ADSL MICROFILTER

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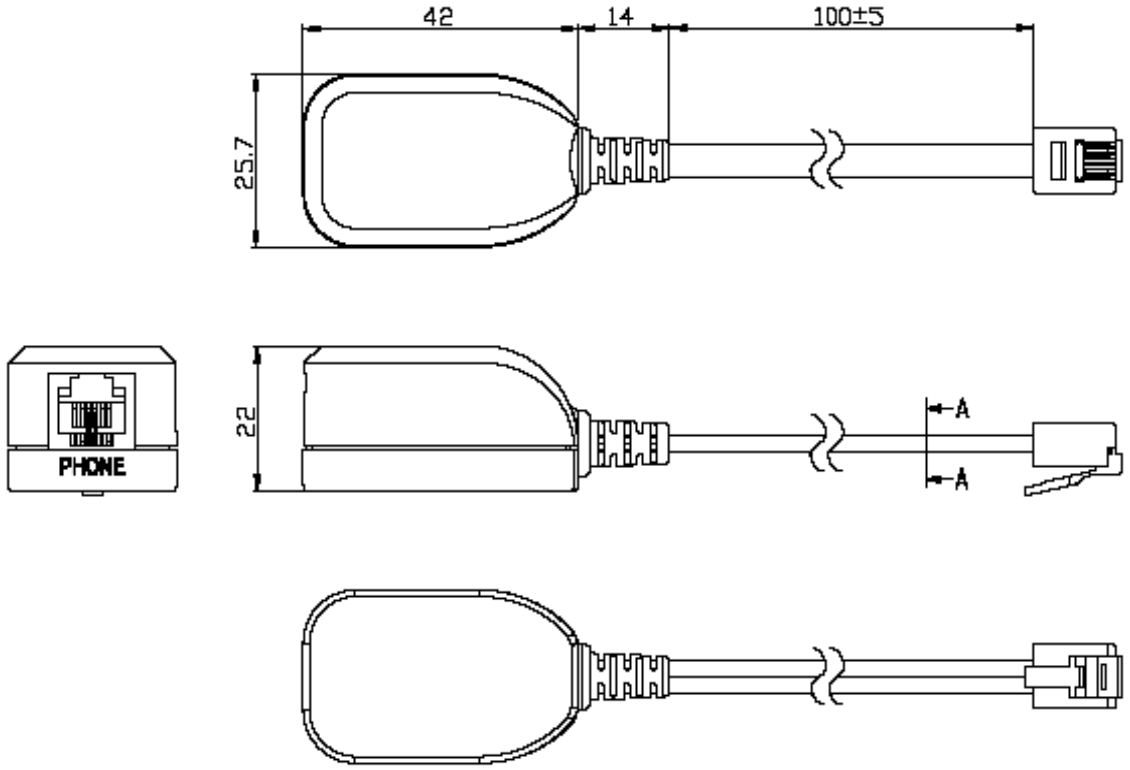
Splitter parameters	Electrical requirements	
	Range	Values
Splitter bandwidth		DC to 3.4KHz
Nominal voice band		0.2KHz to 3.4KHz
Ringing frequency		15.3Hz to 68Hz
ADSL band		30KHz to 1104KHz
Line impedance	300Hz to 3.4KHz	600ohm
Modem impedance	30KHz to 1104KHz	100ohm
Operation voltage voice band		
Nominal signal		21mVpp to 5.4Vpp
Ringing signal		40Vrms to 150Vrms
DC voltage		0V to 105V
Max AC voltage		150Vrms
Operation current voice band		
Loop current		<100Ma
DC resistance	Tip+Ring	<50ohm
Isolation resistance	Tip to Ring	>100Mohm
Voice band characteristics		
Insertion loss	1000Hz	<0.8dB
Insertion loss distortion	200 to 3.4KHz	±1.0dB
With 3 Filter	1000Hz	<0.8dB
ADSL band characteristics		
Insertion loss distortion	30KHz to 1104KHz	<0.25dB
With 3 Filter	30KHz to 1104KHz	<0.25dB
Return loss	300Hz to 3400Hz	>14dB
Longitudinal conversion loss(LCL)	60Hz to 600Hz	>40dB
	600Hz to 3.4KHz	>46dB
Delay distortion	300Hz to 3.4KHz	<1ms
ADSL band		
ADSL band attenuation	30KHz to 1104KHz	>40dB
With 3 Filter	30KHz to 1104KHz	>40dB

2. Mechanical Conditions

2. Dimension



2.2 Description:

RJ11 JACK 6P2C

RJ11 PLUG 6P2C

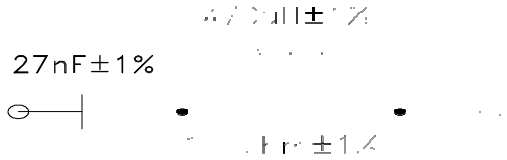
Notes:

1.Unit:mm

3. XDSL Splitter/Filter Impedance & Testing Set Up

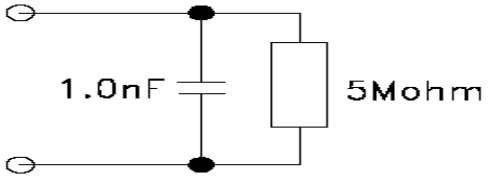
3.1 Terminating impedances

Zadsl



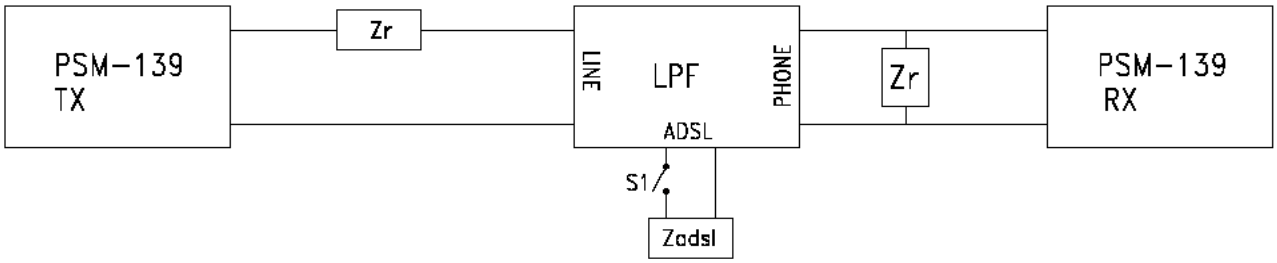
Zr

Zon

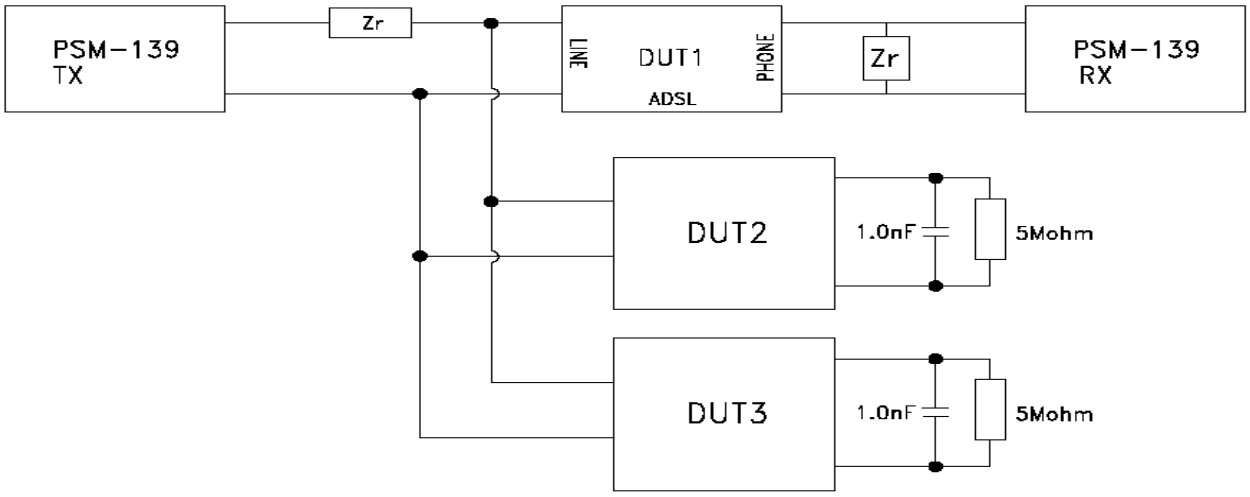


3.2 Testing Set Up

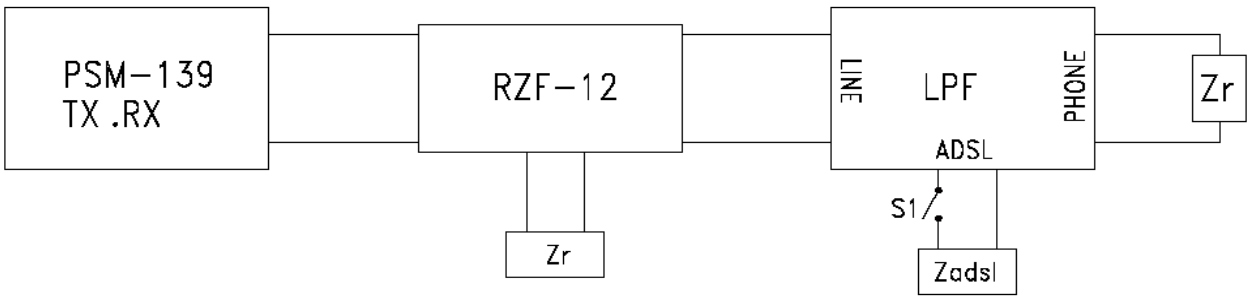
3.2.1 Voice band Insertion loss (1 DUT Line to Phone / with/without Zadsl)



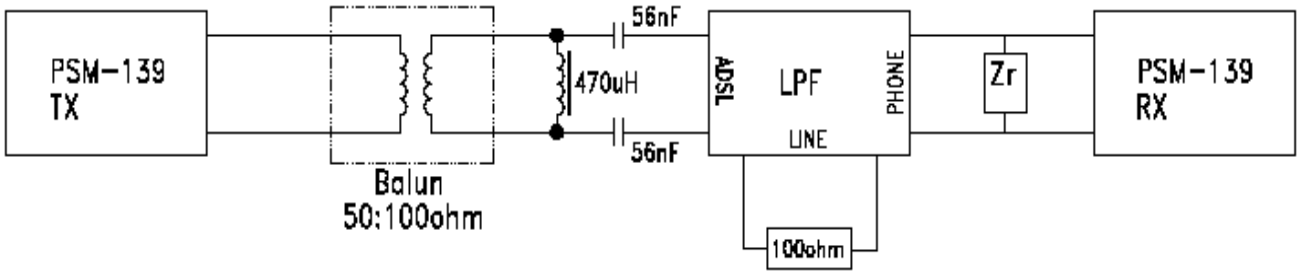
3.2.2 Voice band Insertion loss (1+2 DUT ON HOOKLine to Phone / without Zadsl)



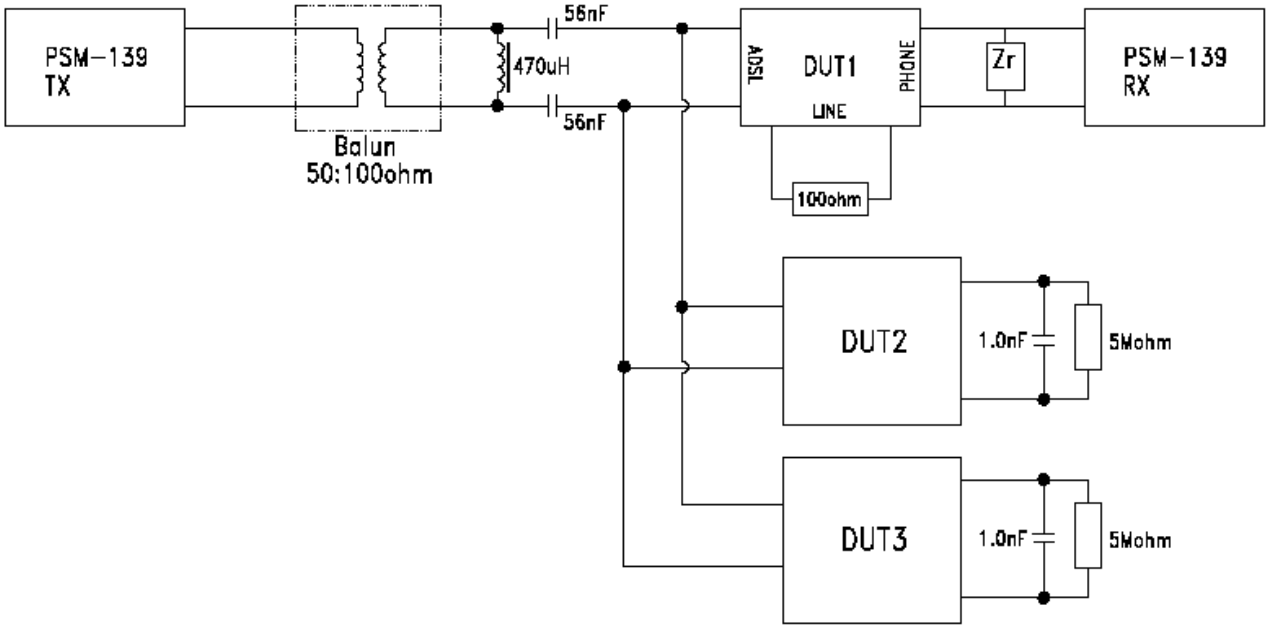
3.2.3 Voice band Return loss (Line to Phone / with/without Zadsl)



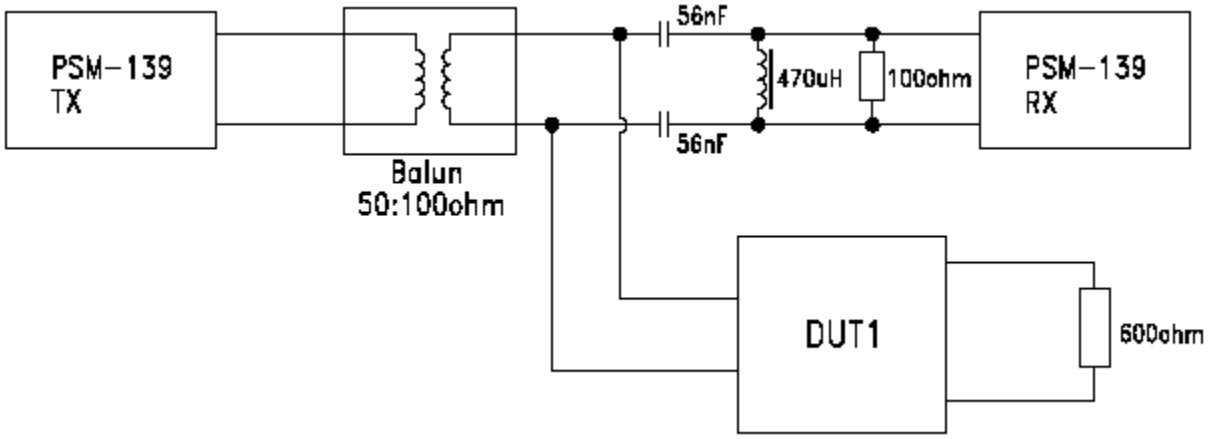
3.2.4 DSL band Attenuation (Line to Phone / 1DUT without Zadsl)



