

深圳天珑移动技术股份有限公司

承 认 书

(FPC 类)

SPECIFICATION FOR APPROVAL

物料描述

DESCRIBE: T9201-GSM黑色

物料型号

PRODUCTS: T9201-GSM

物料编码

PART NO: F-2A-BV-0087-000-KA

品牌(制造商)

BRAND:

适用机种

APPLICATION: T9201

日期

DATE: 2013. 9. 3

供应商

PROVIDER: 硕贝德无线科技股份有限公司

APPROVED BY VENDOR

确认	校对	审核	批准

研发部

2013-09-05

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目 录

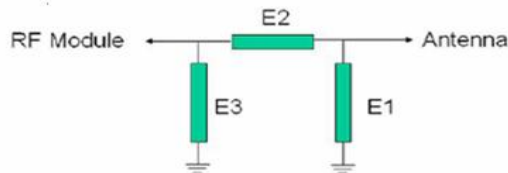
一、	封面	1
二、	目录	2
三、	变更履历	3
四、	电特性	4-11
五、	天线结构图	12
六、	全尺寸检测报告	13
七、	CPK报告	14
八、	QC工程图	15-16
九、	可靠性测试报告	17
十、	材质证明	18
十一、	镀金层报告	19
十二、	包装	20

四、电特性

1. Antenna Structure



2. Matching Network



Element	Value
E1(0402)	NG
E2(0402)	0Ω
E3(0402)	NG

3. Passive Test

1. Return Loss

Test Equipment: HP8753E

Test Result:

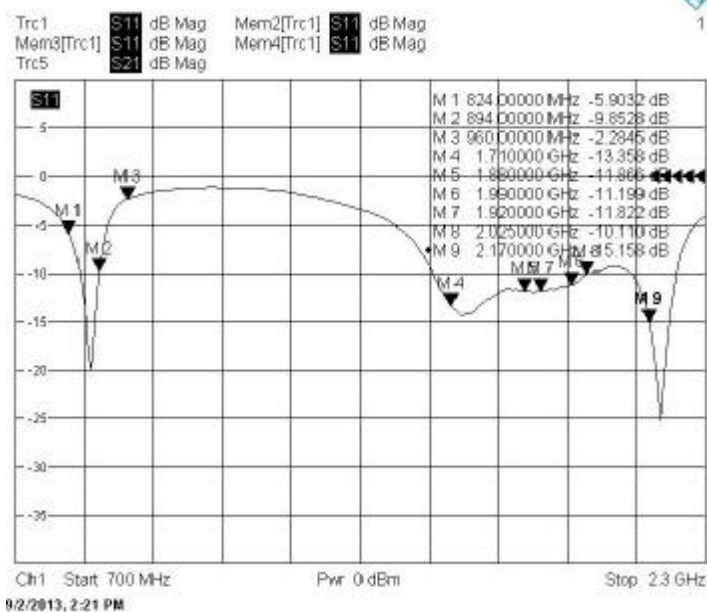


Figure3.1 S11 curve

2. Vswr

Test Equipment: HP8753E

Result:

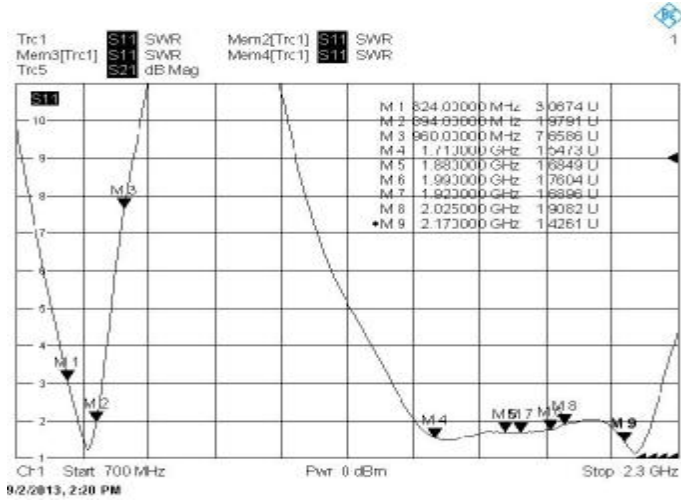


Figure 3.2 S11 curve

3. Smith

Test Equipment: HP8753E

Result:

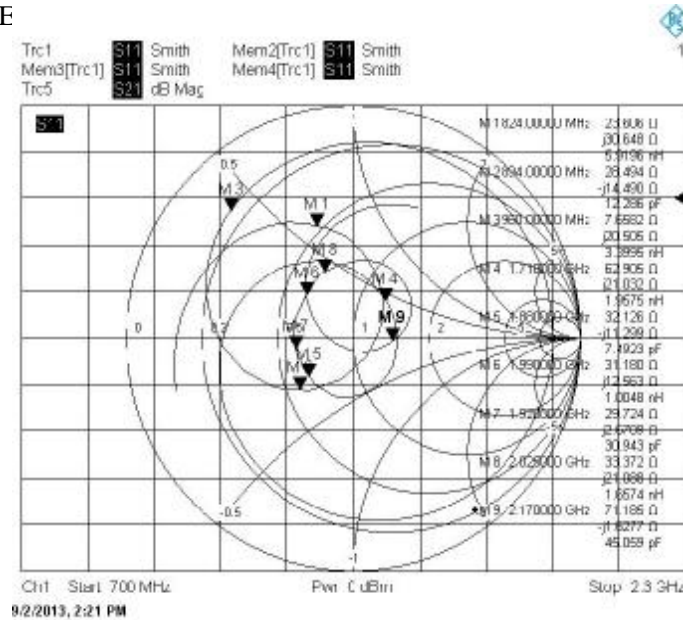


Figure 3.3 smith curve

4. Isolation

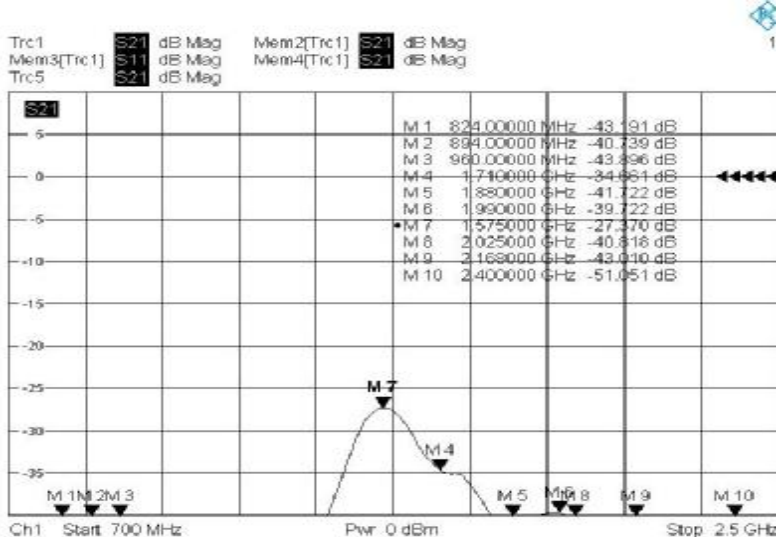


Figure 3.4 The isolation between wifi and GPS antenna

5. Radiation Pattern

Test Equipment: Satimo StarLab, HP8753E, Shielding R
Antenna Range Axis Definition

