# REPORT

issued by an FCC listed Laboratory Reg. no. 93866.
The test sites comply with RSS-Gen, IC file no: 3482A

1002
ISO/IEC 17025

| Date | Reference | Page |
|---|---|---|
| 2011-02-14 | FX100778-F22L | 1 (2) |


Handled by, department
Jonas Bremholt
Electronics
+46 10 516 54 38, jonas.bremholt@sp.se


Ericsson AB
Anders Johansson
PDU Radio Base Stations
164 80 Stockholm

## Class II permissive change measurements on RUS 01 B5 radio equipment with FCC ID: TA8AKRC11864-2 and IC: 287AB-AS118642

(7 appendices)

### Test object

RUS 01 B5, KRC 118 64/2, revision R2A

### Summary


Appendix 1 describes the test object and set-ups during test.
Appendix 7 presents photos of the test object.


| Standard | | Compliant | Appendix |
|---|---|---|---|
| **FCC CFR 47 / IC RSS-132** | | | |
| | | | |
| 2.1046 / RSS-132 4.4 | RF power output | Yes | 2 |
| 2.1049 / RSS-Gen 4.6.1 | Occupied bandwidth | Yes | 3 |
| 2.1051 / RSS-132 4.5 | Band edge | Yes | 4 |
| 2.1051 / RSS-132 4.5 | Spurious emission at antenna terminals | Yes | 5 |
| 2.1053 / RSS-132 4.5 | Field strength of spurious radiation | Yes | 6 |

Note: Above RSS-132 items are given as cross-reference only. Measurements were performed according to ANSI procedures referenced by FCC and covered by SP's accreditation.

**SP Sveriges Tekniska Forskningsinstitut**
**Electronics - EMC**

Jonas Bremholt
Technical Officer

Christer Karlsson
Technical Manager

FCC ID: TA8AKRC11864-2
IC: 287AB-AS118642

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Appendix 1

**Description of the test object**

| | |
|---|---|
| Equipment: | Radio equipment RUS 01 B5 running in LTE-mode |
| Frequency bands: | TX: 869 - 894 MHz<br>RX: 824 – 849 MHz<br>Highest and lowest EARFCN per supported channel BW configuration and corresponding frequencies are listed below. |
| Supported channel bandwidth configurations | 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz and 20 MHz |
| Modulation and access scheme | OFDMA in FDD |
| OFDM subcarrier modulation | System information and pilots use BPSK and QPSK.<br>For payload data QPSK, 16QAM and 64QAM can be used. |
| Maximum rated output power: | Single carrier 1x 47.8 dBm (1x60 W) |
| Number of antenna ports: | TX/RX: 1 RX only: 1 |
| Nominal supply voltage: | -48 VDC |

**Tested EARFCN settings and frequencies per LTE channel BW configuration**

| EARFCN settings | | Frequency [MHz] | | BW configuration |
|---|---|---|---|---|
| DL | UL | DL | UL | |
| 2407 | 20407 | 869.7 | 824.7 | 1.4 MHz, bottom (B) frequency |
| 2415 | 20415 | 870.5 | 825.5 | 3 MHz, bottom (B) frequency |
| 2425 | 20425 | 871.5 | 826.5 | 5 MHz, bottom (B) frequency |
| 2450 | 20450 | 874.0 | 829.0 | 10 MHz, bottom (B) frequency |
| 2475 | 20475 | 876.5 | 831.5 | 15 MHz, bottom (B) frequency |
| 2500 | 20500 | 879.0 | 834.0 | 20 MHz, bottom (B) frequency |
| 2525 | 20525 | 881.5 | 836.5 | all BW, mid (M) frequency |
| 2550 | 20550 | 884.0 | 839.0 | 20 MHz, top (T) frequency |
| 2575 | 20575 | 886.5 | 841.5 | 15 MHz, top (T) frequency |
| 2600 | 20600 | 889.0 | 844.0 | 10 MHz, top (T) frequency |
| 2625 | 20625 | 891.5 | 846.5 | 5 MHz, top (T) frequency |
| 2635 | 20635 | 892.5 | 847.5 | 3 MHz, top (T) frequency |
| 2643 | 20643 | 893.3 | 848.3 | 1.4 MHz, top (T) frequency |

Note: EARFCN are derived according 3GPP TS 36.141, table 5.7.3-1.

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Appendix 1

**Operation modes and test set-ups during measurements**

The setting with test model E-TM1.1 in channel bandwidth configuration 1.4 MHz(defined in 3GPP TS 36.141) was found to be representative for worst case setting for all traffic scenarios. This setting was used for all measurements unless noted otherwise.

The test object was powered with -48 VDC and measurements were performed with the test object configured for maximum transmit power, unless noted otherwise.

**Conducted measurements**

The EUT was mounted into a RBS 6201 cabinet and supplied by the cabinet's internal -48 V DC. TX parameters were measured at port RF A with port RF B unterminated.

**Radiated measurements**

The test object was tested stand-alone and supplied with -48 VDC from functional test equipment. The active port RF A was monitored with signal analyzer outside the test chamber. Port RF B was unterminated.

**Purpose of test**

The purpose of the tests is a class II permissive change verification of maintained compliance to the performance characteristics specified in applicable parts of FCC CFR 47 and IC RSS-132. The changes comprise a product revision update to version R2A due to minor HW changes as described in the client documentation. Limited verification measurements in LTE mode were performed and showed maintained compliance.

**References**

Measurements were done according to relevant parts of the following standards:
ANSI C63.4-2003
ANSI/TIA/EIA-603-C-2004
3GPP TS 36.141, version 8.5.0
CFR 47 part 2, October 1st , 2010
CFR 47 part 22, October 1st, 2010
RSS-132 Issue 2
RSS-Gen Issue 3

**Measurement equipment**

| Measurement equipment | Calibration Due | SP number |
|---|---|---|
| Semi anechoic chamber, Tesla | 2012-10 | 503 881 |
| Rohde & Schwarz FSIQ 40 | 2011-07 | 503 738 |
| Rohde & Schwarz FSQ 40 | 2011-07 | 504 143 |
| Rohde & Schwarz ESI 26 | 2011-08 | 503 292 |
| EMI measurement computer | - | - |
| Software: R&S EMC32, ver. 8.20.1 | - | 503 745 |
| High pass filter | 2011-07 | 502 758 |
| High pass filter | 2011-07 | 503 739 |
| High pass filter | 2011-07 | 503 740 |
| High pass filter | 2011-07 | 504 199 |
| High pass filter | 2011-07 | 504 200 |
| RF attenuator | 2011-07 | 504 159 |
| RF attenuator | 2011-08 | 900 233 |
| Boonton RF Peak power meter/analyzer | 2011-10 | 503 144 |
| Boonton Power sensor 56518-S/4 | 2012-10 | 503 145 |
| Chase Bilog antenna CBL 6111A | 2011-10 | 503 182 |
| Horn antenna EMCO 3115 | 2014-01 | 502 175 |
| Standard Gain model 20240-20 | - | 503 674 |
| Low Noise Amplifier, Miteq | 2011-07 | 503 285 |
| µComp Nordic, Low Noise Amplifier | 2011-07 | 504 160 |
| Multimeter Fluke 87 | 2011-03 | 502 190 |
| Testo 625 temperature and humidity meter | 2011-04 | 504 117 |
| Testo 635 temperature and humidity meter | 2011-03 | 504 203 |

**Uncertainties**

Measurement and test instrument uncertainties are described in the quality assurance documentation ”SP-QD 10885”. The uncertainties are calculated with a coverage factor k=2 (95% level of confidence).

**Reservation**

The test results in this report apply only to the particular test objects as declared in the report.

**Delivery of test object**

The test objects were delivered: 2011-01-31.

**Manufacturer’s representative**

Samir Catic, Ericsson AB

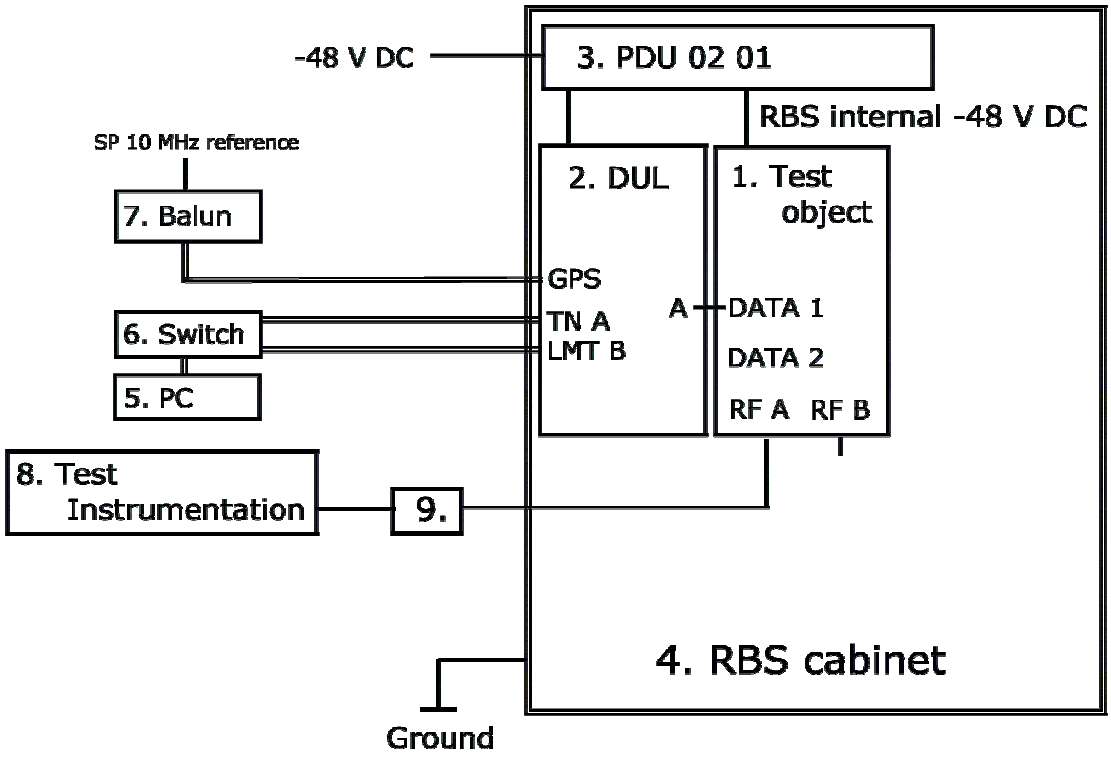
## Test engineers

Andreas Johnson, Jörgen Wassholm, and Jonas Bremholt

## Test participants

Samir Catic, Ericsson AB (partially present)

