

TEST REPORT

Test report no.: 1-4333/12-01-05-A



Deutsche
Akkreditierungsstelle
D-PL-12076-01-01

Testing laboratory

CETECOM ICT Services GmbH

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Accredited Testing Laboratory:

The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2005) by the Deutsche Akkreditierungsstelle GmbH (DAkkS)

The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number: D-PL-12076-01-01

Area of Testing: Radio/Satellite Communications

Applicant

Valeo Sécurité Habitacle

(Interior Electronics, Comfort & Driving Assistance Systems)

Phone: -/-

Fax: -/-

Contact: Jerome Hugot

e-mail: jerome.hugot@valeo.com

Phone: +33 1 48 84 57 14

Manufacturer

Valeo Interior Controls (Shenzhen) Co. Ltd

North Junyi Industrial Park, Huaide Village, Fuyong

Town, Baoan District

518128 Shenzhen, China (PRC)

Test standard/s

47 CFR Part 15

Title 47 of the Code of Federal Regulations; Chapter I

Part 15 - Radio frequency devices

RSS - 210 Issue 8

Spectrum Management and Telecommunications - Radio Standards Specification

Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands):

Category I Equipment

For further applied test standards please refer to section 3 of this test report.

Test Item

Kind of test item: Transmitter, Smart Key 3SW (M16)

Model name: A09TAA

FCC ID: 2AAS2-A09TAA

IC: 11313A-A09TAA

Frequency: 433.369 MHz & 434.471 MHz

Technology tested: Modulated carrier

Antenna: Integrated antenna

Power supply: 3.0 V DC by battery CR2032

Temperature range: -20°C to +60°C



This test report is electronically signed and valid without handwriting signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Test report authorised:



Stefan Bös
Senior Testing Manager

Test performed:



Marco Bertolino
Testing Manager

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2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item.

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In no case this test report can be considered as a Letter of Approval.

This test report is electronically signed and valid without handwritten signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

2.2 Application details

Date of receipt of order:	2012-03-06
Date of receipt of test item:	2013-07-03
Start of test:	2013-07-04
End of test:	2013-07-05
Person(s) present during the test:	-/-

3 Test standard/s

Test standard	Date	Test standard description
47 CFR Part 15	01.10.2010	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices
RSS - 210 Issue 8	01.12.2010	Spectrum Management and Telecommunications - Radio Standards Specification Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment

4 Test environment

Temperature:	T_{nom}	+22 °C during room temperature tests
	T_{max}	+60 °C during high temperature tests
	T_{min}	-20 °C during low temperature tests
Relative humidity content:		47 %
Barometric pressure:		not relevant for this kind of testing
Power supply:	V_{nom}	3.0 V DC by battery CR2032
	V_{max}	3.5 V
	V_{min}	2.3 V

5 Test item

Kind of test item	:	Transmitter, Smart Key 3SW (M16)
Type identification	:	A09TAA
S/N serial number	:	No information available!
HW hardware status	:	3.1
SW software status	:	1.1
Frequency band [MHz]	:	433.369 MHz & 434.471MHz
Type of radio transmission	:	Modulated carrier
Use of frequency spectrum	:	
Type of modulation	:	FSK – frequency shift keying
Number of channels	:	2
Antenna	:	Integrated antenna
Power supply	:	3.0 V DC by battery CR2032
Temperature range	:	-20°C to +60 °C

5.1 Additional information

Test setup - and EUT - photos are included in the following test reports:

External EUT photos: 1-4333/12-01-01_AnnexA
 Internal EUT photos: 1-4333/12-01-01_AnnexB
 Test setup: 1-4333/12-01-01_AnnexD