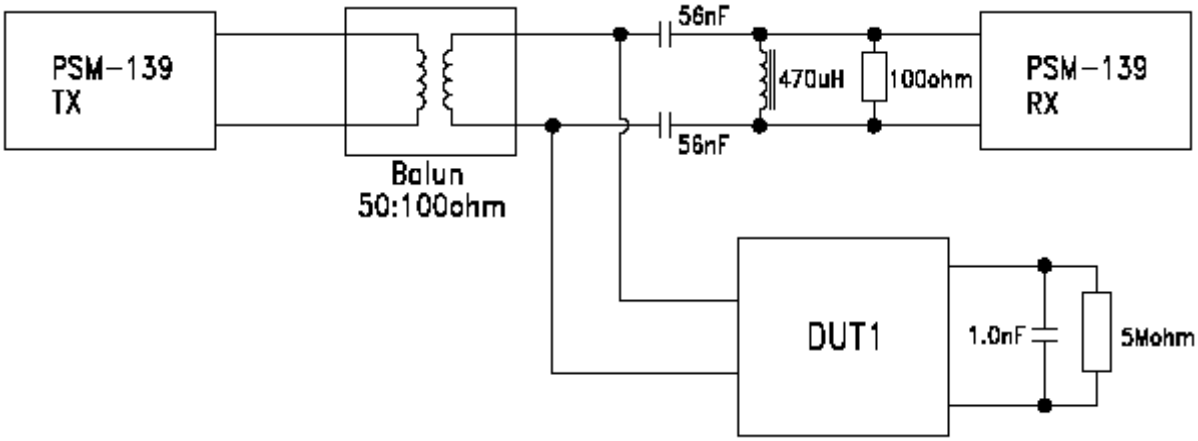
3.2.5 DSL band Attenuation (Line to Phone 1+2DUT ON HOOK)



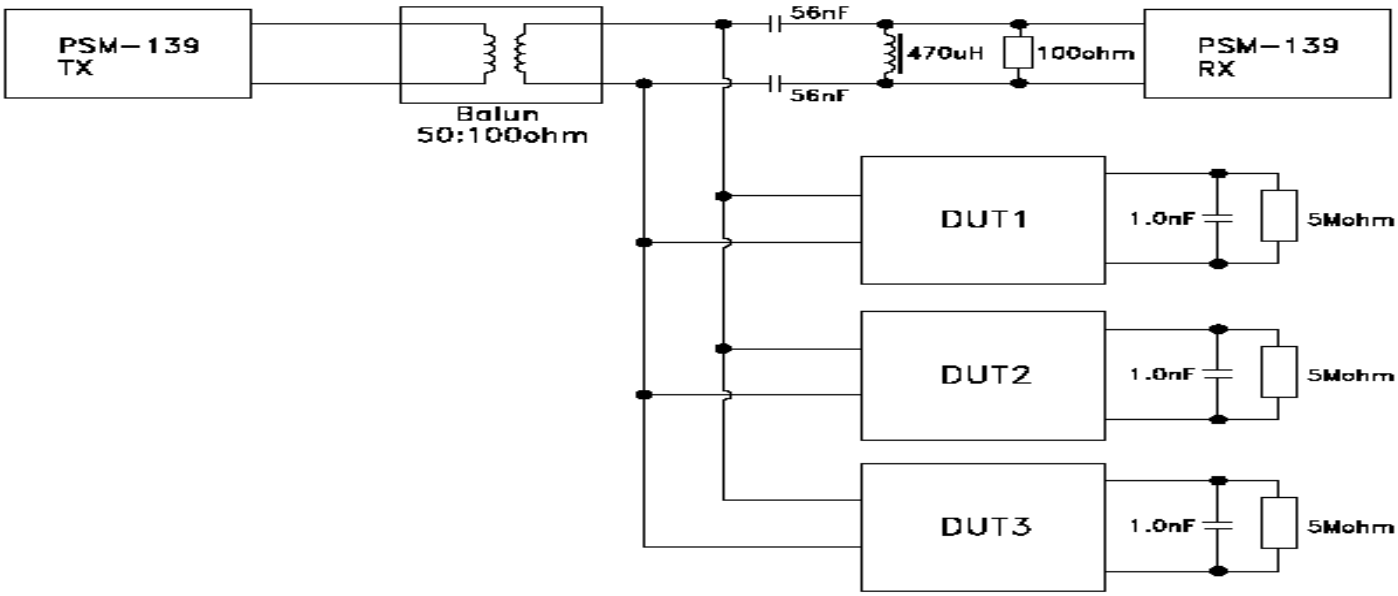
3.2.6 ADSL band Insertion loss (1DUT LINE TO ADSL OFF HOOK)



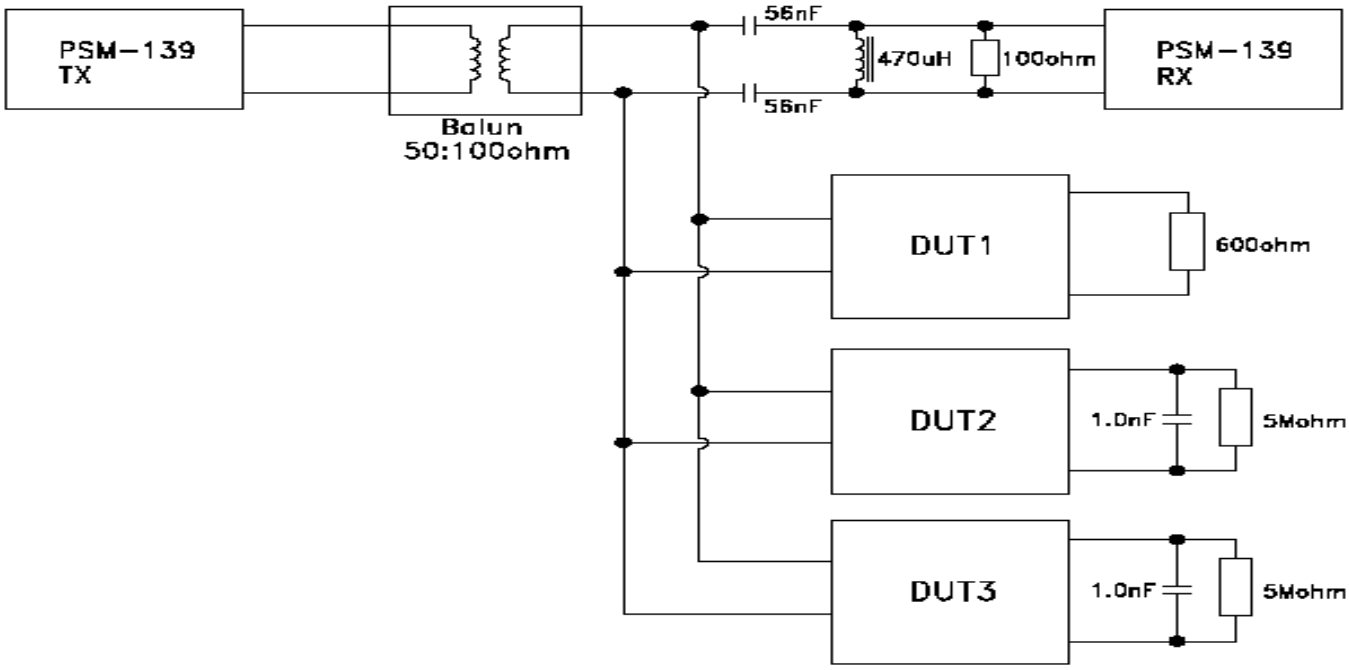
3.2.7 ADSL band Insertion loss (1DUT LINE TO ADSL ON HOOK)



