



BUREAU
VERITAS

Test Report No.: PSZ-QBJ2501200112RF03



Certificate #6613.01

FCC TEST REPORT (PART 27)

Applicant:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer or Supplier:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Product:	Mobile Phone
Brand Name:	POCO
Model Name:	25053PC47G
FCC ID	2AFZZPC47G
Date of tests	Feb. 13, 2025-Mar. 26, 2025

The tests have been carried out according to the requirements of the following standard:

- | | |
|--|--|
| <input checked="" type="checkbox"/> FCC Part 27 | <input checked="" type="checkbox"/> ANSI/TIA/EIA-603-E |
| <input checked="" type="checkbox"/> ANSI/TIA/EIA-603-D | <input checked="" type="checkbox"/> ANSI C63.26-2015 |
| <input checked="" type="checkbox"/> FCC Part 2 | |

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
Date: Mar. 26, 2025	Date: Mar. 26, 2025

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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(Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District,
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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSZ-QBJ2501200112RF03	Original release	Mar. 26, 2025



1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	TEST LAB*
§2.1046	Conducted Output Power	Compliance	A
§27.50(d)(4) §27.50(h)(2)	Equivalent Isotropically Radiated Power (WCMDA Band 4)(Band 7)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(c)(2) §27.53(g) §27.53(h) §27.53(m)(4)	Conducted Band Edge Measurements (WCMDA Band 4) (Band 7)	Compliance	A
§2.1051 §27.53(g) §27.53(c)(2) §27.53(f) §27.53(h) §27.53(m)(4)	Conducted Spurious Emissions (WCMDA Band 4)(Band 7)	Compliance	A
§2.1053 §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4)	Radiated Spurious Emissions (WCMDA Band 4)(Band 7)	Compliance	A
§27.50	Peak to average ratio*	Compliance	A

* Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.



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***Test Lab Information Reference**

Lab A:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

The FCC Site Registration No. is 434559; The Designation No. is CN1325.

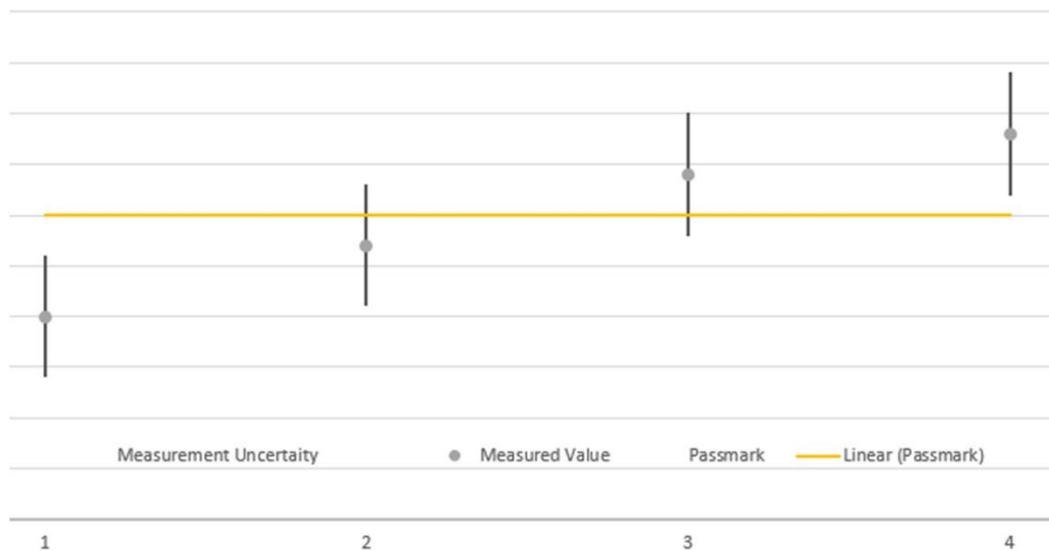


1.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	UNCERTAINTY
Frequency Stability	±76.97Hz
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions & Radiated Power (30MHz~1GHz)	±4.98dB
Radiated emissions & Radiated Power (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Band Edge Measurements	±4.70dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.29,24	Aug.28,26
Pre-Amplifier	R&S	SCU08F1	101028	Sep.15,24	Sep.14,26
Vector Signal Generator	R&S	SMBV100B	102176	Feb.15,24	Feb.14,26
Signal Generator	R&S	SMB100A	182185	Feb.15,24	Feb.14,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Feb.24,24	Feb.23,26
EMI TEST Receiver	R&S	ESW44	101973	Feb.24,24	Feb.23,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.27,24	Feb.26,26
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.21,24	Aug.20,26
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.22,24	Feb.21,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.21,24	Aug.20,26
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,24	Feb.21,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.26,24	Jun.25,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	Sep.30,24	Sep.39,26
DC Source	HYELEC	HY3010B	551016	Aug.30,24	Aug.29,26
Hygrothermograph	DELI	20210528	SZ014	Sep.05,24	Sep.04,26
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.26,24	Oct.25,25
CABLE	R&S	W12.14	N/A	Apr.26,24	Oct.25,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,24	Oct.25,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,24	Oct.25,25
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26

NOTE:

1. The calibration interval of the above test instruments is 6 months or 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 434559; The Designation No. is CN1325.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	Mobile Phone	
BRAND NAME*	POCO	
MODEL NAME*	25053PC47G	
NOMINAL VOLTAGE*	5/3.6-20V dc (adapter or host equipment) 3.93Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	WCDMA IV	BPSK, QPSK
	LTE	QPSK, 16QAM, 64QAM, 256QAM
FREQUENCY RANGE	WCDMA IV	1712.4MHz ~ 1752.6MHz
	LTE Band 7 Channel Bandwidth: 5MHz	2502.5MHz ~ 2567.5MHz
	LTE Band 7 Channel Bandwidth: 10MHz	2505MHz ~ 2565MHz
	LTE Band 7 Channel Bandwidth: 15MHz	2507.5MHz ~ 2562.5MHz
	LTE Band 7 Channel Bandwidth: 20MHz	2510MHz ~ 2560MHz
MAX. EIRP/ERP POWER	WCDMA IV	216.27mW
	LTE Band 7 Channel Bandwidth: 5MHz	244.91mW
	LTE Band 7 Channel Bandwidth: 10MHz	244.34mW
	LTE Band 7 Channel Bandwidth: 15MHz	246.60mW
	LTE Band 7 Channel Bandwidth: 20MHz	250.61mW
EMISSION DESIGNATOR	WCDMA IV	4M15F9W
	LTE Band 7 Channel Bandwidth: 5MHz	QPSK: 4M48G7D
		16QAM: 4M50W7D
	LTE Band 7 Channel Bandwidth: 10MHz	QPSK: 8M96G7D
16QAM: 8M96W7D		
EMISSION DESIGNATOR	LTE Band 7 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
	LTE Band 7	QPSK: 18M0G7D



	Channel Bandwidth: 20MHz	16QAM: 17M9W7D	
ANTENNA GAIN*	WCDMA IV	ANT0	-3.81dBi
		ANT2	-1.08dBi
		ANT3	-2.08dBi
		ANT4	-4.27dBi
	LTE BAND7	ANT0	-3.04dBi
		ANT2	-1.55dBi
		ANT3	-3.15dBi
		ANT4	-0.07dBi
ANTENNA TYPE*	PIFA		
HW VERSION*	13510O10U		
SW VERSION*	Xiaomi HyperOS 2.0		
I/O PORTS*	Refer to user's manual		
CABLE SUPPLIED*	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter		
EXTREME TEMPERATURE*	0°C-40°C		
EXTREME VOLTAGE*	3.8V-4.3V		

NOTE:

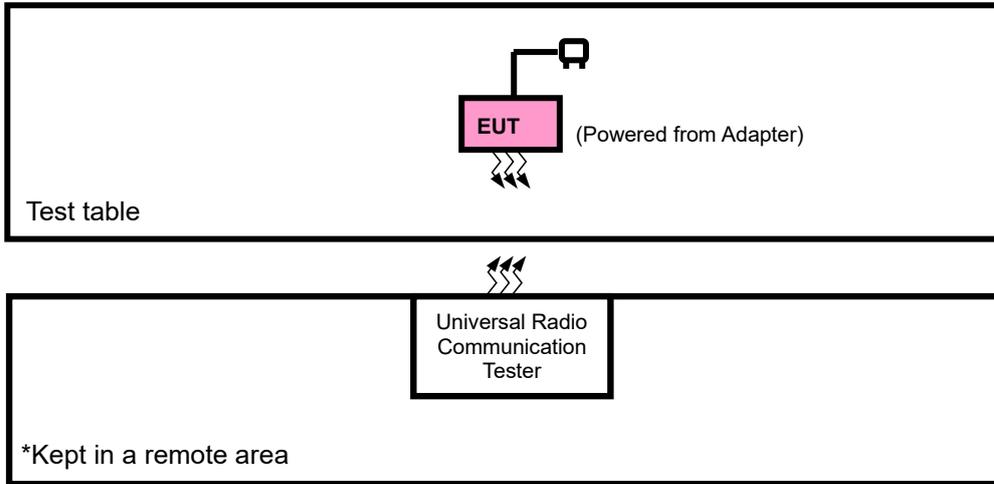
- *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a SISO function. Physically, the EUT provides four completed transmitters.

MODULATION MODE	TX FUNCTION
WCDMA	4TX
LTE	4TX

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in the test report.



2.2 CONFIGURATION OF SYSTEM UNDER TEST FOR RADIATION EMISSION TEST





2.3 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
1	Laptop	Lenovo	ThinkPad E14	HRSW00024	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter
2	USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter



2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter with WCDMA or LTE link
B	EUT + DC Supply with WCDMA or LTE link

WCDMA BAND 4 MODE				
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A	EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
B	FREQUENCY STABILITY	1312 to 1513	1312, 1413, 1513	WCDMA
A	OCCUPIED BANDWIDTH	1312 to 1513	1312, 1413, 1513	WCDMA
A	BAND EDGE	1312 to 1513	1312, 1513	WCDMA
A	PEAK TO AVERAGE RATIO	1312 to 1513	1312, 1413, 1513	WCDMA
A	CONDCUDED EMISSION	1312 to 1513	1312, 1413, 1513	WCDMA
A	RADIATED EMISSION	1312 to 1513	1312, 1413, 1513	WCDMA

LTE BAND 7 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM,256QAM	1 RB / 0 RB offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM,256QAM	1 RB / 0RB offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM,256QAM	1 RB / 0 RB offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM,256QAM	1 RB / 0 RB offset
B	FREQUENCY STABILITY	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	100 RB / 0 RB offset
A	OCCUPIED BANDWIDTH	20775 to 21425	21100	5MHz	QPSK, 16QAM	25 RB / 0 RB offset
		20800 to 21400	21100	10MHz	QPSK, 16QAM	50 RB / 0 RB offset
		20825 to 21375	21100	15MHz	QPSK, 16QAM	75 RB / 0 RB offset



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		20850 to 21350	21100	20MHz	QPSK, 16QAM	100 RB / 0 RB offset		
A	PEAK TO AVERAGE RATIO	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB / 0 RB offset 100 RB / 0 RB offset		
A	BAND EDGE	20775 to 21425	20775	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB offset 25 RB / 0 RB offset		
			21425	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 24 RB offset 25 RB / 0 RB offset		
		20800 to 21400	20800	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB offset 50 RB / 0 RB offset		
			21400	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 49 RB offset 50 RB / 0 RB offset		
		20825 to 21375	20825	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB offset 75 RB / 0 RB offset		
			21375	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 74 RB offset 75 RB / 0 RB offset		
		20850 to 21350	20850	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB offset 100 RB / 0 RB offset		
			21350	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 99 RB offset 100 RB / 0 RB offset		
		A	CONDCUDED EMISSION	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB / 0 RB offset
				20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB / 0RB offset
				20825 to 21375	20825, 21100, 21375	15MHz	QPSK	1 RB / 0 RB offset
				20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB / 0 RB offset
A	RADIATED EMISSION	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB offset		
		20800 to 21400	20800,21100,21400	10MHz	QPSK	1 RB / 0 RB offset		
		20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB offset		
		20850 to 21350	21100	20MHz	QPSK	1 RB / 0 RB offset		

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



TEST CONDITION			
TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu
CONDCUDED EMISSION	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	AC 120V/60Hz	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 3.93V By Battery	Hanwen Xu



2.5 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 v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

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



3. TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.”

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1-watt EIRP.

3.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{C}}$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_{T} = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_{C} = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

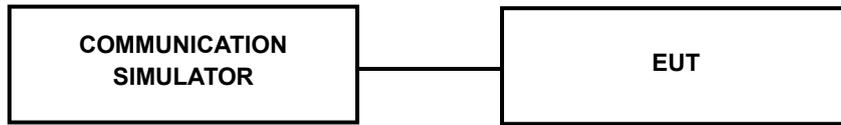
CONDUCTED POWER MEASUREMENT:

- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA IV_Ant0			WCDMA IV_Ant2		
	1312	1413	1513	1312	1413	1513
TX Channel	1312	1413	1513	1312	1413	1513
Rx Channel	1537	1638	1738	1537	1638	1738
Frequency (MHz)	1712.4	1732.6	1752.6	1712.4	1732.6	1752.6
RMC 12.2K	23.27	23.30	23.39	24.32	24.43	24.38
HSDPA Subtest-1	22.22	22.34	22.10	23.34	23.46	23.40
HSDPA Subtest-2	22.16	22.23	22.43	23.25	23.36	23.53
HSDPA Subtest-3	21.53	21.88	21.57	22.62	22.93	22.66
HSDPA Subtest-4	21.71	21.76	21.81	22.85	22.68	22.92
DC-HSDPA Subtest-1	22.25	22.30	22.42	23.15	23.37	23.58
DC-HSDPA Subtest-2	22.34	22.21	22.24	23.40	23.24	23.37
DC-HSDPA Subtest-3	21.64	21.91	21.88	22.68	22.95	22.89
DC-HSDPA Subtest-4	21.73	21.69	21.70	22.65	22.81	22.82
HSUPA Subtest-1	22.30	22.25	22.31	23.35	23.38	23.45
HSUPA Subtest-2	21.28	21.37	21.26	22.71	22.90	22.94
HSUPA Subtest-3	22.16	22.15	22.21	23.19	23.28	23.25
HSUPA Subtest-4	22.03	22.35	22.18	23.17	23.27	23.27
HSUPA Subtest-5	22.07	22.43	22.13	23.20	23.42	23.35

0.6

0.6

Band	WCDMA IV_Ant3			WCDMA IV_Ant4		
	1312	1413	1513	1312	1413	1513
TX Channel	1312	1413	1513	1312	1413	1513
Rx Channel	1537	1638	1738	1537	1638	1738
Frequency (MHz)	1712.4	1732.6	1752.6	1712.4	1732.6	1752.6
RMC 12.2K	24.26	24.27	24.31	24.17	24.15	24.18
HSDPA Subtest-1	22.99	23.01	22.96	23.14	23.15	23.03
HSDPA Subtest-2	23.05	23.00	23.12	23.17	23.09	23.16
HSDPA Subtest-3	22.49	22.61	22.46	22.62	22.77	22.49
HSDPA Subtest-4	22.60	22.44	22.82	22.75	22.51	22.85
DC-HSDPA Subtest-1	23.05	23.08	23.15	23.13	23.20	23.14
DC-HSDPA Subtest-2	23.10	23.07	22.95	23.08	23.08	23.04
DC-HSDPA Subtest-3	22.66	22.76	22.55	22.64	22.81	22.73
DC-HSDPA Subtest-4	22.45	22.58	22.53	22.55	22.70	22.57
HSUPA Subtest-1	23.21	22.99	23.07	23.27	23.13	23.10
HSUPA Subtest-2	22.44	22.65	22.61	22.54	22.66	22.78
HSUPA Subtest-3	23.00	23.27	23.03	23.10	23.33	23.14
HSUPA Subtest-4	22.89	23.05	22.89	22.87	23.06	23.03
HSUPA Subtest-5	22.89	23.43	22.95	22.90	23.45	23.01



LTE Band 7_Ant0

BW: 5M

BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	23.63	23.68	23.72
		1	12	23.61	23.77	23.57
		1	24	23.66	23.57	23.51
		12	0	22.65	22.79	22.72
		12	6	22.74	22.64	22.51
		12	13	22.69	22.66	22.39
		25	0	22.66	22.6	22.66
	16QAM	1	0	22.76	22.74	22.83
		1	12	22.59	22.6	22.63
		1	24	22.43	22.27	22.41
		12	0	21.69	21.74	21.91
		12	6	21.94	21.9	21.76
		12	13	21.75	21.84	21.79
		25	0	21.88	21.84	21.79
	64QAM	1	0	21.82	21.77	21.8
		1	12	21.83	21.82	21.86
		1	24	21.82	21.82	21.93
		12	0	20.81	20.83	20.86
		12	6	20.85	20.82	20.87
		12	13	20.71	20.76	20.86
		25	0	20.76	20.78	20.88
	256QAM	1	0	18.78	18.81	18.9
		1	12	18.82	18.91	18.85
		1	24	18.74	18.84	18.89
		12	0	18.71	18.77	18.95
		12	6	18.7	18.74	18.78
		12	13	18.53	18.63	18.71
		25	0	18.79	18.77	18.8



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	23.76	23.68	23.74
		1	24	23.65	23.63	23.61
		1	49	23.63	23.49	23.58
		25	0	22.69	22.76	22.82
		25	12	22.73	22.69	22.45
		25	25	22.74	22.66	22.4
		50	0	22.58	22.58	22.64
	16QAM	1	0	22.74	22.75	22.89
		1	24	22.6	22.66	22.65
		1	49	22.46	22.33	22.45
		25	0	21.76	21.81	21.91
		25	12	21.92	21.83	21.72
		25	25	21.72	21.8	21.82
		50	0	21.81	21.82	21.77
	64QAM	1	0	21.74	21.79	21.94
		1	24	21.81	21.85	21.86
		1	49	21.82	21.89	21.87
		25	0	20.87	20.8	20.91
		25	12	20.83	20.76	20.9
		25	25	20.7	20.77	20.79
		50	0	20.75	20.67	20.8
	256QAM	1	0	18.83	18.81	18.79
		1	24	18.89	18.91	18.92
		1	49	18.8	18.81	18.95
		25	0	18.82	18.84	18.92
		25	12	18.7	18.77	18.74
		25	25	18.63	18.66	18.67
		50	0	18.83	18.79	18.82



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	23.74	23.66	23.84
		1	37	23.65	23.72	23.64
		1	74	23.58	23.58	23.51
		36	0	22.68	22.73	22.81
		36	19	22.72	22.63	22.55
		36	39	22.63	22.6	22.43
		75	0	22.61	22.57	22.63
	16QAM	1	0	22.79	22.62	22.81
		1	37	22.66	22.61	22.61
		1	74	22.42	22.27	22.44
		36	0	21.7	21.72	21.81
		36	19	21.89	21.8	21.72
		36	39	21.68	21.82	21.86
		75	0	21.88	21.8	21.84
	64QAM	1	0	21.75	21.81	21.92
		1	37	21.84	21.85	21.8
		1	74	21.8	21.87	21.94
		36	0	20.83	20.71	20.94
		36	19	20.88	20.77	20.81
		36	39	20.7	20.82	20.84
		75	0	20.71	20.74	20.89
	256QAM	1	0	18.78	18.79	18.83
		1	37	18.87	18.89	18.95
		1	74	18.78	18.9	18.93
		36	0	18.74	18.78	18.88
		36	19	18.65	18.81	18.76
		36	39	18.64	18.69	18.69
		75	0	18.78	18.81	18.78



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	23.78	23.81	23.87
		1	50	23.75	23.78	23.65
		1	99	23.72	23.64	23.62
		50	0	22.79	22.81	22.84
		50	25	22.77	22.74	22.6
		50	50	22.76	22.7	22.44
		100	0	22.7	22.68	22.72
	16QAM	1	0	22.87	22.77	22.9
		1	50	22.72	22.7	22.75
		1	99	22.53	22.41	22.55
		50	0	21.82	21.85	21.95
		50	25	21.98	21.94	21.86
		50	50	21.81	21.86	21.91
		100	0	21.89	21.9	21.88
	64QAM	1	0	21.87	21.9	21.95
		1	50	21.85	21.97	21.92
		1	99	21.87	21.91	22
		50	0	20.96	20.84	20.98
		50	25	20.95	20.88	20.93
		50	50	20.76	20.87	20.91
		100	0	20.82	20.82	20.94
	256QAM	1	0	18.89	18.89	18.94
		1	50	18.93	18.95	18.96
		1	99	18.87	18.93	18.96
		50	0	18.86	18.91	18.97
		50	25	18.73	18.82	18.85
		50	50	18.68	18.77	18.82
		100	0	18.9	18.89	18.92



LTE Band 7_Ant2

BW: 5M

BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	24.42	24.47	24.52
		1	12	24.38	24.55	24.16
		1	24	24.35	24.53	24.14
		12	0	23.61	23.63	23.33
		12	6	23.49	23.5	23.34
		12	13	23.43	23.51	23.13
		25	0	23.46	23.64	23.28
	16QAM	1	0	23.62	23.83	23.55
		1	12	23.55	23.79	23.56
		1	24	23.32	23.63	23.46
		12	0	22.45	22.59	22.5
		12	6	22.3	22.55	22.26
		12	13	22.36	22.41	22.41
		25	0	22.51	22.5	22.54
	64QAM	1	0	22.62	22.66	22.49
		1	12	22.52	22.58	22.55
		1	24	22.31	22.46	22.17
		12	0	21.5	21.65	21.76
		12	6	21.3	21.51	21.66
		12	13	21.1	21.48	21.47
		25	0	21.35	21.5	21.28
	256QAM	1	0	19.42	19.63	19.49
		1	12	19.41	19.5	19.24
		1	24	19.02	19.29	19.11
		12	0	19.47	19.55	19.8
		12	6	19.34	19.54	19.67
		12	13	19.35	19.46	19.74
		25	0	19.19	19.42	19.26



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	24.37	24.59	24.41
		1	24	24.32	24.51	24.16
		1	49	24.35	24.48	24.13
		25	0	23.59	23.66	23.4
		25	12	23.46	23.5	23.34
		25	25	23.45	23.39	23.01
		50	0	23.48	23.52	23.24
	16QAM	1	0	23.68	23.74	23.51
		1	24	23.56	23.8	23.56
		1	49	23.35	23.54	23.43
		25	0	22.5	22.57	22.48
		25	12	22.2	22.57	22.39
		25	25	22.27	22.4	22.33
		50	0	22.41	22.51	22.5
	64QAM	1	0	22.59	22.76	22.46
		1	24	22.49	22.71	22.42
		1	49	22.33	22.38	22.24
		25	0	21.48	21.62	21.64
		25	12	21.31	21.53	21.56
		25	25	21.16	21.39	21.44
		50	0	21.4	21.46	21.27
	256QAM	1	0	19.46	19.64	19.46
		1	24	19.31	19.6	19.21
		1	49	19.08	19.26	18.99
		25	0	19.44	19.64	19.85
		25	12	19.36	19.61	19.63
		25	25	19.39	19.5	19.74
		50	0	19.27	19.49	19.27



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	24.39	24.63	24.43
		1	37	24.3	24.6	24.2
		1	74	24.31	24.54	24.15
		36	0	23.57	23.73	23.34
		36	19	23.39	23.56	23.27
		36	39	23.52	23.48	23.15
		75	0	23.54	23.58	23.36
	16QAM	1	0	23.69	23.82	23.54
		1	37	23.61	23.75	23.65
		1	74	23.35	23.61	23.44
		36	0	22.43	22.63	22.45
		36	19	22.27	22.48	22.3
		36	39	22.25	22.45	22.32
		75	0	22.51	22.48	22.43
	64QAM	1	0	22.48	22.68	22.54
		1	37	22.52	22.65	22.43
		1	74	22.31	22.49	22.21
		36	0	21.44	21.55	21.65
		36	19	21.23	21.46	21.61
		36	39	21.15	21.37	21.45
		75	0	21.35	21.53	21.23
	256QAM	1	0	19.41	19.61	19.51
		1	37	19.39	19.53	19.33
		1	74	19.05	19.25	19.01
		36	0	19.5	19.67	19.77
		36	19	19.35	19.62	19.7
		36	39	19.4	19.44	19.73
		75	0	19.18	19.41	19.22



