

TEST RESULT SUMMARY

FCC Part 24 Subpart E

MANUFACTURER
ADDRESS

ADC Inc.
P.O. Box 1101
Minneapolis, MN 55440-1101

NAME OF EQUIPMENT

Digivance® CXD 1900 MHz ADB Band

MODEL NUMBERS

DGVF-04000000XXCRN

TEST REPORT NUMBER

WC505364

TEST DATES

18 October, 2005 (TÜV)
20 October, 2005 (ADC)

According to testing performed at TÜV America Inc, the above-mentioned unit is in compliance with the electromagnetic compatibility (EMC) portions of the requirements defined in FCC Part 24 Subpart E.

It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

TÜV America Inc, as an independent testing laboratory, declares that the equipment tested as specified above conforms to the EMC requirements of FCC Part 24 Subpart E "Broadband PCS".

Date: 25 October 2005

Tested By

Technical Writer



J. C. Sausen

G. S. Jakubowski

Not Transferable

EMC EMISSION - TEST REPORT

Test Report File No. : **WC505364** Date of issue: 25 October 2005

Model / Serial Nos. : **DGVF-04000000XXCRN**

Product Name : **Digivance® CXD 1900 MHz ADB Band**

Applicant : **ADC Inc.**

Manufacturer : **ADC Inc.**

Address : **P.O. Box 1101**
: **Minneapolis, MN 55440-1101**

Test Result : ☒ **Positive** ☐ **Negative**

Test Project Number :
Reference(s) : **WC505364**

Total pages including
Appendices : **146**

TÜV America Inc reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. TÜV America Inc shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV America Inc issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full without our written approval. This report shall not be used by the client to claim product endorsement by NVLAP, NIST, or any agency of the US government.

TÜV America Inc and its professional staff hold government and professional organization certifications and are members of AAMI, ACIL, AEA, ANSI, IEEE, NVLAP, and VCCI

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Sign Explanations:

- ☐ - not applicable
- ☒ - applicable

EMISSIONS TEST REGULATIONS :

The emissions tests were performed according to following regulations:

- | | | |
|---|---|------------------------------------|
| ☐ - EN 50081-1 / 1991 | ☐ - Group 1 | ☐ - Group 2 |
| ☐ - EN 55011 / 1991 | ☐ - Class A | ☐ - Class B |
| ☐ - EN 55013 / 1990 | ☐ - Household appliances and similar | |
| ☐ - EN 55014 / 1987 | ☐ - Portable tools | |
| | ☐ - Semiconductor devices | |
| ☐ - EN 55014 / A2:1990 | ☐ - Household appliances and similar | |
| ☐ - EN 55014 / 1993 | ☐ - Portable tools | |
| | ☐ - Semiconductor devices | |
| ☐ - EN 55015 / 1987 | ☐ - Class A | ☐ - Class B |
| ☐ - EN 55015 / A1:1990 | ☐ - Class A | ☐ - Class B |
| ☐ - EN 55015 / 1993 | | |
| ☐ - EN 55022 / 1987 | ☐ - Class A | ☐ - Class B |
| ☐ - EN 55022 / 1994 | ☐ - Class A | ☐ - Class B |
| ☐ - BS | ☐ - Class A | ☐ - Class B |
| ☐ - VCCI | ☐ - Class A | ☐ - Class B |
| ☒ - FCC Part 24 Subpart E | ☐ - Class A | ☐ - Class B |
| ☐ - FCC Part 15 Subpart B | ☐ - Class A | ☐ - Class B |
| ☐ - CISPR 11 (1990) | ☐ - Group 1 | ☐ - Group 2 |
| | ☐ - Class A | ☐ - Class B |
| ☐ - CISPR 22 (1993) | ☐ - Class A | ☐ - Class B |

24.232 Power and antenna height limits

The transmit power measurements were tested at the following test location:

☐ - Test not applicable

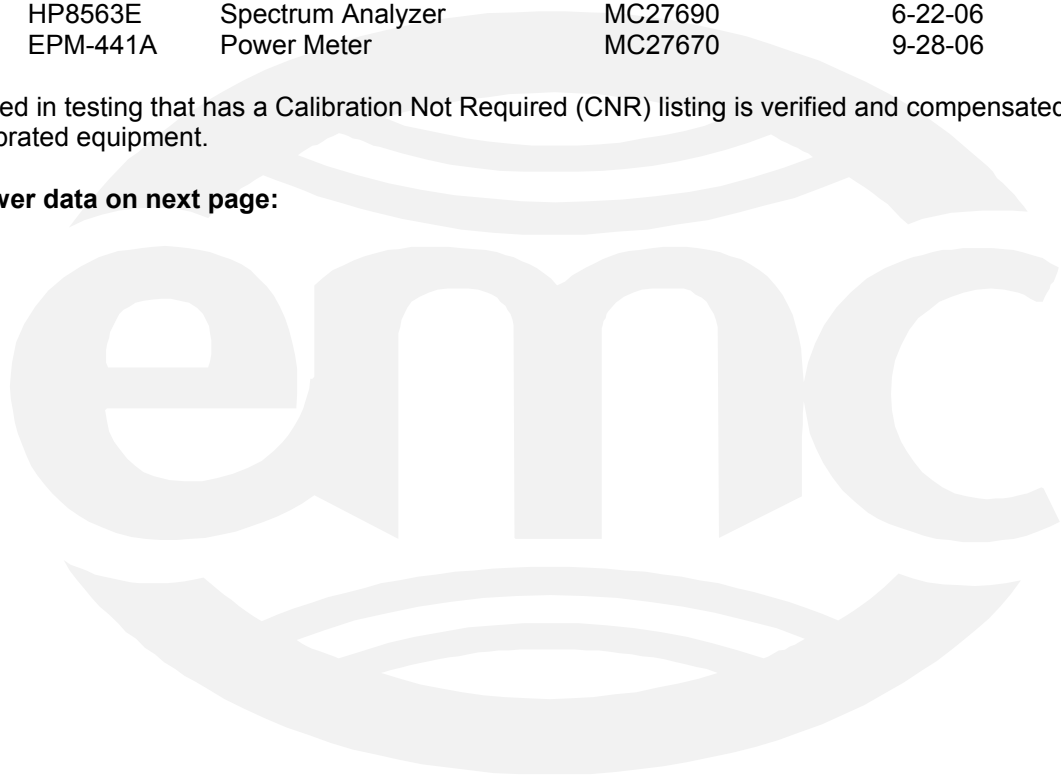
- ☐ - Wild River Lab Large Test Site (Open Area Test Site)
- ☐ - Wild River Lab Small Test Site (Open Area Test Site)
- ☒ - ADC facility

ADC's Test equipment used:

Manufacturer	Model	Description	ADC Serial No.	Cal Due
Aeroflex	49-30-33	Attenuator	n/a	CNR
HP	HP8563E	Spectrum Analyzer	MC27690	6-22-06
HP	EPM-441A	Power Meter	MC27670	9-28-06

Equipment used in testing that has a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

Transmit power data on next page:



Effective Isotropic Radiated Power Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000CRN

*Note: The EUT is a fixed repeater and not a base station.

This measurement was made as a direct conducted emission measurement. The output from the EUT antenna connector was connected to the spectrum analyzer. The carrier output, below, was conducted using a single CW signal generator. The spectrum analyzer level was offset to compensate for attenuators and cable loss between the EUT and the analyzer.

A CW signal was used at the low, mid and high parts of the selected band. The spectrum analyzer level was offset by 51.3 dB to compensate for attenuators and cable loss between the EUT and the analyzer.

Band A	(1900 MHz)
Carrier Frequency	Carrier Output
1930.0 MHz	<u>40.97</u> dBm
1937.5 MHz	<u>41.47</u> dBm
1945.0 MHz	<u>41.13</u> dBm

Band D	(1900 MHz)
Carrier Frequency	Carrier Output
1945.0 MHz	<u>41.13</u> dBm
1947.5 MHz	<u>41.47</u> dBm
1950.0 MHz	<u>41.97</u> dBm

Band B	(1900 MHz)
Carrier Frequency	Carrier Output
1950.0 MHz	<u>41.97</u> dBm
1957.5 MHz	<u>41.47</u> dBm
1965.0 MHz	<u>41.47</u> dBm

24.235 Frequency Stability

The Frequency Stability measurements were tested at the following test location:

☐ - Test not applicable

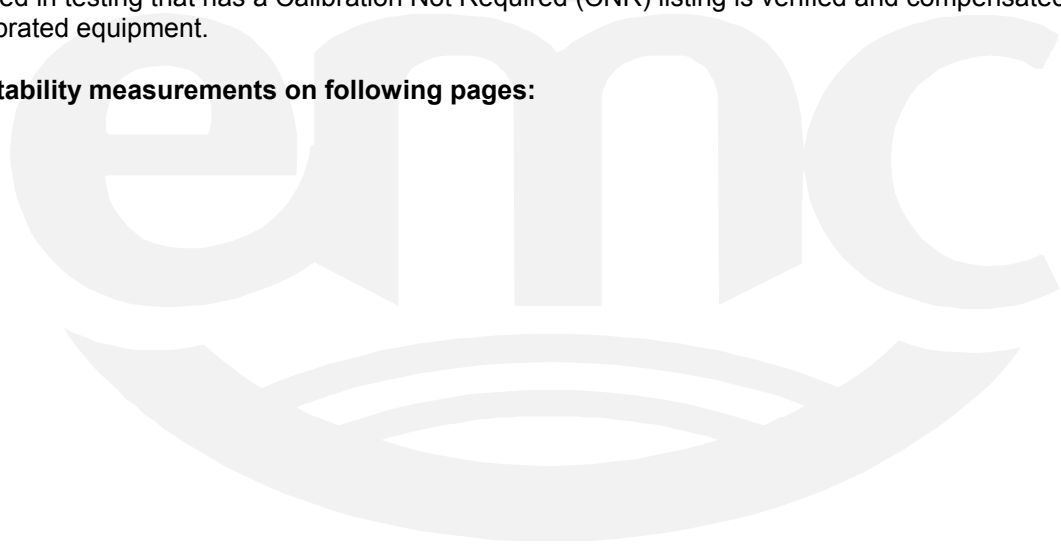
- ☐ - Wild River Lab Large Test Site (Open Area Test Site)
- ☐ - Wild River Lab Small Test Site (Open Area Test Site)
- ☒ - ADC facility

ADC's Test equipment used:

Manufacturer	Model	Description	ADC Serial No.	Cal Due
Aeroflex	49-30-33	Attenuator	n/a	CNR
HP	5347A	Freq. counter	MC27569	7-21-06
Staco	1520CT	Variable Auto Transformer	MC/44655	CNR
Thermotron	n/a	Temperature Chamber	MC18966	3-1-06
HP	HP8563E	Spectrum Analyzer	MC27690	6-22-06
HP	EPM-441A	Power Meter	MC27670	9-28-06
Fluke	26III	Multimeter	MC22687	4-27-06

Equipment used in testing that has a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

Frequency Stability measurements on following pages:



**Frequency Tolerance Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000XXCRN**

EUT A Band (1900 MHz)

Input Voltage	Carrier Frequency	Measured Frequency	Meets Requirements?
102 VAC	1930.000 MHz	1930.000 MHz	Yes
120 VAC	1930.000 MHz	1930.000 MHz	Yes
138 VAC	1930.000 MHz	1930.000 MHz	Yes
102 VAC	1937.500 MHz	1937.500 MHz	Yes
120 VAC	1937.500 MHz	1937.500 MHz	Yes
138 VAC	1937.500 MHz	1937.500 MHz	Yes
102 VAC	1945.000 MHz	1945.000 MHz	Yes
120 VAC	1945.000 MHz	1945.000 MHz	Yes
138 VAC	1945.000 MHz	1945.000 MHz	Yes
Temperature	Carrier Frequency	Measured Frequency	Meets Requirements?
-30 Deg. C	1930.000 MHz	1930.000 MHz	Yes
-20 Deg. C	1930.000 MHz	1930.000 MHz	Yes
-10 Deg. C	1930.000 MHz	1930.000 MHz	Yes
0 Deg. C	1930.000 MHz	1930.000 MHz	Yes
10 Deg. C	1930.000 MHz	1930.000 MHz	Yes
20 Deg. C	1930.000 MHz	1930.000 MHz	Yes
30 Deg. C	1930.000 MHz	1930.000 MHz	Yes
40 Deg. C	1930.000 MHz	1930.000 MHz	Yes
50 Deg. C	1930.000 MHz	1930.000 MHz	Yes
-30 Deg. C	1937.500 MHz	1937.500 MHz	Yes
-20 Deg. C	1937.500 MHz	1937.500 MHz	Yes
-10 Deg. C	1937.500 MHz	1937.500 MHz	Yes
0 Deg. C	1937.500 MHz	1937.500 MHz	Yes
10 Deg. C	1937.500 MHz	1937.500 MHz	Yes
20 Deg. C	1937.500 MHz	1937.500 MHz	Yes
30 Deg. C	1937.500 MHz	1937.500 MHz	Yes
40 Deg. C	1937.500 MHz	1937.500 MHz	Yes
50 Deg. C	1937.500 MHz	1937.500 MHz	Yes
-30 Deg. C	1945.000 MHz	1945.000 MHz	Yes
-20 Deg. C	1945.000 MHz	1945.000 MHz	Yes
-10 Deg. C	1945.000 MHz	1945.000 MHz	Yes
0 Deg. C	1945.000 MHz	1945.000 MHz	Yes
10 Deg. C	1945.000 MHz	1945.000 MHz	Yes
20 Deg. C	1945.000 MHz	1945.000 MHz	Yes
30 Deg. C	1945.000 MHz	1945.000 MHz	Yes
40 Deg. C	1945.000 MHz	1945.000 MHz	Yes
50 Deg. C	1945.000 MHz	1945.000 MHz	Yes

**Frequency Tolerance Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000XXCRN**

EUT D Band (1900 MHz)

Input Voltage	Carrier Frequency	Measured Frequency	Meets Requirements?
102 VAC	1945.000 MHz	1945.000 MHz	Yes
120 VAC	1945.000 MHz	1945.000 MHz	Yes
138 VAC	1945.000 MHz	1945.000 MHz	Yes
102 VAC	1947.500 MHz	1947.500 MHz	Yes
120 VAC	1947.500 MHz	1947.500 MHz	Yes
138 VAC	1947.500 MHz	1947.500 MHz	Yes
102 VAC	1950.000 MHz	1950.000 MHz	Yes
120 VAC	1950.000 MHz	1950.000 MHz	Yes
138 VAC	1950.000 MHz	1950.000 MHz	Yes
Temperature	Carrier Frequency	Measured Frequency	Meets Requirements?
-30 Deg. C	1945.000 MHz	1945.000 MHz	Yes
-20 Deg. C	1945.000 MHz	1945.000 MHz	Yes
-10 Deg. C	1945.000 MHz	1945.000 MHz	Yes
0 Deg. C	1945.000 MHz	1945.000 MHz	Yes
10 Deg. C	1945.000 MHz	1945.000 MHz	Yes
20 Deg. C	1945.000 MHz	1945.000 MHz	Yes
30 Deg. C	1945.000 MHz	1945.000 MHz	Yes
40 Deg. C	1945.000 MHz	1945.000 MHz	Yes
50 Deg. C	1945.000 MHz	1945.000 MHz	Yes
-30 Deg. C	1947.500 MHz	1947.500 MHz	Yes
-20 Deg. C	1947.500 MHz	1947.500 MHz	Yes
-10 Deg. C	1947.500 MHz	1947.500 MHz	Yes
0 Deg. C	1947.500 MHz	1947.500 MHz	Yes
10 Deg. C	1947.500 MHz	1947.500 MHz	Yes
20 Deg. C	1947.500 MHz	1947.500 MHz	Yes
30 Deg. C	1947.500 MHz	1947.500 MHz	Yes
40 Deg. C	1947.500 MHz	1947.500 MHz	Yes
50 Deg. C	1947.500 MHz	1947.500 MHz	Yes
-30 Deg. C	1950.000 MHz	1950.000 MHz	Yes
-20 Deg. C	1950.000 MHz	1950.000 MHz	Yes
-10 Deg. C	1950.000 MHz	1950.000 MHz	Yes
0 Deg. C	1950.000 MHz	1950.000 MHz	Yes
10 Deg. C	1950.000 MHz	1950.000 MHz	Yes
20 Deg. C	1950.000 MHz	1950.000 MHz	Yes
30 Deg. C	1950.000 MHz	1950.000 MHz	Yes
40 Deg. C	1950.000 MHz	1950.000 MHz	Yes
50 Deg. C	1950.000 MHz	1950.000 MHz	Yes

**Frequency Tolerance Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000XXCRN**

EUT B Band (1900 MHz)

Input Voltage	Carrier Frequency	Measured Frequency	Meets Requirements?
102 VAC	1950.000 MHz	1950.000 MHz	Yes
120 VAC	1950.000 MHz	1950.000 MHz	Yes
138 VAC	1950.000 MHz	1950.000 MHz	Yes
102 VAC	1957.500 MHz	1957.500 MHz	Yes
120 VAC	1957.500 MHz	1957.500 MHz	Yes
138 VAC	1957.500 MHz	1957.500 MHz	Yes
102 VAC	1965.000 MHz	1965.000 MHz	Yes
120 VAC	1965.000 MHz	1965.000 MHz	Yes
138 VAC	1965.000 MHz	1965.000 MHz	Yes
Temperature	Carrier Frequency	Measured Frequency	Meets Requirements?
-30 Deg. C	1950.000 MHz	1950.000 MHz	Yes
-20 Deg. C	1950.000 MHz	1950.000 MHz	Yes
-10 Deg. C	1950.000 MHz	1950.000 MHz	Yes
0 Deg. C	1950.000 MHz	1950.000 MHz	Yes
10 Deg. C	1950.000 MHz	1950.000 MHz	Yes
20 Deg. C	1950.000 MHz	1950.000 MHz	Yes
30 Deg. C	1950.000 MHz	1950.000 MHz	Yes
40 Deg. C	1950.000 MHz	1950.000 MHz	Yes
50 Deg. C	1950.000 MHz	1950.000 MHz	Yes
-30 Deg. C	1957.500 MHz	1957.500 MHz	Yes
-20 Deg. C	1957.500 MHz	1957.500 MHz	Yes
-10 Deg. C	1957.500 MHz	1957.500 MHz	Yes
0 Deg. C	1957.500 MHz	1957.500 MHz	Yes
10 Deg. C	1957.500 MHz	1957.500 MHz	Yes
20 Deg. C	1957.500 MHz	1957.500 MHz	Yes
30 Deg. C	1957.500 MHz	1957.500 MHz	Yes
40 Deg. C	1957.500 MHz	1957.500 MHz	Yes
50 Deg. C	1957.500 MHz	1957.500 MHz	Yes
-30 Deg. C	1965.000 MHz	1965.000 MHz	Yes
-20 Deg. C	1965.000 MHz	1965.000 MHz	Yes
-10 Deg. C	1965.000 MHz	1965.000 MHz	Yes
0 Deg. C	1965.000 MHz	1965.000 MHz	Yes
10 Deg. C	1965.000 MHz	1965.000 MHz	Yes
20 Deg. C	1965.000 MHz	1965.000 MHz	Yes
30 Deg. C	1965.000 MHz	1965.000 MHz	Yes
40 Deg. C	1965.000 MHz	1965.000 MHz	Yes
50 Deg. C	1965.000 MHz	1965.000 MHz	Yes

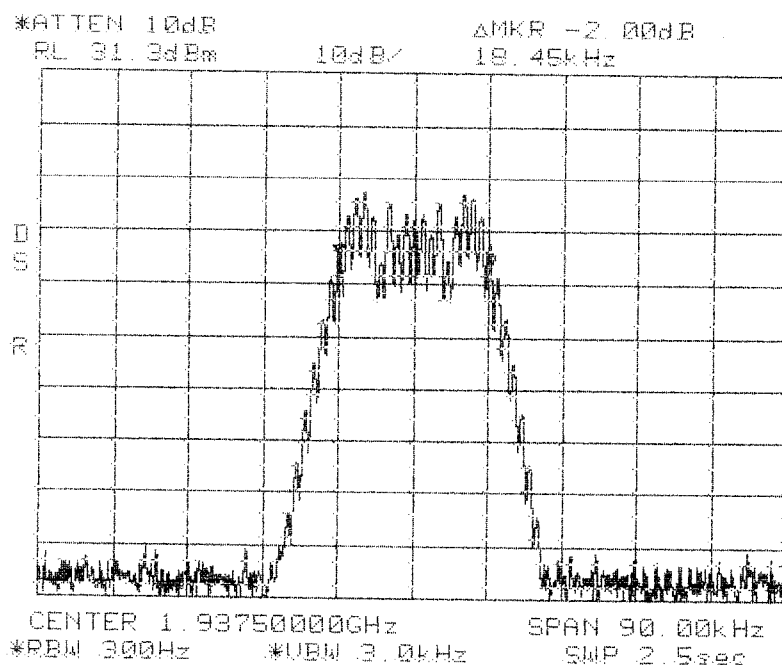
Occupied Bandwidth Modulation Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000XXCRN

An input/output Occupied Bandwidth test was done with modulation types: FM, TDMA, GSM, 16 QAM, and CDMA. The purpose was to determine the amount of distortion added to different types of modulation schemes by the EUT. The following plots show input signals vs. output signals.

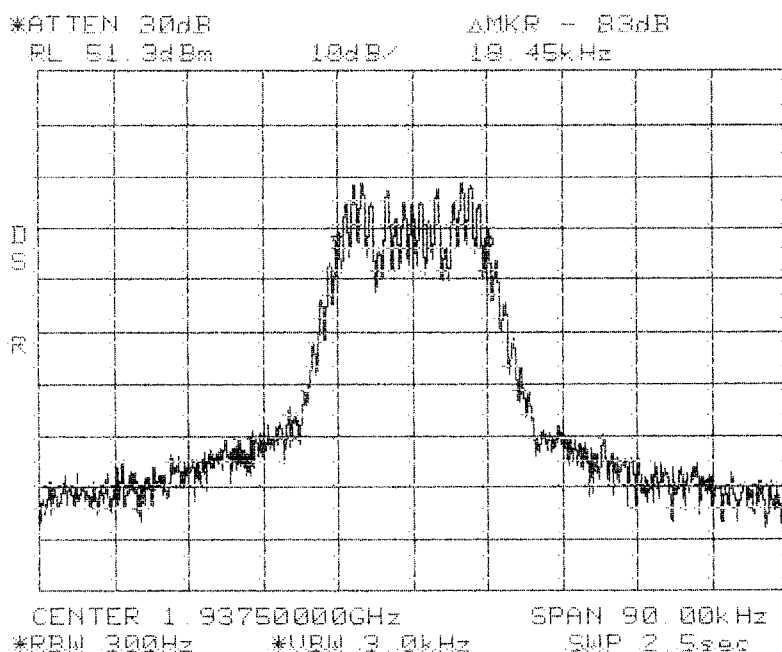
Results:

Pass (see plots)

Center: 1937.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz



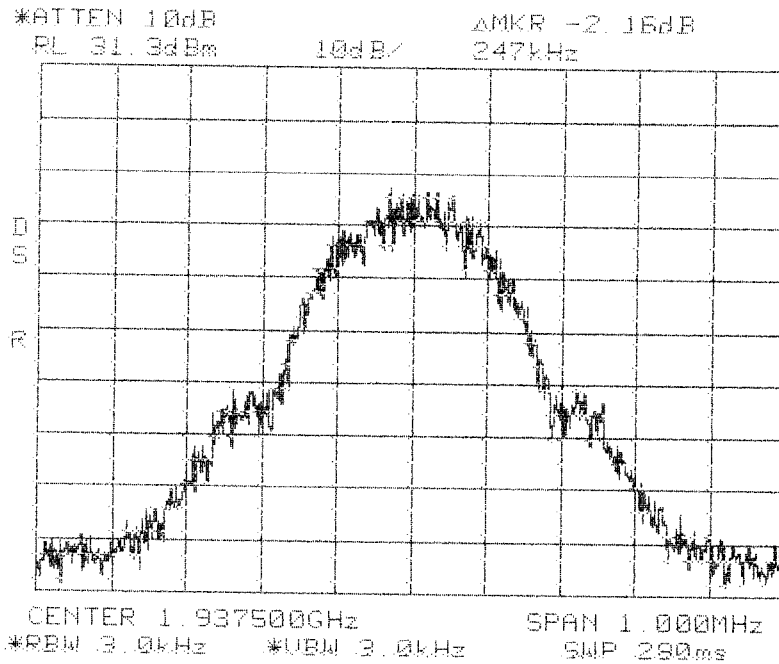
**Occupied Bandwidth
FM In
PCS 1900 MHz
A Band**