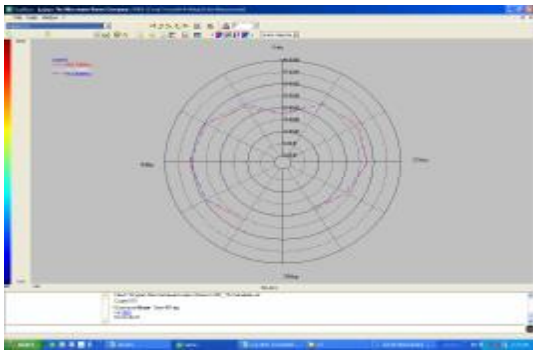


figure3.5.1 GSM850 XY plane Antenna pattern

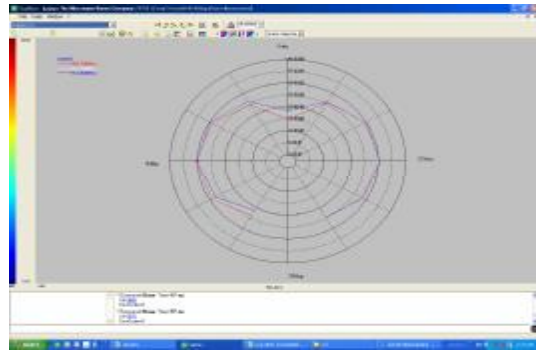


figure 3.5.2 GSM850 ZX plane Antenna pattern

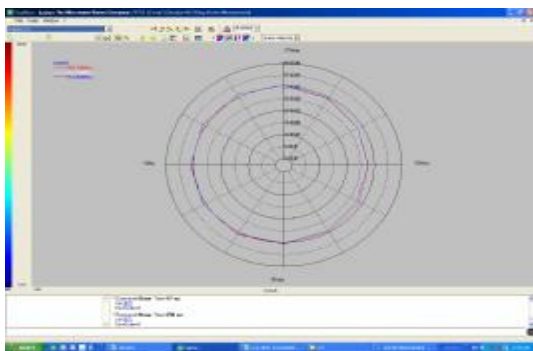


figure 3.5.3 GSM850 YZ plane Antenna pattern

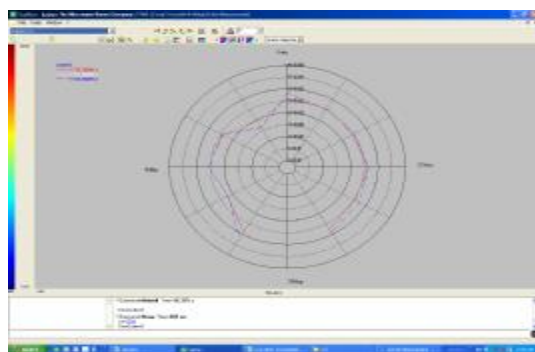


Figure 3.5.4 PCS1900 XY plane Antenna pattern

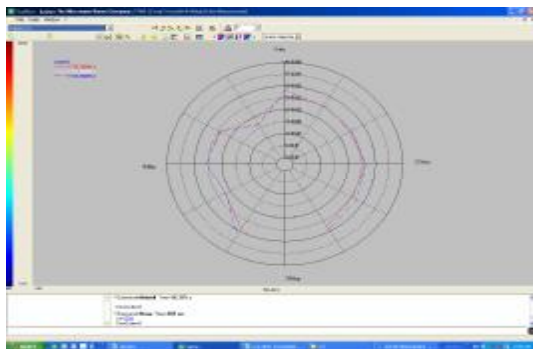


Figure 3.5.5 PCS1900 ZX plane Antenna patte

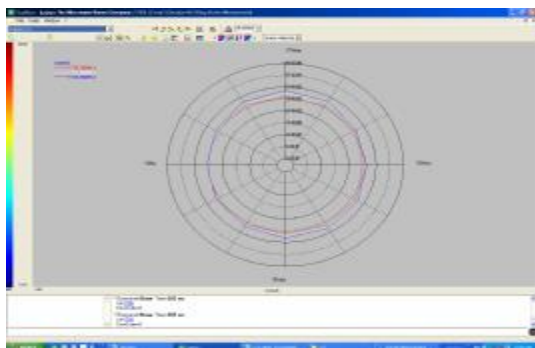


