

Eteking

Specification document

APPROVAL SHEET

CUSTOMER:

Mount Cinenor

DISCRIPTION:

Antenna

MODEL NO:

4G+GPS/WIFI+ Diversity

CUSTOMER P/N:

4G95-1B143-A WBP700-1B185A FJ83-1B160B-A

CUSTOMER MODEL:

P30

Ant type:

4G:PIFA,WIFI:PIFA

DRADWN	Q.C.DEPT	FAE	TESTED BY	APPROVED BY
CUSTOMER	CUSTOMER Q.C.DEPT	CUSTOMER FAE	CUSTOMER TESTED BY	CUSTOMER APPROVED BY

Address:

Room 211, Hengbo science and technology Industrial Park, Qingning road, Long
hua District, Shenzhen

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

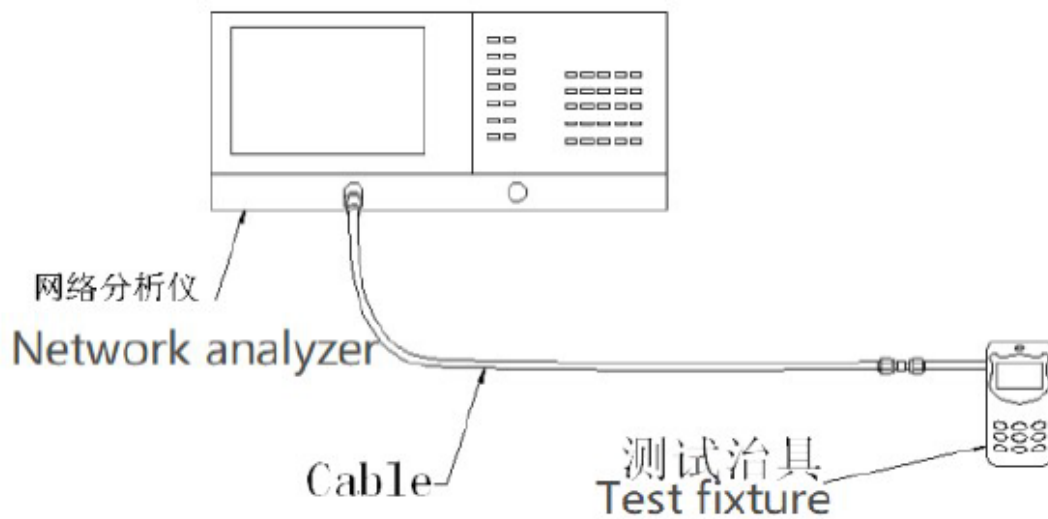
All matching devices on the RF circuit of DUT remain unchanged

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.*

The test diagram is as follows :