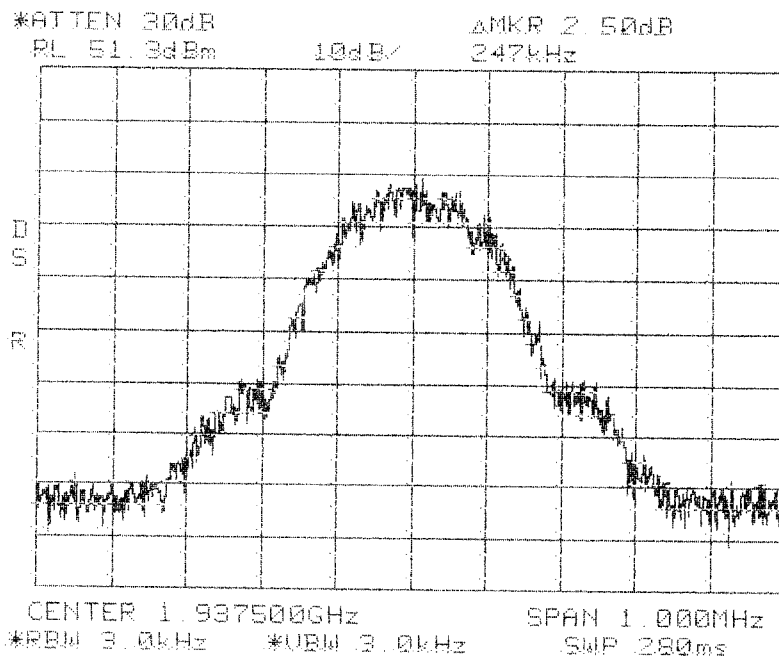
**Occupied Bandwidth
FM Out
PCS 1900 MHz
A Band**

Center: 1937.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz

Center: 1937.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz



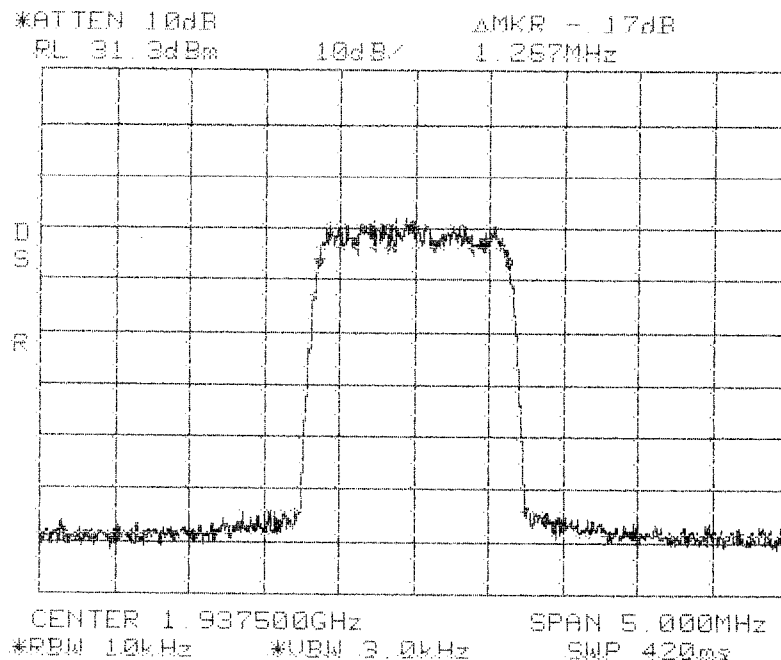
**Occupied Bandwidth
GSM In
PCS 1900 MHz
A Band**



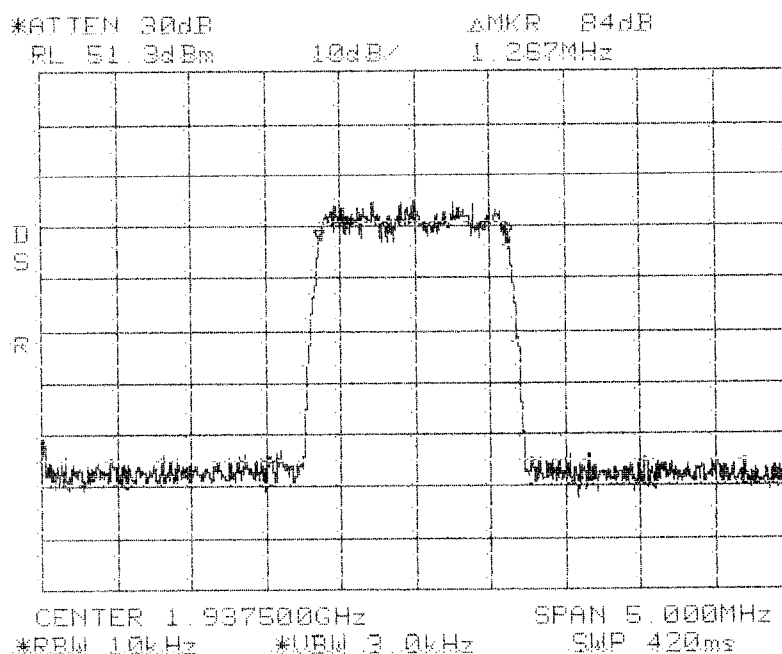
**Occupied Bandwidth
GSM Out
PCS 1900 MHz
A Band**

Center: 1937.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz

Center: 1937.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz



**Occupied Bandwidth
CDMA In
PCS 1900 MHz
A Band**

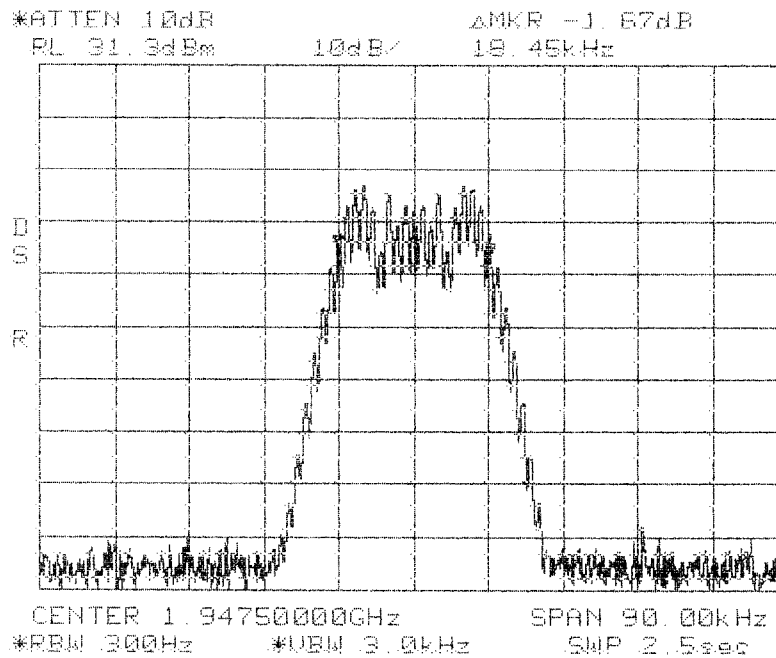


**Occupied Bandwidth
CDMA Out
PCS 1900 MHz
A Band**

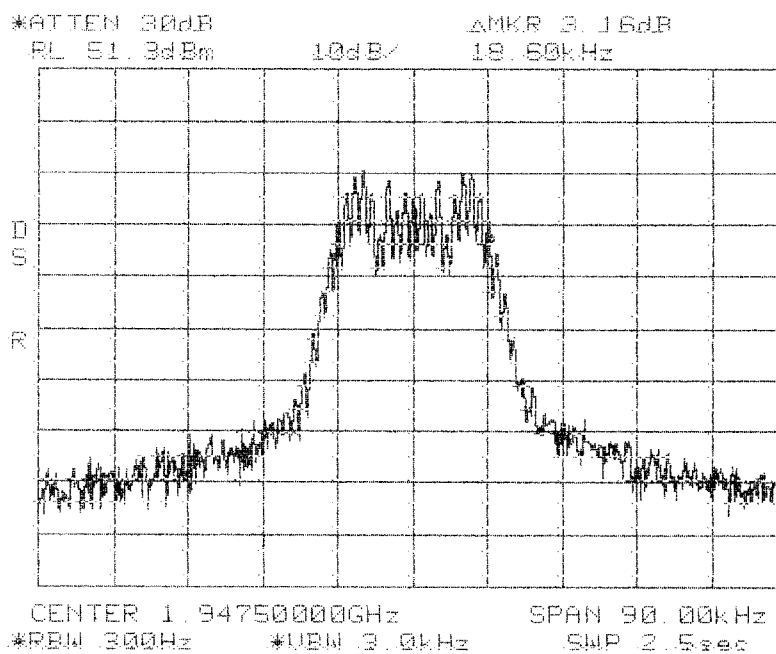
Center: 1937.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz

Center: 1947.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz

**Occupied Bandwidth
FM In
PCS 1900 MHz
D Band**

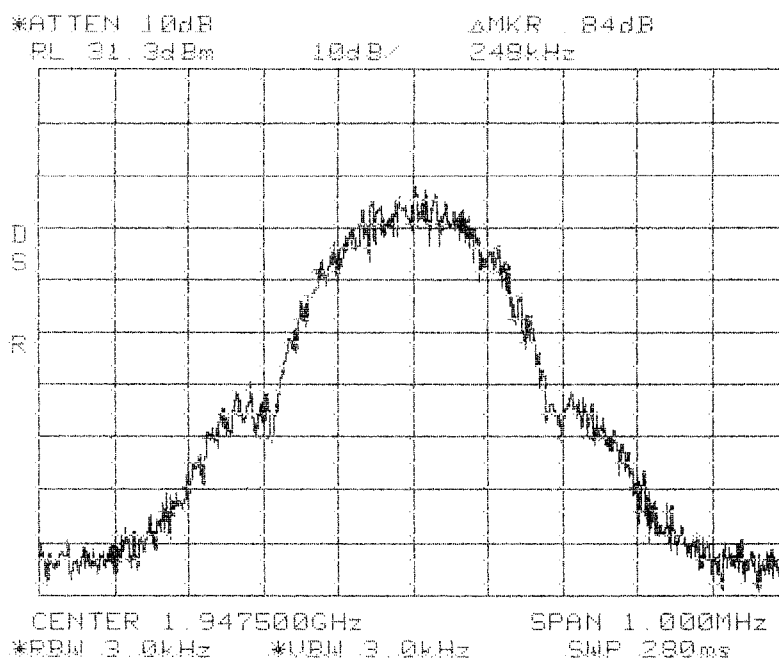


**Occupied Bandwidth
FM Out
PCS 1900 MHz
D Band**

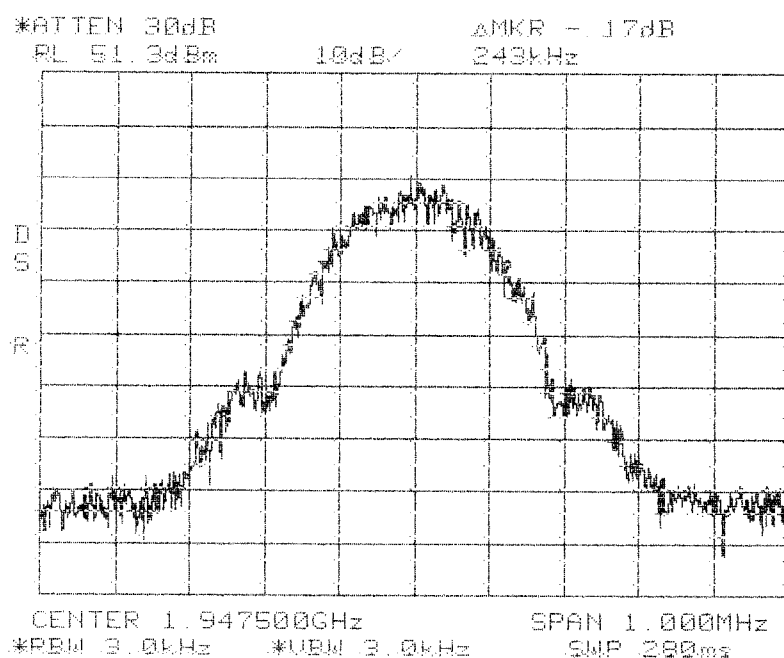


Center: 1947.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz

Center: 1947.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz



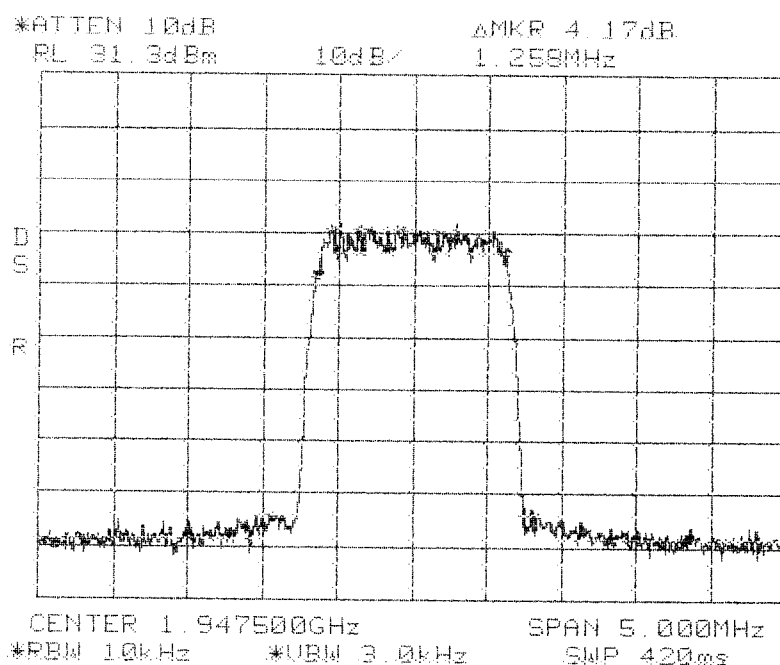
**Occupied Bandwidth
GSM In
PCS 1900 MHz
D Band**



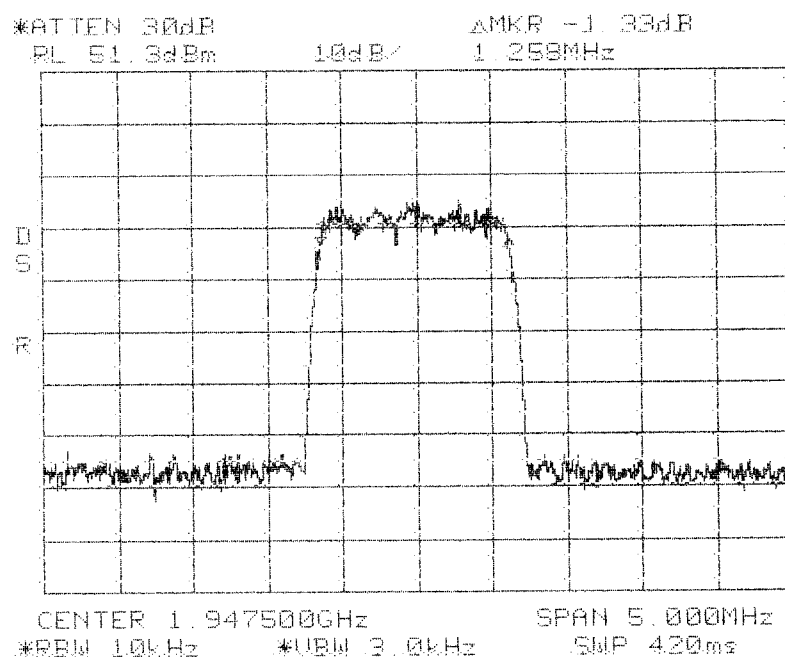
**Occupied Bandwidth
GSM Out
PCS 1900 MHz
D Band**

Center: 1947.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz

Center: 1947.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz



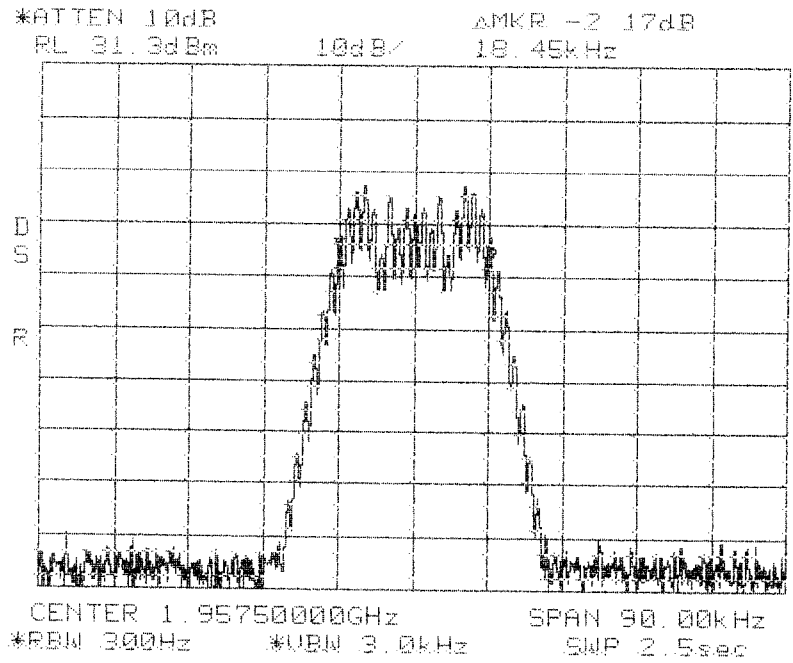
**Occupied Bandwidth
CDMA In
PCS 1900 MHz
D Band**



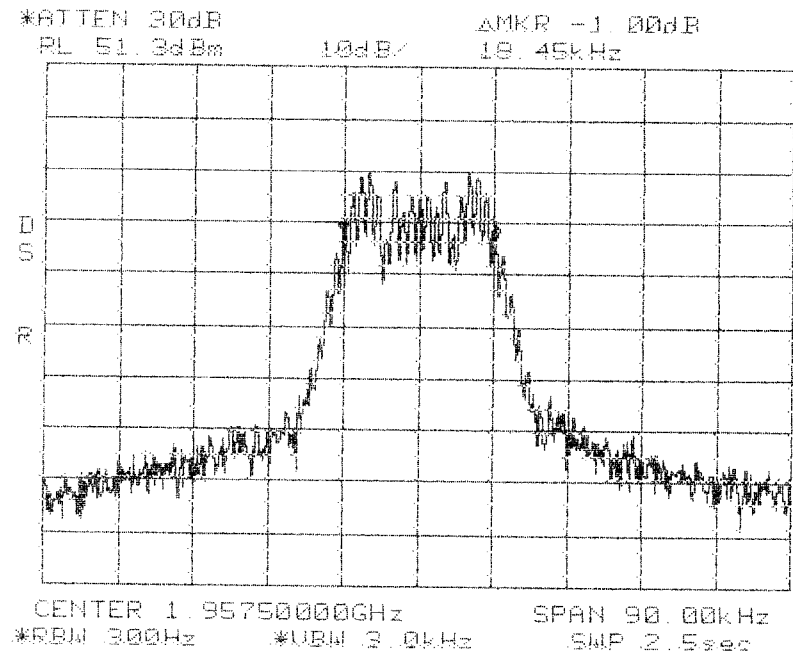
**Occupied Bandwidth
CDMA Out
PCS 1900 MHz
D Band**

Center: 1947.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz

Center: 1957.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz



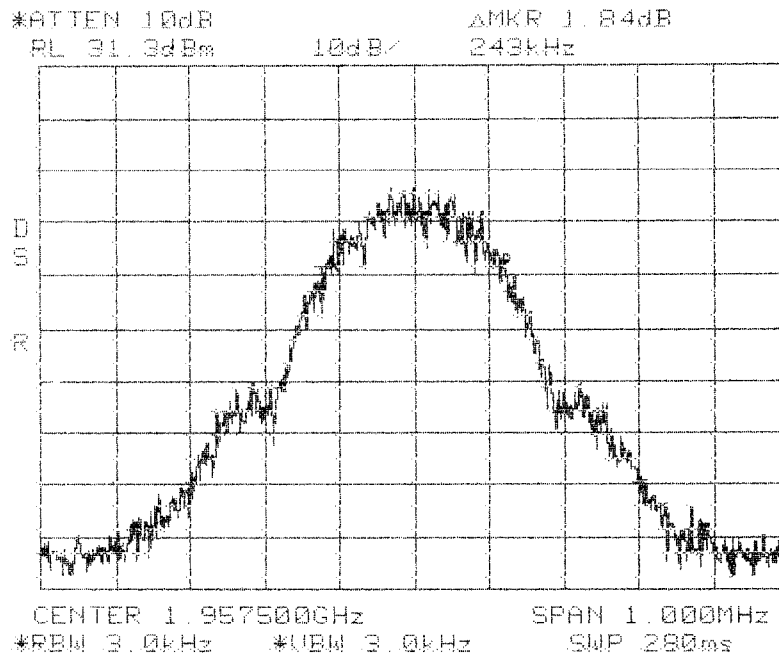
**Occupied Bandwidth
FM In
PCS 1900 MHz
B Band**



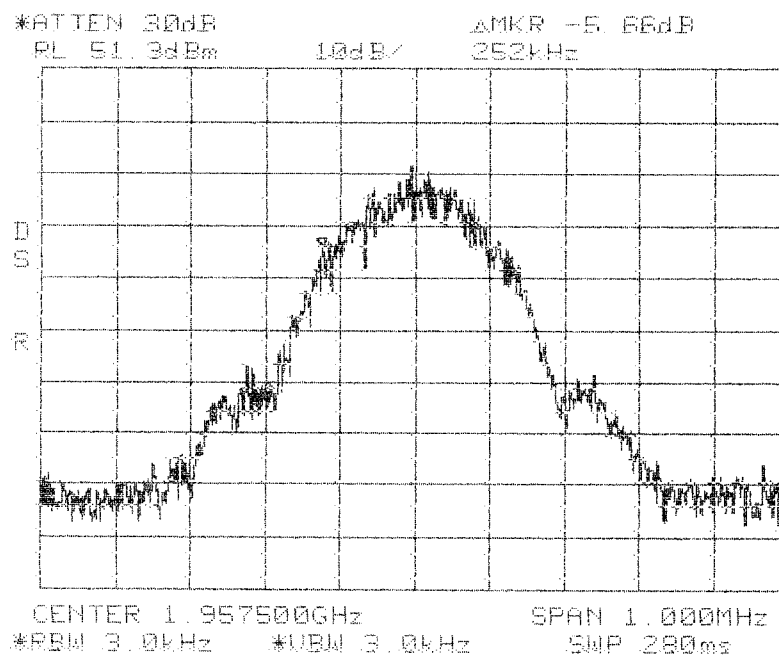
**Occupied Bandwidth
FM Out
PCS 1900 MHz
B Band**

Center: 1957.5 MHz
Span: 90 KHz
RBW/VBW: 300 Hz / 3 kHz

Center: 1957.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz



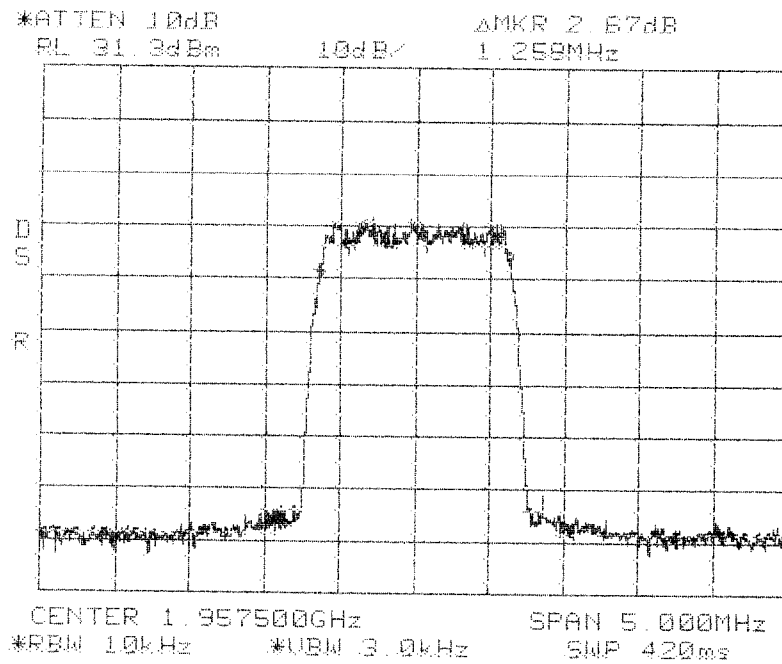
**Occupied Bandwidth
GSM In
PCS 1900 MHz
B Band**



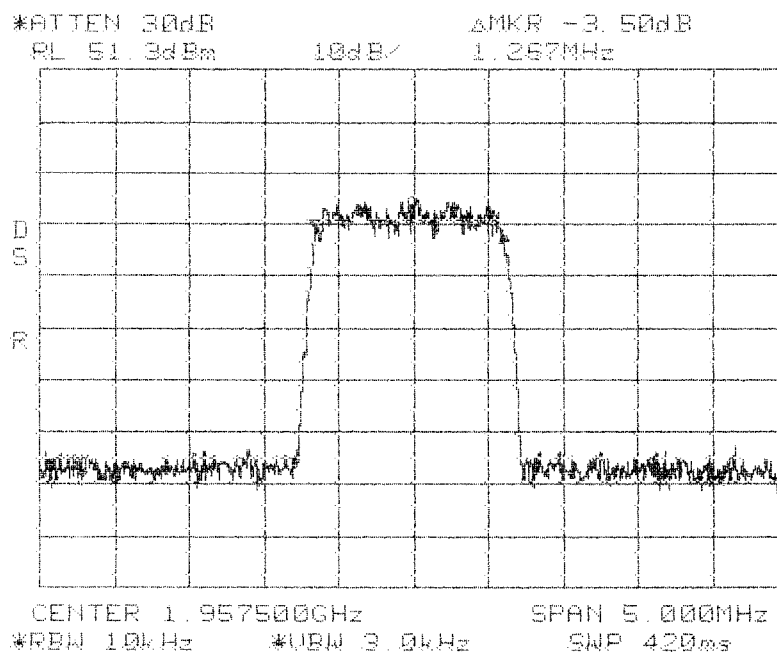
**Occupied Bandwidth
GSM Out
PCS 1900 MHz
B Band**

Center: 1957.5 MHz
Span: 1 MHz
RBW/VBW: 3 kHz / 3 kHz

Center: 1957.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz



**Occupied Bandwidth
CDMA In
PCS 1900 MHz
B Band**



**Occupied Bandwidth
CDMA Out
PCS 1900 MHz
B Band**

Center: 1957.5 MHz
Span: 5 MHz
RBW/VBW: 10 kHz / 3 kHz

24.238 Emission Limits

The Emission limits measurements were performed at the following test location:

- - ADC facility (Conducted emissions)

ADC's Test equipment used:

Manufacturer	Model	Description	ADC Serial No.	Cal Due
Aeroflex	49-30-33	Attenuator	n/a	CNR
HP	HP8563E	Spectrum Analyzer	MC27690	6-22-06
HP	EPM-441A	Power Meter	MC27670	9-28-06

Equipment used in testing that has a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

- - Wild River Lab Large Test Site (Radiated case emissions)

TÜV's Test equipment used:

Manufacturer	Model	Description	TUV asset ID	Cal Due
Electro-Metrics	EM-6917B	Biconicalog Periodic	3203	01 Apr 06
EMCO	3115	Ridge Guide Ant. 1-18 GHz	2075	24 Nov 05
Mini-Circuits	ZHL-1042J	Preamplifier	3961	Code B
Phase1 μ wave	SL18B4020	Preamplifier 1 – 18 GHz	3958	Code B
HP	8566B	Spectrum analyzer	8052	24 Mar 06
HP	85650A	Quasi-Peak Adapter	2681	03 Feb 06
HP	85662A	Analyzer Display	8051	24 Mar 06

Cal Code B = Calibration verification performed internally.

