

## RF Exposure / MPE Calculation

**No. : 10124906H**

**Applicant** : Murata Manufacturing Company, Ltd.  
**Type of Equipment** : Communication Module  
**Model No.** : TypeYD  
**FCC ID** : VPYLBYD

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Murata Manufacturing Company, Ltd. declares that Model : TypeYD  
complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

### **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided with the "TypeYD" 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/cm<sup>2</sup> uncontrolled exposure limit. The Friis formula used was:

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

Where

**P = 50.35 mW (Maximum average output power)**  
**G = 0.69 Numerical Antenna gain; equal to -1.60 dBi**  
**r = 20.0 cm**

**For: TypeYD**

$$S = 0.00693 \text{ mW/cm}^2$$