

### **EXPERIMENTATION DESCRIPTION**

The program of research and experimentation is intended to investigate the feasibility and commercial performance of transmitting a modulated signal through a proprietary solid state transmitter unit operating at 27.7-28.35 GHz and 31.0-31.3 GHz. The proposed investigation seeks to improve the power efficiency and fidelity of the transmitter technology and to apply it to commercial applications.

The equipment employed in the investigation is composed of breadboard and prototype devices designed by Wytec and fabricated by various subcontractors in accordance with Wytec specifications.

The investigation seeks to determine if a proprietary transmitter design achieving at least 50% power efficiency can be fabricated so that an undistorted signal can be generated with 2 watts of radiated power in the LMDS frequency bands.

The development that is the subject of this application is intended to produce a low-cost competitive product for use by wireless cable distribution systems operating in the LMDS frequency bands. Authority for nationwide itinerant operation is also requested to permit Wytec to demonstrate its technology to various LMDS licensees in the licensed markets.