Emission Limits data on following pages:

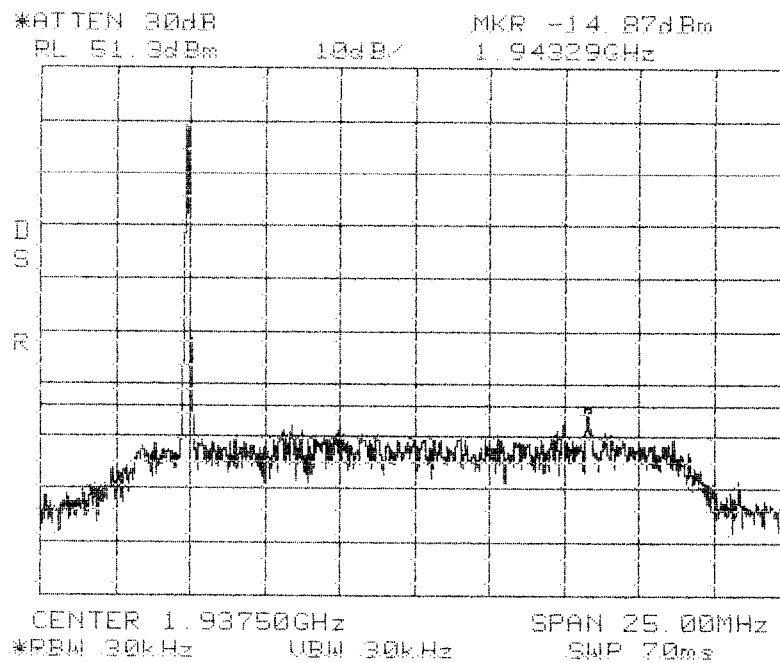
Conducted Emission Limits Test for ADC Inc.
Digivance CXD
Model Number DGVF-04000000CRN

The out of band emissions were measured directly from the EUT antenna output with a spectrum analyzer from 30 MHz to the 10th harmonic of the highest carrier frequency. Test signals used are CW, FM, GSM, and CDMA. The different signals were input one at a time to the EUT. In all cases, the out of band emissions were less than -13dBm from the equation
$$(19\text{dBm} - [43 + 10\log(0.08W)])$$

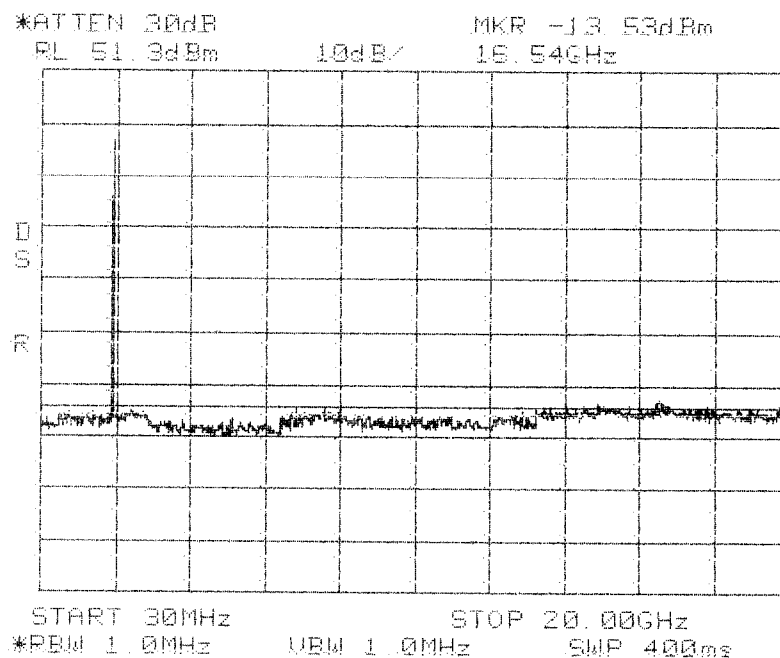
Band edge compliance is also demonstrated using a FM signal at the upper and lower limits of the band and a resolution bandwidth of 300 Hz.

Results:
Pass (See plots)

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



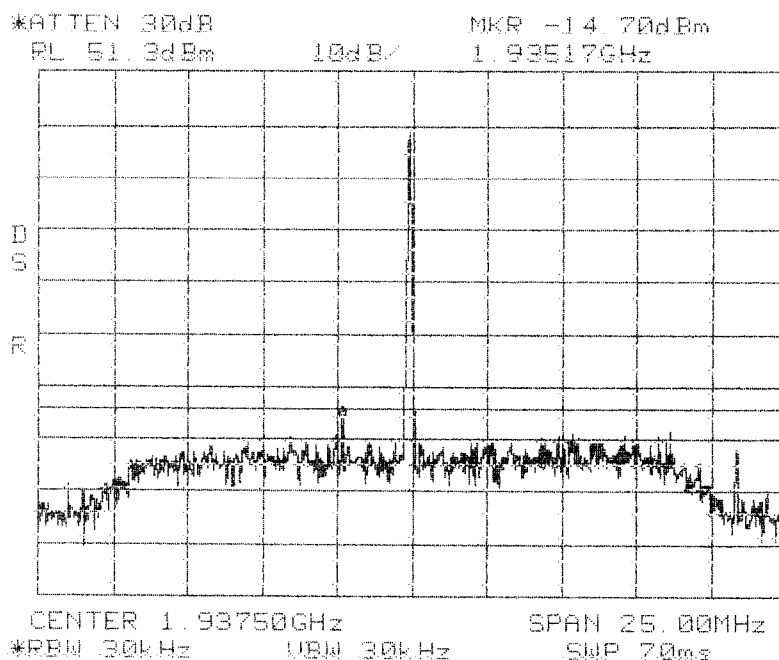
Conducted Emissions
Low
PCS 1900 MHz
A Band



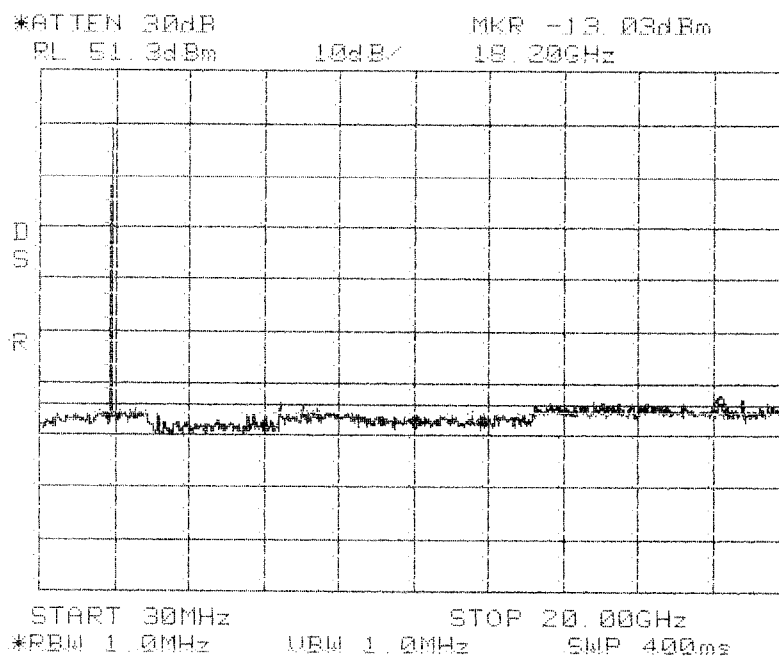
Conducted Emissions
Low
PCS 1900 MHz
A Band

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



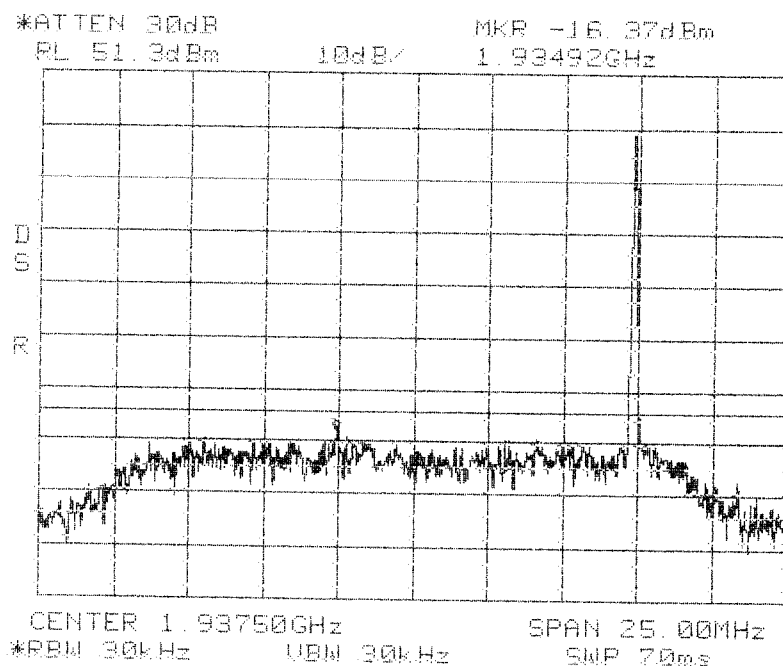
Conducted Emissions
Mid
PCS 1900 MHz
A Band



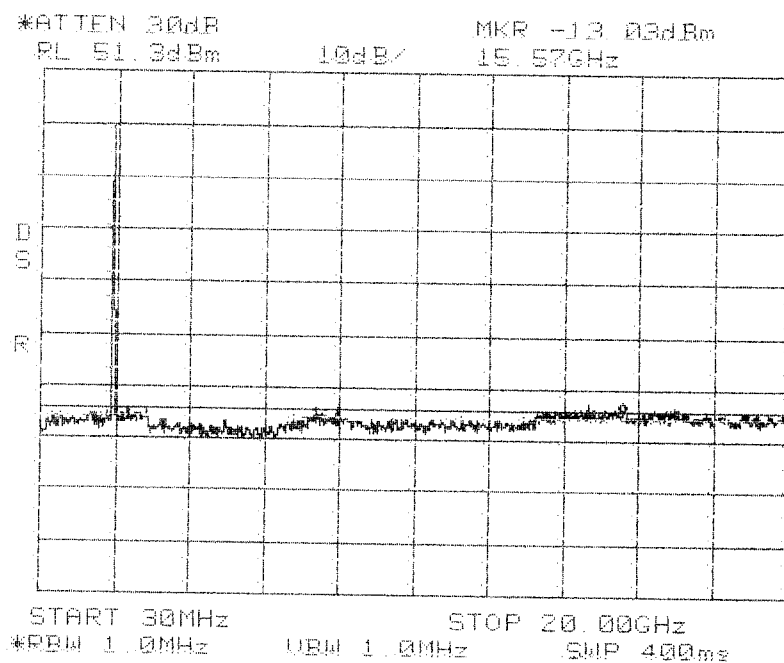
Conducted Emissions
Mid
PCS 1900 MHz
A Band

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



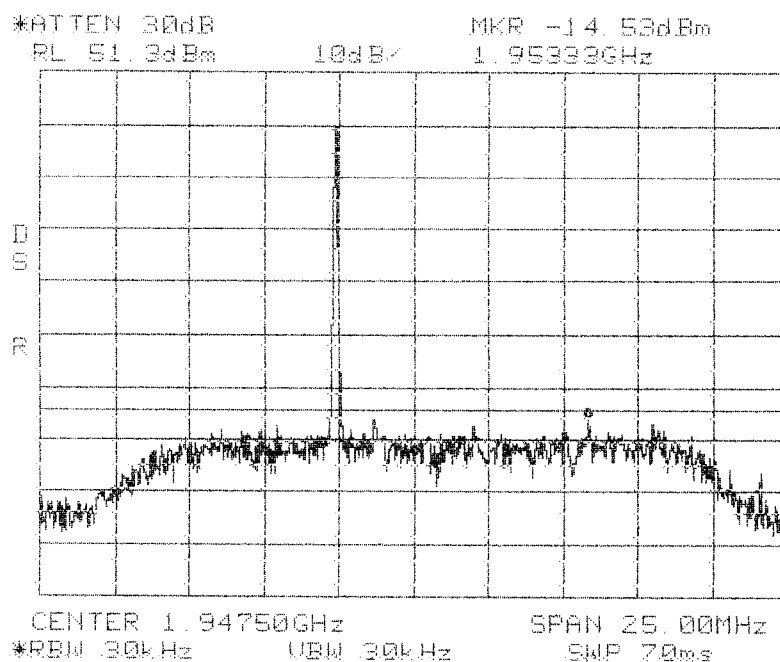
**Conducted Emissions
High
PCS 1900 MHz
A Band**



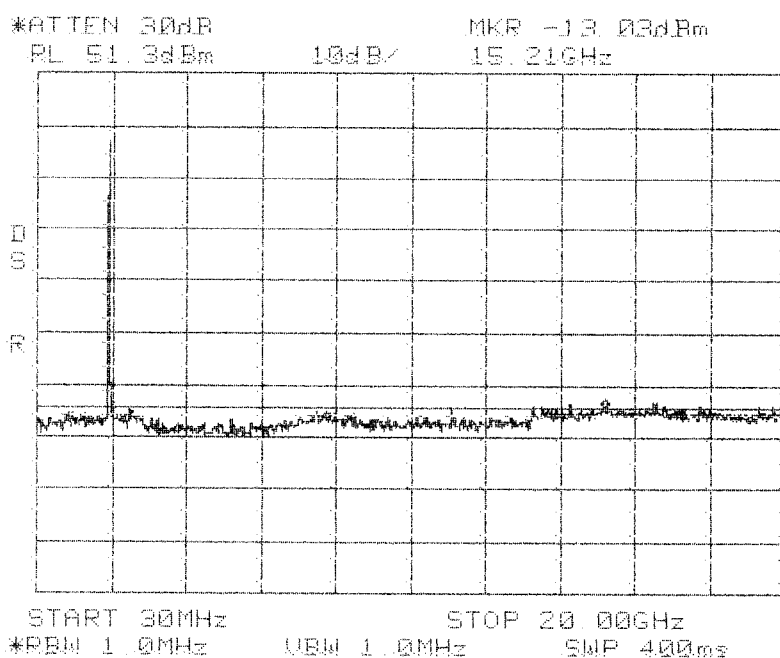
**Conducted Emissions
High
PCS 1900 MHz
A Band**

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1947.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



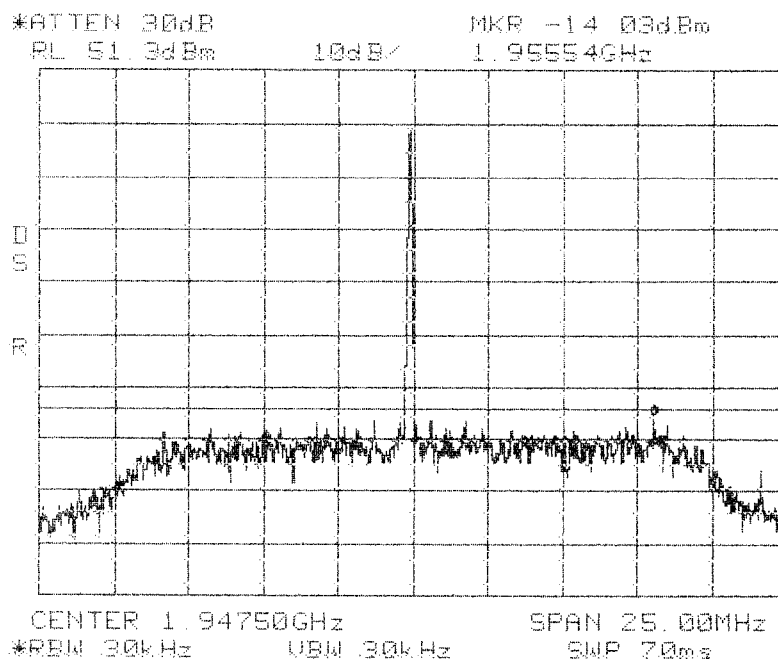
Conducted Emissions
Low
PCS 1900 MHz
D Band



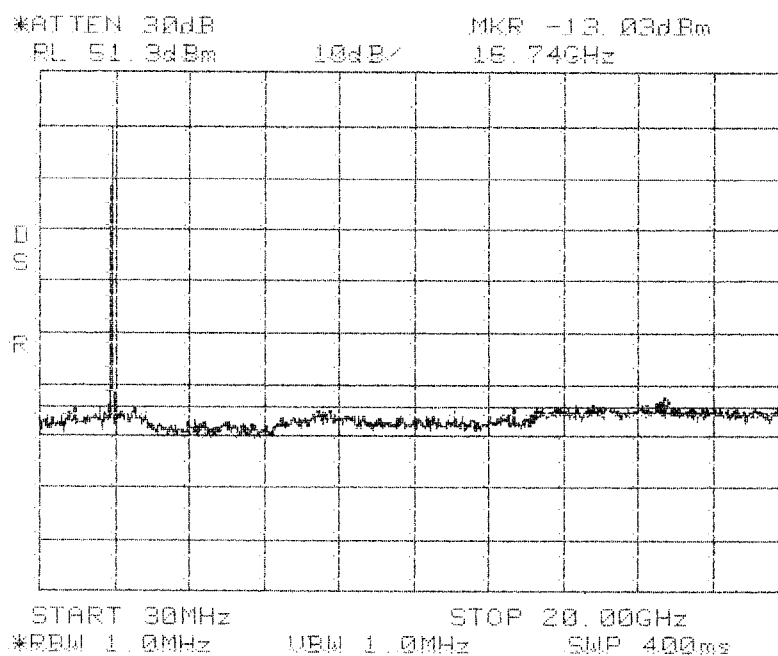
Conducted Emissions
Low
PCS 1900 MHz
D Band

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1947.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



**Conducted Emissions
Mid
PCS 1900 MHz
D Band**



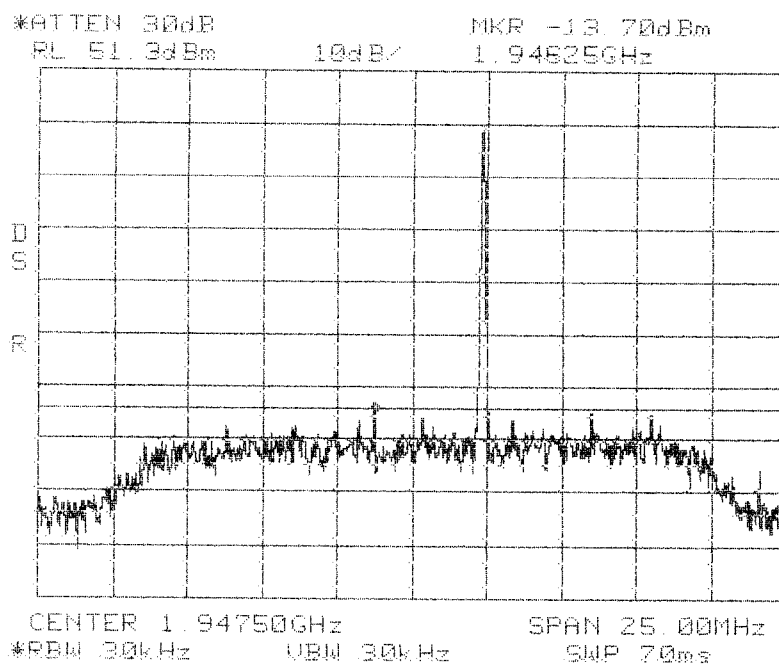
**Conducted Emissions
Mid
PCS 1900 MHz
D Band**

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

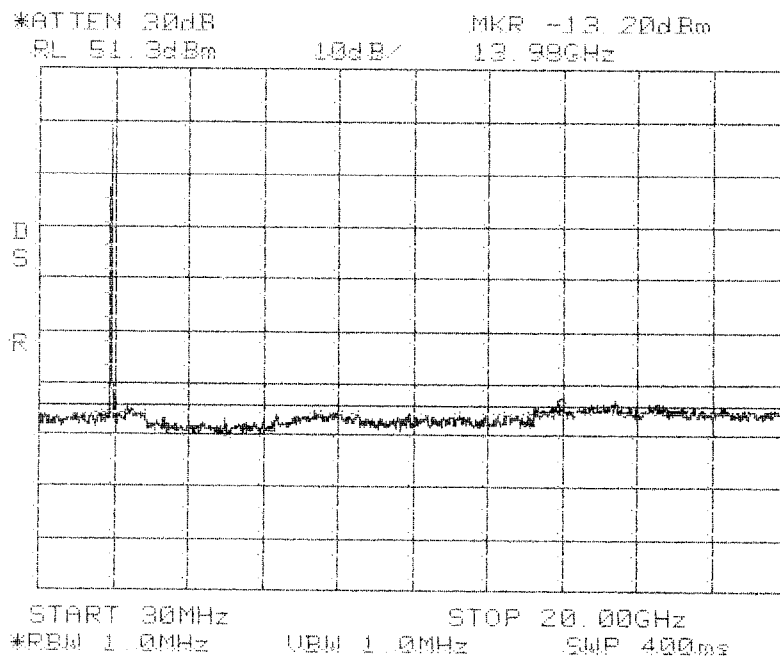
Center: 1947.5 MHz

Span: 25 MHz

RBW/VBW: 30 kHz



**Conducted Emissions
High
PCS 1900 MHz
D Band**

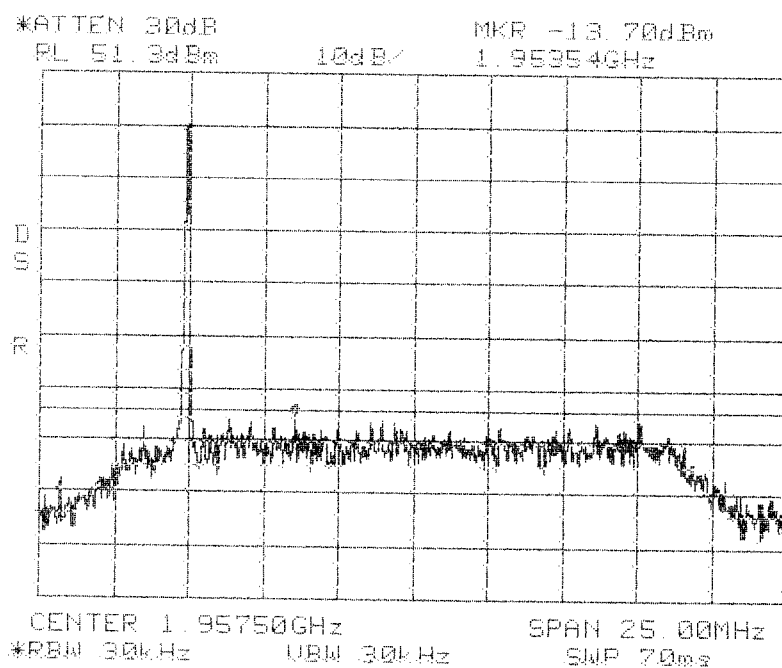


**Conducted Emissions
High
PCS 1900 MHz
D Band**

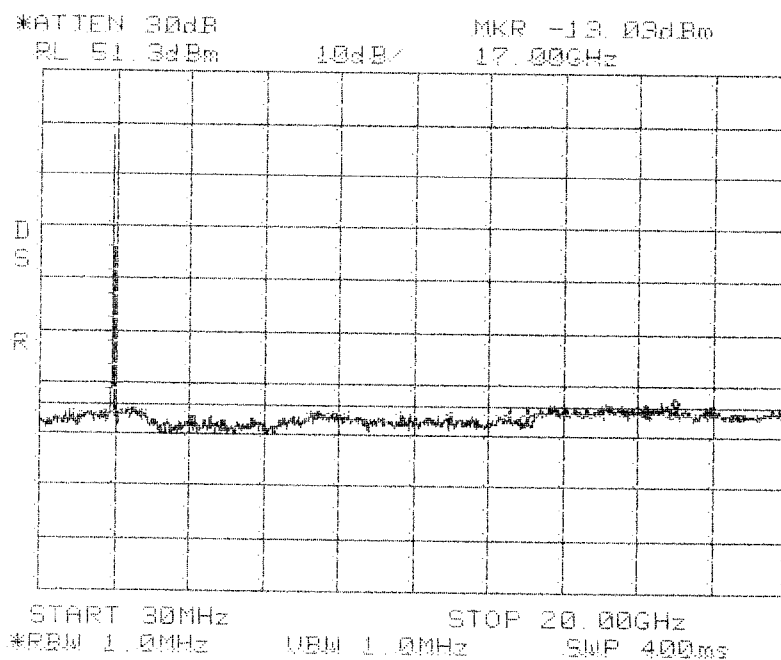
Span: 30 MHz to 20 GHz

RBW/VBW: 1 MHz

Center: 1957.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



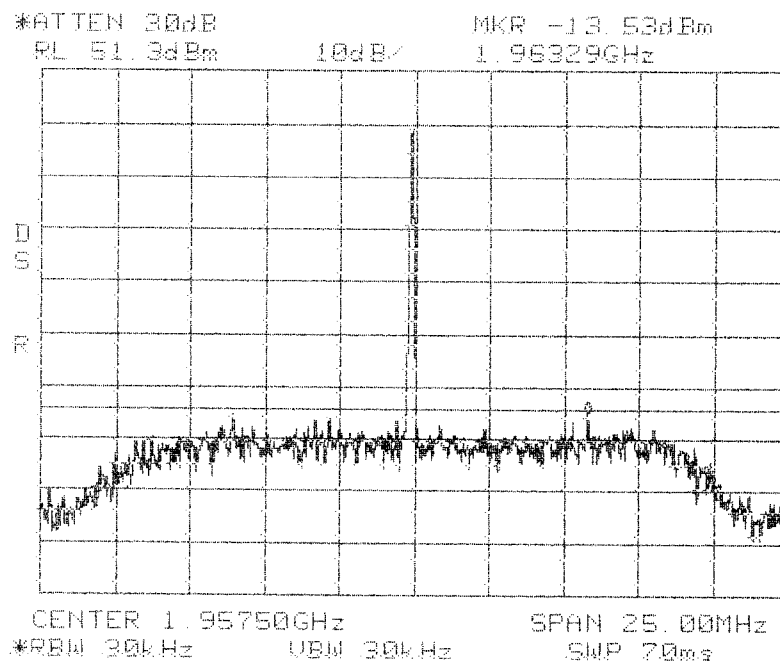
Conducted Emissions
Low
PCS 1900 MHz
B Band



