

# TEST RESULT SUMMARY

## FCC Part 24

|                        |                                                   |
|------------------------|---------------------------------------------------|
| MANUFACTURER           | ADC Inc.                                          |
| NAME OF EQUIPMENT      | Digivance® CXD 1900 MHz EFC Band                  |
| MODEL NUMBERS          | <b>DGVF-05000000XXCRN</b>                         |
| MANUFACTURER'S ADDRESS | P.O. Box 1101<br>Minneapolis, MN 55440-1101       |
| TEST REPORT NUMBER     | WC506388.2 Rev A                                  |
| TEST DATES             | 30 September 2005 (ADC)<br>14 December 2005 (TÜV) |

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.

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" Sections 24.232 "Power and antenna height limits", 24.235 "Frequency stability", 24.238 "Emission limitations for Broadband PCS equipment".

Date: 25 April 2006

Tested By

Technical Writer



Michael Schultz



Greg Jakubowski

Not Transferable

# EMC Emission - TEST REPORT

Test Report File No. : **WC506388.2 Rev A** Date of issue: 23 February 2006

Model Nos. : **DGVF-05000000XXCRN**

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

Product Type : **Transports RF between a remote antenna and base station.**

Applicant : **ADC Inc.**

Manufacturer : **ADC Inc.**

License Holder : **ADC Inc.**

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

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

Test Project Number :  
Reference(s) : **WC506388.2 Rev A**

Total pages including Appendices : **150**

*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*

## REVISION RECORD

| REVISION | TOTAL<br>NUMBER<br>OF PAGES | DATE             | DESCRIPTION                                                 |
|----------|-----------------------------|------------------|-------------------------------------------------------------|
|          | 158                         | 16 February 2006 | Initial Release                                             |
| A        | 158                         | 21 April 2006    | Revisions include:<br>▪ Pages A2-A3, Updated EIRP Test Data |

## DIRECTORY

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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
- ☐ - EN 55011 / 1991

- ☐ - Group 1
- ☐ - Class A

- ☐ - Group 2
- ☐ - Class B

- ☐ - EN 55013 / 1990
- ☐ - EN 55014 / 1987

- ☐ - Household appliances and similar
- ☐ - Portable tools
- ☐ - Semiconductor devices

- ☐ - EN 55014 / A2:1990
- ☐ - EN 55014 / 1993

- ☐ - Household appliances and similar
- ☐ - Portable tools
- ☐ - Semiconductor devices

- ☐ - EN 55015 / 1987
- ☐ - EN 55015 / A1:1990
- ☐ - EN 55015 / 1993
- ☐ - EN 55022 / 1987
- ☐ - EN 55022 / 1991

- ☐ - Class A
- ☐ - Class A

- ☐ - Class B
- ☐ - Class B

- ☐ - BS
- ☐ - VCCI

- ☐ - Class A

- ☐ - Class B

- ☐ - FCC Part 15 Subpart B
- ☐ - FCC Part 15 Subpart C
- ☒ - FCC Part 24

- ☐ - Class A

- ☐ - Class B

- ☐ - CISPR 11 (1990)

- ☐ - Group 1
- ☐ - Class A

- ☐ - Group 2
- ☐ - Class B

- ☐ - CISPR 22 (1993)

- ☐ - Class A

- ☐ - Class B

- ☐ - IC RSS-Gen Issue 1
- ☐ - IC RSS-193 Issue 1

## 24.232 Power and antenna height limits

### Test summary

The requirements are: ■ - MET □ - NOT MET

Minimum margin of compliance is 12 dB at 1967.5 MHz and 1970.0 MHz (GSM Band E) and 1975 MHz (GSM Band F)

### Test location

□ - Wild River Lab Large Test Site (Open Area Test Site)

□ - Wild River Lab Small Test Site (Open Area Test Site)

■ - ADC facility

### Test Distance

□ - 3 meters

□ - 10 meters

■ - Conducted measurement

### Test equipment (ADC)

| Model Number | Manufacturer | Description       | ADC Serial Number | Cal Due |
|--------------|--------------|-------------------|-------------------|---------|
| 49-30-33     | Aeroflex     | Attenuator        | n/a               | CNR     |
| HP8563E      | HP           | Spectrum Analyzer | MC27690           | 6-22-06 |
| EPM-441A     | HP           | Power Meter       | MC27670           | 9-28-06 |

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

### Test limit

100 watts or 50 dBm

### Test Data

See page A2 – A3

## 24.235 Frequency stability

### Test summary

The requirements are: ■ - MET □ - NOT MET

The fundamental emission stays within the authorized frequency block

Frequency measured over a temperature range of -30 to 50°C and an input voltage range of 102 to 138 VAC

### Test location

□ - Wild River Lab Large Test Site (Open Area Test Site)

□ - Wild River Lab Small Test Site (Open Area Test Site)

■ - ADC facility

### Test equipment (ADC)

| Model Number | Manufacturer | Description               | ADC Serial Number | Cal Due  |
|--------------|--------------|---------------------------|-------------------|----------|
| 26III        | Fluke        | Multimeter                | MC22687           | 4-27-06  |
| 5347A        | HP           | Freq. Counter             | MC27569           | 7-21-06  |
| 1520CT       | Staco        | Variable Auto Transformer | MC/44655          | CNR      |
| E4436B       | Agilent      | Signal Generator          | 963739            | 10-16-06 |

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

### Test limit

The emission must stay within the authorized frequency block

### Test data

See pages A4 – A6

## 24.238 Emission limitations for Broadband PCS equipment

### Test summary

The requirements are: ■ - MET □ - NOT MET

Out of band emissions were less than  $-13\text{dBm}$  from the equation  $(19\text{dBm} - [43 + 10\log(0.08\text{W})])$

Outside the emission bandwidth of the carrier, all emissions are attenuated at least 26 dB below the transmitter power

### Test location

■ - Wild River Lab Large Test Site (Open Area Test Site)

□ - Wild River Lab Small Test Site (Open Area Test Site)

■ - ADC facility

### Test equipment (ADC)

| Model Number | Manufacturer | Description               | ADC Serial Number | Cal Due  |
|--------------|--------------|---------------------------|-------------------|----------|
| 49-30-33     | Aeroflex     | Attenuator                | n/a               | CNR      |
| HP8563E      | HP           | Spectrum Analyzer         | MC27690           | 6-22-06  |
| EPM-441A     | HP           | Power Meter               | MC27670           | 9-28-06  |
| 26III        | Fluke        | Multimeter                | MC22687           | 4-27-06  |
| 5347A        | HP           | Freq. Counter             | MC27569           | 7-21-06  |
| Thermotron   | Thermotron   | Temperature Chamber       | MC18966           | 3-1-06   |
| 1520CT       | Staco        | Variable Auto Transformer | MC/44655          | CNR      |
| E4436B       | Agilent      | Signal Generator          | 963739            | 10-16-06 |
| E4436B       | Agilent      | Signal Generator          | MC50601           | 12-29-06 |

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

### Test equipment (TUV)

| TUV ID | Model Number | Manufacturer             | Description               | Serial Number | Cal Due   |
|--------|--------------|--------------------------|---------------------------|---------------|-----------|
| 3203   | EM-6917B     | Electro-Metrics          | Biconicalog Periodic      | 106           | 01-Apr-06 |
| 2075   | 3115         | Electro-Mechanics (EMCO) | Ridge Guide Ant. 1-18 GHz | 9001-3275     | 07-Dec-06 |
| 3961   | ZHL-1042J    | Mini-Circuits            | Preamplifier              | D120403-1     | Code B    |
| 3958   | SL18B4020    | Phase One Microwave      | Preamplifier 1 – 18 GHz   | 0002          | Code B    |
| 2681   | 85650A       | Hewlett-Packard          | Quasi-Peak Adapter        | 2430A00562    | 03-Feb-06 |
| 8052   | 8566B        | Hewlett-Packard          | Spectrum Analyzer         | 2115A00853    | 24-Mar-06 |
| 8051   | 85662A       | Hewlett-Packard          | Analyzer Display          | 2112A02220    | 24-Mar-06 |
| 3367   | E4440A       | Agilent                  | Spectrum Analyzer         | MY43362222    | 02-Sep-06 |
| 6717   | 3116         | Electro-Mechanics (EMCO) | Ridge Guide Ant 18-40 GHz | 2005          | 19-Sep-06 |

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

### Test limits

Out of band emissions:

Attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

$(19\text{dBm} - [43 + 10\log(0.08\text{W})]) = -13 \text{ dBm}$

Outside of the carrier emission bandwidth:

26 dB below the transmitter power

### Test data

Occupied bandwidth, pages A7 – A16

Conducted Emissions, pages A17 – A53

Radiated emissions, pages A54 – A69

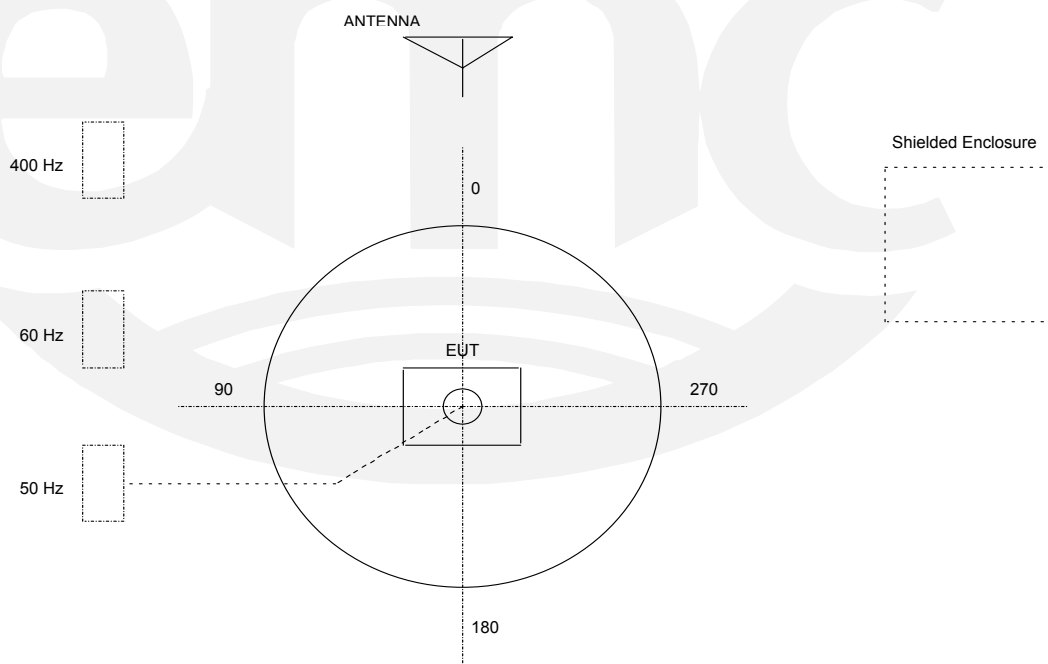
Inter-Modulation Test, pages A70 – A124

## TEST SETUP FOR EMISSIONS TESTING

### WILD RIVER LAB Large Test Site

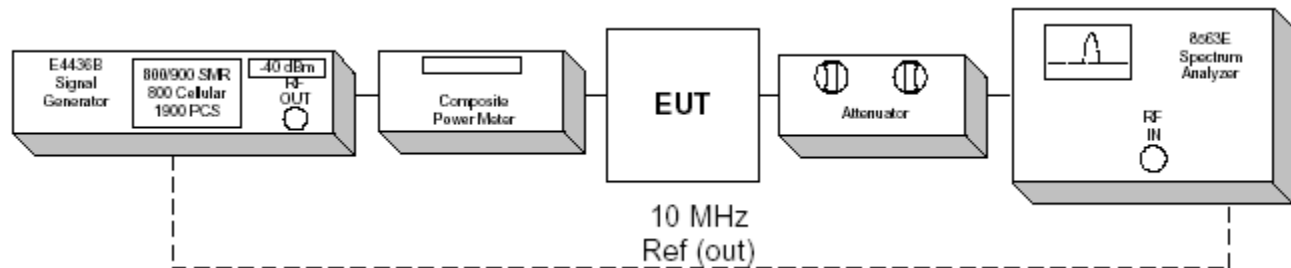
#### Notes:

1. Items shown in dotted lines are located on the floor below the test area. It is 5 meters vertically from the ground floor to the test area.
2. 50 Hz, 60 Hz, and 400 Hz are power panels for alternating current.
3. The antenna may be positioned horizontally 3, 10 or 30 meters from the center of the turntable.
4. The circle is a 6.7 meter diameter turntable.
5. A ground plane is in the plane of this sheet.
6. The test sample is shown in the azimuthal position representing zero degrees.



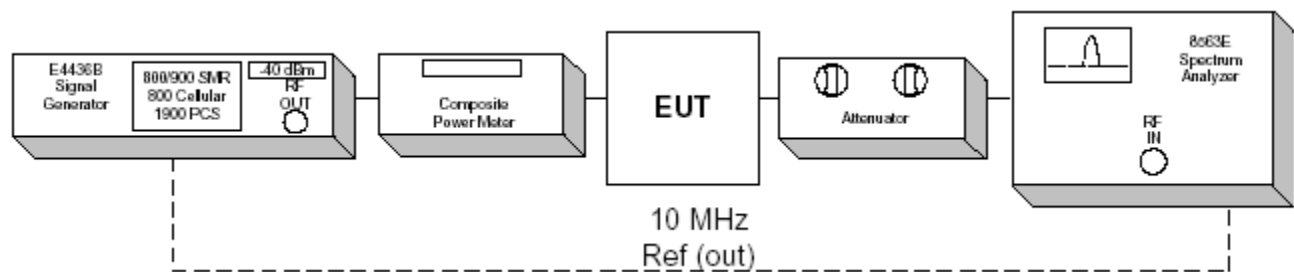
**Conducted Emission Limits Test for ADC Inc.  
Digivance CXD  
Model Number DGVF-05000000CRN**

**Test Set-up**



# Effective Isotropic Radiated Power Limit Test for ADC Inc. Digivance CXD Model Number DGVF-05000000CRN

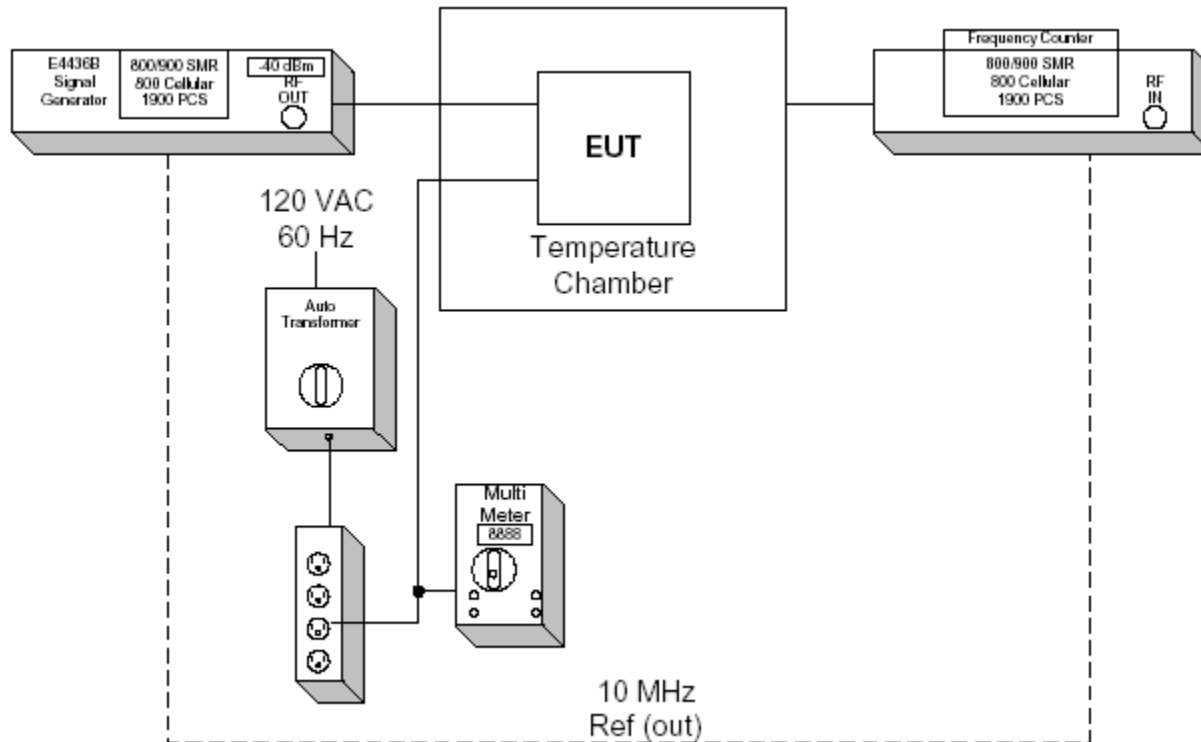
## Test Set-up



# **Frequency Tolerance Test for ADC Inc. Digivance CXD Model Number DGVF-05000000XXCRN**

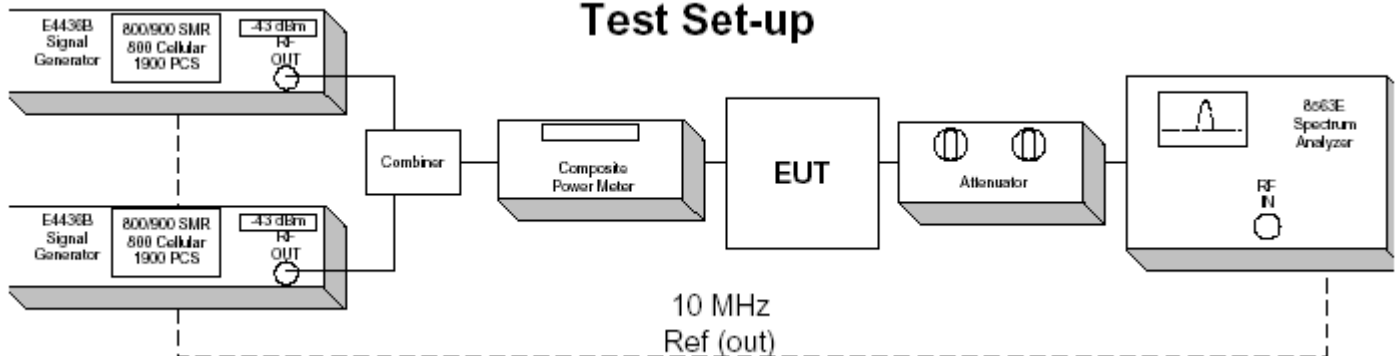
EUT Host is specified for indoor use only with temperature range of 0° to +50° C, and was tested with its range.  
EUT Remote is specified with a temperature range of -30° to +50° C and was tested with its range.

## **Test Set-up**



# **Inter-Modulation Test for ADC Inc. Digivance CXD Model Number DGVF-05000000XXCRN**

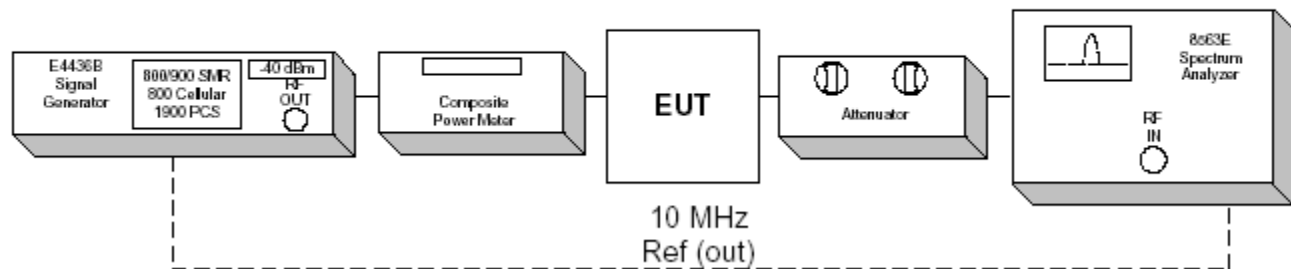
## **Test Set-up**



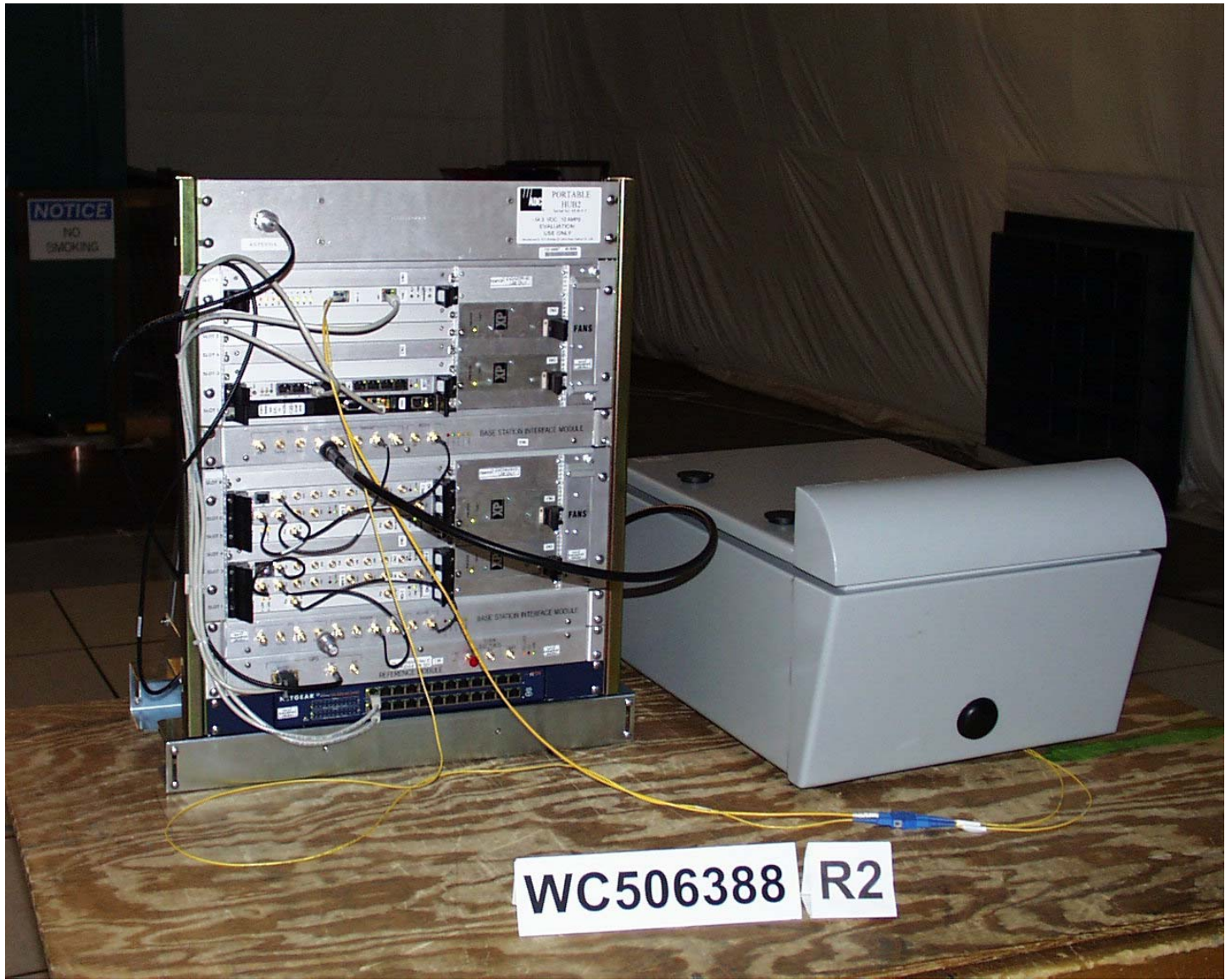
**Occupied Bandwidth Modulation Test for ADC Inc.  
Digivance CXD  
Model Number DGVF-05000000XXCRN**



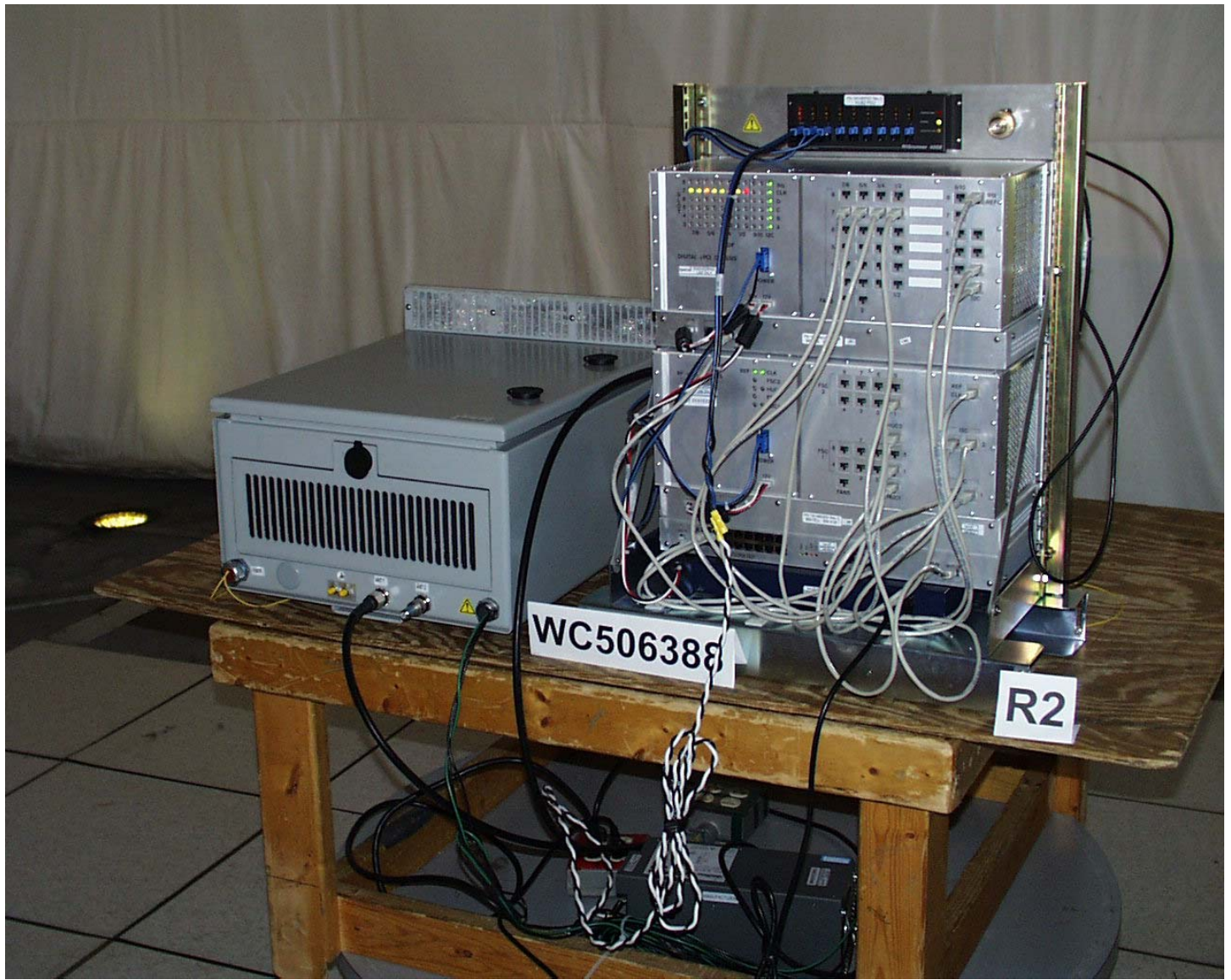
**Test Set-up**



Test setup photo, radiated emissions



Test setup photo, radiated emissions



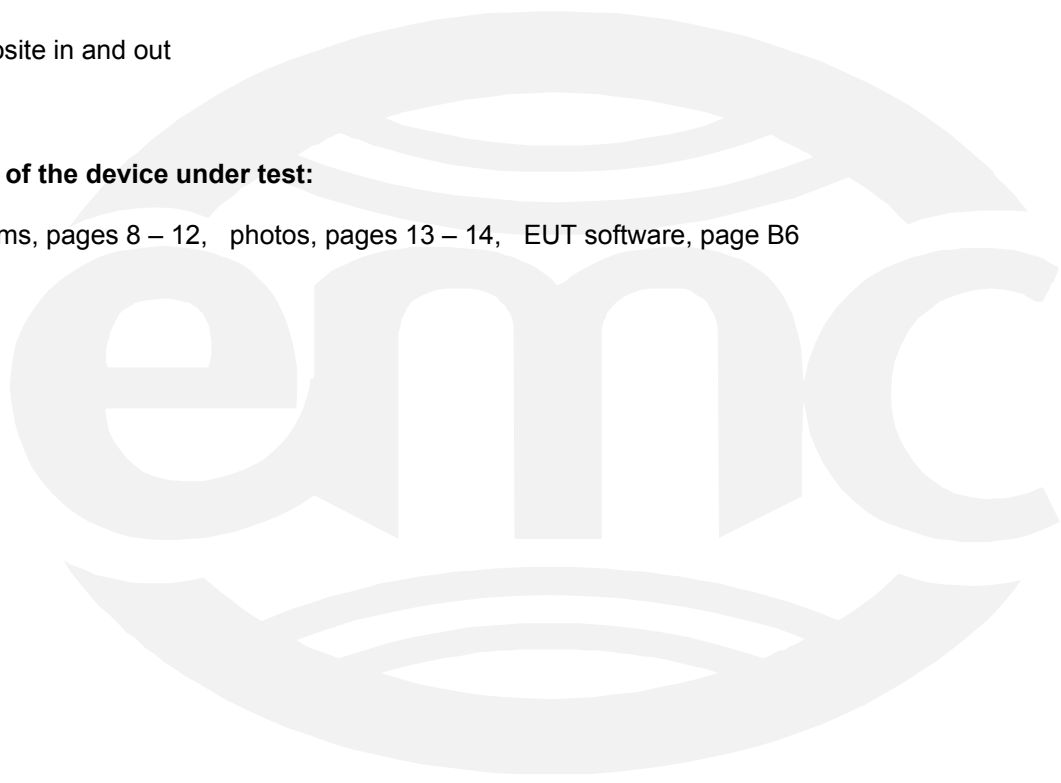
### **Test Operation Mode:**

**The device under test was operated under the following conditions during emissions testing:**

- ☐ - Standby
- ☐ - Test program (H - Pattern)
- ☐ - Test program (color bar)
- ☐ - Test program (customer specific)
- ☐ - Practice operation
- ☒ - Max composite in and out

### **Configuration of the device under test:**

- ☒ - See diagrams, pages 8 – 12, photos, pages 13 – 14, EUT software, page B6



## DEVIATIONS FROM STANDARD:

None.

