



规格承认书

APPROVAL SHEET

供应商: 信诺山

CUSTOMER:

品 名: Antenna

DISCRIPTION:

型 号: 4G+分集

MODEL NO:

供应商料号: 4G95-1B125B-A WBP700-1B185B-A FJ83-1B200B-A

CUSTOMER P/N:

机 种: 平板

CUSTOMER MODEL:

承认部门	项目	硬件	软件	测试	fae,结构	技术中心 经理
确 认						

审 核 结 果:

合格

☐

不合格

☐

说 明:

REMARK:

深圳信诺山通信技术有限公司

深圳市龙华新区龙华街道办清吉路恒博创新科技园 211

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contents

CONTENTS.....	2
1. PROJECT INFORMATION AND ELECTRICAL SPECIFICATION.....	3
1-1 PROJECT PICTURE.....	3
1-2 FREQUENCY BAND:	3
1-3 IMPEDANCE MATCHING	3
2. VSWR.....	3
2-1 MEASURING METHOD:.....	4
2-2 S11 PARAMETER VALUES	4
3. EFFICIENCY AND GAIN	5
3-1 EFFICIENCY/PEAKGAIN-4G	5
4. ICTIVE TEST RESULT	8
5. THE PRODUCTION INDEX.....	9
6. STRUCTURAL DRAWINGS	10

1. Project information and Electrical Specification

Those specifications were specially defined for 4G, and all characteristics were measured under the model's handset testing jig .

1-1 Project picture



1-2 Frequency Band:

Frequency Band	MHz
4G	791-960/1710-2690

1-3 Impedance matching

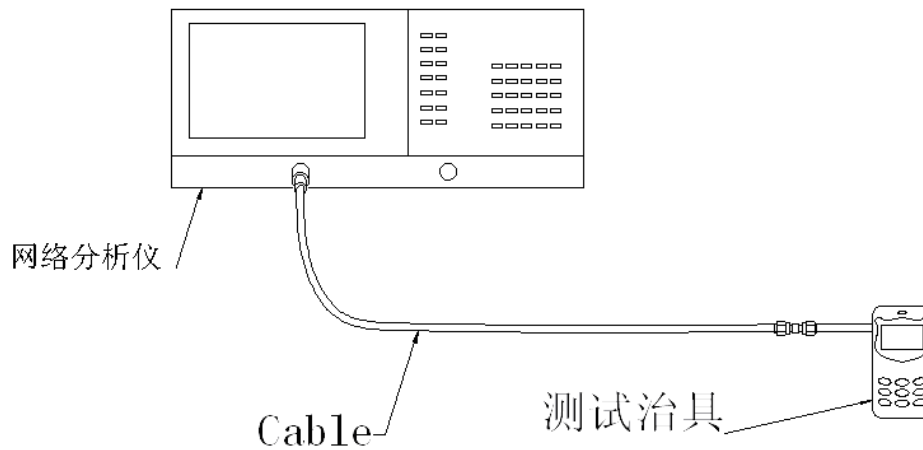
天线原匹配无更改

2. VSWR

2-1 Measuring Method:

1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

测试示意图如下:



2-2 S11 parameter values-4G

频率 (MHZ)	791	960	1710	2170	2690
驻波	2.63	3.40	2.28	1.34	1.48



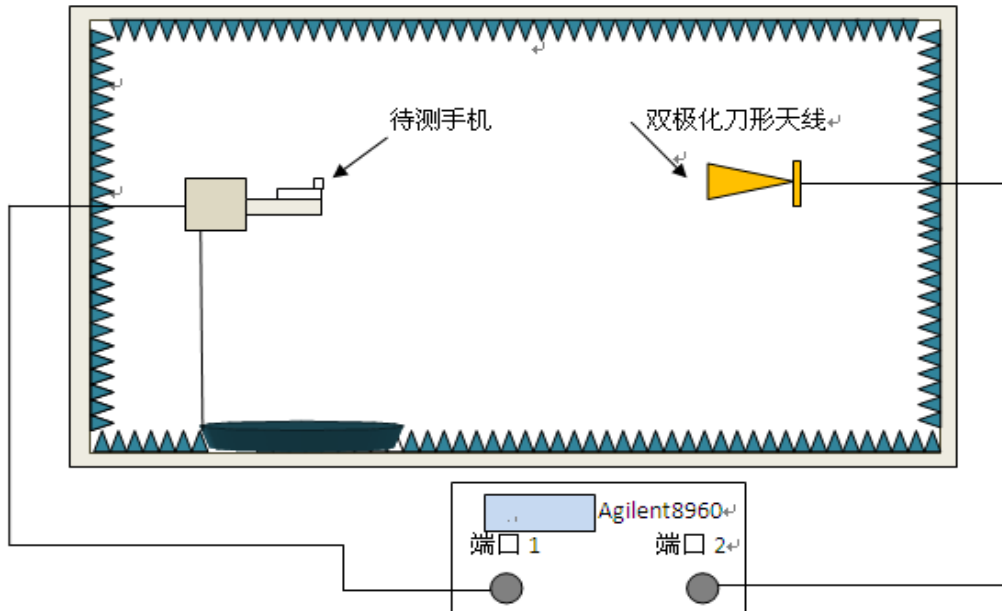
3. Efficiency and Gain

*measuring and test instruments:

微波暗室，Agilent 网络分析仪，Agilent 频谱分析仪，8960 综合测试仪，标准天线

*test method:

equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



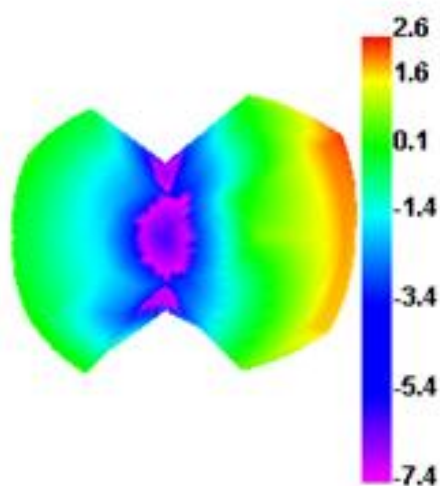
3-1 Efficiency/Gain- 2G&3G&4G

	Band& Peak Gain			
CE	2G	900: -0.6dbi	1800: 1.2dbi	
	3G	B1: 1.3dbi	B8: -0.6dbi	
	4G	B3: 1.2dbi	B7: 1.4dbi	B8: -0.6dbi
		B20: -1.2dbi	B38: 1.4dbi	
FCC	2G	850: -0.8dbi	1900: 1.2dbi	
	3G	B2: 1.2dbi	B5: -0.8dbi	
	4G	B2: 1.2dbi	B4: 1.2dbi	B5: -0.8dbi
		B12: -1.5dbi	B17: -1.5dbi	B41: 1.4dbi

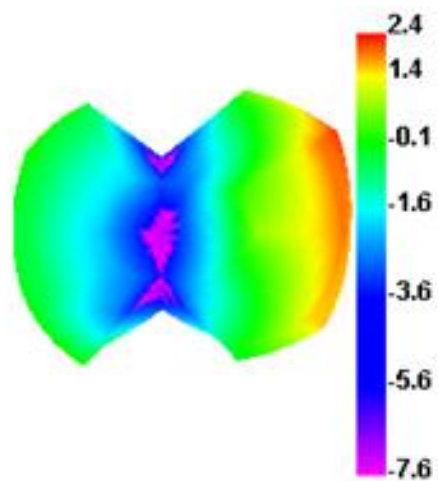
Efficiency/Gain- WIFI/BT

BAND	WIFI/BT					
Freq.[MHZ]	2400	2450	2500	5050	5450	5850
Eff.[%]	56.78	55.95	55.56	50.16	50.47	51.28
Gain [dBi]	2.6	2.4	2.1	0.5	0.5	0.6

