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Permissible change measurements on GSM Base station Transceiver unit with FCC ID: B5KDKRC1311004-2 (7 appendices)

Test object

Transceiver Unit dTRU 19 Edge, KRC 131 1004/2 rev. R3A

 See appendix 1 for general information, appendix 6 for hardware list and appendix 7 for photos of the test object.

Summary

Standard	Compliant	Appendix	Remarks
FCC CFR 47			
2.1046 RF Power output	Yes	2	
2.1049 Band Edge	Yes	3	
2.1051 Spurious emission at antenna	Yes	4	Note 1
2.1053 Field strength of spurious radiation	Yes	5	

Note 1: The maximum output power that can be used on the channels adjacent to the frequency band edges (channel 512 and 810) are 38 dBm for both GMSK and 8-PSK.

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FCC ID: B5KDKRC1311004-2

Appendix 1

Description - Equipment Under Test (EUT)

Equipment: GSM Base station transceiver 1900 MHz

Tx Frequency range: 1930.2-1989.8 MHz

Modulations: GMSK and 8-PSK

Nominal power voltage: 24 V DC

Tested Channels

Radiated measurements:

5 dTRUs were activated at maximum output power with the following settings:

dTRU	TRX	Modulation	ARFCN	RF config
1	0	GMSK	512	Combined
	1	8-PSK	537	Combined
2	2	GMSK (TCC)	710	Combined TCC
	3	-	-	-
3	4	8-PSK	652	Combined
	5	GMSK	587	Combined
4	6	8-PSK (TCC)	661	Combined TCC
	7	-	-	-
5	8	GMSK	785	Uncombined
	9	8-PSK	810	Uncombined

The radiated spurious emission measurements were done with the three RF configurations listed above at the same time to simulate worst case.

The radiated measurements were performed with the EUT installed in a RBS 2206V2 powered with 120 VAC, 60 Hz which was used as a worst case configuration.



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Appendix 1

Conducted measurements:

ARFCN	Frequency
512	1930.2
513	1930.4
537	1935.2
661	1960.0
785	1984.8
809	1989.6
810	1989.8

All RF conducted measurements were performed with the EUT installed in a RBS 2206V2 powered with DC power (the list of the RBS hardware is shown in appendix 6). The measurements were done at the output connector of CDU-K (BFL 119 447/1 rev. R1A) with serial number TR44918247. The dTRU with serial number AE52476746 was used for the measurements. The measurement was performed with configurations that represents worst case scenario.

Manufacturer's representative

Per Helmersson, Ericsson AB

Purpose of test

The purpose of the tests is to verify that the EUT comply with the performance characteristics specified in FCC CFR47.

References

Measurements were done according to relevant parts of the following standards:
ANSI/TIA/EIA-603-C-2004
J-STD007A Vol 1
ANSI/TIA/EIA 136-280-D-2002

Reservation

The test results in this report apply only to the particular Equipment Under Test (EUT) as declared in the report.

Delivery of test object

The test object was delivered: 2006-10-31

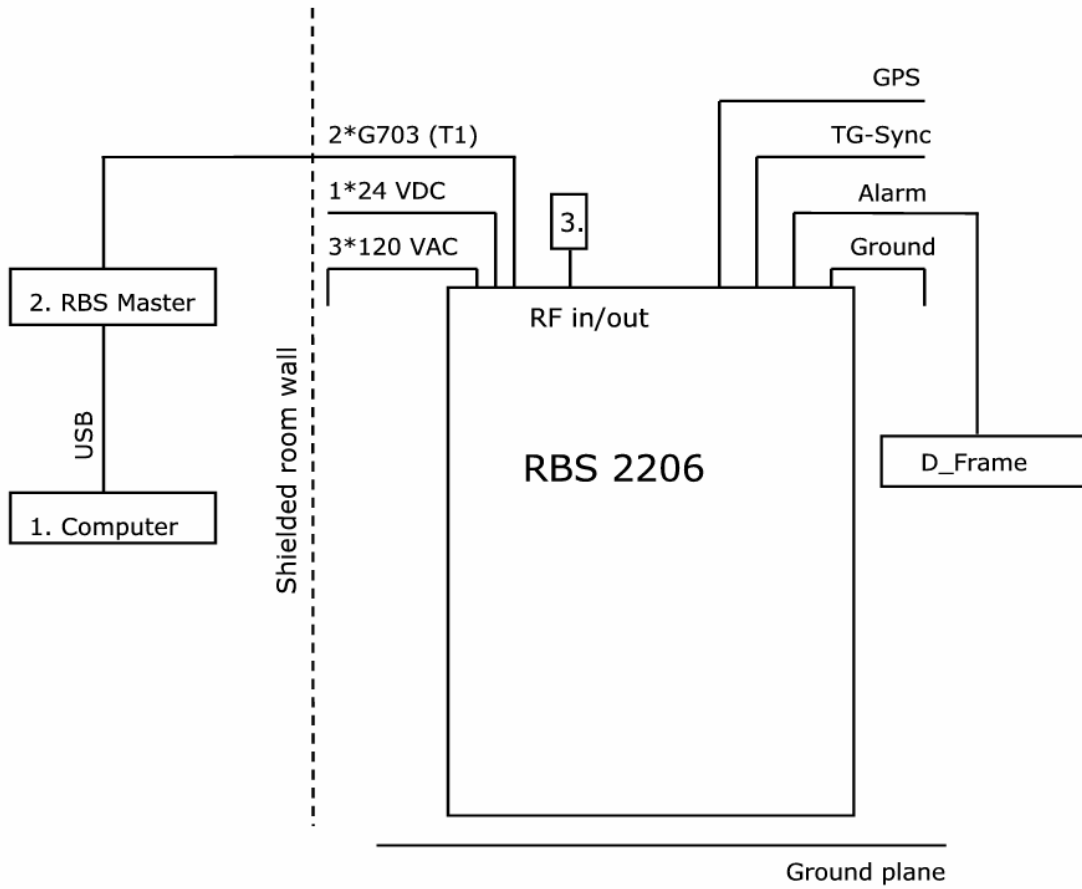
Test engineers

Jörgen Wassholm and Jonas Bremholt

Test witnesses

Lars Hagbjörk, Ericsson AB

Test set-up



1. Computer with software RBSMMI ver. R10A05
2. Ericsson RBS Master 2 LPY 107 1007/1 R1E/A software ver. R6A05
3. Dummy loads (50 ohm)

Interfaces:

- 24 VDC
- 120 VAC, 60 Hz
- Antenna: Coaxial cable (50 ohm)
- G703: T1, shielded multi-wire (120 ohm)
- TG-sync: Shielded multi-wire
- Alarm: Unshielded multi-wire
- GPS: Shielded multiwire

Type of port:

- DC power
- AC mains
- Antenna
- Telecom
- Signal
- Signal
- Signal



RF Power output measurements according to 47CFR 2.1046

Date	Temperature	Humidity
2006-11-01	22 °C ± 3 °C	17 % ± 5 %
2006-11-05	24 °C ± 3 °C	25 % ± 5 %

Test set-up and procedure

Measurements were made at CDU-K output connectors. The output was connected to a Peak power analyser via a 50 ohm attenuator. The transmitter was modulated with pseudorandom data and with maximum power in all the time slots during the measurements.

Measurement equipment	Calibration Due	SP number
Boonton RF Peak power meter/analyzer	2007-02	503 144
Boonton Power sensor 56518-S/4	2007-02	503 145
Multimeter Fluke 87	2006-11	502 190
Testo 610, Temperature and humidity meter	2006-12	502 658

Measurement uncertainty: 0.5 dB

Results

Modulation: **GMSK**

dTRU, output 1+2, with internal combiner plus TCC.

Rated output power level after CDU-K (maximum): 46 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	46.8/ 45.9	47.0/ 46.2	46.7/ 45.8

dTRU, output 1, without internal combiner:

Rated output power level after CDU-K (maximum): 44 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	44.5/ 43.7	44.9/ 44.1	44.5/ 43.7

dTRU, output 2, without internal combiner:

Rated output power level after CDU-K (maximum): 44 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	44.5/ 43.8	45.2/ 44.4	45.1/ 44.3



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Appendix 2

dTRU, output 1, with internal combiner:

Rated output power level after CDU-K (maximum): 40 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	40.8/ 40.1	41.2/ 40.4	40.8/ 40.1

dTRU, output 2, with internal combiner:

Rated output power level after CDU-K (maximum): 40 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	40.7/ 40.0	40.9/ 40.2	40.6/ 39.9

Modulation: **8-PSK**

dTRU, output 1+2, with internal combiner plus TCC:

Rated output power level after CDU-K (maximum): 43 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	46.7/ 42.8	47.1/ 43.1	46.7/ 42.8

dTRU, output 1, without internal combiner:

Rated output power level after CDU-K (maximum): 41 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	44.4/ 40.5	44.8/ 41.0	44.4/ 40.5

dTRU, output 2, without internal combiner:

Rated output power level after CDU-K (maximum): 41 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	44.5/ 40.7	45.7/ 41.3	45.2/ 41.2



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Appendix 2

dTRU, output 1, with internal combiner:

Rated output power level after CDU-K (maximum): 38 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	40.8/ 37.0	41.1/ 37.3	40.8/ 37.0

dTRU, output 2, with internal combiner:

Rated output power level after CDU-K (maximum): 38 dBm

Test conditions		Transmitter power (dBm)		
		Peak/ Average		
		Channel 512	Channel 661	Channel 810
T _{nom} 22 °C	V _{nom} 24 V DC	40.7/ 36.9	40.9/ 37.1	40.6/ 36.8

Limit

§ 24.232: Maximum peak output power shall not exceed 100W (50dBm).

GMSK: The measured output power shall be within ± 2 dB of the rated output power (J-STD007A Vol 1)

8-PSK: The measured output power shall be within +1 to -3 dB of the rated output power (ANSI/TIA/EIA 136-280-B)

Complies?	Yes
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Band edge measurements according to 47CFR 2.1049

Date 2006-11-01	Temperature 22 °C ± 3 °C	Humidity 17 % ± 5 %
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Test set-up and procedure

The measurements were made per definition in 24.238. The measurements were made at CDU-K output connectors. The output was connected to a spectrum analyser with the RMS detector activated. A resolution bandwidth of 3 kHz (1% of OBW) was used up to 300 kHz away from the band edges. A resolution bandwidth of 50 kHz was used up to 5 MHz from the band edges. As the FCC rules specify a RBW of 1 MHz for measurements of emissions >1 MHz away from the band edges, the limit was adjusted with 11.2 dB to -24.2 dBm to compensate for the reduced measurement bandwidth.

The spectrum analyzer was connected to an external 10 MHz reference standard during the measurements. The transmitter was modulated with pseudorandom data during the measurements.

Measurement equipment	Calibration Due	SP number
R&S FSIQ	2007-08	503 738
Testo 610, Temperature and humidity meter	2006-12	502 658

Measurement uncertainty: 3.7 dB

Results

The results are shown in appendix 3.1

Modulation: **GMSK**

dTRU Output 1, without internal combiner (CDU-K):

- Diagram 1 Ch 512 (1930.2 MHz) Band edge +38 dBm output power
- Diagram 2 Ch 810 (1989.8 MHz) Band edge +38 dBm output power

dTRU Output 2, without internal combiner (CDU-K):

- Diagram 3 Ch 512 (1930.2 MHz) Band edge +38 dBm output power
- Diagram 4 Ch 810 (1989.8 MHz) Band edge +38 dBm output power

dTRU Output 1+2 (TX1+TX2) (TCC) (CDU-K):

- Diagram 5 Ch 513 (1930.4 MHz) Band edge +46 dBm output power
- Diagram 6 Ch 809 (1989.6 MHz) Band edge +46 dBm output power

Modulation: **8-PSK**

dTRU Output 1, without internal combiner (CDU-K):

- Diagram 7 Ch 512 (1930.2 MHz) Band edge +38 dBm output power
- Diagram 8 Ch 810 (1989.8 MHz) Band edge +38 dBm output power

dTRU Output 2, without internal combiner (CDU-K):

- Diagram 9 Ch 512 (1930.2 MHz) Band edge +38 dBm output power
- Diagram 10 Ch 810 (1989.8 MHz) Band edge +38 dBm output power

dTRU Output 1+2 (TX1+TX2) (TCC) (CDU-K):

- Diagram 11 Ch 513 (1930.4 MHz) Band edge +43 dBm output power
- Diagram 12 Ch 809 (1989.6 MHz) Band edge +43 dBm output power



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Appendix 3

Remarks

The maximum output power that can be used on the channels adjacent to the frequency band edges (channel 512 and 810) are 38 dBm for both GMSK and 8-PSK.

Limits

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.

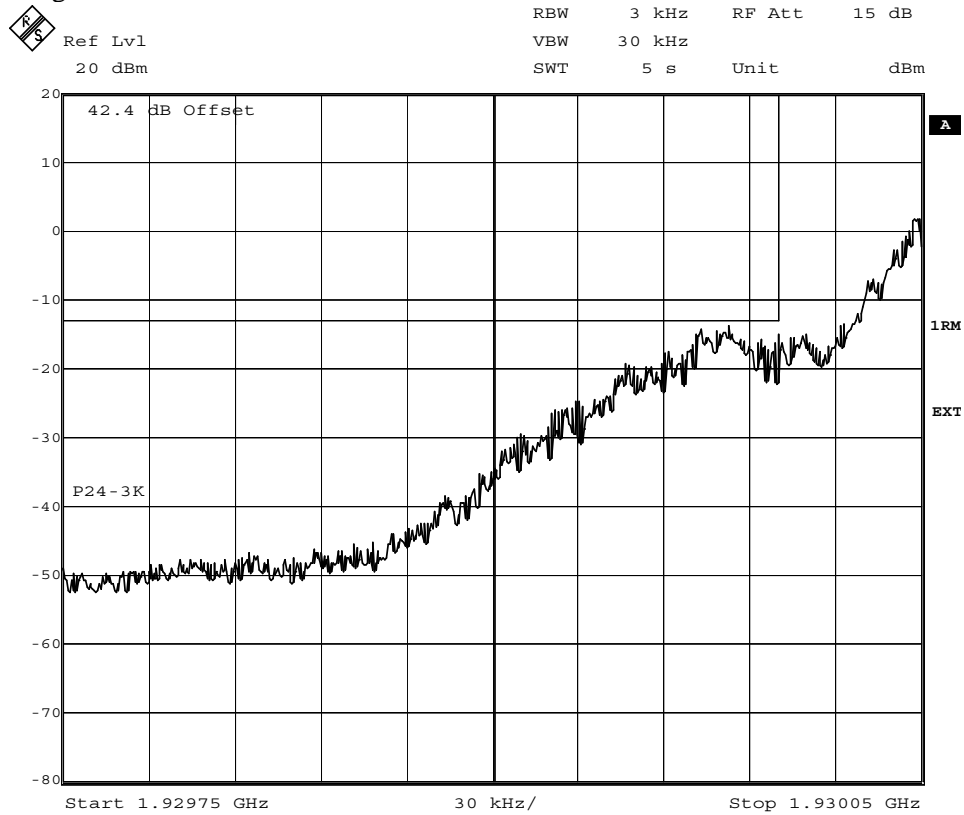
Complies?	Yes
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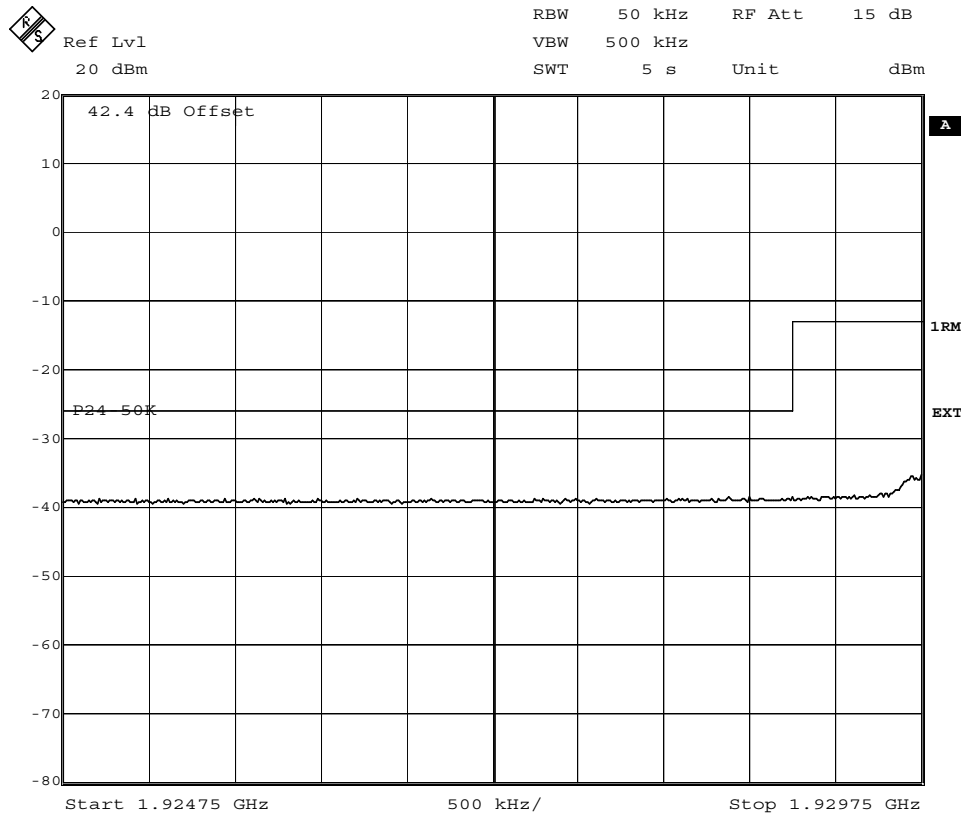
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 1



Date: 1.NOV.2006 14:08:07



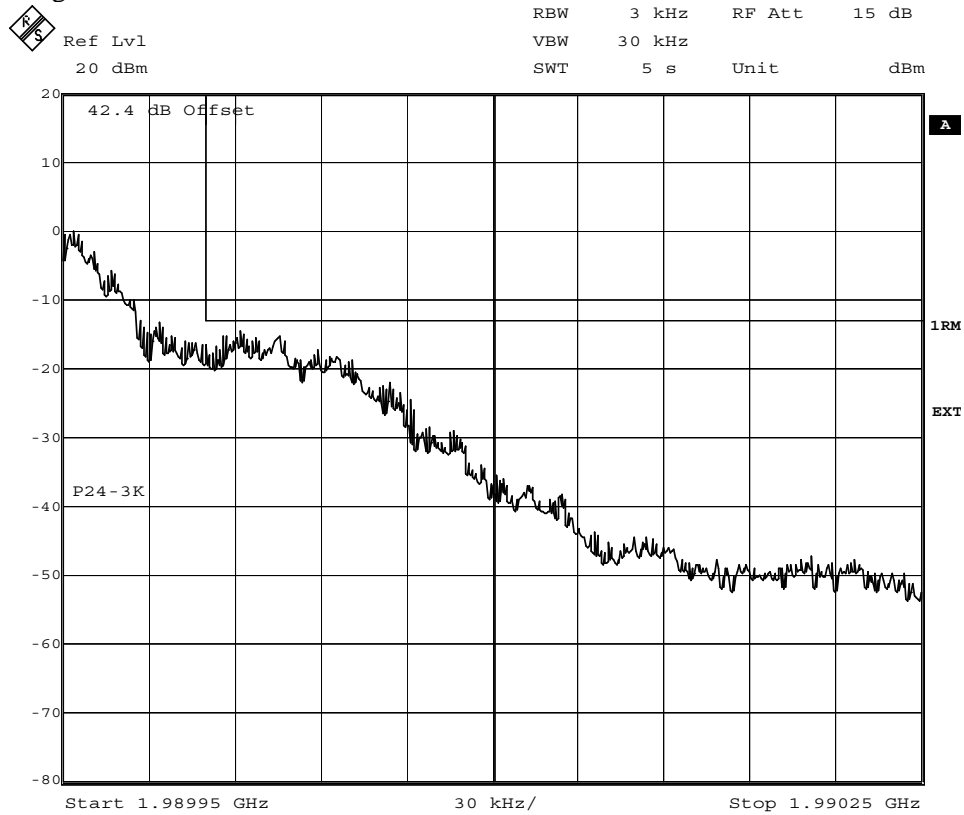
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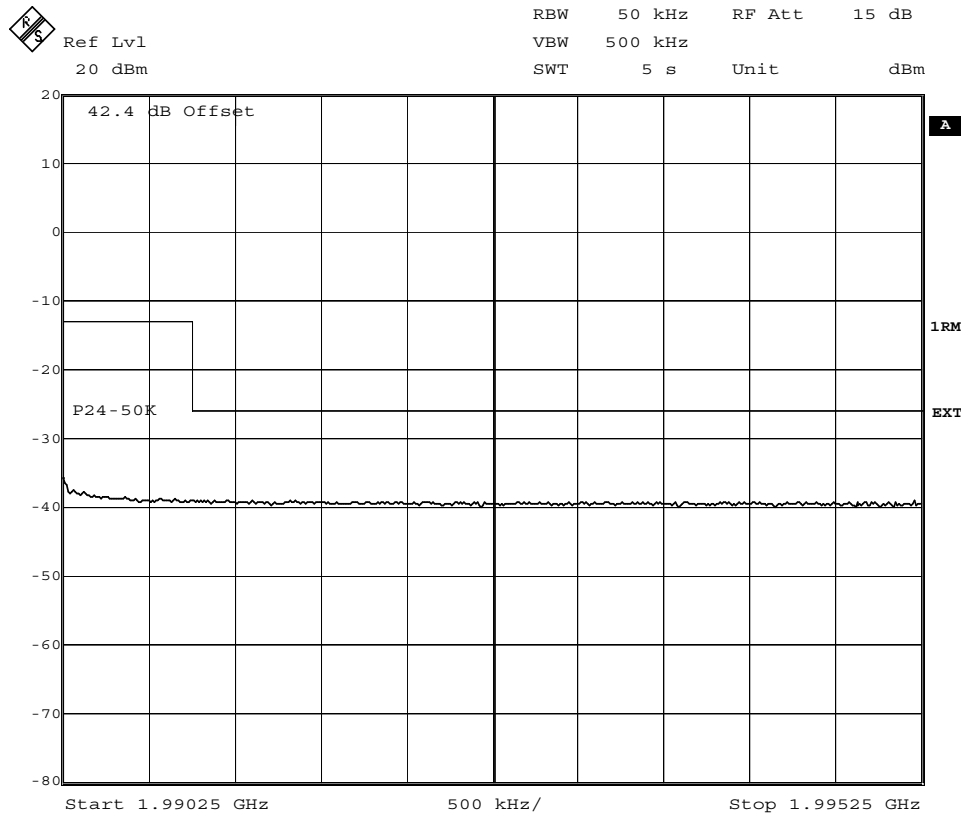
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 2