Figure 3.5.6 PCS1900 YZ plane Antenna pattern

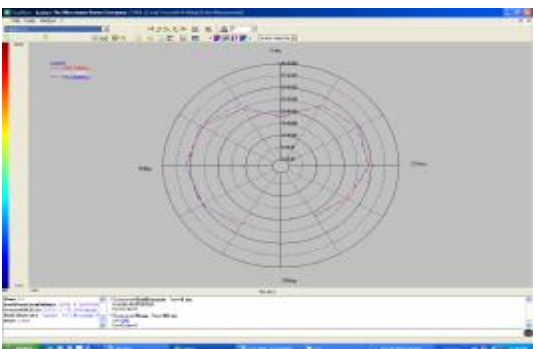


figure3.5.7 GSM900 XY plane Antenna pattern

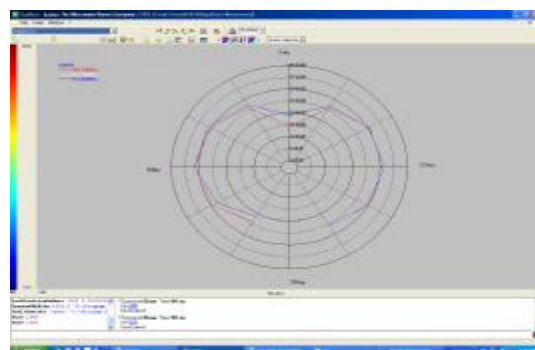


figure 3.5.8 GSM900 ZX plane Antenna pattern

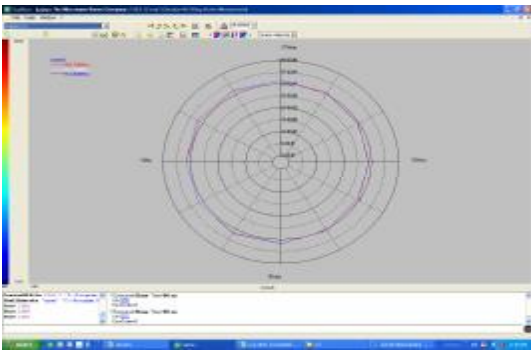


figure 3.5.9 DGSM900 YZ plane Antenna pattern

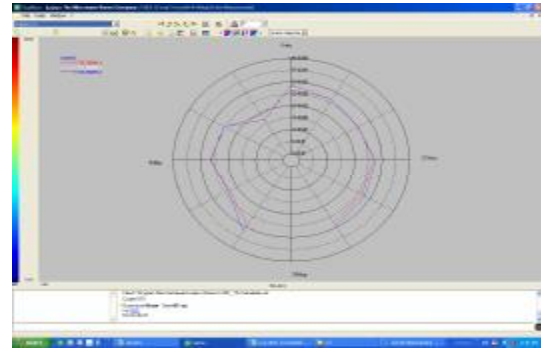


Figure 3.5.10 DCS1800 XY plane Antenna pattern

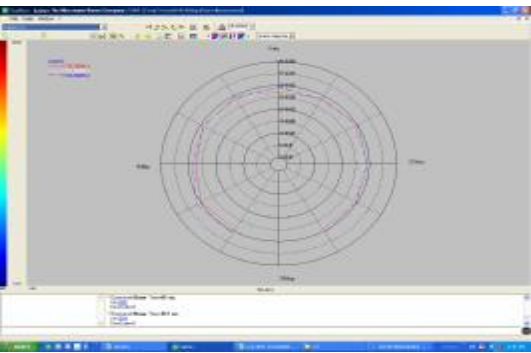


