

## RF Exposure / MPE Calculation

No. : 14033439S-B  
Applicant : Sony Corporation Japan & Sony Group  
Companies  
Type of Equipment : AV Receiver  
Model No. : XAV-AX6000  
FCC ID : AK8XAVAX6000

Sony Corporation Japan & Sony Group Companies declares that Model: XAV-AX6000 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 “XAV-AX6000“ 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<sup>2</sup> uncontrolled exposure limit. The Friis formula used was:

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

Where

$P =$  8.52 mW (Maximum average output power)

Time average was used for the above value in consideration of 6-minutes time-averaging

Burst power average was used for the above value in consideration of worst condition.

$G =$  2.089 Numerical Antenna gain; equal to 3.2 dBi

$r =$  20 cm (Separation distance)

**Power Density Result**  $S =$  0.00354 mW/cm<sup>2</sup>

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

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