

TEST REPORT

Test Report Reference: F113239E1

Equipment under Test:

**Digital Indoor Base Transceiver
DIB-500 R4.1**

Applicant:

Rohde & Schwarz Professional Mobile Radio GmbH

Manufacturer:

Rohde & Schwarz Professional Mobile Radio GmbH

**Laboratory (CAB) accredited by
Deutsche Gesellschaft für Akkreditierung mbH
in compliance with DIN EN ISO/IEC 17025
under the Reg. No. DGA-PL-105/99-22,
FCC Test site registration number 90877 and
Industry Canada Test site registration IC3469A-1**

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1 IDENTIFICATION

1.1 APPLICANT

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Country:	Germany
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Tel:	+49-(0)-5042-998-384
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1.2 MANUFACTURER

Name:	Rohde & Schwarz Professional Mobile Radio GmbH
Address:	Fritz-Hahne-Straße 7 31848 Bad Münder
Country:	Germany
Name for contact purposes:	Mr. Dominik Vatovic
Tel:	+49-(0)-5042-998-384
Fax:	+49-(0)-5042-998-305
e-mail address:	dominik.vatovic@rohde-schwarz.com

1.3 DATES

Date of receipt of test sample:	1 September 2011
Start of test:	1 September 2011
End of test:	9 September 2011

1.4 TEST LABORATORY

The tests were carried out at: **PHOENIX TESTLAB GmbH**
Königswinkel 10
32825 Blomberg
Germany

accredited by DGA Deutsche Gesellschaft für Akkreditierung mbH in compliance with
DIN EN ISO/IEC 17025 under Reg. No. DGA-PL-105/99-22, FCC Test site registration number 90877 and
Industry Canada Test site registration IC3469A-1.

Test engineer:	Raimund BLASK		19 December 2011
	_____ Name	_____ Signature	_____ Date
Authorized reviewer:	Bernd STEINER		20 December 2011
	_____ Name	_____ Signature	_____ Date

1.5 RESERVATION

This test report is only valid in its original form.

Any reproduction of its contents without written permission of the accredited test laboratory PHOENIX TEST-LAB GmbH is prohibited.

The test results herein refer only to the tested sample. PHOENIX TEST-LAB GmbH is not responsible for any generalisations or conclusions drawn from these test results concerning further samples. Any modification of the tested samples is prohibited and leads to the invalidity of this test report. Each page necessarily contains the PHOENIX TEST-LAB Logo and the TEST REPORT REFERENCE.

1.6 NORMATIVE REFERENCES

- [1] **FCC 47 CFR Part 90 (October 2010)**
Private Land Mobile Radio Service
- [2] **FCC 47 CFR Part 2 (October 2010)**
- [3] **RSS119 Issue 11 (June 2011)**
Radio Transmitters and Receivers Operating in the Land Mobile and Fixed Services in the Frequency range 27.41 to 960 MHz.
- [4] **FCC Waiver for Tetra FCC 11-63 and FCC DA 11-1604**

1.7 TEST RESULTS

The requirements of this test document are fulfilled by the equipment under test.
The complete test results are presented in the following.

2 TECHNICAL DATA OF EQUIPMENT

2.1 DEVICE UNDER TEST

Type of equipment:	Digital Indoor Base Transceiver
Type designation:	DIB-500 R4.1
Operating frequency range:	406.025 MHz to 469.975 MHz
Transmitter output power:	+47.0 dBm (nominal for single carrier)
Channel spacing:	25 kHz

* declared by the applicant

The following external I/O cables were used:

Cable	Length	Shielding	Connector
Ethernet	2m	yes	RJ45
RF-Connector	3m	yes	7/16
AC-Power	3m	no	AC-Plug

2.2 PERIPHERY DEVICES

The ancillary equipment mentioned below was in use*:

Type of equipment:	Type designation:
Cabinet:	19"-SMARACT
Power-Supply:	EATON AC/DC-Converter
Antenna Coupling Unit:	ACS-500
Fan Unit:	Fan Unit
Controller:	SC200

* declared by the applicant

2.3 MODIFICATIONS

No modifications were necessary to fulfil the requirements.

2.4 OPERATIONAL STATES

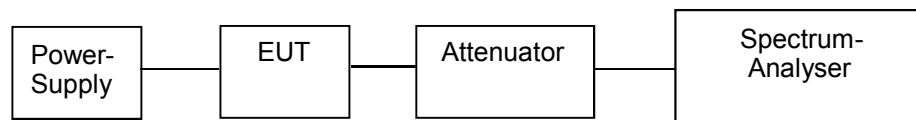
The EUT (Transmitter) was operating in normal operation mode according to ETSI EN 300 392-1 during the tests (unless otherwise stated).

3 TEST PROCEDURES

The test procedures were performed as follows (according to TIA/EIA-603-C (17 August 2004)).

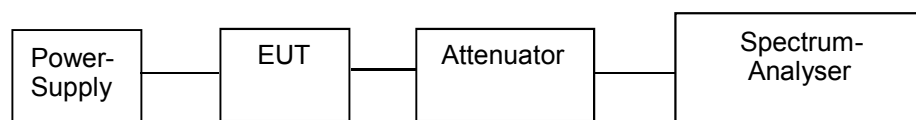
3.1 Power Output at Terminals FCC 2.1046, FCC 90.205

The conducted RF output power is the available power at the output terminals of the transmitter when the output terminals are connected to the standard transmitter load. The test sample is connected to a radio communication analyser. The power output at the transmitter antenna port is determined by adding the value of the cable loss to the power reading. The tests are performed at the frequencies as shown in chapter 4 of this Test Report with full rated power level of the transmitter.



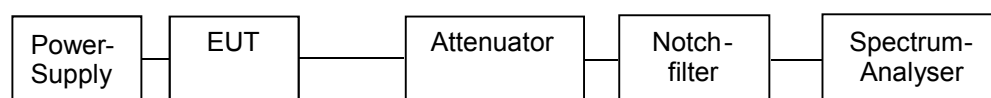
3.2 Occupied Bandwidth FCC 2.1049, 90.210

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.



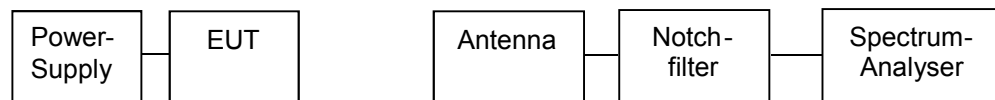
3.3 Spurious Emissions at Antenna Terminals FCC 2.1051

Conducted spurious emissions are emissions at the antenna terminal on frequencies outside the operating band. In order to suppress inter-modulation products in the spectrum analyser a notch filter is used (if applicable). The test is performed according to the principle below:



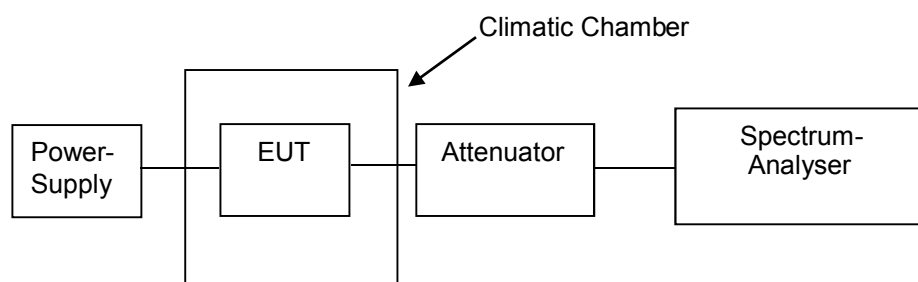
3.4 Radiated Spurious Emissions FCC 2.1053, FCC 90.210

Radiated spurious emissions are emissions from the EUT when transmitting in non-radiating load on frequencies outside the operating band. ERP-Measurement of spurious emission were done to the general substitution method. In order to suppress inter-modulation products in the spectrum analyser a notch filter is used (if applicable).



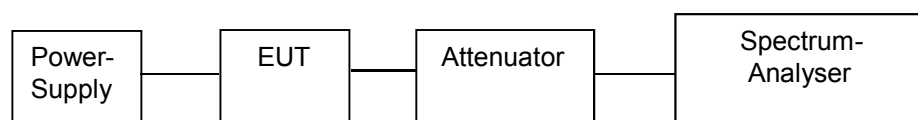
3.5 Frequency Stability with Temperature Variation FCC 2.1055, FCC 90.213

The carrier frequency is the stability of the transmitter to maintain an assigned carrier frequency. The frequency stability was measured with variation of ambient temperature from +5°C to +45°C and variation of the primary voltage.



3.6 Frequency Stability with Primary Voltage Variation FCC 2.1055, FCC 90.213

The carrier frequency is the stability of the transmitter to maintain an assigned carrier frequency. The frequency stability was measured with variation of the primary voltage.



4 OPERATIONAL STATES AND PHYSICAL BOUNDARIES

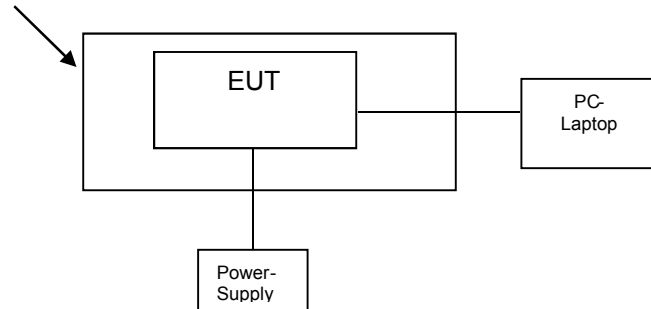
The Occupied Bandwidth was measured in 25 kHz-Mode.

