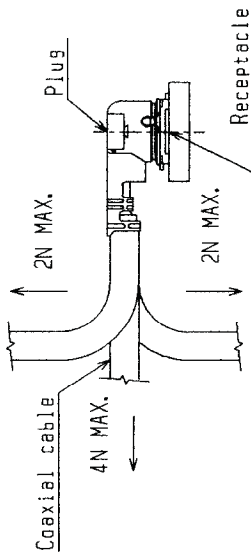
- (2) In case of unmating directly by hand
 Please catch the catching area of plug , and please pull plug to vertical direction as directly as possible.

- (2) 手で直接引き抜く場合
 下図の保持部をつかみ、できるだけ垂直に引き抜いて下さい。



4. Permissible load of cable at mating

コネクタかん合後のケーブルに対する荷重

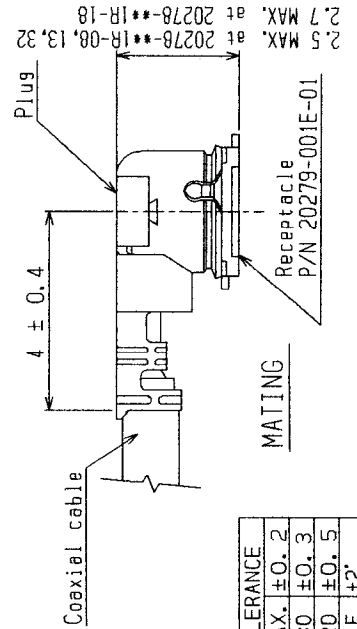


5. Suggestions for mating & unmating operation.

5. コネクタかん合時および抜き時の注意

5-1 Mating.
 Please mate the connector straightly to vertical direction as much as possible, adjusting the mating axis of plug and receptacle.
 As excessive slant angle mating may break the connector , please don't do it.

5-1 コネクタ挿入時
 PlugとReceptacleのかん合軸を合わせ、できるだけ垂直に挿入して下さい。極端な斜め挿入は行わないで下さい。コネクタ破損の原因となりますので、過度なこじり挿入は行わないで下さい。



GENERAL TOLERANCE	
6 MAX.	±0.2
6 OVER MAX. 30	±0.3
30 OVER MAX. 120	±0.5
ANGLE	±2°

DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN	TITLE	MHF series micro coaxial connector plug vertical
CHK'D BY	DATE		PROJECTION	SCALE UNIT
APP'D BY	DATE		1:1	mm
CUSTOMER COPY			DWG. No.	20278
			SHEET REV.	3/3 6B

材料証明書 MATERIAL CERTIFICATE

当社製品には下記の材料が使われている事を証明致します。

WE HEREBY CERTIFY THAT THE FOLLOWING MATERIALS ARE USED IN OUR PRODUCT.

PRODUCT NAME : MHF series micro coaxial connector PLUG

P/N 20278-**1R-**, 20308-**1R-**, P/N 20351-**1R-37

	部品 COMPONENT	材料/MATERIAL			UL94難燃性 UL94 FLAME CLASS	ULファイルNo. UL FILE No.
		材質名 MATERIAL	型名 CAT No.	材料メーカ MANUFACTURER		
1	HOUSING	PBT	3116	WINTECH POLYMER LTD.	V-0	E 213445

PRODUCT NAME : MHF series micro coaxial connector RECEP.

P/N 20279-001E-01, P/N20314-001E-01

	部品 COMPONENT	材料/MATERIAL			UL94難燃性 UL94 FLAME CLASS	ULファイルNo. UL FILE No.
		材質名 MATERIAL	型名 CAT No.	材料メーカ MANUFACTURER		
1	HOUSING	LCP	E130i	POLYPLASTICS CO.,LTD.	V-0	E 106764

PRODUCT NAME : MHF II connector

P/N 20311-**1R-**, P/N 20312-**1R-**

	部品 COMPONENT	材料/MATERIAL			UL94難燃性 UL94 FLAME CLASS	ULファイルNo. UL FILE No.
		材質名 MATERIAL	型名 CAT No.	材料メーカ MANUFACTURER		
1	HOUSING	LCP	A430	POLYPLASTICS CO.,LTD.	V-0	E 106764

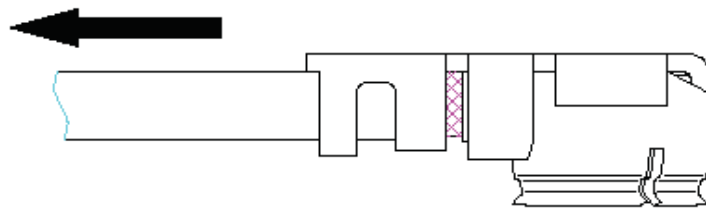
株式会社アイベックス
I-PEX Co.,Ltd.