## GENERAL REMARKS:

### Modifications required to pass:

- ☒ None
- ☐ As indicated on the data sheet(s)

### Test Specification Deviations: Additions to or Exclusions from:

- ☒ None
- ☐ As indicated in the Test Plan

## SUMMARY:

The requirements according to the technical regulations are

- ☒ - met
- ☐ - **not** met.

The device under test does

- ☒ - fulfill the general approval requirements mentioned on page 3.
- ☐ - **not** fulfill the general approval requirements mentioned on page 3.

|                           |                          |
|---------------------------|--------------------------|
| EUT Received Date: (TÜV)  | <u>14 December 2005</u>  |
| Condition of EUT:         | <u>Normal</u>            |
| Testing Start Date: (ADC) | <u>30 September 2005</u> |
| Testing End Date: (TÜV)   | <u>14 December 2005</u>  |

- TÜV AMERICA INC -

Tested By:



Michael Schultz

Reviewed By:



Greg Jakubowski

## Appendix A

Test data



# Effective Isotropic Radiated Power Test for ADC Inc.

## Digivance CXD

### Model Number DGVF-05000000XXCRN

\*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 power meter. The carrier output, below, was conducted using a single GSM, CDMA and CDMA2000 signal generator. The power meter level was offset to compensate for attenuators and cable loss between the EUT and the meter. The power meter head correction factors were calibrated and included in the measurements as well.

A signal was used at the low, mid and high parts of the selected band. The power meter level was offset by 32.2 dB to compensate for attenuators and cable loss between the EUT and the meter.

| <b><u>GSM – 6.12 Watts</u></b> |                  | <b><u>CDMA – 5.83 Watts</u></b> |                  |
|--------------------------------|------------------|---------------------------------|------------------|
| Band E                         | (1900 MHz)       | Band E                          | (1900 MHz)       |
| Carrier Frequency              | Carrier Output   | Carrier Frequency               | Carrier Output   |
| 1965.0 MHz                     | <u>37.13</u> dBm | 1965.0 MHz                      | <u>37.36</u> dBm |
| 1967.5 MHz                     | <u>37.87</u> dBm | 1967.5 MHz                      | <u>37.66</u> dBm |
| 1970.0 MHz                     | <u>37.87</u> dBm | 1970.0 MHz                      | <u>36.86</u> dBm |
|                                |                  |                                 |                  |
| Band F                         | (1900 MHz)       | Band F                          | (1900 MHz)       |
| Carrier Frequency              | Carrier Output   | Carrier Frequency               | Carrier Output   |
| 1970.0 MHz                     | <u>36.97</u> dBm | 1970.0 MHz                      | <u>36.70</u> dBm |
| 1972.5 MHz                     | <u>37.59</u> dBm | 1972.5 MHz                      | <u>37.36</u> dBm |
| 1975.0 MHz                     | <u>37.87</u> dBm | 1975.0 MHz                      | <u>37.36</u> dBm |
|                                |                  |                                 |                  |
| Band C                         | (1900 MHz)       | Band C                          | (1900 MHz)       |
| Carrier Frequency              | Carrier Output   | Carrier Frequency               | Carrier Output   |
| 1975.0 MHz                     | <u>36.63</u> dBm | 1975.0 MHz                      | <u>36.23</u> dBm |
| 1982.5 MHz                     | <u>36.41</u> dBm | 1982.5 MHz                      | <u>37.10</u> dBm |
| 1990.0 MHz                     | <u>36.57</u> dBm | 1990.0 MHz                      | <u>36.86</u> dBm |

**CDMA2000 – 6.11 Watts**

|                   |                  |
|-------------------|------------------|
| Band A            | (1900 MHz)       |
| Carrier Frequency | Carrier Output   |
| 1930.0 MHz        | <u>36.53</u> dBm |
| 1937.5 MHz        | <u>37.86</u> dBm |
| 1945.0 MHz        | <u>37.70</u> dBm |

|                   |                  |
|-------------------|------------------|
| Band D            | (1900 MHz)       |
| Carrier Frequency | Carrier Output   |
| 1945.0 MHz        | <u>37.36</u> dBm |
| 1947.5 MHz        | <u>37.70</u> dBm |
| 1950.0 MHz        | <u>37.50</u> dBm |

|                   |                  |
|-------------------|------------------|
| Band B            | (1900 MHz)       |
| Carrier Frequency | Carrier Output   |
| 1950.0 MHz        | <u>37.06</u> dBm |
| 1957.5 MHz        | <u>37.20</u> dBm |
| 1965.0 MHz        | <u>37.36</u> dBm |

**Frequency Tolerance Test for ADC Inc.  
Digivance CXD  
Model Number DGVF-05000000XXCRN**

**EUT E Band (1900 MHz)**

| <b>Input Voltage</b> | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|----------------------|--------------------------|---------------------------|----------------------------|
| 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                        |
| 102 VAC              | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 120 VAC              | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 138 VAC              | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 102 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 120 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 138 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| <b>Temperature</b>   | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|                      |                          |                           |                            |
| -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                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| -20 Deg. C           | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| -10 Deg. C           | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 0 Deg. C             | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 10 Deg. C            | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 20 Deg. C            | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 30 Deg. C            | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 40 Deg. C            | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
| 50 Deg. C            | 1967.500 MHz             | 1967.500 MHz              | Yes                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| -20 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| -10 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 0 Deg. C             | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 10 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 20 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 30 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 40 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 50 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |

**Frequency Tolerance Test for ADC Inc.  
Digivance CXD  
Model Number DGVF-05000000XXCRN**

**EUT F Band (1900 MHz)**

| <b>Input Voltage</b> | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|----------------------|--------------------------|---------------------------|----------------------------|
| 102 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 120 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 138 VAC              | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 102 VAC              | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 120 VAC              | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 138 VAC              | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 102 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 120 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 138 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| <b>Temperature</b>   | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|                      |                          |                           |                            |
| -30 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| -20 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| -10 Deg. C           | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 0 Deg. C             | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 10 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 20 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 30 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 40 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
| 50 Deg. C            | 1970.000 MHz             | 1970.000 MHz              | Yes                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| -20 Deg. C           | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| -10 Deg. C           | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 0 Deg. C             | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 10 Deg. C            | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 20 Deg. C            | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 30 Deg. C            | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 40 Deg. C            | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
| 50 Deg. C            | 1972.500 MHz             | 1972.500 MHz              | Yes                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| -20 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| -10 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 0 Deg. C             | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 10 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 20 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 30 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 40 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 50 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |

**Frequency Tolerance Test for ADC Inc.  
Digivance CXD  
Model Number DGVF-05000000XXCRN**

**EUT C Band (1900 MHz)**

| <b>Input Voltage</b> | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|----------------------|--------------------------|---------------------------|----------------------------|
| 102 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 120 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 138 VAC              | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 102 VAC              | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 120 VAC              | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 138 VAC              | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 102 VAC              | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 120 VAC              | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 138 VAC              | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| <b>Temperature</b>   | <b>Carrier Frequency</b> | <b>Measured Frequency</b> | <b>Meets Requirements?</b> |
|                      |                          |                           |                            |
| -30 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| -20 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| -10 Deg. C           | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 0 Deg. C             | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 10 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 20 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 30 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 40 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
| 50 Deg. C            | 1975.000 MHz             | 1975.000 MHz              | Yes                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| -20 Deg. C           | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| -10 Deg. C           | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 0 Deg. C             | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 10 Deg. C            | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 20 Deg. C            | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 30 Deg. C            | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 40 Deg. C            | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
| 50 Deg. C            | 1982.500 MHz             | 1982.500 MHz              | Yes                        |
|                      |                          |                           |                            |
| -30 Deg. C           | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| -20 Deg. C           | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| -10 Deg. C           | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 0 Deg. C             | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 10 Deg. C            | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 20 Deg. C            | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 30 Deg. C            | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 40 Deg. C            | 1990.000 MHz             | 1990.000 MHz              | Yes                        |
| 50 Deg. C            | 1990.000 MHz             | 1990.000 MHz              | Yes                        |

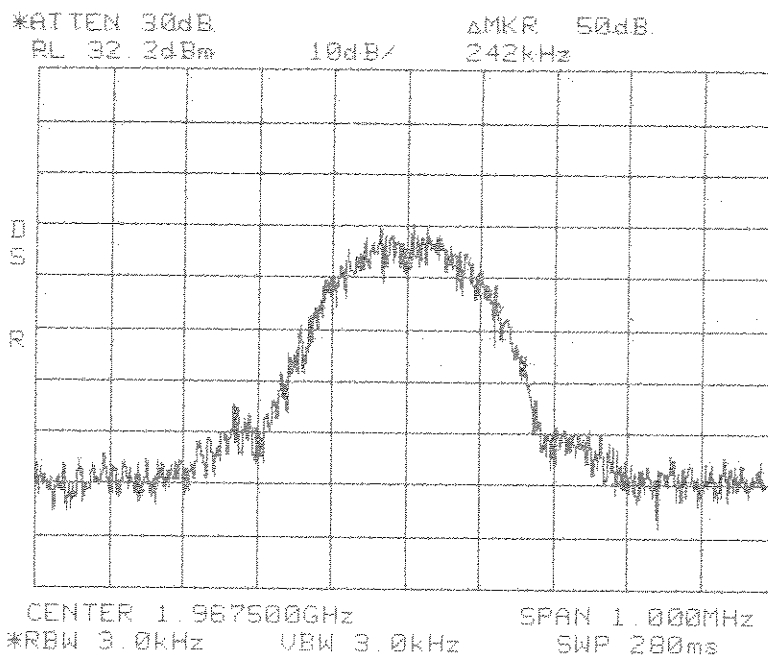
**Occupied Bandwidth Modulation Test for ADC Inc.**  
**Digivance CXD**  
**Model Number DGVF-05000000XXCRN**

An input/output Occupied Bandwidth test was done with modulation types: GSM, CDMA, and CDMA2000. 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.

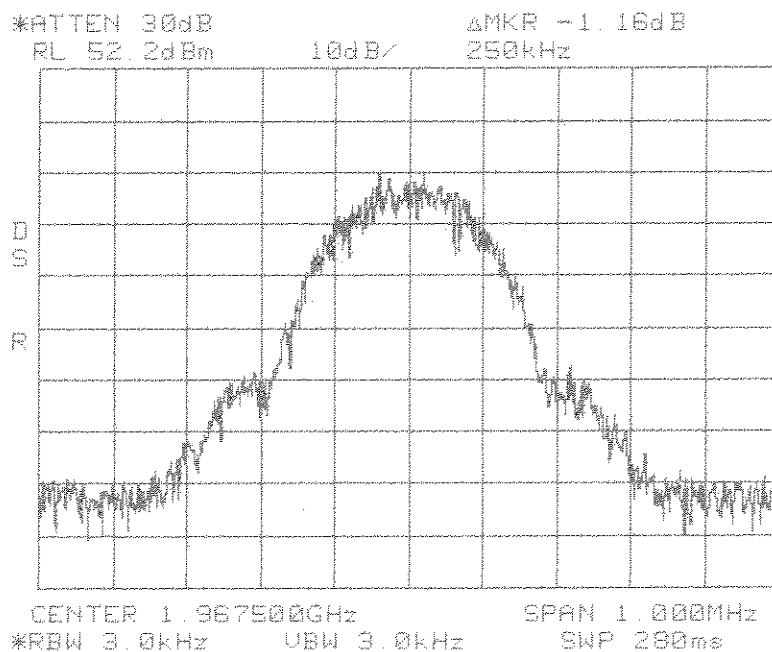
**Results:**

Pass (see plots)

Center: 1967.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz



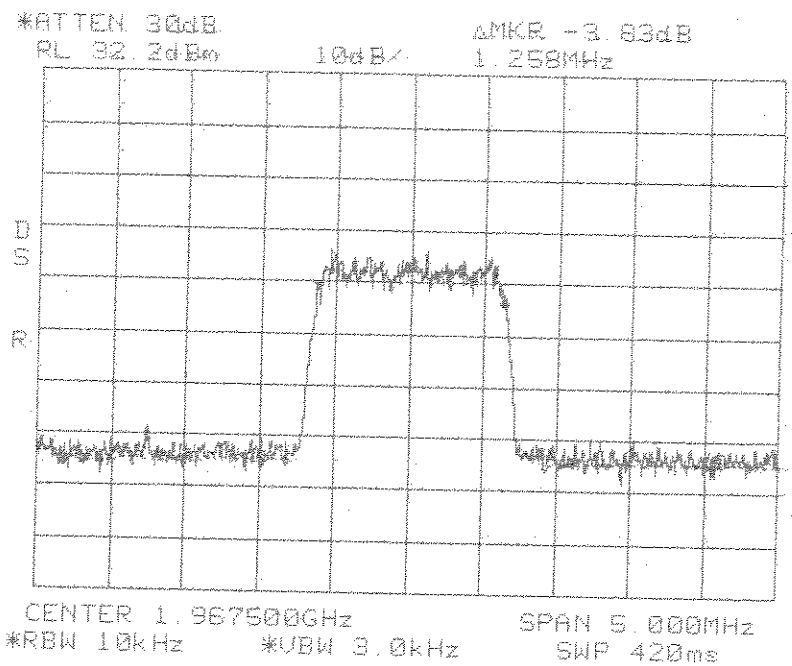
**Occupied Bandwidth  
GSM In  
PCS 1900 MHz  
E Band**



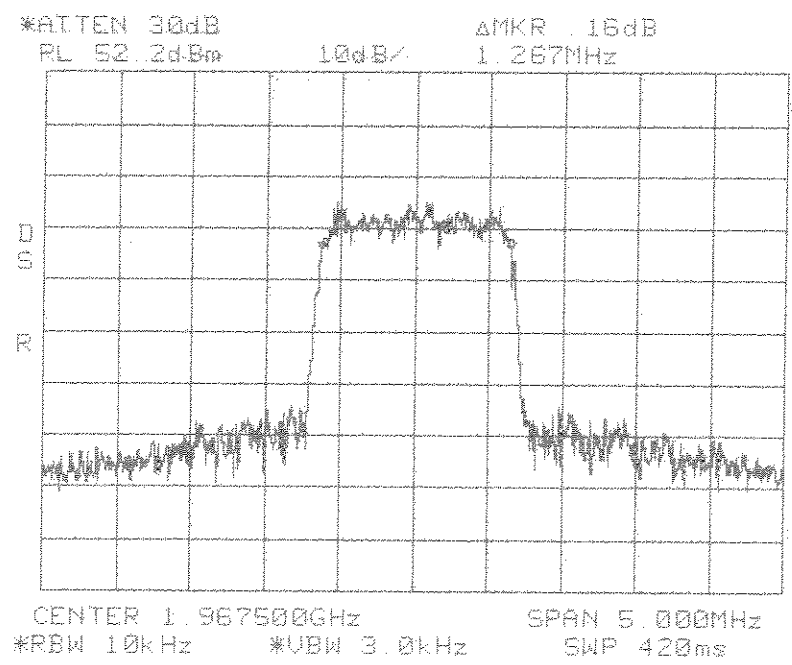
**Occupied Bandwidth  
GSM Out  
PCS 1900 MHz  
E Band**

Center: 1962.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



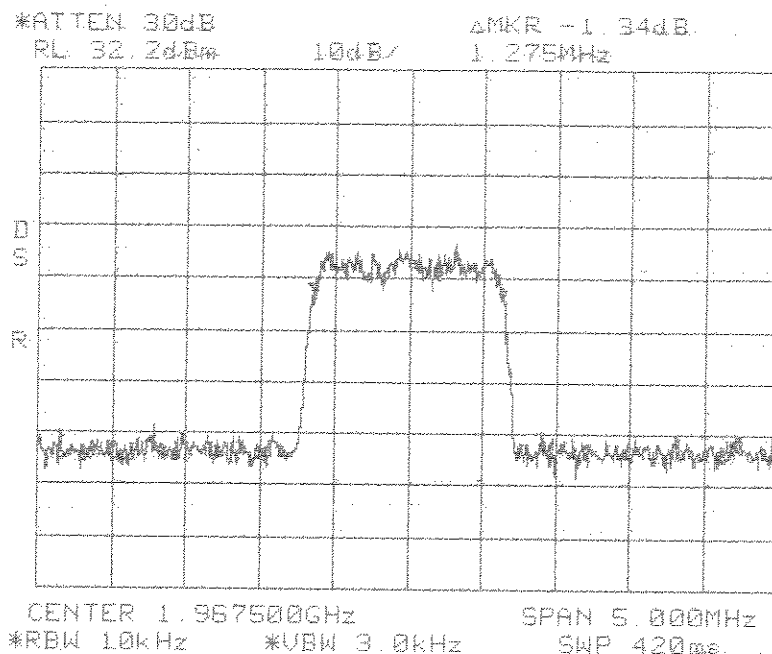
**Occupied Bandwidth  
CDMA In  
PCS 1900 MHz  
E Band**



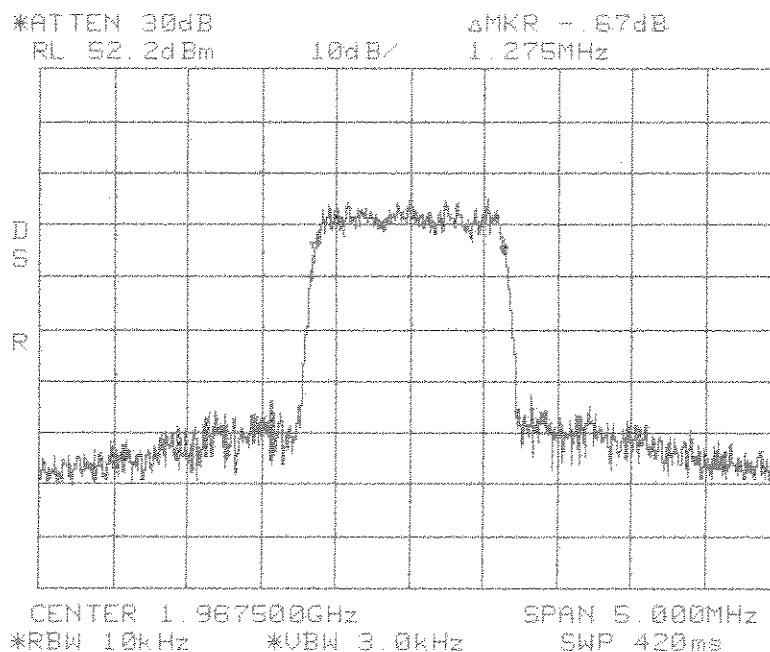
**Occupied Bandwidth  
CDMA Out  
PCS 1900 MHz  
E Band**

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



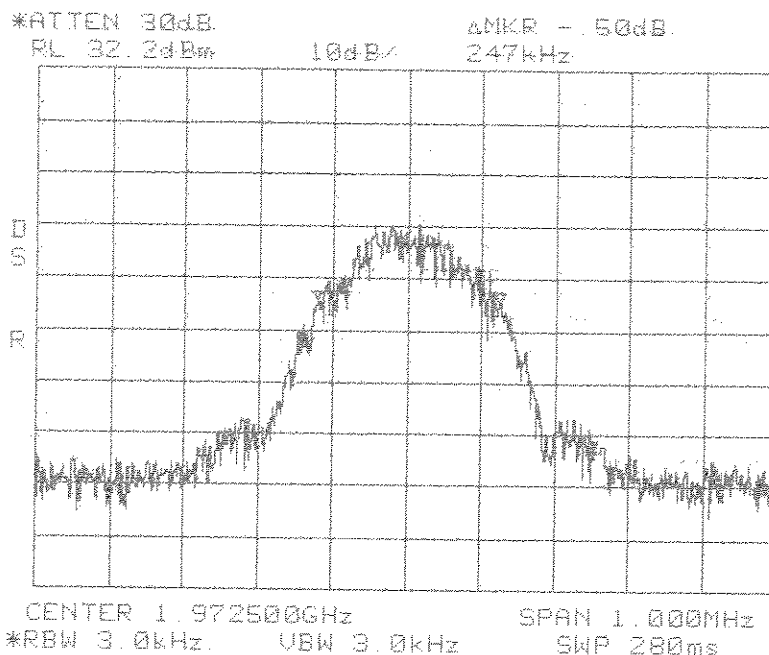
**Occupied Bandwidth  
CDMA2000 In  
PCS 1900 MHz  
E Band  
1xRTT**



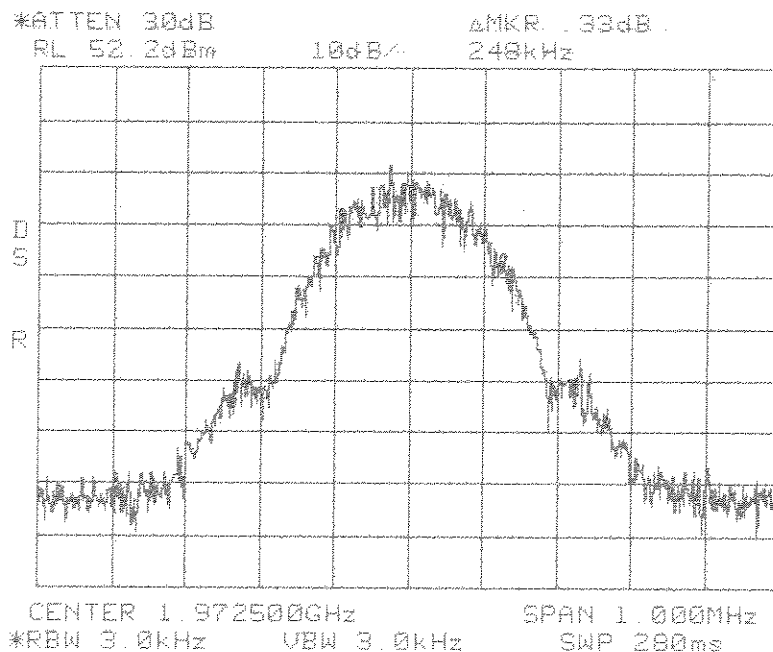
**Occupied Bandwidth  
CDMA2000 Out  
PCS 1900 MHz  
E Band  
2xRTT**

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1972.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz



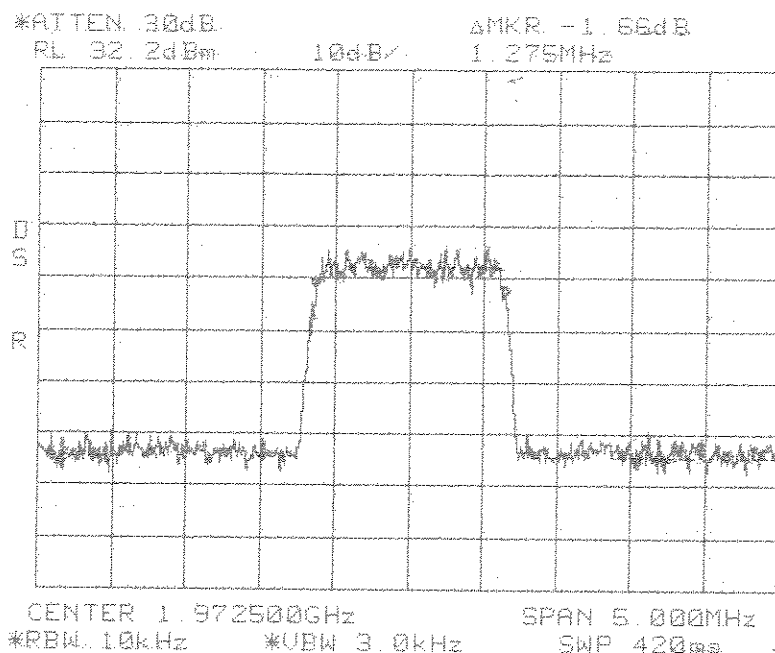
**Occupied Bandwidth  
GSM In  
PCS 1900 MHz  
F Band**



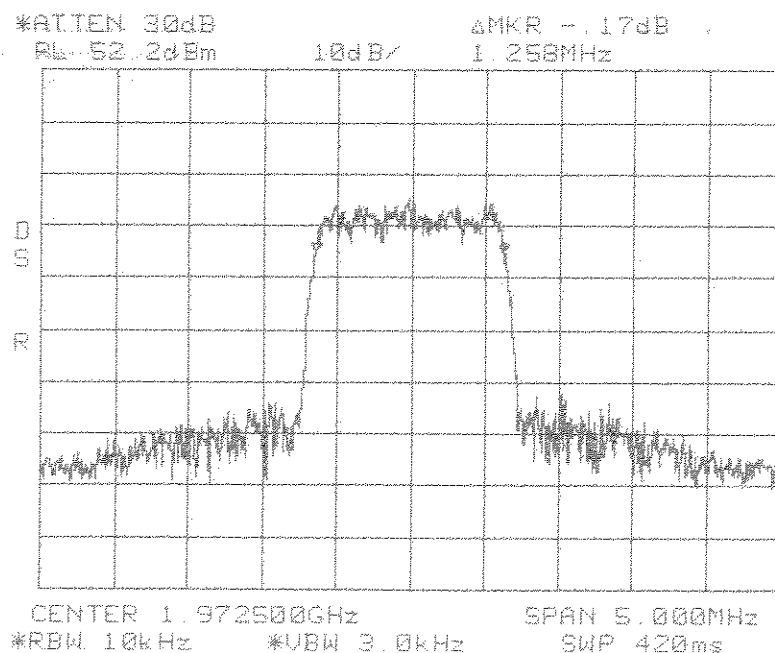
**Occupied Bandwidth  
GSM Out  
PCS 1900 MHz  
F Band**

Center: 1972.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



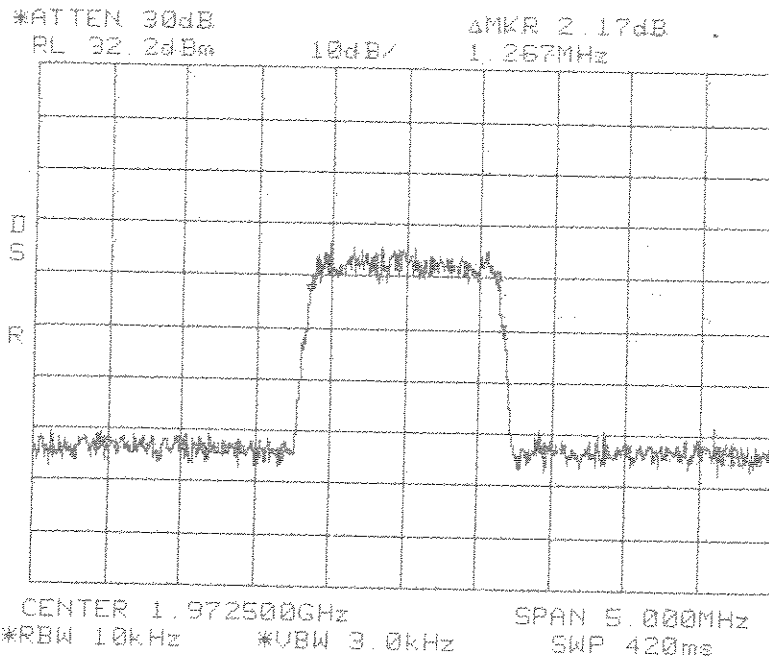
**Occupied Bandwidth  
CDMA In  
PCS 1900 MHz  
F Band**



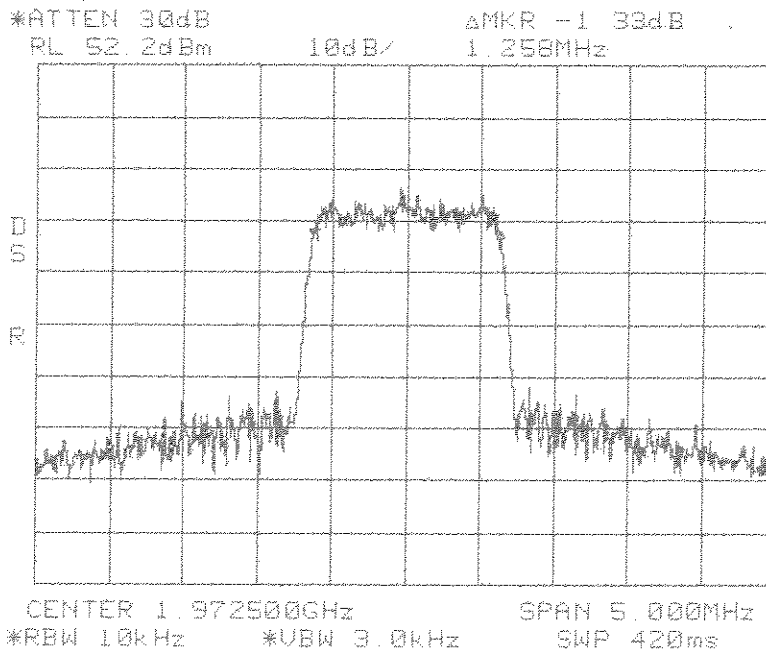
**Occupied Bandwidth  
CDMA Out  
PCS 1900 MHz  
F Band**

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



**Occupied Bandwidth  
CDMA2000 In  
PCS 1900 MHz  
F Band**  
1xRTT

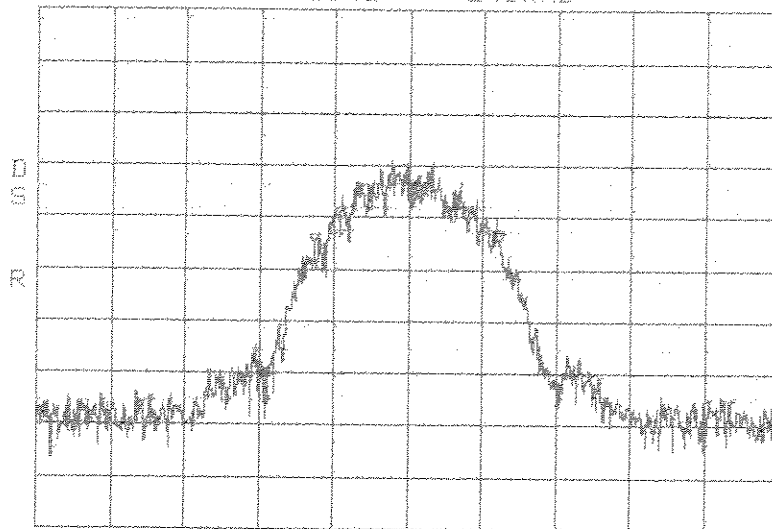


**Occupied Bandwidth  
CDMA2000 Out  
PCS 1900 MHz  
F Band**  
1xRTT

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1982.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz

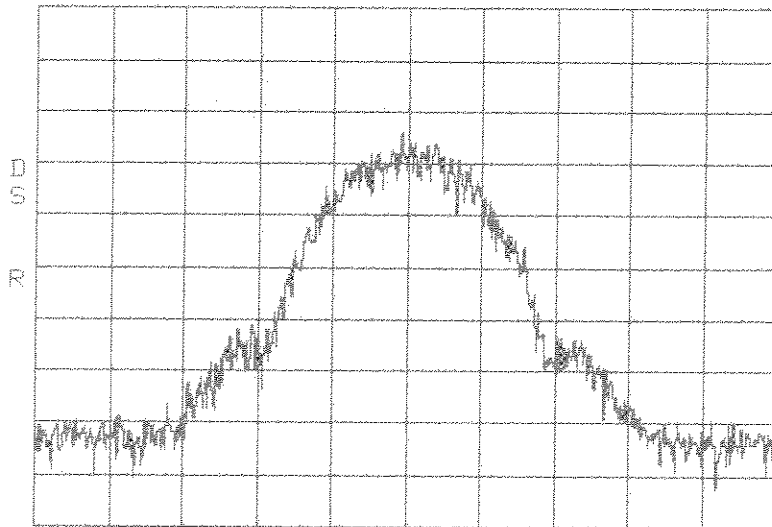
\*ATTEN 30dB  
RL 32.2dBm 10dB/ 245kHz



CENTER 1.982500GHz SPAN 1.000MHz  
\*RBW 3.0kHz VBW 3.0kHz SWP 200ms

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

\*ATTEN 30dB  
RL 52.2dBm 10dB/ 245kHz

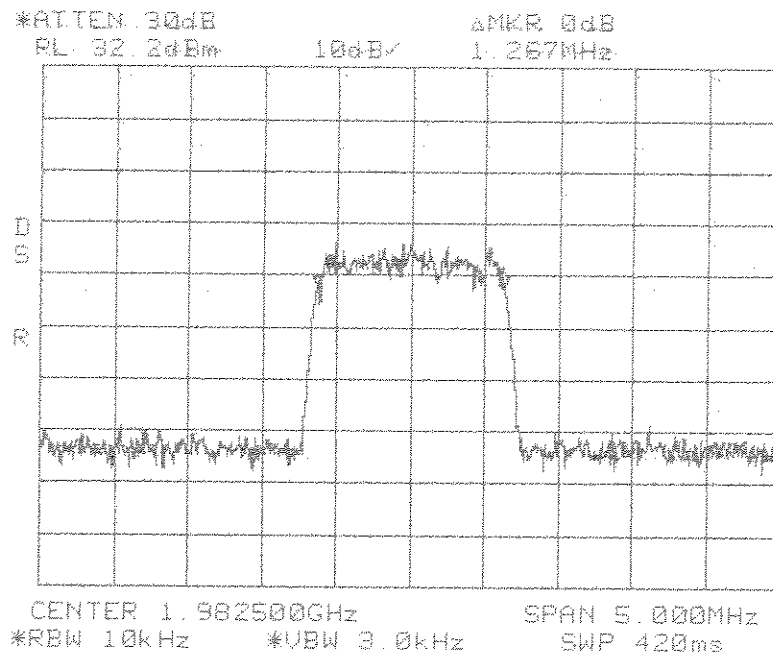


CENTER 1.982500GHz SPAN 1.000MHz  
\*RBW 3.0kHz VBW 3.0kHz SWP 200ms

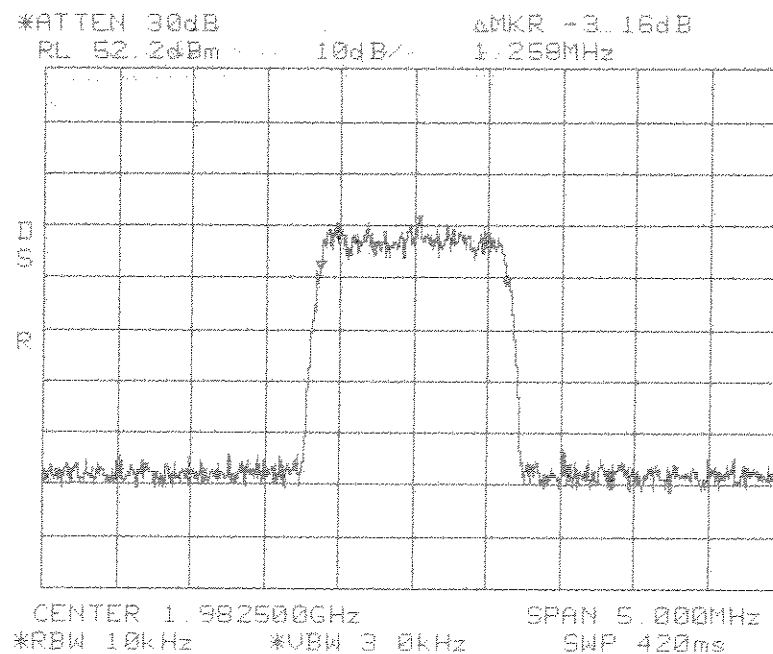
**Occupied Bandwidth  
GSM Out  
PCS 1900 MHz  
C Band**

Center: 1982.5 MHz  
Span: 1 MHz  
RBW/VBW: 3 kHz / 3 kHz

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



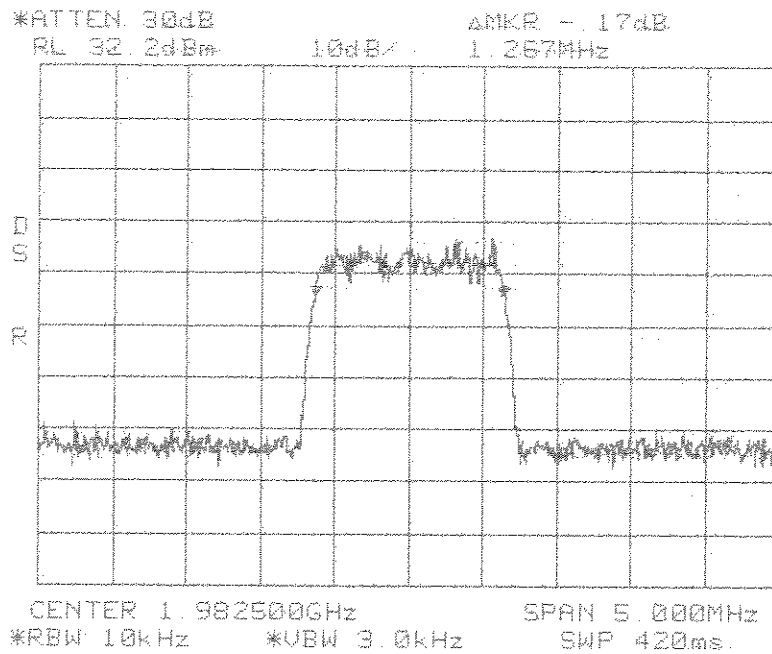
**Occupied Bandwidth  
CDMA In  
PCS 1900 MHz  
C Band**



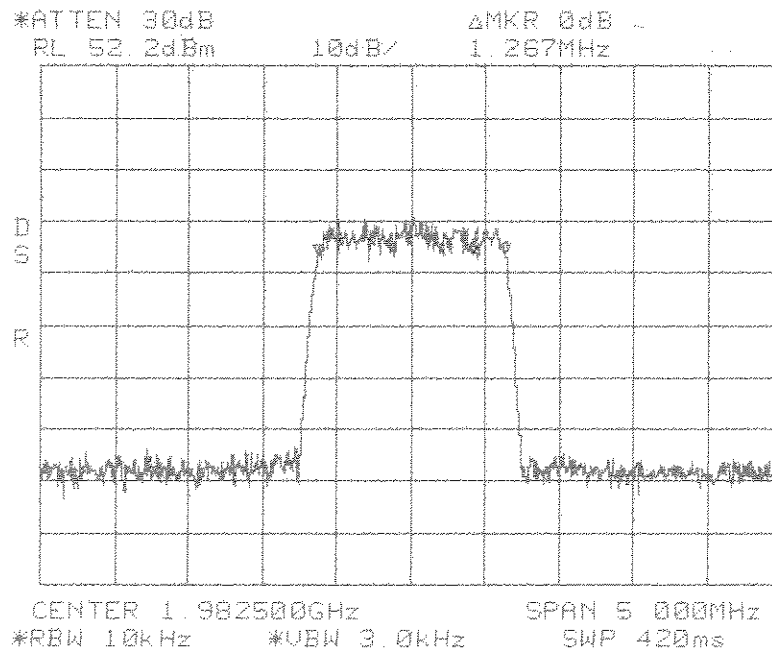
**Occupied Bandwidth  
CDMA Out  
PCS 1900 MHz  
C Band**

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz



**Occupied Bandwidth  
CDMA2000 In  
PCS 1900 MHz  
C Band  
1xRTT**



**Occupied Bandwidth  
CDMA2000 Out  
PCS 1900 MHz  
C Band  
1xRTT**

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 10 kHz / 3 kHz

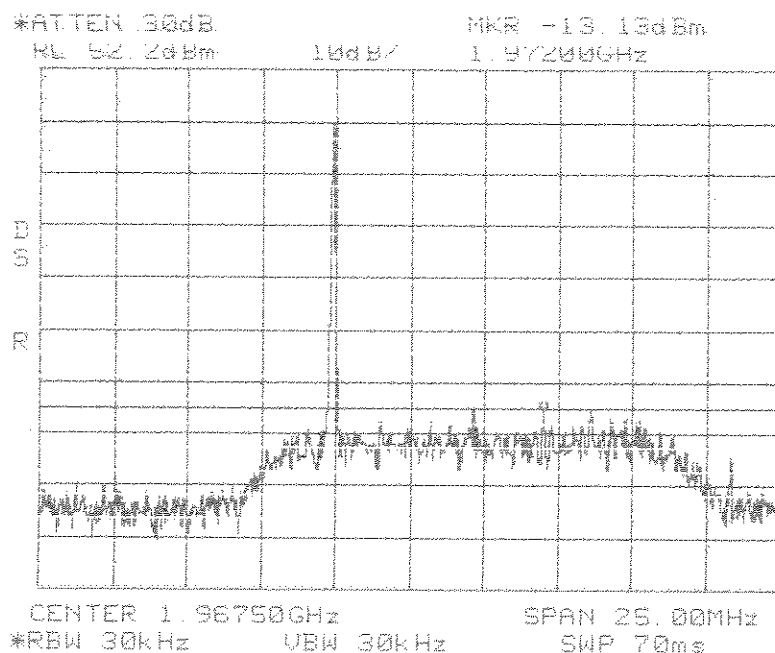
**Conducted Emission Limits Test for ADC Inc.**  
**Digivance CXD**  
**Model Number DGVF-05000000CRN**

The out of band emissions were measured directly from the EUT antenna output with a spectrum analyzer from 30 MHz to the 10<sup>th</sup> harmonic of the highest carrier frequency. Test signals used are GSM, CDMA, and CDMA2000. 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  
$$(19\text{dBm} - [43 + 10\log(0.08W)])$$

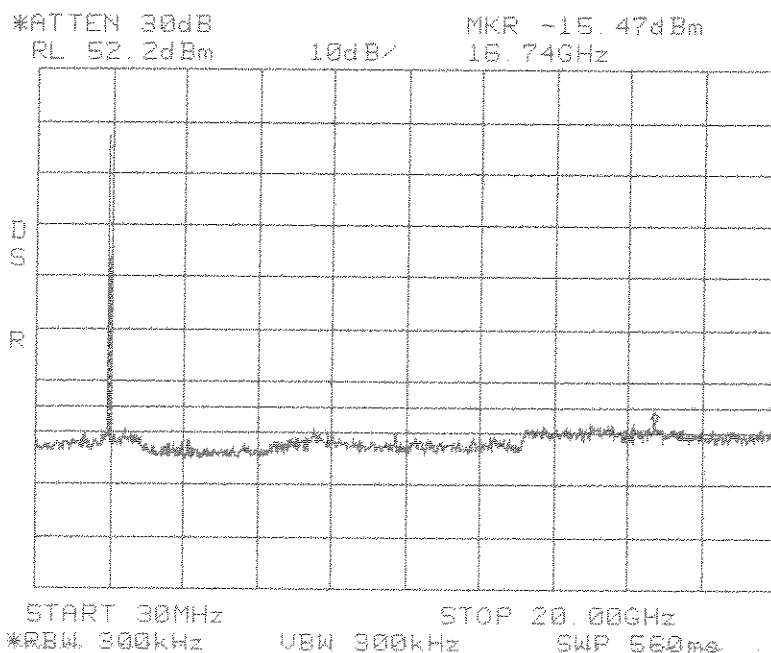
Band edge compliance is also demonstrated using a signal at the upper and lower limits of the band and a resolution bandwidth of 300 Hz.

Results:  
Pass (See plots)

Center: 1967.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



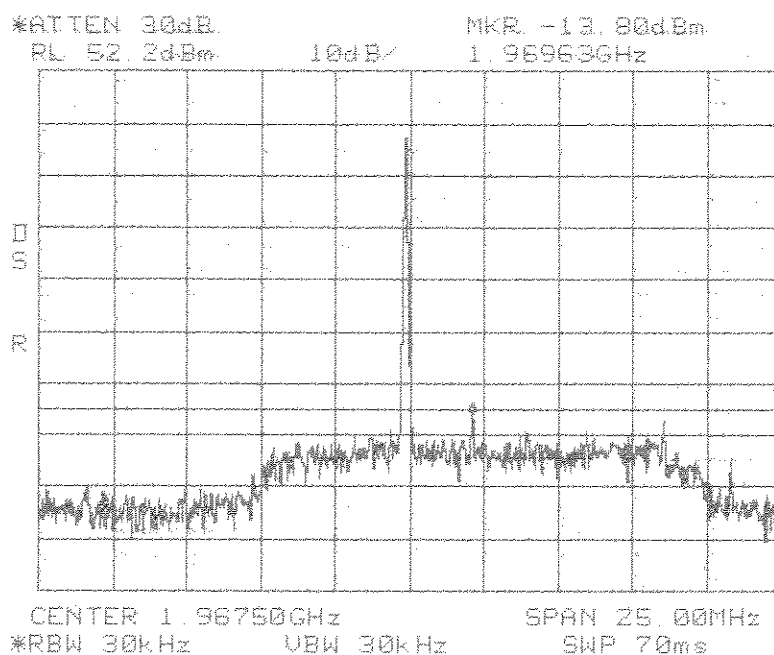
**Conducted Emissions  
Low  
PCS 1900 MHz  
E Band**



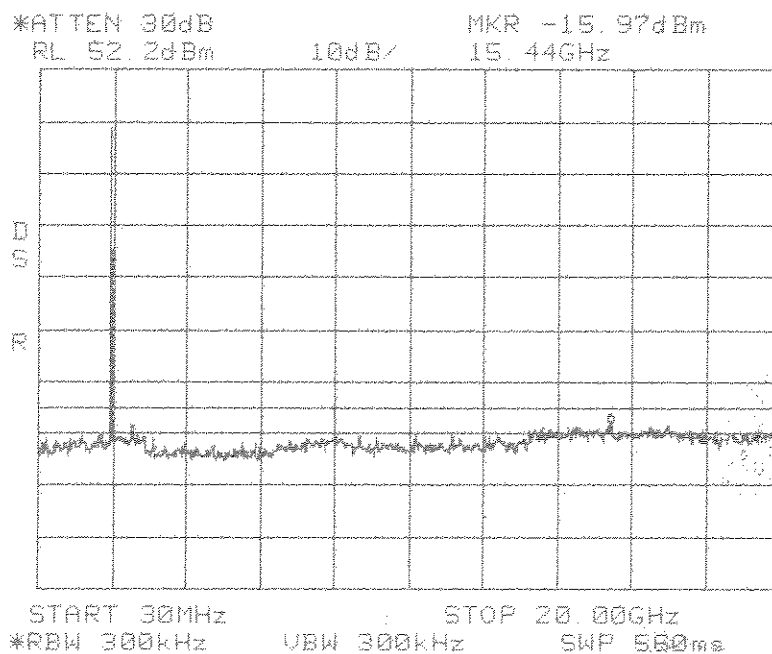
**Conducted Emissions  
Low  
PCS 1900 MHz  
E Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1967.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



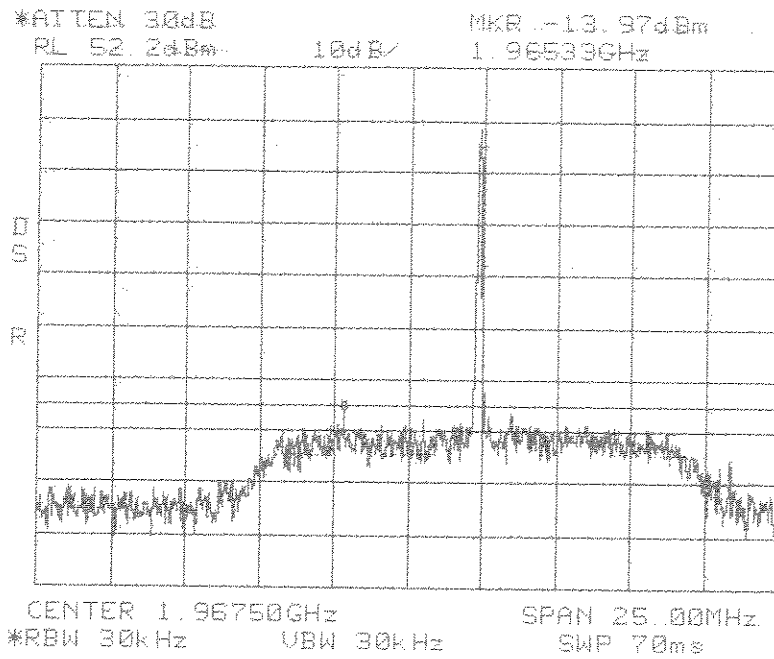
**Conducted Emissions  
Mid  
PCS 1900 MHz  
E Band**



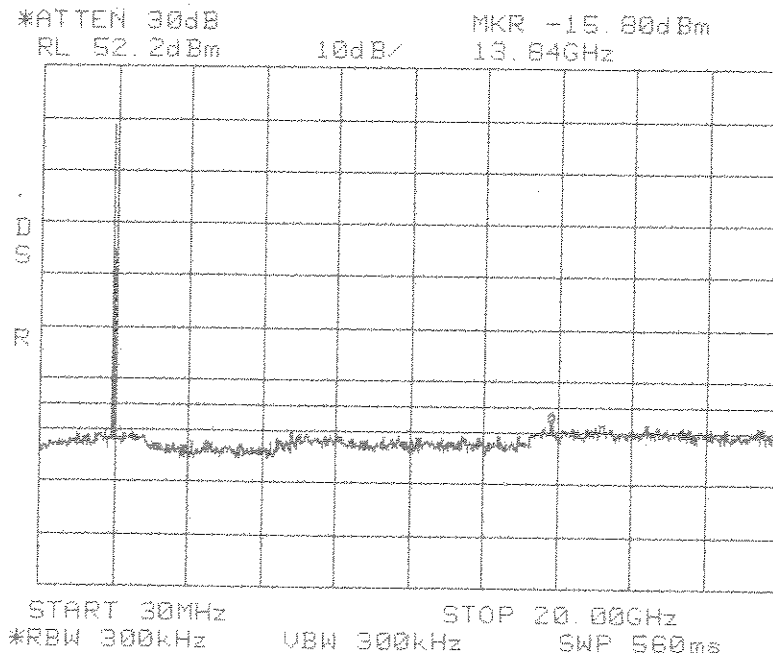
**Conducted Emissions  
Mid  
PCS 1900 MHz  
E Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1967.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



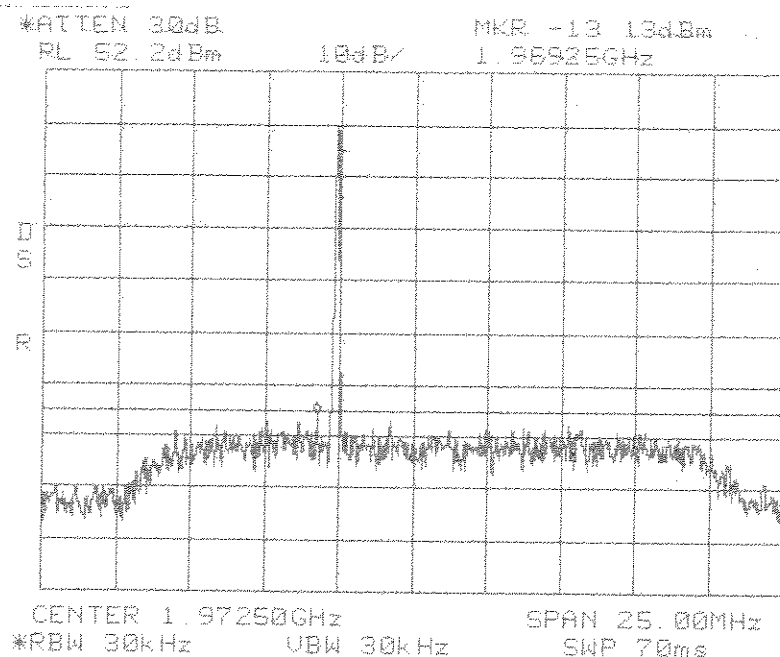
**Conducted Emissions  
High  
PCS 1900 MHz  
E Band**



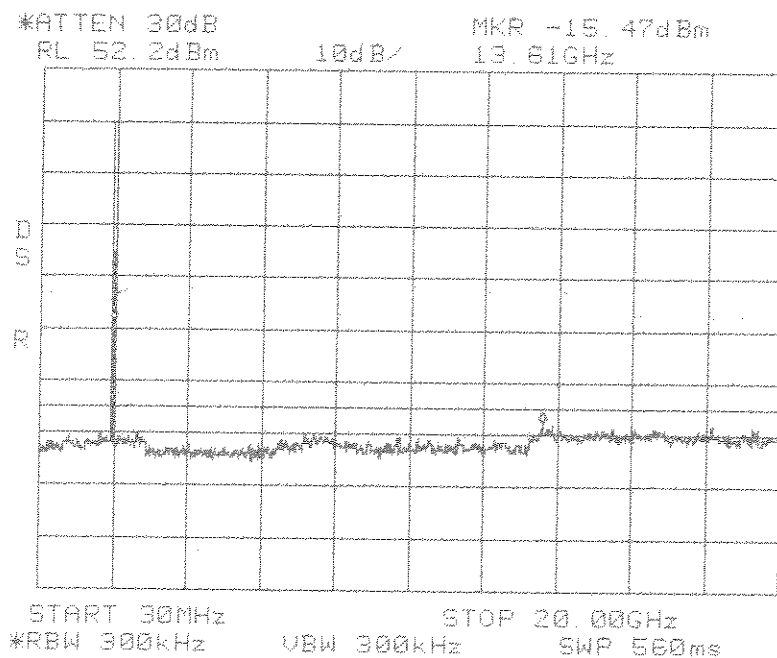
**Conducted Emissions  
High  
PCS 1900 MHz  
E Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1972.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



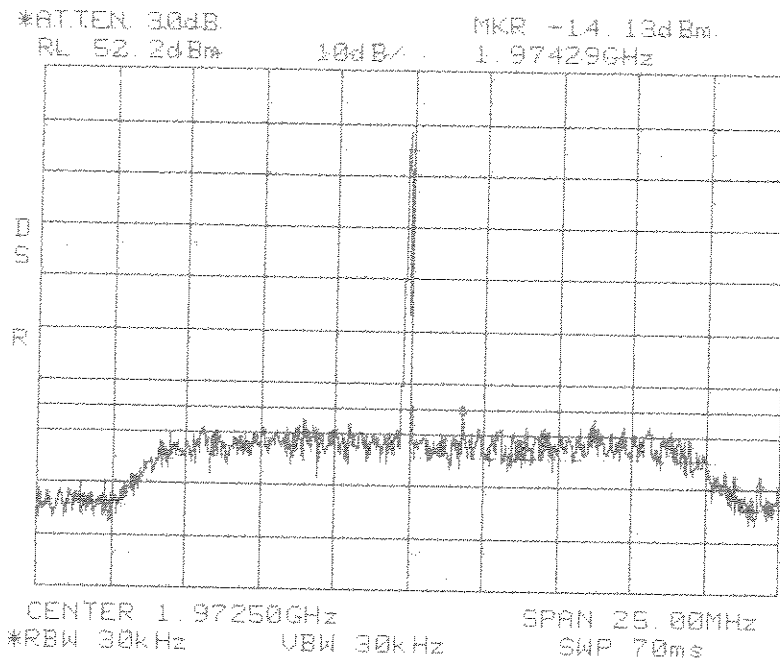
**Conducted Emissions  
Low  
PCS 1900 MHz  
F Band**



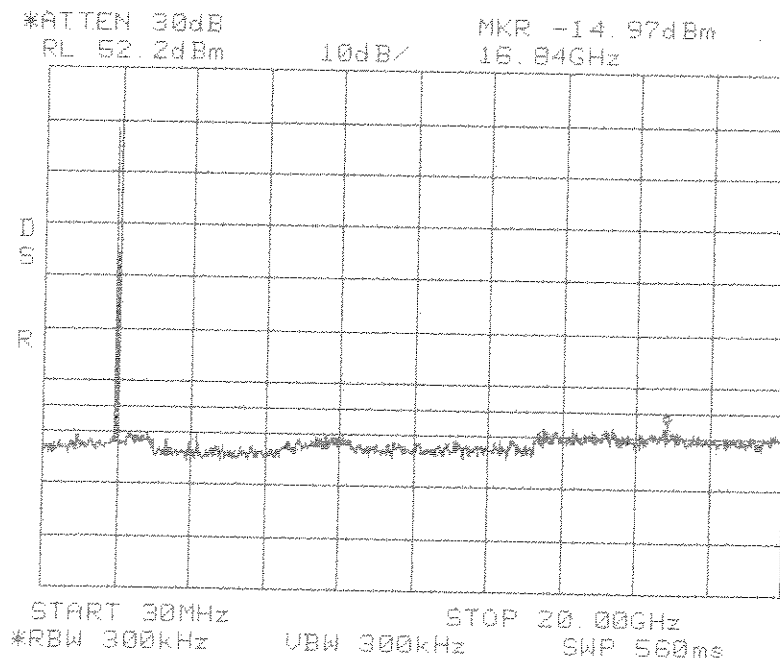
**Conducted Emissions  
Low  
PCS 1900 MHz  
F Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1972.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



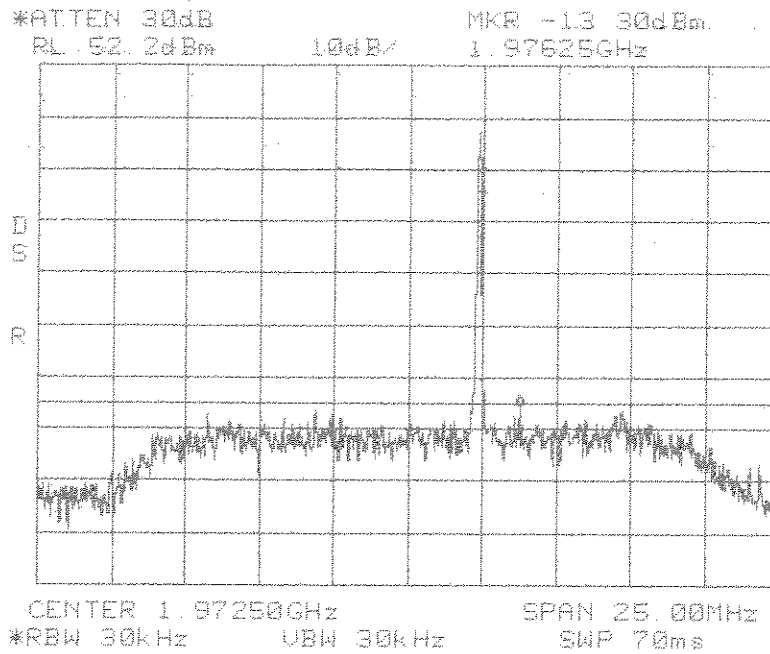
**Conducted Emissions  
Mid  
PCS 1900 MHz  
F Band**



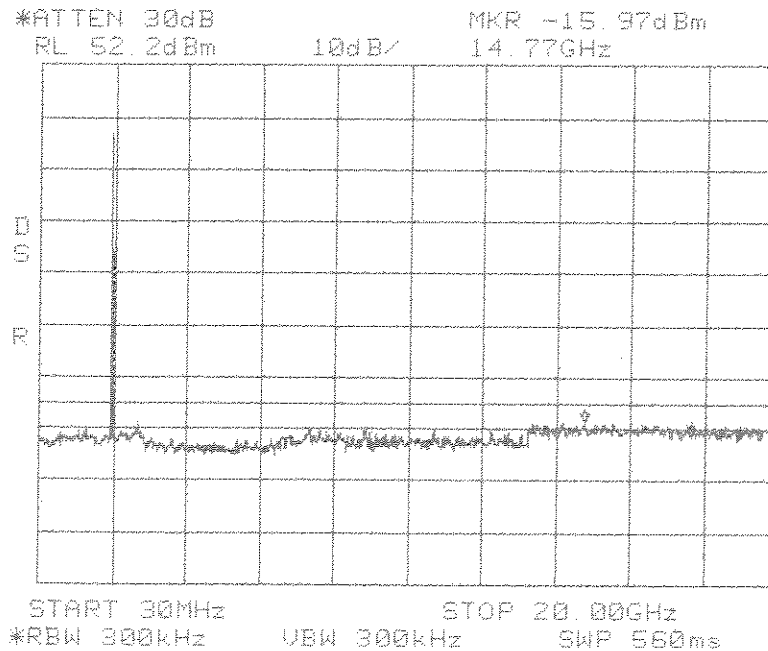
**Conducted Emissions  
Mid  
PCS 1900 MHz  
F Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1972.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



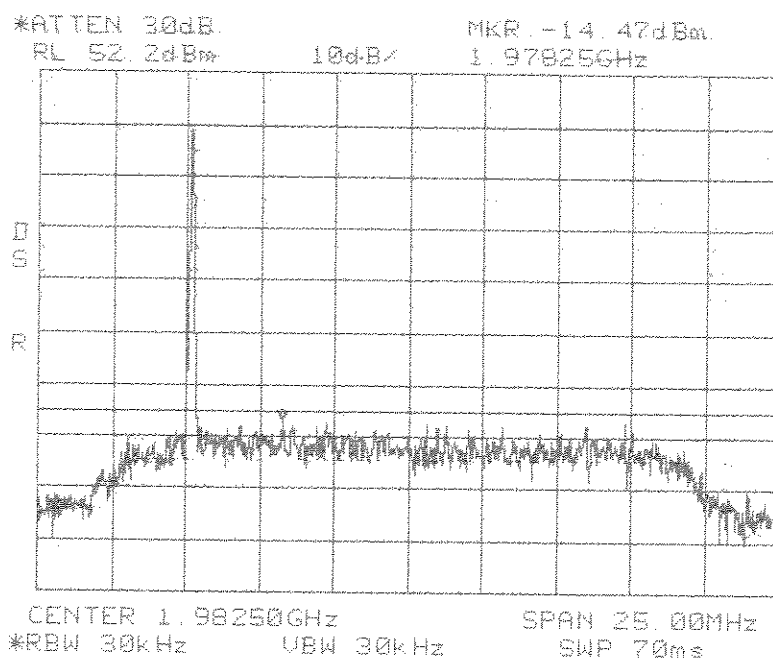
**Conducted Emissions  
High  
PCS 1900 MHz  
F Band**



