**CETECOM™****CETECOM ICT Services**
consulting - testing - certification >>>

TEST REPORT

Test report no.: 1-8847/14-01-04-A

Deutsche
Akkreditierungsstelle
D-PL-12076-01-00

Testing laboratory

CETECOM ICT Services GmbH

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Internet: <http://www.cetecom.com>e-mail: ict@cetecom.com**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-12076-01-00

Applicant

Valeo Comfort and Driving Assistance

Europarc - 76 rue Auguste Perret

F-94046 CRETEIL / FRANCE

Phone: -/-

Fax: -/-

Contact: Jerome Hugot

e-mail: jerome.hugot@valeo.com

Phone: +33 1 48 84 57 14

Manufacturer

Valeo Comfort and Driving Assistance

Europarc - 76 rue Auguste Perret

F-94046 CRETEIL / FRANCE

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 - Licence-exempt Radio Apparatus (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**Model name:** ID2A-A1 / ID2A-A2**FCC ID:** N5F-ID2A**IC:** 3248A-ID2A**Frequency:** 433.180 MHz, 434.648 MHz**Technology tested:** proprietary**Antenna:** Integrated antenna**Power supply:** 3.3 V DC by battery**Temperature range:** -10°C to +55°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:

Marco Bertolino
Radio Communications & EMC

Test performed:

Christoph Schneider
Radio Communications & EMC

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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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This test report replaces the test report with the number 1-8847/14-01-04 and dated 2015-02-09

2.2 Application details

Date of receipt of order:	2014-10-28
Date of receipt of test item:	2014-10-28
Start of test:	2014-11-03
End of test:	2014-11-05
Person(s) present during the test:	-/-

3 Test standard/s

Test standard	Date	Test standard description
47 CFR Part 15	-/-	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 - Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment

4 Test environment

Temperature:	T_{nom}	+22 °C during room temperature tests
	T_{max}	+55 °C during high temperature tests
	T_{min}	-10 °C during low temperature tests
Relative humidity content:		47 %
Barometric pressure:		not relevant for this kind of testing
Power supply:	V_{nom}	3.3 V DC by battery
	V_{max}	3.5 V
	V_{min}	2.8 V

5 Test item

Kind of test item	:	Transmitter, Smart Key
Type identification	:	ID2A-A1 / ID2A-A2
S/N serial number	:	-/-
HW hardware status	:	B011005
SW software status	:	8.04
Frequency band	:	433.180 MHz, 434.648 MHz
Type of radio transmission	:	single carrier
Use of frequency spectrum	:	
Type of modulation	:	FSK
Number of channels	:	1
Antenna	:	Integrated antenna
Power supply	:	3.3 V DC by battery
Temperature range	:	-10°C to +55 °C

5.1 Additional information

The content of the following annexes is defined in the QA. It may be that not all of the listed annexes are necessary for this report, thus some values in between may be missing.

Test setup- and EUT-photos are included in test report:

- 1-8847/14-01-01_AnnexA
- 1-8847/14-01-01_AnnexB
- 1-8847/14-01-01_AnnexD

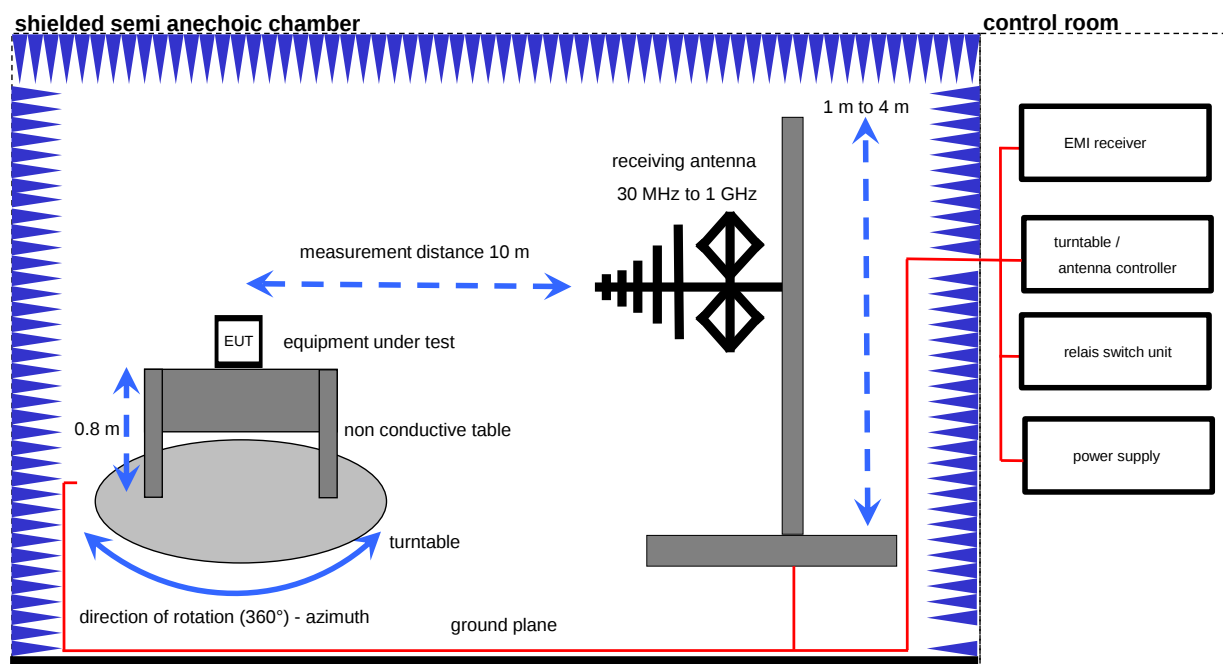
6 Test laboratories sub-contracted

None

7 Description of the test setup

7.1 Radiated measurements chamber F

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.

