

1.1. Test Result of RF Exposure Evaluation

- . Product: RangeMax 150 Wireless Router
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATSI-SD
- . Test Mode: Normal Operation

1.1.1. Antenna Gain

Antenna L Gain: The maximum Gain is 4.062 dBi.

Antenna R Gain: The maximum Gain is 1.922 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

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

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	23.29	0.066
06	2437	23.05	0.063
11	2462	23.31	0.066

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

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	23.54	0.115
06	2437	23.43	0.112
11	2462	23.25	0.107

(3) Modulation Standard: IEEE 802.11g(6Mbps), ANT R

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	23.43	0.068
06	2437	23.40	0.068
11	2462	23.33	0.067

(4) Modulation Standard: IEEE 802.11g(6Mbps), ANT L

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	23.07	0.103
06	2437	23.36	0.110
11	2462	22.72	0.095

(5) Modulation Standard: IEEE 802.11n, HT20(6.5Mbps), ANT R

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	21.91	0.048
06	2437	22.13	0.051
11	2462	21.95	0.049

(6) Modulation Standard: IEEE 802.11n, HT20(6.5Mbps), ANT L

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	21.91	0.079
06	2437	22.13	0.083
11	2462	21.95	0.079

(7) Modulation Standard: IEEE 802.11n, HT40(13.5Mbps), ANT R

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	22.02	0.049
06	2437	22.14	0.051
11	2462	22.20	0.051

(8) Modulation Standard: IEEE 802.11n, HT40(13.5Mbps), ANT L

Test Date: Jan. 09, 2009 Temperature: 25°C Humidity: 60%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	22.02	0.081
06	2437	22.14	0.083
11	2462	22.20	0.084

The MPE is calculated as $0.115\text{mW} / \text{cm}^2 < \text{limit } 1\text{ mW} / \text{cm}^2$. 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.