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	24.45	24.68	24.54
		1	50	24.41	24.62	24.31
		1	99	24.4	24.56	24.27
		50	0	23.62	23.75	23.48
		50	25	23.54	23.64	23.39
		50	50	23.56	23.54	23.16
		100	0	23.58	23.65	23.38
	16QAM	1	0	23.74	23.88	23.64
		1	50	23.68	23.84	23.69
		1	99	23.42	23.64	23.53
		50	0	22.56	22.69	22.55
		50	25	22.33	22.58	22.41
		50	50	22.4	22.54	22.46
		100	0	22.53	22.61	22.57
	64QAM	1	0	22.63	22.78	22.56
		1	50	22.6	22.73	22.56
		1	99	22.44	22.51	22.32
		50	0	21.58	21.68	21.78
		50	25	21.36	21.56	21.67
		50	50	21.24	21.51	21.54
		100	0	21.44	21.6	21.35
	256QAM	1	0	19.55	19.7	19.6
		1	50	19.45	19.61	19.35
		1	99	19.11	19.4	19.12
		50	0	19.56	19.69	19.87
		50	25	19.37	19.63	19.75
		50	50	19.41	19.52	19.75
		100	0	19.33	19.5	19.35



LTE Band 7_Ant3

BW: 5M

BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	23.55	23.89	23.86
		1	12	23.75	23.85	23.79
		1	24	23.68	23.8	23.76
		12	0	22.93	22.96	22.85
		12	6	22.88	22.84	22.81
		12	13	22.67	22.82	22.67
		25	0	22.68	22.72	22.75
	16QAM	1	0	23.04	22.9	23.01
		1	12	23.07	23.1	22.97
		1	24	22.98	22.93	22.94
		12	0	21.86	21.9	21.97
		12	6	21.77	21.83	21.74
		12	13	21.67	21.76	21.61
		25	0	21.62	21.78	21.72
	64QAM	1	0	21.91	22.07	21.91
		1	12	21.71	22.06	21.74
		1	24	21.91	21.81	21.95
		12	0	20.93	21.04	20.98
		12	6	20.74	20.83	20.83
		12	13	20.57	20.77	20.65
		25	0	20.82	20.81	20.67
	256QAM	1	0	18.99	18.91	18.8
		1	12	19.04	19.07	19.02
		1	24	18.71	18.75	18.55
		12	0	18.92	18.91	18.84
		12	6	18.74	18.69	18.92
		12	13	18.82	18.91	18.64
		25	0	18.6	18.88	18.68



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	23.56	23.81	23.8
		1	24	23.82	23.88	23.8
		1	49	23.74	23.74	23.75
		25	0	22.94	22.93	22.85
		25	12	22.89	22.88	22.88
		25	25	22.69	22.83	22.65
		50	0	22.71	22.79	22.74
	16QAM	1	0	23.03	22.97	23
		1	24	23.03	23.03	22.93
		1	49	23	23	22.84
		25	0	21.95	21.93	21.84
		25	12	21.72	21.83	21.67
		25	25	21.71	21.8	21.73
		50	0	21.58	21.77	21.7
	64QAM	1	0	21.96	22.18	22.03
		1	24	21.8	22.01	21.71
		1	49	21.77	21.78	21.87
		25	0	20.88	20.93	20.97
		25	12	20.76	20.84	20.92
		25	25	20.6	20.78	20.72
		50	0	20.8	20.8	20.77
	256QAM	1	0	19.01	18.95	18.76
		1	24	19.06	19.1	18.99
		1	49	18.67	18.79	18.54
		25	0	18.91	18.83	18.94
		25	12	18.8	18.74	18.86
		25	25	18.73	18.89	18.6
		50	0	18.66	18.85	18.72



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	23.64	23.81	23.86
		1	37	23.76	23.97	23.89
		1	74	23.79	23.81	23.75
		36	0	22.93	22.99	22.91
		36	19	22.88	22.94	22.92
		36	39	22.62	22.82	22.58
		75	0	22.7	22.73	22.79
	16QAM	1	0	23.02	22.98	23.01
		1	37	22.99	23.07	22.93
		1	74	23.06	23	22.89
		36	0	21.87	21.8	21.96
		36	19	21.72	21.84	21.8
		36	39	21.77	21.86	21.72
		75	0	21.61	21.8	21.6
	64QAM	1	0	21.98	22.08	22.01
		1	37	21.8	22.07	21.73
		1	74	21.78	21.88	21.87
		36	0	20.84	21.05	21
		36	19	20.83	20.81	20.86
		36	39	20.54	20.76	20.7
		75	0	20.86	20.78	20.77
	256QAM	1	0	19.02	18.96	18.85
		1	37	19.17	19.08	18.89
		1	74	18.71	18.79	18.59
		36	0	18.96	18.93	18.88
		36	19	18.75	18.7	18.81
		36	39	18.76	18.91	18.62
		75	0	18.63	18.86	18.6



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	23.68	23.9	23.89
		1	50	23.86	24.06	23.92
		1	99	23.83	23.85	23.8
		50	0	22.99	23.01	22.96
		50	25	22.97	22.95	22.94
		50	50	22.71	22.86	22.69
		100	0	22.81	22.84	22.81
	16QAM	1	0	23.11	23.01	23.08
		1	50	23.1	23.13	23.05
		1	99	23.11	23.07	22.99
		50	0	21.97	21.95	21.98
		50	25	21.82	21.92	21.81
		50	50	21.82	21.88	21.75
		100	0	21.66	21.89	21.75
	64QAM	1	0	22.01	22.19	22.05
		1	50	21.84	22.12	21.84
		1	99	21.92	21.93	21.98
		50	0	20.97	21.07	21.04
		50	25	20.87	20.96	20.94
		50	50	20.65	20.85	20.76
		100	0	20.93	20.92	20.78
	256QAM	1	0	19.06	19.01	18.89
		1	50	19.19	19.21	19.04
		1	99	18.82	18.88	18.67
		50	0	19.04	18.95	18.95
		50	25	18.88	18.84	18.95
		50	50	18.87	18.97	18.73
		100	0	18.75	18.99	18.73



LTE Band 7_Ant4

BW: 5M

BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	23.68	23.62	23.82
		1	12	23.96	23.94	23.85
		1	24	23.78	23.53	23.68
		12	0	22.74	22.9	22.84
		12	6	22.66	22.73	22.74
		12	13	22.57	22.55	22.51
		25	0	22.69	22.64	22.57
	16QAM	1	0	22.8	23.11	22.93
		1	12	22.89	23.02	22.93
		1	24	22.98	23.25	23
		12	0	21.67	21.75	21.58
		12	6	21.57	21.77	21.89
		12	13	21.58	21.64	21.56
		25	0	21.63	21.52	21.65
	64QAM	1	0	21.91	21.93	21.73
		1	12	21.74	22.02	21.88
		1	24	21.67	21.78	21.61
		12	0	21.27	21.3	21.01
		12	6	20.63	20.64	20.62
		12	13	20.78	20.6	20.51
		25	0	20.66	20.81	20.7
	256QAM	1	0	18.84	18.82	18.73
		1	12	18.85	18.7	18.67
		1	24	18.58	18.66	18.62
		12	0	18.63	18.59	18.79
		12	6	18.57	18.66	18.57
		12	13	18.64	18.59	18.63
		25	0	18.69	18.83	18.52



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	23.68	23.56	23.75
		1	24	23.88	23.95	23.91
		1	49	23.78	23.61	23.71
		25	0	22.72	22.9	22.83
		25	12	22.62	22.66	22.66
		25	25	22.6	22.67	22.55
		50	0	22.74	22.77	22.56
	16QAM	1	0	22.81	23.1	23.05
		1	24	22.84	22.98	22.95
		1	49	23.01	23.25	22.99
		25	0	21.66	21.79	21.62
		25	12	21.6	21.8	21.84
		25	25	21.57	21.64	21.54
		50	0	21.55	21.53	21.6
	64QAM	1	0	21.89	21.9	21.78
		1	24	21.78	22.13	21.89
		1	49	21.67	21.78	21.66
		25	0	21.16	21.33	21.08
		25	12	20.63	20.71	20.51
		25	25	20.74	20.52	20.56
		50	0	20.58	20.69	20.81
	256QAM	1	0	18.93	18.83	18.78
		1	24	18.79	18.71	18.68
		1	49	18.52	18.67	18.55
		25	0	18.65	18.67	18.85
		25	12	18.53	18.71	18.61
		25	25	18.59	18.59	18.62
		50	0	18.66	18.8	18.59



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	23.69	23.64	23.83
		1	37	23.92	23.99	23.89
		1	74	23.77	23.57	23.66
		36	0	22.69	22.79	22.8
		36	19	22.62	22.67	22.7
		36	39	22.52	22.68	22.55
		75	0	22.64	22.65	22.59
	16QAM	1	0	22.89	23.09	23.01
		1	37	22.88	22.97	22.95
		1	74	23.01	23.39	22.96
		36	0	21.59	21.69	21.66
		36	19	21.59	21.7	21.9
		36	39	21.53	21.75	21.54
		75	0	21.62	21.63	21.64
	64QAM	1	0	21.95	21.83	21.71
		1	37	21.74	22.06	21.91
		1	74	21.59	21.84	21.72
		36	0	21.24	21.22	20.98
		36	19	20.65	20.77	20.55
		36	39	20.75	20.57	20.51
		75	0	20.68	20.71	20.8
	256QAM	1	0	18.85	18.72	18.78
		1	37	18.82	18.75	18.68
		1	74	18.52	18.61	18.51
		36	0	18.53	18.58	18.77
		36	19	18.62	18.6	18.61
		36	39	18.52	18.57	18.61
		75	0	18.68	18.77	18.6



BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	23.74	23.67	23.88
		1	50	24.02	24.06	23.94
		1	99	23.84	23.68	23.8
		50	0	22.77	22.94	22.85
		50	25	22.68	22.75	22.81
		50	50	22.64	22.7	22.59
		100	0	22.75	22.78	22.61
	16QAM	1	0	22.95	23.17	23.06
		1	50	22.97	23.08	22.96
		1	99	23.07	23.4	23.1
		50	0	21.73	21.84	21.72
		50	25	21.65	21.81	21.95
		50	50	21.59	21.78	21.69
		100	0	21.51	21.67	21.68
	64QAM	1	0	21.96	21.94	21.79
		1	50	21.83	22.16	21.92
		1	99	21.73	21.93	21.74
		50	0	21.28	21.34	21.11
		50	25	20.67	20.78	20.64
		50	50	20.81	20.62	20.65
		100	0	20.73	20.84	20.84
	256QAM	1	0	18.95	18.87	18.86
		1	50	18.9	18.82	18.78
		1	99	18.53	18.68	18.57
		50	0	18.67	18.71	18.87
		50	25	18.56	18.73	18.64
		50	50	18.55	18.62	18.66
		100	0	18.72	18.88	18.63



EIRP

WCDMA IV_Ant0						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
4132	826.4	23.27	-3.81	19.46	88.31	1
4182	836.4	23.30	-3.81	19.49	88.92	1
4233	846.6	23.39	-3.81	19.58	90.78	1
WCDMA IV_Ant2						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	24.32	-1.08	23.24	210.86	1
1413	1732.6	24.43	-1.08	23.35	216.27	1
1513	1752.6	24.38	-1.08	23.30	213.80	1
WCDMA IV_Ant3						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	24.26	-2.08	22.18	165.20	1
1413	1732.6	24.27	-2.08	22.19	165.58	1
1513	1752.6	24.31	-2.08	22.23	167.11	1
WCDMA IV_Ant4						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	24.17	-4.27	19.90	97.72	1
1413	1732.6	24.15	-4.27	19.88	97.27	1
1513	1752.6	24.18	-4.27	19.91	97.95	1



LTE Band 7_Ant0

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-QPSK	20850	2510	23.78	-3.04	20.74	118.58	2
	21100	2535	23.81	-3.04	20.77	119.40	2
	21350	2560	23.87	-3.04	20.83	121.06	2
20M-16QAM	20850	2510	22.87	-3.04	19.83	96.16	2
	21100	2535	22.77	-3.04	19.73	93.97	2
	21350	2560	22.90	-3.04	19.86	96.83	2
20M-64QAM	20850	2510	21.87	-3.04	18.83	76.38	2
	21100	2535	21.97	-3.04	18.93	78.16	2
	21350	2560	22.00	-3.04	18.96	78.70	2
20M-256QAM	20850	2510	18.93	-3.04	15.89	38.82	2
	21100	2535	18.95	-3.04	15.91	38.99	2
	21350	2560	18.97	-3.04	15.93	39.17	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	20825	2507.5	23.74	-3.04	20.70	117.49	2
	21100	2535	23.72	-3.04	20.68	116.95	2
	21375	2562.5	23.84	-3.04	20.80	120.23	2
15M-16QAM	20825	2507.5	22.79	-3.04	19.75	94.41	2
	21100	2535	22.62	-3.04	19.58	90.78	2
	21375	2562.5	22.81	-3.04	19.77	94.84	2
15M-64QAM	20825	2507.5	21.84	-3.04	18.80	75.86	2
	21100	2535	21.87	-3.04	18.83	76.38	2
	21375	2562.5	21.94	-3.04	18.90	77.62	2
15M-256QAM	20825	2507.5	18.87	-3.04	15.83	38.28	2
	21100	2535	18.90	-3.04	15.86	38.55	2
	21375	2562.5	18.95	-3.04	15.91	38.99	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	20800	2505	23.76	-3.04	20.72	118.03	2
	21100	2535	23.68	-3.04	20.64	115.88	2
	21400	2565	23.74	-3.04	20.70	117.49	2
10M-16QAM	20800	2505	22.74	-3.04	19.70	93.33	2
	21100	2535	22.75	-3.04	19.71	93.54	2
	21400	2565	22.89	-3.04	19.85	96.61	2



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10M-64QAM	20800	2505	21.82	-3.04	18.78	75.51	2
	21100	2535	21.89	-3.04	18.85	76.74	2
	21400	2565	21.94	-3.04	18.90	77.62	2
10M-256QAM	20800	2505	18.89	-3.04	15.85	38.46	2
	21100	2535	18.91	-3.04	15.87	38.64	2
	21400	2565	18.95	-3.04	15.91	38.99	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	20775	2502.5	23.66	-3.04	20.62	115.35	2
	21100	2535	23.77	-3.04	20.73	118.30	2
	21425	2567.5	23.72	-3.04	20.68	116.95	2
5M-16QAM	20775	2502.5	22.76	-3.04	19.72	93.76	2
	21100	2535	22.74	-3.04	19.70	93.33	2
	21425	2567.5	22.83	-3.04	19.79	95.28	2
5M-64QAM	20775	2502.5	21.83	-3.04	18.79	75.68	2
	21100	2535	21.82	-3.04	18.78	75.51	2
	21425	2567.5	21.93	-3.04	18.89	77.45	2
5M-256QAM	20775	2502.5	18.82	-3.04	15.78	37.84	2
	21100	2535	18.91	-3.04	15.87	38.64	2
	21425	2567.5	18.95	-3.04	15.91	38.99	2



LTE Band 7_Ant2

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-QPSK	20850	2510	24.45	-1.55	22.90	194.98	2
	21100	2535	24.68	-1.55	23.13	205.59	2
	21350	2560	24.54	-1.55	22.99	199.07	2
20M- 16QAM	20850	2510	23.74	-1.55	22.19	165.58	2
	21100	2535	23.88	-1.55	22.33	171.00	2
	21350	2560	23.69	-1.55	22.14	163.68	2
20M- 64QAM	20850	2510	22.63	-1.55	21.08	128.23	2
	21100	2535	22.78	-1.55	21.23	132.74	2
	21350	2560	22.56	-1.55	21.01	126.18	2
20M- 256QAM	20850	2510	19.56	-1.55	18.01	63.24	2
	21100	2535	19.70	-1.55	18.15	65.31	2
	21350	2560	19.87	-1.55	18.32	67.92	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	20825	2507.5	24.39	-1.55	22.84	192.31	2
	21100	2535	24.63	-1.55	23.08	203.24	2
	21375	2562.5	24.43	-1.55	22.88	194.09	2
15M- 16QAM	20825	2507.5	23.69	-1.55	22.14	163.68	2
	21100	2535	23.82	-1.55	22.27	168.66	2
	21375	2562.5	23.65	-1.55	22.10	162.18	2
15M- 64QAM	20825	2507.5	22.52	-1.55	20.97	125.03	2
	21100	2535	22.68	-1.55	21.13	129.72	2
	21375	2562.5	22.54	-1.55	20.99	125.60	2
15M- 256QAM	20825	2507.5	19.50	-1.55	17.95	62.37	2
	21100	2535	19.67	-1.55	18.12	64.86	2
	21375	2562.5	19.77	-1.55	18.22	66.37	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	20800	2505	24.37	-1.55	22.82	191.43	2
	21100	2535	24.59	-1.55	23.04	201.37	2
	21400	2565	24.41	-1.55	22.86	193.20	2
10M- 16QAM	20800	2505	23.68	-1.55	22.13	163.31	2
	21100	2535	23.80	-1.55	22.25	167.88	2
	21400	2565	23.56	-1.55	22.01	158.85	2



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10M-64QAM	20800	2505	22.59	-1.55	21.04	127.06	2
	21100	2535	22.76	-1.55	21.21	132.13	2
	21400	2565	22.46	-1.55	20.91	123.31	2
10M-256QAM	20800	2505	19.46	-1.55	17.91	61.80	2
	21100	2535	19.64	-1.55	18.09	64.42	2
	21400	2565	19.85	-1.55	18.30	67.61	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	20775	2502.5	24.42	-1.55	22.87	193.64	2
	21100	2535	24.55	-1.55	23.00	199.53	2
	21425	2567.5	24.52	-1.55	22.97	198.15	2
5M-16QAM	20775	2502.5	23.62	-1.55	22.07	161.06	2
	21100	2535	23.83	-1.55	22.28	169.04	2
	21425	2567.5	23.56	-1.55	22.01	158.85	2
5M-64QAM	20775	2502.5	22.62	-1.55	21.07	127.94	2
	21100	2535	22.66	-1.55	21.11	129.12	2
	21425	2567.5	22.55	-1.55	21.00	125.89	2
5M-256QAM	20775	2502.5	19.47	-1.55	17.92	61.94	2
	21100	2535	19.63	-1.55	18.08	64.27	2
	21425	2567.5	19.80	-1.55	18.25	66.83	2



LTE Band 7_Ant3

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-QPSK	20850	2510	23.86	-3.15	20.71	117.76	2
	21100	2535	24.06	-3.15	20.91	123.31	2
	21350	2560	23.92	-3.15	20.77	119.40	2
20M-16QAM	20850	2510	23.11	-3.15	19.96	99.08	2
	21100	2535	23.13	-3.15	19.98	99.54	2
	21350	2560	23.08	-3.15	19.93	98.40	2
20M-64QAM	20850	2510	22.01	-3.15	18.86	76.91	2
	21100	2535	22.19	-3.15	19.04	80.17	2
	21350	2560	22.05	-3.15	18.90	77.62	2
20M-256QAM	20850	2510	19.19	-3.15	16.04	40.18	2
	21100	2535	19.21	-3.15	16.06	40.36	2
	21350	2560	19.04	-3.15	15.89	38.82	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	20825	2507.5	23.79	-3.15	20.64	115.88	2
	21100	2535	23.97	-3.15	20.82	120.78	2
	21375	2562.5	23.89	-3.15	20.74	118.58	2
15M-16QAM	20825	2507.5	23.06	-3.15	19.91	97.95	2
	21100	2535	23.07	-3.15	19.92	98.17	2
	21375	2562.5	23.01	-3.15	19.86	96.83	2
15M-64QAM	20825	2507.5	21.98	-3.15	18.83	76.38	2
	21100	2535	22.08	-3.15	18.93	78.16	2
	21375	2562.5	22.01	-3.15	18.86	76.91	2
15M-256QAM	20825	2507.5	19.17	-3.15	16.02	39.99	2
	21100	2535	19.08	-3.15	15.93	39.17	2
	21375	2562.5	18.89	-3.15	15.74	37.50	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	20800	2505	23.82	-3.15	20.67	116.68	2
	21100	2535	23.88	-3.15	20.73	118.30	2
	21400	2565	23.80	-3.15	20.65	116.14	2
10M-16QAM	20800	2505	23.03	-3.15	19.88	97.27	2
	21100	2535	23.03	-3.15	19.88	97.27	2
	21400	2565	23.00	-3.15	19.85	96.61	2



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10M-64QAM	20800	2505	21.96	-3.15	18.81	76.03	2
	21100	2535	22.18	-3.15	19.03	79.98	2
	21400	2565	22.03	-3.15	18.88	77.27	2
10M-256QAM	20800	2505	19.06	-3.15	15.91	38.99	2
	21100	2535	19.10	-3.15	15.95	39.36	2
	21400	2565	18.99	-3.15	15.84	38.37	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	20775	2502.5	23.75	-3.15	20.60	114.82	2
	21100	2535	23.89	-3.15	20.74	118.58	2
	21425	2567.5	23.86	-3.15	20.71	117.76	2
5M-16QAM	20775	2502.5	23.07	-3.15	19.92	98.17	2
	21100	2535	23.10	-3.15	19.95	98.86	2
	21425	2567.5	23.01	-3.15	19.86	96.83	2
5M-64QAM	20775	2502.5	21.91	-3.15	18.76	75.16	2
	21100	2535	22.07	-3.15	18.92	77.98	2
	21425	2567.5	21.95	-3.15	18.80	75.86	2
5M-256QAM	20775	2502.5	19.04	-3.15	15.89	38.82	2
	21100	2535	19.07	-3.15	15.92	39.08	2
	21425	2567.5	19.02	-3.15	15.87	38.64	2



LTE Band 7_Ant4

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-QPSK	20850	2510	24.02	-0.07	23.95	248.31	2
	21100	2535	24.06	-0.07	23.99	250.61	2
	21350	2560	23.94	-0.07	23.87	243.78	2
20M-16QAM	20850	2510	23.07	-0.07	23.00	199.53	2
	21100	2535	23.40	-0.07	23.33	215.28	2
	21350	2560	23.10	-0.07	23.03	200.91	2
20M-64QAM	20850	2510	21.96	-0.07	21.89	154.53	2
	21100	2535	22.16	-0.07	22.09	161.81	2
	21350	2560	21.92	-0.07	21.85	153.11	2
20M-256QAM	20850	2510	18.95	-0.07	18.88	77.27	2
	21100	2535	18.88	-0.07	18.81	76.03	2
	21350	2560	18.87	-0.07	18.80	75.86	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	20825	2507.5	23.92	-0.07	23.85	242.66	2
	21100	2535	23.99	-0.07	23.92	246.60	2
	21375	2562.5	23.89	-0.07	23.82	240.99	2
15M-16QAM	20825	2507.5	23.01	-0.07	22.94	196.79	2
	21100	2535	23.39	-0.07	23.32	214.78	2
	21375	2562.5	23.01	-0.07	22.94	196.79	2
15M-64QAM	20825	2507.5	21.95	-0.07	21.88	154.17	2
	21100	2535	22.06	-0.07	21.99	158.12	2
	21375	2562.5	21.91	-0.07	21.84	152.76	2
15M-256QAM	20825	2507.5	18.85	-0.07	18.78	75.51	2
	21100	2535	18.77	-0.07	18.70	74.13	2
	21375	2562.5	18.78	-0.07	18.71	74.30	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	20800	2505	23.88	-0.07	23.81	240.44	2
	21100	2535	23.95	-0.07	23.88	244.34	2
	21400	2565	23.91	-0.07	23.84	242.10	2
10M-16QAM	20800	2505	23.01	-0.07	22.94	196.79	2
	21100	2535	23.25	-0.07	23.18	207.97	2
	21400	2565	23.05	-0.07	22.98	198.61	2



BUREAU VERITAS Test Report No.: PSZ-QBJ2501200112RF03

10M-64QAM	20800	2505	21.89	-0.07	21.82	152.05	2
	21100	2535	22.13	-0.07	22.06	160.69	2
	21400	2565	21.89	-0.07	21.82	152.05	2
10M-256QAM	20800	2505	18.93	-0.07	18.86	76.91	2
	21100	2535	18.83	-0.07	18.76	75.16	2
	21400	2565	18.85	-0.07	18.78	75.51	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	20775	2502.5	23.96	-0.07	23.89	244.91	2
	21100	2535	23.94	-0.07	23.87	243.78	2
	21425	2567.5	23.85	-0.07	23.78	238.78	2
5M-16QAM	20775	2502.5	22.98	-0.07	22.91	195.43	2
	21100	2535	23.25	-0.07	23.18	207.97	2
	21425	2567.5	23.00	-0.07	22.93	196.34	2
5M-64QAM	20775	2502.5	21.91	-0.07	21.84	152.76	2
	21100	2535	22.02	-0.07	21.95	156.68	2
	21425	2567.5	21.88	-0.07	21.81	151.71	2
5M-256QAM	20775	2502.5	18.85	-0.07	18.78	75.51	2
	21100	2535	18.83	-0.07	18.76	75.16	2
	21425	2567.5	18.79	-0.07	18.72	74.47	2



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

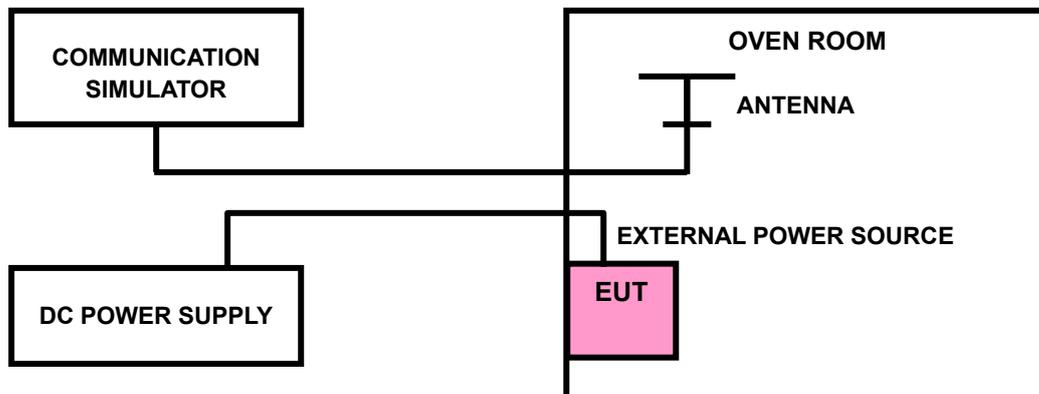
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

- a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ 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.

