Subject: RE: Response to Inquiry to FCC (Tracking Number 672303)

From: oetech@fccsun27w.fcc.gov

Sent: Wednesday, December 17, 2008 10:32 AM

Subject: Response to Inquiry to FCC (Tracking Number 672303)



Inquiry:

Dear FCC,

I'm writing to get your guidance for USB dongle SAR testnig.

Question #1;

I'd like to know the specific test configurations since this device can swivel at 45, 90, 135 and 180 degrees. According the FCC guidance KDB 447498, fow swivel connectors or antennas, the test orientations and configurations will need to be considered on a case-by-case.

I attached the User Manual for your understanding.

Generally, we perform the SAR testing in Horizontal-up, Horizontal-Down, Verticagl-front and Vertical-back positions at 180 degree since it is worst configuration.

In this case, should we verify the other tilted positions even though we evaluate the all above orientations?

Question #1;

If the EUT can not swivel and is designed at 90 degree only, which orientations should be tested?

Should you have any questions, please fell free to contact me.

Best Regards, SunHee Kim
/Is. SunHee Kim
Engineer, Product Compliance Division

Response:

For this particular dongle transmitter with a USB connector that can swing from the stowed zero degree position to a range of 180 degrees, the following procedures should be used. It should be noted that it is assumed the connector is unable to swing beyond 180 degrees and the dongle is locked into one of the specific angles (45, 90, 135 and 180 degrees). The 180 degree position is similar to a typical dongle with a fixed, straight USB connector.

Follow the general USB dongle SAR procedures in the "attachment" for KDB 447498 and test the device like a dongle with a straight, fixed USB connector (180 degrees) for the four defined connector orientations (A, B, C

& D) using 5 mm or less test separation distance. In addition, if the antenna is closer than 1 cm from the tail end of the dongle (the end without the connector), the dongle should also be tested with the tail end positioned at 5 mm or less perpendicularly from the phantom; but only on the channel with the highest SAR among all the other positions (A, B, C, D). These test configurations also cover the exposure conditions of the 45, 90 and 135 degree positions. A laptop computer should be used for one of the horizontal and also one of the vertical test positions. The KDB attachment is also included to this response.

The same procedures apply if the dongle has a fixed 90 degree USB connector configuration.

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