



LCIE

RFID 13,56MHz Template: Release October 12<sup>th</sup>, 2021

# TEST REPORT

N°: 13278228-775039-A (FILE#2752012)

Version : 02

## Subject

Radio spectrum matters  
tests according to standards:  
47 CFR Part 15.225 & RSS 210 Issue 10 & RSS-Gen Issue 5

## Issued to

E.M.S Electro Medical Systems S.A.  
Chemin de la Vuarpilliere 31  
1260 - NYON  
Switzerland

## Apparatus under test

↪ Product

DolorClast Radial Shock Waves

↪ Trade mark

Electro Medical Sytems SA

↪ Manufacturer

Electro Medical Sytems SA

↪ Family range

DolorClast Radial Shock Waves FT-237 &  
DolorClast Radial Shock Waves FT-250

↪ Model under test

DolorClast Radial Shock Waves FT-237

↪ Serial number

Console LQ00506 and Hand piece LS00035

↪ FCC ID

2ANZC-PLYBVSAOOEL

↪ IC

23296-PLYBVSAOOEL

## Conclusion

See Test Program chapter

## Test date

December 26, 2019 & January 21, 2022 to January 25, 2022

## Test location

Moirans

## FCC Test site

FR0008 - 197516

## ISED Test site

FR0008 - 6500A

## Sample receipt date

December 26, 2021

## Composition of document

52 pages

## Document issued on

August 10, 2022

Written by :  
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Tests operator

Approved by :  
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## PUBLICATION HISTORY

Version	Date	Author	Modification
01	March 3 , 2022	Majid MOURZAGH	Creation of the document
02	August 10, 2022	Majid MOURZAGH	Add FCC an IC ID on page 1

*Each new edition of this test report replaces and cancels the previous edition. The control of the old editions of report is under responsibility of client.*



**SUMMARY**

1. TEST PROGRAM ..... 4

2. EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER) ..... 5

3. OCCUPIED BANDWIDTH..... 9

4. 20DB EMISSION BANDWIDTH ..... 12

5. FREQUENCY TOLERANCE ..... 16

6. AC POWER LINE CONDUCTED EMISSIONS..... 20

7. FIELD STRENGTH OUTSIDE OF THE BANDS 13.110-14.010 MHZ ..... 30

8. FIELD STRENGTH WITHIN THE BAND 13.110-14.010MHZ..... 46

9. UNCERTAINTIES CHART ..... 52



## 1. TEST PROGRAM

### References

- 47 CFR Part 15.225 (2020)
- RSS 210 Issue 10
- RSS Gen Issue 5
- ANSI C63.10 (2013)

### Radio requirement:

Clause (47CFR Part 15.225 & RSS-210 Issue 9 & RSS-Gen Issue 5) Test Description	Test result - Comments			
Occupied Bandwidth	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
20dB Bandwidth	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
AC Power Line Conducted Emission	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA(2)	<input type="checkbox"/> NP(1)
Frequency Tolerance	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Field strength within the band 13.110-14.010MHz	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Field strength outside of the bands 13.110-14.010 MHz	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Receiver Radiated Emissions	<input type="checkbox"/> PASS (3)	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> NP(1)
This table is a summary of test report, see conclusion of each clause of this test report for detail.				

(1): Limited program

(2): EUT not directly or indirectly connected to the AC Power Public Network

(3) Testing covered the receive mode, and receiver spurious emissions are considered to be the same as transmitter.

PASS: EUT complies with standard's requirement

FAIL: EUT does not comply with standard's requirement

NA: Not Applicable

NP: Test Not Performed

**2. EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER)**

**2.1. HARDWARE IDENTIFICATION (EUT AND AUXILIARIES):**

**Equipment under test (EUT):**

Electro Medical Sytems SA DolorClast Radial Shock Waves FT-237  
 Serial Number: Console LQ00506 and Hand piece LS00035



Equipment Under Test

**Power supply:**

Name	Type	Rating	Reference / Sn	Comments
Supply1	<input checked="" type="checkbox"/> AC	100-240 VAC / 50-60 Hz	/	/

**Voltage table used:**

Type	Measurement performed:
<input checked="" type="checkbox"/> AC	<input checked="" type="checkbox"/> 120VAC/60Hz <input type="checkbox"/> 230VAC/50Hz

**Inputs/outputs - Cable:**

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Supply1	L+N+Pe	5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Auxiliary equipment used during test:**

Type	Reference	Sn	Comments
None			



**Equipment information (declaration of provider):**

Type:	<input checked="" type="checkbox"/> <b>RFID</b>		
Frequency band:	[13.553 to 13.567] MHz		
Number of Channel:	1		
Antenna Type:	<input checked="" type="checkbox"/> Integral	<input type="checkbox"/> External	<input type="checkbox"/> Dedicated
Transmit chains:	1		
Receiver chains:	1		
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined
Equipment arrangement:	<input checked="" type="checkbox"/> Tabletop	<input type="checkbox"/> Floor-standing	<input type="checkbox"/> Multiple orientations
Equipment type:	<input checked="" type="checkbox"/> Production model		<input type="checkbox"/> Pre-production model
Operating temperature range:	Tmin:	<input checked="" type="checkbox"/> 10°C*	
	Tnom:	20°C	
	Tmax:	<input checked="" type="checkbox"/> 30°C*	
Operating voltage:	Vmin (85% Vnom):	<input checked="" type="checkbox"/> 102V/60Hz	
	Vnom:	<input checked="" type="checkbox"/> 120V/60Hz	
	Vmax (115% Vnom):	<input checked="" type="checkbox"/> 138V/60Hz	

\*Ask from provider

Hardware information		
Software (if applicable):	V. :	ES-1002 rev A (v 1.0.0) in EL-695



## 2.2. RUNNING MODE

Test mode	Description of test mode
Test mode 1	Permanent emission with modulation produced the highest power

Test	Running mode
Occupied Bandwidth	<input checked="" type="checkbox"/> Test mode 1 <input type="checkbox"/> Alternative test mode()
Frequency Tolerance	<input checked="" type="checkbox"/> Test mode 1 <input type="checkbox"/> Alternative test mode()
AC Power Line Conducted Emission	<input checked="" type="checkbox"/> Test mode 1 <input type="checkbox"/> Alternative test mode()
Field strength within the band 13.110-14.010MHz	<input checked="" type="checkbox"/> Test mode 1 <input type="checkbox"/> Alternative test mode()
Field strength outside of the bands 13.110-14.010 MHz	<input checked="" type="checkbox"/> Test mode 1 <input type="checkbox"/> Alternative test mode()
Receiver Radiated Emissions	Not Applicable

## 2.3. EQUIPMENT LABELLING

None

## 2.4. EQUIPMENT MODIFICATION

None       Modification:



## 2.5. FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follow:

$$FS = RA + AF + CF - AG$$

Where

- FS = Field Strength
- RA = Receiver Amplitude
- AF = Antenna Factor
- CF = Cable Factor
- AG = Amplifier Gain

Assume a receiver reading of 52.5dB $\mu$ V is obtained. The antenna factor of 7.4 and a cable factor of 1.1 are added. The amplifier gain of 29dB is subtracted, giving a field strength of 32 dB $\mu$ V/m.

$$FS = 52.5 + 7.4 + 1.1 - 29 = 32 \text{ dB}\mu\text{V/m}$$

The 32 dB $\mu$ V/m value can be mathematically converted to its corresponding level in  $\mu$ V/m.

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(32\text{dB}\mu\text{V/m})/20] = 39.8 \mu\text{V/m.}$$

## 2.6. CALIBRATION DATE

The calibration intervals are extended at 12+2 months. This extended interval is based on the fact that there is sufficient calibration data to statistically establish a trend or based on experience of use of the test equipment to assure good measurement results for a longer period



### 3. OCCUPIED BANDWIDTH

#### 3.1. TEST CONDITIONS

Test performed by : Majid MOURZAGH  
Date of test : January 24, 2022  
Ambient temperature : 20 °C  
Relative humidity : 38 %

#### 3.2. TEST SETUP

- The Equipment Under Test is installed:

- On a table
- In a climatic chamber
- In an anechoic chamber

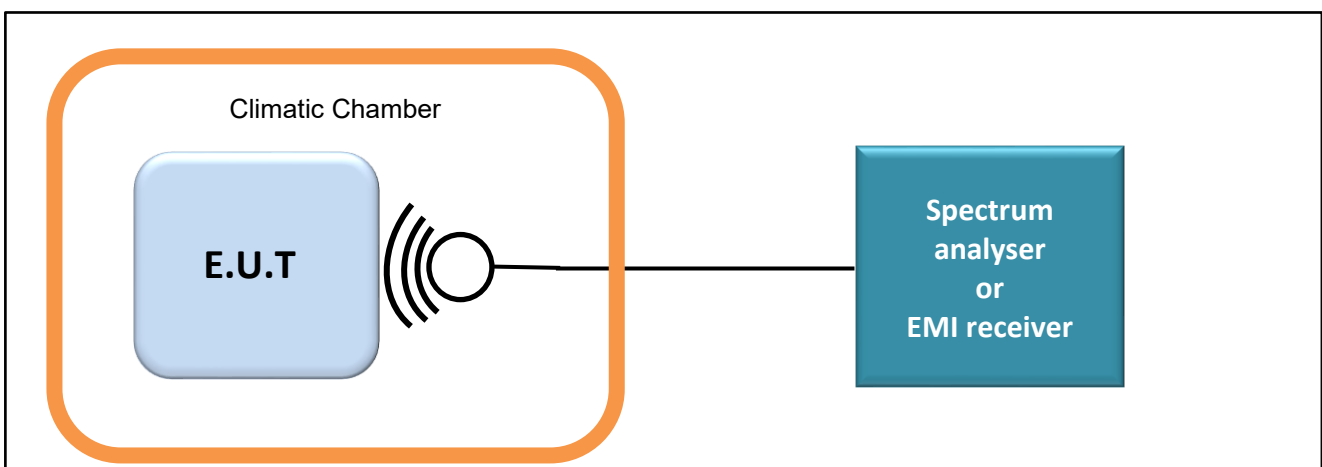
- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

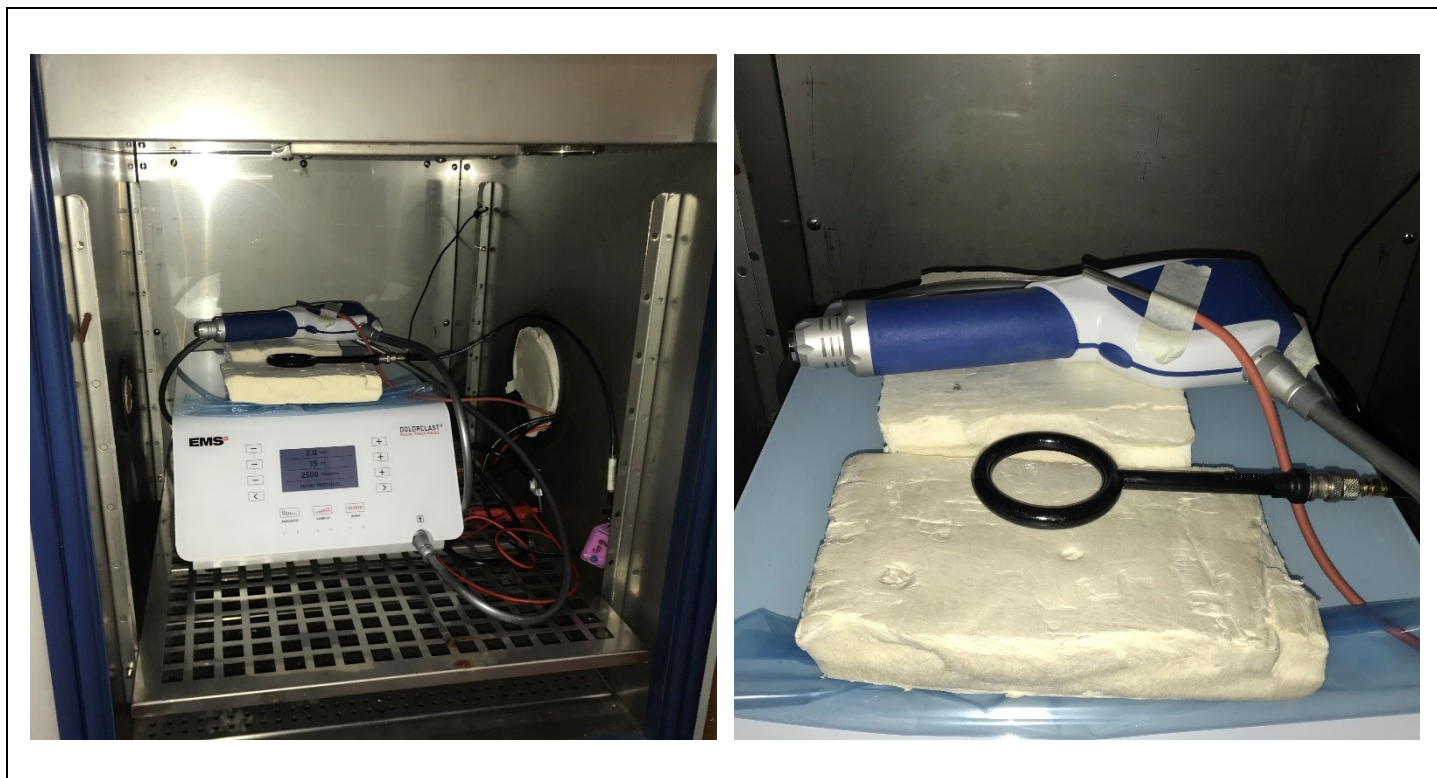
The EUT is turned ON and connected to measurement instrument; the center frequency of the spectrum analyzer is set to the fundamental frequency. The captured power is measured and recorded; the measurement is repeated until all frequencies required were complete.

- Test Procedure:

- RSS-Gen Issue 5 § 6.7
  - RBW used in the range of 1% to 5% of the anticipated emission bandwidth
  - Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
  - Detector = Peak.
  - Trace mode = Max Hold.
  - Sweep = Auto couple.
  - Allow the trace to stabilize.
  - OBW 99% function of spectrum analyzer used



Test set up of Occupied Bandwidth



Photograph for Occupied bandwidth

### 3.3. LIMIT

None

### 3.4. TEST EQUIPMENT LIST

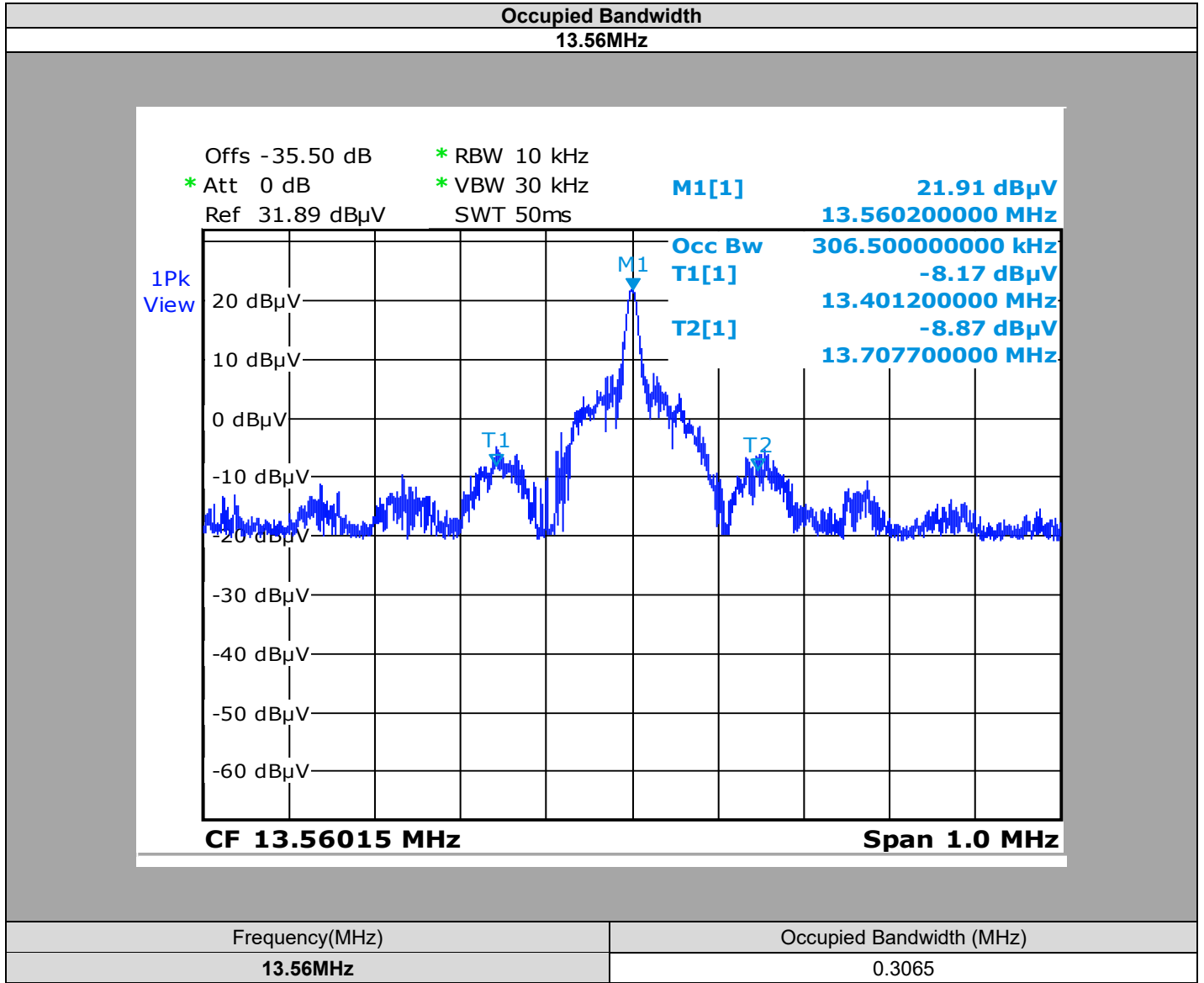
TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
AC source 1kW	KEYSIGHT	AC6802A	A7042305		
Antenna Loop (near field)	ELECTRO-METRICS	EM-6993	C2040215	06/19	06/22
Attenuator 10dB	AEROFLEX	_	A7122267	08/21	08/23
Cable SMA 2m	_	6GHz	A5329635	02/20	02/22
Climatic chamber	BIA CLIMATIC	CL 6-25	D1022117	12/20	12/21*
Data Logger (CEM1)	AGILENT	34970A	A6440083	11/20	11/22
Frequency Counter	HEWLETT PACKARD	HP 5350B	B2082009	08/19	08/24
Multimeter - CEM	FLUKE	87	A1240251	03/21	03/23
Spectrum analyzer	ROHDE & SCHWARZ	FSV 40	A4060059	11/21	11/23
Spectrum Analyzer 9kHz - 6GHz	ROHDE & SCHWARZ	FSL6	A2642020	08/20	08/22
Thermo-hygrometer	TESTO	608-H1	B4204120	12/20	12/22
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23

\*: Under derogation



L C I E

### 3.5. RESULTS



### 3.6. CONCLUSION

Occupied Channel Bandwidth measurement performed on the sample of the product **Electro Medical Sytems SA DolorClast Radial Shock Waves FT-237**, SN: **Console LQ00506** and **Hand piece LS00035**, in configuration and description presented in this test report, show levels **compliant** to the **RSS-GEN** limits.

