

Acoustic Test Report

Model Name : **SR20169**

Rev : **A**



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1. Executive Summary of Results

The Chenbro Micom [SR20169](#) Chassis balances the noise level with adequate thermal performance for the [Intel S3000AH](#) mainboard with [Golden Sun](#) Heatsink.

Operation Mode	Test Results
Idle Mode(front)	35.2 dB(A)
50%Loading(front)	38.3 dB(A)
80%Loading(front)	38.8 dB(A)
100%Loading(front)	40.9 dB(A)

Table 1 – Summary of Results

2. Introduction

The purpose of this test is to ensure that the design of tested chassis model can balance the noise level with the thermal goal under specific configuration which is either inquired or the most critical one.

This report has defined test configuration and all the relevant modifications. The test result would be valid only when the same circumstance has been applied.

The test was done by Chenbro Micom Co., Ltd. Which is located at following address:

15Fl., No.150,Jian Yi Road, Chung Ho City, Taipei Hsien, Taiwan, R.O.C.

3. Test Configuration

The tested system configuration is as following.

Component	Manufacturer	Model Number	Q'ty	Specification
Chassis	Chenbro	SR20169	1	Pedestal Server chassis
Main Board	Intel	S3000AH	1	Full function
CPU Type	Intel	Core 2 Duo E6600	1	Dual Core 2.4GHz
Memory	Transcend	256MB DDR2 533	1	256MB DDR2 533
Chipset	Intel	3000 Server Chipset	1	Full Function
VGA (on board)	ATI	ES1000 Chipset	1	Integrated Graphics
Hard Drive	Western Digital	WD4000KS-22MNB0	5	SATAII 400GB
Hard Drive	Seagate	ST3250823AS	2	SATAII 250GB
RAID CARD	3Ware	8506-8	1	SATA RAID CARD
PSU	FSP	FSP350-60PLN	1	350W with PFC
System Fan (Rear)	ADDA	AD1212UB-A7BGL	1	120x120x25/2500RPM(PWM)
CPU Cooler	Chenbro	66H080000-055	1	Active Heatsink

Table 2 – System Configuration

4. Chassis Description (as Tested)

The SR20169 chassis is a Pedestal Server chassis that may ship with a FSP 350W power supply (optional) and one system fan. It has four exposed Standard CD-ROM drive bays, one exposed FDD drive bay and five internal 3.5" HDD drive bays.

The dimensions of this chassis are 19.5"D x 7.8"W x 16.7"H

The chassis is manufactured by Chenbro Micom Co., Ltd. which is located at following address:

15Fl., No.150,Jian Yi Road, Chung Ho City, Taipei Hsien, Taiwan, R.O.C.

5. Test Facility Used

Test Facility

Item	Manufacturer	Model
Semi-Anechoic Chamber	Free Field Acoustic	N/A
Microphone	B&K	4190-L-001
Acoustic Analyzer	B&K	2827-002

Semi-Anechoic Chamber



Fig. 1 –Semi-Anechoic Chamber

6. Test Setup

The test was performed in accordance with the ISO 7779:1999 standard. The microphone position was placed at operator position i.e., $1.20\text{m} \pm 0.03\text{m}$ above the floor and $1.00\text{m} \pm 0.03\text{m}$ horizontally.