The tests were performed at the lowest, middle and highest frequency of the equipment under test as defined below:

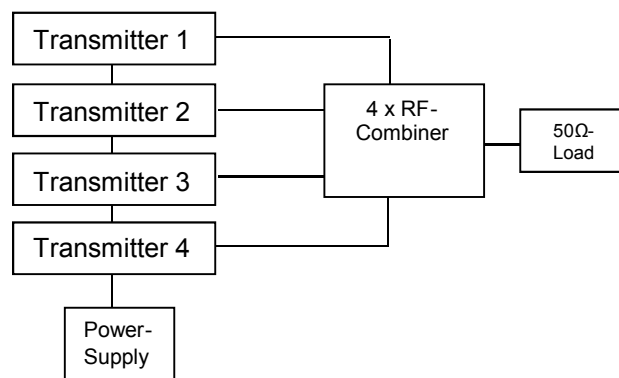
EUT:	Channel:	Transmit frequency:
1	1	406.125 MHz
	2	418.050 MHz
	3	429.975 MHz
2	4	450.025 MHz
	5	460.000 MHz
	6	469.975 MHz

The physical boundaries of the Equipment Under Test are shown below:

Physical boundaries of the EUT



Transmitter combining network to Antenna port:



Transmitter:	Transmitter Output Power:	Combiner:	Combiner loss:	Output Power:
1	50 W / +47 dBm	-	0 dB	50 W / +47 dBm
1	50 W / +47 dBm	yes	9.4 dB	22.9 W / +43.6 dBm
2	50 W / +47 dBm			
3	50 W / +47 dBm			
4	50 W / +47 dBm			

Remark: The highest output power is reached by using the equipment as single transmitter. While using 4 Transmitters the sum of the rf-output power is less due to the combiner loss of 9.4 dB.

5 LIST OF MEASUREMENTS

Test Type:	Application:	Reference clauses in 47 CFR	Appendix No. in Test Report	Result:
RF Power Output at Terminals	RF Terminals	2.1046	5.1	No Limit specified
Occupied Bandwidth 25 kHz-mode	RF Terminals	2.1049 and 90.210 c	5.2	Passed
Occupied Bandwidth 12.5 kHz-mode	RF Terminals	2.1049 and 90.210 d	-	No 12.5 kHz-Mode available
Spurious Emissions at Antenna Terminal	RF Terminals	2.1051 and 90.210	5.3	Passed
Field Strength of Spurious Radiation	Antenna	2.1053 and 90.210	5.4	Passed
Frequency stability with temperature variation	RF Terminals	2.1055 a / i and 90.213	5.5	Passed
Frequency stability with primary voltage variation	RF Terminals	2.1055 d / i and 90.213	5.6	Passed
Transmitter Transient Frequency Behaviour	RF Terminals	90.214	-	Not carried out. EUT operates in continuous transmission mode (100%-Duty-Cycle).
Transmitter intermodulation (co-located transmitter)	RF Terminals	-	5.7	-

5.1 RF POWER OUTPUT AT TERMINALS

47CFR2.1046

Ambient temperature	20 °C	Relative humidity	55 %
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Test methods: The test was carried out in transmit mode according to TIA-603-C.
All results are shown in the following.

Operation mode: Transmit (single carrier mode) with nominal Power P = 50 W / +47 dBm

Power measurement (conducted):

Channel:	Transmit frequency:	Carrier Power:
1	406.125 MHz	+46.5 dBm
2	418.050 MHz	+47.2 dBm
3	429.975 MHz	+46.5 dBm
4	450.025 MHz	+46.9 dBm
5	460.000 MHz	+47.2 dBm
6	469.975 MHz	+46.8 dBm
Measurement uncertainty		+0.66 dB / - 0.72 dB

LIMITS:

No Limits are specified in the standard.

TEST EQUIPMENT USED FOR THE TEST:

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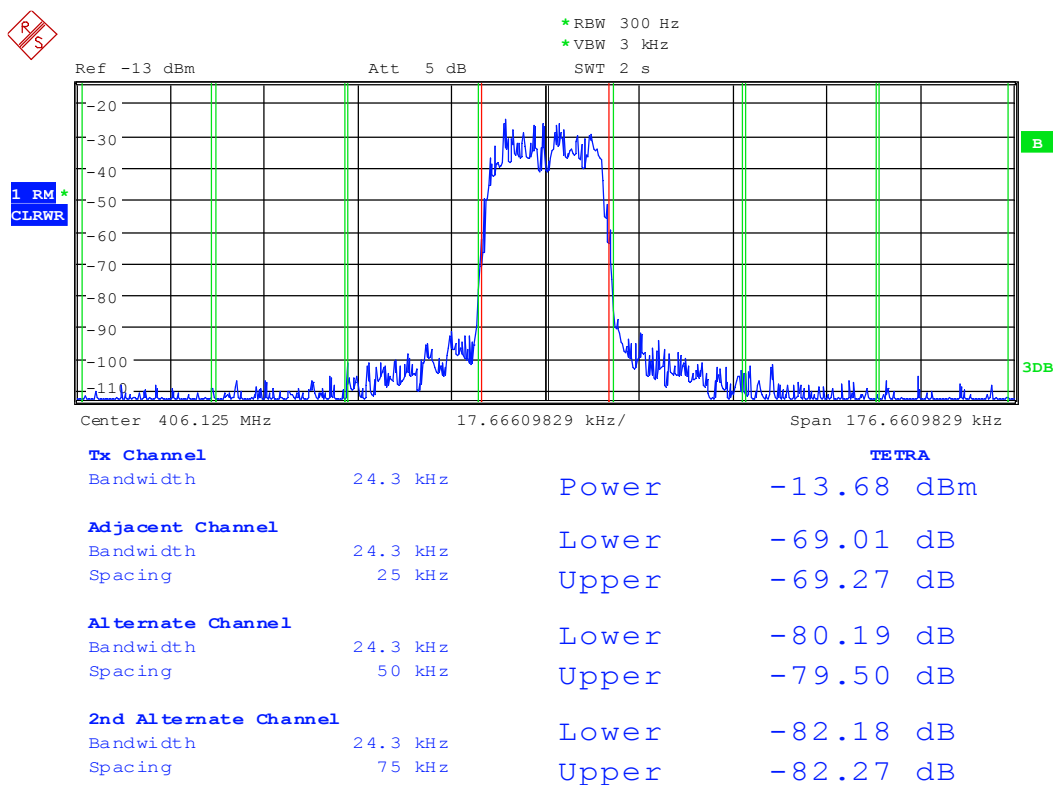
5.2 OCCUPIED BANDWIDTH

47CFR2.1049

Ambient temperature	20 °C	Relative humidity	50 %
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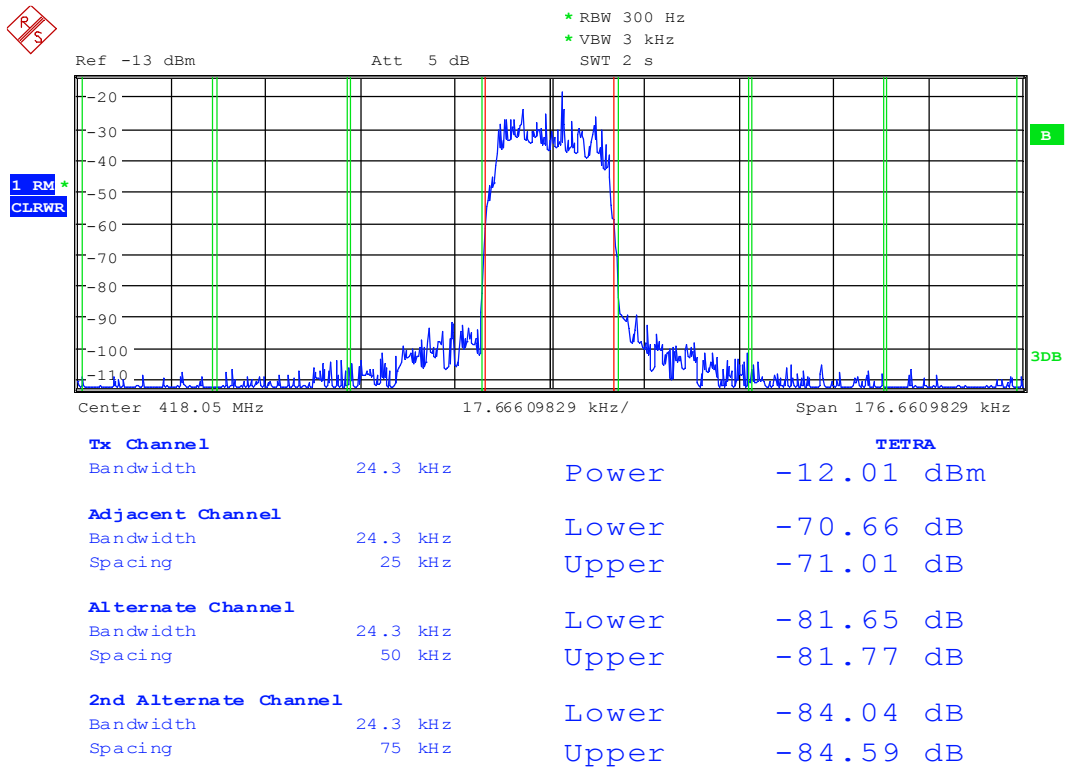
Test methods: The test was carried out in transmit mode according to TIA-603-C.
All results are shown in the following.

Operation mode: Transmit (single carrier mode) with nominal Power P = 50 W / +47 dBm



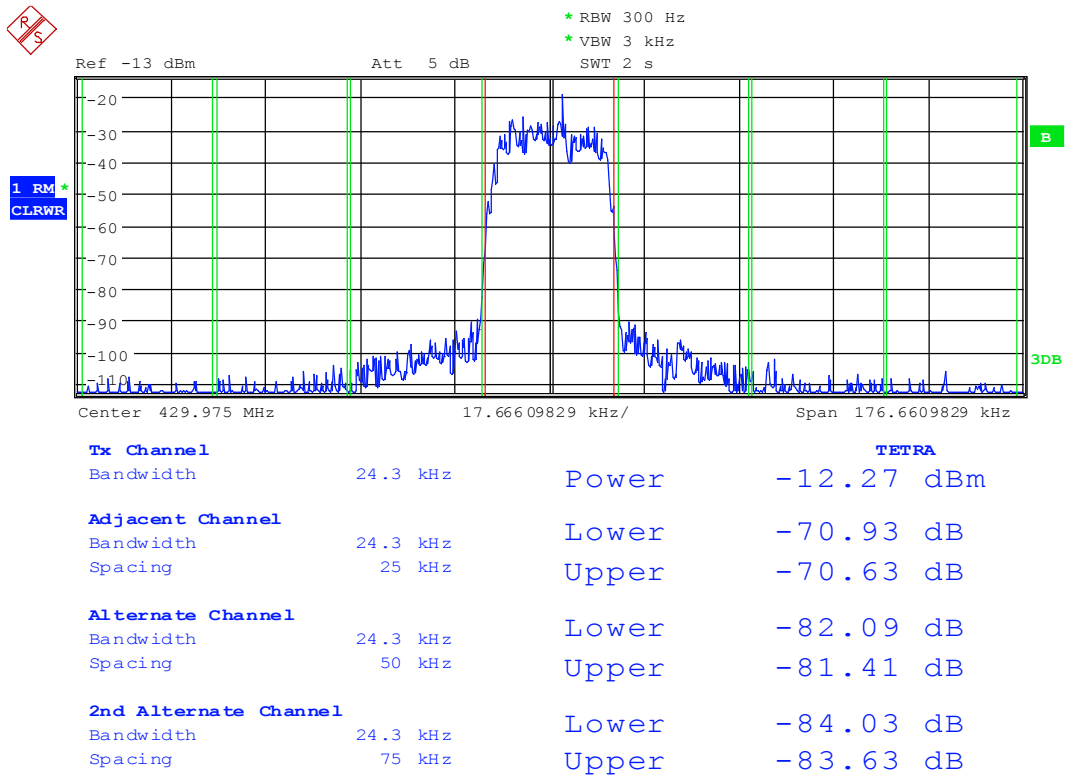
ACP406125: Transmit 406.125 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.