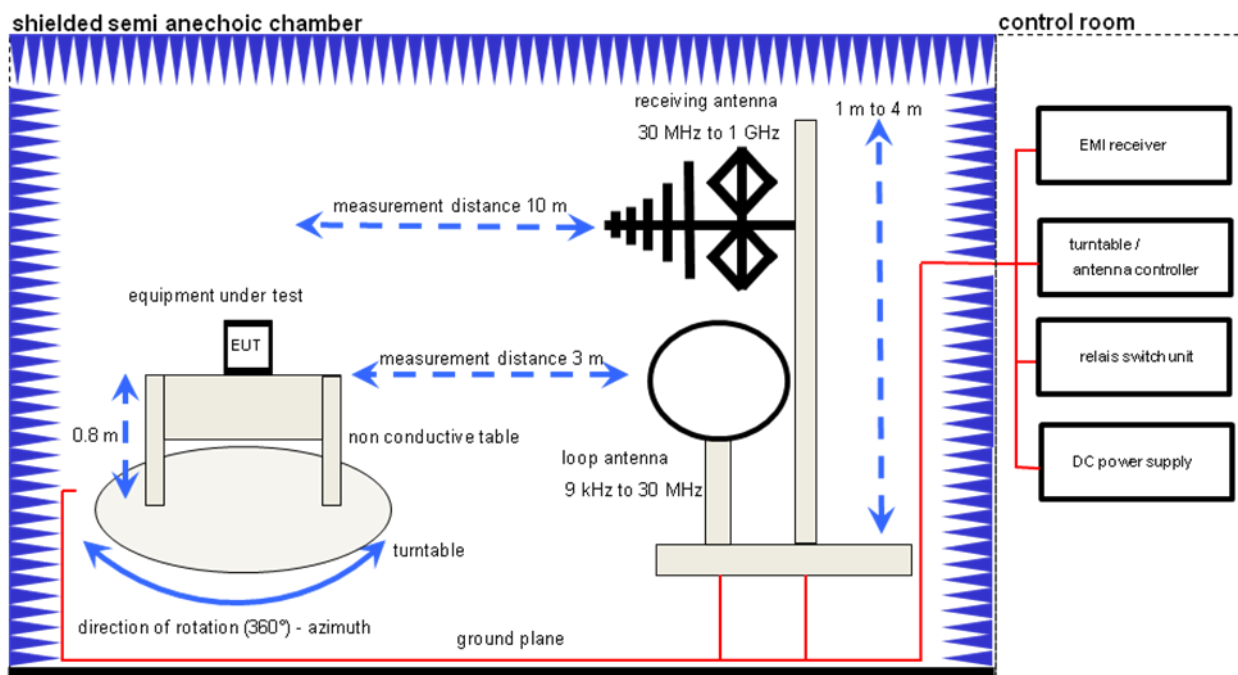
6 Test laboratories sub-contracted

None

7 Description of the test setup

7.1 Radiated measurements

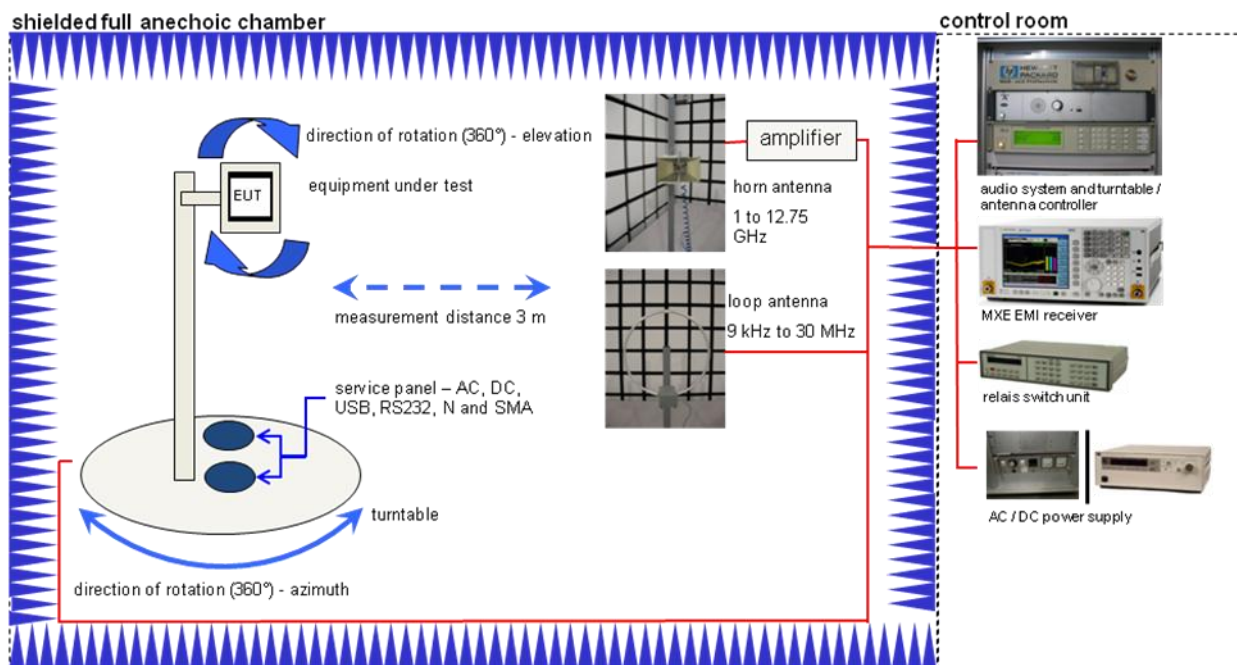
The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 1 GHz in semi-anechoic chambers. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber. The receiving antennas are confirmed with specifications ANSI C63. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test setups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received. The wanted and unwanted emissions are received by spectrum analysers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.



Equipment table:

Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom
Switch-Unit	3488A	HP Meßtechnik	2719A14505	300000368
DC power supply, 60Vdc, 50A, 1200 W	6032A	HP Meßtechnik	2920A04466	300000580
EMI Test Receiver	ESCI 3	R&S	100083	300003312
Amplifier	JS42-00502650-28-5A	MITEQ	1084532	300003379
Antenna Tower	Model 2175	ETS-LINDGREN	64762	300003745
Positioning Controller	Model 2090	ETS-LINDGREN	64672	300003746
Turntable Interface-Box	Model 105637	ETS-LINDGREN	44583	300003747
TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	295	300003787
Test Receiver	ESH2	R&S	871921/095	300002505
Loop Antenna 9 KHz - 30 MHz	HFH2-Z2	R&S	872096/61	300001824
EMI Test Receiver 9 kHz - 3 GHz incl. Preselector	ESPI3	R&S	101713	300004059

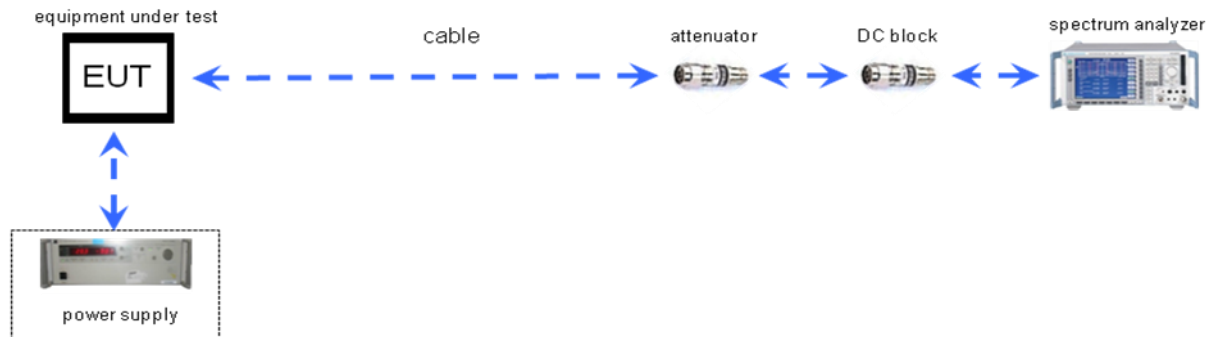
7.2 Radiated measurements chamber C



Equipment table:

Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom
MXE EMI Receiver 20 Hz bis 26,5 GHz	N9038A	Agilent Technologies	MY51210197	300004405
Double-Ridged Waveguide Horn Antenna 1-18.0GHz	3115	EMCO	8812-3088	300001032
Active Loop Antenna	6502	EMCO	8905-2342	300000256
Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996
Three-Way Power Splitter, 50 Ohm	11850C	HP Meßtechnik		300000997
Amplifier	js42-00502650-28-5a	Parzich GMBH	928979	300003143

7.3 Conducted measurements



Equipment table:

Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom
Signal Analyzer 40 GHz	FSV40	R&S	101042	300004517

8 Summary of measurement results



No deviations from the technical specifications were ascertained



There were deviations from the technical specifications ascertained

TC Identifier	Description	Verdict	Date	Remark
RF-Testing	CFR Part 15 RSS 210, Issue 8, Annex 8	Passed	2013-09-09	-/-

Test Specification Clause	Test Case	Temperature Conditions	Power Source Voltages	Pass	Fail	NA	NP	Remark
§ 15.35 (c)/ RSS-GEN	Timing of the transmitter (Duty cycle correction factor)	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.231 (a) (1)/ RSS-210 Issue 8	Switch off time	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.231 (3) (c)/ RSS-210 Issue 8	Emission Bandwidth	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.231 (b)/ RSS-210 Issue 8	Fieldstrength of Fundamental	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.209/ RSS-210 Issue 8	Fieldstrength of harmonics and spurious	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.209/ RSS-GEN	Receiver spurious emissions (radiated)	Nominal	Nominal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-/-

Note: NA = Not Applicable; NP = Not Performed

9 RF measurements

9.1 Additional comments

Reference documents: None

Special test descriptions: None

Configuration descriptions: None

9.2 RSP100 test report cover sheet / performance test data

Test Report Number	:	1-4333/12-01-05-A
Equipment Model Number	:	A09TAA
Certification Number	:	11313A-A09TAA
Manufacturer (complete Address)	:	Valeo Interior Controls (Shenzen) Co. Ltd North Junyi Industrial Park, Huaide Village, Fuyong Town, Baoan District 518128 Shenzhen, China (PRC)
Tested to radio standards specification no.	:	RSS 210, Issue 8
Open Area Test Site IC No.	:	IC 3462C-1
Frequency Range or fixed frequency	:	F1: 433.369 MHz F2: 434.471 MHz
Field Strength [dBμV/m] (at which distance)	:	78.0 @ 3 m
Occupied bandwidth (99%-BW) [kHz]	:	127 kHz
Type of modulation	:	FSK
Emission Designator (TRC-43)	:	127KF7D
Antenna Information	:	Integrated PCB antenna
Transmitter Spurious (worst case) [μV/m @ 3m]:	:	43.8 μV/m @ 868.9 MHz

ATTESTATION:

DECLARATION OF COMPLIANCE:

I attest that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned Industry Canada standard(s); and that the equipment identified in this application has been subjected to all the applicable test conditions specified in the Industry Canada standards and all of the requirements of the standard have been met.

