

RRA-EMIESS22O779DIS-02Av0

Certification Radio test report

According to the standard:

CFR 47 FCC PART 15

RSS GEN – Issue 5

RSS 210 - Issue 10

Equipment under test:

Dexter Surgical System – Patient cart

FCC ID: 2BCEADM-L6001


Company:

DISTALMOTION

Distribution: Mr MONTAVON

(Company: DISTALMOTION)

Number of pages: 28 with 1 annexes

Ed.	Date	Modified Page(s)	Technical Verification and Quality Approval	
			Name and Function	Visa
0	29-Sep-23	Creation	J.C. BOGA, Laboratories Manager	

Duplication of this document is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above.

This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample.

Information in italics are declared by the manufacturer/customer and are under his responsibility

DESIGNATION OF PRODUCT: *Dexter Surgical System – Patient Cart*

Serial number (S/N): 11244

Reference / model (P/N): DM-L6

Trade mark: Dexter

Software/Firmware version: SW 006.000 RC1 with special configuration for PC-H

MANUFACTURER: DISTALMOTION

COMPANY CERTIFYING THE PRODUCT:

Company: Distalmotion US Inc.

Address: 251 Little Falls Drive
c/o Corporation Service Company
Wilmington, DE 19808
United State

Responsible: Mr CARRIER

COMPANY SUBMITTING THE PRODUCT:

Company: DISTALMOTION

Address: Route de la Corniche 3B
Bâtiment Phenyl
1066 EPALINGES - Suisse

Responsible: Mr MONTAVON

Person(s) present during the tests: Mr MONTAVON

DATES OF TEST: From 18-Jan-23 to 20-Jan-23

TESTING LOCATION:

EMITECH CHASSIEU laboratory at CHASSIEU (69) FRANCE
FCC Accredited under US-EU MRA Designation Number: FR0013
Test Firm Registration Number: 807590

ISED Accredited under CANADA-EU MRA Designation Number: FR0007
Industry Canada Registration Number: 4379D

TESTED BY:

T. LEDRESSEUR

VISA:**WRITTEN BY:**

T. LEDRESSEUR

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REVISIONS HISTORY

Revision	Date	Modified pages	Modifications
0	3-Feb-23	/	Creation

1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: **Dexter Surgical System – Patient cart**, in accordance with normative reference.

The equipment under test integrates:

- 13.56MHz NFC Reader function not already certified,

2. PRODUCT DESCRIPTION

Class:	A
Utilization:	Specialized medical device
Antenna type and gain:	0 dBi / integral antenna PCB antenna
Operating frequency range:	From 13.110 MHz to 14.010 MHz
Number of channels:	1
Channel spacing:	Not concerned
Modulation:	ASK
Power source:	120 Vac - 60 Hz

Power level, frequency range and channels characteristics are not user adjustable.
The details pictures of the product and the circuit boards are joined with this file.

3. NORMATIVE REFERENCE

The standards and testing methods related throughout this report are those listed below.

They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 FCC Part 15 (2023)	Radio Frequency Devices
ANSI C63.10	2013 Procedures for Compliance Testing of Unlicensed Wireless Devices.
RSP-100	Issue 12, August 2019 Certification of Radio Apparatus and Broadcasting equipment
RSS-Gen	Issue 5, April 2018 General Requirements for Compliance of Radio Apparatus
RSS-210	Issue 10, December 2019 Licence-Exempt Radio Apparatus: Category I equipment.

4. TEST METHODOLOGY

Radio performance tests procedures given in CFR 47 part 15:

Subpart C – Intentional Radiators

- Paragraph 203: Antenna requirement
- Paragraph 205: Restricted bands of operation
- Paragraph 207: Conducted limits
- Paragraph 209: Radiated emission limits; general requirements
- Paragraph 212: Modular transmitter
- Paragraph 215: Additional provisions to the general radiated emission limitations
- Paragraph 225: Operation within the band 13.110-14.010 MHz

Radio performance tests procedures given in RSS-Gen:

- Paragraph 2 - General
- Paragraph 3 - Normative publications and related documents
- Paragraph 4 - Labelling requirements
- Paragraph 6 - General administrative and technical requirements
- Paragraph 8 - Licence-exempt Radio Apparatus

Radio performance tests procedures given in RSS-210:

- Paragraph 5 – RSS-Gen compliance
- Paragraph 7 - Technical specifications
- Annex B - Devices Operating in Frequency Bands for Any Application
 - Annex B.6 Band 13.110-14.010 MHz

5. TEST EQUIPMENT CALIBRATION DATES

Emitech Number	Model	Type	Last calibration	Calibration interval (years)	Next calibration due
0	BAT-EMC V3.17.0.25	Software	/	/	/
5602	Rohde et Schwarz ESH3-Z5	LISN	27/05/2021	2	27/05/2023
5609	EMCO 3146A	Log periodic antenna	14/12/2021	3	14/12/2024
6118	Rohde et Schwarz HK116	Biconical antenna	14/12/2021	3	14/12/2024
6136	N-2m	Cable	02/02/2021	2	02/02/2023
6155	EMCO 6502	Loop antenna	11/02/2021	2	11/02/2023
6527	N-2m	Cable	02/02/2021	2	02/02/2023
7537	N-10m	Cable	03/02/2021	2	03/02/2023
7564	La Crosse Technology WS-9232	Meteo station	09/06/2021	2	09/06/2023
7651	SIDT Cage	Anechoic chamber	/	/	/
7655	N-10.5m	Cable	03/02/2021	2	03/02/2023
8508	California instruments 1251RP	Power source	(1)	(1)	(1)
14648	R&S ESI	Test receiver	01/03/2022	2	01/03/2024
14831	Fluke 177	Multimeter	01/02/2022	2	01/02/2024
15202	N-3m	Cable	26/07/2022	2	26/07/2024
15776	Rohde & Schwarz FSV40	Spectrum Analyzer	06/04/2022	1	06/04/2023
16408	N-3m	Cable	30/04/2021	2	30/04/2023
16531	R&S ESIB7	Test receiver	02/08/2021	2	02/08/2023
17087	Votsch VS4200	Climatic chamber	25/03/2022	1	25/03/2023
17207	COM-POWER LIT-930A	Transient limiter	02/09/2021	3	02/09/2024
18361	Absorber sheath current	Emitech	26/01/2022	2	26/01/2024
/	EMITECH	Open test site	/	/	/

(1) The equipment is not verified; instead, the output voltage is checked before each measurement with the calibrated multimeter.