## 4. 20dB EMISSION BANDWIDTH

### 4.1. TEST CONDITIONS

Test performed by : Majid MOURZAGH  
Date of test : January 24, 2022  
Ambient temperature : 20 °C  
Relative humidity : 38 %

### 4.2. TEST SETUP

- The Equipment Under Test is installed:

In an Climatic chamber

- Measurement is performed with a spectrum analyzer in:

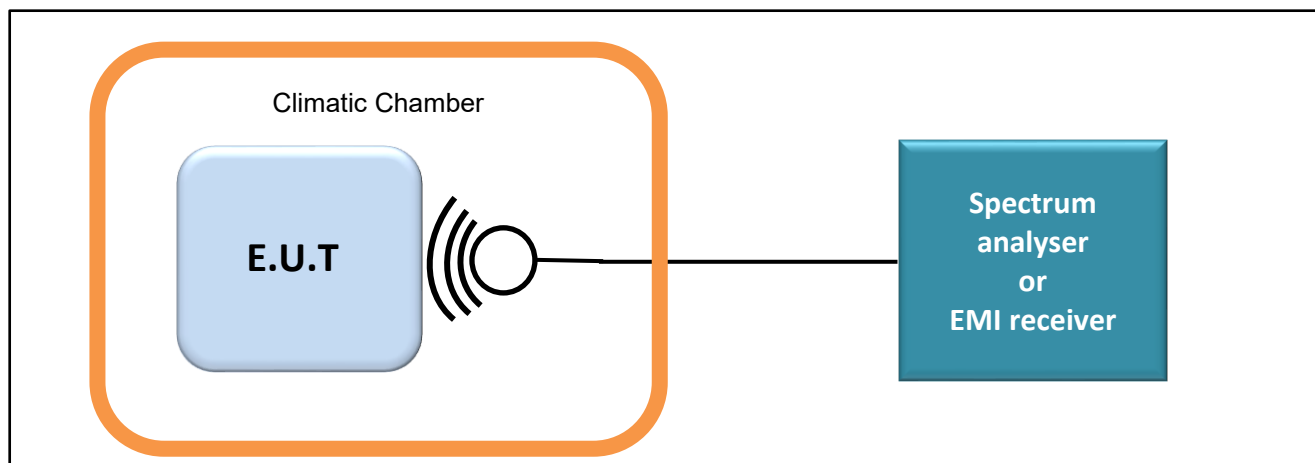
Conducted Method

Radiated Method

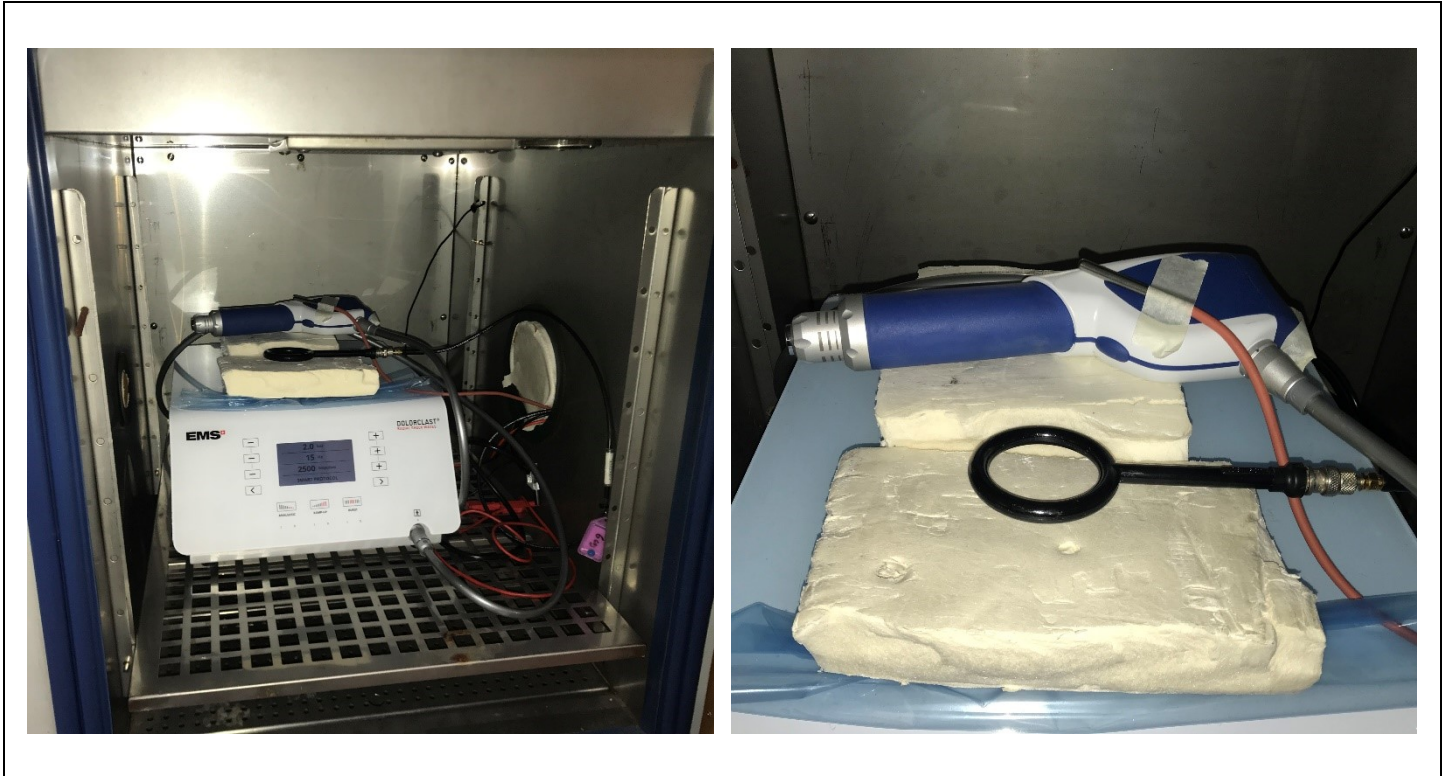
- Test Procedure:

ANSI C63.10 § 6.9.2:

The EUT is placed in an anechoic chamber; levels have been corrected to be in compliant with the Peak Output Power measured. The EUT is turn ON and using the MaxHold function, the frequency separation of two frequencies that were attenuated 20dB from the Peak Output Power level. A delta marker is used to measure the frequency difference as the emission bandwidth.



Test set up of 20dB Emission Bandwidth



Photograph for 20dB emission bandwidth

#### 4.3. LIMIT

No Limit

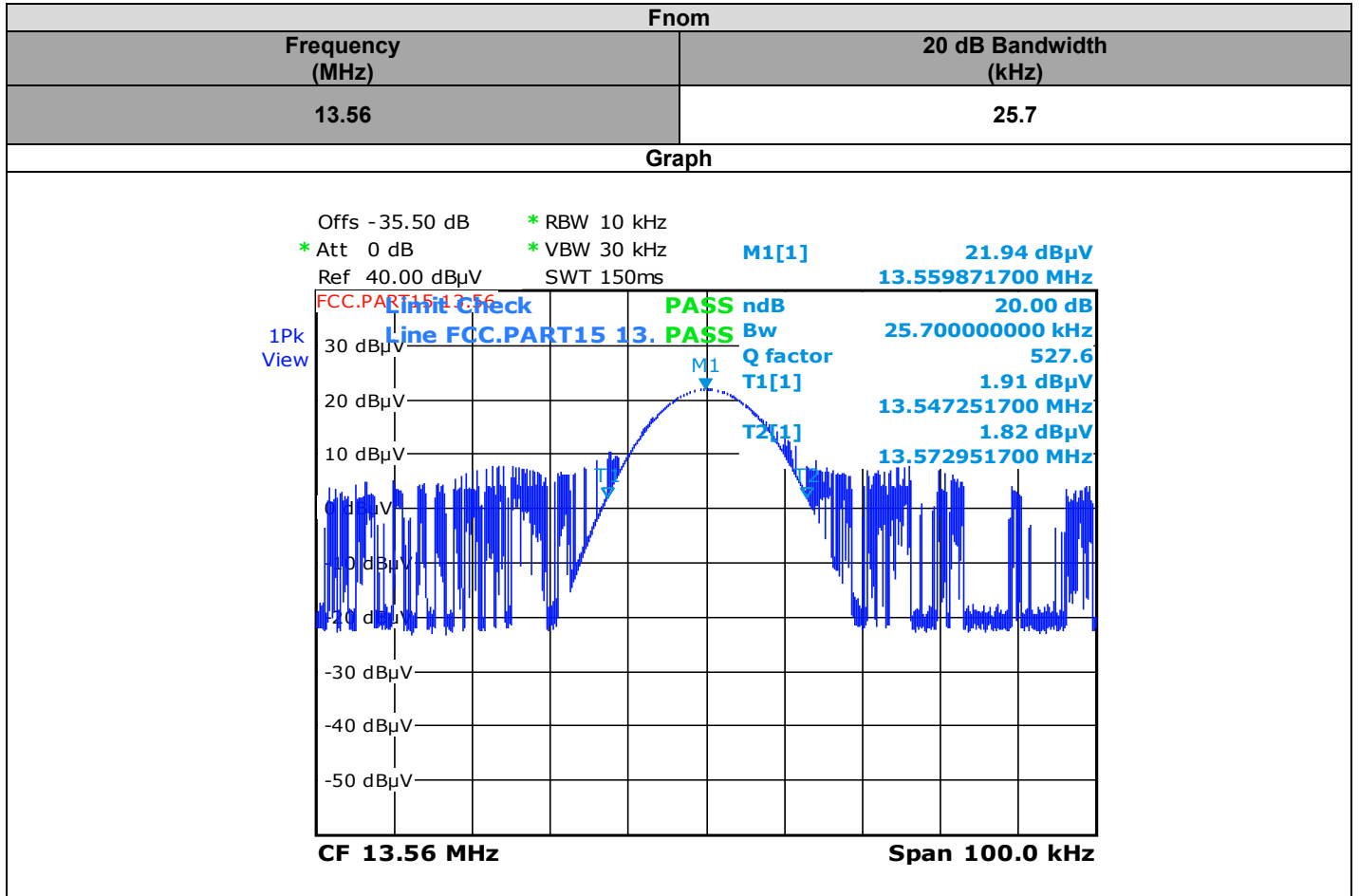


#### 4.4. TEST EQUIPMENT LIST

TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
AC source 1kW	KEYSIGHT	AC6802A	A7042305		
Antenna Loop (near field)	ELECTRO-METRICS	EM-6993	C2040215	06/19	06/22
Attenuator 10dB	AEROFLEX	_	A7122267	08/21	08/23
Cable SMA 2m	_	6GHz	A5329635	02/20	02/22
Climatic chamber	BIA CLIMATIC	CL 6-25	D1022117	12/20	12/21*
Data Logger (CEM1)	AGILENT	34970A	A6440083	11/20	11/22
Frequency Counter	HEWLETT PACKARD	HP 5350B	B2082009	08/19	08/24
Multimeter - CEM	FLUKE	87	A1240251	03/21	03/23
Spectrum analyzer	ROHDE & SCHWARZ	FSV 40	A4060059	11/21	11/23
Spectrum Analyzer 9kHz - 6GHz	ROHDE & SCHWARZ	FSL6	A2642020	08/20	08/22
Thermo-hygrometer	TESTO	608-H1	B4204120	12/20	12/22
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23

\*: Under derogation

#### 4.5. RESULTS



#### 4.6. CONCLUSION

20dB Emission Bandwidth measurement performed on the sample of the product **Electro Medical Sytems SA DolorClast Radial Shock Waves FT-237**, SN: **Console LQ00506 and Hand piece LS00035**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.225 & RSS 210 limits.

## 5. FREQUENCY TOLERANCE

### 5.1. TEST CONDITIONS

Test performed by : Majid MOURZAGH  
Date of test : January 24, 2022  
Ambient temperature : 20 °C  
Relative humidity : 38 %

### 5.2. TEST SETUP

- The Equipment Under Test is installed:

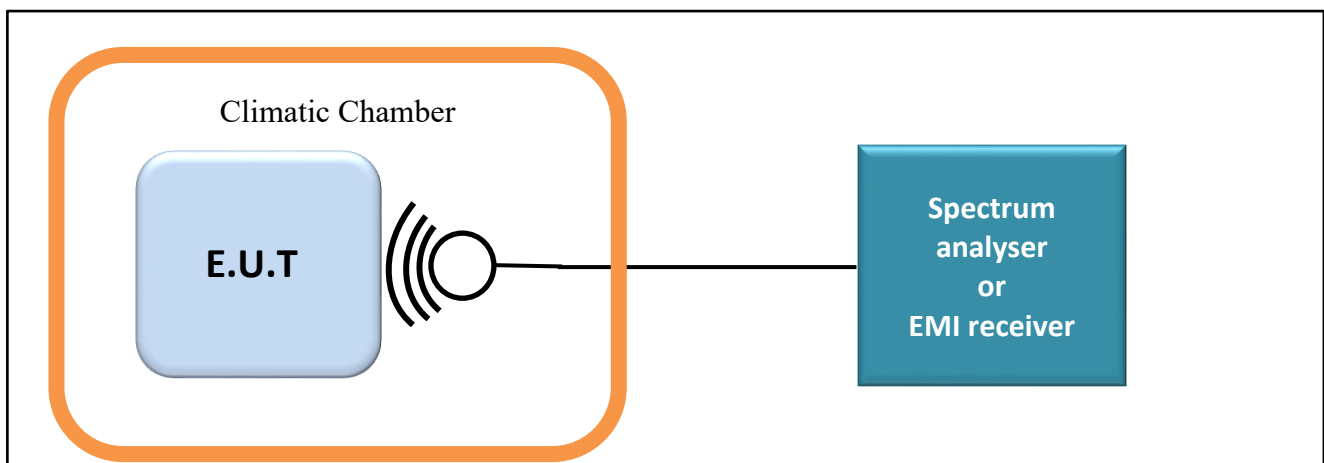
- On a table
- In a climatic chamber
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

