



## APPENDIX I

### RADIO FREQUENCY EXPOSURE

#### LIMIT

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

#### EUT Specification

<b>EUT</b>	802.11b/g /n USB dongle
<b>Frequency band (Operating)</b>	<input checked="" type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input type="checkbox"/> WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz <input type="checkbox"/> WLAN: 5.745GHz ~ 5.825GHz <input type="checkbox"/> Others
<b>Device category</b>	<input checked="" type="checkbox"/> Portable (<20cm separation) <input type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
<b>Exposure classification</b>	<input type="checkbox"/> Occupational/Controlled exposure ( $S = 5\text{mW/cm}^2$ ) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure ( $S=1\text{mW/cm}^2$ )
<b>Antenna diversity</b>	<input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity
<b>Max. output power</b>	Peak power: IEEE 802.11b mode: 14.67 dBm (29.31 mW) IEEE 802.11g mode: 18.56 dBm (71.78 mW) draft 802.11n Standard-20 MHz Channel mode: 18.83 dBm (76.38 mW) draft 802.11n Wide-40 MHz Channel mode: 18.57 dBm (71.94 mW) Average power: IEEE 802.11b mode: 11.72dBm (14.86 mW) IEEE 802.11g mode: 11.18 dBm (13.12 mW) draft 802.11n Standard-20 MHz Channel mode: 11.69 dBm (14.76 mW) draft 802.11n Wide-40 MHz Channel mode: 11.42 dBm (13.87 mW)
<b>Antenna gain (Max)</b>	-1.54 dBi (Numeric gain: 0.70)
<b>Evaluation applied</b>	<input type="checkbox"/> MPE Evaluation <input type="checkbox"/> SAR Evaluation <input checked="" type="checkbox"/> N/A*

#### Remark:

1. The maximum output power is 18.83dBm (76.38mW) at 2462MHz (with 0.70 numeric antenna gain.)
2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.
3. For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm<sup>2</sup> even if the calculation indicates that the power density would be larger.

#### TEST RESULTS

No non-compliance noted.

- (1)  $11.72\text{dBm}=14.859\text{mW}$  is less than  $(60/f)\text{mW}=24.620\text{mW}$ , so 802.11b stand-alone SAR is not required.
- (2)  $11.18\text{dBm}=13.122\text{mW}$  is less than  $(60/f)\text{mW}=24.370\text{mW}$ , so 802.11g stand-alone SAR is not required.
- (3)  $11.69\text{dBm}=14.757\text{mW}$  is less than  $(60/f)\text{mW}=24.620\text{mW}$ , so 802.11n HT20 stand-alone SAR is not required.
- (4)  $11.42\text{dBm}=13.868\text{mW}$  is less than  $(60/f)\text{mW}=24.470\text{mW}$ , so 802.11n HT40 stand-alone SAR is not required.