



Test Report

Product Name : 2.5GHz Integrated CPE Transmitter
Model No. : PLC-200
FCC ID. : OUP960710101

Applicant : TRANSYSTEM INC.
Address : No.1-2, Li-Hsin Rd. 1, Science-Based Industrial
Park, Hsinchu, Taiwan R.O.C.

Date of Receipt : 2008/08/21
Issued Date : 2008/09/19
Report No. : 088325R-RFUSP21V01
Version : V1.0

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 2008/09/19

Report No. : 088325R-RFUSP21V01



Product Name : 2.5GHz Integrated CPE Transmitter
 Applicant : TRANSYSTEM INC.
 Address : No.1-2, Li-Hsin Rd. 1, Science-Based Industrial Park,
 Hsinchu, Taiwan R.O.C.
 Manufacturer : TRANSYSTEM INC.
 Model No. : PLC-200
 FCC ID. : OUP960710101
 Rated Voltage : AC 120V / 60Hz
 EUT Voltage : AC 120V / 60Hz
 Trade Name : TSI
 Applicable Standard : FCC CFR Title 47 Part 2 and Part 27
 Test Result : Complied

The test results relate only to the samples tested.

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Documented By : 

(Carol Tsai / Senior Engineering Adm. Specialist)

Reviewed By : 

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Approved By : 

(Roy Wang / Manager)

TABLE OF CONTENTS

Description	Page
1. General Information.....	5
1.1. EUT Description	5
1.2. Operational Description	6
1.3. Test Mode	7
1.4. Tested System Details	8
1.5. Configuration of tested System	8
1.6. EUT Exercise Software	9
1.7. Test Facility	10
2. Peak Output Power.....	12
2.1. Test Equipment.....	12
2.2. Test Setup	13
2.3. Limits	14
2.4. Test Procedure	14
2.5. Uncertainty	14
2.6. Test Result.....	15
3. Occupied Bandwidth	25
3.1. Test Equipment.....	25
3.2. Test Setup	25
3.3. Limits	25
3.4. Test Procedure	25
3.5. Uncertainty	25
3.6. Test Result.....	26
4. Band Edge.....	58
4.1. Test Equipment.....	58
4.2. Test Setup	58
4.3. Limits	58
4.4. Test Procedure	59
4.5. Uncertainty	59
4.6. Test Result.....	60
5. Conducted Spurious Emission.....	64
5.1. Test Equipment.....	64
5.2. Test Setup	64
5.3. Limits	65
5.4. Test Procedure	65
5.5. Uncertainty	65
5.6. Test Result.....	66
6. Radiated Spurious Emission	78
6.1. Test Equipment.....	78
6.2. Test Setup	79
6.3. Limits	80
6.4. Test Procedure	80
6.5. Uncertainty	80
6.6. Test Result.....	81
6.7. Test Photo	97

7.	Frequency Stability Over Temperatures Variation.....	99
7.1.	Test Equipment.....	99
7.2.	Test Setup	99
7.3.	Limits	99
7.4.	Test Procedure	99
7.5.	Uncertainty	99
7.6.	Test Result.....	100
8.	Frequency Stability Over Voltage Variation	105
8.1.	Test Equipment.....	105
8.2.	Test Setup	105
8.3.	Limits	105
8.4.	Test Procedure	106
8.5.	Uncertainty	106
8.6.	Test Result.....	107
9.	AC Conducted Emission	112
9.1.	Test Equipment.....	112
9.2.	Test Setup	112
9.3.	Limits	113
9.4.	Test Procedure	113
9.5.	Uncertainty	113
9.6.	Test Result.....	114
9.7.	Test Photo	118
Attachement		119
☐	EUT Photograph.....	119

1. General Information

1.1. EUT Description

Product Name	2.5GHz Integrated CPE Transmitter
Trade Name	TSI
Model No.	PLC-200
Frequency Range	2500-2530MHz
Modulation Type	QPSK, 16QAM,
Antenna Gain	1.65dBi
Channel Control	AUTO
Antenna Type	Dipole
Normal operation dc voltages	DC Voltages: 15V
DC Currents	DC Current: 350mA

Upstream Symbol Rate (ksps)	QPSK Data Rate (kbps)	16QAM Data Rate (kbps)	Bandwidth Used (kHz)
160	320	640	200
320	640	1280	400
640	1280	2560	800
1280	2560	5120	1600
2560	5120	10240	3200

Note:

1. This device is a 2.5GHz Integrated CPE Transmitter which included 2.5GHz transmitting function.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 27 for 2.5GHz Integrated CPE Transmitter.
3. Regards to the frequency band operation; the highest rate that was included the lowest 、middle and highest frequency of channel were selected to perform the test, and then shown on this report.

1.3. Test Mode

QuieTek has verified the construction and function in typical operation. All the test modes were evaluated with the EUT in normal operation, which was shown in this test report and defined as below:

Evaluated Mode (Uplink)		
	Bandwidth(kHz)	Modulation
Mode 1: Transmit	200	QPSK
		16QAM
Mode 2: Transmit	3200	QPSK
		16QAM
Mode 3: Transmit	400	QPSK
		16QAM
Mode 4: Transmit	800	QPSK
		16QAM
Mode 5: Transmit	1600	QPSK
		16QAM

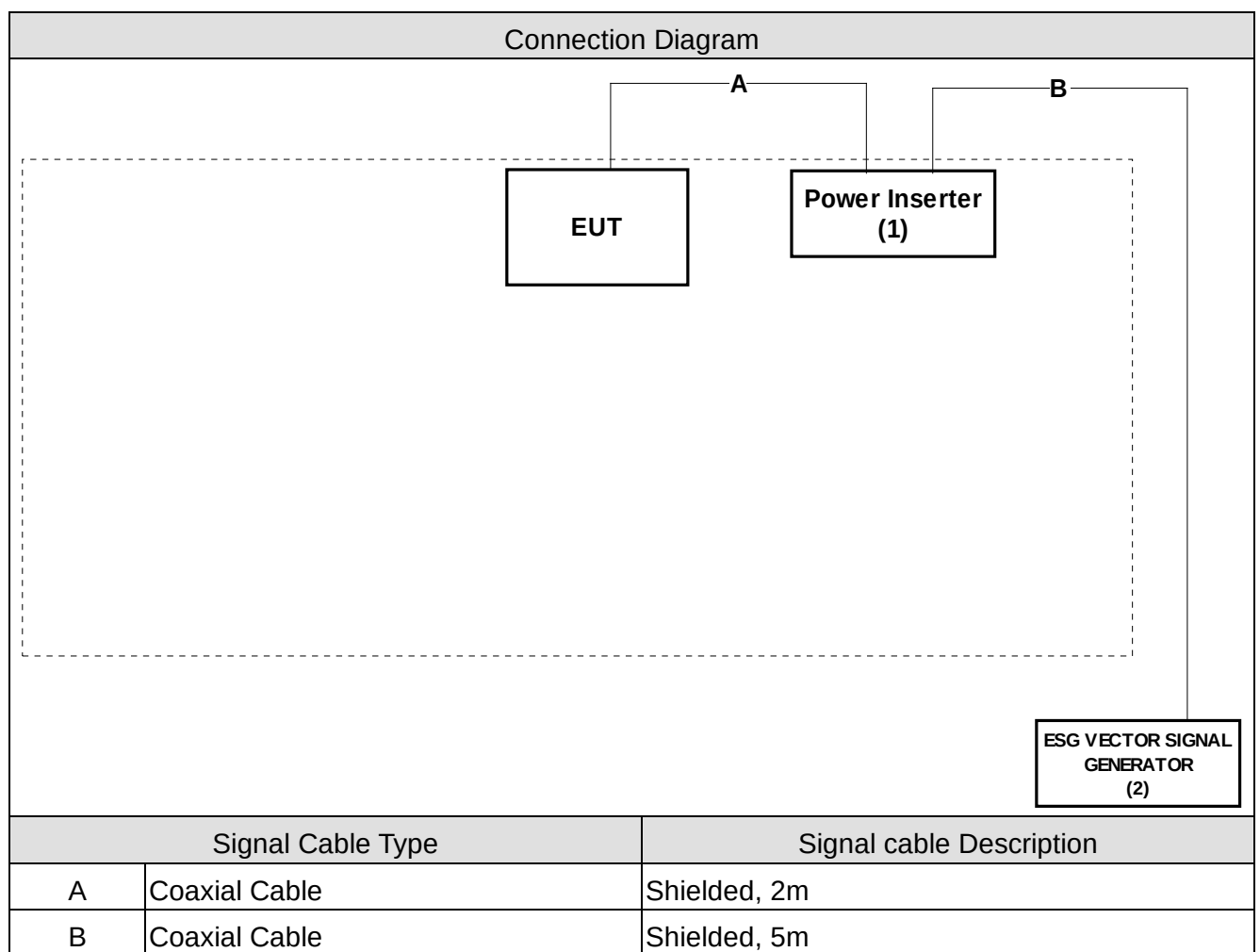
Final Test Mode & Test Item (Uplink)		
Test Item	QPSK	16 QAM
Peak Output Power	MODE 1 、 MODE 2	MODE 1 、 MODE 2
Band Edge	--	MODE 1 、 MODE 2
Occupied Bandwidth	MODE 1 、 MODE 2 MODE 3 、 MODE 4 MODE 5	MODE 1 、 MODE 2 MODE 3 、 MODE 4 MODE 5
Conducted Spurious Emission	--	MODE 1 、 MODE 2
Radiated Spurious Emission	--	MODE 1 、 MODE 2
Frequency Stability Over Temperatures Variation	Carrier Frequency	
Frequency Stability Over Voltage Variation	Carrier Frequency	
AC Conducted Emission	--	MODE 1 、 MODE 2

1.4. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1 Power Inserter	TRANSYSTEM INC.	M7-9103R	N/A	DoC	N/A
2 ESG VECTOR SIGNAL GENERATOR	Agilent	E4438C	N/A	DoC	N/A

1.5. Configuration of tested System



1.6. EUT Exercise Software

1	Setup the EUT and VSG (Modulation Source) as shown on 1.5.
2	Turn on the power of EUT and VSG.
3	Data will transmit continuously from VSG to EUT.
4	All the peripheral will be retrieved during the test
5	Repeat the above procedure (3) to (4)

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 2.1046 and PART 27.50(h)(2) Peak Output Power	15 - 35	22
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1049 and PART 27.53(l)(6) Occupied Bandwidth	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1051 and PART 27.53(l)(4)(6) Band Edge	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1051 and PART 27.53(l)(4)(6) Conducted Spurious Emission	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1053 and PART 27.53(l)(4)(6) Radiated Spurious Emission	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1055(a)(l) and PART 27.54 Frequency Stability Over Temperature Variation	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 2.1055(d) and PART 27.54 Frequency Stability Over Voltage Variation	15 - 35	22
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.207 AC Conducted Emission	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description:

January 24, 2005 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 365520



Accredited by TAF
Accreditation Number: 1313
Effective through: December 27, 2010



Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2008



Site Name: Quietek Corporation
Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwan, R.O.C.
TEL : 886-3-592-8858 / FAX : 886-3-592-8859
E-Mail : service@quietek.com

2. Peak Output Power

2.1. Test Equipment

The following test equipments are used during the test:

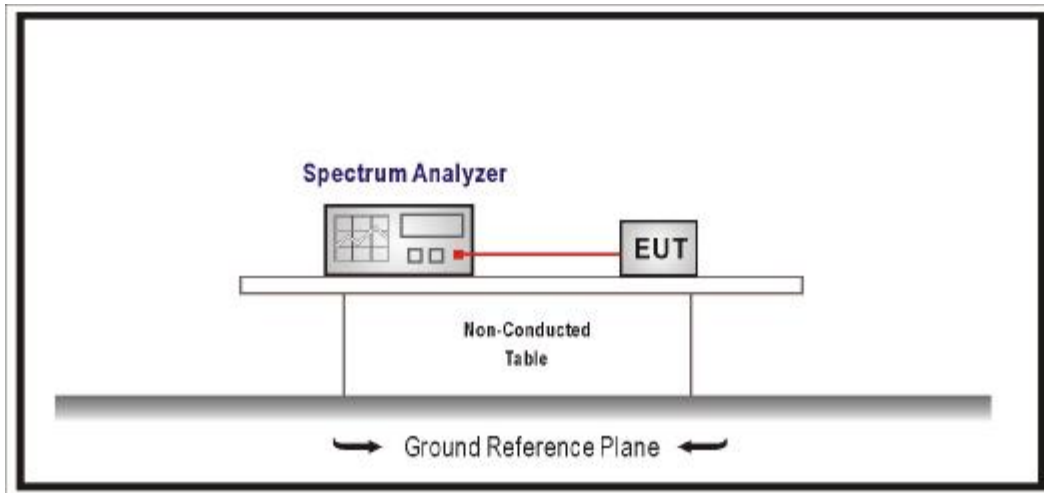
RF Conducted Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer		R & S	FSP / 100561	Jan., 2008
2	No.7 Shielding Room				Sep., 2008
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2008
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2008
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2008
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2008
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2008
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2008
7	X	Horn Antenna	Schwarzbeck	BBHA 9120 / 9120D-639	Aug., 2008
8	X	Singal Generator	MG3694A	041902	Nov., 2007
9	No.1 OATS				Sep., 2008

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

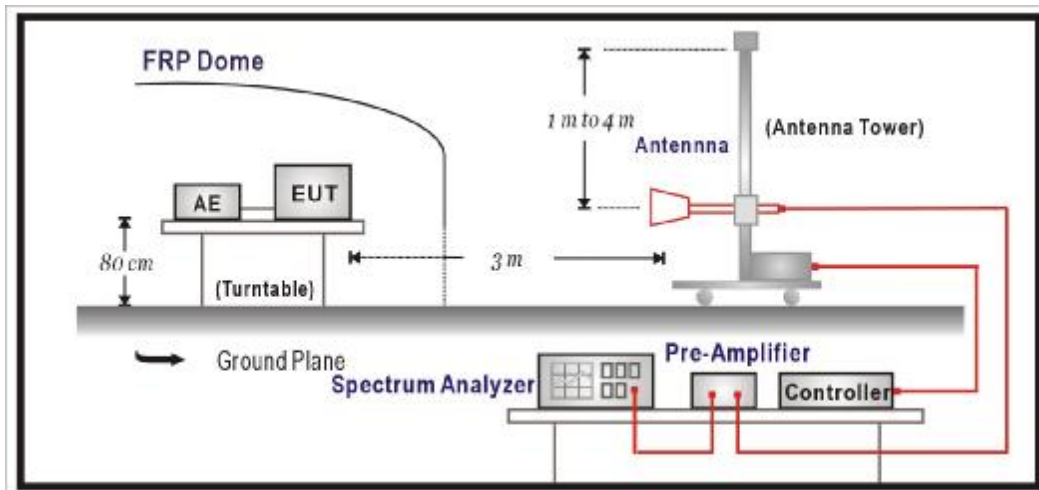
2. Mark "X" test instruments are used to measure the final test results.

2.2. Test Setup

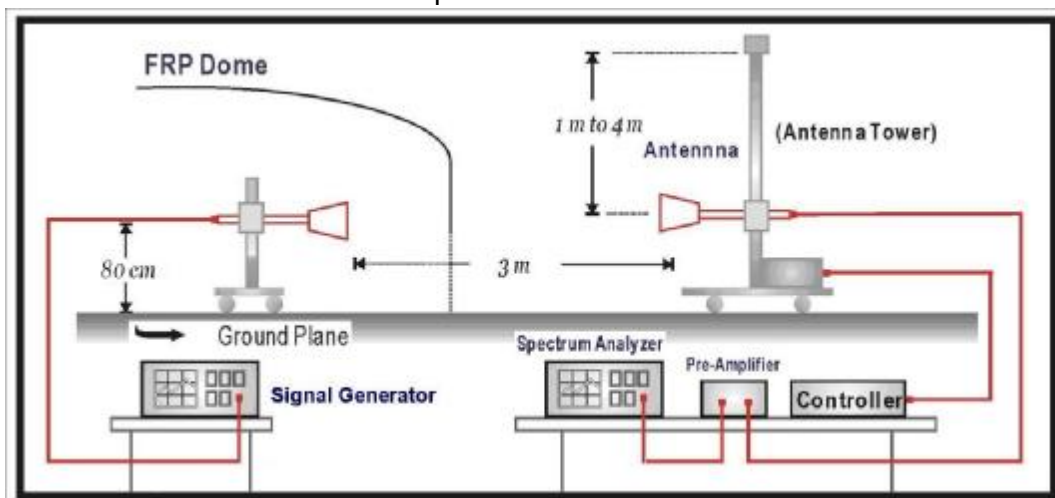
RF Conducted Measurement:



RF Radiated Measurement:



Substitution Measurement Setup:



2.3. Limits

(1) Main, Booster and Base Stations: Maximum E.I.R.P shall not exceed $33 \text{ dBW} + 10\log(X/Y)$ dBW, where X is the actual channel width in MHz and Y is either 6 MHz if prior to transition or the station is in the MBS following transition or 5.5 MHz if the station is in the LBS and UBS following transition.

(2) Mobile and Other User Stations: 2.0 Watts EIRP.

2.4. Test Procedure

The conducted peak output power is measured using R&S Spectrum Analyzer. The EUT was set up for the rated peak power. All measurements were done at 3 channels: low, middle and high operational frequency range.

For measuring E.I.R.P peak power, EUT was placed on the turn-table which was rotated around 360 degrees to search the maximum radiation power and receiver antenna was rotated vertical and horizontal polarization to find the maximum polarization radiated power.

The EUT is replaced by a horn antenna connected to a signal generator tuned to the frequency of emission and level of signal generator adjusted to same level of emission. Both horizontal and vertical polarization of the antenna are set on measurement.

The radiated E.I.R.P power was calculated via the Correct factor, Reading Level, and Antenna gain as follows:

$$\text{E.I.R.P} = \text{Reading Level} + \text{Correct Factor} = \text{S.G.} - \text{Cable Loss} + \text{Antenna Gain}$$

2.5. Uncertainty

The measurement uncertainty is defined as $\pm 1.27 \text{ dB}$

2.6. Test Result

Product	2.5GHz Integrated CPE Transmitter		
Test Item	Peak Output Power		
Test Mode	Transmit		
Date of Test	2008/08/31	Test Site	No.7 Shielding Room

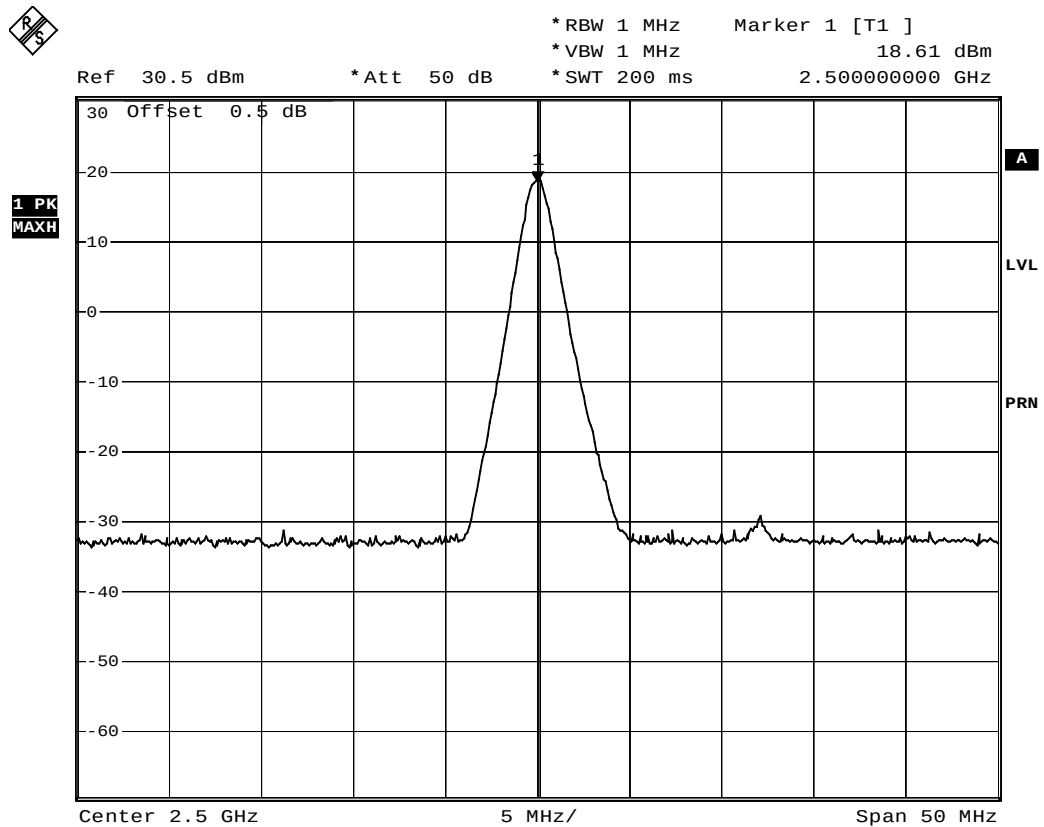
Upstream Symbol Rate (ksps)	Test Mode	QPSK			16QAM		
		2500MHz	2515MHz	2530MHz	2500MHz	2515MHz	2530MHz
160	Mode 1	19.10dBm	21.51dBm	19.86dBm	18.61dBm	21.96dBm	19.84dBm
320	Mode 3	18.90dBm	21.26dBm	19.53dBm	18.89dBm	21.76dBm	19.46dBm
640	Mode 4	18.46dBm	21.18dBm	19.36dBm	18.75dBm	21.76dBm	19.64dBm
1280	Mode 5	18.84dBm	21.37dBm	19.26dBm	18.17dBm	21.86dBm	19.79dBm
2560	Mode 2	19.00dBm	21.38dBm	19.67dBm	18.91dBm	21.96dBm	19.79dBm

