
Antenna Data Sheet

Catalogue

- 1. Capability Status**
- 2. Antenna Location**
- 3. Antenna Passive Efficiency**
- 4. Simple Antenna Pattern Plot**
- 5. Antenna return loss**

1. Capability Status

a. Main software and hardware facilities for antenna R&D

Equipment introduction

Shanghai: Satimo:2 GTS1800:3 NFC Micropross:1

SAR DASY 5:1

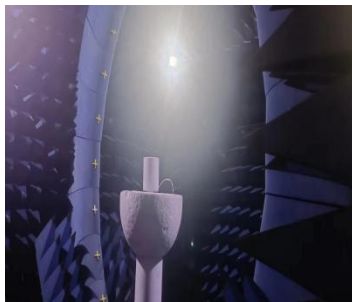
Shenzhen: GTS1800:1 GTS2800:1 NFC Micropross:1

Xian: GTS2800:1

Beijing: GTS1800:2 GTS2800:1

Kunshan: GTS2800:1 Satimo:2 GTS1800:3

SAR DASY 4:2



Satimo SG24



GTS2800



DASY4/5



NFC

b. Full category testing capability

Support system

GSM/WCDMA/EVDO/TDSCDMA/TDD/FDD/5G-SA/5G-NSA/eMTC/NB-iot/GPS/WiFi/BT/
CA/ENDC

Common equipment

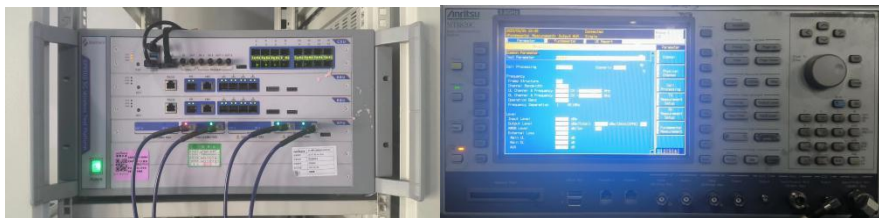
SP9500

Anritsu MT8820C

5071C

CMW500

DASY4/5 SAR

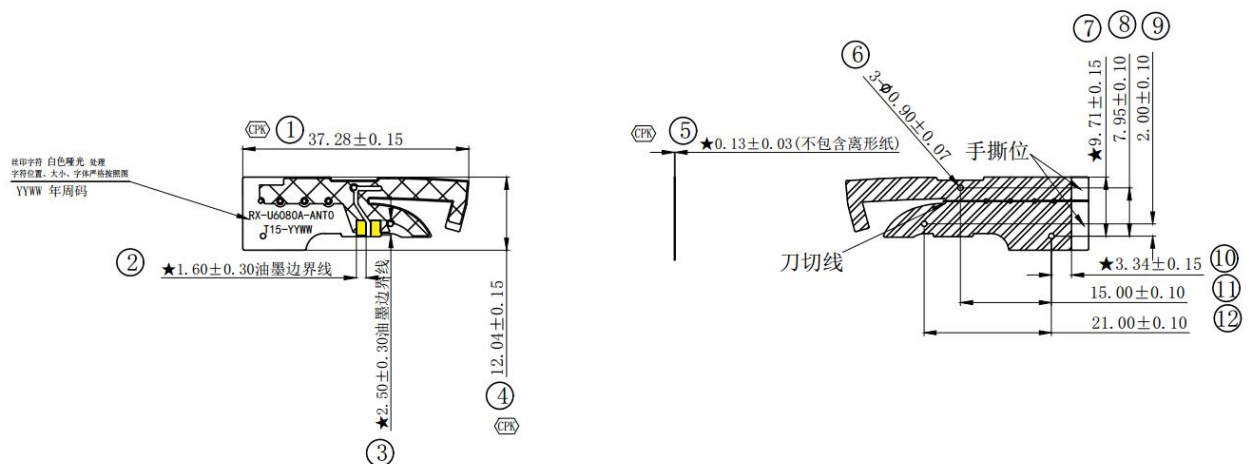


StarPoint SP9500

Anritsu MT8820C

2. Antenna Location

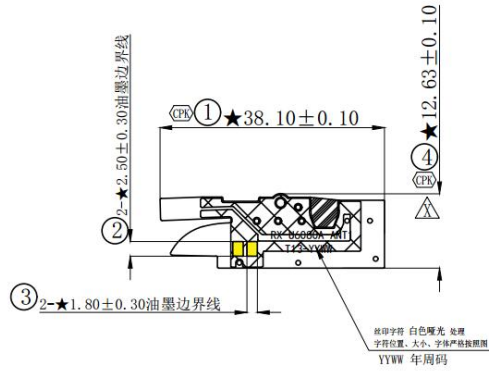
ANT0:GPS L1+2.4G+5G WIFI



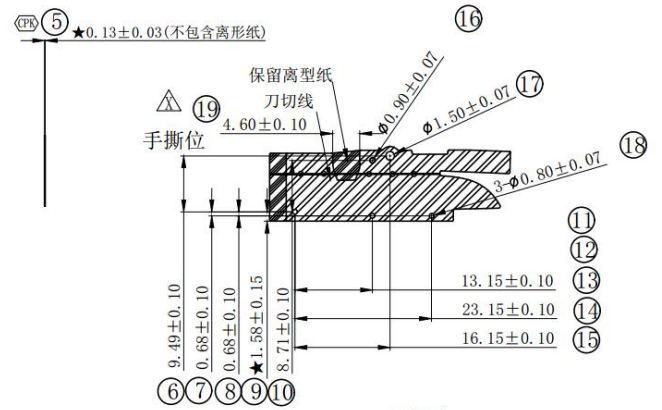
ANT1:3G: WCDMA B2/4/5

4G: LTE B2/3/4/5/12/14/29/30/66

5G: n5/n2/n66/n30 DRX(RX2)



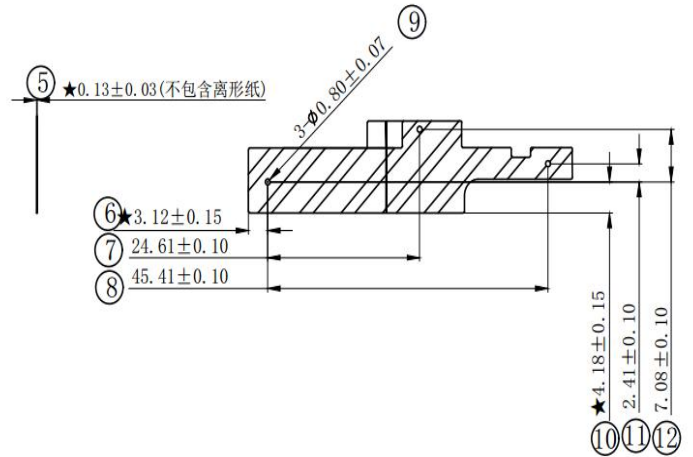
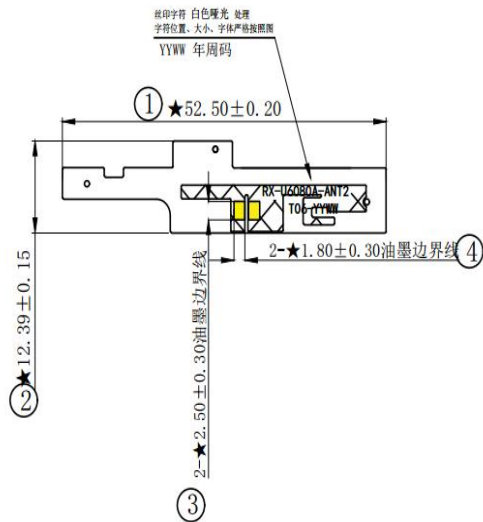
正面



