



Test Report No.: 7212316074

Applicant: BlueWind Medical Ltd.

Equipment Under Test:

G02 system - electrical medical equipment

Product Name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Issued by:

The Standards Institution of Israel

Industry Division

Electrical & Electronics Laboratory

EMC Branch





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Applicant:	BlueWind Medical Ltd.
Address:	6 Maskit St., P.O.B 4101, Business Park 4614002, Herzliya, Israel
Sample for test selected by:	The customer
The date of test:	July, December 2022

Description of Equipment Under Test (EUT):	G02 system - electrical medical equipment
Product name:	OAB2000
Model:	RENOVA iStim (FCC ID: 2BAXD-E02-0)
Software version of radio unit:	4.1.2.204
Hardware version of radio unit:	MA-1004-0500, Revision A
Implant software version:	1.1.0.15
Implant hardware version:	Revision 12
Manufactured by:	BlueWind Medical Ltd

Reference Standard and Documents:

- ❖ CFR 47 FCC: Rules and Regulations: 47 CFR Subpart C - Intentional Radiators § 15.223 - Operation in the band 1.705-10 MHz.
- ❖ FCC Document: FCC "DA 23-1092" Waiver. In the Matter of BlueWind Medical Ltd. Request for Waiver of Section 15.223(a) of the Commission's Rules.

Test Result: This report includes the result of testing equipment based on the FCC 15.223 standard and compliance with FCC "DA 23-1092" Waiver. Details see in clause 1

This Test Report contains 31 pages and may be used only in its entirety.	This Test Report applies only to the specimen tested and may not be applied to other specimens of the same product.
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Product name: OAB2000

Model: RENOVA iStim

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1. Summary of Test Results

Test	Standard	Test Result
Radiated emission Freq. range: 1.705-10.0 MHz	FCC Part 15 Subpart C §15.223(a)	Pass*
Radiated emission outside of the band 1.705-10.0 MHz	FCC Part 15 Subpart C §15.223(b) - §15.209	Pass

Note: (*) The EUT compliance with FCC "DA 23-1092" Waiver

Electrical & Electronics
Laboratory
December 2022

Approved: Eng. Yuri Rozenberg
Position: Head of Branch

Name: Alexander Konkov
Position: Testing Engineer

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2. EUT Description

Note: All information in this section was provided by the customer.

2.1. General description:

The Equipment under Test (hereinafter: EUT) is an electrical medical equipment incorporate an External Control Unit (ECU) and Implant. The ECU power and control the implantable device intended for indoor/home neurostimulation of the tibial nerve.

The EUT is intended for indoor/home neurostimulation of the tibial nerve. It comprises implant, External Control Unit (ECU), and Clinical Programmer (CP). ECU drives and controls the energy transfer to the implant and communicates with CP through Bluetooth (BLE) communication interface.

ECU transmits electrical power at frequency 6.78MHz (ISM band).
ECU comprises RF Bluetooth module (BLE) transmitting at 2.4GHz.

After implantation patient receives wall adapter for battery charging and ECU for neurostimulation treatment.

CP intended only for physician use in clinics.

External Control Unit (ECU)

The ECU is comprised of the following:

- Transmitting Antenna
- Electronic Assembly – produces the energy for the Transmitting Antenna, controls treatment, communicates with the Implant, and CP/PC
- Rechargeable battery
- Audible and Visual Indicators (buzzer, LEDs)
- Housing – component which houses the electronic assembly and indicators
- Buttons for Interface (“Power”, “+”, and “-“)
- Charge/Communication interface with USB-C connector

The ECU is designed to be worn around the leg by the patient during treatment or utilized by the physician during the implantation procedure. To accommodate varying leg circumferences, the ECU will have an adjustable closing mechanism (pocket).

Charger

The ECU charging is allowed only with the dedicated charger supplied with the ECU.

The connection between the charger to ECU is done via regular USB-C type cable (supplied with the ECU).

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Implant

The Implant consists of an electronic assembly. On the outer surface of the Implant there are two ring electrodes, which provide the stimulation current to the tissue surrounding the Implant (see Picture # 3. The electrodes are connected electrically to the encapsulated electronic assembly. The electronic assembly comprises of an energy receiving antenna and electronic circuit. The electronic circuit is powered wirelessly using magnetic coupling between the receiving antenna in the Implant and the source antenna in the ECU. The main functions of the electronic circuit are the stimulation current output and communication with the ECU to receive the control commands and send the values of various electrical parameters.

The EUT dimensions:

ECU	40 x 11.3 x 4 cm approx.
AC Adapter (Charger)	55 x 27 x 55 mm approx.
Implant	30 x 2.7 mm approx.

AC Adapter for Charging: 85-230 VAC, 6 W.

Treatment performed using the internal battery only: 3.7 VDC Li-Ion battery 1400mAh.

The EUT's component views are shown in Pictures #1 - #3 and can be found in Appendix 3 also.

The EUT's block diagram is presents in Picture #4.

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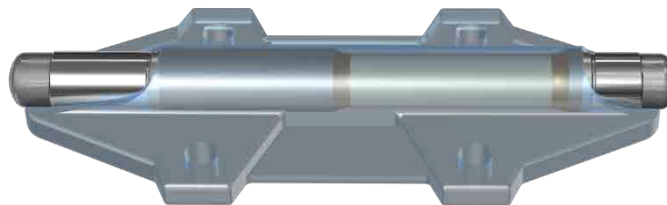
FCC ID: 2BAXD-E02-0



Picture # 1. EUT: ECU Rendering



Picture # 2. EUT: Charger and USB-C type cable



Picture # 3. EUT: Implant Rendering

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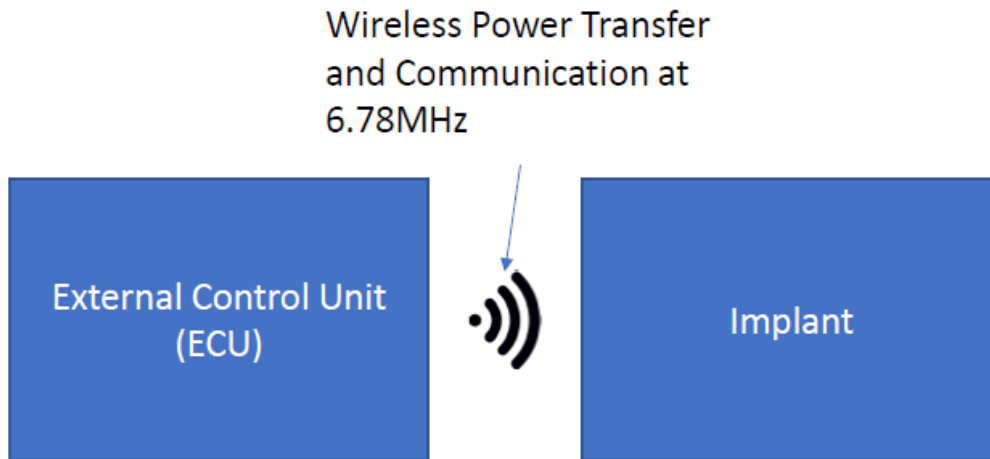
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Picture # 4. EUT block diagram – Test mode.