## Test set-up conducted TX measurements at port RF A



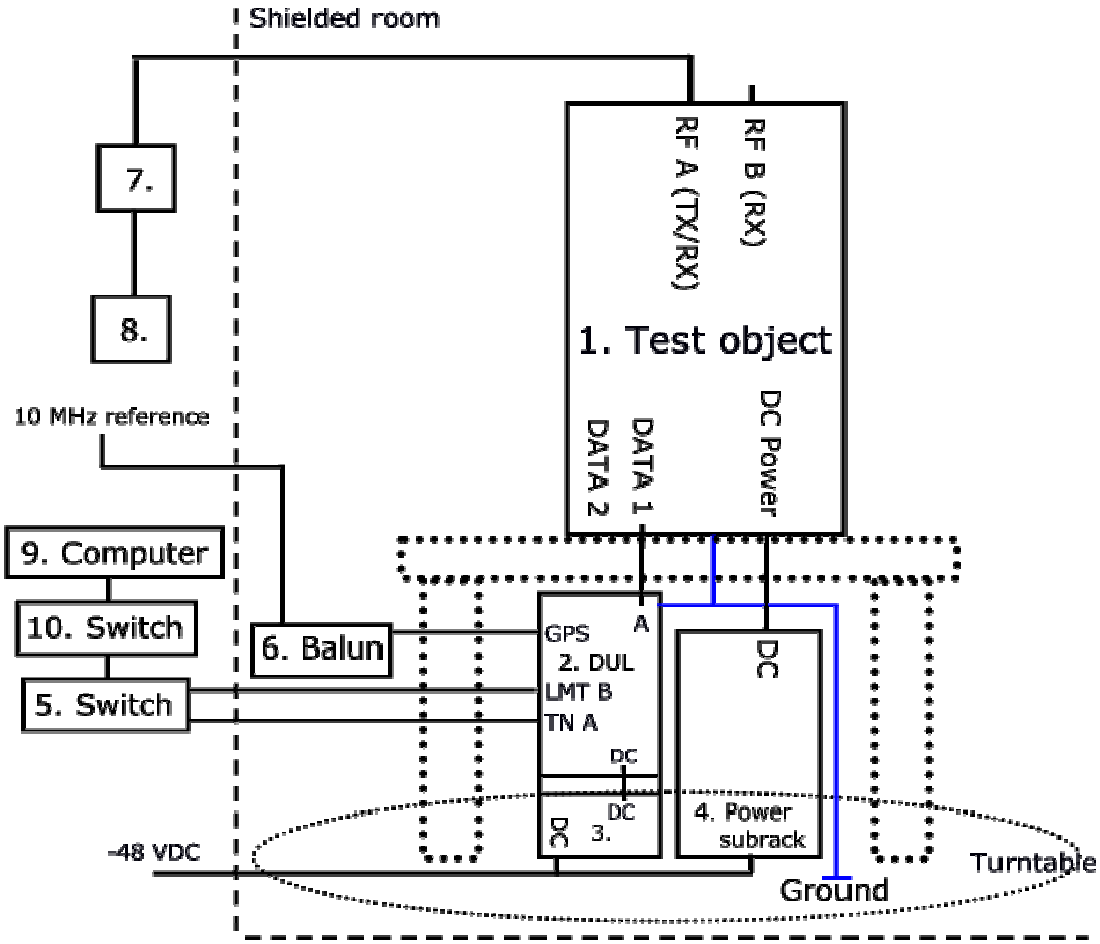

**Test object**

1. RUS 01 B5, product KRC 118 64/2, revision R2A, S/N: C823824691
   FCC ID: TA8AKRC11864-2 and IC: 287AB-AS118642

**Functional test equipment**

2. DUL 20 01, product KDU 137 533/4, revision R1A, S/N: C823562999
3. PDU 02 01, product BMG 980 336/4, revision R2A, SN BJ31528316
4. RBS 6201 cabinet, BAMS 1000778792
5. Controlling laptop HP Elitebook 8730w, SN CNU 942532V, BAMS 1000757967 running software MOSHELL V8.0k
6. Switch, Netgear Fast Ethernet Switch FS108
7. Balun for 10 MHz reference, converting BNC to RJ-45 connector
8. SP test instrument according measurement equipment list
9. Attenuator and filter according measurement equipment list

## Test set-up, radiated measurements




### Test object

1 RUS 01 B5, product KRC 118 64/2, revision R2A, S/N: C823990634
FCC ID: TA8AKRC11864-2 and IC: 287AB-AS118642

### Functional test equipment

2. DUL 20 01, product KDU 137 533/4, revision R1A, S/N: C823562999
3. Power subrack, individual components are listed below
4. SUP 6601 1/BFL 901 009/1 Rev R1B, S/N: BR80867188
5. Switch, D-Link DES-3526
6. Balun for 10 MHz reference, converting BNC to RJ-45 connector
7. RF attenuator
8. Signal analyzer FSIQ 40, SP no:503 738
9. Laptop computor:Mobile Workstation, HP Elite book BAMS – 1000757968 with MOSHELL Ver. 8.0k
10. Switch: Netgear 10/100 Mbps model: FS108

## Test object ports

| Interface: | Type of port: |
|---|---|
| Ground connection during stand alone radiated emission test,<br>in normal use grounded via cabinet | Ground |
| Supply power -48 VDC | DC Power |
| Antenna port 1 “RF A”, 7/16 connector, female, combined TX/RX | Antenna |
| Antenna port 2 “RF B”, 7/16 connector, female, RX only | Antenna |
| Data 1, connected to Port “A” at DUL | Signal |
| Data 2, unused | Signal |
| RXA I/O cross connecter, unused | Signal |
| RXA OUT cross connecter, unused | Signal |
| RXB I/O cross connecter, unused | Signal |

## Test object software

| Software | Revision |
|---|---|
| CXP 102 051/10 | R9AJ |

## Components of the power sub-rack used during radiated emission test

| Position | Product name | Product number | R-state | Serial number |
|---|---|---|---|---|
| 1 | PDU 01 01 | BMG 980 336/2 | R4F | BJ31532384 |
| 2 | PDU 01 01 | BMG 980 336/2 | R4F | BJ31532382 |
| 3 | SHU 01 01 | BGK 901 18/1 | R3C | BJ31446269 |
| 4 | DUMMY | SXK 109 8257/1 | R1F | - |
| 5 | DUMMY | SXK 109 8257/1 | R1F | - |
| 6 | PFU 01 01 | KFE 101 1162/1 | R1B | BR80910495 |
| 7 | DUMMY | SXK 109 8257/1 | R1F | - |
| 8 | DUMMY | SXK 109 8257/1 | R1F | - |
| 9 | PCF 02 01 | KFE 101 1157/1 | R1C | BW95301450 |

Note: The power subrack is functional test equipment in the context of this test report.

FCC ID: TA8AKRC11864-2
IC: 287AB-AS118642

Appendix 2

## RF power output measurements according to 47 CFR 2.1046, 22.913 / IC RSS-132 4.4

| Date | Temperature | Humidity |
|---|---|---|
| 2011-02-04 | 23 °C ± 3 °C | 22 % ± 5 % |

### Test set-up and procedure

The test object was connected to a power analyzer measuring peak and RMS output power in CDF mode.

| Measurement equipment | SP number |
|---|---|
| Boonton RF Peak power meter/analyzer | 503 144 |
| Boonton Power sensor 56518-S/4 | 503 145 |
| RF attenuator | 504 159 |
| Testo 615 temperature and humidity meter | 503 498 |

Nominal maximum rated output power 47.8 dBm (60 W).

**Measurement uncertainty**: 0.7 dB

### Results

Measured output power at connector RF A:

| Test conditions | Transmitter power RMS (dBm) / PAR (dB) | | |
|---|---|---|---|
| | Frequency B | Frequency M | Frequency T |
| BW configuration 1.4 MHz | - | 47.5 / 7.0 | - |
| BW configuration 3 MHz | - | 47.5/ 6.8 | - |
| BW configuration 5 MHz | - | 47.5 / 6.7 | - |
| BW configuration 10 MHz | - | 47.4 / 6.6 | - |
| BW configuration 15 MHz | - | 47.3 / 6.8 | - |
| BW configuration 20 MHz | - | 47.2 / 7.0 | - |

### Limits

CFR 47, 22.913/ SRSP-503 5.1: The effective radiated power (ERP) of base transmitters and cellular repeaters must not exceed 500 Watts (57 dBm).

RSS-132: The transmitter output power shall not exceed the limits given in SRSP-503

| Complies? | Yes |
|---|---|

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Appendix 3

## Occupied bandwidth measurements according to 47 CFR 2.1049 / IC RSS-Gen 4.6.1

| Date | Temperature | Humidity |
|---|---|---|
| 2011-02-04 | 23 °C ± 3 °C | 22 % ± 5 % |

### Test set-up and procedure

The measurements were made per definition in §2.1049. The output was connected to a signal analyzer with the RMS detector activated. The signal analyzer was connected to an external 10 MHz reference standard during the measurements.

| Measurement equipment | SP number |
|---|---|
| Rohde & Schwarz signal analyzer FSQ40 | 504 143 |
| RF attenuator | 504 159 |
| Testo 615 temperature and humidity meter | 503 498 |

Measurement uncertainty: 3.7 dB

### Results

The results are shown in appendix 3.1

| Diagram | BW configuration | Tested frequency | OBW / [MHz] |
|---|---|---|---|
| 1 | 1.4 MHz | M | 1.094 |
| 2 | 20 MHz | M | 17.850 |

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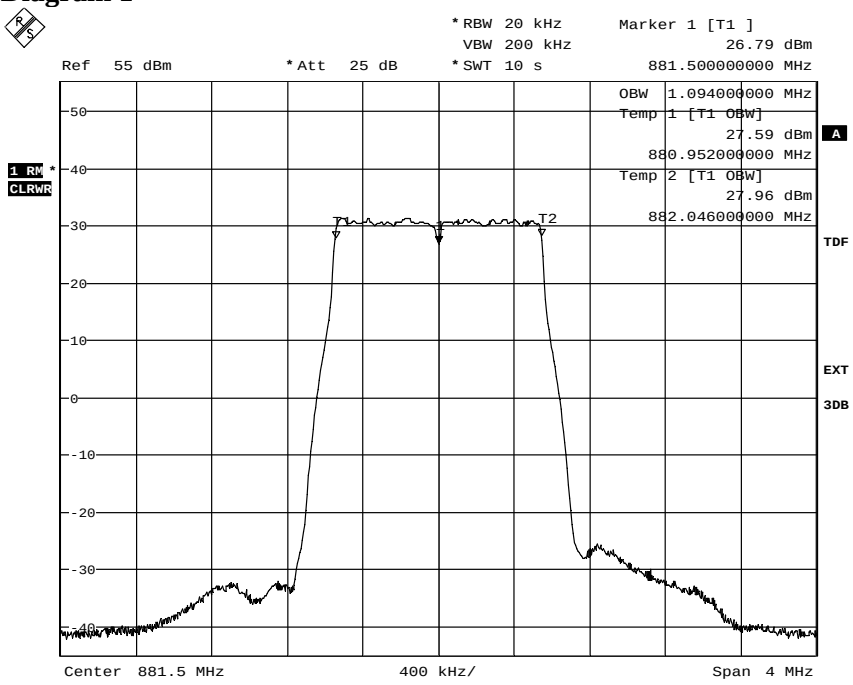
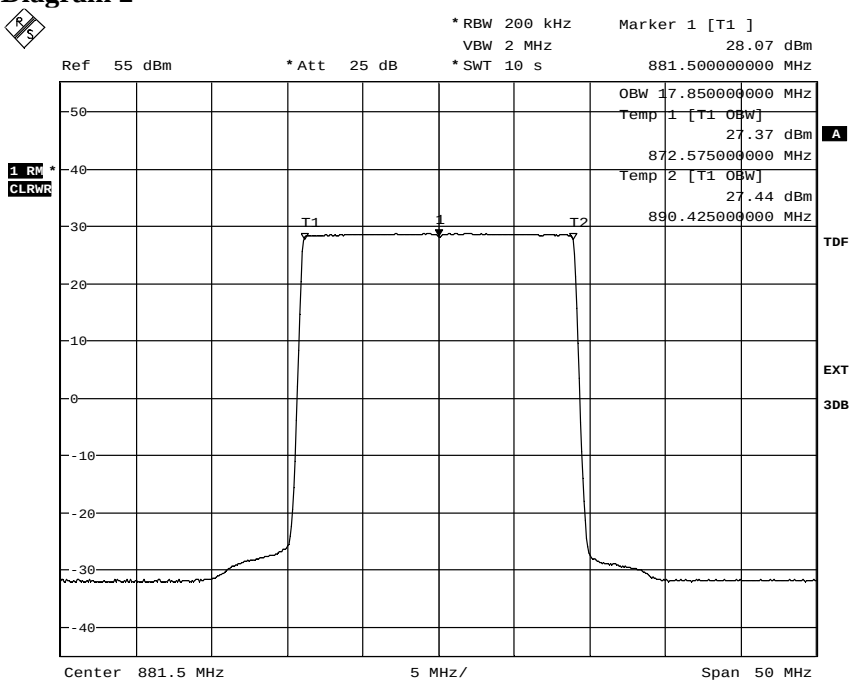
Appendix 3.1

## Diagram 1




Date: 4.FEB.2011 12:21:22

## Diagram 2




Date: 4.FEB.2011 13:43:11

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Appendix 4

## Band edge measurements according to 47 CFR 2.1051, 22.917 / IC RSS-132 4.5

| Date | Temperature | Humidity |
|---|---|---|
| 2011-02-04 | 23 °C ± 3 °C | 22 % ± 5 % |
| 2011-02-08 | 22 °C ± 3 °C | 19 % ± 5 % |

### Test set-up and procedure

The measurements were made per definition in §22.917. The test object was connected to a spectrum analyzer with the RMS detector activated. The spectrum analyzer was connected to an external 10 MHz reference standard during the measurements.