Figure 3.5.11 DCS1800 ZX plane Antenna patte

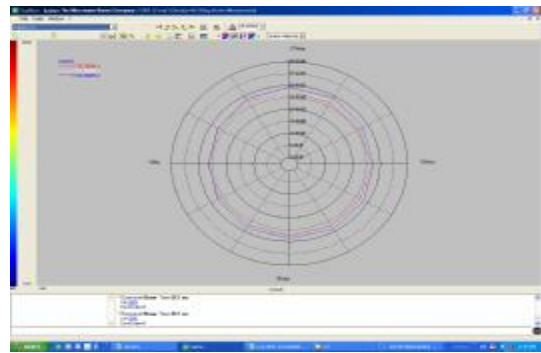


Figure 3.5.12 DCS1800 YZ plane Antenna pattern

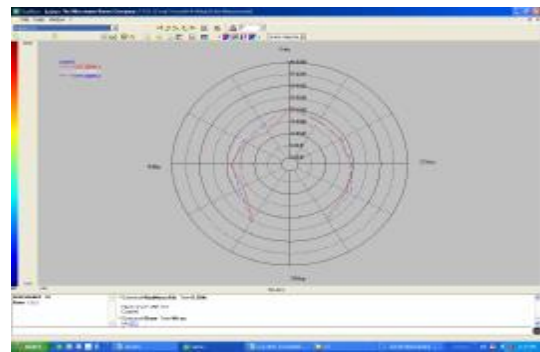


Figure 3.5.13 B1 XY plane Antenna pattern

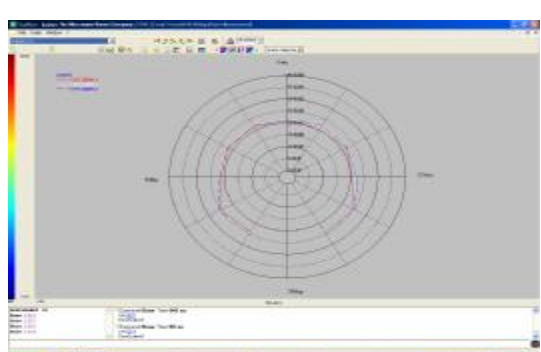


Figure 3.5.14 B1 ZX plane Antenna pattern

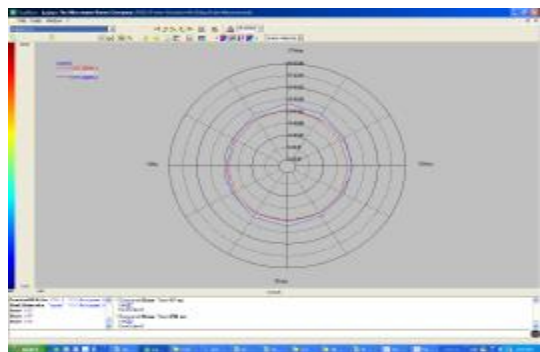


Figure 3.5.15 B1 S YZ plane Antenna pattern

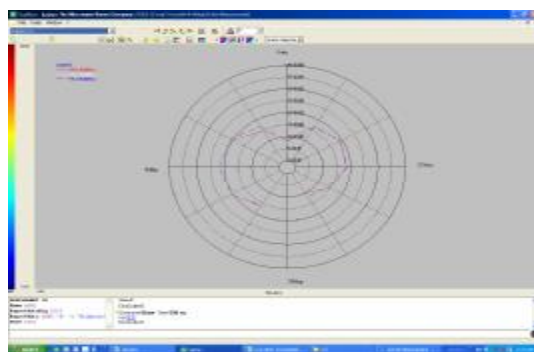


Figure 3.5.16 B5 XY plane Antenna pattern

