

ENGLISH
Original: RUSSIAN

COMMENT BY THE RUSSIAN FEDERATION
IN REGARDS TO THE PROPOSAL BY CHINA
FOR THE DRAFT AMENDMENTS TO THE REGULATION No. 28
(document ECE/TRANS/WP.29/GRB/2010/2)

In the framework of check and evaluation of proposal by China in the document TRANS/WP.29/GRB/2010/2, the Technical Service of the Russian Federation has conducted tests of the audible warning devices, primarily made by the Russian and Chinese manufacturers. The test results have shown:

- The audible warning devices made in the Russian Federation comply with the requirements of the paragraph 6.2.7.1. of the Regulation No.28.
- The audible warning devices made in the European and Asian countries having the type approval in most cases satisfy the requirements of the paragraph 6.2.7.1. of the Regulation No.28, except for the audible warning devices made in China. However in connection with an uncertainty in what complete set they had been tested for the type approval purpose, such devices also can be considered as complying to the Regulation No.28, once the test results had reached the admissible limit.
- The audible warning devices made in China and not having the type approval in the majority cases were not in compliance with the Regulation No.28.

Taking into account the aforesaid the Russian Federation experts do not see a necessity for amending the paragraph 6.2.7 of the Regulation No.28 reducing thereby the requirements on the level of the sound pressure to the frequency range, which is most perceived by a human ear. Correctly designed audible warning devices have a double stock on levels in such frequency range in relation to the requirement of 105 dBA which is set in the paragraph 6.2.7.1. of the Regulation No.28.

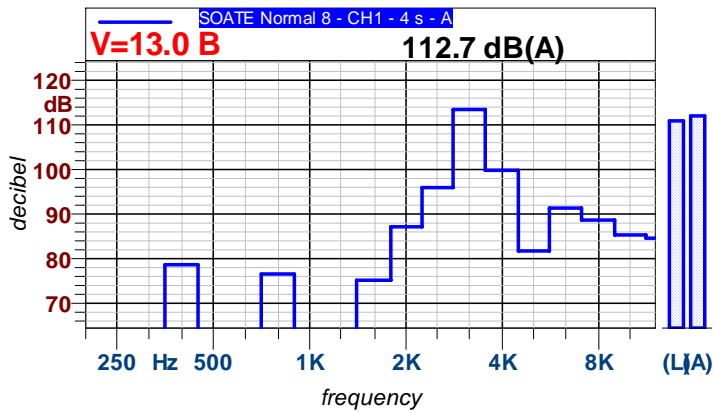
For the time being the limited number of tests made by our Technical Service, does not allow to draw unequivocal conclusions concerning conformity to the requirements of the Regulation No.28 of the audible warning devices having the official type approval.

A concern of incompliance to the requirements of the Regulation No.28 of the audible warning devices is considered as a concern of the manufacturer not satisfying the conditions for provision of conformity of production. Such a fact cannot form the basis for modification of the Regulation No.28.

Annex: Test results.

