

GKN Aerospace Engineering Services
Test Facilities

Test Certificate No WA/TF/0689

APPENDIX A

Vibration Test Log Sheets and Plots

CHI AN35

ENVIRONMENTAL GROUP

W.O. NUMBER TFT 458

FIRM SRT

SPECIMEN SEE BELOW

SER. NO. SEE BELOW

ES
SHEET
1 of 3

TEST DESCRIPTION SINUSOIDAL VIBRATION

FACILITY DPS60 / DVS

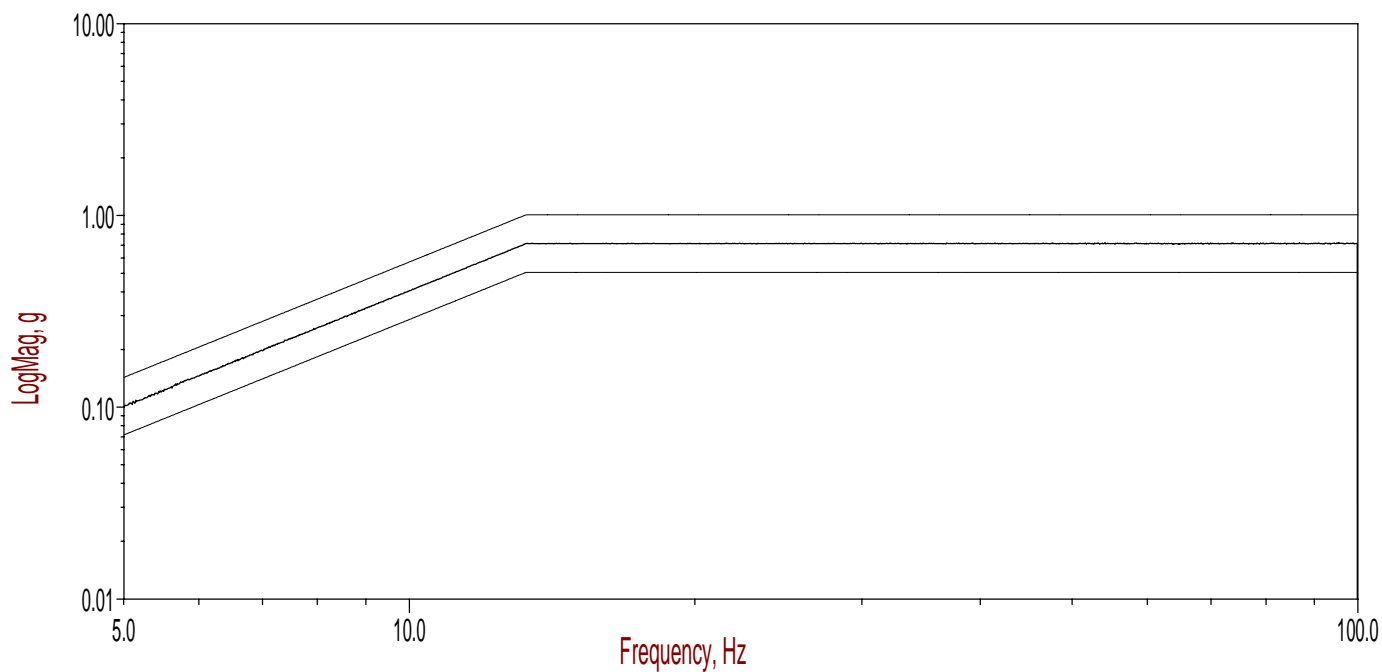
SPEC. NO. SEE BELOW

SIG.

