



Test report issued under the responsibility of:
EMITECH MONTPELLIER laboratory
MRA US-EU Designation Number: FR0006
Canadian CAB Identifier: FR0003

RADIO TEST REPORT

FCC Part 15 :2018
ANSI C63.10 : 2013
RSS-Gen - Issue 5, April 2018
RSS-210-Issue 9, August 2016

Company: **PRASTEL FRANCE**
Address.....: 225 impasse du Serpolet
ZI Athélia II
13600 LA CIOTAT
FRANCE

Test item description: **Remote control 4 channels**
Trade Mark: PRASTEL
Manufacturer: PRASTEL FRANCE
Model/Type reference.....: SLIM+
FCC ID.....: 2AEHC-SLIMPLUS
IC: None
Ratings.....: 3 Vdc

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

Report Reference No: **R410-18-101706-12A**
Test procedure: FCC&IC Certification
Diffusion.....: Mr JAUMES
Applicant's name: PRASTEL FRANCE
Date of issue.....: 20/05/2019
Total number of pages.....: 26
Revision.....: 0
Modified page(s).....: Creation
Compiled by.....: Morgan PATEY
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.*



REPORT INDEX:

1. GENERAL INFORMATIONS	3
2. REFERENCE DOCUMENT(S)	4
3. EQUIPMENT TECHNICAL DESCRIPTION	5
3.1. TEST CONDITIONS	5
3.2. EUT MECHANICAL AND ELECTRICAL DESIGN.....	5
3.3. EUT INPUT/OUTPUT PORTS.....	6
3.4. EUT RADIO SPECIFICATIONS.....	7
4. RESULT SUMMARY	8
5. MEASUREMENT UNCERTAINTY	9
6. TEST CONDITIONS AND RESULTS	10
6.1. RADIATED SPURIOUS EMISSIONS <30MHZ	10
6.2. RADIATED SPURIOUS EMISSIONS >30MHZ	15
6.3. RADIATED FIELD STRENGTH OF FUNDAMENTAL.....	20
6.4. OCCUPIED BANDWIDTH 99% & 20 DB BANDWIDTH	22

1. GENERAL INFORMATIONS

This document submits the results of Radio tests performed on the equipment **Door opening remote control (Model: SLIM+)** (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 Laboratory	EMITECH MONTPELLIER laboratory		
Address.....	145 rue de Massacan 34740 VENDARGUES Cedex FRANCE		
Test procedure.	FCC IC Certification		
Tested by.....	Morgan PATEY		
Test supervisor	None		
Date of receipt of test item.....	N/A		
Date (s) of performance of tests.....	May between the 05 th to the 14 th of 2018		
APPLICANT'S GENERAL INFORMATIONS:			
Company name	PRASTEL FRANCE		
Company address.	225 impasse du Serpolet ZI Athélia II 13600 LA CIOTAT FRANCE		
Person(s) present during the tests.	Mr JAUMES		
Responsible.	Mr JAUMES		
GENERAL REMARKS:			
<p>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>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(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:			
<p>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) Test object was not subjected to all tests..... : I (Inconclusive)</p>			
DEFINITIONS AND ABBREVIATIONS:			
E.U.T.	Equipement under test	AE	Ancillary equipment
RBW	Resolution bandwidth	VBW	Video bandwidth
OATS	Open area test site	FAR	Full anechoic room
RF	Radio frequency	NTR	Nothing to report

2. REFERENCE DOCUMENT(S)

NORMATIVE REFERENCES:

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

FCC Part 15 :2018

Code of Federal Regulations
Title 47 – Telecommunications
Chapter 1 – Federal Communications Commission
Part 15 – Radio frequency devices
Subpart C – Intentional Radiators

ANSI C63.10 : 2013

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

RSS-Gen - Issue 5, April 2018

General requirements and Information for the Certification of radio Apparatus

RSS-210-Issue 9, August 2016

Licence-exempt Radio Apparatus: Category I Equipment

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. : SLIM+
 Model/Type reference..... : SLIM+
 Trade Mark. : PRASTEL
 Serial number (S/N)..... : Not communicated
 Part number (P/N). : Not communicated
 Software version..... : Not communicated
 Firmware version. : Not communicated
 Type of sample..... : Pre-serial
 Function(s)..... : Door opening remote control
 Manufacturer name. : PRASTEL FRANCE

General product information:

N/A

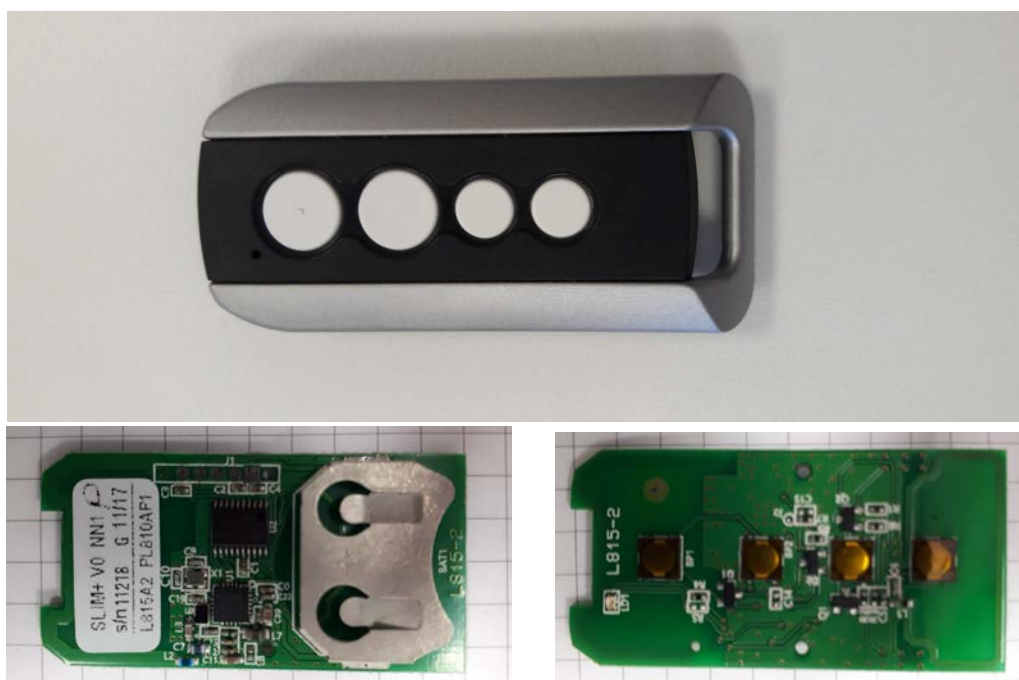
3.2. EUT Mechanical and Electrical Design

Power supply. : 3 Vdc
 Power supply range..... : 3 Vdc
 Power type..... : Battery (CR2032)
 Power : 75 mW
 Nominal current : 25 mA
 Dimensions (L x W x H) (m). : 0.065x0.03x0.011
 Weight (kg). : 0.027
 Temperature range..... : -20°C to +55°C
 Ground bounding strap..... : No

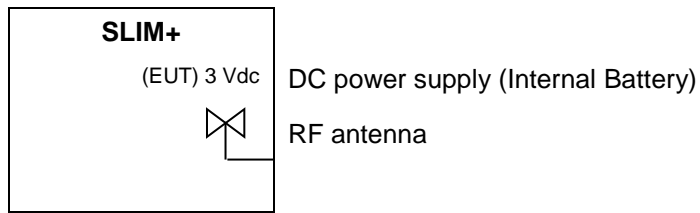
Comments:

Batteries was replaced by external power source during tests.