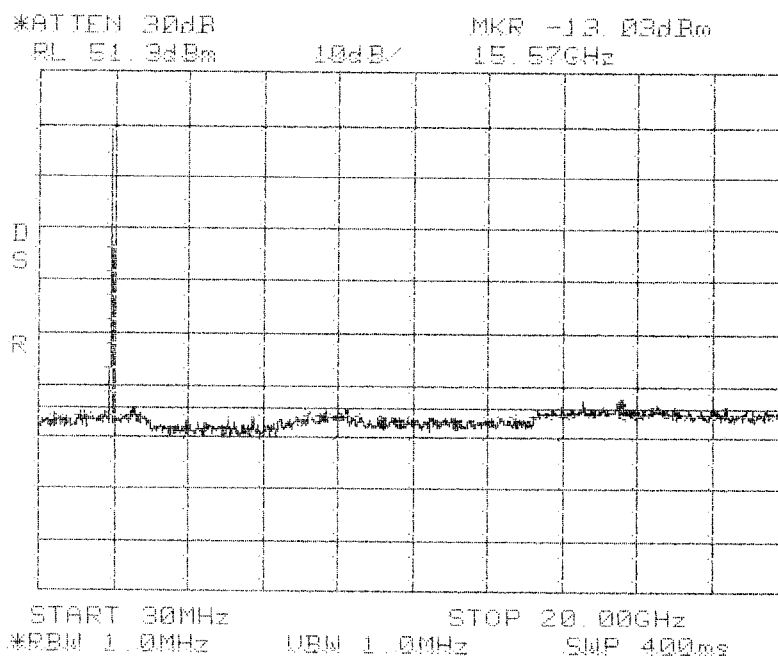
Conducted Emissions
Low
PCS 1900 MHz
B Band

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1957.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



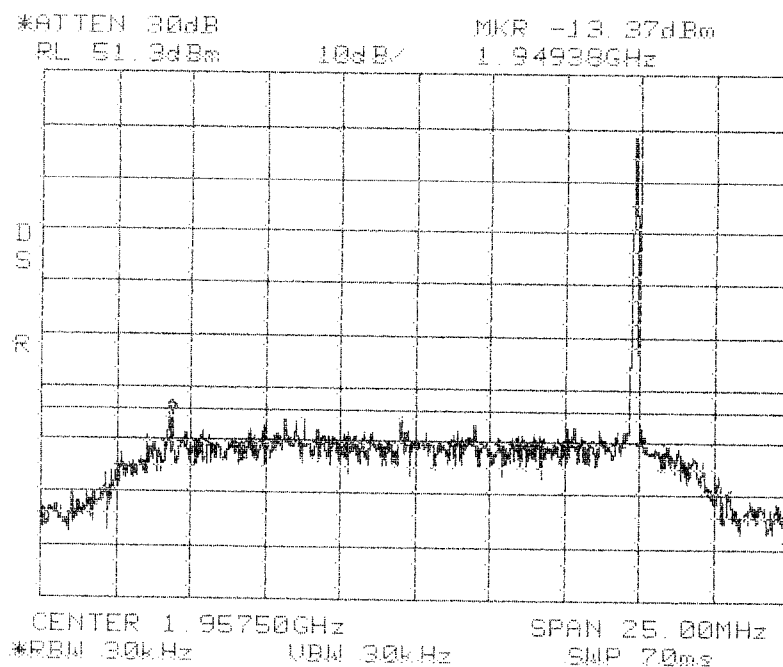
**Conducted Emissions
Mid
PCS 1900 MHz
B Band**



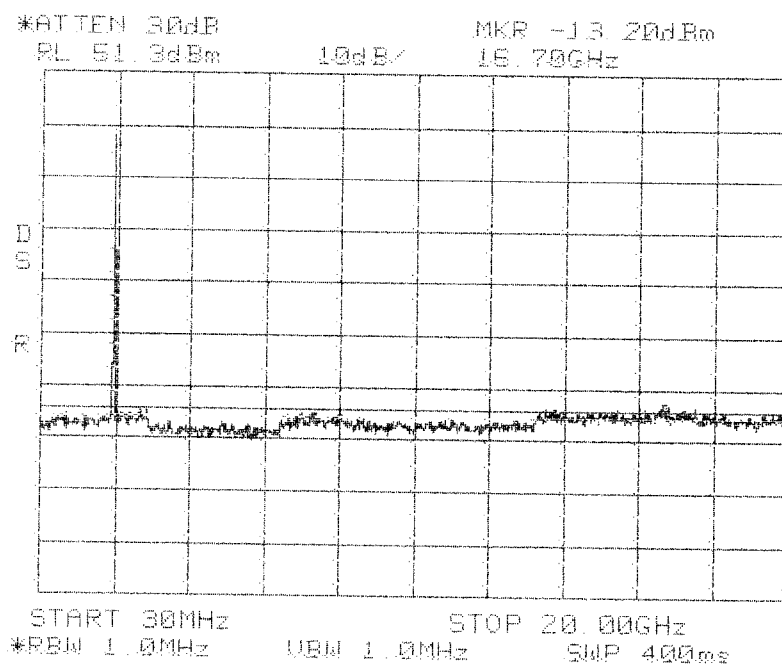
**Conducted Emissions
Mid
PCS 1900 MHz
B Band**

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1957.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



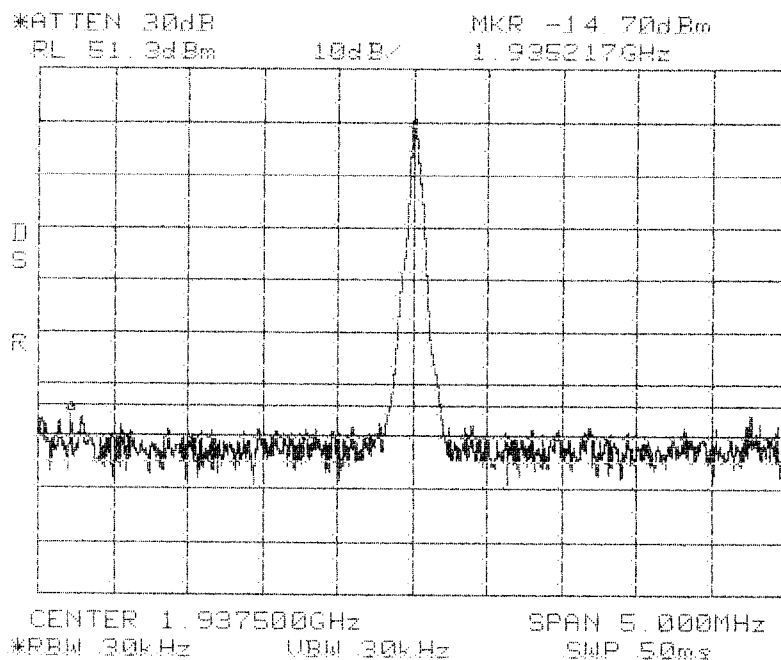
**Conducted Emissions
High
PCS 1900 MHz
B Band**



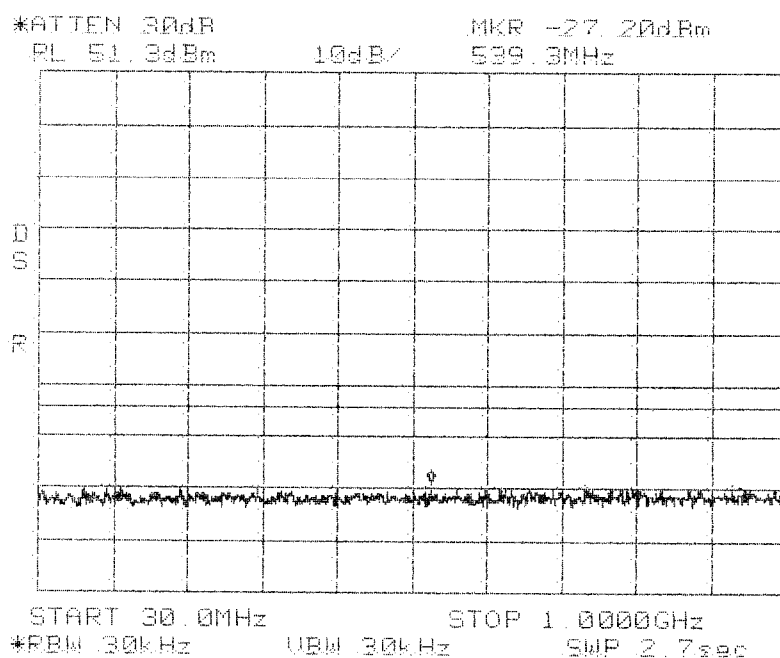
**Conducted Emissions
High
PCS 1900 MHz
B Band**

Span: 30 MHz to 20 GHz
RBW/VBW: 1 MHz

Center: 1937.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



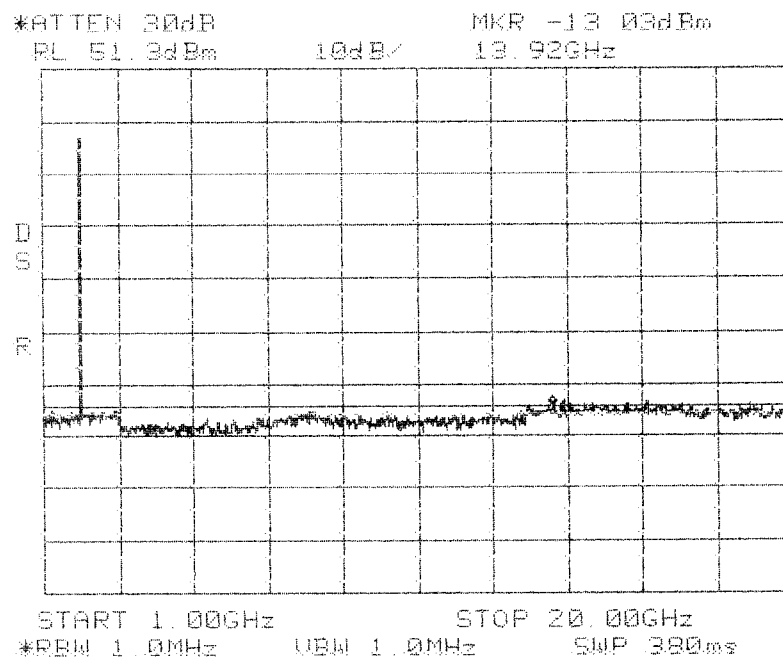
Conducted Emissions
FM
PCS 1900 MHz
A Band



Conducted Emissions
FM
PCS 1900 MHz
A Band

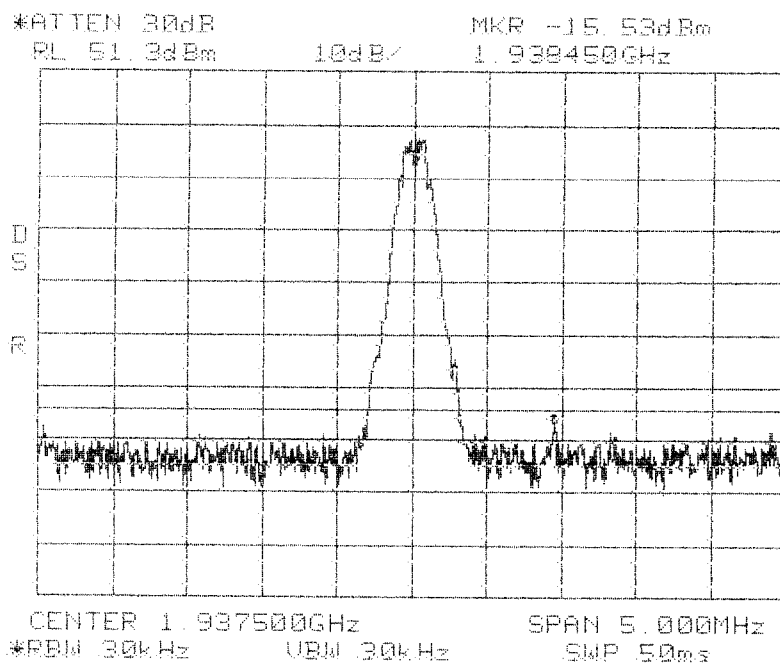
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

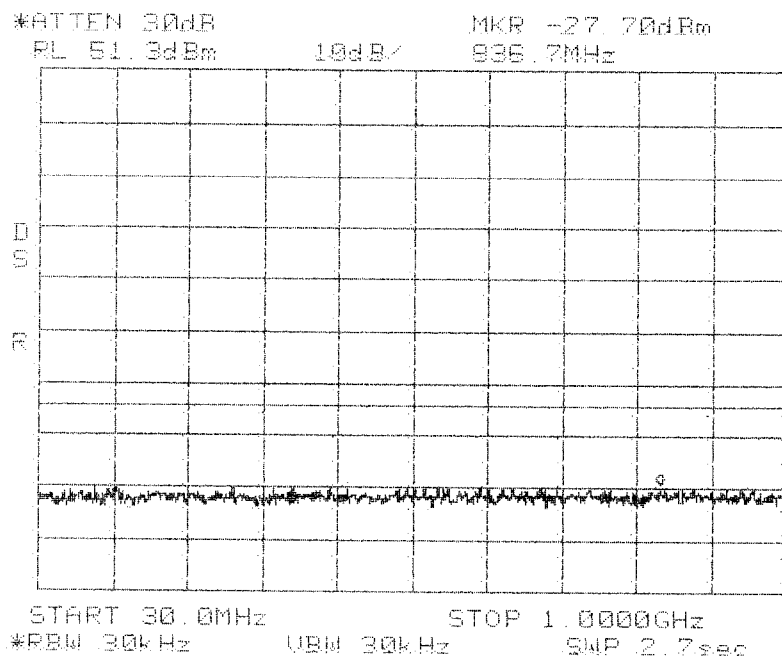


Conducted Emissions
FM
PCS 1900 MHz
A Band

Center: 1937.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



Conducted Emissions
GSM
PCS 1900 MHz
A Band

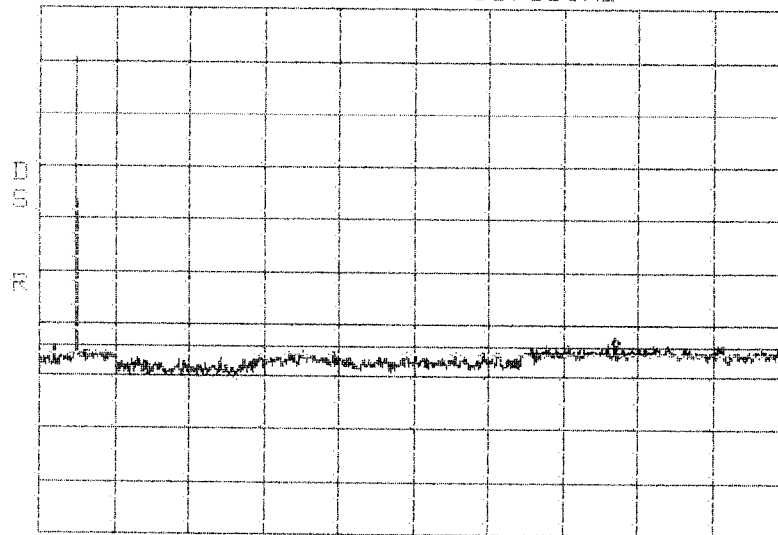


Conducted Emissions
GSM
PCS 1900 MHz
A Band

Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

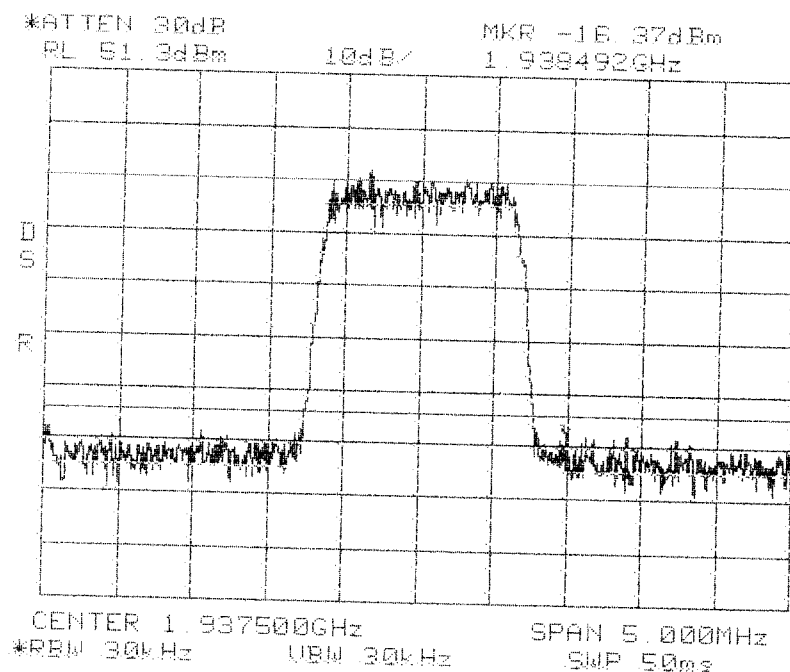
*ATTEN 30dB MKR -13.03dBm
RL 51.3dBm 10dB✓ 15.69GHz



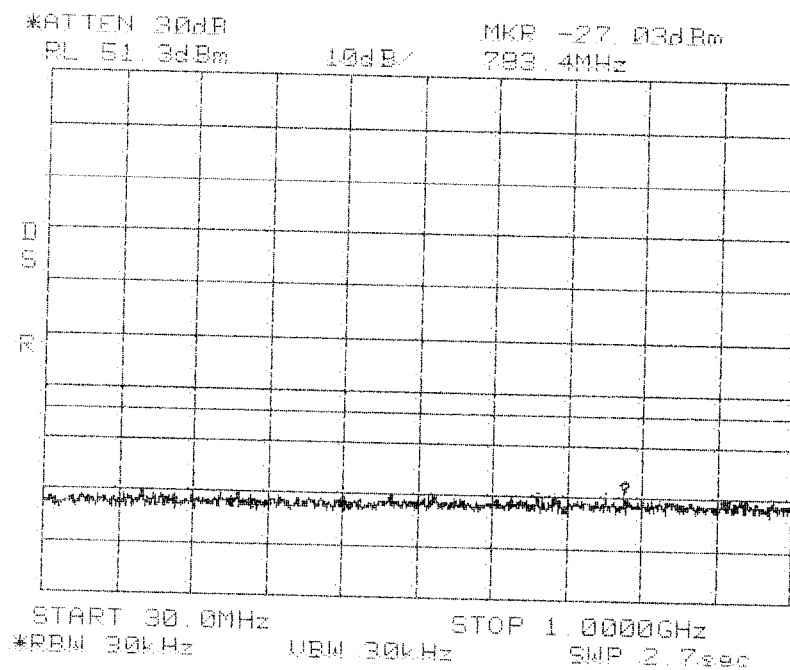
START 1.00GHz STOP 20.00GHz
*RBW 1.0MHz VBW 1.0MHz SWP 380ms

Conducted Emissions
GSM
PCS 1900 MHz
A Band

Center: 1937.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



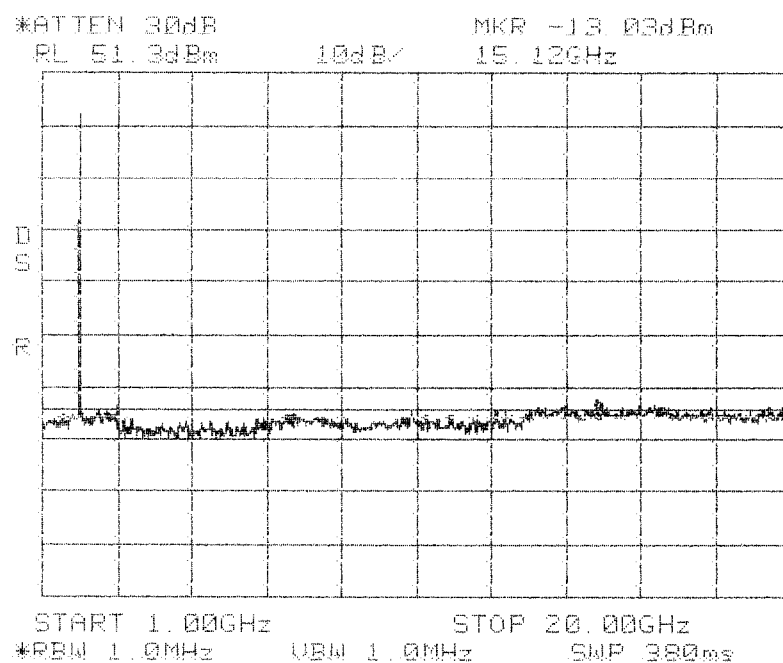
Conducted Emissions
CDMA
PCS 1900 MHz
A Band



Conducted Emissions
CDMA
PCS 1900 MHz
A Band

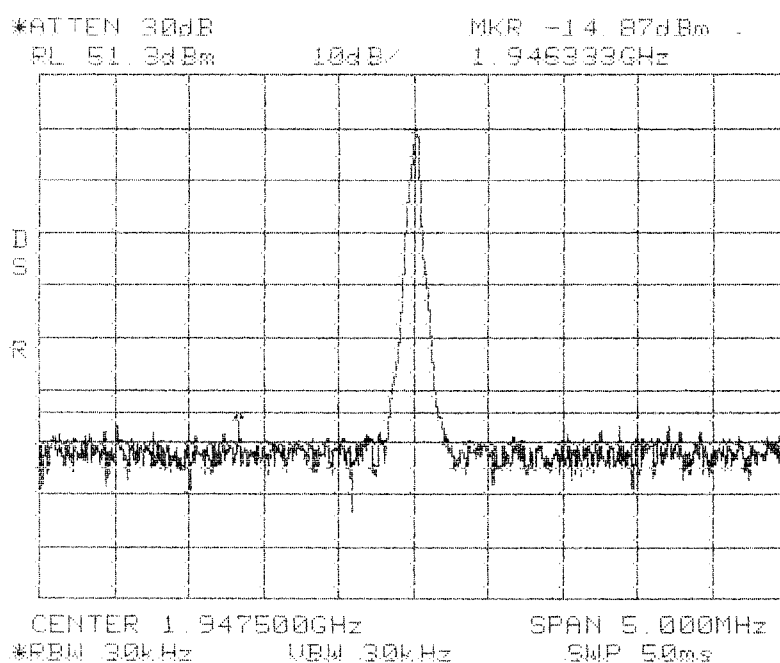
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

