



**Test Report:** 6W65729

**Applicant:** BelAir Networks Inc.,  
603 March Road,  
Ottawa, ON  
K2K 2M5

**Apparatus:** 2.3GHz WCS Band Radio Module

**FCC ID:** RAR20006001

**In Accordance With:** FCC Part 27 Miscellaneous Wireless  
Communications Services

**Tested By:** Nemko Canada Inc.  
303 River Road  
Ottawa, Ontario  
K1V 1H2

A handwritten signature in blue ink, appearing to read 'Jason Nixon'.

**Authorized By:** Jason Nixon, Telecom Specialist

**Date:** June 6, 2006

**Total Number of Pages:** 65

## Report Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 27. Conducted measurements were performed in accordance with ANSI TIA-603-B-2002. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site. A description of the test facility is on file with the FCC.

The assessment summary is as follows:

<b>Apparatus Assessed:</b>	2.3GHz WCS Band Radio Module
<b>Specification:</b>	FCC Part 27 Miscellaneous Wireless Communications Services
<b>Compliance Status:</b>	Complies
<b>Exclusions:</b>	None
<b>Non-compliances:</b>	None
<b>Report Release History:</b>	Original Release

Author: Xu Jin, Wireless Specialist

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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## **Section 1: Equipment Under Test**

### **1.1 Product Identification**

The Equipment Under Test was identified as follows: 2.3GHz WCS Band Radio Module

### **1.2 Samples Submitted for Assessment**

The following samples of the apparatus have been submitted for type assessment:

<b>Sample No.</b>	<b>Description</b>	<b>Serial No.</b>
1	2.3GHz WCS Band Radio Module	K001619775
2	Digital Board LPM	A000000217
3	Power Supply	02905034 0545

The first samples were received on: May 11, 2006

**1.3 Technical Specifications of the EUT**

<b>Manufacturer:</b>	BelAir Networks Inc.
<b>Operating Frequency:</b>	2305.625 – 2318.125 MHz 2346.875 – 2359.375 MHz
<b>Emission Designator:</b>	4M6G7W
<b>Modulation:</b>	802.16
<b>Antenna Data:</b>	(1). 15 Bi & 8.5dBi MTI patch antenna, 8dBi "BelAir" patch antenna (2). 13 & 18dBi "WISP24013/WISP24018" MAXRAD Antenna (3). 6 & 8dBi Omni Antenna (4). 25dBi MAXRAD dish
<b>Antenna Connector:</b>	MCX

## Section 2: Test Conditions

### 2.1 Specifications

The apparatus was assessed against the following specifications:  
FCC Part 27 Miscellaneous Wireless Communications Services

### 2.2 Deviations From Laboratory Test Procedures

No deviations were made from laboratory test procedures.

### 2.3 Test Environment

All tests were performed under the following environmental conditions:

Temperature range	:	15 – 30 °C
Humidity range	:	20 - 75 %
Pressure range	:	86 - 106 kPa
Power supply range	:	+/- 5% of rated voltages

### 2.4 Test Equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next Cal.
Spectrum Analyzer	Rohde & Schwarz	FSU	FA001877	May 10/07
Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	May 16/07
Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	May 16/07
Horn Antenna #2	EMCO	3115	FA000825	Dec. 16/06
Log Periodic Antenna #1	EMCO	LPA-25	FA000477	Aug. 29/06
1.0 – 2.0 GHz Amplifier	JCA	12-400	FA001498	July 14/06
18.0 – 40.0GHz Horn Antenna	EMCO	3116	FA001847	May 3, 2007
2.0 – 4.0 GHz Amplifier	JCA	24-600	FA001496	July 14/06
4.0 – 8.0 GHz Amplifier	JCA	48-600	FA001497	July 14/06
5.0 - 18GHz Amplifier	Narda	DWT-186N23U40	FA001409	COU
18.0 – 26.0 GHz Amplifier	NARDA	BBS-1826N612	FA001550	COU
Signal Generator	Rhode & Schwarz	SMR 40	FA001879	July 13/06
Climate Chamber	Thermotron	SM-16C	15649-S	COU

\* COU (Calibrate on Use)

## **Section 3: Observations**

### **3.1 Modifications Performed During Assessment**

No modifications were performed during assessment.

### **3.2 Record Of Technical Judgements**

No technical judgements were made during the assessment.

### **3.3 EUT Parameters Affecting Compliance**

The user of the apparatus could not alter parameters that would affect compliance.

### **3.4 Test Deleted**

No Tests were deleted from this assessment.

### **3.5 Additional Observations**

There were no additional observations made during this assessment.

## **Section 4: Results Summary**

This section contains the following:

FCC Part 27: Test Results

The column headed 'Required' indicates whether the associated clauses were invoked for the apparatus under test. The following abbreviations are used:

- N No: not applicable / not relevant.
- Y Yes: Mandatory i.e. the apparatus shall conform to these tests.
- N/T Not Tested, mandatory but not assessed. (See section 3.4 Test deleted)

The results contained in this section are representative of the operation of the apparatus as originally submitted.



**4.1 FCC Part 27: Test Results**

Clause	Test Method	Test Description	Required	Result
27.50(a)(1)	2.1046	Equivalent isotropically radiated power	Y	PASS
27.53(a)	2.1049	Occupied bandwidth	Y	PASS
27.53(a)	2.1051	Spurious emissions at the antenna terminal	Y	PASS
27.53(a)	2.1053	Field strength of spurious radiation	Y	PASS
27.54	2.1055	Frequency stability	Y	PASS

## Appendix A: Test Results

### Clause 27.50(a) Equivalent Isotropically Radiated Power

(a) The following power limits apply to the 2305-2320 MHz and 2345-2360 MHz bands:  
 (1) Fixed, land, and radiolocation land stations transmitting are limited to 2000 watts peak equivalent isotropically radiated power (EIRP).  
 (i) Peak transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

#### Test Conditions:

<b>Sample Number:</b>	1, 2, 3	<b>Temperature:</b>	21°C
<b>Date:</b>	May 19, 2006	<b>Humidity:</b>	52%
<b>Modification State:</b>	0	<b>Tester:</b>	Xu Jin
		<b>Laboratory:</b>	Ottawa

**Test Results:** Pass

**Test Data:** See attached tables and Plots

(1) 15dBi MTI patch antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	15	44.36	34.6
2306.25	29.54	19.93	15	44.54	34.93
2312.5	29.83	20.08	15	44.83	35.08
2316.25	29.82	19.89	15	44.82	34.89
2318.125	29.82	20.09	15	44.82	35.09
2346.875	29.77	20.26	15	44.77	35.26
2348.75	30.11	20.35	15	45.11	35.35
2352.5	29.86	20.30	15	44.86	35.3
2358.75	29.88	20.37	15	44.88	35.37
2359.375	29.98	20.13	15	44.98	35.13

(2) 8dBi Belair patch antenna, 8dBi Omni Antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	8	37.36	27.6
2306.25	29.54	19.93	8	37.54	27.93
2312.5	29.83	20.08	8	37.83	28.08
2316.25	29.82	19.89	8	37.82	27.89
2318.125	29.82	20.09	8	37.82	28.09
2346.875	29.77	20.26	8	37.77	28.26
2348.75	30.11	20.35	8	38.11	28.35
2352.5	29.86	20.30	8	37.86	28.3
2358.75	29.88	20.37	8	37.88	28.37
2359.375	29.98	20.13	8	37.98	28.13

(3) 8.5dBi MTI Patch Antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.6	8.5	37.86	28.1
2306.25	29.54	19.93	8.5	38.04	28.43
2312.5	29.83	20.08	8.5	38.33	28.58
2316.25	29.82	19.89	8.5	38.32	28.39
2318.125	29.82	20.09	8.5	38.32	28.59
2346.875	29.77	20.26	8.5	38.27	28.76
2348.75	30.11	20.35	8.5	38.61	28.85
2352.5	29.86	20.3	8.5	38.36	28.8
2358.75	29.88	20.37	8.5	38.38	28.87
2359.375	29.98	20.13	8.5	38.48	28.63

(4) 18dBi MAXRAD antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	18	47.36	37.6
2306.25	29.54	19.93	18	47.54	37.93
2312.5	29.83	20.08	18	47.83	38.08
2316.25	29.82	19.89	18	47.82	37.89
2318.125	29.82	20.09	18	47.82	38.09
2346.875	29.77	20.26	18	47.77	38.26
2348.75	30.11	20.35	18	48.11	38.35
2352.5	29.86	20.30	18	47.86	38.3
2358.75	29.88	20.37	18	47.88	38.37
2359.375	29.98	20.13	18	47.98	38.13

(5) 13dBi MAXRAD antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	13	42.36	32.6
2306.25	29.54	19.93	13	42.54	32.93
2312.5	29.83	20.08	13	42.83	33.08
2316.25	29.82	19.89	13	42.82	32.89
2318.125	29.82	20.09	13	42.82	33.09
2346.875	29.77	20.26	13	42.77	33.26
2348.75	30.11	20.35	13	43.11	33.35
2352.5	29.86	20.30	13	42.86	33.3
2358.75	29.88	20.37	13	42.88	33.37
2359.375	29.98	20.13	13	42.98	33.13

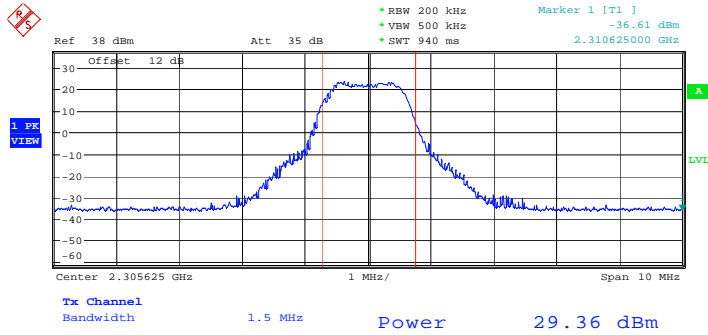
(6) 6dBi Omni antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	6	35.36	25.6
2306.25	29.54	19.93	6	35.54	25.93
2312.5	29.83	20.08	6	35.83	26.08
2316.25	29.82	19.89	6	35.82	25.89
2318.125	29.82	20.09	6	35.82	26.09
2346.875	29.77	20.26	6	35.77	26.26
2348.75	30.11	20.35	6	36.11	26.35
2352.5	29.86	20.30	6	35.86	26.3
2358.75	29.88	20.37	6	35.88	26.37
2359.375	29.98	20.13	6	35.98	26.13

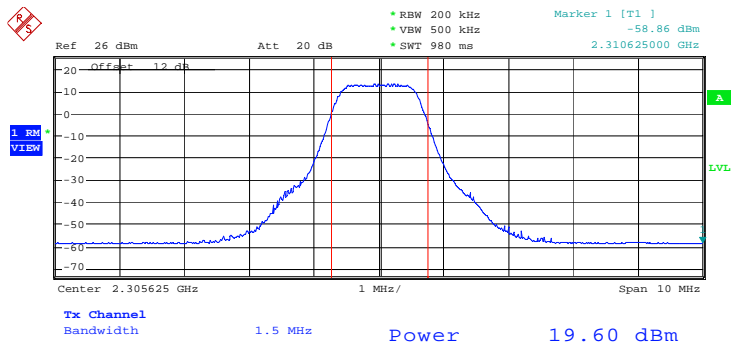
(7) 25 dBi MAXRAD dish antenna

Frequency (MHz)	Measured Output Power (dBm)-PK	Measured Output Power (dBm)-Avg.	Antenna Gain (dB)	EIRP (dBm) Peak	EIRP (dBm) Avg.
2305.625	29.36	19.60	25	54.36	44.6
2306.25	29.54	19.93	25	54.54	44.93
2312.5	29.83	20.08	25	54.83	45.08
2316.25	29.82	19.89	25	54.82	44.89
2318.125	29.82	20.09	25	54.82	45.09
2346.875	29.77	20.26	25	54.77	45.26
2348.75	30.11	20.35	25	55.11	45.35
2352.5	29.86	20.30	25	54.86	45.3
2358.75	29.88	20.37	25	54.88	45.37
2359.375	29.98	20.13	25	54.98	45.13

Operation frequency 2305.625MHz.

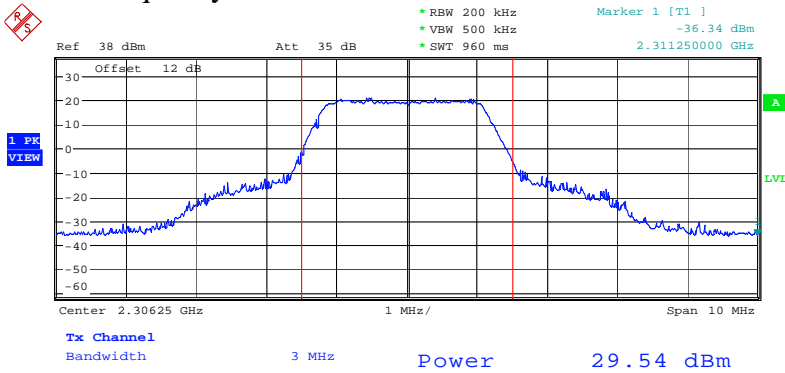


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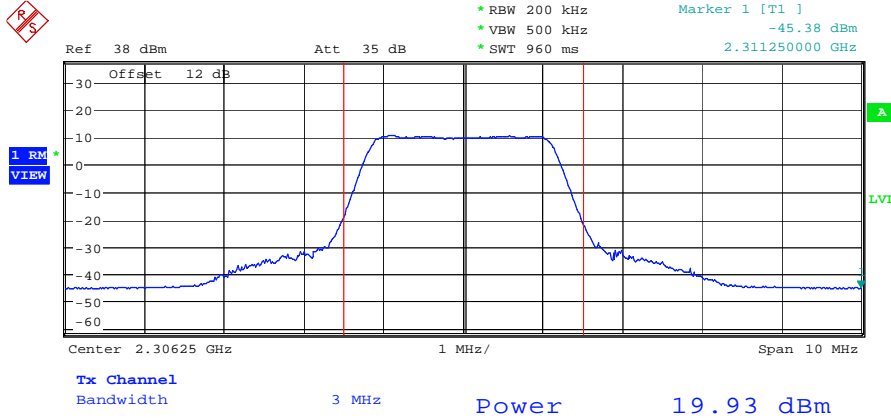