Test Results of Audible Warning Device for compliance with the requirements of paragraph 6.2.7. of the UNECE Regulations No.28								
No. of the audible warning device	Country of origin	Availability of approval mark	Nominal Voltage, V	Test Results			Total Sound Pressure Level at 13/26 V (Permissible Level < 118 dB (A))	Inspection Result
				Sound Pressure Level in the band 1800-3550 Hz (Permissible Level > 105 dB (A))				
				11.4/22.8 V	13.0/26.0 V	13.8/27.6 V		
1.	Russia	Yes	12	109.6	112.7	113.5	113.8	Satisfy the requirements
2.	Russia	Yes	12	108.8	109.7	110.1	110.2	Satisfy the requirements
3.	Russia	Yes	12	107.8	110.2	111.9	111.0	Satisfy the requirements
4.	Russia	Yes	12	106.0	110.5	115.9	110.7	Satisfy the requirements
5.	Russia	Yes	12	107.2	111.5	115.9	111.5	Satisfy the requirements
6.	Russia	Yes	12	107.7	109.3	109.5	109.5	Satisfy the requirements
7.	Spain	Yes	24	108.4	109.9	111.6	109.9	Satisfy the requirements
8.	Korea	Yes	24	107.2	108.7	108.7	109.3	Satisfy the requirements
9.	Korea	Yes	12	109.7	111.6	111.1	111.8	Satisfy the requirements
10.	China	Yes	12	103.7	104.6	105.2	105.4	Below limits
11.	China	Yes	12	105.4	105.7	105.8	106.4	Satisfy the requirements
12.	China	Yes	12	105.5	108.2	108.7	108.6	Satisfy the requirements
13.	China	Yes	12	104.7	105.8	105.2	105.8	Below limits
14.	China	Yes	12	79.1	100.1	99.5	100.4	Below limits
15.	China	Yes	12	106.0	105.2	105.0	105.8	Satisfy the requirements
16.	China	No	12	93.5	98.4	100.2	104.7	Below limits
17.	China	No	12	93.0	98.4	101.5	101.9	Below limits
18.	China	No	12	94.2	99.6	101.6	104.7	Below limits
19.	China	No	24	101.5	105.8	106.7	106.6	Below limits
20.	China	No	24	101.3	102.6	104.6	103.2	Below limits
21.	China	No	24	105.6	108.7	110.1	109.2	Satisfy the requirements
22.	China	No	24	95.7	98.2	100.9	101.4	Below limits
23.	China	No	24	92.5	96.6	98.3	103.3	Below limits
24.	China	No	24	95.1	98.9	101.1	104.4	Below limits

