MFA Report Tracker

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Applicant:	RF Central
Model:	ODU
FCC ID:	TO4-RFXDFL2007

Formulaire:	L:\\Project\\Formulaire\\FCC.Certification.General_calrevised10_06.rtf
Last Modified:	2007-Sept-20
Purpose:	FCC, Transmitter Certification for general "Business Band" transmitters. Including "Land Mobile" and "Fixed Radio" stations.
MFA Project ID:	p0810010
Client ID:	RFCENTRAL
MFA Document ID:	d0840055
Date:	April 30, 2008
This Printing	2008-Jun-19 Thu
Writer:	/mdw

____ < Check here if this report has been manually modified.

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Original document:

____ < Check here if this report varies significantly from the formulaire

Flom Test Labs
3356 N. San Marcos Place, Suite 107
Chandler, Arizona 85225-7176
(866) 311-3268 phone, (480) 926-3598 fax

Flom Test Labs
EMI, EMC, RF Testing Experts Since 1963

toll-free: (866) 311-3268
fax: (480) 926-3598
http://www.flomlabs.com
info@flomlabs.com

Date: April 30, 2008

Applicant: RF Central
99 Garden Pkwy
Carlisle, PA 17013

Attention of: Keith Blaisdell, Director of Engineering and Production
Ph: (717)249-4900 Fax: (717)249-3630
Email: keith.blaisdell@rfcentral.com

Equipment: ODU
FCC ID: TO4-RFXDFL2007
FCC Rules: Part 74F

Gentlemen:

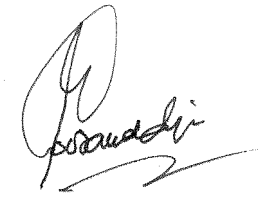
Enclosed please find your copy of the Engineering Test Report for which you are subject to the restrictions as listed on the attached summary.

As you know, the FCC, after a TCB issues a Grant, still has 30 days to review a submission and request added information. It is your decision whether or not to market the equipment subject to a possible recall before the end of the 30 days.

If your equipment is still retained by us, it will be returned to you 30 days after approval is achieved. Our invoice for services has been directed to your Accounts Payable Department.

Should you need any clarification, just fax or phone. Thank you again for this order - it has been a pleasure to be of service.

Sincerely yours,



Hoosamuddin S. Bandukwala, Lab Director

enclosure(s)
/mdw

Flom Test Labs
EMI, EMC, RF Testing Experts Since 1963

Memo

Date: April 30, 2008

Applicant: RF Central
99 Garden Pkwy
Carlisle, PA 17013

Equipment: ODU
FCC ID: TO4-RFXDFL2007

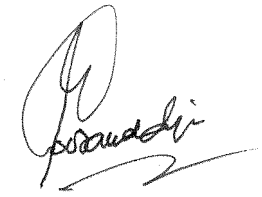
Please note that the enclosed Reports reflect the results of tests performed to the currently published Federal Communications Commissions Rules and Regulations.

Should the FCC's Examiners' interpretations request new and unpublished requirements, we will be pleased to provide them. We will invoice you accordingly, i.e. for the time spent on re-testing, providing the amended pages and/or Reports and for the time necessary to be spent on electronic filing. We will of course provide you with copies of any of the additions.

We regret any added expense to the Applicants, but of late the FCC continues to change their requirements without any prior written publication and/or notices.

As in the past, we will continue to provide all liaison with the FCC necessary for the successful conclusion of your project and the receipt of your Grant of Equipment Authorization.

Sincerely yours,



Hoosamuddin S. Bandukwala, Lab Director

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3356 N. San Marcos Place, Suite 107
Chandler, Arizona 85225-7176
(866) 311-3268 phone, (480) 926-3598 fax

Summary of Restrictions

1. All submissions to the FCC are subject to **their** Examiner's interpretation.

2. Please allow from 60 to 90 days before hearing from the FCC with regard to any submission.

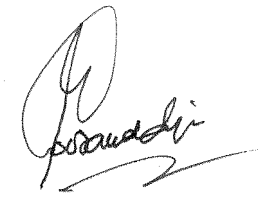
3. The FCC can set aside any action; modify or set aside any action, within 30 days. (FCC Rule 1.108, 1.113).

4. Under Rule 2.803, if device is not type accepted/certificated then it must **not** be sold, leased, offered for sale, imported, shipped or distributed or advertised for sale.

5. FCC can revoke its certificates at any time if the equipment does not meet or **continue** to meet their Rules. (Rule Parts 2.927, 2.939).

6. FCC can request a sample at any time (2.936).

Flom Test Lab



Hoosamuddin S. Bandukwala, Lab Director

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toll-free: (866) 311-3268
fax: (480) 926-3598
http://www.flomlabs.com
info@flomlabs.com

Date: April 30, 2008

Federal Communications Commission
Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: RF Central
Equipment: ODU
FCC ID: TO4-RFXDFL2007
FCC Rules: 74F

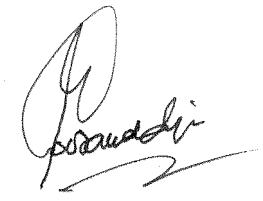
Gentlemen:

On behalf of the Applicant, enclosed please find Application Form 731, Engineering Test Report and all pertinent documentation, the whole for approval of the referenced equipment as shown.

Filing fees are attached.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,



Hoosamuddin S. Bandukwala, Lab Director

enclosure(s)
cc: Applicant
/mdw

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Test Report

for

Model: ODU

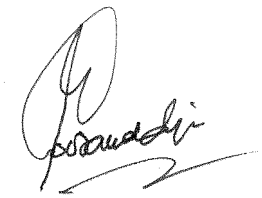
to

Federal Communications Commission

Rule Part(s) 74F

Date of report: April 30, 2008
Date of revised report: June 5, 2008

On the Behalf of the Applicant:	RF Central
At the Request of:	RF Central 99 Garden Pkwy Carlisle, PA 17013
Attention of:	Keith Blaisdell, Director of Engineering and Production Ph: (717)249-4900 Fax: (717)249-3630 Email: keith.blaisdell@rfcentral.com



Supervised by: Hoosamuddin S. Bandukwala, Lab Director

Revision History

Revision	Date	Revised By	Reason for revision
1.0	April 30, 2008	M.Wyman	Original Document
2.0	May 29, 2008	M. Wyman	Emission Designator corrected.
3.0	Jun 5, 2008	M.Wyman	Emission Designator changed again

List of Exhibits

(FCC **Certification** (Transmitters) - Revised 9/28/98)

Applicant: RF Central

FCC ID: TO4-RFXDFL2007

By Applicant:

1. Letter of Authorization

2. Confidentiality Request: 0.457 And 0.459

3. Identification Drawings, 2.1033(c)(11)
   - Label
   - Location of Label
   - Compliance Statement
   - Location of Compliance Statement

3. Photographs, 2.1033(c)(12)

4. Documentation: 2.1033(c)
   - (3) User Manual
   - (9) Tune Up Info
   - (10) Schematic Diagram
   - (10) Circuit Description
   - Block Diagram
   - Parts List
   - Active Devices

5. MPE/SAR Report

By F.T.L.:

A. Testimonial & Statement of Certification

The Applicant has been cautioned as to the following:

15.21 **Information to the User**.

