

Reverb Networks
20099 Ashbrook Place, Suite 105
Ashburn, VA 20147

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburg, PA 15251-5320

Re: Experimental license application for Reverb Networks
Confirmation #: EL215224

Dear Sir or Madam:

With this letter we would like to respectfully request an experimental license for Reverb Networks to be used explicitly for the purpose of integration and testing of a commercial beamforming antenna. The licence is required for the use of an appliqué active beamsteering/beamforming antenna array.

The proposed antenna array can radiate in either a CW multi-carrier mode over a 30 MHz wide sub-band tuned within the frequency range 3.3 – 3.8 GHz with a maximum power capability of 15 dBm per antenna column. There are 8 columns with 14 dBi gain ~8 Deg elevation 3dB beamwidth and a 120 deg 3dB beamwidth. Sidelobes and backlobes are 30 dB or more below the main beam. CW radiation will only be used for initial system set-up mainly in an indoor environment. In normal operation which may be used indoor and outdoor the unit will be transmitting &MHz bandwidth channels in accordance with 802.16 regulations. The azimuth beamwidth of the combined signals from all 8 columns may have a 3 dB beamwidth of ~18 – 120 deg. This beam may be steered by up to plus or minus 50deg from the antenna boresight with up to 4 simultaneous beams on up to 3 adjacent channels. These beams will meet a 25dB down worst case sidelobe performance with greater than 30 dB front to back ratio. The maximum available EIRP for a single channel minimum beamwidth signal at boresight is 38 dBm. Software control is provided to ensure that the EIRP is maintained within the regulatory limits for any particular beam set-up when deployed.

Also, our testing will be done utilizing FCC compliant Basestations, such as Aperto PacketMax 3000, which will control and determine the maximum power and EIRP produced by the system. Therefore, we do not anticipate any possible interference.

Please do not hesitate to let me know if you have any questions and/or require further information in order to provide your approval. I can be reached at (813) 966-9269.

We would like to thank you in advance for your time and consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Esperanza Hughes-Johnson".

Esperanza Hughes-Johnson
Sr. Product Manager