3.3.3 TEST SETUP





BUREAU VERITAS Test Report No.: PSZ-QBJ2501200112RF03

3.2.3 TEST RESULTS

Please Refer to Appendix of this test report.

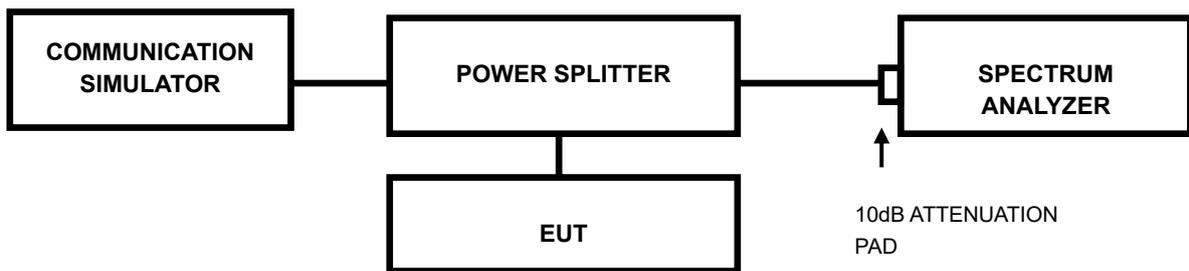


3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

Please Refer to Appendix of this test report.



3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

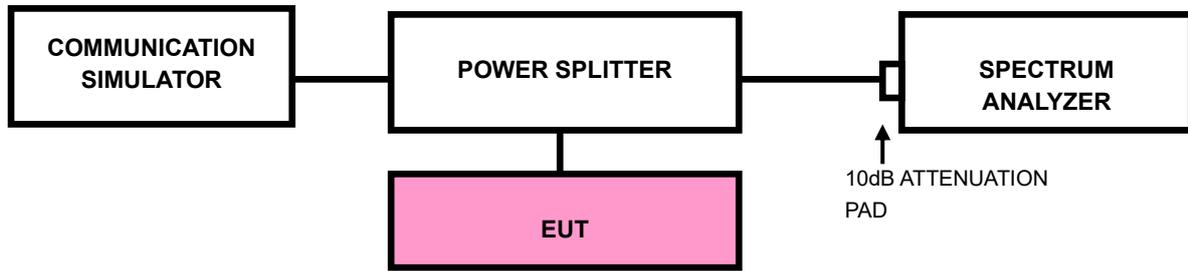
According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2) : On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

47 CFR 27.53(f) : For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.



3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

- a) All measurements were done at low and high operational frequency range
- b) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- c) Tune the analyzer to the nominal center frequency of the emission bandwidth

(EBW)
- d) .Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- f) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- g) Select the average power (RMS) display detector.
- h) Set the number of measurement points to ≥ 1001 .
- i) Use auto-coupled sweep time.
- j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- l) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix of this test report.



CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2) : On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

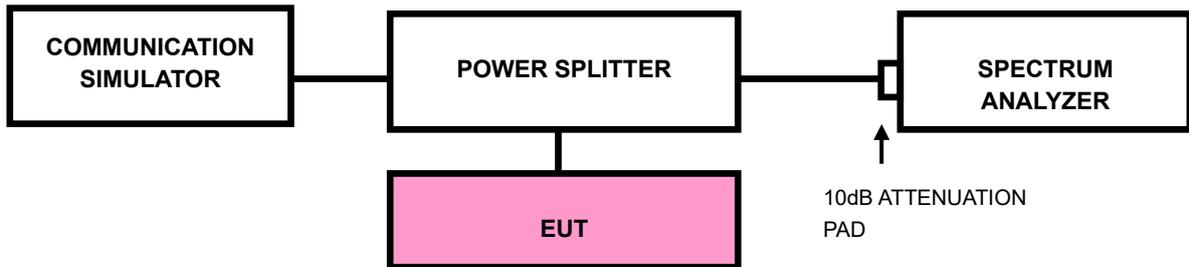
47 CFR 27.53(f) : For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.



3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix of this test report.



3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2) : On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

47 CFR 27.53(f) : For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.



3.6.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P 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.
- b. 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 a. Record the power level of S.G.
- c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
E.R.P power = E.I.P.R power - 2.15dBi.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

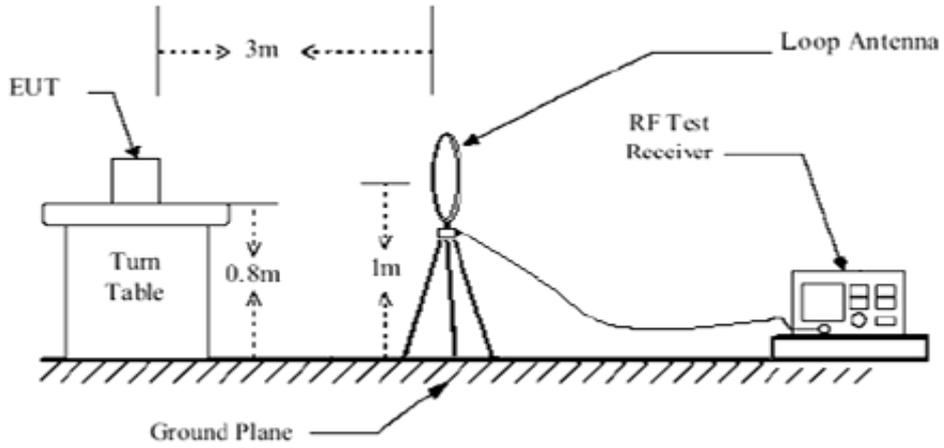
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

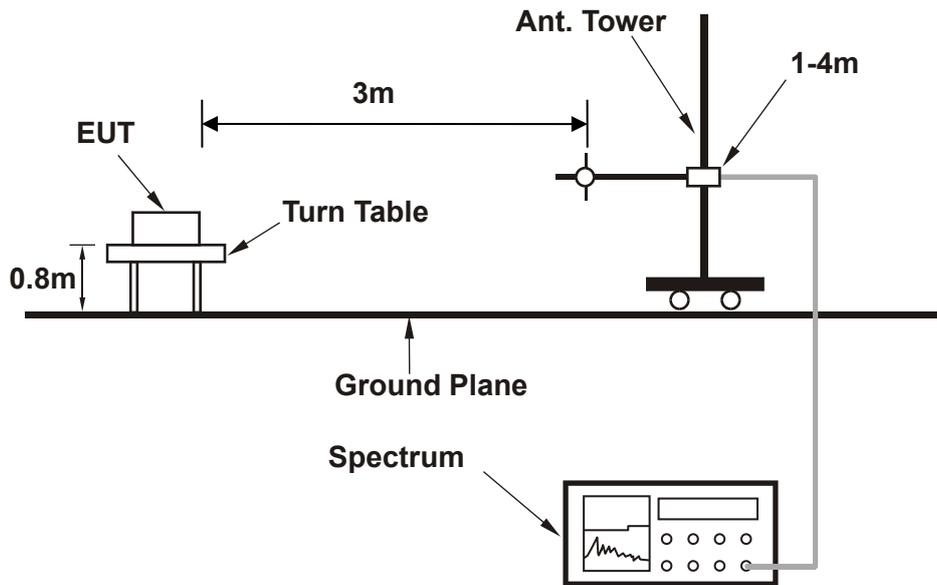


3.6.4 TEST SETUP

< Frequency Range below 30MHz >

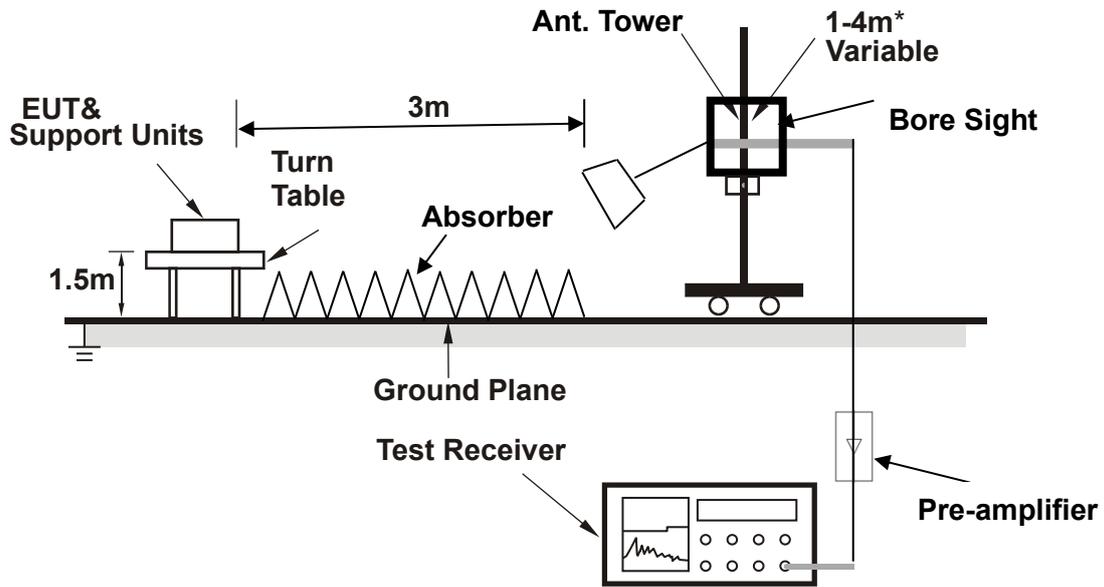


< Frequency Range 30MHz~1GHz >





<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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



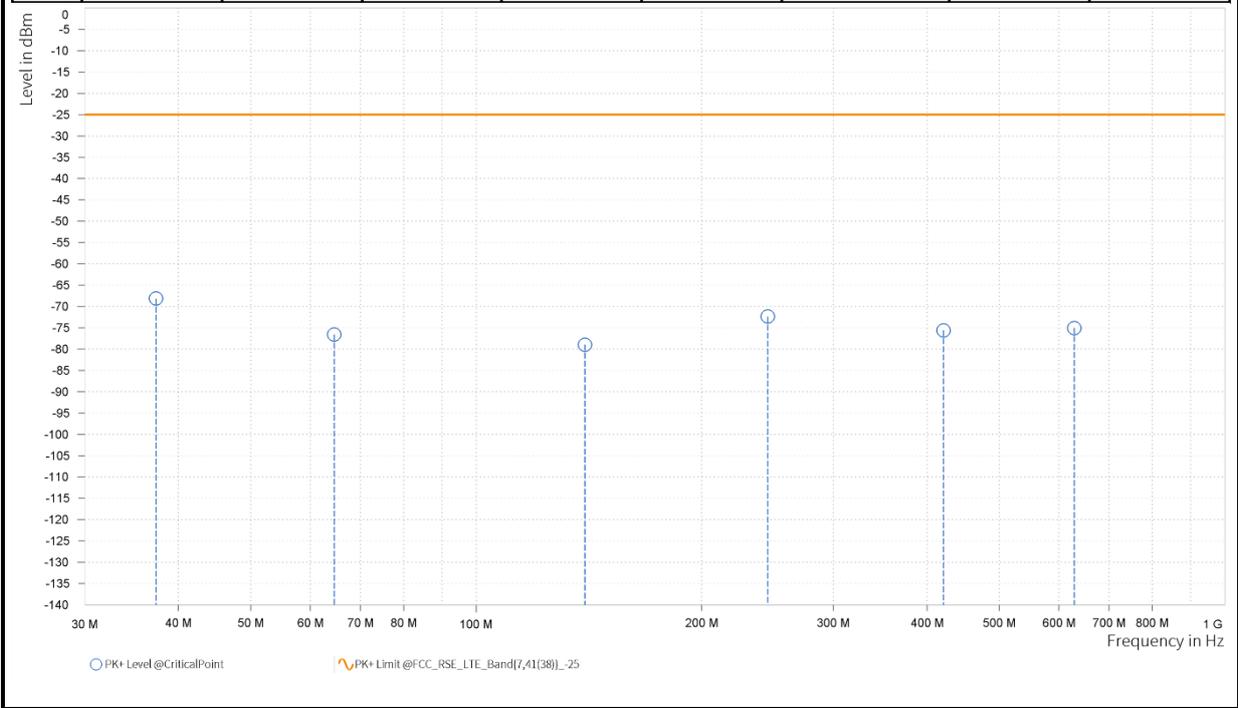
3.6.5 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

LTE Band 7 CHANNEL BANDWIDTH: 20MHz / QPSK			
MODE	TX channel 21100	FREQUENCY RANGE	30MHz~1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	37.350	-68.16	-25.00	43.16	0.19	H	163.4	2.00
1	64.600	-76.60	-25.00	51.60	-6.28	H	134.8	2.00
1	139.750	-78.98	-25.00	53.98	-14.14	H	107.3	2.00
1	245.200	-72.38	-25.00	47.38	-2.56	H	198.9	1.00
1	420.950	-75.61	-25.00	50.61	0.90	H	61.4	1.00
2	629.346	-75.08	-25.00	50.08	0.84	H	323.2	1.00

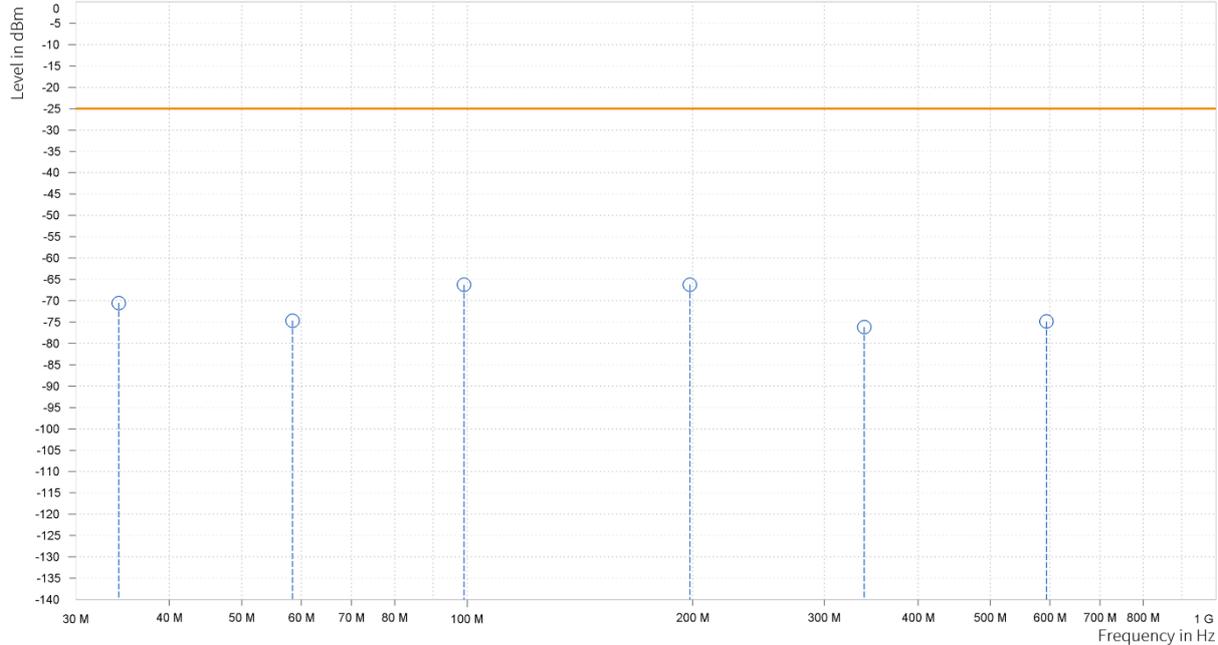




MODE	TX channel 21100	FREQUENCY RANGE	30MHz~1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	34.250	-70.51	-25.00	45.51	-10.04	V	0.9	2.00
1	58.450	-74.67	-25.00	49.67	-3.57	V	358	1.00
1	99.050	-66.27	-25.00	41.27	5.04	V	359.1	1.00
1	198.300	-66.22	-25.00	41.22	-6.76	V	86.6	1.00
1	339.200	-76.16	-25.00	51.16	-0.15	V	359.1	1.00
2	594.146	-74.88	-25.00	49.88	0.42	V	99.8	1.00





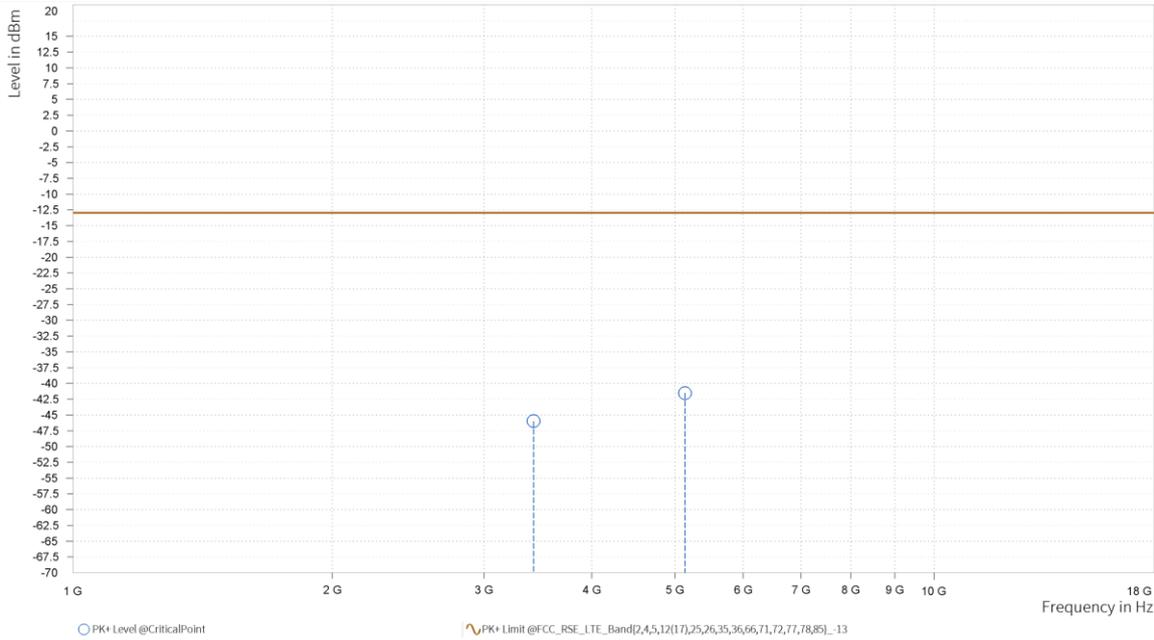
ABOVE 1GHz

Note: For higher frequency, the emission is too low to be detected.