APPROVAL	CHECK	ORIGINATOR
T.Harada Feb/13/'04		K.Ohbayashi Feb/13/'04

I-PEX CONNECTOR 拉力測試報告

編號	1	2	3	4	5	6	7	8	9	10	Avg.
拉力值	19.8	23.6	20.5	19.4	19.9	21.2	22.2	19.5	23.2	21.6	21.09

UNIT: N



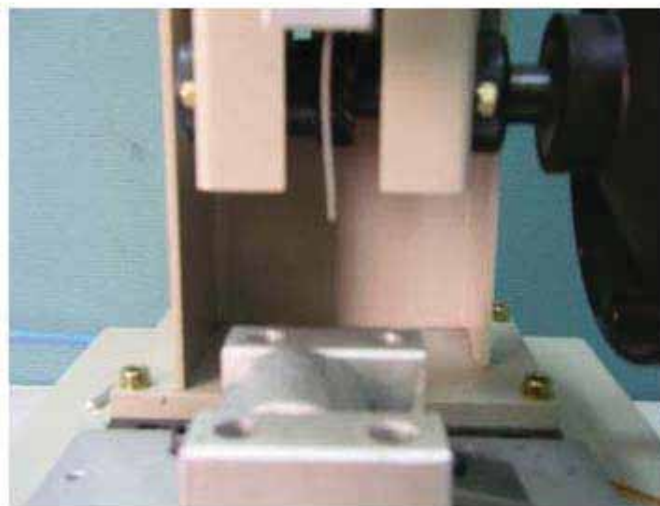
I-PEX CONNECTOR 拉力測試報告

測試前



I-PEX CONNECTOR 拉力測試報告

測試後



7. Sponge Specification:

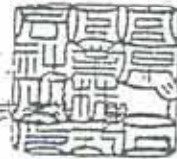
試験報告書

No. 3G-1672

平成5年11月 4日

CR700

財団法人 化学工業協会
大阪事務所



1. 依頼者 宮原ゴム工業株式会社
2. 受付日 平成5年10月18日
3. 試料名 CR-250

4. 試験項目及び結果

- 1) 硬さ試験
硬さ Hs (SRIS-C) 23
- 2) 引張試験
引張強さ kgf/cm^2 10.3
伸び % 210
50%引張応力 kgf/cm^2 3.2
- 3) みかけ比重 0.22
- 4) 圧縮試験
25%圧縮応力 kgf/cm^2 0.63
50%圧縮応力 kgf/cm^2 1.54
- 5) 圧縮回復試験 (室温 \times 24hrs, 50%圧縮, 解除30分後に測定)
回復率 % 93.7
- 6) 老化試験 (ギヤー式, $100 \pm 1^\circ\text{C} \times 24\text{hrs}$)
硬さ Hs (SRIS-C) 22
引張強さ kgf/cm^2 9.5
伸び % 180
50%引張応力 kgf/cm^2 3.8
- 7) 圧縮永久ひずみ試験 ($70 \pm 1^\circ\text{C} \times 22\text{hrs}$, 圧縮率25%)
*圧縮永久ひずみ率 % 11
- 8) 耐熱収縮試験
試験条件 70 \pm 1 $^\circ\text{C} \times$ 2hrs 100 \pm 1 $^\circ\text{C} \times$ 24hrs
収縮率 % 0.0 2.3
0.1 1.8
- 9) 燃焼試験
燃焼時間 (秒) 1.8
残じんの有無 なし
燃焼停止位置 燃焼限界線を超えない

〒543 大阪市天王寺区堂ヶ芝1-6-5 ☎ (06) 771-5157



QMFZ2

Component Plates

January 20, 1987

E66114 (S)

MIYAHARA RUBBER INDUSTRY CO LTD
1-20 KARUMO-DORI 1-CHOME NAGATO-KU KODE-
SHI, HYOGO-KEN JAPAN

Mill Deg	Col	Den PCF (g/cc)	In.	Min Thick (mm)	UL94 Flame Class
					94HDF
					94HIF-1
					94HIF-1
Chloroprene rubber foam furnished in sheet or block form.					
CR-30	BK	12.7(0.2)-14.4(0.23)	0.073	(1.85)	
CR-45	BK	15.90(0.28)-16.74(0.26)	0.078	(2.0)	
CR-250	BK	12.0(0.19)-13.2(0.21)	0.082	(1.57)	

✓ Marking: Company name and material designation on container, wrapper or finished part.

See General Information Preceding These Recognitions.

UL94 small-scale test data does not pertain to building materials, furnishings and related contents.
UL94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report: March 1, 1978.

Replaces E66114 dated December 2, 1986.
877379001 110076 Underwriters Laboratories Inc.®

DIV/0026547