反面

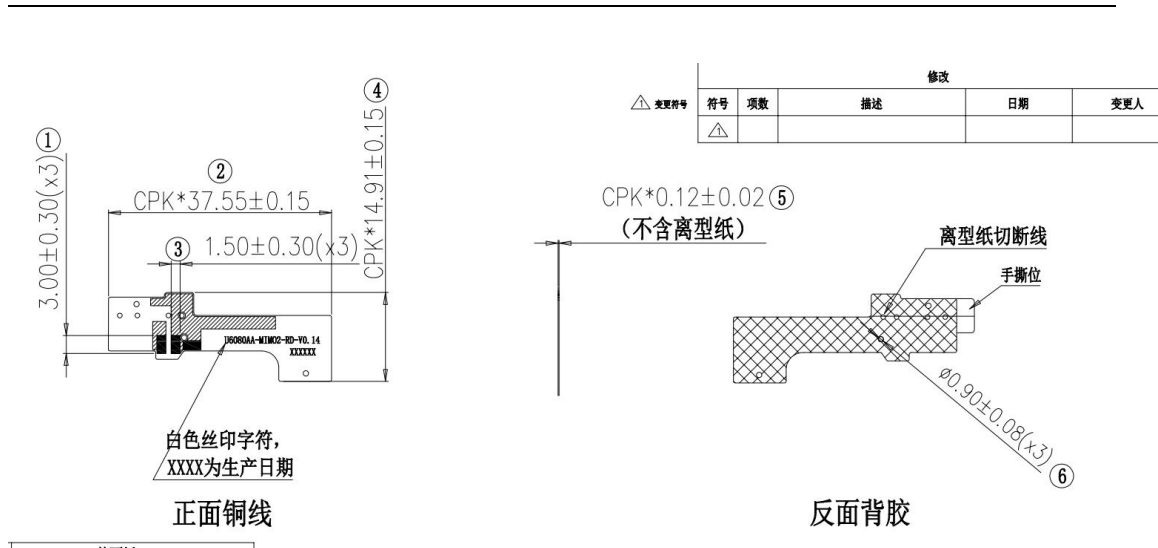
ANT2: 4G: LTE B2/4/30/66

5G: n2/n66/n30/n77 PRX2 MIMO (RX3)



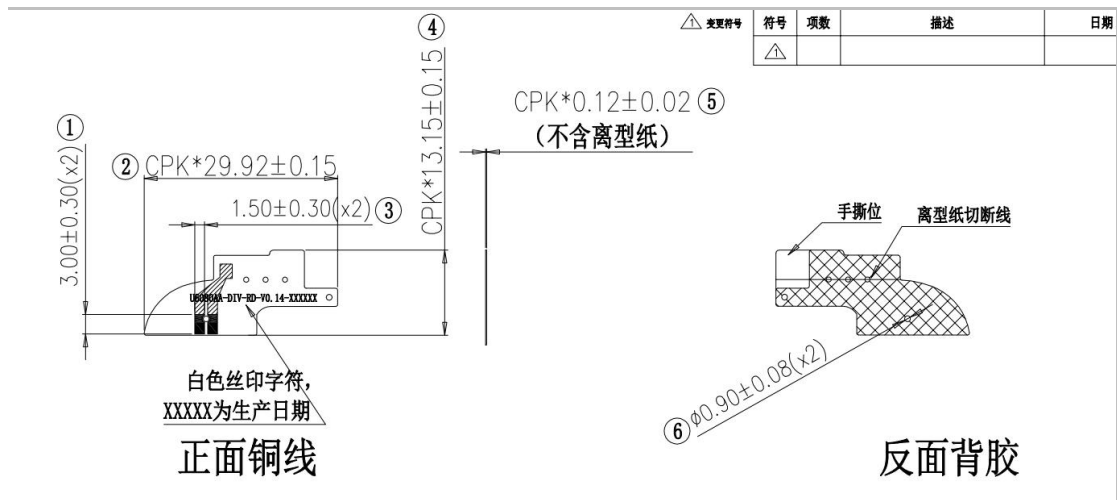
ANT3:4G: LTE B2/4/30/66

5G: n2/n66/n30/n77 DRX2 MIMO (RX4)



ANT4: 4G: LTE B48

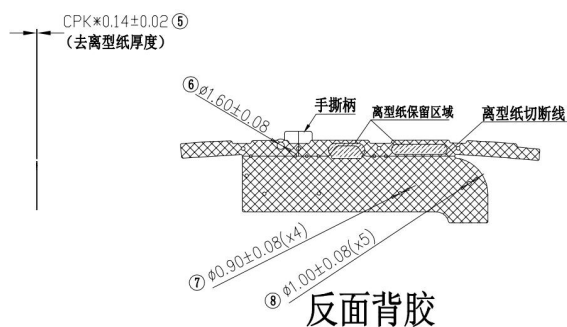
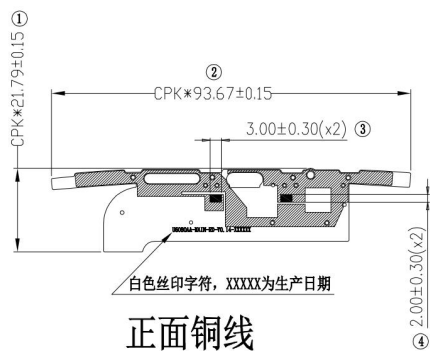
5G: n77 DRX(RX2)



