June 18, 2004

Applicant: Inovonics Wireless Corp. FCC ID: HCQ3B6ETRTXM

Correspondence Reference Number: 26950 731 Confirmation Number: EA969371

Re: Action Items regarding Grant approval

1) How did you determine that the RF output power is 50 mW as shown on Form 731? Please provide measurement and calculation of the RF output power. Be sure to provide RF output power measurements at low, middle and high frequency bands.

Pursuant to FCC Public Notice DA 00-705, the following measurements were made using an Agilent 8594E spectrum analyzer having the following settings:

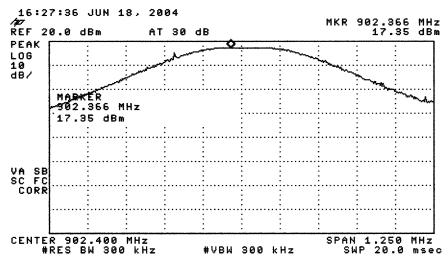
Span: 1250 kHz (approximately 5 times the 20 dB bandwidth)

RBW: 300 kHz (RBW > the 20 dB bandwidth)

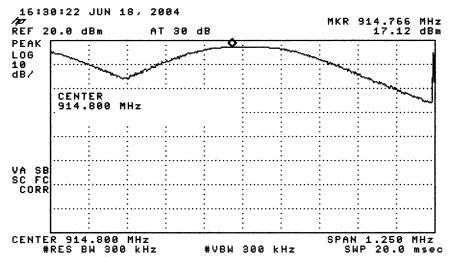
VBW:  $300 \text{ kHz} \text{ (VBW } \ge \text{RBW)}$ 

Sweep: auto Detector: peak Trace: max hold

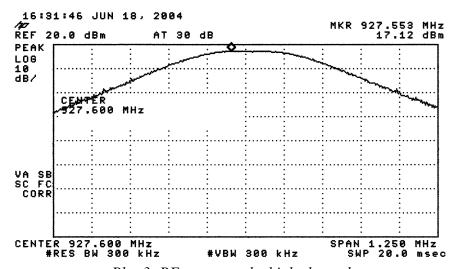
The antenna is removed and a 3" semi-rigid coaxial cable having negligible insertion loss connects the DUT to the spectrum analyzer. Please note that the device in question is designed to have an output power of +17 dBm (50 mW) however a variation of +1, -2 dB is anticipated.



Plot 1: RF output at the low channel



Plot 2: RF output at the middle channel



Plot 3: RF output at the high channel

2) Please submit the average time of occupancy measurement per Section 15.247(a)(1)(i) and FCC Public Notice DA00-705

Section 15.247(a)(1)(i) states, "...if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period."

To effectively obtain this measurement, FCC Public Notice DA 00-705 requires the following spectrum analyzer settings:

Span: 0

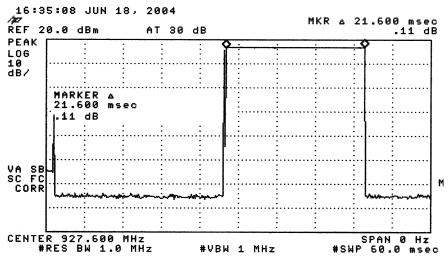
RBW: 1 MHz

VBW:  $1 \text{ MHz (VBW} \ge \text{RBW)}$ 

Sweep: 60 ms (as necessary to capture the entire dwell time per hopping channel)

Detector: peak Trace: max hold

Plot 4 below clearly shows the dwell time is less than the 0.4 seconds required by 15.247(a)(1)(i).



Plot 4: Channel Occupancy