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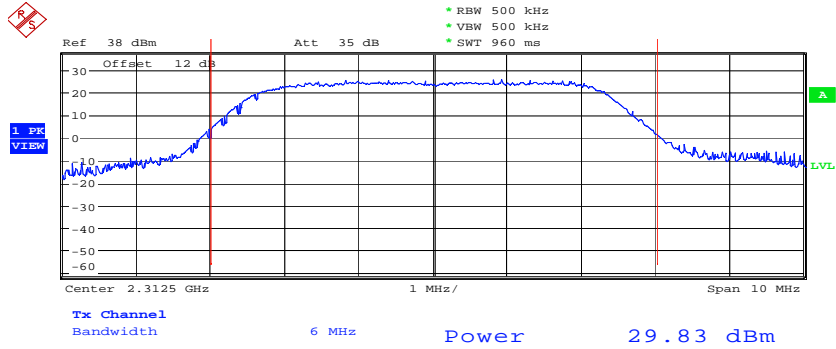


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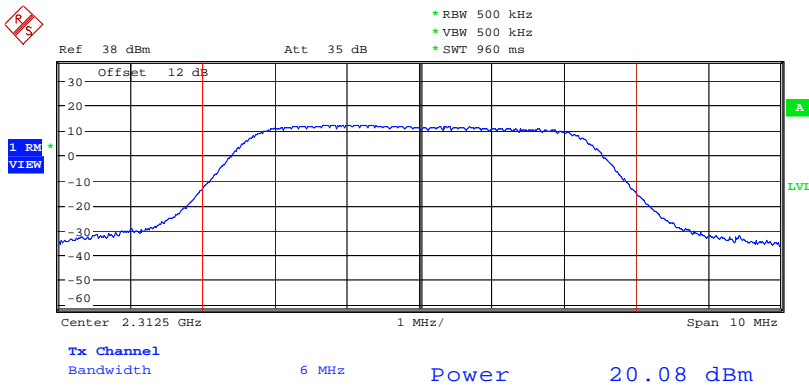


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Operation Frequency 2312.5MHz



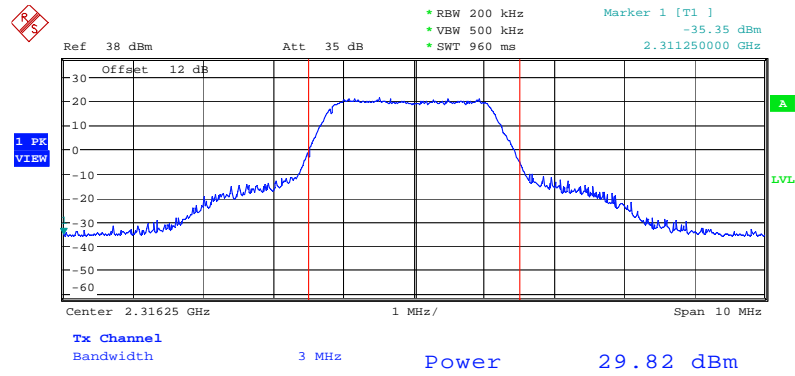
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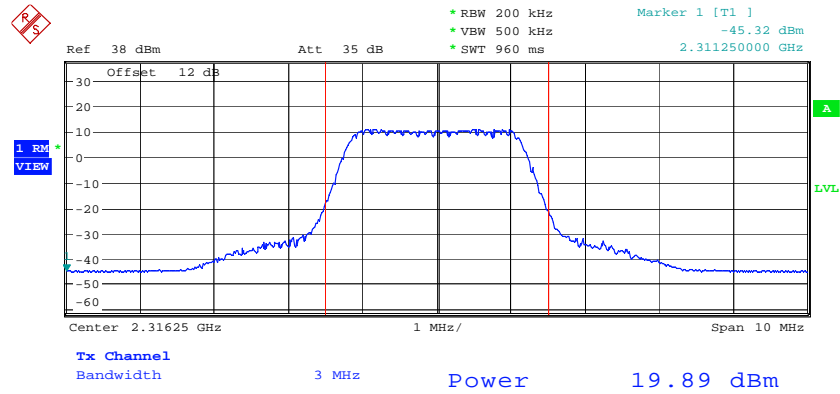
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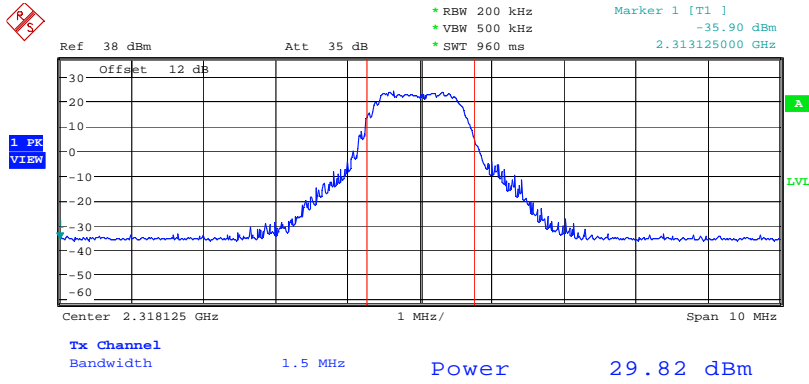


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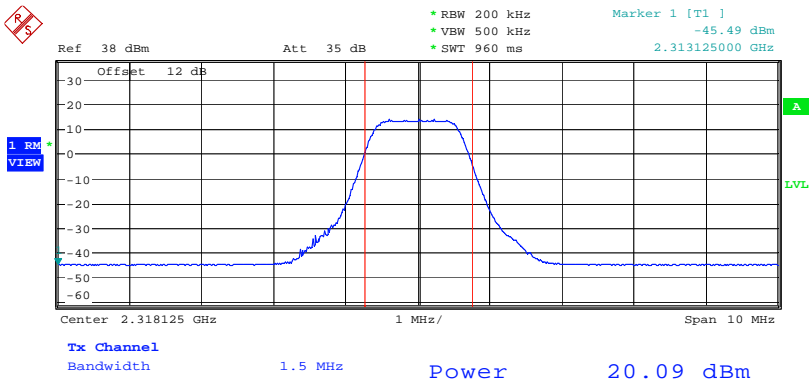


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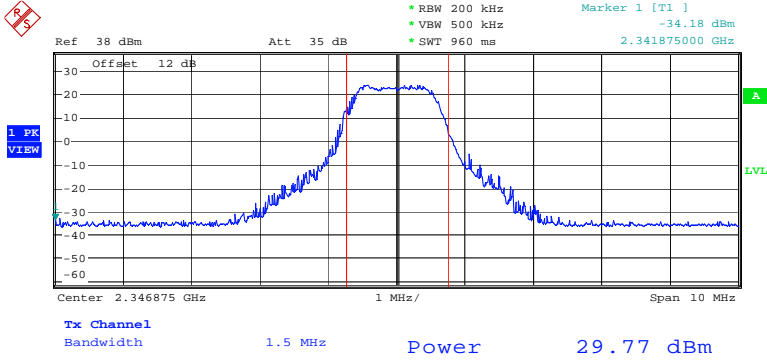


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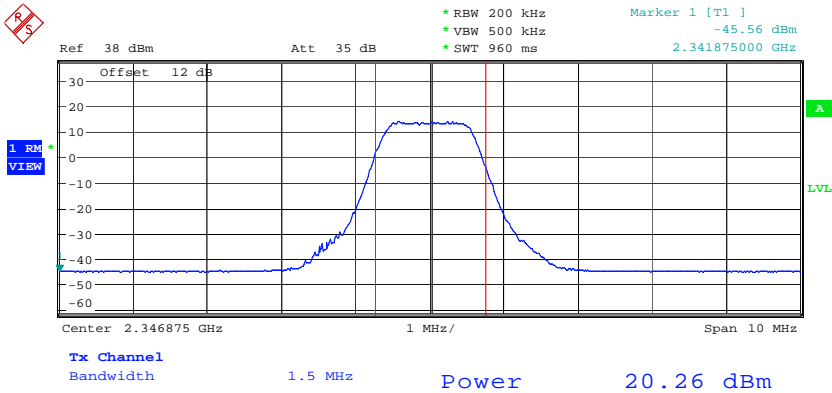


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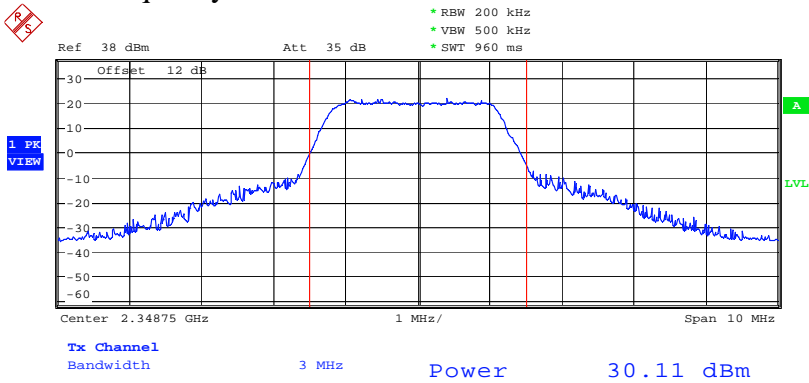


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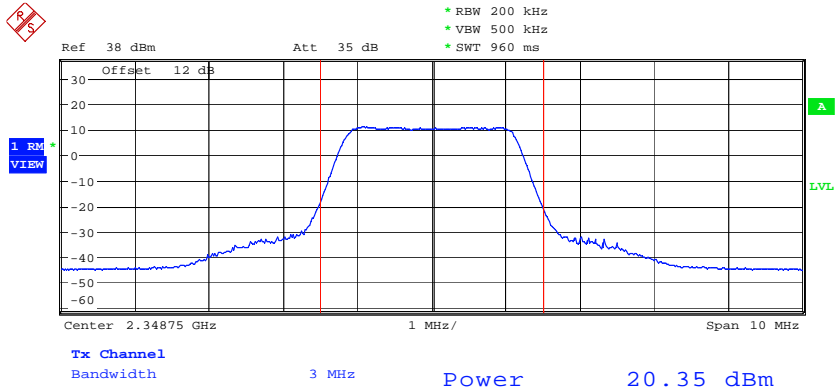


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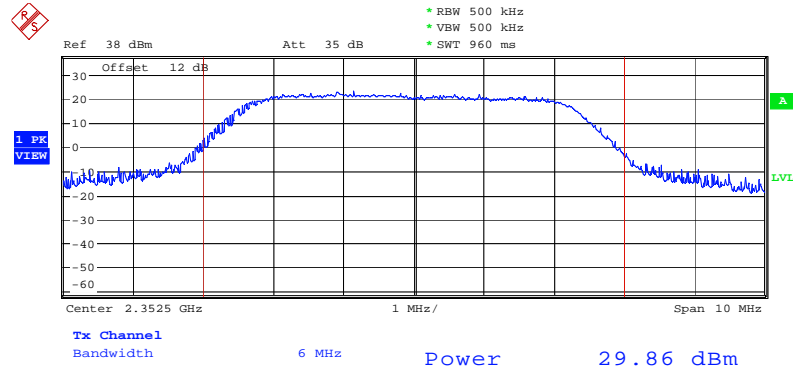


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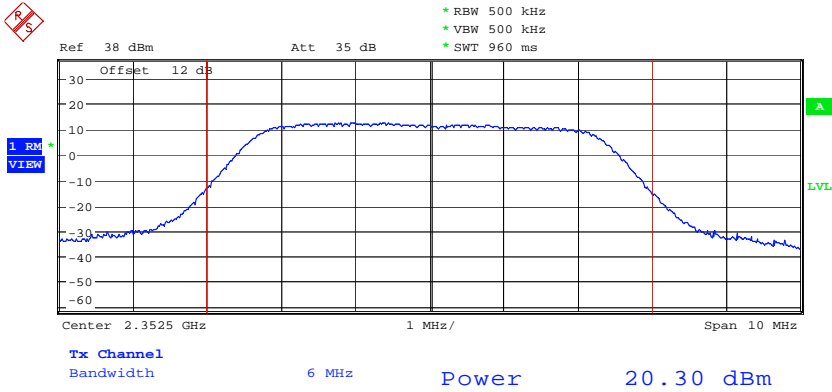


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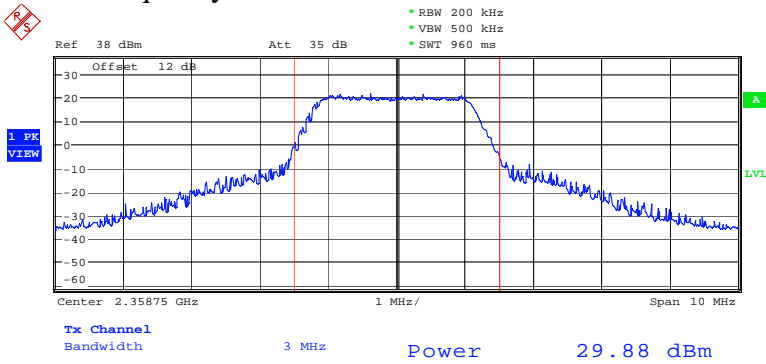


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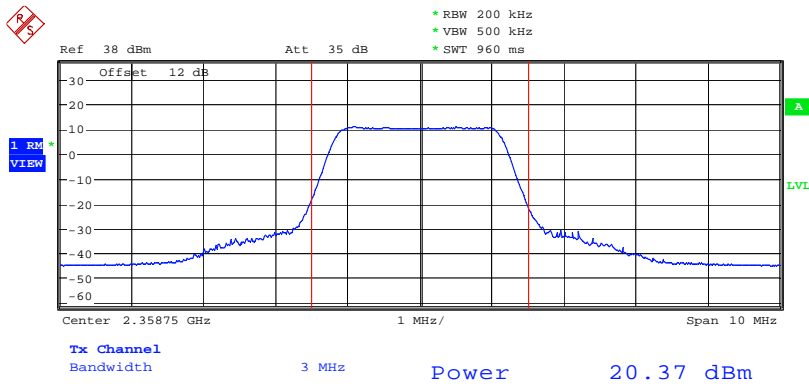


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Operation Frequency 2358.75MHz