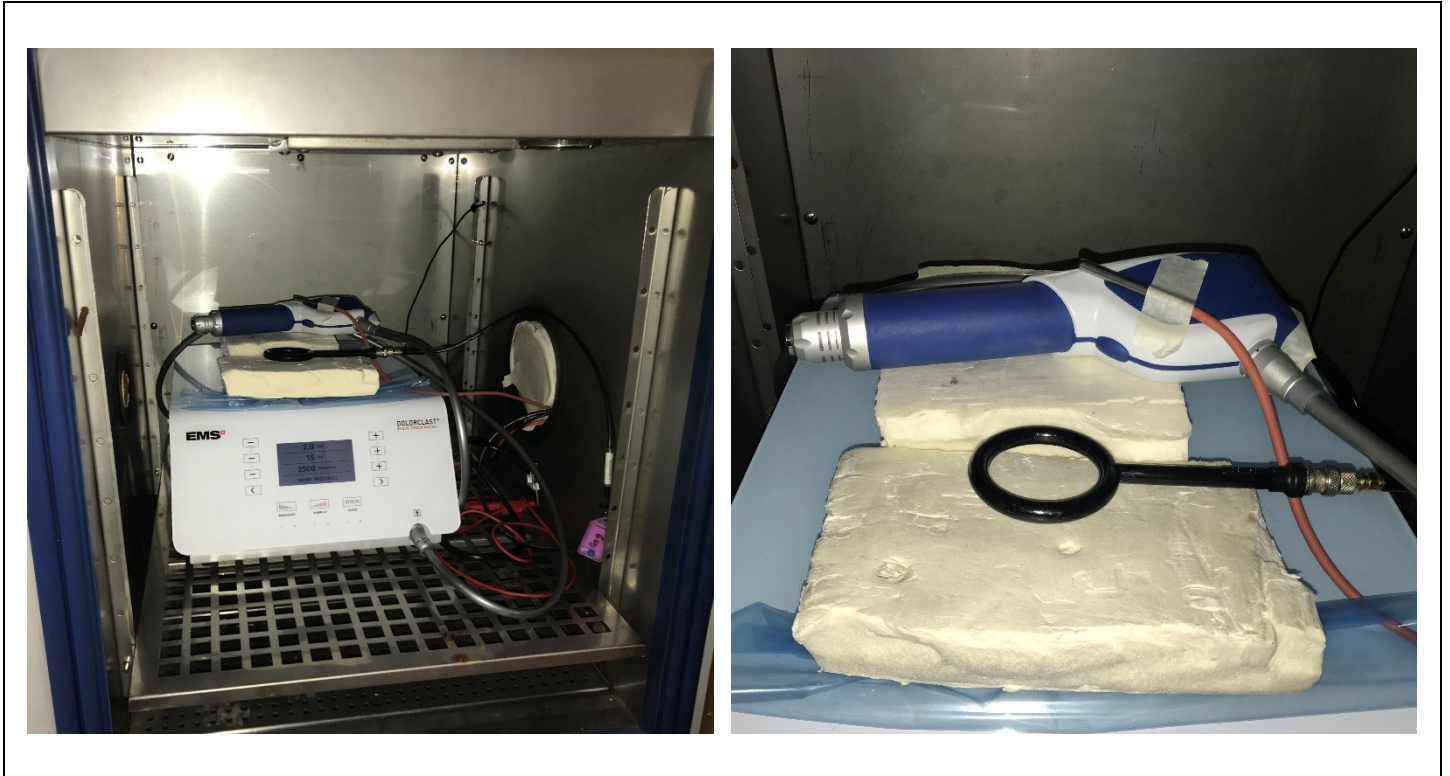
- Test Procedure:

- ANSI C63.10 § 6.8



Test set up of Occupied Bandwidth





Photograph for Frequency Tolerance

### 5.3. LIMIT

$\pm 0.01\%$  ( $\pm 100\text{ppm}$ )



#### 5.4. TEST EQUIPMENT LIST

TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
AC source 1kW	KEYSIGHT	AC6802A	A7042305		
Antenna Loop (near field)	ELECTRO-METRICS	EM-6993	C2040215	06/19	06/22
Attenuator 10dB	AEROFLEX	_	A7122267	08/21	08/23
Cable SMA 2m	_	6GHz	A5329635	02/20	02/22
Climatic chamber	BIA CLIMATIC	CL 6-25	D1022117	12/20	12/21*
Data Logger (CEM1)	AGILENT	34970A	A6440083	11/20	11/22
Frequency Counter	HEWLETT PACKARD	HP 5350B	B2082009	08/19	08/24
Multimeter - CEM	FLUKE	87	A1240251	03/21	03/23
Spectrum analyzer	ROHDE & SCHWARZ	FSV 40	A4060059	11/21	11/23
Spectrum Analyzer 9kHz - 6GHz	ROHDE & SCHWARZ	FSL6	A2642020	08/20	08/22
Thermo-hygrometer	TESTO	608-H1	B4204120	12/20	12/22
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23

\*: Under derogation



## 5.5. RESULTS

EUT activation:	Startup		
Voltage:	Vnom		
Temperature:	10°C	20°C	30°C
Frequency (MHz)	13.56005999	13.56003491	13.56001149
Frequency Drift (%)	0.0004%	0.0003%	0.0001%
EUT activation:	2min		
Voltage:	Vnom		
Temperature:	10°C	20°C	30°C
Frequency (MHz)	13.5600619	13.56000432	13.56015204
Frequency Drift (%)	0.0005%	0.0000%	0.0011%
EUT activation:	5min		
Voltage:	Vnom		
Temperature:	10°C	20°C	30°C
Frequency (MHz)	13.56007755	13.56004897	13.56001865
Frequency Drift (%)	0.0006%	0.0004%	0.0001%
EUT activation:	10min		
Voltage:	Vnom		
Temperature:	10°C	20°C	30°C
Frequency (MHz)	13.56008073	13.56004924	13.56001314
Frequency Drift (%)	0.0006%	0.0004%	0.0001%

Temperature	Tnom		
Voltage:	Vmin	Vnom	Vmax
Frequency (MHz)	13.5600212	13.56003491	13.5600432
Frequency Drift (%)	0.0002%	0.0003%	0.0003%

## 5.6. CONCLUSION

Frequency tolerance measurement performed on the sample of the product **Electro Medical Systems SA DolorClast Radial Shock Waves FT-237**, SN: **Console LQ00506 and Hand piece LS00035**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.225 & RSS 210 limits.

## 6. AC POWER LINE CONDUCTED EMISSIONS

### 6.1. TEST CONDITIONS

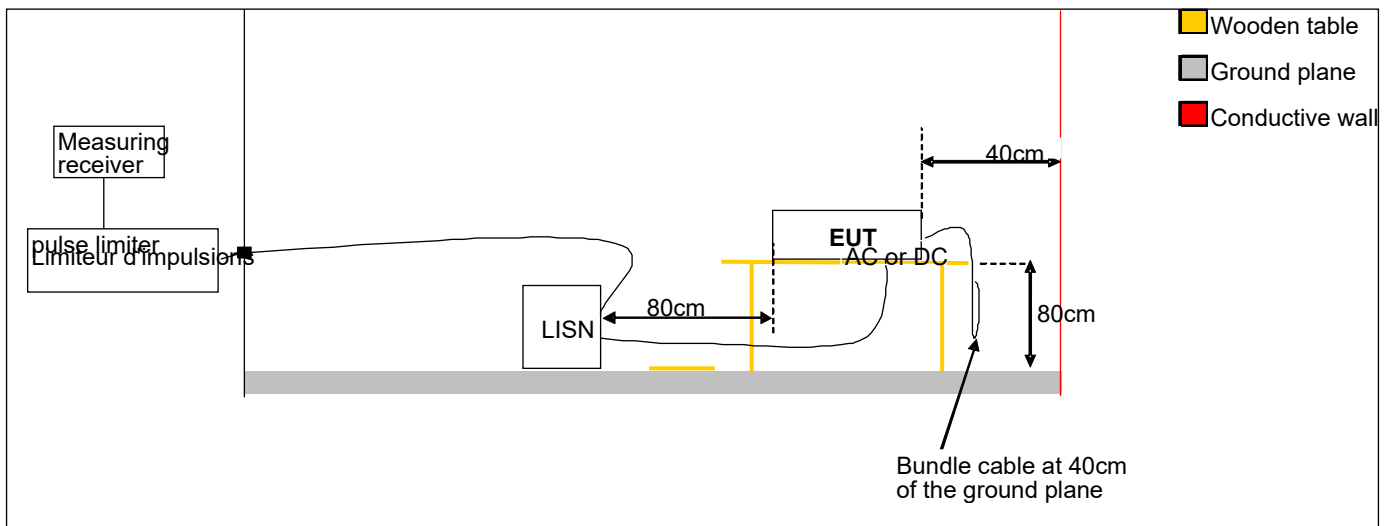
Date of test : December 26, 2019  
 Test performed by : Hamza GHAFILI  
 Atmospheric pressure (hPa) : 994  
 Relative humidity (%) : 39  
 Ambient temperature (°C) : 23

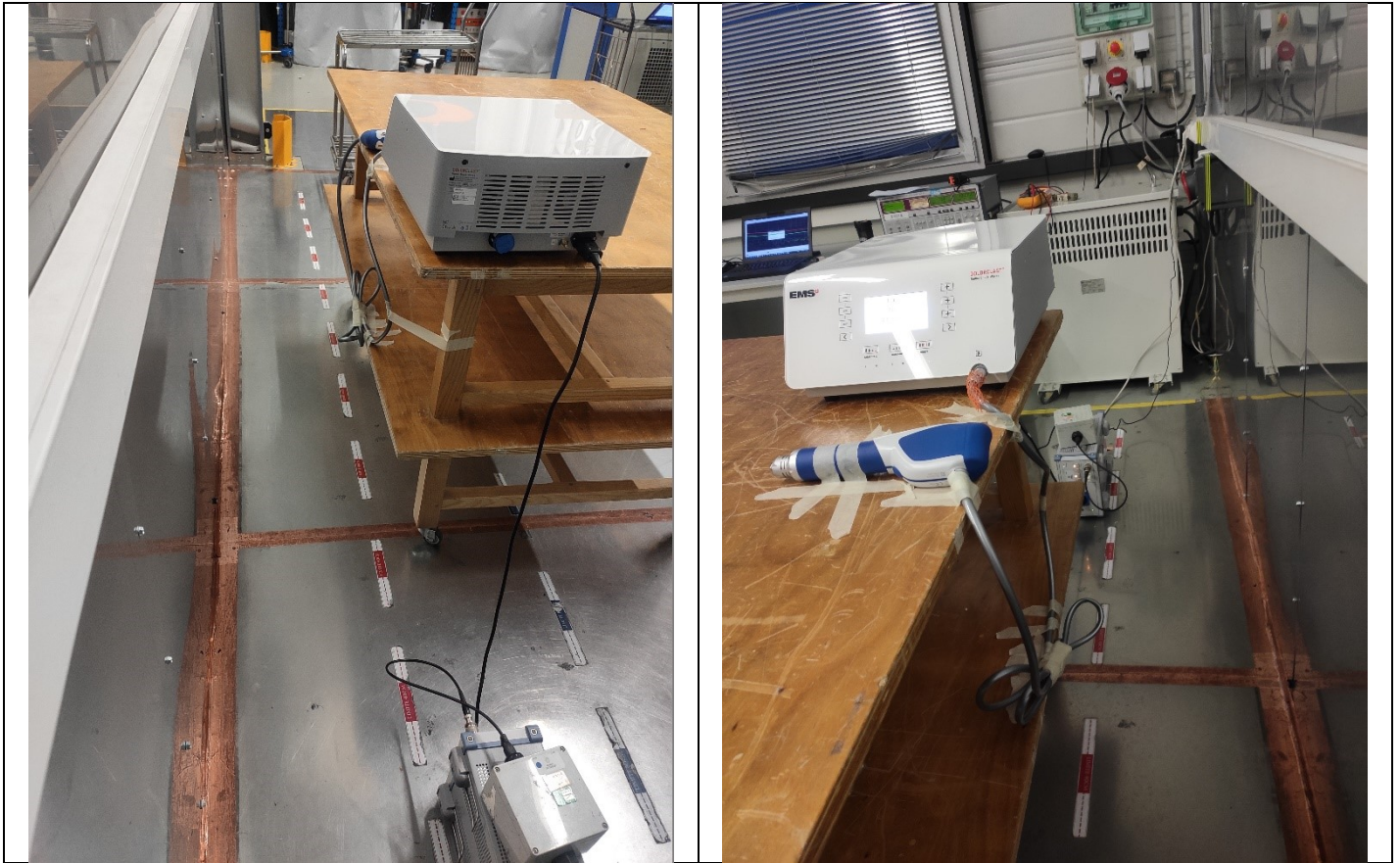
### 6.2. TEST SETUP

The product has been tested according to ANSI C63.10 method. The EUT is placed on the ground reference plane, at 80cm from the LISN. The distance between the EUT and the vertical ground plane is 40cm. Auxiliaries are powered by another LISN. The cable has been shorted to 1meter length. The EUT is powered through the LISN. Measurement is made with a receiver in peak mode. This was followed by a Quasi-Peak, i.e. CISPR measurement for any strong signal. If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary. The LISN (measure) is  $50\Omega / 50\mu\text{H}$ . Interconnecting cables and equipment's were moved to position that maximized emission.

Voltage table used (for Power Line Conducted Emissions):

Type	Measurement performed:	
<input checked="" type="checkbox"/> AC /	<input checked="" type="checkbox"/> 120VAC/60Hz	<input checked="" type="checkbox"/> 240VAC/50Hz





Photograph for AC Power Line Conducted Emissions

### 6.3. LIMIT

Frequency range	Level	Detector
0,15kHz to 0,5MHz	66dB $\mu$ V to 56 $\mu$ V*	QPeak
	56dB $\mu$ V to 46 $\mu$ V*	Average
0,5MHz to 5MHz	56dB $\mu$ V	QPeak
	46dB $\mu$ V	Average
5MHz to 30MHz	60B $\mu$ V	QPeak
	50dB $\mu$ V	Average

\*Decreases with the logarithm of the frequency

### 6.4. TEST EQUIPMENT LIST

TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
BAT EMC	NEXIO	v3.9.0.10	L1000115		
Cable + self	-	-	A5329585	12/18	12/19
EMC comb generator	LCIE SUD EST	-	A3169098		
LISN	ROHDE & SCHWARZ	ENV216	C2320291	02/19	02/20
Receiver 20Hz – 8GHz	ROHDE & SCHWARZ	ESU8	A2642019	12/17	12/19
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	08/18	08/20
Transient limiter	ROHDE & SCHWARZ	ESH3-Z2	A7122204	02/19	02/20
Artificial hand	LCIE SUD EST	-	C2320219	01/19	01/21

### 6.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

None       Divergence:

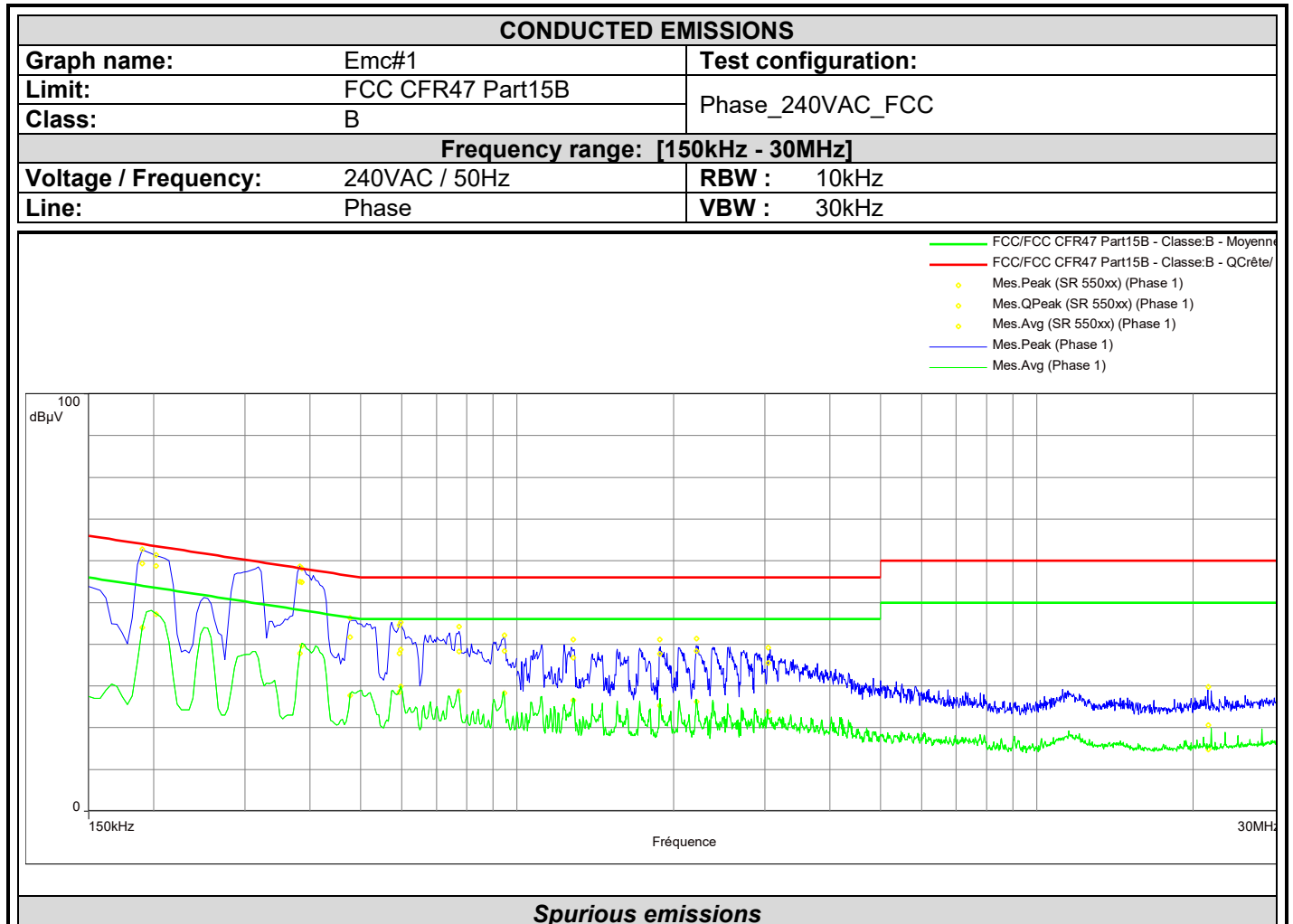
## 6.6. RESULTS

### AC tests Results:

Measurements are performed on the phase (L1) and neutral (N) of the power line.

