## 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: Jul. 26, 2005 Temperature: 27℃ Humidity: 64%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) ($mW/cm^2$) |
|---|---|---|---|
| 01 | 2412 | 13.58 | 0.0070 |
| 06 | 2437 | 14.72 | 0.0090 |
| 11 | 2462 | 13.60 | 0.0070 |

Modulation Standard: IEEE 802.11g

Test Date: May. 18, 2004 Temperature: 25℃ Humidity: 58%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) ($mW/cm^2$) |
|---|---|---|---|
| 01 | 2412 | 12.22 | 0.0050 |
| 06 | 2437 | 14.27 | 0.0080 |
| 11 | 2462 | 12.72 | 0.0060 |

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

Modulation Standard: Flash-OFDM

Test Date: Jul. 26, 2005 Temperature: 27℃ 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 0.0090/1.0 + 0.1/0.474 = 0.22 < limit 1 mW / cm2.

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