

1/05/2025

Devicor Medical Products Inc.  
300 E-Business Way, Fifth Floor  
Cincinnati, OH 45241  
USA

Dear Kyle Wagner,

Enclosed is the EMC test report for testing of the Devicor Medical Products Inc., MAHC tested to the requirements of FCC Part 2.1093, RSS-102 Issue 6

Thank you for using the services of Eurofins E&E North America. If you have any questions regarding these results or if MET can be of further service to you, please do feel free to contact me.

Sincerely,



Nancy LaBrecque  
Documentation Department  
Eurofins Electrical and Electronic Testing NA, Inc.

Reference: WIRA121643-MPE\_R1



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**RF Exposure Criteria  
Test Report  
Using SAR Exemption Calculations**

for the

**Devicor Medical Products Inc.**  
MAHC

**Tested under**

**FCC Part 2.1093, RSS-102 Issue 6**

**Report: WIRA121643-MPE\_R1**

1/05/2025



Bryan Taylor, Wireless Team Lead  
Electromagnetic Compatibility Lab



Nancy LaBrecque  
Documentation Department

**Engineering Statement:** The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of FCC Part 2.1093, RSS-102 Issue 6 under normal use and maintenance.



Matthew Hinojosa  
EMC Manager, Austin Electromagnetic Compatibility Lab

## Report Status Sheet

Revision	Report Date	Reason for Revision
0	12/04/2023	Initial Issue.
1	1/05/2025	Reviewer Comments

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## List of Terms and Abbreviations

<b>AC</b>	Alternating Current
<b>ACF</b>	Antenna Correction Factor
<b>Cal</b>	Calibration
<b><i>d</i></b>	Measurement Distance
<b>dB</b>	Decibels
<b>dB<math>\mu</math>A</b>	Decibels above one <b>microamp</b>
<b>dB<math>\mu</math>V</b>	Decibels above one <b>microvolt</b>
<b>dB<math>\mu</math>A/m</b>	Decibels above one <b>microamp per meter</b>
<b>dB<math>\mu</math>V/m</b>	Decibels above one <b>microvolt per meter</b>
<b>DC</b>	Direct Current
<b>E</b>	Electric Field
<b>DSL</b>	Digital Subscriber Line
<b>ESD</b>	Electrostatic Discharge
<b>EUT</b>	Equipment Under Test
<b><i>f</i></b>	Frequency
<b>CISPR</b>	Comite International Special des Perturbations Radioelectriques (International Special Committee on Radio Interference)
<b>GRP</b>	Ground Reference Plane
<b>H</b>	Magnetic Field
<b>HCP</b>	Horizontal Coupling Plane
<b>Hz</b>	Hertz
<b>IEC</b>	International Electrotechnical Commission
<b>kHz</b>	kiloHertz
<b>kPa</b>	kiloPascal
<b>kV</b>	kilovolt
<b>LISN</b>	Line Impedance Stabilization Network
<b>MHz</b>	MegaHertz
<b><math>\mu</math>H</b>	microHenry
<b><math>\mu</math>F</b>	microFarad
<b><math>\mu</math>s</b>	microseconds
<b>PRF</b>	Pulse Repetition Frequency
<b>RF</b>	Radio Frequency
<b>RMS</b>	Root-Mean-Square
<b>V/m</b>	Volts <b>per meter</b>
<b>VCP</b>	Vertical Coupling Plane

## 1.0 Requirements Summary

Page Number	Test Name	Result
12	RSS-102 Issue 6 SAR Exemption Limits (For General Public Exposure)	Compliant
12	FCC Part 2.1093 SAR Exemption Limits (For General Public Exposure)	Compliant

**Table 1. Summary of Test Results**

## 2.0 Equipment Configuration

### 2.1 Overview

Eurofins MET Labs was contracted by Devicor Medical Products Inc. to perform testing on the MAHC, under Devicor Medical Products Inc.'s purchase order number D1253750.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the Devicor Medical Products Inc. MAHC.

The results obtained relate only to the item(s) tested.

<b>Product Name</b>	Mammotome AutoCore	
<b>Model Number</b>	MAHC	
<b>FCCID</b>	2ATMT-MAHC01	
<b>EUT Specifications:</b>	Primary Power: Battery Powered	
	EUT Frequency	13.56MHz (RFID)
	Ranges:	2402 – 2480MHz (BLE)
	Maximum Output Power (ERP):	50.59dBuV/m @ 3m, -44.64dBm (RFID) 8.47dBm (BLE)
<b>Analysis:</b>	The results obtained relate only to the item(s) tested.	
<b>Environmental Test Conditions:</b>	Temperature: 15-35° C	
	Relative Humidity: 30-60%	
	Barometric Pressure: 860-1060 mbar	
<b>Type of Filing:</b>	Original	
<b>Evaluated by:</b>	Bryan Taylor	
<b>Report Date(s):</b>	10/06/2022 through 10/14/2022	

**Table 2. EUT Summary Table**



## 2.2 Test Site

All testing was performed at Eurofins E&E North America, Austin, TX. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

## 2.3 References

<b>IEC62311 Edition 2.0 (2019-04)</b>	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
<b>RSS-102: Issue 6</b>	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
<b>FCC Part 2.1093</b>	Radiofrequency radiation exposure evaluation: portable devices.

**Table 3. References**

## 2.4 Description of Test Sample

The Mammotome AutoCore Single Insertion Core Biopsy System is a single insertion, automated, spring-loaded core needle device. The system is used to take breast biopsy samples. The system consists of a reusable motorized battery-powered holster, charging base, and disposable probes. The intended user is a breast surgeon in a hospital setting.

The Mammotome AutoCore integrates a preapproved BLE transmitter module (nBlue BR-LE5.0-S1A).

## 2.5 Modifications

### 2.5.1 Modifications to EUT

No modifications were made to the EUT.

### 2.5.2 Modifications to Test Standard

No modifications were made to the test standard.

## 2.6 Disposition of EUT

The test sample including all support equipment submitted to the Electro-Magnetic Compatibility Lab for testing was returned to Devicor Medical Products Inc. upon completion of testing.

### 3.0 SAR Exemption Results

The SAR Exemption power threshold values are shown in the tables below. Note for both FCC and Canada for extremity use these power thresholds are multiplied by a factor of 2.5.

#### 3.1 FCC SAR Exemption Limits

Frequency (MHz)	Distance (mm)										
		5	10	15	20	25	30	35	40	45	50
	300	39	65	88	110	129	148	166	184	201	217
	450	22	44	67	89	112	135	158	180	203	226
	835	9	25	44	66	90	116	145	175	207	240
	1900	3	12	26	44	66	92	122	157	195	236
	2450	3	10	22	38	59	83	111	143	179	219
	3600	2	8	18	32	49	71	96	125	158	195
	5800	1	6	14	25	40	58	80	106	136	169

#### 3.1 RSS-102 SAR Exemption Limits

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

### Test Procedure:

The maximum power for each transmitter onboard was compared to the exemption threshold values from RSS-102 and KDB447498 D04. When the power was less than the threshold value the transmitter is considered exempt from SAR. For simultaneous transmission exemption is determined by the sum of the power to power threshold values. When this sum is less than 1 the device is exempt from SAR.

### Test Results:

The Mammotome AutoCore was **compliant** with FCC Part 2.1093, RSS-102 Issue 6 based on SAR exemption for extremity exposure. The Mammotome AutoCore is a handheld device and the maximum output power is less than the threshold values needed for SAR exemption.

Additionally, the sum of the power to power exemption threshold values for all transmitters onboard is less than 1 indicating that all radios may transmit simultaneously.

**Test Data (FCC):**

Operating Mode	Frequency (MHz)	Maximum Output Power (dBm)	Maximum Output Power (mW)	Extremity SAR Exemption Threshold (mW) <sup>1</sup>	Result
BLE	2402	8.47	7.03	7.5	Exempt
RFID	13.56	-44.64	0.000034	97.5	Exempt

**Simultaneous Transmission Calculation**

$$(7.03/7.5) + (0.000034/97.5) = 0.93733333 + 0.00000035 = 0.93733367$$

**Test Data (ISED):**

Operating Mode	Frequency (MHz)	Maximum Output Power (dBm)	Maximum Output Power (mW)	Extremity SAR Exemption Threshold (mW) <sup>1</sup>	Result
BLE	2402	8.47	7.03	7.5	Exempt
RFID	13.56	-44.64	0.000034	112.5	Exempt

**Simultaneous Transmission Calculation**

$$(7.03/7.5) + (0.000034/112.5) = 0.93733333 + 0.00000030 = 0.93733363$$

**Test Engineer(s):** Bryan Taylor

**Test Date(s):** 10/06/2022 - 10/14/2022

<sup>1</sup> The values in this table include a 2.5 factor to adjust them for extremity exposure since the Mammoth AutoCore is a handheld device.