

FCC TEST REPORT

(PART 22)

Applicant:	Fibocom Wireless Inc.
Address:	1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen , China

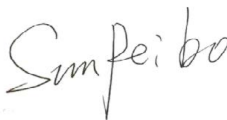
Manufacturer or Supplier:	Fibocom Wireless Inc.
Address:	1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen , China
Product:	LTE Module
Brand Name:	Fibocom
Model Name:	SC206-NA
FCC ID	ZMOSC206NA
Date of tests	Apr. 11, 2025 - May. 14, 2025

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

☒ **FCC PART 22, Subpart H**
☒ **ANSI/TIA/EIA-603-D**
☒ **ANSI/TIA/EIA-603-E**

☒ **FCC Part 2**
☒ **ANSI C63.26-2015**

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: May. 14, 2025	Date: May. 14, 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.



TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 SUMMARY OF TEST RESULTS.....	5
1.1 MEASUREMENT UNCERTAINTY	6
1.2 TEST SITE AND INSTRUMENTS	7
2 GENERAL INFORMATION	9
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 CONFIGURATION OF SYSTEM UNDER TEST	11
2.3 DESCRIPTION OF SUPPORT UNITS	12
2.4 TEST ITEM AND TEST CONFIGURATION.....	13
2.5 EUT OPERATING CONDITIONS	16
2.6 GENERAL DESCRIPTION OF APPLIED STANDARDS	16
3 TEST TYPES AND RESULTS.....	17
3.1 OUTPUT POWER MEASUREMENT.....	17
3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	17
3.1.2 TEST PROCEDURES	17
3.1.3 TEST SETUP.....	18
3.1.4 TEST RESULTS	18
3.2 FREQUENCY STABILITY MEASUREMENT.....	24
3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	24
3.2.2 TEST PROCEDURE.....	24
3.2.3 TEST SETUP	24
3.2.4 TEST RESULTS	24
3.3 OCCUPIED BANDWIDTH MEASUREMENT	25
3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	25
3.3.2 TEST SETUP.....	25
3.3.3 TEST PROCEDURES	25
3.3.4 TEST RESULTS	25
3.4 BAND EDGE MEASUREMENT	26
3.4.1 LIMITS OF BAND EDGE MEASUREMENT	26
3.4.2 TEST SETUP	26
3.4.3 TEST PROCEDURES	27
3.4.4 TEST RESULTS	27
3.5 CONDUCTED SPURIOUS EMISSIONS	28
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	28
3.5.2 TEST PROCEDURE.....	28
3.5.3 TEST SETUP	28
3.5.4 TEST RESULTS	28
3.6 RADIATED EMISSION MEASUREMENT	29
3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT	29
3.6.2 TEST PROCEDURES	29
3.6.3 DEVIATION FROM TEST STANDARD	29
3.6.4 TEST SETUP	30
3.6.5 TEST RESULTS	32
3.7 PEAK TO AVERAGE RATIO	48
3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	48
3.7.2 TEST SETUP	48
3.7.3 TEST PROCEDURES	48
3.7.4 TEST RESULTS	49
4 PHOTOGRAPHS OF THE TEST CONFIGURATION	50
5 INFORMATION ON THE TESTING LABORATORIES	51
6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	52
7 APPENDIX:.....	53
LTE BAND26(INCLUDING LTE B5).....	53
PEAK-TO-AVERAGE RATIO(CCDF).....	53
TEST RESULT	53
TEST GRAPHS	55
26DB BANDWIDTH AND OCCUPIED BANDWIDTH.....	65
TEST RESULT	65



Test Report No.: PSZ-QSZ2504020109RF01

TEST GRAPHS	66
BAND EDGE	76
TEST RESULT	76
TEST GRAPHS	77
CONDUCTED SPURIOUS EMISSION	84
TEST RESULT	84
TEST GRAPHS	85
FREQUENCY STABILITY	88
TEST RESULT	88



Test Report No.: PSZ-QSZ2504020109RF01

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSZ-QSZ2504020109RF01	Original release	May. 14, 2025



1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 22 & Part 2			
STANDARD SECTION	TEST TYPE	RESULT	Test lab*
§2.1046	Conducted Output Power	Compliance	A
§22.913 (a)(5)	Equivalent Isotropic Radiated Power	Compliance	A
§2.1055 §22.355	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§22.913 (d)	Peak to average ratio*	Compliance	A
§2.1051 §22.917(a)	Band Edge Measurements	Compliance	A
§2.1051 §22.917(a)	Conducted Spurious Emissions	Compliance	A
§2.1053 §22.917(a)	Radiated Spurious Emissions	Compliance	A

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

*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, China

Accredited Test Lab Cert 6613.01

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

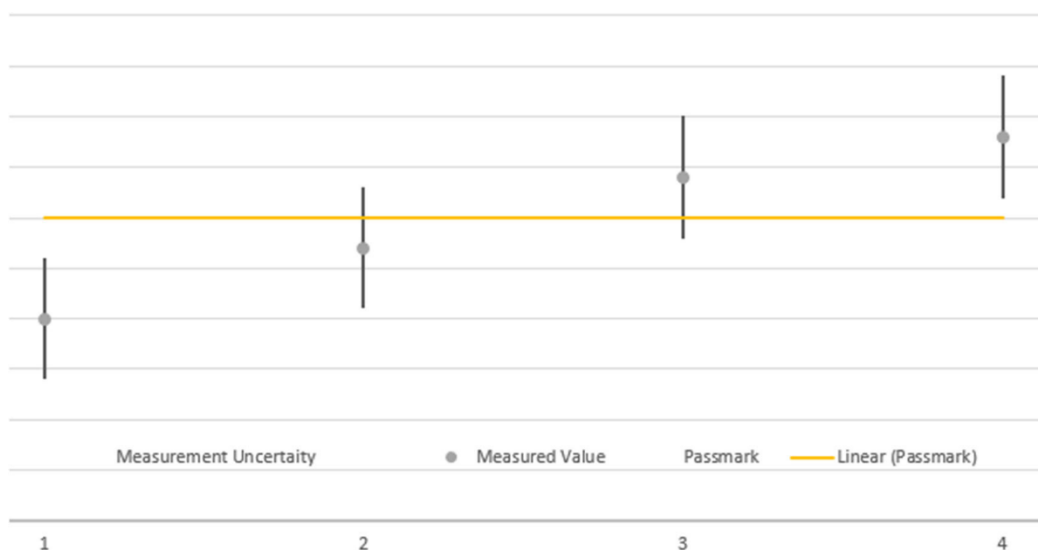


1.1 MEASUREMENT UNCERTAINTY

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
Maximum Peak Output Power	$\pm 2.06\text{dB}$
Frequency Stability	$\pm 76.97\text{Hz}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Band Edge Measurements	$\pm 4.70\text{dB}$
Peak to average ratio	$\pm 0.76\text{dB}$

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.30,23	Aug.29,25
Pre-Amplifier	R&S	SCU08F1	101028	Jan.22,24	Jan.21,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
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	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Dec.26,23	Dec.25,25
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22,23	Aug.21,25
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.22,23	Aug.21,25
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,25	Feb.21,27
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	N/A	N/A
DC Source	HYELEC	HY3010B	551016	Aug.31,23	Aug.30,25
Hygrothermograph	DELI	20210528	SZ014	Sep.06,23	Sep.05,25
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.27,24	Apr.26,25
CABLE	R&S	W13.02	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26



NOTE:

1. The calibration interval of the above test instruments is 12/ 24/ 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*	LTE Module	
BRAND NAME*	Fibocom	
MODEL NAME*	SC206-NA	
NOMINAL VOLTAGE*	3.8Vdc	
MODULATION TYPE	LTE	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 5 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz
	LTE Band 5 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz
	LTE Band 5 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz
	LTE Band 5 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz
	LTE Band 26 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz
	LTE Band 26 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz
	LTE Band 26 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz
	LTE Band 26 (Channel Bandwidth: 15MHz)	831.5MHz ~ 841.5MHz
MAX. ERP POWER	LTE Band 5 (Channel Bandwidth: 1.4MHz)	169.43mW
	LTE Band 5 (Channel Bandwidth: 3MHz)	171.79mW
	LTE Band 5 (Channel Bandwidth: 5MHz)	169.04mW
	LTE Band 5 (Channel Bandwidth: 10MHz)	172.58mW
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	171.79mW
	LTE Band 26 (Channel Bandwidth: 3MHz)	167.88mW
	LTE Band 26 (Channel Bandwidth: 5MHz)	168.66mW
	LTE Band 26 (Channel Bandwidth: 10MHz)	171.79mW
	LTE Band 26 (Channel Bandwidth: 15MHz)	174.58mW
EMISSION DESIGNATOR GOGN	LTE Band 26 (Channel Bandwidth: 1.4MHz)	QPSK: 1M10G7D 16QAM: 1M09W7D
	LTE Band 26	QPSK: 2M70G7D



	(Channel Bandwidth: 3MHz)	16QAM: 2M69W7D
	LTE Band 26	QPSK: 4M50G7D
	(Channel Bandwidth: 5MHz)	16QAM: 4M49W7D
	LTE Band 26	QPSK: 8M96G7D
	(Channel Bandwidth: 10MHz)	16QAM: 8M95W7D
	LTE Band 26	QPSK: 13M5G7D
	(Channel Bandwidth: 15MHz)	16QAM: 13M5W7D
ANTENNA GAIN*	LTE B5	1.17dBi
	LTE B26	1.17dBi
ANTENNA TYPE*	Dipole Antenna	
HW VERSION*	V1.0	
SW VERSION*	SC206-U6.400.002	
I/O PORTS*	Refer to user's manual	
CABLE SUPPLIED*	N/A	
EXTREME TEMPERATURE*	-30°C-75°C	
EXTREME VOLTAGE*	3.8Vdc-4.4Vdc	

NOTE:

1. *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.
2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

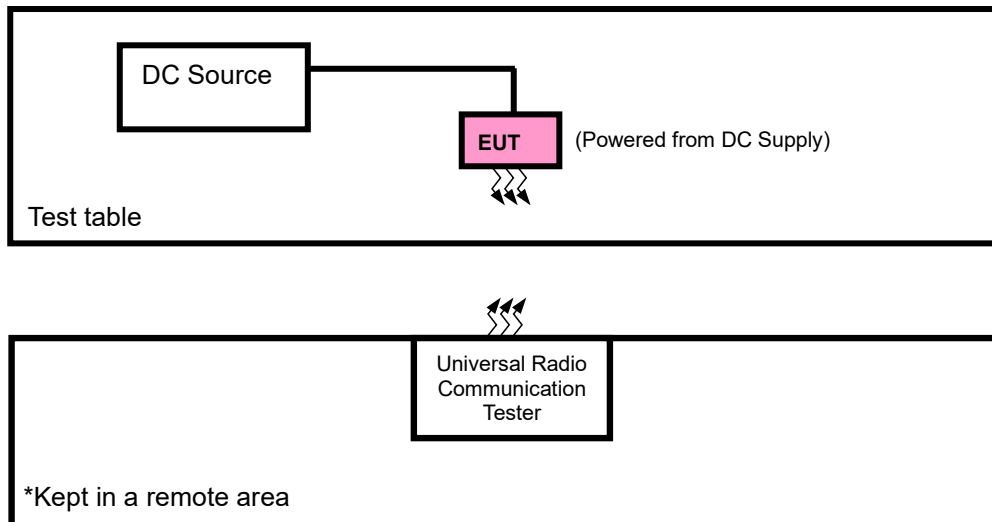
MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

4. 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





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	DC Source	HYELEC	HY3010B	551016	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable, 1.0m;

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 in ERP and radiated emission was found when positioned on X-plane for GSM /EDGE /WCDMA /LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + DC Supply with LTE link

LTE BAND 5 MODE

EUT CONFIGURE MODE	TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
A	ERP	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. LTE Band 5 are covered by LTE Band 26, Because it is a subset of LTE Band 26 with the same output power and supported bandwidths, So the test data please refer to LTE Band 26

LTE BAND 26 MODE

EUT CONFIGURE MODE	TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
A	ERP	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,16QAM	1 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK,16QAM	1 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK,16QAM	1 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK,16QAM	1 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK,16QAM	1 RB / 0 RB offset
A	FREQUENCY STABILITY	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	75 RB / 0 RB offset
A	OCCUPIED BANDWIDTH	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,16QAM	6 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK,16QAM	15 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK,16QAM	25 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK,16QAM	50 RB / 0 RB offset



		26865 to 26965	26865, 26915, 26965	15MHz	QPSK,16QAM	75 RB / 0 RB offset
A	PEAK TO AVERAGE RATIO	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
A	BAND EDGE	26797 to 27033	26797	1.4 MHz	QPSK,16QAM	1 RB / 0 RB offset 6 RB / 0 RB offset
						1 RB / 5 RB offset 6 RB / 0 RB offset
		26797 to 27033	27033	1.4 MHz	QPSK,16QAM	1 RB / 5 RB offset 6 RB / 0 RB offset
						1 RB / 0 RB offset 15 RB / 0 RB offset
		26805 to 27025	26805	3 MHz	QPSK,16QAM	1 RB / 0 RB offset 15 RB / 0 RB offset
						1 RB / 14 RB offset 15 RB / 0 RB offset
		26805 to 27025	27025	3 MHz	QPSK,16QAM	1 RB / 0 RB offset 25 RB / 0 RB offset
						1 RB / 24 RB offset 25 RB / 0 RB offset
		26815 to 27015	26815	5MHz	QPSK,16QAM	1 RB / 0 RB offset 25 RB / 0 RB offset
						1 RB / 0 RB offset 25 RB / 0 RB offset
		26815 to 27015	27015	5MHz	QPSK,16QAM	1 RB / 0 RB offset 25 RB / 0 RB offset
						1 RB / 0 RB offset 25 RB / 0 RB offset
		26840 to 26990	26840	10MHz	QPSK,16QAM	1 RB / 0 RB offset 50 RB / 0 RB offset
						1 RB / 49 RB offset 50 RB / 0 RB offset
		26840 to 26990	26990	10MHz	QPSK,16QAM	1 RB / 49 RB offset 50 RB / 0 RB offset
						1 RB / 0 RB offset 75 RB / 0 RB offset
		26865 to 26965	26865	15MHz	QPSK,16QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
						1 RB / 74 RB offset 75 RB / 0 RB offset
		26865 to 26965	26965	15MHz	QPSK,16QAM	1 RB / 74 RB offset 75 RB / 0 RB offset
						1 RB / 74 RB offset 75 RB / 0 RB offset
A	CONDCUDED EMISSION	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK	1 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK	1 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK	1 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK	1 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB / 0 RB offset
A	RADIATED EMISSION	26797 to 27033	26797,26915,27033	1.4MHz	QPSK	1 RB / 0 RB offset
		26805 to 27025	26915	3MHz	QPSK	1 RB / 0 RB offset



		26815 to 27015	26915	5MHz	QPSK	1 RB / 0 RB offset
		26840 to 26990	26915	10MHz	QPSK	1 RB / 0 RB offset
		26865 to 26965	26915	15MHz	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 3.8V By DC Supply	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu
CONDCUDED EMISSION	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 3.8V By DC Supply	Hanwen Xu

2.5 EUT OPERATING CONDITIONS

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

2.6 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 22

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

Mobile / Portable station are limited to 7 watts e.r.p.