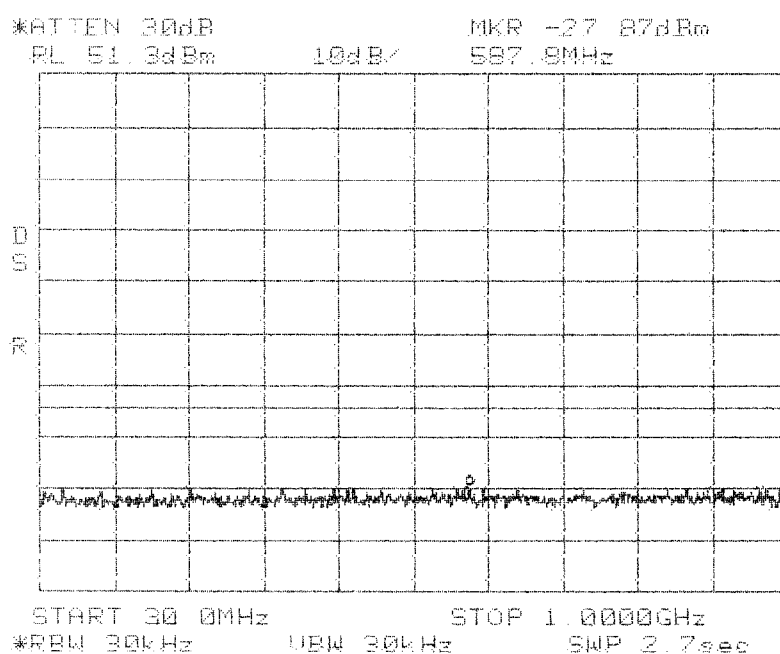


Conducted Emissions
CDMA
PCS 1900 MHz
A Band

Center: 1947.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



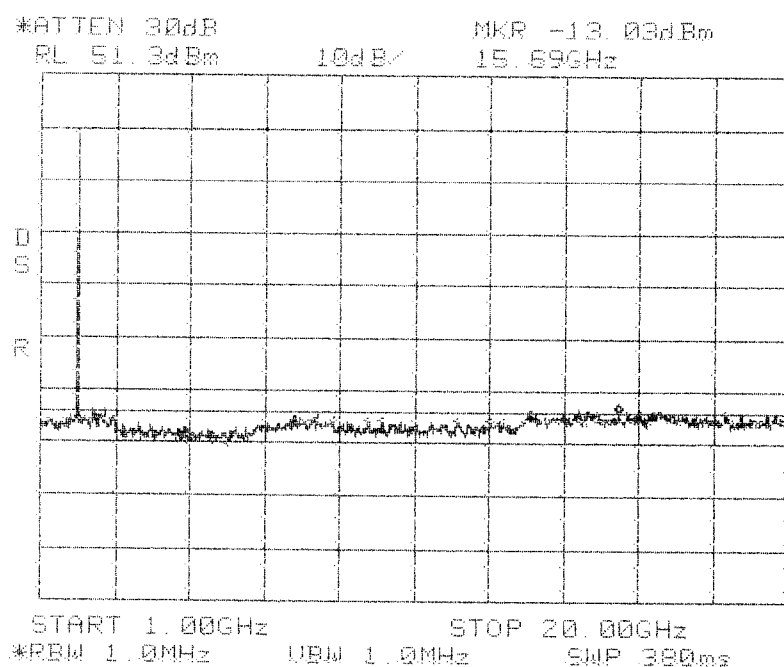
**Conducted Emissions
FM
PCS 1900 MHz
D Band**



**Conducted Emissions
FM
PCS 1900 MHz
D Band**

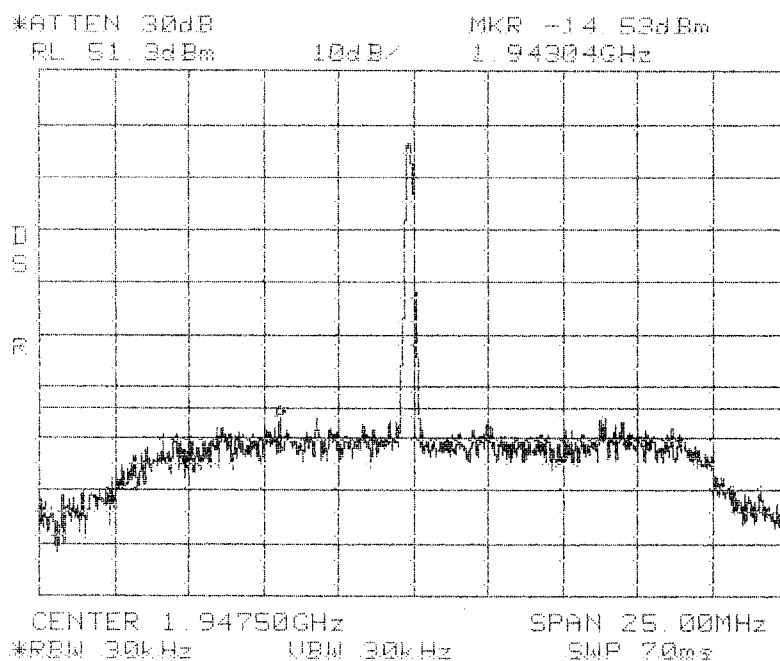
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

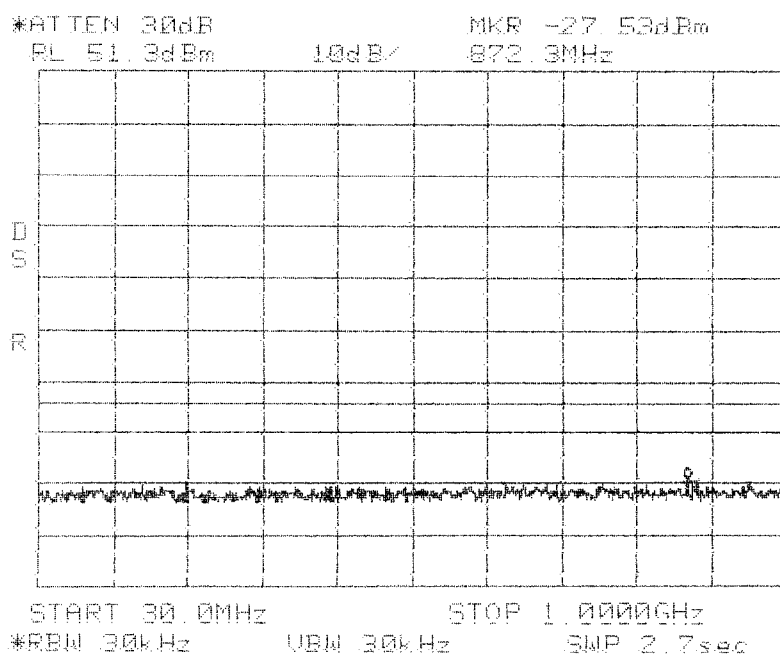


Conducted Emissions
FM
PCS 1900 MHz
D Band

Center: 1947.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



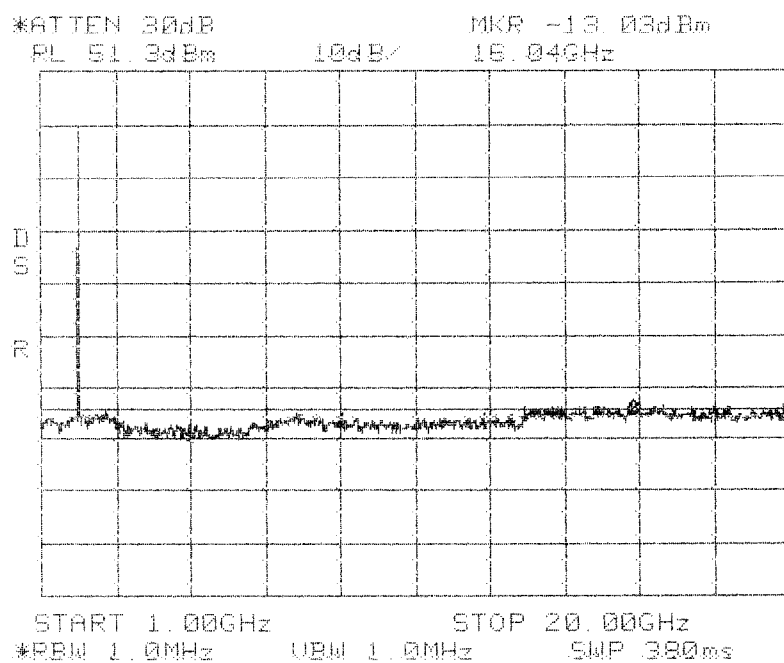
Conducted Emissions
GSM
PCS 1900 MHz
D Band



Conducted Emissions
GSM
PCS 1900 MHz
D Band

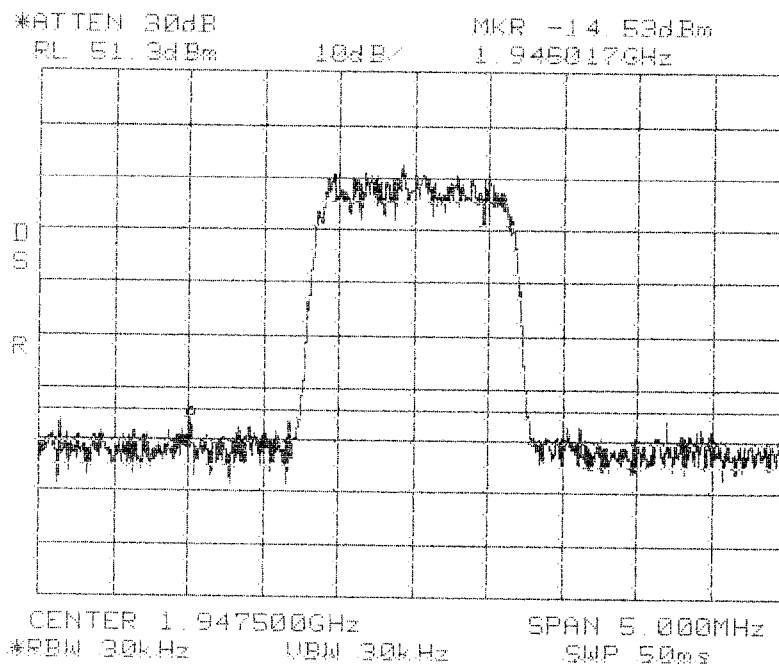
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

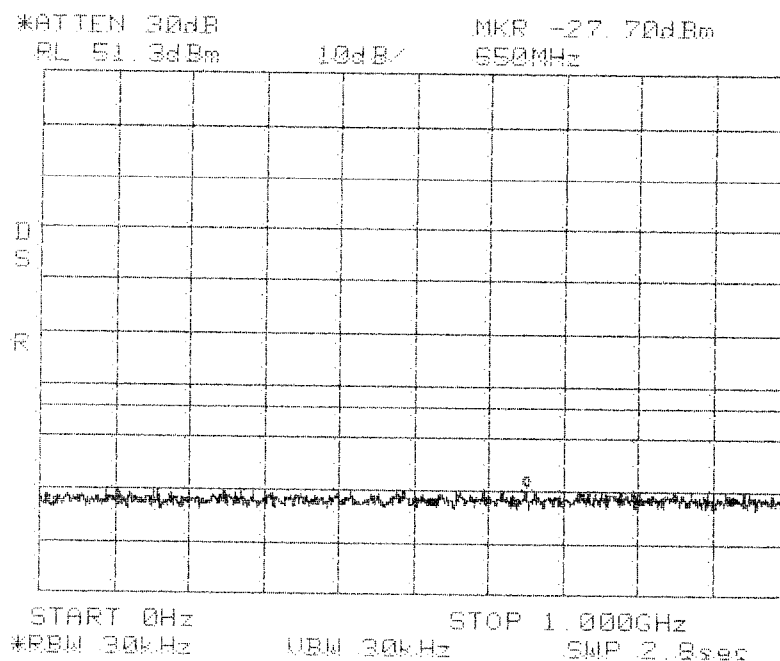


Conducted Emissions
GSM
PCS 1900 MHz
D Band

Center: 1947.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



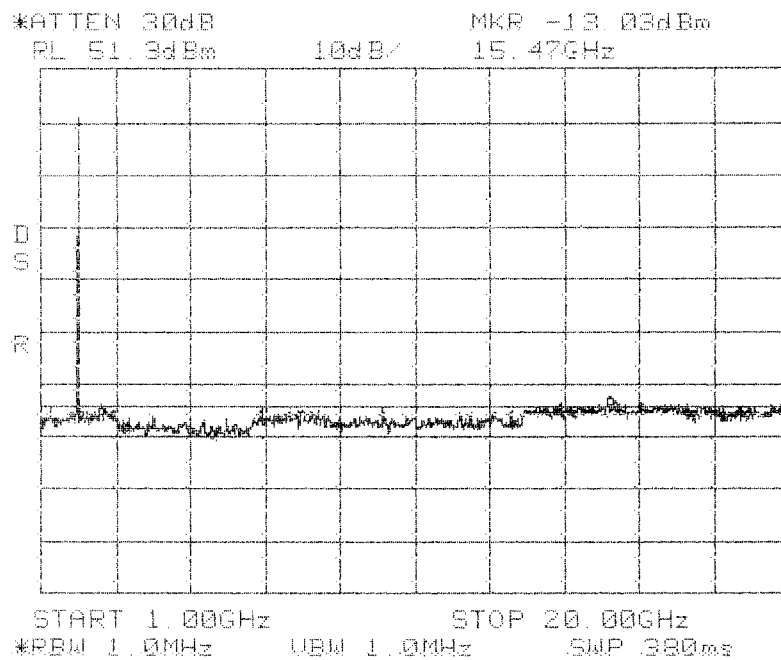
Conducted Emissions
CDMA
PCS 1900 MHz
D Band



Conducted Emissions
CDMA
PCS 1900 MHz
D Band

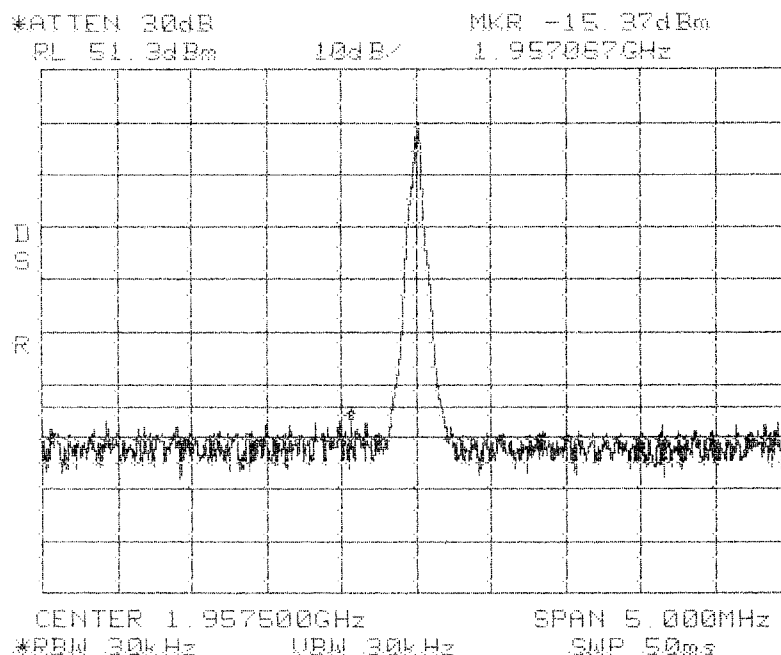
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

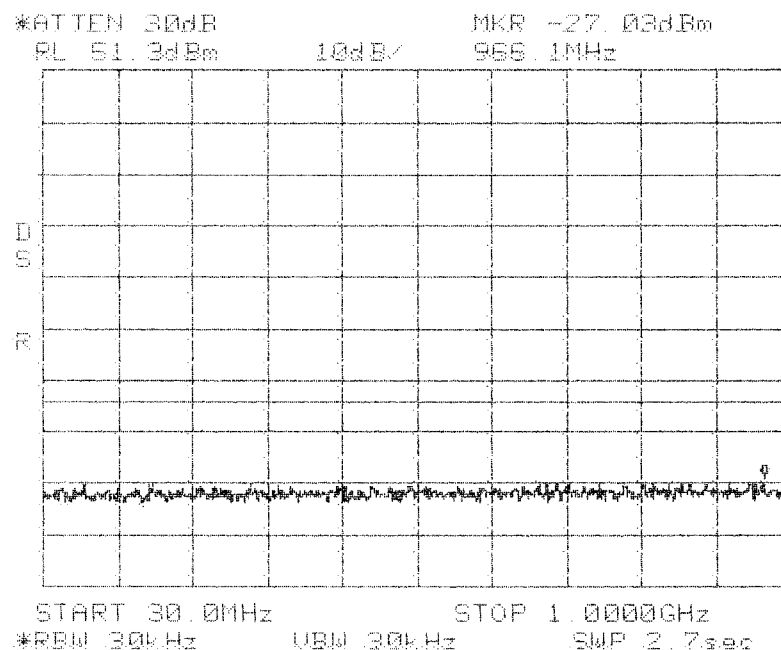


Conducted Emissions
CDMA
PCS 1900 MHz
D Band

Center: 1957.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



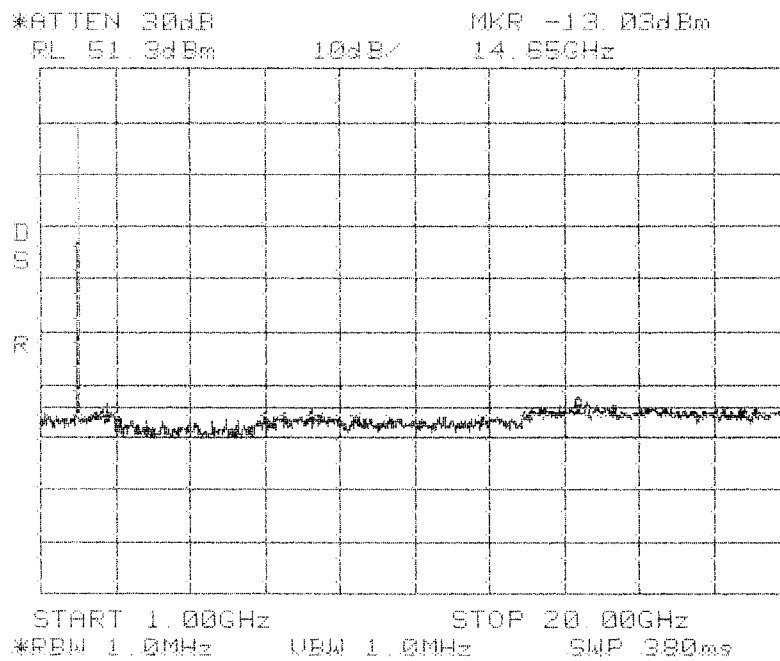
Conducted Emissions
FM
PCS 1900 MHz
B Band



Conducted Emissions
FM
PCS 1900 MHz
B Band

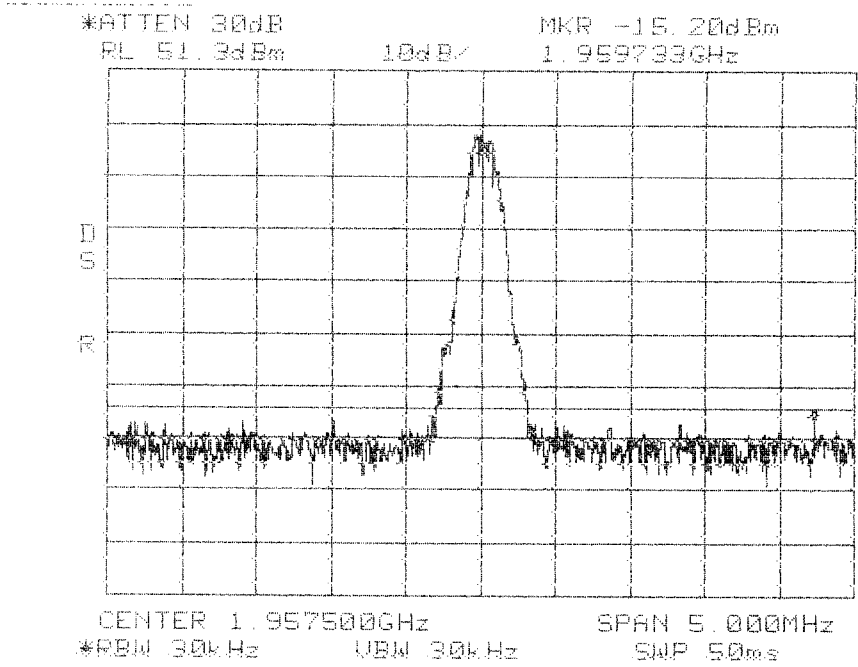
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

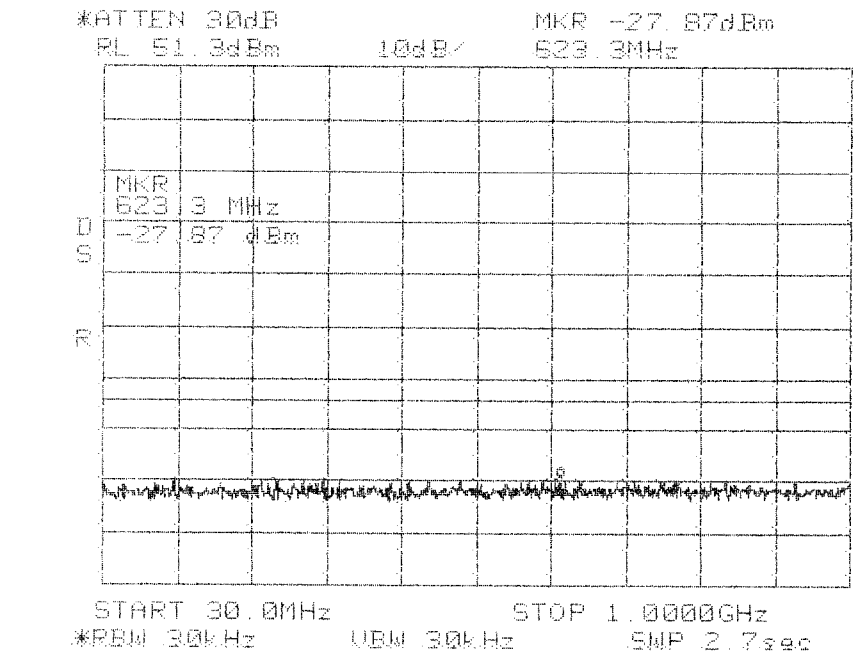


Conducted Emissions
FM
PCS 1900 MHz
B Band

Center: 1957.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



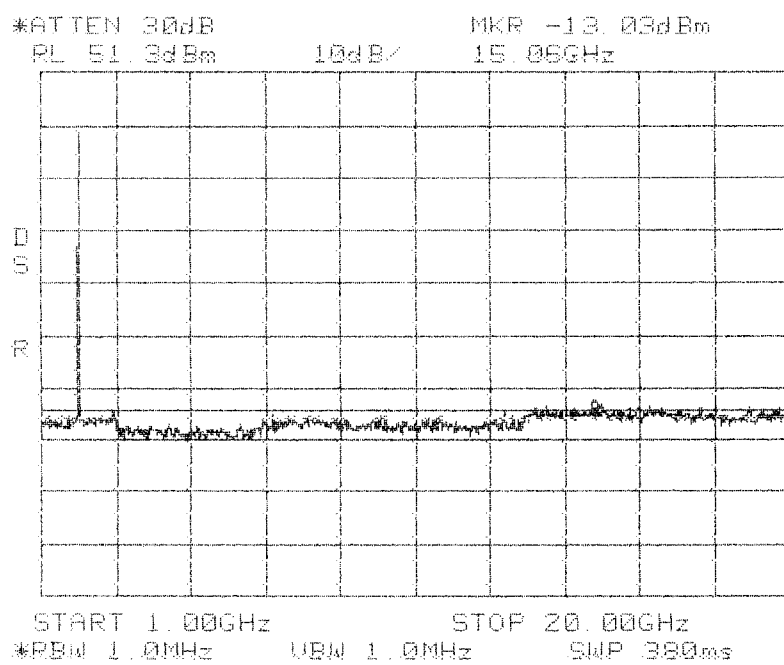
Conducted Emissions
GSM
PCS 1900 MHz
B Band



Conducted Emissions
GSM
PCS 1900 MHz
B Band

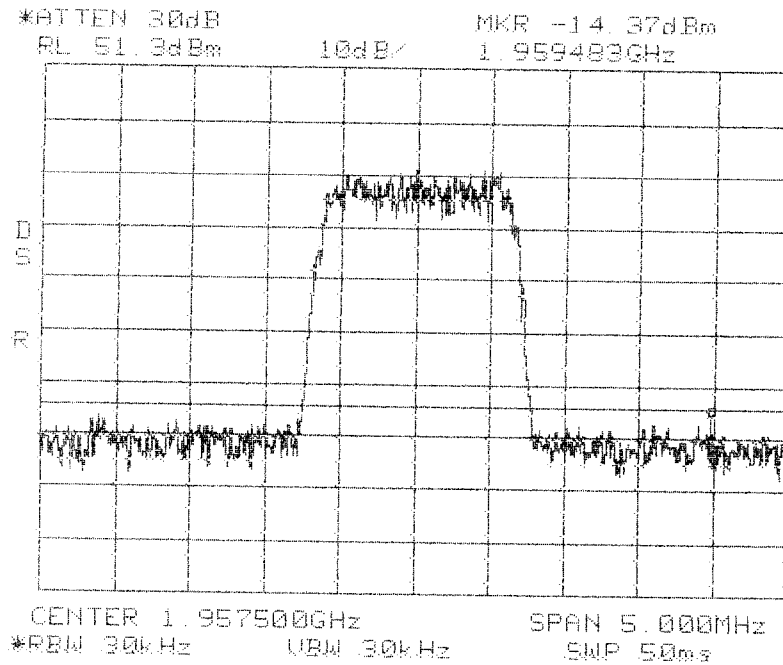
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

