RF Exposure / MPE Calculation

No.	:	10792621H
Applicant	:	MITSUBISHI ELECTRIC CORPORATION SANDA WORKS
Type of Equipment	:	Car Audio
Model No.	:	AR-0H
FCC ID	:	UJHAR0H

MITSUBISHI ELECTRIC CORPORATION SANDA WORKS declares that Model: AR-0H 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 "AR-0H" 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 1mW/cm^2 uncontrolled exposure limit. The Friis formula used was:

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

Where

$P =$ 0.77 mW (Maximum average output power)

$G =$ 1.706 Numerical Antenna gain; equal to 2.32 dBi

$r =$ 20 cm (Separation distance)

Power Density Result $S =$ **0.00026 mW/cm^2**

Even taking into account the tolerance, this device can be satisfied with the limits.