

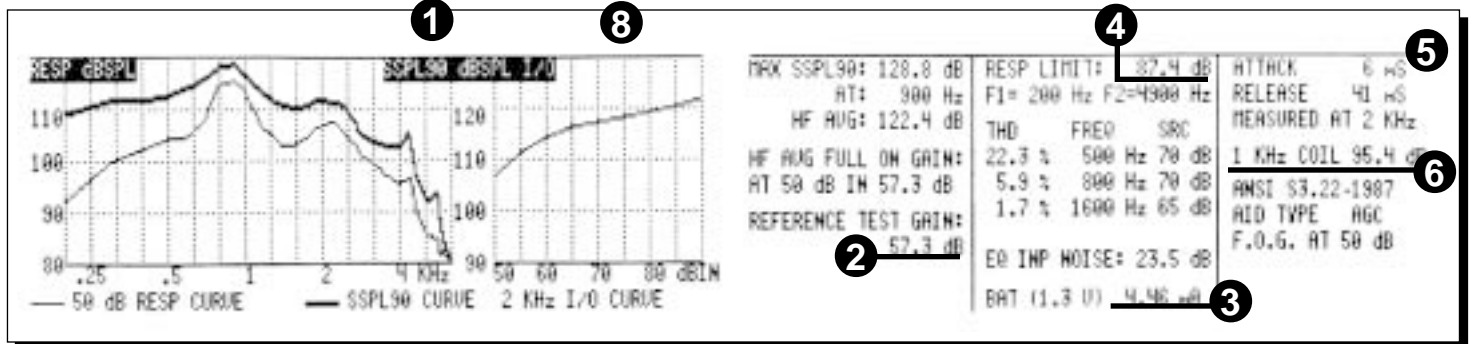
# One Hearing Aid—Two Standards

## ANSI S3.22-1987 and ANSI S3.22-1996

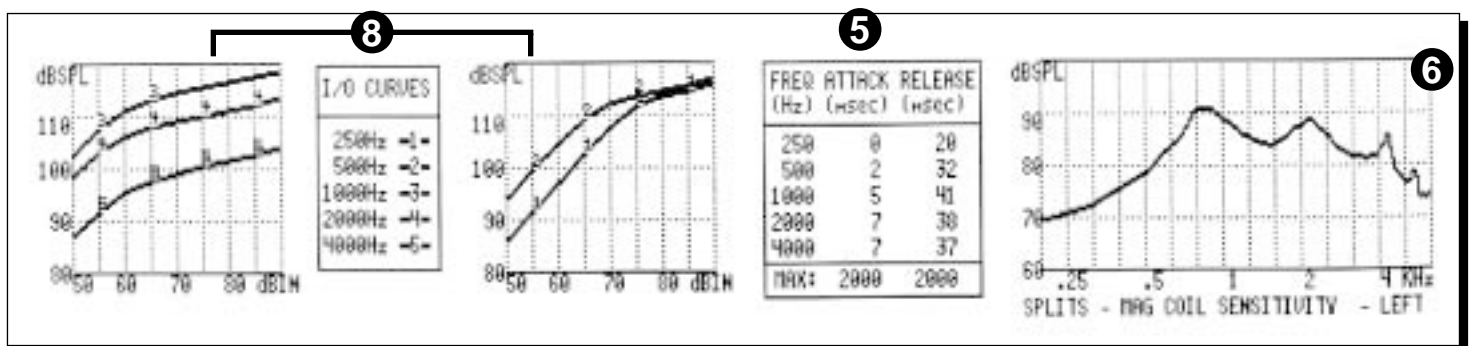
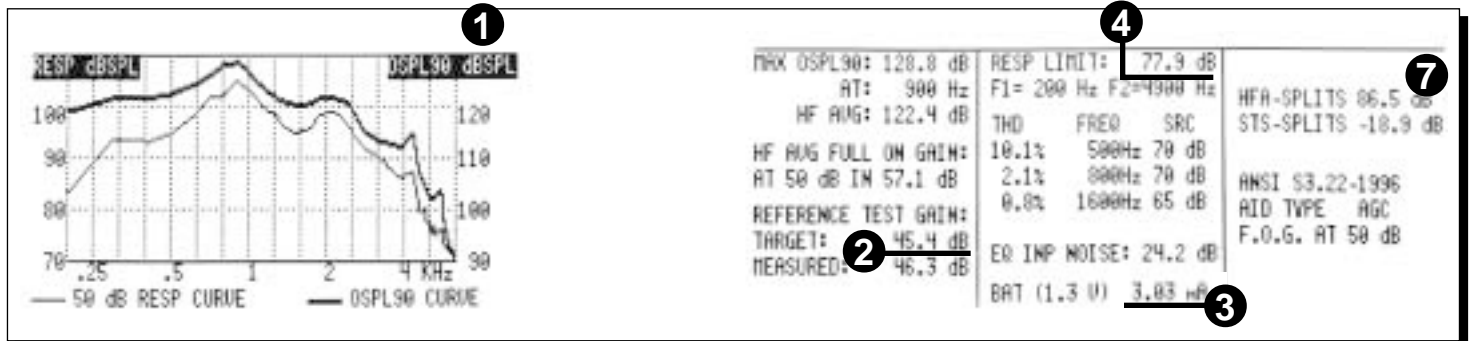
The ANSI '96 standard is a very different standard from the earlier one. Here is an example of what one hearing aid looks like when tested with test sequences based on the old and new standards. Many of the differences are pointed out here as they appear on the test strips