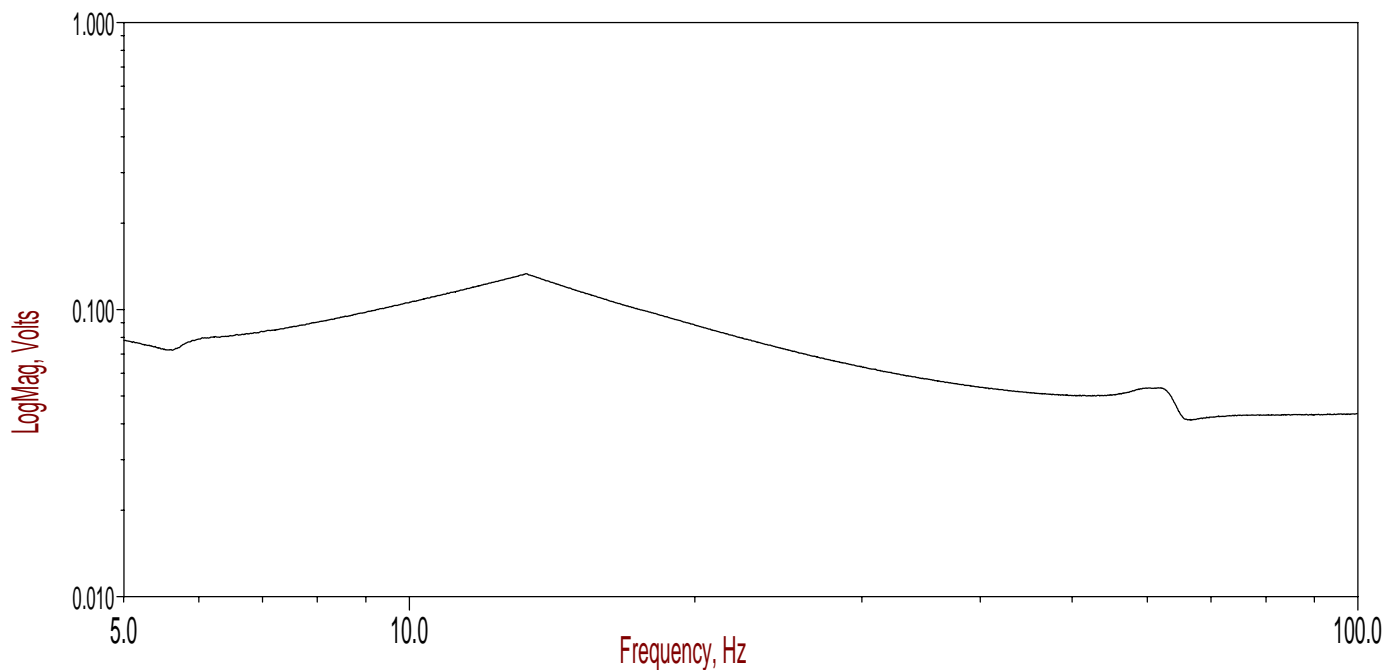
DATE	TEST NO.	AMB. CONDITIONS	TEST DATA	TIME	FUNCTIONAL CHECKS
16-8-06			SPECIMENS:-		
			1 OFF SRT-MTB-OEM (WHITE)		
			UNIT No #005		
			1 OFF COMAR CSB 200		
			S/No 003		
			CLASS B AIS TRANSPONDER (BLACK)		
			VIBRATION TESTING TO		
			IEC 62287-1 FIRST EDITION		
			IEC 2006 (E)		
			PARA 9.2.1. DEFINED SWEEP RATE		
			REFERS TO IEC 60945 IEC 2002		
			PARA 8.7. DEFINED AMPLITUDE		
			2 mm Peak to Peak 5 to 13.32 Hz		
			0.7138 g peak (7.0 m/s)		
			13.32 to 100 Hz 0.2 octave / minute		

ENVIRONMENTAL GROUP					W.O. NUMBER		ES SHEET 2 of 3
FIRM		SPECIMEN			SER. NO.		
TEST DESCRIPTION		FACILITY		SPEC. NO.			
SRT		SRT-MTB-OEM & CSB 200			SEE SMT 1		
SINUSOIDAL VIBRATION		DPS60 / DVS		SEE SMT 1			
DATE	TEST NO.	AMB. CONDITIONS	TEST DATA	TIME	FUNCTIONAL CHECKS	SIG.	
16-8-06			SWEEP LIMITED TO 5 HZ				
			LOWER FREQUENCY INSTEAD OF 2 HZ				
			TIME TO BE MADE UP BY A				
			13 MIN 20 SEC DWELL AT 5 HZ				
	RUN 1	24°C 50%	SWEEP COMMENCED IN VERTICAL				
			AXIS ON DVS SHAKER	12-07	ON	DB	
			BI-DIRECTIONAL SWEEP COMPLETED	12-51	ON	DB	
	RUN 2		DWELL COMMENCED IN VERT AXIS	12-52	ON	DB	
			5 HZ \pm 1.0 mm (0.1 g peak)				
		25°C 46%	DWELL COMPLETED	13-06	ON	DB	
	RUN 3		SPECIMENS MOUNTED ON SLIP				
			TABLE IN LATERAL AXIS				
		25°C 49%	SWEEP COMMENCED	14-50	ON	DB	
		25°C 47%	BI-DIRECTIONAL SWEEP COMPLETED	15-32	ON	DB	

Control



Drive



+/- 1 mm Displacement 5 to 13.32 Hz : 0.7138 g peak 13.32 to 100 Hz : 0.2 octave / min sweep rate
1 Bi-directional sweep per axis

Software Radio Technology SRT-MTB- OEM Unit No #005 and COMAR CSB200 S/No 003 W/O TFT458
End of Run No 2 in Vertical Axis 16/08/2006