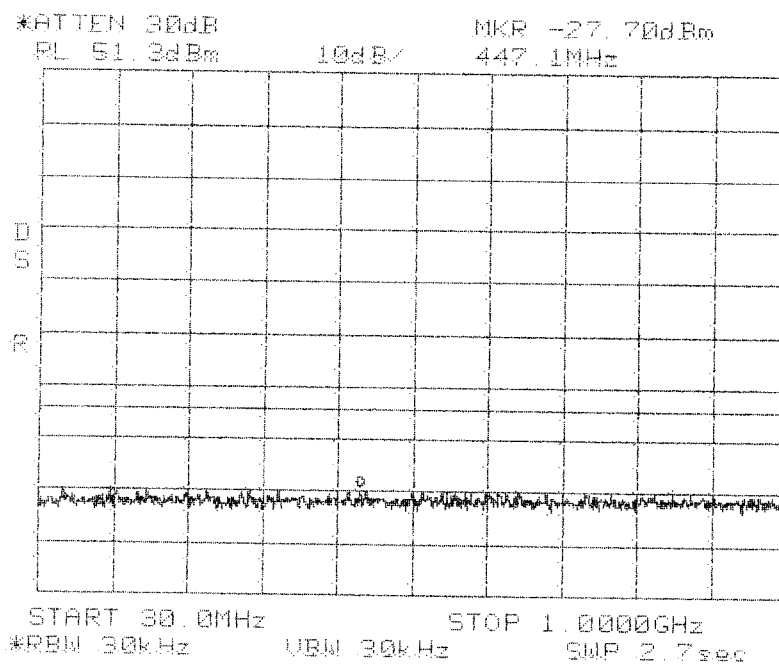


Conducted Emissions
GSM
PCS 1900 MHz
B Band

Center: 1957.5 MHz
Span: 5 MHz
RBW/VBW: 30 kHz



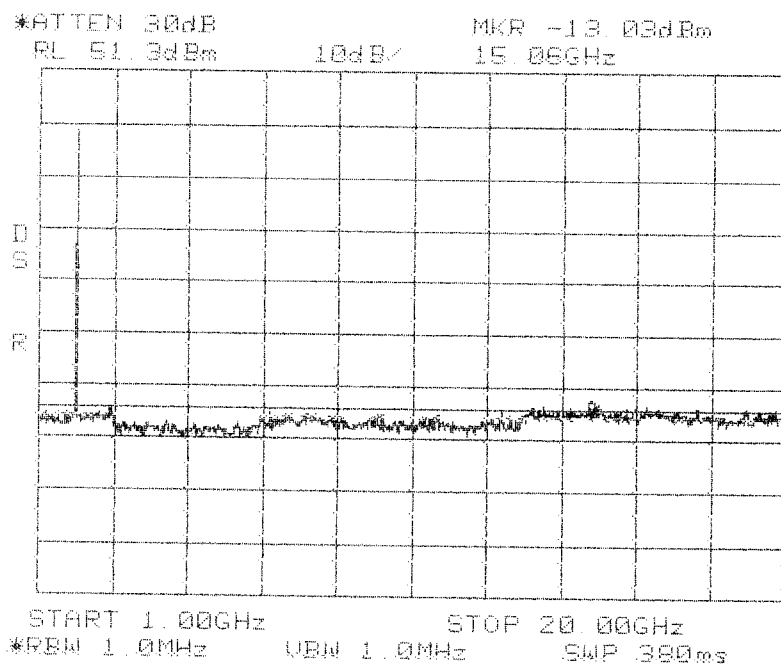
Conducted Emissions
CDMA
PCS 1900 MHz
B Band



Conducted Emissions
CDMA
PCS 1900 MHz
B Band

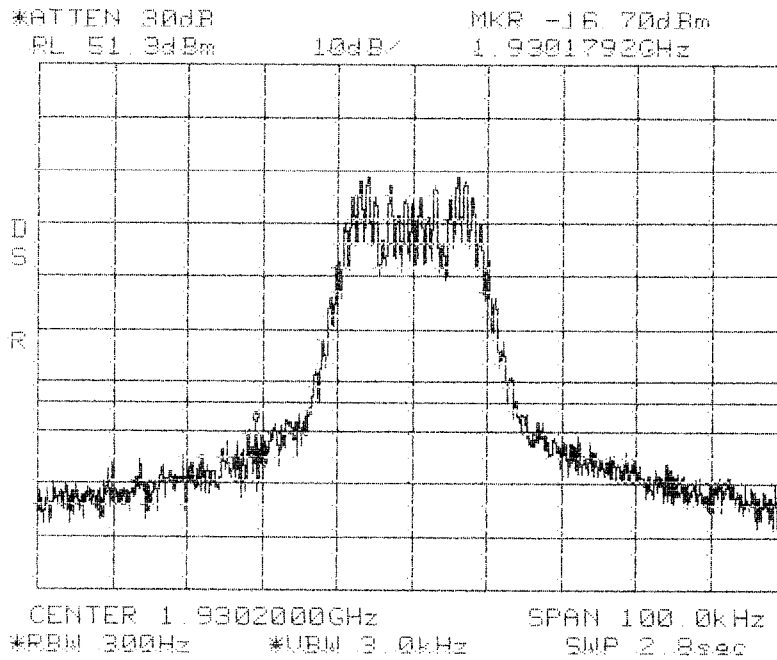
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

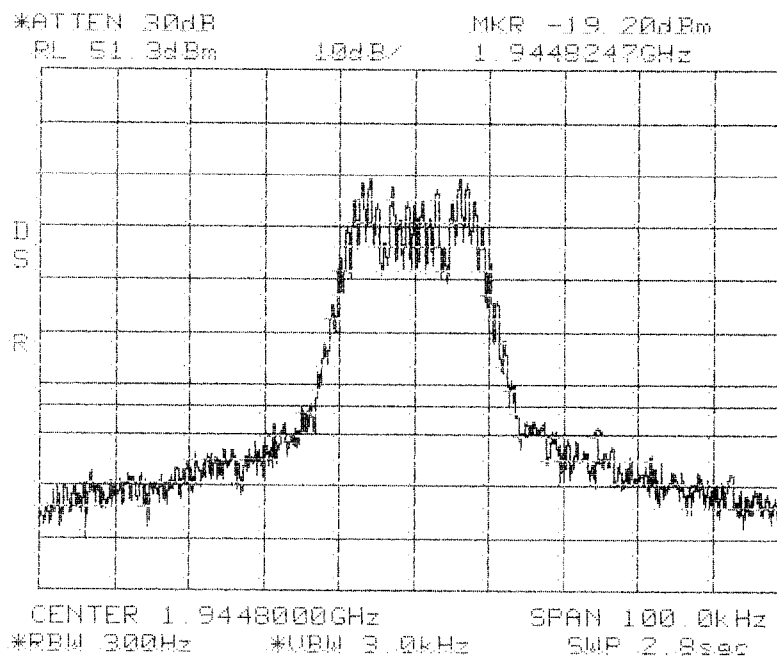


Conducted Emissions
CDMA
PCS 1900 MHz
B Band

Center: 1930.2 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz



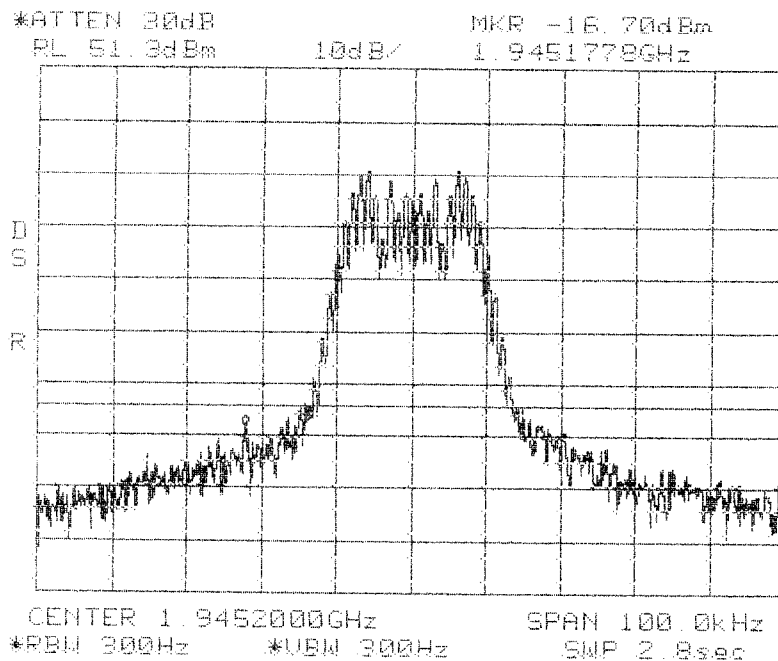
**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
A Band**



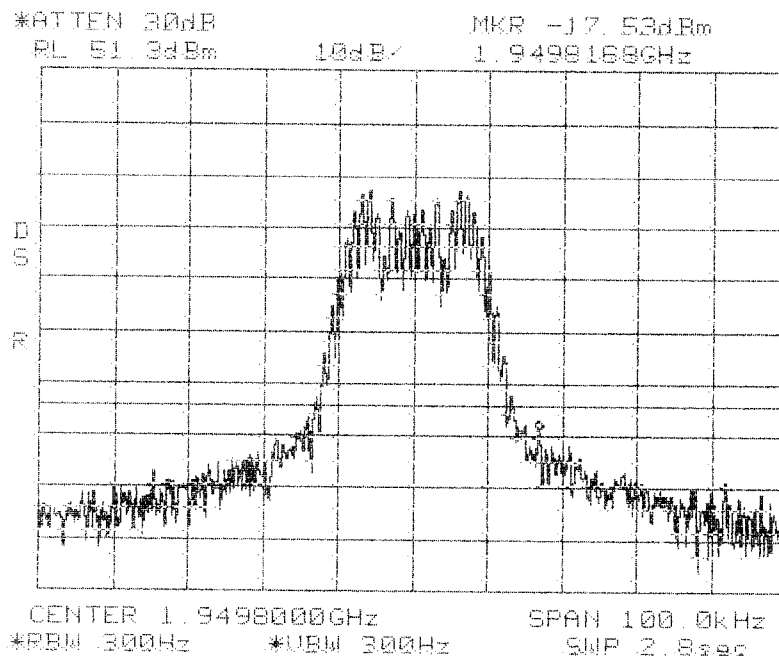
**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
A Band**

Center: 1944.8 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz

Center: 1945.2 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz



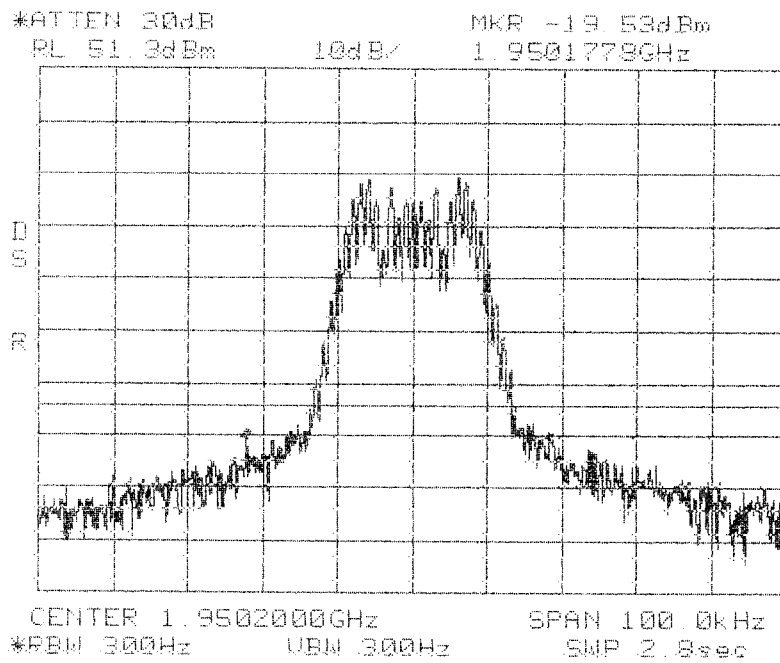
**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
D Band**



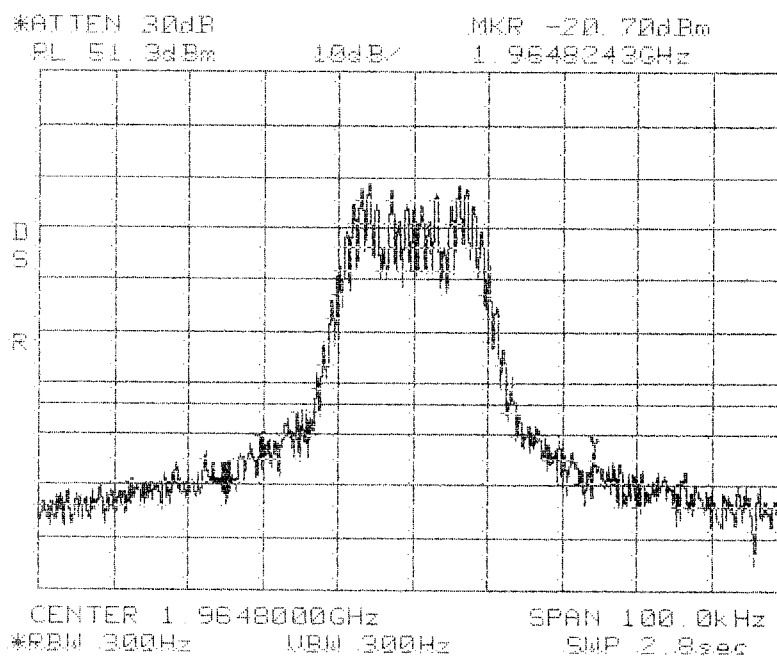
**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
D Band**

Center: 1949.8 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz

Center: 1950.2 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz



**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
B Band**



**Conducted Emissions
Band Edge
FM
PCS 1900 MHz
B Band**

Center: 1964.8 MHz
Span: 100 kHz
RBW/VBW: 300 Hz / 300 Hz

RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 1 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
Low "A" setting = 1930 MHz:						
30.0 MHz	38.75 Qp	0.7 / 19.9 / 27.4 / 0.0	31.95	V / 1.00 / 0	-51.65	n/a
40.182 MHz	53.65 Qp	0.8 / 16.15 / 27.09 / 0.0	43.5	V / 1.00 / 0	-40.1	n/a
46.032 MHz	65.2 Qp	0.9 / 14.29 / 27.1 / 0.0	53.29	V / 1.00 / 0	-30.31	n/a
51.684 MHz	58.85 Qp	0.9 / 12.86 / 27.03 / 0.0	45.58	V / 1.00 / 0	-38.02	n/a
57.552 MHz	55.3 Qp	1.0 / 11.33 / 27.0 / 0.0	40.63	V / 1.00 / 0	-42.97	n/a
60.162 MHz	55.7 Qp	1.0 / 10.65 / 27.0 / 0.0	40.35	V / 1.00 / 0	-43.25	n/a
64.074 MHz	61.15 Qp	1.0 / 9.59 / 27.0 / 0.0	44.74	V / 1.00 / 0	-38.86	n/a
75.606 MHz	64.65 Qp	1.12 / 7.34 / 26.98 / 0.0	46.13	V / 1.00 / 0	-37.47	n/a
90.582 MHz	56.55 Qp	1.3 / 7.46 / 26.9 / 0.0	38.41	V / 1.00 / 0	-45.19	n/a
102.12 MHz	65.75 Qp	1.4 / 8.38 / 27.0 / 0.0	48.53	V / 1.00 / 0	-35.07	n/a
110.13 MHz	55.5 Qp	1.4 / 8.39 / 27.06 / 0.0	38.23	V / 1.00 / 0	-45.37	n/a
122.731 MHz	48.55 Qp	1.52 / 7.74 / 27.08 / 0.0	30.72	V / 1.00 / 0	-52.88	n/a
143.149 MHz	50.3 Qp	1.64 / 8.5 / 26.96 / 0.0	33.48	V / 1.00 / 0	-50.12	n/a
167.029 MHz	56.0 Qp	1.76 / 8.18 / 27.0 / 0.0	38.94	V / 1.00 / 0	-44.66	n/a
195.529 MHz	50.7 Qp	1.99 / 9.89 / 27.1 / 0.0	35.48	V / 1.00 / 0	-48.12	n/a
233.857 MHz	46.35 Qp	2.15 / 10.48 / 27.2 / 0.0	31.77	V / 1.00 / 0	-51.83	n/a
257.461 MHz	44.3 Qp	2.37 / 11.5 / 27.2 / 0.0	30.97	V / 1.00 / 0	-52.63	n/a
278.755 MHz	42.6 Qp	2.4 / 12.0 / 27.4 / 0.0	29.6	V / 1.00 / 0	-54.0	n/a
300.373 MHz	47.7 Qp	2.51 / 12.13 / 27.5 / 0.0	34.83	V / 1.00 / 0	-48.77	n/a
300.679 MHz	45.35 Qp	2.51 / 12.15 / 27.5 / 0.0	32.51	V / 1.00 / 0	-51.09	n/a
324.758 MHz	45.9 Qp	2.62 / 13.1 / 27.52 / 0.0	34.1	V / 1.00 / 0	-49.5	n/a
386.192 MHz	48.35 Qp	2.87 / 15.3 / 27.74 / 0.0	38.77	V / 1.00 / 0	-44.83	n/a
400.88 MHz	42.7 Qp	2.92 / 15.75 / 27.82 / 0.0	33.55	V / 1.00 / 0	-50.05	n/a
429.092 MHz	49.45 Qp	3.02 / 16.44 / 27.9 / 0.0	41.01	V / 1.00 / 0	-42.59	n/a
451.688 MHz	45.95 Qp	3.1 / 16.22 / 27.9 / 0.0	37.37	V / 1.00 / 0	-46.23	n/a
472.01 MHz	45.9 Qp	3.22 / 17.28 / 27.9 / 0.0	38.5	V / 1.00 / 0	-45.1	n/a

Tested by: J. C. Sausen

Printed

Signature

Reviewed by: G. Jakubowski

Printed

Signature

RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 2 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
501.122 MHz	43.0 Qp	3.35 / 17.18 / 27.95 / 0.0	35.58	V / 1.00 / 0	-48.02	n/a
557.823 MHz	44.4 Qp	3.5 / 18.55 / 28.1 / 0.0	38.35	V / 1.00 / 0	-45.25	n/a
643.668 MHz	34.6 Qp	3.82 / 19.18 / 28.18 / 0.0	29.42	V / 1.00 / 0	-54.18	n/a
729.489 MHz	35.35 Qp	4.09 / 20.66 / 27.99 / 0.0	32.11	V / 1.00 / 0	-51.49	n/a
919.646 MHz	35.25 Qp	4.64 / 21.29 / 27.6 / 0.0	33.59	V / 1.00 / 0	-50.01	n/a
944.048 MHz	35.3 Qp	4.72 / 22.4 / 27.6 / 0.0	34.82	V / 1.00 / 0	-48.78	n/a
944 MHz maxed:						
944.048 MHz	38.96 Qp	4.72 / 22.4 / 27.6 / 0.0	38.48	V / 2.69 / 347	-45.12	n/a
429.092 MHz	52.85 Qp	3.02 / 16.44 / 27.9 / 0.0	44.41	V / 2.69 / 347	-39.19	n/a
451.688 MHz	51.95 Qp	3.1 / 16.22 / 27.9 / 0.0	43.37	V / 2.69 / 347	-40.23	n/a
472.01 MHz	48.9 Qp	3.22 / 17.28 / 27.9 / 0.0	41.5	V / 2.69 / 347	-42.1	n/a
501.122 MHz	54.35 Qp	3.35 / 17.18 / 27.95 / 0.0	46.93	V / 2.69 / 347	-36.67	n/a
643.668 MHz	41.95 Qp	3.82 / 19.18 / 28.18 / 0.0	36.77	V / 2.69 / 347	-46.83	n/a
729.489 MHz	38.45 Qp	4.09 / 20.66 / 27.99 / 0.0	35.21	V / 2.69 / 347	-48.39	n/a
429 MHz maxed:						
429.092 MHz	53.16 Qp	3.02 / 16.44 / 27.9 / 0.0	44.72	V / 3.10 / 0	-38.88	n/a
75.606 MHz	64.2 Qp	1.12 / 7.34 / 26.98 / 0.0	45.68	V / 3.10 / 0	-37.92	n/a
257.461 MHz	45.65 Qp	2.37 / 11.5 / 27.2 / 0.0	32.32	V / 3.10 / 0	-51.28	n/a
324.889 MHz	47.9 Qp	2.62 / 13.1 / 27.52 / 0.0	36.1	V / 3.10 / 0	-47.5	n/a
257.461 MHz	50.05 Qp	2.37 / 11.5 / 27.2 / 0.0	36.72	V / 3.10 / 180	-46.88	n/a
300.373 MHz	49.2 Qp	2.51 / 12.13 / 27.5 / 0.0	36.33	V / 3.10 / 180	-47.27	n/a
643 MHz maxed:						
643.668 MHz	46.2 Qp	3.82 / 19.18 / 28.18 / 0.0	41.02	H / 2.95 / 340	-42.58	n/a
944.048 MHz	38.8 Qp	4.72 / 22.4 / 27.6 / 0.0	38.32	H / 2.95 / 0	-45.28	n/a

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Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 3 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
High "A" setting = 1945 MHz:						
944.048 MHz	37.89 Qp	4.72 / 22.4 / 27.6 / 0.0	37.41	H / 2.95 / 0	-46.19	n/a
300.373 MHz	49.7 Qp	2.51 / 12.13 / 27.5 / 0.0	36.83	H / 2.95 / 0	-46.77	n/a
386.192 MHz	48.15 Qp	2.87 / 15.3 / 27.74 / 0.0	38.57	H / 2.95 / 0	-45.03	n/a
557.823 MHz	42.65 Qp	3.5 / 18.55 / 28.1 / 0.0	36.6	H / 2.95 / 0	-47.0	n/a
944.048 MHz	37.95 Qp	4.72 / 22.4 / 27.6 / 0.0	37.47	H / 2.95 / 0	-46.13	n/a
643.668 MHz	45.49 Qp	3.82 / 19.18 / 28.18 / 0.0	40.31	H / 2.95 / 340	-43.29	n/a
46.032 MHz	65.1 Qp	0.9 / 14.29 / 27.1 / 0.0	53.19	V / 2.95 / 340	-30.41	n/a
60.162 MHz	52.95 Qp	1.0 / 10.65 / 27.0 / 0.0	37.6	V / 2.95 / 340	-46.0	n/a
75.606 MHz	63.3 Qp	1.12 / 7.34 / 26.98 / 0.0	44.78	V / 2.95 / 340	-38.82	n/a
257.461 MHz	49.9 Qp	2.37 / 11.5 / 27.2 / 0.0	36.57	V / 2.95 / 340	-47.03	n/a
300.373 MHz	53.55 Qp	2.51 / 12.13 / 27.5 / 0.0	40.68	V / 2.95 / 340	-42.92	n/a
300.679 MHz	46.7 Qp	2.51 / 12.15 / 27.5 / 0.0	33.86	V / 2.95 / 340	-49.74	n/a
386.192 MHz	49.95 Qp	2.87 / 15.3 / 27.74 / 0.0	40.37	V / 2.95 / 340	-43.23	n/a
557.823 MHz	44.35 Qp	3.5 / 18.55 / 28.1 / 0.0	38.3	V / 2.95 / 340	-45.3	n/a
944.048 MHz	37.85 Qp	4.72 / 22.4 / 27.6 / 0.0	37.37	V / 2.95 / 340	-46.23	n/a
46.032 MHz	65.1 Qp	0.9 / 14.29 / 27.1 / 0.0	53.19	V / 1.00 / 340	-30.41	n/a
643 MHz maxed:						
643.668 MHz	47.57 Qp	3.82 / 19.18 / 28.18 / 0.0	42.39	H / 1.00 / 163	-41.21	n/a
386.192 MHz	53.05 Qp	2.87 / 15.3 / 27.74 / 0.0	43.47	H / 1.00 / 163	-40.13	n/a
729.489 MHz	40.0 Qp	4.09 / 20.66 / 27.99 / 0.0	36.76	H / 1.00 / 163	-46.84	n/a
Low "D" setting = 1945 MHz:						
643.668 MHz	47.94 Qp	3.82 / 19.18 / 28.18 / 0.0	42.76	H / 1.00 / 163	-40.84	n/a