Date: 1.NOV.2006 14:10:34



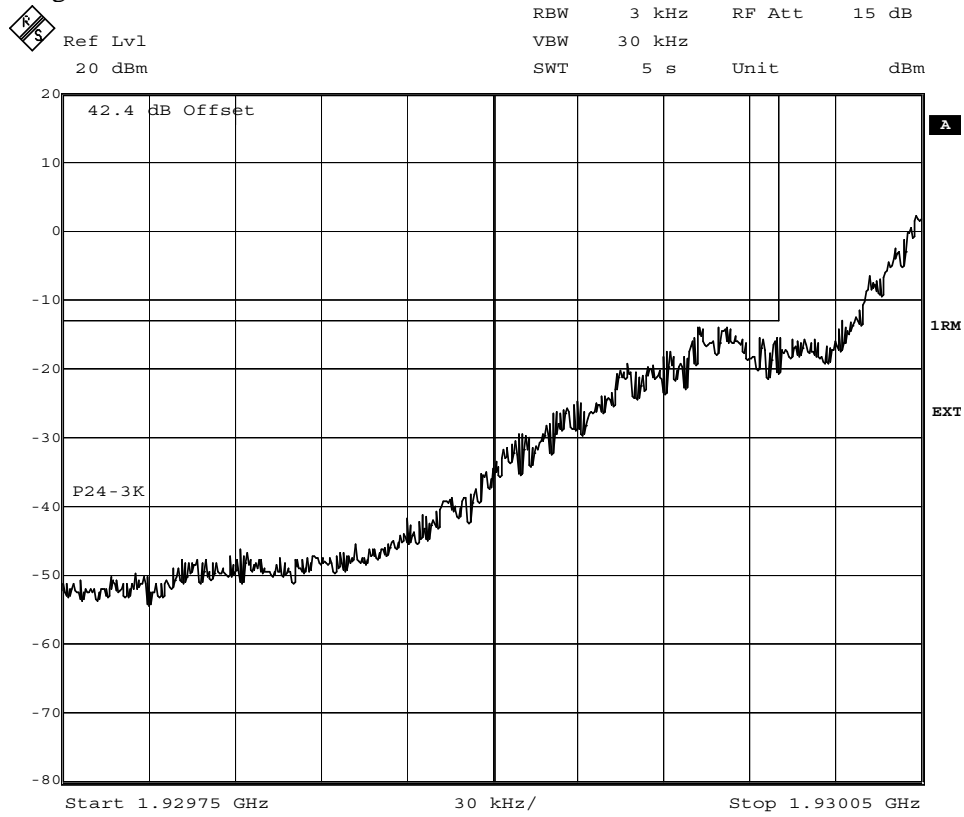
Date: 1.NOV.2006 14:12:24



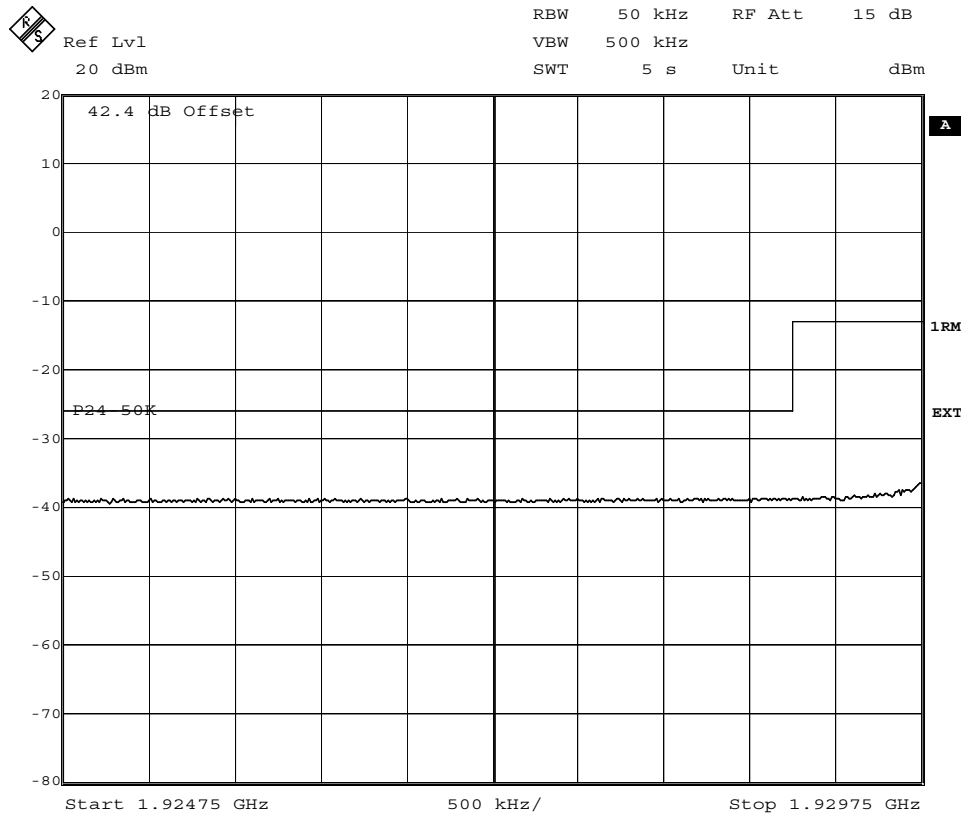
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 3



Date: 1.NOV.2006 15:37:01



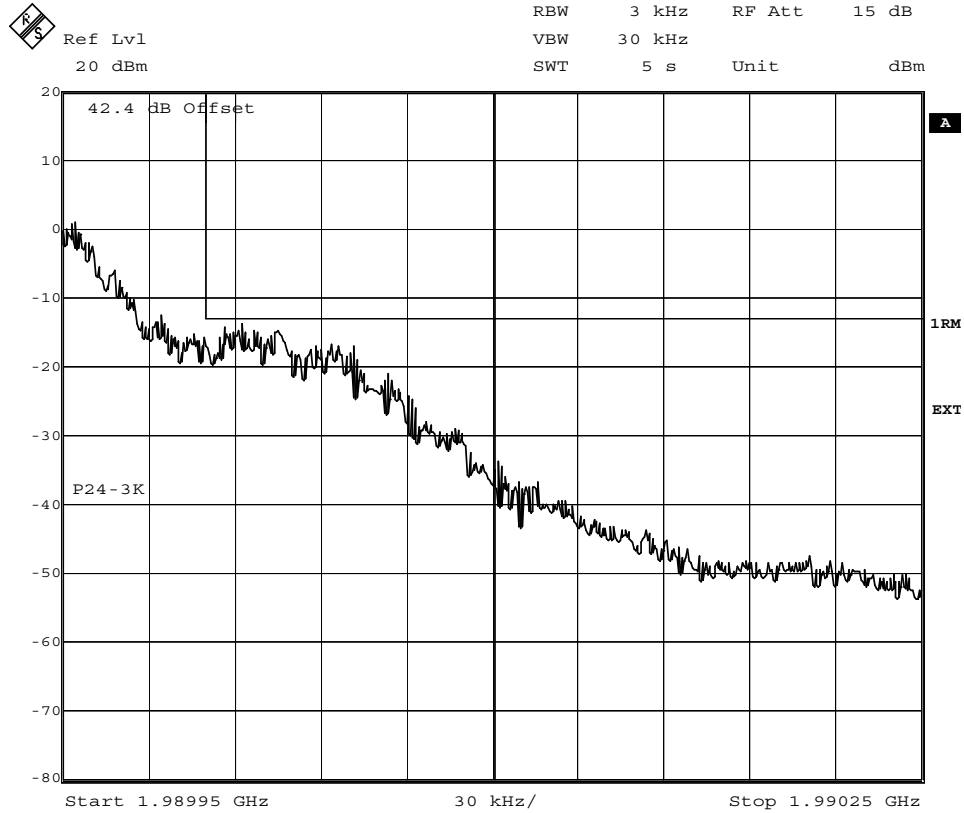
Date: 1.NOV.2006 15:36:06



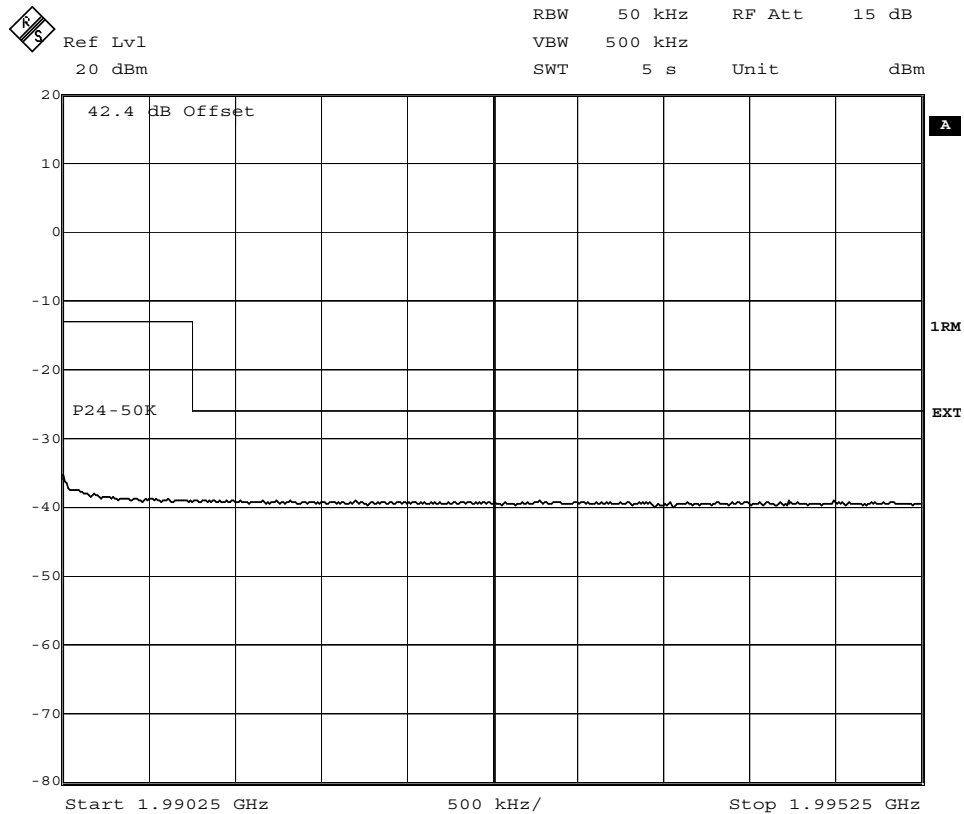
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 4



Date: 1.NOV.2006 15:27:04



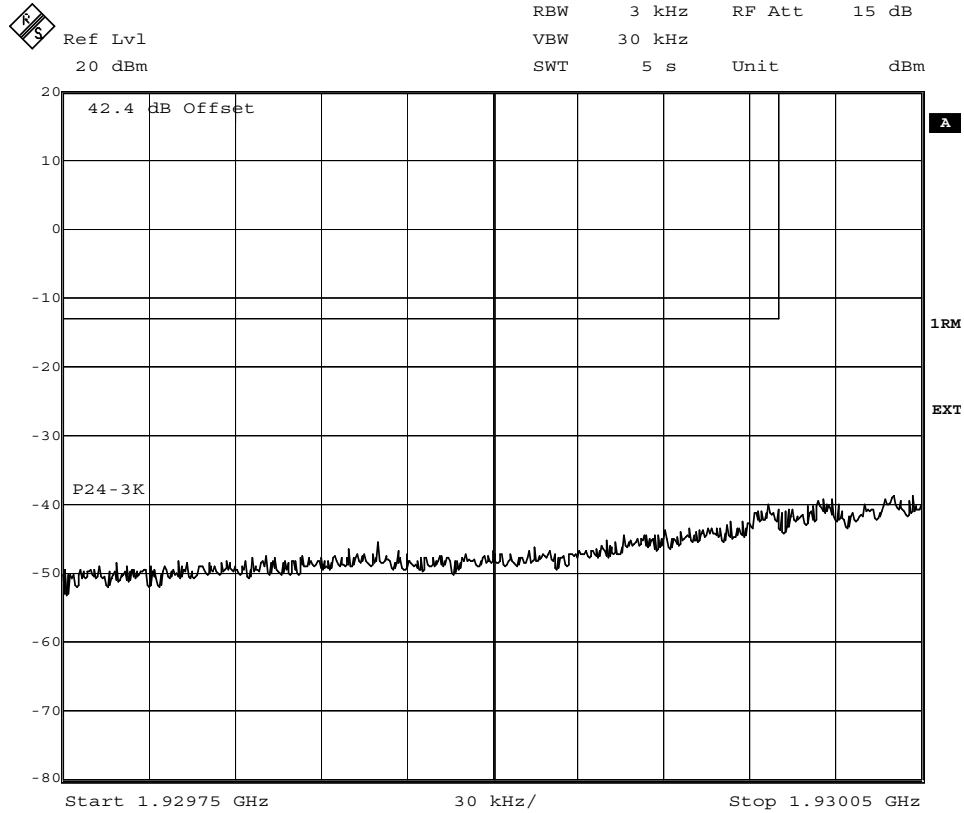
Date: 1.NOV.2006 15:28:21



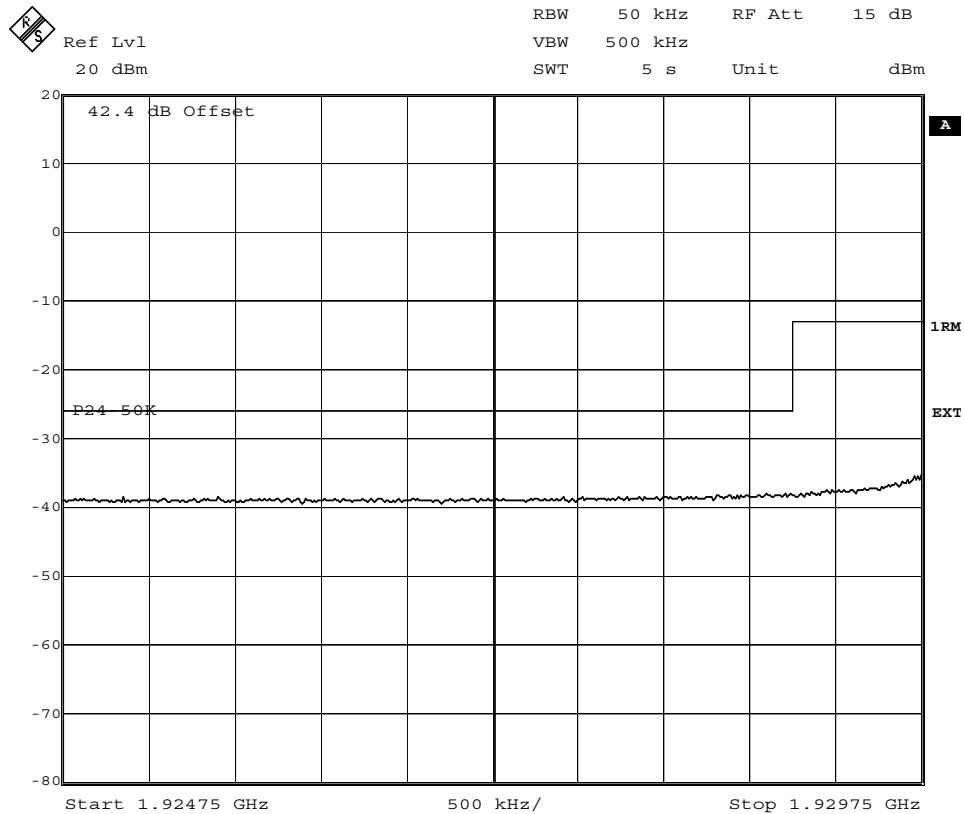
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 5



Date: 1.NOV.2006 16:53:13



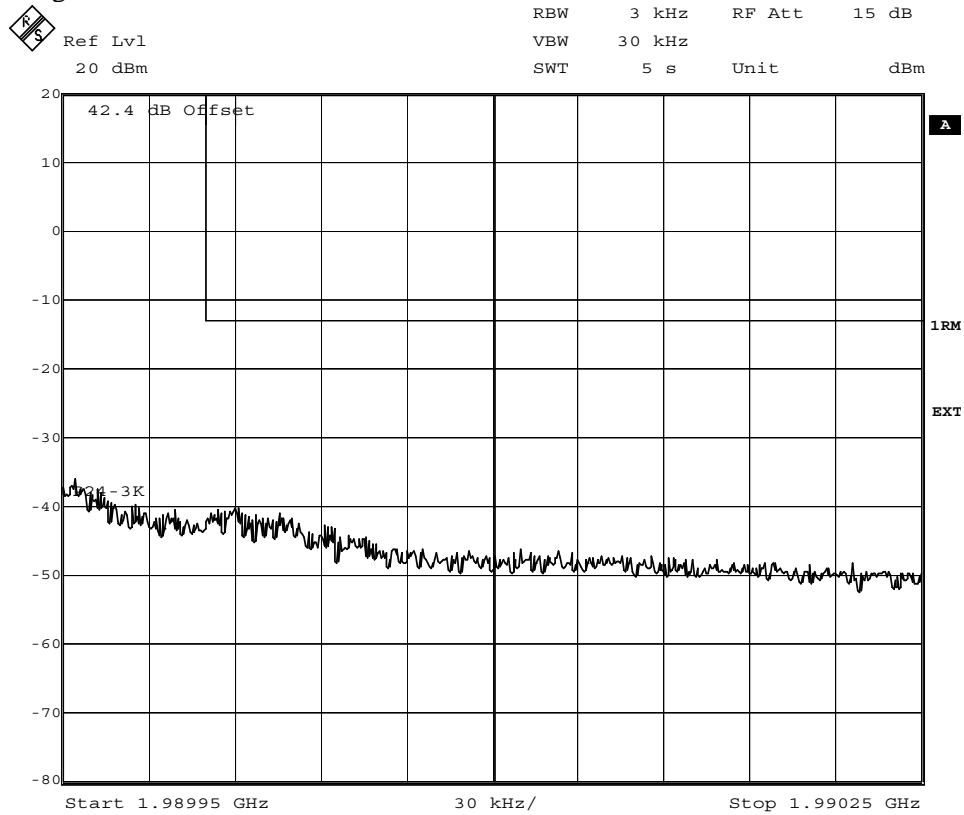
Date: 1.NOV.2006 16:52:21



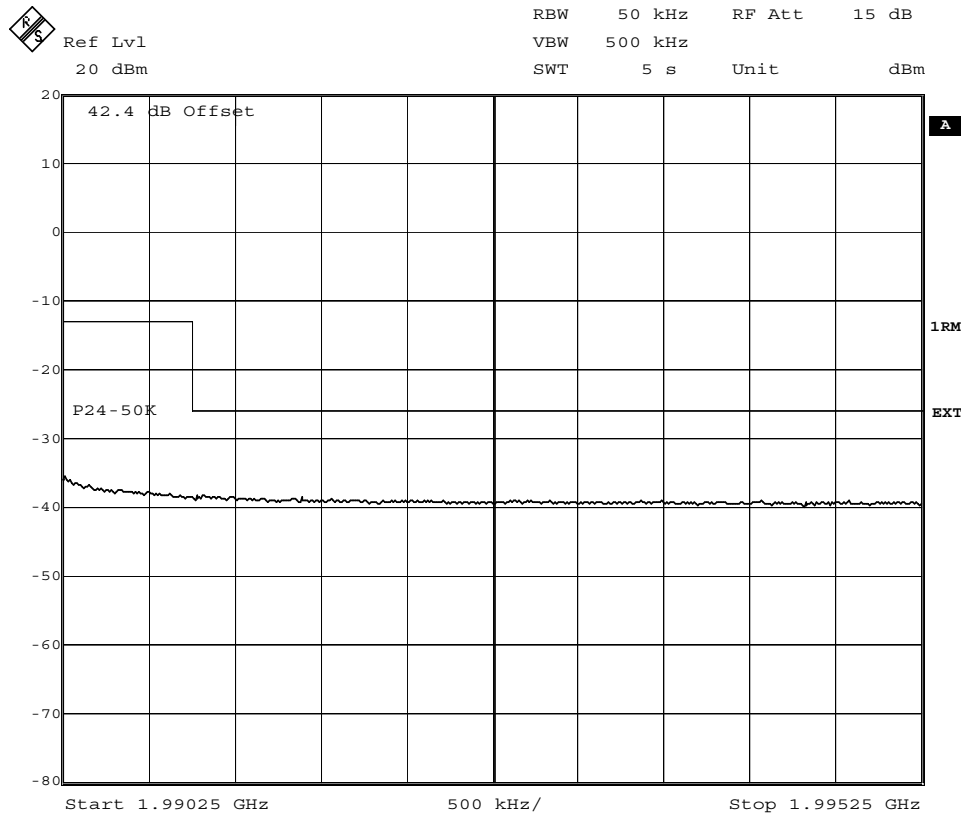
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 6



Date: 1.NOV.2006 16:54:13



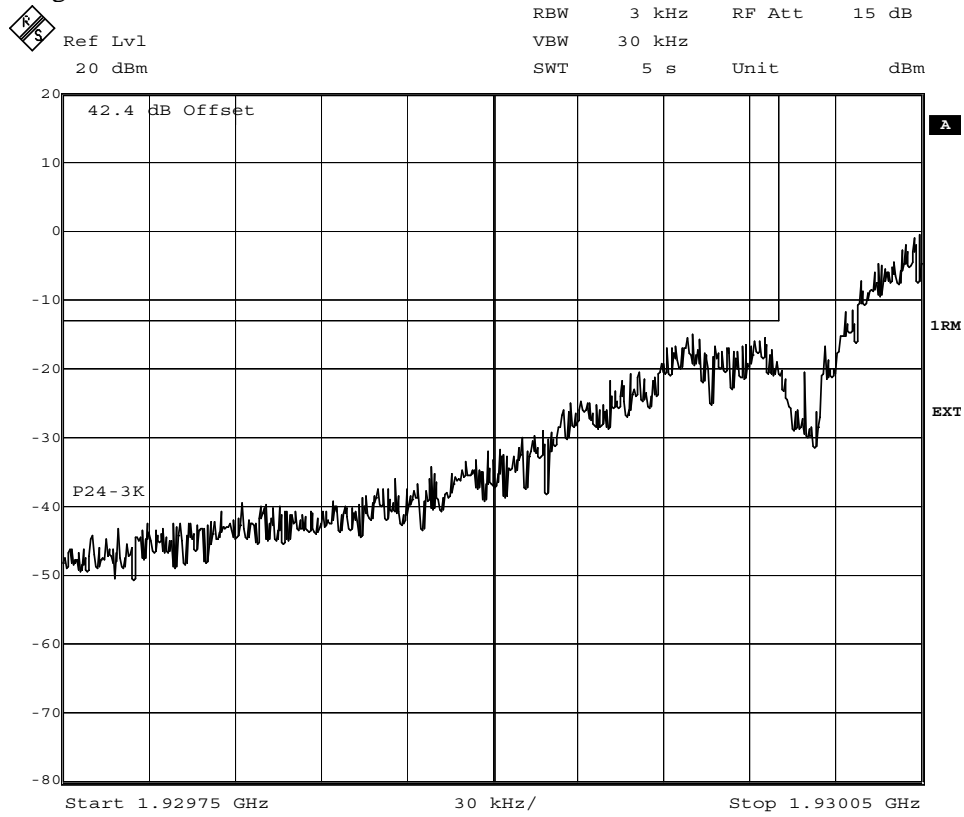
Date: 1.NOV.2006 16:55:08



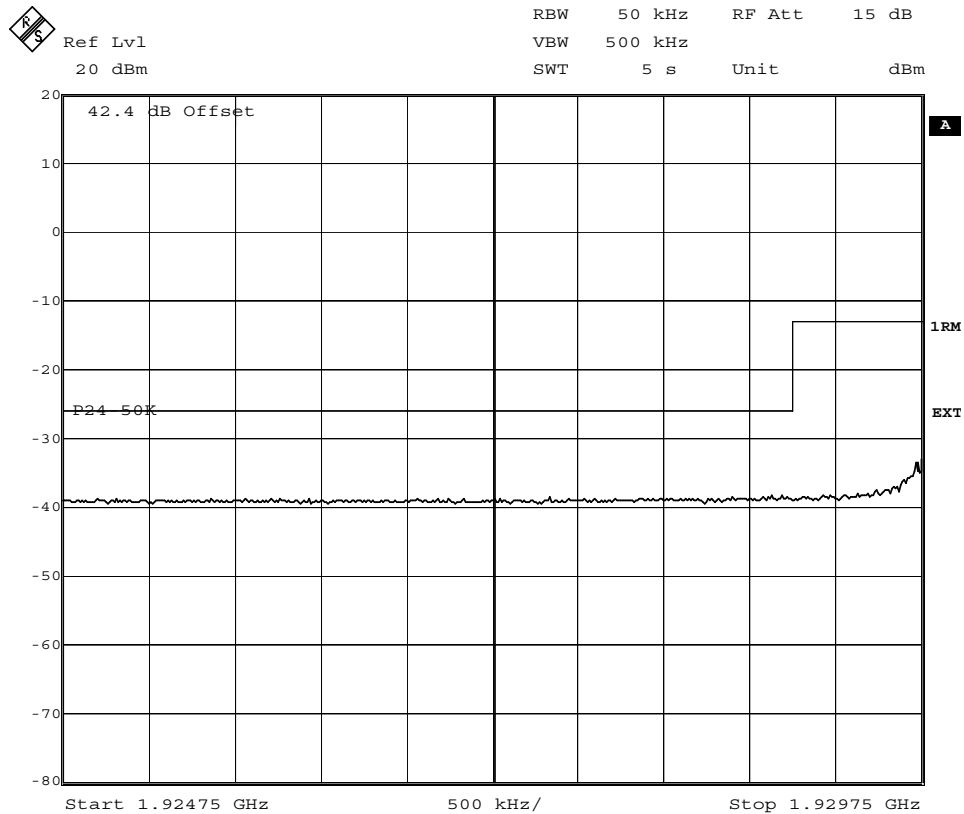
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 7