2-2 S11 parameter values-4G

Fre (MHZ)	791	960	1710	2170	2690
VSWR	2.63	3.40	2.28	1.34	1.48



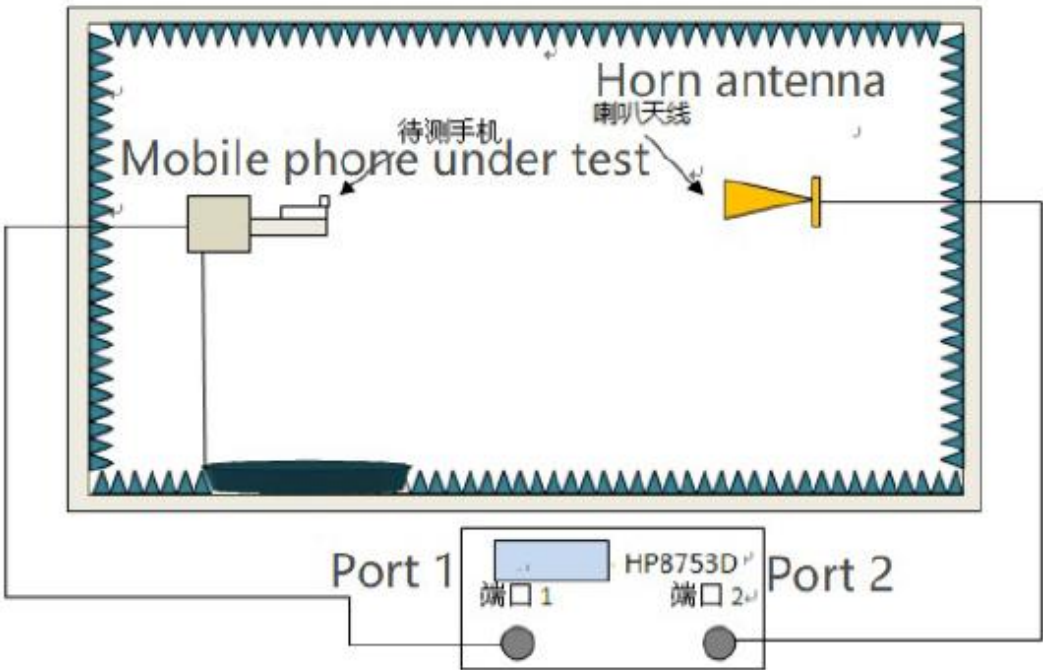
3. Efficiency and Gain

*measuring and test instruments:

Microwave anechoic chamber

Agilent Microwave anechoic chamber

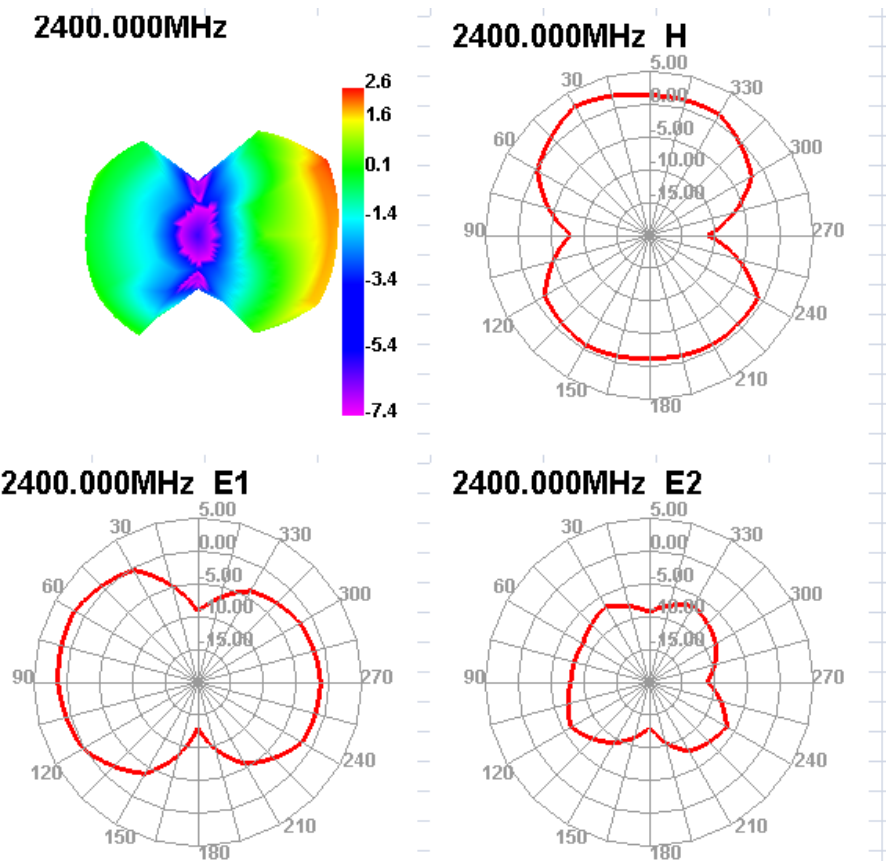
Spectrum analyzer
Network analyzer
Standard antenna
***test method:**



