

ERO1eT Pro EU

-Antenna passive pretest report

V1.4

Report version update resume



NO.	Modify description	Modifier	Date
V1.0	Initial issue	Wen	2021.1.18
V1.1	Increase combination gain	Wen	2023.9.13
V1.2	Update report	Wen	2024.02.02
V1.3	Added antenna manufacturer, antenna model, size diagram	Wen	2024.04.09
V1.4	Added the description of ANT9 onboard antenna	Wen	2024.04.25

CONTENTS

- ◆ Purpose & Environment
- ◆ DUT Antenna
- ◆ Return Loss and Isolation
- ◆ 2D/3D Radiation pattern
- ◆ Efficiency and Peak Gain
- ◆ Summary

Purpose

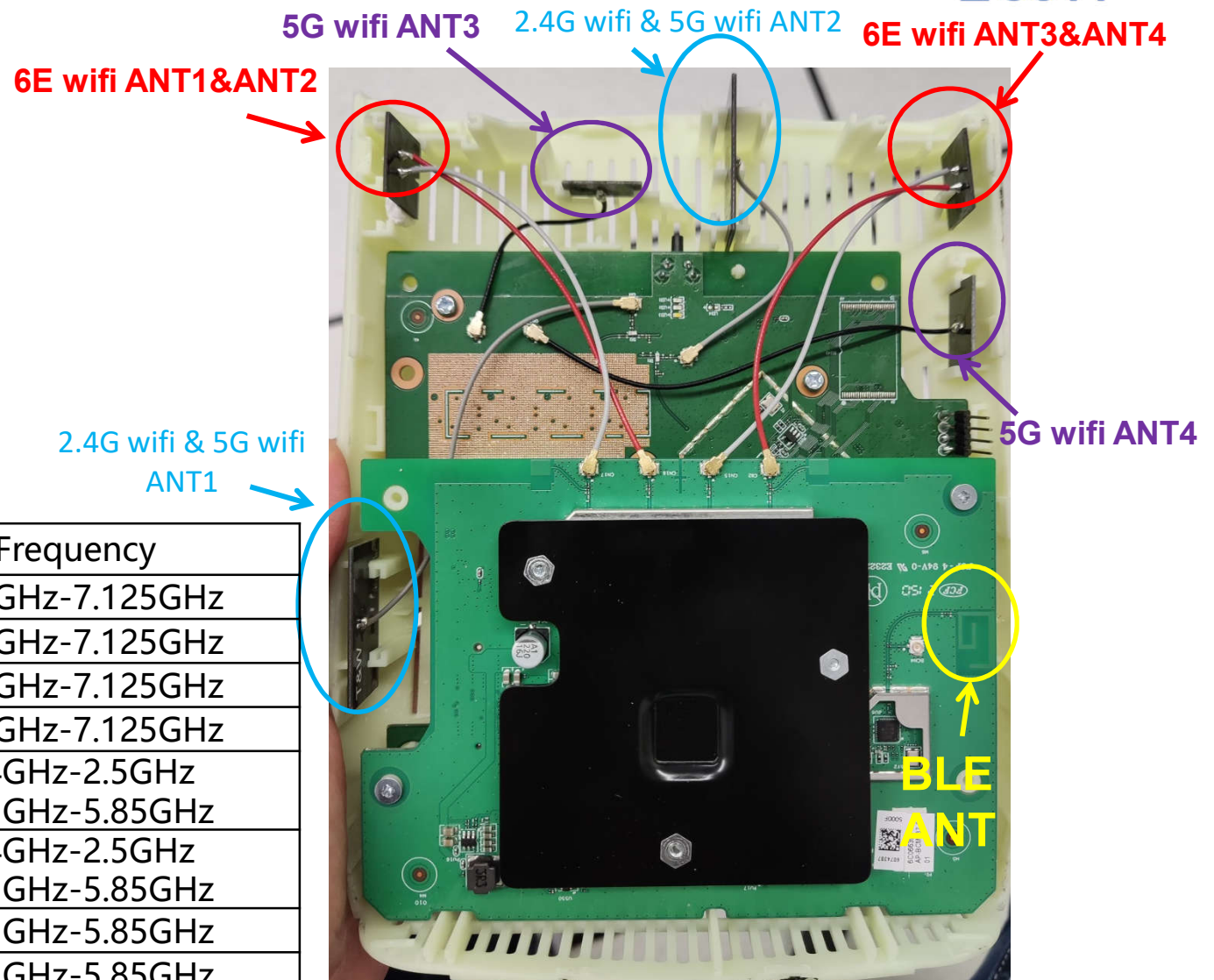
- Meet the electrical performance index ;
- Confirm the antenna scheme to meet the design requirements;

Environment

- Test Condition: the network analyzer(E5071C) and SATIMO microwave anechoic chamber
- Passive measurement results are presented

DUT Antenna

T&W



NO.	Frequency
6E WIFI ANT1	5.91GHz-7.125GHz
6E WIFI ANT2	5.91GHz-7.125GHz
6E WIFI ANT3	5.91GHz-7.125GHz
6E WIFI ANT4	5.91GHz-7.125GHz
2.4G wifi & 5G wifi ANT1	2.4GHz-2.5GHz 5.15GHz-5.85GHz
2.4G wifi & 5G wifi ANT2	2.4GHz-2.5GHz 5.15GHz-5.85GHz
5G wifi ANT3	5.15GHz-5.85GHz
5G wifi ANT4	5.15GHz-5.85GHz
BLE ANT	2.4GHz-2.5GHz

DUT Antenna



Antenna manufacturer :

Dongguan City Xinsheng Electronics Co.,Ltd,

Manufacturer address:

No.6 Village, Datanlang District, Dalingshan, Dongguan, Guangdong, China.

Antenna product model :

6E wifi ANT1&ANT2:EmP602-B-I85(G)I95(R)

6E wifi ANT3&ANT4:EmP602a-B-I95(B)I85(W)

2.4G wifi & 5G wifi ANT1:EmP359-B-I110(G)

2.4G wifi & 5G wifi ANT2:EmP359a-B-I65(G)

5G wifi ANT3:EmP220-B-I60(B)

5G wifi ANT4:EmP224-B-I110(B)

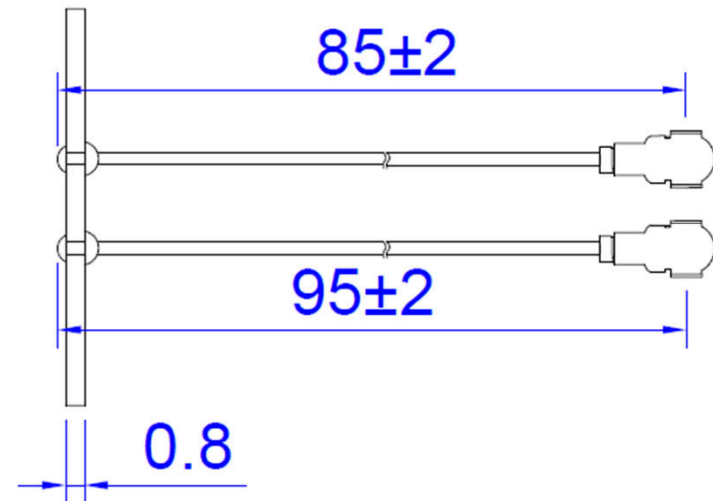
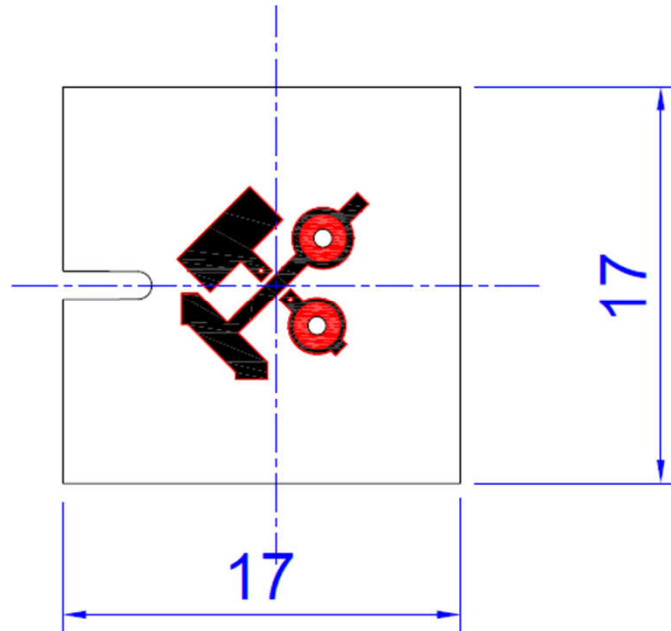
BLE ANT:BT Onboard antenna(NA)

DUT Antenna

6E Wifi ANT1&ANT2:

Antenna dimension:

(Remark: for EmP602-B-I85(G)I95(R) the RF cable is 85mm and 95mm)



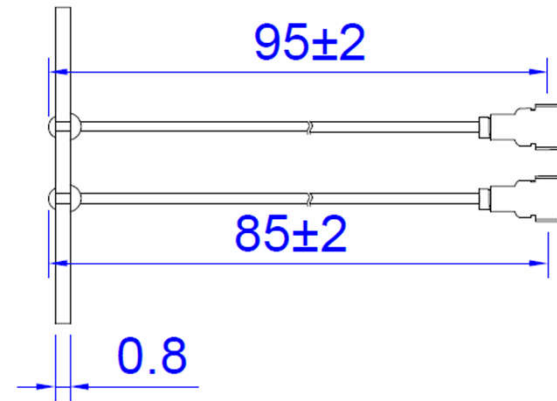
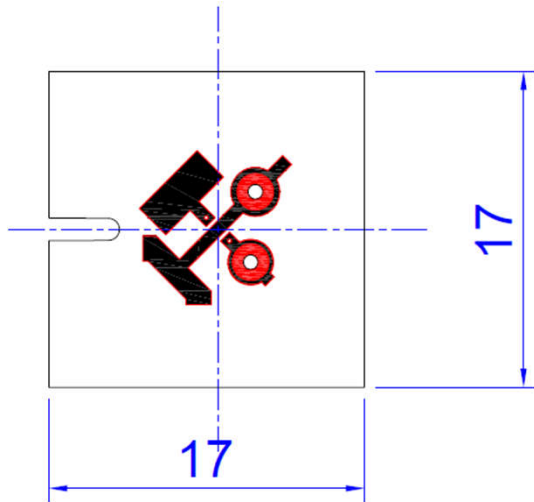
(Unit:mm)

DUT Antenna

6E Wifi ANT3&ANT4:

Antenna dimension:

(Remark: for EmP602a-B-I95(B)I85(W) the RF cable is 95mm and 85mm)



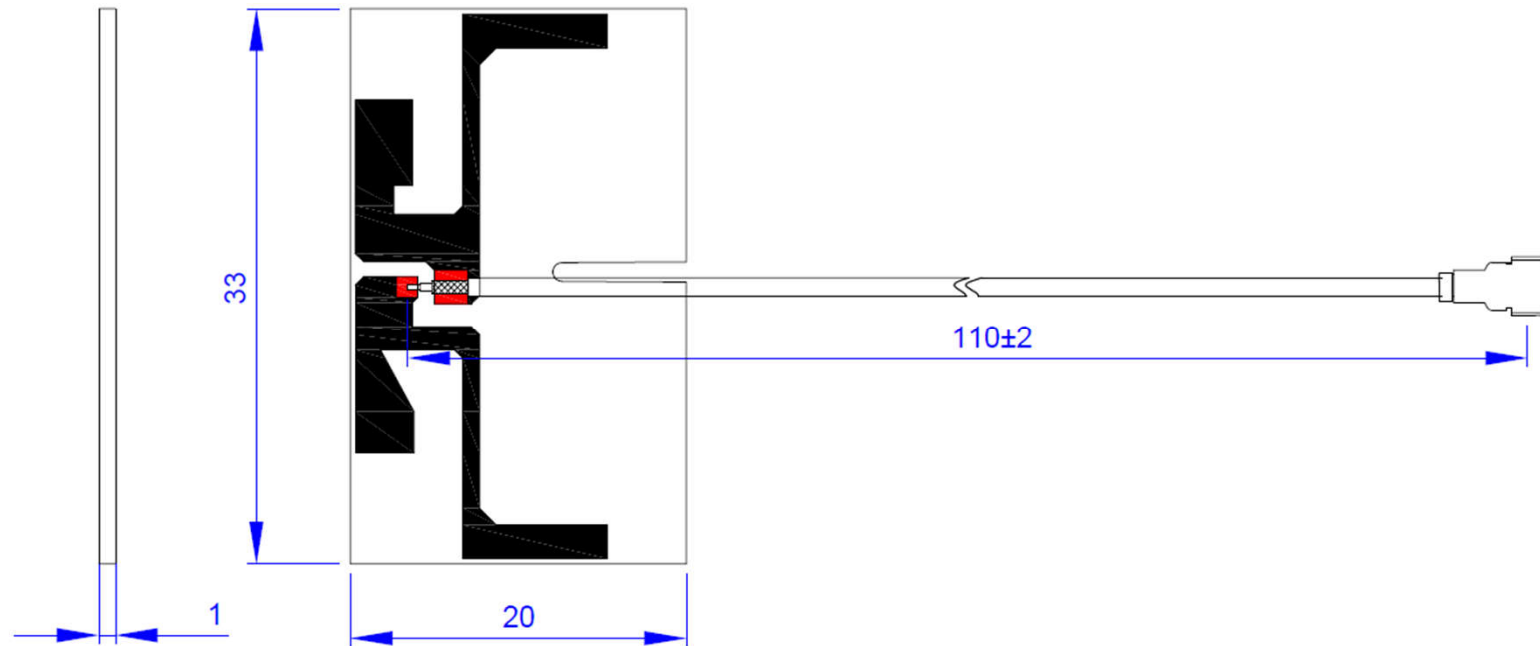
(Unit:mm)

DUT Antenna

2.4G wifi & 5G wifi ANT1

Antenna dimension:

(Remark: for EmP359-B-I110(G) the RF cable is 110mm)



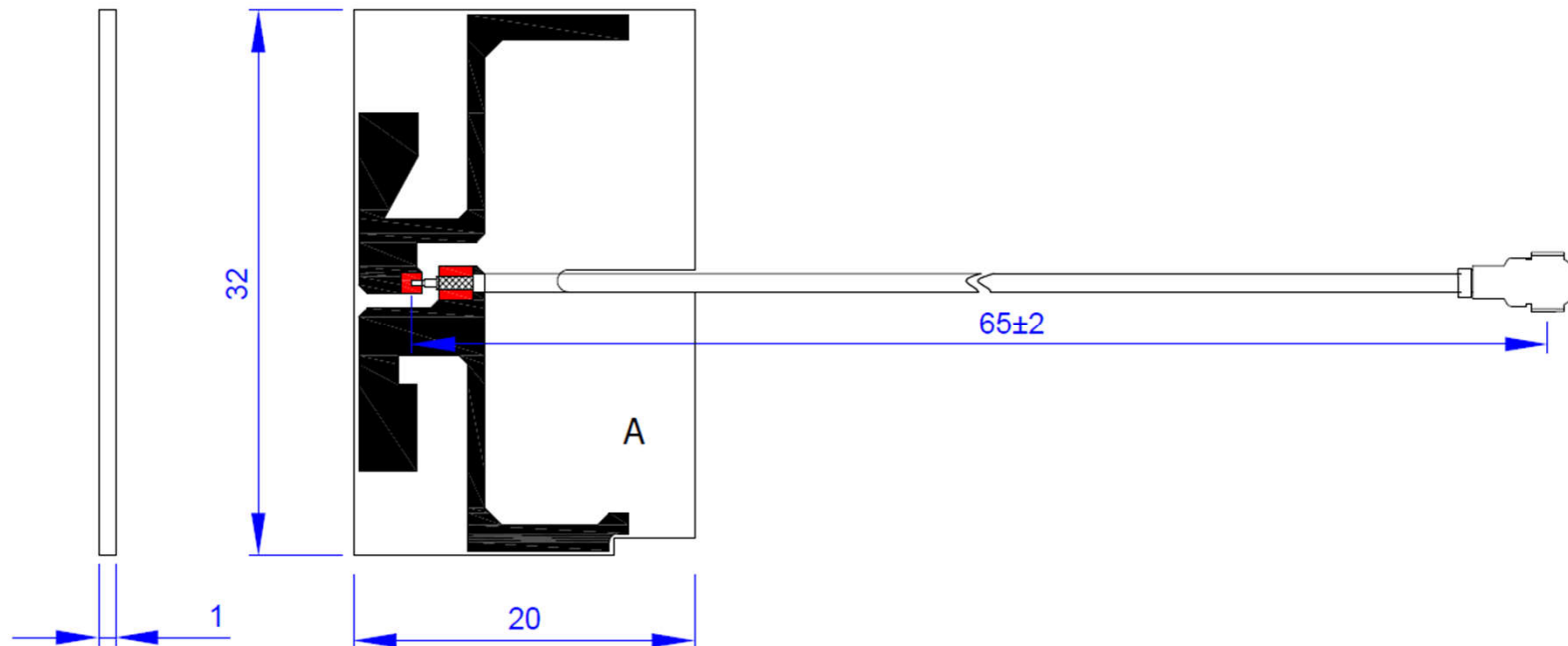
(Unit:mm)

DUT Antenna

2.4G wifi & 5G wifi ANT2:

Antenna dimension:

(Remark: for EmP359a-B-I65(G) the RF cable is 65mm)



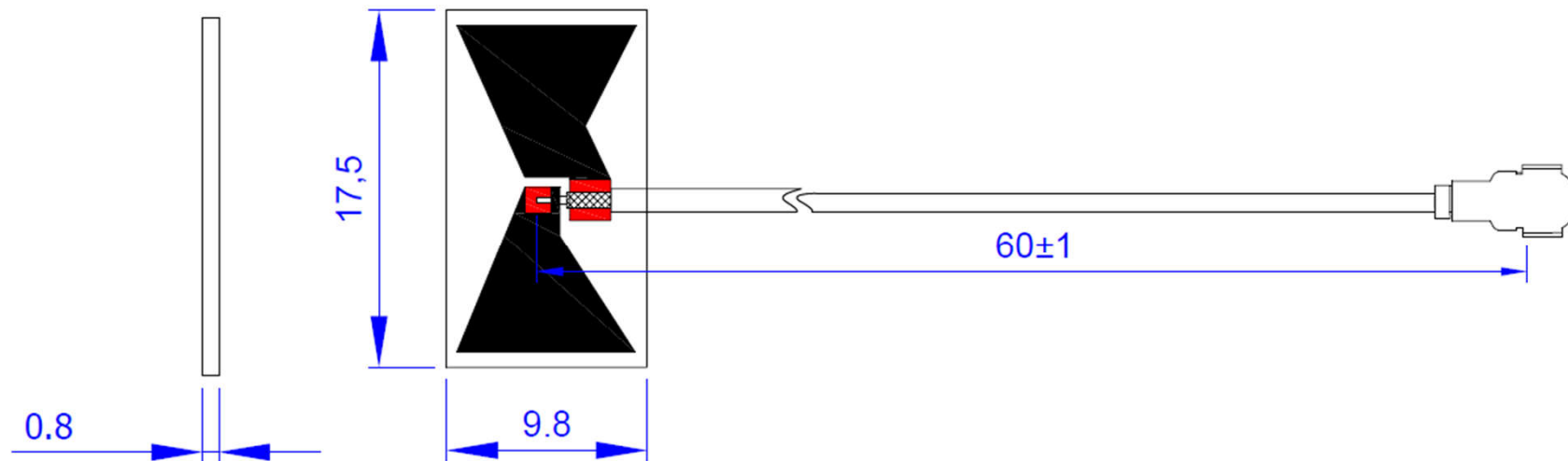
(Unit:mm)

DUT Antenna

5G wifi ANT3:

Antenna dimension:

(Remark: for EmP220-B-I60(B) the RF cable is 60mm)



(Unit:mm)