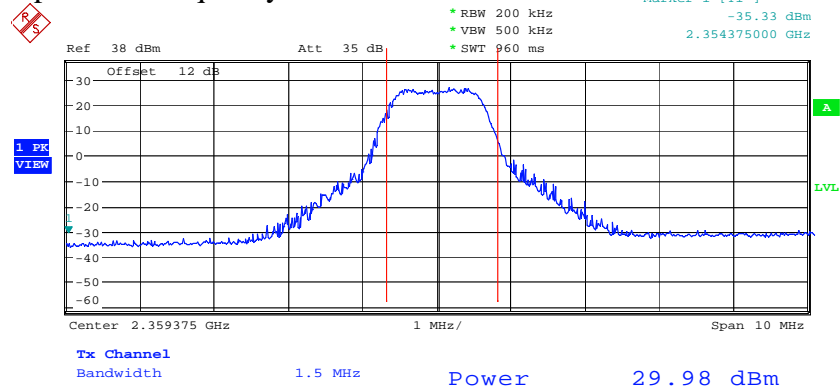


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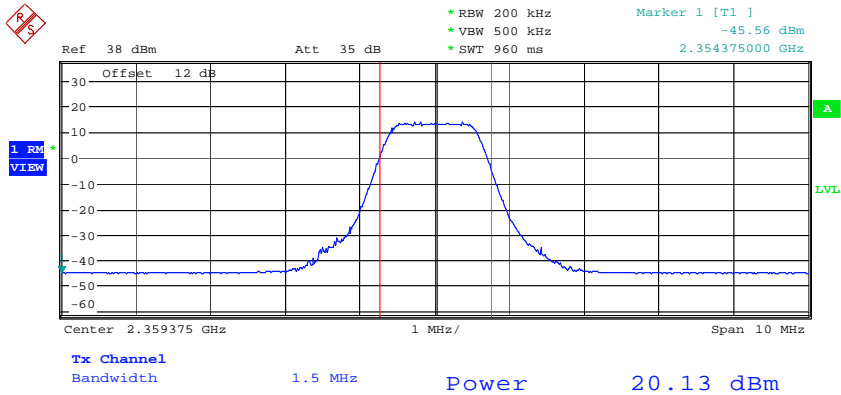


Date: 19.MAY.2006 11:27:55

Operation Frequency 2359.375MHz



Date: 19.MAY.2006 10:43:45



Date: 19.MAY.2006 10:44:17

**Clause 27.53(a) Occupied Bandwidth**

(a) For operations in the bands 2305-2320 MHz and 2345-2360 MHz, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:

(1) For fixed, land, and radiolocation land stations: By a factor not less than  $80 + 10 \log(p)$  dB on all frequencies between 2320 and 2345 MHz;

(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth;

**Test Conditions:**

<b>Sample Number:</b>	1, 2, 3	<b>Temperature:</b>	21°C
<b>Date:</b>	May 12, 2006	<b>Humidity:</b>	52%
<b>Modification State:</b>	0	<b>Tester:</b>	Xu Jin
		<b>Laboratory:</b>	Ottawa

**Test Results:** Pass

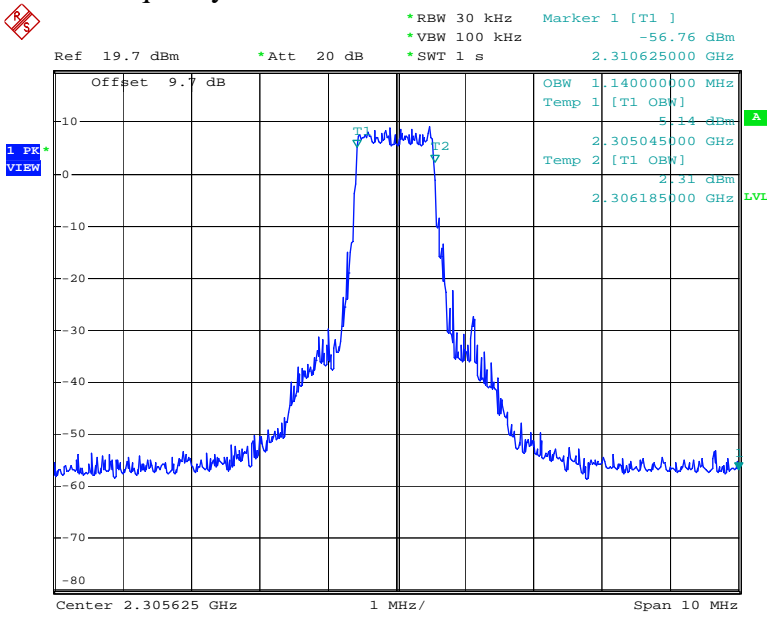
**Test Data:** See attached tables and plots.

99% Occupied Bandwidth Test Data

Frequency (MHz)	Occupied Bandwidth (MHz)
2305.625	1.14
2306.25	2.26
2312.5	4.58
2316.25	2.26
2318.125	1.14
2346.875	1.16
2348.75	2.26
2352.5	4.56
2358.75	2.26
2359.375	1.14

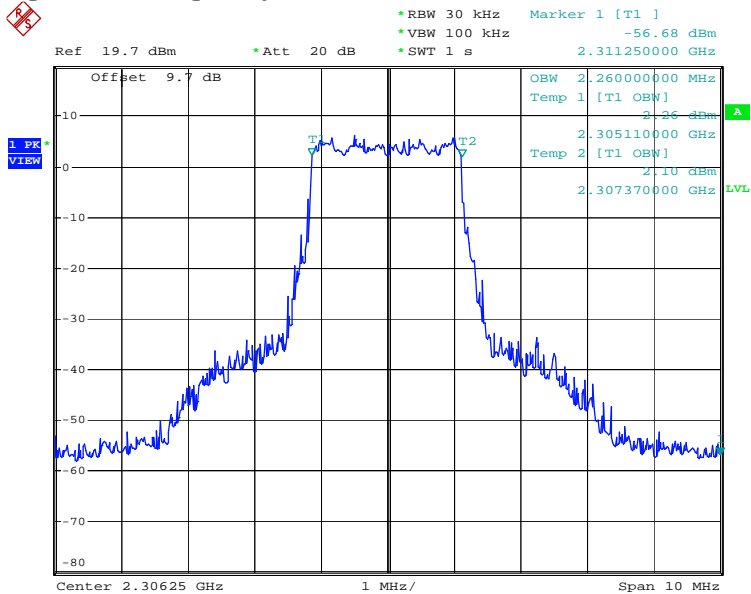


Operation Frequency 2305.625MHz



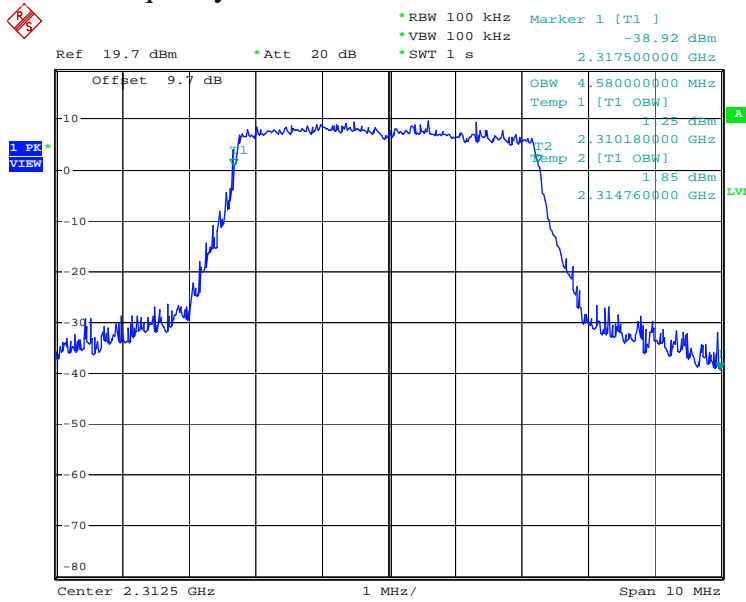
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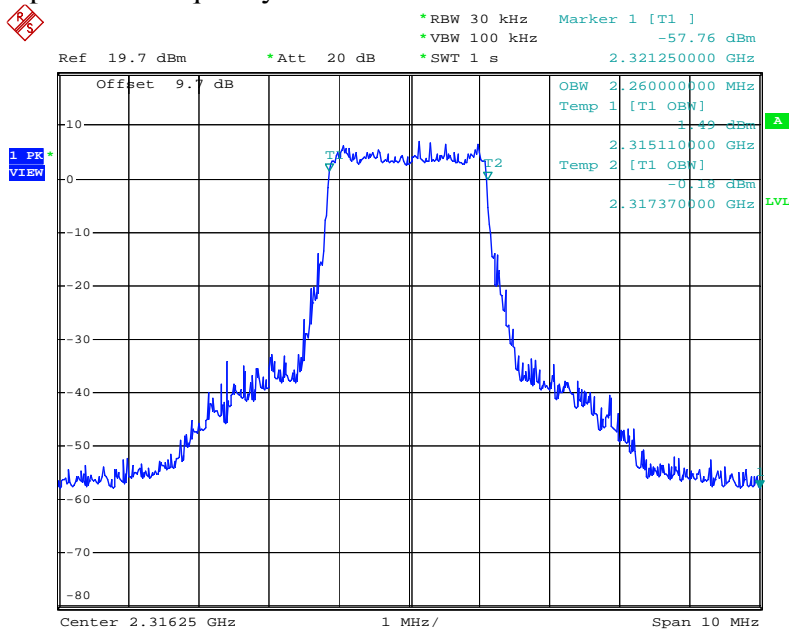
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Operation Frequency 2312.5MHz



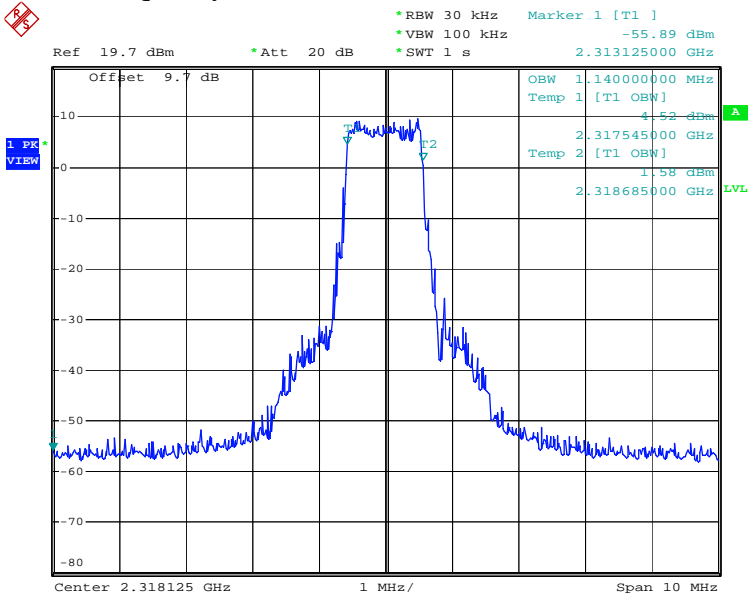
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Operation Frequency 2316.25MHz



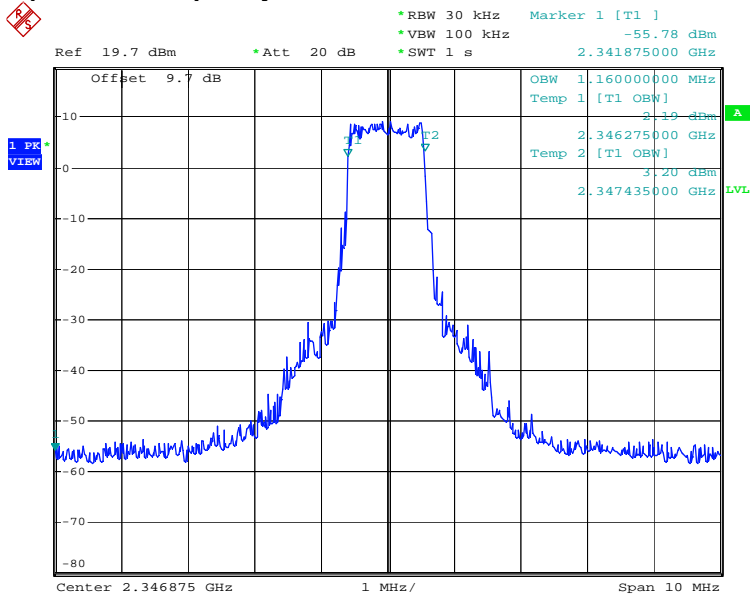
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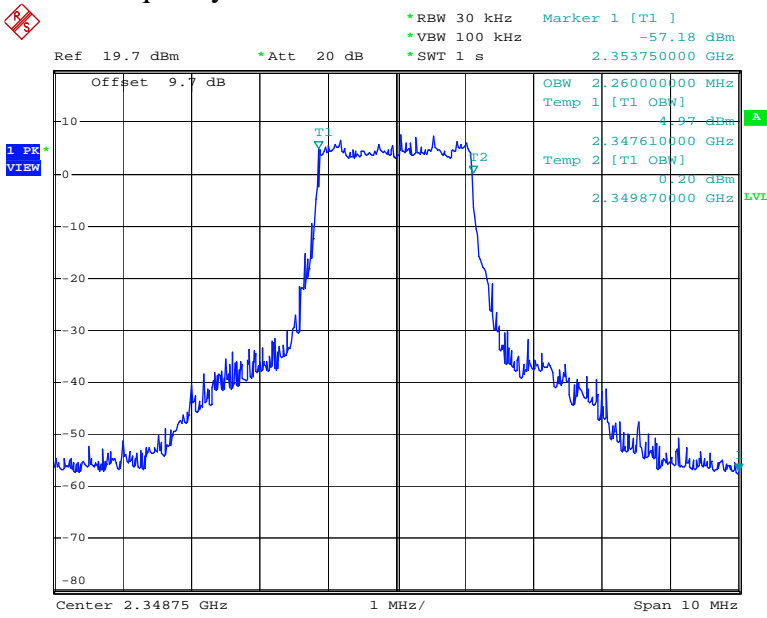
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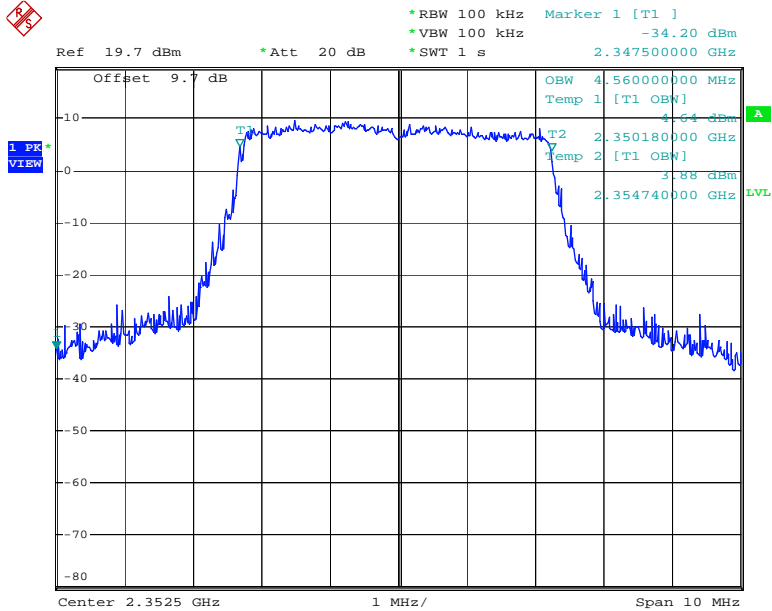
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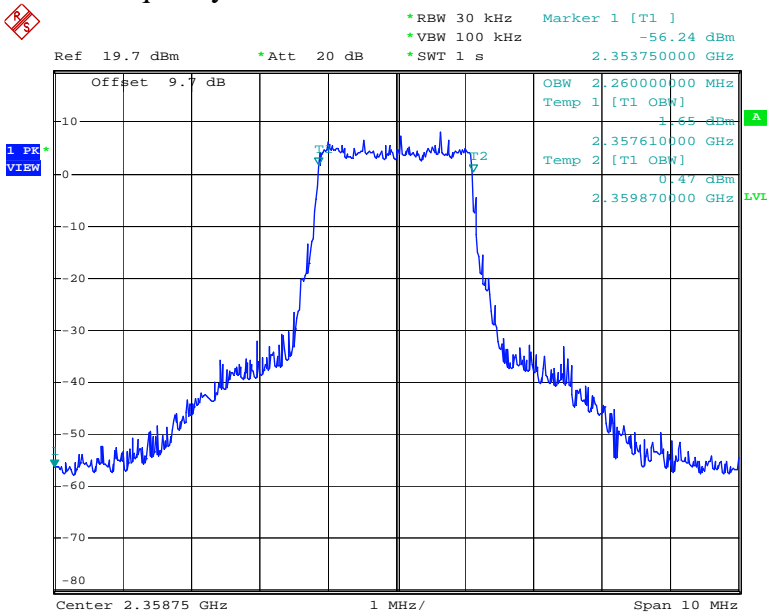
Date: 12.MAY.2006 21:52:31