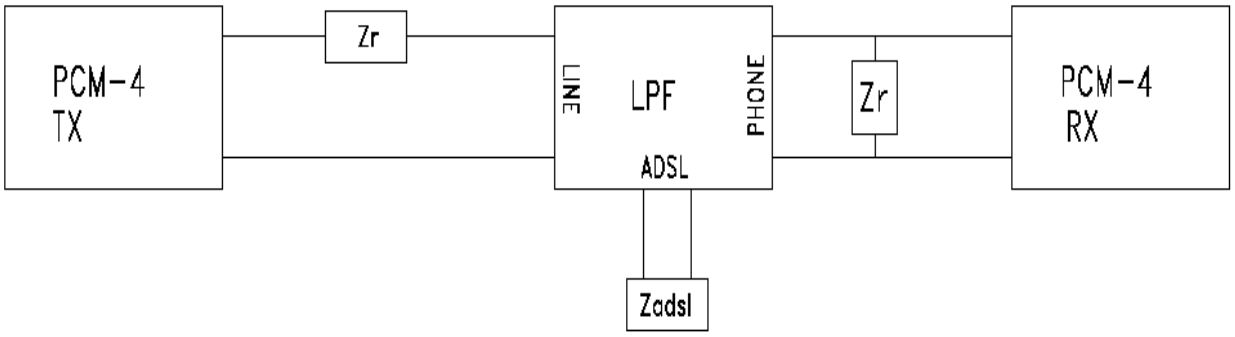
3.2.8 ADSL band Insertion loss (1+2 DUT LINE TO ADSL ON HOOK)



