



Test report issued under the responsibility of:
EMITECH MONTPELLIER laboratory
MRA US-EU Designation Number: FR0006(FCC#: 954701)
Canadian CAB Identifier: FR0003 (ISED#: 4379C)

RADIO TEST REPORT

FCC 47 CFR PART 15: 2020
RSS-210

Company : **STID**
Address..... : 20 PA des Pradeaux
Boulevard Salvador Allende
13850 GREASQUE
FRANCE

Test item description : **Access Controler**
Trade Mark. : STid
Manufacturer..... : STid
Model/Type reference..... : SE8M complete configuration: ARC-IM, ARC-JM, ARC-KM
Model. : ARC-AC1
FCC ID..... : OVNAC1
IC. : 10520A-ARC
Ratings..... : 7Vdc-28Vdc

Testing Laboratory : **EMITECH MONTPELLIER laboratory**
Address..... : 145 rue de Massacan
34740 VENDARGUES
FRANCE

Report Reference No..... : **RR410-20-102742-4A**
Test procedure. : FCC IC Certification
Diffusion..... : Mr SILVE
Applicant's name. : STID
Date of issue..... : February 18, 2022
Total number of pages..... : 39
Revision. : 0
Modified page(s)..... : Creation
Compiled by..... : Nicolas SOULAY
Approved by (+ signature). : Olivier HEYER (Laboratory Manager)

*Duplication of this test report 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.*

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REVISION HISTORY:			
Revision	Date	Modified pages	Modifications
0	February 18, 2022	/	Creation

1. GENERAL INFORMATIONS

This document submits the results of Radio tests performed on the equipment **Access Controler SE8M complete configuration: ARC-IM, ARC-JM, ARC-KM** (denominated hereafter E.U.T.: equipment under test) according to document(s) listed in §2 of this test report.

TESTING PROCEDURE AND TESTING LOCATION:					
Testing Location	EMITECH MONTPELLIER laboratory				
Address.	145 rue de Massacan 34740 VENDARGUES FRANCE				
Test procedure.	FCC Certification				
Tested by	Nicolas SOULAY				
Test supervisor	David MONTAULON				
Date of receipt of test item	N/A				
Date (s) of performance of tests	February 10 to March 03 of 2021				
APPLICANT'S GENERAL INFORMATIONS:					
Company name	STID				
Company address.	20 PA des Pradeaux - Boulevard Salvador Allende - 13850 GREASQUE FRANCE				
Person(s) present during the tests.	No representative for company attended the tests.				
Responsible.	Mr SILVE				
GENERAL REMARKS:					
<p>The information in italics is declared by the manufacturer and is under his responsibility The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.</p> <p>"(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report the decimal separator is point.</p>					
POSSIBLE TEST CASE VERDICTS:					
Test case does not apply to the test object.:	N/A				
Test case not performed.....	N/P				
Test object does meet the requirement.....	P (Pass)				
Test object does not meet the requirement.	F (Fail)				
DEFINITIONS AND ABBREVIATIONS:					
E.U.T.	Equipment under test	AE	Ancillary equipment	Pk	Peak detector
RBW	Resolution bandwidth	VBW	Video bandwidth	QP	Quasi-peak detector
OATS	Open area test site	FAR	Full anechoic room	Av	Average detector
VP	Vertical Polarization	HP	Horizontal Polarization	RMS	Root Mean Square
RF	Radio frequency	NTR	Nothing to report	N/C	Not communicated

2. REFERENCE DOCUMENT(S)

NORMATIVE REFERENCES:

The following referenced documents are necessary for the application of the present test report.

FCC 47 CFR PART 15: 2020

Code of federal regulations. Title 47- Telecommunication Chapter 1- Federal Communication Commission. Part 15- Radio frequency devices Subpart B- Unintentional Radiators. Limits and methods of measurement of radio disturbance. Characteristic of information technology equipment.

RSS-210_Issue 10, Decembar 2019

Licence-Exempt Radio Apparatus: Category I Equipment

RSS/CNR-Gen,_Issue 5, March 2019

Exigences générales et information relatives à la certification du matériel de radiocommunication

FCC part 15.225

Operation within the bands 13.553-13.567MHz

ANSI C 63.10:2013

American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

ANSI C 63.4:2014

American National Standard for Methods of measurement of Radio-Noise from low-voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Although the product standard uses obsolete technical standards, the latest versions of standards achievable by the laboratory will be used for testing.

INFORMATIVE REFERENCES:

The following referenced documents are not necessary for the application of the present test report but they assist the user with regard to a particular subject area.

3. EQUIPMENT TECHNICAL DESCRIPTION

3.1. Test Conditions

Test item description. :	<i>Access Controler</i>
Model/Type reference..... :	<i>SE8M complete configuration: ARC-IM, ARC-JM, ARC-KM</i>
Trade Mark. :	<i>STid</i>
Model..... :	<i>ARC-AC1</i>
FCC ID..... :	<i>OVNAC1</i>
IC. :	<i>10520A-ARC</i>
Serial number (S/N)..... :	<i>G20310326</i>
Part number (P/N). :	<i>Not communicated</i>
Software version..... :	<i>Not communicated</i>
Firmware version..... :	<i>SY275A</i>
Type of sample..... :	<i>Standard equipment</i>
Function(s)..... :	<i>13.56 MHz & 125kHz reader</i>
Manufacturer name. :	<i>STid</i>
Address. :	<i>20 PA des Pradeaux Boulevard Salvador Allende 13850 GREASQUE FRANCE</i>

General product information:

N/A

3.2.EUT Marking plate



3.3.EUT General view



3.4.EUT internal view



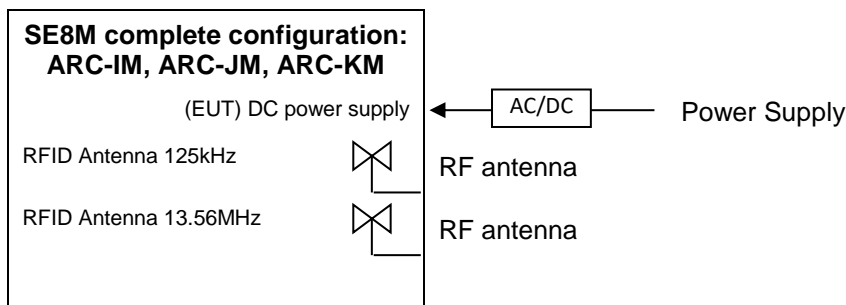
3.5. EUT Mechanical and Electrical Design

