

## FCC Test Report

### (PART 27)

**Report No.:** RF150326E02C

**FCC ID:** 2AD8UFZPFWID01

**Test Model:** FWID

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

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

**Issued Date:** July 27, 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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**Test Location (2):** No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin  
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A D T

### Release Control Record

Issue No.	Description	Date Issued
RF150326E02C	Original release.	July 27, 2015



## 1 Certificate of Conformity

**Product:** Flexi Zone Indoor Pico BTS

**Brand:** Nokia

**Test Model:** FWID

**Sample Status:** ENGINEERING SAMPLE

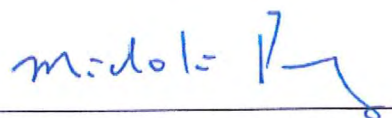
**Applicant:** Nokia Solutions and Networks

**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.

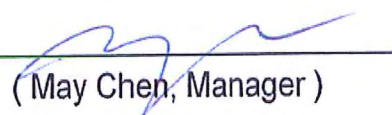
**Prepared by :**



( Midoli Peng, Specialist )

**Date:** July 27, 2015

**Approved by :**



( May Chen, Manager )

**Date:** July 27, 2015

## 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 -15.44dB at 19192.5MHz.

### 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	Expanded 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:**

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
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	FWID	
Test Sample S/N	EA150610120	
Hardware Version	473150A.X33 (Confirmation that the hardware version 473150A.X33 is fully identical with 473150A.101)	
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	1120.2mW (QPSK)
	Channel Bandwidth: 10MHz	1146.3mW (QPSK)
	Channel Bandwidth: 15MHz	1183.9mW (QPSK)
	Channel Bandwidth: 20MHz	1154.3mW (QPSK)
Emission Designator	Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M52W7D
		64QAM: 4M52W7D
	Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M00W7D
		64QAM: 9M00W7D
	Channel Bandwidth: 15MHz	QPSK: 13M7G7D
		16QAM: 13M7W7D
		64QAM: 13M7W7D
	Channel Bandwidth: 20MHz	QPSK: 18M1G7D
		16QAM: 18M1W7D
		64QAM: 18M1W7D

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 BT, LTE and GPS technology used for the EUT.
2. The EUT incorporates a MIMO function for LTE mode

Channel Bandwidth	Modulation	TX & RX configuration	
5MHz	QPSK, 16QAM, 64QAM	2TX	2RX
10MHz	QPSK, 16QAM, 64QAM	2TX	2RX
15MHz	QPSK, 16QAM, 64QAM	2TX	2RX
20MHz	QPSK, 16QAM, 64QAM	2TX	2RX

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

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

4. The emission of the simultaneous operation (BT & LTE) has been evaluated and no non-compliance was found.
5. The EUT must be supplied with a POE(option) or power adapter as following table:

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)

6. 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.

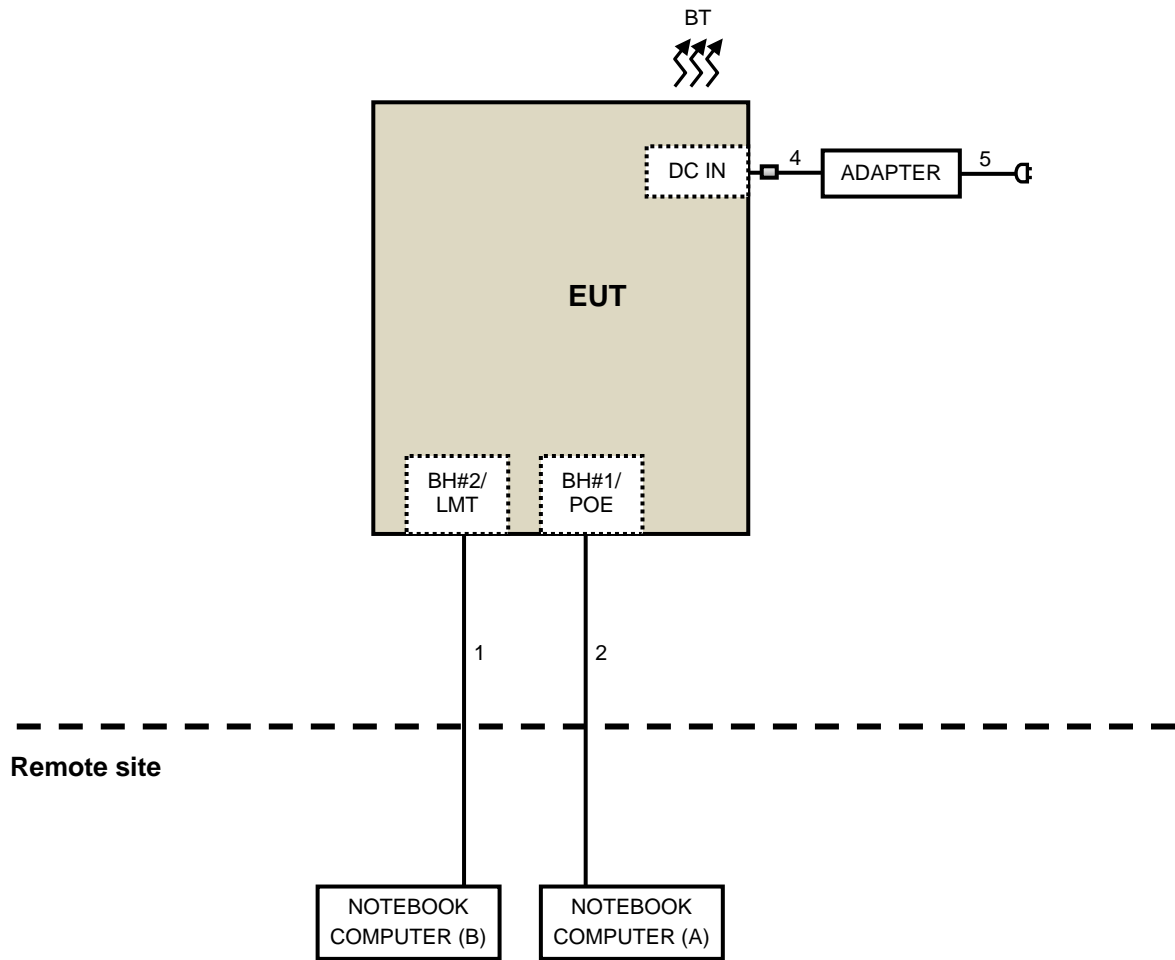
7. The antennas provided to the EUT, please refer to the following table:

<b>LTE Antenna Spec.</b>							
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)
<b>GPS Antenna Spec.</b>							
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
<b>BT Antenna Spec.</b>							
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

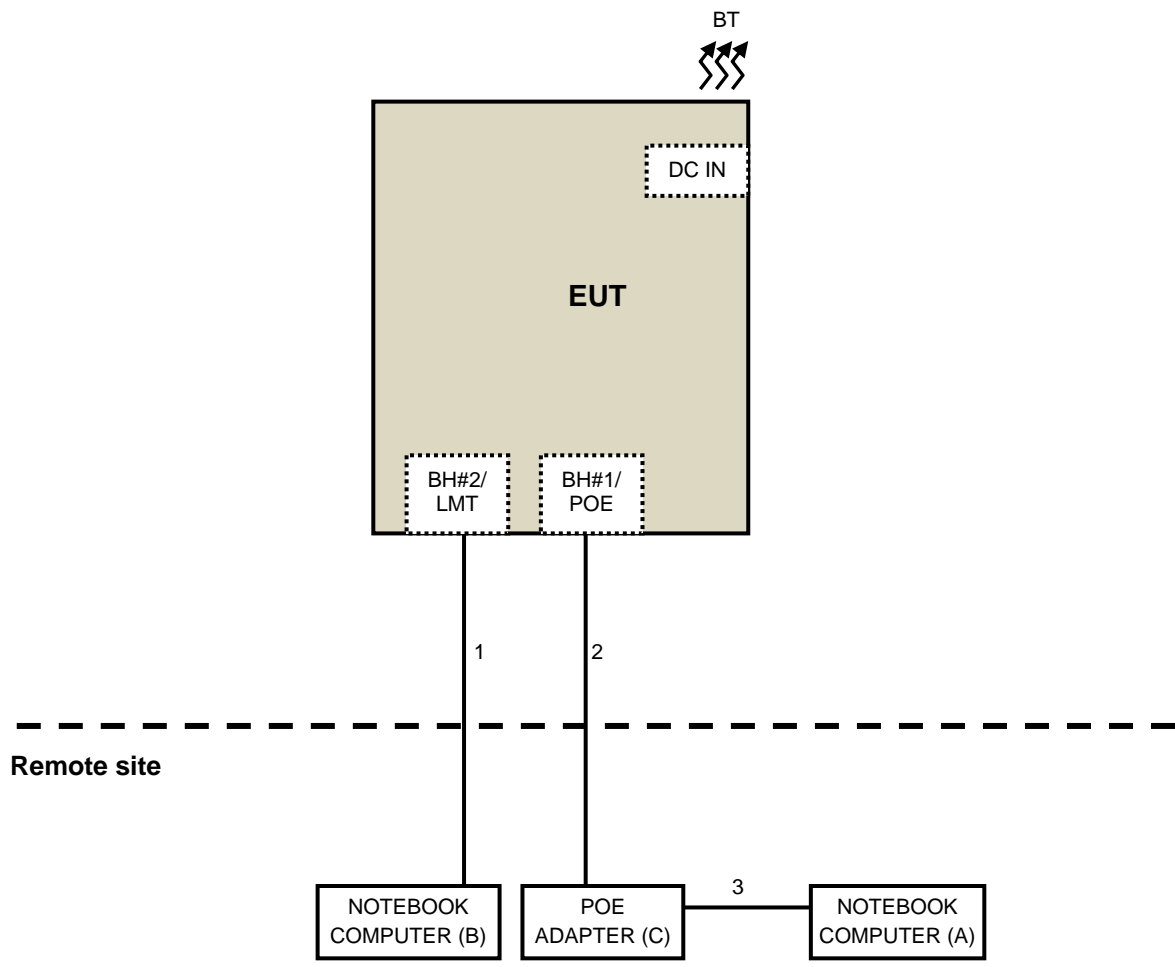
8. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

### 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
Condcudeted 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:**

1. 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.
2. All supported modulation types were evaluated. The Worst case emaisson of QPSK was selected. Therefore, the EIRP power, Frequency Stability, Channel Edge, Condcudeted 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
Conducuted 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

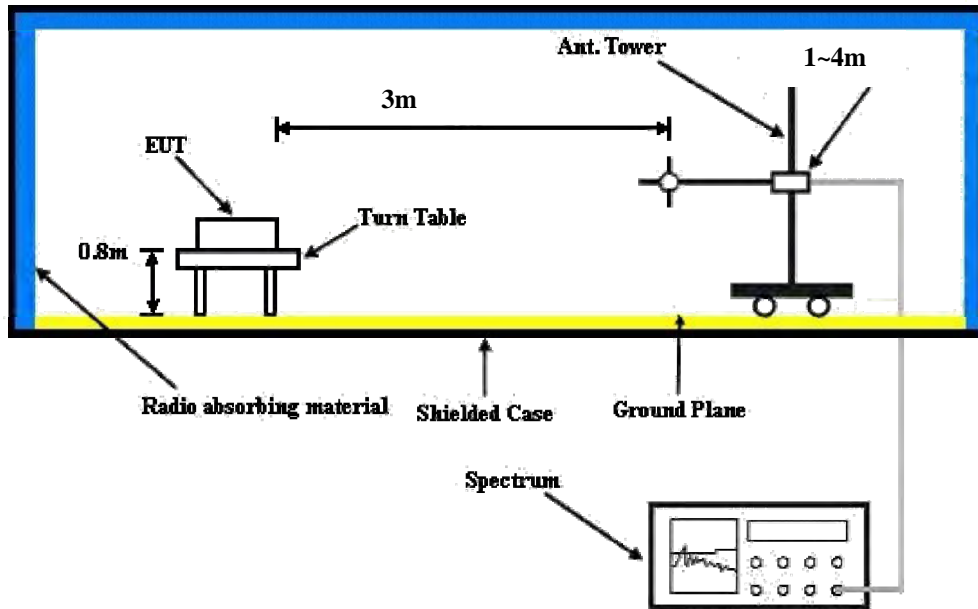
The radiated peak output power shall be according to the specific rule Part 27.50(d)(2) that are limited to EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

#### 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.  $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$

### 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	24.0	6.4	30.4	1094.7
2175	2132.5	24.1	6.4	30.5	1120.2
2375	2152.5	23.9	6.4	30.3	1082.2

LTE Band 4					
Channel Bandwidth: 10MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2000	2115	24.1	6.4	30.5	1130.6
2175	2132.5	24.2	6.4	30.6	1146.3
2350	2150	24.0	6.4	30.5	1110.0

LTE Band 4					
Channel Bandwidth: 15MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2025	2117.5	24.2	6.4	30.6	1154.3
2175	2132.5	24.3	6.4	30.7	1183.9
2325	2147.5	24.2	6.4	30.6	1156.9

LTE Band 4					
Channel Bandwidth: 20MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
2050	2120	24.0	6.4	30.4	1102.3
2175	2132.5	24.2	6.4	30.6	1154.3
2300	2145	24.1	6.4	30.5	1130.6

## 4.2 Frequency Stability Measurement

### 4.2.1 Limits of Frequency Stability Measurement

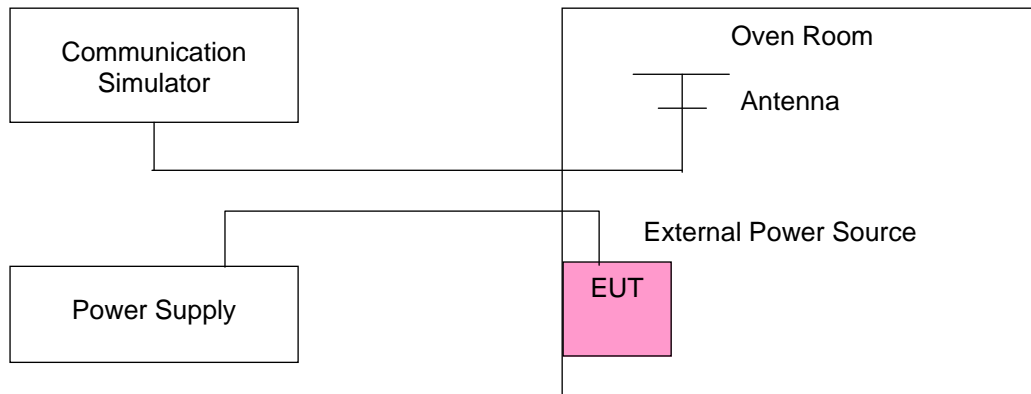
According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that "The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary 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  $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$ .

### 4.2.2 Test Procedure

- 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.
- The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the  $\pm 0.5^{\circ}\text{C}$  during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

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

### 4.2.3 Test Setup



#### 4.2.4 Test Results (With POE)

##### Frequency Error vs. Voltage

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

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

#### 4.2.5 Test Results (With Adapter)

##### 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

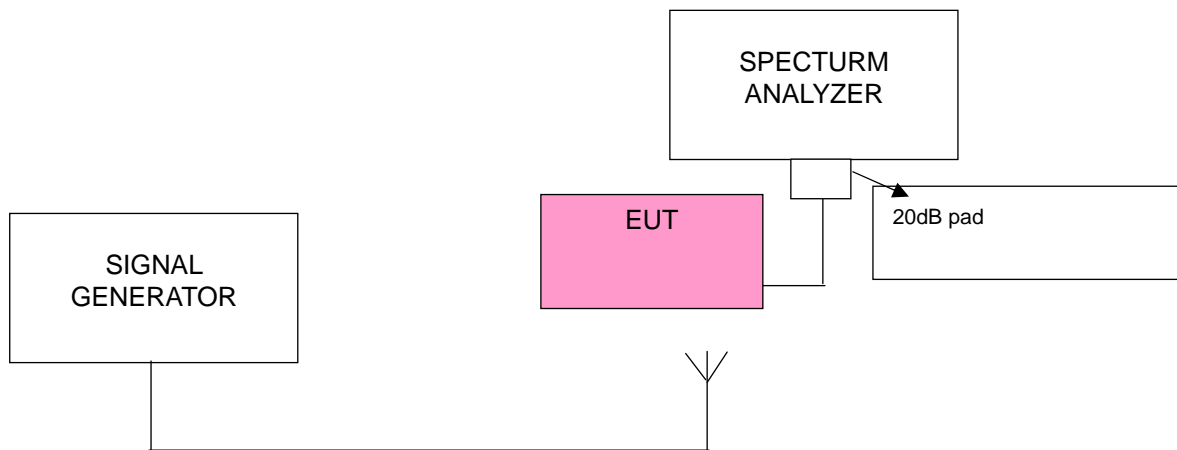
#### 4.3.1 Limits of Emission Bandwidth Measurement

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).

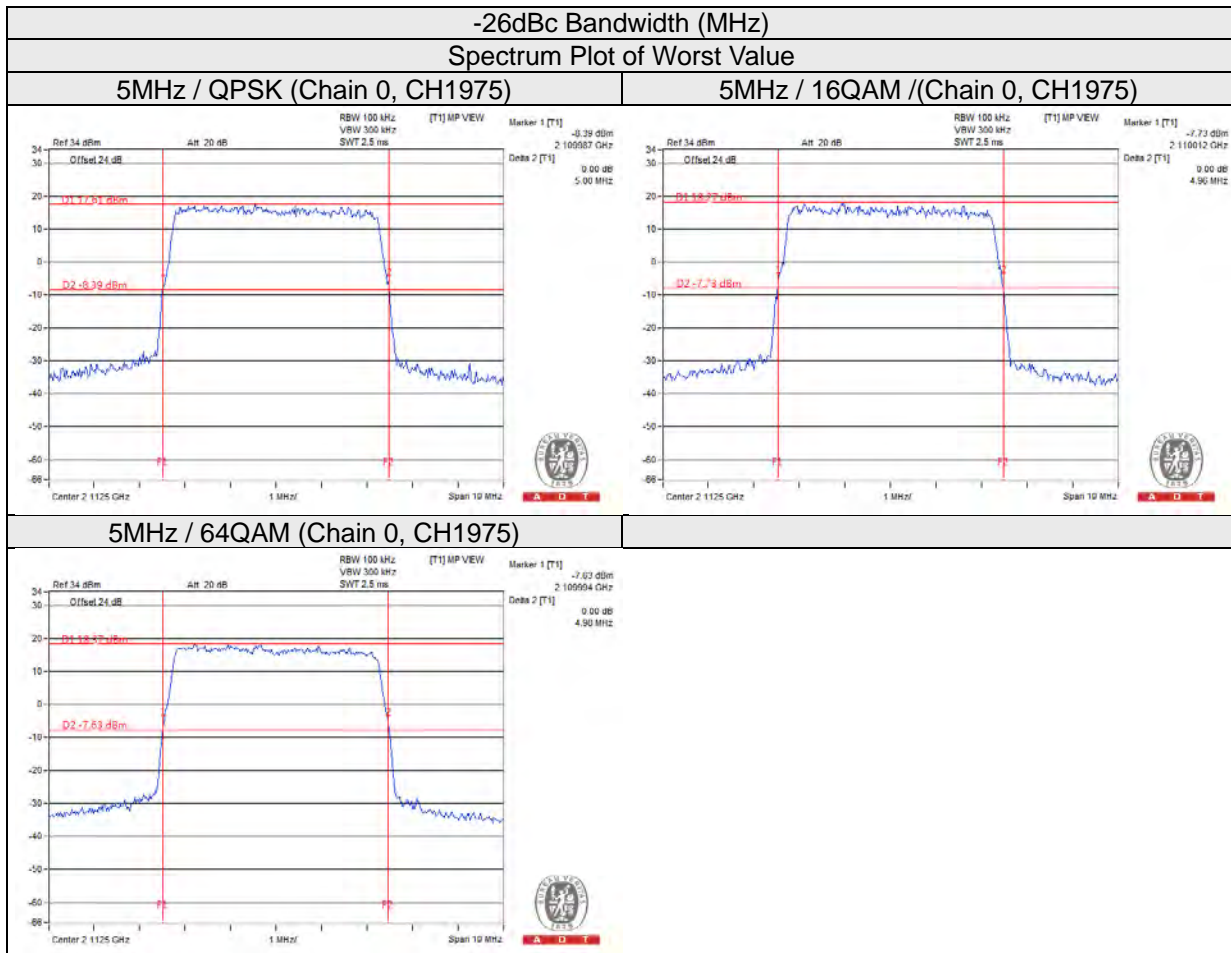
#### 4.3.3 Test Setup





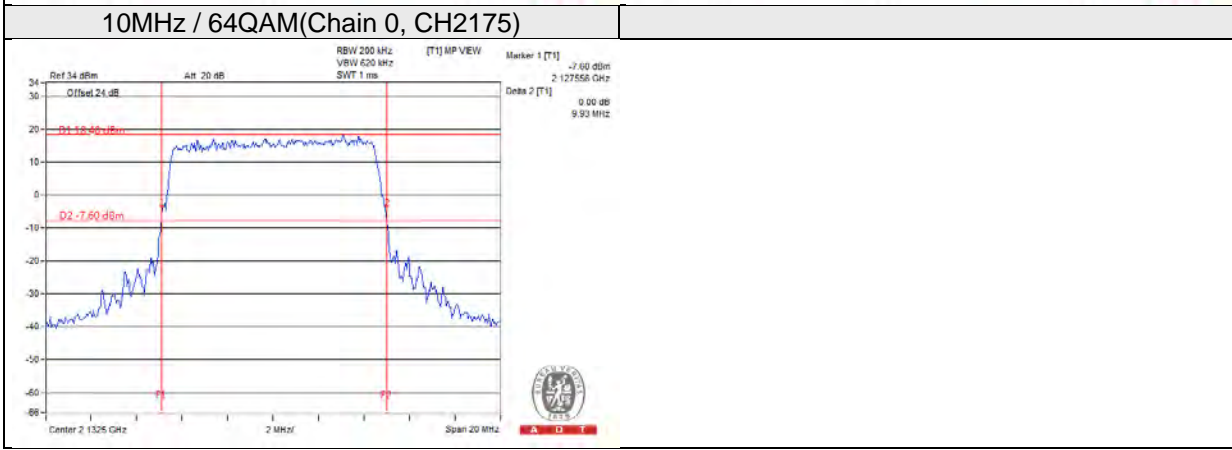
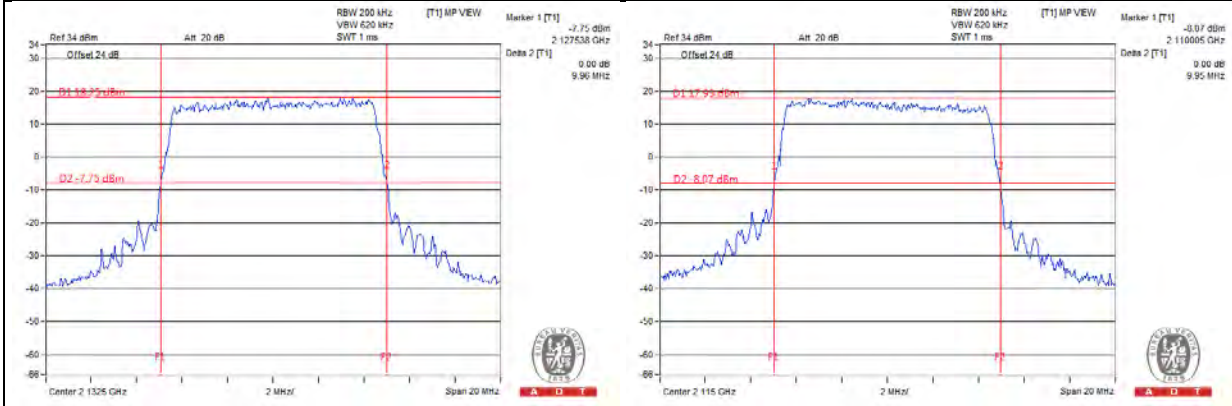
### 4.3.4 Test Results (-26dBc Bandwidth)

Channel Bandwidth: 5MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1975	2112.5	5	4.96	4.98	4.94	4.92	4.98
2175	2132.5	4.93	4.96	4.97	4.92	4.94	4.91
2375	2152.5	4.99	4.95	4.95	4.99	4.95	4.96



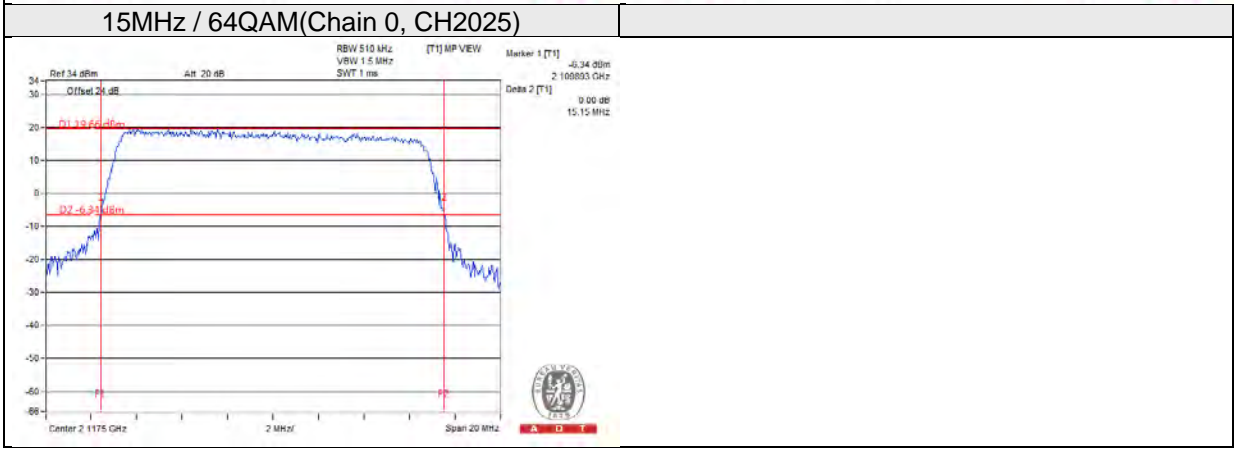
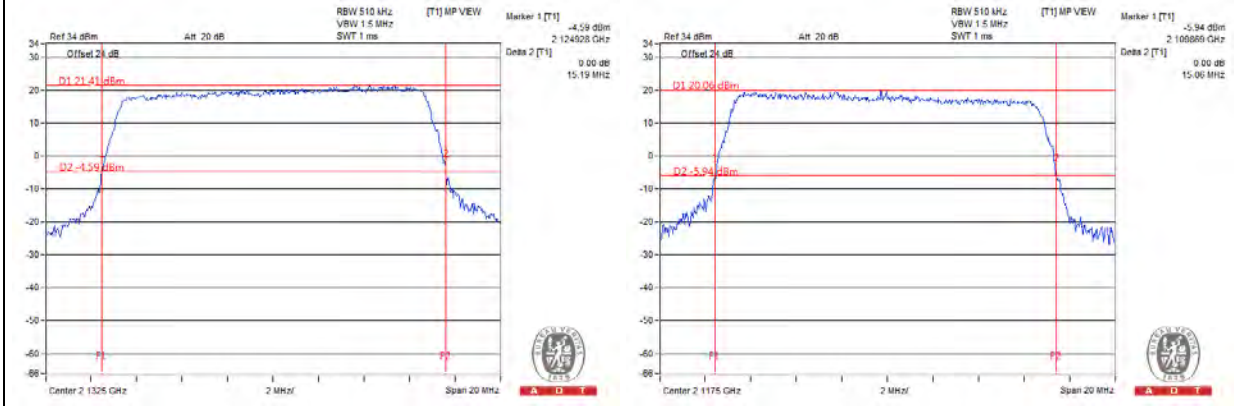
Channel Bandwidth: 10MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115	9.87	9.95	9.91	9.89	9.94	9.93
2175	2132.5	9.87	9.93	9.93	9.96	9.89	9.87
2350	2150	9.92	9.92	9.8	9.88	9.86	9.86

-26dBc Bandwidth (MHz)  
Spectrum Plot of Worst Value



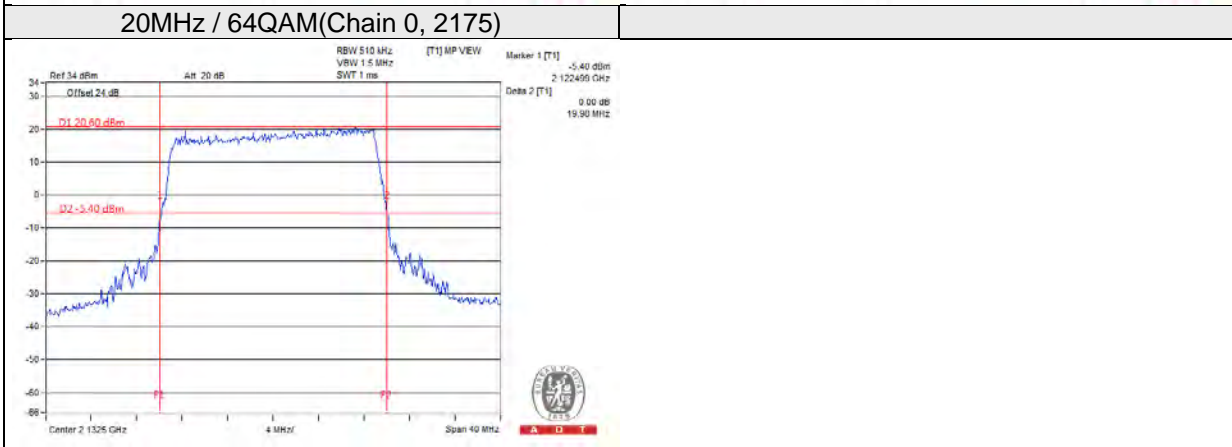
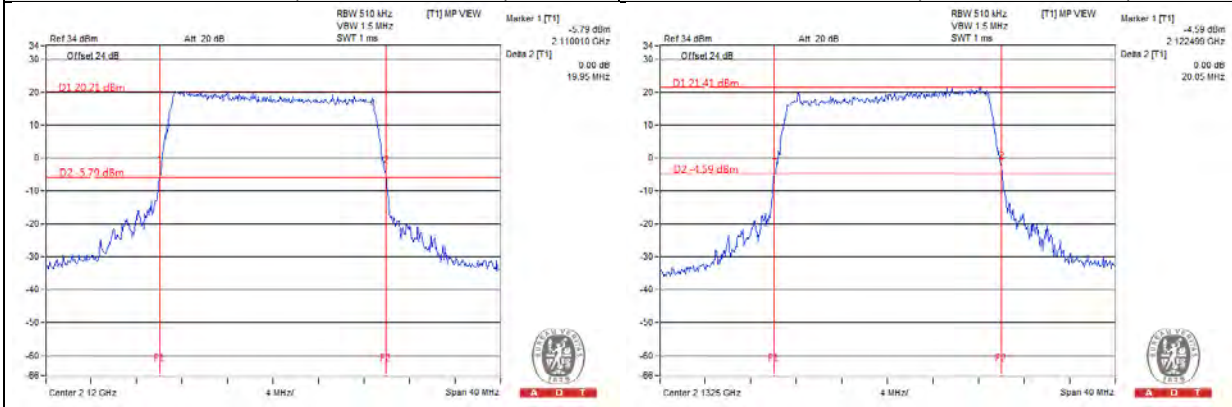
Channel Bandwidth: 15MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	15.13	15.02	15.15	15.12	15.06	15.05
2175	2132.5	15.19	15.05	14.86	15.09	15.06	15.09
2325	2147.5	14.92	14.91	15	15.01	14.95	14.8

-26dBc Bandwidth (MHz)  
Spectrum Plot of Worst Value



Channel Bandwidth: 20MHz							
Channel	Frequency (MHz)	-26dBc Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	19.95	20.03	19.97	19.9	19.92	19.87
2175	2132.5	19.9	19.77	19.98	19.94	20.05	19.87
2300	2145	19.76	19.67	19.81	19.73	19.5	19.62

