

RF Exposure / MPE Calculation

No. : 10017505H

Applicant : Sony Computer Entertainment Inc.
Type of Equipment : Development Kit (for PlayStation®4) *WLAN/Bluetooth(LE) part
Model No. : DUH-D1000AA
FCC ID : AK8DUTD1000

Sony Computer Entertainment Inc. declares that Model : DUH-D1000AA 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 "DUH-D1000AA" 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/cm² uncontrolled exposure limit. The Friis formula used was:

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

Where

P = 248.54 mW (Maximum peak output power)
G = 3.16 Numerical Antenna gain; equal to 5.00 dBi *1
r = 20.0 cm

For: DUH-D1000AA

$$S = 0.15636 \text{ mW/cm}^2$$

***1: Antenna gain was calculated as follows based on KDB662911D01;**

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

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

*Bluetooth antenna also transmit simultaneously with WLAN antennas, but there is no correlation between WLAN antennas and Bluetooth antenna.