6. TESTS RESULTS SUMMARY

6.1 CFR 47 part 15 requirements

Test procedure	Description of test	Respected criteria?				Comment
		Yes	No	NAp	NAs	
FCC Part 15.203	ANTENNA REQUIREMENT	X				Note 1
FCC Part 15.205	RESTRICTED BANDS OF OPERATION	X				
FCC Part 15.207	CONDUCTED LIMITS	X				
FCC Part 15.209	RADIATED EMISSION LIMITS; general requirements	X				Note 2
FCC Part 15.212	MODULAR TRANSMITTERS			X		
FCC part 15.215	ADDITIONAL PROVISIONS TO THE GENERAL RADIATED EMISSION LIMITATIONS					
	(a) Alternative to general radiated emission limits	X				Note 3
	(b) Unwanted emissions outside of §15.225 frequency bands	X				
	(c) 20 dB bandwidth and band-edge compliance	X				
FCC Part 15.225	OPERATION WITHIN THE BAND 13.110-14.010 MHZ					
	(a) Field strength within the band 13.553-13.567 MHz	X				
	(b) Field strength within the bands 13.410-13.553 MHz and 13.567-13.710 MHz	X				
	(c) Field strength within the bands 13.110-13.410 MHz and 13.710-14.010 MHz	X				
	(d) Field strength outside the band 13.110-14.010 MHz	X				
	(e) Carrier frequency tolerance	X				
	(f) Powered tags			X		

NAp: Not Applicable NAs: Not Asked

Note 1: Integral antenna without standard connector.

Note 2: See FCC part 15.225 (d).

Note 3: See FCC part 15.209. Unwanted emissions levels are all below the fundamental emission field strength level.

6.2 RSS-Gen requirements

Test procedure	Description of test	Criteria respected ?				Comment
		Yes	No	NAp	NAs	
Paragraph 2	General	X				
Paragraph 3	Normative publications and related documents	X				
Paragraph 4	Labelling requirements	X				
Paragraph 6	General administrative and technical requirements	X				
§ 6.7	Occupied bandwidth (or 99% emission bandwidth) and x dB bandwidth	X				
Paragraph 8	Licence-exempt radio apparatus					
§ 8.1	Measurement Bandwidths and Detector Functions	X				
§ 8.2	Pulsed operation	X				
§ 8.3	Prohibition of amplifiers	X				
§ 8.4	User manual notice	X				see certification documents
§ 8.5	Measurement of licence-exempt devices on-site (in-situ)			X		
§ 8.6	Operating frequency range of devices in master/slave networks			X		
§ 8.7	Radio frequency identification (RFID) devices	X				
§ 8.8	AC power line conducted emissions limits	X				
§ 8.9	Transmitter emission limits	X				
§ 8.10	Restricted frequency bands	X				
§ 8.11	Frequency stability	X				

NAp: Not Applicable

NAs: Not Asked

Note 1: when the product is switched on the RFID is activated and in emission.

Note 2: the conducted emissions shall be performed in the final product.

6.3 RSS-210 requirements

Test Procedure RSS-210	Description of test	Criteria respected ?				Comment
		Yes	No	NAP	NAs	
Paragraph 5	RSS-Gen compliance	X				
Paragraph 7	Technical Specifications					
7.1	Emission Falling Within Restricted Frequency Bands	X				
7.2	General Field Strength Limits	X				
7.3	Transmitters with wanted and unwanted emissions that are within the general field strength limits	X				
7.4	Cordless Telephones			X		
Annex B	Device Operating in Frequency Bands for Any Application					
Annex B.6	Band 13.110-14.010 MHz					
(a) i	Field strength within the band 13.553-13.567 MHz	X				
(a) ii	Field strength within the bands 13.410-13.553 MHz and 13.67-13.710 MHz	X				
(a) iii	Field strength within the bands 13.110-13.410 MHz and 13.710-14.010 MHz	X				
(a) iv	Field strength outside the band 13.110-14.010 MHz	X				
(b)	Carrier frequency stability	X				

NAP: Not Applicable

NAs: Not Asked

7. MEASUREMENT UNCERTAINTY

To declare, or not, the compliance with the specifications, it was not explicitly taken into account of uncertainty associated with the result(s)

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for normal distribution corresponds to a coverage probability of approximately 95%.

Parameter	Emitech Uncertainty
RF power, conducted	$\pm 0.8\text{dB}$
Radiated emission valid to 26 GHz	
9kHz – 30MHz	$\pm 2.7. \text{ dB}$
30MHz – 1GHz	$\pm 5.0 \text{ dB}$
1GHz – 18GHz	$\pm 5.3 \text{ dB}$
18GHz – 40GHz	$\pm 6.1 \text{ dB}$
AC Power Lines conducted emissions	$\pm 3.4 \text{ dB}$
Temperature	$\pm 1 \text{ }^{\circ}\text{C}$
Humidity	$\pm 5 \%$

8. AC CONDUCTED EMISSIONS**Temperature (°C) :** 20**Humidity (%HR):** 39**Date :** January 19, 2023**Technician :** T. LEDRESSEUR**Standard:** FCC Part 15
RSS-Gen**Test procedure:**

For FCC Part 15: § 15.207

For RSS-Gen: § 8.8

Method of § 6.2 of ANSI C63.10

Software used: BAT-EMC V3.18.0.26**Test set up:**

The EUT is isolated and placed on a wooden table, 0.8 m over an horizontal reference plane and 0.4 m from a vertical reference plane. It is powered by an artificial main network placed on the ground reference plane. The equipment is powered with the AC power operating voltage of 120 V / 60 Hz.

