

## Marina Chernyavsky

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**From:** oetech@fcc.gov  
**Sent:** Thursday, June 08, 2017 9:48 PM  
**To:** Marina Chernyavsky  
**Subject:** Response to Inquiry to FCC (Tracking Number 239584)



### Office of Engineering and Technology

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#### **Inquiry on 05/11/2017 :**

##### **Inquiry:**

Dear All,

Please check and approve our test report issued per FCC part 15 subpart F for UWB device.

Thank you,

Marina Cherniavsky, Hermon Laboratories

#### **FCC response on 05/11/2017**

Please provide the FCC ID.

---Reply from Customer on 05/14/2017---

Good morning,

FCC ID:2ADBO-P1100 (given on the first page of the test report).

Thank you,

Marina Cherniavsky, Hermon Laboratories

#### **FCC response on 05/16/2017**

Greetings,

You need to upload the UWB test report that shows your device passes the specific UWB rule.

---Reply from Customer on 05/17/2017---

Goog morning,

Please find attached.

Kindly,

---Reply from Customer on 05/17/2017---

Good morning,

Please find attached.

Kindly,

Marina Cherniavsky, Hermon Labs

### **FCC response on 05/17/2017**

You need to establish a new application or filing for the portion of the device that is UWB using the 731 form. With that said, the graph for rule part 15.519(d) does not indicate that it passes rule part 15.519(d). The procedure to test rule part 15.519(d) is below. In addition, it does not appear that this device was tested under rule part 15.519(a)(1).

Rule part 15.519(a)(1) is shown below;

1) A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

The FCC recommends that the procedure to test part 15.519(d), should be followed as indicated below in order to show compliance to the federal code of regulations.

This is a recommended manner in which to test the strict requirement as defined in part 15.519(d).

1. Configure the unit under test according to ANSI C63.4.
2. Provide power to the unit under test and supporting hardware.
3. Rotate the unit under test and supporting hardware 360 degrees to determine the position of the worst case radiated emission.
4. The height of the broadband receiving antenna should be varied between 1 meter and 4 meters.
5. For each suspicious radiated emission, move the receiving antenna between 1 meter and 4 meters and then rotate the turn table between 0 and 360 degrees.
6. The measured maximum radiated emissions should be measured with a Spectrum analyzer using an RMS detector. The RBW of 1 kHz and VBW of 1 kHz with a 1 msec averaging time is recommended for this measurement.

The Spectrum Analyzer is recommended to be set to:

Frequencies = 1164 MHz - 1240 MHz and 1559 MHz - 1610 MHz

RWB = 1 kHz

VBW = 1 kHz or 3 kHz (VBW greater than or equal to RWB)

Detector set at RMS or average (it is recommended to be set at RMS)

Span = auto

---Reply from Customer on 05/18/2017---

Dear FCC team,

1. For testing as per FCC part 15 sec.15.519(d) the relevant testprocedure of ANSI C63.10-2013 was used and not ANSI C63.4. We've followed section 10.3.10 which states: "the RBW may be reduced to a minimum of 1 kHz (30 kHz is recommended) to enhance the resolution of the individual spectral lines."

The power limit into field strength conversion is provided in the relevant section of the test report (Table 7.3.2) and it is based on ANSI C63.10-2013 section 10.3.9 equation (34). Plots 7.3.7 to 7.3.12 show all emissions below the limit 9.9 dB $\mu$ V/m.

Hope it explains the issue.

2. Plot 7.4.1 demonstrates that the UWB device ceases transmitting within 10 sec. The applicant Declaration about device operation was provided, please refer to attached.

Sincerely,

Marina Cherniavsky,

Hermon Laboratories

### **FCC response on 05/18/2017**

Greetings,

First, You have not uploaded the UWB portion of the grant of certification using form 731 as asked by the FCC.

Rule Secondly, rule part 15.519(d) states the following;

(d) In addition to the radiated emission limits specified in the table in paragraph (c) of this section, UWB

transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

Please redo this test in accordance with the procedure stated below otherwise the FCC will call in a sample.

---Reply from Customer on 06/08/2017---

Dear FCC Team,

The test was redone, test report PIXRAD\_FCC.28663\_UWB\_rev2 issued. Please check attached.  
The FCC Form731\_28663\_UWB\_rev1 also attached.

Best regards,

Marina Cherniavsky, Hermon Laboratories

**FCC response on 06/08/2017**

The item subject to PAG has been reviewed. The TCB may proceed with the grant of the application pending its review of all non-PAG items.

**Attachment Details:**

[TR per part 15 subp.F sec.15.519](#)

[Response to FCC Inquiry with Declaration of UWB device operation](#)

[Revised test report with retest according to part 15.519\(d\)](#)

[Form731 for UWB part](#)

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