## 1.0 GENERAL

### 1.1 Introduction

The purpose of this report is to demonstrate compliance with Part 15, Subpart C of the FCC's Code of Federal Regulations. Testing was performed by LXE Inc., a division of EMS Technologies, Inc.

### 1.2 Product Description

The equipment under test (EUT) is the combination of the Proxim Inc. Model 7520 with various antennas described below. The 7520 is Frequency Hopping Spread Spectrum(FHSS) transmitter operates over the frequency range of 2400.0 to 2483.5 MHz. The following antennas are covered by this report:

- Cushcraft Model S2403 - 3dB Omni - N Connector(Note 1)
- Cushcraft Model S2400 - 0dB Omni - N Connector (Notes 1 & 2)
- Cushcraft Model S2406P - 6dB Patch - N Connector (Note 1)
- Cushcraft Model PC~~2145~~ 2415 - 15dB Yagi - N Connector (Note 1)
- LXE Model Spire - LXE P/N(s): 155845-0001 - ~~6~~ 3dB Omni - RTNC Connector(Note 3)
- LXE Model Spire - LXE P/N(s): 155846-0001 - ~~3~~ 6dB Omni - RTNC Connector(Notes 2 & 3)

**Note 1:** Models numbers generalized to incorporate the many configurations of the antenna, including cable pigtail lengths, connector types and genders. Antennas were tested with shortest cable length available and were assumed to be worst case.

**Note 2:** Antenna not tested. Compliance is assumed based on data from higher gain antenna of same type.

**Note 3:** The LXE Model and part numbers given are for the base unit of the antenna. Additional models are available that include different cable pigtail lengths, connector types, genders etc.… Antennas were tested with shortest cable length available and were assumed to be worst case.

## 2.0 LOCATION OF TEST FACILITY

The LXE test facility is located at the following address:

LXE, Inc.
An Electromagnetic Sciences Company
125 Technology Parkway
Norcross, GA US 30092-2993
Tel: (770) 447-4224
Fax: (770) 447-6928

Radiated emission tests were conducted at the manufacture's test facility at a location specifically prepared for this testing. The radiated emissions test site meets the characteristics of ANSI C63.4:1992, CISPR 16 and EN 55022:1994. This site has been fully described and submitted to the FCC, and accepted in their letter marked 31040/SIT, 1300F2.

## 3.0 DESCRIPTION OF OPEN AREA TEST SITE

The open area test site(OATS) is located in the center of the rooftop of the building. The roof is located at a height of approximately 8 meters above the ground. The 3 meters radiated emissions test site is an open, flat area (open area) test site approximately 6.2m x 9.2m in dimension. All reflecting objects including test personnel lie outside the perimeter of the ellipse. The 3 meters test site ground plane is made of a 1/4" metal screen mesh which extends 2 meters past the mast and equipment under test(EUT). Material of the ground plane, comprised of individual 1/4" metal screen mesh rolls, were soldered at the seams with gaps smaller than 1/10 of the wavelength at 1000MHz. The ground plane is connected to the earth ground by ground rods. All wiring is done at floor level around the test site periphery. The radiated emissions test setup is shown in figure 1.