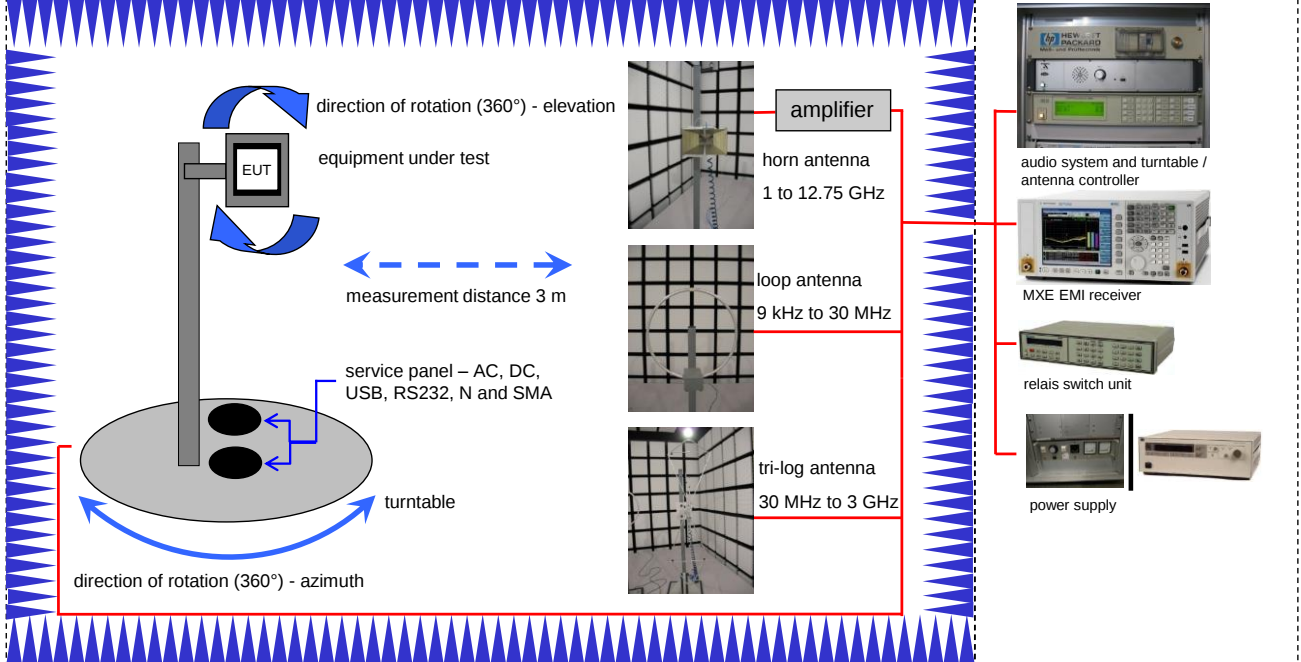


Equipment table:

Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom
Software	EMC32 V. 9.12.05	R&S	-/-	-/-
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

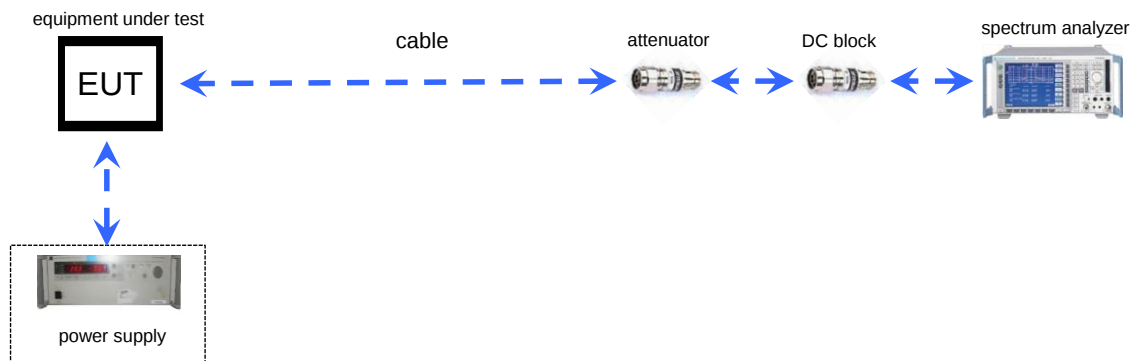
7.2 Radiated measurements chamber C

shielded full anechoic chamber


Equipment table:

Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom
MXE EMI Receiver 20 Hz bis 26,5 GHz	N9038A	Agilent Technologies	MY51210197	300004405
TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	371	300003854
Band Reject filter	WRCG2400/2483-2375/2505-50/10SS	Wainwright	11	300003351
Highpass Filter	WHKX7.0/18G-8SS	Wainwright	18	300003789
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
Switch / Control Unit	3488A	HP Meßtechnik	*	300000199
Switch / Control Unit	3488A	HP Meßtechnik	2719A15013	300001156
Isolating Transformer	MPL IEC625 Bus Regeltrenntravo	ErFi	91350	300001155
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	2015-03-09	-/-

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	☒	☐	☐	☐	-/-
§ 15.231 (a) (1)/ RSS-210 Issue 8	Switch off time	Nominal	Nominal	☒	☐	☐	☐	-/-
§ 15.231 (3) (c)/ RSS-210 Issue 8	Emission Bandwidth	Nominal	Nominal	☒	☐	☐	☐	-/-
§ 15.231 (b)/ RSS-210 Issue 8	Fieldstrength of Fundamental	Nominal	Nominal	☒	☐	☐	☐	-/-
§ 15.209/ RSS-210 Issue 8	Fieldstrength of harmonics and spurious	Nominal	Nominal	☒	☐	☐	☐	-/-
§ 15.109/ RSS-GEN	Receiver spurious emissions (radiated)	Nominal	Nominal	☒	☐	☐	☐	-/-

Note: NA = Not Applicable; NP = Not Performed

9 RF measurement testing

9.1 Additional comments

Reference documents: None

Special test descriptions: None

Configuration descriptions: None

10 Measurement results

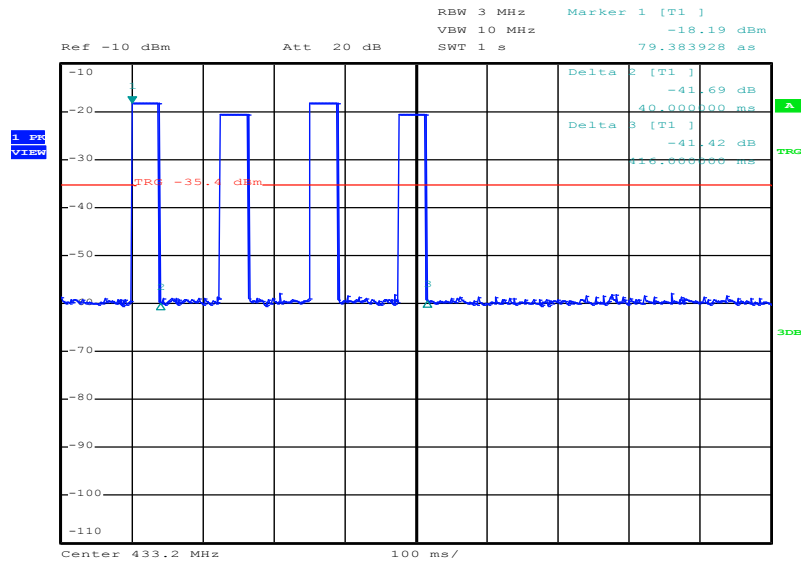
10.1 Timing of the transmitter

Measurement:

Measurement parameter	
Detector:	peak
Sweep time:	1 s
Resolution bandwidth:	3 MHz
Video bandwidth:	10 MHz
Span:	Zero span
Trace-Mode:	Max hold

Limits:

FCC	IC
Timing of the transmitter	
(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.	

