



BSWA 308 FACTORY CALIBRATION DATA

SN: 490144

1. APPEARANCE Pass

2. CALIBRATION (sound)

Calibrator : CA111 Sound Level: 94.0 dB Frequency: 1000 Hz
 Microphone Model/SN: MP231/490157 Preamplifier Model/SN: MA231T/500007

Filter	Nominal[dB]	Indication[dB]	Error[dB]
A	94.0	94.0	0.0
C	94.0	94.0	0.0
Z	94.0	94.0	0.0

3. CALIBRATION (electrical)

Filter=A; Fsin=1000Hz

Range	Input[mV _{RMS}]	Indication[dB]	Error[dB]
Low	50.0	94.0	0.0
High	50.0	94.0	0.0

4. LINEARITY (electrical)

Filter=A; Range=Low; Fsin=1000Hz

Nominal[dB]	23	24	25	26	27	28	29	30	40	50	60	70	80
Indication[dB]	23.3	24.2	25.2	26.2	27.2	28.2	29.1	30.1	40.1	50.0	60.1	70.1	80.1
Error[dB]	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Nominal[dB]	90	100	105										
Indication[dB]	90.0	100.0	105.0										
Error[dB]	0.0	0.0	0.0										

Filter=A; Range=High; Fsin=1000Hz

Nominal[dB]	35	36	37	38	39	40	50	60	70	80	90	100	110
Indication[dB]	35.3	36.3	37.3	38.3	39.2	40.2	50.1	60.1	70.1	80.1	90.0	100.0	110.0
Error[dB]	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Nominal[dB]	120	130	131										
Indication[dB]	120.0	130.0	131.0										
Error[dB]	0.0	0.0	0.0										

5. INTERNAL NOISE LEVEL

Range=Auto; Backlight=Off; Use 16pF Dummy Microphone; Cal.Factor=0

Filter	A	C	Z
Indication[dB]	≤ 13	≤ 16	≤ 22

6. Detector (electrical)

Filter=A; Range=High; Fsin=4000Hz; Steady Level=100dB

Detector	F	S
Rate of Decrease[dB/s]	31.2	4.7
Difference of F/S[dB]	0.0	

7. TONE BURST RESPONSE (electrical)

Steady Level= 120 dB; Filter=A; Range=High; Fsin=4000Hz; Burst Period=2s

Tone Burst Duration[ms]	Response[dB]	
	LAFmax	LASmax
500	-0.1	-3.8
200	-1.0	-7.1
50	-4.9	-12.8
10	-11.2	-19.7