Power supply..... : 12Vdc
 Power supply range..... : 7Vdc-28Vdc
 Power type..... : DC Power Supply
 Power (W)..... : 3.12 max
 Nominal current (A)..... : ARC: 1M:0.18max-JM:0.21max-KM:0.25
 Dimensions (L x W x H) (m)..... : 0.15 x 0.08 x 0.025
 Weight (kg)..... : 0.180
 Temperature range (°C)..... : -20°C to +70°C
 Ground bounding strap..... : No

Comments:

N/A

3.6. EUT Input/Output ports



PORT	NAME	TYPE	LENGHT	CABLE TYPE	COMMENTS
0	Main frame	N/E	N/A	Plastic	
1	Power Supply	AC/DC		2P	
2	RF antenna	RF	N/A	N/A	
3	RF antenna	RF	N/A	N/A	

AC/DC : AC/DC Converter port AC: Alternative current port DC.....: Discontinuous current port
 I/O: Input or Output port TP.....: Telecommunication port RF: Radio frequency port
 N/E: Non Electrical port

3.7. EUT Radio Specifications

a) GENERAL INFORMATIONS	
According to manufacturer's declarations :	
EUT type.....	: <i>Transmitter</i>
Technology	: <i>RFID</i>
Environmental profile.....	: <i>N/C</i>
Temperature range.....	: <i>-20°C to +70°C</i>
Antenna type	: <i>Integral</i>
Antenna Gain.....	: <i>N/C</i>
Comments:	
<i>EUT includes an RF module already certified, see appropriate tests report for full testing results.</i>	
b) TRANSMITTER PARAMETERS (Tx)	
Frequency bands.....	: <i>119kHz-140kHz</i> <i>13.553MHz-13.567MHz</i>
RF Power.....	: <i>N/C</i>
Number of channels / Separation	: <i>N/C</i>
Modulation type	: <i>RFID: AM</i>
Duty cycle	: <i>N/C</i>
Tested frequency.....	: <i>125kHz, 13.56MHz</i>
c) RECEIVER PARAMETERS (Rx)	
Frequency bands.....	: <i>N/A</i>
Category/Class	: <i>N/A</i>
Bandwidth.....	: <i>N/A</i>

4. RESULT SUMMARY

TEST DESIGNATION	SEVERITY	VERDICT	BASIC STANDARDS / COMMENTS
INTENTIONAL RADIATORS			
Equipment authorization requirement		PASS	Transmitter part is subject to Certification procedure
Certified operating frequency range		N/A	
Antenna requirement		PASS	Dedicated integral antenna
External radio frequency power amplifiers and antenna modifications		N/A	
Restricted bands of operation		PASS	
Conducted limits		N/A	
Radiated emission limits; general requirements	Class B	PASS	
Tunnel radio systems		N/A	
Modular transmitters		N/A	
Cable locating equipment		N/A	
Cordless telephones		N/A	
Additional provisions to the general radiated emission limits		PASS	
Operation within the band 13.110-14.010 MHz.		PASS	
- Field strength in the band 13.553-13.567 MHz		PASS	
- Field strength in the band 13.410-13.553 MHz and 13.567-13.710 MHz		N/P	
- Field strength in the band 13.110-13.410 MHz and 13.710-14.010 MHz		N/P	
- Field strength outside the band 13.110-14.010 MHz		N/P	
- Frequency tolerance of the carrier signal		N/P	
- Radio frequency powered tag		N/A	EUT is an RFID reader

Sample subject to the test complies with the requirements of the reference document(s) listed in §2 of this test report and, where applicable, with deviation(s) specified in this document.

To declare, or not, the compliance with the specifications, it was not explicitly taken account of uncertainty associated with the results.

Opinion(s) and interpretation(s): N/A

5. MEASUREMENT UNCERTAINTY

PARAMETER	MAXIMAL EMITECH UNCERTAINTY	MINIMAL STANDARD UNCERTAINTY
Radio frequency	$\pm 1 \times 10^{-7}$	$\pm 1 \times 10^{-7}$
Radiated emission (magnetic field) 9kHz – 30MHz	± 3 dB	± 6 dB
Supply voltages	± 3 %	± 3 %
Temperature	± 1 °C	± 1 °C
Humidity	± 5 %	± 5 %
Radiated emission (electric field for FCC standard) 9kHz – 30MHz	± 2.7 dB	/
30MHz – 1GHz	± 5.0 dB	/
1GHz – 18GHz	± 5.6 dB	/
Conducted emission (Artificial Mains Network) 150kHz – 30MHz	± 3.4 dB	± 3.4 dB

For the calculation of expanded uncertainty, the confidence interval is 95 % (k=2).

6. TEST CONDITIONS AND RESULTS

6.1. Field strength at 125 kHz

Reference standard:	FCC Radio part 15.209 & RSS-210
Test method:	ANSI C63.10: 2013
<p>Test description: EUT is set on an insulating support at 80cm. Measurements were then performed in a 10-meter Open Area Test Site that complies to CISPR 16.</p> <p>The EUT was rotated 360° in order to maximize radiated levels. Test antenna was oriented in 3 axes (0°, 45° and 90°).</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p>	

TEST CASE	EUT MODE	SEVERITY	RESULT TAB.	VERDICT
ARC-IM 125kHz (OATS)	Permanent emission mode	N/A	EMI5979	PASS
ARC-JM 125kHz (OATS)	Permanent emission mode	N/A	EMI5980	PASS
ARC-KM 125kHz (OATS)	Permanent emission mode	N/A	EMI5981	PASS

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	N/A
Relative Humidity	20 to 75 %	N/A
Atmospheric pressure	N/A	N/A
Test method deviation: N/A		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	Rohde & Schwarz	HFH2-Z2	5825	24/04/2020	24/06/2022
Cable	Huber + Suhner	N-20m	8385	07/01/2021	07/03/2023
Mast controller	Heinrich Deisel	HD100	4036		
Multimeter	FLUKE	8808A	10382	28/09/2020	28/11/2021
Open area test site	EMITECH	Salinelles	3482	10/10/2017	10/12/2021
Receiver	Rohde & Schwarz	ESHS10	3371	27/04/2020	27/06/2021
Receiver	Rohde & Schwarz	FPL1003	16027	14/08/2020	14/10/2021

Blank cells = Permanent validity

FIELD STRENGTH - TABULATED RESULTS				
TEST CONDITION	FREQUENCY	Level at 10m (dBµA/m)	Level at 300m (µV/m)	Limit at 300m (µV/m)
ARC-IM 125kHz (OATS)	125kHz	-10.544dBµA/m (Azimuth: 180°) (Antenna Pos: 0°)	0.12	19.2
ARC-JM 125kHz (OATS)	125kHz	-10.344dBµA/m (Azimuth: 160°) (Antenna Pos: 0°)	0.13	19.2
ARC-KM 125kHz (OATS)	125kHz	-10.744dBµA/m (Azimuth: 180°) (Antenna Pos: 0°)	0.12	19.2