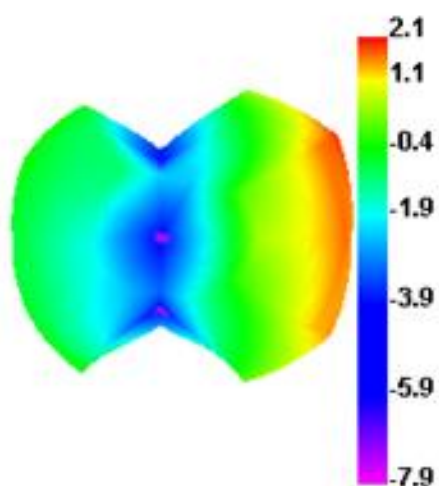
2400.000MHz



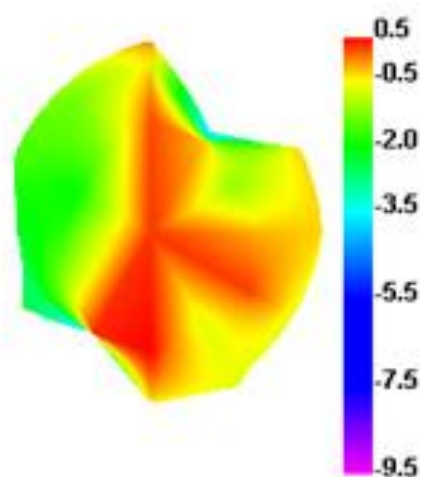
2450.000MHz



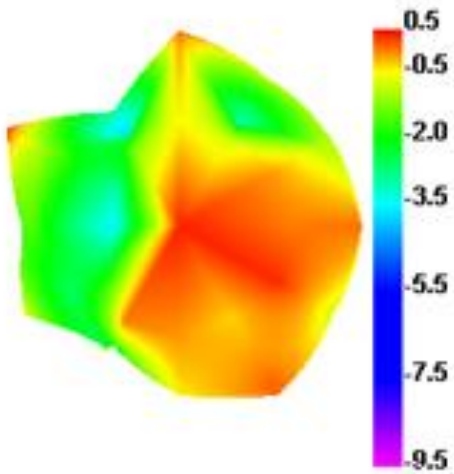
2500.000MHz



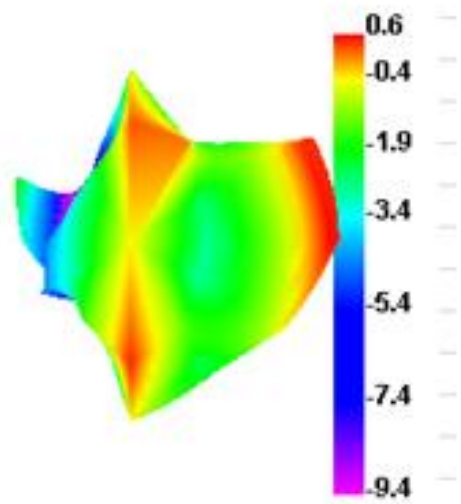
5050.000MHz



5450.000MHz



5850.000MHz



3. Ictive test result-3D

BAND		GSM850			GSM900		
Channel		128	190	251	975	37	124
3D	TRP(dbm)	22.35	22.76	22.11	24.25	24.34	24.33
	TIS(dbm)	-99.33	-99.12	-99.18	-100.04	-101.77	-101.56
BAND		DCS1800					
Channel		512	698	885			
3D	TRP(dbm)	23.74	23.53	23.45			
	TIS(dbm)	-100.32	-100.65	-101.89			
BAND		WCDMA B1			FDD-LTE B1		
Channel		10562	10700	10838	50	300	550
3D	TRP(dbm)	17.26	17.15	17.34	17.34	17.18	17.25
	TIS(dbm)	-100.54	-101.12	-100.81	-86.22	-86.37	-86.55
BAND		FDD-LTE B3			FDD-LTE B5		
Channel		1250	1575	1900	20450	20525	20600
3D	TRP(dbm)	15.48	15.86	15.80	16.56	16.37	15.98
	TIS(dbm)	-86.26	-86.41	-86.88	-86.56	-86.22	-86.53
BAND		FDD-LTE B7			FDD-LTE B8		
Channel		20800	21100	21400	3550	3621	3700
3D	TRP(dbm)	16.13	16.74	16.55	15.63	15.56	15.47
	TIS(dbm)	-88.10	-88.74	-88.11	-87.36	-87.37	-87.79
BAND		FDD-LTE B20			TDD-LTE B40		
Channel		24200	24300	24400	38750	39150	39550
3D	TRP(dbm)	13.20	13.32	13.65	16.24	16.20	16.15
	TIS(dbm)	-86.24	-86.62	-86.71	-89.12	-89.76	-89.77