8. REPEAT TONE BURST RESPONSE (electrical)

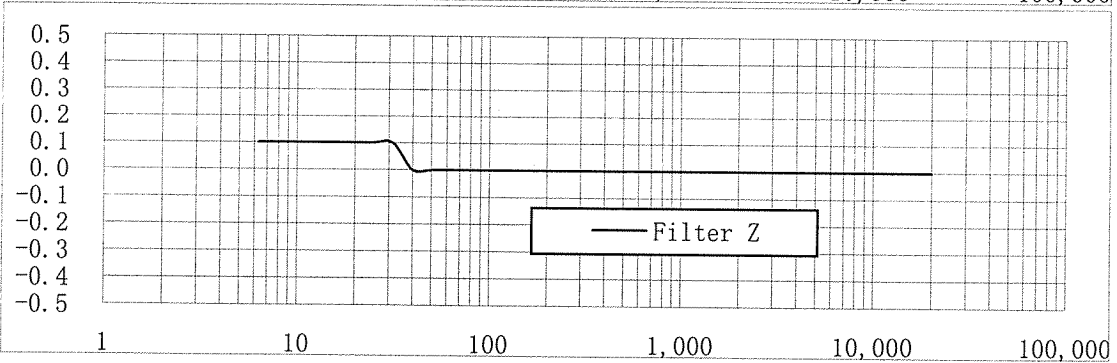
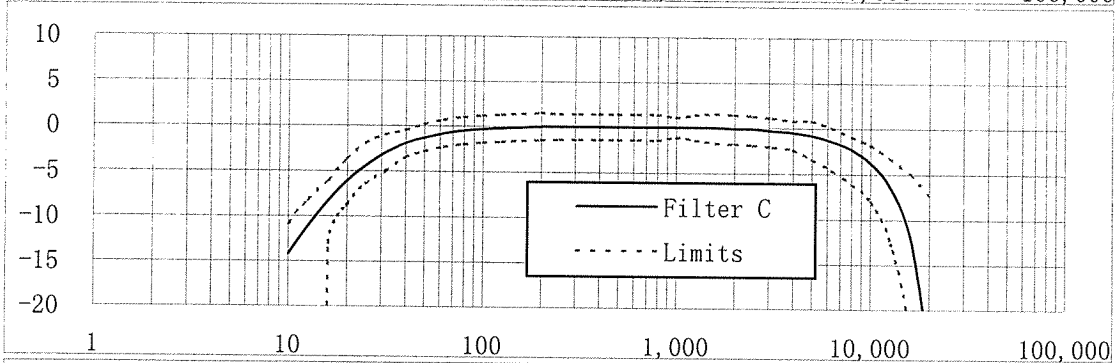
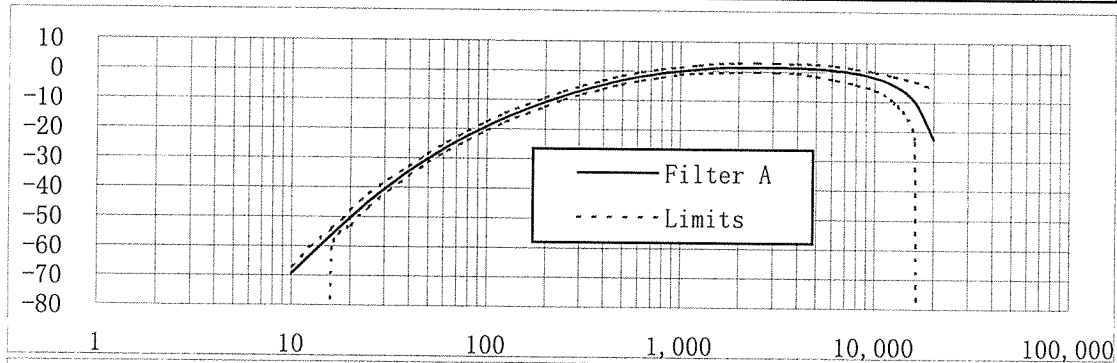
Steady Level= 120 dB; Filter=A; Range=High; Fsin=4000Hz

Tone Burst Duration[ms]	Tone Burst Interval[ms]	Response[dB]
		LAeqT
500	2000	-7.0
200	800	-7.0
50	200	-7.0
10	40	-7.0

9.FREQUENCY RESPONSE (electrical)

Steady Level= 120 dB; Range=Auto

Frequency[Hz]	Attenuation[dB]			Frequency[Hz]	Attenuation[dB]			Frequency[Hz]	Attenuation[dB]		
	A	C	Z		A	C	Z		A	C	Z
6.3	-	-	0.1	100	-19.1	-0.3	0.0	1600	1.1	0.0	0.0
8	-	-	0.1	125	-16.2	-0.2	0.0	2000	1.3	-0.1	0.0
10	-69.3	-14.2	0.1	160	-13.2	-0.1	0.0	2500	1.4	-0.1	0.0
12.5	-63.2	-11.2	0.1	200	-10.8	0.0	0.0	3150	1.4	-0.3	0.0
16	-56.3	-8.3	0.1	250	-8.7	0.0	0.0	4000	1.3	-0.5	0.0
20	-50.3	-6.1	0.1	315	-6.6	0.0	0.0	5000	1.0	-0.8	0.0
25	-44.7	-4.4	0.1	400	-4.8	0.0	0.0	6300	0.5	-1.4	0.0
31.5	-39.5	-3.0	0.1	500	-3.2	0.0	0.0	8000	-0.4	-2.3	0.0
40	-34.5	-1.9	0.0	630	-1.9	0.0	0.0	10000	-1.9	-3.8	0.0
50	-30.2	-1.3	0.0	800	-0.8	0.0	0.0	12500	-4.4	-6.3	0.0
63	-26.2	-0.8	0.0	1000	0.0	0.0	0.0	16000	-10.0	-11.9	0.0
80	-22.4	-0.5	0.0	1250	0.6	0.0	0.0	20000	-22.6	-24.5	0.0



ENVIRONMENTAL	
Temperature	21 °C
Relative Humidity	48 %
Ambient Pressure	1013 hPa

TEST EQUIPMENT				
Item	Manufacturer	Model	SN	Description
1	BSWA	CA111	470118	Calibrator
2	Agilent	33220A	MY44017554	Signal Generator
3	Agilent	34401A	SG47000236	Digital Voltmeter
4	Rigol	ATT-40	-	40dB Attenuator
5	BSWA	-	-	16pF Dummy Microphone

Calibration Specialist: C. P. S.

Test Date: 2012-4-23