Technical Description

This device is a 802.11a/g Mini-PCI Card operates in both the 5GHz and 2.4GHz bands with DSSS and OFDM technique. The transmitter rate could be 1/2/5.5/6/9/11/12/18/24/36/48/54Mbps. The transmitter of the EUT is powered by DC 3.3V from host equipment. The antenna are as following:

Main Antenna						
No.	Model No.	Gain (dBi)	Cable Loss (dB)	Net Gain (dB)	Antenna Type	Connector
1	C037S510729-A	3.5	0.15	3.35	PCB	IPEX
Auxiliary Antenna						
No.	Model No.	Gain (dBi)	Cable Loss (dB)	Net Gain (dB)	Antenna Type	Connector
2	C037S510730-A	3.5	0.3	3.2	PCB	IPEX
		3	0.3	2.7	PCB	IPEX

From the above antennas, the **Antenna 1** was selected as representative antennas for the test and its data were recorded in this report.

Under normal use condition, the user has to keep at least 20 cm separation distance between radiator and the body of the user.

For more detailed instruction, please refer to the user's manual.

FCC 15.407(c) states : The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.
Applicants shall include in their application for equipment authorization a description of hoe this requirement is met.

Data transmission is always initiated by software, which is then pass down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets (ACKs, CTS, PSPoll, etc…) are initiated by the MAC. There are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets are being transmitted.