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Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 4 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
386.192 MHz	52.85 Qp	2.87 / 15.3 / 27.74 / 0.0	43.27	H / 1.00 / 163	-40.33	n/a
729.489 MHz	40.75 Qp	4.09 / 20.66 / 27.99 / 0.0	37.51	H / 1.00 / 163	-46.09	n/a
40.182 MHz	52.05 Qp	0.8 / 16.15 / 27.09 / 0.0	41.9	V / 1.00 / 163	-41.7	n/a
46.032 MHz	65.05 Qp	0.9 / 14.29 / 27.1 / 0.0	53.14	V / 1.00 / 163	-30.46	n/a
75.606 MHz	58.4 Qp	1.12 / 7.34 / 26.98 / 0.0	39.88	V / 1.00 / 163	-43.72	n/a
122.731 MHz	50.95 Qp	1.52 / 7.74 / 27.08 / 0.0	33.12	V / 1.00 / 163	-50.48	n/a
257.461 MHz	52.05 Qp	2.37 / 11.5 / 27.2 / 0.0	38.72	V / 1.00 / 163	-44.88	n/a
400.88 MHz	45.45 Qp	2.92 / 15.75 / 27.82 / 0.0	36.3	V / 1.00 / 163	-47.3	n/a
429 MHz maxed:						
429.092 MHz	53.5 Qp	3.02 / 16.44 / 27.9 / 0.0	45.06	V / 3.00 / 350	-38.54	n/a
46.032 MHz	63.35 Qp	0.9 / 14.29 / 27.1 / 0.0	51.44	V / 3.00 / 350	-32.16	n/a
51.684 MHz	57.2 Qp	0.9 / 12.86 / 27.03 / 0.0	43.93	V / 3.00 / 350	-39.67	n/a
324.889 MHz	47.05 Qp	2.62 / 13.1 / 27.52 / 0.0	35.25	V / 3.00 / 350	-48.35	n/a
451.688 MHz	53.0 Qp	3.1 / 16.22 / 27.9 / 0.0	44.42	V / 3.00 / 350	-39.18	n/a
501.122 MHz	52.5 Qp	3.35 / 17.18 / 27.95 / 0.0	45.08	V / 3.00 / 350	-38.52	n/a
High "B" setting = 1960 MHz:						
429.092 MHz	52.24 Qp	3.02 / 16.44 / 27.9 / 0.0	43.8	V / 3.00 / 350	-39.8	n/a
46.032 MHz	64.4 Qp	0.9 / 14.29 / 27.1 / 0.0	52.49	V / 3.00 / 350	-31.11	n/a
51.684 MHz	57.0 Qp	0.9 / 12.86 / 27.03 / 0.0	43.73	V / 3.00 / 350	-39.87	n/a
324.889 MHz	47.05 Qp	2.62 / 13.1 / 27.52 / 0.0	35.25	V / 3.00 / 350	-48.35	n/a
451.688 MHz	53.5 Qp	3.1 / 16.22 / 27.9 / 0.0	44.92	V / 3.00 / 350	-38.68	n/a
501.122 MHz	52.55 Qp	3.35 / 17.18 / 27.95 / 0.0	45.13	V / 3.00 / 350	-38.47	n/a
643.668 MHz	47.65 Qp	3.82 / 19.18 / 28.18 / 0.0	42.47	H / 1.00 / 163	-41.13	n/a
386.192 MHz	52.3 Qp	2.87 / 15.3 / 27.74 / 0.0	42.72	H / 1.00 / 163	-40.88	n/a
472.01 MHz	48.3 Qp	3.22 / 17.28 / 27.9 / 0.0	40.9	H / 1.00 / 163	-42.7	n/a

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Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 5 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
1.029 GHz maxed:						
1.03 GHz	61.67 Av	2.79 / 25.63 / 48.96 / 0.0	41.13	H / 1.60 / 133	n/a	n/a
1.07 GHz	56.36 Av	2.84 / 25.58 / 49.26 / 0.0	35.52	H / 1.60 / 133	n/a	n/a
1.202 GHz	62.63 Av	3.01 / 25.43 / 49.65 / 0.0	41.42	H / 1.60 / 133	n/a	n/a
1.631 GHz	67.53 Av	3.55 / 25.92 / 49.58 / 0.0	47.42	H / 1.60 / 133	n/a	n/a
1.888 GHz	62.74 Av	3.86 / 27.54 / 49.93 / 0.0	44.21	H / 1.60 / 133	n/a	n/a
1.96 GHz	87.71 Av	3.9 / 27.99 / 49.75 / 0.0	69.85	H / 1.60 / 133	n/a	n/a
1.974 GHz	61.64 Av	3.9 / 28.08 / 49.7 / 0.0	43.91	H / 1.60 / 133	n/a	n/a
2.22 GHz	58.31 Av	4.09 / 28.42 / 49.32 / 0.0	41.49	H / 1.60 / 133	n/a	n/a
2.403 GHz	61.42 Av	4.31 / 28.56 / 49.4 / 0.0	44.89	H / 1.60 / 133	n/a	n/a
3.476 GHz	47.37 Av	5.26 / 31.14 / 47.32 / 0.0	36.45	H / 1.60 / 133	n/a	n/a
3.92 GHz	53.85 Av	5.76 / 32.25 / 46.47 / 0.0	45.38	H / 1.60 / 133	n/a	n/a
Noise floor - no EUT emissions detected:						
5.88 GHz	40.88 Av	7.03 / 34.29 / 45.28 / 0.0	36.92	H / 1.60 / 133	n/a	n/a
7.84 GHz	40.95 Av	8.27 / 36.81 / 45.81 / 0.0	40.22	H / 1.60 / 133	n/a	n/a
17.64 GHz	37.98 Av	13.12 / 46.05 / 45.53 / 0.0	51.62	H / 1.60 / 133	n/a	n/a
15.68 GHz	37.82 Av	11.91 / 37.8 / 44.21 / 0.0	43.33	H / 1.60 / 133	n/a	n/a
13.72 GHz	38.36 Av	10.89 / 41.47 / 43.47 / 0.0	47.26	H / 1.60 / 133	n/a	n/a
7.84 GHz	40.74 Av	8.27 / 36.81 / 45.81 / 0.0	40.01	H / 1.60 / 133	n/a	n/a
EUT emission measurement:						
2.746 GHz	55.14 Av	4.5 / 29.35 / 48.26 / 0.0	40.73	H / 1.60 / 133	n/a	n/a
2.36 GHz	60.19 Av	4.26 / 28.53 / 49.22 / 0.0	43.76	H / 1.60 / 133	n/a	n/a
1.63 GHz maxed:						
1.631 GHz	69.9 Pk	3.55 / 25.92 / 49.58 / 0.0	49.79	H / 1.57 / 127	n/a	-33.81
1.631 GHz	69.32 Av	3.55 / 25.92 / 49.58 / 0.0	49.21	H / 1.57 / 127	n/a	n/a
2.403 GHz	61.65 Av	4.31 / 28.56 / 49.4 / 0.0	45.12	H / 1.57 / 127	n/a	n/a

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Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 6 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
1.03 GHz	63.12 Av	2.79 / 25.63 / 48.96 / 0.0	42.58	H / 1.57 / 127	n/a	n/a
1.03 GHz	65.5 Pk	2.79 / 25.63 / 48.96 / 0.0	44.96	H / 1.57 / 127	n/a	-38.64
3.92 GHz	51.3 Av	5.76 / 32.25 / 46.47 / 0.0	42.83	H / 1.57 / 127	n/a	n/a
3.92 GHz	51.9 Pk	5.76 / 32.25 / 46.47 / 0.0	43.43	H / 1.57 / 127	n/a	-40.17
3.92 GHz	52.74 Av	5.76 / 32.25 / 46.47 / 0.0	44.27	V / 1.60 / 133	n/a	n/a
3.92 GHz	55.15 Pk	5.76 / 32.25 / 46.47 / 0.0	46.68	V / 1.60 / 133	n/a	-36.92
2.746 GHz	55.31 Av	4.5 / 29.35 / 48.26 / 0.0	40.9	V / 1.60 / 133	n/a	n/a
2.746 GHz	59.05 Pk	4.5 / 29.35 / 48.26 / 0.0	44.64	V / 1.60 / 133	n/a	-38.96
1.88 GHz maxed:						
1.888 GHz	68.81 Av	3.86 / 27.54 / 49.93 / 0.0	50.28	V / 1.19 / 186	n/a	n/a
1.202 GHz	64.67 Av	3.01 / 25.43 / 49.65 / 0.0	43.46	V / 1.19 / 186	n/a	n/a
1.202 GHz	65.95 Pk	3.01 / 25.43 / 49.65 / 0.0	44.74	V / 1.19 / 186	n/a	-38.86
1.888 GHz	70.15 Pk	3.86 / 27.54 / 49.93 / 0.0	51.62	V / 1.19 / 186	n/a	-31.98
1.974 GHz	59.07 Av	3.9 / 28.08 / 49.7 / 0.0	41.34	V / 1.19 / 186	n/a	n/a
1.974 GHz	61.65 Pk	3.9 / 28.08 / 49.7 / 0.0	43.92	V / 1.19 / 186	n/a	-39.68
2.704 GHz	57.83 Av	4.48 / 29.22 / 48.25 / 0.0	43.28	V / 1.19 / 186	n/a	n/a
2.704 GHz	60.6 Pk	4.48 / 29.22 / 48.25 / 0.0	46.05	V / 1.19 / 186	n/a	-37.55
Low "D" setting = 1945 MHz:						
1.03 GHz	58.83 Av	2.79 / 25.63 / 48.96 / 0.0	38.29	V / 1.19 / 186	n/a	n/a
1.03 GHz	63.55 Pk	2.79 / 25.63 / 48.96 / 0.0	43.01	V / 1.19 / 186	n/a	-40.59
1.07 GHz	58.3 Pk	2.84 / 25.58 / 49.26 / 0.0	37.46	V / 1.19 / 186	n/a	-46.14
1.202 GHz	67.3 Pk	3.01 / 25.43 / 49.65 / 0.0	46.09	V / 1.19 / 186	n/a	-37.51
1.631 GHz	65.85 Pk	3.55 / 25.92 / 49.58 / 0.0	45.74	V / 1.19 / 186	n/a	-37.86
1.888 GHz	70.2 Pk	3.86 / 27.54 / 49.93 / 0.0	51.67	V / 1.19 / 186	n/a	-31.93
1.96 GHz	56.5 Pk	3.9 / 27.99 / 49.75 / 0.0	38.64	V / 1.19 / 186	n/a	-44.96

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RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 7 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
1.974 GHz	60.55 Pk	3.9 / 28.08 / 49.7 / 0.0	42.82	V / 1.19 / 186	n/a	-40.78
2.22 GHz	65.0 Pk	4.09 / 28.42 / 49.32 / 0.0	48.18	V / 1.19 / 186	n/a	-35.42
2.36 GHz	57.65 Pk	4.26 / 28.53 / 49.22 / 0.0	41.22	V / 1.19 / 186	n/a	-42.38
2.403 GHz	57.95 Pk	4.31 / 28.56 / 49.4 / 0.0	41.42	V / 1.19 / 186	n/a	-42.18
2.704 GHz	60.85 Pk	4.48 / 29.22 / 48.25 / 0.0	46.3	V / 1.19 / 186	n/a	-37.3
3.476 GHz	53.7 Pk	5.26 / 31.14 / 47.32 / 0.0	42.78	V / 1.19 / 186	n/a	-40.82
3.92 GHz	48.85 Pk	5.76 / 32.25 / 46.47 / 0.0	40.38	V / 1.19 / 186	n/a	-43.22
5.88 GHz	47.75 Pk	7.03 / 34.29 / 45.28 / 0.0	43.79	V / 1.19 / 186	n/a	-39.81
1.888 GHz	68.25 Av	3.86 / 27.54 / 49.93 / 0.0	49.72	V / 1.19 / 186	n/a	n/a
1.63 GHz maxed:						
1.631 GHz	67.14 Av	3.55 / 25.92 / 49.58 / 0.0	47.03	H / 1.14 / 196	n/a	n/a
1.631 GHz	67.6 Pk	3.55 / 25.92 / 49.58 / 0.0	47.49	H / 1.14 / 196	n/a	-36.11
1.974 GHz	63.76 Av	3.9 / 28.08 / 49.7 / 0.0	46.03	H / 1.14 / 196	n/a	n/a
1.974 GHz	65.75 Pk	3.9 / 28.08 / 49.7 / 0.0	48.02	H / 1.14 / 196	n/a	-35.58
1.945 GHz	83.35 Pk	3.9 / 27.9 / 49.81 / 0.0	65.34	H / 1.14 / 196	n/a	-18.26
1.945 GHz	89.9 Pk	3.9 / 27.9 / 49.81 / 0.0	71.89	V / 1.14 / 196	n/a	-11.71
Low "A" setting = 1930 MHz:						
1.93 GHz	86.8 Av	3.89 / 27.8 / 49.86 / 0.0	68.63	V / 1.14 / 196	n/a	n/a
1.93 GHz	87.2 Pk	3.89 / 27.8 / 49.86 / 0.0	69.03	V / 1.14 / 196	n/a	-14.57
1.631 GHz	67.5 Av	3.55 / 25.92 / 49.58 / 0.0	47.39	V / 1.14 / 196	n/a	n/a
1.631 GHz	68.25 Pk	3.55 / 25.92 / 49.58 / 0.0	48.14	V / 1.14 / 196	n/a	-35.46
1.888 GHz	60.96 Av	3.86 / 27.54 / 49.93 / 0.0	42.43	V / 1.14 / 196	n/a	n/a
1.888 GHz	64.8 Pk	3.86 / 27.54 / 49.93 / 0.0	46.27	V / 1.14 / 196	n/a	-37.33
1.03 GHz	62.75 Pk	2.79 / 25.63 / 48.96 / 0.0	42.21	V / 1.14 / 196	n/a	-41.39
1.07 GHz	54.0 Pk	2.84 / 25.58 / 49.26 / 0.0	33.16	V / 1.14 / 196	n/a	-50.44
1.202 GHz	62.85 Pk	3.01 / 25.43 / 49.65 / 0.0	41.64	V / 1.14 / 196	n/a	-41.96

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Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 8 of 13

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz	DELTA2 -13 dBm >1GHz
1.945 GHz	56.75 Pk	3.9 / 27.9 / 49.81 / 0.0	38.74	V / 1.14 / 196	n/a	-44.86
1.96 GHz	58.25 Pk	3.9 / 27.99 / 49.75 / 0.0	40.39	V / 1.14 / 196	n/a	-43.21
1.974 GHz	64.1 Pk	3.9 / 28.08 / 49.7 / 0.0	46.37	V / 1.14 / 196	n/a	-37.23
2.22 GHz	65.7 Pk	4.09 / 28.42 / 49.32 / 0.0	48.88	V / 1.14 / 196	n/a	-34.72
2.36 GHz	58.15 Pk	4.26 / 28.53 / 49.22 / 0.0	41.72	V / 1.14 / 196	n/a	-41.88
2.403 GHz	60.2 Pk	4.31 / 28.56 / 49.4 / 0.0	43.67	V / 1.14 / 196	n/a	-39.93
2.704 GHz	60.15 Pk	4.48 / 29.22 / 48.25 / 0.0	45.6	V / 1.14 / 196	n/a	-38.0
2.746 GHz	61.75 Pk	4.5 / 29.35 / 48.26 / 0.0	47.34	V / 1.14 / 196	n/a	-36.26
1.631 GHz	69.74 Av	3.55 / 25.92 / 49.58 / 0.0	49.63	H / 1.53 / 127	n/a	n/a
1.631 GHz	70.7 Pk	3.55 / 25.92 / 49.58 / 0.0	50.59	H / 1.53 / 127	n/a	-33.01
1.974 GHz	56.74 Av	3.9 / 28.08 / 49.7 / 0.0	39.01	H / 1.53 / 127	n/a	n/a
1.974 GHz	62.15 Pk	3.9 / 28.08 / 49.7 / 0.0	44.42	H / 1.53 / 127	n/a	-39.18
Noise floor recheck:						
13.72 GHz	47.1 Pk	10.89 / 41.47 / 43.47 / 0.0	56.0	H / 1.53 / 127	n/a	-27.6
7.84 GHz	46.15 Pk	8.27 / 36.81 / 45.81 / 0.0	45.42	H / 1.53 / 127	n/a	-38.18
15.68 GHz	46.65 Pk	11.91 / 37.8 / 44.21 / 0.0	52.16	H / 1.53 / 127	n/a	-31.44
17.64 GHz	44.35 Pk	13.12 / 46.05 / 45.53 / 0.0	57.99	H / 1.53 / 127	n/a	-25.61
No further significant EUT spurious emissions 30 MHz to 19.6 GHz, vert and hor ant.						

Tested by: J. C. Sausen

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Reviewed by: G. Jakubowski

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RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat Page: 9 of 13

At 643.6 MHz, the measured field strength = 42.8 dBμV/m @ 3 meters
Substitution method was performed to determine the ERP
Matching signal generator level = -45.6 dBm
Cable loss = 2.0 dB
Dipole antenna gain = -6.2 dBi
-45.6 dBm – 2.0 dB + -6.2 dBi = -53.8 dBm ERP
Field strength (dBμV/m) – 96.6 = ERP (dBm)
Field strength limit = -13 dBm ERP + 96.6 = 83.6 dBμV/m @ 3 meters

Tested by: J. C. Sausen

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A handwritten signature in black ink that reads 'J C Sausen'.

Signature

Reviewed by: G. Jakubowski

Printed

A handwritten signature in blue ink that reads 'G Jakubowski'.

Signature

RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 10 of 13

Measurement summary for limit1: -13dBm < 1GHz (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz
46.032 MHz	65.2 Qp	0.9 / 14.29 / 27.1 / 0.0	53.29	V / 1.00 / 0	-30.31
102.12 MHz	65.75 Qp	1.4 / 8.38 / 27.0 / 0.0	48.53	V / 1.00 / 0	-35.07
501.122 MHz	54.35 Qp	3.35 / 17.18 / 27.95 / 0.0	46.93	V / 2.69 / 347	-36.67
75.606 MHz	64.65 Qp	1.12 / 7.34 / 26.98 / 0.0	46.13	V / 1.00 / 0	-37.47
51.684 MHz	58.85 Qp	0.9 / 12.86 / 27.03 / 0.0	45.58	V / 1.00 / 0	-38.02
429.092 MHz	53.5 Qp	3.02 / 16.44 / 27.9 / 0.0	45.06	V / 3.00 / 350	-38.54
451.688 MHz	53.5 Qp	3.1 / 16.22 / 27.9 / 0.0	44.92	V / 3.00 / 350	-38.68
64.074 MHz	61.15 Qp	1.0 / 9.59 / 27.0 / 0.0	44.74	V / 1.00 / 0	-38.86
40.182 MHz	53.65 Qp	0.8 / 16.15 / 27.09 / 0.0	43.5	V / 1.00 / 0	-40.1
386.192 MHz	53.05 Qp	2.87 / 15.3 / 27.74 / 0.0	43.47	H / 1.00 / 163	-40.13
643.668 MHz	47.94 Qp	3.82 / 19.18 / 28.18 / 0.0	42.76	H / 1.00 / 163	-40.84
472.01 MHz	48.9 Qp	3.22 / 17.28 / 27.9 / 0.0	41.5	V / 2.69 / 347	-42.1
300.373 MHz	53.55 Qp	2.51 / 12.13 / 27.5 / 0.0	40.68	V / 2.95 / 340	-42.92
57.552 MHz	55.3 Qp	1.0 / 11.33 / 27.0 / 0.0	40.63	V / 1.00 / 0	-42.97
60.162 MHz	55.7 Qp	1.0 / 10.65 / 27.0 / 0.0	40.35	V / 1.00 / 0	-43.25
167.029 MHz	56.0 Qp	1.76 / 8.18 / 27.0 / 0.0	38.94	V / 1.00 / 0	-44.66
257.461 MHz	52.05 Qp	2.37 / 11.5 / 27.2 / 0.0	38.72	V / 1.00 / 163	-44.88
944.048 MHz	38.96 Qp	4.72 / 22.4 / 27.6 / 0.0	38.48	V / 2.69 / 347	-45.12
90.582 MHz	56.55 Qp	1.3 / 7.46 / 26.9 / 0.0	38.41	V / 1.00 / 0	-45.19
557.823 MHz	44.4 Qp	3.5 / 18.55 / 28.1 / 0.0	38.35	V / 1.00 / 0	-45.25
110.13 MHz	55.5 Qp	1.4 / 8.39 / 27.06 / 0.0	38.23	V / 1.00 / 0	-45.37
729.489 MHz	40.75 Qp	4.09 / 20.66 / 27.99 / 0.0	37.51	H / 1.00 / 163	-46.09
400.88 MHz	45.45 Qp	2.92 / 15.75 / 27.82 / 0.0	36.3	V / 1.00 / 163	-47.3
324.889 MHz	47.9 Qp	2.62 / 13.1 / 27.52 / 0.0	36.1	V / 3.10 / 0	-47.5
195.529 MHz	50.7 Qp	1.99 / 9.89 / 27.1 / 0.0	35.48	V / 1.00 / 0	-48.12
324.758 MHz	45.9 Qp	2.62 / 13.1 / 27.52 / 0.0	34.1	V / 1.00 / 0	-49.5

Tested by: J. C. Sausen

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J C Sausen

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Reviewed by: G. Jakubowski

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G Jakubowski

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RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m
EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005
EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C
Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa
Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 11 of 13

Measurement summary for limit1: -13dBm < 1GHz (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 -13dBm < 1GHz
300.679 MHz	46.7 Qp	2.51 / 12.15 / 27.5 / 0.0	33.86	V / 2.95 / 340	-49.74
919.646 MHz	35.25 Qp	4.64 / 21.29 / 27.6 / 0.0	33.59	V / 1.00 / 0	-50.01
143.149 MHz	50.3 Qp	1.64 / 8.5 / 26.96 / 0.0	33.48	V / 1.00 / 0	-50.12
122.731 MHz	50.95 Qp	1.52 / 7.74 / 27.08 / 0.0	33.12	V / 1.00 / 163	-50.48
30.0 MHz	38.75 Qp	0.7 / 19.9 / 27.4 / 0.0	31.95	V / 1.00 / 0	-51.65
233.857 MHz	46.35 Qp	2.15 / 10.48 / 27.2 / 0.0	31.77	V / 1.00 / 0	-51.83
278.755 MHz	42.6 Qp	2.4 / 12.0 / 27.4 / 0.0	29.6	V / 1.00 / 0	-54.0

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by: G. Jakubowski

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RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat

Page: 12 of 13

Measurement summary for limit2: -13 dBm >1GHz (Pk)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 -13 dBm >1GHz
1.945 GHz	89.9 Pk	3.9 / 27.9 / 49.81 / 0.0	71.89	V / 1.14 / 196	-11.71
1.93 GHz	87.2 Pk	3.89 / 27.8 / 49.86 / 0.0	69.03	V / 1.14 / 196	-14.57
17.64 GHz	44.35 Pk	13.12 / 46.05 / 45.53 / 0.0	57.99	H / 1.53 / 127	-25.61
13.72 GHz	47.1 Pk	10.89 / 41.47 / 43.47 / 0.0	56.0	H / 1.53 / 127	-27.6
15.68 GHz	46.65 Pk	11.91 / 37.8 / 44.21 / 0.0	52.16	H / 1.53 / 127	-31.44
1.888 GHz	70.2 Pk	3.86 / 27.54 / 49.93 / 0.0	51.67	V / 1.19 / 186	-31.93
1.631 GHz	70.7 Pk	3.55 / 25.92 / 49.58 / 0.0	50.59	H / 1.53 / 127	-33.01
2.22 GHz	65.7 Pk	4.09 / 28.42 / 49.32 / 0.0	48.88	V / 1.14 / 196	-34.72
1.974 GHz	65.75 Pk	3.9 / 28.08 / 49.7 / 0.0	48.02	H / 1.14 / 196	-35.58
2.746 GHz	61.75 Pk	4.5 / 29.35 / 48.26 / 0.0	47.34	V / 1.14 / 196	-36.26
3.92 GHz	55.15 Pk	5.76 / 32.25 / 46.47 / 0.0	46.68	V / 1.60 / 133	-36.92
2.704 GHz	60.85 Pk	4.48 / 29.22 / 48.25 / 0.0	46.3	V / 1.19 / 186	-37.3
1.202 GHz	67.3 Pk	3.01 / 25.43 / 49.65 / 0.0	46.09	V / 1.19 / 186	-37.51
7.84 GHz	46.15 Pk	8.27 / 36.81 / 45.81 / 0.0	45.42	H / 1.53 / 127	-38.18
1.03 GHz	65.5 Pk	2.79 / 25.63 / 48.96 / 0.0	44.96	H / 1.57 / 127	-38.64
5.88 GHz	47.75 Pk	7.03 / 34.29 / 45.28 / 0.0	43.79	V / 1.19 / 186	-39.81
2.403 GHz	60.2 Pk	4.31 / 28.56 / 49.4 / 0.0	43.67	V / 1.14 / 196	-39.93
3.476 GHz	53.7 Pk	5.26 / 31.14 / 47.32 / 0.0	42.78	V / 1.19 / 186	-40.82
2.36 GHz	58.15 Pk	4.26 / 28.53 / 49.22 / 0.0	41.72	V / 1.14 / 196	-41.88
1.96 GHz	58.25 Pk	3.9 / 27.99 / 49.75 / 0.0	40.39	V / 1.14 / 196	-43.21
1.07 GHz	58.3 Pk	2.84 / 25.58 / 49.26 / 0.0	37.46	V / 1.19 / 186	-46.14