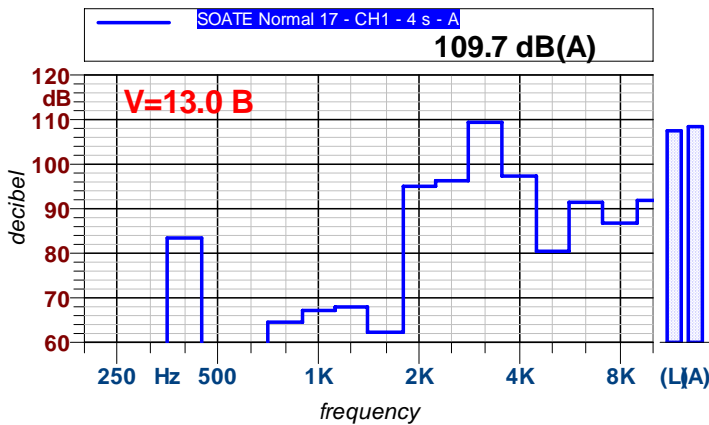
Audible Warning Device No.1



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
81.9	112.7	101.0

Sound Level, dB (A)	113.8
Sound Level, dB (L)	112.2

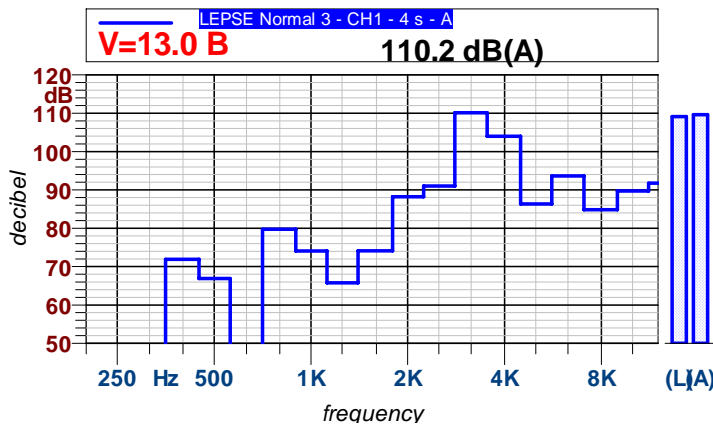
Audible Warning Device No.2



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
83.7	109.7	99.5

Sound Level, dB (A)	110.2
Sound Level, dB (L)	109.2

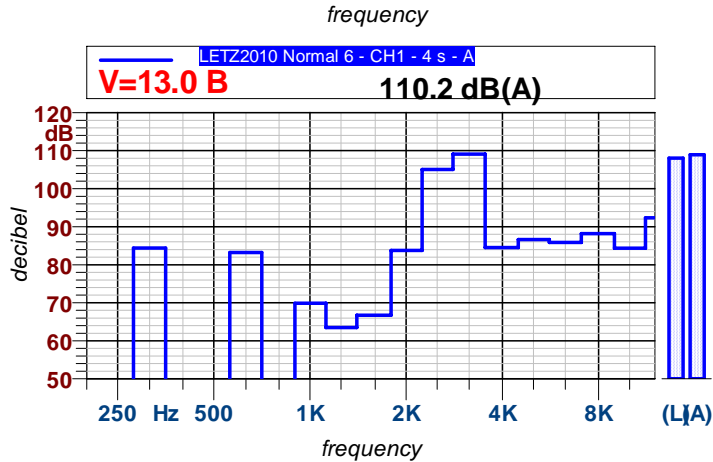
Audible Warning Device No.3



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
82.3	110.2	104.8

Sound Level, dB (A)	111.0
Sound Level, dB (L)	110.2

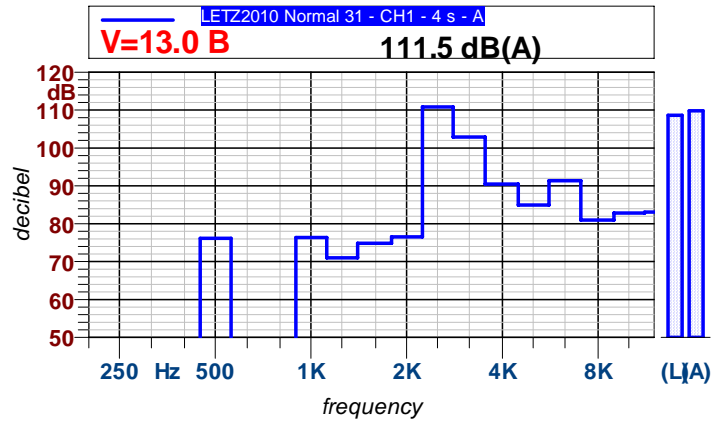
Audible Warning Device No.4



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
87.0	110.5	95.8

Sound Level, dB (A)	110.7
Sound Level , dB (L)	109.8