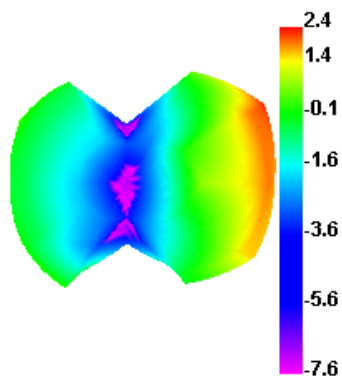
3-1 Efficiency/Gain- 2G&3G&4G

	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

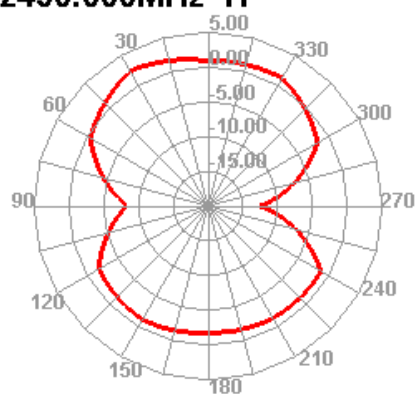
BAND	WIFI/BT					
Freq.[MHZ]	2400	2450	2500	5050	5450	5850
Eff.[%]	56.78	55.95	55.56	50.16	50.47	51.28
Gain [dBi]	2.6	2.4	2.1	0.5	0.5	0.6