Operation Frequency 2352.5MHz



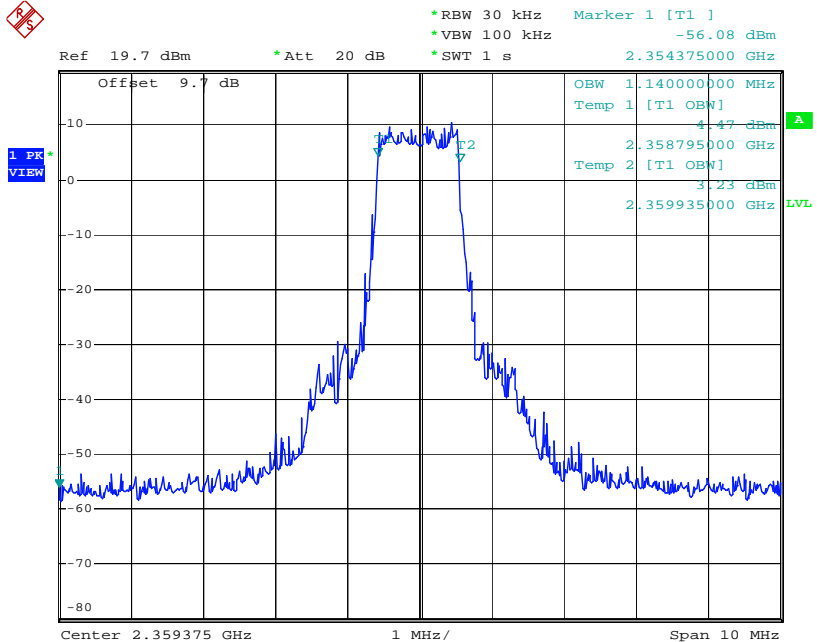
Date: 12.MAY.2006 22:18:29

Operation Frequency 2358.75MHz



Date: 12.MAY.2006 21:51:09

Operation Frequency 2359.375MHz



Date: 12.MAY.2006 22:06:35

**Clause 27.53(a). Spurious emissions at the antenna terminal**

(a) For operations in the bands 2305-2320 MHz and 2345-2360 MHz, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:

(1) For fixed, land, and radiolocation land stations: By a factor not less than  $80 + 10 \log (p)$  dB on all frequencies between 2320 and 2345 MHz;

(3) For fixed, land, mobile, radiolocation land and radiolocation mobile stations: By a factor not less than  $70 + 10 \log (p)$  dB on all frequencies below 2300 MHz and on all frequencies above 2370 MHz; and not less than  $43 + 10 \log (p)$  dB on all frequencies between 2300 and 2320 MHz and on all frequencies between 2345 and 2370 MHz that are outside the licensed bands of operation;

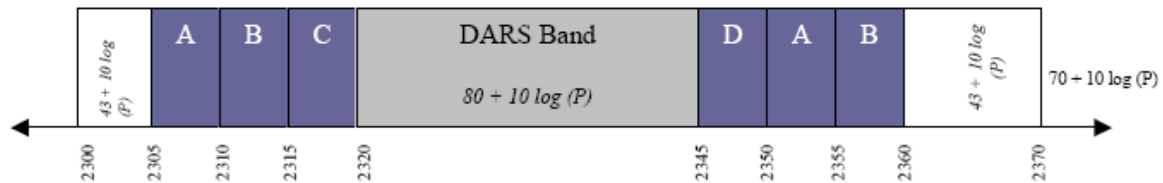
(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth;

**Test Conditions:**

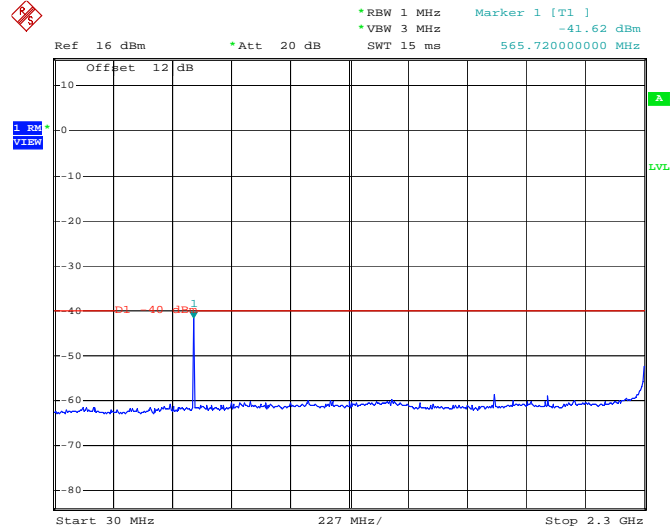
<b>Sample Number:</b>	1, 2, 3	<b>Temperature:</b>	21°C
<b>Date:</b>	May 15, 2006	<b>Humidity:</b>	52%
<b>Modification State:</b>	0	<b>Tester:</b>	Xu Jin
		<b>Laboratory:</b>	Ottawa