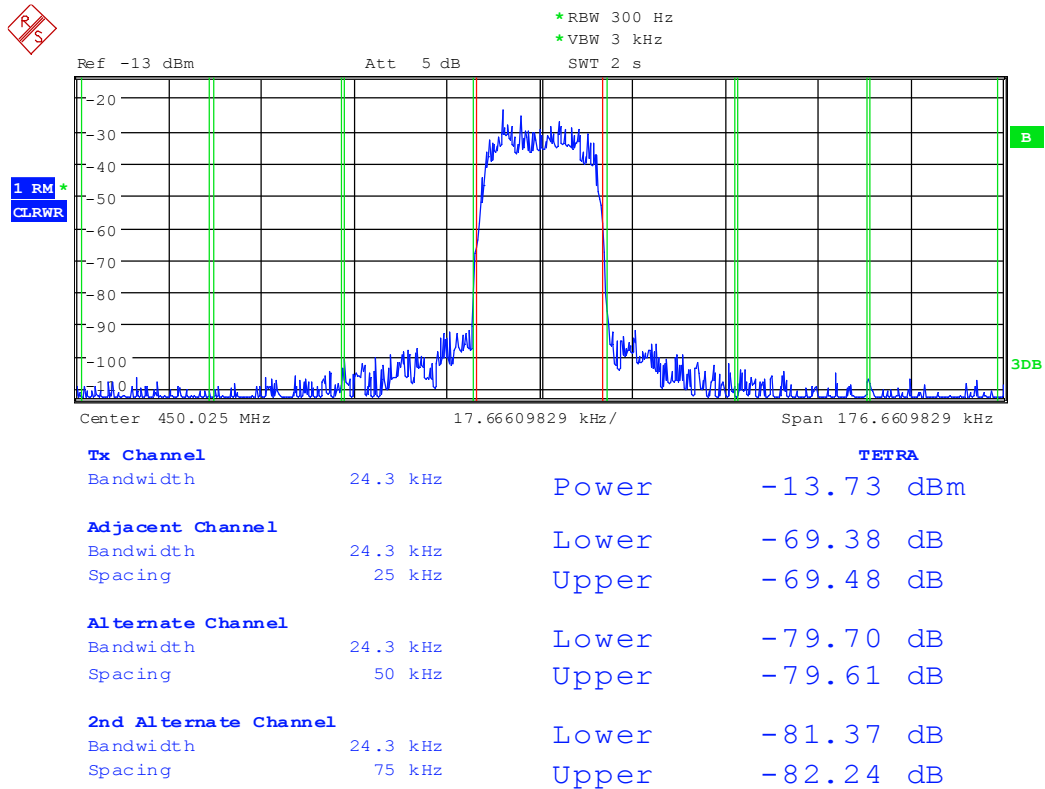
ACP418050: Transmit 418.050 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.



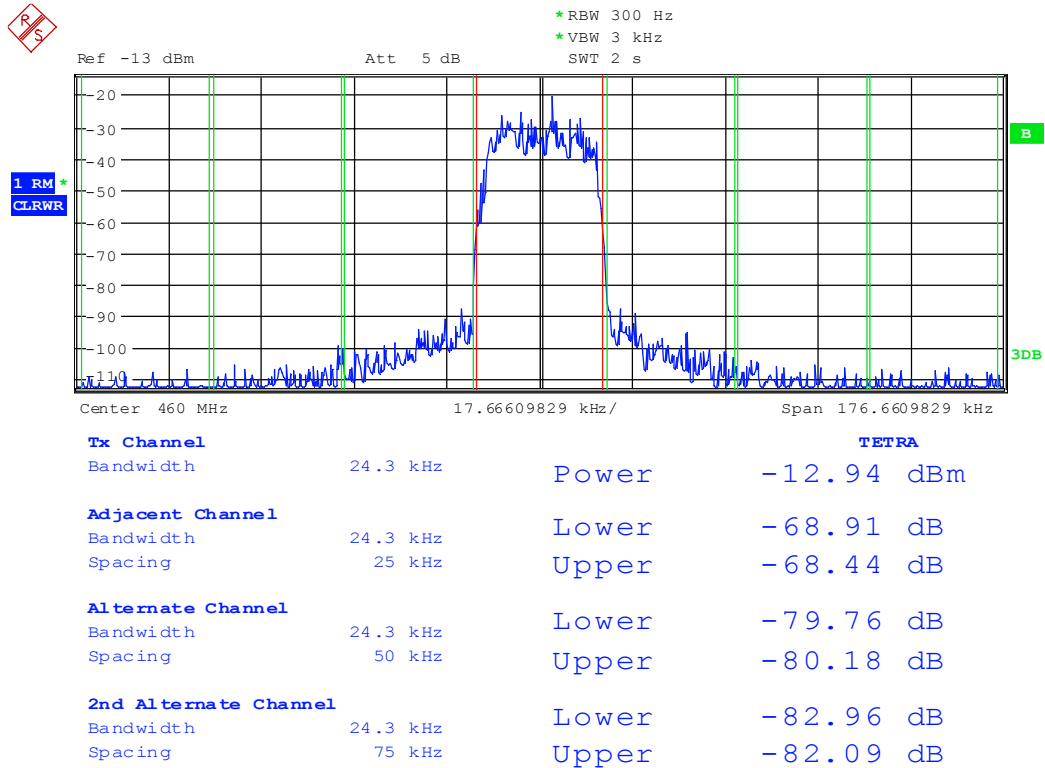
ACP429975: Transmit 429.975 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.



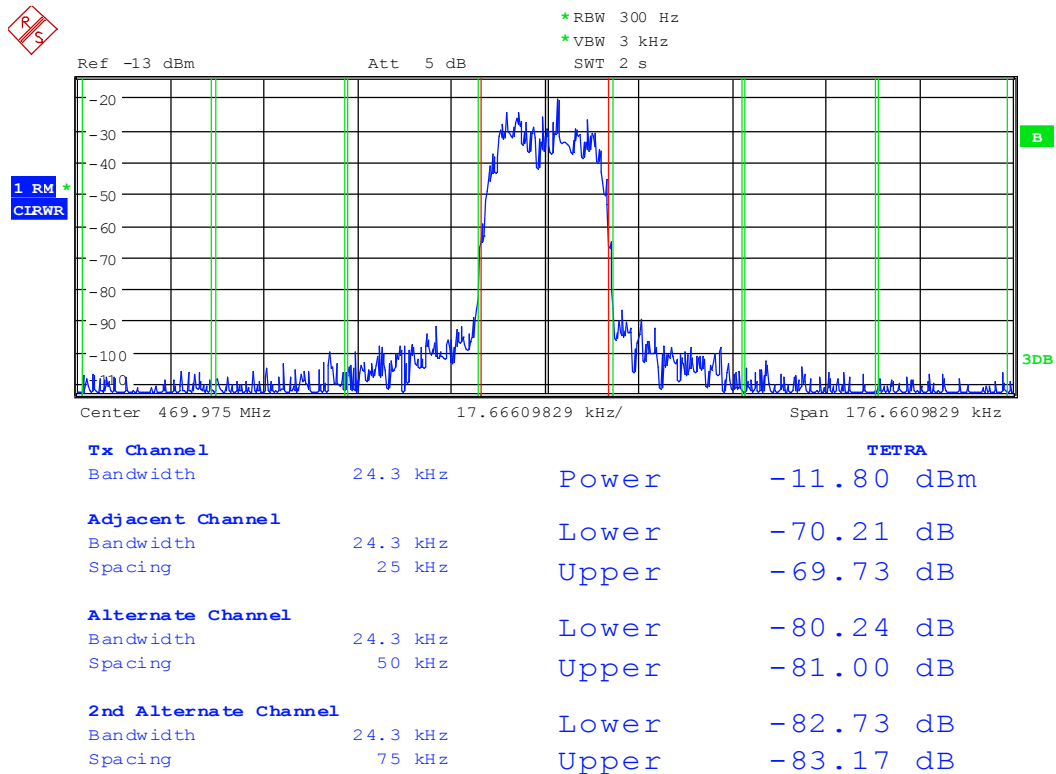
ACP450025: Transmit 450.025 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.



ACP460000: Transmit 460.000 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.



ACP469975: Transmit 469.975 MHz, 25 kHz channel separation

Remark: An external attenuation of 60 dB was used. Therefore the listed absolute values have to be corrected by this value.

LIMITS: Maximum adjacent power levels for frequencies below 700MHz:

Frequency Offset	Maximum ACP (dBc) for devices 1 watt and less	Maximum ACP (dBc) for devices above 1 watt
25 kHz	-55 dBc	-60 dBc
50 kHz	-70 dBc	-70 dBc
75 kHz	-70 dBc	-70 dBc

In any case, no requirement in excess of -36 dBm shall apply.

