

TEST REPORT

Test Report No.: 1-2213-01-11/10-A



Testing Laboratory

CETECOM ICT Services GmbH

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Accredited Test Laboratory:

The test laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025
DAR registration number: DGA-PL-176/94-D1

Area of Testing: Radio Satellite Communications

Applicant

beyerdynamic GmbH & Co. KG

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74072 Heilbronn/Germany
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Manufacturer

beyerdynamic GmbH & Co. KG

Theresienstraße 8
74072 Heilbronn/Germany

Test Standard/s

47 CFR Part 74 Title 47 of the Code of Federal Regulations; Chapter I-Federal Communications Commission
Experimental radio, auxiliary, special broadcast and other program distribution services

RSS - 123 Issue 1 Rev. 2 Spectrum Management and Telecommunications Policy - Radio Standards Specification Low
Power Licensed Radiocommunication Devices

For further applied test standards please refer to section 2 of this test report.

Test Item

Kind of test item: Wireless Microphone System

Model name: S910M

FCC ID: OSDS910M

IC: 3628A-S910M

Frequency [MHz]: 482 MHz to 518 MHz; 518 MHz to 554 MHz
554 MHz to 590 MHz; 590 MHz to 626 MHz
626 MHz to 662 MHz; 662 MHz to 698 MHz

Power supply: 3V DC by power supply / 2 * 1.5 V AA batteries

Temperature range: +60 °C to -10 °C



Test performed:

Marco Bertolino

Test Report authorised:

Jakob Reschke

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1.1 General information

1.2 Notes

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 generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM ICT Services GmbH.

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.

1.3 Application details

Date of receipt of order:	2010-06-15
Date of receipt of test item:	2010-07-05
Start of test:	2010-07-05
End of test:	2010-07-13
Person(s) present during the test:	Mr. Frank Ernst

2 Test standard/s

Test Standard	Version	Test Standard Description
47 CFR Part 2	2008-10	Title 47 of the Code of Federal Regulations; Chapter I-Federal Communications Commission Frequency allocations and radio treaty matters; general rules and regulations
47 CFR Part 74	2006-10	Title 47 of the Code of Federal Regulations; Chapter I-Federal Communications Commission Experimental radio, auxiliary, special broadcast and other program distribution services
RSS - Gen Issue 2	2007-06	General Requirements and Information for the Certification of Radiocommunication Equipment
RSS - 123 Issue 1 Rev. 2	2000-03	Spectrum Management and Telecommunications Policy - Radio Standards Specification Low Power Licensed Radiocommunication Devices

3 Test environment

Temperature:	T_{nom}	+20 °C during room temperature tests
	T_{max}	-10 °C during high temperature test
	T_{min}	+60 °C during low temperature test
Relative humidity content:		51 %
Air pressure:		not relevant for this kind of testing
Power supply:	V_{nom}	3.0 V DC by power supply / 2 * 1.5 V AA batteries
	V_{max}	3.1 V
	V_{min}	2.2 V

4 Test item

Kind of test item	:	Wireless Microphone System
Type identification	:	S 910 M wireless microphone (handheld transmitter)
S/N serial number	:	S 910 M Unit 1: 898201743A 5M2A band 1 low Unit 2: 898201744A 5M2B band 1 high Unit 3: 898201745A 5M9A band 2 low Unit 4: 898201746A 5M9B band 2 high Unit 5: 898201747A 6M6A band 3 low Unit 6: 898201748A 6M6B band 3 high
HW hardware status	:	1.0
SW software status	:	1.0
Frequency Band [MHz]	:	Band 1: 482 MHz to 518 MHz; 518 MHz to 554 MHz Band 2: 554 MHz to 590 MHz; 590 MHz to 626 MHz Band 3: 626 MHz to 662 MHz; 662 MHz to 698 MHz
Type of Modulation	:	FM
Number of channels	:	1440
Antenna	:	Internal rod aerial antenna → for more information, please take a look at C – internal photos of the EUT
Power Supply	:	3 V DC by power supply / 2 * 1.5 V AA batteries
Temperature Range	:	+60 °C to -10 °C

5 Test laboratories sub-contracted

None

6 Technical tests

6.1 Details of manufacturer

Name:	beyerdynamic GmbH & Co. KG
Street:	Theresienstraße 8
Town:	74072 Heilbronn
Country:	Germany

6.2 Test item and additional EUT information for IC Canada (appendix 2)

Kind of test item:	Wireless microphone
Type identification:	S 910 M handheld transmitter
Open Area Test Site Industry Canada Number:	IC 3462C-1
S/N serial number:	<p>S 910 M</p> <p>Unit 1: 898201743A 5M2A band 1 low</p> <p>Unit 2: 898201744A 5M2B band 1 high</p> <p>Unit 3: 898201745A 5M9A band 2 low</p> <p>Unit 4: 898201746A 5M9B band 2 high</p> <p>Unit 5: 898201747A 6M6A band 3 low</p> <p>Unit 6: 898201748A 6M6B band 3 high</p>
HW hardware status:	1.0
SW software status:	1.0
Frequency Band [MHz]:	<p>Band 1: 482 MHz to 518 MHz; 518 MHz to 554 MHz</p> <p>Band 2: 554 MHz to 590 MHz; 590 MHz to 626 MHz</p> <p>Band 3: 626 MHz to 662 MHz; 662 MHz to 698 MHz</p>
Number of Channels:	1440
Measured Channels	482.000 MHz; 500.000 MHz; 536.000 MHz; 572.000 MHz; 607.925 MHz; 614.075 MHz; 644.000 MHz; 680.000 MHz; 697.925 MHz
Channel 1:	482.000 MHz
Channel 2:	500.000 MHz
Channel 3:	536.000 MHz
Channel 4:	572.000 MHz
Channel 5:	607.925 MHz
Channel 6:	614.075 MHz
Channel 7:	644.000 MHz
Channel 8:	680.000 MHz
Channel 9:	697.925 MHz
RF: Power (max):	S 910 M radiated: 11.48 dBm / 14.06 mW
Type of Modulation:	FM
Antenna type:	Internal rod aerial antenna → for more information, please take a look at C – internal photos of the EUT.
Power Supply:	3 V DC by power supply / 2 * 1.5 V AA batteries
Temperature Range:	+60 °C to -10 °C

Occupied Bandwidth (99% BW) [kHz]:	<p><u>482.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 125K2F3E (measured Bandwidth)</p>
	<p><u>500.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 125K2F3E (measured Bandwidth)</p>
	<p><u>536.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 125K2F3E (measured Bandwidth)</p>
	<p><u>572.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 147K2F3E (measured Bandwidth)</p>
	<p><u>607.925 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 96K02F3E (measured Bandwidth)</p>
	<p><u>614.075 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 96K02F3E (measured Bandwidth)</p>
	<p><u>644.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 117K2F3E (measured Bandwidth)</p>
	<p><u>680.000 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 137K2F3E (measured Bandwidth)</p>
	<p><u>697.925 MHz</u></p> <p>130KF3E (2x max. Audio Frequency + 2x max. FM Deviation) 137K2F3E (measured Bandwidth)</p>

Transmitter Spurious (worst case) [dBm]:	-37.30
Receiver Spurious (worst case) [dB μ V/m @ 3m]:	No receiver mode integrated!
IC Registration Number:	3628A-S910M
FCC ID:	OSDS910M
IC Standards:	RSS-123 Issue 1, Rev. 2 November 6, 1999

ATTESTATION:

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

Signature:



Test engineer: Marco Bertolino

Date: 2010-11-15

Signature:



Test engineer: Jakob Reschke

Date: 2010-11-15

7 Summary of measurement results and list of all performed test cases

- No deviations from the technical specifications were ascertained**
- There were deviations from the technical specifications ascertained

Section in this Report	Test Name	Verdict
3.1.1	RF Power Output	passed
3.1.2	Frequency Stability	passed
3.1.3	Radiated Emissions	passed
3.1.4	Receiver Radiated Emissions	passed
3.1.5	Conducted Spurious Emissions	passed
3.1.6	Block Edge Compliance	passed
3.1.7	Occupied Bandwidth	passed

8 Measurements and results

8.1 Output power (radiated) FCC rule Part 74.861 (e)(1)(ii)

Method of measurement:

Measuring the EIRP of Spurious/Harmonic Emissions using Substitution Method

- (a) The measurements was performed with full rf output power and modulation.
- (b) Test was performed at listed 3m test site (listed with FCC, IC).
- (c) The transmitter under test was placed at the specified height on a non-conducting turntable (80 cm height)
- (d) The BICONILOG antenna (20 MHz to 1 GHz) or HORN antenna (1 GHz to 18 GHz) was used for measuring.
- (e) Load an appropriate correction factors file in EMI Receiver for correcting the field strength reading level
Total Correction Factor recorded in the EMI Receiver = Cable Loss + Antenna Factor
 $E \text{ (dBuV/m)} = \text{Reading (dBuV)} + \text{Total Correction Factor (dB/m)}$
- (f) Set the EMI Receiver and #2 as follows:
 - Centre Frequency: test frequency
 - Resolution BW: 100 kHz
 - Video BW: same
 - Detector Mode: positive
 - Average: off
 - Span: 3 x the signal bandwidth
- (g) The test antenna was lowered or raised from 1 to 4 meters until the maximum signal level was detected.
- (h) The transmitter was rotated through 360 o about a vertical axis until a higher maximum signal was received.
- (i) The test antenna was lowered or raised again from 1 to 4 meters until a maximum was obtained. This level was recorded.
- (j) The recorded reading was corrected to the true field strength level by adding the antenna factor, cable loss and subtracting the pre-amplifier gain.
- (k) The above steps were repeated with both transmitters' antenna and test receiving antenna placed in vertical and horizontal polarization. Both readings with the antennas placed in vertical and horizontal polarization shall be recorded.
- (l) Repeat for all different test signal frequencies

Measuring the EIRP of Spurious/Harmonic Emissions using Substitution Method

(a) Set the EMI Receiver (for measuring E-Field) and Receiver #2 (for measuring EIRP) as follows:

Centre Frequency : equal to the signal source
 Resolution BW : 10 kHz
 Video BW : same
 Detector Mode : positive
 Average : off
 Span : 3 x the signal bandwidth

(b) Load an appropriate correction factors file in EMI Receiver for correcting the field strength reading level

Total Correction Factor recorded in the EMI Receiver = Cable Loss + Antenna Factor

$E \text{ (dBuV/m)} = \text{Reading (dBuV)} + \text{Total Correction Factor (dB/m)}$

(c) Select the frequency and E-field levels for ERP/EIRP measurements.

(d) Substitute the EUT by a signal generator and one of the following transmitting antennas (substitution antenna): .DIPOLE antenna for frequency from 30-1000 MHz or .HORN antenna for frequency above 1 GHz}.

(e) Mount the transmitting antenna at 1.5 meter high from the ground plane.

(f) Use one of the following antenna as a receiving antenna: .DIPOLE antenna for frequency from 30-1000 MHz or .HORN antenna for frequency above 1 GHz }.

(g) If the DIPOLE antenna is used, tune its elements to the frequency as specified in the calibration manual.

(h) Adjust both transmitting and receiving antenna in a VERTICAL polarization.

(i) Tune the EMI Receivers to the test frequency.

(j) Lower or raise the test antenna from 1 to 4 meters until the maximum signal level was detected.

(k) The transmitter was rotated through 360 o about a vertical axis until a higher maximum signal was received.

(l) Lower or raise the test antenna from 1 to 4 meters until the maximum signal level was detected.

(m) Adjust input signal to the substitution antenna until an equal or a known related level to that detected from the transmitter was obtained in the test receiver.

(n) Record the power level read from the Average Power Meter and calculates the ERP/EIRP as follows:

$$P = P1 - L1 = (P2 + L2) - L1 = P3 + A + L2 - L1$$

$$\text{EIRP} = P + G1 = P3 + L2 - L1 + A + G1$$

$$\text{ERP} = \text{EIRP} - 2.15 \text{ dB}$$

$$\text{Total Correction factor in EMI Receiver \# 2} = L2 - L1 + G1$$

Where: P: Actual RF Power fed into the substitution antenna port after corrected.

P1: Power output from the signal generator

P2: Power measured at attenuator A input

P3: Power reading on the Average Power Meter

EIRP: EIRP after correction

ERP: ERP after correction

(o) Adjust both transmitting and receiving antenna in a HORIZONTAL polarization, then repeat step (k) to (o)

(p) Repeat step (d) to (o) for different test frequency

(q) Repeat steps (c) to (j) with the substitution antenna oriented in horizontal polarization.

(r) Actual gain of the EUT's antenna is the difference of the measured EIRP and measured RF power at the RF port. Correct the antenna gain if necessary.

Results: S 910 M Band 1: 482 MHz to 518 MHz; 518 MHz to 554 MHz

TEST CONDITIONS		TRANSMITTER OUTPUT POWER					
Frequency (MHz)		5M2A 482 MHz	5M2A 500 MHz	5M2A 518 MHz	5M2B 518 MHz	5M2B 536 MHz	5M2B 554 MHz
T_{nom}	V_{nom}	10.16 dBm	10.97 dBm	10.48 dBm	10.43 dBm	10.68 dBm	10.30 dBm
antenna gain		0 dB					
Maximum deviation from output power under extreme test conditions (dBc)		±3.0 dB					
Measurement uncertainty		±0.5dB					

Results: S 910 M Band 2: 554 MHz to 590 MHz; 590 MHz to 626 MHz

TEST CONDITIONS		TRANSMITTER OUTPUT POWER					
Frequency (MHz)		5M9A 554 MHz	5M9A 572 MHz	5M9A 590 MHz	5M9B 590 MHz	5M9B 608 MHz	5M9B 614 MHz
T_{nom}	V_{nom}	10.91 dBm	10.43 dBm	11.07 dBm	9.35 dBm	9.40 dBm	9.22 dBm
antenna gain		0 dB					
Maximum deviation from output power under extreme test conditions (dBc)		±2.2 dB					
Measurement uncertainty		±0.5dB					

Results: S 910 M Band 3: 626 MHz to 662 MHz; 662 MHz to 698 MHz

TEST CONDITIONS		TRANSMITTER OUTPUT POWER					
Frequency (MHz)		6M6A 626 MHz	6M6A 644 MHz	6M6A 662 MHz	6M6B 662 MHz	6M6B 680 MHz	6M6B 698 MHz
T_{nom}	V_{nom}	11.20 dBm	8.74 dBm	11.48 dBm	10.55 dBm	11.10 dBm	8.86 dBm
antenna gain		0 dB					
Maximum deviation from output power under extreme test conditions (dBc)		±4.0 dB					
Measurement uncertainty		±0.5dB					

Sample calculation:

Freg	SA Reading	SG Setting	Ant. gain	Dipol gain	Cable loss	ERP Result	ERP Result
MHz	dB μ V	dBm	dBi	dBd	dB	dBm	mW
758.0	108.5	13.9	-	0.0	2.9	11.0	12.6

ERP = SG (dBm) - Cable Loss (dB) + Ant. gain (dBd)

LIMIT**FCC Rule Part 74.861**

Frequency range MHz	Power level
54-72, 76-88, 174-216	50 mW / 17 dBm
470-608, 614-806	250 mW / 24 dBm

8.2 AFC frequency error vs. voltage FCC rule Part 74.861

Method of measurement:

The EUT was fixed in test fixture to a resistive coaxial attenuator of normal load impedance, and the unmodulated carrier was measured by means of a spectrum analyzer. The input voltage was varied in an range from 2.2V to 3.1V and the maximum change in frequency was noted within one minute. The temperature tests were performed for each frequency range on one channel.

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
482,000	2.2	-780	-0.000162	-1.618257
482,000	2.4	-780	-0.000162	-1.618257
482,000	2.6	-780	-0.000162	-1.618257
482,000	2.8	-780	-0.000162	-1.618257
482,000	3.0	-780	-0.000162	-1.618257
482,000	3.1	-780	-0.000162	-1.618257

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
500,000	2.2	-900	-0,000180	-1,800000
500,000	2.4	-900	-0,000180	-1,800000
500,000	2.6	-900	-0,000180	-1,800000
500,000	2.8	-900	-0,000180	-1,800000
500,000	3.0	-900	-0,000180	-1,800000
500,000	3.1	-900	-0,000180	-1,800000

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
536,000	2.2	-490	-0,000091	-0,914179
536,000	2.4	-500	-0,000093	-0,932836
536,000	2.6	-500	-0,000093	-0,932836
536,000	2.8	-500	-0,000093	-0,932836
536,000	3.0	-500	-0,000093	-0,932836
536,000	3.1	-260	-0,000049	-0,485075

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
572,000	2.2	-620	-0,000108	-1,083916
572,000	2.4	650	0,000114	1,136364
572,000	2.6	650	0,000114	1,136364
572,000	2.8	700	0,000122	1,223776
572,000	3.0	700	0,000122	1,223776
572,000	3.1	700	0,000122	1,223776

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
607,925	2.2	1000	0,000164	1,644940
607,925	2.4	1100	0,000181	1,809434
607,925	2.6	1100	0,000181	1,809434
607,925	2.8	1120	0,000184	1,842333
607,925	3.0	1120	0,000184	1,842333
607,925	3.1	1140	0,000188	1,875231

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
614,075	2.2	820	0,000134	1,335342
614,075	2.4	820	0,000134	1,335342
614,075	2.6	820	0,000134	1,335342
614,075	2.8	820	0,000134	1,335342
614,075	3.0	820	0,000134	1,335342
614,075	3.1	820	0,000134	1,335342

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
644,000	2.2	980	0,000152	1,521739
644,000	2.4	980	0,000152	1,521739
644,000	2.6	980	0,000152	1,521739
644,000	2.8	980	0,000152	1,521739
644,000	3.0	980	0,000152	1,521739
644,000	3.1	980	0,000152	1,521739

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
680,000	2.2	-1500	-0,000221	-2,205882
680,000	2.4	-1500	-0,000221	-2,205882
680,000	2.6	-1400	-0,000206	-2,058824
680,000	2.8	-1400	-0,000206	-2,058824
680,000	3.0	-1400	-0,000206	-2,058824
680,000	3.1	-1400	-0,000206	-2,058824

Frequency (MHz)	Voltage (V)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
697,925	2.2	-1600	-0,000229	-2,292510
697,925	2.4	-1600	-0,000229	-2,292510
697,925	2.6	-1600	-0,000229	-2,292510
697,925	2.8	-1600	-0,000229	-2,292510
697,925	3.0	-1600	-0,000229	-2,292510
697,925	3.1	-1600	-0,000229	-2,292510

LIMIT

FCC Rule Part 74.861(4)

The frequency tolerance of the transmitter shall be 0.005 percent

8.3 AFC frequency error vs. temperature FCC rule Part 74.861

Method of measurement:

The EUT was connected to a resistive coaxial attenuator of normal load impedance, and the un-modulated carrier was measured by means of a spectrum analyzer. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency error was noted within one minute. The temperature tests were performed for each frequency range on one channel

Frequency (MHz)	Temperature ($^{\circ}\text{C}$)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
482,000	-30	-1200	-0,000249	-2,489627
482,000	-20	-600	-0,000124	-1,244813
482,000	-10	500	0,000104	1,037344
482,000	0	1000	0,000207	2,074689
482,000	10	200	0,000041	0,414938
482,000	20	1600	0,000332	3,319502
482,000	30	1000	0,000207	2,074689
482,000	40	-2200	-0,000456	-4,564315
482,000	50	-3000	-0,000622	-6,224066

Frequency (MHz)	Temperature ($^{\circ}\text{C}$)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
500,000	-30	-1000	-0,000200	-2,000000
500,000	-20	1200	0,000240	2,400000
500,000	-10	2000	0,000400	4,000000
500,000	0	1600	0,000320	3,200000
500,000	10	500	0,000100	1,000000
500,000	20	900	0,000180	1,800000
500,000	30	1380	0,000276	2,760000
500,000	40	-1600	-0,000320	-3,200000
500,000	50	-4600	-0,000920	-9,200000

Frequency (MHz)	Temperature ($^{\circ}\text{C}$)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
536,000	-30	-800	-0,000149	-1,492537
536,000	-20	1560	0,000291	2,910448
536,000	-10	2500	0,000466	4,664179
536,000	0	1800	0,000336	3,358209
536,000	10	1800	0,000336	3,358209
536,000	20	1844	0,000344	3,440299
536,000	30	1820	0,000340	3,395522
536,000	40	-2650	-0,000494	-4,944030
536,000	50	-5500	-0,001026	-10,261194

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
572,000	-30	1200	0,000210	2,097902
572,000	-20	3000	0,000524	5,244755
572,000	-10	4600	0,000804	8,041958
572,000	0	4000	0,000699	6,993007
572,000	10	4000	0,000699	6,993007
572,000	20	3900	0,000682	6,818182
572,000	30	1000	0,000175	1,748252
572,000	40	500	0,000087	0,874126
572,000	50	-2500	-0,000437	-4,370629

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
607,925	-30	100	0,000016	0,164494
607,925	-20	1000	0,000164	1,644940
607,925	-10	2800	0,000461	4,605831
607,925	0	200	0,000033	0,328988
607,925	10	1600	0,000263	2,631904
607,925	20	800	0,000132	1,315952
607,925	30	400	0,000066	0,657976
607,925	40	-1100	-0,000181	-1,809434
607,925	50	-2000	-0,000329	-3,289880

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
614,075	-30	-20	-0,000003	-0,032569
614,075	-20	1000	0,000163	1,628466
614,075	-10	2800	0,000456	4,559704
614,075	0	1000	0,000163	1,628466
614,075	10	500	0,000081	0,814233
614,075	20	230	0,000037	0,374547
614,075	30	180	0,000029	0,293124
614,075	40	-2560	-0,000417	-4,168872
614,075	50	-3300	-0,000537	-5,373936

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
644,000	-30	1000	0,000155	1,552795
644,000	-20	2690	0,000418	4,177019
644,000	-10	4000	0,000621	6,211180
644,000	0	3000	0,000466	4,658385
644,000	10	1800	0,000280	2,795031
644,000	20	1400	0,000217	2,173913
644,000	30	1000	0,000155	1,552795
644,000	40	-1560	-0,000242	-2,422360
644,000	50	-3000	-0,000466	-4,658385

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
680,000	-30	-1000	-0,000147	-1,470588
680,000	-20	1800	0,000265	2,647059
680,000	-10	2000	0,000294	2,941176
680,000	0	1600	0,000235	2,352941
680,000	10	900	0,000132	1,323529
680,000	20	700	0,000103	1,029412
680,000	30	500	0,000074	0,735294
680,000	40	-600	-0,000088	-0,882353
680,000	50	-2000	-0,000294	-2,941176

Frequency (MHz)	Temperature (°C)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
644,000	-30	-2300	-0,000357	-3,571429
644,000	-20	-1560	-0,000242	-2,422360
644,000	-10	1300	0,000202	2,018634
644,000	0	900	0,000140	1,397516
644,000	10	600	0,000093	0,931677
644,000	20	1900	0,000295	2,950311
644,000	30	2100	0,000326	3,260870
644,000	40	-2660	-0,000413	-4,130435
644,000	50	-5700	-0,000885	-8,850932

LIMIT

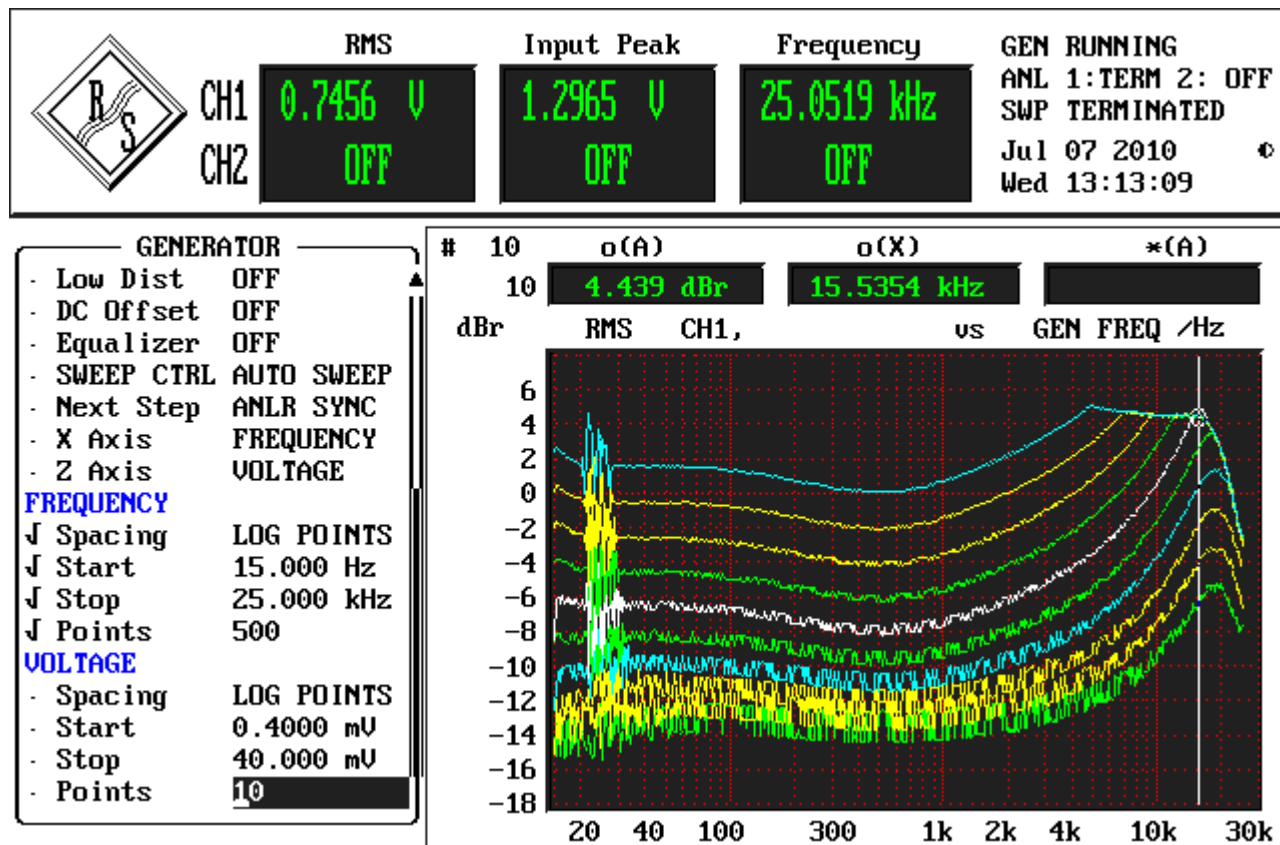
FCC Rule Part 74.861

The frequency tolerance of the transmitter shall be 0.005 percent

8.4 Characteristics of the audio modulation circuitry FCC rule Part 74 .861(e3)

Method of measurement:

The audio frequency responds was measured in accordance with EIA/TIA 603. The plots shows 10 curves with different modulation levels, starting from 0.4mV to 40 mV (30%+20 dB Modulation), the frequency is varied from 15 Hz to 25 kHz.



