

## FCC Test Report

### (PART 27)

**Report No.:** RF150326E02

**FCC ID:** 2AD8UFZPFWIC01

**Test Model:** FWIC

**Received Date:** Mar. 26, 2015

**Test Date:** Apr. 01 to 07, 2015

**Issued Date:** May 21, 2015

**Applicant:** Nokia Solutions and Networks

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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### Release Control Record

Issue No.	Description	Date Issued
RF150326E02	Original release.	May 21, 2015



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## 1 Certificate of Conformity

**Product:** Flexi Zone Indoor Pico BTS

**Brand:** Nokia

**Test Model:** FWIC

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Nokia Solutions and Networks

**Test Date:** Apr. 01 to 07, 2015

**Standards:** FCC Part 27

FCC Part 2

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Midoli Peng, **Date:** May 21, 2015

Midoli Peng / Specialist

**Approved by :** May Chen, **Date:** May 21, 2015

May Chen / Manager

## 2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50(d)(4)	Equivalent Isotropically radiated power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	PASS	Meet the requirement of limit.
2.1049 27.53(h)	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.53(h)	Band Edge Measurements	PASS	Meet the requirement of limit.
---	Peak To Average Ratio	PASS	Meet the requirement of limit.
2.1051 27.53(h)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(h)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -15.68dB at 19035MHz.

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expended Uncertainty (k=2) ( $\pm$ )
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.43 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.72 dB
	6GHz ~ 18GHz	4.00 dB
	18GHz ~ 40GHz	4.11 dB

## 2.2 Test Site and Instruments

### For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY50010156	Aug. 11, 2014	Aug. 10, 2015
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 12, 2014	Nov. 11, 2015
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Feb. 06, 2015	Feb. 05, 2016
RF Cable	NA	CHHCAB_001	Oct. 05, 2014	Oct. 04, 2015
Horn_Antenna AISI	AIH.8018	0000220091110	Aug. 26, 2014	Aug. 25, 2015
Pre-Amplifier Agilent	8449B	300801923	Oct. 28, 2014	Oct. 27, 2015
RF Cable	NA	131206 131213 131215 SNMY23685/4	Jan. 16, 2015	Jan. 15, 2016
Spectrum Analyzer R&S	FSV40	100964	July 05, 2014	July 04, 2015
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Dec. 12, 2014	Dec. 11, 2015
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Aug. 26, 2014	Aug. 25, 2015
RF Cable	NA	329751/4 RF104-204	Dec. 11, 2014	Dec. 10, 2015
Software	ADT_Radiated_V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

#### Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. H.
4. The FCC Site Registration No. is 797305.
5. The CANADA Site Registration No. is IC 7450H-3.
6. Tested Date: Apr. 07, 2015

**For other test items:**

<b>DESCRIPTION &amp; MANUFACTURER</b>	<b>MODEL NO.</b>	<b>SERIAL NO.</b>	<b>CALIBRATED DATE</b>	<b>CALIBRATED UNTIL</b>
Spectrum Analyzer R&S	FSP 40	100037	Oct. 30, 2014	Oct. 29, 2015
Spectrum Analyzer Agilent	E4446A	MY48250253	Dec. 18, 2014	Dec. 17, 2015
AC Power Source EXTECH Electronics	6502	1140503	NA	NA
Temperature & Humidity Chamber TERCHY	MHU-225AU	911033	Dec. 08, 2014	Dec. 07, 2015
DC Power Supply GOOD WILL INSTRUMENT CO., LTD.	GPC - 3030D	7700087	NA	NA
ESG Vector signal generator Agilent	E4438C	MY47271330 506 602 UNJ	Apr. 28, 2014	Apr. 27, 2015
Upgrade the software license on current E4438C ESG Agilent	E4438CK-403	ESG E4_010004	NA	NA
ESG Vector signal generator Agilent	E4438C	MY45094468/ 005 506 602 UK6 UNJ	Dec. 05, 2014	Dec. 04, 2015
Upgrade the software license on current E4438C ESG Agilent	E4438CK-403	ESG E4_010001	NA	NA
Power meter Anritsu	ML2495A	0824006	May 22, 2014	May 21, 2015
Power sensor Anritsu	MA2411B	0738172	May 22, 2014	May 21, 2015
Software	Total Power Measurement Tools V7.1	NA	NA	NA
Software	ADT_RF Test Software V6.6.5.3	NA	NA	NA

**NOTE:** 1. The test was performed in Oven room A.  
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
 3. Tested Date: Apr. 01, 2015

### 3 General Information

#### 3.1 General Description of EUT

Product	Flexi Zone Indoor Pico BTS	
Brand	Nokia	
Test Model	FWIC	
Test Sample S/N	EA150710164	
Hardware Version	472942A	
Software Version	Operating SW: FB_FZM_PS_LFS_OS_2014_05_59-0-g927a301 WiFi module SW: 9.8.1.0.14302702	
Status of EUT	ENGINEERING SAMPLE	
Power Supply Rating	12Vdc from power adapter or 55Vdc from POE	
Modulation Type	QPSK, 16QAM, 64QAM	
Modulation Technology	FHSS / DSSS	
Transfer Rate	Uplink : 75Mbps , Downlink : 300Mbps	
Operating Frequency	Channel Bandwidth: 5MHz	2112.5MHz ~2152.5MHz
	Channel Bandwidth: 10MHz	2115MHz ~2150MHz
	Channel Bandwidth: 15MHz	2117.5MHz ~2147.5MHz
	Channel Bandwidth: 20MHz	2120MHz ~2145MHz
Number of Channel	Channel Bandwidth: 5MHz	401
	Channel Bandwidth: 10MHz	351
	Channel Bandwidth: 15MHz	301
	Channel Bandwidth: 20MHz	251
Max. EIRP Power	Channel Bandwidth: 5MHz	1154.3mW (QPSK)
	Channel Bandwidth: 10MHz	1242.6mW (QPSK)
	Channel Bandwidth: 15MHz	1200.4mW (QPSK)
	Channel Bandwidth: 20MHz	1189.4mW (QPSK)
EMISSION DESIGNATOR	Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M52W7D
		64QAM: 4M54W7D
	Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M00W7D
		64QAM: 9M00W7D
	Channel Bandwidth: 15MHz	QPSK: 13M7G7D
		16QAM: 13M6W7D
		64QAM: 13M7W7D
	Channel Bandwidth: 20MHz	QPSK: 18M1G7D
		16QAM: 18M1W7D
		64QAM: 18M7W7D
Antenna Type	Refer to note as below	
Antenna Connector	Refer to user's manual	
Accessory Device	Adapter x1	
Data Cable Supplied	NA	

Note:

1. There are WLAN, BT, LTE and GPS technology used for the EUT.

2. The EUT's spec. as below table:

Model name	LTE		Wi-Fi	BT	GPS
	Freq.(MHz)	Band			
FWIC	DL	BW 5MHz : 2112.5~2152.5	4 (AWS)	✓	✓
		BW 10MHz : 2115~2150			
		BW 15MHz : 2117.5~2174.5			
		BW 20MHz : 2120~2145			

3. The emission of the simultaneous operation (WLAN, BT & LTE) has been evaluated and no non-compliance was found.

4. The EUT must be supplied with a POE(option) or power adapter as following table:

Power adapter		
Brand	Model No.	Spec.
DVE	DSA-60PFE-12 1 120500	Input: 100-240V, 2.0A, 50/60Hz AC input cable(1.8m, unshielded) Output: 12V, 5A DC output cable(1.2m, unshielded, with one core)

5. The EUT was pre-tested under following test modes :

Test Mode	Description
<b>Mode A</b>	<b>With POE</b>
Mode B	With adapter

For the above modes, the worst radiated emission (above 1GHz) test was found in **Mode A**. Therefore only the test data of the modes were recorded in this report.

6. The antennas provided to the EUT, please refer to the following table:

**LTE Antenna Spec.**

Antenna No	Brand	Model	Antenna Type	Antenna Connector	Gain(dBi) <Including cable loss>	Cable Length (mm)	Frequency (MHz)
Internal LTE (Main)	TongDa	T-543-8141050-6	PIFA	i-pex(MHF)	4.9	50	1710~2390 (Band 4)
Internal LTE (Aux)		T-543-8141050-7			4.6	190	1710~2390 (Band 4)

**WLAN Antenna Spec.**

Antenna No	Brand	Model	Antenna Type	Antenna Connector	Gain(dBi) <Including cable loss>	Cable Length (mm)	Frequency (MHz)
Internal WIFI (Main)	TongDa	T-543-8141037-3	PIFA	i-pex(MHF)	3.3	90	2412~2472
Internal WIFI (Aux)					2.4		5150~5825
External GPS Ant	TongDa	T-543-8141037-4	PIFA	i-pex(MHF)	3	70	2412~2472
					2.9		5150~5825

**GPS Antenna Spec.**

Antenna No	Brand	Model	Antenna Type	Antenna Connector	Gain(dBi) <Including cable loss>	Cable Length (mm)	Frequency (MHz)
External GPS Ant	TongDa	T-543-8141037-9	ElecPatch	SMA Male	4.0	9140 ± 100	GPS : 1575.42 ± 3 MHz Glonass : 1602 ± 8 MHz

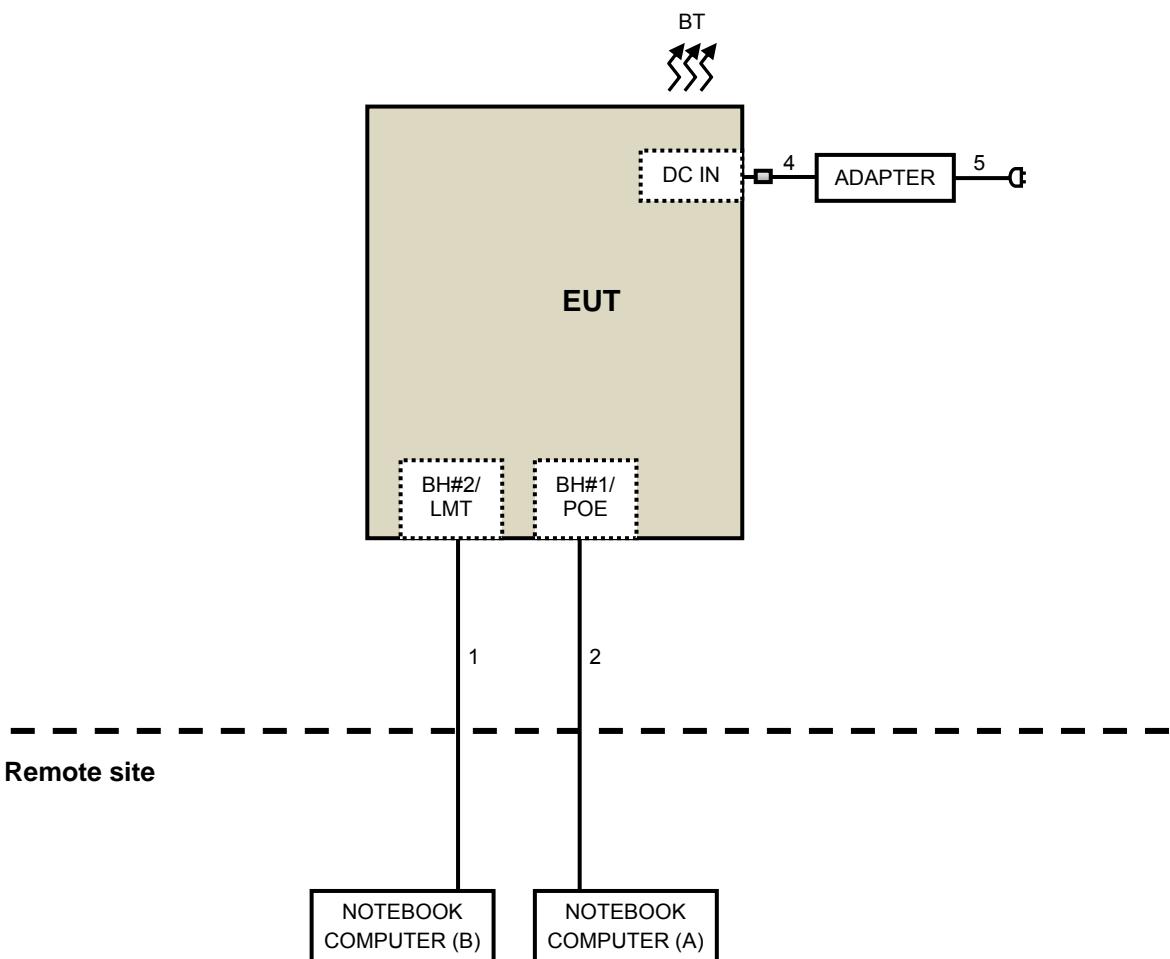
**BT Antenna Spec.**

Antenna No	Brand	Model	Antenna Type	Antenna Connector	Gain(dBi) <Including cable loss>	Cable Length (mm)	Frequency (MHz)
Internal BT Ant	INPAQ	Fz PICO	Chip	NA	-1.22	NA	2400~2500

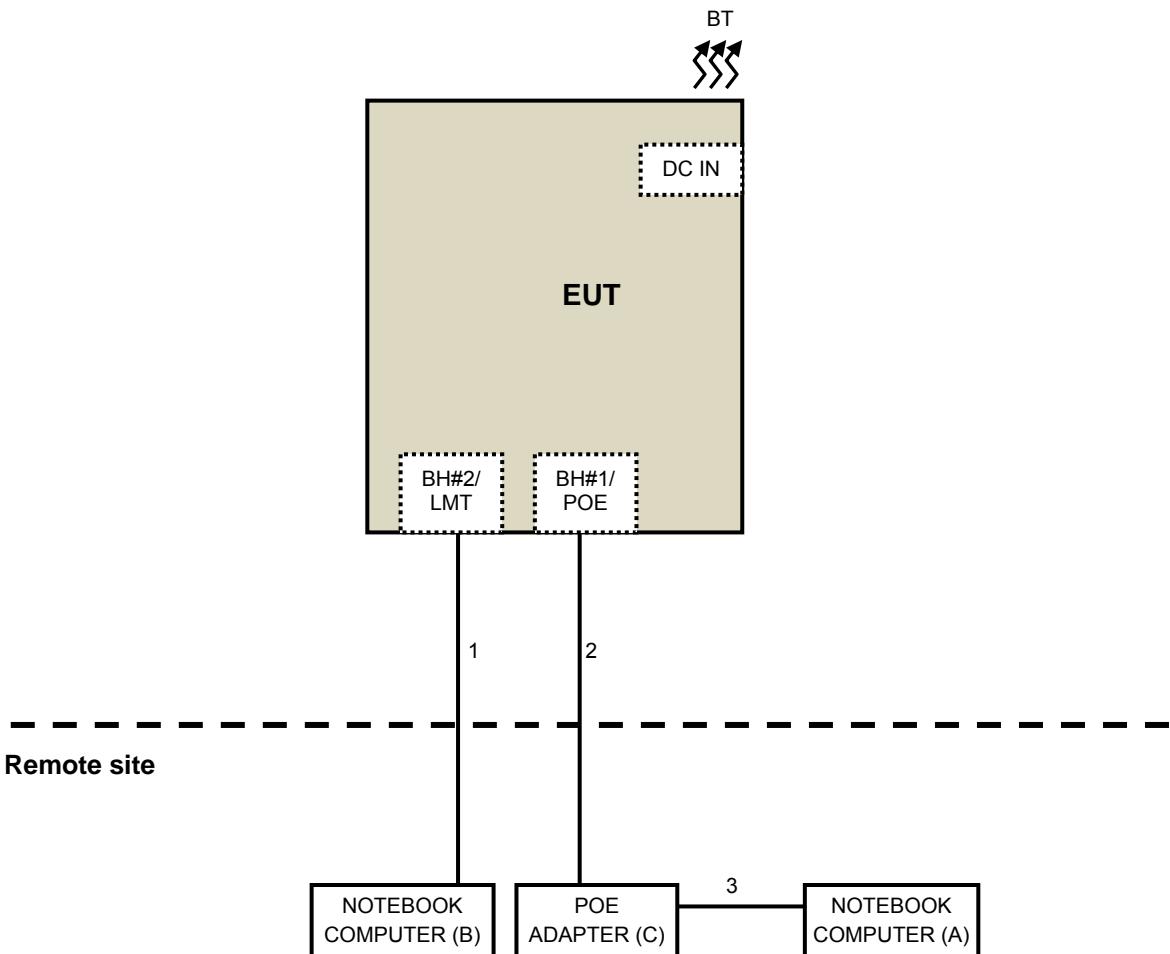
7. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

### 3.2 Configuration of System under Test

For Adapter mode:



For POE mode:



### 3.2.1 Description Of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID	Remark
A	NOTEBOOK COMPUTER	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab
B	NOTEBOOK COMPUTER	DELL	E6420	H62T3R1	FCC DoC	Provided by Lab
C	POE ADAPTER	NA	PD-7001G	D11326441001235A01	FCC DoC	Provided by Lab

**NOTE:**

1. All power cords of the above support units are non-shielded (1.8 m).

No.	Cable	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Number)	Remark
1	RJ-45	1	10	No	0	Provided by Lab
2	RJ-45	1	10	No	0	Provided by Lab
3	RJ-45	1	1.5	No	0	Provided by Lab

### 3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XY axis and antenna ports

The worst case was found when positioned on Y-plane. Following channel(s) was (were) selected for the final test as listed below:

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation
Output Power	1975 to 2375	1975, 2175, 2375	5MHz	QPSK
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK
Frequency Stability	1975 to 2375	2175	5MHz	QPSK
	2000 to 2350	2175	10MHz	QPSK
	2025 to 2325	2175	15MHz	QPSK
	2050 to 2300	2175	20MHz	QPSK
Emission Bandwidth	1975 to 2375	1975, 2175, 2375	5MHz	QPSK, 16QAM, 64QAM
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK, 16QAM, 64QAM
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK, 16QAM, 64QAM
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK, 16QAM, 64QAM
Channel Edge	1975 to 2375	1975, 2375	5MHz	QPSK
	2000 to 2350	2000, 2350	10MHz	QPSK
	2025 to 2325	2025, 2325	15MHz	QPSK
	2050 to 2300	2050, 2300	20MHz	QPSK
Peak To Average Ratio	1975 to 2375	1975, 2175, 2375	5MHz	QPSK, 16QAM, 64QAM
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK, 16QAM, 64QAM
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK, 16QAM, 64QAM
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK, 16QAM, 64QAM
Conducted Emission	1975 to 2375	1975, 2175, 2375	5MHz	QPSK
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK
Radiated Emission Below 1GHz	1975 to 2375	1975, 2175, 2375	5MHz	QPSK
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK
Radiated Emission Above 1GHz	1975 to 2375	1975, 2175, 2375	5MHz	QPSK
	2000 to 2350	2000, 2175, 2350	10MHz	QPSK
	2025 to 2325	2025, 2175, 2325	15MHz	QPSK
	2050 to 2300	2050, 2175, 2300	20MHz	QPSK

#### NOTE:

- For radiated emission, the low, mid and high channels were pre-tested in chamber. The mid channel was the worst case and chosen for final test.
- All supported modulation types were evaluated. The Worst case emission of QPSK was selected. Therefore, the EIRP power, Frequency Stability, Channel Edge, Conducted Emission and Radiated Emission were presented under QPSK mode only.

**Test Condition:**

Test Item	Environmental Conditions	Input Power	Tested By
Output Power	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Frequency Stability	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Emission Bandwidth	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Band Edge	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Peak To Average Ratio	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Conducted Emission	25deg. C, 63%RH	120Vac, 60Hz	James Chan
Radiated Emission	24deg. C, 62%RH	120Vac, 60Hz	Tim Ho

### **3.4 EUT Operating Conditions**

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

### **3.5 General Description of Applied Standards**

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 27**

**KDB 971168 D01 Power Meas License Digital Systems v02r01**

**ANSI/TIA/EIA-603-C 2004**

**NOTE:** All test items have been performed and recorded as per the above standards.

## 4 Test Types and Results

### 4.1 Output Power Measurement

#### 4.1.1 Limits of Output Power Measurement

The radiated peak output power shall be according to the specific rule Part 27.50(d)(2) that are limited to EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

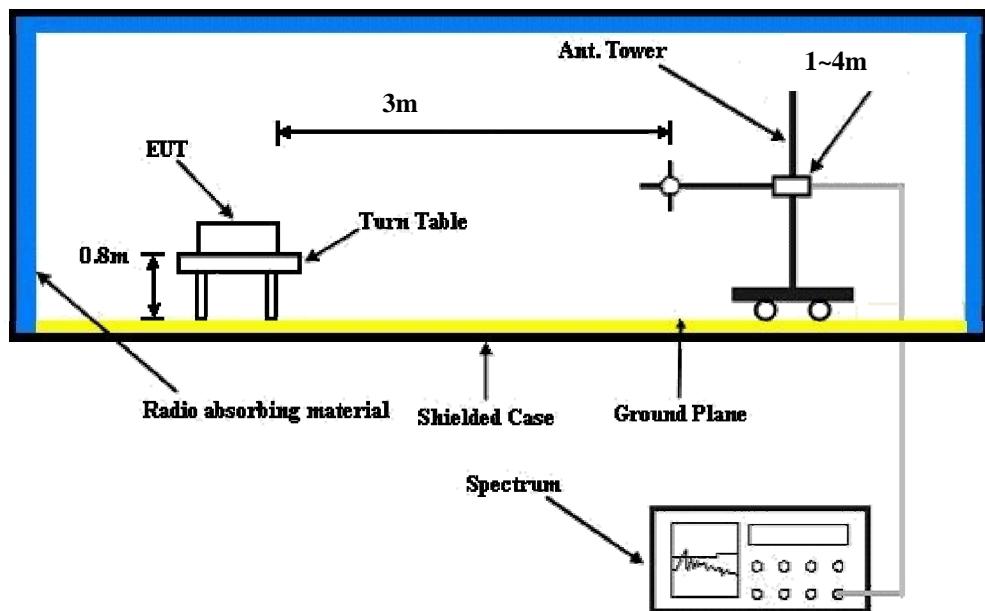
#### 4.1.2 Test Procedures

EIRP / ERP Measurement:

- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 10MHz for LTE mode.
- b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
- c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value“ of step b. Record the power level of S.G
- d. 
$$\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn.}$$

#### 4.1.3 Test Setup

EIRP / ERP MEASUREMENT:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.1.4 Test Results

##### EIRP Power (dBm)

LTE Band 4					
Channel Bandwidth: 5MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
1975	2112.5	24.1	6.4	30.5	1130.6
2175	2132.5	24.2	6.4	30.6	1154.3
2375	2152.5	24.1	6.4	30.5	1122.8

LTE Band 4					
Channel Bandwidth: 10MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2000	2115	24.4	6.4	30.8	1200.4
2175	2132.5	24.5	6.4	30.9	1225.5
2350	2150	24.5	6.4	30.9	1242.6

LTE Band 4					
Channel Bandwidth: 15MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2025	2117.5	24.4	6.4	30.8	1197.6
2175	2132.5	24.4	6.4	30.8	1200.4
2325	2147.5	24.3	6.4	30.7	1170.3

LTE Band 4					
Channel Bandwidth: 20MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2050	2120	24.2	6.4	30.6	1159.6
2175	2132.5	24.1	6.4	30.5	1125.4
2300	2145	24.3	6.4	30.8	1189.4

## 4.2 Frequency Stability Measurement

### 4.2.1 Limits of Frequency Stability Measurement

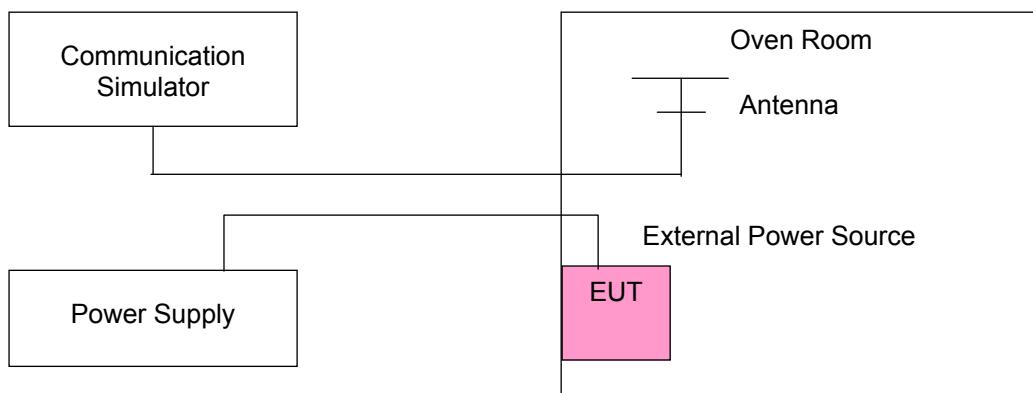
According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that "The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30°C ~ 50°C.

### 4.2.2 Test Procedure

- a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- b. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 °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.

**NOTE:** The frequency error was recorded frequency error from the communication simulator.

### 4.2.3 Test Setup



#### 4.2.4 Test Results

##### Frequency Error vs. Voltage

Voltage (Volts)	Frequency Error (ppm)				Limit (ppm)
	5MHz	10MHz	15MHz	20MHz	
102	0.002	0.002	0.002	0.002	2.5
138	0.001	0.002	0.002	0.001	2.5

TEMP. (°C)	Frequency Error (ppm)				Limit (ppm)
	5MHz	10MHz	15MHz	20MHz	
75	0.002	0.001	0.001	0.001	2.5
70	0.002	0.002	0.002	0.002	2.5
60	0.001	0.002	0.002	0.002	2.5
50	0.002	0.002	0.002	0.002	2.5
40	0.002	0.002	0.001	0.001	2.5
30	0.001	0.002	0.002	0.001	2.5
20	0.002	0.001	0.001	0.002	2.5
10	0.002	0.002	0.001	0.001	2.5
0	0.002	0.001	0.002	0.002	2.5
-10	0.002	0.002	0.001	0.002	2.5
-20	0.002	0.002	0.001	0.002	2.5
-30	0.002	0.001	0.002	0.002	2.5

### 4.3 Emission Bandwidth Measurement

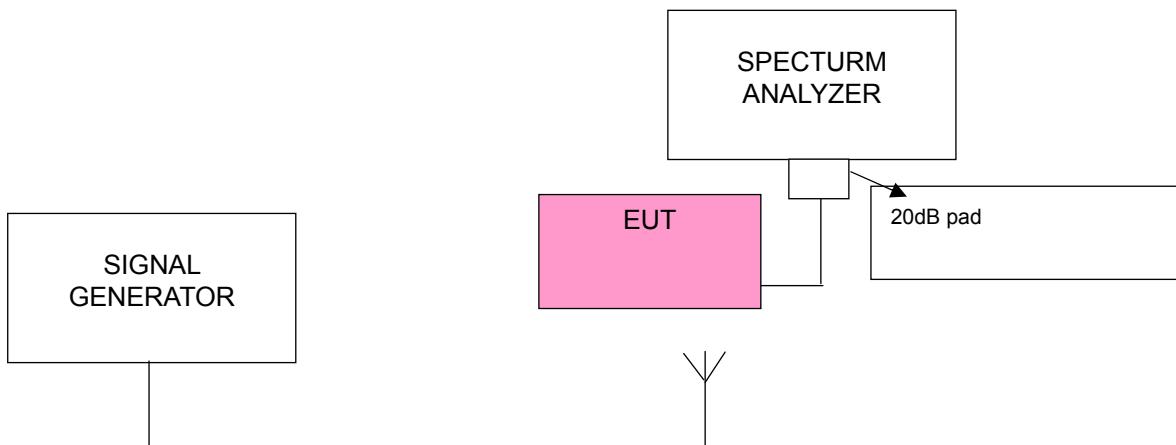
#### 4.3.1 Limits of Emission Bandwidth Measurement

According to FCC 27.53(m)(6) specified that 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 26dB below the transmitter power.

#### 4.3.2 Test Procedure

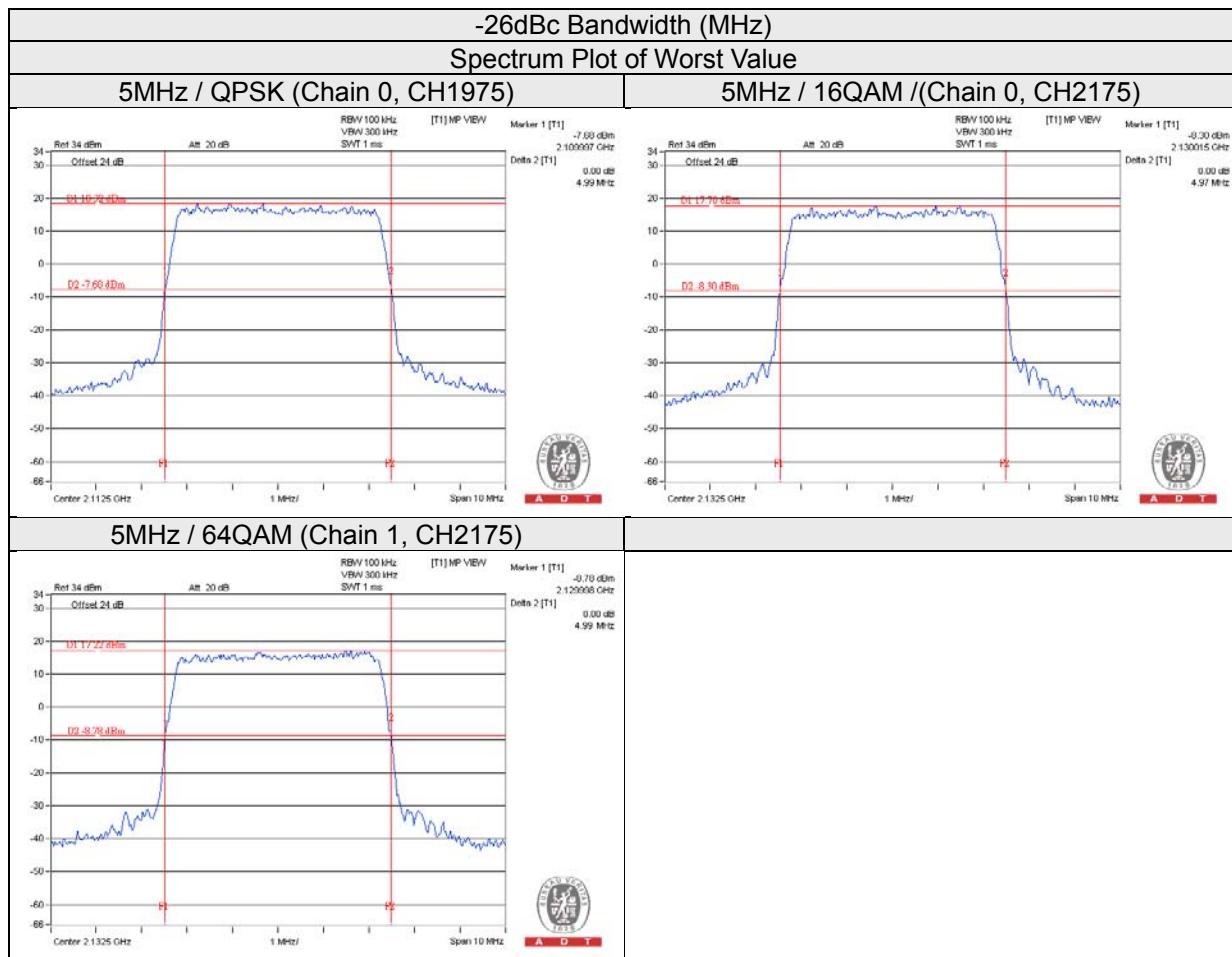
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 100kHz and VBW = 300kHz (Channel Bandwidth: 5MHz), RBW = 200kHz and VBW = 620kHz (Channel Bandwidth: 10MHz), RBW = 510kHz and VBW = 1.5MHz (Channel Bandwidth: 15MHz and 20MHz).