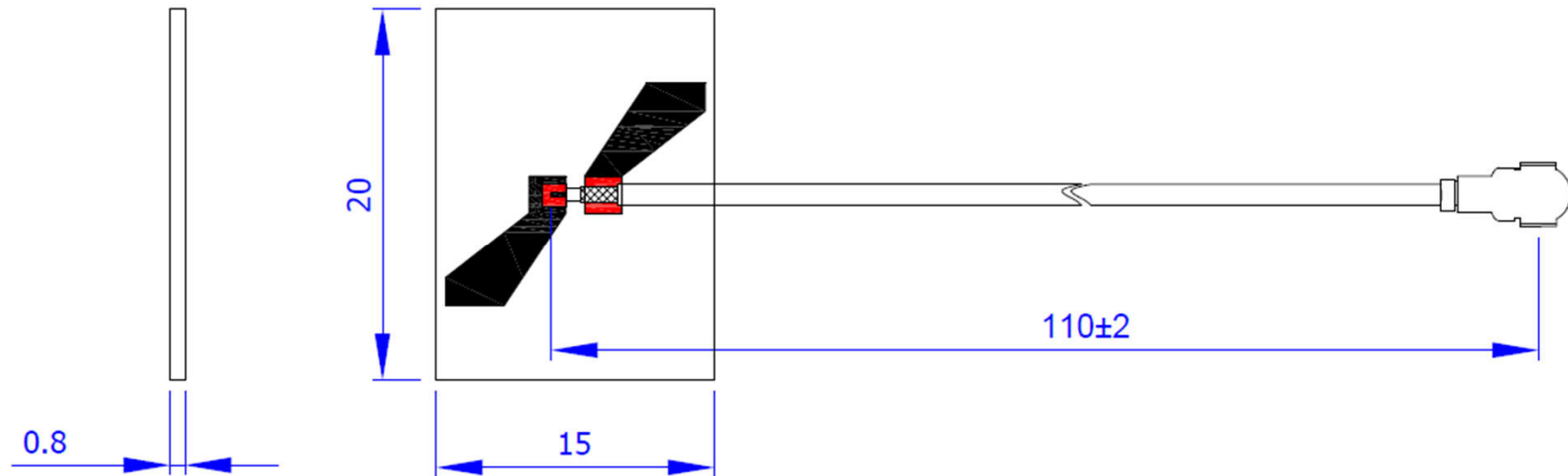
DUT Antenna



5G wifi ANT4:

Antenna dimension:

(Remark: for EmP224-B-I110(B) the RF cable is 110mm)

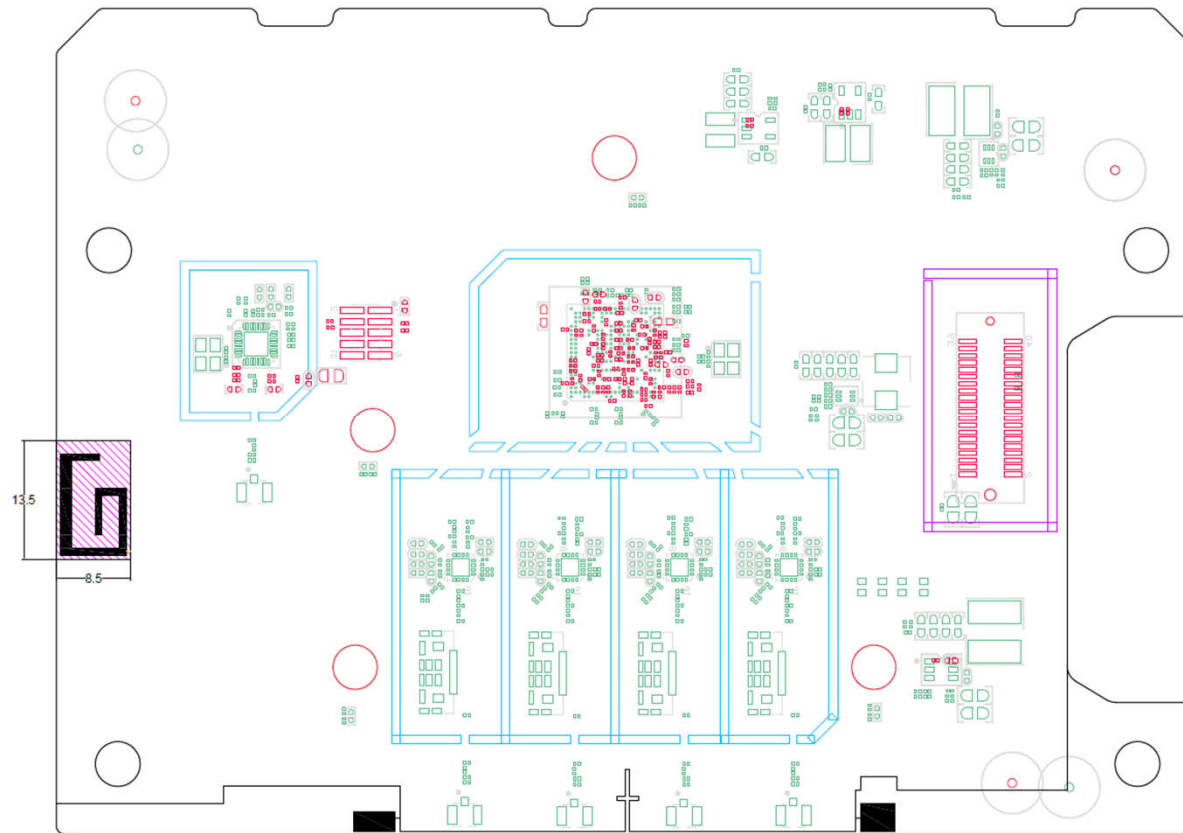


(Unit:mm)

DUT Antenna

BLE ANT

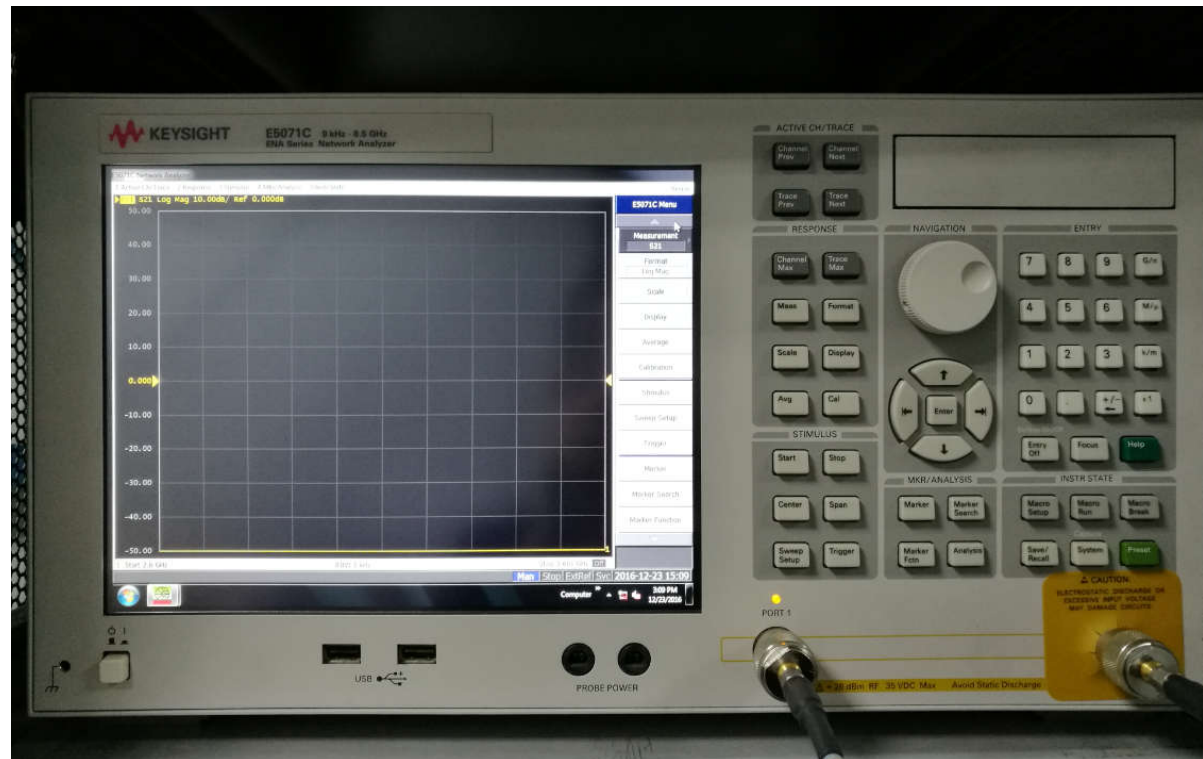
Antenna dimension:
(Remark: BT Onboard antenna(NA))



(Unit:mm)