Test Mode: Mode 1

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 160 ksps



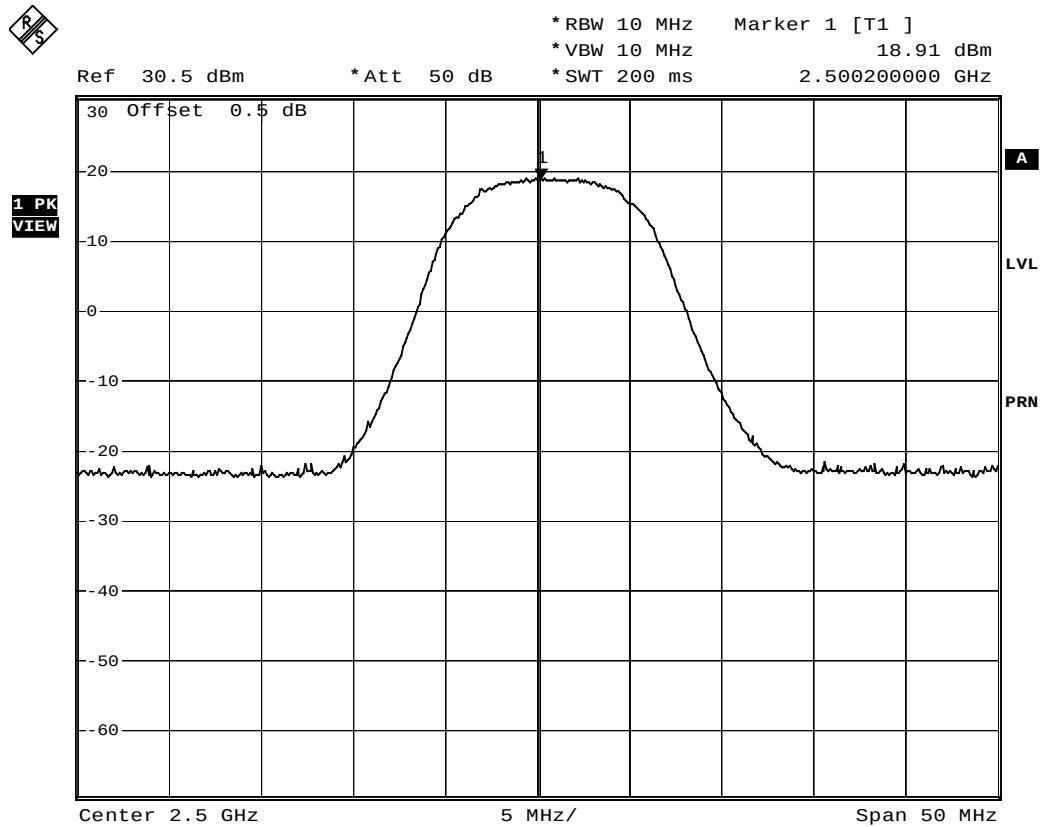
Date: 31.AUG.2008 18:39:06

Test Mode: Mode 2

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 2560 ksp/s



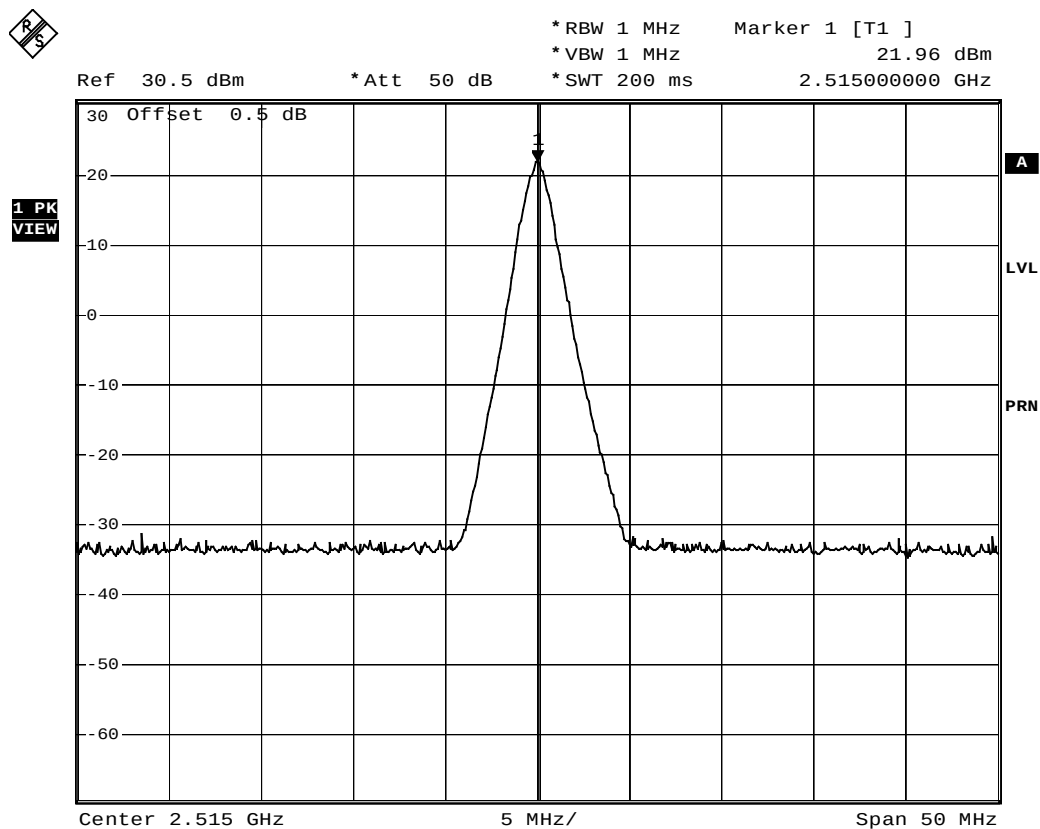
Date: 31.AUG.2008 18:45:17

Test Mode: Mode 1

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 160 ksps



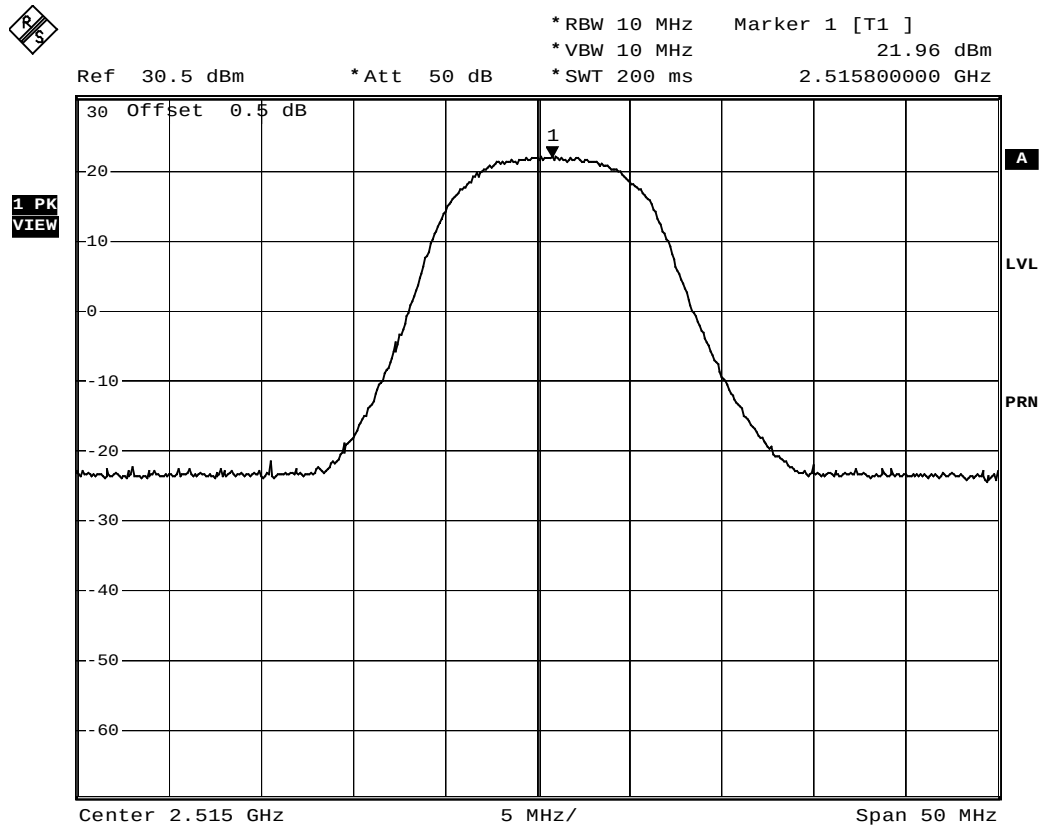
Date: 31.AUG.2008 18:40:20

Test Mode: Mode 2

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 2560 ksps



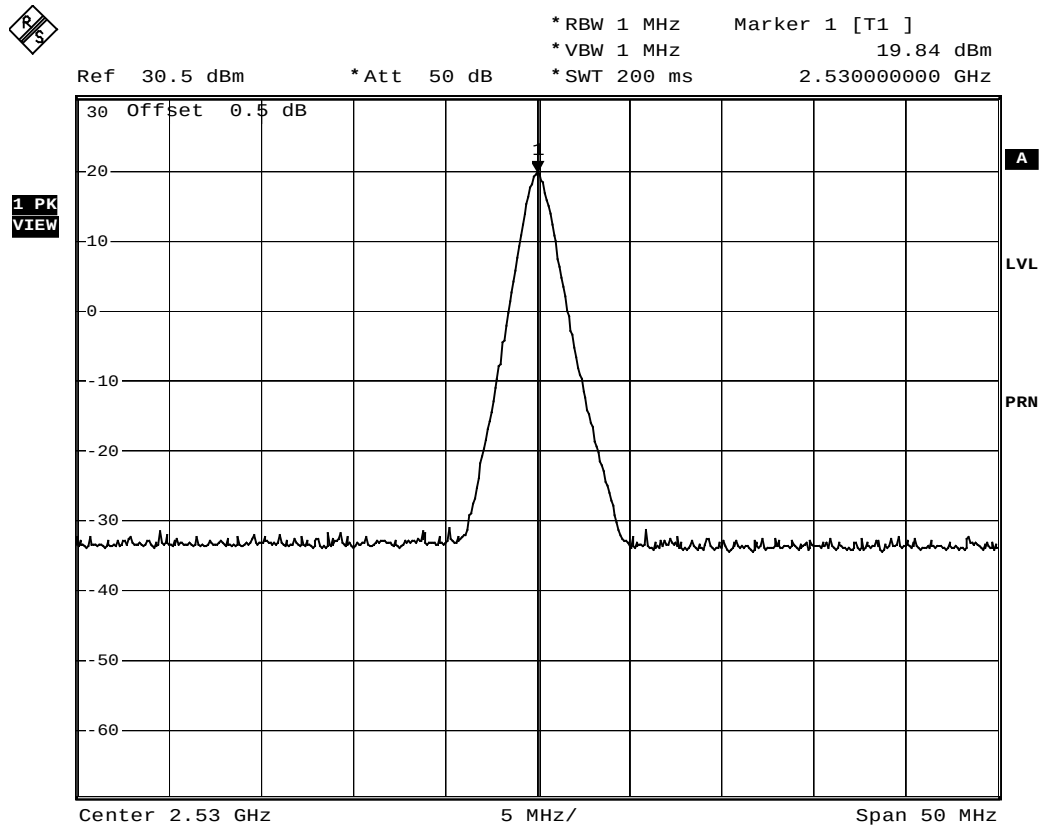
Date: 31.AUG.2008 18:44:18

Test Mode: Mode 1

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 160 ksps



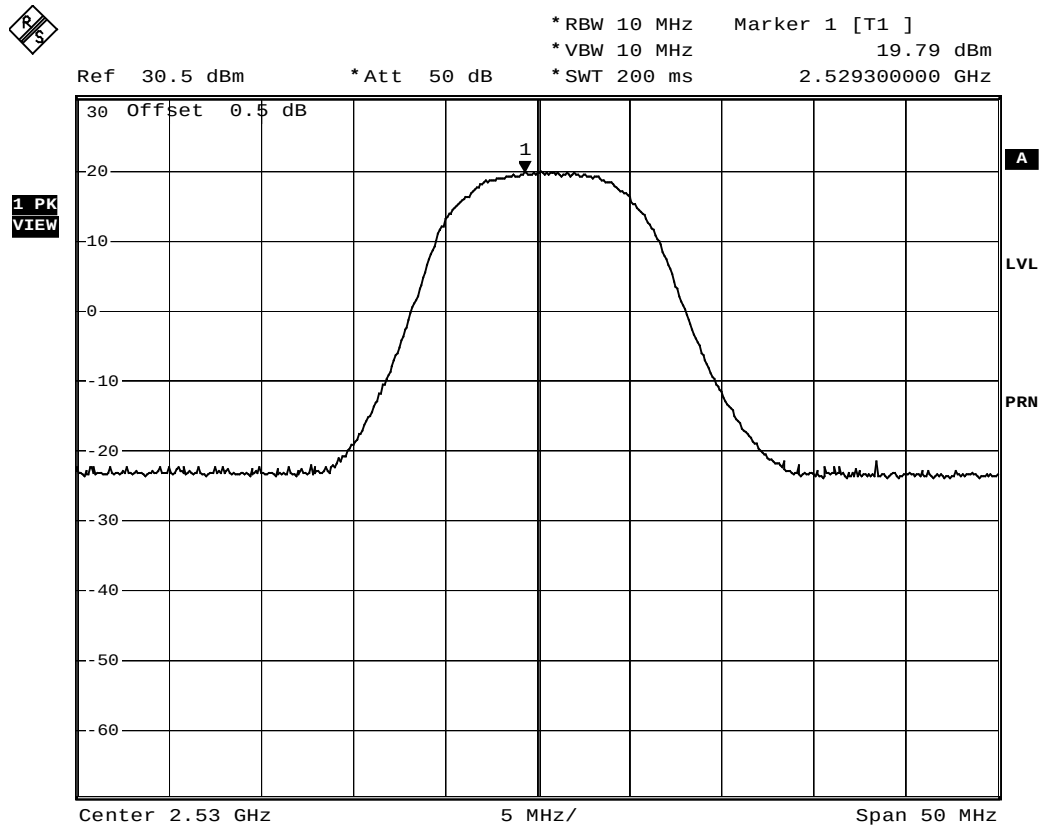
Date: 31.AUG.2008 18:41:26

Test Mode: Mode 2

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 2560 kpsps



Date: 31.AUG.2008 18:42:45

E.I.R.P Power (Mode1: 16QAM-200KHz)					
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	E.I.R.P (dBm)	E.I.R.P (mW)
Low	2500	45.86	-27.878	17.982	62.83
Middle	2515	45.605	-23.555	22.05	160.32
High	2530	45.34	-25.487	19.853	96.67

E.I.R.P = Reading Level + Correct Factor = S.G. – Cable Loss + Antenna Gain

E.I.R.P Power (Mode2: 16QAM-3200KHz)					
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	E.I.R.P (dBm)	E.I.R.P (mW)
Low	2500	45.86	-28.126	17.734	59.35
Middle	2515	45.605	-23.451	22.154	164.21
High	2530	45.34	-25.446	19.894	97.59

E.I.R.P = Reading Level + Correct Factor = S.G. – Cable Loss + Antenna Gain

E.I.R.P Power (Mode3: 16QAM-400KHz)					
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	E.I.R.P (dBm)	E.I.R.P (mW)
Low	2500	45.86	-27.94	17.92	61.94
Middle	2515	45.605	-23.529	22.076	161.29
High	2530	45.34	-25.477	19.863	96.89

E.I.R.P = Reading Level + Correct Factor = S.G. – Cable Loss + Antenna Gain

E.I.R.P Power (Mode4: 16QAM-800KHz)					
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	E.I.R.P (dBm)	E.I.R.P (mW)
Low	2500	45.86	-28.002	17.858	61.07
Middle	2515	45.605	-23.503	22.102	162.26
High	2530	45.34	-25.467	19.873	97.12

E.I.R.P = Reading Level + Correct Factor = S.G. – Cable Loss + Antenna Gain

E.I.R.P Power (Mode5: 16QAM-1600KHz)					
Channel	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	E.I.R.P (dBm)	E.I.R.P (mW)
Low	2500	45.86	-28.064	17.796	60.20
Middle	2515	45.605	-23.477	22.128	163.23
High	2530	45.34	-25.456	19.884	97.36

E.I.R.P = Reading Level + Correct Factor = S.G. – Cable Loss + Antenna Gain

3. Occupied Bandwidth

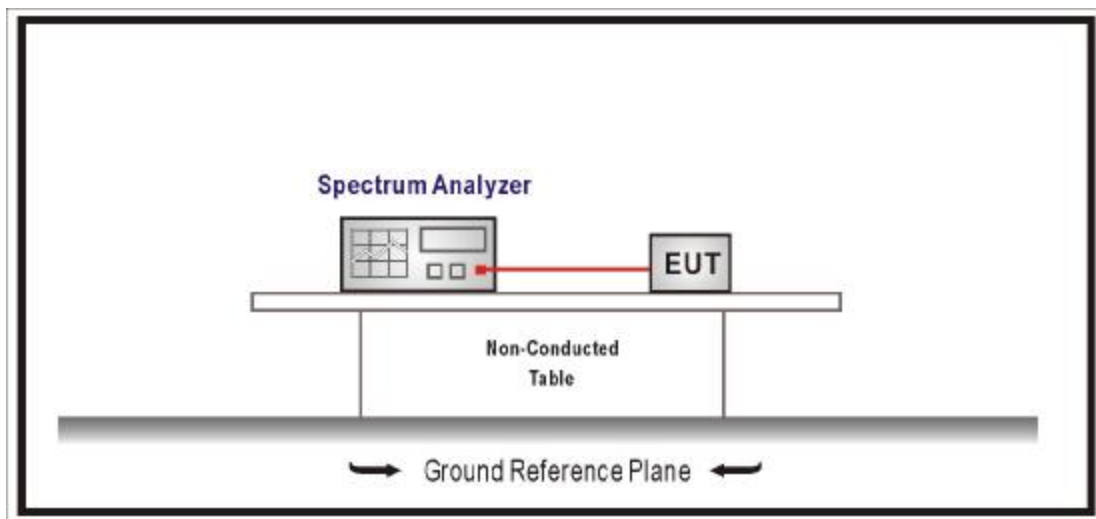
3.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2008
2	No.7 Shielding Room			Sep., 2008

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup



3.3. Limits

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

3.4. Test Procedure

The occupied bandwidth is measured using R&S Spectrum Analyzer with a resolution bandwidth of 100 kHz, video bandwidth of 300 kHz and span of 10 MHz. The EUT was set up for the rated peak power under transmission mode and specific channel frequency. The standards required a measurement bandwidth is the fundamental emission below 26dB bandwidth.

3.5. Uncertainty

The measurement uncertainty is defined as ± 50 KHz

3.6. Test Result

Product	2.5GHz Integrated CPE Transmitter		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2008/08/31	Test Site	No.7 Shielding Room

Test Mode: Mode 1	
Occupied Bandwidth (QPSK-160)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.206
2515	0.206
2530	0.206

Test Mode: Mode 2	
Occupied Bandwidth (QPSK-2560)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	3.200
2515	3.220
2530	3.200

Test Mode: Mode 3	
Occupied Bandwidth (QPSK-320)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.406
2515	0.406
2530	0.404

Test Mode: Mode 4	
Occupied Bandwidth (QPSK-640)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.756
2515	0.760
2530	0.756

Test Mode: Mode 5	
Occupied Bandwidth (QPSK-1280)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	1.580
2515	1.580
2530	1.570

Test Mode: Mode 1	
Occupied Bandwidth (16QAM-160)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.204
2515	0.206
2530	0.206

Test Mode: Mode 2	
Occupied Bandwidth (16QAM-2560)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	3.21
2515	3.20
2530	3.20

Test Mode: Mode 3	
Occupied Bandwidth (16QAM-320)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.404
2515	0.406
2530	0.406

Test Mode: Mode 4	
Occupied Bandwidth (16QAM-640)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	0.760
2515	0.764
2530	0.764

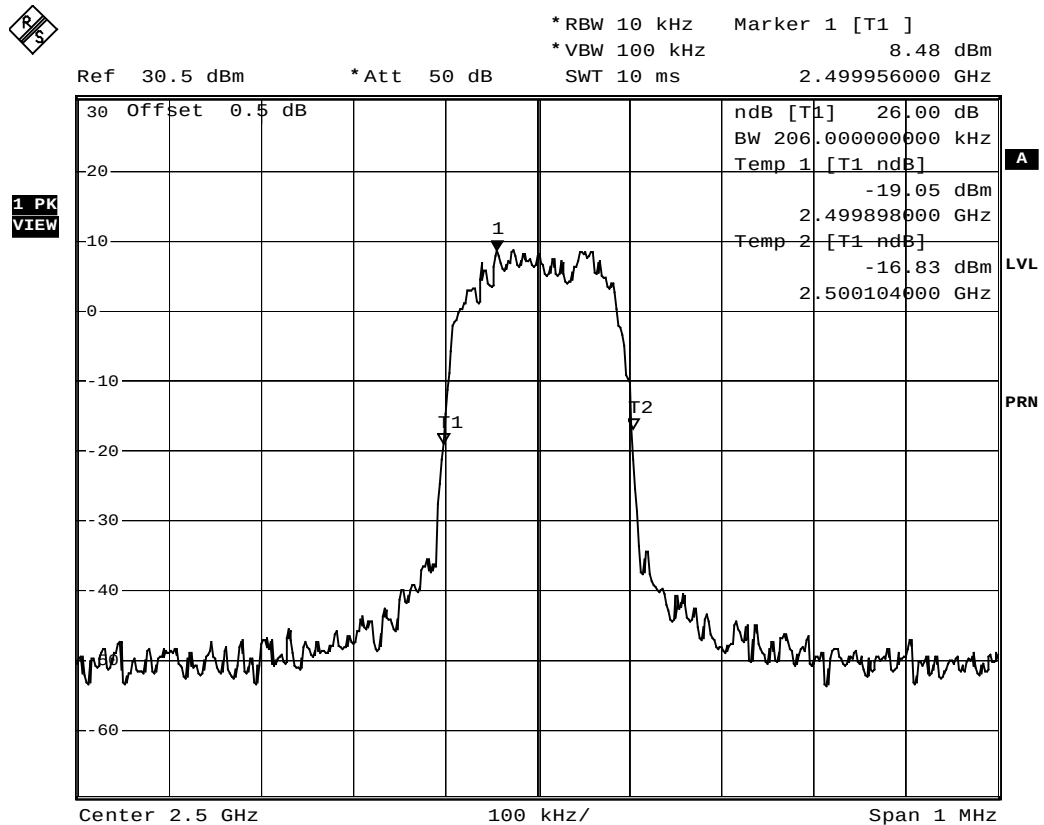
Test Mode: Mode 5	
Occupied Bandwidth (16QAM-1280)	
Frequency (MHz)	-26 dBc Bandwidth (MHz)
2500	1.580
2515	1.580
2530	1.580

Test Mode: Mode 1

Modulation Type: QPSK

2500 MHz

Upstream Symbol Rate: 160 ksps



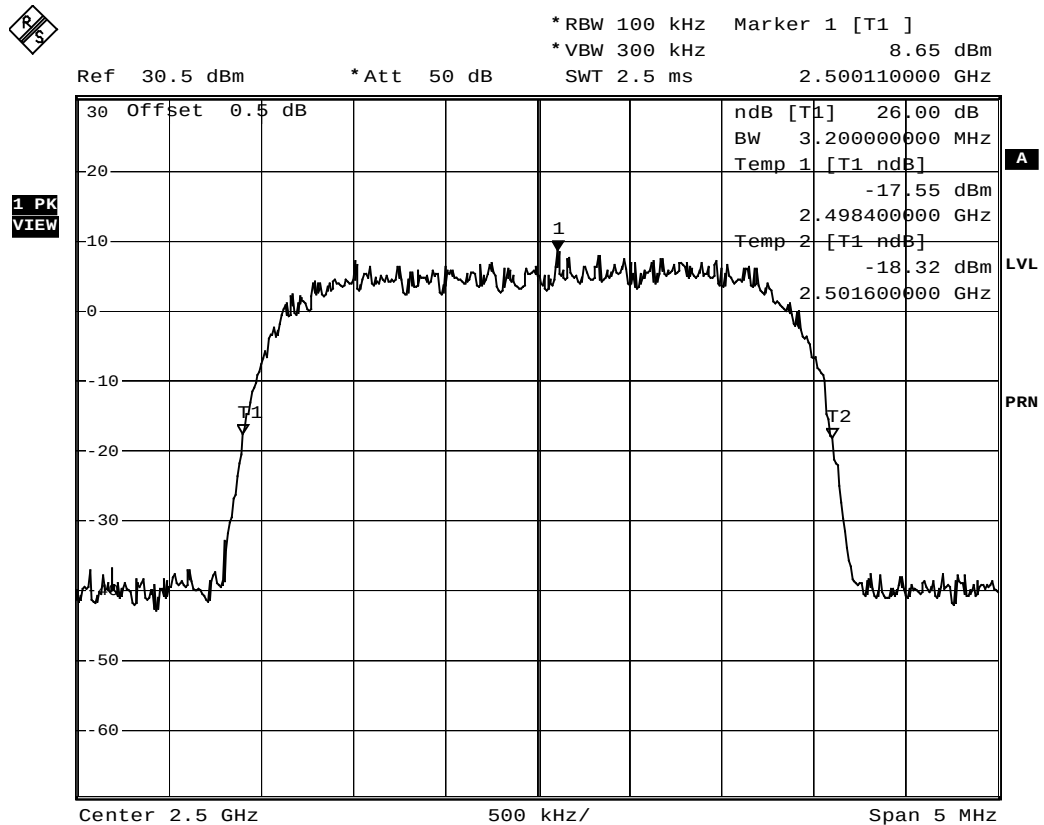
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Test Mode: Mode 2

Modulation Type: QPSK

2500 MHz

Upstream Symbol Rate: 2560 kpsps



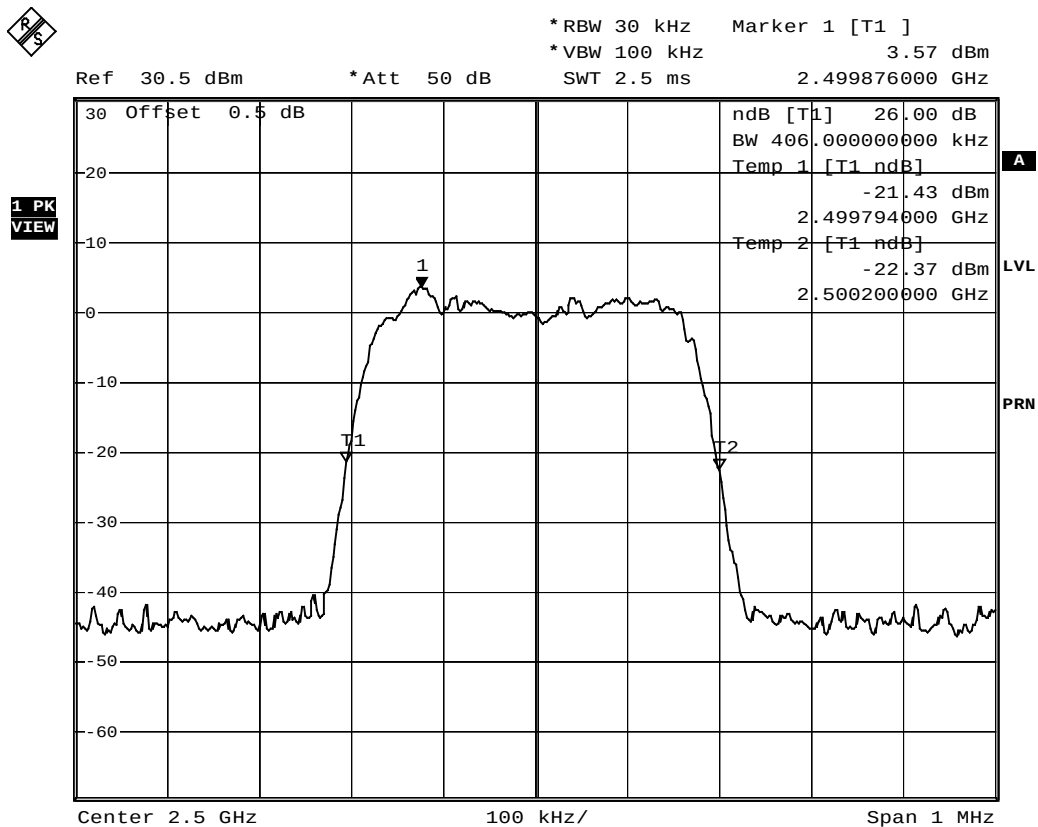
Date: 31.AUG.2008 20:35:41

Test Mode: Mode 3

Modulation Type: QPSK

2500 MHz

Upstream Symbol Rate: 320 ksps



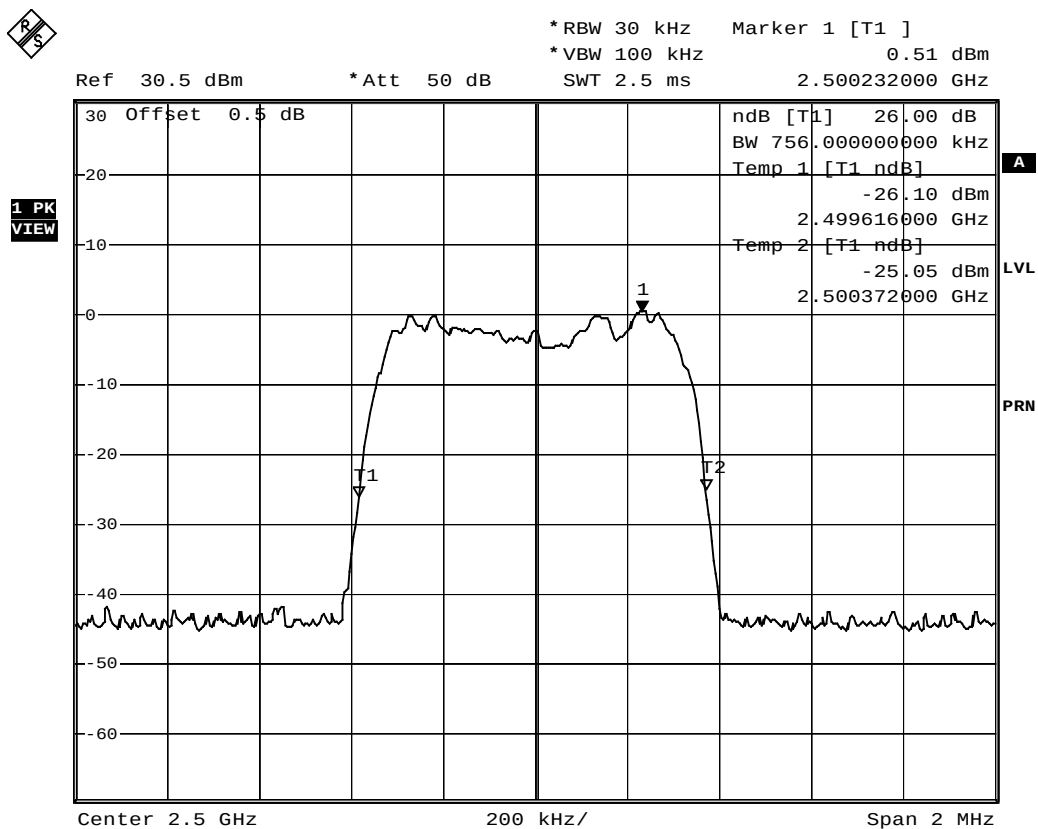
Date: 1.OCT.2008 19:10:28

Test Mode: Mode 4

Modulation Type: QPSK

2500 MHz

Upstream Symbol Rate: 640 ksps



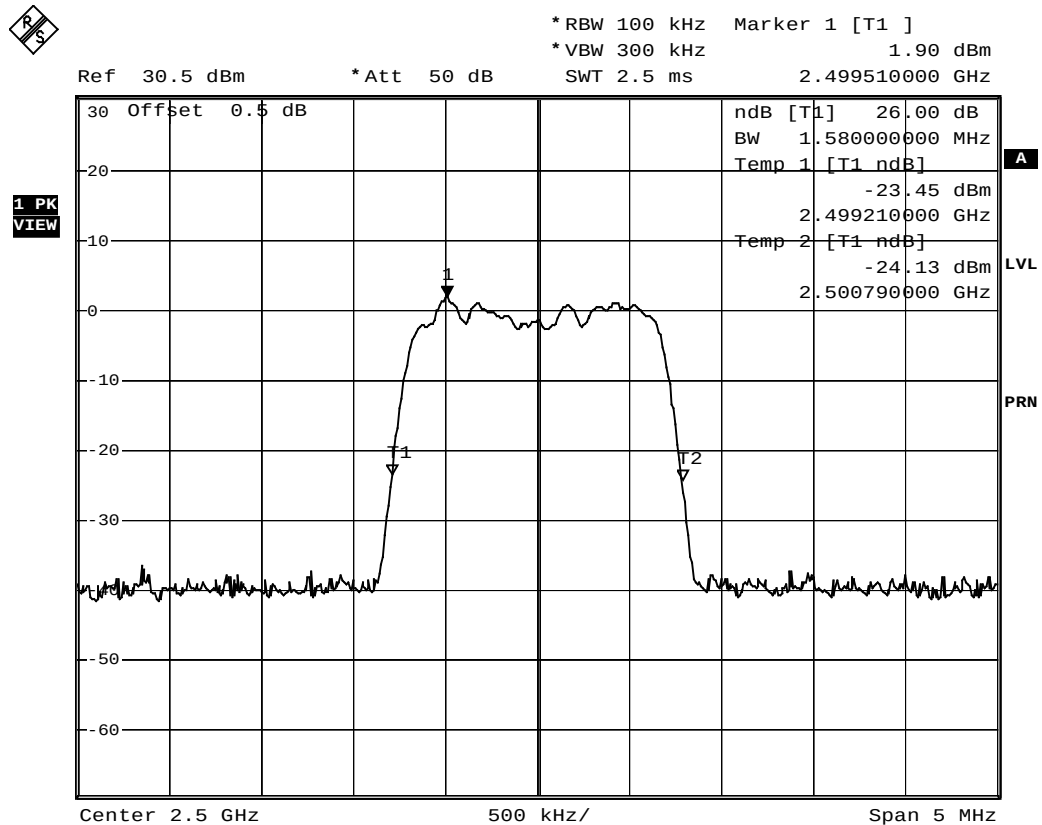
Date: 1.OCT.2008 19:45:24

Test Mode: Mode 5

Modulation Type: QPSK

2500 MHz

Upstream Symbol Rate: 1280 ksps



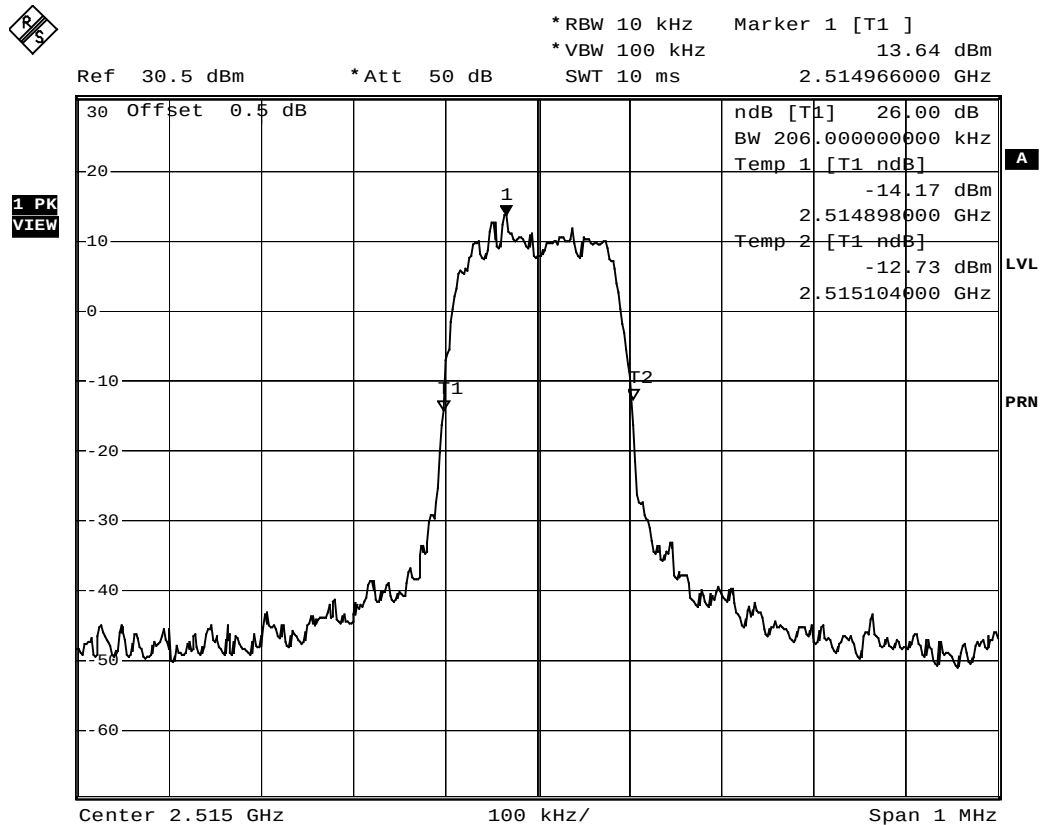
Date: 1.OCT.2008 20:00:28

Test Mode: Mode 1

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 160 ksps



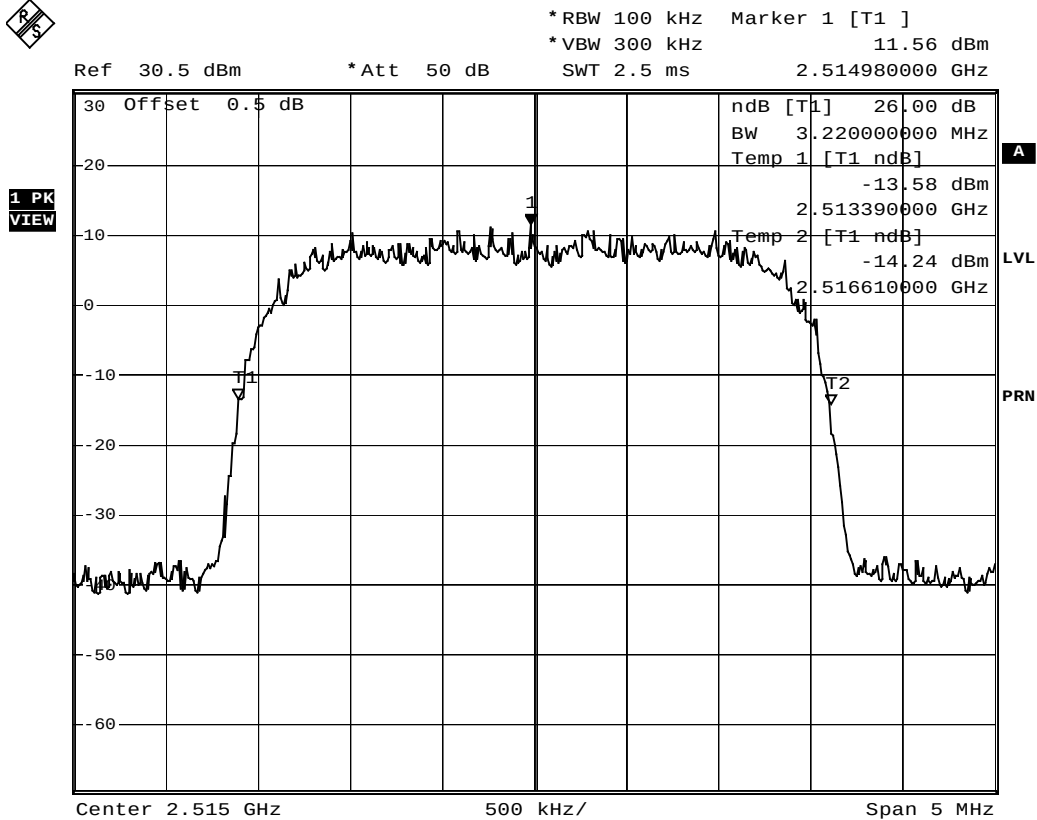
Date: 31.AUG.2008 20:27:09

Test Mode: Mode 2

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 2560 ksps



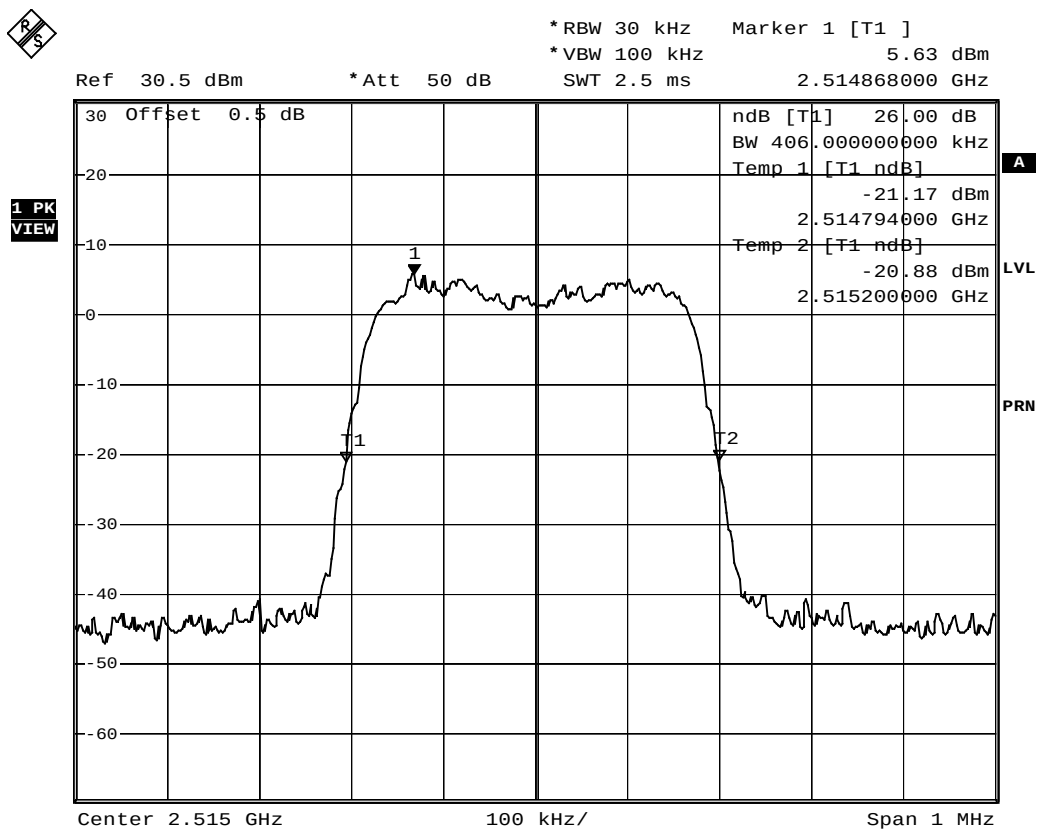
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Test Mode: Mode 3