TEST EQUIPMENT USED FOR THE TEST:

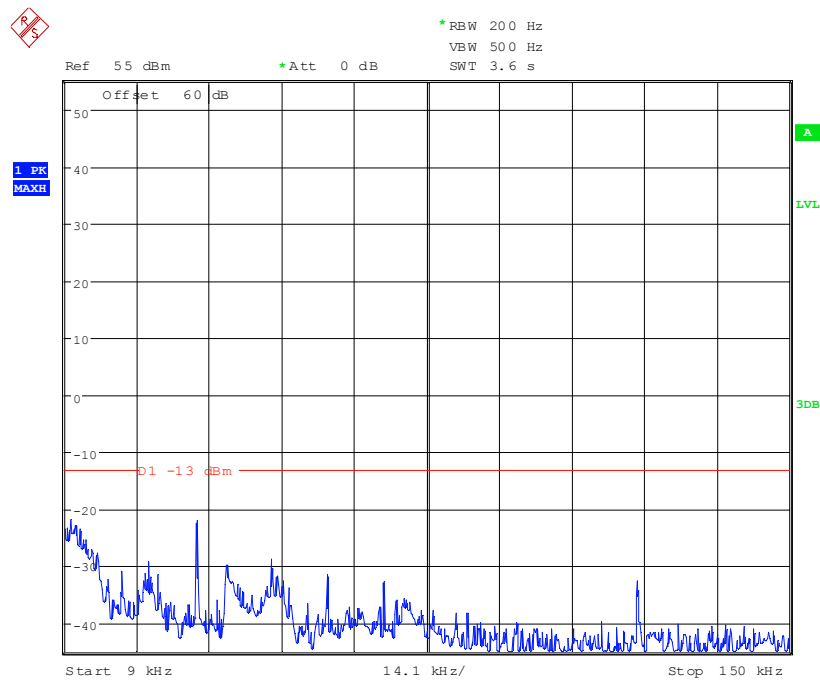
9, 23 - 25

5.3 SPURIOUS EMISSIONS AT ANTENNA TERMINALS 47CFR2.1051 AND 90.210

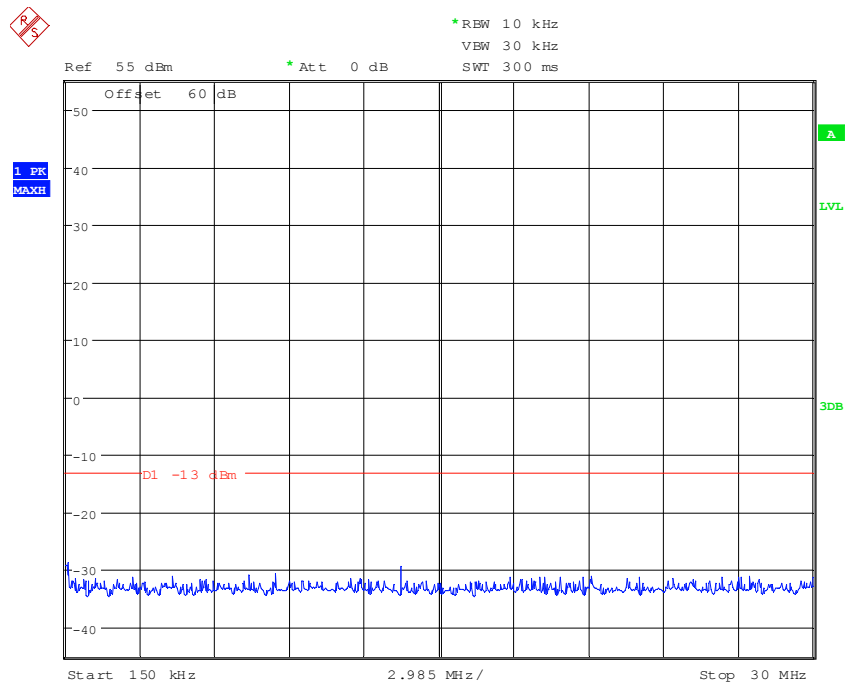
Ambient temperature	20 °C	Relative humidity	55 %
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Test methods: The test was carried out in transmit mode according to TIA-603-C.
All results are shown in the following.

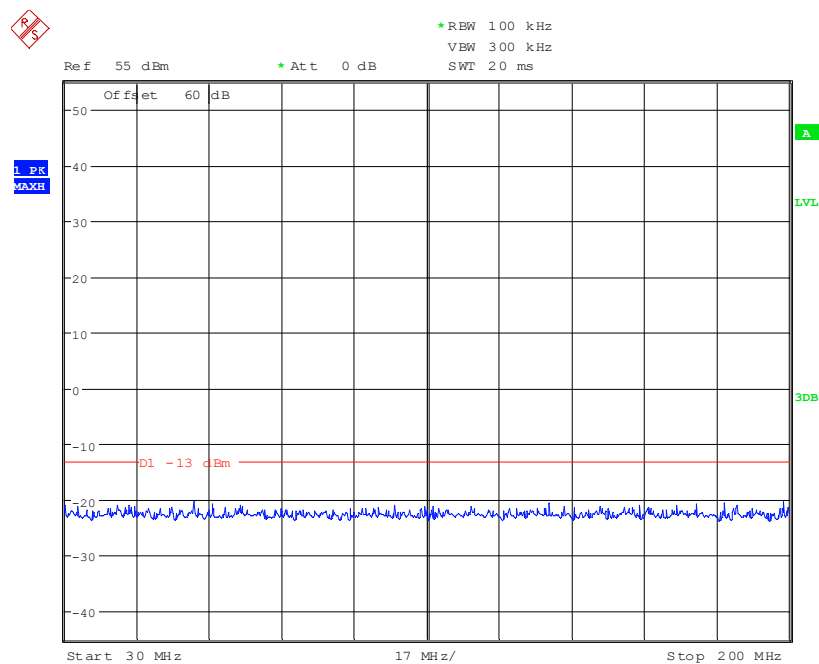
Operation mode: Transmit, (single carrier mode) with $f = 418.050$ MHz with
nominal Power $P = 50$ W / +47 dBm



