

Form 442 Question 7: Experimentation Description

A. The complete program of research and experimentation proposed including description of equipment and theory of operation.

Centerpoint is a manufacturer of point-to-point Wireless equipment. Prior to an upcoming field trial, and going into full production of our equipment, we would like to conduct field test on our equipment. This test will consist of installing the point-to-point equipment on pole mounts located on the rooftop of Centerpoints Melbourne, Florida office. Field test such as long-term BER measurements, and equipment specification stability will be tested.

The equipment will consist of the following equipment:

- 2 Indoor Units (IDU)
- 2 38GHz Outdoor Units (ODU), radio units.
- 2 30cm parabolic antennas
- 2 RG-8 coaxial cables

Equipment Description/Theory of Operation:

The radio link will consist of two radio terminals. Each terminal will consist of an indoor unit that provides user interfaces for data connections and user configuration. The IDU connects to an ODU via an RG-8 coaxial cable. IF frequencies from the IDU are unconverted to the final output frequency in the ODU. The output of the ODU is connected directly to the back of the 30cm antenna. The distance between the two radio terminals is approximately 150ft.

B. The specific Objectives sought to be accomplished.

1. Simulate the field environment variables that will be used during an upcoming field trial.
2. Test long term BER performance in an actual field environment.

C. How the program of experimentation has a reasonable promise of contribution to the development, expansion, or utilization of the radio art, or is along line not already investigated.

Testing of various equipment parameters in a field environment is highly desirable so as to simulate real world situations. This field simulation will also help to establish field performance baselines for upcoming field trials with potential customers.