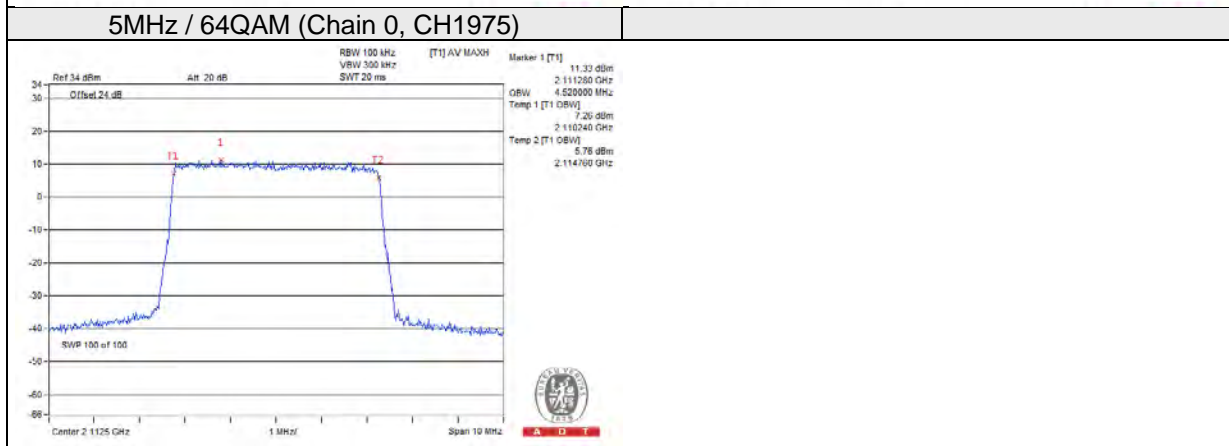
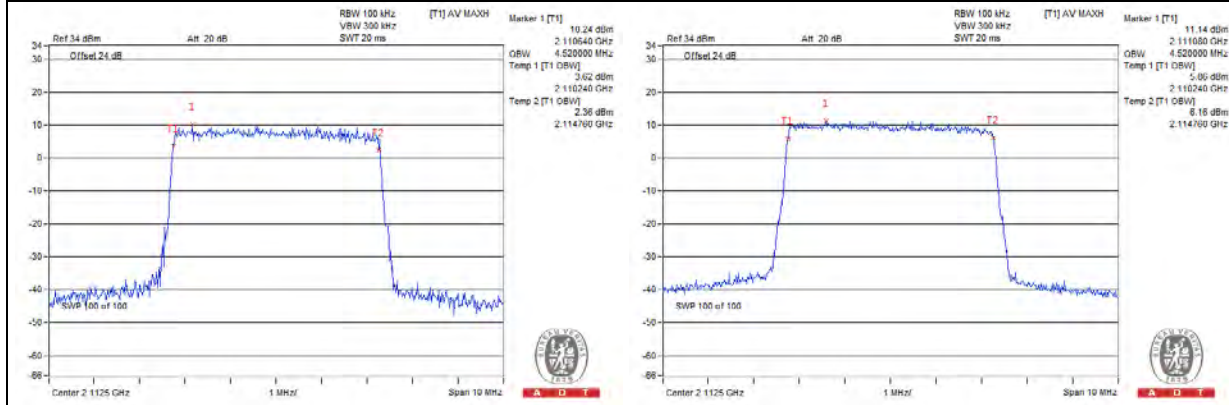
-26dBc Bandwidth (MHz)  
Spectrum Plot of Worst Value



### 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	4.52	4.52	4.50	4.52	4.52	4.52
2375	2152.5	4.50	4.50	4.50	4.50	4.50	4.50

### Occupied Bandwidth Spectrum Plot of Worst Value



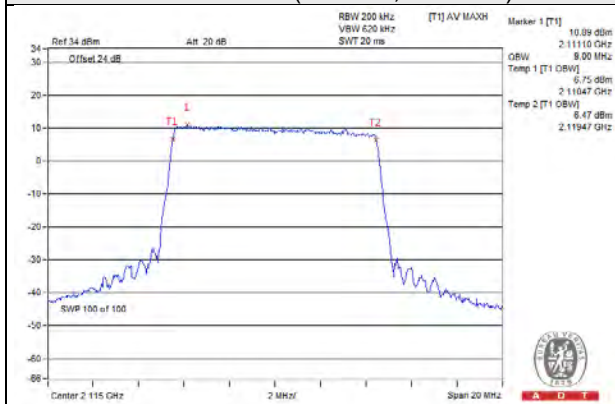
Channel Bandwidth: 10MHz

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

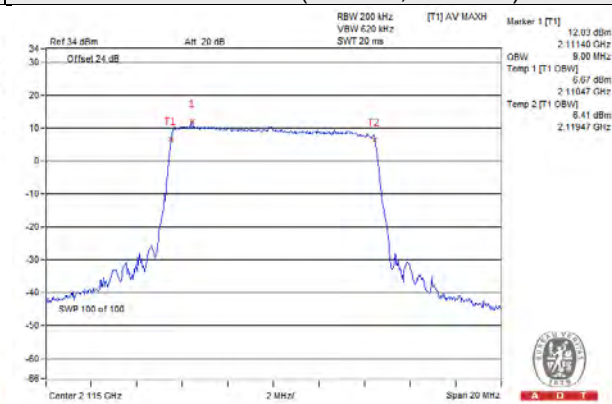
Occupied Bandwidth

Spectrum Plot of Worst Value

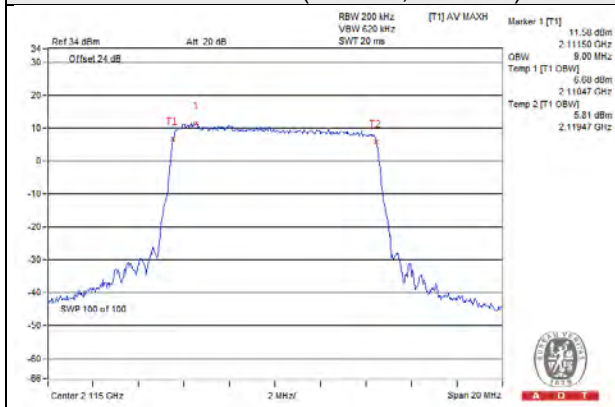
10MHz / QPSK(Chain 1, CH2000)



10MHz / 16QAM(Chain 1, CH2000)



10MHz / 64QAM(Chain 0, CH2000)





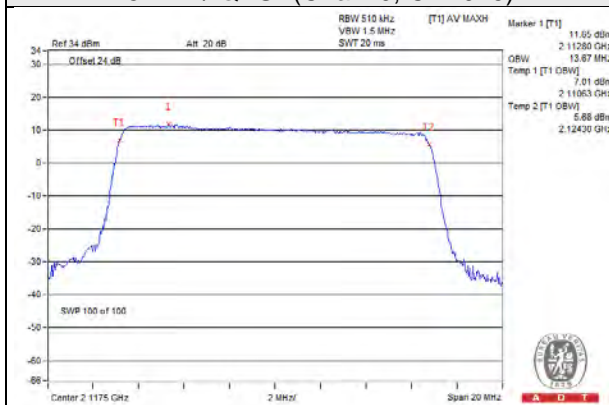
Channel Bandwidth: 15MHz

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

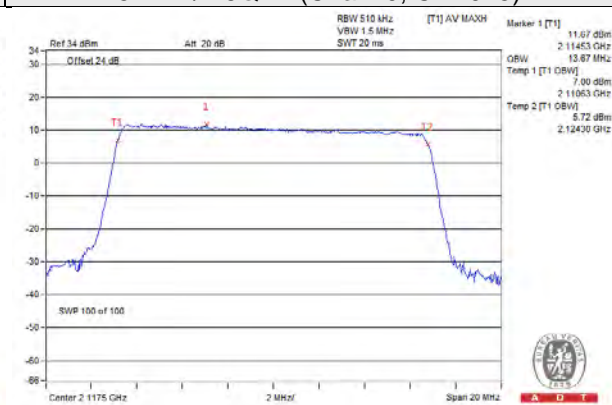
Occupied Bandwidth

Spectrum Plot of Worst Value

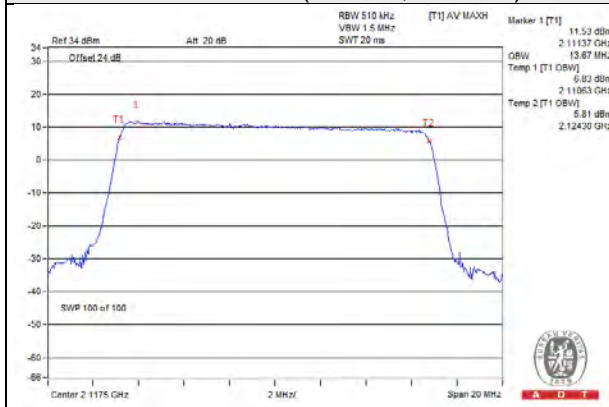
15MHz / QPSK(Chain 0, CH2025)



15MHz / 16QAM(Chain 0, CH2025)



15MHz / 64QAM(Chain 0, CH2025)



Channel Bandwidth: 20MHz

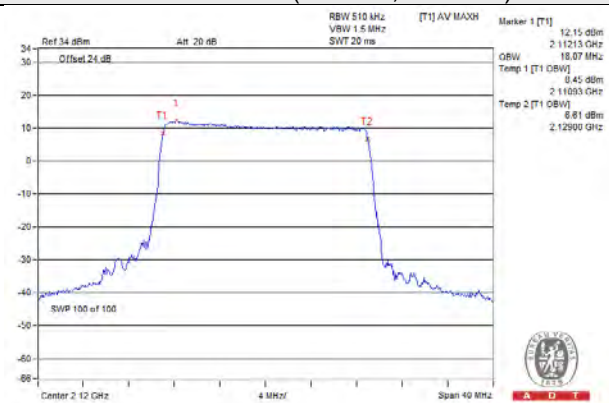
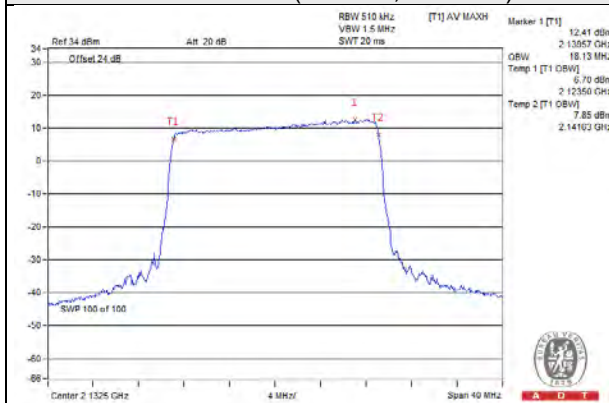
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	18.07	18.07	18.07	18.07	18.07	18.07
2175	2132.5	18.13	18.07	18.07	18.07	18.07	18.07
2300	2145	17.87	17.87	17.87	17.87	17.87	17.87

Occupied Bandwidth

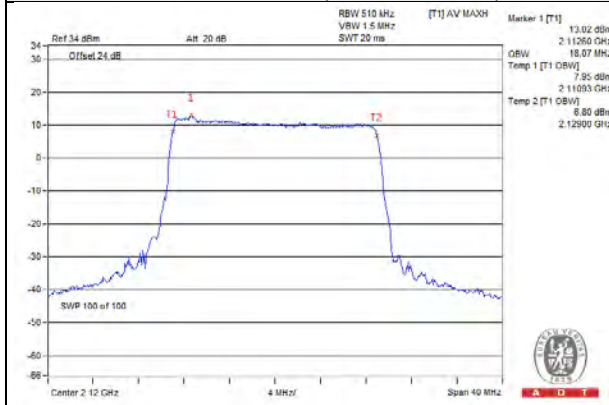
Spectrum Plot of Worst Value

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

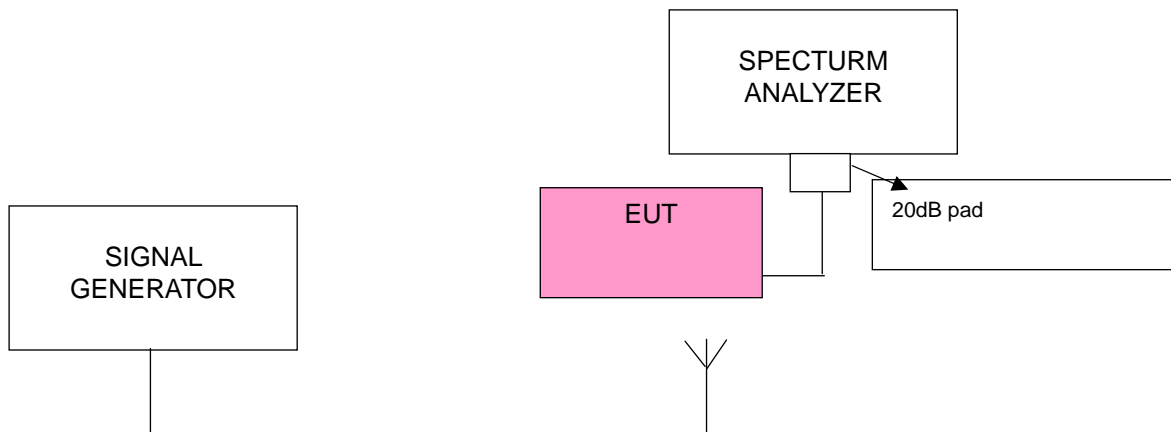
According to FCC 27.53(h) specified the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of 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  $-13\text{dBm} - 10 \cdot \log(2) = -16.01\text{dBm}$ .}

### 4.4.2 Test Setup

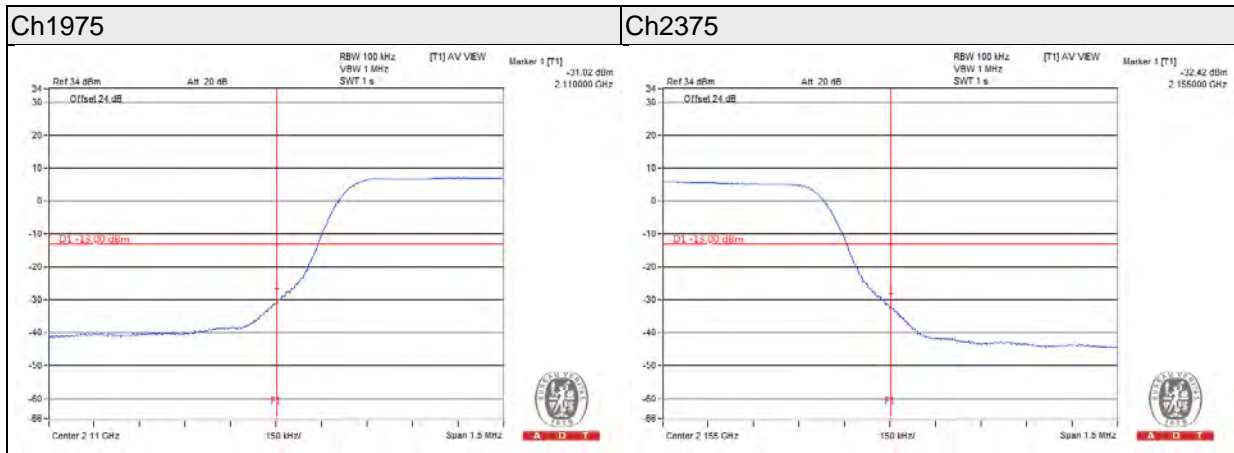


### 4.4.3 Test Procedures

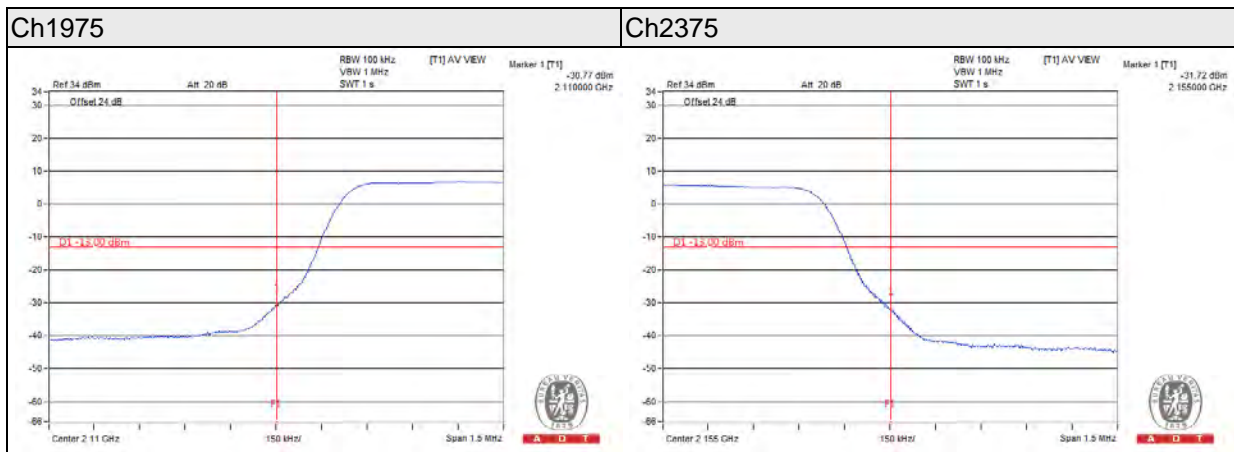
- The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels: low, middle and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 15MHz. RBW of the spectrum is 100kHz (Channel 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	-31.02	-16.01	-15.01	Pass
2155	-32.42	-16.01	-16.41	Pass



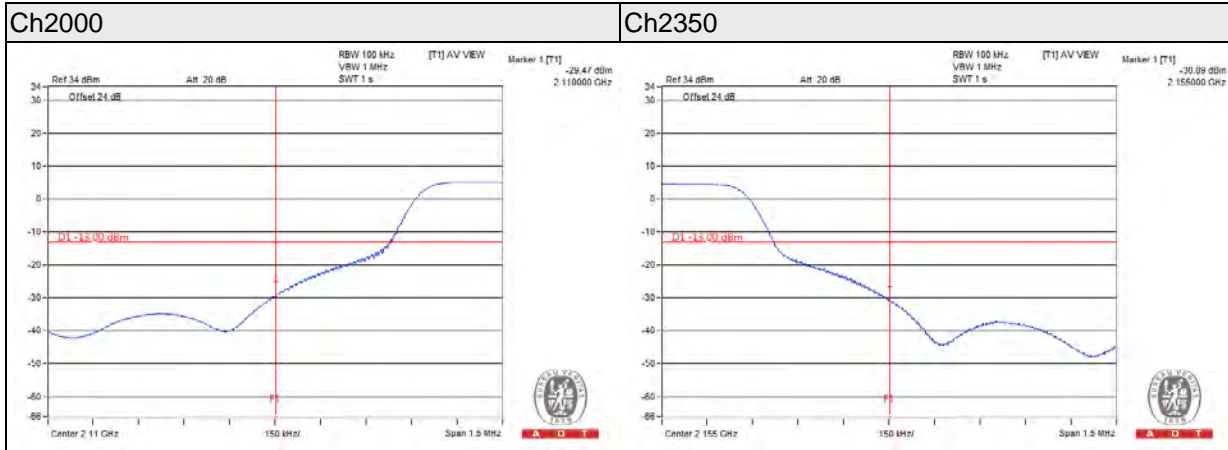
Chain 1				
QPSK / Channel Bandwidth: 5MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-30.77	-16.01	-14.76	Pass
2155	-31.72	-16.01	-15.71	Pass



**Chain 0**

QPSK / Channel Bandwidth: 10MHz

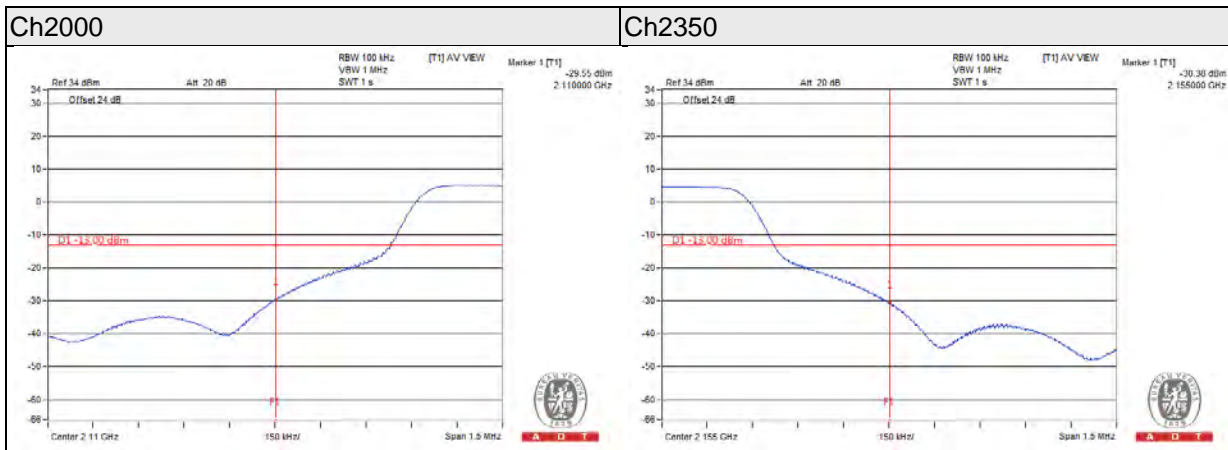
Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-29.47	-16.01	-13.46	Pass
2155	-30.89	-16.01	-14.88	Pass



**Chain 1**

QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-29.55	-16.01	-13.54	Pass
2155	-30.38	-16.01	-14.37	Pass



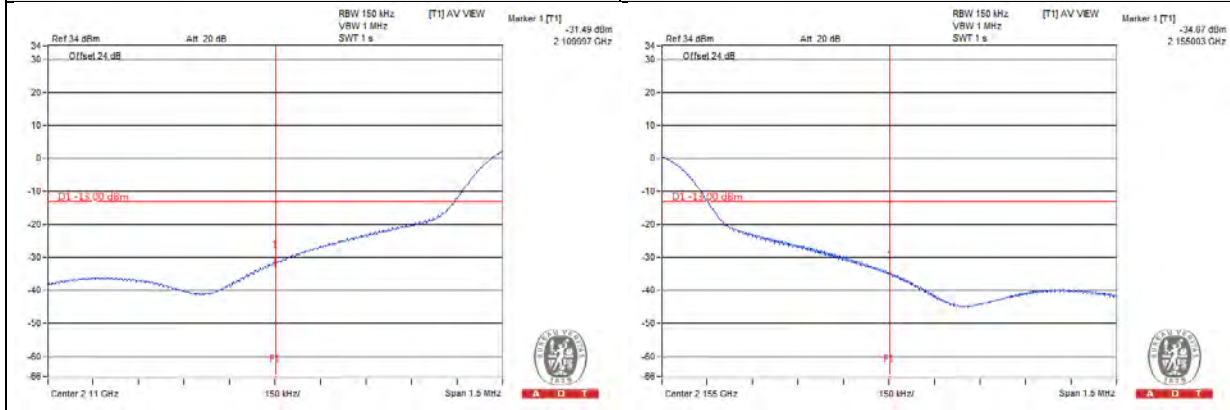
**Chain 0**

QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-31.49	-16.01	-15.48	Pass
2155	-34.67	-16.01	-18.66	Pass

**Ch2025**

**Ch2325**



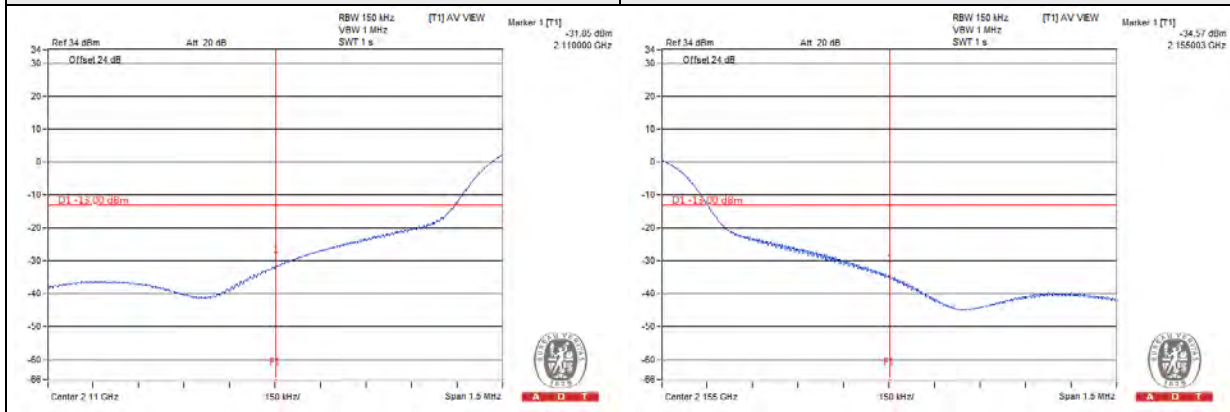
**Chain 1**

QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-31.85	-16.01	-15.84	Pass
2155.01	-34.57	-16.01	-18.56	Pass

**Ch2025**

**Ch2325**



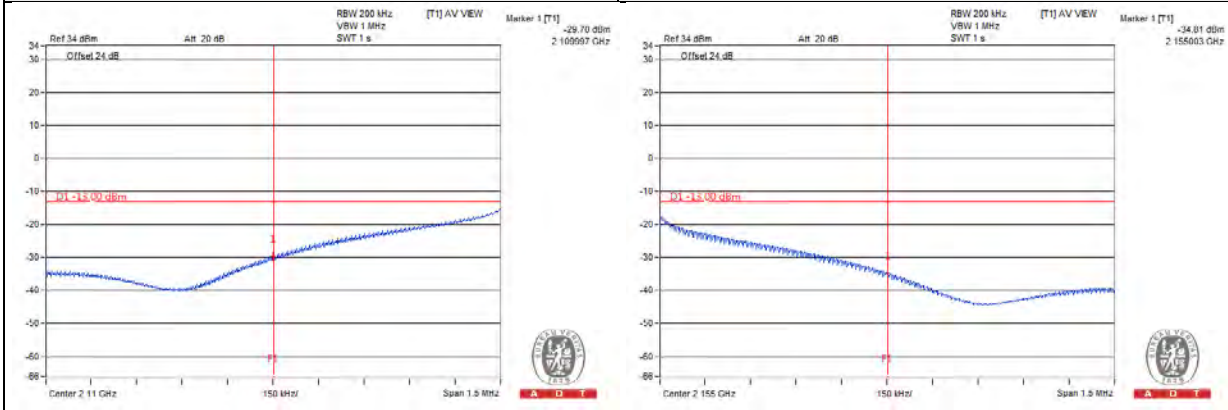
**Chain 0**

QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2109.99	-29.7	-16.01	-13.69	Pass
2155	-34.81	-16.01	-18.8	Pass

**Ch2050**

**Ch2300**



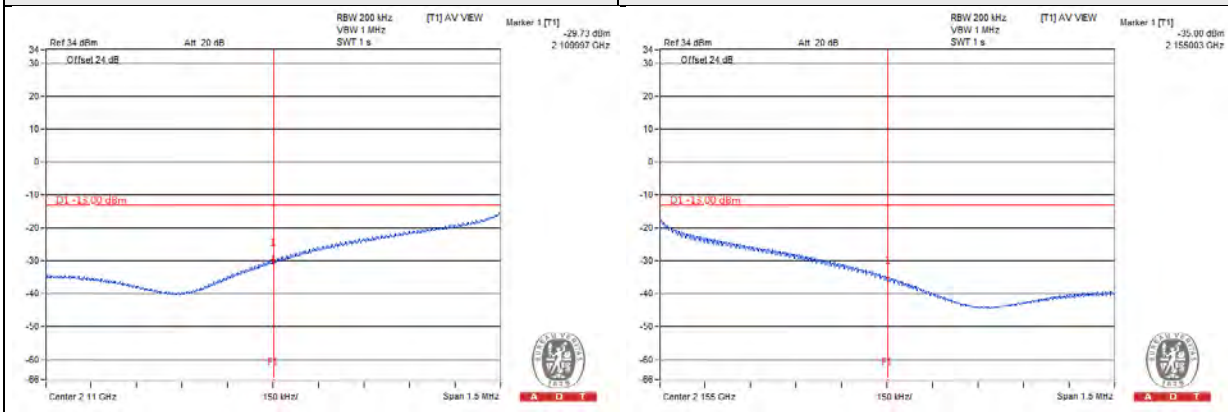
**Chain 1**

QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
2110	-29.73	-16.01	-13.72	Pass
2155.01	-35	-16.01	-18.99	Pass

**Ch2050**

**Ch2300**

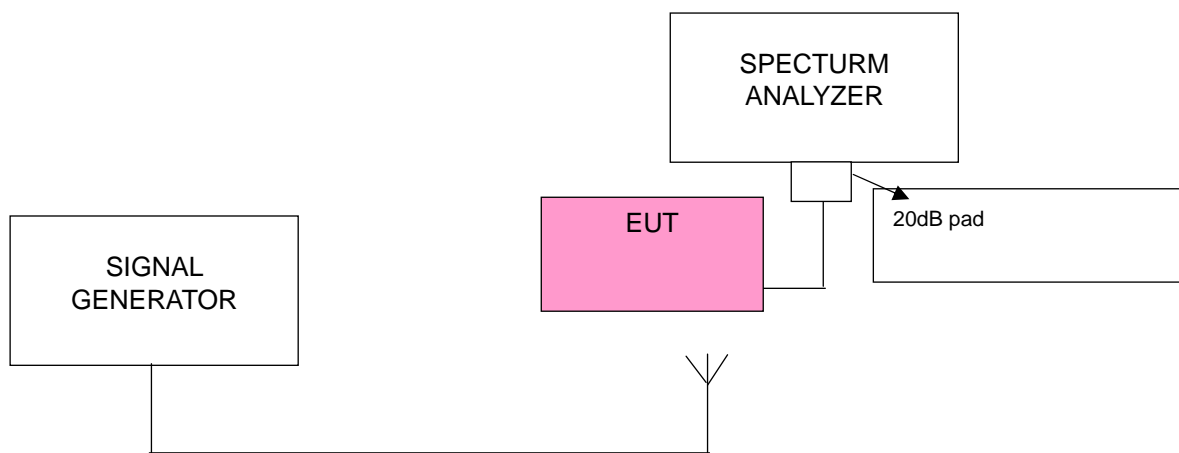


## 4.5 Peak to Average Ratio

### 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

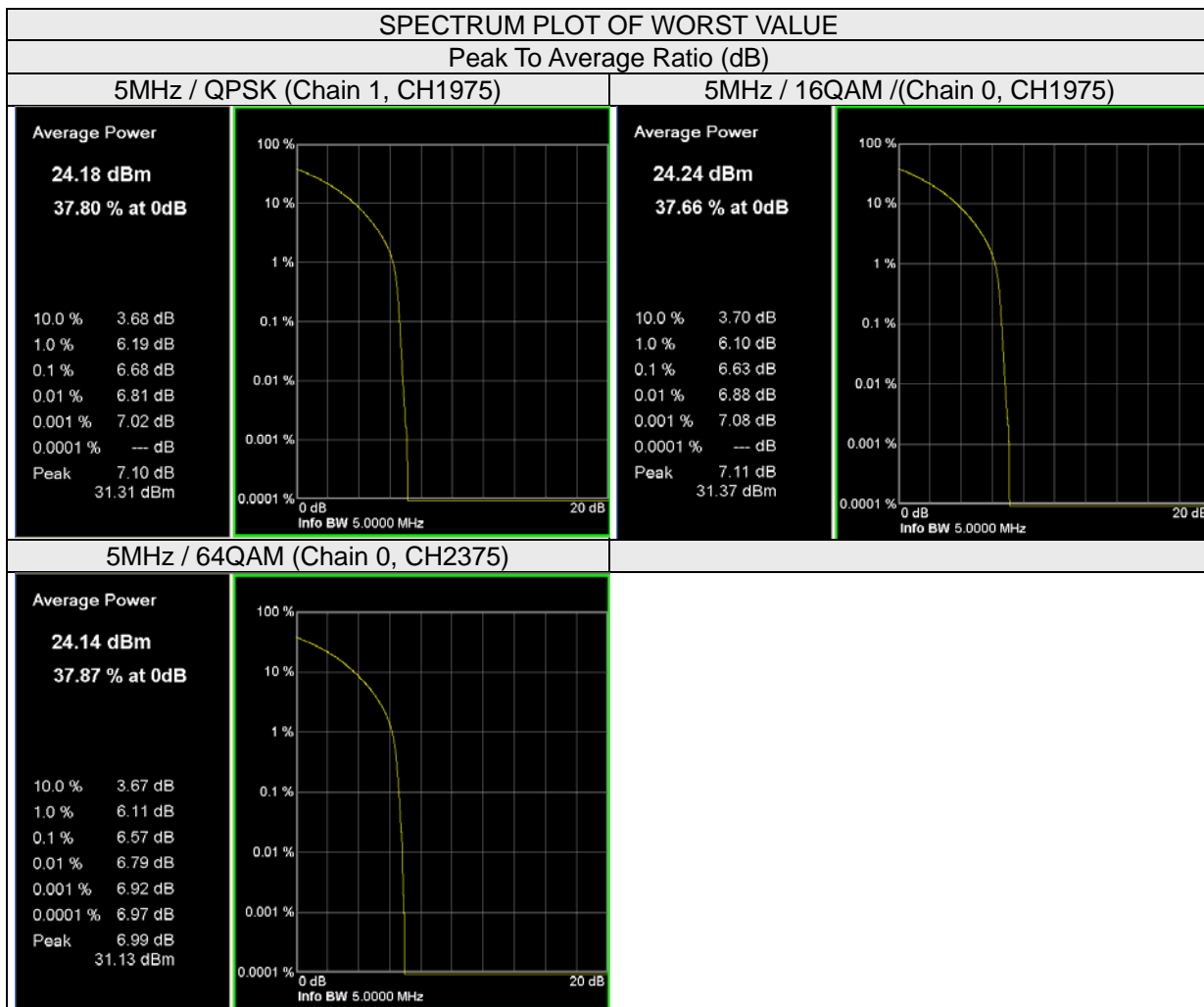


### 4.5.3 Test Procedures

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	6.62	6.59	6.5	6.68	6.63	6.66
2175	2132.5	6.54	6.62	6.56	6.54	6.52	6.56
2375	2152.5	6.58	6.52	6.57	6.62	6.57	6.56



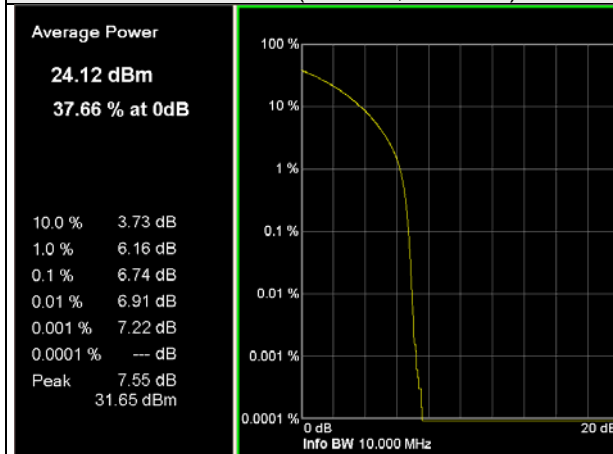
Channel Bandwidth: 10MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115	6.66	6.71	6.71	6.74	6.71	6.79
2175	2132.5	6.66	6.64	6.68	6.56	6.66	6.66
2350	2150	6.67	6.66	6.68	6.67	6.66	6.66