Laboratory Manager:

2013-09-09

Marco Bertolino

Date

Name

Signature

10 Measurement results

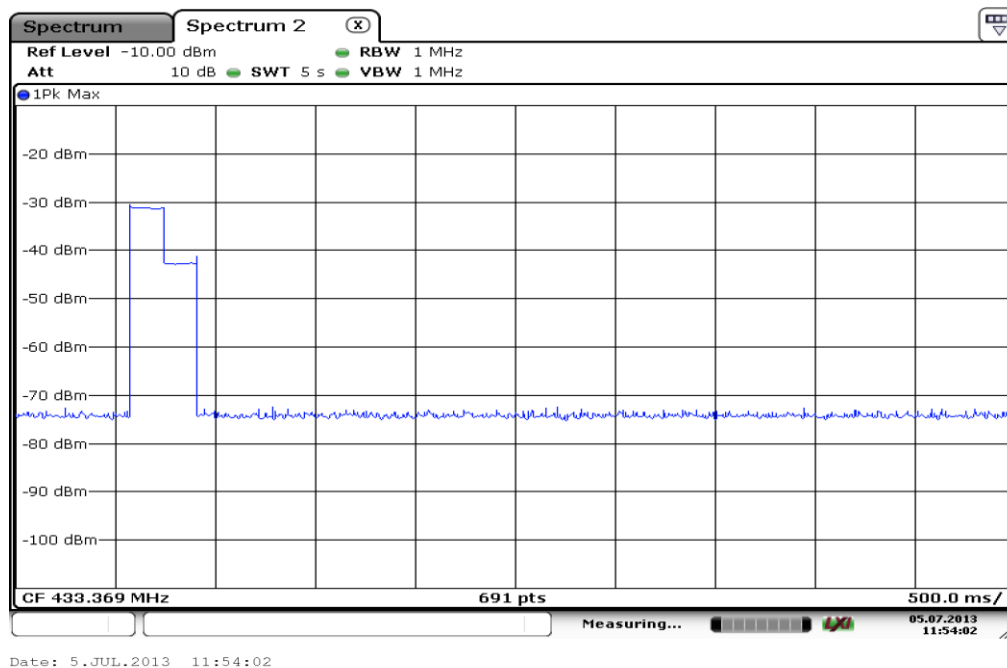
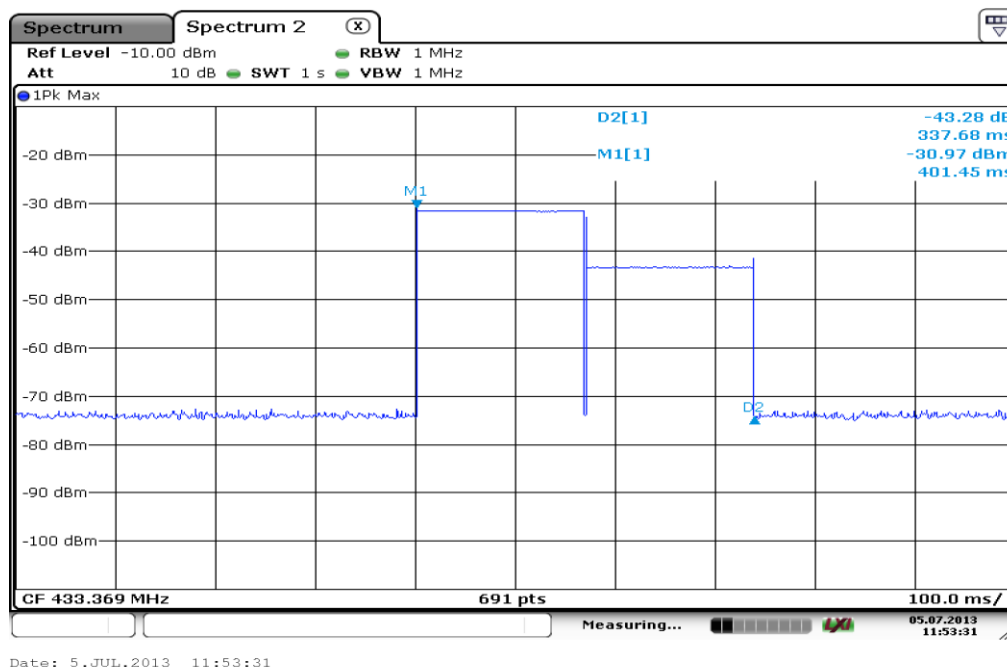
10.1 Timing of the transmitter

Measurement:

Measurement parameter	
Detector:	Peak
Sweep time:	1s / 5s
Resolution bandwidth:	1 MHz
Video bandwidth:	1 MHz
Span:	Zero span
Trace-Mode:	Max hold

Limits:

FCC	IC
Timing of the transmitter	
<p>(c) Unless otherwise specified, e.g. Section 15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.</p>	