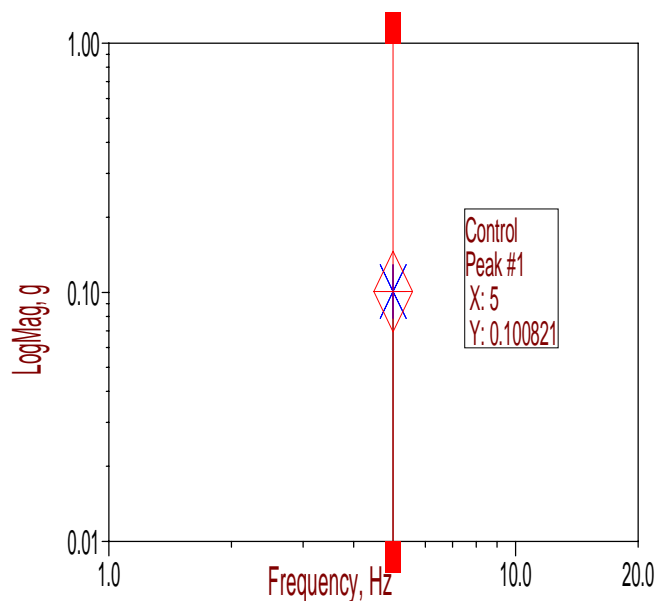
Accel: 0.1008 g
Total Time: 00:13:20

Displ: 2.00345 mm p-p
Sweep No.: 1 [UP]

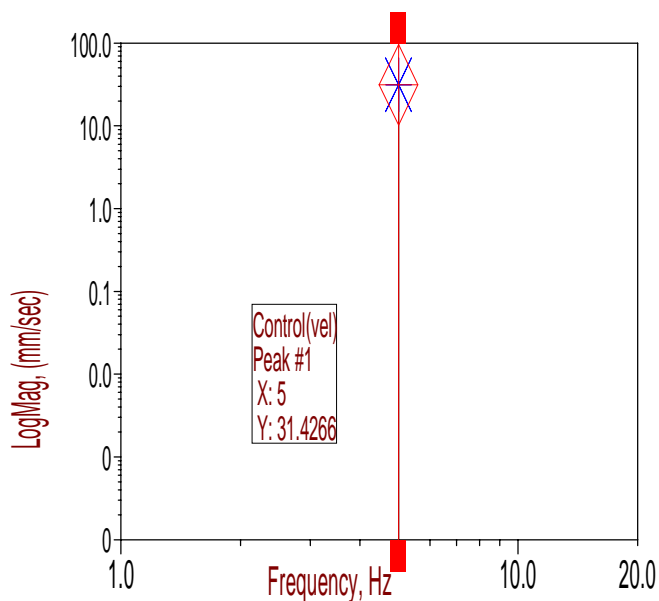
Freq: 5.00 Hz
Dwell Time: 00:13:20 [DWL]

Drive: 0.0792 V-pk
Remaining: 00:00:00

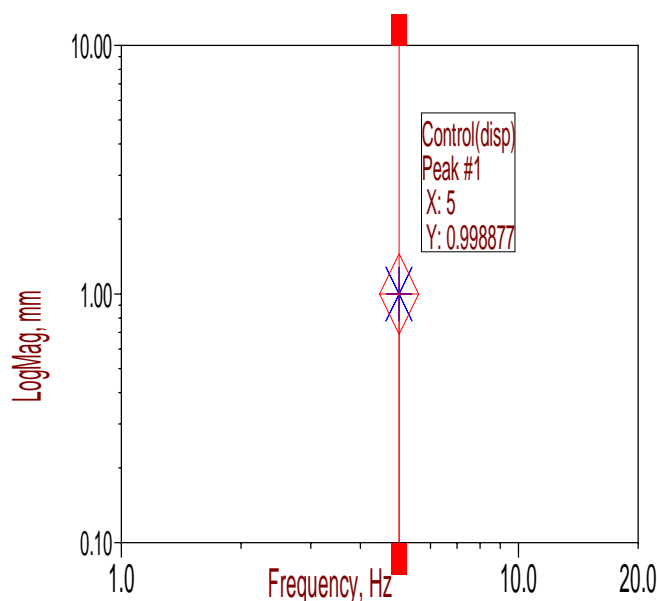
Control



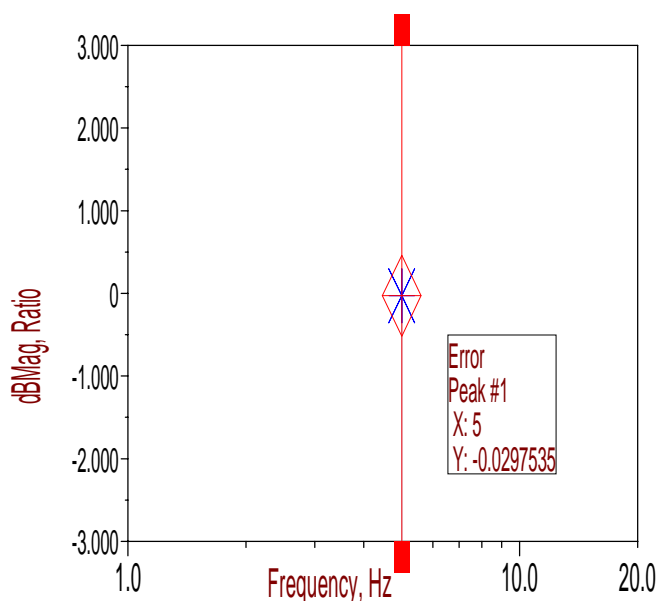
"Control(vel)"