SPECTRUM PLOT OF WORST VALUE

Peak To Average Ratio (dB)

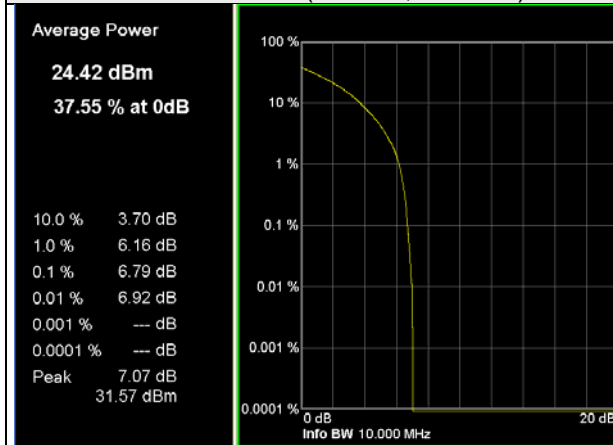
10MHz / QPSK (Chain 1, CH2000)



10MHz / 16QAM ((Chain 0, CH2000)



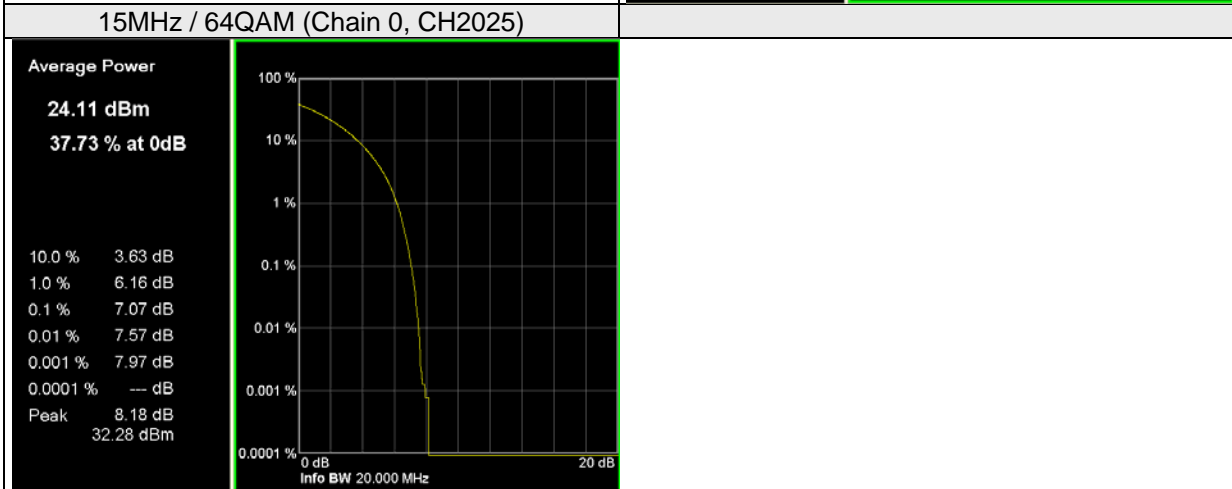
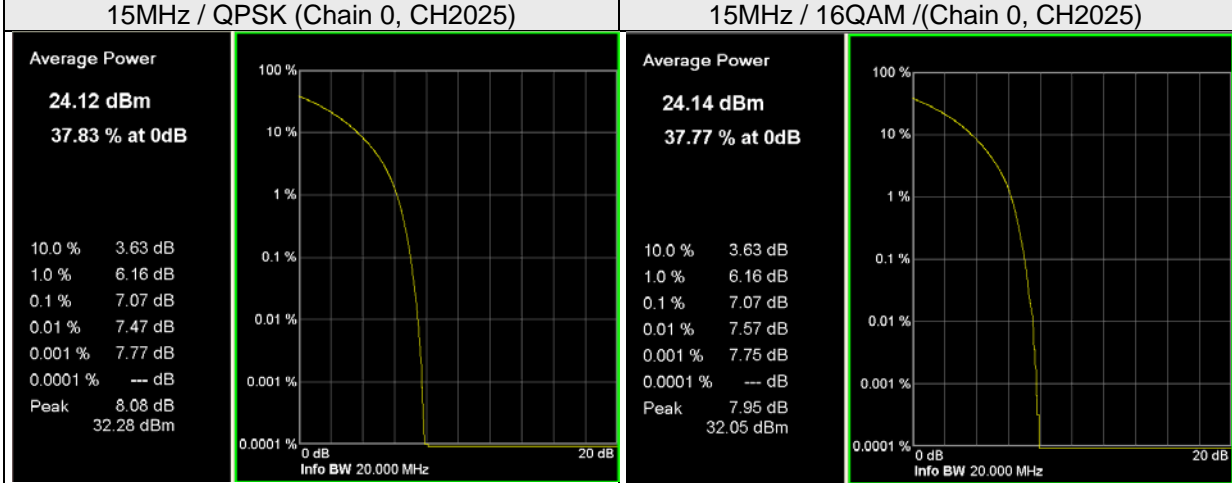
10MHz / 64QAM (Chain 1, CH2000)





Channel Bandwidth: 15MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	7.07	7.07	7.07	7.07	7.07	7.05
2175	2132.5	6.96	6.96	6.96	6.96	6.96	6.96
2325	2147.5	6.96	6.96	6.96	6.95	6.96	6.86

**SPECTRUM PLOT OF WORST VALUE**  
Peak To Average Ratio (dB)



Channel Bandwidth: 20MHz

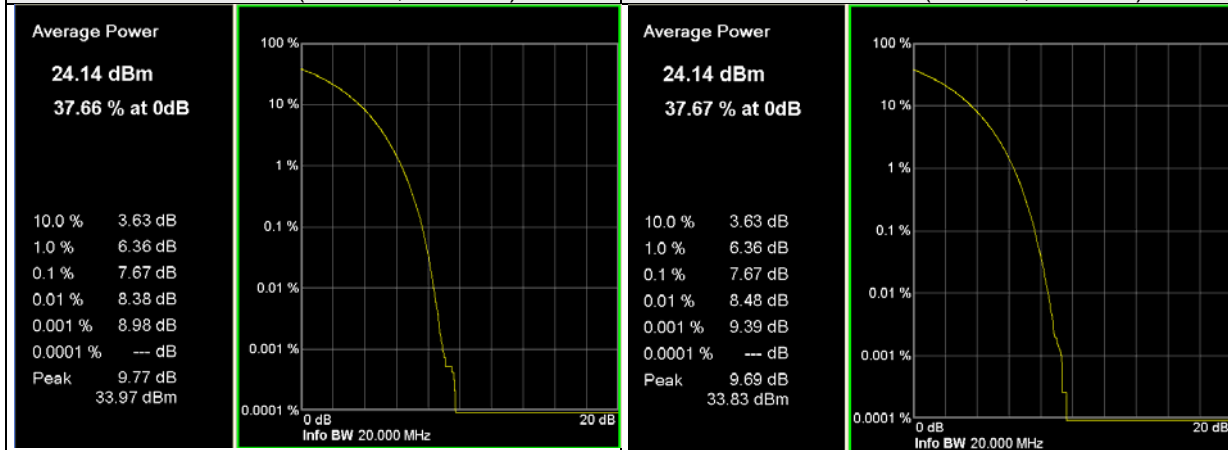
Channel	Frequency (MHz)	Peak To Average Ratio (dB)					
		Chain0			Chain1		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120	7.67	7.67	7.64	7.67	7.67	7.62
2175	2132.5	7.57	7.67	7.58	7.55	7.57	7.68
2300	2145	7.57	7.62	7.64	7.57	7.58	7.68

SPECTRUM PLOT OF WORST VALUE

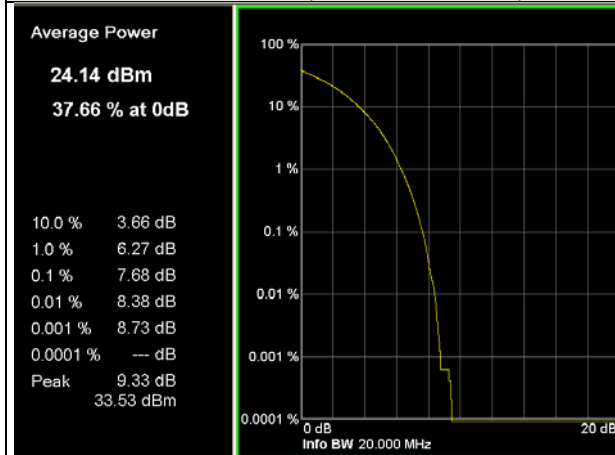
Peak To Average Ratio (dB)

20MHz / QPSK (Chain 1, CH2025)

20MHz / 16QAM /(Chain 0, CH2050)



20MHz / 64QAM (Chain 1, CH2175)



## 4.6 Conducted Spurious Emissions

### 4.6.1 Limits of Conducted Spurious Emissions Measurement

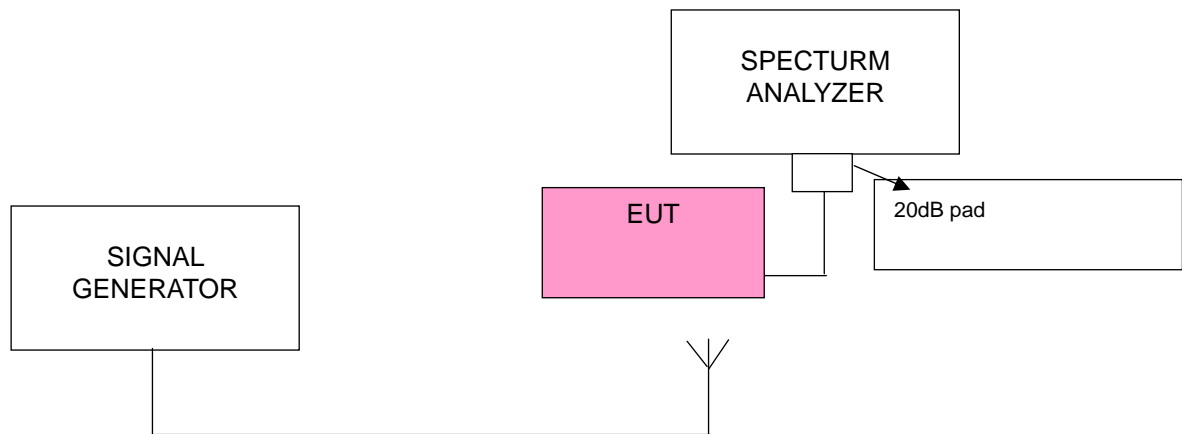
In the FCC 27.53(h), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB, the emission limit equal to  $-13\text{dBm}$ .

Note:

This device can be implemenet 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



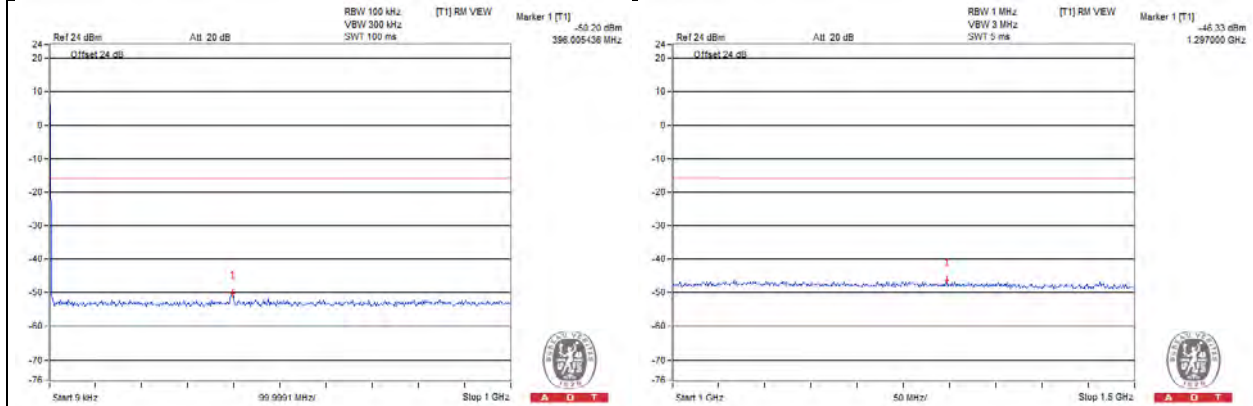
### 4.6.3 Test Procedure

- 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.

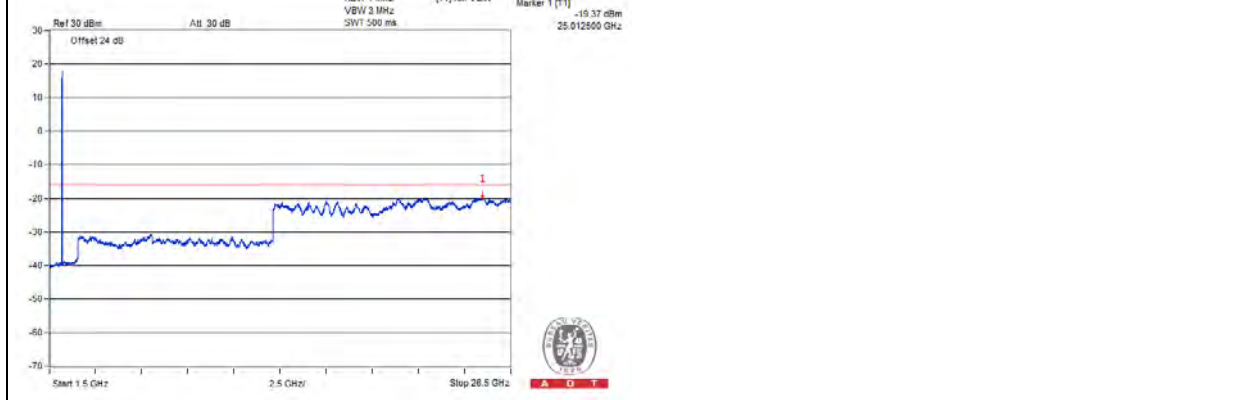
#### 4.6.4 Test Results (With POE)

Chain 0				
QPSK / Channel Bandwidth: 5MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.20	-16.01	-34.19	Pass
1297	-46.33	-16.01	-30.32	Pass
25012.5	-19.37	-16.01	-3.36	Pass

Channel 1975	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
-----------------------------------



**Chain 1**

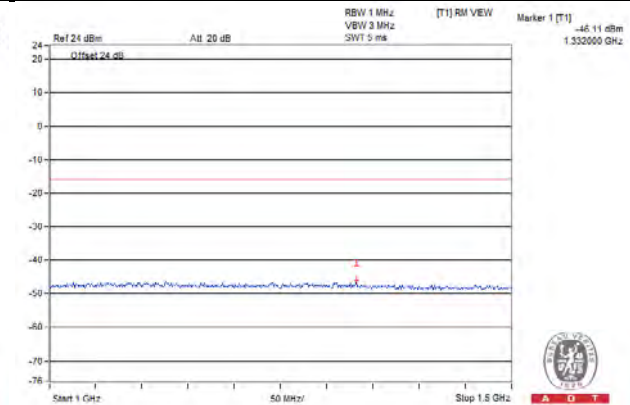
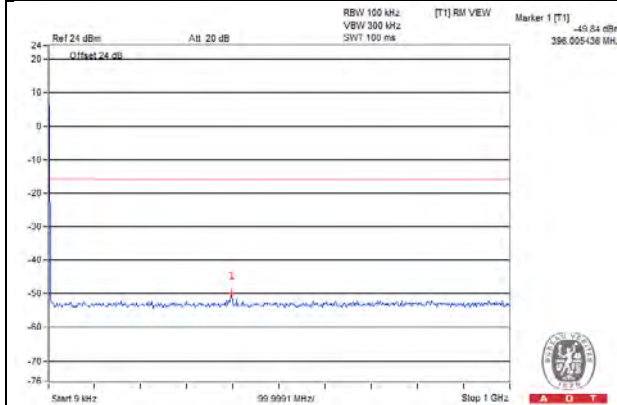
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.84	-16.01	-33.83	Pass
1332	-46.11	-16.01	-30.1	Pass
24981.25	-19.47	-16.01	-3.46	Pass

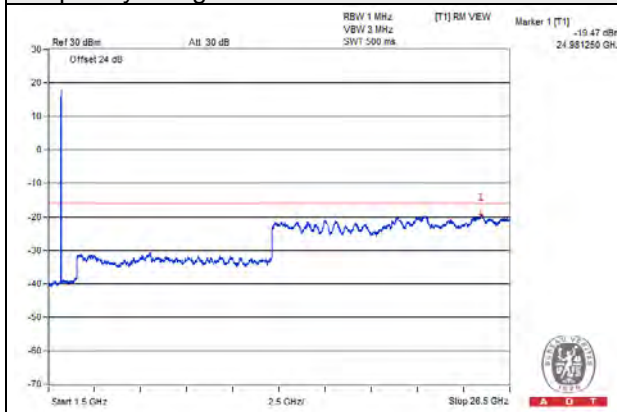
**Channel 1975**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

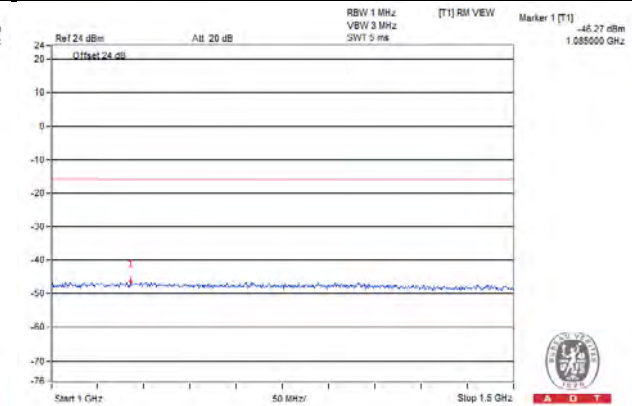
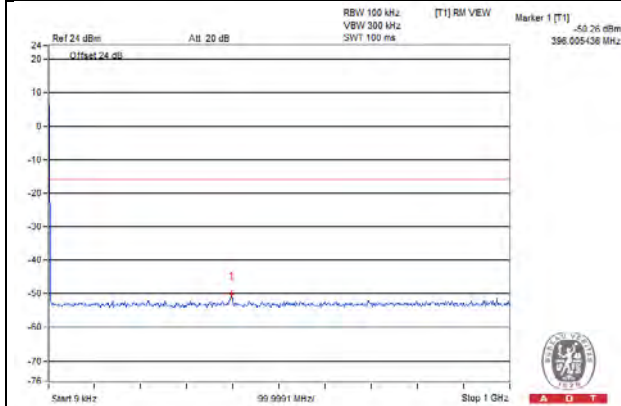
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.26	-16.01	-34.25	Pass
1085	-46.27	-16.01	-30.26	Pass
24987.5	-19.39	-16.01	-3.38	Pass

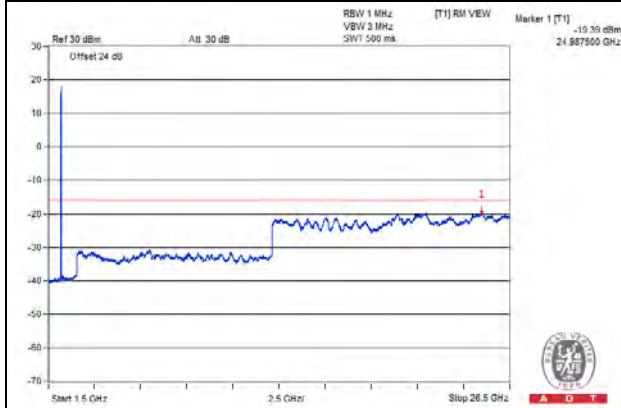
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

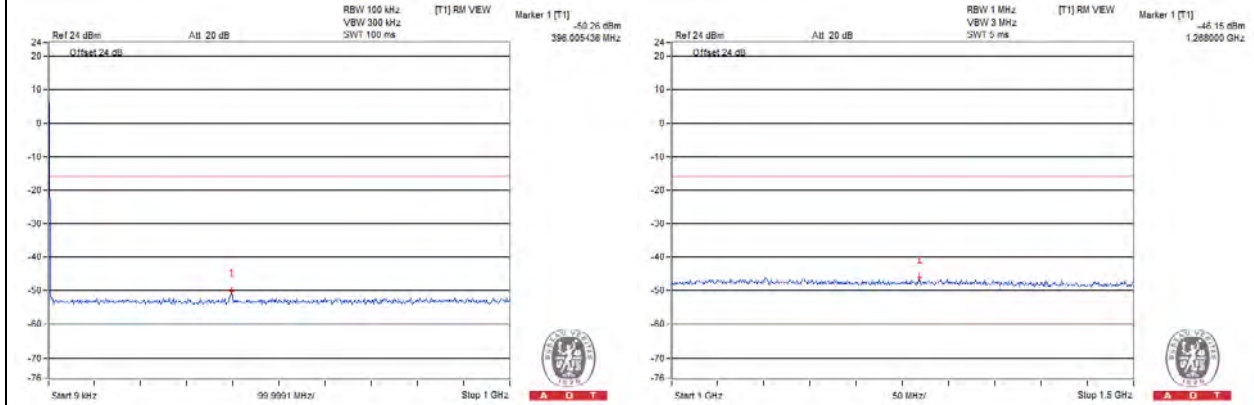


Frequency Range : 1.5GHz ~26.5GHz

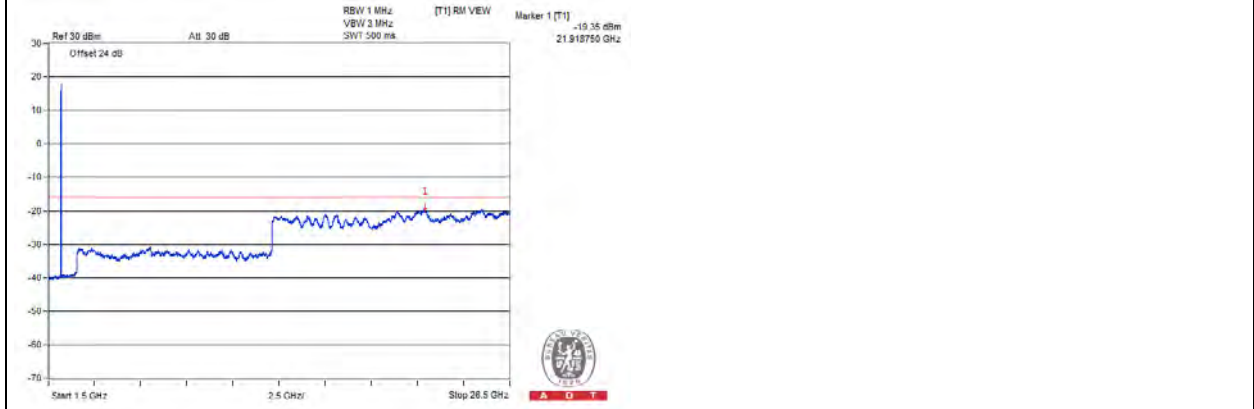


Chain 1				
QPSK / Channel Bandwidth: 5MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.26	-16.01	-34.25	Pass
1268	-46.15	-16.01	-30.14	Pass
21918.75	-19.35	-16.01	-3.34	Pass

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

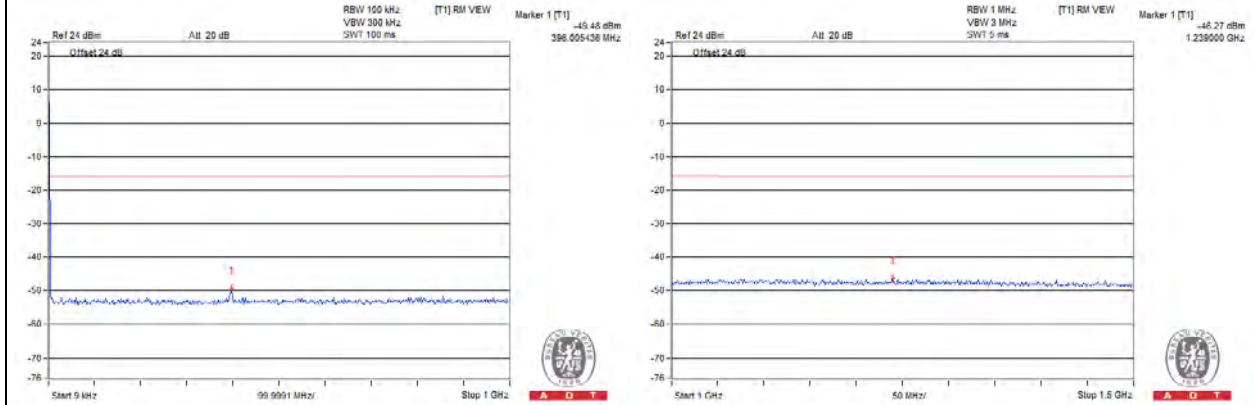


Frequency Range : 1.5GHz ~26.5GHz
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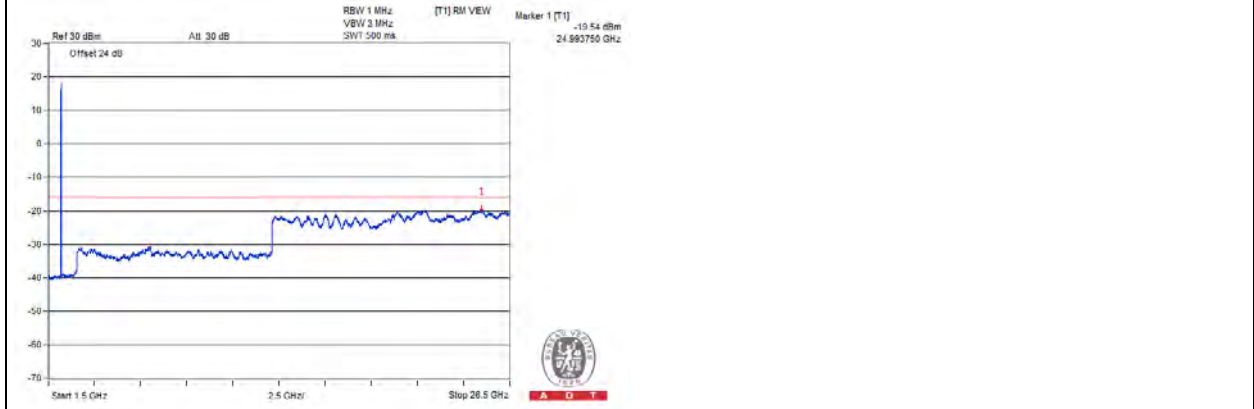


Chain 0				
QPSK / Channel Bandwidth: 5MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.48	-16.01	-33.47	Pass
1239	-46.27	-16.01	-30.26	Pass
24993.75	-19.54	-16.01	-3.53	Pass

Channel 2375	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
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**Chain 1**

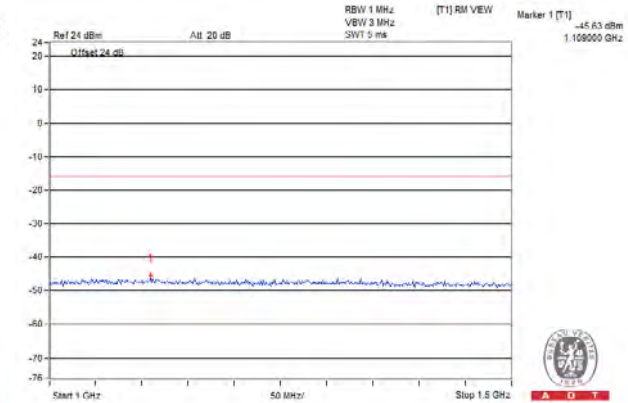
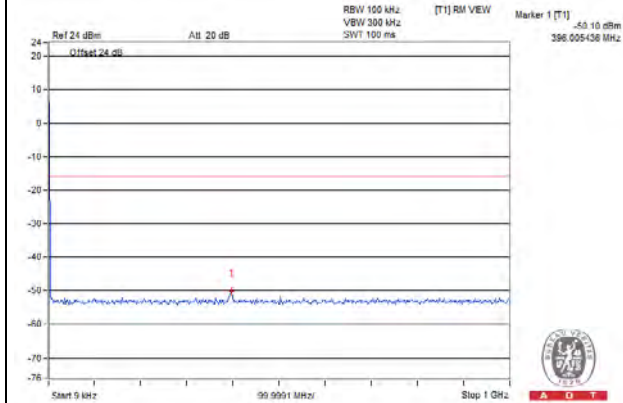
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.10	-16.01	-34.09	Pass
1109	-45.63	-16.01	-29.62	Pass
24943.75	-19.32	-16.01	-3.31	Pass

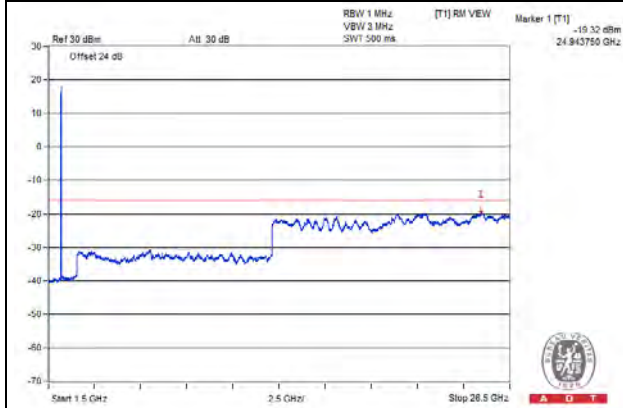
**Channel 2375**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

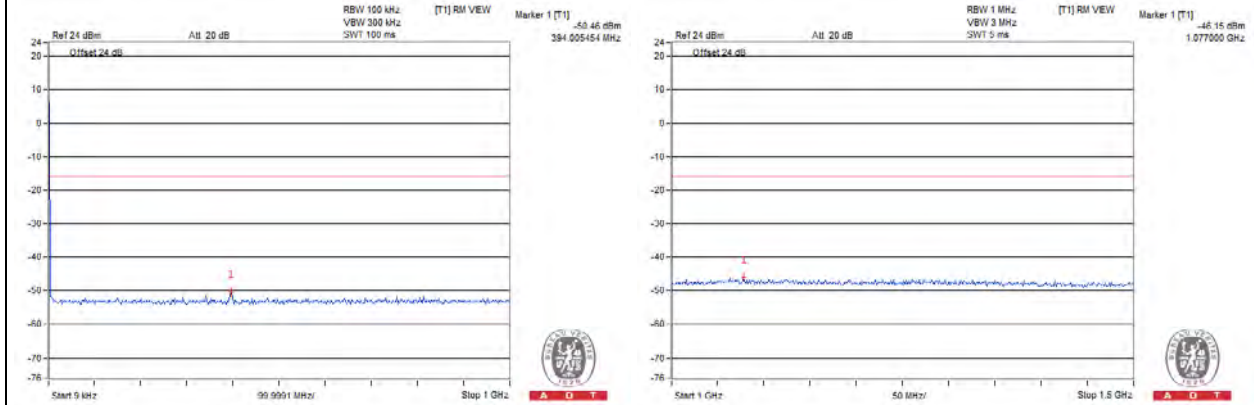


Frequency Range : 1.5GHz ~26.5GHz

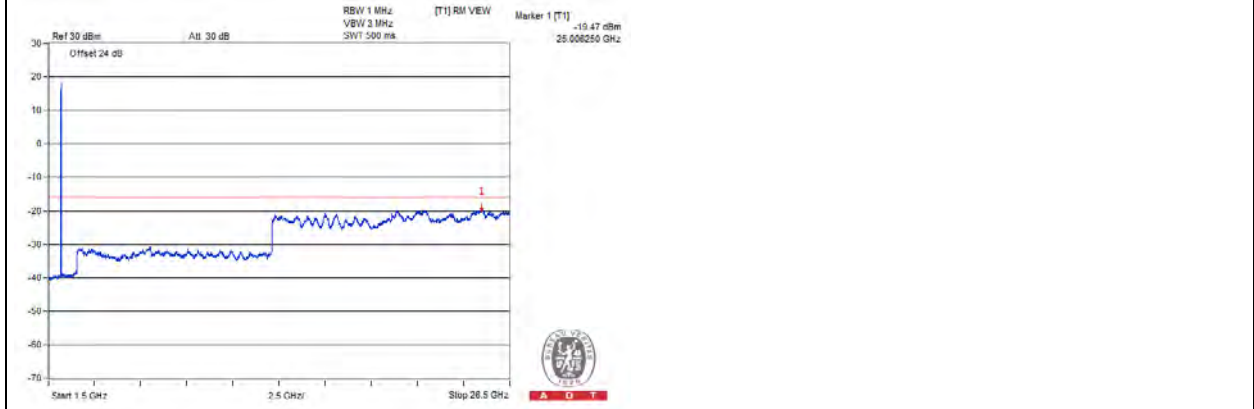


Chain 0				
QPSK / Channel Bandwidth: 10MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-50.46	-16.01	-34.45	Pass
1077	-46.15	-16.01	-30.14	Pass
25006.25	-19.47	-16.01	-3.46	Pass