3.1.2 TEST PROCEDURES

EIRP / ERP 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:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

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:

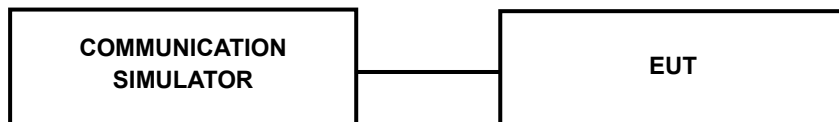
The EUT was set up for the maximum power with WCDMA link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



3.1.3 TEST SETUP

EIRP / ERP Measurement:

CONDUCTED POWER MEASUREMENT:



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm):

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10	QPSK	1	0	23.19	22.98	23.05
		1	24	23.35	23.22	23.13
		1	49	23.09	23.18	22.98
		25	0	22.26	22.14	22.06
		25	12	22.33	22.26	22.07
		25	25	22.13	22.09	22.05
		50	0	22.20	22.12	22.12
	16QAM	1	0	22.01	21.93	21.84
		1	24	22.03	21.97	21.89
		1	49	22.00	21.89	21.85
		25	0	20.99	21.01	20.92
		25	12	21.11	21.13	21.08
		25	25	21.13	21.14	21.10
		50	0	21.24	21.18	21.18
BW [MHz]	Modulation	Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5	QPSK	1	0	23.10	22.90	22.89
		1	12	23.26	23.05	22.95
		1	24	22.98	23.12	22.93
		12	0	22.10	21.97	22.05
		12	6	22.17	22.08	22.08
		12	13	22.02	21.93	21.94
		25	0	22.16	21.97	21.95
	16QAM	1	0	22.00	21.78	21.80
		1	12	21.99	21.93	21.77
		1	24	21.84	21.77	21.68
		12	0	20.93	21.00	20.74



		12	6	21.10	21.02	21.01
		12	13	20.96	20.93	20.94
		25	0	21.20	21.08	21.10
BW [MHz]	Modulation	Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3	QPSK	1	0	23.20	22.80	23.00
		1	7	23.33	23.06	23.14
		1	14	23.04	23.07	22.85
		8	0	22.18	21.96	21.93
		8	3	22.34	22.20	21.87
		8	7	21.92	22.05	22.05
		15	0	22.12	22.00	22.00
	16QAM	1	0	21.85	21.80	21.81
		1	7	21.90	21.87	21.87
		1	14	21.80	21.79	21.71
		8	0	21.00	21.00	20.86
		8	3	20.92	21.06	20.90
		8	7	21.06	21.13	21.09
		15	0	21.20	21.17	21.12
BW [MHz]	Modulation	Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4	QPSK	1	0	23.02	22.90	22.95
		1	2	23.27	23.06	22.98
		1	5	22.92	23.10	22.95
		3	0	23.22	22.93	22.84
		3	1	23.25	23.12	22.98
		3	3	23.00	23.07	22.93
		6	0	22.01	21.89	22.06
	16QAM	1	0	21.84	21.92	21.79
		1	2	21.93	21.95	21.77
		1	5	21.82	21.87	21.71
		3	0	21.94	21.79	21.77
		3	1	22.01	22.05	21.85
		3	3	21.94	21.96	22.07
		6	0	21.08	21.03	20.97



LTE BAND 26						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		26765	26865	26965
		Frequency (MHz)		821.5	831.5	841.5
15	QPSK	1	0	23.06	23.20	23.06
		1	37	23.31	23.40	23.28
		1	74	22.93	23.16	22.97
		36	0	22.28	22.22	22.01
		36	19	22.31	22.35	22.17
		36	39	22.23	22.24	22.11
		75	0	22.26	22.28	22.12
	16QAM	1	0	21.90	22.09	22.01
		1	37	21.86	22.01	21.84
		1	74	21.81	21.83	21.74
		36	0	20.96	21.04	20.93
		36	19	21.06	21.19	21.13
		36	39	21.08	21.15	21.01
		75	0	20.93	21.06	20.98
BW [MHz]	Modulation	Channel		26740	26865	26990
		Frequency (MHz)		819	831.5	844
10	QPSK	1	0	22.87	23.16	23.04
		1	24	23.30	23.20	23.08
		1	49	22.75	23.16	22.93
		25	0	22.12	22.22	21.85
		25	12	22.25	22.31	22.07
		25	25	22.23	22.16	22.07
		50	0	22.05	22.12	21.92
	16QAM	1	0	21.71	22.10	21.85
		1	24	21.82	21.97	21.85
		1	49	21.67	21.67	21.61
		25	0	20.96	21.04	20.74
		25	12	21.07	21.03	21.06
		25	25	20.93	21.13	20.94
		50	0	20.74	20.96	20.99
BW [MHz]	Modulation	Channel		26715	26865	27015
		Frequency (MHz)		816.5	831.5	846.5
5	QPSK	1	0	22.92	23.13	22.93
		1	12	23.12	23.26	23.19
		1	24	22.76	23.01	22.83
		12	0	22.20	22.03	21.96
		12	6	22.22	22.27	22.14
		12	13	22.21	22.14	22.12



	16QAM	25	0	22.17	22.12	22.01
		1	0	21.80	22.00	21.93
		1	12	21.68	21.80	21.76
		1	24	21.73	21.72	21.72
		12	0	20.90	20.93	20.84
		12	6	21.00	20.99	21.07
		12	13	21.03	21.09	21.00
		25	0	20.83	21.01	20.82
BW [MHz]	Modulation	Channel		26705	26865	27025
		Frequency (MHz)		815.5	831.5	847.5
3	QPSK	1	0	22.92	23.00	22.95
		1	7	23.22	23.34	23.15
		1	14	22.88	22.99	22.83
		8	0	22.22	22.13	22.02
		8	3	22.18	22.27	22.01
		8	7	22.14	22.10	21.99
		15	0	22.08	22.14	21.98
	16QAM	1	0	21.71	22.05	22.01
		1	7	21.70	22.00	21.83
		1	14	21.62	21.66	21.69
		8	0	20.95	20.92	20.74
		8	3	20.93	21.15	21.09
		8	7	21.00	21.11	20.96
		15	0	20.77	20.87	20.86
BW [MHz]	Modulation	Channel		26697	26865	27033
		Frequency (MHz)		814.7	831.5	848.3
1.4	QPSK	1	0	22.93	22.98	23.02
		1	2	23.25	23.23	23.19
		1	5	22.80	23.05	22.95
		3	0	23.19	23.20	22.93
		3	1	23.21	23.12	23.16
		3	3	23.07	23.05	22.89
		6	0	22.22	22.19	22.05
	16QAM	1	0	21.72	21.94	21.89
		1	2	21.74	21.98	21.70
		1	5	21.69	21.77	21.70
		3	0	21.92	21.85	21.76
		3	1	21.95	22.16	22.12
		3	3	21.94	22.01	21.98
		6	0	20.85	20.90	20.78



BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01

ERP POWER (dBm)

LTE BAND 5

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
10M-QPSK	20450	829	23.35	1.17	22.37	172.58	7
	20525	836.5	23.22	1.17	22.24	167.49	7
	20600	844	23.13	1.17	22.15	164.06	7
10M-16QAM	20450	829	22.03	1.17	21.05	127.35	7
	20525	836.5	21.97	1.17	20.99	125.60	7
	20600	844	21.89	1.17	20.91	123.31	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
5M-QPSK	20425	826.5	23.26	1.17	22.28	169.04	7
	20525	836.5	23.12	1.17	22.14	163.68	7
	20625	846.5	22.95	1.17	21.97	157.40	7
5M-16QAM	20425	826.5	22.00	1.17	21.02	126.47	7
	20525	836.5	21.93	1.17	20.95	124.45	7
	20625	846.5	21.80	1.17	20.82	120.78	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
3M-QPSK	20415	825.5	23.33	1.17	22.35	171.79	7
	20525	836.5	23.07	1.17	22.09	161.81	7
	20635	847.5	23.14	1.17	22.16	164.44	7
3M-16QAM	20415	825.5	21.90	1.17	20.92	123.59	7
	20525	836.5	21.87	1.17	20.89	122.74	7
	20635	847.5	21.87	1.17	20.89	122.74	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
1.4M-QPSK	20407	824.7	23.27	1.17	22.29	169.43	7
	20525	836.5	23.12	1.17	22.14	163.68	7
	20643	848.3	22.98	1.17	22.00	158.49	7
1.4M-16QAM	20407	824.7	22.01	1.17	21.03	126.77	7
	20525	836.5	22.05	1.17	21.07	127.94	7
	20643	848.3	22.07	1.17	21.09	128.53	7



BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01

LTE BAND 26

BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
15M-QPSK	26865	831.5	23.40	1.17	22.42	174.58	7
	26915	836.5	23.22	1.17	22.24	167.49	7
	26965	841.5	23.28	1.17	22.30	169.82	7
15M-16QAM	26865	831.5	22.09	1.17	21.11	129.12	7
	26915	836.5	21.90	1.17	20.92	123.59	7
	26965	841.5	22.01	1.17	21.03	126.77	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
10M-QPSK	26840	829	23.12	1.17	22.14	163.68	7
	26915	836.5	23.33	1.17	22.35	171.79	7
	26990	844	23.08	1.17	22.10	162.18	7
10M-16QAM	26840	829	21.75	1.17	20.77	119.40	7
	26915	836.5	21.99	1.17	21.01	126.18	7
	26990	844	21.85	1.17	20.87	122.18	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
5M-QPSK	26815	826.5	23.11	1.17	22.13	163.31	7
	26915	836.5	23.25	1.17	22.27	168.66	7
	27015	846.5	23.19	1.17	22.21	166.34	7
5M-16QAM	26815	826.5	21.77	1.17	20.79	119.95	7
	26915	836.5	21.93	1.17	20.95	124.45	7
	27015	846.5	21.93	1.17	20.95	124.45	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
3M-QPSK	26805	825.5	23.21	1.17	22.23	167.11	7
	26915	836.5	23.23	1.17	22.25	167.88	7
	27025	847.5	23.15	1.17	22.17	164.82	7
3M-16QAM	26805	825.5	21.86	1.17	20.88	122.46	7
	26915	836.5	22.05	1.17	21.07	127.94	7
	27025	847.5	22.01	1.17	21.03	126.77	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
1.4M-QPSK	26797	824.7	23.21	1.17	22.23	167.11	7
	26915	836.5	23.33	1.17	22.35	171.79	7
	27033	848.3	23.19	1.17	22.21	166.34	7
1.4M-16QAM	26797	824.7	21.94	1.17	20.96	124.74	7
	26915	836.5	22.02	1.17	21.04	127.06	7
	27033	848.3	22.12	1.17	21.14	130.02	7

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

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

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

Tel: +86 (0557) 368 1008



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

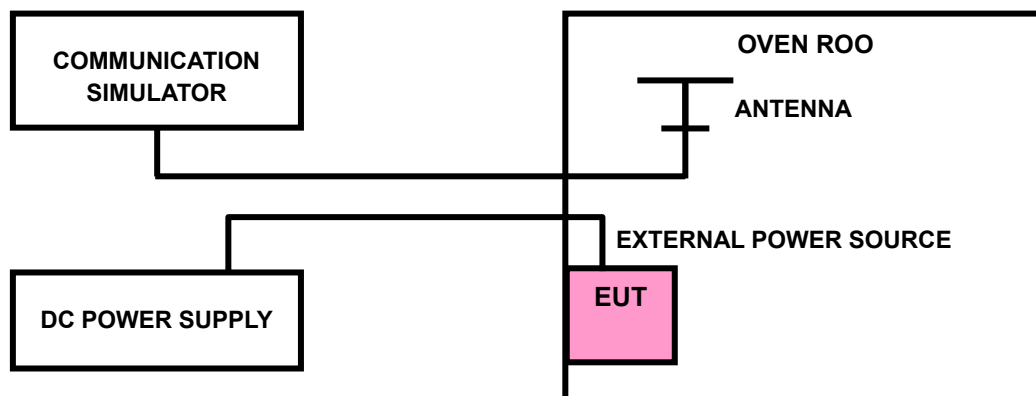
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

3.2.2 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.
- 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.
- 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.

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

Please Refer to Appendix of this test report.

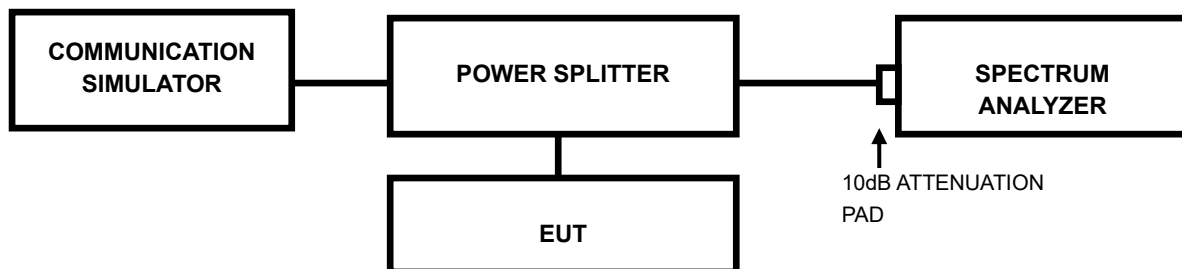


3.3 OCCUPIED BANDWIDTH MEASUREMENT

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.

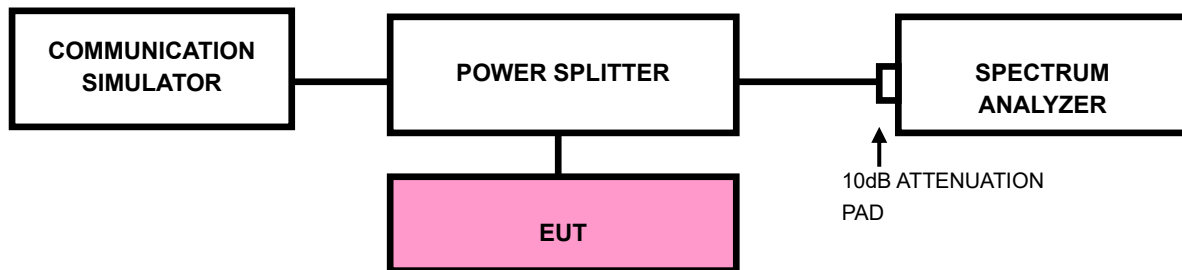


3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ 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.