The users manual or instruction manual for an intentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15.27(a) **Special Accessories**.

Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed. Where special accessories, such as shielded cables and/or special connectors are required to enable an unintentional or intentional radiator to comply with the emission limits in this part, the equipment must be marketed with, i.e. shipped and sold with, those special accessories. However, in lieu of shipping or packaging the special accessories with the unintentional or intentional radiator, the responsible party may employ other methods of ensuring that the special accessories are provided to the consumer, without additional charge.

Information detailing any alternative method used to supply the special accessories for a grant of equipment authorization or retained in the verification records, as appropriate. The party responsible for the equipment, as detailed in § 2.909 of this chapter, shall ensure that these special accessories are provided with the equipment. The instruction manual for such devices shall include appropriate instructions on the first page of text concerned with the installation of the device that these special accessories must be used with the device. It is the responsibility of the user to use the needed special accessories supplied with the equipment.

Testimonial
and
Statement of Certification

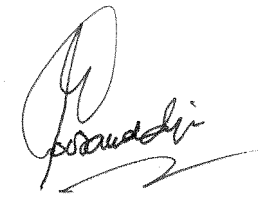
This is to Certify:

1. **That** the application was prepared either by, or under the direct supervision of, the undersigned.

2. **That** the technical data supplied with the application was taken under my direction and supervision.

3. **That** the data was obtained on representative units, randomly selected.

4. **That**, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.



Certifying Engineer: Hoosamuddin S. Bandukwala, Lab Director

Table of Contents

Required information per ISO 17025-2005, paragraph 5.10.2:

a)	**Test Report**
b) Laboratory: (FCC: 31040/SIT) (Canada: IC 2044-A)	Flom Test Lab 3356 N. San Marcos Place, Suite 107 Chandler, AZ 85225
c) Report Number:	d0840055
d) Client:	RF Central 99 Garden Pkwy Carlisle, PA 17013
e) Identification:	ODU
EUT Description:	7 GHz Part 74 Transmitter
f) EUT Condition:	Not required unless specified in individual tests.
g) Report Date: EUT Received:	April 30, 2008
h, j, k):	As indicated in individual tests.
i) Sampling method:	No sampling procedure used.
l) Uncertainty:	In accordance with FTL internal quality manual.
m) Supervised by:	
n) Results:	The results presented in this report relate only to the item tested.
o) Reproduction:	This report must not be reproduced, except in full, without written permission from this laboratory.

Accessories used during testing:

Type	Quantity	Manufacturer	Model	Serial No.	FCC ID

Sub-part 2.1033(c)(14):

Test and Measurement Data

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II; Part 2, Sub-part J, Sections 2.947, 2.1033(c), 2.1041, 2.1046, 2.1047, 2.1079, 2.1051, 2.1053, 2.1055, 2.1057 and the following individual Parts:

_____ 15 – Radio Frequency Devices (unlicensed)
_____ 21 – Domestic Public Fixed Radio Services
_____ 22 – Public Mobile Services
_____ 22 Subpart H - Cellular Radiotelephone Service
_____ 22.901(d) - Alternative technologies and auxiliary services
_____ 23 – International Fixed Public Radiocommunication services
_____ 24 – Personal Communications Services
__X__ 74 Subpart F – Television Broadcast Auxiliary Station
_____ 80 – Stations in the Maritime Services
_____ 80 Subpart E - General Technical Standards
_____ 80 Subpart F - Equipment Authorization for Compulsory Ships
_____ 80 Subpart K - Private Coast Stations and Marine Utility Stations
_____ 80 Subpart S - Compulsory Radiotelephone Installations for Small Passenger Boats
_____ 80 Subpart T - Radiotelephone Installation Required for Vessels on the Great Lakes
_____ 80 Subpart U - Radiotelephone Installations Required by the Bridge-to-Bridge Act
_____ 80 Subpart V - Emergency Position Indicating Radio Beacons (EPIRB'S)
_____ 80 Subpart W - Global Maritime Distress and Safety System (GMDSS)
_____ 80 Subpart X - Voluntary Radio Installations
_____ 87 – Aviation Services
_____ 90 – Private Land Mobile Radio Services
_____ 94 – Private Operational-Fixed Microwave Service
_____ 95 Subpart A - General Mobile Radio Service (GMRS)
_____ 95 Subpart C - Radio Control (R/C) Radio Service
_____ 95 Subpart D - Citizens Band (CB) Radio Service
_____ 95 Subpart E - Family Radio Service
_____ 95 Subpart F - Interactive Video and Data Service (IVDS)
_____ 97 - Amateur Radio Service
_____ 101 – Fixed Microwave Services

Standard Test Conditions and Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.4-2003, TIA 603-C-2004, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104 °F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Measurement results, unless otherwise noted, are worst-case measurements.

A2LA

"A2LA has accredited Flom Test Labs, Inc. Chandler, AZ for technical competence in the field of Electrical testing. The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO 17025:2005 'General Requirements for the Competence of Testing and Calibration Laboratories' and any additional program requirements in the identified field of testing."

Please refer to www.a2la.org for current scope of accreditation.

Certificate number: 2152.01

ACCREDITED
CERT NO: 2152-01

IC O.A.T.S. Number: 2044A-1

List of General Information Required for Certification

In Accordance with FCC Rules and Regulations,
Volume II, Part 2 and to

Sub-part 2.1033
(c)(1):

Name and Address of Applicant: RF Central
99 Garden Pkwy
Carlisle, PA 17013

Manufacturer: RF Central
99 Garden Pkwy
Carlisle, PA 17013

(c)(2): **FCC ID**: TO4-RFXDFL2007

Model Number: ODU

(c)(3): **Instruction Manual(s):**

Please see attached exhibits

(c)(4): **Type of Emission**: 25M0D7W

(c)(5): **Frequency Range, MHz**: 6436 – 7120MHz

(c)(6): **Power Rating, Watts**: ~0.340W

____ Switchable ____ Variable ____ N/A

FCC Grant Note:

(c)(7): **Maximum Power Rating, Watts**: ~1.25W

DUT Results: Passes ____x____ Fails _____

Subpart 2.1033 (continued)
(c)(8): Voltages & currents in all elements in final RF stage, including final transistor or solid-state device:

Collector Current, A	=	1.2
Collector Voltage, Vdc	=	6.0
Supply Voltage, Vdc	=	24.0 Vdc

(c)(9): **Tune-Up Procedure**:

Please see attached exhibits

(c)(10): **Circuit Diagram/Circuit Description**:
Including description of circuitry & devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation and limiting power.