WCDMA Band IV			
MODE	TX channel 1312	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,424.800	-45.99	-13.00	32.99	27.41	H	0.9	2.00
4	5,137.200	-41.53	-13.00	28.53	31.19	H	359	1.00

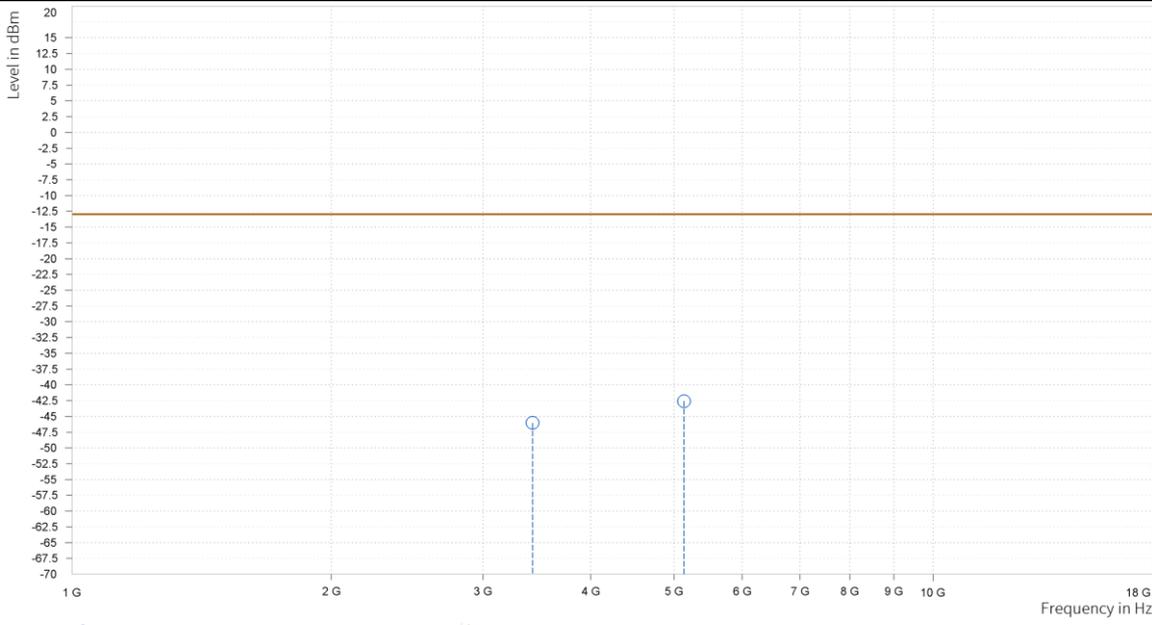




MODE	TX channel 1312	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,424.800	-46.03	-13.00	33.03	27.19	V	359	2.00
4	5,137.200	-42.58	-13.00	29.58	31.06	V	0.9	2.00



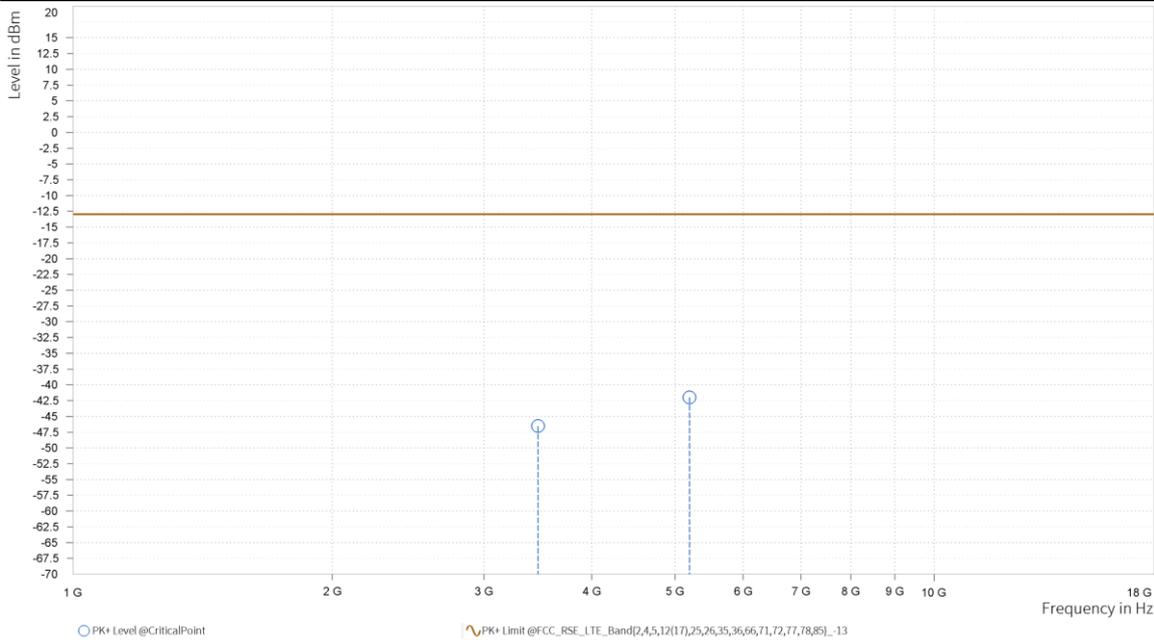
○ PK+ Level @CriticalPoint ▽ PK+ Limit @FCC_RSE_LTE_Band(2,4,5,12(1,7),25,26,35,36,66,71,72,77,78,85)_13



MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,465.200	-46.54	-13.00	33.54	26.80	H	359	2.00
4	5,197.800	-41.99	-13.00	28.99	32.06	H	107.2	2.00

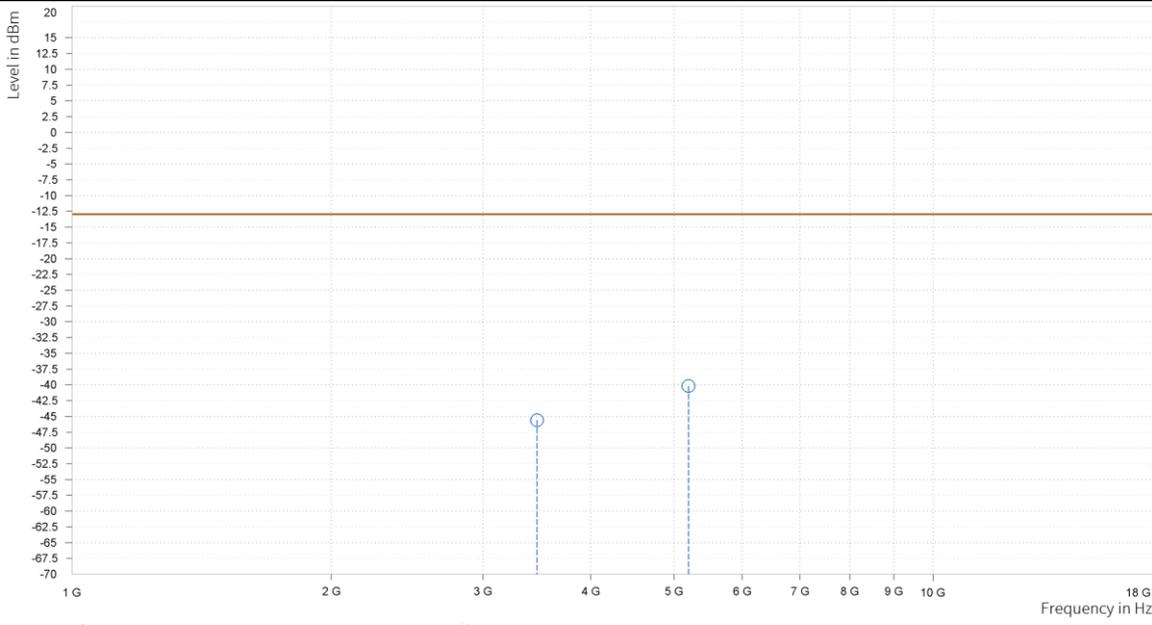




MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,465.200	-45.61	-13.00	32.61	26.52	V	99.9	2.00
4	5,197.800	-40.19	-13.00	27.19	32.02	V	1	1.00



○ PK+ Level @CriticalPoint

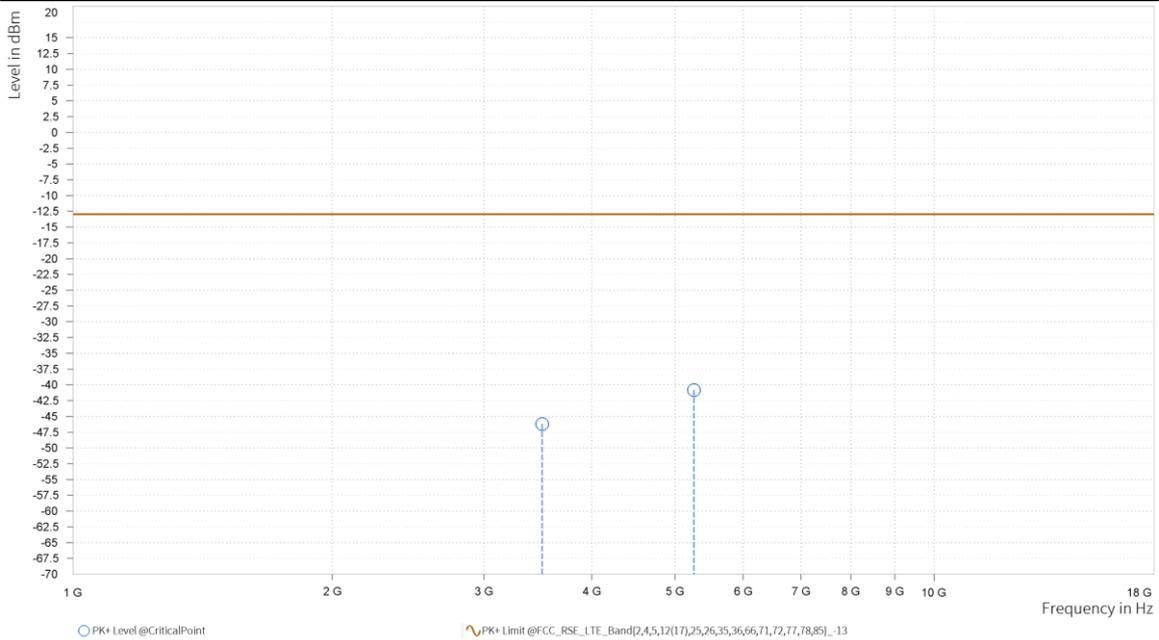
∧ PK+ Limit @FCC_RSE_LTE_Band(2,4,5,12(1,7),25,26,35,36,66,71,72,77,78,85)_13



MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,505.200	-46.21	-13.00	33.21	27.01	H	249.4	1.00
4	5,257.800	-40.83	-13.00	27.83	31.85	H	359	1.00

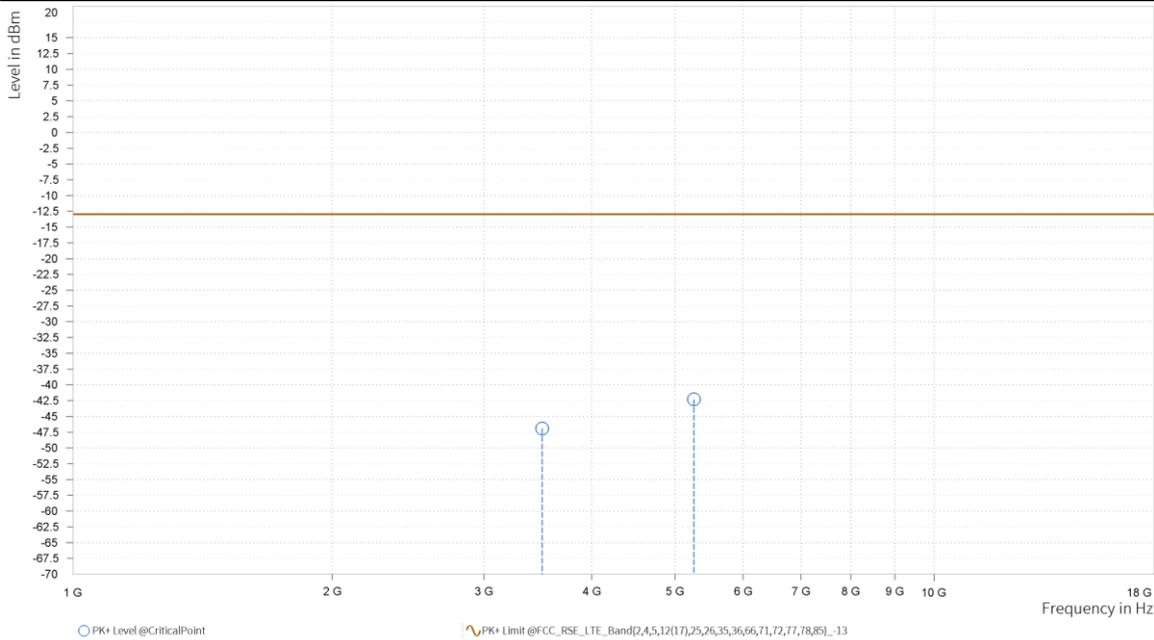




MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,505.200	-46.90	-13.00	33.90	26.83	V	249.4	1.00
4	5,257.800	-42.30	-13.00	29.30	31.79	V	359	1.00

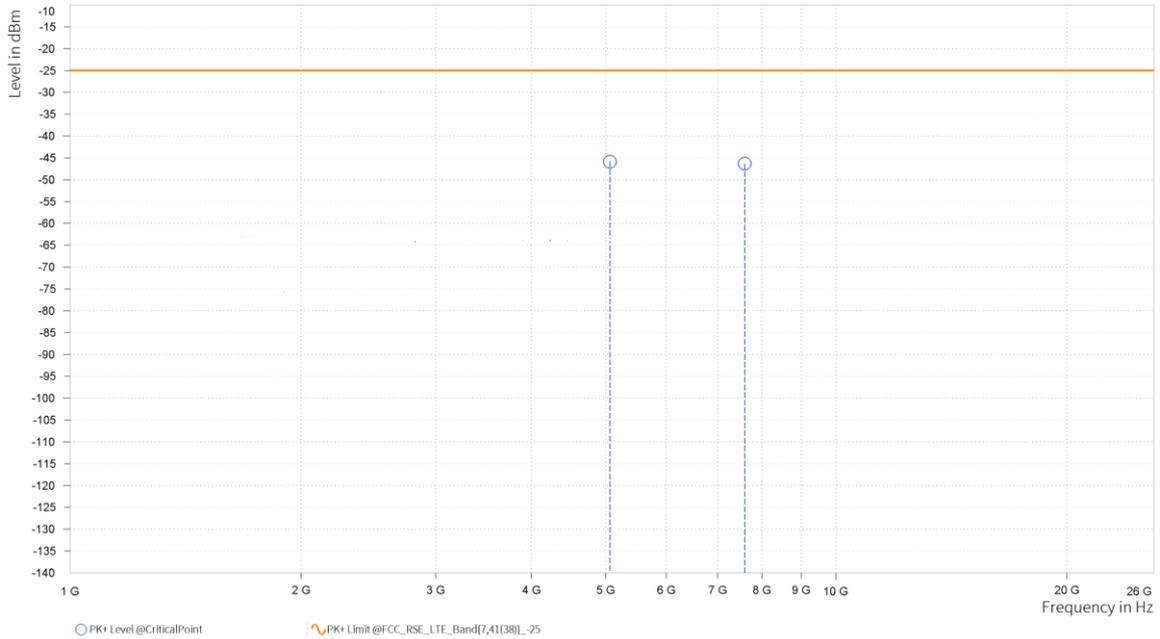




LTE Band 7			
CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,065.500	-45.87	-25.00	20.87	23.81	H	253.9	2.00
5	7,598.250	-46.33	-25.00	21.33	27.56	H	359.1	1.00

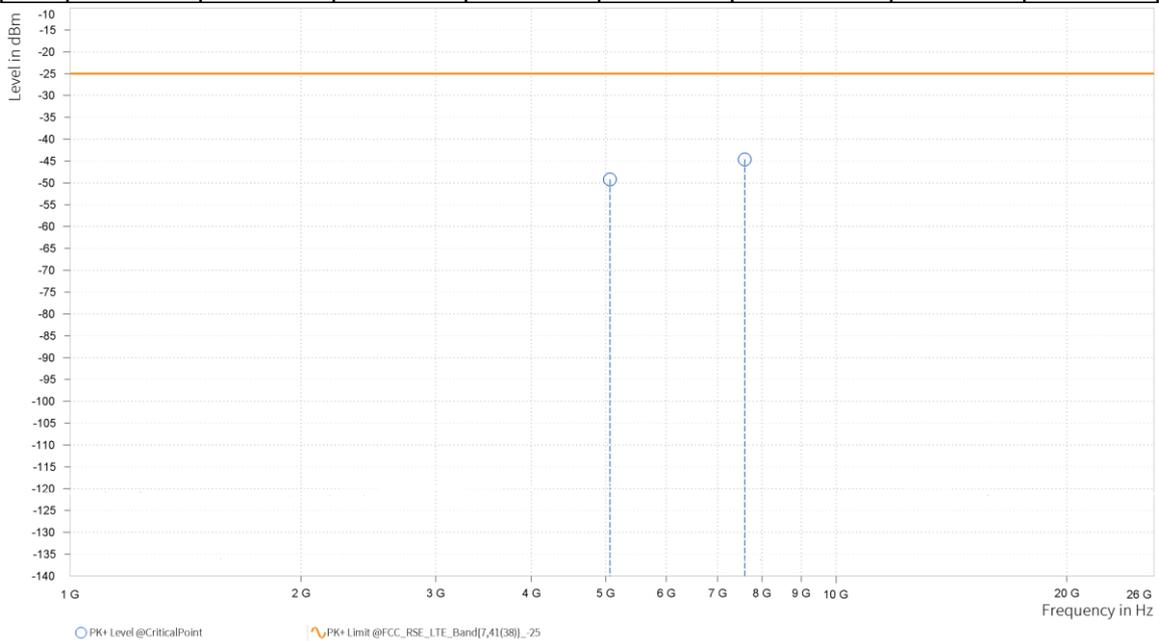




CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,065.500	-49.21	-25.00	24.21	24.26	V	359	2.00
5	7,598.250	-44.63	-25.00	19.63	27.34	V	0.9	2.00

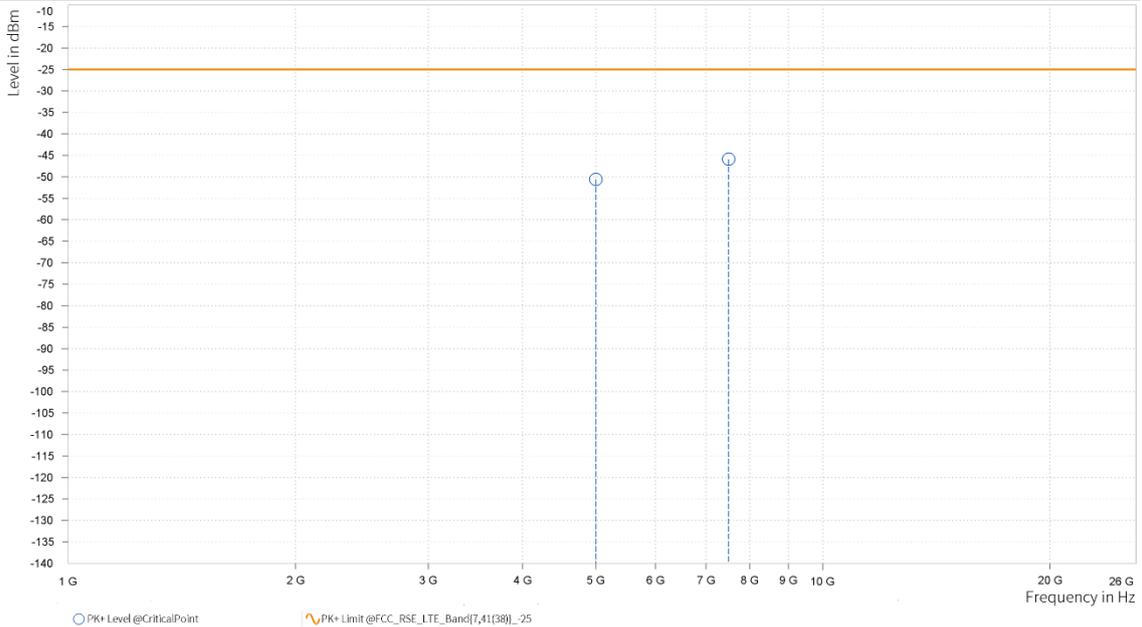




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20800
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,001.000	-50.58	-25.00	25.58	23.66	H	228.5	1.00
5	7,501.500	-45.88	-25.00	20.88	27.41	H	320.5	2.00

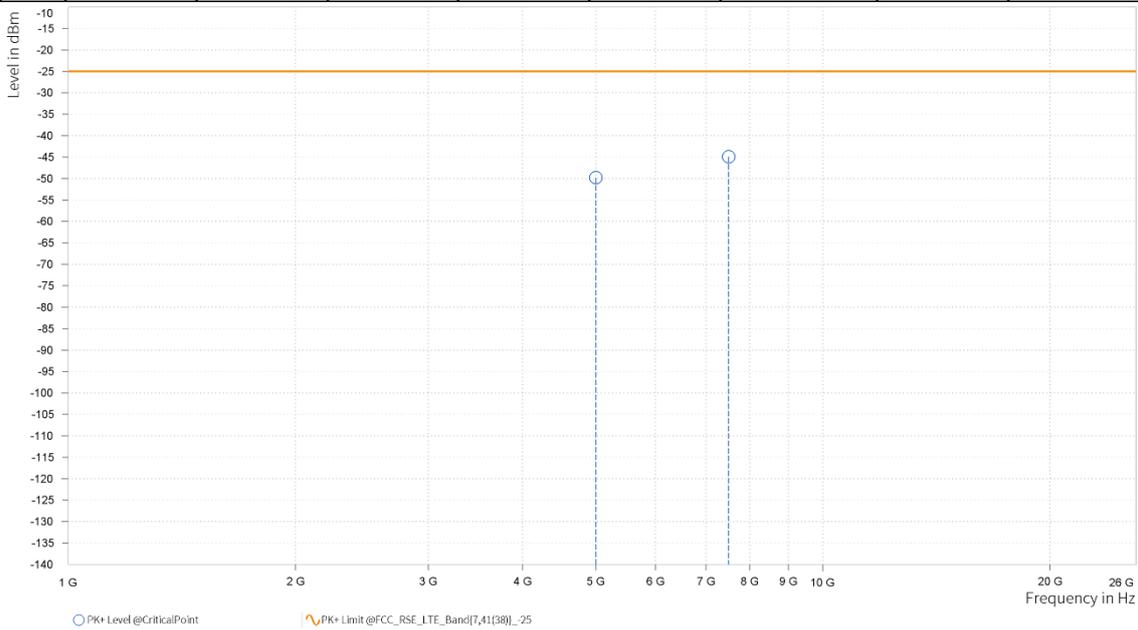




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20800
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,001.000	-49.81	-25.00	24.81	23.87	V	325.4	1.00
5	7,501.500	-44.91	-25.00	19.91	27.39	V	359	2.00

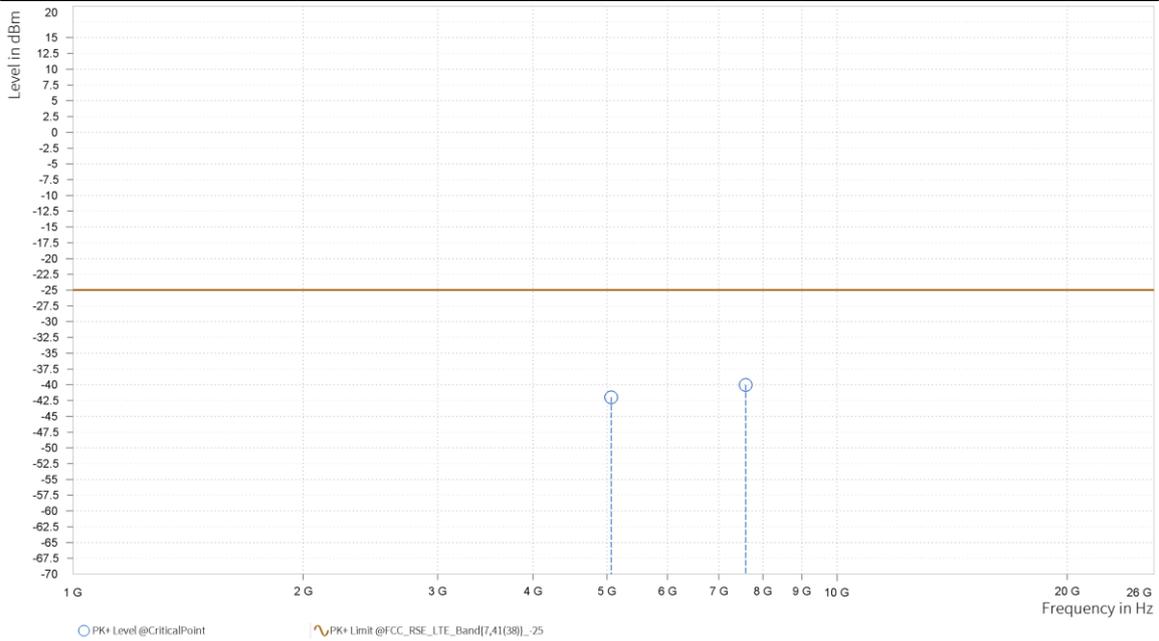




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,061.000	-41.98	-25.00	16.98	31.50	H	1	1.00
4	7,591.500	-40.02	-25.00	15.02	36.45	H	24.6	2.00

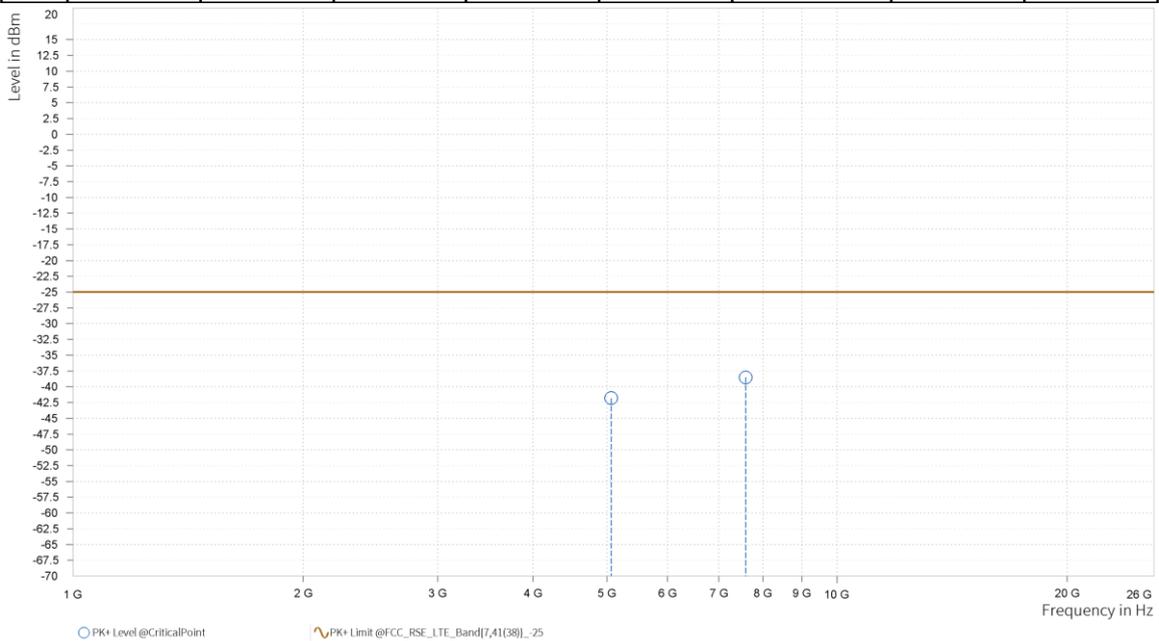




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,061.000	-41.79	-25.00	16.79	31.27	V	359.1	1.00
4	7,591.500	-38.51	-25.00	13.51	36.48	V	1	1.00

