RF Exposure / MPE Calculation

No.	:	13408107S-C
Applicant	:	Panasonic Corporation
Type of Equipment	:	Car Navigation
Model No.	:	AT2104
FCC ID	:	ACJ932AT2104

Panasonic Corporation declares that Model: AT2104 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 "AT2104" 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 =4.19 mW (Maximum average output power) \Box Time average was used for the above value in consideration of 6-minutes time-ave \boxdot Burst power average was used for the above value in consideration of worst conditG =1.837 Numerical Antenna gain; equal to 2.64 dBir =20 cm (Separation distance)

Power Density Result $S = 0.00153 \text{ mW/cm}^2$

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