2.2. EUT sub-assemblies list:

Table1. Sub-assemblies list

Description (function)	Manufacturer	Model
External Control Unit (ECU)	BlueWind Medical LTD.	SW version is 4.1.2.204 HW version is based on MA-1004-0500, Revision A
Implant	BlueWind Medical LTD.	Implant SW version – 1.1 Implant HW version – Revision 12

2.3. Auxiliary equipment used:

Table2. Auxiliary equipment used

Name	MFR	Material	Model
Jig with circumference of 25cm	BlueWind Medical LTD.	PA12 (Nylon 12)	JP-1004-0796

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2.4. Potential emission sources:

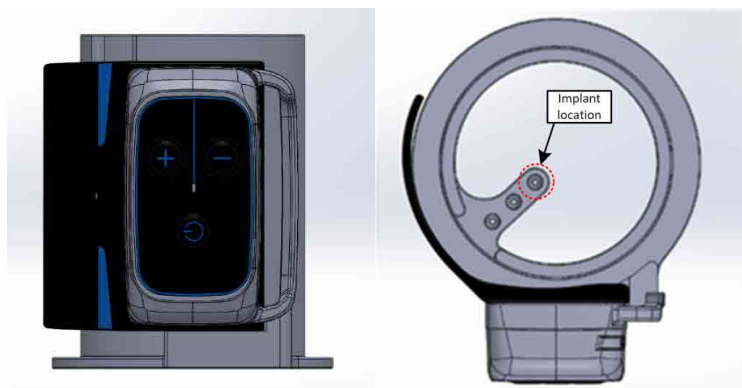
Table3. Potential emission sources

Frequency	Location	Remarks
13.56MHz	Power Amplifier board of ECU	Power amplifier clock frequency
6.78MHz	Power Amplifier board of ECU	Power amplifier RF transmission frequency
2.4GHz	Main Board of ECU	Bluetooth Module (BLE)
8MHz	Main Board of ECU	CPU main clock crystal
3MHz or 1.6MHz	Main Board of ECU	DC-DC Auxiliary boost
100kHz / 250kHz	Main Board of ECU	DC-DC buck boost
100kHz	Compensation board of ECU	DC-DC Fly-back
32.768kHz	Main Board of ECU	Real time clock

2.5. EUT setup and operation:

Tested modes:

Modulation Treatment (OOK-On off key) Mode, Ramp Up mode and Positioning Mode (EUT is powered from the battery) – see Picture # 5.



**Picture # 5. Test Setup
EUT assembled on the JIG**

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3. Test specification, Methods and Procedures

- ❖ CFR 47 FCC: "Rules and Regulations": Part 15. "Radio frequency devices", Subpart B: Unintentional radiators (2020).
- ❖ ANSI C63.4:2014: "American National Standard for Method of Measurement of Radio Noise Emissions from Low Voltage Electrical and Electronic Equipment in the Range 9 kHz to 40 GHz".
- ❖ ANSI C63.10: 2020 "American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices".

4. Additional deviations or exclusions from the test specifications

Tests were performed at the request of the customer.

5. General conditions

5.1. Location of the Test Site:

All tests were conducted at the EMC Laboratory of the Standards Institution of Israel in Tel-Aviv.

5.2. Emission tests:

- * The initial scan was made using a peak detector but still using the appropriate CISPR 16 (Quasi-Peak) detector IF bandwidth.
- * A tolerance limit was set 10 dB below the specification limit. Levels above the tolerance limit were retested using the Quasi-Peak detector.

5.3. Initial visual check and functional test:

Initial visual check and brief built-in test of the EUT was performed before testing. No external damages were found.

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6. Emissions

6.1. Radiated Emission Summary

Test procedure:

Tested modes – Treatment mode, Ramp Up mode and Positioning Mode.

Treatment mode, Ramp Up mode – Transmit data to Implant.

Positioning Mode - search mode and synchronization with the implant.

Test setup – see sec.2.5.

The measurements were conducted in 3m semi-anechoic chamber.

The frequency range from 9 kHz to 70MHz was investigated.

Antennas used:

Biconilog Antenna (30 MHz-2 GHz),

Loop Antenna (9 kHz – 30MHz)

For measurements above 30MHz: the levels were maximized by changing antenna polarization from vertical to horizontal, rotating turntable through 360-degree, varying antenna height from 1m to 4m and rerouting EUT cable.

For measurements below 30MHz: the levels were maximized by changing antenna along the orthogonal axis (parallel (hereinafter: PAR), perpendicular (hereinafter: PER), and ground parallel (hereinafter: GR)), rotating turntable through 360-degree.

Requirements FCC Part 15 Subpart C §15.223 :

The field strength of any emission within the band 1.705-10.0 MHz shall not exceed 15 microvolts/meter at a distance of 30 meters. The emission limits in this paragraph are based on measurement instrumentation employing an average detector. The provisions in § 15.35(b) for limiting peak emissions apply.

The field strength of emissions outside of the band 1.705-10.0 MHz shall not exceed the general radiated emission limits in § 15.209.

Note:

According to official Waiver document number DA 23-1092 (FCC) , BlueWind's device would operate in the 6.78 MHz band, with a field strength limit that does not exceed 108.8 microvolts per meter at 30m.

In this document the limit of 3 meters was used, the limit was calculated:

$$\text{Limit AVG@3m} = 20 * \text{Log}(108.8 \mu\text{V/m@30m}) + 40 * \text{Log}(30\text{m}/3\text{m}) = 80.73 \text{ dB}\mu\text{V/m@3m}$$

$$\text{Limit Peak@3m} = \text{Limit AVG@3m} + 20 \text{ dB} = 100.73 \text{ dB}\mu\text{V/m@3m}$$

(In according with FCC § 15.35(b))



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Test results:

Specified Standard	Frequency range	Polarization	Ref. Table/ Plot
FCC Part 15 Subpart C Sec.15.223	9 kHz – 30 MHz	PAR/PER/GR	Plots # 1-9
FCC Part 15 Subpart C Sec.15.223	30 MHz – 70 MHz	V/H	

