RF Exposure Evaluation

The EUT is a wireless device used at frequency range of 2.4 GHz in a mobile application, e.g. at least 20 cm from any body part of the user or nearby persons.

The Power Density is calculated using formula:

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

Where: S is Power Density in W/m^2
D is the distance from the antenna in meters.

The EUT contains three radio transmitters: WiFi, Bluetooth 2.0 (Classic) and Bluetooth 4.0 (LE). They are operating in standalone configuration.

1) **WiFi Radio**

The maximum conducted (average) Power is 0.0619 W, maximum antenna gain 3.6 dBi or 2.29 numeric. *EIRP* is calculated as 0.142 W.

At D = 0.2 m, S = 0.282 W/m^2 , which is below the MPE Limit of 10 W/m^2 at frequency 2.4 GHz

2) **Bluetooth (Classic) Radio (FHSS)**

The maximum conducted power is 0.0023 W; maximum antenna gain is 3.6 dBi or 2.29 numeric. *EIRP* is calculated as 0.005 W.

At D = 0.2 m, S = 0.01 W/m^2 , which is below the MPE Limit of 10 W/m^2 at frequency 2.4 GHz

1) **Bluetooth (Low Energy) Radio (DTS)**

The maximum conducted power is 0.0019 W; maximum antenna gain is 3.6 dBi or 2.29 numeric. *EIRP* is calculated as 0.004 W.

At D = 0.2 m, S = 0.008 W/m^2 , which is below the MPE Limit of 10 W/m^2 at frequency 2.4 GHz

All transmitters are in compliance with RF Exposure requirement in standalone operation, however they are also in compliance in simultaneous operation, since the summarized power density (equals 0.3 W/m^2) is below the MPE Limit.