Date: 1.NOV.2006 13:07:42



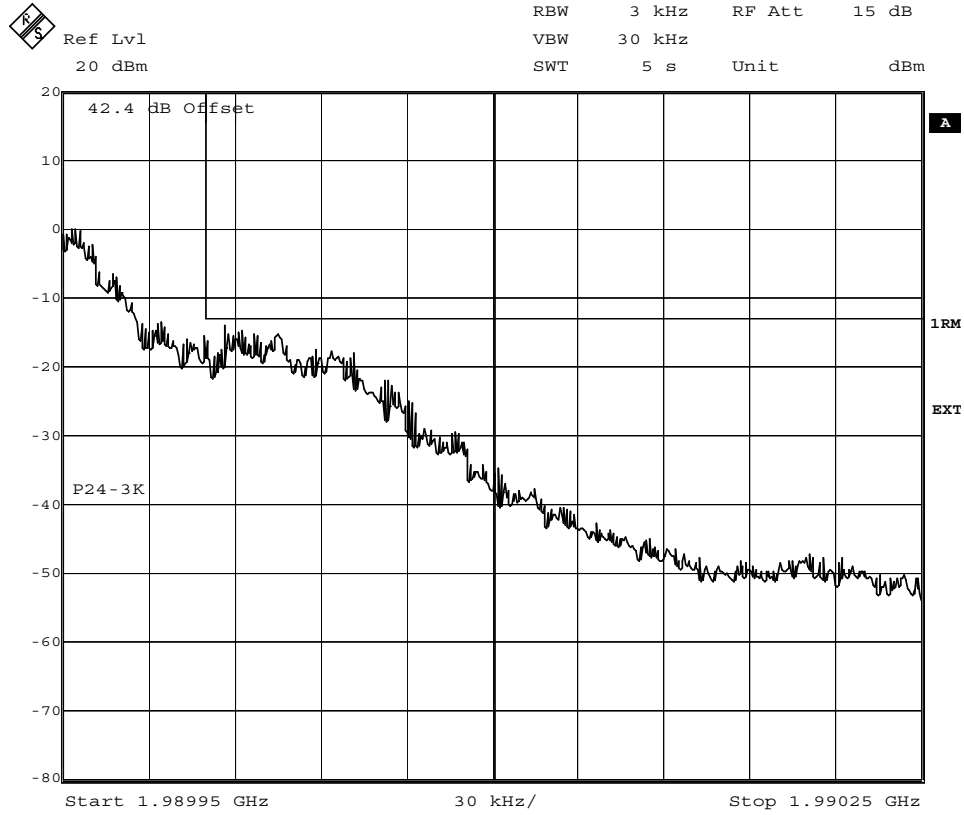
Date: 1.NOV.2006 14:05:39



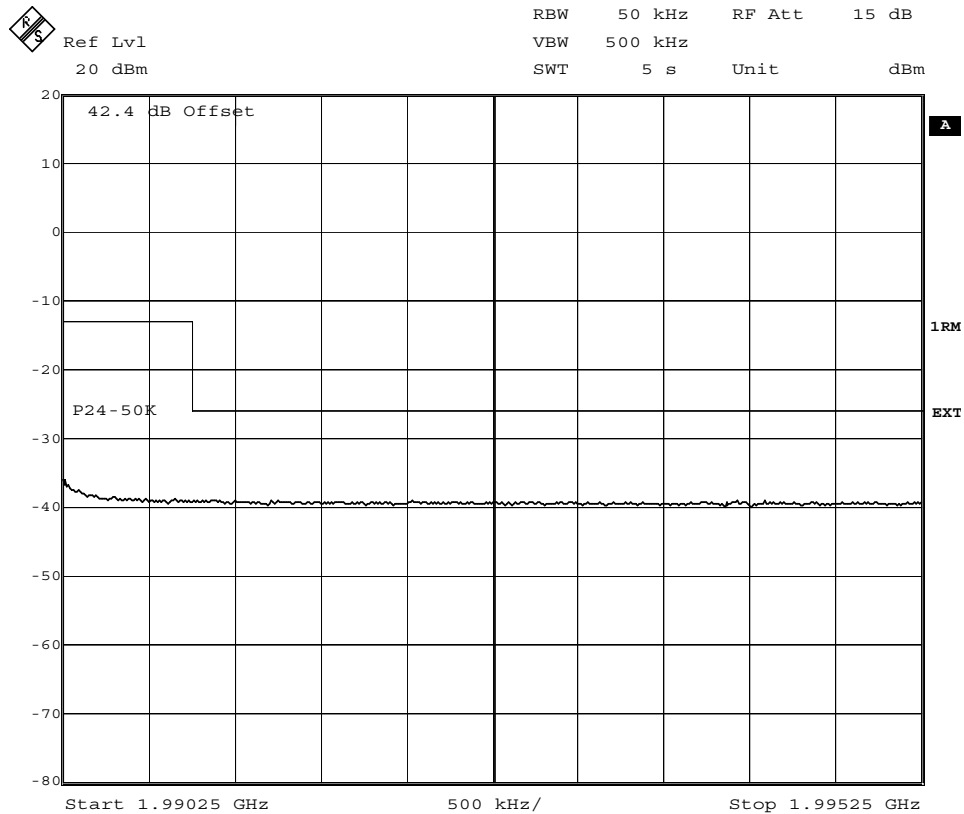
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 8



Date: 1.NOV.2006 14:13:37



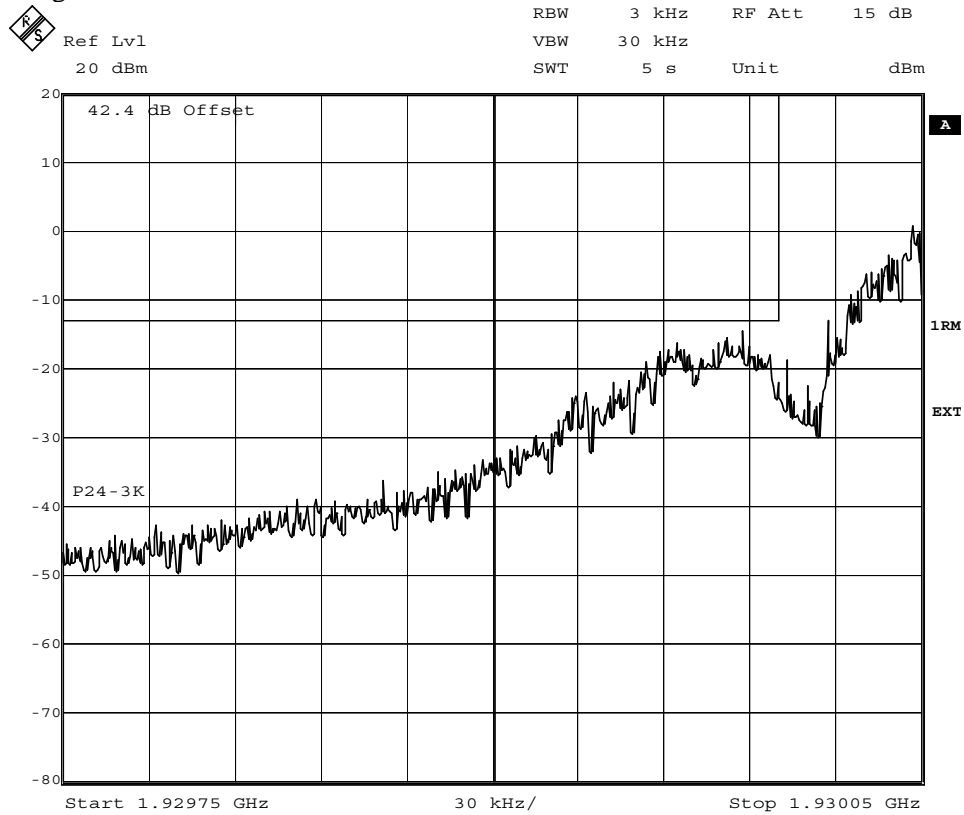
Date: 1.NOV.2006 14:15:19



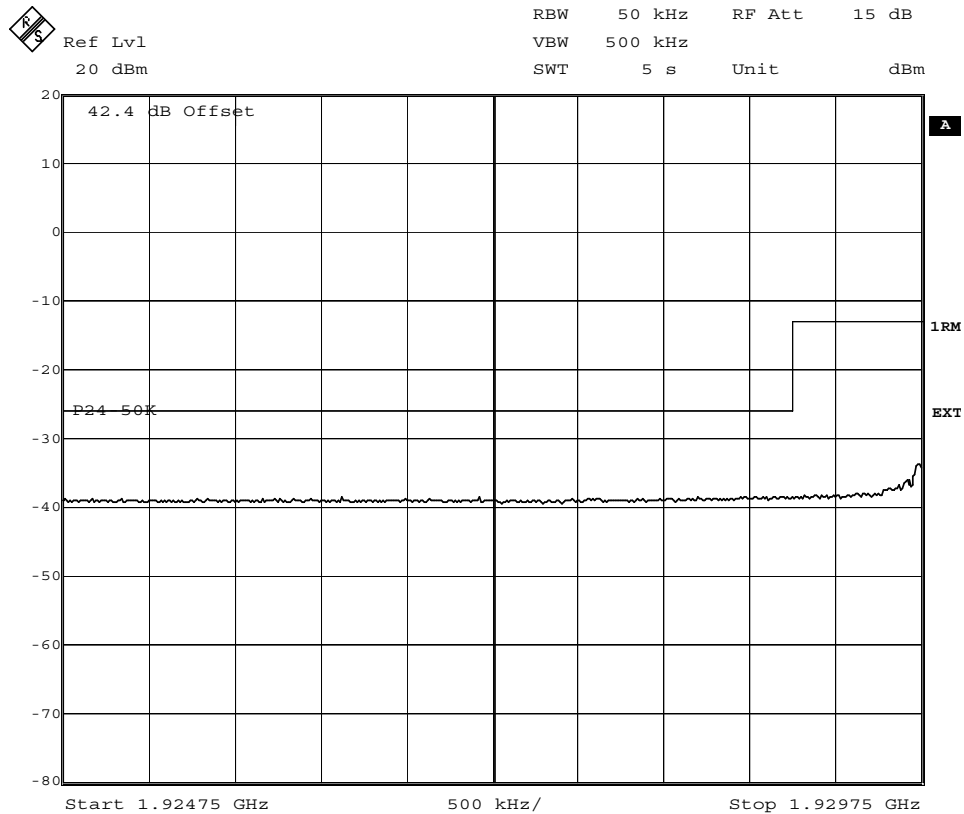
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 9



Date: 1.NOV.2006 15:34:06



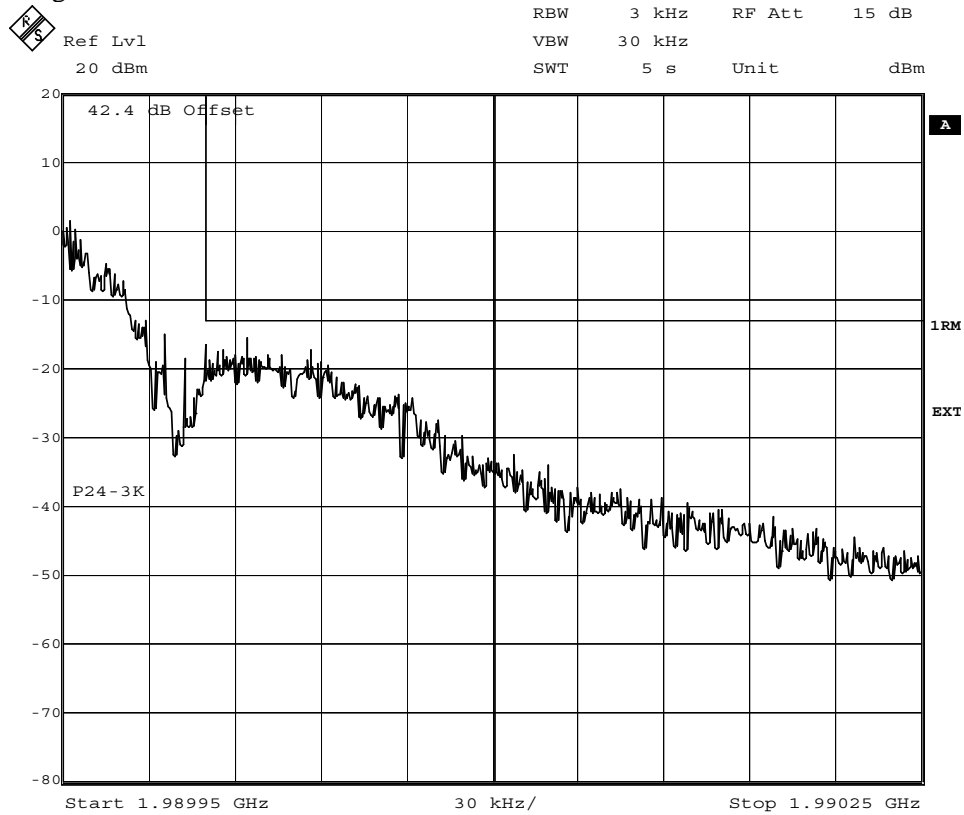
Date: 1.NOV.2006 15:34:58



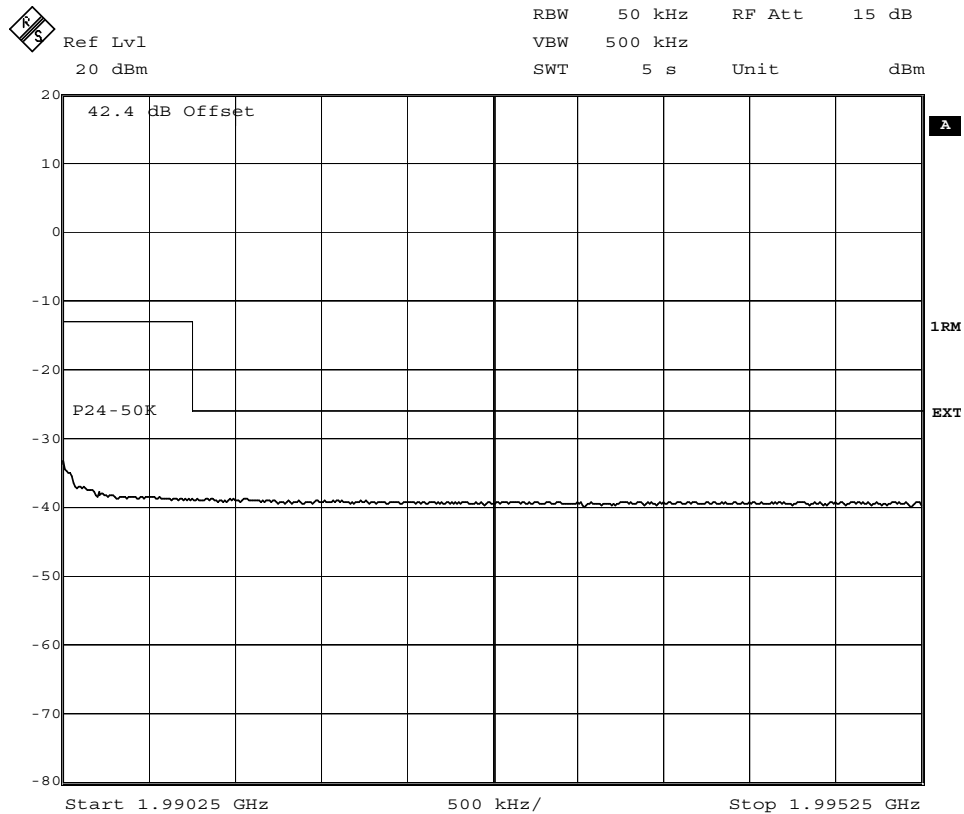
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 10



Date: 1.NOV.2006 15:32:36



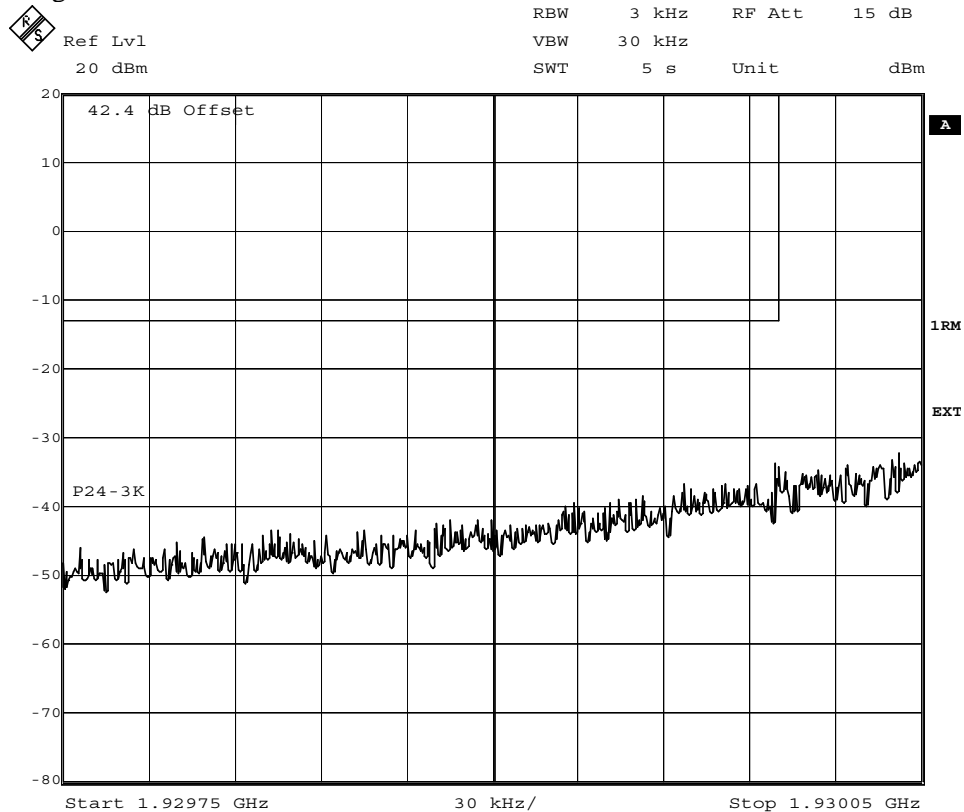
Date: 1.NOV.2006 15:30:53



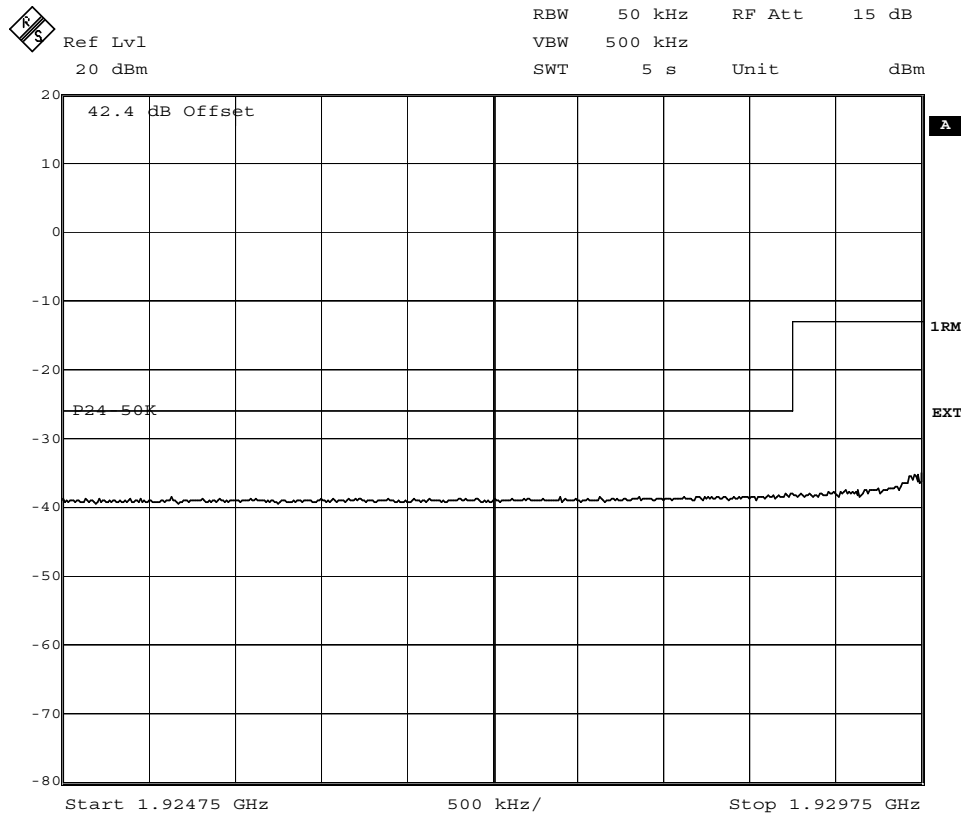
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 11