Please see attached exhibits

(c)(11): **Label Information**:

Please see attached exhibits

(c)(12): **Photographs**:

Please see attached exhibits

(c)(13): **Digital Modulation Description**:

___ Attached Exhibits
_x_ N/A

(c)(14): **Test and Measurement Data**:

Follows

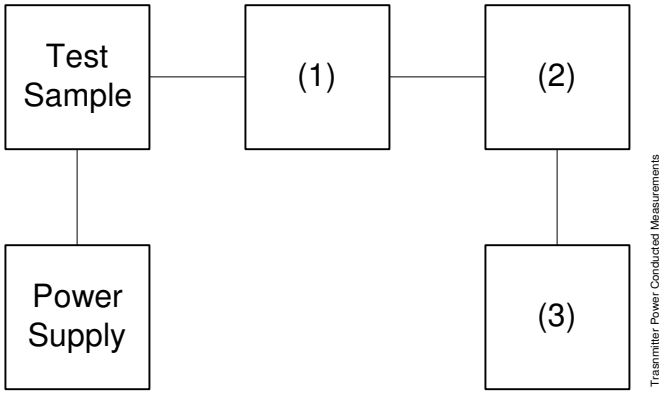
Name of Test: Carrier Output Power (Conducted)
Specification: 2.1046(a)
Test Equipment Utilized: See Equipment List for details **Test Date: 4/29/2008**

Measurement Procedure

A) The EUT was connected to a resistive coaxial attenuator of normal load impedance, and the unmodulated output power was measured by means of an RF Power Meter.

B) Measurement accuracy is ±3%.

Transmitter Test Set-Up: RF Power Output



Measurement Results
(Worst case)

Frequency of Carrier, MHz =
Ambient Temperature = 23℃ ± 3℃

Frequency, MHz	Output Power dBm	RF Power, Watts
6436.000	25.22	333mW
6772.000	25.46	351mW
7120.000	24.69	294mW

Performed by: Michael Wyman

Name of Test: RF Power Output (Radiated)
Specification: 2.1046(a)
Test Equipment Utilized: See Equipment List for details **Test Date: 4.30/2008**

Measurement Procedure (Radiated)

1. The EUT was placed on an open-field site and its radiated field strength at a known distance was measured by means of a spectrum analyzer. Equivalent loading was calculated from the equation $P_t=((E \times R)^2/49.2)$ watts, where R = 3m.

2. Measurement accuracy is ±1.5 dB.

Measurement Results

State: Ambient Temperature: 23°C ± 3°C
Amps Mode:

Frequency Tuned, MHz	Frequency Emission, MHz	Radiated out, dBuV/m	CF, dB	ERP, dBm	ERP, Watts
6436.0000	6436.0000	82.50	-8.12	-16.38	0.000230
6772.0000	6772.0000	75.17	-8.47	-23.36	0.0000461
7120.0000	7120.0000	79.83	-8.83	-18.34	0.000146

Note: radiated power out was measured with the EUT output fed into a 50-ohm load.

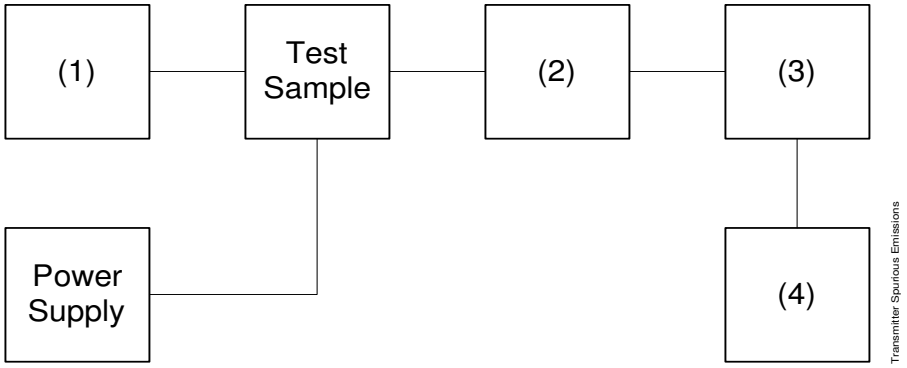
Name of Test: Unwanted Emissions (Transmitter Conducted)
Specification: 2.1051
Test Equipment Utilized: See Equipment List for details **Test Date: 4/30/2008**

Measurement Procedure

A) The emissions were measured for the worst case as follows:
   1). within a band of frequencies defined by the carrier frequency plus and minus one channel.
   2). from the lowest frequency generated in the EUT and to at least the 10th harmonic of the carrier frequency, or 40 GHz, whichever is lower.

B) The magnitude of spurious emissions that are attenuated more than 20 dB below the permissible value need not be specified.

Transmitter Test Set-Up: Spurious Emission



Measurement Results

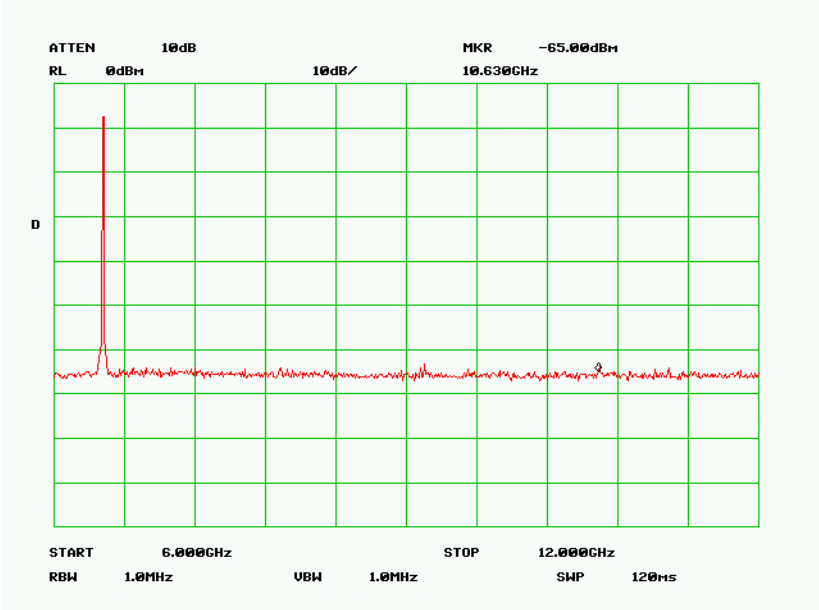
Summary:

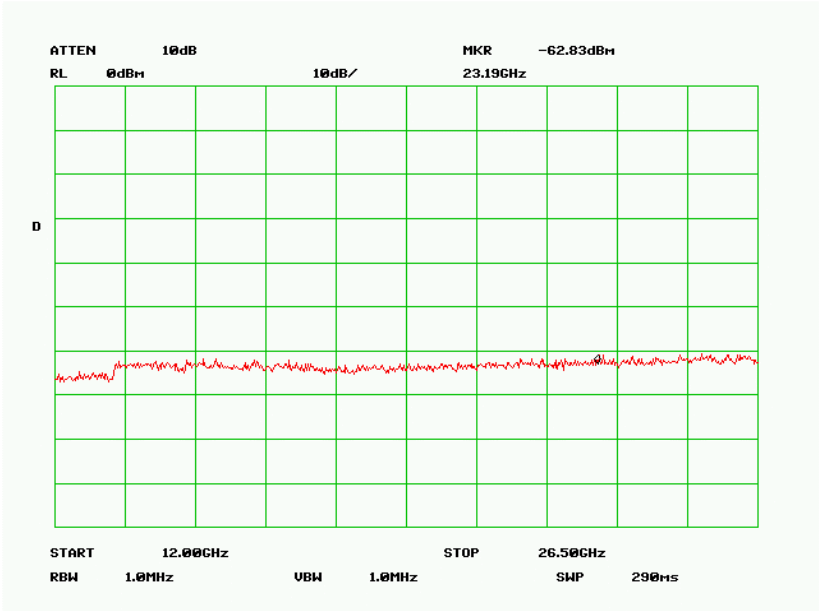
Frequency of carrier, MHz	=	6436, 6772, 7120MHz
Spectrum Searched, GHz	=	0 to 10 x F_C or 40GHz which ever comes first
Maximum Response, Hz	=	
All Other Emissions	=	≥ 20 dB Below Limit
Limit(s), dBc		

Graphical Results follow:

Measurement Results

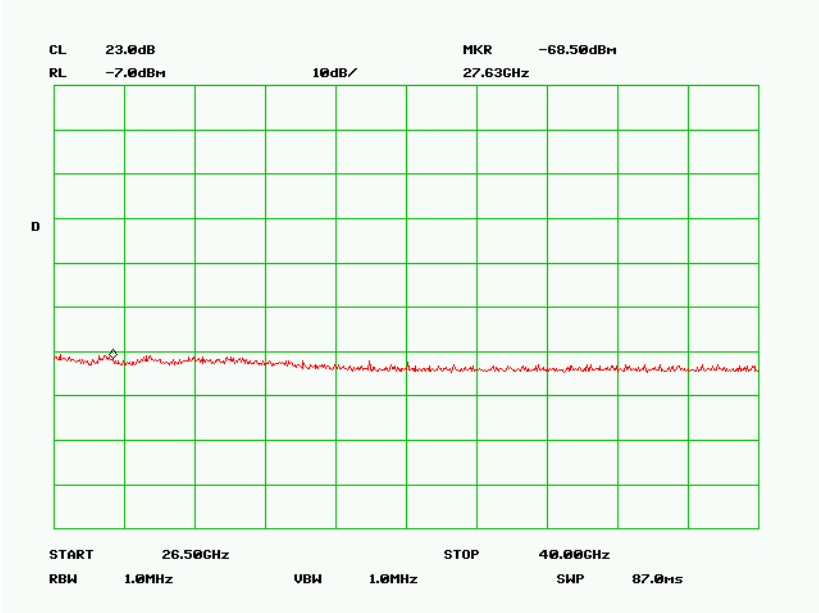
State: Ambient Temperature: 23℃ ± 3℃

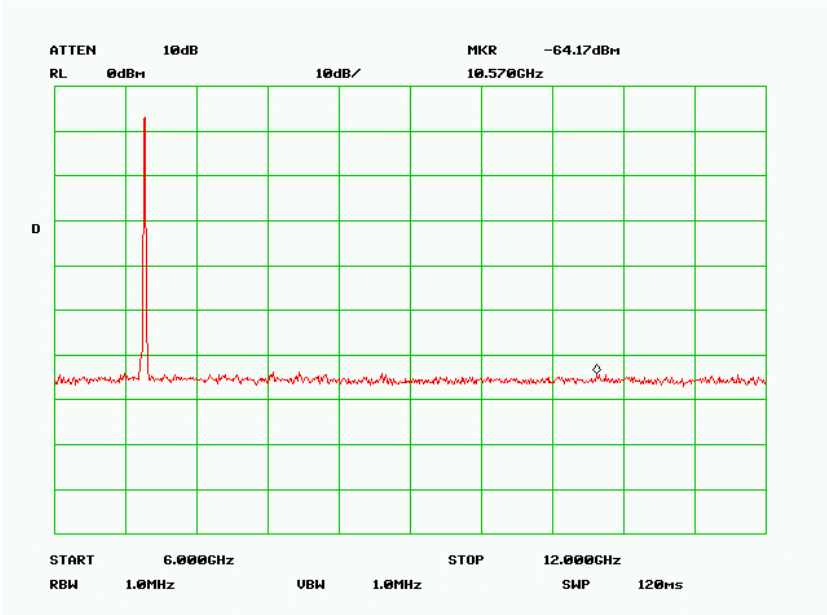




Measurement Results

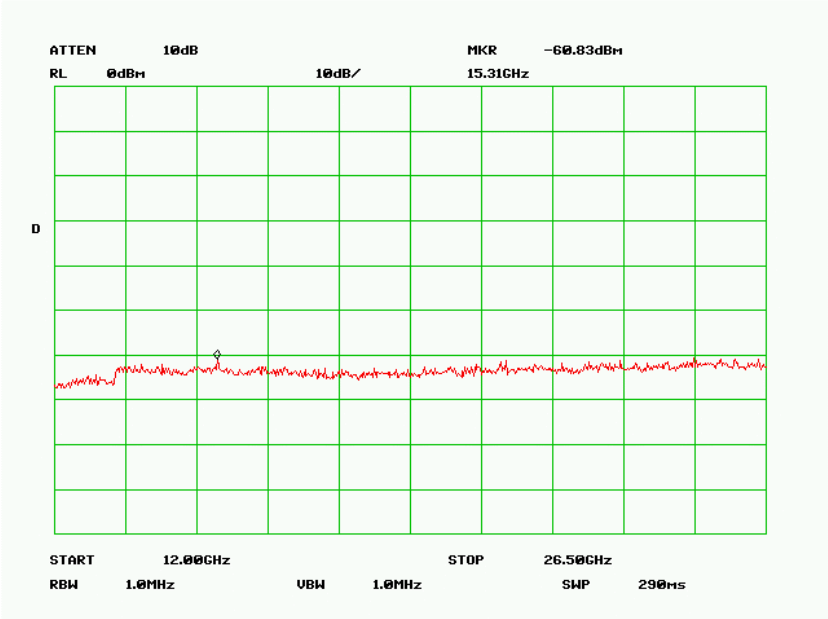
State: Ambient Temperature: 23℃ ± 3℃

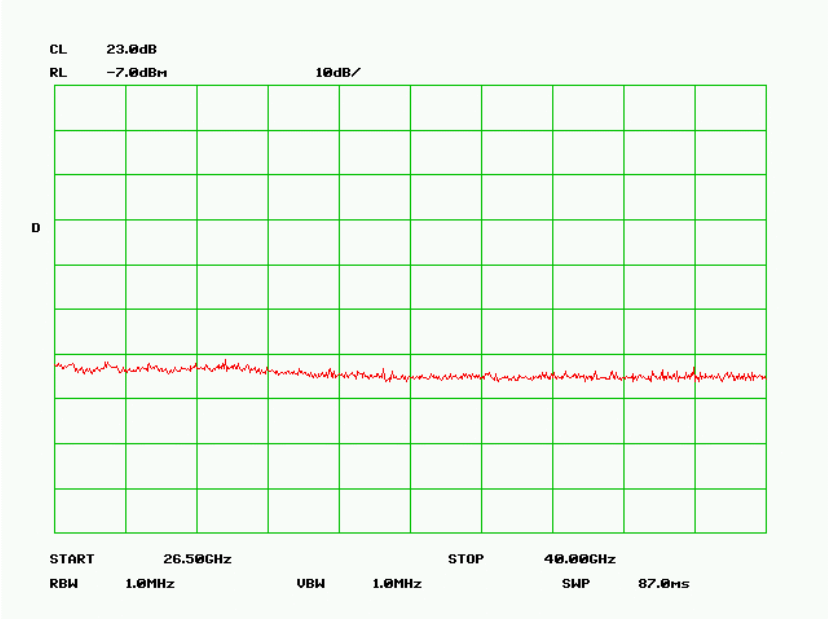




Measurement Results

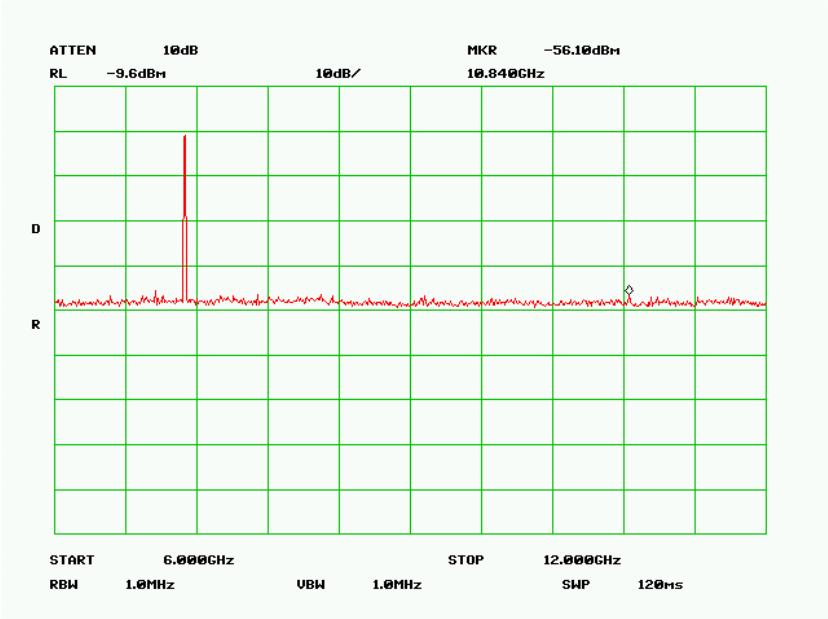
State: Ambient Temperature: 23℃ ± 3℃

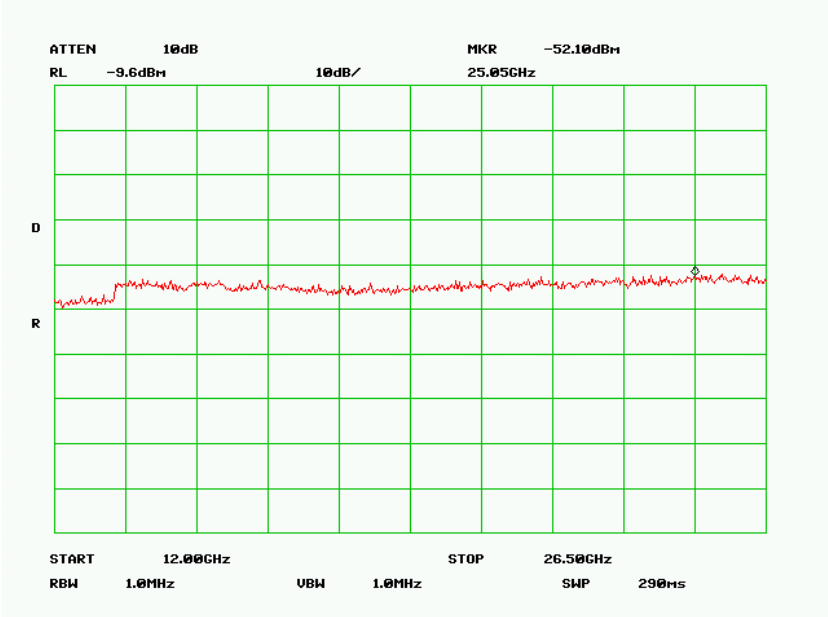




Measurement Results

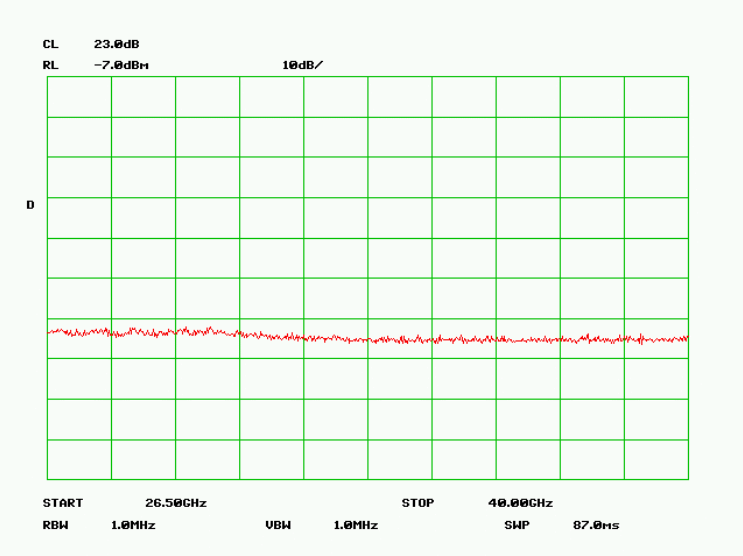
State: Ambient Temperature: 23℃ ± 3℃





Measurement Results

State: Ambient Temperature: 23°C ± 3°C



Performed by: Michael Wyman

Name of Test: Field Strength of Spurious Radiation
Specification: 2.1053(a)
Test Equipment Utilized: See Equipment List for details **Test Date: 4/30/2008**

Measurement Procedure

Definition:
Radiated spurious emissions are emissions from the equipment when transmitting into a non-radiating load on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communications desired.