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 320 ksps



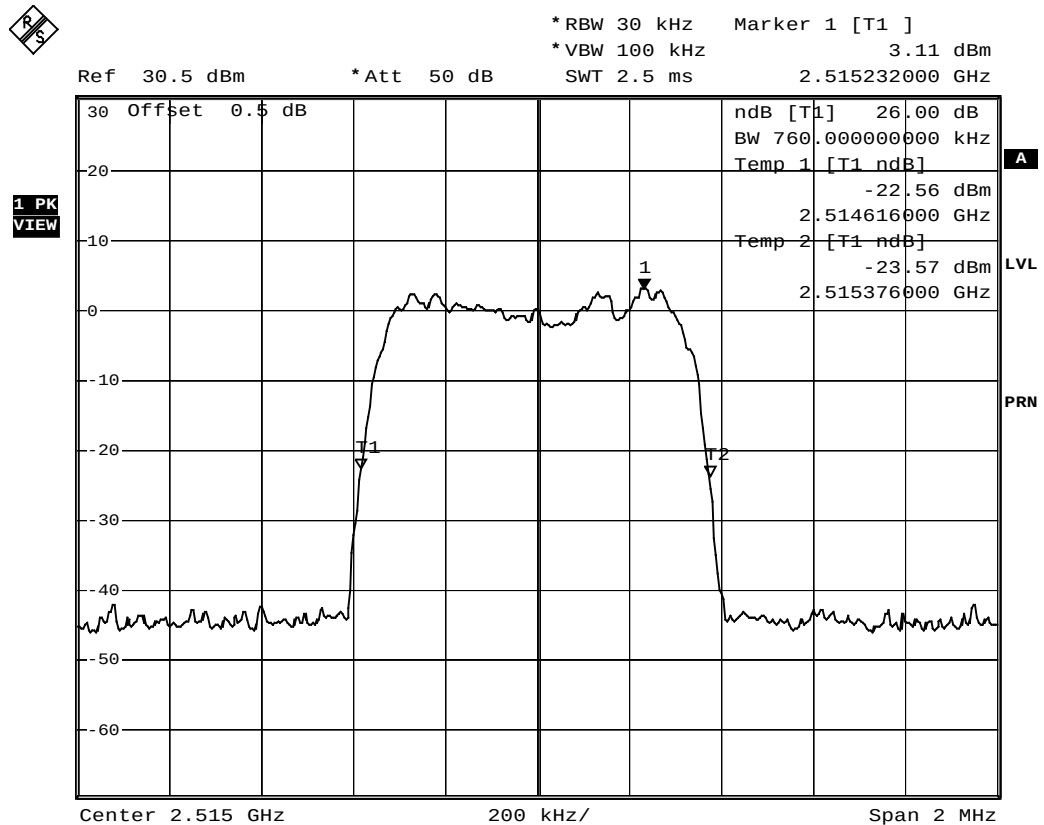
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Test Mode: Mode 4