3.2.9 ADSL band Insertion loss (1+2 DUT LINE TO ADSL OFF HOOK)



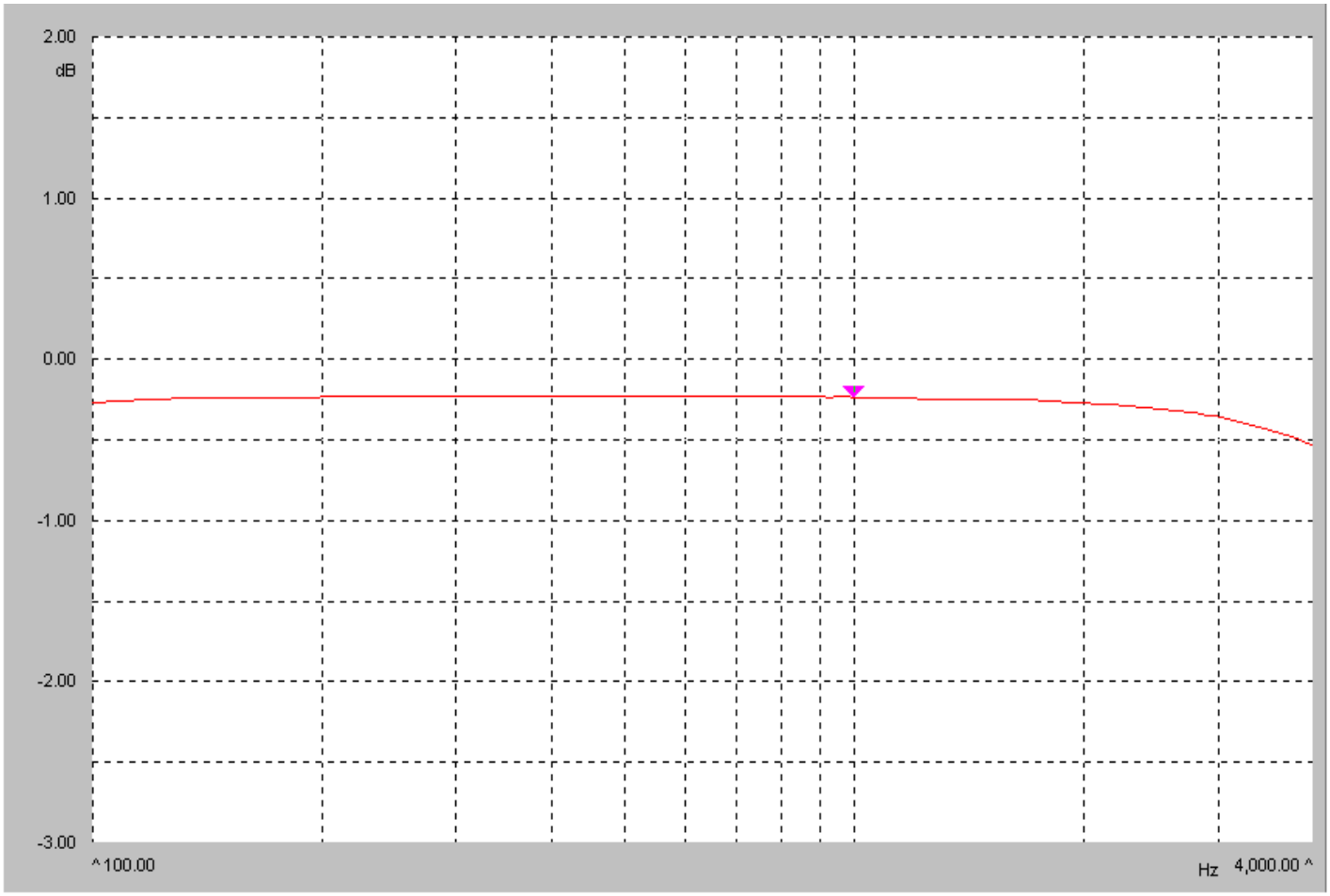
3.2.10 Delay Distortion



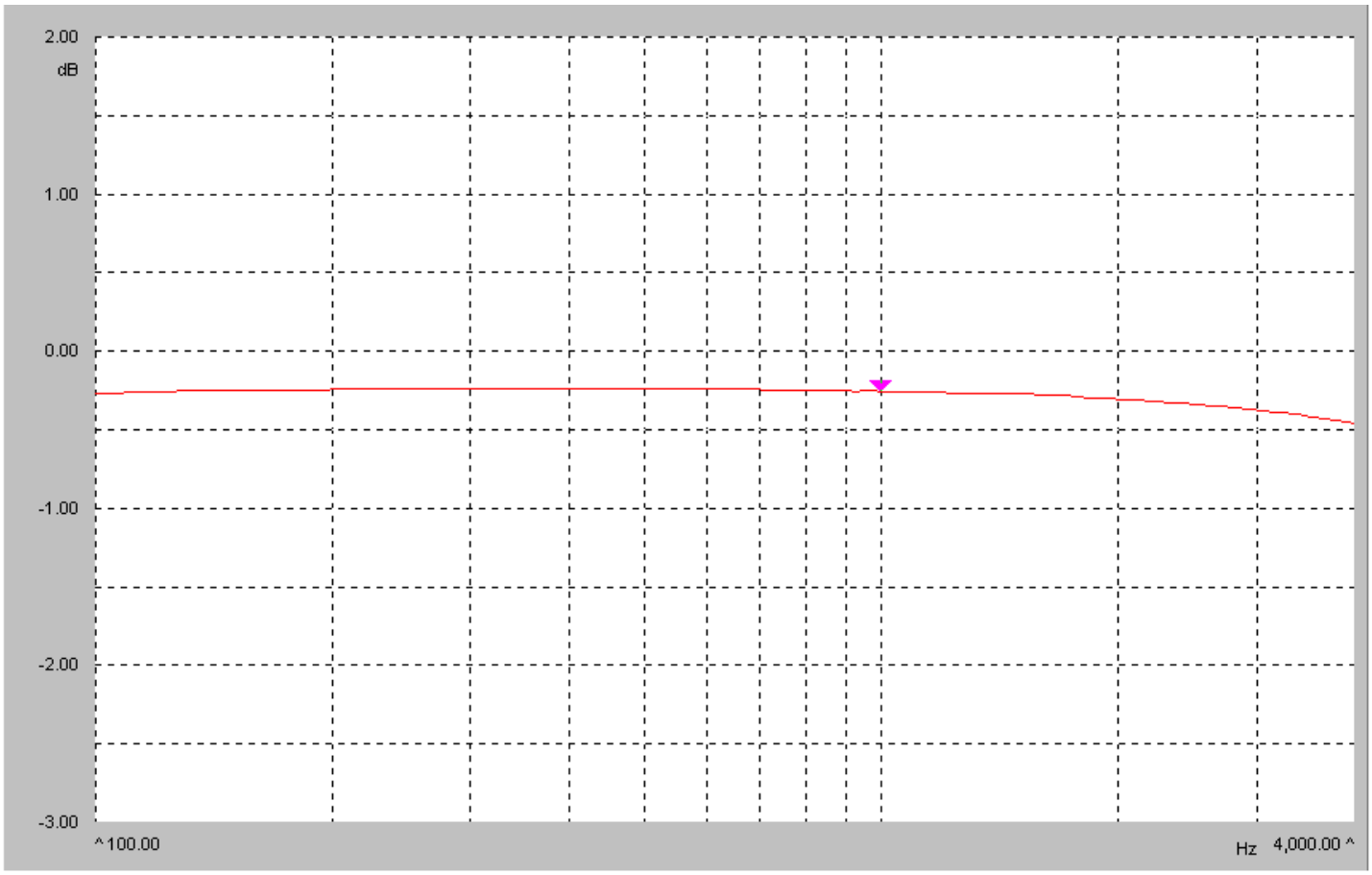
4. Voice band Insertion loss Test

4.1 Apparatus:W&G PSM-139

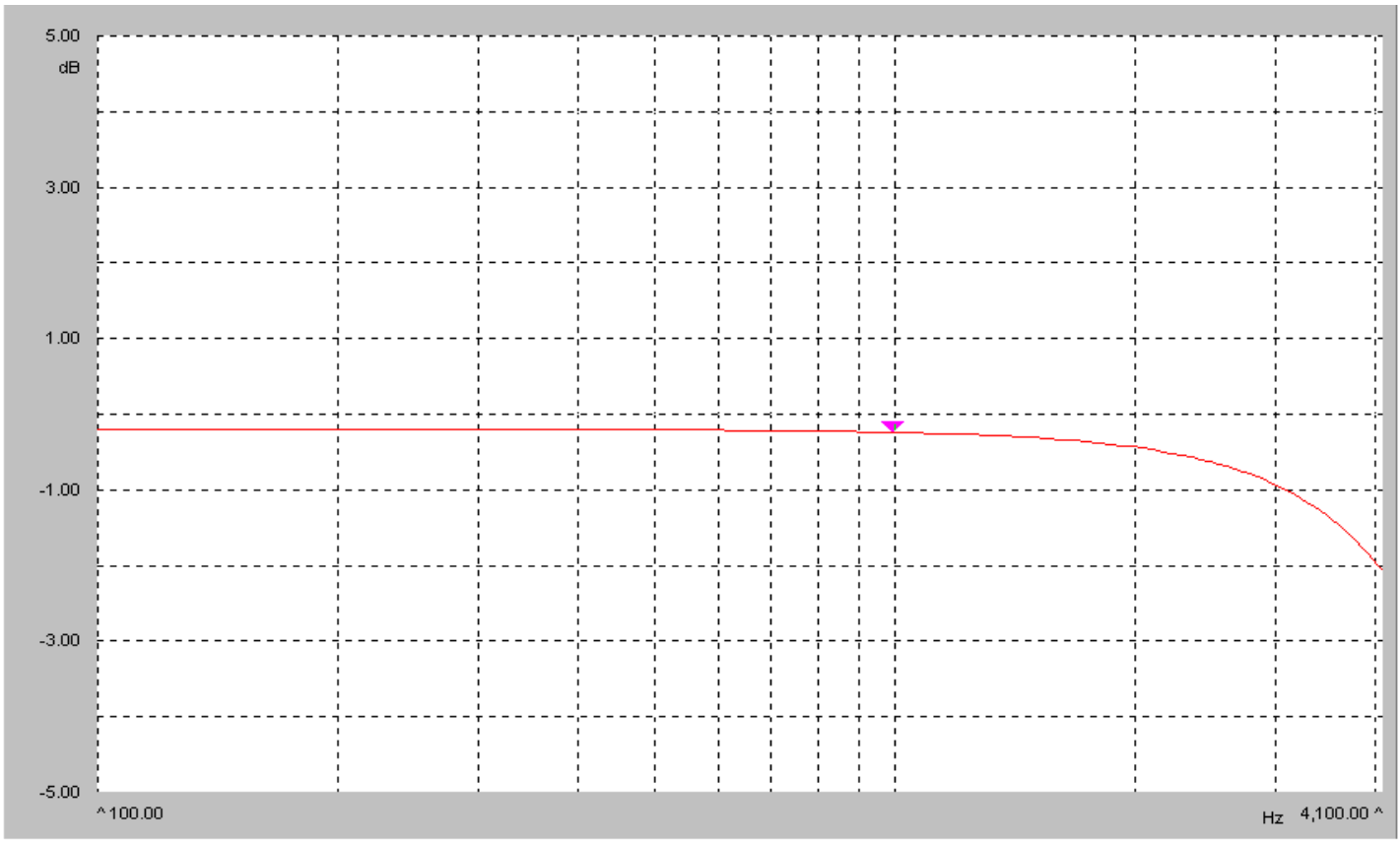
4.2 1DUT / Line to Phone /With ADSL Load / Zr = 600ohm/DC48V/ 20mA



4. 3 1 DUT /Line to Phone /Without ADSL Load / DC48V/ 20mA



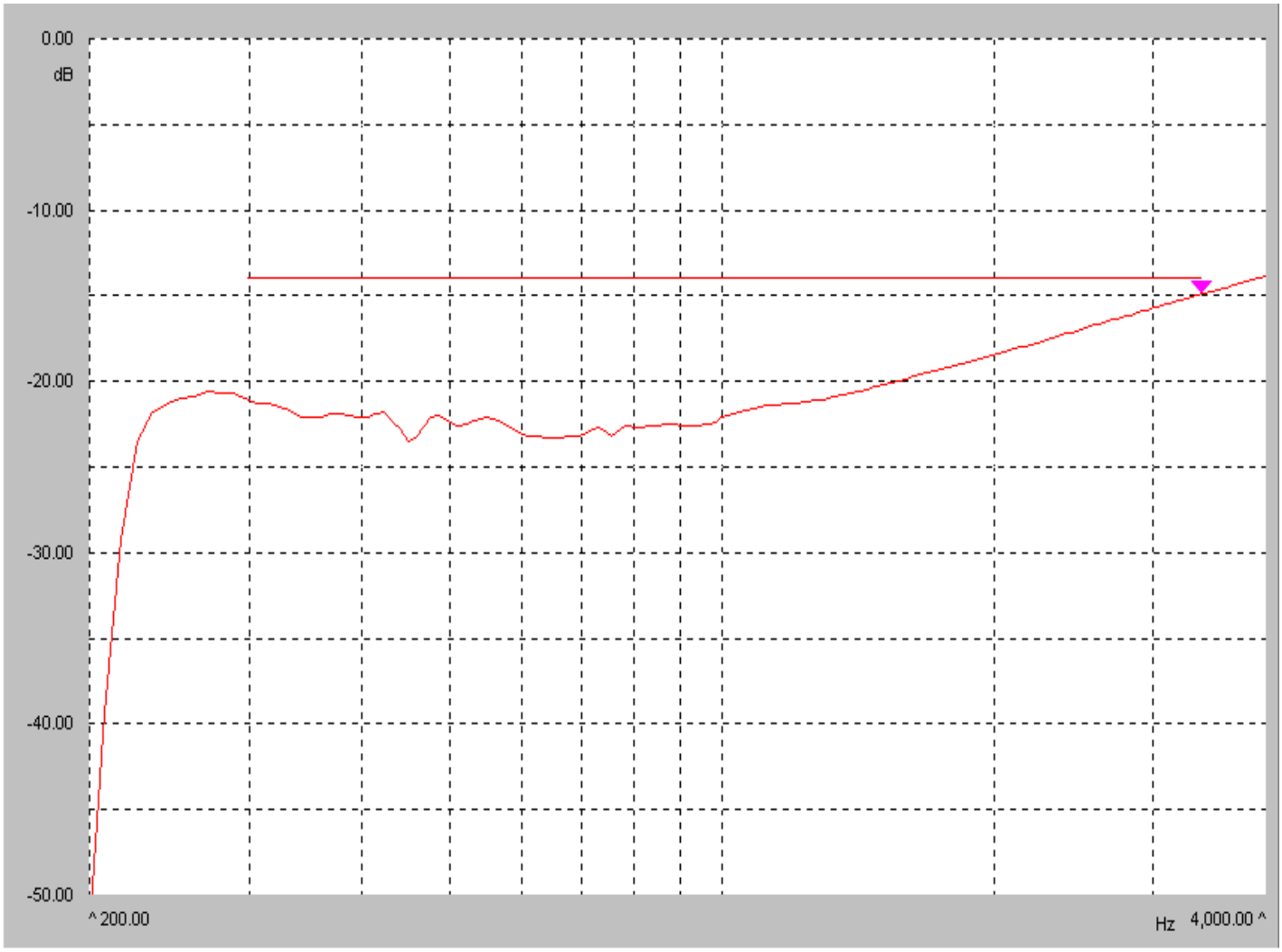
4.4 1+2 DUT /ON HOOK Line to Phone /Without ADSL Load / DC48V/ 20mA