**Test Results:** Complies

**Test Data:** See Attached Plots.

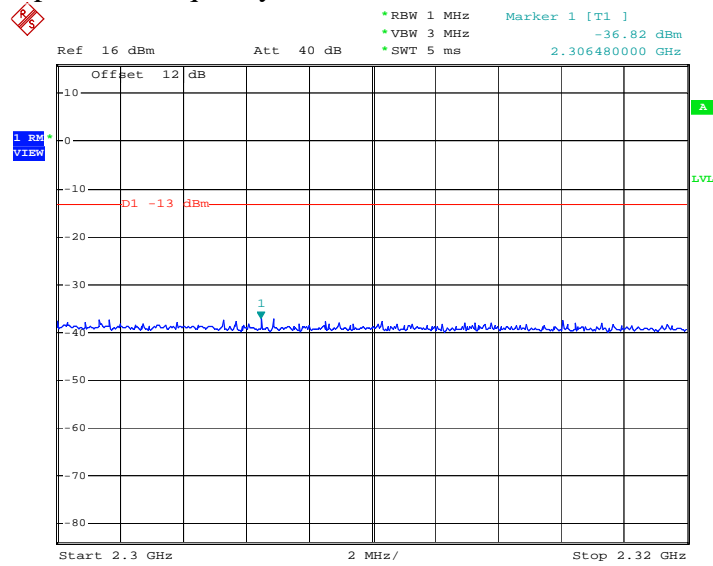


Operation frequency 2305.625MHz



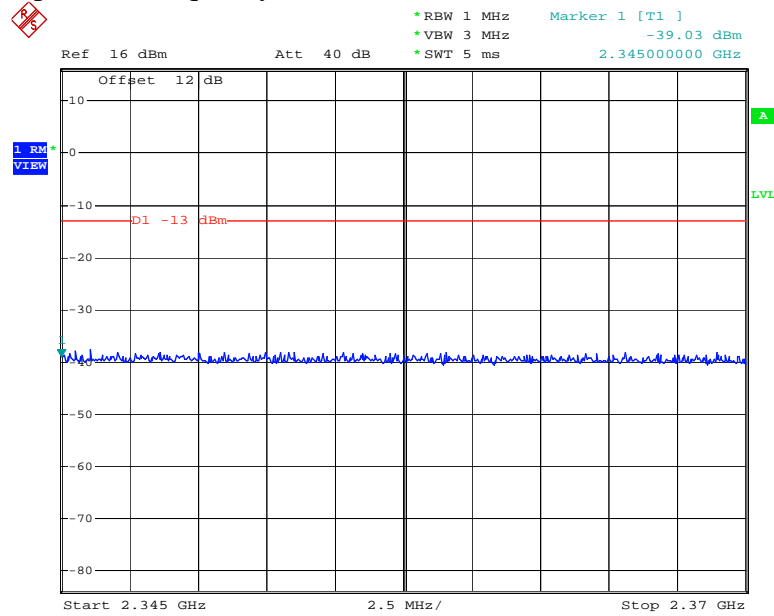
Date: 15.MAY.2006 15:21:12

Operation frequency 2346.875MHz



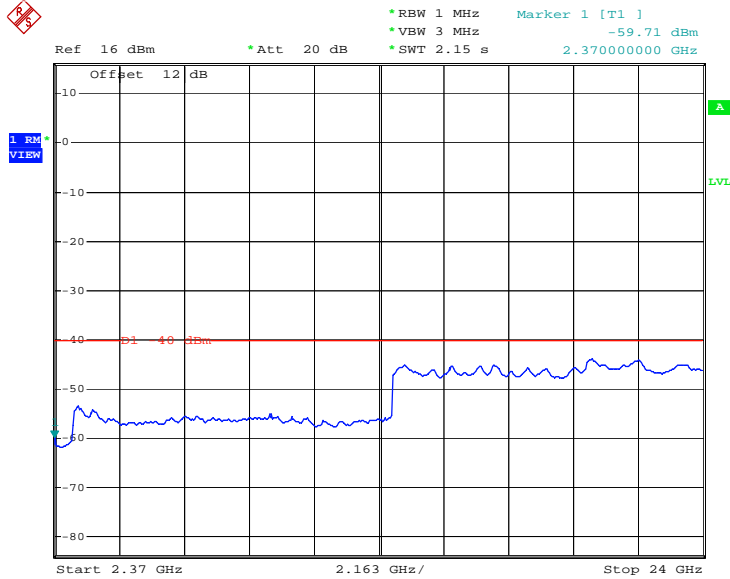
Date: 15.MAY.2006 16:03:12

Operation frequency 2318.125MHz



Date: 15.MAY.2006 16:12:28

Operation frequency 2359.375MHz



Date: 15.MAY.2006 16:20:27

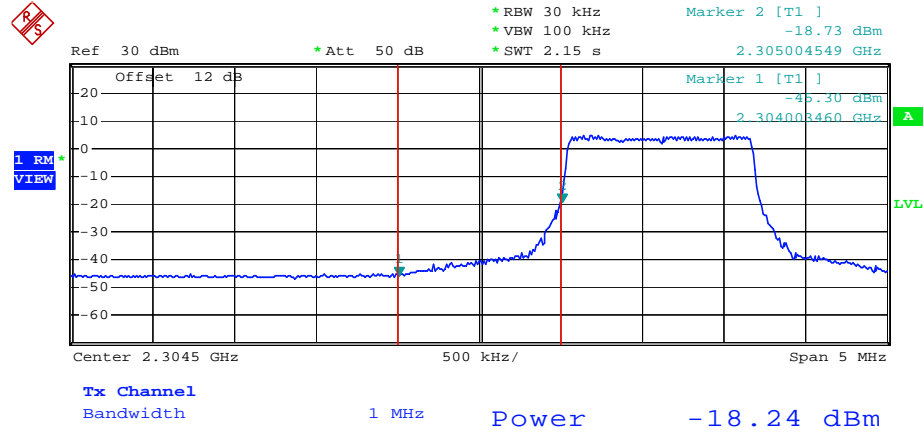


Sub Band Checking

Band A---Lower band edge 2305MHz

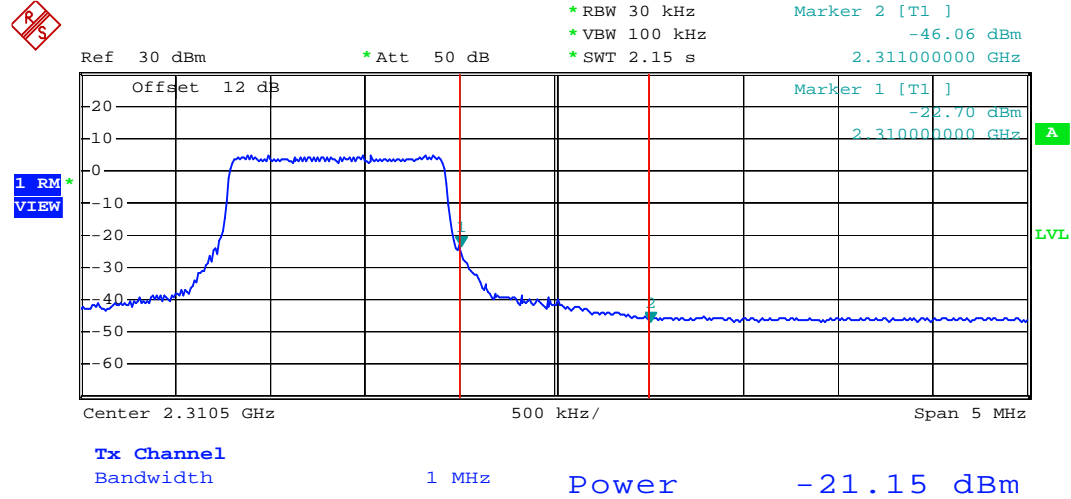
Operation frequency---2305.625MHz

Limit: -13dBm



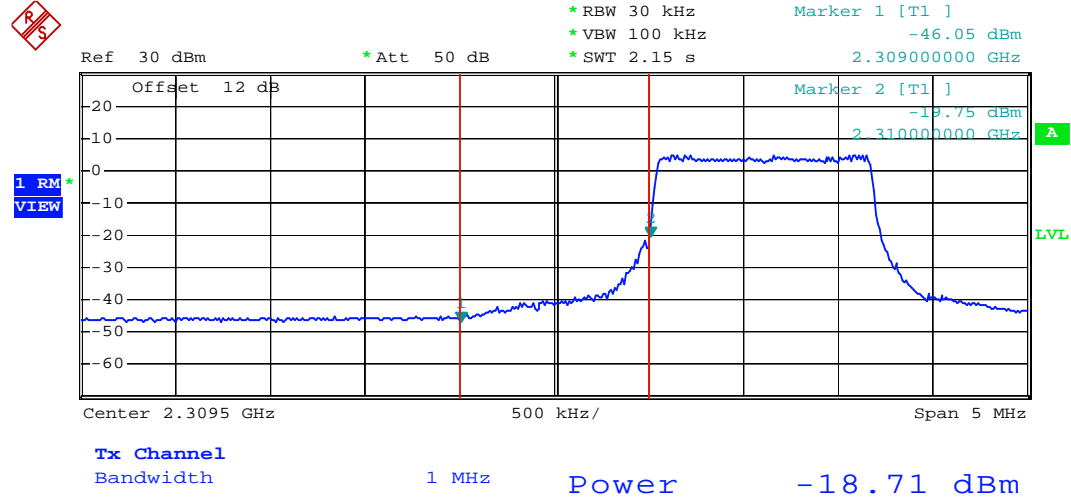
Date: 15.MAY.2006 19:26:30

Band A---Higher band edge 2310MHz  
Operation frequency----2309.375MHz  
Limit: -13dBm



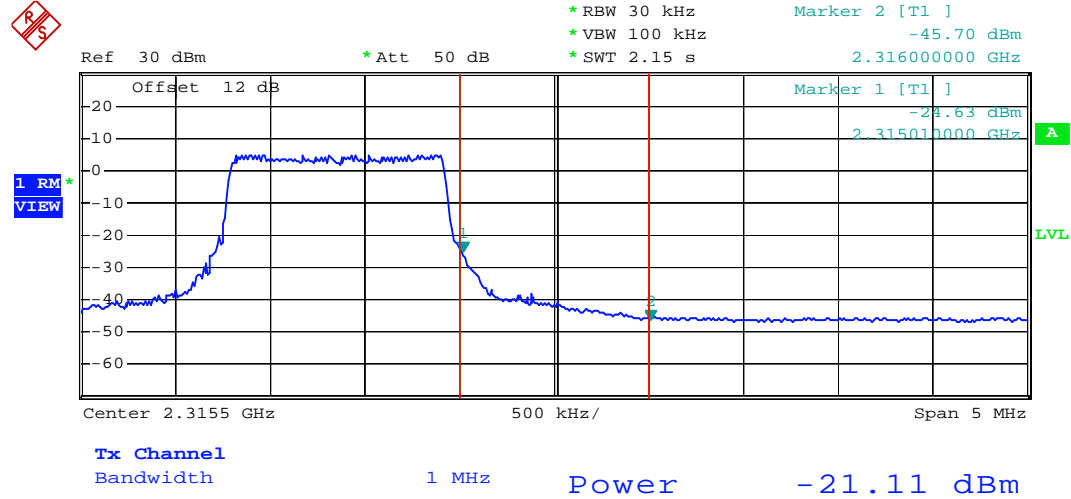
Date: 15.MAY.2006 19:33:54

Band B---lower band edge 2310MHz  
Operation frequency----2310.625MHz  
Limit: -13dBm



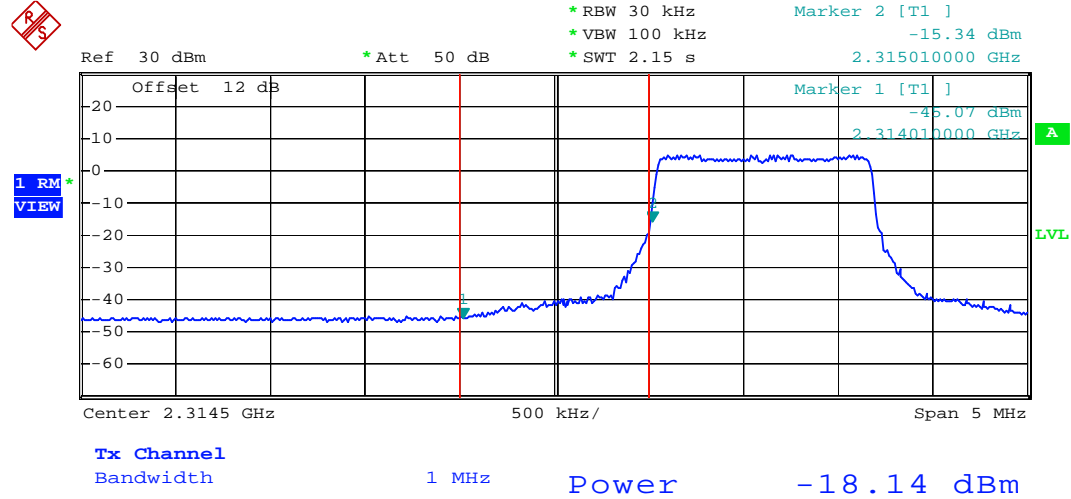
Date: 15.MAY.2006 19:42:11

Band B--- Higher band edge 2315MHz  
Operation frequency----2314.375MHz  
Limit: -13dBm



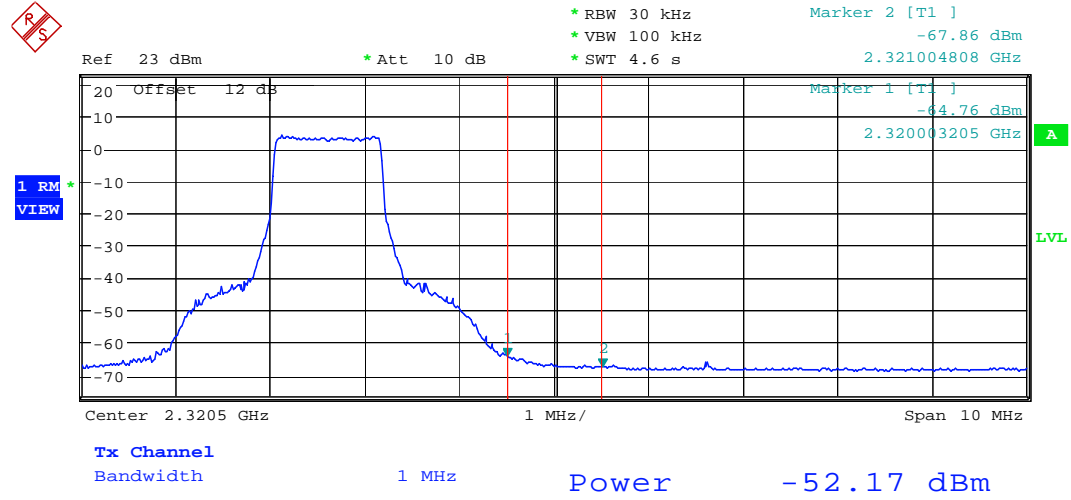
Date: 15.MAY.2006 19:46:57

Band C--- Lower band edge 2315MHz  
Operation frequency----2315.625MHz  
Limit: -13dBm



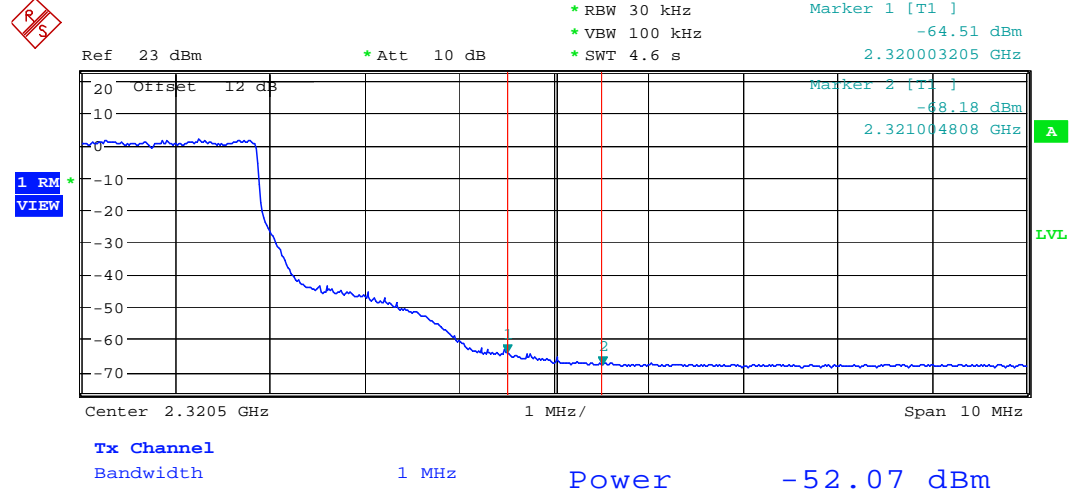
Date: 15.MAY.2006 19:52:13

DARS Band---Lower band edge 2320MHz  
Operation frequency----2318.125MHz  
Limit: -50dBm



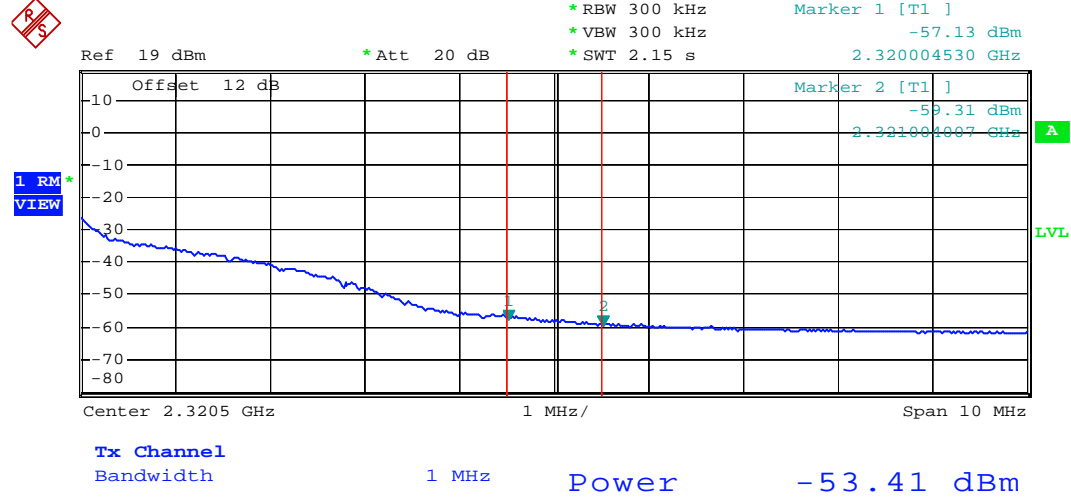
Date: 16.MAY.2006 15:47:44

DARS Band --- Lower band edge 2320MHz  
Operation frequency----2316.25MHz  
Limit: -50dBm



Date: 16.MAY.2006 15:53:03

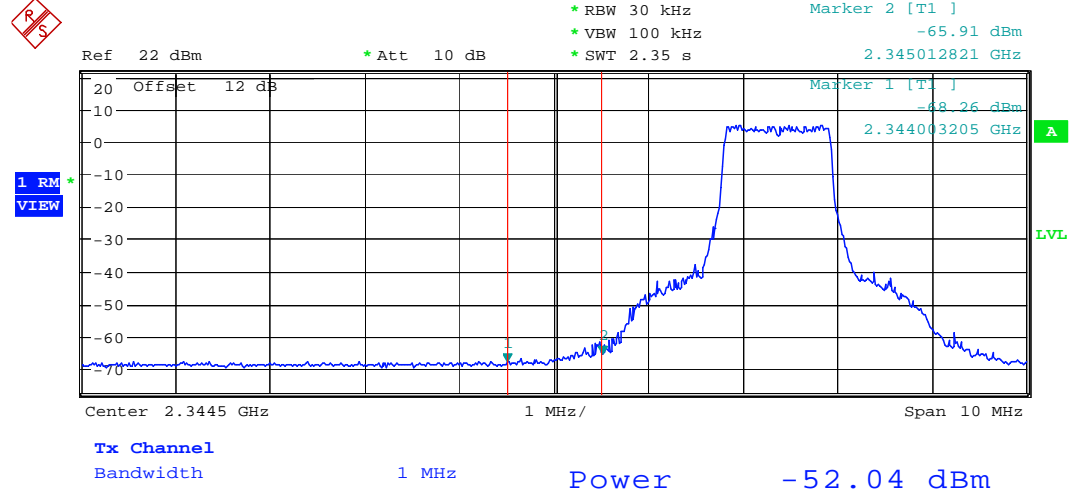
DARS Band ---Lower Band Edge 2320MHz  
Operation frequency----2312.5MHz  
Limit: -50dBm