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 640 ksps



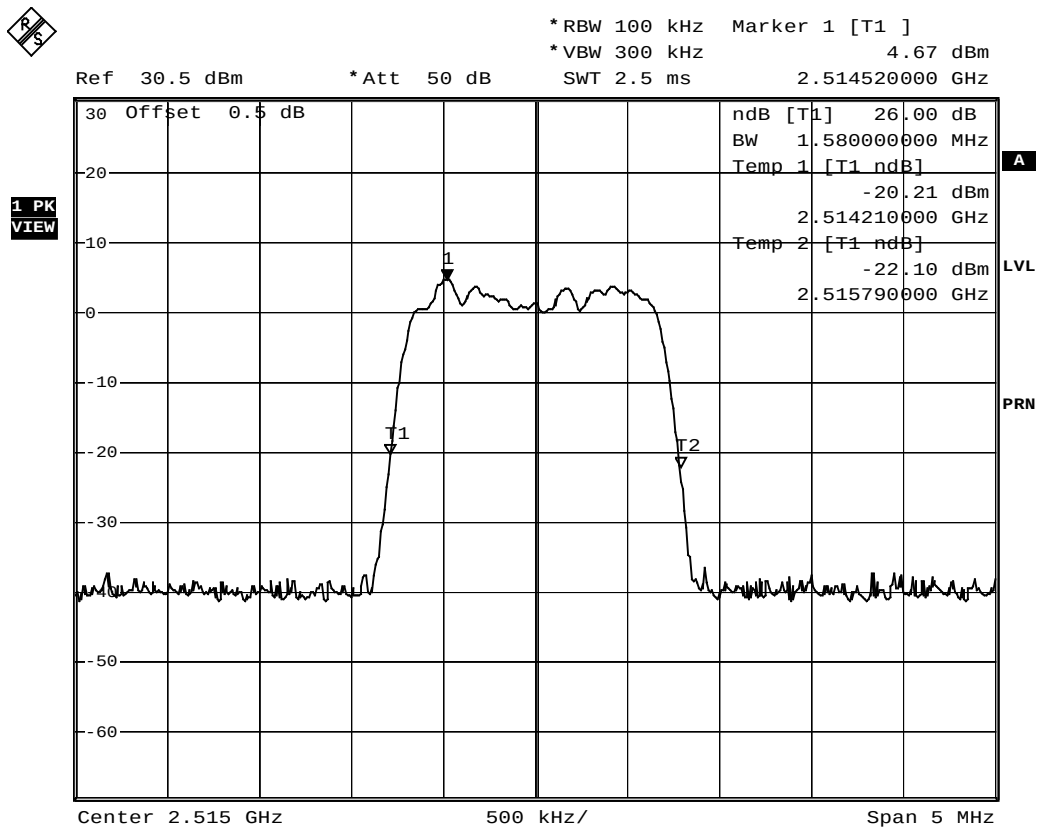
Date: 1.OCT.2008 19:46:06

Test Mode: Mode 5

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 1280 ksps



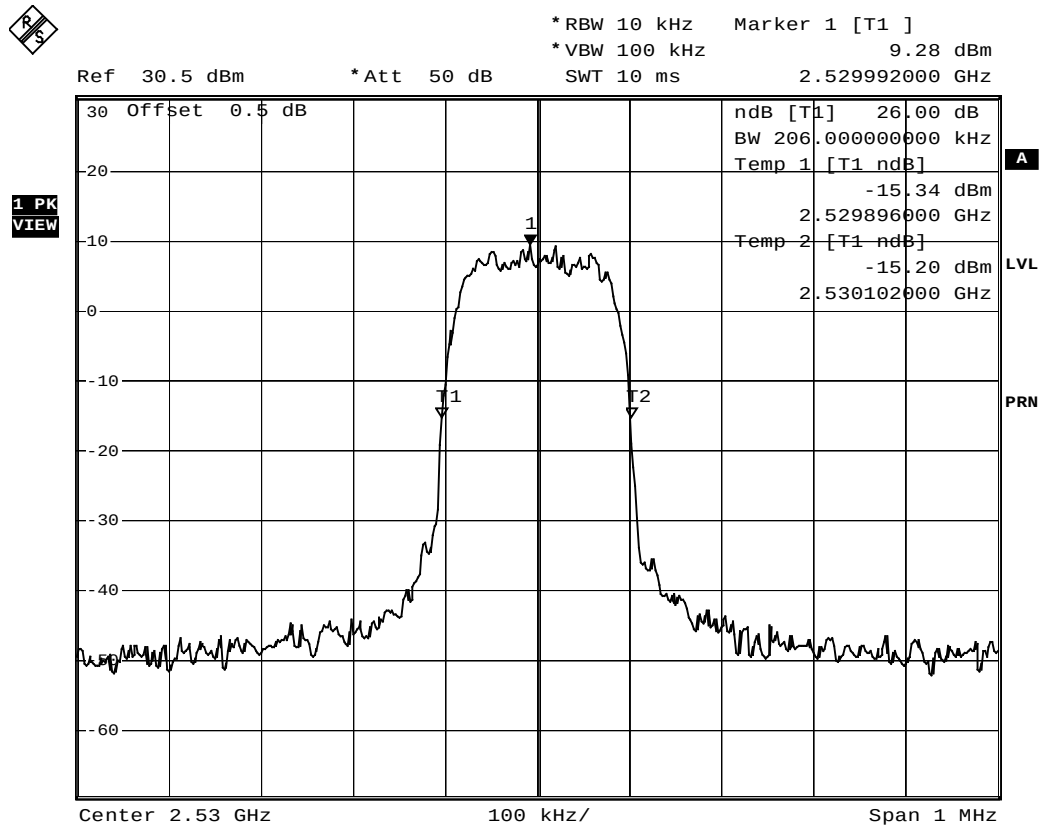
Date: 1.OCT.2008 20:01:02

Test Mode: Mode 1

Modulation Type: QPSK

2530 MHz

Upstream Symbol Rate: 160 ksps



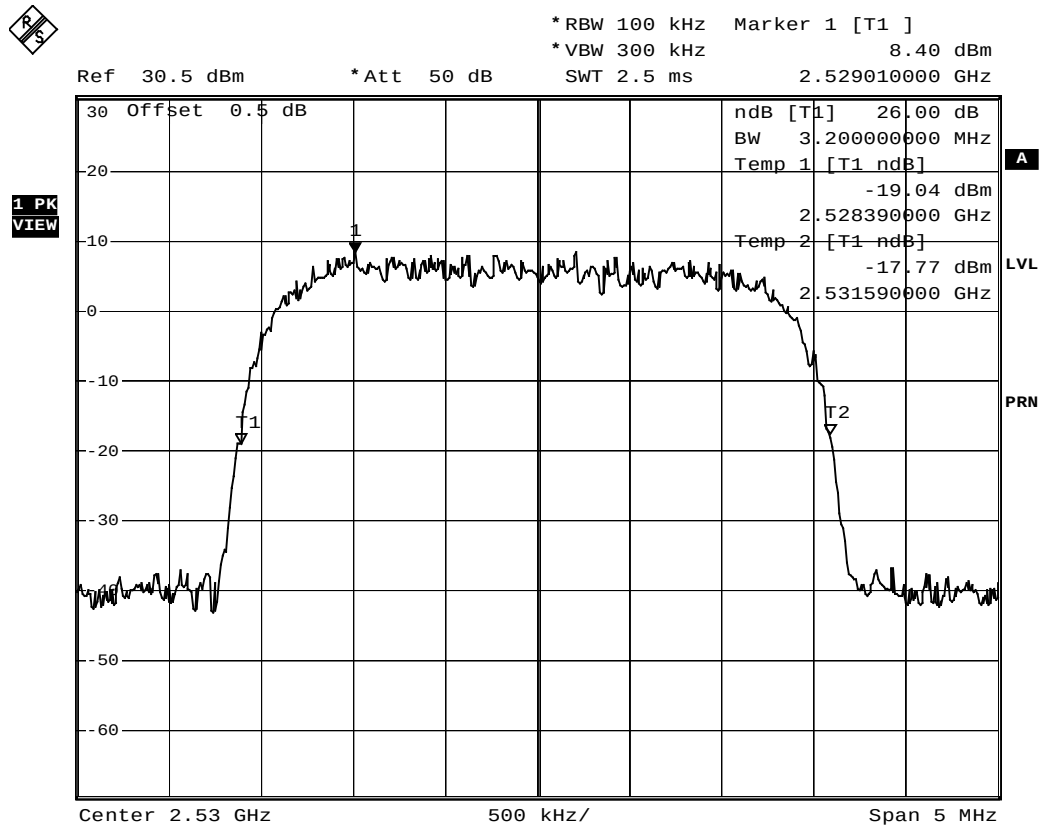
Date: 31.AUG.2008 20:27:54

Test Mode: Mode 2

Modulation Type: QPSK

2530 MHz

Upstream Symbol Rate: 2560 ksp/s



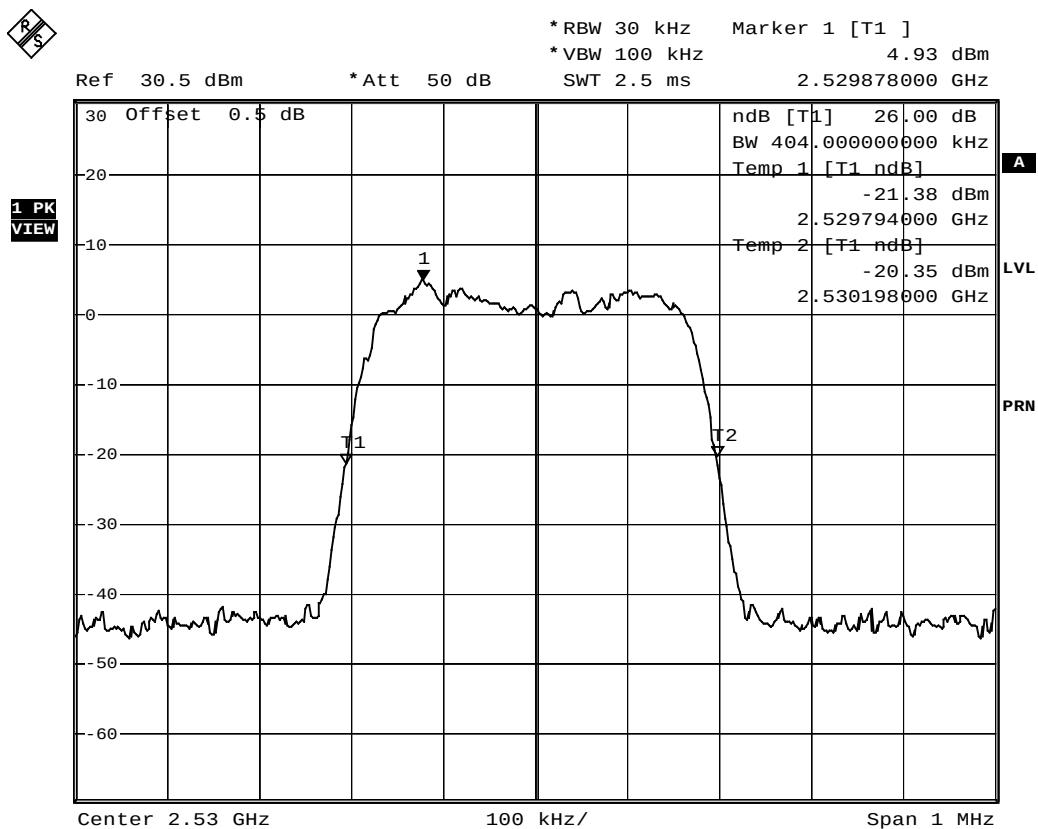
Date: 31.AUG.2008 20:33:06

Test Mode: Mode 3

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 320 ksps



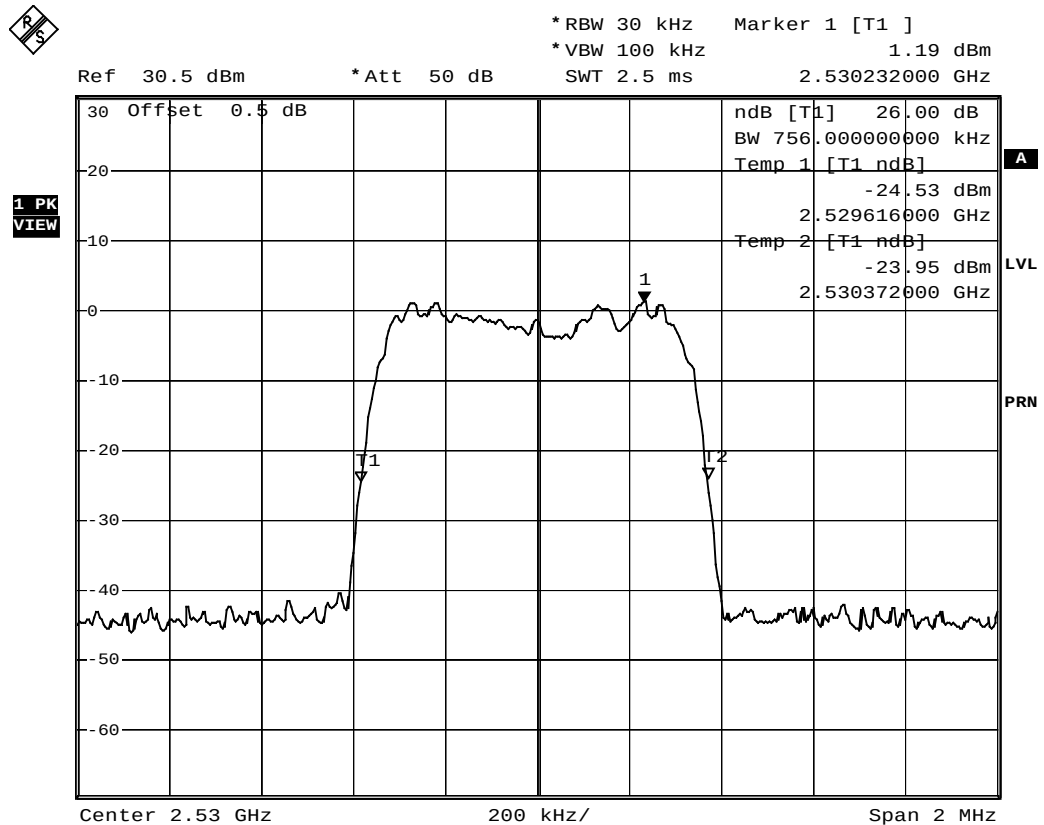
Date: 1.OCT.2008 19:12:51

Test Mode: Mode 4

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 640 ksps



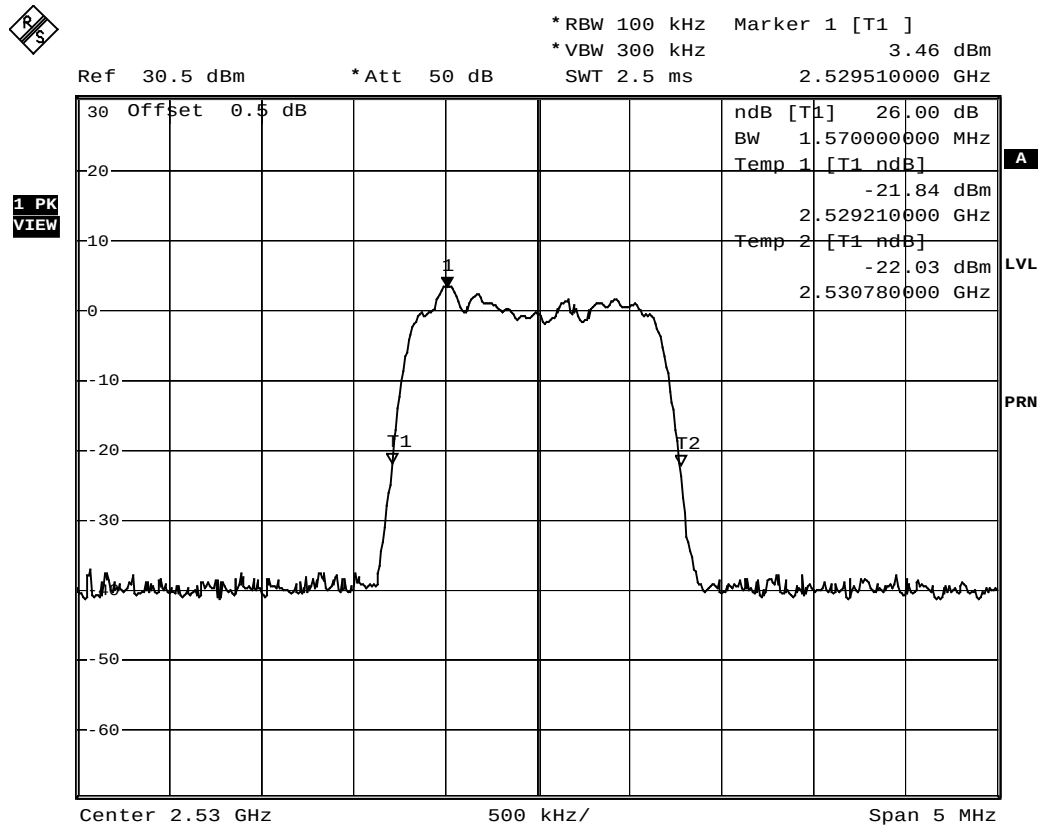
Date: 1.OCT.2008 19:46:50

Test Mode: Mode 5

Modulation Type: QPSK

2515 MHz

Upstream Symbol Rate: 1280 ksps



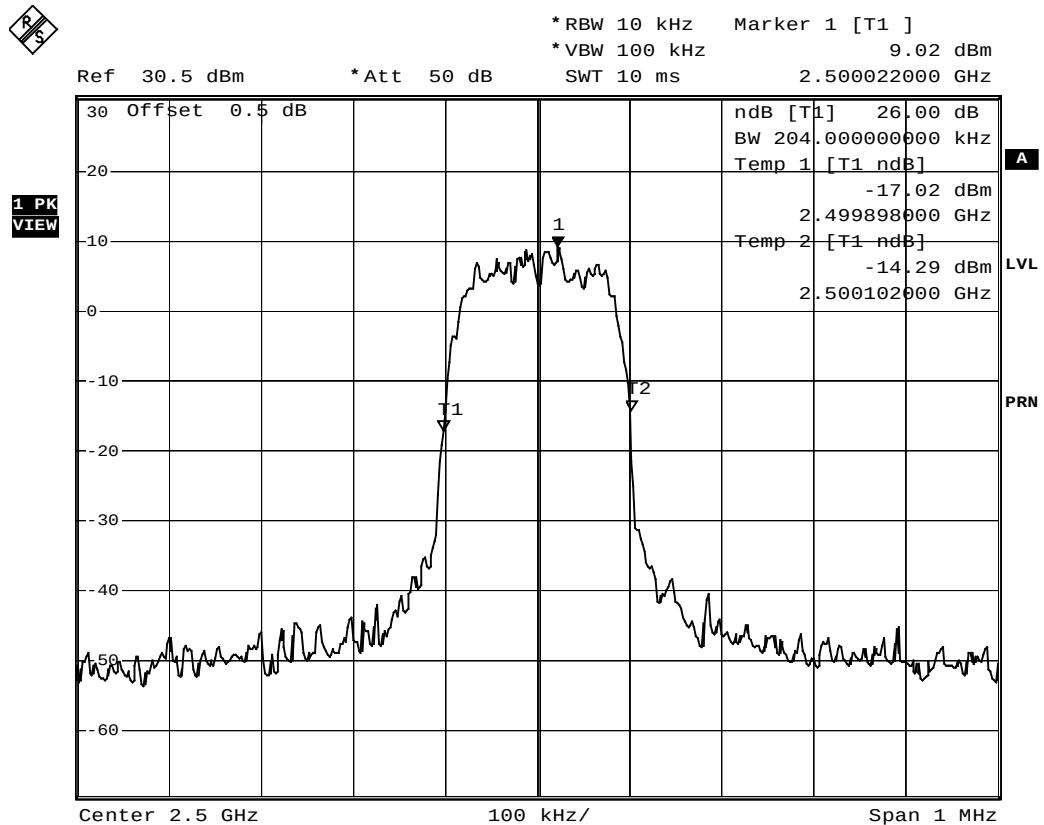
Date: 1.OCT.2008 20:01:52

Test Mode: Mode 1

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 160 ksps



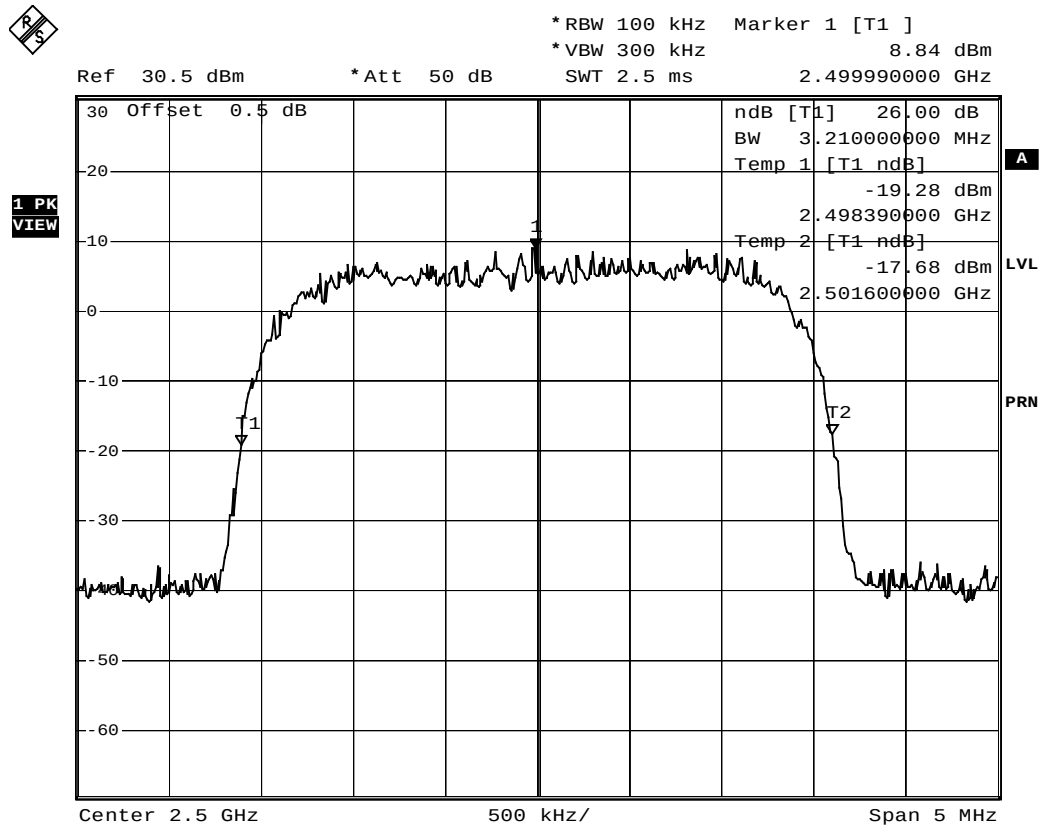
Date: 31.AUG.2008 19:35:07

Test Mode: Mode 2

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 2560 ksps



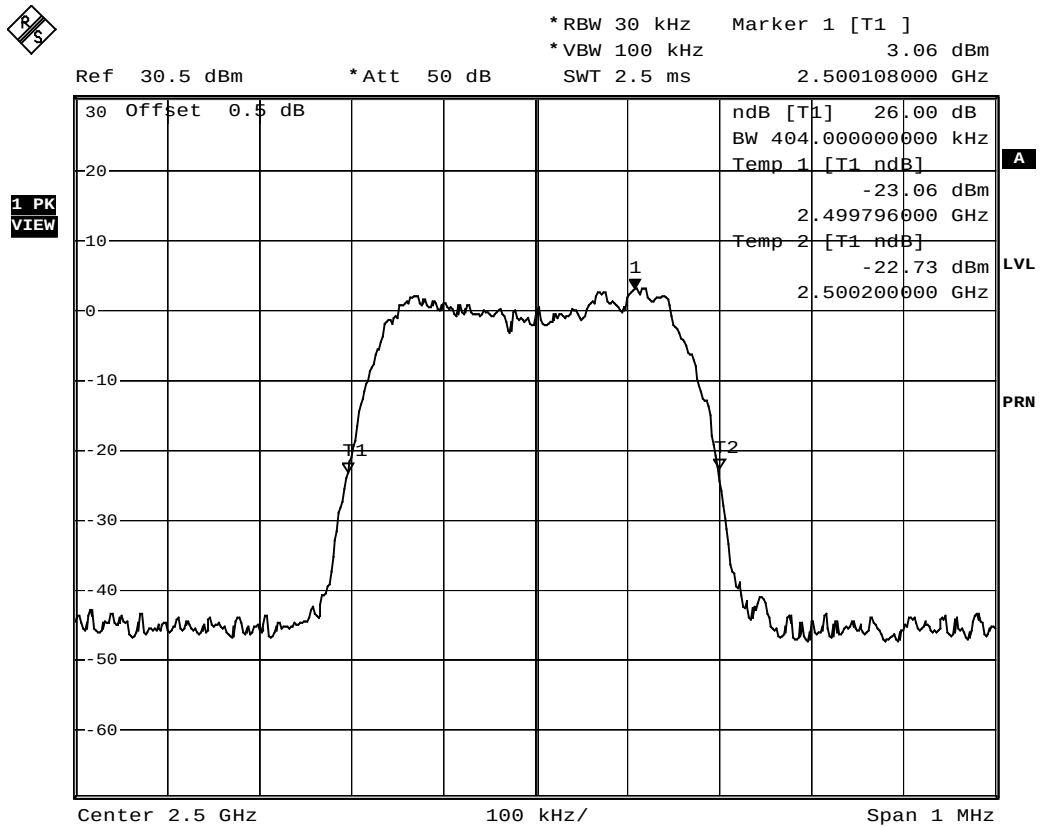
Date: 31.AUG.2008 19:02:58

Test Mode: Mode 3

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 320 ksps



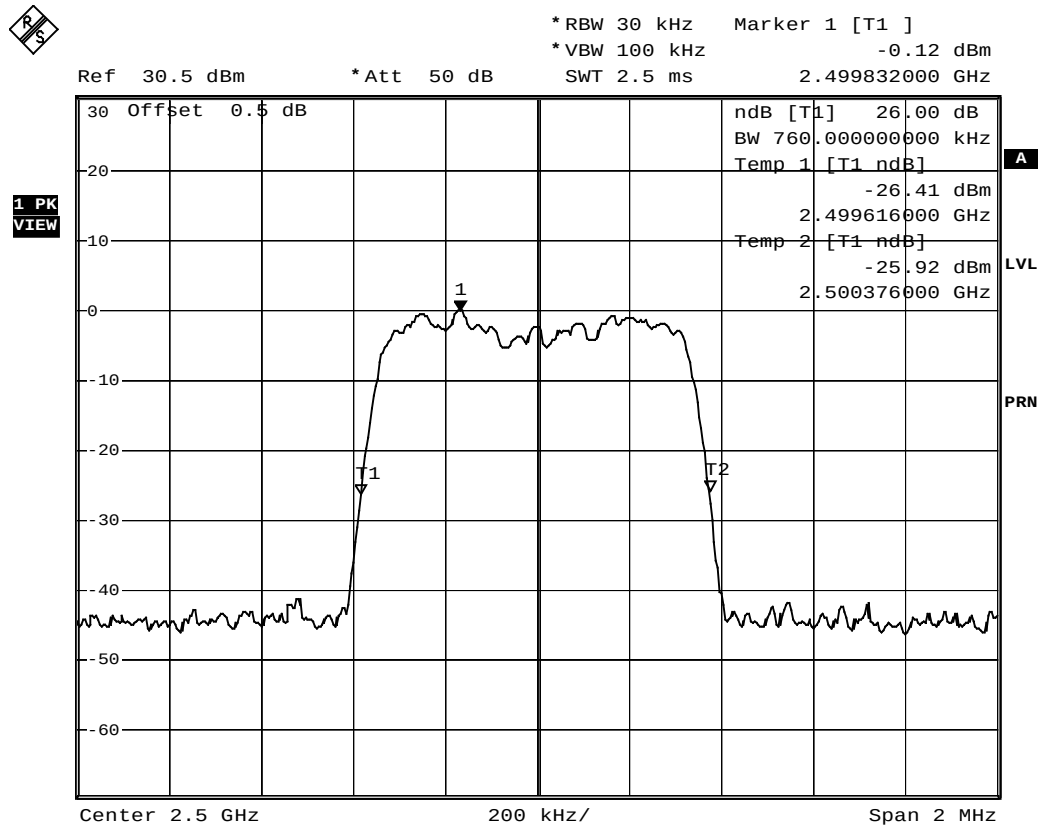
Date: 1.OCT.2008 19:15:36

Test Mode: Mode 4

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 640 ksps



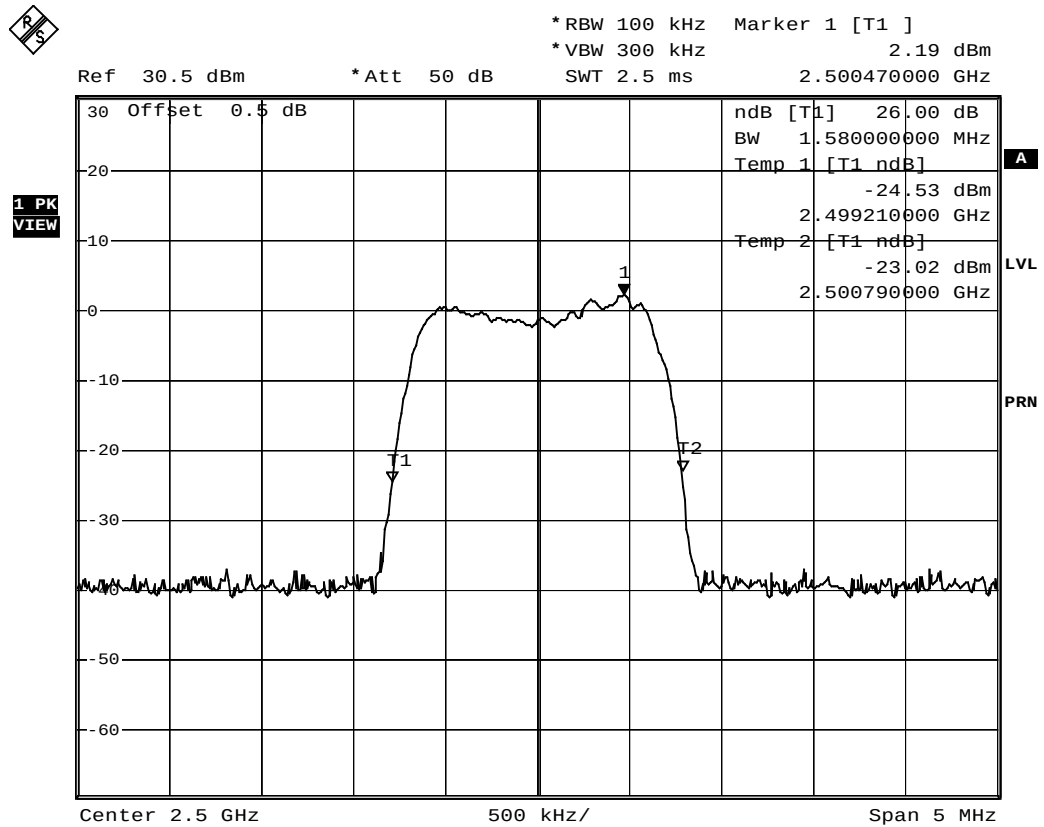
Date: 1.OCT.2008 19:35:27

Test Mode: Mode 5

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 1280 ksps



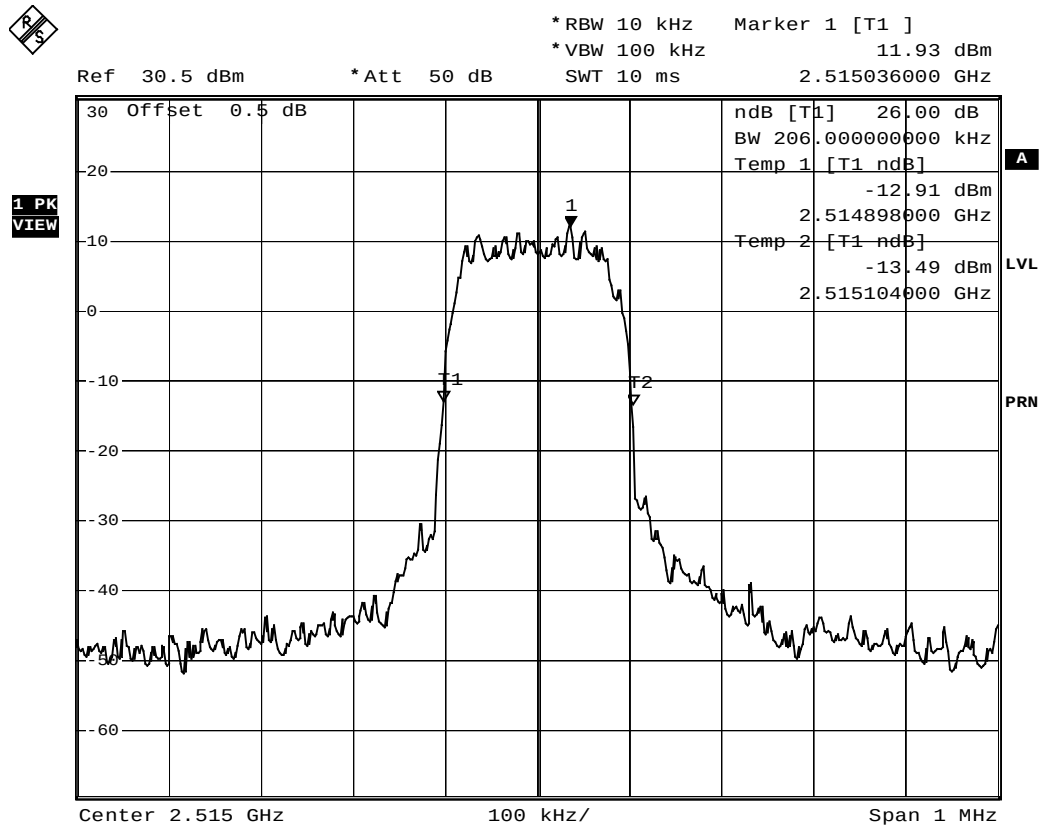
Date: 1.OCT.2008 19:57:57

Test Mode: Mode 1

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 160 ksps



Date: 31.AUG.2008 19:34:33

Upstream Symbol Rate: 2560 ksps

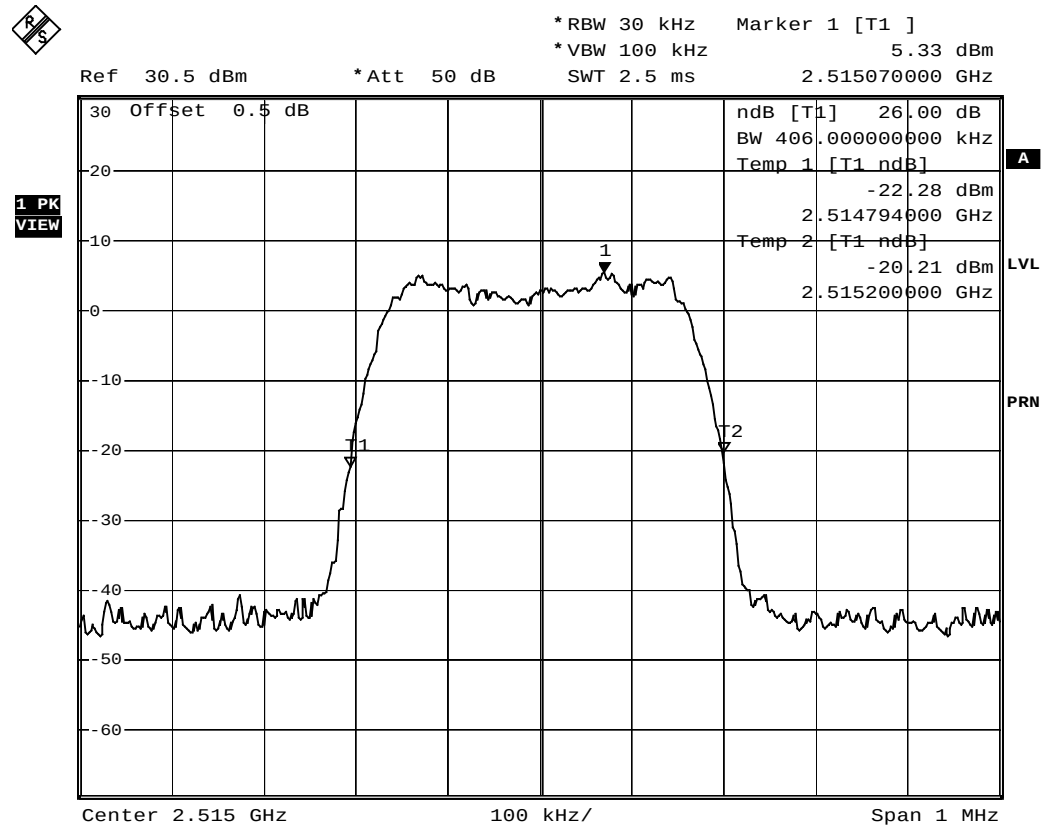


Test Mode: Mode 3

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 320 ksps



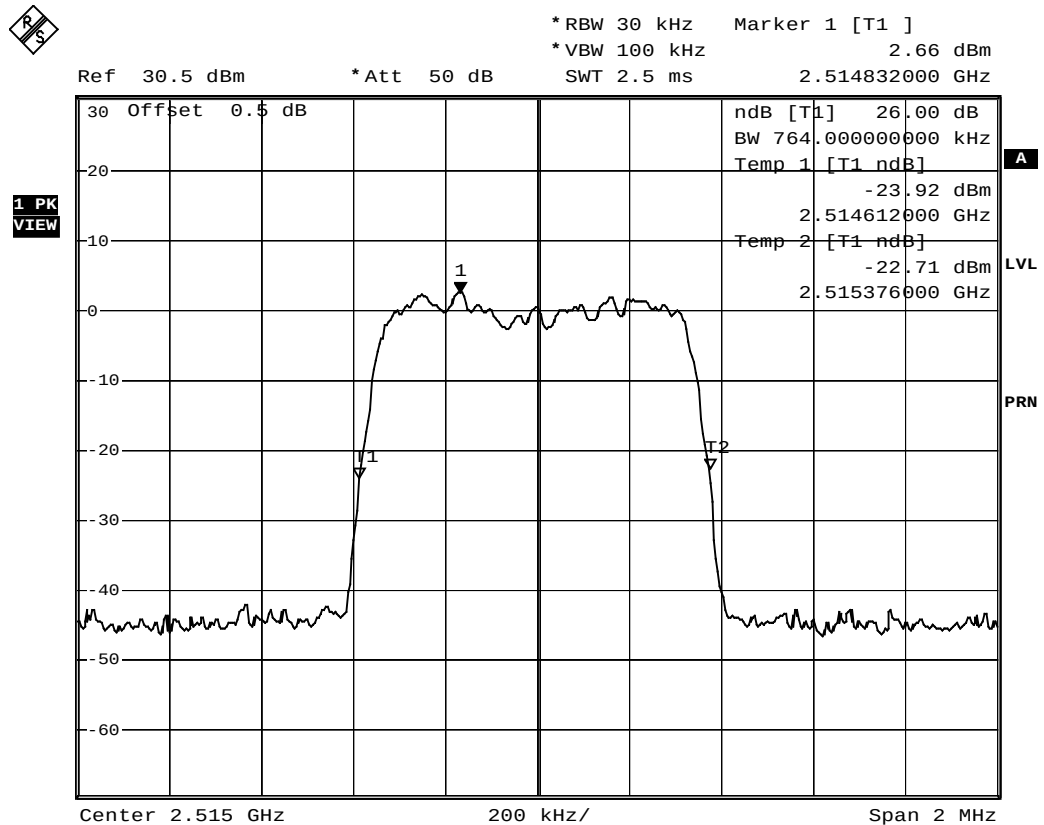
Date: 1.OCT.2008 19:14:45

Test Mode: Mode 4

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 640 ksps



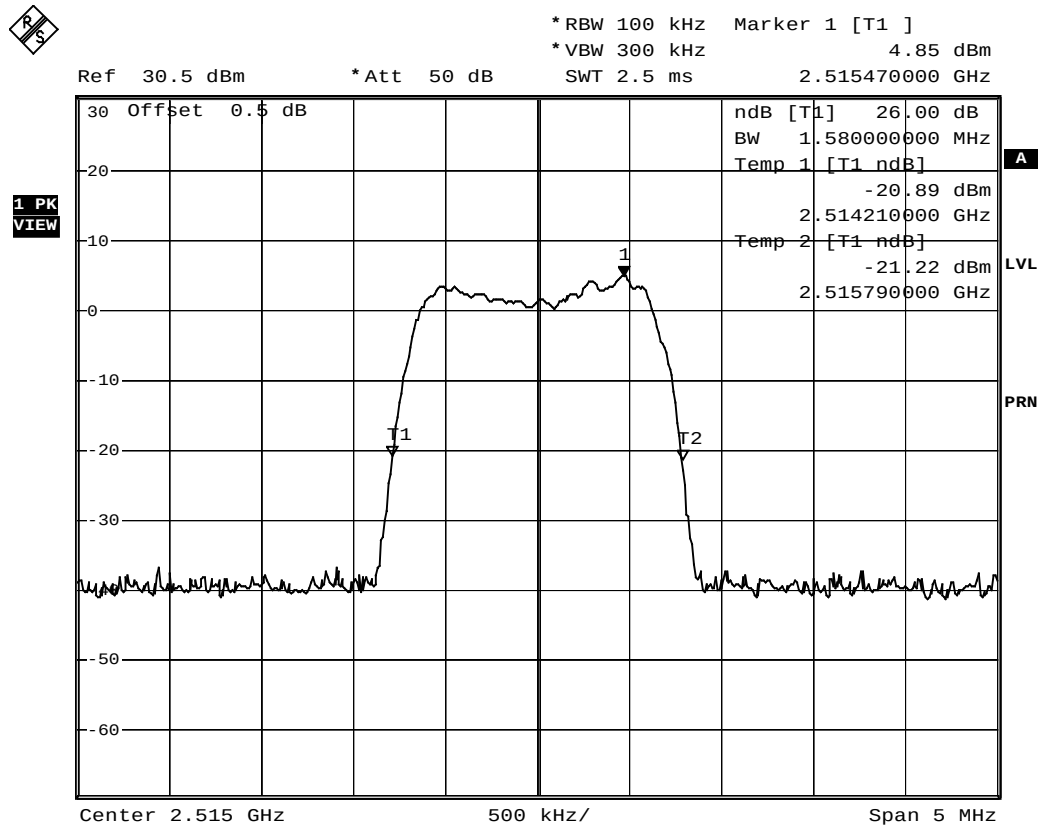
Date: 1.OCT.2008 19:34:24

Test Mode: Mode 5

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 1280 ksps



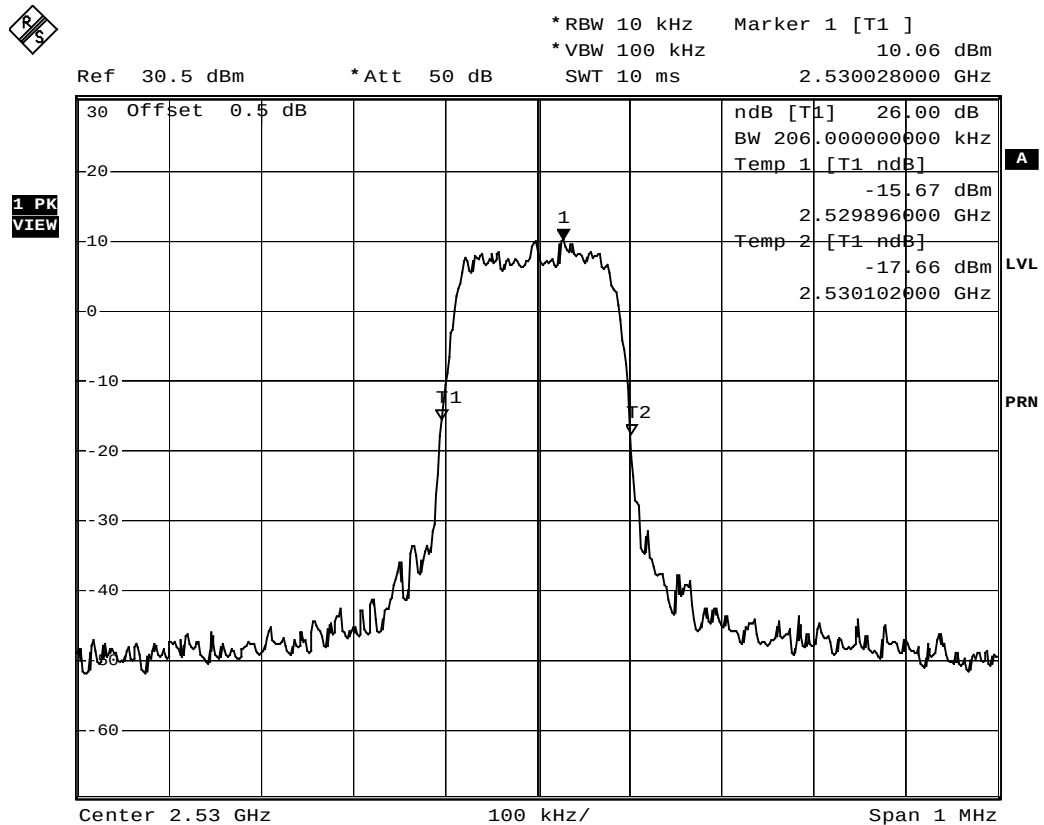
Date: 1.OCT.2008 19:57:19

Test Mode: Mode 1

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 160 ksps



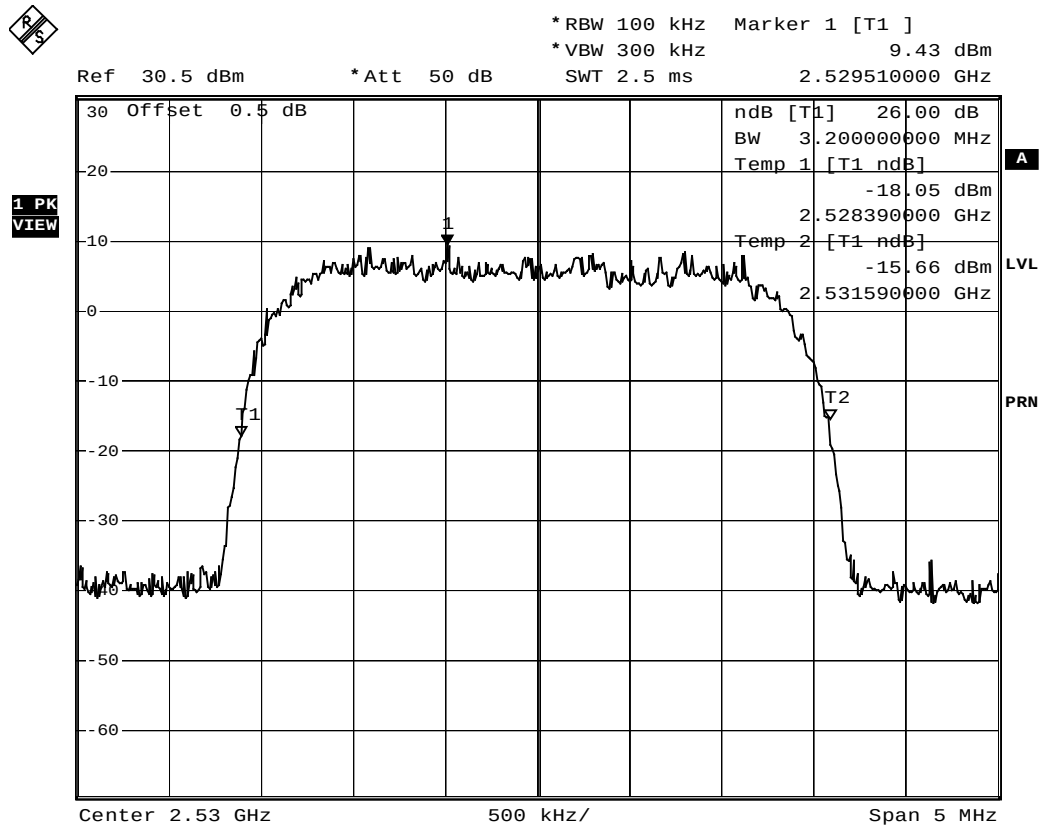
Date: 31.AUG.2008 19:30:54

Test Mode: Mode 2

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 2560 kpsps



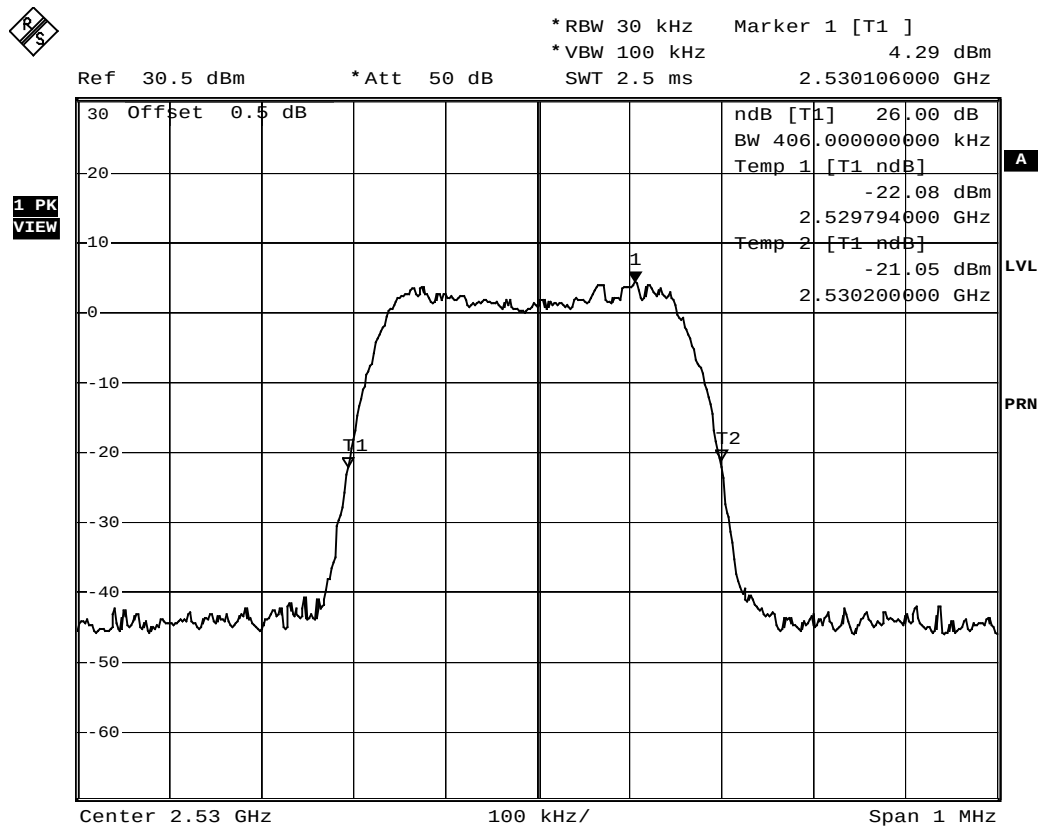
Date: 31.AUG.2008 19:22:17

Test Mode: Mode 3

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 320 ksps



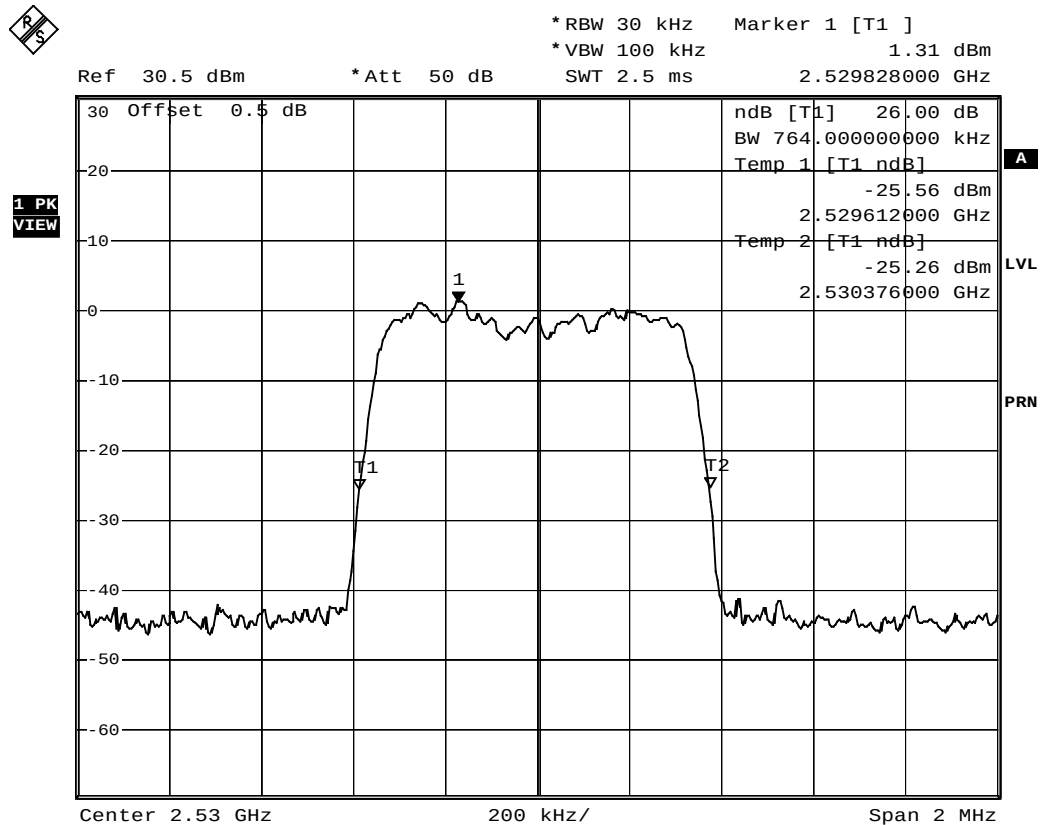
Date: 1.OCT.2008 19:13:53

Test Mode: Mode 4

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 640 ksps



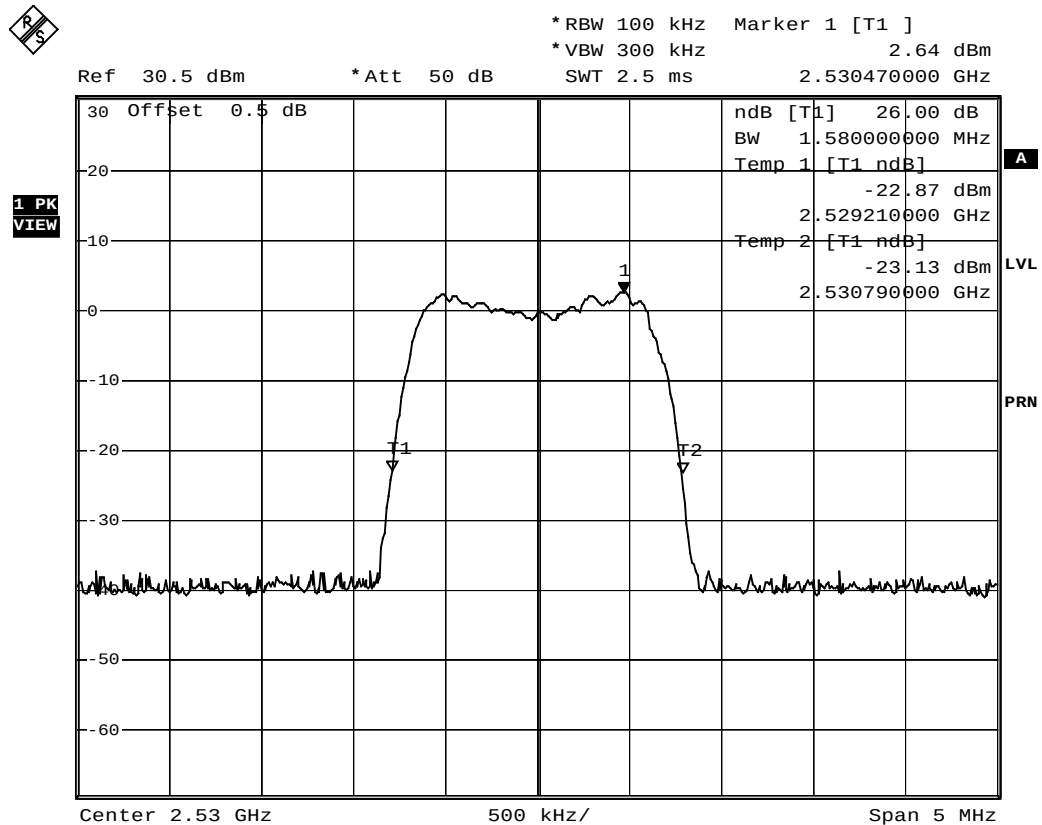
Date: 1.OCT.2008 19:33:30

Test Mode: Mode 5

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 1280 ksps



Date: 1.OCT.2008 19:56:41

4. Band Edge

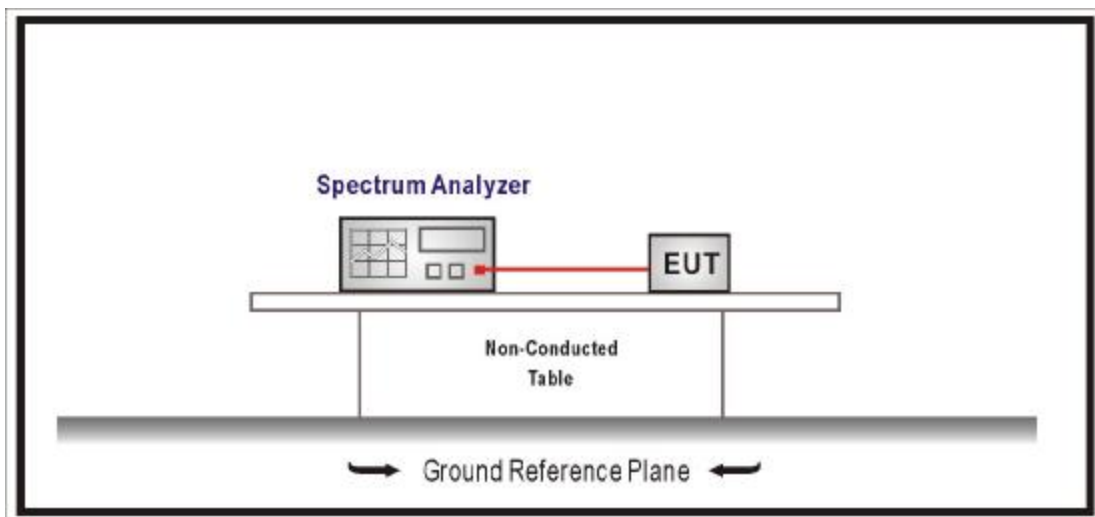
4.1. Test Equipment

The following test equipments are used during the test:

RF Conducted Measurement:				
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2008
2	No.7 Shielding Room			Sep., 2008

4.2. Test Setup

RF Conducted Measurement:



4.3. Limits

- (1) Fixed and Temporary Fixed Digital Stations: not less than $43 + \log (P)$ dB
- (2) Mobile Digital Stations: not less than $43 + \log (P)$ dB at the channel edge and $55 + \log (P)$ dB at 5.5 MHz from the channel edges

Sample Calculation:

Assume the EUT Output Power is 2 W = 33 dBm

$$43 + \log (P) \text{ dB}$$

$$43 + \log (2) = 46 \text{ dB}$$

$$33 \text{ dBm} - 46 \text{ dB} = -13 \text{ dBm}$$

$$55 + \log (2) = 58 \text{ dB}$$

$$33 \text{ dBm} - 58 \text{ dB} = -25 \text{ dBm}$$

4.4. Test Procedure

The EUT was set up for the rated peak power. The band edge was measured with Spectrum Analyzer with a resolution bandwidth of 100 kHz and video bandwidth of 300 kHz. All measurements were done at 2 channels: low and high operational frequency range.