Result:**Plot 1: Pulse train of normal operation**

Date: 6.NOV.2014 13:23:32

Duty cycle = 40 %

Result: passed

10.2 Switch off time**Measurement:**

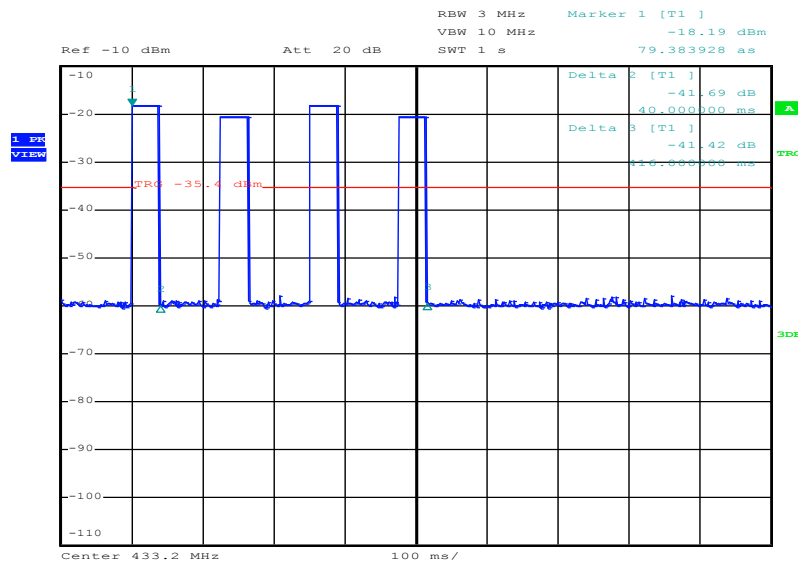
Measurement parameter	
Detector:	peak
Sweep time:	1 s
Resolution bandwidth:	3 MHz
Video bandwidth:	10 MHz
Span:	Zero span
Trace-Mode:	Max hold

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:



Date: 6.NOV.2014 13:23:32

The EUT automatically ceases transmission within not more than 416 ms after releasing the switch.

Result: passed

10.3 Emission bandwidth

Measurement:

Measurement of the 20 dB bandwidth of the modulated signal and the 99% bandwidth of the signal.

Measurement parameter	
Detector:	peak
Sweep time:	auto
Resolution bandwidth:	2 kHz
Video bandwidth:	10 kHz
Span:	200 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.	

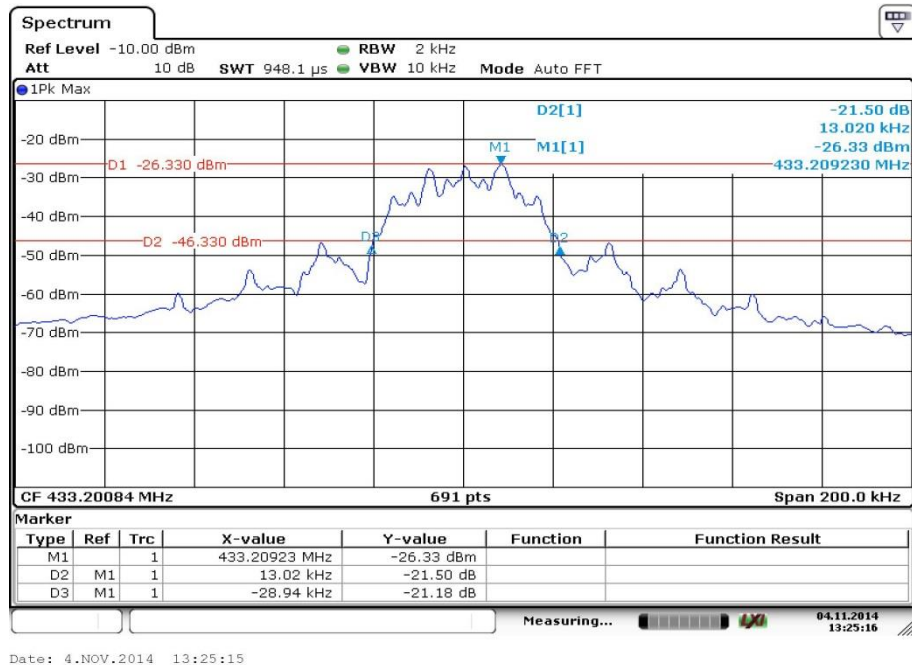
Result:

Emission bandwidth [kHz]		
Frequency	433.20 MHz	434.64 MHz
20 dB bandwidth	41.96	65.17
99 % bandwidth	47.18	48.34
Measurement uncertainty: $\pm$ RBW		

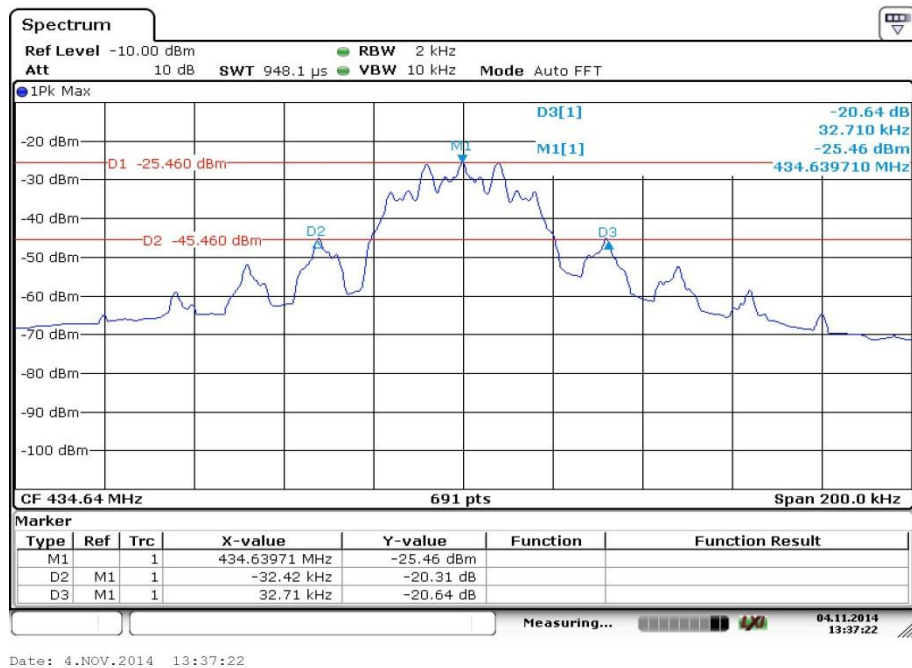
Result: **passed**

Plots:

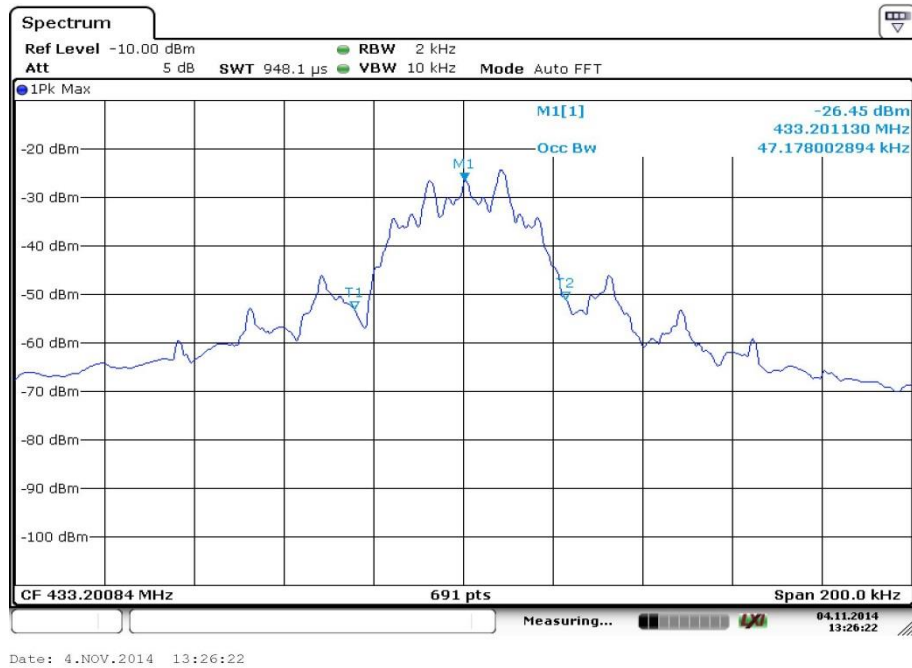
Plot 1: 20 dB bandwidth, 433.2 MHz



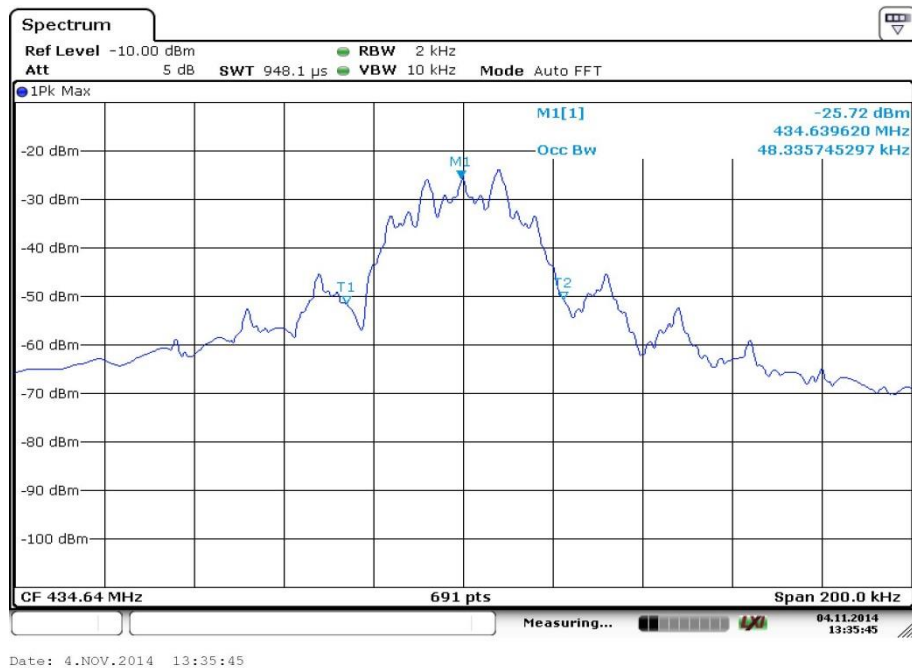
Plot 2: 20 dB bandwidth, 434.64 MHz



Plot 3: 99% bandwidth, 433.2 MHz



Plot 4: 99% bandwidth, 434.64 MHz



10.4 Field strength of the fundamental

Measurement:

Measurement parameter	
Detector:	CISPR quasi-peak
Sweep time:	Auto
Video bandwidth:	120 kHz
Resolution bandwidth:	100 kHz
Span:	1 MHz
Trace-Mode:	Max hold

Limits:

FCC		
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 (μV/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 = $41.6667(F) - 7083.3333$.

Result:

TEST CONDITIONS		MAXIMUM POWER (dBμV/m at 3 m distance)			
Frequency		433.180 MHz	433.180 MHz	434.648 MHz	434.648 MHz
Mode		Peak	Average	Peak	Average
T _{nom}	V _{nom}	80.68	76.63	80.93	79.75
Measurement uncertainty		±3dB			

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 ($\mu\text{V/m}$)	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
SUBCLAUSE § 15.209		
Field strength of the harmonics and spurious.		
Frequency (MHz)	Field strength ($\mu\text{V/m}$)	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:

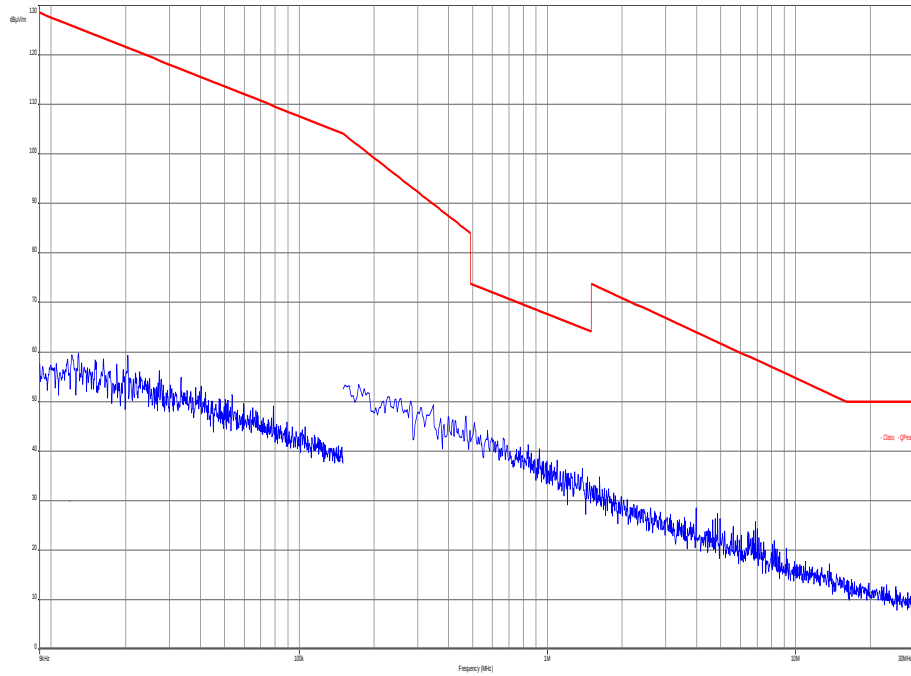
EMISSION LIMITATIONS				
f [MHz]	Detector	Limit max. allowed [dB μ V/m]	Amplitude of emission [dB μ V/m]	Results
See plots!				

Result: passed

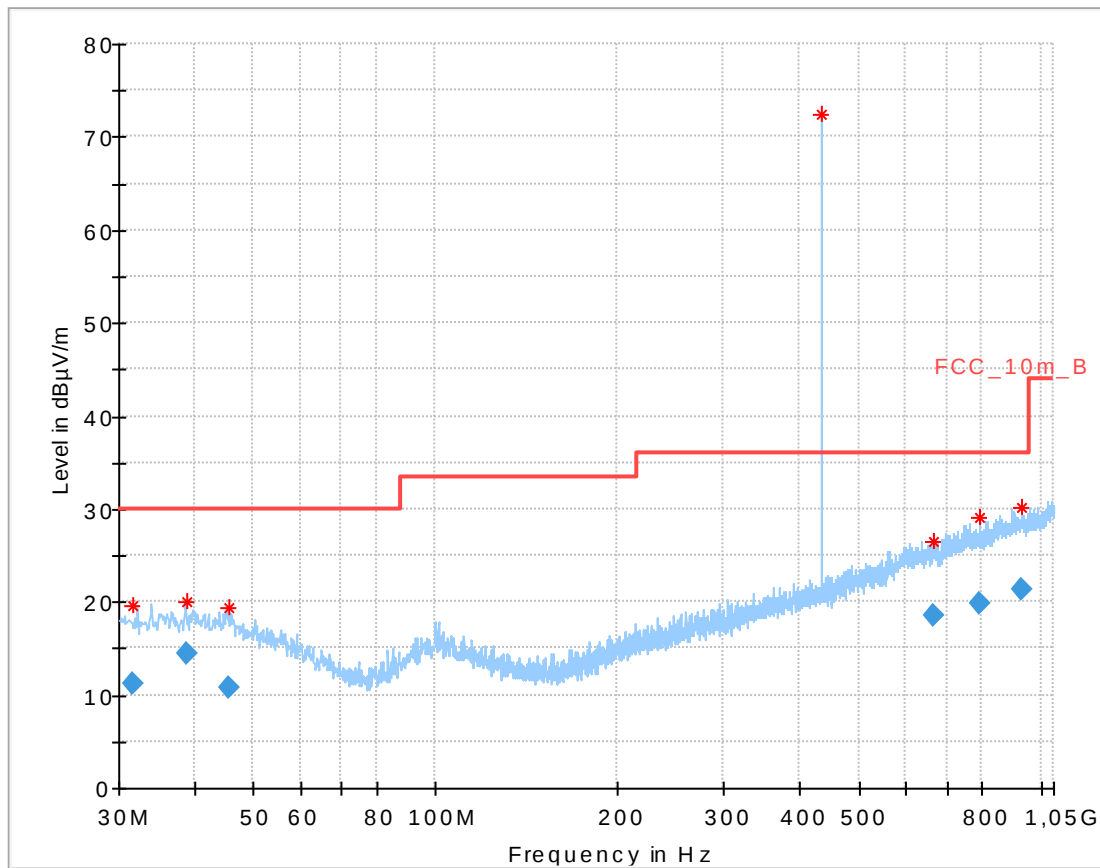
Note: The limit was recalculated with 20 dB / decade (Part 15.31) for all radiated spurious emissions 30 MHz to 1 GHz from 3 meter limit to a 10 meter distance. (40dB/decade for emissions < 30MHz)

