“Open Ear” hearing aids have exploded in popularity in the past couple of years. They have brought with them new testing concerns and a need for new testing methods. The traditional HA-1 and HA-2 couplers used for performing sound chamber measurements were designed for conventional hearing aids that fit snugly into the canal or that have attached earmolds. Open Ear hearing aids do not easily adapt to these couplers, and the resulting frequency response produces a curve that is nothing like the real-ear response of the hearing aid.

Frye Electronics has designed the Open Fit Coupler in order to provide a realistic frequency response using a mechanism that makes it easy to attach the Open Ear hearing aid to the coupler.

The Open Fit Coupler has an opening designed to fit the sound outlet part of the Open Ear hearing aid. Just place this part into the coupler as you would place it into the patient's ear. The sound outlet part may contain the receiver of the hearing aid or may be the end of a sound delivery tube. The hearing aid/coupler assembly is positioned in the sound chamber with the microphone of the hearing aid at the reference point of the chamber. Since FONIX analyzers use the “substitution method” with leveling instead of a second control microphone, you don’t have to worry about the hearing aid interfering with the measurement of the control microphone.

The Open Fit Coupler is not a standard 2-cc coupler like the HA-1 and HA-2, so it can’t be used to compare to manufacturing specification, but it will give you a much more realistic frequency response of the Open Ear hearing aids with a test that is very easy to set up and perform.