Antenna Gain Information

The Wave Tunnel (model WT-2041SM-US00) includes two BFM06010 antenna modules. This antenna is a Phased Array with a beamformer ASIC that provides 20.8dB of gain maximum. This module was designed by Sivers IMA and it is sold as a commercial product. The modules connect to the BB PCB through a Samtec interface connector.

The antenna gain is measured by setting the transmit power to the P1dB level of +22dBm and measuring the EIRP. The resulting average EIRP is +43dBm. The resulting antenna gain is therefore 21dBi. This measurement is published in the Sivers data sheets for the RF ASIC and the Beamformer module.

The antenna gain has also been published in a technical paper by Sivers as 20.8dB.

Airvine limits the EIRP to +34dBm (average) by limiting the Tx power to +13dBm.

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