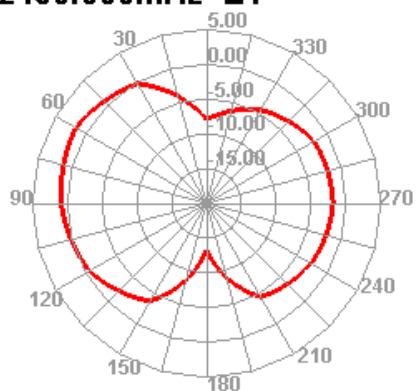
2450.000MHz



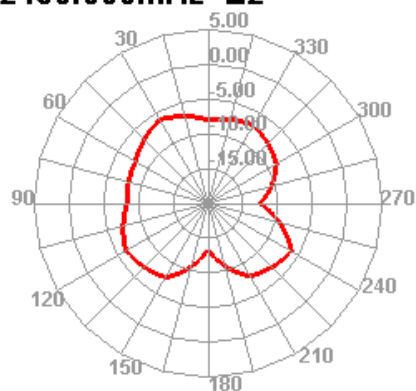
2450.000MHz H



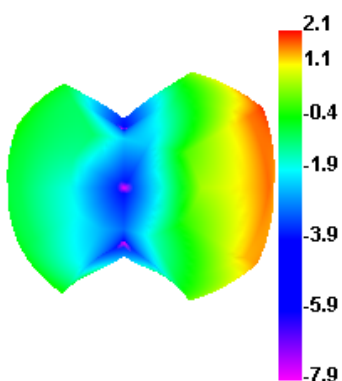
2450.000MHz E1



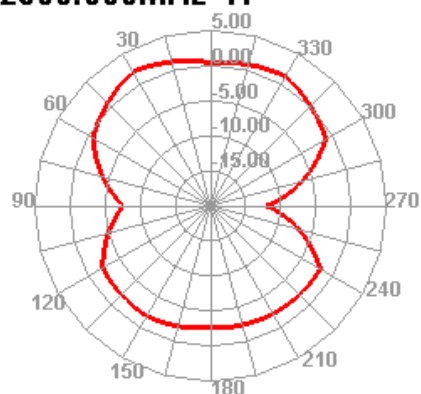
2450.000MHz E2



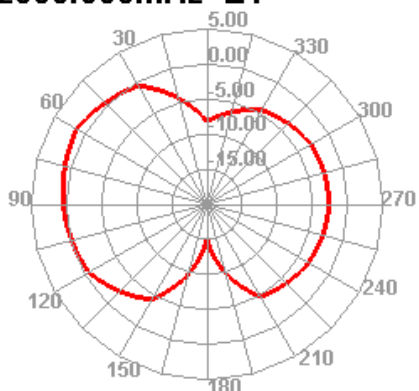
2500.000MHz



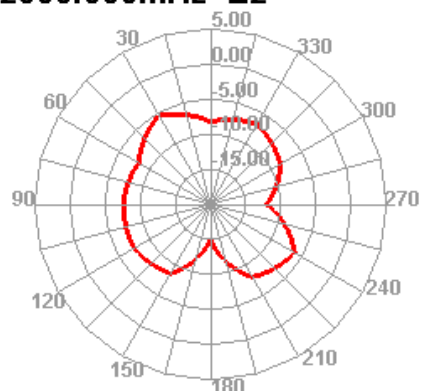
2500.000MHz H



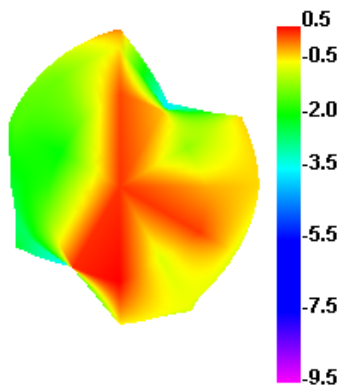
2500.000MHz E1



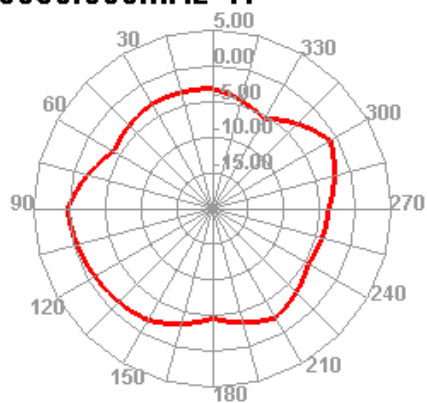
2500.000MHz E2



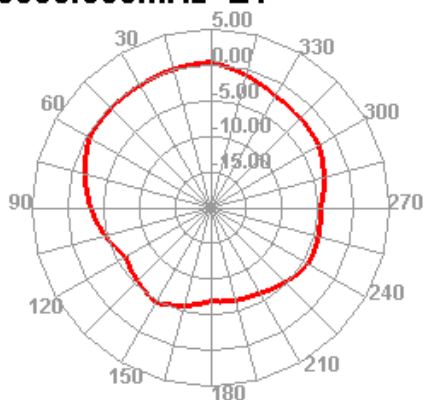
5050.000MHz



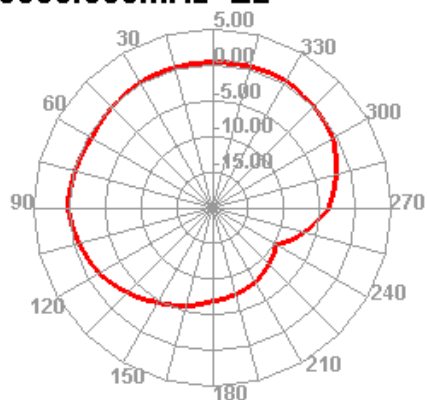
