

RF Exposure / MPE Calculation

No. : 10273917H

Applicant : Yamaha Corporation
Type of Equipment : Wireless Module
Model No. : BTCARD4
FCC ID : A6RBT CARD4A

Yamaha Corporation declares that Model : BTCARD4
complies with FCC radiation exposure requirement specified in the FCC Rules 2.1091 (for mobile).

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the “BTCARD4” as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 0.94 mW (Maximum average output power)
G = 1.58 Numerical Antenna gain; equal to 2.00 dBi
r = 20.0 cm

For: BTCARD4

$$S = 0.00030 \text{ mW/cm}^2$$