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.



3.5 CONDUCTED SPURIOUS EMISSIONS

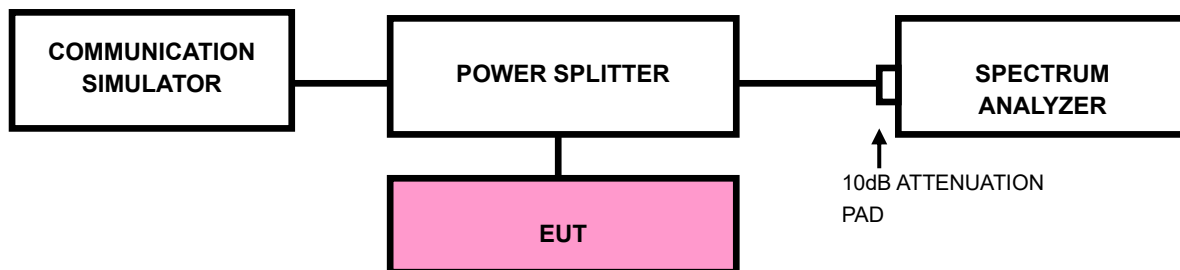
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

3.5.2 TEST PROCEDURE

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- 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

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

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. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
 $\text{E.R.P power} = \text{E.I.P.R power} - 2.15\text{dBi}$.

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

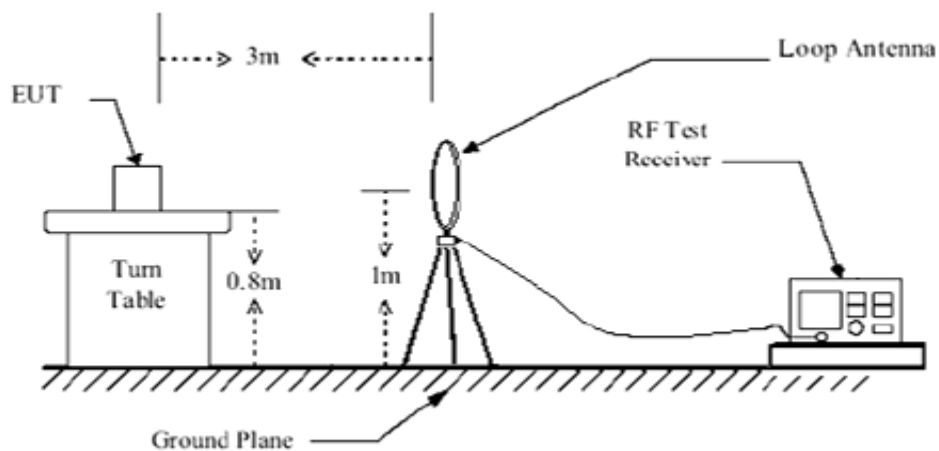
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

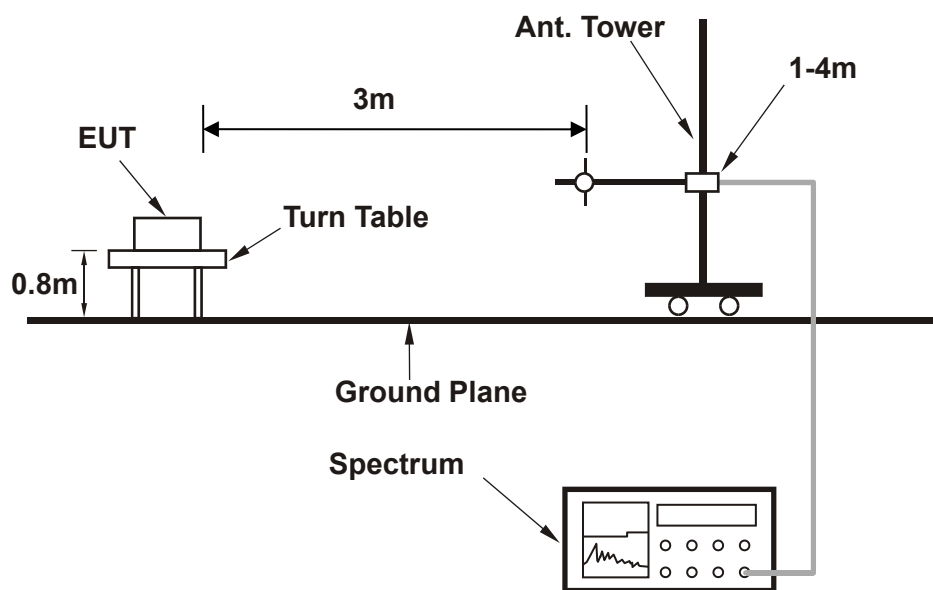


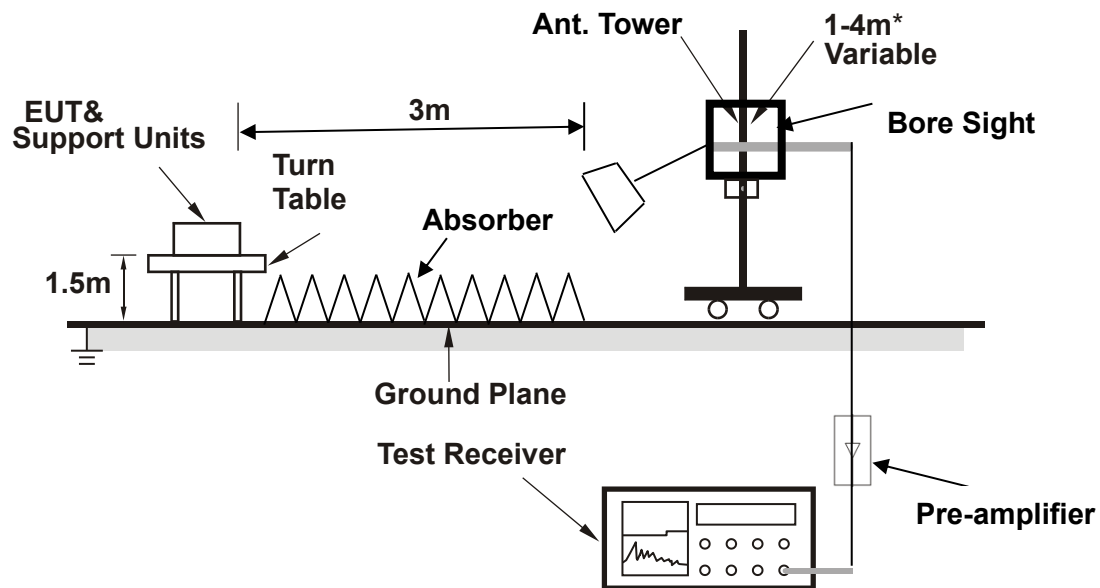
3.6.4 TEST SETUP

< Frequency Range below 30MHz >



< Frequency Range 30MHz~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

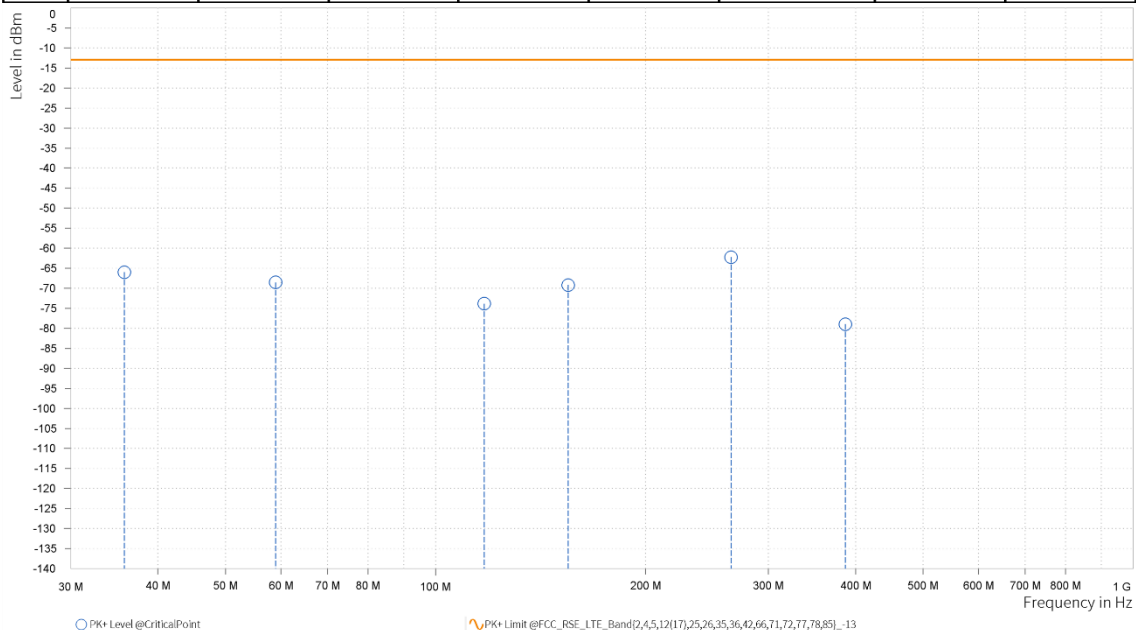
NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

LTE B26			
MODE	TX channel 26915	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 3.8V
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	35.800	-66.00	-13.00	53.00	-1.87	H	2.5	2.00
1	59.000	-68.55	-13.00	55.55	-3.81	H	355.8	2.00
1	117.400	-73.84	-13.00	60.84	-12.05	H	355.8	2.00
1	154.950	-69.21	-13.00	56.21	-13.97	H	243	1.00
1	265.100	-62.24	-13.00	49.24	-2.03	H	172.6	1.00
1	386.850	-78.99	-13.00	65.99	0.40	H	120.5	2.00

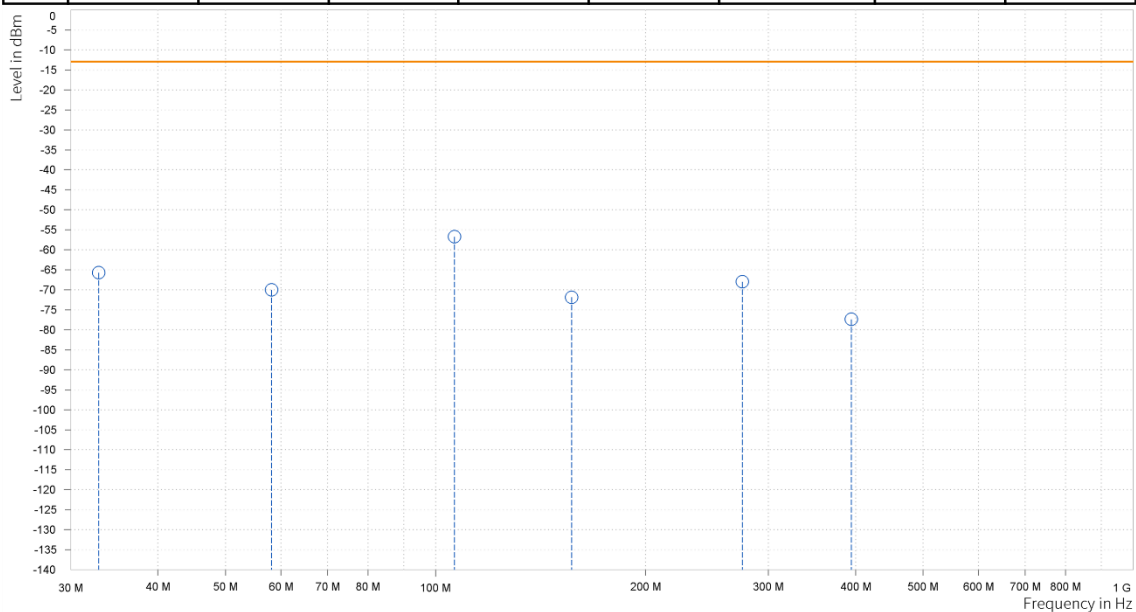




MODE	TX channel 20525	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 3.8V
TESTED BY	Hanwen Xu		

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	32.900	-65.72	-13.00	52.72	-6.56	V	4.8	1.00
1	58.200	-70.04	-13.00	57.04	-3.29	V	39.1	2.00
1	106.450	-56.73	-13.00	43.73	3.76	V	1	1.00
1	156.700	-71.86	-13.00	58.86	-11.50	V	1	1.00
1	275.350	-67.98	-13.00	54.98	-1.90	V	177.3	1.00
1	394.350	-77.36	-13.00	64.36	0.21	V	358.2	1.00





ABOVE 1GHz DATA

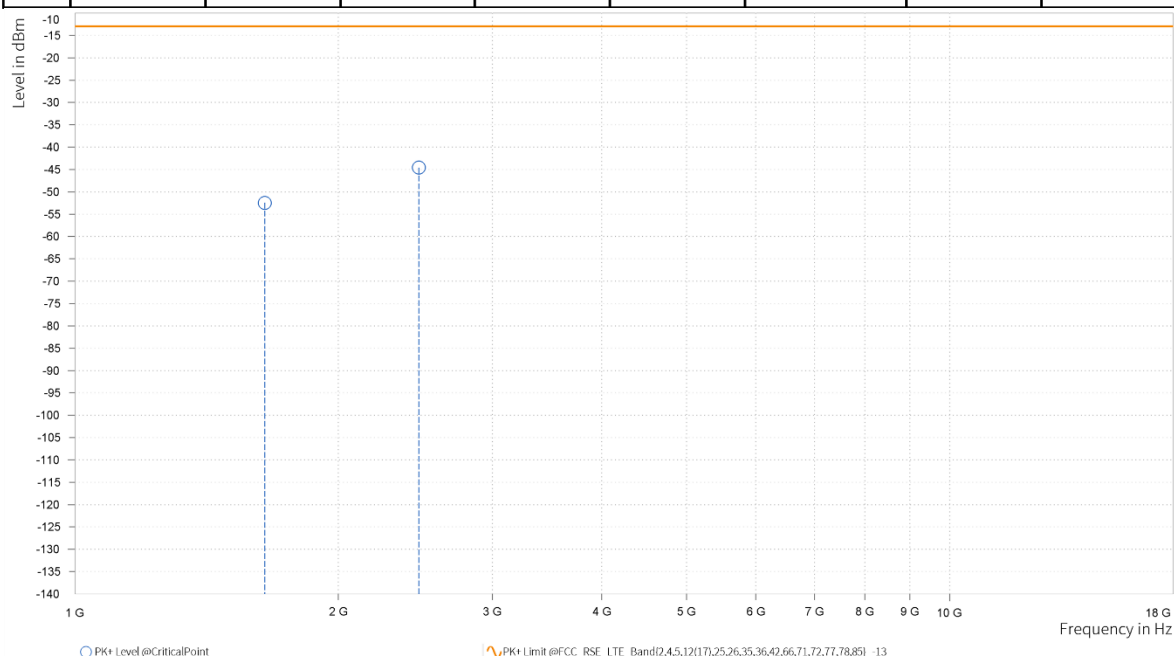
Note: For higher frequency, the emission is too low to be detected.