### Results: (PEAK detection)

Graph identifier	Line	Comments	
Emc# 1	Phase	240VAC/50Hz	See below
Emc# 2	Neutral	240VAC/50Hz	See below
Emc# 3	Phase	120VAC/60Hz	See below
Emc# 4	Neutral	120VAC/60Hz	See below





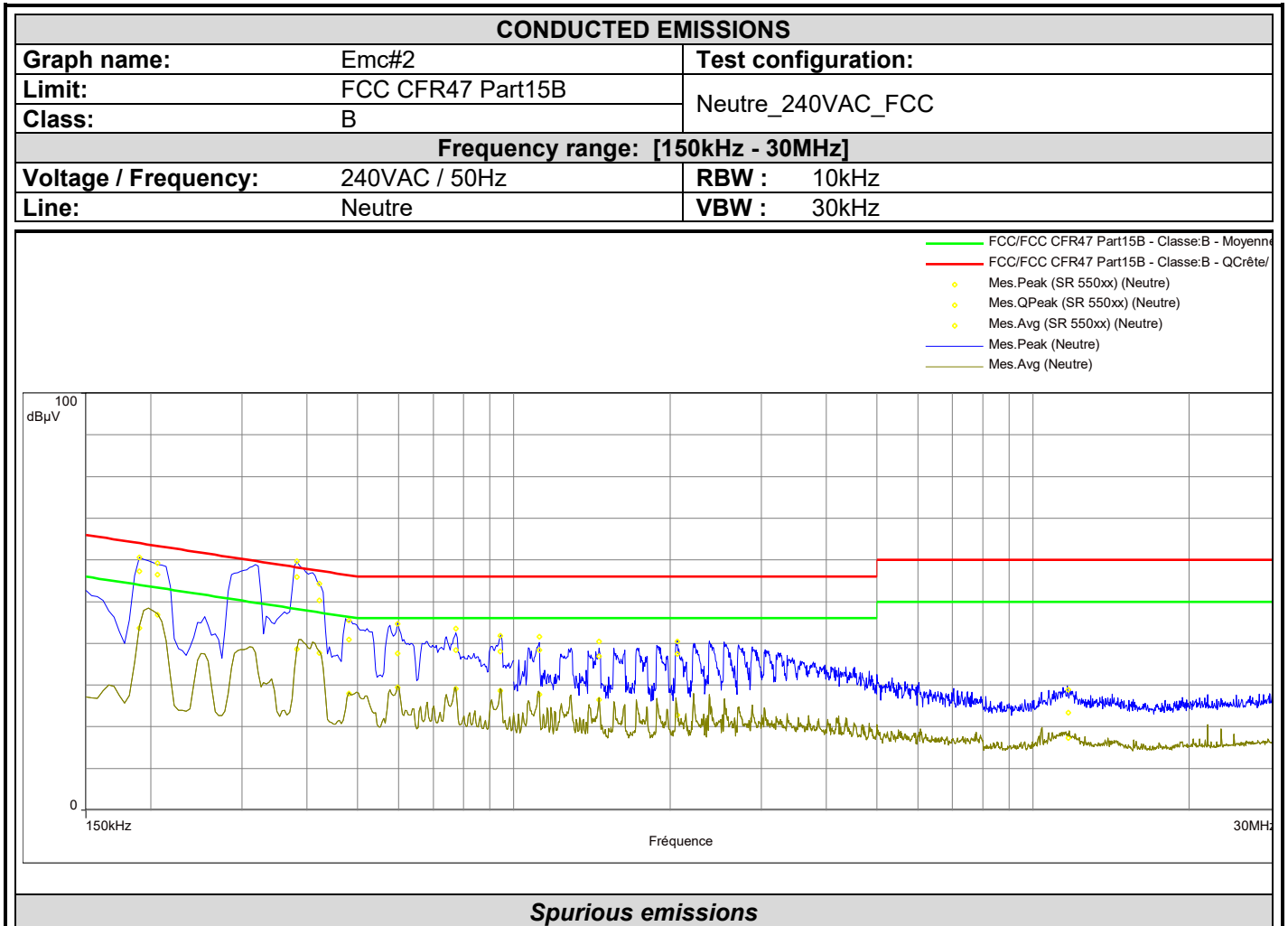
L C I E

Frequency (MHz)	Mes.Peak (dB $\mu$ V)	Mes.QPeak (dB $\mu$ V)	LimQP (dB $\mu$ V)	Mes.QPeak-LimQP (dB)	Mes.Avg (dB $\mu$ V)	LimAvg (dB $\mu$ V)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
0.190	62.7	59.3	64.0	-4.7	44.0	54.0	-10.1	Phase 1	19.6
0.202	61.4	58.8	63.5	-4.8	47.2	53.5	-6.3	Phase 1	19.6
0.382	58.7	55.0	58.2	-3.2	37.8	48.2	-10.4	Phase 1	19.5
0.386	58.1	54.8	58.2	-3.3	39.6	48.2	-8.6	Phase 1	19.5
0.478	46.3	41.7	56.4	-14.7	27.8	46.4	-18.6	Phase 1	19.6
0.594	44.6	37.8	56.0	-18.2	28.5	46.0	-17.5	Phase 1	19.7
0.598	45.3	38.7	56.0	-17.3	29.9	46.0	-16.1	Phase 1	19.7
0.774	44.3	38.3	56.0	-17.7	28.7	46.0	-17.3	Phase 1	19.6
0.946	42.1	38.4	56.0	-17.6	28.3	46.0	-17.7	Phase 1	19.6
1.284	41.2	36.8	56.0	-19.2	26.5	46.0	-19.5	Phase 1	19.6
1.884	41.1	37.7	56.0	-18.3	25.4	46.0	-20.6	Phase 1	19.6
2.216	41.4	38.3	56.0	-17.7	26.2	46.0	-19.8	Phase 1	19.7
3.044	39.2	35.5	56.0	-20.5	23.8	46.0	-22.2	Phase 1	19.7
21.364	29.7	20.7	60.0	-39.3	14.8	50.0	-35.2	Phase 1	20.9





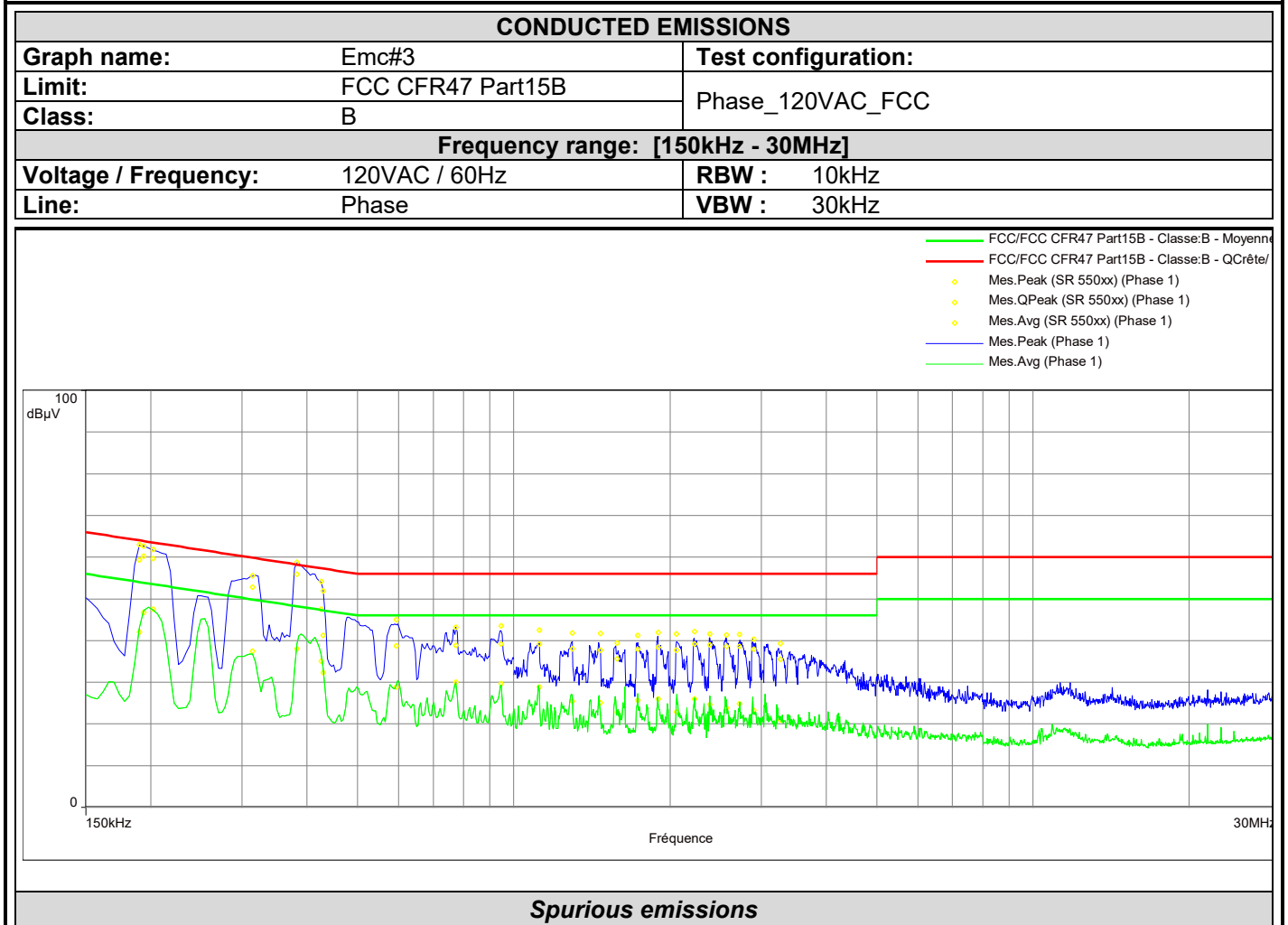
L C I E



Frequency (MHz)	Mes.Peak (dBµV)	Mes.QPeak (dBµV)	LimQP (dBµV)	Mes.QPeak-LimQP (dB)	Mes.Avg (dBµV)	LimAvg (dBµV)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
0.190	60.7	57.2	64.0	-6.8	43.6	54.0	-10.4	Neutre	19.6
0.206	59.2	56.5	63.4	-6.9	46.9	53.4	-6.4	Neutre	19.6
0.382	59.7	55.9	58.2	-2.3	38.6	48.2	-9.7	Neutre	19.5
0.422	54.3	50.3	57.4	-7.2	37.7	47.4	-9.7	Neutre	19.5
0.482	45.5	40.9	56.3	-15.4	27.9	46.3	-18.4	Neutre	19.6
0.598	44.7	37.6	56.0	-18.4	29.4	46.0	-16.6	Neutre	19.7
0.774	43.5	38.4	56.0	-17.6	29.2	46.0	-16.8	Neutre	19.6
0.942	41.8	38.0	56.0	-18.0	28.7	46.0	-17.3	Neutre	19.6
1.120	41.6	38.3	56.0	-17.7	27.7	46.0	-18.3	Neutre	19.6
1.460	40.4	36.9	56.0	-19.1	26.5	46.0	-19.5	Neutre	19.6
2.068	40.4	37.5	56.0	-18.5	22.8	46.0	-23.2	Neutre	19.7
11.700	28.9	23.4	60.0	-36.6	17.3	50.0	-32.7	Neutre	20.3



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Frequency (MHz)	Mes.Peak (dBµV)	Mes.QPeak (dBµV)	LimQP (dBµV)	Mes.QPeak-LimQP (dB)	Mes.Avg (dBµV)	LimAvg (dBµV)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
0.190	63.0	59.4	64.0	-4.7	42.1	54.0	-12.0	Phase 1	19.6
0.194	62.7	60.3	63.9	-3.6	46.8	53.9	-7.1	Phase 1	19.6
0.202	61.9	59.7	63.5	-3.8	47.6	53.5	-6.0	Phase 1	19.6
0.314	55.5	52.8	59.9	-7.1	37.5	49.9	-12.4	Phase 1	19.5
0.382	58.7	56.0	58.2	-2.3	38.1	48.2	-10.2	Phase 1	19.5
0.426	54.2	47.6	57.3	-9.8	35.0	47.3	-12.3	Phase 1	19.5
0.430	51.9	41.3	57.2	-16.0	32.3	47.2	-15.0	Phase 1	19.5
0.594	45.0	38.7	56.0	-17.3	28.9	46.0	-17.1	Phase 1	19.7
0.774	43.2	38.8	56.0	-17.2	30.0	46.0	-16.0	Phase 1	19.6
0.946	43.6	39.2	56.0	-16.8	29.7	46.0	-16.3	Phase 1	19.6
1.120	42.5	39.2	56.0	-16.8	28.9	46.0	-17.1	Phase 1	19.6
1.296	41.9	38.0	56.0	-18.0	25.4	46.0	-20.6	Phase 1	19.6
1.468	41.7	37.6	56.0	-18.4	25.1	46.0	-20.9	Phase 1	19.6

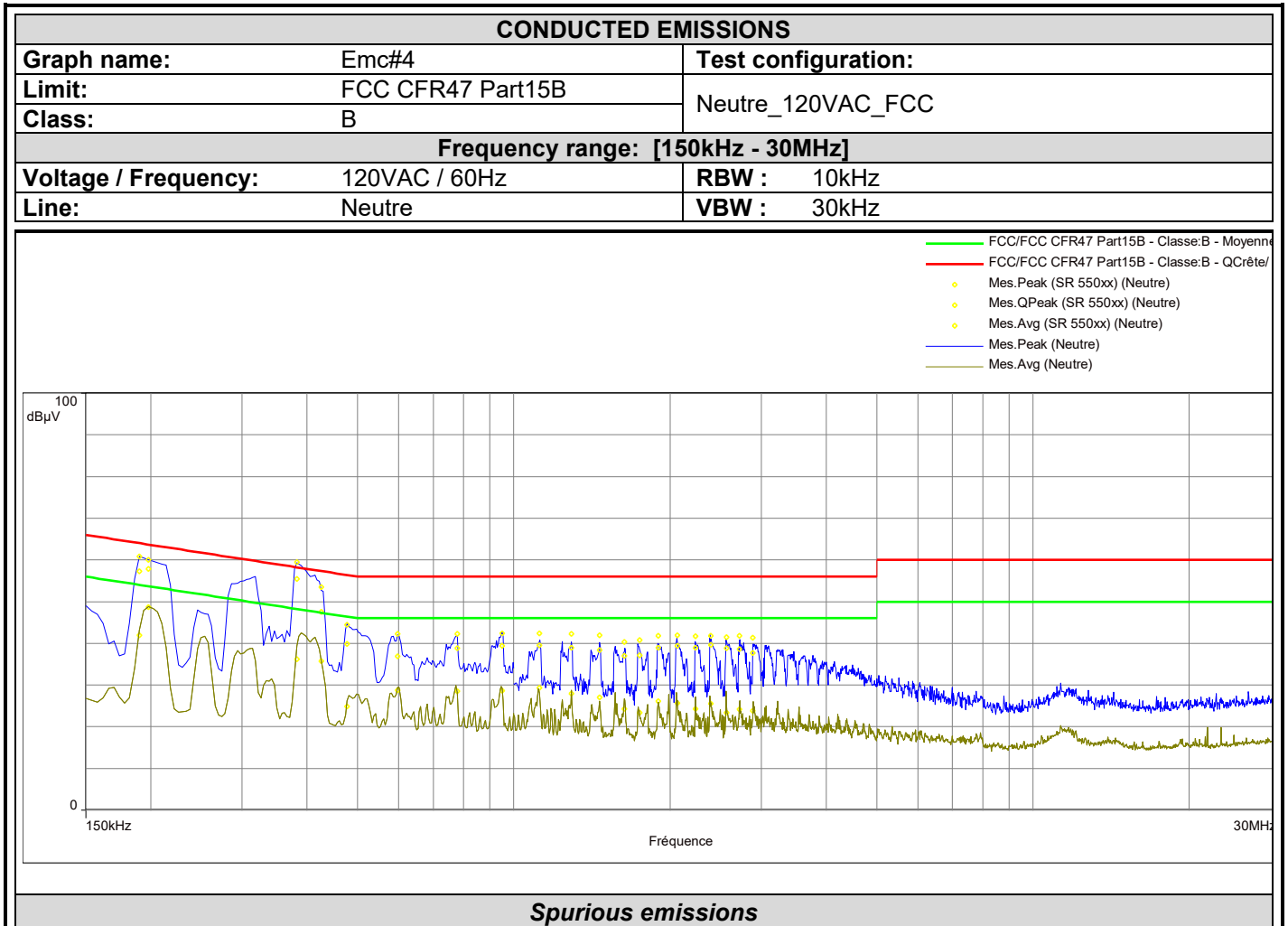


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Frequency (MHz)	Mes.Peak (dB $\mu$ V)	Mes.QPeak (dB $\mu$ V)	LimQP (dB $\mu$ V)	Mes.QPeak-LimQP (dB)	Mes.Avg (dB $\mu$ V)	LimAvg (dB $\mu$ V)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
1.584	39.4	35.7	56.0	-20.3	22.8	46.0	-23.2	Phase 1	19.6
1.732	41.3	38.0	56.0	-18.0	25.7	46.0	-20.3	Phase 1	19.6
1.900	42.0	38.4	56.0	-17.6	26.0	46.0	-20.0	Phase 1	19.6
2.056	41.6	37.7	56.0	-18.3	22.9	46.0	-23.1	Phase 1	19.7
2.228	42.2	39.2	56.0	-16.8	26.0	46.0	-20.0	Phase 1	19.7
2.388	41.6	38.9	56.0	-17.1	24.6	46.0	-21.4	Phase 1	19.7
2.568	41.4	38.6	56.0	-17.4	23.9	46.0	-22.1	Phase 1	19.7
2.720	41.5	38.6	56.0	-17.4	24.8	46.0	-21.2	Phase 1	19.7
2.896	40.4	37.9	56.0	-18.1	23.3	46.0	-22.7	Phase 1	19.7
3.264	39.3	35.6	56.0	-20.4	20.9	46.0	-25.1	Phase 1	19.7