The center frequency of spectrum is the band edge frequency and span is 7.5 MHz for test mode 1 (5 MHz bandwidth) and 15 MHz for test mode 2 (10 MHz bandwidth). The resolution bandwidth of spectrum is 100 kHz and video bandwidth of spectrum is 300 kHz.

Record the max trace plot into the test report.

4.5. Uncertainty

The measurement uncertainty

Conducted is defined as $\pm 1.27\text{dB}$

Radiated is defined as $\pm 3.9\text{dB}$

4.6. Test Result

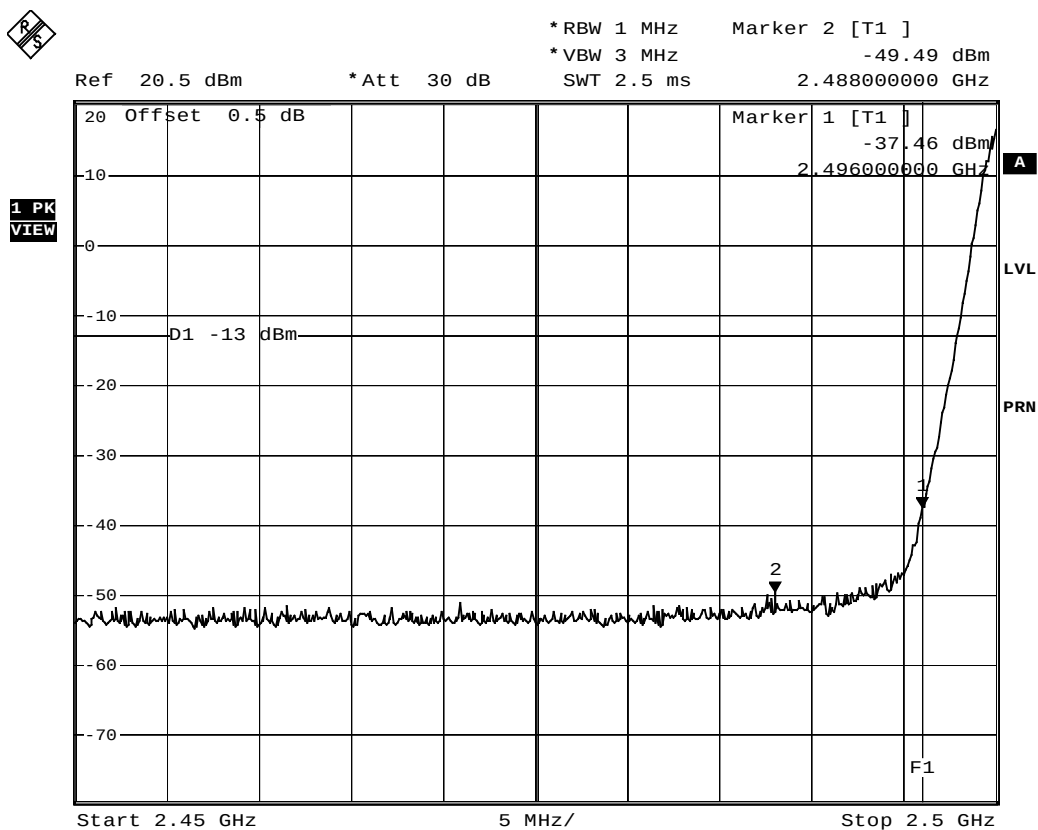
Product	2.5GHz Integrated CPE Transmitter		
Test Item	Band Edge		
Test Mode	Transmit		
Date of Test	2008/08/31	Test Site	No.7 Shielding Room

Test Mode: Mode 1

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 160 kps



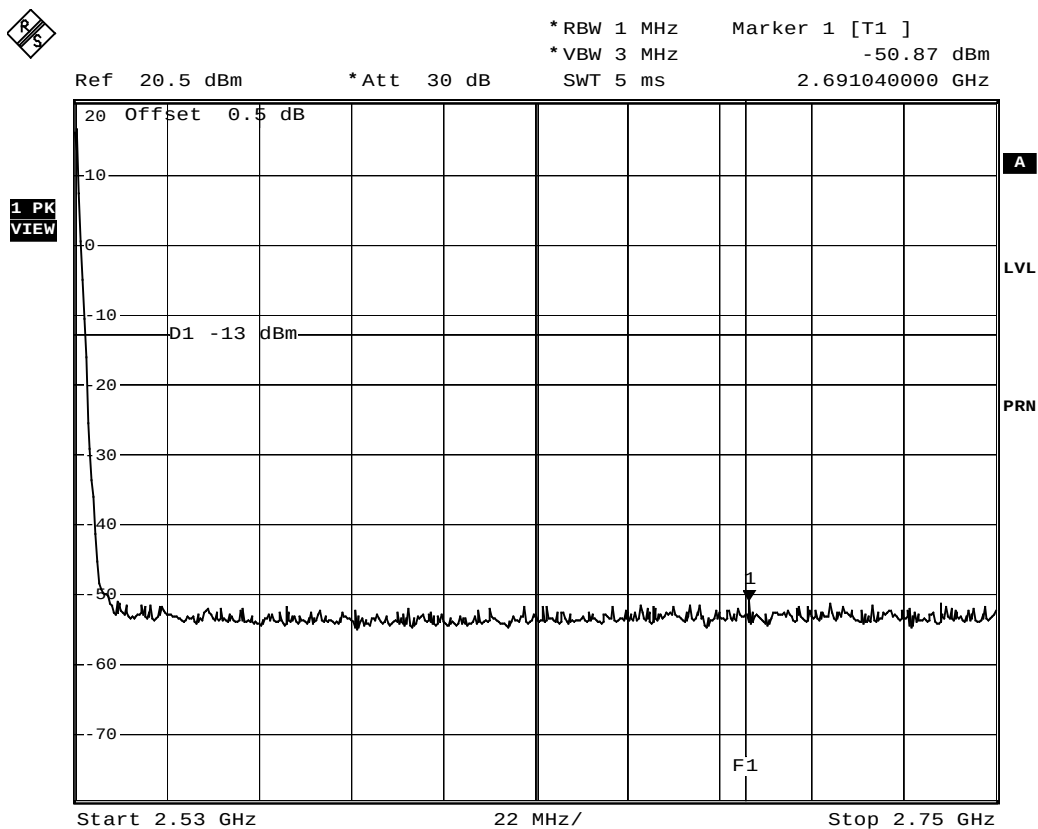
Date: 31.AUG.2008 20:51:31

Test Mode: Mode 1

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 160 ksps



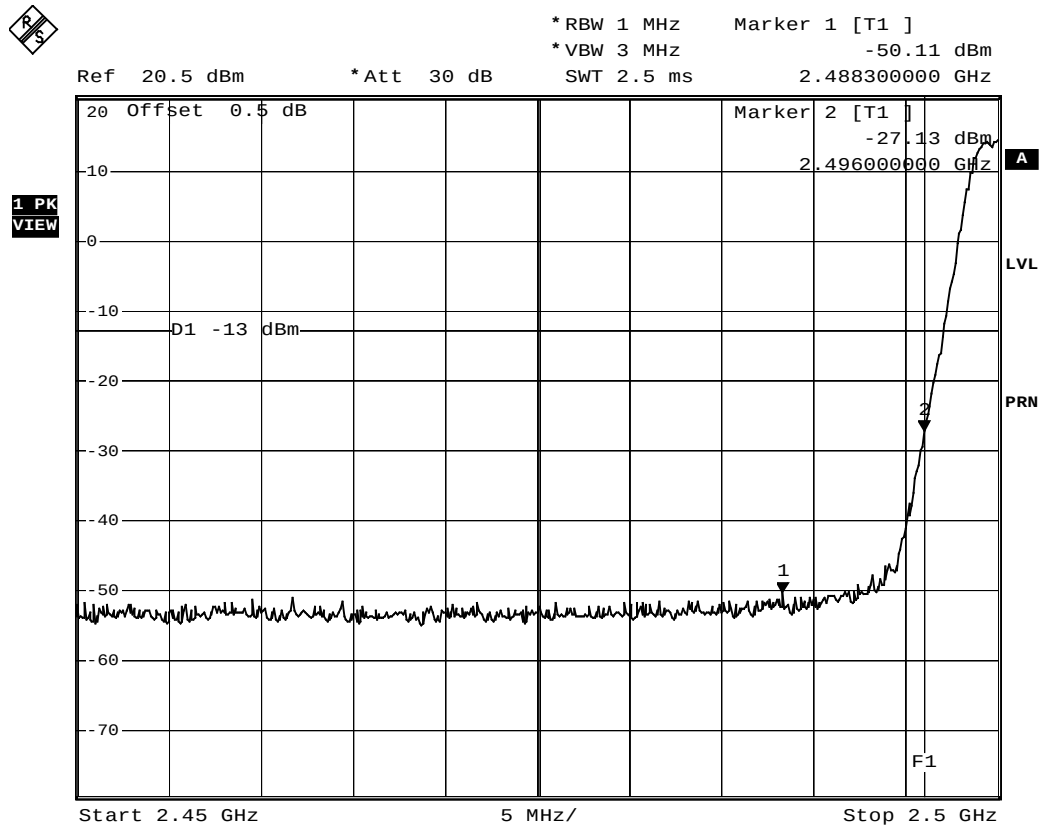
Date: 31.AUG.2008 20:54:11

Test Mode: Mode 2

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 2560 ksps



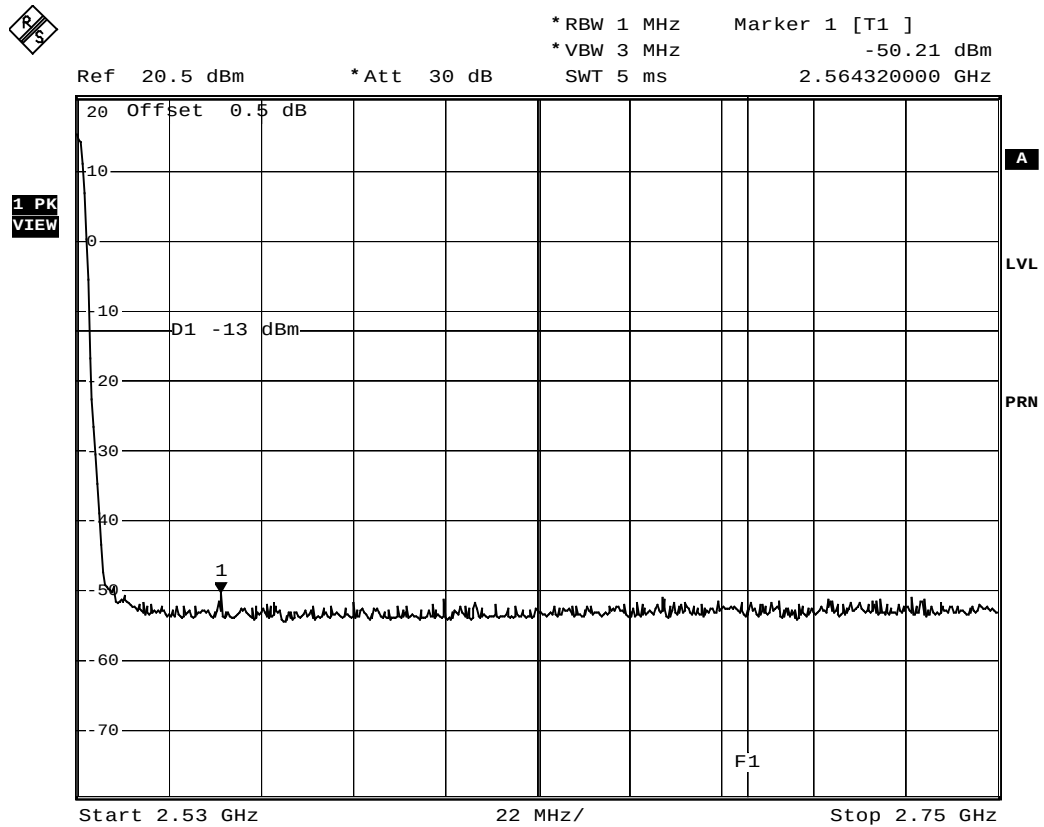
Date: 31.AUG.2008 21:00:21

Test Mode: Mode 2

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 2560 ksps



Date: 31.AUG.2008 20:58:07

5. Conducted Spurious Emission

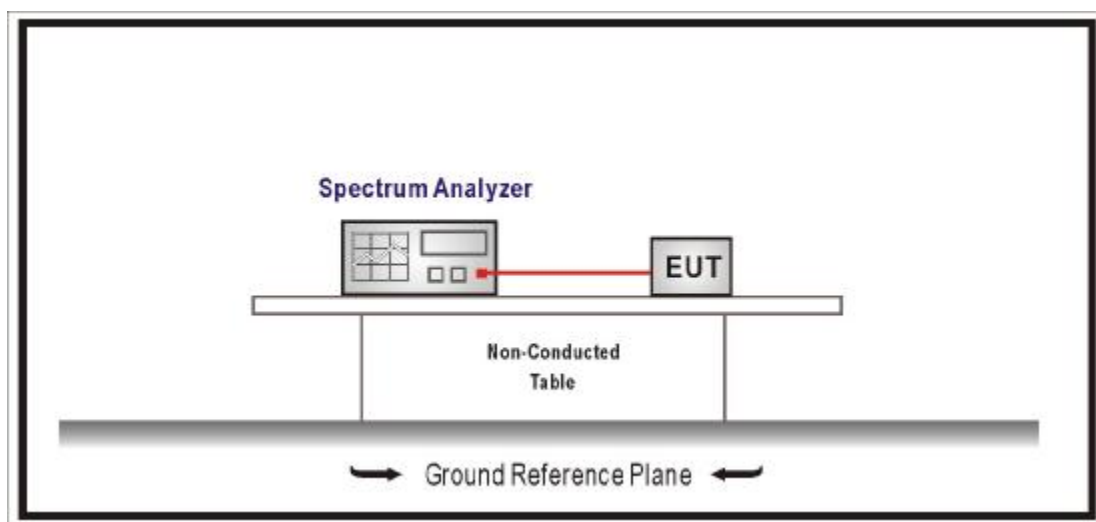
5.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP40 / 100005	Nov., 2007
2	No.7 Shielding Room			Sep., 2008

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

5.2. Test Setup



5.3. Limits

- (1) Fixed and Temporary Fixed Digital Stations: not less than $43 + \log (P)$ dB
- (2) Mobile Digital Stations: not less than $43 + \log (P)$ dB at the channel edge and $55 + \log (P)$ dB at 5.5 MHz from the channel edges

Sample Calculation:

Assume the EUT Output Power is 2 W = 33 dBm

$$43 + \log (P) \text{ dB}$$

$$43 + \log (2) = 46 \text{ dB}$$

$$33 \text{ dBm} - 46 \text{ dB} = -13 \text{ dBm}$$

$$55 + \log (2) = 58 \text{ dB}$$

$$33 \text{ dBm} - 58 \text{ dB} = -25 \text{ dBm}$$

5.4. Test Procedure

The EUT was set up for the rated peak power. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels: low, middle and high operational frequency range.

When the spectrum scanned from 30MHz to 27GHz, it connected to the 10dB attenuator to the carried frequency. The spectrum set RBW = 1MHz, VBW = 3MHz. and using peak detection mode.

5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

5.6. Test Result

Product	2.5GHz Integrated CPE Transmitter		
Test Item	Conducted Spurious Emission		
Test Mode	Transmit		
Date of Test	2008/09/04	Test Site	No.7 Shielding Room

