

1.1. Test Result of RF Exposure Evaluation

- . Product: 802.11N Wireless ADSL Router
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATSI-SD
- . Test Mode: Normal Operation

1.1.1. Antenna Gain

The maximum Gain is 1.8 dBi.

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

Test Mode: IP1006GA

(1) Modulation Standard: IEEE 802.11b(11Mbps), TX0

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	18.42	0.021
06	2437	18.55	0.022
11	2462	18.50	0.021

(2) Modulation Standard: IEEE 802.11b(11Mbps), TX1

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	18.38	0.021
06	2437	18.25	0.020
11	2462	18.28	0.020

(3) Modulation Standard: IEEE 802.11g(54Mbps), TX0

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	16.45	0.013
06	2437	16.49	0.013
11	2462	16.44	0.013

(4) Modulation Standard: IEEE 802.11g(54Mbps), TX1

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	16.71	0.014
06	2437	16.74	0.014
11	2462	16.84	0.015

(5) Modulation Standard: IEEE 802.11n, HT20(130Mbps)

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	13.81	0.007
06	2437	14.11	0.008
11	2462	14.10	0.008

(6) Modulation Standard: IEEE 802.11n, HT40(270Mbps)

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	14.00	0.008
06	2437	14.15	0.008
11	2462	14.33	0.008

Test Mode: IP1006GB

(1) Modulation Standard: IEEE 802.11b(11Mbps), TX0

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	18.27	0.020
06	2437	18.77	0.023
11	2462	18.28	0.020

(2) Modulation Standard: IEEE 802.11b(11Mbps), TX1

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	18.31	0.020
06	2437	18.27	0.020
11	2462	18.30	0.020

(3) Modulation Standard: IEEE 802.11g(54Mbps), TX0

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	16.47	0.013
06	2437	16.29	0.013
11	2462	16.37	0.013

(4) Modulation Standard: IEEE 802.11g(54Mbps), TX1

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	16.74	0.014
06	2437	16.29	0.013
11	2462	16.55	0.014

(5) Modulation Standard: IEEE 802.11n, HT20(130Mbps)

Test Date: Nov. 05, 2008 Temperature: 20 Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	13.81	0.007
06	2437	14.11	0.008
11	2462	14.10	0.008

(6) Modulation Standard: IEEE 802.11n, HT40(270Mbps)

Test Date: Nov. 05, 2008

Temperature: 20

Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	14.00	0.008
06	2437	14.15	0.008
11	2462	14.33	0.008

The MPE is calculated as $0.023\text{mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$. 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.