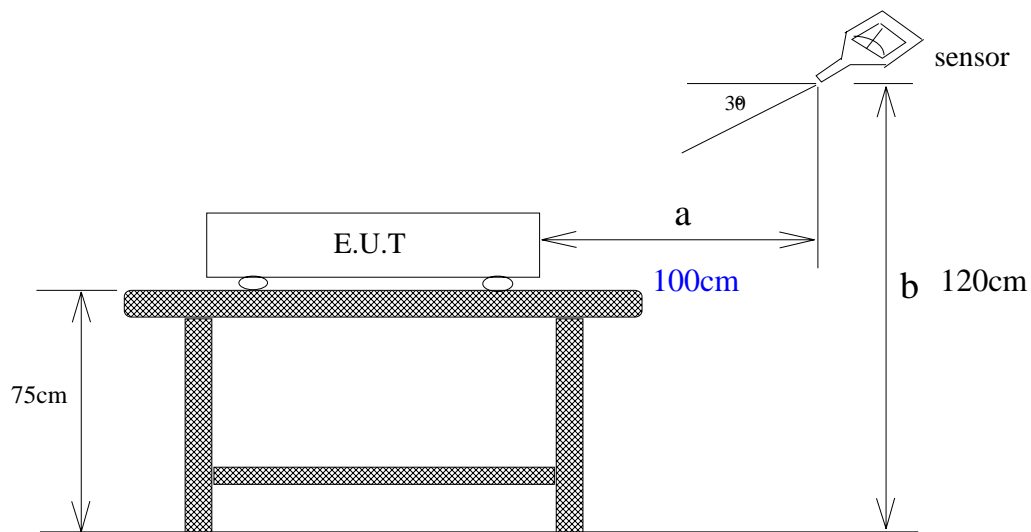


Fig. 2 – Test Position

7. Test Ambient

- ♦ Ambient Pressure: 985 mbar
- ♦ Ambient Temperature: 27.4 degree C
- ♦ Relative Humidity: 60.7%RH
- ♦ Background Noise: 15.8dB(A)

8. Test Results

Operation Mode	Test Results
Idle Mode(front)	35.2 dB(A)
50%Loading(front)	38.3 dB(A)
80%Loading(front)	38.8 dB(A)
100%Loading(front)	40.9 dB(A)

Table 3 – Test Results

9. Conclusion

The SR20169 chassis (as tested) does balance the noise level under 45dB(A) with adequate thermal performance at specific configuration.

The tested system does not necessarily represent the absolute worst-case that the system is subject to.