Date: 1.NOV.2006 16:50:19



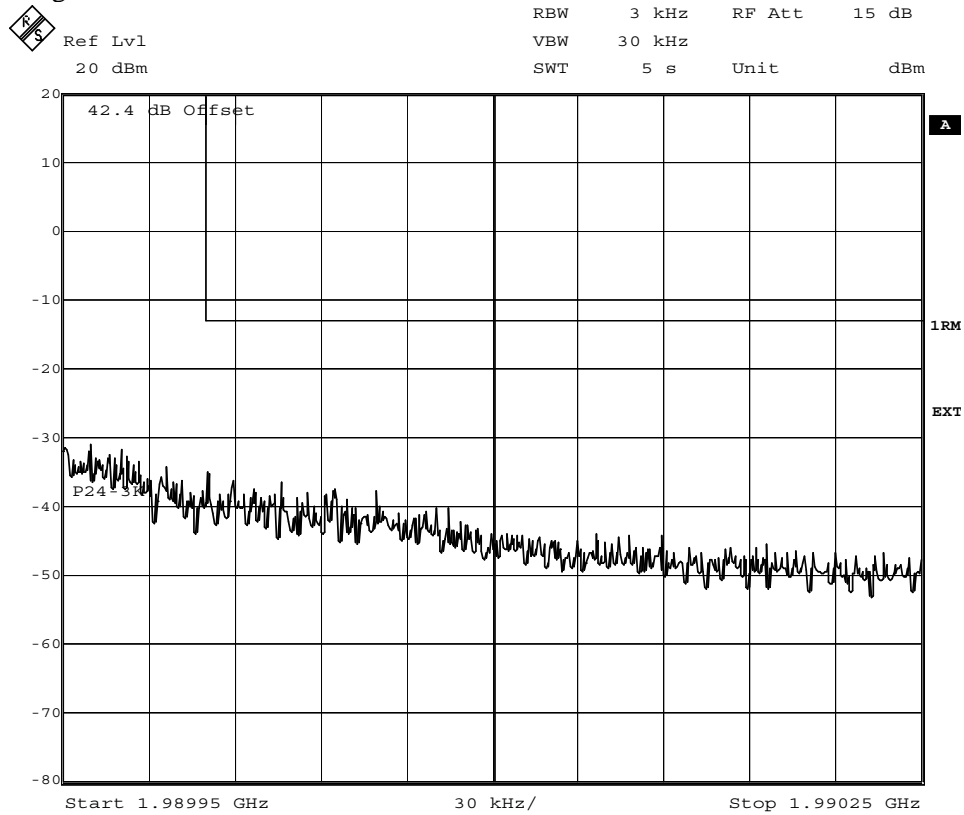
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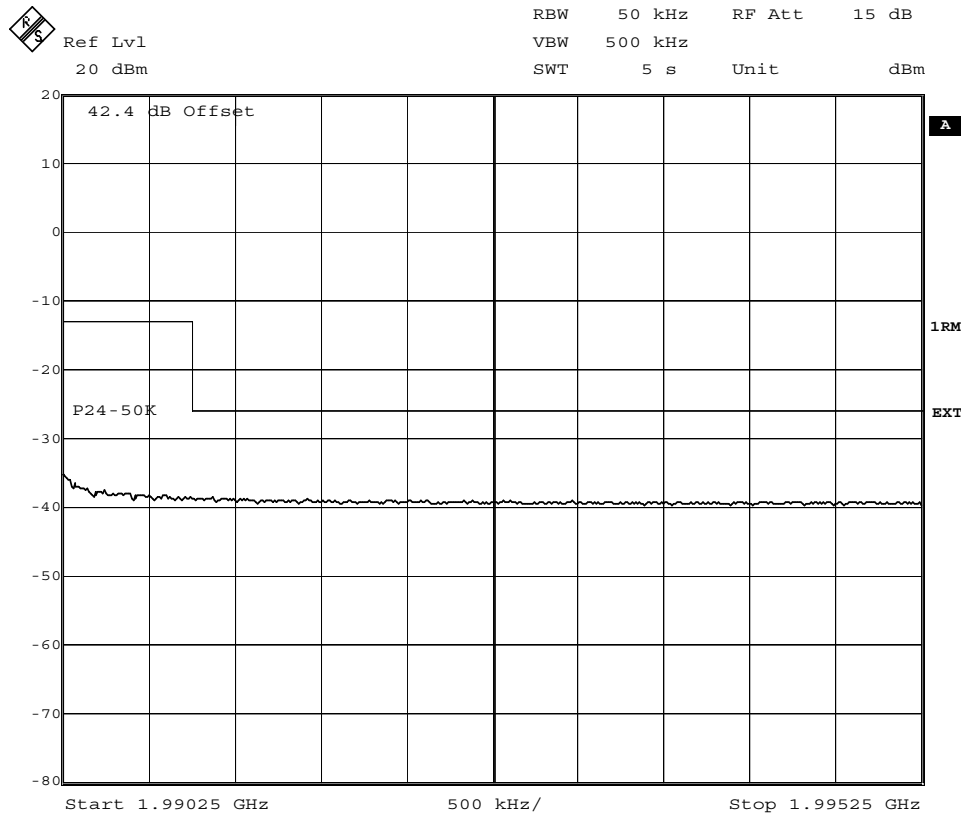
FCC ID: B5KDKRC1311004-2

Appendix 3.1

Diagram 12



Date: 1.NOV.2006 16:57:06



Date: 1.NOV.2006 16:56:40



FCC ID: B5KDKRC1311004-2

Appendix 4

Conducted spurious emission measurements according to 47CFR 2.1051

Date	Temperature	Humidity
2006-11-01	22 °C ± 3 °C	17 % ± 5 %
2006-11-05	24 °C ± 3 °C	25 % ± 5 %

Test set-up and procedure

The measurements were made per definition in 24.238. Measurements were made at CDU-K output connectors. The output was connected to a spectrum analyser. The spectrum analyser was connected to an external 10 MHz reference standard during the measurements. The transmitter was activated at maximum output power and modulated with pseudorandom data during the measurements.

Measurement equipment	Calibration Due	SP number
R&S FSIQ	2007-08	503 738
Testo 610, Temperature and humidity meter	2006-12	502 658

Measurement uncertainty: 3.7 dB**Results**

The results are shown in appendix 4.1

Modulation: **GMSK**

dTRU, with internal combiner plus TCC:

- Diagram 1: Ch 512
- Diagram 2: Ch 661
- Diagram 3: Ch 810

dTRU, without internal combiner:

- Diagram 4: TRX output 1, Ch 512
- Diagram 5: TRX output 1, Ch 661
- Diagram 6: TRX output 1, Ch 810
- Diagram 7: TRX output 2, Ch 512
- Diagram 8: TRX output 2, Ch 661
- Diagram 9: TRX output 2, Ch 810

dTRU, with internal combiner:

- Diagram 10: TRX output 1 Ch 512, TRX output 2 Ch 537
- Diagram 11: TRX output 1 Ch 785, TRX output 2 Ch 810



FCC ID: B5KDKRC1311004-2

Appendix 4

Modulation: **8-PSK****dTRU, with internal combiner plus TCC:**

Diagram 12: Ch 512
Diagram 13: Ch 661
Diagram 14: Ch 810

dTRU, without internal combiner:

Diagram 15: TRX output 1, Ch 512
Diagram 16: TRX output 1, Ch 661
Diagram 17: TRX output 1, Ch 810
Diagram 18: TRX output 2, Ch 512
Diagram 19: TRX output 2, Ch 661
Diagram 20: TRX output 2, Ch 810

dTRU, with internal combiner:

Diagram 21: TRX output 1 Ch 512, TRX output 2 Ch 537
Diagram 22: TRX output 1 Ch 785, TRX output 2 Ch 810

Limits

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.

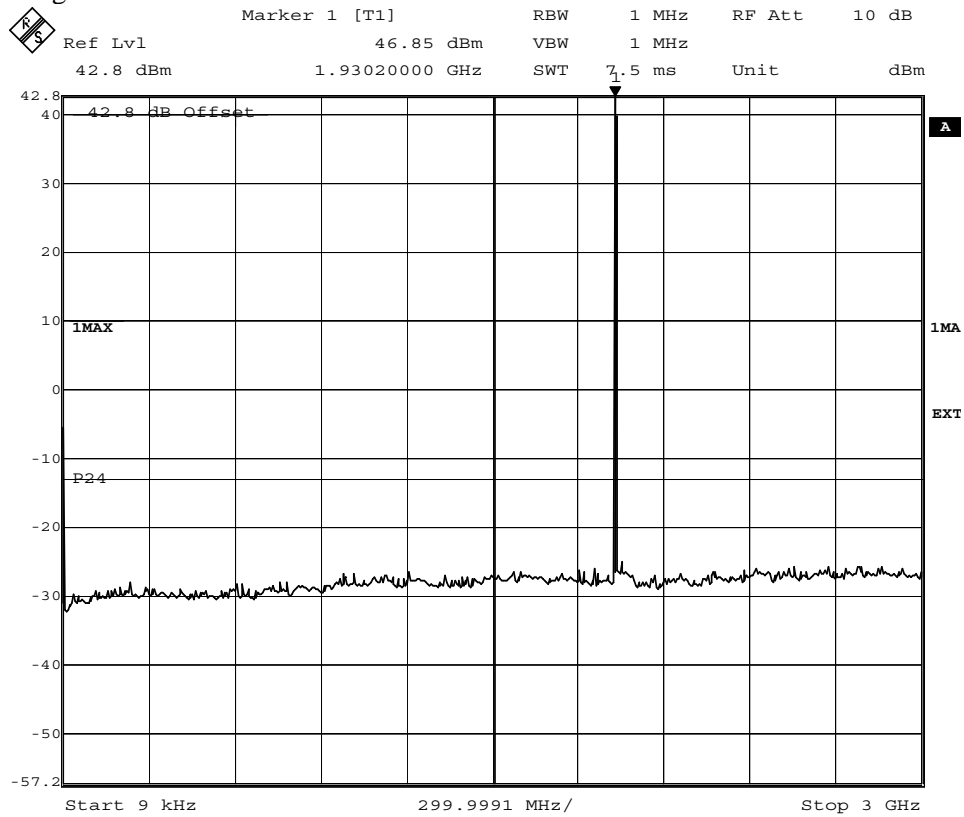
Complies?	Yes
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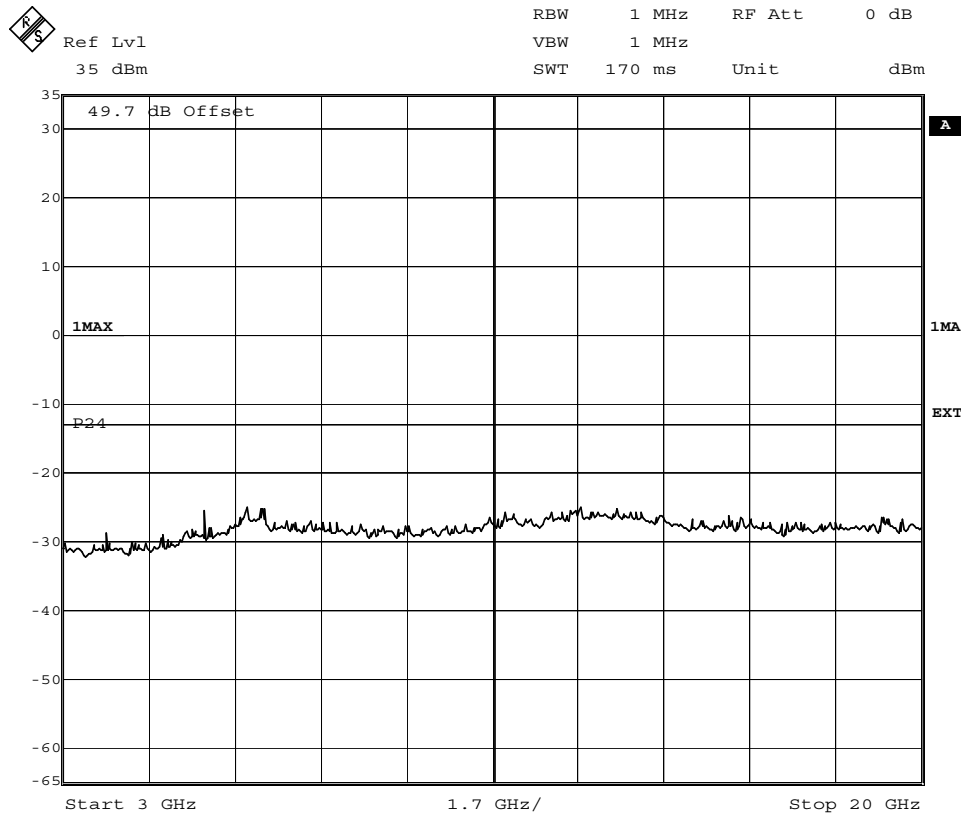
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 1



Date: 1.NOV.2006 17:29:25



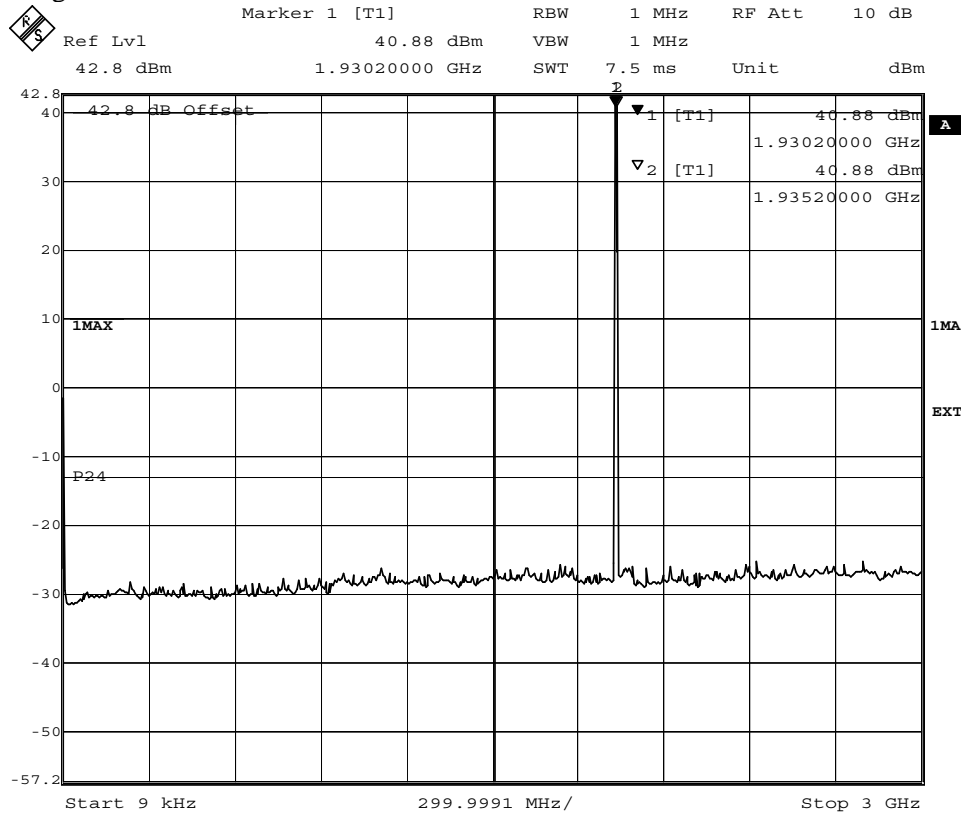
Date: 1.NOV.2006 17:37:15



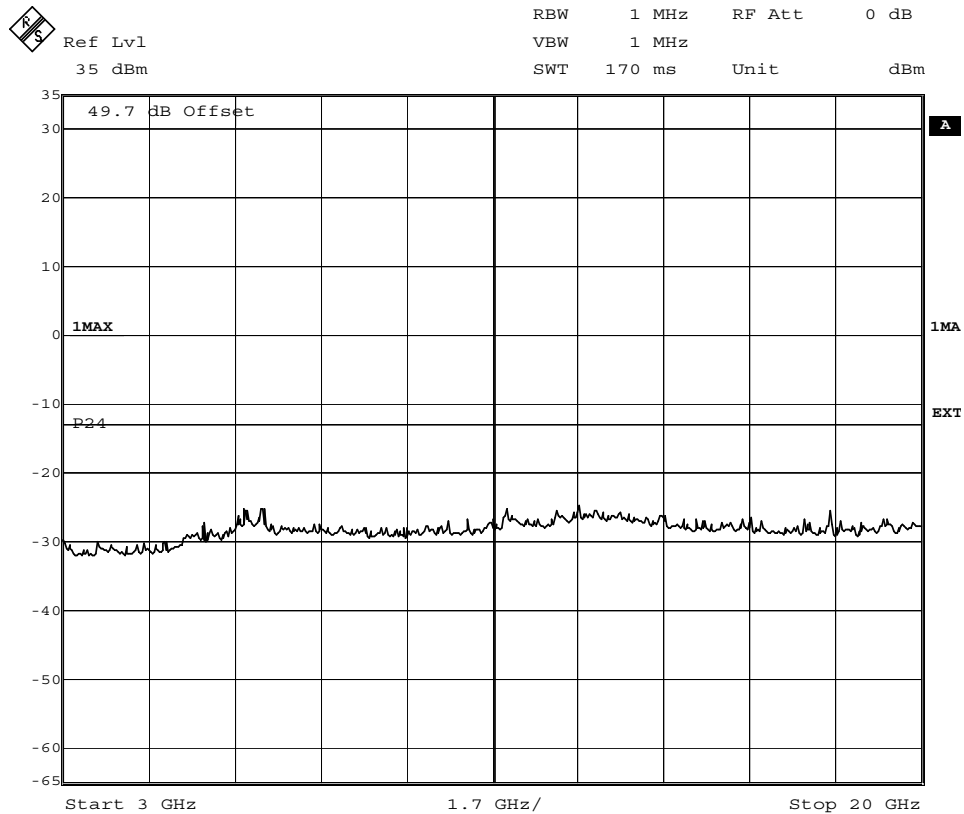
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 10-1



Date: 1.NOV.2006 20:00:46



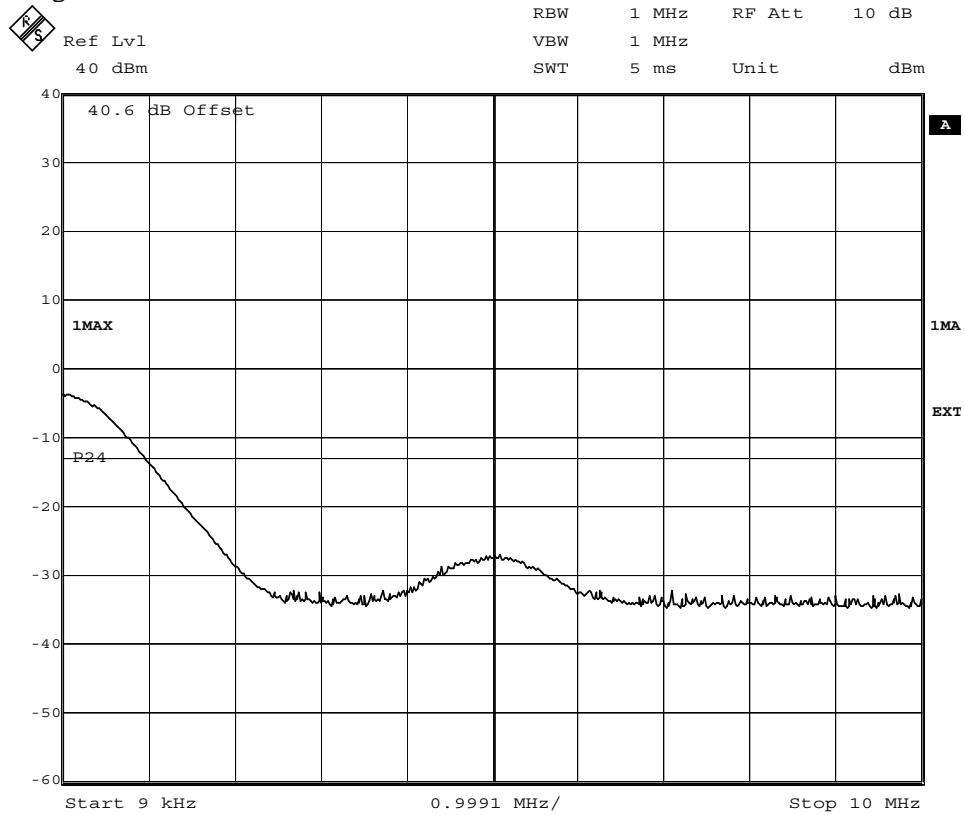
Date: 1.NOV.2006 19:36:42



FCC ID: B5KDKRC1311004-2

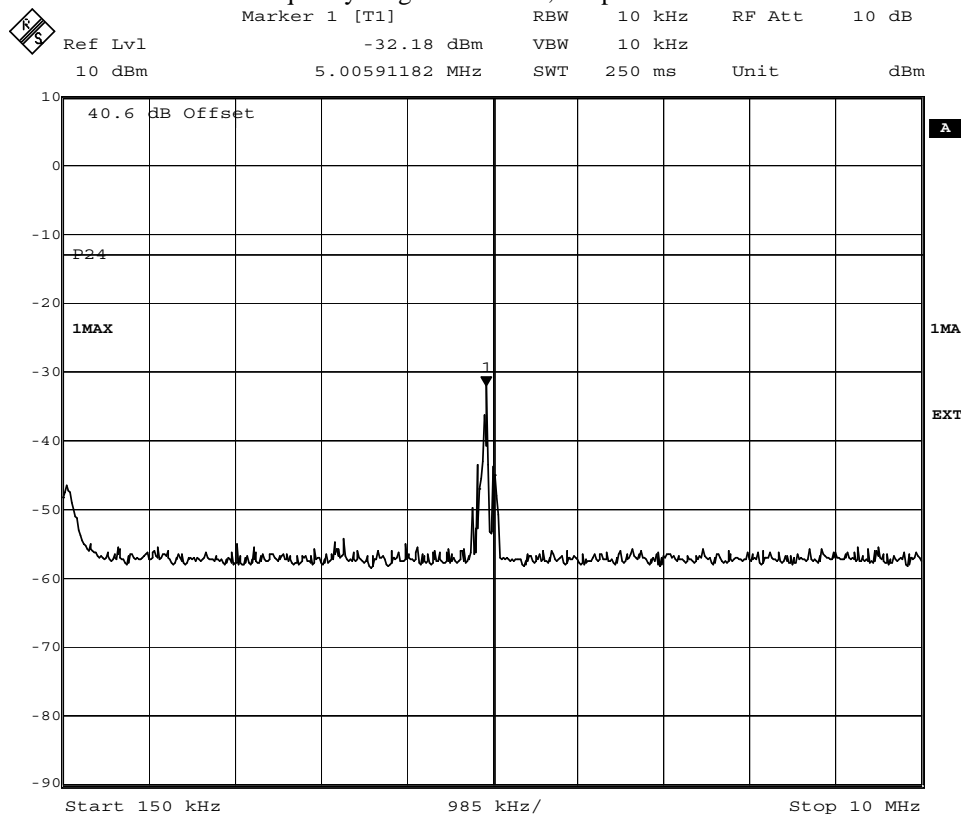
Appendix 4.1

Diagram 10-2



Date: 1.NOV.2006 20:05:32

Note: The emission at 9 kHz was related to the LO feedthrough. A complementary measurement was performed with a smaller RBW to verify that there were no emission in the frequency range 9k-10MHz, see plots below.