#### 4.3.3 Test Setup

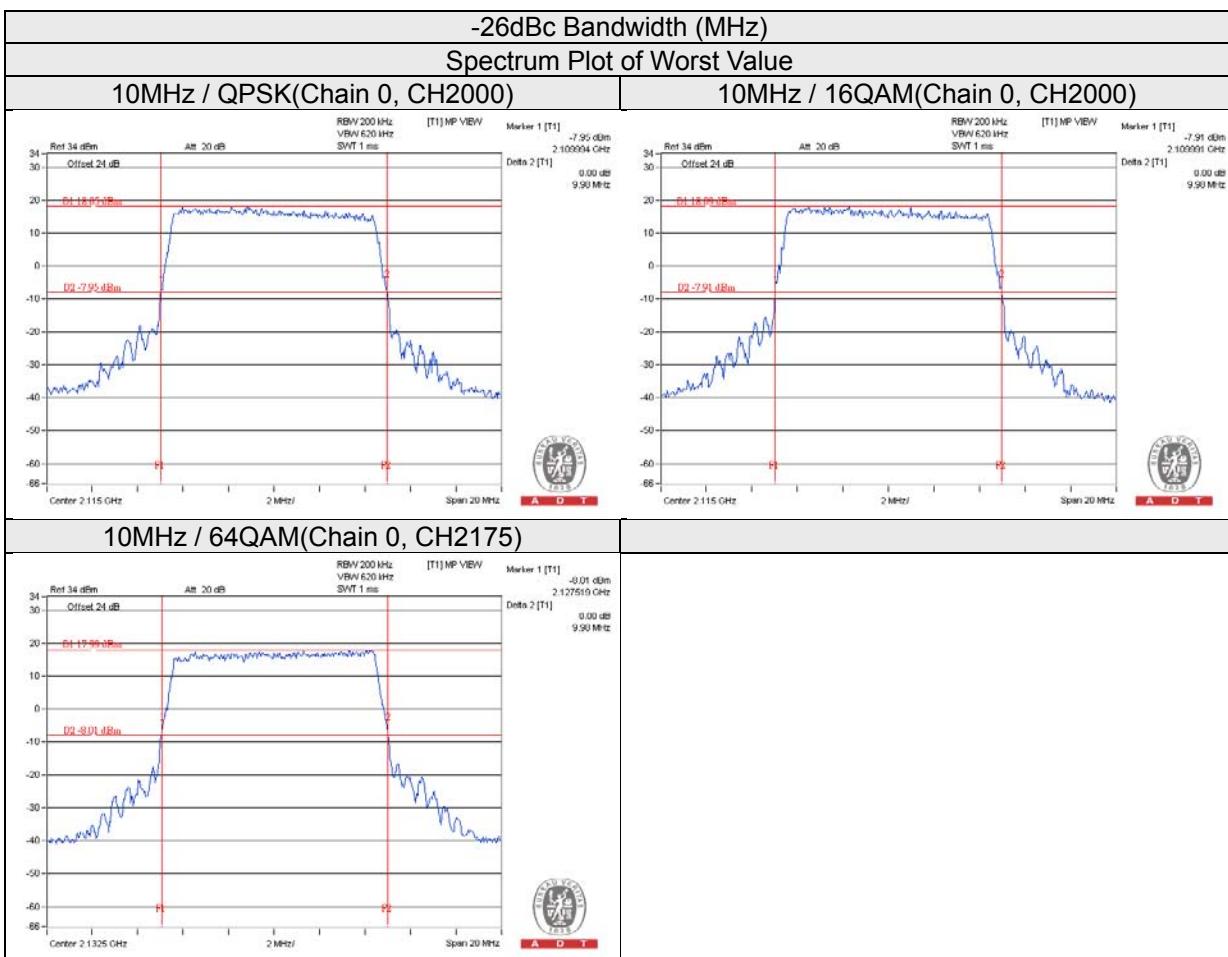


#### 4.3.4 Test Results (-26dBc Bandwidth)

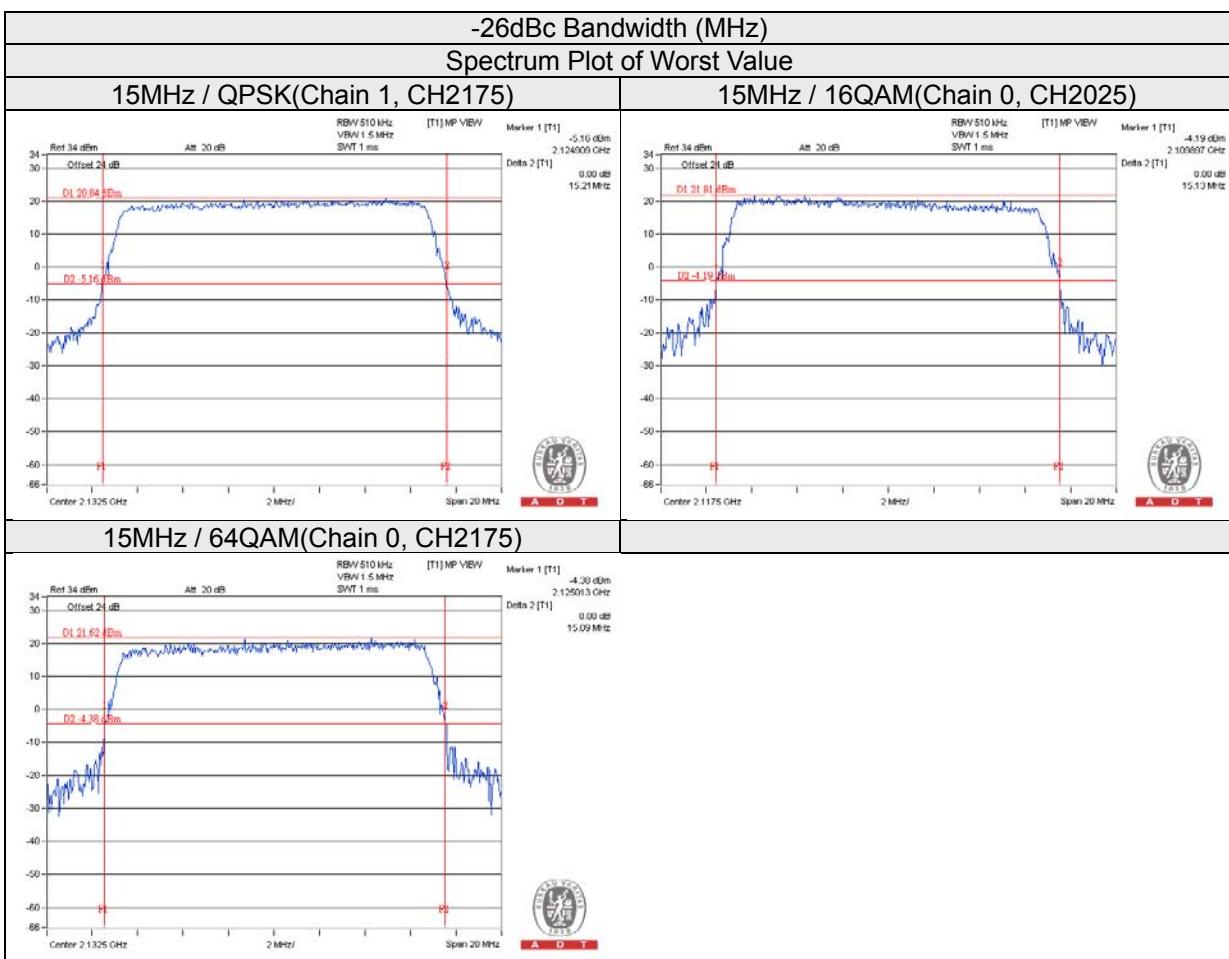
Channel Bandwidth: 5MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1975	2112.5	4.99	4.95	4.96	4.94	4.93	4.95
2175	2132.5	4.94	4.97	4.94	4.96	4.93	4.99
2375	2152.5	4.95	4.95	4.92	4.96	4.97	4.89



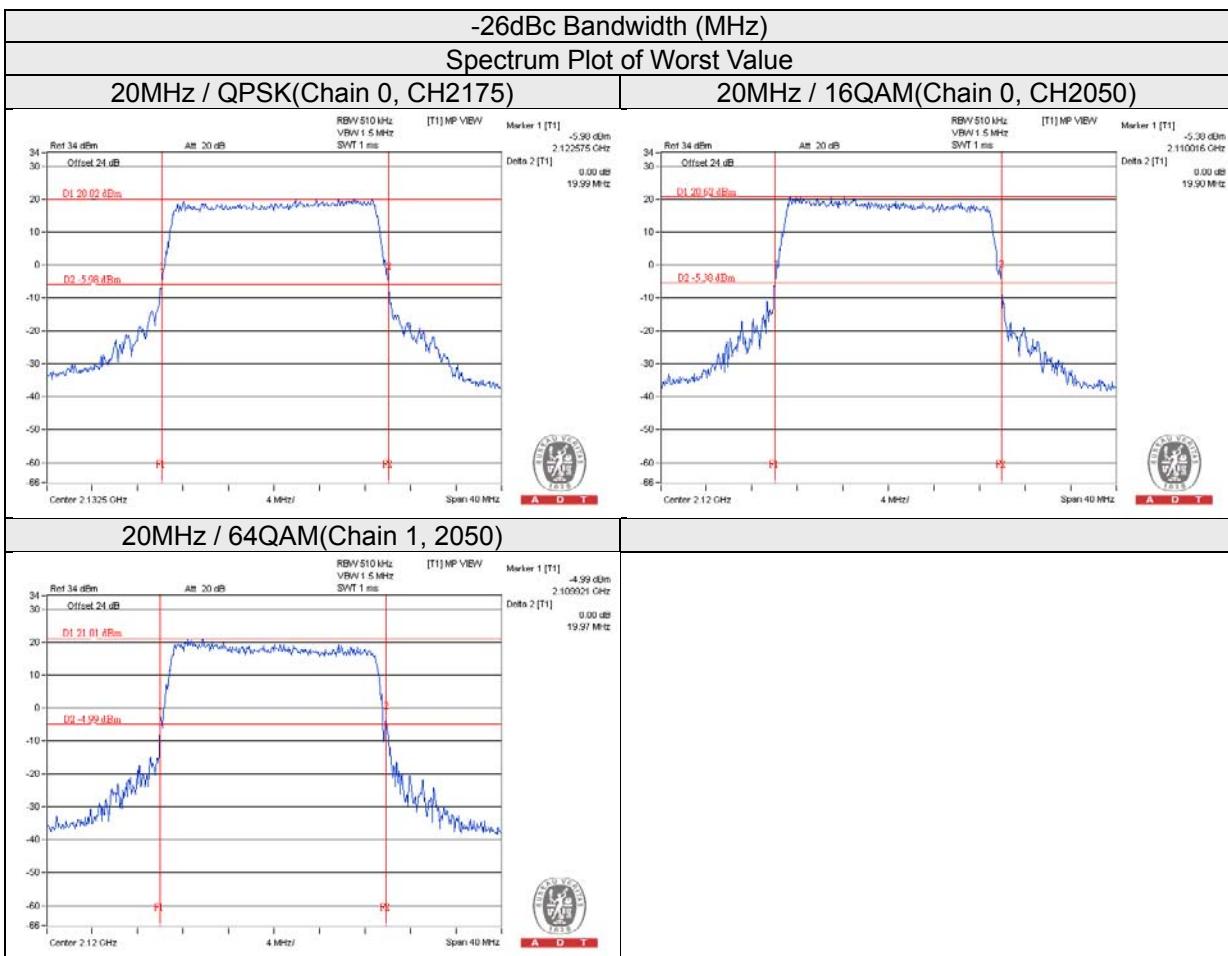
Channel Bandwidth: 10MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115	9.98	9.98	9.9	9.8	9.89	9.97
2175	2132.5	9.96	9.96	9.98	9.91	9.86	9.97
2350	2150	9.89	9.92	9.97	9.9	9.9	9.89



Channel Bandwidth: 15MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	15.06	15.13	15.04	15.12	14.93	15.05
2175	2132.5	15.07	14.97	15.09	15.21	15.05	15.07
2325	2147.5	15.01	14.97	14.82	14.99	14.92	14.96

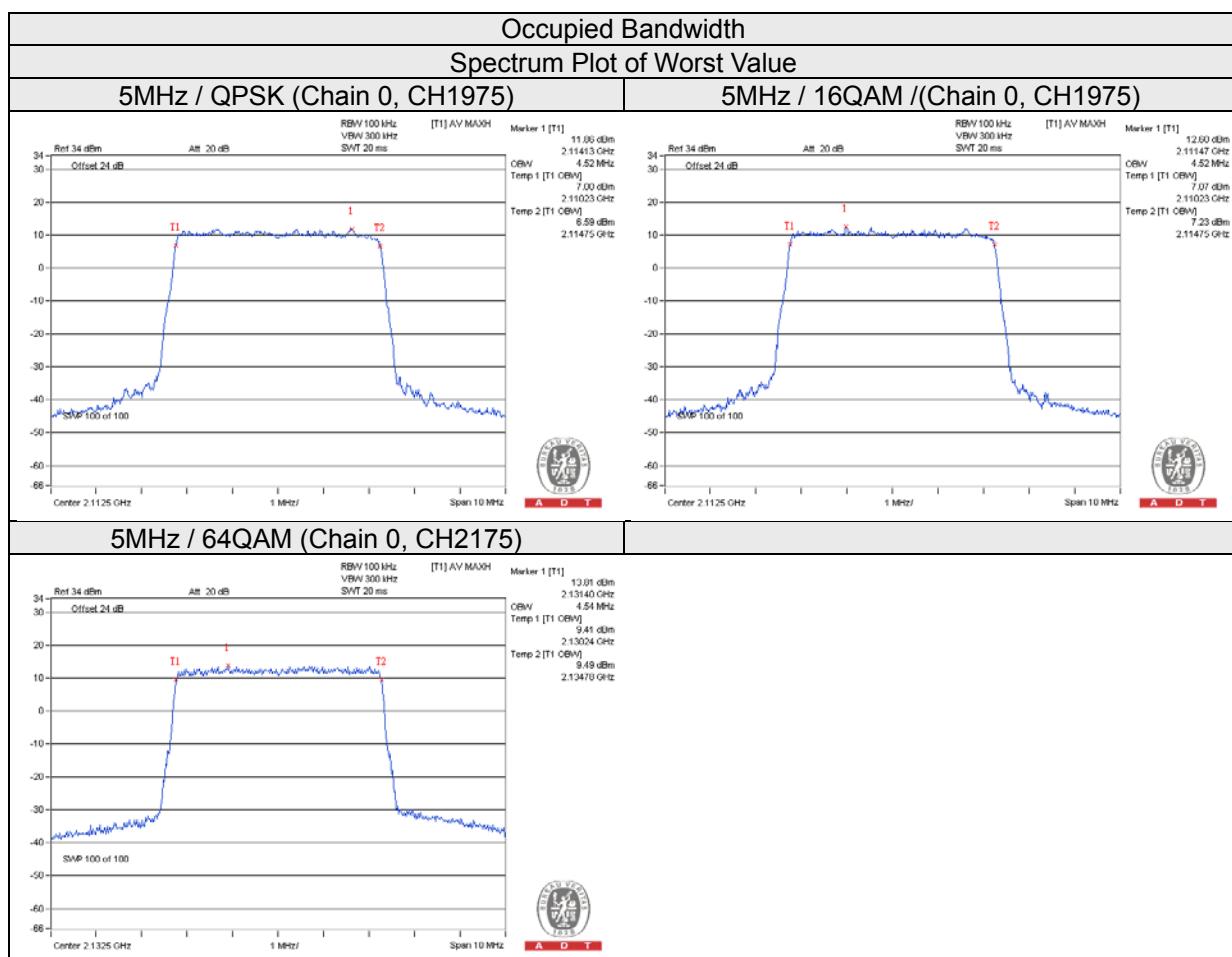


Channel Bandwidth: 20MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	19.95	19.9	19.94	19.81	19.9	19.97
2175	2132.5	19.99	19.7	19.94	19.95	19.88	19.96
2300	2145	19.72	19.6	19.75	19.42	19.78	19.57

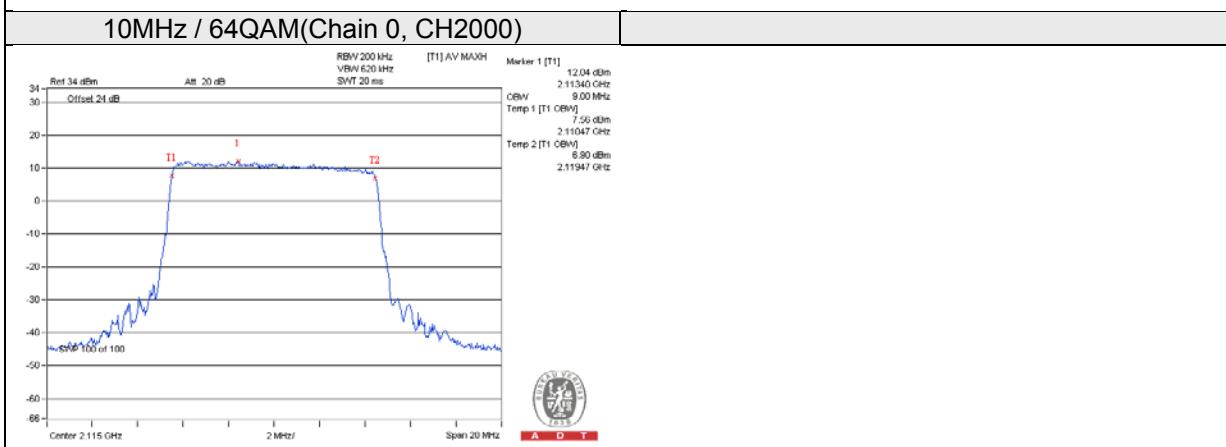
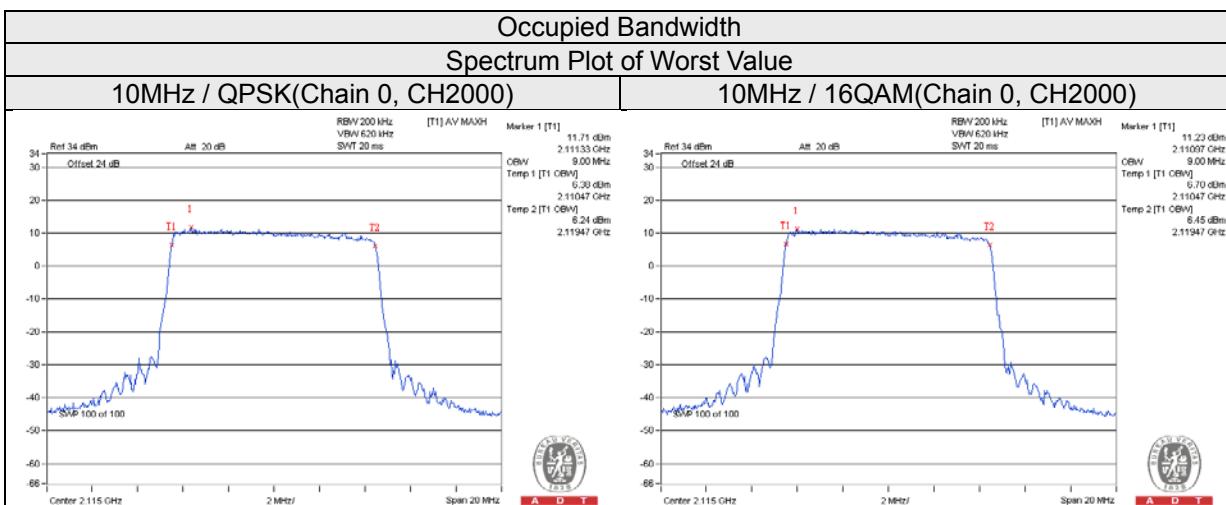


#### 4.3.5 Test Results (Occupied Bandwidth)

Channel Bandwidth: 5MHz							
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1975	2112.5	4.52	4.52	4.52	4.50	4.52	4.52
2175	2132.5	4.50	4.50	4.54	4.50	4.50	4.50
2375	2152.5	4.50	4.50	4.52	4.52	4.50	4.52



Channel Bandwidth: 10MHz							
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115	9.00	9.00	9.00	8.97	9.00	8.97
2175	2132.5	9.00	9.00	9.00	9.00	9.00	9.00
2350	2150	8.97	8.97	8.97	8.97	8.97	9.00



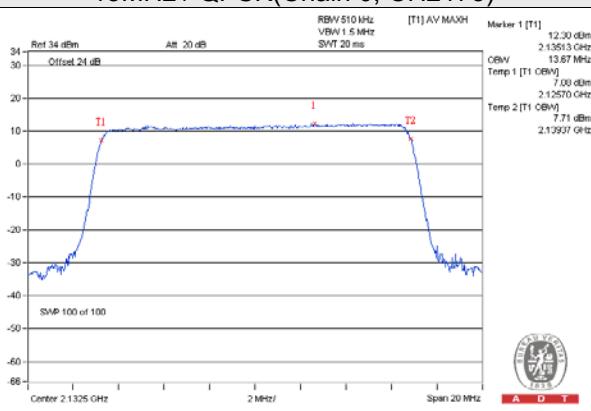
### Channel Bandwidth: 15MHz

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	13.60	13.57	13.63	13.60	13.63	13.63
2175	2132.5	13.67	13.63	13.67	13.63	13.63	13.67
2325	2147.5	13.57	13.57	13.57	13.53	13.57	13.57

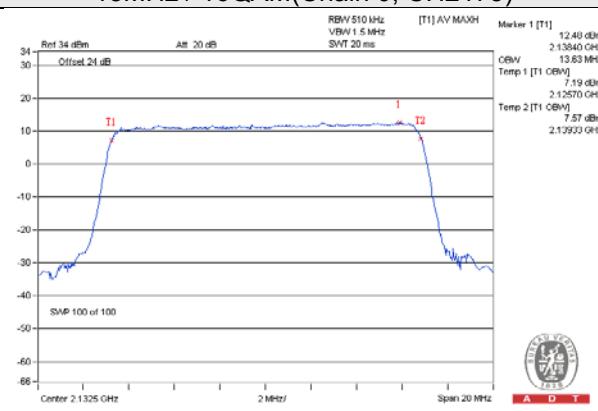
### Occupied Bandwidth

#### Spectrum Plot of Worst Value

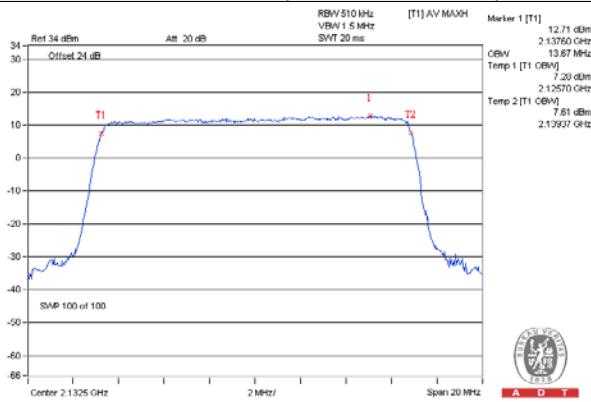
15MHz / QPSK(Chain 0, CH2175)



15MHz / 16QAM(Chain 0, CH2175)



15MHz / 64QAM(Chain 0, CH2175)



### Channel Bandwidth: 20MHz

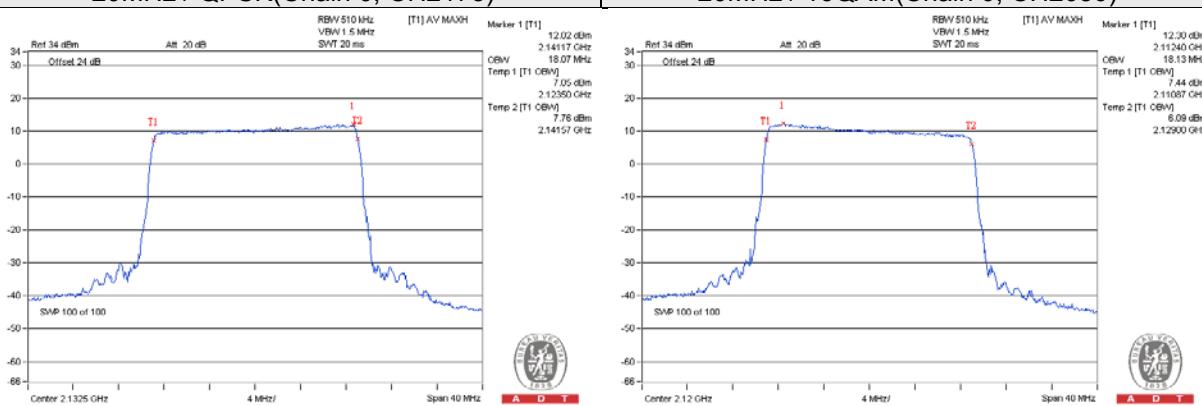
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	18.00	18.13	18.70	18.07	18.13	18.00
2175	2132.5	18.07	18.07	18.70	18.07	18.07	18.70
2300	2145	17.87	17.87	17.87	17.93	17.87	17.93

### Occupied Bandwidth

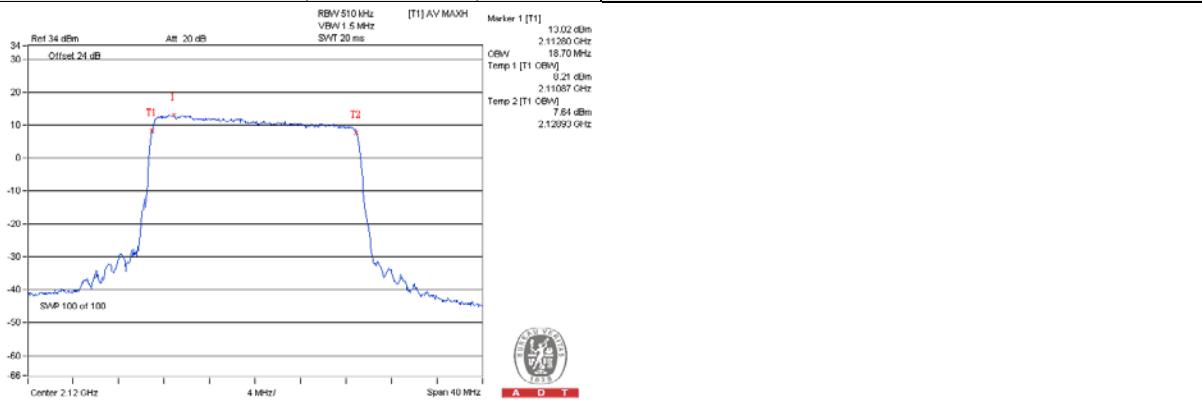
#### Spectrum Plot of Worst Value

20MHz / QPSK(Chain 0, CH2175)

20MHz / 16QAM(Chain 0, CH2050)



20MHz / 64QAM(Chain 0, 2050)



## 4.4 Channel Edge Measurement

### 4.4.1 Limits of Channel Edge Measurement

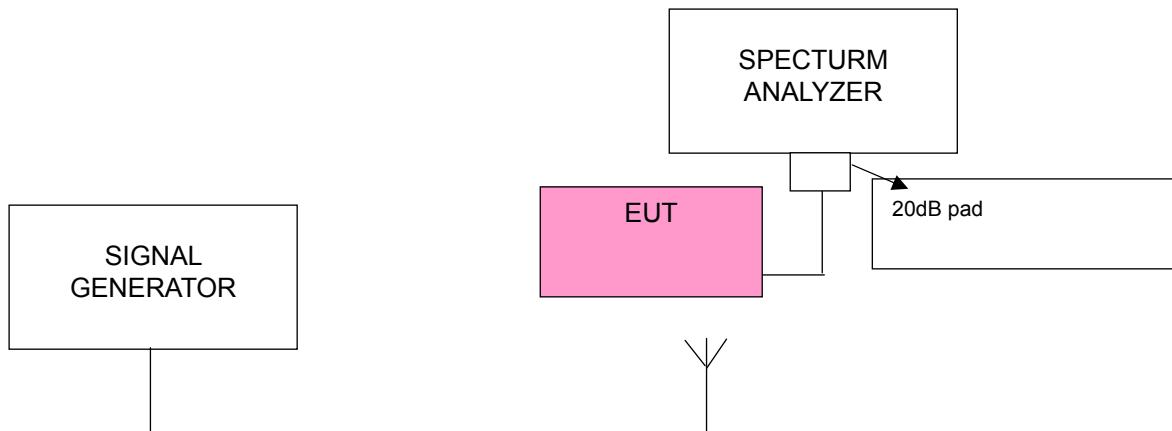
According to FCC 27.53(h) specified the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10} (P)$  dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

Note:

This device can be implement MIMO function, so the limit of spurious emissions needs to be reduced by  $10\log(\text{Numbers}_{\text{Ant}})$  according to FCC KDB 662911 D01 guidance.

{The limit is adjusted to  $-13\text{dBm} - 10*\log(2) = -16.01\text{dBm}$ .}

### 4.4.2 Test Setup



### 4.4.3 Test Procedures

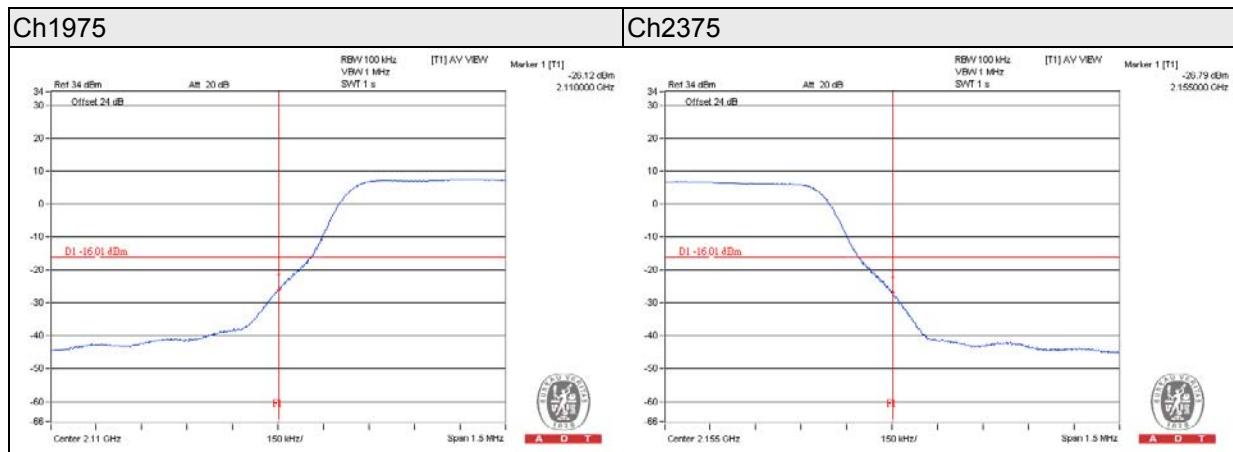
- The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels: low, middle and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 15MHz. RBW of the spectrum is 100kHz (Channel Bandwidth: 5MHz & 10MHz) / 150kHz (Channel Bandwidth: 15MHz) / 200kHz (Channel Bandwidth: 20MHz).
- Record the max trace plot into the test report.