Max. measured frequency deviation : 50 kHz

This measurement is valid for all channels

Limit: max Deviation ±75kHz

8.5 Occupied bandwidth FCC rule Part 74.861(e)(3), (5)/ Sec. 2.1049

Test method:

The audio frequency responds was measured in accordance with EIA/TIA 603.

Data in the plots show that all sidebands between 50 & 100% for the authorized bandwidth are attenuated by at least 25dB. From 100 to 250% of the authorized bandwidth they are attenuated by at least 35dB and beyond 250% 43 log(Po) dB. The plot shows the transmitter modulated with 15000 Hz (the highest modulation frequency), adjusted for 50% modulation plus 16 dB. The spectrum analyzer was set with the un-modulated carrier at the top of the screen. The test procedure diagram and occupied bandwidth plots follow.

TEST CONDITIONS Frequency (MHz)		OCCUPIED BANDWIDTH (kHz)					
		482.000 MHz	500.000 MHz	536.000 MHz	572.000 MHz	607.925 MHz	614.075 MHz
T _{nom}	V _{nom}	125	125	125	147	96	96
max. Deviation (FM)		50 kHz					
Measurement uncertainty		±0.5%					

TEST CONDITIONS Frequency (MHz)		OCCUPIED BANDWIDTH (kHz)					
		644.000 MHz	680.000 MHz	697.925 MHz	-/-	-/-	-/-
T _{nom}	V _{nom}	117	137	137	-/-	-/-	-/-
max. Deviation (FM)		50 kHz					
Measurement uncertainty		±0.5%					

Limits

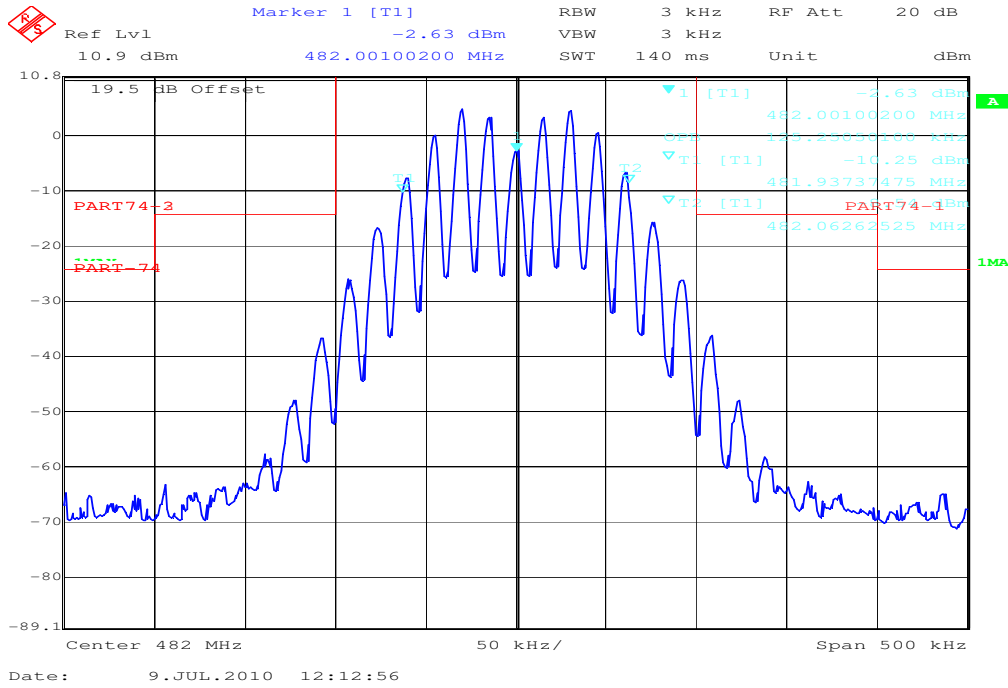
FCC Rule Part 74.861(e)(5)

The operating bandwidth shall not exceed 200 kHz

OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.989

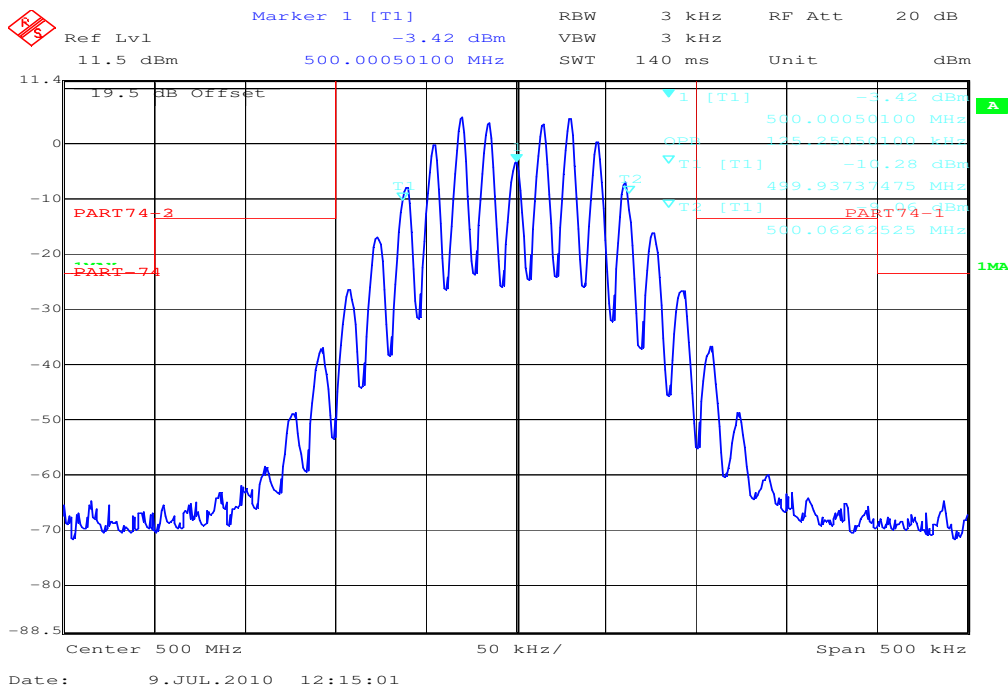
Frequency: 482.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

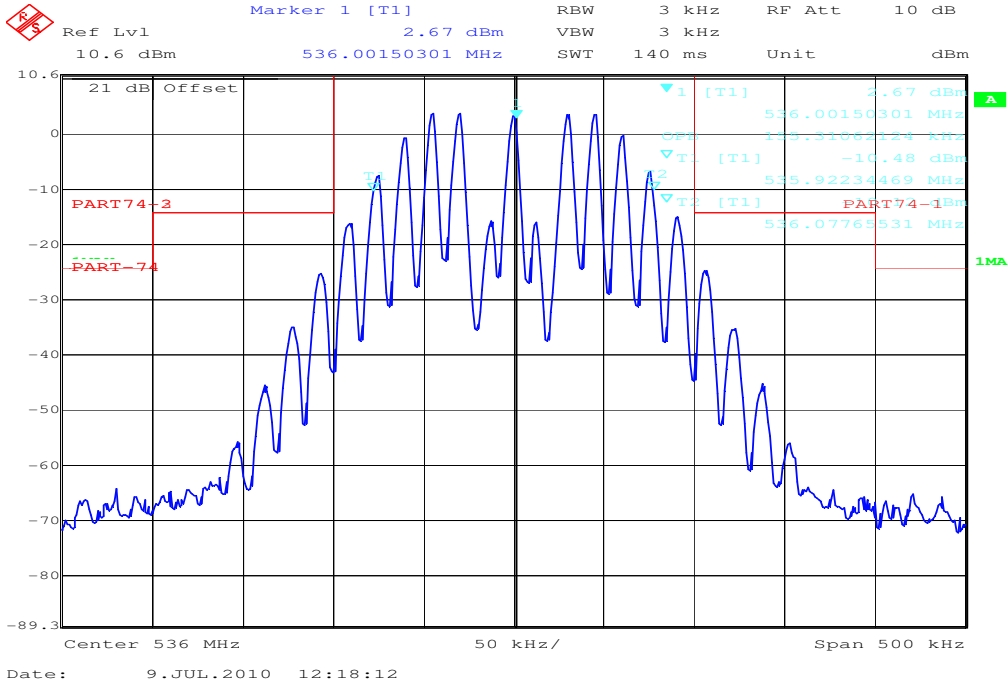
Frequency: 500.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

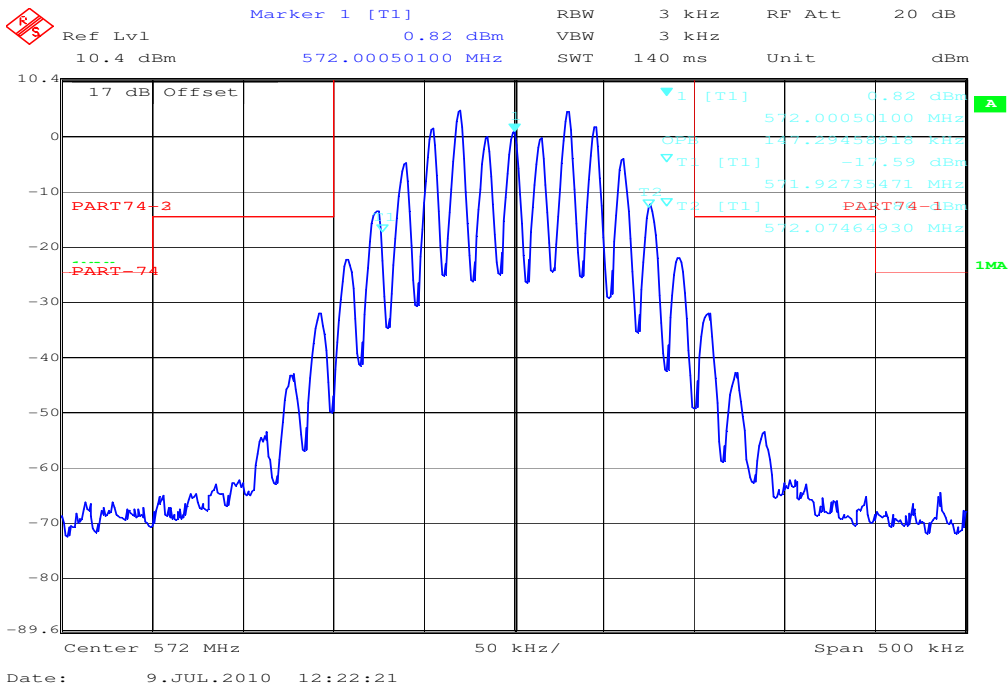
Frequency: 536.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.989

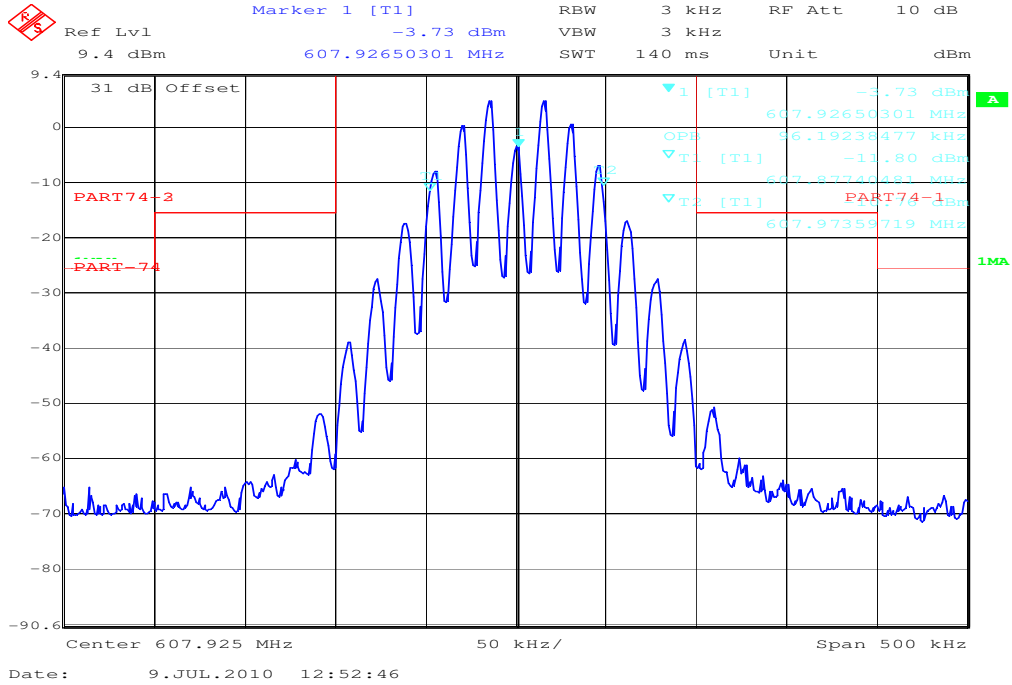
Frequency: 572.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

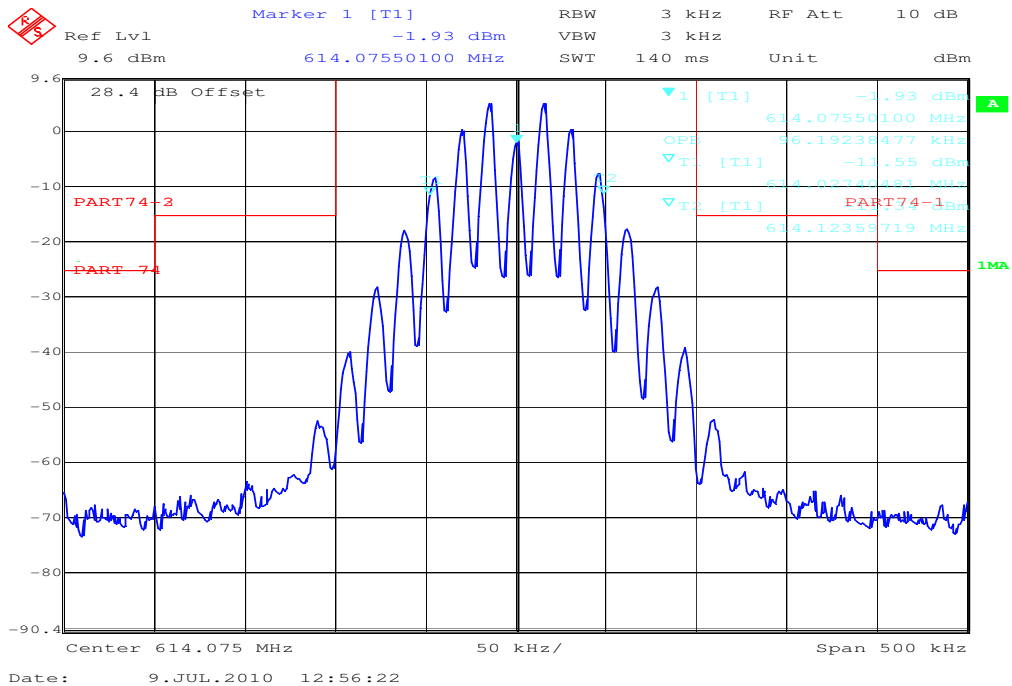
Frequency: 607.925 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

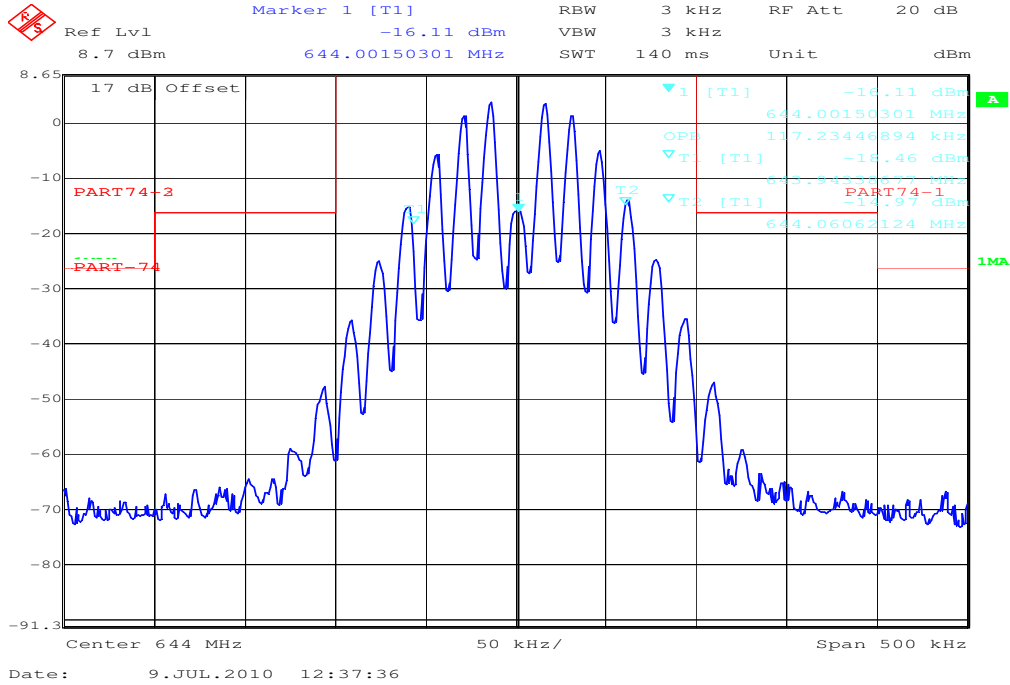
Frequency: 614.075 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

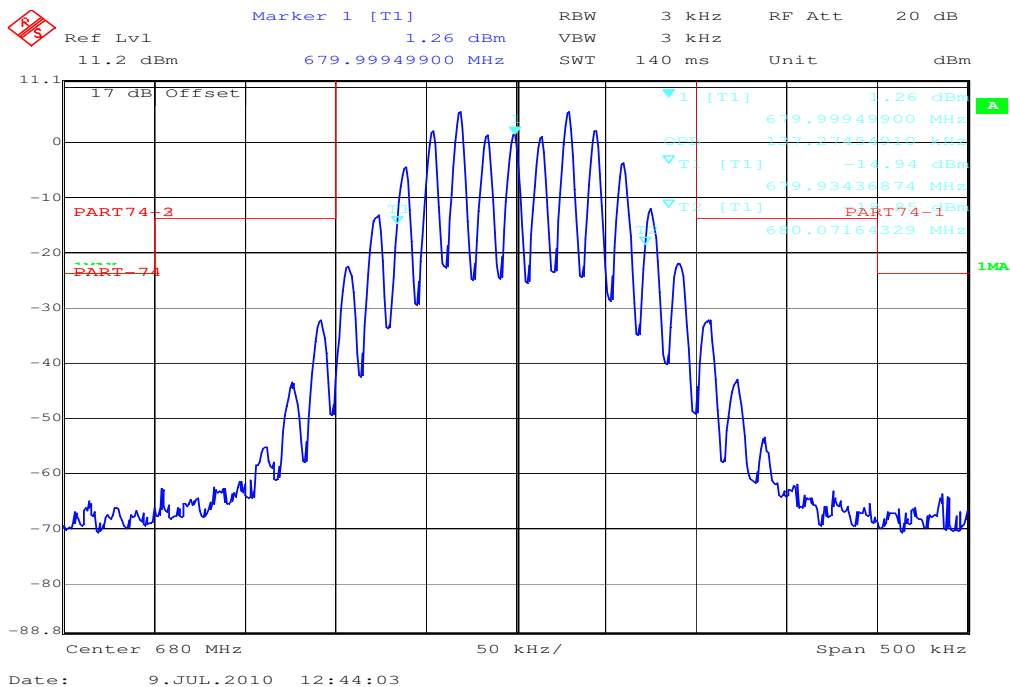
Frequency: 644.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

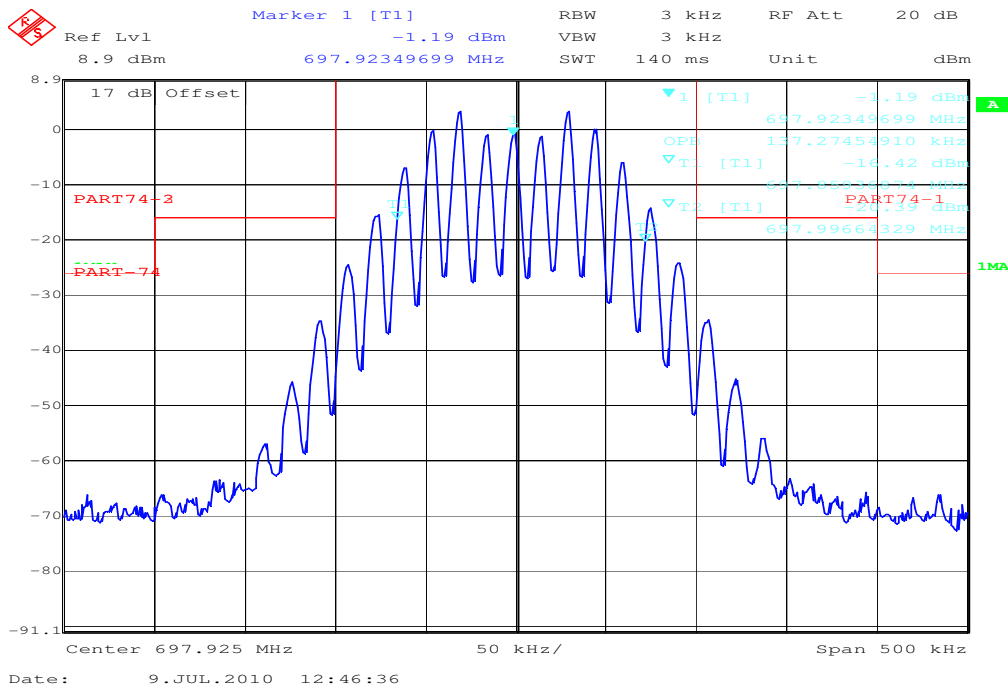
Frequency: 680.000 MHz / max. deviation: ± 50 kHz (Limit ± 75 kHz)



OCCUPIED BANDWIDTH

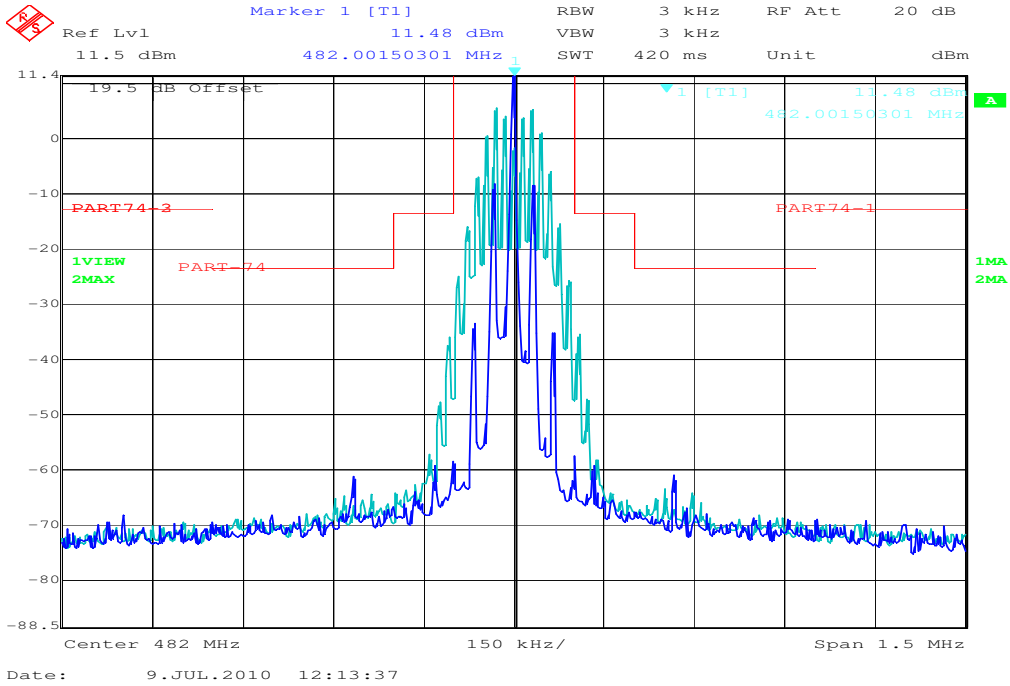
FCC Rule Part 74.861(e)(3), (5)/ Sec. 2.1049

Frequency: 697.925 MHz / max. deviation: ± 51 kHz (Limit ± 75 kHz)