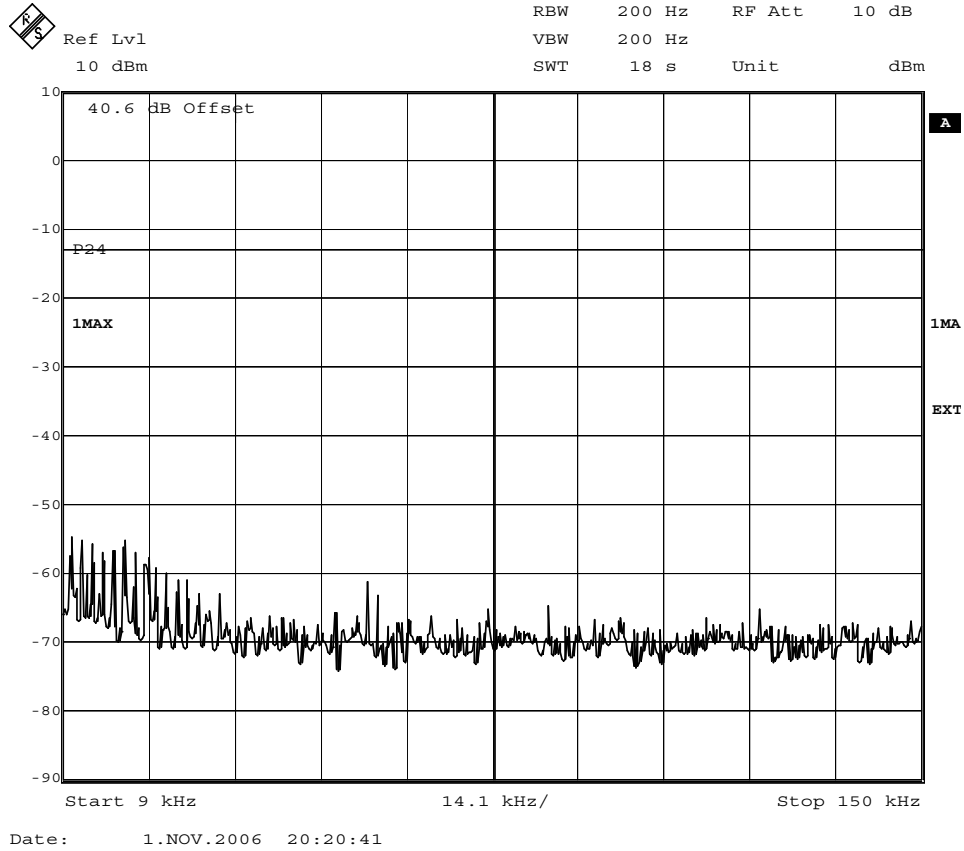
Date: 1.NOV.2006 20:08:20



FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 10-3

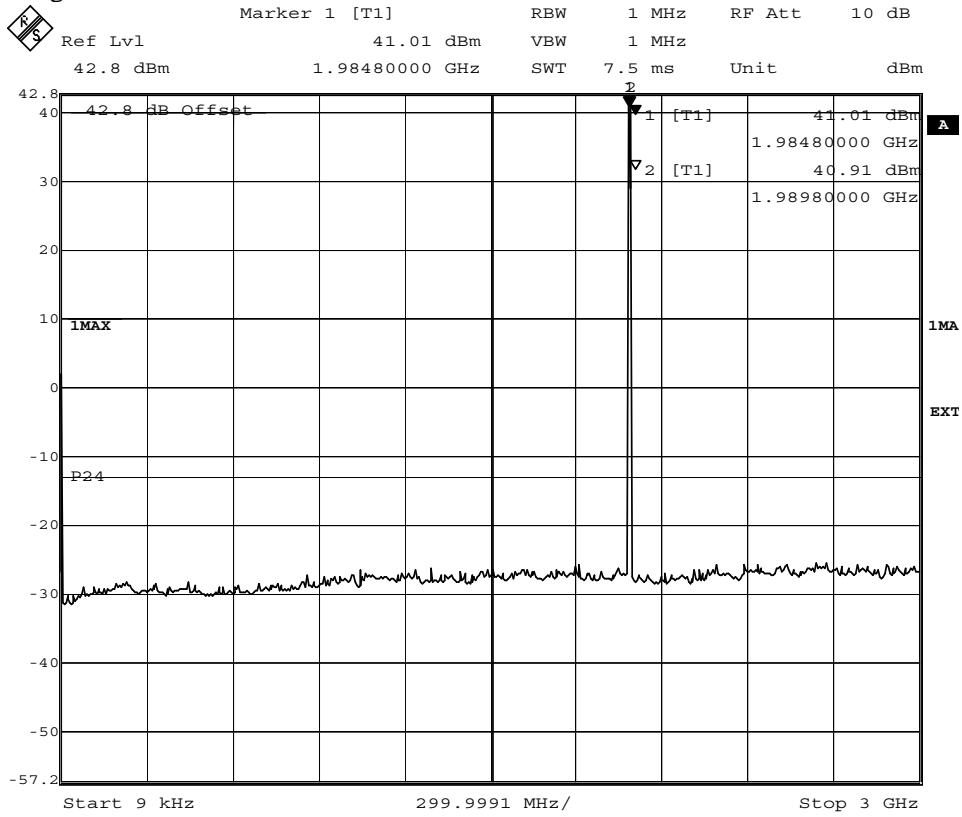




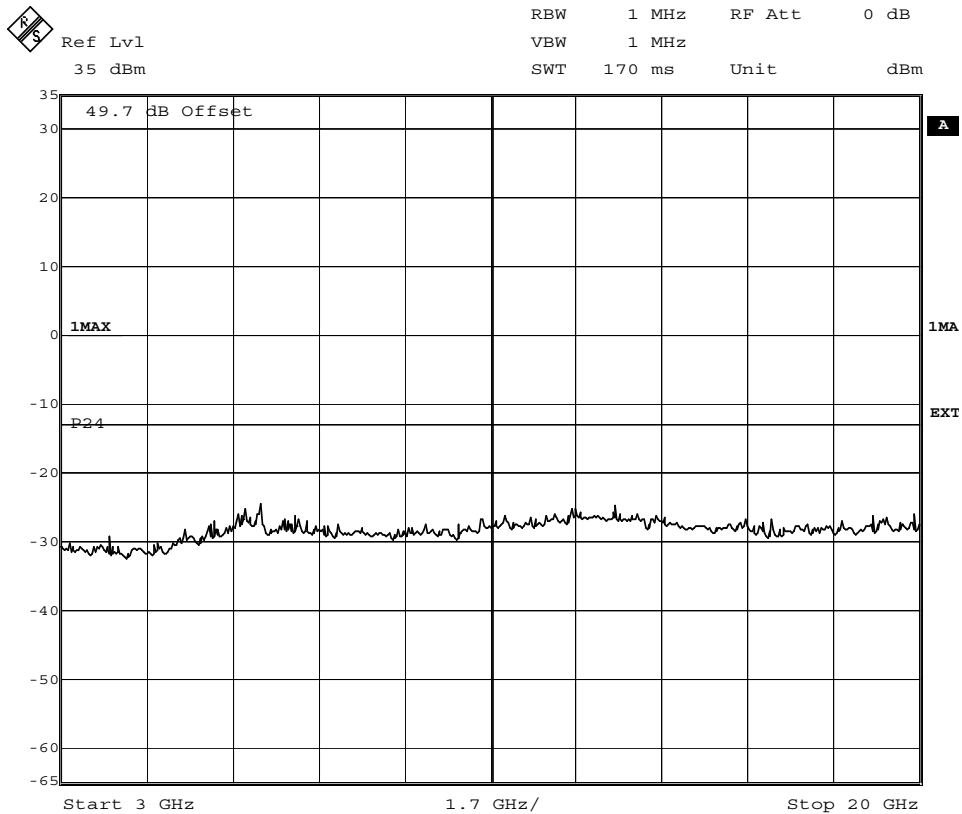
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 11-1



Date: 1.NOV.2006 19:45:59



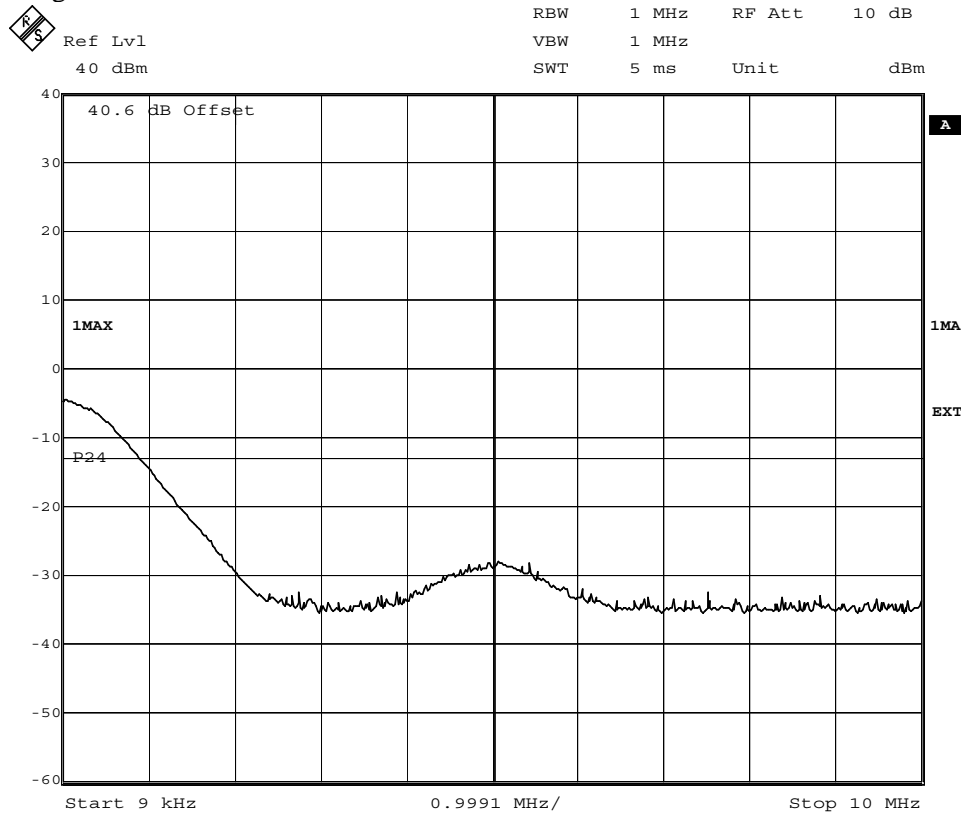
Date: 1.NOV.2006 19:42:55



FCC ID: B5KDKRC1311004-2

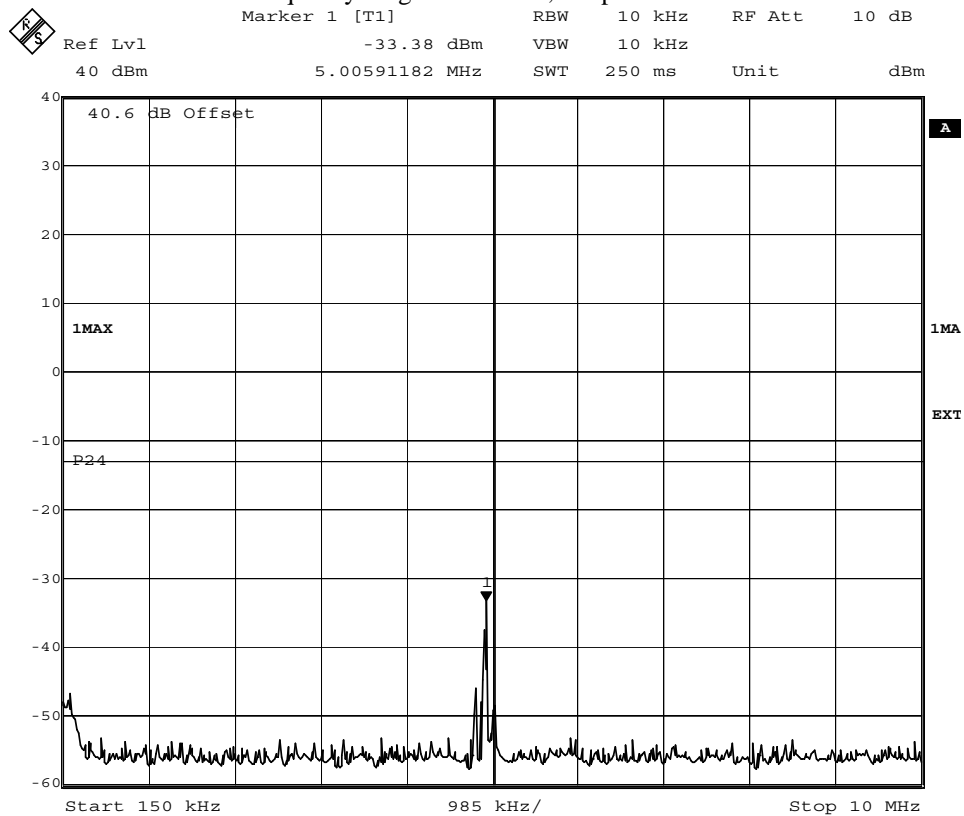
Appendix 4.1

Diagram 11-2



Date: 5.NOV.2006 19:02:13

Note: The emission at 9 kHz was related to the LO feedthrough. A complementary measurement was performed with a smaller RBW to verify that there were no emission in the frequency range 9k-10MHz, see plots below.



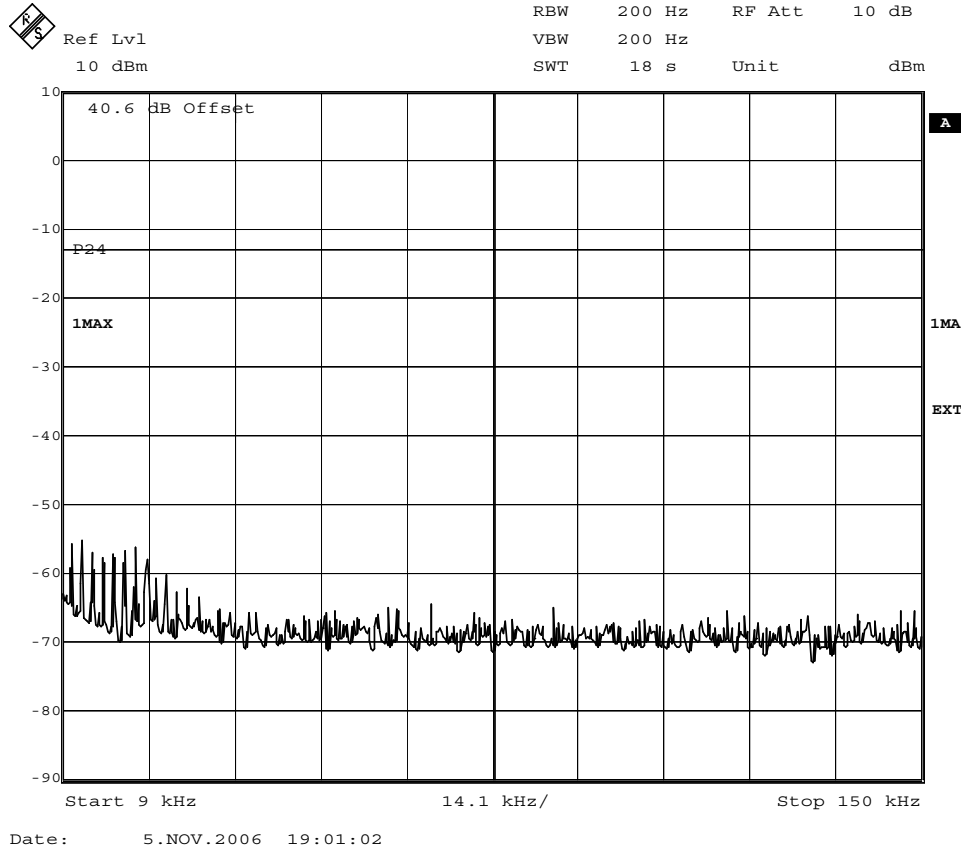
Date: 5.NOV.2006 19:03:47



FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 11-3

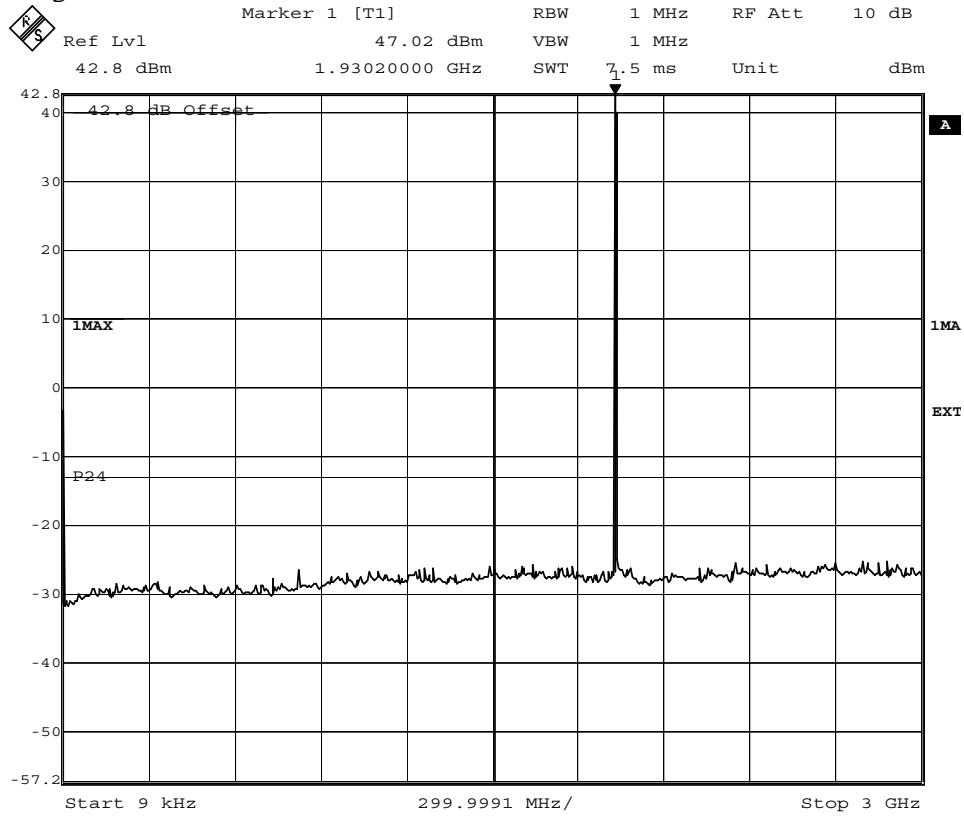




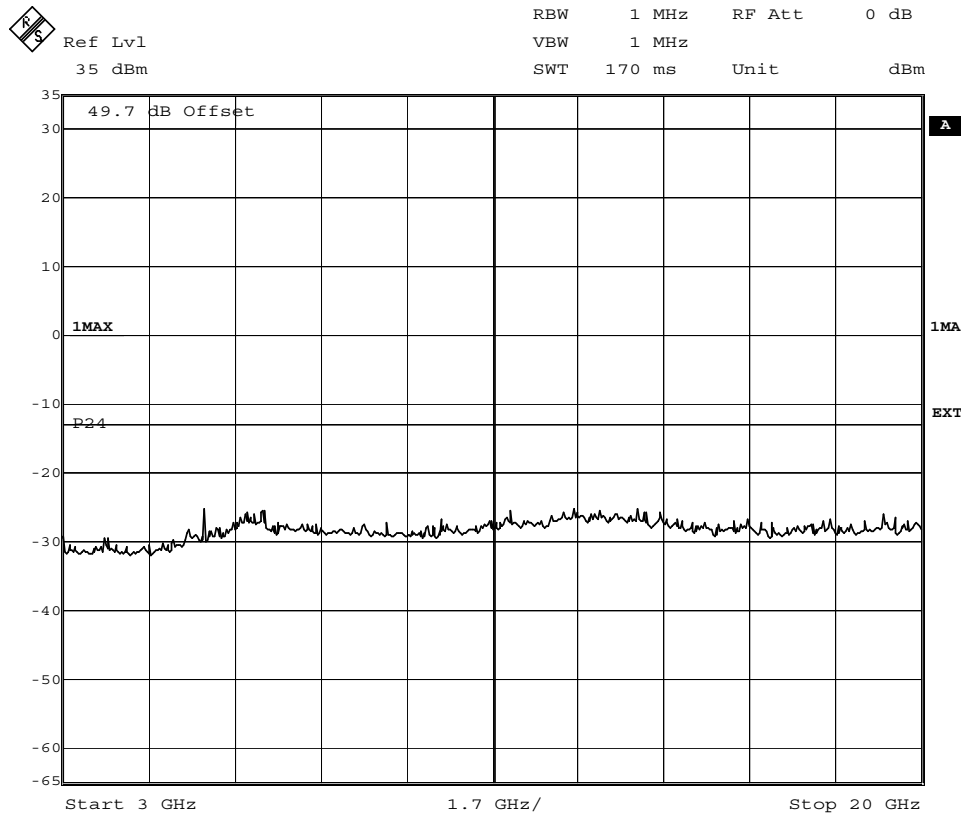
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 12