10. Appendix A - System Setup



Fig. 3 – System Setup

11. Appendix B – Acoustic Diagram (Idle Mode)

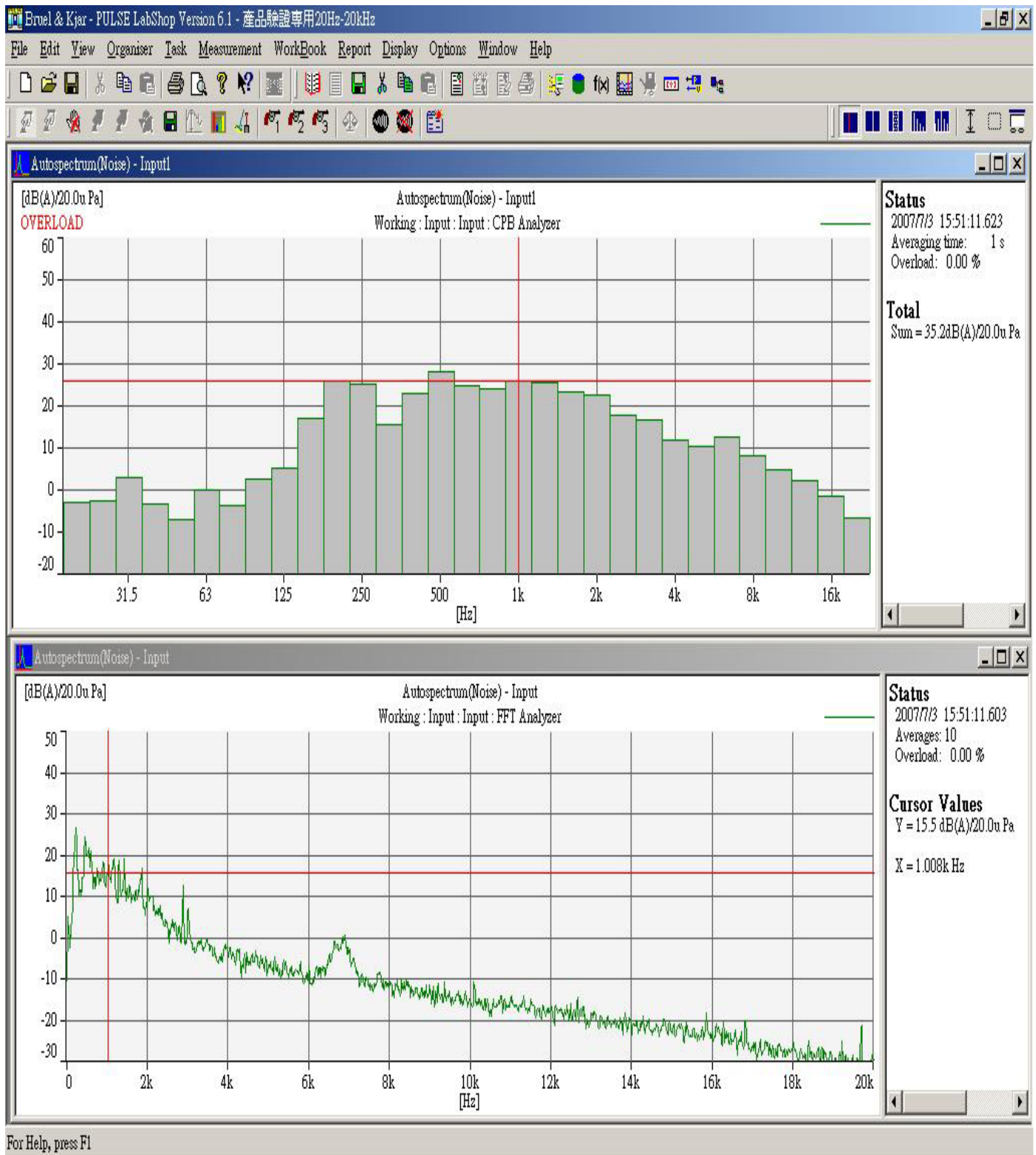


Fig. 5 – Acoustic Diagram (Idle Mode)