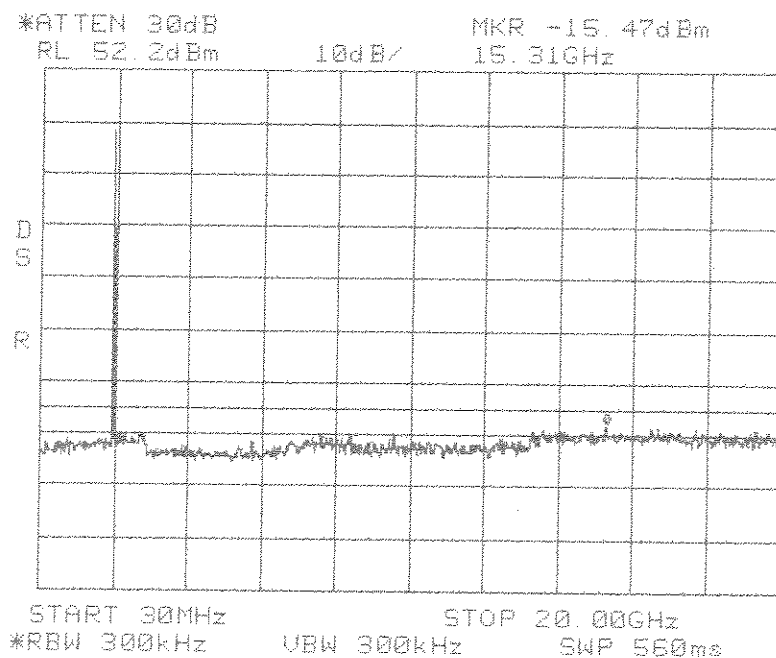
**Conducted Emissions  
High  
PCS 1900 MHz  
F Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1982.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



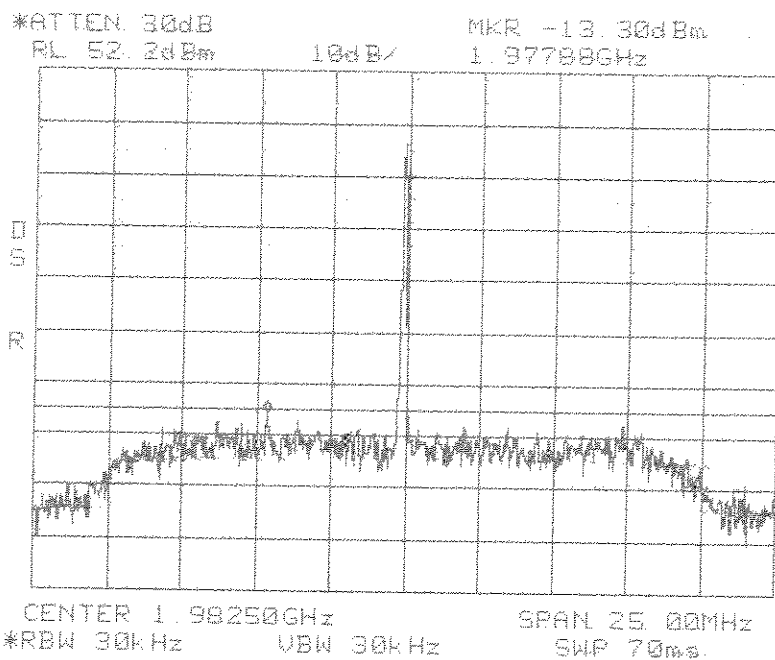
**Conducted Emissions  
Low  
PCS 1900 MHz  
C Band**



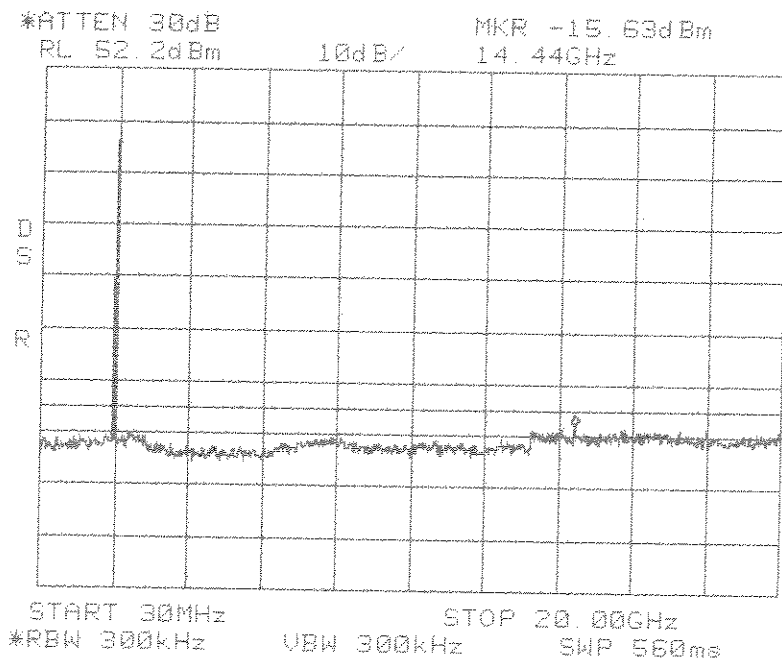
**Conducted Emissions  
Low  
PCS 1900 MHz  
C Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1982.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



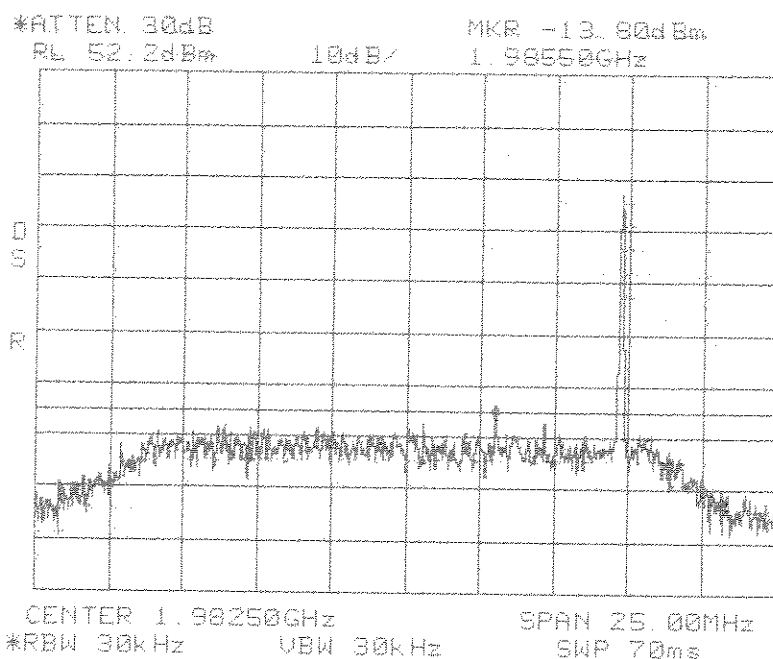
**Conducted Emissions**  
**Mid**  
**PCS 1900 MHz**  
**C Band**



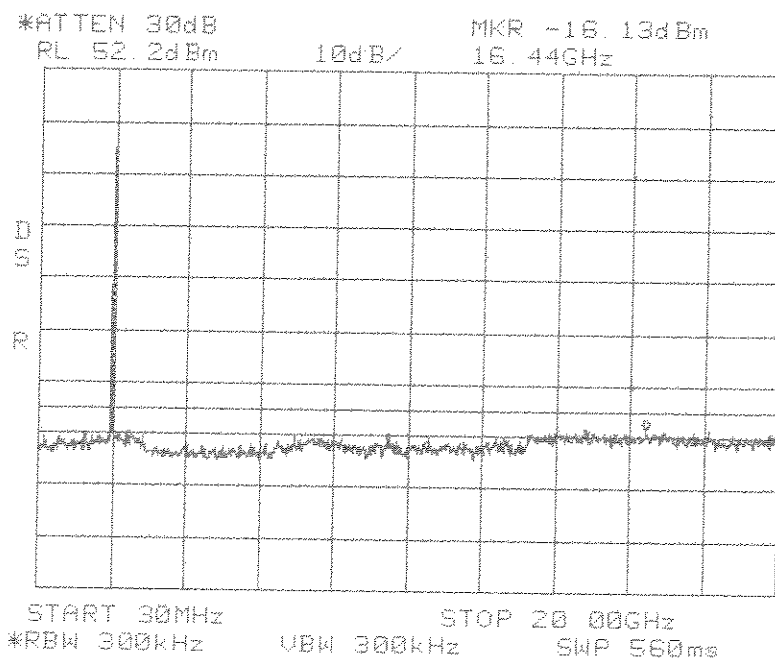
**Conducted Emissions**  
**Mid**  
**PCS 1900 MHz**  
**C Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1982.5 MHz  
Span: 25 MHz  
RBW/VBW: 30 kHz



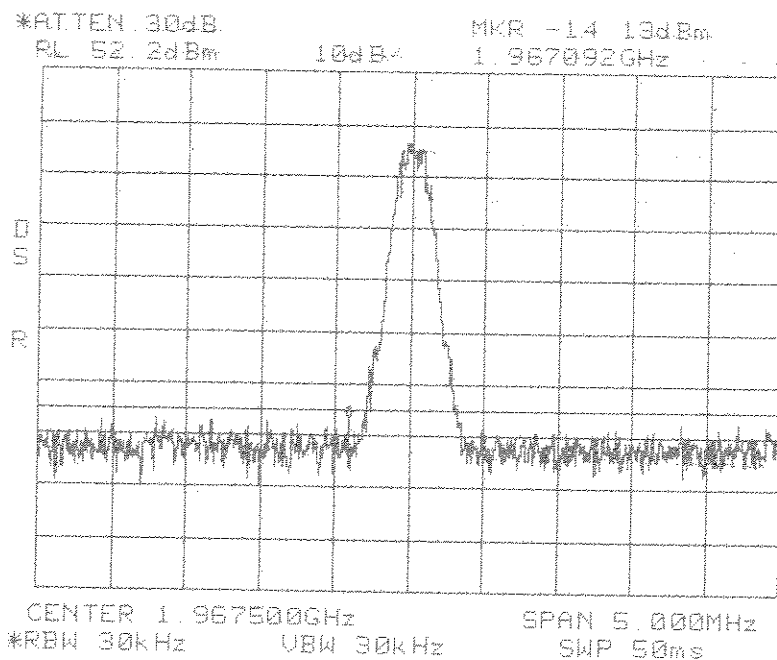
**Conducted Emissions  
High  
PCS 1900 MHz  
C Band**



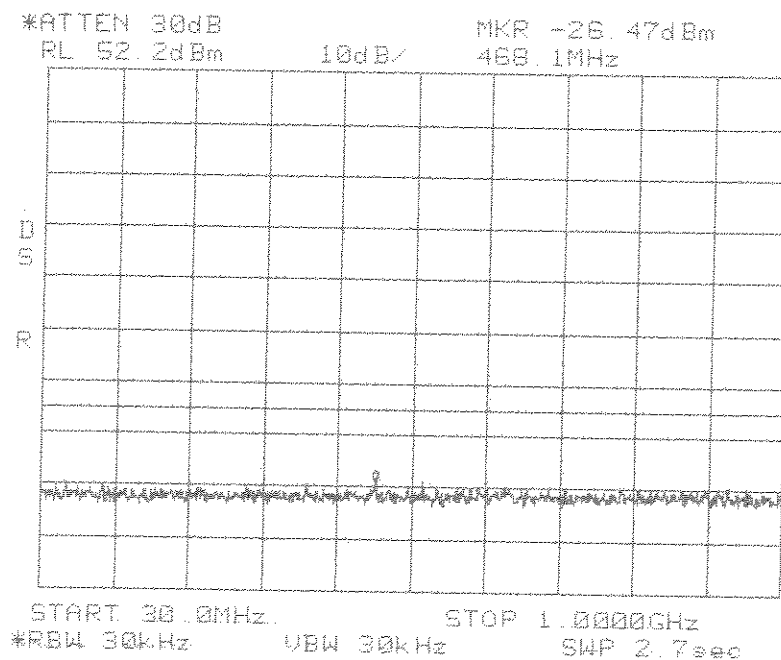
**Conducted Emissions  
High  
PCS 1900 MHz  
C Band**

Span: 30 MHz to 20 GHz  
RBW/VBW: 300 kHz

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



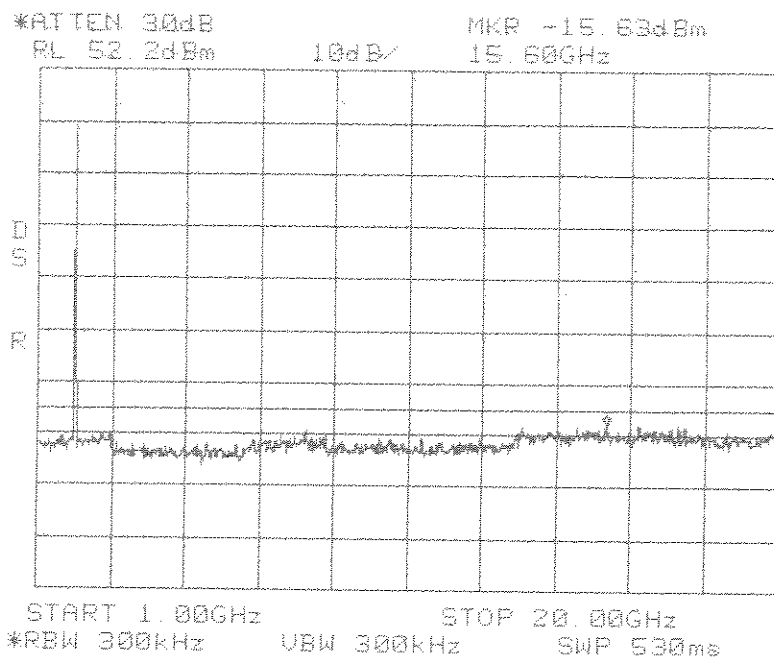
**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**E Band**



**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**E Band**

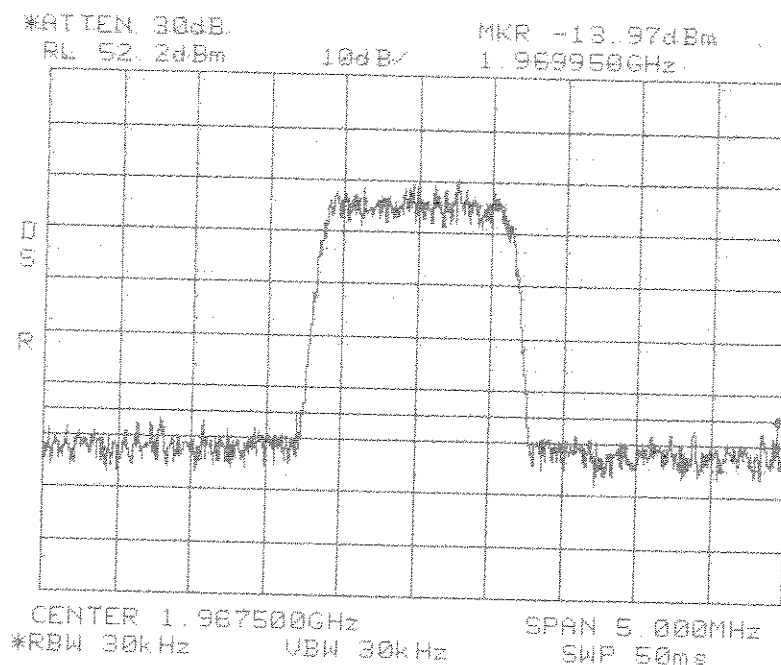
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

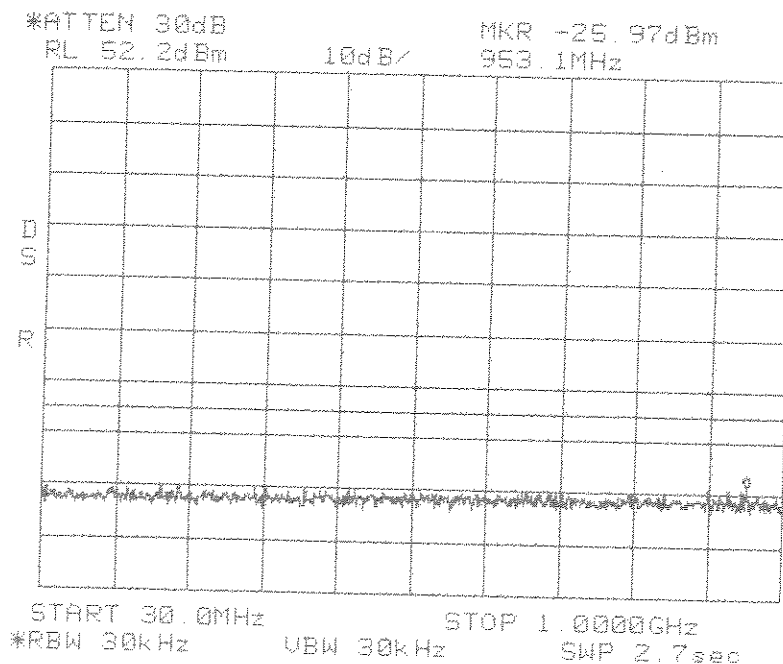


**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**E Band**

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**E Band**

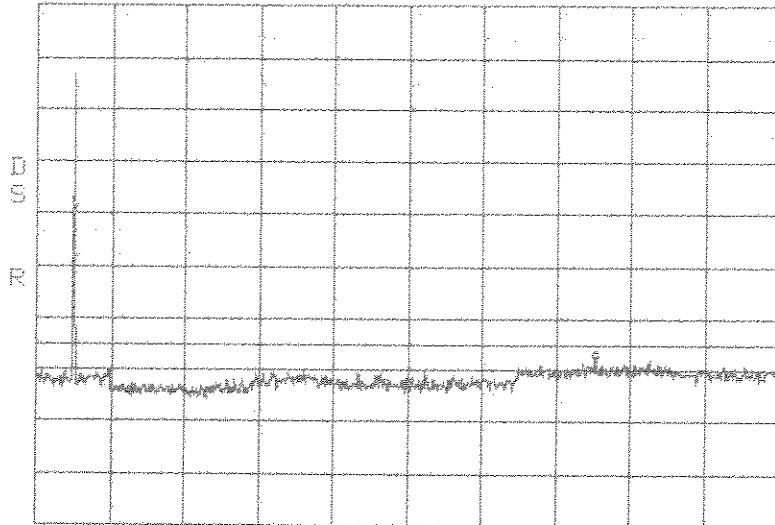


**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**E Band**

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

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

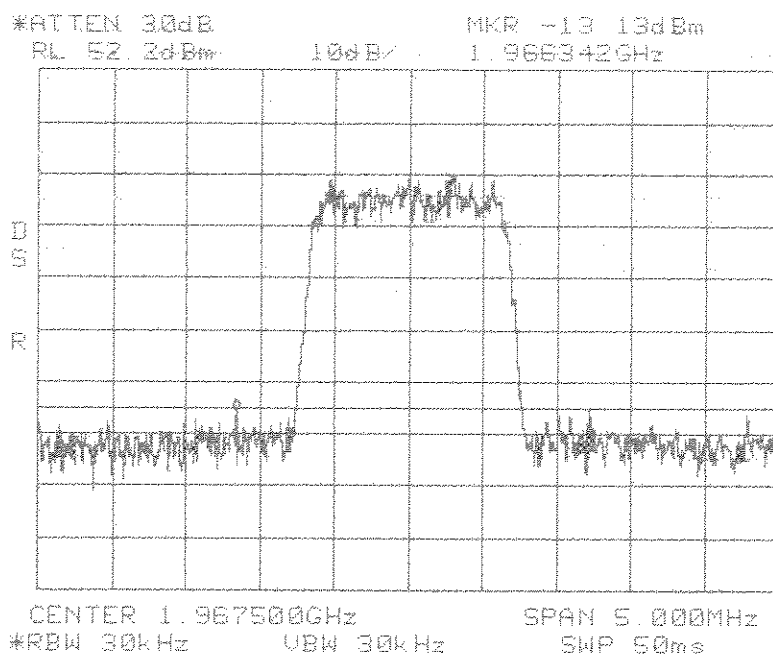
\*ATTEN 30dB MKR -25.97dBm  
\*ATTEN 30dB MKR -15.80dBm  
RL 52.2dBm 10dB 15.31GHz



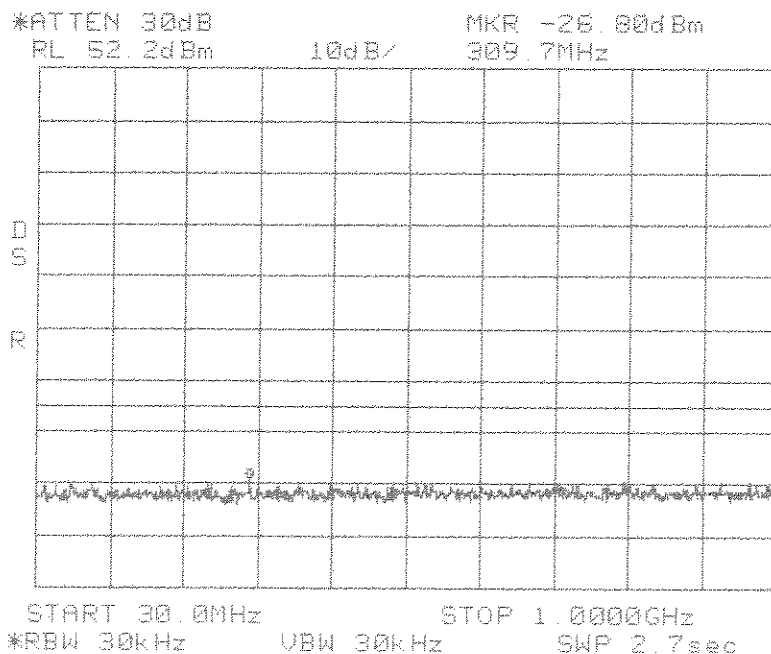
**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**E Band**

START 1.00GHz STOP 20.00GHz  
\*RBW 300kHz VBW 300kHz SWP 530ms

Center: 1967.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



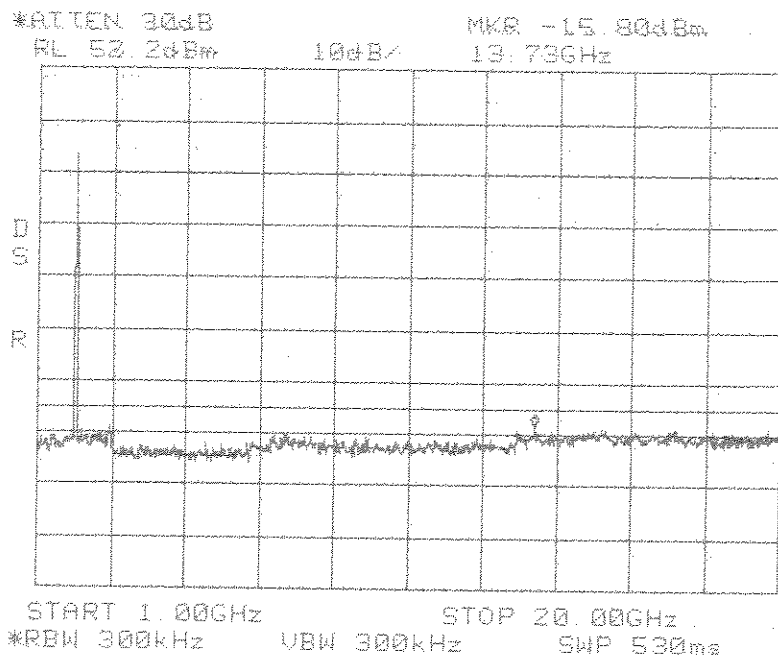
**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**E Band**  
*1xRTT*



**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**E Band**  
*1xRTT*

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

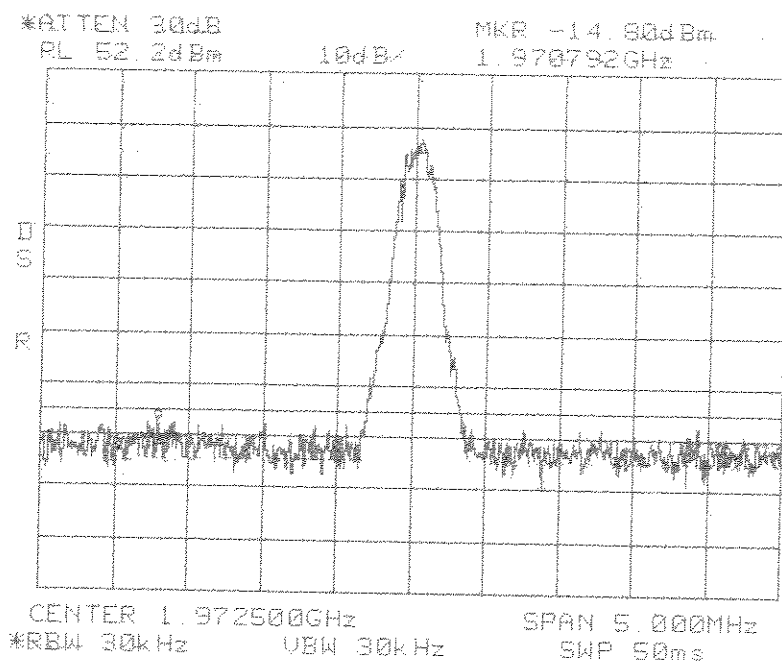
Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz



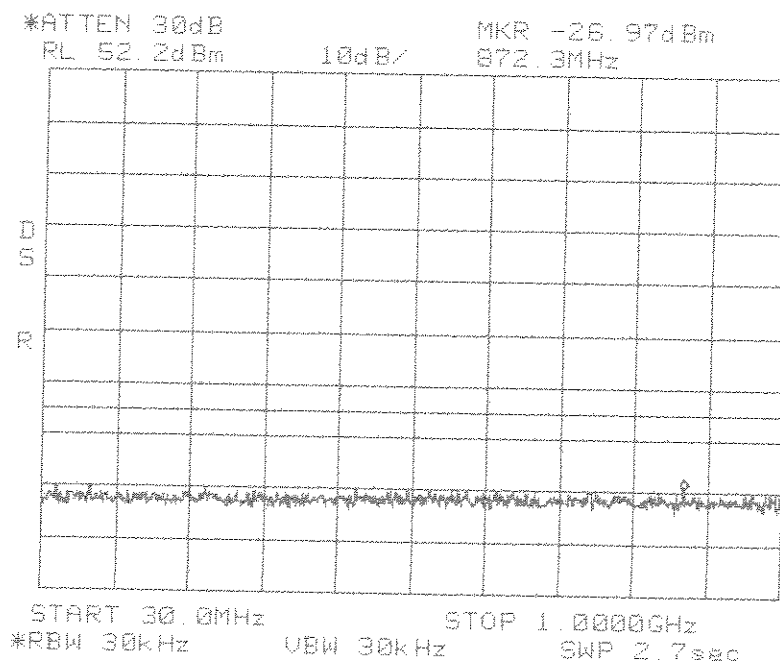
**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**E Band**

1xRTT

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



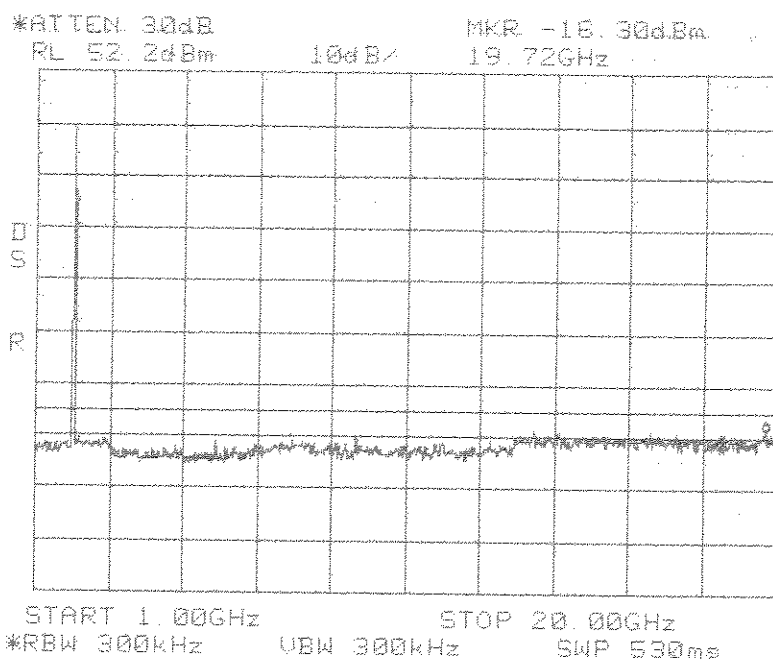
**Conducted Emissions  
GSM  
PCS 1900 MHz  
F Band**



**Conducted Emissions  
GSM  
PCS 1900 MHz  
F Band**

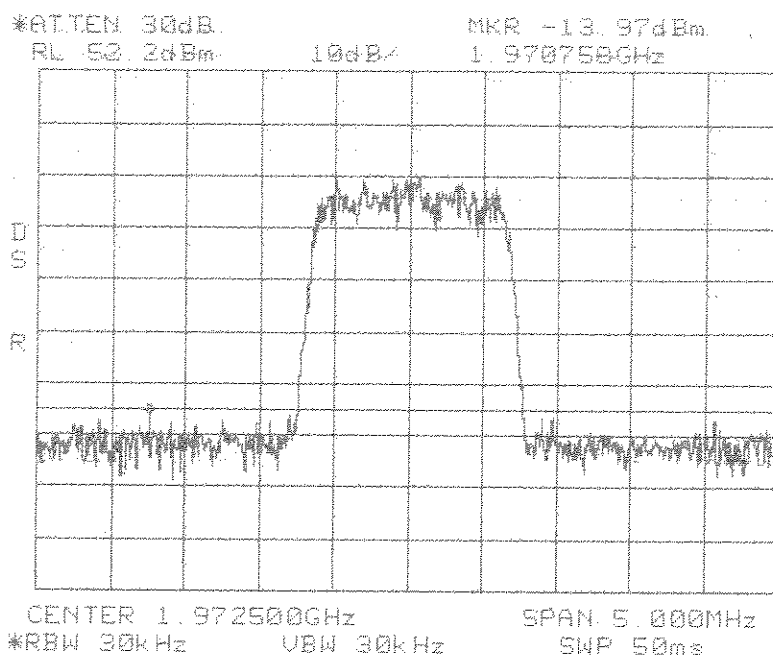
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