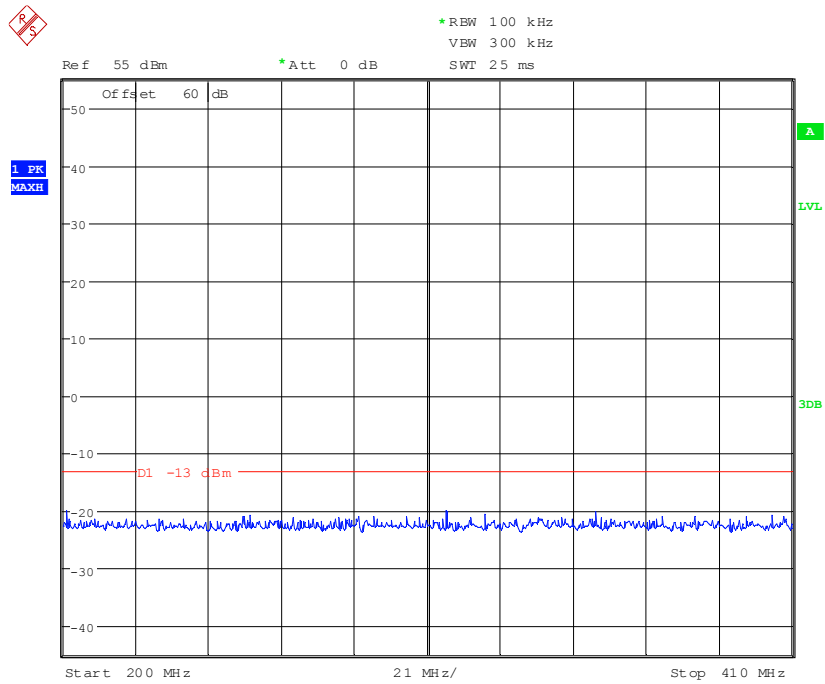
418tx1.wmf: 9 kHz to 150 kHz



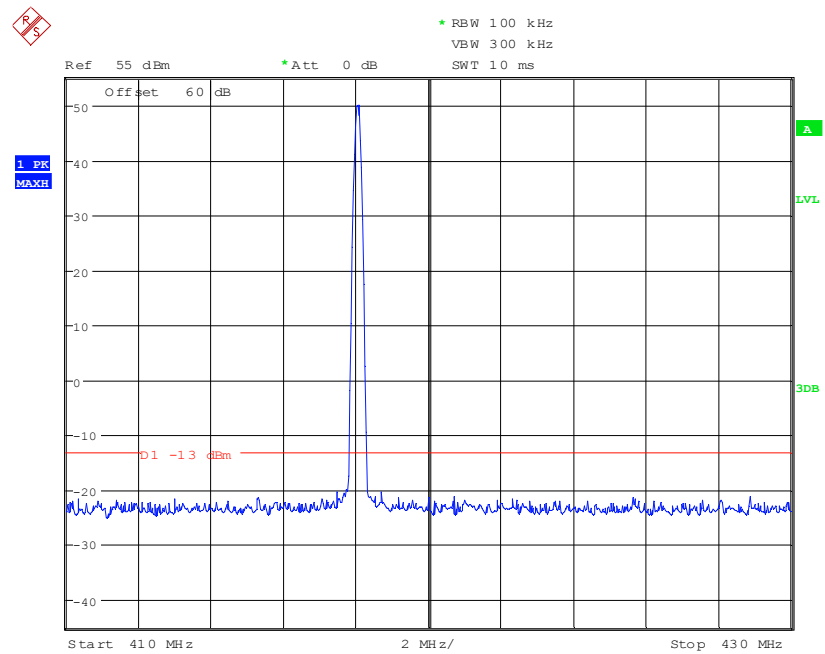
418tx2.wmf: 150 kHz to 30 MHz



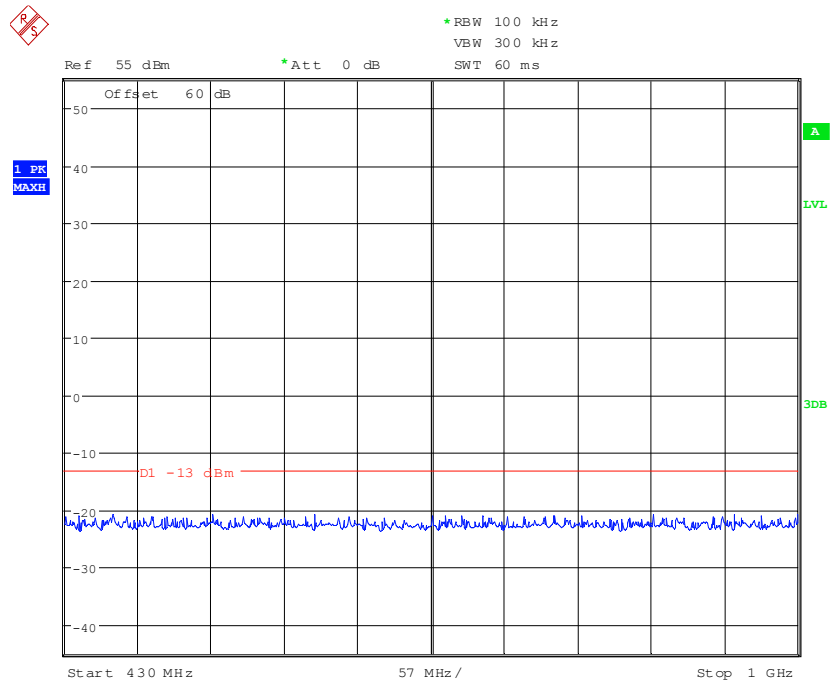
418tx3.wmf: 30 MHz to 200 MHz



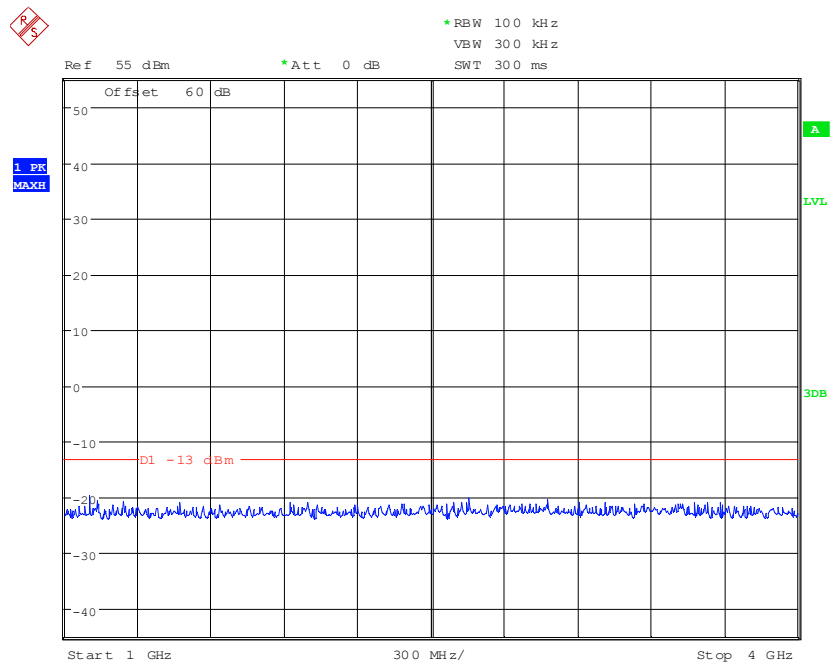
418tx4.wmf: 200 MHz to 410 MHz



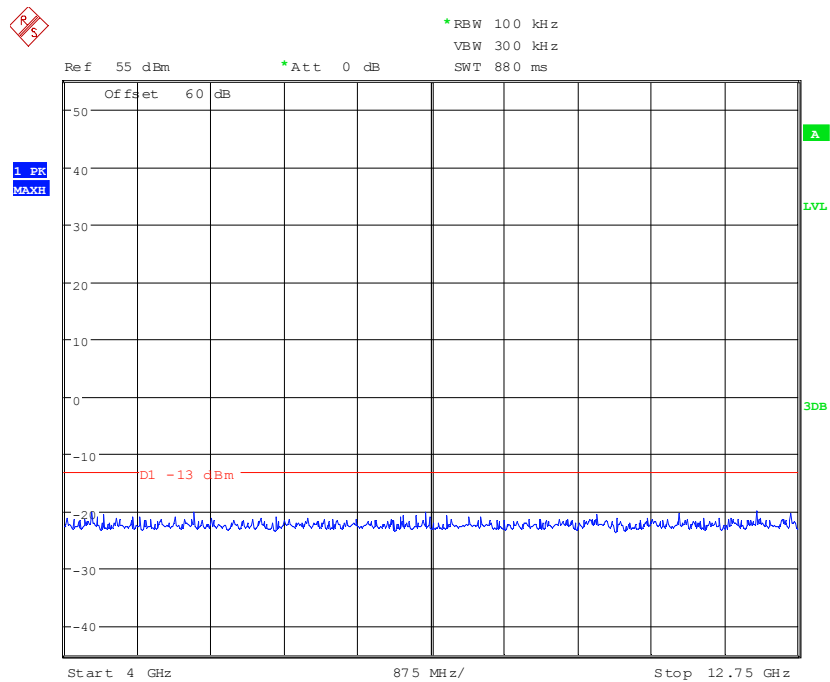
418tx5.wmf: 410 MHz to 430 MHz



418tx6.wmf: 430 MHz to 1 GHz



418tx7.wmf: 1 GHz to 4 GHz

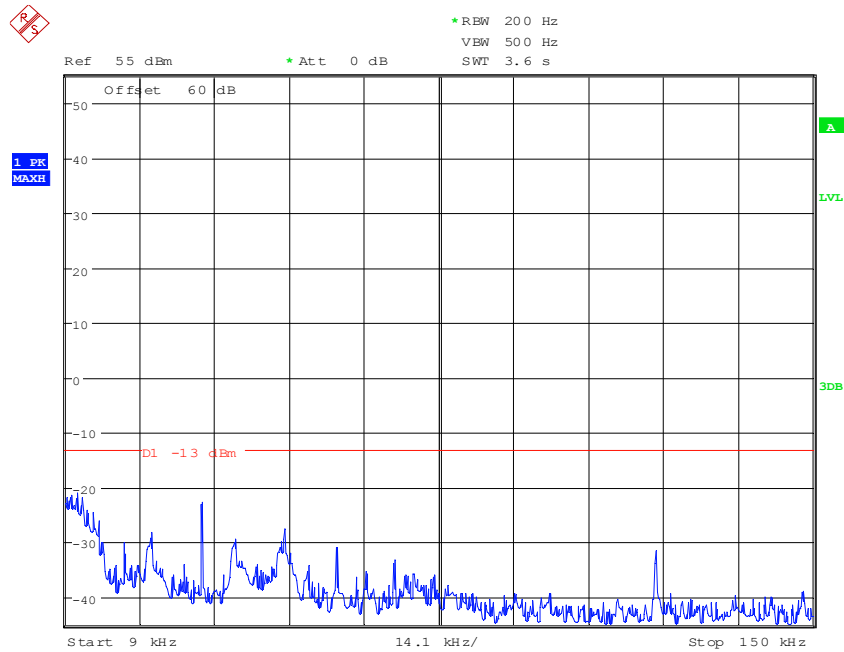


418tx8.wmf: 4 GHz to 12.75 GHz

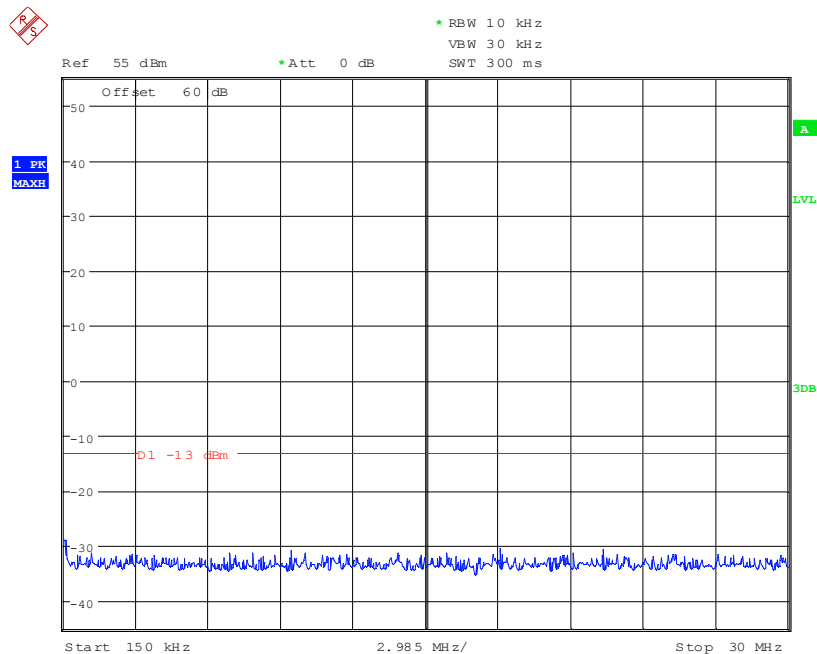
Measurement results:

SPURIOUS EMISSIONS LEVEL (CONDUCTED)					
f	Level	Bandwidth	f	Level	Bandwidth
-	-	-	-	-	-
-	All significant spurious emission at least 10 dB below the limit.				-
-	-	-	-	-	-
Measurement uncertainty		+ 0.66 dB / - 0.72 dB			

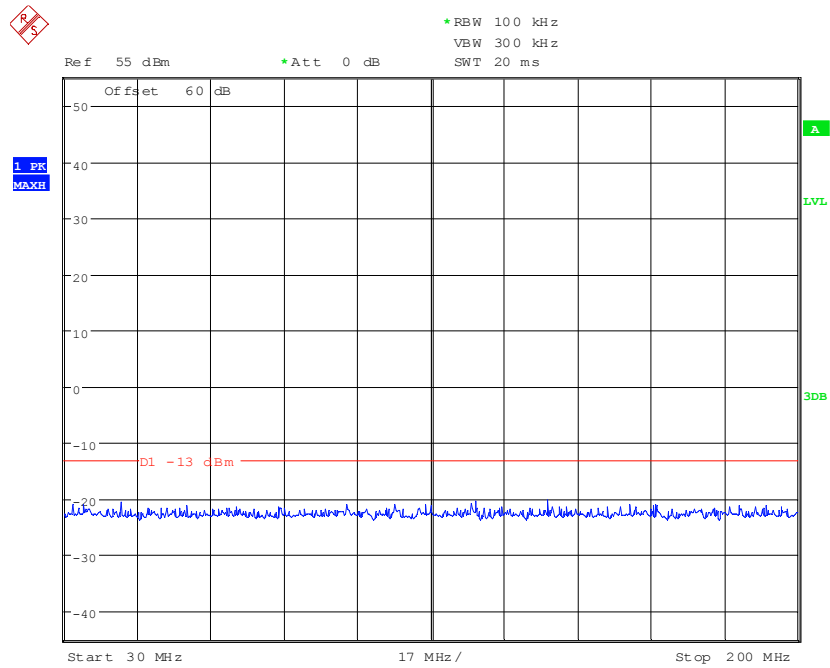
Operation mode: Transmit, (single carrier mode) with $f = 459.975$ MHz with nominal Power $P = 50$ W / +47 dBm