TEST SETUP PHOTOS



TEST SETUP PHOTOS



TEST SETUP PHOTOS



6.2. Field strength in the band 13.553-13.567MHz

Reference standard:	FCC Radio part 15.225 a) & RSS-210
Test method:	ANSI C63.10: 2013
<p>Test description: EUT is set on an insulating support at 80cm. Measurements were then performed in a 10-meter Open Area Test Site that complies to CISPR 16.</p> <p>The EUT was rotated 360° in order to maximize radiated levels. Test antenna was oriented in 3 axes (0°, 45° and 90°).</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p>	

TEST CASE	EUT MODE	SEVERITY	RESULT TAB.	VERDICT
ARC-IM 13.56MHz (OATS)	Permanent emission mode	15848µV/m at 30m	-	PASS
ARC-JM 13.56MHz (OATS)	Permanent emission mode	15848µV/m at 30m	-	PASS
ARC-KM 13.56MHz (OATS)	Permanent emission mode	15848µV/m at 30m	-	PASS

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	N/A
Relative Humidity	20 to 75 %	N/A
Atmospheric pressure	N/A	N/A
Test method deviation: N/A		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	Rohde & Schwarz	HFH2-Z2	5825	24/04/2020	24/06/2022
Cable	Huber + Suhner	N-20m	8385	07/01/2021	07/03/2023
Mast controller	Heinrich Deisel	HD100	4036		
Multimeter	FLUKE	8808A	10382	28/09/2020	28/11/2021
Open area test site	EMITECH	Salinelles	3482	10/10/2017	10/12/2020
Receiver	Rohde & Schwarz	ESHS10	3371	27/04/2020	27/06/2021
Receiver	Rohde & Schwarz	FPL1003	16027	14/08/2020	14/10/2021

Blank cells = Permanent validity

FIELD STRENGTH - TABULATED RESULTS				
TEST CONDITION	FREQUENCY	Level at 10m (dBµA/m)	Level at 30m (µV/m)	Limit at 30m (µV/m)
ARC-IM 13.56MHz (OATS)	13.56MHz	6.1744dBµA/m (Azimuth: 260°) (Antenna Pos: 90°)	85.01	15848
ARC-JM 13.56MHz (OATS)	13.56MHz	0.2744dBµA/m (Azimuth: 270°) (Antenna Pos: 0°)	43.10	15848
ARC-KM 13.56MHz (OATS)	13.56MHz	2.7744dBµA/m (Azimuth: 260°) (Antenna Pos: 90°)	57.47	15848

TEST SETUP PHOTOS



TEST SETUP PHOTOS



TEST SETUP PHOTOS



6.3. Radiated emissions limits

Reference standard:	FCC part 15 Radio part 15.209 & CNR-Gen
Test method:	ANCI C63.10: 2013
<p>General test setup: For $f < 30\text{MHz}$, EUT is set on an insulating support at 80cm above the ground reference plane.</p> <p>Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter in a semi-anechoic chamber. The EUT was rotated 360° in order to maximize radiated levels. Test antenna was oriented in 3 axes (0°, 45° and 90°).</p> <p>Final measurements (quasi-peak) were then performed in a 10-meter Open Area Test Site that complies to CISPR 16 in the same measurement conditions.</p> <p>For $f > 30\text{MHz}$, EUT is set on an insulating support at 80cm above the ground reference.</p> <p>Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities.</p> <p>Final measurements (quasi-peak or average) were then performed in a semi-anechoic chamber or Open Area Test Site that complies to CISPR 16. The EUT was rotated 360° about its azimuth and adjusting the receive antenna height from 1 to 4 m.</p> <p>All frequencies were investigated, where applicable.</p> <p>For portable equipments a research of maximum level is done on the 3 axes. Only the highest levels are recorded.</p>	

TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
ARC-IM / 0°	9kHz-30MHz	15.209	EMI4824	PASS
ARC-IM / 45°	9kHz-30MHz	15.209	EMI4825	PASS
ARC-IM / 90°	9kHz-30MHz	15.209	EMI4826	PASS
ARC-JM / 0°	9kHz-30MHz	15.209	EMI4832	PASS
ARC-JM / 45°	9kHz-30MHz	15.209	EMI4833	PASS
ARC-JM / 90°	9kHz-30MHz	15.209	EMI4834	PASS
ARC-KM / 0°	9kHz-30MHz	15.209	EMI4840	PASS
ARC-KM / 45°	9kHz-30MHz	15.209	EMI4841	PASS
ARC-KM / 90°	9kHz-30MHz	15.209	EMI4842	PASS
30MHz-1GHz / ARC-KM	30MHz-1GHz	15.209	EMI4789	PASS
30MHz-1GHz / ARC-JM	30MHz-1GHz	15.209	EMI4790	PASS
30MHz-1GHz / ARC-IM	30MHz-1GHz	15.209	EMI4791	PASS

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	See Graph(es)
Relative Humidity	20 to 75 %	See Graph(es)
Atmospheric pressure	N/A	See Graph(es)
Test method deviation: N/A		
<p>Supplementary information:</p> <p>From 9 kHz to 30MHz: limit indicated on the curves is calculated with 40 dB/decade extrapolation factor and 51.5 dB conversion factor.</p> <p>From 30MHz to 1GHz Quasi peak limit provided is the limit given in §15.209.</p>		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	Electro Metrics	BIA-30HF	0824	13/06/2018	13/08/2021
Antenna	Rohde & Schwarz	HFH2-Z2	5825	24/04/2020	24/06/2022
Antenna	Rohde & Schwarz	HL223	1137	13/06/2018	13/08/2021
Antenna	Rohde & Schwarz	HL223	3126	13/06/2018	13/08/2021
Cable	MegaPhase	F135N1N28	16664	25/10/2019	25/12/2021
Cable	MegaPhase	F135N1N28	16666	25/10/2019	25/12/2021
Cable	SUCOFLEX	N-3m	14378	25/06/2019	25/08/2021
Cable	SUCOFLEX	N-3m	14379	25/06/2019	25/08/2021
Cable	MegaPhase	N-3m	14852	30/10/2018	30/06/2021
Cable	SUCOFLEX	N-6,5m	14380	25/07/2019	25/09/2021
Cable	MegaPhase	N-8m	15813	14/01/2021	14/03/2023
Cable	MegaPhase	RG214N1N139	16658	23/10/2019	23/12/2021
Cable	Huber + Suhner	SF102K	16041	28/02/2019	28/04/2021
Cable	MegaPhase	TM18-N1N1-118	12841	14/08/2020	14/10/2022
Filter	Micro-Tronics	HPM 15162	10273	12/01/2019	12/03/2022
Filter	Micro-Tronics	HPM18865	12843	09/06/2018	09/08/2021
Preamplifier	Techniwave	APS16-0087	14040	02/12/2020	02/02/2022
Preamplifier	Mini-circuit	ZFL-1000LN	1119	11/08/2020	11/10/2021
Receiver	Rohde & Schwarz	ESI	9704	03/03/2020	03/05/2021
Shielded enclosure	COMTEST	SAC 3m	14494	02/10/2019	02/12/2022
Software	Nexio		0000		
Thermohygrometer	Testo	608-H2	12269	07/05/2020	07/07/2022
Thermohygrometer	Bioblock Scientific	Météostar	0963	25/01/2019	25/03/2021
Turntable	INN-CO	CO3000 & DS1200S	11571		