#### 4.4.4 Test Results

##### Chain 0

QPSK / Channel Bandwidth: 5MHz

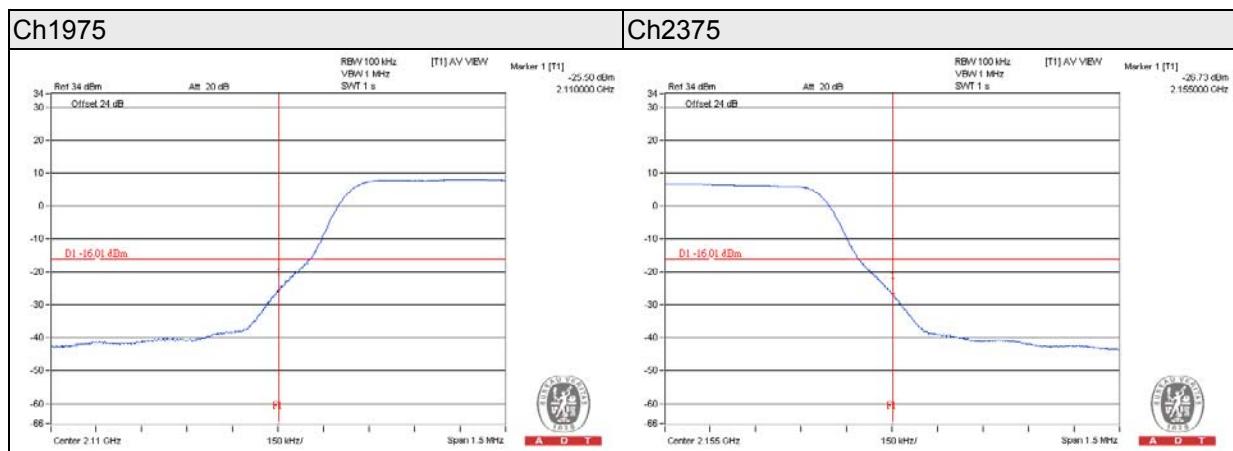
Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-26.12	-16.01	-10.11	Pass
2155	-26.79	-16.01	-10.78	Pass



##### Chain 1

QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-25.5	-16.01	-9.49	Pass
2155	-26.73	-16.01	-10.72	Pass

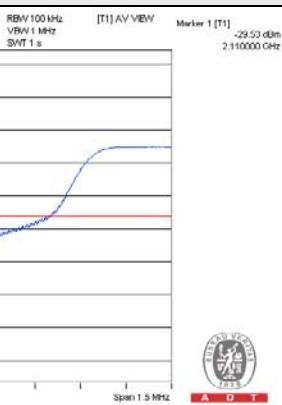


### Chain 0

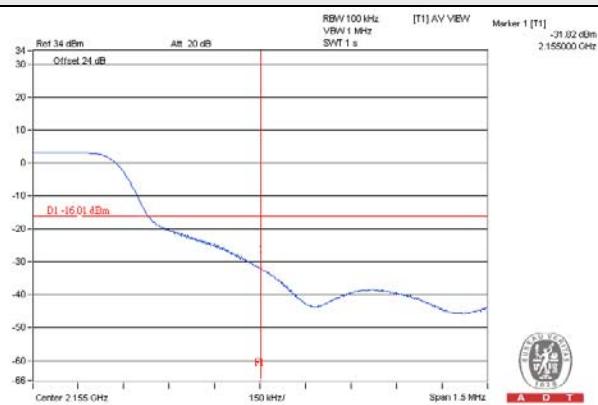
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-29.53	-16.01	-13.52	Pass
2155	-31.82	-16.01	-15.81	Pass

### Ch2000



### Ch2350

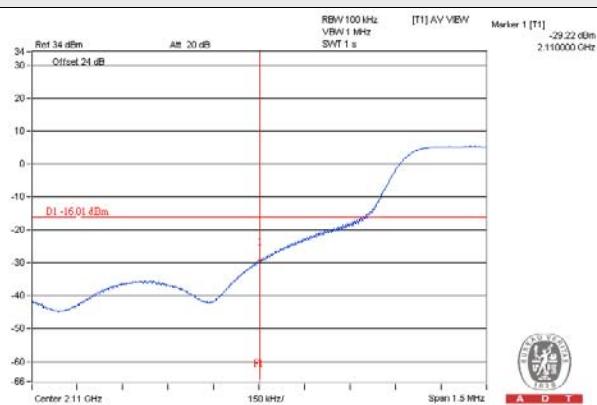


### Chain 1

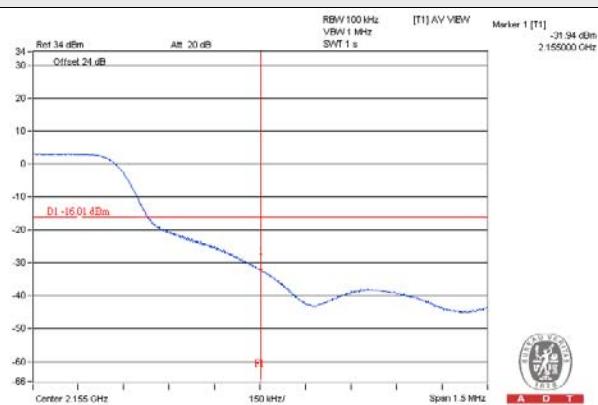
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-29.22	-16.01	-13.21	Pass
2155	-31.94	-16.01	-15.93	Pass

### Ch2000



### Ch2350



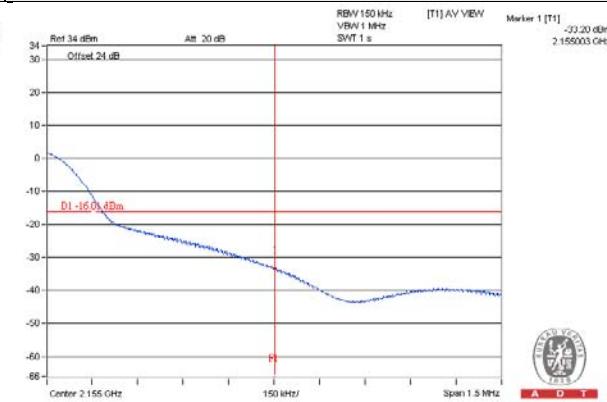
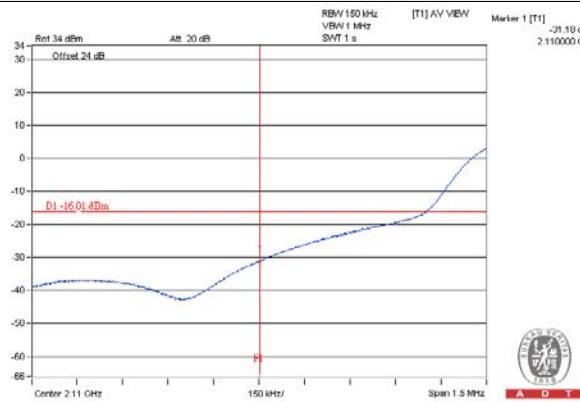
### Chain 0

QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-31.18	-16.01	-15.17	Pass
2155	-33.2	-16.01	-17.19	Pass

Ch2025

Ch2325



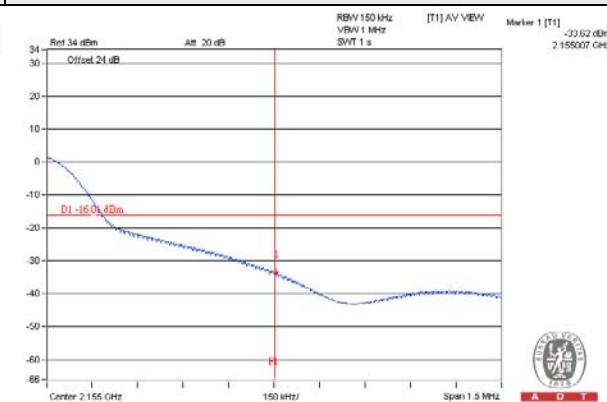
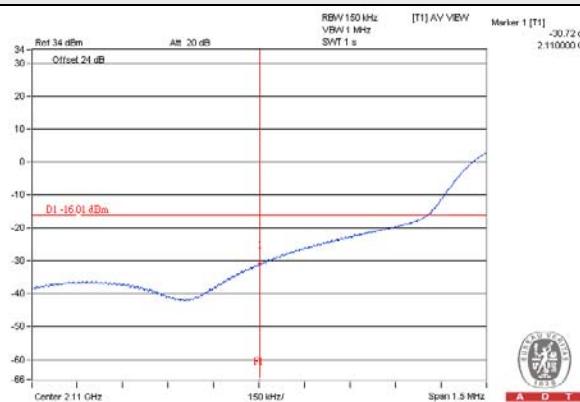
### Chain 1

QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-30.72	-16.01	-14.71	Pass
2155.01	-33.62	-16.01	-17.61	Pass

Ch2025

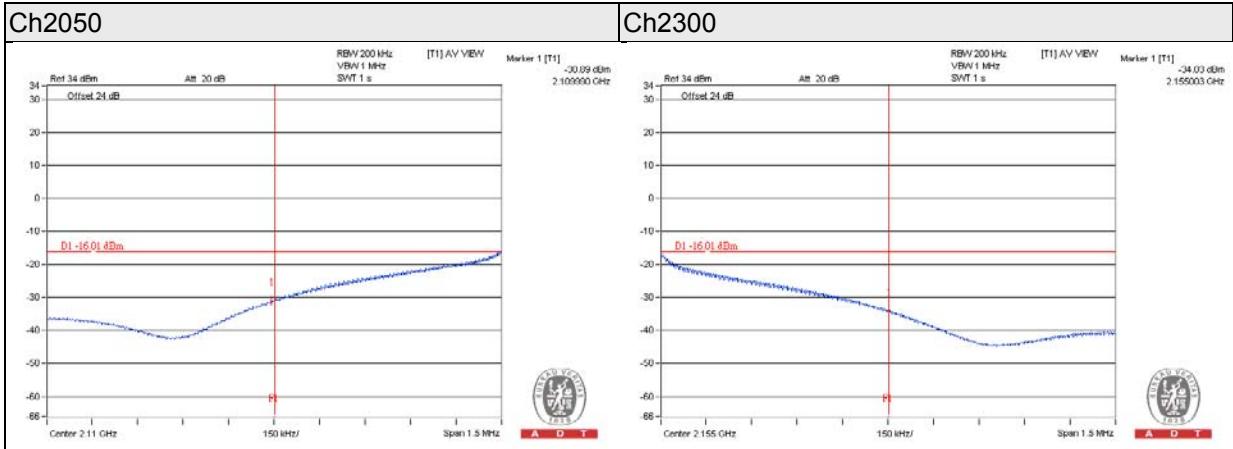
Ch2325



## Chain 0

QPSK / Channel Bandwidth: 20MHz

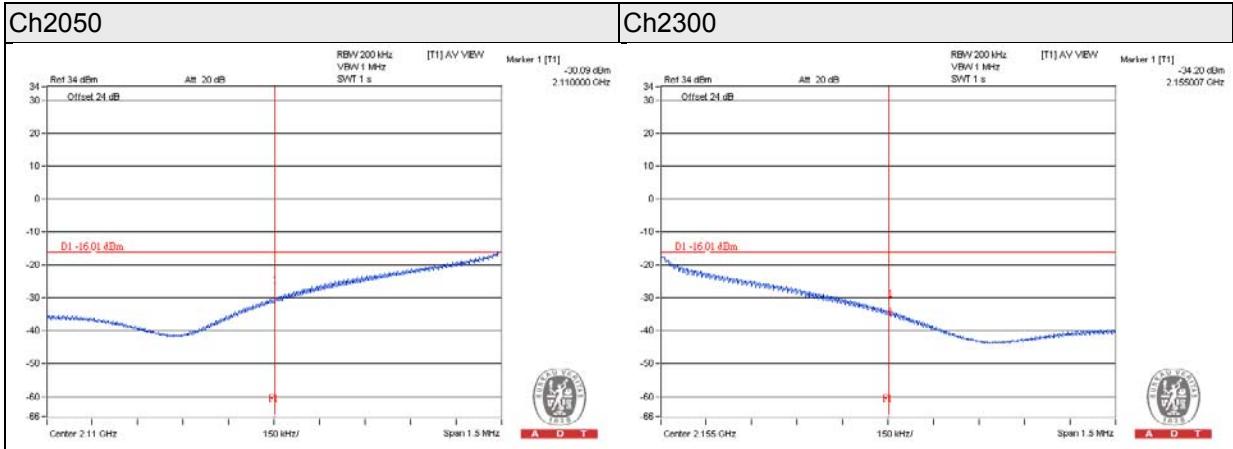
Frequency(MHz)	Measurement Value	Limit	Margin	Result
2109.99	-30.89	-16.01	-14.88	Pass
2155	-34.03	-16.01	-18.02	Pass



## Chain 1

QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-30.09	-16.01	-14.08	Pass
2155.01	-34.2	-16.01	-18.19	Pass

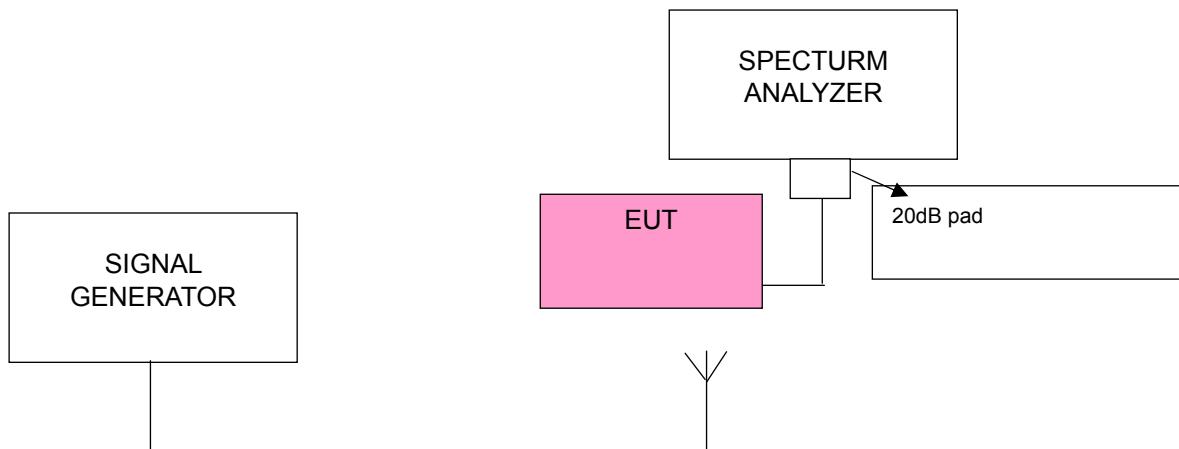


## 4.5 Peak to Average Ratio

### 4.5.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

### 4.5.2 Test Setup



### 4.5.3 Test Procedures

1. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

#### 4.5.4 Test Results

Channel Bandwidth: 5MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1975	2112.5	6.61	6.62	6.57	6.61	6.6	6.62
2175	2132.5	6.59	6.59	6.54	6.58	6.59	6.59
2375	2152.5	6.57	6.57	6.57	6.6	6.57	6.58



### Channel Bandwidth: 10MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115	6.69	6.7	6.7	6.73	6.7	6.67
2175	2132.5	6.62	6.63	6.64	6.57	6.68	6.64
2350	2150	6.61	6.64	6.62	6.68	6.64	6.64

### SPECTRUM PLOT OF WORST VALUE

#### Peak To Average Ratio (dB)

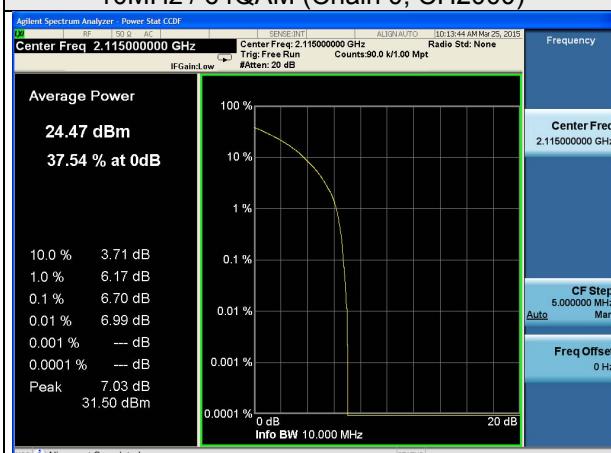
10MHz / QPSK (Chain 1, CH2000)



10MHz / 16QAM /(Chain 1, CH2000)



10MHz / 64QAM (Chain 0, CH2000)



### Channel Bandwidth: 15MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	7.01	7.02	7.05	7.02	7	7.02
2175	2132.5	6.95	6.99	6.96	6.97	6.99	6.98
2325	2147.5	6.92	6.95	6.94	6.95	6.95	6.89

### SPECTRUM PLOT OF WORST VALUE

#### Peak To Average Ratio (dB)

15MHz / QPSK (Chain 1, CH2025)



15MHz / 16QAM /(Chain 0, CH2025)



15MHz / 64QAM (Chain 0, CH2025)



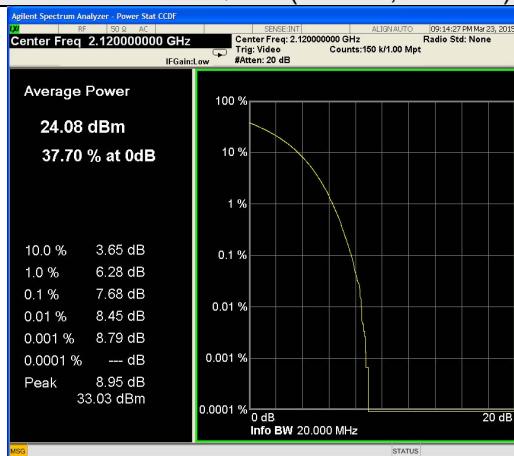
### Channel Bandwidth: 20MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	7.63	7.62	7.61	7.68	7.6	7.63
2175	2132.5	7.56	7.64	7.57	7.54	7.58	7.64
2300	2145	7.55	7.6	7.62	7.53	7.58	7.62

### SPECTRUM PLOT OF WORST VALUE

#### Peak To Average Ratio (dB)

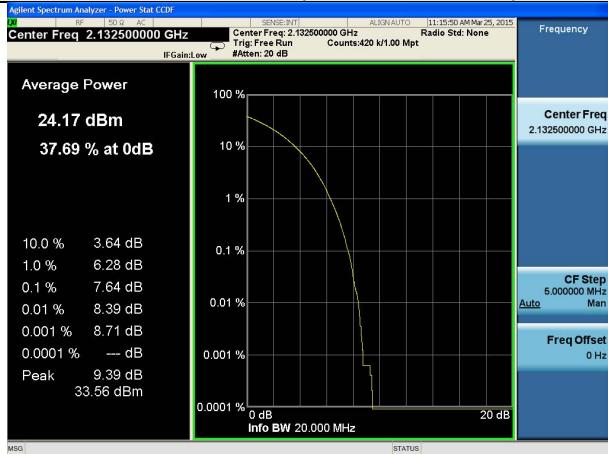
##### 20MHz / QPSK (Chain 1, CH2025)



##### 20MHz / 16QAM /(Chain 0, CH2175)



##### 20MHz / 64QAM (Chain 1, CH2175)



## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

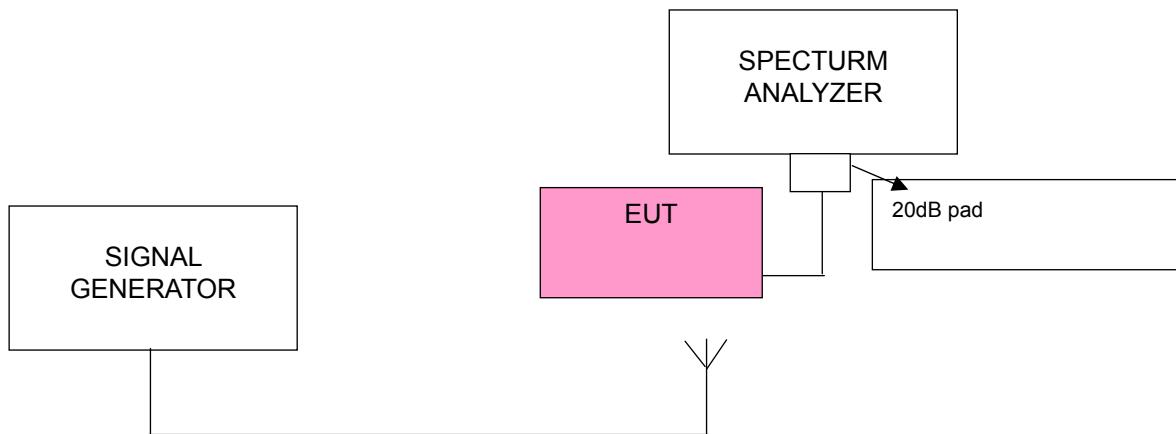
In the FCC 27.53(h), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB, the emission limit equal to  $-13\text{dBm}$ .

Note:

This device can be implement MIMO function, so the limit of spurious emissions needs to be reduced by  $10\log(\text{Numbers}_{\text{Ant}})$  according to FCC KDB 662911 D01 guidance.

{The limit is adjusted to  $-13\text{dBm} - 10*\log(2) = -16.01\text{dBm}$ .}

### 4.6.2 Test Setup



### 4.6.3 Test Procedure

- All measurements were done at 3 channels: low, middle and high operational frequency range.
- When the spectrum scanned from 9kHz to 26.5GHz, it shall be connected to the 20dB pad attenuated the carried frequency.

#### 4.6.4 Test Results (With POE)

##### Chain 0

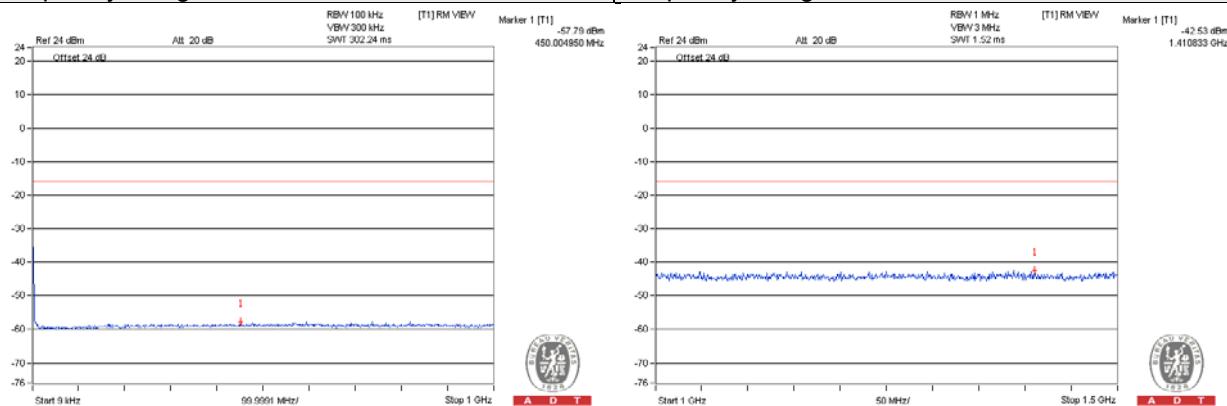
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
450.00495	-57.79	-16.01	-41.78	Pass
1410.833333	-42.53	-16.01	-26.52	Pass
25025	-18.93	-16.01	-2.92	Pass

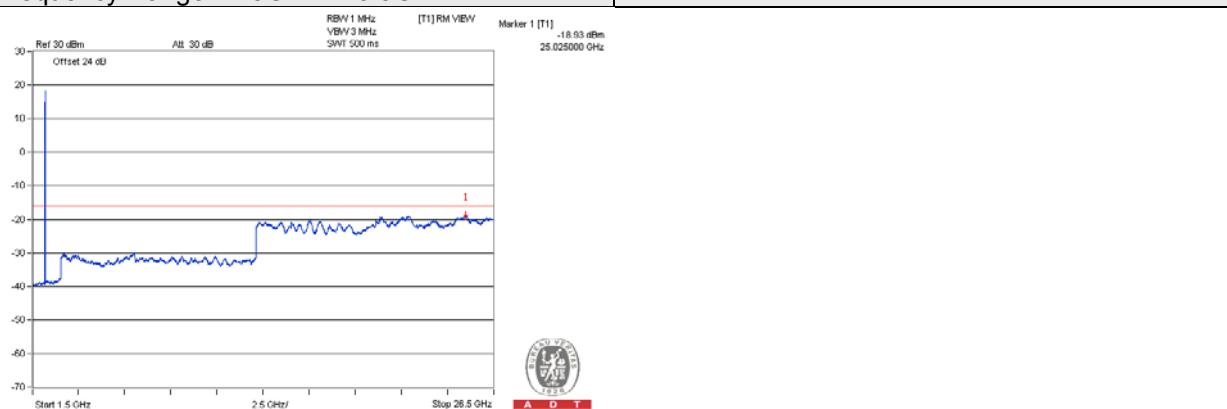
Channel 1975

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

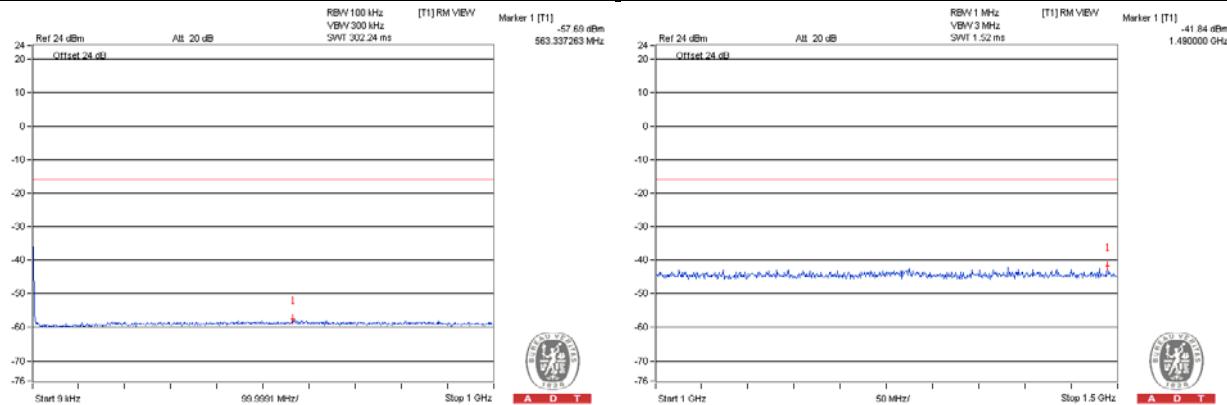
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
563.337263	-57.69	-16.01	-41.68	Pass
1490	-41.84	-16.01	-25.83	Pass
21862.5	-18.94	-16.01	-2.93	Pass

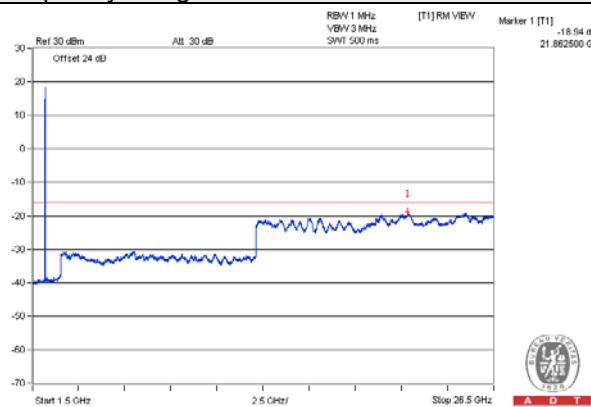
### Channel 1975

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

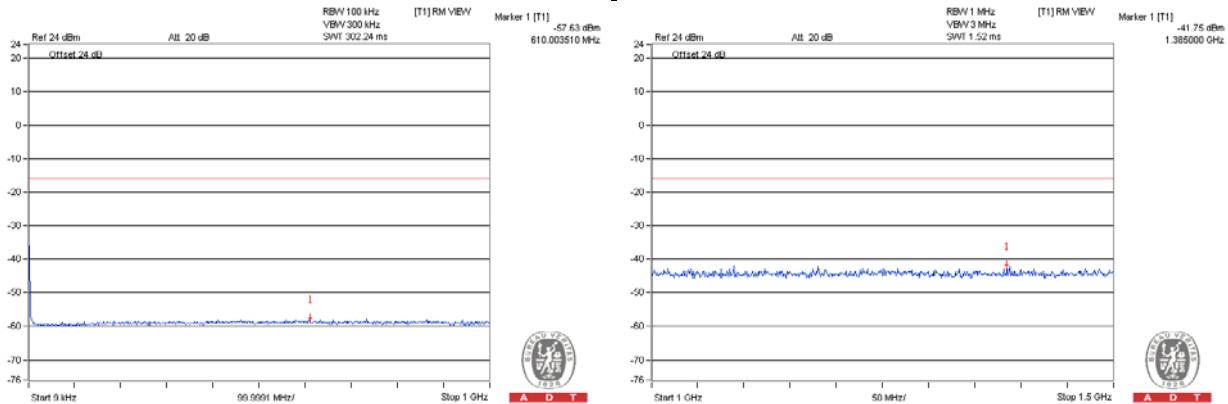
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
610.00351	-57.63	-16.01	-41.62	Pass
1385	-41.75	-16.01	-25.74	Pass
21862.5	-19.17	-16.01	-3.16	Pass

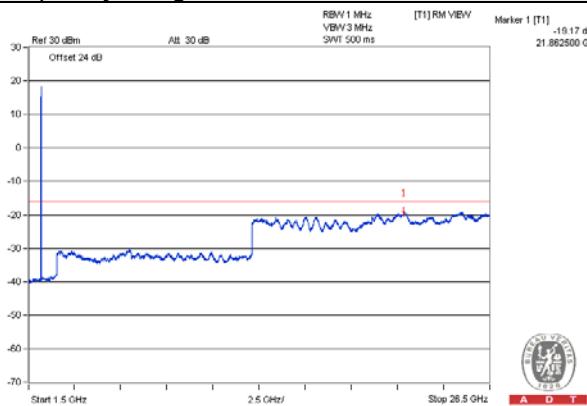
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

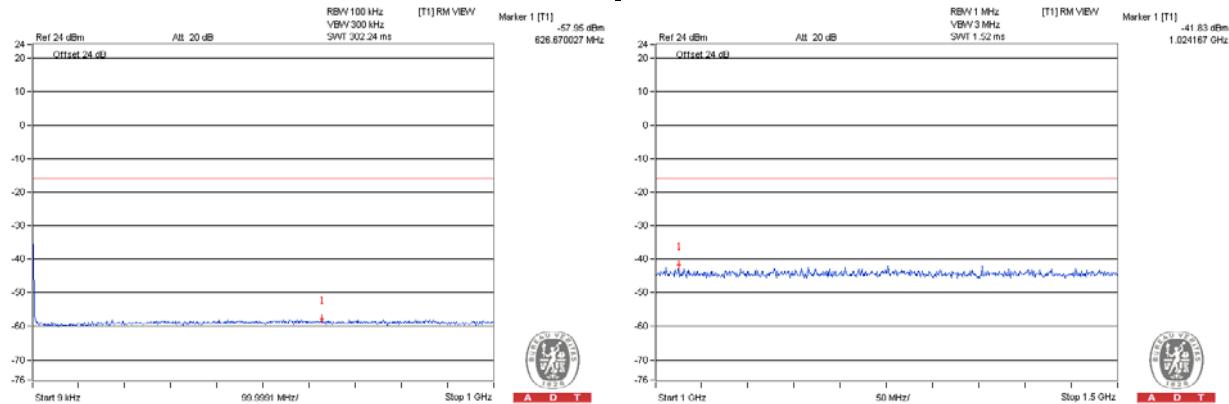
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
626.670027	-57.95	-16.01	-41.94	Pass
1024.166667	-41.83	-16.01	-25.82	Pass
24962.5	-19.15	-16.01	-3.14	Pass

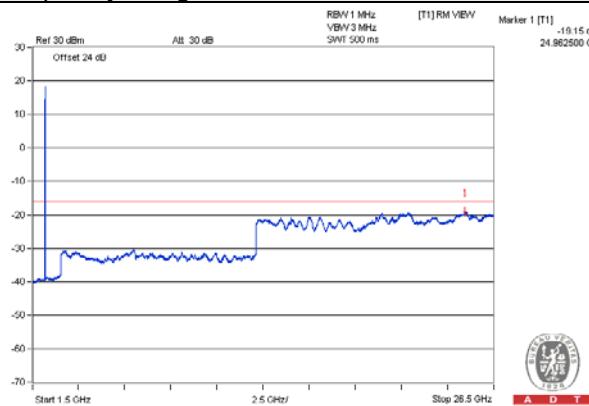
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