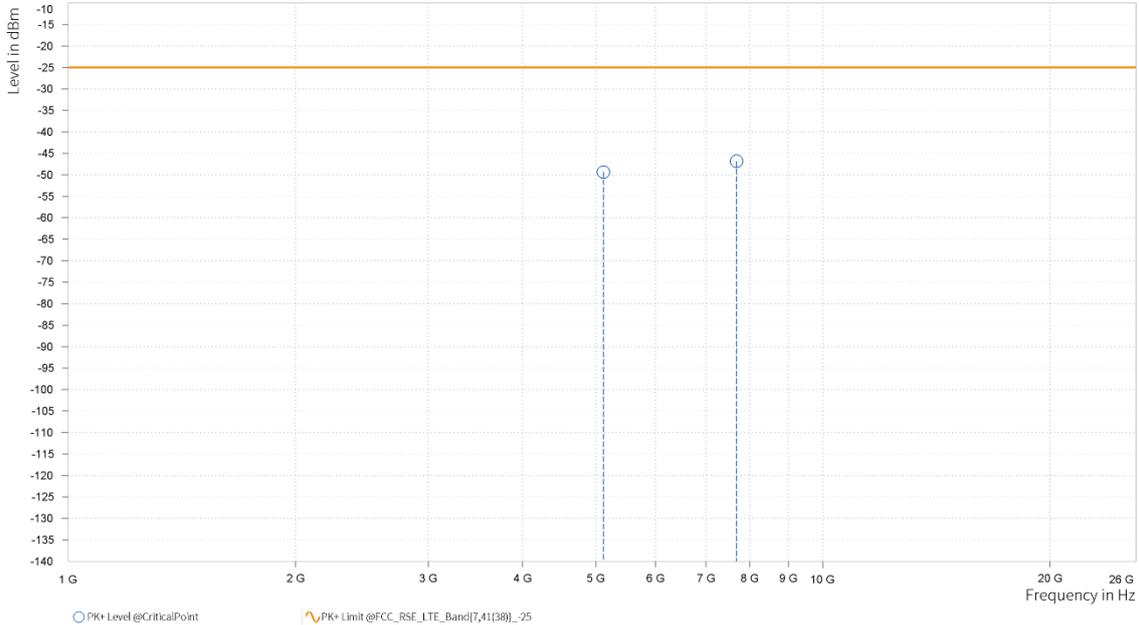




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 21400
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,121.000	-49.33	-25.00	24.33	23.51	H	359	1.00
5	7,681.500	-46.83	-25.00	21.83	28.00	H	133.6	2.00

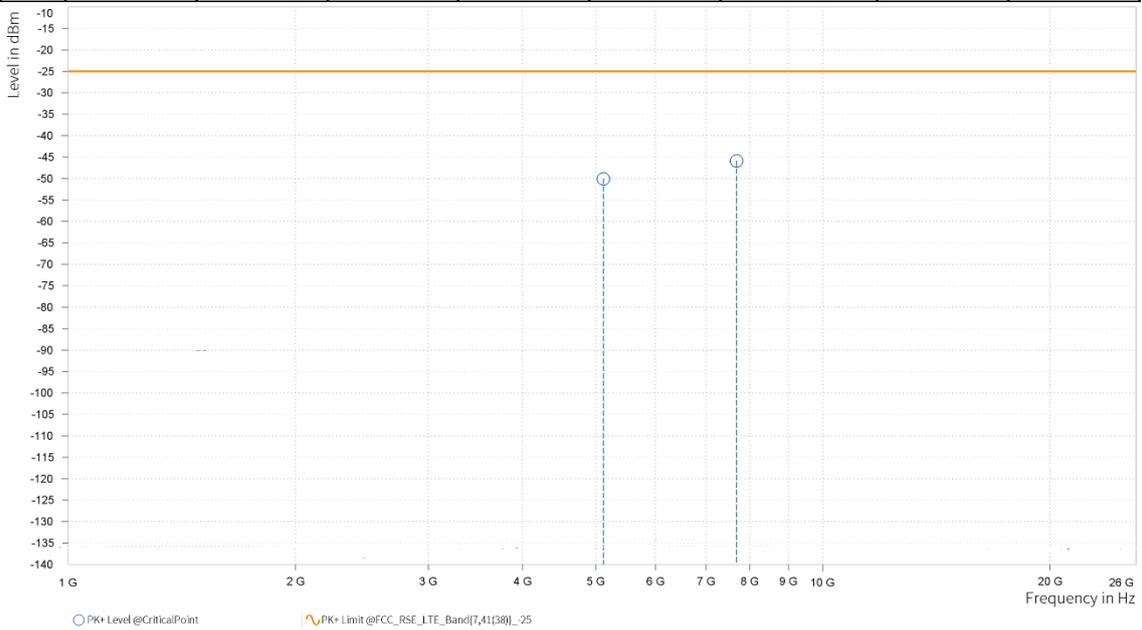




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 21400
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,121.000	-50.06	-25.00	25.06	23.91	V	133.6	1.00
5	7,681.500	-45.88	-25.00	20.88	27.82	V	1	2.00

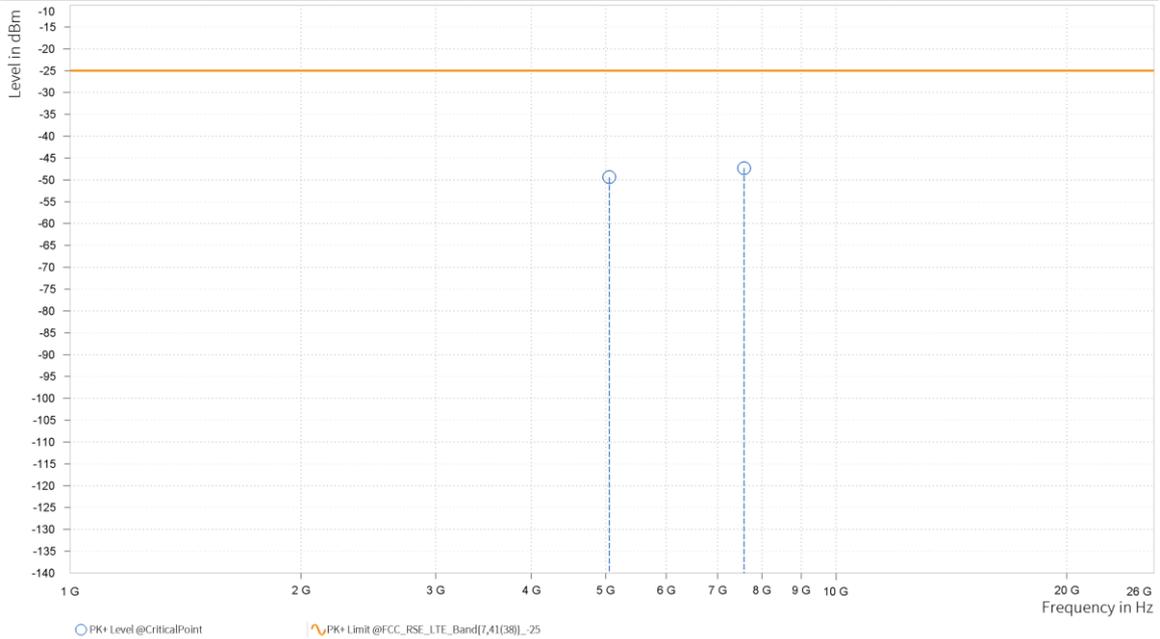




CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,056.500	-49.38	-25.00	24.38	23.92	H	254.6	2.00
5	7,584.750	-47.29	-25.00	22.29	27.48	H	222.2	2.00

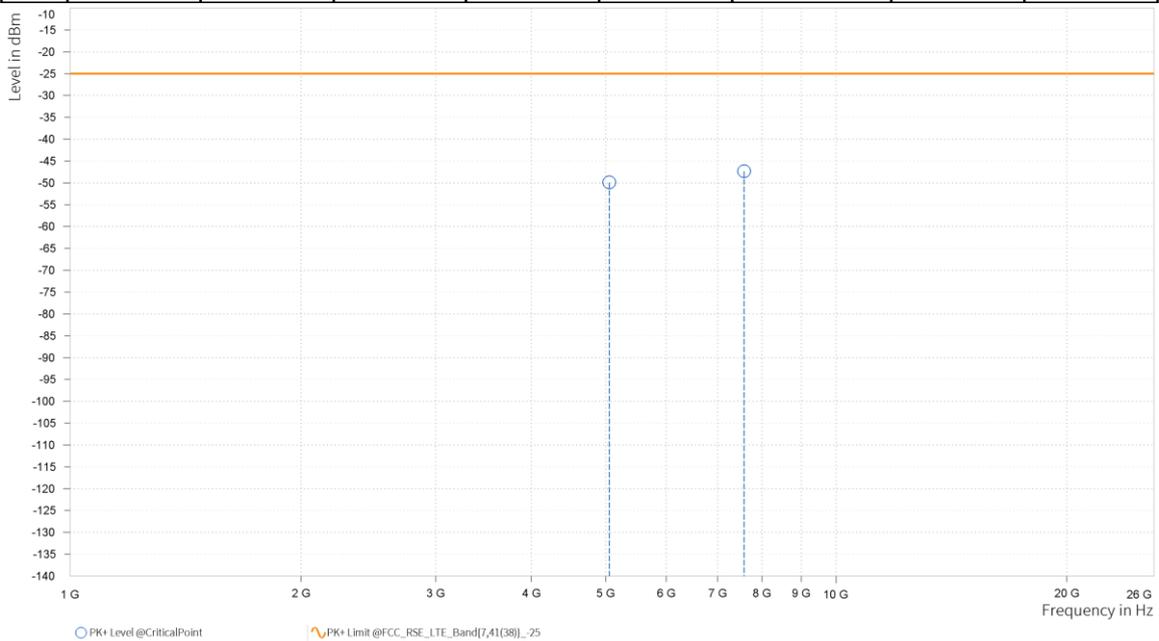




CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,056.500	-49.90	-25.00	24.90	24.34	V	2	2.00
5	7,584.750	-47.33	-25.00	22.33	27.26	V	316.2	1.00

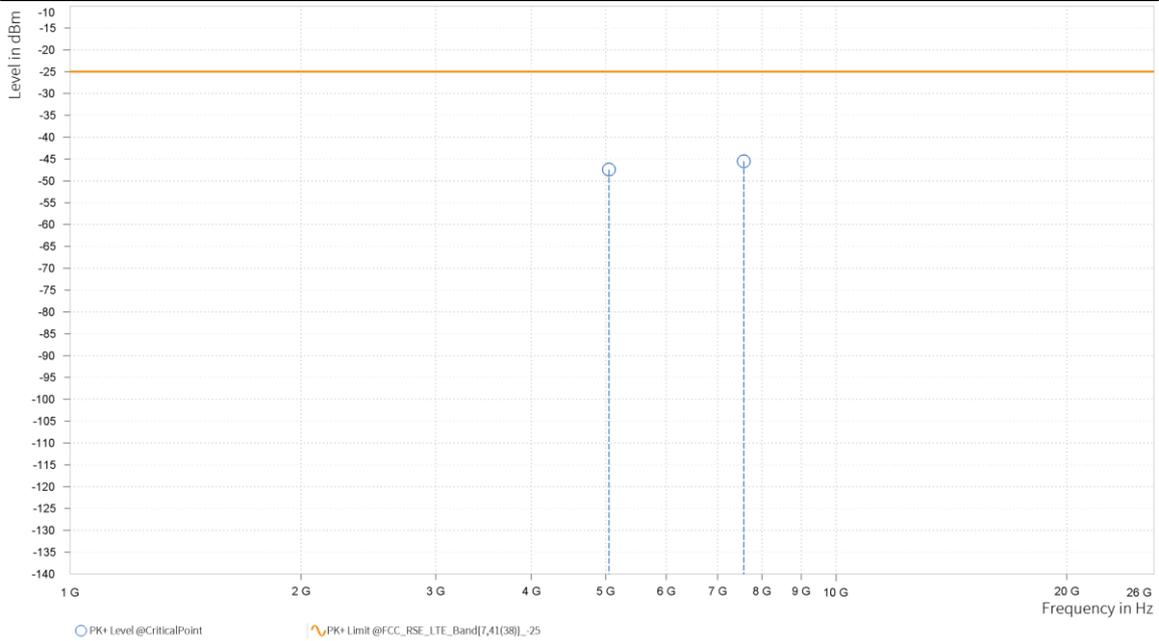




CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,052.000	-47.41	-25.00	22.41	23.97	H	43.7	2.00
5	7,578.000	-45.51	-25.00	20.51	27.48	H	33.8	2.00

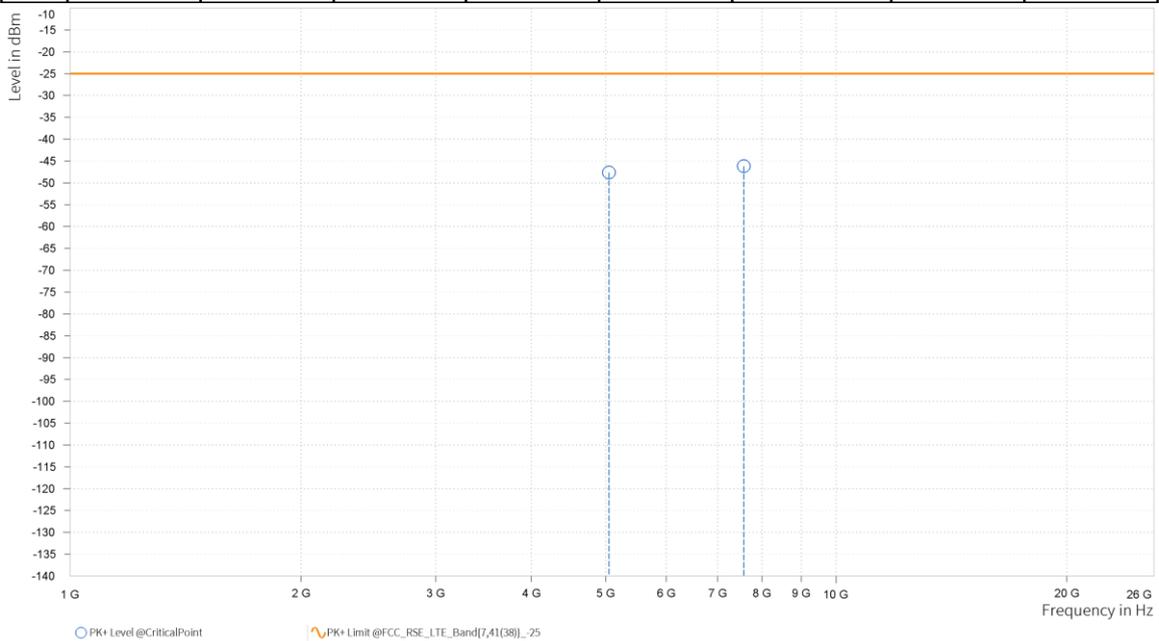




CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 21100
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,052.000	-47.64	-25.00	22.64	24.38	V	258.9	2.00
5	7,578.000	-46.19	-25.00	21.19	27.27	V	0.9	2.00



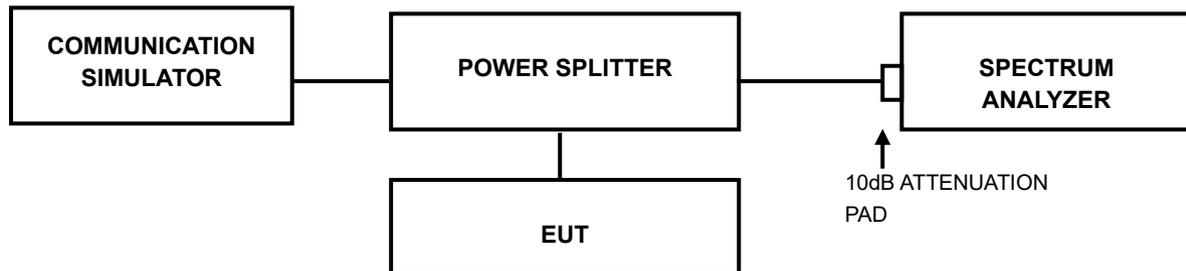


3.7 PEAK TO AVERAGE RATIO

3.7.1 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

3.7.2 TEST SETUP



3.7.3 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%.

3.7.4 TEST RESULTS

Please Refer to Appendix of this test report.



4 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

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

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 Appendix

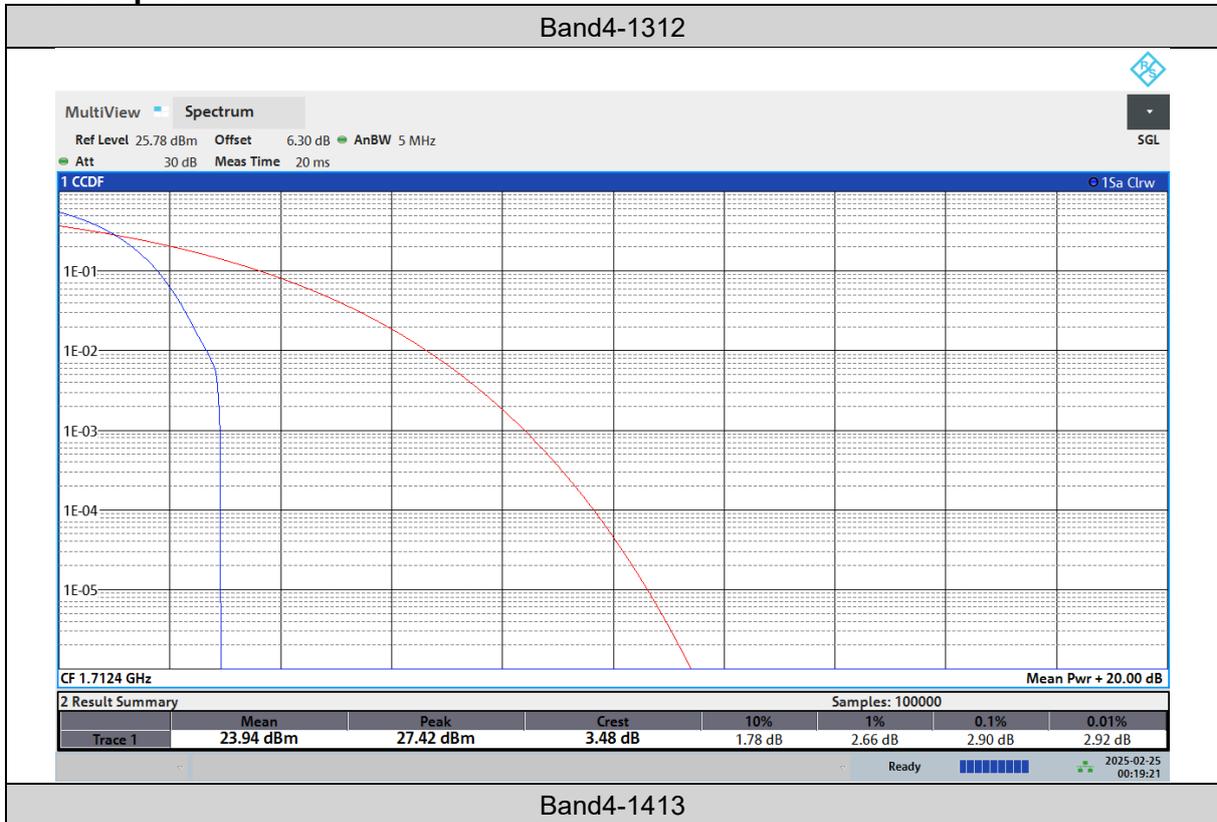
WCDMA B4

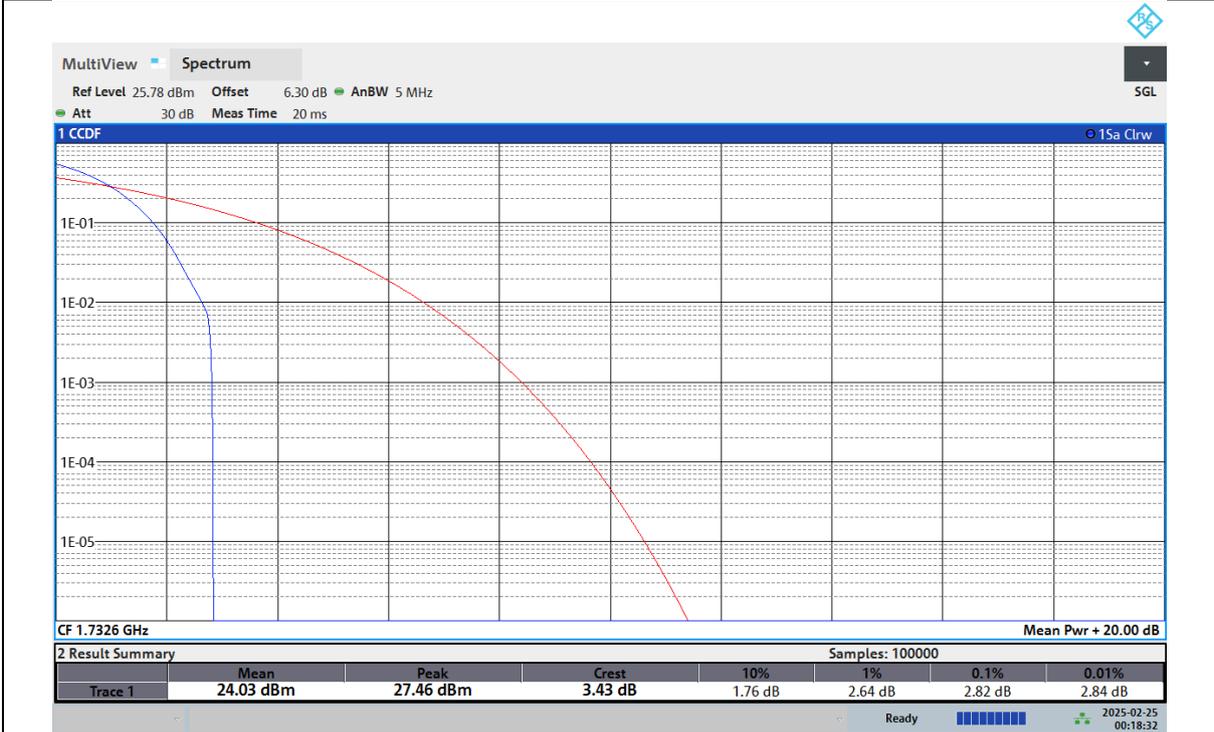
PEAK-TO-AVERAGE RATIO

Test Result

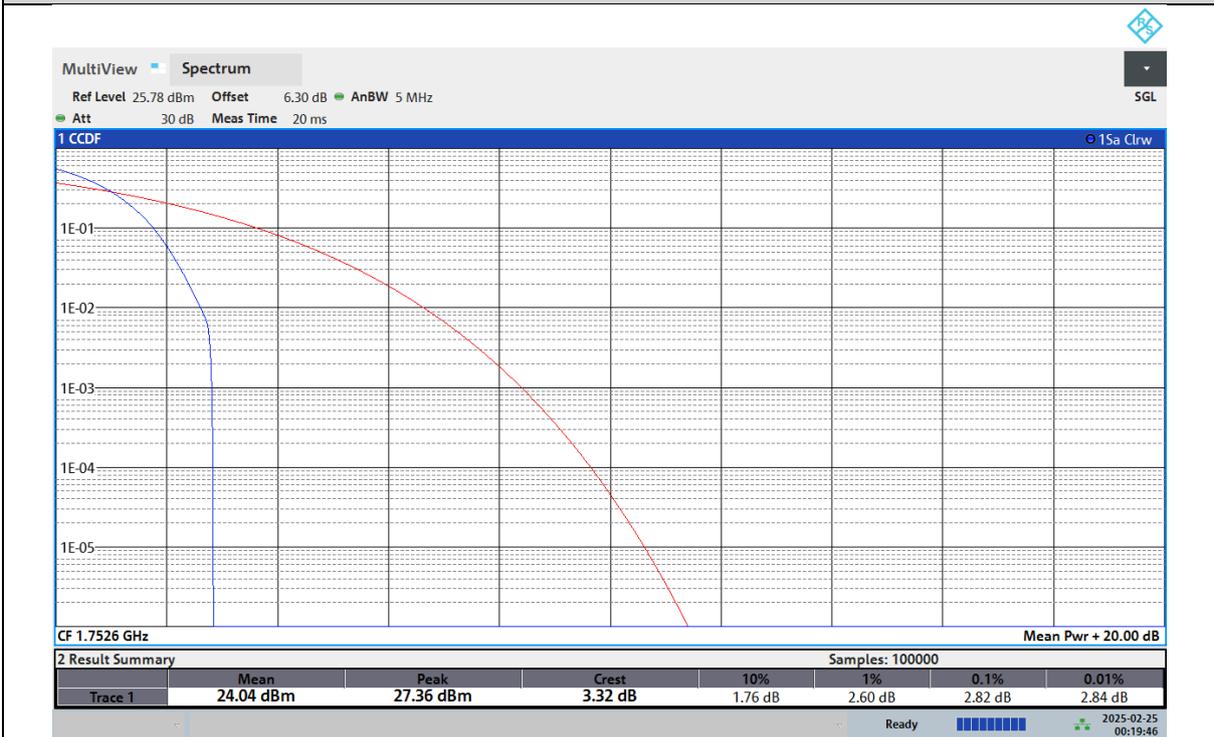
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	2.90	13	PASS
Band4	1413	2.82	13	PASS
Band4	1513	2.82	13	PASS