BAT-EMC software version: V3.18.0.26

Blank cells = Permanent validity

TRANSMITTER RADIATED SPURIOUS EMISSIONS - TABULATED RESULTS			
ARC-IM			
Frequency (MHz)	Antenna Position	Level	Limit
0.376	0°	-10.57 dBμA/m	44.588 dBμA/m
27.151	0°	0.828 dBμA/m	18.04 dBμA/m
0.376	45°	-10.48 dBμA/m	44.588 dBμA/m
27.15	45°	0.968 dBμA/m	18.04 dBμA/m
27.15	90°	1.202 dBμA/m	18.04 dBμA/m
243.305	Horizontal	37.24 dBμV/m	46 dBμV/m
281.810	Horizontal	39.29 dBμV/m	46 dBμV/m
352.319	Horizontal	40.87 dBμV/m	46 dBμV/m
265.808	Vertical	33.38 dBμV/m	46 dBμV/m
352.319	Vertical	36.41 dBμV/m	46 dBμV/m
746.668	Vertical	35.71 dBμV/m	46 dBμV/m
ARC-JM			
Frequency (MHz)	Antenna Position	Level	Limit
0.373	0°	-10.103 dBμA/m	44.667 dBμA/m
27.151	0°	-3.982 dBμA/m	18.04 dBμA/m
27.151	45°	-3.596 dBμA/m	18.04 dBμA/m
27.151	90°	-4.193 dBμA/m	18.04 dBμA/m
94.8631	Horizontal	28.29 dBμV/m	43.5 dBμV/m
243.305	Horizontal	32.06 dBμV/m	46 dBμV/m
358.719	Horizontal	35.72 dBμV/m	46 dBμV/m
52.145	Vertical	31.54 dBμV/m	40 dBμV/m
95.075	Vertical	28.12 dBμV/m	43.5 dBμV/m
360.320	Vertical	30.67 dBμV/m	46 dBμV/m
ARC-KM			
Frequency (MHz)	Antenna Position	Level	Limit
27.151	0°	-6.058 dBμA/m	18.04 dBμA/m
27.151	45°	-6.058 dBμA/m	18.04 dBμA/m
27.151	90°	-12.8 dBμA/m	18.04 dBμA/m
325.015	Horizontal	33.94 dBμV/m	46 dBμV/m
379.522	Horizontal	32.97 dBμV/m	46 dBμV/m
480.535	Horizontal	28.46 dBμV/m	46 dBμV/m
325.015	Vertical	36.06 dBμV/m	46 dBμV/m
360.320	Vertical	32.89 dBμV/m	46 dBμV/m
379.522	Vertical	32.26 dBμV/m	46 dBμV/m