Method of Measurement:

A) Connect the equipment as illustrated

B) Adjust the spectrum analyzer for the following settings:
   1) Resolution Bandwidth 100 kHz (<1 GHZ), 1 MHZ (> 1GHz).
   2) Video Bandwidth ≥ 3 times Resolution Bandwidth
   3) Sweep Speed ≤2000 Hz/second
   4) Detector Mode = Mean or Average Power

C) Place the transmitter to be tested on the turntable in the standard test site. The transmitter is transmitting into a non-radiating load that is placed on the turntable. The RF cable to this load should be of minimum length.

D) For each spurious measurement the test antenna should be adjusted to the correct length for the frequency involved. This length may be determined from a calibration ruler supplied with the equipment. Measurements shall be made from the lowest radio frequency generated in the equipment to the tenth harmonic of the carrier, except for the region close to the carrier equal to ± the test bandwidth (see section 1.3.4.4).

E) For each spurious frequency, raise and lower the test antenna from 1 m to 4 m to obtain a maximum reading on the spectrum analyzer with the test antenna at horizontal polarity. Repeat this procedure to obtain the highest possible reading. Record this maximum reading.

F) Repeat step E) for each spurious frequency with the test antenna polarized vertically.

G) Reconnect the equipment as illustrated.

H) Keep the spectrum analyzer adjusted as in step B).

I) Remove the transmitter and replace it with a substitution antenna (the antenna should be half-wavelength for each frequency involved). The center of the substitution antenna should be approximately at the same location as the center of the transmitter. At lower frequencies, where the substitution antenna is very long, this will be impossible to achieve when the antenna is polarized vertically. In such case the lower end of the antenna should be 0.3 m above the ground.

J) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

K) Repeat step J) with both antennas vertically polarized for each spurious frequency.

L) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps J) and K) by the power loss in the cable between the generator and the antenna and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna.

M) The levels recorded in step L) are absolute levels of radiated spurious emissions in dBm. The radiated spurious emissions in dB can be calculated by the following:

Radiated spurious emissions dB =

$10\log_{10}$(TX power in watts/0.001) – the levels in step l)

NOTE: It is permissible that other antennas provided can be referenced to a dipole.

Name of Test: Field Strength of Spurious Radiation

Measurement Results

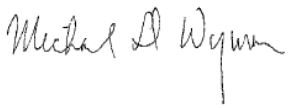
STATE: Ambient Temperature: 23℃ ± 3℃

Frequency Tuned, MHz	Frequency Emission, MHz	EIRP, dBm + CF, dB	EIRP, dBc
6436.000000	12872.000000	-29.97	-55.19

Frequency Tuned, MHz	Frequency Emission, MHz	EIRP, dBm	EIRP, dBc
6772.000000	13544.000000	-24.17	-49.79

Frequency Tuned, MHz	Frequency Emission, MHz	EIRP, dBm	EIRP, dBc
7120.000000	14240.000000	-25.17	-49.86

Note: Measurements were made to 40GHz and no observable spurious emissions were found above the second harmonic.



Performed by: Michael Wyman

Name of Test: Emission Masks (Occupied Bandwidth)
Specification: 2.1049(c)(1)
Test Equipment Utilized: See Equipment List for details **Test Date: 4/30/2008**

Measurement Procedure

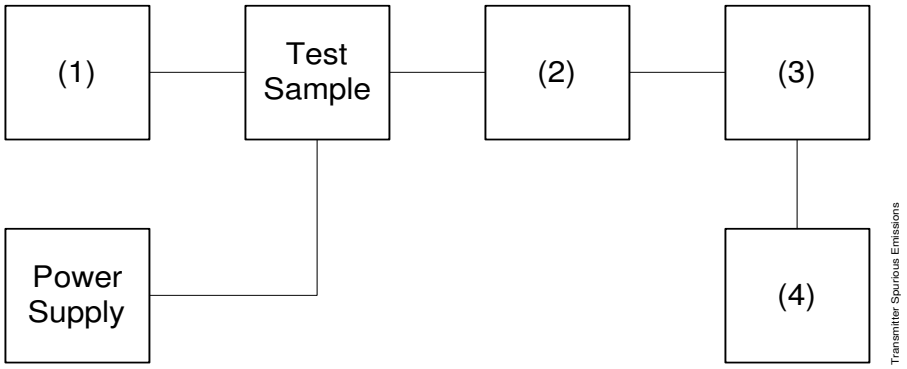
A) The EUT and test equipment were set up as shown below

B) For EUTs supporting audio modulation, the audio signal generator was adjusted to the frequency of maximum response and with output level set for ±2.5/±1.25 kHz deviation (or 50% modulation). With level constant, the signal level was increased 16 dB.

C) For EUTs supporting digital modulation, the digital modulation mode was operated to its maximum extent.

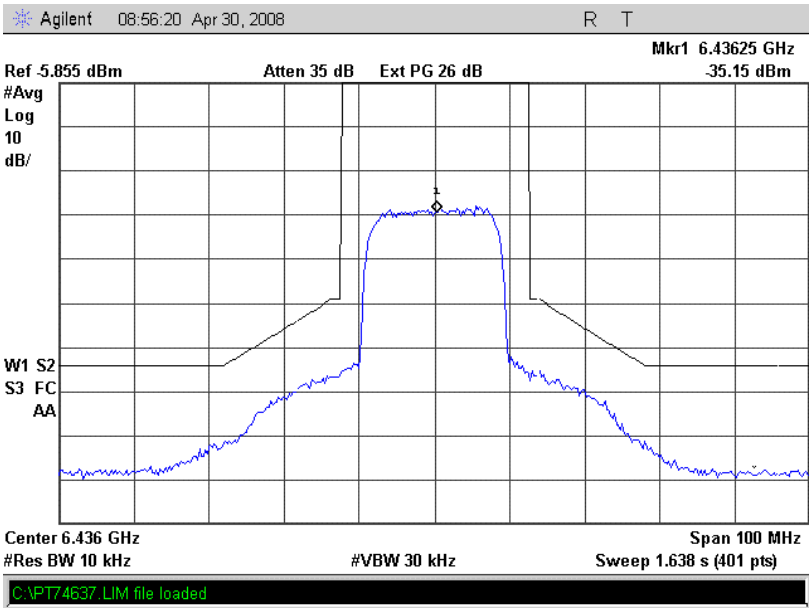
D) The Occupied Bandwidth was measured with the Spectrum Analyzer controls set as shown on the test results.

