## Addendum to Test Report F2LQ5644C, Additional Family Members, rev.04

The following products have been found to qualify by similarity and are being added to the Seymour Duncan family of EFX:

Product	Justification
805 Overdrive Pedal	No clocks or digital logic
Pickup Booster	No clocks or digital logic
Dirty Deed Distortion Pedal	No clocks or digital logic
Vise Grip Compressor Pedal	Fastest clock 80kHz
Studio Bass Compressor Pedal	Fastest clock 80kHz
Catalina Chorus Pedal	Similar to Analog Delay Pedal
LA Super Rica	No clocks or digital logic
Killing Floor	No clocks or digital logic
Palladium	Tested, conforms to requirements
Forza	No clocks or digital logic
Fooz Fuzz Synth	Tested, conforms to requirements

## **Technical Justification for Conformance by Similarity**

Our determination of conformance by similarity is a two-step process. First, we prove by measurement, in a certified compliance laboratory, the conformance of the product that represents the worst-case condition for radiated and conducted electromagnetic interference (EMI). Second, we show that other products, by their design, will generate less interference than the worst-case product.

For the case of many audio products, the complete absence of digital signals, clocks, power rectifier diodes and electrical arcing eliminates the sources of EMI, so it is not possible for these products to produce a measurable level of EMI. In these cases, examination of the electrical design of the product suffices to demonstrate compliance with applicable regulations.

For products that do contain clocks and/or digital signals, the complexity and clock rate of those signals largely determine the level of EMI produced. Thus, when similar EMI suppression methods have been used in two products, the one with less digital complexity and lower clock speeds will produce lower levels of EMI. As a result, the compliance of these products can be demonstrated by examining the clock speeds and digital complexity of the internal electronics, and showing that the EMI suppression techniques are substantially similar to the product qualified by direct measurement.

The worst-case product that we use as a baseline is the Shape Shifter Tremolo Pedal and Vapor Trail Analog Delay Pedal. Their compliance with various international EMI standards is documented in the compliance report.

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