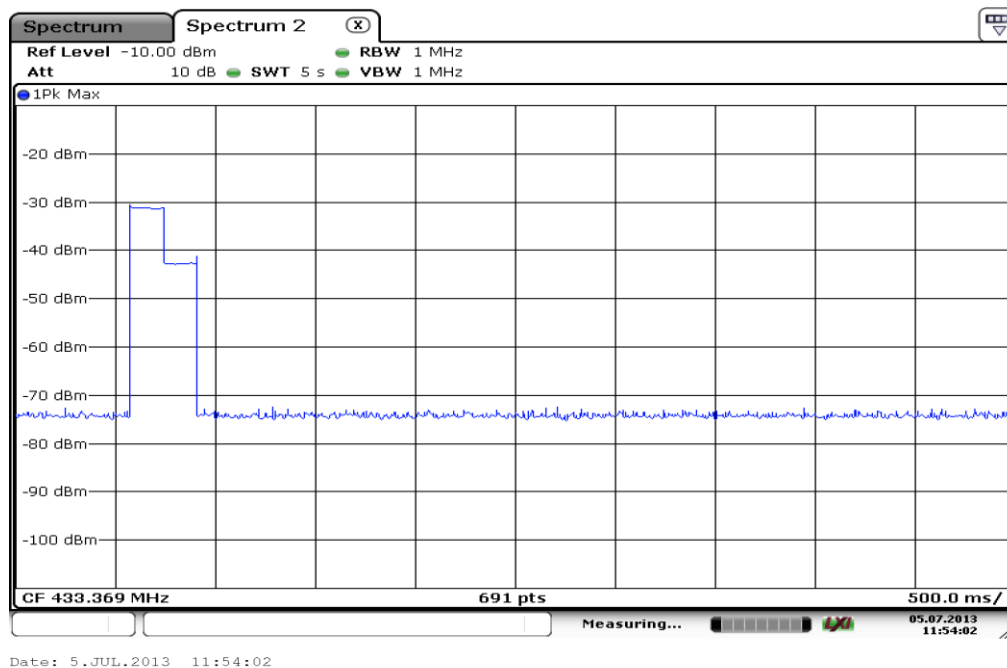
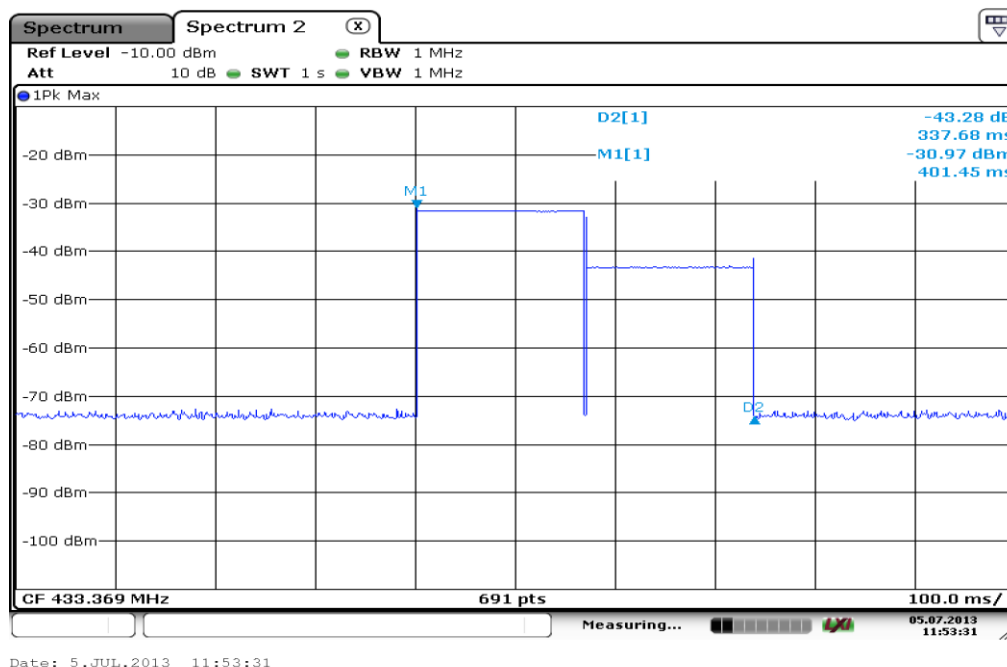
Result:**Plot 1: Transmit burst****Plot 2: Transmit burst****Result: Passed**

10.2 Switch off time**Measurement:**

Measurement parameter	
Detector:	Peak
Sweep time:	1s / 5s
Resolution bandwidth:	1 MHz
Video bandwidth:	1 MHz
Span:	Zero span
Trace-Mode:	Max hold

Limits:

FCC	IC
Switch off time	
A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.	

Results:**Plot 1: Transmit burst****Plot 2: Transmit burst**

The EUT automatically ceases transmission within not more than 337.68 ms after releasing the switch.

Result: **Passed**

10.3 Emission bandwidth

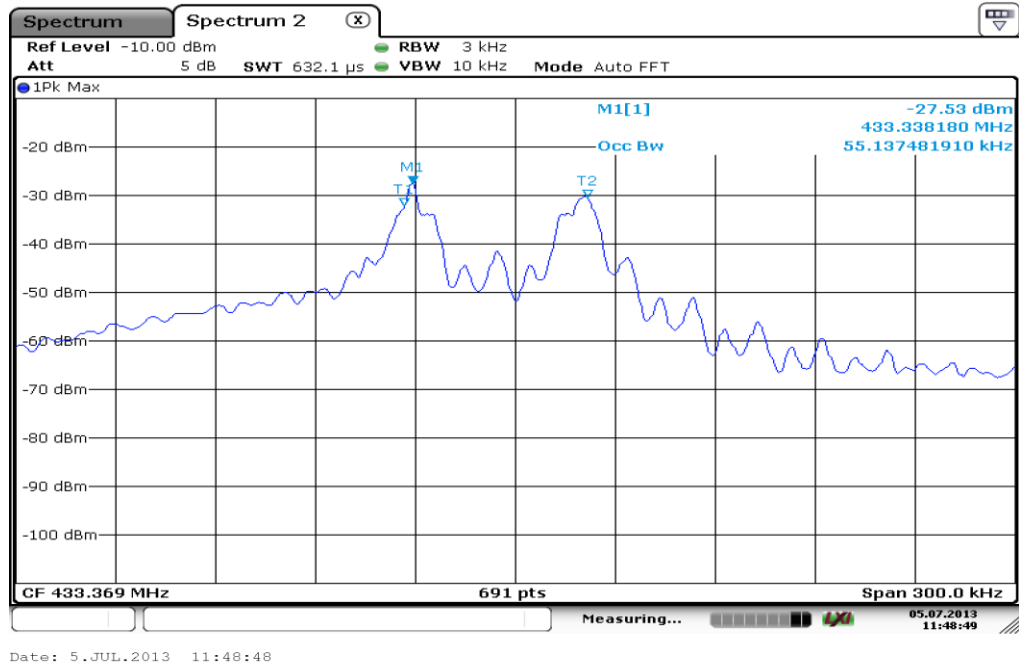
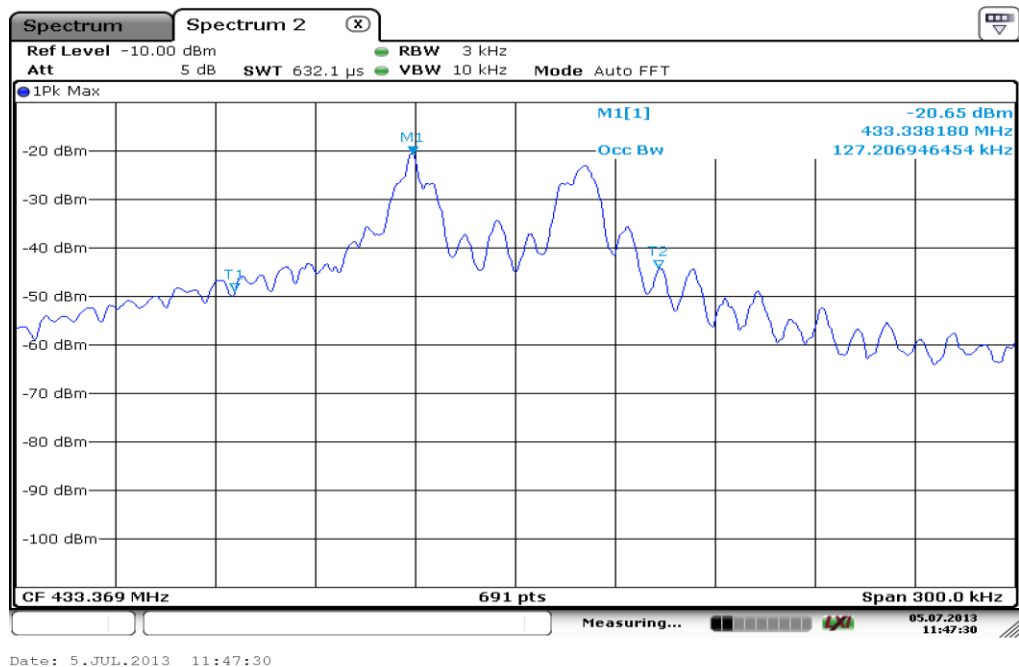
Measurement:

Measurement of the 20 dB bandwidth of the modulated signal

Measurement parameter	
Detector:	Peak
Sweep time:	Auto
Resolution bandwidth:	3 kHz
Video bandwidth:	10 kHz
Span:	300 kHz
Trace-Mode:	Max hold

Limits:

FCC	IC
Emission bandwidth	
The OBW shall not be wider than 0.25% of the centre frequency, here maximum 787.5 kHz.	

Result:**Plot 1:****Plot 2:**

The emission bandwidth at 20 dB is 127.2 kHz.

Result: Passed

10.4 Field strength of the fundamental

Measurement:

Measurement parameter	
Detector:	Peak
Sweep time:	Auto
Resolution bandwidth:	1 MHz
Video bandwidth:	1 MHz
Span:	5 MHz
Trace-Mode:	Max hold

Limits:

FCC		IC
Field strength of the fundamental.		
In addition to the provisions of Section 15.205, the field strength of emissions from intentional radiators operated under this Section shall not exceed the following:		
Fundamental Frequency (MHz)	Field strength of Fundamental ($\mu\text{V/m}$)	Measurement distance (m)
40.66 – 40.70	2,250	3
70-130	1,250	3
130-174	1,250 to 3,750	3
174-260	3,750	3
260-470	3,750 to 12,500	3
Above 470	12,500	3

Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

- for the band 130-174 MHz, $\mu\text{V/m}$ at 3 meters = $56.81818(F) - 6136.3636$;
- for the band 260-470 MHz, $\mu\text{V/m}$ at 3 meters = $41.6667(F) - 7083.3333$.

Results:

TEST CONDITIONS		Maximum Field Strength (dB $\mu\text{V/m}$ at 3 m distance)	
Frequency		433.369 MHz	434.471 MHz
Mode		Peak	Peak
T _{nom}	V _{nom}	68.0 @ 10 m	67.7 @ 10 m
T _{nom}	V _{nom}	78.0 @ 3 m	77.7 @ 3 m
Measurement uncertainty		$\pm 3\text{dB}$	

*Value recalculated from Peak-to-Average correction factor described in 6.1

Result: Passed

10.5 Field strength of the harmonics and spurious

Measurement:

Measurement parameter	
Detector:	Peak / Average / Quasi Peak
Sweep time:	Auto
Resolution bandwidth:	120 kHz / 1 MHz
Video bandwidth:	> RBW
Span:	See plots!
Trace-Mode:	Max hold

Limits:

FCC		IC
Field strength of the fundamental.		
In addition to the provisions of Section 15.205, the field strength of emissions from intentional radiators operated under this Section shall not exceed the following:		
Fundamental Frequency (MHz)	Field strength of spurious (μV/m)	Measurement distance (m)
40.66 – 40.70	225	3
70-130	125	3
130-174	125 to 375	3
174-260	375	3
260-470	375 to 1,250	3
Above 470	1,250	3

The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in Section 15.209, whichever limit permits a higher field strength.

FCC		IC
Field strength of the harmonics and spurious.		
Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30 – 88	100	3
88 – 216	150	3
216 – 960	200	3
above 960	500	3

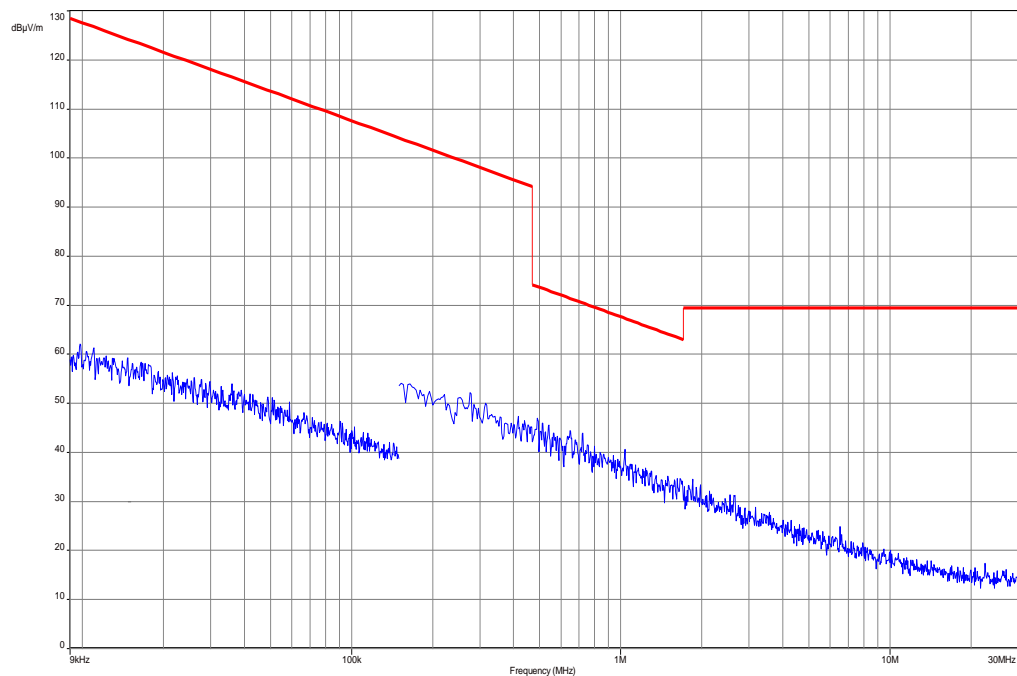
Results:

EMISSION LIMITATIONS				
f [MHz]	Detector	Limit max. allowed [dB μ V/m]	Amplitude of emission [dB μ V/m]	Results
For emissions below 1 GHz, please take a look at the table below the 1 GHz plot.				
Above 1 GHz no emissions detected closer than 20 dB below the limit				

Result: Passed

Plots:

Plot 1: 9 kHz – 30 MHz; magnetic emissions @ 3 m distance, low channel



Plot 2: 30 MHz – 1000 MHz; spurious @ 10 m distance, low channel

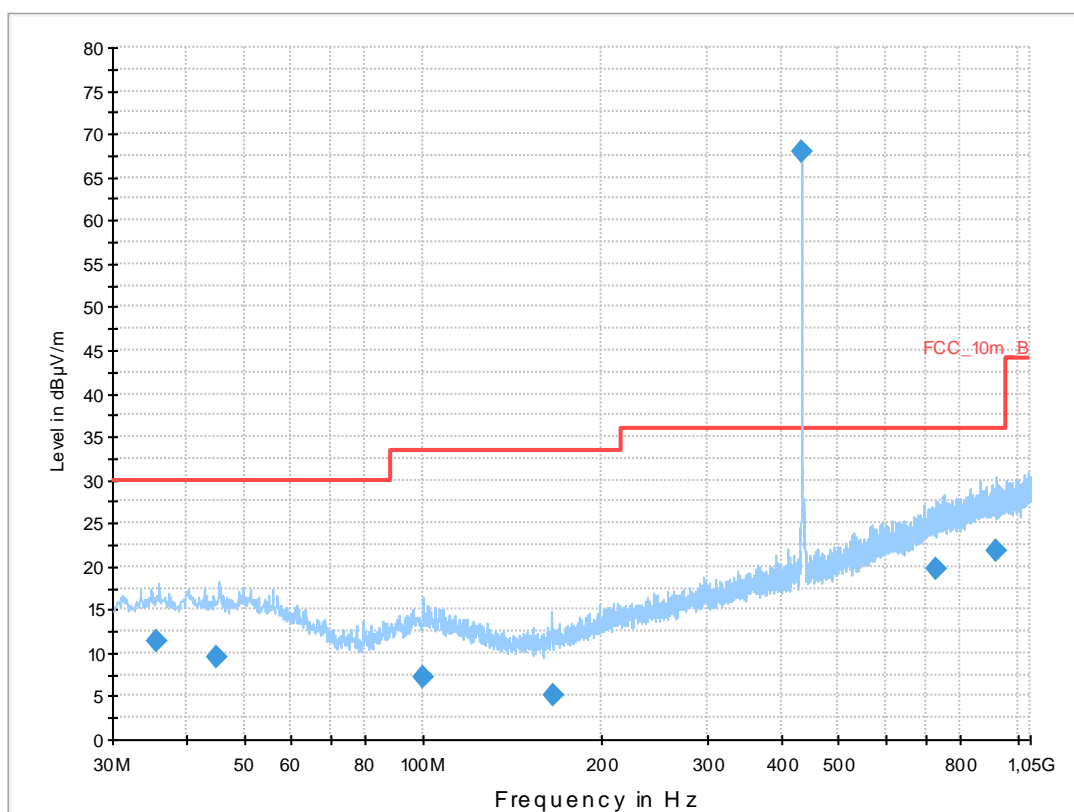
Common Information

EUT: A09TAA
 Serial Number: - / -
 Test Description: FCC part 15 B class B @ 10 m
 Operating Conditions: TX 433.369 MHz
 Operator Name: Hennemann
 Comment: CR 2032 3V button cell

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dB μ V/m

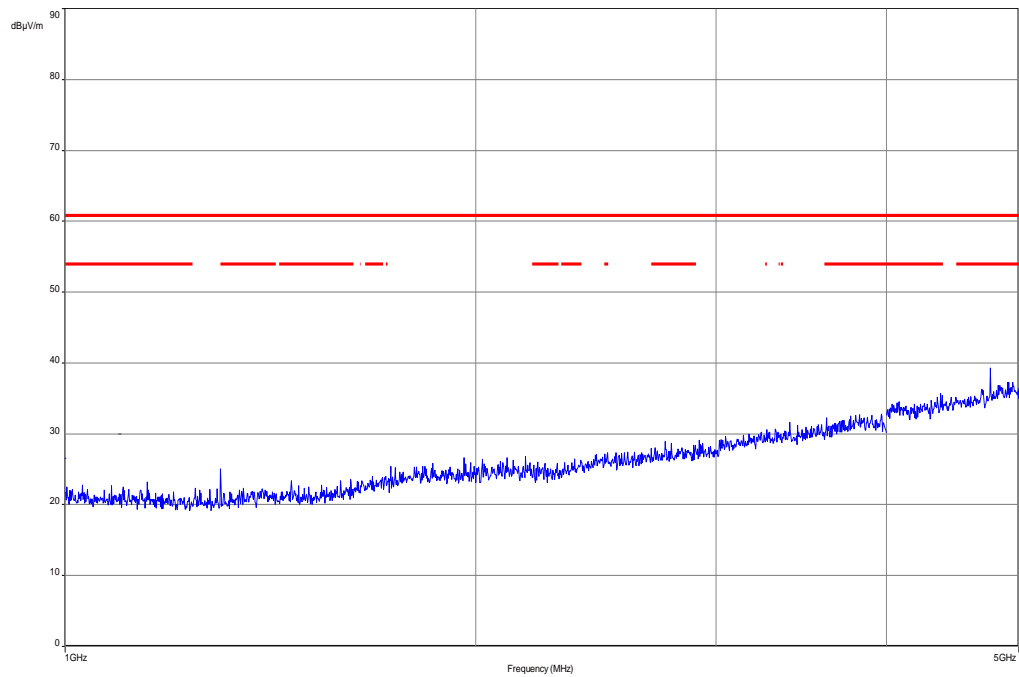
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



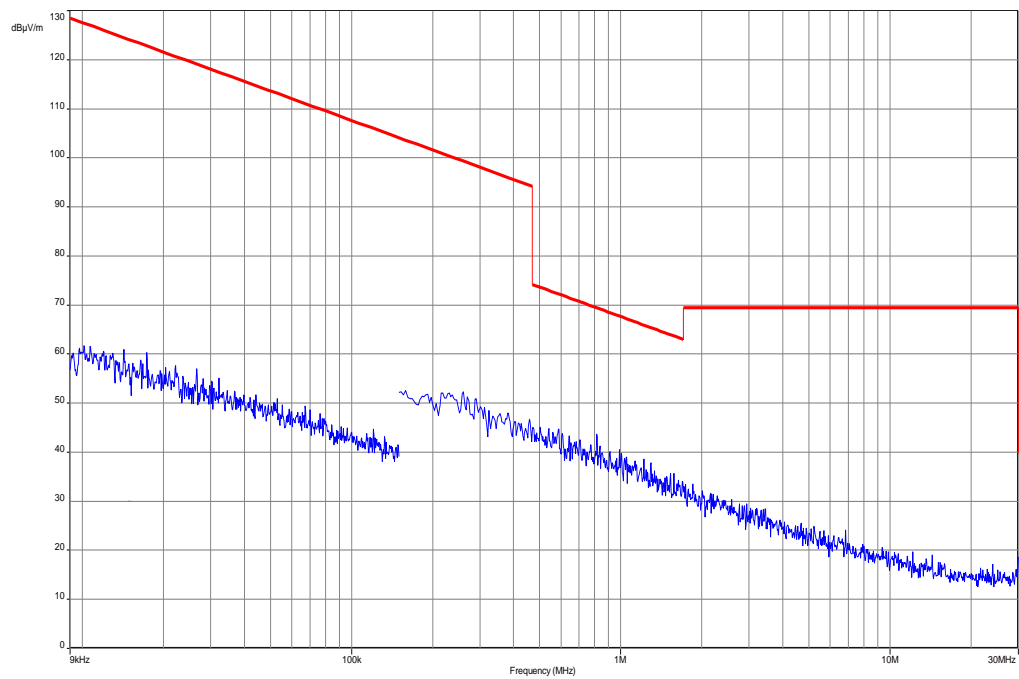
Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)	Comment
35.504850	11.3	1000.0	120.000	200.0	V	157.0	13.1	18.7	30.0	
45.087000	9.5	1000.0	120.000	338.0	H	256.0	13.3	20.5	30.0	
99.907200	7.2	1000.0	120.000	302.0	H	62.0	11.9	26.3	33.5	
164.916150	5.1	1000.0	120.000	400.0	V	331.0	9.5	28.4	33.5	
433.343550	68.0	1000.0	120.000	100.0	V	323.0	17.4	-32.0	36.0	PK 68.03
728.863950	19.8	1000.0	120.000	400.0	H	87.0	23.2	16.2	36.0	
920.358450	21.7	1000.0	120.000	188.0	H	158.0	25.3	14.3	36.0	