Date: 16.MAY.2006 22:17:35

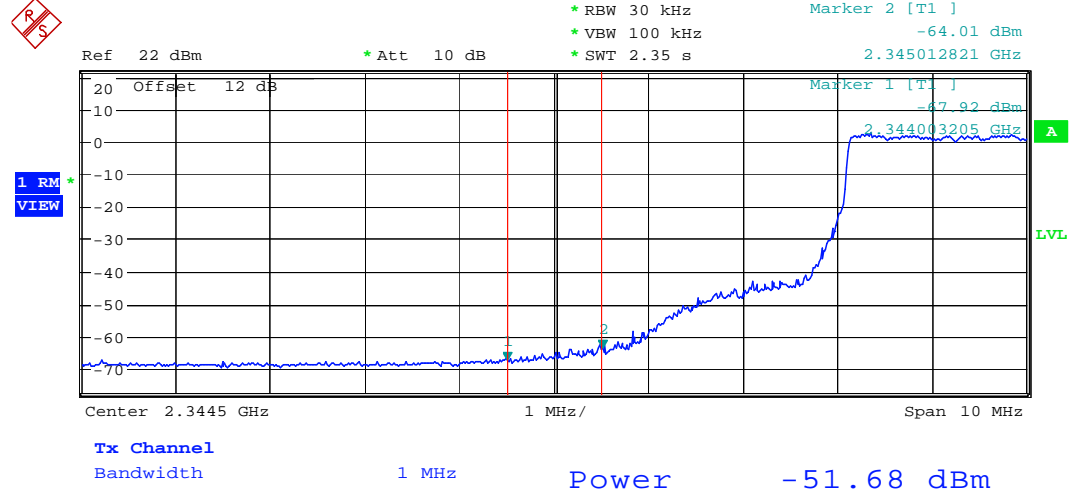


DARS Band --- Higher band edge 2345MHz  
Operation frequency----2346.875MHz  
Limit: -50dBm



Date: 17.MAY.2006 08:39:41

DARS Band --- Higher band edge 2345MHz  
Operation frequency----2348.75MHz  
Limit: -50dBm

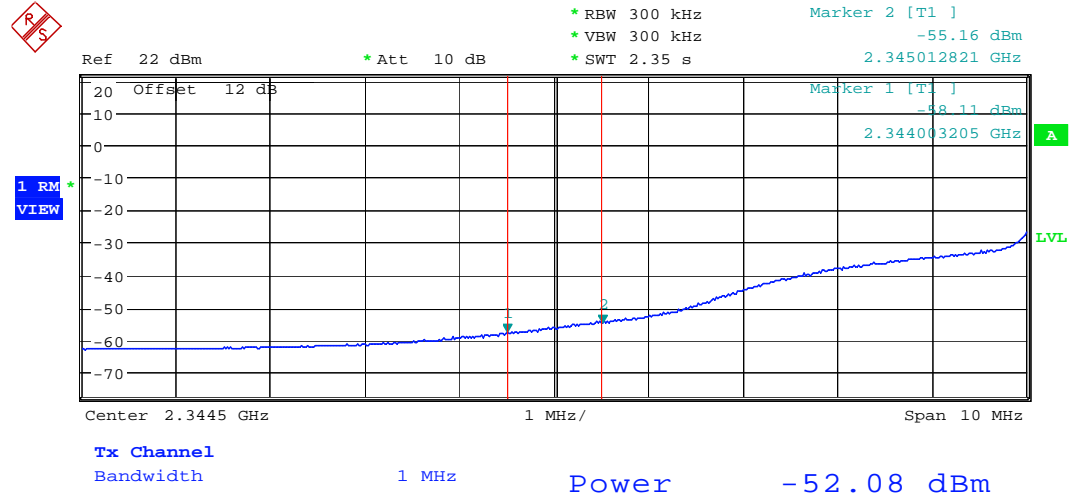


Date: 17.MAY.2006 08:45:05

DARS Band ---Higher band edge 2345MHz

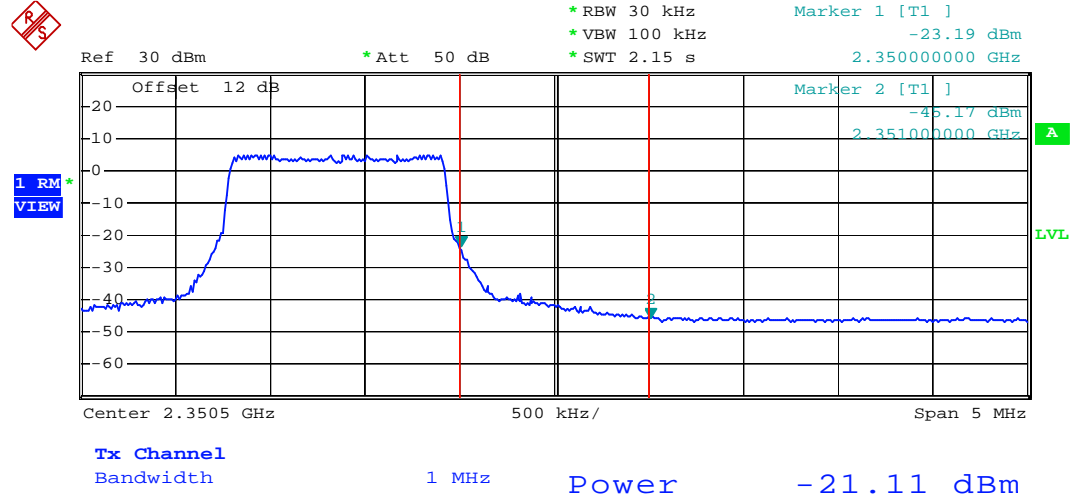
Operation frequency----2352.5MHz

Limit: -50dBm



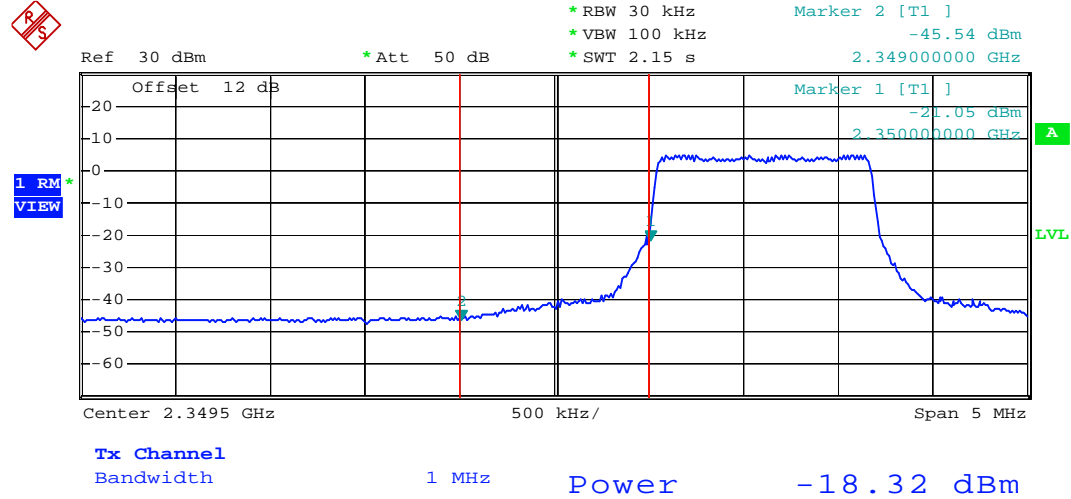
Date: 17.MAY.2006 08:53:49

Band D---Higher band edge 2350MHz  
Operation frequency----2349.375MHz  
Limit: -13dBm



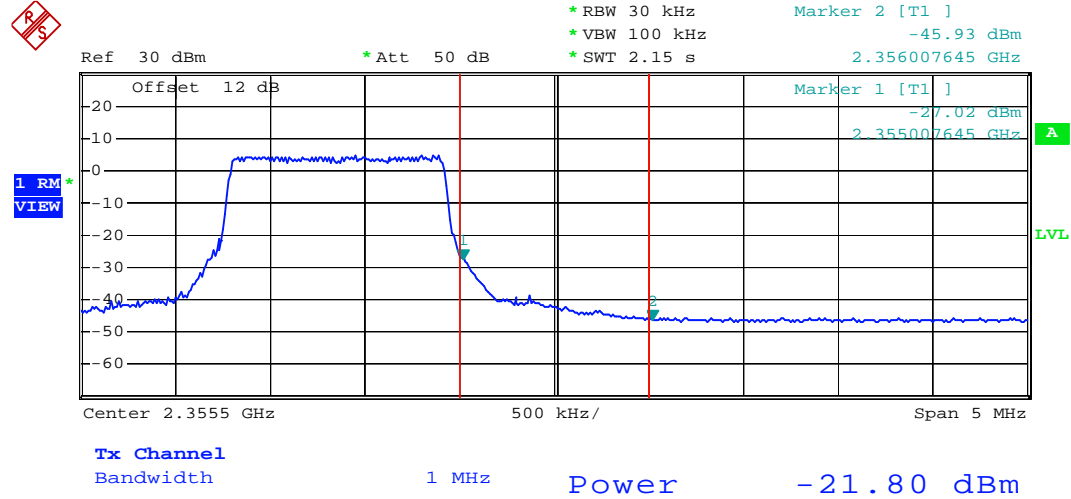
Date: 15.MAY.2006 19:59:00

Band A ---Lower band edge 2350MHz  
Operation frequency----2350.625MHz  
Limit: -13dBm



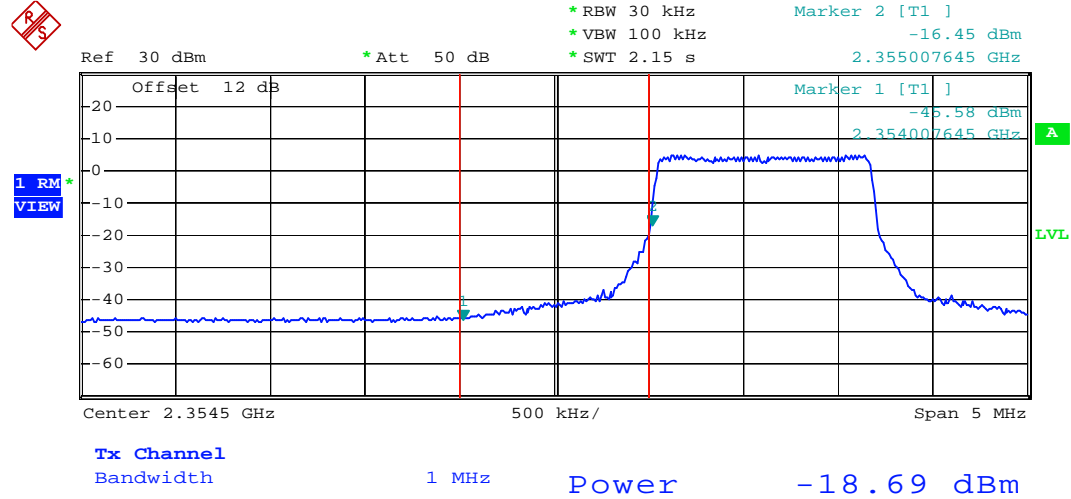
Date: 15.MAY.2006 20:02:24

Band A---Higher band edge 2355MHz  
Operation frequency----2354.375MHz  
Limit: -13dBm



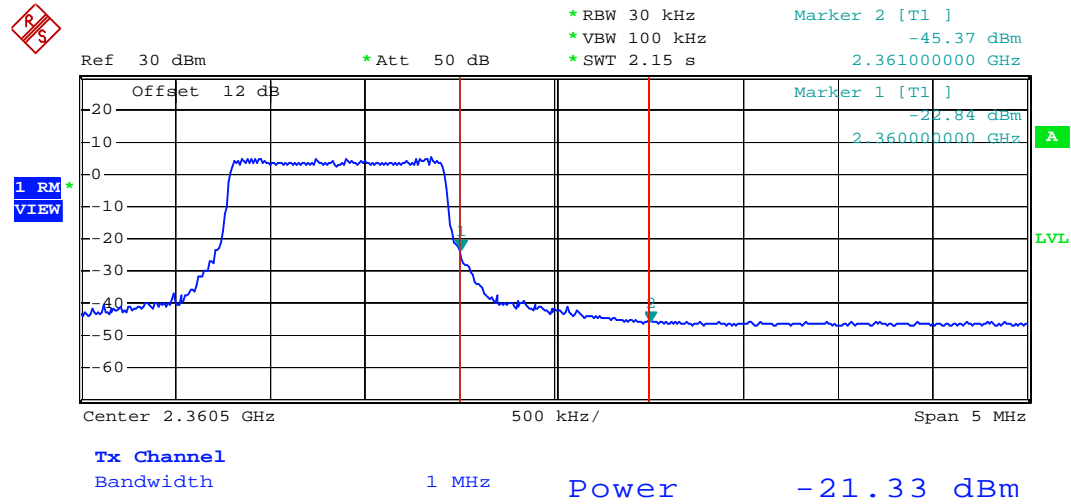
Date: 15.MAY.2006 20:07:47

Band B---Lower band edge 2355MHz  
Operation frequency----2355.625MHz  
Limit: -13dBm



Date: 15.MAY.2006 20:13:27

Band B check— Higher band edge 2360MHz  
Operation frequency----2359.375MHz  
Limit: -13dBm



Date: 15.MAY.2006 20:21:01



**Clause 27..53(a) Field Strength of Spurious Radiation**

(a) For operations in the bands 2305-2320 MHz and 2345-2360 MHz, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:

(1) For fixed, land, and radiolocation land stations: By a factor not less than  $80 + 10 \log (p)$  dB on all frequencies between 2320 and 2345 MHz;

(3) For fixed, land, mobile, radiolocation land and radiolocation mobile stations: By a factor not less than  $70 + 10 \log (p)$  dB on all frequencies below 2300 MHz and on all frequencies above 2370 MHz; and not less than  $43 + 10 \log (p)$  dB on all frequencies between 2300 and 2320 MHz and on all frequencies between 2345 and 2370 MHz that are outside the licensed bands of operation;

**Test Conditions:**

<b>Sample Number:</b>	1, 2, 3	<b>Temperature:</b>	21°C
<b>Date:</b>	May 12, 2006	<b>Humidity:</b>	52%
<b>Modification State:</b>	0	<b>Tester:</b>	Xu Jin
		<b>Laboratory:</b>	Ottawa

**Test Results:**

See Attached Table for Results

**Additional Observations:**

All measurements were performed using a Quasi-Peak detector with 100kHz RBW/VBW below 1GHz and RMS detector at 1MHz RBW/VBW above 1GHz at a distance of 3 meters.

The spectrum was searched from 30MHz to the 10<sup>th</sup> Harmonic. The low, medium and high frequency have been evaluated.

Only worst case data was reported

Freq. (MHz)	Ant.	Pol. V/H	RCVD Signal (dBμV)	Sig Sub. Factor (dB)	Signal Substitution Power (dBm)	Limit (dBm)	Margin (dB)
4611.2500	Horn2	H	64.6	-111.4	-46.8	-40	6.8
4611.2500	Horn2	V	58.8	-112.6	-53.8	-40	13.8
6916.8750	Horn2	H	63.3	-105.7	-42.4	-40	2.4
6916.8750	Horn2	V	50.2	-106.9	-56.7	-40	16.7
4636.2500	Horn2	H	65.2	-111.4	-46.1	-40	6.1
4636.2500	Horn2	V	61.5	-112.5	-51.0	-40	11
6954.3750	Horn2	H	64.3	-106.1	-41.7	-40	1.7
6954.3750	Horn2	V	53.2	-107.1	-53.9	-40	13.9
4718.7500	Horn2	H	63.3	-111.1	-47.8	-40	7.8
4718.7500	Horn2	V	60.4	-112.1	-51.7	-40	11.7
7078.1250	Horn2	H	64.1	-106.2	-42.1	-40	2.1
7078.1250	Horn2	V	52.8	-106.5	-53.8	-40	13.8

Note 1: Antenna Legend: BC = Biconical, BL = Bilog, LP = Log-Periodic, Horn = Horn, ED = EMCO Dipol

**Clause 27.54 Frequency Stability**

§27.54 Frequency stability. - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

**Test Conditions:**

<b>Sample Number:</b>	1,2,3	<b>Temperature:</b>	21°C
<b>Date:</b>	May 18, 2006.	<b>Humidity:</b>	50%
<b>Modification State:</b>	0	<b>Tester:</b>	Xu Jin
		<b>Laboratory:</b>	Wireless Lab

**Test Results:** Complies

**Test Conditions** Ambient Temperature: 21°C  
 Extreme Temperature: -30°C to +50°C  
 Extreme Voltage Conditions: +/-15% of 120VAC

**Test Data:** See attached tables and plots

**Frequency Stability Test Data**

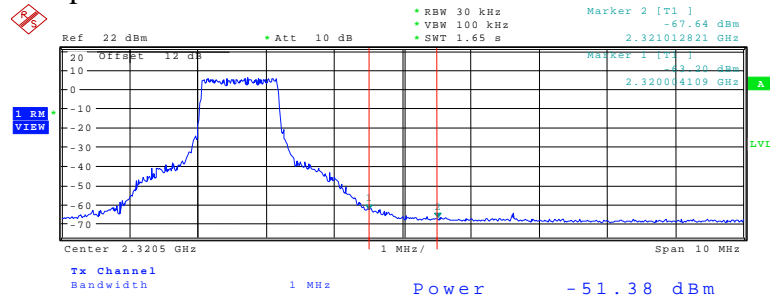
Test Condition	Measured Frequency (MHz)	Frequency Drift (kHz)	Frequency Drift (ppm)
+21°C, 120VAC	2318.112341	---	---
+21°C, 138VAC	2318.112358	0.02	0.01
+21°C, 102VAC	2318.112361	0.02	0.01
+50°C, 120VAC	2318.113153	0.81	0.35
+40°C, 120VAC	2318.110099	-2.24	-0.97
+30°C, 120VAC	2318.111143	-1.20	-0.52
+20°C, 120VAC	2318.114968	2.63	1.13
+10°C, 120VAC	2318.119145	6.80	2.93
0°C, 120VAC	2318.124302	11.96	5.16
-10°C, 120VAC	2318.12771	15.37	6.63
-20°C, 120VAC	2318.128977	16.64	7.18
-30°C, 120VAC	2318.12651	14.17	6.11

DARS Band---Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +50°C

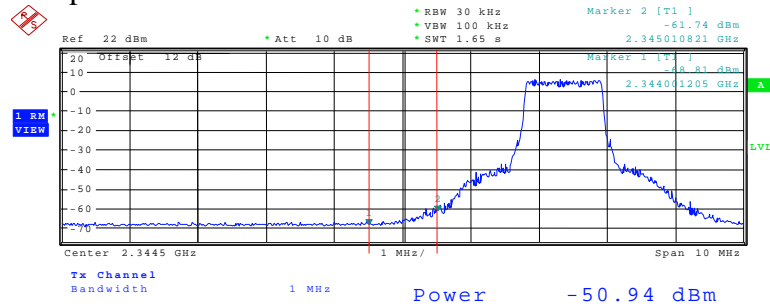


DARS Band ---Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +50°C

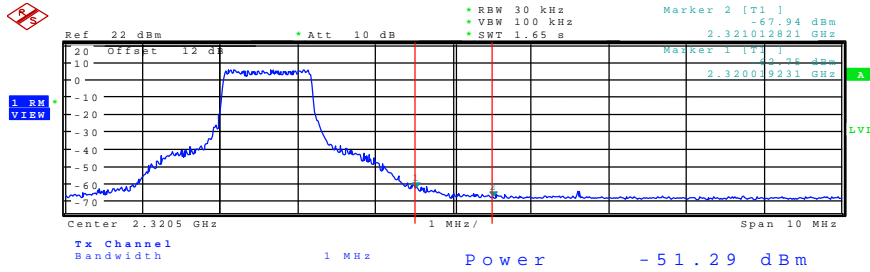


DARS Band ---Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +40°C

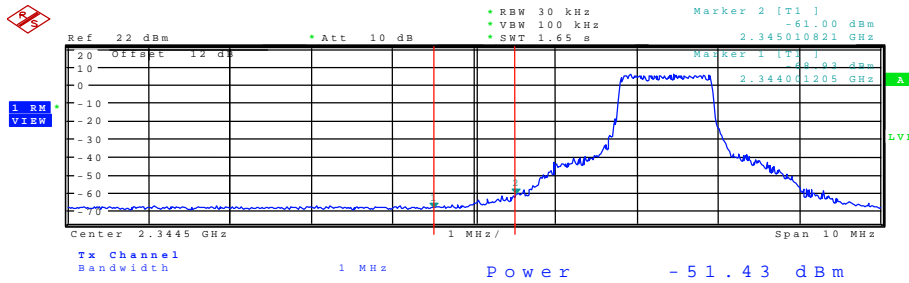


DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +40°C

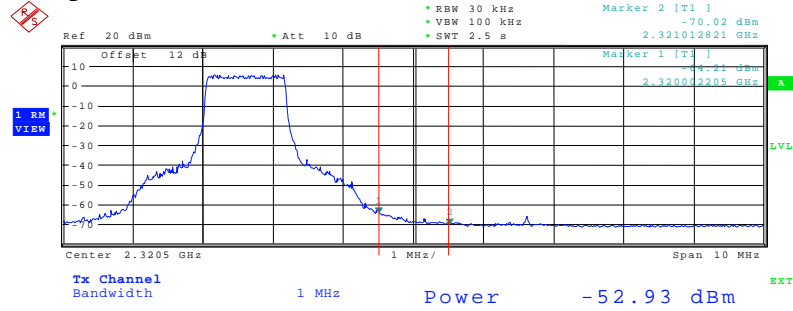


DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +30°C

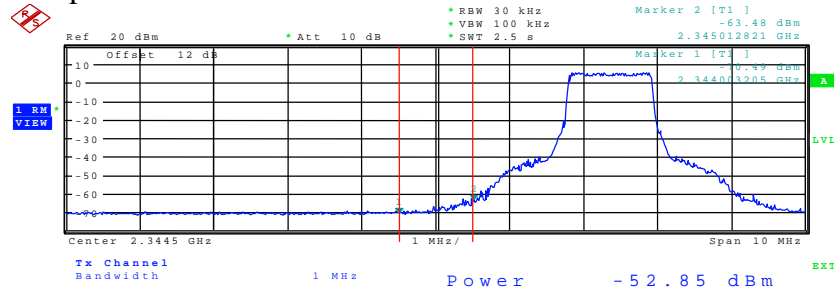


DARS Band—Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +30°C

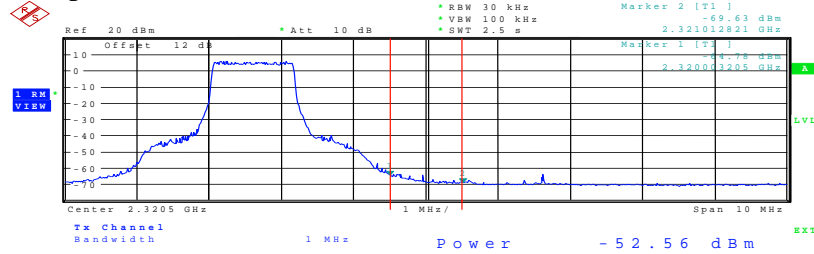


DARS Band ---Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +20°C

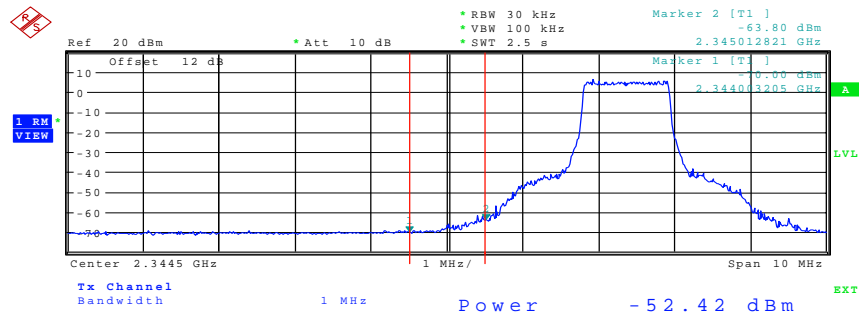


DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +20°C

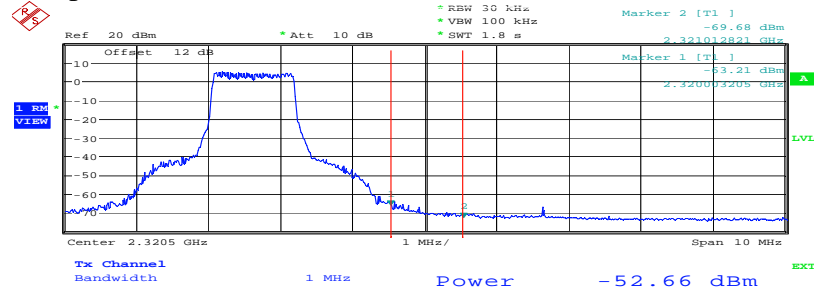


DARS Band---Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +10°C



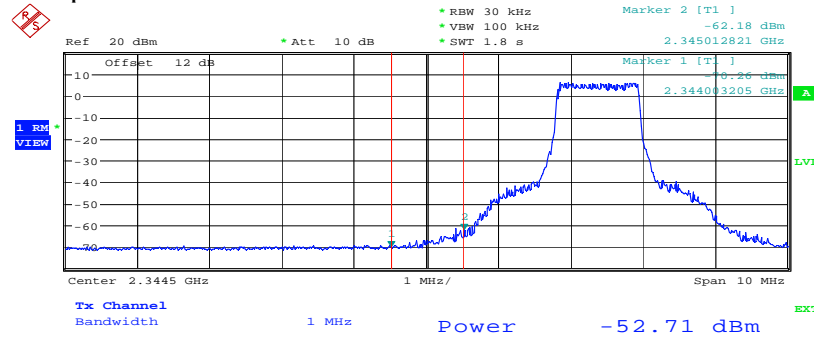
Date: 17.MAY.2006 15:51:46

DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +10°C



Date: 17.MAY.2006 15:53:35

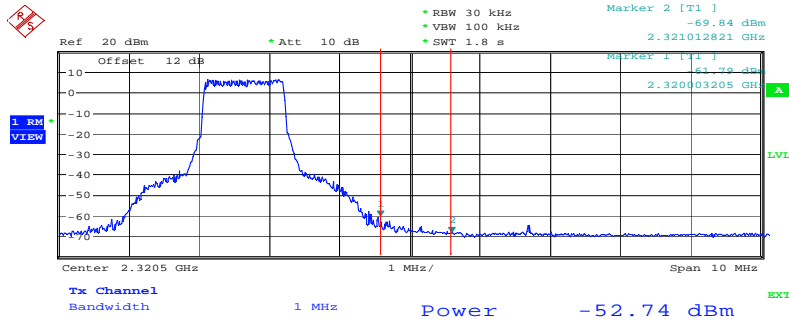


DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: +0°C



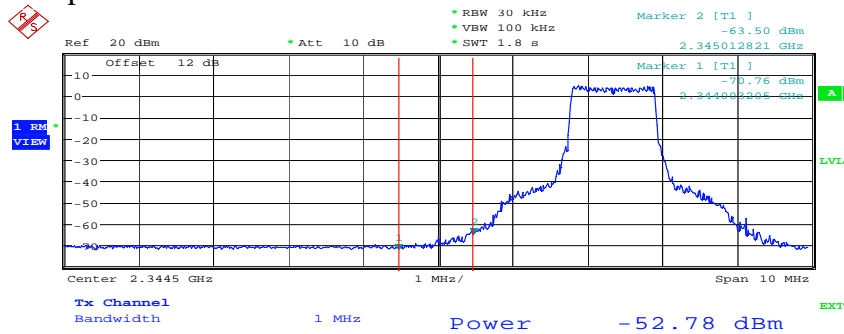
Date: 17.MAY.2006 16:20:23

DARS Band---Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: +0°C



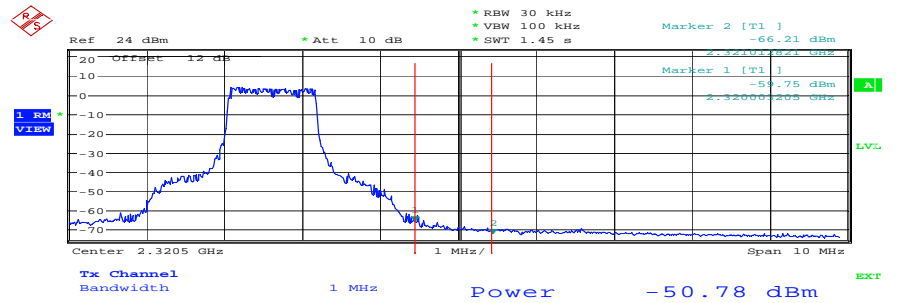
Date: 17.MAY.2006 16:19:11

DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: -10°C



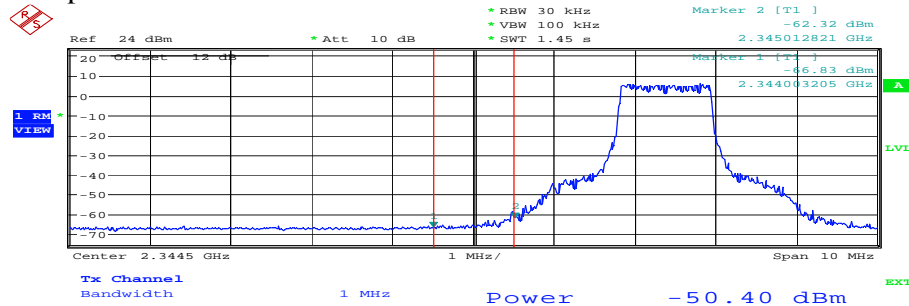
Date: 18.MAY.2006 10:22:13

DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: -10°



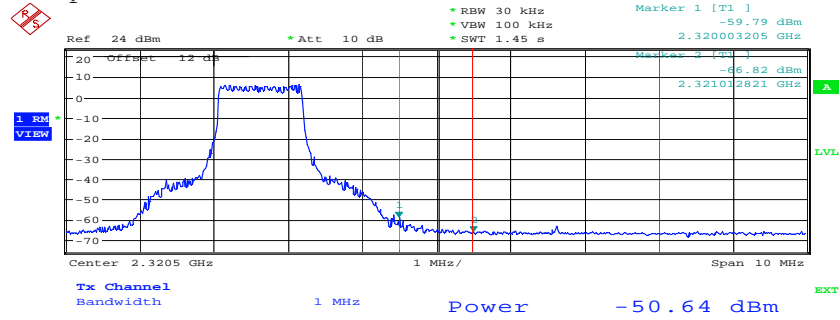
Date: 18.MAY.2006 10:24:52

DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Temperature: -20°C



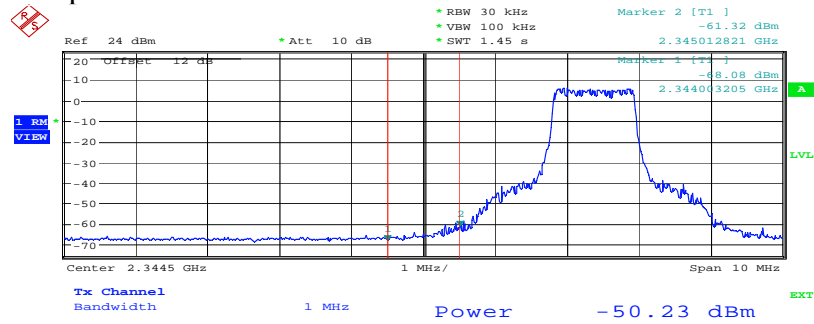
Date: 18.MAY.2006 10:51:49

DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Temperature: -20°



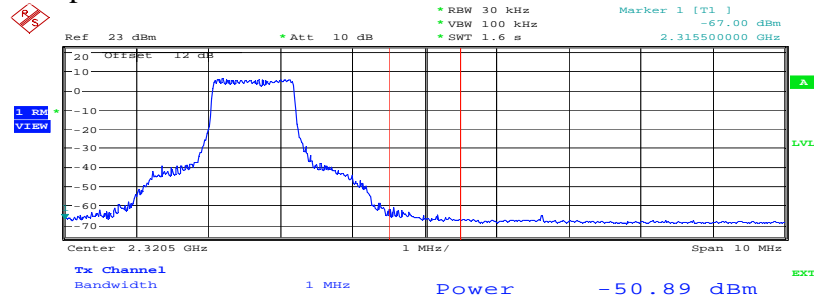
Date: 18.MAY.2006 10:50:17

DARS Band --- Lower band edge 2320MHz

Operation frequency---2318.125MHz

Limit: -50dBm

Temperature: -30°C



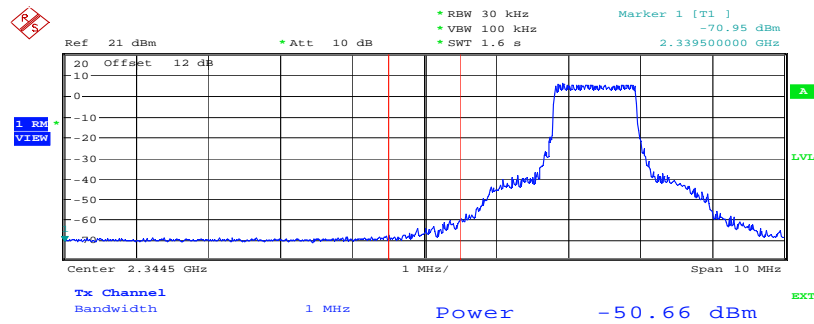
Date: 18.MAY.2006 11:31:42

DARS Band --- Higher band edge 2345MHz

Operation frequency---2346.875MHz

Limit: -50dBm

Temperature: -30°



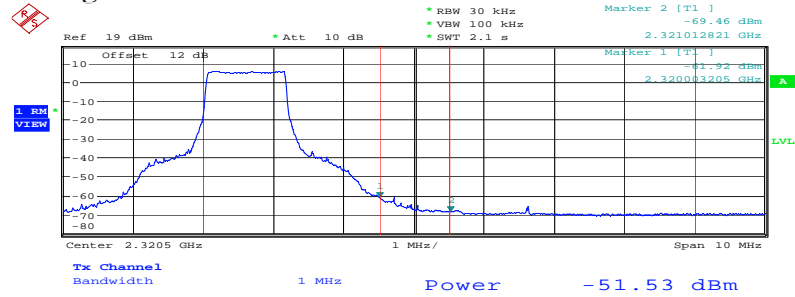
Date: 18.MAY.2006 11:33:34

DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Voltage: 102V



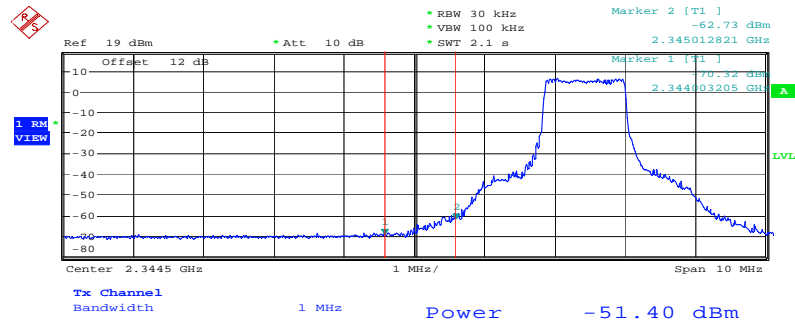
Date: 19.MAY.2006 14:56:34

DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

Voltage: 102V



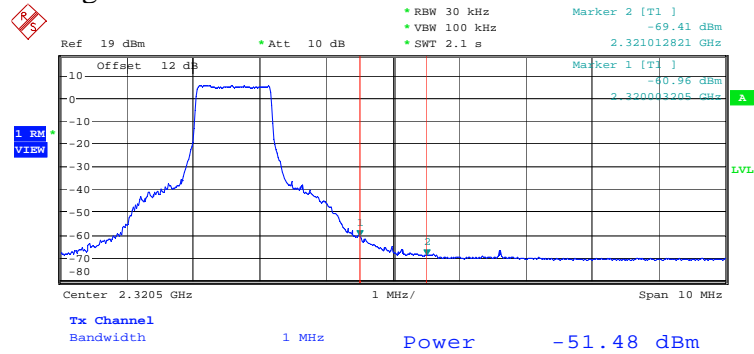
Date: 19.MAY.2006 15:00:49

DARS Band --- Lower band edge 2320MHz

Operation frequency----2318.125MHz

Limit: -50dBm

Voltage: 138V



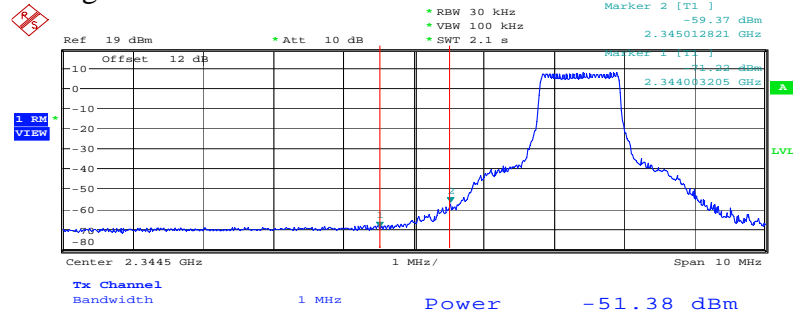
Date: 19.MAY.2006 14:57:18

DARS Band --- Higher band edge 2345MHz

Operation frequency----2346.875MHz

Limit: -50dBm

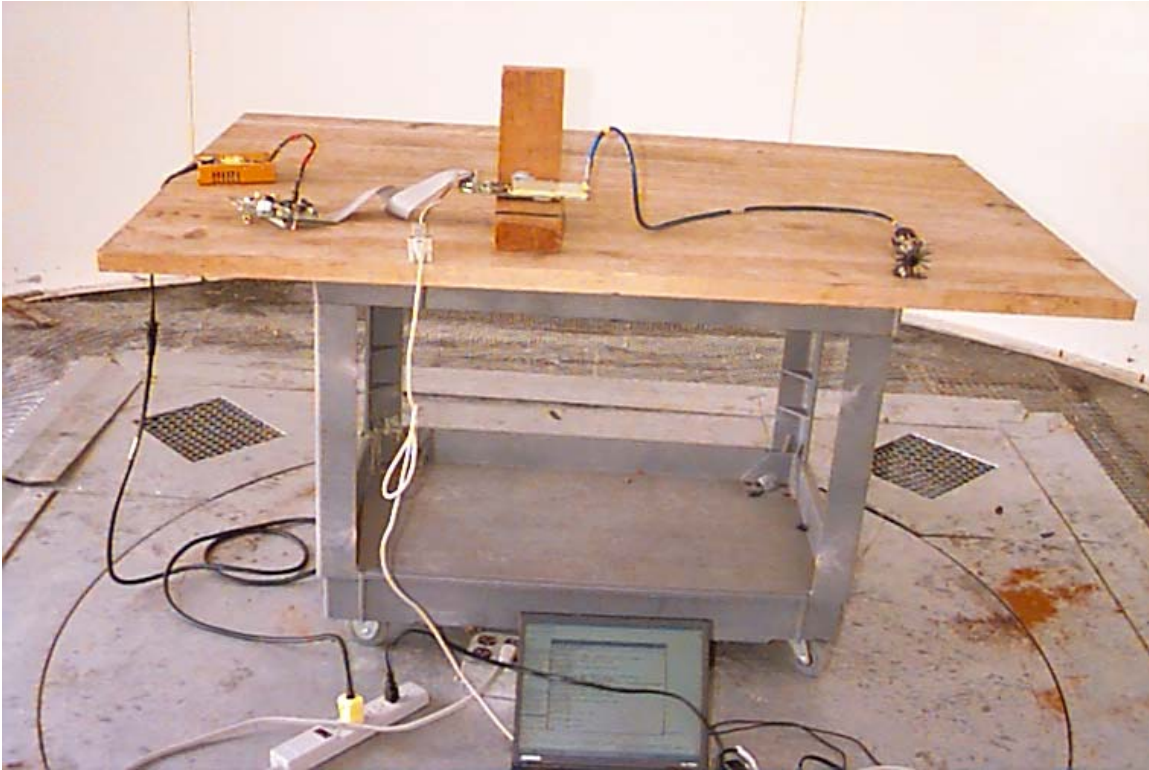
Voltage: 138V



Date: 19.MAY.2006 14:59:47

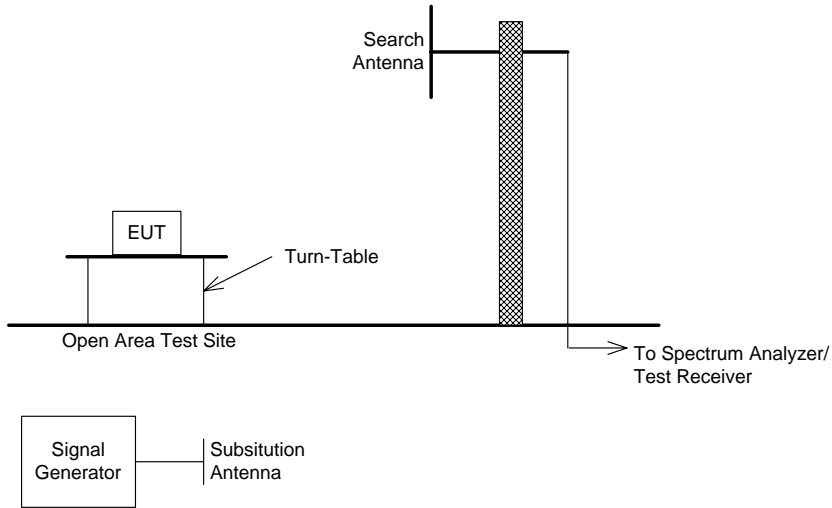
## **Appendix B: Setup Photographs**

### **Radiated Spurious Emissions Setup:**

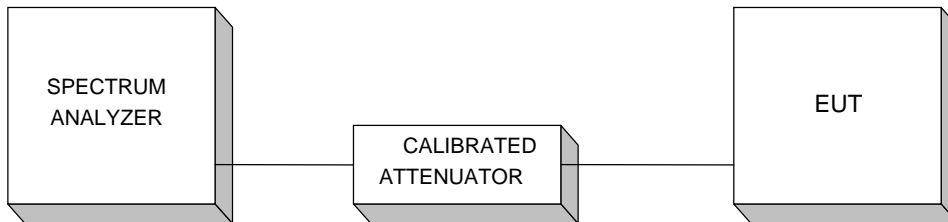


## Appendix C: Block Diagram of Test Setups

### Test Site For Radiated Emissions



### Conducted Measurement





**Frequency Stability Test**