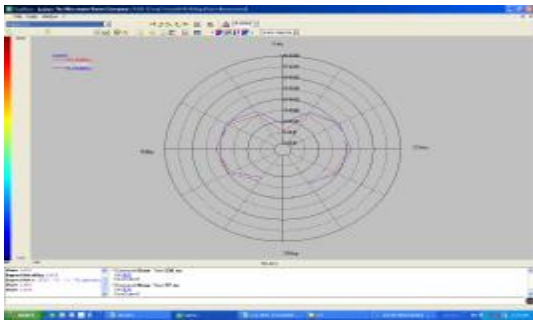


Figure 3.5.17 B5 ZX plane Antenna pattern

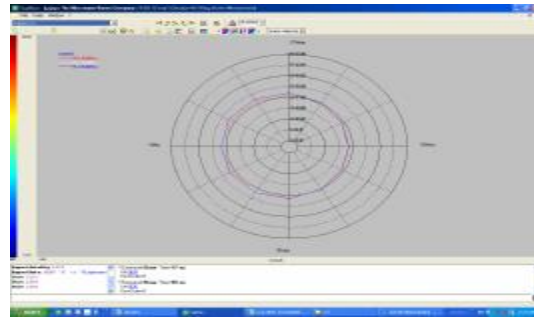


Figure 3.5.18 B5 S YZ plane Antenna pattern

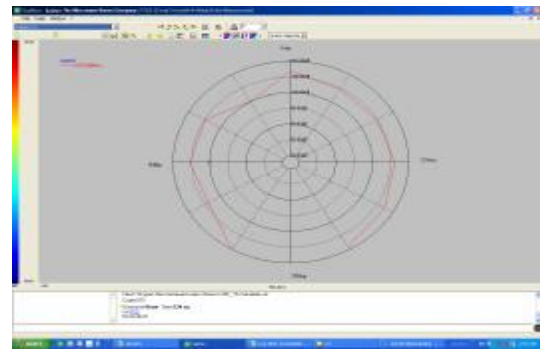


Figure 3.5.19 B2 XY plane Antenna pattern

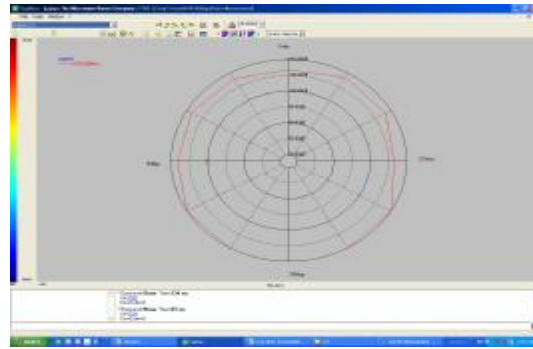


Figure 3.5.20 B2 ZX plane Antenna pattern

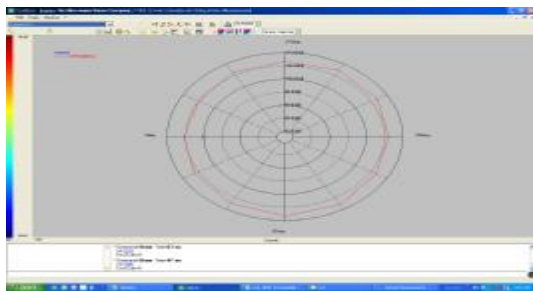
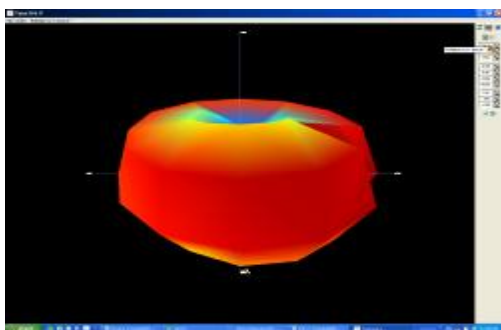
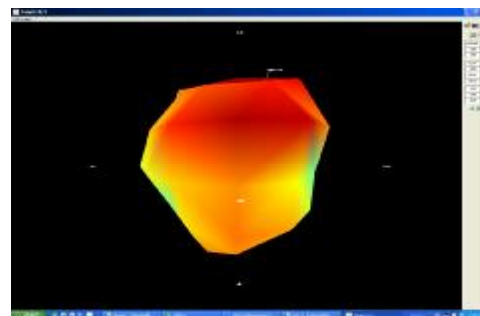


