



**International
Standard**

ISO 7029

**Acoustics — Statistical distribution
of hearing thresholds related to age
and gender**

**AMENDMENT 1: Correction of
parameter values for estimating the
hearing threshold distribution**

*Acoustique — Distribution statistique des seuils d'audition en
fonction de l'âge et du sexe*

*AMENDEMENT 1: Correction des valeurs des paramètres pour
l'estimation de la distribution des seuils d'audition*

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**AMENDMENT 1
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Acoustics — Statistical distribution of hearing thresholds related to age and gender

AMENDMENT 1: Correction of parameter values for estimating the hearing threshold distribution

4.3, Tables 2 to 5

Replace them with the tables below, respectively:

Table 2 — Values of $\gamma_{n,su}$ ($n = 0, 1, 2, \dots, 5$) in Formula (2) for males

Frequency Hz	$\gamma_{0,su}$	$\gamma_{1,su}$	$\gamma_{2,su}$	$\gamma_{3,su}$	$\gamma_{4,su}$	$\gamma_{5,su}$
125	4,629	$6,447 \times 10^{-1}$	$-8,849 \times 10^{-2}$	$3,691 \times 10^{-3}$	$-5,976 \times 10^{-5}$	$3,394 \times 10^{-7}$
250	5,267	$7,097 \times 10^{-1}$	$-9,128 \times 10^{-2}$	$3,637 \times 10^{-3}$	$-5,741 \times 10^{-5}$	$3,218 \times 10^{-7}$
500	4,981	$7,507 \times 10^{-1}$	$-9,202 \times 10^{-2}$	$3,677 \times 10^{-3}$	$-5,836 \times 10^{-5}$	$3,281 \times 10^{-7}$
750	4,651	$7,329 \times 10^{-1}$	$-8,814 \times 10^{-2}$	$3,590 \times 10^{-3}$	$-5,760 \times 10^{-5}$	$3,241 \times 10^{-7}$
1 000	4,420	$7,140 \times 10^{-1}$	$-8,541 \times 10^{-2}$	$3,569 \times 10^{-3}$	$-5,816 \times 10^{-5}$	$3,286 \times 10^{-7}$
1 500	4,144	$6,787 \times 10^{-1}$	$-8,044 \times 10^{-2}$	$3,518 \times 10^{-3}$	$-5,886 \times 10^{-5}$	$3,347 \times 10^{-7}$
2 000	4,098	$6,318 \times 10^{-1}$	$-7,534 \times 10^{-2}$	$3,457 \times 10^{-3}$	$-5,937 \times 10^{-5}$	$3,401 \times 10^{-7}$
3 000	4,295	$5,302 \times 10^{-1}$	$-6,283 \times 10^{-2}$	$3,090 \times 10^{-3}$	$-5,368 \times 10^{-5}$	$2,946 \times 10^{-7}$
4 000	4,682	$4,554 \times 10^{-1}$	$-5,519 \times 10^{-2}$	$2,946 \times 10^{-3}$	$-5,300 \times 10^{-5}$	$2,919 \times 10^{-7}$
6 000	5,613	$3,626 \times 10^{-1}$	$-4,721 \times 10^{-2}$	$2,920 \times 10^{-3}$	$-5,581 \times 10^{-5}$	$3,121 \times 10^{-7}$
8 000	6,615	$2,912 \times 10^{-1}$	$-4,155 \times 10^{-2}$	$2,921 \times 10^{-3}$	$-5,852 \times 10^{-5}$	$3,330 \times 10^{-7}$

Table 3 — Values of $\gamma_{n,sl}$ ($n = 0, 1, 2, \dots, 5$) in Formula (3) for males