"Control(displ)"

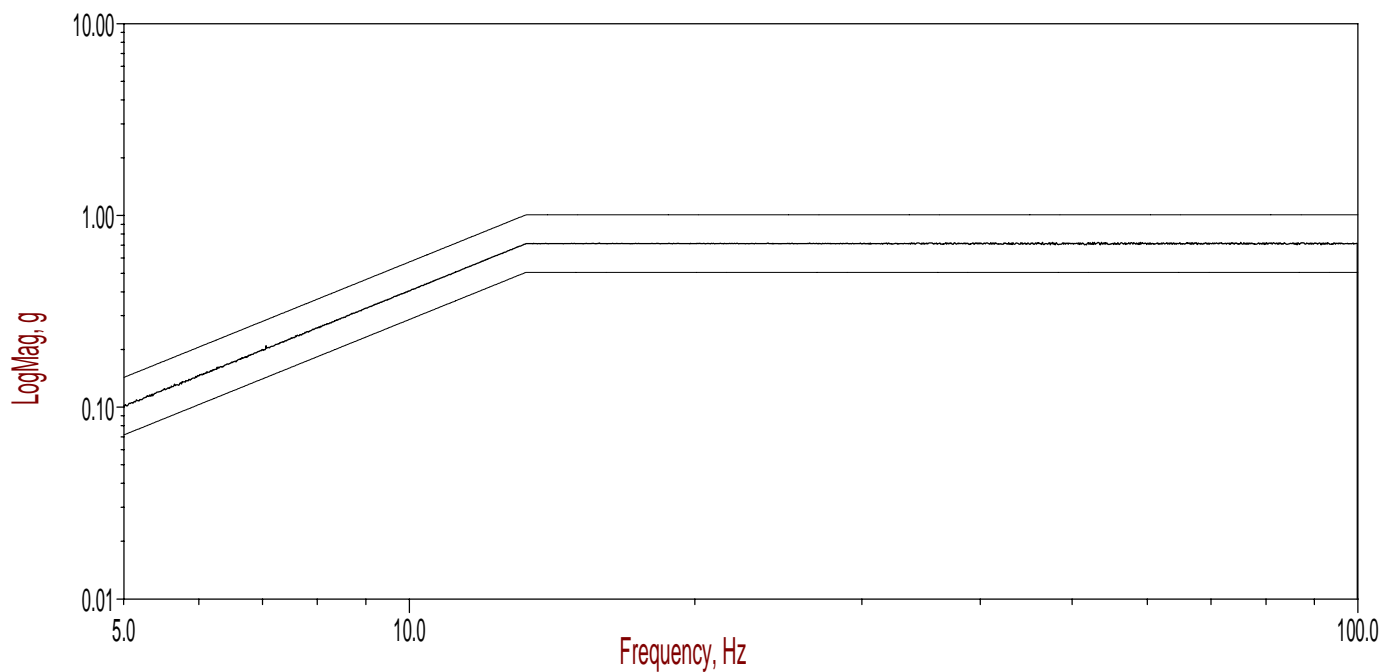


Error

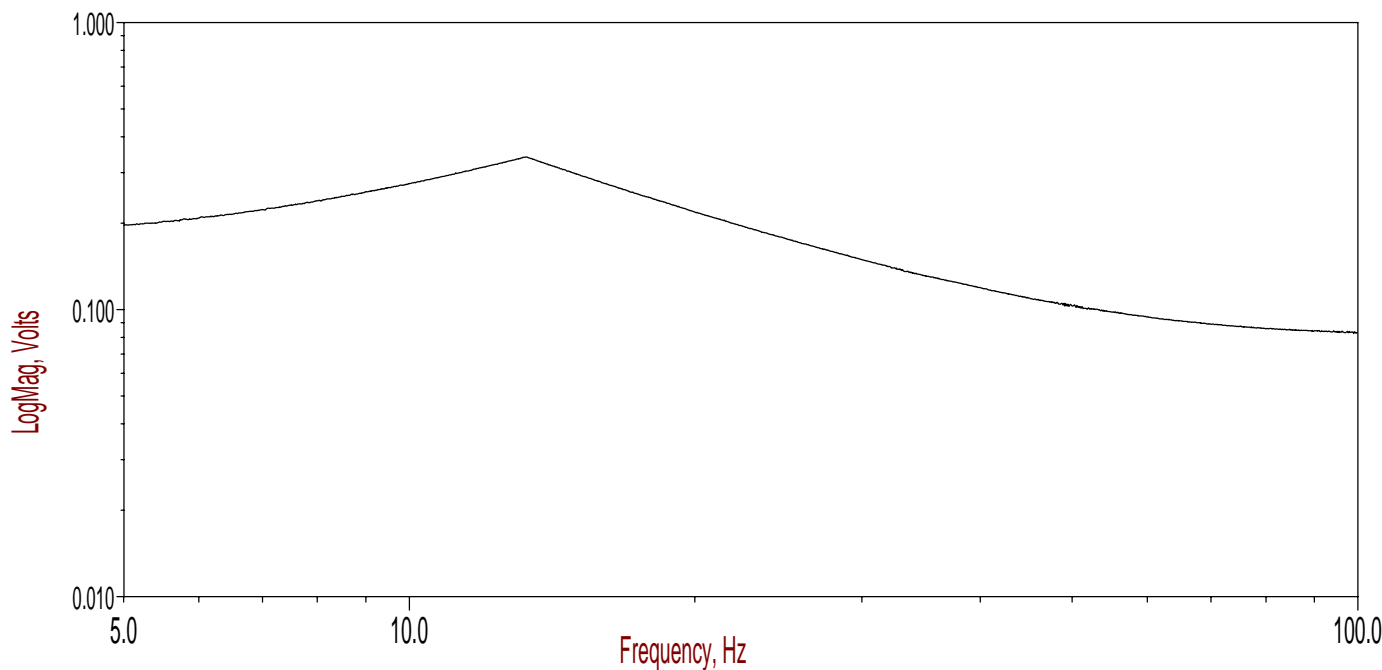


13 min 20 sec Dwell at 5.0 Hz +/- 1 mm Displacement

Control



Drive



+/- 1 mm Displacement 5 to 13.32 Hz : 0.7138 g peak 13.32 to 100 Hz : 0.2 octave / min sweep rate
1 Bi-directional sweep per axis