Return Loss and Isolation

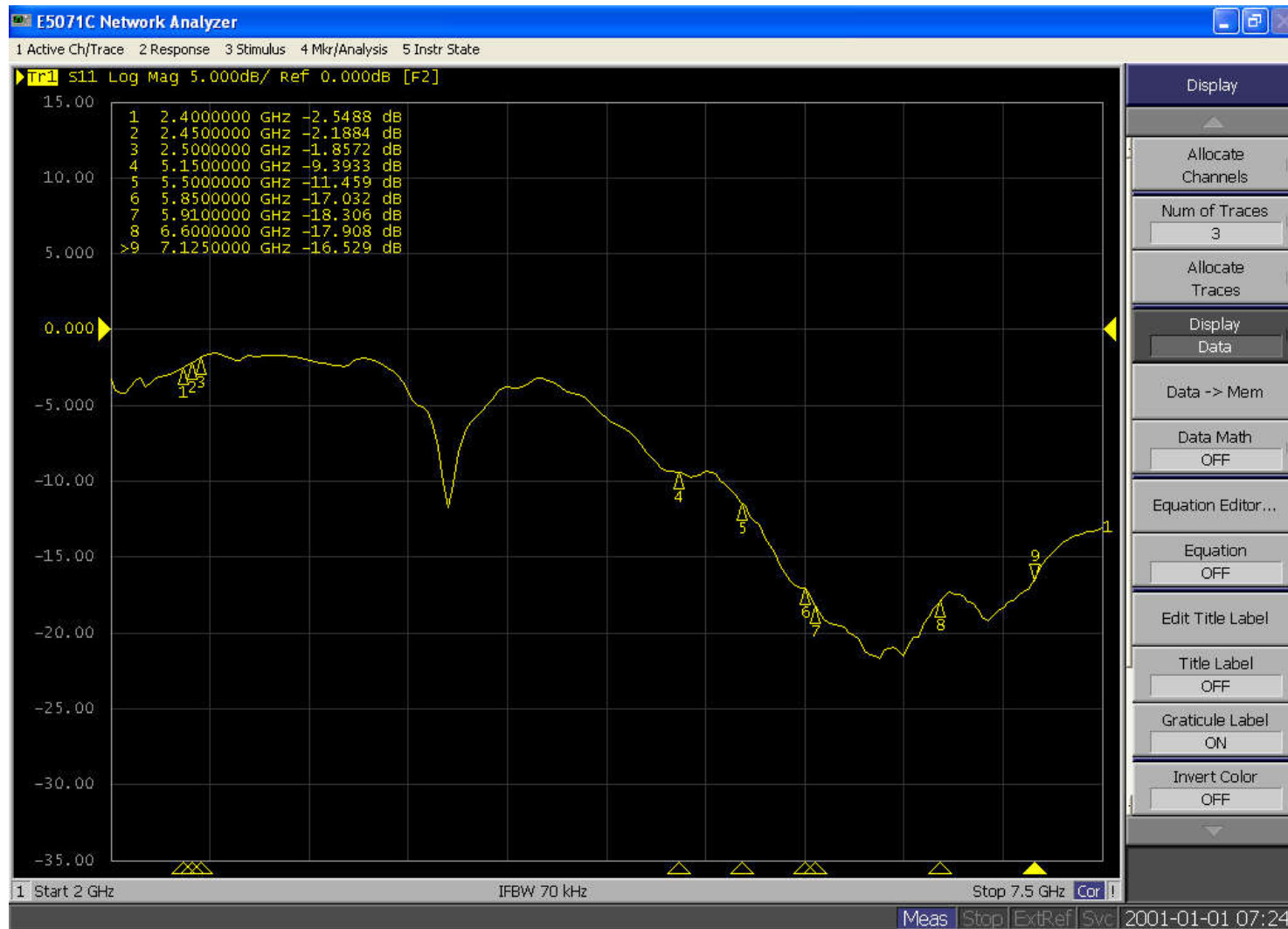
Test Condition



The network Analyzer

Return Loss and Isolation

6E Wifi ANT1



Return Loss and Isolation

6E wifi ANT2



Return Loss and Isolation

6E wifi ANT3



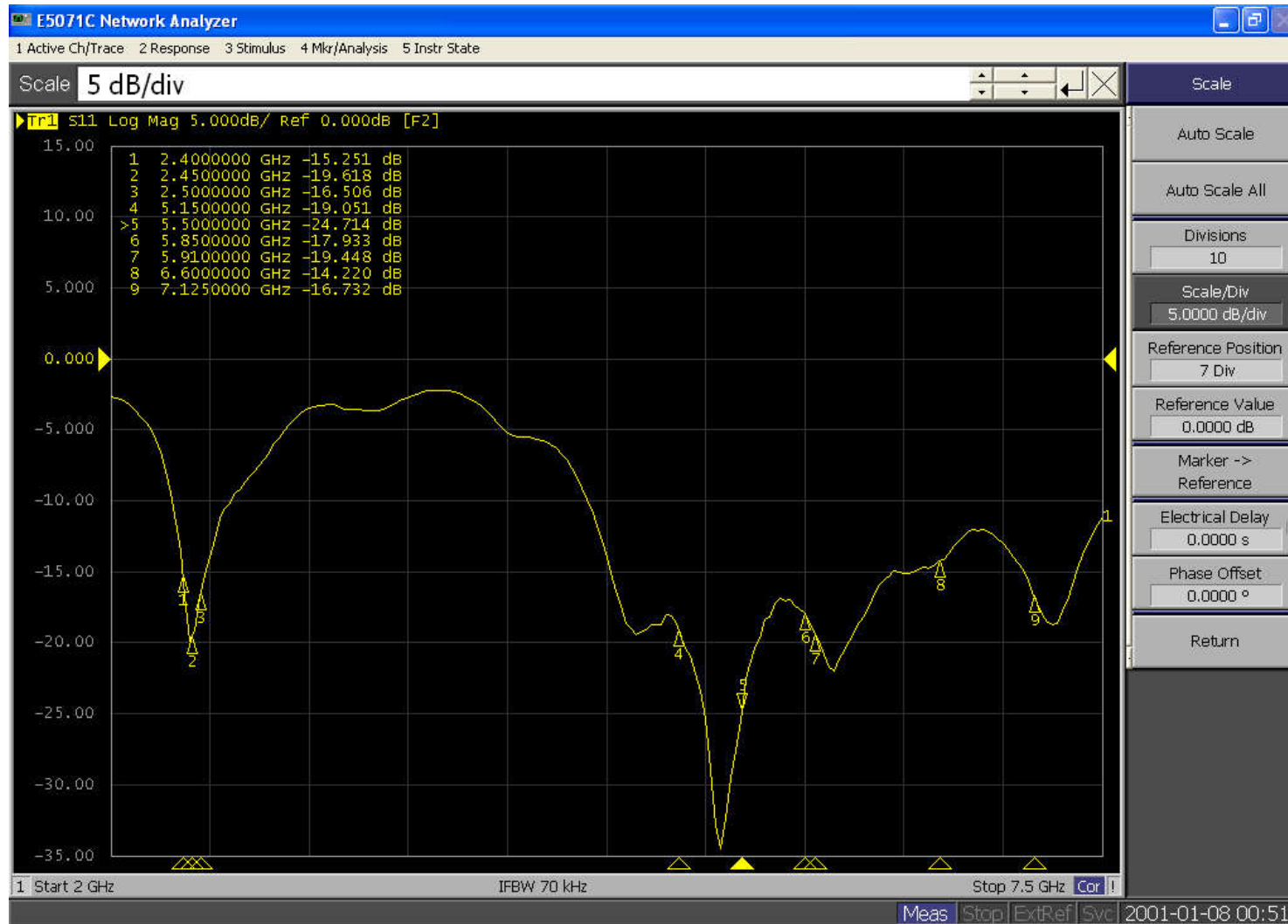
Return Loss and Isolation

6E wifi ANT4



Return Loss and Isolation

2.4G wifi & 5G wifi ANT1