Frequency Hz	$\gamma_{0,sl}$	$\gamma_{1,sl}$	$\gamma_{2,sl}$	$\gamma_{3,sl}$	$\gamma_{4,sl}$	$\gamma_{5,sl}$
125	3,336	$1,307 \times 10^{-1}$	$-2,025 \times 10^{-2}$	$1,120 \times 10^{-3}$	$-2,281 \times 10^{-5}$	$1,568 \times 10^{-7}$
250	3,320	$2,304 \times 10^{-1}$	$-2,539 \times 10^{-2}$	$1,205 \times 10^{-3}$	$-2,269 \times 10^{-5}$	$1,458 \times 10^{-7}$
500	3,428	$3,620 \times 10^{-1}$	$-4,110 \times 10^{-2}$	$1,869 \times 10^{-3}$	$-3,445 \times 10^{-5}$	$2,208 \times 10^{-7}$
750	3,596	$3,839 \times 10^{-1}$	$-4,432 \times 10^{-2}$	$1,977 \times 10^{-3}$	$-3,549 \times 10^{-5}$	$2,222 \times 10^{-7}$
1 000	3,771	$3,633 \times 10^{-1}$	$-4,187 \times 10^{-2}$	$1,821 \times 10^{-3}$	$-3,145 \times 10^{-5}$	$1,890 \times 10^{-7}$
1 500	3,930	$3,645 \times 10^{-1}$	$-4,219 \times 10^{-2}$	$1,792 \times 10^{-3}$	$-2,965 \times 10^{-5}$	$1,703 \times 10^{-7}$
2 000	4,012	$3,872 \times 10^{-1}$	$-4,472 \times 10^{-2}$	$1,874 \times 10^{-3}$	$-3,024 \times 10^{-5}$	$1,693 \times 10^{-7}$
3 000	4,105	$4,046 \times 10^{-1}$	$-4,557 \times 10^{-2}$	$1,857 \times 10^{-3}$	$-2,828 \times 10^{-5}$	$1,464 \times 10^{-7}$
4 000	4,095	$4,385 \times 10^{-1}$	$-4,776 \times 10^{-2}$	$1,921 \times 10^{-3}$	$-2,843 \times 10^{-5}$	$1,404 \times 10^{-7}$
6 000	4,007	$4,972 \times 10^{-1}$	$-4,973 \times 10^{-2}$	$1,930 \times 10^{-3}$	$-2,672 \times 10^{-5}$	$1,178 \times 10^{-7}$
8 000	3,900	$5,594 \times 10^{-1}$	$-5,620 \times 10^{-2}$	$2,401 \times 10^{-3}$	$-3,925 \times 10^{-5}$	$2,287 \times 10^{-7}$

Table 4 — Values of $\gamma_{n,su}$ ($n = 0, 1, 2, \dots, 5$) in Formula (2) for females

Frequency Hz	$\gamma_{0,su}$	$\gamma_{1,su}$	$\gamma_{2,su}$	$\gamma_{3,su}$	$\gamma_{4,su}$	$\gamma_{5,su}$
125	5,024	$4,074 \times 10^{-1}$	$-4,706 \times 10^{-2}$	$1,794 \times 10^{-3}$	$-2,881 \times 10^{-5}$	$1,803 \times 10^{-7}$
250	4,992	$4,869 \times 10^{-1}$	$-4,930 \times 10^{-2}$	$1,822 \times 10^{-3}$	$-2,856 \times 10^{-5}$	$1,704 \times 10^{-7}$
500	4,693	$4,996 \times 10^{-1}$	$-5,011 \times 10^{-2}$	$1,881 \times 10^{-3}$	$-2,923 \times 10^{-5}$	$1,674 \times 10^{-7}$
750	4,484	$4,957 \times 10^{-1}$	$-5,061 \times 10^{-2}$	$1,936 \times 10^{-3}$	$-3,001 \times 10^{-5}$	$1,680 \times 10^{-7}$
1 000	4,352	$4,825 \times 10^{-1}$	$-5,026 \times 10^{-2}$	$1,965 \times 10^{-3}$	$-3,061 \times 10^{-5}$	$1,698 \times 10^{-7}$
1 500	4,209	$4,767 \times 10^{-1}$	$-5,075 \times 10^{-2}$	$2,047 \times 10^{-3}$	$-3,219 \times 10^{-5}$	$1,770 \times 10^{-7}$
2 000	4,253	$4,550 \times 10^{-1}$	$-4,899 \times 10^{-2}$	$2,015 \times 10^{-3}$	$-3,165 \times 10^{-5}$	$1,710 \times 10^{-7}$
3 000	4,343	$4,743 \times 10^{-1}$	$-5,135 \times 10^{-2}$	$2,194 \times 10^{-3}$	$-3,544 \times 10^{-5}$	$1,955 \times 10^{-7}$
4 000	4,614	$4,736 \times 10^{-1}$	$-5,014 \times 10^{-2}$	$2,163 \times 10^{-3}$	$-3,455 \times 10^{-5}$	$1,840 \times 10^{-7}$
6 000	5,201	$4,952 \times 10^{-1}$	$-4,978 \times 10^{-2}$	$2,181 \times 10^{-3}$	$-3,463 \times 10^{-5}$	$1,775 \times 10^{-7}$
8 000	5,861	$5,067 \times 10^{-1}$	$-4,798 \times 10^{-2}$	$2,138 \times 10^{-3}$	$-3,406 \times 10^{-5}$	$1,712 \times 10^{-7}$