Beyond the 1st MHz off the band edges the limit was adjusted to compensate for reduced measurement bandwidths where applicable, pursuant to the FCC rules, specifying a RBW of at least 1% of the fundamental emission bandwidth up to 1 MHz away from the band edges and a RBW of at least 100 KHz for measurements of emissions more than 1 MHz away from the band edges. For used RBWs smaller than the reference measurement bandwidth required by the applicable standards the limit was determined according fomula [1],

Limit = -13 dBm + 10 log ( RBWused / Bandwidth required by the applicable standard) [1]

resulting in following limits for frequencies offset 1 MHz to 5 MHz from the band edges:

| Channel BW configuration [MHz] | RBW used [kHz] | FCC limit [dBm] | IC limit [dBm] |
|---|---|---|---|
| 1.4 | 20 | -20.0 | -20.0 |
| 3 | 30 | -18.2 | -18.2 |
| 5 | 30 (*) | -18.2 | -28.2 |
| 10 | 100 | -13.0 | -23.0 |
| 15 | 200 | -13.0 | -20.0 |
| 20 | 200 | -13.0 | -20.0 |

(*) The RBW 30 kHz is less than 1% of the measured emission bandwidth of 4.508 MHz for this BW configuration, thus the limit line in the plot was adapted by -1.8 dB (10 log[30/45]) to -14.8 dBm up to 1 MHz from the band edge.

Beyond 5 MHz off the band edges RBW 1 MHz was used to cover RSS-132 item 4.5.1.2, which requires 1 MHz RBW for signals exceeding 4 MHz emission bandwidth.

The limit lines shown in the plots represent the lower bound (most conservative requirement) of aggregated FCC and IC limits.

| Measurement equipment | SP number |
|---|---|
| Rohde & Schwarz FSQ40 | 504 143 |
| RF attenuator | 504 159 |
| Testo 615 temperature and humidity meter | 503 498 |

**Measurement uncertainty:** 3.7 dB

**Results**

The results are shown in appendix 4.1

| Diagram | BW configuration | Tested frequency |
|---|---|---|
| 1 a+b | 1.4 MHz | B |
| 2 a+b | 3 MHz | B |
| 3 a+b | 5 MHz | B |
| 4 a+b | 10 MHz | B |
| 5 a+b | 15 MHz | B |
| 6 a+b | 20 MHz | B |
| | | |
| 7 a+b | 1.4 MHz | T |
| 8 a+b | 3 MHz | T |
| 9 a+b | 5 MHz | T |
| 10 a+b | 10 MHz | T |
| 11 a+b | 15 MHz | T |
| 12 a+b | 20 MHz | T |

**Limits**

CFR 47, 22.917 / RSS-132 4.5:
The power of any emission outside the frequency band shall be attenuated below the transmitter power (P) by at least 43 + 10 log P dB.

| | |
|---|---|
| Complies? | Yes |

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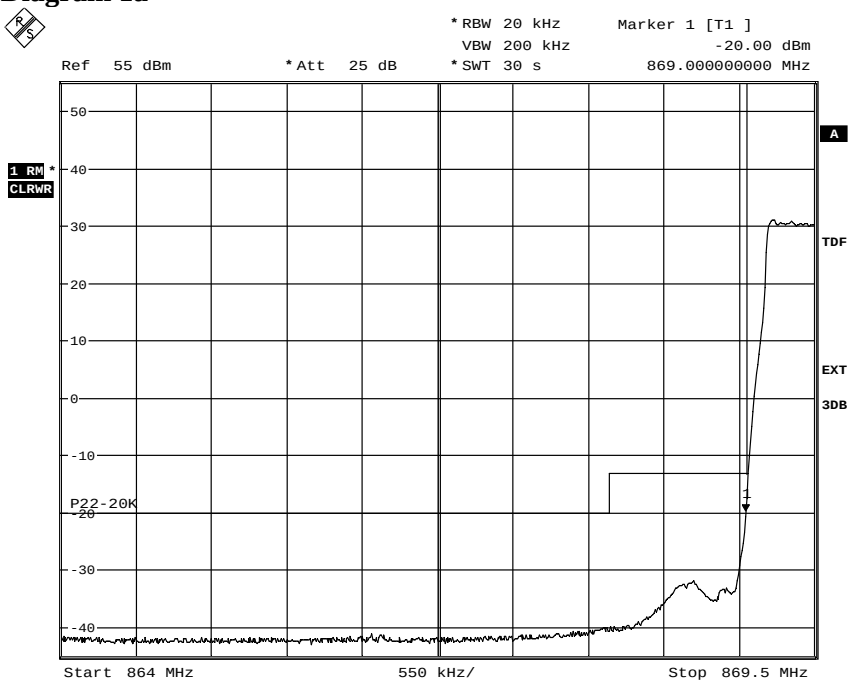
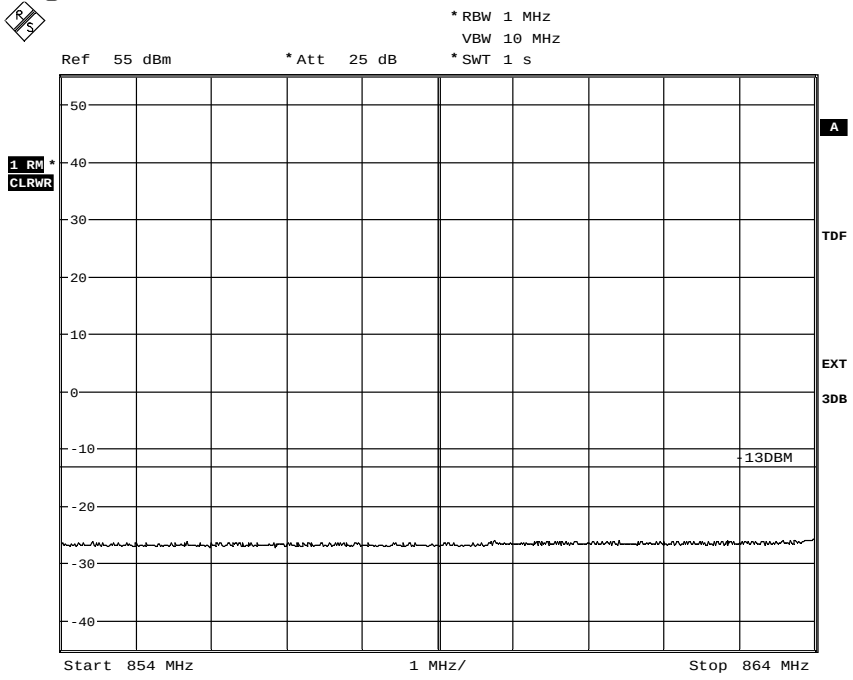
Appendix 4.1

## Diagram 1a




Date: 4.FEB.2011 14:25:05

## Diagram 1b




Date: 4.FEB.2011 14:26:30

FCC ID: TA8AKRC11864-2
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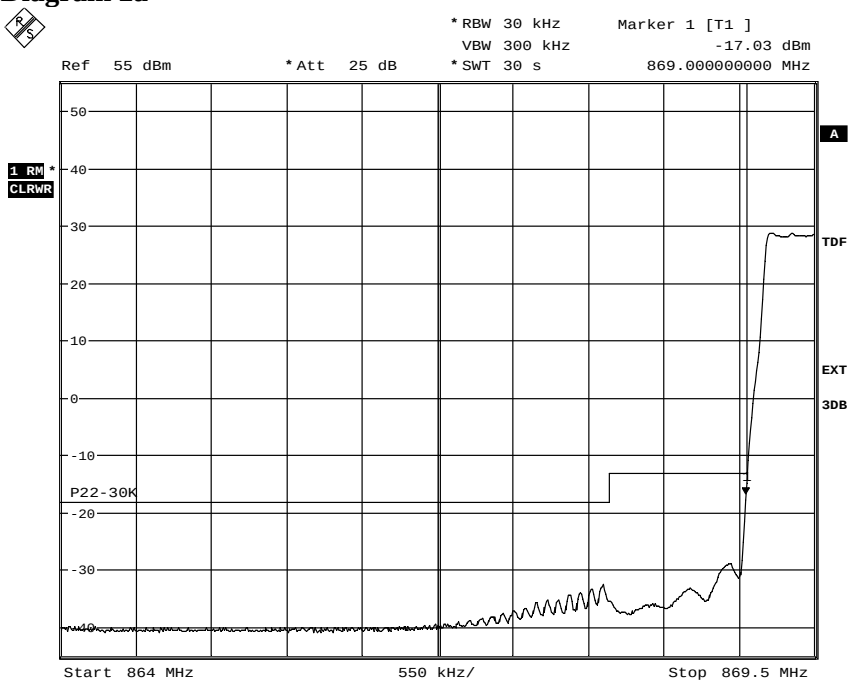
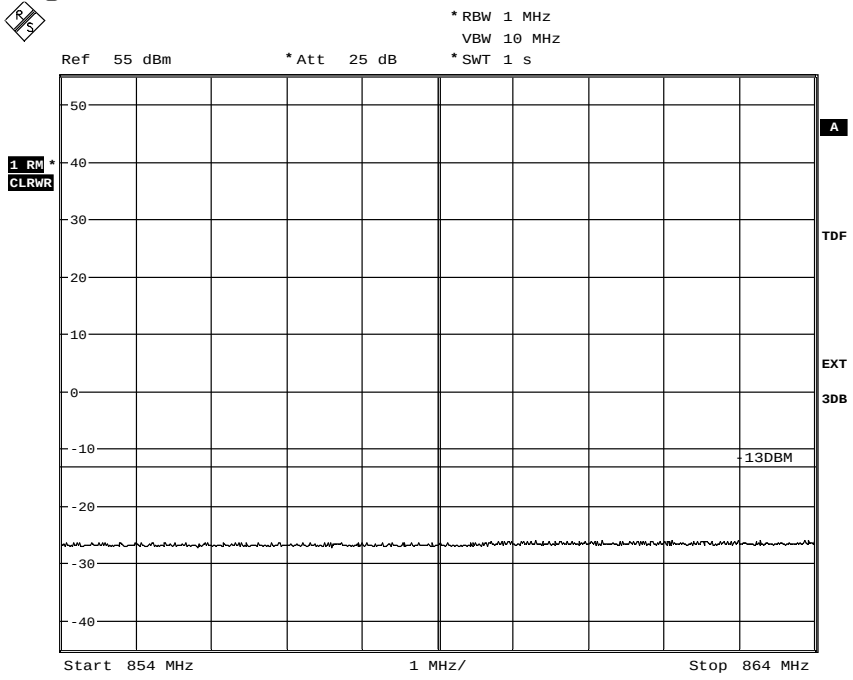
Appendix 4.1