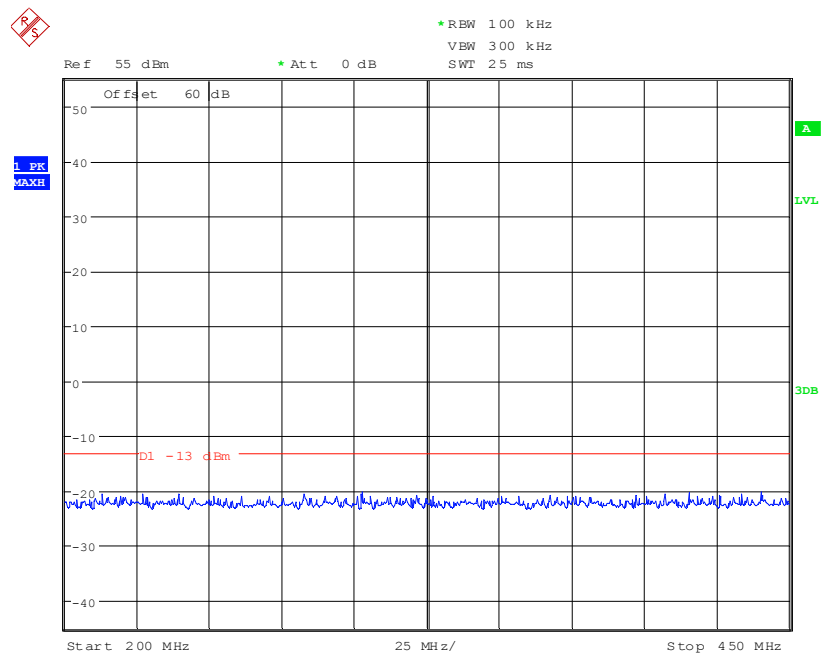
460tx1.wmf: 9 kHz to 150 kHz



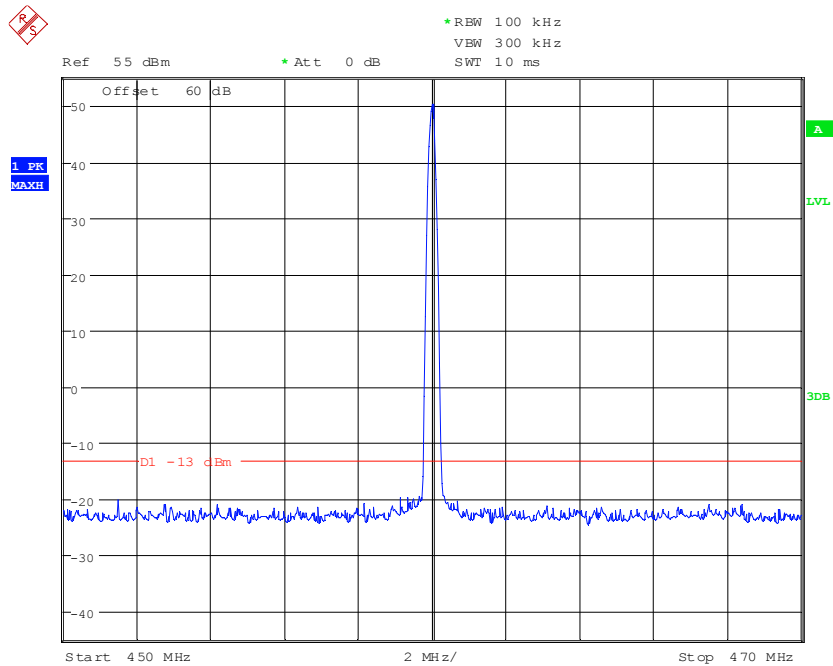
460tx2.wmf: 150 kHz to 30 MHz



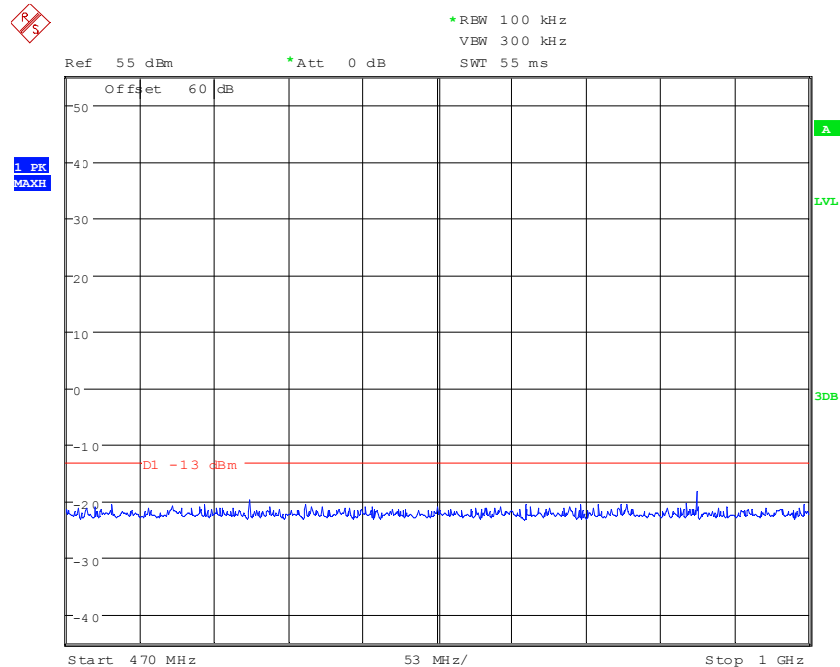
460tx3.wmf: 30 MHz to 200 MHz



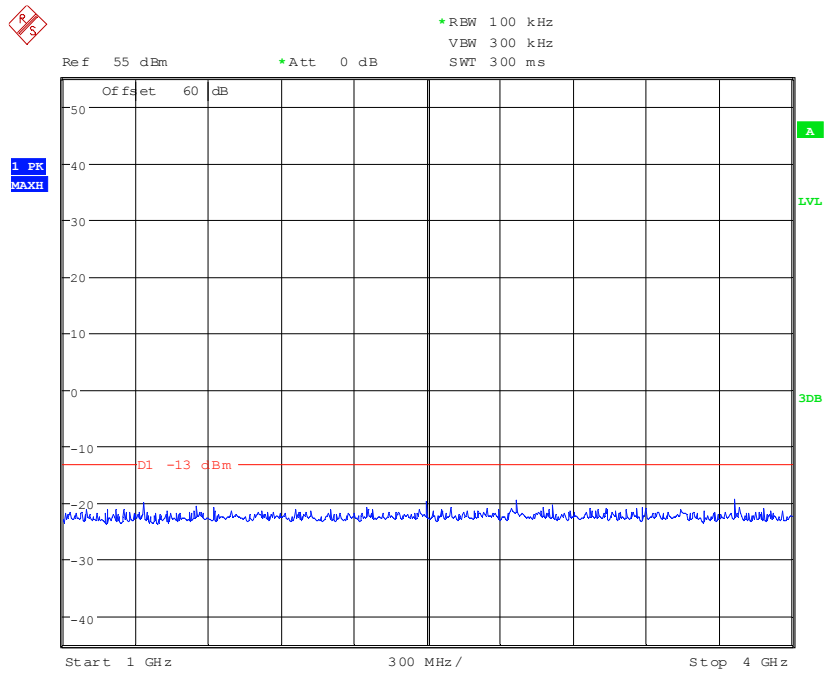
460tx4.wmf: 200 MHz to 450 MHz



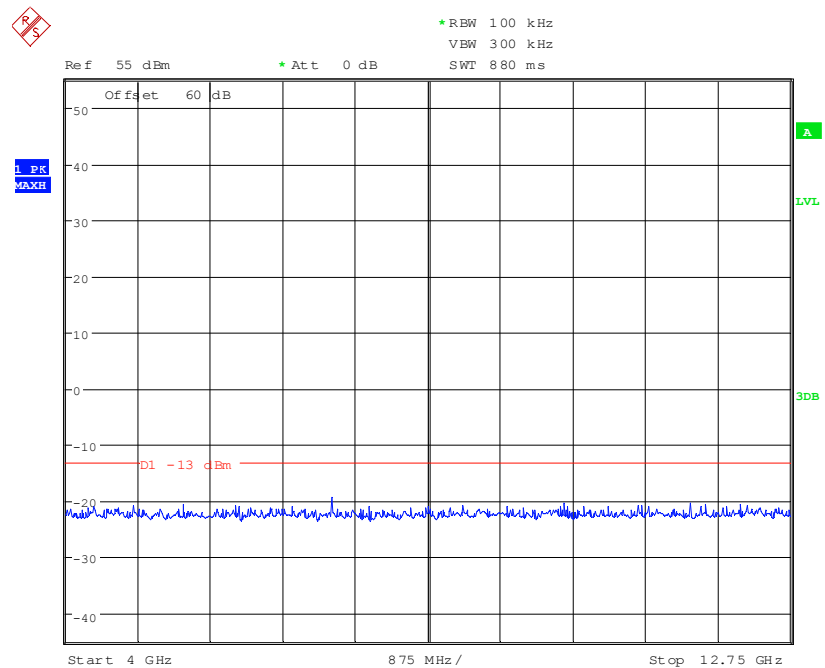
460tx5.wmf: 450 MHz to 470 MHz



460tx6.wmf: 470 MHz to 1 GHz



460x7.wmf: 1 GHz to 4 GHz



460x8.wmf: 4 GHz to 12.75 GHz

Measurement results:

SPURIOUS EMISSIONS LEVEL (CONDUCTED)					
f	Level	Bandwidth	f	Level	Bandwidth
-	-	-	-	-	-
-	All significant spurious emission at least 10 dB below the limit.				-
-	-	-	-	-	-
Measurement uncertainty		+ 0.66 dB / - 0.72 dB			

LIMITS:

$P \text{ (dBm)} = (43 + 10 \log(P))$ $P = \text{Carrier Power in Watts}$
 $P = -13 \text{ dBm}$

TEST EQUIPMENT USED:

9, 23 - 25

5.4 FREQUENCY STABILITY WITH TEMPERATURE VARIATION 47CFR2.1055 AND 90.213

Ambient temperature	20 °C	Relative humidity	50 %
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Test methods: The test was carried out according to TIA-603-C.
All results are shown in the following.