LTE Band 26

CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 26797
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	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]
2	1,648.140	-52.48	-13.00	39.48	14.78	H	8.1	2.00
3	2,472.500	-44.60	-13.00	31.60	20.28	H	1	2.00

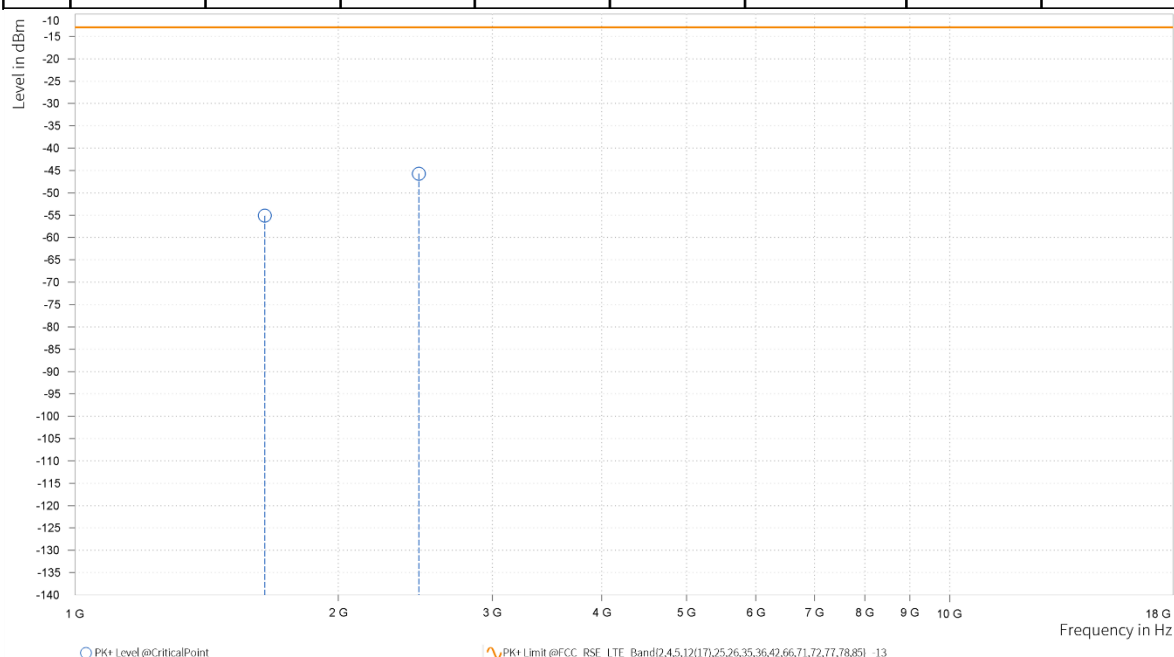




CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 26797
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,648.140	-55.12	-13.00	42.12	14.39	V	175.4	1.00
3	2,472.500	-45.73	-13.00	32.73	20.53	V	35.2	2.00



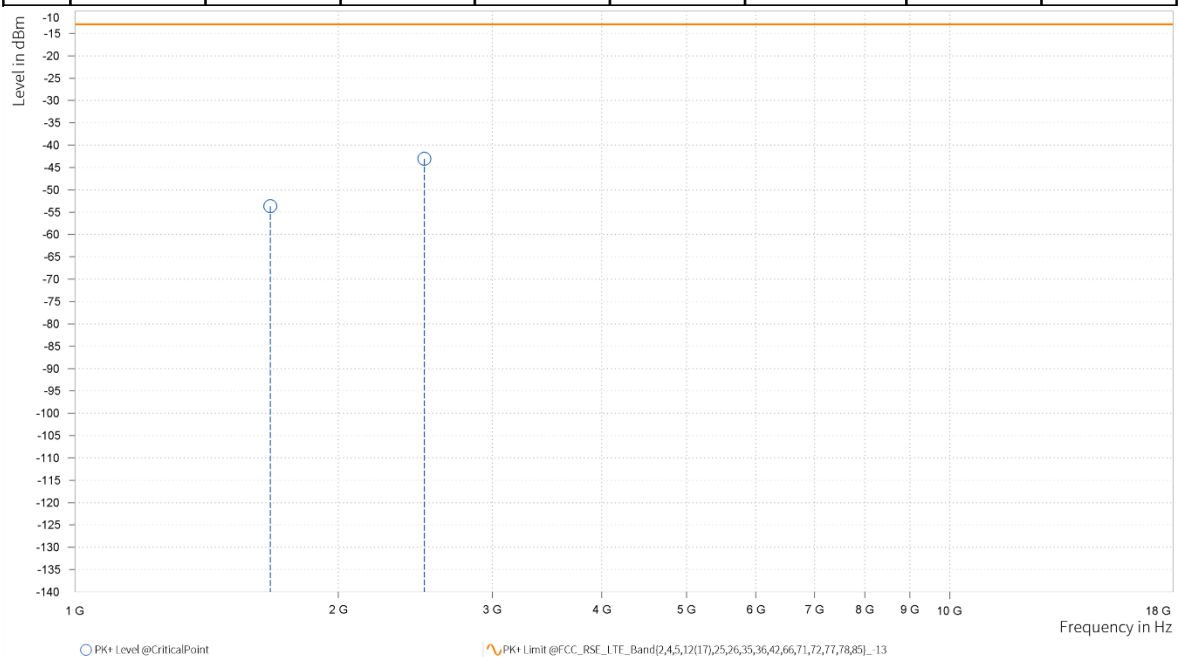


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01

CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	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]
2	1,671.740	-53.65	-13.00	40.65	15.46	H	325.4	2.00
3	2,508.000	-43.08	-13.00	30.08	20.54	H	352.8	1.00

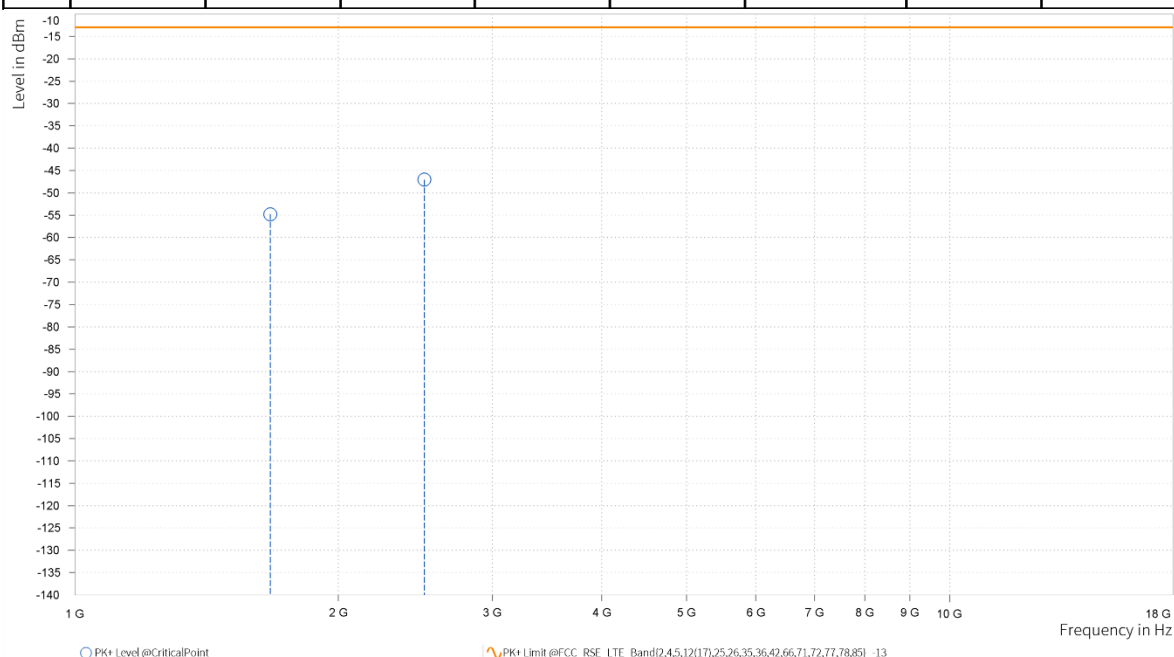




CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,671.740	-54.79	-13.00	41.79	14.35	V	359	2.00
3	2,508.500	-47.06	-13.00	34.06	21.13	V	359	2.00



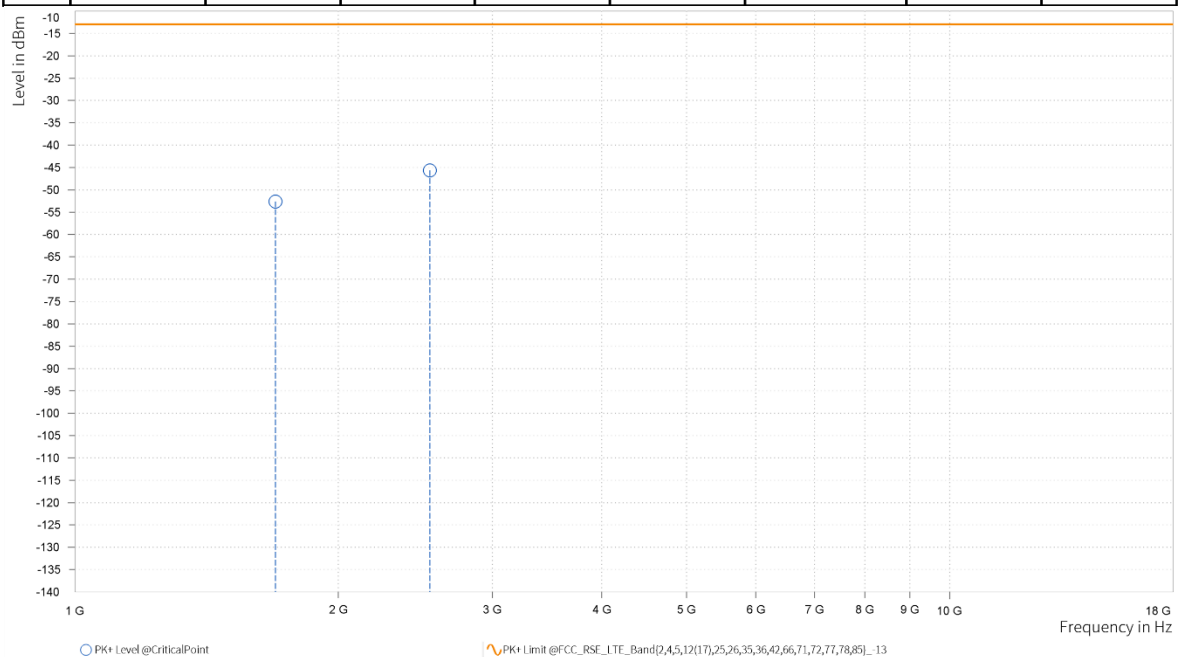


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01

CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 27033
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	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]
2	1,695.340	-52.60	-13.00	39.60	15.98	H	354	1.00
3	2,543.500	-45.63	-13.00	32.63	20.30	H	357.6	1.00

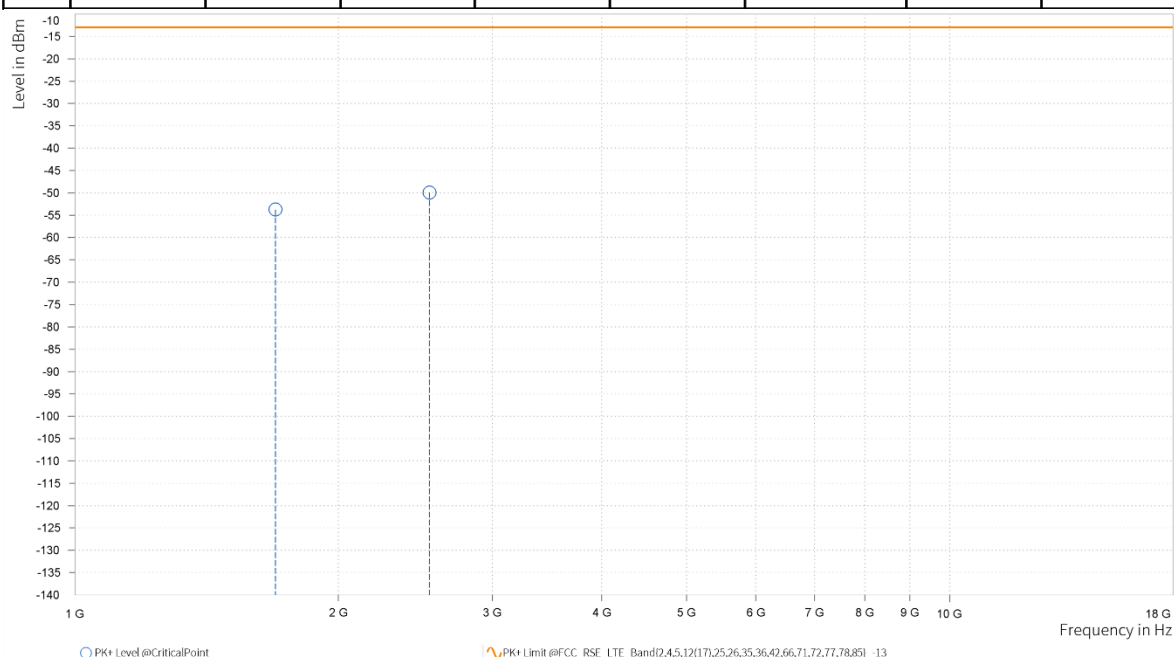




CHANNEL BANDWIDTH	1.4MHz/QPSK	MODE	TX channel 27033
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,695.340	-53.75	-13.00	40.75	15.11	V	69.2	2.00
3	2,543.010	-49.94	-13.00	36.94	20.96	V	354	1.00