Channel 2000
Frequency Range : 9kHz~1GHz
Frequency Range : 1GHz ~1.5GHz

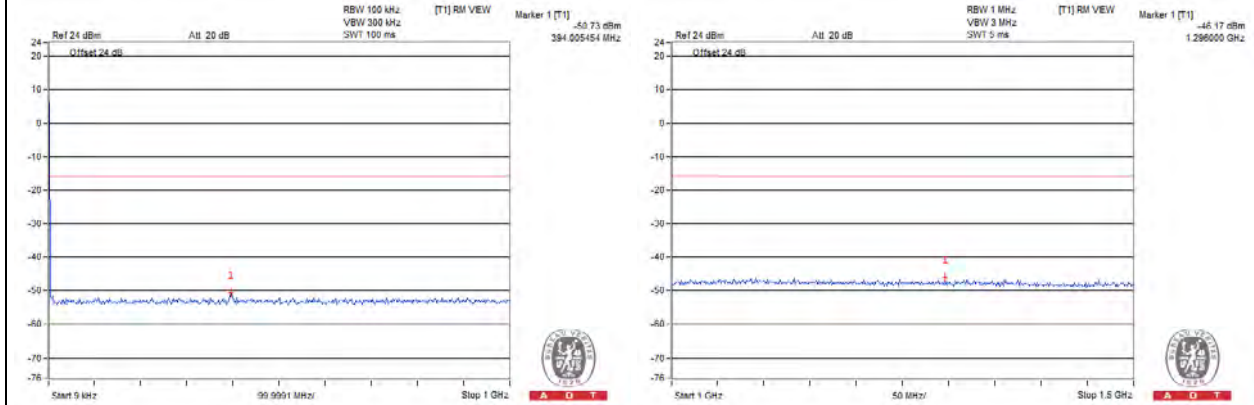


Frequency Range : 1.5GHz ~26.5GHz
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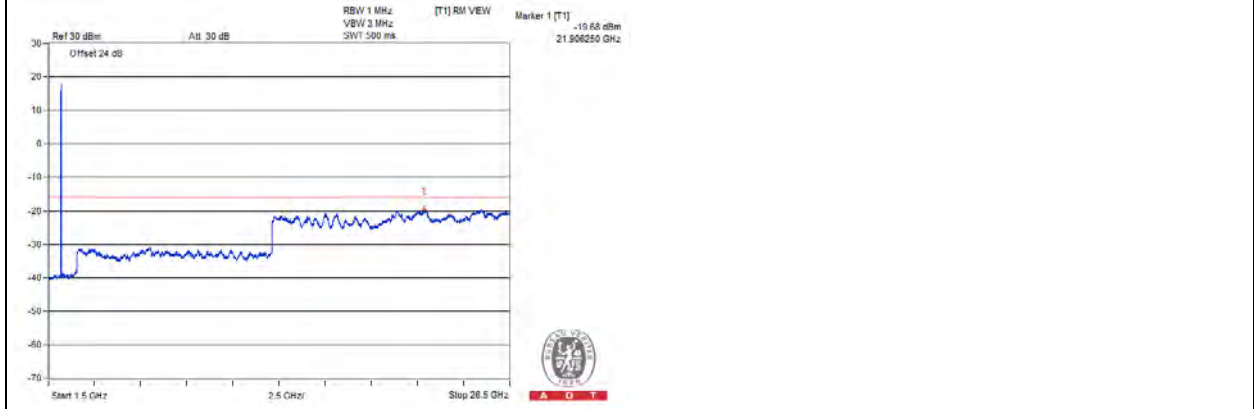


Chain 1				
QPSK / Channel Bandwidth: 10MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-50.73	-16.01	-34.72	Pass
1296	-46.17	-16.01	-30.16	Pass
21906.25	-19.68	-16.01	-3.67	Pass

Channel 2000	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
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**Chain 0**

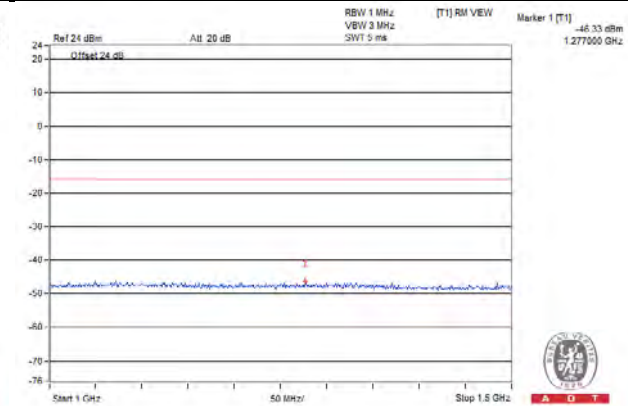
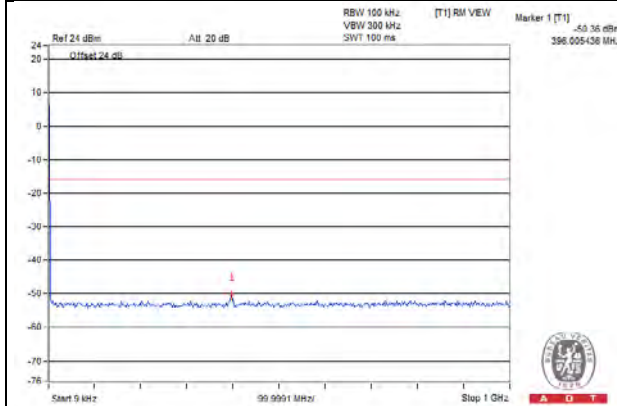
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.36	-16.01	-34.35	Pass
1277	-46.33	-16.01	-30.32	Pass
25087.5	-19.58	-16.01	-3.57	Pass

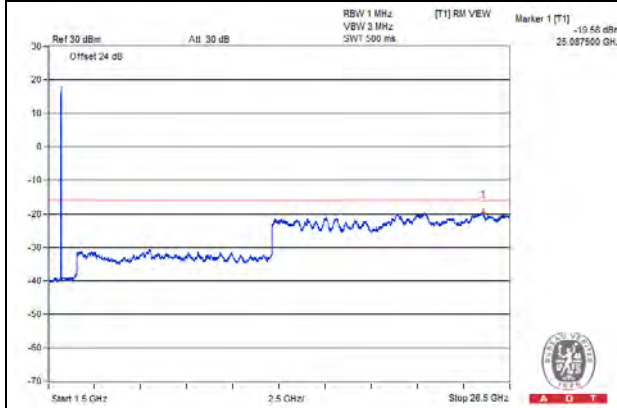
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

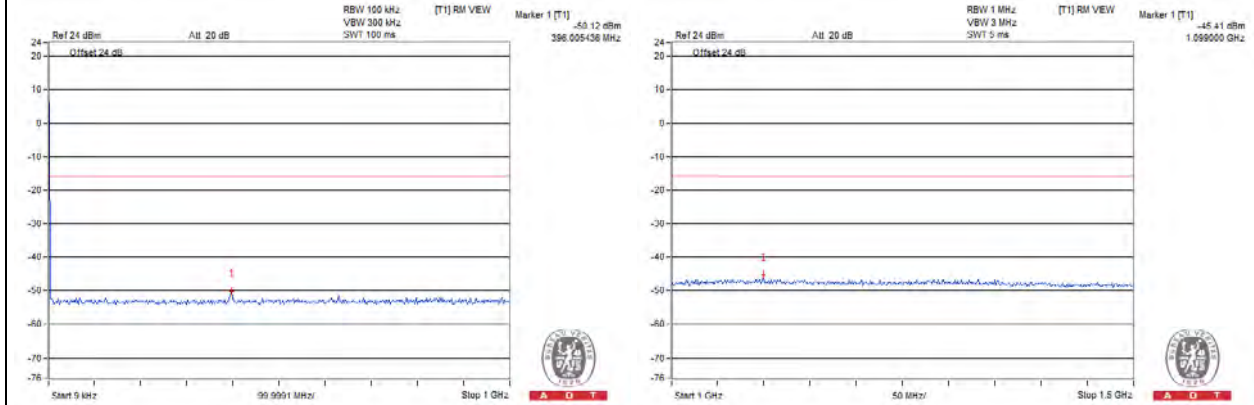


Frequency Range : 1.5GHz ~26.5GHz

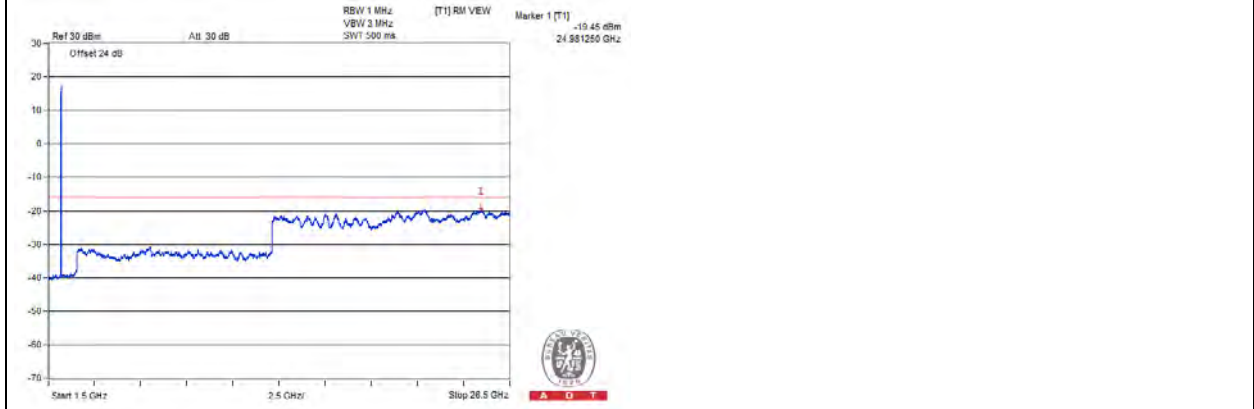


Chain 1				
QPSK / Channel Bandwidth: 10MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.12	-16.01	-34.11	Pass
1099	-45.41	-16.01	-29.4	Pass
24981.25	-19.45	-16.01	-3.44	Pass

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



Frequency Range : 1.5GHz ~26.5GHz
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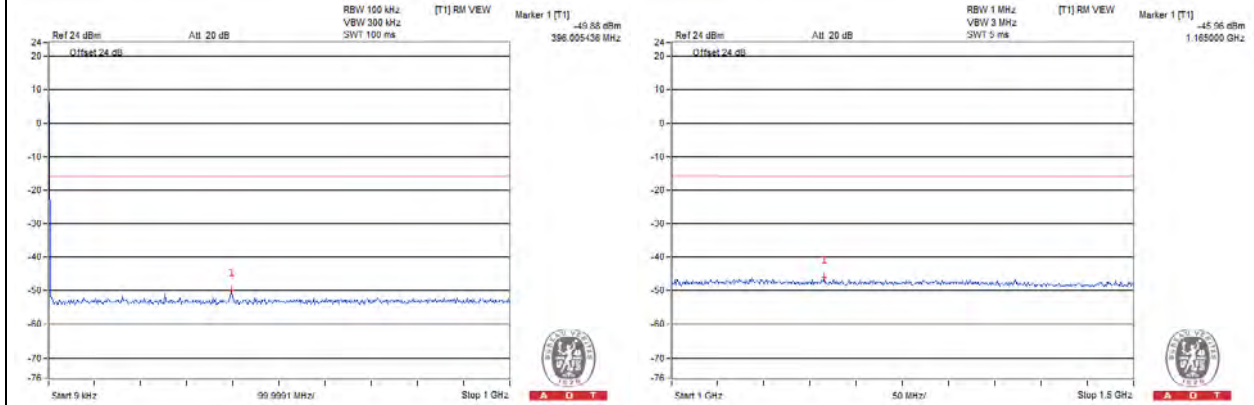
**Chain 0**

QPSK / Channel Bandwidth: 10MHz

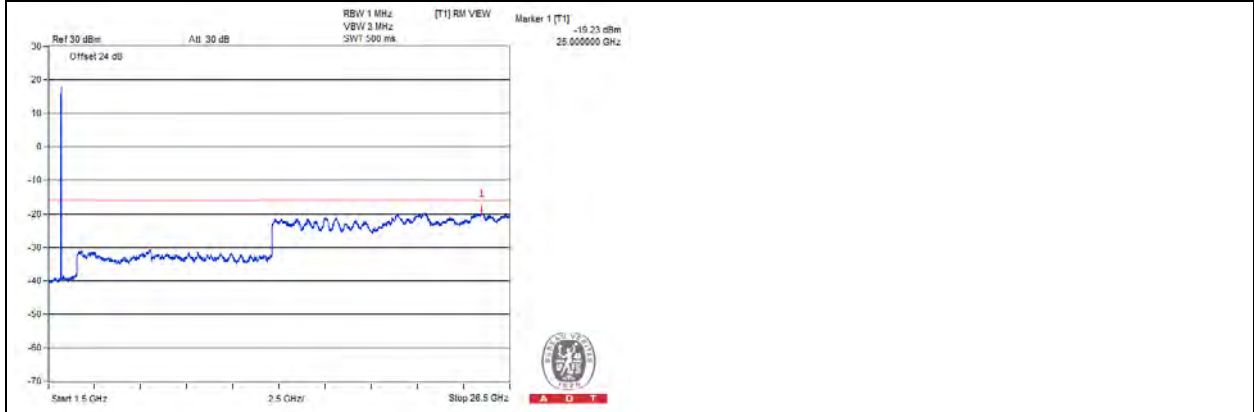
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.88	-16.01	-33.87	Pass
1165	-45.96	-16.01	-29.95	Pass
25000	-19.23	-16.01	-3.22	Pass

**Channel 2350**

Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz ~1.5GHz



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



**Chain 1**

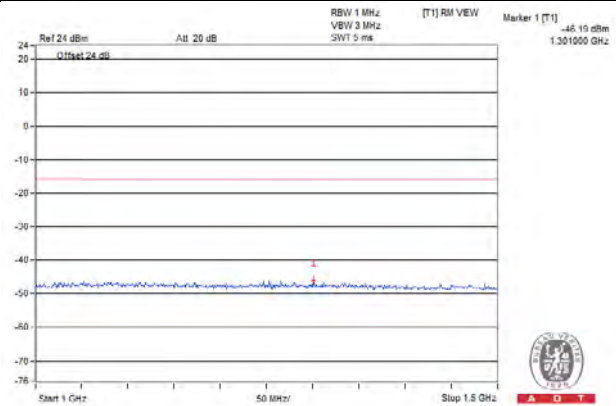
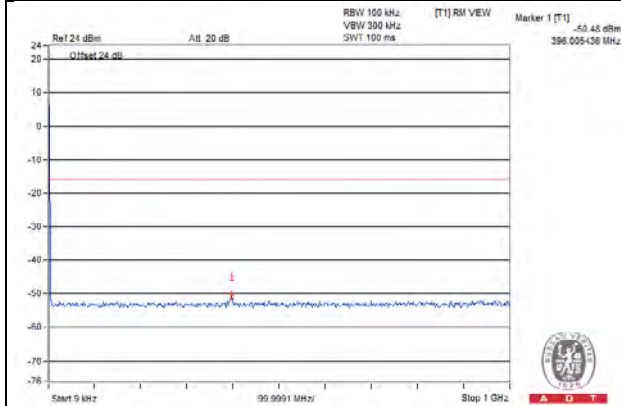
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.48	-16.01	-34.47	Pass
1301	-46.19	-16.01	-30.18	Pass
20393.75	-19.40	-16.01	-3.39	Pass

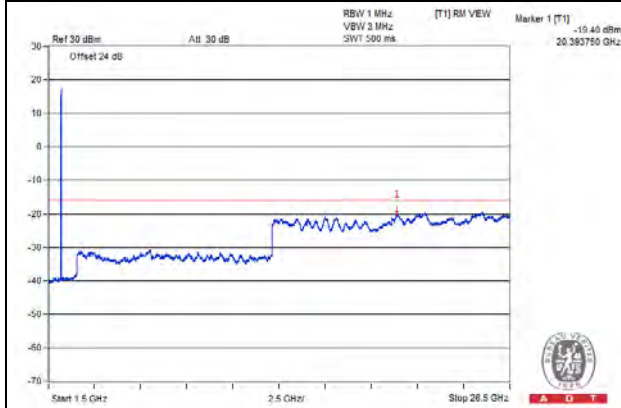
**Channel 2350**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

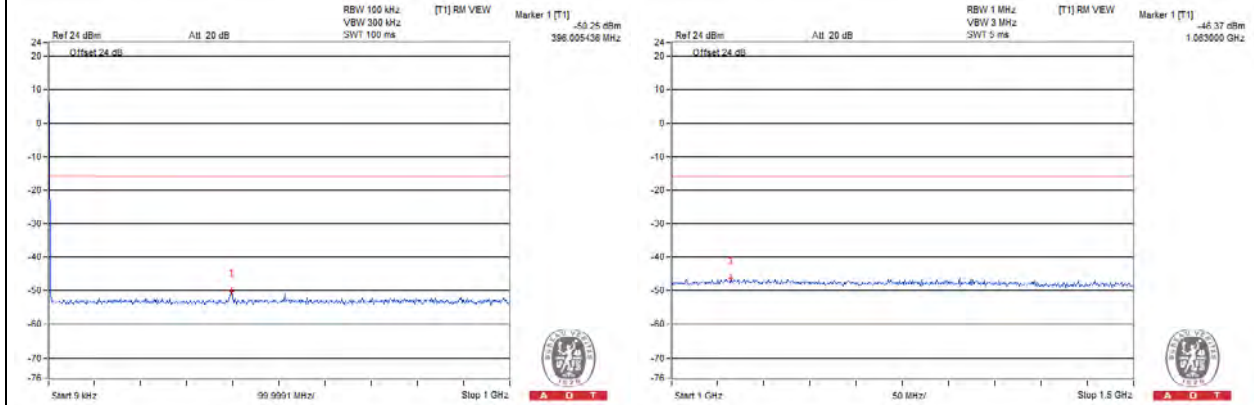


Frequency Range : 1.5GHz ~26.5GHz

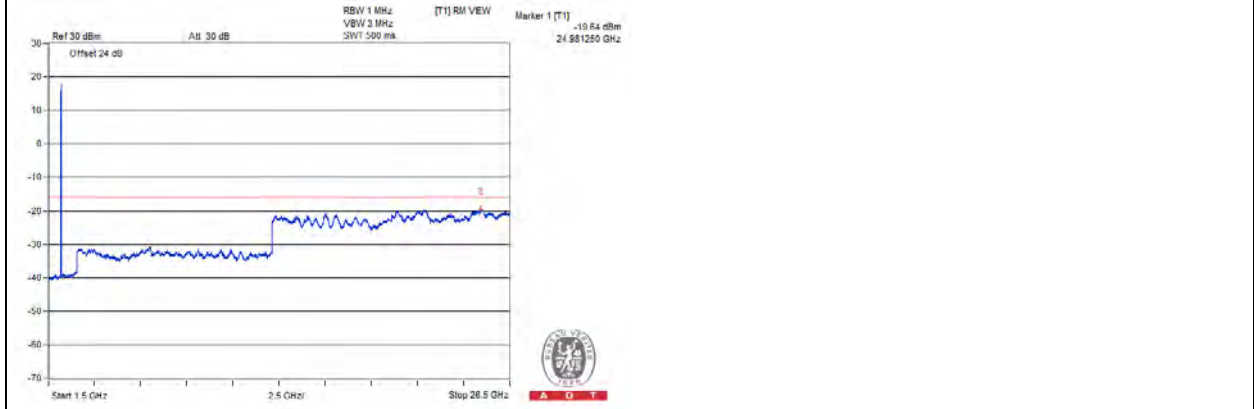


Chain 0				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.25	-16.01	-34.24	Pass
1063	-46.37	-16.01	-30.36	Pass
24981.25	-19.64	-16.01	-3.63	Pass

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



Frequency Range : 1.5GHz ~26.5GHz
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**Chain 1**

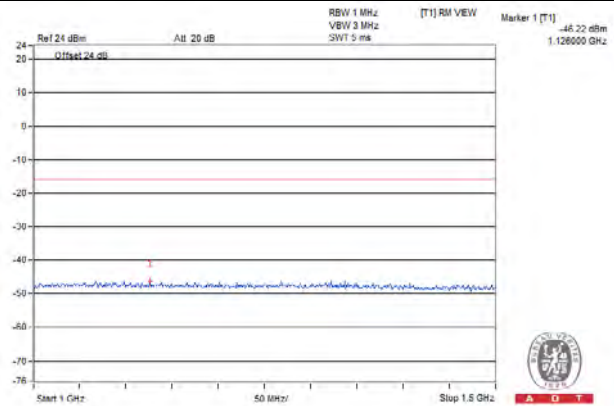
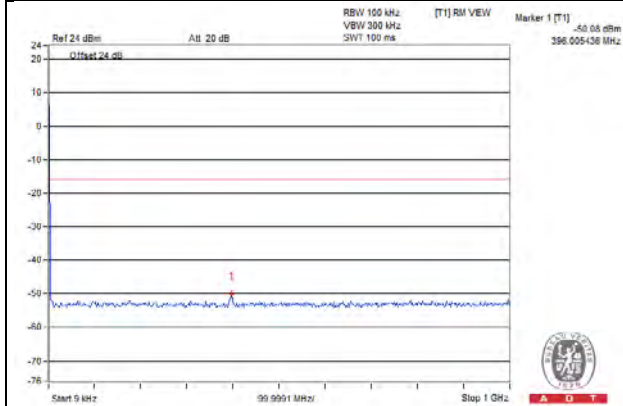
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.08	-16.01	-34.07	Pass
1126	-46.22	-16.01	-30.21	Pass
21912.5	-19.49	-16.01	-3.48	Pass

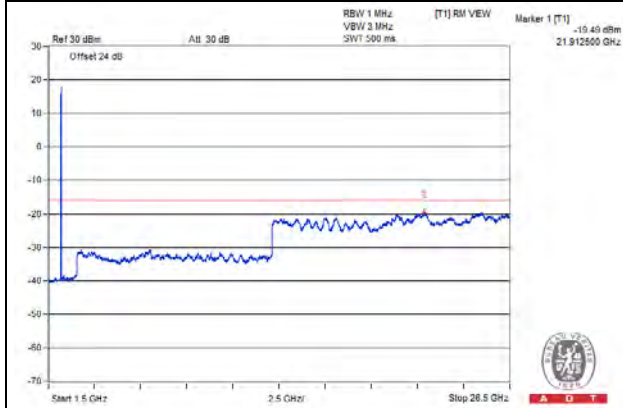
**Channel 2025**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

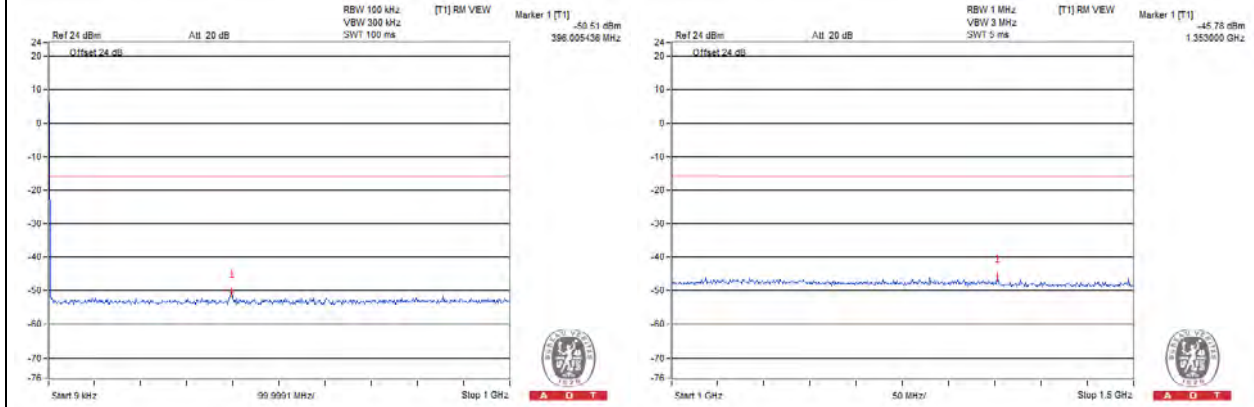


Frequency Range : 1.5GHz ~26.5GHz

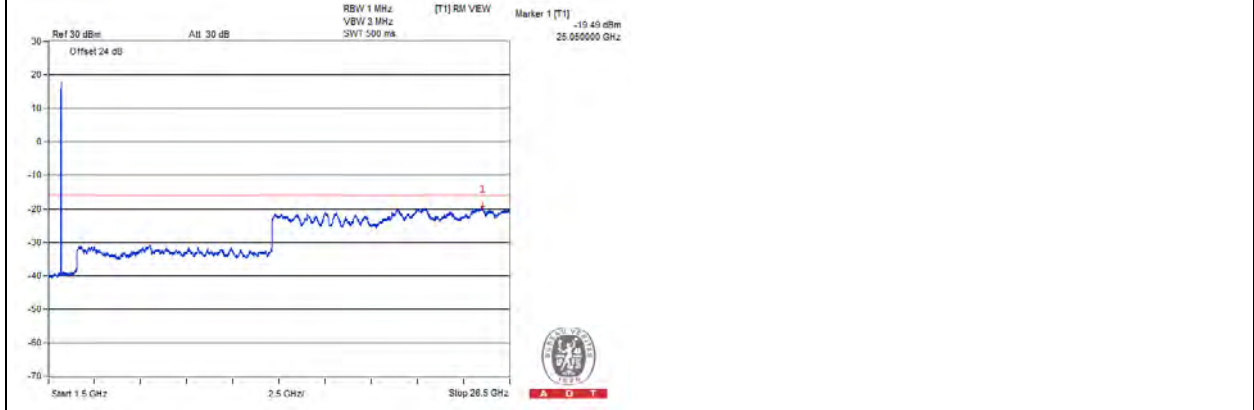


Chain 0				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.51	-16.01	-34.5	Pass
1353	-45.78	-16.01	-29.77	Pass
25050	-19.49	-16.01	-3.48	Pass

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



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



**Chain 1**

QPSK / Channel Bandwidth: 15MHz

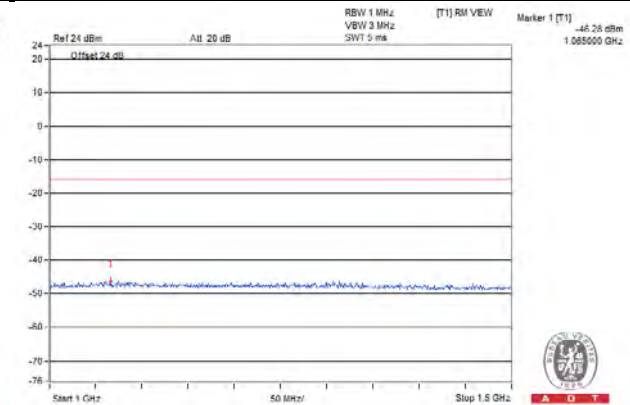
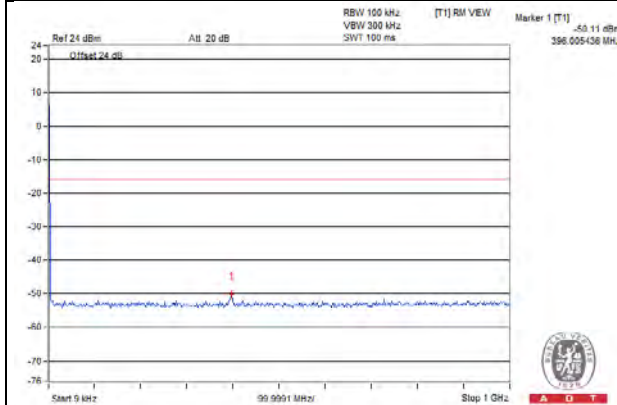
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.11	-16.01	-34.1	Pass
1065	-46.28	-16.01	-30.27	Pass
25056.25	-19.59	-16.01	-3.58	Pass

Channel Bandwidth:15MHz

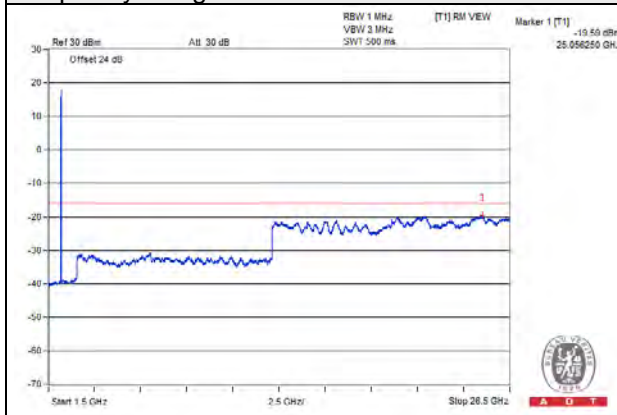
Channel 2175

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

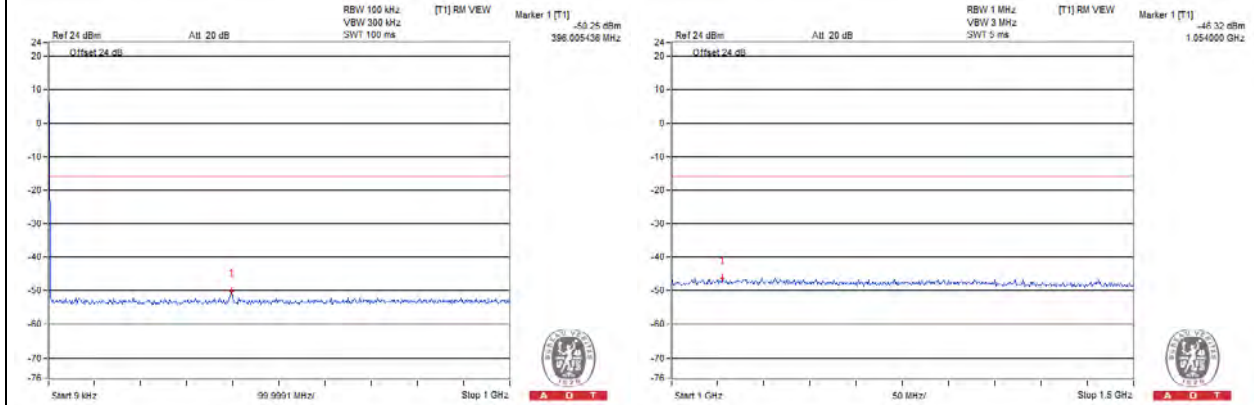


Frequency Range : 1.5GHz ~26.5GHz

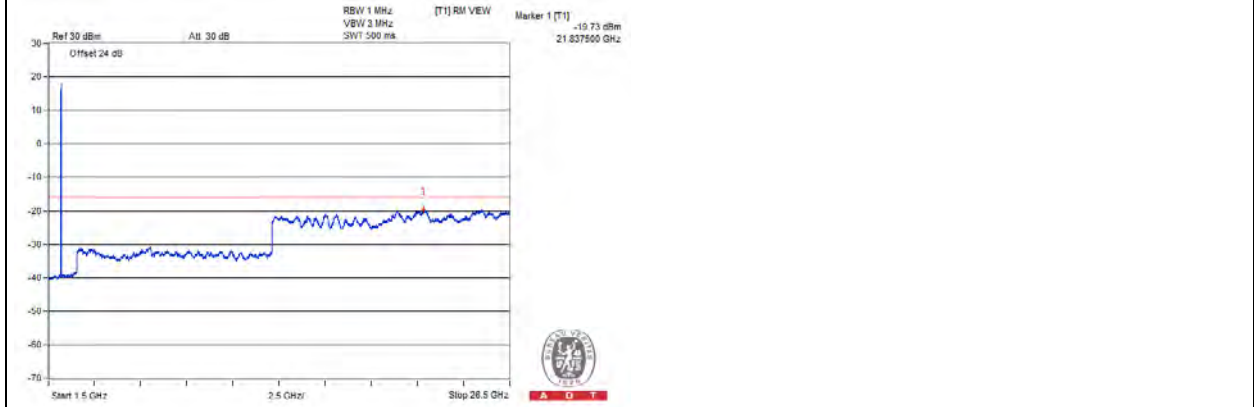


Chain 0				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.25	-16.01	-34.24	Pass
1054	-46.32	-16.01	-30.31	Pass
21837.5	-19.73	-16.01	-3.72	Pass

Channel 2325	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
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**Chain 1**

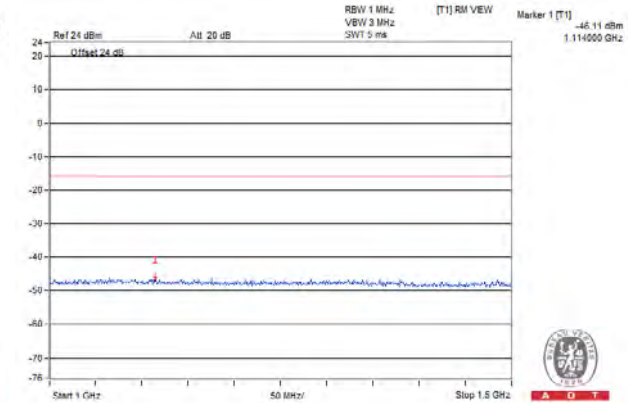
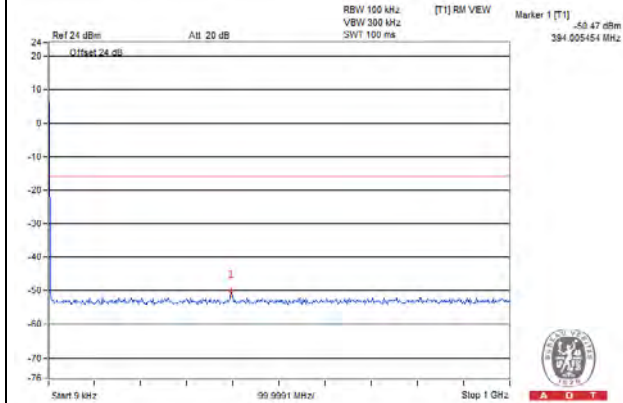
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-50.47	-16.01	-34.46	Pass
1114	-46.11	-16.01	-30.1	Pass
21912.5	-19.36	-16.01	-3.35	Pass