ANT5: 3G: WCDMA B2/4/5

4G: LTE B2/3/4/5/12/14/29/30/66

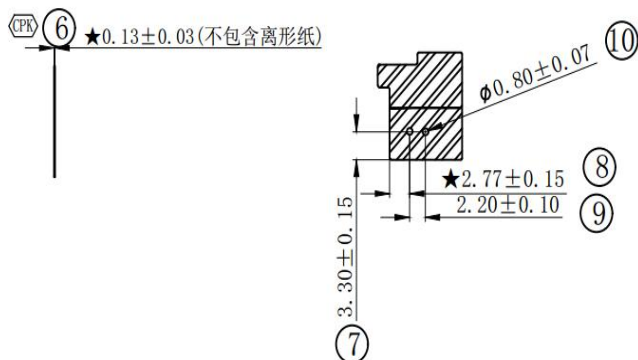
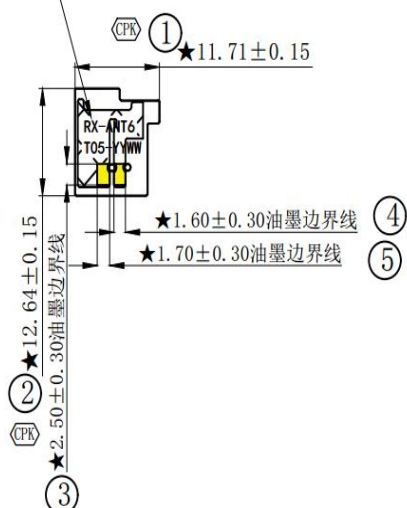
5G: n5/n2/n66/n30 TX/PRX(RX1)



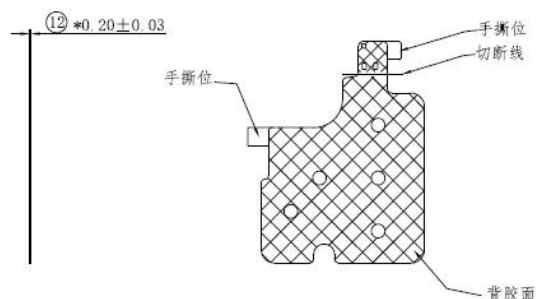
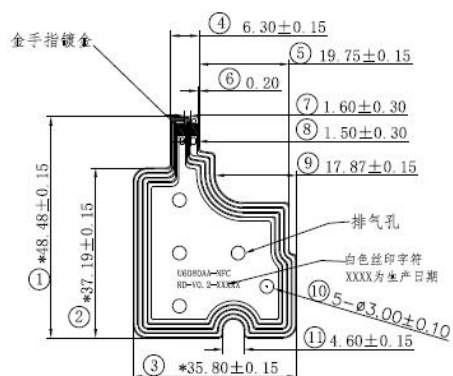
ANT6:4G: LTE B48

5G: n77 TX/PRX(RX1)

丝印字符 白色曝光 处理
字符位置、大小、字体严格按照图
YYWW 年周码



ANT7:NFC



Note:

ANT0/1/2/6

manufacturer: Kunshan Ruixiang Xun Communication Technology Co., LTD

Website:www.innowave.cn

Address: Building C, 1689 Zizhu Road, Yushan Town, Kunshan City, Jiangsu Province.
Antenna model number: RX-U6080

ANT3/4/5/7

manufacturer: Shenzhen Ruide Communication Technology Co., LTD

Website: www.myetheta.com.

Address: Zone B and Zone D, Floor 3, Building 1, Baisha Science and Technology
Industrial Park, No. 3011, Shahe West Road, Nanshan District, Shenzhen.

Antenna model number: RD-U6080

3. **Antenna Passive Efficiency**

a.. Antenna0

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
GPS	L1 1575.5	/	-4.1dB	/	1.0dBi
WIFI 2.4G	2.4Ghz-2.5 Ghz	-4.2dBi	-4.2dBi	1.5dBi	1.5dBi
WIFI 5G	5.15Ghz-5. 85Ghz	-5.9dBi	-5.9dBi	-0.5dBi	-0.5dBi
BT	2.4Ghz-2.5 Ghz	-4.2dBi	-4.2dBi	1.5dBi	1.5dBi

b. Antenna1

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
WCDMA	WCDMA B2	-5.0dBi	-3.9dBi	-1.8dBi	-0.7dBi
	WCDMA B4	-7.9dBi	-4.1dBi	-3.6dBi	0.9dBi
	WCDMA B5	-11.7dBi	-8.0dBi	-7.5dBi	-3.6dBi
LTE	Band 2	-5.0dBi	-3.9dBi	-1.8dBi	-0.7dBi
	Band 3	-7.9dBi	-5.3dBi	-3.6dBi	-2.1dBi
	Band 4	-7.9dBi	-4.1dBi	-3.6dBi	0.9dBi
	Band 5	-11.7dBi	-8.0dBi	-7.5dBi	-3.6dBi

	Band 12	-9.6dBi	-8.9dBi	-5.9dBi	-4.9dBi
	Band 14	-11.0dBi	-8.6dBi	-6.0dBi	-4.6dBi
	Band 66	-7.9dBi	-4.1dBi	-3.6dBi	0.9dBi
	Band 30	-6.0dBi	-4.8dBi	-0.2dBi	0.8dBi
	Band 29	/	-8.7dBi	/	-4.9dBi
NR	N2	-5.0dBi	-3.9dBi	-1.8dBi	-0.7dBi
	N5	-11.7dBi	-8.0dBi	-7.5dBi	-3.6dBi
	N66	-7.9dBi	-4.1dBi	-3.6dBi	0.9dBi
	N30	-6.0dBi	-4.8dBi	-0.2dBi	0.8dBi

c. Antenna2

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
LTE	Band 2	/	-7.1dBi	/	-2.5dBi
	Band 4	/	-7.4dBi	/	-2.1dBi
	Band 66	/	-7.4dBi	/	-2.1dBi
	Band 30	/	-8.6dBi	/	-3.2dBi
NR	N2	/	-7.1dBi	/	-2.5dBi
	N66	/	-7.4dBi	/	-2.1dBi
	N30	/	-8.6dBi	/	-3.2dBi
	N77	-7.6dBi	-7.6dBi	-2.4dBi	-2.4dBi

d. Antenna3

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
LTE	B2	/	-15.2dBi	/	-9.9dBi
	B4	/	-13.2dBi	/	-8.6dBi
	B66	/	-13.2dBi	/	-8.6dBi
	B30	/	-12.1dBi	/	-6.3dBi
NR	N2	/	-15.2dBi	/	-9.9dBi

