Correspondence Reference Number: 32589

1) Upload coupler photos to the external photos exhibit.

Please see uploaded file named UGN-KPI-2330 Coupler photos.pdf.

2) Is this device used for common mode injection, differential mode injection, or both? Which mode of injection was tested?

The device operates in common mode and was tested in common mode.

3) The User's Manual indicates that there is a master mode and a slave mode. How do these modes differ and what mode(s) were tested?

In order to establish communications between any two units, one unit must be set as master and the other unit must be set as slave. The master / slave modes are merely protocols used for data synchronization. The transmission levels are identical in either mode.

4) This device has two connections, I assume for couplers. Explain how these ports were configured for testing.

The device was tested first in mode (10) while port (a) was connected to a dedicated coupler. The device was then set for mode (11) while port (b) was connected to a second dedicated coupler. This was how the MV lines were tested. During the LV line testing, the MV couplers were disconnected from both ports and a coaxial cable was connected between port (a) and port (L) while running in mode (10) and then again with the coaxial cable connected between port (b) and port (L) while running in mode (11). Port (L) routes the BPL signals back inside the unit, through the internal power supply and then back to the (220) VAC input lines.

5) The Test Report states that the power setting was set to the maximum. Was this for both overhead and underground configurations? The device was 0.2 dB from the limit. Please explain the power settings available and how they are to be used.

The power level setting used during testing are described at the end of the previously uploaded attachment – UGN-KPI-2330 Circuit Description.pdf.

6) The User's Manual is not clear how the utility would set the notch is there was a complaint on a specific frequency. Please clarify how this would be done.

Please see uploaded file named UGN-KPI-2330 Mitigation Methodology.pdf.