5050.000MHz H



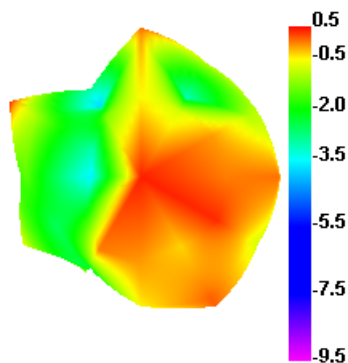
5050.000MHz E1



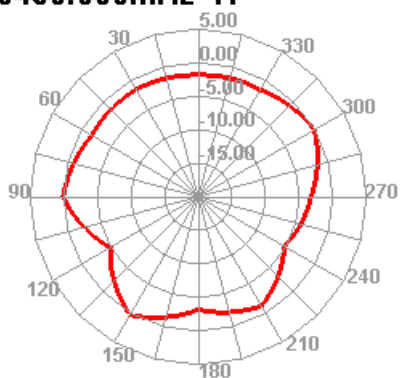
5050.000MHz E2



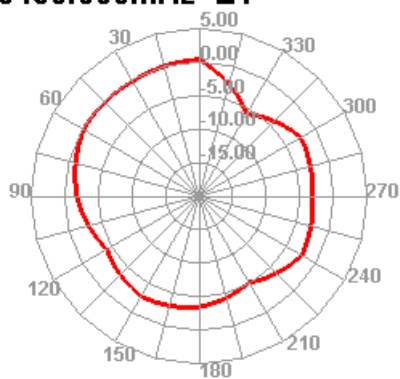
5450.000MHz



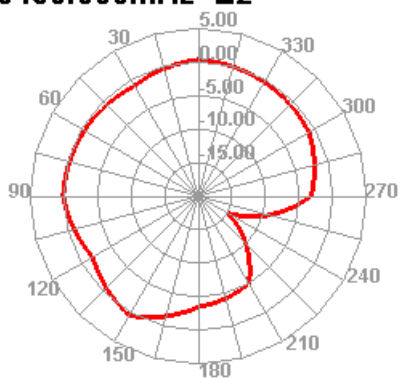
5450.000MHz H



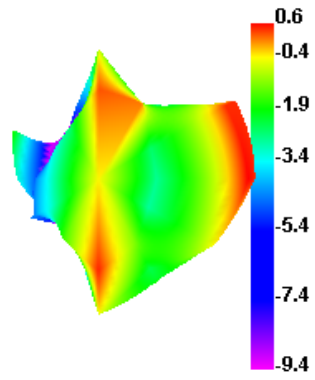
5450.000MHz E1



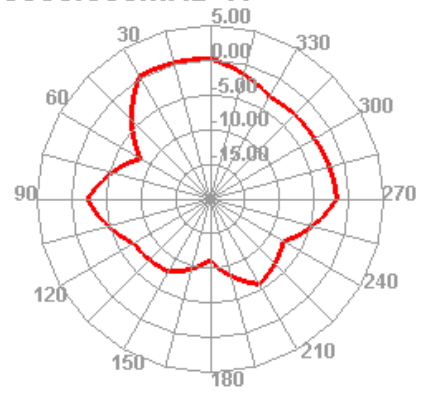
5450.000MHz E2



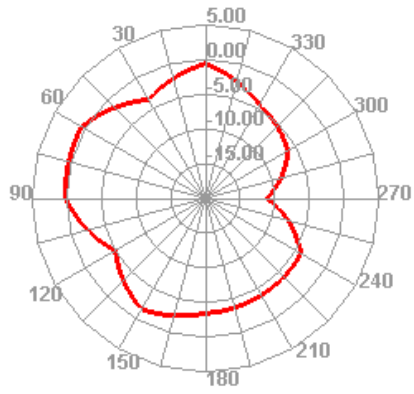
5850.000MHz



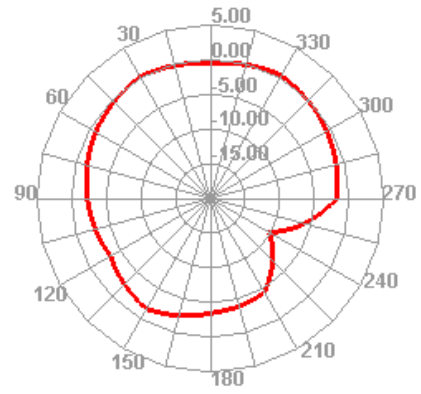
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