## Diagram 2a



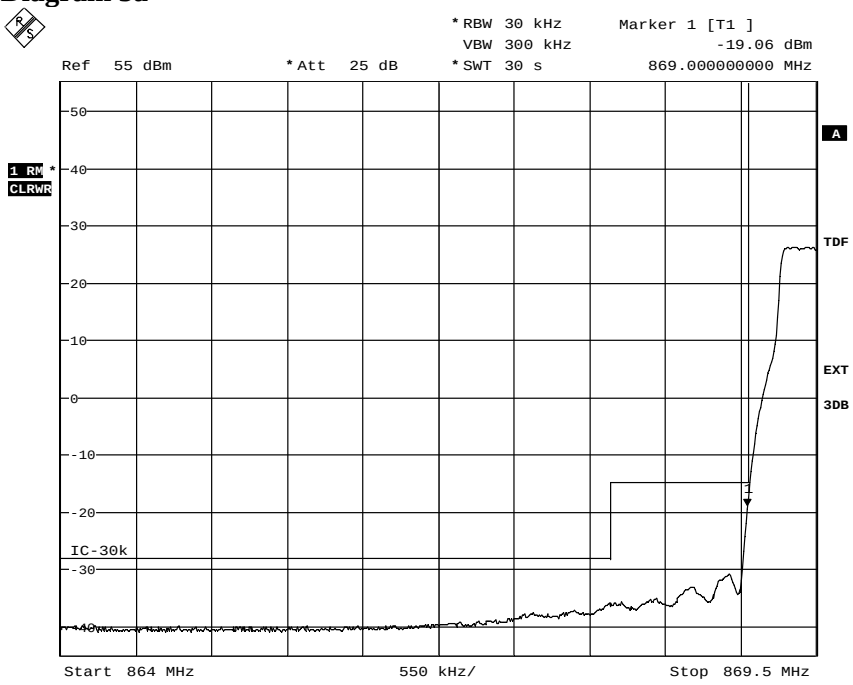

Date: 4.FEB.2011 15:37:49

## Diagram 2b



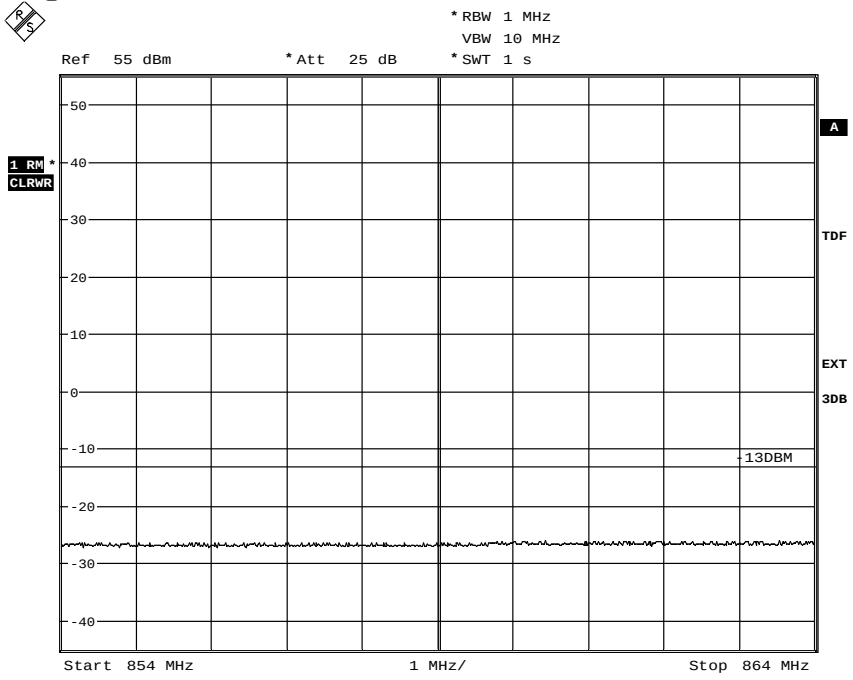

Date: 4.FEB.2011 15:39:36

## Diagram 3a



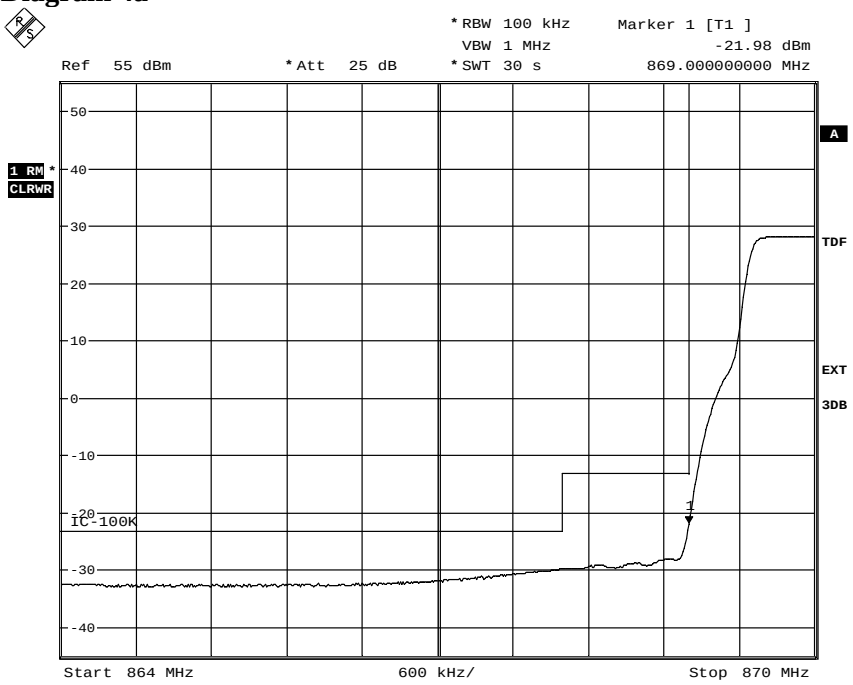

Date: 4.FEB.2011 15:54:26

## Diagram 3b



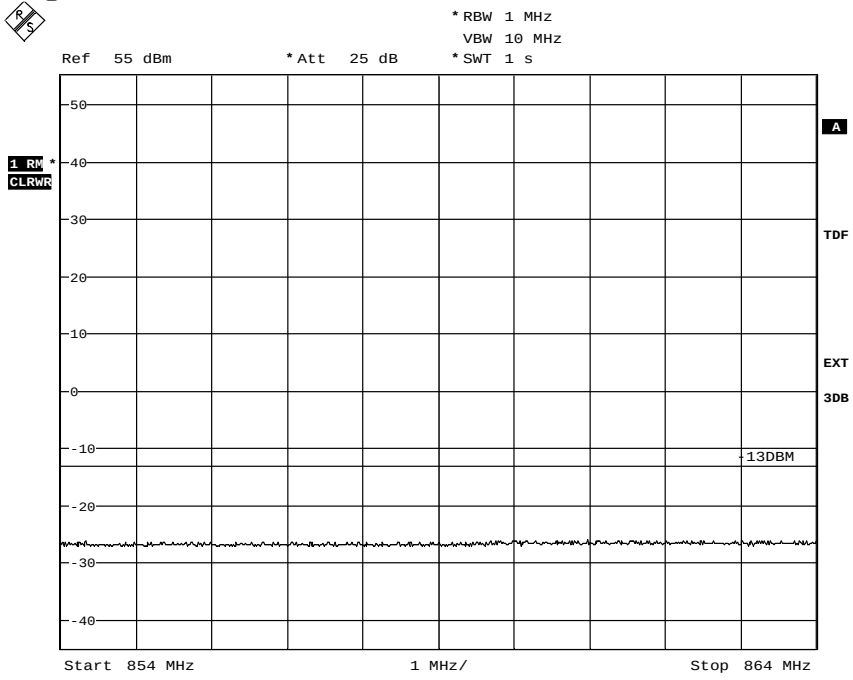

Date: 4.FEB.2011 15:50:10

## Diagram 4a



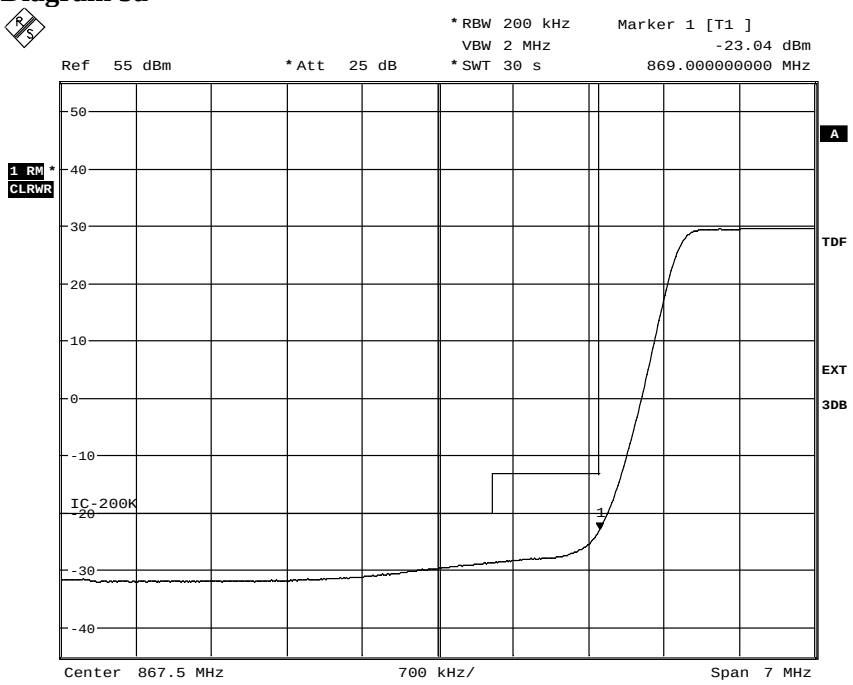

Date: 4.FEB.2011 16:02:57

## Diagram 4b



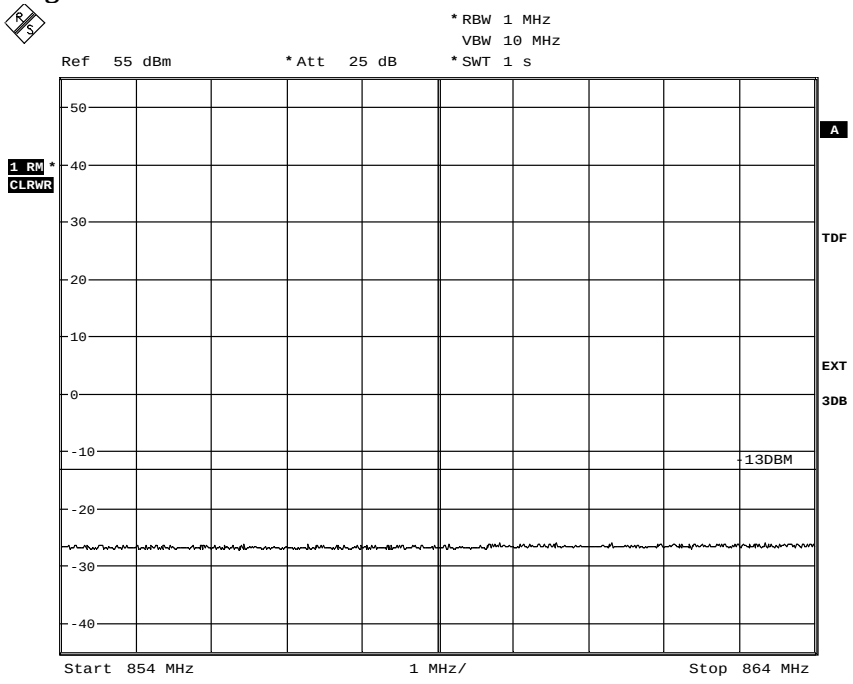

Date: 4.FEB.2011 16:04:29

## Diagram 5a



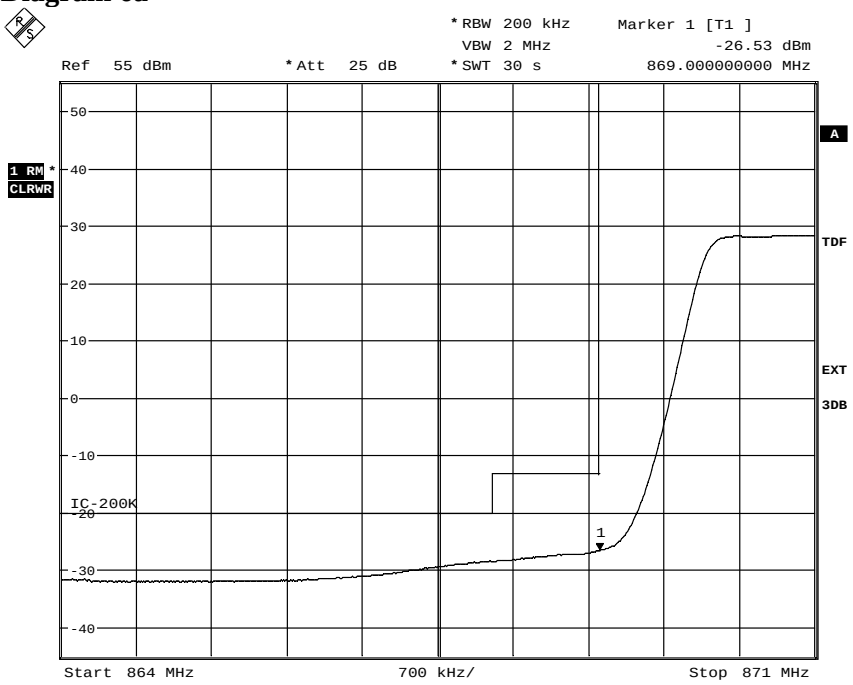

Date: 8.FEB.2011 10:44:32