Return Loss and Isolation

2.4G wifi & 5G wifi ANT2



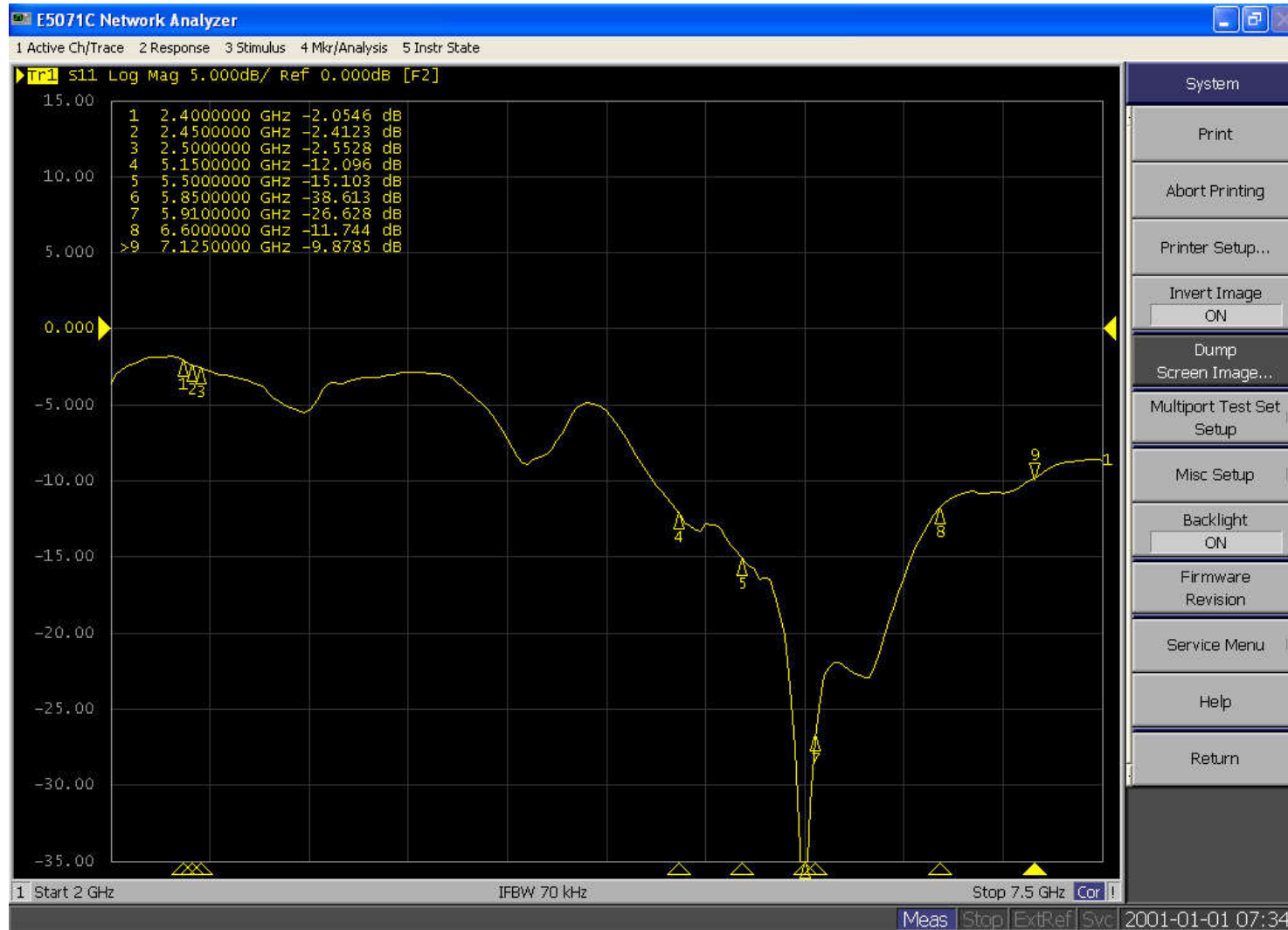
Return Loss and Isolation

5G wifi ANT3



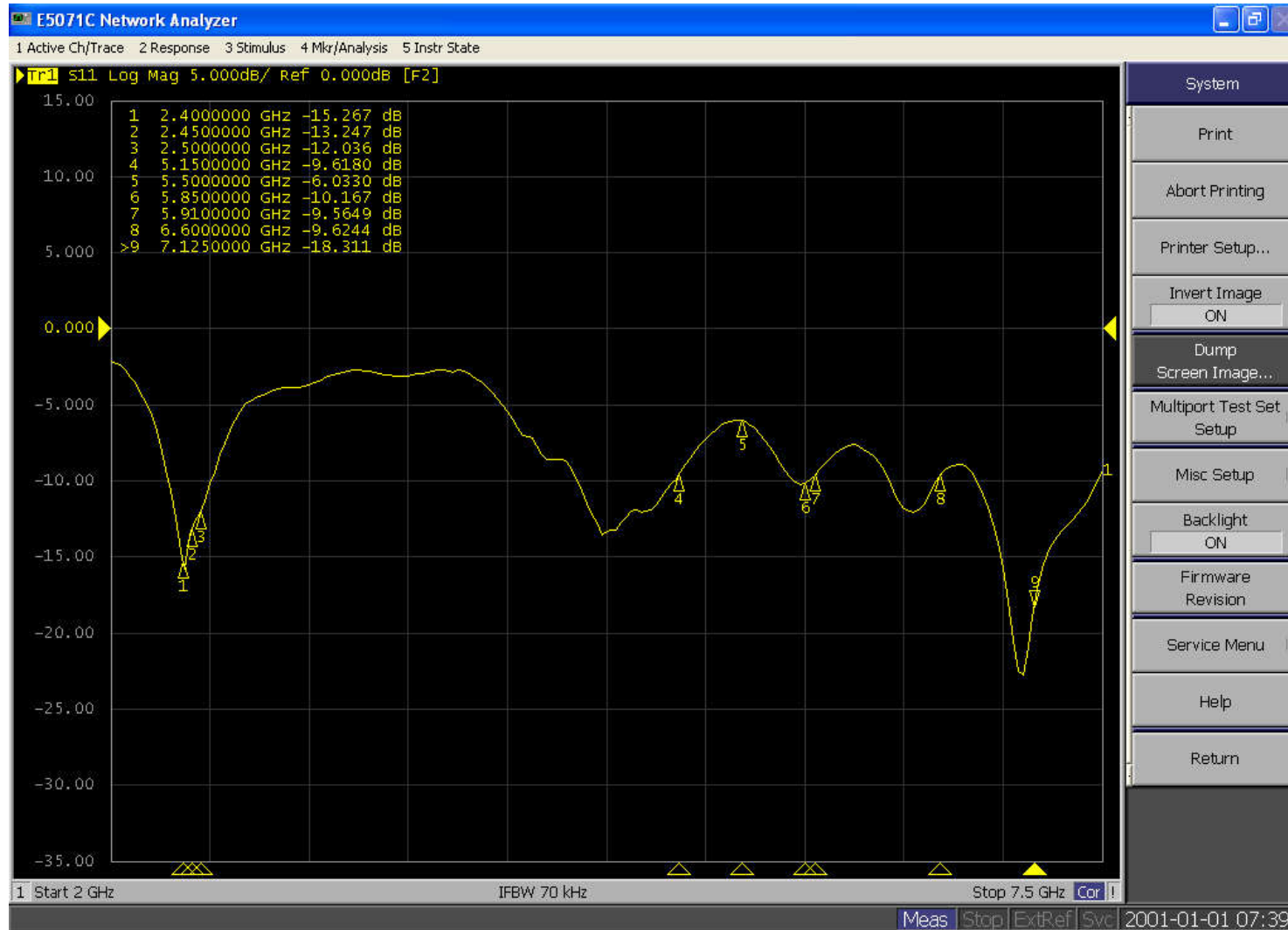
Return Loss and Isolation

5G wifi ANT4



Return Loss and Isolation

BLE ANT



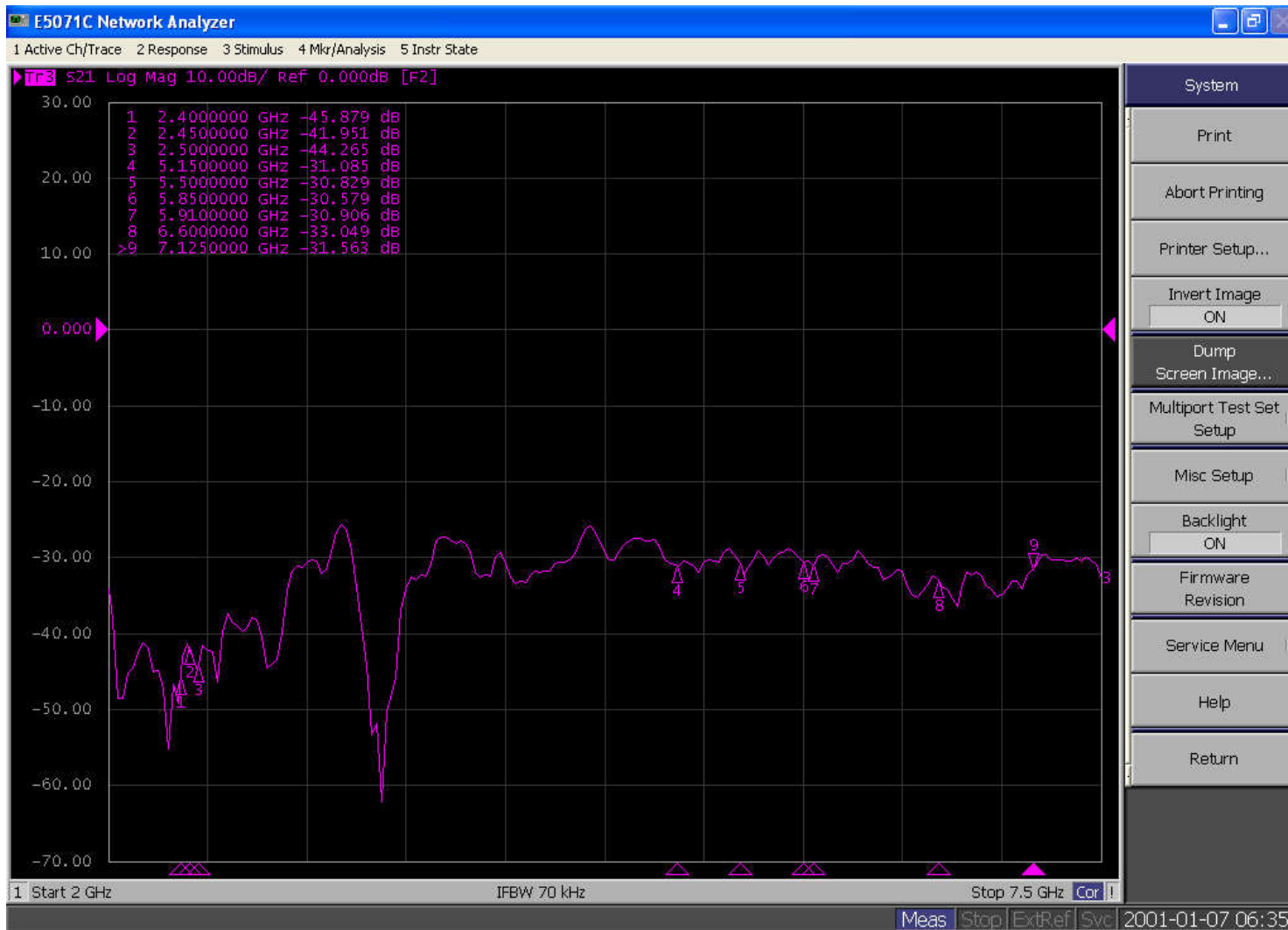
Return Loss and Isolation

6E Wifi ANT1&6E Wifi ANT2



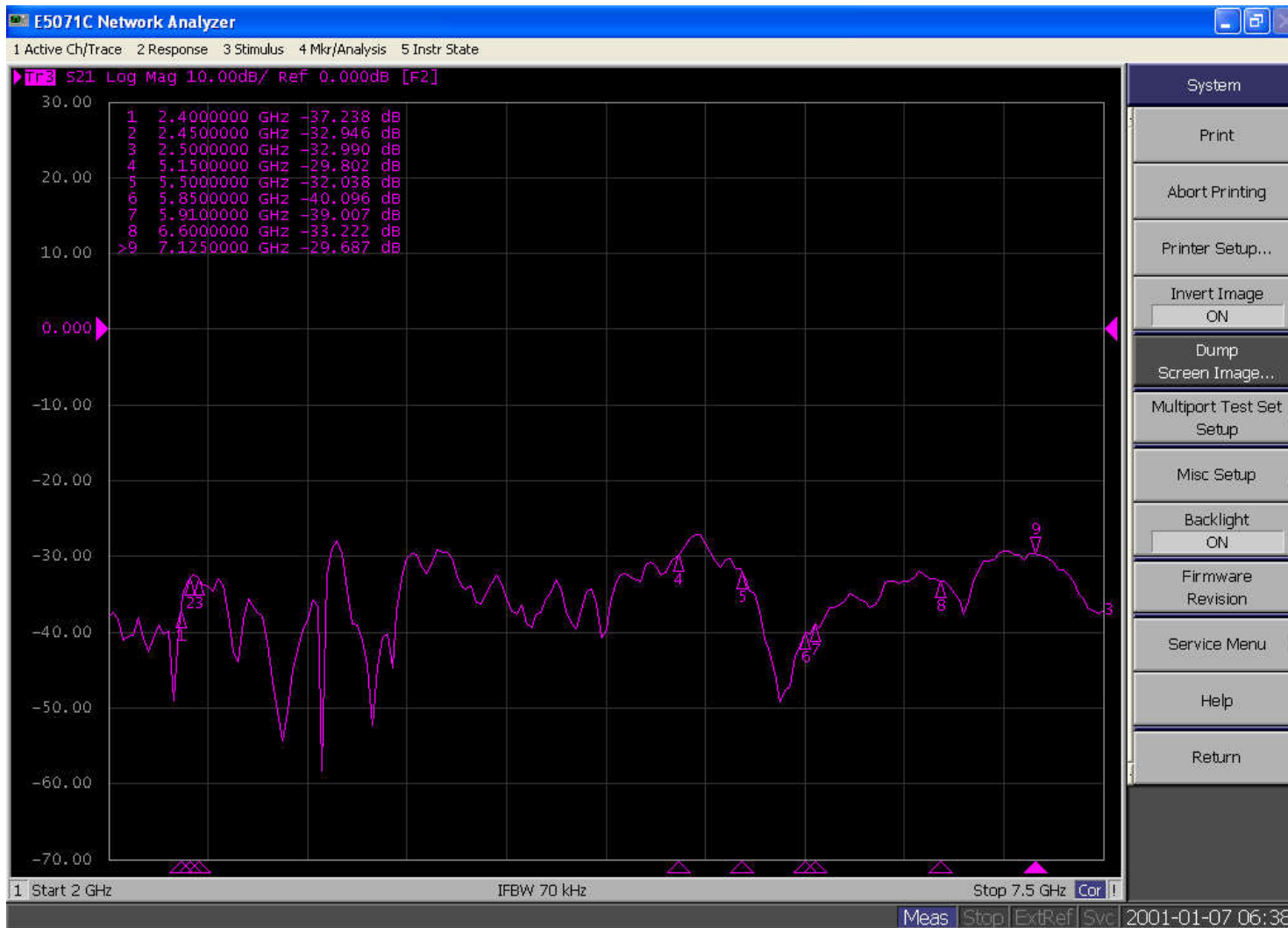