5. Voice band Return loss Test

5.1 Apparatus:W&G PSM-139

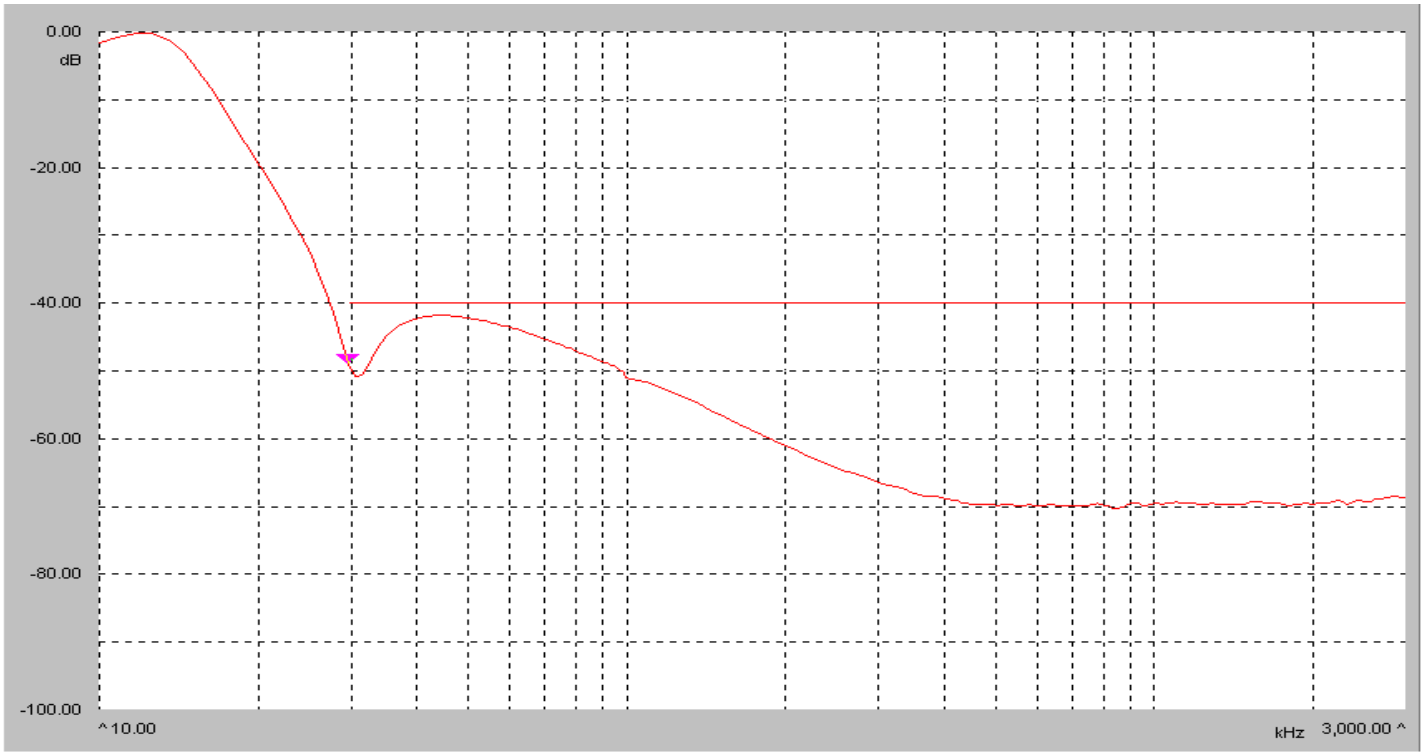
5. 1DUT / Line to Phone / Without ADSL Load / Zr = 600ohm/DC48V/20mA