Software Radio Technology SRT-MTB- OEM Unit No #005 and COMAR CSB200 S/No 003 W/O TFT458
End of Run No 4 in Lateral Axis 16/08/2006

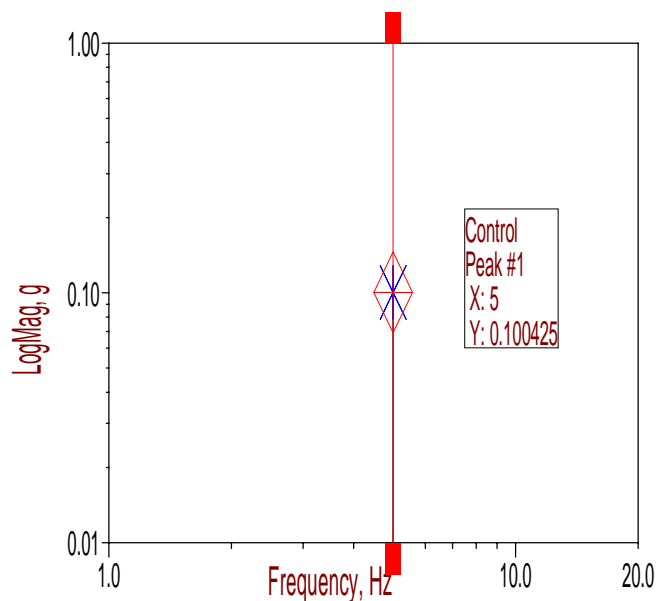
Accel: 0.1004 g
Total Time: 00:13:20

Displ: 1.99559 mm p-p
Sweep No.: 1 [UP]

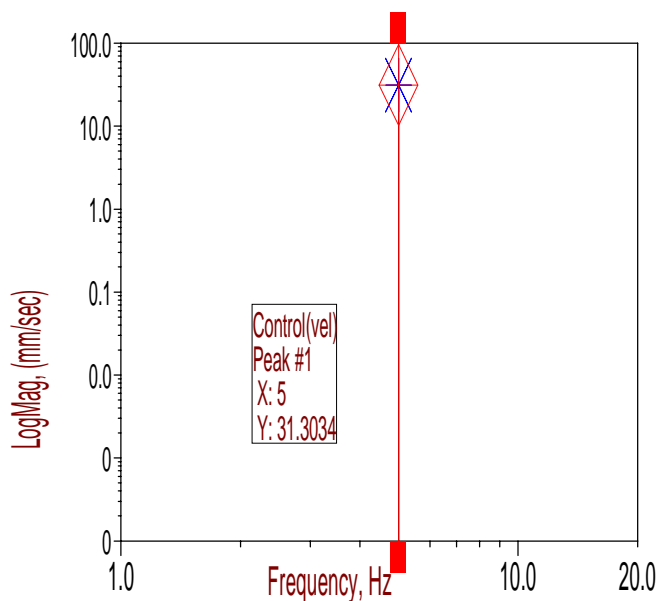
Freq: 5.00 Hz
Dwell Time: 00:13:20 [DWL]