Test Graphs





Band4-1513





26DB BANDWIDTH AND OCCUPIED BANDWIDTH

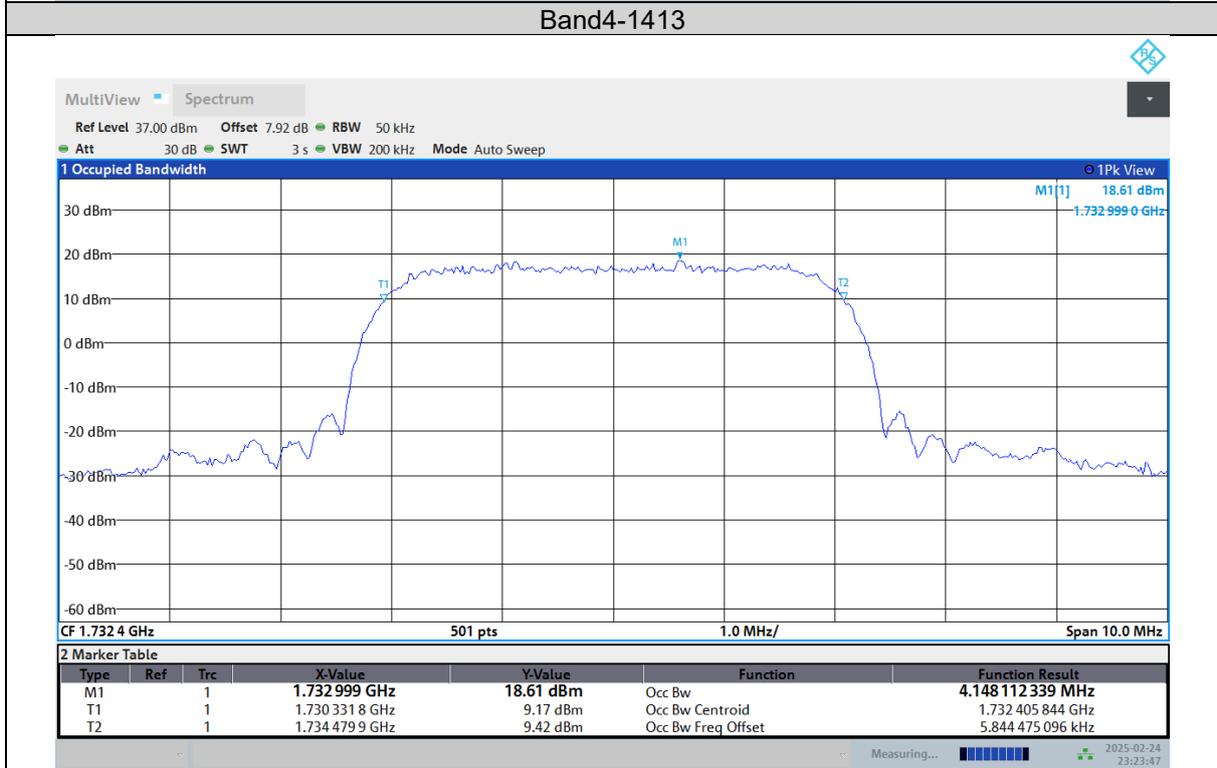
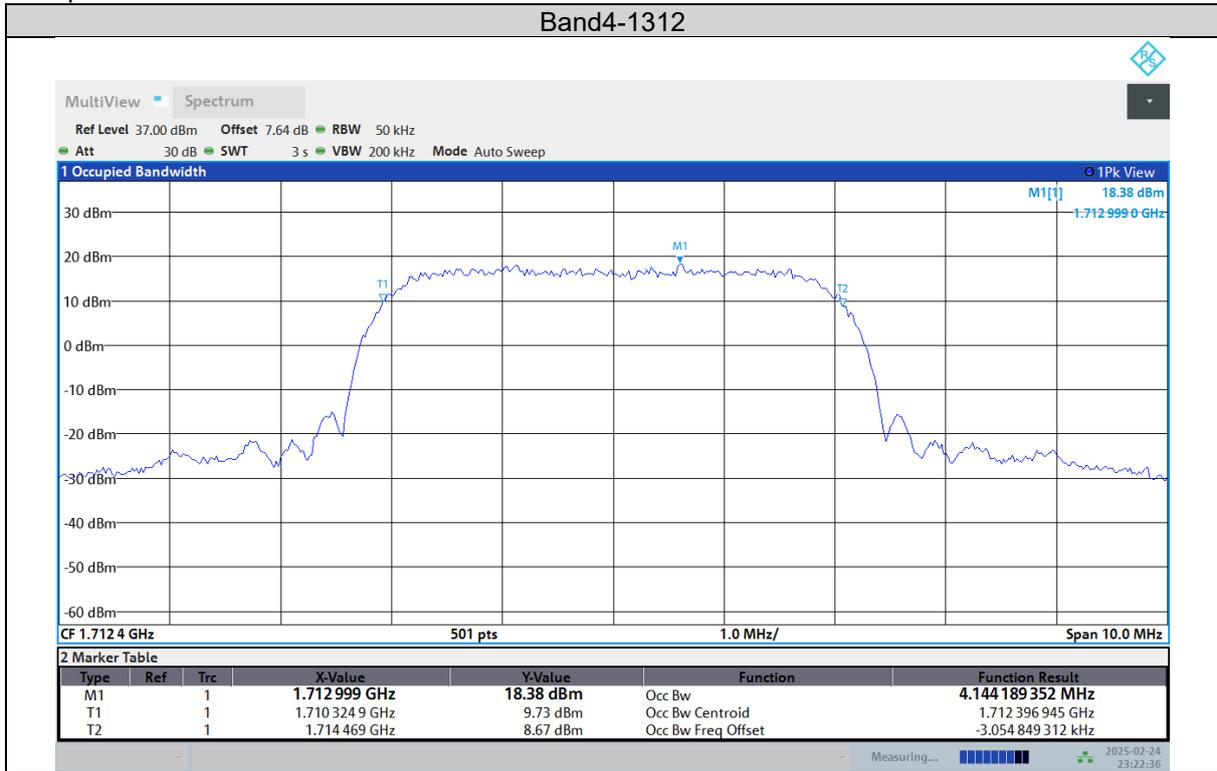
Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1312	4.144	4.68	PASS
Band4	1413	4.148	4.70	PASS
Band4	1513	4.148	4.70	PASS

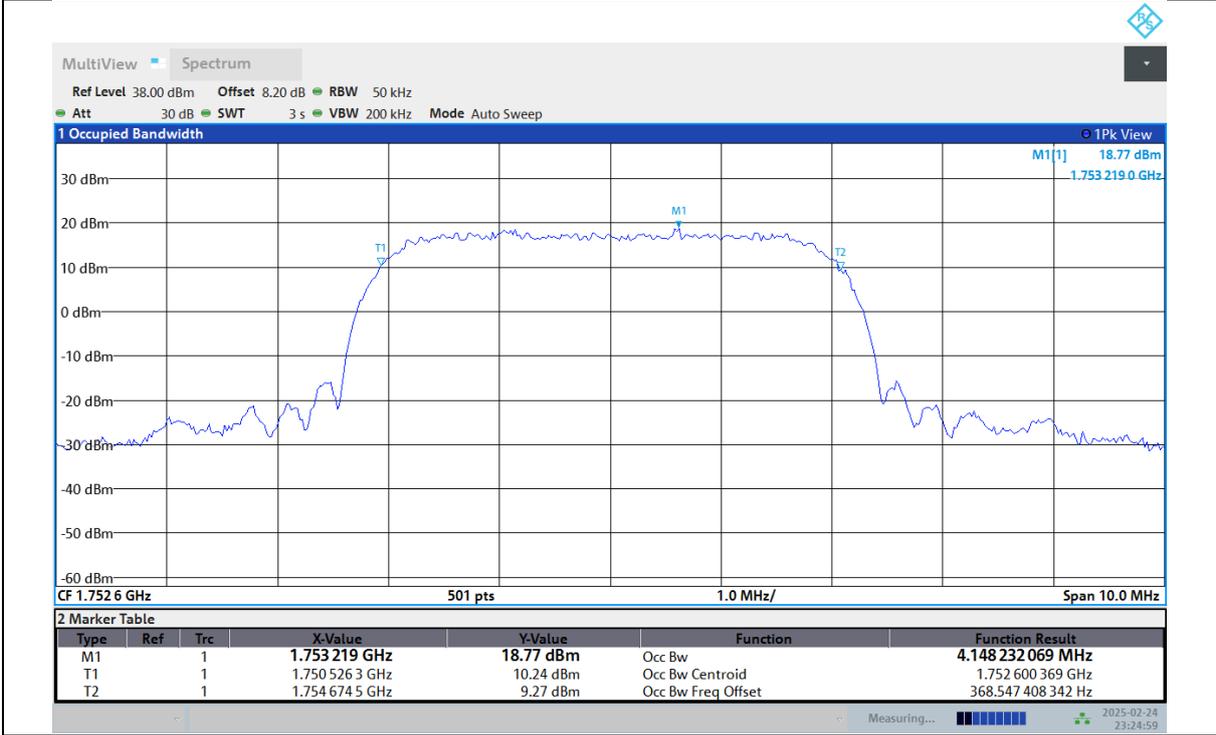


Test Graphs

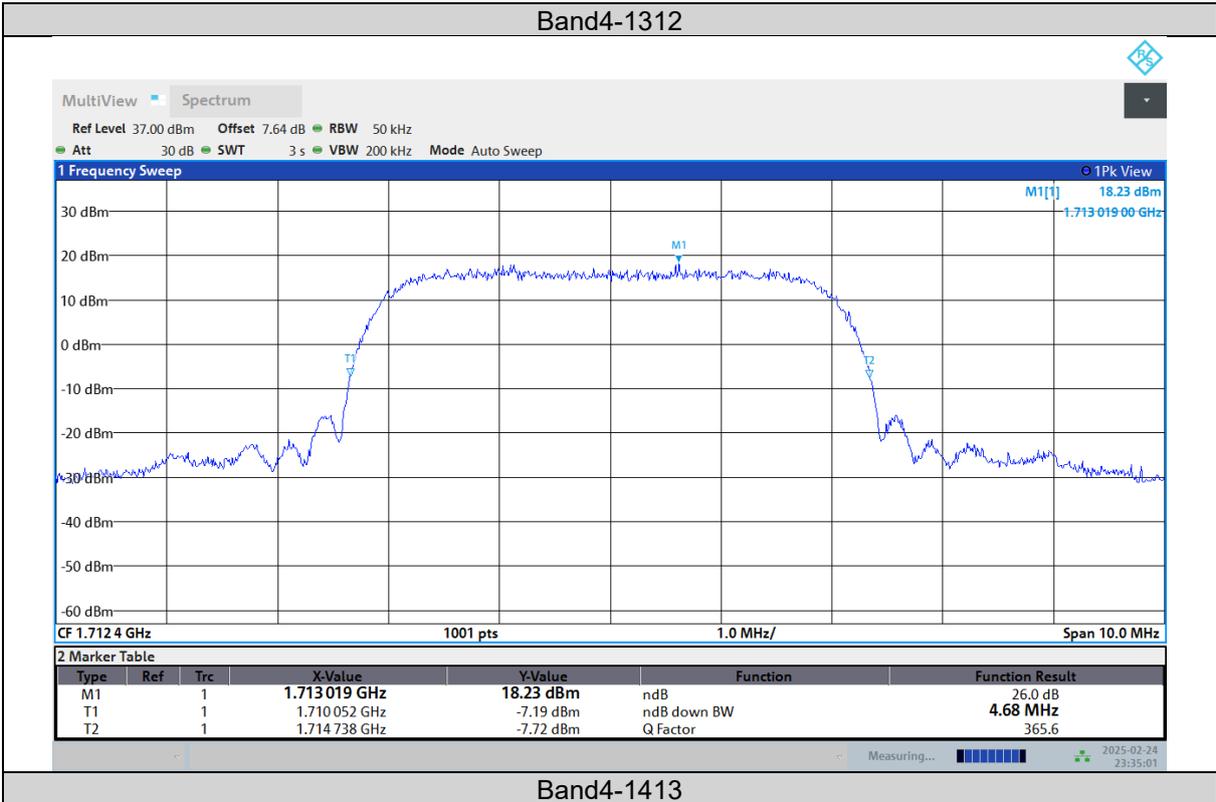
Occupied Bandwidth

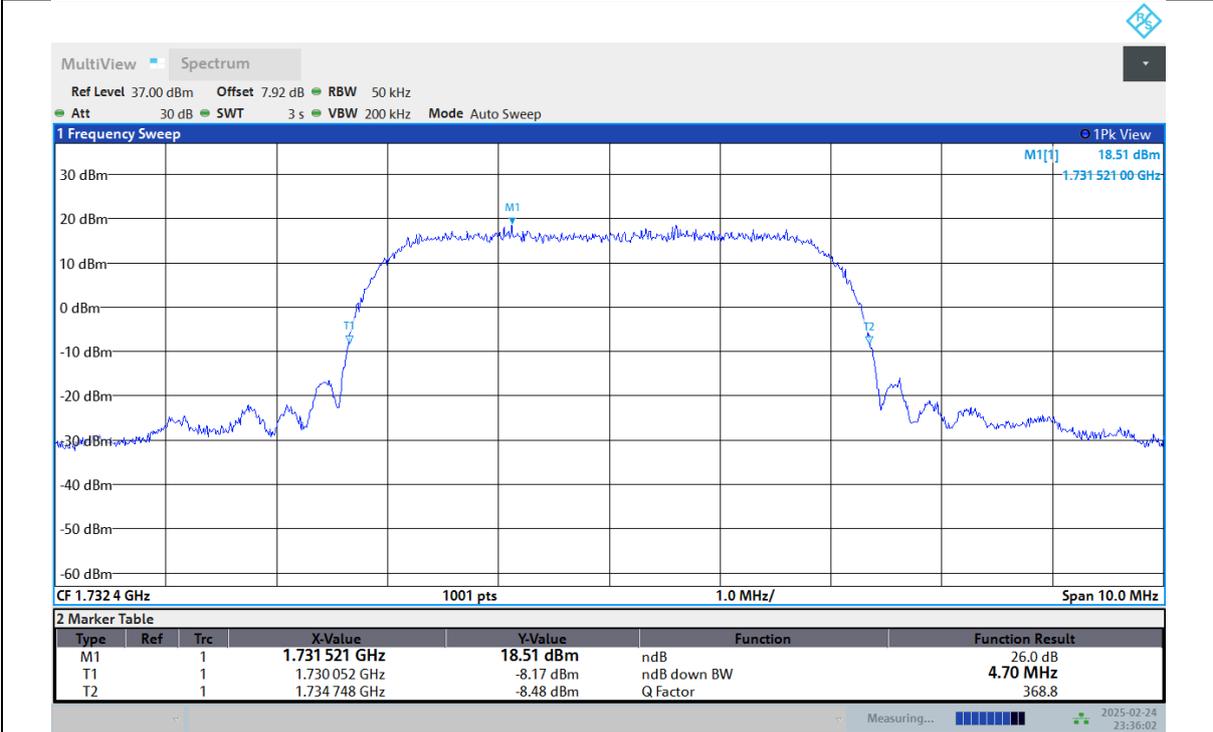


Band4-1513

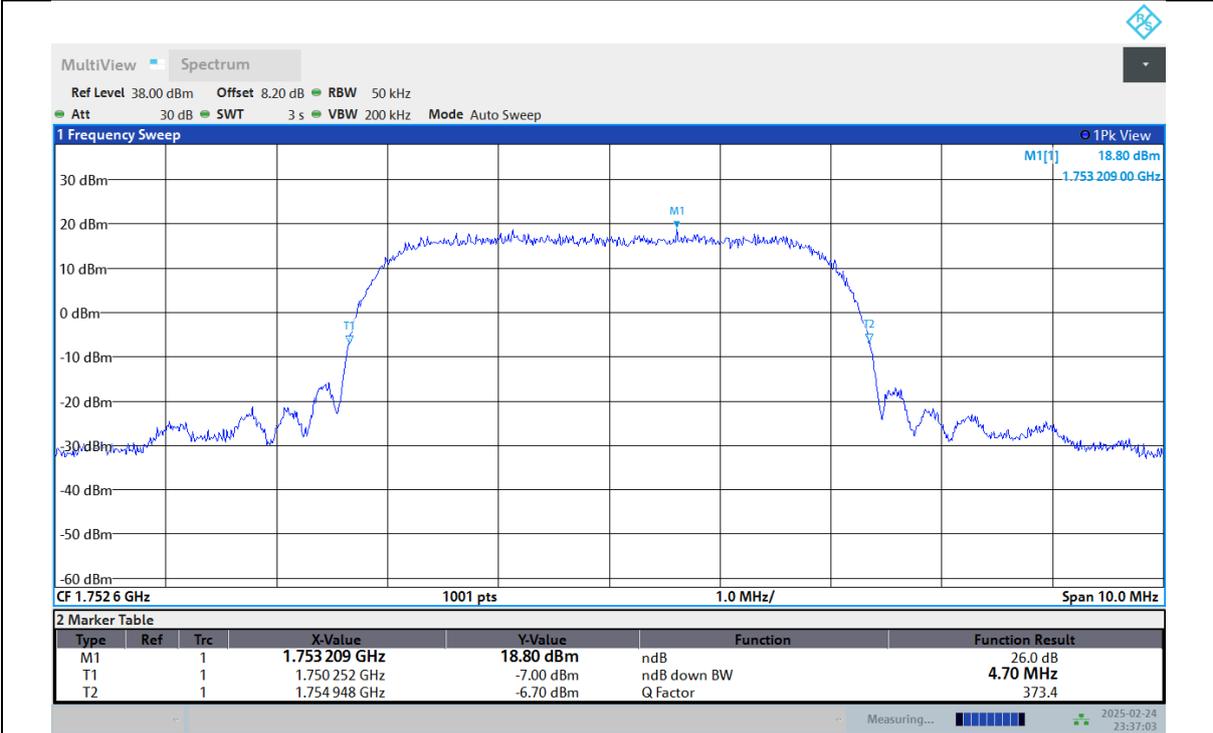


26dB Bandwidth





Band4-1513





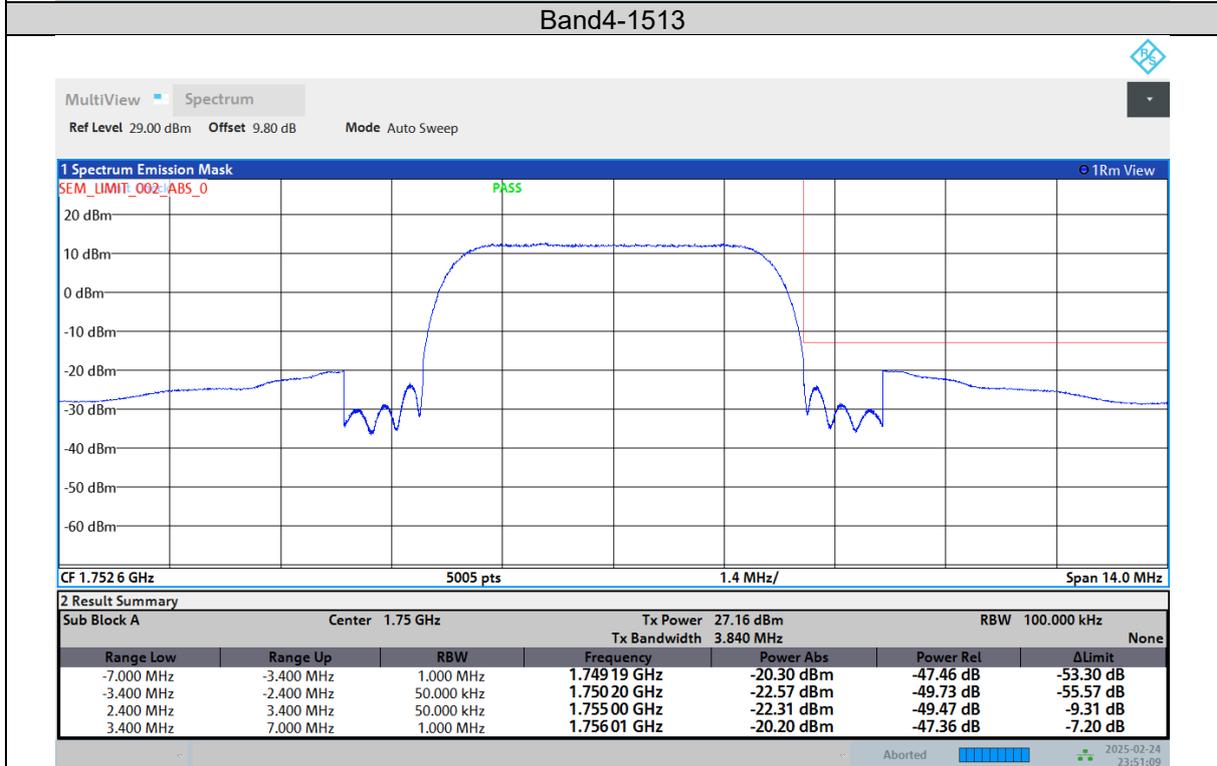
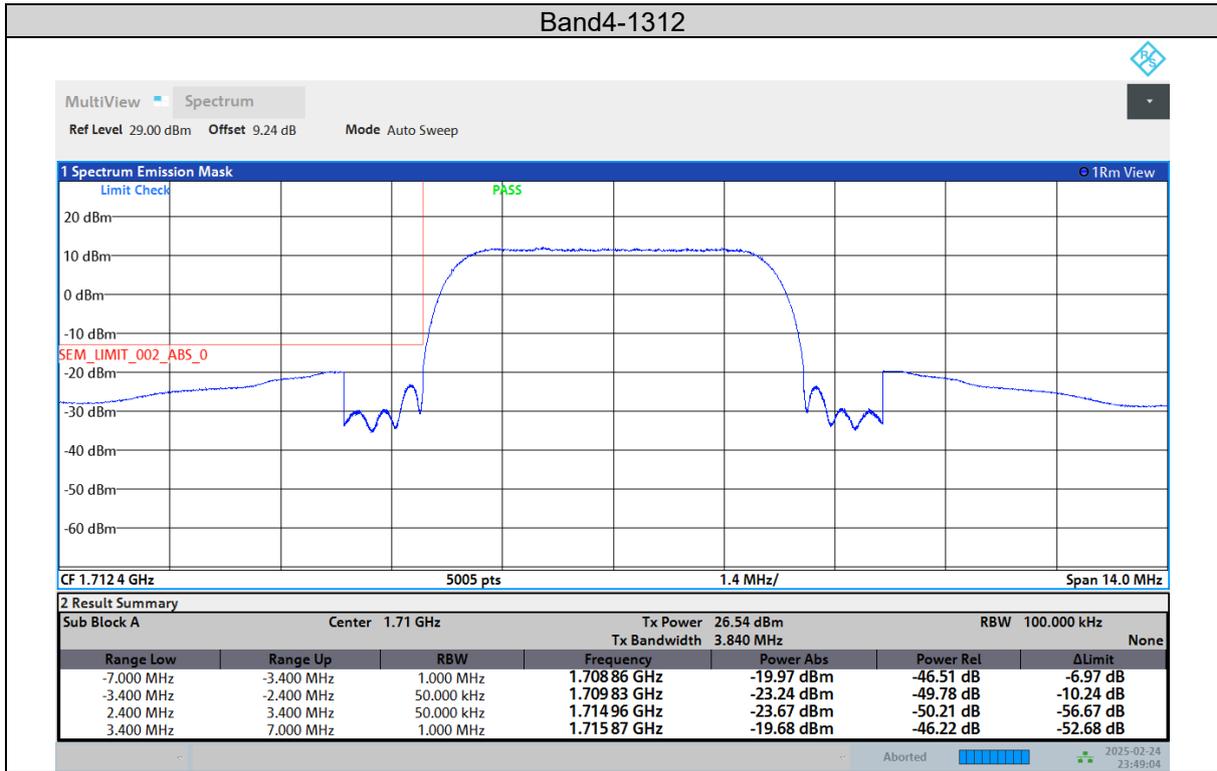
BAND EDGE