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RADIATED EMISSIONS



Test Report #: WC505364 Run 2 Test Area: LTS – 3m

EUT Model #: DGVF-04000000XXCRN Date: 10/18/2005

EUT Serial #: NA EUT Power: 60 Hz / 120 VAC Temperature: 22.0 °C

Test Method: FCC Pt 24 E Air Pressure: 98.0 kPa

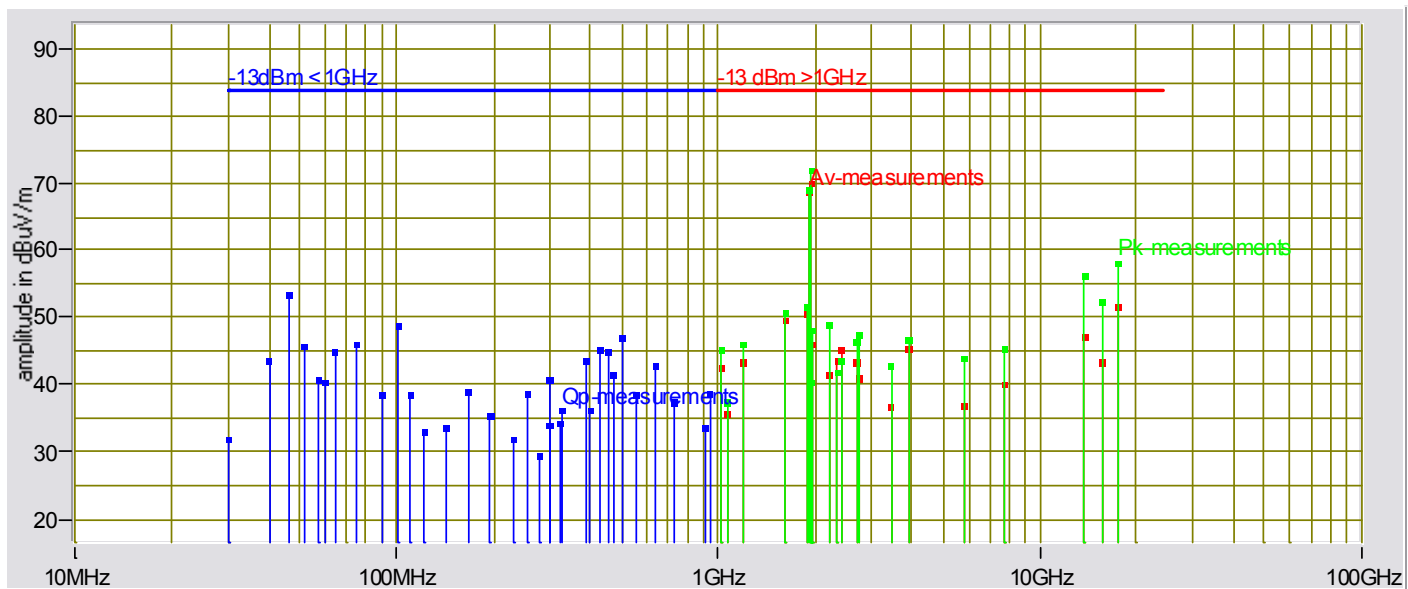
Customer: ADC Rel. Humidity: 36.0 %

EUT Description: PCS ADB

Notes: 1930 - 1965 MHz

Data File Name: 5364 pt 22 & 24.dat Page: 13 of 13

Graph:



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Intermodulation

The Intermodulation measurements were performed at the following test location:

- - ADC facility

ADC's Test equipment used:

Manufacturer	Model	Description	ADC Serial No.	Cal Due
Aeroflex	49-30-33	Attenuator	n/a	CNR
HP	HP8563E	Spectrum Analyzer	MC27690	6-22-06
HP	EPM-441A	Power Meter	MC27670	9-28-06

Equipment used in testing that has a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

Intermodulation data on following pages:

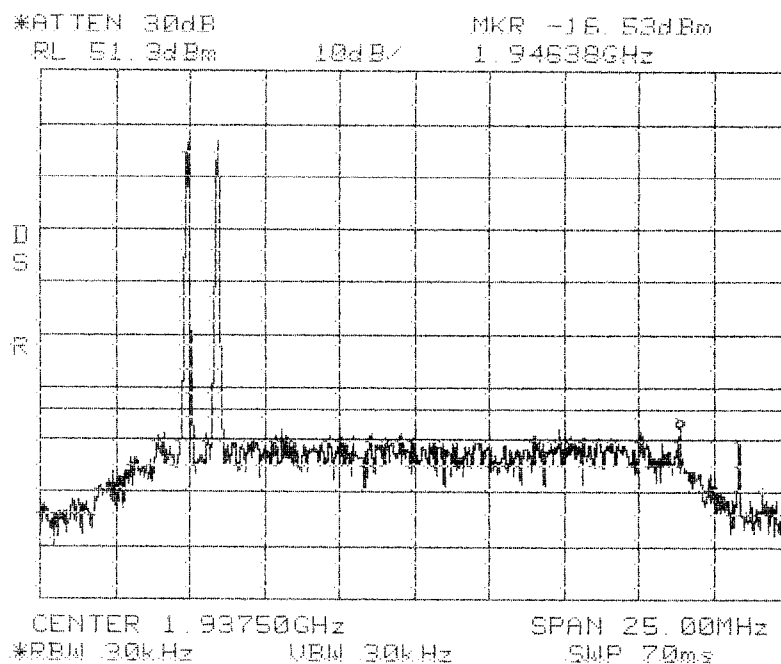


Inter-Modulation Test for ADC Inc
Digivance CXD
Model Number DGVF-04000000XXCRN

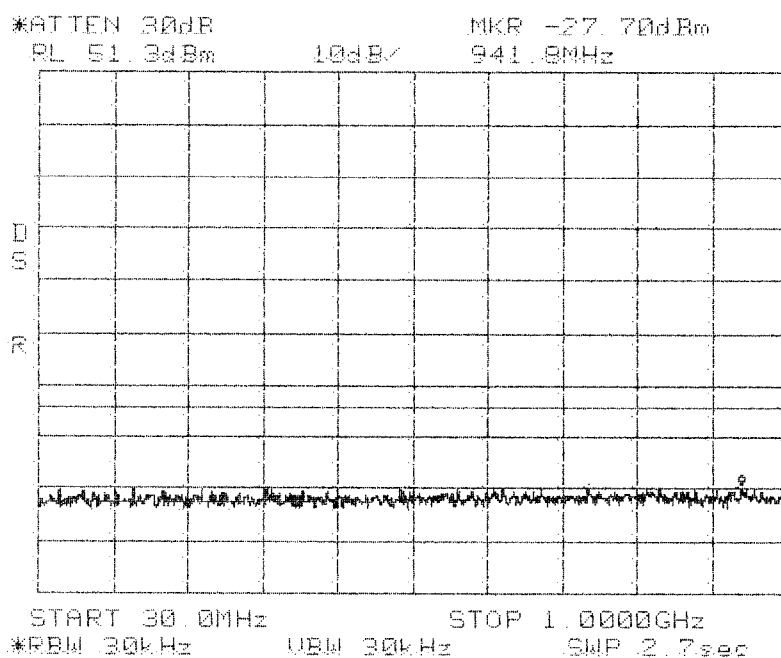
The inter-modulation products test was performed for the EUT. Three tests were performed with the modulation type. Test 1 was with 2 signals input to the EUT at lower end channels. Test 2 was with 2 signals input to the EUT at upper end channels. Test 3 was with 2 signals, one at a lower end channel and one at a higher end channel. The modulation type tested was FM, TDMA, GSM, 16 QAM, and CDMA. An investigation was made from 30 MHz to the 10th Harmonic of the highest fundamental frequency (~20 GHz). The following plots show the results.

Results:
(See Plots)

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



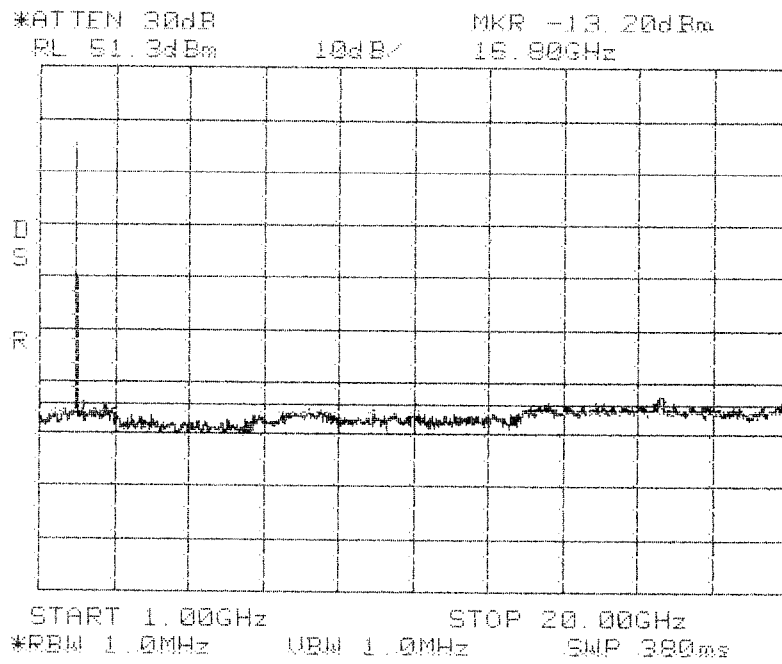
**Intermodulation
Close
Lower
FM
PCS 1900 MHz
A Band**



**Intermodulation
Close
Lower
FM
PCS 1900 MHz
A Band**

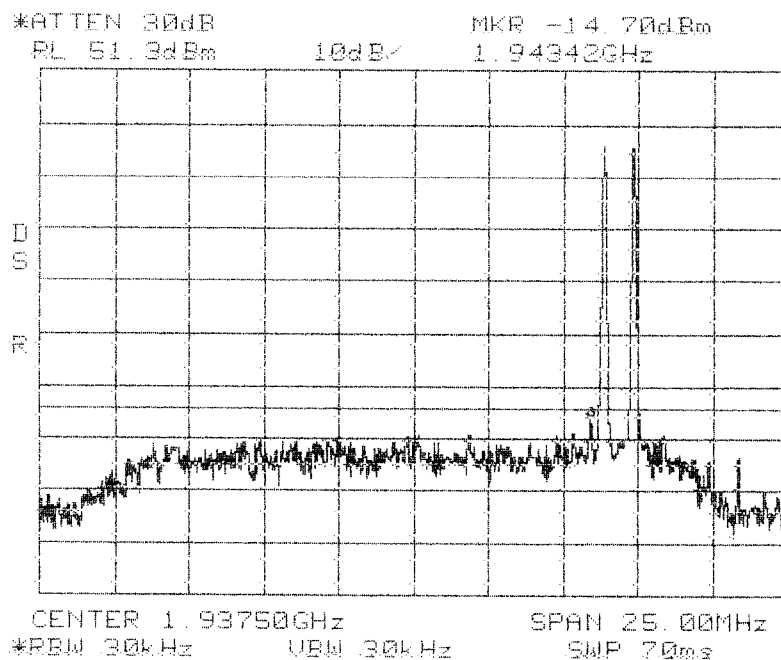
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

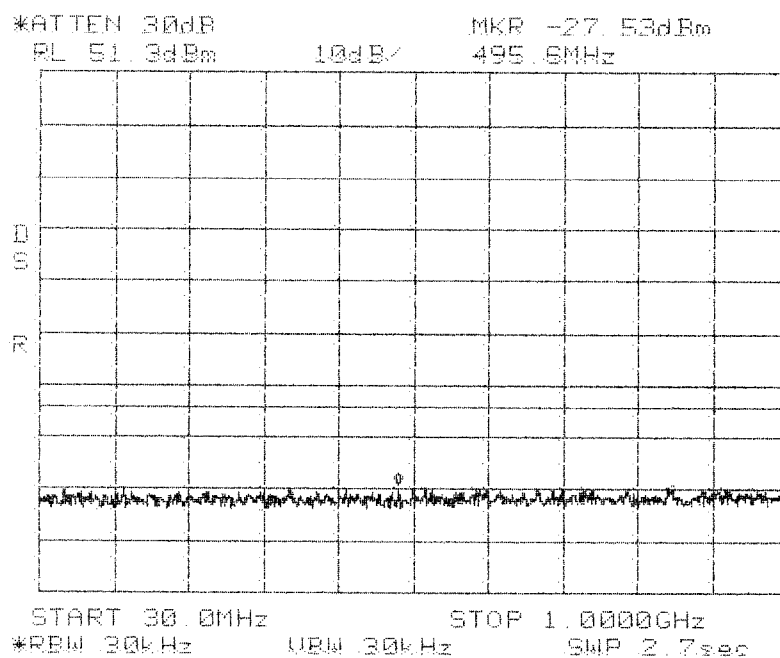


**Intermodulation
Close
Lower
FM
PCS 1900 MHz
A Band**

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



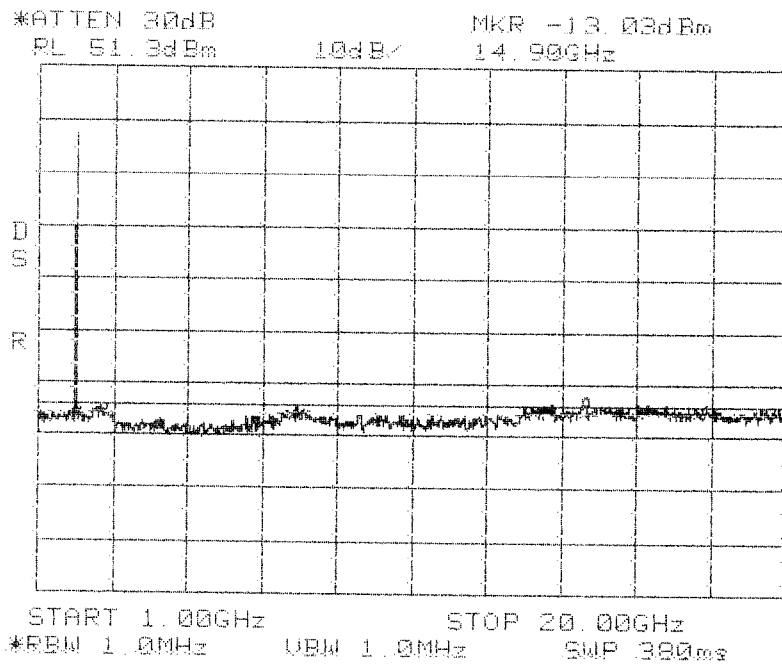
**Intermodulation
Close
Upper
FM
PCS 1900 MHz
A Band**



**Intermodulation
Close
Upper
FM
PCS 1900 MHz
A Band**

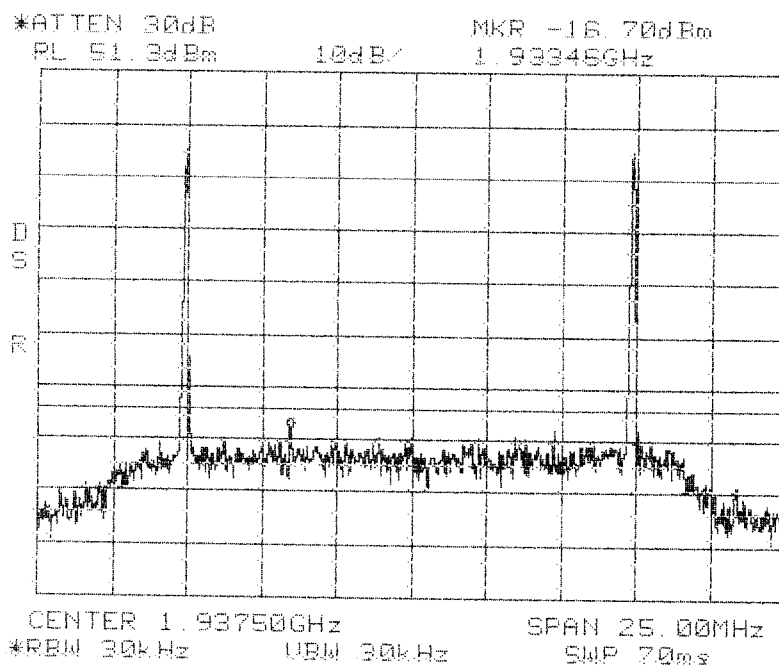
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

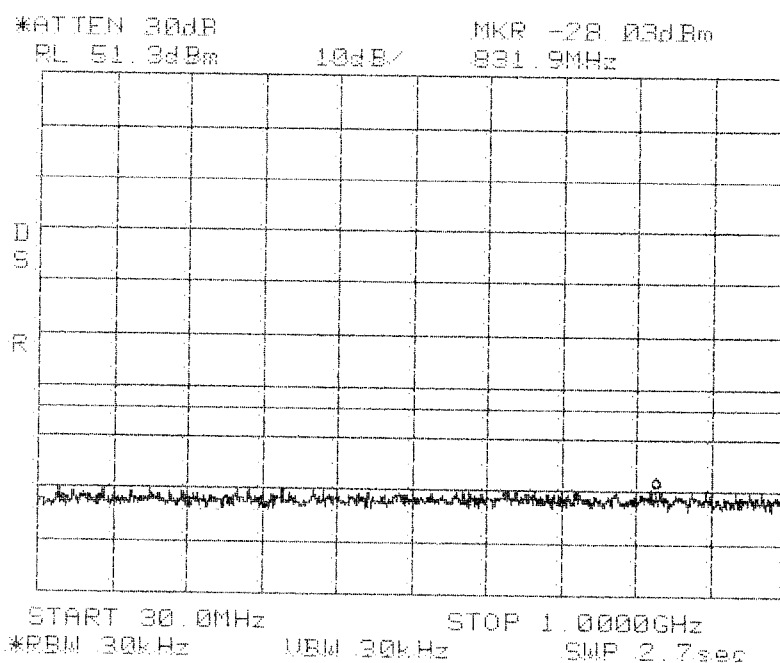


**Intermodulation
Close
Upper
FM
PCS 1900 MHz
A Band**

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



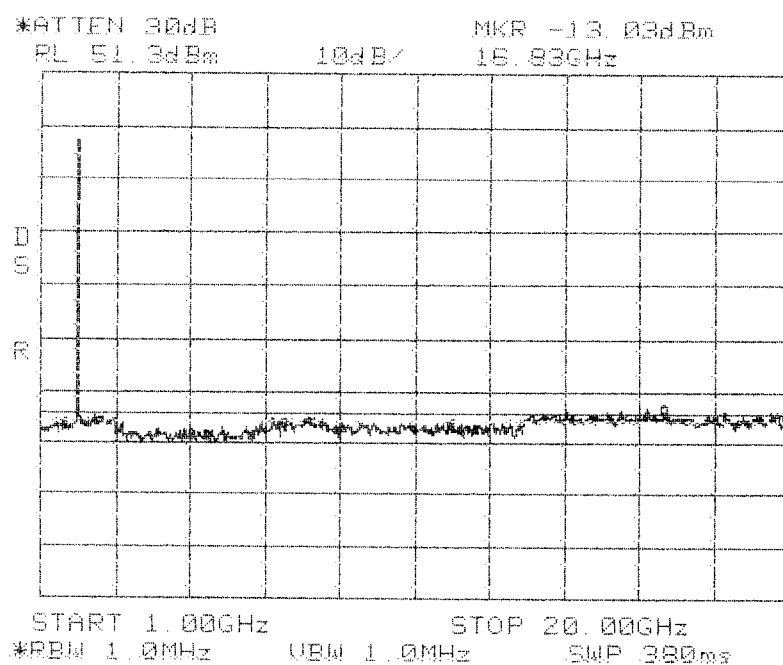
**Intermodulation
Apart
FM
PCS 1900 MHz
A Band**



**Intermodulation
Apart
FM
PCS 1900 MHz
A Band**

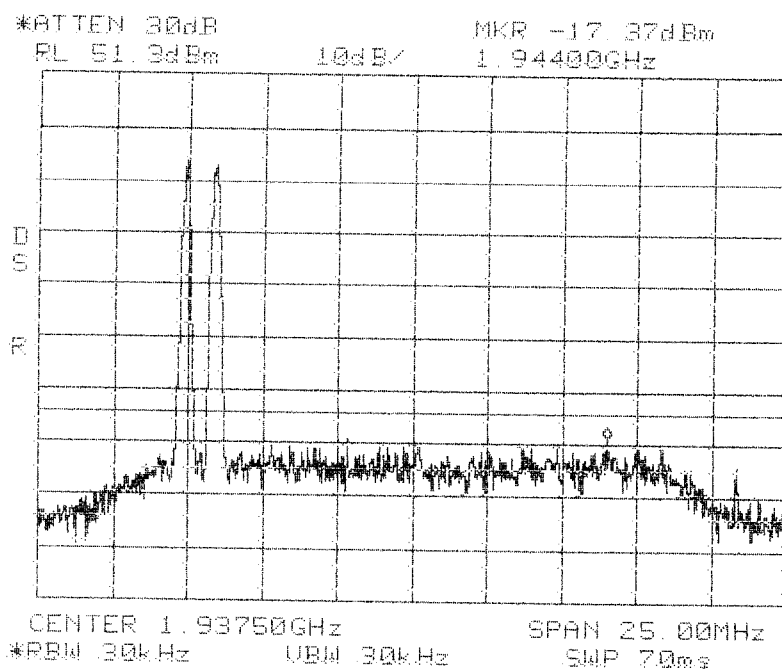
Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz

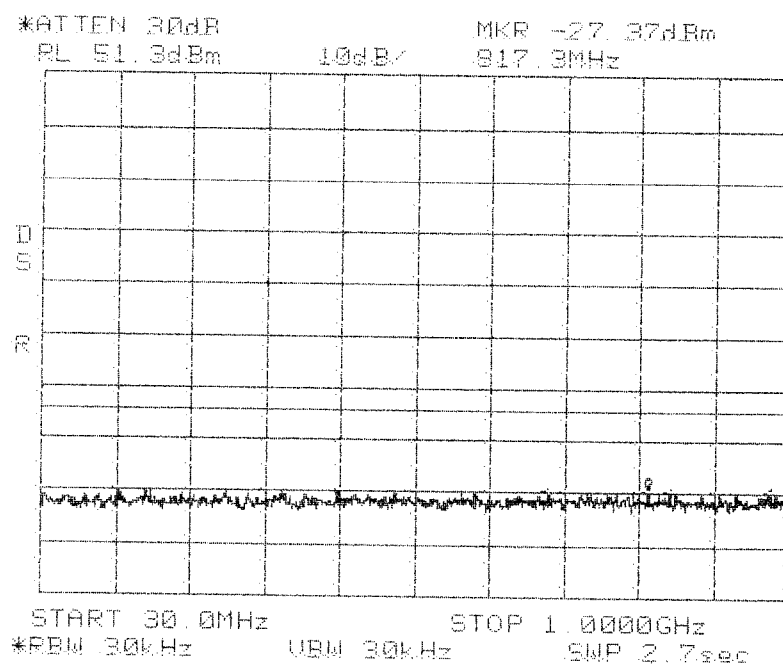


**Intermodulation
Apart
FM
PCS 1900 MHz
A Band**

Center: 1937.5 MHz
Span: 25 MHz
RBW/VBW: 30 kHz



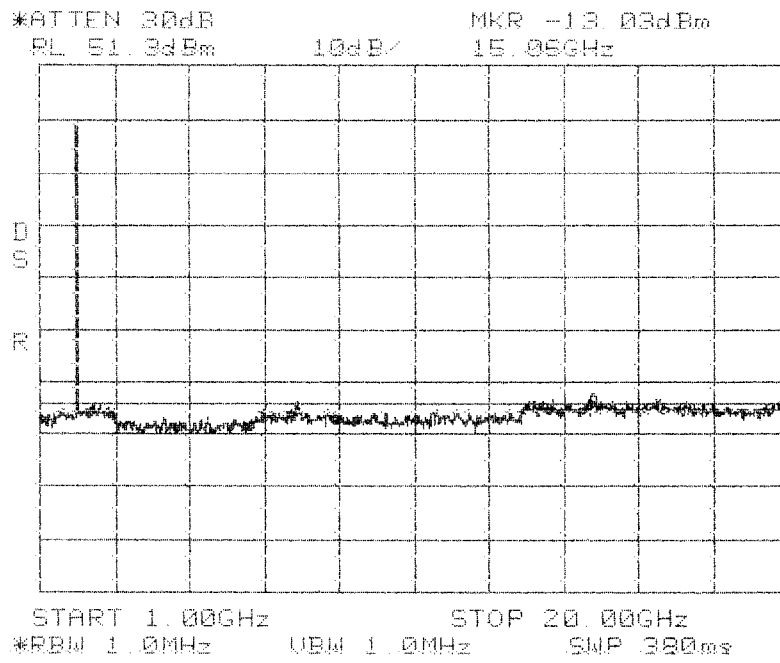
**Intermodulation
Close
Lower
GSM
PCS 1900 MHz
A Band**



**Intermodulation
Close
Lower
GSM
PCS 1900 MHz
A Band**

Span: 30 MHz to 1 GHz
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz
RBW/VBW: 1 MHz



**Intermodulation
Close
Lower
GSM
PCS 1900 MHz
A Band**