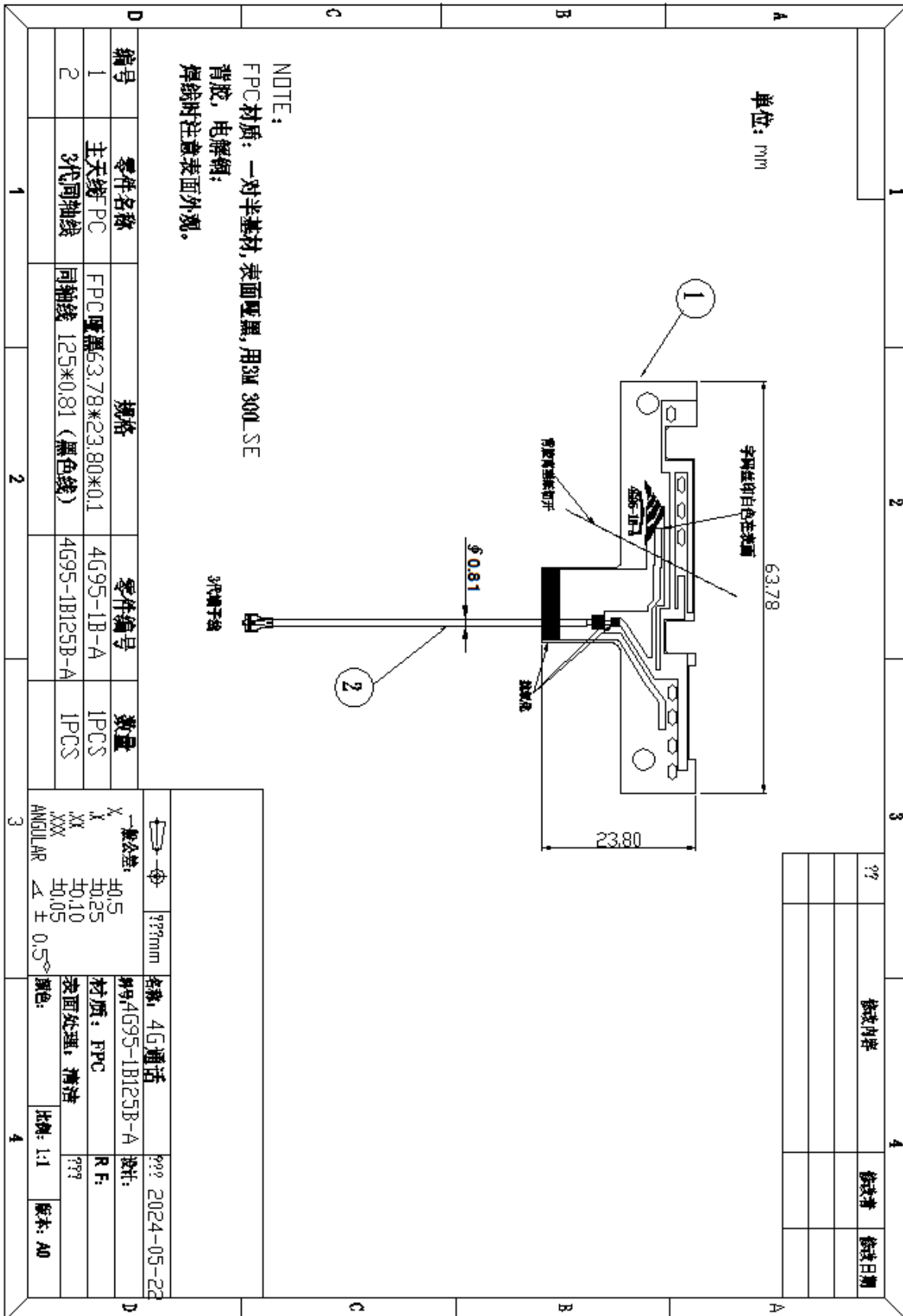
5The production index

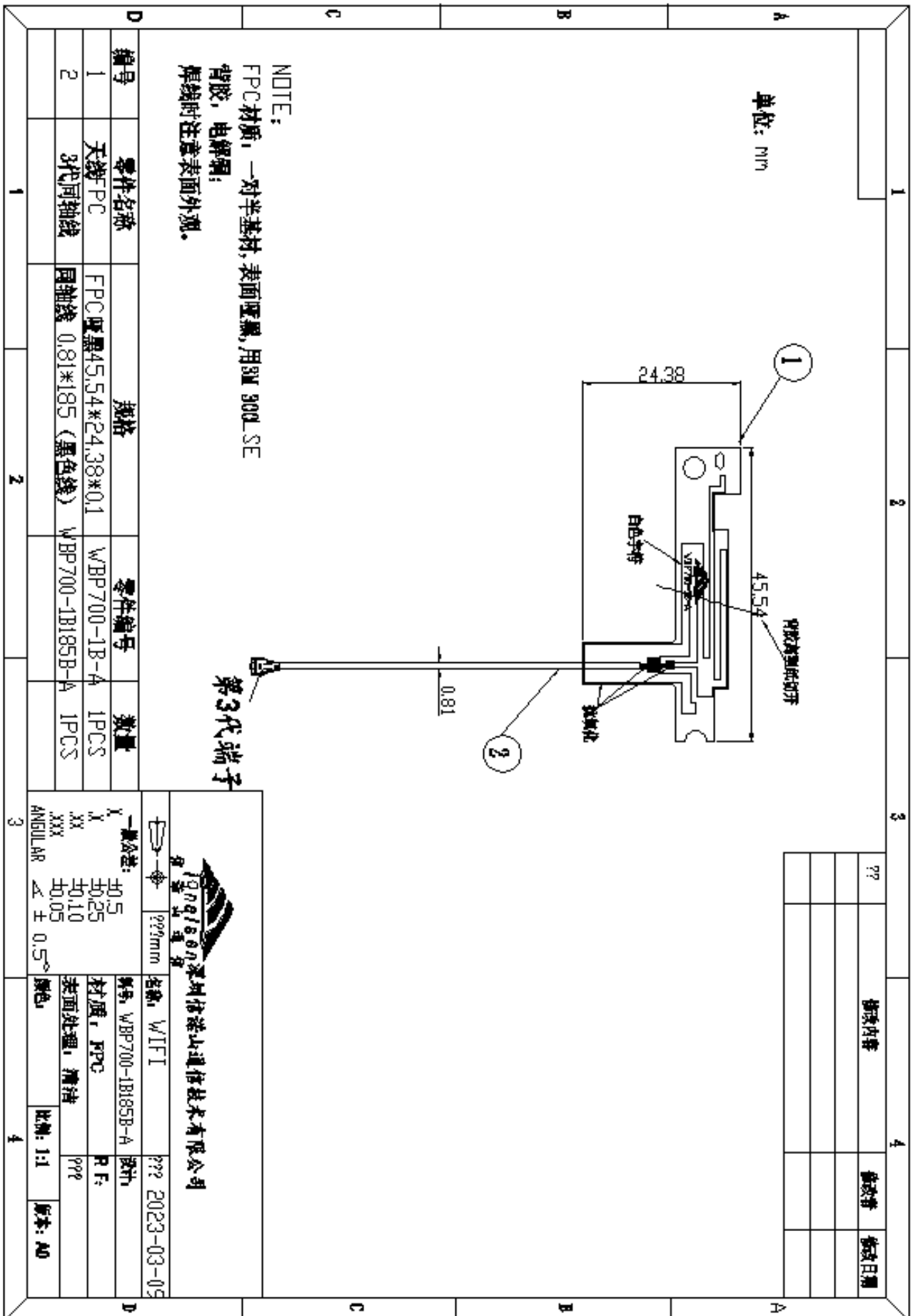
天线量产时，以驻波比作为量产测试标准。

根据项目本身的差异,给出如下标准:

频率 (MHZ)	量产标准
791-960/1710-1990-2690	VSWR (量产产品) < VSWR(设计样品)+0.5

6.structural drawings





第 12 页-