## Diagram 5b



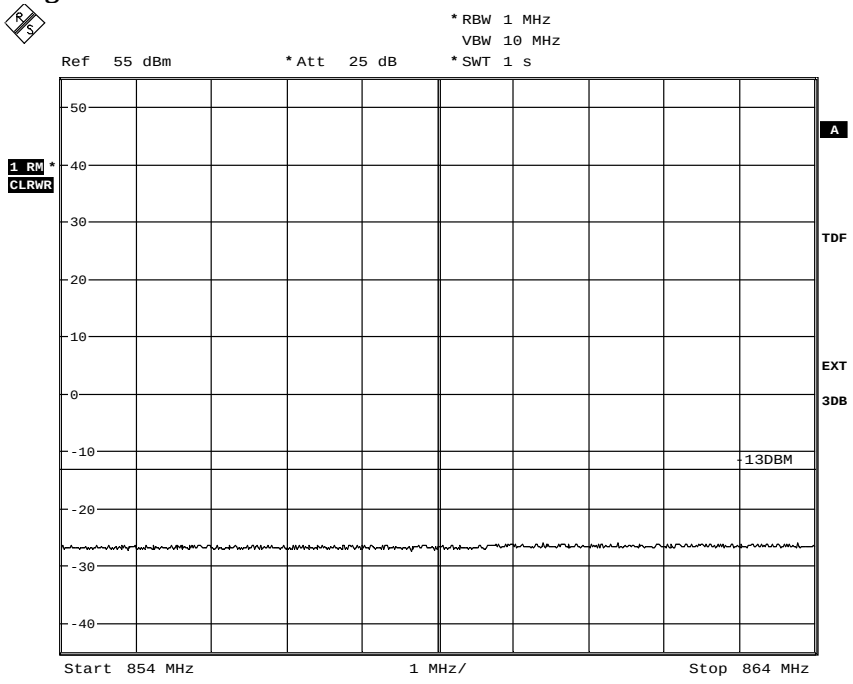

Date: 8.FEB.2011 10:46:47

## Diagram 6a



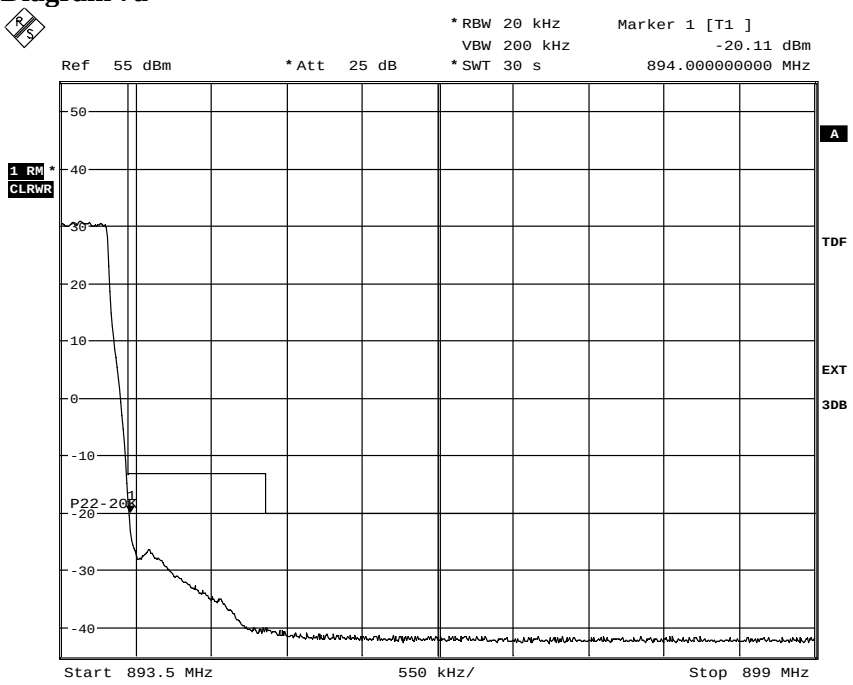

Date: 8.FEB.2011 10:58:27

## Diagram 6b




Date: 8.FEB.2011 10:56:16

## Diagram 7a

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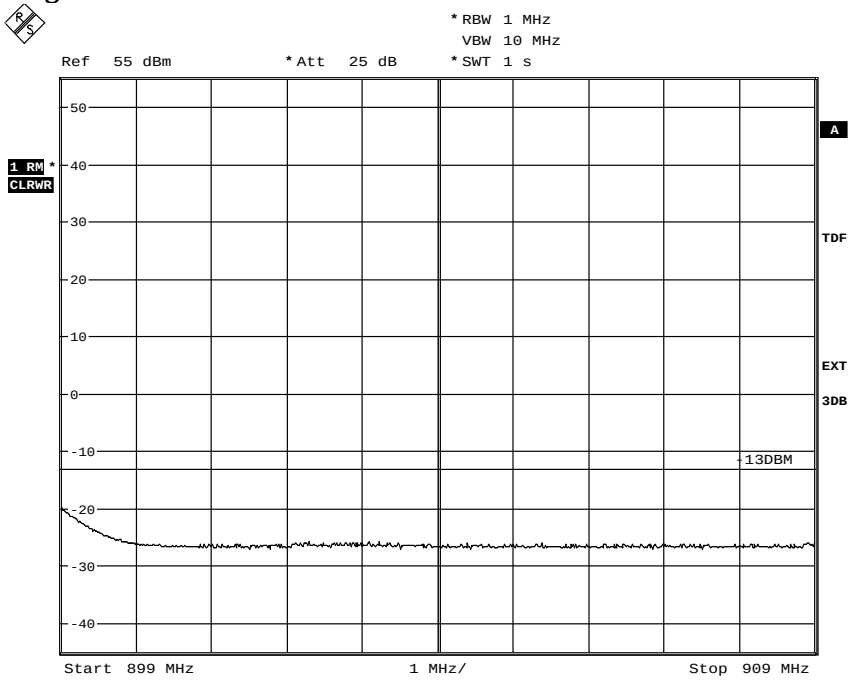
## Diagram 7b

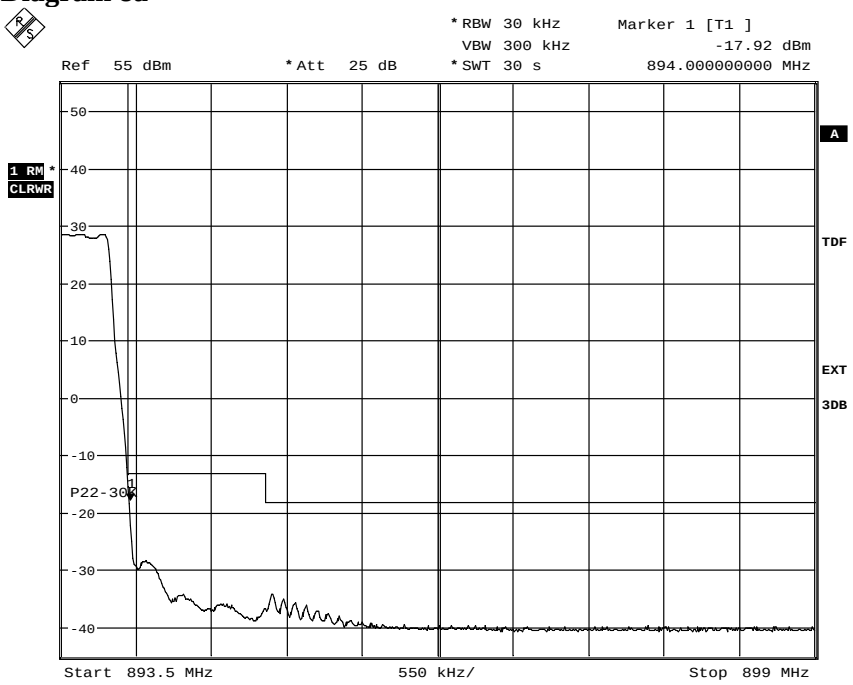



Date: 8.FEB.2011 13:16:33

FCC ID: TA8AKRC11864-2
IC: 287AB-AS118642

Appendix 4.1

## Diagram 8a

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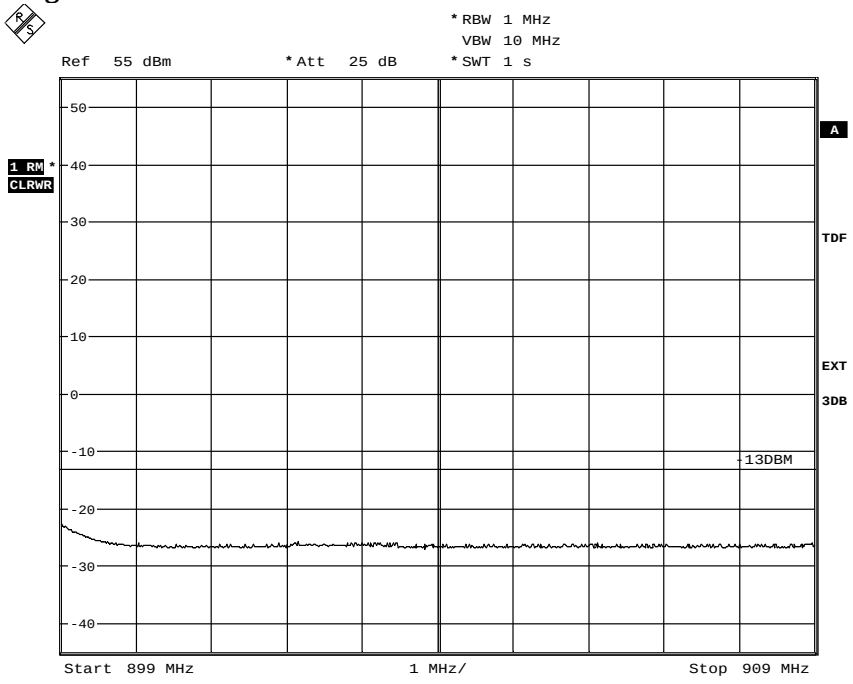
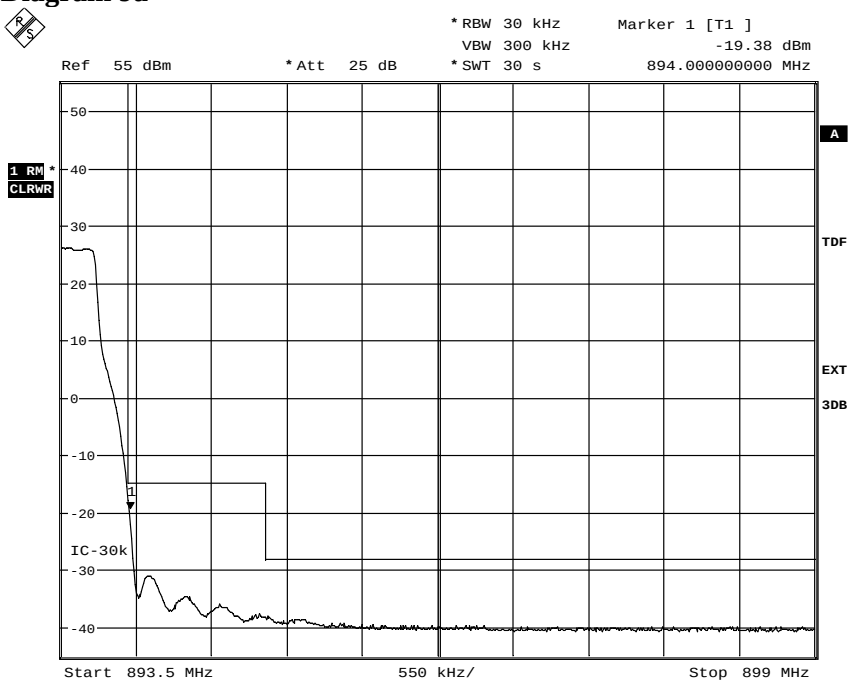
## Diagram 8b