Drive: 0.1954 V-pk
Remaining: 00:00:00

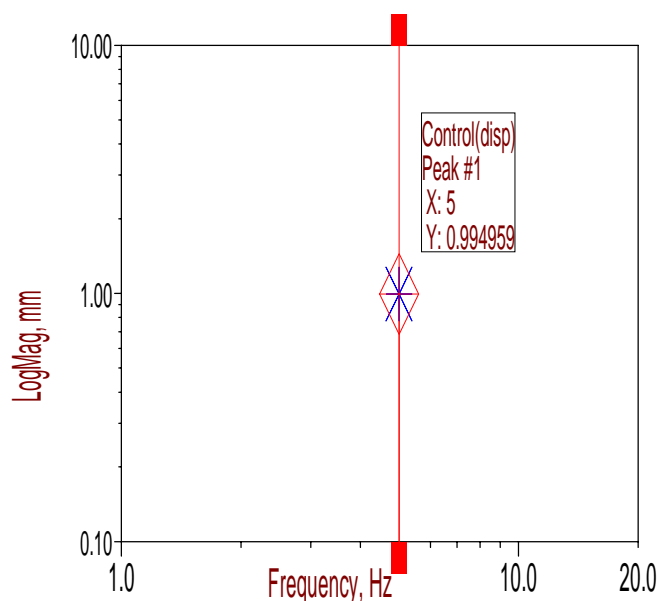
Control



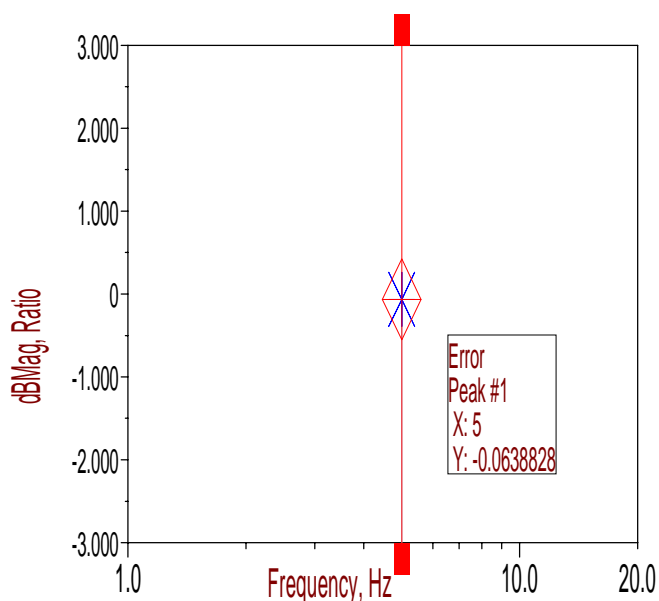
"Control(vel)"



"Control(displ)"

