

RF Exposure / MPE Calculation

No. : 10012781H

Applicant : Mitsubishi Electric Co.,Ltd
Type of Equipment : Navigation System
Model No. : NR-241, NR-241UH, NR-243UH *Bluetooth part
FCC ID : UJHNR241NR243

Mitsubishi Electric Co.,Ltd declares that Model : NR-241, NR-241UH, NR-243UH *Bluetooth part 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 “NR-241, NR-241UH, NR-243UH *Bluetooth part” 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 = 1.79 mW (Maximum peak output power)
G = 1.10 Numerical Antenna gain; equal to 0.40 dBi
r = 20.0 cm

For: NR-241, NR-241UH, NR-243UH *Bluetooth part **S = 0.00039 mW/cm²**

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