3. Ictive test result-3D

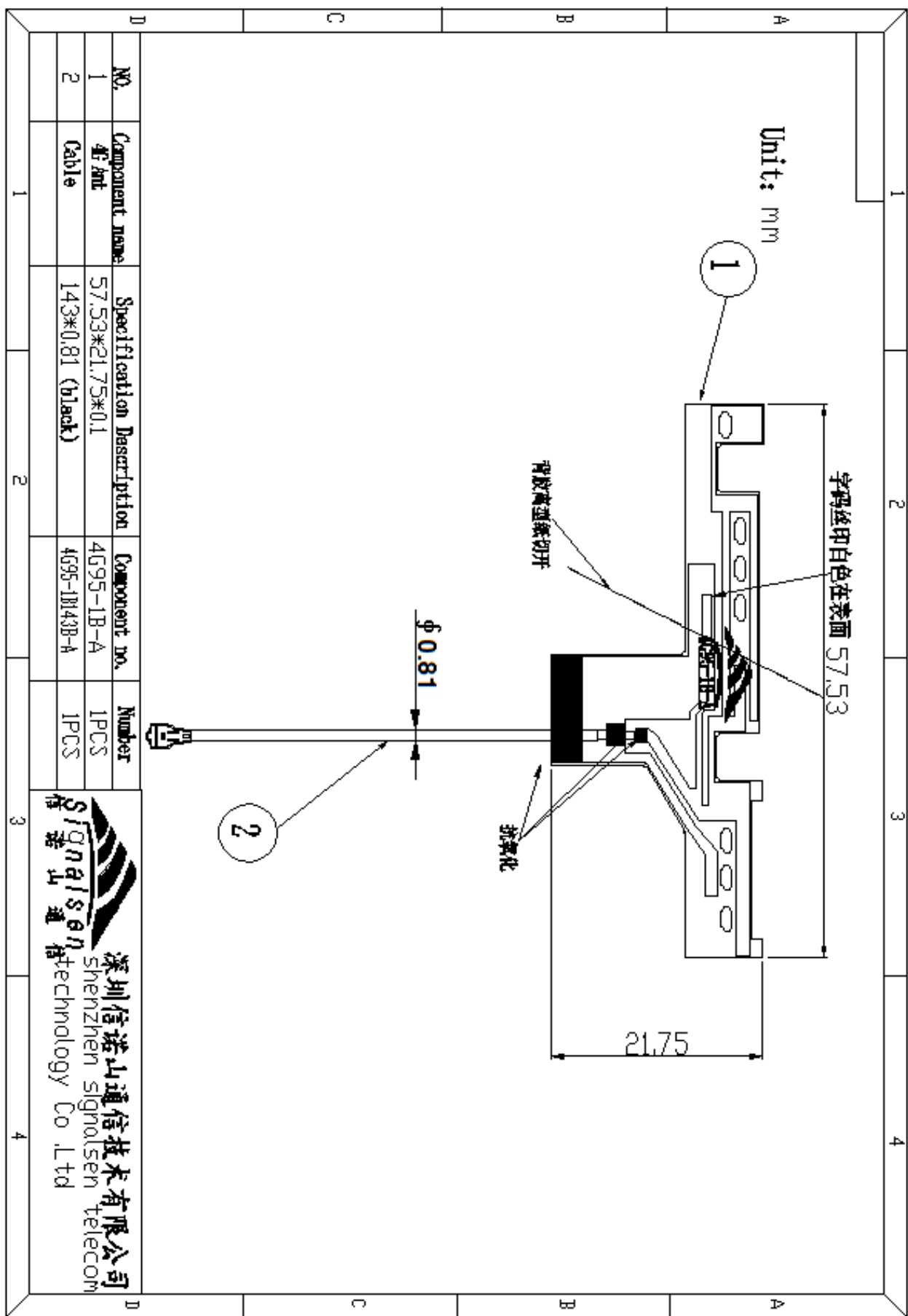
BAND		GSM850			GSM900		
Channel		128	190	251	975	37	124
3D	TRP(dbm)	22.35	22.76	22.11	24.25	24.34	24.33
	TIS(dbm)			-99.18			-101.56
BAND		DCS1800			PCS1900		
Channel		512	698	885	512	661	810
3D	TRP(dbm)	23.74	23.53	23.45	23.59	23.47	23.65
	TIS(dbm)			-101.89			-102.77
BAND		WCDMA B1			FDD-LTE B1		
Channel		10562	10700	10838	50	300	550
3D	TRP(dbm)	17.26	17.15	17.34	17.34	17.18	17.25
	TIS(dbm)			-100.81			-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)			-86.88			-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)			-88.11			-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)			-86.71			-89.77
BAND		TDD-LTE B39			TDD-LTE B38		
Channel		38350	38450	38550	37850	38000	38150
3D	TRP(dbm)	18.63	18.56	18.47	18.13	18.78	18.62
	TIS(dbm)			-88.79			-89.05

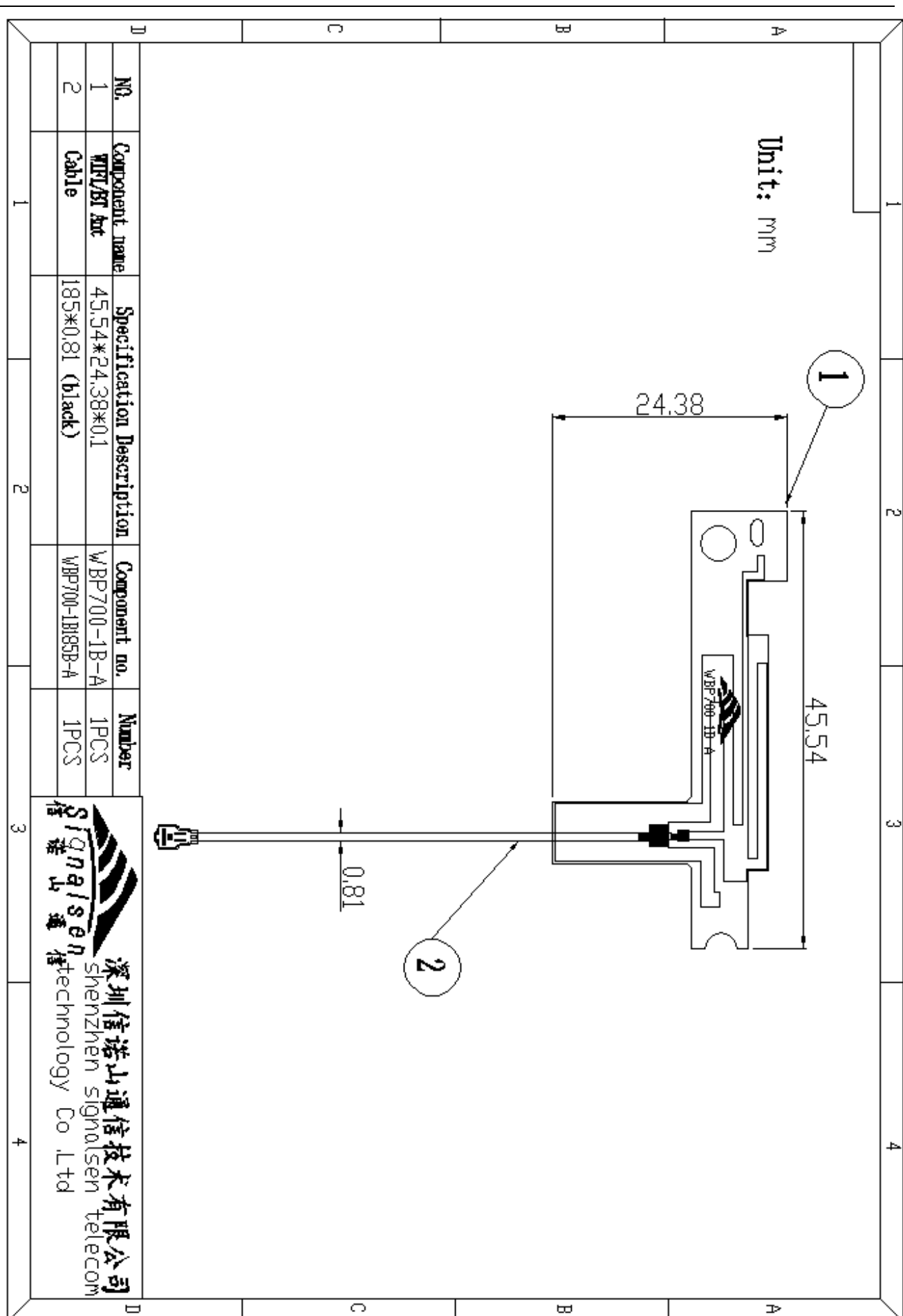
5The production index

6. In the mass production of antenna, the standing- wave ratio is used as the test standard
- 7.
- 8.根据项目本身的差异,给出如下标准 According to the differences of the project itself, the
- 9.following standards are given:
- 10.

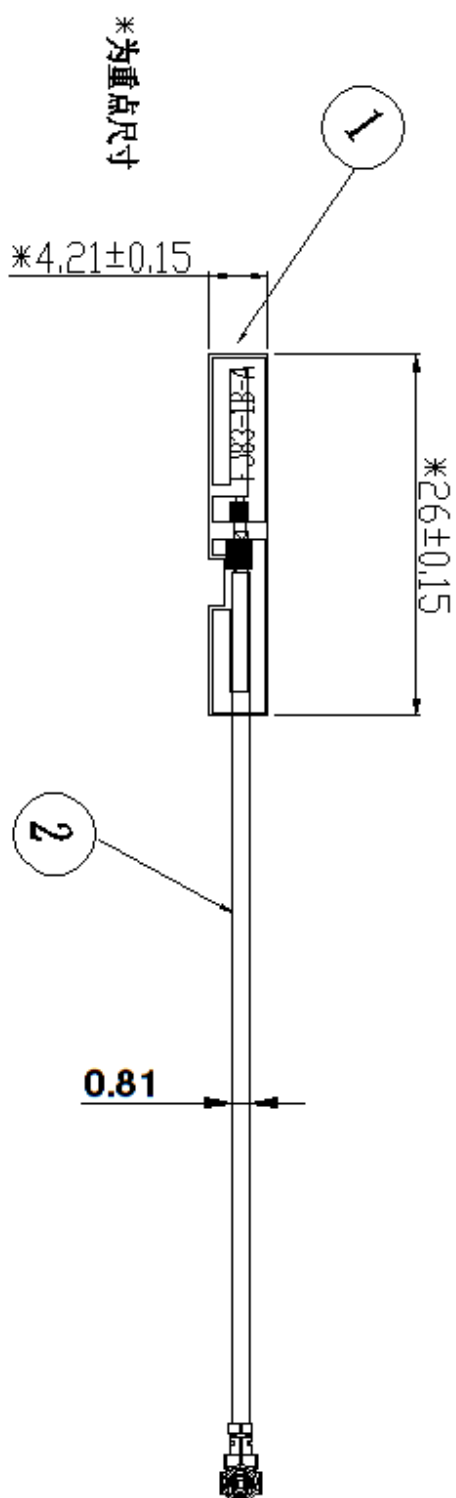
Frequency （MHZ）	Mass production standard
(791-960/1710-2690)	VSWR Mass production products <VSWR(Design sample)+ 0.5

11.structural drawings





Unit: mm



					 深圳信诺山通信技术有限公司 shenzhen signalSen telecom 信诺山通信
No.	Component name	Specification Description	Component no.	Number	
1	FJ Art	26*4.21*0.1	FJ83-1B-A	1PCS	
2	Cable	160*0.81 (black)	FJ83-1B160B-A	1PCS	
1 2 3 4					