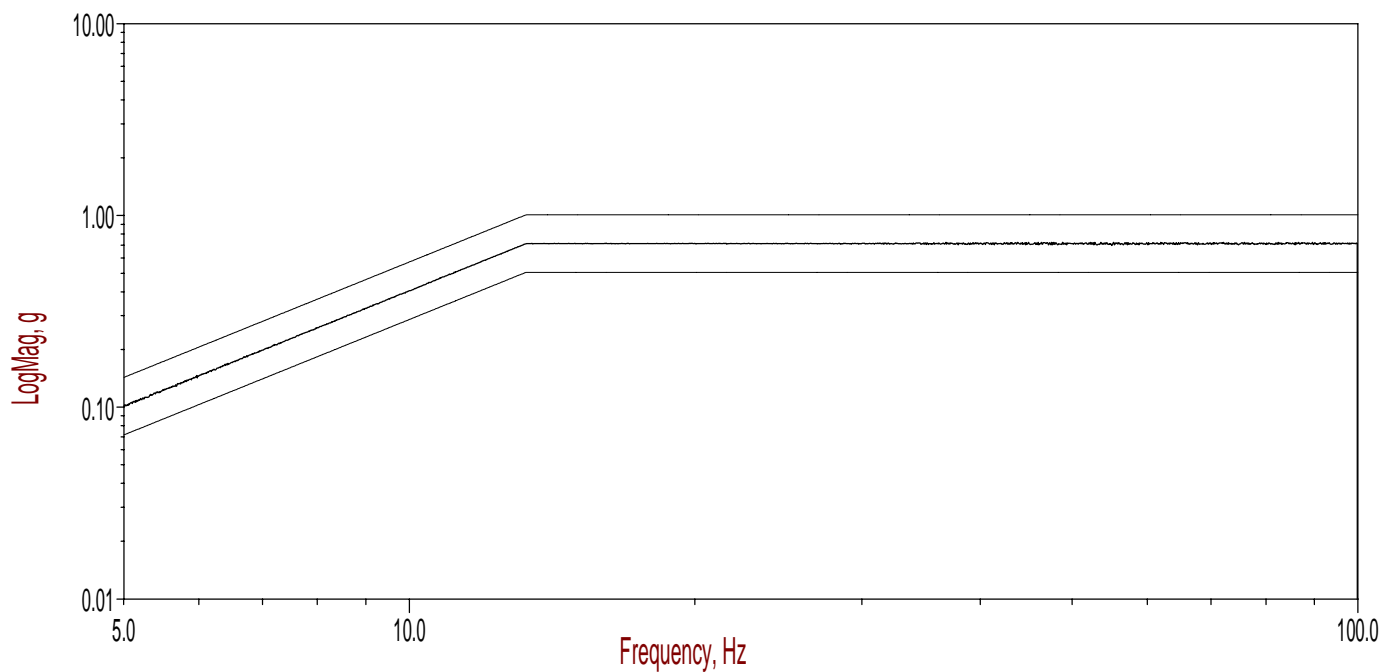


Error

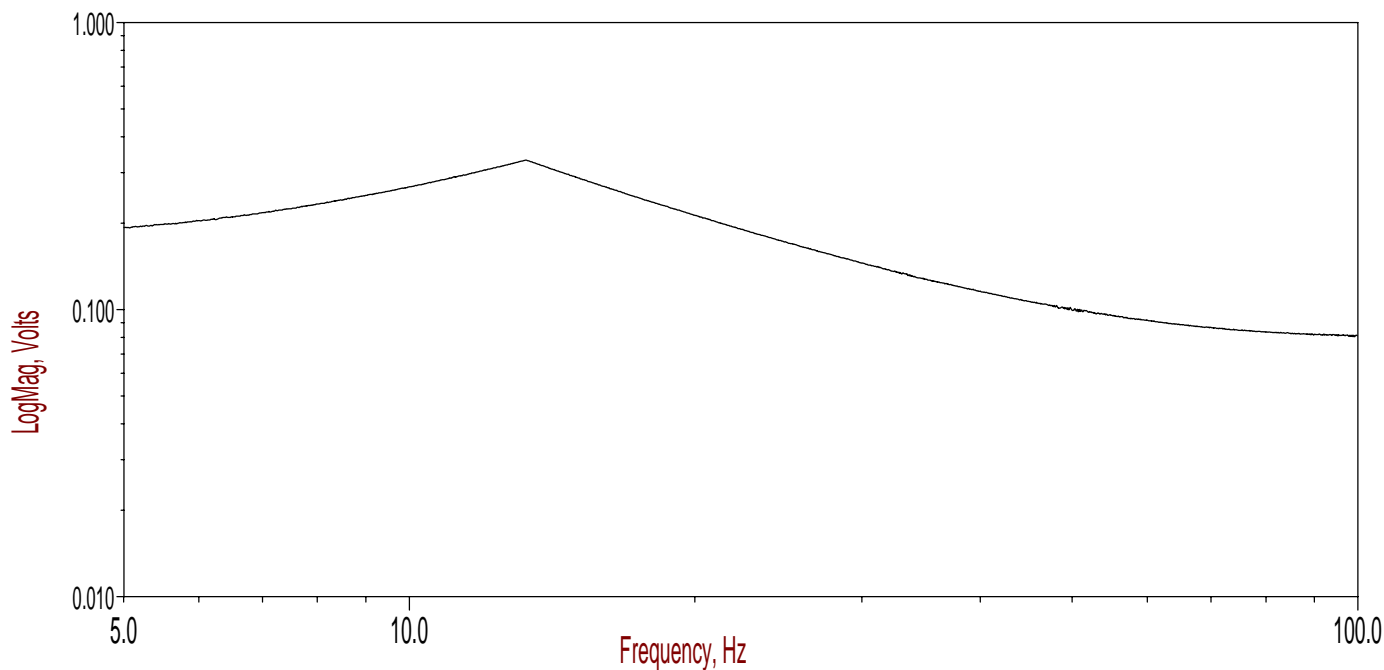


13 min 20 sec Dwell at 5.0 Hz +/- 1.0 mm

Control



Drive



+/- 1 mm Displacement 5 to 13.32 Hz : 0.7138 g peak 13.32 to 100 Hz : 0.2 octave / min sweep rate
1 Bi-directional sweep per axis

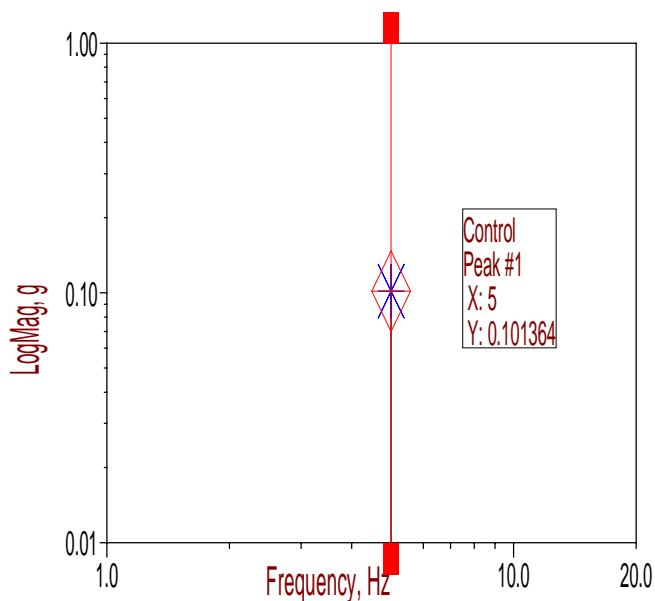
Software Radio Technology SRT-MTB- OEM Unit No #005 and COMAR CSB200 S/No 003 W/O TFT458
End of Run No 6 in Longitudinal Axis 17/08/2006