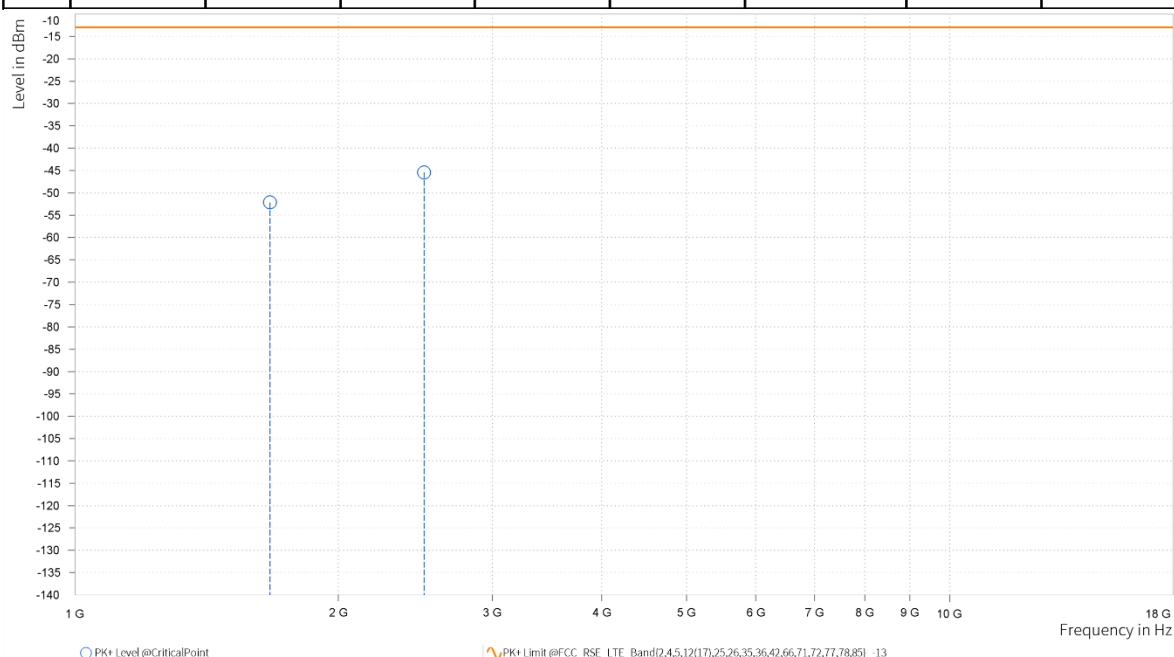




CHANNEL BANDWIDTH	3MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,670.300	-52.12	-13.00	39.12	15.44	H	185.9	2.00
3	2,505.450	-45.42	-13.00	32.42	20.59	H	352.4	1.00

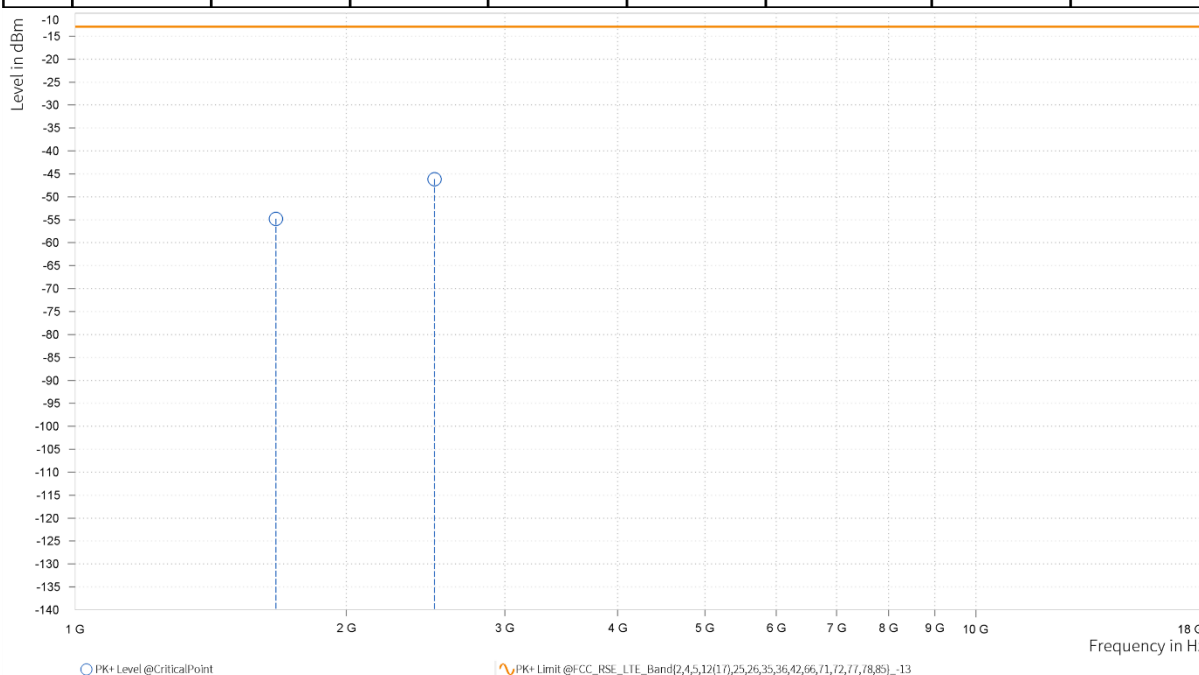




CHANNEL BANDWIDTH	3MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,670.300	-54.78	-13.00	41.78	14.33	V	68.6	2.00
3	2,505.000	-46.17	-13.00	33.17	21.10	V	5.2	2.00

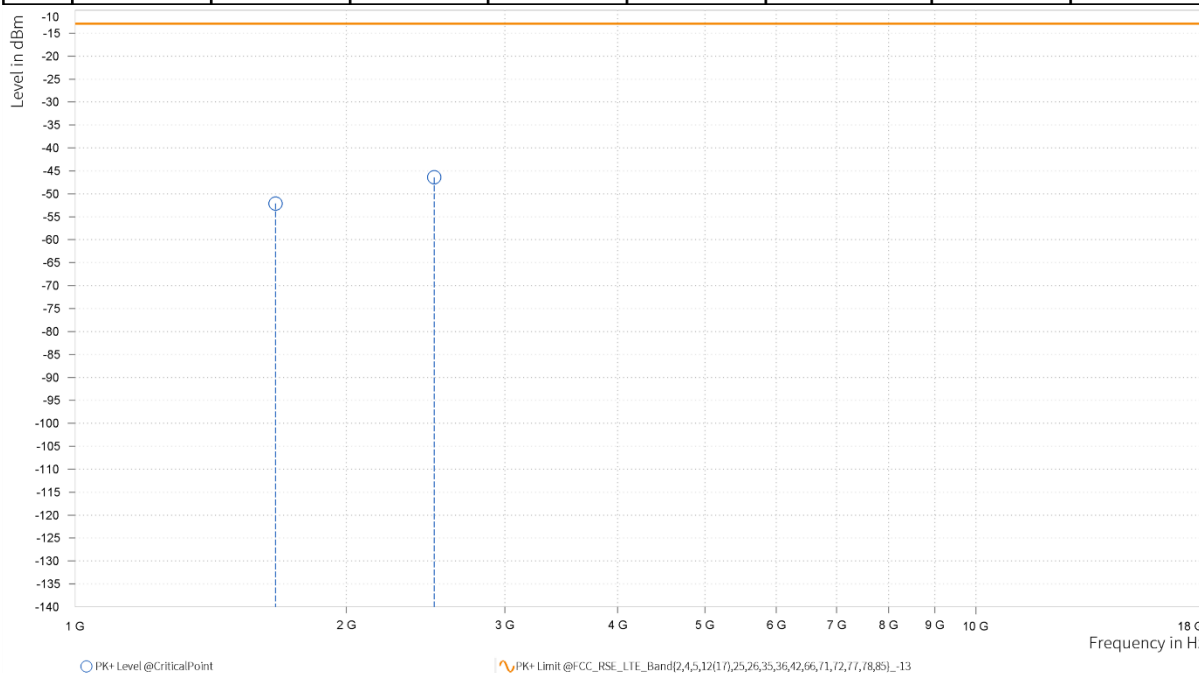


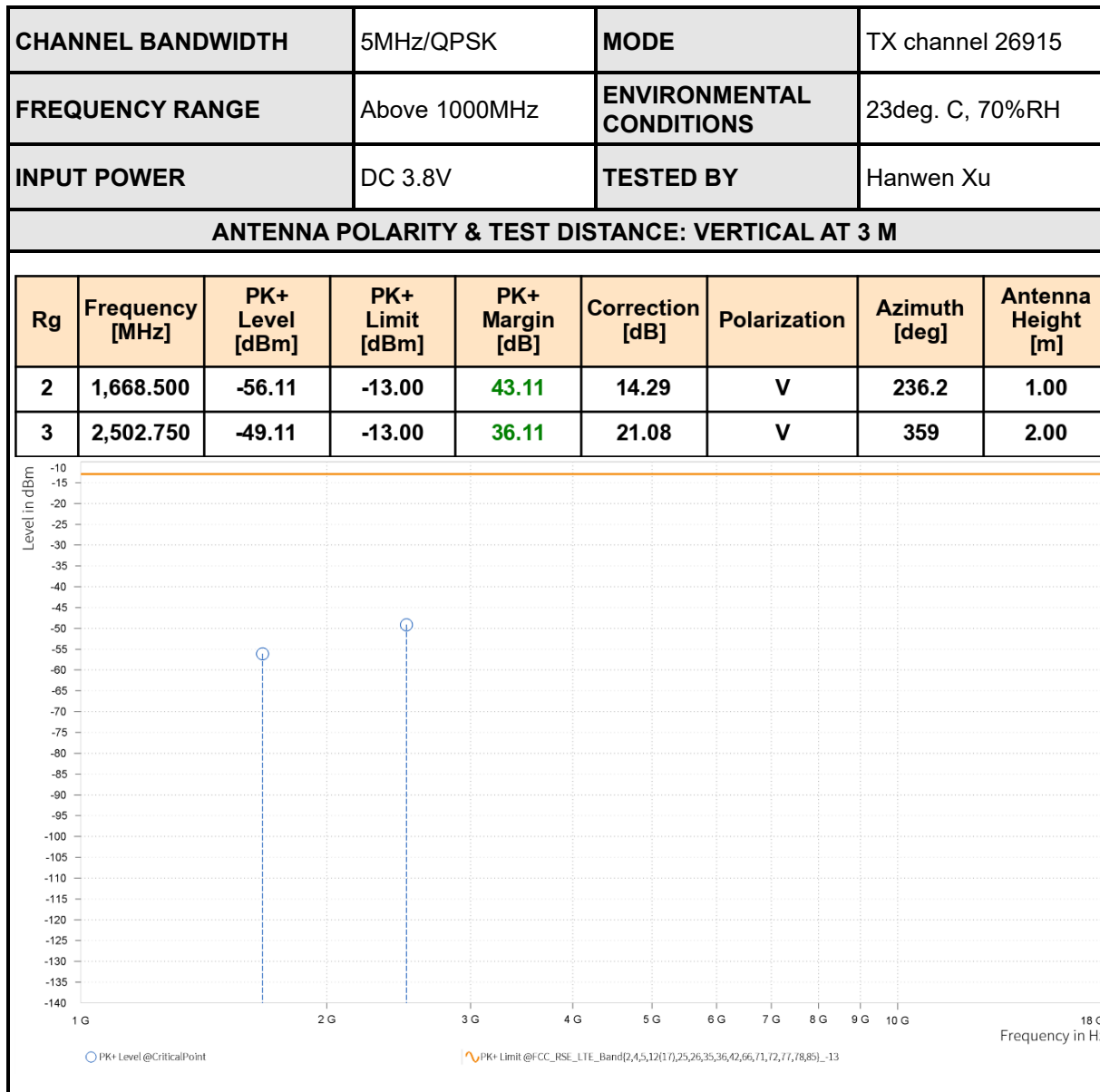


CHANNEL BANDWIDTH	5MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,668.500	-52.11	-13.00	39.11	15.40	H	359	1.00
3	2,502.750	-46.39	-13.00	33.39	20.64	H	351.4	1.00



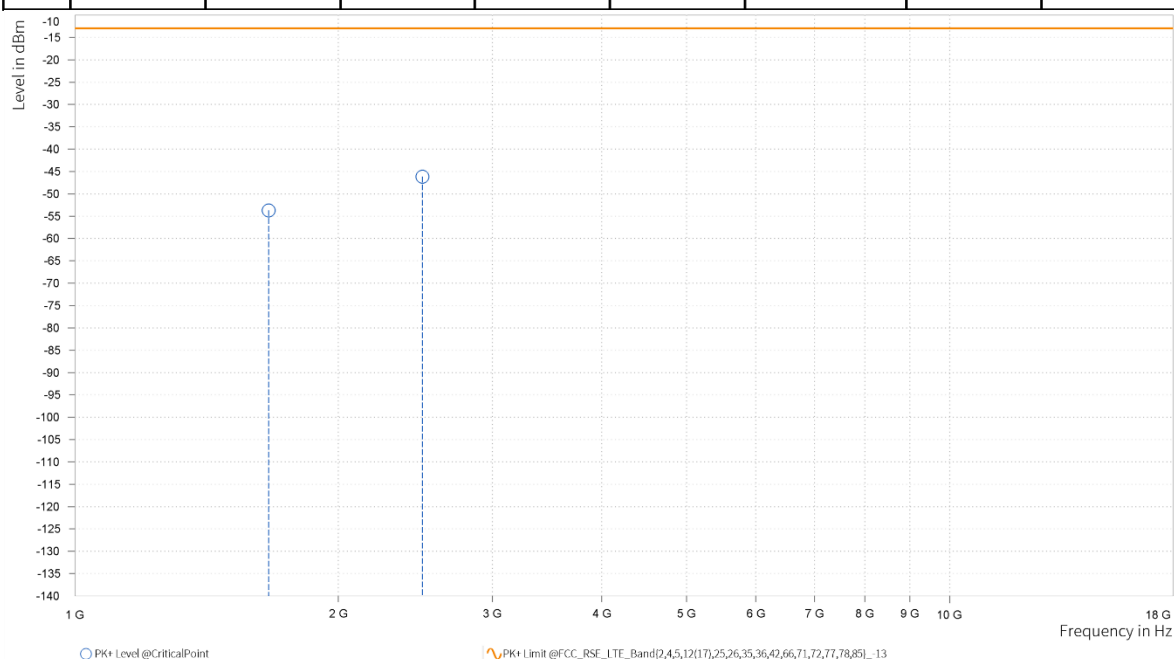




CHANNEL BANDWIDTH	10MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,664.000	-53.69	-13.00	40.69	15.32	H	1	2.00
3	2,496.000	-46.14	-13.00	33.14	20.76	H	1	1.00

