RF Exposure / MPE Calculation
No. : 10022574H

Applicant	**:**	**Sony Computer Entertainment Inc.**
Type of Equipment	**:**	**Computer Enternainment System *WLAN/Bluetooth(LE) part**
Model No.	**:**	**CUH-1001A**
FCC ID	**:**	**AK8CUH100C1**

Sony Computer Entertainment Inc. declares that Model : CUH-1001A
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 "CUH-1001A" as calculated
from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled
Exposure. This calculation is based on the highest EIRP possible from the system,
considering maximum power and antenna gain, and considering a 1.0mW/cm^2 uncontrolled
exposure limit. The Friis formula used was:

$$S = (P * G) / (4* \pi * r^2)$$

Where

$P =$ **163.51 mW (Maximum peak output power)**
$G =$ **3.99 Numerical Antenna gain; equal to   6.01 dBi *1**
$r =$ **20.0 cm**

For: CUH-1001A (WLAN part)   **S =   0.12980 mW/cm^2**

*1: Antenna gain was calculated based on KDB662911D01,

  Directional antenna gain = G_{ANT} + 10 log (N) dBi

    Where: G_{ANT} is individual antenna gain, N is number of tansmit antenna

[Reference]
Bluetooth antenna does not have any correlation with WLAN antenna, but transmits simultaneously with WLAN antenna.
If Bluetooth antenna has correlation with and transmits simultaneously with WLAN antenna, the formula is as follows:

$$S = (P * G) / (4* \pi * r2)$$

Where

$P =$ **2.00 mW (Maximum peak output power)**
$G =$ **2.82 Numerical Antenna gain; equal to   4.50 dBi**
$r =$ **20.0 cm**

For: CUH-1001A (Bluetooth part)   **S =   0.00112 mW/cm^2**

Therefore, if Bluetooth antenna has correlation with and transmits simultaneously with WLAN antenna;

  S= 0.12980 mW/cm^2 + 0.00112 mW/cm^2
   = 0.13092 mW/cm^2