	N66	/	-13.2dBi	/	-8.6dBi
	N30	/	-12.1dBi	/	-6.3dBi
	N77	-8.6dBi	-8.6dBi	-3.8dBi	-3.8dBi

e.Antenna4

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
	B48	-6.9dBi	-6.9dBi	-1.7dBi	-1.7dBi
	N77	-6.6dBi	-6.6dBi	-0.5dBi	-0.5dBi

f.Antenna5

	Band	Average Gain		Maximum Gain	
		TX	RX	TX	RX
WCDMA	Band 2	-4.8dBi	-5.8dBi	-1.1dBi	-1.2dBi
	Band 4	-4.7dBi	-6.8dBi	-1.9dBi	-1.1dBi
	Band 5	-6.4dBi	-6.4dBi	-3.1dBi	-3.0dBi
LTE	Band 2	-4.8dBi	-5.8dBi	-1.1dBi	-1.2dBi
	Band 3	-4.7dBi	-4.8dBi	-1.7dBi	-1.1dBi
	Band4	-4.7dBi	-6.8dBi	-1.9dBi	-1.1dBi
	Band 5	-6.4dBi	-6.4dBi	-3.1dBi	-3.0dBi
	Band 12	-4.8dBi	-5.2dBi	-2.4dBi	-2.6dBi
	Band 14	-5.5dBi	-6.0dBi	-2.5dBi	-3.0dBi
	Band 66	-4.7dBi	-6.8dBi	-1.9dBi	-1.1dBi
	Band 30	-4.2dBi	-4.8dBi	-0.2dBi	-0.7dBi
	Band 29	/	-4.9dBi	/	-2.3dBi
NR	N2	-4.8dBi	-5.8dBi	-1.1dBi	-1.2dBi
	N5	-6.4dBi	-6.4dBi	-3.1dBi	-3.0dBi
	N66	-4.7dBi	-6.8dBi	-1.9dBi	-1.1dBi

	N30	-4.2dBi	-4.8dBi	-0.2dBi	-0.7dBi
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g. Antenna6

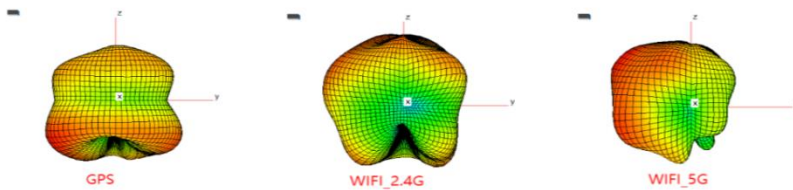
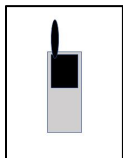
		Average Gain		Maximum Gain	
	Band	TX	RX	TX	RX
LTE	B48	-5.7dBi	-5.7dBi	-0.9dBi	-0.9dBi
NR	N77	-5.1dBi	-5.1dBi	-0.1dBi	-0.1dBi

h. Antenna7 NFC

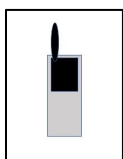
The devices does not support the test of NFC gain.In addition,all measurements were performed radiated and therefore additional antenna gain documentation is not required.

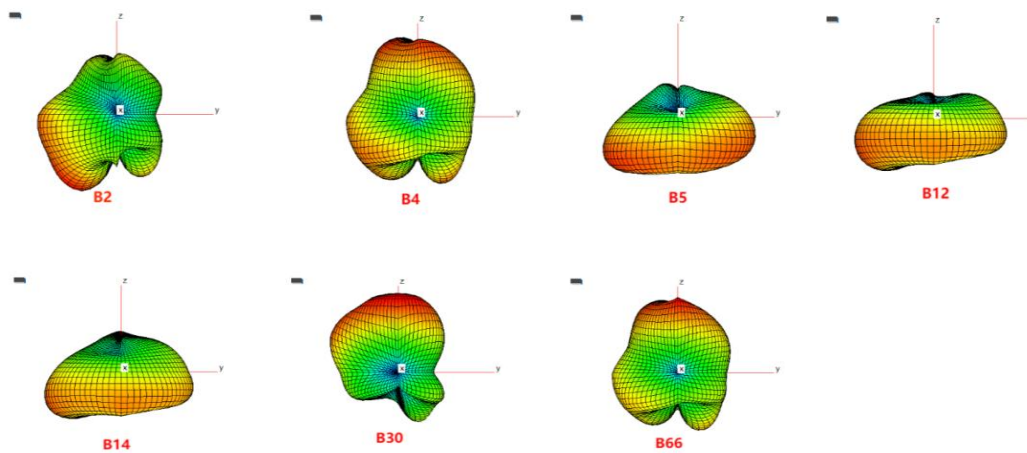
4. Simple Antenna Pattern Plot

a. Antenna0

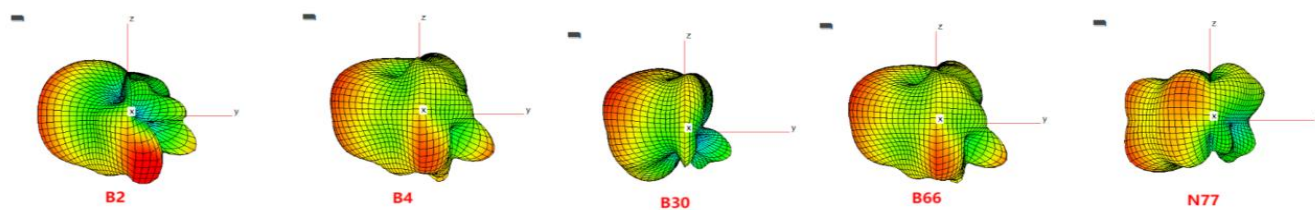
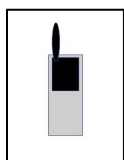


b. Antenna1

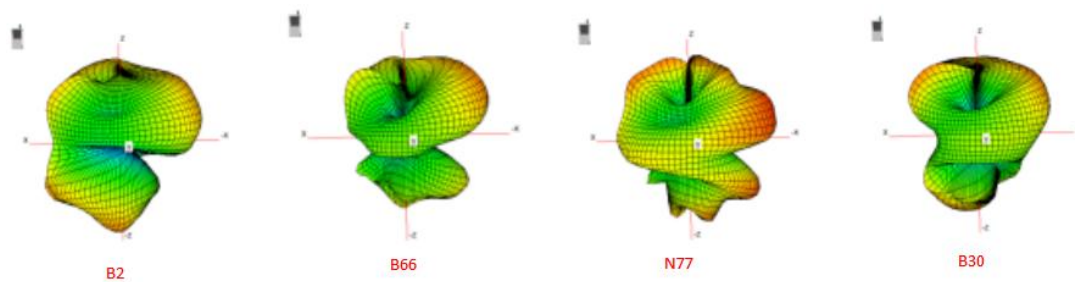
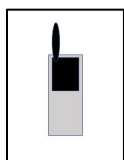