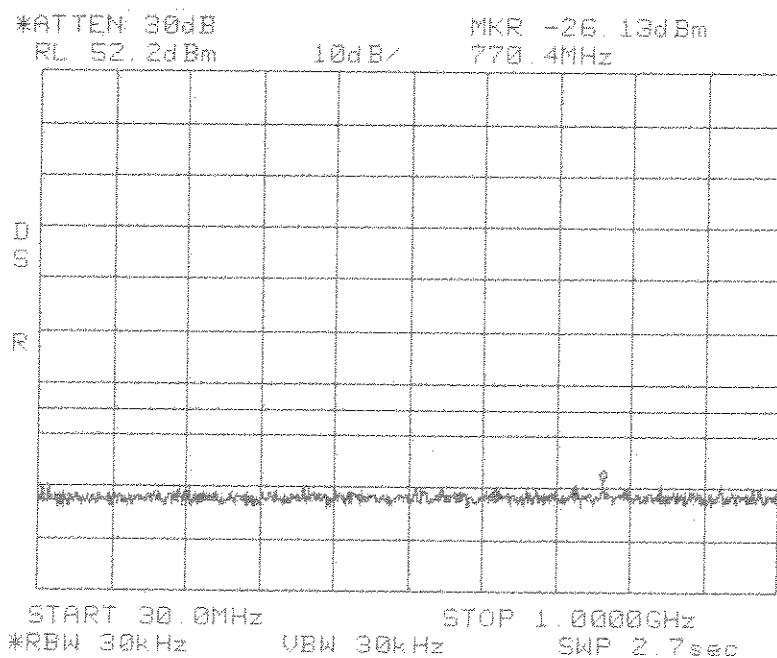


**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**F Band**

Center: 1972.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



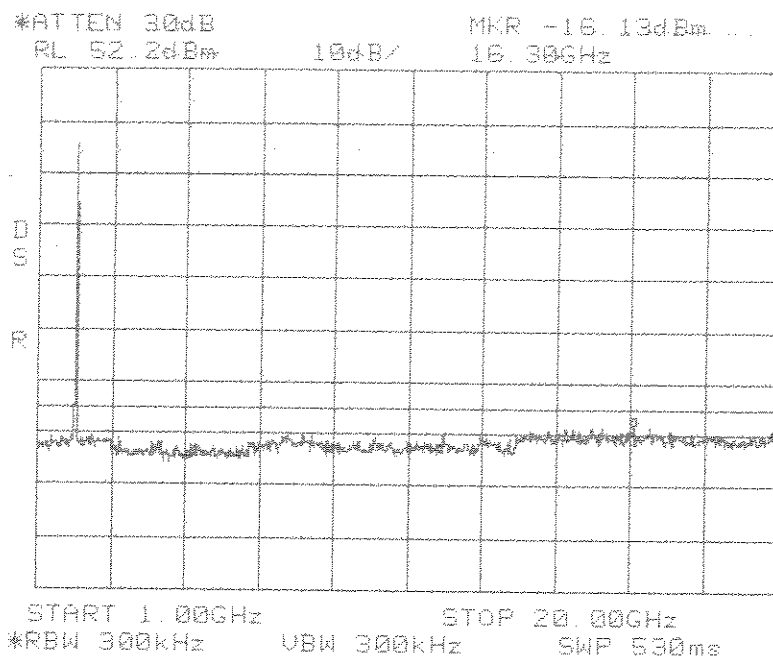
**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**F Band**



**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**F Band**

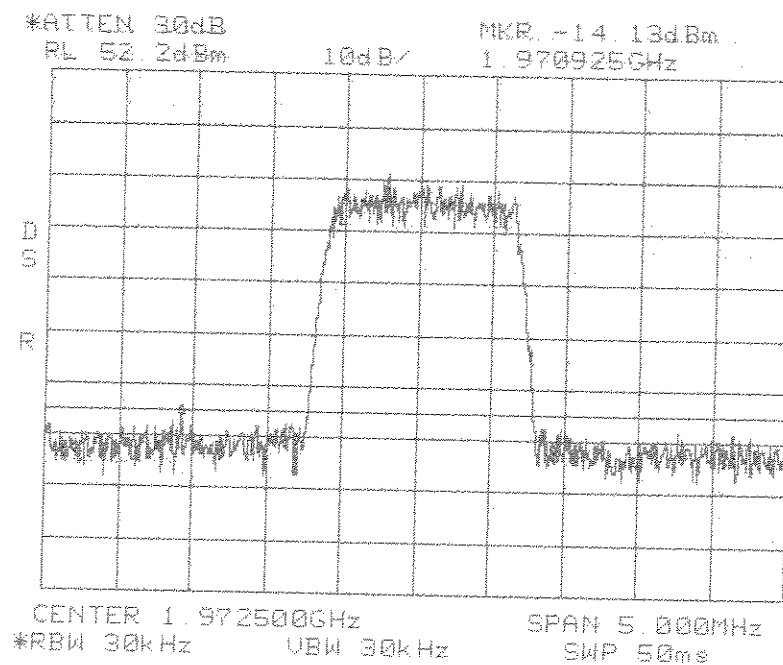
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

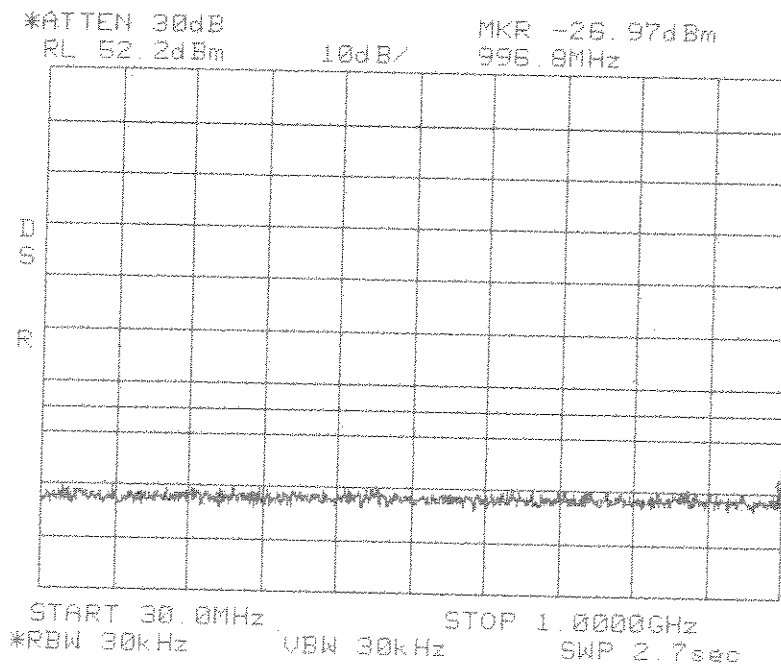


**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**F Band**

Center: 1972.5 MHz  
 Span: 5 MHz  
 RBW/VBW: 30 kHz



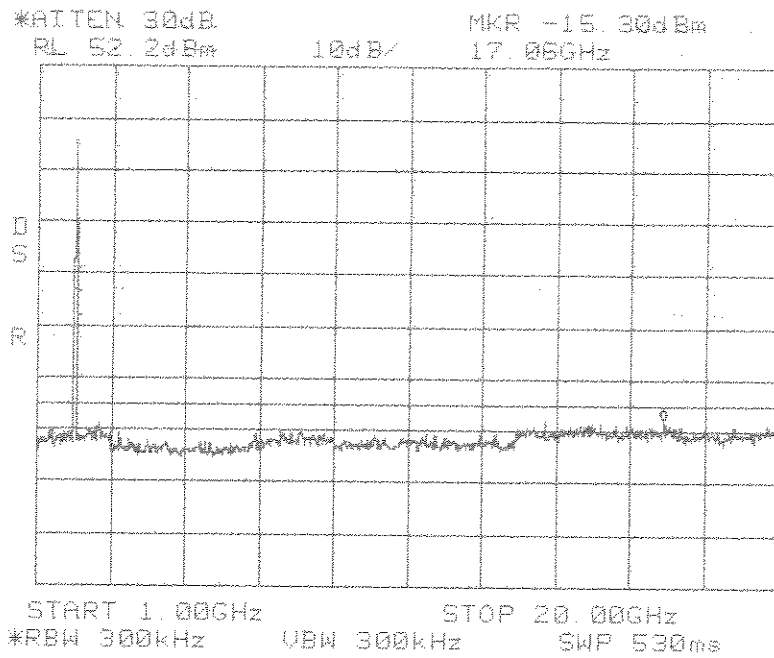
**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**F Band**  
 1xRTT



**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**F Band**  
 1xRTT

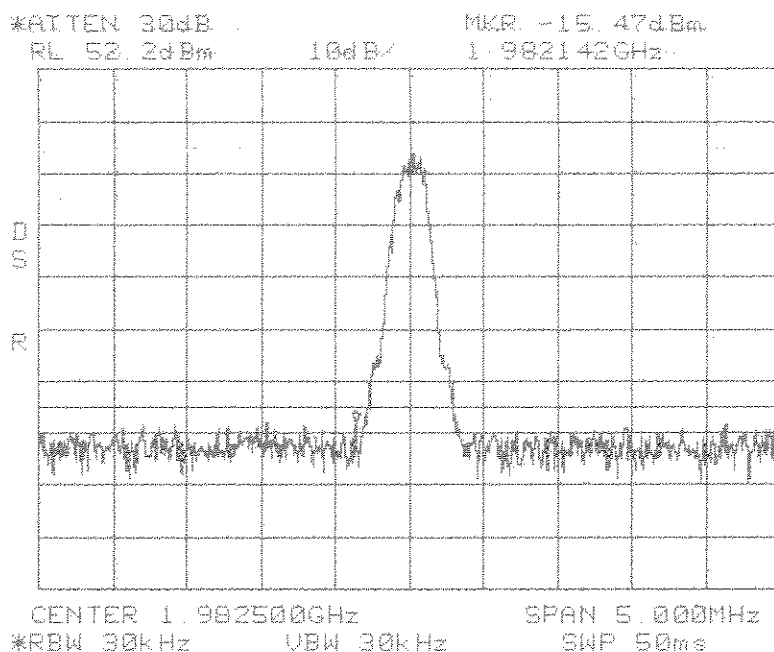
Span: 30 MHz to 1 GHz  
 RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

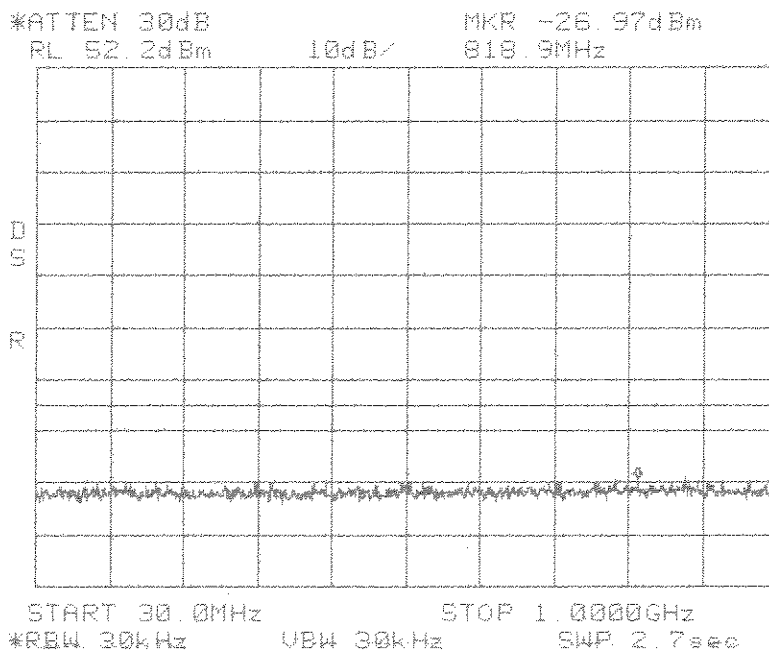


**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**F Band**  
*1xRTT*

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



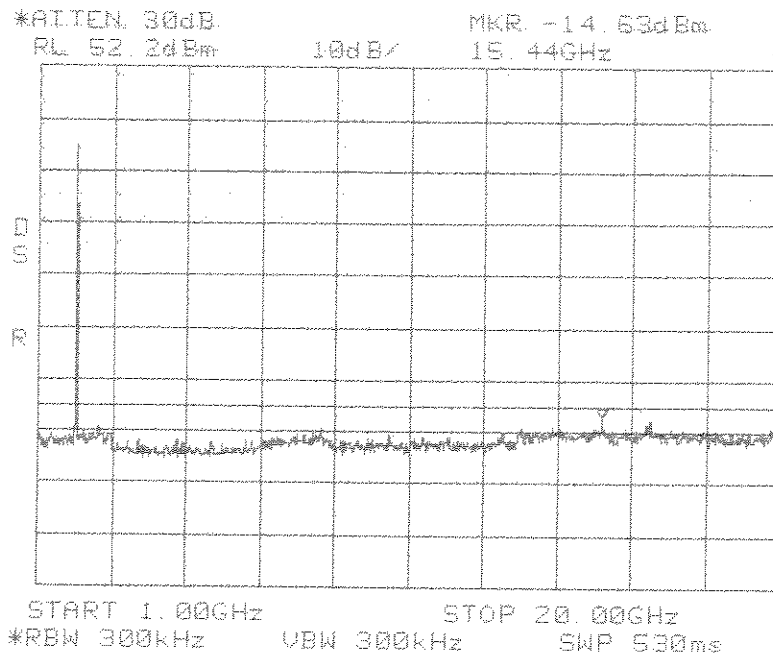
**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**C Band**



**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**C Band**

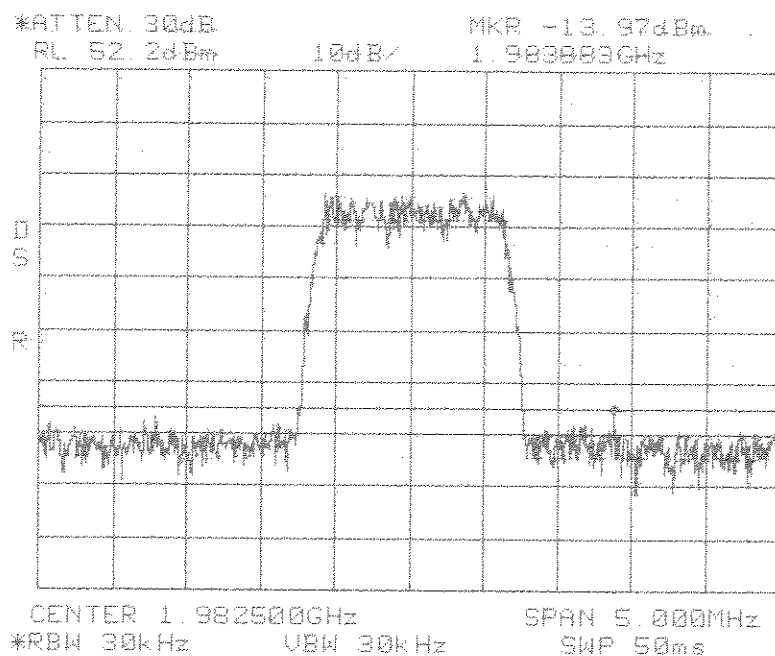
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

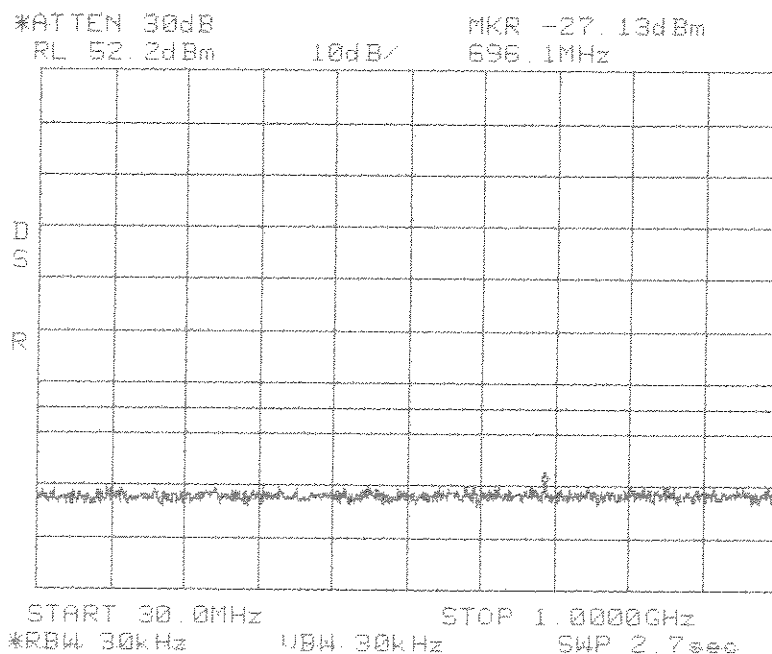


**Conducted Emissions**  
**GSM**  
**PCS 1900 MHz**  
**C Band**

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



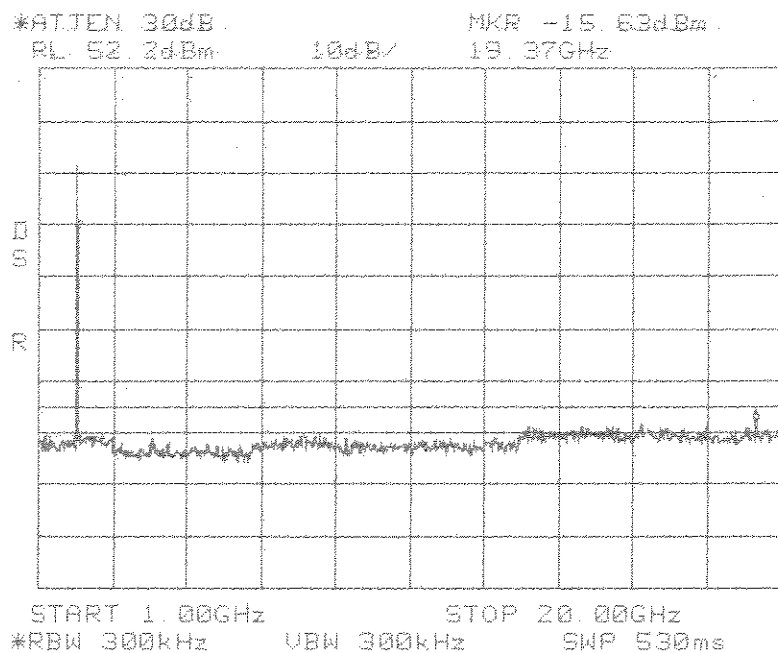
**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**C Band**



**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**C Band**

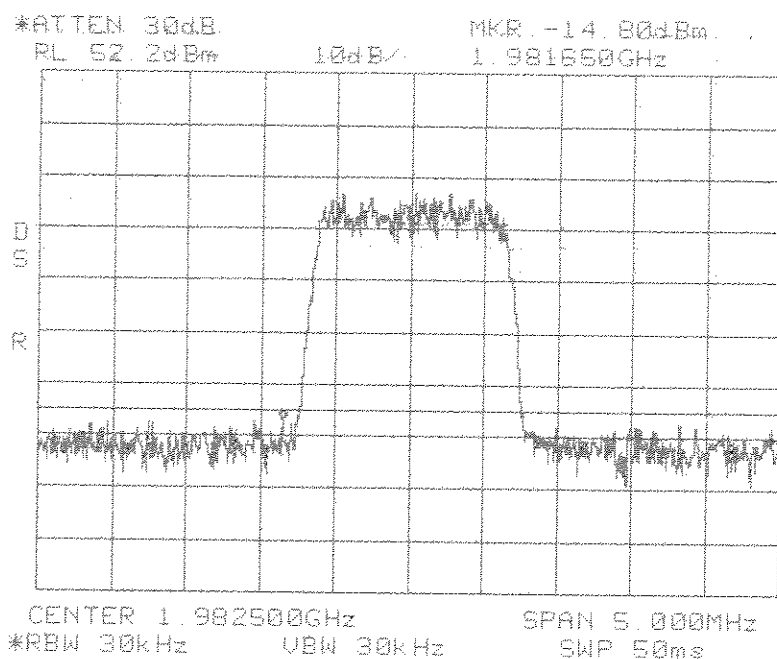
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

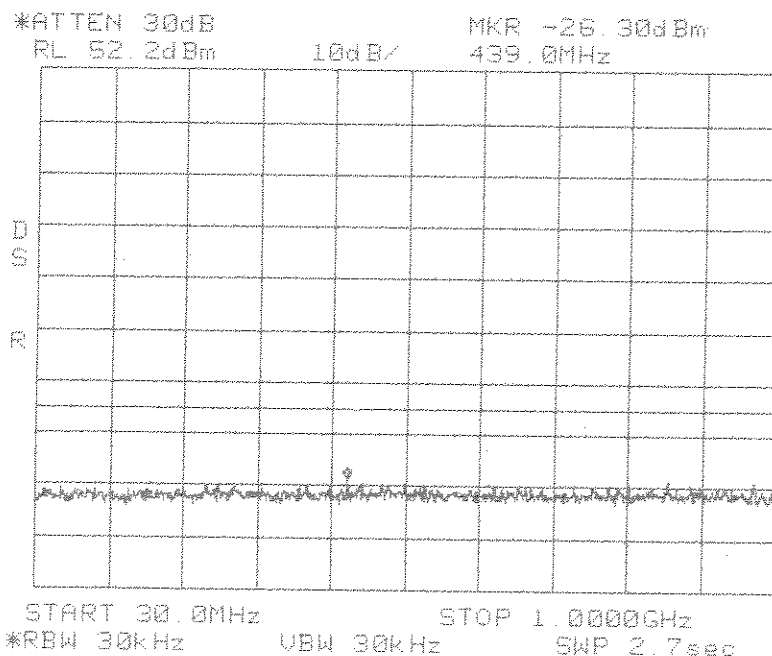


**Conducted Emissions**  
**CDMA**  
**PCS 1900 MHz**  
**C Band**

Center: 1982.5 MHz  
Span: 5 MHz  
RBW/VBW: 30 kHz



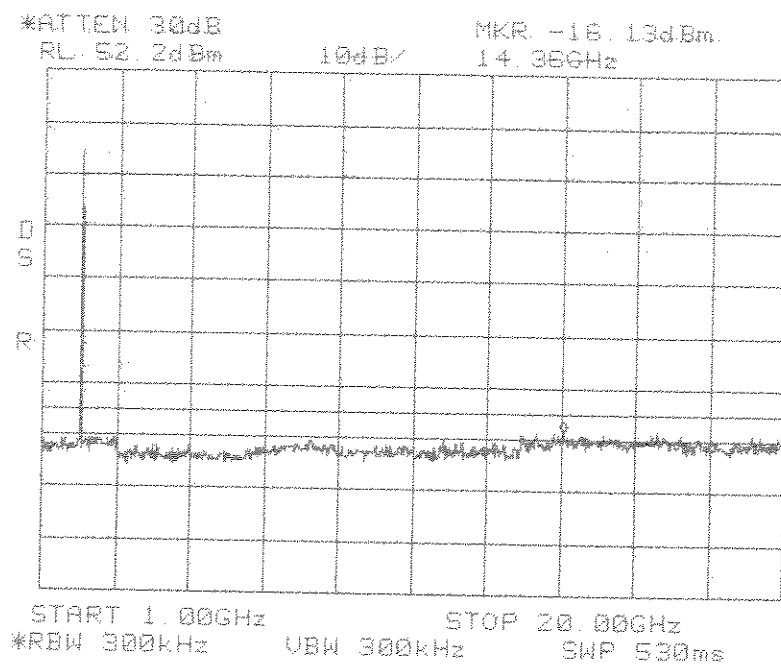
**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**C Band**  
*1xRTT*



**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**C Band**  
*1xRTT*

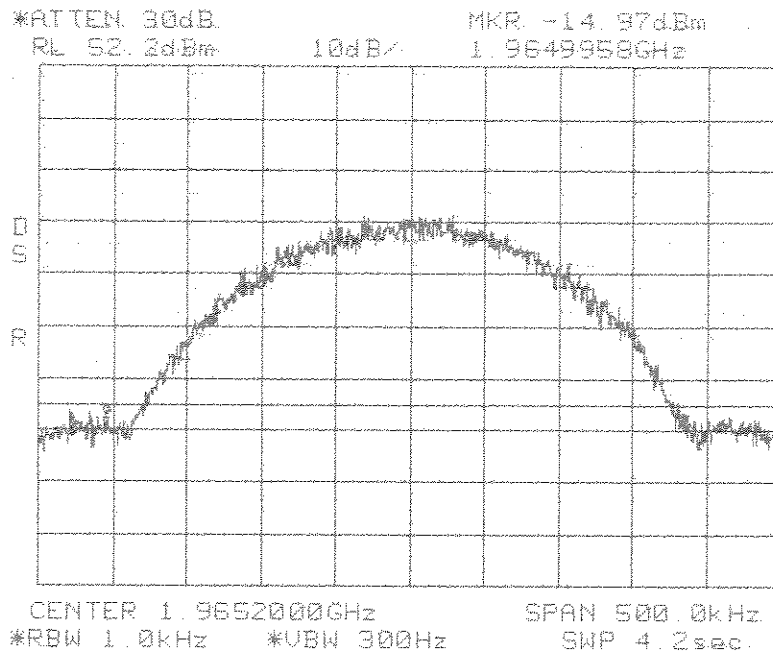
Span: 30 MHz to 1 GHz  
RBW/VBW: 30 kHz

Span: 1 GHz to 20 GHz  
RBW/VBW: 300 kHz

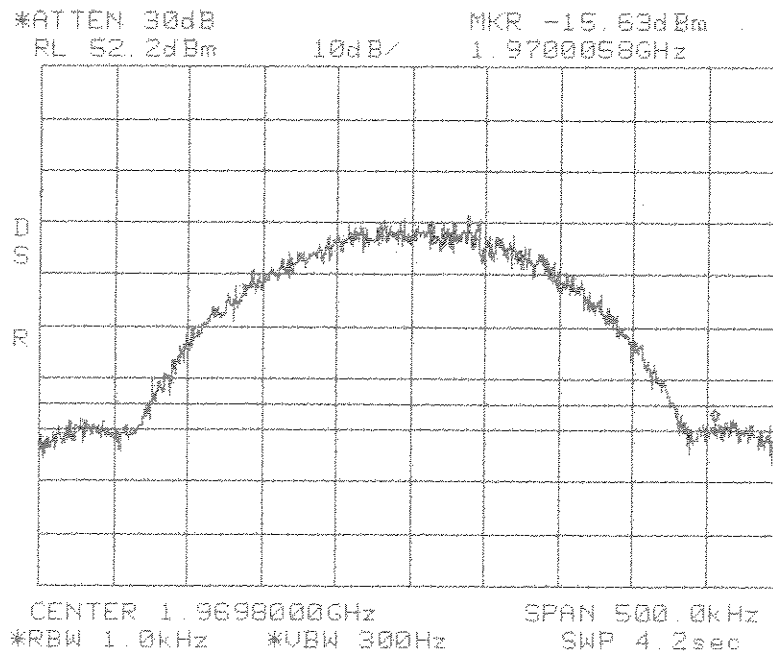


**Conducted Emissions**  
**CDMA2000**  
**PCS 1900 MHz**  
**C Band**  
*1xRTT*

Center: 1965.2 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz



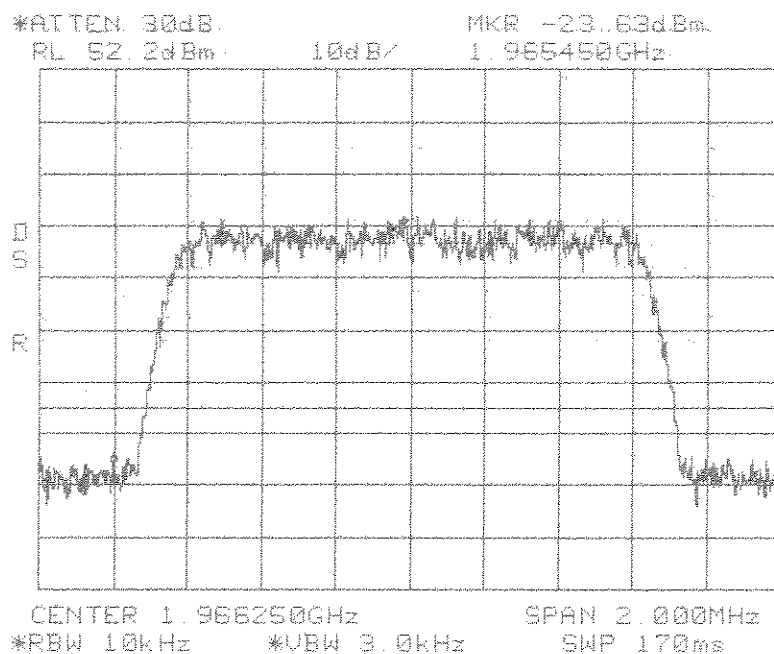
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
E Band**



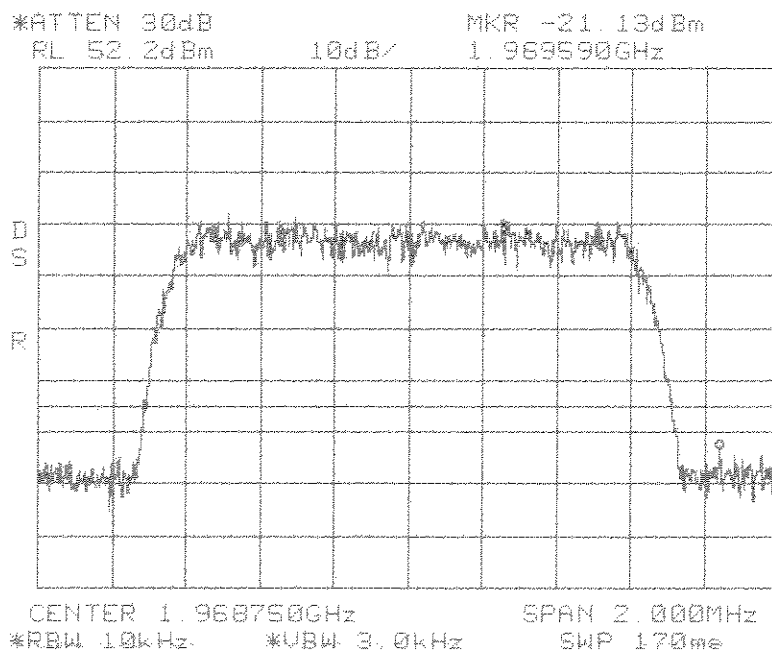
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
E Band**

