



28 York Avenue  
Randolph, MA 02368  
Tel: (781) 961-9600  
(800) 650-5740  
Fax: (781) 961-2845

## **Path Loss Simulations using ECCOSORB<sup>®</sup> AN-77 For Broadband Wireless Transport Testing in the U-NII Bands**

With the newly allocated U-NII bands (Unlicensed National Information Infrastructure), which have no FCC licensing requirements antenna manufacturers are developing new methods for point-to-point communications. In this application, Proxim Wireless Networks manufactures a product line called “Stratum”, which delivers both IP/Ethernet and T1 connectivity at 20 and 100 Mbps.

The challenge given to Emerson & Cuming Microwave Products was how to simulate the path loss between two flat panel antennas (one for each of the two radios which make up a radio link) in a lab environment allowing the customer to perform lab testing, troubleshoot and pre-configure the hardware.

It was recommended that for this simulation that two sheets of ECCOSORB<sup>®</sup> AN-77 be sandwiched together (back to back) and placed between the two flat panel antennas of a Stratum ODU (out-door unit).



*Note: This insertion loss application is a non-traditional use of ECCOSORB<sup>®</sup> AN-77.  
ECCOSORB<sup>®</sup> AN-77 is designed for use as a free-space absorber.*