Date: 1.NOV.2006 17:08:52



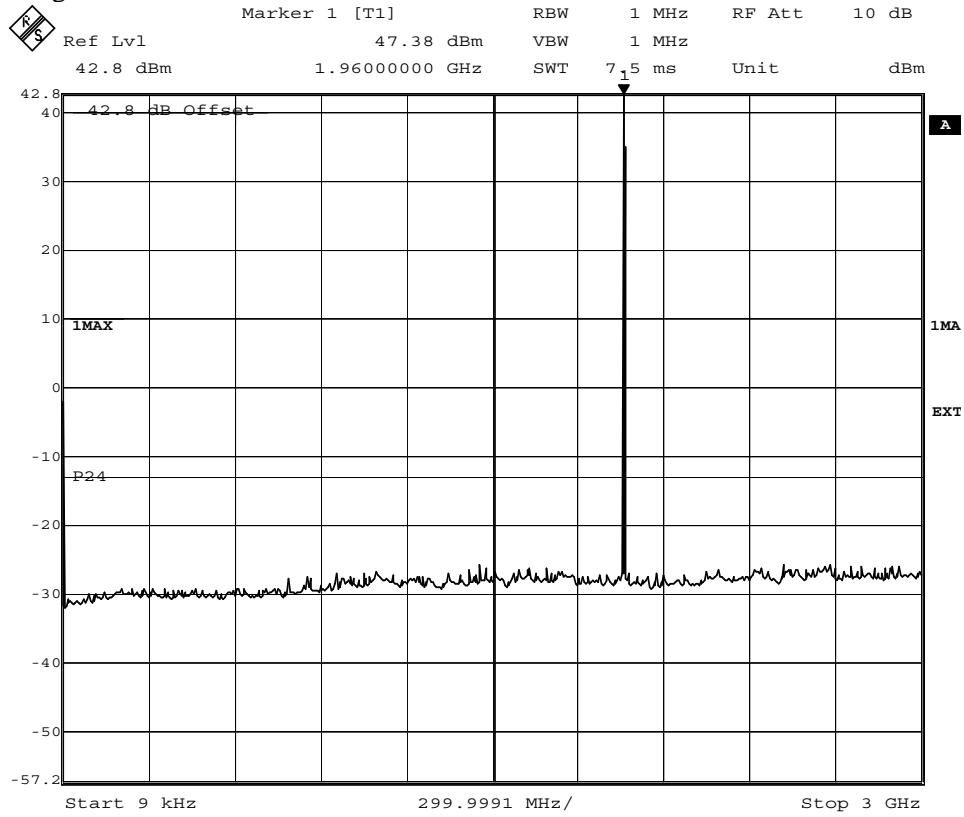
Date: 1.NOV.2006 19:32:41



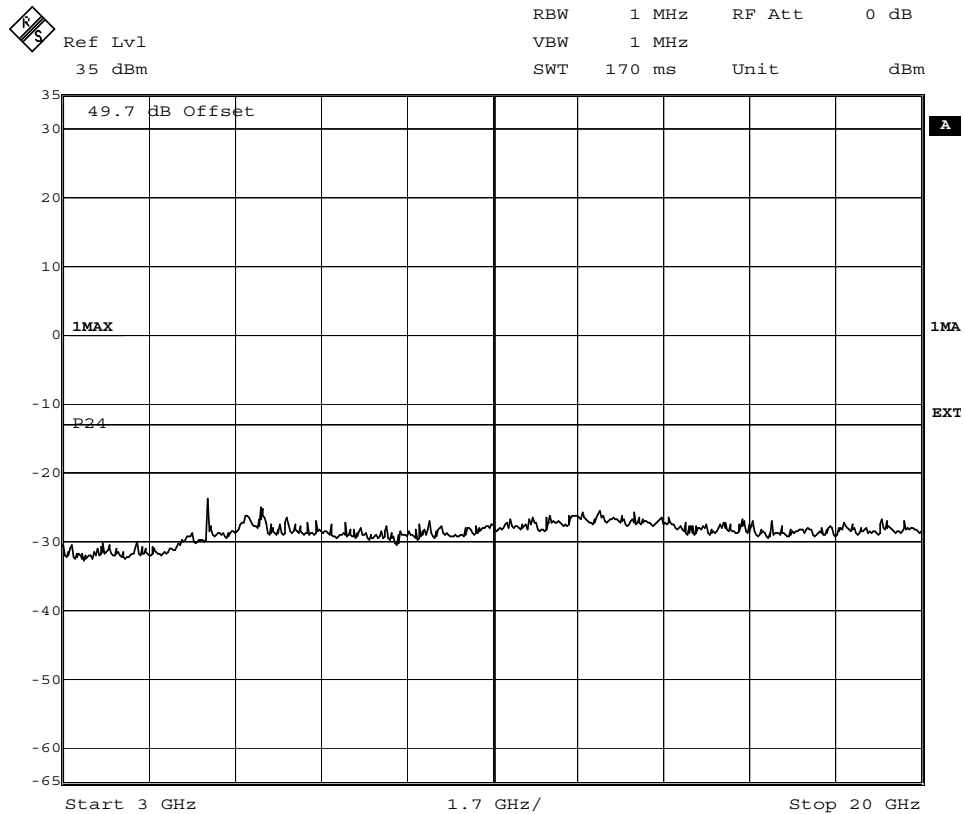
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 13



Date: 1.NOV.2006 17:11:25



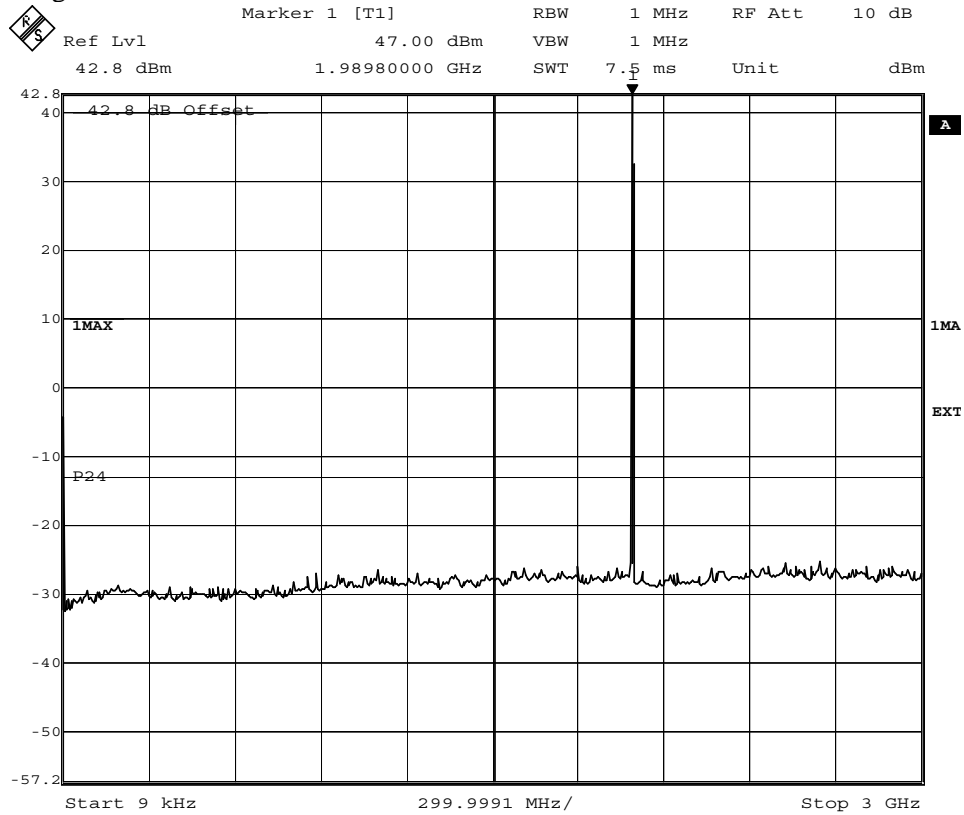
Date: 1.NOV.2006 19:31:40



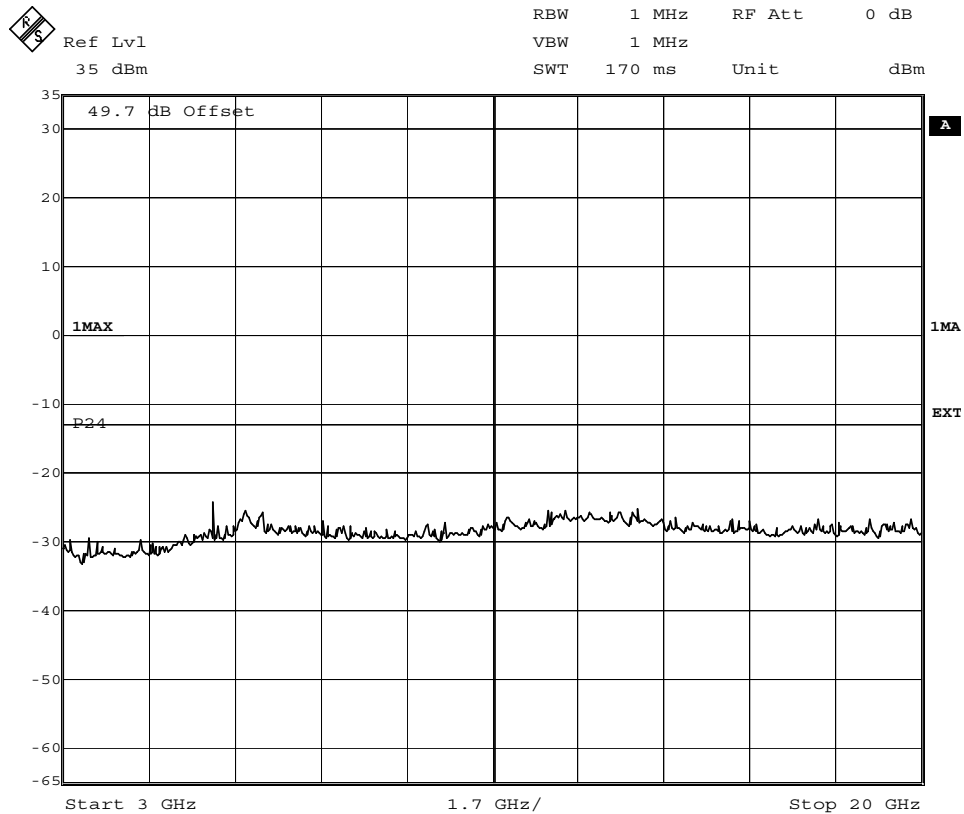
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 14



Date: 1.NOV.2006 17:12:22



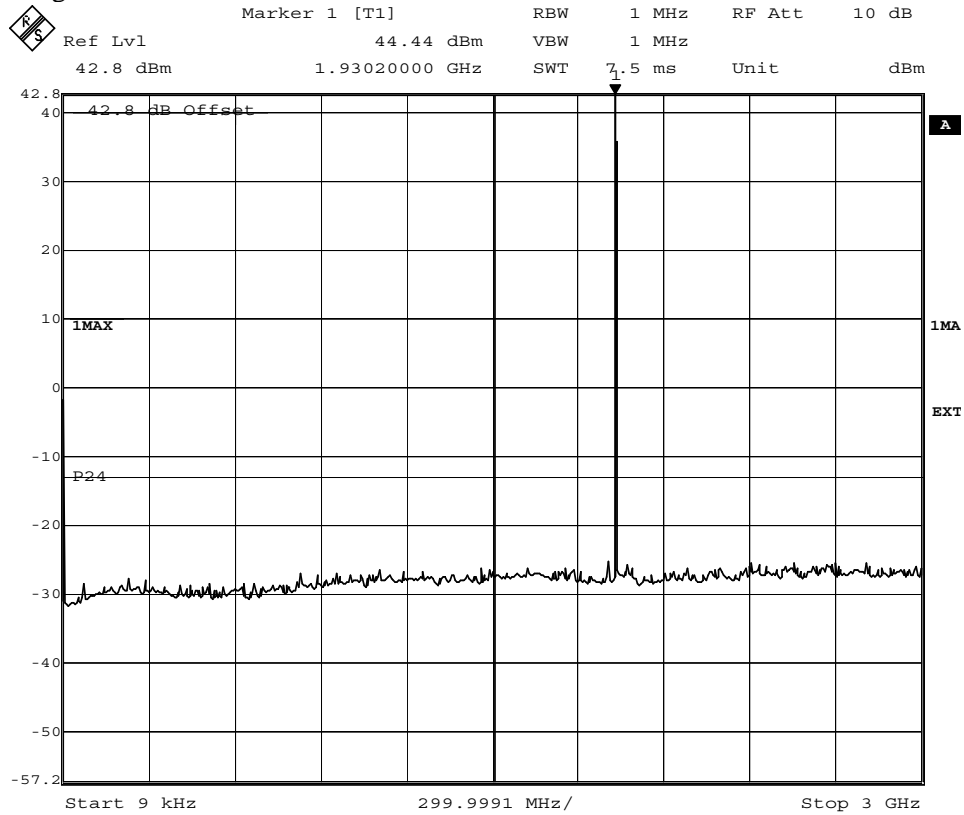
Date: 1.NOV.2006 19:30:42



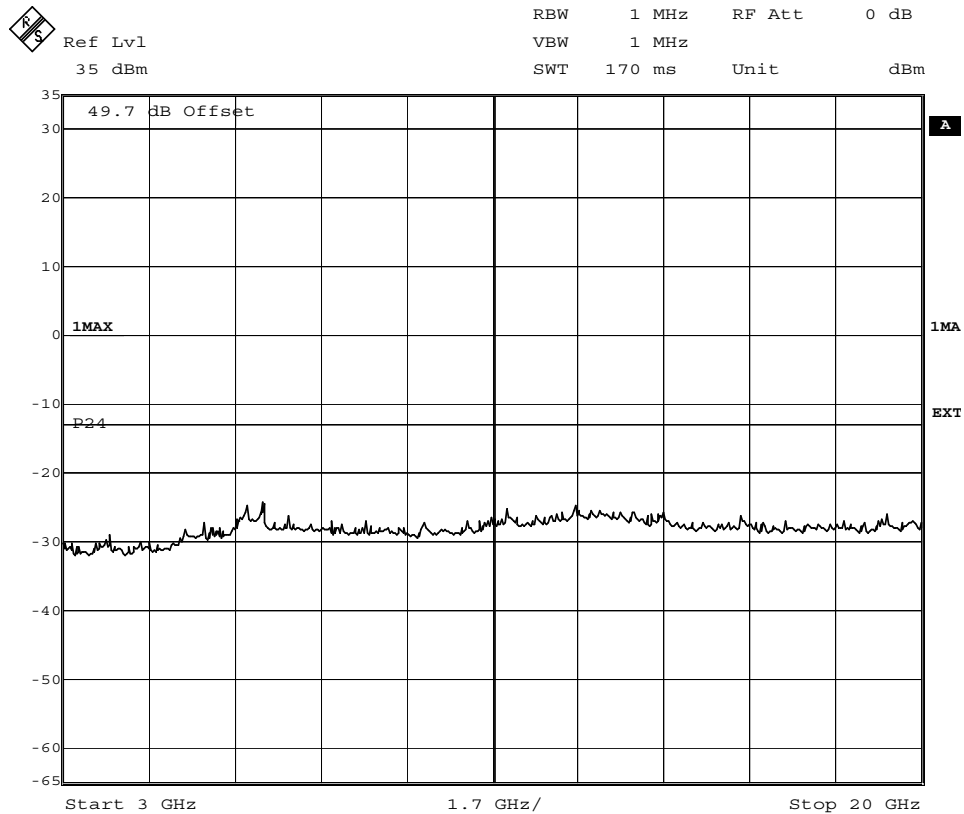
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 15



Date: 5.NOV.2006 19:49:10



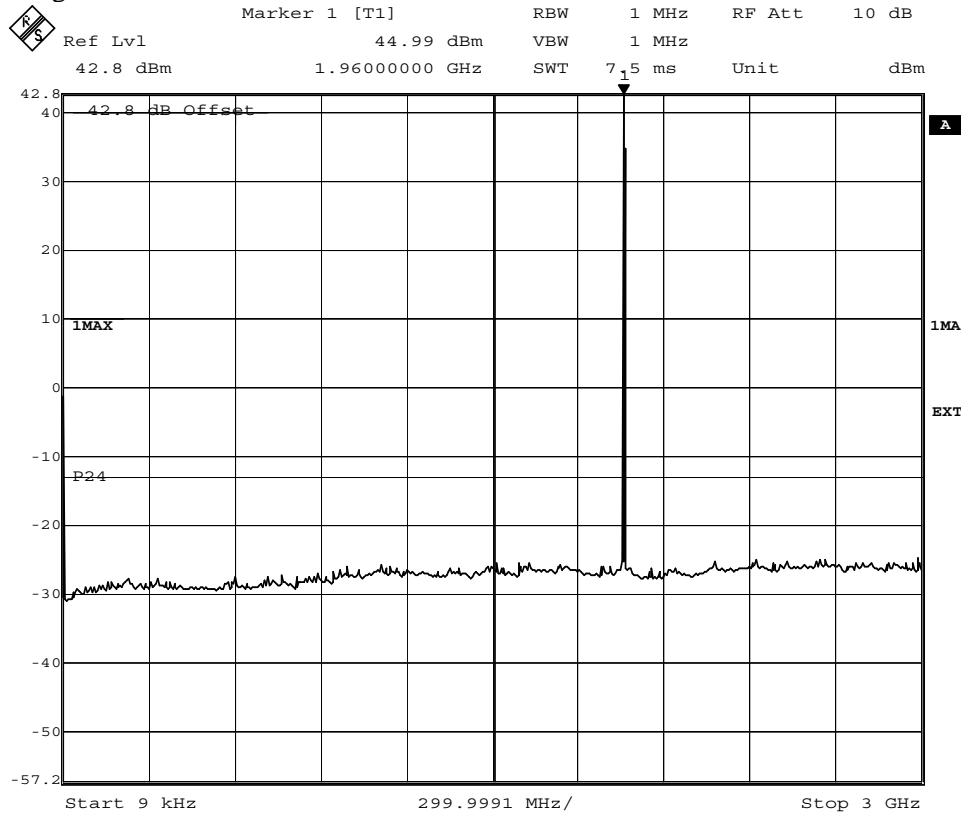
Date: 5.NOV.2006 20:16:05



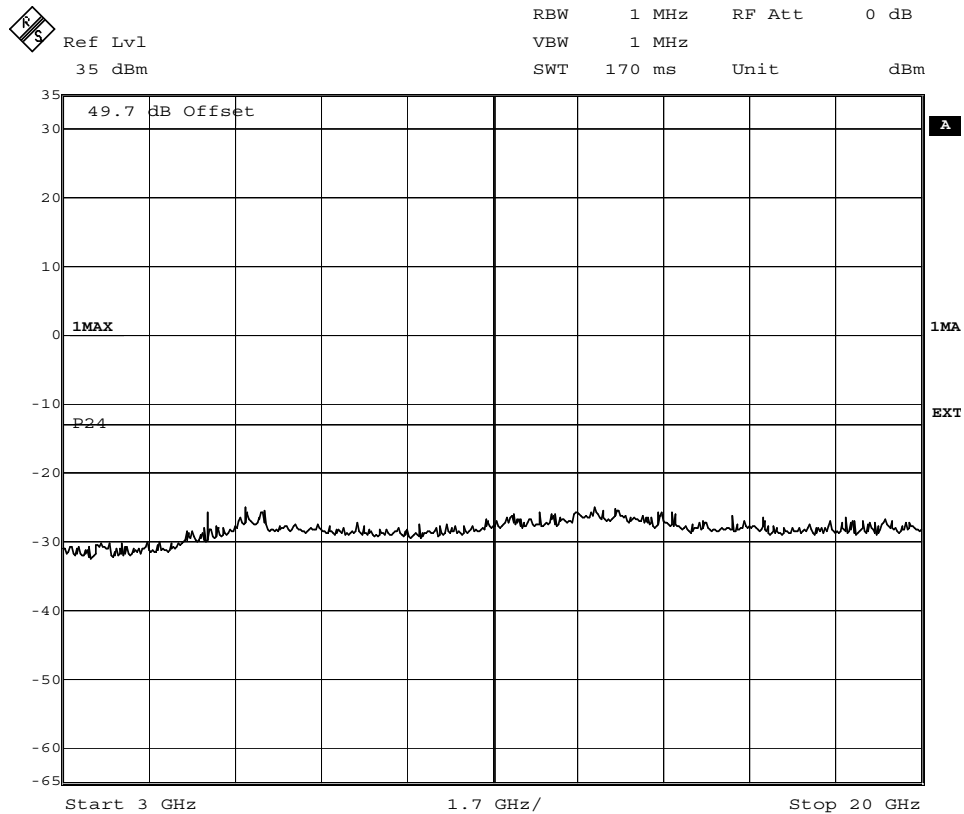
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 16



Date: 5.NOV.2006 19:58:50



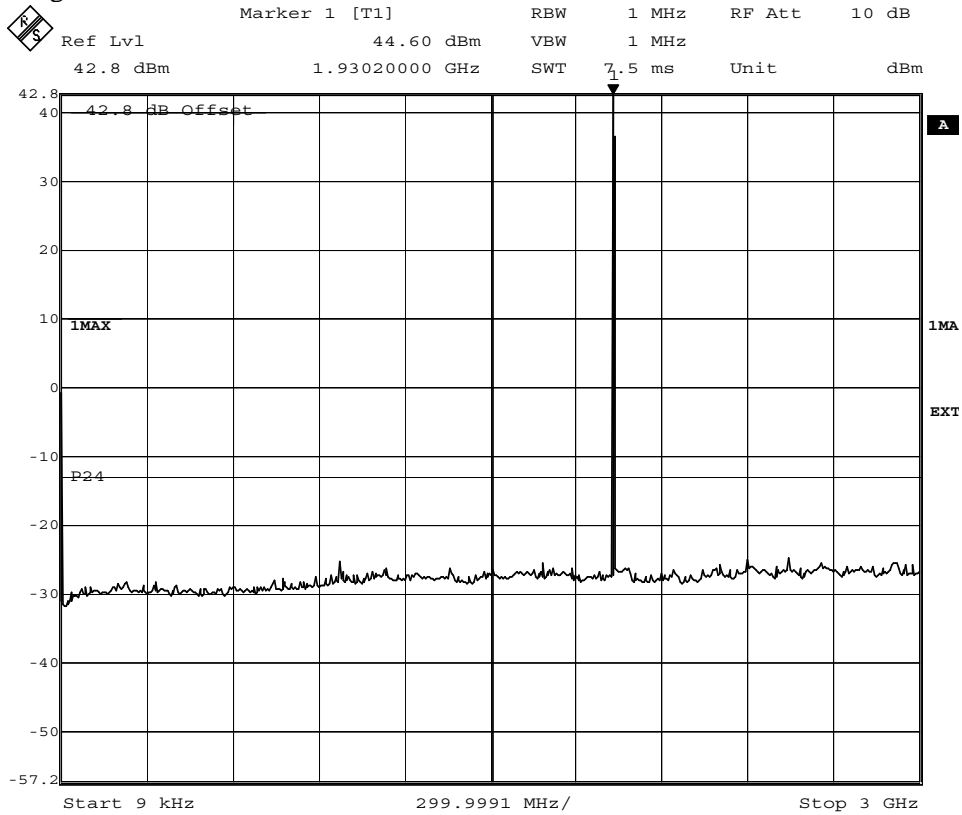
Date: 5.NOV.2006 20:15:00



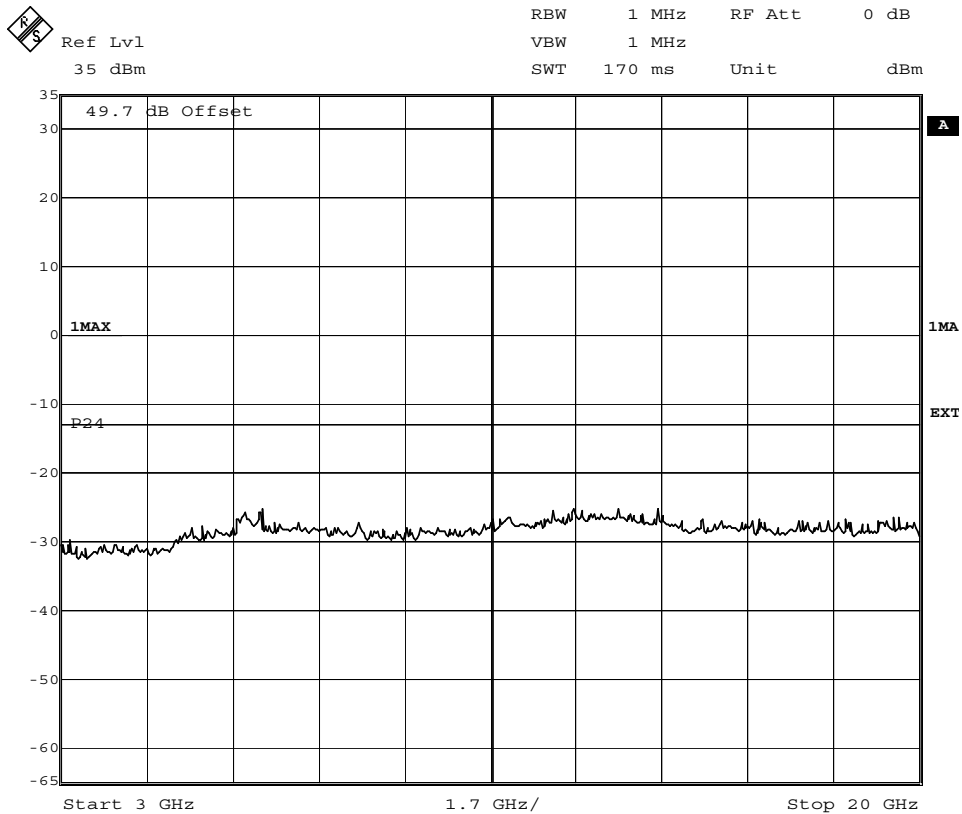
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 18