See photos in appendix

Frequency range: 150 kHz - 30 MHz**Detection mode:** Peak / Quasi-peak / Average**Bandwidth:** 10 kHz / 9 kHz**Equipment under test operating condition:**

The equipment under test is blocked in alternance of emission and reception mode with tag.

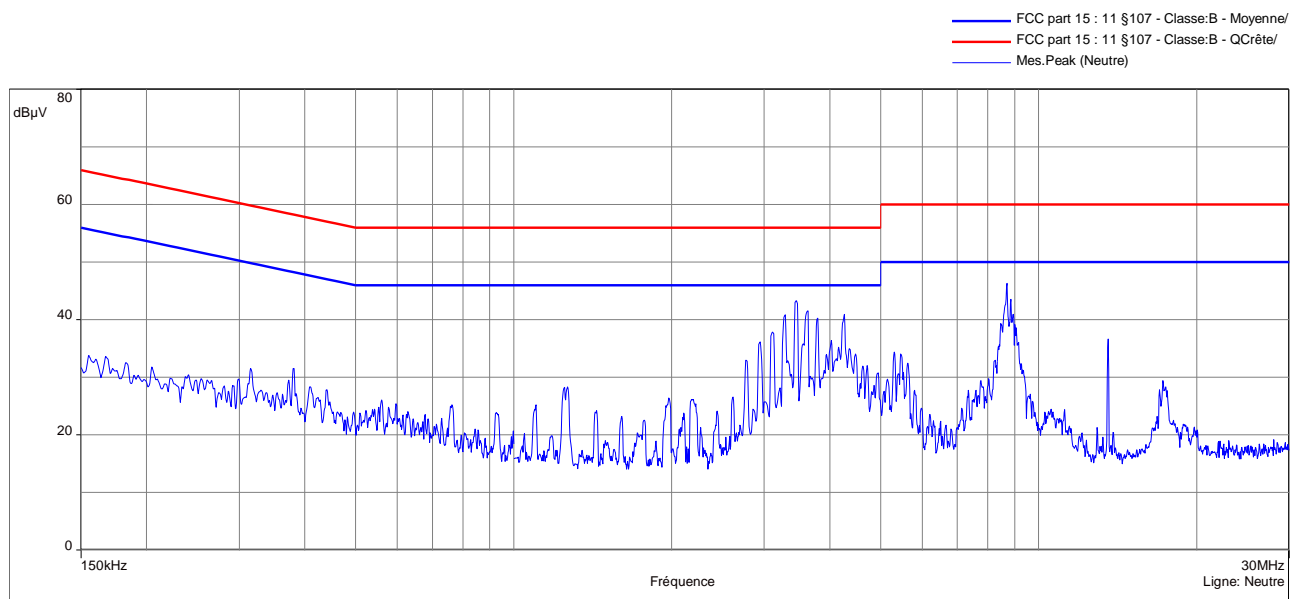
Results:

Sample N° 1:

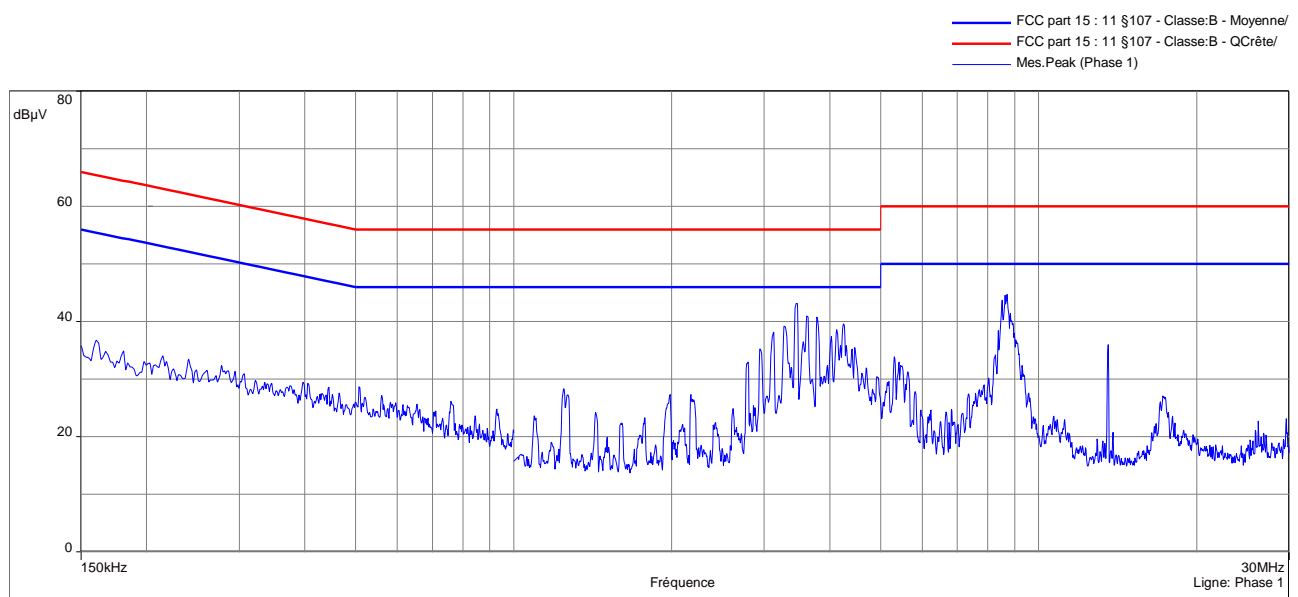
Measurement on the mains power supply:

The measurement is first realized with peak detector.

