

## **Region 53 700MHz Plan**

### **Appendix L (1 of 2) – Propagation Model Calibration Map**

Region 53 understands that there are many differing computer modeling software products that an applicant can utilize to perform the required responsible radiation calculations, as well as service and interference calculations to other systems and CAPRAD assignments. In order not to limit the applicant in the selection of a propagation software product, while still maintaining a quality control on the documents submitted to the Region, we have established a standard propagation model.

The applicant must define the propagation software that is utilized in the application process. This software must be commercially available and have received peer review and be a generally accepted propagation modeling tool. Utilizing the following technical parameters the applicant will submit a calibration propagation which shows general agreements to the following plot.

Coordinates: 29-28-32 N 98-33-6 W

Site elevation: 232 m ASL

Antenna radiation center (antenna height): 45 m AGL

Antenna type: Omni-directional (DB806 or equivalent)

Effective Radiated Power: 150 watts

Propagation Model: Okumura-Hata-Davidson

Reliability: median F(50,50)

Environment: Suburban

Frequency: 770 MHz

Receive Antenna Height: 1.8 m

Advanced Settings:

K factor: 1.3333

Ground conductivity: 8 mS/m

Ground dielectric constant: 15

Atmospheric absorption: none

Climate type: Continental Temperate

Terrain Data: Include

Clutter Loss: Include

Fresnel zone loss: Include

Building data: Exclude

Ground Reflection: Exclude