Date: 5.NOV.2006 20:48:30



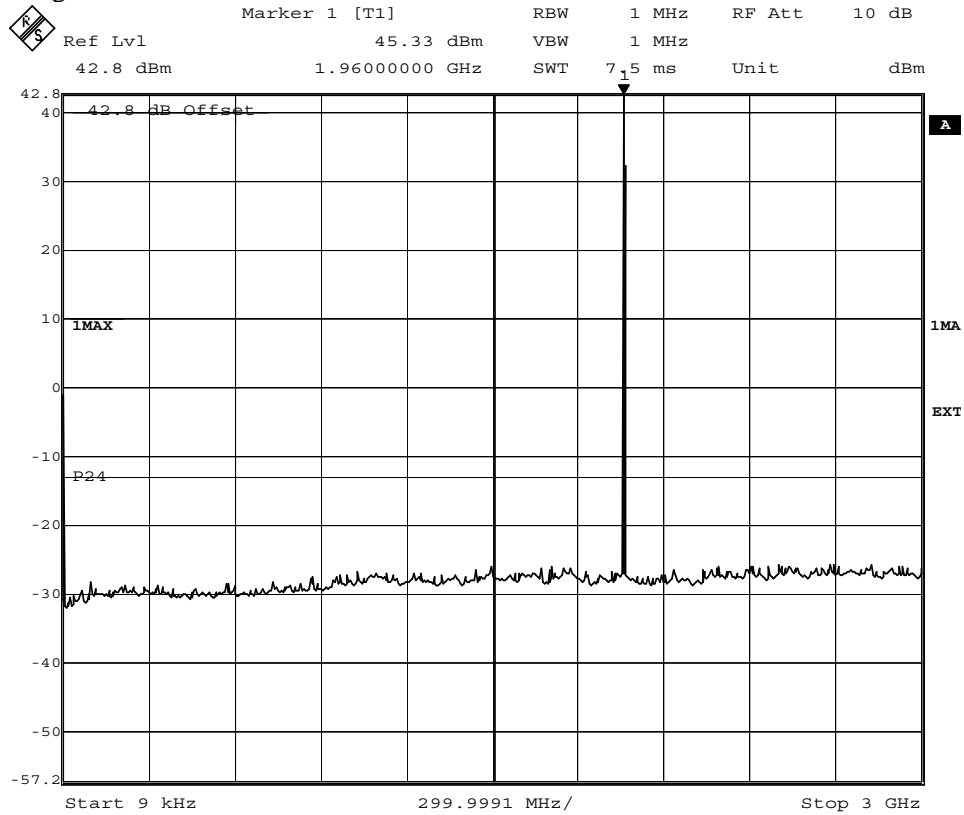
Date: 5.NOV.2006 20:44:13



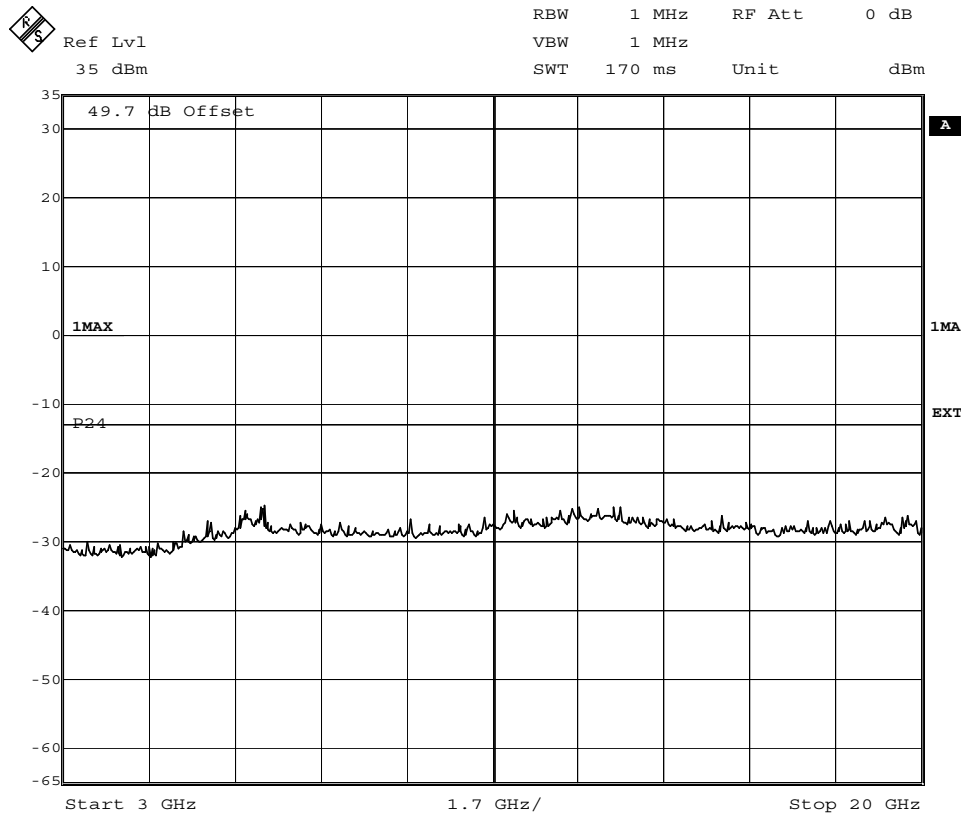
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 19



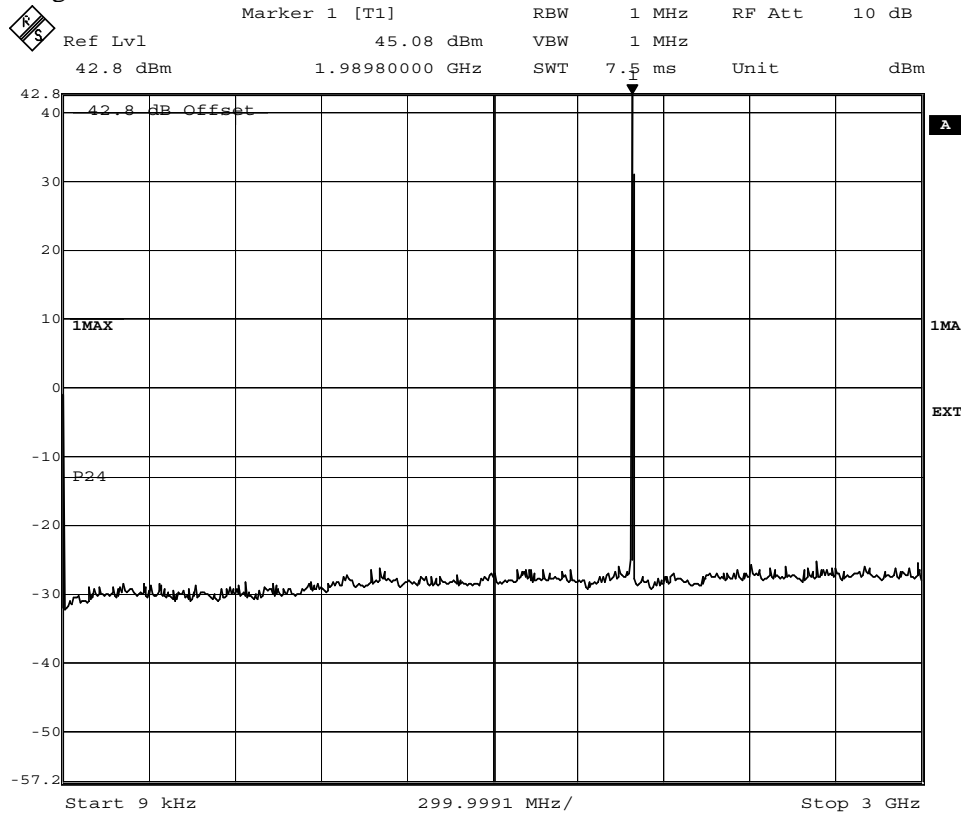
Date: 5.NOV.2006 20:50:00



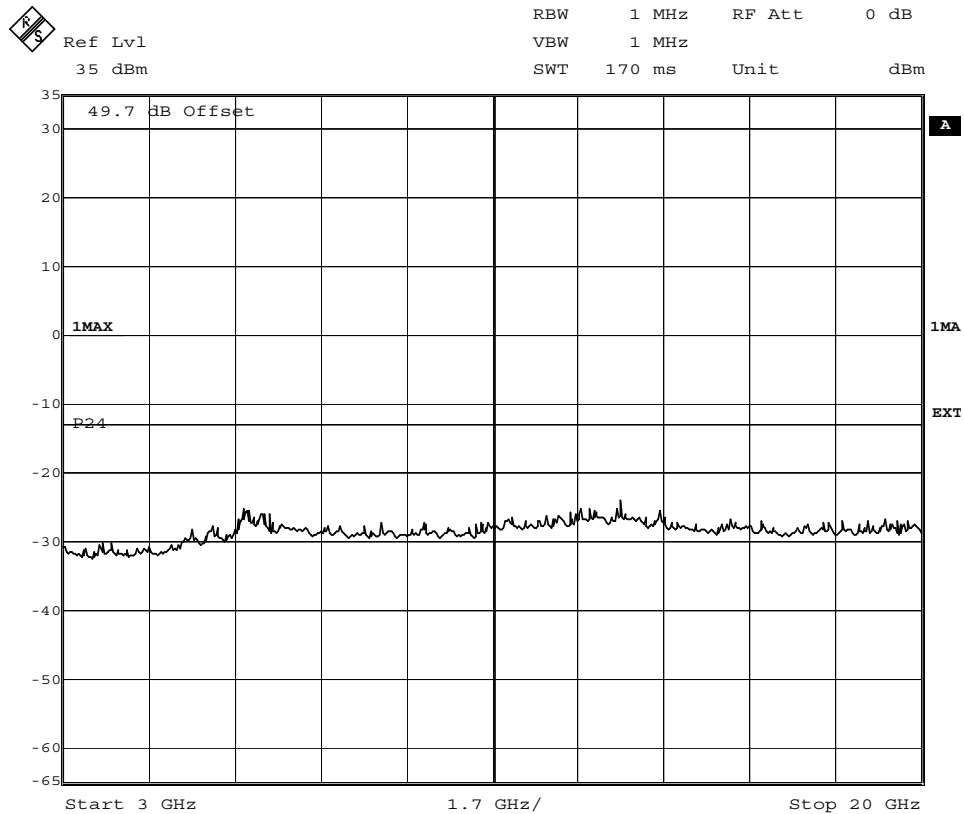
Date: 5.NOV.2006 20:43:17



Diagram 20



Date: 5.NOV.2006 20:55:52



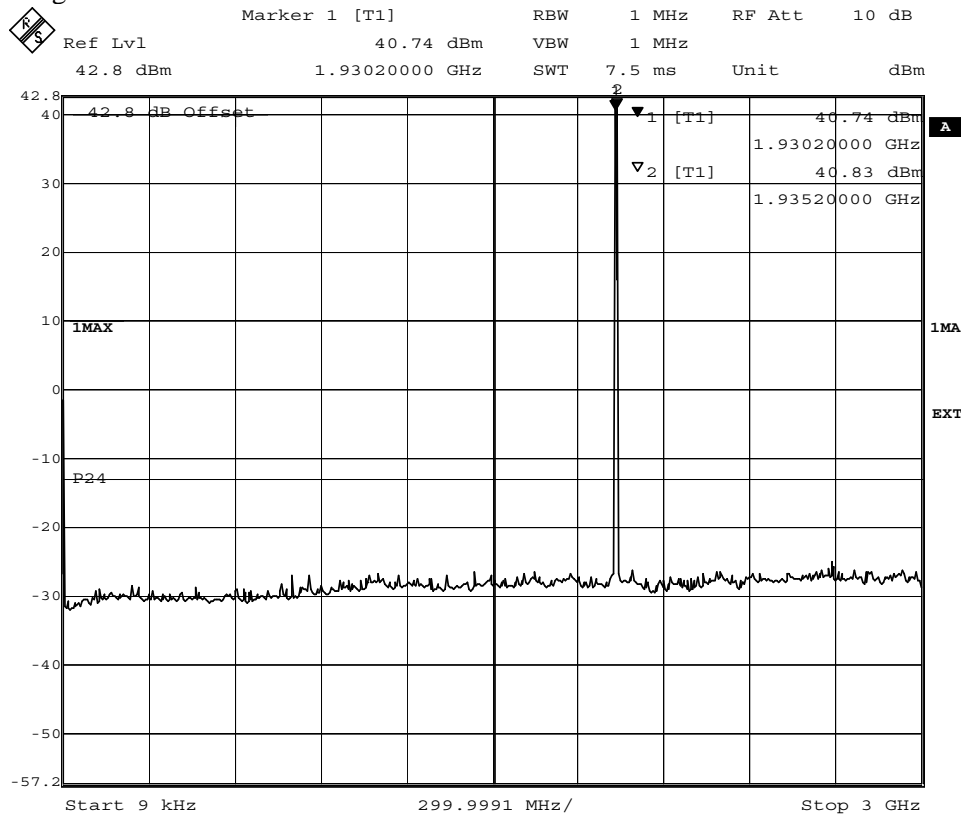
Date: 5.NOV.2006 20:42:26



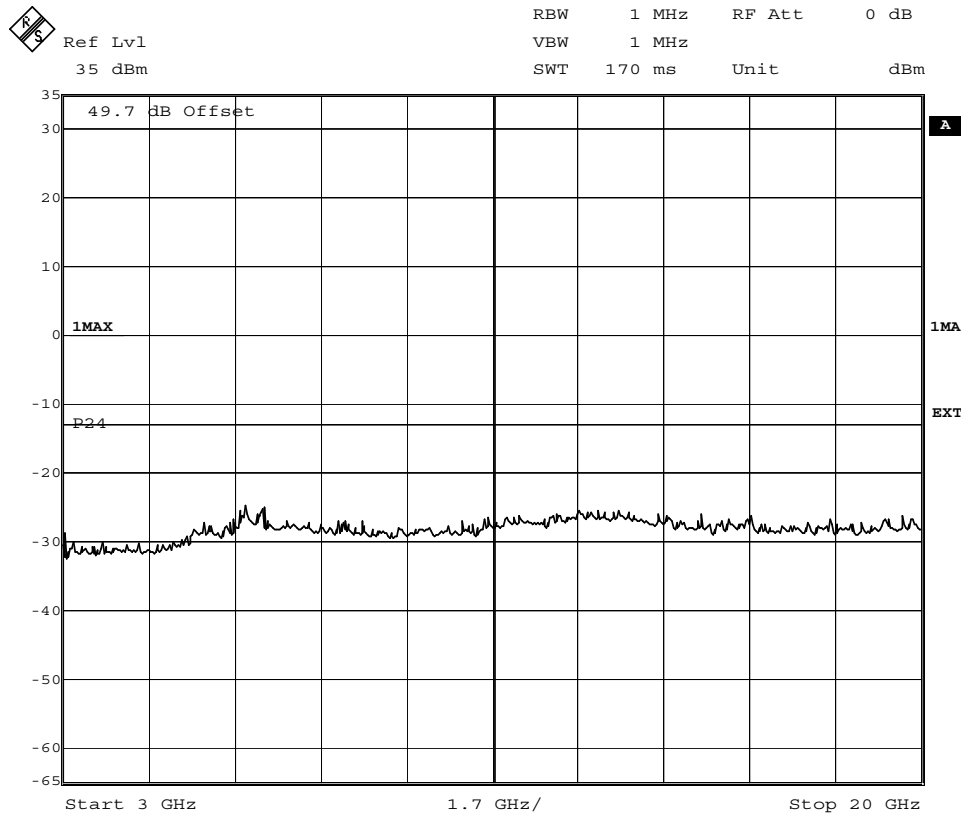
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 21-1



Date: 1.NOV.2006 19:59:00



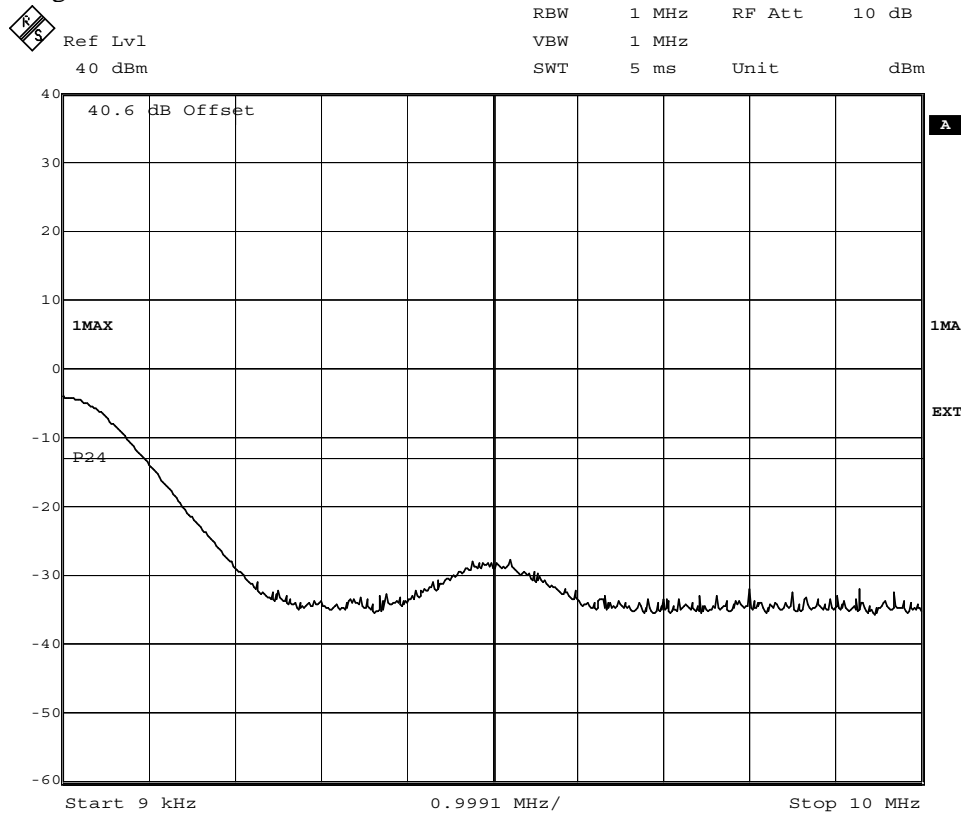
Date: 1.NOV.2006 19:38:28



FCC ID: B5KDKRC1311004-2

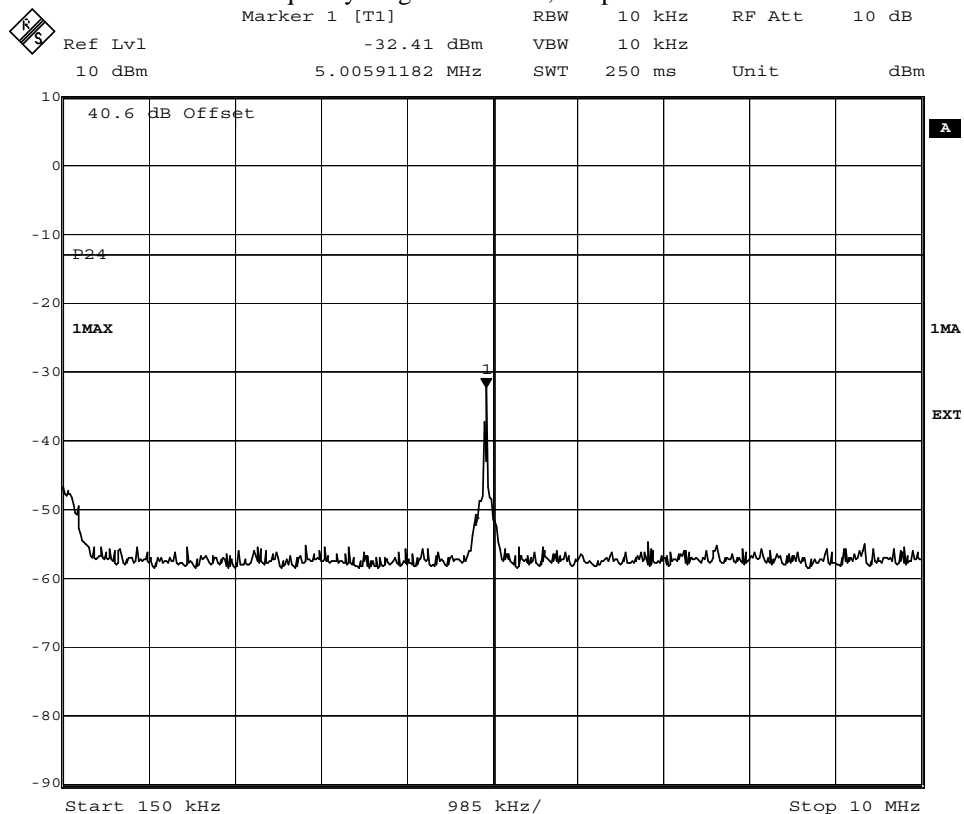
Appendix 4.1

Diagram 21-2



Date: 1.NOV.2006 20:29:19

Note: The emission at 9 kHz was related to the LO feedthrough. A complementary measurement was performed with a smaller RBW to verify that there were no emission in the frequency range 9k-10MHz, see plots below.



