



TEST SUMMARY

Introduction

Medtronic has performed full testing on a parent model and partial testing for a variant model. The updated guidance from KDB 484596 v3 was considered as part of the proposal below. The client understands that depopulating a radio from a system approval will require a separate FCC ID and appropriate testing on both models.

Product Overview – Parent: MyCareLink Home 26950

Bedside monitor that connects with various implantable device. This device contains the following radios:

- Quectel Wireless Solutions LTE Cat 1 bis Module 2023EG915QNA FCC ID LF526900A. This is a pre-approved module. The client as the host integrator has performed partial testing to show that the emissions from the module in the host meet FCC requirements.
- Wi-Fi a/b/g/n and BLE radio which was retested and certified as part of FCC ID LF526950.
- 175 kHz Inductive radio which the client has tested to FCC 15C and included as part of the system approval with the Wi-Fi/BLE above via a TCB. This radio is an external attachment to main PCB (see pictures below). It is a self contained item that is connected to the main PCB via an IO cable internal to the enclosure. See details in the FCC filing.



TEST SUMMARY



Product Overview – Variant: MyCareLink Home 26900

Bedside monitor that connects with various implantable device. This device contains the following radios:

- Quectel Wireless Solutions LTE Cat 1 bis Module 2023EG915QNA FCC ID LF526900A. This is a pre-approved module. The client as the host integrator has performed partial testing to show that the emissions from the module in the host meet FCC requirements.
- Wi-Fi a/b/g/n and BLE radio which was retested and certified as part of FCC ID LF526950. The manufacturer will follow the data referencing information in this document to partially leverage this testing under FCC ID LF526900.

The client states that the main PCB is electrically and mechanically identical between the parent and the variant. The differences between the two models are that the separate Inductive radio has been removed and the enclosure modified to remove the external cradle used for the Inductive radio (see pictures below).



Manufacturer states PCBA is identical in both the model 26950 and model 26900



TEST SUMMARY

Test Strategy for the Variant

KDB 484596 is clear that this KDB is only allowed in situations limited to depopulation. The proposed variant falls under this guidance, however, the enclosure has been modified due to the external inductive attachment being depopulated. The FCC via inquiry confirmed the TCB will review the manufacturer-provided documentation and make a determination on whether or not it is acceptable.

Based on best engineering practices in conjunction with the guidance from KDB and various FCC presentations, the following test strategy was performed. Each test report contains a comparison of worst case emissions between the parent and variant in accordance with the KDB and best engineering practices.

- Unintentional radiator will not leverage data from the parent
- RF exposure requirements will be addressed specific to the variant
- Cellular module
 - Emissions from the module in the host will be spot checked in the variant

Radio testing

The radio is based on a modular approved design and the conducted RF port measurements are unlikely to change so much of the conducted data was leveraged. This includes DFS since the radio will be limited to “client without radar detection” and both the main PCB and antenna design will not change between the two models.

Test Requirement	Test Item	DUT Setup Conditions	Parent Reference Document	Variant Reference Document
FCC 15.247(d)	Bluetooth - Spurious Radiated Emissions	2400-2483.5 MHz	MDTR1166.6	MDTR1174.16
FCC 15.207	Bluetooth - Powerline Conducted Emissions	2400-2483.5 MHz	MDTR1166.6	MDTR1174.16
FCC 15.247(b)(3)	Bluetooth - Output power/EIRP Spot Check	2400-2483.5 MHz	MDTR1166.6	MDTR1174.16
FCC 15.247	Bluetooth – All other requirements	2400-2483.5 MHz	MDTR1166.6	Leveraged from Parent
FCC 15.247(d)	Wi-Fi - Spurious Radiated Emissions	2400-2483.5 MHz	MDTR1166.5	MDTR1174.17
FCC 15.207	Wi-Fi - Powerline Conducted Emissions	2400-2483.5 MHz	MDTR1166.5	MDTR1174.17
FCC 15.247(b)(3)	Wi-Fi - Output power/EIRP Spot Check	2400-2483.5 MHz	MDTR1166.5	MDTR1174.17
FCC 15.247	Wi-Fi – All other requirements	2400-2483.5 MHz	MDTR1166.5	Leveraged from Parent
FCC 15.407(b)(1-7)	Wi-Fi - Spurious Radiated Emissions	5150-5850 MHz	MDTR1166.9	MDTR1174.19
FCC 15.207	Wi-Fi - Powerline Conducted Emissions	5150-5850 MHz	MDTR1166.9	MDTR1174.19
FCC 15.407(a)(1-4)	Wi-Fi - Output power/EIRP Spot Check	5150-5850 MHz	MDTR1166.9	MDTR1174.19
FCC 15.407	Wi-Fi – All other requirements	5150-5850 MHz	MDTR1166.9	Leveraged from Parent