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Frequency (MHz)	Mes.Peak (dBµV)	Mes.QPeak (dBµV)	LimQP (dBµV)	Mes.QPeak-LimQP (dB)	Mes.Avg (dBµV)	LimAvg (dBµV)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
0.190	60.8	57.3	64.0	-6.7	41.9	54.0	-12.2	Neutre	19.6
0.198	60.0	57.9	63.7	-5.8	48.7	53.7	-5.0	Neutre	19.6
0.382	59.5	55.5	58.2	-2.8	36.2	48.2	-12.0	Neutre	19.5
0.426	53.5	47.5	57.3	-9.8	35.7	47.3	-11.6	Neutre	19.5
0.478	44.4	39.9	56.4	-16.5	24.9	46.4	-21.5	Neutre	19.6
0.598	42.3	36.9	56.0	-19.1	28.7	46.0	-17.3	Neutre	19.7
0.778	42.2	38.8	56.0	-17.2	28.5	46.0	-17.5	Neutre	19.6
0.950	42.4	39.4	56.0	-16.6	28.6	46.0	-17.4	Neutre	19.6
1.120	42.4	39.5	56.0	-16.5	29.3	46.0	-16.7	Neutre	19.6
1.292	42.3	39.0	56.0	-17.0	27.9	46.0	-18.1	Neutre	19.6
1.464	41.9	38.4	56.0	-17.6	27.1	46.0	-18.9	Neutre	19.6
1.632	40.3	37.0	56.0	-19.0	24.3	46.0	-21.7	Neutre	19.6
1.748	40.8	37.1	56.0	-18.9	23.4	46.0	-22.6	Neutre	19.6

Frequency (MHz)	Mes.Peak (dB $\mu$ V)	Mes.QPeak (dB $\mu$ V)	LimQP (dB $\mu$ V)	Mes.QPeak-LimQP (dB)	Mes.Avg (dB $\mu$ V)	LimAvg (dB $\mu$ V)	Mes.Avg-LimAvg (dB)	Line	Correction (dB)
1.900	41.8	39.0	56.0	-17.0	26.1	46.0	-19.9	Neutre	19.6
2.064	41.9	39.4	56.0	-16.6	25.7	46.0	-20.3	Neutre	19.7
2.240	41.6	39.0	56.0	-17.0	24.3	46.0	-21.7	Neutre	19.7
2.396	41.8	39.6	56.0	-16.4	25.6	46.0	-20.4	Neutre	19.7
2.572	41.4	38.9	56.0	-17.1	23.4	46.0	-22.6	Neutre	19.7
2.720	41.8	38.6	56.0	-17.4	24.2	46.0	-21.8	Neutre	19.7
2.884	41.3	37.7	56.0	-18.3	23.8	46.0	-22.2	Neutre	19.7

## 6.7. CONCLUSION

The sample of the equipment **Electro Medical Systems SA DolorClast Radial Shock Waves**, Sn: Console **LQ00020 Hand piece EL-695**, tested in the configuration presented in this test report satisfies to requirements of class B limits of the standard FCC Part15B and ICES-003, for conducted emissions.

## 7. FIELD STRENGTH OUTSIDE OF THE BANDS 13.110-14.010 MHz

### 7.1. TEST CONDITIONS

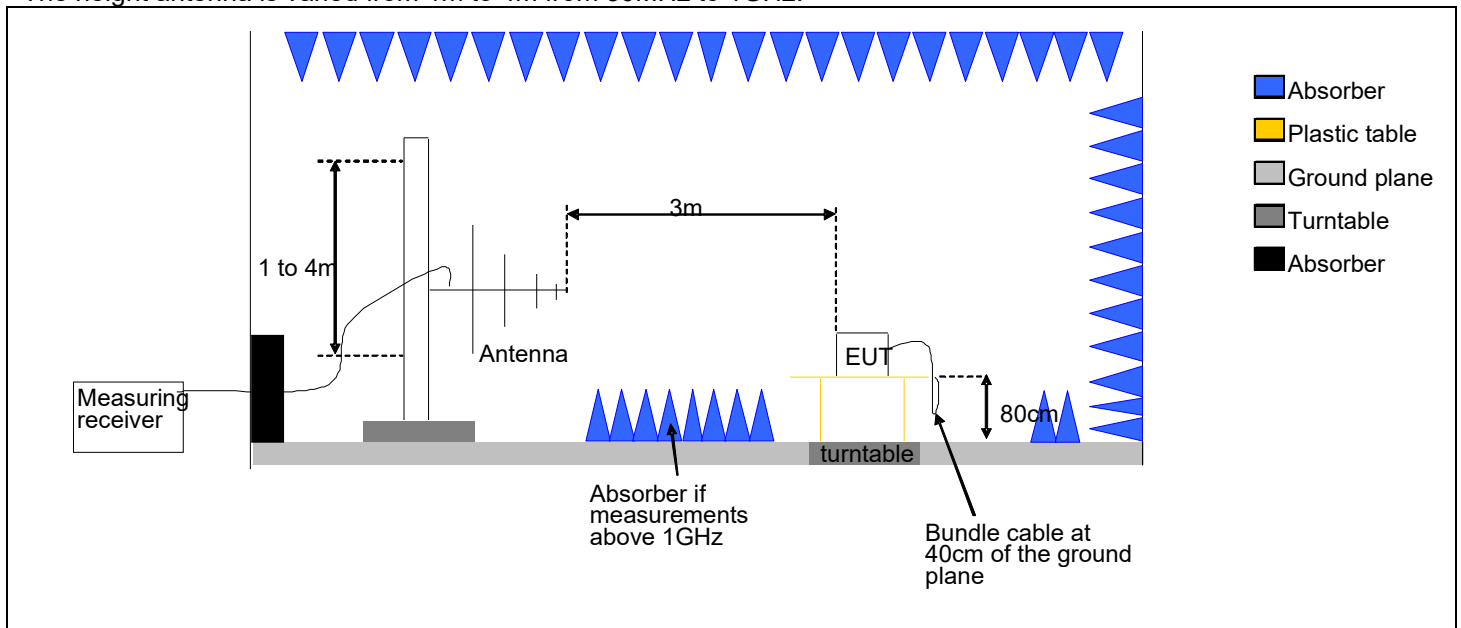
Test performed by : Majid MOURZAGH  
 Date of test : January 21, 2022  
 Ambient temperature : 8 °C -22 °C  
 Relative humidity : 47% -37 %

### 7.2. TEST SETUP

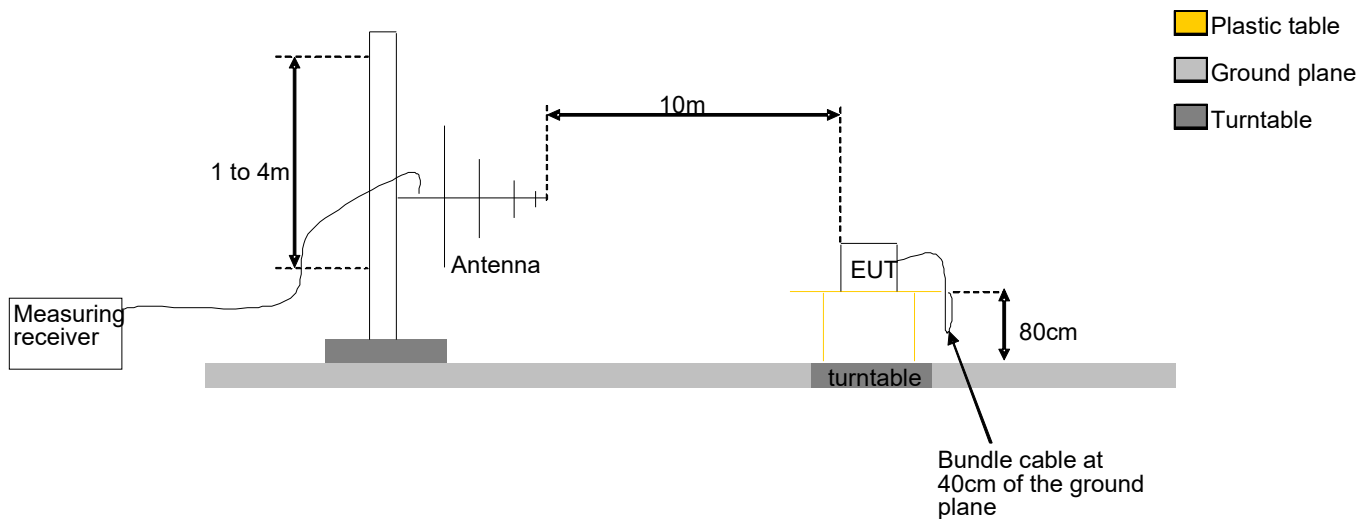
The product has been tested according to ANSI C63.10 and FCC part 15 subpart C.

Test is performed in parallel, perpendicular and ground parallel axis with a loop antenna below 30MHz. Measurement bandwidth was 200Hz below 150kHz and 9kHz between 150kHz & 30MHz. The level has been maximised by the turntable rotation of 360 degrees range on all axis of EUT used in normal configuration. Antenna height was 1m. The EUT is placed **in a semi-anechoic chamber**. Distance between measuring antenna and the EUT is **3m**.

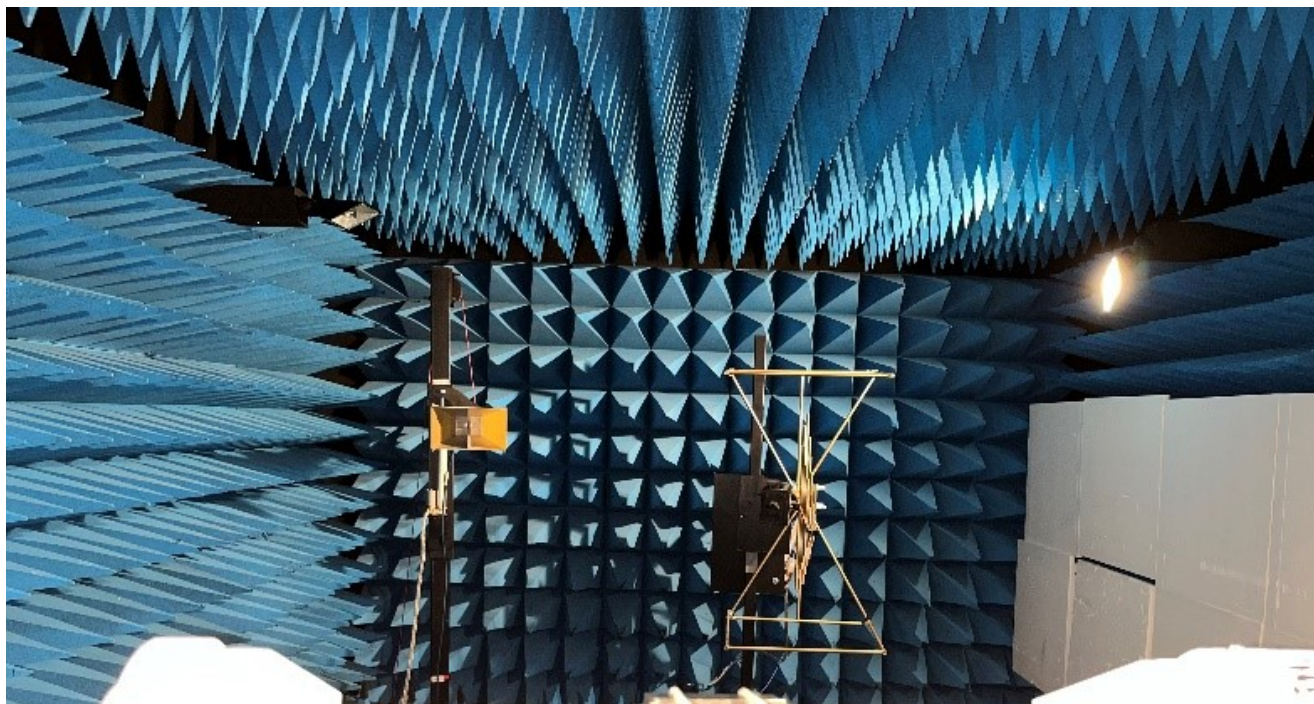
Test is performed in horizontal (H) and vertical (V) polarization with **bilog** between 30MHz & 1GHz. Measurement bandwidth was 120kHz below 1GHz. The level has been maximised by the turntable rotation of 360 degrees range on all axis of EUT used in normal configuration. The EUT is placed at 0.8m high under 1GHz. The EUT is placed **on an open area test site** from 30MHz to 1GHz. Distance between measuring antenna and the EUT is **Distance**. The height antenna is varied from 1m to 4m from 30MHz to 1GHz.

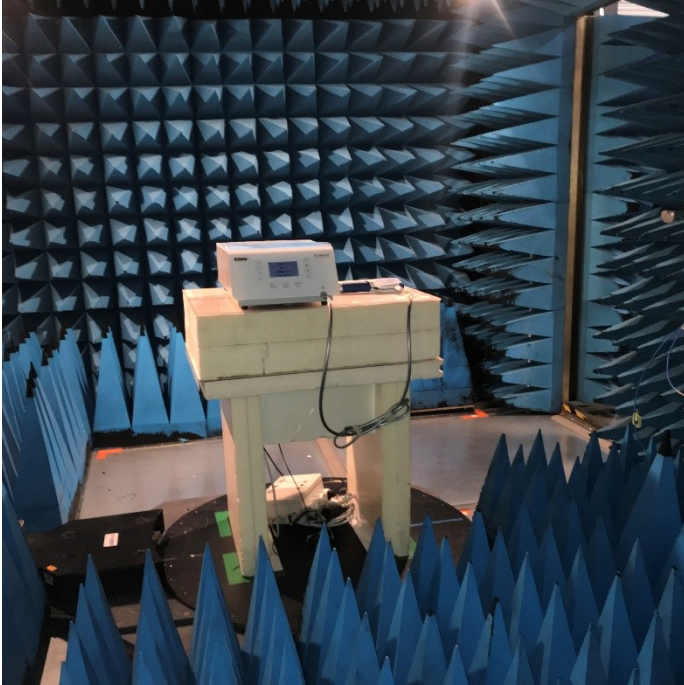


Test set up of Unwanted Emissions in Restricted Frequency Bands in semi anechoic chamber