Photos:



3.3. EUT Input/Output ports



PORT	NAME	TYPE	LENGHT	CABLE TYPE	COMMENTS
0	Main frame	N/E	N/A	Plastic Metallic	
1	DC power supply (Internal Battery)	DC	N/A	Internal battery	Replaced by external power source (Emitech n°8496)
2	RF antenna	RF	433.92 MHz	RF Antenna	

AC/DC : AC/DC Converter port

I/O.....: Input or Output port

N/E: Non Electrical port

AC.....: Alternative current port

TP: Telecommunication port

DC: Discontinuous current port

RF.....: Radio frequency port

3.4. EUT Radio Specifications

a) GENERAL INFORMATIONS

According to manufacturer's declarations :

EUT type : Transmitter
 Technology : SRD
 Environmental profile : Light Industry – Residential
 Temperature range : -20°C to +60°C
 Antenna type : Integral
 Antenna Gain : Not communicated

Comments:

N/A

b) TRANSMITTER PARAMETERS (TX)

Frequency bands : 433.92 MHz
 RF Power : 10 mW
 Number of channels / Separation : 1
 Modulation type : OOK + GFSK
 Duty cycle : 0.002%
 Tested frequency : 433.92 MHz

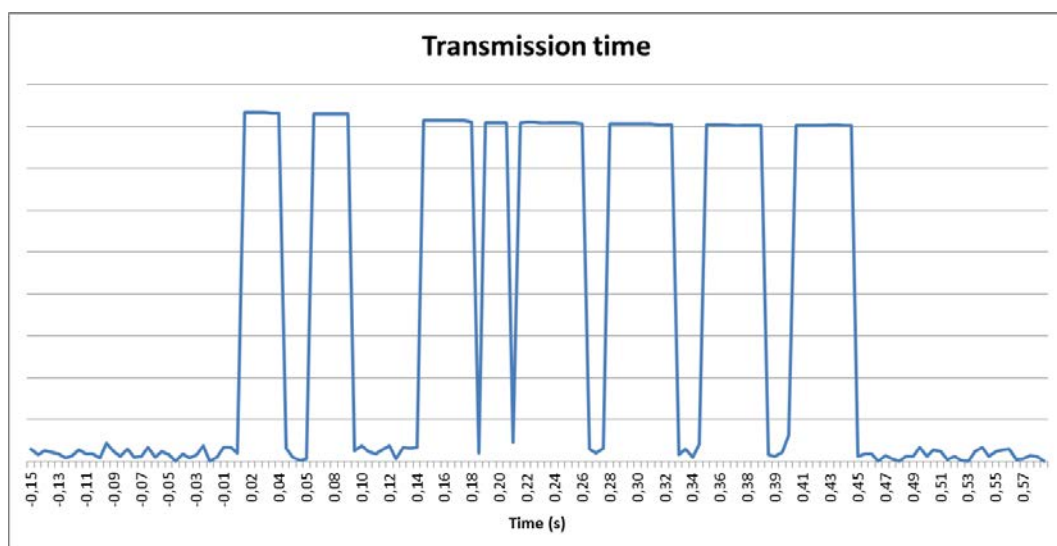
c) RECEIVER PARAMETERS (Rx)

Frequency bands : N/A
 Category/Class : N/A
 Bandwidth : N/A

d) TRANSMISSION TIME (Tx)

To comply with §15.231 (a) (1) or (2) it was verified that the emission of the product lasted less than 5 s after a key was pressed.

It was found that the transmission lasted no less than 500 ms after each press (see below)



4. RESULT SUMMARY

TEST DESIGNATION	SEVERITY	VERDICT	BASIC STANDARDS / COMMENTS
Antenna requirement	-	PASS	Integrated antenna
Conducted voltage emission (measurement)		N/A	ANSI C63.10: 2013 //15.207 and RSS-Gen Powered by internal batteries
Radiated spurious emissions <30MHz			15.209
- RNE_TX / 0°	Tx	PASS	
- RNE_TX / 45°	Tx	PASS	
- RNE_TX / 90°	Tx	PASS	
Radiated spurious emissions >30MHz			15.209 & 15.231 and RSS-Gen & RSS-210 Annex A1
- RNE / Tx Mode / SLIM+ / OOK	Tx	PASS	
- RNE / Tx Mode / SLIM+ / GFSK	Tx	PASS	
Radiated field strength of fundamental	a)	PASS	15.231 a) and RSS-210 Annex A1
Occupied bandwidth	-	PASS	RSS-Gen §6.7

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
Conducted emission		
(Artificial Mains Network) 3kHz – 9kHz	± 3.8 dB	/
(Artificial Mains Network) 9kHz – 150kHz	± 3.6 dB	± 3.6 dB
(Artificial Mains Network) 150kHz – 30MHz	± 3.4 dB	± 3.4 dB
(Voltage probe) 9kHz – 30MHz	± 2.9 dB	± 2.9 dB
(Asymmetric Artificial Network) 150kHz – 30MHz	± 3.5 dB	± 5.0 dB
(Current measurement) 150kHz – 30MHz	± 2.9 dB	± 2.9 dB
(Capacitive Voltage Probe) 150kHz – 30MHz	± 3.6 dB	± 3.9 dB
(Discontinuous) 150kHz – 30MHz	± 3.4 dB	± 3.4 dB
(Van Veen) 9kHz – 30MHz	± 3.3 dB	/
(Coupling Decouplingl Network) 30MHz – 300MHz	± 3.5 dB	± 3.8 dB
(Splitter) 30MHz – 2.15GHz	± 3.4 dB	/
Radio frequency	± 1 x 10 ⁻⁷	±1 x 10 ⁻⁷
Occupied bandwidth		
RF power	± 1.2 %	± 5 %
Radiated emission (magnetic field)		
9kHz – 30MHz	± 2.7 dB	± 6 dB
Supply voltages	± 3 %	± 3 %
Temperature	± 1 °C	± 1°C
Humidity	± 5 %	± 5 %
Time / Duty cycle	± 4.4 %	± 5 %
Radiated emission (electric field for FCC standard)		
9kHz – 30MHz	± 2.7 dB	/
30MHz – 1GHz	± 5.2 dB	/
1GHz – 18GHz	± 5.3 dB	/
18GHz – 26GHz	± 5.5 dB	/
26GHz – 40GHz	± 5.5 dB	/

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

6. TEST CONDITIONS AND RESULTS

6.1. Radiated spurious emissions <30MHz

Reference standard:	CFR 47 FCC part 15 and RSS-Gen
Test method:	15.209
<p>Test description: : Spurious domain emission limits are limits on emissions at frequencies other than those of the carrier and sidebands associated with normal test modulation.</p> <p>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 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>If necessary, final measurements (quasi-peak) are then performed in a 10-meter Open Area Test Site that complies to CISPR 16 in the same measurement conditions.</p> <p>All frequencies were investigated, where applicable.</p>	

TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
RNE_TX / 0°	9kHz-30MHz	Class Tx	EMI5797	PASS
RNE_TX / 45°	9kHz-30MHz	Class Tx	EMI5798	PASS
RNE_TX / 90°	9kHz-30MHz	Class Tx	EMI5799	PASS

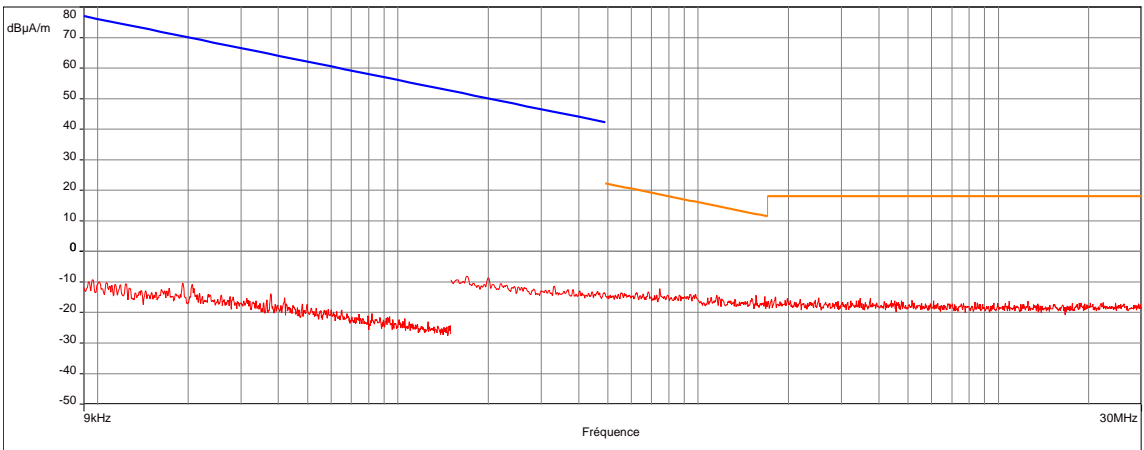
LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	See Graph(es)
Relative Humidity	20 to 75 %	See Graph(es)
Atmospheric pressure	N/A	See Graph(es)
Test method deviation: N/A		
Supplementary information: limit indicated on the curves is calculated with 40 dB/decade extrapolation factor and 51.5 dB conversion factor.		

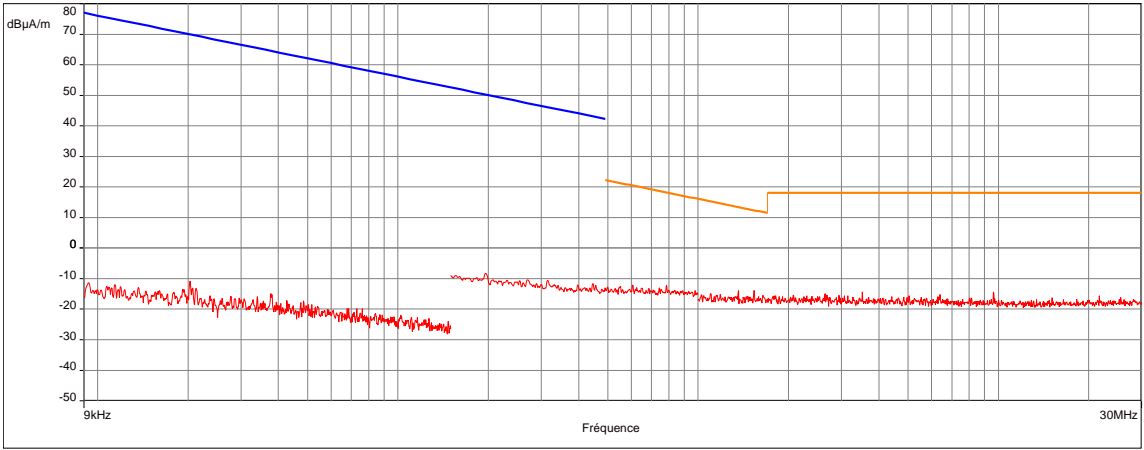
TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	Rohde & Schwarz	HFH2-Z2	5825	20/09/2017	20/11/2019
Cable	Huber Suhner	N-10m	8472	16/02/2017	16/04/2019
Cable	SUCOFLEX	N-3m	14378	18/01/2017	18/03/2019
Cable	SUCOFLEX	N-6,5m	14380	18/01/2017	18/03/2019
Receiver	Agilent Technologies	E4440A	5824	18/04/2018	18/06/2020
Shielded enclosure	COMTEST	SAC 3m	14494	14/02/2017	14/04/2020
Software	Nexio	BAT EMC v3.16.0.64	0000		
Thermohygrometer	Testo	608-H2	12268	27/11/2017	27/01/2020
Thermohygrometer	Bioblock Scientific	Météostar	0963	27/12/2016	27/02/2019
Turntable	Maturo	NCD	14657		

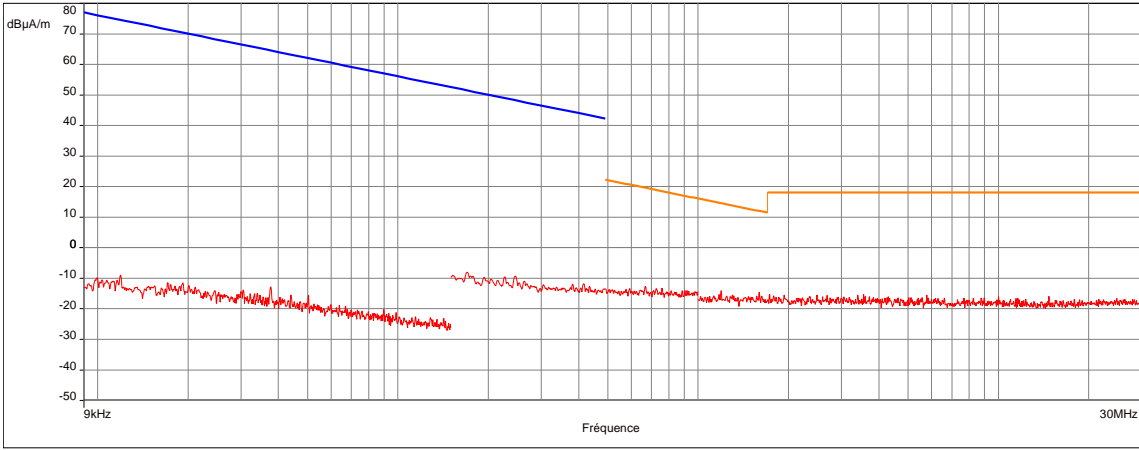
Blank cells = Permanent validity

TEST SETUP PHOTO(S) – RNE_TX / 0°



RADIATED SPURIOUS EMISSIONS <30MHz - GRAPH					
RNE_TX / 0°			EMI5797		
EUT mode:	The transmitter is modulated (OOK+GFSK) in continuous mode by an internal D-M3 data signal.			T (°C):	19.7
Test Date:	03/05/2018			H (%):	41.6
Test Operator:	MPA			P (hPa):	1009
<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	1kHz	3kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	Measurements maximized at 360 ° in peak maxhold mode.				
Comments:	N/A				
<i>EUT modification(s): N/A</i>					

RADIATED SPURIOUS EMISSIONS <30MHz - GRAPH					
RNE_TX / 45°			EMI5797		
EUT mode:	The transmitter is modulated (OOK+GFSK) in continuous mode by an internal D-M3 data signal.			T (°C):	19.7
Test Date:	03/05/2018			H (%):	41.6
Test Operator:	MPA			P (hPa):	1009
— FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes. Peak					
					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	1kHz	3kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	Measurements maximized at 360 ° in peak maxhold mode.				
Comments:	N/A				
<i>EUT modification(s): N/A</i>					

RADIATED SPURIOUS EMISSIONS <30MHz - GRAPH					
RNE_TX / 90°			EMI5797		
EUT mode:	The transmitter is modulated (OOK+GFSK) in continuous mode by an internal D-M3 data signal.			T (°C):	19.7
Test Date:	03/05/2018			H (%):	41.6
Test Operator:	MPA			P (hPa):	1009
— FCC/FCC Part 15 §209 - Classe:Tx - Moyenne/3.0m/ — FCC/FCC Part 15 §209 - Classe:Tx - QCrête/3.0m/ — Mes.Peak					
					
POSITION	FREQUENCIES	RBW	VBW	DETECTOR	
Circular	9kHz-150kHz	1kHz	3kHz	Peak	
Circular	150kHz-1MHz	10kHz	30kHz	Peak	
Circular	1MHz-30MHz	10kHz	30kHz	Peak	
Configuration:	Measurements maximized at 360 ° in peak maxhold mode.				
Comments:	N/A				
<i>EUT modification(s): N/A</i>					

All unwanted radiated spurious (<30MHz) are at least 20 dB below specified limits.

6.2. Radiated spurious emissions >30MHz

Reference standard:	CFR 47 FCC part 15 and RSS-Gen
Test method:	15.209
Test description: : Test is done in fully anechoic shielded chamber at 3m. E.U.T. is set on a styrofoam table. Measurements are done in max-hold peak detection in hopping mode maximized at 360°.	

TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
RNE / Tx mode / SLIM+ / OOK	30MHz-6GHz	Class Tx	EMI5797	PASS
RNE / Tx mode / SLIM+ / GFSK	30MHz-6GHz	Class Tx	EMI5797	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		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	ETS-Lindgren	3117	5456	16/03/2016	16/05/2019
Antenna	Electro Metrics	BIA-30HF	0824	25/04/2015	25/06/2018
Antenna	Rohde & Schwarz	HL223	3126	25/04/2015	25/06/2018
Cable	TechniWAVE	N-0.23m	14894	23/02/2018	23/04/2020
Cable	TechniWAVE	N-0.23m	14896	23/02/2018	23/04/2020
Cable	STORM MICROWAVE	N-0.2m	10265	05/10/2016	05/12/2018
Cable	Huber Suhner	N-10m	8472	16/02/2017	16/04/2019
Cable	SUCOFLEX	N-3m	14379	18/01/2017	18/03/2019
Cable	SUCOFLEX	N-6,5m	14380	18/01/2017	18/03/2019
Filter	Micro-Tronics	HPM 11630	4392	05/10/2016	05/12/2018
Preamplifier	IMPULSE	CA118-546ACN	9169	13/10/2017	13/12/2018
Receiver	Agilent Technologies	E4440A	5824	18/04/2018	18/06/2020
Shielded enclosure	COMTEST	SAC 3m	14494	14/02/2017	14/04/2020
Software	Nexio	BAT EMC v3.6.0.32	0000		
Antenna mast	Maturo	NCD	14656		
Turntable	Maturo	NCD	14657		
Thermohygrometer	Testo	608-H1	12269	27/12/2016	27/02/2019
Thermohygrometer	Bioblock Scientific	Météostar	0963	27/12/2016	27/02/2019

Blank cells = Permanent validity

TEST SETUP PHOTO(S) -



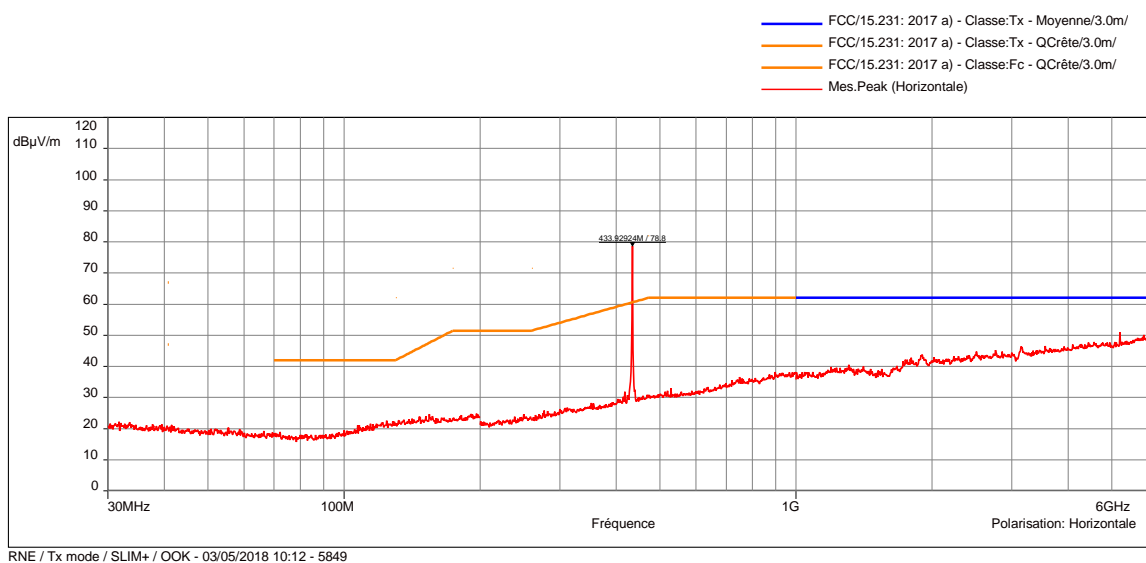
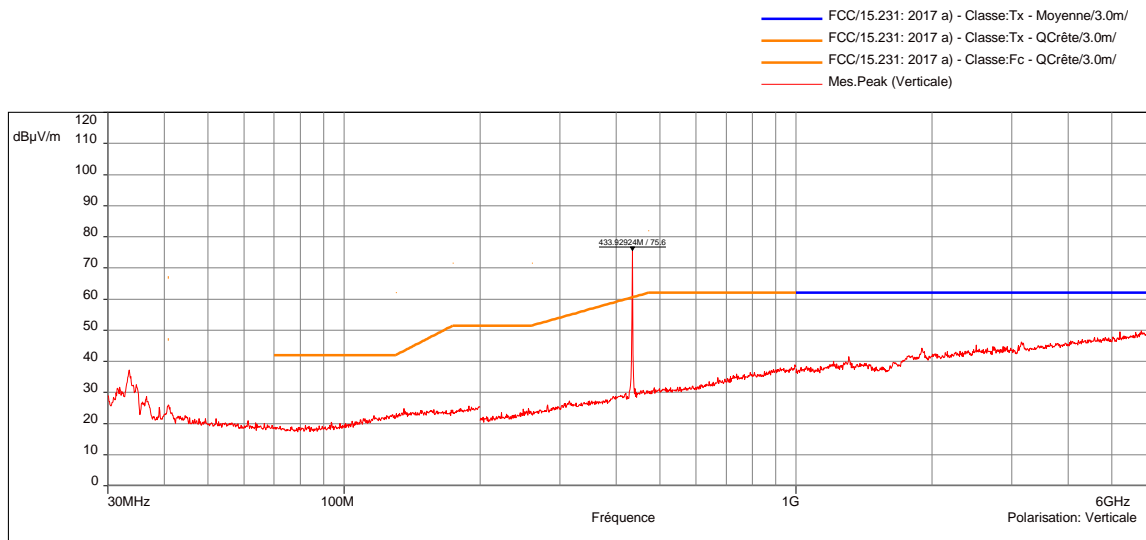
TEST SETUP PHOTO(S) -



TEST SETUP PHOTO(S) -



RADIATED SPURIOUS EMISSIONS <30MHz - GRAPH			
RNE / Tx MODE / SLIM+ / OOK			EMI5797
EUT mode:	The transmitter is modulated (OOK) in continuous mode.		T (°C): 19.7
Test Date:	03/05/2018		H (%): 41.6
Test Operator:	MPA		P (hPa): 1009

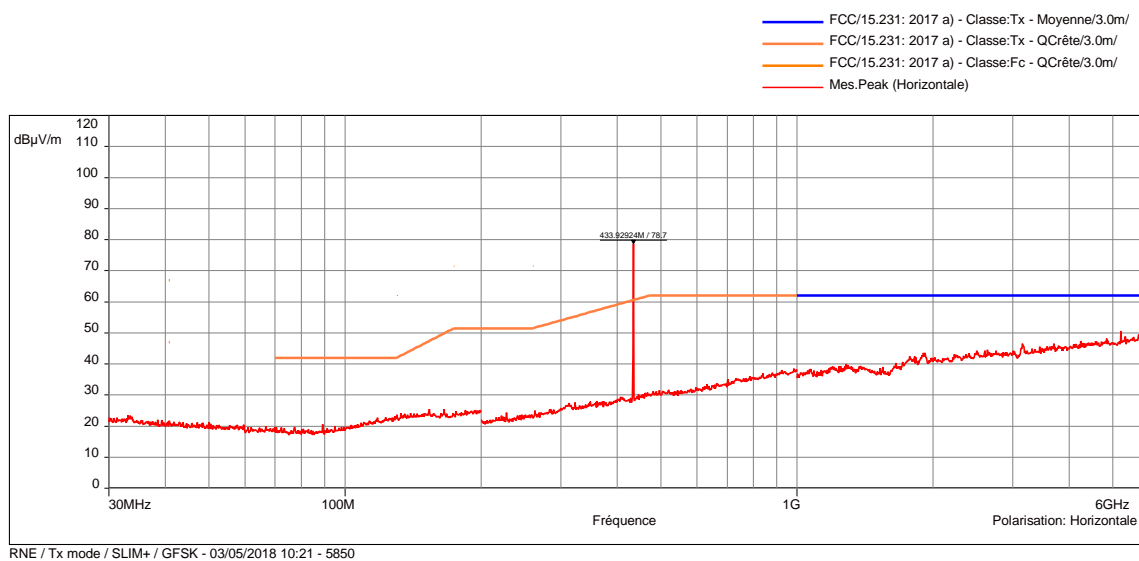
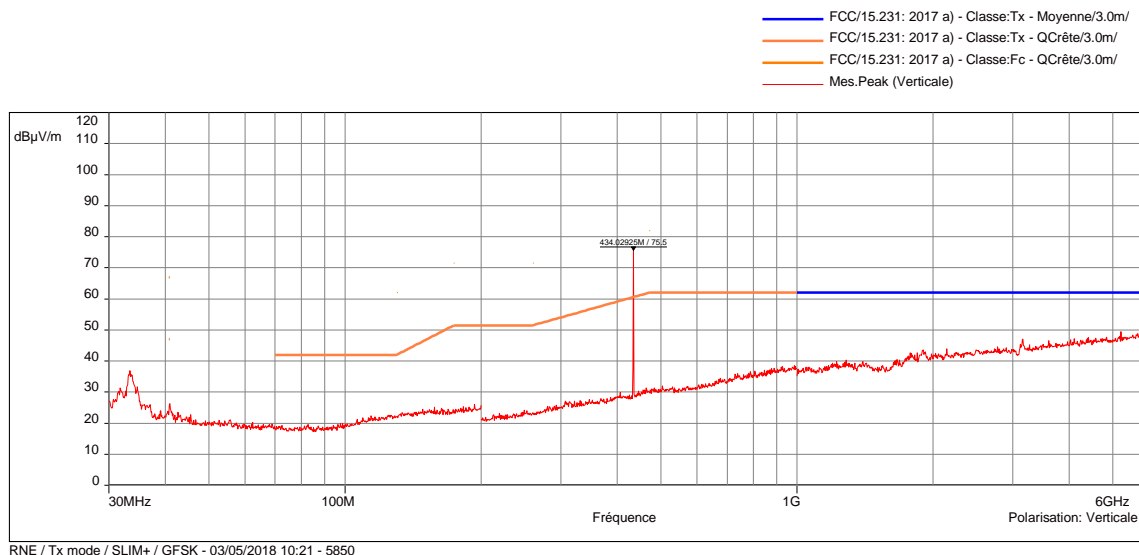


POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	30MHz-1GHz	100kHz	300kHz	Peak
Horizontal	30MHz-1GHz	100kHz	300kHz	Peak
Vertical	1GHz-6GHz	1MHz	3MHz	Peak
Horizontal	1GHz-6GHz	1MHz	3MHz	Peak

Configuration:	Measurements maximized at 360 ° in peak maxhold mode.
Comments:	N/A

EUT modification(s): N/A

RADIATED SPURIOUS EMISSIONS <30MHZ - GRAPH			
RNE / Tx MODE / SLIM+ / GFSK			EMI5797
EUT mode:	The transmitter is modulated (GFSK) in continuous mode.		T (°C): 19.7
Test Date:	03/05/2018		H (%): 41.6
Test Operator:	MPA		P (hPa): 1009



POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	30MHz-1GHz	100kHz	300kHz	Peak
Horizontal	30MHz-1GHz	100kHz	300kHz	Peak
Vertical	1GHz-6GHz	1MHz	3MHz	Peak
Horizontal	1GHz-6GHz	1MHz	3MHz	Peak
Configuration:	Measurements maximized at 360 ° in peak maxhold mode.			
Comments:	N/A			
<i>EUT modification(s): N/A</i>				

6.3. Radiated field strength of fundamental

Reference standard:	CFR 47 FCC part 15 and RSS-210
Test method:	15.231
Test description: : Test is done in fully anechoic shielded chamber at 3m. E.U.T. is set on a styrofoam table. Measurements are done in max-hold peak detection in hopping mode maximized at 360°.	

TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
Tx / Vertical	100kHz	(b)	EMI5797	PASS
Tx / Horizontal	100kHz	(b)	EMI5798	PASS
Deactivate time	N/A	(a)(1)	EMI5799	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		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	Rohde & Schwarz	HFH2-Z2	5825	20/09/2017	20/11/2019
Cable	Huber Suhner	N-10m	8472	16/02/2017	16/04/2019
Cable	SUCOFLEX	N-3m	14378	18/01/2017	18/03/2019
Cable	SUCOFLEX	N-6,5m	14380	18/01/2017	18/03/2019
Receiver	Agilent Technologies	E4440A	5824	18/04/2018	18/06/2020
Shielded enclosure	COMTEST	SAC 3m	14494	14/02/2017	14/04/2020
Software	Nexio	BAT EMC v3.16.0.64	0000		
Thermohygrometer	Testo	608-H2	12268	27/11/2017	27/01/2020
Thermohygrometer	Bioblock Scientific	Météostar	0963	27/12/2016	27/02/2019
Turntable	Maturo	NCD	14657		

Blank cells = Permanent validity

TEST SETUP PHOTO(S) -



RADIATED FIELD STRENGTH OF FUNDAMENTAL - GRAPH

RNE / Tx MODE / SLIM+ / OOK			EMI5797		
EUT mode:	The transmitter is modulated (OOK) in continuous mode.			T (°C):	19.7
Test Date:	03/05/2018			H (%):	41.6
Test Operator:	MPA			P (hPa):	1009
POSITION	FREQUENCIES	QUASI PEAK LEVEL	LIMIT		
Vertical	433.92 MHz	6,026 $\mu\text{V/m}$	10,997 $\mu\text{V/m}$		
Horizontal	433.92 MHz	8,710 $\mu\text{V/m}$	10,997 $\mu\text{V/m}$		
Configuration:	Measurements maximized at 360°				
Comments:	N/A				
<i>EUT modification(s): N/A</i>					

RADIATED FIELD STRENGTH OF FUNDAMENTAL - GRAPH

RNE / Tx MODE / SLIM+ / GFSK			EMI5797		
EUT mode:	The transmitter is modulated (GFSK) in continuous mode.			T (°C):	19.7
Test Date:	03/05/2018			H (%):	41.6
Test Operator:	MPA			P (hPa):	1009
POSITION	FREQUENCIES	QUASI PEAK LEVEL	LIMIT		
Vertical	433.92 MHz	5,957 $\mu\text{V/m}$	10,997 $\mu\text{V/m}$		
Horizontal	433.92 MHz	8,610 $\mu\text{V/m}$	10,997 $\mu\text{V/m}$		
Configuration:	Measurements maximized at 360°				
Comments:	N/A				
<i>EUT modification(s): N/A</i>					

6.4. Occupied Bandwith 99% & 20 dB Bandwith

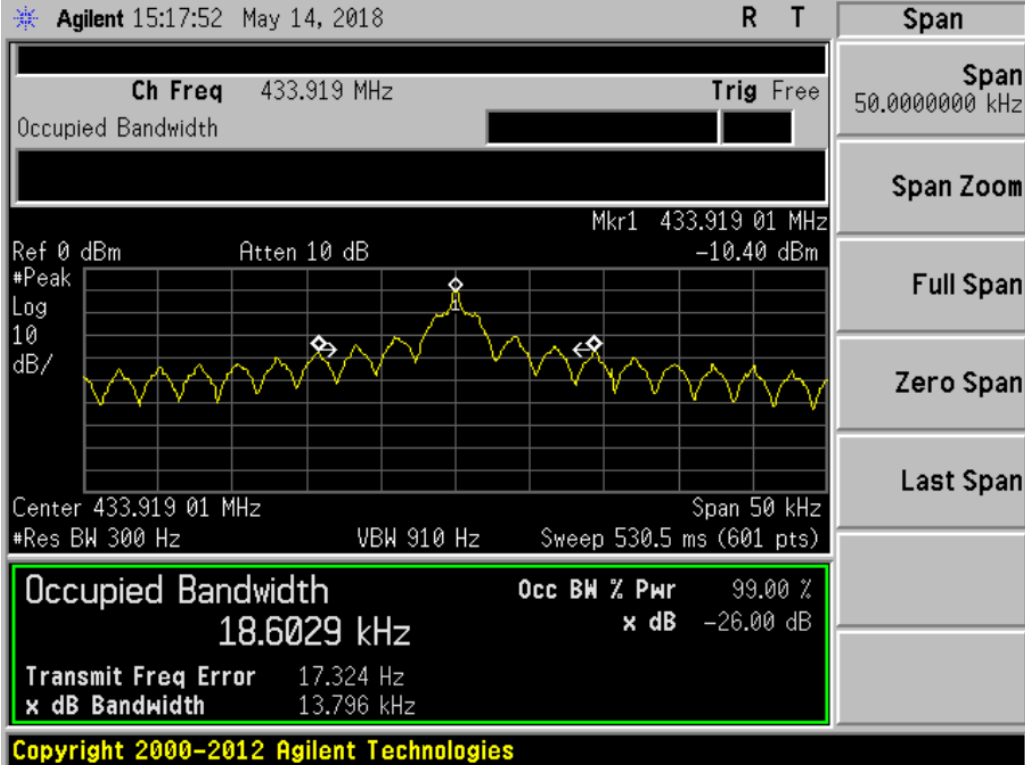
Reference standard:	RSS-Gen § 6.7
Test method:	RSS-Gen § 6.7
General test setup: A near field probe detects field near equipment (relative measurement). The 99 % OBW function is used .	

TESTED	FREQUENCY	SEVERITY	RESULT TAB.	VERDICT
OBW 99%	433.92 MHz	NA	EMI5756	PASS
-20 dB Bandwith	433.92 MHz	NA	EMI5797	PASS

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	20.1 °C
Relative Humidity	20 to 75 %	42.5%
Atmospheric pressure	N/A	1015 hPa
Test method deviation: N/A		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Attenuator	Radiall	R412720124	4391	01/02/2018	01/04/2020
Cable	MICRO-COAX	N-3m	10536	12/10/2017	12/12/2019
Cable	C&C	N-3m	14332	15/12/2016	15/02/2019
Cable	C&C	N-3m	14333	15/12/2016	15/02/2019
Climatic enclosure	Heraeus	UT6060	2116		
Multimeter	Agilent Technologies	U1252A	6138	24/01/2018	24/03/2020
Power supply	TTi	PL303QMD	8496		
Receiver	Agilent Technologies	E4440A	5824	18/04/2018	18/06/2020
Software	Nexio	BAT EMC v3.6.0.32	0000		
Thermohygrometer	Testo	608-H2	12268	27/11/2017	27/01/2020
Thermohygrometer	Bioblock Scientific	Météostar	0963	27/12/2016	27/02/2019

Blank cells = Permanent validity

OCCUPIED BANDWIDTH 99% - GRAPH			
OBW / SLIM+ / OOK			EMI5756
EUT mode:	D-M2 (OOK)		
Test Date:	14/05/2018		
Test Operator:	MPA		
			
<i>EUT modification(s): N/A</i>			

PERMITTED RANGE OF OPERATING FREQUENCIES - TABULATED RESULTS			
OBW / SLIM+ / OOK			EMI5756
Center Frequency	RBW	OCCUPIED BANDWIDTH 99%	N/A
433.919 MHz	300 Hz	18.6029 kHz	N/A

OCCUPIED BANDWIDTH 99% - GRAPH	
OBW / SLIM+ / GFSK	
EUT mode:	D-M2 (GFSK)
Test Date:	14/05/2018
Test Operator:	MPA

Agilent 10:22:37 May 14, 2018
R T

Ch Freq 433.92 MHz
Trig Free

Occupied Bandwidth

Ref -7 dBm
#Atten 10 dB

#Peak

Log

10

dB/

Center 433.920 00 MHz
Span 400 kHz

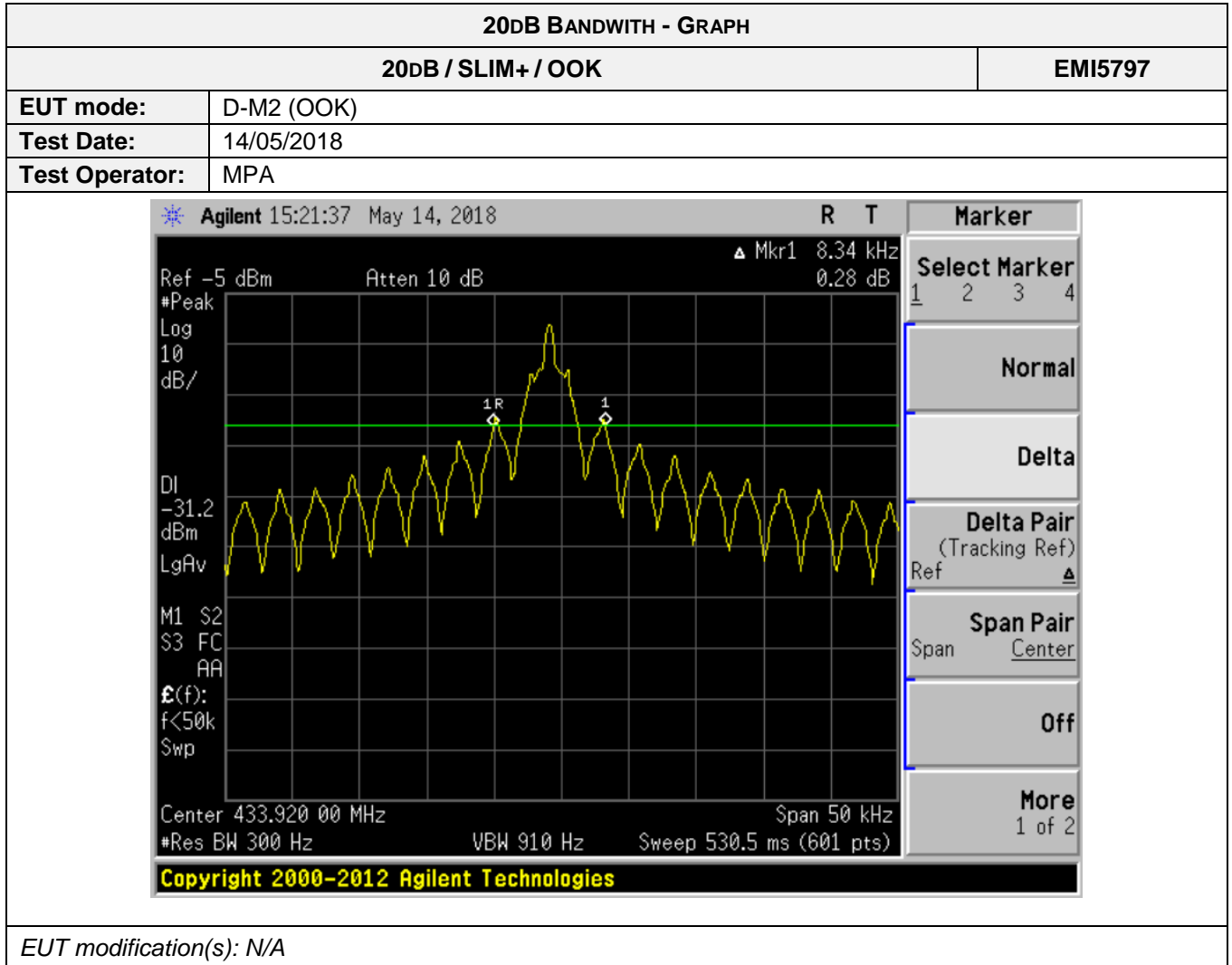
#Res BW 3 kHz
VBW 9.1 kHz
Sweep 42.59 ms (8192 pts)

Occupied Bandwidth	Occ BW % Pwr 99.00 %
95.5296 kHz	x dB -26.00 dB
Transmit Freq Error 157.516 Hz	
x dB Bandwidth 103.759 kHz	

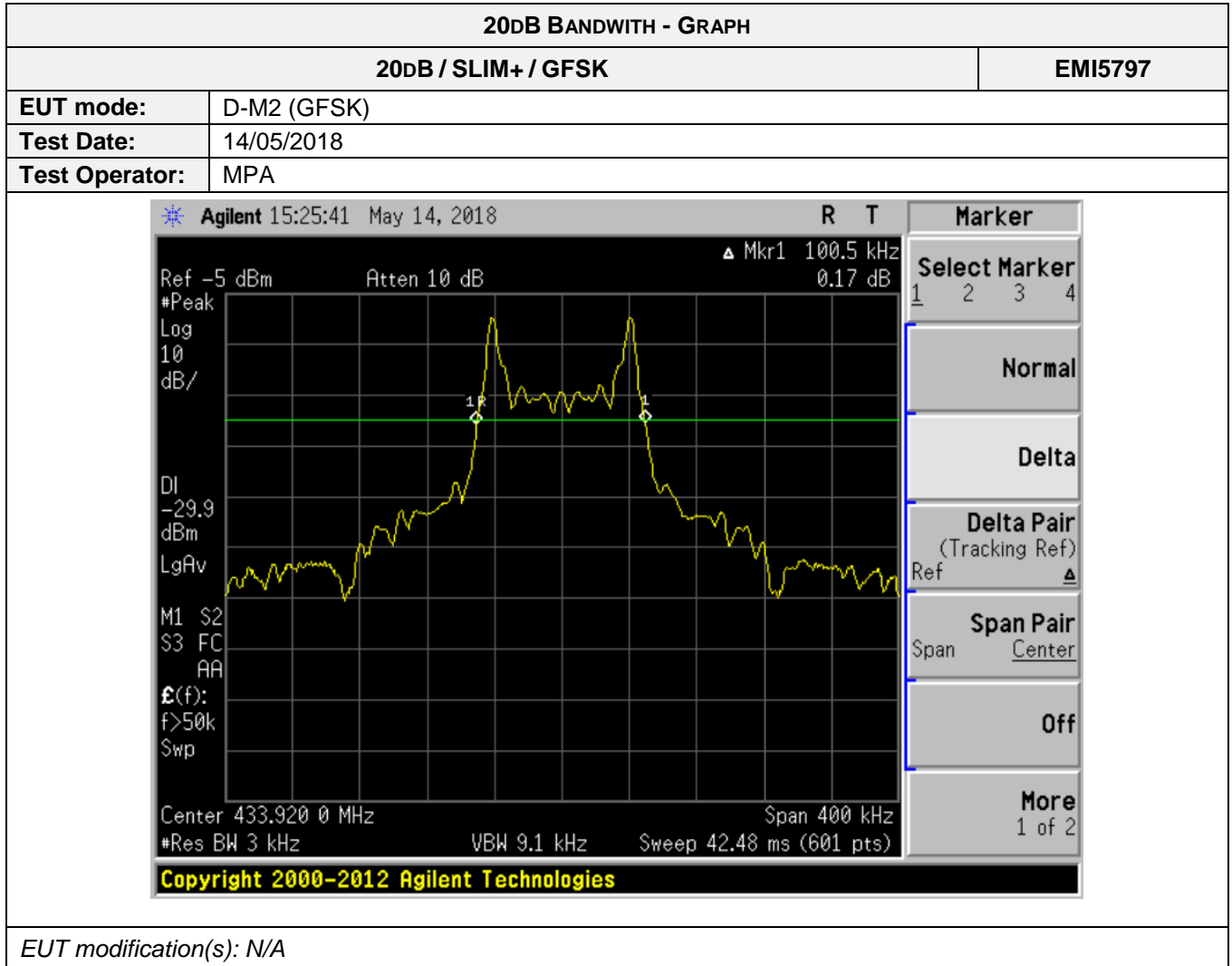
Copyright 2000-2012 Agilent Technologies

Trace
Trace 1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More 1 of 2

PERMITTED RANGE OF OPERATING FREQUENCIES - TABULATED RESULTS			
OBW / SLIM+ / GFSK			EMI5756
Center Frequency	RBW	OCCUPIED BANDWIDTH 99%	N/A
433.92 MHz	3 kHz	95.5296 kHz	N/A



PERMITTED RANGE OF OPERATING FREQUENCIES - TABULATED RESULTS			
20dB / SLIM+ / OOK			EMI5797
Center Frequency	RBW	20DB BANDWIDTH	N/A
433.92 MHz	300 Hz	8.34 kHz	N/A



PERMITTED RANGE OF OPERATING FREQUENCIES - TABULATED RESULTS			
20dB / SLIM+ / GFSK			EMI5797
Center Frequency	RBW	20DB BANDWIDTH	N/A
433.92 MHz	3 kHz	100.5 kHz	N/A

⦿⦿⦿ End of test report ⦿⦿⦿