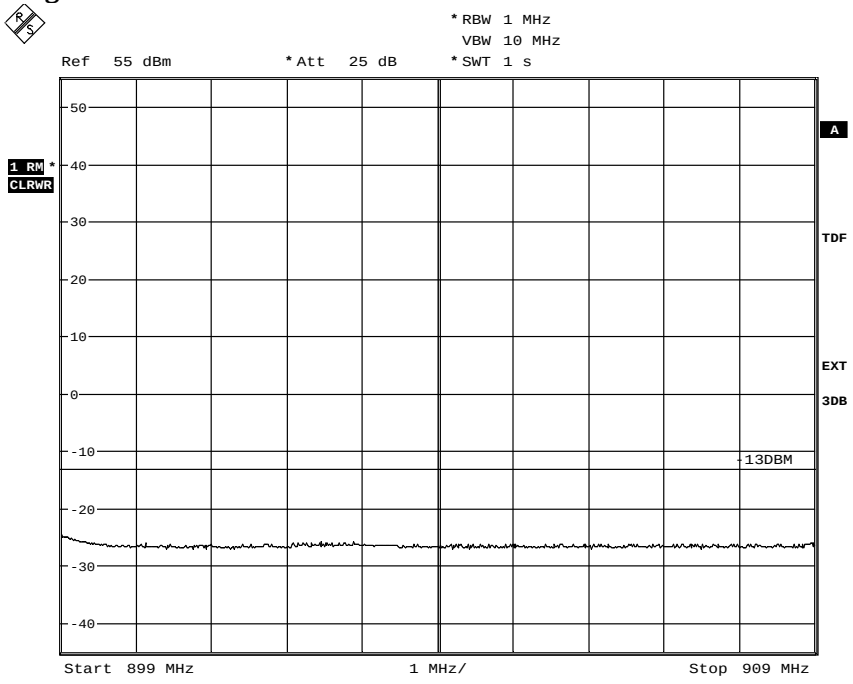

Date: 8.FEB.2011 13:10:32

## Diagram 9a



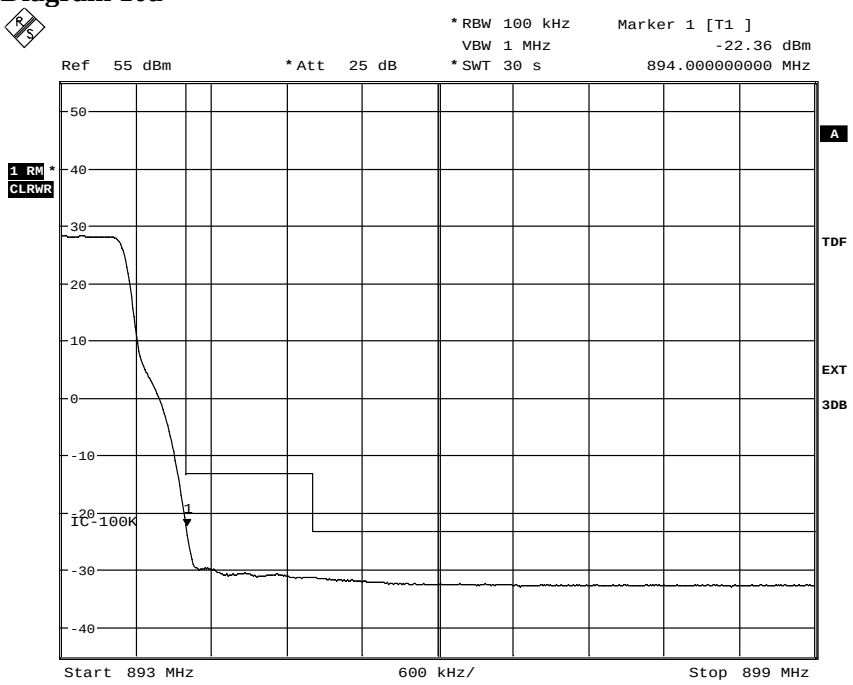

Date: 8.FEB.2011 12:54:40

## Diagram 9b



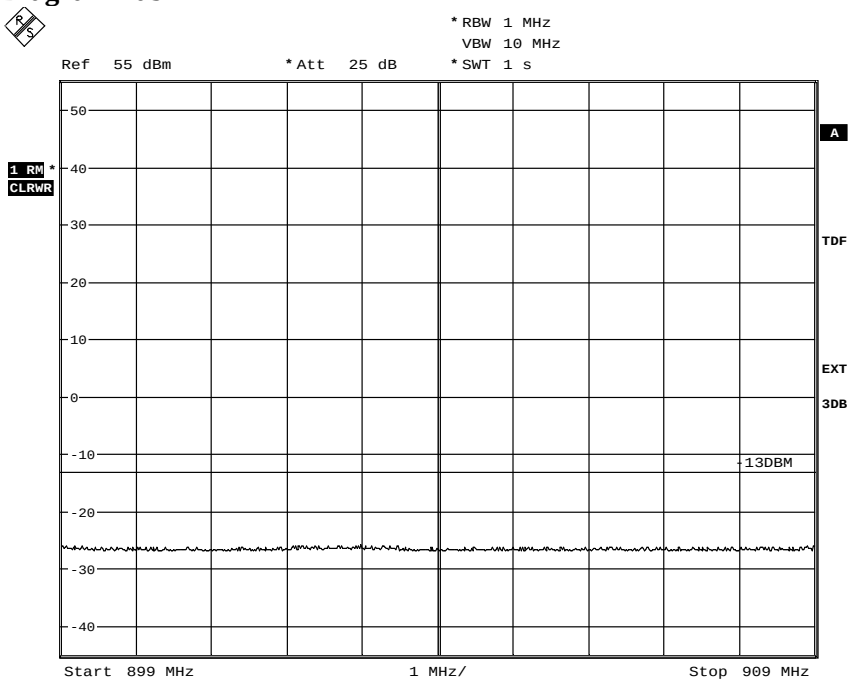

Date: 8.FEB.2011 12:51:06

## Diagram 10a



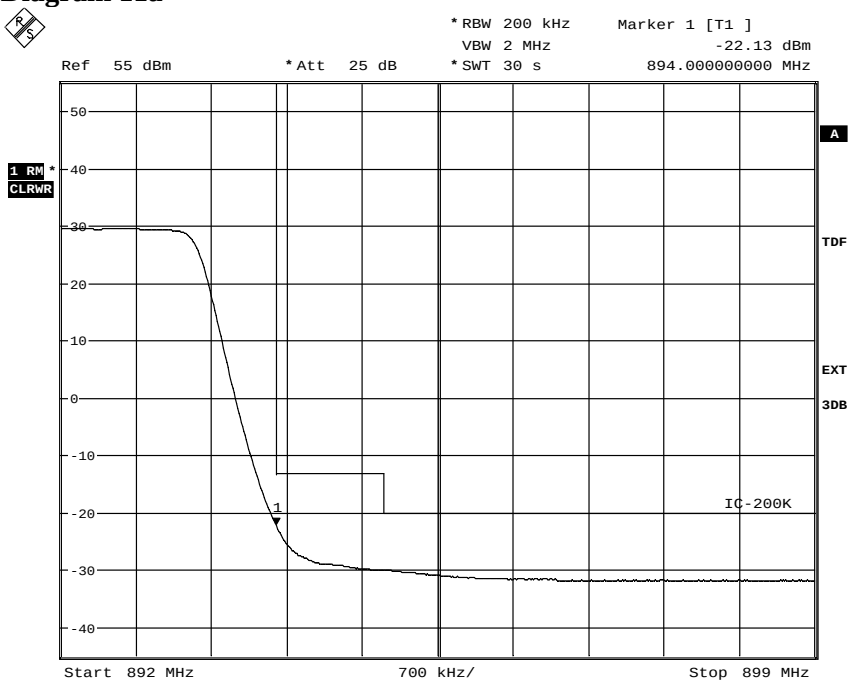

Date: 8.FEB.2011 11:29:54

## Diagram 10b



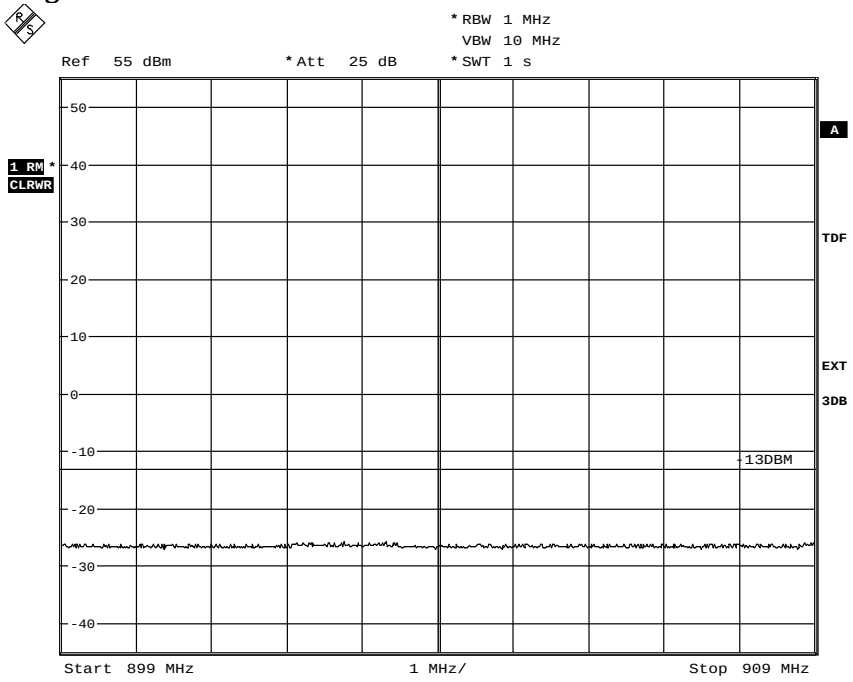

Date: 8.FEB.2011 11:30:47

## Diagram 11a



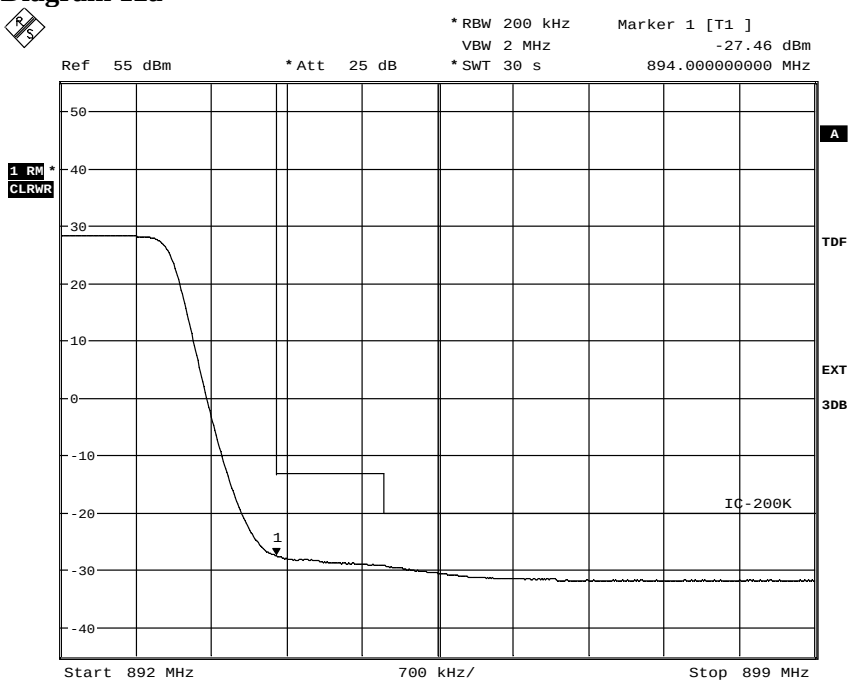

Date: 8.FEB.2011 11:21:07

## Diagram 11b



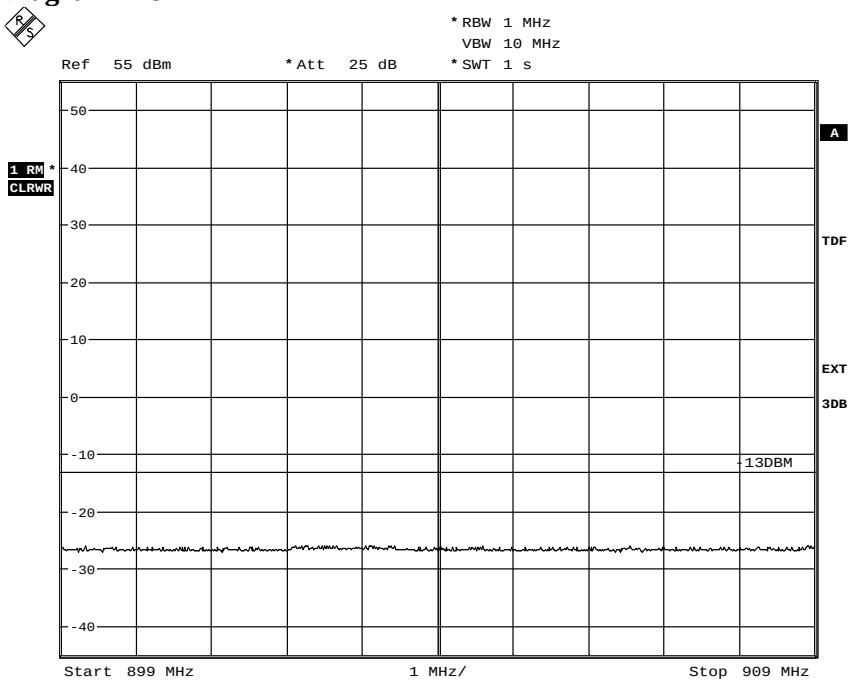

Date: 8.FEB.2011 11:17:31

## Diagram 12a




Date: 8.FEB.2011 11:08:31

## Diagram 12b




Date: 8.FEB.2011 11:10:02

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Appendix 5

## Conducted spurious emission measurements according to 47 CFR 2.1051, 22.917 / IC RSS-132 4.5

| Date | Temperature | Humidity |
|---|---|---|
| 2011-02-04 | 23 °C ± 3 °C | 22 % ± 5 % |
| 2011-02-08 | 22 °C ± 3 °C | 19 % ± 5 % |

### Test set-up and procedure

The measurements were made with a RBW of 1 MHz instead of 100 kHz to cover RSS-132 section 4.5.1.2, requiring a RBW of 1 MHz for emission bandwidths exceeding 4 MHz, even though the worst case configuration was found to be BW configuration 1.4 MHz.

The test object output was connected to a spectrum analyzer. A pre-measurement wideband sweep was performed with the PEAK detector activated. Emission close to or above the limit with the PEAK detector was zoomed in and re-measured with the RMS detector activated using the substitution method, and the result was noted. The spectrum analyzer was connected to an external 10 MHz reference standard during the measurements.

According to the client, the 2.4576 GHz clock was not used in the RF chain and is not affected by the power setting of the carrier frequency. The transmitter was activated for 40 W output power during the measurements in the frequency range 18 to 25 GHz. In the frequency range 9 kHz to 18 GHz the transmitter was activated for maximum output power.