Plots of the measurements

Plot 1: 9 kHz – 30 MHz; 433.180 MHz, Measurement distance 3m



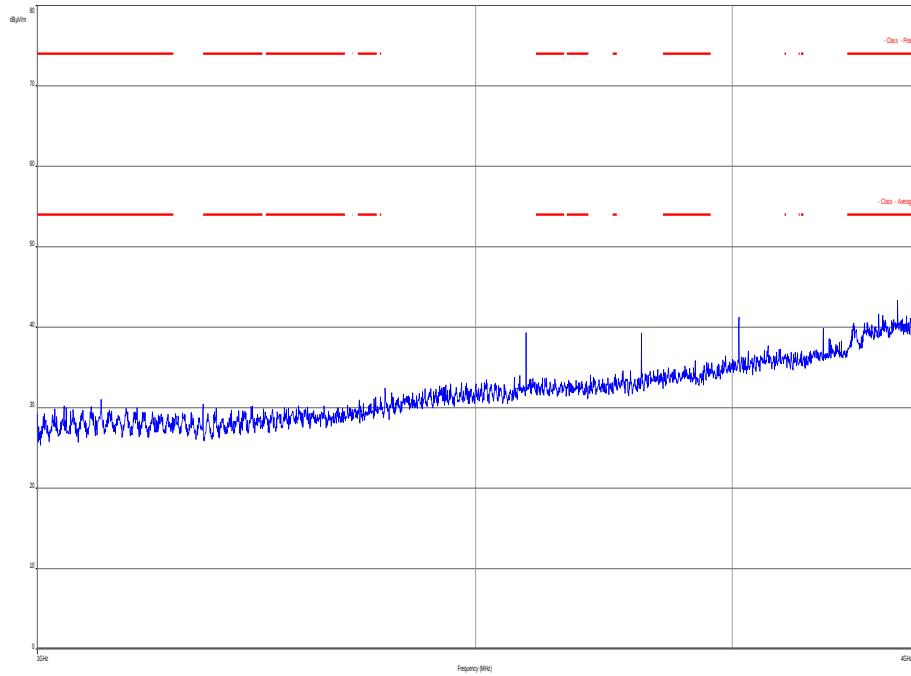
Plot 2: 30 MHz – 1000 MHz, 433.180 MHz



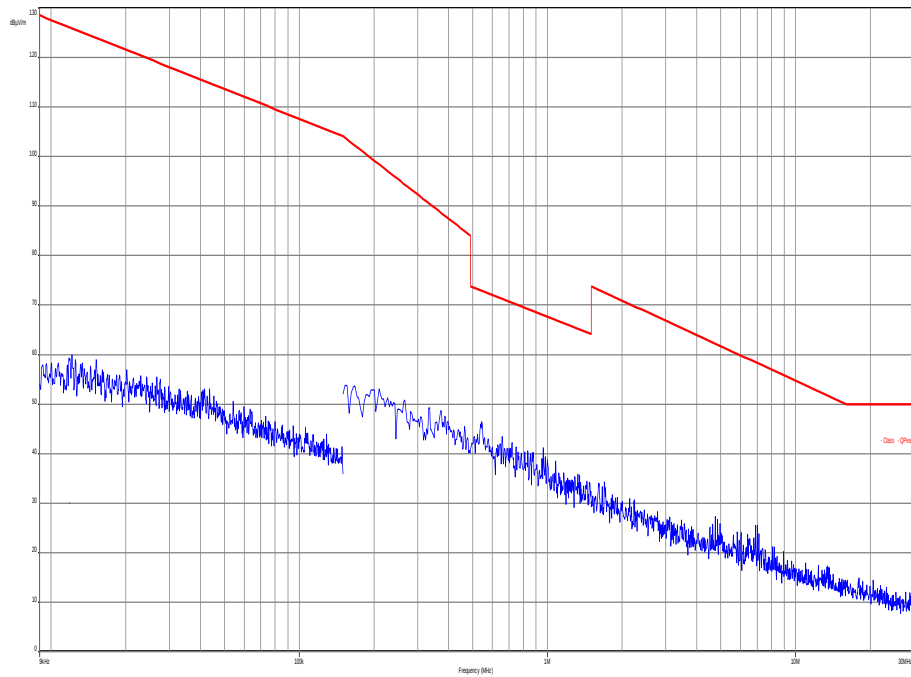
Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
31.671150	11.30	30.00	18.70	1000.0	120.000	173.0	V	57	13.5
38.718450	14.47	30.00	15.53	1000.0	120.000	173.0	V	-5	14.0
45.660750	10.88	30.00	19.12	1000.0	120.000	103.0	V	302	13.7
662.959200	18.46	36.00	17.54	1000.0	120.000	349.0	H	190	21.2
793.328700	19.92	36.00	16.08	1000.0	120.000	100.0	V	236	22.7
927.980250	21.41	36.00	14.59	1000.0	120.000	103.0	H	140	24.2

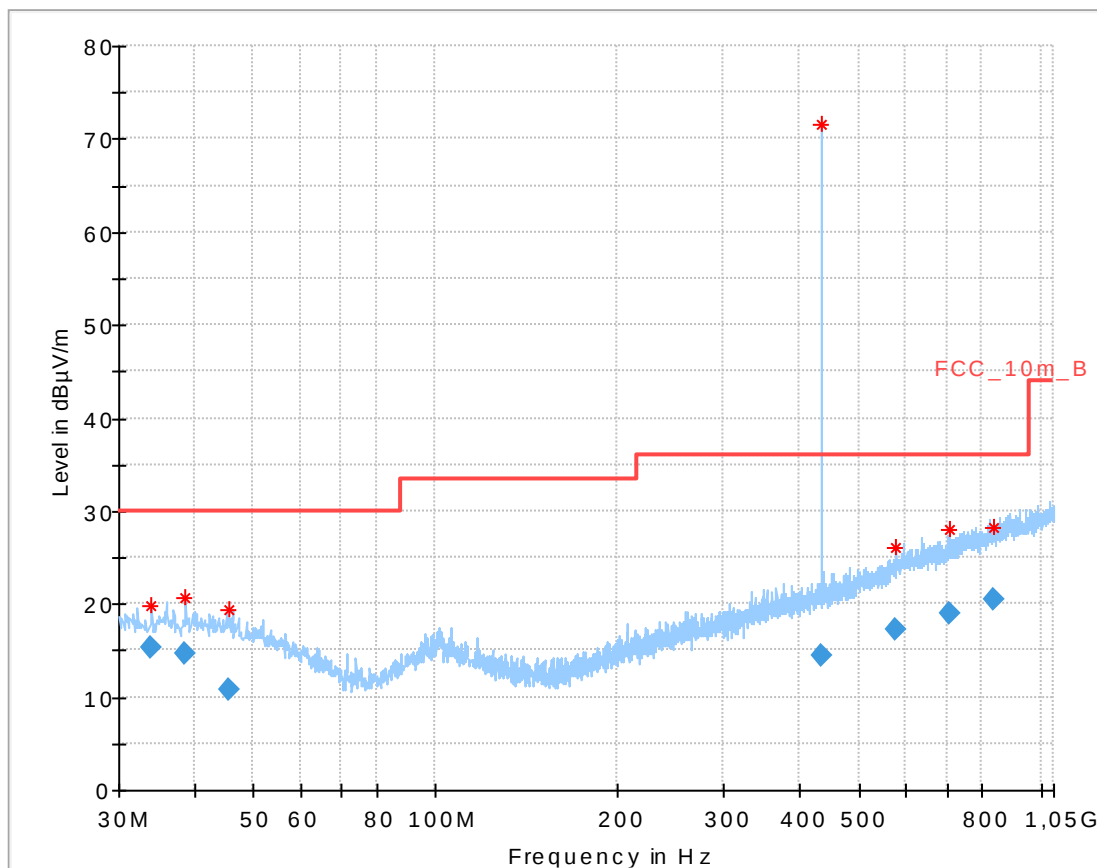
Plot 3: 1000 MHz – 4000 MHz, 433.180 MHz