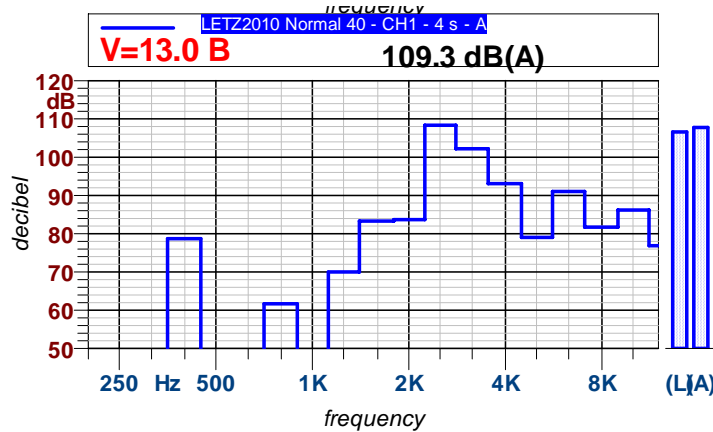
Audible Warning Device No.5



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
81.1	111.5	95.2

Sound Level, dB (A)	111.5
Sound Level , dB (L)	110.4

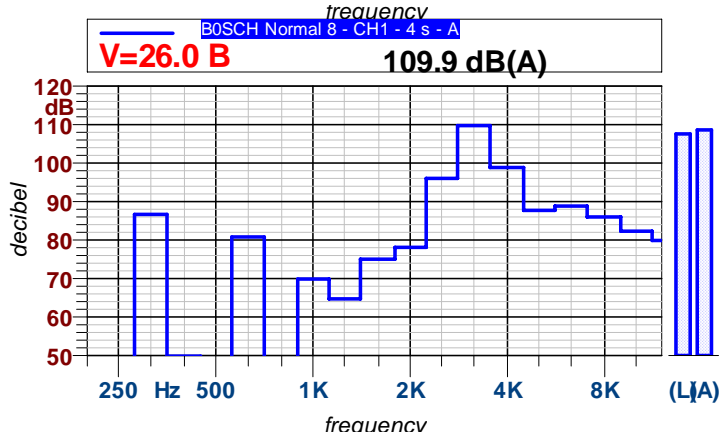
Audible Warning Device No.6



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
84.8	109.3	96.0

Sound Level, dB (A)	109.5
Sound Level , dB (L)	108.3

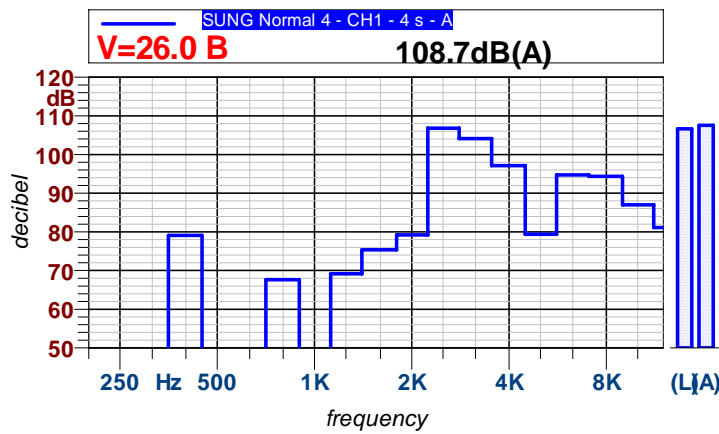
Audible Warning Device No.7



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
88.0	109.9	99.9

Sound Level, dB (A)	110.3
Sound Level, dB (L)	109.3

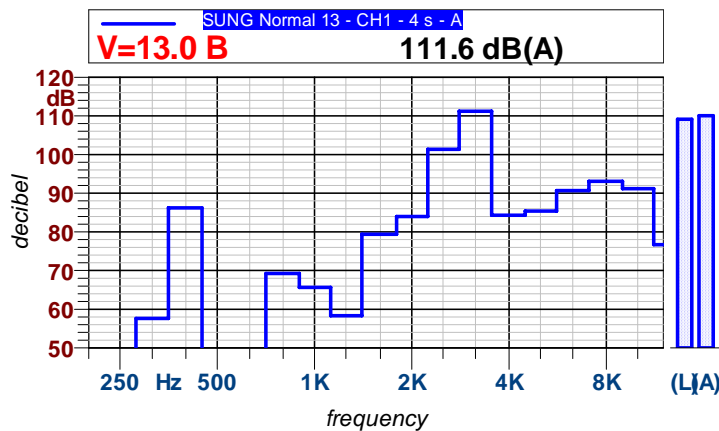
Audible Warning Device No.8



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
81.1	108.7	100.6

Sound Level, dB (A)	109.3
Sound Level, dB (L)	108.4