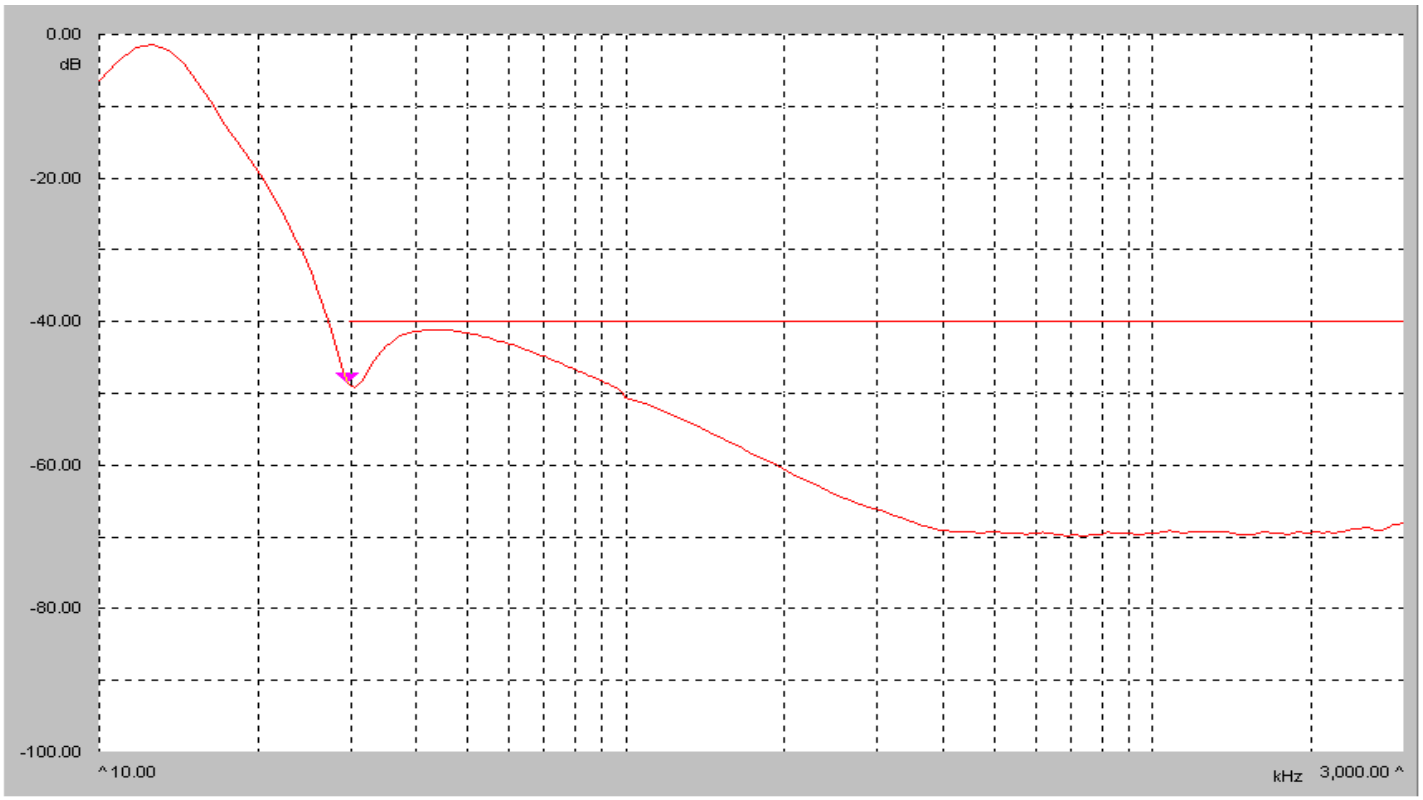
6. DSL Band Attenuation Test

6.1 Apparatus:W&G PSM-139

6. 2 1DUT / Line to Phone / Without ADSL Load / DC48V/20mA



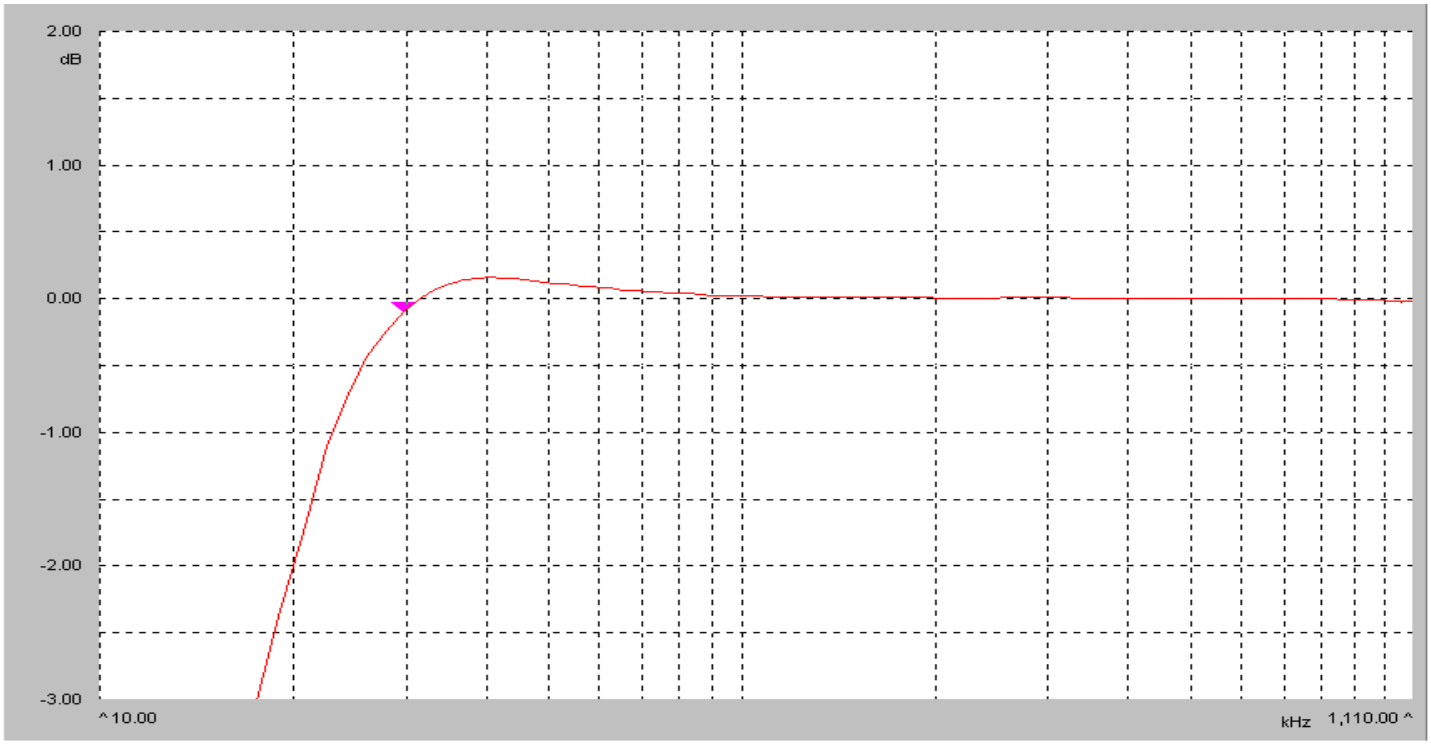
6. 3 1+2DUT / Line to Phone / ON HOOK/Without ADSL Load / DC48V/20mA