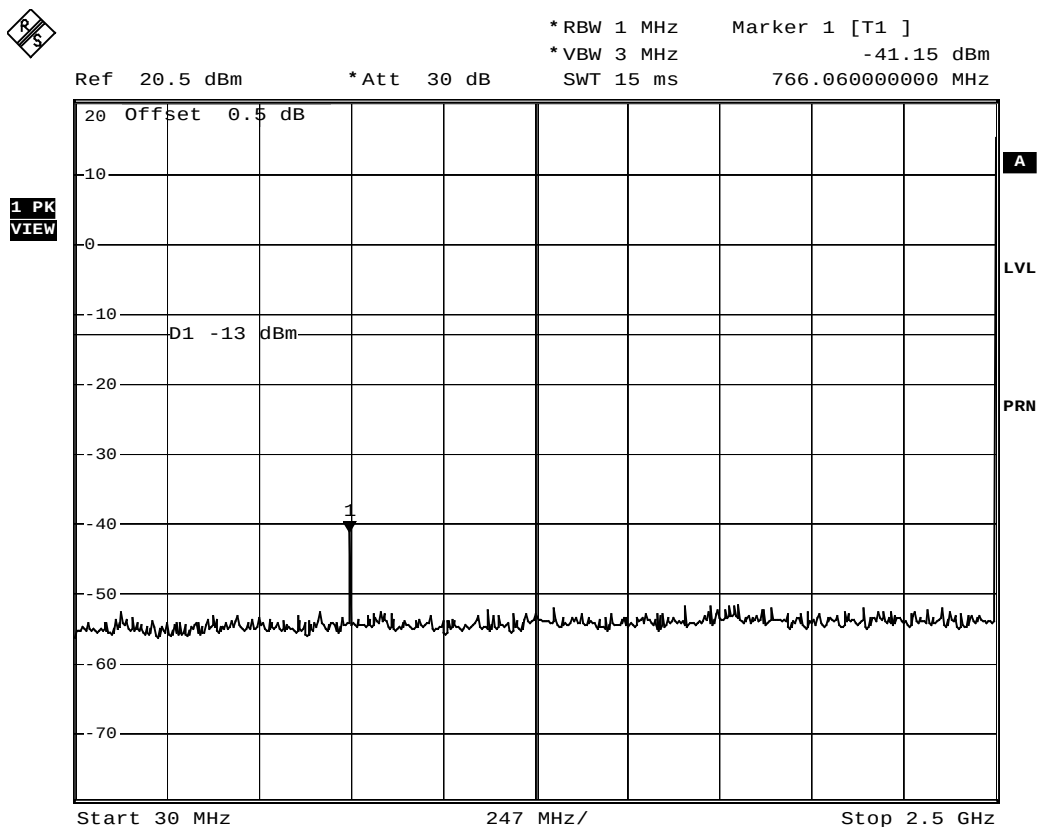
Test Mode: Mode 1

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 160 kps

30MHz-2500MHz



Date: 4.SEP.2008 14:30:13

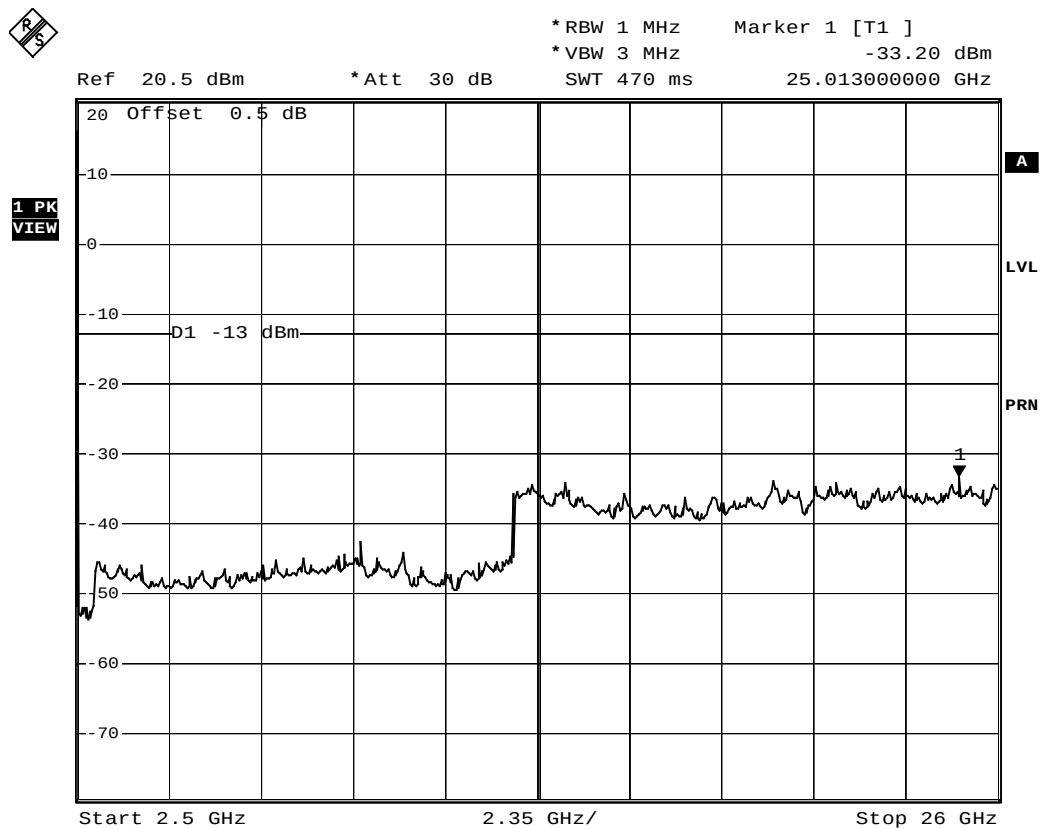
Test Mode: Mode 1

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 160 ksps

2500MHz-26000MHz



Date: 4.SEP.2008 14:31:33

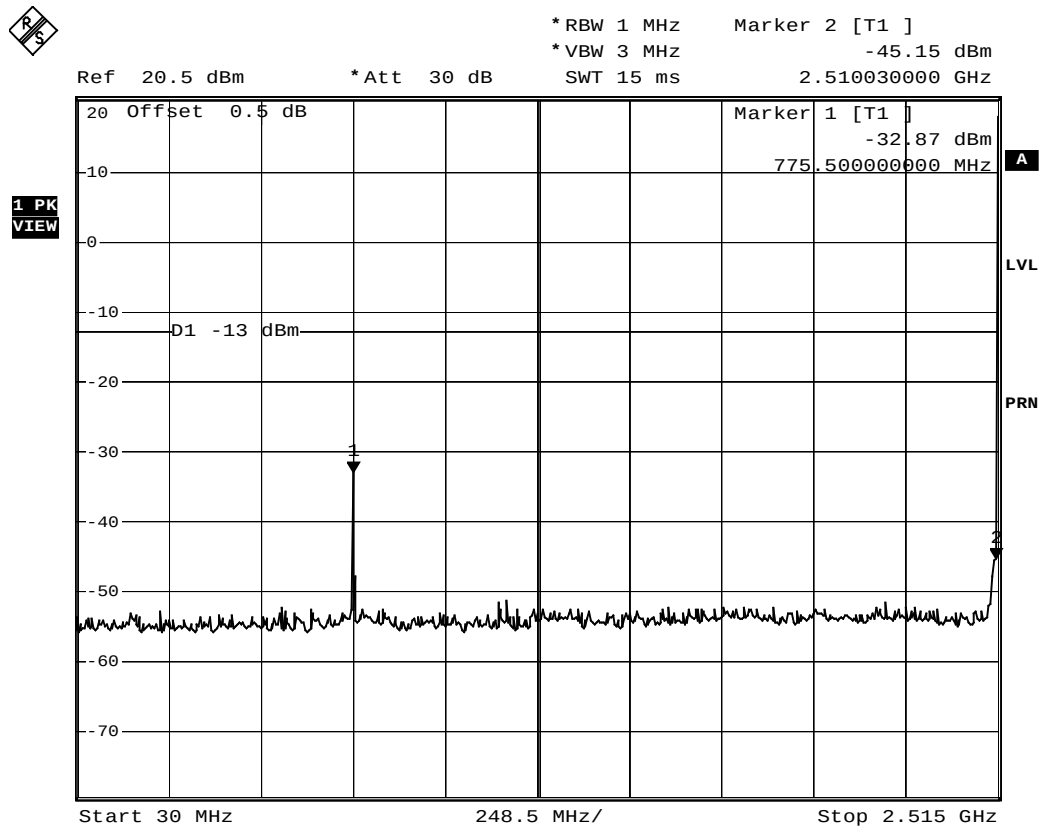
Test Mode: Mode 1

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 160 ksps

30MHz-2515MHz



Date: 4.SEP.2008 14:33:16

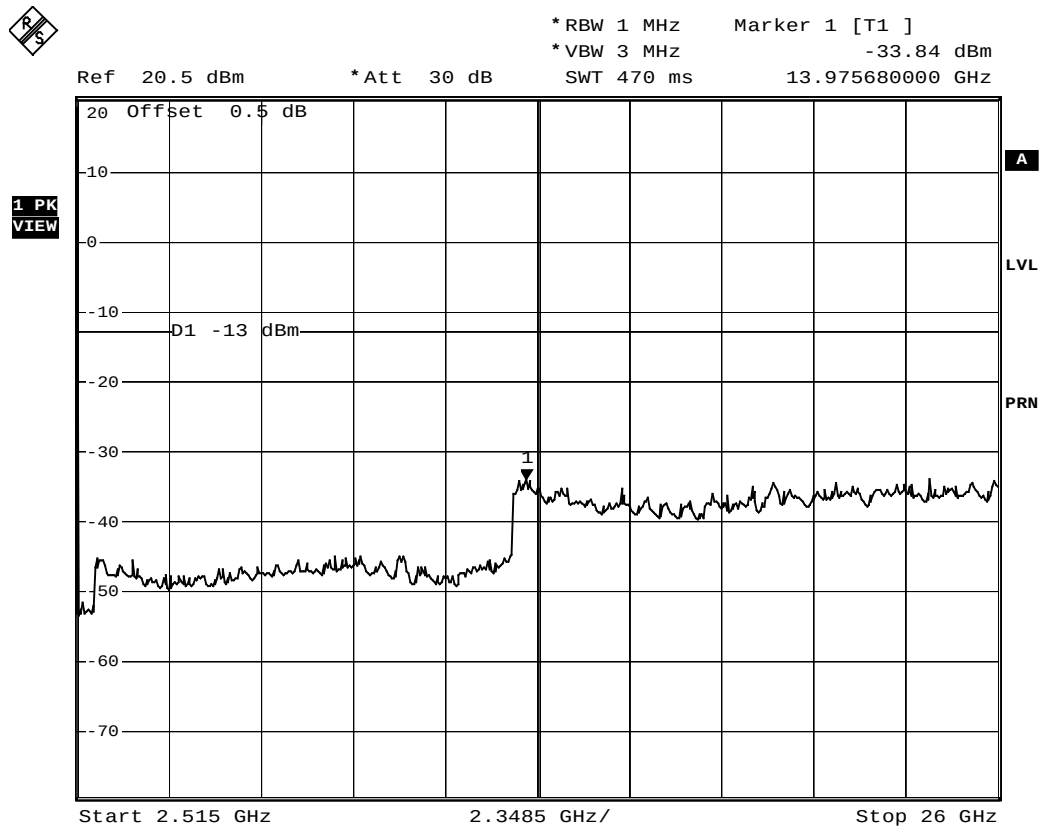
Test Mode: Mode 1

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 160 ksps

2515MHz-26000MHz



Date: 4.SEP.2008 14:37:27

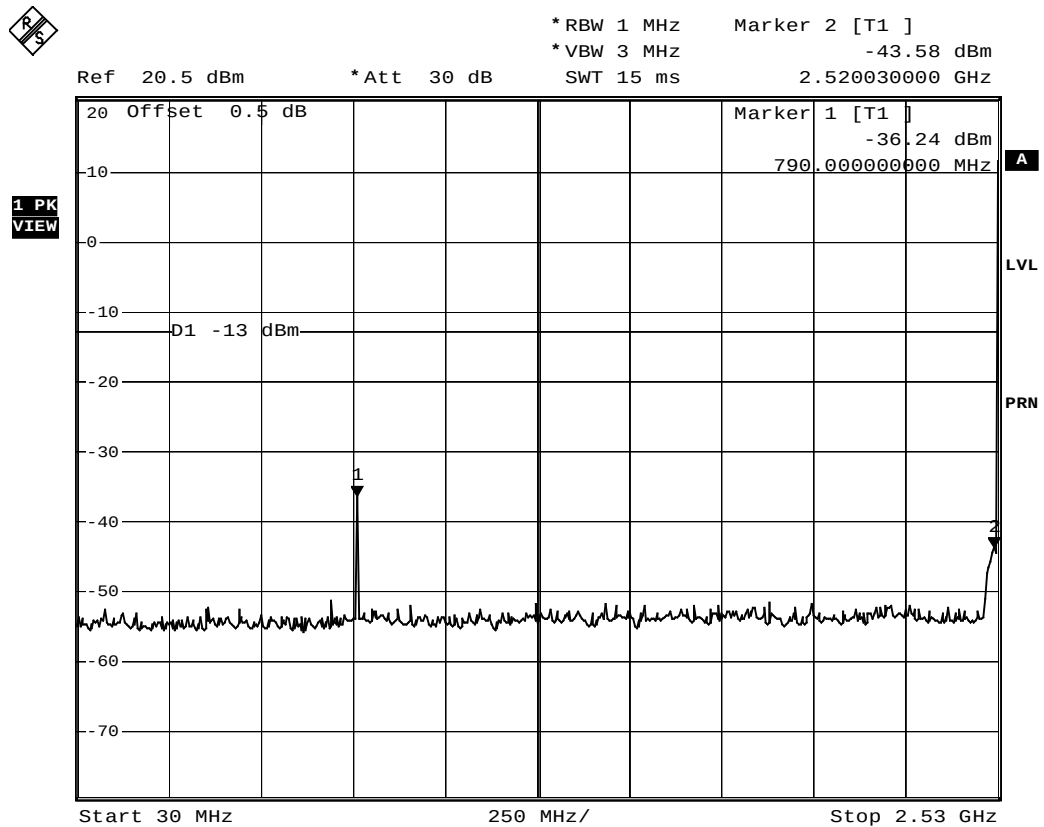
Test Mode: Mode 1

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 160 ksps

30MHz-2530MHz



Date: 4.SEP.2008 14:34:53

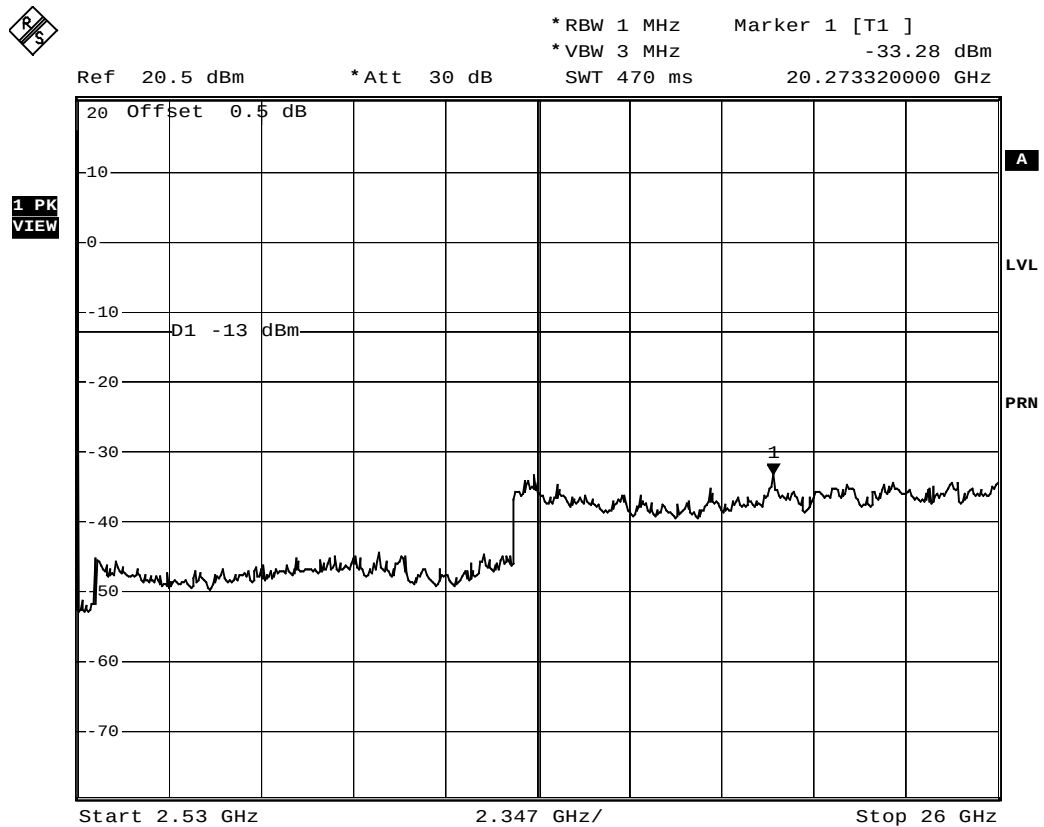
Test Mode: Mode 1

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 160 ksps

2530MHz-26000MHz



Date: 4.SEP.2008 14:35:58

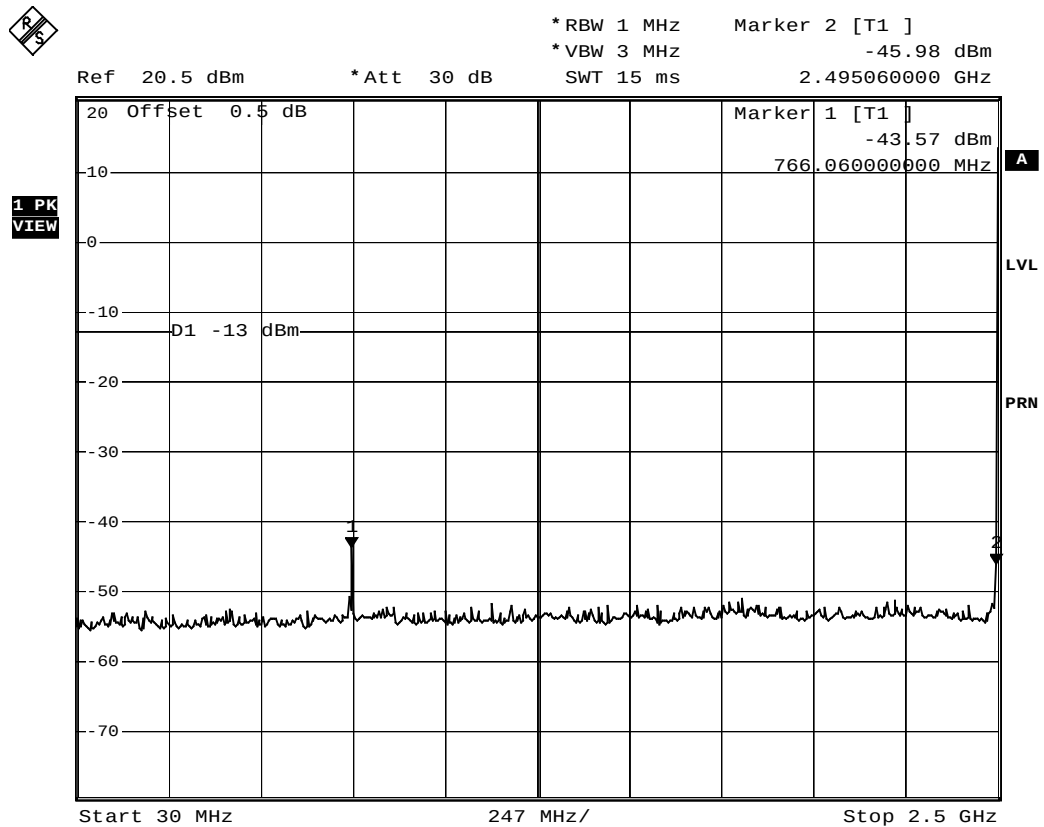
Test Mode: Mode 2

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 2560 ksps

30MHz-2500MHz



Date: 4.SEP.2008 14:56:15

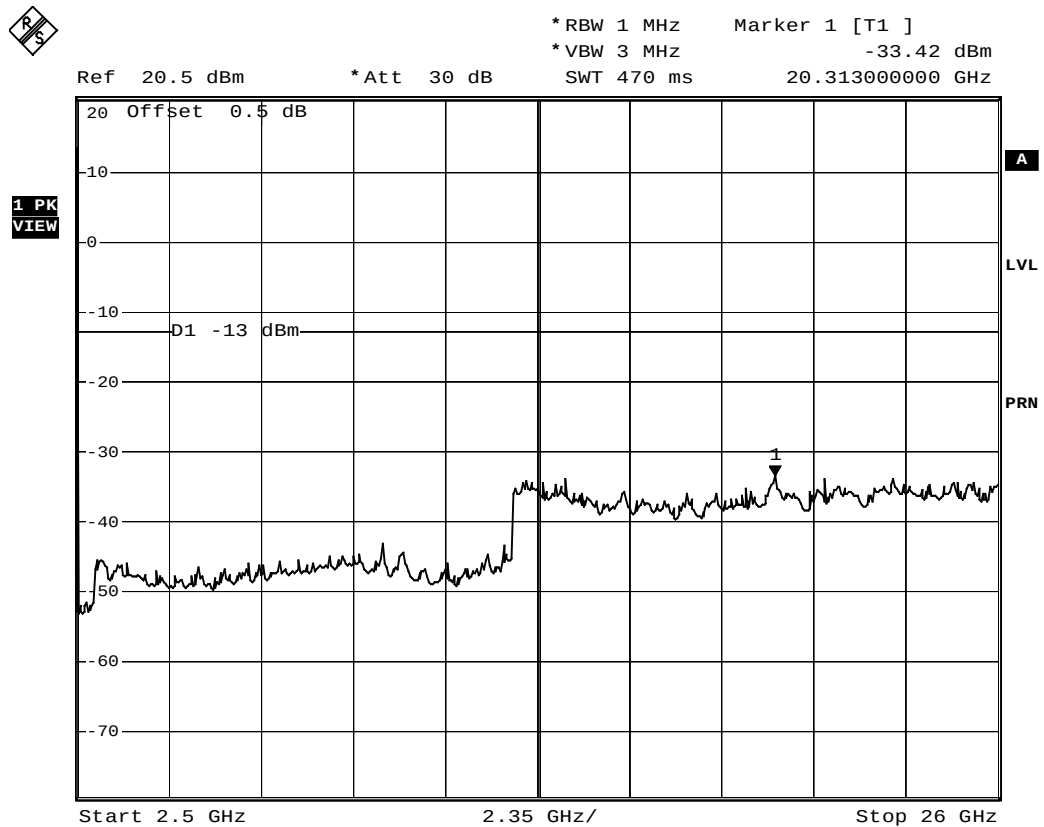
Test Mode: Mode 2

Modulation Type: 16QAM

2500 MHz

Upstream Symbol Rate: 2560 ksps

2500MHz-26000MHz



Date: 4.SEP.2008 15:01:41

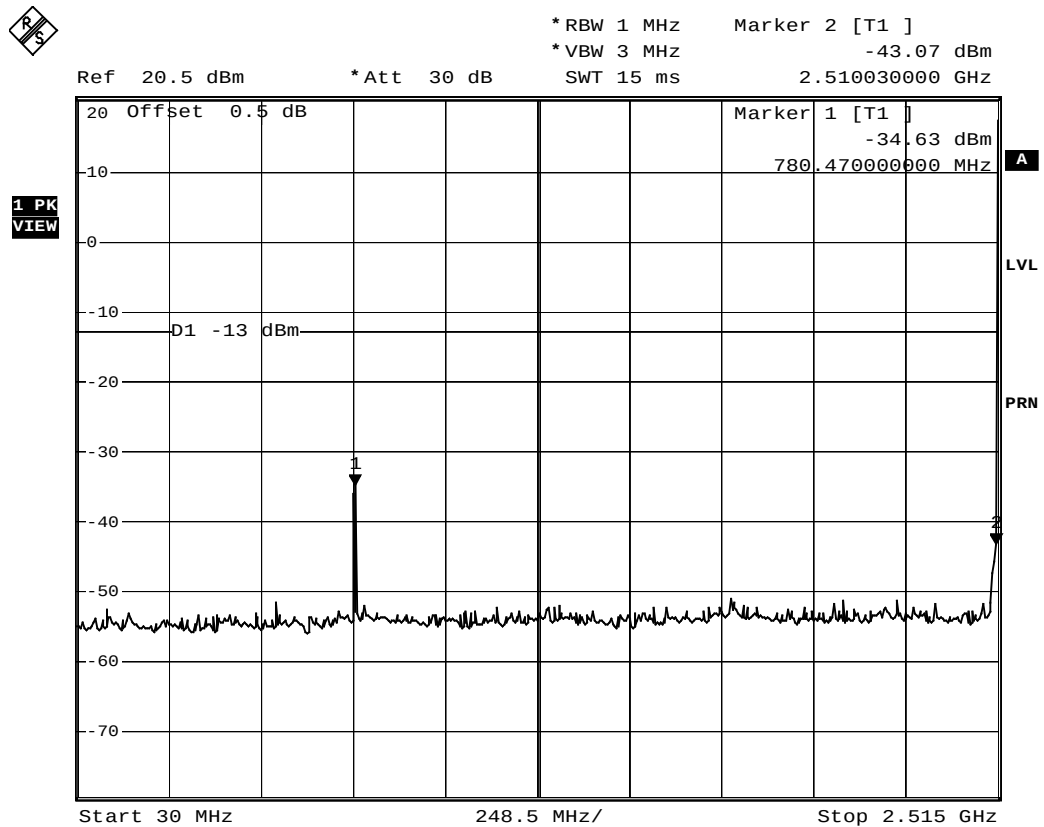
Test Mode: Mode 2

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 2560 ksps

30MHz-2515MHz



Date: 4.SEP.2008 14:57:33

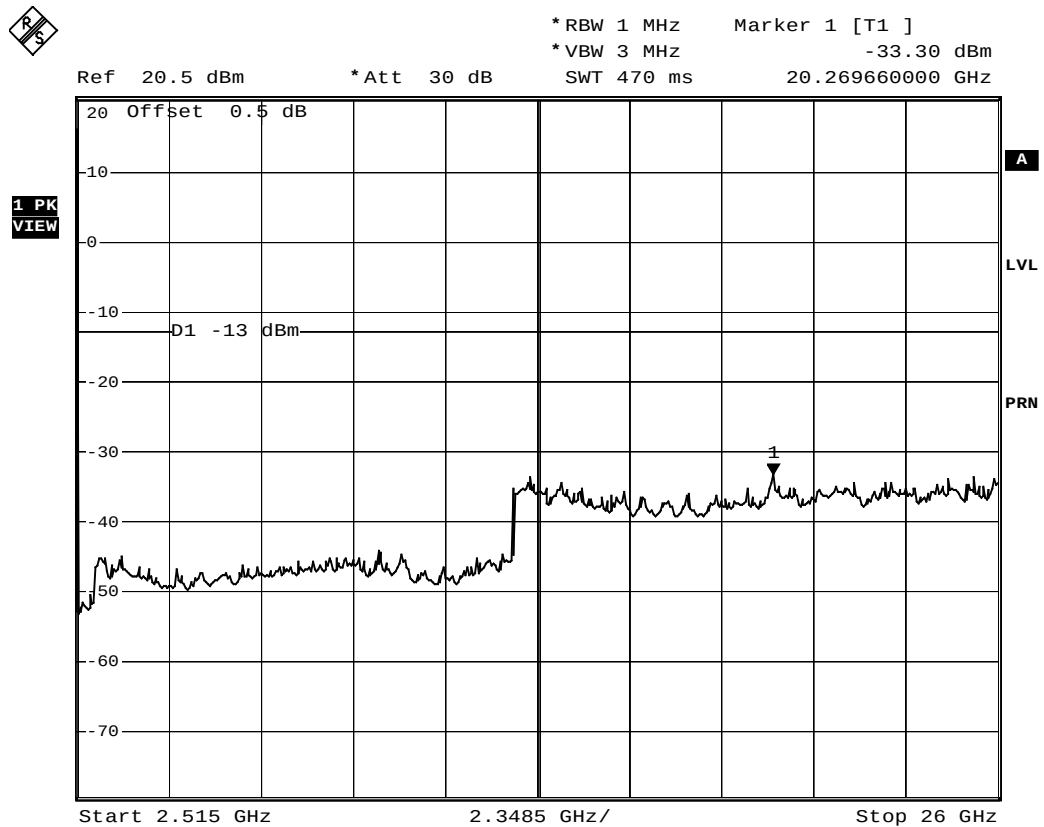
Test Mode: Mode 2

Modulation Type: 16QAM

2515 MHz

Upstream Symbol Rate: 2560 ksps

2515MHz-26000MHz



Date: 4.SEP.2008 15:00:43

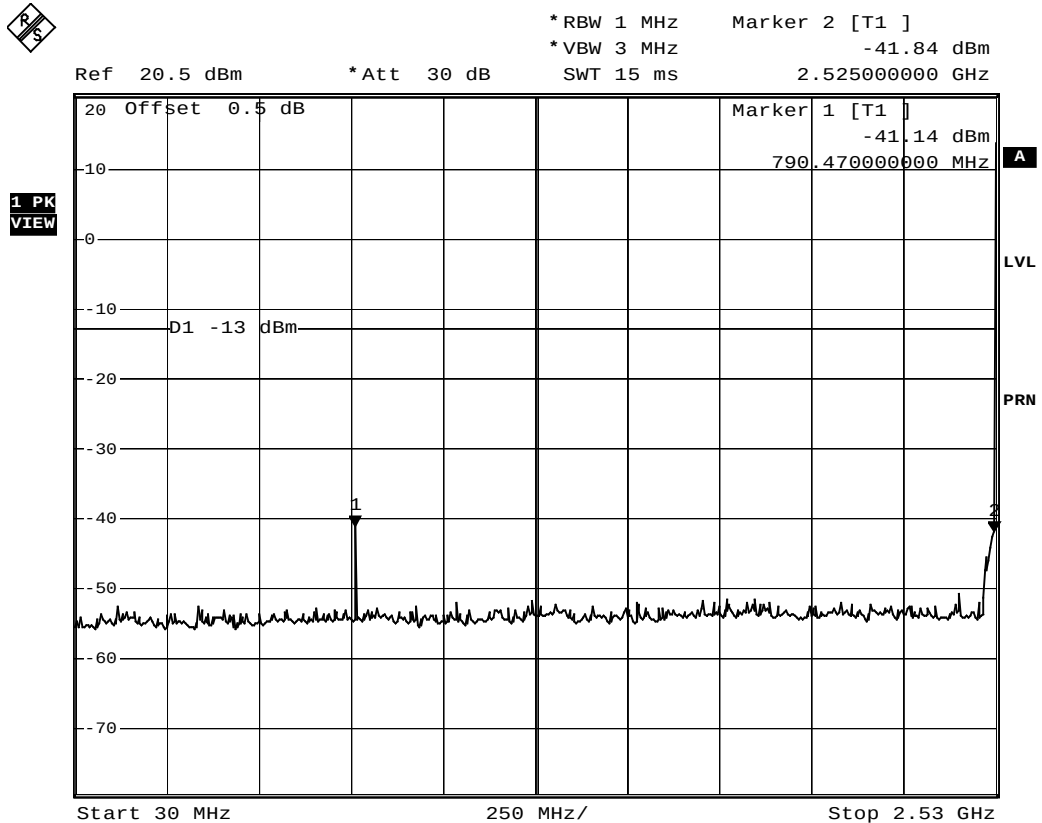
Test Mode: Mode 2

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 2560 ksps

30MHz-2530MHz



Date: 4.SEP.2008 14:58:40

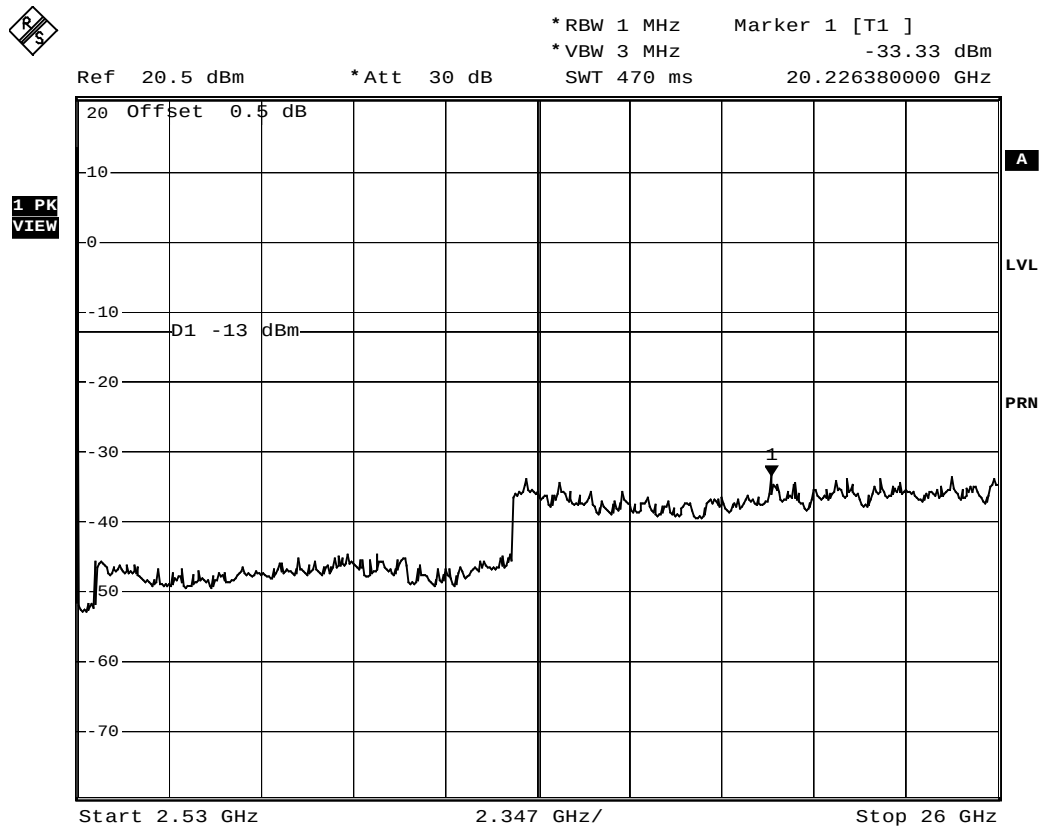
Test Mode: Mode 2

Modulation Type: 16QAM

2530 MHz

Upstream Symbol Rate: 2560 ksps

2530MHz-26000MHz



Date: 4.SEP.2008 14:59:49

6. Radiated Spurious Emission

6.1. Test Equipment

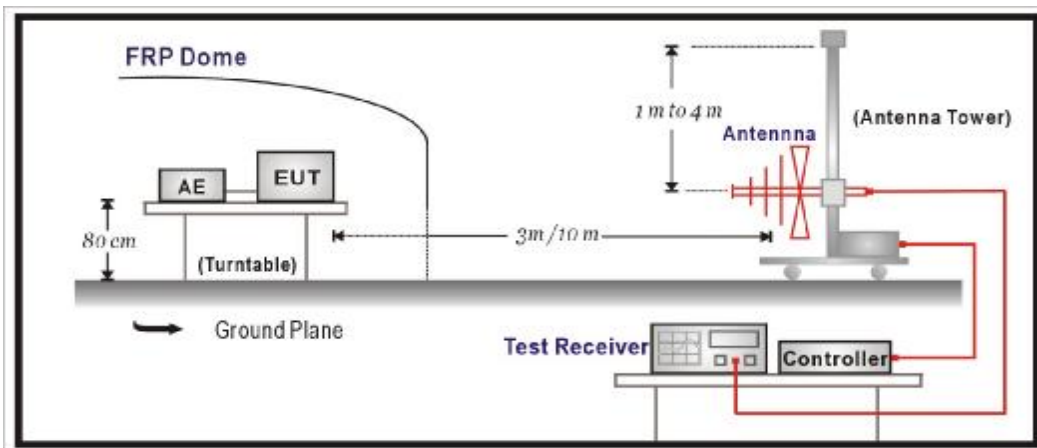
The following test equipments are used during the test:

Item		Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Test Receiver	R & S	ESCS 30 / 825442/017	Jan., 2008
2	X	Spectrum Analyzer	Advantest	R3261C / 81720266	N/A
3	X	Pre-Amplifier	HP	8447D / 2944A09276	N/A
4	X	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2008
5	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2008
6	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2008
7	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Jul., 2008
8	X	Horn Antenna	Schwarzbeck	BBHA 9120 / 9120D-639	Aug., 2008
9	X	Singal Generator	MG3694A	041902	Nov., 2007
10		No.1 OATS			Sep., 2008

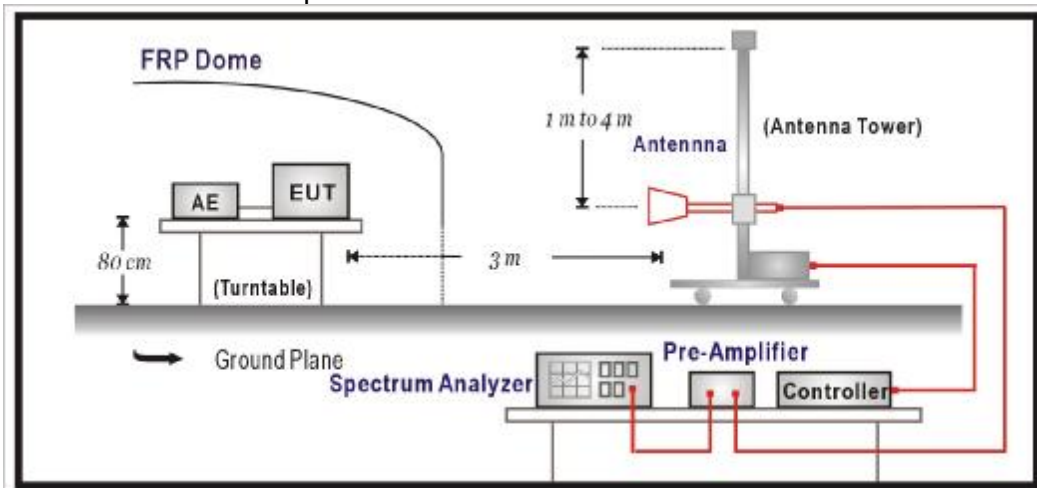
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
2. "N/A" Ca1.Date is used to Pre-test, not final test.

6.2. Test Setup

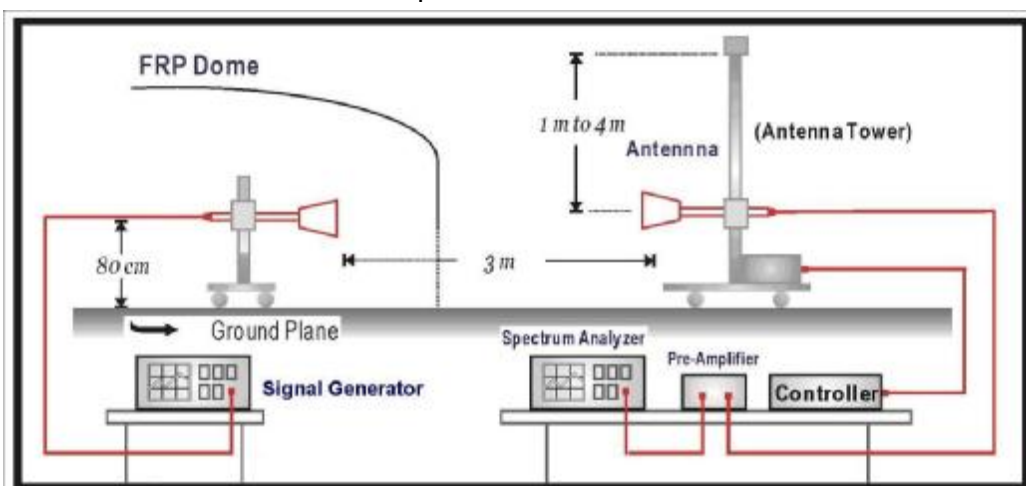
Under 1GHz Test Setup:



Above 1GHz Test Setup:



Substitution Measurement Setup:



Measure Level = Signal Generator - Cable Loss + Antenna Gain

6.3. Limits

- (1) Fixed and Temporary Fixed Digital Stations: not less than $43 + \log (P)$ dB.
- (2) Mobile Digital Stations: not less than $43 + \log (P)$ dB at the channel edge and $55 + \log (P)$ dB at 5.5 MHz from the channel edges.

Sample Calculation:

Assume the EUT Output Power is $2\text{ W} = 33\text{ dBm}$

$43 + \log (P)$ dB

$43 + \log (2) = 46\text{ dB}$

$33\text{ dBm} - 46\text{ dB} = -13\text{ dBm}$

$55 + \log (2) = 58\text{ dB}$

$33\text{ dBm} - 58\text{ dB} = -25\text{ dBm}$

6.4. Test Procedure

For measuring E.I.R.P peak power, EUT was placed on the turn-table which was rotated around 360 degrees to search the maximum radiation power and receiver antenna was rotated vertical and horizontal polarization to find the maximum polarization radiated power.

The EUT is replaced by a horn antenna connected to a signal generator tuned to the frequency of emission and level of signal generator adjusted to same level of emission. Both horizontal and vertical polarization of the antenna are set on measurement.

On any frequency, the limits shown are based on measuring equipment employing a peak detector function. The resolution bandwidth of spectrum analyzer is 1MHz. and video bandwidth is 3MHz.