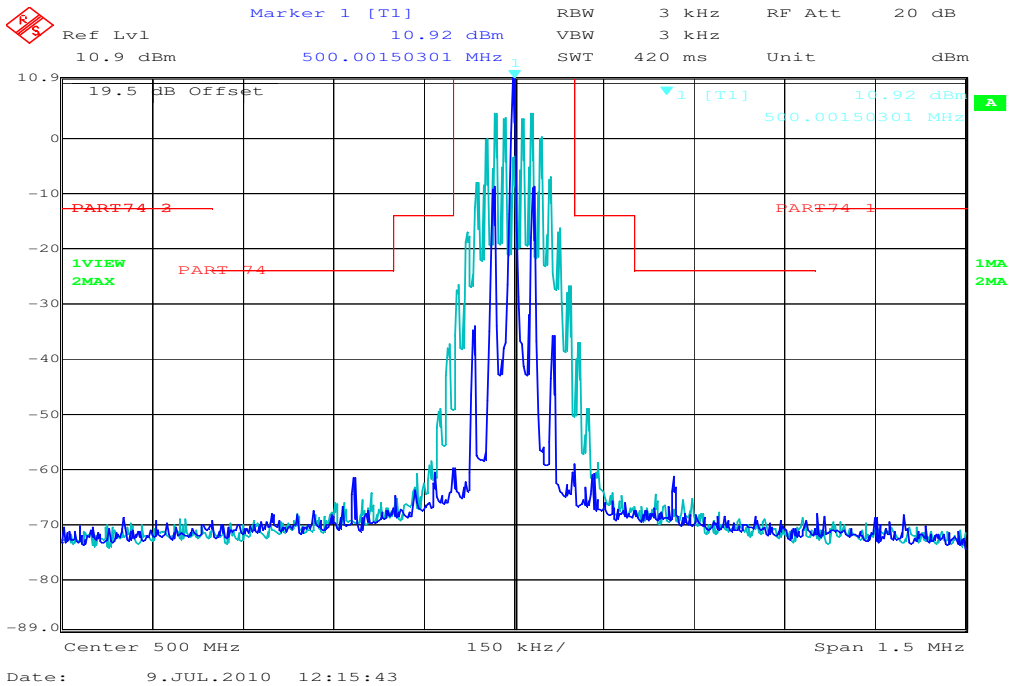


8.6 Emission mask FCC 74 861(e)(6)

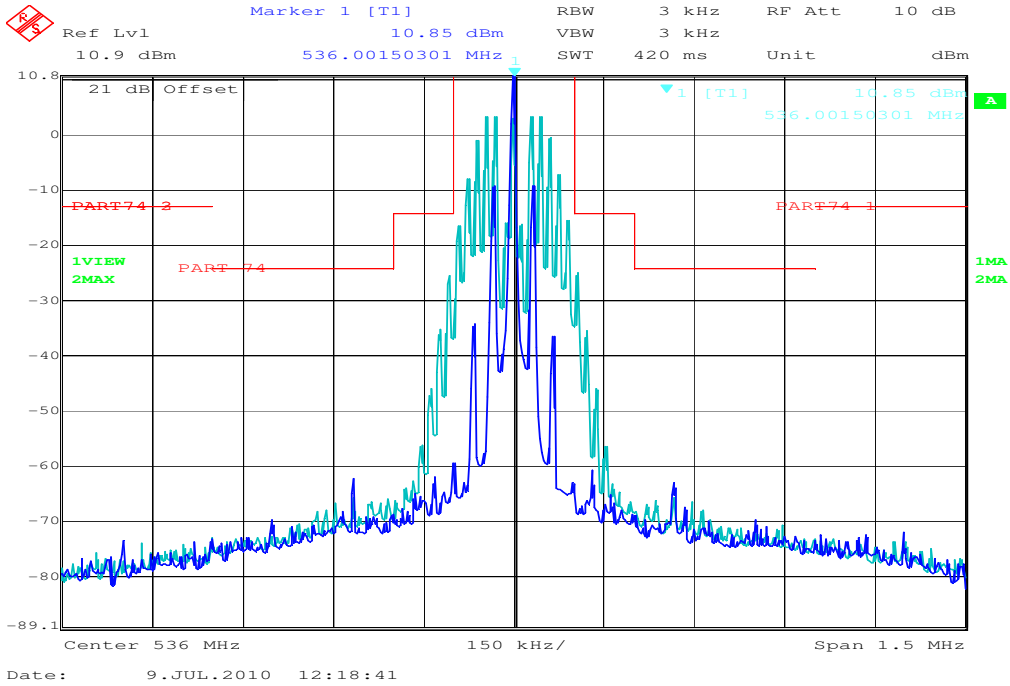
Frequency: 482.000 MHz



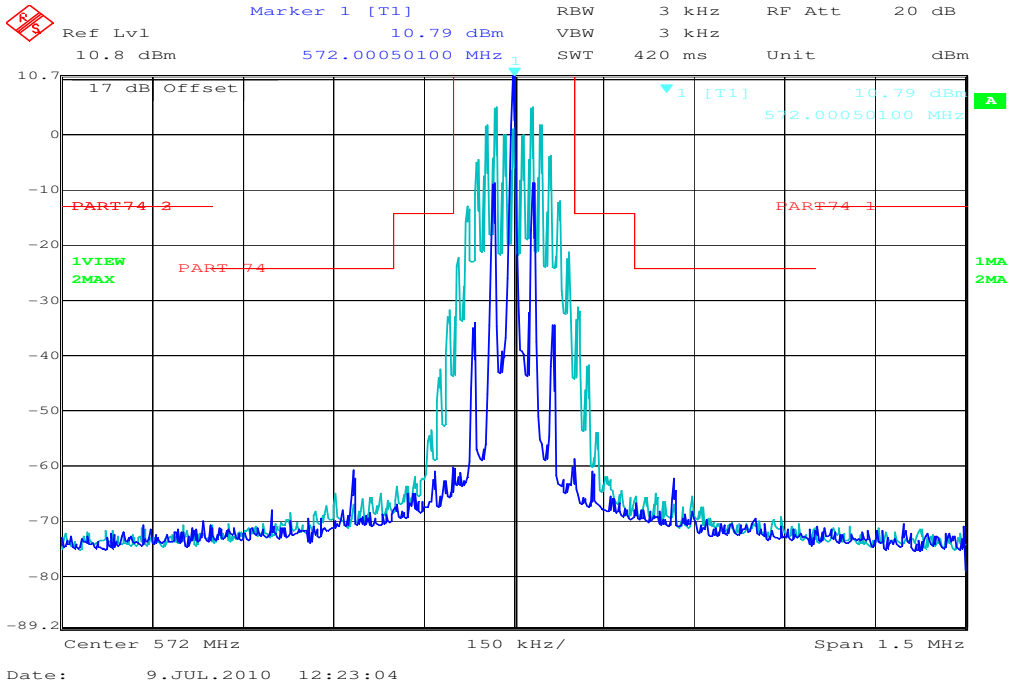
Frequency: 500.000 MHz



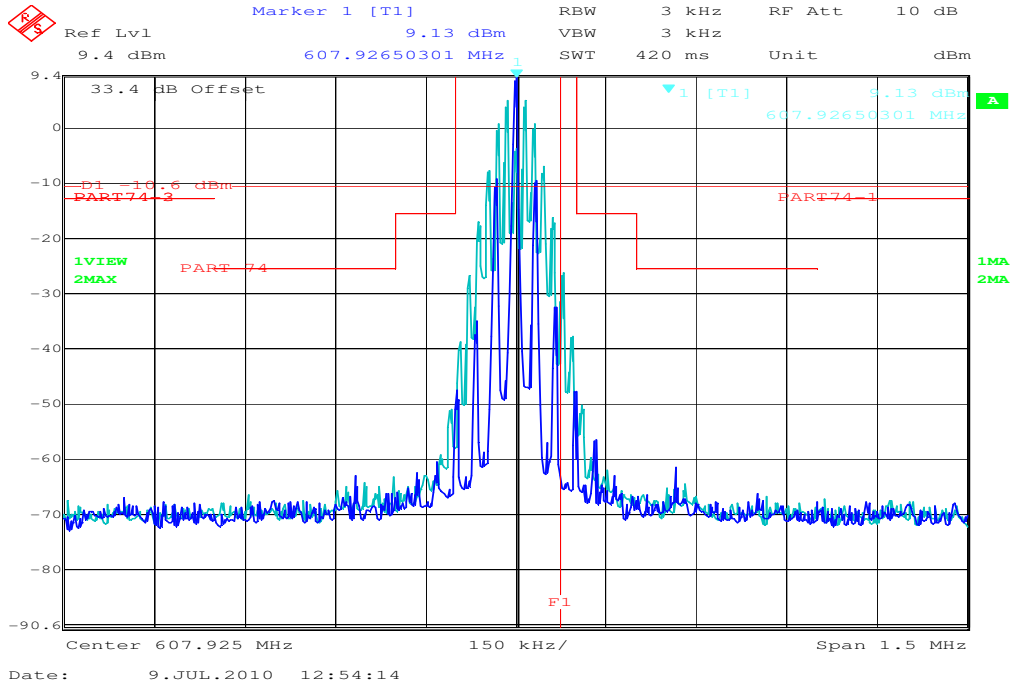
Frequency: 536.000 MHz



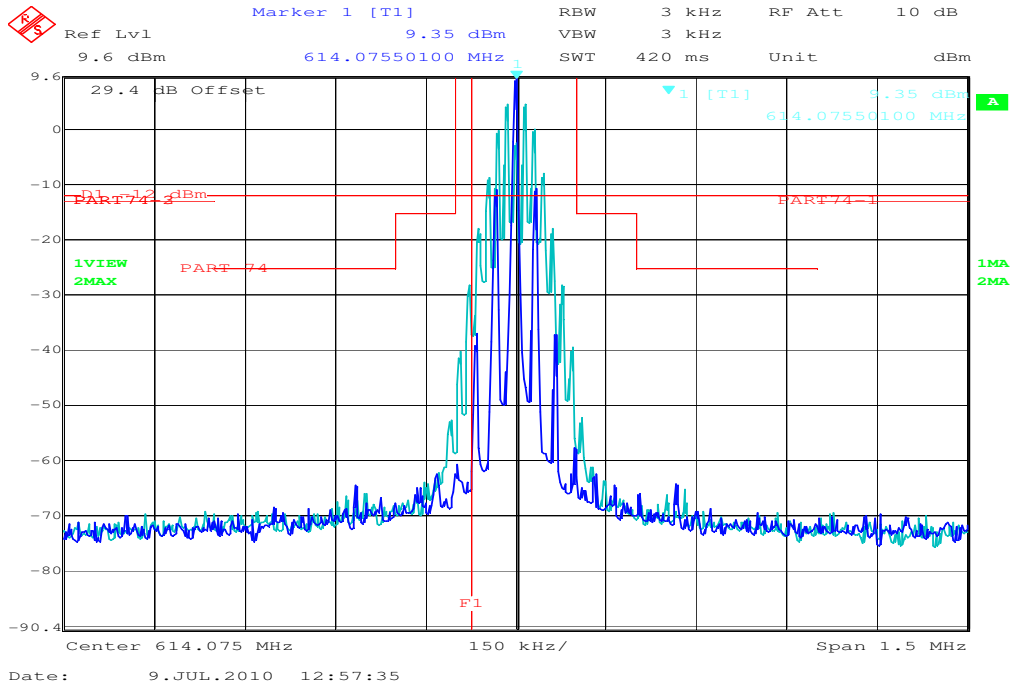
Frequency: 572.000 MHz



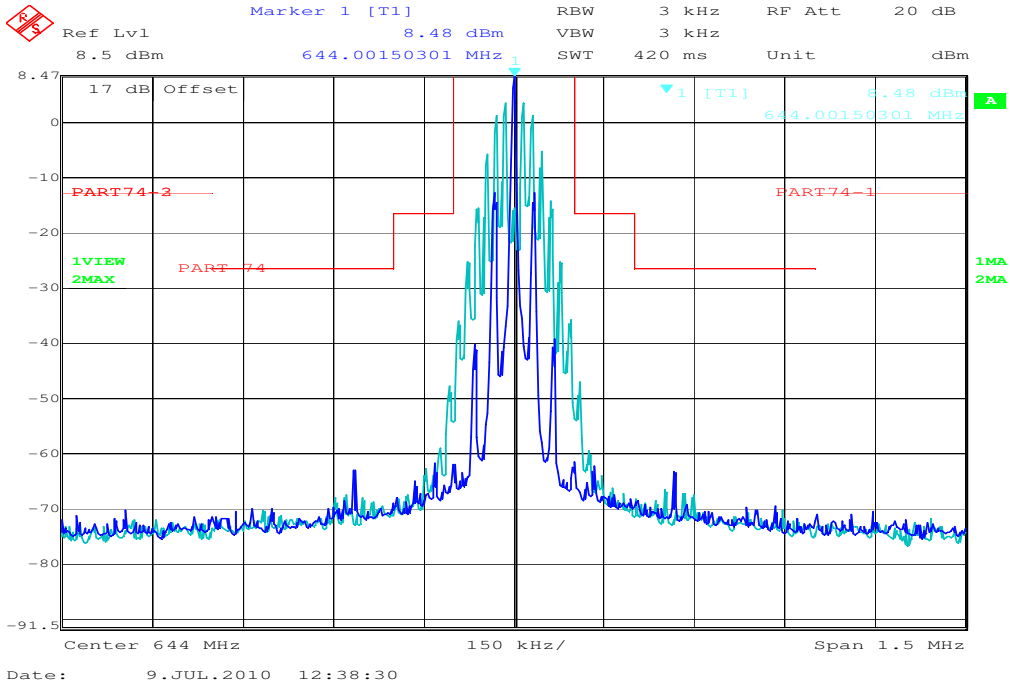
Frequency: 607.925 MHz



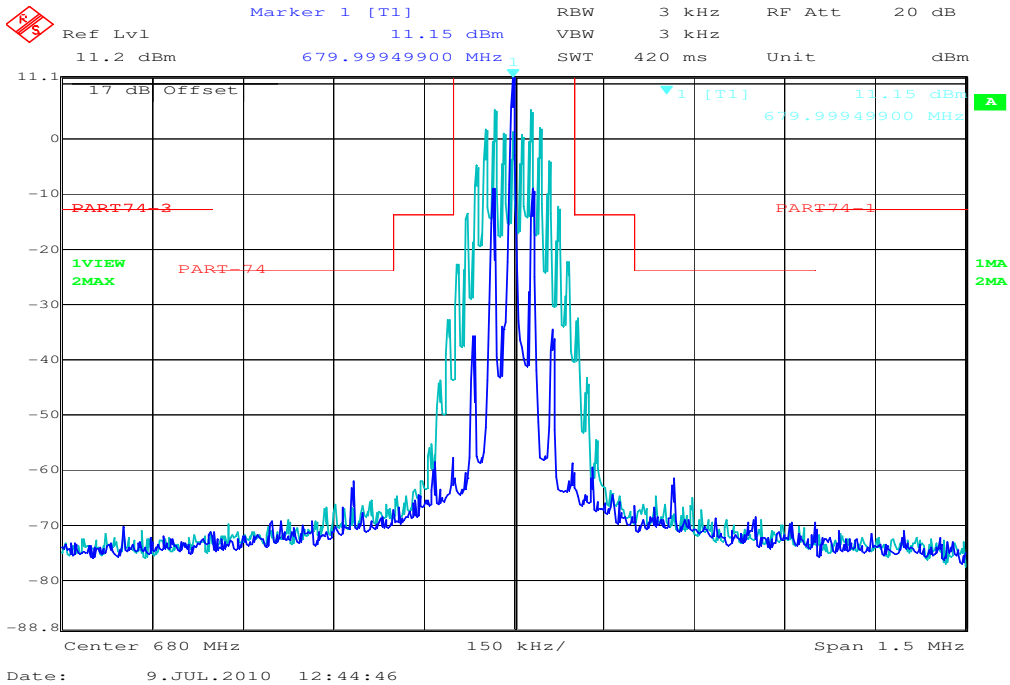
Frequency: 614.075 MHz



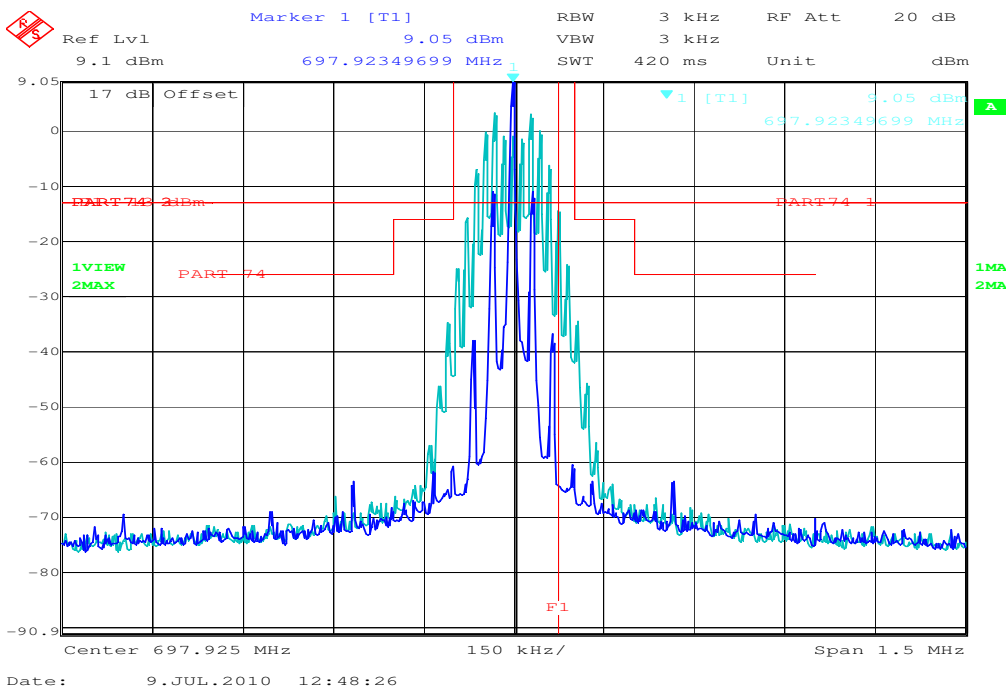
Frequency: 644.000 MHz



Frequency: 680.000 MHz



Frequency: 697.925 MHz



Limits

FCC Rule Part 74.861(e)(6)

$f \pm 100 \text{ kHz to } f \pm 200 \text{ kHz}$	$f \pm 200 \text{ kHz to } f \pm 500 \text{ kHz}$	$f \pm 500 \text{ kHz}$
25 dBc	35 dBc	-43 +10 log ₁₀ (mean output power in watts) dB below the mean output power

8.7 Radiated emissions FCC rule Part 74 subpart H

Test procedure

- 1). on a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- 2). the test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the frequency of the transmitter.
- 3). the output of the test antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- 4). the transmitter shall be switched on, if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- 5). the test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- 6). the transmitter shall than be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- 7). the test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- 8). the maximum signal level detected by the measuring receiver shall be noted.
- 9). the transmitter shall be replaced by a substitution antenna (tuned dipole for f less than 1GHz and horn for frequency higher than 1GHz).
- 10). the substitution antenna shall be oriented for vertical polarization and the length (if a dipole antenna is used) of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- 11). the substitution antenna shall be connected to a calibrated signal generator.
- 12). If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- 13). the test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- 14). the input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- 15). the input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- 16). the measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.
- 17). the measure of the effective radiated power is the larger of the two levels recorded, at the input to the substitution antenna, corrected for the gain of the substitution antenna if necessary.
- 18). Repeat above substitution measurement procedure for fundamental and all harmonica emissions.

8.7.1 Results of the measurements

Wireless microphone: S 910 M

Results: 5M2A

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
No critical peaks detected. All detected emissions are 20 dB below the limit!			No critical peaks detected. All detected emissions are 20 dB below the limit!			-/-	-/-	-/-
Measurement uncertainty			± 3 dB					

Results: 5M2B

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
No critical peaks detected. All detected emissions are 20 dB below the limit!			-/-	-/-	-/-	-/-	-/-	-/-
Measurement uncertainty			± 3 dB					

Limits

FCC Rule Part 74.861(e)(6)

f ± 100 kHz to f ± 200 kHz	f ± 200 kHz to f ± 500 kHz	f ± 500 kHz
25 dBc	35 dBc	-43 + 10 log ₁₀ (mean output power in watts) dB below the mean output power

Results: 5M9A

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
-/-	-/-	-/-	No critical peaks detected. All detected emissions are 20 dB below the limit!			-/-	-/-	-/-
Measurement uncertainty			± 3 dB					

Results: 5M9B

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
-/-	-/-	-/-	No critical peaks detected. All detected emissions are 20 dB below the limit!			-/-	-/-	-/-
Measurement uncertainty			± 3 dB					

Limits

FCC Rule Part 74.861(e)(6)

f ± 100 kHz to f ± 200 kHz	f ± 200 kHz to f ± 500 kHz	f ± 500 kHz
25 dBc	35 dBc	-43 + 10 log ₁₀ (mean output power in watts) dB below the mean output power

Results: 6M6A

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
-/-	-/-	-/-	1288.0	1 MHz	-44.18 dBm vertical -40.14 dBm horizontal	-/-	-/-	-/-
			3864.10	1 MHz	-44.76 dBm vertical -40.34 dBm horizontal			
Measurement uncertainty			± 3 dB					

Results: 6M6B

TX Spurious Emissions Radiated [dBm]								
TX mode								
Low channel			Mid channel			High channel		
F [MHz]	Detector	Level	F [MHz]	Detector	Level	F [MHz]	Detector	Level
-/-	-/-	-/-	1360.99	1 MHz	-41.50 dBm vertical -37.30 dBm horizontal	1395.98	1 MHz	-43.06 dBm vertical -39.57 dBm horizontal
			2719.89	1 MHz	-50.44 dBm vertical -48.79 dBm horizontal	2792.00	1 MHz	-45.05 dBm vertical -44.24 dBm horizontal
Measurement uncertainty			± 3 dB					

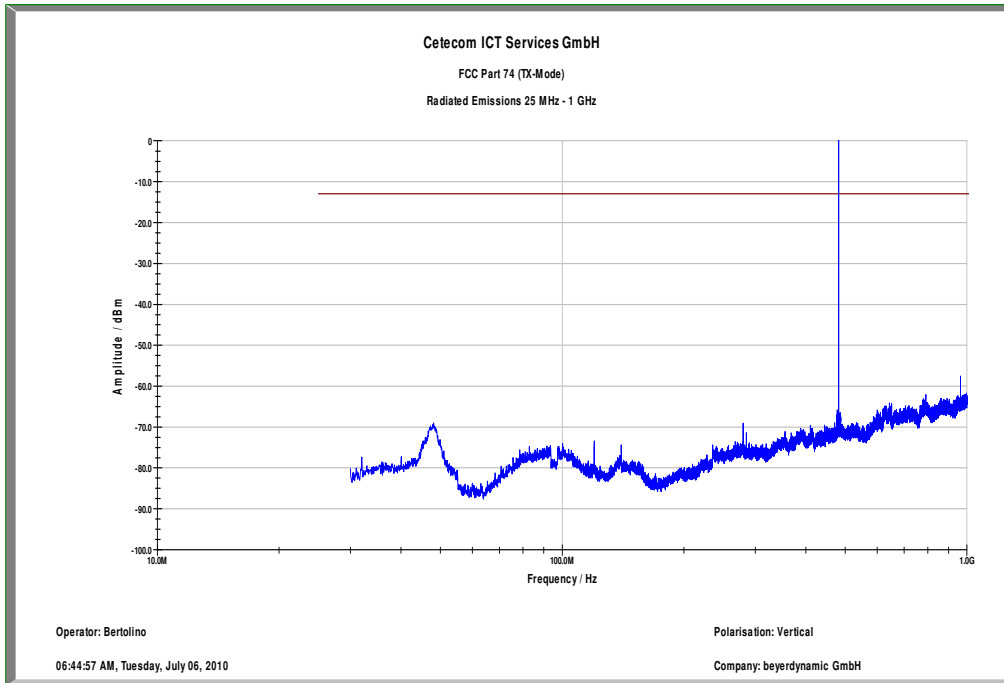
Limits

FCC Rule Part 74.861(e)(6)

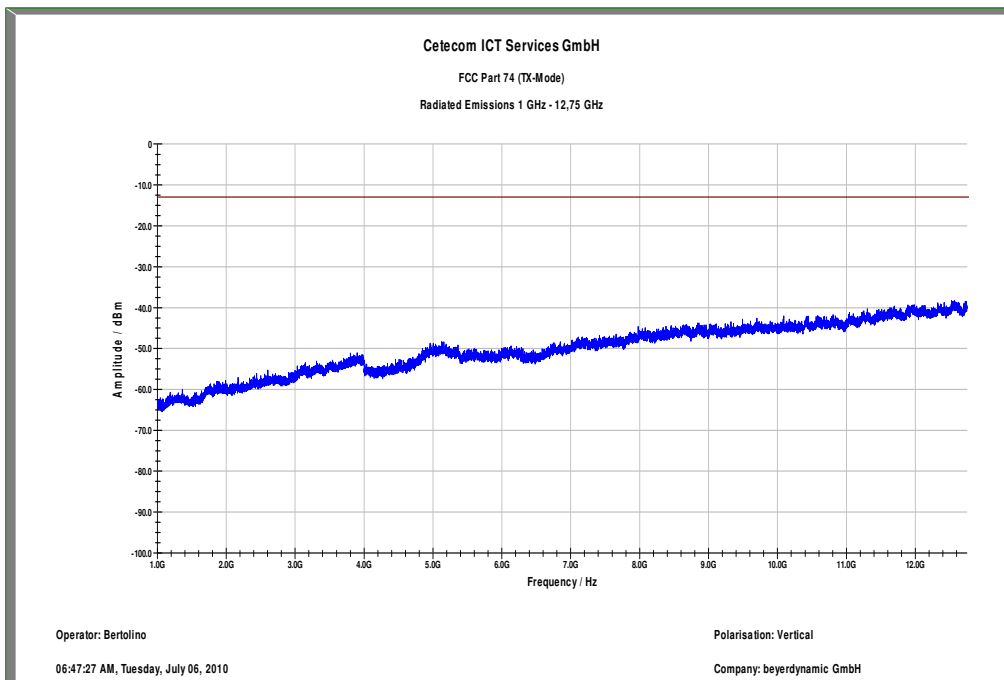
f ± 100 kHz to f ± 200 kHz	f ± 200 kHz to f ± 500 kHz	f ± 500 kHz
25 dBc	35 dBc	-43 + 10 log ₁₀ (mean output power in watts) dB below the mean output power

8.7.2 Plots of the measurements

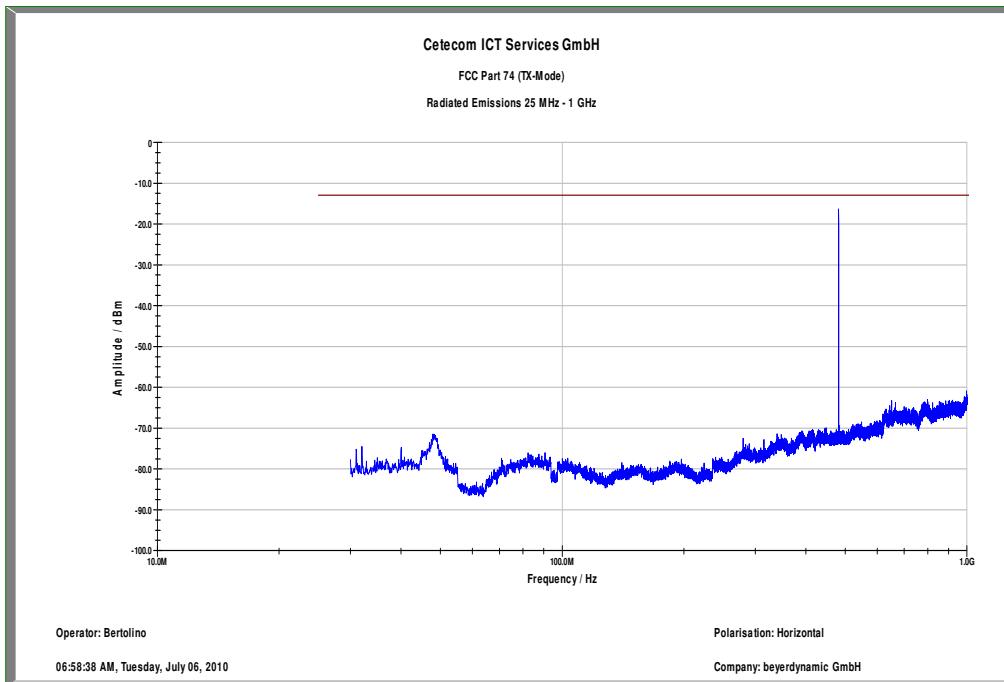
Plot 1: 5M2A band 1 low, TX mode, low channel, 30 MHz to 1 GHz, vertical polarization