This new information will help you in understanding the new, more advanced hearing aids.

### ANSI '87



### ANSI '96



graphs shown smaller than actual size

- 1 change in terminology
- 2 reference test gain
- 3 battery current
- 4 response limit
- 5 attack & release
- 6 telecoil measurement now full frequency test
- 7 new telecoil calculations
- 8 multiple input output curves

# Changes in the ANSI S3.22 Standard

## ANSI 1987

## ANSI 1996

|  |  |
|--|--|
| “Saturation Sound Pressure Level with a 90-dB input” (SSPL90)                                | “Output SPL with a 90-dB input” (OSPL90)   |
| AGC aids measured using full-on gain   | AGC aids measured using reduced reference-test position  |
| AGC aids measured using attack and release levels 55-80-55                                   | AGC aids measured using attack and release levels 55-90-55   |
| Attack level for AGC aids determined when a steady state within 2 dB is attained             | Attack level for AGC aids determined when a steady state within 3 dB is attained   |
| Release level for AGC aids determined when a steady state within 2 dB is attained            | Release level for AGC aids determined when a steady state within 4 dB is attained  |
| I/O curve for AGC aids measured at 2000 Hz with input levels from 50 to 90 dB in 10 dB steps | I/O curves for AGC aids measured with a choice of 250, 500, 1000, 2000, and 4000 Hz with input levels from 50 to 90 dB in 5-dB steps   |
| Telecoil measured with full-on gain  | Telecoil measured with reduced reference-test gain   |
| Telecoil measured with a weak magnetic field   | Telecoil measured with a 10 dB stronger magnetic field created with a “Telecoil Magnetic Field Simulator” (TMFS)   |
| Telecoil measured with a frequency of 1000 Hz  | Telecoil measured with a range of frequencies between 200 and 5000 Hz. The resulting curve is called the “Sound Pressure Level for an Inductive Telephone Simulator” (SPLITS) curve.   |
|  | Additional measurement: “High-Frequency Average” of the SPLITS curve (HFA-SPLITS) is the average SPLITS value at 1000, 1600, and 2500 Hz. You can also take the “Special Purpose Average” (SPA-SPLITS) for those aids with specified frequencies |
|  | Additional measurement: Simulated Telephone Sensitivity (STS):<br>HFA-SPLITS – reference-test gain + 60 dB<br>or<br>SPA-SPLITS – reference-test gain + 60 dB   |



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