Plot 4: 9 kHz – 30 MHz; 434.648 MHz, Measurement distance 3m



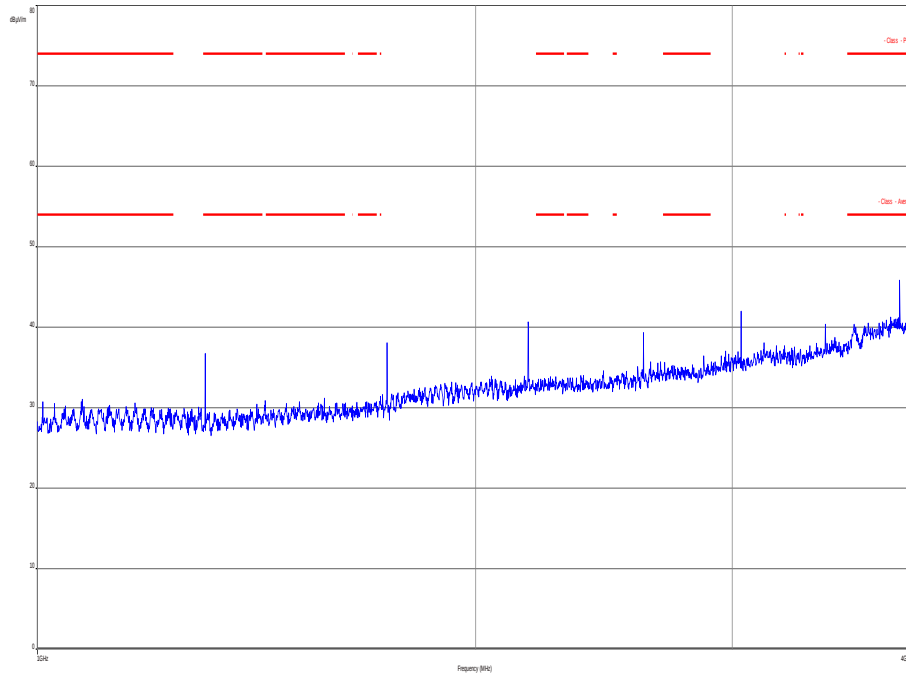
Plot 2: 30 MHz – 1000 MHz, 434.648 MHz



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
33.964350	15.33	30.00	14.67	1000.0	120.000	103.0	V	56	13.7
38.701800	14.60	30.00	15.40	1000.0	120.000	172.0	V	126	14.0
45.725700	10.84	30.00	19.16	1000.0	120.000	273.0	V	236	13.7
577.310100	17.34	36.00	18.66	1000.0	120.000	400.0	H	50	20.1
704.806500	18.91	36.00	17.09	1000.0	120.000	176.0	V	-7	21.6
833.025300	20.46	36.00	15.54	1000.0	120.000	103.0	H	216	23.2

Plot 3: 1000 MHz – 4000 MHz, 434.648 MHz



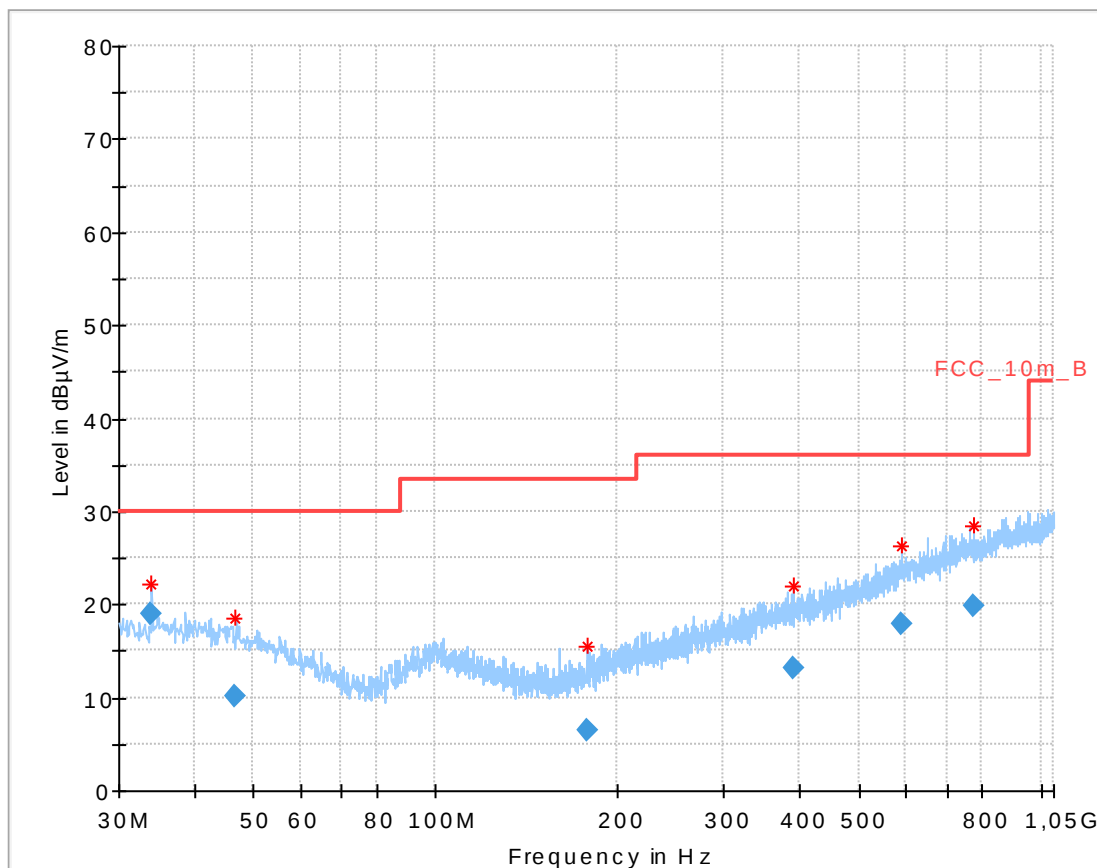
10.6 Receiver spurious emission (radiated)**Measurement:**

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

Limits:

FCC		IC
Receiver Spurious Emission (radiated)		
Frequency (MHz)	Field strength ($\mu\text{V/m}$)	Measurement distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