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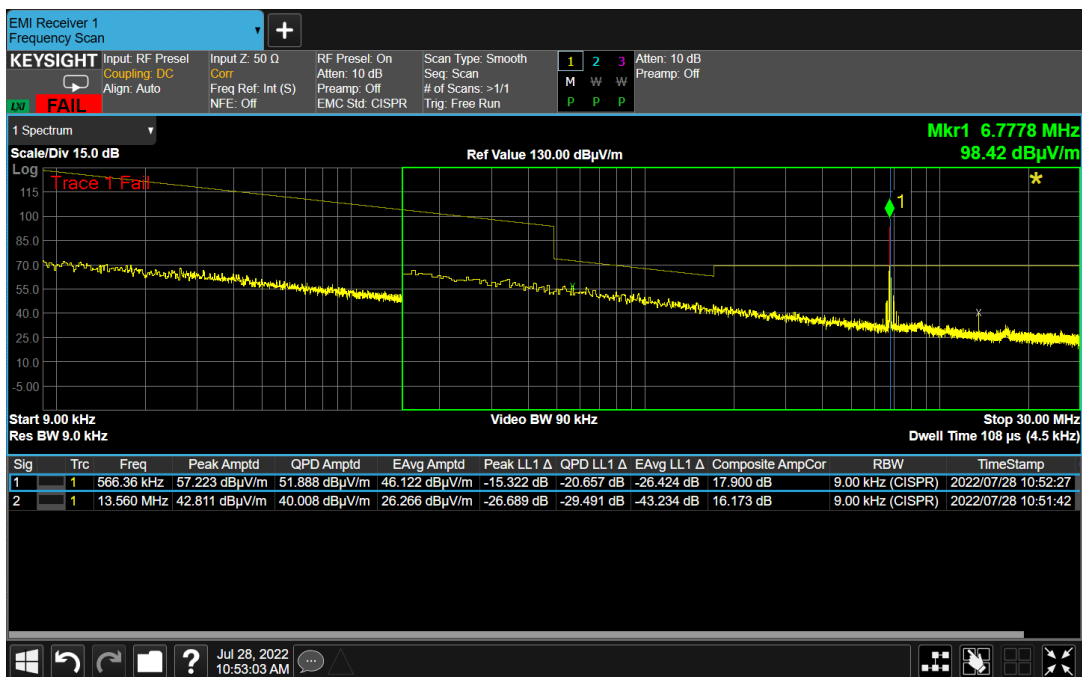
Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 9kHz – 30MHz
 Measured distance: 3m
 Mode Treatment mode

Plot 1: Radiated emission scan in range 9 kHz -30 MHz. Treatment mode



No	Frequency (MHz)	Antenna Height (m)	Turntable angle (°)	Emission (dBµV/m)		Limit (dBµV/m)		Margin (dB)	
				Peak	Qp	Peak	QP	Peak	QP
1	0.556	1.0	50	57.22	51.88	-	72.53	-	-20.65
2	6.7778	1.0	10	98.42	-	Tx			
3	13.560	1.0	112	42.81	40.00	-	69.5	-	-29.49

Note:

The maximum measurement value was found in PAR. polarization of the measuring antenna.



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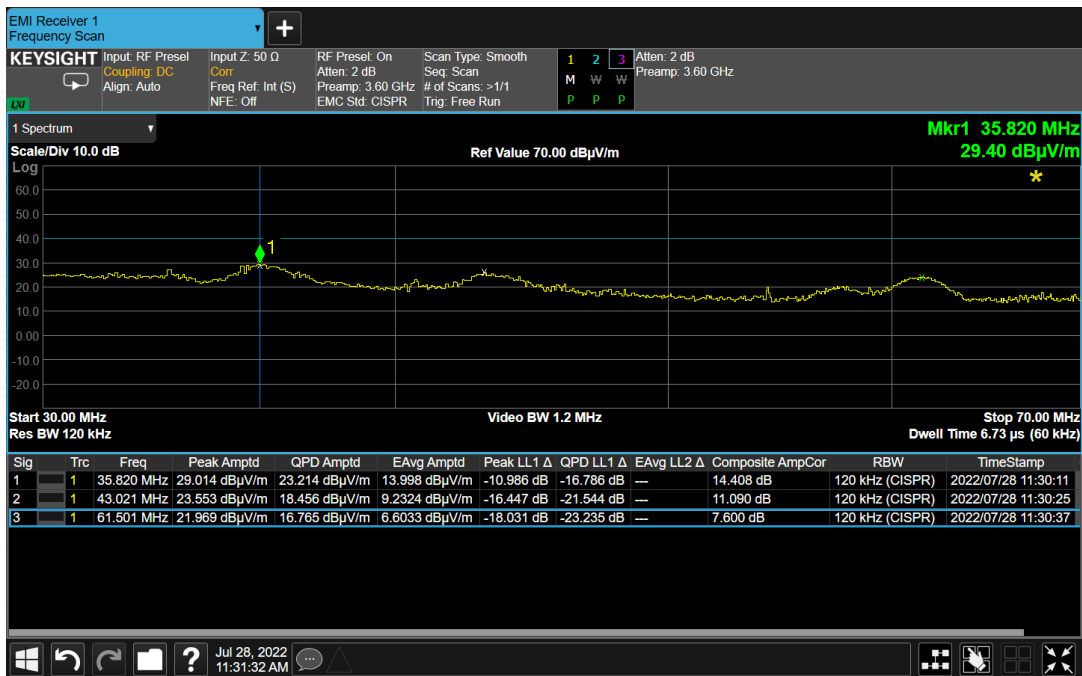
Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 30 – 70 MHz
 Measured distance: 3m
 Mode Treatment mode

Plot 2: Radiated emission scan in range 30-70 MHz. Treatment mode



No	Frequency (MHz)	Emission (dBμV/m)		Limit (dBμV/m)	Margin (dB)
		Peak	Qp	Qp	Qp
1	45.820	29.01	23.21	40	-16.79
2	43.021	23.55	18.45	40	-21.55
3	61.501	21.96	16.76	40	-23.24

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Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass *

Ref. Standard: FCC Part 15 Subpart C 15.223

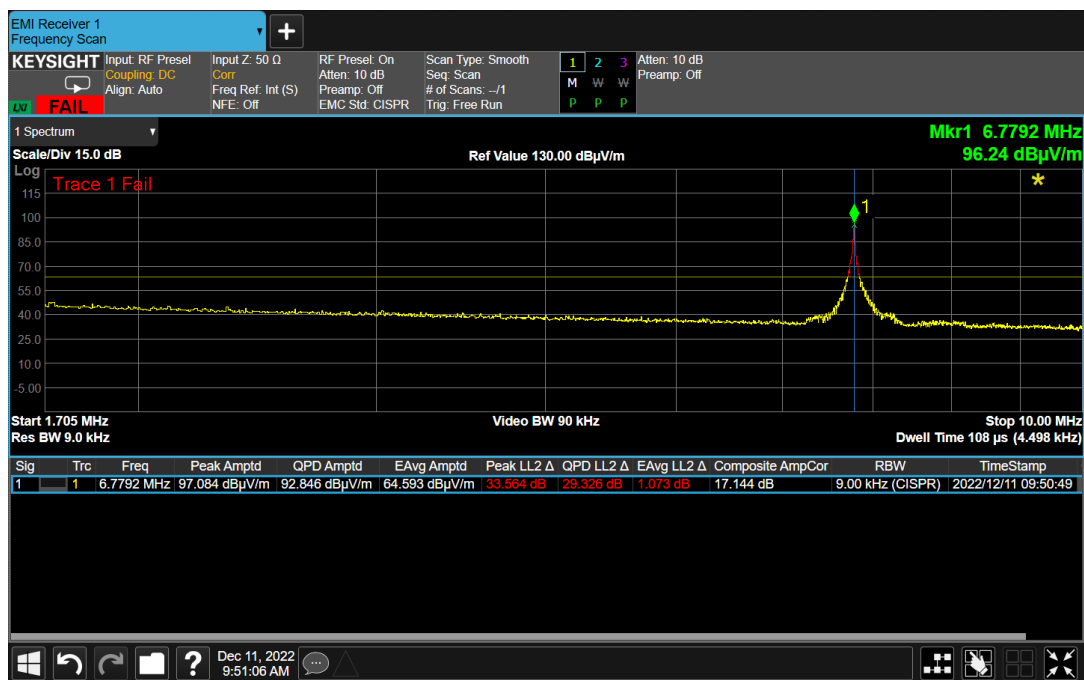
Frequency range: 1.705 – 10 MHz

Measured distance: 3m

Mode Treatment mode

Note: (*) The EUT compliance with FCC “DA 23-1092” Waiver

Plot 3: Radiated emission scan in range 1.705-10 MHz. Treatment mode



No	Frequency (MHz)	Emission (dBµV/m)		Limit* (dBµV/m)	Margin (dB)	Limit* (dBµV/m)	Margin (dB)
		Peak	AVG	Peak	Peak	AVG	AVG
1	6.7792	97.084	64.69	100.73	-3.64	80.73	-15.27

Note 1: The duty cycle Correction Factor δ (dB) { for value AVG }

$$\delta \text{ (dB)} = 20 \cdot \text{Log}(t/T) = 20 \cdot \text{Log}(5 \cdot 0.16\text{mS} / 33.33 \text{ mS}) = -32.39 \text{ dB}$$

$$\text{AVG} = \text{Peak}(\text{Meas}) + \delta \text{ (dB)}$$

Note 2: The maximum measurement value was found in PAR. polarization of the measuring antenna.

Value	Points	Note
<i>T</i> is the period of the pulse train	33.33 mS	Plot 10
<i>t1</i> is duration pulse	0.16 mS	Plot 16
<i>Pulses</i> - is the number of pulses of duration <i>t1</i>	5 times	Plot 11
<i>t</i> is duration pulses in the pulse train	0.8 mS	Pulses * <i>t1</i>

Note 3: (*) in according with FCC “DA 23-1092” Waiver and limit calculated in section 6.1

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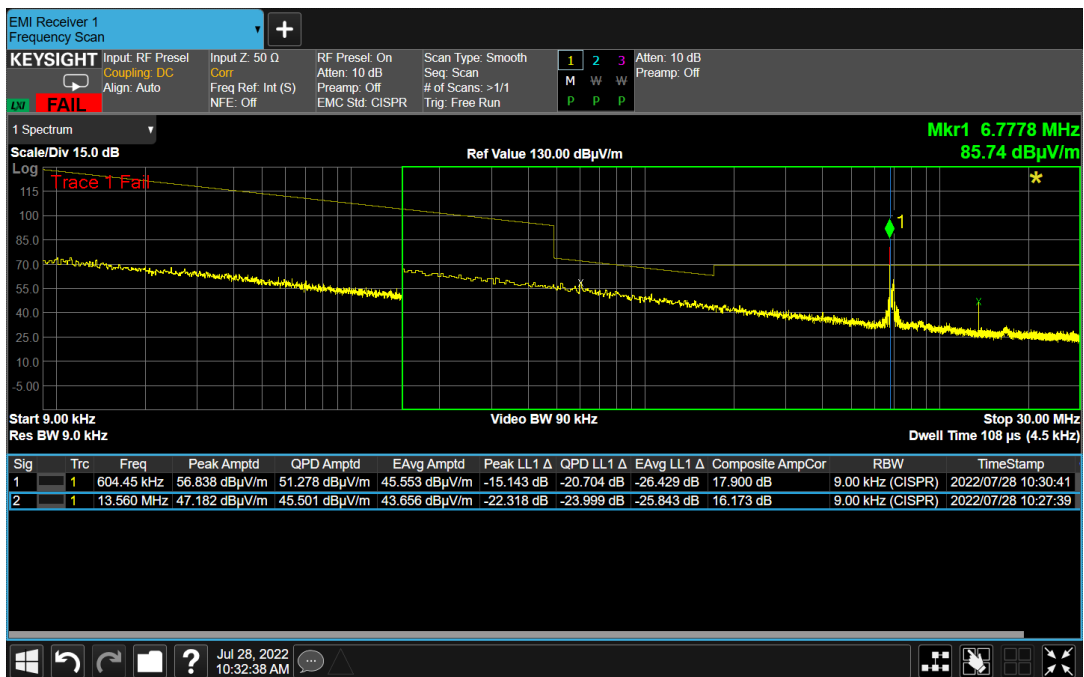
Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 9kHz – 30MHz
 Measured distance: 3m
 Mode Positioning Mode

Plot 4: Radiated emission scan in range 9 kHz -30 MHz. Positioning Mode



No	Frequency (MHz)	Antenna Height (m)	Turntable angle (°)	Emission (dBµV/m)		Limit (dBµV/m)		Margin (dB)	
				Peak	Qp	Peak	QP	Peak	QP
1	0.604	1.0	46	56.83	51.27	-	71.97	-	-20.704
2	6.7778	1.0	10	85.74	-	Tx			
3	13.560	1.0	110	47.18	45.50	-	69.5	-	-23.50

Note:

The maximum measurement value was found in PAR. polarization of the measuring antenna.



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Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 30 – 70 MHz
 Measured distance: 3m
 Mode Positioning Mode

Plot 5: Radiated emission scan in range 30-70MHz. Positioning Mode



No	Frequency (MHz)	Emission (dBµV/m)		Limit (dBµV/m)	Margin (dB)
		Peak	Qp	Qp	Qp
1	36.298	27.43	21.92	40	-18.079
2	42.659	23.03	18.13	40	-21.870
3	60.945	22.26	17.65	40	-22.145

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Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass *

Ref. Standard: FCC Part 15 Subpart C 15.223

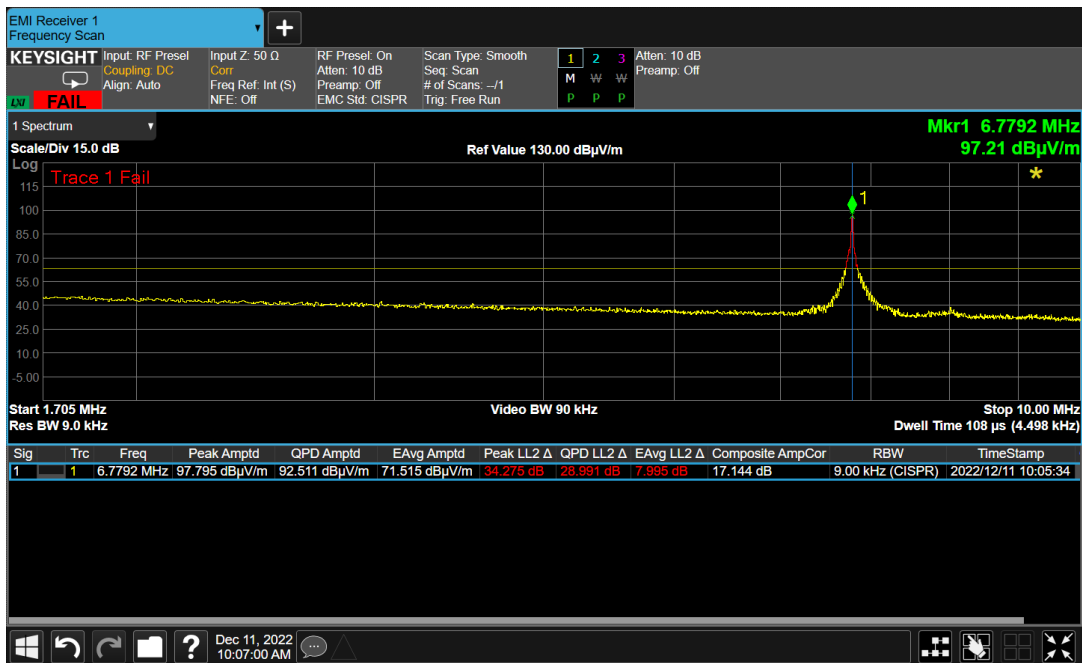
Frequency range: 1.705-10 MHz

Measured distance: 3m

Mode Positioning Mode

Note: (*) The EUT compliance with FCC "DA 23-1092" Waiver

Plot 6: Radiated emission scan in range 1.705-10MHz. Positioning Mode



No	Frequency (MHz)	Emission (dBµV/m)		Limit* (dBµV/m)	Margin (dB)	Limit* (dBµV/m)	Margin (dB)
		Peak	AVG	Peak	Peak	AVG	AVG
1	6.7792	97.795	77.735	100.73	-2.93	80.73	-2.99

Note 1: The duty cycle Correction Factor δ (dB) { for value AVG }

$$\delta \text{ (dB)} = 20 \cdot \text{Log}(t/T) = 20 \cdot \text{Log}(62 \cdot 0.16\text{mS} / 100 \text{ mS}) = -20.06 \text{ dB}$$

$$\text{AVG} = \text{Peak}(\text{Meas}) + \delta \text{ (dB)}$$

Note 2: The maximum measurement value was found in PAR. polarization of the measuring antenna.

Value	Points	Note
<i>T</i> is the period of the pulse train	100 mS	Plot 12
<i>t1</i> is duration pulse	0.16 mS	Plot 18
<i>Pulses</i> - is the number of pulses of duration <i>t1</i>	62 times	Plot 13
<i>t</i> is duration pulses in the pulse train	10.24 mS	Pulses * <i>t1</i>

Note 3: (*) in according with FCC "DA 23-1092" Waiver and limit calculated in section 6.1

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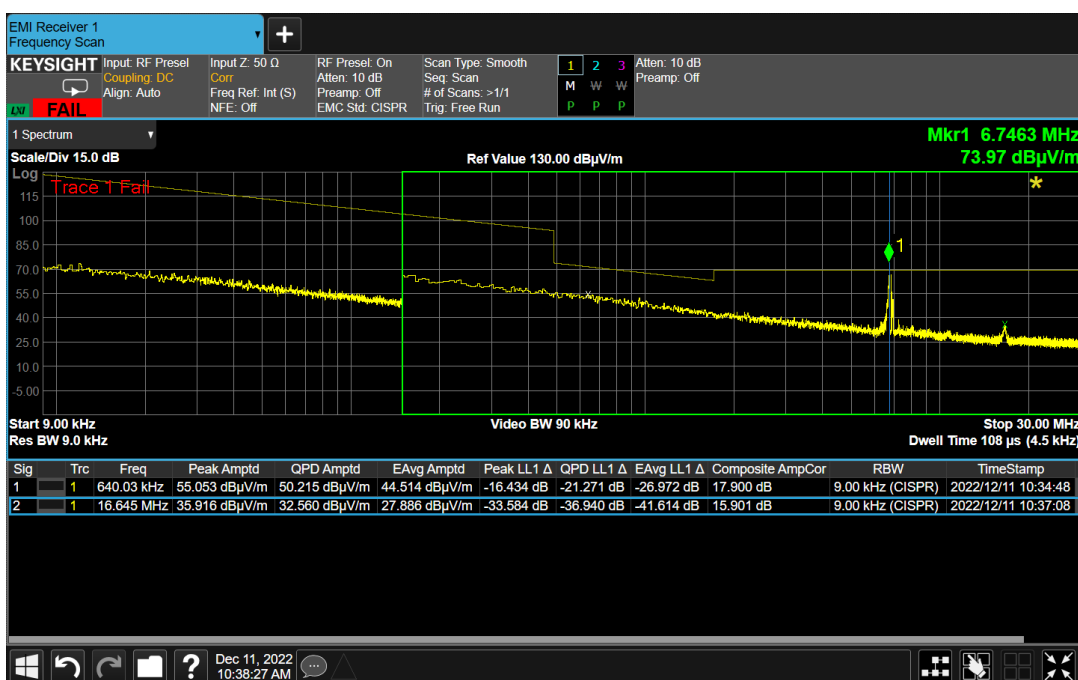
Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 9kHz – 30MHz
 Measured distance: 3m
 Mode Ramp Up Mode

Plot 7: Radiated emission scan in range 9 kHz -30 MHz. Ramp Up Mode



No	Frequency (MHz)	Antenna Height (m)	Turntable angle (°)	Emission (dBµV/m)		Limit (dBµV/m)		Margin (dB)	
				Peak	Qp	Peak	QP	Peak	QP
1	0.64003	1.0	82	55.05	50.21	-	71.48	-	-21.27
2	6.7463	1.0	10	73.97	-	Tx			
3	16.645	1.0	128	35.91	32.56	-	69.5	-	-36.94

Note:

The maximum measurement value was found in PAR. polarization of the measuring antenna.



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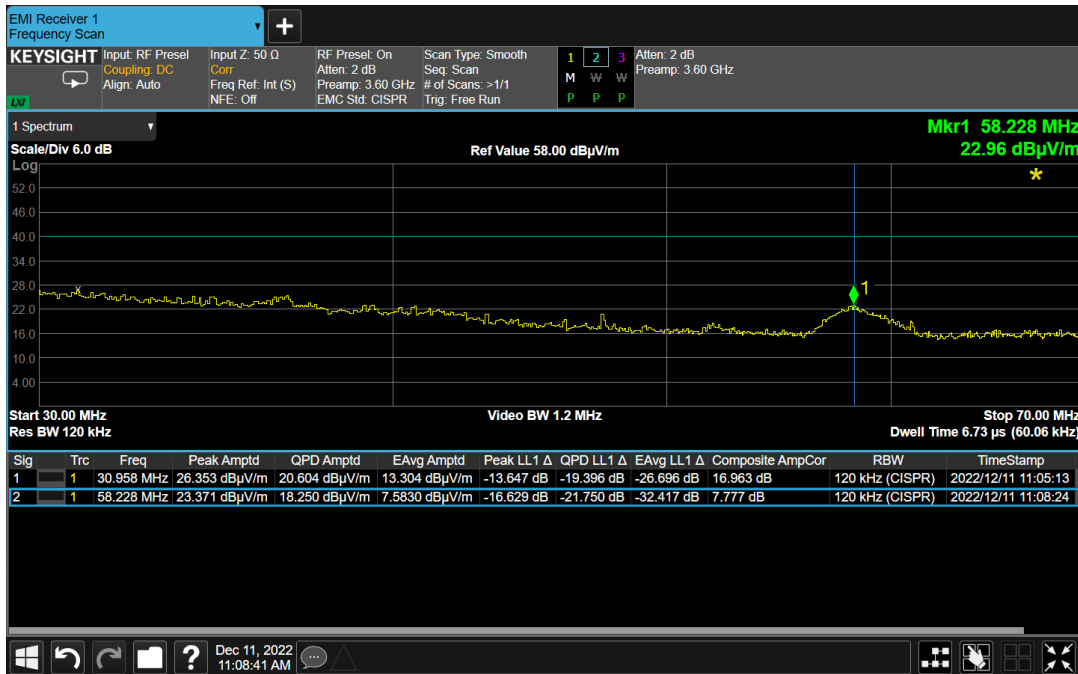
Product name: OAB2000

Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass
 Ref. Standard: FCC Part 15 Subpart C 15.209
 Frequency range: 30 – 70 MHz
 Measured distance: 3m
 Mode Ramp Up Mode

Plot 8: Radiated emission scan in range 30-70MHz. Ramp Up Mode



No	Frequency (MHz)	Emission (dBμV/m)		Limit (dBμV/m)	Margin (dB)
		Peak	Qp	Qp	Qp
1	30.958	26.35	20.60	40	-19.40
2	58.228	23.37	18.25	40	-21.75

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Product name: OAB2000

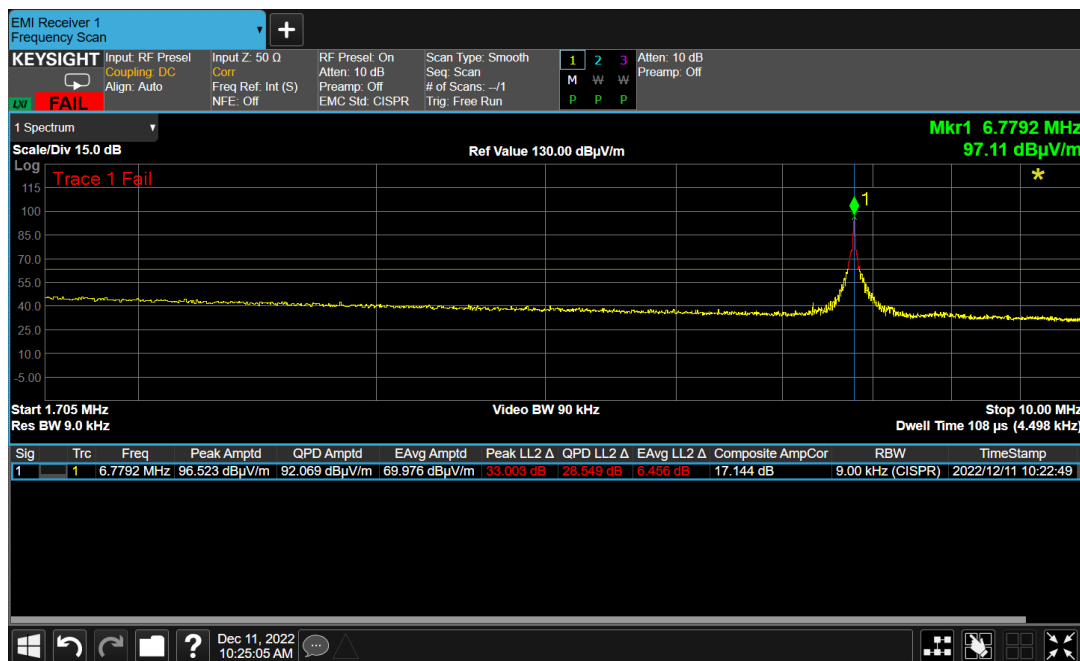
Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

Result Pass *
 Ref. Standard: FCC Part 15 Subpart C 15.223
 Frequency range: 1.705-10 MHz
 Measured distance: 3m
 Mode Ramp Up Mode

Note: (*) The EUT compliance with FCC "DA 23-1092" Waiver

Plot 9: Radiated emission scan in range 1.705-10MHz. Ramp Up Mode



No	Frequency (MHz)	Emission (dBµV/m)		Limit* (dBµV/m)	Margin (dB)	Limit* (dBµV/m)	Margin (dB)
		Peak	AVG	Peak	Peak	AVG	AVG
1	6.7792	96.5	77.73	100.73	-4.23	80.73	-3

Note 1: The duty cycle Correction Factor δ (dB) { for value AVG }
 δ (dB) = $20 \cdot \log(t/T) = 20 \cdot \log(72 \cdot 0.16\text{mS} / 100 \text{ mS}) = -18.77 \text{ dB}$
 AVG = Peak(Meas) + δ (dB)

Note 2: The maximum measurement value was found in PAR. polarization of the measuring antenna.

Value	Points	Note
T is the period of the pulse train	100 mS	Plot 14
$t1$ is duration pulse	0.16 mS	Plot 18
Pulses - is the number of pulses of duration $t1$	72 times	Plot 15
t is duration pulses in the pulse train	11.52 mS	Pulses * $t1$

Note 3: (*) in according with FCC "DA 23-1092" Waiver and limit calculated in section 6.1

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6.2. Determining the average value of pulsed emissions

The average field strength may be found by measuring the peak pulse amplitude (in log equivalent units) and determining the duty cycle correction factor (in dB) associated with the pulse modulation as shown in Equation:

$$\delta(\text{dB}) = 20 \log \left[\frac{\sum (nt_1 + mt_2 + \dots + \xi t_x)}{T} \right]$$

where

- n is the number of pulses of duration t_1
- m is the number of pulses of duration t_2
- ξ is the number of pulses of duration t_x
- T is the period of the pulse train, or 100 ms if the pulse train length is greater than 100 ms

Tested modes

Treatment mode – Transmit data to Implant (Plots 10-11)

Positioning Mode - search mode and synchronization with the implant (Plots 12-13)

Ramp Up mode - Transmit data to Implant (Plots 14-15)

This worst case which includes transmit data to implant (twice 5 pulses) and synchronization with the implant (62 pulses).



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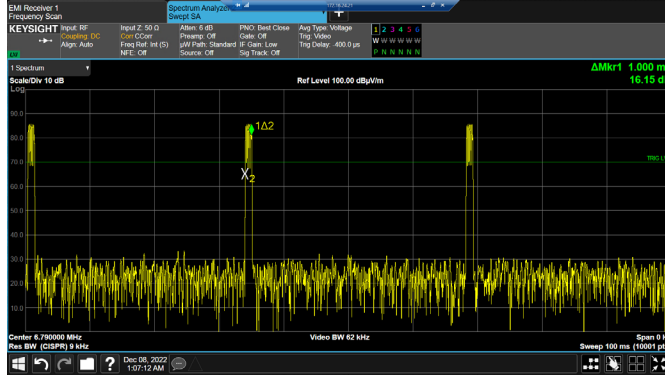
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Title: G02 system - electrical medical equipment

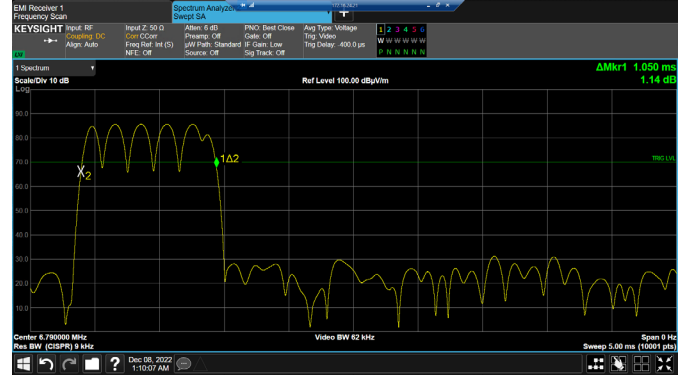
Product name: OAB2000

Model: RENOVA iStim

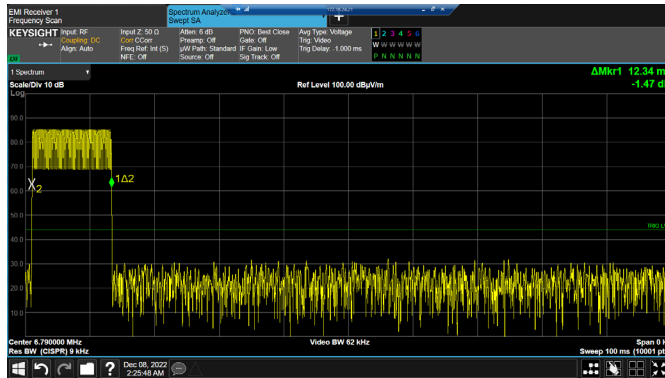
FCC ID: 2BAXD-E02-0



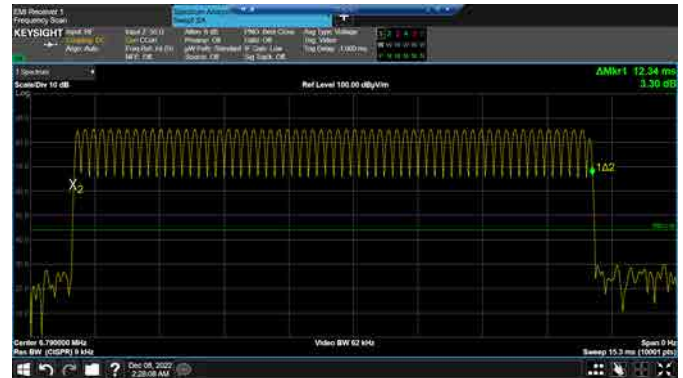
Plot 10: Treatment mode



Plot 11: Treatment mode



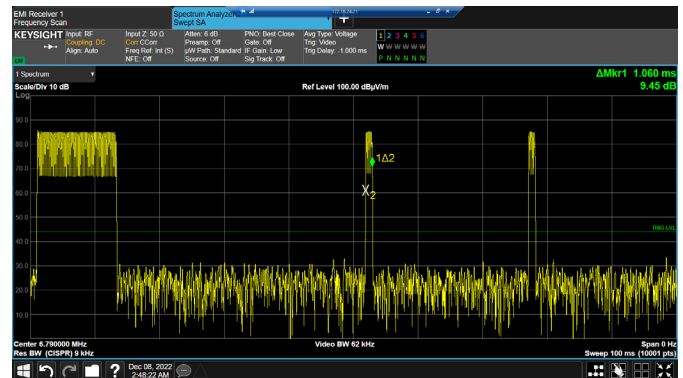
Plot 12: Positioning Mode



Plot 13: Positioning Mode



Plot 14: Ramp Up Mode



Plot 15: Ramp Up Mode

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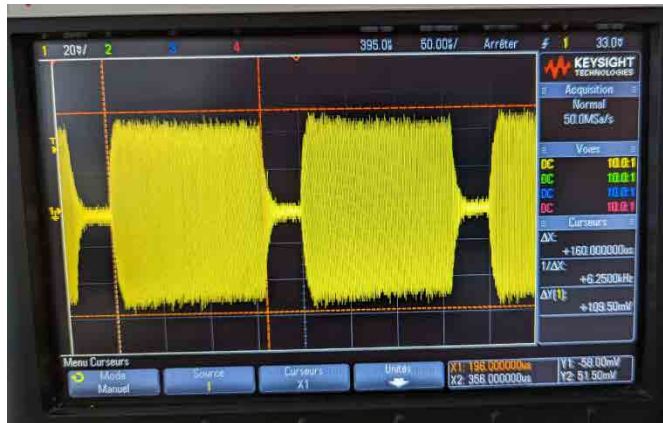
Title: G02 system - electrical medical equipment

Product name: OAB2000

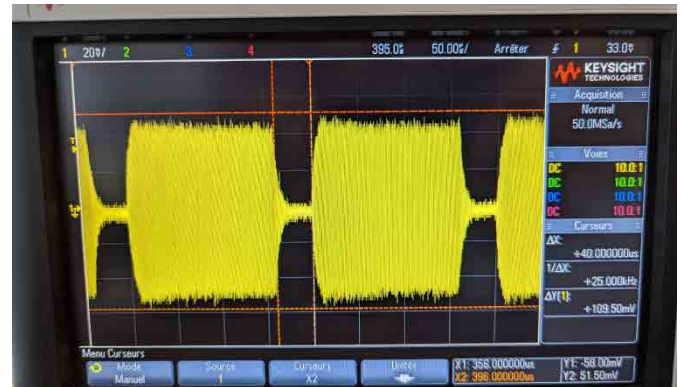
Model: RENOVA iStim

FCC ID: 2BAXD-E02-0

This information was provided by the customer, Customer declaration of is duration pulses in all modes, Treatment mode plots 16-17 and Ramp Up plot 18.



Plot 16: Treatment mode



Plot 17: Treatment mode



Plot 18: Ramp Up Mode



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7. Appendix 1: Test equipment used

All measurements equipment is on SII calibration schedule with a recalibration interval not exceeding one year.

Instrument	Manufacturer	Model	SII No.	Last calibration date	Next calibration date
EMI RECEIVER-MXE 3Hz-44GHz	Agilent	N9038B	6505208	09/22	09/23
Active Receiving Loop Antenna	ETS-Lindgren	6507	00144641	11/20	11/22
Bigonilog Antenna 20 MHz - 6000 MHz	ETS-Lindgren	3142D	146490	10/21	10/23
Double Ridged Waveguide Antenna 1-18 GHz	EMCO	3115	0143138	07/21	07/23
Semi Anechoic Chamber	ETS-Lindgren	RFSD-F/A-100	5002	N/A	N/A
Multi-Device Positioning Controller	ETS-Lindgren	2090	5002	N/A	N/A
Antenna Tower	ETS-Lindgren	2175	5002	N/A	N/A
Boresight Antenna Tower	ETS-Lindgren	2171B	5002	N/A	N/A
Turntable	ETS-Lindgren	2188	5002	N/A	N/A
Cable RF 3 m	VPO 2930	K30K30-5003- 300cm5VI	005	04/22	04/23
Cable RF 3 m	VPO 2930	K30K30-5003- 300cm6VI	006	04/22	04/23
Cable RF 3 m	VPO 2930	K30K30-5003- 300cm7VI	007	04/22	04/23
Cable RF 3 m	VPO 2930	K30K30-5003- 300cm8VI	008	04/22	04/23
Attenuator 10dB 5W	-	5W	6502986	04/22	04/23
Cable	EIM	RG 214/U	8 & 10	01/22	01/23



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Title: G02 system - electrical medical equipment

Product name: OAB2000

Model: RENOVA iStim

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8. Appendix 2: Antenna Factor and Cable Loss

Cable Loss (SAC, frequency range: 30 MHz-1.0 GHz)

No.	Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
1	28.71	0.4	97.21	1.0	329.17	1.7
2	30.14	0.4	102.07	1.0	345.63	1.8
3	31.65	0.5	107.17	1.0	362.91	1.8
4	33.23	0.5	112.53	1.0	381.06	1.8
5	34.89	0.5	118.15	1.0	400.11	1.9
6	36.64	0.5	124.06	1.1	420.12	2.0
7	38.47	0.5	130.27	1.1	441.12	2.0
8	40.39	0.6	136.78	1.1	463.18	2.1
9	42.41	0.6	143.62	1.1	486.34	2.1
10	44.53	0.6	150.80	1.1	510.66	2.2
11	46.76	0.6	158.34	1.1	536.19	2.2
12	49.10	0.6	166.26	1.1	563.00	2.4
13	51.55	0.6	174.57	1.2	591.15	2.4
14	54.13	0.7	183.30	1.2	620.70	2.5
15	56.83	0.7	192.46	1.3	651.74	2.6
16	59.68	0.7	202.08	1.3	684.33	2.6
17	62.66	0.7	212.19	1.3	718.54	2.8
18	65.79	0.8	222.80	1.4	754.47	2.9
19	69.08	0.8	233.94	1.4	792.19	2.9
20	72.54	0.8	245.63	1.4	831.80	3.0
21	76.16	0.8	257.92	1.5	873.39	3.2
22	79.97	0.9	270.81	1.5	917.06	3.2
23	83.97	0.9	284.35	1.5	962.92	3.3
24	88.17	0.9	298.57	1.6	1011.06	3.4
25	92.58	0.9	313.50	1.6	--	--



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Title: G02 system - electrical medical equipment

Product name: OAB2000

Model: RENOVA iStim

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Cable Loss (SAC, frequency range: 1.0 GHz – 6.0 GHz)

No.	Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
1	962.92	3.3	1815.72	5.0	3423.81	7.2
2	1011.06	3.4	1906.51	5.1	3595.00	6.8
3	1061.61	3.4	2001.83	5.2	3774.75	7.0
4	1114.70	3.5	2101.92	5.3	3963.49	7.1
5	1170.43	3.7	2207.02	5.4	4161.67	7.6
6	1228.95	3.9	2317.37	5.5	4369.75	7.7
7	1290.4	3.9	2433.24	5.6	4588.24	7.7
8	1354.92	4.0	2554.90	5.9	4817.65	7.8
9	1422.67	4.2	2682.65	5.8	5058.53	8.1
10	1493.80	4.6	2816.78	5.8	5311.46	8.4
11	1568.49	4.7	2957.62	6.3	5577.03	8.6
12	1646.91	4.8	3105.50	6.2	5855.88	9.1
13	1729.26	4.9	3260.77	6.7	6000.00	9.3



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Product name: OAB2000

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Double Ridged Waveguide Antenna Model Number: 3115 S/N 0143138
Frequency range: 1.0 GHz – 18.0 GHz
3m distance

No.	f / MHz	AF / dB/m	f / MHz	AF / dB/m	f / MHz	AF / dB/m
1	1000	23.6	7000	36.7	13000	39.7
2	1500	25.6	7500	37.3	13500	40.3
3	2000	28.2	8000	37.0	14000	41.0
4	2500	27.8	8500	37.6	14500	41.0
5	3000	29.3	9000	37.8	15000	39.6
6	3500	30.7	9500	38.0	15500	38.8
7	4000	31.8	10000	38.3	16000	39.1
8	4500	32.1	10500	38.6	16500	40.0
9	5000	32.9	11000	38.6	17000	40.9
10	5500	32.9	11500	38.9	17500	42.3
11	6000	34.0	12000	38.8	18000	42.5
12	6500	35.3	12500	38.9	--	--

Antenna Factor

Biconilog Antenna, Model Number: 3142D S/N: 00146488 SII No. 6503046
Frequency range: 1.0 GHz – 2.0 GHz
3 m distance

No.	f / MHz	ACF / dB/m	f / MHz	AF / dB/m
1	30	22.7	200	16.7
2	35	20.4	250	18.0
3	40	17.8	300	19.8
4	45	15.7	400	22.7
5	50	14.2	500	25.8
6	60	13.0	600	27.4
7	70	13.0	700	28.4
8	80	12.4	800	30.0
9	90	13.3	900	31.3
10	100	14.2	1000	32.8
11	120	13.3	1250	35.8
12	140	13.3	1500	42.9
13	160	14.6	1750	36.1
14	180	16.3	2000	34.6

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9. Appendix 3: Test illustrations



Picture # 6.
Radiated Emission test setup below 30 MHz.

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**Picture # 7.
Radiated Emission test setup.**

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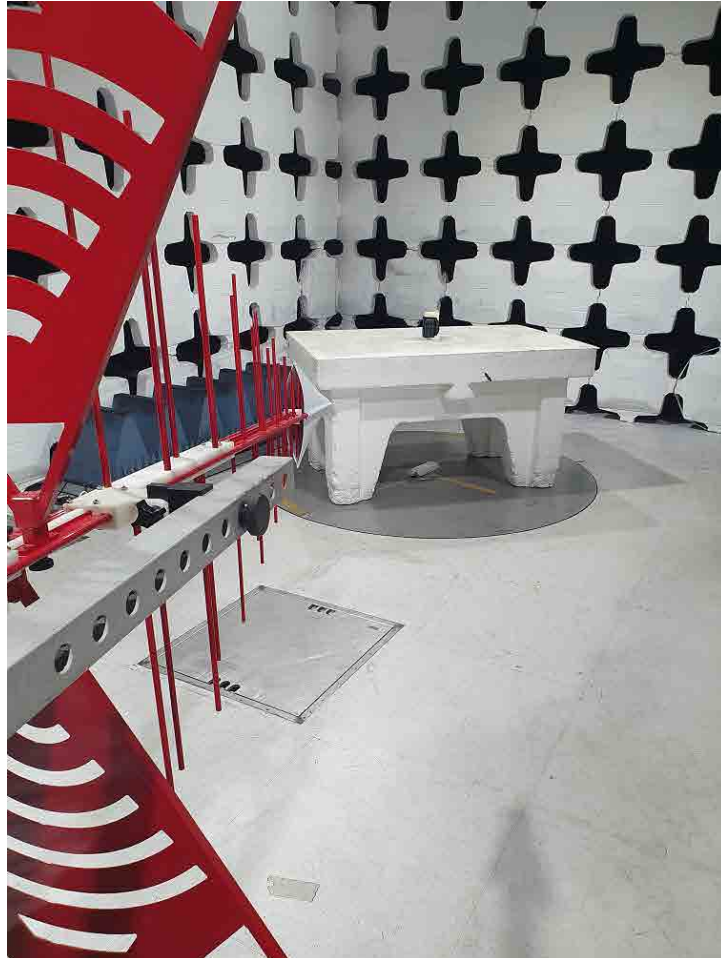
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**Picture # 8.
Radiated Emission test setup above 30 MHz.**

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