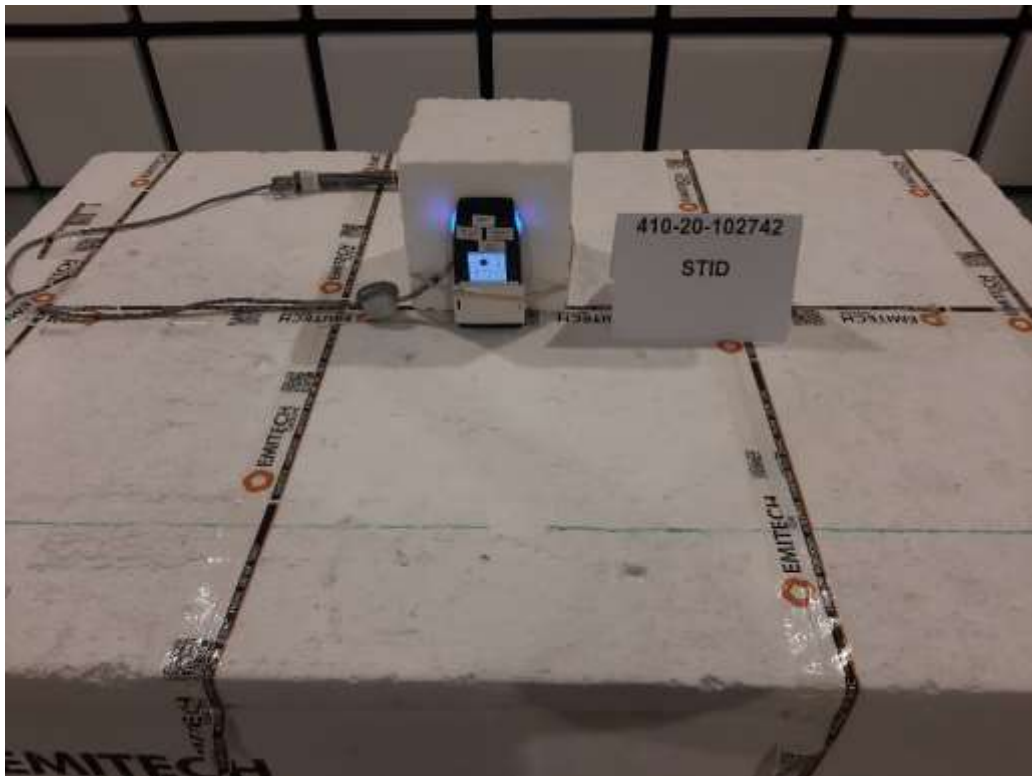
TEST SETUP PHOTOS



TEST SETUP PHOTOS

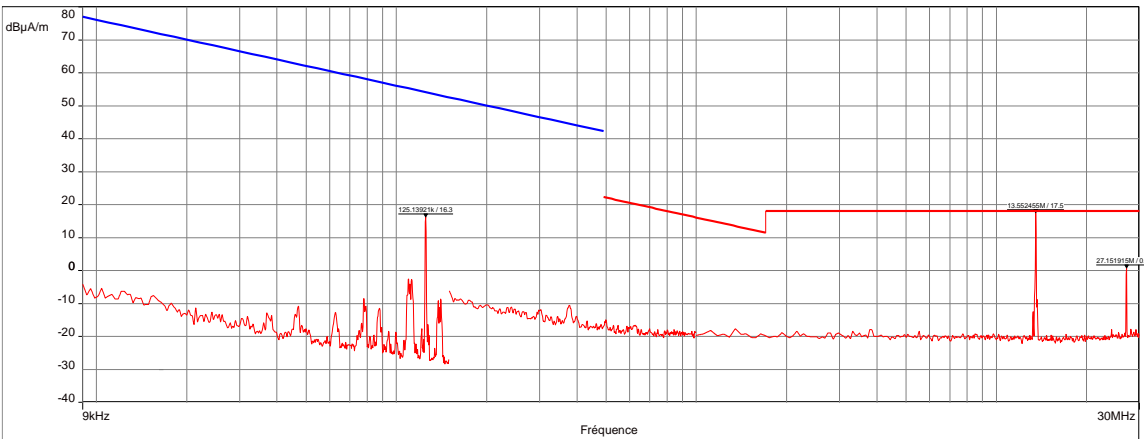


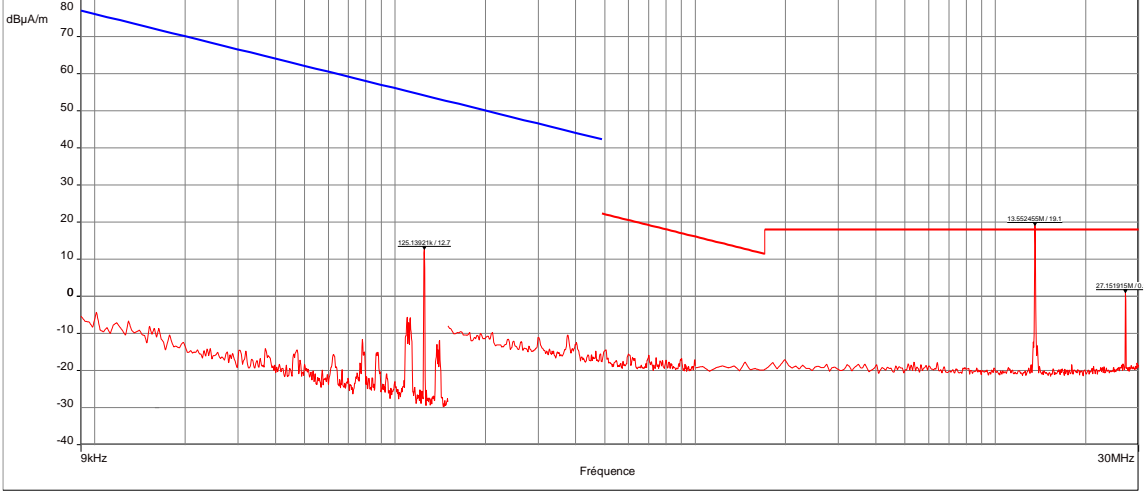
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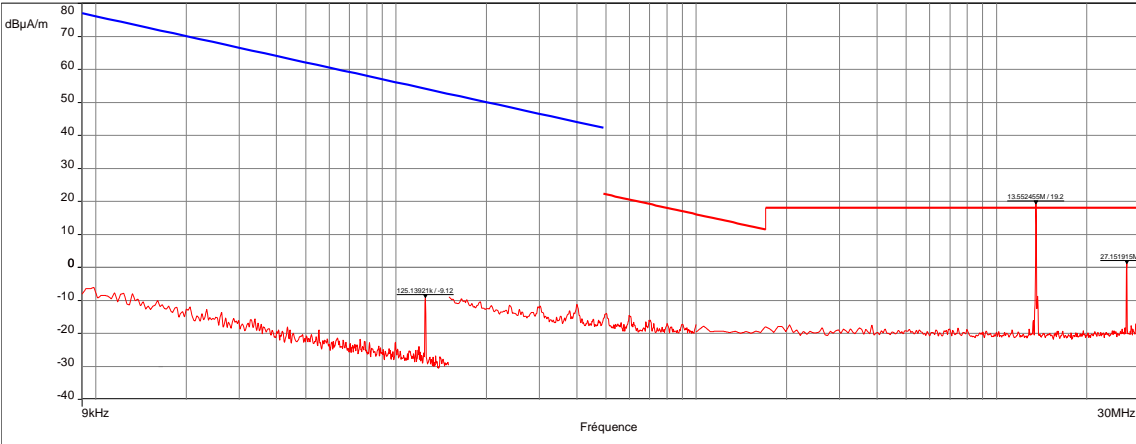