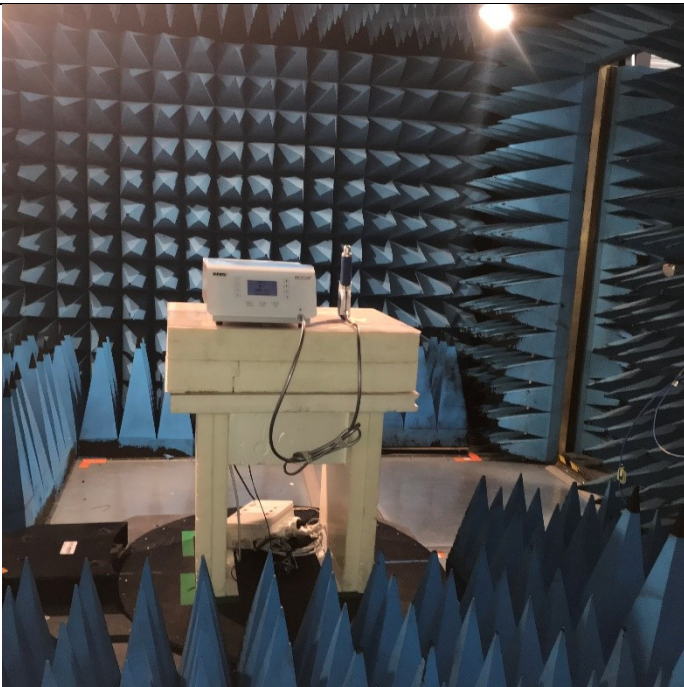


Test Set up for radiated measurement in open area test site

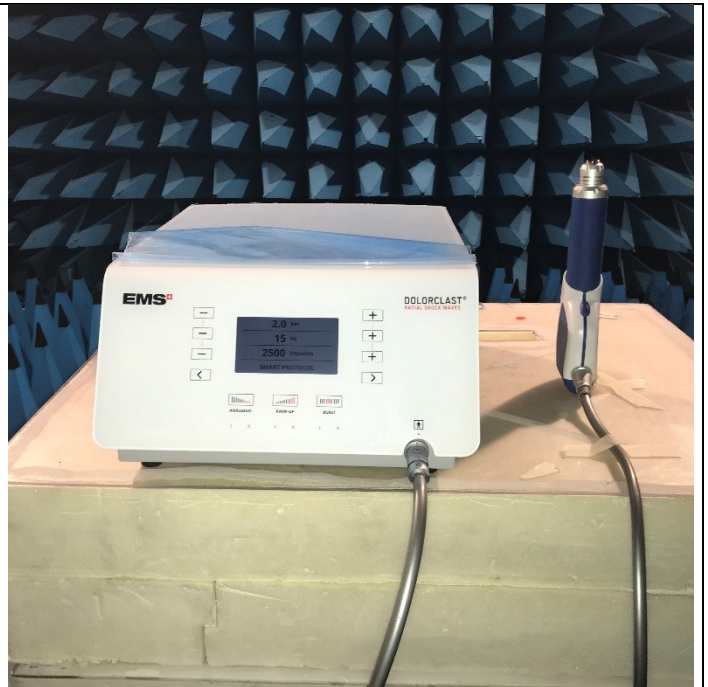




Axis XY



Axis Z



Photograph for Field strength outside of the bands 13.110-14.010 MHz





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Axis XY on OATS



Axis Z on OATS

Photograph for Field strength outside of the bands 13.110-14.010 MHz in OATS



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**7.3. LIMIT**

<b>Measure at 300m</b>		
<b>Frequency range</b>	<b>Level</b>	<b>Detector</b>
9kHz-490kHz	67.6dB $\mu$ V/m /F(kHz)	QPeak
<b>Measure at 30m</b>		
<b>Frequency range</b>	<b>Level</b>	<b>Detector</b>
490kHz-1.705MHz	87.6dB $\mu$ V/m /F(kHz)	QPeak
1.705MHz-30MHz	29.5dB $\mu$ V/m	QPeak
<b>Measure at 10m</b>		
<b>Frequency range</b>	<b>Level</b>	<b>Detector</b>
30MHz to 88MHz	29.5dB $\mu$ V/m	QPeak
88MHz to 216MHz	33dB $\mu$ V/m	QPeak
216MHz to 960MHz	35.5B $\mu$ V/m	QPeak
960MHz to 1000MHz	43.5dB $\mu$ V/m	QPeak
Above 1000MHz	63.5dB $\mu$ V/m	Peak
	43.5dB $\mu$ V/m	Average
<b>Measure at 3m</b>		
<b>Frequency range</b>	<b>Level</b>	<b>Detector</b>
30MHz to 88MHz	40dB $\mu$ V/m	QPeak
88MHz to 216MHz	43.5dB $\mu$ V/m	QPeak
216MHz to 960MHz	46B $\mu$ V/m	QPeak
960MHz to 1000MHz	54dB $\mu$ V/m	QPeak
Above 1000MHz	74dB $\mu$ V/m	Peak
	54dB $\mu$ V/m	Average



#### 7.4. TEST EQUIPMENT LIST

TEST EQUIPMENT USED on FAR					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
Amplifier 9kHz - 40GHz	LCIE SUD EST	_	A7102082	06/20	06/22
Antenna Bi-log	AH System	SAS-521-7	C2040180	02/21	02/23
Antenna Loop	ELECTRO-METRICS	EM-6879	C2040052	06/19	06/22
BAT EMC	NEXIO	v3.19.1.23	L1000115		
Cable N 10m	_	1GHz	A5329784	06/20	06/22
Cable SMA 40GHz 40cm	WITHWAVE	W101-SM1-0.4M	A5329979	04/21	04/22
Comb EMR HF	YORK	CGE01	A3169114		
Emission Cable <1GHz (Ampl <-> Cage)	-	18GHz	A5329907	08/21	08/22
Filter Matrice	LCIE SUD EST	Combined filters	A7484078	09/20	09/22
Multimeter - CEM	FLUKE	87	A1240251	03/21	03/23
Semi-Anechoic chamber #3 (BF)	SIEPEL	_	D3044017_BF	12/19	12/22
Semi-Anechoic chamber #3 (VSWR)	SIEPEL	_	D3044017_VSWR	12/19	12/22
Spare C3 Cable Measure	TELEDYNE	26GHz	A5329681	09/20	09/22
Spectrum analyzer	ROHDE & SCHWARZ	FSU 26	A4060058	09/21	09/23
Table C3	LCIE	_	F2000461		
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23
Turntable chamber (Cage#3)	ETS Lingren	Model 2165	F2000371		
Turntable controller (Cage#3)	ETS Lingren	Model 2090	F2000444		



LCIE

TEST EQUIPMENT USED on OATS					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
Antenna Bi-log	CHASE	CBL6111A	C2040051	07/20	07/22
Antenna Mat (OATS)	ETS Lingren	2071-2	F2000392		
BAT EMC	NEXIO	v3.19.1.23	L1000115		
Biconic Antenna	EATON	94455-1	C2040234	03/21	03/23
Cable (OATS)	_	1GHz	A5329623	08/21	08/22
CALCUL_FACTEURS	LCIE SUD EST	V4	L2000035		
Emission Cable	MICRO-COAX	1GHz	A5329656	08/21	08/22
Emission Cable	SUCOFLEX	6GHz	A5329061	08/21	08/22
OATS	_	_	F2000409	04/21	04/22
Radiated emission comb generator	BARDET	_	A3169050		
Receiver 20Hz – 8GHz	ROHDE & SCHWARZ	ESU8	A2642019	11/20	11/22
Table C1/OATS	LCIE	_	F2000445		
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23
Turntable (OATS)	ETS Lingren	Model 2187	F2000403		
Turntable / Mast controller (OATS)	ETS Lingren	Model 2066	F2000372		
Antenna Loop	ELECTRO-METRICS	EM-6879	C2040052	06/19	06/22

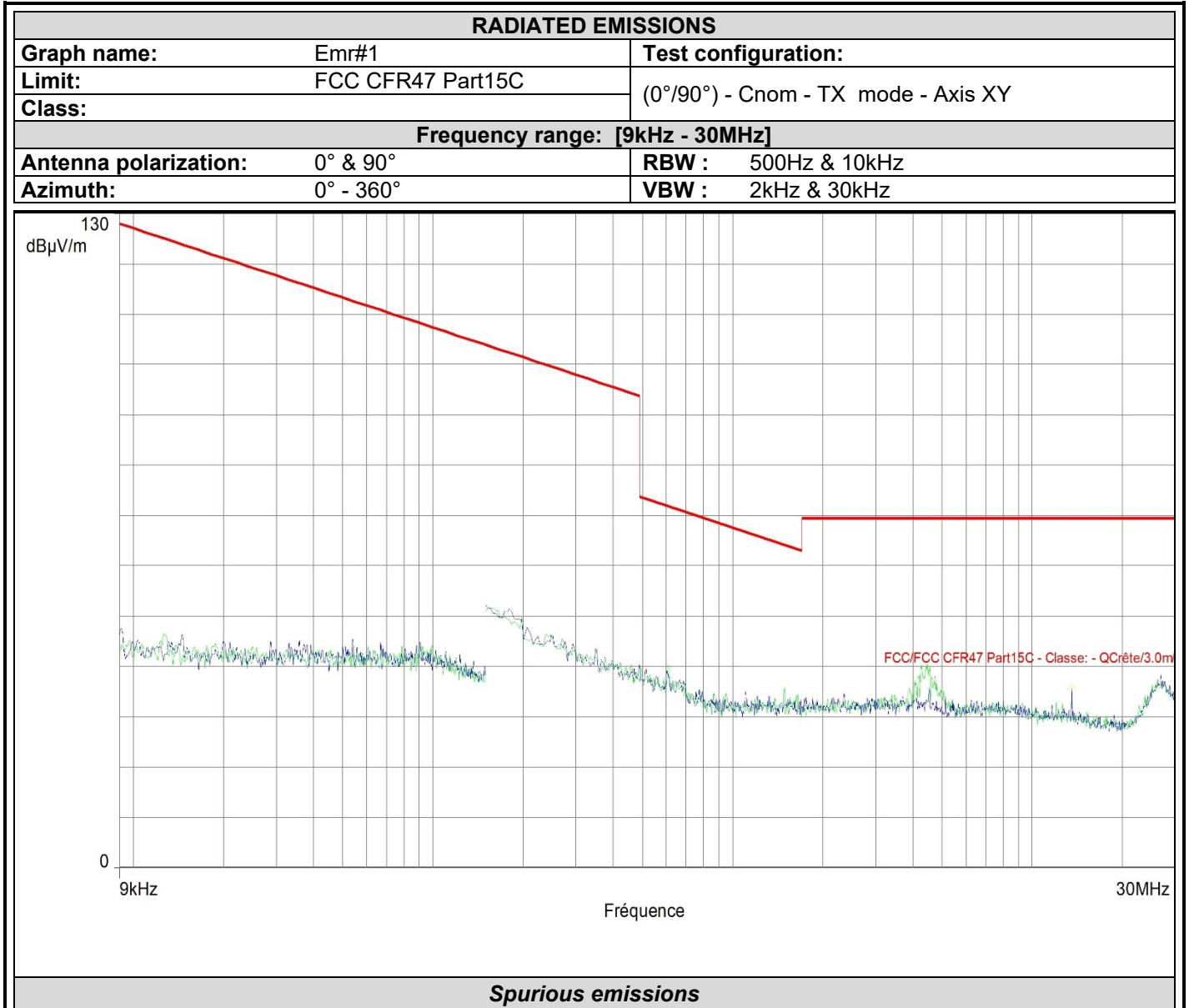
#### 7.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

None       Divergence:



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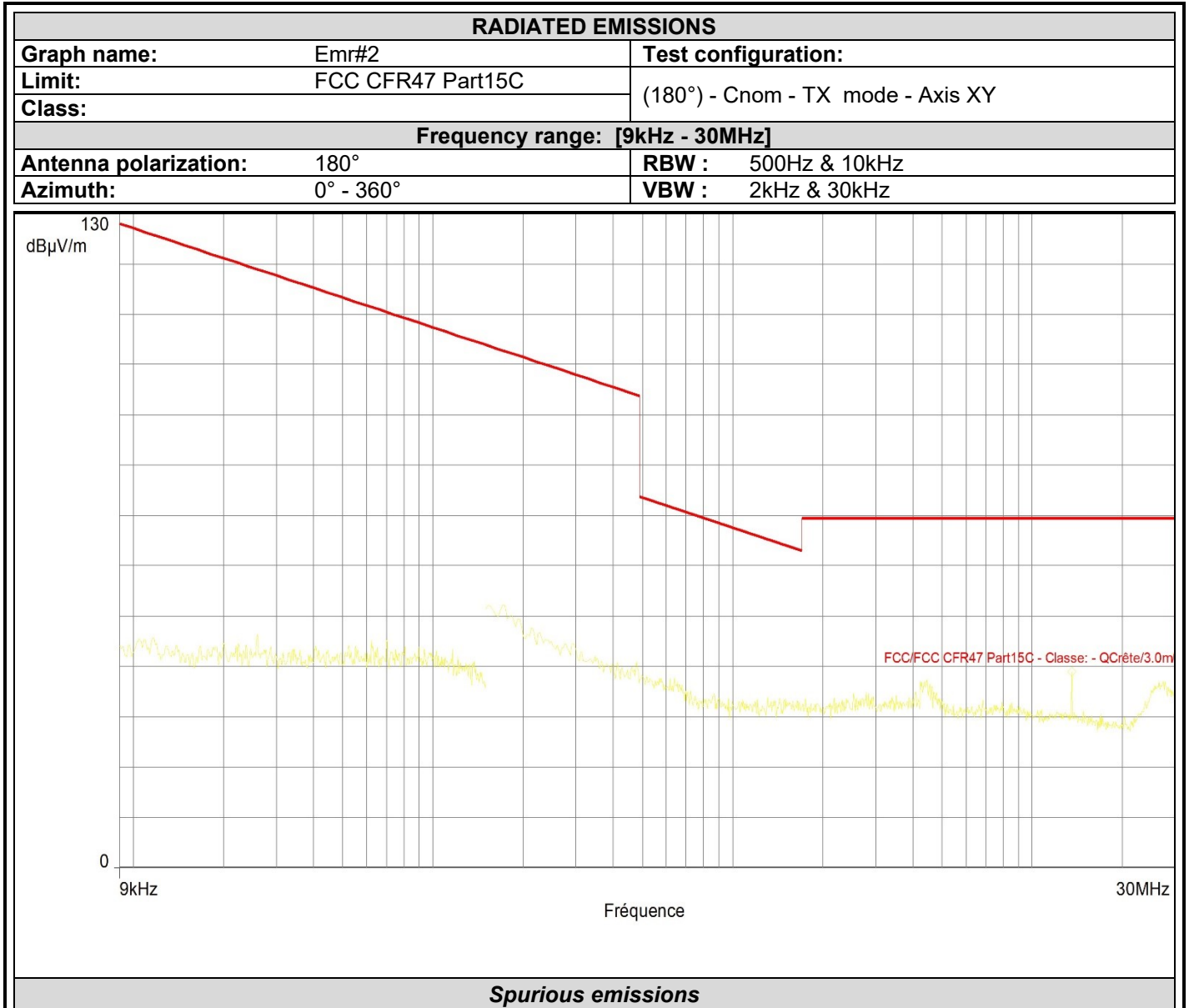
7.6. RESULTS



Frequency (MHz)	Peak Level (dBµV/m)	Polarization	Correction (dB)
13.559	35.6	0°	38.2



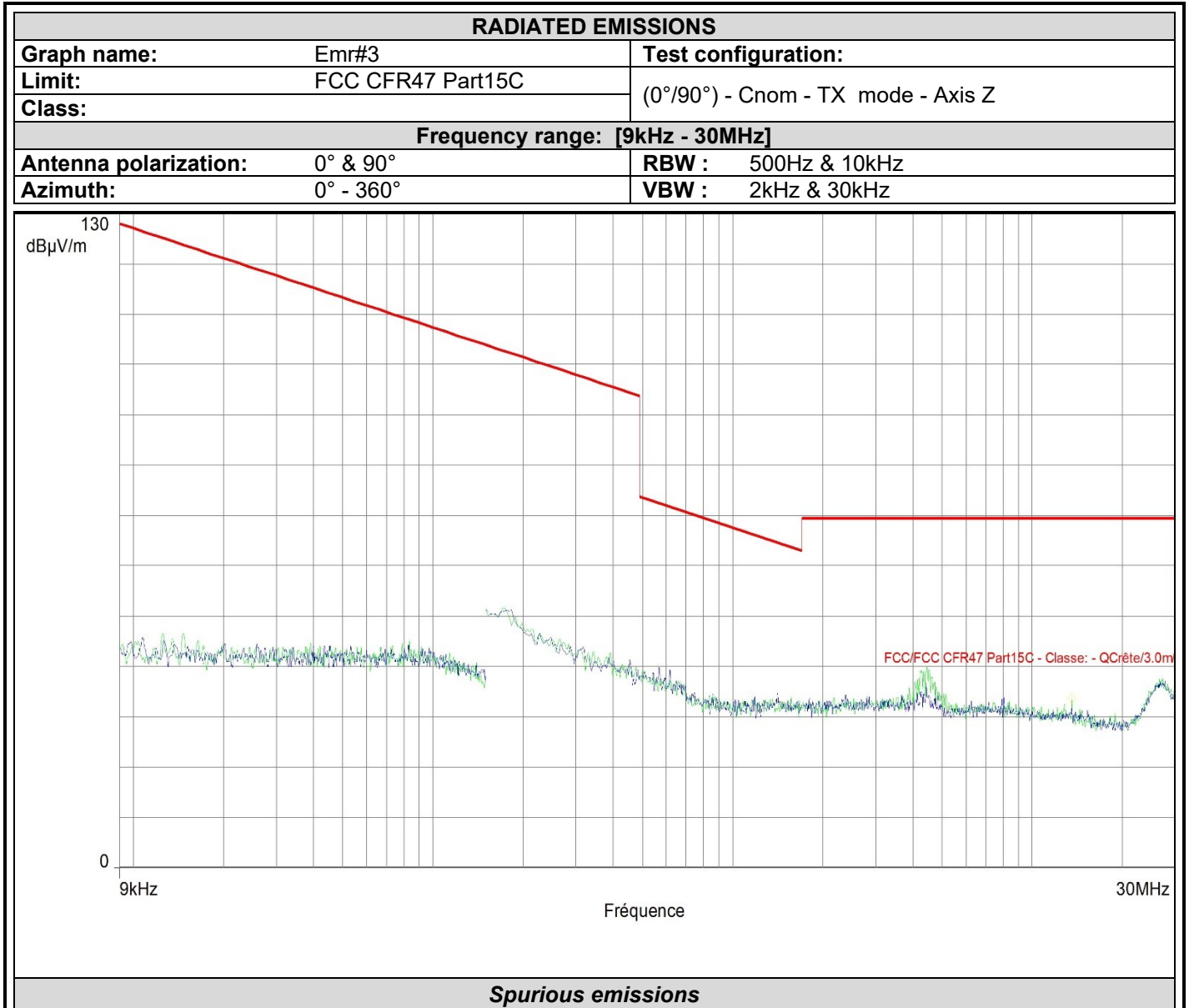
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Frequency (MHz)	Peak Level (dBµV/m)	Polarization	Correction (dB)
13.559	38.9	180°	38.2