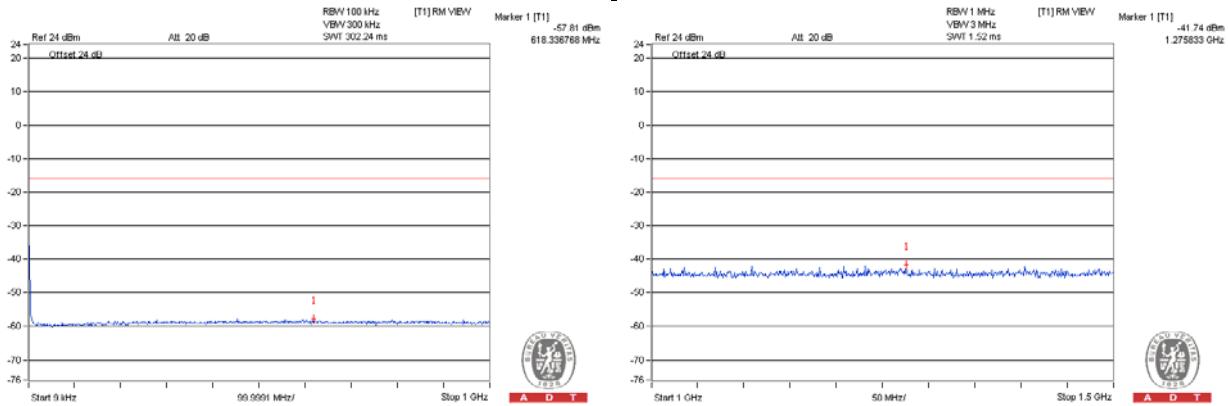
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
618.336768	-57.81	-16.01	-41.8	Pass
1275.833333	-41.74	-16.01	-25.73	Pass
24981.25	-19.16	-16.01	-3.15	Pass

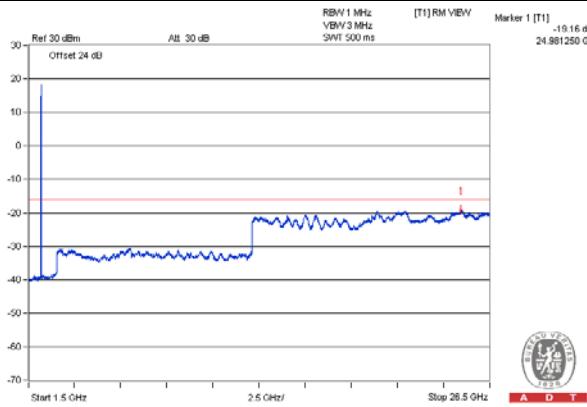
### Channel 2375

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

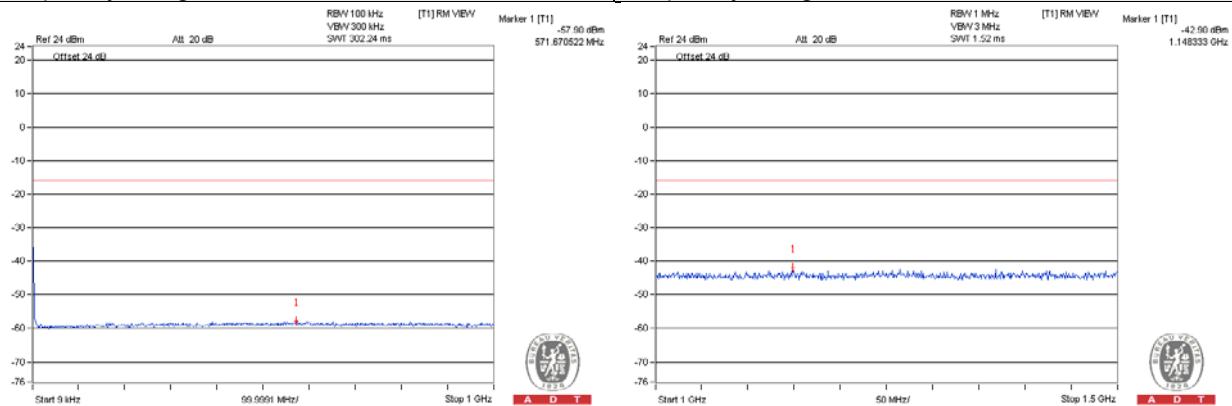
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
571.670522	-57.9	-16.01	-41.89	Pass
1148.333333	-42.90	-16.01	-26.89	Pass
25087.5	-19.18	-16.01	-3.17	Pass

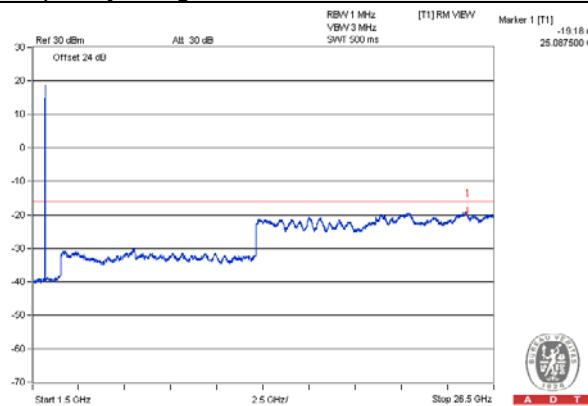
### Channel 2375

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

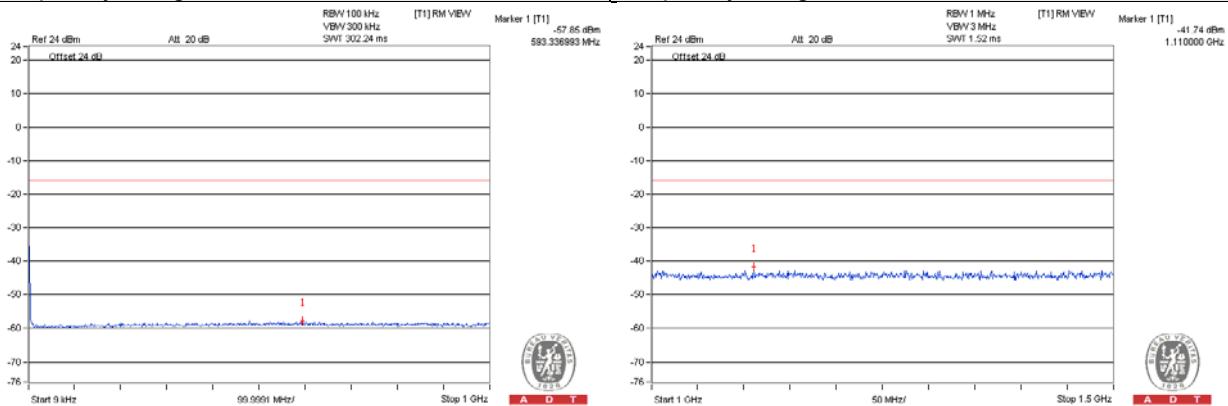
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
593.336993	-57.85	-16.01	-41.84	Pass
1110	-41.74	-16.01	-25.73	Pass
25062.5	-19.05	-16.01	-3.04	Pass

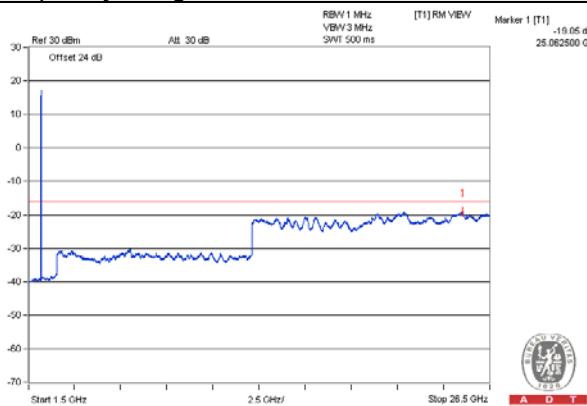
### Channel 2000

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

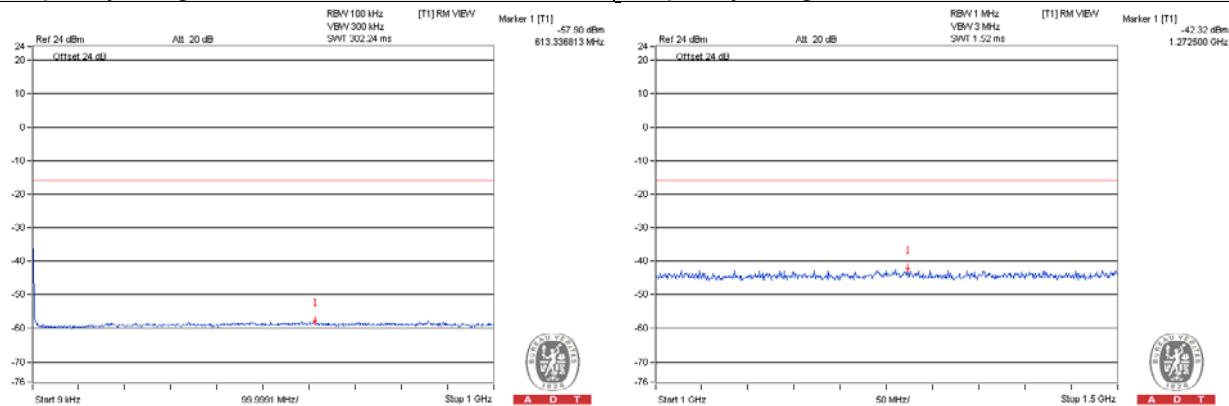
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
613.336813	-57.9	-16.01	-41.89	Pass
1272.5	-42.32	-16.01	-26.31	Pass
25006.25	-19.35	-16.01	-3.34	Pass

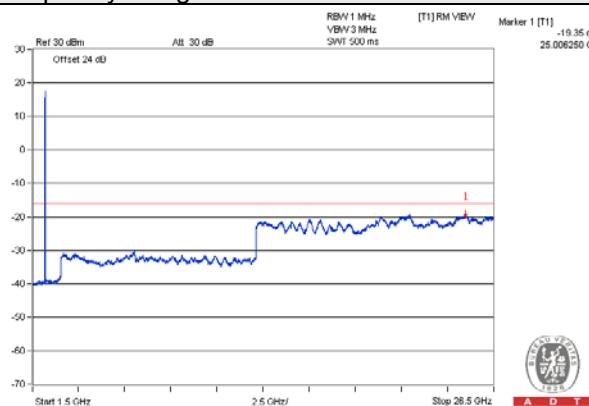
### Channel 2000

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

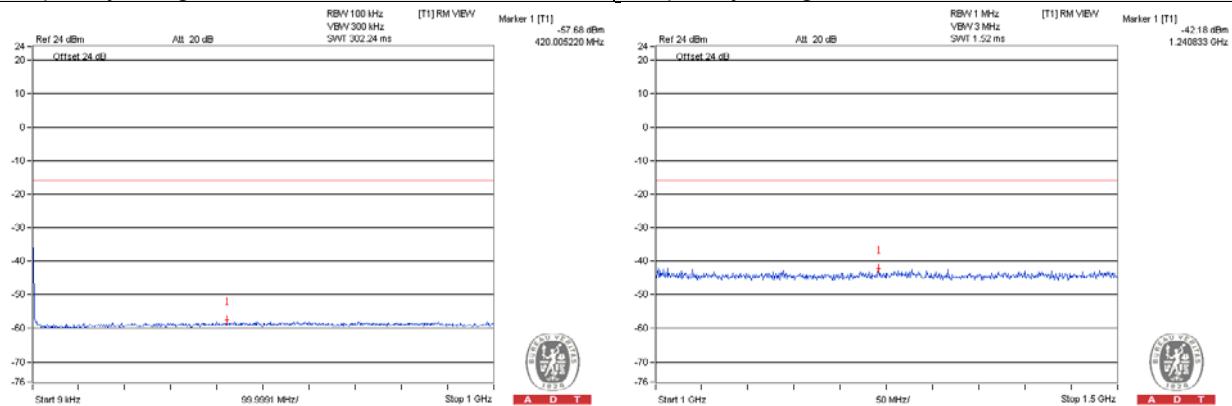
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
420.00522	-57.68	-16.01	-41.67	Pass
1240.833333	-42.18	-16.01	-26.17	Pass
25018.75	-19.42	-16.01	-3.41	Pass

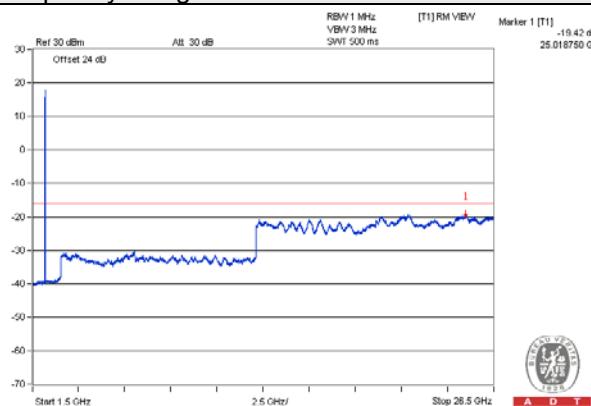
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

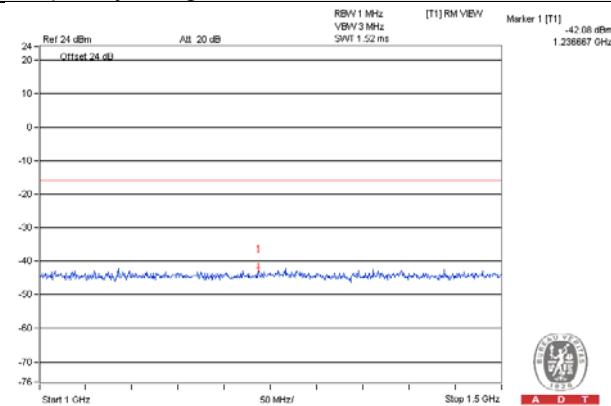
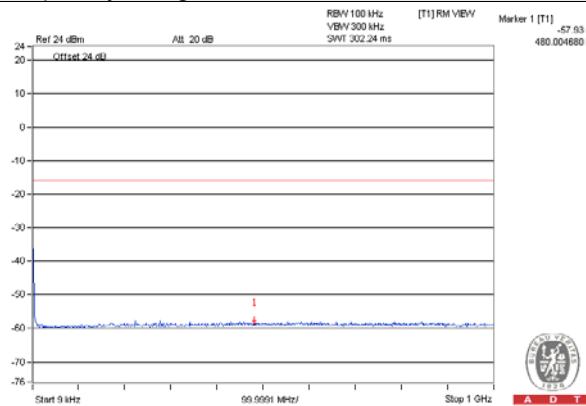
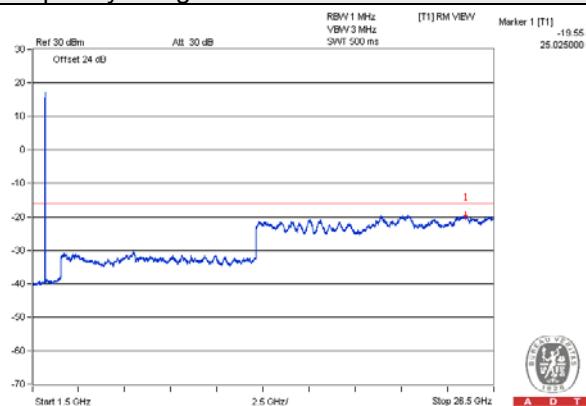


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 10MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
480.00468	-57.93	-16.01	-41.92	Pass
1236.666667	-42.08	-16.01	-26.07	Pass
25025	-19.55	-16.01	-3.54	Pass

**Channel 2175**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


### Chain 0

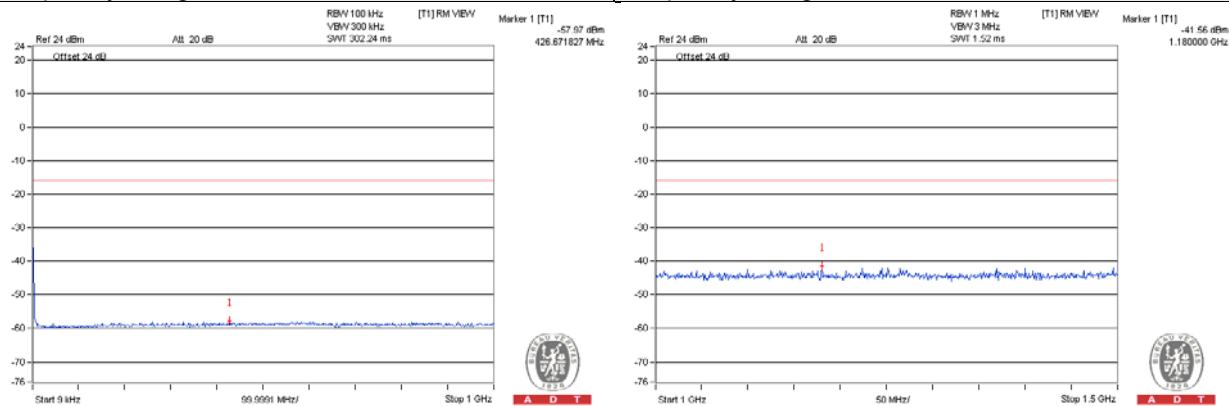
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
426.671827	-57.97	-16.01	-41.96	Pass
1180	-41.56	-16.01	-25.55	Pass
25018.75	-19.12	-16.01	-3.11	Pass

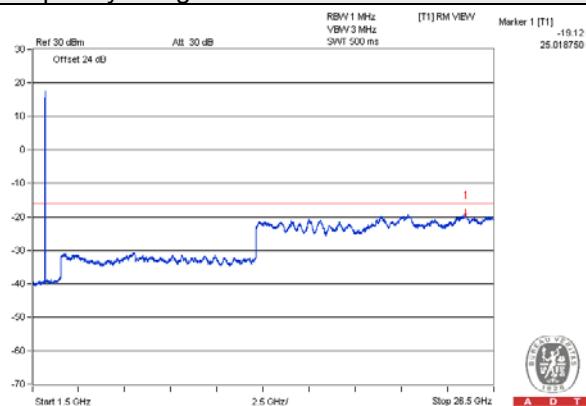
### Channel 2350

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

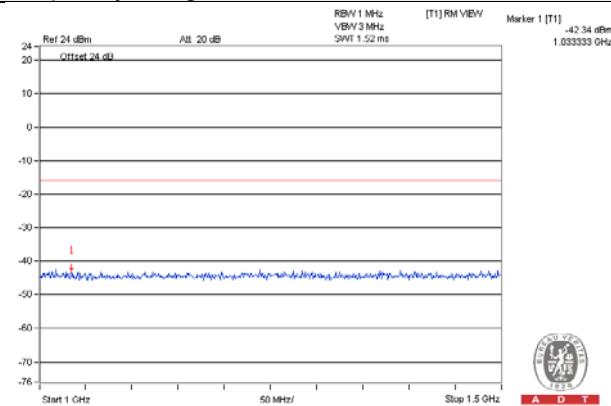
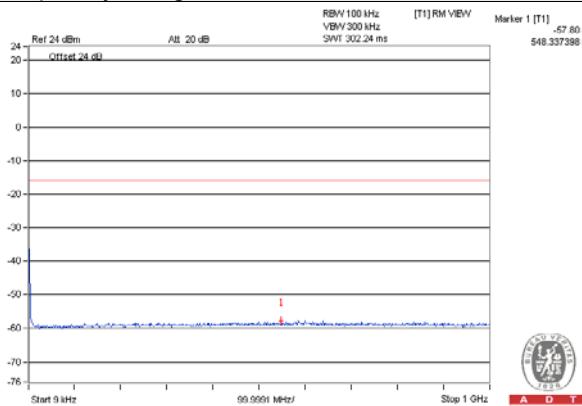
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
548.337398	-57.8	-16.01	-41.79	Pass
1033.333333	-42.34	-16.01	-26.33	Pass
21925	-19.3	-16.01	-3.29	Pass

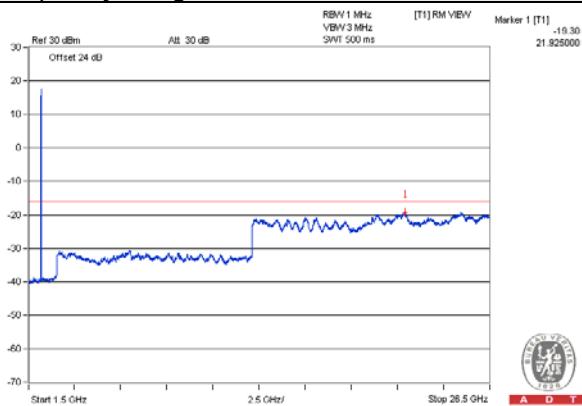
### Channel 2350

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

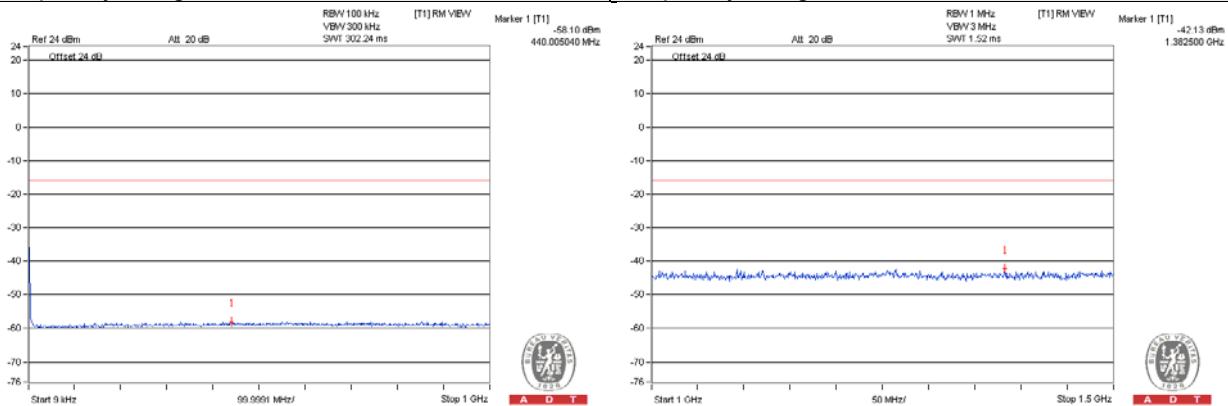
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
440.00504	-58.01	-16.01	-42	Pass
1382.5	-42.13	-16.01	-26.12	Pass
25018.75	-19.29	-16.01	-3.28	Pass

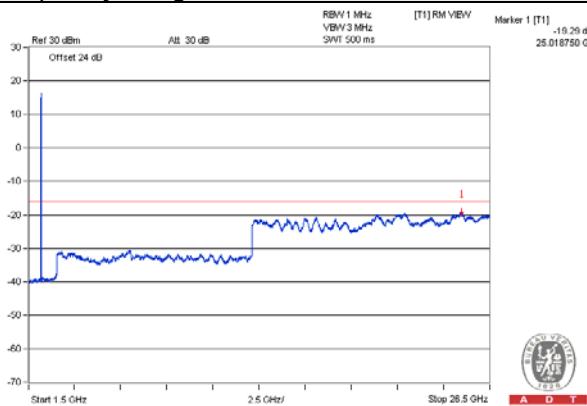
### Channel 2025

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

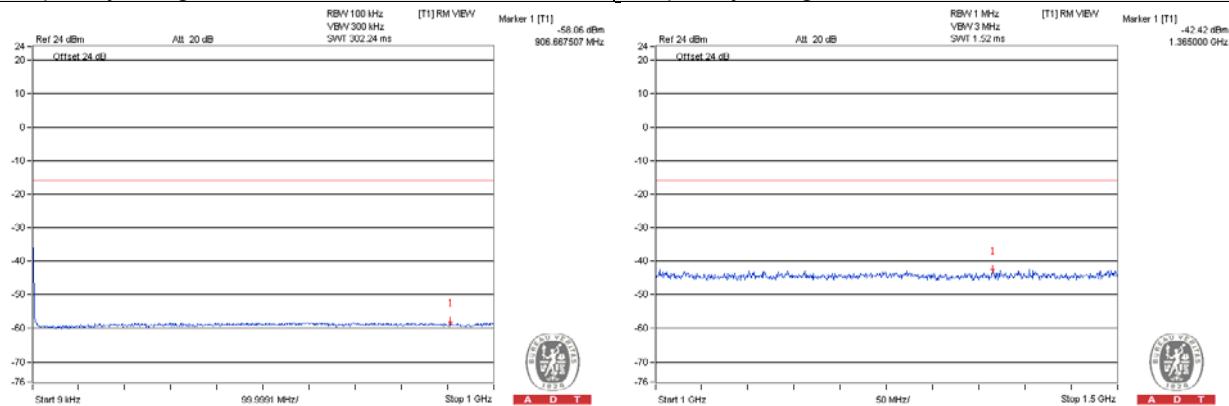
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
906.667507	-58.06	-16.01	-42.05	Pass
1365	-42.42	-16.01	-26.41	Pass
25025	-19.42	-16.01	-3.41	Pass

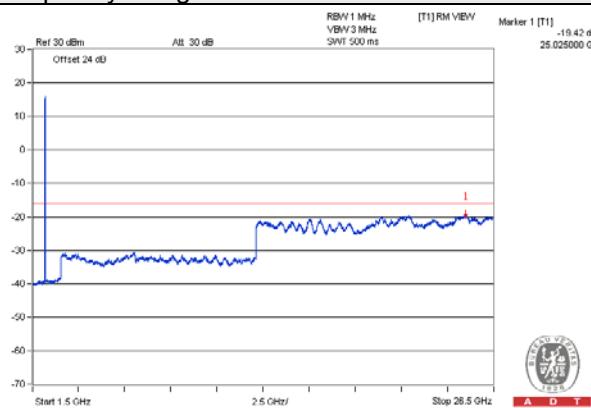
### Channel 2025

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

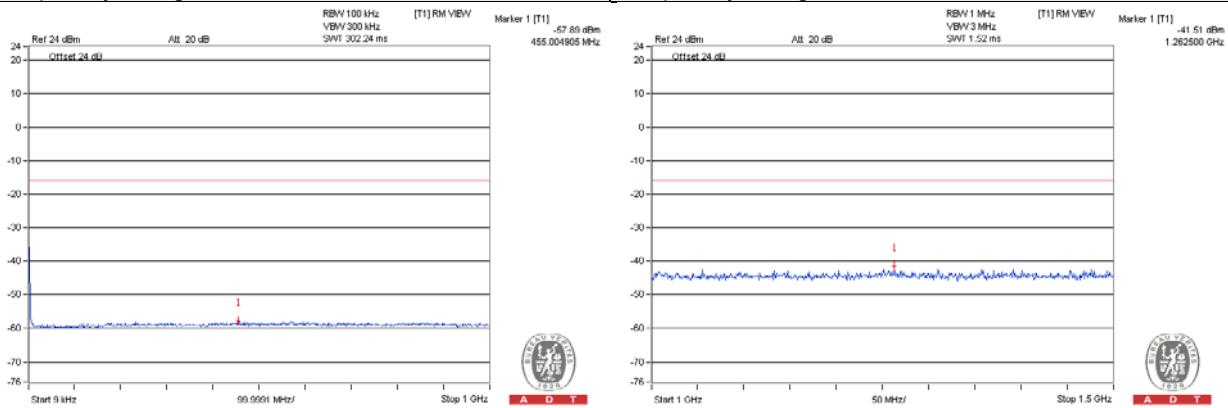
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
455.004905	-57.89	-16.01	-41.88	Pass
1262.5	-41.51	-16.01	-25.5	Pass
24987.5	-19.2	-16.01	-3.19	Pass

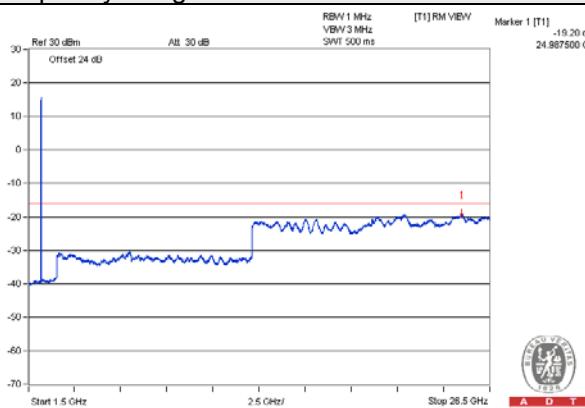
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

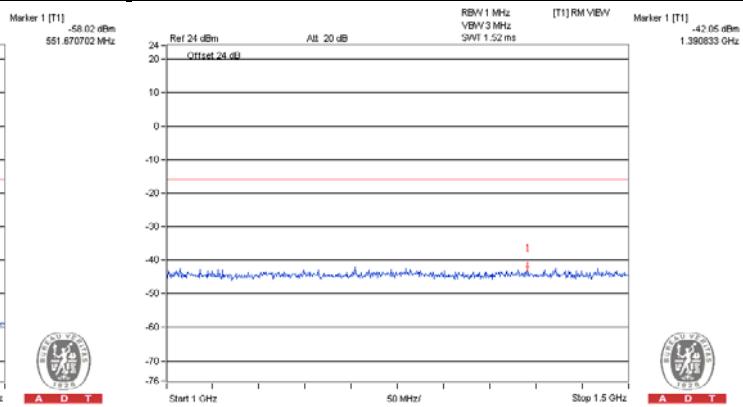
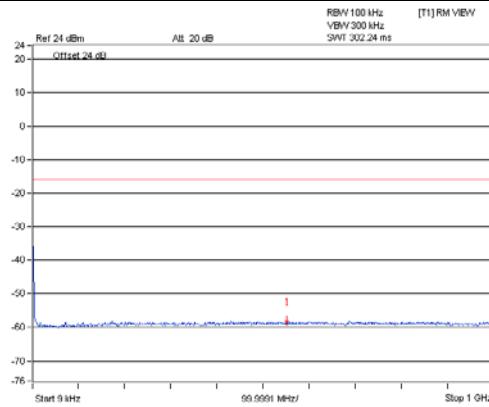
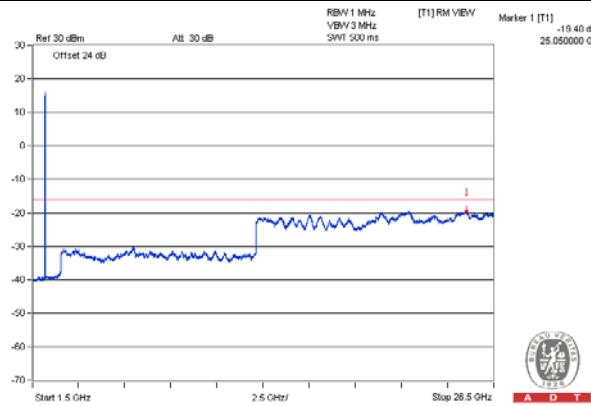


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 15MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
551.670702	-58.02	-16.01	-42.01	Pass
1390.833333	-42.05	-16.01	-26.04	Pass
25050	-19.4	-16.01	-3.39	Pass

