

## **ELTA North America Request for FCC Experimental License**

Form 442 File Number: **EL352177**

Form 442 Confirmation Number: **0786-EX-CN-2018**

1 October 2018

### **Question 9: Statement of Environmental Impact**

The specified locations for this application are rural and have a wide open area of mostly desert.

#### **At 10001 South Wilmot Rd, Tucson, AZ 85756-**

Approximately 0.5 mile to the west are a few scattered buildings.

Approximately .25 miles to the north are a few scattered buildings.

Isolated desert to the south and east.



#### **At 11300 South Houghton Rd, Tucson, AZ 85747-**

A few buildings surrounding within 0.2 miles of the test site.



The antenna will be mounted on the ground using a tripod and have a height of 6 feet.

It is the policy of ELTA N.A. that company personnel, customers, or members of the public are not subjected to RF power density levels that exceed the Maximum Permissible Exposure (MPE) limits as given in Part 1.1310 of the FCC Rules. Experimental testing will only be conducted with appropriate controls in place, and no personnel will be in an area of transmissions that will exceed the MPE levels. ELTA N.A. will have an RF Safety Plan which describes the procedures and controls necessary to comply with MPE levels during operations and maintenance.

*Table 1 - Power Density Analysis*

| <b>Parameter</b>                                 | <b>Value</b> |
|--------------------------------------------------|--------------|
| Frequency (MHz)                                  | 434          |
| Transmitter Output Power (dBm)                   | 34           |
| Antenna Gain (dBi)                               | 3.5          |
| Ground Reflection Factor                         | 1.6          |
| Distance (feet)                                  | 5            |
| Estimated RF Power Density (mW/cm <sup>2</sup> ) | 0.0491       |

*Table 2 - Power Density Analysis Results*

| <b>Parameter</b>                                | <b>Controlled</b> | <b>Uncontrolled</b> |
|-------------------------------------------------|-------------------|---------------------|
| Maximum Permissible Exposer, mW/cm <sup>2</sup> | 1.4517            | 0.2943              |
| Minimum required distance, Meters               | .296              | .643                |
| Minimum required distance, Feet                 | .9711             | 2.1095              |