

**FCC ID: QI3BIL-6200NXL**

**Operation Description**

The Equipment Under Test (EUT) is a Billion Electric Co., Ltd., 3.75G Wireless-N Broadband Router, the transmission signal is digital modulated with channel frequency range 2412-2462MHz / 2422-2452MHz. The measurement were conducted at different modulation and data rate, the test results shown in this test report is based on the worst case of the initial investigation.

Broadband signal from the Ethernet port come in through the RT3052 processing, and generates a WiFi signal, through U510/U512 filter, transmit from antennas.

The EUT has 2pcs 20cm Dipole Antenna which is connected to the reverse-polarity SMA connector on the PCB of the main unit, the antenna gain = 2dBi. All component install on inside of EUT. User unable to remove or changed the Antenna.

The user has to keep at least 20cm separation distance between radiator and the body of the user. The other instruction, please have a look at the user's manual.

The EUT is a router with WiFi function, continues to transmit while power on, Modulation by IC; and type is DSSS/ OFDM modulation.

DSSS:CCK/DBPSK/DQPSK, OFDM:BPSK/QPSK/16QAM/64QAM.

Antenna: 2dBi Dipole Fixed Antenna with SMA connector x 2 (2T2R Spatial Multiplexing MIMO configuration; both antennas are for signal transceiving.)

Channel List for 802.11 b/g, n20/40:

For both 20MHz bandwidth systems, use Channel 1-Channel 11.

For both 40MHz bandwidth systems, use Channel 3-Channel 9.

Transmit Power: 11n:14dBm $\pm$ 1.5dBm, 11g: 14dBm $\pm$ 1.5dBm, 11b: 17dBm $\pm$ 1.5dBm maximum transfer rate: 802.11b-11Mbps, and 802.11g- 54Mbps, and 802.11n-300Mbps.