Operation mode: Transmit, (single carrier mode) with nominal Power P = 50 W / +47 dBm

Measuring results: Channel 1 / 406.125 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	406.125023 MHz	+23 Hz	+0.06ppm
+5° C		406.125025 MHz	+25 Hz	+0.06ppm
+45° C		406.125026 MHz	+26 Hz	+0.06ppm

Measuring results: Channel 2 / 418.050 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	418.050024 MHz	+24 Hz	+0.06ppm
+5° C		418.050025 MHz	+25 Hz	+0.06ppm
+45° C		418.050024 MHz	+24 Hz	+0.06ppm

Measuring results: Channel 3 / 429.975 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	429.975024 MHz	+24 Hz	+0.06ppm
+5° C		429.975024 MHz	+24 Hz	+0.06ppm
+45° C		429.975026 MHz	+26 Hz	+0.06ppm

Measuring results: Channel 4 / 450.025 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	450.025025 MHz	+25 Hz	+0.06ppm
+5° C		450.025026 MHz	+26 Hz	+0.06ppm
+45° C		450.025025 MHz	+25 Hz	+0.06ppm

Measuring results: Channel 5 / 460.000 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	460.000026 MHz	+26 Hz	+0.06ppm
+5° C		460.000027 MHz	+27 Hz	+0.06ppm
+45° C		460.000025 MHz	+25 Hz	+0.06ppm

Measuring results: Channel 6 / 469.975 MHz

Temperature:	Voltage:	Measured frequency:	Frequency error:	Relative error:
+20° C	120 V AC / 60 Hz	469.975027 MHz	+27 Hz	+0.06ppm
+5° C		469.975024 MHz	+24 Hz	+0.06ppm
+45° C		469.975026 MHz	+26 Hz	+0.06ppm

Remark:

The frequency stability with temperature variation test was carried out in 10°C-Steps from +5°C to +45°C. The extreme values at +5°C and +45°C were documented in this Test-Report.
The device is equipped with a wide range power supply. During the test the input voltage was varied between 100 V to 240 V AC and with 60 Hz and no influence in the measurement results were detected.

Limits: §90.213

±2.5 ppm

TEST EQUIPMENT USED FOR THE TEST:

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5.5 FREQUENCY STABILITY WITH PRIMARY VOLTAGE VARIATION 47CFR2.1055 / 90.213

Ambient temperature	20 °C	Relative humidity	50 %
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Test methods: The test was carried out according to TIA-603-C.
All results are shown in the following.

Operation mode: Transmit, (single carrier mode) with nominal Power P = 50 W / +47 dBm

Measuring results: Channel 1

Temp:	Voltage:	Measured frequency:	Frequency Error:	Relative Error:
+20° C	102 V AC	406.125023 MHz	+23 Hz	+0.06ppm
	120 V AC	406.125023 MHz	+23 Hz	+0.06ppm
	138 V AC	406.125024 MHz	+24 Hz	+0.06ppm

Measuring results: Channel 2

Temp:	Voltage:	Measured frequency:	Frequency Error:	Relative Error:
+20° C	102 V AC	418.050024 MHz	+24 Hz	+0.06ppm
	120 V AC	418.050024 MHz	+24 Hz	+0.06ppm
	138 V AC	418.050024 MHz	+24 Hz	+0.06ppm

Measuring results: Channel 3

Temp:	Voltage:	Measured frequency:	Frequency Error:	Frequency Error:
+20° C	102 V AC	429.975025 MHz	+25 Hz	+0.06ppm
	120 V AC	429.975024 MHz	+24 Hz	+0.06ppm
	138 V AC	429.975024 MHz	+24 Hz	+0.06ppm

Measuring results: Channel 4

Temp:	Voltage:	Measured frequency:	Frequency Error:	Frequency Error:
+20° C	102 V AC	450.025025 MHz	+25 Hz	+0.06ppm
	120 V AC	450.025025 MHz	+25 Hz	+0.06ppm
	138 V AC	450.025027 MHz	+27 Hz	+0.06ppm

Measuring results: Channel 5

Temp:	Voltage:	Measured frequency:	Frequency Error:	Frequency Error:
+20° C	102 V AC	460.000024 MHz	+24 Hz	+0.06ppm
	120 V AC	460.000026 MHz	+26 Hz	+0.06ppm
	138 V AC	460.000025 MHz	+25 Hz	+0.06ppm

Measuring results: Channel 6

Temp:	Voltage:	Measured frequency:	Frequency Error:	Frequency Error:
+20° C	102 V AC	469.975028 MHz	+28 Hz	+0.06ppm
	120 V AC	469.975027 MHz	+27 Hz	+0.06ppm
	138 V AC	469.975029 MHz	+29 Hz	+0.06ppm

Remark:

The device is equipped with a wide range power supply. During the test the input voltage was varied between 100 V to 240 V AC and with 60 Hz and no influence in the measurement results were detected.

LIMITS: §90.213

± 2.5 ppm

TEST EQUIPMENT USED FOR THE TEST:

9, 23 - 25

5.6 RADIATED SPURIOUS EMISSIONS

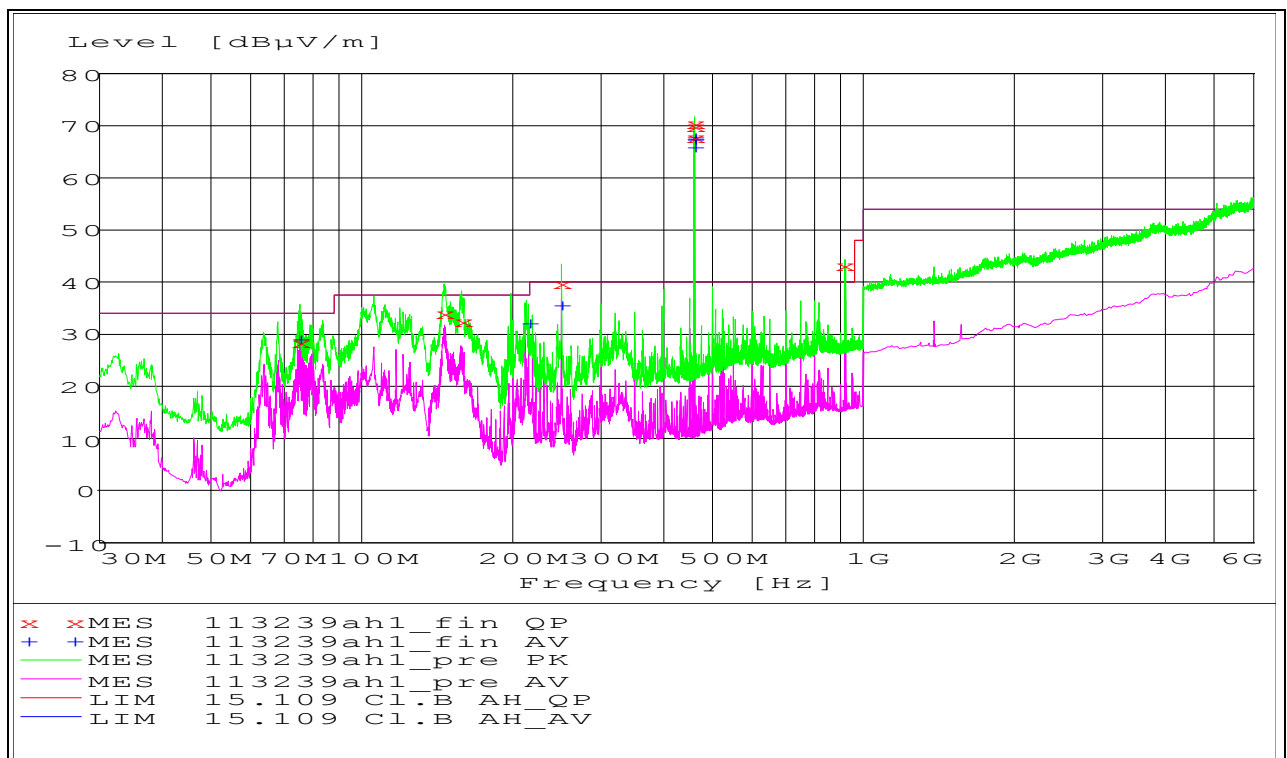
47CFR2.1053 / 90.210

Ambient temperature	20 °C	Relative humidity	55 %
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Test methods: The test was carried out according to TIA-603-C Section 2.2.12.
All results are shown in the following.

Operation mode: Multicarrier mode with 4 carriers on the following frequencies:
460.025 MHz, 460.225 MHz, 460.500 MHz, 460.900 MHz

Preliminary measurement results (radiated):

