

RF Exposure / MPE Calculation

Customer	Minebea AccessSolutions Inc.
Description of EUT	NFC Reader
Model Number of EUT	MASNFC-2
FCC ID	MLBMASNFC-2
Issue Date	December 1, 2025
Approver	 Toyokazu Imamura Engineer

Minebea AccessSolutions Inc. declares that Model: MASNFC-2 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 "MASNFC-2" 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 0.97mW/cm² (180/f²) uncontrolled exposure limit. The Friis formula used was:

$$S = \frac{P \times G}{4 \times \pi \times r^2}$$

Where

$PG =$ 0.003 mW (Maximum average output power)
 $r =$ 20 cm (Separation distance)

Power Density Result $S = 0.00000059683 \text{ mW/cm}^2$

* PG: EIRP