Figure 3.5.21 B2 S YZ plane Antenna pattern

6. 3D radiation pattern

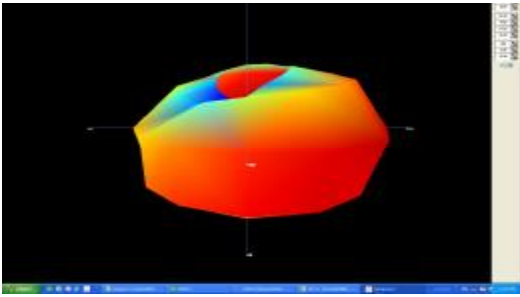


GSM850

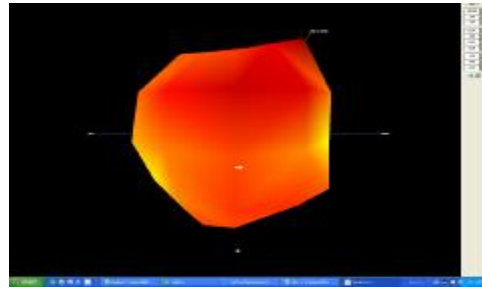


PCS1900

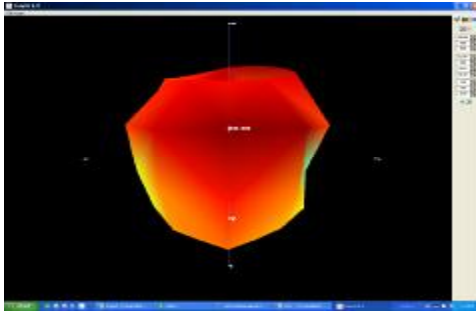




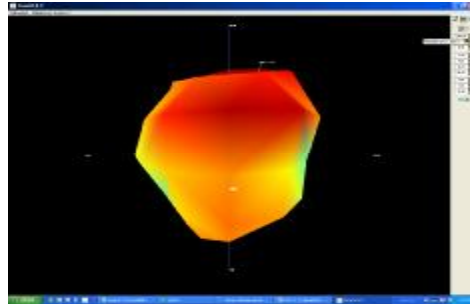
GSM900



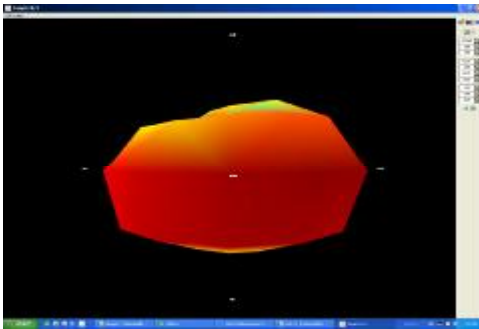
DCS1800



B1



B2



B5

7. Peak gain

Test Equipment: Satimo StarLab, HP8753E, Shielding Room

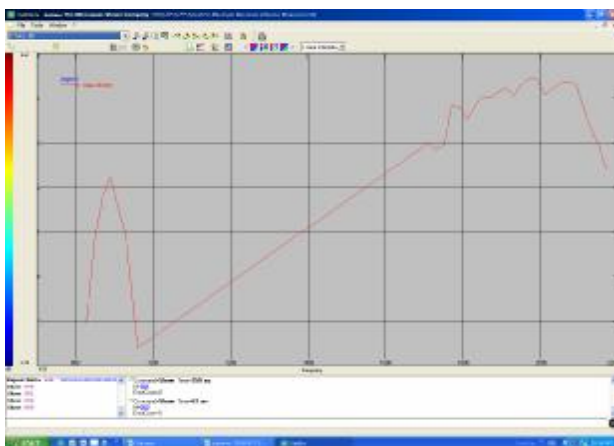


Figure 3.7 BT gain curve

8. Efficiency

Test Equipment: Satimo StarLab, HP8753E, Shielding R

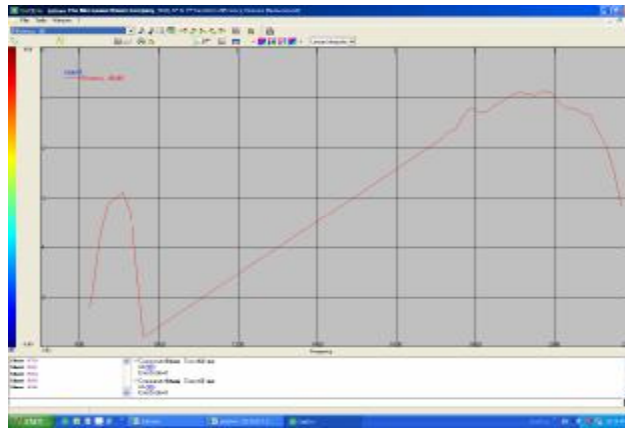


Figure 3.8 BT efficiency curve

9. Main Antenna efficiency and gain table

Frequency (MHz)	824	880	960	1710	1880	1910	1990	2170
Efficiency (%)	44.5	46.6	31.6	51.3	63.5	56.1	58.5	52.4
Gain (dB)	-1.3	1.7	-1.6	2.7	2.9	2.1	2.5	2.4

Table 1 Main Antenna efficiency and gain

Active Test

nt8960, Shielding Room, Satimo

Modulation	GSM850			EGSM		
Channel	128	190	251	975	37	124
Frequency(MHz)	824.20	836.60	848.80	880.20	897.40	914.80
Average Power(dBm)	28.10	28.60	28.50	28.50	27.60	26.90
Frequency(MHz)	869.20	881.60	893.80	925.20	942.40	959.80
Total	-105.6	-105.7	-105.5	-104.1	-103.5	-102.1
Modulation	DCS			PCS		
Channel	512	698	885	512	661	810
Frequency(MHz)	1710.20	1747.40	1784.80	1850.20	1880.00	1909.08
Average Power(dBm)	26.20	26.70	26.90	26.70	27.10	26.80
Frequency(MHz)	1805.20	1842.40	1879.80	1930.20	1960.00	1989.80
Total	-106.3	-106.7	-106.8	-105.9	-105.7	-105.2
Modulation	WCDMA2100			WCDMA1900		
Channel	9612	9750	9888	9662	9800	9938
Frequency(MHz)	1922.41	1950.00	1977.60	1850.00	1860.00	1885.00
Average Power(dBm)	21.2	21.7	21.6	20.7	21	20.9
Frequency(MHz)	2112.40	2140.00	2167.60	1910.00	1950.00	1998.00
Total	-107.8	-108.3	-108.7	-106.5	-106.6	-106.7
Modulation	WCDMA850					
Channel	4132	4183	4233			
Frequency(MHz)	826.40	836.60	846.60			
Average Power(dBm)	19.3	19.5	19.2			
Frequency(MHz)	871.40	881.60	891.60			
Total	-106.8	-106.5	-106.6			

5. Materials

Antenna	modul e
material s	FPC

Table2 antenna material

6. Conclusion

Test results arrive at customer requirement. Recommend that customers to accept