The radiated E.I.R.P power was calculated via the Correct factor, Reading Level, and Antenna gain as follows:

$\text{E.I.R.P} = \text{Reading Level} + \text{Correct Factor} = \text{S.G.} - \text{Cable Loss} + \text{Antenna Gain}$

6.5. Uncertainty

The measurement uncertainty

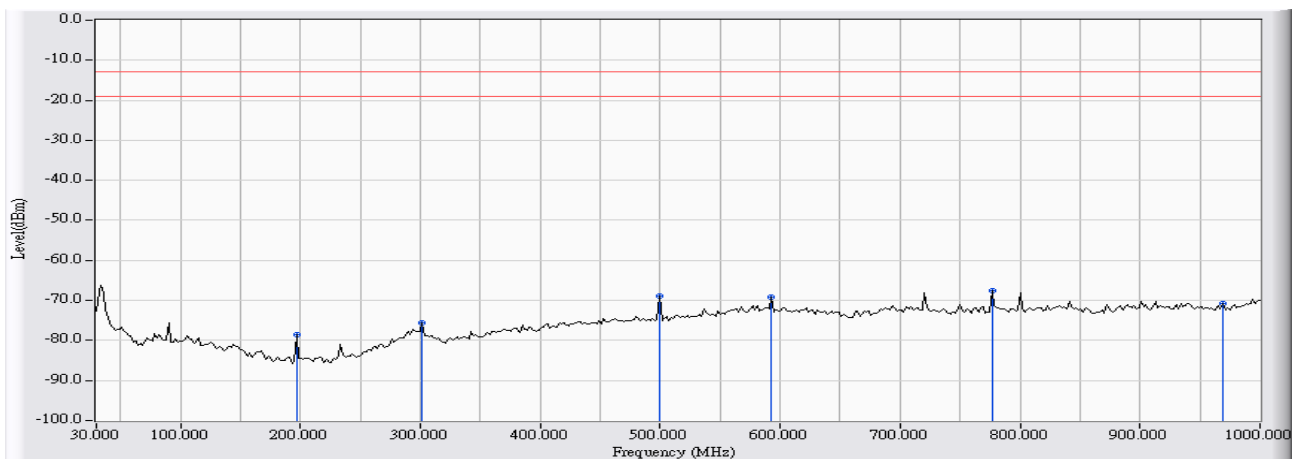
30MHz~1GHz as $\pm 3.19\text{ dB}$

1GHz~27GHz as $\pm 3.9\text{ dB}$

6.6. Test Result

30 MHz – 1 GHz Spurious:

Site : Site 1	Time : 2008/09/16 - 10:15
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : CE_30-1G(2008-9) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit

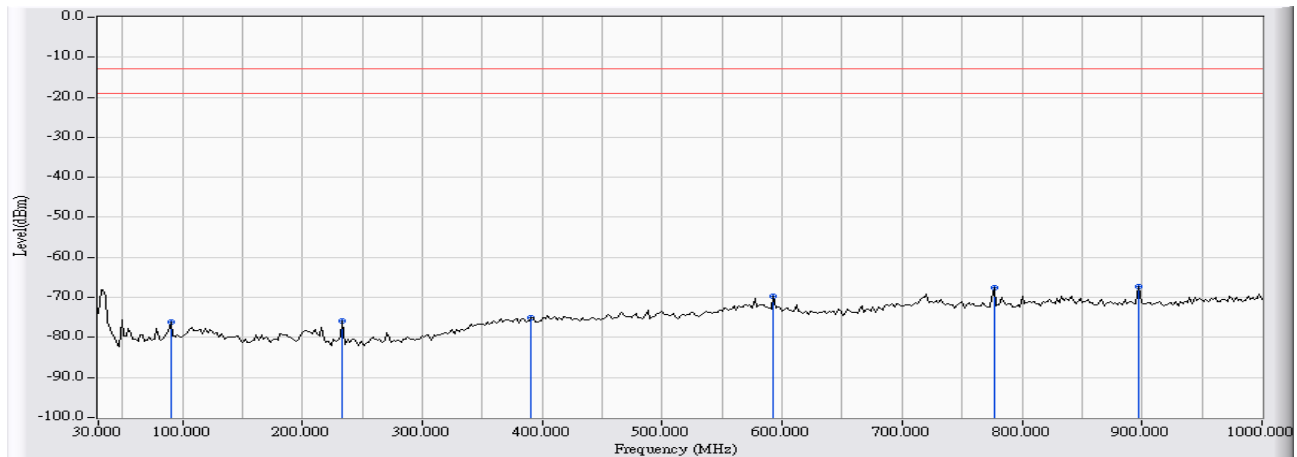


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		196.840	-2.778	-75.796	-78.574	-65.574	-13.000	PEAK
2		301.600	4.640	-80.131	-75.491	-62.491	-13.000	PEAK
3		499.480	8.352	-77.127	-68.775	-55.775	-13.000	PEAK
4		592.600	10.660	-79.800	-69.141	-56.141	-13.000	PEAK
5	*	776.900	10.816	-78.394	-67.578	-54.578	-13.000	PEAK
6		968.960	11.336	-82.056	-70.720	-57.720	-13.000	PEAK

Note:

1. All Reading Levels are Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Site 1	Time : 2008/09/16 - 10:15
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : CE_30-1G(2008-9) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit

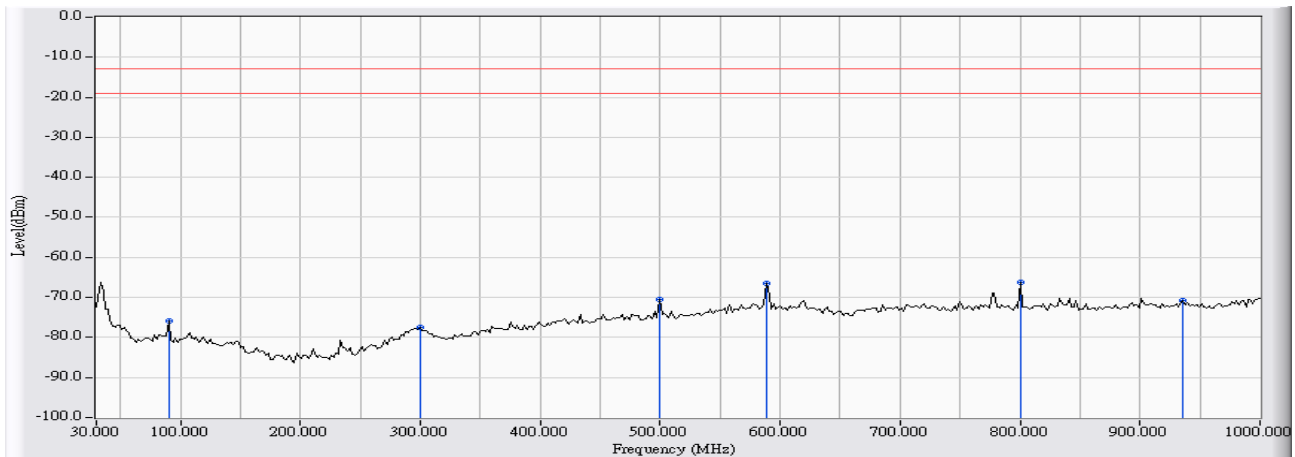


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		90.140	2.908	-79.075	-76.167	-63.167	-13.000	PEAK
2		233.700	2.113	-77.940	-75.828	-62.828	-13.000	PEAK
3		390.840	7.253	-82.406	-75.153	-62.153	-13.000	PEAK
4		592.600	10.578	-80.326	-69.748	-56.748	-13.000	PEAK
5		776.900	11.516	-79.074	-67.558	-54.558	-13.000	PEAK
6	*	897.180	12.110	-79.491	-67.380	-54.380	-13.000	PEAK

Note:

1. All Reading Levels are Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Site 1	Time : 2008/09/16 - 10:16
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : CE_30-1G(2008-9) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit

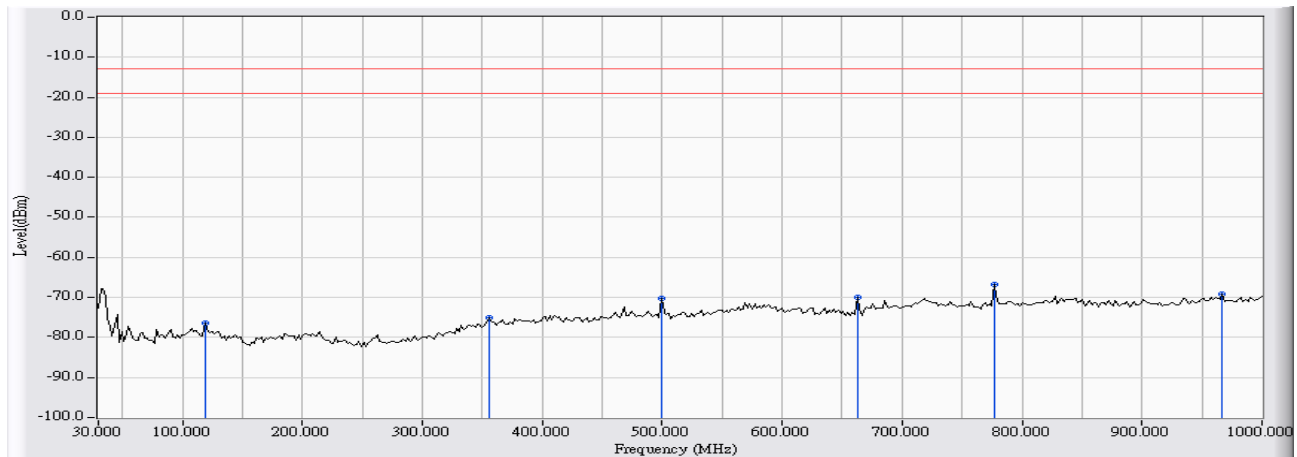


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		90.140	2.558	-78.345	-75.787	-62.787	-13.000	PEAK
2		299.660	4.856	-82.348	-77.492	-64.492	-13.000	PEAK
3		499.480	8.352	-78.939	-70.587	-57.587	-13.000	PEAK
4		588.720	10.689	-77.284	-66.595	-53.595	-13.000	PEAK
5	*	800.180	10.955	-77.188	-66.233	-53.233	-13.000	PEAK
6		935.980	11.694	-82.513	-70.819	-57.819	-13.000	PEAK

Note:

1. All Reading Levels are Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Site 1	Time : 2008/09/16 - 10:17
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : CE_30-1G(2008-9) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit



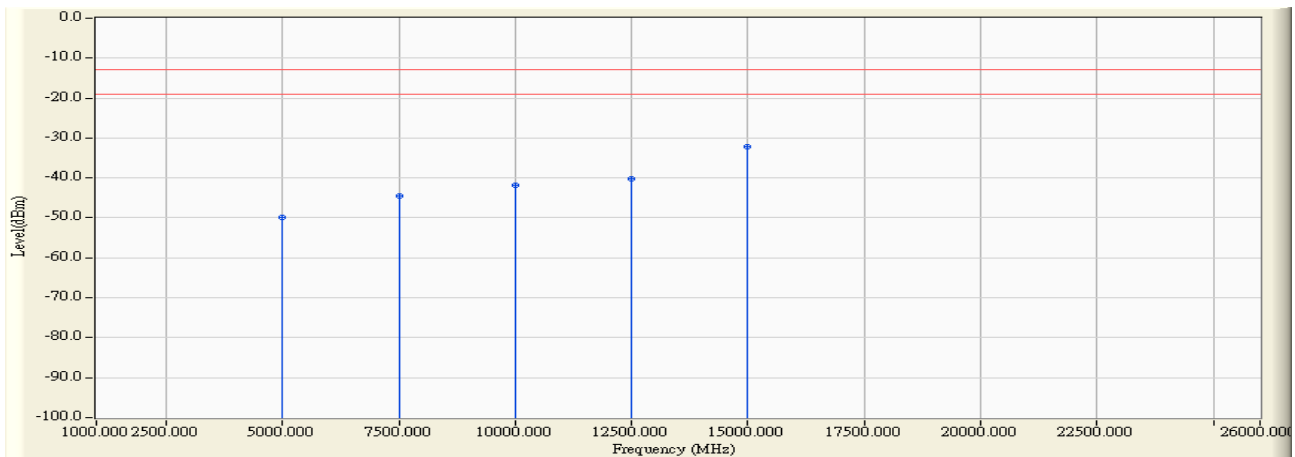
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		119.240	3.860	-80.137	-76.277	-63.277	-13.000	PEAK
2		355.920	6.589	-81.707	-75.118	-62.118	-13.000	PEAK
3		499.480	8.731	-78.984	-70.252	-57.252	-13.000	PEAK
4		662.440	9.526	-79.565	-70.039	-57.039	-13.000	PEAK
5	*	776.900	11.516	-78.179	-66.663	-53.663	-13.000	PEAK
6		967.020	13.021	-82.187	-69.166	-56.166	-13.000	PEAK

Note:

1. All Reading Levels are Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

1 GHz – 26 GHz Spurious:

Site : Site 1	Time : 2008/09/05 - 10:14
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH1

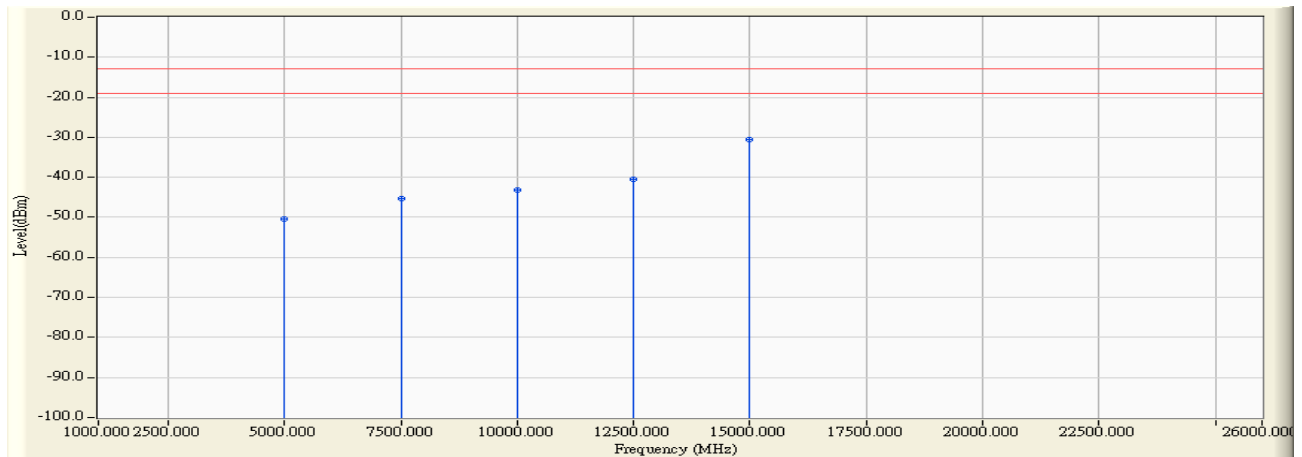


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		4999.960	19.204	-69.120	-49.916	-36.916	-13.000	PEAK
2		7500.040	24.606	-69.050	-44.444	-31.444	-13.000	PEAK
3		9999.880	28.274	-69.980	-41.706	-28.706	-13.000	PEAK
4		12499.800	30.282	-70.370	-40.088	-27.088	-13.000	PEAK
5	*	15000.160	31.287	-63.360	-32.074	-19.074	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 10:22
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH1

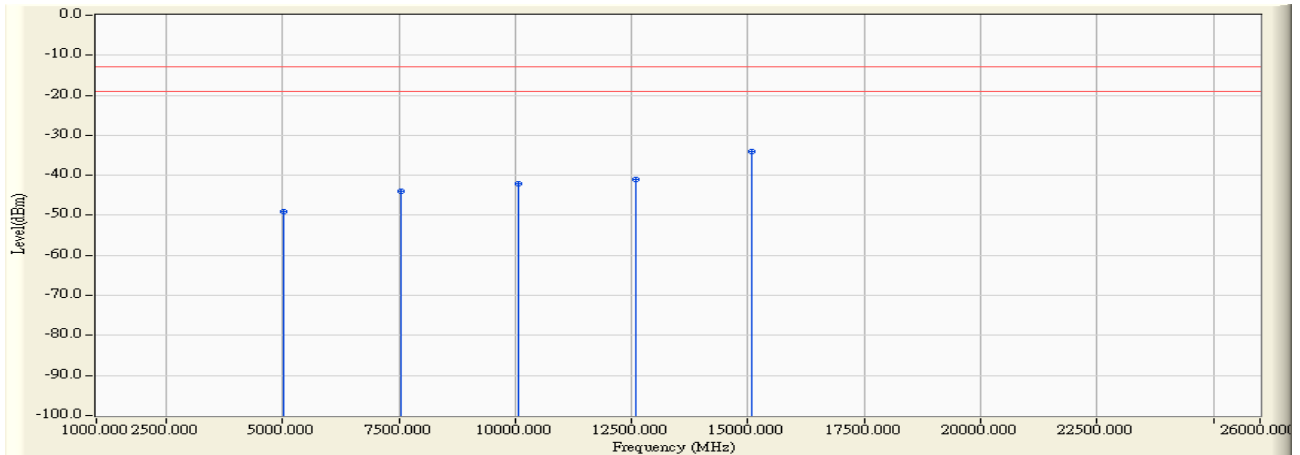


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5000.020	18.398	-68.760	-50.362	-37.362	-13.000	PEAK
2		7500.080	24.164	-69.530	-45.366	-32.366	-13.000	PEAK
3		9999.950	26.828	-70.000	-43.172	-30.172	-13.000	PEAK
4		12500.050	30.411	-70.770	-40.359	-27.359	-13.000	PEAK
5	*	15000.110	34.589	-65.040	-30.451	-17.451	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 10:32
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH15

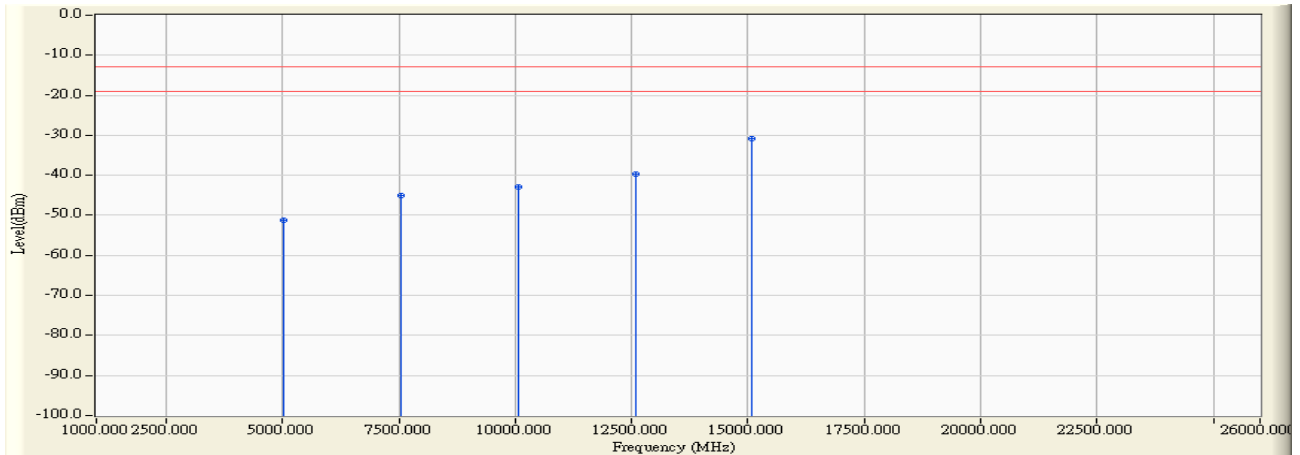


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5030.040	19.095	-68.180	-49.085	-36.085	-13.000	PEAK
2		7545.120	24.540	-68.640	-44.100	-31.100	-13.000	PEAK
3		10060.280	28.326	-70.400	-42.073	-29.073	-13.000	PEAK
4		12575.240	30.194	-71.080	-40.886	-27.886	-13.000	PEAK
5	*	15089.920	31.492	-65.550	-34.059	-21.059	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 10:41
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH15

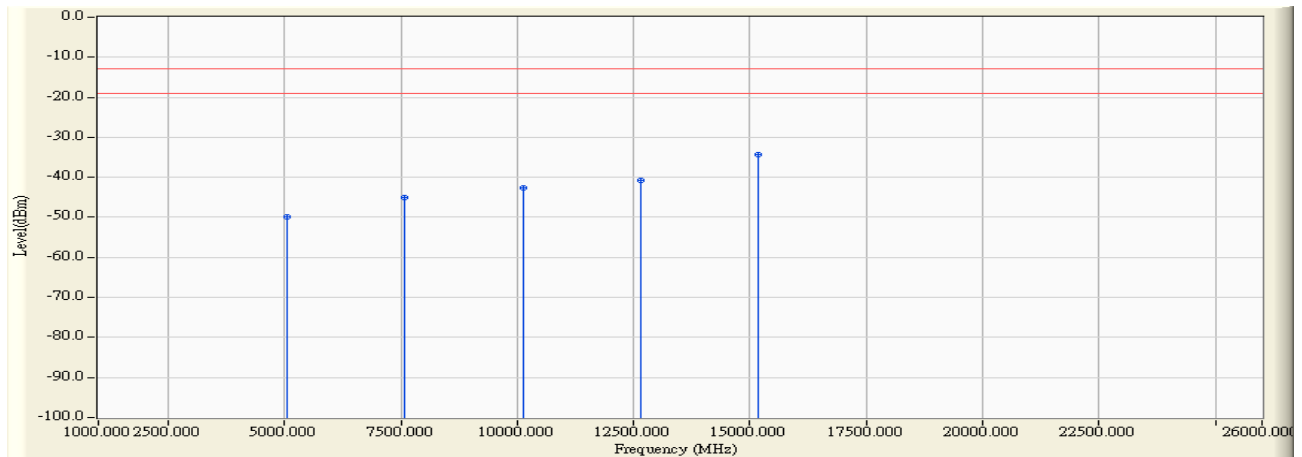


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5030.100	18.441	-69.650	-51.209	-38.209	-13.000	PEAK
2		7545.080	24.461	-69.480	-45.019	-32.019	-13.000	PEAK
3		10060.170	26.903	-69.790	-42.886	-29.886	-13.000	PEAK
4		12575.120	30.388	-70.110	-39.722	-26.722	-13.000	PEAK
5	*	15089.970	34.221	-65.130	-30.910	-17.910	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 10:51
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH30

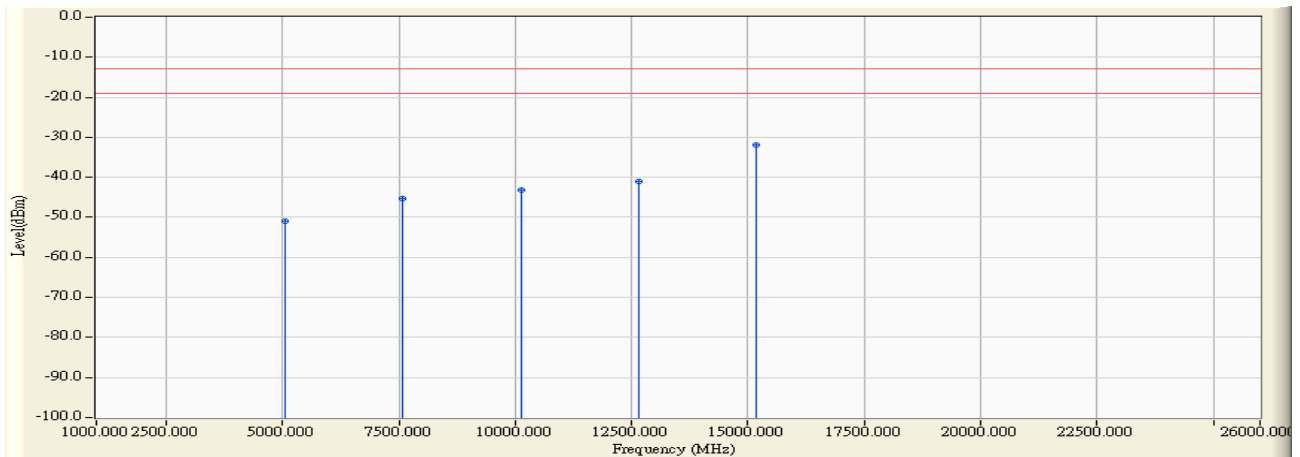


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5060.040	18.984	-68.850	-49.866	-36.866	-13.000	PEAK
2		7590.040	24.452	-69.520	-45.068	-32.068	-13.000	PEAK
3		10120.120	28.369	-71.020	-42.652	-29.652	-13.000	PEAK
4		12650.120	30.098	-70.890	-40.792	-27.792	-13.000	PEAK
5	*	15180.280	31.676	-65.910	-34.235	-21.235	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 10:59
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 1: Transmit-CH30

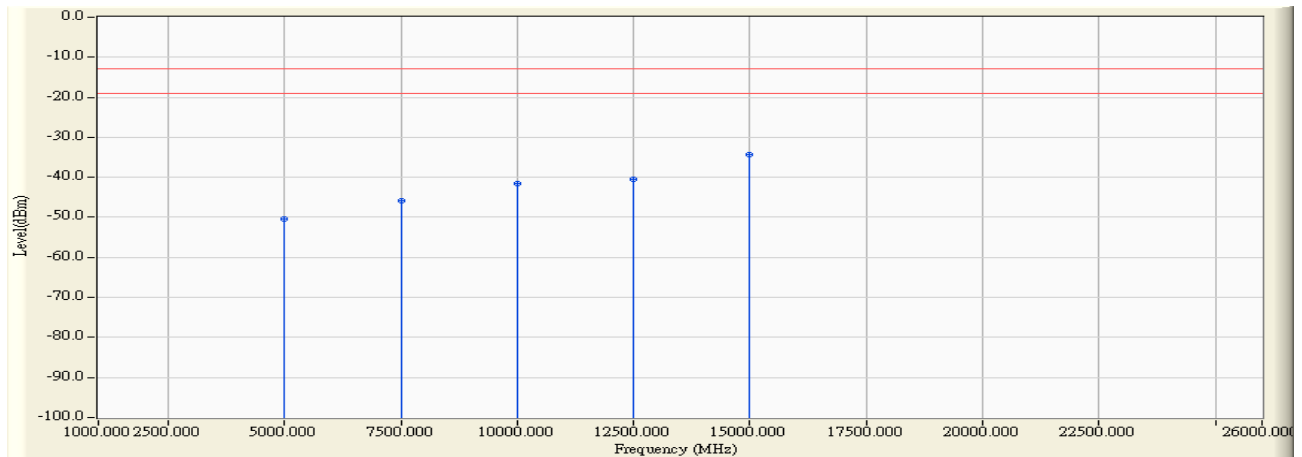


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5060.100	18.460	-69.530	-51.070	-38.070	-13.000	PEAK
2		7590.070	24.535	-69.890	-45.355	-32.355	-13.000	PEAK
3		10120.080	27.158	-70.250	-43.093	-30.093	-13.000	PEAK
4		12650.150	30.359	-71.410	-41.051	-28.051	-13.000	PEAK
5	*	15180.160	34.260	-66.120	-31.860	-18.860	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 11:07
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH1

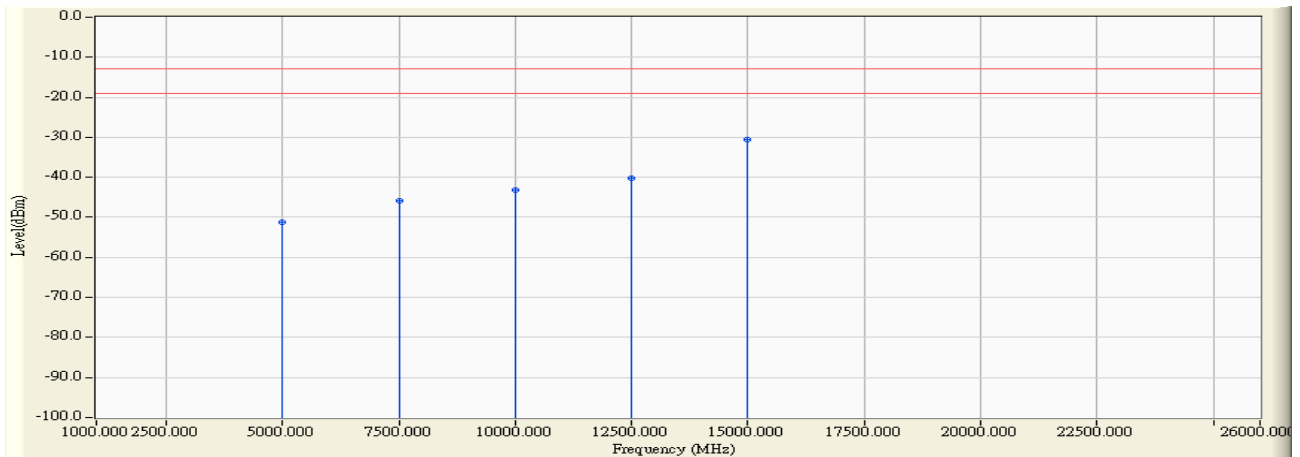


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5000.020	19.204	-69.630	-50.427	-37.427	-13.000	PEAK
2		7500.140	24.606	-70.400	-45.794	-32.794	-13.000	PEAK
3		9999.980	28.274	-69.750	-41.476	-28.476	-13.000	PEAK
4		12499.960	30.281	-70.650	-40.368	-27.368	-13.000	PEAK
5	*	15000.110	31.287	-65.560	-34.274	-21.274	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 11:15
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH1

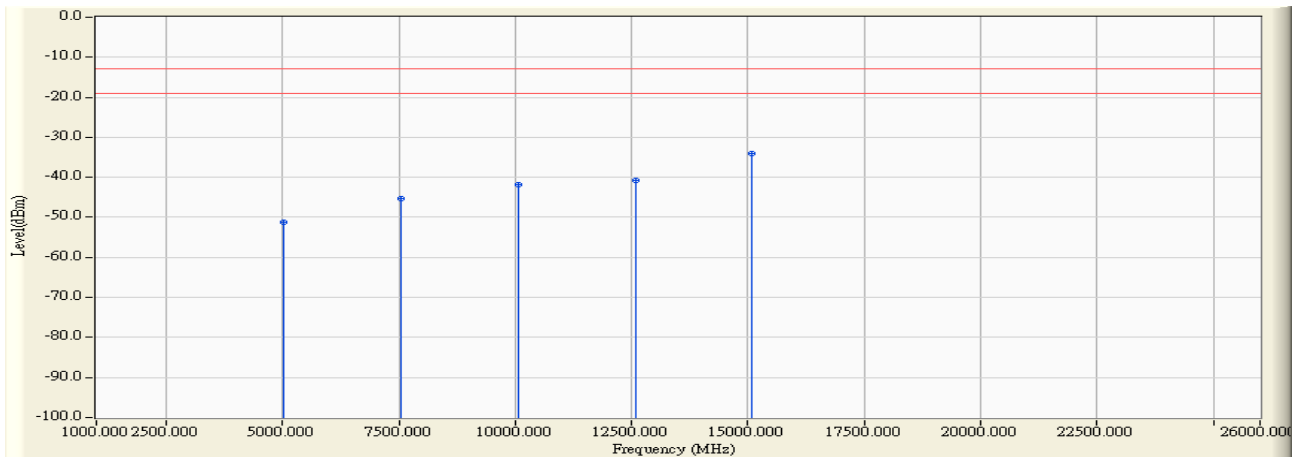


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5000.070	18.398	-69.650	-51.252	-38.252	-13.000	PEAK
2		7500.140	24.164	-70.060	-45.896	-32.896	-13.000	PEAK
3		9999.970	26.828	-70.000	-43.172	-30.172	-13.000	PEAK
4		12499.910	30.411	-70.640	-40.229	-27.229	-13.000	PEAK
5	*	15000.040	34.593	-65.160	-30.568	-17.568	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 11:26
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH15

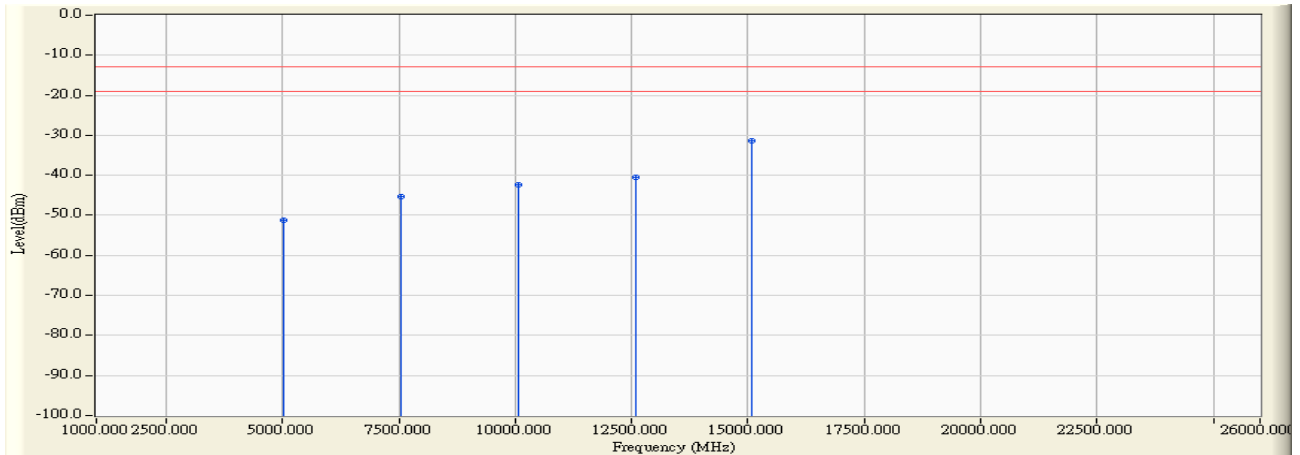


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5030.110	19.095	-70.250	-51.155	-38.155	-13.000	PEAK
2		7545.080	24.540	-69.750	-45.210	-32.210	-13.000	PEAK
3		10060.170	28.326	-70.180	-41.853	-28.853	-13.000	PEAK
4		12575.130	30.194	-70.880	-40.686	-27.686	-13.000	PEAK
5	*	15089.990	31.492	-65.530	-34.039	-21.039	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 11:47
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH15