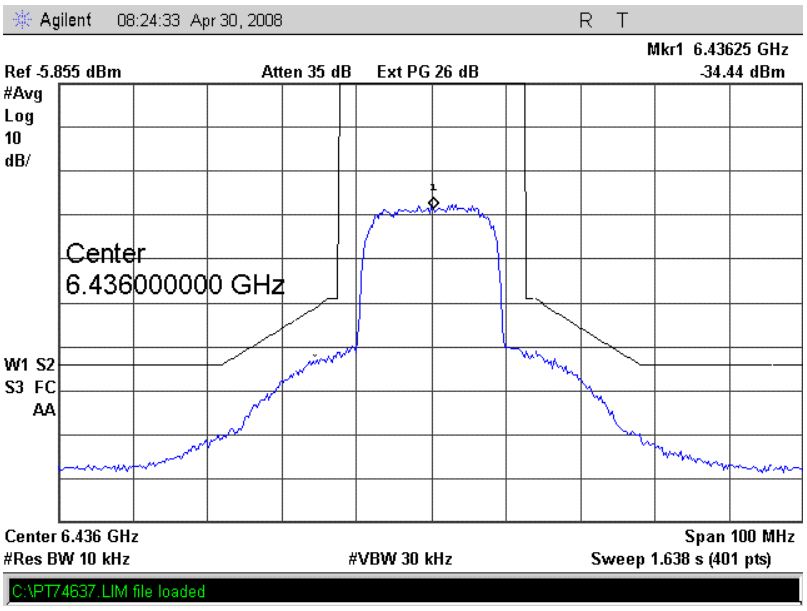
Transmitter Test Set-Up: Occupied Bandwidth



Measurement Results

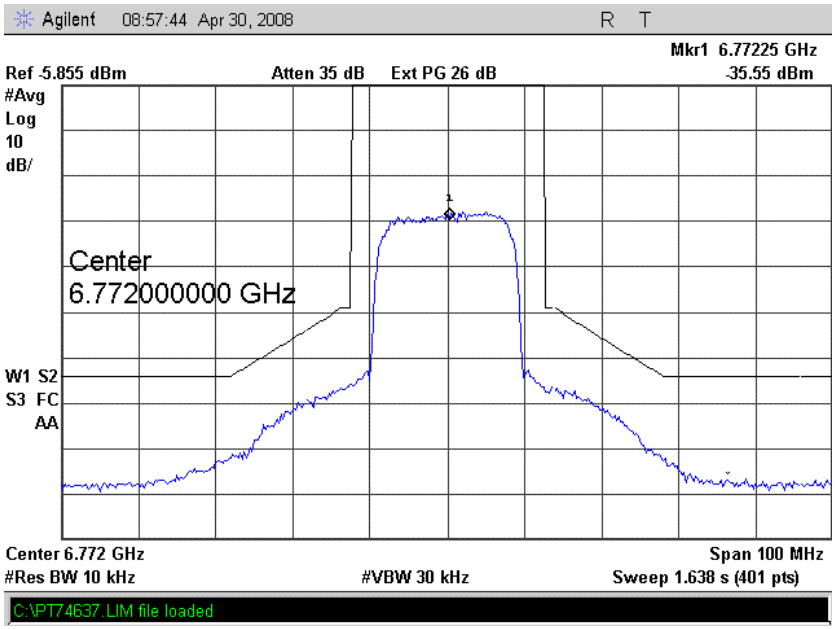
State: Ambient Temperature: 23℃ ± 3℃

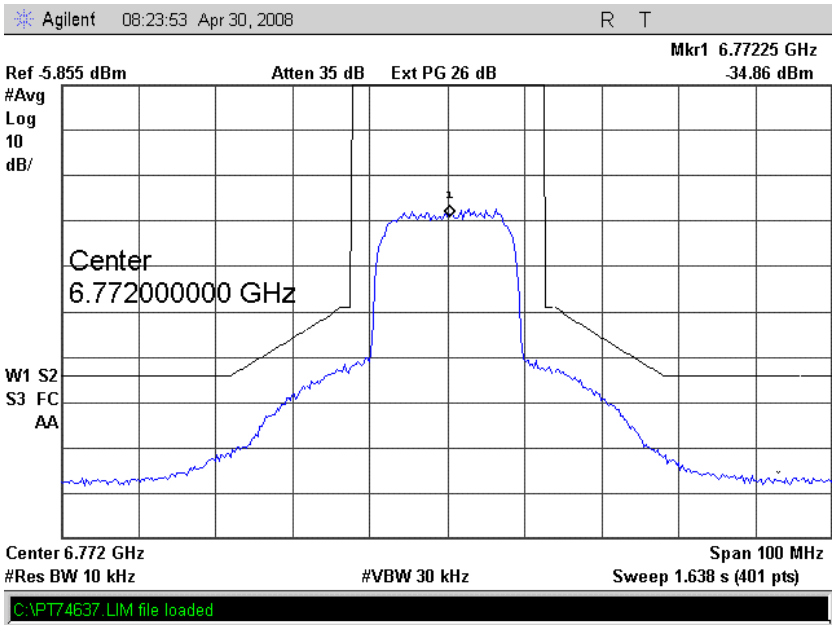




Measurement Results

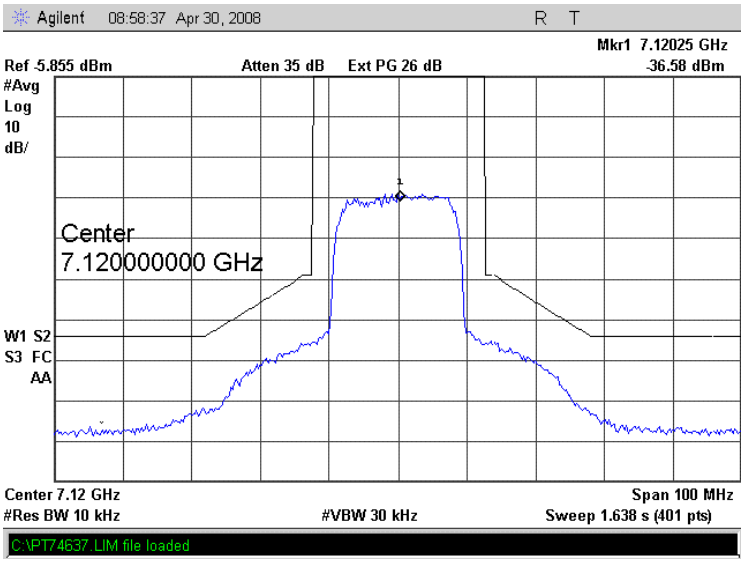
State: Ambient Temperature: 23℃ ± 3℃

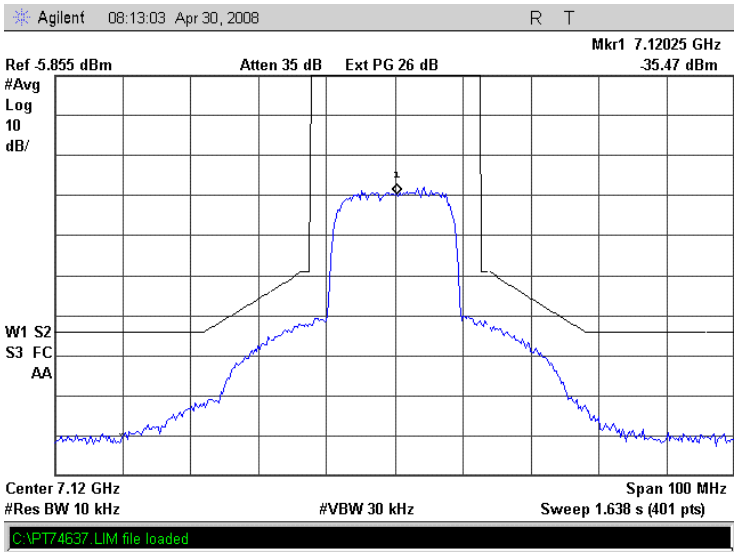




Measurement Results

State: Ambient Temperature: 23℃ ± 3℃





Performed by: Michael Wyman

Name of Test: Frequency Stability (Temperature Variation)
Specification: 2.1055(a)(1)
Test Equipment Utilized: See Equipment List for details **Test Date: 4/21/2008**

Measurement Procedure

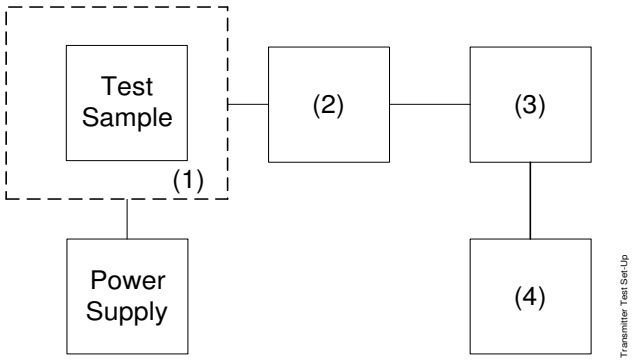
A) The EUT and test equipment were set up as shown on the following page.

B) With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute.

C) With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.

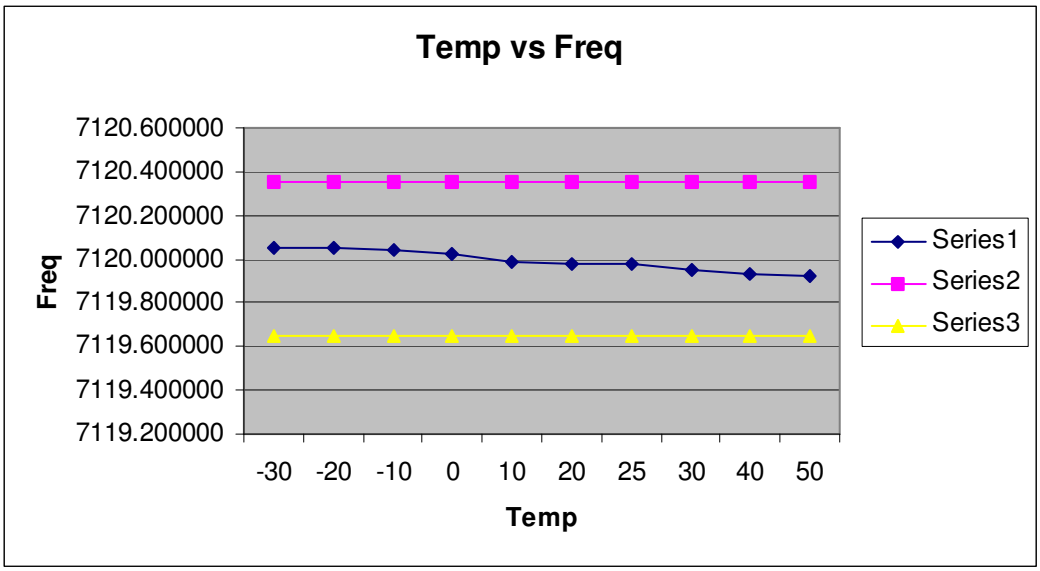
D) The temperature tests were performed for the worst case.

Transmitter Test Set-Up: Temperature Variation



Measurement Results

State: Ambient Temperature: 23℃ ± 3℃



Performed by: Michael Wyman

Flom Test Labs
3356 North San Marcos Place, Suite 107
Chandler, Arizona 85225-7176
(866) 311-3268 phone, (480) 926-3598 fax

Name of Test: Frequency Stability (Voltage Variation)
Specification: 2.1055(b)(1)
Test Equipment Utilized: **Test Date: 4/21/2008**

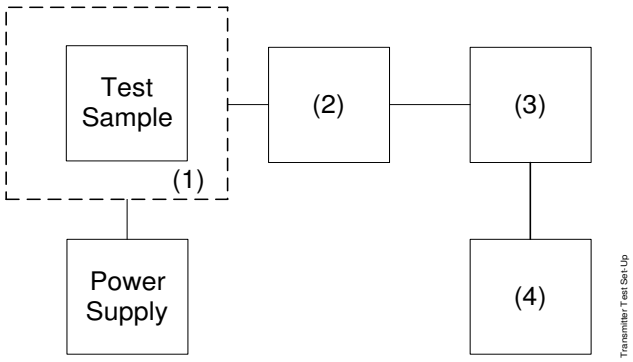
Measurement Procedure

A) The EUT was placed in a temperature chamber (if required) at 25±5°C and connected as shown below.

B) The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.

C) The variation in frequency was measured for the worst case.

Transmitter Test Set-Up: Voltage Variation



Measurement Results

Note: The power supply for the transmitter is an interface controlled power supply that has monitoring circuits that control the voltage over temperature. There isn't any external way of powering the transmitter without the interface unit connected to the transmitter and the voltage is fed to the transmitter through the coax between the interface and the EUT.

Performed by: Michael Wyman

Test Equipment Utilized

Description	MFG	Model Number	FTL Asset Number	Last Cal Date	Cal Due Date
RF Pre-Amplifier	HP	8449	i00028	1/23/07	1/23/09
Spectrum Analyzer	HP	8563E	i00029	3/9/07	3/9/08
Spectrum Analyzer	HP	8566B	i00049	8/18/07	8/18/08
Horn Antenna	EMCO	3115	i00103	9/5/06	9/5/08
Horn Antenna	ARA	MWH-1826/B	i00273	3/7/07	3/7/09
Horn Antenna	ARA	MWH-2640/B	I00272	NCR	NCR
Power Meter	HP	E4418B	i00228	9/6/07	9/6/08
Power sensor	HP	8481A	i00317	9/6/07	9/6/08
Spectrum Analyzer	HP	8566B	i00329	4/16/07	4/16/08
Spectrum Analyzer	Agilent	E4407B	iI00331	10/23/07	10/23/08
Temp Chamber	Tenney	Tenney Jr.	iI00027	9/28/07	9/28/09

In addition to the above listed equipment standard RF connectors and cables were utilized in the testing of the described equipment. Prior to testing these components were tested to verify proper operation.

END OF TEST REPORT