Plot 3: 1000 MHz – 5000 MHz; spurious @ 3 m distance, low channel



Plot 4: 9 kHz – 30 MHz; magnetic emissions @ 3 m distance, high channel



Plot 5: 30 MHz – 1000 MHz; spurious @ 10 m distance, high channel

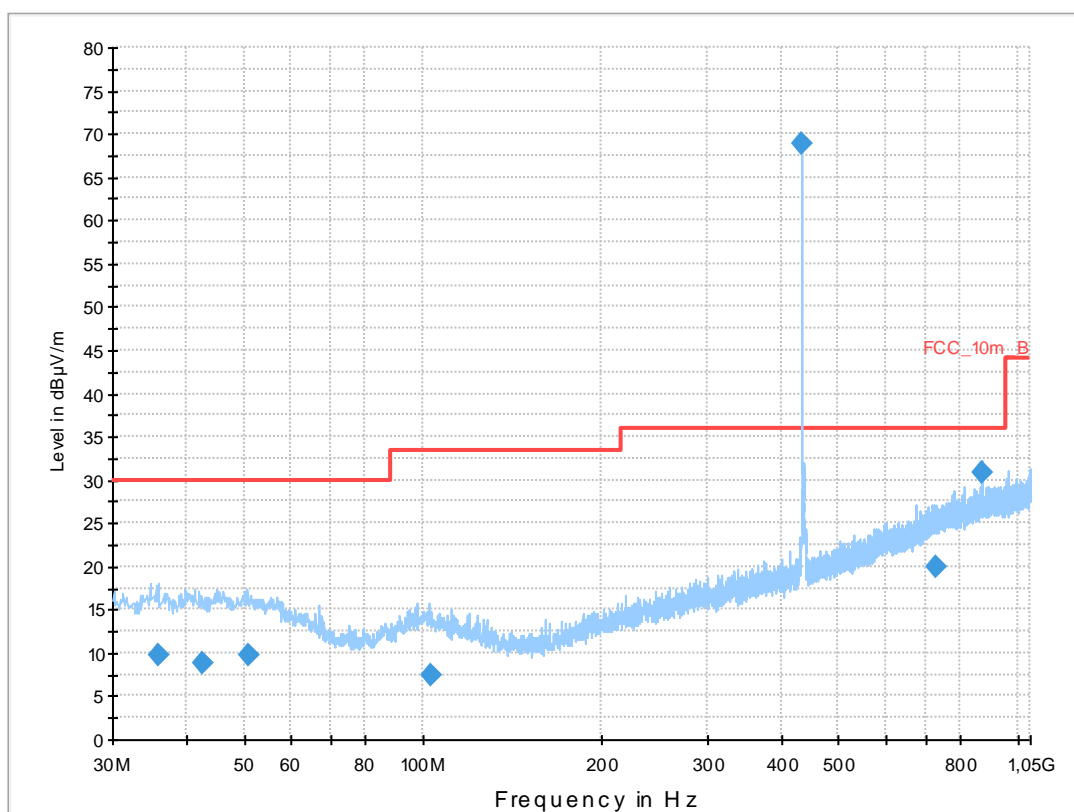
Common Information

EUT: A09TAA
 Serial Number: - / -
 Test Description: FCC part 15 B class B @ 10 m
 Operating Conditions: TX 434,471 MHz
 Operator Name: Hennemann
 Comment: CR 2032 3V button cell

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dB μ V/m

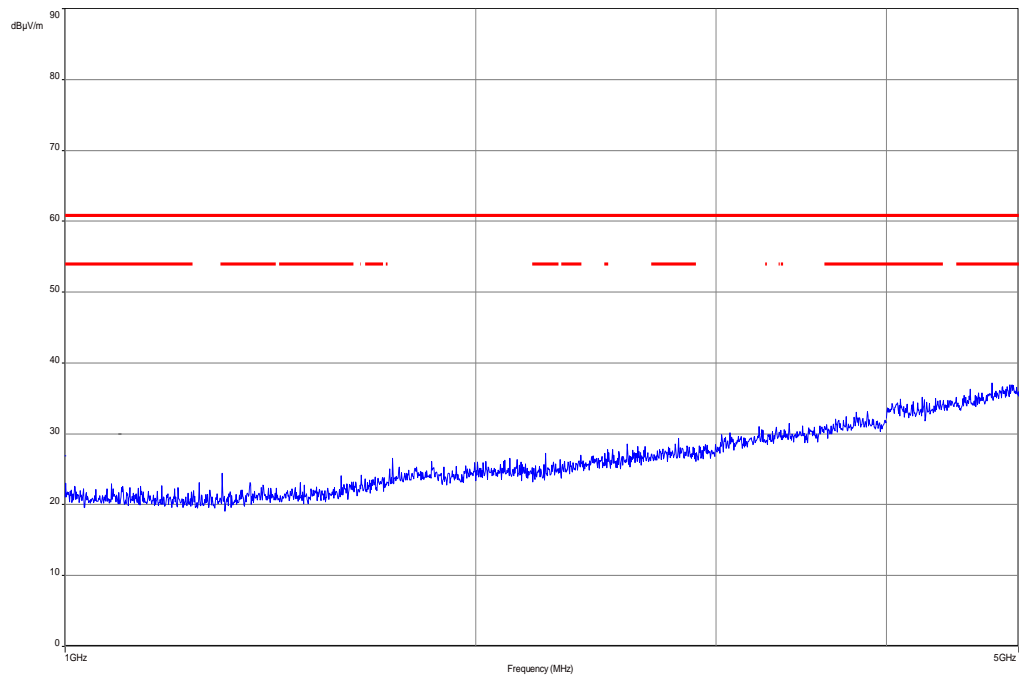
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)	Comment
35.764650	9.7	1000.0	120.000	200.0	H	48.0	13.1	20.3	30.0	
42.388650	8.7	1000.0	120.000	400.0	H	121.0	13.4	21.3	30.0	
50.808150	9.7	1000.0	120.000	200.0	H	50.0	13.3	20.3	30.0	
102.806400	7.3	1000.0	120.000	200.0	H	41.0	11.6	26.2	33.5	
434.441850	68.8	1000.0	120.000	100.0	V	320.0	17.4	-32.8	36.0	PK 67.67
731.514900	19.9	1000.0	120.000	206.0	H	341.0	23.2	16.1	36.0	
868.891800	30.9	1000.0	120.000	300.0	H	300.0	24.8	5.1	36.0	PK 33.79

Plot 6: 1000 MHz – 5000 MHz; spurious @ 3 m distance, high channel



10.6 Receiver spurious emission (radiated)

Not performed – no receiver integrated!