12. Appendix C – Acoustic Diagram (50%Loading)

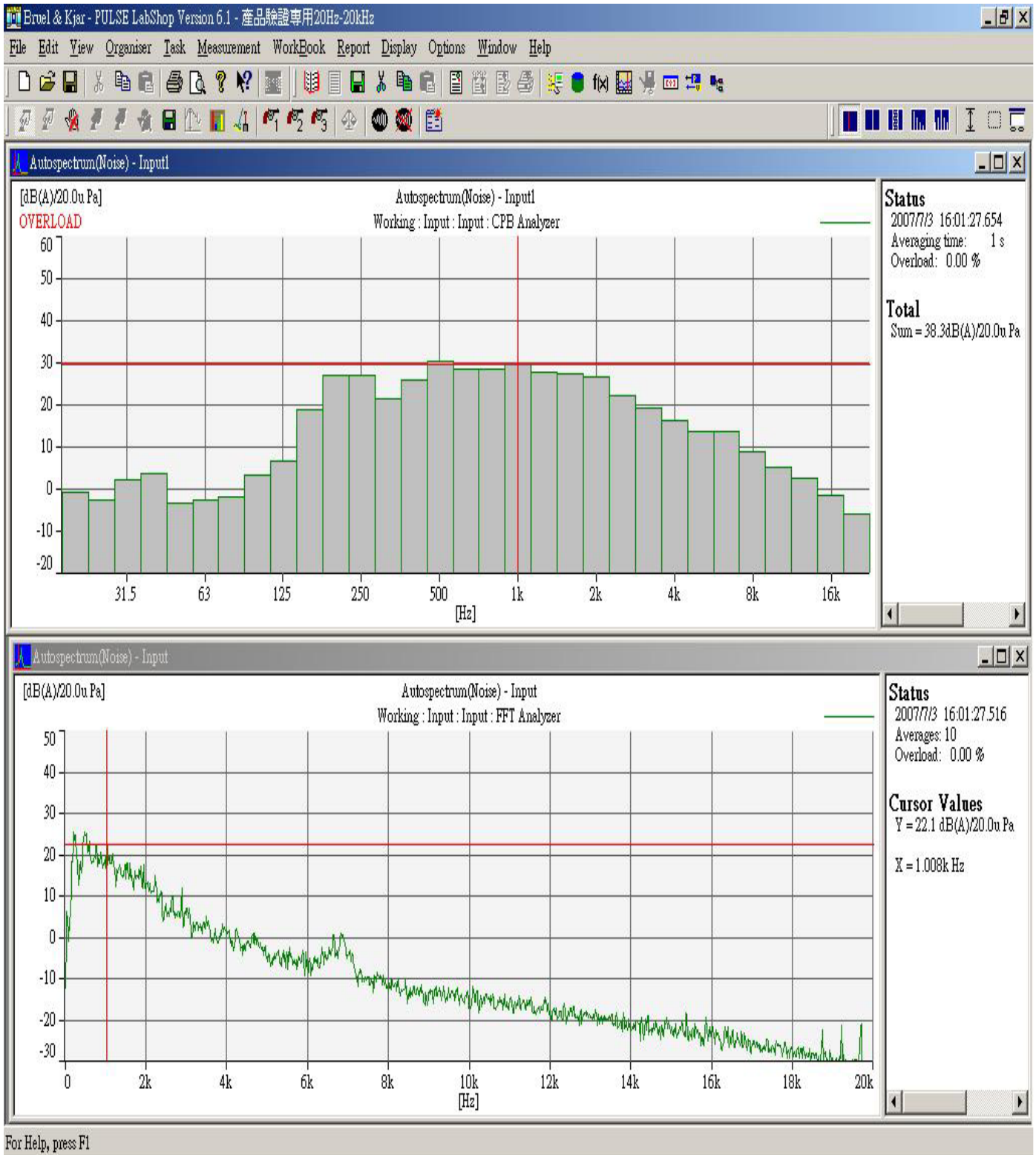


Fig. 6 – Acoustic Diagram (50%Loading)

13. Appendix D – Acoustic Diagram (80%Loading)

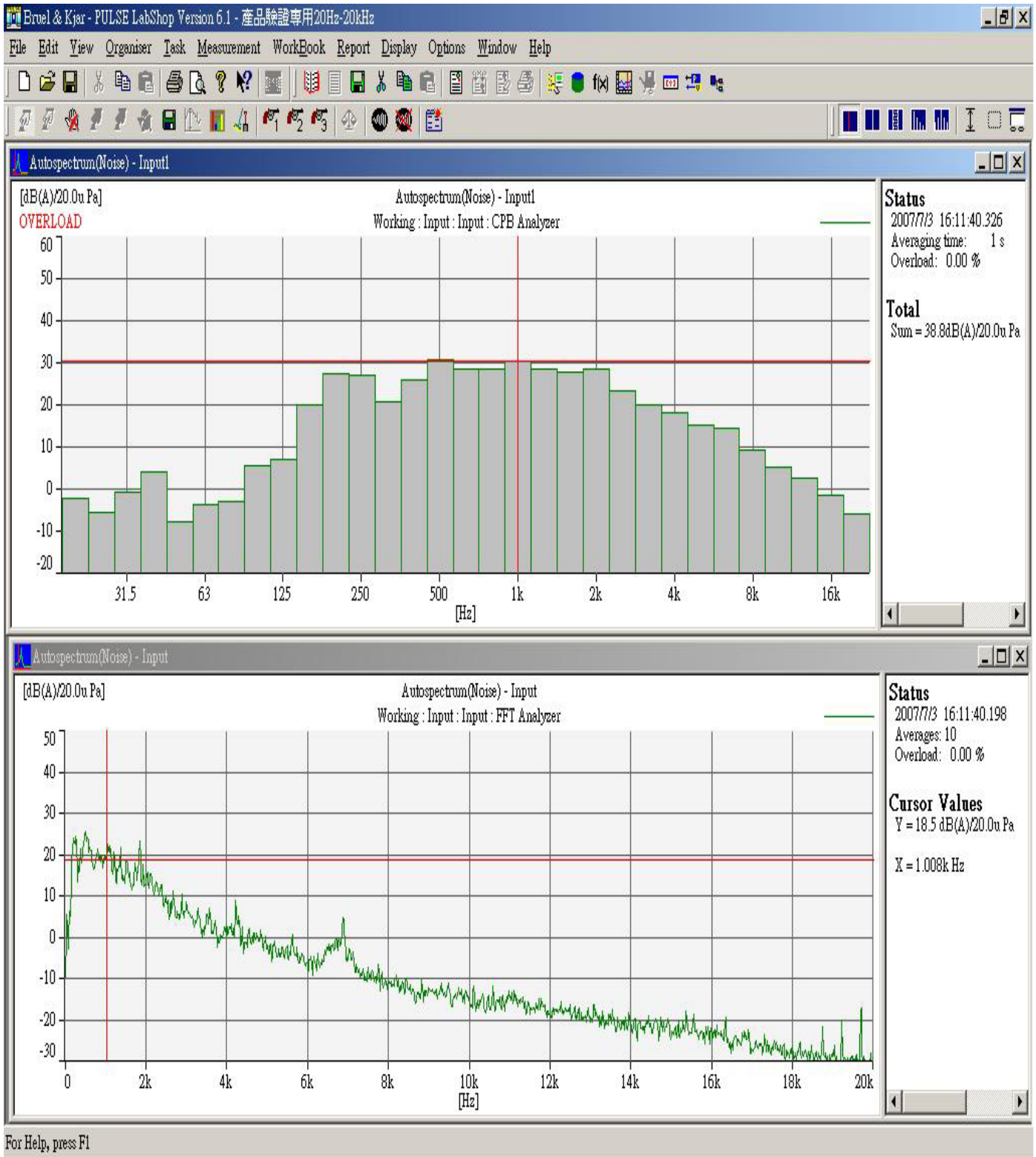


Fig. 7 – Acoustic Diagram (80%Loading)

