

## 1.2. Operational Description

The EUT is a SpectraGuard Sensor with a built-in 2.4GHz and 5GHz WLAN card. This device provided four kinds of transmitting speed 1, 2, 5.5 and 11Mbps and the device of RF carrier is DBPSK, DQPSK and CCK (IEEE 802.11b). The device provided of eight kinds of transmitting speed 6, 9, 12, 18, 24, 36, 48 and 54Mbps the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11a/g).

The device provided of eight kinds of transmitting speed 21.6,43.2,65.1,86.7,129.9,173.4,195 and 216Mbps in 802.11n(20M-BW) mode and 45,90,135,180,270,360,405 and 450 Mbps(40M-BW) the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11n), the IEEE 802.11n is Multiple In, Multiple Out" (MIMO) technology.

The device adapts direct sequence spread spectrum modulation. The antenna provides diversity function to improve the receiving function and the antennas to support 3(Transmit) × 3(Receive) MIMO technology.

This SpectraGuard Sensor, compliant with IEEE 802.11b and IEEE 802.11a/g/n, is a high-efficiency Wireless LAN adapter. It allows your computer to connect to a wireless network and to share resources, such as files or printers without being bound to the network wires. Operation in 2.4GHz/5GHz Direct Sequence Spread Spectrum (DSSS) radio transmission, the SpectraGuard Sensor Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b and IEEE 802.11a/g/n network.

The Device no radar detection and no ad-hoc operation in the DFS band, another information please refer to users manual.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit - 802.11a 6Mbps
	Mode 4: Transmit - 802.11n-20BW_21.6Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_45Mbps(2.4G Band)
	Mode 6: Transmit - 802.11n-20BW_21.6Mbps(5G Band)
	Mode 7: Transmit - 802.11n-40BW_45Mbps(5G Band)

NOTE: All mode the power combiner is used, the factor of combiner is 10dB and offset it in test instrument.