| Measurement equipment | SP number |
|---|---|
| Rohde & Schwarz FSQ40 | 504 143 |
| RF attenuator | 504 159 |
| RF attenuator | 900 233 |
| High pass filter used within 1-15 GHz | 504 199 |
| High pass filter used within 15-18 GHz | 504 200 |
| High pass filter used within 18-25 GHz | 503 740 |
| Testo 615 temperature and humidity meter | 503 498 |

**Measurement uncertainty:** 3.7 dB

### Results

| Diagram | BW configuration / [MHz] | Tested frequency |
|---|---|---|
| 1 | 1.4 | M |

The diagrams are shown in appendix 5.1

### Remark

The emission at 9 kHz on some plots was not generated by the test object. A complementary measurement with a smaller RBW showed that it was related to the LO feed-through.

### Limits

CFR 47, 22.917 / RSS-132 4.5: The power of any emission outside the frequency band shall be attenuated below the transmitter power (P) by at least 43 + 10 log P dB.

| Complies? | Yes |
|---|---|

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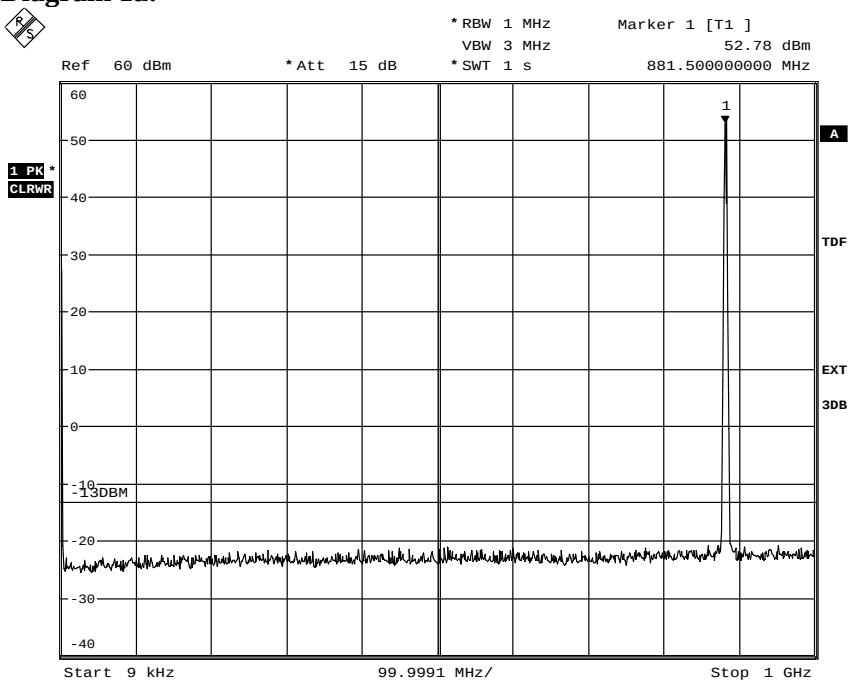
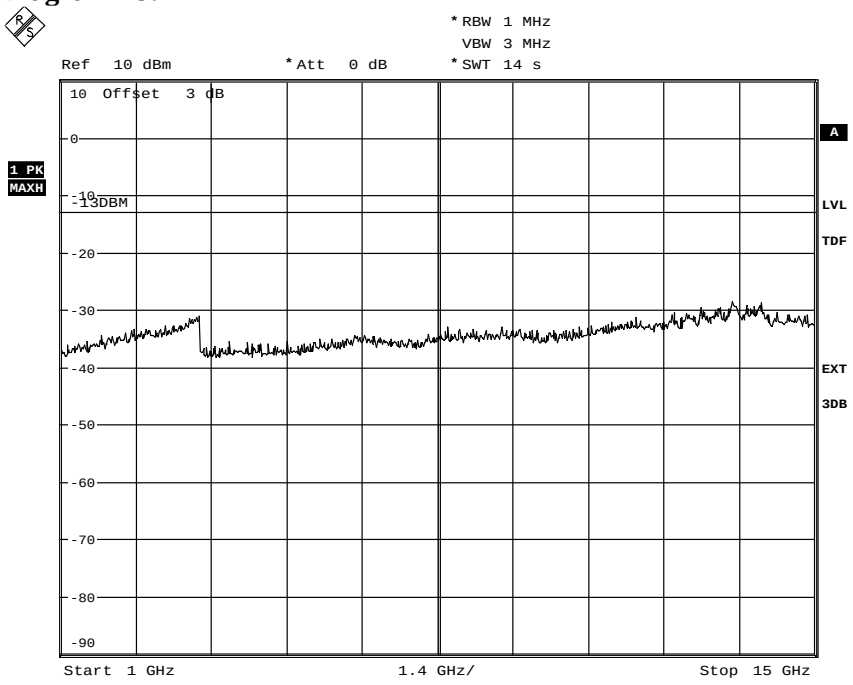
Appendix 5.1

## Diagram 1a:



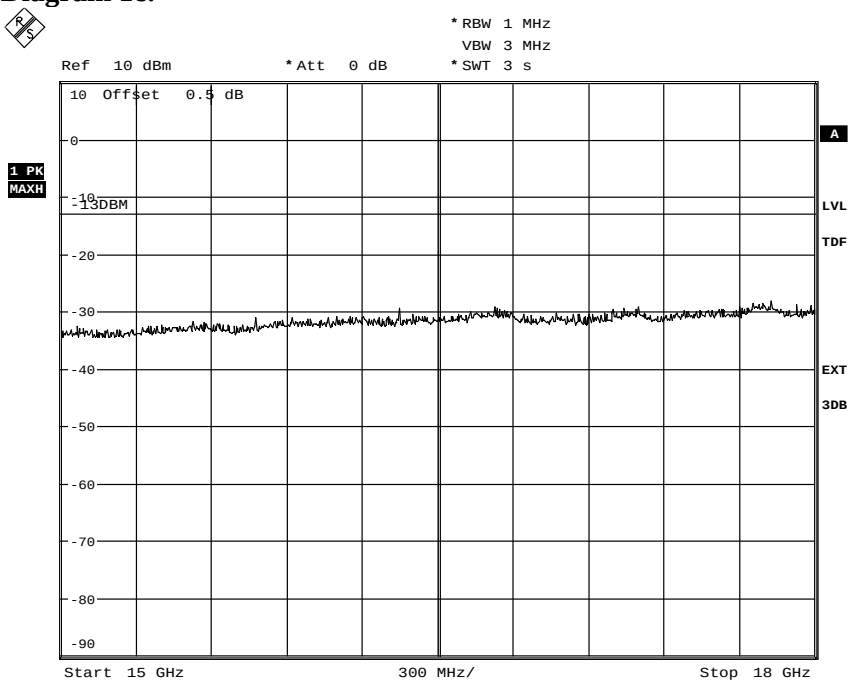

Date: 4.FEB.2011 11:37:17

## Diagram 1b:



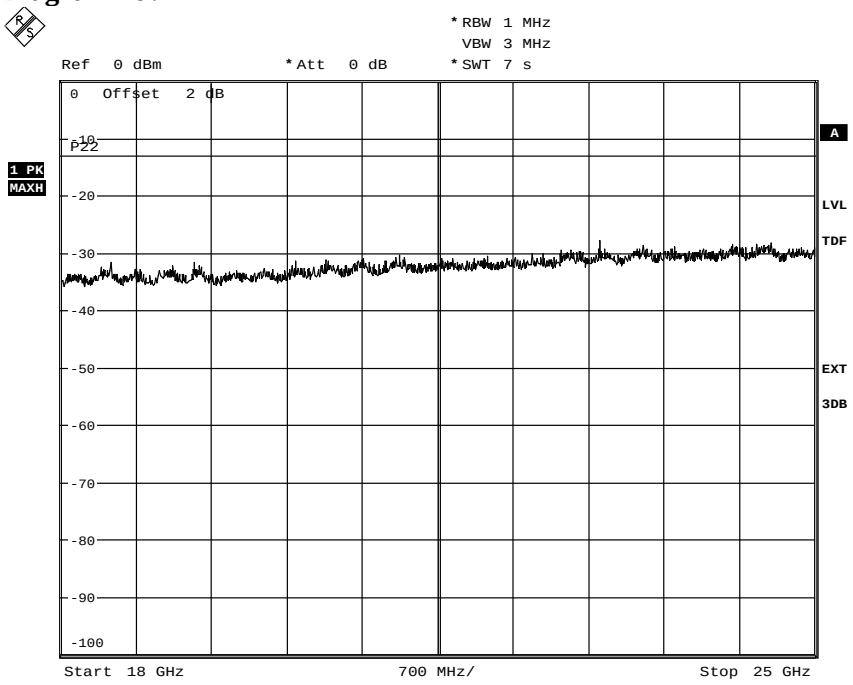

Date: 4.FEB.2011 14:03:35

## Diagram 1c:




Date: 8.FEB.2011 15:35:25

## Diagram 1d:




Date: 8.FEB.2011 15:30:25

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IC: 287AB-AS118642

Appendix 6

## Field strength of spurious radiation measurements according to 47 CFR 2.1053, 22.917 / IC RSS-132 4.5

| Date | Temperature | Humidity |
|---|---|---|
| 2011-01-04 | 23 % ± 5 °C | 19 % ± 5 % |

### Test set-up and procedure

The test sites are listed at FCC, Columbia with registration number: 93866. The test site complies with RSS-Gen, Industry Canada file no. 3482A-1.

