

NoiseBox® Performance

NoiseBox® is a soundproof, sound masking device used for protection against eavesdropping attacks of cell phones and mobile devices equipped with microphones. The noise generation is truly randomized, non-algorithm based, and is built up from several different sources.

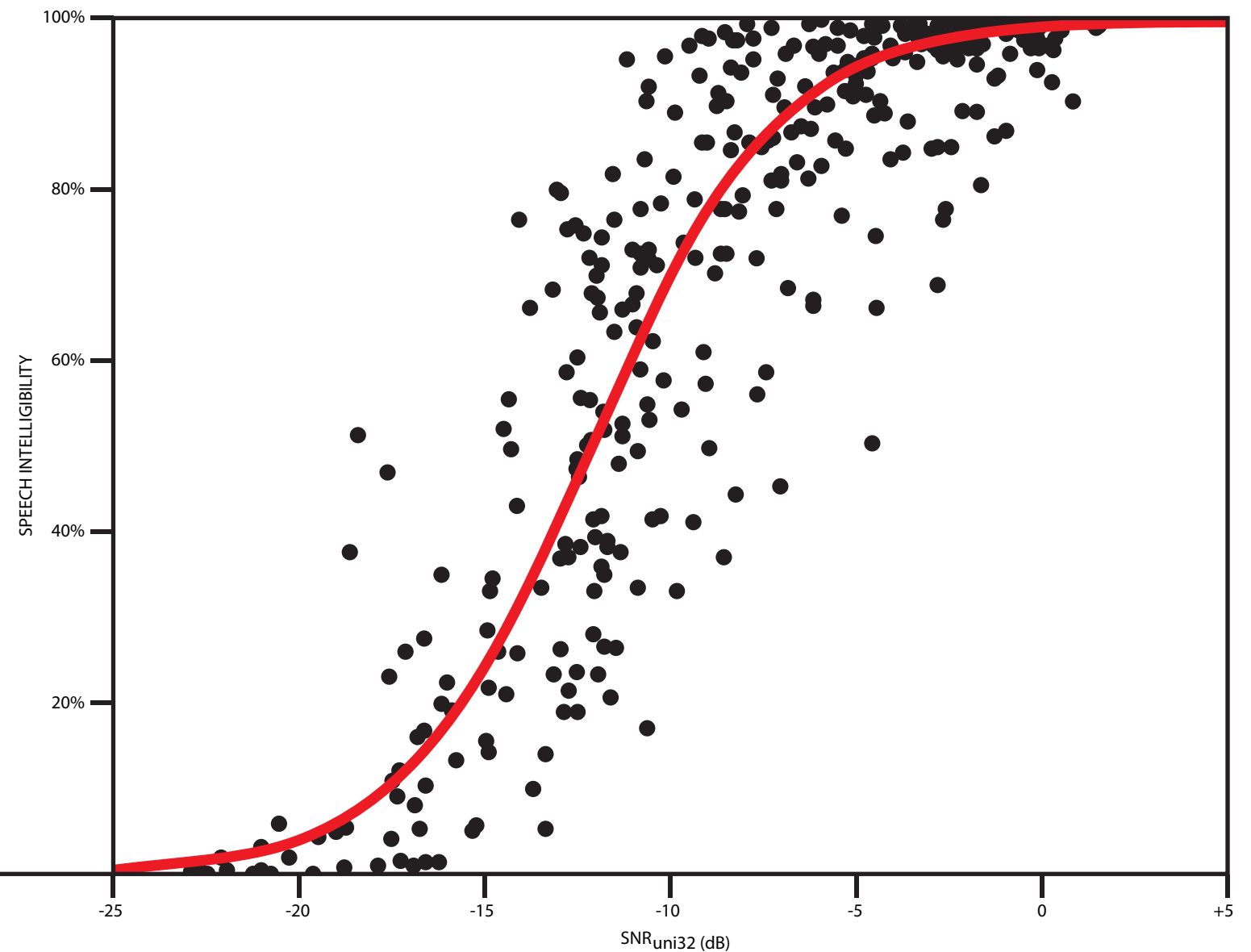
NoiseBox® was originally designed as a response to a demand from the Swedish police and military authorities. It has been tested by them, with resulting further improvements. Since 2012 thousands of NoiseBox® have been delivered to Swedish and foreign authorities and companies. Designed by Swedish craftsmanship from massive beech or oak these beautiful boxes will fit into any meeting room.

NoiseBox®-S1 has also been tested at Research Institutes of Sweden (RISE/SP) with excellent result. After measurements RISE/SP stated:

"Presume a worst-case scenario of a raised voice conversation/argumentation in a room of approx. 85 dBA (human shouting) there is an extremely low probability to record or distinguish what is being said in similar recording inside the box when the masking noise is on and the box lid is closed. Observe that normal conversations are around 60-65 dBA in sound level."



NoiseBox®-S1



SNRuni32 is a parameter that can be matched against speech intelligibility. The parameter is a result of research performed by Bradley, J.S. and Gover, B.N.⁽¹⁾ The researchers found that a value of -16dB or less is the threshold for intelligibility. All NoiseBox® are below this value and NoiseBox®-S1 and S1+ has a value of -44dB⁽²⁾ which gives a margin for eavesdropping of 28dB.

(1) Bradley, J.S. and Gover, B.N. "A new system of speech privacy criteria in terms of Speech Privacy Class (SPC) values." *Proceedings of 20th International Congress on Acoustics, ICA, 2010.*
(2) SNR calculated for relevant speech frequencies 160 – 5000 Hz, female and male voices of 85.5dB (human shouting).