**Channel Bandwidth:15MHz**
**Channel 2175**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


### Chain 0

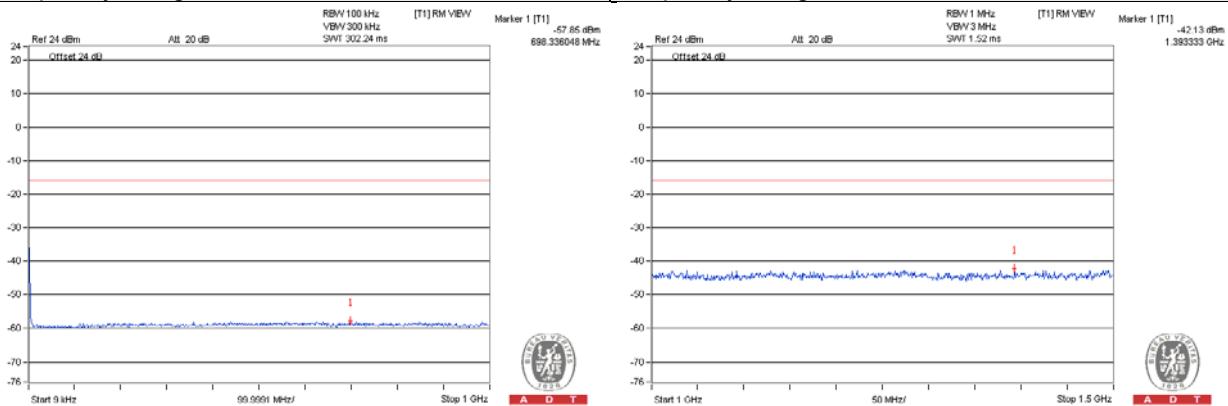
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
698.336048	-57.85	-16.01	-41.84	Pass
1393.333333	-42.13	-16.01	-26.12	Pass
24962.5	-19.35	-16.01	-3.34	Pass

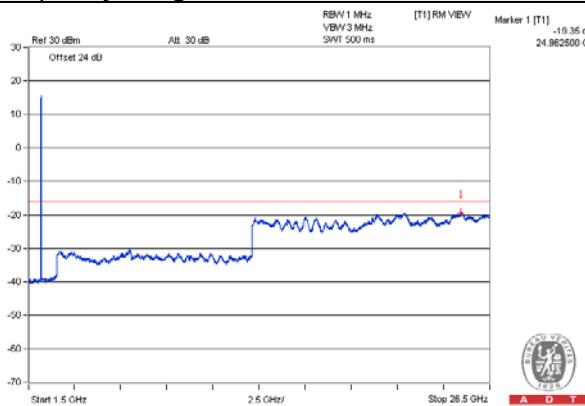
### Channel 2325

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

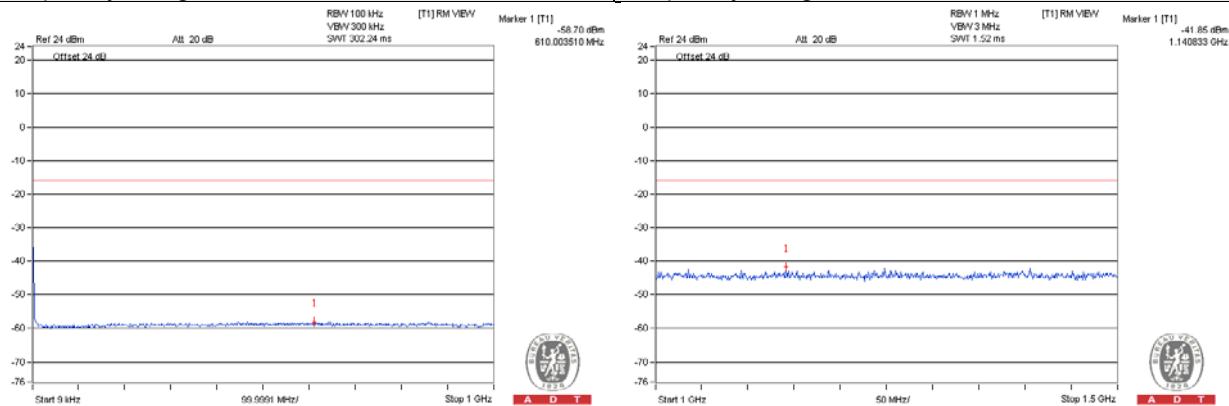
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
610.00351	-58.7	-16.01	-42.69	Pass
1140.833333	-41.85	-16.01	-25.84	Pass
24968.75	-19.32	-16.01	-3.31	Pass

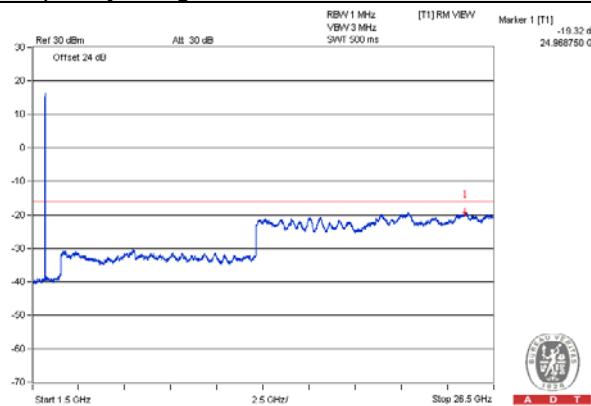
### Channel 2325

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

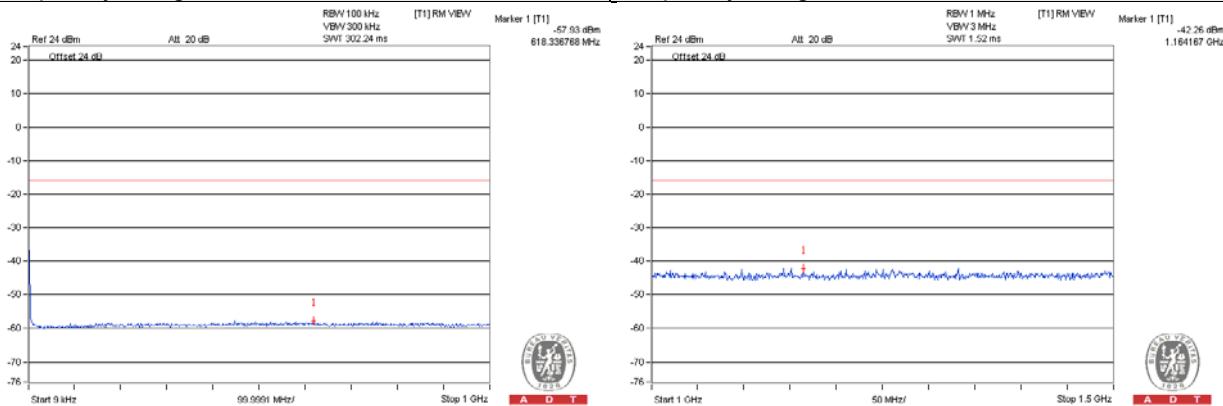
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
618.336768	-57.93	-16.01	-41.92	Pass
1164.166667	-42.26	-16.01	-26.25	Pass
25006.25	-19.22	-16.01	-3.21	Pass

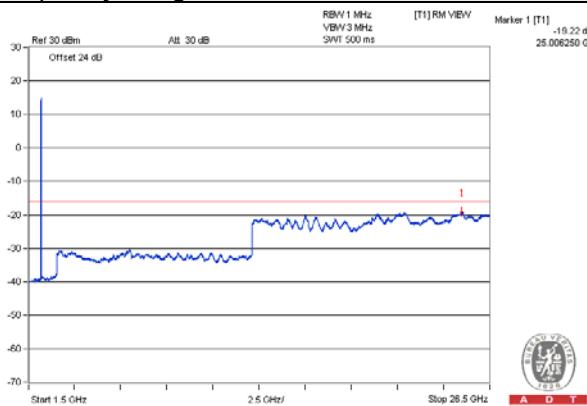
### Channel 2050

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

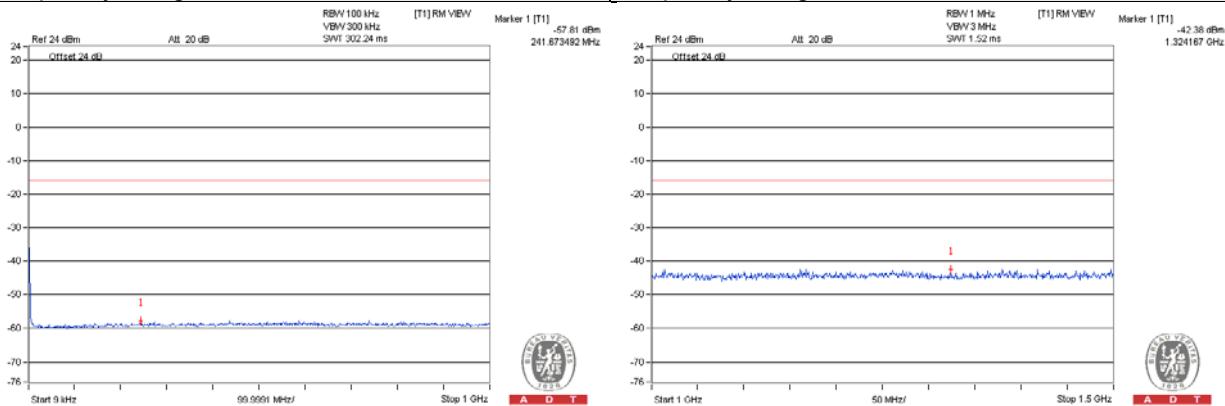
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
241.673492	-57.81	-16.01	-41.8	Pass
1324.166667	-42.38	-16.01	-26.37	Pass
24968.75	-19.29	-16.01	-3.28	Pass

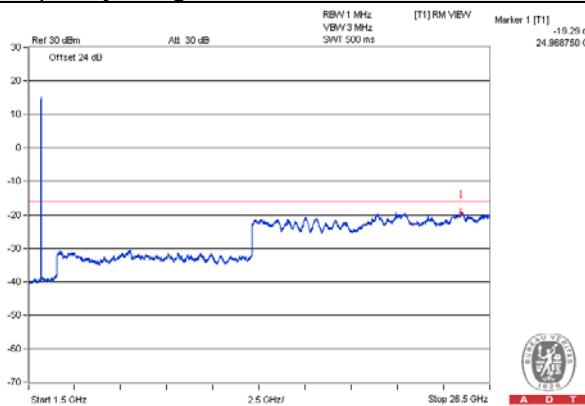
### Channel 2050

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

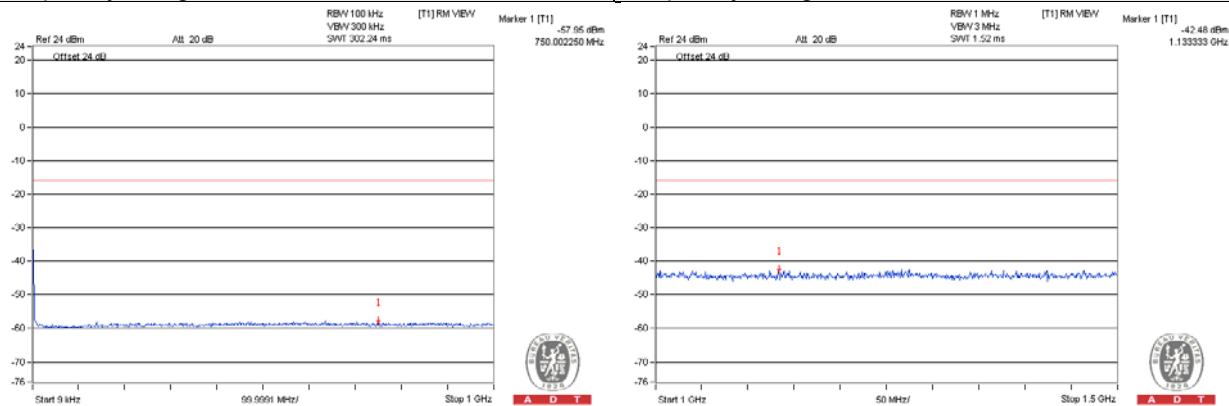
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
750.00225	-57.95	-16.01	-41.94	Pass
1133.333333	-42.48	-16.01	-26.47	Pass
21837.5	-19.41	-16.01	-3.4	Pass

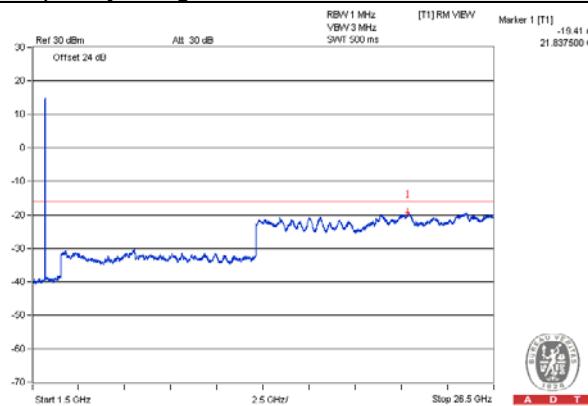
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

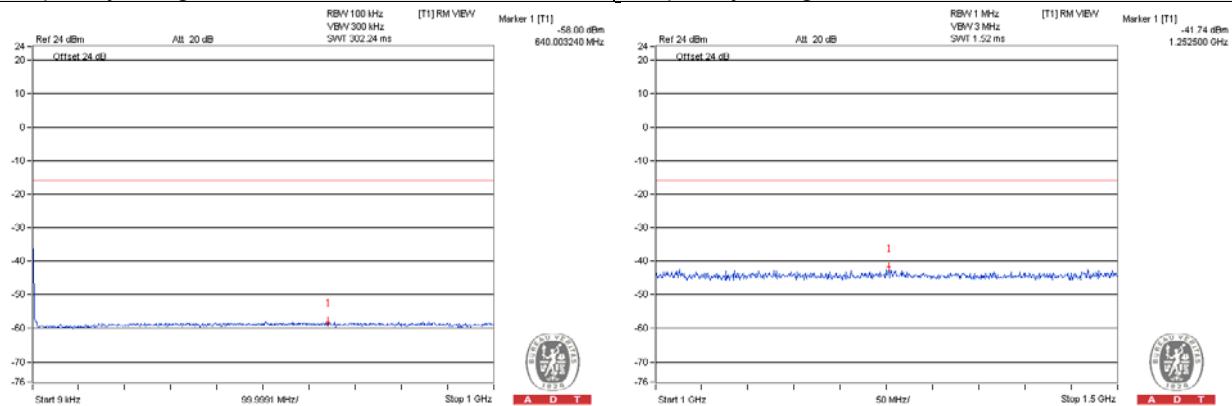
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
640.00324	-58	-16.01	-41.99	Pass
1252.5	-41.74	-16.01	-25.73	Pass
25000	-19.33	-16.01	-3.32	Pass

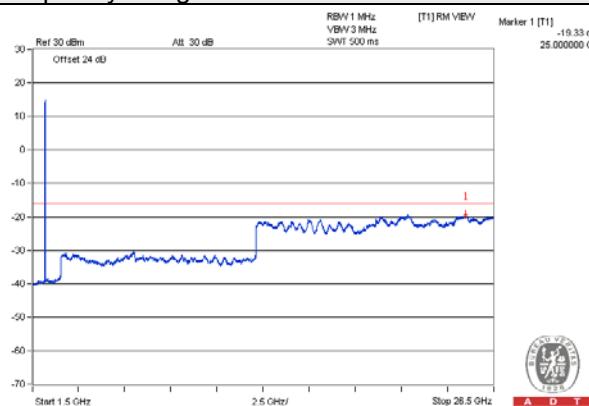
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

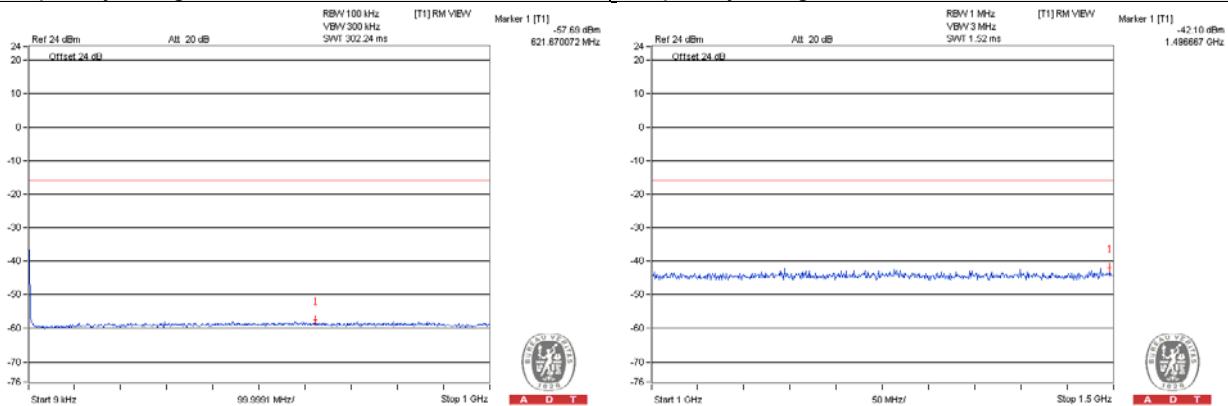
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
621.670072	-57.69	-16.01	-41.68	Pass
1496.666667	-42.1	-16.01	-26.09	Pass
24987.5	-19.21	-16.01	-3.2	Pass

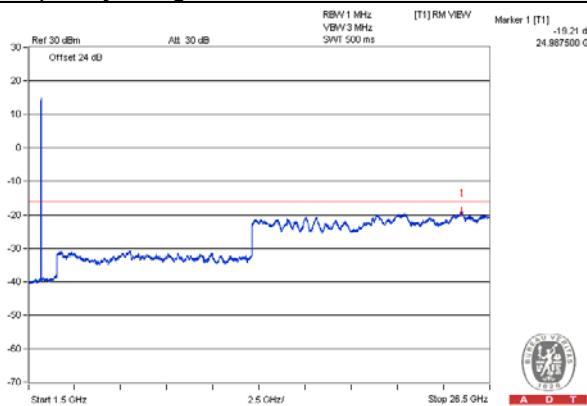
### Channel 2300

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

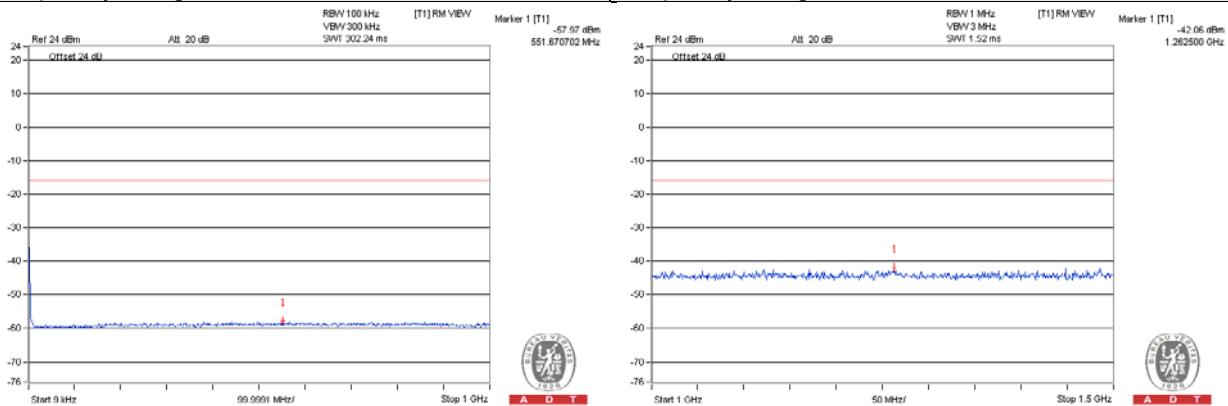
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
551.670702	-57.97	-16.01	-41.96	Pass
1262.5	-42.06	-16.01	-26.05	Pass
25062.5	-19.34	-16.01	-3.33	Pass

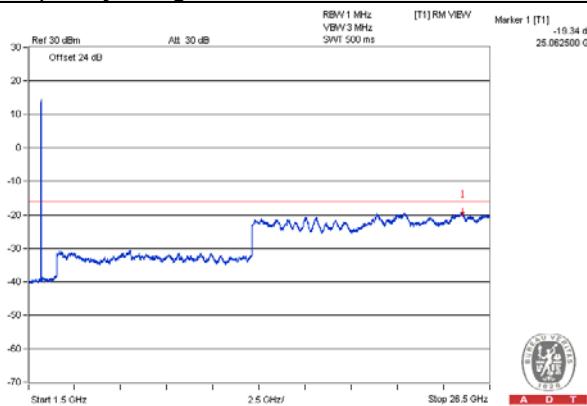
### Channel 2300

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



#### 4.6.6 Test Results (With Adapter)

##### Chain 0

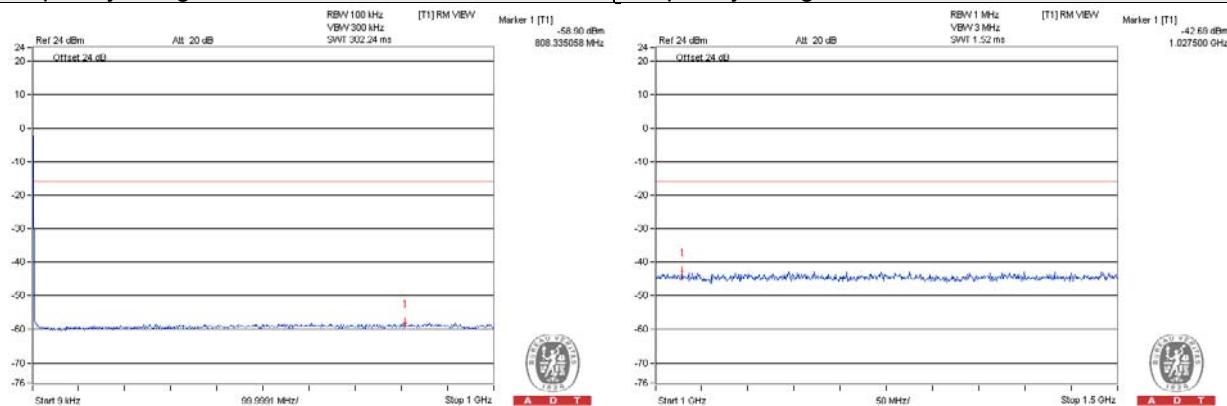
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
808.335058	-58.9	-16.01	-42.89	Pass
1027.5	-42.69	-16.01	-26.68	Pass
25078.125	-18.79	-16.01	-2.78	Pass

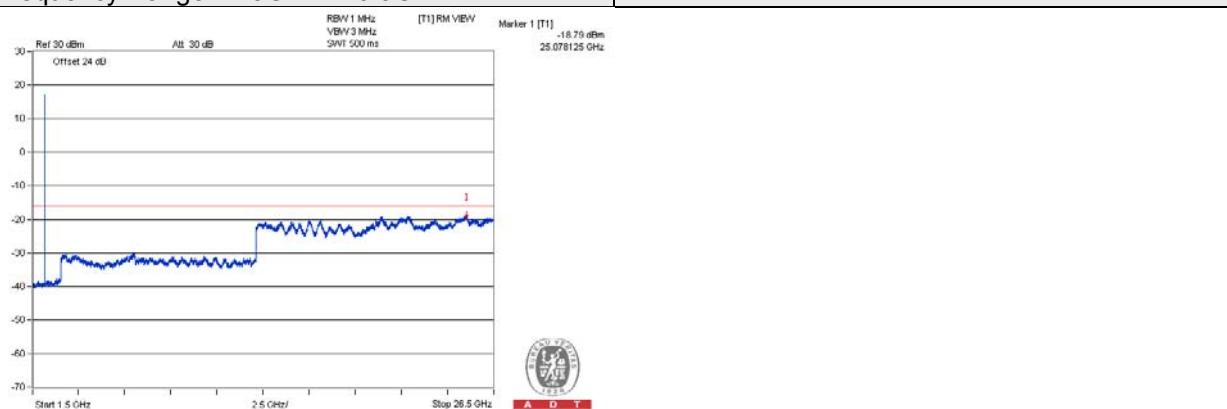
##### Channel 1975

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

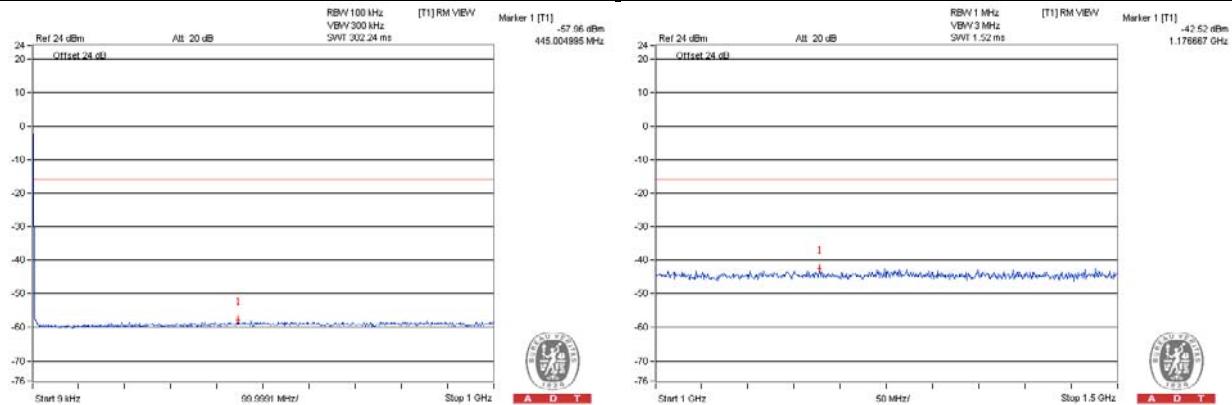
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
445.004995	-57.96	-16.01	-41.95	Pass
1176.666667	-42.52	-16.01	-26.51	Pass
21896.875	-18.76	-16.01	-2.75	Pass

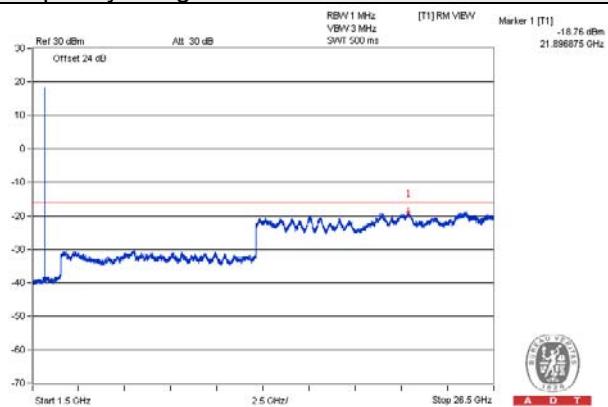
### Channel 1975

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

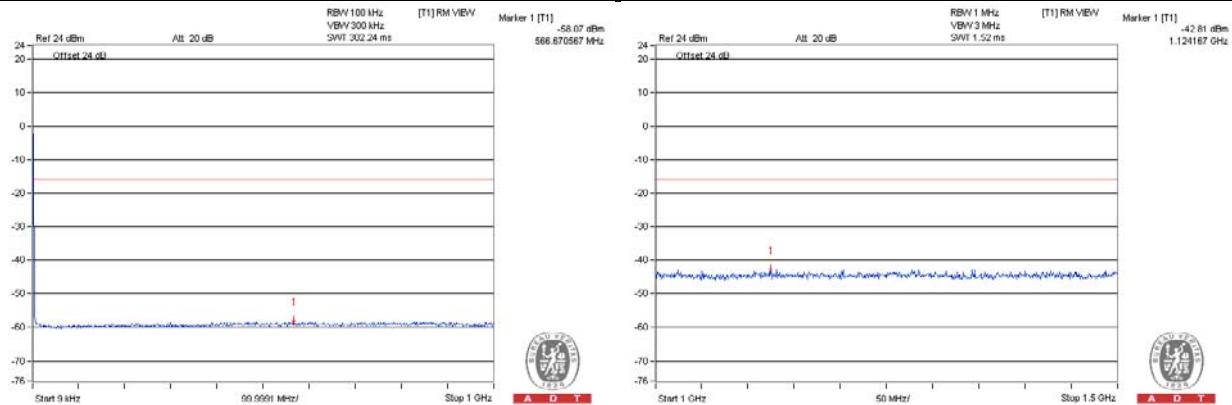
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
566.670567	-58.07	-16.01	-42.06	Pass
1124.166667	-42.81	-16.01	-26.8	Pass
24968.75	-18.78	-16.01	-2.77	Pass

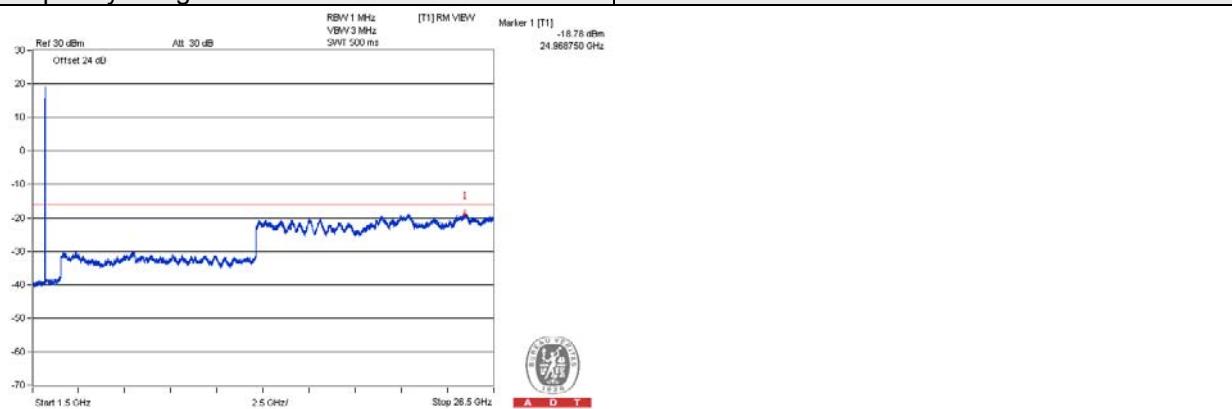
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

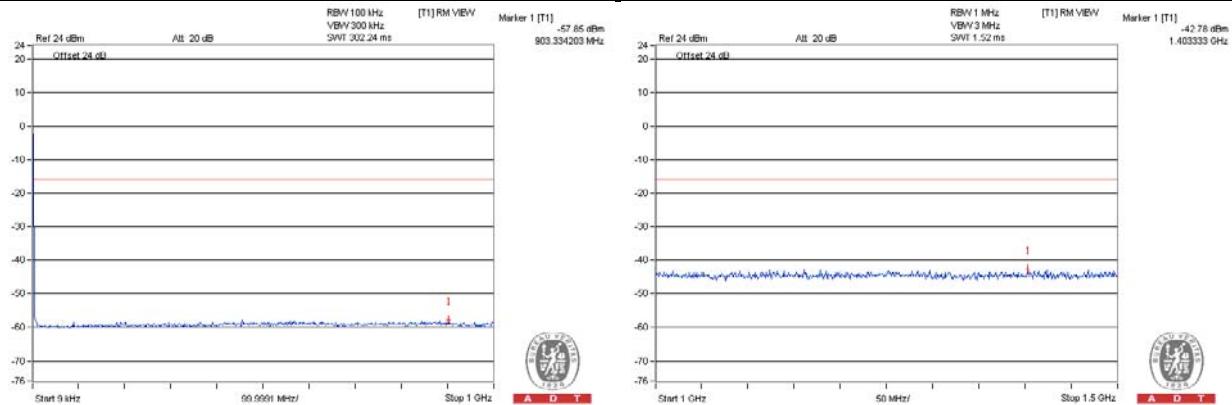
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
903.334203	-57.85	-16.01	-41.84	Pass
1403.333333	-42.78	-16.01	-26.77	Pass
21868.75	-18.89	-16.01	-2.88	Pass

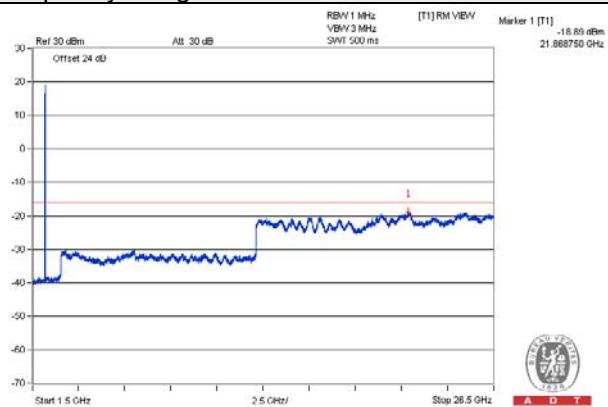
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