Return Loss and Isolation

6E Wifi ANT1&6E Wifi ANT3



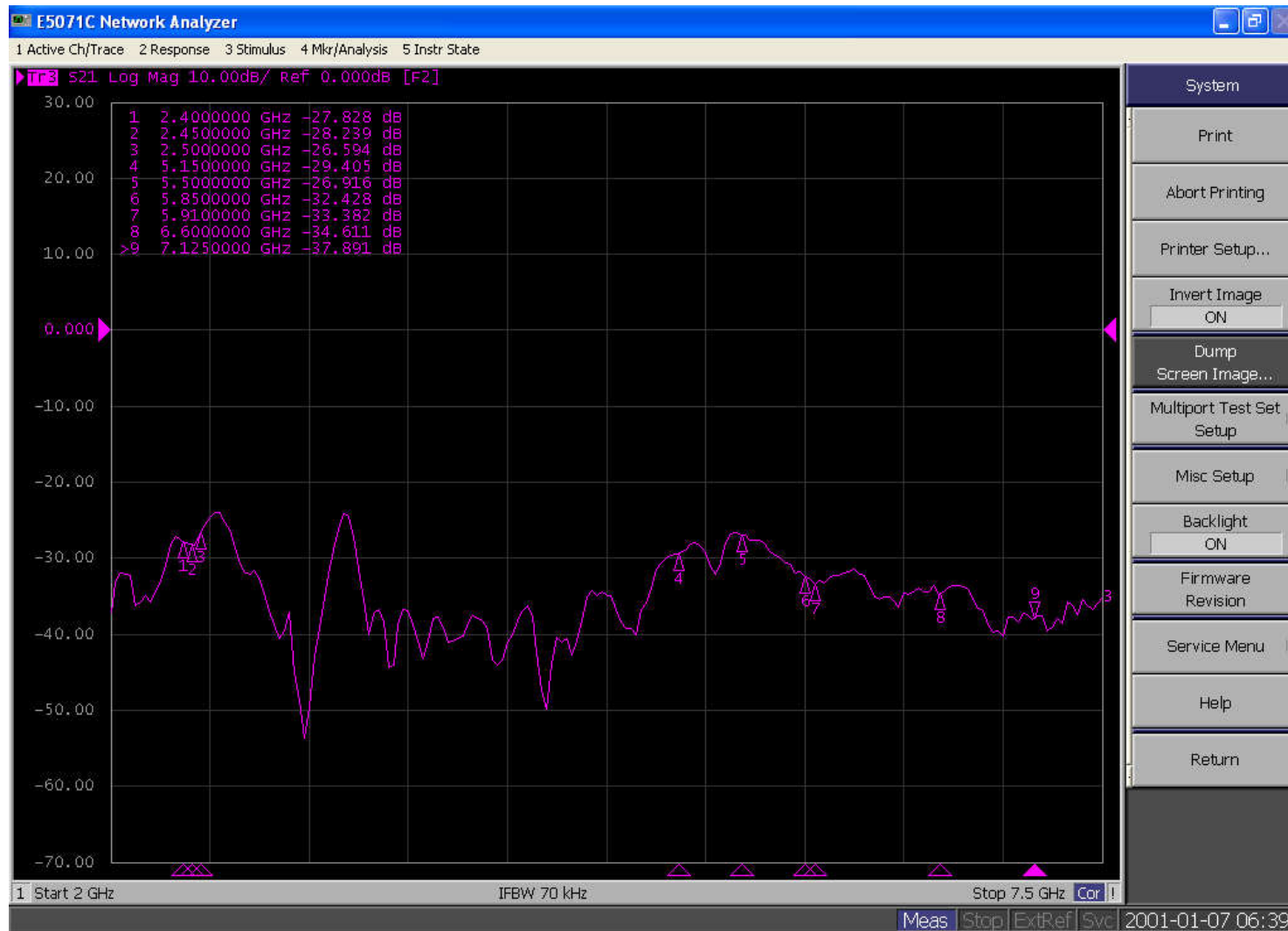
Return Loss and Isolation

6E Wifi ANT1&6E wifi ANT4



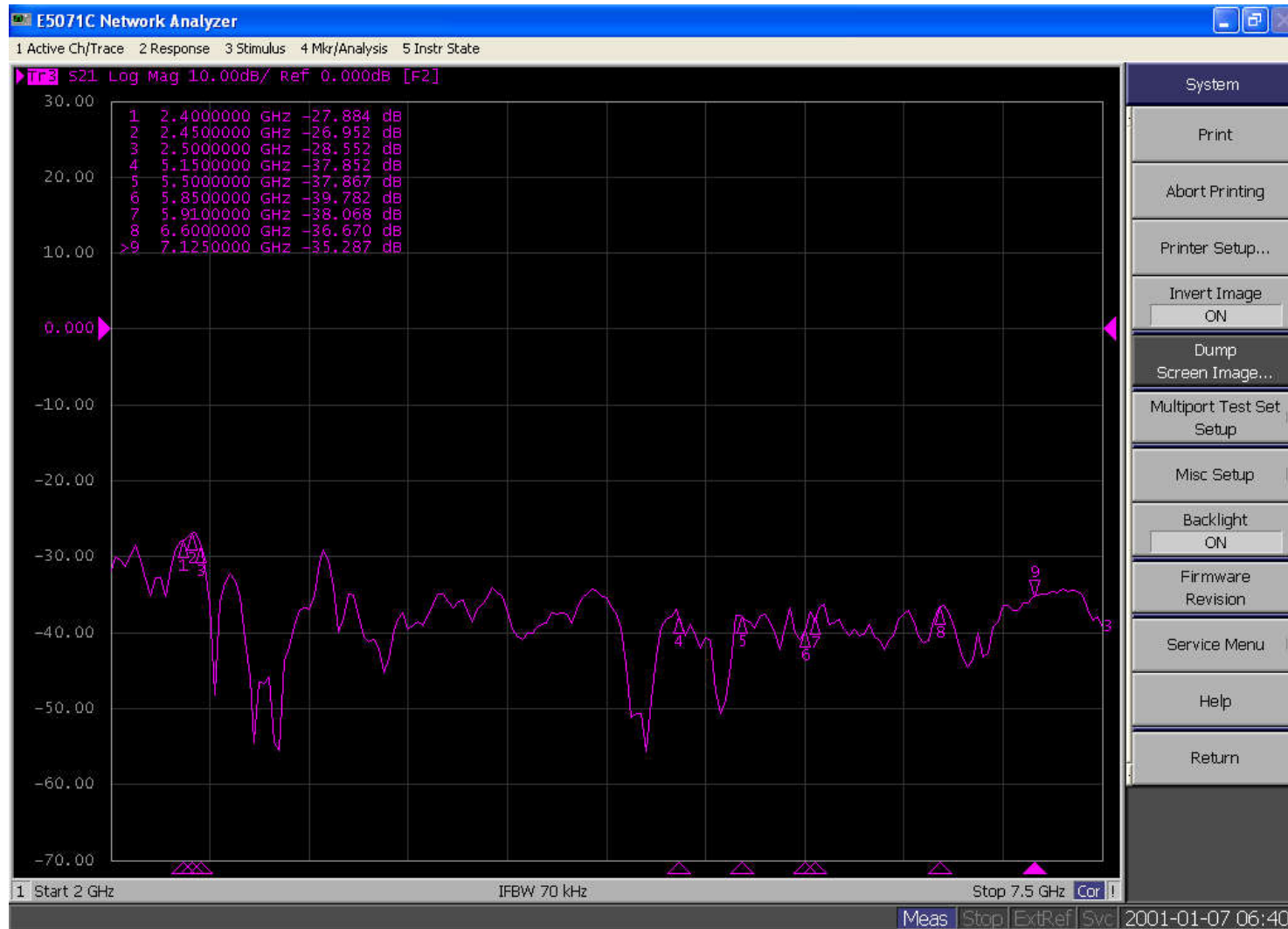
Return Loss and Isolation

6E Wifi ANT1 & (2.4G wifi & 5G wifi ANT1)



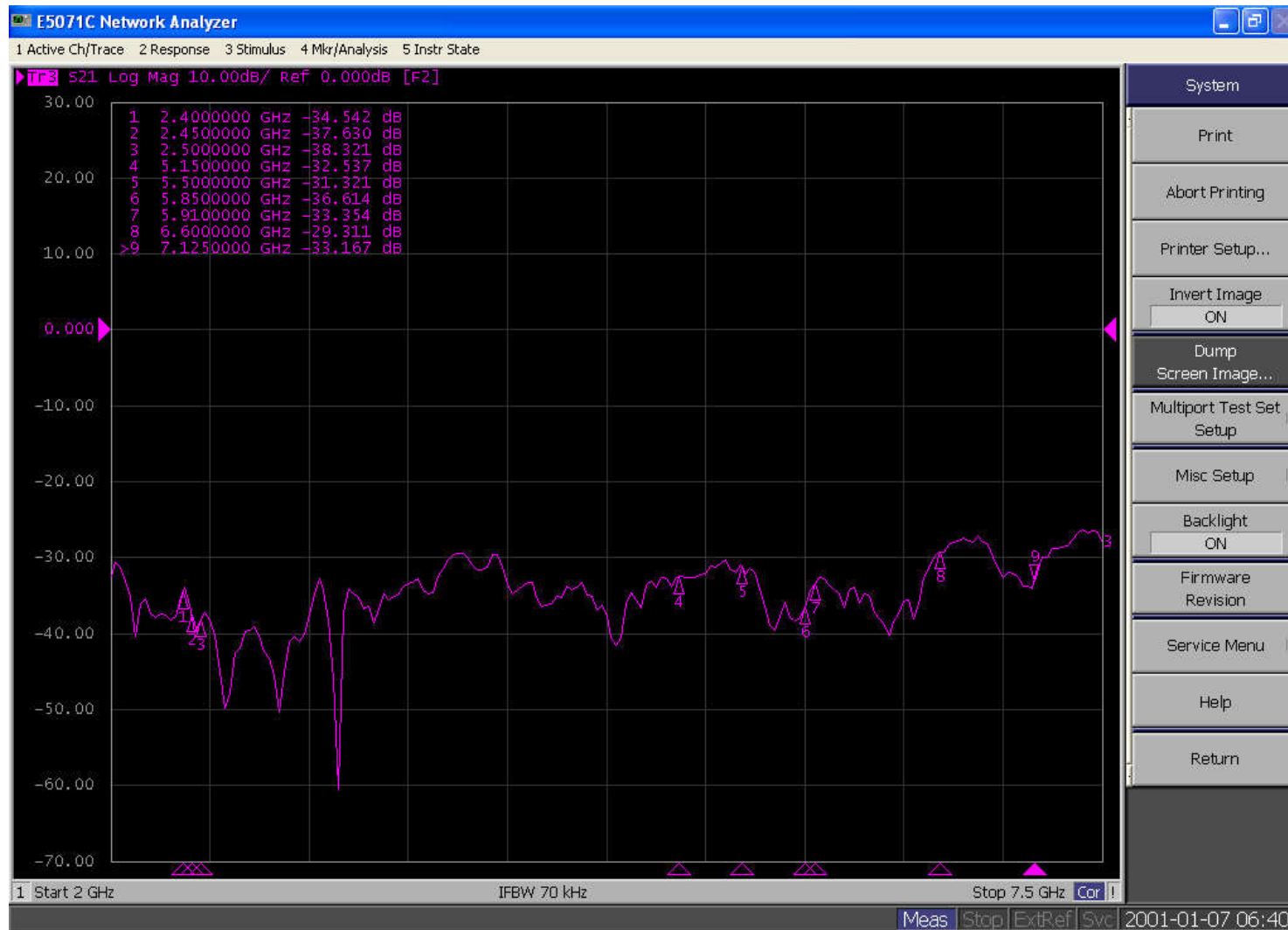
Return Loss and Isolation

6E Wifi ANT1 & (2.4G wifi & 5G wifi ANT2)