Center: 1969.8 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz

Center: 1966.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



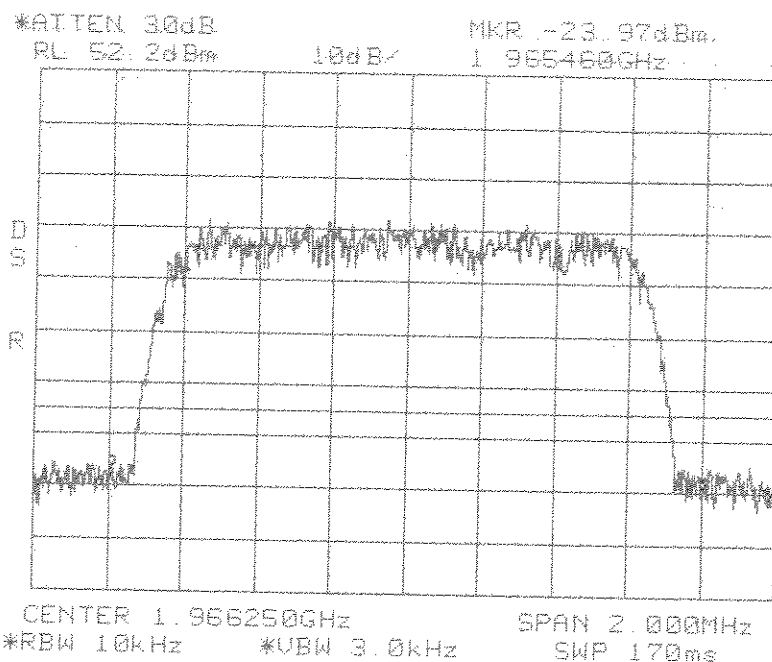
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
E Band**



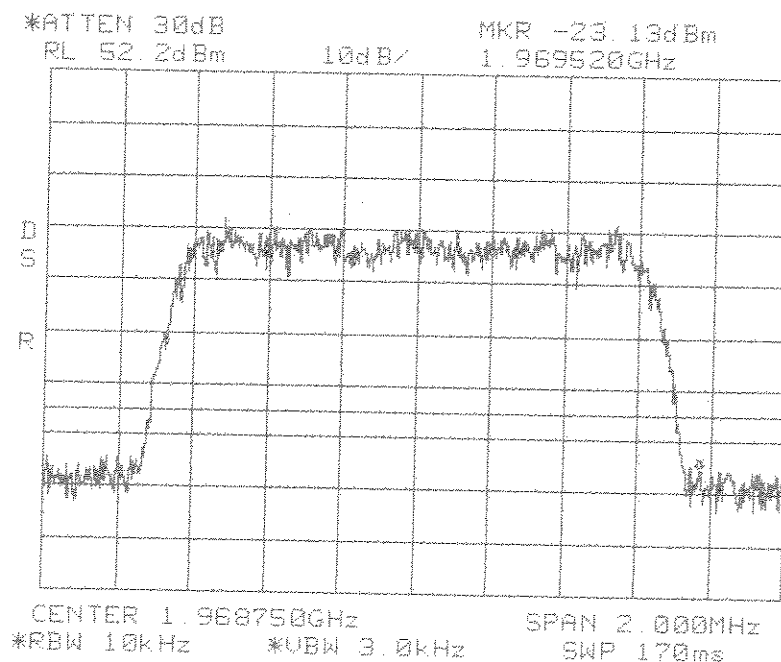
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
E Band**

Center: 1968.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1966.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



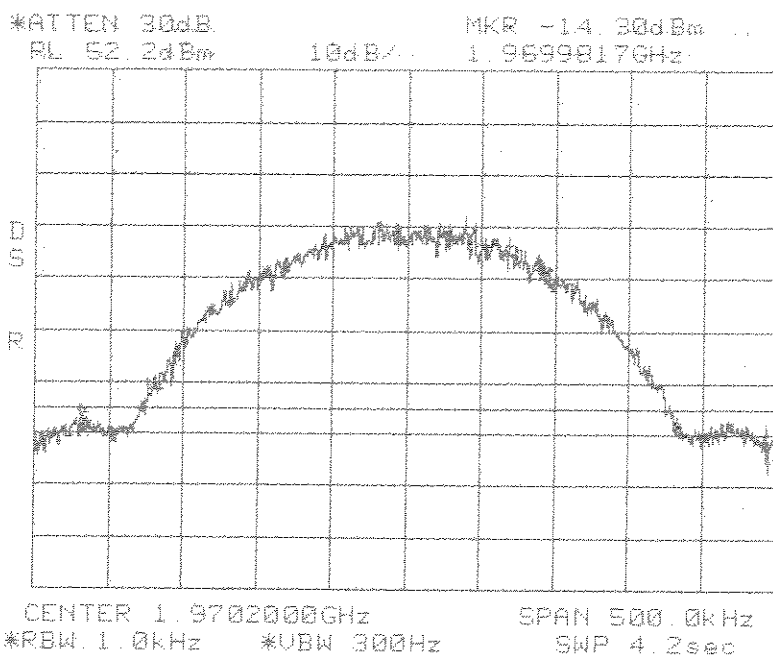
**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**E Band**  
**1xRTT**



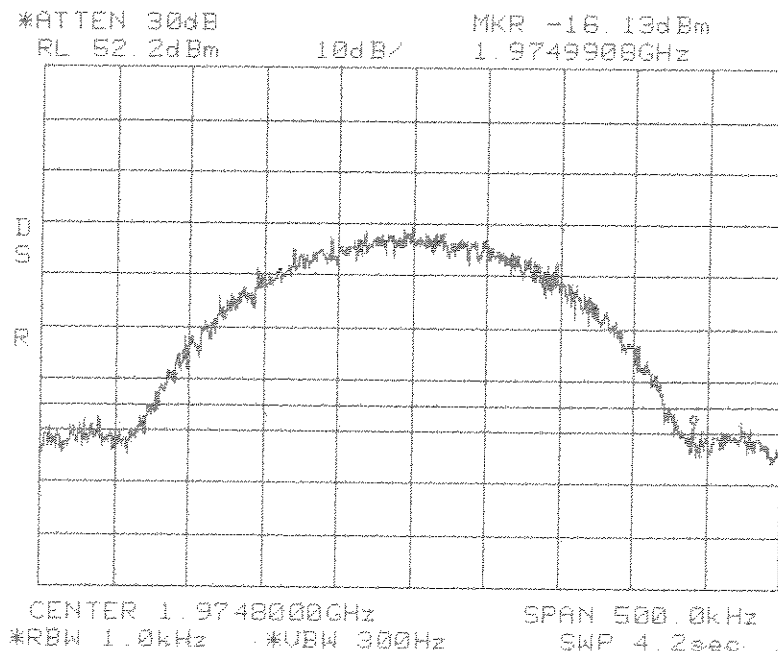
**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**E Band**  
**1xRTT**

Center: 1968.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1970.2 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz



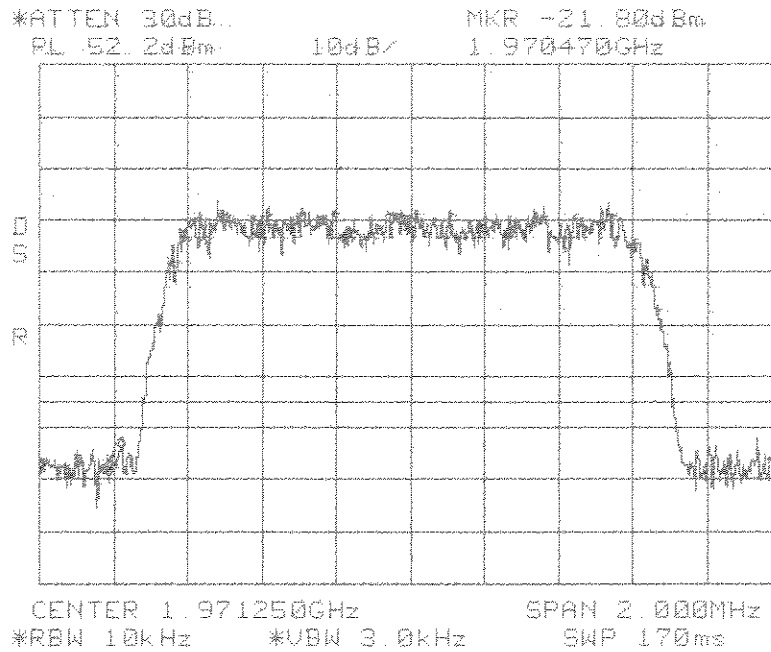
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
F Band**



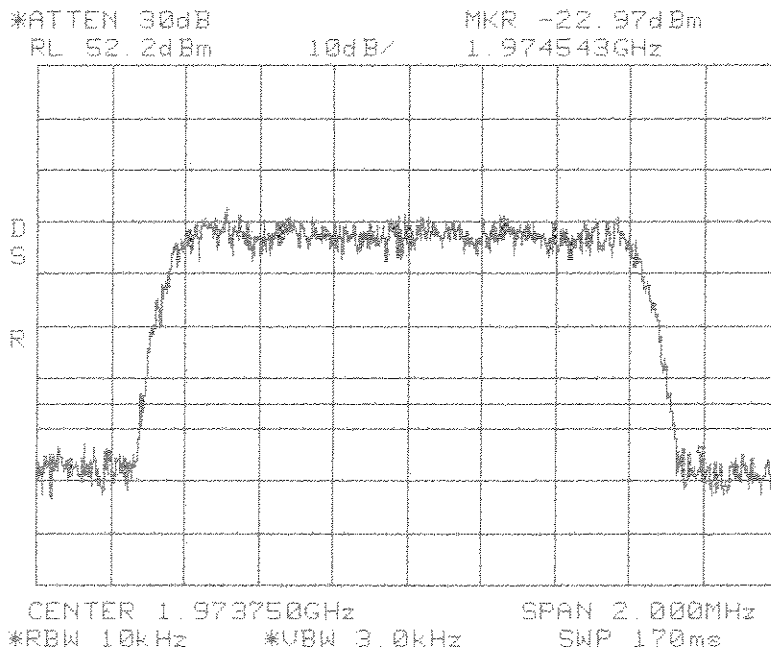
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
F Band**

Center: 1974.8 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz

Center: 1971.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



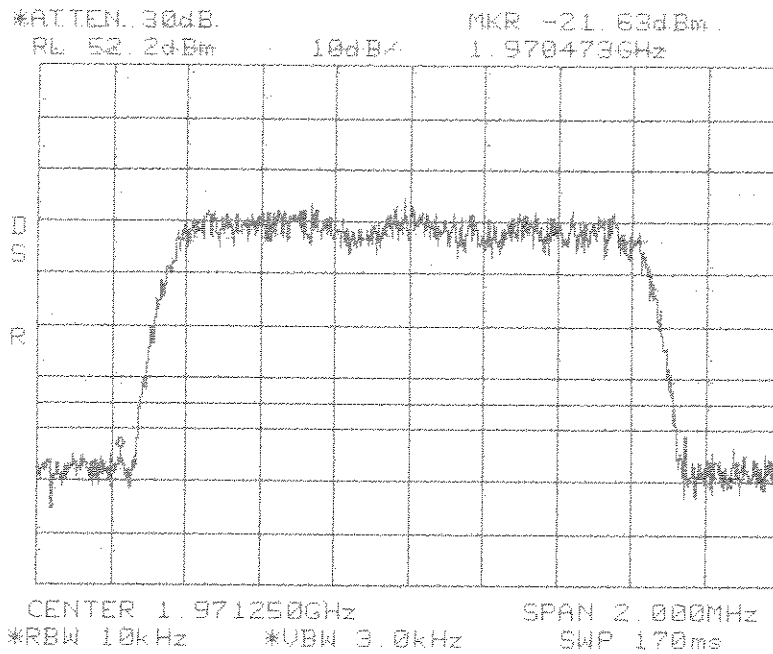
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
F Band**



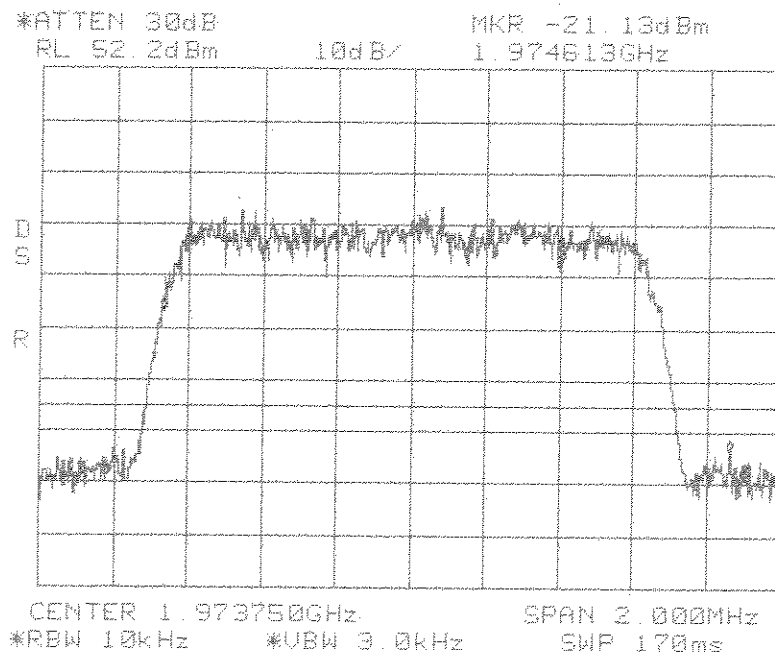
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
F Band**

Center: 1973.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1971.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



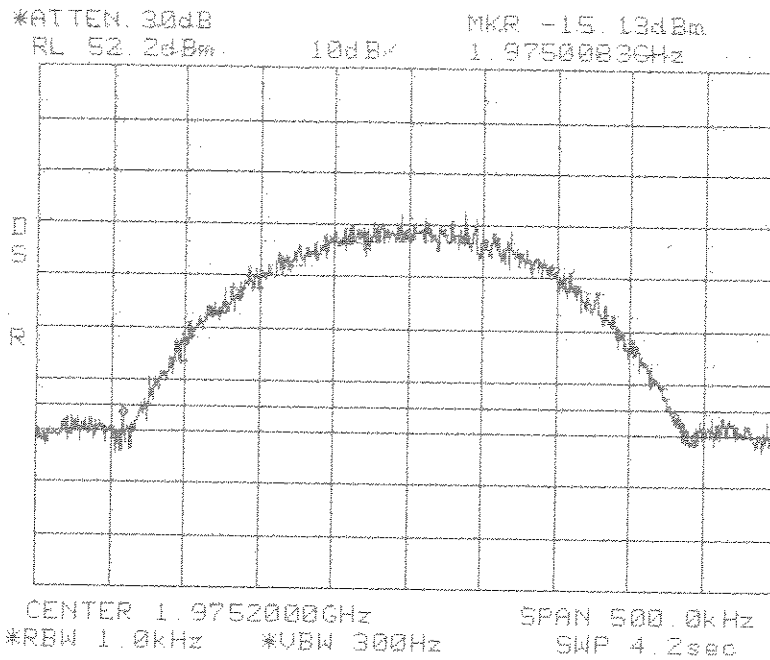
**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**F Band**  
*1xRTT*



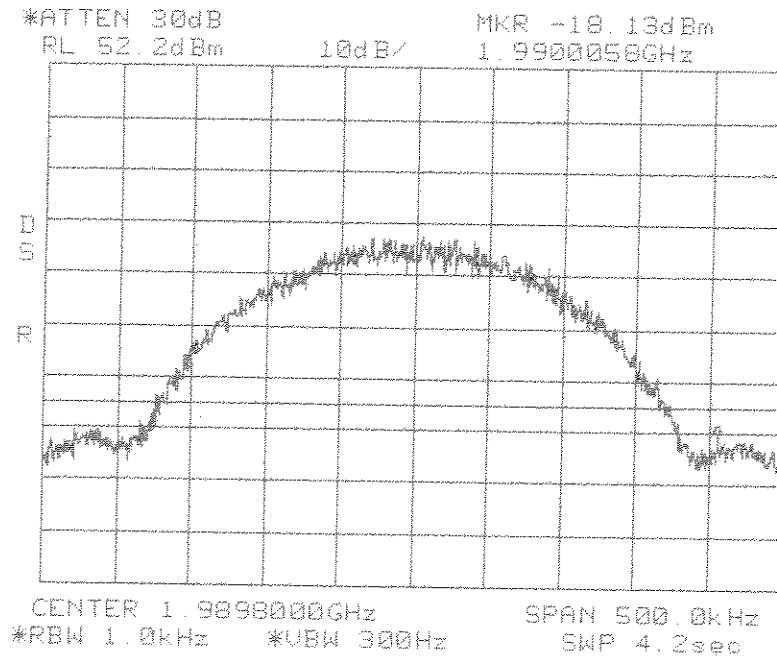
**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**F Band**  
*1xRTT*

Center: 1973.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1975.2 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz



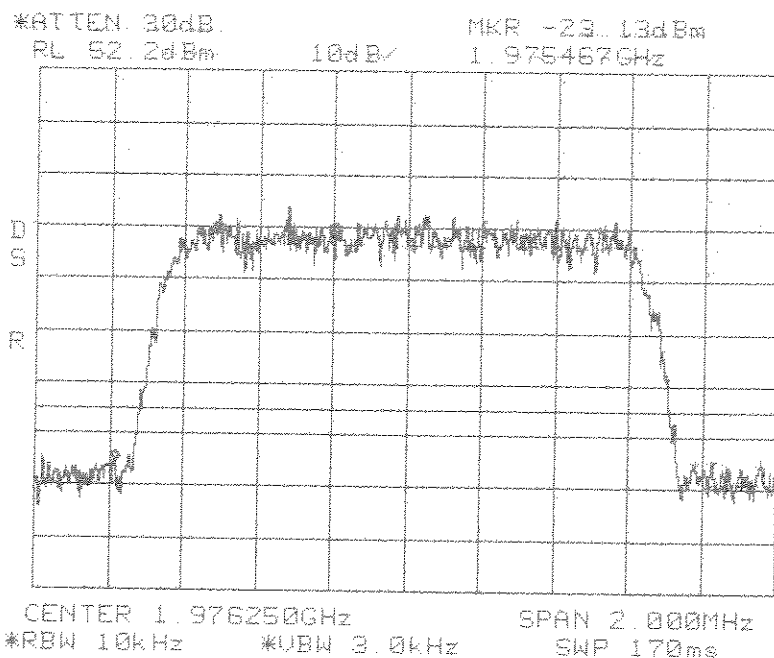
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
C Band**



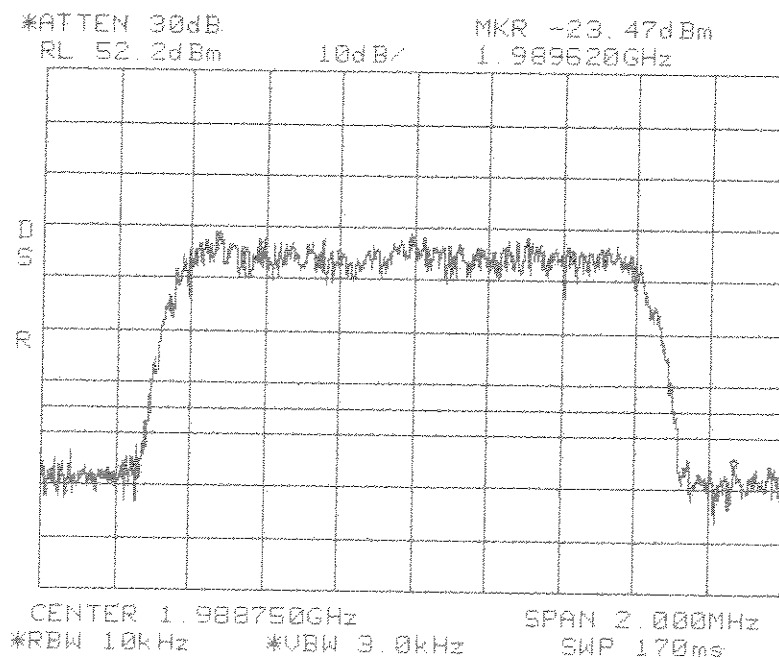
**Conducted Emissions  
Band Edge  
GSM  
PCS 1900 MHz  
C Band**

Center: 1989.8 MHz  
Span: 500 kHz  
RBW/VBW: 1 kHz / 300 Hz

Center: 1976.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



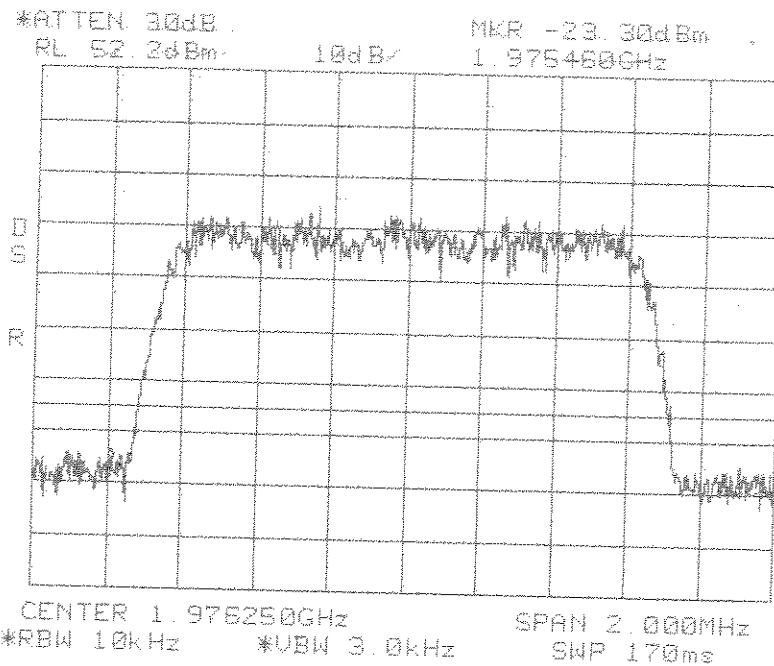
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
C Band**



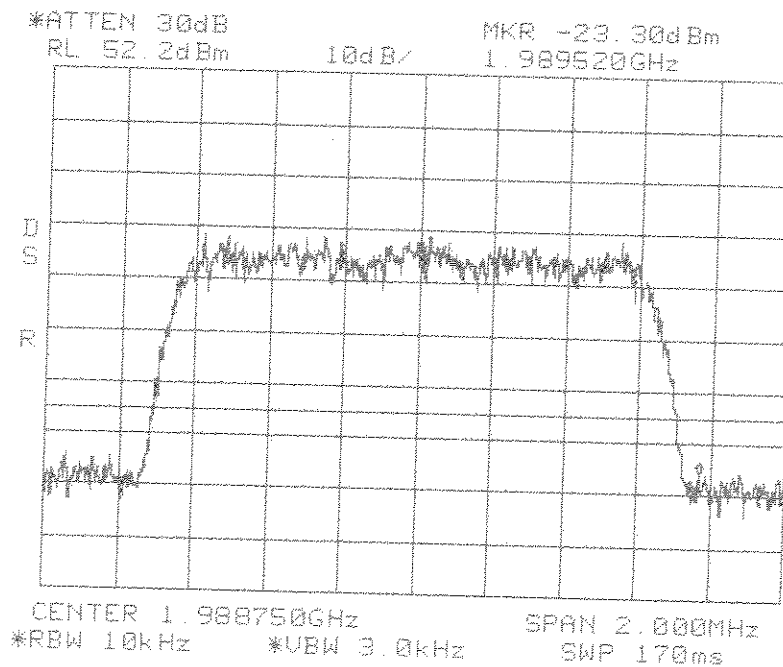
**Conducted Emissions  
Band Edge  
CDMA  
PCS 1900 MHz  
C Band**

Center: 1988.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

Center: 1976.25 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz



**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**C Band**  
*1xRTT*



**Conducted Emissions**  
**Band Edge**  
**CDMA2000**  
**PCS 1900 MHz**  
**C Band**  
*1xRTT*

Center: 1988.75 MHz  
Span: 2 MHz  
RBW/VBW: 10 kHz / 3 kHz

### Equivalent Isotropically Radiated Power (EIRP) Substitution

Company: ADC Inc.  
EUT: DGVL461110SYS  
Date: 11/10/05  
Tested By: Joe Sausen

### SUBSTITUTION PERFORMED

Plug in freq, final dBuV/m, Matching Sig gen level, and cable loss

(if using antenna other than dipole also enter ant. Gain) - final matching dBm will automatically be calculated in column F. (Final dBm = Sig gen level (dBm) - Cable loss + Ant. Gain)

Schwarzbeck dipole antenna gain : 2.15dBi -10dB + 1.64dB = -6.21

2.15dBi theoretical gain of a dipole, 10dB internal attenuator, 1.64dB correction for 73 / 50 ohm balun

|             |                   | Matches                |                    | Dipole            | Matches        |
|-------------|-------------------|------------------------|--------------------|-------------------|----------------|
| Freq. (MHz) | Final<br>(dBuV/m) | Sig Gen Level<br>(dBm) | Cable Loss<br>(dB) | Ant. Gain<br>(dB) | Final<br>(dBm) |
| 426         | 68.8              | -31.3                  | 1.6                | -6.21             | -39.11         |

### SUBSTITUTION EXTRAPOLATED TO OTHER SPURIOUS EMISSIONS

Enter any more spurious frequencies and final dBuV/m. Corresponding final power levels will automatically be calculated.

| Freq. MHz | Final<br>dBuV/m | Correction<br>Factor | Final<br>dBm | Final<br>uW |
|-----------|-----------------|----------------------|--------------|-------------|
| 426       | 68.8            | 107.91               | -39.11       | 0.122744    |
| 1990      | 58.14           | 107.91               | -49.77       | 0.010544    |
| 1965      | 57.63           | 107.91               | -50.28       | 0.009376    |
| 1373      | 50.39           | 107.91               | -57.52       | 0.001770    |
| 2446      | 50.3            | 107.91               | -57.61       | 0.001734    |

# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 1 of 15

## List of measurements for run #: 2

| FREQ                   | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|------------------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| TX setting = 1965 MHz: |                 |                                         |                     |                            |                                           |                                           |
| 30.144 MHz             | 53.0 Qp         | 0.42 / 20.97 / 27.4 / 0.0               | 47.0                | V / 1.00 / 0               | -35.23                                    | n/a                                       |
| 31.446 MHz             | 53.85 Qp        | 0.43 / 20.49 / 27.35 / 0.0              | 47.42               | V / 1.00 / 0               | -34.81                                    | n/a                                       |
| 64.626 MHz             | 62.55 Qp        | 0.69 / 10.21 / 27.0 / 0.0               | 46.45               | V / 1.00 / 0               | -35.78                                    | n/a                                       |
| 82.404 MHz             | 60.7 Qp         | 0.8 / 7.15 / 26.9 / 0.0                 | 41.75               | V / 1.00 / 0               | -40.48                                    | n/a                                       |
| 109.044 MHz            | 54.3 Qp         | 0.85 / 9.28 / 27.05 / 0.0               | 37.38               | V / 1.00 / 0               | -44.85                                    | n/a                                       |
| 125.73 MHz             | 59.9 Qp         | 0.95 / 8.33 / 27.05 / 0.0               | 42.13               | V / 1.00 / 0               | -40.1                                     | n/a                                       |
| 128.76 MHz             | 60.65 Qp        | 0.99 / 8.02 / 27.01 / 0.0               | 42.65               | V / 1.00 / 0               | -39.58                                    | n/a                                       |
| 214.569 MHz            | 62.5 Qp         | 1.22 / 10.55 / 27.12 / 0.0              | 47.15               | V / 1.00 / 0               | -35.08                                    | n/a                                       |
| 233.469 MHz            | 41.0 Qp         | 1.3 / 11.07 / 27.2 / 0.0                | 26.17               | V / 1.00 / 0               | -56.06                                    | n/a                                       |
| 251.568 MHz            | 38.65 Qp        | 1.35 / 11.81 / 27.2 / 0.0               | 24.61               | V / 1.00 / 0               | -57.62                                    | n/a                                       |
| 257.481 MHz            | 46.9 Qp         | 1.39 / 12.22 / 27.2 / 0.0               | 33.31               | V / 1.00 / 0               | -48.92                                    | n/a                                       |
| 281.481 MHz            | 34.5 Qp         | 1.5 / 12.46 / 27.41 / 0.0               | 21.04               | V / 1.00 / 0               | -61.19                                    | n/a                                       |
| 300.394 MHz            | 43.8 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 31.01               | V / 1.00 / 0               | -51.22                                    | n/a                                       |
| 300.688 MHz            | 51.25 Qp        | 1.5 / 13.21 / 27.5 / 0.0                | 38.46               | V / 1.00 / 0               | -43.77                                    | n/a                                       |
| 319.306 MHz            | 35.0 Qp         | 1.5 / 13.59 / 27.5 / 0.0                | 22.59               | V / 1.00 / 0               | -59.64                                    | n/a                                       |
| 343.297 MHz            | 59.45 Qp        | 1.6 / 14.47 / 27.6 / 0.0                | 47.92               | V / 1.00 / 0               | -34.31                                    | n/a                                       |
| 400.915 MHz            | 51.9 Qp         | 1.7 / 15.59 / 27.82 / 0.0               | 41.37               | V / 1.00 / 0               | -40.86                                    | n/a                                       |
| 434.5 MHz              | 38.95 Qp        | 1.74 / 16.21 / 27.9 / 0.0               | 29.0                | V / 1.00 / 0               | -53.23                                    | n/a                                       |
| 448.027 MHz            | 32.25 Qp        | 1.79 / 16.5 / 27.9 / 0.0                | 22.64               | V / 1.00 / 0               | -59.59                                    | n/a                                       |
| 477.95 MHz             | 31.0 Qp         | 1.88 / 16.64 / 27.9 / 0.0               | 21.62               | V / 1.00 / 0               | -60.61                                    | n/a                                       |
| 501.139 MHz            | 60.15 Qp        | 1.9 / 17.61 / 27.95 / 0.0               | 51.72               | V / 1.00 / 0               | -30.51                                    | n/a                                       |
| 514.936 MHz            | 51.1 Qp         | 1.9 / 17.9 / 27.99 / 0.0                | 42.91               | V / 1.00 / 0               | -39.32                                    | n/a                                       |
| 557.851 MHz            | 47.55 Qp        | 2.0 / 18.14 / 28.1 / 0.0                | 39.59               | V / 1.00 / 0               | -42.64                                    | n/a                                       |
| 583.333 MHz            | 54.2 Qp         | 2.07 / 18.77 / 28.1 / 0.0               | 46.93               | V / 1.00 / 0               | -35.3                                     | n/a                                       |
| 622.057 MHz            | 48.4 Qp         | 2.1 / 19.66 / 28.16 / 0.0               | 42.0                | V / 1.00 / 0               | -40.23                                    | n/a                                       |
| 643.687 MHz            | 51.05 Qp        | 2.12 / 19.5 / 28.18 / 0.0               | 44.49               | V / 1.00 / 0               | -37.74                                    | n/a                                       |