Test Result

Band	Channel	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	See Graph	-13	PASS
Band4	1513	See Graph	-13	PASS



Test Graphs





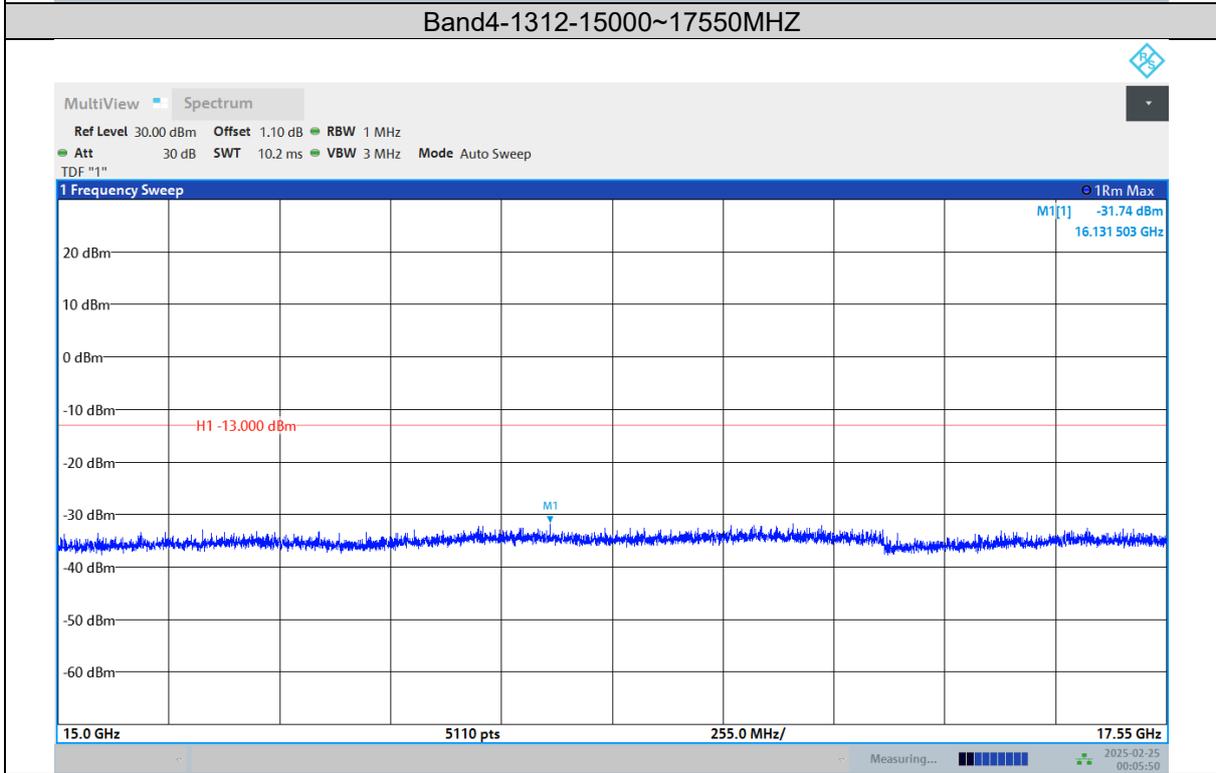
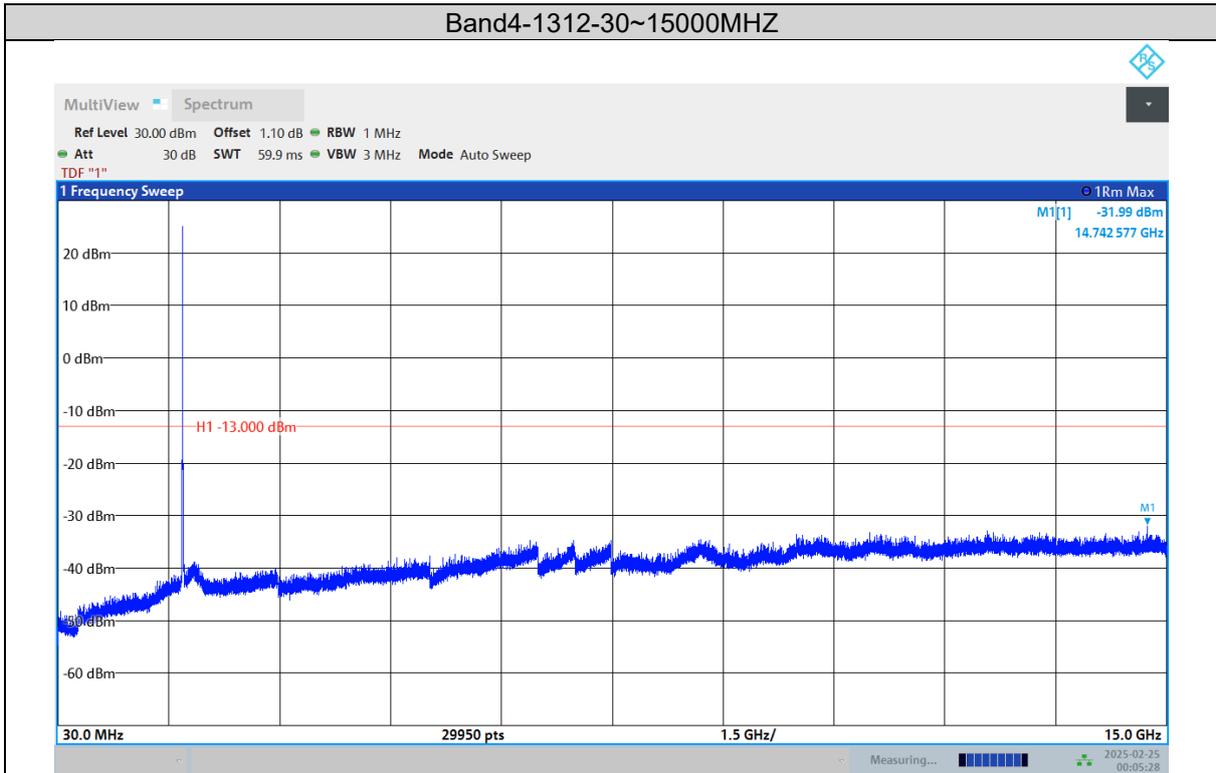
CONDUCTED SPURIOUS EMISSION

Test Result

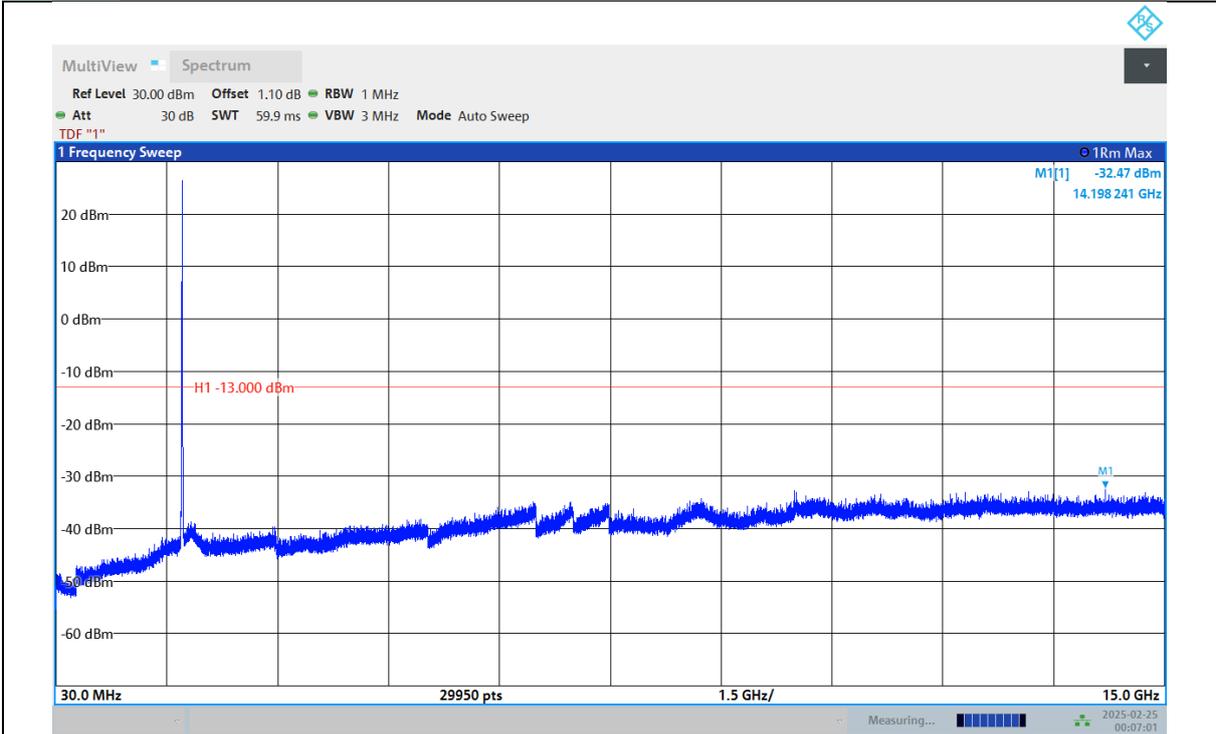
Band	Channel	Frequency Range (Mhz)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	30~15000MHZ	See Graph	-13	PASS
Band4	1312	15000~17550MHZ	See Graph	-13	PASS
Band4	1413	30~15000MHZ	See Graph	-13	PASS
Band4	1312	15000~17550MHZ	See Graph	-13	PASS
Band4	1513	30~15000MHZ	See Graph	-13	PASS
Band4	1312	15000~17550MHZ	See Graph	-13	PASS



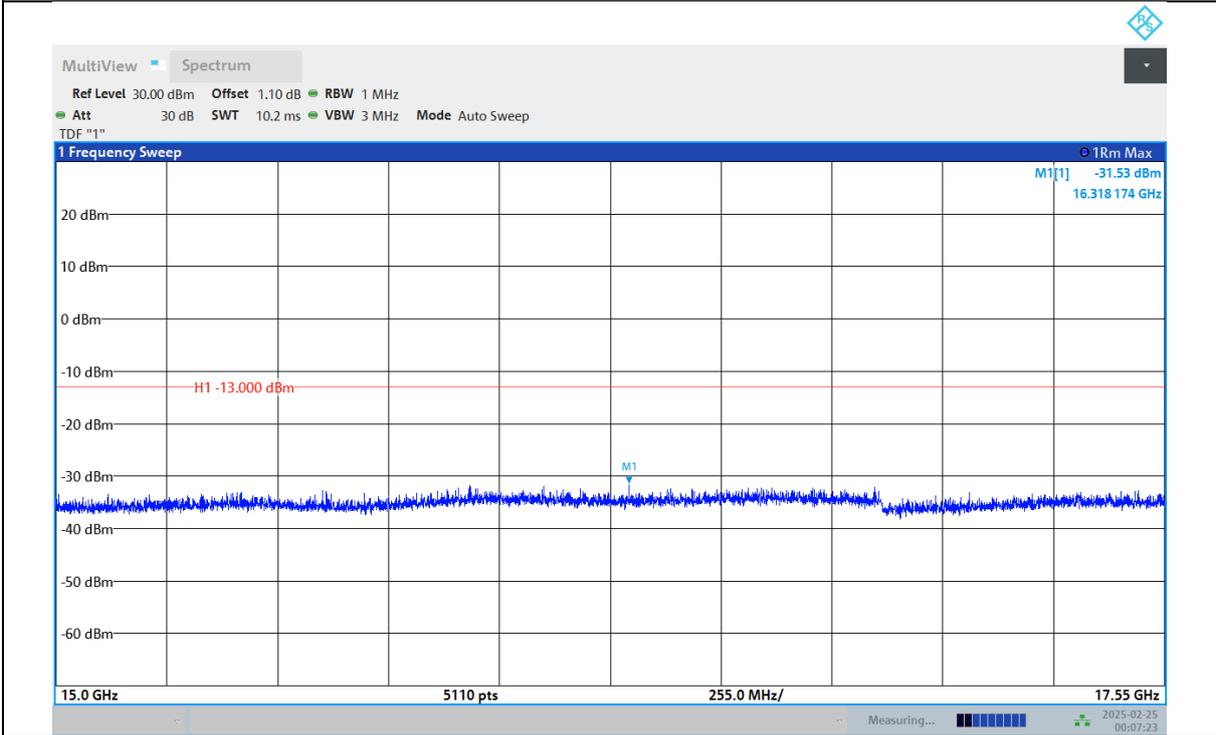
Test Graphs



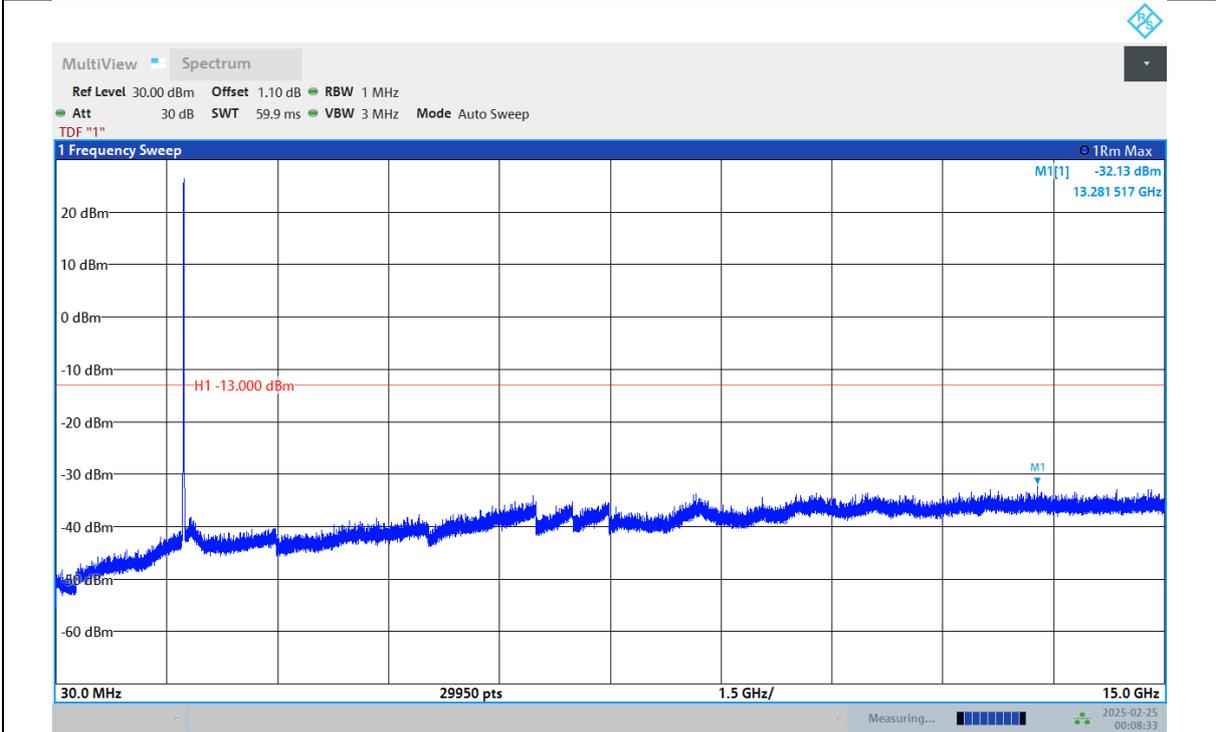
Band4-1413-30~15000MHZ



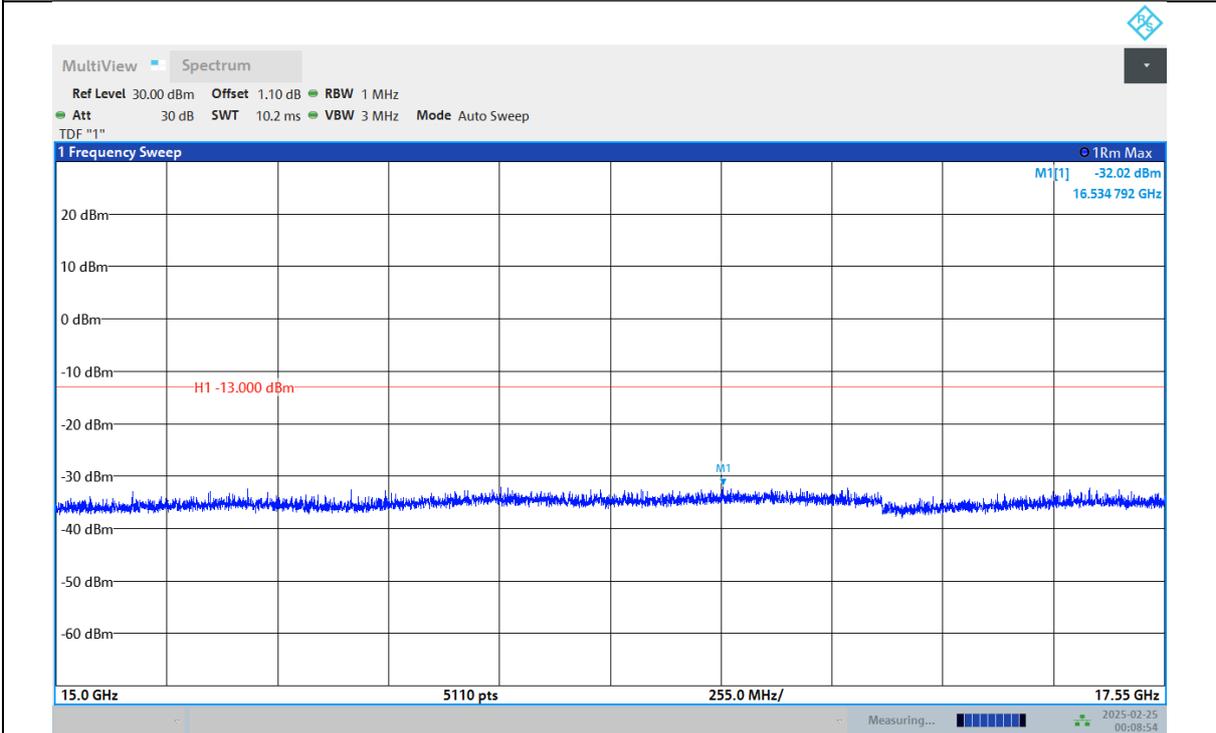
Band4-1413-15000~17550MHZ



Band4-1513-30~15000MHZ



Band4-1513-15000~17550MHz





FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VL	NT	6.69	0.0039	±2.5	PASS
Band4	1312	VN	NT	-7.47	-0.0044	±2.5	PASS
Band4	1312	VH	NT	9.91	0.0058	±2.5	PASS
Band4	1413	VL	NT	-4.44	-0.0025	±2.5	PASS
Band4	1413	VN	NT	-5.68	-0.0033	±2.5	PASS
Band4	1413	VH	NT	-3.76	-0.0022	±2.5	PASS
Band4	1513	VL	NT	-6.98	-0.0039	±2.5	PASS
Band4	1513	VN	NT	3.00	0.0017	±2.5	PASS
Band4	1513	VH	NT	-0.40	-0.0002	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	2.24	0.0013	±2.5	PASS
Band4	1312	NV	-20	-0.77	0.0009	±2.5	PASS
Band4	1312	NV	0	-4.45	-0.0026	±2.5	PASS
Band4	1312	NV	-10	-7.82	-0.0046	±2.5	PASS
Band4	1312	NV	10	3.56	0.0021	±2.5	PASS
Band4	1312	NV	20	-8.49	-0.0050	±2.5	PASS
Band4	1312	NV	30	-3.21	-0.0019	±2.5	PASS
Band4	1312	NV	40	-0.20	-0.0001	±2.5	PASS
Band4	1312	NV	50	-6.00	-0.0035	±2.5	PASS
Band4	1413	NV	-30	4.34	0.0025	±2.5	PASS
Band4	1413	NV	-20	-9.97	-0.0057	±2.5	PASS
Band4	1413	NV	-10	-4.02	-0.0023	±2.5	PASS
Band4	1413	NV	0	7.04	0.0040	±2.5	PASS
Band4	1413	NV	10	0.40	0.0002	±2.5	PASS
Band4	1413	NV	20	0.83	0.0005	±2.5	PASS
Band4	1413	NV	30	-0.78	-0.0004	±2.5	PASS
Band4	1413	NV	40	1.78	0.0010	±2.5	PASS
Band4	1413	NV	50	6.12	0.0035	±2.5	PASS
Band4	1513	NV	-30	-0.67	-0.0004	±2.5	PASS
Band4	1513	NV	-20	-9.09	-0.0051	±2.5	PASS
Band4	1513	NV	-10	-0.42	-0.0002	±2.5	PASS
Band4	1513	NV	0	7.57	0.0042	±2.5	PASS
Band4	1513	NV	10	-5.47	-0.0031	±2.5	PASS
Band4	1513	NV	20	0.32	0.0002	±2.5	PASS



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Band4	1513	NV	30	-3.29	-0.0018	±2.5	PASS
Band4	1513	NV	40	-8.63	-0.0048	±2.5	PASS
Band4	1513	NV	50	-8.42	-0.0047	±2.5	PASS



