

1.1. Test Result of RF Exposure Evaluation

- . Product: RANGEMAX WIRELESS-N DSL GIGABIT MODEM ROUTER
- . Test Item: RF Exposure Evaluation Data
- . Test Mode: Normal Operation

1.1.1. Antenna Gain

Antenna 1: PCB Antenna, 2dBi
Antenna 2: PCB Antenna, 2dBi

1.1.2. EUT Operation condition

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

1.1.3. Output Power into Antenna & RF Exposure Evaluation Distance 20cm:

Test Date: Jul. 23, 2009 Temperature: 27 Humidity: 66%

Ant1:

Modulation Standard	Channel	Frequency (MHz)	Out put power to Antenna (dBm)	Power Density (S) (mW/cm ²)
802.11b (11Mbps)	01	2412	17.06	0.016
	06	2437	17.32	0.017
	11	2462	17.1	0.016
802.11g (6Mbps)	01	2412	17.1	0.016
	06	2437	17.19	0.017
	11	2462	17.14	0.017
802.11n, HT20 (6.5Mbps)	01	2412	13.57	0.007
	06	2437	13.31	0.007
	11	2462	13.12	0.006
802.11n, HT40 (13.5Mbps)	03	222	13.44	0.007
	06	2437	13.04	0.006
	09	2452	13.38	0.007

Ant2:

Modulation Standard	Channel	Frequency (MHz)	Out put power to Antenna (dBm)	Power Density (S) (mW/cm ²)
802.11b (11Mbps)	01	2412	16.88	0.015
	06	2437	17.07	0.016
	11	2462	17.16	0.017
802.11g (6Mbps)	01	2412	17.15	0.017
	06	2437	17.05	0.016
	11	2462	17.06	0.016
802.11n, HT20 (6.5Mbps)	01	2412	12.98	0.006
	06	2437	13.13	0.006
	11	2462	13.28	0.007
802.11n, HT40 (13.5Mbps)	03	222	13.31	0.007
	06	2437	13.23	0.007
	09	2452	13.35	0.007

The MPE is calculated as $0.017\text{mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$. So, RF exposure limit warning or SAR test are not required.

For 2412-2462 MHz the EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.