Tested by: J. C. Sausen / Michael Schultz

Printed

Signature

Reviewed by: Greg Jakubowski

Signature

# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 2 of 15

## List of measurements for run #: 2

| FREQ           | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|----------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 662.617 MHz    | 27.75 Qp        | 2.2 / 19.43 / 28.05 / 0.0               | 21.32               | V / 1.00 / 0               | -60.91                                    | n/a                                       |
| 666.673 MHz    | 55.2 Qp         | 2.22 / 19.47 / 28.03 / 0.0              | 48.86               | V / 1.00 / 0               | -33.37                                    | n/a                                       |
| 686.605 MHz    | 39.85 Qp        | 2.3 / 19.8 / 27.9 / 0.0                 | 34.05               | V / 1.00 / 0               | -48.18                                    | n/a                                       |
| 732.205 MHz    | 29.0 Qp         | 2.3 / 20.97 / 27.99 / 0.0               | 24.27               | V / 1.00 / 0               | -57.96                                    | n/a                                       |
| 869.0 MHz      | 29.25 Qp        | 2.54 / 21.9 / 27.72 / 0.0               | 25.97               | V / 1.00 / 0               | -56.26                                    | n/a                                       |
| 880.0 MHz      | 30.85 Qp        | 2.56 / 21.9 / 27.68 / 0.0               | 27.63               | V / 1.00 / 0               | -54.6                                     | n/a                                       |
| 894.0 MHz      | 30.85 Qp        | 2.58 / 22.08 / 27.64 / 0.0              | 27.88               | V / 1.00 / 0               | -54.35                                    | n/a                                       |
| 901.154 MHz    | 53.55 Qp        | 2.59 / 22.22 / 27.61 / 0.0              | 50.75               | V / 1.00 / 0               | -31.48                                    | n/a                                       |
| 944.078 MHz    | 44.15 Qp        | 2.66 / 22.6 / 27.6 / 0.0                | 41.81               | V / 1.00 / 0               | -40.42                                    | n/a                                       |
| 955.9 MHz      | 27.45 Qp        | 2.68 / 22.6 / 27.6 / 0.0                | 25.13               | V / 1.00 / 0               | -57.1                                     | n/a                                       |
| 986.99 MHz     | 32.85 Qp        | 2.72 / 22.73 / 27.58 / 0.0              | 30.73               | V / 1.00 / 0               | -51.5                                     | n/a                                       |
| 501 MHz maxed: |                 |                                         |                     |                            |                                           |                                           |
| 501.139 MHz    | 62.7 Qp         | 1.9 / 17.61 / 27.95 / 0.0               | 54.27               | V / 1.73 / 0               | -27.96                                    | n/a                                       |
| 64.626 MHz     | 67.45 Qp        | 0.69 / 10.21 / 27.0 / 0.0               | 51.35               | V / 1.73 / 0               | -30.88                                    | n/a                                       |
| 257.481 MHz    | 55.5 Qp         | 1.39 / 12.22 / 27.2 / 0.0               | 41.91               | V / 1.73 / 0               | -40.32                                    | n/a                                       |
| 300.394 MHz    | 57.7 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 44.91               | V / 1.73 / 0               | -37.32                                    | n/a                                       |
| 300.688 MHz    | 55.6 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 42.81               | V / 1.73 / 0               | -39.42                                    | n/a                                       |
| 400.915 MHz    | 54.4 Qp         | 1.7 / 15.59 / 27.82 / 0.0               | 43.87               | V / 1.73 / 0               | -38.36                                    | n/a                                       |
| 557.851 MHz    | 53.3 Qp         | 2.0 / 18.14 / 28.1 / 0.0                | 45.34               | V / 1.73 / 0               | -36.89                                    | n/a                                       |
| 686.605 MHz    | 43.75 Qp        | 2.3 / 19.8 / 27.9 / 0.0                 | 37.95               | V / 1.73 / 0               | -44.28                                    | n/a                                       |
| 732.205 MHz    | 38.1 Qp         | 2.3 / 20.97 / 27.99 / 0.0               | 33.37               | V / 1.73 / 0               | -48.86                                    | n/a                                       |
| 858.26 MHz     | 42.8 Qp         | 2.52 / 21.9 / 27.75 / 0.0               | 39.47               | V / 1.73 / 0               | -42.76                                    | n/a                                       |
| 902.066 MHz    | 44.85 Qp        | 2.6 / 22.24 / 27.61 / 0.0               | 42.08               | V / 1.73 / 0               | -40.15                                    | n/a                                       |
| 109.044 MHz    | 57.45 Qp        | 0.85 / 9.28 / 27.05 / 0.0               | 40.53               | H / 1.73 / 0               | -41.7                                     | n/a                                       |
| 400.915 MHz    | 60.85 Qp        | 1.7 / 15.59 / 27.82 / 0.0               | 50.32               | H / 1.73 / 0               | -31.91                                    | n/a                                       |
| 686.605 MHz    | 48.05 Qp        | 2.3 / 19.8 / 27.9 / 0.0                 | 42.25               | H / 1.73 / 0               | -39.98                                    | n/a                                       |

Tested by: J. C. Sausen / Michael Schultz  
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*Michael Schultz*

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Reviewed by: Greg Jakubowski

*G Jakubowski*

Signature

# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 3 of 15

## List of measurements for run #: 2

| FREQ                   | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|------------------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 986.99 MHz             | 48.4 Qp         | 2.72 / 22.73 / 27.58 / 0.0              | 46.28               | H / 1.73 / 0               | -35.95                                    | n/a                                       |
| 400.9 MHz maxed:       |                 |                                         |                     |                            |                                           |                                           |
| 400.915 MHz            | 62.15 Qp        | 1.7 / 15.59 / 27.82 / 0.0               | 51.62               | H / 1.54 / 0               | -30.61                                    | n/a                                       |
| 128.76 MHz             | 62.0 Qp         | 0.99 / 8.02 / 27.01 / 0.0               | 44.0                | H / 1.54 / 0               | -38.23                                    | n/a                                       |
| 257.481 MHz            | 59.75 Qp        | 1.39 / 12.22 / 27.2 / 0.0               | 46.16               | H / 1.54 / 0               | -36.07                                    | n/a                                       |
| 557.851 MHz            | 55.6 Qp         | 2.0 / 18.14 / 28.1 / 0.0                | 47.64               | H / 1.54 / 0               | -34.59                                    | n/a                                       |
| TX setting = 1977.5MHz |                 |                                         |                     |                            |                                           |                                           |
| 300.394 MHz            | 59.1 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 46.31               | H / 1.54 / 0               | -35.92                                    | n/a                                       |
| 889.875 MHz            | 26.65 Qp        | 2.57 / 22.0 / 27.65 / 0.0               | 23.57               | H / 1.54 / 0               | -58.66                                    | n/a                                       |
| 30.144 MHz             | 53.85 Qp        | 0.42 / 20.97 / 27.4 / 0.0               | 47.85               | V / 1.54 / 0               | -34.38                                    | n/a                                       |
| 64.626 MHz             | 70.65 Qp        | 0.69 / 10.21 / 27.0 / 0.0               | 54.55               | V / 1.54 / 0               | -27.68                                    | n/a                                       |
| 214.569 MHz            | 64.15 Qp        | 1.22 / 10.55 / 27.12 / 0.0              | 48.8                | V / 1.54 / 0               | -33.43                                    | n/a                                       |
| 64 MHz maxed;          |                 |                                         |                     |                            |                                           |                                           |
| 64.626 MHz             | 70.9 Qp         | 0.69 / 10.21 / 27.0 / 0.0               | 54.8                | V / 1.40 / 0               | -27.43                                    | n/a                                       |
| TX setting = 1990 MHz  |                 |                                         |                     |                            |                                           |                                           |
| 82.404 MHz             | 62.5 Qp         | 0.8 / 7.15 / 26.9 / 0.0                 | 43.55               | V / 1.40 / 0               | -38.68                                    | n/a                                       |
| 300.688 MHz            | 57.2 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 44.41               | H / 1.40 / 0               | -37.82                                    | n/a                                       |
| 64.626 MHz             | 70.7 Qp         | 0.69 / 10.21 / 27.0 / 0.0               | 54.6                | V / 1.40 / 0               | -27.63                                    | n/a                                       |
| 1.006 GHz              | 47.4 Pk         | 2.75 / 24.98 / 48.77 / 0.0              | 26.36               | V / 1.40 / 0               | n/a                                       | -55.87                                    |
| 1.011 GHz              | 50.1 Pk         | 2.76 / 24.99 / 48.81 / 0.0              | 29.03               | V / 1.40 / 0               | n/a                                       | -53.2                                     |
| 1.025 GHz              | 45.55 Pk        | 2.78 / 25.0 / 48.92 / 0.0               | 24.42               | V / 1.40 / 0               | n/a                                       | -57.81                                    |
| 1.03 GHz               | 59.8 Pk         | 2.79 / 25.01 / 48.96 / 0.0              | 38.64               | V / 1.40 / 0               | n/a                                       | -43.59                                    |
| 1.033 GHz              | 46.4 Pk         | 2.79 / 25.02 / 48.98 / 0.0              | 25.23               | V / 1.40 / 0               | n/a                                       | -57.0                                     |
| 1.038 GHz              | 49.4 Pk         | 2.8 / 25.02 / 49.02 / 0.0               | 28.2                | V / 1.40 / 0               | n/a                                       | -54.03                                    |

Tested by: J. C. Sausen / Michael Schultz

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Reviewed by: Greg Jakubowski

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 4 of 15

## List of measurements for run #: 2

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 1.073 GHz | 56.15 Pk        | 2.84 / 25.07 / 49.28 / 0.0              | 34.78               | V / 1.40 / 0               | n/a                                       | -47.45                                    |
| 1.094 GHz | 48.8 Pk         | 2.87 / 25.1 / 49.45 / 0.0               | 27.32               | V / 1.40 / 0               | n/a                                       | -54.91                                    |
| 1.116 GHz | 55.2 Pk         | 2.9 / 25.13 / 49.52 / 0.0               | 33.71               | V / 1.40 / 0               | n/a                                       | -48.52                                    |
| 1.121 GHz | 48.3 Pk         | 2.91 / 25.13 / 49.53 / 0.0              | 26.82               | V / 1.40 / 0               | n/a                                       | -55.41                                    |
| 1.124 GHz | 49.75 Pk        | 2.91 / 25.14 / 49.53 / 0.0              | 28.27               | V / 1.40 / 0               | n/a                                       | -53.96                                    |
| 1.156 GHz | 56.0 Pk         | 2.95 / 25.18 / 49.59 / 0.0              | 34.55               | V / 1.40 / 0               | n/a                                       | -47.68                                    |
| 1.159 GHz | 56.65 Pk        | 2.96 / 25.18 / 49.59 / 0.0              | 35.2                | V / 1.40 / 0               | n/a                                       | -47.03                                    |
| 1.202 GHz | 52.35 Pk        | 3.01 / 25.24 / 49.65 / 0.0              | 30.95               | V / 1.40 / 0               | n/a                                       | -51.28                                    |
| 1.223 GHz | 48.6 Pk         | 3.03 / 25.27 / 49.54 / 0.0              | 27.36               | V / 1.40 / 0               | n/a                                       | -54.87                                    |
| 1.244 GHz | 50.95 Pk        | 3.06 / 25.3 / 49.43 / 0.0               | 29.88               | V / 1.40 / 0               | n/a                                       | -52.35                                    |
| 1.287 GHz | 53.95 Pk        | 3.11 / 25.36 / 49.21 / 0.0              | 33.21               | V / 1.40 / 0               | n/a                                       | -49.02                                    |
| 1.33 GHz  | 56.3 Pk         | 3.15 / 25.41 / 49.28 / 0.0              | 35.59               | V / 1.40 / 0               | n/a                                       | -46.64                                    |
| 1.373 GHz | 56.45 Pk        | 3.2 / 25.47 / 49.48 / 0.0               | 35.64               | V / 1.40 / 0               | n/a                                       | -46.59                                    |
| 1.416 GHz | 60.0 Pk         | 3.29 / 25.53 / 49.64 / 0.0              | 39.17               | V / 1.40 / 0               | n/a                                       | -43.06                                    |
| 1.459 GHz | 50.7 Pk         | 3.38 / 25.59 / 49.73 / 0.0              | 29.93               | V / 1.40 / 0               | n/a                                       | -52.3                                     |
| 1.502 GHz | 53.5 Pk         | 3.43 / 25.65 / 49.81 / 0.0              | 32.77               | V / 1.40 / 0               | n/a                                       | -49.46                                    |
| 1.503 GHz | 51.6 Pk         | 3.43 / 25.66 / 49.81 / 0.0              | 30.88               | V / 1.40 / 0               | n/a                                       | -51.35                                    |
| 1.545 GHz | 57.7 Pk         | 3.47 / 25.85 / 49.67 / 0.0              | 37.35               | V / 1.40 / 0               | n/a                                       | -44.88                                    |
| 1.588 GHz | 56.1 Pk         | 3.51 / 26.06 / 49.53 / 0.0              | 36.14               | V / 1.40 / 0               | n/a                                       | -46.09                                    |
| 1.631 GHz | 58.2 Pk         | 3.55 / 26.27 / 49.58 / 0.0              | 38.44               | V / 1.40 / 0               | n/a                                       | -43.79                                    |
| 1.674 GHz | 58.0 Pk         | 3.59 / 26.47 / 49.7 / 0.0               | 38.36               | V / 1.40 / 0               | n/a                                       | -43.87                                    |
| 1.704 GHz | 56.7 Pk         | 3.62 / 26.62 / 49.76 / 0.0              | 37.18               | V / 1.40 / 0               | n/a                                       | -45.05                                    |
| 1.717 GHz | 49.5 Pk         | 3.65 / 26.68 / 49.75 / 0.0              | 30.07               | V / 1.40 / 0               | n/a                                       | -52.16                                    |
| 1.737 GHz | 49.25 Pk        | 3.68 / 26.78 / 49.72 / 0.0              | 29.98               | V / 1.40 / 0               | n/a                                       | -52.25                                    |
| 1.759 GHz | 58.15 Pk        | 3.72 / 26.88 / 49.69 / 0.0              | 39.06               | V / 1.40 / 0               | n/a                                       | -43.17                                    |
| 1.794 GHz | 45.6 Pk         | 3.77 / 27.05 / 49.65 / 0.0              | 26.78               | V / 1.40 / 0               | n/a                                       | -55.45                                    |
| 1.802 GHz | 53.9 Pk         | 3.79 / 27.09 / 49.65 / 0.0              | 35.13               | V / 1.40 / 0               | n/a                                       | -47.1                                     |

Tested by: J. C. Sausen / Michael Schultz

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Reviewed by: Greg Jakubowski

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 5 of 15

## List of measurements for run #: 2

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 1.824 GHz | 47.75 Pk        | 3.81 / 27.19 / 49.72 / 0.0              | 29.03               | V / 1.40 / 0               | n/a                                       | -53.2                                     |
| 1.843 GHz | 48.1 Pk         | 3.82 / 27.28 / 49.78 / 0.0              | 29.42               | V / 1.40 / 0               | n/a                                       | -52.81                                    |
| 1.888 GHz | 51.85 Pk        | 3.86 / 27.5 / 49.93 / 0.0               | 33.28               | V / 1.40 / 0               | n/a                                       | -48.95                                    |
| 1.931 GHz | 51.5 Pk         | 3.89 / 27.7 / 49.86 / 0.0               | 33.24               | V / 1.40 / 0               | n/a                                       | -48.99                                    |
| 1.974 GHz | 53.7 Pk         | 3.9 / 28.52 / 28.05 / 0.0               | 58.07               | V / 1.40 / 0               | n/a                                       | -24.16                                    |
| 1.99 GHz  | 68.5 Pk         | 3.9 / 28.8 / 28.07 / 0.0                | 73.13               | V / 1.40 / 0               | n/a                                       | -9.1                                      |
| 2.017 GHz | 58.3 Pk         | 3.9 / 28.06 / 49.57 / 0.0               | 40.68               | H / 1.40 / 0               | n/a                                       | -41.55                                    |
| 2.103 GHz | 49.85 Pk        | 3.93 / 28.17 / 49.4 / 0.0               | 32.55               | H / 1.40 / 0               | n/a                                       | -49.68                                    |
| 2.189 GHz | 56.8 Pk         | 4.05 / 28.28 / 49.42 / 0.0              | 39.71               | H / 1.40 / 0               | n/a                                       | -42.52                                    |
| 2.317 GHz | 44.05 Pk        | 4.21 / 28.45 / 49.02 / 0.0              | 27.69               | H / 1.40 / 0               | n/a                                       | -54.54                                    |
| 2.446 GHz | 49.05 Pk        | 4.33 / 28.62 / 49.25 / 0.0              | 32.75               | H / 1.40 / 0               | n/a                                       | -49.48                                    |
| 2.488 GHz | 51.15 Pk        | 4.36 / 28.68 / 49.1 / 0.0               | 35.08               | H / 1.40 / 0               | n/a                                       | -47.15                                    |
| 2.489 GHz | 51.05 Pk        | 4.36 / 28.68 / 49.1 / 0.0               | 34.99               | H / 1.40 / 0               | n/a                                       | -47.24                                    |
| 2.532 GHz | 48.55 Pk        | 4.38 / 28.78 / 48.9 / 0.0               | 32.81               | H / 1.40 / 0               | n/a                                       | -49.42                                    |
| 2.746 GHz | 45.55 Pk        | 4.5 / 29.36 / 48.26 / 0.0               | 31.15               | H / 1.40 / 0               | n/a                                       | -51.08                                    |
| 5.734 GHz | 38.5 Pk         | 6.94 / 34.21 / 45.52 / 0.0              | 34.13               | H / 1.40 / 0               | n/a                                       | -48.1                                     |
| 1.974 GHz | 63.7 Pk         | 3.9 / 27.91 / 49.7 / 0.0                | 45.81               | V / 1.30 / 160             | n/a                                       | -36.42                                    |
| 3.433 GHz | 45.8 Pk         | 5.19 / 30.97 / 47.31 / 0.0              | 34.65               | V / 1.30 / 160             | n/a                                       | -47.58                                    |
| 3.259 GHz | 46.45 Pk        | 4.99 / 30.6 / 47.57 / 0.0               | 34.48               | V / 1.30 / 160             | n/a                                       | -47.75                                    |
| 3.218 GHz | 46.85 Pk        | 4.96 / 30.51 / 47.65 / 0.0              | 34.68               | V / 1.30 / 160             | n/a                                       | -47.55                                    |
| 3.133 GHz | 44.2 Pk         | 4.88 / 30.33 / 47.23 / 0.0              | 32.18               | V / 1.30 / 160             | n/a                                       | -50.05                                    |
| 3.004 GHz | 49.1 Pk         | 4.76 / 30.06 / 48.08 / 0.0              | 35.84               | V / 1.30 / 160             | n/a                                       | -46.39                                    |
| 2.918 GHz | 49.15 Pk        | 4.68 / 29.83 / 48.45 / 0.0              | 35.21               | V / 1.30 / 160             | n/a                                       | -47.02                                    |
| 2.875 GHz | 47.55 Pk        | 4.63 / 29.71 / 48.46 / 0.0              | 33.44               | V / 1.30 / 160             | n/a                                       | -48.79                                    |
| 2.832 GHz | 52.75 Pk        | 4.59 / 29.59 / 48.35 / 0.0              | 38.58               | V / 1.30 / 160             | n/a                                       | -43.65                                    |
| 2.746 GHz | 53.35 Pk        | 4.5 / 29.36 / 48.26 / 0.0               | 38.95               | V / 1.30 / 160             | n/a                                       | -43.28                                    |
| 2.703 GHz | 51.8 Pk         | 4.48 / 29.24 / 48.25 / 0.0              | 37.27               | V / 1.30 / 160             | n/a                                       | -44.96                                    |

Tested by: J. C. Sausen / Michael Schultz

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Reviewed by: Greg Jakubowski

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 6 of 15

## List of measurements for run #: 2

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 2.698 GHz | 50.05 Pk        | 4.48 / 29.23 / 48.26 / 0.0              | 35.5                | V / 1.30 / 160             | n/a                                       | -46.73                                    |
| 2.682 GHz | 45.25 Pk        | 4.47 / 29.19 / 48.31 / 0.0              | 30.59               | V / 1.30 / 160             | n/a                                       | -51.64                                    |
| 2.661 GHz | 55.55 Pk        | 4.45 / 29.13 / 48.38 / 0.0              | 40.76               | V / 1.30 / 160             | n/a                                       | -41.47                                    |
| 2.532 GHz | 57.5 Pk         | 4.38 / 28.78 / 48.9 / 0.0               | 41.76               | V / 1.30 / 160             | n/a                                       | -40.47                                    |
| 2.489 GHz | 55.85 Pk        | 4.36 / 28.68 / 49.1 / 0.0               | 39.79               | V / 1.30 / 160             | n/a                                       | -42.44                                    |
| 2.446 GHz | 63.05 Pk        | 4.33 / 28.62 / 49.25 / 0.0              | 46.75               | V / 1.30 / 160             | n/a                                       | -35.48                                    |
| 2.403 GHz | 58.5 Pk         | 4.31 / 28.56 / 49.4 / 0.0               | 41.97               | V / 1.30 / 160             | n/a                                       | -40.26                                    |
| 2.317 GHz | 51.9 Pk         | 4.21 / 28.45 / 49.02 / 0.0              | 35.54               | V / 1.30 / 160             | n/a                                       | -46.69                                    |
| 2.103 GHz | 53.0 Pk         | 3.93 / 28.17 / 49.4 / 0.0               | 35.7                | V / 1.30 / 160             | n/a                                       | -46.53                                    |
| 1.974 GHz | 63.6 Pk         | 3.9 / 27.91 / 49.7 / 0.0                | 45.71               | V / 1.30 / 160             | n/a                                       | -36.52                                    |
| 1.931 GHz | 62.35 Pk        | 3.89 / 27.7 / 49.86 / 0.0               | 44.09               | V / 1.30 / 160             | n/a                                       | -38.14                                    |
| 1.99 GHz  | 68.3 Pk         | 3.9 / 27.99 / 49.65 / 0.0               | 50.54               | V / 1.30 / 160             | n/a                                       | -31.69                                    |
| 1.974 GHz | 64.3 Pk         | 3.9 / 27.91 / 49.7 / 0.0                | 46.41               | V / 1.30 / 160             | n/a                                       | -35.82                                    |
| 1.931 GHz | 62.35 Pk        | 3.89 / 27.7 / 49.86 / 0.0               | 44.09               | V / 1.30 / 160             | n/a                                       | -38.14                                    |
| 2.012 GHz | 53.25 Pk        | 3.9 / 28.05 / 49.59 / 0.0               | 35.61               | V / 1.30 / 160             | n/a                                       | -46.62                                    |
| 3.823 GHz | 41.45 Pk        | 5.66 / 31.94 / 46.24 / 0.0              | 32.8                | V / 1.30 / 160             | n/a                                       | -49.43                                    |
| 3.952 GHz | 39.5 Pk         | 5.8 / 32.26 / 46.25 / 0.0               | 31.31               | V / 1.30 / 160             | n/a                                       | -50.92                                    |
| 4.291 GHz | 44.4 Pk         | 6.1 / 32.33 / 45.93 / 0.0               | 36.9                | V / 1.30 / 160             | n/a                                       | -45.33                                    |
| 4.334 GHz | 43.25 Pk        | 6.1 / 32.32 / 45.88 / 0.0               | 35.79               | V / 1.30 / 160             | n/a                                       | -46.44                                    |
| 5.734 GHz | 37.7 Pk         | 6.94 / 34.21 / 45.52 / 0.0              | 33.33               | V / 1.30 / 160             | n/a                                       | -48.9                                     |
| 1.033 GHz | 52.45 Pk        | 2.79 / 25.02 / 48.98 / 0.0              | 31.28               | V / 1.30 / 270             | n/a                                       | -50.95                                    |
| 1.116 GHz | 60.2 Pk         | 2.9 / 25.13 / 49.52 / 0.0               | 38.71               | V / 1.30 / 270             | n/a                                       | -43.52                                    |
| 1.121 GHz | 52.45 Pk        | 2.91 / 25.13 / 49.53 / 0.0              | 30.97               | V / 1.30 / 270             | n/a                                       | -51.26                                    |
| 1.159 GHz | 60.15 Pk        | 2.96 / 25.18 / 49.59 / 0.0              | 38.7                | V / 1.30 / 270             | n/a                                       | -43.53                                    |
| 1.202 GHz | 63.1 Pk         | 3.01 / 25.24 / 49.65 / 0.0              | 41.7                | V / 1.30 / 270             | n/a                                       | -40.53                                    |
| 1.244 GHz | 60.05 Pk        | 3.06 / 25.3 / 49.43 / 0.0               | 38.98               | V / 1.30 / 270             | n/a                                       | -43.25                                    |
| 1.287 GHz | 59.7 Pk         | 3.11 / 25.36 / 49.21 / 0.0              | 38.96               | V / 1.30 / 270             | n/a                                       | -43.27                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 7 of 15

## List of measurements for run #: 2

| FREQ                                                             | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|------------------------------------------------------------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 1.373 GHz                                                        | 60.45 Pk        | 3.2 / 25.47 / 49.48 / 0.0               | 39.64               | V / 1.30 / 270             | n/a                                       | -42.59                                    |
| 1.459 GHz                                                        | 60.5 Pk         | 3.38 / 25.59 / 49.73 / 0.0              | 39.73               | V / 1.30 / 270             | n/a                                       | -42.5                                     |
| 1.717 GHz                                                        | 55.95 Pk        | 3.65 / 26.68 / 49.75 / 0.0              | 36.52               | V / 1.30 / 270             | n/a                                       | -45.71                                    |
| 1.843 GHz                                                        | 52.55 Pk        | 3.82 / 27.28 / 49.78 / 0.0              | 33.87               | V / 1.30 / 270             | n/a                                       | -48.36                                    |
| Maximized 1.116 GHz TX setting = 1990 MHz                        |                 |                                         |                     |                            |                                           |                                           |
| 1.116 GHz                                                        | 68.35 Pk        | 2.9 / 25.13 / 49.52 / 0.0               | 46.86               | V / 1.30 / 195             | n/a                                       | -35.37                                    |
| 1.121 GHz                                                        | 58.2 Pk         | 2.91 / 25.13 / 49.53 / 0.0              | 36.72               | V / 1.30 / 195             | n/a                                       | -45.51                                    |
| 1.124 GHz                                                        | 56.15 Pk        | 2.91 / 25.14 / 49.53 / 0.0              | 34.67               | V / 1.30 / 195             | n/a                                       | -47.56                                    |
| 1.156 GHz                                                        | 60.05 Pk        | 2.95 / 25.18 / 49.59 / 0.0              | 38.6                | V / 1.30 / 195             | n/a                                       | -43.63                                    |
| 1.159 GHz                                                        | 65.25 Pk        | 2.96 / 25.18 / 49.59 / 0.0              | 43.8                | V / 1.30 / 195             | n/a                                       | -38.43                                    |
| 1.202 GHz                                                        | 70.8 Pk         | 3.01 / 25.24 / 49.65 / 0.0              | 49.4                | V / 1.30 / 195             | n/a                                       | -32.83                                    |
| 1.244 GHz                                                        | 60.8 Pk         | 3.06 / 25.3 / 49.43 / 0.0               | 39.73               | V / 1.30 / 195             | n/a                                       | -42.5                                     |
| 1.287 GHz                                                        | 68.05 Pk        | 3.11 / 25.36 / 49.21 / 0.0              | 47.31               | V / 1.30 / 195             | n/a                                       | -34.92                                    |
| 1.373 GHz                                                        | 71.85 Pk        | 3.2 / 25.47 / 49.48 / 0.0               | 51.04               | V / 1.30 / 195             | n/a                                       | -31.19                                    |
| 1.459 GHz                                                        | 58.0 Pk         | 3.38 / 25.59 / 49.73 / 0.0              | 37.23               | V / 1.30 / 195             | n/a                                       | -45.0                                     |
| 1.717 GHz                                                        | 57.6 Pk         | 3.65 / 26.68 / 49.75 / 0.0              | 38.17               | V / 1.30 / 195             | n/a                                       | -44.06                                    |
| 1.888 GHz                                                        | 62.9 Pk         | 3.86 / 27.5 / 49.93 / 0.0               | 44.33               | V / 1.30 / 195             | n/a                                       | -37.9                                     |
| 1.931 GHz                                                        | 58.95 Pk        | 3.89 / 27.7 / 49.86 / 0.0               | 40.69               | V / 1.30 / 195             | n/a                                       | -41.54                                    |
| 1.974 GHz                                                        | 57.05 Pk        | 3.9 / 27.91 / 49.7 / 0.0                | 39.16               | V / 1.30 / 195             | n/a                                       | -43.07                                    |
| 2.489 GHz                                                        | 61.2 Pk         | 4.36 / 28.68 / 49.1 / 0.0               | 45.14               | V / 1.30 / 195             | n/a                                       | -37.09                                    |
| Maximized Vertical frequencies above 1 GHz TX setting = 1990 MHz |                 |                                         |                     |                            |                                           |                                           |
| 1.202 GHz                                                        | 72.05 Pk        | 3.01 / 25.24 / 49.65 / 0.0              | 50.65               | V / 1.30 / 150             | n/a                                       | -31.58                                    |
| 1.287 GHz                                                        | 68.2 Pk         | 3.11 / 25.36 / 49.21 / 0.0              | 47.46               | V / 1.30 / 195             | n/a                                       | -34.77                                    |
| 1.373 GHz                                                        | 71.15 Pk        | 3.2 / 25.47 / 49.48 / 0.0               | 50.34               | V / 1.30 / 195             | n/a                                       | -31.89                                    |