14. Appendix E – Acoustic Diagram (100%Loading)

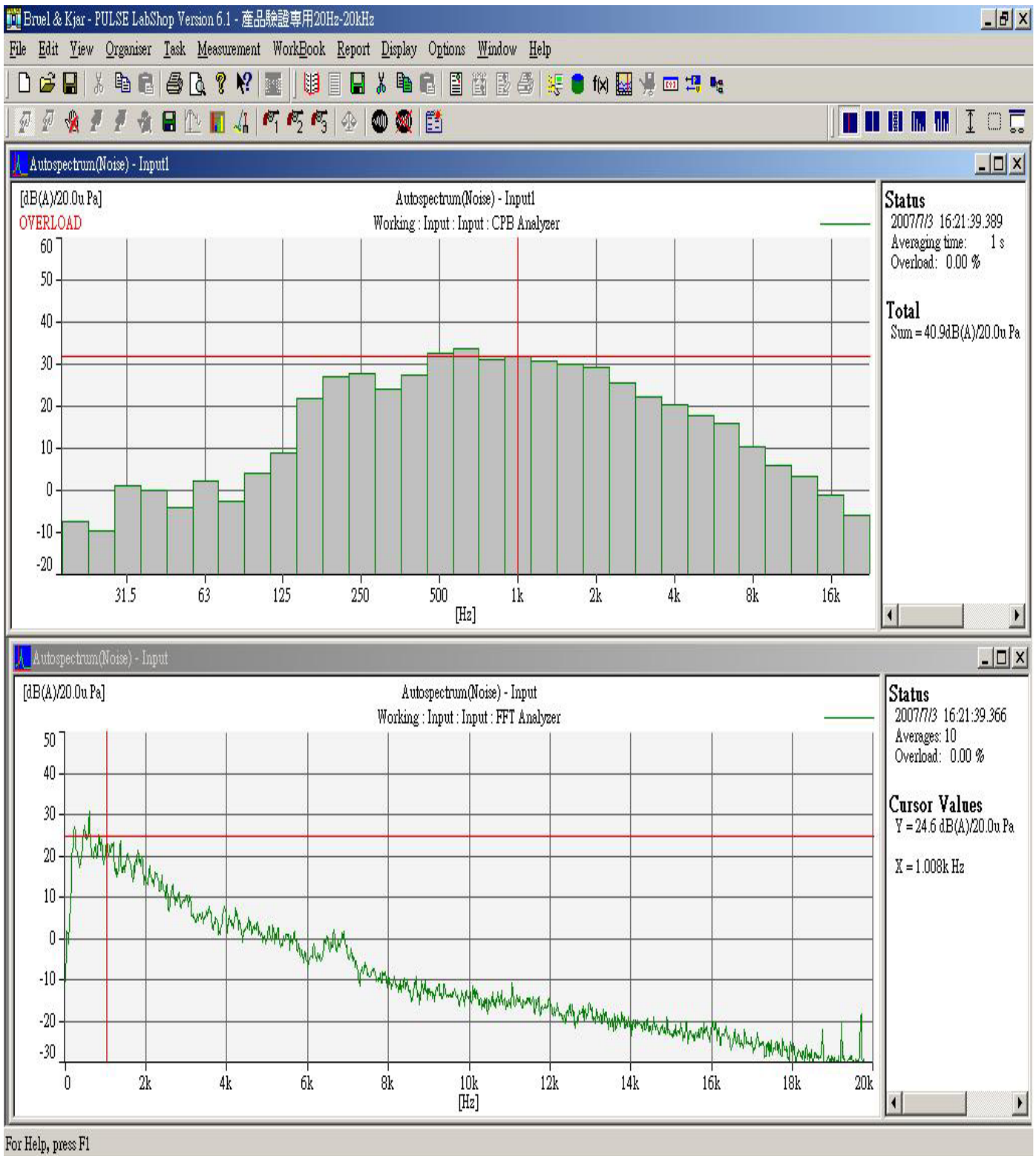


Fig. 8 – Acoustic Diagram (100%Loading)