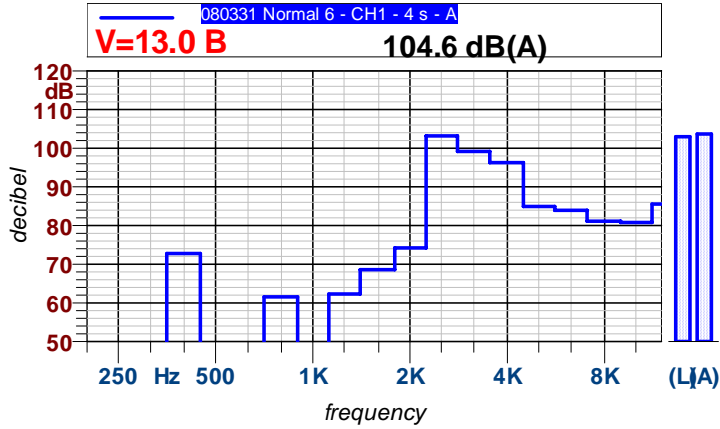
Audible Warning Device No.9



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
87.1	111.6	97.1

Sound Level, dB (A)	111.8
Sound Level, dB (L)	110.8

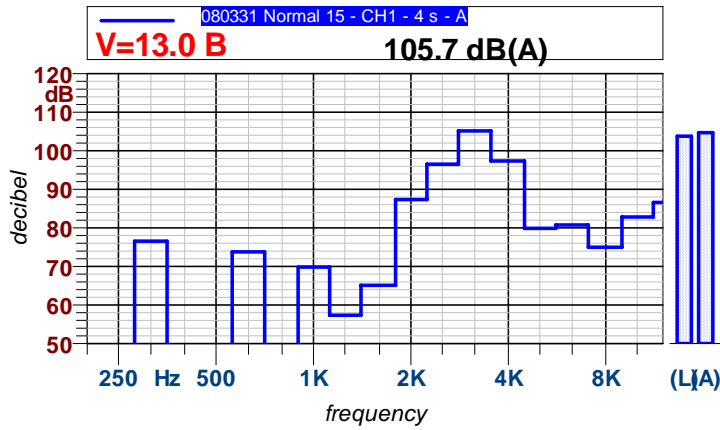
Audible Warning Device No.10



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
74.7	104.6	97.3

Sound Level, dB (A)	105.4
Sound Level , dB (L)	104.7

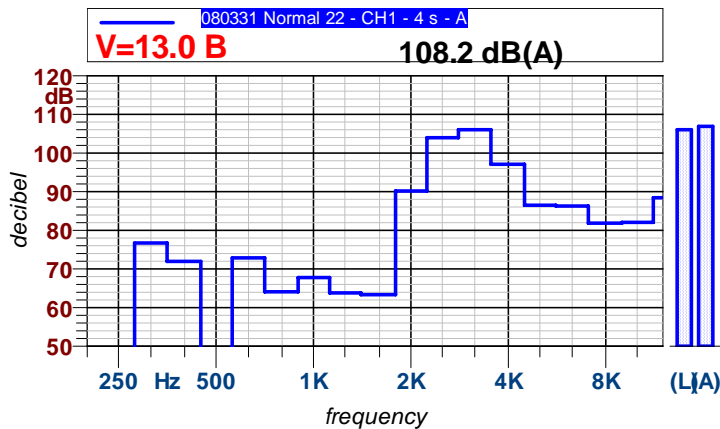
Audible Warning Device No.11



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
79.2	105.7	98.0

Sound Level, dB (A)	106.4
Sound Level , dB (L)	105.6

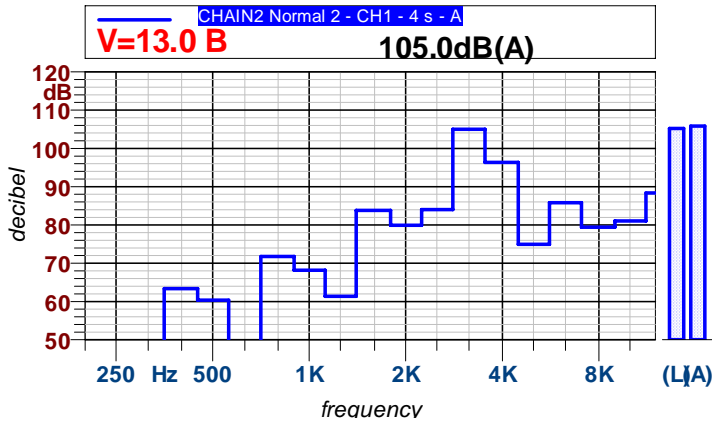
Audible Warning Device No.12



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
79.8	108.2	98.5

Sound Level, dB (A)	108.6
Sound Level , dB (L)	107.8

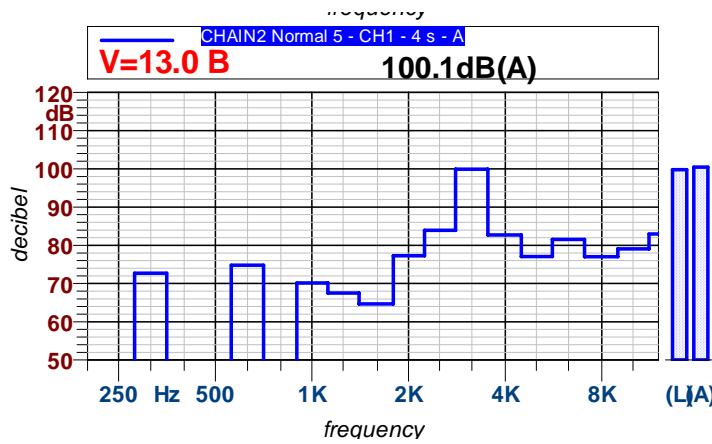
Audible Warning Device No.13



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
84.2	105.0	97.5

Sound Level, dB (A)	105.8
Sound Level , dB (L)	105.2

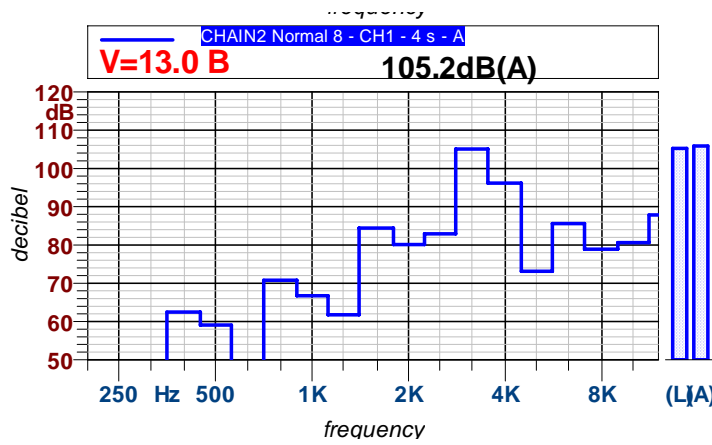
Audible Warning Device No.14



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
78.3	100.1	88.5

Sound Level, dB (A)	100.4
Sound Level , dB (L)	99.8

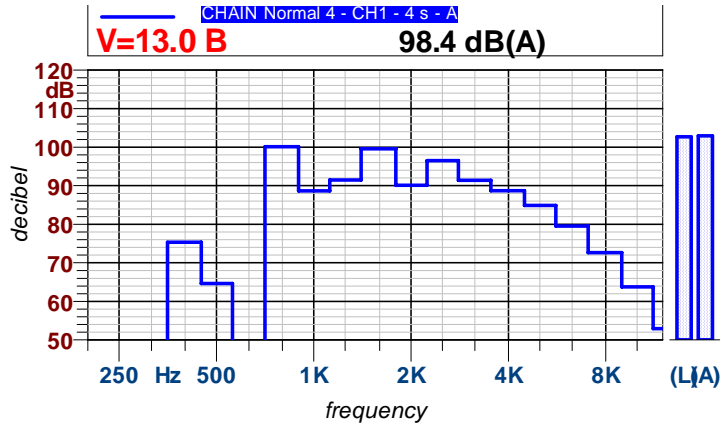
Audible Warning Device No.15



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
84.7	105.2	97.3

Sound Level, dB (A)	105.8
Sound Level , dB (L)	105.2

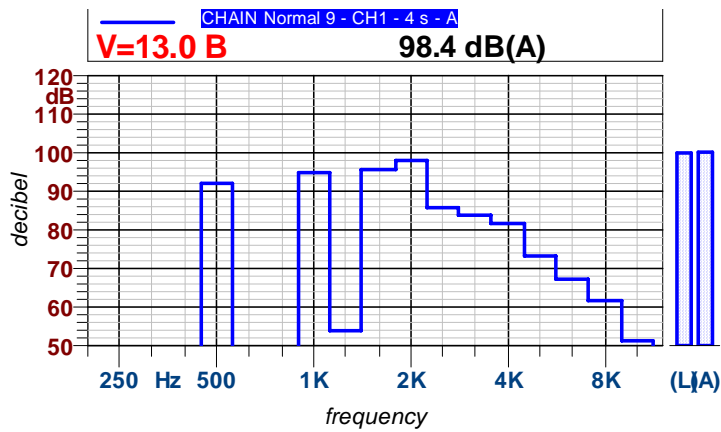
Audible Warning Device No.16



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
103.3	98.4	90.7

Sound Level, dB (A)	104.7
Sound Level , dB (L)	104.4

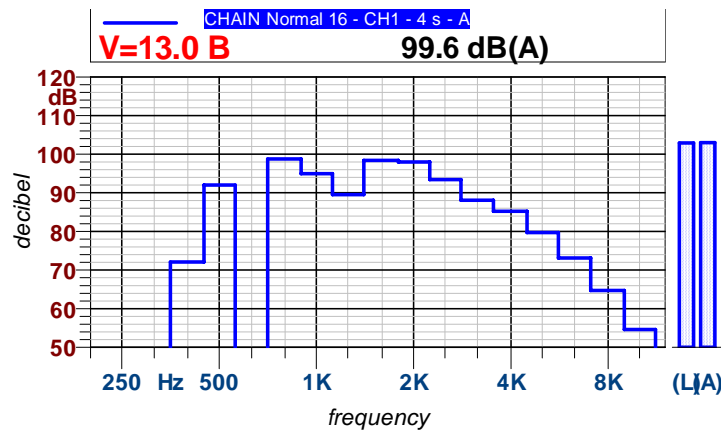
Audible Warning Device No.17



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
99.2	98.4	82.4

Sound Level, dB (A)	101.9
Sound Level , dB (L)	101.7

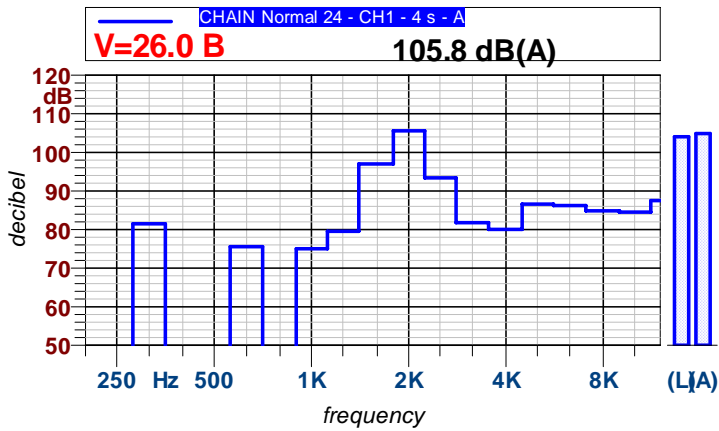
Audible Warning Device No.18



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
103.0	99.6	86.5

Sound Level, dB (A)	104.7
Sound Level , dB (L)	104.7

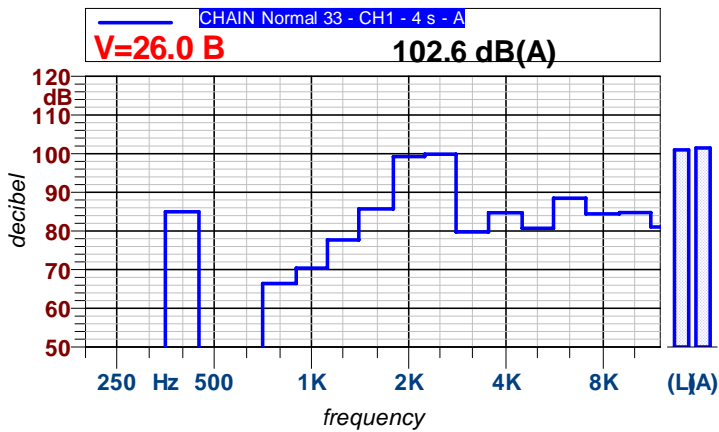
Audible Warning Device No.19



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
97.3	105.8	93.3

Sound Level, dB (A)	106.6
Sound Level , dB (L)	105.8

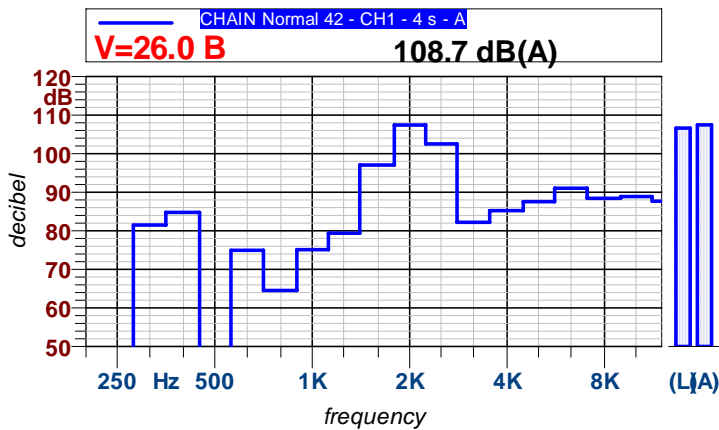
Audible Warning Device No.20



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
88.8	102.6	92.6

Sound Level, dB (A)	103.2
Sound Level , dB (L)	102.7

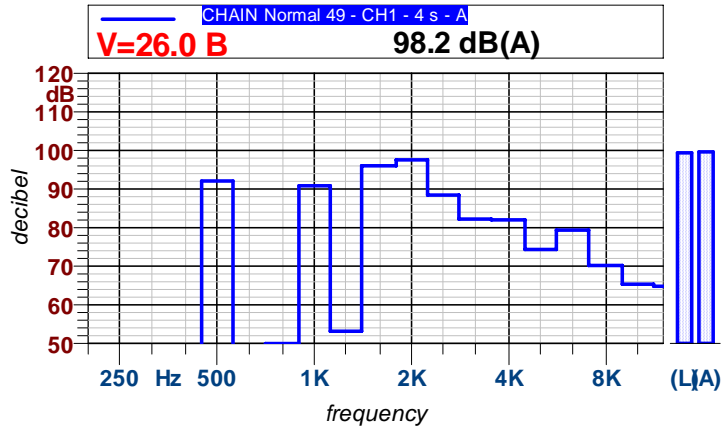
Audible Warning Device No.21



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
97.5	108.7	96.3

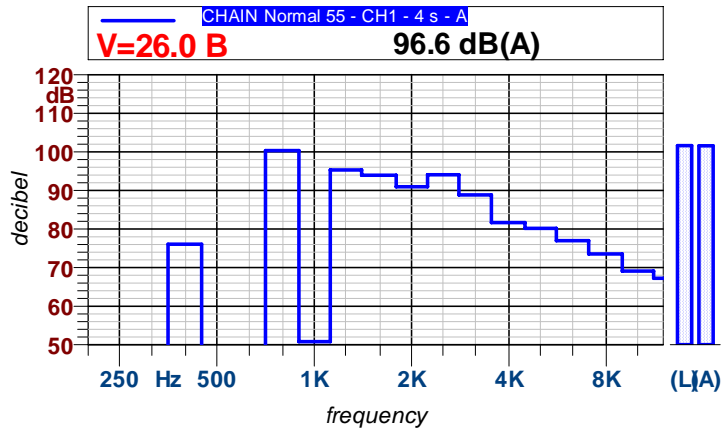
Sound Level, dB (A)	109.2
Sound Level , dB (L)	108.4

Audible Warning Device No.22



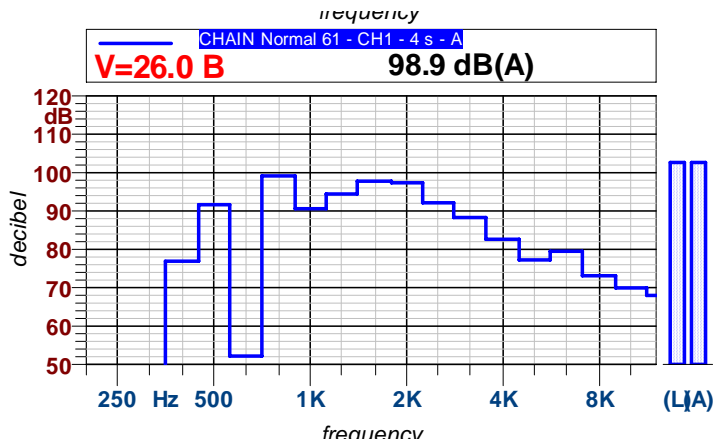
Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
98.3	98.2	84.6
Sound Level, dB (A)		101.4
Sound Level , dB (L)		101.2

Audible Warning Device No.23



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
102.2	96.6	85.3
Sound Level, dB (A)		103.3
Sound Level , dB (L)		103.4

Audible Warning Device No.24



Sound Pressure Level, dB (A)		
f<1800 Hz	(1800-3550) Hz	f>3550 Hz
102.9	98.9	85.6
Sound Level, dB (A)		104.4
Sound Level , dB (L)		104.4