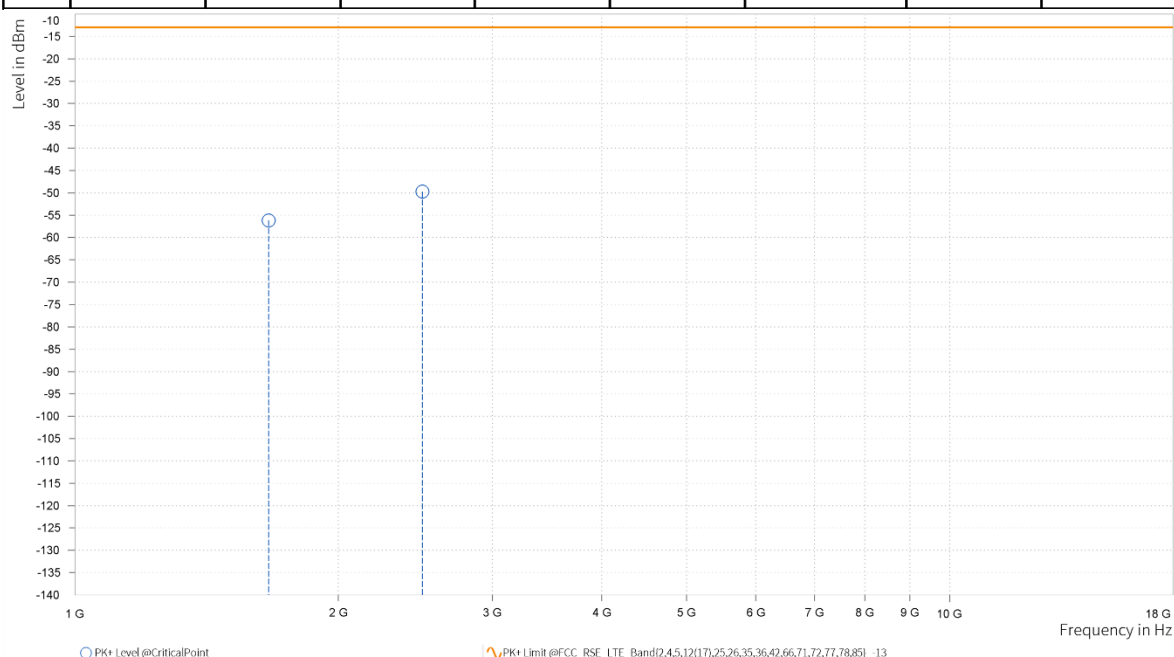




CHANNEL BANDWIDTH	10MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,664.000	-56.16	-13.00	43.16	14.20	V	179.5	2.00
3	2,496.000	-49.74	-13.00	36.74	21.03	V	310.6	1.00

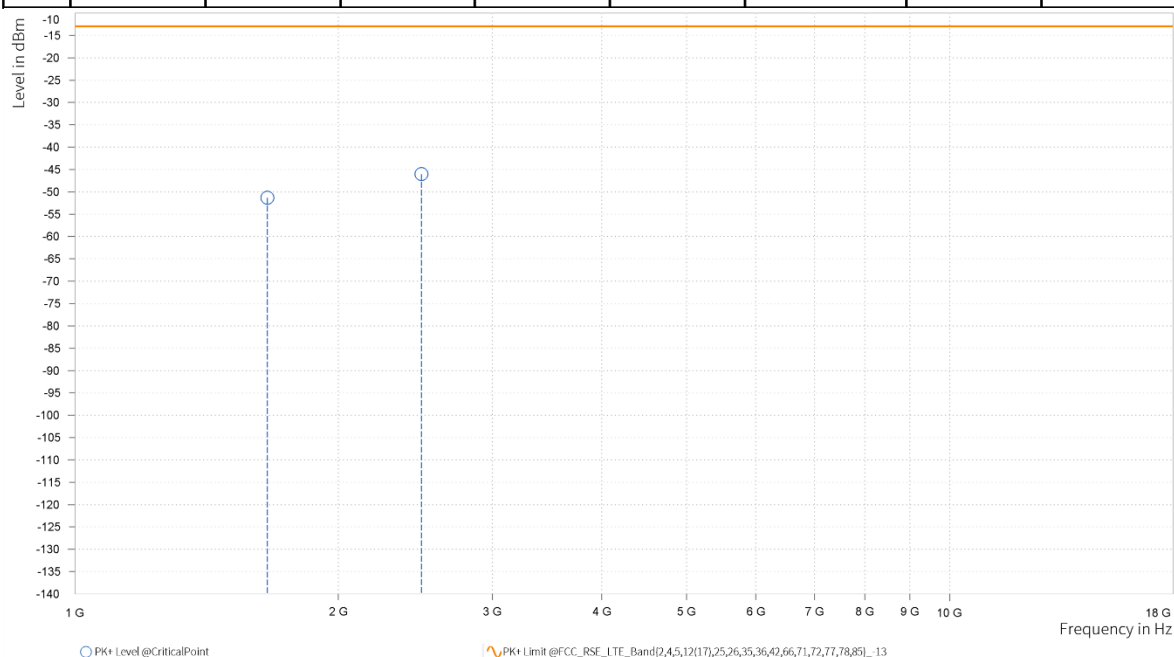




CHANNEL BANDWIDTH	15MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,659.500	-51.36	-13.00	38.36	15.24	H	325.4	2.00
3	2,489.500	-46.03	-13.00	33.03	20.69	H	3	2.00

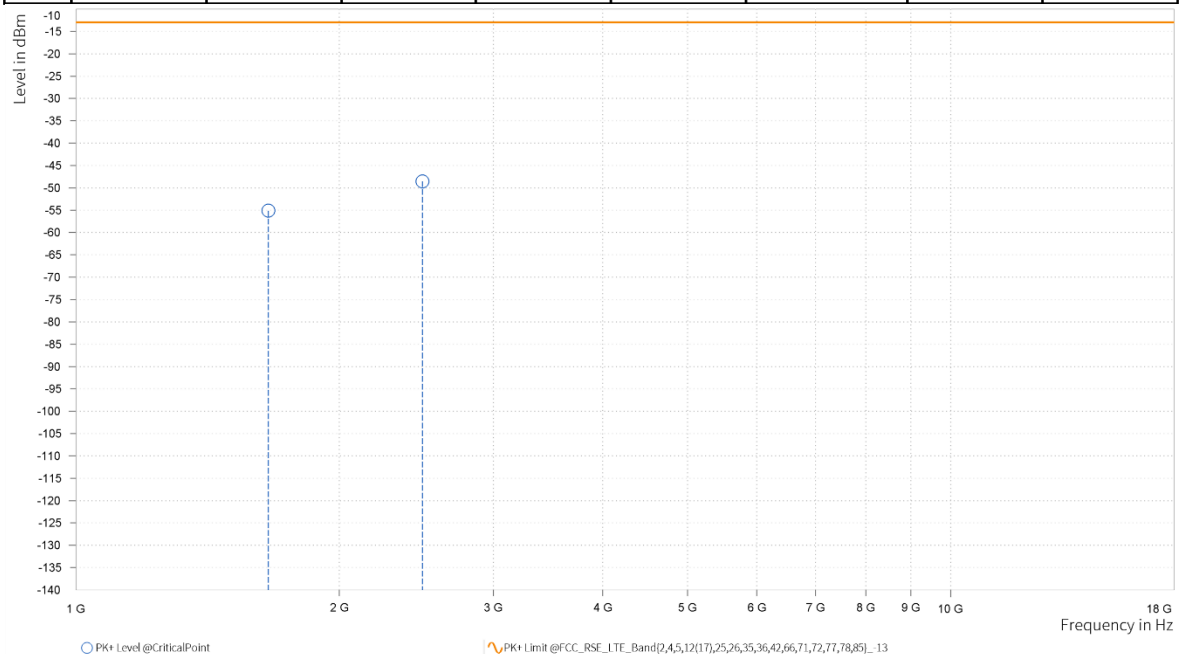




CHANNEL BANDWIDTH	15MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	DC 3.8V	TESTED BY	Hanwen Xu

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]
2	1,659.500	-55.11	-13.00	42.11	14.12	V	8	2.00
3	2,489.250	-48.56	-13.00	35.56	20.91	V	225.7	1.00

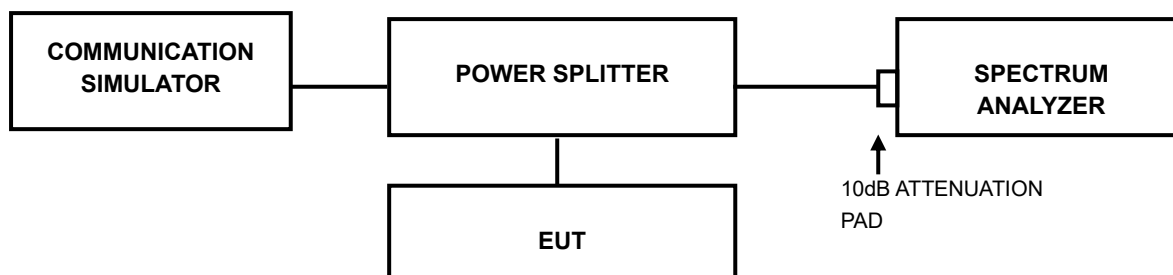


3.7 PEAK TO AVERAGE RATIO

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 PHOTOGRAPHS OF THE TEST CONFIGURATION

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



5 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, China
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



6 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.



7 APPENDIX:

LTE BAND26(INCLUDING LTE B5)

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

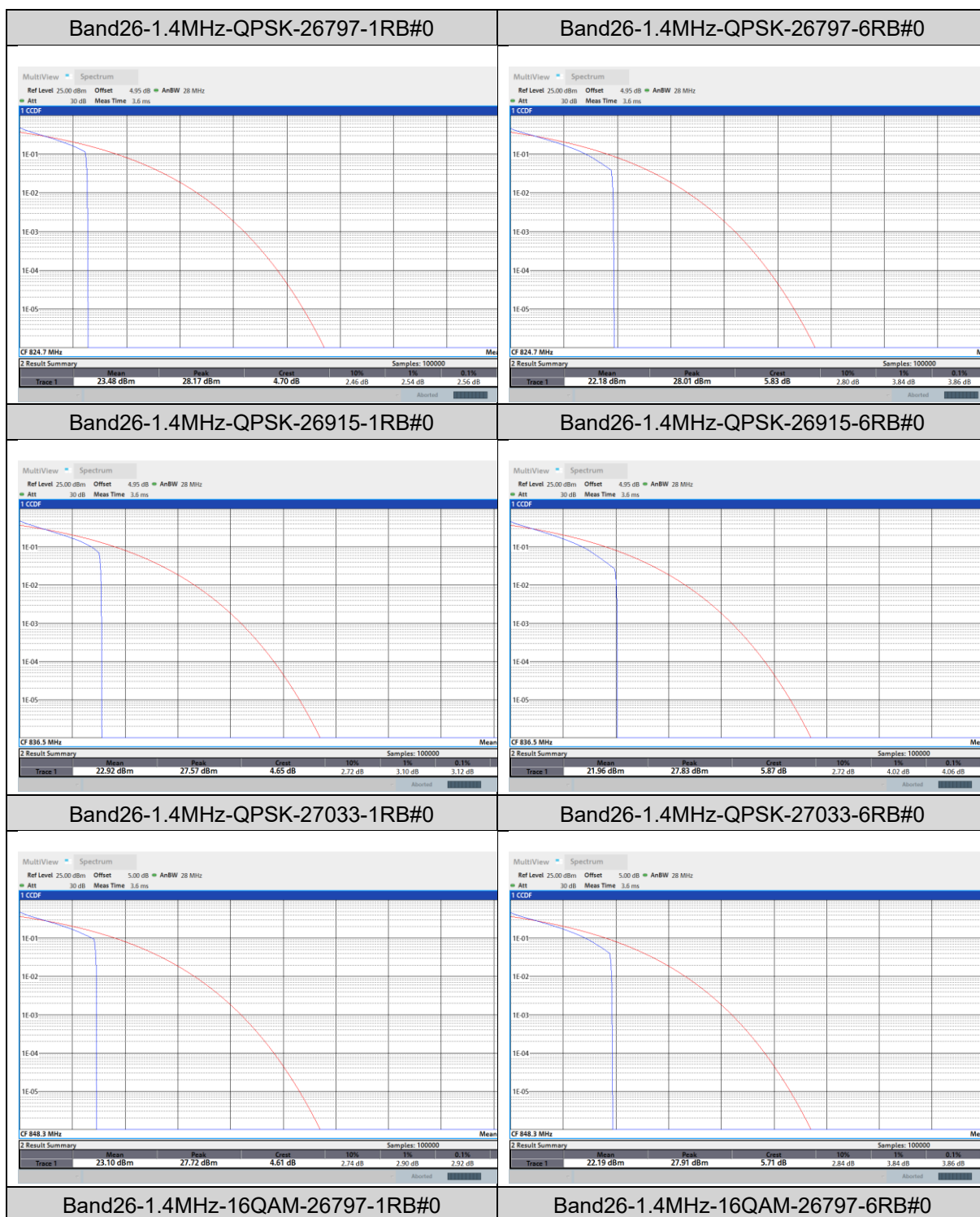
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band26	1.4MHz	QPSK	26797	1RB#0	2.56	13	PASS
Band26	1.4MHz	QPSK	26797	6RB#0	3.86	13	PASS
Band26	1.4MHz	QPSK	26915	1RB#0	3.12	13	PASS
Band26	1.4MHz	QPSK	26915	6RB#0	4.06	13	PASS
Band26	1.4MHz	QPSK	27033	1RB#0	2.92	13	PASS
Band26	1.4MHz	QPSK	27033	6RB#0	3.86	13	PASS
Band26	1.4MHz	16QAM	26797	1RB#0	3.68	13	PASS
Band26	1.4MHz	16QAM	26797	6RB#0	5.18	13	PASS
Band26	1.4MHz	16QAM	26915	1RB#0	3.50	13	PASS
Band26	1.4MHz	16QAM	26915	6RB#0	5.08	13	PASS
Band26	1.4MHz	16QAM	27033	1RB#0	3.96	13	PASS
Band26	1.4MHz	16QAM	27033	6RB#0	5.08	13	PASS
Band26	3MHz	QPSK	26805	1RB#0	2.84	13	PASS
Band26	3MHz	QPSK	26805	15RB#0	3.96	13	PASS
Band26	3MHz	QPSK	26915	1RB#0	3.02	13	PASS
Band26	3MHz	QPSK	26915	15RB#0	3.96	13	PASS
Band26	3MHz	QPSK	27025	1RB#0	2.74	13	PASS
Band26	3MHz	QPSK	27025	15RB#0	3.86	13	PASS
Band26	3MHz	16QAM	26805	1RB#0	4.06	13	PASS
Band26	3MHz	16QAM	26805	15RB#0	5.36	13	PASS
Band26	3MHz	16QAM	26915	1RB#0	3.96	13	PASS
Band26	3MHz	16QAM	26915	15RB#0	5.26	13	PASS
Band26	3MHz	16QAM	27025	1RB#0	4.24	13	PASS
Band26	3MHz	16QAM	27025	15RB#0	5.26	13	PASS
Band26	5MHz	QPSK	26815	1RB#0	3.12	13	PASS
Band26	5MHz	QPSK	26815	25RB#0	3.96	13	PASS
Band26	5MHz	QPSK	26915	1RB#0	3.12	13	PASS
Band26	5MHz	QPSK	26915	25RB#0	4.06	13	PASS
Band26	5MHz	QPSK	27015	1RB#0	3.30	13	PASS
Band26	5MHz	QPSK	27015	25RB#0	3.96	13	PASS
Band26	5MHz	16QAM	26815	1RB#0	4.90	13	PASS
Band26	5MHz	16QAM	26815	25RB#0	5.36	13	PASS
Band26	5MHz	16QAM	26915	1RB#0	4.14	13	PASS
Band26	5MHz	16QAM	26915	25RB#0	5.08	13	PASS
Band26	5MHz	16QAM	27015	1RB#0	4.42	13	PASS
Band26	5MHz	16QAM	27015	25RB#0	5.26	13	PASS
Band26	10MHz	QPSK	26840	1RB#0	2.92	13	PASS
Band26	10MHz	QPSK	26840	50RB#0	3.86	13	PASS
Band26	10MHz	QPSK	26915	1RB#0	2.92	13	PASS
Band26	10MHz	QPSK	26915	50RB#0	4.06	13	PASS
Band26	10MHz	QPSK	26990	1RB#0	2.84	13	PASS
Band26	10MHz	QPSK	26990	50RB#0	3.96	13	PASS
Band26	10MHz	16QAM	26840	1RB#0	3.86	13	PASS
Band26	10MHz	16QAM	26840	50RB#0	4.98	13	PASS
Band26	10MHz	16QAM	26915	1RB#0	3.58	13	PASS
Band26	10MHz	16QAM	26915	50RB#0	5.36	13	PASS