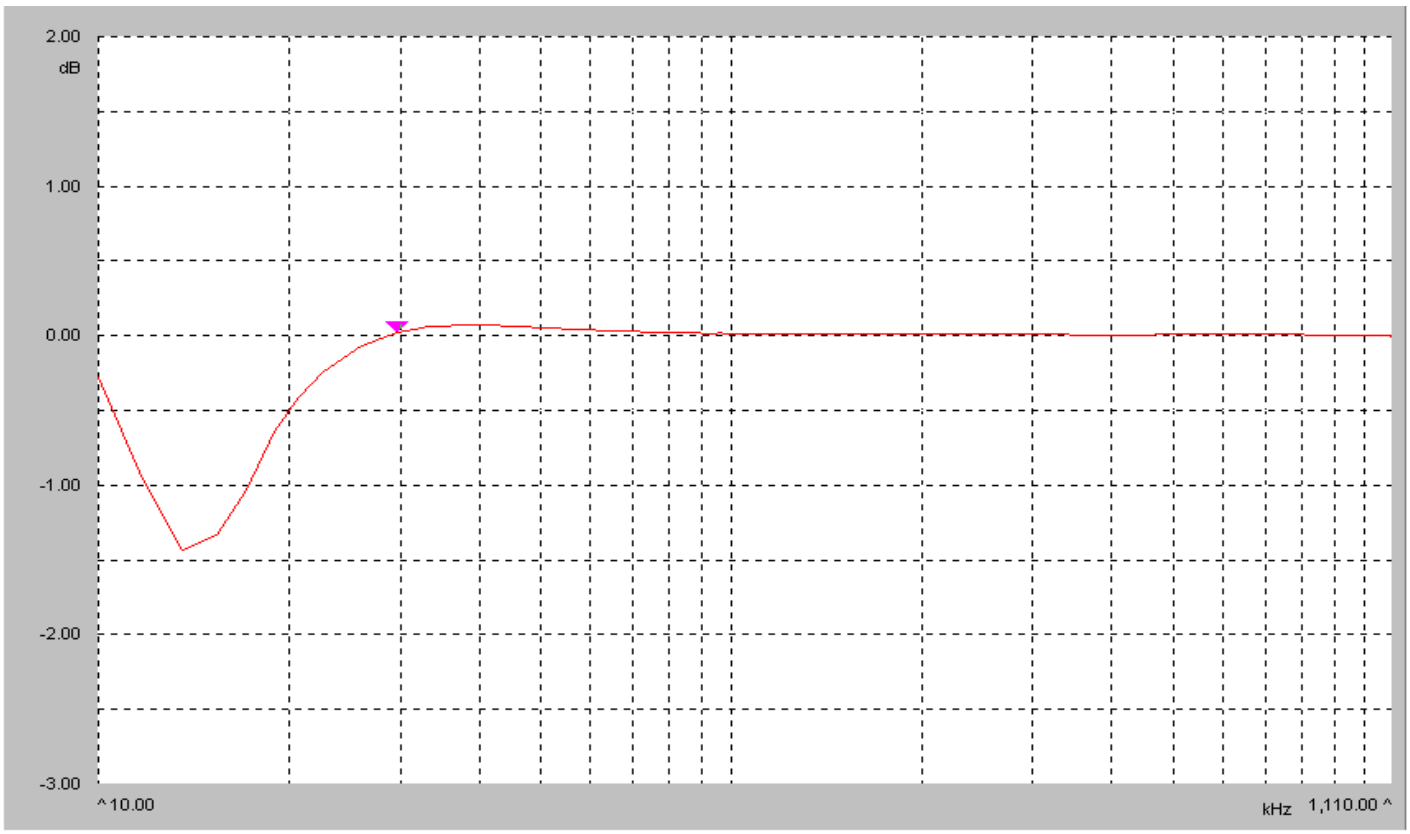
7. ADSL band Insertion loss Test

7.1 Apparatus:W&G PSM-139

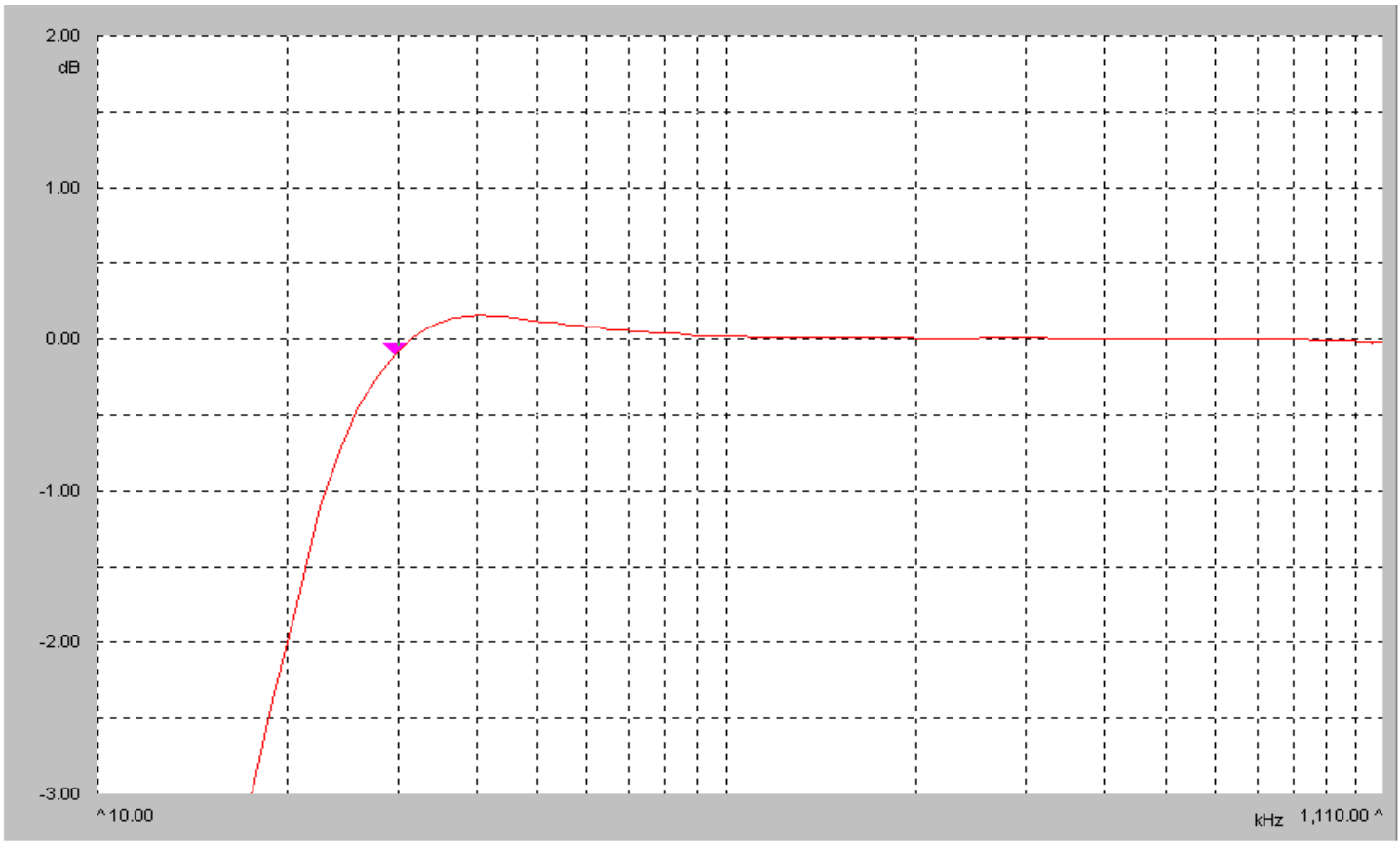
7. 2 1DUT LIEN To ADSL/ON HOOK/DC48V/20mA



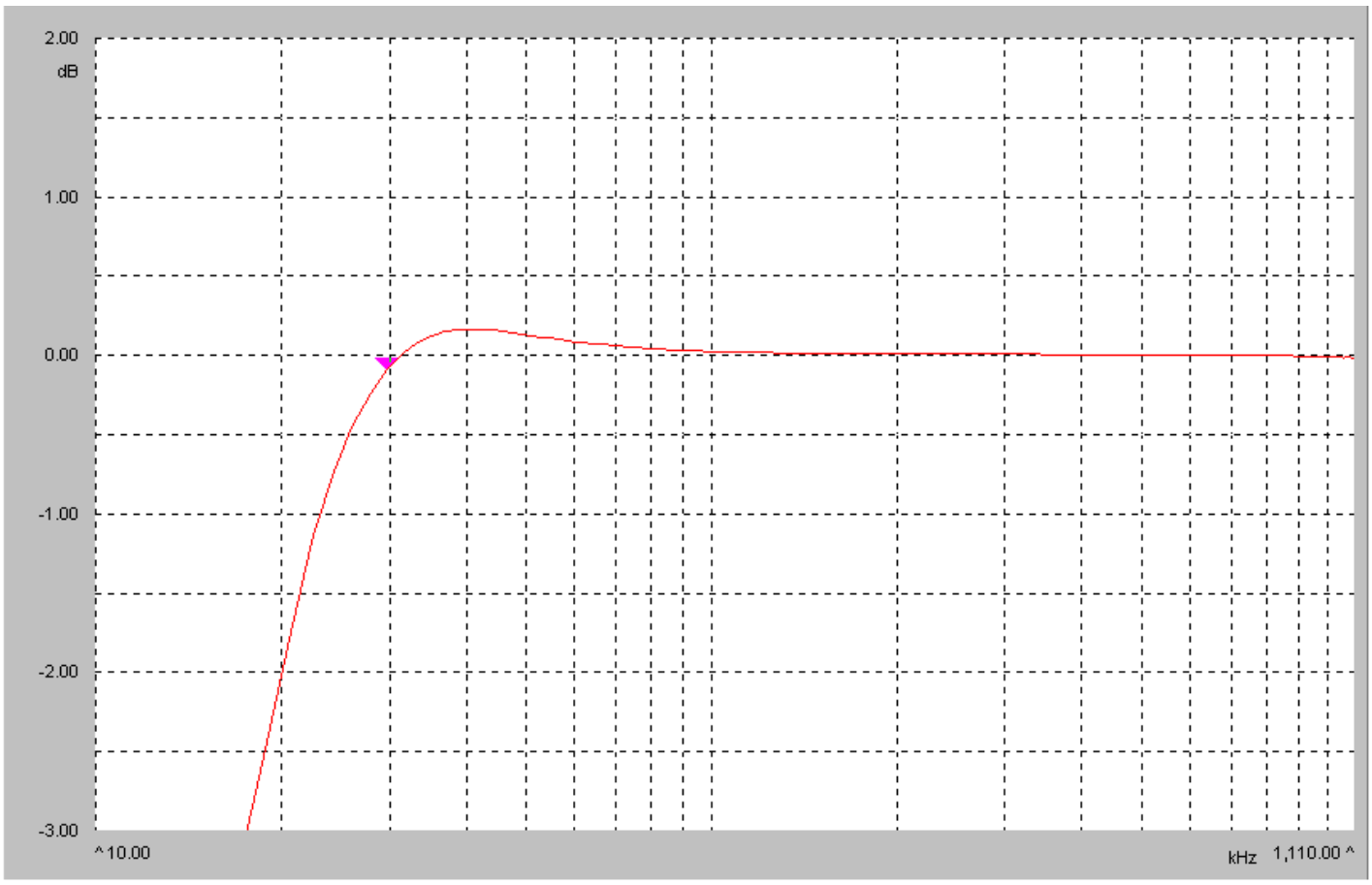
7. 3 1DUT LIEN To ADSL/OFF HOOK/DC48V/20mA



7. 4 1+2 DUT LIEN To ADSL/ON HOOK/DC48V/20mA



7. 5 1+2 DUT LIEN To ADSL/OFF HOOK/DC48V/20mA



8. Delay Distortion

8.1 Apparatus:W&G PCM Channel Measuring Set PCM-4

8.2 Result: