Masimo Corporation

Radius VSM NiBP

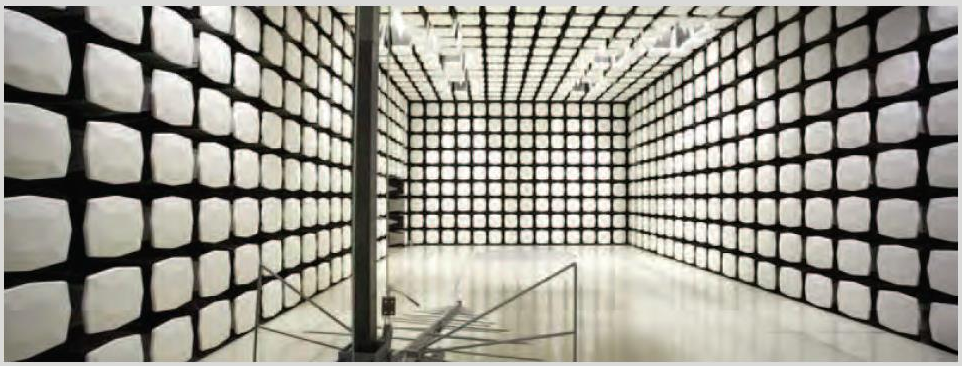
FCC 15.225:2025

RSS-210 Issue 11:2024

RSS-Gen Issue 5:2018 + A1:2019+A2:2021

13.56 MHz Radio

Report: MASI0909.0 Rev. 2, Issue Date: March 12, 2025



CERT #3310.04

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2023.04.17

Section	Page Number

CERTIFICATE OF TEST

Last Date of Test: November 29, 2021
Reissue Date: March 12, 2025
Masimo Corporation
EUT: Radius VSM NiBP

Radio Equipment Testing

Standards

Specification	Method
FCC 15.225:2025	ANSI C63.10:2013
RSS-210 Issue 11:2024	
RSS-Gen Issue 5:2018 + A1:2019+A2:2021	

Note: RSS-210 Issue 11 has been updated superseding prior issues. The changes between the specifications do not affect the results of the prior testing. The manufacturer attests that no changes have been made to the product.

Results

Test Description	Result	Specification Section(s)	Method Section(s)	Specification Section(s)	Method Section(s)	Comments
Powerline Conducted Emissions	Pass	15.207	15.207	RSS-Gen 8.8	6.2	
Emissions Bandwidth (20 dB)	Pass	15.215(c)	15.215(c)	RSS-Gen 6.7	6.9.3	
Field Strength of Fundamental	Pass	15.225(a)-(c)	15.225(a)-(c)	RSS-210 B.6(a)(i-iv)	6.4	
Field Strength of Spurious Emissions (Less Than 30 MHz)	Pass	15.225(d), 15.209	15.225(d), 15.209	RSS-210 B.6(a)(iv)	6.4	
Field Strength of Spurious Emissions (Greater Than 30 MHz)	Pass	15.225(d), 15.209	15.225(d), 15.209	RSS-210 B.6(a)(iv)	6.5	
Frequency Stability	Pass	15.225(e), 15.31(e), 15.215(c), 2.1055	15.225(e), 15.31(e), 15.215(c), 2.1055	RSS-210 B.6(b)	6.8	

Deviations From Test Standards

None

Approved By:

Johnny Candelas, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY

R

Revision Number	Description	Date (yyyy-mm-dd)	Page Number
01	Revised to reflect RSS 210 Issue 11	2025-02-06	1, 3
	Updated FCC reference on Cover Page and Certificate of Test to 2025	2025-02-06	1, 3
	Added applicable statement to Certificate of Test	2025-02-06	3
	Updated attestation	2025-02-06	41
	Corrected test dates	2025-02-06	3, 12
	Updated Power Settings page to reflect 100 mW	2025-02-06	13
02	New Frequency Stability testing was completed	2025-03-11	

ACCREDITATIONS AND AUTHORIZATIONS

element
2025.02.07

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Each laboratory is accredited by A2LA to ISO / IEC 17025, and as a product certifier to ISO / IEC 17065 which allows Element to certify transmitters to FCC and IC specifications.

FDA - Recognized by the FDA as an Accreditation Scheme for Conformity Assessment (ASCA)-accredited testing laboratory for basic safety and essential performance.

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Recognized as an EU Notified Body validated for the EMCD and RED Directives.

United Kingdom

BEIS – Recognized by the UK as an Approved Body under the UK Radio Equipment and UK EMC Regulations.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIT / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:

California Minnesota Oregon Washington

FACILITIES

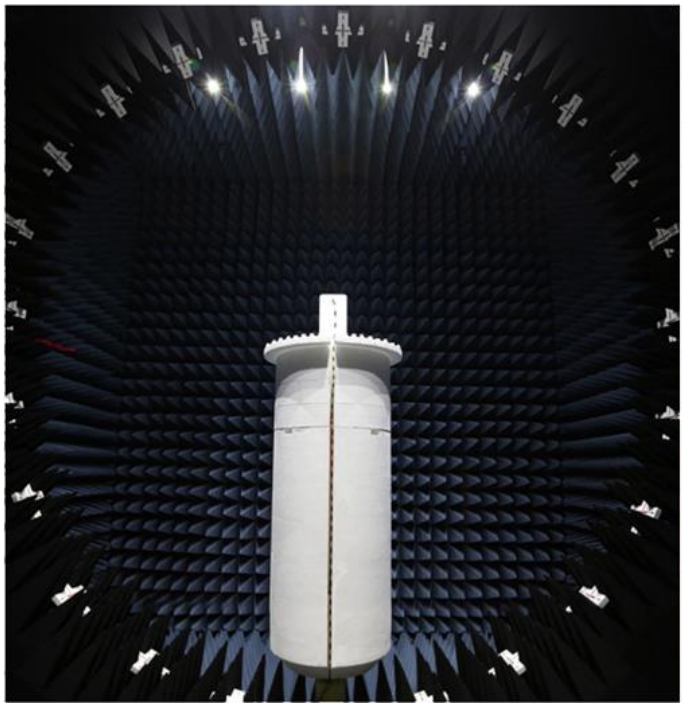
element
2025.01.03

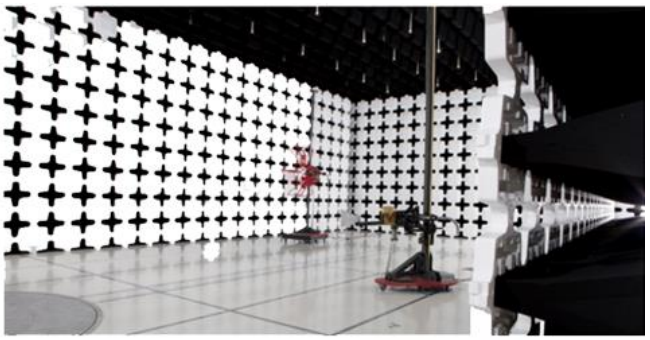
Testing was performed at the following location(s)

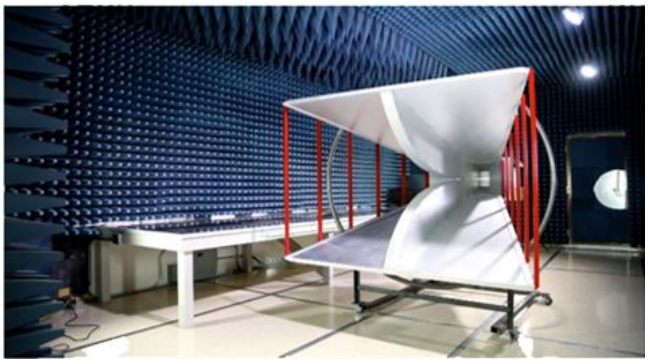
	Location	Labs (1)	Address	A2LA (2)	ISED (3)	BSMI (4)	VCCI (5)	CAB (6)	FDA (7)
☒	California	OC01-17	41 Tesla Irvine, CA 92618 (949) 861-8918	3310.04	2834B	SL2-IN-E-1154R	A-0029	US0158	TL-55
☐	Minnesota	MN01-11	9349 W Broadway Ave. Brooklyn Park, MN 55445 (612) 638-5136	3310.05	2834E	SL2-IN-E-1152R	A-0109	US0175	TL-57
☐	Oregon	EV01-12	6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	3310.02	2834D	SL2-IN-E-1017	A-0108	US0017	TL-56
☐	Washington	NC01-05	19201 120th Ave NE Bothell, WA 98011 (425) 984-6600	3310.06	2834F	SL2-IN-E-1153R	A-0110	US0157	TL-67
☐	Offsite	N/A	See Product Description	N/A	N/A	N/A	N/A	N/A	N/A

See data sheets for specific labs

(1) The lab designations denote individual rooms within each location. (OC01, OC02, OC03, etc.)
(2) A2LA Certificate No.
(3) ISED Company No.
(4) BSMI No.
(5) VCCI Site Filing No.
(6) CAB Identifier. Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MOC, NCC, OFCA
(7) FDA ASCA No.







MEASUREMENT UNCERTAINTY

element
TMU.2015.07.10

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found in the table below. A lab specific value may also be found in the applicable test description section. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Test	+ MU	- MU
Frequency Accuracy	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	1.2 dB	-1.2 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.1 dB	-5.1 dB
AC Powerline Conducted Emissions (dB)	3.2 dB	-3.2 dB

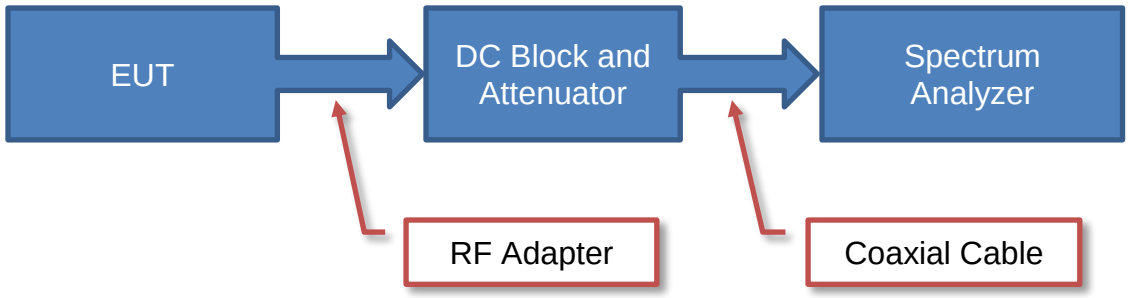
TEST SETUP BLOCK DIAGRAMS

Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Unless otherwise stated, measurements were made using the bandwidths and detectors specified. No video filter was used.

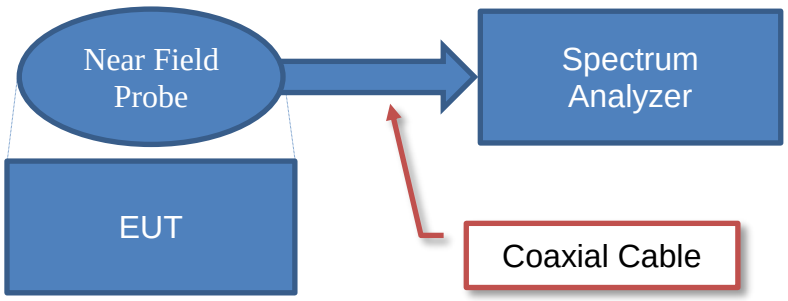
Antenna Port Conducted Measurements



Sample Calculation (logarithmic units)

Measured Value		Measured Level		Reference Level Offset
71.2	=	42.6	+	28.6

Near Field Test Fixture Measurements

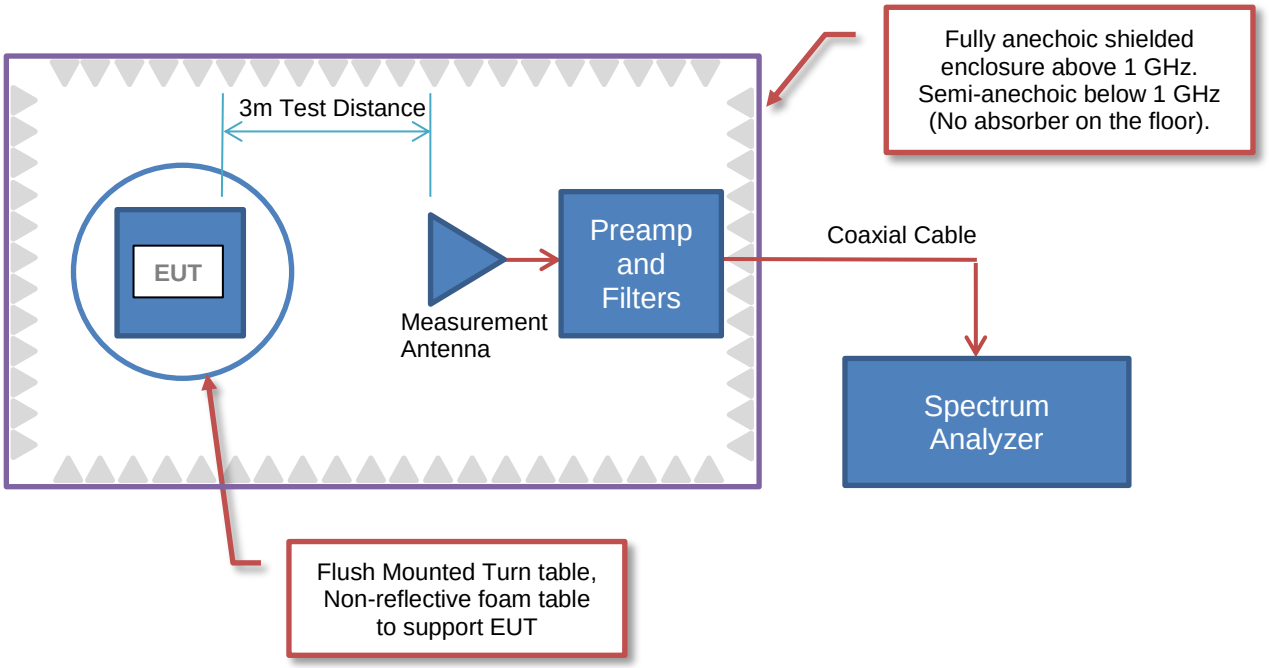


Sample Calculation (logarithmic units)

Measured Value		Measured Level		Reference Level Offset
71.2	=	42.6	+	28.6

TEST SETUP BLOCK DIAGRAMS

Emissions Measurements



Sample Calculation (logarithmic units)

Radiated Emissions:

Measured Level (Amplitude)		Factor: Antenna Factor		Factor: Cable Factor		Factor: Amplifier Gain		Distance Adjustment Factor		External Attenuation		Field Strength
42.6	+	28.6	+	3.1	-	40.8	+	0.0	+	0.0	=	**33.5**

Conducted Emissions:

Measured Level (Amplitude)		Factor: Transducer Factor		Factor: Cable Factor		External Attenuation		Adjusted Level
26.7	+	0.3	+	0.1	+	20.0	=	**47.1**

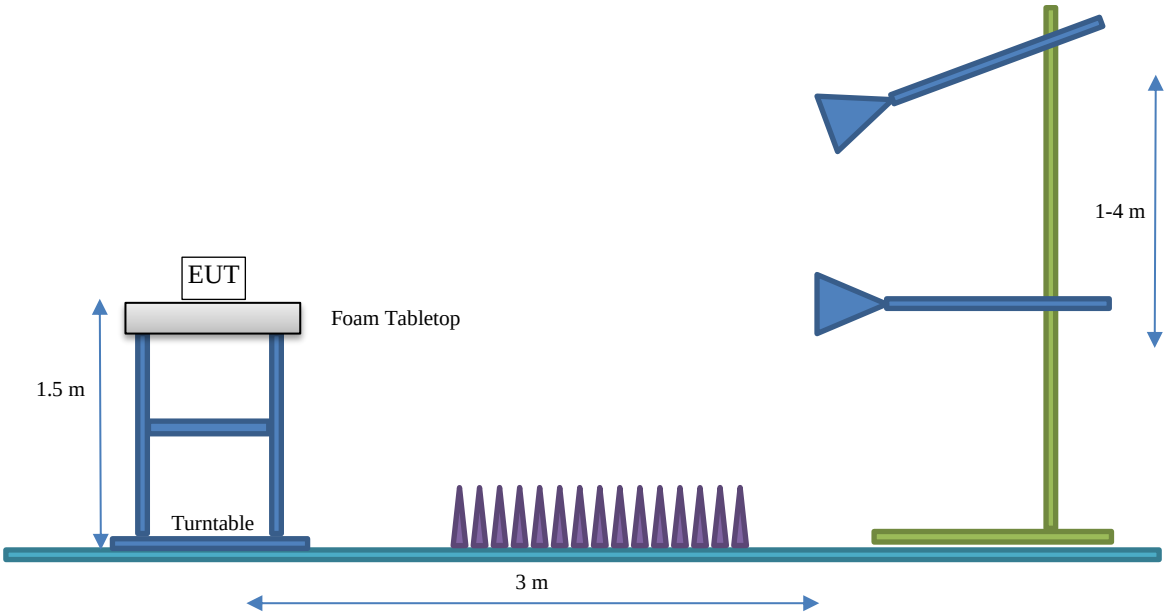
Radiated Power (ERP/EIRP) – Substitution Method:

Measured Level into Substitution Antenna (Amplitude dBm)		Substitution Antenna Factor (dBi)		EIRP to ERP (if applicable)		Measured power (dBm ERP/EIRP)
10.0	+	6.0	-	2.15	=	**13.9/16.0**

TEST SETUP BLOCK DIAGRAMS

Bore Sighting (>1GHz)

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.



PRODUCT DESCRIPTION

Client and Equipment under Test (EUT) Information

Company Name:	Masimo Corporation
Address:	52 Discovery
City, State, Zip:	Irvine, CA 92618
Test Requested By:	Anami Joshi
EUT:	Radius VSM NiBP
First Date of Test:	November 17, 2021
Last Date of Test:	March 11, 2025
Receipt Date of Samples:	November 17, 2021
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Wireless Medical Device operating at 13.56 MHz

Testing Objective:
To demonstrate compliance of the 13.56 MHz radio to FCC 15.225 requirements and RSS-210 Annex B.6 specifications.

POWER SETTINGS AND ANTENNAS

The power settings, antenna gain value(s) and cable loss (if applicable) used for the testing contained in this report were provided by the customer and will affect the validity of the results. Element assumes no responsibility for the accuracy of this information.

ANTENNA INFORMATION

Type	Provided by:	Dimensions
Embedded Inductive Loop	Manufacturer	9mm x 18mm

POWER SETTING

Radio	Operating Mode	Frequency	Power Setting (mW)
NFC	ISO14443A and ISO15693	13.56 MHz	100

CONFIGURATIONS

Configuration MASI0745-1

Software/Firmware Running During Test	
Description	**Version**
Radius VSM NiBP - Radio Test Firmware	V1000.1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM NIBP Module	Masimo Corporation	28053	RE00000089

Peripherals in Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM	Masimo Corporation	27740	2047203126
VSM ECG Electrode	Masimo Corporation	27336	E20HE40
Radius VSM ECG Module	Masimo Corporation	27024	RE00000177

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Radius VSM NiBP Module Cable	No	0.8m	No	Radius VSM	VSM ECG Electrode

Configuration MASI0745-2

Software/Firmware Running During Test	
Description	**Version**
Radius VSM NiBP - Radio Test Firmware	V1000.1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM NIBP Module	Masimo Corporation	28053	RE00000089

Peripherals in Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM	Masimo Corporation	27740	2047203126

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Radius VSM NiBP Module Cable	No	0.8m	No	Radius VSM	VSM ECG Electrode

CONFIGURATIONS

Configuration MASI0745-3

Software/Firmware Running During Test	
Description	**Version**
Radius VSM NiBP - Radio Test Firmware	V1000.1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM NIBP Module	Masimo Corporation	28053	RE00000089

Peripherals in Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM	Masimo Corporation	27740	2047203126
VSM ECG Electrode	Masimo Corporation	27336	E20HE40
Radius VSM ECG Module	Masimo Corporation	27024	RE00000177

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Radius VSM NiBP Module Cable	No	0.8m	No	Radius VSM	VSM ECG Electrode

Configuration MASI0909-1

Software/Firmware Running During Test	
Description	**Version**
Radius VSM NiBP - Radio Test Firmware	V1000.1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM NIBP Module	Masimo Corporation	28053	RN00001138

Peripherals in Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radius VSM	Masimo Corporation	28053	BP00000021

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Radius VSM NiBP Module Cable	No	0.8m	No	Radius VSM NIBP Module	Radius VSM (Peripheral)

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2021-11-17	Emissions Bandwidth (20 dB)	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	2021-11-17	Occupied Bandwidth	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	2021-11-17	Field Strength of Fundamental	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	2021-11-17	Field Strength of Spurious Emissions (Greater Than 30 MHz)	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	2021-11-17	Field Strength of Spurious Emissions (Less Than 30 MHz)	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	2021-11-29	Frequency Stability	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.
7	2025-03-11	Frequency Stability	Tested as delivered to test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

EMISSIONS BANDWIDTH (20 dB)

XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR
Cable	Micro-Coax	UFD150A-1-0720-200200	OCA	2021-04-27	2022-04-27
Block - DC	Aeroflex	INMET 8535	AMO	2021-02-22	2022-02-22
Attenuator	Fairview Microwave	SA18H-20	TKR	2020-12-18	2021-12-18
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2021-01-06	2022-01-06

TEST DESCRIPTION

The 20 dB occupied bandwidth was measured with the EUT set to medium transmit frequency in the band. The intentional radiator must be designed to ensure that the 20 dB bandwidth of the emission is contained within the frequency band designated in the rule section under which the equipment is operated.

EMISSIONS BANDWIDTH (20 dB)

XMit 2020.12.30.0

EUT:	**Radius VSM NiBP**			**Work Order:**	**MASI0745**
Serial Number:	**RE00000089**			**Date:**	**17-Nov-21**
Customer:	**Masimo Corporation**			**Temperature:**	**20.8 °C**
Attendees:	**Nghi Nguyen**			**Humidity:**	**53% RH**
Project:	**None**			**Barometric Pres.:**	**1021 mbar**
Tested by:	**Nolan De Ramos, Vincent Liwag**	**Power:**	**7.5 VDC**	**Job Site:**	**OC13**

TEST SPECIFICATIONS	**Test Method**
FCC 15.225:2021	ANSI C63.10:2013

COMMENTS

20 dB bandwidth of the emission is contained within the frequency band designated in FCC 15.225:2021 Operation within the band 13.110 - 14.010 MHz (900 kHz).

DEVIATIONS FROM TEST STANDARD

None

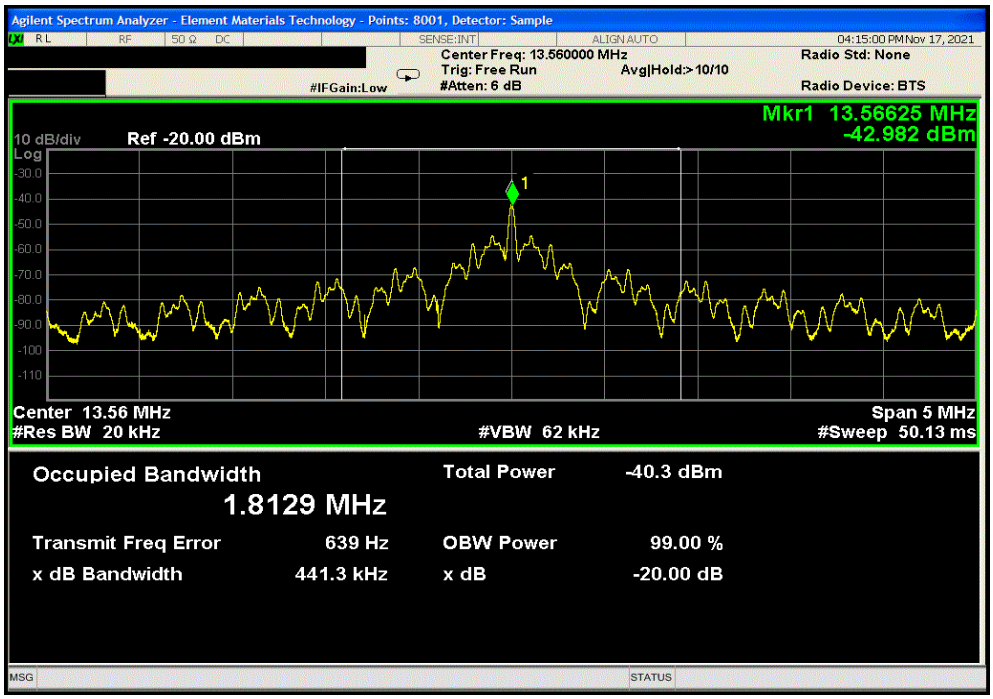
Configuration #	**2**	*Signature*

	Value (kHz)	**Limit (kHz)**	**Result**
13.56 MHz			
Occupied Bandwidth (20 dB)	441.3	< 900	Pass

EMISSIONS BANDWIDTH (20 dB)

XMit 2020.12.30.0

13.56 MHz, Occupied Bandwidth (20 dB)						
				Value (kHz)	Limit (kHz)	Result
				441.3	< 900	Pass



OCCUPIED BANDWIDTH (99%)

XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Block - DC	Aeroflex	INMET 8535	AMO	2021-02-22	2022-02-22
Attenuator	Fairview Microwave	SA18H-20	TKR	2020-12-18	2021-12-18
Cable	Micro-Coax	UFD150A-1-0720-200200	OCA	2021-04-27	2022-04-27
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFP	2021-11-12	2022-11-12

TEST DESCRIPTION

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth as defined in RSS-Gen.

The 99% occupied bandwidth was measured with the EUT configured for continuous modulated operation.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) of the spectrum analyzer was set to the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto to prevent video filtering or averaging. A sample detector was used unless the device was not able to be operated in a continuous transmit mode, in which case a peak detector was used.

The spectrum analyzer occupied bandwidth measurement function was used to sum the power of the transmission in linear terms to obtain the 99% bandwidth.

OCCUPIED BANDWIDTH (99%)

XMit 2020.12.30.0

EUT:	Radius VSM NiBP			**Work Order:**	MASI0745
Serial Number:	RE00000089			**Date:**	17-Nov-21
Customer:	Masimo Corporation			**Temperature:**	20.8 °C
Attendees:	Nghi Nguyen			**Humidity:**	53% RH
Project:	None			**Barometric Pres.:**	1021 mbar
Tested by:	Nolan De Ramos, Vincent Liwag	**Power:**	7.50 VDC	**Job Site:**	OC13

TEST SPECIFICATIONS	Test Method
RSS-Gen Issue 5:2018 + A1:2019+A2:2021	ANSI C63.10:2013

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

None

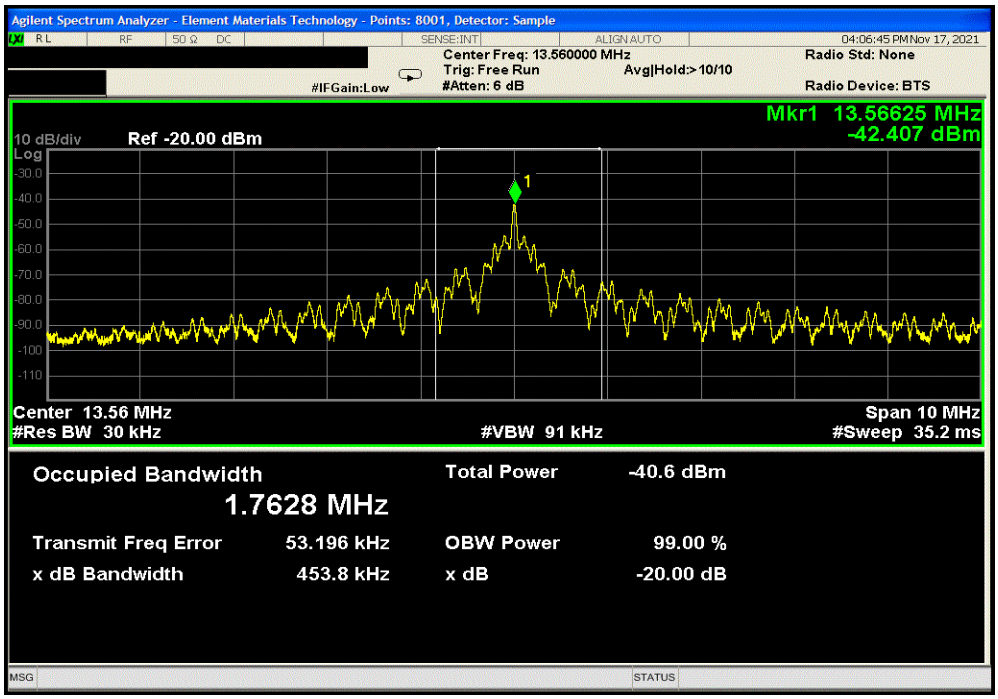
Configuration #	2	Signature

	Value (MHz)	Limit	Result
13.56 MHz			
Occupied Bandwidth (99%)	1.7628	N/A	N/A

OCCUPIED BANDWIDTH (99%)

XMit 2020.12.30.0

13.56 MHz, Occupied Bandwidth (99%)						
				Value (MHz)	Limit	Result
				1.7628	N/A	N/A



FREQUENCY STABILITY

element
TbtTx 2024.10.31.2
WTD.2024.12.31.0

TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

A near-field probe was placed near the transmitter. A low-loss coaxial cable was used to connect the near-field probe to the spectrum analyzer.

The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

Measurements were made on the single transmit frequency as called out on the data sheets. Testing was done while the EUT was continuously polling.

The primary supply voltage was varied from 85 % to 115% of the nominal voltage while at ambient temperature. Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range of -20 ° to +50° C and at 10°C intervals.

The requirement of a frequency tolerance of ±0.01% is equivalent to 100 ppm
The formula to check for compliance is:

ppm = (Measured Frequency / Measured Nominal Frequency - 1) * 1,000,000

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2025-03-03	2026-03-03
Block - DC	Fairview Microwave	SD3379	ANG	2024-10-03	2025-10-03
Cable	Element	None	OC5	2024-10-02	2025-10-02
Probe - Near Field Set	EMCO	7405	IPI	NCR	NCR
Chamber - Temperature/Humidity	Cincinnati Sub Zero (CSZ)	ZPHS-32-3.5-SCT/AC	TBE	NCR	NCR

FREQUENCY STABILITY

element
TbtTx 2024.10.31.2
WTD.2024.12.31.0

EUT:	Radius VSM NiBP	Work Order:	MASI0909
Serial Number:	RR00036668	Date:	2025-03-18
Customer:	Masimo Corporation	Temperature:	22°C
Attendees:	Anami Joshi	Relative Humidity:	45.4%
Customer Project:	None	Bar. Pressure (PMSL):	1024 mbar
Tested By:	Matthew Ng	Job Site:	OC13
Power:	7.50VDC	Configuration:	MASI0909-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.225:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A2:2021	ANSI C63.10:2013

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

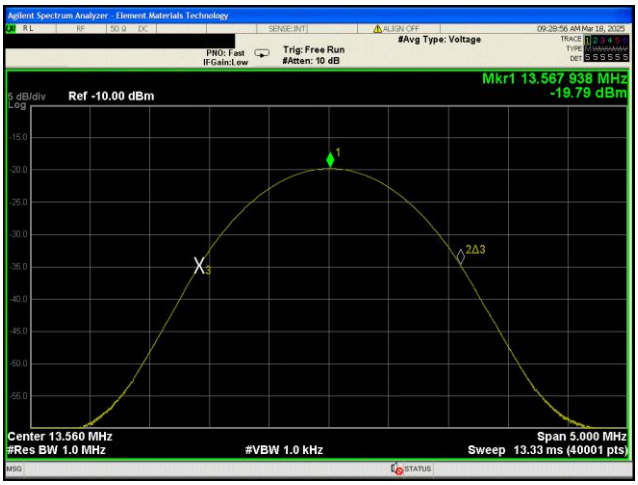
Tested By

TEST RESULTS

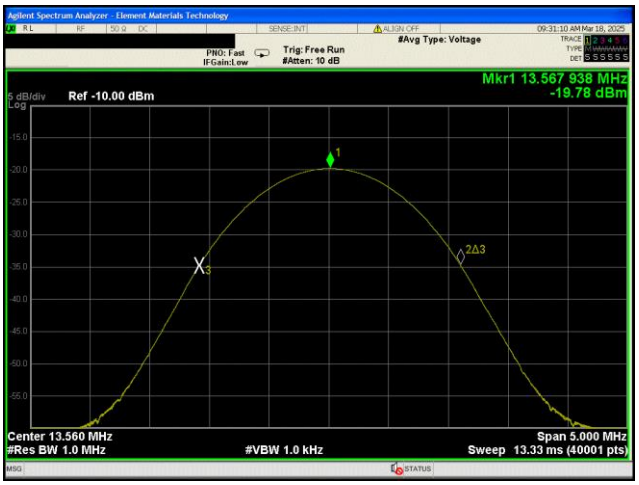
	Measured Value (MHz)	Nominal Value (MHz)	Error (ppm)	Limit (ppm)	Results
13.56 MHz RFID, ISO/IEC 15693					
Normal Conditions (7.5VDC)	13.5679375	13.5679375	0	100	Pass
Extreme Voltage 115% (8.625VDC)	13.5679375	13.5679375	0	100	Pass
Extreme Voltage 85% (6.375VDC)	13.568	13.5679375	4.61	100	Pass
Extreme Temperature +50°C	13.567625	13.5679375	23.03	100	Pass
Extreme Temperature +40°C	13.5675	13.5679375	32.25	100	Pass
Extreme Temperature +30°C	13.5675625	13.5679375	27.64	100	Pass
Extreme Temperature +20°C	13.56775	13.5679375	13.82	100	Pass
Extreme Temperature +10°C	13.5678125	13.5679375	9.21	100	Pass
Extreme Temperature +0°C	13.5679375	13.5679375	0	100	Pass
Extreme Temperature -10°C	13.567875	13.5679375	4.61	100	Pass
Extreme Temperature -20°C	13.5679375	13.5679375	0	100	Pass

FREQUENCY STABILITY

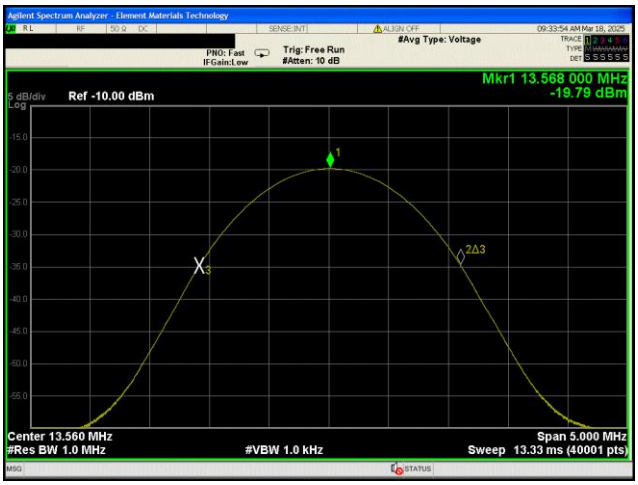
element
TbtTx 2024.10.31.2
WTD.2024.12.31.0



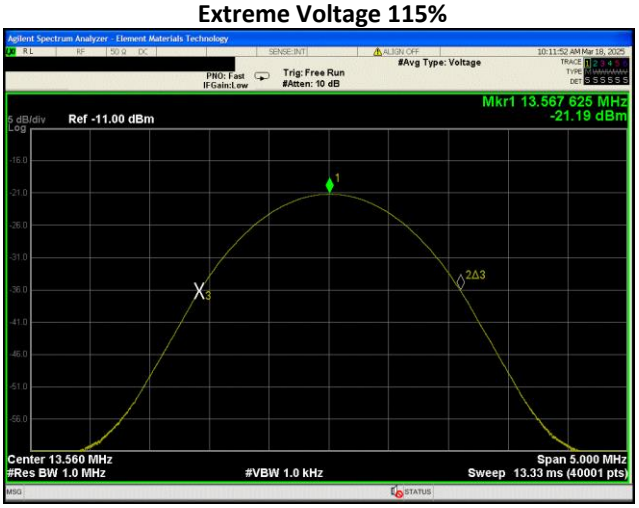
13.56 MHz RFID, ISO/IEC 15693
Normal Conditions



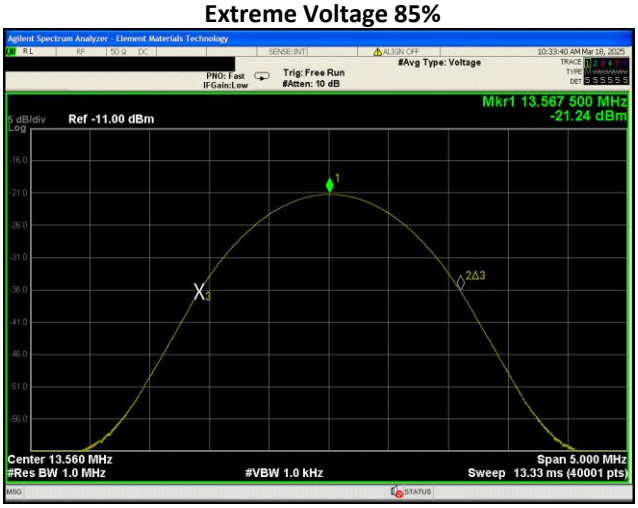
13.56 MHz RFID, ISO/IEC 15693
Extreme Voltage 115%



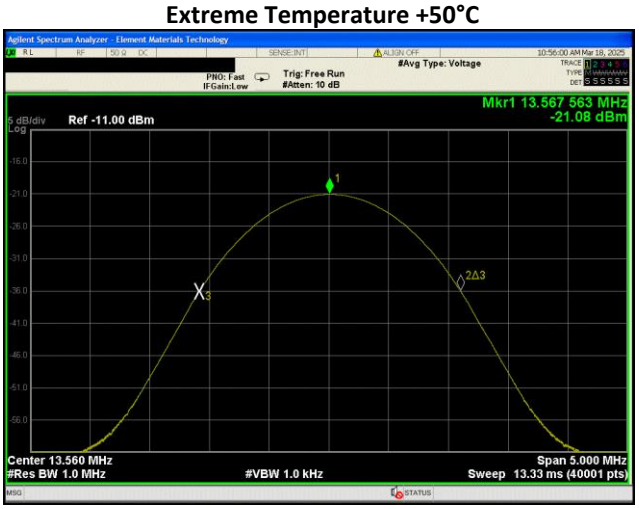
13.56 MHz RFID, ISO/IEC 15693
Extreme Voltage 85%



13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +50°C



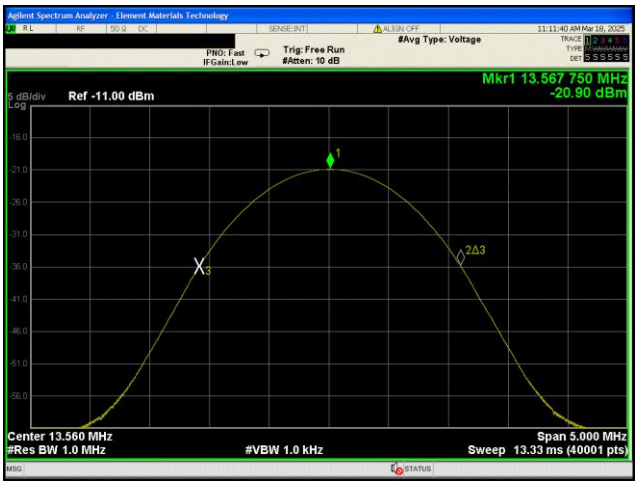
13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +40°C



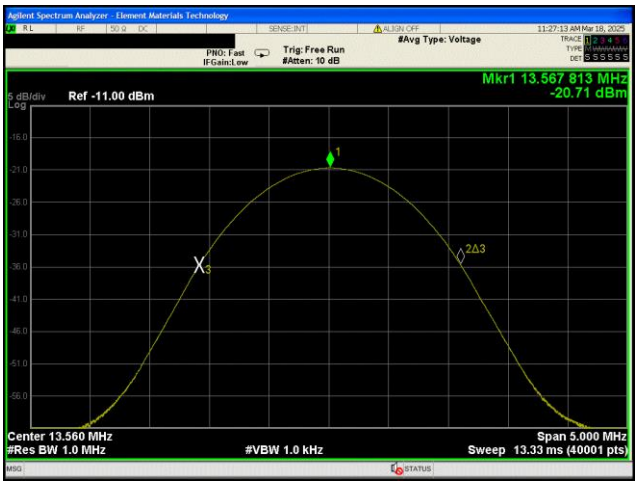
13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +30°C

FREQUENCY STABILITY

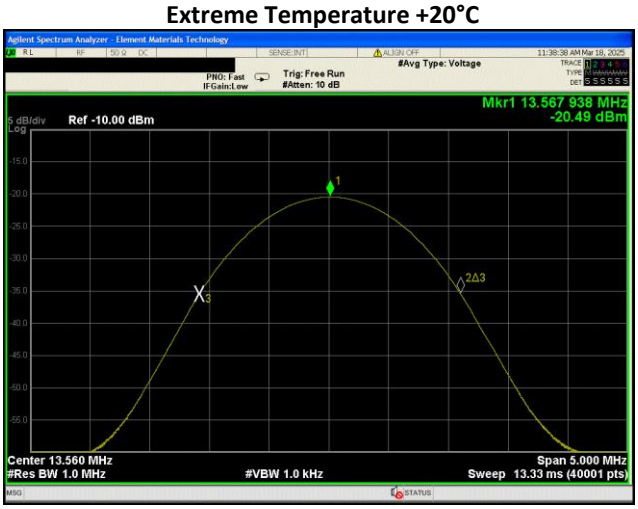
element
TbtTx 2024.10.31.2
WTD.2024.12.31.0



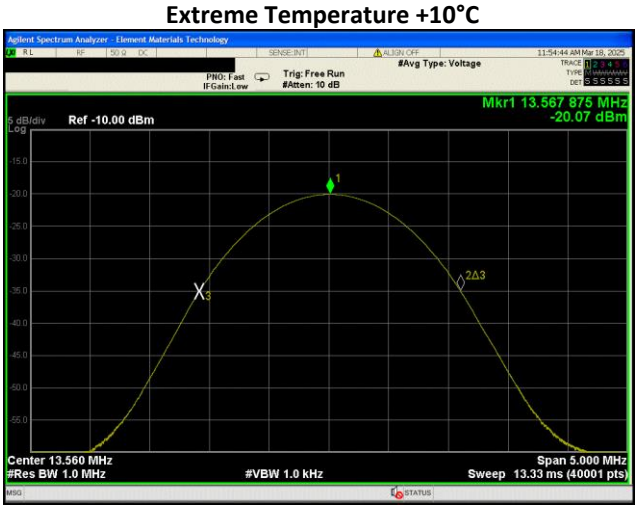
13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +20°C



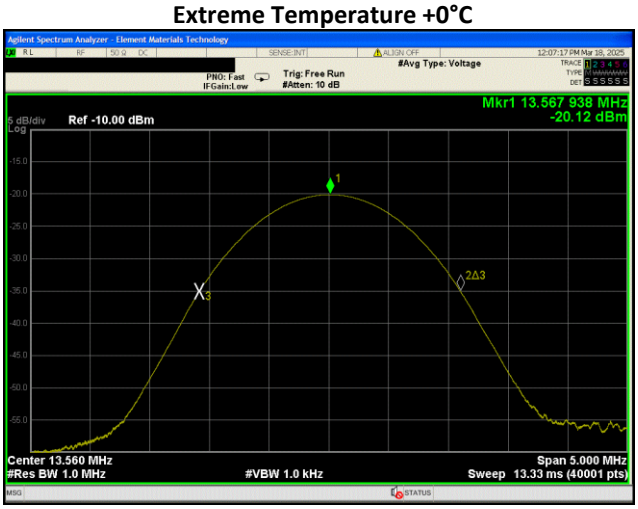
13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +10°C



13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature +0°C



13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature -10°C



13.56 MHz RFID, ISO/IEC 15693
Extreme Temperature -20°C

FIELD STRENGTH OF FUNDAMENTAL

PSA-ESCI 2021.03.17.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 13.56 MHz.

POWER SETTINGS INVESTIGATED

7.5 VDC

CONFIGURATIONS INVESTIGATED

MASI0745 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Antenna - Loop	EMCO	6502	AZB	2021-09-03	2023-09-03
Cable	Northwest EMC	3kHz - 1GHz RE Cables	OCB	2021-06-25	2022-06-25
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	2021-08-26	2022-08-26

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

The fundamental carrier of the EUT was maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

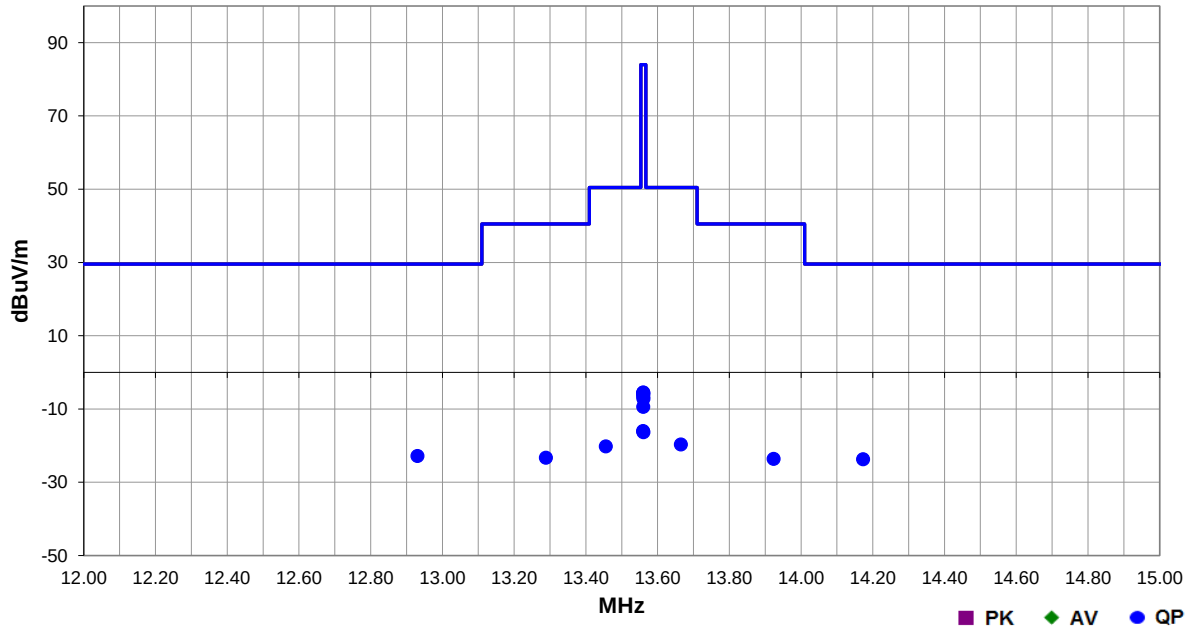
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2021.09.09.0 PSA-ESCI 2021.03.17.0

Work Order:	MASI0745	**Date:**	2021-11-17		
Project:	None	**Temperature:**	20.9 °C		
Job Site:	OC08	**Humidity:**	47.7% RH		
Serial Number:	RE00000089	**Barometric Pres.:**	1020 mbar	**Tested by:**	Nolan De Ramos, Vincent Liwag
EUT:	Radius VSM NiBP				
Configuration:	1				
Customer:	Masimo Corporation				
Attendees:	Nghi Nguyen				
EUT Power:	7.5 VDC				
Operating Mode:	Transmitting 13.56 MHz.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2021	ANSI C63.10:2013
RSS-210 Issue 10:2019+A1:2020	ANSI C63.10:2013

Run #	6	**Test Distance (m)**	3	**Antenna Height(s)**	1 (m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
12.930	5.8	11.4	1.0	21.0	3.0	0.0	Par to EUT	QP	-40.0	-22.8	29.5	-52.3	EUT On Side
14.173	5.0	11.3	1.0	331.0	3.0	0.0	Par to EUT	QP	-40.0	-23.7	29.5	-53.2	EUT On Side
13.288	5.3	11.4	1.0	192.0	3.0	0.0	Par to EUT	QP	-40.0	-23.3	40.5	-63.8	EUT On Side
13.924	5.1	11.3	1.0	282.0	3.0	0.0	Par to EUT	QP	-40.0	-23.6	40.5	-64.1	EUT On Side
13.665	9.0	11.3	1.0	0.0	3.0	0.0	Par to EUT	QP	-40.0	-19.7	50.5	-70.2	EUT On Side
13.456	8.4	11.4	1.0	332.0	3.0	0.0	Par to EUT	QP	-40.0	-20.2	50.5	-70.7	EUT On Side
13.560	23.2	11.3	1.0	2.0	3.0	0.0	Par to EUT	QP	-40.0	-5.5	84.0	-89.5	EUT On Side
13.560	23.1	11.3	1.0	245.0	3.0	0.0	Par to GND	QP	-40.0	-5.6	84.0	-89.6	EUT On Side
13.560	22.9	11.3	1.0	-1.0	3.0	0.0	Par to EUT	QP	-40.0	-5.8	84.0	-89.8	EUT Vert
13.560	22.6	11.3	1.0	290.0	3.0	0.0	Perp to EUT	QP	-40.0	-6.1	84.0	-90.1	EUT On Side
13.560	22.0	11.3	1.0	250.0	3.0	0.0	Par to GND	QP	-40.0	-6.7	84.0	-90.7	EUT Vert
13.560	21.5	11.3	1.0	293.0	3.0	0.0	Perp to EUT	QP	-40.0	-7.2	84.0	-91.2	EUT Vert
13.560	19.3	11.3	1.0	262.0	3.0	0.0	Par to GND	QP	-40.0	-9.4	84.0	-93.4	EUT Horz
13.560	12.7	11.3	1.0	302.0	3.0	0.0	Perp to EUT	QP	-40.0	-16.0	84.0	-100.0	EUT Horz
13.560	12.4	11.3	1.0	181.0	3.0	0.0	Par to EUT	QP	-40.0	-16.3	84.0	-100.3	EUT Horz

FIELD STRENGTH OF FUNDAMENTAL

PSA-ESCI 2021.03.17.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 13.56 MHz.

POWER SETTINGS INVESTIGATED

7.5 VDC

CONFIGURATIONS INVESTIGATED

MASI0745 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Cable	Northwest EMC	3kHz - 1GHz RE Cables	OCB	2021-06-25	2022-06-25
Antenna - Loop	EMCO	6502	AZB	2021-09-03	2023-09-03
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	2021-08-26	2022-08-26

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

The fundamental carrier of the EUT was maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

As outlined in RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

The limits in CFR 47, Part 15C 15.209(a) are identical to those is RSS-Gen section 8.9 Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ohms. For example, an E-Field measurement in dBuV/m can be converted to dBuA/m via the following formula: dBuV/m - 51.5 dB = dBuA/m. E-Field measurements have the same margin in dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limits.

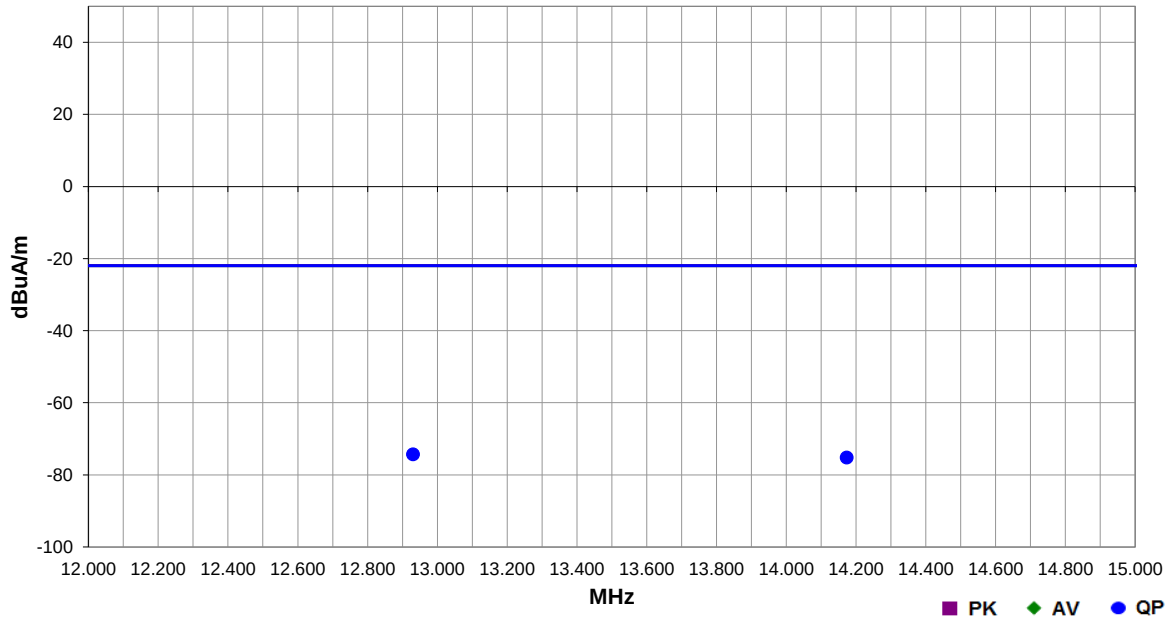
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2021.09.09.0 PSA-ESCI 2021.03.17.0

Work Order:	MASI0745	**Date:**	2021-11-17		
Project:	None	**Temperature:**	20.9 °C		
Job Site:	OC08	**Humidity:**	47.7% RH		
Serial Number:	RE00000089	**Barometric Pres.:**	1020 mbar	**Tested by:**	Nolan De Ramos, Vincent Liwag
EUT:	Radius VSM NiBP				
Configuration:	1				
Customer:	Masimo Corporation				
Attendees:	Nghi Nguyen				
EUT Power:	Powered by Radius VSM				
Operating Mode:	Transmitting 13.56 MHz.				
Deviations:	None				
Comments:	Applying limits of clause B.6 Band 13.110-14.010 MHz sections (a.) (iv). Plotted data is the converted data using the stated formula: Factor (dB) = LC(dB) - AF(electric) - 51.5 [dBΩ] H[dB(µA/m)] (Adjusted) = V[dB(µV)] + Factor (dB) + (distance correction factor of 40dB/decade)				

Test Specifications	**Test Method**
RSS-210 Issue 10:2019+A1:2020	RSS-Gen Issue 5:2018 + A1:2019+A2:2021

Run #	6	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuA/m)	Spec. Limit (dBuA/m)	Compared to Spec. (dB)	Comments
12.930	5.8	-40.1	1.0	21.0	3.0	0.0	Par to EUT	QP	-40.0	-74.3	-21.96	-52.3	Tx 13.56 MHz, EUT On Side
14.173	5.0	-40.2	3.98	331.0	3.0	0.0	Par to EUT	QP	-40.0	-75.2	-21.96	-53.2	Tx 13.56 MHz, EUT On Side

FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)

PSA-ESCI 2021.03.17.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 13.56 MHz.

POWER SETTINGS INVESTIGATED

7.5 VDC

CONFIGURATIONS INVESTIGATED

MASI0745 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	490 kHz	Stop Frequency	30 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Antenna - Loop	EMCO	6502	AZB	2021-09-03	2023-09-03
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	2021-08-26	2022-08-26
Cable	Northwest EMC	3kHz - 1GHz RE Cables	OCB	2021-06-25	2022-06-25

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). An active loop antenna was used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.5, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

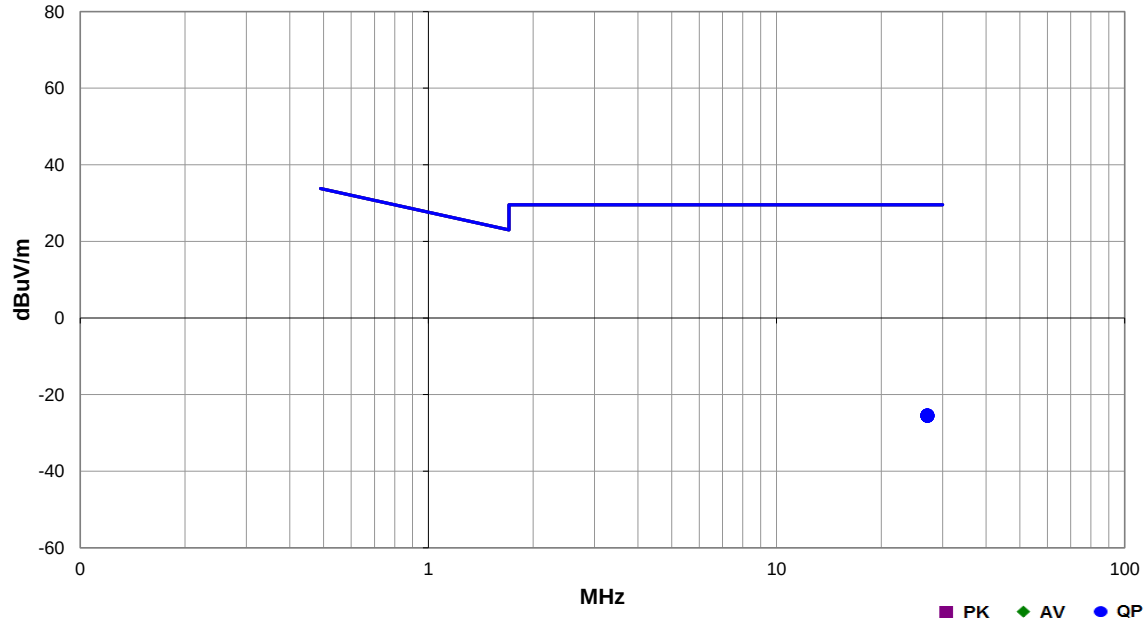
FIELD STRENGTH OF SPURIOUS EMISSIONS (LESS THAN 30 MHZ)

EmiR5 2021.09.09.0 PSA-ESCI 2021.03.17.0

Work Order:	MASI0745	**Date:**	2021-11-17		
Project:	None	**Temperature:**	20.9 °C		
Job Site:	OC08	**Humidity:**	47.7% RH		
Serial Number:	RE00000089	**Barometric Pres.:**	1020 mbar	**Tested by:**	Nolan De Ramos, Vincent Liwag
EUT:	Radius VSM NiBP				
Configuration:	1				
Customer:	Masimo Corporation				
Attendees:	Nghi Nguyen				
EUT Power:	7.5 VDC				
Operating Mode:	Transmitting 13.56 MHz.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2021	ANSI C63.10:2013
RSS-210 Issue 10:2019+A1:2020	ANSI C63.10:2013

Run #	7	**Test Distance (m)**	3	**Antenna Height(s)**	1 (m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
27.100	4.9	9.7	1.0	105.0	3.0	0.0	Par to EUT	QP	-40.0	-25.4	29.5	-54.9	Tx 13.56 MHz, EUT On Side
27.165	4.8	9.7	1.0	217.0	3.0	0.0	Perp to EUT	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT On Side
27.089	4.8	9.7	1.0	358.0	3.0	0.0	Perp to EUT	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT Horz
27.132	4.8	9.7	1.0	16.0	3.0	0.0	Par to GND	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT Horz
27.113	4.8	9.7	1.0	184.0	3.0	0.0	Par to EUT	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT Horz
27.101	4.8	9.7	1.0	219.0	3.0	0.0	Par to EUT	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT Vert
27.093	4.8	9.7	1.0	132.0	3.0	0.0	Perp to EUT	QP	-40.0	-25.5	29.5	-55.0	Tx 13.56 MHz, EUT Vert
27.145	4.7	9.7	1.0	115.0	3.0	0.0	Par to GND	QP	-40.0	-25.6	29.5	-55.1	Tx 13.56 MHz, EUT On Side
27.130	4.7	9.7	1.0	144.0	3.0	0.0	Par to GND	QP	-40.0	-25.6	29.5	-55.1	Tx 13.56 MHz, EUT Vert

FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)

PSA-ESCI 2021.03.17.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 13.56 MHz.

POWER SETTINGS INVESTIGATED

7.5 VDC

CONFIGURATIONS INVESTIGATED

MASI0745 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	1000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Amplifier - Pre-Amplifier	Miteq	AM-1551	AOX	2021-06-25	2022-06-25
Antenna - Biconilog	EMCO	3142	AXA	2021-10-21	2023-10-21
Cable	Northwest EMC	3kHz - 1GHz RE Cables	OCB	2021-06-25	2022-06-25
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	2021-08-26	2022-08-26

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting while set at the operating channel.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

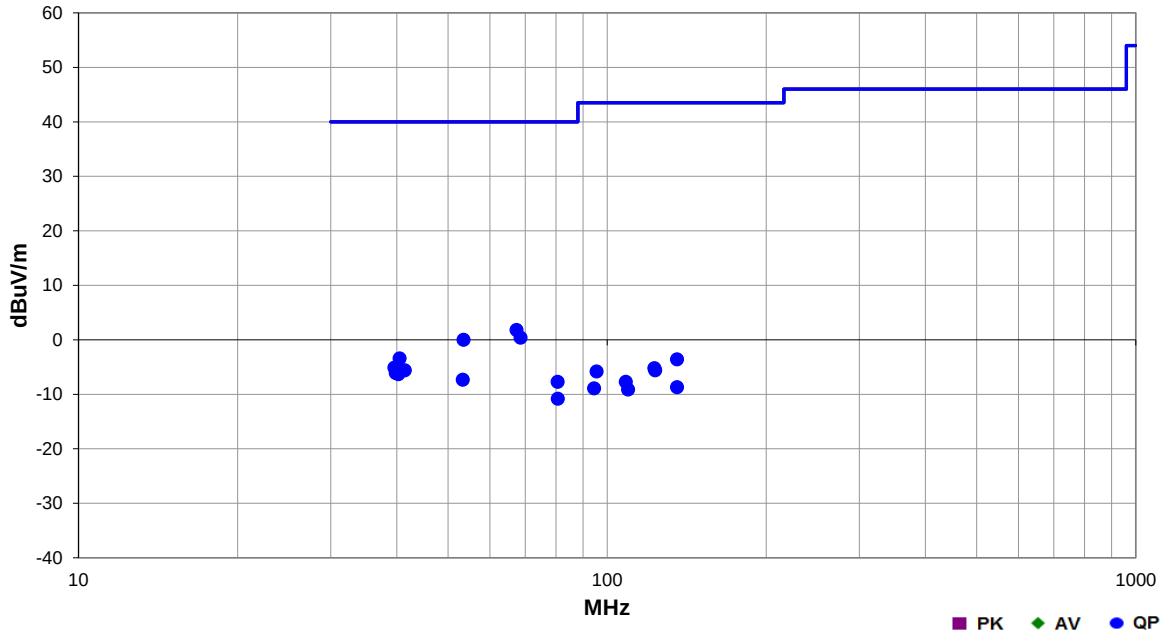
FIELD STRENGTH OF SPURIOUS EMISSIONS (GREATER THAN 30 MHZ)

EmiR5 2021.09.09.0 PSA-ESCI 2021.03.17.0

Work Order:	MASI0745	**Date:**	2021-11-17		
Project:	None	**Temperature:**	20.9 °C		
Job Site:	OC08	**Humidity:**	47.7% RH		
Serial Number:	RE00000089	**Barometric Pres.:**	1020 mbar	**Tested by:**	Nolan De Ramos
EUT:	Radius VSM NiBP				
Configuration:	1				
Customer:	Masimo Corporation				
Attendees:	Nghi Nguyen				
EUT Power:	7.5 VDC				
Operating Mode:	Transmitting 13.56 MHz.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.225:2021	ANSI C63.10:2013
RSS-210 Issue 10:2019+A1:2020	ANSI C63.10:2013

Run #	8	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
67.395	32.0	-30.2	2.96	252.0	3.0	0.0	Vert	QP	0.0	1.8	40.0	-38.2	EUT On Side
68.590	30.5	-30.1	3.66	329.0	3.0	0.0	Horz	QP	0.0	0.4	40.0	-39.6	EUT Vert
53.498	28.9	-28.9	1.0	208.0	3.0	0.0	Horz	QP	0.0	0.0	40.0	-40.0	EUT Vert
40.494	21.8	-25.2	3.54	180.0	3.0	0.0	Horz	QP	0.0	-3.4	40.0	-43.4	EUT Vert
39.595	19.7	-24.8	1.0	257.0	3.0	0.0	Vert	QP	0.0	-5.1	40.0	-45.1	EUT On Side
41.417	20.0	-25.6	3.45	8.0	3.0	0.0	Horz	QP	0.0	-5.6	40.0	-45.6	EUT On Side
40.487	19.4	-25.2	3.94	208.0	3.0	0.0	Horz	QP	0.0	-5.8	40.0	-45.8	EUT Horz
39.825	18.8	-24.9	2.82	124.0	3.0	0.0	Vert	QP	0.0	-6.1	40.0	-46.1	EUT Vert
40.284	18.8	-25.1	1.0	258.0	3.0	0.0	Vert	QP	0.0	-6.3	40.0	-46.3	EUT Horz
135.595	25.2	-28.8	3.35	9.0	3.0	0.0	Horz	QP	0.0	-3.6	43.5	-47.1	EUT Vert
53.322	21.6	-28.9	1.05	289.0	3.0	0.0	Vert	QP	0.0	-7.3	40.0	-47.3	EUT On Side
80.565	22.7	-30.4	3.24	174.0	3.0	0.0	Horz	QP	0.0	-7.7	40.0	-47.7	EUT Vert
122.872	23.9	-29.1	2.85	138.0	3.0	0.0	Vert	QP	0.0	-5.2	43.5	-48.7	EUT On Side
123.284	23.5	-29.1	3.43	0.0	3.0	0.0	Horz	QP	0.0	-5.6	43.5	-49.1	EUT Vert
95.515	23.0	-28.8	2.86	103.0	3.0	0.0	Vert	QP	0.0	-5.8	43.5	-49.3	EUT On Side
80.687	19.6	-30.4	3.3	124.0	3.0	0.0	Vert	QP	0.0	-10.8	40.0	-50.8	EUT On Side
108.489	20.8	-28.5	3.21	195.0	3.0	0.0	Horz	QP	0.0	-7.7	43.5	-51.2	EUT Vert
135.592	20.1	-28.8	1.0	309.0	3.0	0.0	Vert	QP	0.0	-8.7	43.5	-52.2	EUT On Side

Freq (MHz)	Amplitude (dBuV)	Factor (dB/m)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
94.488	20.0	-28.9	3.04	33.0	3.0	0.0	Horz	QP	0.0	-8.9	43.5	-52.4	EUT Vert
109.504	19.4	-28.5	3.7	288.0	3.0	0.0	Vert	QP	0.0	-9.1	43.5	-52.6	EUT On Side

APPENDIX

Masimo
52 Discovery
Irvine CA 92618

Dated: 22 January 2025

To whoever, it may concern,

The results documented in test report MASI0909 continue to be representative of the current device. The equipment design and manufacturing process has not changed since the testing/evaluation was performed and documented.

Sincerely,

Anami Joshi

EMC Project Manager

End of Test Report