

To: FCC OET Laboratory, ATTN Andrew Leimer

From: CURRENT Technologies

Regarding: Correspondence 31206, FCC ID TY7210-0061-0001, EA247076

The correspondence noted above raised a number of questions. These questions are listed in boldface below, with the answer directly below the questions:

**Q: Submit an operator's manual explaining how to set and control the notch capability, etc.**

**A:** An operator document describing the notch conditions is attached to this correspondence reply.

**Q: What is the maximum duty factor and what was the duty factor used for testing?**

**A:** To generate test traffic, a special mode in the device was used that forces the BPL modem to continuously generate transmission on the line. This works by forcing the modem under test to repeatedly and continuously transmit system overhead messages. The 'mfgviperon' command transmits these in a manner that exceeds the normal ability of the modem to generate traffic in actual use, by repeatedly sending these overhead messages to a remote station on the powerline. These messages generate 200 OFDM symbols over 40 times per second, ensuring that the 20 pulse per second minimum is exceeded, and that the transmit rate approaches the maximum achievable with these signals in actual operation. As the maximum duty cycle in a CSMA network such as this is indeterminate; this technique ensures that a repeatable measurement can be conducted while ensuring that the quasi-peak detection filter is not allowed to decay, and reduce the measured level in a manner not indicative of its maximum transmission.