

1.1. Test Result of RF Exposure Evaluation

- . Product: Mobile Broadband Router
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATSI-SD
- . Test Mode: Normal Operation

1.1.1. Antenna Gain

The maximum Gain is 2.0 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

(a) For the 802.11b/g device, the calculation is as follow:

Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Apr. 22, 2006 Temperature: 26°C Humidity: 65%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	15.06	0.0100
06	2437	15.06	0.0100
11	2462	15.18	0.0100

Modulation Standard: IEEE 802.11g

Test Date: Apr. 22, 2006 Temperature: 26°C Humidity: 65%

Channel	Channel Frequency (MHz)	Output Power to Antenna (dBm)	Power Density (S) (mW/cm ²)
01	2412	12.04	0.0050
06	2437	14.14	0.0080
11	2462	14.31	0.0090

(b) For the flash-OFDM device, the calculation is as follow:

Modulation Standard: Flash-OFDM

Test Date: Jul. 26, 2005 Temperature: 27°C Humidity: 64%

Channel Frequency (MHz)	Output Power of ERP (dBm)	Output Power of EIRP (mW)	Power Density (S) (mW/cm ²)
710.96	24.773	492.4	0.098
713.03	24.883	505.0	0.100
715.05	24.883	505.0	0.100

Co-located MPE for the EUT with the flash-OFDM TX installed as well is calculated as
 $0.010/1.0 + 0.10/0.474 = 0.22 < \text{limit } 1 \text{ mW / cm}^2$.

This meets with FCC RF exposure requirements for a mobile device.