Return Loss and Isolation

6E Wifi ANT1&5G wifi ANT3



Return Loss and Isolation

6E Wifi ANT1&5G wifi ANT4



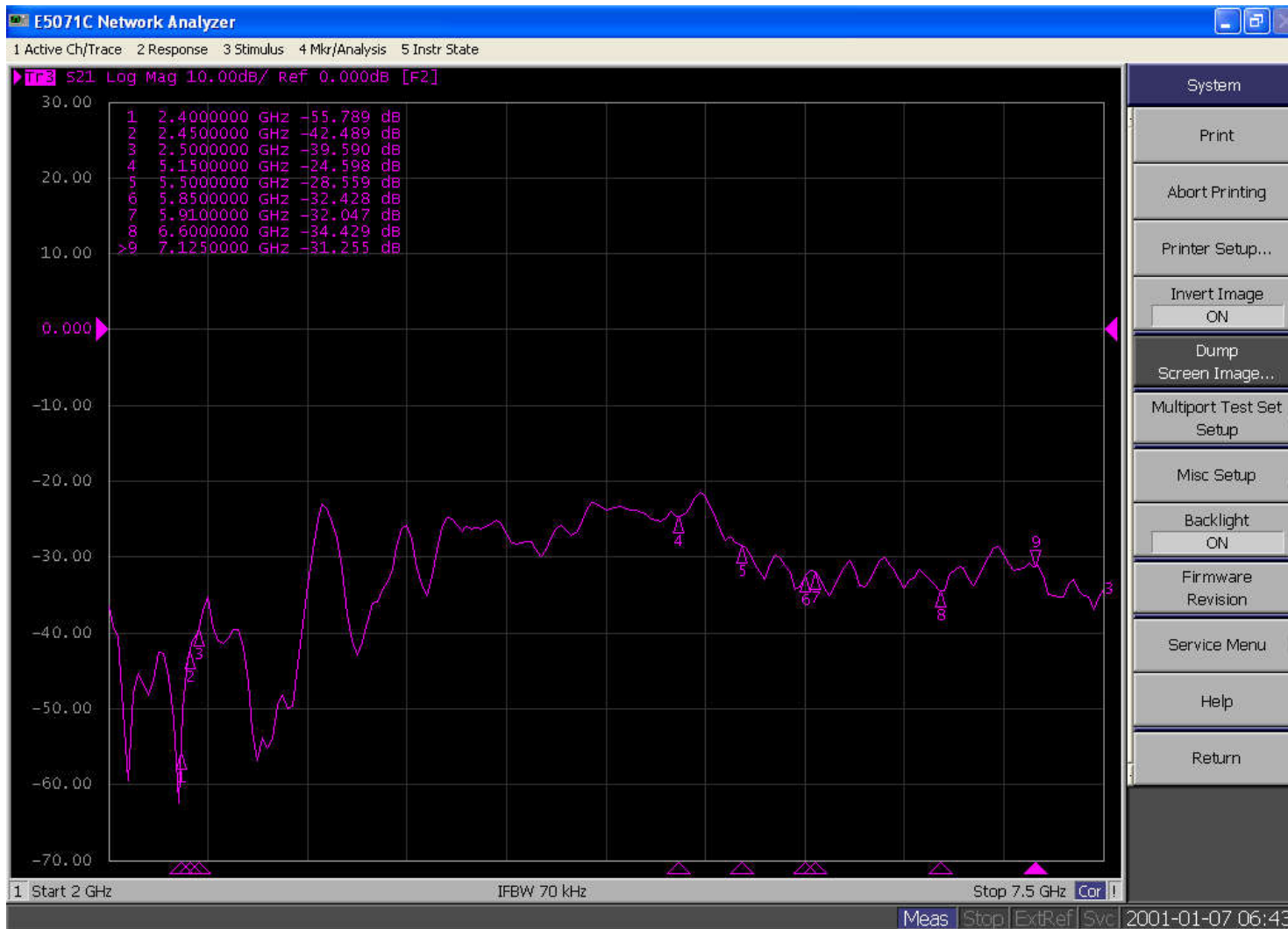
Return Loss and Isolation

6E Wifi ANT1&BLE ANT



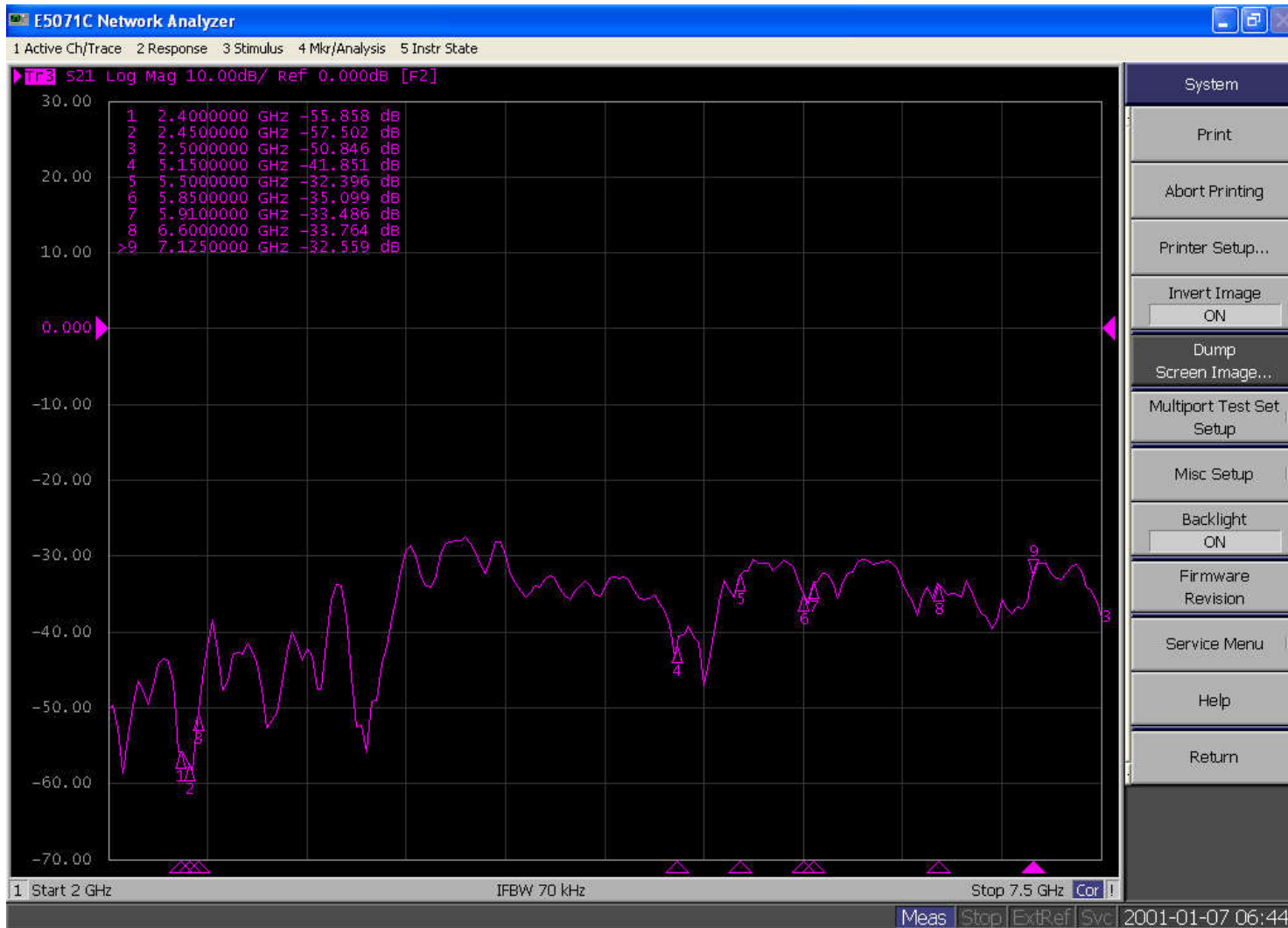
Return Loss and Isolation

6E Wifi ANT2&6E Wifi ANT3



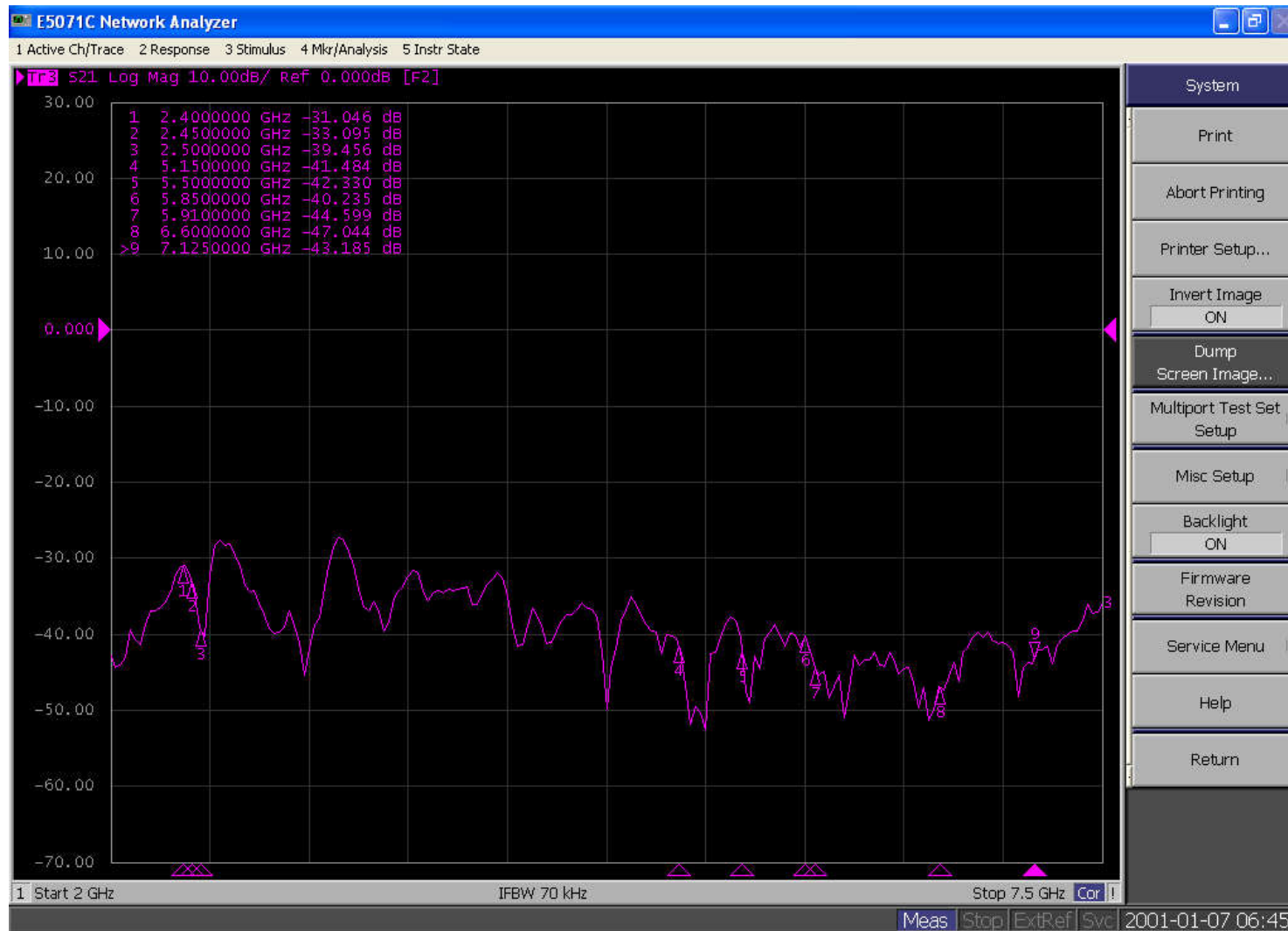
Return Loss and Isolation

6E Wifi ANT2&6E Wifi ANT4



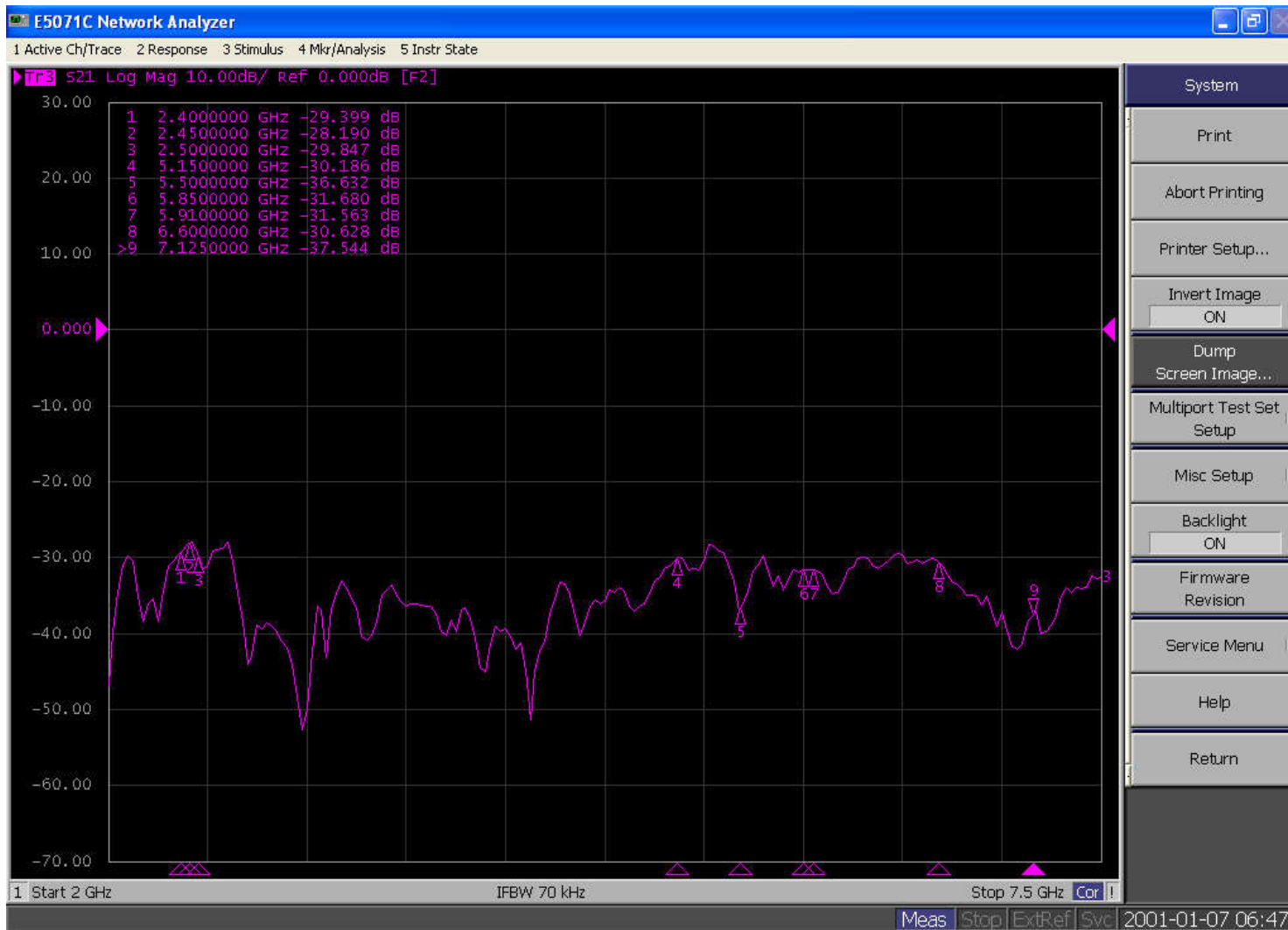
Return Loss and Isolation