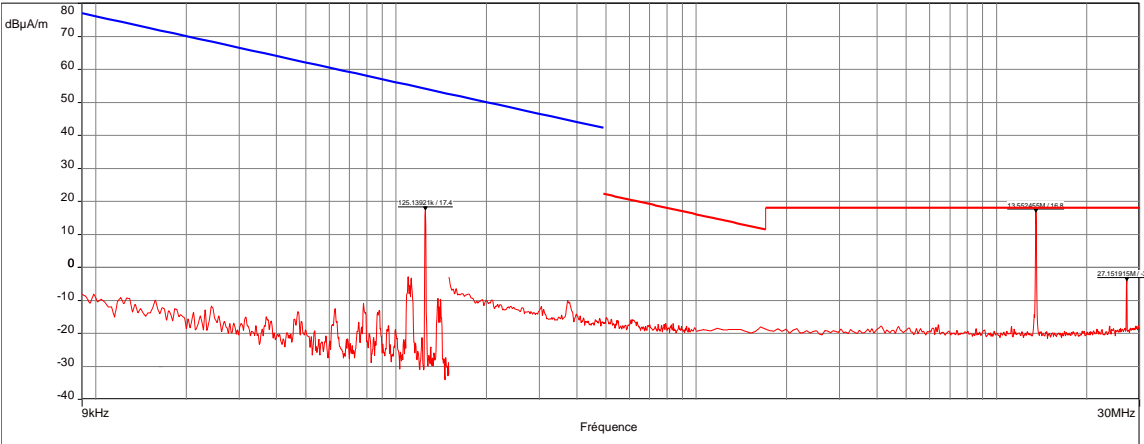
TEST SETUP PHOTOS

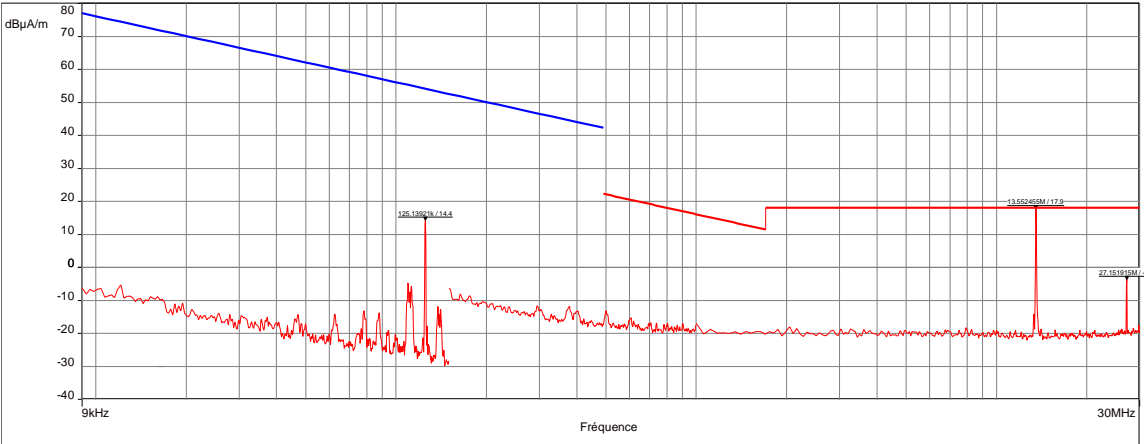


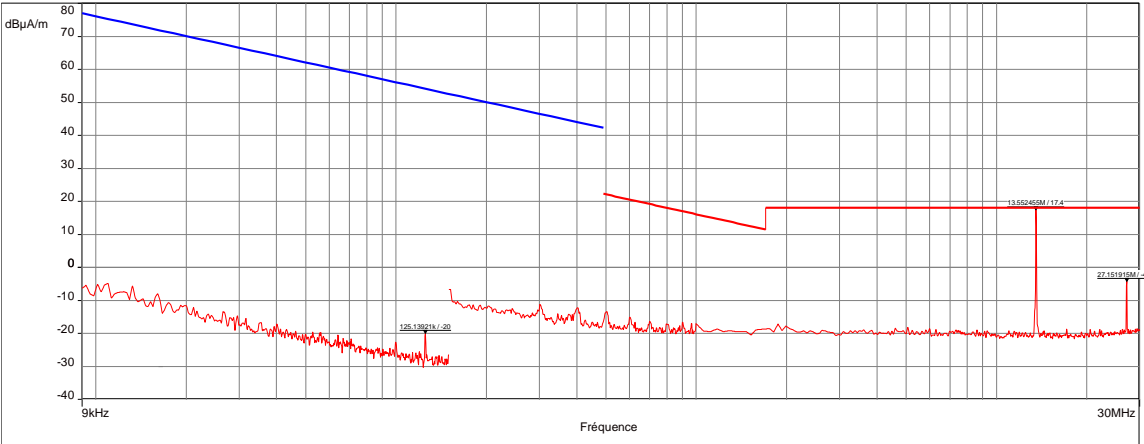
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHz - GRAPH					
ARC-IM / 0°			EMI4824		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 09:32:00			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

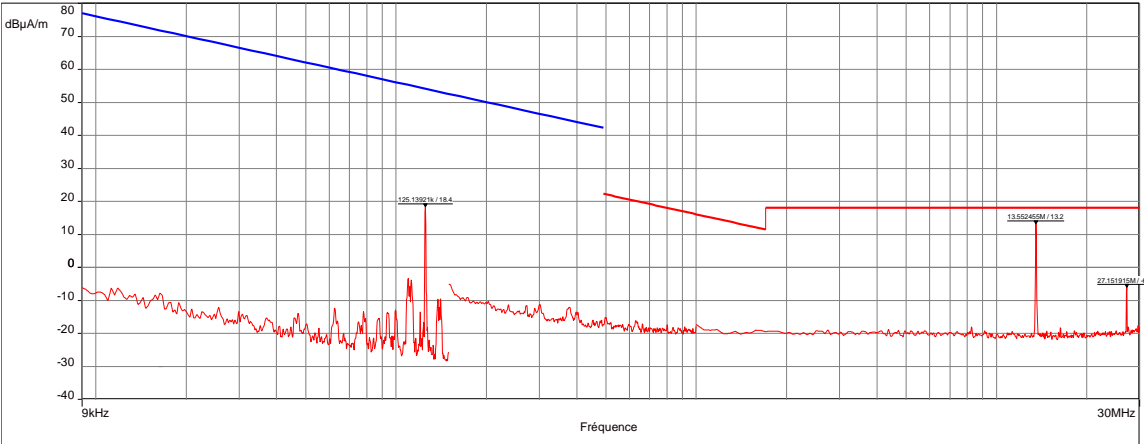
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHZ - GRAPH					
ARC-IM / 45°			EMI4825		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 09:35:10			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

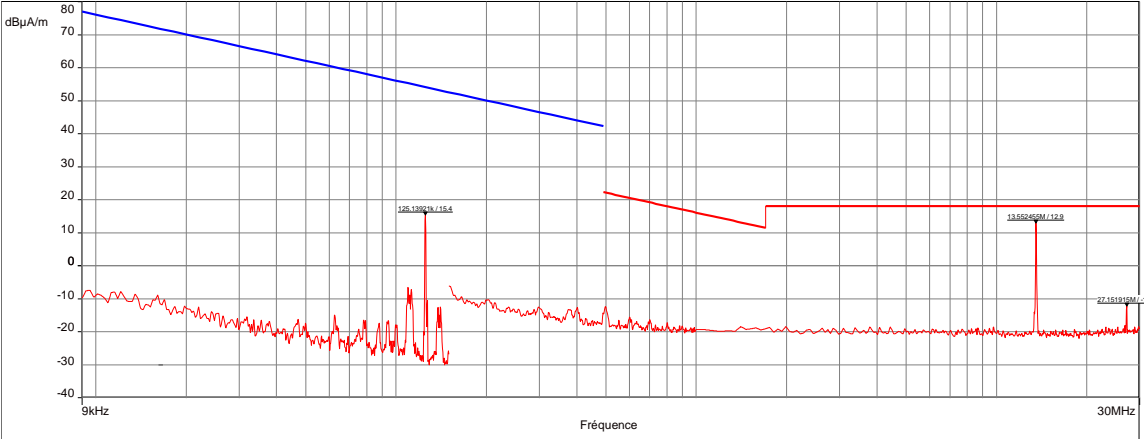
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHZ - GRAPH					
ARC-IM / 90°			EMI4826		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 10:03:02			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes. Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

