Operational Description

This device is a Wireless-B/G/N Mobile Broadband Router, which operates in the 2.4GHz frequency spectrum with throughput of up to 300Mbps which OFDM technique will be applied. If the signal to noise radio is too poor which could not support 300Mbps, the 11Mbps data rate with DSSS technique will be applied.

1. There are three antennas provided to this EUT, please refer to the following table:

Transmitter Circuit	Antenna Type	Antenna Connector	Gain(dBi)
Chain(0)	Dipole	IPEX	4
Chain(1)	Dipole	IPEX	4
Chain(2)	Dipole	IPEX	4

2. The EUT could be applied with one 3G 1XEV-DO Card and following two different models could be chosen; therefore emission tests are added for simultaneously transmit between wireless LAN and 3G 1XEV-DO function. The emission tests have been performed at the worst channel of both WLAN and 3G 1XEV-DO, and recorded in the report.

Interface	Brand name	Model name	FCC ID
Express card	KYOCERA	KPC680	OVFKWC-KPC680
USB port	C-motech	CDU-680	TARCDU-680

   From the above 3G 1XEV-DO cards, Model No. : KPC680 was selected for testing. Only one card can transmit on different interface for 1XEV-DO.

3. The EUT incorporates a MIMO function with 802.11b, 802.11g, draft 802.11n. Physically, the EUT provides two completed transmit and three completed receivers.

4. The EUT is 2 * 3 spatial MIMO without beam forming function. The antenna configurations are two transmitter antennas and three receiver antennas, as there are 3 Dipole antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 3 antennas.

5. When the EUT operating in draft 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.

6. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products.

7. The EUT must be supplied with a power adapter and following two different models could be chosen:

Adapter 1	
Brand:	LEI
Model No.:	MU18-2120150-A1
Input power :	AC100-240V, 0.6A, 50/60Hz
Output power :	DC12V, 1.5A Cable:1.5m/unshielded/without core
Adapter 2	
Brand:	ELEMENTECH
Model No.:	Au-79Dmu
Input power :	AC100-240V, 0.5A, 50/60Hz
Output power :	DC12V, 1.5A Cable:1.3m/unshielded/without core

8. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b and draft 802.11n technique devices to the network.

9. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.