Curve N° 1: measurement on the Neutral with peak detector



Curve N° 2: measurement on the Line with peak detector



The highest frequencies are then analyzed with Quasi-peak detector and Average detector

Table N° 1: measurement on the Neutral, for the frequency range:

Frequency	Quasi-peak	QP Limit	QP margin	Frequency	Average	Average Limit	Average margin
(MHz)	(dBμV)	(dBμV)	(dB)	(MHz)	(dBμV)	(dBμV)	(dB)
1.250	19.38	56.0	36.62	1.250	15.64	46.0	30.36
3.291	40.86	56.0	15.14	3.291	32.32	46.0	13.68
3.453	42.26	56.0	13.74	3.453	33.49	46.0	12.51
3.634	39.73	56.0	16.27	3.634	32.58	46.0	13.42
4.265	32.81	56.0	23.19	4.265	26.79	46.0	19.21
5.311	29.92	60.0	30.08	5.311	22.54	50.0	27.46
8.701	40.14	60.0	19.86	8.701	32.02	50.0	17.98
13.566	22.58	60.0	37.42	13.566	21.35	50.0	28.65
17.255	23.7	60.0	36.30	17.255	19.88	50.0	30.12

Table N° 2: measurement on the Line, for the frequency range:

Frequency	Quasi-peak	QP Limit	QP margin	Frequency	Average	Average Limit	Average margin
(MHz)	(dBμV)	(dBμV)	(dB)	(MHz)	(dBμV)	(dBμV)	(dB)
1.245	24.84	56.0	31.16	1.245	19.59	46.0	26.41
3.128	36.73	56.0	19.27	3.128	27.53	46.0	18.47
3.273	38.36	56.0	17.64	3.273	26.92	46.0	19.08
3.453	41.65	56.0	14.35	3.453	33.22	46.0	12.78
3.616	41.01	56.0	14.99	3.616	32.58	46.0	13.42
4.247	37.8	56.0	18.20	4.247	30.37	46.0	15.63
8.701	39.46	60.0	20.54	8.701	30.88	50.0	19.12
13.566	22.07	60.0	37.93	13.566	19.91	50.0	30.09

Test conclusion:

RESPECTED STANDARD

9. OCCUPIED BANDWIDTH

Temperature (°C) : 20

Humidity (%HR): 39

Date : January 19, 2023

Technician : T. LEDRESSEUR

Standard: FCC Part 15
RSS-210

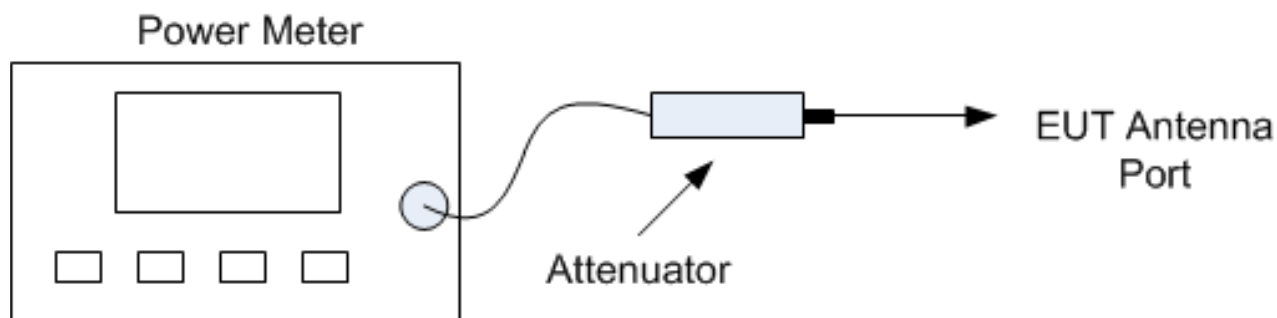
Test procedure:

Method of § 6.9.3 of ANSI C63.10 (99% Measurement)

Test set up:

Radiated test

Test realized in near field.



Setting:

Measure	99%	20dB
Center frequency	The centre frequency of the channel under test	
Detector	Peak	
Span	1.5 to 5 times the OBW	2 to 5 times the OBW
RBW	1% to 5% of the OBW	1% to 5% of the OBW
VBW	3 x RBW	3 x RBW
Trace	Max hold	
Sweep	Auto	

Test operating condition of the equipment:

The equipment under test is blocked in alternance of emission and reception mode with tag.

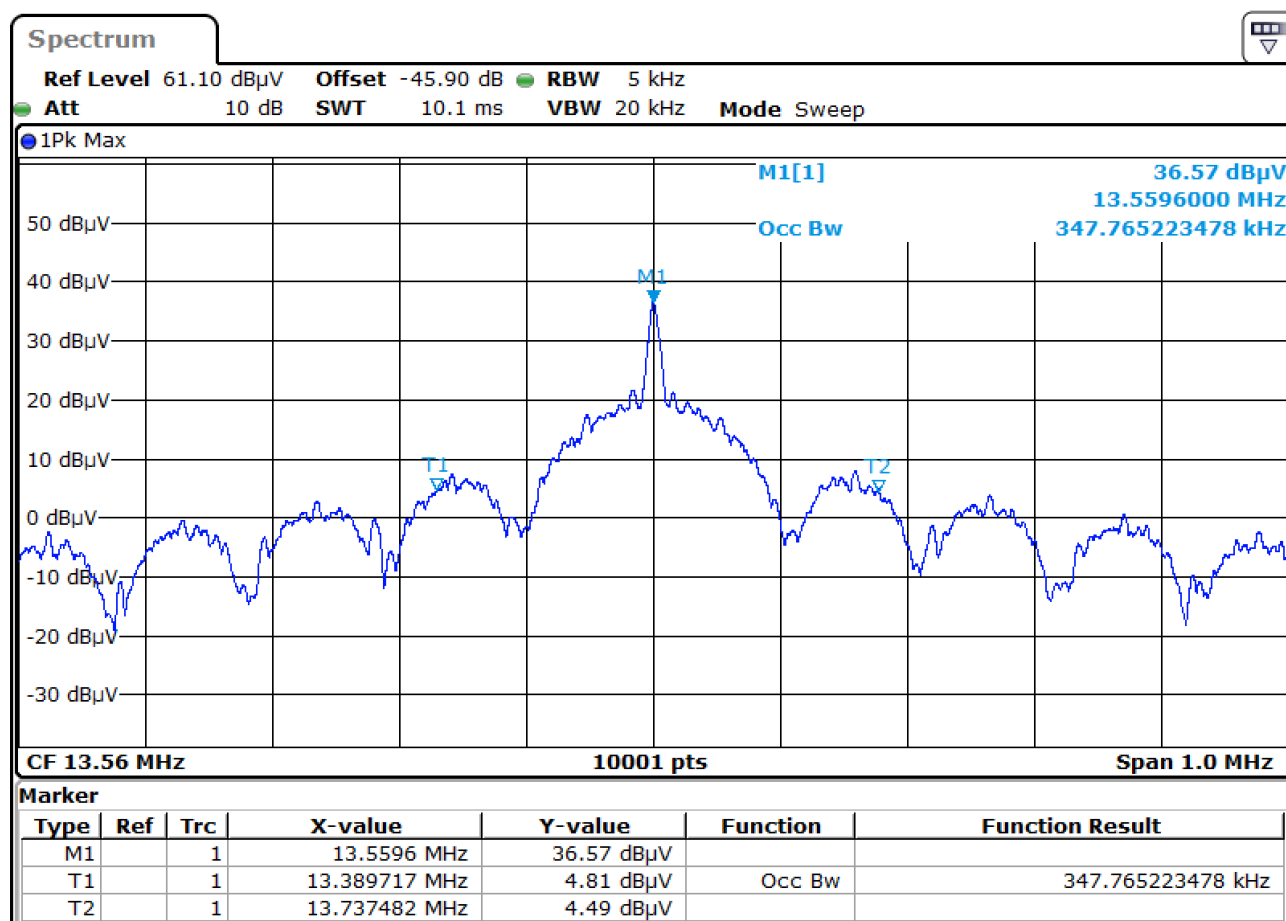
Power source: 120 Vac by an external power supply