Accel: 0.1014 g
Total Time: 00:13:20

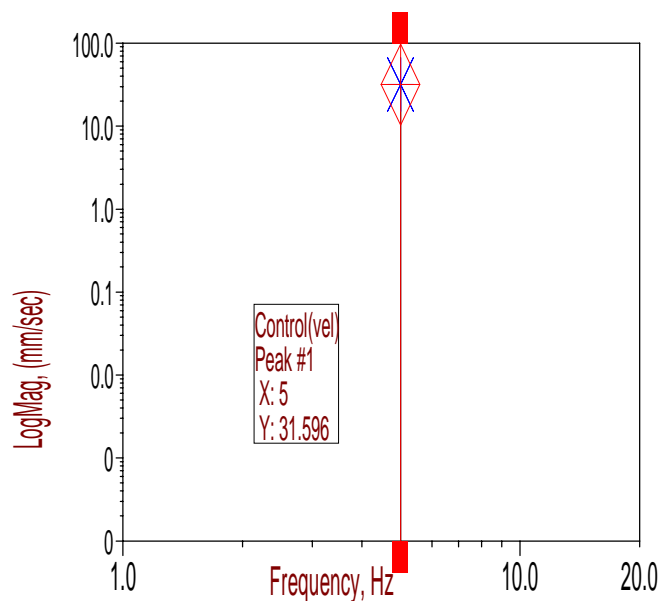
Displ: 2.01425 mm p-p
Sweep No.: 1 [UP]

Freq: 5.00 Hz
Dwell Time: 00:13:20 [DWL] Remaining: 00:00:00

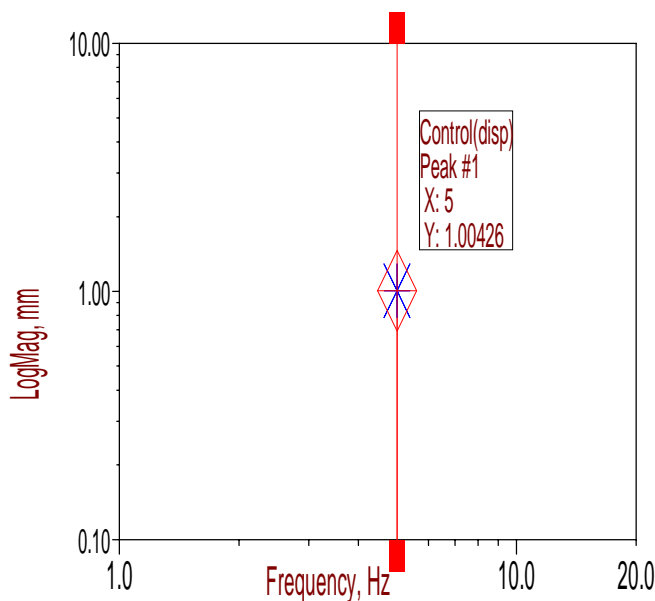
Control



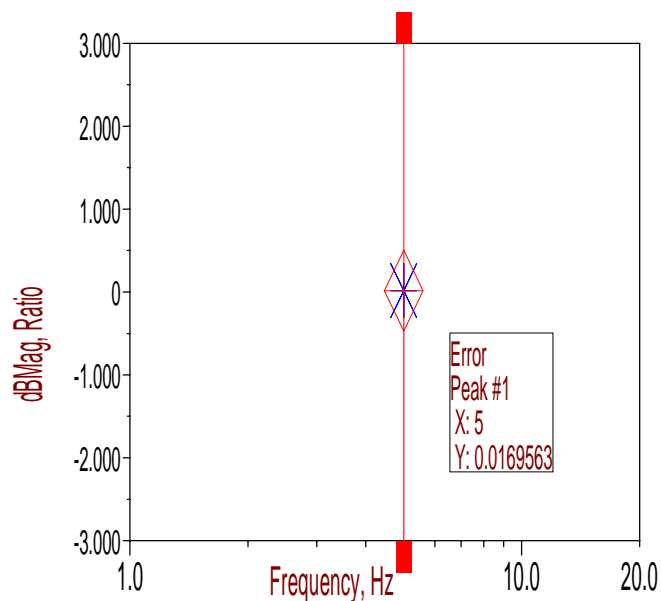
"Control(vel)"



"Control(displ)"



Error



13 min 20 sec Dwell at 5.0 Hz +/- 1.0 mm