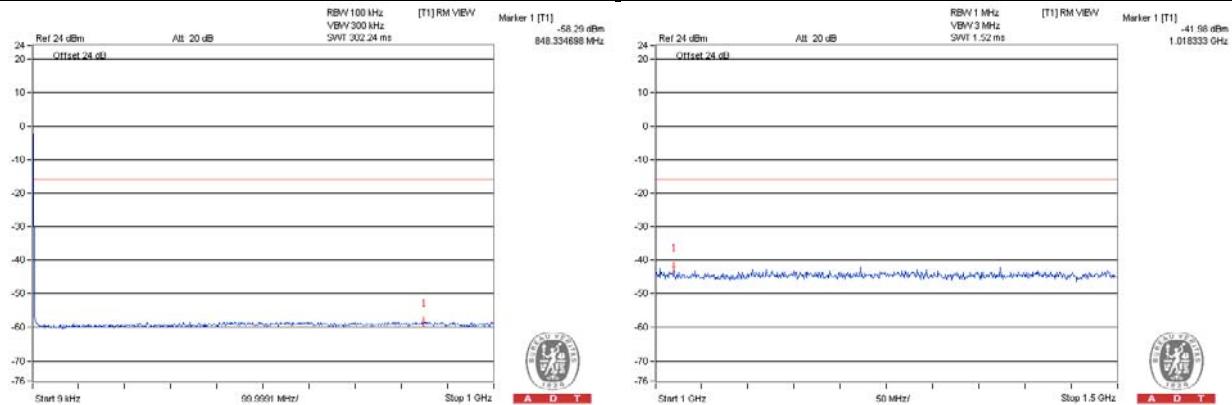
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
848.334698	-58.29	-16.01	-42.28	Pass
1018.333333	-41.98	-16.01	-25.97	Pass
21837.5	-18.79	-16.01	-2.78	Pass

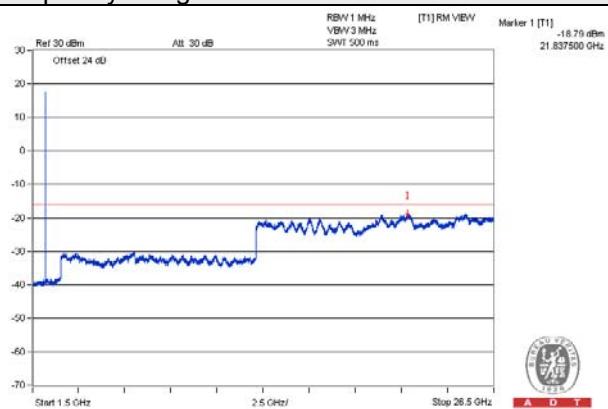
### Channel 2375

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

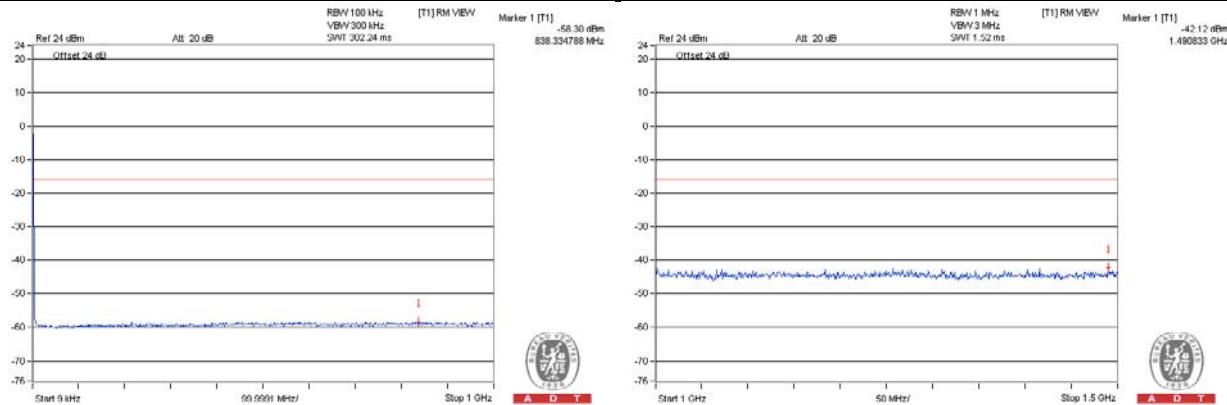
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
838.334788	-58.3	-16.01	-42.29	Pass
1490.833333	-42.12	-16.01	-26.11	Pass
25084.375	-18.48	-16.01	-2.47	Pass

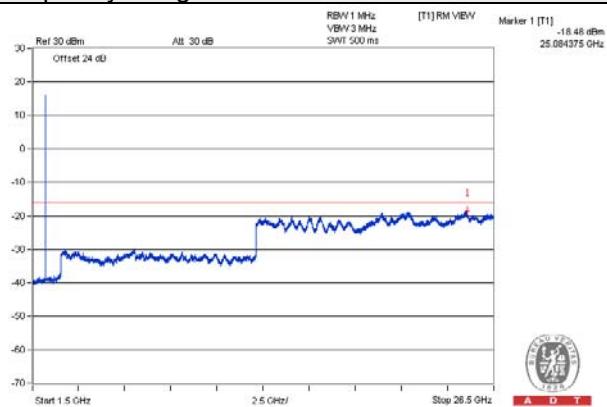
### Channel 2375

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

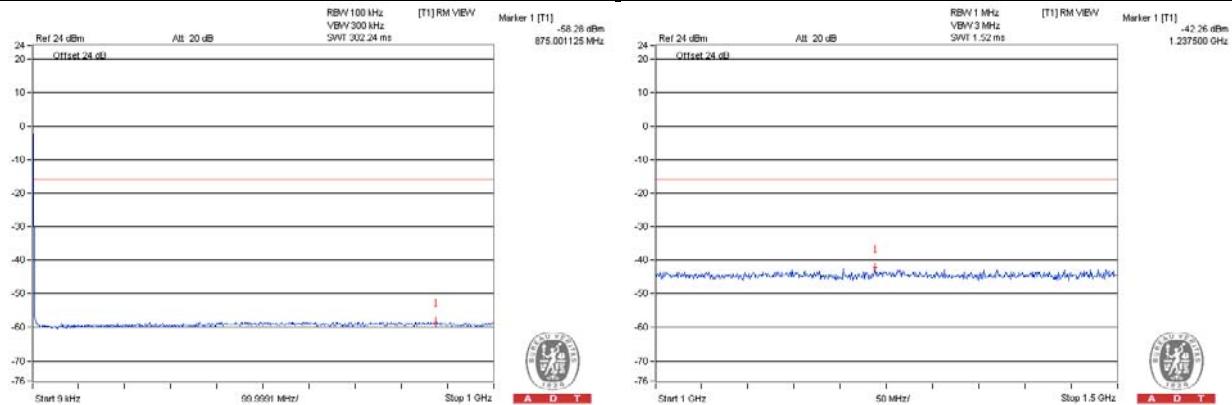
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
875.001125	-58.28	-16.01	-42.27	Pass
1237.5	-42.26	-16.01	-26.25	Pass
25012.5	-18.54	-16.01	-2.53	Pass

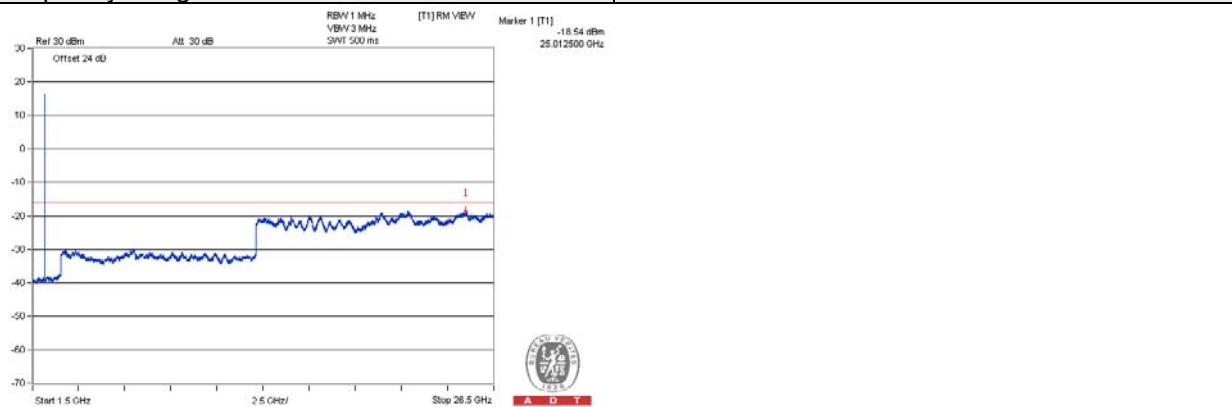
### Channel 2000

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

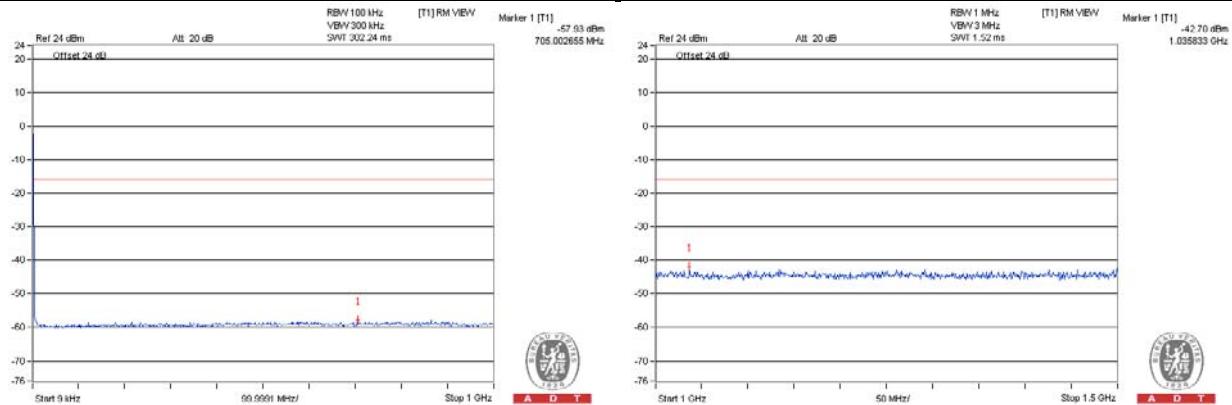
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
705.002655	-57.93	-16.01	-41.92	Pass
1035.833333	-42.7	-16.01	-26.69	Pass
24946.875	-19	-16.01	-2.99	Pass

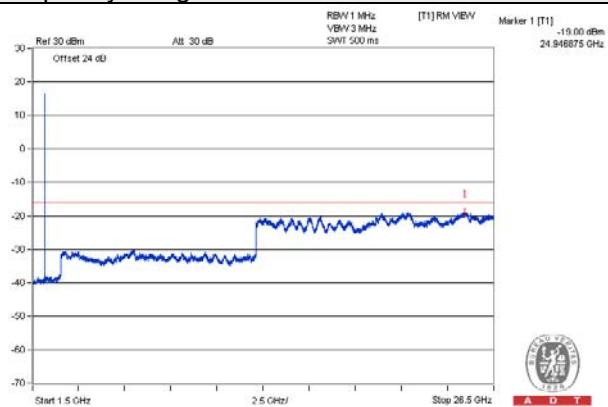
### Channel 2000

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

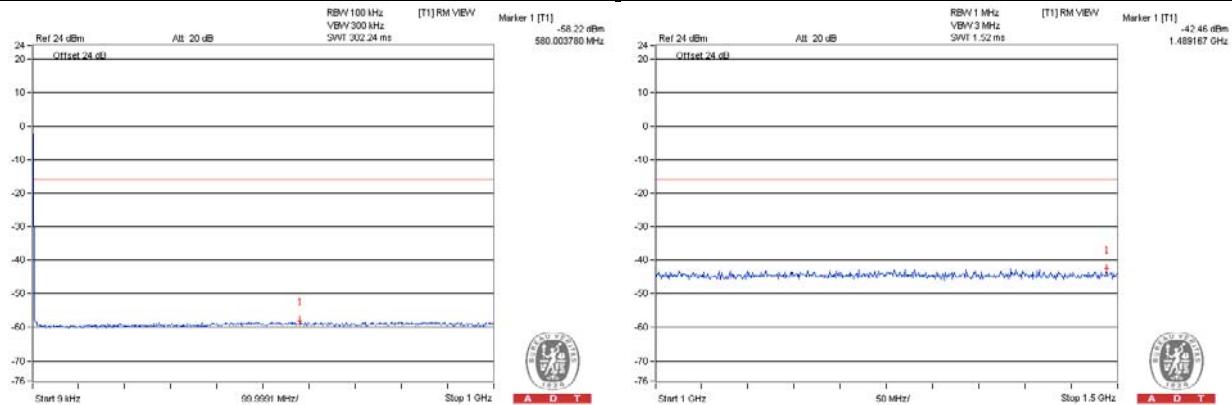
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
580.00378	-58.22	-16.01	-42.21	Pass
1489.166667	-42.46	-16.01	-26.45	Pass
25015.625	-18.74	-16.01	-2.73	Pass

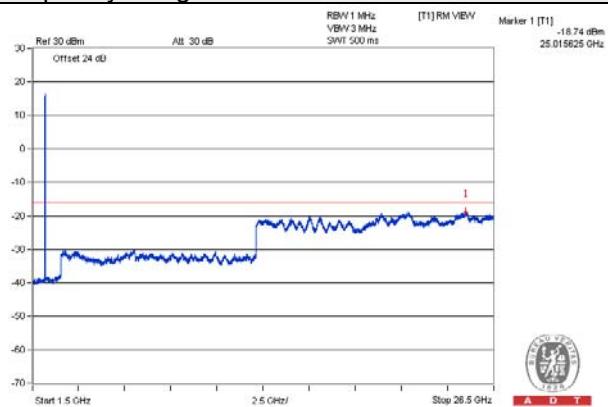
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

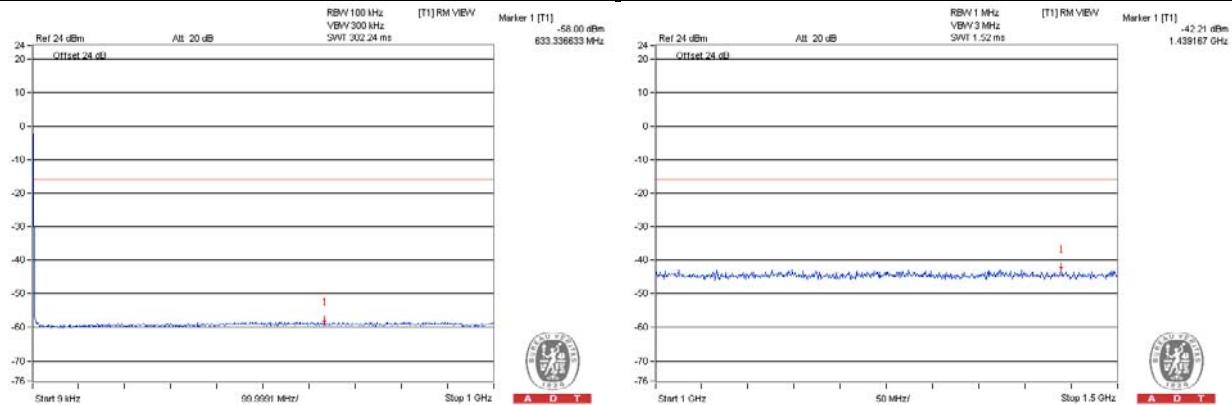
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
633.336633	-58	-16.01	-41.99	Pass
1439.166667	-42.21	-16.01	-26.2	Pass
24750	-18.91	-16.01	-2.9	Pass

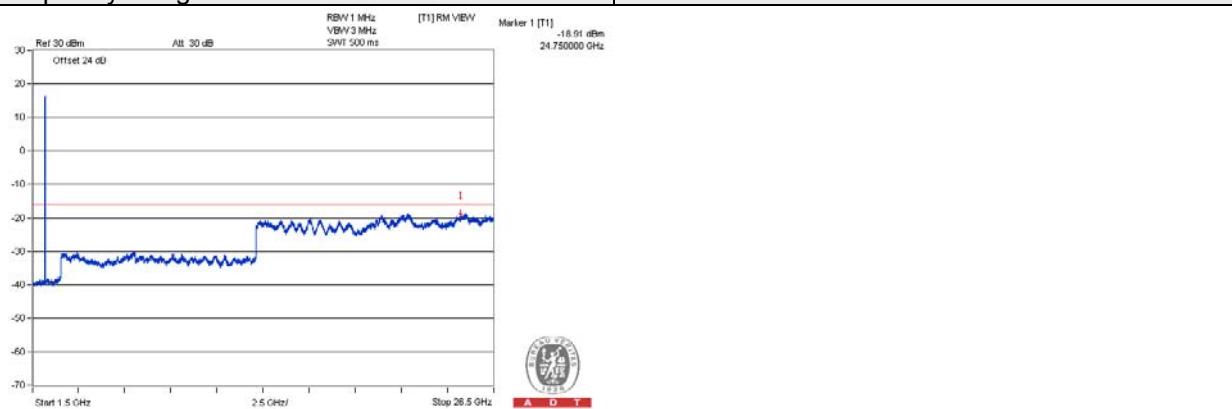
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

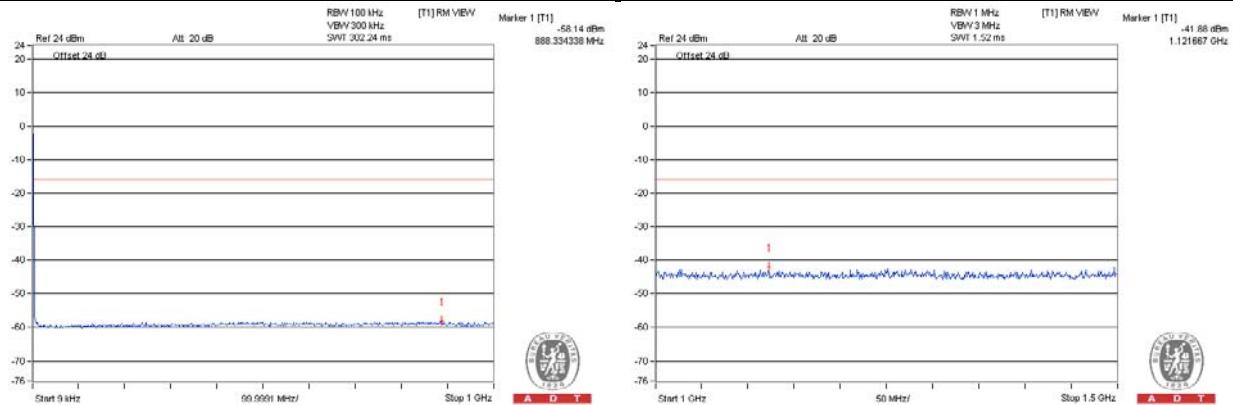
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
888.334338	-58.14	-16.01	-42.13	Pass
1121.666667	-41.88	-16.01	-25.87	Pass
24968.75	-18.76	-16.01	-2.75	Pass

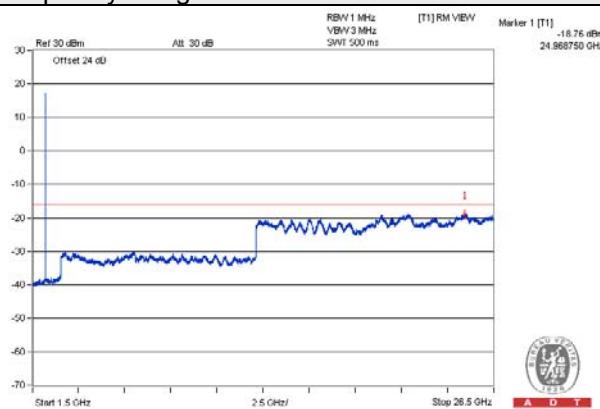
### Channel 2350

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

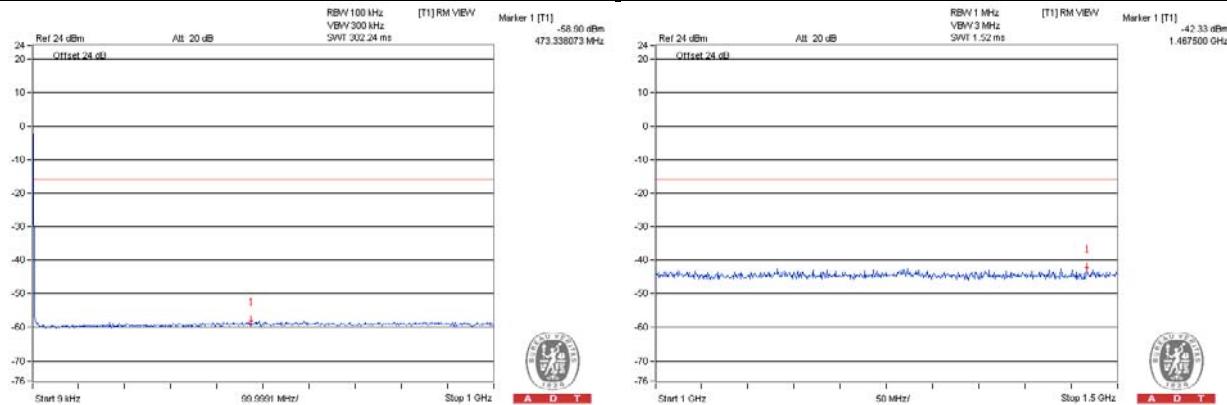
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
473.338073	-58.9	-16.01	-42.89	Pass
1467.5	-42.33	-16.01	-26.32	Pass
25037.5	-18.76	-16.01	-2.75	Pass

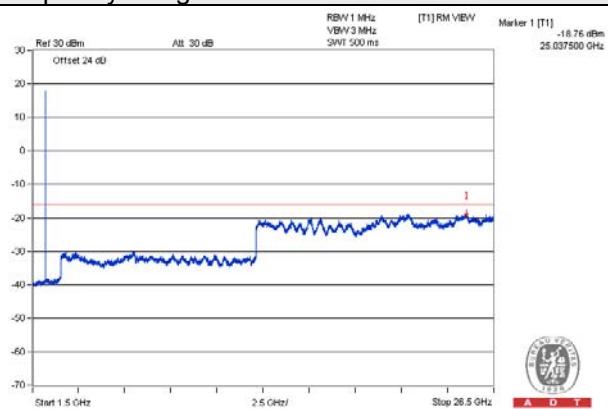
### Channel 2350

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

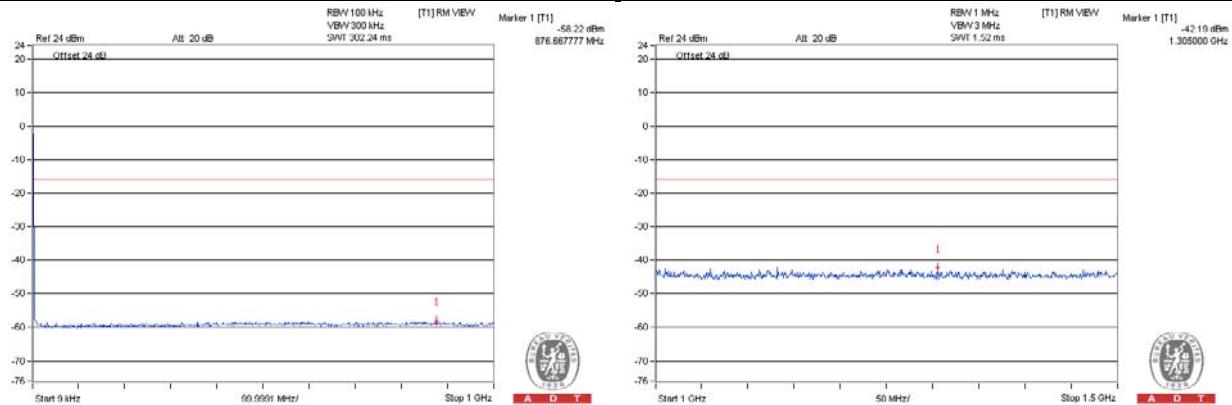
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
876.667777	-58.22	-16.01	-42.21	Pass
1305	-42.19	-16.01	-26.18	Pass
24981.25	-18.67	-16.01	-2.66	Pass

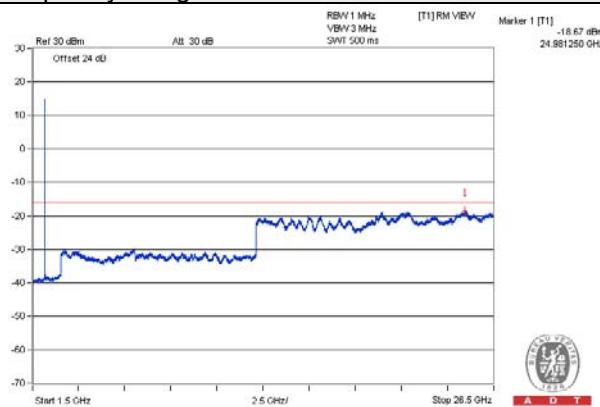
### Channel 2025

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

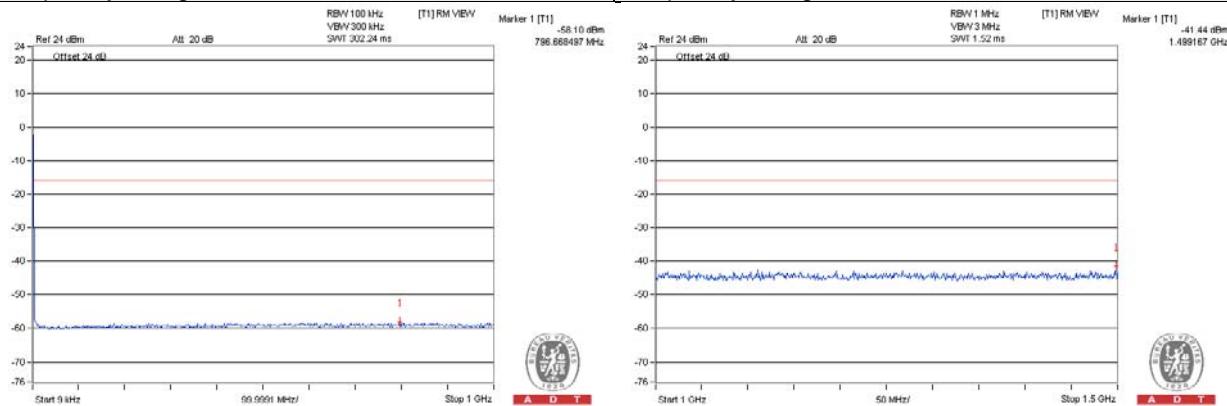
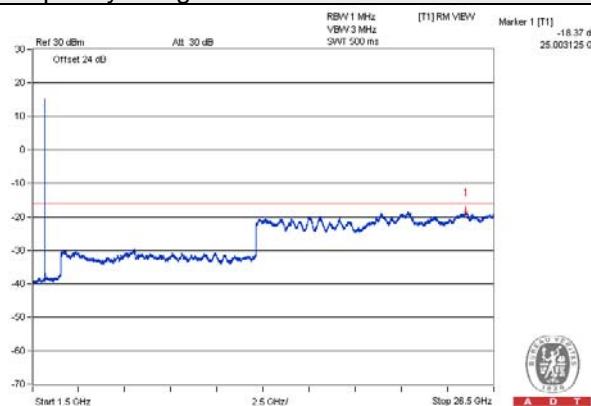


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 15MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
796.668497	-58.10	-16.01	-42.09	Pass
1499.166667	-41.44	-16.01	-25.43	Pass
25003.125	-18.37	-16.01	-2.36	Pass

**Channel 2025**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


### Chain 0

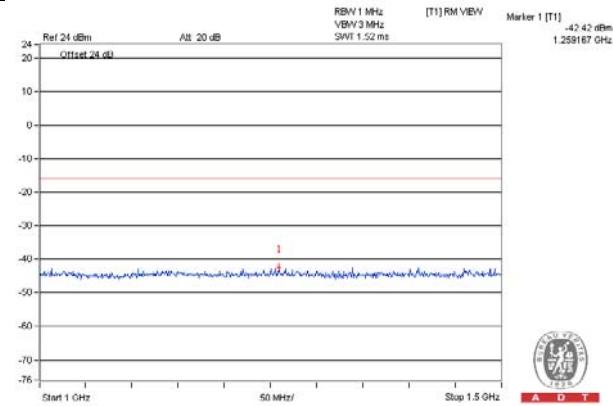
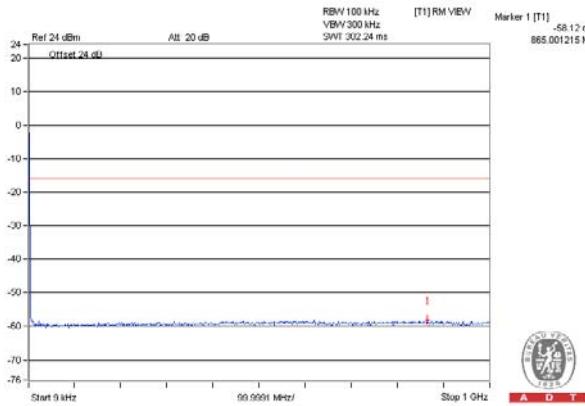
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
865.001215	-58.12	-16.01	-42.11	Pass
1259.166667	-42.42	-16.01	-26.41	Pass
25000	-18.9	-16.01	-2.89	Pass

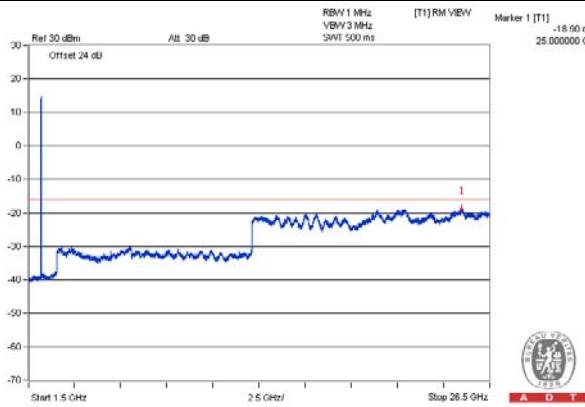
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

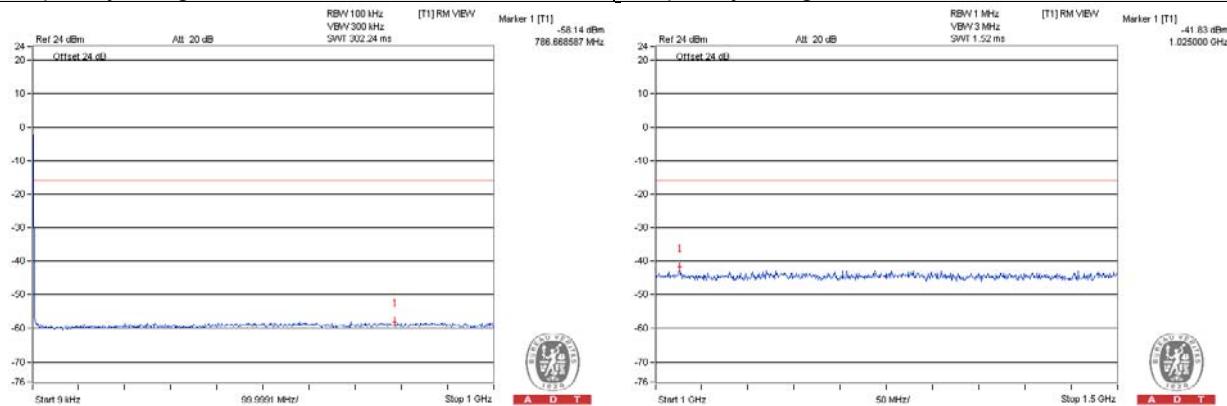
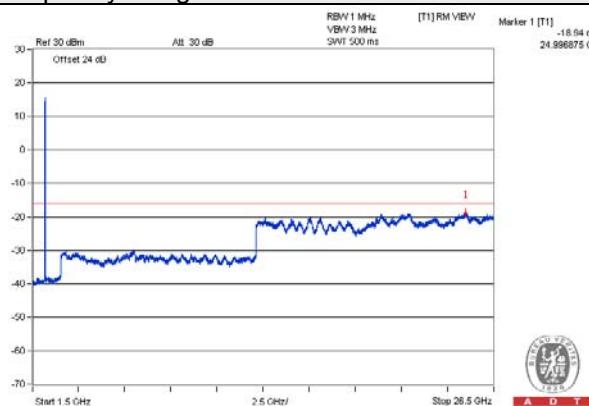