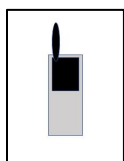
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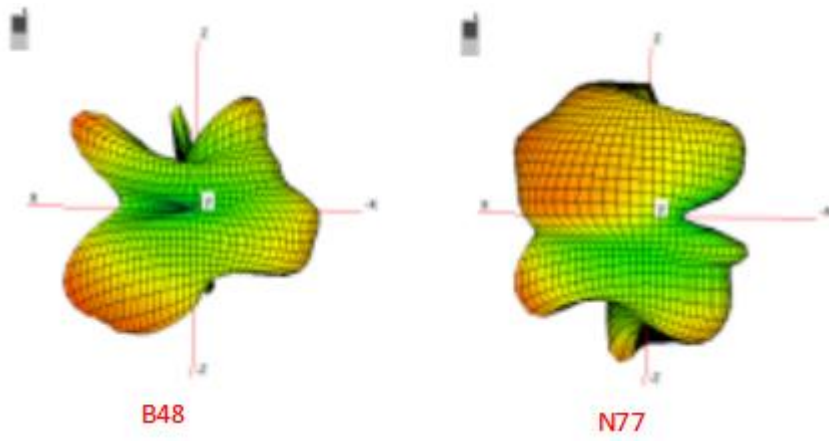


d. Antenna3

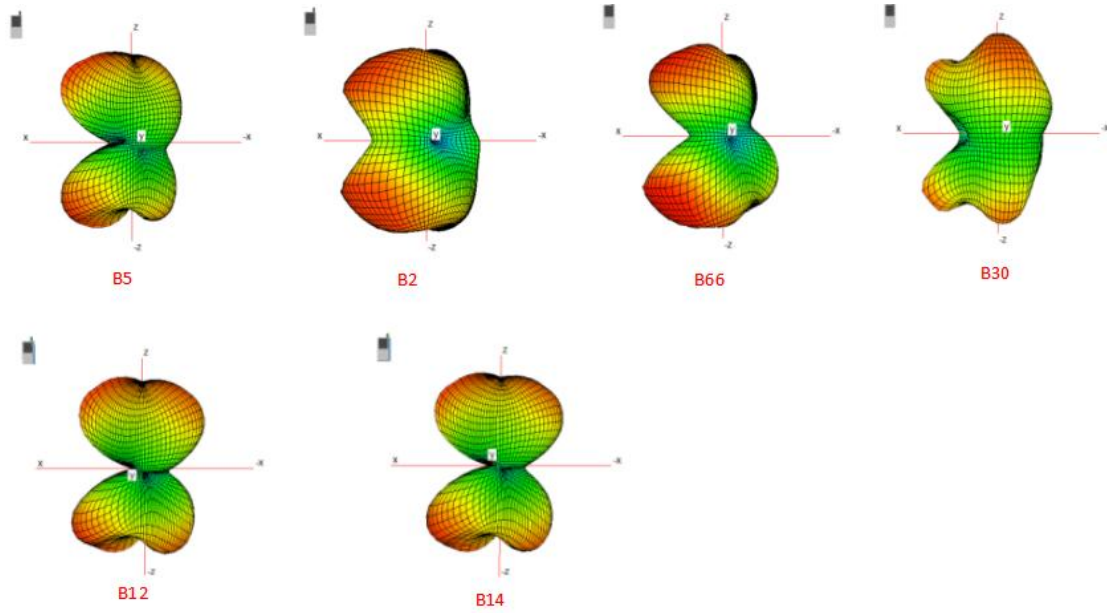
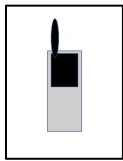


e. Antenna4

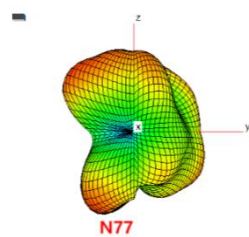
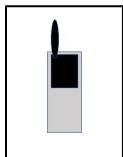