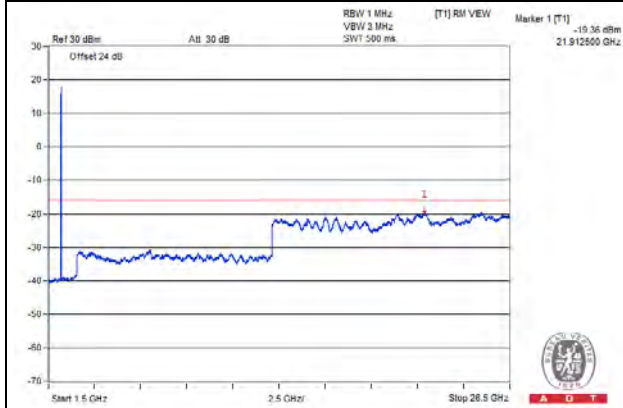
**Channel 2325**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

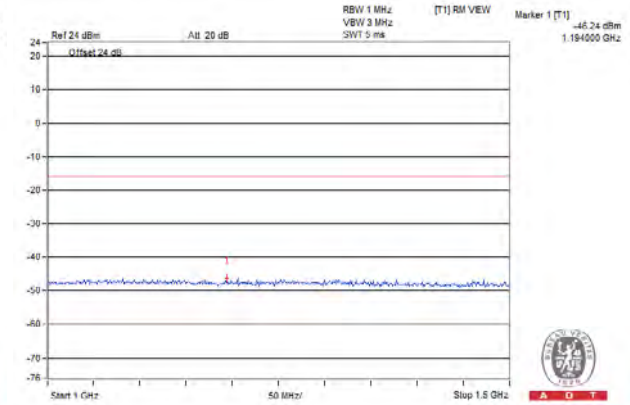
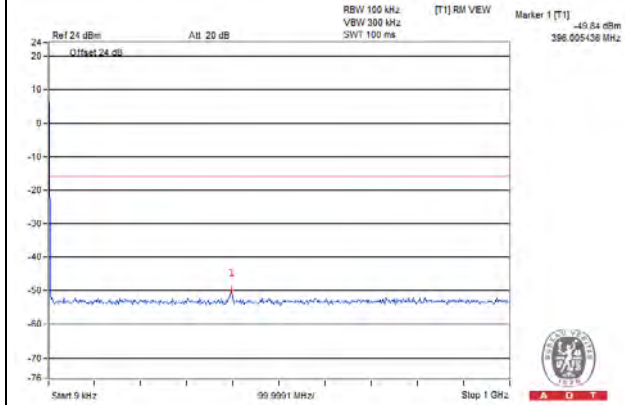


Frequency Range : 1.5GHz ~26.5GHz

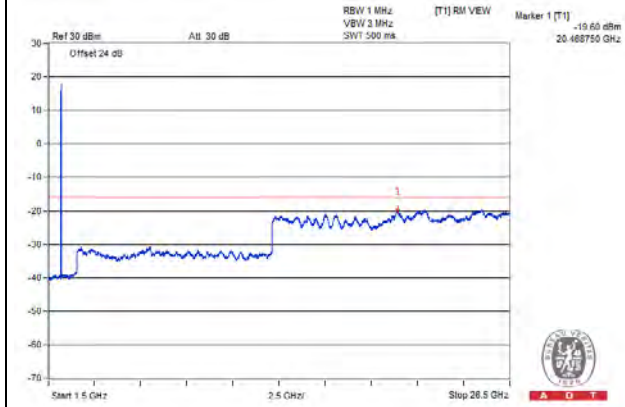


Chain 0				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.84	-16.01	-33.83	Pass
1194	-46.24	-16.01	-30.23	Pass
20468.75	-19.60	-16.01	-3.59	Pass

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

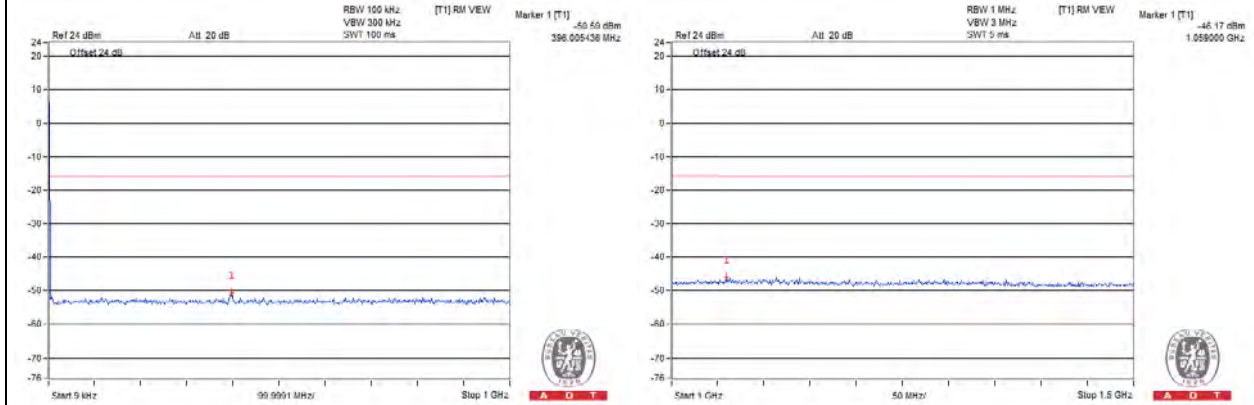


Frequency Range : 1.5GHz ~26.5GHz
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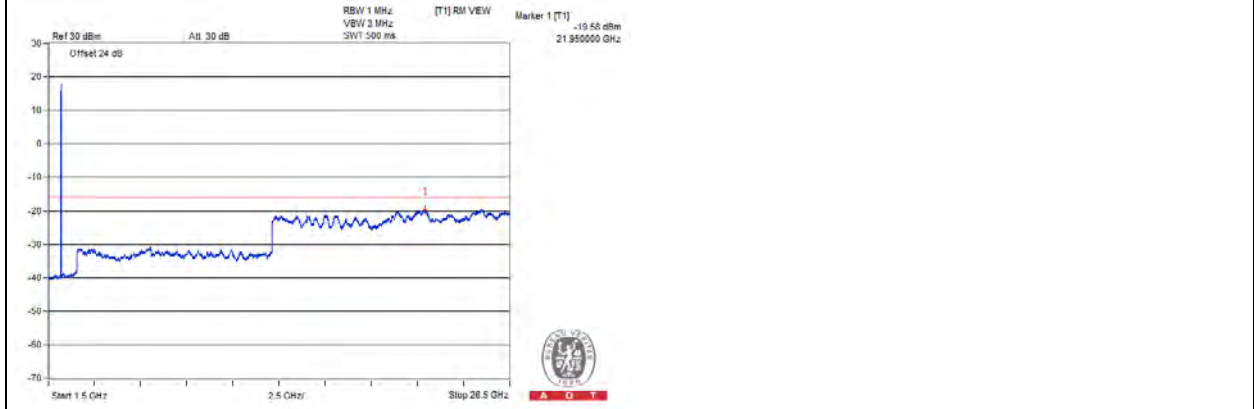


Chain 1				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.59	-16.01	-34.58	Pass
1059	-46.17	-16.01	-30.16	Pass
21950	-19.58	-16.01	-3.57	Pass

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

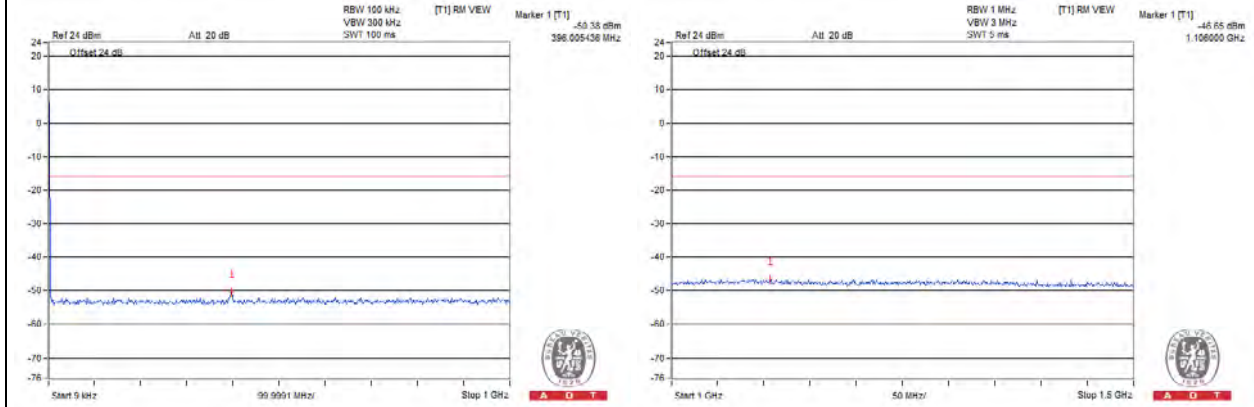


Frequency Range : 1.5GHz ~26.5GHz
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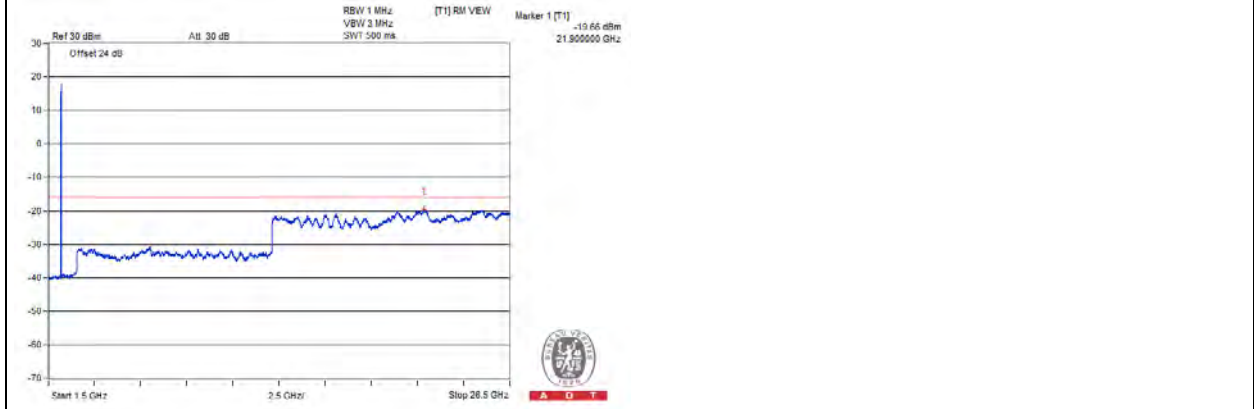


Chain 0				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.38	-16.01	-34.37	Pass
1106	-46.65	-16.01	-30.64	Pass
21900	-19.66	-16.01	-3.65	Pass

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



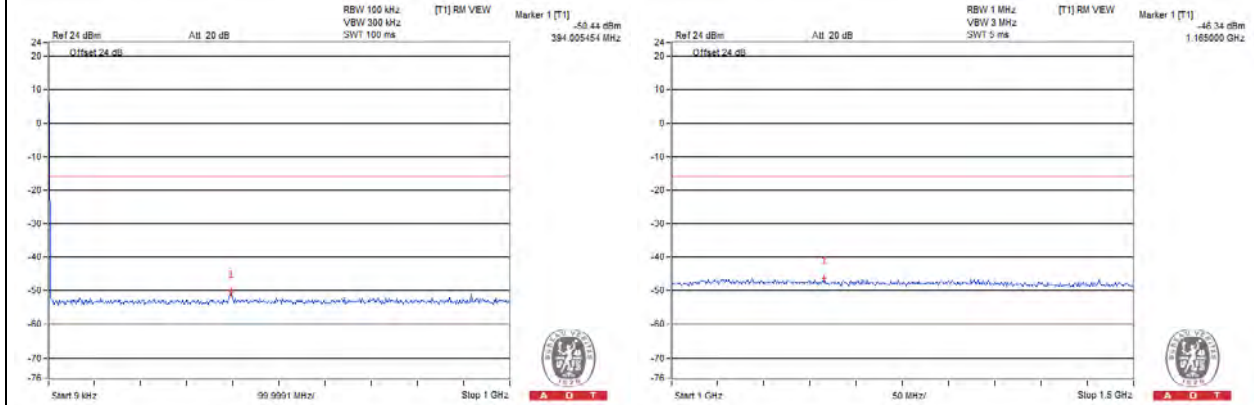
Frequency Range : 1.5GHz ~26.5GHz
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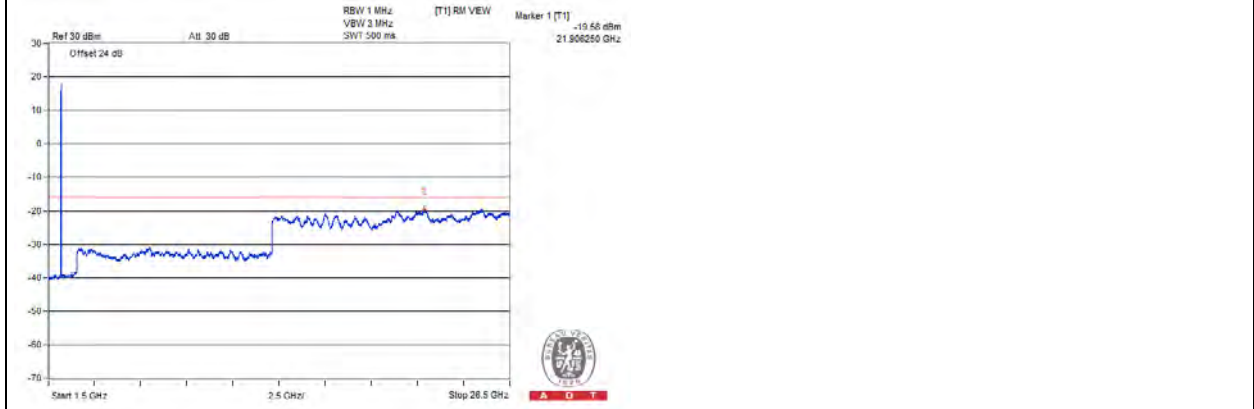


Chain 1				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-50.44	-16.01	-34.43	Pass
1165	-46.34	-16.01	-30.33	Pass
21906.25	-19.58	-16.01	-3.57	Pass

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

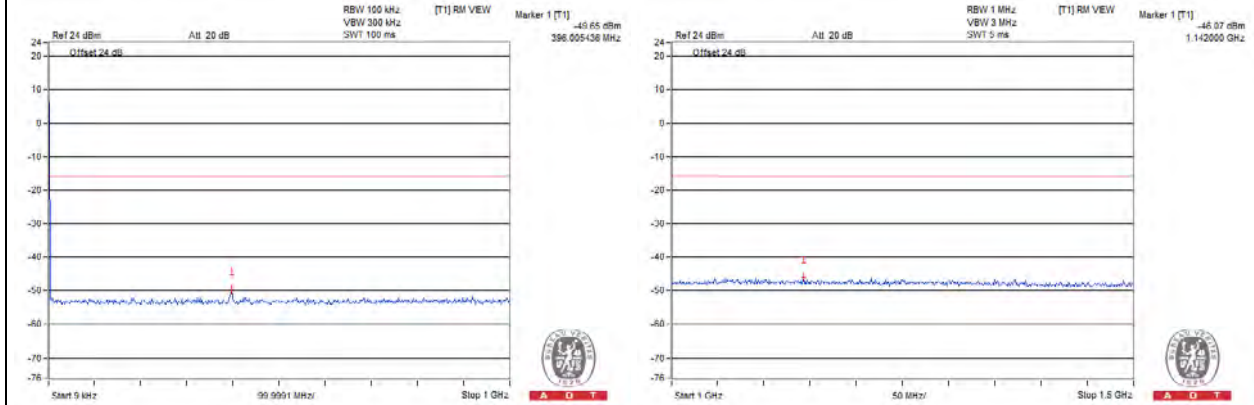


Frequency Range : 1.5GHz ~26.5GHz

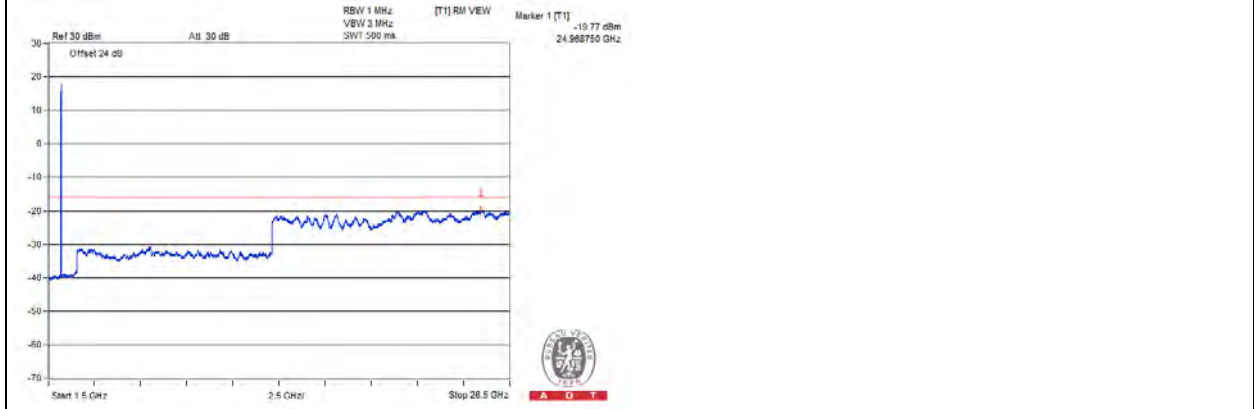


Chain 0				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.65	-16.01	-33.64	Pass
1142	-46.07	-16.01	-30.06	Pass
24968.75	-19.77	-16.01	-3.76	Pass

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

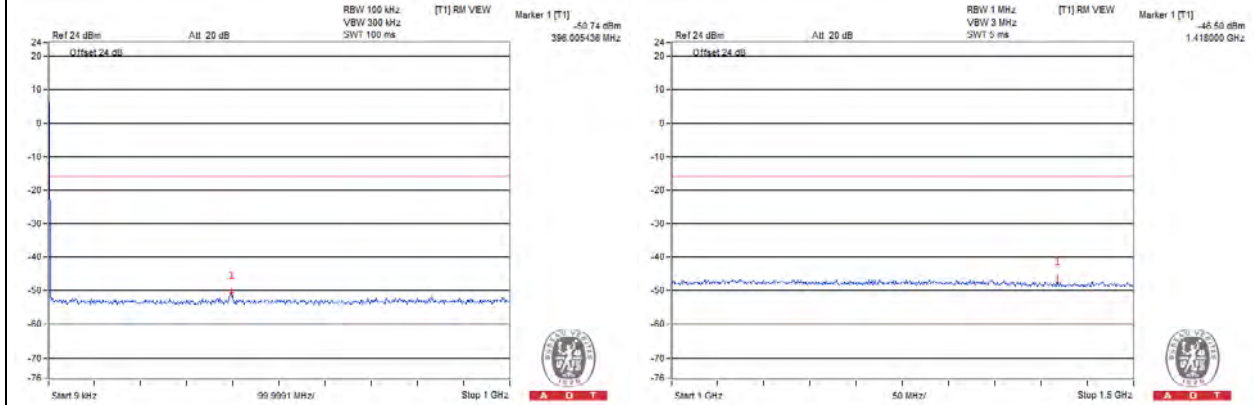


Frequency Range : 1.5GHz ~26.5GHz
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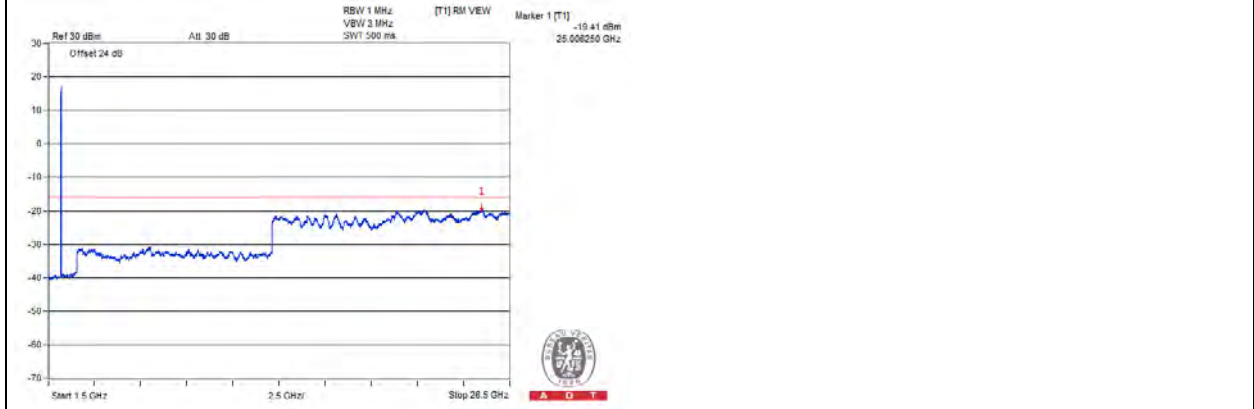


Chain 1				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.74	-16.01	-34.73	Pass
1418	-46.50	-16.01	-30.49	Pass
25006.25	-19.41	-16.01	-3.4	Pass

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



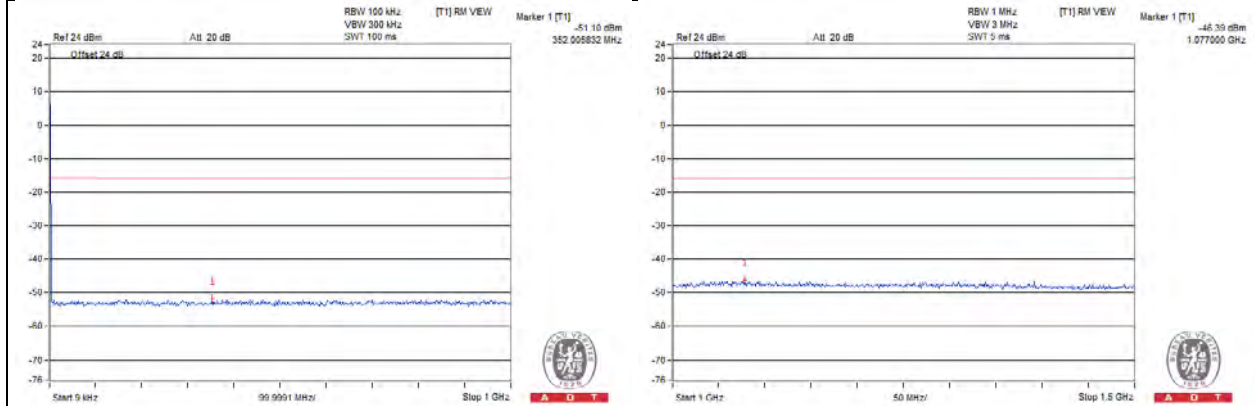
**Frequency Range : 1.5GHz ~26.5GHz**



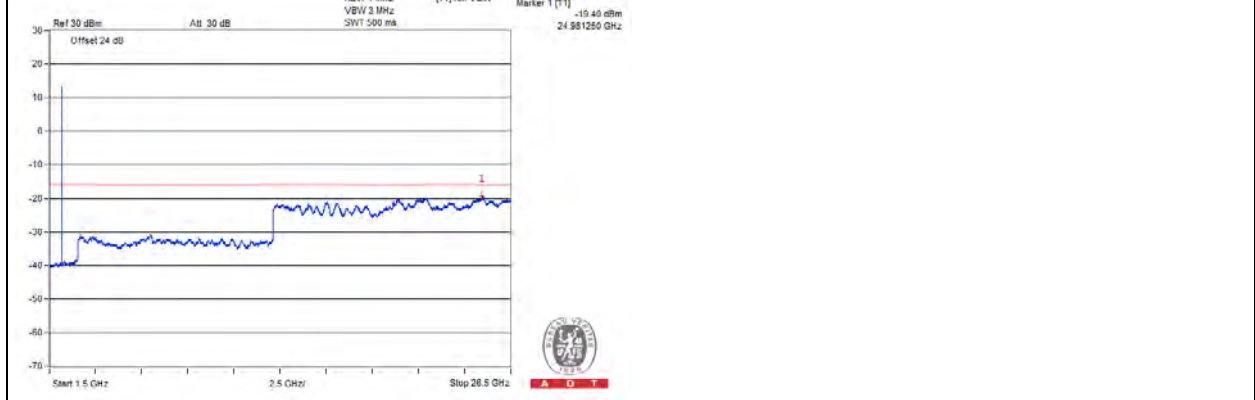
4.6.6 Test Results (With Adapter)

Chain 0				
QPSK / Channel Bandwidth: 5MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
352.0058	-51.10	-16.01	-35.09	Pass
1077	-46.39	-16.01	-30.38	Pass
24981.25	-19.40	-16.01	-3.39	Pass

Channel 1975	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
-----------------------------------



**Chain 1**

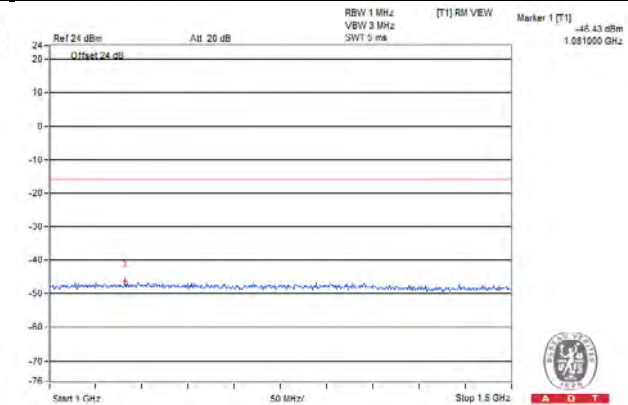
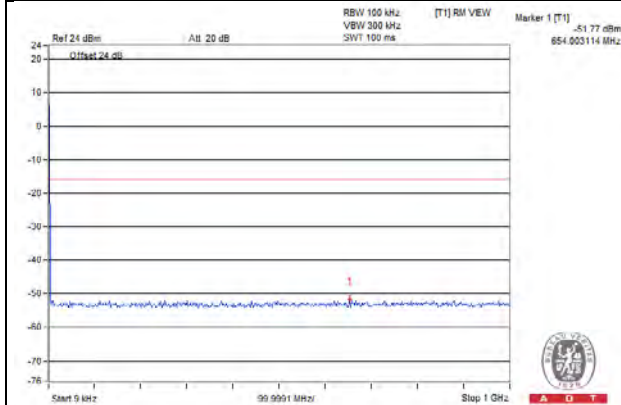
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
654.0031	-51.77	-16.01	-35.76	Pass
1081	-46.43	-16.01	-30.42	Pass
24981.25	-19.57	-16.01	-3.56	Pass

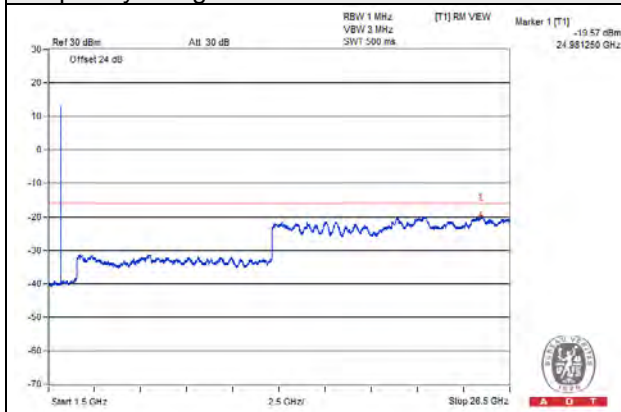
**Channel 1975**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

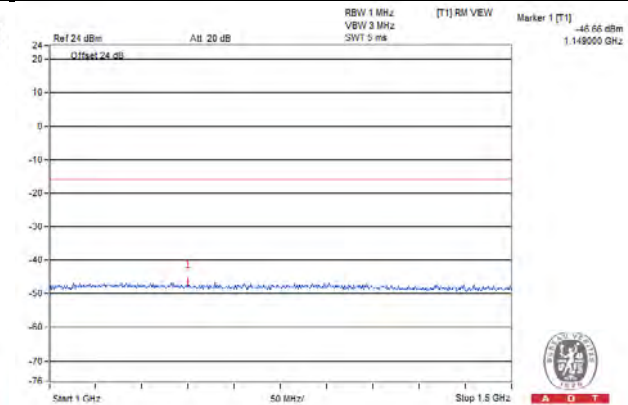
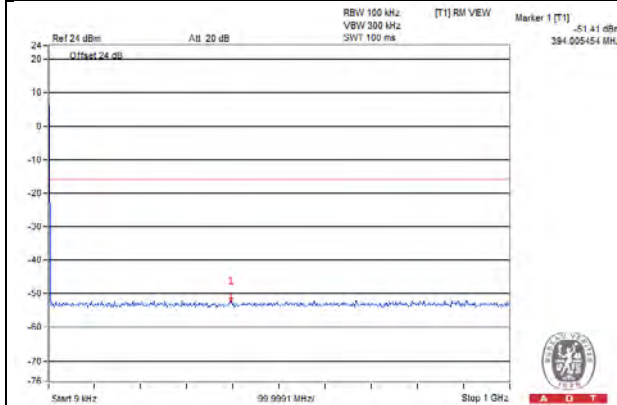
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-51.41	-16.01	-35.4	Pass
1149	-46.66	-16.01	-30.65	Pass
24981.25	-19.83	-16.01	-3.82	Pass

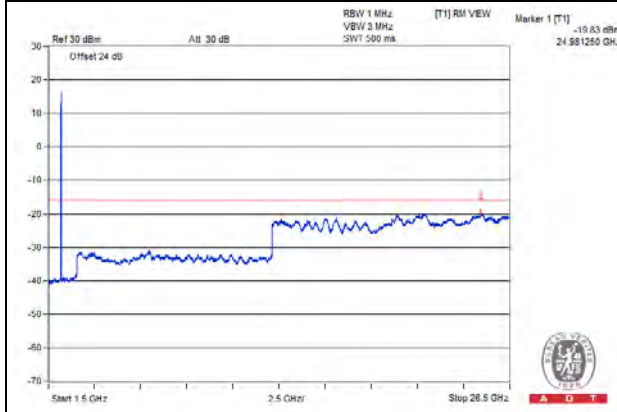
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**

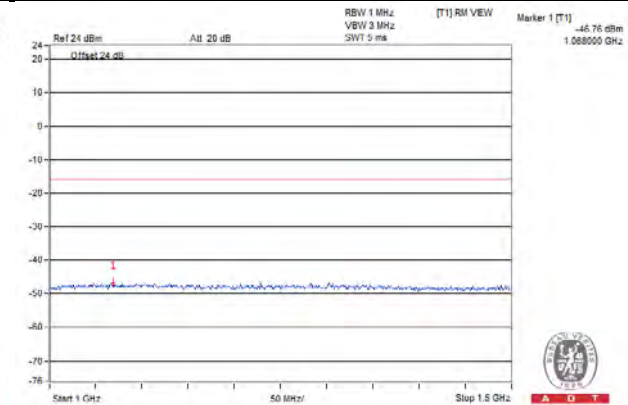
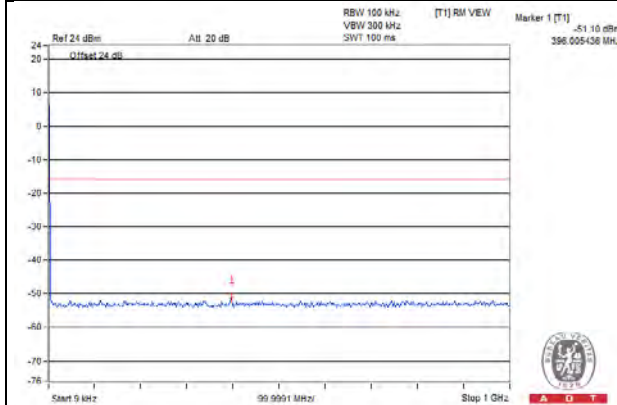
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-51.10	-16.01	-35.09	Pass
1068	-46.76	-16.01	-30.75	Pass
21950	-19.98	-16.01	-3.97	Pass

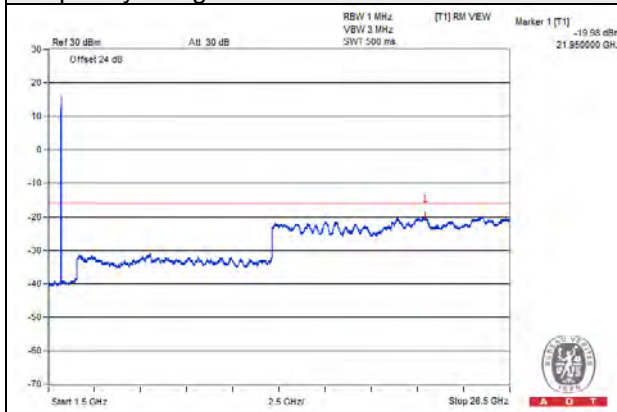
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