Percentage of voltage variation during the test (%): ± 1

Results:

Sample N° 1

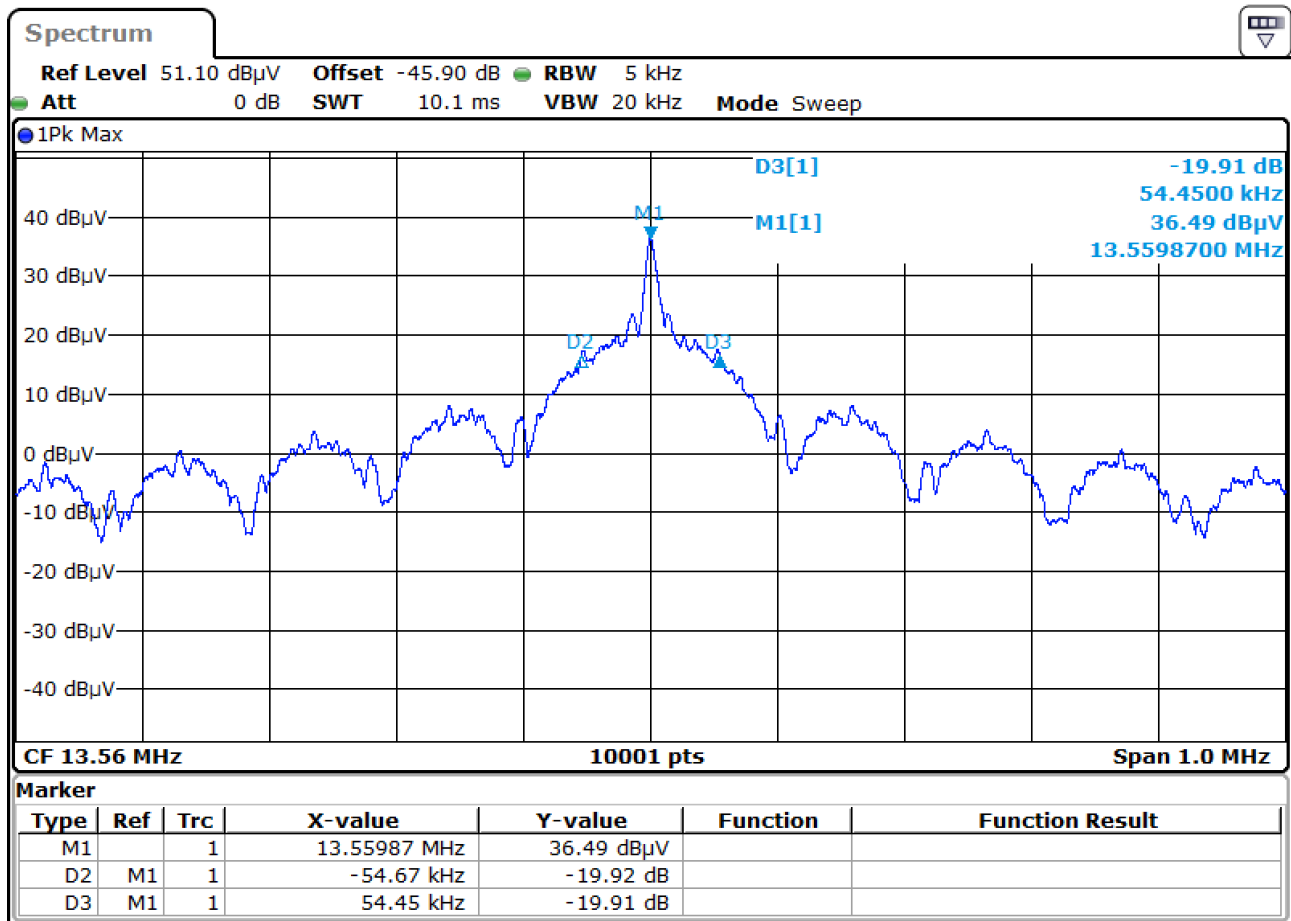
99% bandwidth – Channel 13.56 MHz



Limit:

Measure realized for reporting only

20dB bandwidth – Channel 13.56 MHz



Limit:

Measure realized for reporting only

Test conclusion:

RESPECTED STANDARD

10. BAND EDGE**Temperature (°C) :** 20**Humidity (%HR):** 38**Date :** January 19, 2023**Technician :** T. LEDRESSEUR**Standard:** FCC Part 15**Test procedure:**

For FCC Part 15: § 15.215

Method of § 6.10.6 of ANSI C63.10

Test set up:

Test realized in near field. All field strength measurements are correlated with the radiated maximum peak output power

Test operating condition of the equipment:

The equipment under test is blocked in alternance of emission and reception mode with tag.

Power source: 120 Vac by an external power supply

Percentage of voltage variation during the test (%): ± 1

Results:

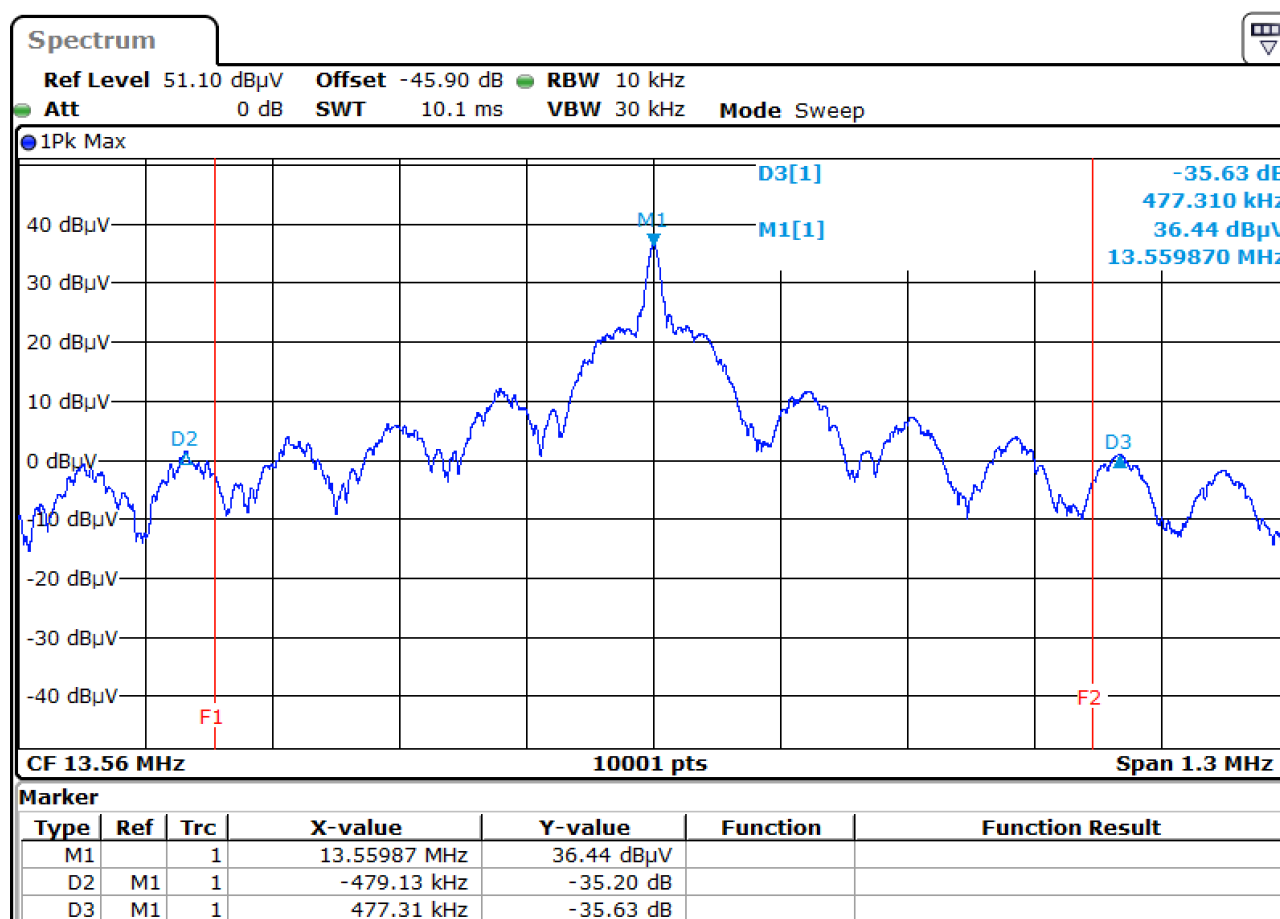
Lower Band Edge: Below 13.110 MHz

Upper Band Edge: Above 14.010 MHz

Sample N° 1:

Fundamental frequency (MHz)	Field Strength Level of fundamental (dBμV/m)	Detector (Peak or Average)	Frequency of maximum Band-edges Emission (MHz)	Delta Marker (dB) (1)	Calculated Max Out-of-Band Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
13.56	45.91	Peak	13.08074	35.20	10.71	25.91	15.2
13.56	45.91	Peak	14.03709	35.63	10.28	25.91	15.63

(1) Marker-Delta method



Test conclusion:

RESPECTED STANDARD

11. OPERATION WITHIN THE BAND 13.110 – 14.010 MHZ**Temperature (°C) :** 20**Humidity (%HR):** 38**Date :** January 18, 2023 and
January 19, 2023**Technician :** T. LEDRESSEUR**Standard:** FCC Part 15
RSS-210**Test procedure:**

For FCC Part 15: § 15.209, § 15.225 (a), (b), (c), (e)

For RSS-210: § Annex B.6 (a), (b), (c)

Method of § 6.3 of ANSI C63.10

Method of § 6.4 of ANSI C63.10

Method of § 6.8 of ANSI C63.10

Test set up:

First an exploratory radiated measurement was performed. During this phase the product is oriented in these two normal positions

Then the final measurement is realized with the product on the most critical orientation.

The system is tested in an open area test site (OATS). The EUT is placed on a rotating table, 0.8 m from a ground plane. Zero degree azimuth corresponds to the front of the equipment under test.

See photos in appendix 2

The frequency stability measure is realized in near-field with the product in a climatic chamber.

Detection mode: Quasi-peak ($F < 1$ GHz)**Bandwidth:** 9 kHz ($150 \text{ kHz} < F < 30\text{MHz}$)**Distance of antenna:** 10 meters**Antenna height:** 1 meter**Antenna polarization:** oriented in the vertical plane. The lowest point of the loop is 1m above ground level.**Equipment under test operating condition:**

The equipment under test is blocked in alternance of emission and reception mode with tag.

Power source: 120 Vac by an external power supply

Percentage of voltage variation during the test (%):

 ± 1

Results:

Sample N° 1:

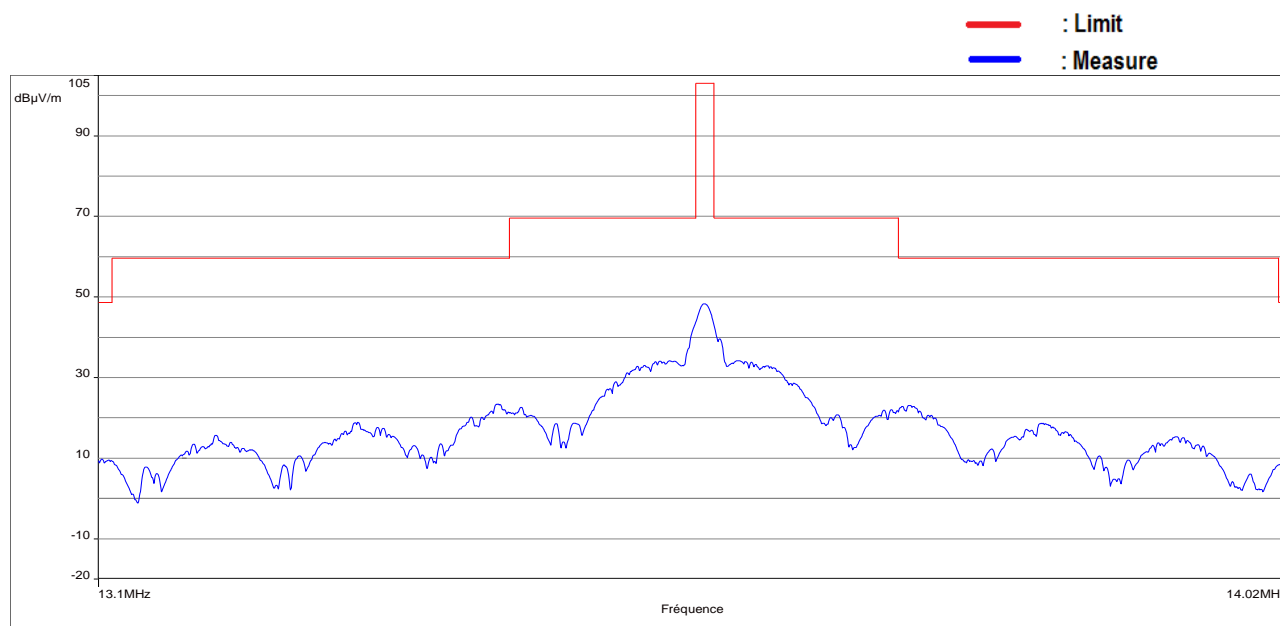
Carrier field strength

	Field strength (dB μ V/m) at frequency: 13.56 MHz
Normal test conditions measure at 10 m	45.91
Normal test conditions correlated at 30 m	26.83
Limits at 30m (dB μ V/m)	84
Margin (dB)	57.17

Polarization of test antenna: perpendicular at the equipment at 0 degree.

Position of equipment: Position 1, see photos in appendix 2 (azimuth: 315°)

Field strength within the band 13.110-14.010 MHz



Frequency stability

Results for temperature variation

The standard request firstly a variation of temperature between -20°C to +50 °C, but the product is not destined for this range.

The range of temperature declared was +10°C to +30°C, that's why the measure was only realized on this range.

Realized with a power source at 120 Vac – 60 Hz through a variac

Temperature (°C)	Mesure at startup		Measure at 2 min		Measure at 5 min		Measure at 10 min		Drift limit (kHz)
	Frequency measured (MHz)	Frequency drift (kHz)	Frequency measured (MHz)	Frequency drift (kHz)	Frequency measured (MHz)	Frequency drift (kHz)	Frequency measured (MHz)	Frequency drift (kHz)	
30	13.560074	0.074	13.560034	0.034	13.560034	0.034	13.560034	0.034	± 1.356 (a)
20	13.560044	0.044	13.560035	0.035	13.560035	0.035	13.560032	0.032	
10	13.560103	0.103	13.560065	0.065	13.560064	0.064	13.560064	0.064	

(a) ±0.01% of the operating frequency

Results for power supply variation

Realized at +20 °C

Power supply (Vac)	Frequency measured (MHz)	Frequency drift (kHz)	Drift limit (kHz)
102	13.560023	0.023	± 1.356 (b)
120	13.560044	0.044	
138	13.560065	0.065	

(b) ±0.01% of the operating frequency

Test conclusion:

RESPECTED STANDARD

12. FIELD STRENGTH OUTSIDE THE BAND 13.110-14.01 MHZ**Temperature (°C) :** 19 to 20**Humidity (%HR):** 33 to 45**Date :** January 19, 2023 and
January 20, 2023**Technician :** T. LEDRESSEUR**Standard:** FCC Part 15**Standard:** FCC Part 15
RSS-210**Test procedure:**

For FCC Part 15: § 15.209, § 15.225 (d)

For RSS-210: § Annex B.6 (d)

Method of § 6.3 of ANSI C63.10

Method of § 6.4 of ANSI C63.10

Method of § 6.5 of ANSI C63.10

Test set up:

First an exploratory radiated measurement was performed. During this phase, the product is oriented in this normal position, but the arm of the product was oriented in two different positions.

Then the final measurement is realized with the product on the most critical orientation.

The EUT is placed on a rotating table, directly on the floor.

Zero degree azimuths correspond to the front of the device under test.

Frequency range: From 9 kHz to 1000 MHz**Detection mode:** Quasi-peak ($F < 1$ GHz)**Bandwidth:** 200Hz ($9 \text{ kHz} < F < 150\text{kHz}$)
9 kHz ($150 \text{ kHz} < F < 30\text{MHz}$)
120 kHz ($30 \text{ MHz} < F < 1 \text{ GHz}$)**Distance of antenna:** 10 meters (in open area test site) / 3 meters (in anechoic room)**Antenna height:** 1 to 4 meters above 30 MHz**Antenna polarization:** vertical and horizontal (only the highest level is recorded)

Equipment under test operating condition:

The equipment under test is blocked in alternance of emission and reception mode with tag.

Power source: 120 Vac by an external power supply

Percentage of voltage variation during the test (%): ± 1

Results:

Sample N° 1:

Below 30 MHz

Frequencies (MHz)	Detector P QP Av	RBW (kHz)	Polarization (Parallel Perpendicular Horizontal)	Field strength Measured at 10 m (dBμV/m)	Field strength Computed at 30 m (dBμV/m)	Limits (dBμV/m)	Margin (dB)
27.12	P	10	//	36.5 (1)	17.42	29.5	12.08

(1): Noise floor

Above 30 MHz

Frequencies (MHz)	Detector P QP Av	Antenna height (cm)	RBW (kHz)	Polarization H: Horizontal V: Vertical	Field strength Measured at 3 m (dBμV/m)	Limits (dBμV/m) 40	Margin (dB)
40.68	P	100	100	V	35	40	5
54.24	P	125	100	V	33.9	40	6.1
67.8	P	153	100	V	26	40	14
135.6	P	100	100	H	37.5	43.5	6

P= Peak, QP=Quasi-peak, Av=Average

Applicable limits: for $9 \text{ kHz} \leq F \leq 490 \text{ kHz}$: $2400/F(\text{kHz})$ at 300 meters
for $490 \text{ kHz} < F \leq 1.705 \text{ MHz}$: $24000/F(\text{kHz})$ at 30 meters
for $1.705 \text{ MHz} < F \leq 30 \text{ MHz}$: 29.5 dBμV/m at 30 meters
for $30 \text{ MHz} < F \leq 88 \text{ MHz}$: 40 dBμV/m at 3 meters
for $88 \text{ MHz} < F \leq 216 \text{ MHz}$: 43.5 dBμV/m at 3 meters
for $216 \text{ MHz} < F \leq 960 \text{ MHz}$: 46 dBμV/m at 3 meters
Above 960 MHz : 54 dBμV/m at 3 meters

Note: any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

Test conclusion:

RESPECTED STANDARD

□□□ End of report, (1) appendix to be forwarded □□□

APPENDIX 1: Test equipment list

AC Conducted emissions

TYPE	MANUFACTURER	EMITECH NUMBER
Outside room Hors cage	Emitech	/
Test receiver ESIB7	Rohde & Schwarz	16531
Transient limiter LIT-930A	COM-POWER	17207
LISN ESH3-Z5	Rohde & Schwarz	5602
Absorber sheath current	Emitech	18361
Cable N-2m	/	6527
Cable N-3m	/	16408
Power source 1251RP	California instruments	8508
Multimeter 177	Fluke	14831
Meteo station WS-9232	La Crosse Technology	7564
Software	BAT-EMC V3.18.0.26	0000

Occupied bandwidth

TYPE	MANUFACTURER	EMITECH NUMBER
Spectrum Analyzer FSV40	Rohde & Schwarz	15776
Climatic chamber VS4200	Votsch	17087
Multimeter 177	Fluke	14831
Power source 1251RP	California instruments	8508
Meteo station WS-9232	La Crosse Technology	7564
Software	BAT-EMC V3.18.0.26	0000
Software GPIBShot	Rohde et Schwarz	/

Band edge

TYPE	MANUFACTURER	EMITECH NUMBER
Spectrum Analyzer FSV40	Rohde & Schwarz	15776
Climatic chamber VS4200	Votsch	17087
Multimeter 177	Fluke	14831
Power source 1251RP	California instruments	8508
Meteo station WS-9232	La Crosse Technology	7564
Software	BAT-EMC V3.18.0.26	0000
Software GPIBShot	Rohde et Schwarz	/

Operation within the band 13.110 – 14.010 MHz

TYPE	MANUFACTURER	EMITECH NUMBER
Open test site	EMITECH	/
Spectrum Analyzer FSV40	Rohde & Schwarz	15776
Climatic chamber VS4200	Votsch	17087
Active loop antenna 6502	Emco	6155
Cable N-2m	/	6527
Cable N-3m	/	16408
Power source 1251RP	California instruments	8508
Multimeter 177	Fluke	14831
Meteo station WS-9232	La Crosse Technology	7564
Software	BAT-EMC V3.18.0.26	0000

Field strength outside the band 13.110-14.010 MHz

TYPE	MANUFACTURER	EMITECH NUMBER
Open test site	EMITECH	/
Spectrum Analyzer FSV40	Rohde & Schwarz	15776
Anechoic Chamber	EMITECH	7651
Test receiver ESI	Rohde & Schwarz	14648
Spectrum Analyzer FSV40	Rohde & Schwarz	15776
Active loop antenna 6502	Emco	6155
Biconical antenna HK116	Rohde & Schwarz	6118
Log periodic antenna 3146A	EMCO	5609
Low-noise amplifier RF30400-27-LNA	RFPA	6136
N-10M Cable	/	7537
N-10.5M Cable	HYTEM	7655
N-3M Cable	H&S	15202
Cable N-2m	/	6527
Cable N-3m	/	16408
Power source 1251RP	California instruments	8508
Multimeter 177	Fluke	14831
Meteo station WS-9232	La Crosse Technology	7564
Software	BAT-EMC V3.18.0.26	0000