



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

EUT	802.11b/g /n USB dongle
Frequency band (Operating)	<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
Device category	<input checked="" type="checkbox"/> Portable (<20cm separation) <input type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
Exposure classification	<input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm ²) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm ²)
Antenna diversity	<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
Max. output power	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)
Antenna gain (Max)	-1.54 dBi (Numeric gain: 0.70)
Evaluation applied	<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/cm² even if the calculation indicates that the power density would be larger.

TEST RESULTS

No non-compliance noted.

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