6E Wifi ANT2&(2.4G wifi & 5G wifi ANT1)



Return Loss and Isolation

6E Wifi ANT2&(2.4G wifi & 5G wifi ANT2)



Return Loss and Isolation

6E Wifi ANT2&5G wifi ANT3



Return Loss and Isolation

6E Wifi ANT2&5G wifi ANT4



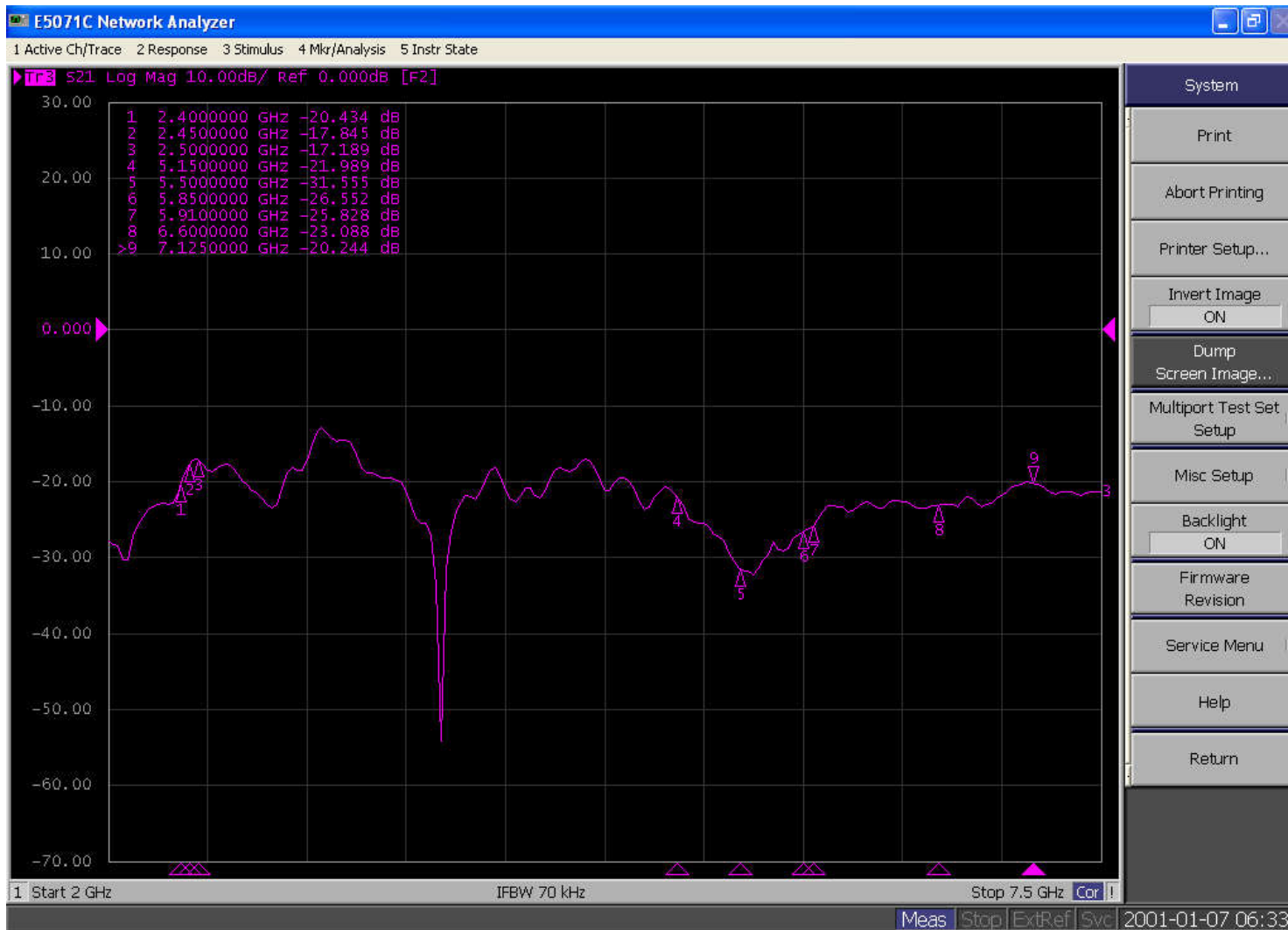
Return Loss and Isolation

6E wifi ANT2&BLE ANT



Return Loss and Isolation

6E wifi ANT3&6E wifi ANT4



Return Loss and Isolation

6E wifi ANT3& (2.4G wifi & 5G wifi ANT1)