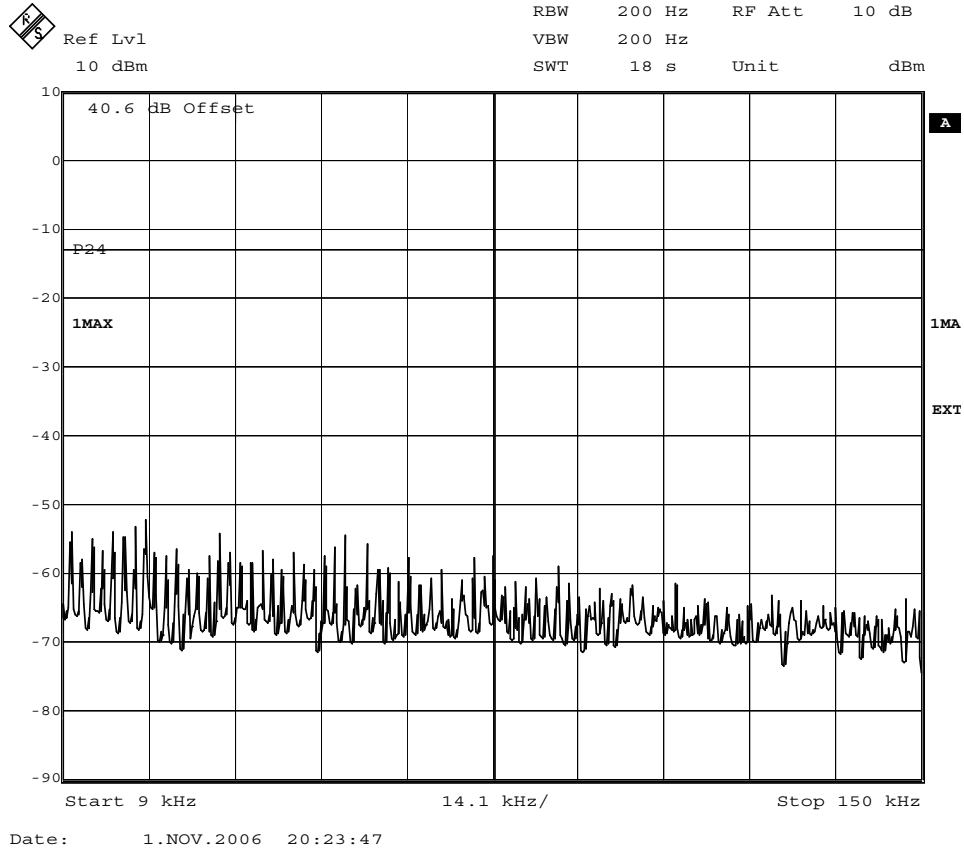
Date: 1.NOV.2006 20:31:43



FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 21-3

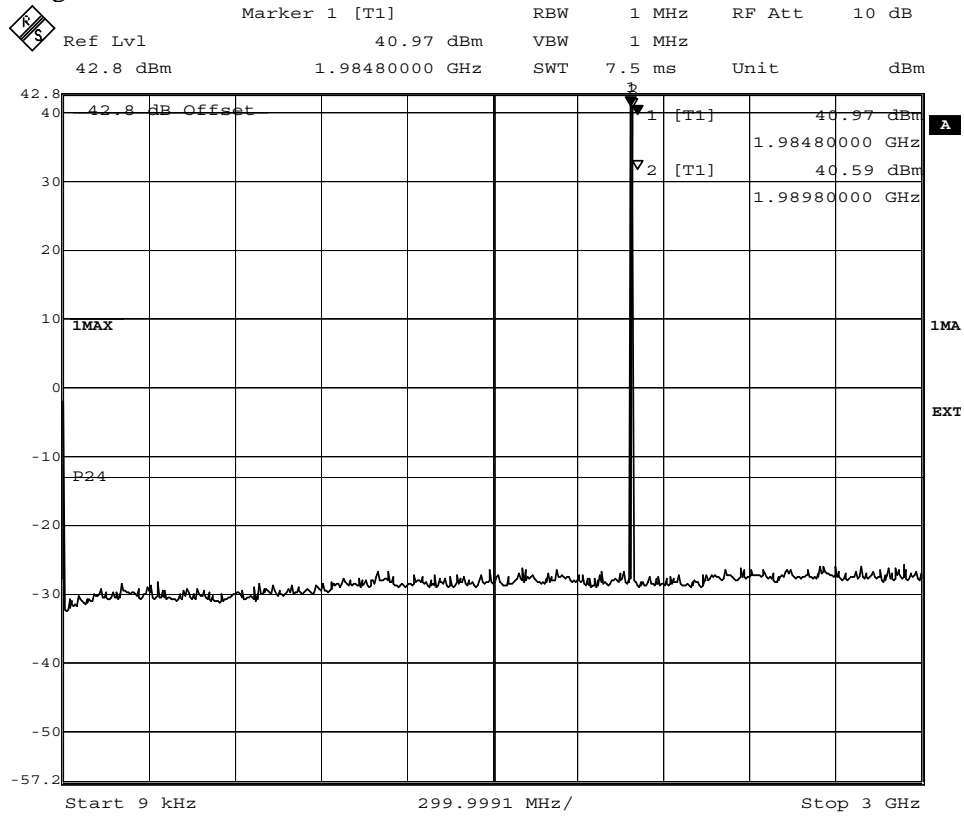




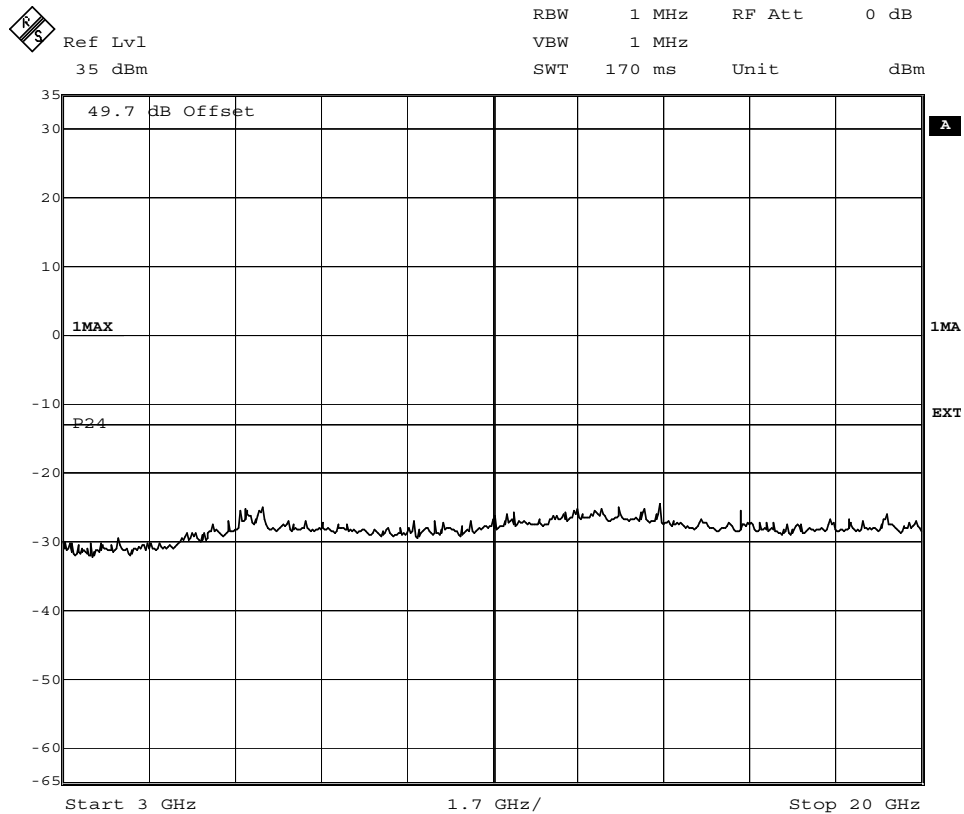
FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 22-1



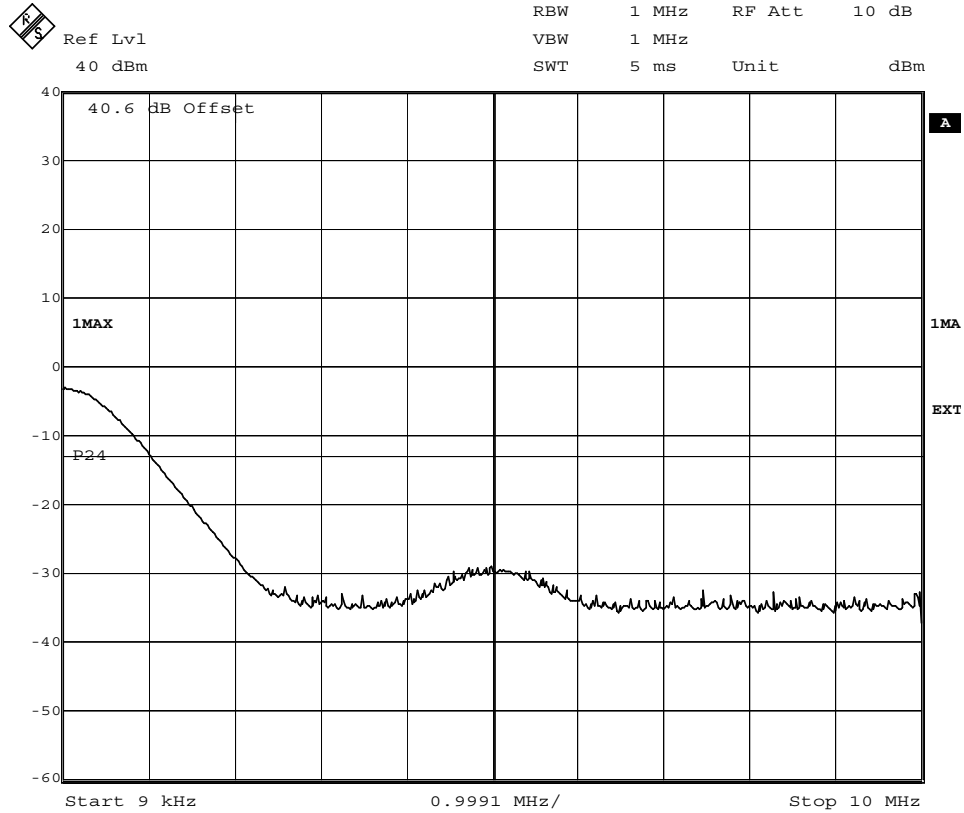
Date: 1.NOV.2006 19:47:59



Date: 1.NOV.2006 19:40:33

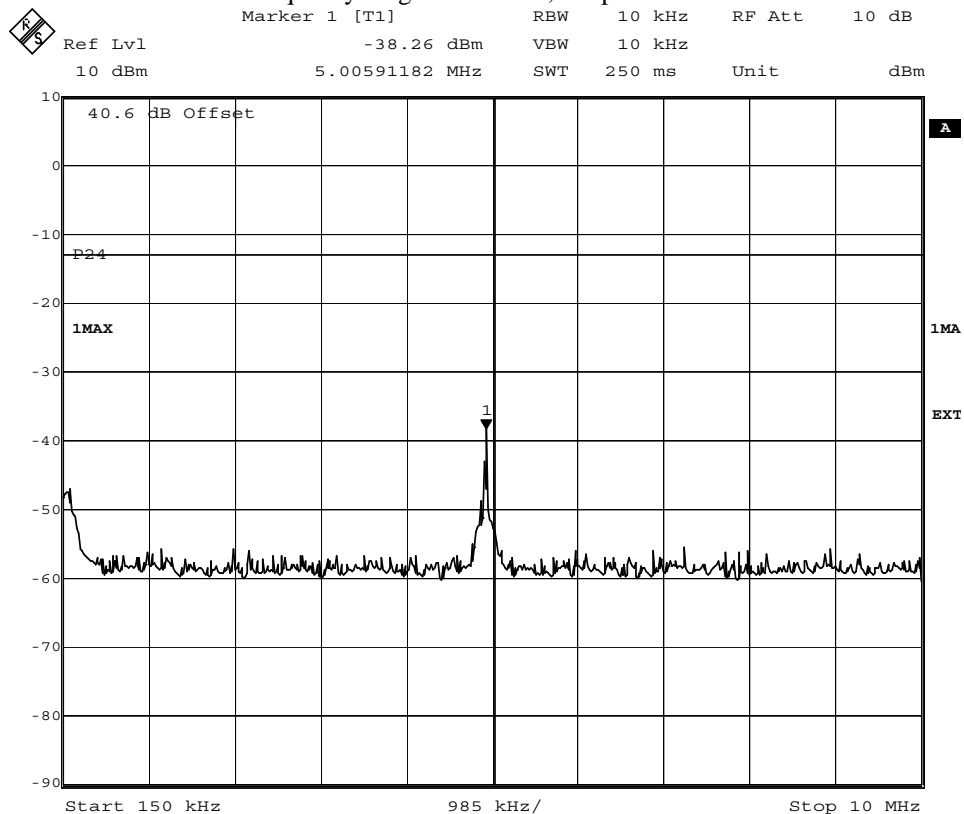


Diagram 22-2



Date: 1.NOV.2006 20:35:19

Note: The emission at 9 kHz was related to the LO feedthrough. A complementary measurement was performed with a smaller RBW to verify that there were no emission in the frequency range 9k-10MHz, see plots below.



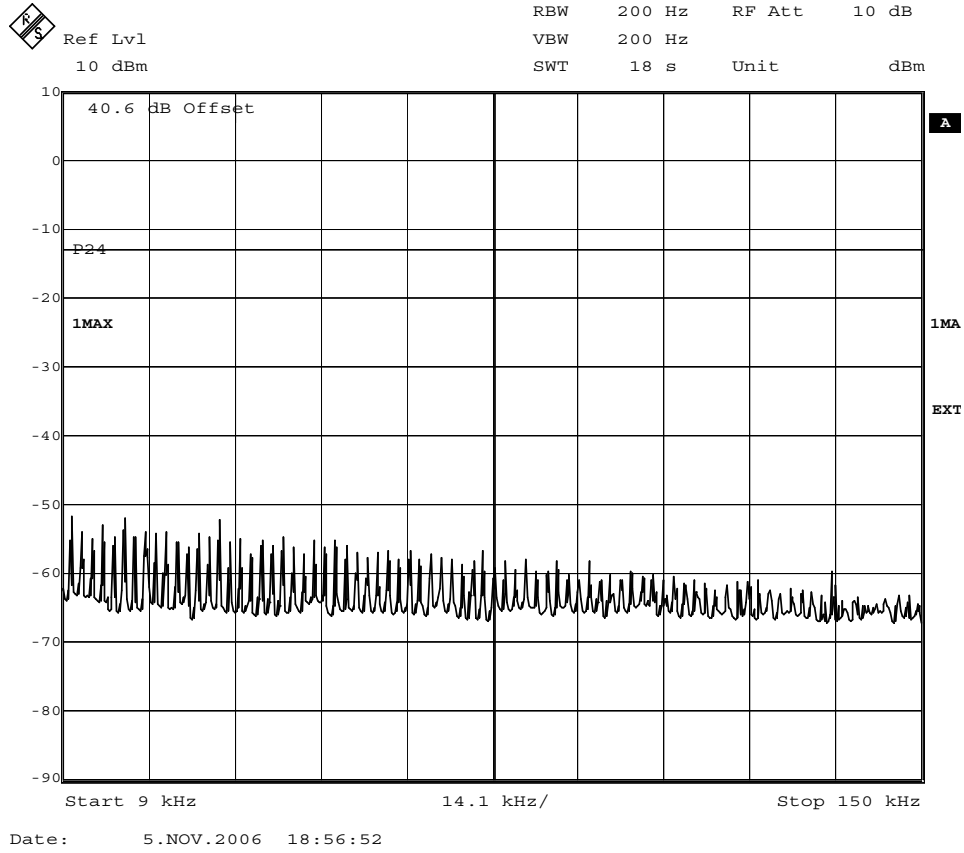
Date: 1.NOV.2006 20:34:45



FCC ID: B5KDKRC1311004-2

Appendix 4.1

Diagram 22-3





Field strength of spurious radiation measurements according to 47CFR 2.1053

Date 2006-11-08	Temperature 21 °C ± 3 °C	Humidity 40 % ± 5 %
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Test set-up and procedure

The test site is listed at FCC, Columbia with registration number: 93866. The test site also complies with RSS 212, Issue 1, Industry Canada file no.:IC 3482.

The transmitter was modulated with pseudorandom data during the measurements. The antenna ports were terminated with 50 ohm loads. The base station was powered by 120VAC 60 Hz during this measurement.

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 – 18 GHz and 1m in the frequency range 18-20 GHz.

A pre-measurement was first performed:

In the frequency range 30 MHz-20 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,

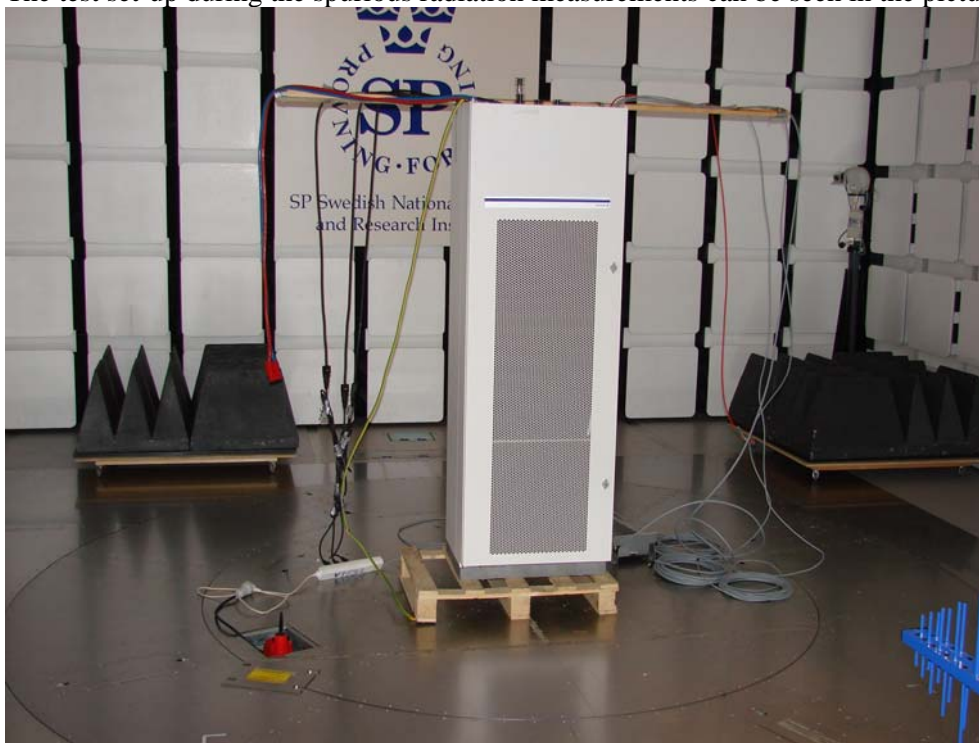
$$\gamma = 20 \log \left(\frac{4\pi D}{\lambda} \right), \gamma \text{ is the propagation loss and } D \text{ is the antenna distance.}$$

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	Calibration Due	SP number
Test site	2008-11	503 881
R&S ESI 26	2007-09	503 292
Control computer	-	503 479
Software: R&S ES-K1, ver. 1.60	-	-
Chase Bilog antenna CBL 6111A	2008-11	503 182
EMCO Horn Antenna 3115	2007-11	502 175
MITEQ Low Noise Amplifier	2007-07	503 285
Std gain horn 8,2-12 GHz, model 16240-25	-	503 939
Std gain horn 12-18 GHz, model 18240-25	-	503 900
Std gain horn 18-20 GHz, model 20240-20	-	s/n 407
Testo 615, Temperature and humidity meter	2007-09	503 505

The test set-up during the spurious radiation measurements can be seen in the picture below:



Results

GMSK and 8-PSK with CDU-G and CDU-K

Frequency (MHz)	Spurious emission level (dBm)	
	Vertical	Horizontal
30-20 000	All emission > 20 dB below limit	All emission > 20 dB below limit
Measurement uncertainty		4.7 dB

Limits

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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FCC ID: B5KDKRC1311004-2

Appendix 6

Hardware list RBS 2206V2

Unit	Product Number	Revision	Serial Number
Cabinet	SEB 112 1154/1	R2A	AB20110385
Door	SXK 109 7157/1	R1A	-
ACCU-11	BMG 980 07/9	R1B	BH41049204
Subrack	BFL 119 424/1	R2A	-
CDU-G 19	BFL 119 153/1	R6E	TR44948153
CDU-K19-01	BFL 119 447/1	R1A	TR44918247
CDU-K19-01	BFL 119 447/1	R1A	TR44918246
Dummy	SXK 107 5047/1	R1D	-
Dummy	SXK 107 5031/2	R1B	-
CXU-10	KRY 101 1856/1	R3D	TR44252258
Dummy	SXK 107 503171	R1B	-
TRU shelf	BFL 119 425/1	R1C	-
Backplane	BFX 101 107/3	R1A	-
dTRU-19	KRC 131 1004/2	R3A	AE52476768
dTRU-19	KRC 131 1004/2	R3A	AE52476777
dTRU-19	KRC 131 1004/2	R3A	AE52476746
dTRU-19	KRC 131 1004/2	R3A	AE52476744
dTRU-19	KRC 131 1004/2	R3A	AE52476767
dTRU-19	KRC 131 1004/2	R3A	AE52476774
IDM-11	BMG 980 327/1	R2A	TR21004159
PSU-shelf	BFL 119 453/1	R1A	(S)BK41067514
Backplane	BFX 101 109/1	R1A	-
PSU-AC-32	BML 353 206/1	R2A	BR80129058
PSU-AC-32	BML 353 206/1	R2A	BR80129061
PSU-AC-32	BML 353 206/1	R2A	BR80129062
Dummy	SXK 107 9314/1	R1D	-
Dummy	-	-	-
TMA-CM-02	SDK 107 881/1	R3A	(S)BG800000QP
Dummy	-	-	-
DXU-23	BOE 602 21/1	R1B	AE53357128
Distribution frame	NBA 101 22/1	R1A	-
OVP-ALM8	NFD 302 34/08	R1A	-
OVP-ALM8	NFD 302 34/08	R1A	-

Software	Revision
R12	06B

FCC ID: B5KDKRC1311004-2

Appendix 7

Photos
Transceiver Unit KRC 131 1004/2, R3A

Front side



Rear side



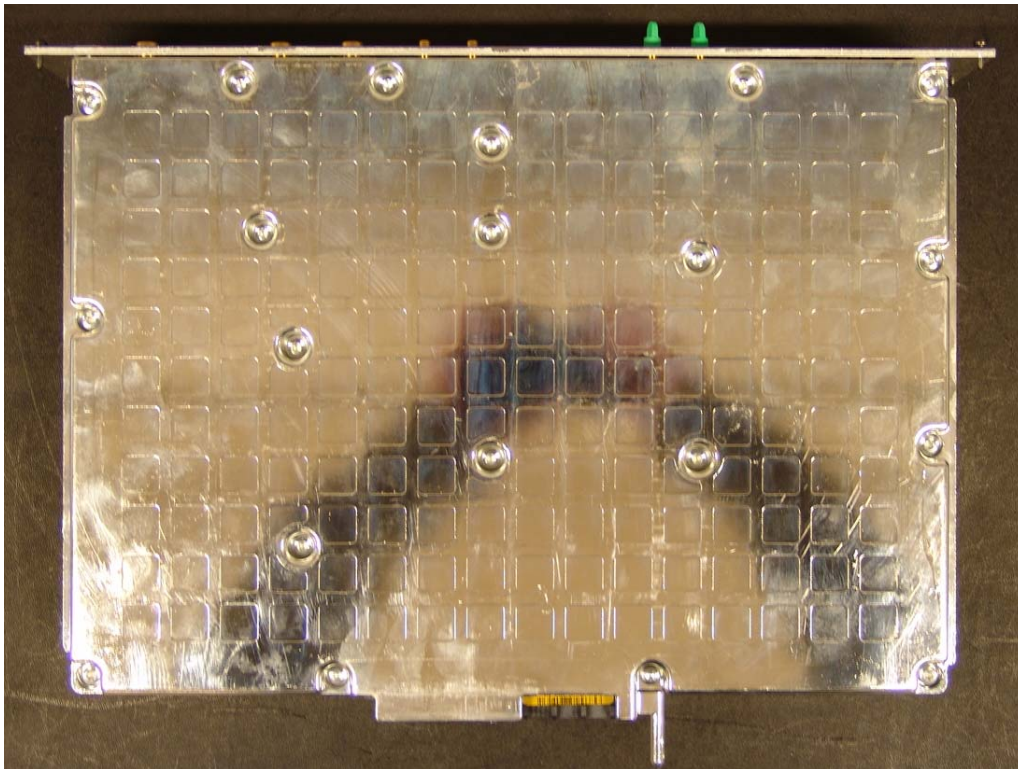
FCC ID label



FCC ID: B5KDKRC1311004-2

Appendix 7

Left side



Right side

