Reply FCC SAR question for Model: 19-903

- The sample of SAR testing is tested in the maximum power 4.5 W although the rated power is 5W. This difference in the maximum output power is only 0.46dB. This difference may be caused by equipment of difference Laboratory. And then, this difference is also within the manufacturer specification +/- 1dB.
- 2) In the use manual, it shows to the user that the belt clip is used for storage only. The user must unclip it from the body before transmitting with a distance at least 5cm from the body. Therefore, the device would not use the body worn configuration for transmission. In this case, the SAR test for body worn configuration is not necessary.
- 3) Yes, it has a bit output reduced after a long test time. And you are right that we need to scaling the SAR to maximum power. Therefore the scaled maximum power is 0.9929W/kg and 0.7849W.kg for 462.550MHz and 462.725MHz respectively. They still are compliance the requirement 1.6W/kg.
- 4) In the SAR report, it showed that the peak SAR location with respect to the device is 35mm and 30mm below the antenna for 462.550MHz and 462.752MHz respectively.
- 5) The distance between the surface of the hand and the surface of head of phantom is 5cm. When the device is placed in the hand, the antenna and the device must be less than 5cm from the surface of the head of phantom. In user manual, the user is alerted hold the device 5cm from the face. Therefore, the measured result must be the worst case that manufacturer specified.
- 6) Please find the attached the re-do SAR Report and the missing page 17 for FCC evaluation.
- 7) The frequency range of the device is less than 1MHz. Therefore, I think that there is enough to choose the lowest frequency, 462.550MHz and the highest frequency, 462.725MHz for SAR measurement and the mid-band frequency is not necessary. And then, the device is no body worn transmission, so it is not necessary to perform the SAR test with belt-clip.
- 8) The SAR test result is compared the limit of uncontrolled environment and is compliance. Therefore, it means the device can be used in controlled/uncontrolled environment. And then, the user is alerted by caution statement in user manual.
- 9) In user manual, 50% duty cycle is stated in the user for RF exposure compliance.