f.Antenna5



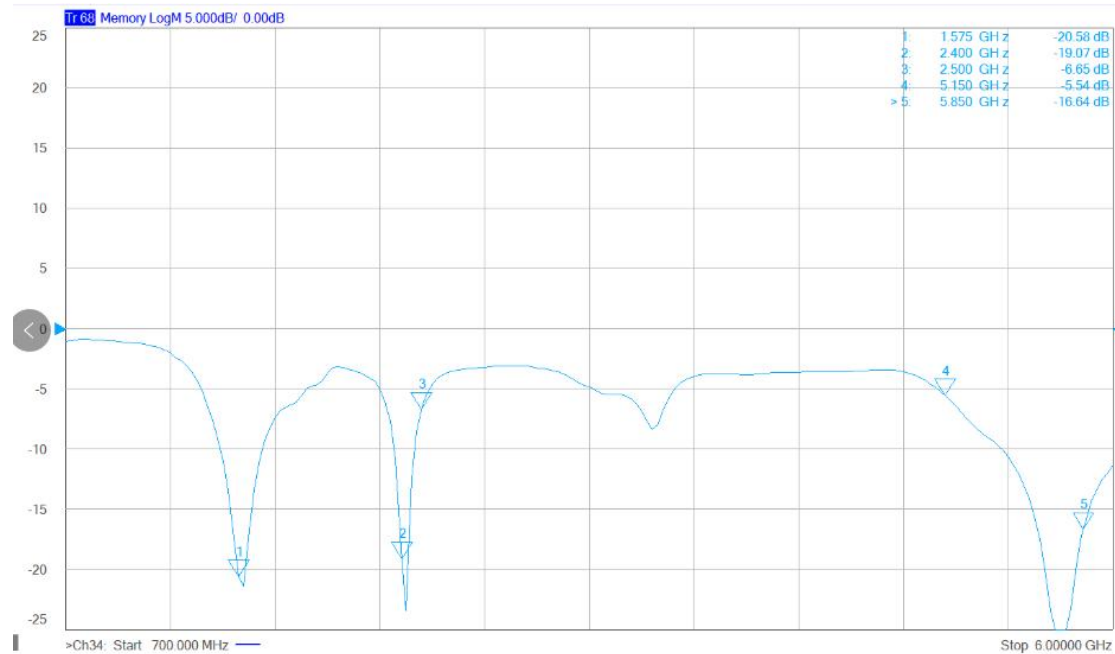
g.Antenna6



5. Antenna return loss

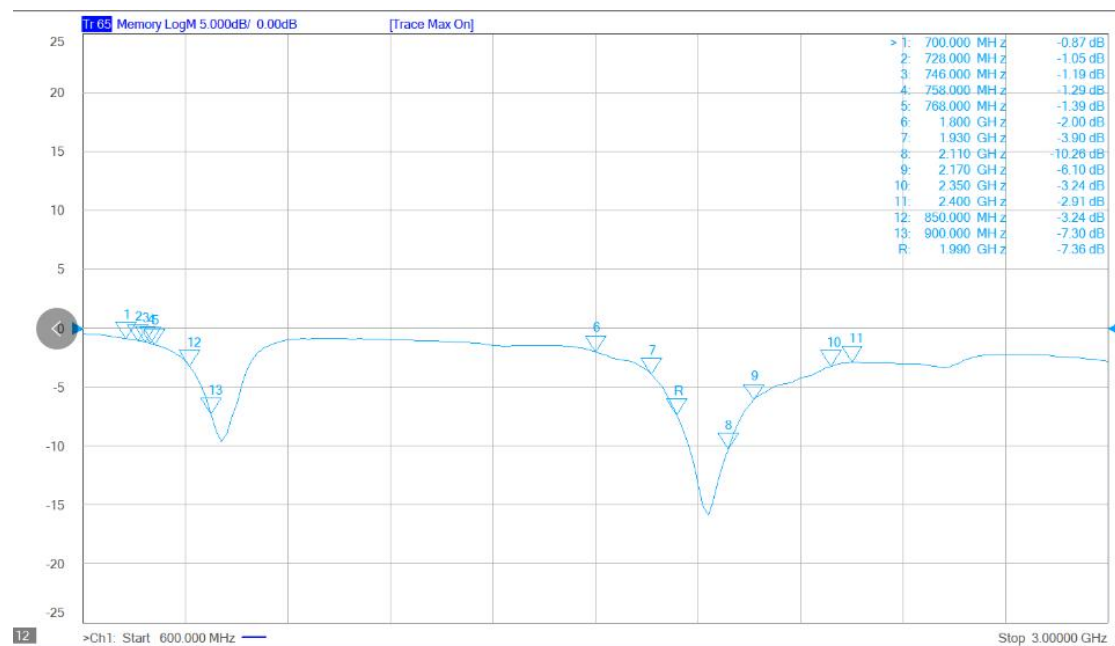
a. Antenna0

GPS/WIFI/BT

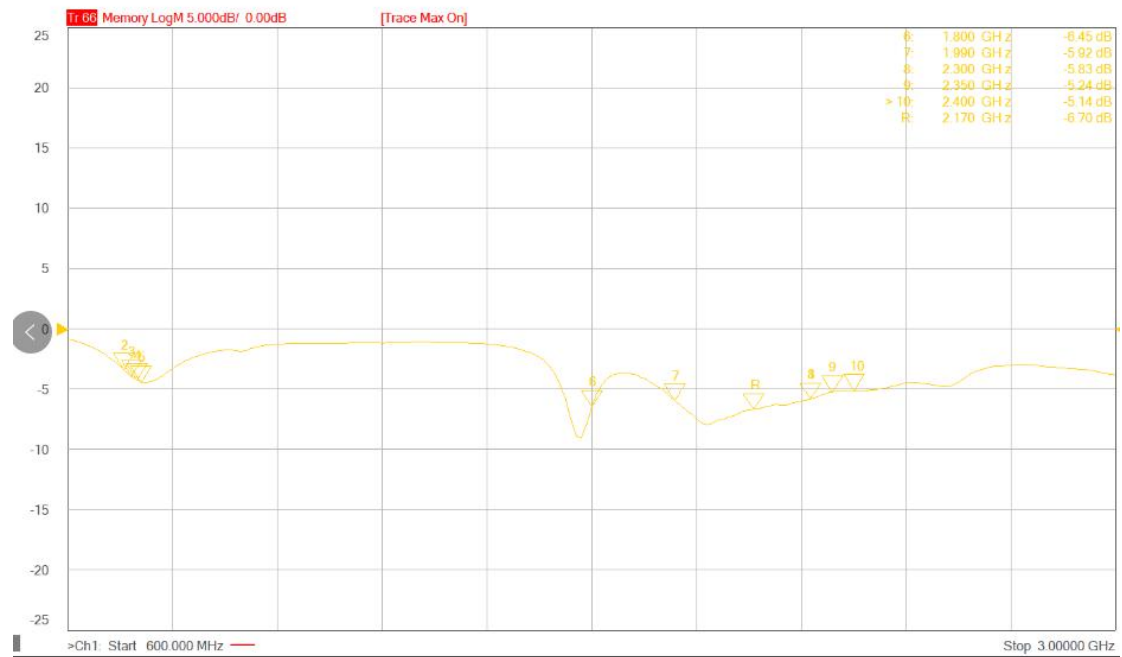


b. Antenna1

B2/4/5/30/66

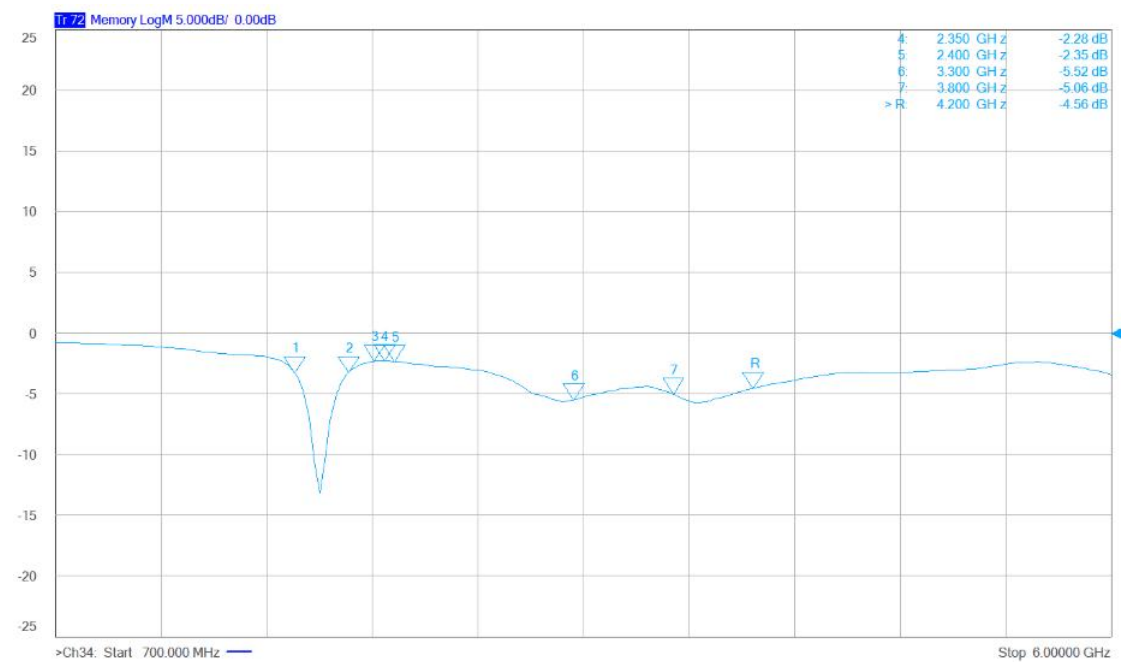


B12/14



c.Antenna2

B2/4/30/66/N77



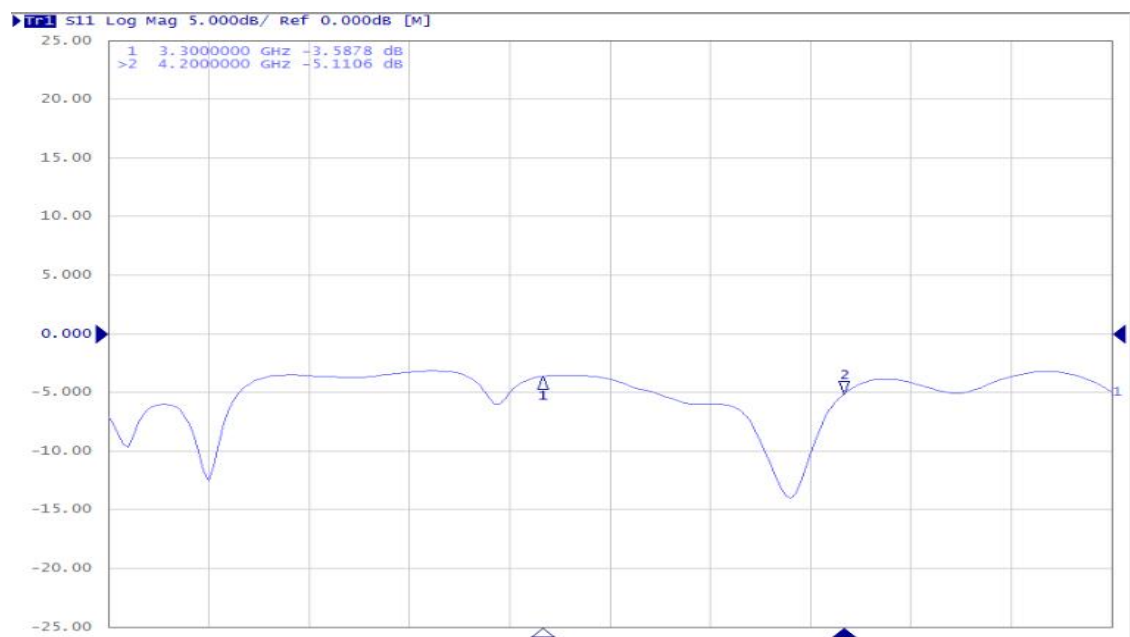
d.Antenna3

B2/4/30/66/N77



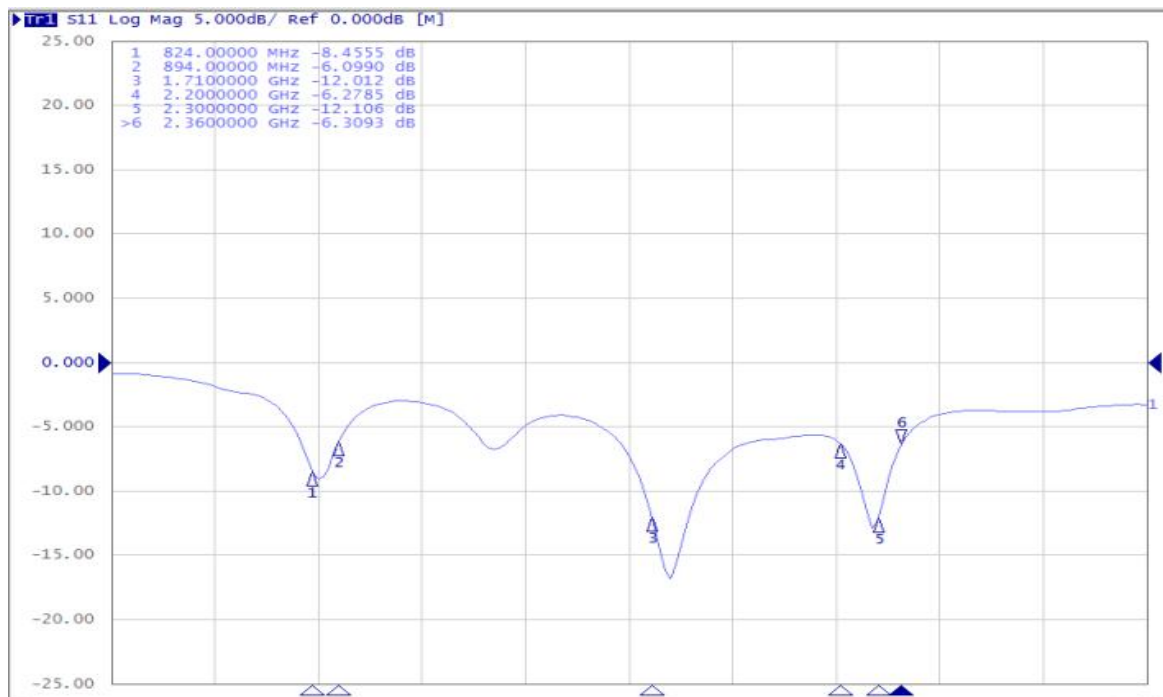
e.Antenna4

B48/N77

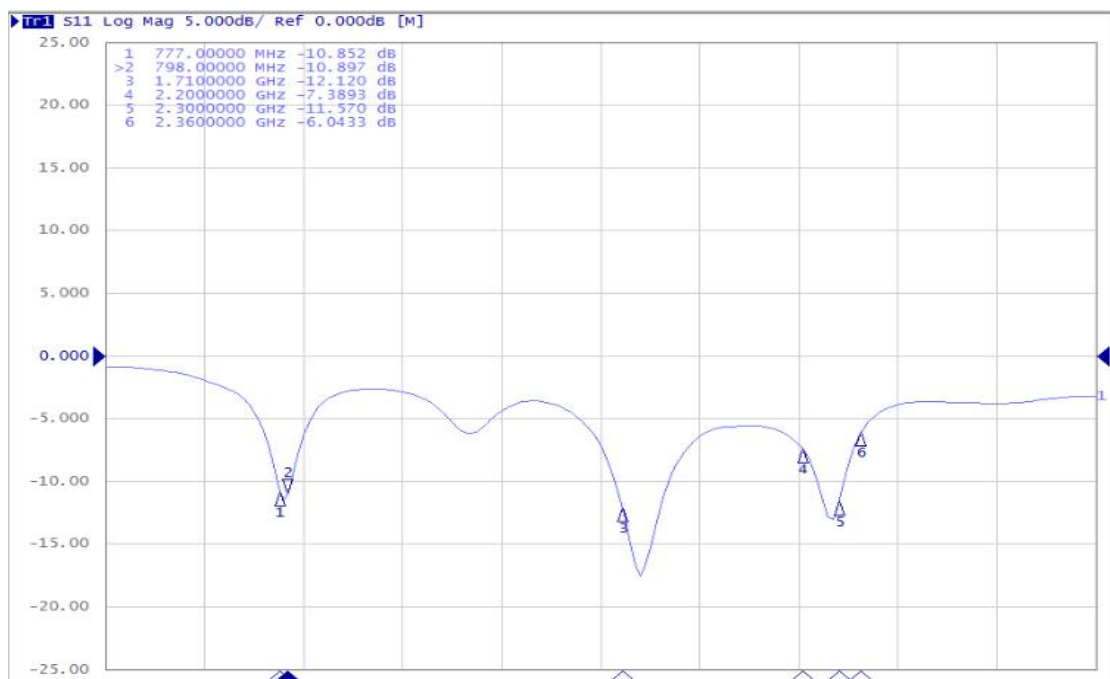


f.Antenna5

B2/4/5/66/30



B12

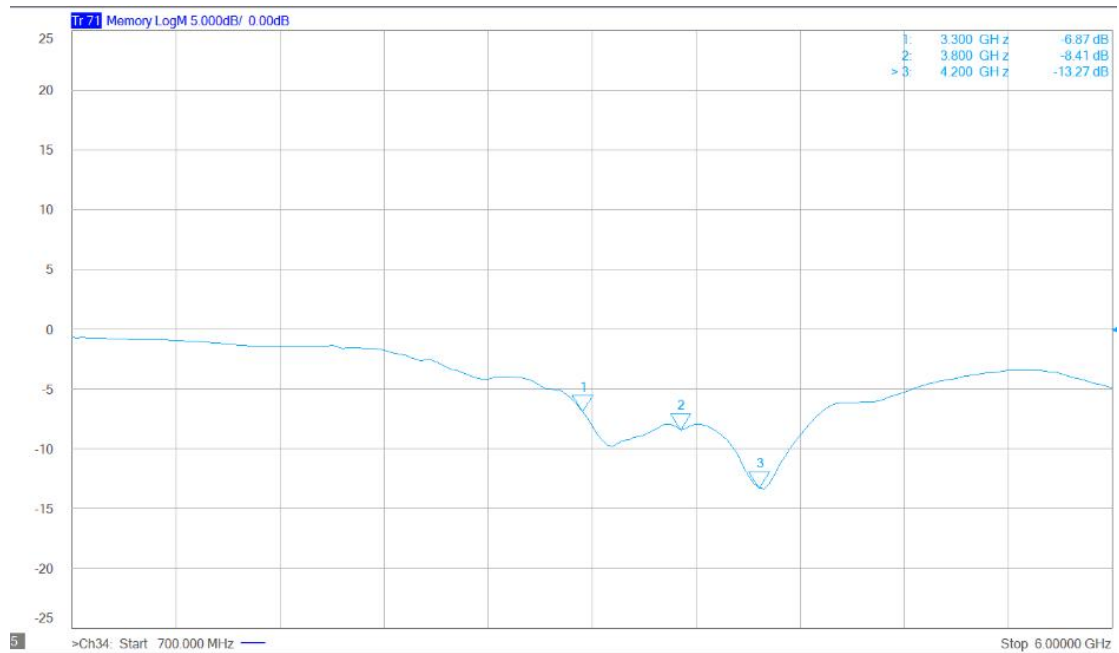


B14



g.Antenna6

B48/N77



UL CA Combination

Combination UL CA	DL_MIM O	UL Band		
CA_5B	2-2	5B	ANT5	ANT5
CA_2A-12A	2-2	2-12	ANT1	ANT5
CA_12A-66A	2-2	12-66	ANT5	ANT1
CA_2A-5A	2-2	2-5	ANT1	ANT5