LTE BAND7

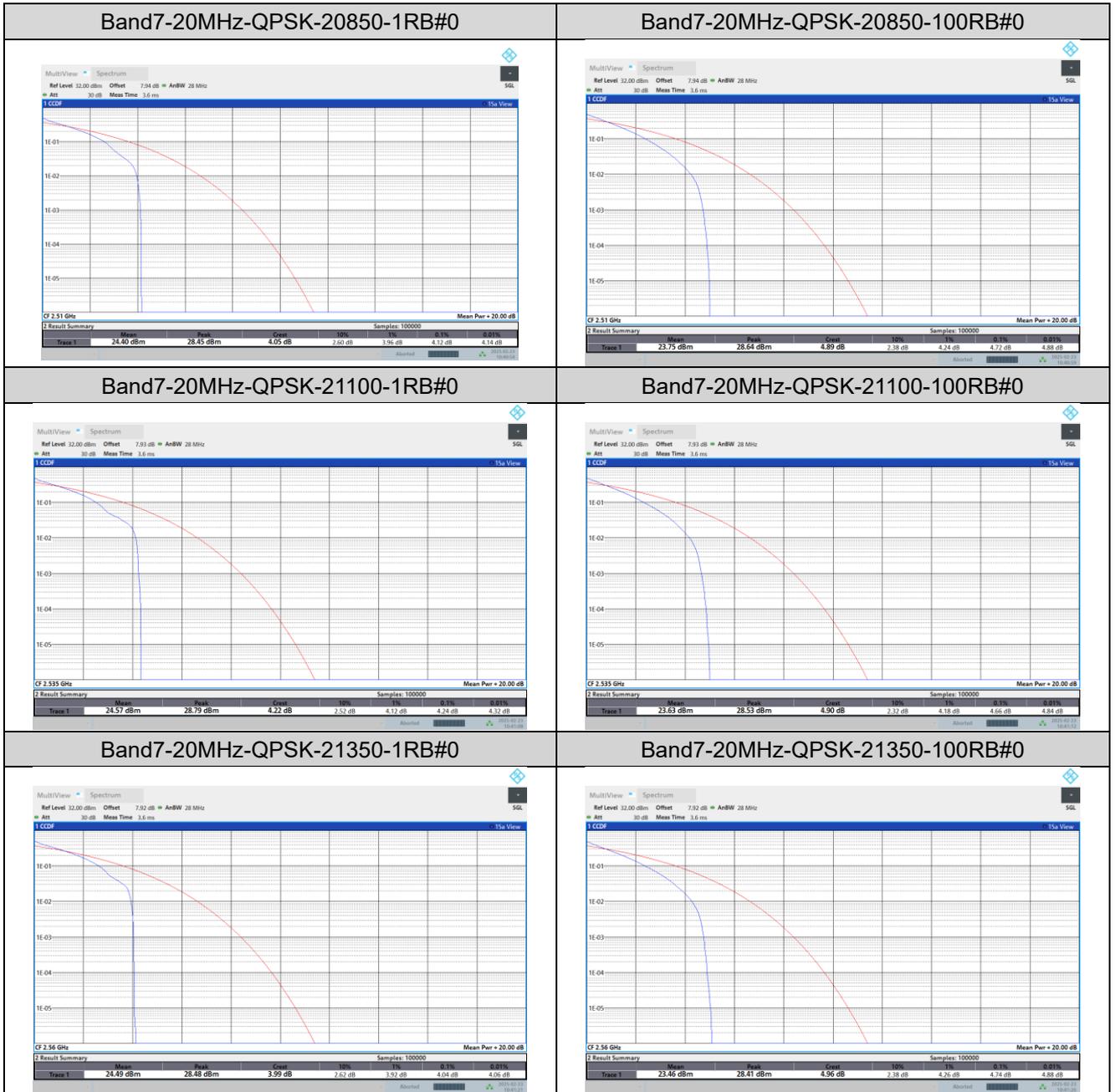
PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	1RB#0	4.12	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	4.72	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	4.24	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	4.66	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	4.04	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	4.74	13	PASS



Test Graphs





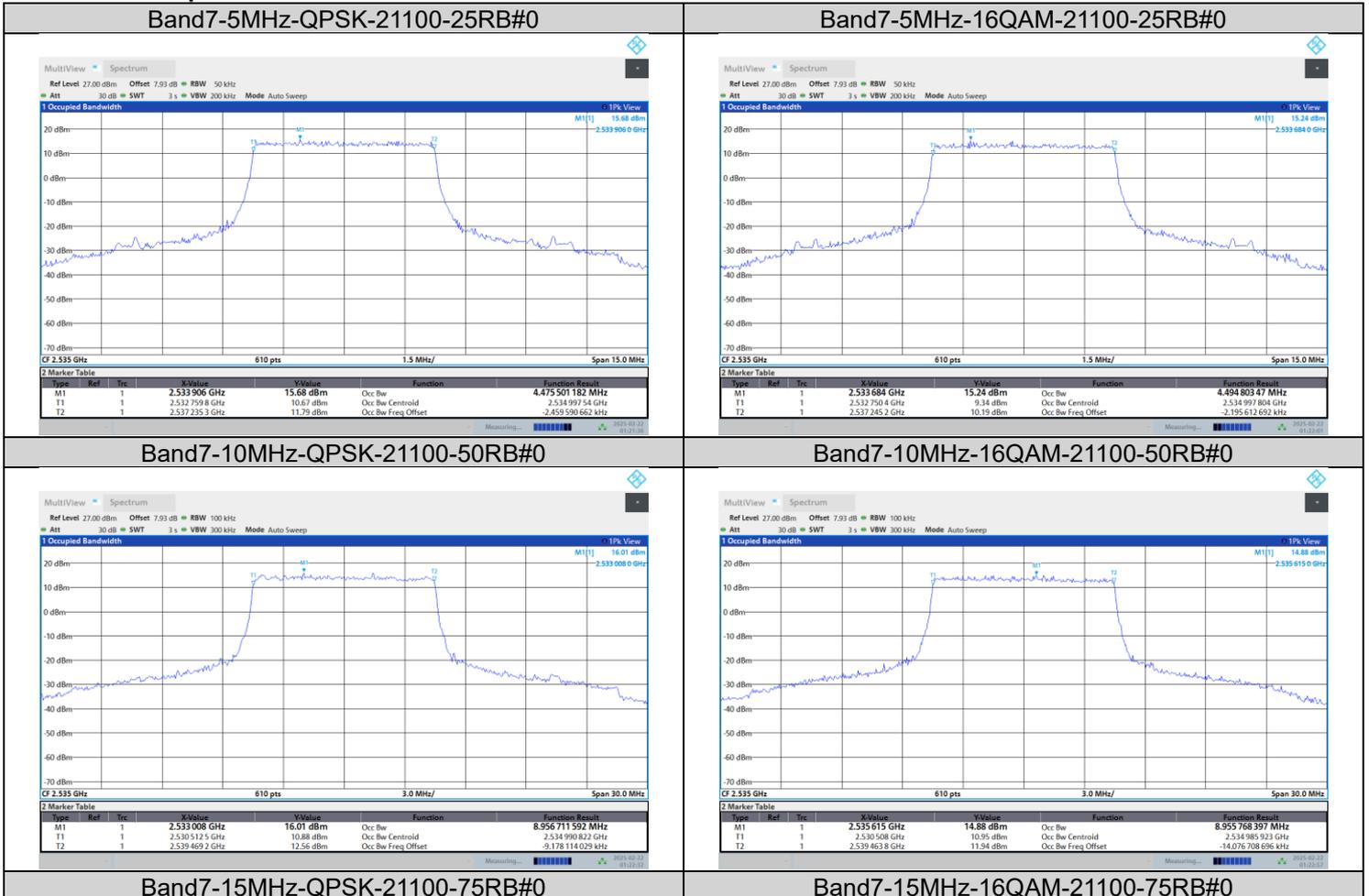
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

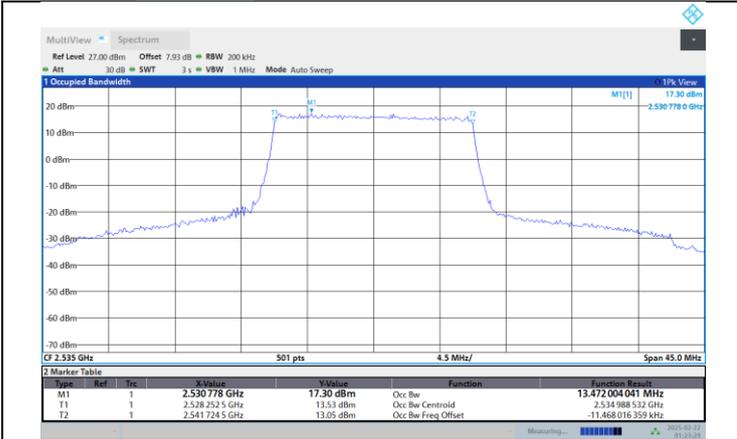
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	21100	25RB#0	4.476	5.02	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.495	4.99	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.957	9.83	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.956	9.74	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.472	14.79	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.486	14.65	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.955	19.48	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.922	19.54	PASS

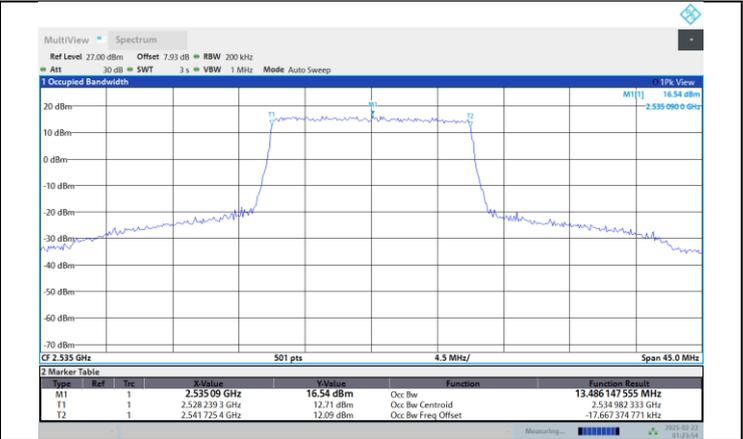
Test Graphs

Occupied Bandwidth

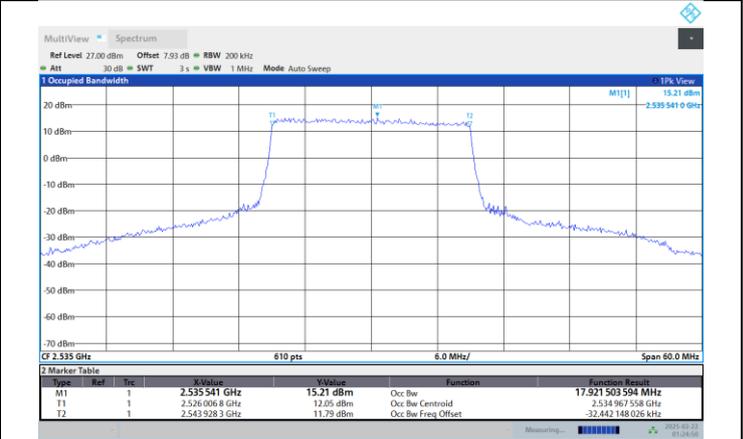
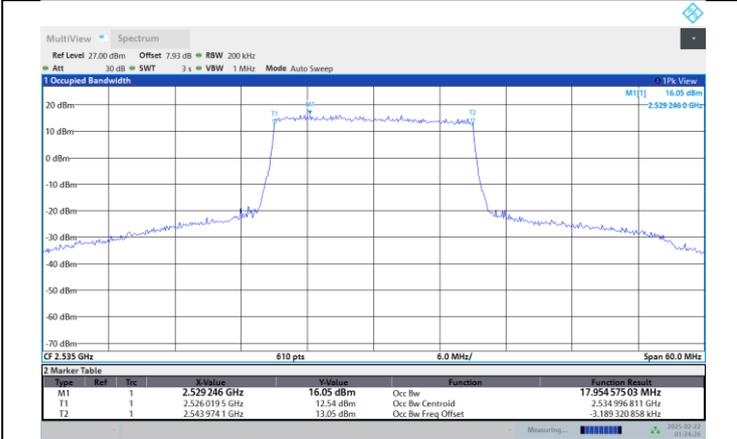




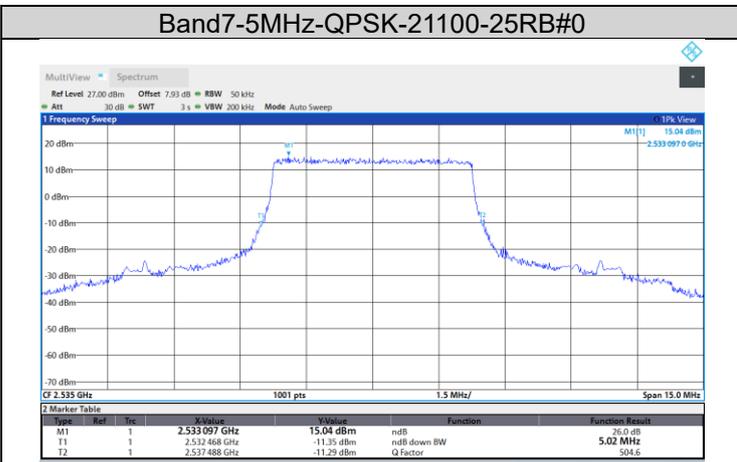
Band7-20MHz-QPSK-21100-100RB#0



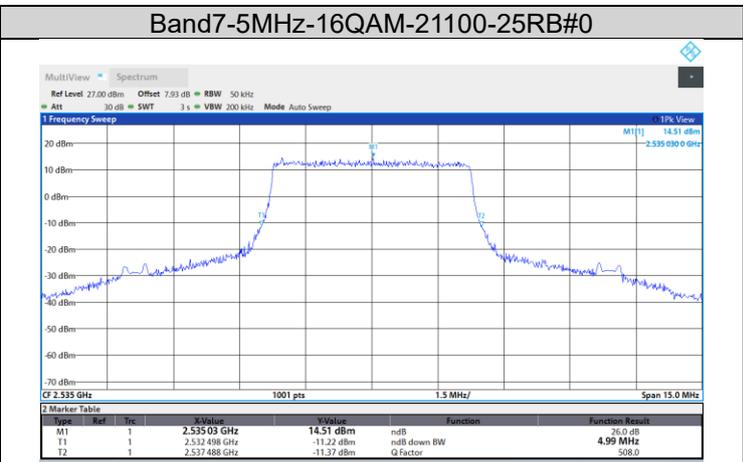
Band7-20MHz-16QAM-21100-100RB#0



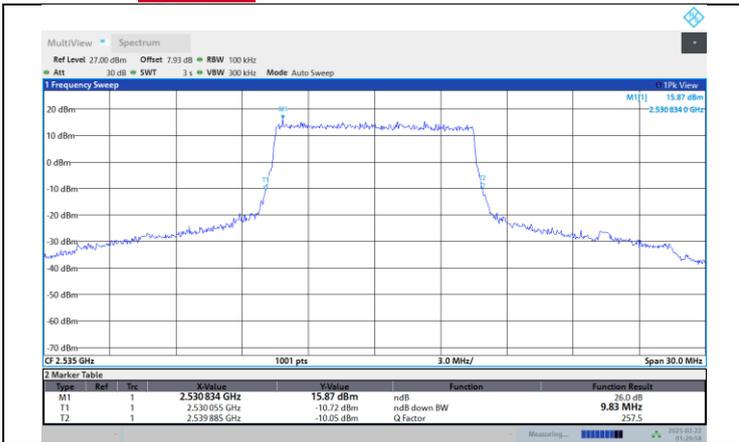
26dB Bandwidth



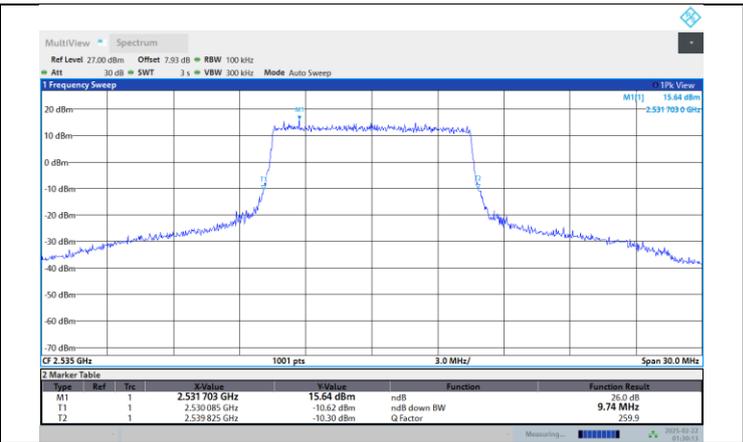
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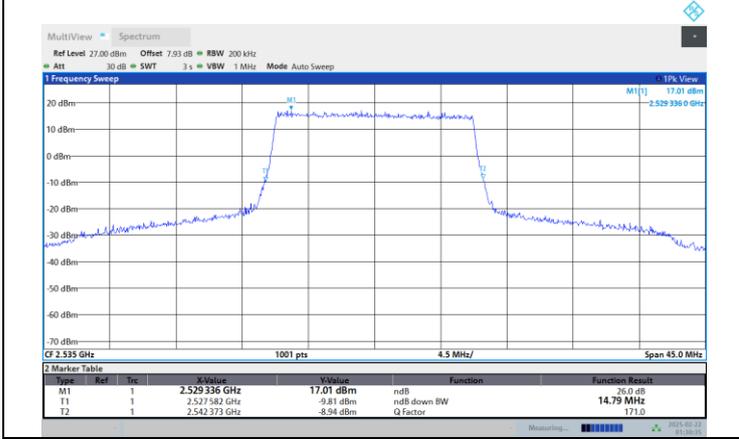
Band7-10MHz-16QAM-21100-50RB#0



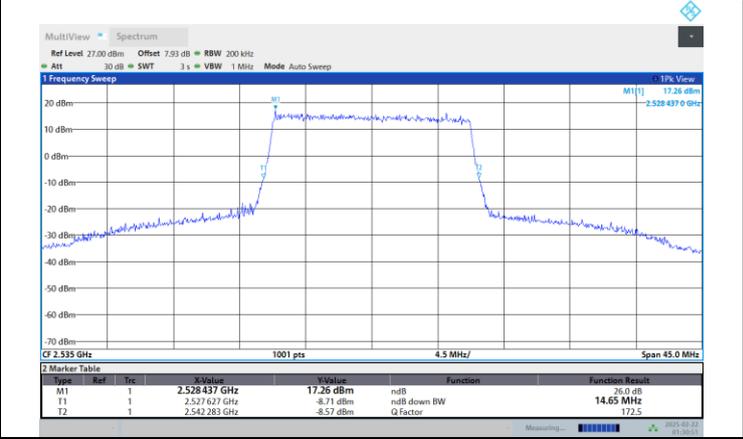
Band7-15MHz-QPSK-21100-75RB#0



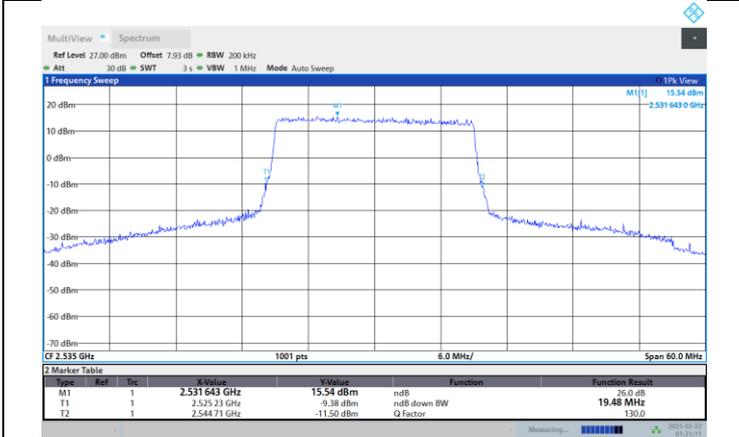
Band7-15MHz-16QAM-21100-75RB#0



Band7-20MHz-QPSK-21100-100RB#0



Band7-20MHz-16QAM-21100-100RB#0





Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	See Graph	PASS
Band7	5MHz	QPSK	20775	25RB#0	See Graph	PASS
Band7	5MHz	QPSK	21425	1RB#24	See Graph	PASS
Band7	5MHz	QPSK	21425	25RB#0	See Graph	PASS
Band7	5MHz	16QAM	20775	1RB#0	See Graph	PASS
Band7	5MHz	16QAM	20775	25RB#0	See Graph	PASS
Band7	5MHz	16QAM	21425	1RB#24	See Graph	PASS
Band7	5MHz	16QAM	21425	25RB#0	See Graph	PASS
Band7	5MHz	64QAM	20775	1RB#0	See Graph	PASS
Band7	5MHz	64QAM	20775	25RB#0	See Graph	PASS
Band7	5MHz	64QAM	21425	1RB#24	See Graph	PASS
Band7	5MHz	64QAM	21425	25RB#0	See Graph	PASS
Band7	5MHz	256QAM	20775	1RB#0	See Graph	PASS
Band7	5MHz	256QAM	20775	25RB#0	See Graph	PASS
Band7	5MHz	256QAM	21425	1RB#24	See Graph	PASS
Band7	5MHz	256QAM	21425	25RB#0	See Graph	PASS
Band7	10MHz	QPSK	20800	1RB#0	See Graph	PASS
Band7	10MHz	QPSK	20800	50RB#0	See Graph	PASS
Band7	10MHz	QPSK	21400	1RB#49	See Graph	PASS
Band7	10MHz	QPSK	21400	50RB#0	See Graph	PASS
Band7	10MHz	16QAM	20800	1RB#0	See Graph	PASS
Band7	10MHz	16QAM	20800	50RB#0	See Graph	PASS
Band7	10MHz	16QAM	21400	1RB#49	See Graph	PASS
Band7	10MHz	16QAM	21400	50RB#0	See Graph	PASS
Band7	10MHz	64QAM	20800	1RB#0	See Graph	PASS
Band7	10MHz	64QAM	20800	50RB#0	See Graph	PASS
Band7	10MHz	64QAM	21400	1RB#49	See Graph	PASS
Band7	10MHz	64QAM	21400	50RB#0	See Graph	PASS
Band7	10MHz	256QAM	20800	1RB#0	See Graph	PASS
Band7	10MHz	256QAM	20800	50RB#0	See Graph	PASS
Band7	10MHz	256QAM	21400	1RB#49	See Graph	PASS
Band7	10MHz	256QAM	21400	50RB#0	See Graph	PASS
Band7	15MHz	QPSK	20825	1RB#0	See Graph	PASS
Band7	15MHz	QPSK	20825	75RB#0	See Graph	PASS
Band7	15MHz	QPSK	21375	1RB#74	See Graph	PASS
Band7	15MHz	QPSK	21375	75RB#0	See Graph	PASS
Band7	15MHz	16QAM	20825	1RB#0	See Graph	PASS
Band7	15MHz	16QAM	20825	75RB#0	See Graph	PASS
Band7	15MHz	16QAM	21375	1RB#74	See Graph	PASS
Band7	15MHz	16QAM	21375	75RB#0	See Graph	PASS
Band7	15MHz	64QAM	20825	1RB#0	See Graph	PASS
Band7	15MHz	64QAM	20825	75RB#0	See Graph	PASS
Band7	15MHz	64QAM	21375	1RB#74	See Graph	PASS
Band7	15MHz	64QAM	21375	75RB#0	See Graph	PASS
Band7	15MHz	256QAM	20825	1RB#0	See Graph	PASS
Band7	15MHz	256QAM	20825	75RB#0	See Graph	PASS
Band7	15MHz	256QAM	21375	1RB#74	See Graph	PASS
Band7	15MHz	256QAM	21375	75RB#0	See Graph	PASS



BUREAU VERITAS Test Report No.: PSZ-QBJ2501200112RF03

Band7	20MHz	QPSK	20850	1RB#0	See Graph	PASS
Band7	20MHz	QPSK	20850	100RB#0	See Graph	PASS
Band7	20MHz	QPSK	21350	1RB#99	See Graph	PASS
Band7	20MHz	QPSK	21350	100RB#0	See Graph	PASS
Band7	20MHz	16QAM	20850	1RB#0	See Graph	PASS
Band7	20MHz	16QAM	20850	100RB#0	See Graph	PASS
Band7	20MHz	16QAM	21350	1RB#99	See Graph	PASS
Band7	20MHz	16QAM	21350	100RB#0	See Graph	PASS
Band7	20MHz	64QAM	20850	1RB#0	See Graph	PASS
Band7	20MHz	64QAM	20850	100RB#0	See Graph	PASS
Band7	20MHz	64QAM	21350	1RB#99	See Graph	PASS
Band7	20MHz	64QAM	21350	100RB#0	See Graph	PASS
Band7	20MHz	256QAM	20850	1RB#0	See Graph	PASS
Band7	20MHz	256QAM	20850	100RB#0	See Graph	PASS
Band7	20MHz	256QAM	21350	1RB#99	See Graph	PASS
Band7	20MHz	256QAM	21350	100RB#0	See Graph	PASS

Test Graphs