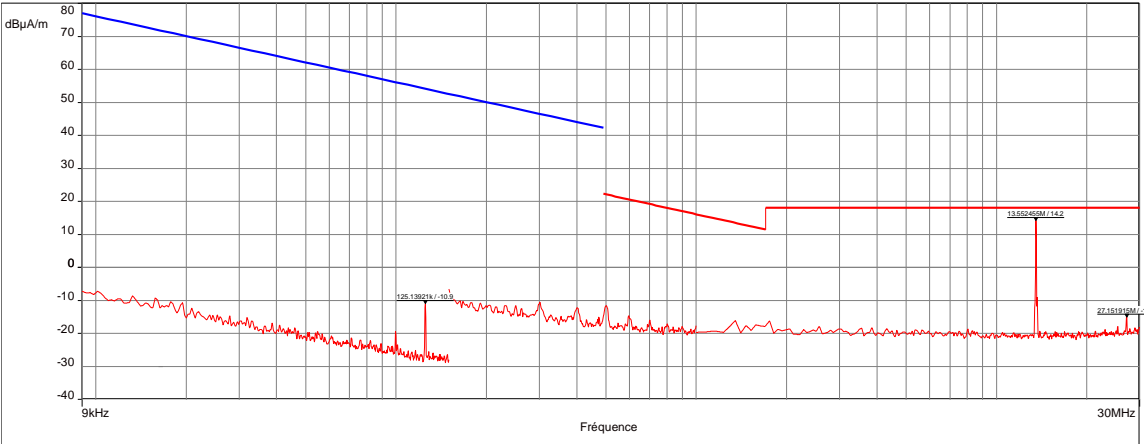
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHz - GRAPH					
ARC-JM / 0°			EMI4832		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 10:41:02			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right;"> <p>— FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/</p> <p>— FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/</p> <p>— Mes.Peak</p> </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

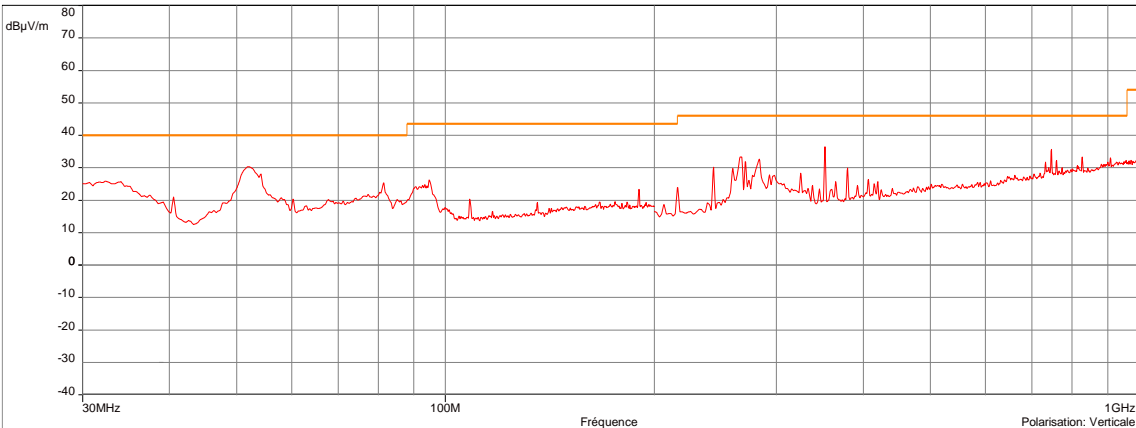
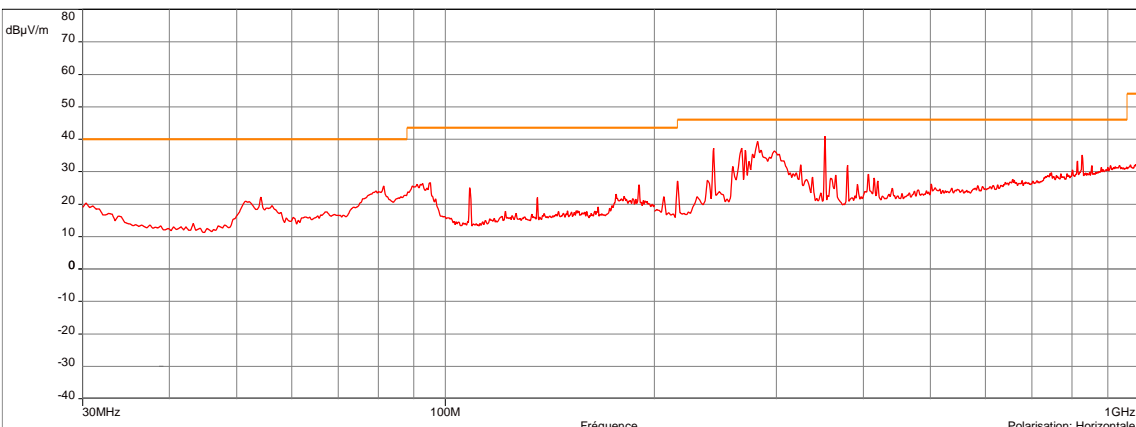
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHZ - GRAPH					
ARC-JM / 45°			EMI4833		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 10:47:49			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

