FCC ID: Q87-WRT160NL

Operational Description

This device is a Wireless-N Broadband Router with Storage Link, which operates in the 2.4GHz frequency spectrum with throughput of up to 150Mbps which OFDM technique will be applied. If the signal to noise rate is too poor which could not support 150Mbps, the 11Mbps data rate with DSSS technique will be applied.

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

No.	Antenna Type	Gain (dBi)	Antenna Connector
1	Dipole	1.8	SAM male reverse
2	Dipole	1.8	SAM male reverse

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

Adapter 1			
Brand:	Bestec		
Model No.:	NA0181WAA		
Input power:	AC100-240V, 1A, 50-60Hz		
Output power :	DC 12V, 1.5A		
Output power:	DC output cable (Unshielded, 1.8m)		
Adapter 2			
Brand:	LEI		
Model No.:	MU18-D120150-A1		
Input power:	AC100-240V, 0.6A, 50-60Hz		
Output nower i	DC 12V, 1.5A		
Output power :	DC output cable (Unshielded, 1.8m)		

From the above adapters, adapter 1 is the worse case one, Therefore only the test data of the adapter was recorded in this report individually.

3. The EUT was pre-tested in chamber under the following modes:

Test Mode	Description	
Mode A	Level-set (Put on tabletop)	
Mode B	Tower-set (Wall-mounted)	

From the above modes, the worst case was found in **Mode A**. Therefore only the test data of the modes were recorded in this report.

4. The EUT incorporates a MIMO function with draft 802.11n. Physically, the card provides two completed transmit and two completed receivers.

FCC ID: Q87-WRT160NL 5. The EUT is 2 * 2 spatial MIMO without beam forming function. The antenna configurations are two transmitter antennas and two receiver antennas, as there are 2 dipole antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 2 antennas. 6. 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. 7. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products. 8. 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.