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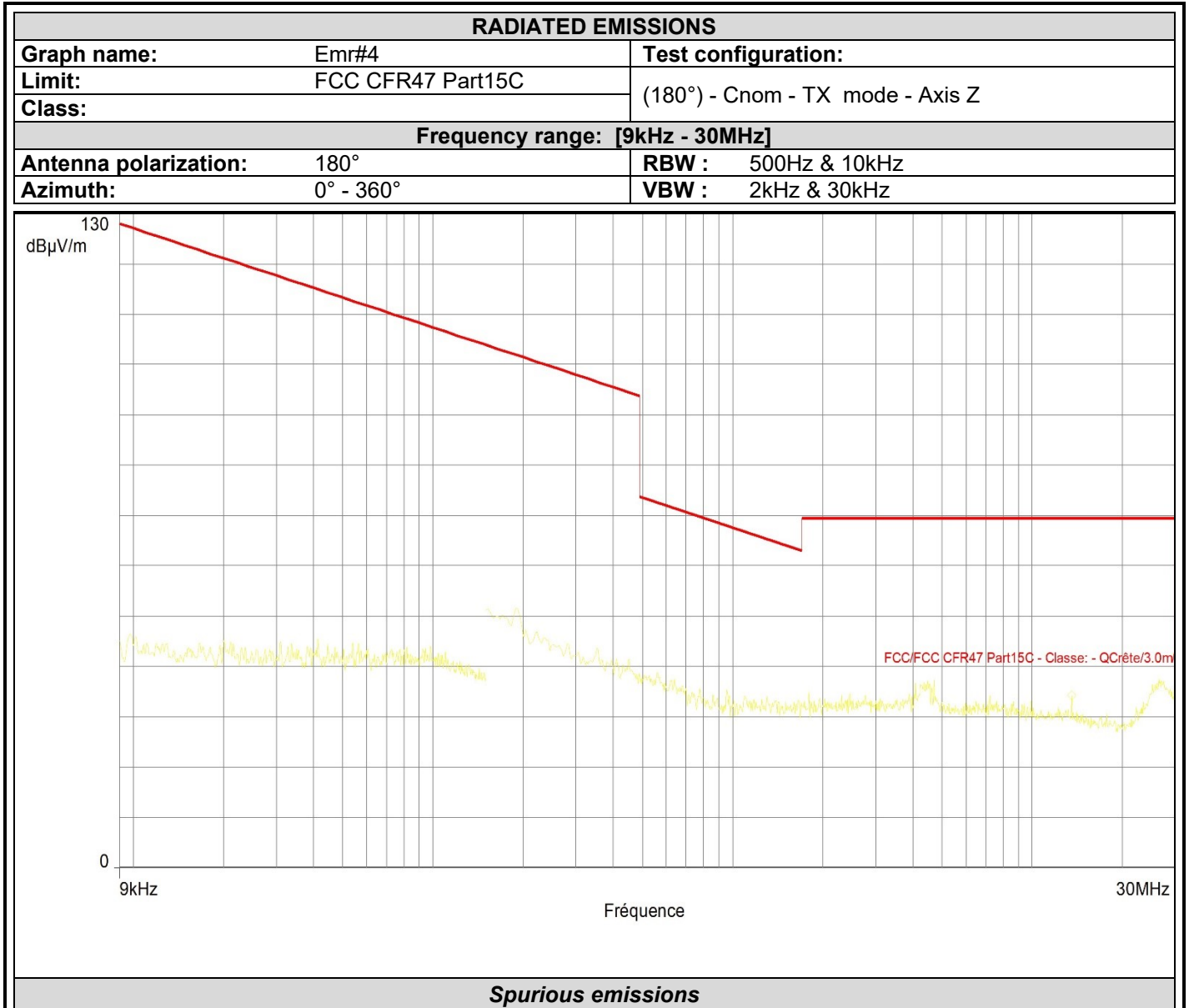


Frequency (MHz)	Peak Level (dBµV/m)	Polarization	Correction (dB)
13.562	33.5	90°	38.2





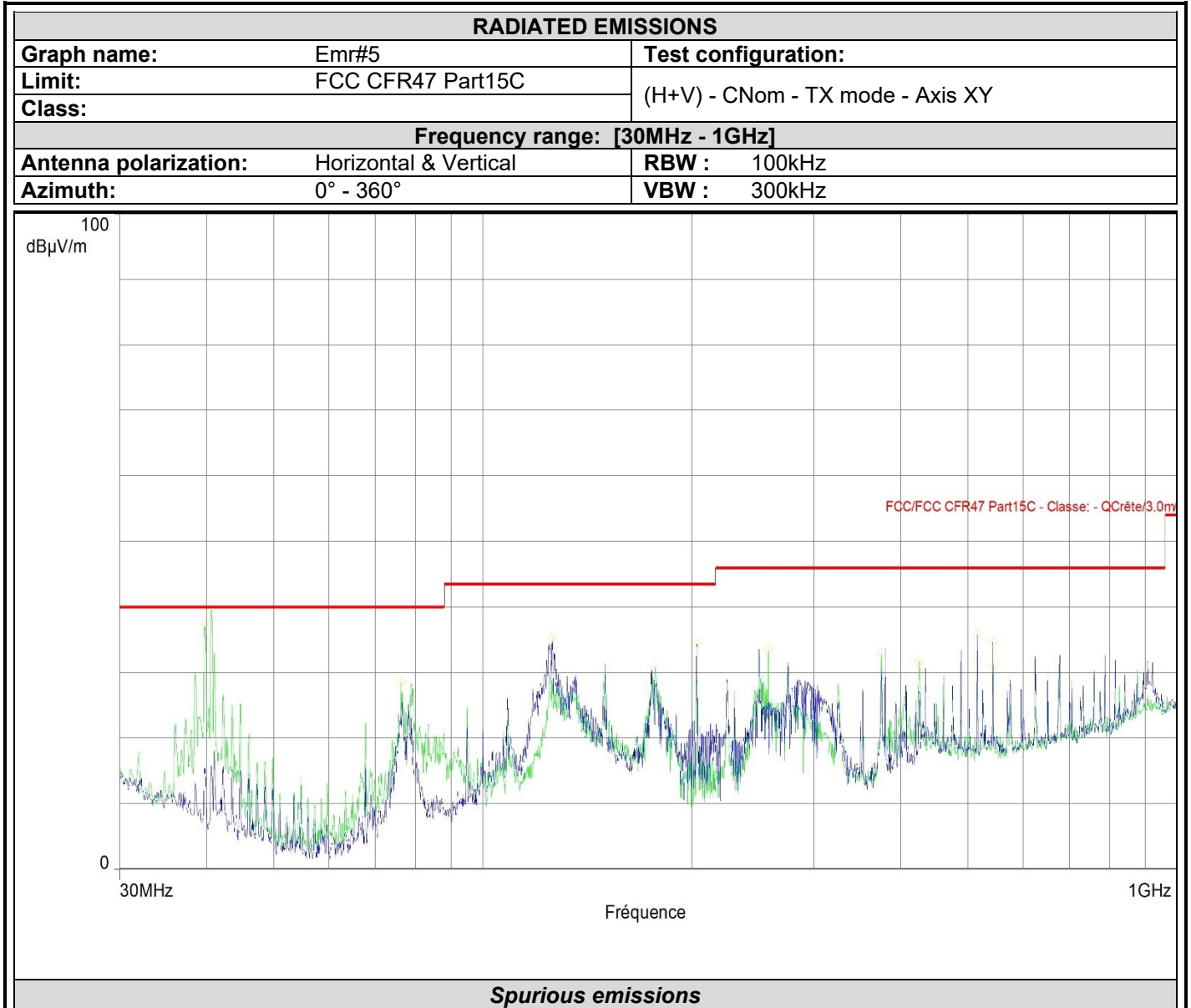
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Frequency (MHz)	Peak Level (dBµV/m)	Polarization	Correction (dB)
13.562	34.3	180°	38.2



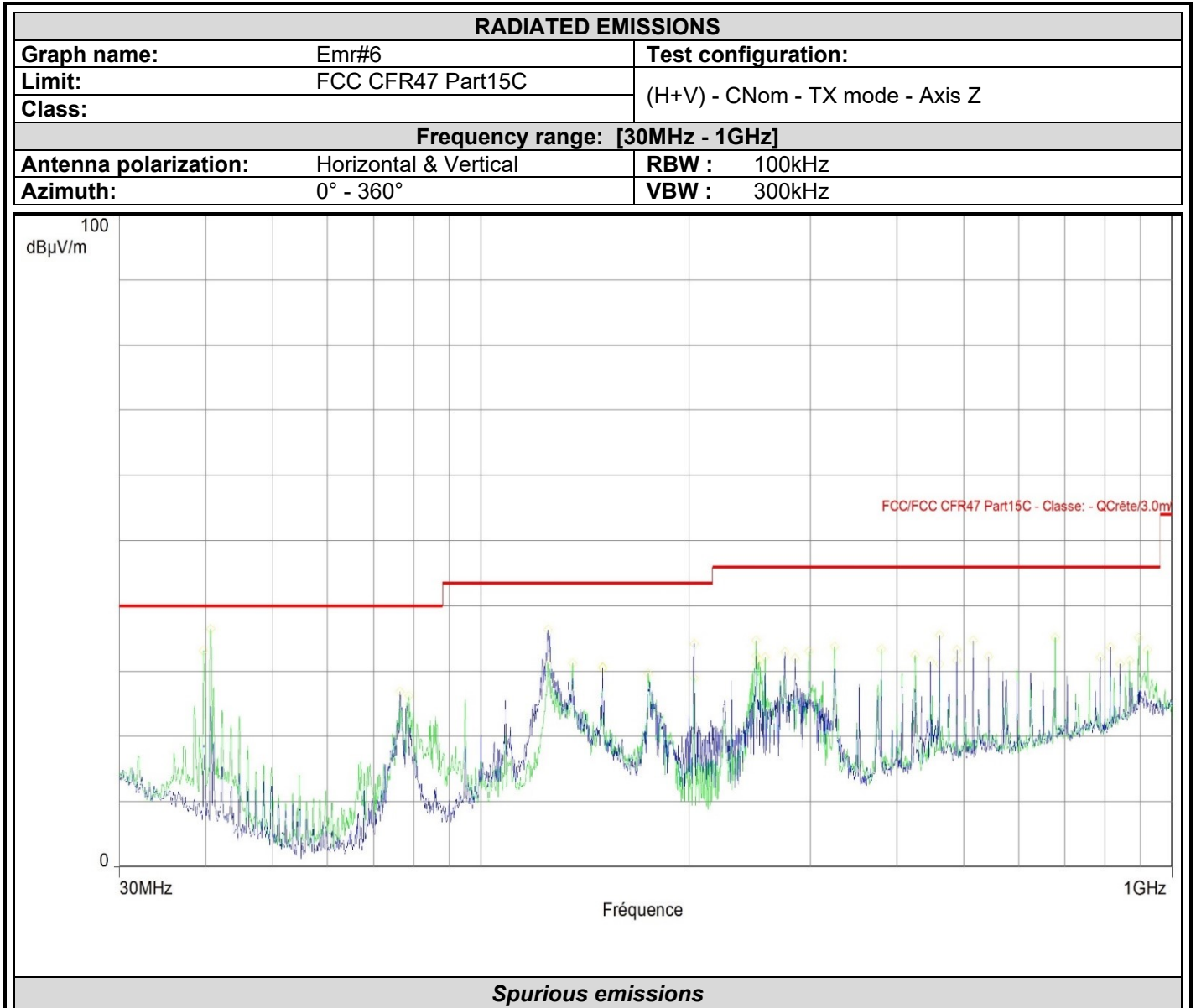
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Frequency (MHz)	Peak Level (dBµV/m)	Polarization	Correction (dB)
125.933	35.3	Horizontal	-15.3
203.436	34.4	Horizontal	-21.7
515.291	35.9	Horizontal	-13.6
542.451	34.7	Horizontal	-12.9
39.797	37.4	Vertical	-20.6
40.670	39.7	Vertical	-21.0
76.172	28.5	Vertical	-25.2
257.562	33.5	Vertical	-19.5
374.835	32.9	Vertical	-17.1
424.887	31.7	Vertical	-15.3



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Frequency (MHz)	Peak (dB $\mu$ V/m)	LimQP (dB $\mu$ V/m)	Peak-LimQP (dB)	Polarization	Correction (dB)
76.366	26.8	40	-13.2	Horizontal	-25.1
125.06	36.3	43.5	-7.2	Horizontal	-15.6
203.436	34.2	43.5	-9.3	Horizontal	-21.7
275.022	33	46	-13	Horizontal	-19
284.722	32	46	-14	Horizontal	-18.9
447.488	31.5	46	-14.5	Horizontal	-15
461.068	35.5	46	-10.5	Horizontal	-14.5
488.228	33.2	46	-12.8	Horizontal	-14.3
515.291	34.7	46	-11.3	Horizontal	-13.6
542.451	32.3	46	-13.7	Horizontal	-12.9
786.503	32.1	46	-13.9	Horizontal	-10.5
813.663	33.6	46	-12.4	Horizontal	-10.2
39.7	33.2	40	-6.8	Vertical	-20.6
40.67	36.4	40	-3.6	Vertical	-21
78.694	26.3	40	-13.7	Vertical	-24.6
135.633	31.2	43.5	-12.3	Vertical	-14
149.989	30.6	43.5	-12.9	Vertical	-12.7
174.627	29.6	43.5	-13.9	Vertical	-18
249.996	34.7	46	-11.3	Vertical	-15
251.16	31.1	46	-14.9	Vertical	-15.3
252.518	31.7	46	-14.3	Vertical	-16
257.659	32.2	46	-13.8	Vertical	-19.5
298.302	33.1	46	-12.9	Vertical	-18.7
324.783	33.8	46	-12.2	Vertical	-17.9
379.685	33.4	46	-12.6	Vertical	-16.8
424.79	32.5	46	-13.5	Vertical	-15.3
678.057	35.1	46	-10.9	Vertical	-12

**Final measurement:**

9kHz to 30MHz					
Polarization	Frequency (MHz)	Peak Level (dB $\mu$ V/m)	QPeak Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin QPeak (dB $\mu$ V/m)
all emissions were greater than 20 dB below the limit					



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Final measurement:

Test Frequency (MHz)	Meter Reading dB(μV)	Detector (Pk/QP/Av)	Polarity (V/H)	Azimuth (Degrees)	Antenna Height (cm)	Transducer Factor (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
39.7	19.3	QP	V	350	100	14.5	33.8	40.0	-6.2
40.67	20.6	QP	V	350	100	14.4	35.0	40.0	-5.0
76.366	20.1	QP	V	300	110	8.7	28.8	40.0	-11.2
78.694	18.5	QP	H	270	230	9.4	27.9	40.0	-12.1
125.06	13.5	QP	V	300	100	14.1	27.6	43.5	-15.9
135.633	18.5	QP	V	350	100	16.7	35.2	43.5	-8.3
149.989	11.5	QP	V	45	100	19.4	30.9	43.5	-12.6
174.627	14.0	QP	V	120	100	18.5	32.5	43.5	-11.0
203.436	15.1	QP	H	270	250	12.4	27.5	43.5	-16.0
249.996	16.2	QP	V	180	120	16.2	32.4	46.0	-13.6
251.16	17.3	QP	V	100	110	16.4	33.7	46.0	-12.3
252.518	18.4	QP	V	45	100	16.6	35.0	46.0	-11.0
257.659	19.5	QP	V	0	110	17.3	36.8	46.0	-9.2
275.022	20.6	QP	V	120	120	16.7	37.3	46.0	-8.7
284.722	15.7	QP	H	330	230	17.2	32.9	46.0	-13.1
298.302	20.8	QP	V	300	100	17.5	38.3	46.0	-7.7
324.783	18.9	QP	V	350	110	18.2	37.1	46.0	-8.9
379.685	15	QP	V	270	120	20.1	35.1	46.0	-10.9
424.79	14.1	QP	V	45	120	21.8	35.9	46.0	-10.1
447.488	13.5	QP	V	270	110	22.2	35.7	46.0	-10.3
461.068	12.9	QP	H	270	270	22.7	35.6	46.0	-10.4
488.228	12.2	QP	V	270	130	23.3	35.5	46.0	-10.5
515.291	12.5	QP	H	230	230	24.2	36.7	46.0	-9.3
542.451	12	QP	H	230	220	25.1	37.1	46.0	-8.9
678.057	12.3	QP	V	180	125	27.6	39.9	46.0	-6.1
786.503	11.7	QP	V	90	130	29.8	41.5	46.0	-4.5
813.663	11.0	QP	V	90	130	30.2	41.3	46.0	-4.7
840.823	11.0	QP	V	90	90	31.4	42.4	46.0	-3.6
867.886	11.5	QP	V	180	180	31.1	42.6	46.0	-3.4
895.046	11.5	QP	V	180	180	31.4	42.9	46.0	-3.1
922.206	11.7	QP	V	180	180	32.3	44.0	46.0	-2.0

**all emissions were greater than 20 dB below the limit**

## 7.7. CONCLUSION

Field strength outside of the bands 13.110-14.010 MHz measurement performed on the sample of the product **Electro Medical Sytems SA DolorClast Radial Shock Waves FT-237**, SN: **Console LQ00506 and Hand piece LS00035**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.225 & RSS-Gen limits.