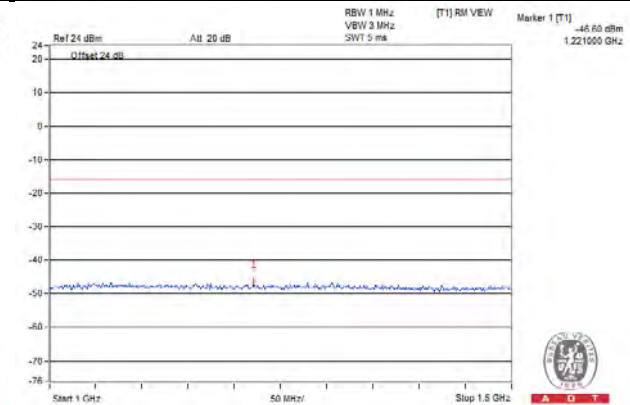
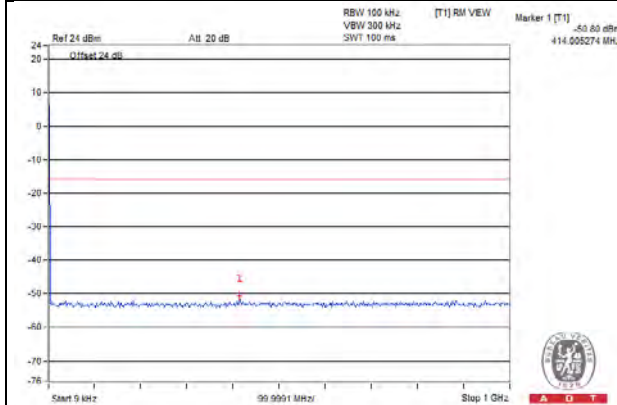
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
414.0053	-50.80	-16.01	-34.79	Pass
1221	-46.60	-16.01	-30.59	Pass
25006.25	-19.93	-16.01	-3.92	Pass

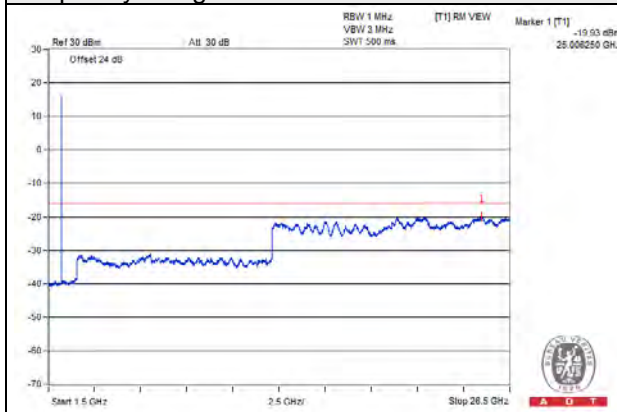
**Channel 2375**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz





**Chain 1**

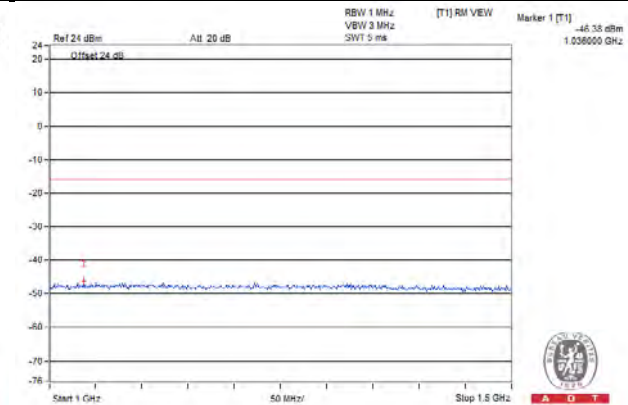
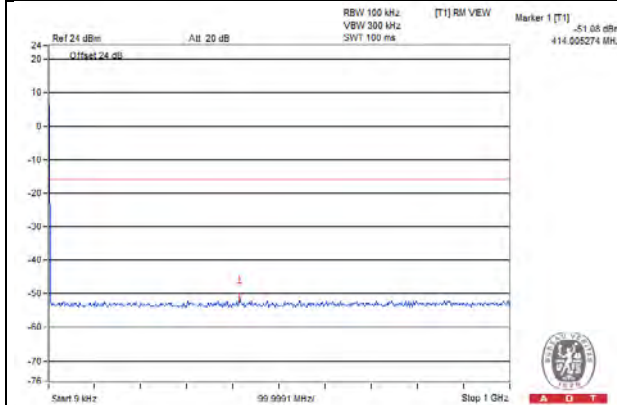
QPSK / Channel Bandwidth: 5MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
414.0053	-51.08	-16.01	-35.07	Pass
1036	-46.38	-16.01	-30.37	Pass
21856.25	-19.74	-16.01	-3.73	Pass

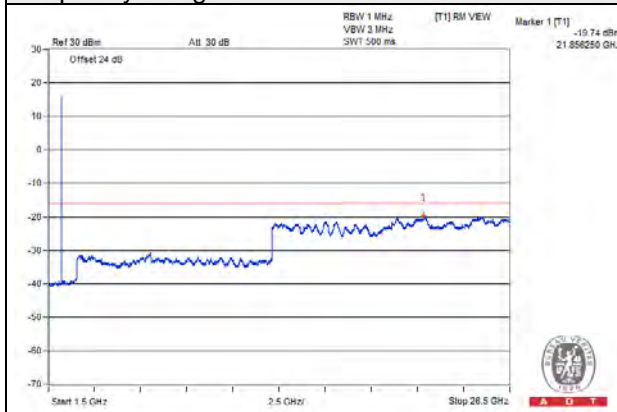
**Channel 2375**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

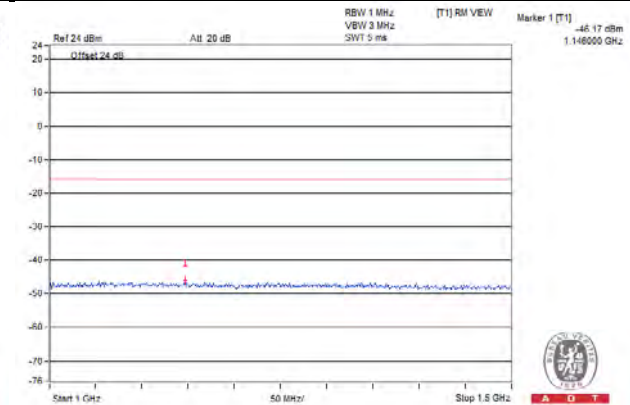
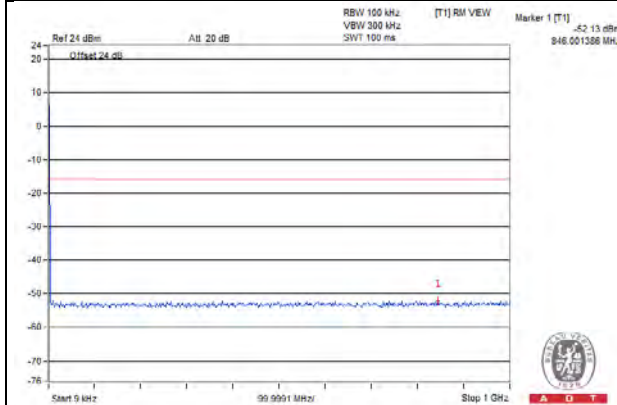
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
846.0014	-52.13	-16.01	-36.12	Pass
1146	-46.17	-16.01	-30.16	Pass
25012.5	-19.33	-16.01	-3.32	Pass

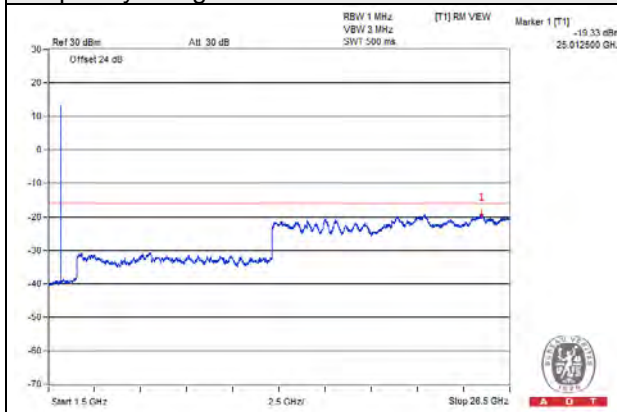
**Channel 2000**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**

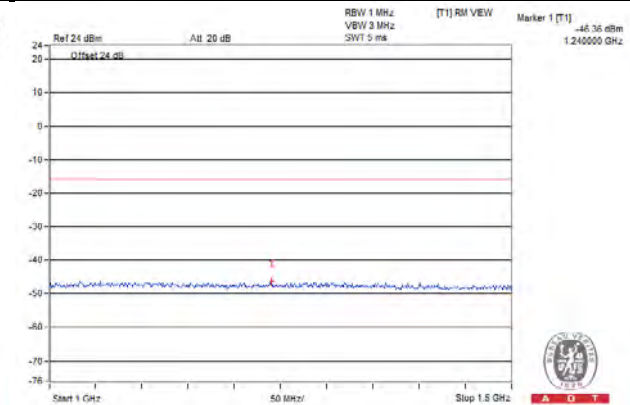
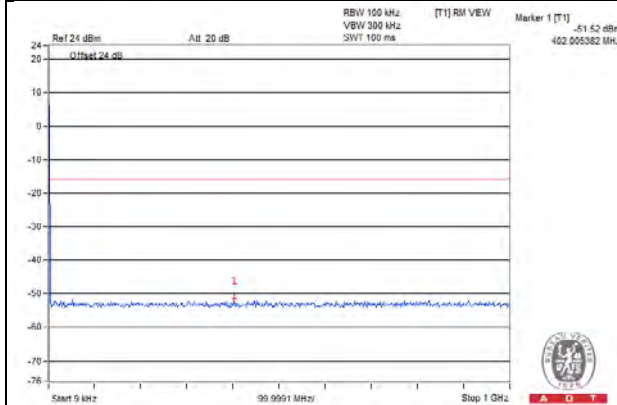
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
402.0054	-51.52	-16.01	-35.51	Pass
1240	-46.36	-16.01	-30.35	Pass
25050	-19.43	-16.01	-3.42	Pass

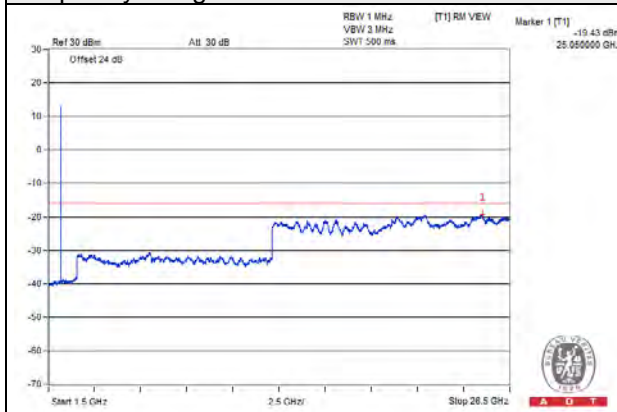
**Channel 2000**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

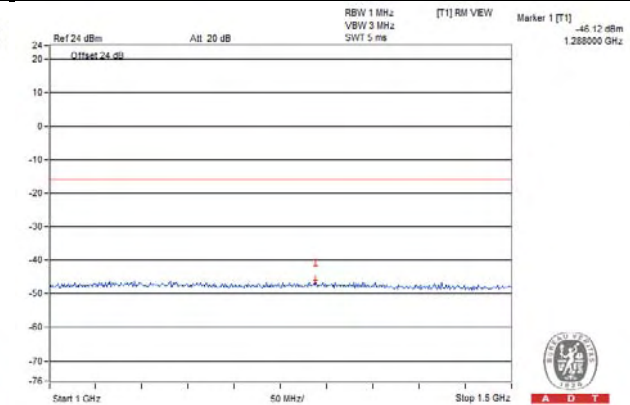
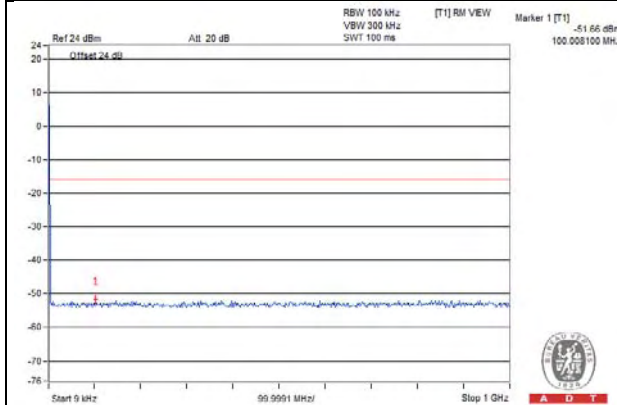
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
100.0081	-51.66	-16.01	-35.65	Pass
1288	-46.12	-16.01	-30.11	Pass
24968.75	-19.31	-16.01	-3.3	Pass

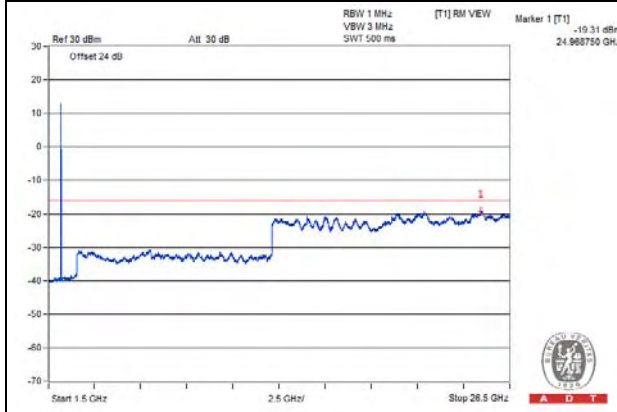
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**

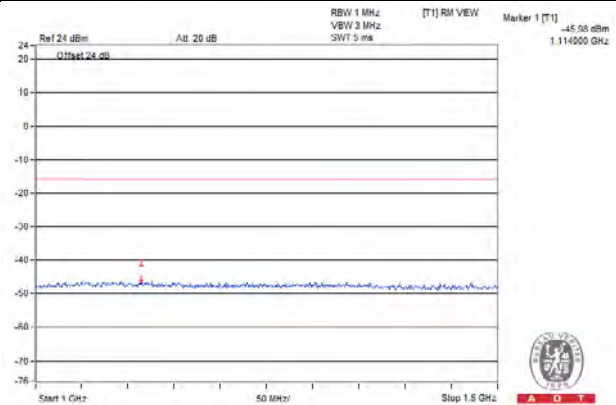
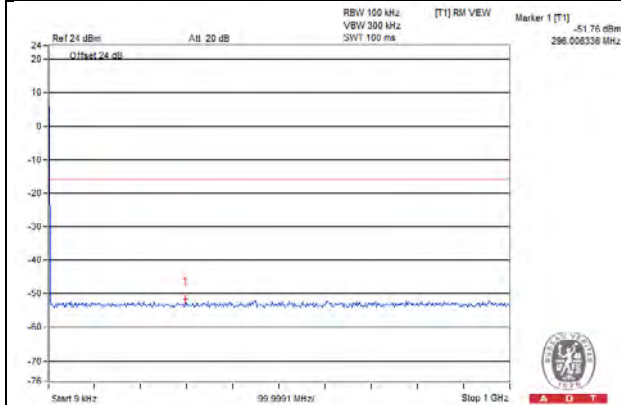
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
296.0063	-51.76	-16.01	-35.75	Pass
1114	-45.98	-16.01	-29.97	Pass
21812.5	-19.45	-16.01	-3.44	Pass

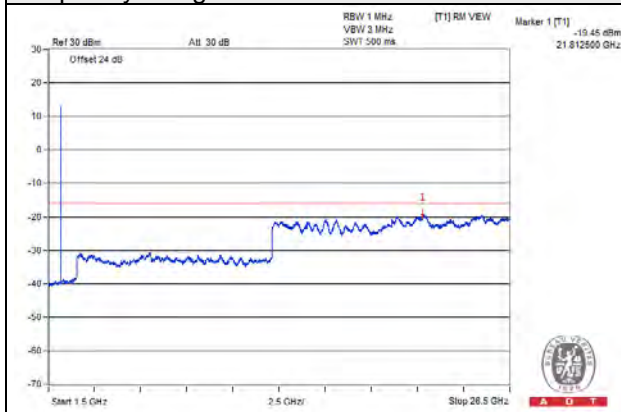
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

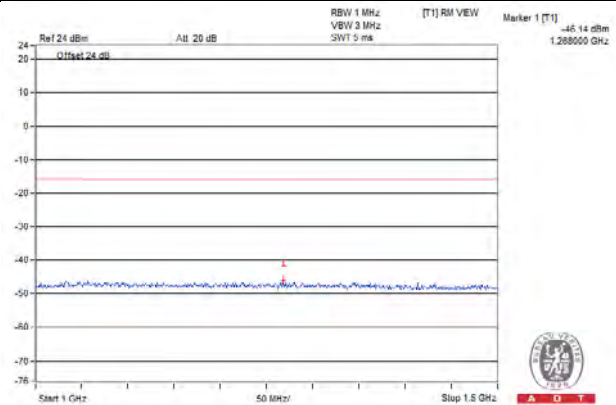
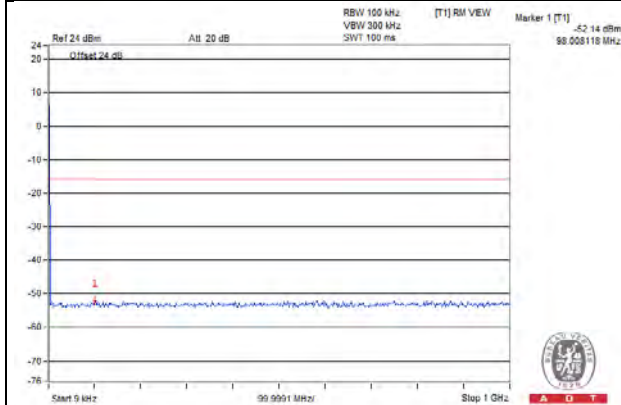
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
98.00812	-52.14	-16.01	-36.13	Pass
1268	-46.14	-16.01	-30.13	Pass
25018.75	-19.09	-16.01	-3.08	Pass

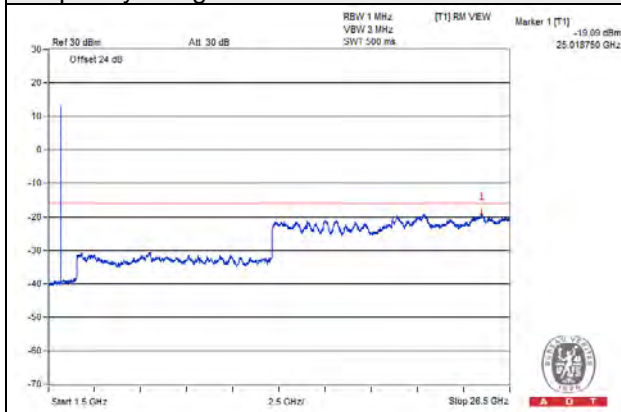
**Channel 2350**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 1**

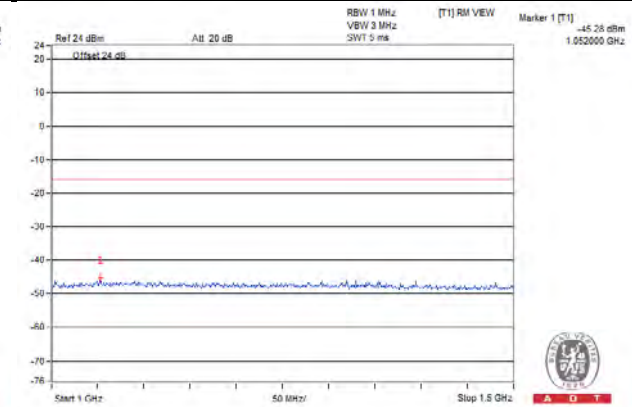
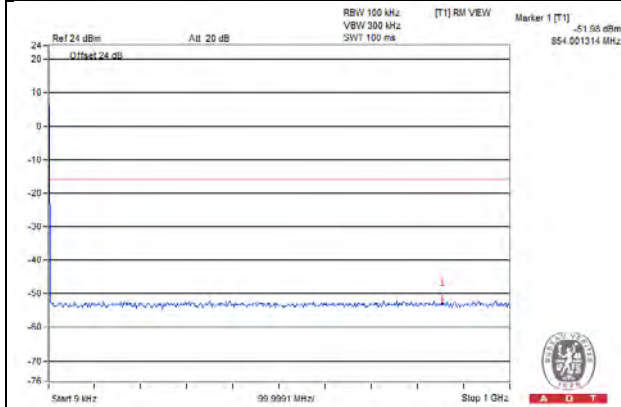
QPSK / Channel Bandwidth: 10MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
854.0013	-51.98	-16.01	-35.97	Pass
1052	-45.28	-16.01	-29.27	Pass
24981.25	-19.50	-16.01	-3.49	Pass

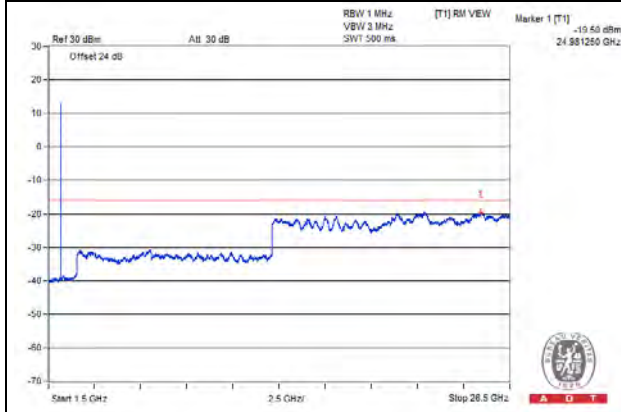
**Channel 2350**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



**Chain 0**

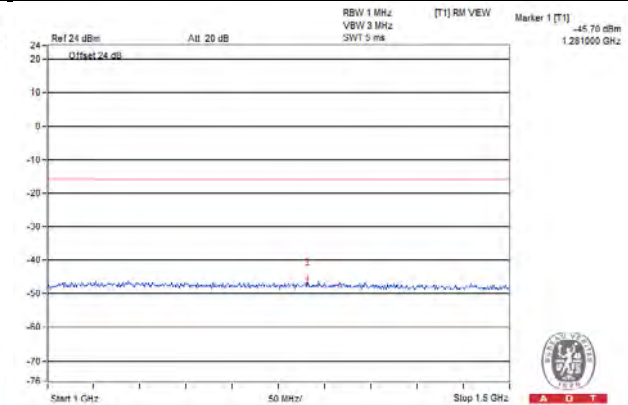
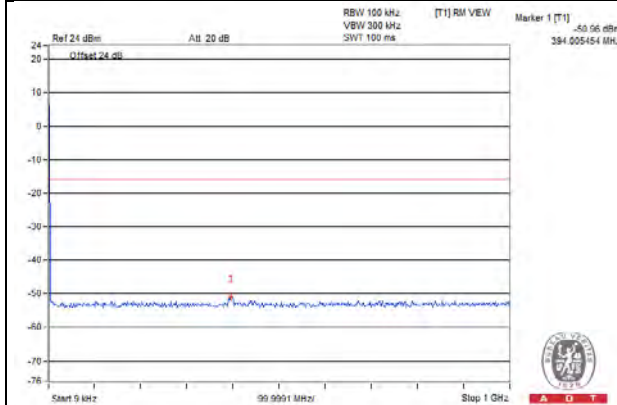
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
394.0055	-50.96	-16.01	-34.95	Pass
1281	-45.70	-16.01	-29.69	Pass
25006.25	-19.31	-16.01	-3.3	Pass

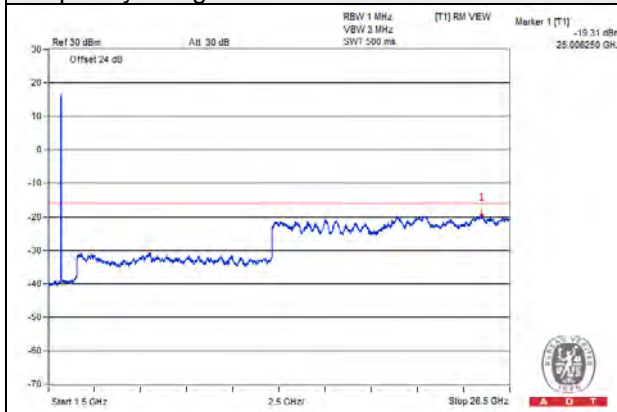
**Channel 2025**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



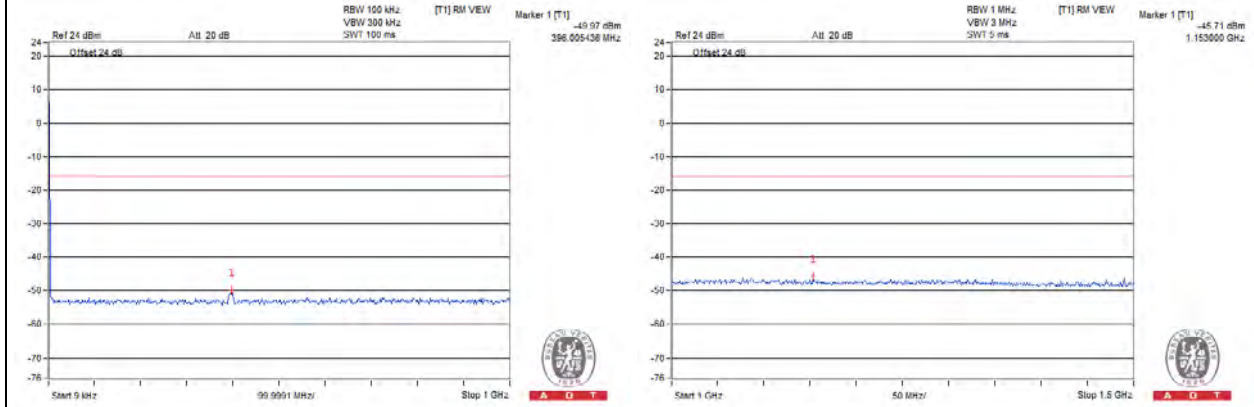
Frequency Range : 1.5GHz ~26.5GHz



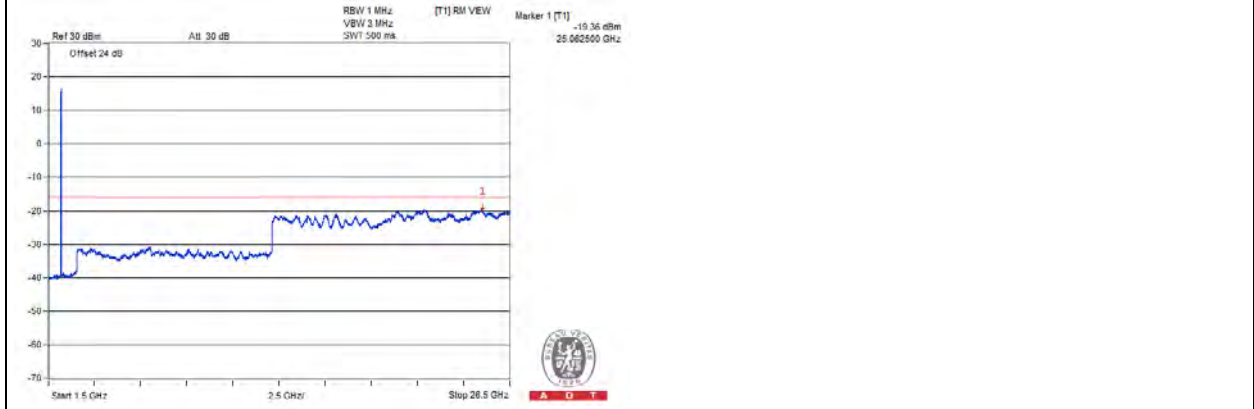


Chain 1				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-49.97	-16.01	-33.96	Pass
1153	-45.71	-16.01	-29.7	Pass
25062.5	-19.36	-16.01	-3.35	Pass

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

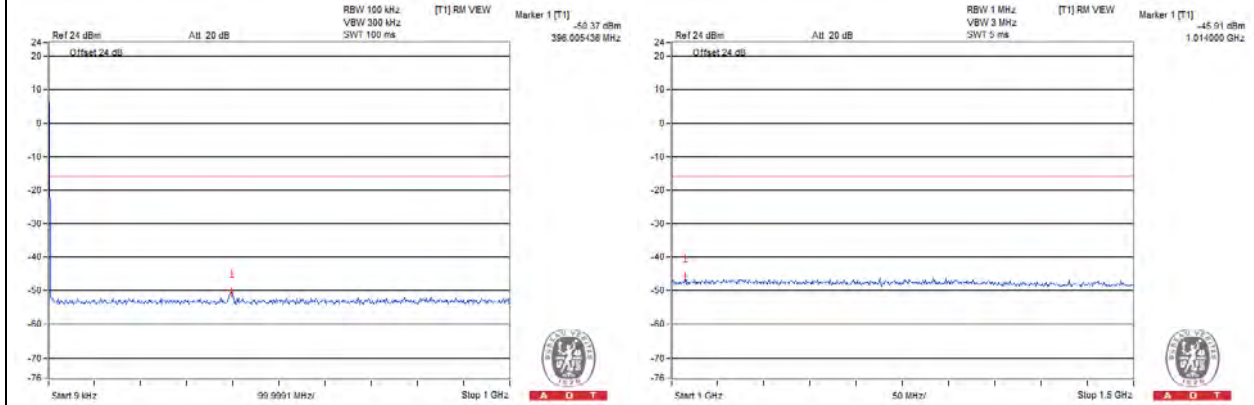


Frequency Range : 1.5GHz ~26.5GHz
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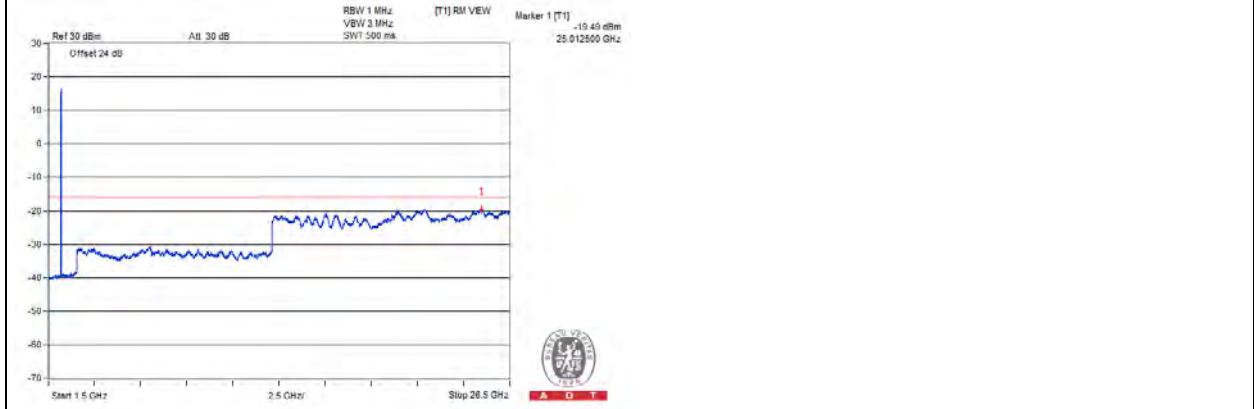


Chain 0				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.37	-16.01	-34.36	Pass
1014	-45.91	-16.01	-29.9	Pass
25012.5	-19.49	-16.01	-3.48	Pass

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



Frequency Range : 1.5GHz ~26.5GHz
-----------------------------------



**Chain 1**

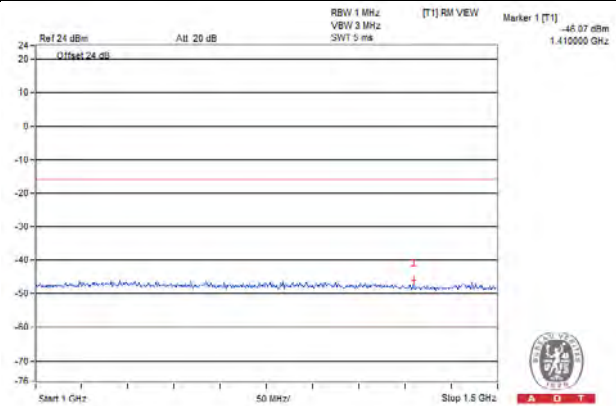
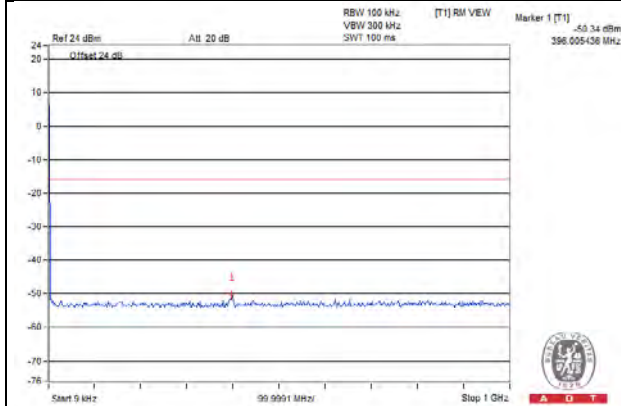
QPSK / Channel Bandwidth: 15MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.34	-16.01	-34.33	Pass
1410	-46.07	-16.01	-30.06	Pass
25006.25	-19.36	-16.01	-3.35	Pass

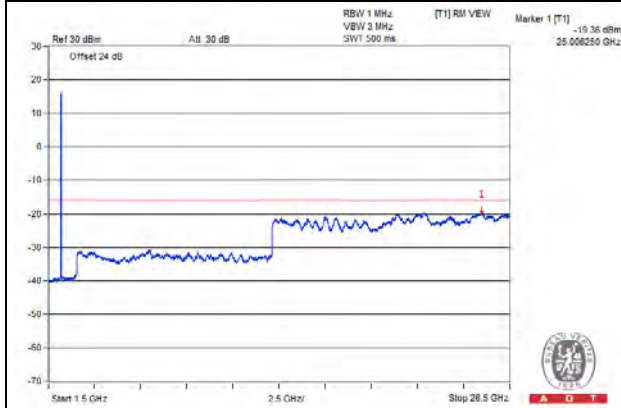
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz



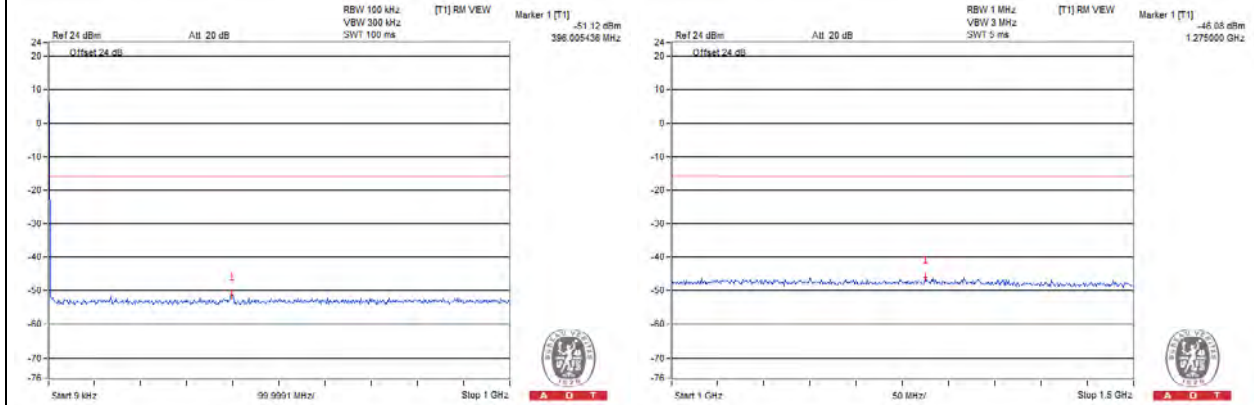
**Chain 0**

QPSK / Channel Bandwidth: 15MHz

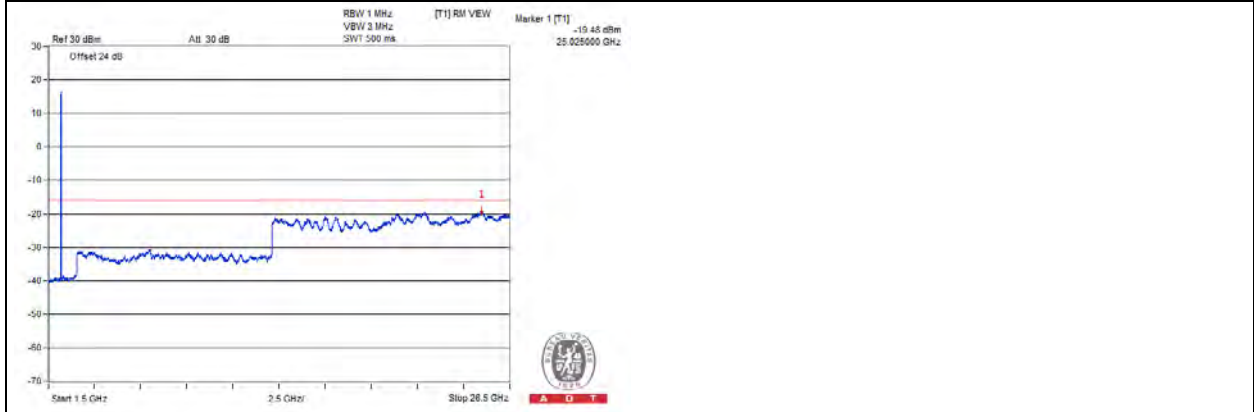
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-51.12	-16.01	-35.11	Pass
1275	-46.08	-16.01	-30.07	Pass
25025	-19.48	-16.01	-3.47	Pass

**Channel 2325**

Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz ~1.5GHz

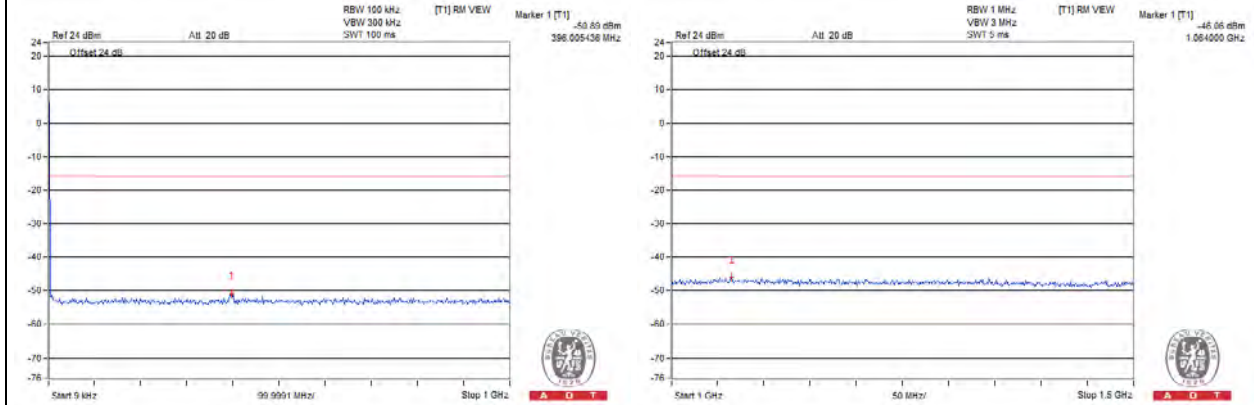


**Frequency Range : 1.5GHz ~26.5GHz**

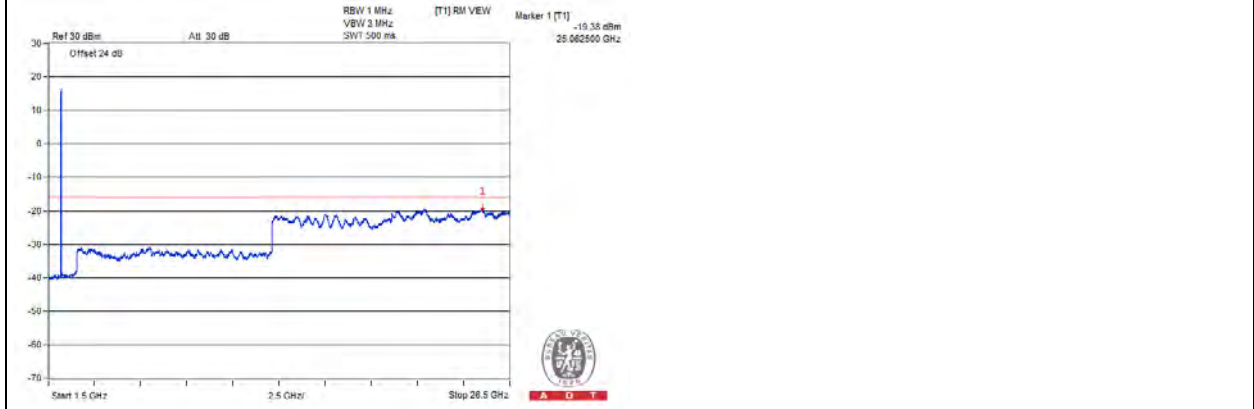


Chain 1				
QPSK / Channel Bandwidth: 15MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
396.0054	-50.89	-16.01	-34.88	Pass
1064	-46.06	-16.01	-30.05	Pass
25062.5	-19.38	-16.01	-3.37	Pass

Channel 2325	
Frequency Range : 9kHz~1GHz	Frequency Range : 1GHz ~1.5GHz



Frequency Range : 1.5GHz ~26.5GHz
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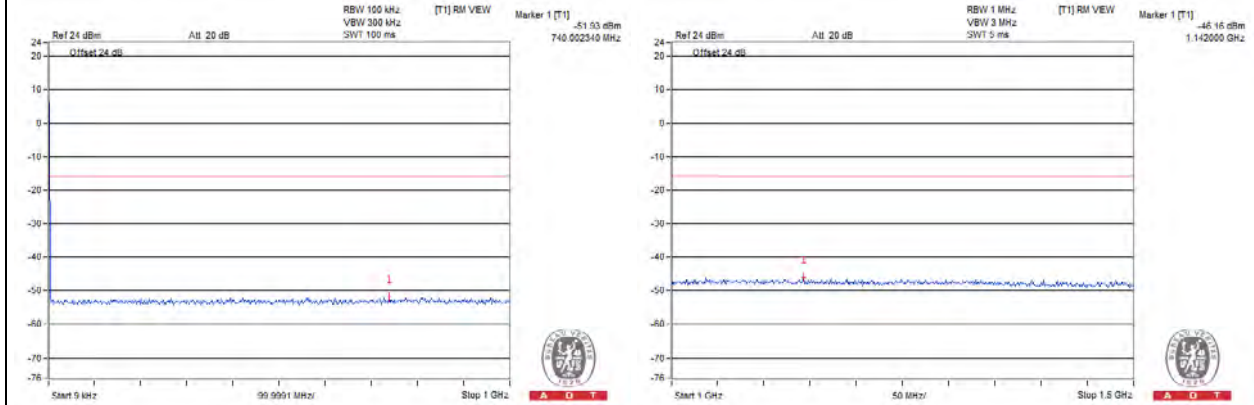
**Chain 0**

QPSK / Channel Bandwidth: 20MHz

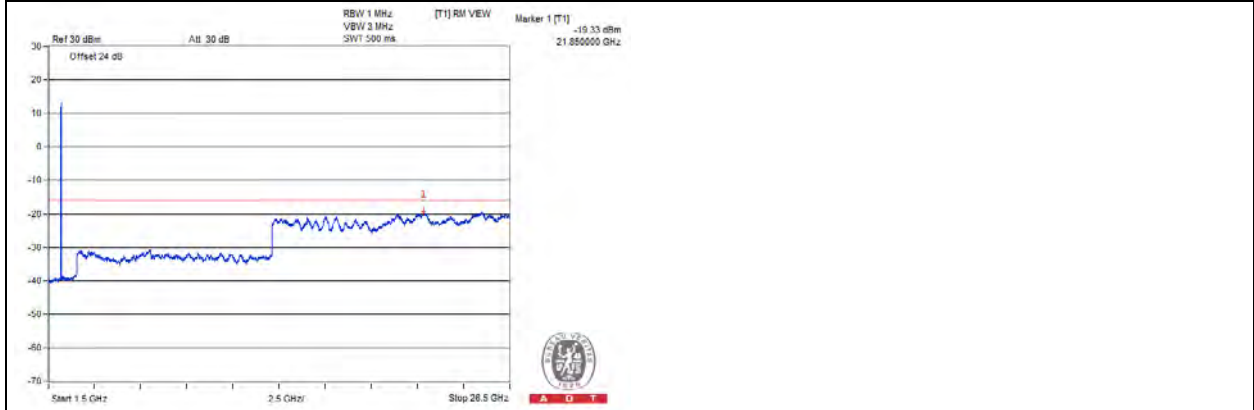
Frequency(MHz)	Measurement Value	Limit	Margin	Result
740.0023	-51.93	-16.01	-35.92	Pass
1142	-46.16	-16.01	-30.15	Pass
21850	-19.33	-16.01	-3.32	Pass

**Channel 2050**

Frequency Range : 9kHz~1GHz      Frequency Range : 1GHz ~1.5GHz



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



**Chain 1**

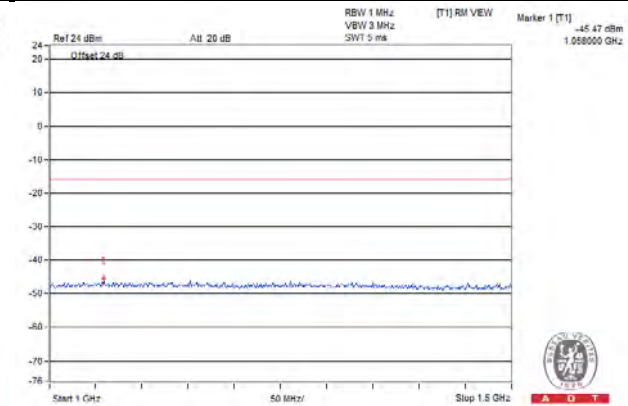
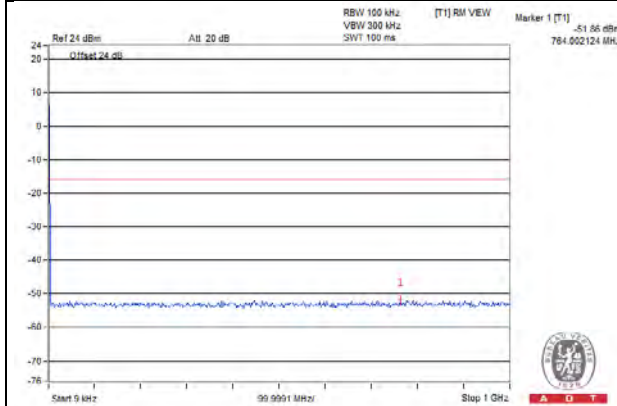
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
764.0021	-51.86	-16.01	-35.85	Pass
1058	-45.47	-16.01	-29.46	Pass
24987.5	-19.38	-16.01	-3.37	Pass

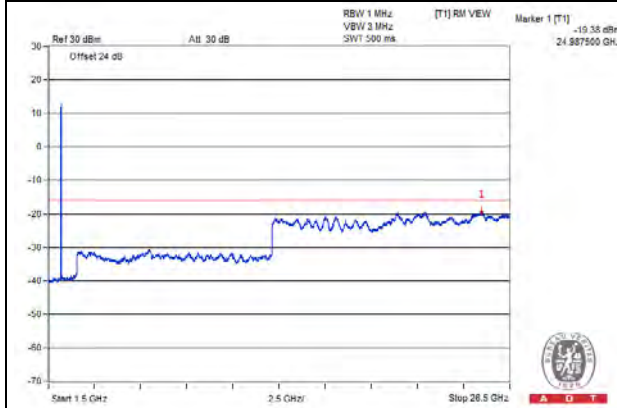
**Channel 2050**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

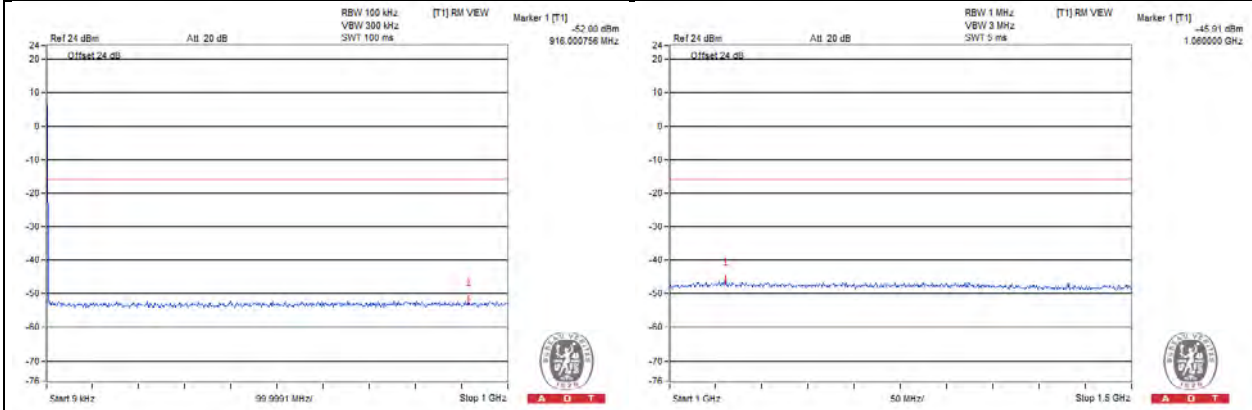


Frequency Range : 1.5GHz ~26.5GHz

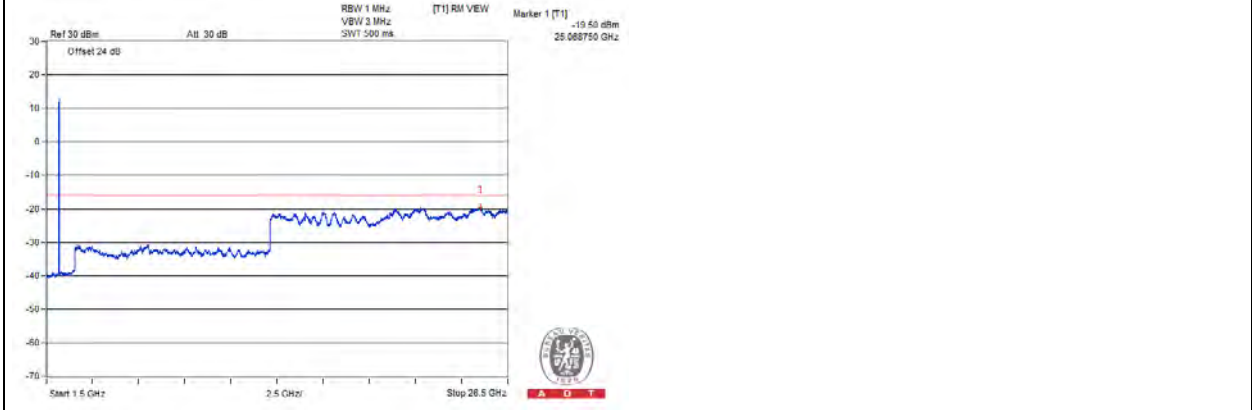


Chain 0				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
916.0008	-52.00	-16.01	-35.99	Pass
1060	-45.91	-16.01	-29.9	Pass
25068.75	-19.50	-16.01	-3.49	Pass

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



Frequency Range : 1.5GHz ~26.5GHz
-----------------------------------





**Chain 1**

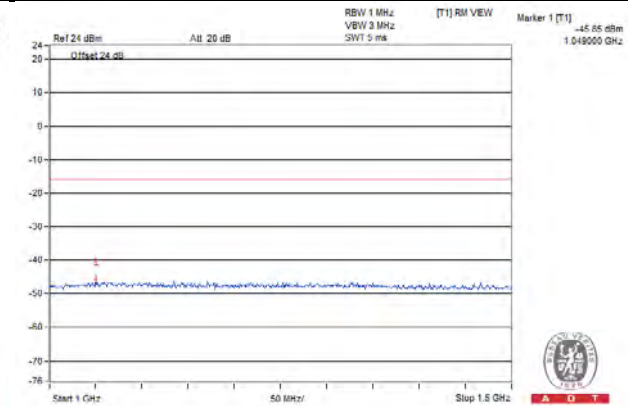
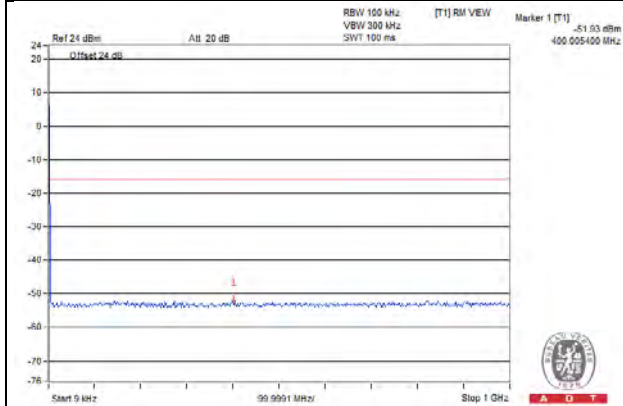
QPSK / Channel Bandwidth: 20MHz

Frequency(MHz)	Measurement Value	Limit	Margin	Result
400.0054	-51.93	-16.01	-35.92	Pass
1049	-45.85	-16.01	-29.84	Pass
25018.75	-19.46	-16.01	-3.45	Pass

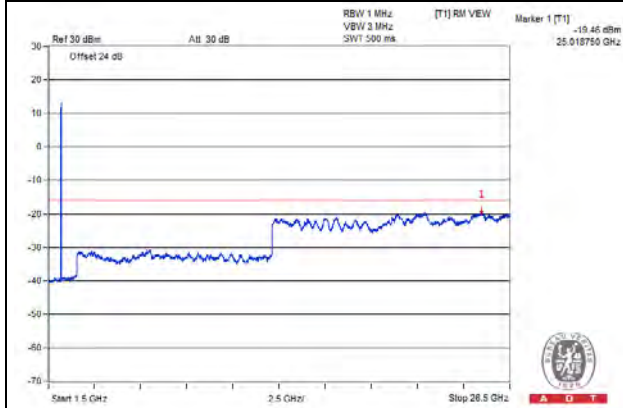
**Channel 2175**

Frequency Range : 9kHz~1GHz

Frequency Range : 1GHz ~1.5GHz

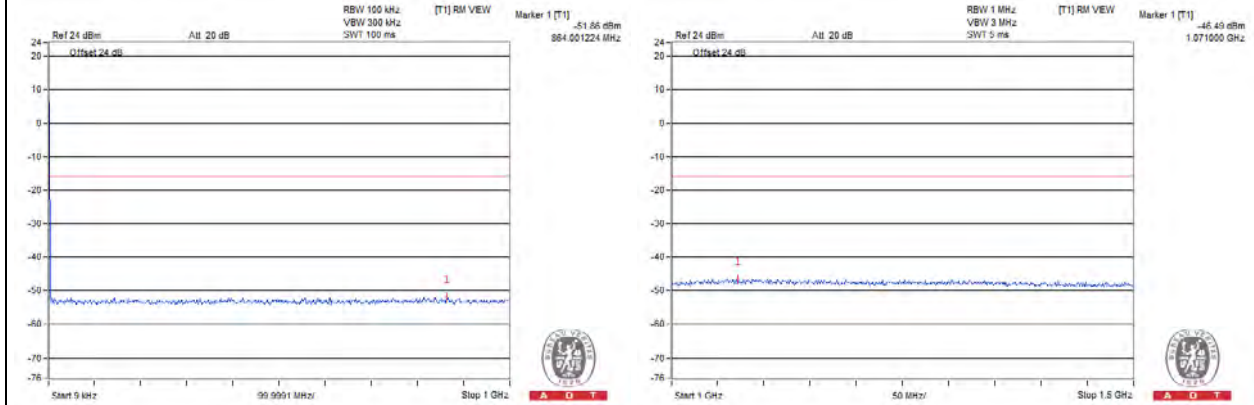


Frequency Range : 1.5GHz ~26.5GHz

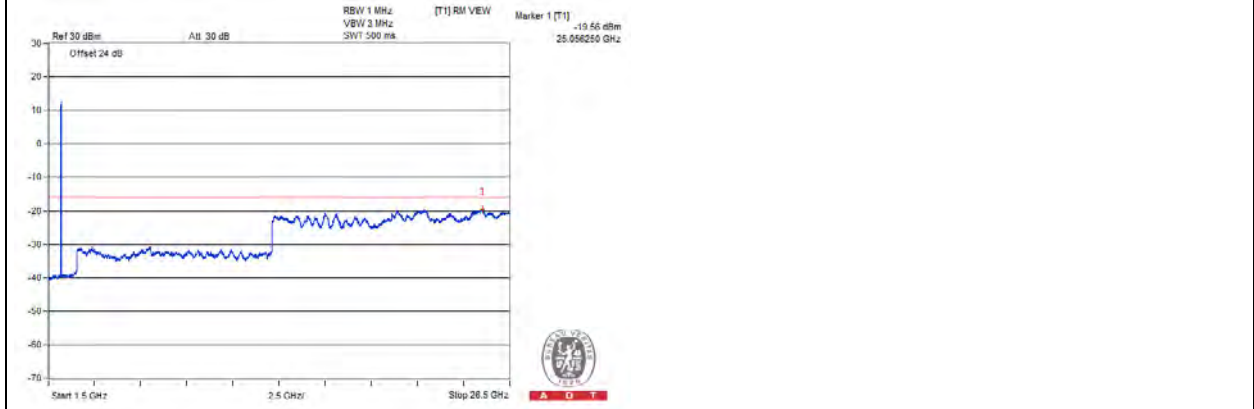


Chain 0				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
864.0012	-51.86	-16.01	-35.85	Pass
1071	-46.49	-16.01	-30.48	Pass
25056.25	-19.56	-16.01	-3.55	Pass

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

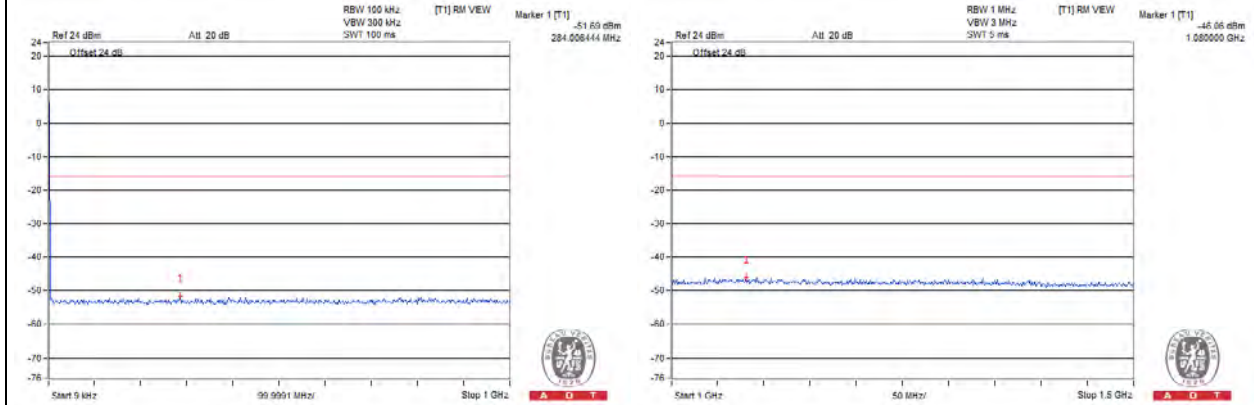


Frequency Range : 1.5GHz ~26.5GHz
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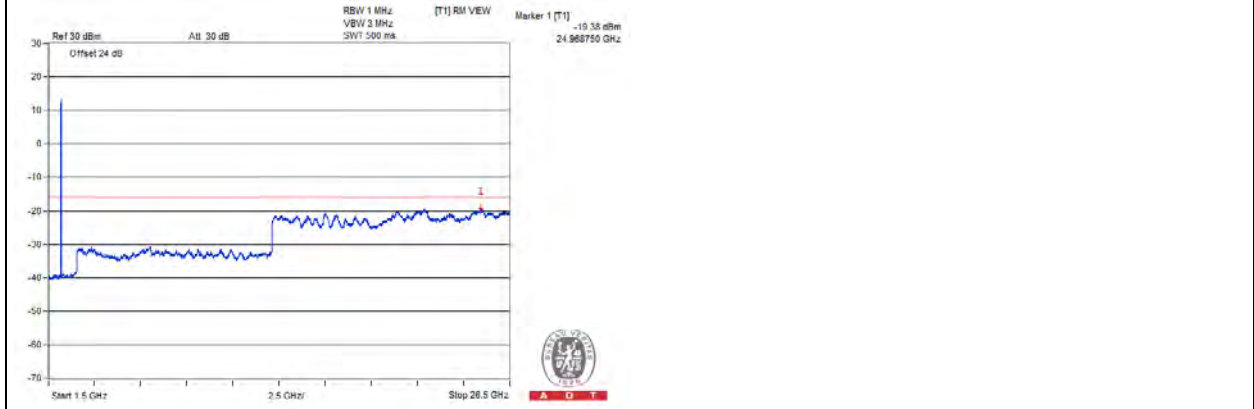


Chain 1				
QPSK / Channel Bandwidth: 20MHz				
Frequency(MHz)	Measurement Value	Limit	Margin	Result
284.0064	-51.69	-16.01	-35.68	Pass
1080	-46.06	-16.01	-30.05	Pass
24968.75	-19.38	-16.01	-3.37	Pass

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



Frequency Range : 1.5GHz ~26.5GHz
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## 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

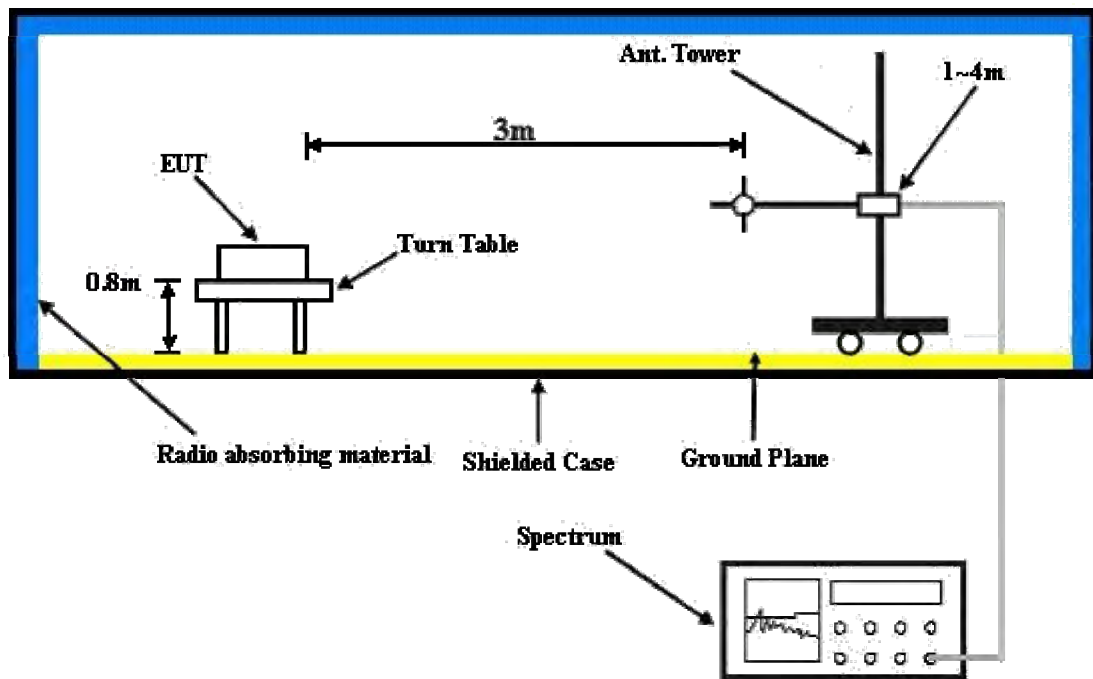
- a. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high channel of operational frequency range.)
- b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the 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	52.202	31.59	-47.71	-9.48	-57.19	-13	-44.19
2	139.371	30.37	-63.43	-1.31	-64.74	-13	-51.74
3	295.336	33.30	-62.34	3.74	-58.60	-13	-45.60
4	650.854	38.23	-56.79	1.74	-55.05	-13	-42.05
5	920.354	39.77	-58.73	0.43	-58.30	-13	-45.30
6	959.224	41.51	-56.35	0.39	-55.96	-13	-42.96
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	49.34	37.31	-40.95	-10.18	-51.13	-13	-38.13
2	101.6	39.18	-51.41	-0.67	-52.08	-13	-39.08
3	501.33	34.10	-61.40	2.88	-58.52	-13	-45.52
4	649.74	33.45	-61.54	1.74	-59.79	-13	-46.79
5	900.8	39.28	-59.44	0.49	-58.95	-13	-45.95
6	958.54	41.78	-56.10	0.38	-55.72	-13	-42.72

**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 &amp; 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	52.232	32.15	-47.16	-9.47	-56.63	-13	-43.63
2	139.471	31.45	-62.38	-1.31	-63.68	-13	-50.68
3	295.596	34.73	-60.92	3.74	-57.18	-13	-44.18
4	650.244	39.72	-55.28	1.74	-53.54	-13	-40.54
5	921.034	41.00	-57.50	0.43	-57.07	-13	-44.07
6	960.074	41.83	-56.00	0.39	-55.61	-13	-42.61

## Antenna Polarity &amp; 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	49.32	37.97	-40.29	-10.18	-50.47	-13	-37.47
2	101.06	39.60	-51.02	-0.66	-51.67	-13	-38.67
3	501.72	35.09	-60.41	2.88	-57.53	-13	-44.53
4	650.45	34.39	-60.62	1.74	-58.87	-13	-45.87
5	900.1	40.95	-57.78	0.49	-57.29	-13	-44.29
6	958.7	42.52	-55.35	0.38	-54.97	-13	-41.97

## 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	52.012	31.16	-48.07	-9.53	-57.60	-13	-44.60
2	140.021	30.06	-63.88	-1.31	-65.19	-13	-52.19
3	295.386	34.12	-61.52	3.74	-57.78	-13	-44.78
4	649.554	38.54	-56.44	1.75	-54.70	-13	-41.70
5	921.244	40.49	-58.00	0.43	-57.58	-13	-44.58
6	960.804	40.83	-56.97	0.39	-56.58	-13	-43.58

**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	49.93	37.60	-40.88	-10.04	-50.91	-13	-37.91
2	100.44	39.51	-51.14	-0.64	-51.78	-13	-38.78
3	502.03	34.25	-61.25	2.87	-58.37	-13	-45.37
4	651.42	33.65	-61.38	1.74	-59.64	-13	-46.64
5	899.21	39.74	-59.00	0.50	-58.51	-13	-45.51
6	958.19	42.45	-55.44	0.38	-55.06	-13	-42.06

**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 &amp; 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	65.35	-39.45	7.43	-32.03	-13	-19.03
2	6337.5	51.71	-52.43	6.20	-46.23	-13	-33.23
3	8450	57.80	-44.82	4.20	-40.62	-13	-27.62
4	10562.5	58.07	-43.98	3.51	-40.47	-13	-27.47
5	12675	58.63	-42.70	4.38	-38.33	-13	-25.33
6	14787.5	61.3	-35.86	3.78	-32.08	-13	-19.08
7	16900	64.89	-34.17	2.93	-31.24	-13	-18.24
8	19012.5	67.17	-33.25	3.71	-29.54	-13	-16.54