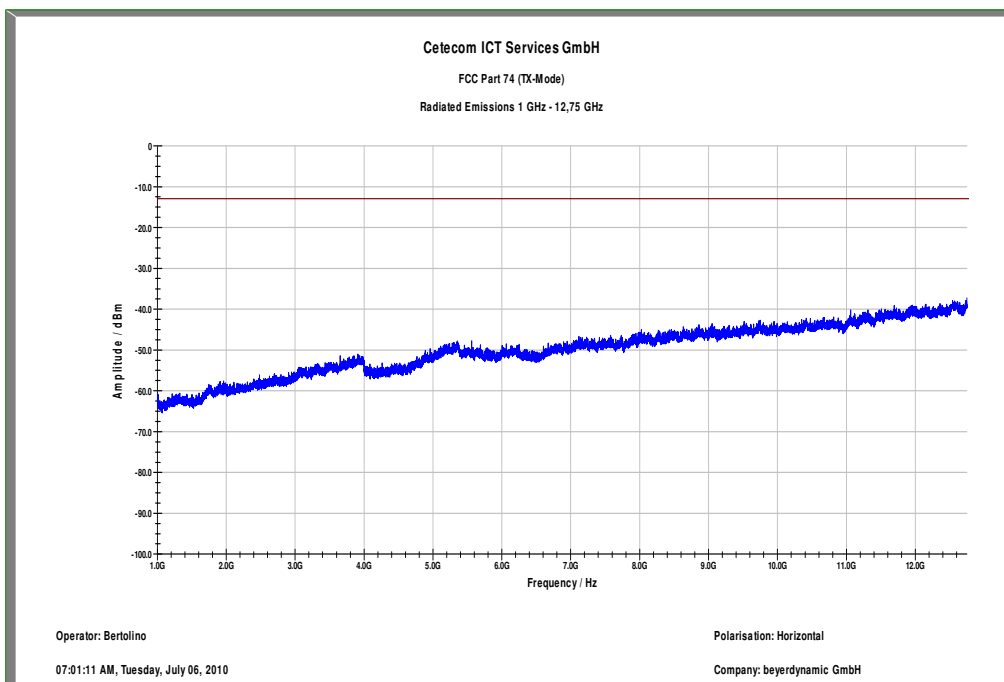
Plot 2: 5M2A band 1 low, TX mode, low channel, 1 GHz to 12.75 GHz, vertical polarization



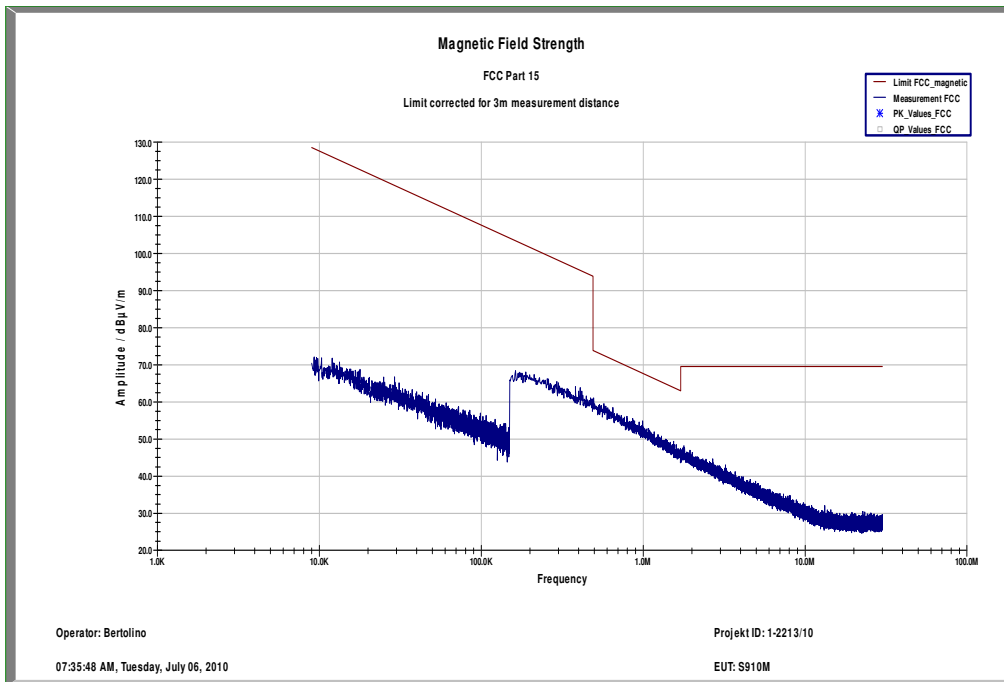
Plot 3: 5M2A band 1 low, TX mode, low channel, 30 MHz to 1 GHz, horizontal polarization



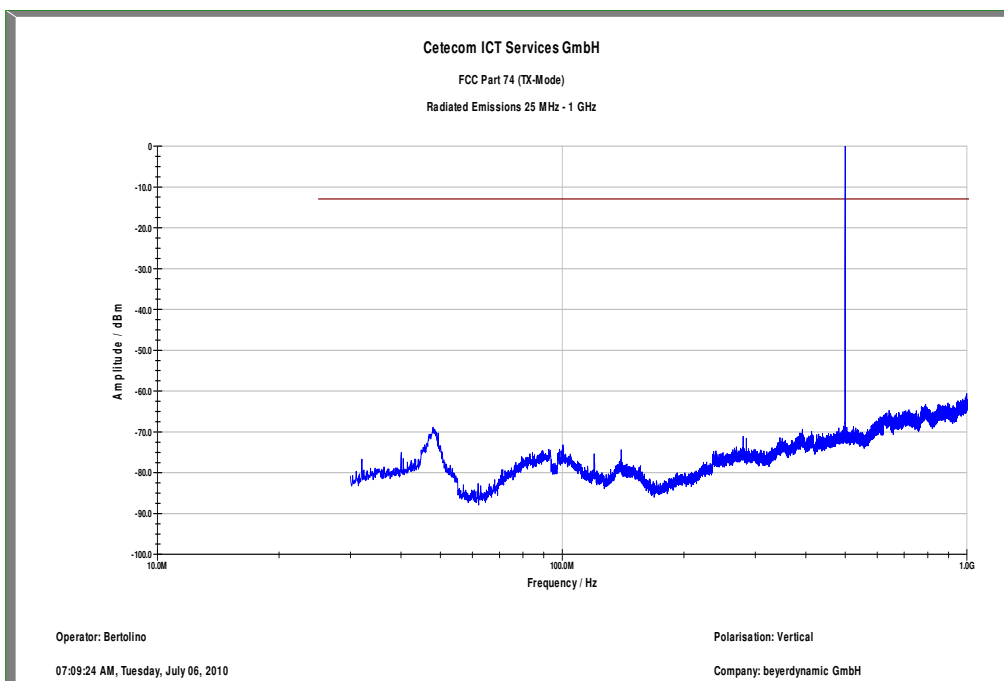
Plot 4: 5M2A band 1 low, TX mode, low channel, 1 GHz to 12.75 GHz, horizontal polarization



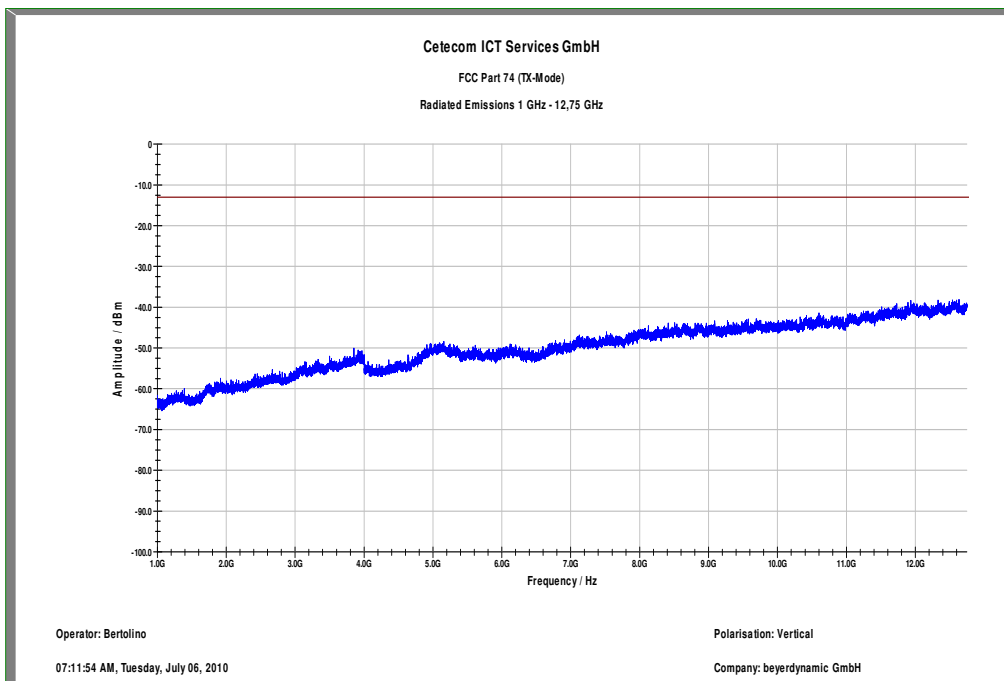
Plot 5: 5M2A band 1 low, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 5M2A channels)



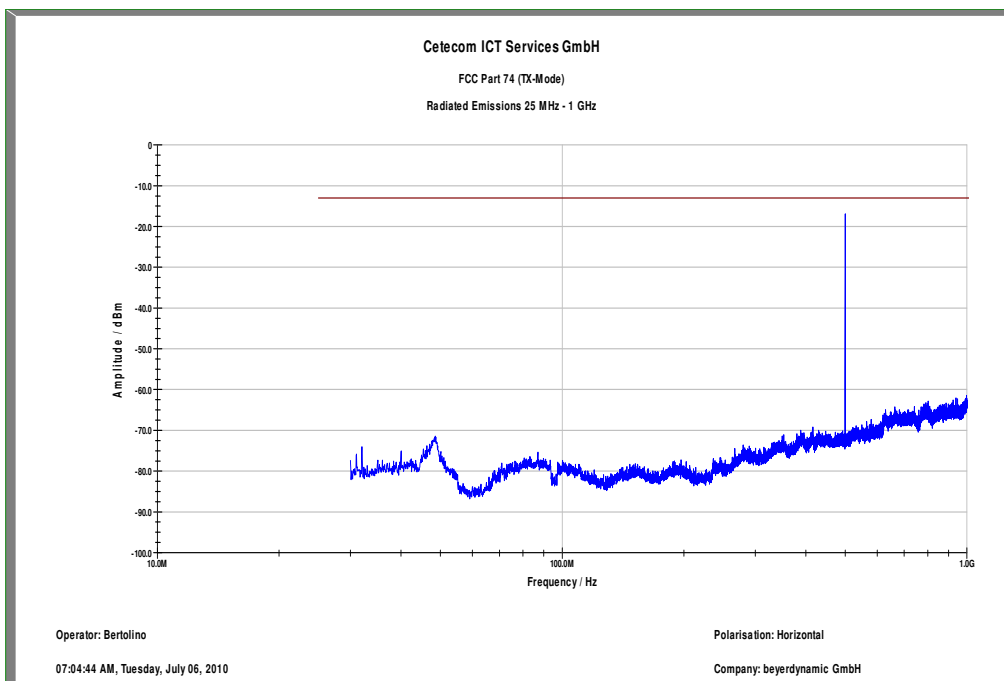
Plot 6: 5M2A band 1 low, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



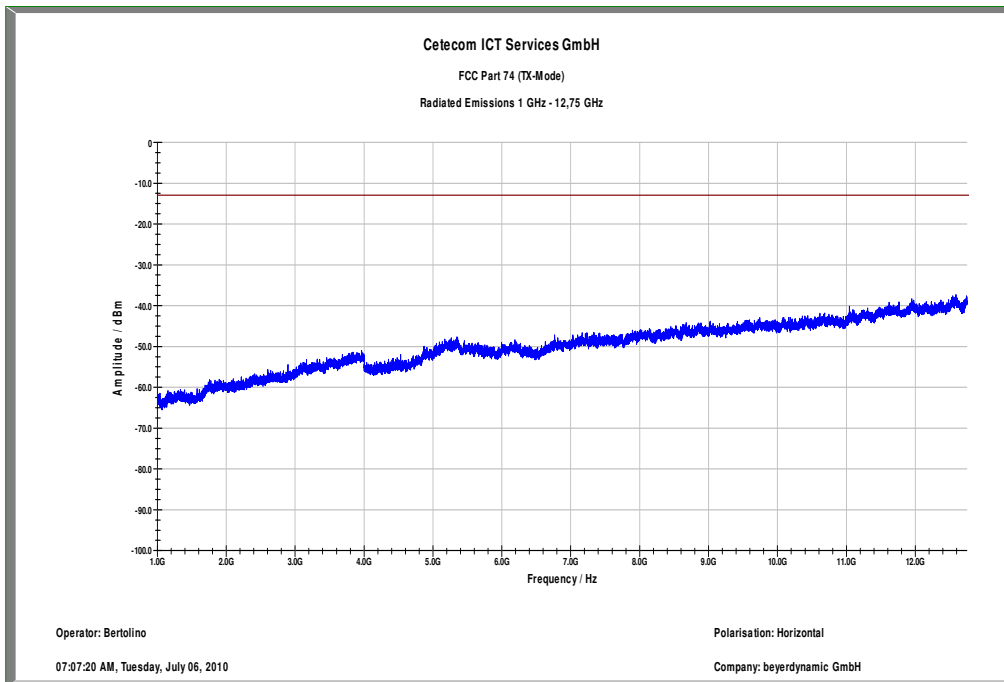
Plot 7: 5M2A band 1 low, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



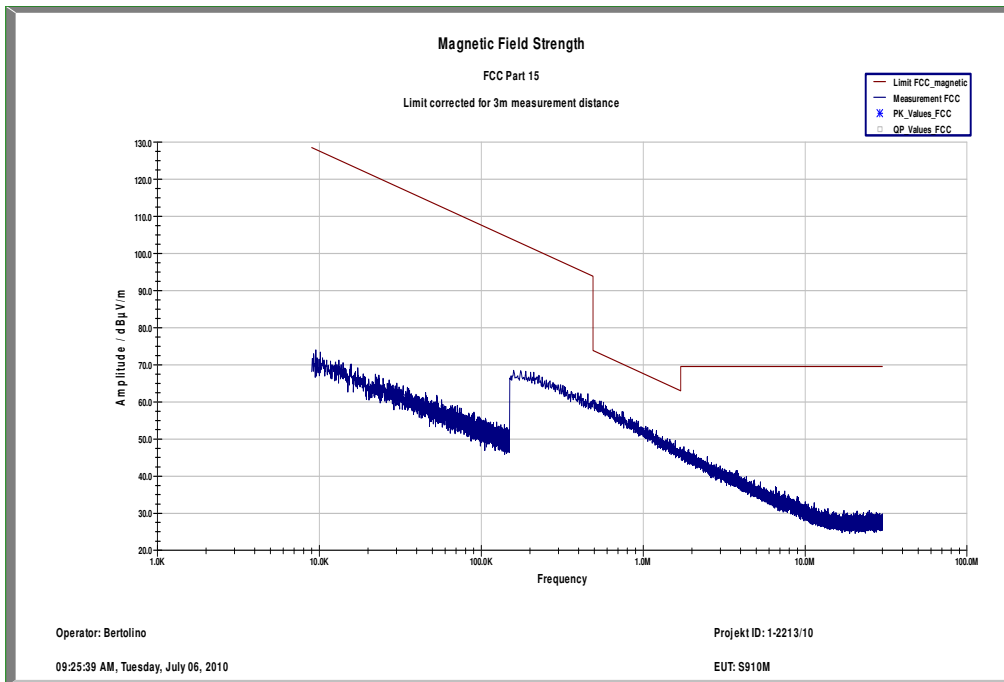
Plot 8: 5M2A band 1 low, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



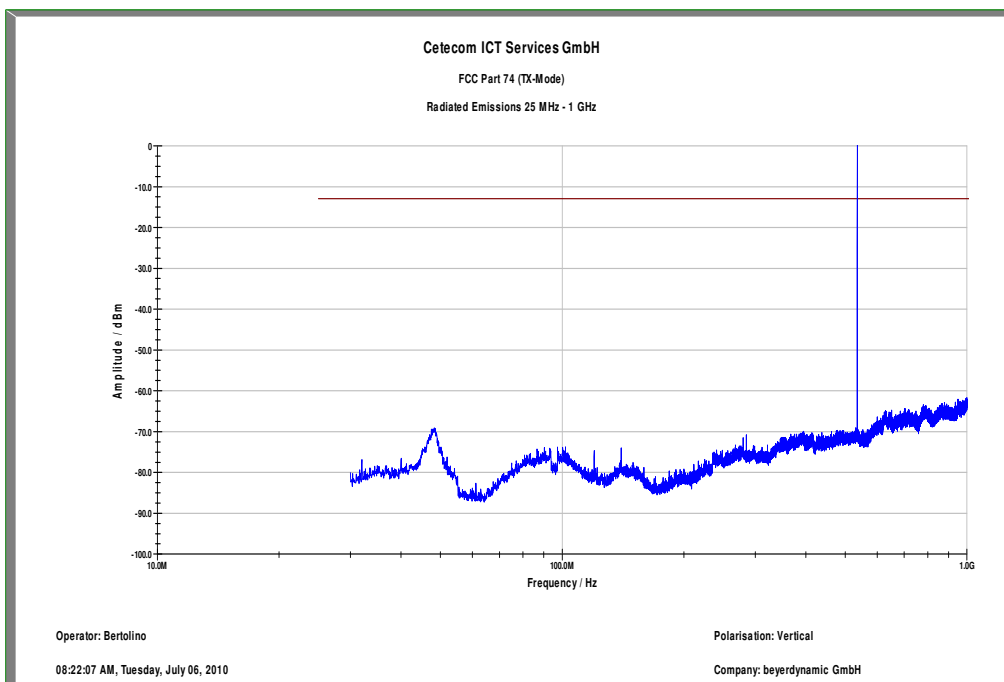
Plot 9: 5M2A band 1 low, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



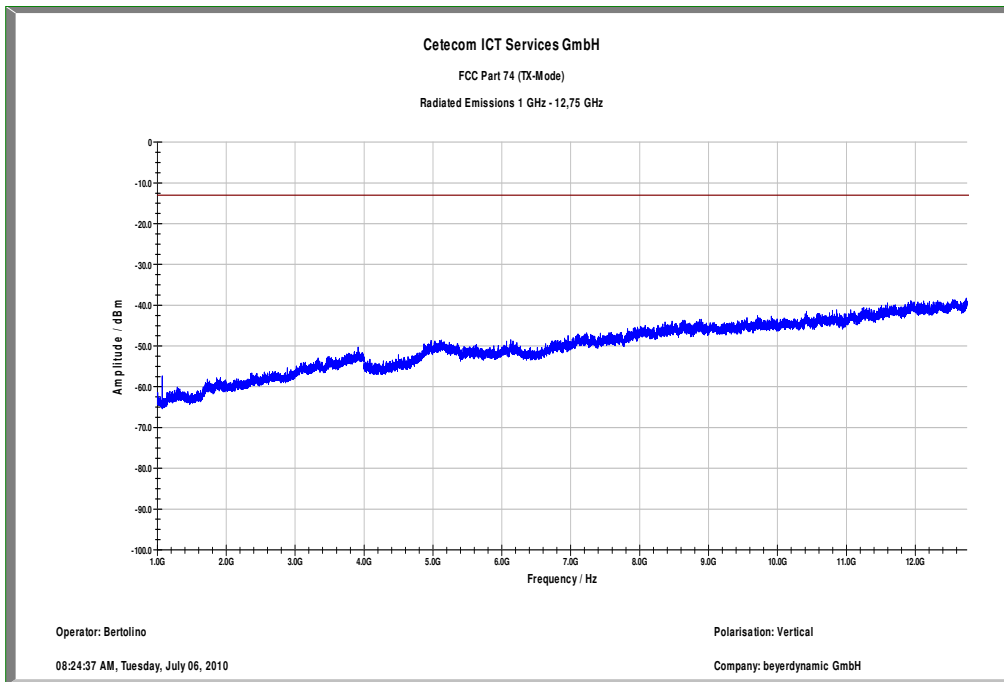
Plot 10: 5M2B band 1 high, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 5M2B channels)



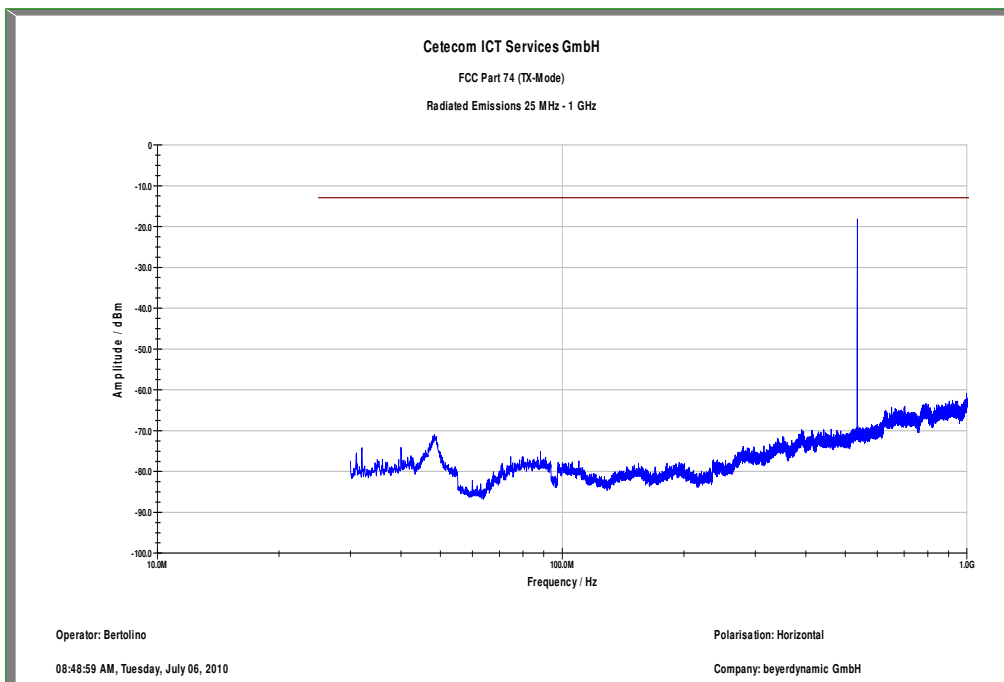
Plot 11: 5M2B band 1 high, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



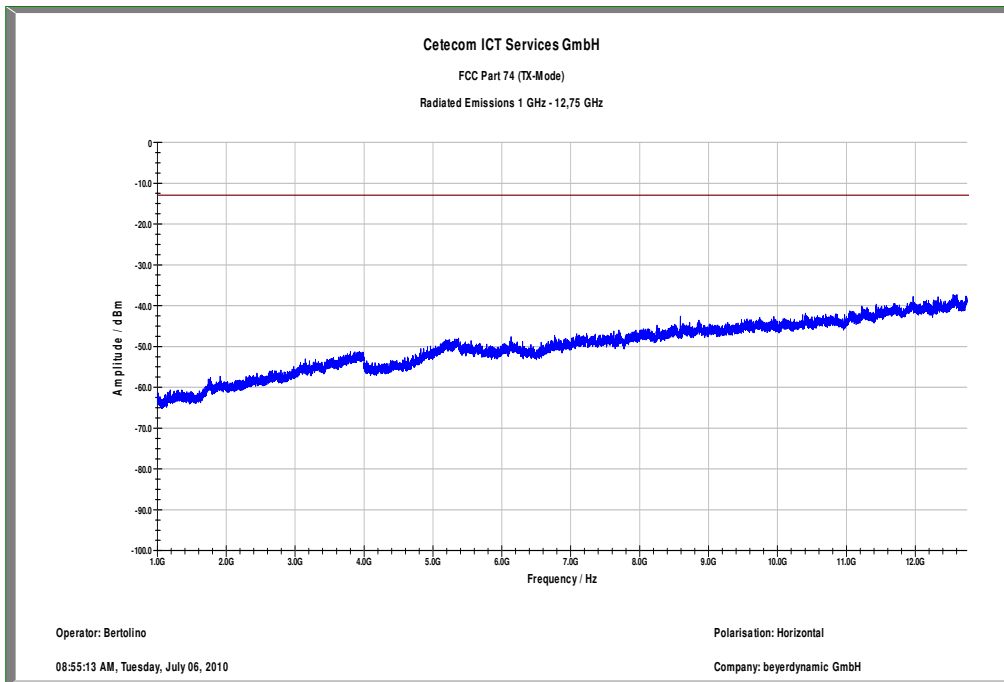
Plot 12: 5M2B band 1 high, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



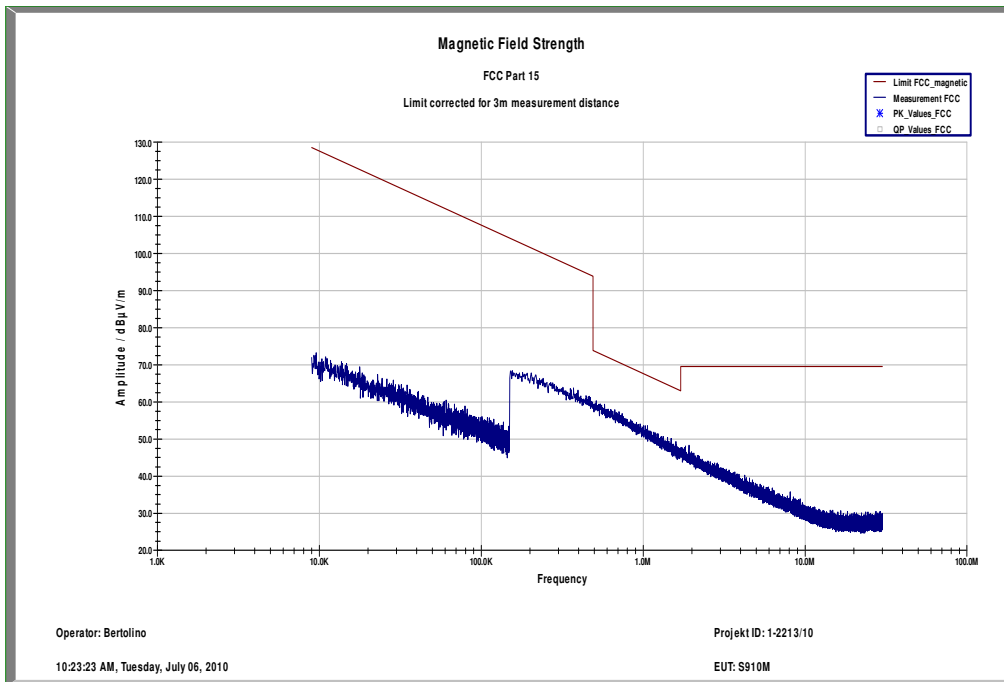
Plot 13: 5M2B band 1 high, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



