

## 1.1. Test Result of RF Exposure Evaluation

- . Product: Wireless G Universal Range Extender
- . Test Item: RF Exposure Evaluation Data
- . Test site: OATSI-SD
- . Test Mode: Transmit/ Receive

### 1.1.1. Antenna Gain

Antenna 1 Gain: The maximum Gain is 1.8 dBi.

Antenna 2 Gain: The maximum Gain is 3 dBi.

Antenna 3 Gain : The maximum Gain is 5 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) Antenna 1, Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Oct. 11, 2005      Temperature: 25      Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 18.07                         | 0.0190                                        |
| 06      | 2437                    | 18.28                         | 0.0200                                        |
| 11      | 2462                    | 18.35                         | 0.0210                                        |

#### (2) Antenna 1, Modulation Standard: IEEE 802.11g (48Mbps)

Test Date: Oct. 11, 2005      Temperature: 25      Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 15.72                         | 0.0110                                        |
| 06      | 2437                    | 15.80                         | 0.0110                                        |
| 11      | 2462                    | 16.05                         | 0.0120                                        |

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

Test Date: Oct. 11, 2005

Temperature: 25

Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 18.07                         | 0.0250                                        |
| 06      | 2437                    | 18.28                         | 0.0270                                        |
| 11      | 2462                    | 18.35                         | 0.0270                                        |

(4) Antenna 2, Modulation Standard: IEEE 802.11g (48Mbps)

Test Date: Oct. 11, 2005

Temperature: 25

Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 15.72                         | 0.0150                                        |
| 06      | 2437                    | 15.80                         | 0.0150                                        |
| 11      | 2462                    | 16.05                         | 0.0160                                        |

(5) Antenna 3, Modulation Standard: IEEE 802.11b (11Mbps)

Test Date: Oct. 11, 2005

Temperature: 25

Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 18.07                         | 0.0400                                        |
| 06      | 2437                    | 18.28                         | 0.0420                                        |
| 11      | 2462                    | 18.35                         | 0.0430                                        |

(6) Antenna 3, Modulation Standard: IEEE 802.11g (48Mbps)

Test Date: Oct. 11, 2005

Temperature: 25

Humidity: 65%

| Channel | Channel Frequency (MHz) | Output Power to Antenna (dBm) | Power Density (S) 20 cm (mW/cm <sup>2</sup> ) |
|---------|-------------------------|-------------------------------|-----------------------------------------------|
| 01      | 2412                    | 15.72                         | 0.0230                                        |
| 06      | 2437                    | 15.80                         | 0.0240                                        |
| 11      | 2462                    | 16.05                         | 0.0250                                        |

The MPE is calculated as  $0.043 \text{ mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$ . So, RF exposure limit warning or SAR test are not required.