Yang, Viola-xx (Shenzhen)

From: oetech@fcc.gov
Sent: 2018年7月14日星期六 2:00
To: Geng, Peter (Shenzhen)
Subject: Response to Inquiry to FCC (Tracking Number 136267)

Inquiry on 06/28/2018 :

Inquiry:

Dear Sir/Madam,

This is an EMC engineer from SGS SZ. I got a wireless charger which using a QI technology to apply certification. It will be used in vehicle. please find its specification as below:

operation frequency: 114.1-128.4kHz

max output power: 10W

turns: 10

max diameter of the coil: 44mm

According to the user guide of this device, there's a posibility for end user to touch the device during normal operation. We have completed the RF exposure evaluation with a variational distance from 0cm to 15cm between the device and the test probe. Please refer to the RF exposure test report for details. A structure of the device has submitter for reference. please help to review and advise if it is acceptable? Thank you.

---Reply from Customer on 07/03/2018---

Dear Sir/Madam,

A user manual was submitted. Could you help to review it and give your comment?

Thank you very much and looking forward to your reply.

FCC response on 07/06/2018

Please explain if the charger is manufacture inbuilt with the car, provide photos of the location of the charger and its proximity to the passenger,what is the separation distance

. Please provide additional information about the host vehicle as well as justification for the proposed exposure distances. Please also provide more in depth description of the moving object and foreign object detection features

In order to assist us with providing adequate guidance ,description of specific device in which the wireless device is intended to be used is required, please provide us with the following information

1) Provide a detailed operational description of the device including all modes of operation and use condition, internal and external photos showing the location of the antennas, and the form size
signal characteristics, message types and channels

Please provide detail information of the RF exposure analysis the coil design to simulate the actual coil. all . line feed of coil including z-component H-fields considered, watt, voltage or ampere driven, calibration for custom H-field probe.

Provide description on the description on the message exchanges between the transmitter and the receiver and clarify if single channel is used for both transmitting and receiving the messages

Provide information on how the IEC code validation procedures were properly followed noting that t he 1-g SAR validation does follow procedures for all occasion.

Per KDN 680106, If your device does not meet the approval requirement in a-f for item 2

" Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation "

. You need to apply the item 3 requirement which states as follows:

"In all other cases, unless excluded by 2) above, an RF exposure evaluation report must be reviewed and accepted through a KDB or PBA inquiry to enable authorization of the equipment. When evaluation is required to show compliance; for example, using field strength, power density, SAR measurements or computational modeling etc., the specific authorization requirements will be determined based on the results of the RF exposure evaluation."

insure that your tabulated data are complete. Need to provide results at different charging conditions at 10%, 50% and 90.

Provide conducted power test results for all modes,. Is the device battery operated?

---Reply from Customer on 07/10/2018---

Dear Sir/Madam,

The device will be used in a vehicle environment and it does not contain a built-in rechargeable battery.

We can see from in user manual that the device will be mounted in the windscreen in the car and it is possible for the driver to touch it during normal operation because you can make the device 360 degree rotation.

The device can operate in charging mode and stand by mode since it support FOD function. It will detect the foreign object if it is a QI compatibility or not, then it will be in charging mode if yes, or it will be in standby mode.

A single channel is using when the wireless charger is in charging mode.

Because the device can not be considered as a mobile device, it doesnot comply with all requirement in item 3 in KDB 680106 app v03. I had completed the test at different charging conditions at 0%, 50% and 100%. I think it also can get a more accurate test result like this.

A detailed using specification has submitted for reference.

Base on my response above, can you help to review it again and give your comment. Thank you very much and looking forward to your reply.

---Reply from Customer on 07/13/2018---

Dear Sir/Madam,

Sorry to bother you again. It is urgent. May I have your comment?

FCC response on 07/13/2018

Please follow the given test guidance and your proposed test plan

Attachment Details:

structure of the wireless charger

RF exposure report

user manual

360 degree using specification

Do not reply to this message. Please select the Reply to an Inquiry Response link from the OET Inquiry System to add any additional information pertaining to this inquiry.