

# **Hearing Protection Test Report**

### **Prepared for**

David James Based upon a test conducted on 06/14/2021 date. London – 2021

# Hearing is vital to well-being:

Hearing loss has long been recognised to cause sufferers to feel isolated, depressed and anxious. In the case of Noise Induced Hearing Loss it is also irreversible with hearing aids being the only viable help available which are not on most people's wish list for their later years. Tinnitus (noises in the head) often accompanies hearing loss and is something else to be avoided if possible.

## Hearing is also vital to general health:

Recent studies have demonstrated a clear link between the onset of dementia and untreated hearing loss. The website contains a link to an article published in The Lancet on this subject. The following quote is from another study carried out by John Hopkins University:

In a study that tracked 639 adults for nearly 12 years, Johns Hopkins expert <u>Frank Lin</u>, <u>M.D.</u>, <u>Ph.D</u>, and his colleagues found that mild hearing loss doubled dementia risk. Moderate loss tripled risk, and people with a severe hearing impairment were five times more likely to develop dementia.

Source: https://www.hopkinsmedicine.org/health/wellness-and-prevention/the-hiddenrisks-of-hearing-loss Poorly performing hearing protection is a menace to you and your long term health. Using this test to ensure your hearing protection works adequately is a very small investment in time and money for such a massive long-term gain.

## **Hearing Protection test results:**

Noise becomes damaging at 85dB and the louder it gets the less time we can safely spend in it. This test accurately measures the effectiveness of your earplugs and expresses the value as your Personal Attenuation Rating (PAR). PAR is directly comparable to SNR. This report will identify how your protection performs compared to manufacturers specification (if known) or, if you didn't know the SNR, how it performs compared to BS EN 352 minimum attenuation values.



Specification for your hearing protection is represented by the green line and the actual performance (PSA) is represented by the blue line for your left ear and the red line for your right ear. Black lines at one or more frequencies indicate we were unable to establish a value we had confidence in, hearing loss being the most likely cause.

SNR	15
PAR - Left	16
PAR - Right	35

Research suggests manufacturer SNR data should be de-rated by at least 3dB. On that basis both of your ear protectors are meeting or exceeding specification. Please see below to determine if this is enough protection to meet your individual needs.

Now you know the actual performance of your hearing protection subtract it from the level of noise you are exposed to. Your employer may be able to provide you with an accurate value if they've had a noise survey done otherwise use the "Did you know" chart on the noise exposure page of the website to estimate the level.

This represents the amount of noise you are exposed to with hearing protection.

Now check the "Maximum exposure time in 24 hours" chart to see how long you can safely be in that level of noise. If you are exposed to noise for longer than the maximum safe time you either need to reduce the amount of time you spend in noise to a safe level or change your hearing protection to something that is safe.

## Recommendations

- 1. You told us your employer pays for your hearing protection. We recommend you show them this report.
- 2. In-ear hearing protection that is over five years old is highly likely to need to be replaced.

### **Responses.**

Question	Answer
Do you use your hearing protection for work?	Construction