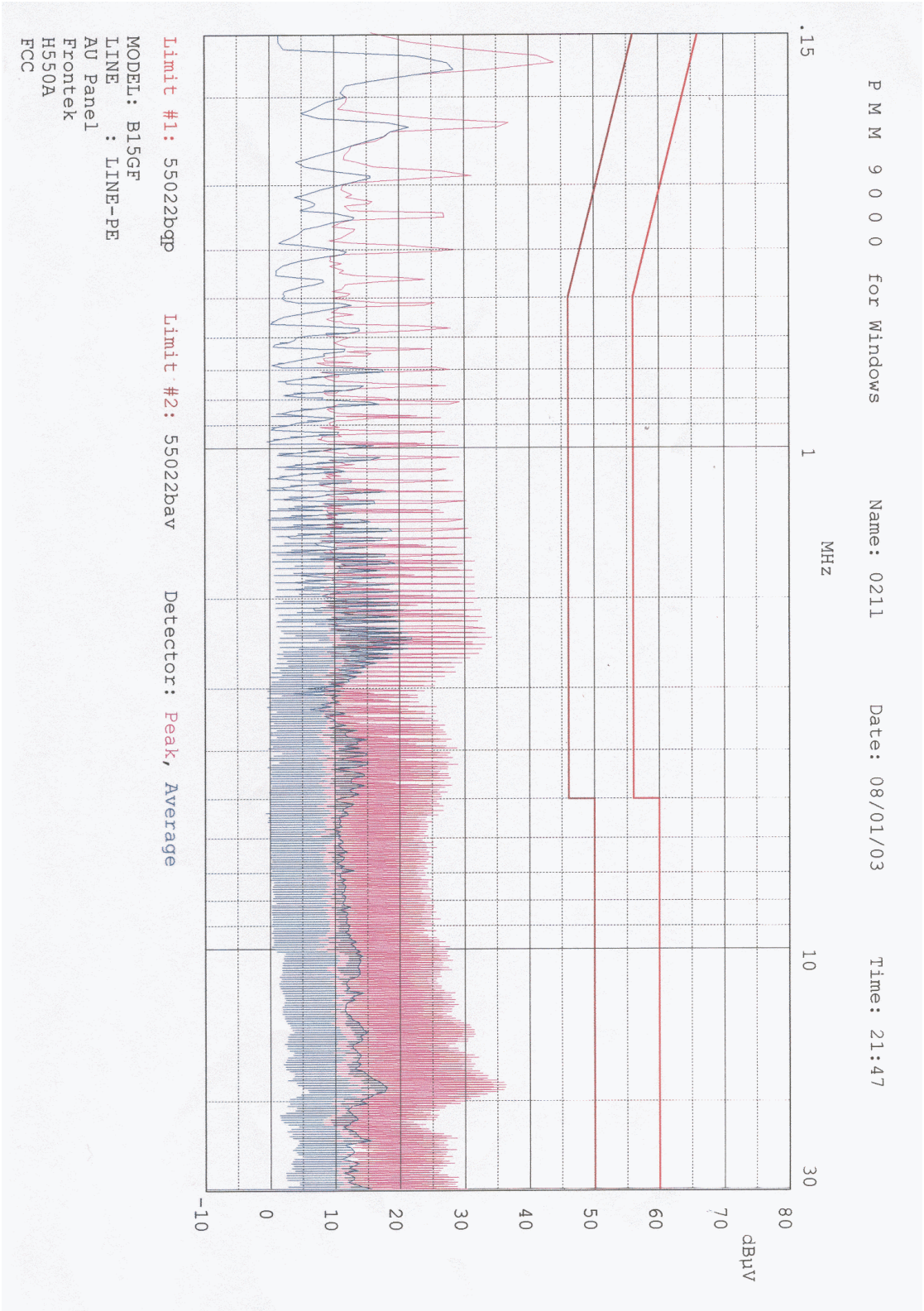


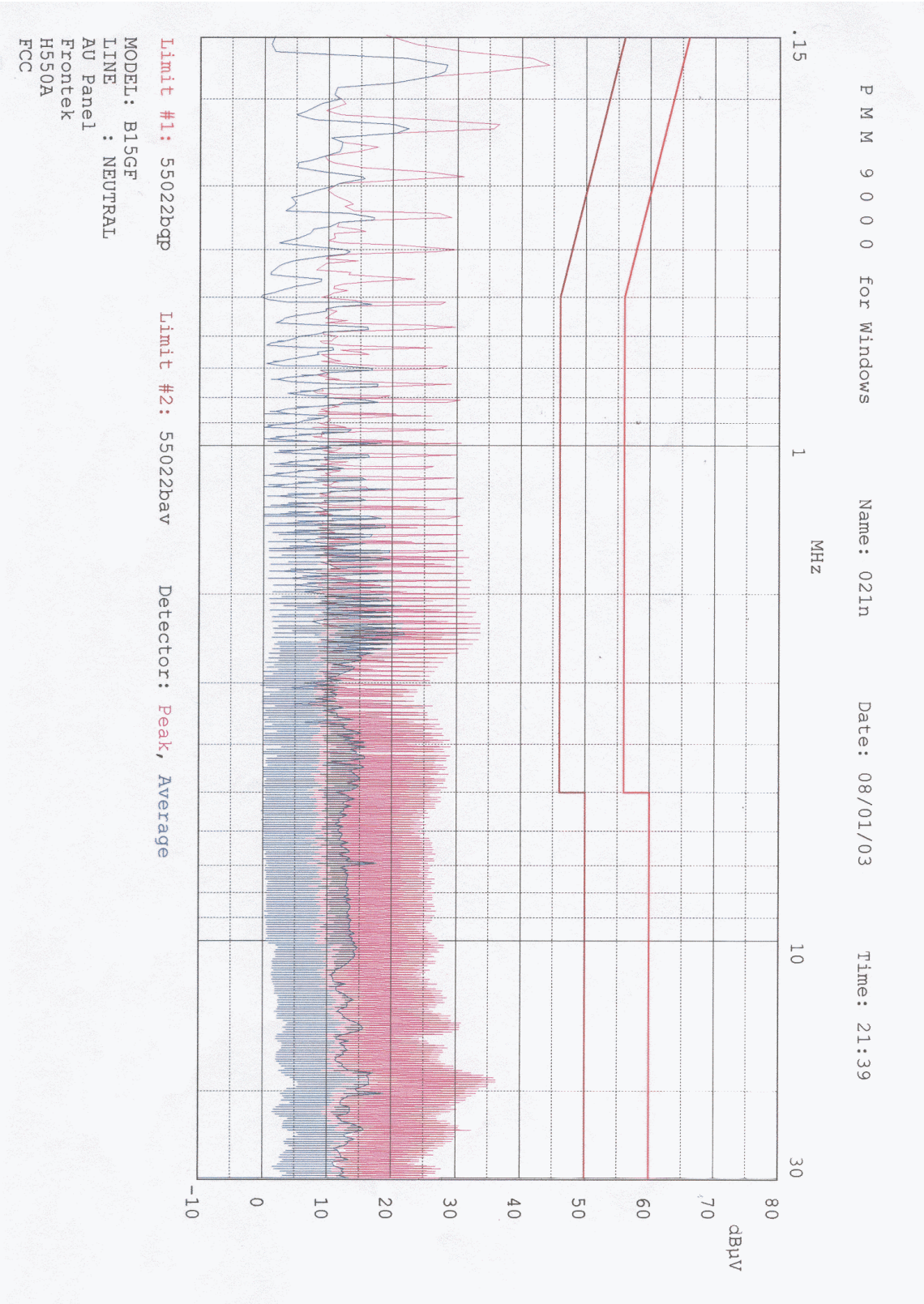
PLOTS OF EMISSIONS

- Conducted Emission at the Mains port(Line, FLFI 521-01A)



PLOTS OF EMISSIONS

- Conducted Emission at the Mains port(Neutral, FLFI 521-01A)



SAMPLE CALCULATIONS

$$\text{dB } \mu\text{V} = 20 \log_{10} (\mu\text{V}/\text{m})$$

$$\mu\text{V} = 10^{(\text{dB } \mu\text{V}/20)}$$

EX. 1.