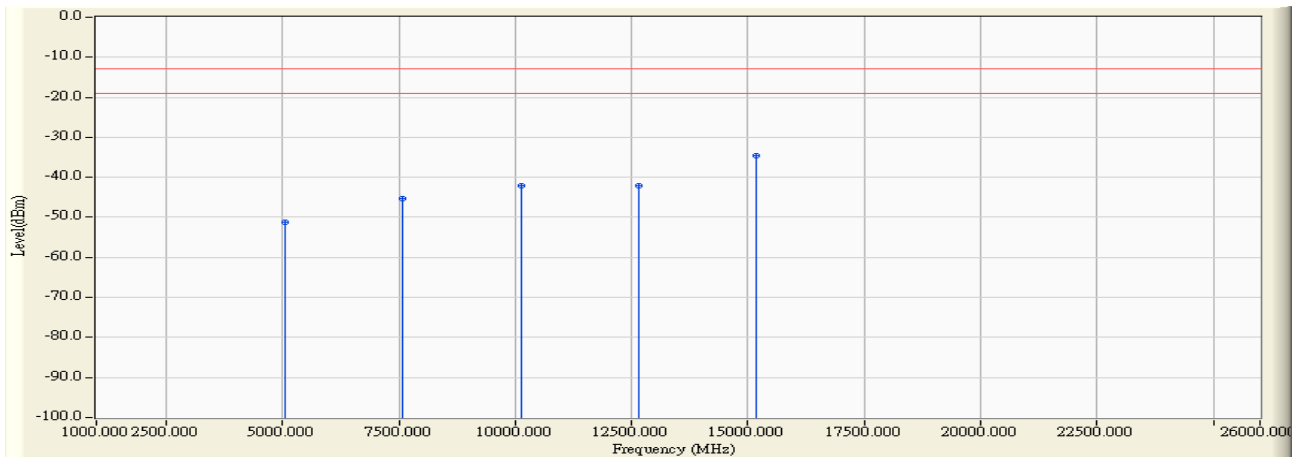


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5030.170	18.441	-69.760	-51.319	-38.319	-13.000	PEAK
2		7545.140	24.461	-69.650	-45.189	-32.189	-13.000	PEAK
3		10060.170	26.903	-69.320	-42.416	-29.416	-13.000	PEAK
4		12575.220	30.388	-70.810	-40.423	-27.423	-13.000	PEAK
5	*	15090.030	34.220	-65.570	-31.350	-18.350	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 11:53
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - HORIZONTAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH30

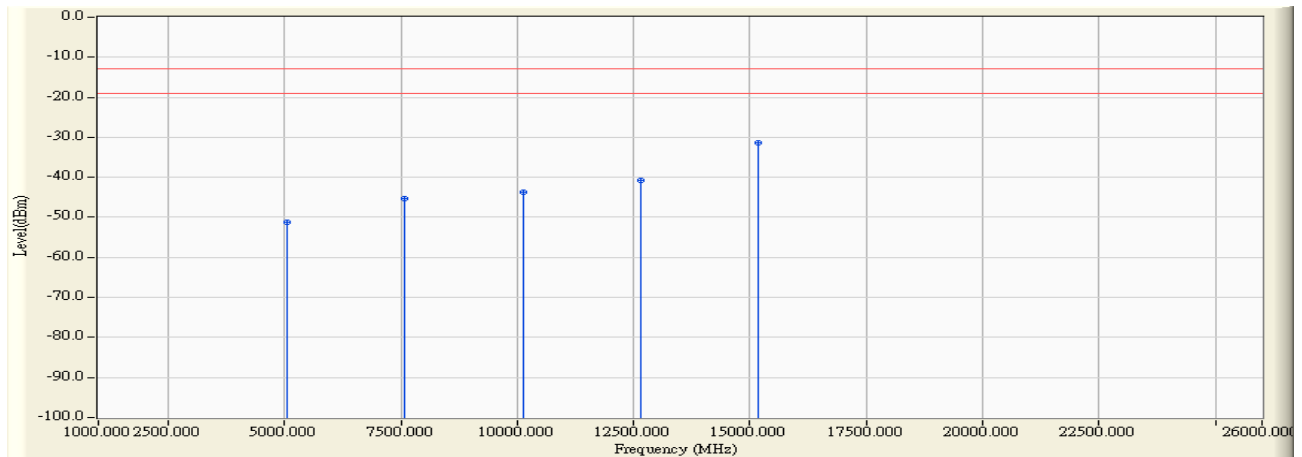


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5060.130	18.983	-70.280	-51.296	-38.296	-13.000	PEAK
2		7590.010	24.452	-69.860	-45.408	-32.408	-13.000	PEAK
3		10120.080	28.369	-70.360	-41.992	-28.992	-13.000	PEAK
4		12650.040	30.098	-72.110	-42.012	-29.012	-13.000	PEAK
5	*	15180.190	31.676	-66.230	-34.555	-21.555	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	Time : 2008/09/05 - 12:00
Limit : PART27(Fixed_station)_00M_PK	Margin : 6
Probe : FCC_1-18G(2008-8) - VERTICAL	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit-CH30



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		5060.060	18.460	-69.680	-51.220	-38.220	-13.000	PEAK
2		7590.070	24.535	-69.950	-45.415	-32.415	-13.000	PEAK
3		10120.060	27.156	-70.730	-43.573	-30.573	-13.000	PEAK
4		12650.170	30.359	-71.110	-40.751	-27.751	-13.000	PEAK
5	*	15180.140	34.260	-65.560	-31.300	-18.300	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

7. Frequency Stability Over Temperatures Variation

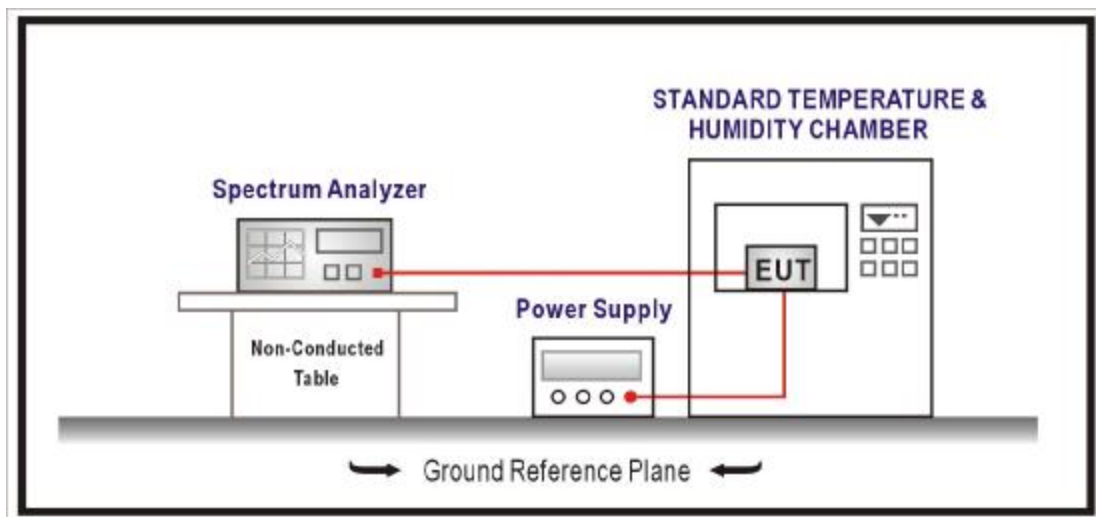
7.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2008
2	STANDARD TEMPERATURE & HUMIDITY CHAMBER	WIT	TH-1S-B / 108210	Feb., 2008

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Limits

The frequency stability shall be measured with variation of ambient temperature as follows: From -30° to +50° centigrade for all equipment. Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range.

7.4. Test Procedure

Power must be turned off when changing from one temperature to another. Power warm up is at least 15 min and power applied should perform before recording frequency error. The temperature range step is 10 degrees in this test items. All temperature levels shall be holding the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

7.5. Uncertainty

The measurement uncertainty is defined as $\pm 100\text{KHz}$

7.6. Test Result

Product	2.5GHz Integrated CPE Transmitter		
Test Item	Frequency Stability Over Temperatures Variation		
Test Mode	Mode 1: Transmit		
Date of Test	2008/09/05	Test Site	No.7 Shielding Room

Mode 1		
Carrier Signal		
2500MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2499.998	-0.800
40	2499.9994	-0.240
30	2499.9998	-0.080
25	2500	0.000
20	2499.9988	-0.480
10	2499.9996	-0.160
0	2500.001	0.400
-10	2500.0018	0.720
-20	2500.0018	0.720

Carrier Signal		
2515MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2514.9976	-0.875
40	2514.999	-0.318
30	2514.9996	-0.080
25	2514.9998	0.000
20	2514.9986	-0.477
10	2514.9994	-0.159
0	2515.0008	0.398
-10	2515.0018	0.795
-20	2515.0016	0.716

Carrier Signal		
2530MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2529.9976	-0.870
40	2529.9986	-0.474
30	2529.9996	-0.079
25	2529.9998	0.000
20	2529.9988	-0.395
10	2529.9992	-0.237
0	2530.0006	0.316
-10	2530.0016	0.711
-20	2530.0018	0.791

Mode 2		
Carrier Signal		
2500MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2499.9978	-0.960
40	2499.9992	-0.400
30	2499.9998	-0.160
25	2500.0002	0.000
20	2499.9986	-0.640
10	2499.9998	-0.160
0	2500.0008	0.240
-10	2500.0018	0.640
-20	2500.0018	0.640

Carrier Signal		
2515MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2514.9978	-0.795
40	2514.9988	-0.398
30	2514.9996	-0.080
25	2514.9998	0.000
20	2514.9986	-0.477
10	2514.9996	-0.080
0	2515.0008	0.398
-10	2515.0018	0.795
-20	2515.0014	0.636

Carrier Signal		
2530MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2529.9978	-0.791
40	2529.9988	-0.395
30	2529.9996	-0.079
25	2529.9998	0.000
20	2529.9986	-0.474
10	2529.9996	-0.079
0	2530.0006	0.316
-10	2530.0018	0.791
-20	2530.0018	0.791

Mode 3		
Carrier Signal		
2500MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2499.998	-0.880
40	2499.9994	-0.320
30	2499.9998	-0.160
25	2500.0002	0.000
20	2499.9988	-0.560
10	2499.9994	-0.320
0	2500.0008	0.240
-10	2500.0018	0.640
-20	2500.002	0.720

Carrier Signal		
2515MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2514.998	-0.795
40	2514.9992	-0.318
30	2514.9998	-0.080
25	2515	0.000
20	2514.9988	-0.477
10	2514.9996	-0.159
0	2515.0012	0.477
-10	2515.0018	0.716
-20	2515.0018	0.716

Carrier Signal		
2530MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2529.998	-0.711
40	2529.9992	-0.237
30	2529.9996	-0.079
25	2529.9998	0.000
20	2529.9988	-0.395
10	2529.9994	-0.158
0	2530.0008	0.395
-10	2530.0016	0.711
-20	2530.0018	0.791

Mode 4		
Carrier Signal		
2500MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2499.9976	-0.960
40	2499.9992	-0.320
30	2499.9998	-0.080
25	2500	0.000
20	2499.9986	-0.560
10	2499.9996	-0.160
0	2500.0006	0.240
-10	2500.0014	0.560
-20	2500.0018	0.720

Carrier Signal		
2515MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2514.9976	-0.875
40	2514.9986	-0.477
30	2514.9996	-0.080
25	2514.9998	0.000
20	2514.9988	-0.398
10	2515	0.080
0	2515.0006	0.318
-10	2515.0016	0.716
-20	2515.0018	0.795

Carrier Signal		
2530MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2529.9982	-0.632
40	2529.9986	-0.474
30	2529.9996	-0.079
25	2529.9998	0.000
20	2529.9988	-0.395
10	2530.0002	0.158
0	2530.0004	0.237
-10	2530.0016	0.711
-20	2530.0018	0.791

Mode 5		
Carrier Signal		
2500MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2499.9982	-0.800
40	2499.9994	-0.320
30	2499.9998	-0.160
25	2500.0002	0.000
20	2499.9988	-0.560
10	2499.9996	-0.240
0	2500.0008	0.240
-10	2500.0018	0.640
-20	2500.002	0.720

Carrier Signal		
2515MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2514.998	-0.716
40	2514.999	-0.318
30	2514.9996	-0.080
25	2514.9998	0.000
20	2514.9986	-0.477
10	2514.9994	-0.159
0	2515.001	0.477
-10	2515.0014	0.636
-20	2515.0016	0.716

Carrier Signal		
2530MHz		
Frequency Error Over Temperatures		
Temp. (°C)	Frequency (MHz)	Frequency Error (ppm)
50	2529.9978	-0.791
40	2529.999	-0.316
30	2529.9996	-0.079
25	2529.9998	0.000
20	2529.9992	-0.237
10	2530	0.079
0	2530.0006	0.316
-10	2530.0018	0.791
-20	2530.002	0.870

8. Frequency Stability Over Voltage Variation

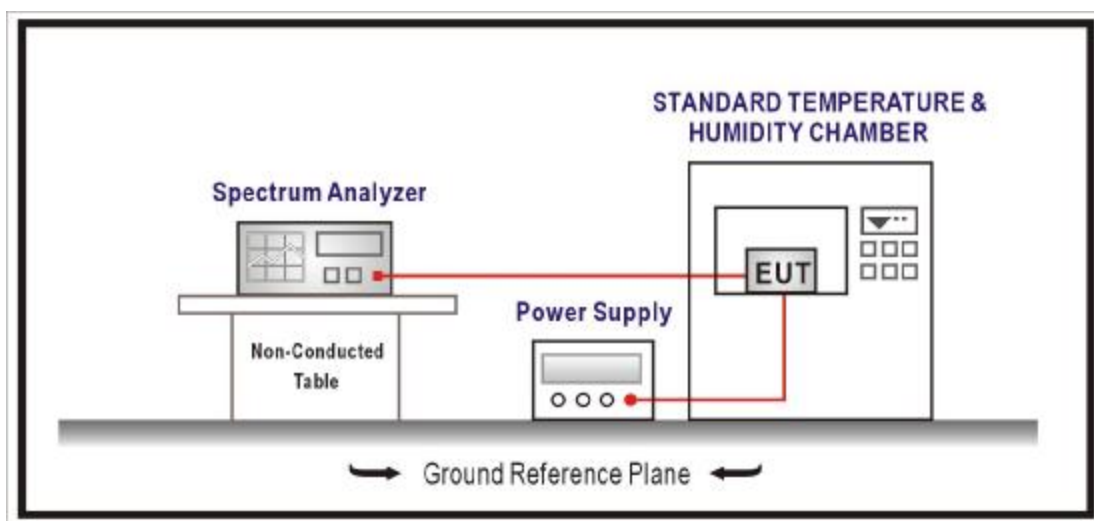
8.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2008
2	STANDARD TEMPERATURE & HUMIDITY CHAMBER	WIT	TH-1S-B / 108210	Feb., 2008

Note: 1. all equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup



8.3. Limits

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.
- (3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.

8.4. Test Procedure

Power must be removed when changing from one voltage to another voltage. Power warm up is at least 15 min and power applied should perform before recording frequency error.

EUT is connected the external power supply to control the DC input power. The various Volts set from the minimum 4.5 Volts to 5.5 Volts. Each step shall be record the frequency error rate.

8.5. Uncertainty

The measurement uncertainty is defined as $\pm 100\text{KHz}$.

8.6. Test Result

Product	2.5GHz Integrated CPE Transmitter		
Test Item	Frequency Stability Over Voltage Variation		
Test Mode	Mode 1: Transmit		
Date of Test	2008/09/05	Test Site	No.7 Shielding Room

Mode 1		
Carrier Signal		
2500MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2499.9996	-0.080
120	2499.9998	0.000
102	2499.9998	0.000

Carrier Signal		
2515MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2514.9998	0.080
120	2514.9996	0.000
102	2514.9996	0.000

Carrier Signal		
2530MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2529.9998	0.040
120	2529.9997	0.000
102	2529.9996	-0.040

Mode 2		
Carrier Signal		
2500MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2499.9998	0.000
120	2499.9998	0.000
102	2499.9996	-0.080

Carrier Signal		
2515MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2514.9998	0.000
120	2514.9998	0.000
102	2514.9996	-0.080

Carrier Signal		
2530MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2529.9998	0.079
120	2529.9996	0.000
102	2529.9996	0.000

Mode 3		
Carrier Signal		
2500MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2499.9996	0.000
120	2499.9996	0.000
102	2499.9996	0.000

Carrier Signal		
2515MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2514.9998	0.040
120	2514.9997	0.000
102	2514.9998	0.040

Carrier Signal		
2530MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2529.9996	0.000
120	2529.9996	0.000
102	2529.9998	0.079

Mode 4		
Carrier Signal		
2500MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2499.9998	0.000
120	2499.9998	0.000
102	2499.9996	-0.080

Carrier Signal		
2515MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2514.9996	-0.080
120	2514.9998	0.000
102	2514.9996	-0.080

Carrier Signal		
2530MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2529.9997	0.000
120	2529.9997	0.000
102	2529.9996	-0.040

Mode 5		
Carrier Signal		
2500MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2499.9996	0.000
120	2499.9996	0.000
102	2499.9998	0.080

Carrier Signal		
2515MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2514.9998	0.080
120	2514.9996	0.000
102	2514.9996	0.000

Carrier Signal		
2530MHz		
Frequency Error Over Voltage		
Voltage	Frequency (MHz)	Frequency Error (ppm)
138	2529.9997	0.040
120	2529.9996	0.000
102	2529.9996	0.000

9. AC Conducted Emission

9.1. Test Equipment

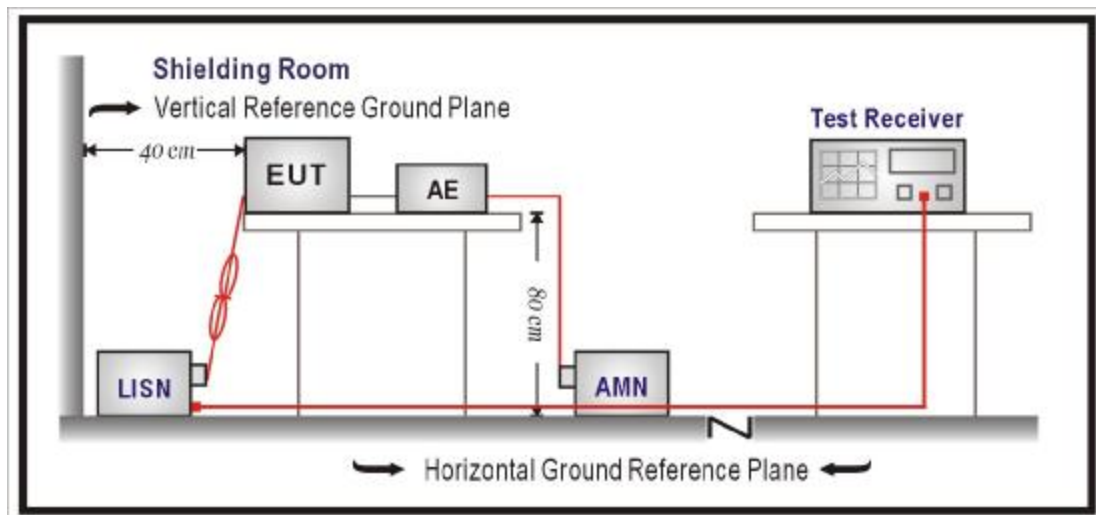
The following test equipments are used during the test:

Conducted Emission / SR2

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
4-Wire ISN	R & S	ENY 41	837032/001	2008/04/15
Double 2-Wire ISN	R & S	ENY 22	835354/008	2008/04/15
LISN	R & S	ESH3-Z5	836679/022	2008/06/30
LISN	R & S	ESH3-Z5	836679/013	2008/01/07
Pulse Limiter	R & S	ZSH3-Z2	100411	2007/11/16
Test Receiver	R & S	ESCS 30	100149	2007/11/15

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

9.2. Test Setup



9.3. Limits

FCC Part 15 Subpart C Paragraph 15.247 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

9.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

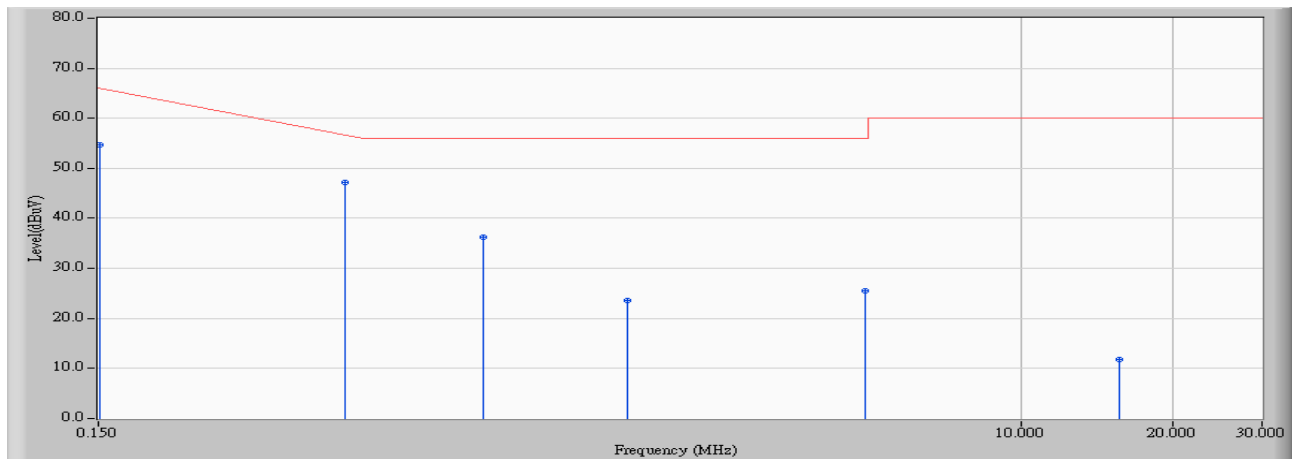
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

9.5. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB

9.6. Test Result

Site : Shielding Room 2	Time : 2008/09/09 - 19:46
Limit : CISPR_B_00M_QP	Margin : 0
Probe : QTK-LISN-SR2 - Line1	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit

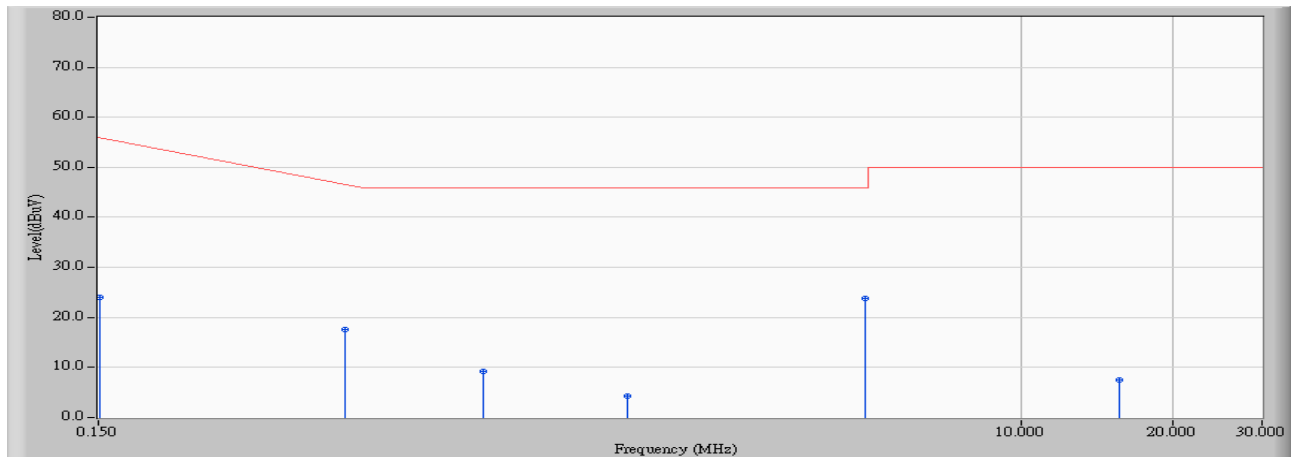


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.151	0.040	54.580	54.620	-11.351	65.971	QUASIPeAK
2	*	0.462	0.060	47.100	47.160	-9.926	57.086	QUASIPeAK
3		0.866	0.075	36.120	36.195	-19.805	56.000	QUASIPeAK
4		1.671	0.100	23.570	23.670	-32.330	56.000	QUASIPeAK
5		4.933	0.270	25.240	25.510	-30.490	56.000	QUASIPeAK
6		15.615	1.020	10.840	11.860	-48.140	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Shielding Room 2	Time : 2008/09/09 - 19:46
Limit : CISPR_B_00M_AV	Margin : 0
Probe : QTK-LISN-SR2 - Line1	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit

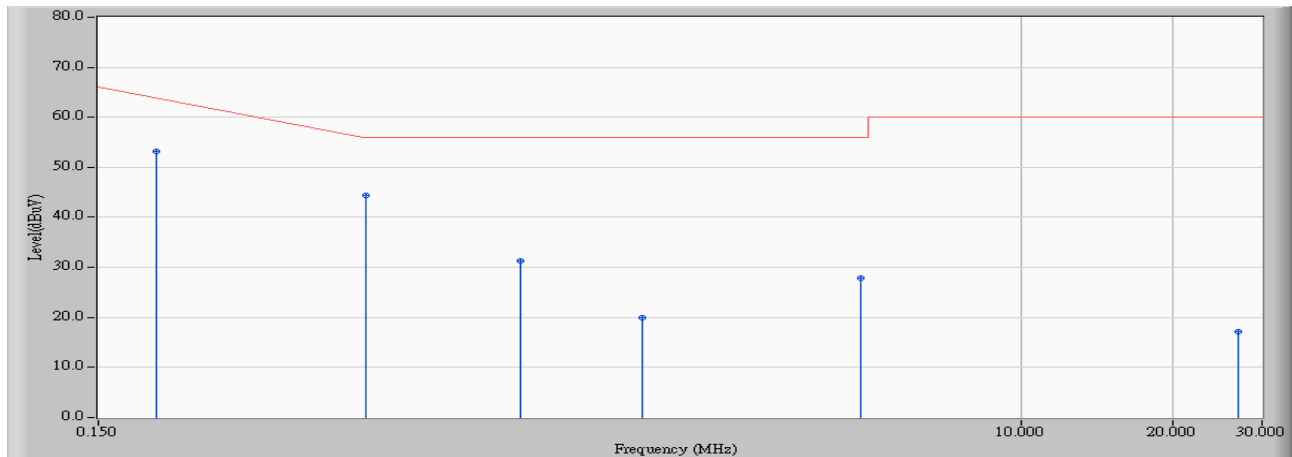


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.151	0.040	24.000	24.040	-31.931	55.971	AVERAGE
2		0.462	0.060	17.510	17.570	-29.516	47.086	AVERAGE
3		0.866	0.075	9.130	9.205	-36.795	46.000	AVERAGE
4		1.671	0.100	4.140	4.240	-41.760	46.000	AVERAGE
5	*	4.933	0.270	23.570	23.840	-22.160	46.000	AVERAGE
6		15.615	1.020	6.420	7.440	-42.560	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Shielding Room 2	Time : 2008/09/09 - 19:52
Limit : CISPR_B_00M_QP	Margin : 0
Probe : QTK-LISN-SR2 - Line2	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit

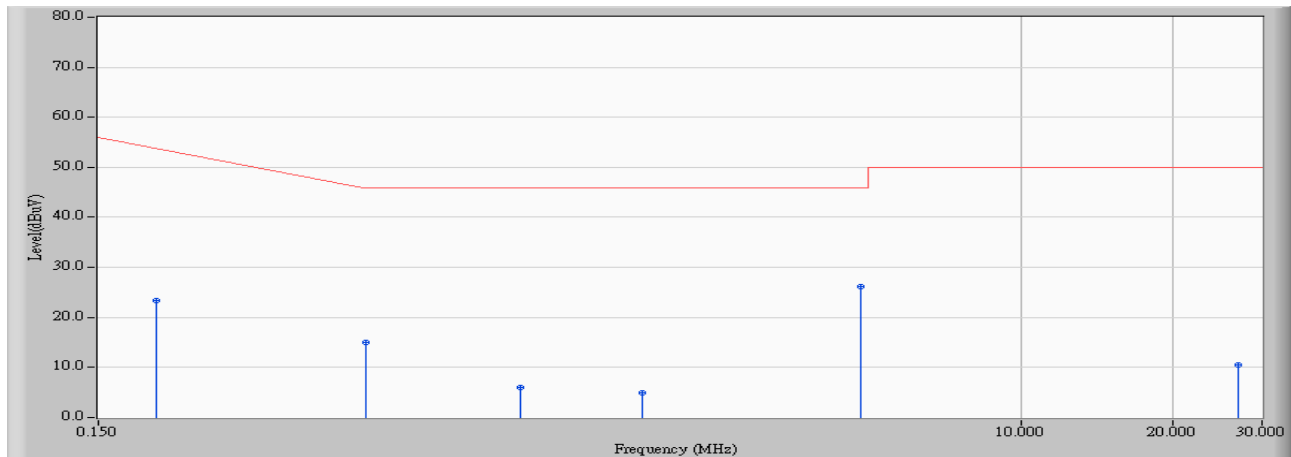


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.195	0.030	53.120	53.150	-11.564	64.714	QUASIPeAK
2		0.507	0.050	44.270	44.320	-11.680	56.000	QUASIPeAK
3		1.028	0.060	31.210	31.270	-24.730	56.000	QUASIPeAK
4		1.784	0.090	19.750	19.840	-36.160	56.000	QUASIPeAK
5		4.835	0.220	27.630	27.850	-28.150	56.000	QUASIPeAK
6		27.000	1.140	16.100	17.240	-42.760	60.000	QUASIPeAK

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : Shielding Room 2	Time : 2008/09/09 - 19:52
Limit : CISPR_B_00M_AV	Margin : 0
Probe : QTK-LISN-SR2 - Line2	Power : AC 120V/60Hz
EUT : 2.5GHz Integrated CPE Transmitter	Note : Mode 2: Transmit



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.195	0.030	23.270	23.300	-31.414	54.714	AVERAGE
2		0.507	0.050	14.870	14.920	-31.080	46.000	AVERAGE
3		1.028	0.060	5.940	6.000	-40.000	46.000	AVERAGE
4		1.784	0.090	4.790	4.880	-41.120	46.000	AVERAGE
5	*	4.835	0.220	26.000	26.220	-19.780	46.000	AVERAGE
6		27.000	1.140	9.440	10.580	-39.420	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor