

## Yang, Viola-xx (Shenzhen)

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**From:** oetech@fcc.gov  
**Sent:** 2018年8月14日星期二 1:24  
**To:** Geng, Peter (Shenzhen)  
**Subject:** Response to Inquiry to FCC (Tracking Number 861417)

### **Inquiry on 08/01/2018 :**

#### **Inquiry:**

Dear Sir,

I got a Qi wireless charger to apply FCC part 18 under certificate.

Please find the specification of the device as following:

Max output power: 10W

number of turns:9

frequency of operation: 112.8-156.7kHz

The wireless charger contains a built-in rechargeable battery. It will not be considered as a mobile device per 2.1091. So it does not comply with the item b) of sub clause 5 in KDB 680106 App v03. The end user can touch the wireless charger during the normal operation. We have completed the tests with a distance of 4cm between the edge of the wireless charger and the center of the test probe. The test probe will be mostly close to the wireless charger during the tests but without touching. The tests report has submitted for reference. Please help to check if it is acceptable. Thank you very much and looking forward to your reply.

### **FCC response on 08/09/2018**

Thanks for your inquiry, explain if the charger is manufacture inbuilt and where the inbuilt device can likely be used and implemented, provide photos of the location of the charger and its proximity to the user, 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 the 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 08/12/2018---

Dear Sir/Madam,

The wireless charger contains a built-in rechargeablebattery. It can be used as an portable device. So it is not covered in KDB680106 app v03.

We can see from in user manual that the device will be intended to use in a couple of modes and it is possible for the end user to touch it during normal operation. So I had conducted the tests with a 4cm distance between the device and the test probe. It means the test device is so close to the test probe but without touching.

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.

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.

The submitted report is the test result of E-field and H-field. please help to check it again.

The user manual of the wireless charger pad, Operation Description for FOD and external and internal photos of the device have 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.

**FCC response on 08/13/2018**

Test proposal has been accepted and approved

**Attachment Details:**

[RF evaluation report](#)

[Operation Description for FOD](#)

[user manual](#)

[External and Internal photos of the wireless charge pad](#)

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.