The measurements were performed with both horizontal and vertical polarisation of the antenna. The antenna distance was 3 m in the frequency range 30 MHz – 15 GHz and 1m in the frequency range 15-25 GHz.

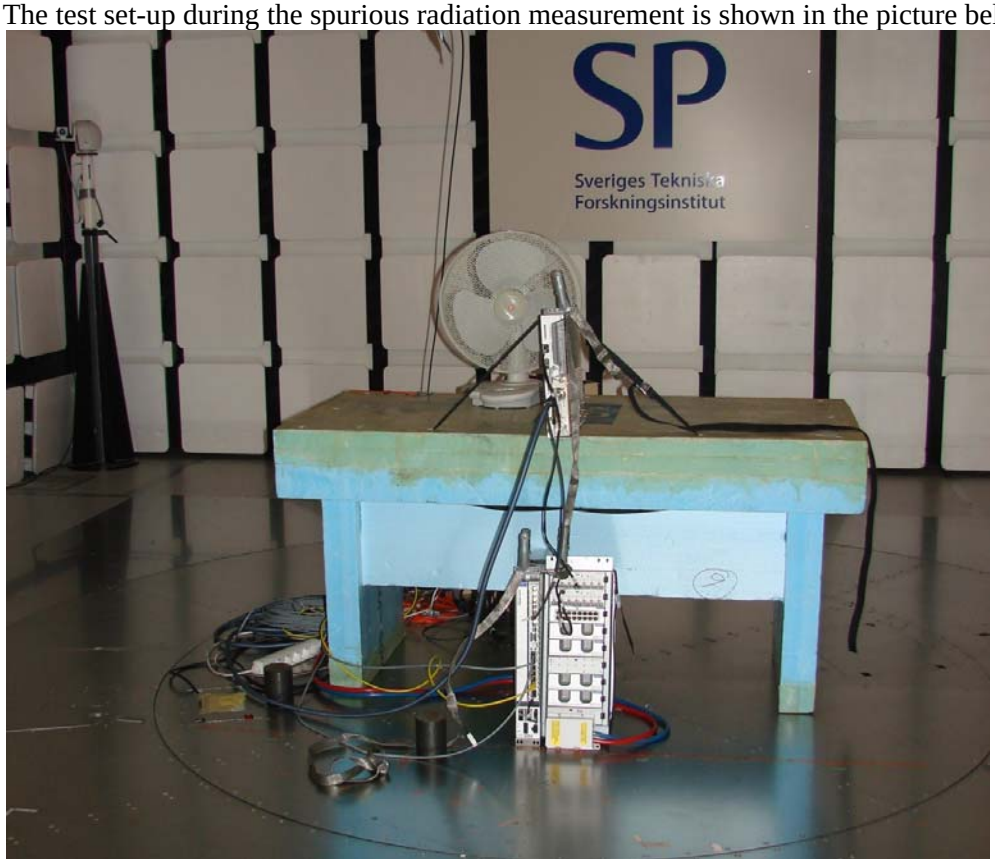
A pre-measurement was first performed:
In the frequency range 30 MHz-25 GHz the measurement was performed in power with a RBW of 1 MHz. A propagation loss in free space was calculated. The used formula was, $\gamma = 20\log\left(\frac{4\pi D}{\lambda}\right)$, $\gamma$ is the propagation loss and $D$ is the antenna distance.

The measurement procedure was as the following:

1. The pre-measurement was first performed with peak detector. The EUT was measured in eight directions and with the antenna at three heights, 1.0 m, 1.5 m and 2.0 m.
2. Spurious radiation on frequencies closer than 20 dB to the limit is scanned 0-360 degrees and the antenna is scanned 1-4 m for maximum response. The emission is then measured with the average detector and the average value is reported, frequencies closer than 10 dB to the limit measured with the average detector was measured with the substitution method according to the standard.

| Measurement equipment | SP number |
|---|---|
| Semi anechoic chamber Tesla | 503 881 |
| Rohde & Schwarz ESI 26 | 503 292 |
| Rohde & Schwarz FSIQ 40 | 503 738 |
| EMC 32 ver. 8.20.1 | 503 745 |
| Chase Bilog antenna CBL 6111A | 503 182 |
| EMCO Horn Antenna 3115 | 502 175 |
| Standard Gain model 20240-20 | 503 674 |
| Highpass filter 1-15 GHz | 504 199 |
| Highpass filter 3-18 GHz | 504 200 |
| MITEQ Low Noise Amplifier | 503 285 |
| uComp Nordic Low Noise Amplifier | 504 160 |
| Testo 625 temperature and humidity meter | 504 188 |

The test set-up during the spurious radiation measurement is shown in the picture below:




**Results**

Channel M

| Frequency (MHz) | Spurious emission level (dBm) | |
|---|---|---|
| | Vertical | Horizontal |
| 30-25 000 | All emission > 20 dB below limit | All emission > 20 dB below limit |

**Measurement uncertainty:**

3.2 dB up to 18 GHz, 3.6 dB above 18 GHz

**Limits**

CFR 47, 22.917 / RSS-132 4.5:
The power of any emission outside the frequency band shall be attenuated below the transmitter power (P) by at least 43 + 10 log P dB.

| | |
|---|---|
| Complies? | Yes |

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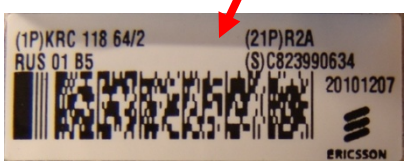
Appendix 7

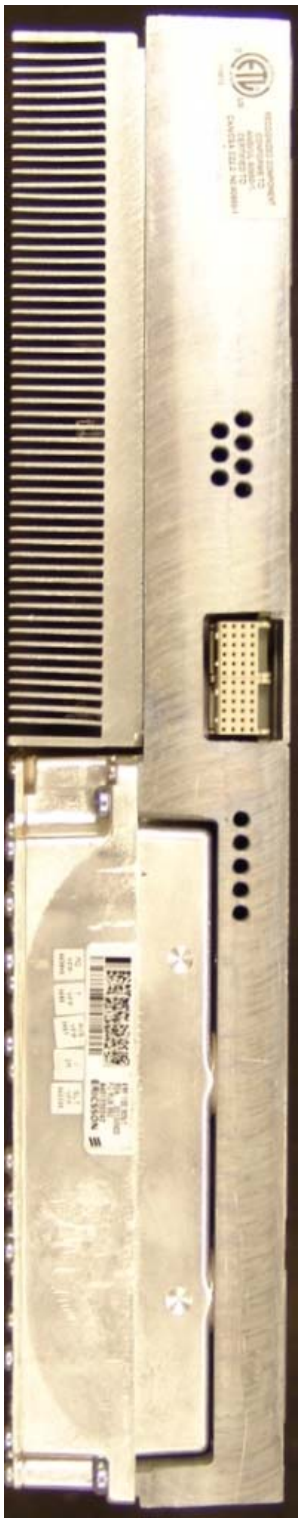
## External photos of the test object

Note: The pictures show the sample used for radiated tests.

Front side


Rear side



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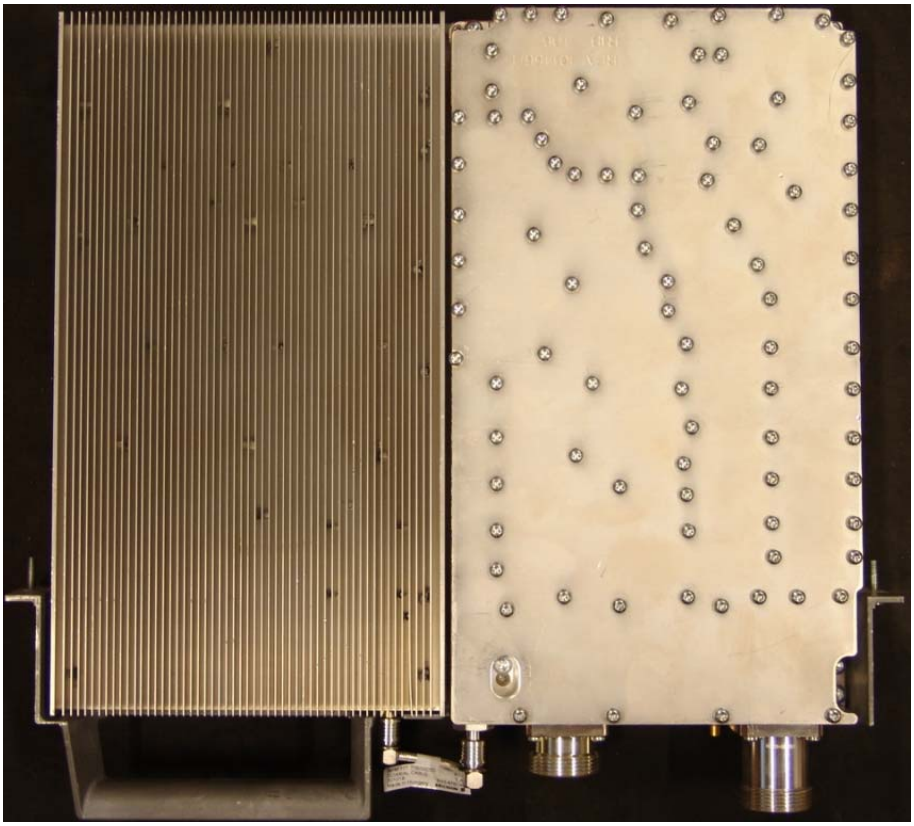
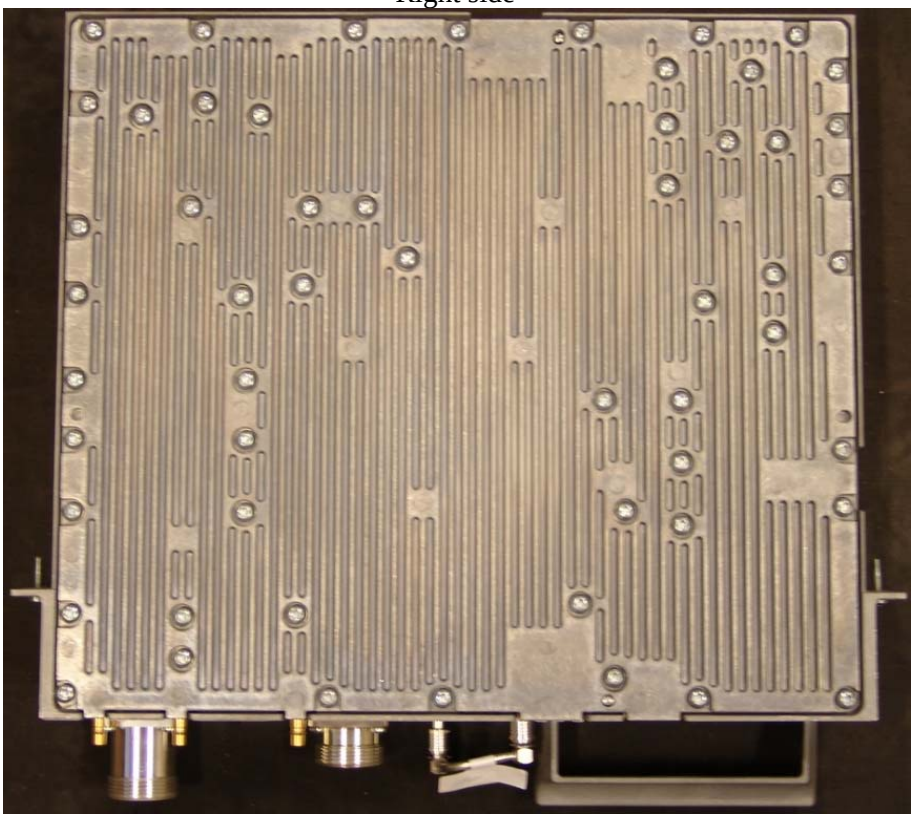
Appendix 7

Left side



Right side



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Appendix 7

Bottom side

Top side