## Antenna Polarity &amp; 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	56.33	-48.47	7.43	-41.05	-13	-28.05
2	6337.5	51.39	-52.75	6.20	-46.55	-13	-33.55
3	8450	56.34	-46.28	4.20	-42.08	-13	-29.08
4	10562.5	58.19	-43.86	3.51	-40.35	-13	-27.35
5	12675	56.71	-44.62	4.38	-40.25	-13	-27.25
6	14787.5	60.55	-36.61	3.78	-32.83	-13	-19.83
7	16900	64.79	-34.27	2.93	-31.34	-13	-18.34
8	19012.5	68.48	-31.94	3.71	-28.23	-13	-15.23

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	65.90	-37.17	7.87	-29.30	-13	-16.30
2	6397.5	52.80	-51.72	7.05	-44.67	-13	-31.67
3	8530	58.50	-43.44	5.03	-38.41	-13	-25.41
4	10662.5	58.8	-43.91	4.23	-39.68	-13	-26.68
5	12795	60	-42.24	3.67	-38.57	-13	-25.57
6	14927.5	62.4	-39.11	4.37	-34.74	-13	-21.74
7	17060	65	-34.85	1.93	-32.91	-13	-19.91
8	19192.5	68.2	-32.99	3.85	-29.14	-13	-16.14

**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	57.6	-45.47	7.87	-37.60	-13	-24.60
2	6397.5	52.5	-52.02	7.05	-44.97	-13	-31.97
3	8530	57.7	-44.24	5.03	-39.21	-13	-26.21
4	10662.5	59.3	-43.41	4.23	-39.18	-13	-26.18
5	12795	57.5	-44.74	3.67	-41.07	-13	-28.07
6	14927.5	61.9	-39.61	4.37	-35.24	-13	-22.24
7	17060	65	-34.85	1.93	-32.91	-13	-19.91
<b>8</b>	<b>19192.5</b>	<b>68.9</b>	<b>-32.29</b>	<b>3.85</b>	<b>-28.44</b>	<b>-13</b>	<b>-15.44</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 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	65.53	-39.19	7.39	-31.80	-13	-18.80
2	6457.5	52.53	-51.61	6.00	-45.61	-13	-32.61
3	8610	57.72	-44.90	4.23	-40.67	-13	-27.67
4	10762.5	58.02	-43.80	3.32	-40.48	-13	-27.48
5	12915	59.33	-41.63	4.43	-37.20	-13	-24.20
6	15067.5	61.26	-36.15	3.68	-32.47	-13	-19.47
7	17220	64.43	-34.83	3.05	-31.78	-13	-18.78
8	19372.5	67.67	-34.65	3.78	-30.87	-13	-17.87

**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	56.3	-48.42	7.39	-41.03	-13	-28.03
2	6457.5	52.47	-51.67	6.00	-45.67	-13	-32.67
3	8610	56.31	-46.31	4.23	-42.08	-13	-29.08
4	10762.5	57.84	-43.98	3.32	-40.66	-13	-27.66
5	12915	57.18	-43.78	4.43	-39.35	-13	-26.35
6	15067.5	60.93	-36.48	3.68	-32.80	-13	-19.80
7	17220	64.84	-34.42	3.05	-31.37	-13	-18.37
8	19372.5	67.59	-34.73	3.78	-30.95	-13	-17.95

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	52.772	32.37	-47.14	-9.34	-56.48	-13	-43.48
2	139.631	29.27	-64.59	-1.31	-65.90	-13	-52.90
3	294.736	33.64	-61.98	3.75	-58.24	-13	-45.24
4	649.894	38.49	-56.50	1.74	-54.76	-13	-41.76
5	921.454	38.68	-59.81	0.43	-59.38	-13	-46.38
6	960.144	41.59	-56.24	0.39	-55.84	-13	-42.84

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	49.91	36.02	-42.45	-10.04	-52.49	-13	-39.49
2	99.86	39.10	-51.58	-0.62	-52.20	-13	-39.20
3	502.14	32.01	-63.48	2.87	-60.61	-13	-47.61
4	651.25	32.23	-62.80	1.74	-61.06	-13	-48.06
5	899.13	40.79	-57.95	0.50	-57.46	-13	-44.46
6	957.57	42.80	-55.11	0.38	-54.73	-13	-41.73

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 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	53.222	33.06	-46.61	-9.23	-55.84	-13	-42.84
2	139.801	30.67	-63.23	-1.31	-64.54	-13	-51.54
3	294.636	34.06	-61.56	3.75	-57.81	-13	-44.81
4	650.914	40.21	-54.81	1.74	-53.07	-13	-40.07
5	920.634	40.36	-58.14	0.43	-57.71	-13	-44.71
6	960.774	42.75	-55.05	0.39	-54.66	-13	-41.66

**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	49.59	37.23	-41.12	-10.12	-51.24	-13	-38.24
2	100.57	40.52	-50.12	-0.64	-50.77	-13	-37.77
3	501.96	34.12	-61.38	2.88	-58.50	-13	-45.50
4	649.91	33.89	-61.10	1.74	-59.36	-13	-46.36
5	899.3	40.92	-57.82	0.50	-57.33	-13	-44.33
6	958.97	43.19	-54.68	0.39	-54.29	-13	-41.29

**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	51.832	32.37	-46.79	-9.57	-56.37	-13	-43.37
2	140.891	29.27	-64.86	-1.32	-66.18	-13	-53.18
3	294.746	33.64	-61.98	3.75	-58.24	-13	-45.24
4	649.324	38.49	-56.49	1.75	-54.74	-13	-41.74
5	921.354	38.68	-59.81	0.43	-59.38	-13	-46.38
6	960.274	41.59	-56.23	0.39	-55.84	-13	-42.84

**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	50.76	36.02	-42.76	-9.83	-52.59	-13	-39.59
2	100.49	39.10	-51.55	-0.64	-52.19	-13	-39.19
3	501.71	32.01	-63.49	2.88	-60.61	-13	-47.61
4	652.28	32.23	-62.83	1.74	-61.09	-13	-48.09
5	898.45	40.79	-57.96	0.50	-57.46	-13	-44.46
6	958.18	42.80	-55.09	0.38	-54.71	-13	-41.71

**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	65.33	-39.47	7.42	-32.04	-13	-19.04
2	6345	50.75	-53.39	6.19	-47.20	-13	-34.20
3	8460	57.24	-45.38	4.20	-41.18	-13	-28.18
4	10575	58.61	-43.42	3.50	-39.93	-13	-26.93
5	12690	59.49	-41.82	4.38	-37.44	-13	-24.44
6	14805	62.18	-35.00	3.78	-31.22	-13	-18.22
7	16920	64.52	-34.55	2.94	-31.61	-13	-18.61
8	19035	67.53	-33.00	3.71	-29.29	-13	-16.29

**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	4230	56.01	-48.79	7.42	-41.36	-13	-28.36
2	6345	51.79	-52.35	6.19	-46.16	-13	-33.16
3	8460	57.73	-44.89	4.20	-40.69	-13	-27.69
4	10575	57.36	-44.67	3.50	-41.18	-13	-28.18
5	12690	58.32	-42.99	4.38	-38.61	-13	-25.61
6	14805	61.6	-35.58	3.78	-31.80	-13	-18.80
7	16920	64.09	-34.98	2.94	-32.04	-13	-19.04
8	19035	67.33	-33.20	3.71	-29.49	-13	-16.49

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	65.80	-37.27	7.87	-29.40	-13	-16.40
2	6397.5	51.80	-52.72	7.05	-45.67	-13	-32.67
3	8530	57.80	-44.14	5.03	-39.11	-13	-26.11
4	10662.5	59	-43.71	4.23	-39.48	-13	-26.48
5	12795	60.4	-41.84	3.67	-38.17	-13	-25.17
6	14927.5	62.8	-38.71	4.37	-34.34	-13	-21.34
7	17060	64.6	-35.25	1.93	-33.31	-13	-20.31
8	19192.5	68.1	-33.09	3.85	-29.24	-13	-16.24

**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	56.6	-46.47	7.87	-38.60	-13	-25.60
2	6397.5	52.4	-52.12	7.05	-45.07	-13	-32.07
3	8530	58.1	-43.84	5.03	-38.81	-13	-25.81
4	10662.5	58.5	-44.21	4.23	-39.98	-13	-26.98
5	12795	58.4	-43.84	3.67	-40.17	-13	-27.17
6	14927.5	62.6	-38.91	4.37	-34.54	-13	-21.54
7	17060	65.3	-34.55	1.93	-32.61	-13	-19.61
8	19192.5	67.8	-33.39	3.85	-29.54	-13	-16.54

**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	65.06	-39.66	7.39	-32.27	-13	-19.27
2	6450	50.34	-53.80	6.01	-47.79	-13	-34.79
3	8600	57.71	-44.91	4.23	-40.68	-13	-27.68
4	10750	58.92	-42.92	3.33	-39.58	-13	-26.58
5	12900	60.06	-40.92	4.42	-36.50	-13	-23.50
6	15050	62.36	-35.03	3.69	-31.35	-13	-18.35
7	17200	63.99	-35.25	3.04	-32.21	-13	-19.21
8	19350	67.44	-34.76	3.77	-30.99	-13	-17.99

**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	4300	55.7	-49.02	7.39	-41.63	-13	-28.63
2	6450	52.26	-51.88	6.01	-45.87	-13	-32.87
3	8600	57.9	-44.72	4.23	-40.49	-13	-27.49
4	10750	57.38	-44.46	3.33	-41.12	-13	-28.12
5	12900	58.08	-42.90	4.42	-38.48	-13	-25.48
6	15050	61.58	-35.81	3.69	-32.13	-13	-19.13
7	17200	65.11	-34.13	3.04	-31.09	-13	-18.09
8	19350	66.56	-35.64	3.77	-31.87	-13	-18.87

**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	52.992	32.36	-47.22	-9.29	-56.51	-13	-43.51
2	139.411	29.83	-63.98	-1.31	-65.29	-13	-52.29
3	294.656	34.44	-61.18	3.75	-57.43	-13	-44.43
4	648.674	38.44	-56.52	1.75	-54.77	-13	-41.77
5	922.044	40.78	-57.70	0.43	-57.28	-13	-44.28
6	960.264	40.32	-57.50	0.39	-57.11	-13	-44.11

**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	50.57	37.12	-41.59	-9.88	-51.47	-13	-38.47
2	101.21	39.67	-50.94	-0.66	-51.60	-13	-38.60
3	502.63	32.73	-62.76	2.87	-59.89	-13	-46.89
4	650.86	33.13	-61.89	1.74	-60.15	-13	-47.15
5	899.33	38.99	-59.75	0.50	-59.26	-13	-46.26
6	957.81	40.00	-57.91	0.38	-57.53	-13	-44.53

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	51.722	32.69	-46.43	-9.60	-56.03	-13	-43.03
2	138.781	30.48	-63.20	-1.30	-64.50	-13	-51.50
3	295.006	35.40	-60.23	3.75	-56.49	-13	-43.49
4	650.574	39.09	-55.92	1.74	-54.18	-13	-41.18
5	921.634	41.02	-57.47	0.43	-57.04	-13	-44.04
6	960.694	41.79	-56.02	0.39	-55.62	-13	-42.62

**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	38.17	-40.33	-10.02	-50.35	-13	-37.35
2	102.01	40.44	-50.12	-0.68	-50.81	-13	-37.81
3	501.79	34.19	-61.31	2.88	-58.43	-13	-45.43
4	649.56	34.17	-60.81	1.75	-59.07	-13	-46.07
5	899.43	40.47	-58.27	0.49	-57.77	-13	-44.77
6	958.4	41.74	-56.15	0.38	-55.76	-13	-42.76

**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	51.612	31.88	-47.21	-9.63	-56.83	-13	-43.83
2	140.841	29.66	-64.46	-1.32	-65.78	-13	-52.78
3	296.366	35.30	-60.37	3.74	-56.64	-13	-43.64
4	650.054	38.50	-56.50	1.74	-54.75	-13	-41.75
5	921.304	39.88	-58.61	0.43	-58.19	-13	-45.19
6	960.924	40.79	-57.01	0.40	-56.61	-13	-43.61

**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	50.17	36.94	-41.62	-9.98	-51.60	-13	-38.60
2	101.33	38.98	-51.62	-0.66	-52.29	-13	-39.29
3	502.77	32.56	-62.93	2.87	-60.06	-13	-47.06
4	651.75	33.70	-61.34	1.74	-59.60	-13	-46.60
5	899.49	39.79	-58.95	0.49	-58.45	-13	-45.45
6	957.67	40.53	-57.38	0.38	-57.00	-13	-44.00

**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	65.38	-39.41	7.42	-31.99	-13	-18.99
2	6352.5	51.41	-52.73	6.18	-46.55	-13	-33.55
3	8470	57.56	-45.06	4.20	-40.86	-13	-27.86
4	10587.5	58.63	-43.39	3.49	-39.90	-13	-26.90
5	12705	59.11	-42.17	4.38	-37.79	-13	-24.79
6	14822.5	61.55	-35.64	3.77	-31.87	-13	-18.87
7	16940	65.08	-34.00	2.95	-31.06	-13	-18.06
8	19057.5	67.36	-33.29	3.71	-29.58	-13	-16.58
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	56.6	-48.19	7.42	-40.77	-13	-27.77
2	6352.5	52.63	-51.51	6.18	-45.33	-13	-32.33
3	8470	57.3	-45.32	4.20	-41.12	-13	-28.12
4	10587.5	57.8	-44.22	3.49	-40.73	-13	-27.73
5	12705	57.68	-43.60	4.38	-39.22	-13	-26.22
6	14822.5	62.06	-35.13	3.77	-31.36	-13	-18.36
7	16940	64.81	-34.27	2.95	-31.33	-13	-18.33
8	19057.5	67.64	-33.01	3.71	-29.30	-13	-16.30

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	Above 1000MHz
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## Antenna Polarity &amp; 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	66.50	-36.57	7.87	-28.70	-13	-15.70
2	6397.5	52.20	-52.32	7.05	-45.27	-13	-32.27
3	8530	57.60	-44.34	5.03	-39.31	-13	-26.31
4	10662.5	59.7	-43.01	4.23	-38.78	-13	-25.78
5	12795	60.6	-41.64	3.67	-37.97	-13	-24.97
6	14927.5	62.8	-38.71	4.37	-34.34	-13	-21.34
7	17060	65.4	-34.45	1.93	-32.51	-13	-19.51
8	19192.5	68.8	-32.39	3.85	-28.54	-13	-15.54

## Antenna Polarity &amp; 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	57.1	-45.97	7.87	-38.10	-13	-25.10
2	6397.5	53.3	-51.22	7.05	-44.17	-13	-31.17
3	8530	57.8	-44.14	5.03	-39.11	-13	-26.11
4	10662.5	59	-43.71	4.23	-39.48	-13	-26.48
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	65	-34.85	1.93	-32.91	-13	-19.91
8	19192.5	67.7	-33.49	3.85	-29.64	-13	-16.64

## 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	66.08	-38.65	7.40	-31.25	-13	-18.25
2	6442.5	51.69	-52.45	6.02	-46.43	-13	-33.43
3	8590	56.71	-45.91	4.22	-41.69	-13	-28.69
4	10737.5	59.69	-42.16	3.34	-38.82	-13	-25.82
5	12885	59.45	-41.56	4.42	-37.14	-13	-24.14
6	15032.5	61.57	-35.81	3.69	-32.12	-13	-19.12
7	17180	65.22	-34.01	3.03	-30.98	-13	-17.98
8	19327.5	67.91	-34.17	3.77	-30.40	-13	-17.40

**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	4295	55.68	-49.05	7.40	-41.65	-13	-28.65
2	6442.5	52.42	-51.72	6.02	-45.70	-13	-32.70
3	8590	57.36	-45.26	4.22	-41.04	-13	-28.04
4	10737.5	58.3	-43.55	3.34	-40.21	-13	-27.21
5	12885	57.89	-43.12	4.42	-38.70	-13	-25.70
6	15032.5	61.97	-35.41	3.69	-31.72	-13	-18.72
7	17180	64.9	-34.33	3.03	-31.30	-13	-18.30
8	19327.5	67.47	-34.61	3.77	-30.84	-13	-17.84

**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	52.282	30.15	-49.18	-9.46	-58.64	-13	-45.64
2	140.561	27.73	-66.33	-1.31	-67.65	-13	-54.65
3	294.976	32.80	-62.83	3.75	-59.09	-13	-46.09
4	649.174	39.73	-55.24	1.75	-53.50	-13	-40.50
5	921.334	39.97	-58.52	0.43	-58.10	-13	-45.10
6	960.254	40.56	-57.26	0.39	-56.87	-13	-43.87

**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	36.74	-41.60	-10.13	-51.73	-13	-38.73
2	99.96	37.25	-53.43	-0.63	-54.05	-13	-41.05
3	502.29	33.61	-61.88	2.87	-59.01	-13	-46.01
4	650.55	34.95	-60.06	1.74	-58.32	-13	-45.32
5	899.89	39.16	-59.57	0.49	-59.08	-13	-46.08
6	957.88	42.69	-55.21	0.38	-54.83	-13	-41.83

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	52.422	31.47	-47.91	-9.43	-57.34	-13	-44.34
2	138.561	30.56	-63.07	-1.30	-64.37	-13	-51.37
3	296.286	34.19	-61.48	3.74	-57.74	-13	-44.74
4	651.154	39.88	-55.15	1.74	-53.40	-13	-40.40
5	920.534	40.56	-57.94	0.43	-57.51	-13	-44.51
6	960.164	41.43	-56.40	0.39	-56.00	-13	-43.00

**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	49.48	37.27	-41.04	-10.15	-51.19	-13	-38.19
2	101.5	38.74	-51.85	-0.67	-52.52	-13	-39.52
3	501.93	34.61	-60.89	2.88	-58.01	-13	-45.01
4	650.25	35.28	-59.72	1.74	-57.98	-13	-44.98
5	899.62	40.48	-58.26	0.49	-57.76	-13	-44.76
6	959.14	42.82	-55.04	0.39	-54.65	-13	-41.65

**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	52.522	30.27	-49.14	-9.40	-58.55	-13	-45.55
2	139.611	28.10	-65.76	-1.31	-67.06	-13	-54.06
3	294.506	33.14	-62.48	3.75	-58.73	-13	-45.73
4	650.504	38.43	-56.58	1.74	-54.83	-13	-41.83
5	921.234	39.30	-59.19	0.43	-58.77	-13	-45.77
6	959.934	40.07	-57.76	0.39	-57.37	-13	-44.37

**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	49.94	36.65	-41.83	-10.03	-51.86	-13	-38.86
2	99.52	37.93	-52.77	-0.61	-53.38	-13	-40.38
3	502.9	33.59	-61.90	2.87	-59.03	-13	-46.03
4	650.57	34.29	-60.72	1.74	-58.98	-13	-45.98
5	898.93	39.97	-58.78	0.50	-58.28	-13	-45.28
6	958.28	41.75	-56.14	0.38	-55.76	-13	-42.76

**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	65.30	-39.49	7.42	-32.07	-13	-19.07
2	6360	52.20	-51.94	6.16	-45.78	-13	-32.78
3	8480	58.40	-44.22	4.20	-40.02	-13	-27.02
4	10600	59.5	-42.51	3.47	-39.03	-13	-26.03
5	12720	60.6	-40.66	4.39	-36.28	-13	-23.28
6	14840	62.1	-35.11	3.76	-31.35	-13	-18.35
7	16960	64.5	-34.60	2.95	-31.64	-13	-18.64
8	19080	67.8	-32.97	3.72	-29.25	-13	-16.25

**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	4240	56.4	-48.39	7.42	-40.97	-13	-27.97
2	6360	52.5	-51.64	6.16	-45.48	-13	-32.48
3	8480	57.4	-45.22	4.20	-41.02	-13	-28.02
4	10600	58.5	-43.51	3.47	-40.03	-13	-27.03
5	12720	57.9	-43.36	4.39	-38.98	-13	-25.98
6	14840	62.4	-34.81	3.76	-31.05	-13	-18.05
7	16960	65.8	-33.30	2.95	-30.34	-13	-17.34
8	19080	68.5	-32.27	3.72	-28.55	-13	-15.55

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	65.30	-37.77	7.87	-29.90	-13	-16.90
2	6397.5	52.20	-52.32	7.05	-45.27	-13	-32.27
3	8530	58.40	-43.54	5.03	-38.51	-13	-25.51
4	10662.5	59.5	-43.21	4.23	-38.98	-13	-25.98
5	12795	60.6	-41.64	3.67	-37.97	-13	-24.97
6	14927.5	62.1	-39.41	4.37	-35.04	-13	-22.04
7	17060	64.5	-35.35	1.93	-33.41	-13	-20.41
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	56.4	-46.67	7.87	-38.80	-13	-25.80
2	6397.5	52.5	-52.02	7.05	-44.97	-13	-31.97
3	8530	57.4	-44.54	5.03	-39.51	-13	-26.51
4	10662.5	58.5	-44.21	4.23	-39.98	-13	-26.98
5	12795	57.9	-44.34	3.67	-40.67	-13	-27.67
6	14927.5	62.4	-39.11	4.37	-34.74	-13	-21.74
7	17060	65.8	-34.05	1.93	-32.11	-13	-19.11
8	19192.5	68.5	-32.69	3.85	-28.84	-13	-15.84

**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	65.30	-39.43	7.40	-32.04	-13	-19.04
2	6435	52.20	-51.94	6.04	-45.90	-13	-32.90
3	8580	58.40	-44.22	4.22	-40.00	-13	-27.00
4	10725	59.5	-42.36	3.35	-39.01	-13	-26.01
5	12870	60.6	-40.43	4.42	-36.01	-13	-23.01
6	15015	62.1	-35.26	3.70	-31.57	-13	-18.57
7	17160	64.5	-34.72	3.03	-31.69	-13	-18.69
8	19305	67.8	-34.16	3.76	-30.40	-13	-17.40

**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	4290	56.4	-48.33	7.40	-40.94	-13	-27.94
2	6435	52.5	-51.64	6.04	-45.60	-13	-32.60
3	8580	57.4	-45.22	4.22	-41.00	-13	-28.00
4	10725	58.5	-43.36	3.35	-40.01	-13	-27.01
5	12870	57.9	-43.13	4.42	-38.71	-13	-25.71
6	15015	62.4	-34.96	3.70	-31.27	-13	-18.27
7	17160	65.8	-33.42	3.03	-30.39	-13	-17.39
8	19305	68.5	-33.46	3.76	-29.70	-13	-16.70

**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	60.701	27.41	-54.97	-7.41	-62.37	-13	-49.37
2	174.687	33.68	-67.79	-1.53	-69.32	-13	-56.32
3	300.816	34.50	-61.31	3.71	-57.60	-13	-44.60
4	447.74	26.83	-62.73	2.25	-60.47	-13	-47.47
5	599.35	33.37	-68.75	1.41	-67.34	-13	-54.34
6	921.274	41.71	-57.43	0.19	-57.24	-13	-44.24
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	48.118	34.54	-43.28	-10.48	-53.76	-13	-40.76
2	164.384	30.59	-56.62	-2.42	-59.04	-13	-46.04
3	300.396	33.82	-64.06	4.38	-59.69	-13	-46.69
4	500.044	33.89	-57.07	2.12	-54.95	-13	-41.95
5	600.87	34.12	-67.98	1.41	-66.57	-13	-53.57
6	921.844	39.53	-59.60	0.20	-59.40	-13	-46.40

**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	61.401	27.93	-55.03	-7.17	-62.20	-13	-49.20
2	174.397	34.44	-57.79	1.38	-56.41	-13	-43.41
3	300.716	34.95	-60.86	3.71	-57.15	-13	-44.15
4	448.53	27.93	-70.41	2.80	-67.60	-13	-54.60
5	599.19	34.07	-60.54	1.79	-58.75	-13	-45.75
6	921.654	42.09	-56.40	0.43	-55.97	-13	-42.97

**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	48.058	35.10	-42.70	-10.49	-53.19	-13	-40.19
2	163.734	31.55	-57.70	-0.16	-57.86	-13	-44.86
3	300.246	34.00	-61.79	3.71	-58.08	-13	-45.08
4	499.334	34.11	-61.42	2.89	-58.52	-13	-45.52
5	600.32	34.72	-59.90	1.79	-58.11	-13	-45.11
6	921.644	39.99	-58.50	0.43	-58.07	-13	-45.07

**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 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	60.681	27.32	-55.05	-7.41	-62.46	-13	-49.46
2	173.527	33.09	-68.13	-1.52	-69.65	-13	-56.65
3	299.796	34.87	-60.91	3.71	-57.19	-13	-44.19
4	448.34	27.49	-62.08	2.25	-59.83	-13	-46.83
5	599.67	33.00	-69.11	1.41	-67.70	-13	-54.70
6	922.214	41.14	-57.97	0.20	-57.77	-13	-44.77

**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	48.828	33.61	-44.47	-10.30	-54.77	-13	-41.77
2	163.194	30.75	-56.52	-2.38	-58.91	-13	-45.91
3	300.876	33.52	-64.36	4.37	-59.99	-13	-46.99
4	499.394	32.92	-58.03	2.12	-55.90	-13	-42.90
5	599.71	34.39	-67.72	1.41	-66.31	-13	-53.31
6	921.014	39.46	-59.69	0.19	-59.50	-13	-46.50

**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	61.891	25.73	-57.08	-7.12	-64.19	-13	-51.19
2	174.267	34.49	-66.89	-1.53	-68.42	-13	-55.42
3	300.726	35.62	-60.18	3.71	-56.48	-13	-43.48
4	449.15	26.85	-62.75	2.25	-60.50	-13	-47.50
5	599.26	33.86	-68.26	1.41	-66.85	-13	-53.85
6	920.664	39.84	-59.33	0.19	-59.13	-13	-46.13
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	48.698	34.75	-43.28	-10.34	-53.62	-13	-40.62
2	163.754	30.86	-56.38	-2.40	-58.78	-13	-45.78
3	299.616	34.68	-63.21	4.38	-58.83	-13	-45.83
4	499.184	33.96	-56.98	2.12	-54.86	-13	-41.86
5	599.02	33.28	-68.84	1.41	-67.43	-13	-54.43
6	921.184	39.59	-59.56	0.19	-59.36	-13	-46.36

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	61.941	27.00	-55.82	-7.10	-62.93	-13	-49.93
2	174.397	34.87	-66.54	-1.53	-68.07	-13	-55.07
3	301.546	35.95	-59.88	3.70	-56.18	-13	-43.18
4	448.87	27.97	-61.62	2.25	-59.37	-13	-46.37
5	598.75	34.63	-67.50	1.41	-66.08	-13	-53.08
6	920.784	41.30	-57.86	0.19	-57.67	-13	-44.67

**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	48.108	35.09	-42.73	-10.48	-53.21	-13	-40.21
2	164.154	32.22	-55.00	-2.41	-57.41	-13	-44.41
3	299.426	34.80	-63.09	4.38	-58.71	-13	-45.71
4	498.964	34.81	-56.12	2.12	-54.00	-13	-41.00
5	599.87	33.93	-68.18	1.41	-66.77	-13	-53.77
6	920.664	40.13	-59.04	0.19	-58.84	-13	-45.84

**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	62.221	25.91	-57.02	-7.04	-64.05	-13	-51.05
2	174.907	33.85	-67.67	-1.53	-69.20	-13	-56.20
3	302.286	34.76	-61.09	3.70	-57.39	-13	-44.39
4	449.07	26.69	-62.90	2.25	-60.65	-13	-47.65
5	598.7	33.18	-68.95	1.41	-67.53	-13	-54.53
6	920.204	41.21	-57.97	0.19	-57.78	-13	-44.78

**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	47.408	34.05	-43.51	-10.65	-54.16	-13	-41.16
2	164.364	31.58	-55.63	-2.42	-58.05	-13	-45.05
3	298.776	34.48	-63.42	4.39	-59.04	-13	-46.04
4	498.764	33.46	-57.47	2.13	-55.34	-13	-42.34
5	600.3	32.54	-69.57	1.41	-68.16	-13	-55.16
6	921.334	39.21	-59.93	0.19	-59.74	-13	-46.74

**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	60.181	26.92	-55.27	-7.53	-62.80	-13	-49.80
2	173.937	34.70	-66.61	-1.53	-68.13	-13	-55.13
3	299.676	34.68	-61.09	3.72	-57.38	-13	-44.38
4	450.28	27.40	-62.23	2.25	-59.98	-13	-46.98
5	597.85	34.05	-68.09	1.42	-66.67	-13	-53.67
6	921.834	41.75	-57.38	0.20	-57.18	-13	-44.18

**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	48.738	33.91	-44.13	-10.33	-54.46	-13	-41.46
2	164.104	31.89	-55.33	-2.41	-57.74	-13	-44.74
3	299.686	32.76	-65.13	4.38	-60.75	-13	-47.75
4	498.974	34.58	-56.35	2.12	-54.23	-13	-41.23
5	599.76	33.81	-68.30	1.41	-66.89	-13	-53.89
6	920.924	39.28	-59.88	0.19	-59.68	-13	-46.68

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	61.131	27.20	-55.33	-7.30	-62.63	-13	-49.63
2	173.457	35.10	-66.11	-1.52	-67.63	-13	-54.63
3	300.506	35.68	-60.12	3.71	-56.41	-13	-43.41
4	449.53	27.89	-61.72	2.25	-59.47	-13	-46.47
5	598.48	34.36	-67.77	1.42	-66.35	-13	-53.35
6	921.814	42.83	-56.30	0.20	-56.10	-13	-43.10

**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	48.898	35.08	-43.02	-10.29	-53.31	-13	-40.31
2	164.304	32.24	-54.97	-2.41	-57.39	-13	-44.39
3	300.036	33.79	-64.10	4.38	-59.72	-13	-46.72
4	499.184	34.82	-56.12	2.12	-54.00	-13	-41.00
5	600.35	34.04	-68.07	1.41	-66.66	-13	-53.66
6	921.624	39.32	-59.81	0.20	-59.62	-13	-46.62

**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	61.061	26.27	-56.24	-7.32	-63.56	-13	-50.56
2	174.197	33.75	-67.62	-1.53	-69.14	-13	-56.14
3	301.476	34.65	-61.18	3.70	-57.47	-13	-44.47
4	449.83	27.85	-61.76	2.25	-59.52	-13	-46.52
5	598.48	32.86	-69.27	1.42	-67.85	-13	-54.85
6	922.664	42.42	-56.68	0.20	-56.48	-13	-43.48

**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	49.628	34.90	-43.47	-10.11	-53.58	-13	-40.58
2	164.744	32.13	-55.06	-2.43	-57.49	-13	-44.49
3	299.426	33.72	-64.17	4.38	-59.79	-13	-46.79
4	498.594	34.60	-56.32	2.13	-54.20	-13	-41.20
5	600.52	32.79	-69.32	1.41	-67.91	-13	-54.91
6	921.044	38.34	-60.81	0.19	-60.62	-13	-47.62

**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	61.631	27.84	-54.87	-7.18	-62.05	-13	-49.05
2	173.177	32.81	-68.33	-1.52	-69.86	-13	-56.86
3	300.796	33.95	-61.86	3.71	-58.15	-13	-45.15
4	450.07	26.67	-62.95	2.25	-60.70	-13	-47.70
5	598.27	33.01	-69.12	1.42	-67.70	-13	-54.70
6	920.914	40.73	-58.43	0.19	-58.23	-13	-45.23

**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	47.008	34.20	-43.22	-10.75	-53.97	-13	-40.97
2	165.524	30.82	-56.33	-2.45	-58.78	-13	-45.78
3	299.836	33.90	-63.99	4.38	-59.61	-13	-46.61
4	499.644	33.40	-57.55	2.12	-55.43	-13	-42.43
5	599.94	33.55	-68.56	1.41	-67.15	-13	-54.15
6	921.814	40.49	-58.64	0.20	-58.44	-13	-45.44

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	61.971	28.04	-54.80	-7.10	-61.89	-13	-48.89
2	173.967	34.30	-67.02	-1.53	-68.54	-13	-55.54
3	301.366	34.20	-61.62	3.70	-57.92	-13	-44.92
4	449.11	27.53	-62.06	2.25	-59.81	-13	-46.81
5	598.35	33.23	-68.90	1.42	-67.48	-13	-54.48
6	921.144	41.98	-57.17	0.19	-56.98	-13	-43.98

**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	47.468	35.26	-42.32	-10.64	-52.96	-13	-39.96
2	164.544	32.15	-55.05	-2.42	-57.47	-13	-44.47
3	300.106	34.29	-63.60	4.38	-59.22	-13	-46.22
4	500.094	33.72	-57.24	2.12	-55.12	-13	-42.12
5	599.56	34.94	-67.18	1.41	-65.76	-13	-52.76
6	922.464	40.86	-58.24	0.20	-58.04	-13	-45.04

**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 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	62.501	26.90	-56.13	-6.97	-63.10	-13	-50.10
2	173.017	33.16	-67.95	-1.52	-69.47	-13	-56.47
3	300.966	33.29	-62.52	3.71	-58.82	-13	-45.82
4	448.72	26.84	-62.74	2.25	-60.49	-13	-47.49
5	597.71	32.52	-69.62	1.42	-68.20	-13	-55.20
6	920.154	41.41	-57.77	0.19	-57.58	-13	-44.58

**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	47.748	34.90	-42.79	-10.57	-53.35	-13	-40.35
2	164.584	30.97	-56.23	-2.42	-58.65	-13	-45.65
3	300.286	33.93	-63.95	4.38	-59.58	-13	-46.58
4	500.654	33.68	-57.30	2.12	-55.18	-13	-42.18
5	598.61	34.33	-67.80	1.42	-66.38	-13	-53.38
6	923.364	40.29	-58.78	0.20	-58.58	-13	-45.58

**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.

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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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