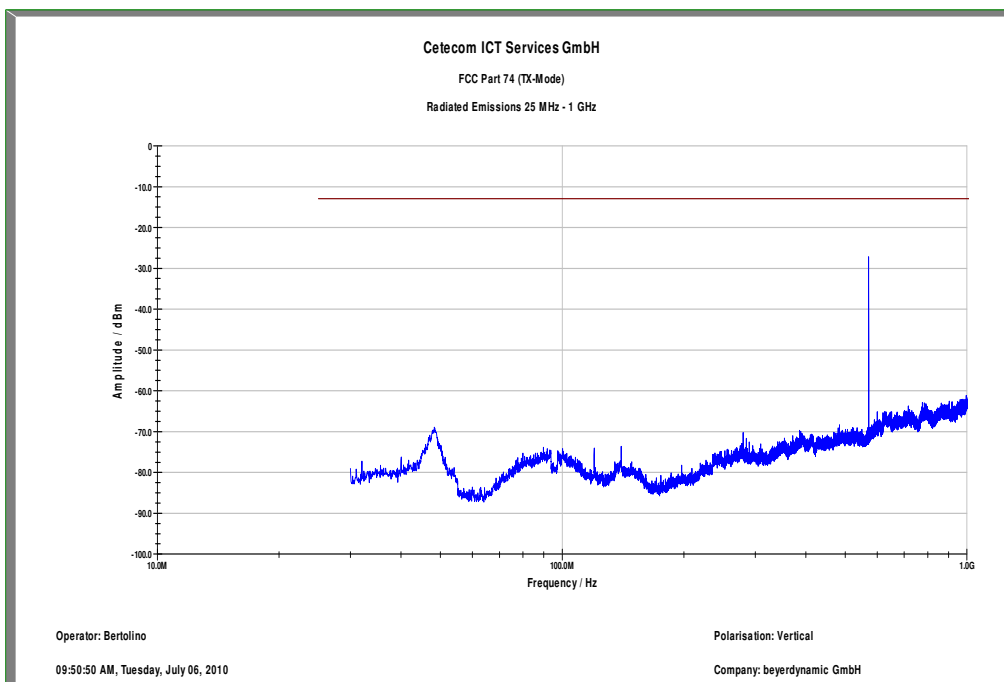
Plot 14: 5M2B band 1 high, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



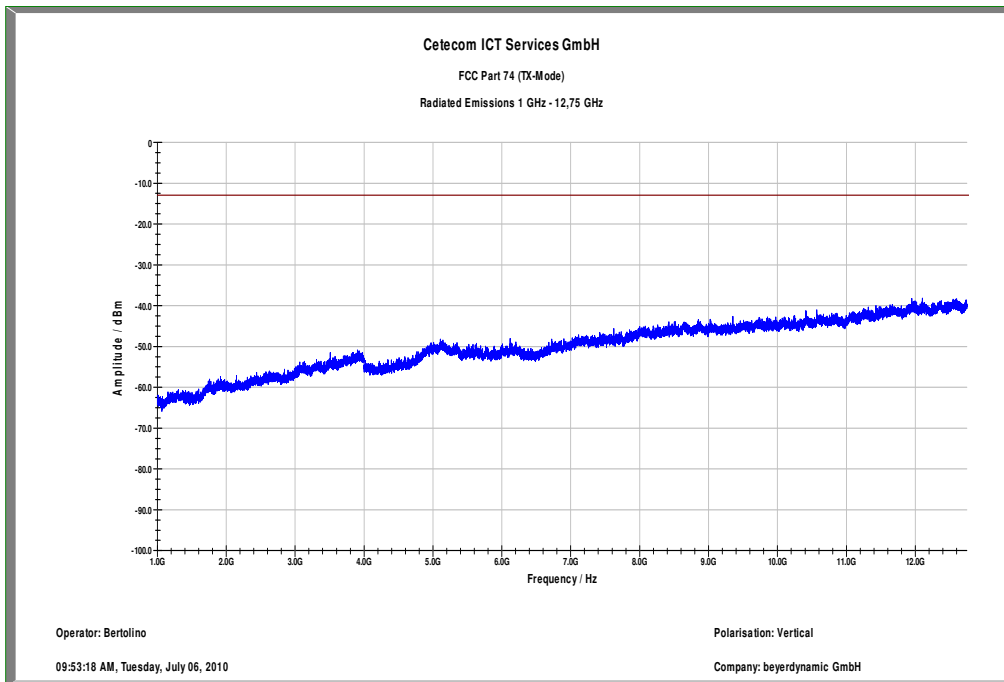
Plot 15: 5M9A band 2 low, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 5M9A channels)



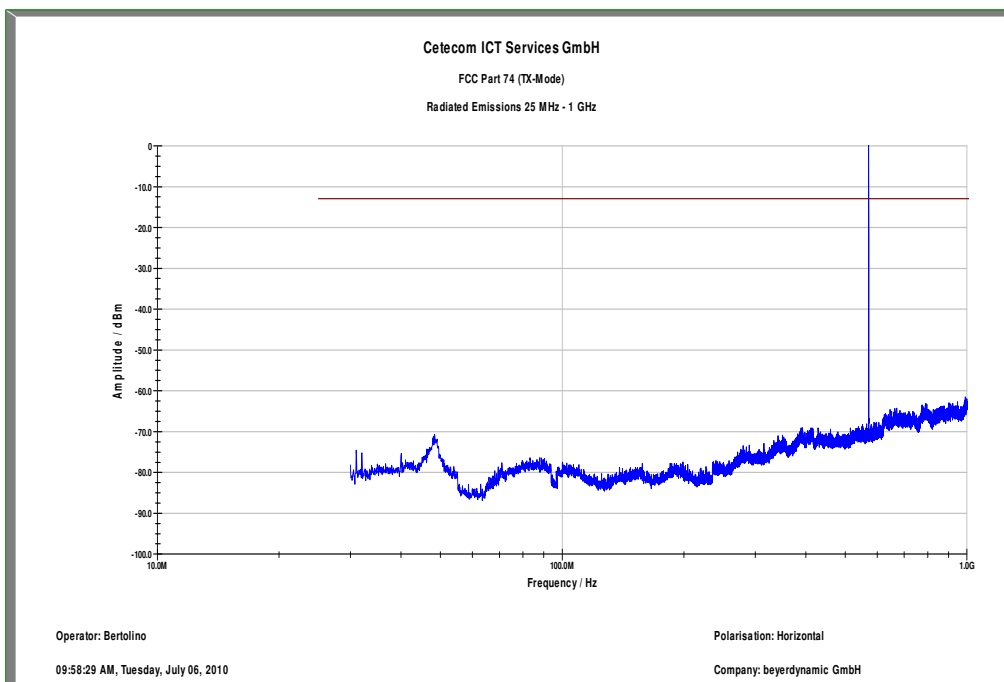
Plot 16: 5M9A band 2 low, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



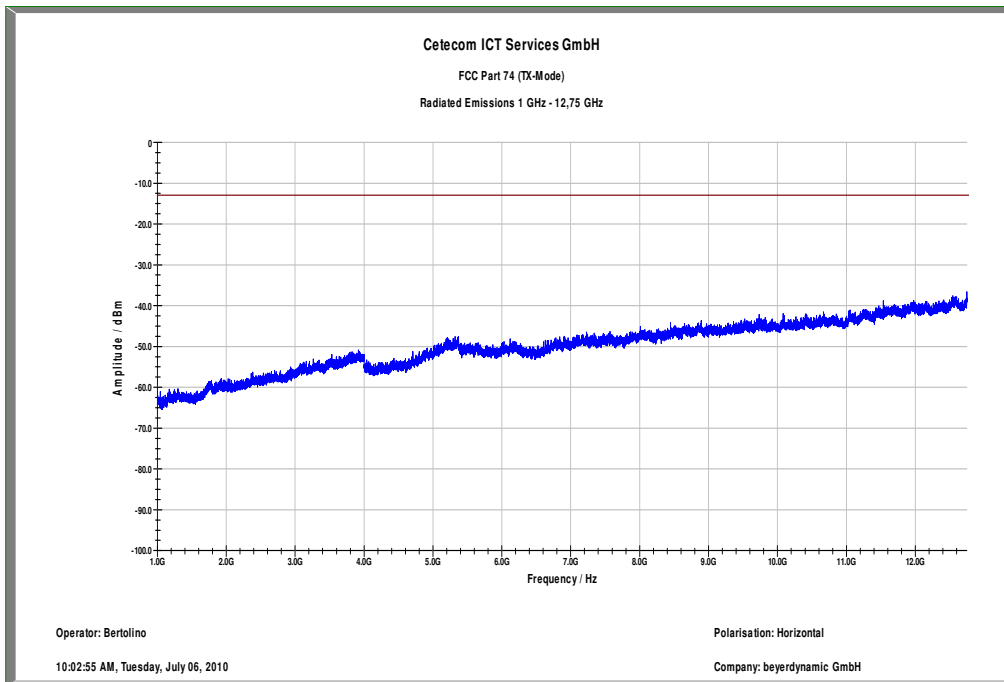
Plot 17: 5M9A band 2 low, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



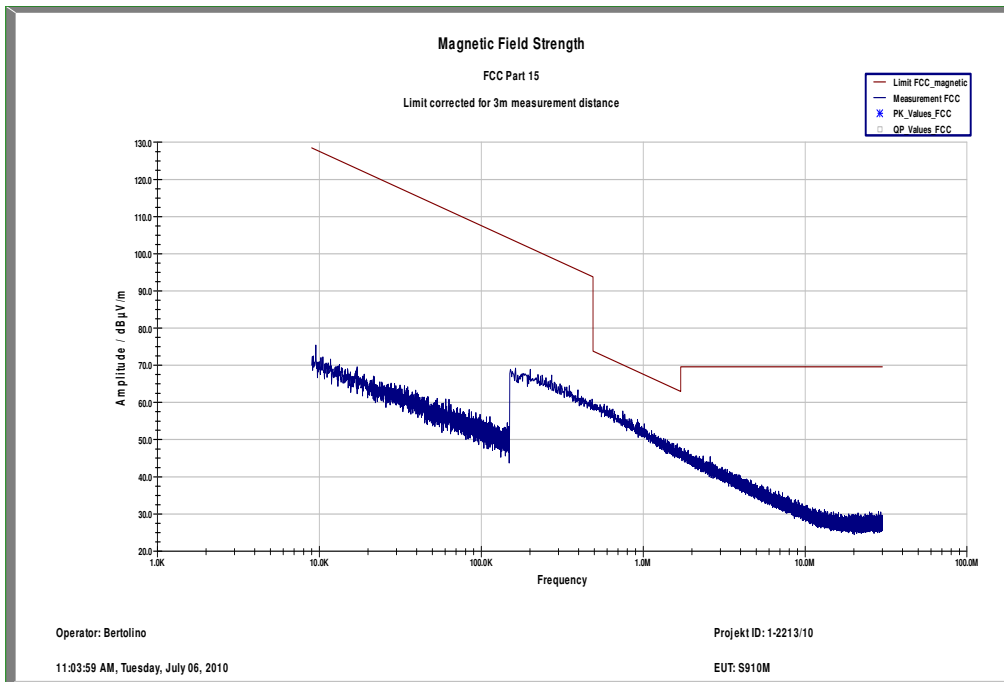
Plot 18: 5M9A band 2 low, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



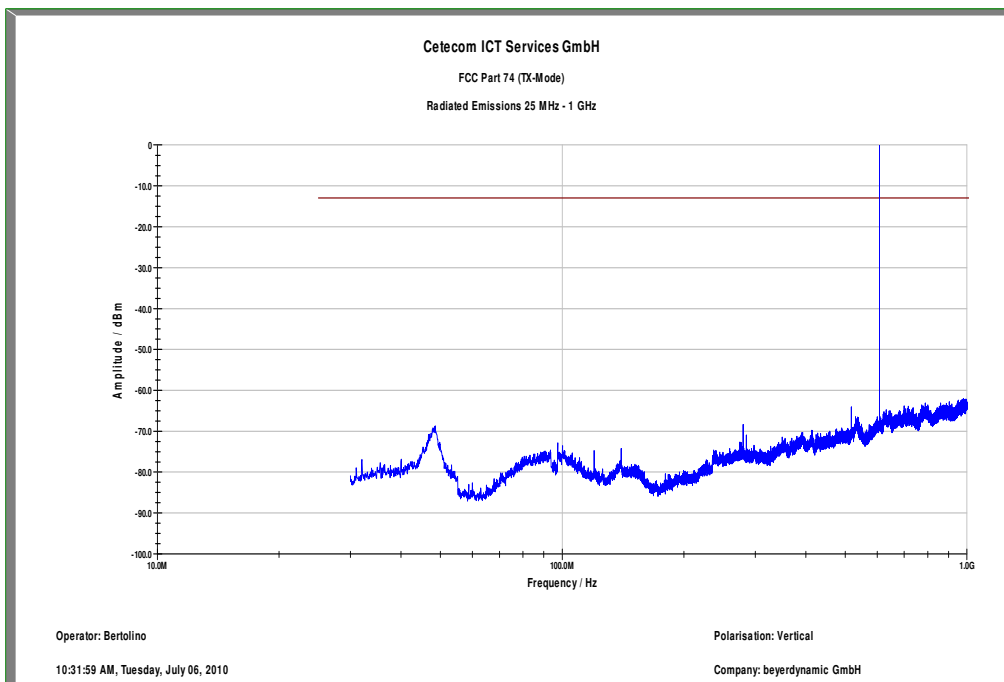
Plot 19: 5M9A band 2 low, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



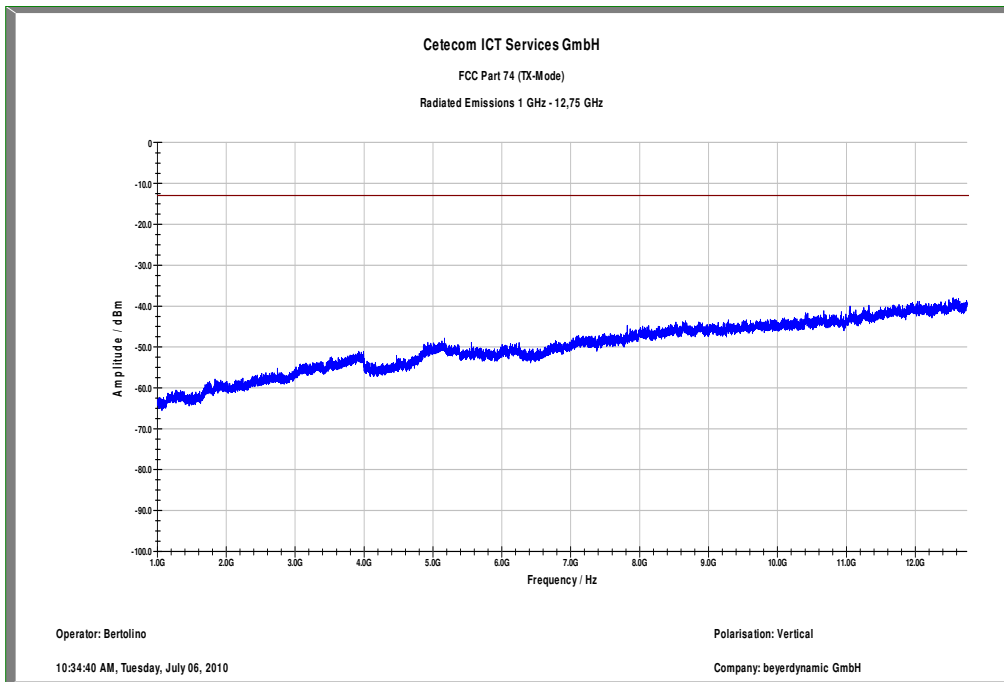
Plot 20: 5M9B band 2 high, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 5M9B channels)



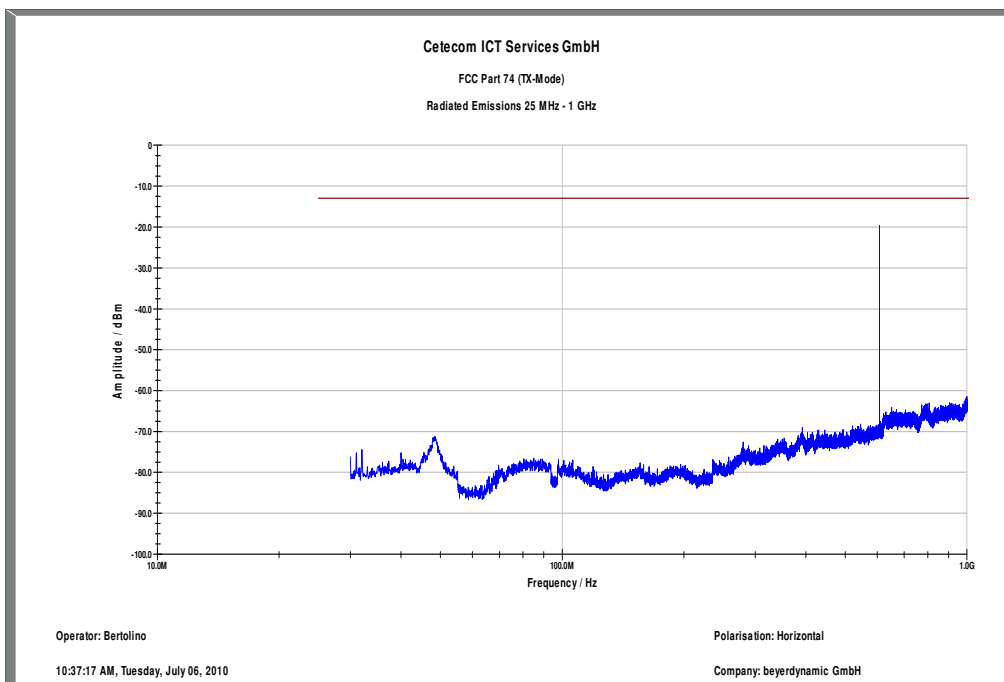
Plot 21: 5M9B band 2 high, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



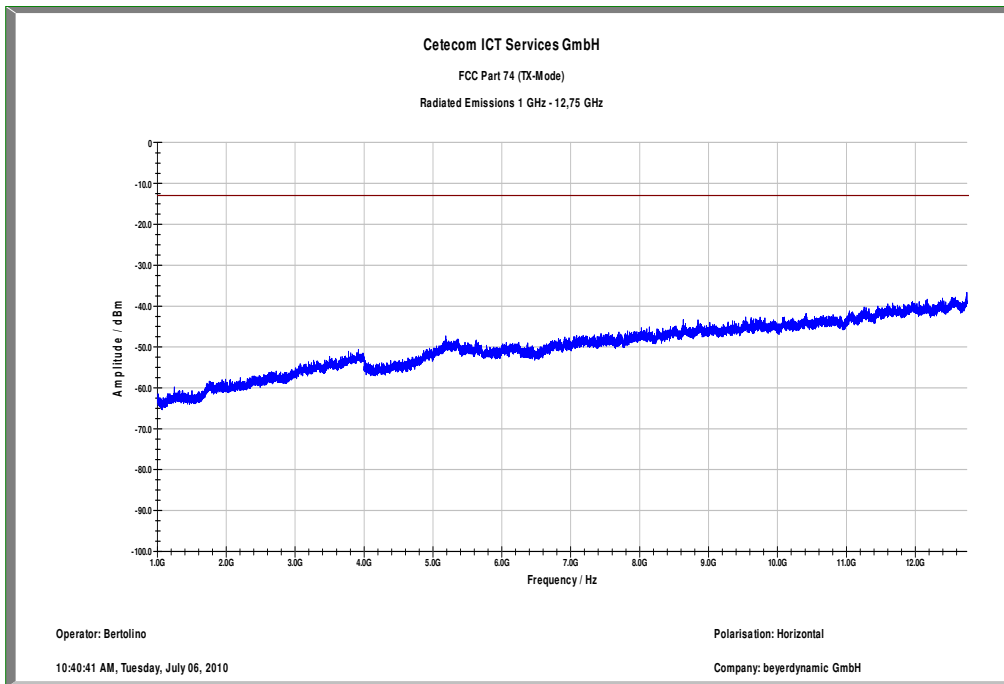
Plot 22: 5M9B band 2 high, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



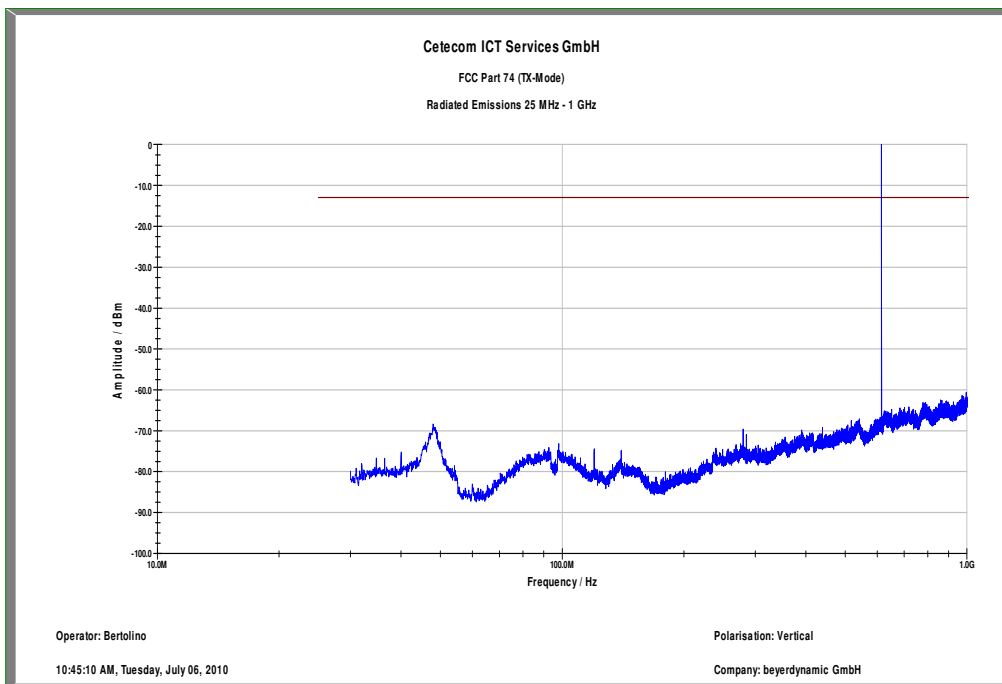
Plot 23: 5M9B band 2 high, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



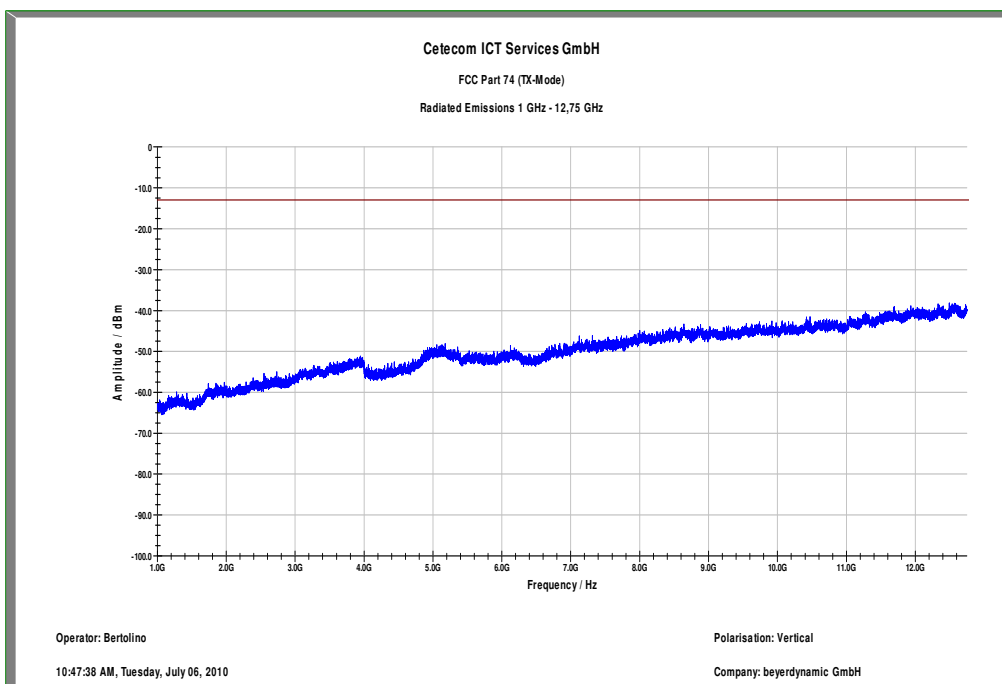
Plot 24: 5M9B band 2 high, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



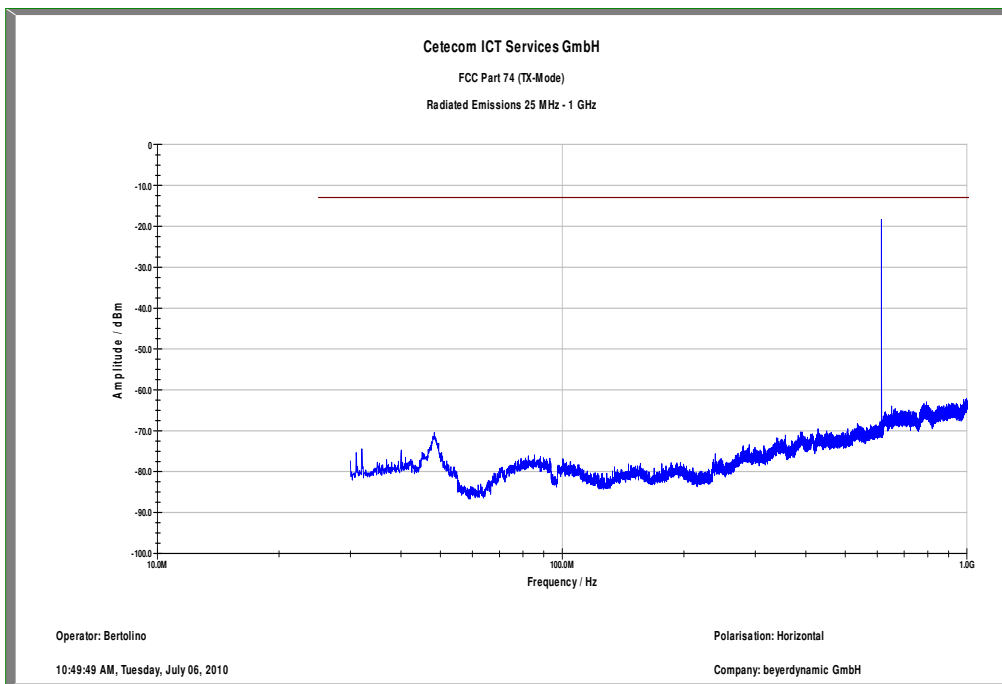
Plot 25: 5M9B band 2 high, TX mode, high channel, 30 MHz to 1 GHz, vertical polarization



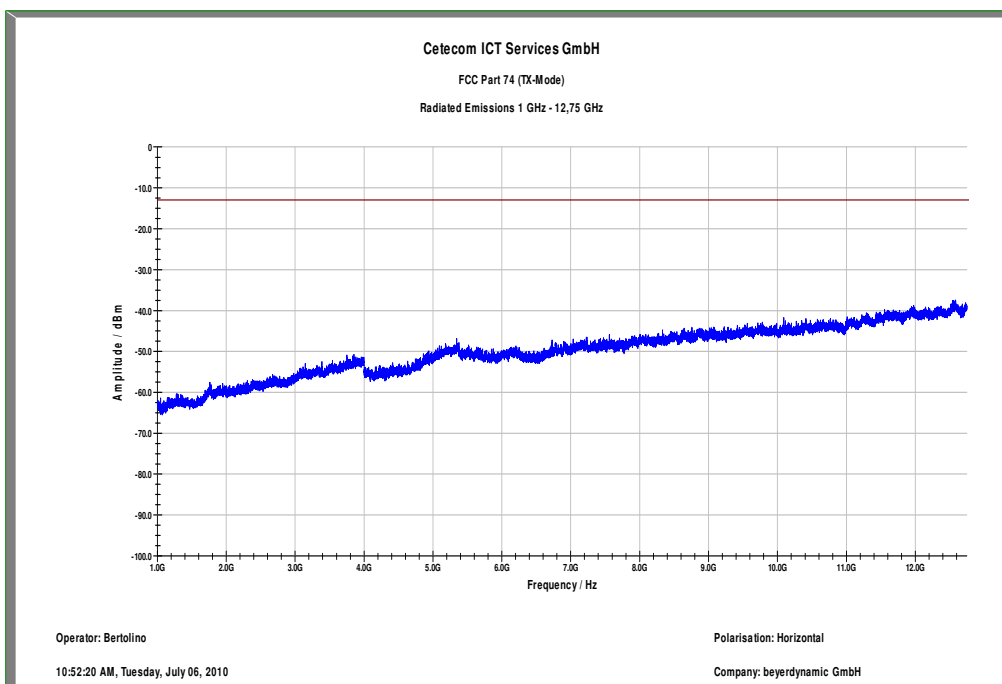
Plot 26: 5M9B band 2 high, TX mode, high channel, 1 GHz to 12.75 GHz, vertical polarization



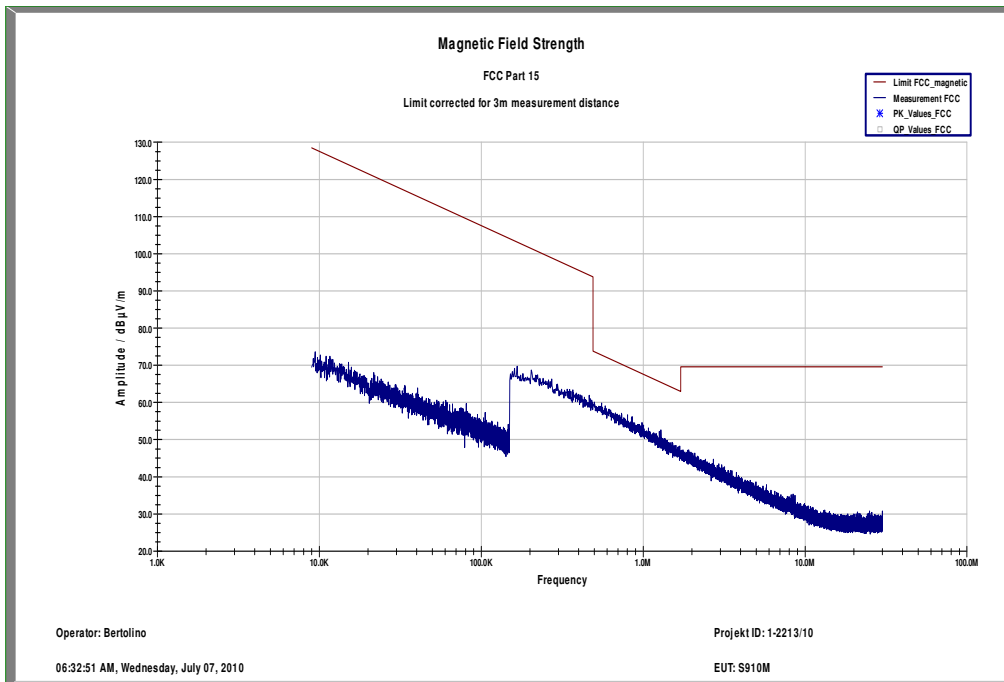
Plot 27: 5M9B band 2 high, TX mode, high channel, 30 MHz to 1 GHz, horizontal polarization



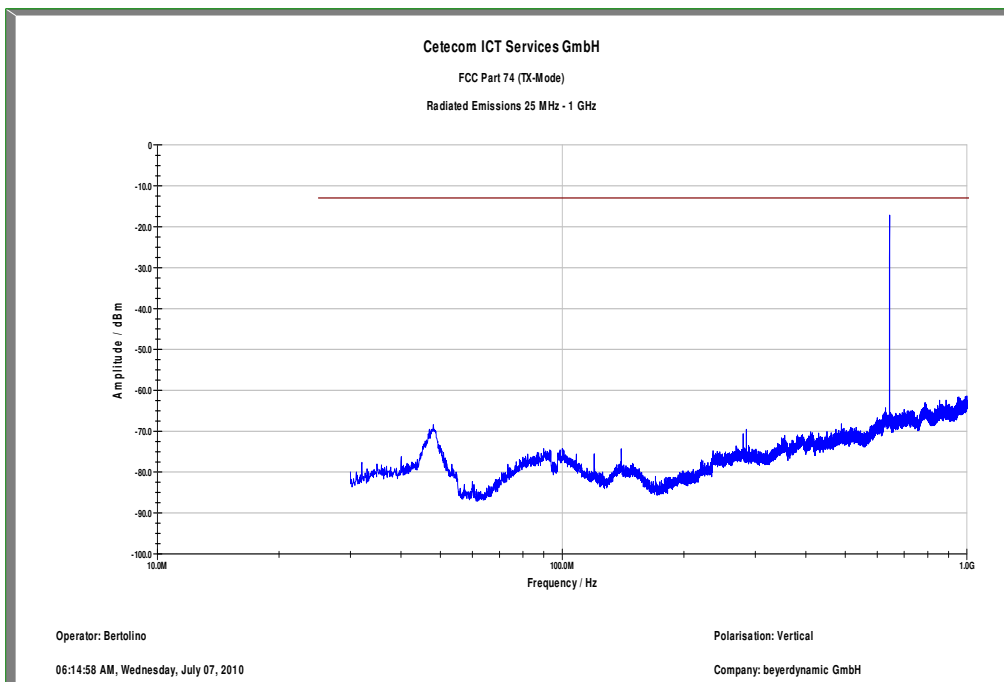
Plot 28: 5M9B band 2 high, TX mode, high channel, 1 GHz to 12.75 GHz, horizontal polarization



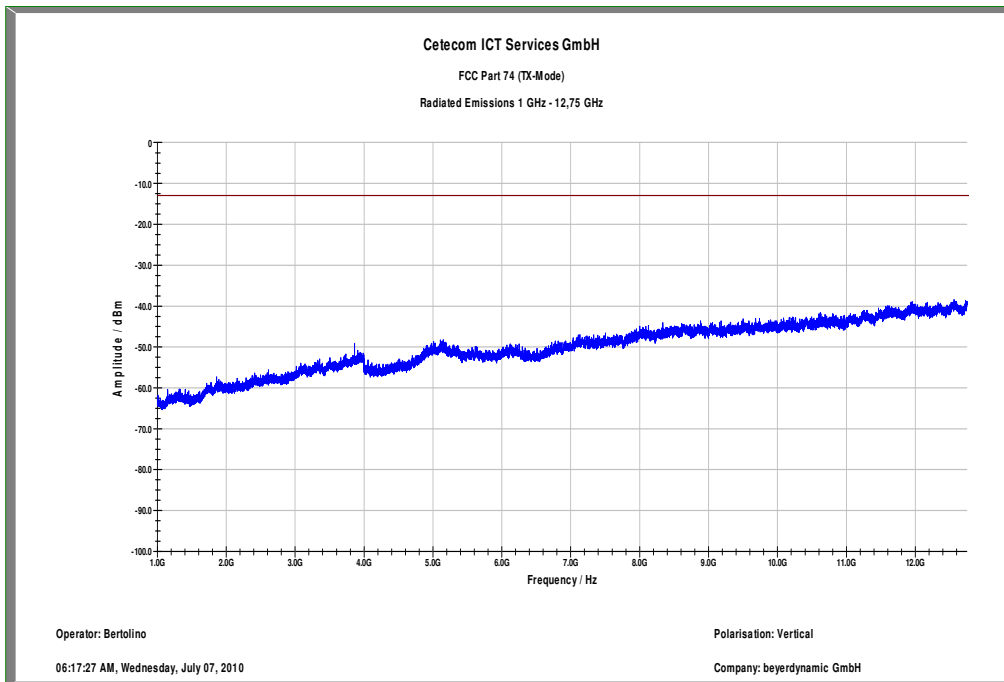
Plot 29: 6M6A band 3 low, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 6M6A channels)



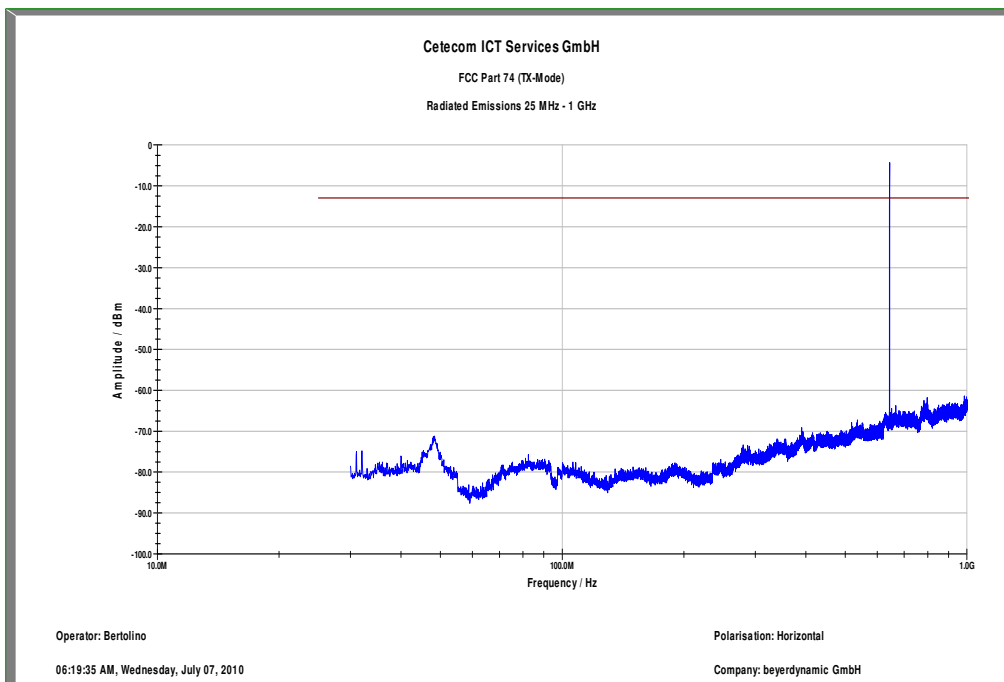
Plot 30: 6M6A band 3 low, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



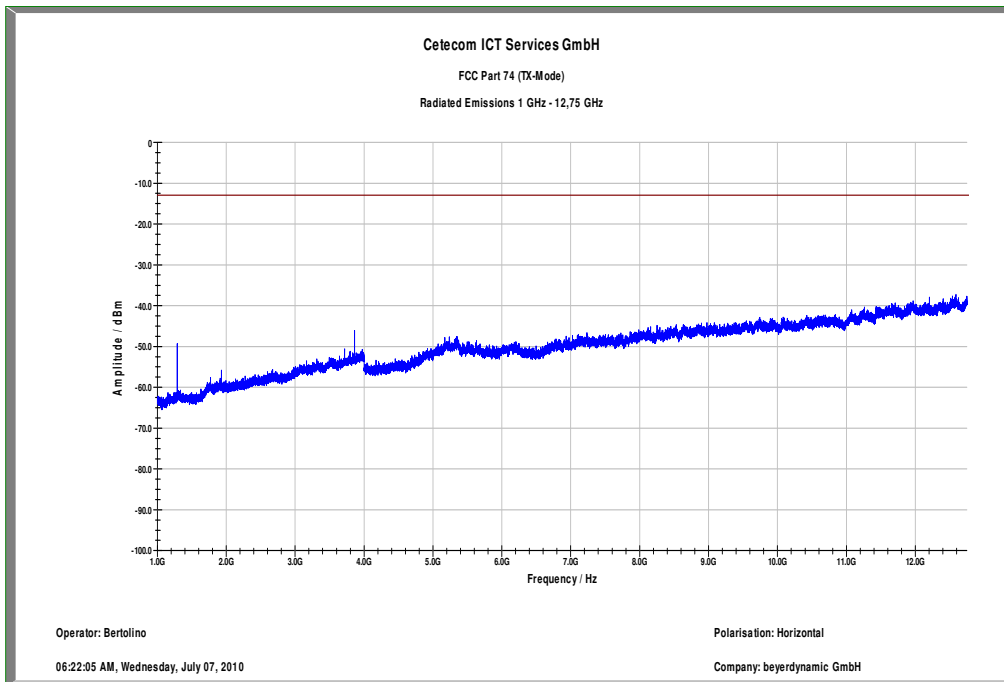
Plot 31: 6M6A band 3 low, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



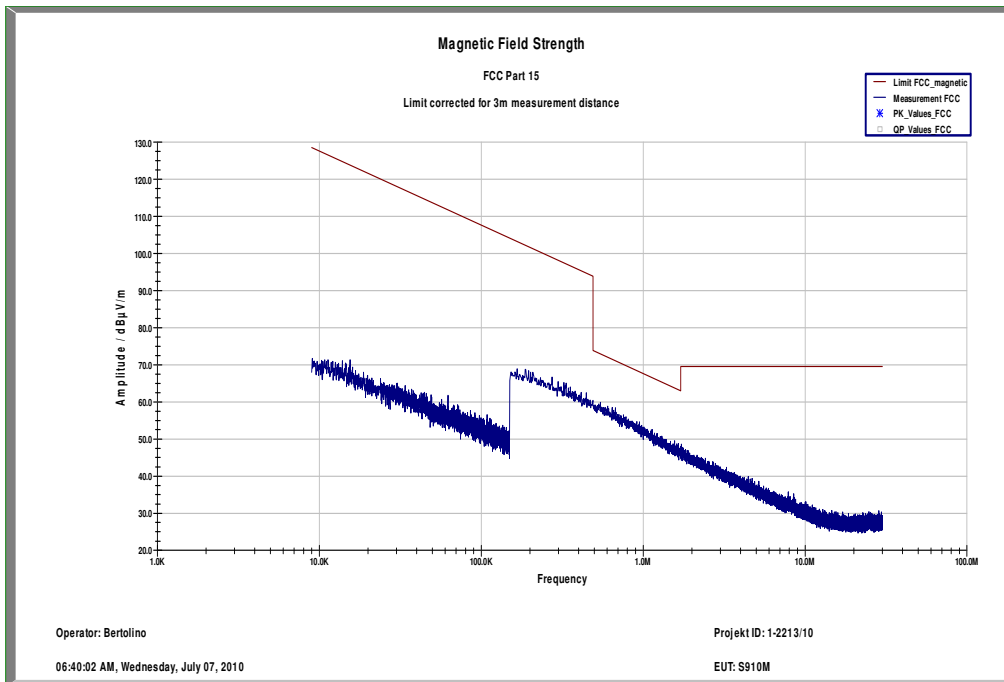
Plot 32: 6M6A band 3 low, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



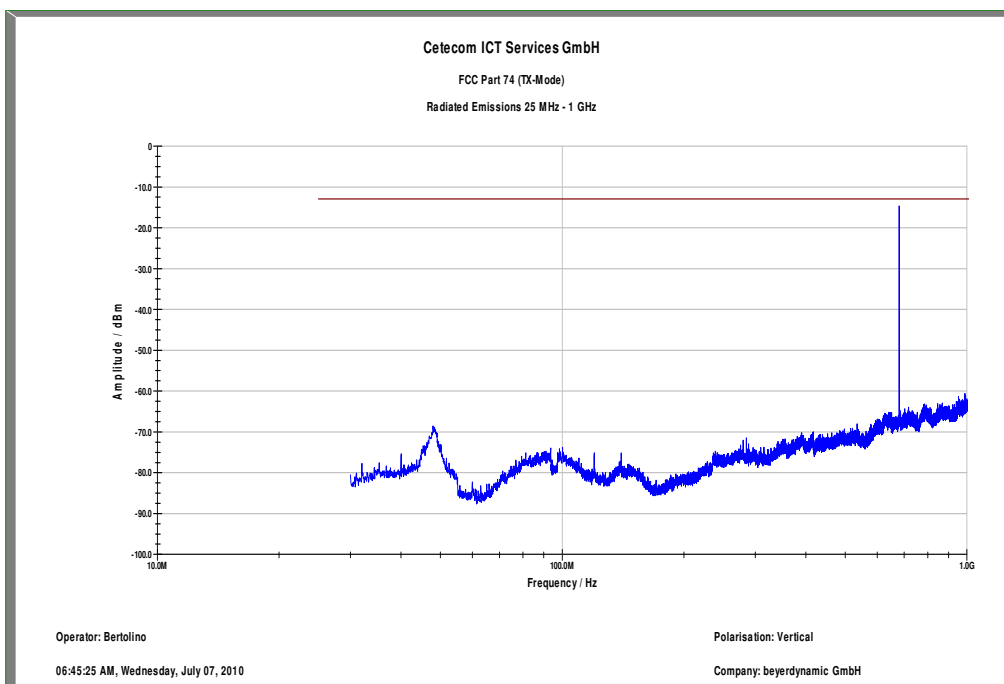
Plot 33: 6M6A band 3 low, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



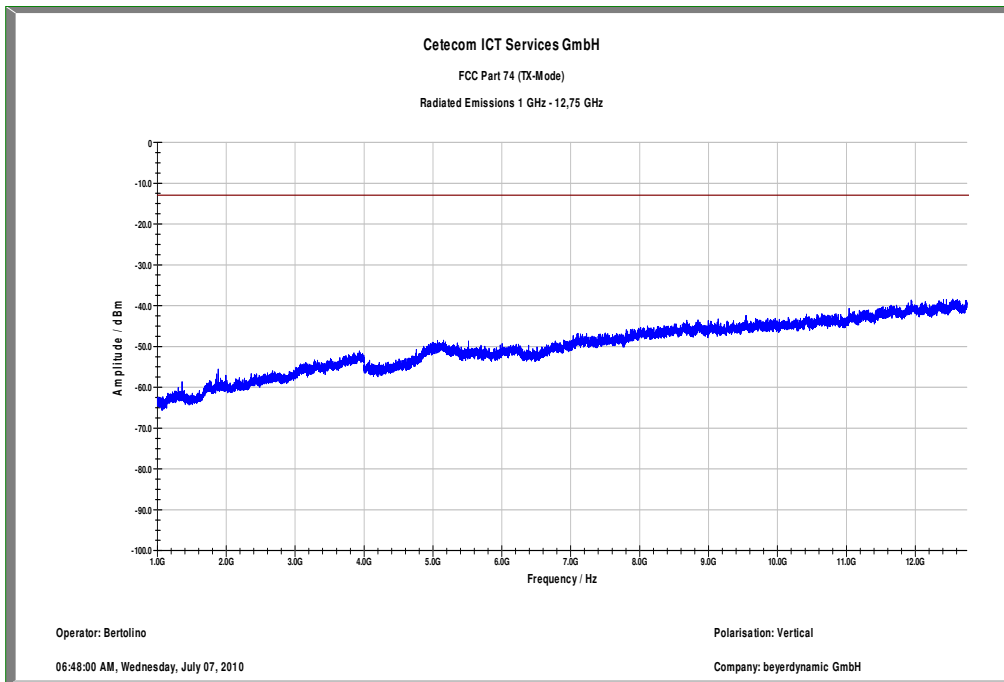
Plot 34: 6M6B band 3 high, TX mode, mid channel, 9 kHz to 30 MHz, magnetic (valid for all 6M6B channels)



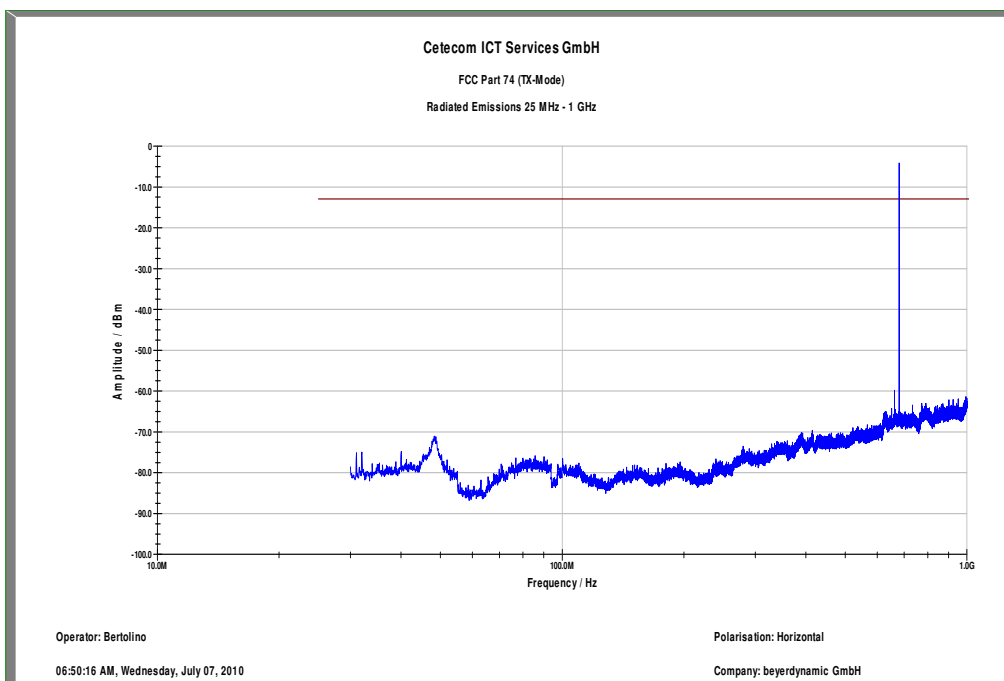
Plot 35: 6M6B band 3 high, TX mode, mid channel, 30 MHz to 1 GHz, vertical polarization



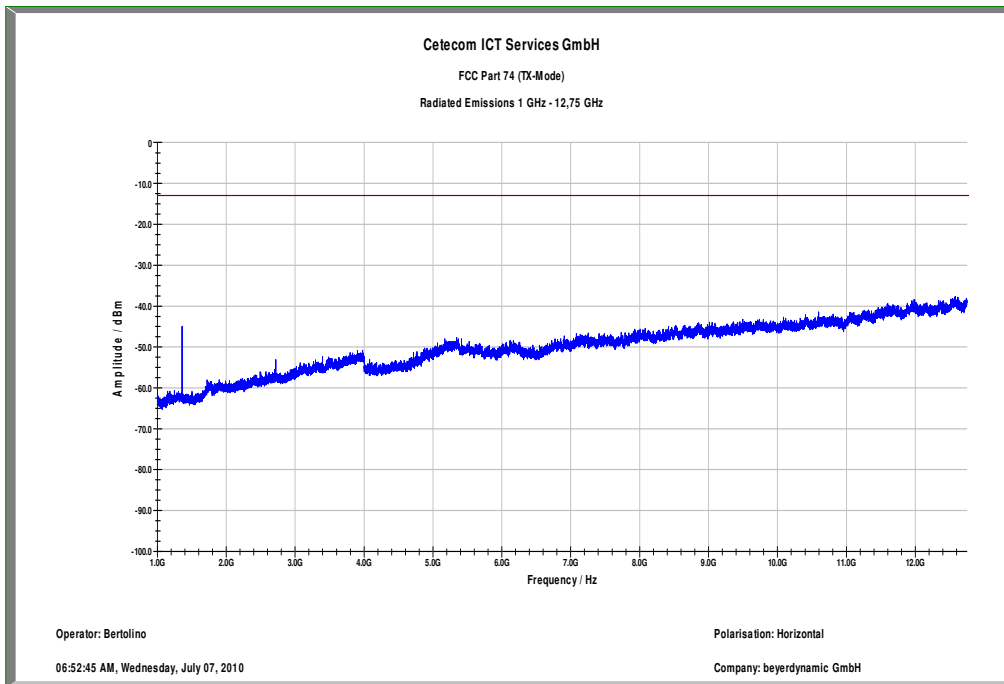
Plot 36: 6M6B band 3 high, TX mode, mid channel, 1 GHz to 12.75 GHz, vertical polarization



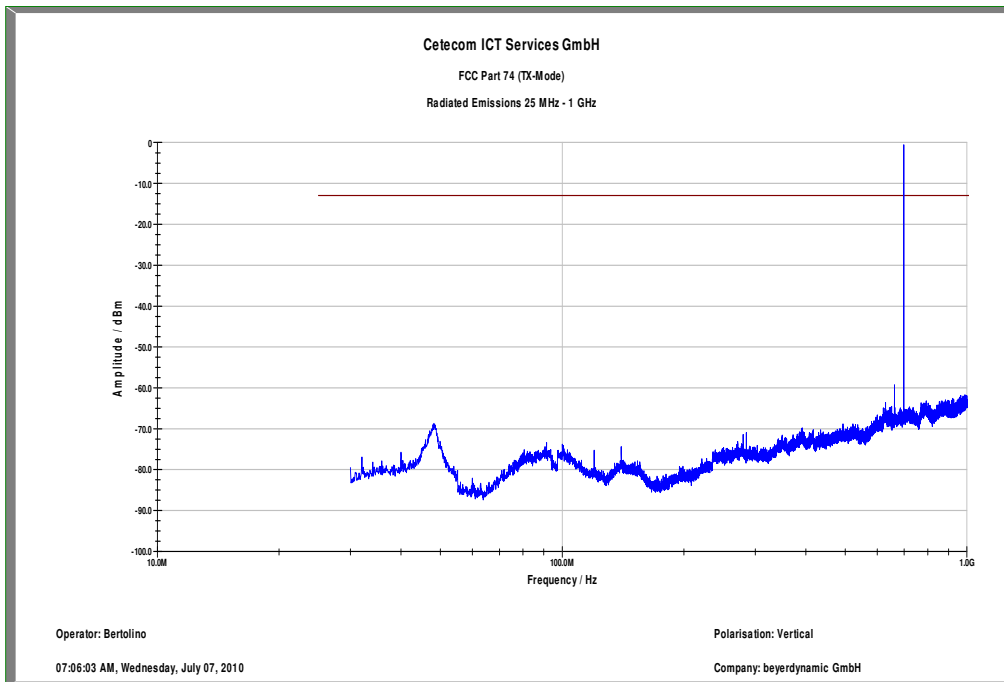
Plot 37: 6M6B band 3 high, TX mode, mid channel, 30 MHz to 1 GHz, horizontal polarization



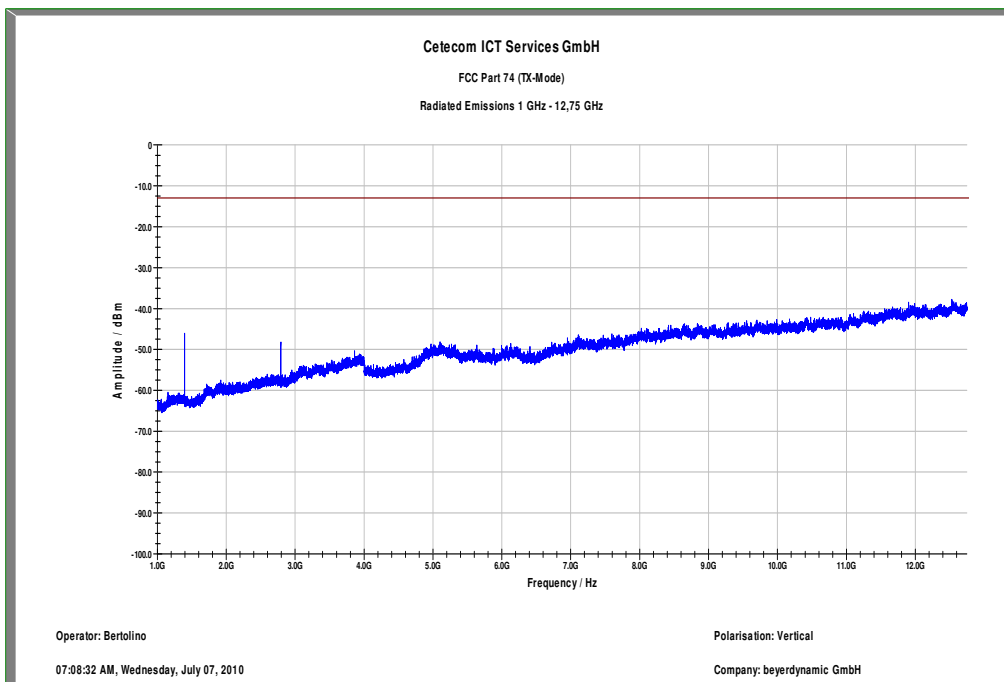
Plot 38: 6M6B band 3 high, TX mode, mid channel, 1 GHz to 12.75 GHz, horizontal polarization



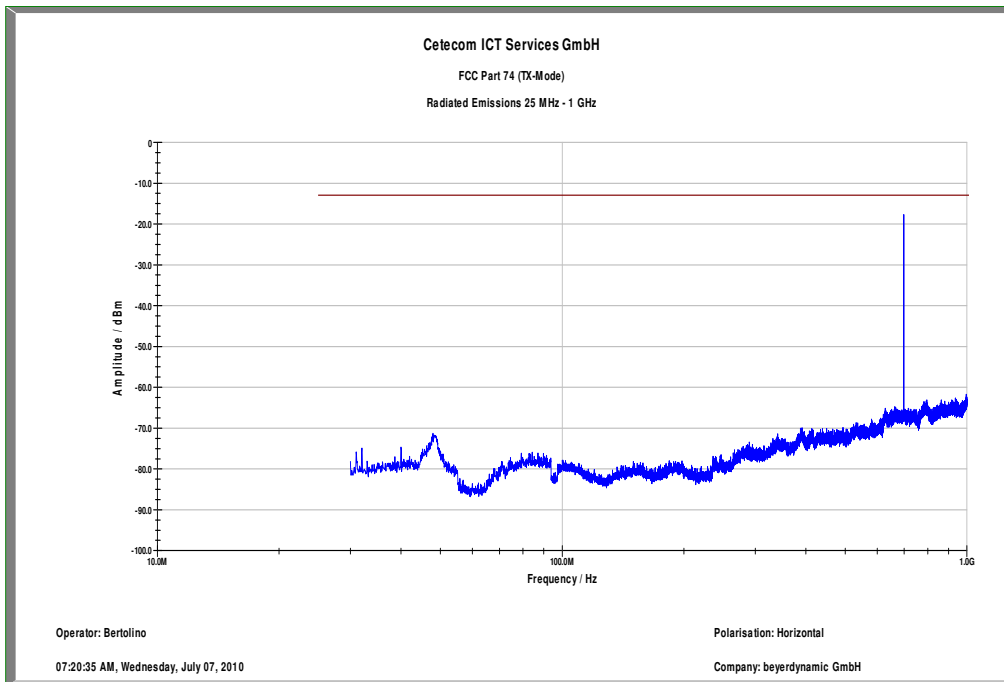
Plot 39: 6M6B band 3 high, TX mode, high channel, 30 MHz to 1 GHz, vertical polarization



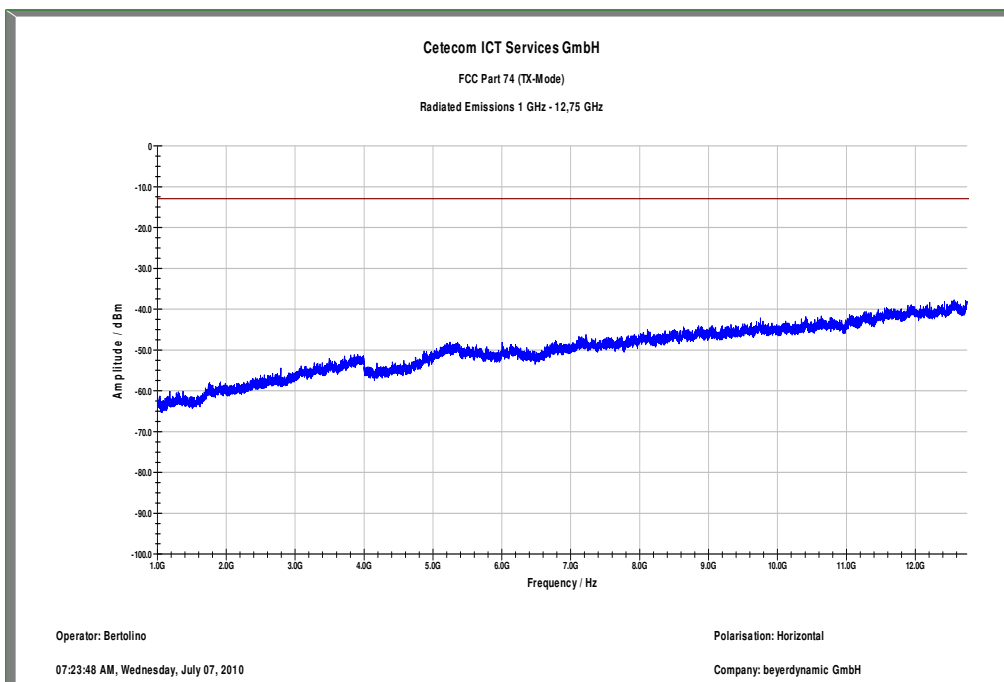
Plot 40: 6M6B band 3 high, TX mode, high channel, 1 GHz to 12.75 GHz, vertical polarization



Plot 41: 6M6B band 3 high, TX mode, high channel, 30 MHz to 1 GHz, horizontal polarization



Plot 42: 6M6B band 3 high, TX mode, high channel, 1 GHz to 12.75 GHz, horizontal polarization



9 Test equipment and ancillaries used for tests

In order to simplify the identification of the equipment used at each specific test, each item of test equipment and ancillaries are provided with an identifier or number in the equipment list below. 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).

No.	Labor / Item	Equipment	Type	Manufact.	Serial No.	INV. No Cetecom	Kal. Art	Last Calibration	Next Calibration
1	n. a.	DC power supply, 60Vdc, 50A, 1200 W	6032A	HP Meßtechnik	2818A03450	300001040	Ve	08.01.2009	08.01.2012
2	n. a.	PowerAttenuator	8325	Byrd	1530	300001595			
3	n. a.	Double-Ridged Waveguide Horn Antenna 1-18.0GHz	3115	EMCO	8812-3088	300001032	vIKI!	05.03.2009	05.03.2011
4	n. a.	Active Loop Antenna	6502	EMCO	2210	300001015	ne		
5	n. a.	Anechoic chamber		MWB	87400/02	300000996			
6	Spec.A. 2_2e	System rack for EMI measurement solution	85900	HP I.V.	*	300000222	ne		
7	9	Artificial Mains 9 kHz to 30 MHz, 4 x 25 Ampere	ESH3-Z5	R&S	828576/020	300001210	Ve	06.01.2010	06.01.2012
8	n. a.	Relais Matrix	3488A	HP Meßtechnik	2719A15013	300001156	ne		
9	n. a.	Relais Matrix	PSU	R&S	890167/024	300001168	ne		
10	n. a.	Isolating Transformer	RT5A	Grundig	9242	300001263	ne		
11	n. a.	Three-Way Power Splitter, 50 Ohm	11850C	HP Meßtechnik		300000997	ne		
12	n. a.	Switch / Control Unit	3488A	HP	2605e08770	300001443	ne		
13	n. a.	Band Reject filter	WRCG1855/1910-1835/1925-40/8SS	Wainwright	7	300003350	ev		
14	n. a.	Band Reject filter	WRCG2400/2483-2375/2505-50/10SS	Wainwright	11	300003351	ev		
15	n. a.	TILE-Software Emission	Quantum Change, Modell TILE-ICS/FULL	EMCO	none	300003451	ne		
16	n. a.	Highpass Filter	WHKX2.9/18G-12SS	Wainwright	1	300003492	ev		
17	n. a.	Highpass Filter	WHK1.1/15G-10SS	Wainwright	3	300003255	ev		
18	n. a.	Highpass Filter	WHKX7.0/18G-8SS	Wainwright	18	300003789	ne		
19	n. a.	PSA Spectrum Analyzer 3 Hz - 26.5 GHz	E4440A	Agilent Technologies	MY48250080	300003812	k	05.08.2008	05.08.2010
20	n. a.	MXG Microwave Analog Signal Generator	N5183A	Agilent Technologies	MY47420220	300003813	k	06.08.2008	06.08.2010
21	n. a.	RF Filter Section 9kHz - 1GHz	N9039A	Agilent Technologies	MY48260003	300003825	vIKI!	19.08.2008	19.08.2010
22	n. a.	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	371	300003854	vIKI!	17.12.2008	17.12.2010
23	n. a.	DC Power Supply 0 – 32V	1108-32	Heiden	001802	300001383	Ve	23.06.2010	23.06.2013
24	n. a.	Temperature Test Chamber	VT 4002	Heraeus Voetsch	521/83761	300002326	Ve	28.05.2009	28.05.2011
25	n. a.	Signal Analyzer 20Hz-26.5GHz-150 to + 30 DBM	FSIQ26	R&S	835111/0004	300002678	Ve	06.01.2009	06.01.2011

Annex A Photographs of the test set-up

Photo documentation: S 910 M

Photo 1:

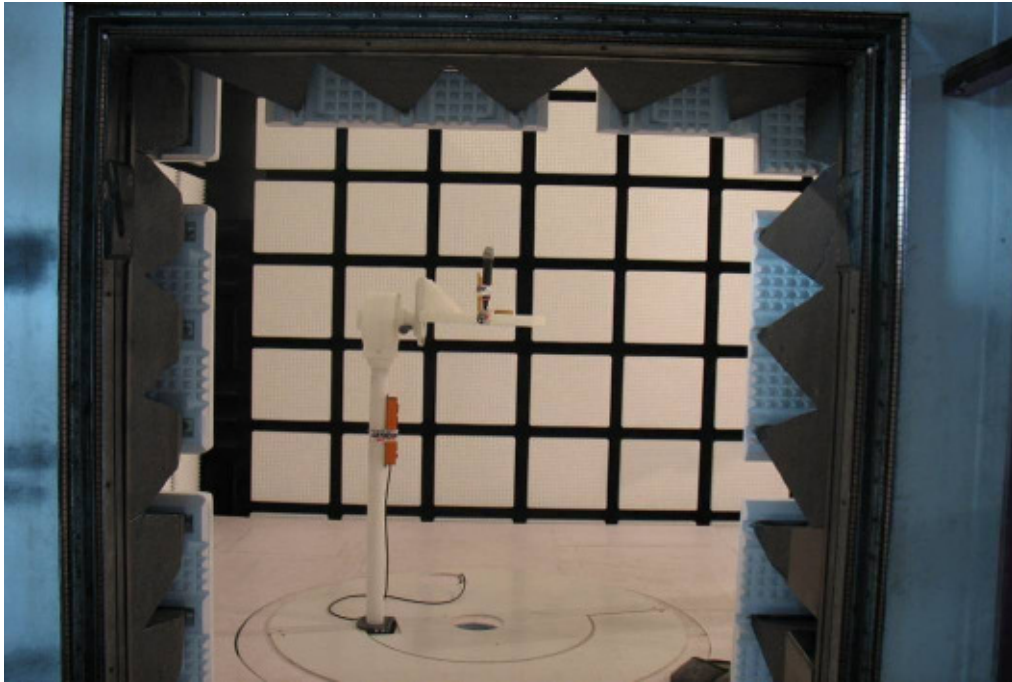


Photo 2:

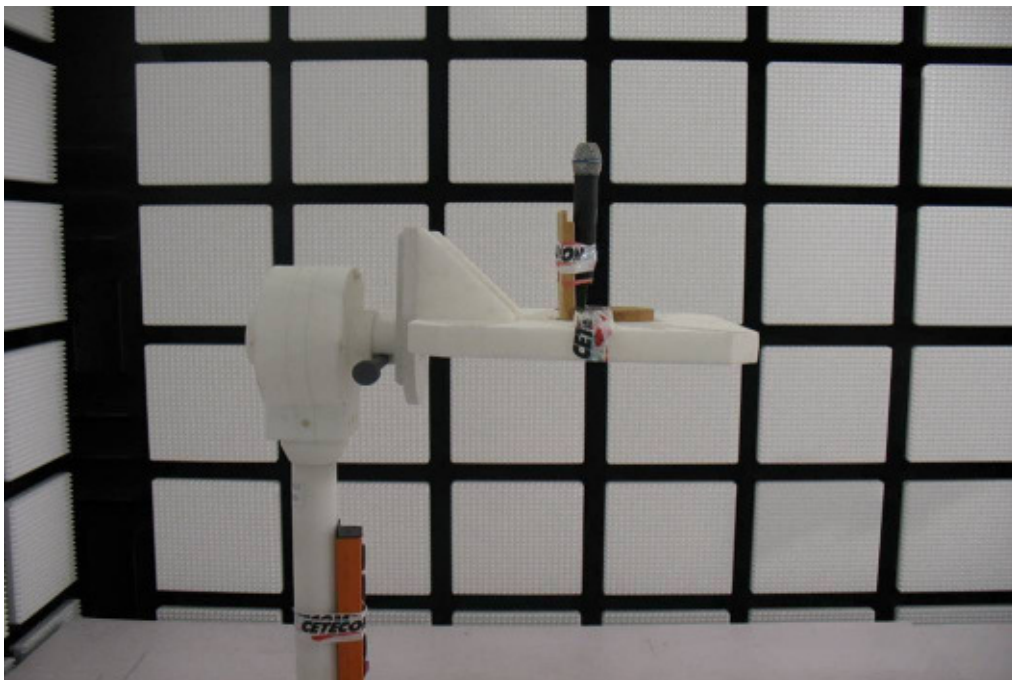


Photo 3:



Photo 4:

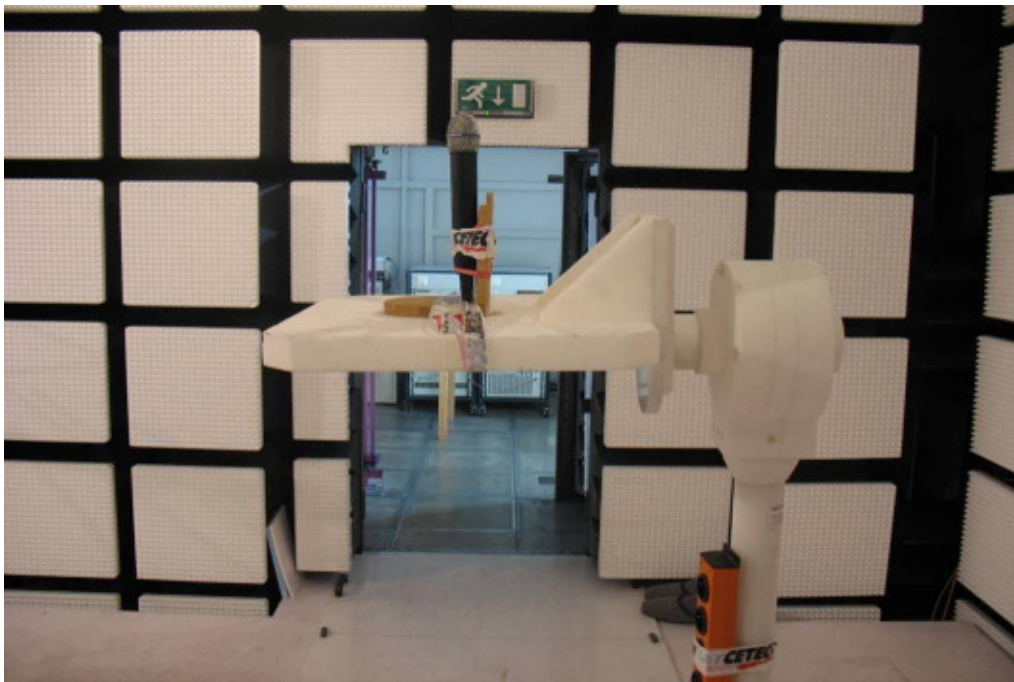
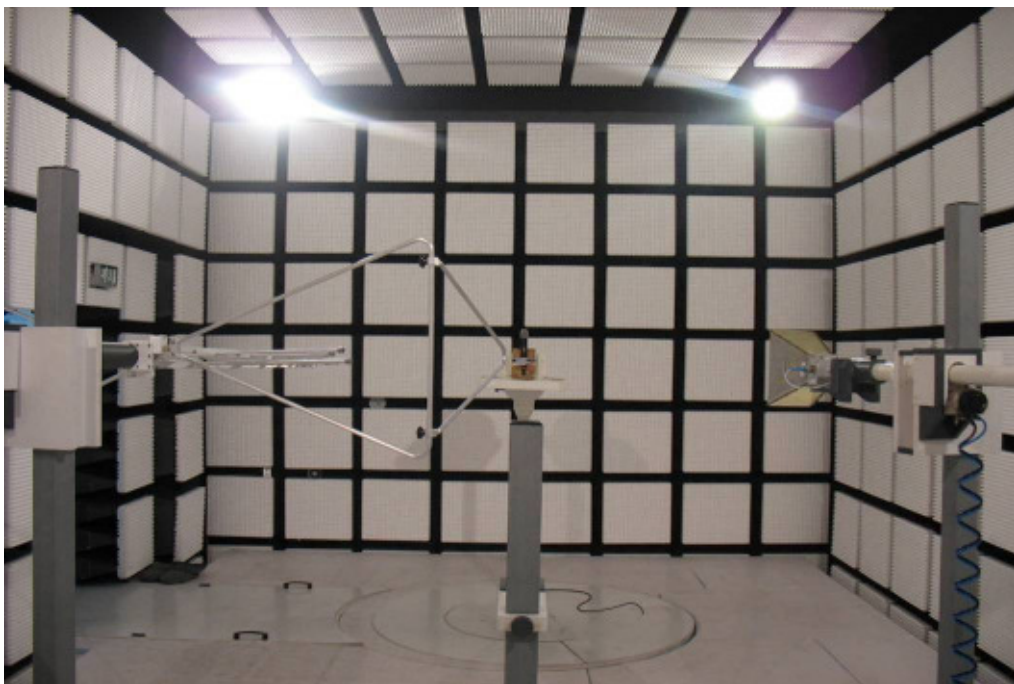


Photo 5:



Photo 6:



Annex B External photographs of the EUT

Photo documentation: S 910 M

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 5:



Photo 6:

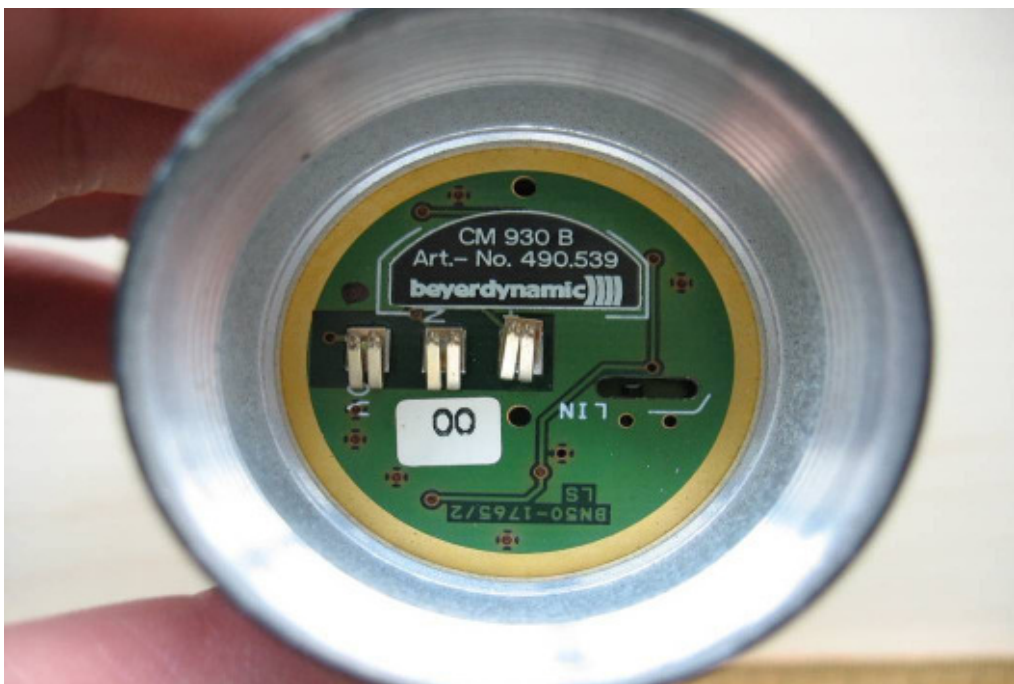


Photo 7:



Photo 8:



Photo 9:



Photo 10:



Photo 11:



Photo 12:



Annex C Internal photographs of the EUT

Photo documentation: S 910 M

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 5:

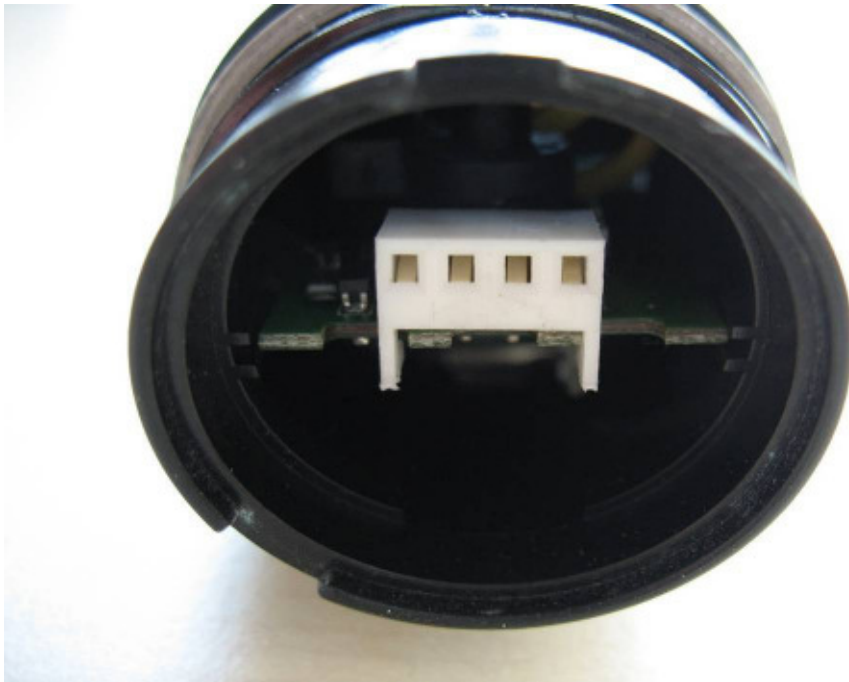


Photo 6:

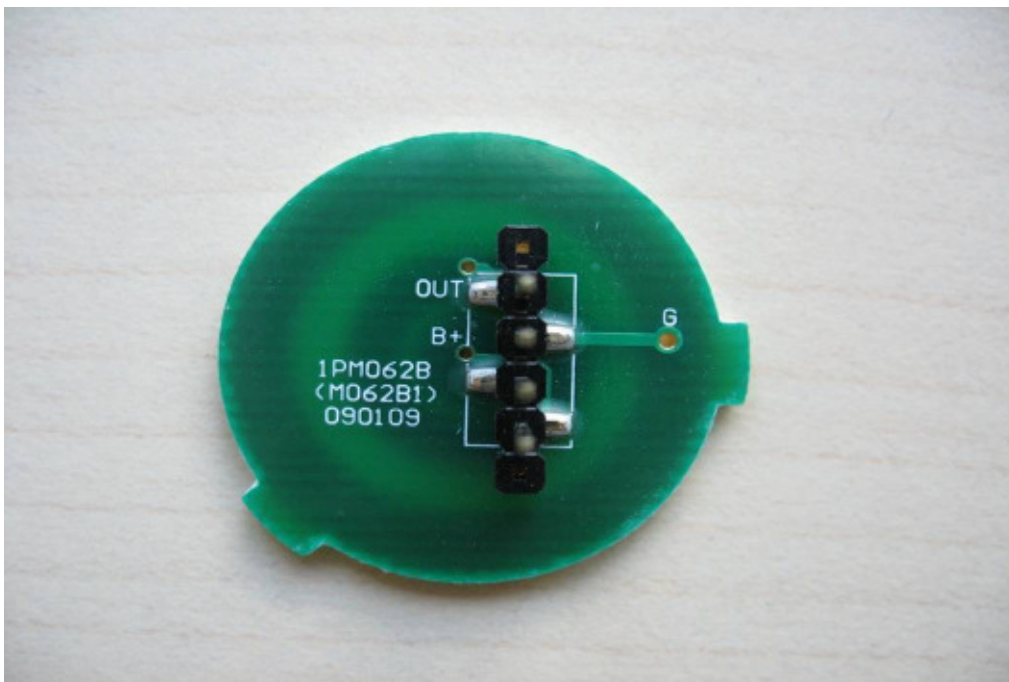


Photo 7:

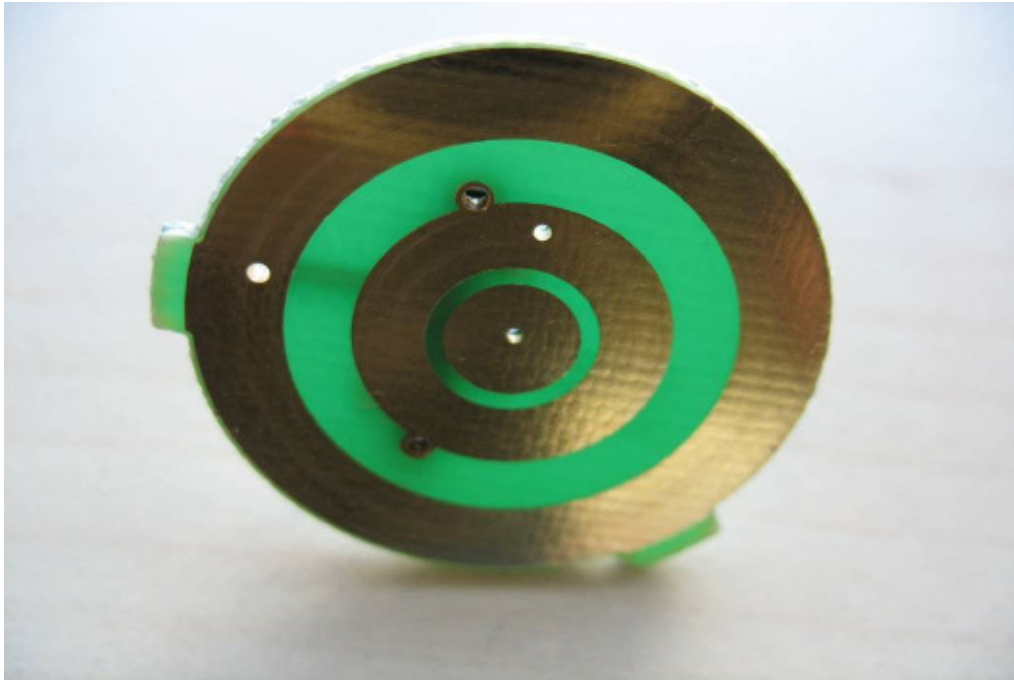


Photo 8:



Photo 9:

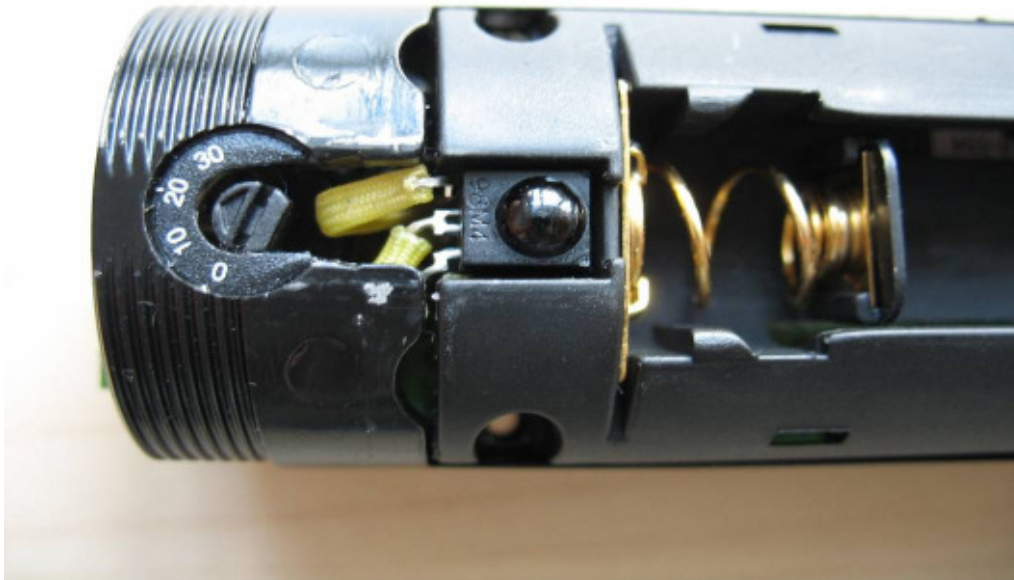


Photo 10:

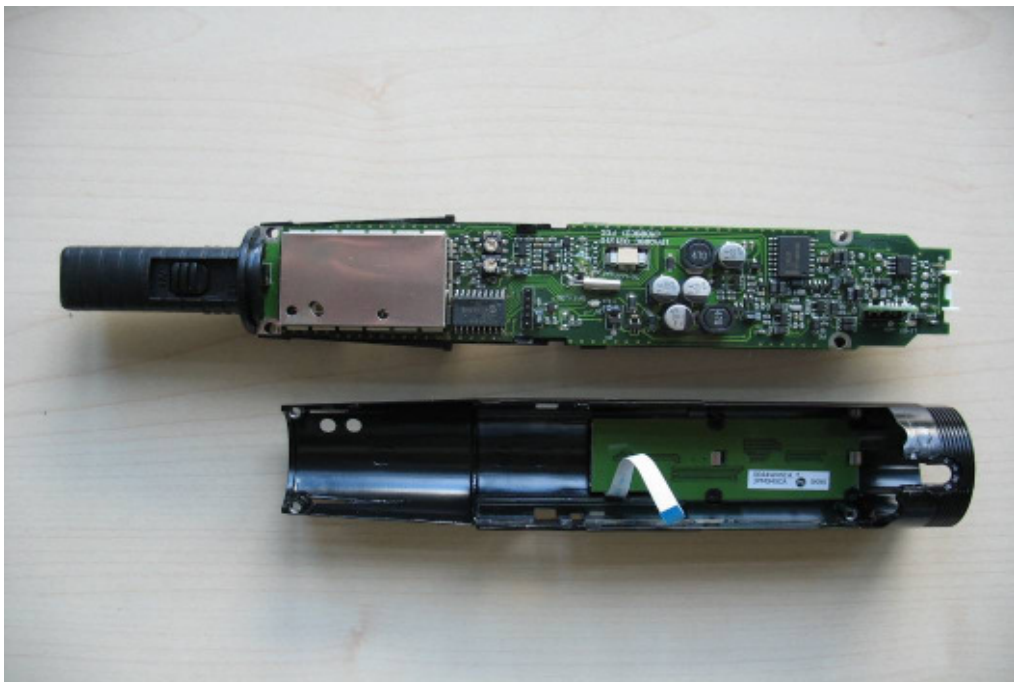


Photo 11:



Photo 12:



Photo 13:

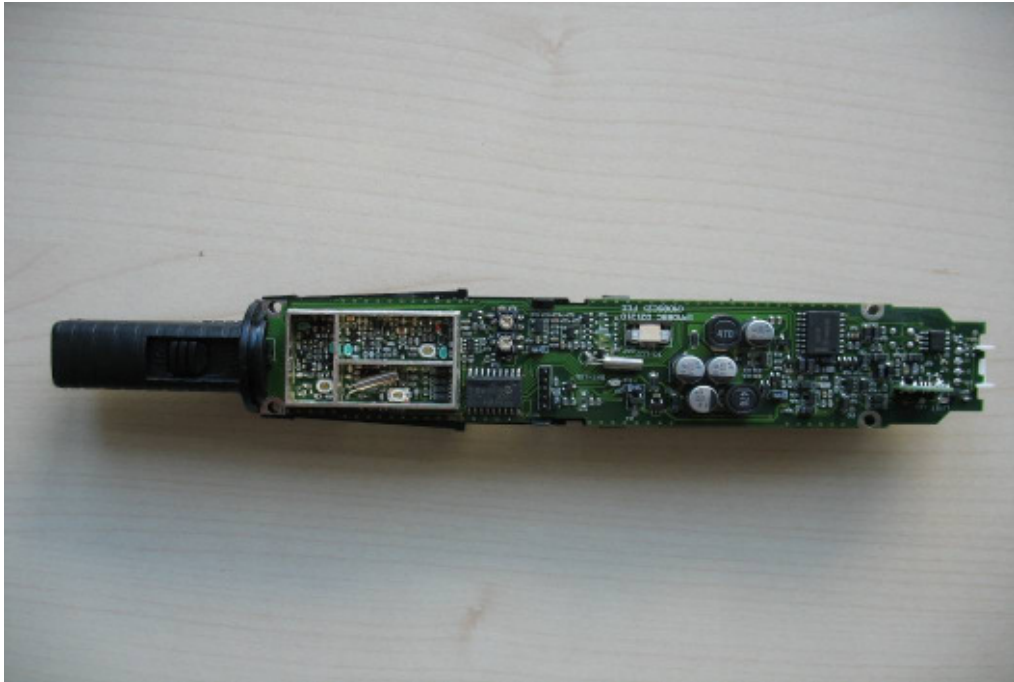


Photo 14:

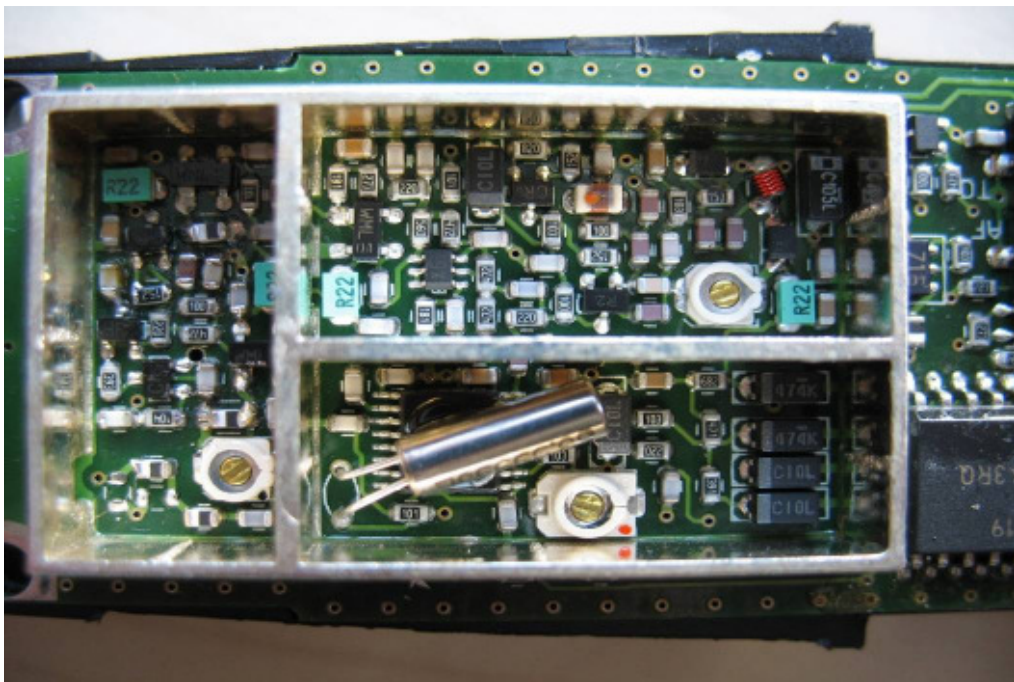


Photo 15:

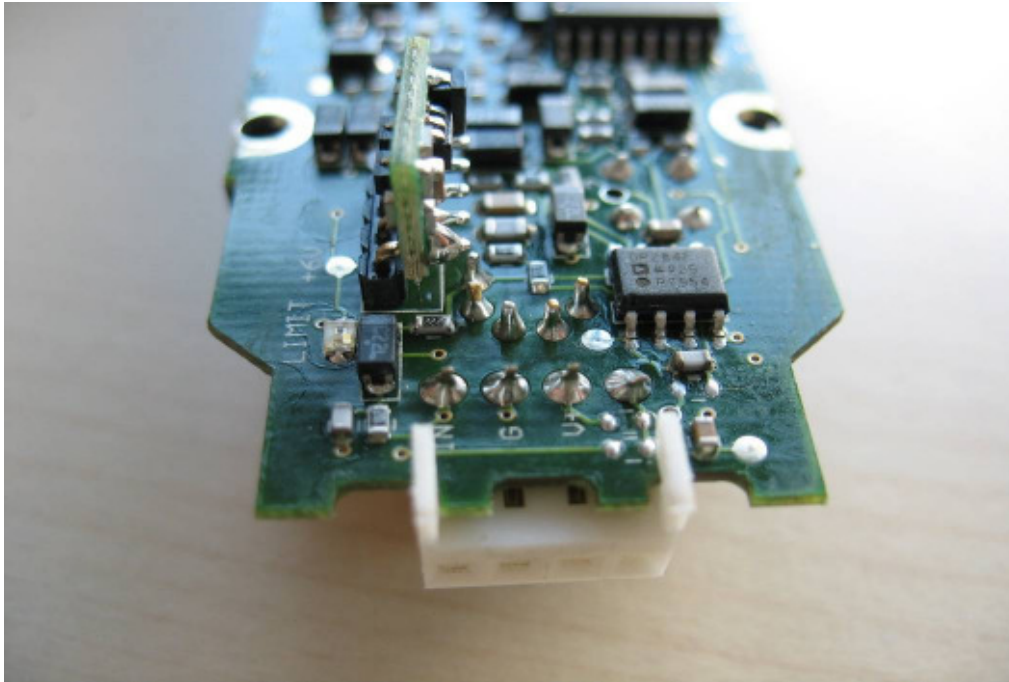


Photo 16:

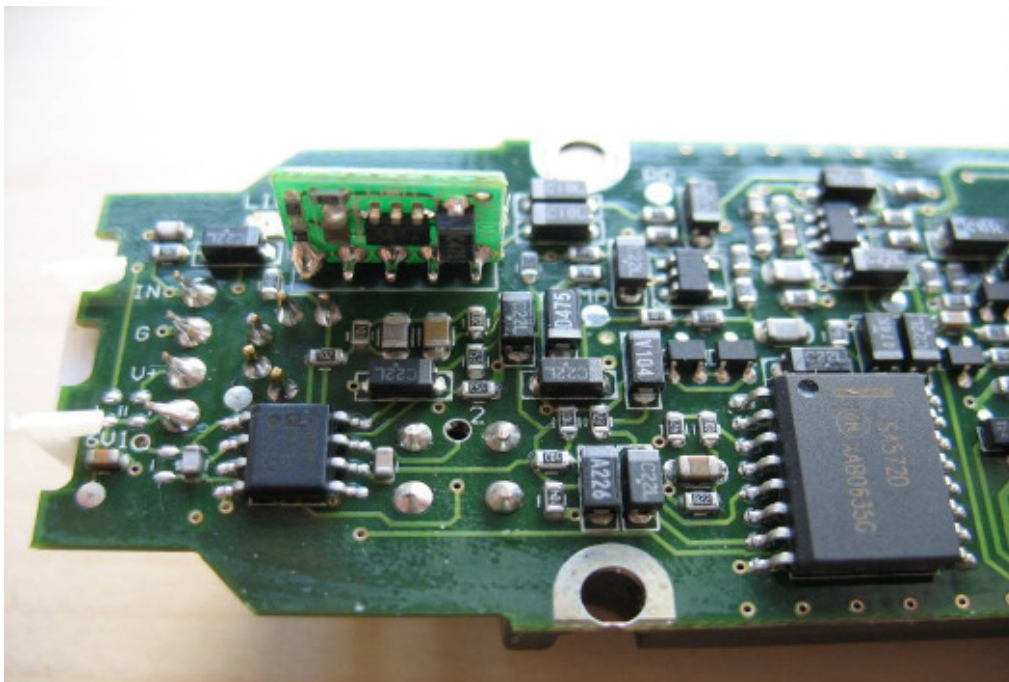


Photo 17:

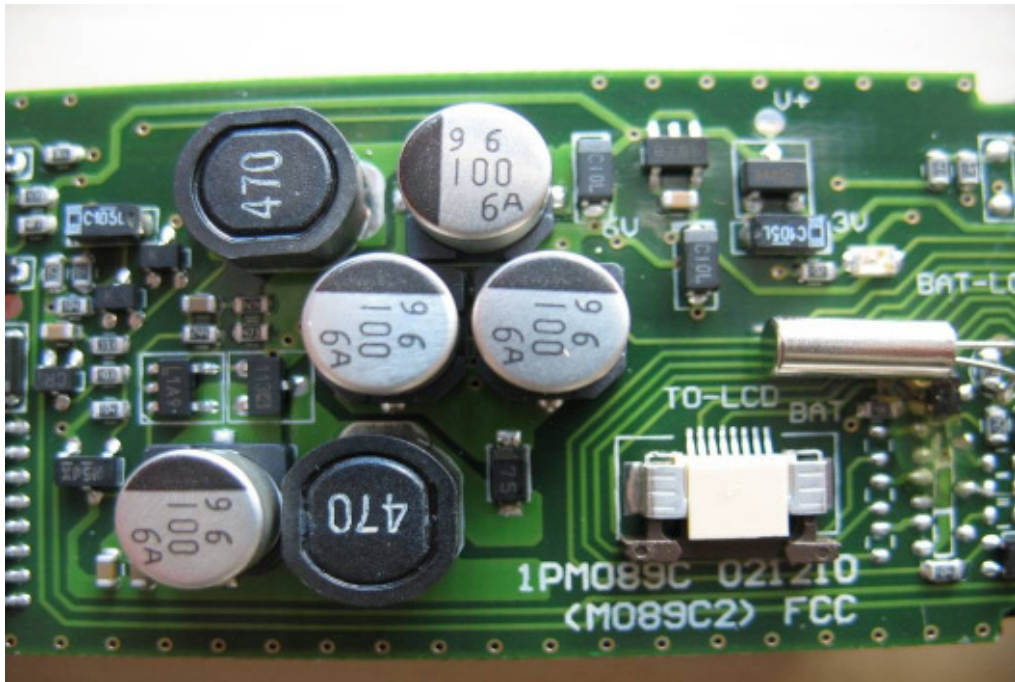


Photo 18:

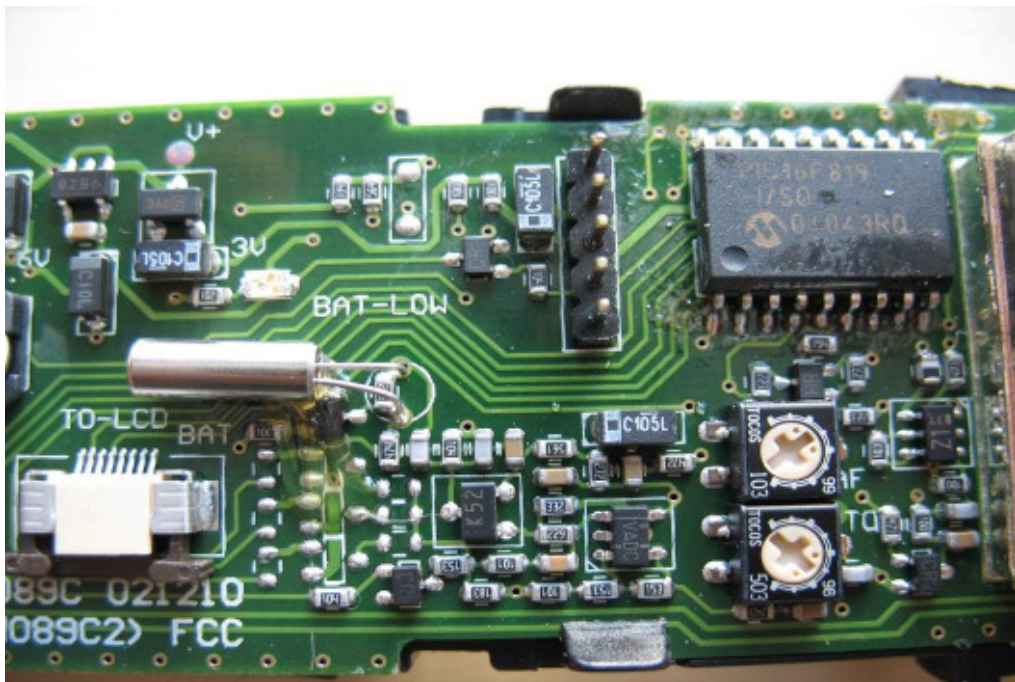


Photo 19:

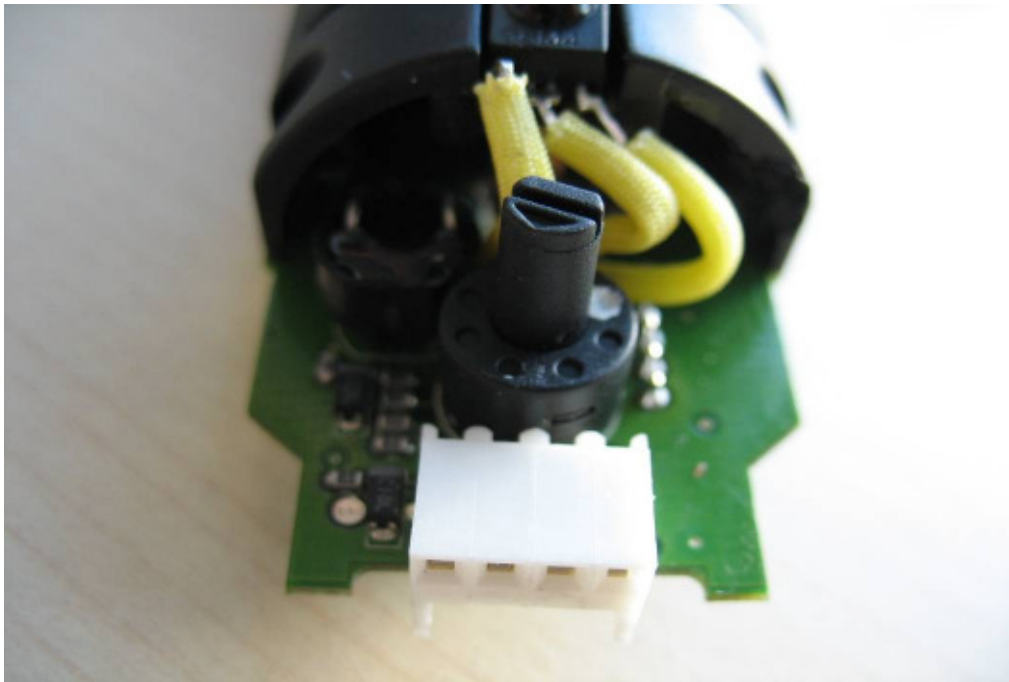


Photo 20:

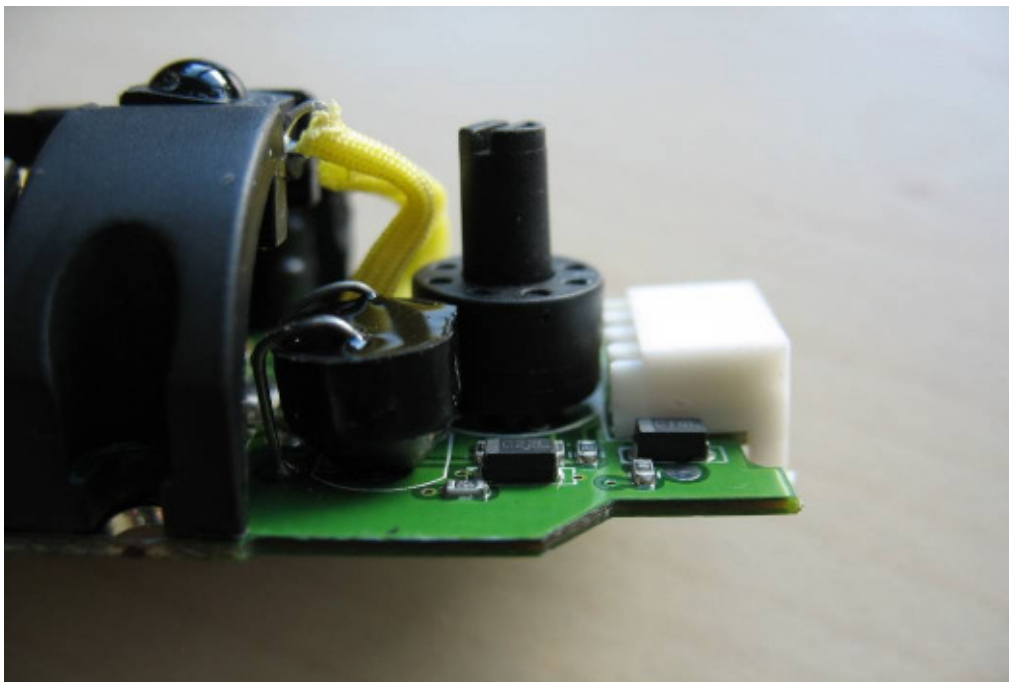
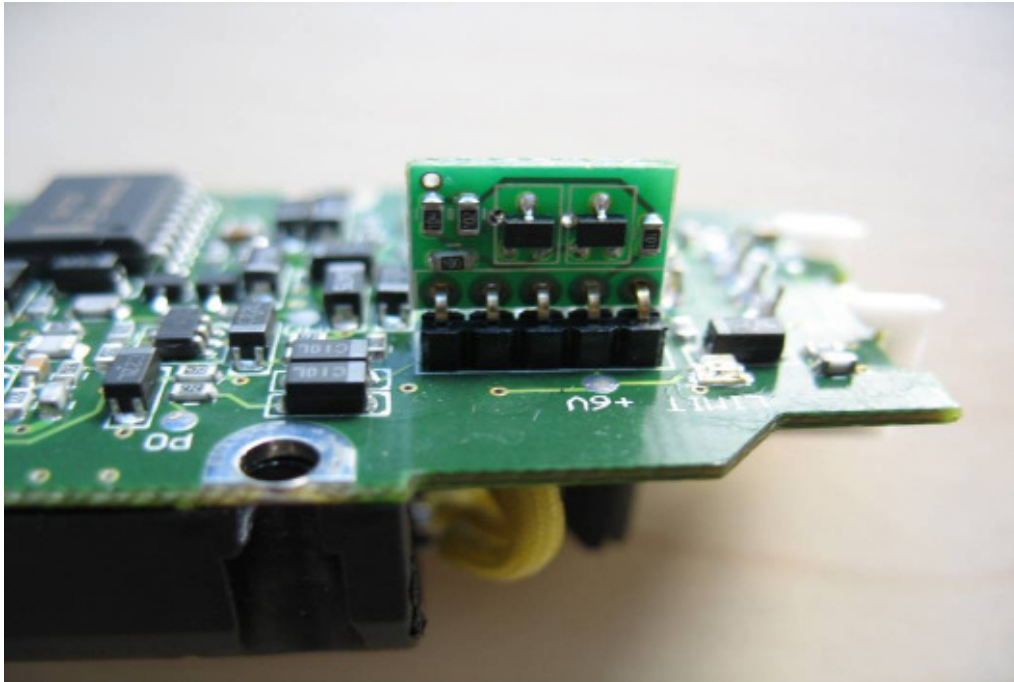


Photo 21:



Annex D Document history

Version	Applied changes	Date of release
1.0	Initial release	2010-07-15
1.0 - A	Additional plot description, modified FCC ID, recalculated measurement results Wrong data imported to frequency error measurement -> corrected	2010-11-16

Annex E Further information

Glossary

DUT	-	Device under Test
EMC	-	Electromagnetic Compatibility
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
N/A	-	not applicable
S/N	-	Serial Number
SW	-	Software