Tested by: J. C. Sausen / Michael Schultz

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 8 of 15

## List of measurements for run #: 2

| FREQ                                                               | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|--------------------------------------------------------------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 1.025 GHz                                                          | 55.2 Pk         | 2.78 / 25.0 / 48.92 / 0.0               | 34.07               | H / 1.30 / 195             | n/a                                       | -48.16                                    |
| 1.033 GHz                                                          | 61.45 Pk        | 2.79 / 25.02 / 48.98 / 0.0              | 40.28               | H / 1.30 / 195             | n/a                                       | -41.95                                    |
| 1.038 GHz                                                          | 58.45 Pk        | 2.8 / 25.02 / 49.02 / 0.0               | 37.25               | H / 1.30 / 195             | n/a                                       | -44.98                                    |
| 1.073 GHz                                                          | 61.15 Pk        | 2.84 / 25.07 / 49.28 / 0.0              | 39.78               | H / 1.30 / 195             | n/a                                       | -42.45                                    |
| 1.116 GHz                                                          | 66.15 Pk        | 2.9 / 25.13 / 49.52 / 0.0               | 44.66               | H / 1.30 / 195             | n/a                                       | -37.57                                    |
| 1.121 GHz                                                          | 56.1 Pk         | 2.91 / 25.13 / 49.53 / 0.0              | 34.62               | H / 1.30 / 195             | n/a                                       | -47.61                                    |
| 1.156 GHz                                                          | 61.2 Pk         | 2.95 / 25.18 / 49.59 / 0.0              | 39.75               | H / 1.30 / 195             | n/a                                       | -42.48                                    |
| 1.159 GHz                                                          | 66.6 Pk         | 2.96 / 25.18 / 49.59 / 0.0              | 45.15               | H / 1.30 / 195             | n/a                                       | -37.08                                    |
| 1.202 GHz                                                          | 68.3 Pk         | 3.01 / 25.24 / 49.65 / 0.0              | 46.9                | H / 1.30 / 195             | n/a                                       | -35.33                                    |
| 1.244 GHz                                                          | 60.85 Pk        | 3.06 / 25.3 / 49.43 / 0.0               | 39.78               | H / 1.30 / 195             | n/a                                       | -42.45                                    |
| 1.287 GHz                                                          | 62.85 Pk        | 3.11 / 25.36 / 49.21 / 0.0              | 42.11               | H / 1.30 / 195             | n/a                                       | -40.12                                    |
| 1.373 GHz                                                          | 68.4 Pk         | 3.2 / 25.47 / 49.48 / 0.0               | 47.59               | H / 1.30 / 195             | n/a                                       | -34.64                                    |
| 1.416 GHz                                                          | 67.3 Pk         | 3.29 / 25.53 / 49.64 / 0.0              | 46.47               | H / 1.30 / 195             | n/a                                       | -35.76                                    |
| 1.459 GHz                                                          | 57.95 Pk        | 3.38 / 25.59 / 49.73 / 0.0              | 37.18               | H / 1.30 / 195             | n/a                                       | -45.05                                    |
| 1.588 GHz                                                          | 59.55 Pk        | 3.51 / 26.06 / 49.53 / 0.0              | 39.59               | H / 1.30 / 195             | n/a                                       | -42.64                                    |
| 1.674 GHz                                                          | 61.3 Pk         | 3.59 / 26.47 / 49.7 / 0.0               | 41.66               | H / 1.30 / 195             | n/a                                       | -40.57                                    |
| 1.717 GHz                                                          | 59.7 Pk         | 3.65 / 26.68 / 49.75 / 0.0              | 40.27               | H / 1.30 / 195             | n/a                                       | -41.96                                    |
| 1.931 GHz                                                          | 56.6 Pk         | 3.89 / 27.7 / 49.86 / 0.0               | 38.34               | H / 1.30 / 195             | n/a                                       | -43.89                                    |
| 1.99 GHz                                                           | 75.9 Pk         | 3.9 / 27.99 / 49.65 / 0.0               | 58.14               | H / 1.30 / 195             | n/a                                       | -24.09                                    |
| 2.446 GHz                                                          | 65.5 Pk         | 4.33 / 28.62 / 49.25 / 0.0              | 49.2                | H / 1.30 / 195             | n/a                                       | -33.03                                    |
| 2.703 GHz                                                          | 59.05 Pk        | 4.48 / 29.24 / 48.25 / 0.0              | 44.52               | H / 1.30 / 195             | n/a                                       | -37.71                                    |
| 3.823 GHz                                                          | 52.15 Pk        | 5.66 / 31.94 / 46.24 / 0.0              | 43.5                | H / 1.30 / 195             | n/a                                       | -38.73                                    |
| 5.734 GHz                                                          | 48.35 Pk        | 6.94 / 34.21 / 45.52 / 0.0              | 43.98               | H / 1.30 / 195             | n/a                                       | -38.25                                    |
| Maximized Horizontal frequencies above 1 GHz TX setting = 1990 MHz |                 |                                         |                     |                            |                                           |                                           |
| 1.416 GHz                                                          | 68.35 Pk        | 3.29 / 25.53 / 49.64 / 0.0              | 47.52               | H / 1.25 / 195             | n/a                                       | -34.71                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 9 of 15

## List of measurements for run #: 2

| FREQ                         | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|------------------------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|-------------------------------------------|
| 2.446 GHz                    | 66.2 Pk         | 4.33 / 28.62 / 49.25 / 0.0              | 49.9                | H / 1.22 / 145             | n/a                                       | -32.33                                    |
| TX setting = 1977.5 MHz      |                 |                                         |                     |                            |                                           |                                           |
| 2.446 GHz                    | 65.9 Pk         | 4.33 / 28.62 / 49.25 / 0.0              | 49.6                | H / 1.22 / 145             | n/a                                       | -32.63                                    |
| 1.416 GHz                    | 67.8 Pk         | 3.29 / 25.53 / 49.64 / 0.0              | 46.97               | H / 1.30 / 195             | n/a                                       | -35.26                                    |
| 1.159 GHz                    | 68.0 Pk         | 2.96 / 25.18 / 49.59 / 0.0              | 46.55               | V / 1.30 / 195             | n/a                                       | -35.68                                    |
| 1.202 GHz                    | 71.3 Pk         | 3.01 / 25.24 / 49.65 / 0.0              | 49.9                | V / 1.30 / 150             | n/a                                       | -32.33                                    |
| 1.287 GHz                    | 67.45 Pk        | 3.11 / 25.36 / 49.21 / 0.0              | 46.71               | V / 1.30 / 195             | n/a                                       | -35.52                                    |
| 1.287 GHz                    | 67.0 Pk         | 3.11 / 25.36 / 49.21 / 0.0              | 46.26               | V / 1.30 / 195             | n/a                                       | -35.97                                    |
| 1.373 GHz                    | 70.95 Pk        | 3.2 / 25.47 / 49.48 / 0.0               | 50.14               | V / 1.30 / 195             | n/a                                       | -32.09                                    |
| 1.978 GHz                    | 69.45 Pk        | 3.9 / 27.93 / 49.69 / 0.0               | 51.59               | V / 1.30 / 195             | n/a                                       | -30.64                                    |
| 1.978 GHz                    | 75.65 Pk        | 3.9 / 27.93 / 49.69 / 0.0               | 57.79               | H / 1.30 / 195             | n/a                                       | -24.44                                    |
| TX setting = 1965 MHz        |                 |                                         |                     |                            |                                           |                                           |
| 1.965 GHz                    | 70.9 Pk         | 3.9 / 27.87 / 49.74 / 0.0               | 52.93               | V / 1.30 / 195             | n/a                                       | -29.3                                     |
| 1.965 GHz                    | 75.6 Pk         | 3.9 / 27.87 / 49.74 / 0.0               | 57.63               | H / 1.30 / 195             | n/a                                       | -24.6                                     |
| 2.446 GHz                    | 66.6 Pk         | 4.33 / 28.62 / 49.25 / 0.0              | 50.3                | H / 1.30 / 145             | n/a                                       | -31.93                                    |
| 1.416 GHz                    | 67.3 Pk         | 3.29 / 25.53 / 49.64 / 0.0              | 46.47               | H / 1.30 / 195             | n/a                                       | -35.76                                    |
| 1.159 GHz                    | 67.7 Pk         | 2.96 / 25.18 / 49.59 / 0.0              | 46.25               | V / 1.30 / 195             | n/a                                       | -35.98                                    |
| 1.202 GHz                    | 69.55 Pk        | 3.01 / 25.24 / 49.65 / 0.0              | 48.15               | V / 1.30 / 150             | n/a                                       | -34.08                                    |
| 1.287 GHz                    | 67.8 Pk         | 3.11 / 25.36 / 49.21 / 0.0              | 47.06               | V / 1.30 / 195             | n/a                                       | -35.17                                    |
| 1.373 GHz                    | 71.2 Pk         | 3.2 / 25.47 / 49.48 / 0.0               | 50.39               | V / 1.30 / 195             | n/a                                       | -31.84                                    |
| Scan complete 30 - 18000 MHz |                 |                                         |                     |                            |                                           |                                           |

Tested by: J. C. Sausen / Michael Schultz

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Reviewed by: Greg Jakubowski

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 10 of 15

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

| FREQ        | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) |
|-------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|
| 64.626 MHz  | 70.7 Qp         | 0.69 / 10.21 / 27.0 / 0.0               | 54.6                | V / 1.40 / 0               | -27.63                                    |
| 501.139 MHz | 62.7 Qp         | 1.9 / 17.61 / 27.95 / 0.0               | 54.27               | V / 1.73 / 0               | -27.96                                    |
| 400.915 MHz | 62.15 Qp        | 1.7 / 15.59 / 27.82 / 0.0               | 51.62               | H / 1.54 / 0               | -30.61                                    |
| 901.154 MHz | 53.55 Qp        | 2.59 / 22.22 / 27.61 / 0.0              | 50.75               | V / 1.00 / 0               | -31.48                                    |
| 666.673 MHz | 55.2 Qp         | 2.22 / 19.47 / 28.03 / 0.0              | 48.86               | V / 1.00 / 0               | -33.37                                    |
| 214.569 MHz | 64.15 Qp        | 1.22 / 10.55 / 27.12 / 0.0              | 48.8                | V / 1.54 / 0               | -33.43                                    |
| 343.297 MHz | 59.45 Qp        | 1.6 / 14.47 / 27.6 / 0.0                | 47.92               | V / 1.00 / 0               | -34.31                                    |
| 30.144 MHz  | 53.85 Qp        | 0.42 / 20.97 / 27.4 / 0.0               | 47.85               | V / 1.54 / 0               | -34.38                                    |
| 557.851 MHz | 55.6 Qp         | 2.0 / 18.14 / 28.1 / 0.0                | 47.64               | H / 1.54 / 0               | -34.59                                    |
| 31.446 MHz  | 53.85 Qp        | 0.43 / 20.49 / 27.35 / 0.0              | 47.42               | V / 1.00 / 0               | -34.81                                    |
| 583.333 MHz | 54.2 Qp         | 2.07 / 18.77 / 28.1 / 0.0               | 46.93               | V / 1.00 / 0               | -35.3                                     |
| 300.394 MHz | 59.1 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 46.31               | H / 1.54 / 0               | -35.92                                    |
| 986.99 MHz  | 48.4 Qp         | 2.72 / 22.73 / 27.58 / 0.0              | 46.28               | H / 1.73 / 0               | -35.95                                    |
| 257.481 MHz | 59.75 Qp        | 1.39 / 12.22 / 27.2 / 0.0               | 46.16               | H / 1.54 / 0               | -36.07                                    |
| 643.687 MHz | 51.05 Qp        | 2.12 / 19.5 / 28.18 / 0.0               | 44.49               | V / 1.00 / 0               | -37.74                                    |
| 300.688 MHz | 57.2 Qp         | 1.5 / 13.21 / 27.5 / 0.0                | 44.41               | H / 1.40 / 0               | -37.82                                    |
| 128.76 MHz  | 62.0 Qp         | 0.99 / 8.02 / 27.01 / 0.0               | 44.0                | H / 1.54 / 0               | -38.23                                    |
| 82.404 MHz  | 62.5 Qp         | 0.8 / 7.15 / 26.9 / 0.0                 | 43.55               | V / 1.40 / 0               | -38.68                                    |
| 514.936 MHz | 51.1 Qp         | 1.9 / 17.9 / 27.99 / 0.0                | 42.91               | V / 1.00 / 0               | -39.32                                    |
| 686.605 MHz | 48.05 Qp        | 2.3 / 19.8 / 27.9 / 0.0                 | 42.25               | H / 1.73 / 0               | -39.98                                    |
| 125.73 MHz  | 59.9 Qp         | 0.95 / 8.33 / 27.05 / 0.0               | 42.13               | V / 1.00 / 0               | -40.1                                     |
| 902.066 MHz | 44.85 Qp        | 2.6 / 22.24 / 27.61 / 0.0               | 42.08               | V / 1.73 / 0               | -40.15                                    |
| 622.057 MHz | 48.4 Qp         | 2.1 / 19.66 / 28.16 / 0.0               | 42.0                | V / 1.00 / 0               | -40.23                                    |
| 944.078 MHz | 44.15 Qp        | 2.66 / 22.6 / 27.6 / 0.0                | 41.81               | V / 1.00 / 0               | -40.42                                    |
| 109.044 MHz | 57.45 Qp        | 0.85 / 9.28 / 27.05 / 0.0               | 40.53               | H / 1.73 / 0               | -41.7                                     |
| 858.26 MHz  | 42.8 Qp         | 2.52 / 21.9 / 27.75 / 0.0               | 39.47               | V / 1.73 / 0               | -42.76                                    |

Tested by: J. C. Sausen / Michael Schultz

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Reviewed by: Greg Jakubowski

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 11 of 15

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

| FREQ        | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA1<br>-13dBm <<br>1GHz<br>(Guideline) |
|-------------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|
| 732.205 MHz | 38.1 Qp         | 2.3 / 20.97 / 27.99 / 0.0               | 33.37               | V / 1.73 / 0               | -48.86                                    |
| 434.5 MHz   | 38.95 Qp        | 1.74 / 16.21 / 27.9 / 0.0               | 29.0                | V / 1.00 / 0               | -53.23                                    |
| 894.0 MHz   | 30.85 Qp        | 2.58 / 22.08 / 27.64 / 0.0              | 27.88               | V / 1.00 / 0               | -54.35                                    |
| 880.0 MHz   | 30.85 Qp        | 2.56 / 21.9 / 27.68 / 0.0               | 27.63               | V / 1.00 / 0               | -54.6                                     |
| 233.469 MHz | 41.0 Qp         | 1.3 / 11.07 / 27.2 / 0.0                | 26.17               | V / 1.00 / 0               | -56.06                                    |
| 869.0 MHz   | 29.25 Qp        | 2.54 / 21.9 / 27.72 / 0.0               | 25.97               | V / 1.00 / 0               | -56.26                                    |
| 955.9 MHz   | 27.45 Qp        | 2.68 / 22.6 / 27.6 / 0.0                | 25.13               | V / 1.00 / 0               | -57.1                                     |
| 251.568 MHz | 38.65 Qp        | 1.35 / 11.81 / 27.2 / 0.0               | 24.61               | V / 1.00 / 0               | -57.62                                    |
| 889.875 MHz | 26.65 Qp        | 2.57 / 22.0 / 27.65 / 0.0               | 23.57               | H / 1.54 / 0               | -58.66                                    |
| 448.027 MHz | 32.25 Qp        | 1.79 / 16.5 / 27.9 / 0.0                | 22.64               | V / 1.00 / 0               | -59.59                                    |
| 319.306 MHz | 35.0 Qp         | 1.5 / 13.59 / 27.5 / 0.0                | 22.59               | V / 1.00 / 0               | -59.64                                    |
| 477.95 MHz  | 31.0 Qp         | 1.88 / 16.64 / 27.9 / 0.0               | 21.62               | V / 1.00 / 0               | -60.61                                    |
| 662.617 MHz | 27.75 Qp        | 2.2 / 19.43 / 28.05 / 0.0               | 21.32               | V / 1.00 / 0               | -60.91                                    |
| 281.481 MHz | 34.5 Qp         | 1.5 / 12.46 / 27.41 / 0.0               | 21.04               | V / 1.00 / 0               | -61.19                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 12 of 15

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

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|
| 1.99 GHz  | 75.9 Pk         | 3.9 / 27.99 / 49.65 / 0.0               | 58.14               | H / 1.30 / 195             | -24.09                                    |
| 1.978 GHz | 75.65 Pk        | 3.9 / 27.93 / 49.69 / 0.0               | 57.79               | H / 1.30 / 195             | -24.44                                    |
| 1.965 GHz | 75.6 Pk         | 3.9 / 27.87 / 49.74 / 0.0               | 57.63               | H / 1.30 / 195             | -24.6                                     |
| 1.373 GHz | 71.2 Pk         | 3.2 / 25.47 / 49.48 / 0.0               | 50.39               | V / 1.30 / 195             | -31.84                                    |
| 2.446 GHz | 66.6 Pk         | 4.33 / 28.62 / 49.25 / 0.0              | 50.3                | H / 1.30 / 145             | -31.93                                    |
| 1.202 GHz | 69.55 Pk        | 3.01 / 25.24 / 49.65 / 0.0              | 48.15               | V / 1.30 / 150             | -34.08                                    |
| 1.287 GHz | 67.8 Pk         | 3.11 / 25.36 / 49.21 / 0.0              | 47.06               | V / 1.30 / 195             | -35.17                                    |
| 1.416 GHz | 67.3 Pk         | 3.29 / 25.53 / 49.64 / 0.0              | 46.47               | H / 1.30 / 195             | -35.76                                    |
| 1.159 GHz | 67.7 Pk         | 2.96 / 25.18 / 49.59 / 0.0              | 46.25               | V / 1.30 / 195             | -35.98                                    |
| 2.489 GHz | 61.2 Pk         | 4.36 / 28.68 / 49.1 / 0.0               | 45.14               | V / 1.30 / 195             | -37.09                                    |
| 1.116 GHz | 66.15 Pk        | 2.9 / 25.13 / 49.52 / 0.0               | 44.66               | H / 1.30 / 195             | -37.57                                    |
| 2.703 GHz | 59.05 Pk        | 4.48 / 29.24 / 48.25 / 0.0              | 44.52               | H / 1.30 / 195             | -37.71                                    |
| 1.888 GHz | 62.9 Pk         | 3.86 / 27.5 / 49.93 / 0.0               | 44.33               | V / 1.30 / 195             | -37.9                                     |
| 5.734 GHz | 48.35 Pk        | 6.94 / 34.21 / 45.52 / 0.0              | 43.98               | H / 1.30 / 195             | -38.25                                    |
| 3.823 GHz | 52.15 Pk        | 5.66 / 31.94 / 46.24 / 0.0              | 43.5                | H / 1.30 / 195             | -38.73                                    |
| 2.403 GHz | 58.5 Pk         | 4.31 / 28.56 / 49.4 / 0.0               | 41.97               | V / 1.30 / 160             | -40.26                                    |
| 2.532 GHz | 57.5 Pk         | 4.38 / 28.78 / 48.9 / 0.0               | 41.76               | V / 1.30 / 160             | -40.47                                    |
| 1.674 GHz | 61.3 Pk         | 3.59 / 26.47 / 49.7 / 0.0               | 41.66               | H / 1.30 / 195             | -40.57                                    |
| 2.661 GHz | 55.55 Pk        | 4.45 / 29.13 / 48.38 / 0.0              | 40.76               | V / 1.30 / 160             | -41.47                                    |
| 2.017 GHz | 58.3 Pk         | 3.9 / 28.06 / 49.57 / 0.0               | 40.68               | H / 1.40 / 0               | -41.55                                    |
| 1.033 GHz | 61.45 Pk        | 2.79 / 25.02 / 48.98 / 0.0              | 40.28               | H / 1.30 / 195             | -41.95                                    |
| 1.717 GHz | 59.7 Pk         | 3.65 / 26.68 / 49.75 / 0.0              | 40.27               | H / 1.30 / 195             | -41.96                                    |
| 1.073 GHz | 61.15 Pk        | 2.84 / 25.07 / 49.28 / 0.0              | 39.78               | H / 1.30 / 195             | -42.45                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 13 of 15

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

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|
| 1.244 GHz | 60.85 Pk        | 3.06 / 25.3 / 49.43 / 0.0               | 39.78               | H / 1.30 / 195             | -42.45                                    |
| 1.156 GHz | 61.2 Pk         | 2.95 / 25.18 / 49.59 / 0.0              | 39.75               | H / 1.30 / 195             | -42.48                                    |
| 2.189 GHz | 56.8 Pk         | 4.05 / 28.28 / 49.42 / 0.0              | 39.71               | H / 1.40 / 0               | -42.52                                    |
| 1.588 GHz | 59.55 Pk        | 3.51 / 26.06 / 49.53 / 0.0              | 39.59               | H / 1.30 / 195             | -42.64                                    |
| 1.974 GHz | 57.05 Pk        | 3.9 / 27.91 / 49.7 / 0.0                | 39.16               | V / 1.30 / 195             | -43.07                                    |
| 1.759 GHz | 58.15 Pk        | 3.72 / 26.88 / 49.69 / 0.0              | 39.06               | V / 1.40 / 0               | -43.17                                    |
| 2.746 GHz | 53.35 Pk        | 4.5 / 29.36 / 48.26 / 0.0               | 38.95               | V / 1.30 / 160             | -43.28                                    |
| 1.03 GHz  | 59.8 Pk         | 2.79 / 25.01 / 48.96 / 0.0              | 38.64               | V / 1.40 / 0               | -43.59                                    |
| 2.832 GHz | 52.75 Pk        | 4.59 / 29.59 / 48.35 / 0.0              | 38.58               | V / 1.30 / 160             | -43.65                                    |
| 1.631 GHz | 58.2 Pk         | 3.55 / 26.27 / 49.58 / 0.0              | 38.44               | V / 1.40 / 0               | -43.79                                    |
| 1.931 GHz | 56.6 Pk         | 3.89 / 27.7 / 49.86 / 0.0               | 38.34               | H / 1.30 / 195             | -43.89                                    |
| 1.545 GHz | 57.7 Pk         | 3.47 / 25.85 / 49.67 / 0.0              | 37.35               | V / 1.40 / 0               | -44.88                                    |
| 1.038 GHz | 58.45 Pk        | 2.8 / 25.02 / 49.02 / 0.0               | 37.25               | H / 1.30 / 195             | -44.98                                    |
| 1.459 GHz | 57.95 Pk        | 3.38 / 25.59 / 49.73 / 0.0              | 37.18               | H / 1.30 / 195             | -45.05                                    |
| 1.704 GHz | 56.7 Pk         | 3.62 / 26.62 / 49.76 / 0.0              | 37.18               | V / 1.40 / 0               | -45.05                                    |
| 4.291 GHz | 44.4 Pk         | 6.1 / 32.33 / 45.93 / 0.0               | 36.9                | V / 1.30 / 160             | -45.33                                    |
| 3.004 GHz | 49.1 Pk         | 4.76 / 30.06 / 48.08 / 0.0              | 35.84               | V / 1.30 / 160             | -46.39                                    |
| 4.334 GHz | 43.25 Pk        | 6.1 / 32.32 / 45.88 / 0.0               | 35.79               | V / 1.30 / 160             | -46.44                                    |
| 2.103 GHz | 53.0 Pk         | 3.93 / 28.17 / 49.4 / 0.0               | 35.7                | V / 1.30 / 160             | -46.53                                    |
| 2.012 GHz | 53.25 Pk        | 3.9 / 28.05 / 49.59 / 0.0               | 35.61               | V / 1.30 / 160             | -46.62                                    |
| 1.33 GHz  | 56.3 Pk         | 3.15 / 25.41 / 49.28 / 0.0              | 35.59               | V / 1.40 / 0               | -46.64                                    |
| 2.317 GHz | 51.9 Pk         | 4.21 / 28.45 / 49.02 / 0.0              | 35.54               | V / 1.30 / 160             | -46.69                                    |
| 2.698 GHz | 50.05 Pk        | 4.48 / 29.23 / 48.26 / 0.0              | 35.5                | V / 1.30 / 160             | -46.73                                    |
| 2.918 GHz | 49.15 Pk        | 4.68 / 29.83 / 48.45 / 0.0              | 35.21               | V / 1.30 / 160             | -47.02                                    |
| 1.802 GHz | 53.9 Pk         | 3.79 / 27.09 / 49.65 / 0.0              | 35.13               | V / 1.40 / 0               | -47.1                                     |
| 2.488 GHz | 51.15 Pk        | 4.36 / 28.68 / 49.1 / 0.0               | 35.08               | H / 1.40 / 0               | -47.15                                    |
| 3.218 GHz | 46.85 Pk        | 4.96 / 30.51 / 47.65 / 0.0              | 34.68               | V / 1.30 / 160             | -47.55                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat

Page: 14 of 15

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

| FREQ      | LEVEL<br>(dBuV) | CABLE / ANT / PREAMP /<br>ATTEN<br>(dB) | FINAL<br>(dBuV / m) | POL / HGT / AZ<br>(m)(DEG) | DELTA2<br>-13 dBm<br>>1GHz<br>(Guideline) |
|-----------|-----------------|-----------------------------------------|---------------------|----------------------------|-------------------------------------------|
| 1.124 GHz | 56.15 Pk        | 2.91 / 25.14 / 49.53 / 0.0              | 34.67               | V / 1.30 / 195             | -47.56                                    |
| 3.433 GHz | 45.8 Pk         | 5.19 / 30.97 / 47.31 / 0.0              | 34.65               | V / 1.30 / 160             | -47.58                                    |
| 1.121 GHz | 56.1 Pk         | 2.91 / 25.13 / 49.53 / 0.0              | 34.62               | H / 1.30 / 195             | -47.61                                    |
| 3.259 GHz | 46.45 Pk        | 4.99 / 30.6 / 47.57 / 0.0               | 34.48               | V / 1.30 / 160             | -47.75                                    |
| 1.025 GHz | 55.2 Pk         | 2.78 / 25.0 / 48.92 / 0.0               | 34.07               | H / 1.30 / 195             | -48.16                                    |
| 1.843 GHz | 52.55 Pk        | 3.82 / 27.28 / 49.78 / 0.0              | 33.87               | V / 1.30 / 270             | -48.36                                    |
| 2.875 GHz | 47.55 Pk        | 4.63 / 29.71 / 48.46 / 0.0              | 33.44               | V / 1.30 / 160             | -48.79                                    |
| 1.502 GHz | 53.5 Pk         | 3.43 / 25.65 / 49.81 / 0.0              | 32.77               | V / 1.40 / 0               | -49.46                                    |
| 3.133 GHz | 44.2 Pk         | 4.88 / 30.33 / 47.23 / 0.0              | 32.18               | V / 1.30 / 160             | -50.05                                    |
| 3.952 GHz | 39.5 Pk         | 5.8 / 32.26 / 46.25 / 0.0               | 31.31               | V / 1.30 / 160             | -50.92                                    |
| 1.503 GHz | 51.6 Pk         | 3.43 / 25.66 / 49.81 / 0.0              | 30.88               | V / 1.40 / 0               | -51.35                                    |
| 2.682 GHz | 45.25 Pk        | 4.47 / 29.19 / 48.31 / 0.0              | 30.59               | V / 1.30 / 160             | -51.64                                    |
| 1.737 GHz | 49.25 Pk        | 3.68 / 26.78 / 49.72 / 0.0              | 29.98               | V / 1.40 / 0               | -52.25                                    |
| 1.011 GHz | 50.1 Pk         | 2.76 / 24.99 / 48.81 / 0.0              | 29.03               | V / 1.40 / 0               | -53.2                                     |
| 1.824 GHz | 47.75 Pk        | 3.81 / 27.19 / 49.72 / 0.0              | 29.03               | V / 1.40 / 0               | -53.2                                     |
| 1.223 GHz | 48.6 Pk         | 3.03 / 25.27 / 49.54 / 0.0              | 27.36               | V / 1.40 / 0               | -54.87                                    |
| 1.094 GHz | 48.8 Pk         | 2.87 / 25.1 / 49.45 / 0.0               | 27.32               | V / 1.40 / 0               | -54.91                                    |
| 1.794 GHz | 45.6 Pk         | 3.77 / 27.05 / 49.65 / 0.0              | 26.78               | V / 1.40 / 0               | -55.45                                    |
| 1.006 GHz | 47.4 Pk         | 2.75 / 24.98 / 48.77 / 0.0              | 26.36               | V / 1.40 / 0               | -55.87                                    |

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# RADIATED EMISSIONS



Test Report #: WC506388 Run 2 Test Area: LTS

EUT Model #: DGVF-05000000XXCRN Date: 12/14/2005

EUT Serial #: na EUT Power: 48 VDC Temperature: 22.0 °C

Test Method: FCC Part 24 Air Pressure: 98.0 kPa

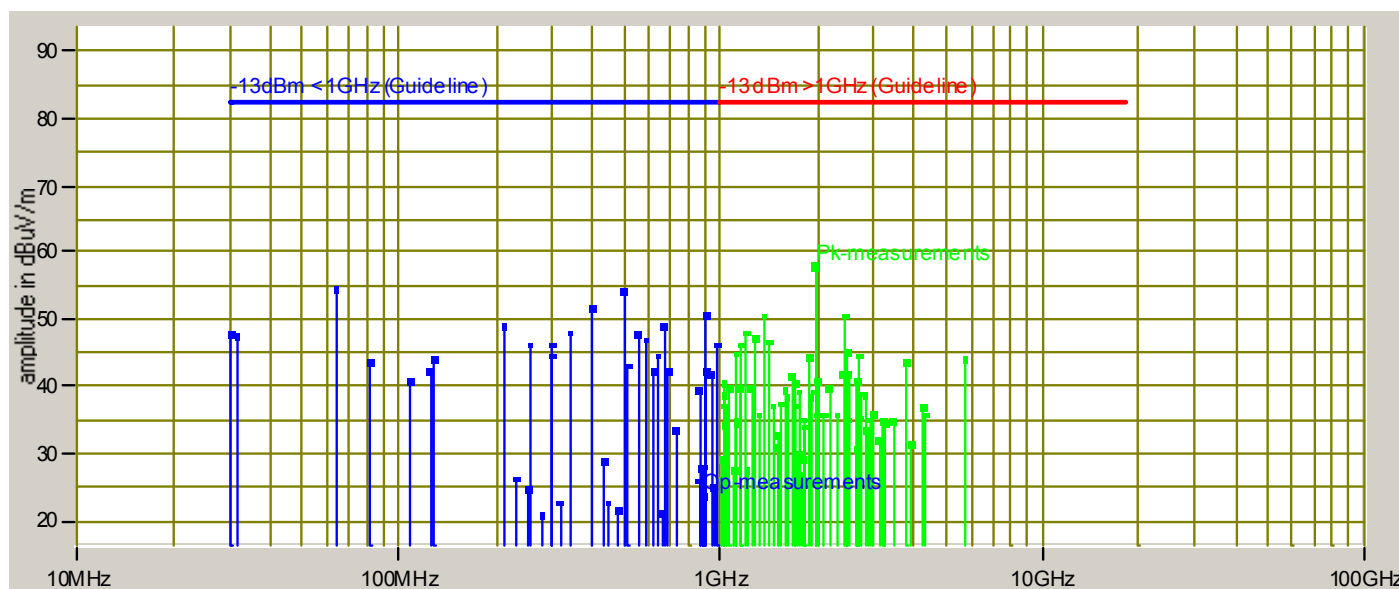
Customer: ADC Telecommunications Rel. Humidity: 22.0 %

EUT Description: Digivance CXD 1900 MHz full band

Notes: 1900 MHz. E, F, & C Bands

Data File Name: 6388.dat Page: 15 of 15

## Graph:



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