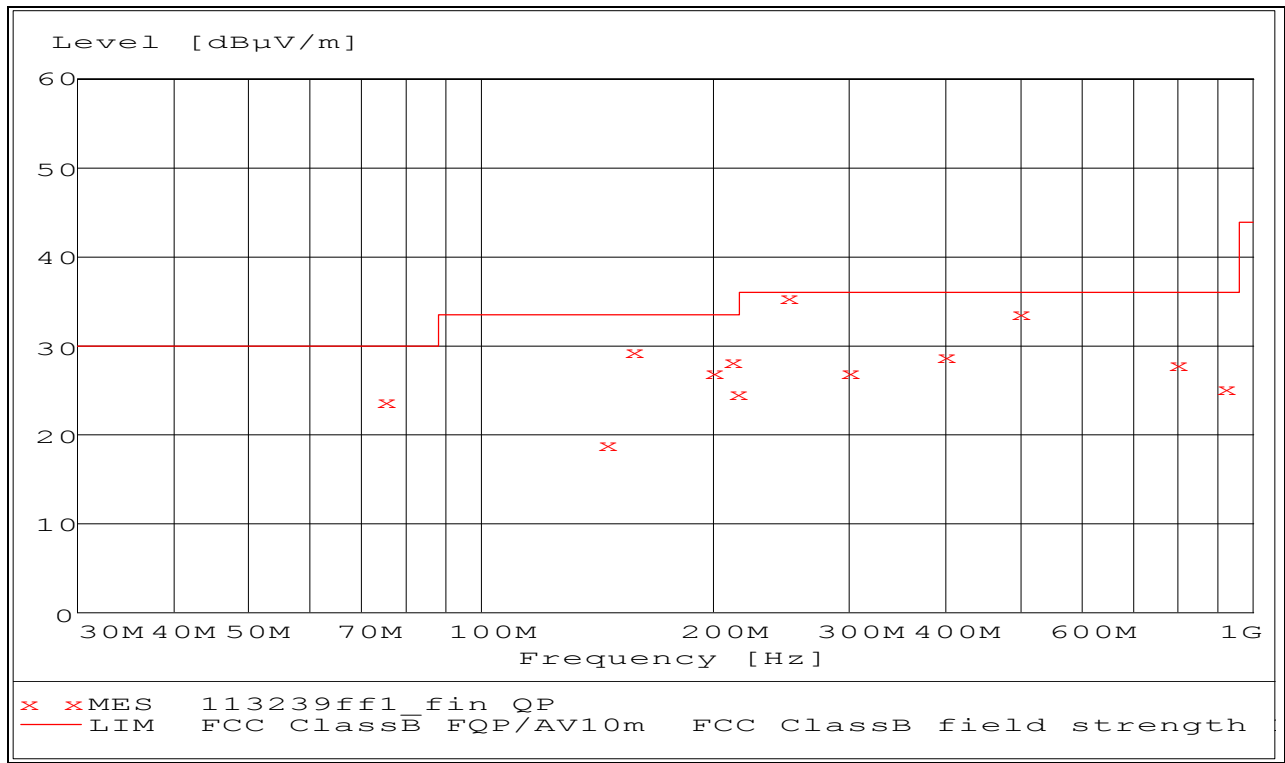


Data record name: 113239ah1

The following frequencies have been carried out from the preliminary measurement and measured at an open area-test-site OATS:

75.160 MHz, 145.608 MHz, 158.004 MHz, 200.000 MHz, 211.360 MHz, 215.112 MHz, 250.000 MHz, 300.000 MHz, 400.000 MHz, 500.000 MHz, 800.000 MHz, 920.068 MHz.

The results from the standard subsequent measurements on the open area test site are presented in the following.



Data record name: 113239ff1

The results of the standard subsequent measurement on the open area test site are indicated in the table below. The limits as well as the measured results (levels) refer to the above mentioned standard while taking account of the specified requirements for a 10 m measuring distance.

Result measured with the quasipeak detector (marked by x):

Frequency MHz	Level dBµV/m	Transducer dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarisation
75.160000	23.70	8.6	30.0	6.3	152.0	187.00	VERTICAL
145.608000	19.10	13.8	33.5	14.4	250.0	180.00	VERTICAL
158.004000	29.50	13.0	33.5	4.0	100.0	179.00	VERTICAL
200.000000	27.10	11.8	33.5	6.4	309.0	182.00	HORIZONTAL
211.360000	28.20	11.9	33.5	5.3	368.0	0.00	HORIZONTAL
215.112000	24.90	11.9	33.5	8.6	400.0	0.00	HORIZONTAL
250.000000	35.60	16.2	36.0	0.4	400.0	357.00	VERTICAL
300.000000	27.00	17.1	36.0	9.0	100.0	2.00	VERTICAL
400.000000	28.80	20.1	36.0	7.2	275.0	174.00	VERTICAL
500.000000	33.70	22.5	36.0	2.3	100.0	172.00	VERTICAL
800.000000	27.90	26.6	36.0	8.1	350.0	35.00	VERTICAL
920.068000	25.30	28.8	36.0	10.7	345.0	226.00	VERTICAL

TEST EQUIPMENT USED FOR THE TEST:

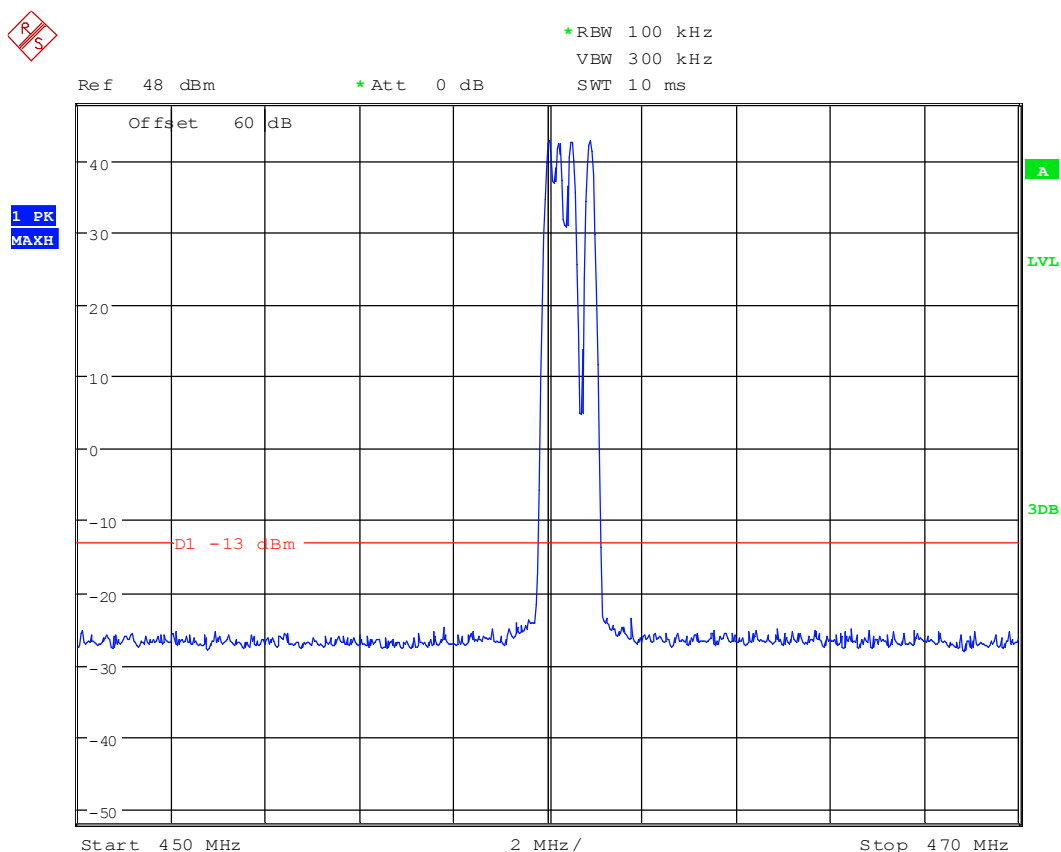
Preliminary: 8, 10 – 17 Final: 1 – 7

5.7 TRANSMITTER INTERMODULATION (CO-LOCATED TRANSMITTER)

Ambient temperature	20 °C	Relative humidity	50 %
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Test methods: The test was carried out according to TIA-603-C.
All results are shown in the following.

Operation mode: Multicarrier mode with 4 carriers on the following frequencies:
460.025 MHz, 460.225 MHz, 460.500 MHz, 460.900 MHz



TEST EQUIPMENT USED FOR THE TEST:

9, 23 - 25

6 MEASUREMENT EQUIPMENT

No.	Test equipment	Type	Manufacturer	Serial No.	PM. No.	Cal. Date	Cal. due
1	Open area test site	-	Phoenix Test-Lab	-	480085	Weekly verification (system cal.)	
2	Measuring receiver	ESIB7	Rohde & Schwarz	100304	480521	03/15/2010	03/2012
3	Controller	HD100	Deisel	100/670	480139	-	-
4	Turntable	DS420HE	Deisel	420/620/80	480087	-	-
5	Antenna support	AS615P	Deisel	615/310	480086	-	-
6	Antenna	CBL6111 A	Chase	1643	480147	08/01/2007	08/2012
7	EMI Software	ES-K1	Rohde & Schwarz	-	480111	-	-
8	Fully anechoic chamber M20	-	Albatross Projects	B83107-E2439-T232	480303	Weekly verification (system cal.)	
9	Spectrum analyser	FSU	Rohde & Schwarz	200125	480956	04/15/2010	04/2012
10	Measuring receiver	ESI 40	Rohde & Schwarz	100064	480355	03/17/2010	03/2012
11	Controller	MCU	Maturo	MCU/043/971107	480832	-	-
12	Turntable	DS420HE	Deisel	420/620/80	480315	-	-
13	Antenna support	AS615P	Deisel	615/310	480187	-	-
14	Antenna	CBL6112 B	Chase	2688	480328	04/2011	04/2014
15	Antenna	3115 A	EMCO	9609-4918	480183	04/11/2008	11/2011
16	RF-cable No. 30	RTK 081	Rosenberger	-	410141	Weekly verification (system cal.)	
17	RF-cable No. 31	RTK 081	Rosenberger	-	410142	Weekly verification (system cal.)	
21	Power Meter	NRVD	Rohde & Schwarz	828110/026	480267	03/2010	03/2012
22	Thermal Power Sensor	NRV-Z51	Rohde & Schwarz	825489/004	480247	03/2010	03/2012
23	Coaxial-Attenuator	200W / 30dB	Spinner	29971	480232	Weekly verification (system cal.)	
24	Coaxial-Attenuator	25W / 10dB	Weinschel	BH4856	410130	Weekly verification (system cal.)	
25	Coaxial-Attenuator	10W / 20dB	Weinschel	7539	410113	Weekly verification (system cal.)	
26	Climatic chamber	MK240	Binder	-	480462	02/2011	08/2012

7 TEST REPORT HISTORY

Report Number	Date	Comment
F113239E1	19 December 2011	Document created
-	-	-
-	-	-

8 LIST OF ANNEXES

ANNEX A	PHOTOS OF THE TEST SETUP:	3 pages
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	Test set-up final radiated spurious emissions	113239emi2.jpg
	Test set-up climatic chamber	113239clima1.jpg
ANNEX B	EXTERNAL PHOTOS OF THE EUT:	2 pages
	EUT, front view	113239eut1.jpg
	EUT, rear view	113239eut2.jpg
ANNEX C	INTERNAL PHOTOS OF THE EUT:	9 pages
	Controller-PCB	113239eut5.jpg
	RF-PCB, front-view	113239eut6.jpg
	RF-PCB, rear-view	113239eut7.jpg
	Prozessor-Unit	113239eut8.jpg
	Controller-Unit, front-view	113239eut9.jpg
	Controller-Unit, rear-view	113239eut10.jpg
	DSP-Board	113239eut13.jpg
	Synthesiser	113239eut14.jpg
	Power-Supply	113239eut15.jpg