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 15MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
786.668587	-58.14	-16.01	-42.13	Pass
1025	-41.83	-16.01	-25.82	Pass
24996.875	-18.94	-16.01	-2.93	Pass

**Channel 2175**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


### Chain 0

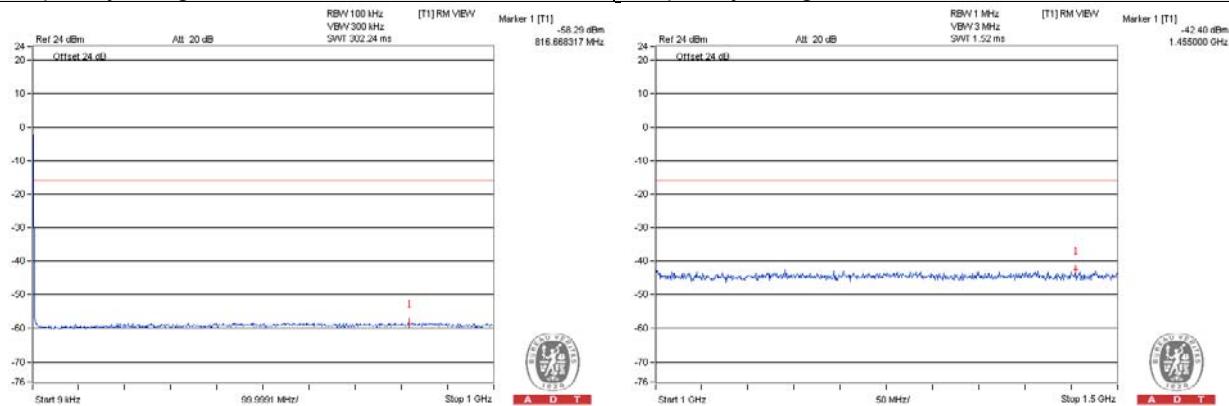
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
816.668317	-58.29	-16.01	-42.28	Pass
1455	-42.4	-16.01	-26.39	Pass
25084.375	-18.34	-16.01	-2.33	Pass

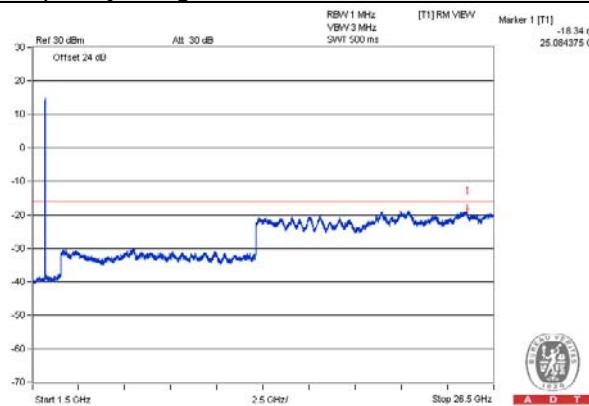
### Channel 2325

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

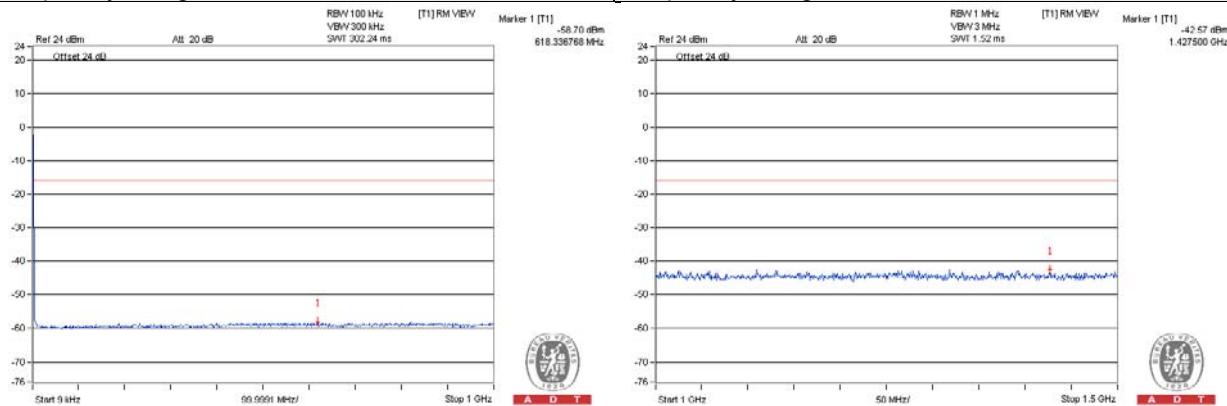
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
618.336768	-58.7	-16.01	-42.69	Pass
1427.5	-42.57	-16.01	-26.56	Pass
21918.75	-18.76	-16.01	-2.75	Pass

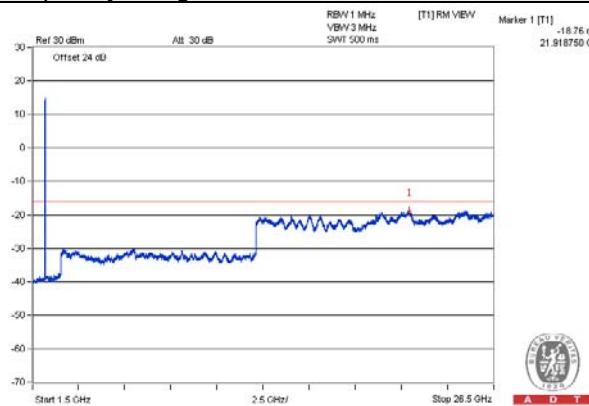
### Channel 2325

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

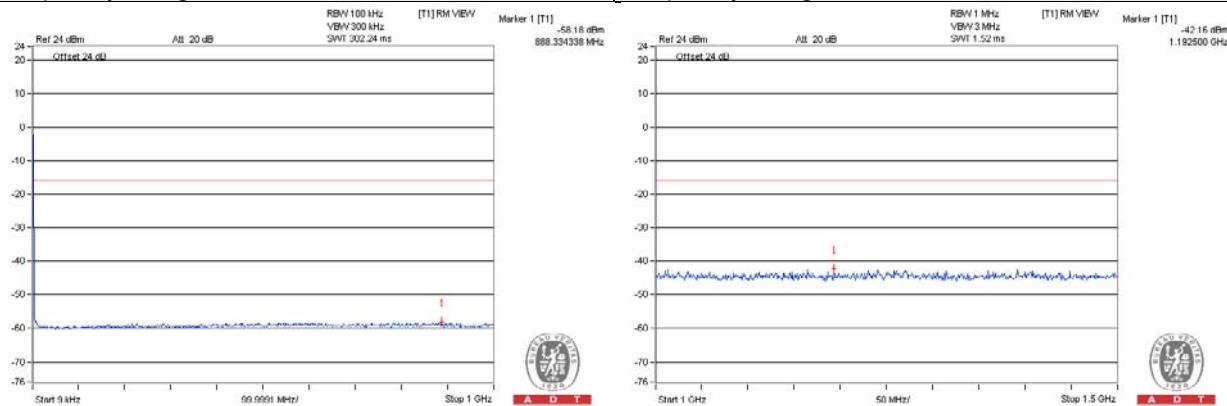
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
888.334338	-58.18	-16.01	-42.17	Pass
1192.5	-42.16	-16.01	-26.15	Pass
25065.625	-18.74	-16.01	-2.73	Pass

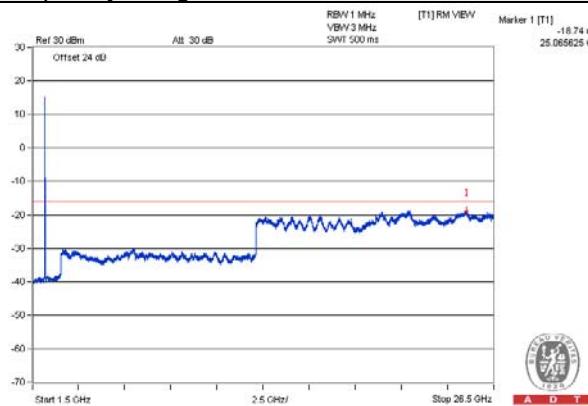
### Channel 2050

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

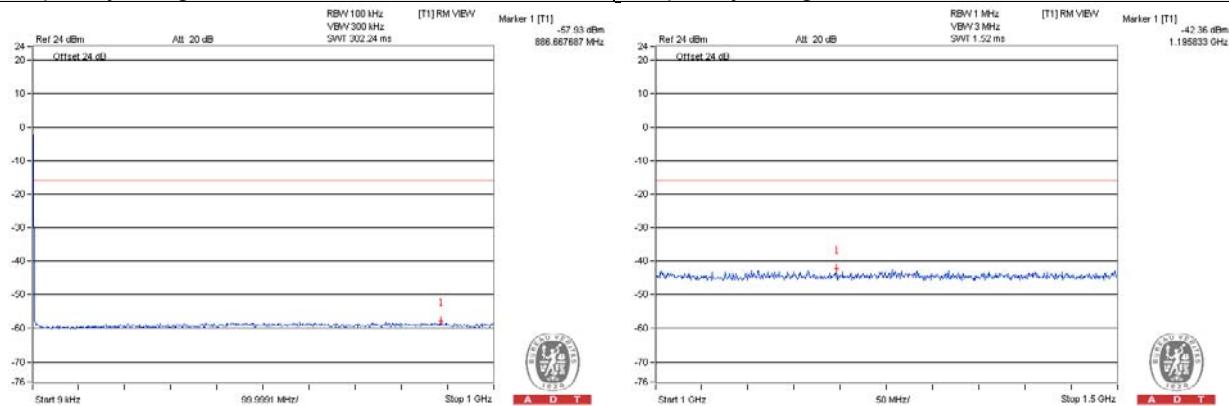
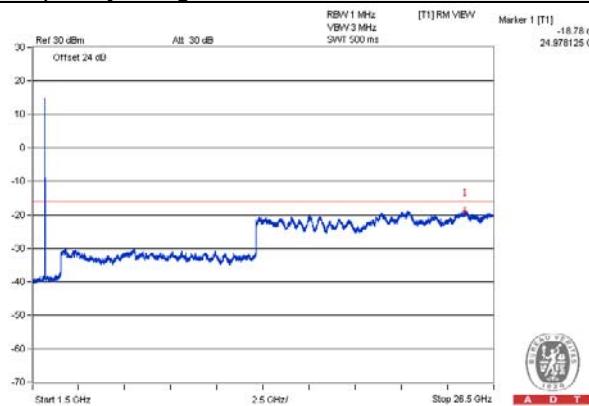


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 20MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
886.667687	-57.93	-16.01	-41.92	Pass
1195.833333	-42.36	-16.01	-26.35	Pass
24978.125	-18.78	-16.01	-2.77	Pass

**Channel 2050**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


### Chain 0

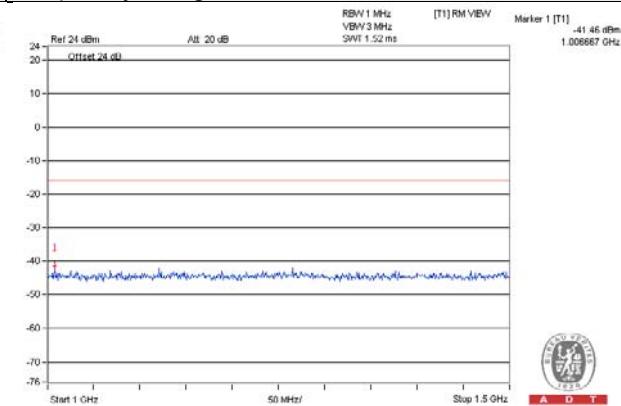
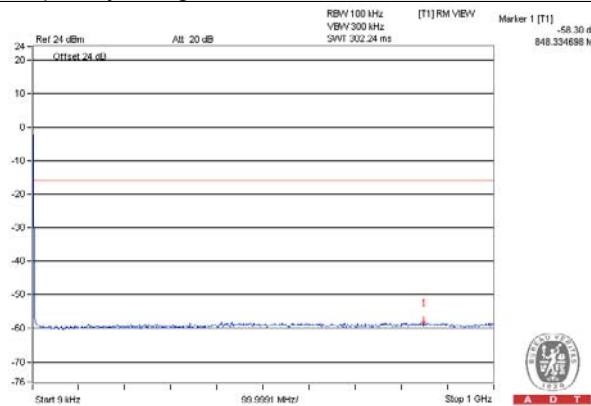
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
848.334698	-58.3	-16.01	-42.29	Pass
1006.666667	-41.46	-16.01	-25.45	Pass
21940.625	-18.98	-16.01	-2.97	Pass

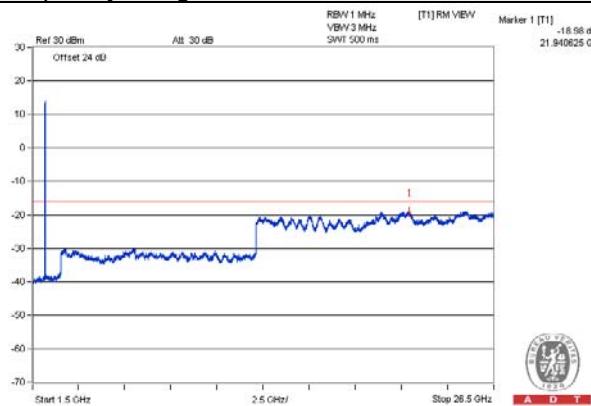
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 1

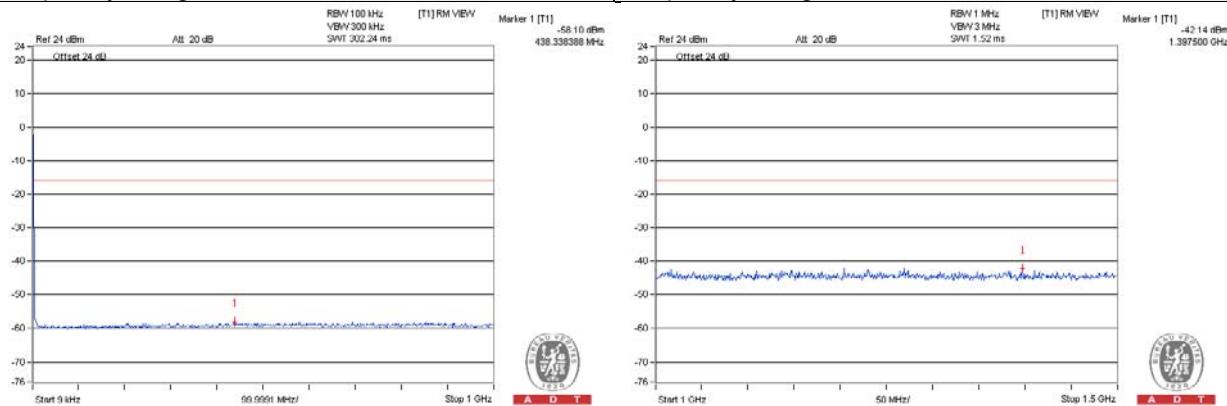
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
438.338388	-58.1	-16.01	-42.09	Pass
1397.5	-42.14	-16.01	-26.13	Pass
21900	-18.71	-16.01	-2.7	Pass

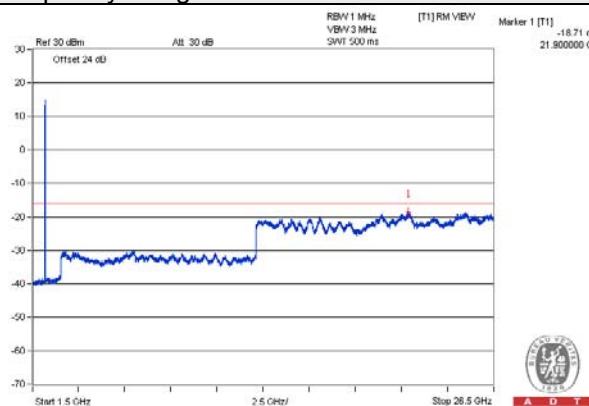
### Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



### Chain 0

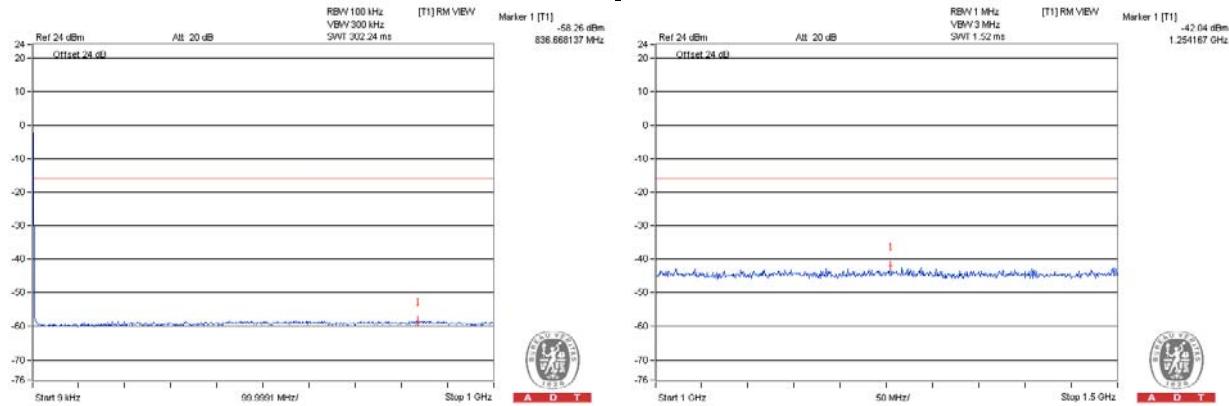
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
836.668137	-58.26	-16.01	-42.25	Pass
1254.166667	-42.04	-16.01	-26.03	Pass
25028.125	-18.8	-16.01	-2.79	Pass

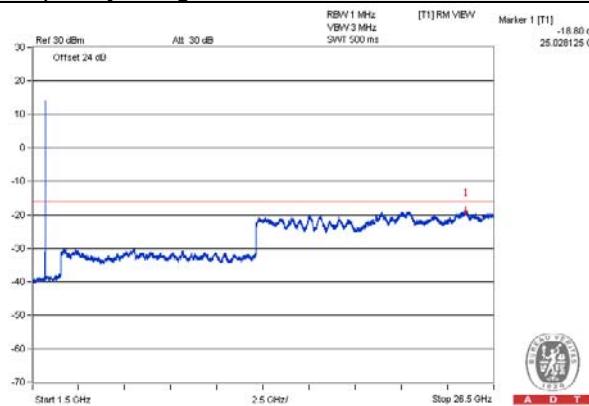
### Channel 2300

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

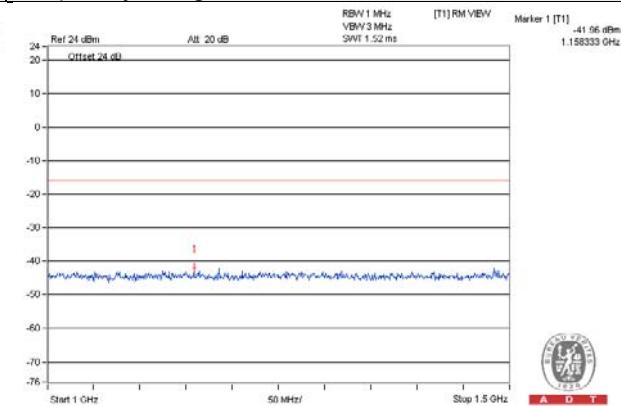
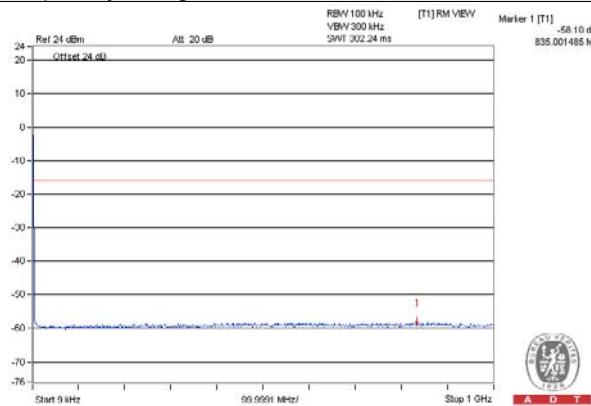
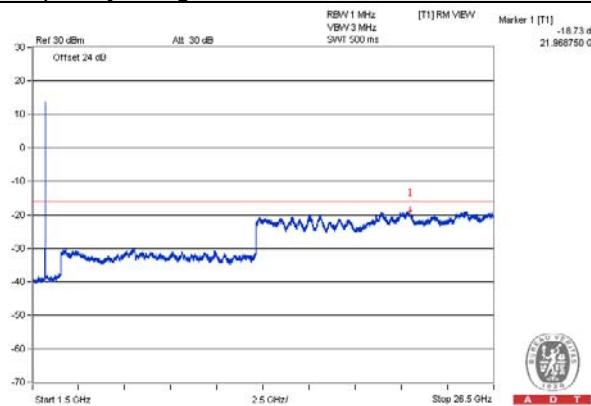


Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**
**QPSK / Channel Bandwidth: 20MHz**

Frequency(MHz)	Measurement Value	Limit	Margin	Result
835.001485	-58.1	-16.01	-42.09	Pass
1158.333333	-41.96	-16.01	-25.95	Pass
21968.75	-18.73	-16.01	-2.72	Pass

**Channel 2300**
**Frequency Range : 9kHz~1GHz**
**Frequency Range : 1GHz ~1.5GHz**

**Frequency Range : 1.5GHz ~26.5GHz**


## 4.7 Radiated Emission Measurement

### 4.7.1 Limits of Radiated Emission Measurement

In the FCC 27.53(h), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB, the emission limit equal to  $-13\text{dBm}$ .

### 4.7.2 Test Procedure

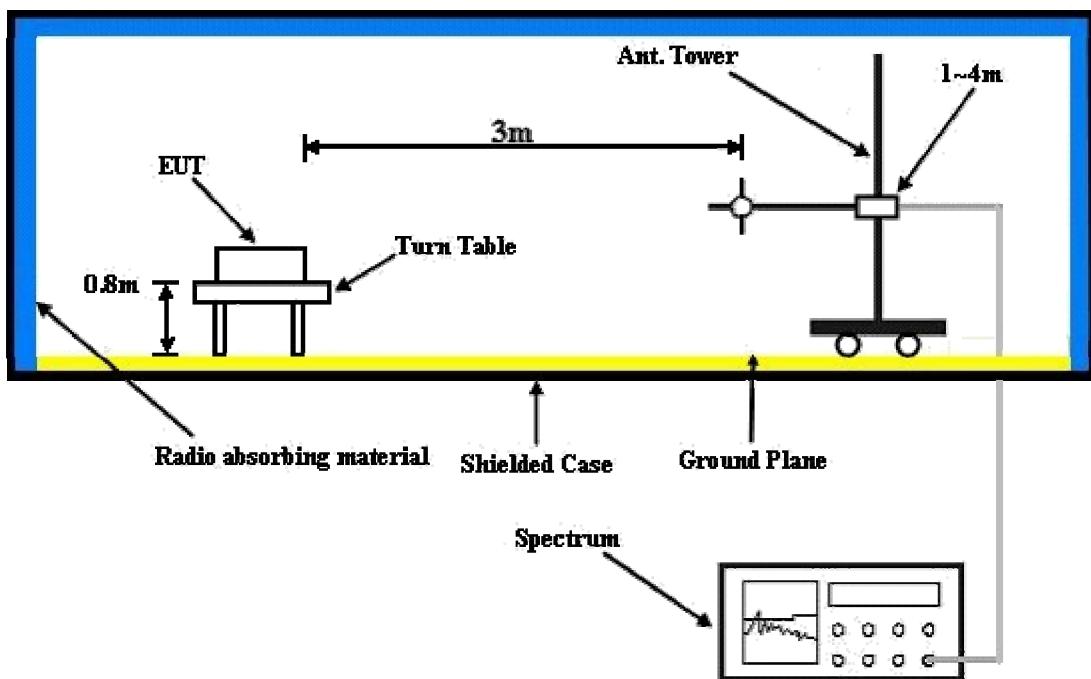
- a. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high channel of operational frequency range.)
- b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step b. Record the power level of S.G
- d.  $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution antenna.}$

**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

### 4.7.3 Deviation from Test Standard

No deviation.

#### 4.7.4 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.7.5 Test Results (With POE)

Below 1GHz

Channel Bandwidth: 5MHz

Mode	TX channel 1975	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.712	30.85	-48.27	-9.60	-57.87	-13	-44.87
2	138.711	32.05	-61.61	-1.30	-62.91	-13	-49.91
3	295.386	34.92	-60.72	3.74	-56.98	-13	-43.98
4	650.694	38.06	-56.95	1.74	-55.21	-13	-42.21
5	922.224	38.90	-59.58	0.42	-59.16	-13	-46.16
6	958.384	41.62	-56.27	0.38	-55.88	-13	-42.88

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.95	37.06	-41.42	-10.03	-51.45	-13	-38.45
2	99.88	38.20	-52.48	-0.62	-53.10	-13	-40.10
3	500.69	33.87	-61.64	2.88	-58.76	-13	-45.76
4	649.91	33.62	-61.37	1.74	-59.63	-13	-46.63
5	901.77	38.73	-59.98	0.49	-59.50	-13	-46.50
6	960.39	41.62	-56.20	0.39	-55.80	-13	-42.80

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.282	32.10	-46.87	-9.71	-56.57	-13	-43.57
2	138.511	32.17	-61.45	-1.30	-62.75	-13	-49.75
3	295.286	35.69	-59.95	3.74	-56.21	-13	-43.21
4	649.984	38.80	-56.19	1.74	-54.45	-13	-41.45
5	921.254	40.30	-58.19	0.43	-57.77	-13	-44.77
6	959.794	42.69	-55.15	0.39	-54.76	-13	-41.76

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.55	38.18	-40.16	-10.13	-50.29	-13	-37.29
2	100.49	38.68	-51.97	-0.64	-52.61	-13	-39.61
3	500.91	35.24	-60.27	2.88	-57.39	-13	-44.39
4	649.69	34.10	-60.89	1.74	-59.14	-13	-46.14
5	900.97	39.96	-58.76	0.49	-58.27	-13	-45.27
6	959.58	42.83	-55.02	0.39	-54.63	-13	-41.63

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2375	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.962	31.62	-47.23	-9.78	-57.01	-13	-44.01
2	139.851	31.55	-62.36	-1.31	-63.67	-13	-50.67
3	294.126	34.25	-61.36	3.75	-57.60	-13	-44.60
4	648.994	37.73	-57.24	1.75	-55.49	-13	-42.49
5	921.394	39.68	-58.81	0.43	-58.38	-13	-45.38
6	958.864	42.23	-55.64	0.39	-55.25	-13	-42.25

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.8	37.39	-41.04	-10.07	-51.11	-13	-38.11
2	100.31	38.06	-52.60	-0.64	-53.23	-13	-40.23
3	500.05	33.90	-61.62	2.89	-58.73	-13	-45.73
4	649.73	32.68	-62.31	1.74	-60.56	-13	-47.56
5	900.61	39.20	-59.53	0.49	-59.03	-13	-46.03
6	959.2	42.31	-55.55	0.39	-55.16	-13	-42.16

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## ABOVE 1GHz

Channel Bandwidth: 5MHz

Mode	TX channel 1975	Frequency Range	Above 1000MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4225	53.11	-51.69	7.43	-44.27	-13	-31.27
2	6337.5	63.20	-40.94	6.20	-34.74	-13	-21.74
3	8450	66.13	-36.49	4.20	-32.29	-13	-19.29
4	10562.5	57.41	-44.64	3.51	-41.13	-13	-28.13
5	12675	56.24	-45.09	4.38	-40.72	-13	-27.72
6	14787.5	61.58	-35.58	3.78	-31.80	-13	-18.80
7	16900	66.77	-32.29	2.93	-29.36	-13	-16.36
8	19012.5	66.93	-33.49	3.71	-29.78	-13	-16.78

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4225	53.91	-50.89	7.43	-43.47	-13	-30.47
2	6337.5	66.32	-37.82	6.20	-31.62	-13	-18.62
3	8450	66.66	-35.96	4.20	-31.76	-13	-18.76
4	10562.5	58.16	-43.89	3.51	-40.38	-13	-27.38
5	12675	56.62	-44.71	4.38	-40.34	-13	-27.34
6	14787.5	61.94	-35.22	3.78	-31.44	-13	-18.44
7	16900	66.29	-32.77	2.93	-29.84	-13	-16.84
8	19012.5	67.61	-32.81	3.71	-29.10	-13	-16.10

## Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	53.90	-49.17	7.87	-41.30	-13	-28.30
2	6397.5	63.60	-40.92	7.05	-33.87	-13	-20.87
3	8530	67.20	-34.74	5.03	-29.71	-13	-16.71
4	10662.5	58.7	-44.01	4.23	-39.78	-13	-26.78
5	12795	57.6	-44.64	3.67	-40.97	-13	-27.97
6	14927.5	63	-38.51	4.37	-34.14	-13	-21.14
7	17060	67.3	-32.55	1.93	-30.61	-13	-17.61
8	19192.5	68	-33.19	3.85	-29.34	-13	-16.34

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	54.7	-48.37	7.87	-40.50	-13	-27.50
2	6397.5	66.4	-38.12	7.05	-31.07	-13	-18.07
3	8530	67.7	-34.24	5.03	-29.21	-13	-16.21
4	10662.5	59	-43.71	4.23	-39.48	-13	-26.48
5	12795	57.6	-44.64	3.67	-40.97	-13	-27.97
6	14927.5	63	-38.51	4.37	-34.14	-13	-21.14
7	17060	66.3	-33.55	1.93	-31.61	-13	-18.61
8	19192.5	68.1	-33.09	3.85	-29.24	-13	-16.24

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2375	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4305	53.41	-51.31	7.39	-43.92	-13	-30.92
2	6457.5	63.25	-40.89	6.00	-34.89	-13	-21.89
3	8610	66.07	-36.55	4.23	-32.32	-13	-19.32
4	10762.5	58.16	-43.66	3.32	-40.34	-13	-27.34
5	12915	56.38	-44.58	4.43	-40.15	-13	-27.15
6	15067.5	62.2	-35.21	3.68	-31.53	-13	-18.53
7	17220	67.06	-32.20	3.05	-29.15	-13	-16.15
8	19372.5	67.03	-35.29	3.78	-31.51	-13	-18.51

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4305	54.7	-50.02	7.39	-42.63	-13	-29.63
2	6457.5	66.29	-37.85	6.00	-31.85	-13	-18.85
3	8610	67.29	-35.33	4.23	-31.10	-13	-18.10
4	10762.5	58.9	-42.92	3.32	-39.60	-13	-26.60
5	12915	57.56	-43.40	4.43	-38.97	-13	-25.97
6	15067.5	62.29	-35.12	3.68	-31.44	-13	-18.44
7	17220	65.07	-34.19	3.05	-31.14	-13	-18.14
8	19372.5	67.26	-35.06	3.78	-31.28	-13	-18.28

