

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Specifications

Project Name: TE320A

Frequency Band:

FDD2/4/5/7/12/13/14/17/25/26/66/71

DATE: 2024-04-16

ADDRESS: Room503-505, Building211,

Tairan IndustrialandTrade Park, Chegongmiao, Futian District, Shenzhen,

China

1.Test Project

	Test Project	Equipment
1. S Parameter	<ol style="list-style-type: none">1. Return Loss (RL)2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G)	<ol style="list-style-type: none">1. power2. level3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

2. Test Equipment



Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)

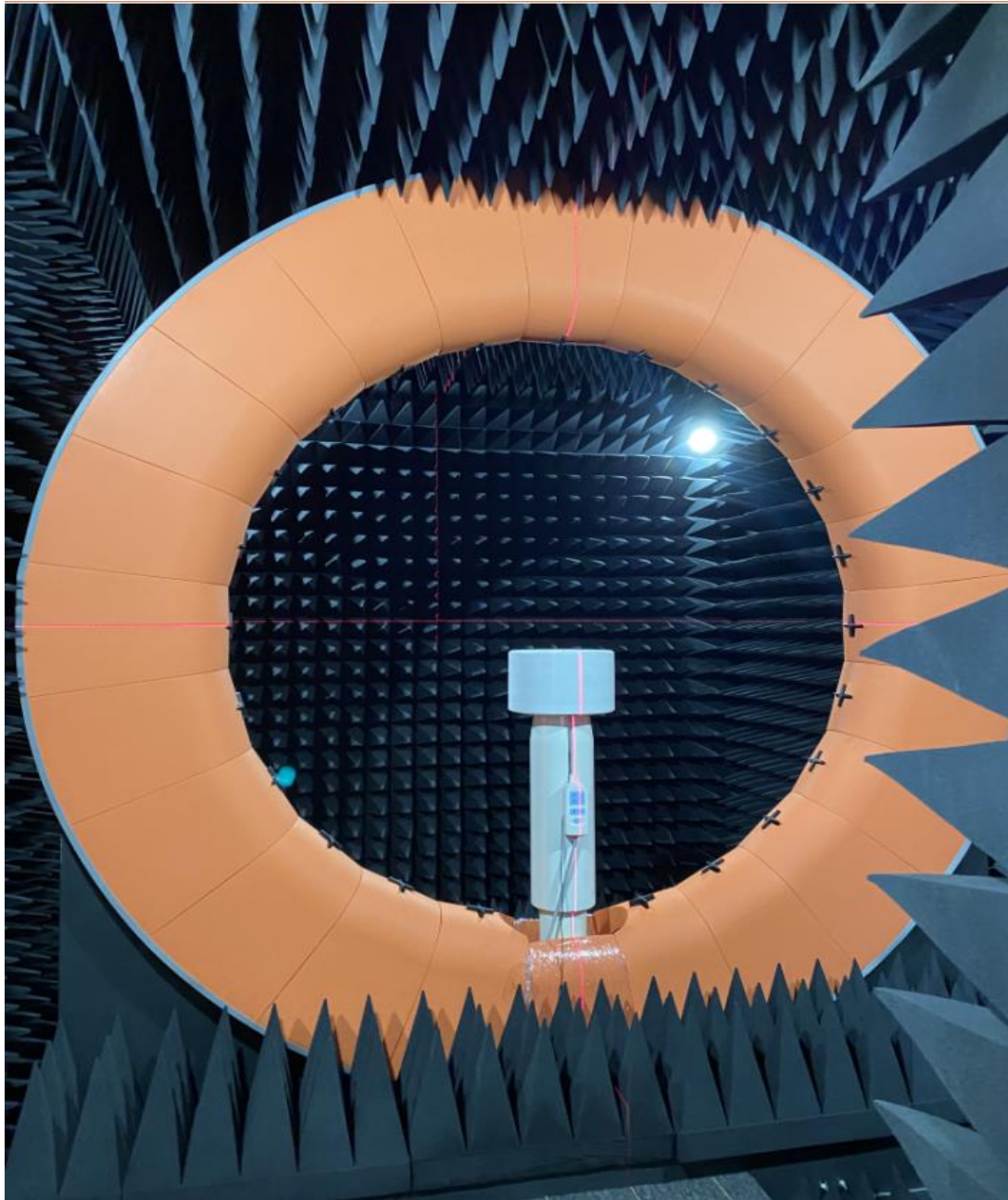


Agilent 8960 (2G/3G Test Equipment)



CMW 500 (2G/3G/4G Test Equipment)

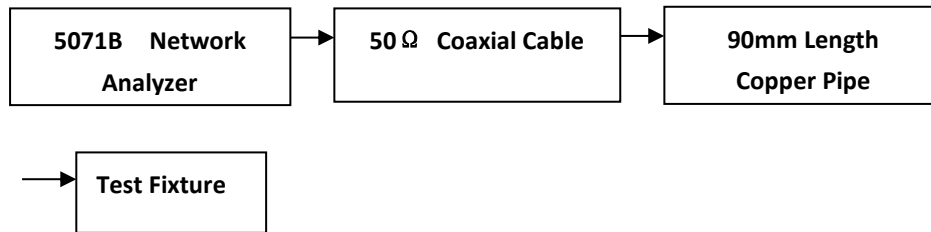
3. TestEnvironment



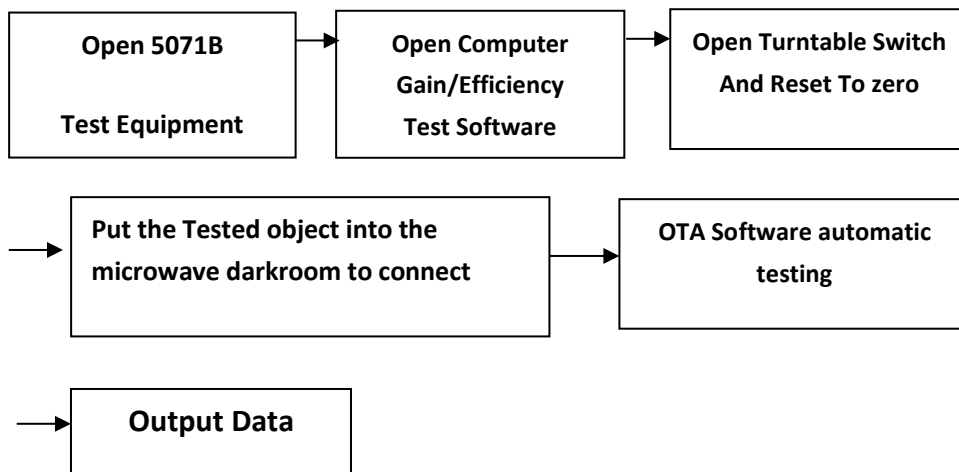
Microwave Anechoic Chamber

4. Test Steps

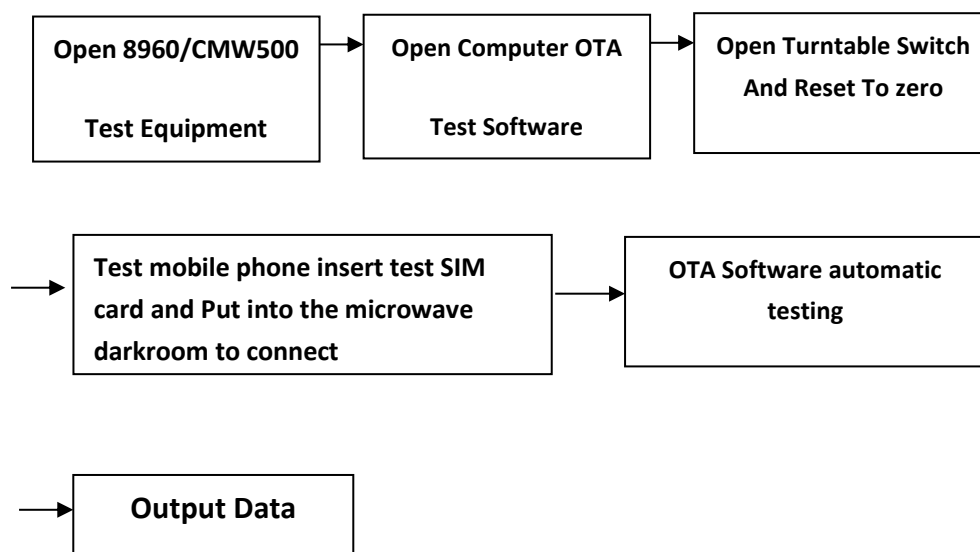
Passive VSWR/RL Test Steps:



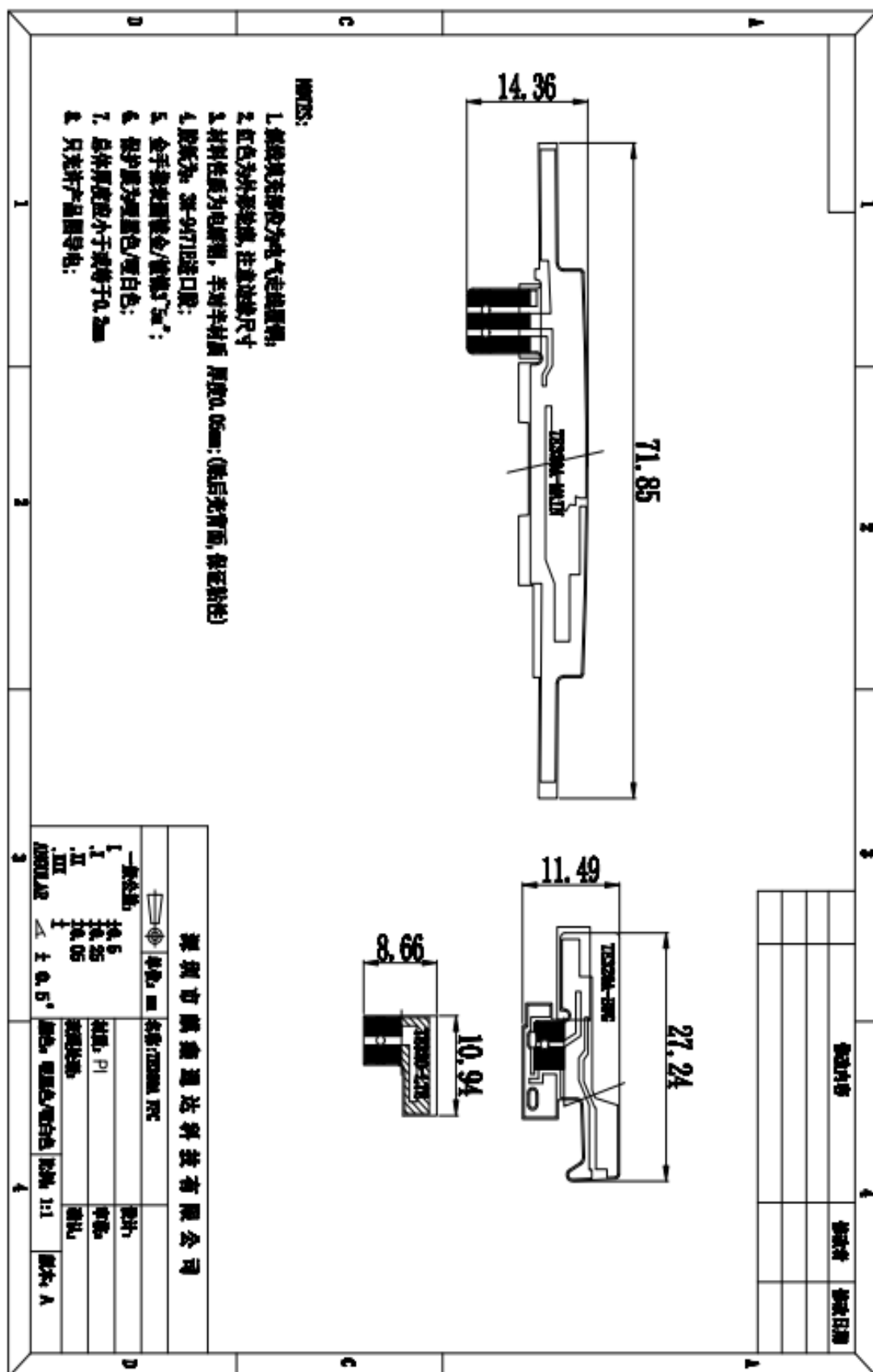
Gain/Efficiency Test Steps:



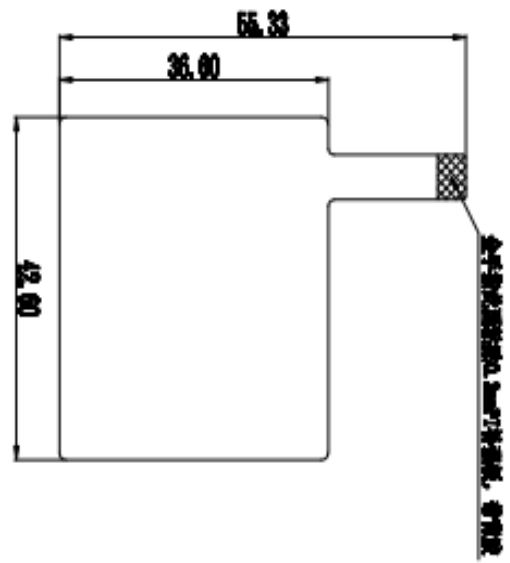
Active TRP/TIS Test Steps:



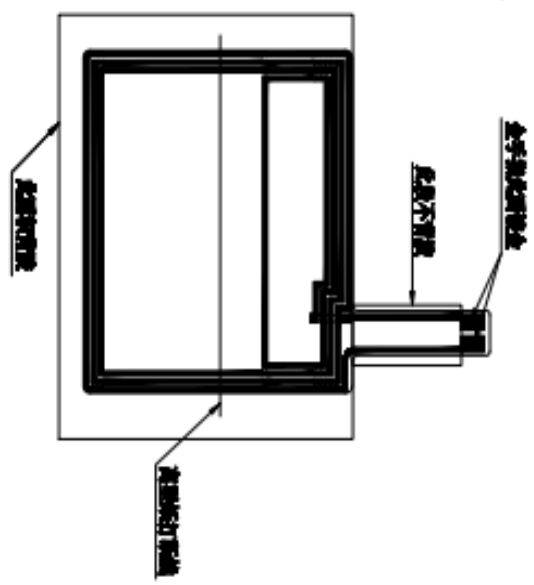
5. Antenna Dimensions



样品正面



样品反面 (基材正面)



NOTES:

1. 导电膜充胶段为电气走线膜层;
2. 红色为外罩胶框, 注意胶框尺寸
3. 材料性质为电绝缘, 半硬半材质 厚度0.05mm; (贴后充膏面, 保证粘性)
4. 胶框为: 3M-9471进口胶;
5. 全手袋表面镀金/镀银5um;
6. 保护层为哑黑色/哑白色;
7. 总片厚度应小于或等于0.3mm
8. 只允许产品导电;

检测内容	检测者	检测日期

深圳市顺康通达科技有限公司

图例	单位	名称/尺寸	材料
I	±0.05	全手袋	PI
II	±0.05	导电膜	导电膜
III	±0.05	导电衬底	导电衬底
IV	±0.05	导电衬底	导电衬底

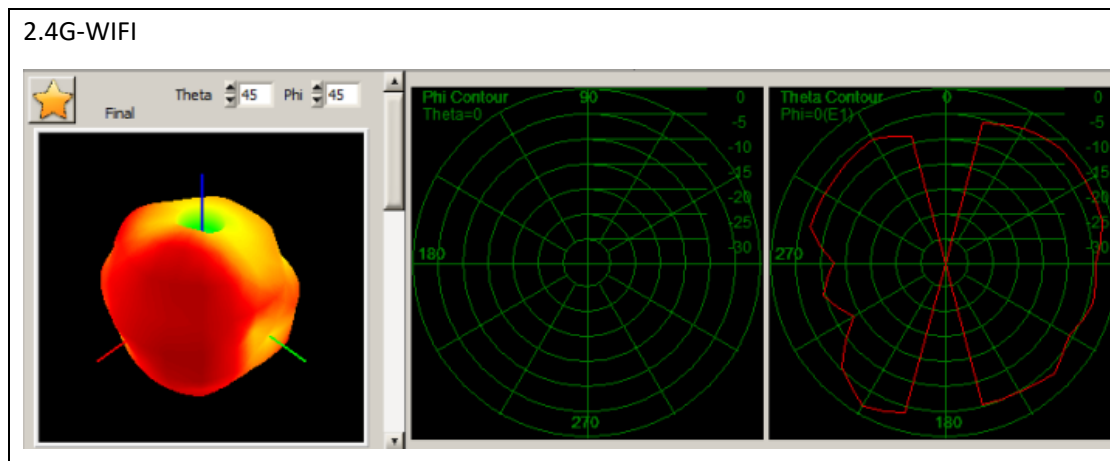
比例: 1:1 版本: A

6. Antenna Gain

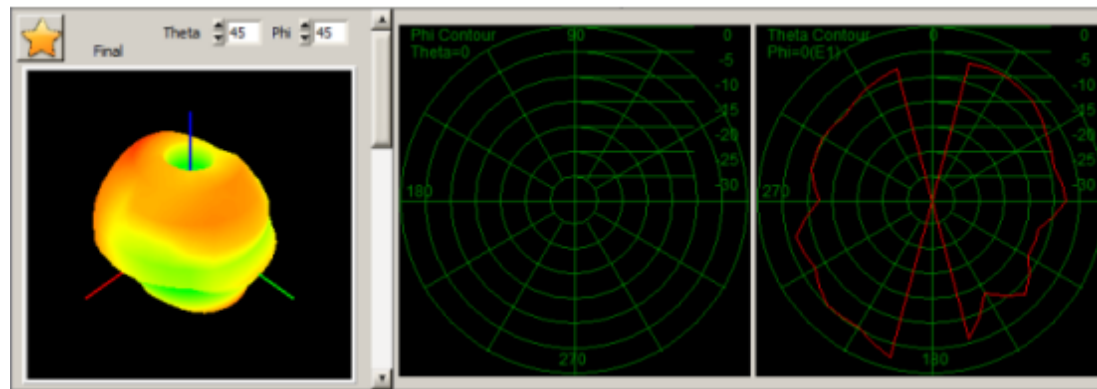
Band	Max Gain	Efficiency
BAND 2	0.1	36%
BAND 4	0.06	35%
BAND 5	-0.16	33%
BAND 7	0.23	38%
BAND 12	-0.42	21%
BAND 13	-0.36	23%
BAND 14	-0.36	23%
BAND 17	-0.42	21%
BAND 25	0.1	36%
BAND 26	-0.16	33%
BAND 66	0.06	35%
BAND 71	-0.63	20%
BAND 41	0.23	38%
Bluetooth	0.2	37%
WIFI	0.2	37%
GPS	0.1	36%

WIFI2.4G/BT												
2400-2500MHZ	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
	Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
	Efficiency (%)	31.00	33.20	35.60	35.80	36.60	37.10	35.60	35.20	35.10	35.00	34.20
	Gain (dBi)	-0.40	-0.38	-0.19	-0.15	0.15	0.22	-0.16	-0.23	-0.25	-0.30	-0.35
GPS												
1500-1600MHZ	Frequency ID	1	2	3	4	5						
	Frequency (MHz)	1500.0	1525.0	1550.0	1575.0	1600.0						
	Efficiency (%)	34.20	34.60	35.80	36.30	36.20						
	Gain (dBi)	-0.35	-0.21	-0.16	0.13	0.06						
5.1-5.8GWifi												
2400-2500MHZ	Frequency ID	1	2	3	4	5	6	7	8	9		
	Frequency (MHz)	5000.0	5100.0	5200.0	5300.0	5400.0	5500.0	5600.0	5700.0	5800.0		
	Efficiency (%)	35.00	36.10	35.80	34.30	33.20	34.5	35.30	35.80	36.00		
	Gain (dBi)	-0.40	-0.13	-0.20	-0.51	0.61	0.46	-0.32	-0.21	-0.16		

7.3D Lobe Diagram



5.1G-WIFI



BT



GPS



8. Antenna type

Band	Model	Type
BT	TE320A-BWG	PIFA
2.4G WIFI	TE320A-BWG	PIFA
5.1-5.8G WIFI	TE320A-BWG	PIFA
GPS	TE320A-BWG	PIFA
NFC	TE320A-NFC	PIFA
Main Antenna	TE320A-MAIN	PIFA
Diversity Antenna	TE320-LTE	PIFA

9. Antenna OTA

Band	FDD-B2			FDD-B4			FDD-B5		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	18.8	18.6	18.5	18.3	18.3	18.5	19.8	19.3	19.2
TIS(dBm)			-96			-96.5			-94.3
Band	FDD-B7			FDD-B12			FDD-B13		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	18.85	18.2	18	18.5	18.8	18.3	18.2	18.2	18.2
TIS(dBm)			-94.2			-94.5			-93.3
Band	FDD-B14			FDD-B17			FDD-B25		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	18.3	18.3	18.3	18.9	18.8	18.7	18.5	18.3	18.2
TIS(dBm)			-92.6			-93.6			-96.3
Band	FDD-B26			FDD-B66			FDD-B71		
CHANNEL	L	M	H	L	M	H	L	M	H
TRP(dBm)	18.8	18.3	18.2	18.2	18.5	18.8	17.2	18.6	18.5
TIS(dBm)			-95.1			-96.1			-91.2
Band	TDD-B41								
CHANNEL	L	M	H						
TRP(dBm)	19.3	19.2	19						
TIS(dBm)			-91.6						

