

RF Exposure evaluation

The EUT is a Bluetooth device used in mobile application, at least 20 cm from any body part of the user or near by persons.

The maximum conducted power is 18.2 mW; antenna is fix-mounted, 2.5 dBi gain. Therefore, to comply with RF Exposure Requirement, the MPE is calculated.

The maximum Peak EIRP calculated is 15.1 dBm or 32.4 mW.

The Power Density can be calculated using the formula

$$S = \text{EIRP} / 4\pi D^2$$

Where: S is Power Density in W/m^2

D is the distance from the antenna.

It is considered that 20cm is the minimum distance that user can go closer to the EUT (PhaseNet Radio Transmitter) which is installed inside the Console of WhiteStar Signature Remote Control system.

At 0.2 m, $S = 0.064 \text{ W}/\text{m}^2$, which is below the MPE Limit of $10 \text{ W}/\text{m}^2$