



October 25, 2007

**BAND07-A2 Bandspeed Inc – 3100AG Wireless Access Point**

**Maximum Permissible Exposure**

**FCC, Part 15 Subpart C §15.407(f)**  
**Industry Canada RSS-Gen §5.5**

**Calculations for Maximum Permissible Exposure Levels**

Power Density = Pd (mW/cm<sup>2</sup>) = EIRP/(4πd<sup>2</sup>)

EIRP = P \* G \* 3

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

Numeric Gain = 10 ^ (G (dBi)/10)

The Bandspeed 3100AG has three transmitters operating over four different frequency bands. The peak power in the table below is calculated for each frequency band by assuming a worst case scenario where the three transmitters are operating simultaneously in the same band. The Peak Power in mW is calculated by taking the maximum conducted power measured in each band and multiplying by 3.

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

Freq. Band (GHz)	Antenna Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm <sup>2</sup> Limit(cm)	Minimum Separation Distance (cm)
5.2	5.0	3.17	+15.80	114.06	5.36	20

**Note:** for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

**Specification**

**Maximum Permissible Exposure Limits**

**§15.247 (f)** U-NII devices are subject to the radio frequency radiation exposure requirements specified in §1.1307 (b), 2.1091 and 2.1093 as appropriate. All equipment shall be considered to operate in a “general population/uncontrolled” environment.

**FCC §1.1310** Limit = 1mW / cm<sup>2</sup> from 1.310 Table 1

**RSS-Gen §5.5** Before equipment certification is granted, the application requirements of RSS-102 shall be met.