CA_5A-66A	2-2	5-66	ANT5	ANT1
CA_12A-30A	2-2	12-30	ANT5	ANT1
CA_5A-30A	2-2	5-30	ANT5	ANT1
CA_2A-14A	2-2	2-14	ANT1	ANT5
CA_14A-66A	2-2	14-66	ANT5	ANT1
CA_14A-30A	2-2	14-30	ANT5	ANT1

ENDC Combination

Combination ENDC	DL_MIMO	UL Band		
			LTE	NR
DC_2A_n5A	4_2	2_5	ANT1	ANT5
DC_30A_n5A	4_2	30_5	ANT1	ANT5
DC_66A_n5A	4_2	66_5	ANT1	ANT5
DC_2A_n66A	2_4	2_66	ANT1	ANT5
DC_5A_n66A	2_4	5_66	ANT1	ANT5
DC_12A_n66A	2_4	12_66	ANT1	ANT5
DC_5A_n2A	2_4	5_2	ANT1	ANT5
DC_12A_n2A	2_4	12_2	ANT1	ANT5
DC_66A_n2A	2_4	66_2	ANT1	ANT5
DC_5A_n30A	2_4	5_30	ANT1	ANT5
DC_12A_n30A	2_4	12_30	ANT1	ANT5
DC_2A-2A_n5A	2-2_2	2_5	ANT1	ANT5
DC_2A-66A_n5A	2-2_2	2_5, 66_5	ANT1	ANT5
DC_66A-66A_n5A	2-2_2	66_5	ANT1	ANT5
DC_2A-5A_n66A	2-2_4	2_66, 5_66	ANT1	ANT5
DC_2A-12A_n66A	2-2_4	2_66, 12_66	ANT1	ANT5
DC_2A-29A_n66A	2-2_4	2_66	ANT1	ANT5
