

Question #7: Purpose of Experiment

The Motorola PTP600 radio equipment is a fixed point-to-point radio system to create an Ethernet (data) and T1 (voice) wireless connection between two sites several miles apart. It uses proprietary 1000+ sub-carrier OFDM modulation and reports good RF link reliability in non-line-of-sight (NLOS) scenarios. The NLOS claims include both encroached Fresnel zone and zero optical LOS. We propose a study to be conducted over multiple seasons and over varied terrains that will create three separate non-LOS point-to-point radio links.

The objective of the study is to observe and understand the RF propagation characteristics and quantify actual reliability of these NLOS radios over multiple seasons.

Our intent is to better understand the propagation characteristics of this unique radio system. Doing so we will be able to better serve and promote this wireless technology to benefit the education, health, and public safety customers in the Rocky Mountain area.