@57.7 MHz

Class B limit = 100 $\mu\text{V}/\text{m}$ = 40.0 dB $\mu\text{V}/\text{m}$

Reading = 19.1 dB μV (calibrated level)

Antenna factor + Cable Loss = 10.12 dB

Total = 29.22 dB $\mu\text{V}/\text{m}$

Margin = 40.0 - 29.22 = 10.78

10.78 dB below the limit

ACCURACY OF MEASUREMENT

The Measurement Uncertainties stated were calculated in accordance with the requirements of NIST Technical Note 1297 with the confidence level of 95%

1. Radiation Uncertainty Calculation

<i>Contribution</i>	<i>Probability Distribution</i>	<i>Uncertainty(+/-dB)</i>
Antenna Factor	Normal (k=2)	± 0.5
Cable Loss	Normal (k=2)	± 0.04
Receiver Specification	Rectangular	± 2.0
Antenna directivity	Rectangular	± 1.0
Antenna Factor variation with Height		
Antenna Phase Center Variation		
Antenna Factor Frequency Interpolation		
Measurement Distance Variation		
Site Imperfections	Rectangular	± 2.0
Mismatch:Receiver VRC $r_i=0.3$ Antenna VRC $r_R=0.1(B_i)0.4(L_p)$ Uncertainty Limits $20\log(1+/-r_i r_R)$	U-Shaped	$+ 0.25 / - 0.26$
System Repeatability	Std.deviation	± 0.05
Repeatability of EUT	-	-
Combined Standard Uncertainty	Normal	± 1.77
Expanded Uncertainty U	Normal (k=2)	± 3.5

2. Conducted Uncertainty Calculation

<i>Contribution</i>	<i>Probability Distribution</i>	<i>Uncertainty(+/-dB)</i>
Receiver Specification	Normal (k=2)	± 2.0
LISN coupling spec.	Normal (k=2)	± 0.4
Cable and input attenuator cal.	Rectangular	± 0.4
Mismatch:Receiver VRC $r_i=0.3$ LISN vrc $r_g=0.1$ Uncertainty Limits $20\log(1+/-r_i r_R)$	U-Shaped	± 0.26
System Repeatability	Std.deviation	± 0.68
Repeatability of EUT	-	-
Combined Standard Uncertainty	Normal	± 1.18
Expanded Uncertainty U	Normal (k=2)	± 2.4

TEST EQUIPMENT

No.	Instrument	Manufacturer	Model	Calibration Date
1	*Test Receiver	R & S	ESCS 30	2002.02
2	*Test Receiver	PMM	PMM9000	2002.06
3	*Amplifier	HP	8447F	2002.09
4	*Amplifier	Agilent	8447F	2002.07
5	*Spectrum Analyzer	Advantest	R3265A	2002.03
6	*Logbicon Super Antenna	Schwarzbeck	VULB9166	2002.05
7	Log-Periodic Antenna	R & S	HL025	2002.01
8	Dipole Antenna	R & S	VHA9103	2002.05
9	Dipole Antenna	R & S	UHA9105	2002.05
11	Biconical Log Antenna	ARA	LPB-2520/A	2002.01
12	Absorbing Clamp	R & S	MDS21	2002.03
13	High Voltage Probe	R & S	ESH2-Z3	2002.09
14	Signal Generator	R & S	SMP02	2002.12
15	Matching Pad	R & S	RAM358.5414.02	2002.05
16	*LISN	R & S	ESH3-Z5	2002.10
17	*LISN	Kyoritsu	KNW-407	2002.04
18	LISN	Kyoritsu	KNW-408	2002.04
19	*Position Controller	EM Eng.	N/A	N/A
20	*Turn Table	EM Eng.	N/A	N/A
21	*Antenna Mast	EM Eng.	N/A	N/A
22	*Anechoic Chamber	EM Eng.	N/A	N/A
23	*Shielded Room	EM Eng.	N/A	N/A

*) Test equipment used during the test

RECOMMENDATION/CONCLUSION

The data collected shows that the **Hansol Electronics Inc.**

FCC ID : **MSAB15GF**, **LCD Monitor**. complies with § 15.107 ,15.109 of the FCC Rules.

The highest emission observed was at **0.2 MHz** for conducted emissions with a margin of **15.0 dB**, at **278.58 MHz** for radiated emissions with a margin of **9.4 dB**.

APPENDIX A – SAMPLE LABEL

Labelling Requirements

The sample label shown shall be *permanently affixed* at a conspicuous location on the device and be readily visible to the user at the time of purchase.



● FCC ID Location of EUT



APPENDIX B – CIRCUIT DIAGRAM

APPENDIX E – USER’S MANUAL

APPENDIX F – SCHEMATIC DIAGRAM