DC_2A-2A_n66A	2-2_4	2_66	ANT1	ANT5
DC_5A-66A_n2A	2-2_4	5_2, 66_2	ANT1	ANT5
DC_12A-66A_n2A	2-2_4	12_2, 66_2	ANT1	ANT5
DC_29A-66A_n2A	2-2_4	66_2	ANT1	ANT5
DC_2A-5A_n2A	2-2_4	2_2, 5_2	ANT1	ANT5
DC_2A-12A_n2A	2-2_4	2_2, 12_2	ANT1	ANT5
DC_2A_n77A	4_4	2_77	ANT1	ANT6/4/3/2

DC_5A_n77A	2_4	5_77	ANT1	ANT6/4/3/2
DC_66A_n77A	4_4	66_77	ANT1	ANT6/4/3/2
DC_30A_n77A	4_4	30_77	ANT1	ANT6/4/3/2
DC_12A_n77A	2_4	12_77	ANT1	ANT6/4/3/2
DC_2A-14A_n66A	2-2_4	2_66, 14_66	ANT1	ANT5
DC_66A_n66A	4_4	66_66	ANT1	ANT5
DC_2A_n2A	4_4	2_2	ANT1	ANT5
DC_29A-66A_n66A	2-2_2	66_66	ANT1	ANT5
DC_2A-29A_n2A	2-2_2	2_2	ANT1	ANT5
DC_2A-66A_n66A	2-2_2	2_66, 66_66	ANT1	ANT5
DC_5A-66A_n66A	2-2_2	5_66, 66_66	ANT1	ANT5
DC_12A-66A_n66A	2-2_2	12_66, 66_66	ANT1	ANT5
DC_2A-66A_n2A	2-2_2	2_2, 66_2	ANT1	ANT5