Band26	10MHz	16QAM	26990	1RB#0	4.06	13	PASS
Band26	10MHz	16QAM	26990	50RB#0	5.26	13	PASS
Band26	15MHz	QPSK	26865	1RB#0	3.02	13	PASS
Band26	15MHz	QPSK	26865	75RB#0	3.96	13	PASS
Band26	15MHz	QPSK	26915	1RB#0	2.92	13	PASS
Band26	15MHz	QPSK	26915	75RB#0	3.96	13	PASS
Band26	15MHz	QPSK	26965	1RB#0	3.02	13	PASS
Band26	15MHz	QPSK	26965	75RB#0	4.06	13	PASS
Band26	15MHz	16QAM	26865	1RB#0	4.34	13	PASS
Band26	15MHz	16QAM	26865	75RB#0	5.18	13	PASS
Band26	15MHz	16QAM	26915	1RB#0	3.58	13	PASS
Band26	15MHz	16QAM	26915	75RB#0	5.26	13	PASS
Band26	15MHz	16QAM	26965	1RB#0	5.00	13	PASS
Band26	15MHz	16QAM	26965	75RB#0	5.36	13	PASS

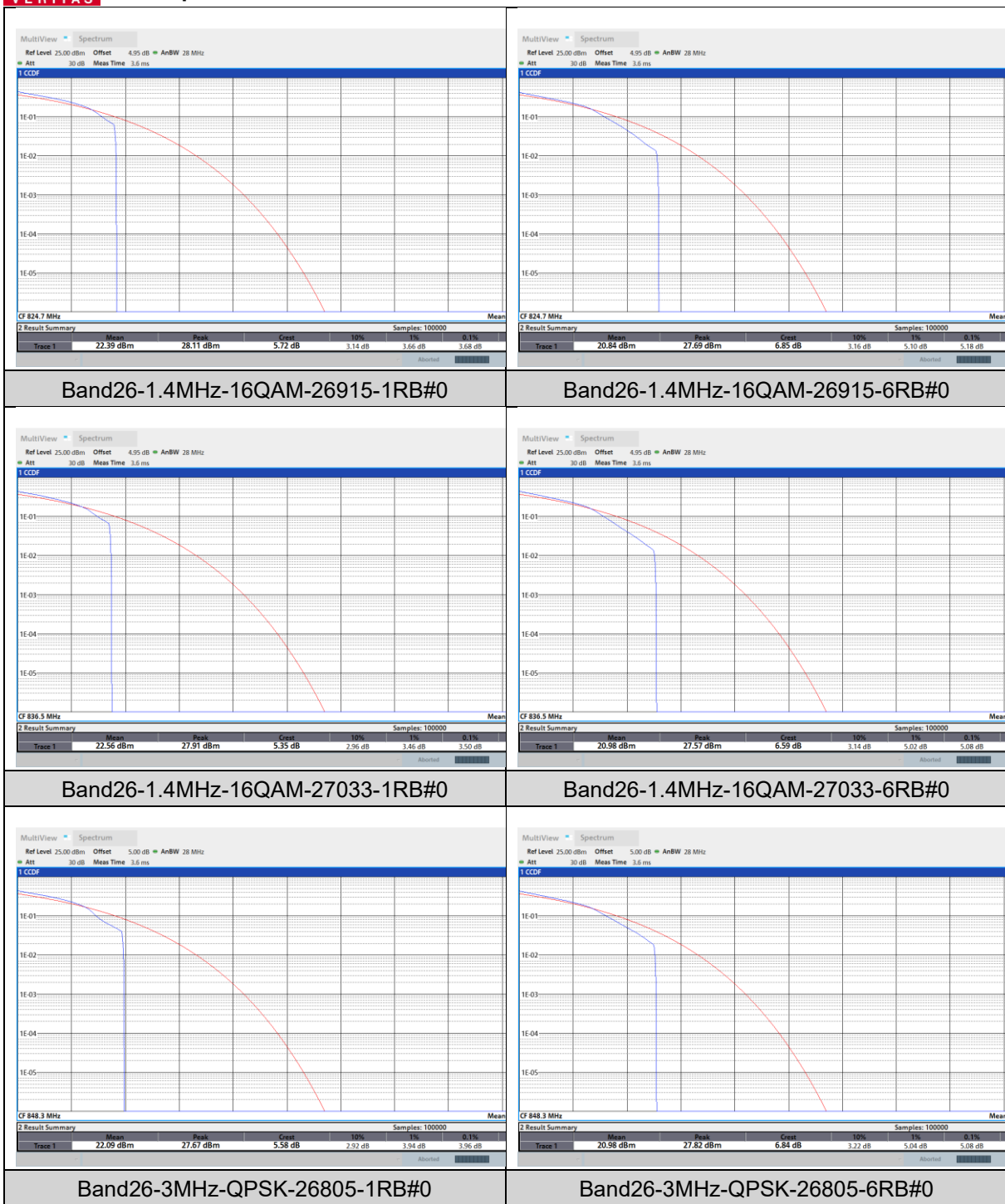


Test Graphs