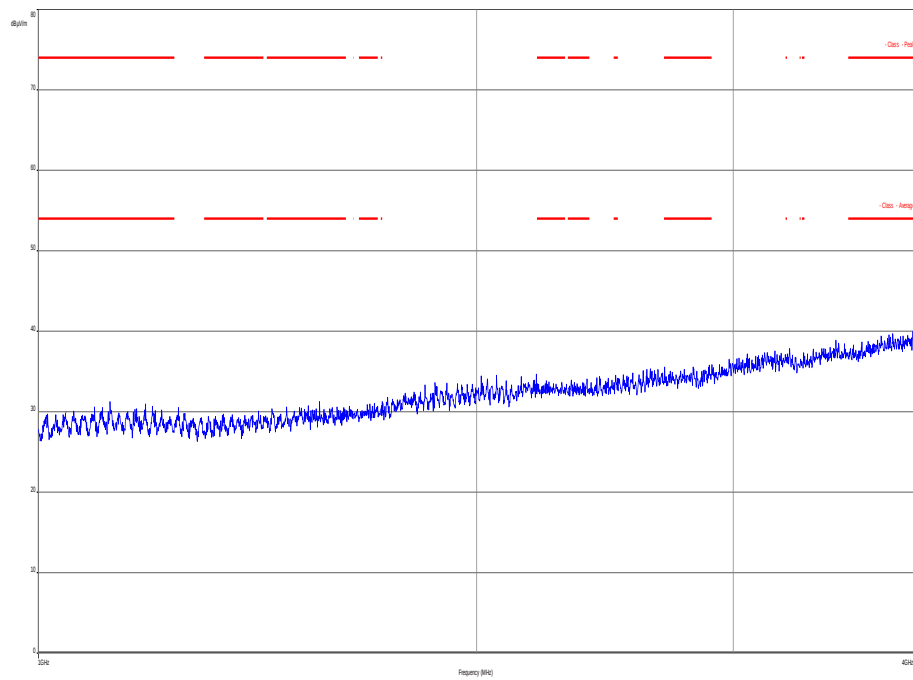
Plot 2: 30 MHz – 1000 MHz



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
34.001850	18.96	30.00	11.04	1000.0	120.000	170.0	V	-25	13.7
46.705500	10.05	30.00	19.95	1000.0	120.000	170.0	H	295	13.4
178.730100	6.52	33.50	26.98	1000.0	120.000	98.0	V	-6	10.3
390.821550	13.26	36.00	22.74	1000.0	120.000	170.0	V	107	16.7
589.207650	17.91	36.00	18.09	1000.0	120.000	170.0	V	205	20.4
775.831650	19.91	36.00	16.09	1000.0	120.000	170.0	V	174	22.7

Plot 2: 1000 MHz – 4000 MHz



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 (Lab/Item).

No.	Lab / Item	Equipment	Type	Manufact.	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	n. a.	Netzgerät 0-20V	6632A	HP Meßtechnik	2851A01814	300000924	ne	09.11.2005	
2	n. a.	Double-Ridged Waveguide Horn Antenna 1-18.0GHz	3115	EMCO Elektronik	9709-5290	300000212	k	23.07.2013	23.07.2015
3	n. a.	Universal Communication Tester	CMU200	R&S	106826	300003346	k	27.01.2014	27.01.2015
4	n. a.	Software Option für CMU 200	CMU-Kxx	R&S	106826	300003345	ne		
5	n. a.	Ultra Stable Notch Filter	WRCD1887.82/1889.55-5EE	Wainwright	1	300000115	ne		
6	n. a.	Highpass Filter	WHK1.1/15G-10SS	Wainwright	37	400000148	ne		
7	n. a.	Highpass Filter	WHKX7.0/18G-8SS	Wainwright	18	300003789	ne		
8	n. a.	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	318	300003696	k	22.04.2014	22.04.2017
9	n. a.	Spectrum-Analyzer	FSU26	R&S	200809	300003874	k	22.01.2014	22.01.2015
10	n. a.	Broadband Amplifier 0.5-18 GHz	CBLU5184540	CERNEX	22050	300004482	ev		
11	n. a.	Broadband Amplifier	CBLU5135235	CERNEX	22011	300004492	ev		
12	n. a.	4U RF Switch Platform	L4491A	Agilent Technologies	MY50000032	300004510	ne		
13	n. a.	Messrechner und Monitor	Intel Core i3 3220/3,3 GHz, Prozessor	Agilent Technologies	2V2403033A54 21	300004591	ne		
14	n. a.	NEXIO EMV-Software	BAT EMC	EMCO	2V2403033A54 21	300004682	ne		
15	n. a.	Spectrum Analyzer 9kHz to 30GHz - 140...+30dBm	FSP30	R&S	100886	300003575	k	26.08.2014	26.08.2016
16	n. a.	DC Power Supply 0 - 32V	1108-32	Heiden	001802	300001383	Ve	29.01.2014	29.01.2017
17	n. a.	Temperature Test Chamber	T-40/50	CTS GmbH	064023	300003540	Ve	26.09.2013	26.09.2015

Agenda: Kind of Calibration

k	calibration / calibrated	EK	limited calibration
ne	not required (k, ev, izw, zw not required)	zw	cyclical maintenance (external cyclical maintenance)
ev	periodic self verification	izw	internal cyclical maintenance
Ve	long-term stability recognized	g	blocked for accredited testing
vlkl!	Attention: extended calibration interval		
NK!	Attention: not calibrated	*)	next calibration ordered / currently in progress

12 Observations

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

Annex A Document history

Version	Applied changes	Date of release
	Initial release	2015-02-09
A	Updated model number	2015-03-09

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

Befehlens gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleG BV
Unterschrift der Multilateralen Abkommen
von EA, ILAC und INF 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 07.03.2014 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 77 Seiten.

Registrierungsnummer der Urkunde: D-PL-12076-01-00

Frankfurt am Main, 07.03.2014

Leiterin des Referats

im Auftrag (PL-12076-01) Ralf Ignor
Abteilungsleiter

Back side of certificate

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Die auszugsweise Veröffentlichung der Akkreditierungsurkunde bedarf der vorherigen schriftlichen Zustimmung der Deutschen Akkreditierungsstelle GmbH (DAkkS). Ausgenommen davon ist die separate Weiterverbreitung des Deckblattes 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 erfolgt gemäß des Gesetzes über die Akkreditierungsstellen (AkkStelleG) vom 31. Juli 2009 (BGBl. I S. 2675) 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 Cooperation 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.eu

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>