Table 5 — Values of $\gamma_{n,sl}$ ($n = 0, 1, 2, \dots, 5$) in Formula (3) for females

Frequency Hz	$\gamma_{0,sl}$	$\gamma_{1,sl}$	$\gamma_{2,sl}$	$\gamma_{3,sl}$	$\gamma_{4,sl}$	$\gamma_{5,sl}$
125	3,630	$4,812 \times 10^{-2}$	$2,039 \times 10^{-3}$	$-5,642 \times 10^{-5}$	$-1,049 \times 10^{-6}$	$2,399 \times 10^{-8}$
250	3,057	$2,425 \times 10^{-1}$	$-9,369 \times 10^{-3}$	$1,635 \times 10^{-4}$	$-1,781 \times 10^{-6}$	$1,516 \times 10^{-8}$
500	2,981	$3,401 \times 10^{-1}$	$-1,773 \times 10^{-2}$	$3,697 \times 10^{-4}$	$-3,040 \times 10^{-6}$	$1,137 \times 10^{-8}$
750	3,035	$3,749 \times 10^{-1}$	$-2,207 \times 10^{-2}$	$5,029 \times 10^{-4}$	$-4,214 \times 10^{-6}$	$1,190 \times 10^{-8}$
1 000	3,123	$3,924 \times 10^{-1}$	$-2,511 \times 10^{-2}$	$6,191 \times 10^{-4}$	$-5,644 \times 10^{-6}$	$1,653 \times 10^{-8}$
1 500	3,318	$3,954 \times 10^{-1}$	$-2,757 \times 10^{-2}$	$7,316 \times 10^{-4}$	$-6,974 \times 10^{-6}$	$1,908 \times 10^{-8}$
2 000	3,457	$4,034 \times 10^{-1}$	$-2,973 \times 10^{-2}$	$8,299 \times 10^{-4}$	$-8,130 \times 10^{-6}$	$2,093 \times 10^{-8}$
3 000	3,690	$4,001 \times 10^{-1}$	$-3,112 \times 10^{-2}$	$9,419 \times 10^{-4}$	$-1,004 \times 10^{-5}$	$2,938 \times 10^{-8}$
4 000	3,860	$3,907 \times 10^{-1}$	$-3,033 \times 10^{-2}$	$9,259 \times 10^{-4}$	$-9,132 \times 10^{-6}$	$1,642 \times 10^{-8}$
6 000	4,028	$4,119 \times 10^{-1}$	$-3,206 \times 10^{-2}$	$1,064 \times 10^{-3}$	$-1,155 \times 10^{-5}$	$2,670 \times 10^{-8}$
8 000	4,103	$4,302 \times 10^{-1}$	$-3,246 \times 10^{-2}$	$1,140 \times 10^{-3}$	$-1,322 \times 10^{-5}$	$3,582 \times 10^{-8}$

4.4, Formula (5)

Replace “+ ks_1 ” with “- ks_1 ”.

B.2

In Step 3, replace the values of $\gamma_{0,su}$, $\gamma_{1,su}$, $\gamma_{2,su}$, $\gamma_{3,su}$, $\gamma_{4,su}$ and $\gamma_{5,su}$ (i.e. 4,68, 0,455, $-5,52 \times 10^{-2}$, $2,95 \times 10^{-3}$, $-5,30 \times 10^{-5}$ and $2,92 \times 10^{-7}$) with

4,682, $4,554 \times 10^{-1}$, $-5,519 \times 10^{-2}$, $2,946 \times 10^{-3}$, $-5,300 \times 10^{-5}$, $2,919 \times 10^{-7}$, respectively.

In Step 4, replace the values of $\gamma_{0,su}$, $\gamma_{1,su}$, $\gamma_{2,su}$, $\gamma_{3,su}$, $\gamma_{4,su}$, $\gamma_{5,su}$ and s_u (i.e. 4,68, 0,455, $-5,52 \times 10^{-2}$, $2,95 \times 10^{-3}$, $-5,30 \times 10^{-5}$, $2,92 \times 10^{-7}$ and 18,22) with

4,682, $4,554 \times 10^{-1}$, $-5,519 \times 10^{-2}$, $2,946 \times 10^{-3}$, $-5,300 \times 10^{-5}$, $2,919 \times 10^{-7}$ and 17,95 respectively.

In Step 6, replace the values of s_u and $\Delta H_{25,60}$ (i.e. 18,22 and 32,49) with 17,95 and 32,30, respectively.