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 10MHz

Mode	TX channel 2000	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.572	30.82	-47.89	-9.88	-57.77	-13	-44.77
2	140.131	30.70	-63.27	-1.31	-64.58	-13	-51.58
3	294.326	35.45	-60.16	3.75	-56.41	-13	-43.41
4	649.724	36.77	-58.22	1.74	-56.47	-13	-43.47
5	922.224	38.78	-59.70	0.42	-59.28	-13	-46.28
6	957.904	41.21	-56.69	0.38	-56.31	-13	-43.31

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.53	37.08	-41.25	-10.13	-51.38	-13	-38.38
2	100.67	38.28	-52.36	-0.65	-53.00	-13	-40.00
3	501.05	35.27	-60.24	2.88	-57.36	-13	-44.36
4	650.21	32.97	-62.03	1.74	-60.29	-13	-47.29
5	901.3	38.73	-59.99	0.49	-59.50	-13	-46.50
6	958.72	42.71	-55.16	0.38	-54.78	-13	-41.78

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.452	31.80	-47.23	-9.66	-56.89	-13	-43.89
2	137.831	31.52	-61.95	-1.30	-63.25	-13	-50.25
3	294.406	36.17	-59.44	3.75	-55.69	-13	-42.69
4	649.624	38.17	-56.81	1.74	-55.07	-13	-42.07
5	920.974	40.01	-58.49	0.43	-58.06	-13	-45.06
6	959.074	42.27	-55.59	0.39	-55.21	-13	-42.21
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.03	37.73	-40.78	-10.01	-50.79	-13	-37.79
2	100.03	38.82	-51.85	-0.63	-52.48	-13	-39.48
3	501.78	35.57	-59.93	2.88	-57.05	-13	-44.05
4	649.05	34.26	-60.71	1.75	-58.96	-13	-45.96
5	901.72	39.90	-58.81	0.49	-58.33	-13	-45.33
6	959.39	43.44	-54.41	0.39	-54.02	-13	-41.02

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2350	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.962	31.48	-47.37	-9.78	-57.15	-13	-44.15
2	140.491	31.17	-62.88	-1.31	-64.19	-13	-51.19
3	293.526	35.69	-59.90	3.76	-56.14	-13	-43.14
4	648.494	37.28	-57.67	1.75	-55.93	-13	-42.93
5	920.684	38.55	-59.95	0.43	-59.52	-13	-46.52
6	958.864	40.81	-57.06	0.39	-56.67	-13	-43.67

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.96	36.45	-42.04	-10.03	-52.07	-13	-39.07
2	101.07	38.72	-51.90	-0.66	-52.55	-13	-39.55
3	500.91	34.83	-60.68	2.88	-57.80	-13	-44.80
4	650.12	33.91	-61.09	1.74	-59.34	-13	-46.34
5	901.33	39.27	-59.45	0.49	-58.96	-13	-45.96
6	958.38	43.11	-54.78	0.38	-54.39	-13	-41.39

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## ABOVE 1GHz

Channel Bandwidth: 10MHz

Mode	TX channel 2000	Frequency Range	Above 1000MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4230	51.13	-53.67	7.42	-46.24	-13	-33.24
2	6345	58.59	-45.55	6.19	-39.36	-13	-26.36
3	8460	64.54	-38.08	4.20	-33.88	-13	-20.88
4	10575	57.19	-44.84	3.50	-41.35	-13	-28.35
5	12690	57.1	-44.21	4.38	-39.83	-13	-26.83
6	14805	62.63	-34.55	3.78	-30.77	-13	-17.77
7	16920	66.97	-32.10	2.94	-29.16	-13	-16.16
8	19035	67.63	-32.90	3.71	-29.19	-13	-16.19

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	4230	50.45	-54.35	7.42	-46.92	-13	-33.92
2	6345	60.59	-43.55	6.19	-37.36	-13	-24.36
3	8460	65.74	-36.88	4.20	-32.68	-13	-19.68
4	10575	57.99	-44.04	3.50	-40.55	-13	-27.55
5	12690	56.55	-44.76	4.38	-40.38	-13	-27.38
6	14805	61.95	-35.23	3.78	-31.45	-13	-18.45
7	16920	65.95	-33.12	2.94	-30.18	-13	-17.18
8	19035	<b>68.14</b>	<b>-32.39</b>	<b>3.71</b>	<b>-28.68</b>	<b>-13</b>	<b>-15.68</b>

## Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	51.40	-51.67	7.87	-43.80	-13	-30.80
2	6397.5	59.30	-45.22	7.05	-38.17	-13	-25.17
3	8530	65.50	-36.44	5.03	-31.41	-13	-18.41
4	10662.5	58.6	-44.11	4.23	-39.88	-13	-26.88
5	12795	57.7	-44.54	3.67	-40.87	-13	-27.87
6	14927.5	63.2	-38.31	4.37	-33.94	-13	-20.94
7	17060	67.3	-32.55	1.93	-30.61	-13	-17.61
8	19192.5	67.9	-33.29	3.85	-29.44	-13	-16.44

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	4265	51.6	-51.47	7.87	-43.60	-13	-30.60
2	6397.5	60.7	-43.82	7.05	-36.77	-13	-23.77
3	8530	66.3	-35.64	5.03	-30.61	-13	-17.61
4	10662.5	58.4	-44.31	4.23	-40.08	-13	-27.08
5	12795	57.5	-44.74	3.67	-41.07	-13	-28.07
6	14927.5	62.8	-38.71	4.37	-34.34	-13	-21.34
7	17060	66.7	-33.15	1.93	-31.21	-13	-18.21
8	19192.5	68.3	-32.89	3.85	-29.04	-13	-16.04

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2350	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4300	50.83	-53.89	7.39	-46.50	-13	-33.50
2	6450	58.80	-45.34	6.01	-39.33	-13	-26.33
3	8600	64.73	-37.89	4.23	-33.66	-13	-20.66
4	10750	58.37	-43.47	3.33	-40.13	-13	-27.13
5	12900	57.57	-43.41	4.42	-38.99	-13	-25.99
6	15050	61.98	-35.41	3.69	-31.73	-13	-18.73
7	17200	66.25	-32.99	3.04	-29.95	-13	-16.95
8	19350	66.74	-35.46	3.77	-31.69	-13	-18.69

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	4300	50.61	-54.11	7.39	-46.72	-13	-33.72
2	6450	60.41	-43.73	6.01	-37.72	-13	-24.72
3	8600	66.14	-36.48	4.23	-32.25	-13	-19.25
4	10750	57.73	-44.11	3.33	-40.77	-13	-27.77
5	12900	56.27	-44.71	4.42	-40.29	-13	-27.29
6	15050	61.95	-35.44	3.69	-31.76	-13	-18.76
7	17200	65.68	-33.56	3.04	-30.52	-13	-17.52
8	19350	67.74	-34.46	3.77	-30.69	-13	-17.69

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 15MHz

Mode	TX channel 2025	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.432	31.07	-47.59	-9.91	-57.50	-13	-44.50
2	139.571	30.16	-63.69	-1.31	-64.99	-13	-51.99
3	293.806	34.42	-61.18	3.75	-57.42	-13	-44.42
4	648.054	38.45	-56.49	1.75	-54.74	-13	-41.74
5	921.414	40.56	-57.93	0.43	-57.50	-13	-44.50
6	958.994	42.14	-55.72	0.39	-55.34	-13	-42.34

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.76	37.38	-41.03	-10.08	-51.11	-13	-38.11
2	101.04	38.75	-51.87	-0.66	-52.52	-13	-39.52
3	500.99	34.45	-61.06	2.88	-58.18	-13	-45.18
4	650.44	33.90	-61.11	1.74	-59.36	-13	-46.36
5	900.83	39.01	-59.71	0.49	-59.22	-13	-46.22
6	958.88	43.38	-54.49	0.39	-54.10	-13	-41.10

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.422	32.02	-46.63	-9.92	-56.55	-13	-43.55
2	138.461	31.34	-62.27	-1.30	-63.57	-13	-50.57
3	294.336	35.37	-60.24	3.75	-56.49	-13	-43.49
4	649.754	38.48	-56.51	1.74	-54.76	-13	-41.76
5	921.174	40.79	-57.70	0.43	-57.28	-13	-44.28
6	960.094	43.39	-54.44	0.39	-54.05	-13	-41.05

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.54	37.98	-40.35	-10.13	-50.49	-13	-37.49
2	101.38	39.26	-51.34	-0.67	-52.00	-13	-39.00
3	501.82	35.77	-59.73	2.88	-56.85	-13	-43.85
4	648.78	34.17	-60.79	1.75	-59.04	-13	-46.04
5	901.17	39.60	-59.12	0.49	-58.63	-13	-45.63
6	959.83	43.72	-54.12	0.39	-53.73	-13	-40.73

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2325	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.812	31.37	-47.79	-9.58	-57.36	-13	-44.36
2	140.141	29.89	-64.08	-1.31	-65.39	-13	-52.39
3	294.416	34.18	-61.43	3.75	-57.68	-13	-44.68
4	649.304	37.40	-57.58	1.75	-55.83	-13	-42.83
5	921.884	40.20	-58.29	0.43	-57.86	-13	-44.86
6	958.584	42.39	-55.49	0.38	-55.11	-13	-42.11

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.25	37.83	-40.76	-9.96	-50.72	-13	-37.72
2	100.09	38.28	-52.39	-0.63	-53.02	-13	-40.02
3	500.87	34.40	-61.11	2.88	-58.23	-13	-45.23
4	649.07	32.78	-62.19	1.75	-60.44	-13	-47.44
5	900.95	39.57	-59.15	0.49	-58.66	-13	-45.66
6	959.68	43.52	-54.32	0.39	-53.93	-13	-40.93

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## ABOVE 1GHz

Channel Bandwidth: 15MHz

Mode	TX channel 2025	Frequency Range	Above 1000MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4235	51.02	-53.77	7.42	-46.35	-13	-33.35
2	6352.5	58.63	-45.51	6.18	-39.33	-13	-26.33
3	8470	64.78	-37.84	4.20	-33.64	-13	-20.64
4	10587.5	57.28	-44.74	3.49	-41.25	-13	-28.25
5	12705	57.9	-43.38	4.38	-39.00	-13	-26.00
6	14822.5	62.25	-34.94	3.77	-31.17	-13	-18.17
7	16940	65.56	-33.52	2.95	-30.58	-13	-17.58
8	19057.5	68.24	-32.41	3.71	-28.70	-13	-15.70

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4235	50.61	-54.18	7.42	-46.76	-13	-33.76
2	6352.5	59.99	-44.15	6.18	-37.97	-13	-24.97
3	8470	65.32	-37.30	4.20	-33.10	-13	-20.10
4	10587.5	58.45	-43.57	3.49	-40.08	-13	-27.08
5	12705	56.76	-44.52	4.38	-40.14	-13	-27.14
6	14822.5	62.71	-34.48	3.77	-30.71	-13	-17.71
7	16940	65.69	-33.39	2.95	-30.45	-13	-17.45
8	19057.5	68.03	-32.62	3.71	-28.91	-13	-15.91

## Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	51.90	-51.17	7.87	-43.30	-13	-30.30
2	6397.5	59.80	-44.72	7.05	-37.67	-13	-24.67
3	8530	65.20	-36.74	5.03	-31.71	-13	-18.71
4	10662.5	58.4	-44.31	4.23	-40.08	-13	-27.08
5	12795	57.9	-44.34	3.67	-40.67	-13	-27.67
6	14927.5	62.8	-38.71	4.37	-34.34	-13	-21.34
7	17060	66.8	-33.05	1.93	-31.11	-13	-18.11
8	19192.5	68.3	-32.89	3.85	-29.04	-13	-16.04

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	51.7	-51.37	7.87	-43.50	-13	-30.50
2	6397.5	61.3	-43.22	7.05	-36.17	-13	-23.17
3	8530	66.1	-35.84	5.03	-30.81	-13	-17.81
4	10662.5	58.5	-44.21	4.23	-39.98	-13	-26.98
5	12795	57.6	-44.64	3.67	-40.97	-13	-27.97
6	14927.5	63.4	-38.11	4.37	-33.74	-13	-20.74
7	17060	67	-32.85	1.93	-30.91	-13	-17.91
8	19192.5	68.3	-32.89	3.85	-29.04	-13	-16.04

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2325	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4295	50.55	-54.18	7.40	-46.78	-13	-33.78
2	6442.5	58.54	-45.60	6.02	-39.58	-13	-26.58
3	8590	63.77	-38.85	4.22	-34.63	-13	-21.63
4	10737.5	57.54	-44.31	3.34	-40.97	-13	-27.97
5	12885	56.98	-44.03	4.42	-39.61	-13	-26.61
6	15032.5	61.44	-35.94	3.69	-32.25	-13	-19.25
7	17180	66.25	-32.98	3.03	-29.95	-13	-16.95
8	19327.5	67.13	-34.95	3.77	-31.18	-13	-18.18

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4295	50.21	-54.52	7.40	-47.12	-13	-34.12
2	6442.5	60.35	-43.79	6.02	-37.77	-13	-24.77
3	8590	64.87	-37.75	4.22	-33.53	-13	-20.53
4	10737.5	57.92	-43.93	3.34	-40.59	-13	-27.59
5	12885	56.44	-44.57	4.42	-40.15	-13	-27.15
6	15032.5	63.2	-34.18	3.69	-30.49	-13	-17.49
7	17180	65.67	-33.56	3.03	-30.53	-13	-17.53
8	19327.5	66.92	-35.16	3.77	-31.39	-13	-18.39

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 20MHz

Mode	TX channel 2050	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.402	32.20	-46.81	-9.68	-56.49	-13	-43.49
2	139.881	32.23	-61.68	-1.31	-62.99	-13	-49.99
3	293.276	35.23	-60.35	3.76	-56.59	-13	-43.59
4	648.284	38.20	-56.75	1.75	-55.00	-13	-42.00
5	921.914	40.61	-57.88	0.43	-57.45	-13	-44.45
6	958.874	40.54	-57.33	0.39	-56.94	-13	-43.94
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	50.23	38.25	-40.33	-9.96	-50.30	-13	-37.30
2	100.79	36.43	-54.20	-0.65	-54.85	-13	-41.85
3	499.91	35.20	-60.32	2.89	-57.43	-13	-44.43
4	649.3	33.11	-61.87	1.75	-60.12	-13	-47.12
5	900.79	40.16	-58.56	0.49	-58.07	-13	-45.07
6	959.32	42.40	-55.45	0.39	-55.07	-13	-42.07

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.372	32.87	-46.13	-9.68	-55.81	-13	-42.81
2	139.371	32.59	-61.21	-1.31	-62.52	-13	-49.52
3	294.986	36.09	-59.54	3.75	-55.80	-13	-42.80
4	649.574	39.24	-55.74	1.75	-54.00	-13	-41.00
5	921.644	41.13	-57.36	0.43	-56.93	-13	-43.93
6	959.764	42.62	-55.22	0.39	-54.83	-13	-41.83

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.07	38.39	-39.77	-10.25	-50.02	-13	-37.02
2	101.38	38.22	-52.38	-0.67	-53.04	-13	-40.04
3	500.39	35.59	-59.93	2.89	-57.04	-13	-44.04
4	649.8	34.25	-60.74	1.74	-58.99	-13	-45.99
5	901.29	40.86	-57.86	0.49	-57.37	-13	-44.37
6	958.68	42.99	-54.89	0.38	-54.50	-13	-41.50

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2300	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	51.062	31.98	-46.91	-9.76	-56.67	-13	-43.67
2	139.221	31.65	-62.12	-1.31	-63.43	-13	-50.43
3	293.306	35.90	-59.68	3.76	-55.92	-13	-42.92
4	649.924	38.19	-56.80	1.74	-55.06	-13	-42.06
5	920.484	40.68	-57.82	0.43	-57.39	-13	-44.39
6	957.934	41.25	-56.65	0.38	-56.27	-13	-43.27

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	49.25	37.96	-40.27	-10.20	-50.47	-13	-37.47
2	99.63	38.14	-52.55	-0.62	-53.17	-13	-40.17
3	500.43	34.15	-61.36	2.89	-58.48	-13	-45.48
4	650.52	32.58	-62.43	1.74	-60.69	-13	-47.69
5	900.46	39.64	-59.09	0.49	-58.60	-13	-45.60
6	958.5	41.70	-56.18	0.38	-55.80	-13	-42.80

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## ABOVE 1GHz

Channel Bandwidth: 20MHz

Mode	TX channel 2050	Frequency Range	Above 1000MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4240	49.63	-55.16	7.42	-47.74	-13	-34.74
2	6360	58.07	-46.07	6.16	-39.91	-13	-26.91
3	8480	64.67	-37.95	4.20	-33.75	-13	-20.75
4	10600	58.81	-43.20	3.47	-39.72	-13	-26.72
5	12720	56.85	-44.41	4.39	-40.03	-13	-27.03
6	14840	61.73	-35.48	3.76	-31.72	-13	-18.72
7	16960	66.82	-32.28	2.95	-29.32	-13	-16.32
8	19080	67.65	-33.12	3.72	-29.40	-13	-16.40

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4240	50.93	-53.86	7.42	-46.44	-13	-33.44
2	6360	60.41	-43.73	6.16	-37.57	-13	-24.57
3	8480	65.43	-37.19	4.20	-32.99	-13	-19.99
4	10600	58.14	-43.87	3.47	-40.39	-13	-27.39
5	12720	57.18	-44.08	4.39	-39.70	-13	-26.70
6	14840	62.03	-35.18	3.76	-31.42	-13	-18.42
7	16960	66.35	-32.75	2.95	-29.79	-13	-16.79
8	19080	66.97	-33.80	3.72	-30.08	-13	-17.08

## Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	50.60	-52.47	7.87	-44.60	-13	-31.60
2	6397.5	59.50	-45.02	7.05	-37.97	-13	-24.97
3	8530	66.00	-35.94	5.03	-30.91	-13	-17.91
4	10662.5	59.2	-43.51	4.23	-39.28	-13	-26.28
5	12795	57.7	-44.54	3.67	-40.87	-13	-27.87
6	14927.5	62.7	-38.81	4.37	-34.44	-13	-21.44
7	17060	67.5	-32.35	1.93	-30.41	-13	-17.41
8	19192.5	67.8	-33.39	3.85	-29.54	-13	-16.54

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4265	51.1	-51.97	7.87	-44.10	-13	-31.10
2	6397.5	60.8	-43.72	7.05	-36.67	-13	-23.67
3	8530	66.3	-35.64	5.03	-30.61	-13	-17.61
4	10662.5	58.2	-44.51	4.23	-40.28	-13	-27.28
5	12795	57.2	-45.04	3.67	-41.37	-13	-28.37
6	14927.5	63.1	-38.41	4.37	-34.04	-13	-21.04
7	17060	66.8	-33.05	1.93	-31.11	-13	-18.11
8	19192.5	68	-33.19	3.85	-29.34	-13	-16.34

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2300	Frequency Range	Above 1000MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4290	49.67	-55.06	7.40	-47.67	-13	-34.67
2	6435	59.06	-45.08	6.04	-39.04	-13	-26.04
3	8580	65.65	-36.97	4.22	-32.75	-13	-19.75
4	10725	58.54	-43.32	3.35	-39.97	-13	-26.97
5	12870	57.54	-43.49	4.42	-39.07	-13	-26.07
6	15015	62.42	-34.94	3.70	-31.25	-13	-18.25
7	17160	66.87	-32.35	3.03	-29.32	-13	-16.32
8	19305	67.65	-34.31	3.76	-30.55	-13	-17.55

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	4290	50.62	-54.11	7.40	-46.72	-13	-33.72
2	6435	60.78	-43.36	6.04	-37.32	-13	-24.32
3	8580	65.94	-36.68	4.22	-32.46	-13	-19.46
4	10725	58	-43.86	3.35	-40.51	-13	-27.51
5	12870	55.77	-45.26	4.42	-40.84	-13	-27.84
6	15015	62.82	-34.54	3.70	-30.85	-13	-17.85
7	17160	65.7	-33.52	3.03	-30.49	-13	-17.49
8	19305	67.5	-34.46	3.76	-30.70	-13	-17.70

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

#### 4.7.6 Test Results (With Adapter)

Below 1GHz

Channel Bandwidth: 5MHz

Mode	TX channel 1975	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.161	27.58	-54.64	-7.53	-62.17	-13	-49.17
2	174.607	34.61	-57.68	1.41	-56.27	-13	-43.27
3	300.866	35.01	-60.81	3.71	-57.10	-13	-44.10
4	449.86	27.42	-70.84	2.81	-68.04	-13	-55.04
5	600.56	33.14	-61.49	1.79	-59.69	-13	-46.69
6	920.964	40.59	-57.91	0.43	-57.48	-13	-44.48
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.248	32.85	-44.29	-10.93	-55.23	-13	-42.23
2	163.374	29.75	-59.40	-0.21	-59.61	-13	-46.61
3	300.836	33.84	-61.98	3.71	-58.27	-13	-45.27
4	500.384	31.83	-63.69	2.89	-60.80	-13	-47.80
5	601.34	32.78	-61.85	1.79	-60.06	-13	-47.06
6	922.624	40.11	-58.37	0.42	-57.94	-13	-44.94

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.821	28.46	-54.15	-7.34	-61.49	-13	-48.49
2	174.917	35.34	-57.03	1.45	-55.58	-13	-42.58
3	301.026	35.67	-60.16	3.71	-56.45	-13	-43.45
4	449.2	27.55	-70.75	2.80	-67.95	-13	-54.95
5	600.13	34.56	-60.06	1.79	-58.27	-13	-45.27
6	921.374	41.49	-57.00	0.43	-56.57	-13	-43.57

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.088	34.28	-43.17	-10.73	-53.90	-13	-40.90
2	162.824	30.96	-58.03	-0.29	-58.32	-13	-45.32
3	300.326	33.94	-61.86	3.71	-58.14	-13	-45.14
4	499.954	33.30	-62.22	2.89	-59.33	-13	-46.33
5	600.5	33.78	-60.84	1.79	-59.05	-13	-46.05
6	922.074	40.69	-57.79	0.43	-57.37	-13	-44.37

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2375	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.421	27.79	-54.58	-7.46	-62.04	-13	-49.04
2	175.647	34.89	-57.69	1.56	-56.13	-13	-43.13
3	300.986	34.38	-61.44	3.71	-57.73	-13	-44.73
4	449.25	26.39	-71.91	2.80	-69.10	-13	-56.10
5	600.11	33.19	-61.43	1.79	-59.64	-13	-46.64
6	920.384	40.25	-58.25	0.43	-57.82	-13	-44.82

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.158	34.27	-42.84	-10.96	-53.80	-13	-40.80
2	162.624	30.55	-58.39	-0.32	-58.71	-13	-45.71
3	300.176	32.44	-63.35	3.71	-59.64	-13	-46.64
4	499.944	32.62	-62.90	2.89	-60.01	-13	-47.01
5	601.36	32.95	-61.68	1.79	-59.89	-13	-46.89
6	922.474	39.61	-58.87	0.42	-58.45	-13	-45.45

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 10MHz

Mode	TX channel 2000	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	59.561	27.29	-54.67	-7.69	-62.36	-13	-49.36
2	174.667	35.05	-66.42	-1.53	-67.95	-13	-54.95
3	300.956	33.82	-61.99	3.71	-58.29	-13	-45.29
4	449.16	26.08	-63.52	2.25	-61.27	-13	-48.27
5	600.77	34.10	-68.00	1.41	-66.59	-13	-53.59
6	921.924	39.53	-59.59	0.20	-59.39	-13	-46.39

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.218	33.32	-43.81	-10.94	-54.75	-13	-41.75
2	163.054	30.63	-56.65	-2.38	-59.03	-13	-46.03
3	299.516	33.25	-64.64	4.38	-60.26	-13	-47.26
4	499.554	32.53	-58.42	2.12	-56.30	-13	-43.30
5	600.15	31.85	-70.26	1.41	-68.85	-13	-55.85
6	920.774	40.66	-58.50	0.19	-58.31	-13	-45.31

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.061	28.38	-53.78	-7.56	-61.34	-13	-48.34
2	175.427	35.35	-57.17	1.53	-55.64	-13	-42.64
3	300.696	34.75	-61.06	3.71	-57.35	-13	-44.35
4	448.26	27.39	-70.96	2.80	-68.16	-13	-55.16
5	600.11	34.51	-60.11	1.79	-58.32	-13	-45.32
6	921.444	40.93	-57.56	0.43	-57.13	-13	-44.13

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.548	34.19	-43.06	-10.86	-53.92	-13	-40.92
2	162.394	31.14	-57.73	-0.35	-58.08	-13	-45.08
3	300.286	33.91	-61.88	3.71	-58.17	-13	-45.17
4	500.354	33.29	-62.23	2.89	-59.34	-13	-46.34
5	600.54	33.26	-61.37	1.79	-59.57	-13	-46.57
6	921.644	41.35	-57.14	0.43	-56.71	-13	-43.71

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2350	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.151	28.03	-54.15	-7.54	-61.69	-13	-48.69
2	175.657	34.23	-67.45	-1.54	-68.99	-13	-55.99
3	301.026	34.29	-61.52	3.71	-57.82	-13	-44.82
4	449.13	26.85	-62.74	2.25	-60.49	-13	-47.49
5	600.34	33.24	-68.87	1.41	-67.46	-13	-54.46
6	921.144	40.12	-59.03	0.19	-58.84	-13	-45.84

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.678	34.18	-43.12	-10.83	-53.95	-13	-40.95
2	161.704	30.86	-56.49	-2.34	-58.84	-13	-45.84
3	300.226	32.49	-65.40	4.38	-61.02	-13	-48.02
4	500.434	32.11	-58.86	2.12	-56.74	-13	-43.74
5	601.25	32.54	-69.56	1.41	-68.15	-13	-55.15
6	921.004	40.35	-58.80	0.19	-58.61	-13	-45.61

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 15MHz

Mode	TX channel 2025	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	62.281	28.24	-54.71	-7.02	-61.73	-13	-48.73
2	174.467	34.22	-67.20	-1.53	-68.73	-13	-55.73
3	300.426	34.90	-60.90	3.71	-57.19	-13	-44.19
4	450.86	27.43	-62.21	2.25	-59.97	-13	-46.97
5	598.75	33.96	-68.17	1.41	-66.75	-13	-53.75
6	921.804	40.19	-58.94	0.20	-58.74	-13	-45.74

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.738	34.45	-43.23	-10.57	-53.80	-13	-40.80
2	164.074	30.34	-56.89	-2.41	-59.29	-13	-46.29
3	300.926	33.80	-64.08	4.37	-59.71	-13	-46.71
4	498.944	32.38	-58.55	2.12	-56.43	-13	-43.43
5	600.87	34.10	-68.00	1.41	-66.59	-13	-53.59
6	921.104	38.87	-60.28	0.19	-60.09	-13	-47.09

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	61.671	28.99	-54.13	-7.09	-61.23	-13	-48.23
2	174.117	35.03	-57.12	1.34	-55.78	-13	-42.78
3	300.586	35.15	-60.66	3.71	-56.95	-13	-43.95
4	449.87	27.96	-70.30	2.81	-67.50	-13	-54.50
5	599.51	35.07	-59.55	1.79	-57.76	-13	-44.76
6	921.644	40.50	-57.99	0.43	-57.56	-13	-44.56

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.618	35.01	-42.63	-10.60	-53.23	-13	-40.23
2	163.364	30.78	-58.36	-0.21	-58.58	-13	-45.58
3	300.546	34.28	-61.53	3.71	-57.81	-13	-44.81
4	499.484	32.49	-63.04	2.89	-60.14	-13	-47.14
5	600.85	34.77	-59.86	1.79	-58.07	-13	-45.07
6	921.594	39.81	-58.68	0.43	-58.25	-13	-45.25

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2325	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	62.091	27.73	-55.15	-7.07	-62.22	-13	-49.22
2	174.107	34.76	-66.59	-1.53	-68.11	-13	-55.11
3	301.446	34.16	-61.67	3.70	-57.96	-13	-44.96
4	450.17	26.64	-62.98	2.25	-60.73	-13	-47.73
5	600.23	34.98	-67.13	1.41	-65.72	-13	-52.72
6	921.874	40.12	-59.00	0.20	-58.81	-13	-45.81

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	47.298	34.91	-42.61	-10.68	-53.29	-13	-40.29
2	163.954	29.82	-57.41	-2.40	-59.82	-13	-46.82
3	300.026	32.99	-64.90	4.38	-60.52	-13	-47.52
4	498.554	31.36	-59.56	2.13	-57.44	-13	-44.44
5	600.28	33.30	-68.81	1.41	-67.40	-13	-54.40
6	921.874	39.01	-60.11	0.20	-59.92	-13	-46.92

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Below 1GHz

Channel Bandwidth: 20MHz

Mode	TX channel 2050	Frequency Range	Below 1000 MHz
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Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	61.671	28.32	-54.41	-7.17	-61.58	-13	-48.58
2	173.807	33.88	-67.40	-1.52	-68.93	-13	-55.93
3	300.316	36.07	-59.72	3.71	-56.01	-13	-43.01
4	447.74	26.27	-63.29	2.25	-61.03	-13	-48.03
5	600.7	34.02	-68.08	1.41	-66.67	-13	-53.67
6	921.244	40.77	-58.38	0.19	-58.18	-13	-45.18
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	45.848	33.92	-43.08	-11.03	-54.11	-13	-41.11
2	162.974	29.79	-57.49	-2.38	-59.87	-13	-46.87
3	298.976	33.25	-64.65	4.39	-60.26	-13	-47.26
4	499.244	32.08	-58.86	2.12	-56.74	-13	-43.74
5	601.29	33.28	-68.82	1.41	-67.41	-13	-54.41
6	922.014	39.62	-59.50	0.20	-59.30	-13	-46.30

Remarks:

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2175	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	60.861	29.18	-53.46	-7.33	-60.79	-13	-47.79
2	174.617	34.68	-57.61	1.41	-56.20	-13	-43.20
3	300.226	36.64	-59.15	3.71	-55.44	-13	-42.44
4	448.61	26.55	-71.78	2.80	-68.98	-13	-55.98
5	600.76	34.30	-60.33	1.79	-58.54	-13	-45.54
6	921.834	41.88	-56.61	0.43	-56.18	-13	-43.18

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.478	34.91	-42.32	-10.88	-53.19	-13	-40.19
2	163.004	31.13	-57.91	-0.26	-58.18	-13	-45.18
3	299.416	34.32	-61.44	3.71	-57.72	-13	-44.72
4	500.104	33.48	-62.04	2.89	-59.15	-13	-46.15
5	600.48	34.71	-59.91	1.79	-58.12	-13	-45.12
6	921.624	40.11	-58.38	0.43	-57.95	-13	-44.95

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 2300	Frequency Range	Below 1000 MHz
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**Antenna Polarity & Test Distance: Horizontal at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	61.241	27.78	-54.79	-7.28	-62.07	-13	-49.07
2	175.377	33.83	-67.79	-1.53	-69.33	-13	-56.33
3	300.246	36.31	-59.48	3.71	-55.77	-13	-42.77
4	447.98	26.52	-63.04	2.25	-60.79	-13	-47.79
5	601.29	34.10	-68.00	1.41	-66.59	-13	-53.59
6	922.164	41.20	-57.91	0.20	-57.72	-13	-44.72

**Antenna Polarity & Test Distance: Vertical at 3 M**

No.	Freq. (MHz)	Reading (dBuV/m)	S.G Power Value (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
1	46.088	34.59	-42.50	-10.97	-53.47	-13	-40.47
2	162.424	31.04	-56.27	-2.36	-58.64	-13	-45.64
3	299.046	33.63	-64.27	4.39	-59.88	-13	-46.88
4	499.964	32.92	-58.04	2.12	-55.92	-13	-42.92
5	599.64	34.24	-67.88	1.41	-66.46	-13	-53.46
6	921.004	40.03	-59.12	0.19	-58.93	-13	-45.93

**Remarks:**

1. Output Power (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

## 5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

## Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The address and road map of all our labs can be found in our web site also.

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