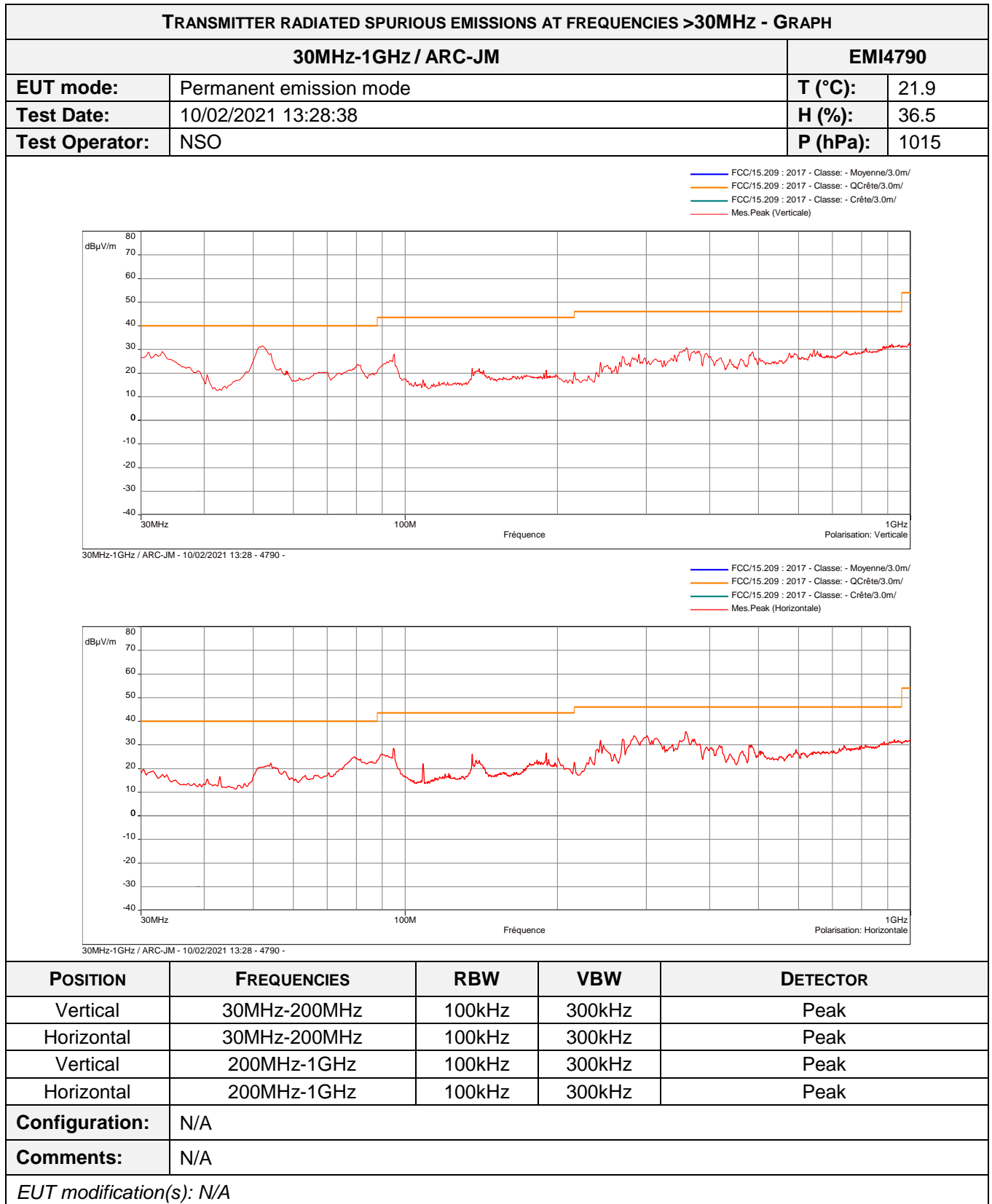
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHz - GRAPH					
ARC-JM / 90°			EMI4834		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 10:51:49			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHZ - GRAPH					
ARC-KM / 0°			EMI4840		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 11:14:44			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes. Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHZ - GRAPH					
ARC-KM / 45°			EMI4841		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 11:18:15			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES <30MHz - GRAPH					
ARC-KM / 90°			EMI4842		
EUT mode:	Permanent emission mode			T (°C):	16.1
Test Date:	11/02/2021 11:22:52			H (%):	43.3
Test Operator:	NSO			P (hPa):	1016
<div style="text-align: right; font-size: small;"> — FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes. Peak </div> 					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	300Hz	1kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	N/A				
Comments:	Limit indicated on these plots are calculated with 40 dB/decade extrapolation factor and 51.5dB conversion factor.				
EUT modification(s): N/A					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHz - GRAPH				
30MHz-1GHz / ARC-IM			EMI4791	
EUT mode:	Permanent emission mode		T (°C):	22.2
Test Date:	10/02/2021 13:58:47		H (%):	38.8
Test Operator:	NSO		P (hPa):	1015
<div style="text-align: right;"> <ul style="list-style-type: none"> — FCC/15.209 : 2017 - Classe: - Moyenne/3.0m/ — FCC/15.209 : 2017 - Classe: - QCrête/3.0m/ — FCC/15.209 : 2017 - Classe: - Crête/3.0m/ — Mes.Peak (Verticale) </div>  <p style="text-align: center;">30MHz-1GHz / ARC-IM - 10/02/2021 13:58 - 4791 -</p> <div style="text-align: right;"> <ul style="list-style-type: none"> — FCC/15.209 : 2017 - Classe: - Moyenne/3.0m/ — FCC/15.209 : 2017 - Classe: - QCrête/3.0m/ — FCC/15.209 : 2017 - Classe: - Crête/3.0m/ — Mes.Peak (Horizontale) </div>  <p style="text-align: center;">30MHz-1GHz / ARC-IM - 10/02/2021 13:58 - 4791 -</p>				
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	30MHz-200MHz	100kHz	300kHz	Peak
Horizontal	30MHz-200MHz	100kHz	300kHz	Peak
Vertical	200MHz-1GHz	100kHz	300kHz	Peak
Horizontal	200MHz-1GHz	100kHz	300kHz	Peak
Configuration:	N/A			
Comments:	N/A			
EUT modification(s): N/A				



TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ - GRAPH				
30MHz-1GHz / ARC-KM			EMI4789	
EUT mode:	Permanent emission mode		T (°C):	22.2
Test Date:	10/02/2021 12:15:14		H (%):	38.8
Test Operator:	NSO		P (hPa):	1015
<ul style="list-style-type: none"> — FCC/15.209 : 2017 - Classe: - Moyenne/3.0m/ — FCC/15.209 : 2017 - Classe: - QCrête/3.0m/ — FCC/15.209 : 2017 - Classe: - Crête/3.0m/ — Mes.Peak (Verticale) 				
30MHz-1GHz / ARC-KM - 05/05/2021 16:26 - 4789 -				
<ul style="list-style-type: none"> — FCC/15.209 : 2017 - Classe: - Moyenne/3.0m/ — FCC/15.209 : 2017 - Classe: - QCrête/3.0m/ — FCC/15.209 : 2017 - Classe: - Crête/3.0m/ — Mes.Peak (Horizontale) 				
30MHz-1GHz / ARC-KM - 05/05/2021 16:26 - 4789 -				
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	30MHz-200MHz	100kHz	300kHz	Peak
Horizontal	30MHz-200MHz	100kHz	300kHz	Peak
Vertical	200MHz-1GHz	100kHz	300kHz	Peak
Horizontal	200MHz-1GHz	100kHz	300kHz	Peak
Configuration:	N/A			
Comments:	N/A			
EUT modification(s): N/A				

●●● End of test report ●●●