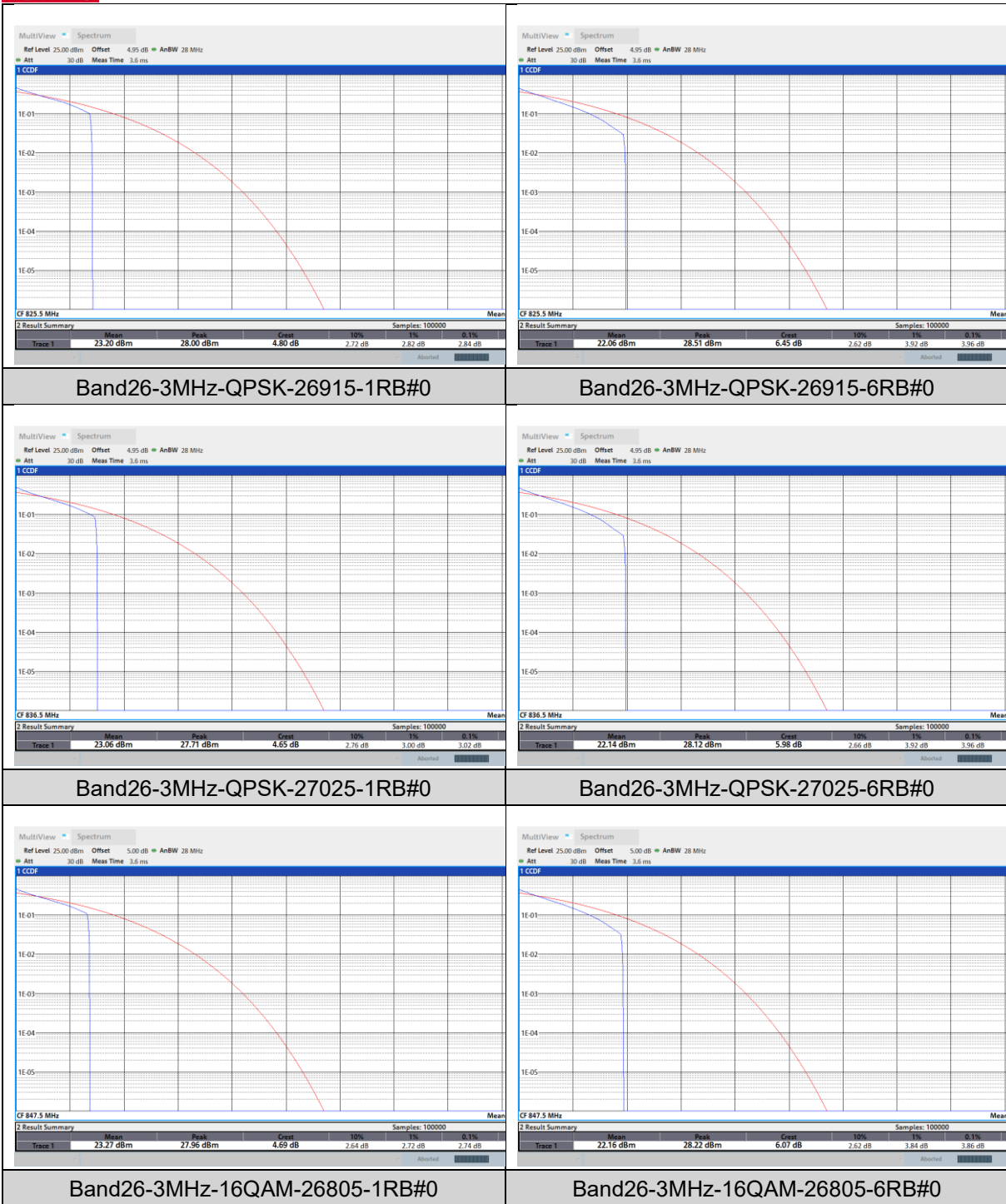


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01



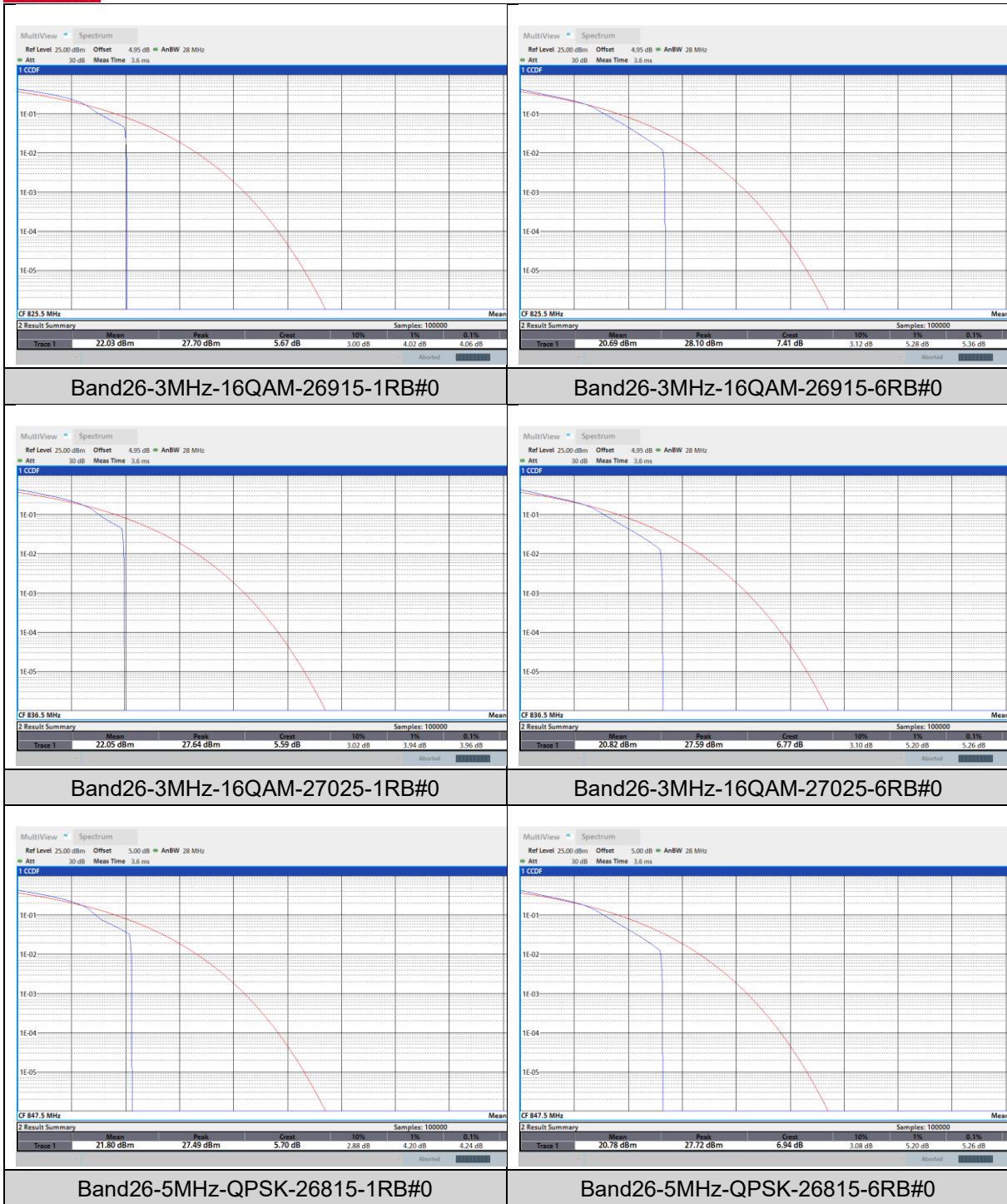


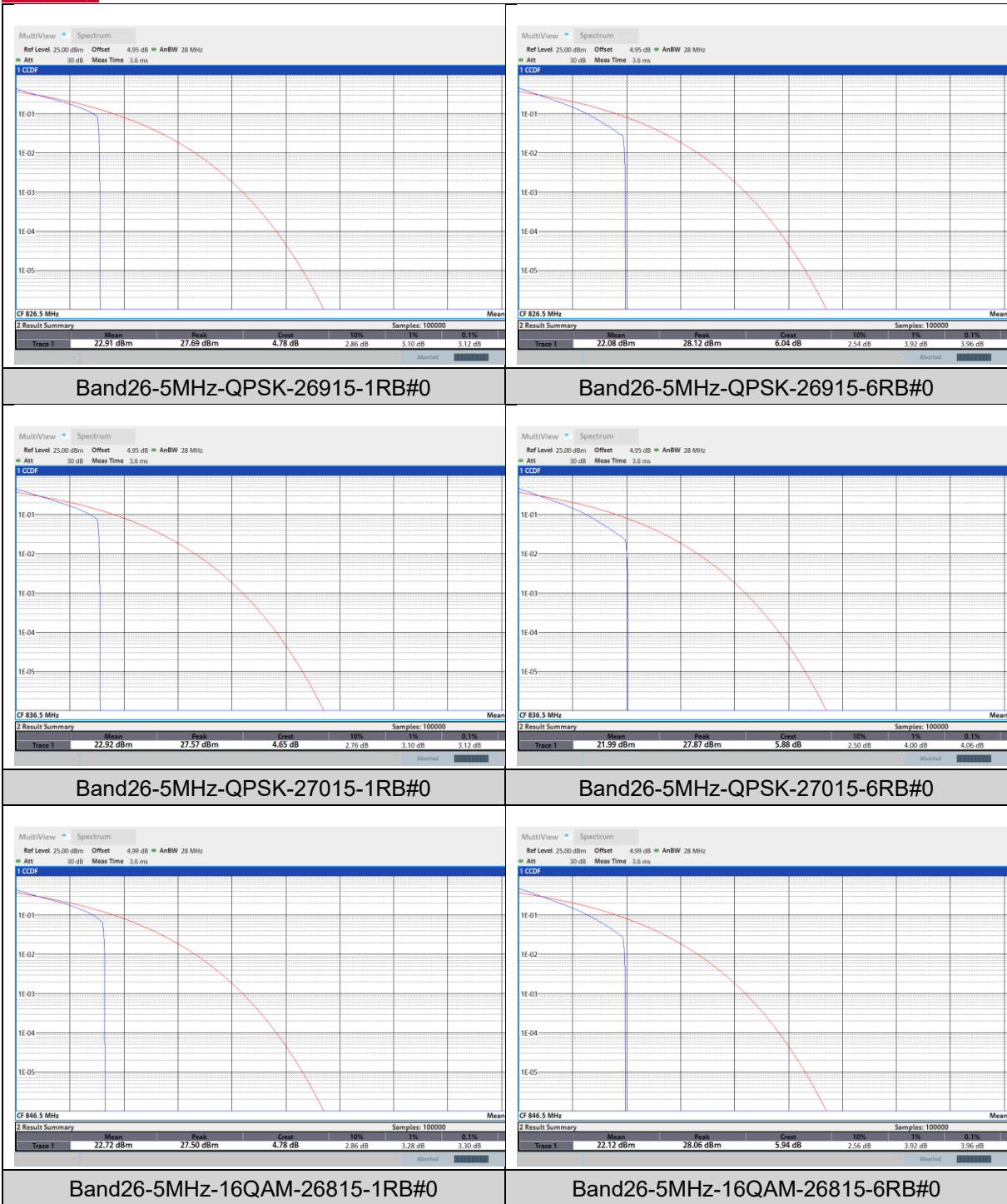
BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01





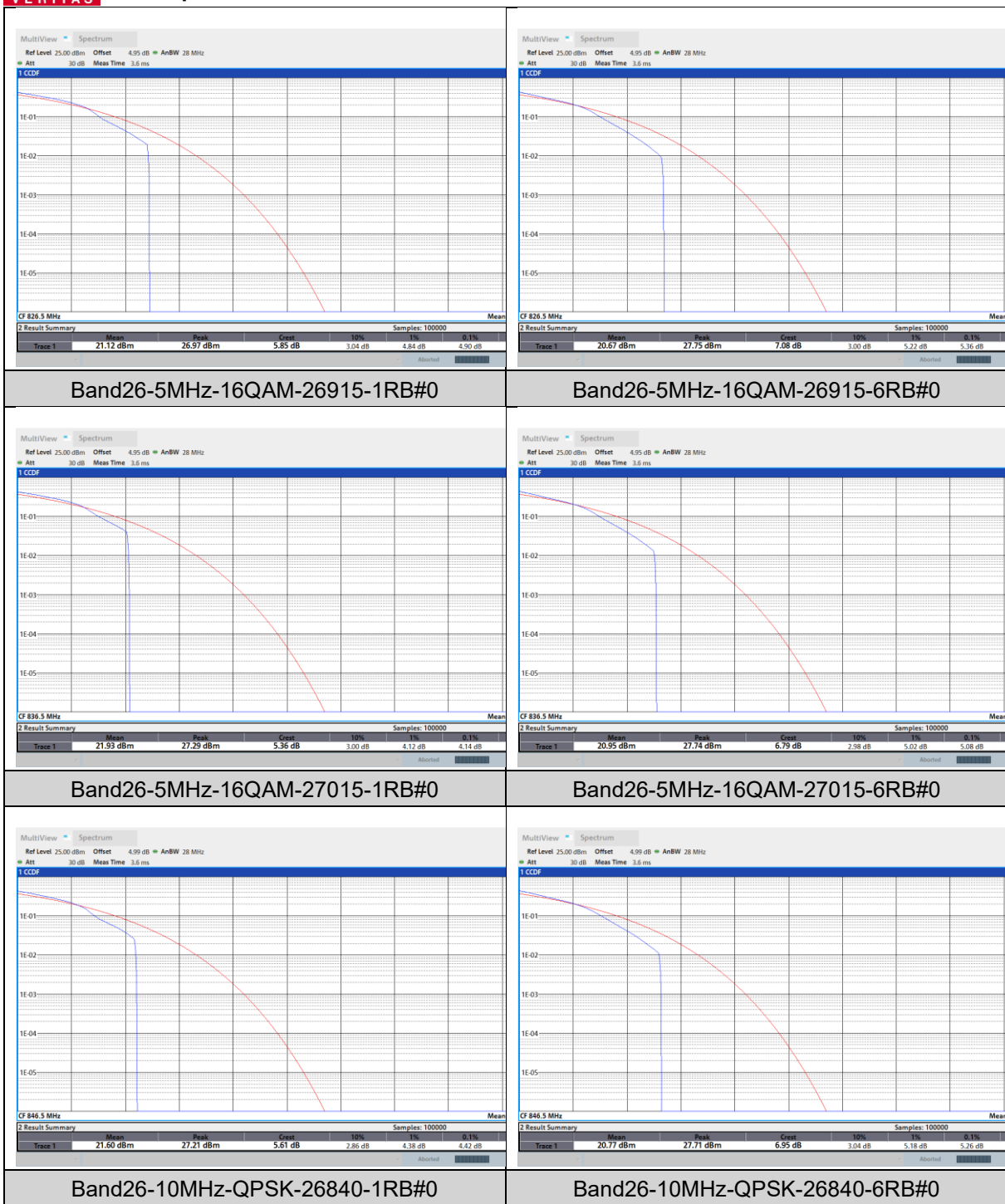
BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01





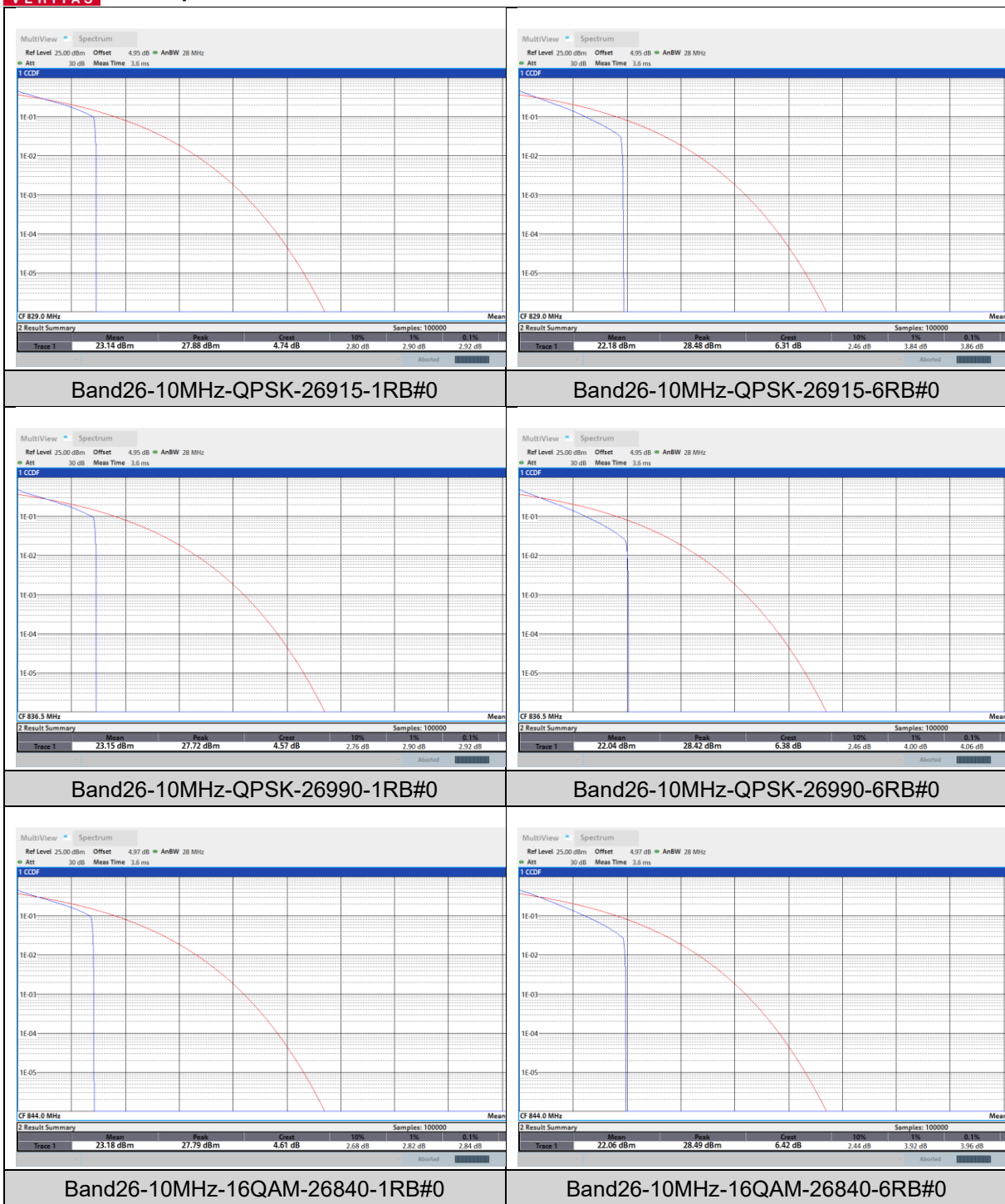


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01



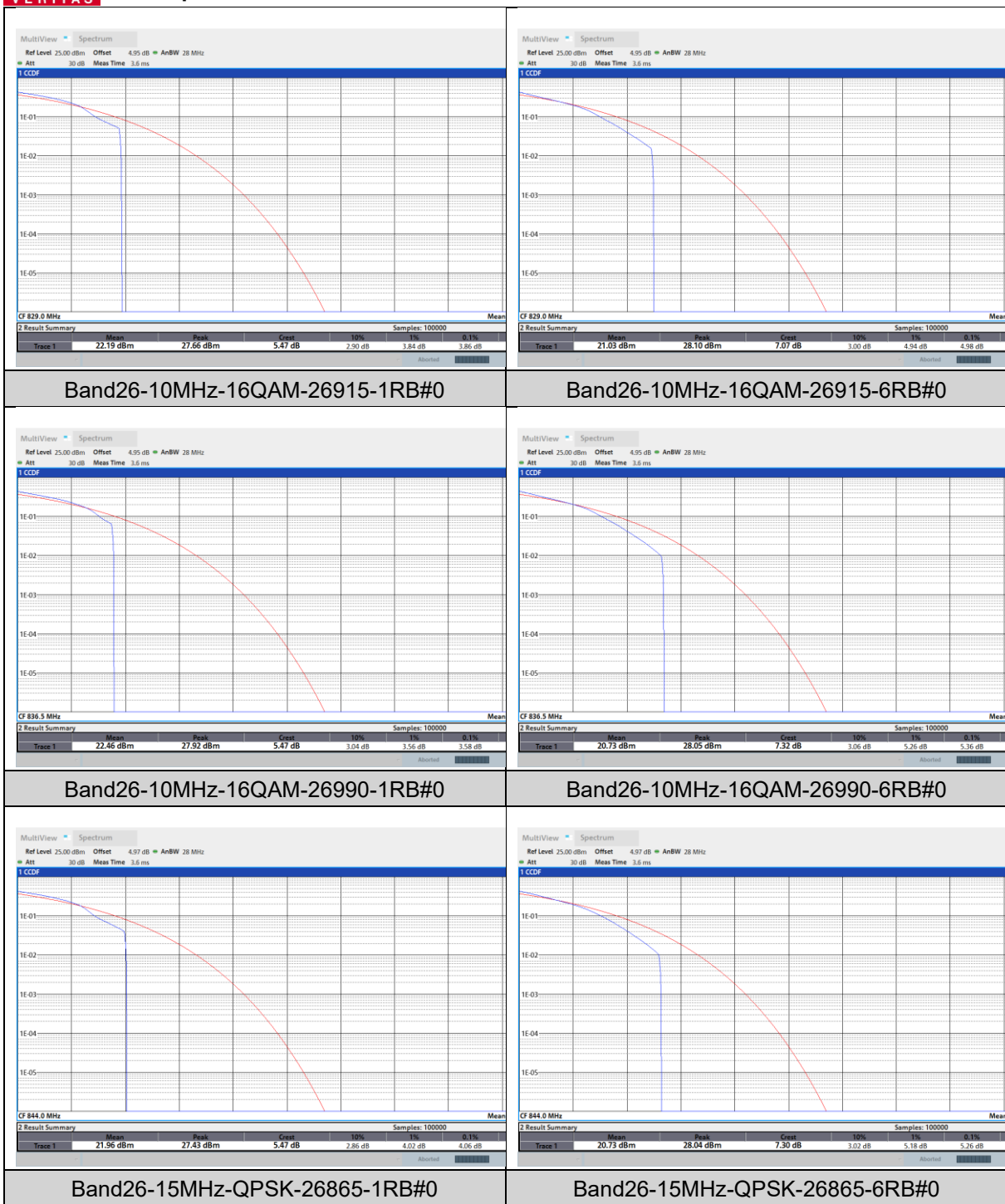


BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01





BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01





BUREAU VERITAS Test Report No.: PSZ-QSZ2504020109RF01

