



3893  
2011

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**ISO 389-3:1994**  
**Acoustics — Reference zero for the calibration of audiometric equipment — Part 3:**  
**Reference equivalent threshold force levels for pure tones and bone vibrators**  
**(IDT)**



2012

2 358 « »

3 1 2011 . 671-

4 389-3:1994 «

3.

» (ISO 389-3:1994 «Acoustics — Reference zero for the calibration of audiometric equipment — Part3: Reference equivalent threshold sound pressure levels for pure tones and bone vibrators»).

1.5 ( 3.5).

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389\*1:1991

389\*2:1994

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Федеральное агентство  
по техническому регулированию  
и метрологии

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по техническому регулированию  
и метрологии

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State system for ensuring the uniformity of measurements. Acoustics. Reference for the calibration of audiometric equipment. Part 3. Reference equivalent threshold sound pressure levels of bone vibrators for pure tones

— 2012—12—01

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a)

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( . 5.3)

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b)

c)

8253-1.

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389-1:1998

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( 389-1:1998 Acoustics — Reference zero for the calibration of audiometric equipment — Part 1: Reference equivalent threshold sound pressure levels for pure tones and supra-aural earphones)

( 389\*2:1994 Acoustics-\* Reference zero for the calibration of audiometric equipment— Part 2: Reference equivalent threshold sound pressure levels for pure tones and insert earphones)

60318\*6:2007

6.

(IEC 60318\*6 ed.I.O (2007\*11),

Electroacoustics — Simulators of human head and ear — Part 6: Mechanical coupler for the measurement on bone vibrators)

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389\*1. 389\*2.

3.1 (bone conduction):

3.2 (bone vibrator):

3.3 ( ) [alternating force level (of a vibration)).

, 3.4 , 1 (mechanical coupler):

60318\*6.

3.5  
)) [equivalent threshold force level (monaural listening)]:

3.6 equivalent threshold force level (RETFL):

(        )<sup>1\*</sup> [reference

18 30

3.7 ( ) [hearing level (of a pure tone)]:  
( )

( , « ) ( )

3.8 (occlusion effect):

RETFL.

07072026

3.9 (masking): ,  
       (                      ) ,

3.10 (                      ) (datum level of masking noise): 1/3-  
       ( . 3.7).

35

1/3-

1           35                   » ,

2                                  369-4.

3.11 (critical bandwidth): ,

3.12 (vibrotactile threshold level): ,  
       50 %

3.13 (white noise): ,

**4** , , 1.

, , 5( .  
   ).

1 , , 1.

2           250 , , D.

1 — , ,

<i>f</i>	" { 1 <> , /	" ( 1 ),
250	67.0	1600*
315	64.0	2000
400**	61.0	2500**
500	58.0	3000
630**	52.5	3150*
750**	48.5	4000
800**	47.0	5000"
1000	42.5	6000s*
1250**	39.0	6300
1500**	36.5	8000
"	0.5	
*		
S		

**5**

5.1

175 2.

10

2000

5.2

5.4

5.3

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(1971) 373,

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5.4

250 400

1 %

1250

500 1000

2 %

5.5

1/3-

5.6

389-2

389-1

5.7

4,5

389-2.

5.8

( . 3.10).

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3.10.

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50 % ( . 389-4).

20

40

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389-2

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43 « ».

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-71"	-71"	-70*	
TDH39 <sup>11</sup>	TDH39 <sup>11</sup>	48 <sup>&lt;1</sup>	
30 . 9'	25 40 .	40 . 9' 125 . 250 : 30 . 9'	
60	136	50	
60	66	25	
250. 500. 1000. 2000. 3000. 4000	250. 500. 1000. 2000. 3000. 4000	125. 250. 500. 750. . 1500. 2000. 3000. 4000. 5000. 6000. 6300. 8000	

" Radioear Corporation.

21 Grahnert Pracitronic. GmbH.

\*1 Telephonica Corporation,

41 Beyer AG.

(4).

4.

(2). S

0

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4 5.

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.2

(11)

 $(175 \pm 25)^{\frac{2}{2}}$ 

(0.5 ).

250

(5.4 0.5)

5.4

145

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) 190 (

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(5.4 ± 0.5)

[11].

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(23 11)\* .

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(4.5 0.5)

389-1 389-2.

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1/3

(10).

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2.

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	( ) ( ) <sup>1*</sup> ,	.	( ) ( ) <sup>1*</sup> .
250	12,0	1600 <sup>2*</sup>	11.0
315 <sup>1</sup>	12.5	2000	11.0
400 <sup>1</sup>	13,5	2500 <sup>31</sup>	11.05
SOO	14.0	3000	12.0
630 <sup>1</sup>	13.5	3150 <sup>31</sup>	11.5
750 <sup>s1</sup>	13.0	4000	6.0
800 <sup>*1</sup>	12.0	SOOO <sup>31</sup>	11.0
1000	12.0	6000 <sup>31</sup>	11.0
12S0 <sup>1</sup>	8.5	6300 <sup>31</sup>	10.0
1500 <sup>*1</sup>	10,0	8000 <sup>**</sup>	10.0
"	0.5	.	.
*		.	.
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	8-71	8-71	-70	8-71
-	26	30	50	50
	26	30	25	25
	250. 500. 1000. 2000. 3000.4000 <sup>*1</sup>	250. 500. 1000. 2000. 3000.4000	125. 250. 500. 750. 1000. 1500. 2000. 3000. 4000. 5000.6000.6300. 8000	250. 500. 750. 1500. 2000. 3000. 4000

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4000

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8.2).

125 250

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0.1 .

5.1—5.3    5.5—5.8.  
 5.4.              2%.

0.1 —

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125	82.5	7.0
ISO <sup>1</sup>	77.5	8.5
200 <sup>*1</sup>	72.5	10.5
> 2>	0.5 .	.

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389*1:1998		389*1—2011 « 1. * . . .
389*2:1994		369*2—2011 « 2. * . . .
80318*6:2007	—	
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- (II) IEC 60645-1 ed2.0 (2001-06) «Electroacoustics — Audiological equipment — Part 1: Pure-tone audiometers»

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