11 Test equipment and ancillaries used for tests

Typically, the calibrations of the test apparatus are commissioned to and performed by an accredited calibration laboratory. The calibration intervals are determined in accordance with the DIN EN ISO/IEC 17025. In addition to the external calibrations, the laboratory executes comparison measurements with other calibrated test systems or effective verifications. Weekly chamber inspections and range calibrations are performed. Where possible, rf-generating and signalling equipment as well as measuring receivers and analyzers are connected to an external high-precision 10 MHz reference (GPS-based or rubidium frequency standard).

In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Labor/Item).

No.	Lab / Item	Equipment	Type	Manufact.	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	n. a.	Double-Ridged Waveguide Horn Antenna 1-18.0GHz	3115	EMCO	8812-3088	300001032	vIKI!	08.05.2013	08.05.2015
2	n. a.	Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996	ev		
3	n. a.	Amplifier	js42-00502650-28-5a	Parzich GMBH	928979	300003143	ne		
4	n. a.	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	371	300003854	vIKI!	14.10.2011	14.10.2014
5	n. a.	MXE EMI Receiver 20 Hz bis 26,5 GHz	N9038A	Agilent Technologies	MY51210197	300004405	k	21.02.2013	21.02.2014
6	45	Switch-Unit	3488A	HP Meßtechnik	2719A14505	300000368	g		
7	50	DC power supply, 60Vdc, 50A, 1200 W	6032A	HP Meßtechnik	2920A04466	300000580	ne		
8	n. a.	software	SPS_PHE 1.4f	Spitzberger & Spieß	B5981; 5D1081; B5979	300000210	ne		
9	n. a.	EMI Test Receiver	ESCI 3	R&S	100083	300003312	k	09.01.2013	09.01.2014
10	n. a.	Amplifier	JS42-00502650-28-5A	MITEQ	1084532	300003379	ev		
11	n. a.	Antenna Tower	Model 2175	ETS-LINDGREN	64762	300003745	izw		
12	n. a.	Positioning Controller	Model 2090	ETS-LINDGREN	64672	300003746	izw		
13	n. a.	Turntable Interface-Box	Model 105637	ETS-LINDGREN	44583	300003747	izw		
14	n. a.	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	295	300003787	k	12.04.2012	12.04.2014
15	n. a.	Spectrum-Analyzer	FSU26	R&S	200809	300003874	k	16.01.2013	16.01.2014
16	n. a.	Signal Analyzer 40 GHz	FSV40	R&S	101042	300004517	k	22.10.2012	22.10.2013

Agenda: Kind of Calibration

k calibration / calibrated
 ne not required (k, ev, izw, zw not required)
 ev periodic self verification
 Ve long-term stability recognized
 vIKI! Attention: extended calibration interval
 NK! Attention: not calibrated

EK limited calibration
 zw cyclical maintenance (external cyclical maintenance)
 izw internal cyclical maintenance
 g blocked for accredited testing
 *) next calibration ordered / currently in progress

12 Observations

No observations exceeding those reported with the single test cases have been made.

Annex A Document history

Version	Applied changes	Date of release
1.0	Initial release	2013-09-09
A	New customer information, HW & SW	2013-09-09

Annex B Further information**Glossary**

AVG	-	Average
DUT	-	Device under test
EMC	-	Electromagnetic Compatibility
EN	-	European Standard
EUT	-	Equipment under test
ETSI	-	European Telecommunications Standard Institute
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
N/A	-	Not applicable
PP	-	Positive peak
QP	-	Quasi peak
S/N	-	Serial number
SW	-	Software

Annex C Accreditation Certificate

Front side of certificate



Deutsche Akkreditierungsstelle GmbH

Befähigung gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV
Unterzeichnerin der Multilateralen Abkommen
von EA, ILAC und IAF zur gegenseitigen Anerkennung

Akkreditierung



Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium

CETECOM ICT Services GmbH
Untertürkheimer Straße 6-10, 66117 Saarbrücken

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

Drahtgebundene Kommunikation einschließlich xDSL
VoIP und DECT
Akustik
Funk einschließlich WLAN
Short Range Devices (SRD)
RFID
WiMax und Richtfunk
Mobilfunk (GSM / DCS, Over the Air (OTA) Performance)
Elektromagnetische Verträglichkeit (EMV) einschließlich Automotive
Produktsicherheit
SAR und Hearing Aid Compatibility (HAC)
Umweltsimulation
Smart Card Terminals
Bluetooth
Wi-Fi Services

Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 18.01.2013 mit der Akkreditierungsnummer D-PL-12076-01 und ist gültig 17.01.2018. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 80 Seiten.

Registrierungsnummer der Urkunde: D-PL-12076-01-01

Frankfurt am Main, 18.01.2013
Seite 1 von 1 auf der Rückseite

Im Auftrag
Ulrich Pöhl, Abteilungsleiter

Back side of certificate

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Die auszugsweise Veröffentlichung der Akkreditierungsurkunde bedarf der vorherigen schriftlichen Zustimmung der Deutsche Akkreditierungsstelle GmbH (DAKKS). Ausgenommen davon ist die separate Weiterverbreitung des Deckblatts durch die umseitig genannte Konformitätsbewertungsstelle in unveränderter Form.

Es darf nicht der Anschein erweckt werden, dass sich die Akkreditierung auch auf Bereiche erstreckt, die über den durch die DAKKS bestätigten Akkreditierungsbereich hinausgehen.

Die Akkreditierung erfolgte gemäß des Gesetzes über die Akkreditierungsstelle (AkkStelleG) vom 31. Juli 2009 (BGBl. I S. 2625) sowie der Verordnung (EG) Nr. 765/2008 des Europäischen Parlaments und des Rates vom 9. Juli 2008 über die Vorschriften für die Akkreditierung und Marktüberwachung im Zusammenhang mit der Vermarktung von Produkten (Abt. L 218 vom 9. Juli 2008, S. 30). Die DAKKS ist Unterzeichnerin der Multilateralen Abkommen zur gegenseitigen Anerkennung der European co-operation for Accreditation (EA), des International Accreditation Forum (IAF) und der International Laboratory Accreditation Cooperation (ILAC). Die Unterzeichner dieser Abkommen erkennen ihre Akkreditierungen gegenseitig an.

Der aktuelle Stand der Mitgliedschaft kann folgenden Webseiten entnommen werden:

EA: www.european-accreditation.org
ILAC: www.ilac.org
IAF: www.iaf.nu

Note:

The current certificate including annex is published on our website (see link below) or may be received from CETECOM ICT Services on request.

<http://www.cetecom.com/eu/de/cetecom-group/europa/deutschland-saarbruecken/akkreditierungen.html>