## 8. FIELD STRENGTH WITHIN THE BAND 13.110-14.010MHZ

### 8.1. TEST CONDITIONS

Test performed by : Majid MOURZAGH  
 Date of test : January 21, 2022  
 Ambient temperature : 8 °C  
 Relative humidity : 45 %

### 8.2. TEST SETUP

Measurement procedure:

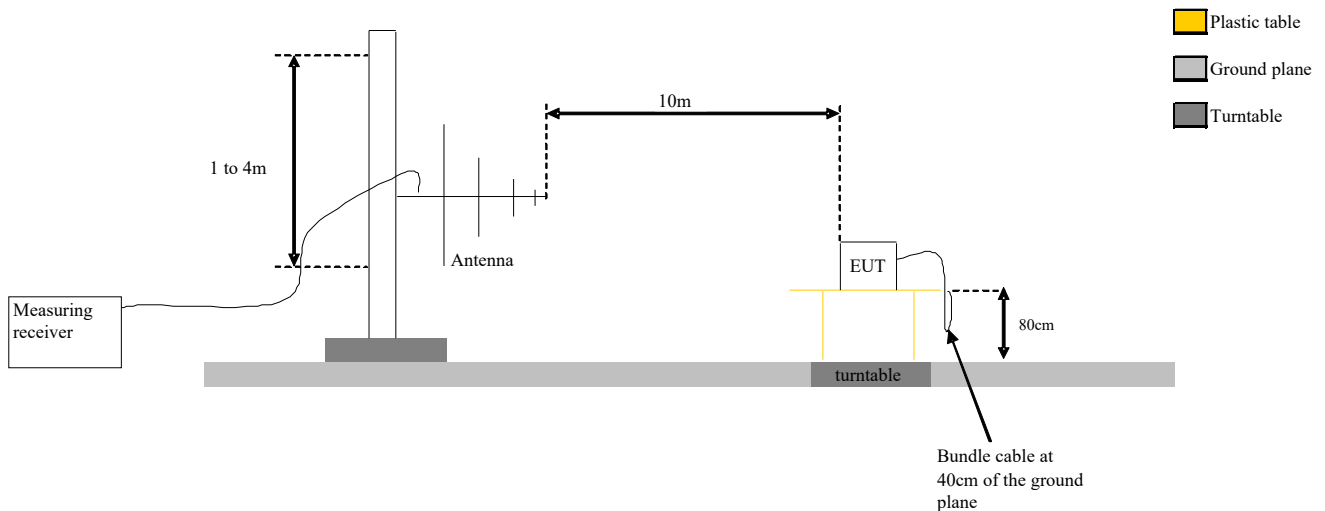
- Open Area Test Site
- Open Area Test Site + Test fixture in climatic chamber

The product has been tested according to ANSI C63.10.

The EUT is placed **on an open area test site**. Distance between measuring antenna and the EUT is **Distance**.

Test is performed in parallel, perpendicular and ground parallel axis with a loop antenna below 30MHz.

Measurement bandwidth was 9kHz between 150kHz & 30MHz. The level has been maximised by the turntable rotation of 360 degrees range on all axis of EUT used in normal configuration. Antenna height search was performed from 1 to 4m. The EUT is place at 0.8m.



Test Set up for radiated measurement in open area test site

For measurement with test fixture is used, the power level calibration of the spectrum analyzer shall then be related to the power level or field strength measured with temperature during OATS measure taking in consideration in climatic chamber. The calculation will be used to calculate the absolute level of the sideband power.

### Frequency band 13.110-14.010MHz

Following plots show radiated emission level in the frequency band 13.110-14.010MHz with a RBW of 9kHz and a quasi-peak detector. The graphs are obtained with a measuring receiver.



L C I E





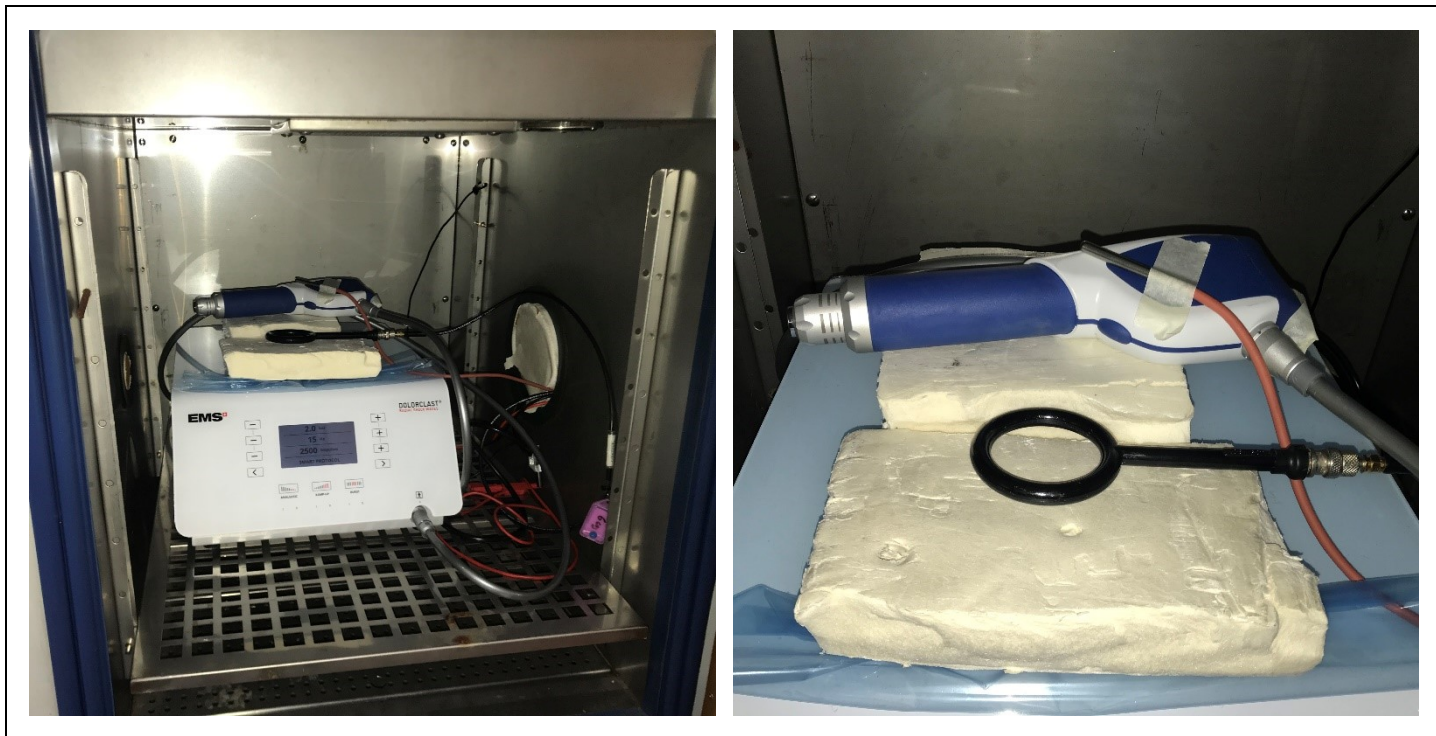
Axis XY on OATS



Axis Z on OATS

Photograph for Field strength within the band 13.110-14.010MHz in OATS





Photograph for Field strength within the band 13.110-14.010MHz in Climatic Chamber (normal condition)

### 8.3. LIMIT

Frequency (MHz)	Field strength ( $\mu\text{V/m}$ ) @30m	Field strength ( $\text{dB}\mu\text{V/m}$ ) @30m	Field strength ( $\text{dB}\mu\text{V/m}$ ) @3m
13.553-13.567	15 848	84.0	124.0
13.410-13.553 13.567-13.710	334.0	50.5	90.5
13.110-13.410 13.710-14.010	106.0	40.5	80.5
Below 13.110MHz Above 14.010MHz	30.0	29.5	69.5

#### 8.4. TEST EQUIPMENT LIST

TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
Antenna Mat (OATS)	ETS Lingren	2071-2	F2000392		
BAT EMC	NEXIO	v3.19.1.23	L1000115		
Cable (OATS)	–	1GHz	A5329623	08/21	08/22
CALCUL_FACTEURS	LCIE SUD EST	V4	L2000035		
Emission Cable	MICRO-COAX	1GHz	A5329656	08/21	08/22
Emission Cable	SUCOFLEX	6GHz	A5329061	08/21	08/22
OATS	–	–	F2000409	04/21	04/22
Radiated emission comb generator	BARDET	–	A3169050		
Receiver 20Hz – 8GHz	ROHDE & SCHWARZ	ESU8	A2642019	11/20	11/22
Table C1/OATS	LCIE	–	F2000445		
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23
Turntable (OATS)	ETS Lingren	Model 2187	F2000403		
Turntable / Mast controller (OATS)	ETS Lingren	Model 2066	F2000372		
Antenna Loop	ELECTRO-METRICS	EM-6879	C2040052	06/19	06/22

TEST EQUIPMENT USED					
Description	Manufacturer	Model	Identifier	Cal_Date	Cal_Due
AC source 1kW	KEYSIGHT	AC6802A	A7042305		
Antenna Loop (near field)	ELECTRO-METRICS	EM-6993	C2040215	06/19	06/22
Attenuator 10dB	AEROFLEX	–	A7122267	08/21	08/23
Cable SMA 2m	–	6GHz	A5329635	02/20	02/22
Climatic chamber	BIA CLIMATIC	CL 6-25	D1022117	12/20	12/21*
Data Logger (CEM1)	AGILENT	34970A	A6440083	11/20	11/22
Frequency Counter	HEWLETT PACKARD	HP 5350B	B2082009	08/19	08/24
Multimeter - CEM	FLUKE	87	A1240251	03/21	03/23
Spectrum analyzer	ROHDE & SCHWARZ	FSV 40	A4060059	11/21	11/23
Spectrum Analyzer 9kHz - 6GHz	ROHDE & SCHWARZ	FSL6	A2642020	08/20	08/22
Thermo-hygrometer	TESTO	608-H1	B4204120	12/20	12/22
Thermo-hygrometer (PM1/2/3)	KIMO	HQ 210	B4206022	01/21	01/23

\*: Under derogation

#### 8.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

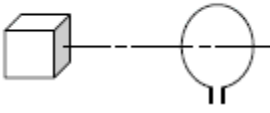
None       Divergence:

## 8.6. RESULTS

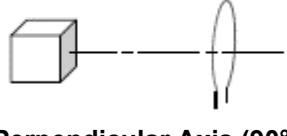
Results on OATS test conditions:

Frequency (MHz)	QPeak Limit (dB $\mu$ V/m) @ 30m	Qpeak (dB $\mu$ V/m) @ 30m	Margin (Mes-Lim) (dB)	Angle Table (deg)	Pol Ant.	Ht Ant. (cm)	Correc. Factor (dB)	Comments
13.56	84	21.5	-62.5	45°	90°	130	35.6	Worst case

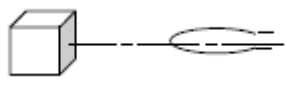
  



**Parallel Axis (0°)**



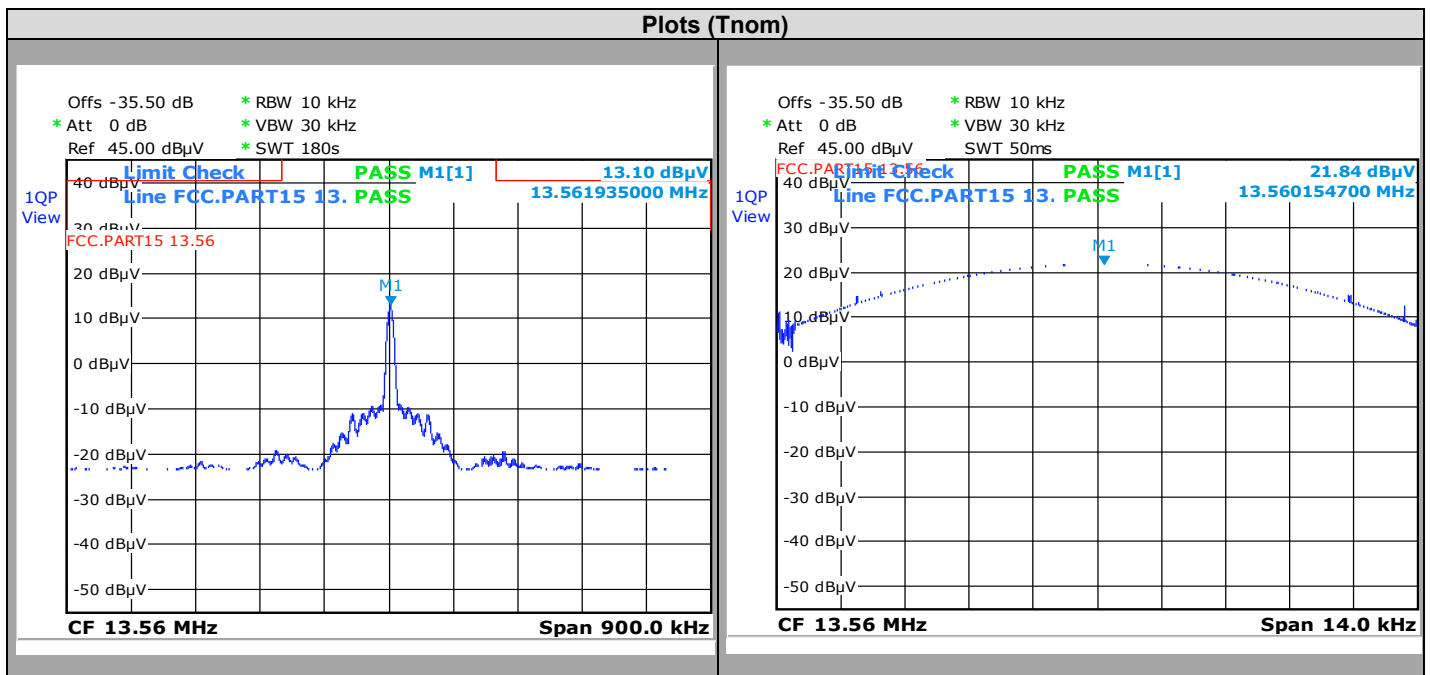
**Perpendicular Axis (90°)**



**Ground Parallel Axis (180°)**

Note: Measure have been done at 10m distance and corrected according to requirements of 15.209.e) ( $M@30m = M@10m-19.1dB$ )

Results under Normal condition



## 8.7. CONCLUSION

Field strength within the band 13.110-14.010MHz measurement performed on the sample of the product **Electro Medical Sysyems SA DolorClast Radial Shock Waves FT-237**, SN: **Console LQ00506** and **Hand piece LS00035**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.225 & RSS 210 limits.

## 9. UNCERTAINTIES CHART

47 CFR Part 15.209 & 15.207 Kind of test	Wide uncertainty laboratory (k=2) $\pm x(\text{dB}) / (\text{Hz}) /$ ms	Uncertainty limit
Measurement of conducted disturbances in voltage on the AC power port (9 kHz – 150 kHz)	2,67	3.8
Measurement of conducted disturbances in voltage on the AC power port (150 kHz – 30 MHz)	2,67	3.4
Measurement of conducted disturbances in voltage on the telecommunication port. (AAN)	3,67	5.0
Measurement of conducted disturbances in current (current clamp)	2,73	2.9
Measurement of disturbance power	2,67	4.5
Measurement of radiated magnetic field from 10kHz to 30MHz in SAC V01	4,48	/
Measurement of radiated magnetic field from 10kHz to 30MHz in SAC C01	4,48	/
Measurement of radiated electric field from 30 to 1000MHz in horizontal position on the OATS (Ecuelles)	4,88	6.3
Measurement of radiated electric field from 1 to 18GHz on the Ecuelles site	5.16	/
Measurement of radiated electric field from 30 to 1000MHz in vertical position on the OATS (Ecuelles)	4,99	6.3
Measurement of radiated electric field from 30 to 1000MHz in horizontal position in SAC C01	5,08	6.3
Measurement of radiated electric field from 30 to 1000MHz in vertical position in SAC C01	5,16	6.3
Measurement of radiated electric field from 30 to 1000MHz in horizontal position in SAC V01	5,08	6.3
Measurement of radiated electric field from 30 to 1000MHz in vertical position in SAC V01	5,15	6.3
Measurement of radiated electric field from 1 to 6 GHz C01	5,1	5.2
Measurement of radiated electric field from 1 to 6 GHz V01	4,85	5.2
Measurement of radiated magnetic field from 10kHz to 30MHz on the OATS (Ecuelles)	4,48	/

The uncertainty values calculated by the laboratory are lower than limit uncertainty values defined by the CISPR. The conformity of the sample is directly established by the applicable limits values. This table includes all uncertainties maximum feasible for testing in the laboratory, whether or not made in this report