

FCC TEST REPORT

(PART 27)

Applicant:	FOXX Development Inc
Address:	3480 Preston Ridge Road Suite 500, Alpharetta, GA 30005

Manufacturer or Supplier:	FOXX Development Inc
Address:	3480 Preston Ridge Road Suite 500, Alpharetta, GA 30005
Product:	Redcap Module
Brand Name:	FOXX
Model Name:	IQ50
FCC ID	2AQRM-IQ50
Date of tests	Dec. 05, 2025 ~Dec. 31, 2025

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

☒ FCC Part 27	☒ ANSI/TIA/EIA-603-E
☒ ANSI/TIA/EIA-603-D	☒ ANSI C63.26-2015
☒ FCC Part 2	

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

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Jan. 12, 2026	Date: Jan. 12, 2026

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	17
2.3 DESCRIPTION OF SUPPORT UNITS	17
2.4 TEST ITEM AND TEST CONFIGURATION	19
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS	29
3 TEST TYPES AND RESULTS	30
3.1 OUTPUT POWER MEASUREMENT	30
3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	30
3.1.2 TEST PROCEDURES	30
3.1.3 TEST SETUP	31
3.1.4 TEST RESULTS	32
3.2 FREQUENCY STABILITY MEASUREMENT	67
3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	67
3.2.2 TEST PROCEDURE	67
3.2.3 TEST SETUP	67
3.2.4 TEST RESULTS	67
3.3 OCCUPIED BANDWIDTH MEASUREMENT	68
3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	68
3.3.2 TEST SETUP	68
3.3.3 TEST PROCEDURES	68
3.3.4 TEST RESULTS	68
3.4 BAND EDGE MEASUREMENT	69
3.4.1 LIMITS OF BAND EDGE MEASUREMENT	69
3.4.2 TEST SETUP	70
3.4.3 TEST PROCEDURES	71
3.4.4 TEST RESULTS	71
3.5 CONDUCTED SPURIOUS EMISSIONS	72
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	72
3.5.2 TEST PROCEDURE	72
3.5.3 TEST SETUP	72
3.5.4 TEST RESULTS	73
3.6 RADIATED EMISSION MEASUREMENT	74
3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT	74
3.6.2 TEST PROCEDURES	74
3.6.3 DEVIATION FROM TEST STANDARD	74
3.6.4 TEST SETUP	75
3.6.5 TEST RESULTS	77
3.7 PEAK TO AVERAGE RATIO	169
3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	169
3.7.2 TEST SETUP	169
3.7.3 TEST PROCEDURES	169
3.7.4 TEST RESULTS	169
4 INFORMATION ON THE TESTING LABORATORIES	170
5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	
171	





RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QBJ2512030110RF01	Original release	Jan. 12, 2026



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(k)(3) §27.50(h)(2)	Equivalent Isotropically Radiated Power (Band 4) (Band 38) (Band 41) (Band 42) (Band 66) (NR BAND 38) (NR BAND 41) (NR BAND 66)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Conducted Band Edge Measurements (Band 4) (Band 38) (Band 41) (Band 42) (Band 66) (NR BAND 38) (NR BAND 41) (NR BAND 66)	Compliance	A
§2.1051 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Conducted Spurious Emissions (Band 4) (Band 38) (Band 41) (Band 42) (Band 66) (NR BAND 38) (NR BAND 41) (NR BAND 66)	Compliance	A
§2.1053 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Radiated Spurious Emissions (Band 4) (Band 38) (Band 41) (Band 42) (Band 66) (NR BAND 38) (NR BAND 41) (NR BAND 66)	Compliance	A
§27.50(d)(5) §27.50(k)(4)	Peak to average ratio	Compliance	A

*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

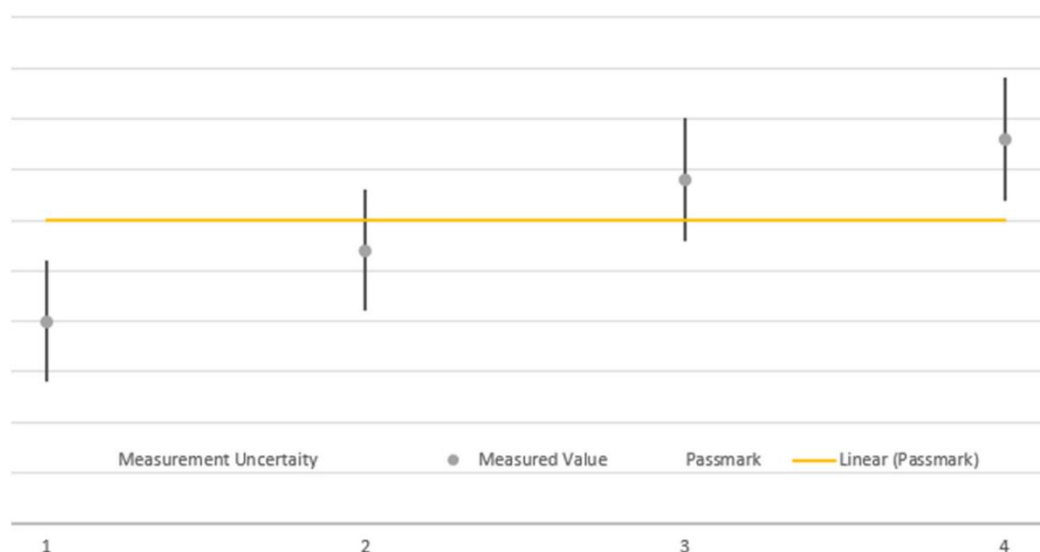
The FCC Site Registration No. is 434559; The Designation No. is CN1325.

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
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.29,25	Aug.28,27
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.24,23	Nov.23,28
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Aug.20,25	Aug.19,28
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	Jul.04,25	Jul.03,27
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.20,25	Aug.19,27
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	Mar.22,25	Mar.21,27
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
Radio Communication Tester	Rohde&Schwarz	CMX500	101446	Mar.21,25	Mar.20,27
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.30,25	Aug.29,27
Hygrothermograph	DELI	20210528	SZ014	Mar.18,25	Mar.17,27
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.26,25	Apr.25,26
CABLE	R&S	W12.14	N/A	Apr.26,25	Apr.25,26
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.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, GREGT/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*	Redcap Module	
BRAND NAME*	FOXX	
MODEL NAME*	IQ50	
NOMINAL VOLTAGE*	3.8Vdc	
MODULATION TECHNOLOGY	LTE	QPSK, 16QAM, 64QAM
	NR	DFT-s-OFDM(Pi/2BPSK,QPSK,16QAM,64QAM,256QAM); CP-OFDM(QPSK,16QAM,64QAM,256QAM);
FREQUENCY RANGE	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~ 1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~ 1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715MHz ~ 1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5 MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~ 1745MHz
	LTE Band 38 Channel Bandwidth: 5MHz	2572.5MHz ~ 2617.5MHz
	LTE Band 38 Channel Bandwidth: 10MHz	2575MHz ~ 2615MHz
	LTE Band 38 Channel Bandwidth: 15MHz	2577.5MHz ~ 2612.5MHz
	LTE Band 38 Channel Bandwidth: 20MHz	2580MHz ~ 2610MHz
	LTE Band 41 Channel Bandwidth: 5MHz	2498.5MHz ~ 2687.5MHz
	LTE Band 41 Channel Bandwidth: 10MHz	2501MHz ~ 2685MHz



	LTE Band 41 Channel Bandwidth: 15MHz	2503.5MHz ~ 2682.5MHz
	LTE Band 41 Channel Bandwidth: 20MHz	2506MHz ~ 2680MHz
	LTE Band 42 Channel Bandwidth: 5MHz	3452.5 MHz ~ 3547.5MHz
	LTE Band 42 Channel Bandwidth: 10MHz	3455MHz ~ 3545MHz
	LTE Band 42 Channel Bandwidth: 15MHz	3457.5MHz ~ 3542.5MHz
	LTE Band 42 Channel Bandwidth: 20MHz	3460MHz ~ 3540MHz
	LTE Band 66 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1779.3MHz
	LTE Band 66 Channel Bandwidth: 3MHz	1711.5MHz ~ 1778.5MHz
	LTE Band 66 Channel Bandwidth: 5MHz	1712.5MHz ~ 1777.5MHz
	LTE Band 66 Channel Bandwidth: 10MHz	1715MHz ~ 1775MHz
	LTE Band 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz
	LTE Band 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz
FREQUENCY RANGE Redcap Mode	NR BAND 38 Channel Bandwidth: 5MHz	2572.5 MHz ~ 2617.5 MHz
	NR BAND 38 Channel Bandwidth: 10MHz	2575 MHz ~ 2615 MHz
	NR BAND 38 Channel Bandwidth: 15MHz	2577.5 MHz ~ 2612.5 MHz
	NR BAND 38 Channel Bandwidth: 20MHz	2580 MHz ~ 2610 MHz
	NR BAND 41 Channel Bandwidth: 5MHz	2498.5MHz ~ 2687.5MHz
	NR BAND 41 Channel Bandwidth: 10MHz	2501MHz ~ 2685MHz



	NR BAND 41 Channel Bandwidth: 15MHz	2503.5MHz ~ 2682.5MHz
	NR BAND 41 Channel Bandwidth: 20MHz	2506MHz ~ 2680MHz
	NR BAND 66 Channel Bandwidth: 5MHz	1712.5MHz ~ 1777.5MHz
	NR BAND 66 Channel Bandwidth: 10MHz	1715MHz ~ 1775MHz
	NR BAND 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz
	NR BAND 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz
MAX. EIRP POWER	LTE Band 4 Channel Bandwidth: 1.4MHz	325.09 mW
	LTE Band 4 Channel Bandwidth: 3MHz	322.85 mW
	LTE Band 4 Channel Bandwidth: 5MHz	325.09 mW
	LTE Band 4 Channel Bandwidth: 10MHz	325.84 mW
	LTE Band 4 Channel Bandwidth: 15MHz	321.37 mW
	LTE Band 4 Channel Bandwidth: 20MHz	331.13 mW
	LTE Band 38 Channel Bandwidth: 5MHz	257.63 mW
	LTE Band 38 Channel Bandwidth: 10MHz	257.04 mW
	LTE Band 38 Channel Bandwidth: 15MHz	258.23 mW
	LTE Band 38 Channel Bandwidth: 20MHz	261.82 mW
	LTE Band 41 Channel Bandwidth: 5MHz	277.97 mW
	LTE Band 41 Channel Bandwidth: 10MHz	277.33 mW
	LTE Band 41 Channel Bandwidth: 15MHz	274.16 mW



	LTE Band 41	
	Channel Bandwidth:	280.54 mW
	20MHz	
	LTE Band 42	
	Channel Bandwidth:	180.30 mW
	5MHz	
	LTE Band 42	
	Channel Bandwidth:	179.89 mW
	10MHz	
	LTE Band 42	
	Channel Bandwidth:	181.55 mW
	15MHz	
MAX. EIRP POWER Redcap mode	LTE Band 42	
	Channel Bandwidth:	184.93 mW
	20MHz	
	LTE Band 66	
	Channel Bandwidth:	279.25 mW
	1.4MHz	
	LTE Band 66	
	Channel Bandwidth:	277.97 mW
	3MHz	
	LTE Band 66	
	Channel Bandwidth:	279.25 mW
	5MHz	
	LTE Band 66	
	Channel Bandwidth:	278.61 mW
	10MHz	
	LTE Band 66	
	Channel Bandwidth:	278.61 mW
	15MHz	
	LTE Band 66	
	Channel Bandwidth:	279.90 mW
	20MHz	
	NR BAND 38 (PC 3)	
	Channel Bandwidth:	236.59 mW
	5MHz	
	NR BAND 38(PC 3)	
	Channel Bandwidth:	229.09 mW
	10MHz	
	NR BAND 38(PC 3)	
MAX. EIRP POWER Redcap mode	Channel Bandwidth:	237.14 mW
	15MHz	
	NR BAND 38(PC 3)	
	Channel Bandwidth:	238.23 mW
	20MHz	
	NR BAND 38 (PC 2)	
	Channel Bandwidth:	464.52 mW
	5MHz	
	NR BAND 38(PC 2)	
	Channel Bandwidth:	458.14 mW
	10MHz	
	NR BAND 38(PC 2)	
	Channel Bandwidth:	457.09 mW
	15MHz	



	NR BAND 38(PC 2) Channel Bandwidth: 20MHz	466.66 mW
	NR BAND 41 (PC 3) Channel Bandwidth: 5MHz	272.90 mW
	NR BAND 41(PC 3) Channel Bandwidth: 10MHz	272.90 mW
	NR BAND 41(PC 3) Channel Bandwidth: 15MHz	276.06 mW
	NR BAND 41(PC 3) Channel Bandwidth: 20MHz	284.45 mW
	NR BAND 41 (PC 2) Channel Bandwidth: 5MHz	463.45 mW
	NR BAND 41(PC 2) Channel Bandwidth: 10MHz	466.66 mW
	NR BAND 41(PC 2) Channel Bandwidth: 15MHz	456.04 mW
	NR BAND 41(PC 2) Channel Bandwidth: 20MHz	469.89 mW
	NR BAND 66 Channel Bandwidth: 5MHz	325.84 mW
	NR BAND 66 Channel Bandwidth: 10MHz	326.59 mW
	NR BAND 66 Channel Bandwidth: 15MHz	317.69 mW
	NR BAND 66 Channel Bandwidth: 20MHz	327.34 mW
EMISSION DESIGNATOR	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M53W7D
		64QAM: 4M52W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 9M02G7D
		16QAM: 9M01W7D
		64QAM: 9M01W7D
	LTE Band 41 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D



	LTE Band 42 Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M53W7D
		64QAM: 4M52W7D
	LTE Band 42 Channel Bandwidth: 10MHz	QPSK: 9M02G7D
		16QAM: 9M01W7D
		64QAM: 9M00W7D
	LTE Band 42 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 42 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
	LTE Band 66 Channel Bandwidth: 1.4MHz	QPSK: 1M11G7D
		16QAM: 1M10W7D
		64QAM: 1M11W7D
	LTE Band 66 Channel Bandwidth: 3MHz	QPSK: 2M71G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
	LTE Band 66 Channel Bandwidth: 5MHz	QPSK: 4M52G7D
		16QAM: 4M53W7D
		64QAM: 4M53W7D
	LTE Band 66 Channel Bandwidth: 10MHz	QPSK: 9M02G7D
		16QAM: 9M02W7D
		64QAM: 9M00W7D
	LTE Band 66 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 66 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
EMISSION DESIGNATOR	LTE Band 41 Channel Bandwidth: 10MHz	Pi/2BPSK: 8M67G7D
		QPSK: 8M80G7D
		16QAM: 8M81W7D
		64QAM: 8M63W7D
		256QAM: 8M66W7D
	LTE Band 41 Channel Bandwidth: 15MHz	Pi/2BPSK: 13M0G7D
		QPSK: 13M0G7D
		16QAM: 13M0W7D
		64QAM: 12M9W7D
		256QAM: 12M9W7D



	LTE Band 41 Channel Bandwidth: 20MHz	Pi/2BPSK: 18M0G7D
		QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
		256QAM: 18M0W7D
	LTE Band 66 Channel Bandwidth: 5MHz	Pi/2BPSK: 4M56G7D
		QPSK: 4M56G7D
		16QAM: 4M56W7D
		64QAM: 4M53W7D
		256QAM: 4M56W7D
	LTE Band 66 Channel Bandwidth: 10MHz	Pi/2BPSK: 8M96G7D
		QPSK: 8M96G7D
		16QAM: 8M96W7D
		64QAM: 8M97W7D
		256QAM: 9M00W7D
	LTE Band 66 Channel Bandwidth: 15MHz	Pi/2BPSK: 13M4G7D
		QPSK: 13M4G7D
		16QAM: 13M4W7D
		64QAM: 13M4W7D
		256QAM: 13M4W7D
	LTE Band 66 Channel Bandwidth: 20MHz	Pi/2BPSK: 17M9G7D
		QPSK: 17M9G7D
		16QAM: 17M9W7D
		64QAM: 17M9W7D
		256QAM: 17M9W7D
ANTENNA GAIN*	☒ Provided by client	
	LTE B4	2.15dBi
	LTE B66	1.12dBi
	LTE B38	1.17dBi
	LTE B41	1.34dBi
	LTE B42	-0.63dBi
	NR BAND 38	0.97dBi
	NR BAND 41	1.3dBi
	NR BAND 66	2.11dBi
ANTENNA TYPE*	External Antenna	



HW VERSION*	SRM813Q-NA_MB_V1.00
SW VERSION*	SRM813Q-NA_2.0.2_EQ100
I/O PORTS*	Refer to user's manual
CABLE SUPPLIED*	N/A
EXTREME TEMPERATURE*	-40°C~85°C
EXTREME VOLTAGE*	3.3V ~ 4.35V

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 two receivers.

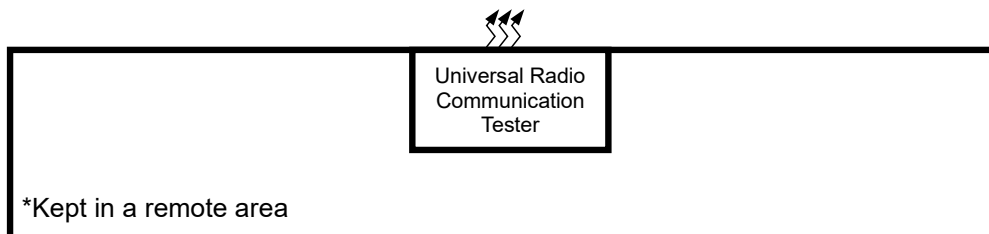
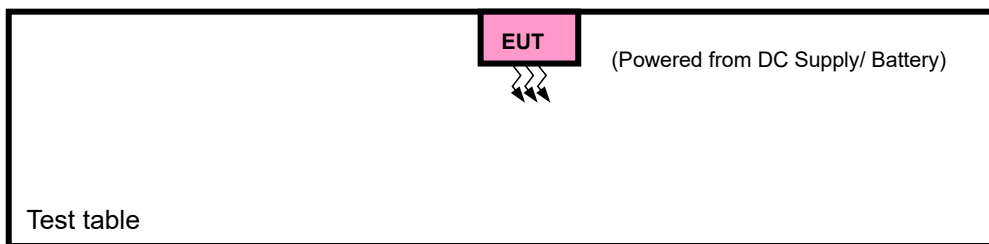
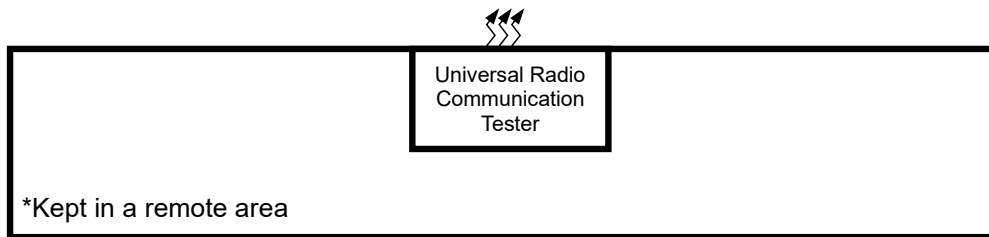
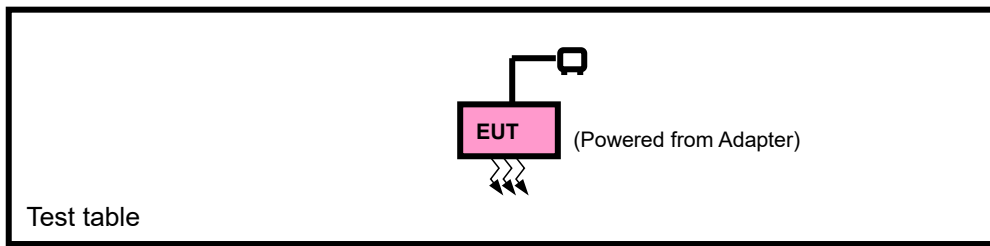
MODULATION MODE	TX FUNCTION
LTE	1TX/2RX
5G NR	1TX/2RX

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in 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
2	DC Source	HYELEC	HY3010B	551016	N/A
3	Adapter	N/A	N/A	N/A	N/A
4	USB Cable	N/A	N/A	N/A	N/A



NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable, 1.0m;
2	USB 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 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 LTE or 5G NR link
B	EUT + DC Supply with LTE or 5G NR link

LTE BAND 4 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	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 4 are covered by LTE Band 66, Because it is a subset of LTE Band 66 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 66

LTE BAND 38 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	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 38 are covered by LTE Band 41, Because it is a subset of LTE Band 41 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 41

LTE BAND 41 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	39675 to 41565	39675	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset



					64QAM	50 RB / 0 RB Offset
			41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		39725 to 41515	39725	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
			41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
		39750 to 41490				75 RB / 0 RB Offset
			39750	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
A	CONDUCTED EMISSION	39675 to 41565	39675, 40620, 41565	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	39675 to 41565	40620	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0 RB Offset
		39725 to 41515	40620	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	40620	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.

LTE band 42						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	42115 to 43065	42115, 42590, 43065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42140 to 43040	42140, 42590, 43040	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42165 to 43015	42165, 42590, 43015	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42190 to 42990	42190, 42590, 42990	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	42140 to 43040	42140, 42590, 43040	10MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	42115 to 43065	42115, 42590, 43065	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset



		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		42165 to 43015	42165,42590,43015	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	42115 to 43065	42115,42590,43065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
		42165 to 43015	42165,42590,43015	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	42115 to 43065	42115	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			43065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		42140 to 43040	42140	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			43040	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset
		42165 to 43015	42165	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
			43015	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset 75 RB / 0 RB Offset
		42190 to 42990	42190	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
			42990	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset 100 RB / 0 RB Offset
A	CONDCUDED EMISSION	42115 to 43065	42115,42590,43065	5MHz	QPSK	1 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK	1 RB / 0RB Offset
		42165 to 43015	42165,42590,43015	15MHz	QPSK	1 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK	1 RB / 0 RB Offset



A	RADIATED EMISSION	42115 to 43065	42590	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		42165 to 43015	42590	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42190 to 42990	42590	20MHz	QPSK, 16QAM, 64QAM	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.

LTE BAND 66 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	15 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	25 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	50 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	75 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	100 RB / 0 RB Offset
A	BAND EDGE	131979 to 132322	131979	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			132322	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		131987 to 132657	131987	3MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
			132657	3MHz	QPSK,16QAM, 64QAM	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		131997 to 132647	131997	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

			132647	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		132022 to 132622	132022	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
		132047 to 132597	132622	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		132047 to 132597	132047	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
		132072 to 132572	132597	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
A	CONDCUETED EMISSION	132072 to 132572	132072	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
		132072 to 132572	132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
		131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM, 64QAM	6RB / 0 RB Offset
A	RADIATED EMISSION	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	RADIATED EMISSION	131979 to 132665	132322	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	132322	3MHz	QPSK	1 RB / 0 RB Offset



		131997 to 132647	132322	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132022, 132322, 132622	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132322	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132322	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.

NR BAND N38 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	514500 to 523500	514500, 519000, 523500	5MHz	QPSK	1 RB / 0 RB Offset
		515000 to 523000	515000, 519000, 523000	10MHz	QPSK	1 RB / 0 RB Offset
		515500 to 522500	515500, 519000, 522500	15MHz	QPSK	1 RB / 0 RB Offset
		516000 to 522000	516000, 519000, 522000	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	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.

- NR Band N38 are covered by NR Band N41, Because it is a subset of NR Band N41 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to NR Band N41.

NR BAND N41 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DF T-S-OFDM) (INCLUDE CP-OFDM)
A	ERP	499704 to 537498	499704, 518598, 537498	Low, Middle, High	5MHz	QPSK	1RB/ 0RB Offset
		500202 to 537000	500202, 518598, 537000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		500700 to 536496	500700, 518598, 536496	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		501204 to 535998	501204, 518598, 535998	Low, Middle, High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
A	FREQUENCY STABILITY	500202 to 537000	500202, 518598, 537000	Low, Middle, High	10MHz	QPSK	Outer_Full
A	PEAK TO AVERAGE RATIO	500202 to 537000	500202, 518598, 537000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset Outer_Full
		500700 to 536496	500700, 518598, 536496	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset Outer_Full



		501204 to 535998	501204,518598, 535998	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset Outer_Full
A	OCCUPIED BANDWIDTH	500202 to 537000	500202,518598,537000	Low, Middle, High	10MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_Full
		500700 to 536496	500700,518598, 536496	Low, Middle, High	15MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_Full
		501204 to 535998	501204,518598, 535998	Low, Middle, High	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_Full
A	BAND EDGE	500202 to 537000	500202,518598,537000	Low	10MHz	QPSK	1RB/ 0RB Offset Outer_Full
				High	10MHz	QPSK	1RB/ 0RB Offset Outer_Full Outer_Full
		500700 to 536496	500700,518598, 536496	Low	10MHz	QPSK	1RB/ 0RB Offset Outer_Full
				High	10MHz	QPSK	1RB/ 0RB Offset Outer_Full
		501204 to 535998	501204,518598, 535998	Low	20MHz	QPSK	1RB/ 0RB Offset Outer_Full
				High	20MHz	QPSK	1RB/ 0RB Offset Outer_Full
				Low	20MHz	QPSK	1RB/ 0RB Offset Outer_Full
				High	20MHz	QPSK	1RB/ 0RB Offset Outer_Full
A	CONDUCTED EMISSION	500202 to 537000	500202,518598,537000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		500700 to 536496	500700,518598, 536496	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		501204 to 535998	501204,518598, 535998	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	499704 to 537498	518598	Middle	5MHz	QPSK	1RB/ 0RB Offset
		500202 to 537000	518598	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		500700 to 536496	518598	Middle	15MHz	QPSK	1RB/ 0RB Offset
		501204 to 535998	501204,518598, 535998	Middle	20MHz	QPSK	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA_n41



NR BAND N66 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	ERP	342500 to 355500	342500, 349000, 355500	Low, Middle, High	5MHz	QPSK	1RB/ 0RB Offset
		343000 to 355000	343000, 349000, 355000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		343500 to 354500	343500, 349000, 354000	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		344000 to 354000	344000, 349000, 354000	Low, Middle, High	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
B	FREQUENCY STABILITY	343000 to 355000	343000, 349000, 355000	Low, High	10MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	342500 to 355500	342500, 349000, 355500	Low, Middle, High	5MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
		343000 to 355000	343000, 349000, 355000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
		343500 to 354500	343500, 349000, 354000	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
		344000 to 354000	344000, 349000, 354000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
A	OCCUPIED BANDWIDTH	342500 to 355500	342500, 349000, 355500	Middle	5MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		343000 to 355000	343000, 349000, 355000	Middle	10MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		343500 to 354500	343500, 349000, 354000	Middle	15MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
		344000 to 354000	344000, 349000, 354000	Middle	20MHz	Pi/2BPSK,QPSK,16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	342500 to 355500	342500, 349000, 355500	Low	5MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	5MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
		343000 to 355000	343000, 349000, 355000	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
		343500 to 354500	343500, 349000, 354000	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full



BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

				High	10MHz	QPSK	1RB/ 0RB Offset
							Outer_Full
		344000 to 354000	344000, 349000, 354000	Low	20MHz	QPSK	1RB/ 0RB Offset
				High	20MHz	QPSK	1RB/ 0RB Offset
A	CONDUCTED EMISSION	342500 to 355500	342500, 349000, 355500	Low, Middle, High	5MHz	QPSK	1RB/ 0RB Offset
		343000 to 355000	343000, 349000, 355000	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		343500 to 354500	343500, 349000, 354000	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		344000 to 354000	344000, 349000, 354000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	342500 to 355500	349000	Middle	5MHz	QPSK	1RB/ 0RB Offset
		343000 to 355000	349000	Middle	10MHz	QPSK	1RB/ 0RB Offset
		343500 to 354500	349000	Middle	15MHz	QPSK	1RB/ 0RB Offset
		344000 to 354000	344000, 349000, 354000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA_n66

TEST CONDITION			
TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP	23deg. C, 70%RH	DC 3.8V By Battery	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.3/ 3.8V/ 4.35V By DC Source	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 3.8V By Battery	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 3.8V By Battery	Hanwen Xu
CONDCUETED EMISSION	23deg. C, 70%RH	DC 3.8V By Battery	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	AC 120V/60Hz	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 3.8V 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 average 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.

According to the specific rule Part 27.50 (k)(3) Mobile devices are limited to 1Watt (30 dBm) EIRP, Mobile devices operating inl these bands must employ a means for limiting power to the minimum necessary for successful communications

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 determing 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.

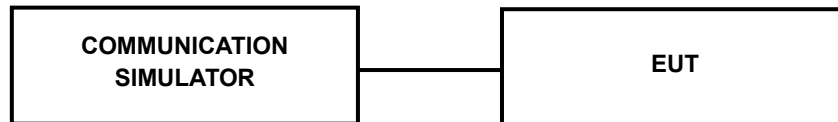
CONDUCTED POWER MEASUREMENT:

- The EUT was set up for the maximum power with LTE 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

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)

LTE Band 4						
Band/BW	Modulation	RB Size	RB Offset	Low CH 19957	Mid CH 20175	High CH 20393
				Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz
4/ 1.4	QPSK	1	0	22.89	22.74	22.76
		1	2	22.74	22.82	22.91
		1	5	22.91	22.93	22.80
		3	0	22.97	22.58	22.88
		3	1	22.93	22.77	22.71
		3	3	22.90	22.88	22.71
		6	0	21.86	21.74	21.80
	16QAM	1	0	22.18	21.98	21.92
		1	2	21.87	21.87	22.08
		1	5	22.18	21.68	21.82
		3	0	22.08	21.82	22.01
		3	1	21.99	21.64	22.01
		3	3	21.94	21.85	21.95
		6	0	21.04	21.04	20.91
	64QAM	1	0	21.14	20.99	20.97
		1	2	21.10	21.04	20.90
		1	5	21.07	20.77	21.02
		3	0	20.98	20.88	20.95
		3	1	20.99	21.03	20.91
		3	3	20.83	20.76	20.90
		6	0	19.99	19.95	19.96



LTE Band 4						
Band/BW	Modulation	RB Size	RB Offset	Low CH 19965	Mid CH 20175	High CH 20385
				Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz
4/ 3	QPSK	1	0	22.87	22.76	22.75
		1	7	22.78	22.76	22.89
		1	14	22.94	22.78	22.84
		8	0	21.79	21.57	21.71
		8	3	21.80	21.79	21.85
		8	7	21.96	21.91	21.79
		15	0	21.84	21.75	21.97
	16QAM	1	0	22.02	22.04	21.90
		1	7	21.92	21.94	22.02
		1	14	22.06	21.76	21.78
		8	0	21.04	20.89	21.01
		8	3	20.98	20.63	21.01
		8	7	21.00	20.83	20.89
		15	0	21.02	21.06	20.89
	64QAM	1	0	21.09	20.89	21.01
		1	7	20.92	20.95	20.94
		1	14	20.97	20.75	21.00
		8	0	19.95	19.75	19.92
		8	3	19.90	19.94	20.03
		8	7	19.96	19.82	19.98
		15	0	20.11	19.92	19.93
Band/BW	Modulation	RB Size	RB Offset	Low CH 19975	Mid CH 20175	High CH 20375
				Frequency 1712.5 MHz	Frequency 1732.5 MHz	Frequency 1752.5 MHz
4/ 5	QPSK	1	0	22.97	22.73	22.77
		1	12	22.85	22.88	22.78
		1	24	22.85	22.85	22.75
		12	0	21.75	21.71	21.79
		12	6	21.99	21.69	21.82
		12	13	21.95	21.79	21.85
		25	0	22.01	21.73	21.79
	16QAM	1	0	22.15	22.00	21.90
		1	12	22.01	22.05	22.04
		1	24	22.18	21.65	21.87
		12	0	21.00	20.75	20.92
		12	6	20.97	20.83	21.08
		12	13	20.82	20.95	20.82
		25	0	21.01	20.93	20.81
	64QAM	1	0	21.00	20.91	21.04
		1	12	21.11	20.98	21.00
		1	24	20.99	20.59	21.07
		12	0	19.91	19.75	19.84
		12	6	20.01	19.83	19.99
		12	13	19.96	19.77	19.98
		25	0	19.93	19.96	20.01



LTE Band 4						
Band/BW	Modulation	RB Size	RB Offset	Low CH 20000	Mid CH 20175	High CH 20350
				Frequency 1715 MHz	Frequency 1732.5 MHz	Frequency 1750 MHz
4/ 10	QPSK	1	0	22.98	22.77	22.75
		1	24	22.90	22.86	22.71
		1	49	22.92	22.84	22.75
		25	0	21.79	21.56	21.88
		25	12	21.82	21.70	21.91
		25	25	21.96	21.80	21.80
		50	0	21.91	21.82	21.98
	16QAM	1	0	22.18	22.20	21.85
		1	24	21.99	21.96	22.01
		1	49	22.10	21.68	21.90
		25	0	20.98	20.85	20.98
		25	12	21.17	20.82	21.01
		25	25	20.87	20.80	20.92
		50	0	21.16	20.92	20.97
	64QAM	1	0	21.05	20.97	20.93
		1	24	20.96	21.11	20.88
		1	49	20.90	20.63	20.96
		25	0	19.89	19.93	19.84
		25	12	20.11	19.95	19.99
		25	25	20.00	19.70	19.96
		50	0	20.02	20.05	20.03
Band/BW	Modulation	RB Size	RB Offset	Low CH 20025	Mid CH 20175	High CH 20325
				Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz
4/ 15	QPSK	1	0	22.88	22.83	22.84
		1	37	22.85	22.81	22.82
		1	74	22.90	22.86	22.92
		36	0	21.77	21.59	21.68
		36	19	21.92	21.64	21.89
		36	39	21.92	21.93	21.84
		75	0	21.88	21.90	21.94
	16QAM	1	0	22.05	22.08	21.92
		1	37	21.90	21.89	22.01
		1	74	22.13	21.76	21.84
		36	0	21.14	20.83	21.11
		36	19	21.03	20.79	20.98
		36	39	21.02	20.95	20.81
		75	0	21.10	20.92	20.82
	64QAM	1	0	21.00	21.07	20.97
		1	37	21.11	21.15	20.98
		1	74	21.03	20.63	20.91
		36	0	19.98	19.71	19.87
		36	19	19.96	19.81	19.91
		36	39	20.02	19.90	19.90
		75	0	19.94	19.93	19.96



LTE Band 4						
Band/BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300
				Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz
4/ 20	QPSK	1	0	23.03	22.94	22.92
		1	50	22.90	22.93	22.90
		1	99	23.05	22.97	22.93
		50	0	21.96	21.77	21.89
		50	25	21.98	21.83	21.90
		50	50	21.99	21.94	21.91
		100	0	22.05	21.92	21.99
	16QAM	1	0	22.22	22.19	21.97
		1	50	22.07	22.05	22.11
		1	99	22.18	21.81	21.95
		50	0	21.13	20.91	21.10
		50	25	21.17	20.82	21.07
		50	50	21.03	20.96	20.98
		100	0	21.17	21.11	20.98
	64QAM	1	0	21.16	21.08	21.09
		1	50	21.10	21.14	21.06
		1	99	21.08	20.79	21.10
		50	0	20.01	19.92	19.99
		50	25	20.11	20.02	20.05
		50	50	20.02	19.89	20.04
		100	0	20.10	20.06	20.12



LTE Band 38						
Band/BW	Modulation	RB Size	RB Offset	Low CH (37775)	Low Mid CH (38000)	Mid CH (38225)
				Frequency (2572.5)MHz	Frequency (2595)MHz	Frequency (2617.5)MHz
38/ 5	QPSK	1	0	22.52	22.37	22.84
		1	12	22.52	22.70	22.94
		1	24	22.54	22.63	22.91
		12	0	21.34	21.27	21.54
		12	6	21.36	21.45	21.68
		12	13	21.33	21.50	21.66
		25	0	21.61	21.48	21.71
	16QAM	1	0	21.50	21.67	22.15
		1	12	21.66	21.82	22.01
		1	24	21.56	21.74	21.95
		12	0	20.28	20.49	20.59
		12	6	20.38	20.48	20.66
		12	13	20.33	20.49	20.76
		25	0	20.79	20.52	20.94
	64QAM	1	0	20.73	20.59	20.92
		1	12	20.53	20.95	21.07
		1	24	20.50	20.78	21.03
		12	0	19.42	19.50	19.55
		12	6	19.28	19.40	19.66
		12	13	19.43	19.42	19.95
		25	0	19.44	19.60	19.90
Band/BW	Modulation	RB Size	RB Offset	Low CH (37800)	Low Mid CH (38000)	Mid CH (38200)
				Frequency (2575)MHz	Frequency (2595)MHz	Frequency (2615)MHz
38/ 10	QPSK	1	0	22.47	22.49	22.80
		1	24	22.73	22.66	22.93
		1	49	22.52	22.58	22.79
		25	0	21.35	21.25	21.56
		25	12	21.37	21.41	21.60
		25	25	21.27	21.42	21.68
		50	0	21.48	21.51	21.84
	16QAM	1	0	21.50	21.65	22.17
		1	24	21.53	21.75	21.89
		1	49	21.54	21.87	21.87
		25	0	20.37	20.39	20.53
		25	12	20.33	20.62	20.75
		25	25	20.37	20.39	20.81
		50	0	20.60	20.68	20.88
	64QAM	1	0	20.54	20.57	21.07
		1	24	20.53	21.01	21.11
		1	49	20.58	20.62	20.93
		25	0	19.43	19.49	19.60
		25	12	19.39	19.41	19.73
		25	25	19.47	19.52	19.85
		50	0	19.42	19.58	19.87



LTE Band 38						
Band/BW	Modulation	RB Size	RB Offset	Low CH (37825)	Low Mid CH (38000)	Mid CH (38175)
				Frequency (2577.5)MHz	Frequency (2595)MHz	Frequency (2612.5)MHz
38/ 15	QPSK	1	0	22.40	22.55	22.95
		1	37	22.67	22.78	22.94
		1	74	22.62	22.51	22.87
		36	0	21.31	21.24	21.53
		36	19	21.42	21.30	21.71
		36	39	21.47	21.44	21.69
		75	0	21.51	21.42	21.68
	16QAM	1	0	21.67	21.66	22.03
		1	37	21.51	21.66	22.06
		1	74	21.70	21.77	21.92
		36	0	20.29	20.44	20.50
		36	19	20.46	20.69	20.58
		36	39	20.48	20.48	20.76
		75	0	20.72	20.66	21.01
	64QAM	1	0	20.59	20.58	20.93
		1	37	20.62	20.94	20.97
		1	74	20.56	20.74	20.93
		36	0	19.43	19.34	19.72
		36	19	19.33	19.48	19.55
		36	39	19.40	19.46	19.94
		75	0	19.60	19.60	20.03
Band/BW	Modulation	RB Size	RB Offset	Low CH (37850)	Low Mid CH (38000)	Mid CH (38150)
				Frequency (2580)MHz	Frequency (2595)MHz	Frequency (2610)MHz
38/ 20	QPSK	1	0	22.55	22.54	22.95
		1	50	22.72	22.80	23.01
		1	99	22.68	22.70	22.98
		50	0	21.35	21.40	21.62
		50	25	21.47	21.48	21.75
		50	50	21.52	21.55	21.78
		100	0	21.61	21.58	21.89
	16QAM	1	0	21.69	21.74	22.16
		1	50	21.71	21.84	22.05
		1	99	21.72	21.91	22.04
		50	0	20.40	20.49	20.62
		50	25	20.50	20.68	20.75
		50	50	20.50	20.56	20.92
		100	0	20.80	20.72	21.04
	64QAM	1	0	20.74	20.62	21.08
		1	50	20.72	21.01	21.12
		1	99	20.68	20.83	21.03
		50	0	19.48	19.52	19.73
		50	25	19.47	19.56	19.75
		50	50	19.56	19.55	19.95
		100	0	19.62	19.72	20.03



LTE Band 41						
Band/BW	Modulation	RB Size	RB Offset	Low CH (39675)	Mid CH (40620)	High CH (41565)
				Frequency (2498.5)MHz	Frequency (2593)MHz	Frequency (2687.5)MHz
41/ 5	QPSK	1	0	22.22	22.27	22.94
		1	12	22.11	22.46	23.10
		1	24	22.12	22.33	23.10
		12	0	21.41	21.49	22.10
		12	6	21.35	21.57	22.18
		12	13	21.30	21.40	22.14
		25	0	21.47	21.48	22.17
	16QAM	1	0	21.22	21.41	22.18
		1	12	21.26	21.56	21.95
		1	24	21.15	21.47	22.08
		12	0	20.46	20.58	21.13
		12	6	20.43	20.46	21.11
		12	13	20.34	20.43	21.33
		25	0	20.54	20.77	21.28
	64QAM	1	0	20.42	20.35	20.92
		1	12	20.34	20.61	21.13
		1	24	20.31	20.56	21.12
		12	0	19.28	19.42	20.18
		12	6	19.44	19.70	20.40
		12	13	19.39	19.75	20.27
		25	0	19.53	19.82	20.25
Band/BW	Modulation	RB Size	RB Offset	Low CH (39700)	Mid CH (40620)	High CH (41540)
				Frequency (2501)MHz	Frequency (2593)MHz	Frequency (2685)MHz
41/ 10	QPSK	1	0	22.23	22.27	22.79
		1	24	22.16	22.50	23.09
		1	49	22.18	22.47	23.02
		25	0	21.38	21.46	22.17
		25	12	21.43	21.51	22.21
		25	25	21.40	21.34	22.16
		50	0	21.53	21.52	22.17
	16QAM	1	0	21.31	21.26	22.20
		1	24	21.14	21.56	21.96
		1	49	21.25	21.52	22.01
		25	0	20.54	20.39	21.06
		25	12	20.51	20.67	21.20
		25	25	20.54	20.56	21.16
		50	0	20.45	20.81	21.39
	64QAM	1	0	20.47	20.36	21.09
		1	24	20.24	20.69	21.05
		1	49	20.29	20.61	20.93
		25	0	19.39	19.45	19.99
		25	12	19.51	19.68	20.32
		25	25	19.25	19.65	20.33
		50	0	19.56	19.69	20.08



LTE Band 41						
Band/BW	Modulation	RB Size	RB Offset	Low CH (39725)	Mid CH (40620)	High CH(41515)
				Frequency (2503.5)MHz	Frequency (2593)MHz	Frequency (2682.5)MHz
41/ 15	QPSK	1	0	22.26	22.25	22.82
		1	37	22.23	22.46	22.97
		1	74	22.11	22.30	23.04
		36	0	21.20	21.41	22.17
		36	19	21.45	21.55	22.25
		36	39	21.28	21.43	22.08
		75	0	21.53	21.54	22.14
	16QAM	1	0	21.25	21.39	22.16
		1	37	21.26	21.38	22.09
		1	74	21.20	21.40	21.98
		36	0	20.35	20.55	21.25
		36	19	20.63	20.46	21.28
		36	39	20.44	20.54	21.29
		75	0	20.48	20.67	21.24
	64QAM	1	0	20.40	20.25	20.96
		1	37	20.29	20.64	21.13
		1	74	20.28	20.57	21.12
		36	0	19.48	19.37	20.10
		36	19	19.50	19.58	20.48
		36	39	19.46	19.63	20.29
		75	0	19.44	19.76	20.08
Band/BW	Modulation	RB Size	RB Offset	Low CH(39750)	Mid CH(40620)	High CH(41490)
				Frequency (2506)MHz	Frequency (2593)MHz	Frequency (2680)MHz
41/ 20	QPSK	1	0	22.30	22.35	22.99
		1	50	22.32	22.49	23.14
		1	99	22.23	22.46	23.11
		50	0	21.41	21.50	22.19
		50	25	21.55	21.58	22.26
		50	50	21.44	21.55	22.25
		100	0	21.61	21.62	22.22
	16QAM	1	0	21.32	21.44	22.19
		1	50	21.35	21.56	22.14
		1	99	21.27	21.55	22.19
		50	0	20.55	20.57	21.27
		50	25	20.64	20.67	21.28
		50	50	20.54	20.63	21.34
		100	0	20.62	20.83	21.41
	64QAM	1	0	20.50	20.46	21.13
		1	50	20.34	20.69	21.15
		1	99	20.37	20.61	21.13
		50	0	19.49	19.58	20.19
		50	25	19.58	19.69	20.47
		50	50	19.45	19.75	20.43
		100	0	19.60	19.83	20.28



LTE band 42 Part 27Q

Band/BW	Modulation	RB Size	RB Offset	Low CH (42115)	Mid CH (42590)	High CH (43065)
				Frequency (3452.5)MHz	Frequency (3500)MHz	Frequency (3547.5)MHz
42/ 5	QPSK	1	0	22.58	22.64	23.01
		1	12	22.73	22.82	23.19
		1	24	22.81	22.84	23.16
		12	0	21.53	21.57	21.89
		12	6	21.51	21.71	22.03
		12	13	21.58	21.51	22.01
		25	0	21.80	21.81	22.18
	16QAM	1	0	21.77	21.85	22.15
		1	12	21.79	22.07	22.15
		1	24	21.91	21.91	22.19
		12	0	20.69	20.54	21.07
		12	6	20.57	20.93	21.28
		12	13	20.53	20.82	21.17
		25	0	20.75	20.65	21.14
	64QAM	1	0	20.81	20.93	20.87
		1	12	20.74	21.05	21.33
		1	24	20.80	20.98	21.18
		12	0	19.59	19.58	20.11
		12	6	19.83	19.67	20.06
		12	13	19.57	19.66	20.14
		25	0	19.96	19.98	20.23
Band/BW	Modulation	RB Size	RB Offset	Low CH (42140)	Mid CH (42590)	High CH (43040)
				Frequency (3455)MHz	Frequency (3500)MHz	Frequency (3545)MHz
42/ 10	QPSK	1	0	22.61	22.69	22.93
		1	24	22.75	22.98	23.18
		1	49	22.74	22.88	23.18
		25	0	21.64	21.51	21.94
		25	12	21.68	21.69	22.04
		25	25	21.55	21.68	21.95
		50	0	21.76	21.67	22.08
	16QAM	1	0	21.77	21.82	22.16
		1	24	21.81	21.98	22.21
		1	49	21.78	21.81	22.33
		25	0	20.52	20.54	21.04
		25	12	20.63	20.83	21.20
		25	25	20.58	20.71	21.20
		50	0	20.77	20.72	21.11
	64QAM	1	0	20.74	20.88	21.05
		1	24	20.83	20.94	21.48
		1	49	20.77	21.02	21.32
		25	0	19.56	19.72	20.03
		25	12	19.69	19.85	20.13
		25	25	19.59	19.63	20.13
		50	0	19.97	19.86	20.15



LTE band 42 Part 27Q

Band/BW	Modulation	RB Size	RB Offset	Low CH (42165)	Mid CH (42590)	High CH (43015)
				Frequency (3457.5)MHz	Frequency (3500)MHz	Frequency (3542.5)MHz
42/ 15	QPSK	1	0	22.73	22.73	22.92
		1	37	22.68	22.97	23.22
		1	74	22.65	22.70	23.19
		36	0	21.62	21.51	21.94
		36	19	21.51	21.60	22.08
		36	39	21.58	21.68	21.95
		75	0	21.65	21.84	22.17
	16QAM	1	0	21.73	21.80	22.22
		1	37	21.93	21.91	22.17
		1	74	21.91	21.87	22.34
		36	0	20.56	20.55	21.02
		36	19	20.51	20.91	21.26
		36	39	20.56	20.71	21.12
		75	0	20.75	20.76	21.20
	64QAM	1	0	20.73	20.92	21.00
		1	37	20.89	20.99	21.38
		1	74	20.73	20.89	21.22
		36	0	19.58	19.59	20.11
		36	19	19.77	19.86	20.20
		36	39	19.66	19.66	20.29
		75	0	19.97	20.04	20.13
Band/BW	Modulation	RB Size	RB Offset	Low CH (42190)	Mid CH (42590)	High CH (42990)
				Frequency (3460)MHz	Frequency (3500)MHz	Frequency (3540)MHz
42/ 20	QPSK	1	0	22.72	22.85	23.05
		1	50	22.87	23.00	23.30
		1	99	22.83	22.91	23.28
		50	0	21.66	21.60	21.98
		50	25	21.67	21.76	22.12
		50	50	21.62	21.72	22.10
		100	0	21.79	21.84	22.24
	16QAM	1	0	21.90	21.87	22.23
		1	50	21.99	22.08	22.33
		1	99	21.91	21.98	22.33
		50	0	20.73	20.62	21.19
		50	25	20.68	20.93	21.27
		50	50	20.63	20.87	21.25
		100	0	20.95	20.84	21.27
	64QAM	1	0	20.84	20.93	21.05
		1	50	20.88	21.04	21.50
		1	99	20.88	21.01	21.39
		50	0	19.66	19.71	20.11
		50	25	19.86	19.87	20.26
		50	50	19.66	19.78	20.29
		100	0	19.97	20.04	20.26



LTE Band 66						
Band/BW	Modulation	RB Size	RB Offset	Low CH 131979	Mid CH 132322	High CH 132665
				Frequency 1710.7MHz	Frequency 1745MHz	Frequency 1779.3MHz
66/ 1.4	QPSK	1	0	23.11	23.02	23.01
		1	2	23.34	23.17	23.05
		1	5	22.97	22.97	22.95
		3	0	23.10	22.93	22.97
		3	1	23.10	22.97	23.09
		3	3	22.99	23.02	23.05
		6	0	22.06	22.03	21.95
	16QAM	1	0	22.17	21.98	22.21
		1	2	22.25	22.39	22.17
		1	5	22.09	22.02	22.13
		3	0	22.28	21.98	22.03
		3	1	22.17	22.40	22.25
		3	3	22.18	22.10	22.18
		6	0	21.12	21.10	21.33
	64QAM	1	0	21.13	21.15	21.24
		1	2	21.47	21.33	21.15
		1	5	21.09	21.26	20.97
		3	0	21.07	21.12	21.17
		3	1	21.34	21.15	21.14
		3	3	21.08	21.08	20.95
		6	0	20.10	20.10	20.14
Band/BW	Modulation	RB Size	RB Offset	Low CH 131987	Mid CH 132322	High CH 132657
				Frequency 1711.5MHz	Frequency 1745MHz	Frequency 1778.5MHz
66/ 3	QPSK	1	0	23.03	23.13	23.02
		1	7	23.26	23.32	23.00
		1	14	22.94	22.92	22.97
		8	0	22.06	21.94	21.93
		8	3	22.10	22.14	21.95
		8	7	21.89	22.06	21.94
		15	0	22.10	22.10	22.02
	16QAM	1	0	22.35	22.05	22.26
		1	7	22.36	22.28	22.02
		1	14	22.23	22.11	22.05
		8	0	21.27	21.03	21.03
		8	3	21.01	21.22	21.11
		8	7	21.12	21.10	21.33
		15	0	21.05	21.10	21.21
	64QAM	1	0	21.02	21.13	21.25
		1	7	21.40	21.28	21.05
		1	14	21.06	21.21	21.13
		8	0	20.17	20.22	20.25
		8	3	20.13	19.99	19.97
		8	7	19.97	20.01	20.03
		15	0	20.01	20.04	20.29



LTE Band 66						
Band/BW	Modulation	RB Size	RB Offset	Low CH 131997	Mid CH 132322	High CH 132647
				Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz
66/ 5	QPSK	1	0	23.14	23.08	23.03
		1	12	23.18	23.34	23.15
		1	24	23.09	22.99	23.04
		12	0	21.98	22.10	21.97
		12	6	22.17	22.07	22.03
		12	13	22.02	22.02	21.97
		25	0	22.03	22.03	22.11
		25	12	22.09	22.09	22.14
	16QAM	1	0	22.35	22.09	22.14
		1	12	22.18	22.28	22.16
		1	24	22.18	22.06	22.17
		12	0	21.20	21.15	20.99
		12	6	21.08	21.26	21.13
		12	13	21.08	21.21	21.34
		25	0	21.19	21.28	21.19
		25	12	21.30	21.39	21.15
	64QAM	1	0	21.10	21.15	21.30
		1	12	21.30	21.39	21.15
		1	24	21.10	21.24	21.10
		12	0	20.20	20.18	20.22
		12	6	20.16	20.14	20.02
		12	13	20.10	20.12	19.94
		25	0	20.17	20.26	20.31
		25	12	20.26	20.31	20.36
Band/BW	Modulation	RB Size	RB Offset	Low CH 132022	Mid CH 132322	High CH 132622
				Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz
66/ 10	QPSK	1	0	23.18	23.08	23.11
		1	24	23.14	23.33	23.09
		1	49	23.06	22.95	22.94
		25	0	22.13	21.97	21.95
		25	12	22.09	21.97	22.16
		25	25	22.06	21.87	22.08
		50	0	22.02	22.17	22.12
		50	12	22.07	22.17	22.12
	16QAM	1	0	22.21	22.07	22.29
		1	24	22.38	22.36	22.18
		1	49	22.26	22.02	22.22
		25	0	21.35	21.13	20.95
		25	12	21.19	21.21	21.23
		25	25	21.04	21.26	21.20
		50	0	21.09	21.09	21.29
		50	12	21.09	21.09	21.29
	64QAM	1	0	21.22	21.19	21.25
		1	24	21.51	21.20	21.08
		1	49	21.09	21.19	20.94
		25	0	20.08	20.11	20.21
		25	12	20.34	20.04	20.10
		25	25	19.97	20.08	19.97
		50	0	20.02	20.04	20.24
		50	12	20.02	20.04	20.24



LTE Band 66						
Band/BW	Modulation	RB Size	RB Offset	Low CH 132047	Mid CH 132322	High CH 132597
				Frequency 1717.5 MHz	Frequency 1745MHz	Frequency 1772.5 MHz
66/ 15	QPSK	1	0	23.13	23.07	22.98
		1	37	23.33	23.32	23.06
		1	74	23.01	23.01	22.97
		36	0	22.14	21.98	22.07
		36	19	22.19	22.19	22.04
		36	39	21.85	21.88	22.11
		75	0	22.02	22.15	21.94
	16QAM	1	0	22.33	22.14	22.33
		1	37	22.25	22.38	22.06
		1	74	22.16	22.02	22.09
		36	0	21.21	20.99	21.08
		36	19	21.21	21.22	21.22
		36	39	21.05	21.07	21.18
		75	0	21.10	21.18	21.24
	64QAM	1	0	21.03	21.23	21.27
		1	37	21.40	21.30	21.08
		1	74	21.10	21.18	21.11
		36	0	20.06	20.24	20.14
		36	19	20.32	20.05	20.01
		36	39	19.96	20.10	19.94
		75	0	20.03	20.12	20.26
Band/BW	Modulation	RB Size	RB Offset	Low CH 132072	Mid CH 132322	High CH 132572
				Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz
66/ 20	QPSK	1	0	23.23	23.16	23.14
		1	50	23.35	23.33	23.15
		1	99	23.13	23.12	23.14
		50	0	22.18	22.11	22.07
		50	25	22.22	22.18	22.15
		50	50	22.05	22.05	22.13
		100	0	22.20	22.17	22.15
	16QAM	1	0	22.35	22.15	22.33
		1	50	22.39	22.41	22.21
		1	99	22.29	22.21	22.26
		50	0	21.36	21.19	21.11
		50	25	21.22	21.39	21.28
		50	50	21.23	21.25	21.34
		100	0	21.25	21.29	21.32
	64QAM	1	0	21.22	21.26	21.32
		1	50	21.50	21.39	21.24
		1	99	21.24	21.31	21.14
		50	0	20.22	20.24	20.24
		50	25	20.34	20.17	20.18
		50	50	20.11	20.13	20.12
		100	0	20.21	20.25	20.34



BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

Redcap mode
NR BAND N38

n38 (SCS 30kHz)_PC3								
BW [MHz]	DFT-s-OFDM	RB Size	RB Offset	Low	Mid	High	MPR (dB)	Max. Tune-up (dBm)
		Channel		516000	519000	522000		
		Frequency (MHz)		2580	2595	2610		
20	Pi/2 BPSK	1	1	22.55	22.74	22.67	0	25.7
		1	26	22.52	22.56	22.52	0	25.7
		1	49	22.53	22.54	22.56	0	25.7
		25	0	22.18	22.20	22.06	0.5	25.2
		25	13	22.51	22.76	22.74	0	25.7
		25	26	22.06	22.25	22.09	0.5	25.2
		50	0	22.11	22.37	22.34	0.5	25.2
	QPSK	1	1	22.56	22.80	22.78	0	25.7
		1	26	22.52	22.76	22.61	0	25.7
		1	49	22.55	22.74	22.57	0	25.7
		25	0	21.82	21.82	21.64	1	24.7
		25	13	22.52	22.78	22.75	0	25.7
		25	26	21.69	21.81	21.76	1	24.7
		50	0	21.73	22.00	21.93	1	24.7
	16QAM	1	1	21.90	22.01	21.90	1	24.7
	64QAM	1	1	20.32	20.31	20.16	2.5	23.2
	256QAM	1	1	18.65	18.67	18.62	4.5	21.2
BW [MHz]	DFT-s-OFDM	Channel		515500	519000	522500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2577.5	2595	2612.5		
15	QPSK	1	1	22.54	22.78	22.61	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		515000	519000	523000	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2575	2595	2615		
10	QPSK	1	1	22.52	22.63	22.61	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		514500	519000	523500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2572.5	2595	2617.5		
5	QPSK	1	1	22.52	22.77	22.72	0	25.7



n38 (SCS 30kHz)_PC2								
BW [MHz]	DFT-s-OFDM	RB Size	RB Offset	Low	Mid	High	MPR (dB)	Max. Tune-up (dBm)
		Channel		516000	519000	522000		
		Frequency (MHz)		2580	2595	2610		
20	Pi/2 BPSK	1	1	25.58	25.66	25.57	0	29.0
		1	26	25.52	25.57	25.55	0	29.0
		1	49	25.56	25.55	25.53	0	29.0
		25	0	25.03	25.07	25.03	0.5	28.5
		25	13	25.57	25.52	25.54	0	29.0
		25	26	25.05	25.01	25.08	0.5	28.5
		50	0	25.03	25.15	25.10	0.5	28.5
	QPSK	1	1	25.63	25.72	25.64	0	29.0
		1	26	25.57	25.68	25.52	0	29.0
		1	49	25.62	25.62	25.57	0	29.0
		25	0	24.58	24.77	24.67	1	28.0
		25	13	25.59	25.70	25.61	0	29.0
		25	26	24.69	24.78	24.61	1	28.0
		50	0	24.79	24.95	24.81	1	28.0
	16QAM	1	1	24.68	24.78	24.69	1	28.0
	64QAM	1	1	23.17	23.31	23.26	2.5	26.5
	256QAM	1	1	21.37	21.53	21.41	4.5	24.5
BW [MHz]	DFT-s-OFDM	Channel		515500	519000	522500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2577.5	2595	2612.5		
15	QPSK	1	1	25.53	25.57	25.63	0	29.0
BW [MHz]	DFT-s-OFDM	Channel		515000	519000	523000	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2575	2595	2615		
10	QPSK	1	1	25.52	25.64	25.63	0	29.0
BW [MHz]	DFT-s-OFDM	Channel		514500	519000	523500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2572.5	2595	2617.5		
5	QPSK	1	1	25.64	25.70	25.55	0	29.0



n41 (SCS 30kHz)_PC3								
BW [MHz]	DFT-s-OFDM	RB Size	RB Offset	Low	Mid	High	MPR (dB)	Max. Tune-up (dBm)
		Channel		501204	518598	535998		
		Frequency (MHz)		2506.02	2592.99	2679.99		
20	Pi/2 BPSK	1	1	22.57	22.93	23.18	0	25.7
		1	26	22.52	22.83	23.06	0	25.7
		1	49	22.51	22.75	23.11	0	25.7
		25	0	22.02	22.34	22.64	0.5	25.2
		25	13	22.54	22.88	23.11	0	25.7
		25	26	22.06	22.47	22.59	0.5	25.2
		50	0	22.16	22.41	22.59	0.5	25.2
	QPSK	1	1	22.61	22.97	23.24	0	25.7
		1	26	22.58	22.92	23.19	0	25.7
		1	49	22.60	22.95	23.08	0	25.7
		25	0	21.68	22.07	22.36	1	24.7
		25	13	22.55	22.96	23.22	0	25.7
		25	26	21.68	22.05	22.14	1	24.7
		50	0	21.71	22.04	22.35	1	24.7
	16QAM	1	1	21.55	21.83	22.10	1	24.7
	64QAM	1	1	20.19	20.46	20.63	2.5	23.2
	256QAM	1	1	18.09	18.44	18.57	4.5	21.2
BW [MHz]	DFT-s-OFDM	Channel		500700	518598	536496	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2503.5	2592.99	2682.48		
15	QPSK	1	1	22.56	22.87	23.11	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		500202	518598	537000	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2501.01	2592.99	2685		
10	QPSK	1	1	22.51	22.78	23.06	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		499704	518598	537498	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2498.52	2592.99	2687.49		
5	QPSK	1	1	22.57	22.78	23.06	0	25.7



n41 (SCS 30kHz)_PC2								
BW [MHz]	DFT-s-OFDM	RB Size	RB Offset	Low	Mid	High	MPR (dB)	Max. Tune-up (dBm)
		Channel		501204	518598	535998		
		Frequency (MHz)		2506.02	2592.99	2679.99		
20	Pi/2 BPSK	1	1	24.50	24.98	25.38	0	29.0
		1	26	24.40	24.86	25.22	0	29.0
		1	49	24.40	24.84	25.35	0	29.0
		25	0	23.80	24.49	24.78	0.5	28.5
		25	13	24.41	24.93	25.33	0	29.0
		25	26	23.91	24.41	24.75	0.5	28.5
		50	0	23.93	24.39	24.70	0.5	28.5
	QPSK	1	1	24.54	25.04	25.42	0	29.0
		1	26	24.47	24.96	25.34	0	29.0
		1	49	24.52	24.95	25.37	0	29.0
		25	0	23.45	24.04	24.29	1	28.0
		25	13	24.46	25.00	25.32	0	29.0
		25	26	23.41	23.97	24.33	1	28.0
		50	0	23.42	23.93	24.34	1	28.0
	16QAM	1	1	23.63	24.11	24.31	1	28.0
	64QAM	1	1	22.11	22.58	22.80	2.5	26.5
	256QAM	1	1	20.10	20.55	20.77	4.5	24.5
BW [MHz]	DFT-s-OFDM	Channel		500700	518598	536496	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2503.5	2592.99	2682.48		
15	QPSK	1	1	24.35	24.93	25.29	0	29.0
BW [MHz]	DFT-s-OFDM	Channel		500202	518598	537000	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2501.01	2592.99	2685		
10	QPSK	1	1	24.45	24.96	25.39	0	29.0
BW [MHz]	DFT-s-OFDM	Channel		499704	518598	537498	MPR (dB)	Max. Tune-up
		Frequency (MHz)		2498.52	2592.99	2687.49		
5	QPSK	1	1	24.38	25.04	25.36	0	29.0



n66 (SCS 15kHz)								
BW [MHz]	DFT-s-OFDM	RB Size	RB Offset	Low	Mid	High	MPR (dB)	Max. Tune-up (dBm)
		Channel		344000	349000	354000		
		Frequency (MHz)		1720	1745	1770		
20	Pi/2 BPSK	1	1	22.94	22.99	22.91	0	25.7
		1	53	22.80	22.97	22.74	0	25.7
		1	104	22.88	22.90	22.84	0	25.7
		50	0	22.39	22.44	22.39	0.5	25.2
		50	28	22.99	22.95	22.78	0	25.7
		50	56	22.28	22.63	22.37	0.5	25.2
		100	0	22.64	22.52	22.61	0.5	25.2
	QPSK	1	1	23.02	23.04	23.01	0	25.7
		1	53	22.99	23.00	22.93	0	25.7
		1	104	22.94	23.02	22.85	0	25.7
		50	0	21.90	22.11	22.04	1	24.7
		50	28	23.00	23.02	22.97	0	25.7
		50	56	21.96	22.15	21.95	1	24.7
		100	0	22.19	22.23	22.16	1	24.7
	16QAM	1	1	22.17	22.23	22.02	1	24.7
	64QAM	1	1	20.42	20.53	20.38	2.5	23.2
	256QAM	1	1	18.94	19.07	19.04	4.5	21.2
BW [MHz]	DFT-s-OFDM	Channel		343500	349000	354500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		1717.5	1745	1772.5		
15	QPSK	1	1	22.85	22.90	22.91	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		343000	349000	355000	MPR (dB)	Max. Tune-up
		Frequency (MHz)		1715	1745	1775		
10	QPSK	1	1	22.85	23.03	22.83	0	25.7
BW [MHz]	DFT-s-OFDM	Channel		342500	349000	355500	MPR (dB)	Max. Tune-up
		Frequency (MHz)		1712.5	1745	1777.5		
5	QPSK	1	1	22.88	22.96	23.02	0	25.7

**EIRP****LTE BAND 4****1.4MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.97	2.15	25.12	325.09	1
20175	1732.5	22.93	2.15	25.08	322.11	1
20393	1754.3	22.91	2.15	25.06	320.63	1

1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.18	2.15	24.33	271.02	1
20175	1732.5	21.98	2.15	24.13	258.82	1
20393	1754.3	22.08	2.15	24.23	264.85	1

1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	21.14	2.15	23.29	213.30	1
20175	1732.5	21.04	2.15	23.19	208.45	1
20393	1754.3	21.02	2.15	23.17	207.49	1

3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.94	2.15	25.09	322.85	1
20175	1732.5	22.78	2.15	24.93	311.17	1
20385	1753.5	22.89	2.15	25.04	319.15	1

3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.06	2.15	24.21	263.63	1
20175	1732.5	22.04	2.15	24.19	262.42	1
20385	1753.5	22.02	2.15	24.17	261.22	1

3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	21.09	2.15	23.24	210.86	1
20175	1732.5	20.95	2.15	23.10	204.17	1
20385	1753.5	21.01	2.15	23.16	207.01	1



5MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.97	2.15	25.12	325.09	1
20175	1732.5	22.88	2.15	25.03	318.42	1
20375	1752.5	22.78	2.15	24.93	311.17	1

5MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.18	2.15	24.33	271.02	1
20175	1732.5	22.05	2.15	24.20	263.03	1
20375	1752.5	22.04	2.15	24.19	262.42	1

5MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	21.11	2.15	23.26	211.84	1
20175	1732.5	20.98	2.15	23.13	205.59	1
20375	1752.5	21.07	2.15	23.22	209.89	1

10MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.98	2.15	25.13	325.84	1
20175	1732.5	22.86	2.15	25.01	316.96	1
20350	1750	22.75	2.15	24.90	309.03	1

10MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.18	2.15	24.33	271.02	1
20175	1732.5	22.20	2.15	24.35	272.27	1
20350	1750	22.01	2.15	24.16	260.62	1

10MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	21.05	2.15	23.20	208.93	1
20175	1732.5	21.11	2.15	23.26	211.84	1
20350	1750	20.96	2.15	23.11	204.64	1



15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.90	2.15	25.05	319.89	1
20175	1732.5	22.86	2.15	25.01	316.96	1
20325	1747.5	22.92	2.15	25.07	321.37	1

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.13	2.15	24.28	267.92	1
20175	1732.5	22.08	2.15	24.23	264.85	1
20325	1747.5	22.01	2.15	24.16	260.62	1

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	21.11	2.15	23.26	211.84	1
20175	1732.5	21.15	2.15	23.30	213.80	1
20325	1747.5	20.98	2.15	23.13	205.59	1

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.05	2.15	25.20	331.13	1
20175	1732.5	22.97	2.15	25.12	325.09	1
20300	1745	22.93	2.15	25.08	322.11	1

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	22.22	2.15	24.37	273.53	1
20175	1732.5	22.19	2.15	24.34	271.64	1
20300	1745	22.11	2.15	24.26	266.69	1

20MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	21.16	2.15	23.31	214.29	1
20175	1732.5	21.14	2.15	23.29	213.30	1
20300	1745	21.10	2.15	23.25	211.35	1

**LTE BAND 38****5MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.54	1.17	23.71	234.96	2
38000	2595.0	22.70	1.17	23.87	243.78	2
38225	2617.5	22.94	1.17	24.11	257.63	2

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	21.66	1.17	22.83	191.87	2
38000	2595.0	21.82	1.17	22.99	199.07	2
38225	2617.5	22.15	1.17	23.32	214.78	2

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	20.73	1.17	21.90	154.88	2
38000	2595	20.95	1.17	22.12	162.93	2
38225	2617.5	21.07	1.17	22.24	167.49	2

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.73	1.17	23.90	245.47	2
38000	2595.0	22.66	1.17	23.83	241.55	2
38200	2615.0	22.93	1.17	24.10	257.04	2

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	21.54	1.17	22.71	186.64	2
38000	2595.0	21.87	1.17	23.04	201.37	2
38200	2615.0	22.17	1.17	23.34	215.77	2

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575	20.58	1.17	21.75	149.62	2
38000	2595	21.01	1.17	22.18	165.20	2
38200	2615	21.11	1.17	22.28	169.04	2



15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.67	1.17	23.84	242.10	2
38000	2595.0	22.78	1.17	23.95	248.31	2
38175	2612.5	22.95	1.17	24.12	258.23	2

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	21.70	1.17	22.87	193.64	2
38000	2595.0	21.77	1.17	22.94	196.79	2
38175	2612.5	22.06	1.17	23.23	210.38	2

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	20.62	1.17	21.79	151.01	2
38000	2595	20.94	1.17	22.11	162.55	2
38175	2612.5	20.97	1.17	22.14	163.68	2

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.72	1.17	23.89	244.91	2
38000	2595.0	22.80	1.17	23.97	249.46	2
38150	2610.0	23.01	1.17	24.18	261.82	2

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	21.72	1.17	22.89	194.54	2
38000	2595.0	21.91	1.17	23.08	203.24	2
38150	2610.0	22.16	1.17	23.33	215.28	2

20MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580	20.74	1.17	21.91	155.24	2
38000	2595	21.01	1.17	22.18	165.20	2
38150	2610	21.12	1.17	22.29	169.43	2



LTE BAND 41

5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.22	1.34	23.56	226.99	2
40620	2593	22.46	1.34	23.80	239.88	2
41565	2687.5	23.10	1.34	24.44	277.97	2

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	21.26	1.34	22.60	181.97	2
40620	2593	21.56	1.34	22.90	194.98	2
41565	2687.5	22.18	1.34	23.52	224.91	2

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	20.42	1.34	21.76	149.97	2
40620	2593	20.61	1.34	21.95	156.68	2
41565	2687.5	21.13	1.34	22.47	176.60	2

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	22.23	1.34	23.57	227.51	2
40620	2593	22.50	1.34	23.84	242.10	2
41540	2685	23.09	1.34	24.43	277.33	2

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	21.31	1.34	22.65	184.08	2
40620	2593	21.56	1.34	22.90	194.98	2
41540	2685	22.20	1.34	23.54	225.94	2

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	20.47	1.34	21.81	151.71	2
40620	2593	20.69	1.34	22.03	159.59	2
41540	2685	21.09	1.34	22.43	174.98	2

**15MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	22.26	1.34	23.60	229.09	2
40620	2593	22.46	1.34	23.80	239.88	2
41515	2682.5	23.04	1.34	24.38	274.16	2

15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	21.26	1.34	22.60	181.97	2
40620	2593	21.40	1.34	22.74	187.93	2
41515	2682.5	22.16	1.34	23.50	223.87	2

15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	20.40	1.34	21.74	149.28	2
40620	2593	20.64	1.34	21.98	157.76	2
41515	2682.5	21.13	1.34	22.47	176.60	2

20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	22.32	1.34	23.66	232.27	2
40620	2593	22.49	1.34	23.83	241.55	2
41490	2680	23.14	1.34	24.48	280.54	2

20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	21.35	1.34	22.69	185.78	2
40620	2593	21.56	1.34	22.90	194.98	2
41490	2680	22.19	1.34	23.53	225.42	2

20 MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	20.50	1.34	21.84	152.76	2
40620	2593	20.69	1.34	22.03	159.59	2
41490	2680	21.15	1.34	22.49	177.42	2



LTE Band 42

5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	22.81	-0.63	22.18	165.20	1
42590	3500	22.84	-0.63	22.21	166.34	1
43065	3547.5	23.19	-0.63	22.56	180.30	1

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	21.91	-0.63	21.28	134.28	1
42590	3500	22.07	-0.63	21.44	139.32	1
43065	3547.5	22.19	-0.63	21.56	143.22	1

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	20.81	-0.63	20.18	104.23	1
42590	3500	21.05	-0.63	20.42	110.15	1
43065	3547.5	21.33	-0.63	20.70	117.49	1

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	22.75	-0.63	22.12	162.93	1
42590	3500	22.98	-0.63	22.35	171.79	1
43040	3545	23.18	-0.63	22.55	179.89	1

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	21.81	-0.63	21.18	131.22	1
42590	3500	21.98	-0.63	21.35	136.46	1
43040	3545	22.33	-0.63	21.70	147.91	1

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	20.83	-0.63	20.20	104.71	1
42590	3500	21.02	-0.63	20.39	109.40	1
43040	3545	21.48	-0.63	20.85	121.62	1



15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	22.73	-0.63	22.10	162.18	1
42590	3500	22.97	-0.63	22.34	171.40	1
43015	3542.5	23.22	-0.63	22.59	181.55	1

15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	21.93	-0.63	21.30	134.90	1
42590	3500	21.91	-0.63	21.28	134.28	1
43015	3542.5	22.34	-0.63	21.71	148.25	1

15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	20.89	-0.63	20.26	106.17	1
42590	3500	20.99	-0.63	20.36	108.64	1
43015	3542.5	21.38	-0.63	20.75	118.85	1

20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	22.87	-0.63	22.24	167.49	1
42590	3500	23.00	-0.63	22.37	172.58	1
42990	3540	23.30	-0.63	22.67	184.93	1

20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	21.99	-0.63	21.36	136.77	1
42590	3500	22.08	-0.63	21.45	139.64	1
42990	3540	22.33	-0.63	21.70	147.91	1

20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	20.88	-0.63	20.25	105.93	1
42590	3500	21.04	-0.63	20.41	109.90	1
42990	3540	21.50	-0.63	20.87	122.18	1



LTE BAND 66						
1.4MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	21.47	1.12	22.59	181.55	1
132322	1745	21.33	1.12	22.45	175.79	1
132665	1779.3	21.24	1.12	22.36	172.19	1

1.4MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	22.28	1.12	23.40	218.78	1
132322	1745	22.40	1.12	23.52	224.91	1
132665	1779.3	22.25	1.12	23.37	217.27	1

1.4MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.34	1.12	24.46	279.25	1
132322	1745	23.17	1.12	24.29	268.53	1
132665	1779.3	23.09	1.12	24.21	263.63	1

3MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.26	1.12	24.38	274.16	1
132322	1745	23.32	1.12	24.44	277.97	1
132657	1778.5	23.02	1.12	24.14	259.42	1

3MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	22.36	1.12	23.48	222.84	1
132322	1745	22.28	1.12	23.40	218.78	1
132657	1778.5	22.26	1.12	23.38	217.77	1

3MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	21.40	1.12	22.52	178.65	1
132322	1745	21.28	1.12	22.40	173.78	1
132657	1778.5	21.25	1.12	22.37	172.58	1

**5MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.18	1.12	24.30	269.15	1
132322	1745	23.34	1.12	24.46	279.25	1
132647	1777.5	23.15	1.12	24.27	267.30	1

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	22.35	1.12	23.47	222.33	1
132322	1745	22.28	1.12	23.40	218.78	1
132647	1777.5	22.17	1.12	23.29	213.30	1

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	21.30	1.12	22.42	174.58	1
132322	1745	21.39	1.12	22.51	178.24	1
132647	1777.5	21.30	1.12	22.42	174.58	1

10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.18	1.12	24.30	269.15	1
132322	1745	23.33	1.12	24.45	278.61	1
132622	1775	23.11	1.12	24.23	264.85	1

10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	22.38	1.12	23.50	223.87	1
132322	1745	22.36	1.12	23.48	222.84	1
132622	1775	22.29	1.12	23.41	219.28	1

10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	21.51	1.12	22.63	183.23	1
132322	1745	21.20	1.12	22.32	170.61	1
132622	1775	21.25	1.12	22.37	172.58	1

**15MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.33	1.12	24.45	278.61	1
132322	1745	23.32	1.12	24.44	277.97	1
132597	1772.5	23.06	1.12	24.18	261.82	1

15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	22.33	1.12	23.45	221.31	1
132322	1745	22.38	1.12	23.50	223.87	1
132597	1772.5	22.33	1.12	23.45	221.31	1

15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	21.40	1.12	22.52	178.65	1
132322	1745	21.30	1.12	22.42	174.58	1
132597	1772.5	21.27	1.12	22.39	173.38	1

20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.35	1.12	24.47	279.90	1
132322	1745	23.33	1.12	24.45	278.61	1
132572	1770	23.15	1.12	24.27	267.30	1

20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	22.39	1.12	23.51	224.39	1
132322	1745	22.41	1.12	23.53	225.42	1
132572	1770	22.33	1.12	23.45	221.31	1

20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	21.50	1.12	22.62	182.81	1
132322	1745	21.39	1.12	22.51	178.24	1
132572	1770	21.32	1.12	22.44	175.39	1



BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

Redcap mode

NR BAND N38

n38 (SCS 30kHz)_PC3							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-Pi/2 BPSK	516000	2580	22.55	0.97	23.52	224.91	2
	519000	2595	22.76	0.97	23.73	236.05	2
	522000	2610	22.74	0.97	23.71	234.96	2
20M-QPSK	516000	2580	22.56	0.97	23.53	225.42	2
	519000	2595	22.80	0.97	23.77	238.23	2
	522000	2610	22.78	0.97	23.75	237.14	2
20M- 16QAM	516000	2580	21.90	0.97	22.87	193.64	2
	519000	2595	22.01	0.97	22.98	198.61	2
	522000	2610	21.90	0.97	22.87	193.64	2
20M- 64QAM	516000	2580	20.32	0.97	21.29	134.59	2
	519000	2595	20.31	0.97	21.28	134.28	2
	522000	2610	20.16	0.97	21.13	129.72	2
20M- 256QAM	516000	2580	18.65	0.97	19.62	91.62	2
	519000	2595	18.67	0.97	19.64	92.04	2
	522000	2610	18.62	0.97	19.59	90.99	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	515500	2577.5	22.54	0.97	23.51	224.39	2
	519000	2595	22.78	0.97	23.75	237.14	2
	522500	2612.5	22.61	0.97	23.58	228.03	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	515000	2575	22.52	0.97	23.49	223.36	2
	519000	2595	22.63	0.97	23.60	229.09	2
	523000	2615	22.61	0.97	23.58	228.03	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	514500	2572.5	22.52	0.97	23.49	223.36	2
	519000	2595	22.77	0.97	23.74	236.59	2
	523500	2617.5	22.72	0.97	23.69	233.88	2



n38 (SCS 30kHz)_PC2							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-Pi/2 BPSK	516000	2580	25.58	0.97	26.55	451.86	2
	519000	2595	25.66	0.97	26.63	460.26	2
	522000	2610	25.57	0.97	26.54	450.82	2
20M-QPSK	516000	2580	25.63	0.97	26.60	457.09	2
	519000	2595	25.72	0.97	26.69	466.66	2
	522000	2610	25.64	0.97	26.61	458.14	2
20M- 16QAM	516000	2580	24.68	0.97	25.65	367.28	2
	519000	2595	24.78	0.97	25.75	375.84	2
	522000	2610	24.69	0.97	25.66	368.13	2
20M- 64QAM	516000	2580	23.17	0.97	24.14	259.42	2
	519000	2595	23.31	0.97	24.28	267.92	2
	522000	2610	23.26	0.97	24.23	264.85	2
20M- 256QAM	516000	2580	21.37	0.97	22.34	171.40	2
	519000	2595	21.53	0.97	22.50	177.83	2
	522000	2610	21.41	0.97	22.38	172.98	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	515500	2577.5	25.53	0.97	26.50	446.68	2
	519000	2595	25.57	0.97	26.54	450.82	2
	522500	2612.5	25.63	0.97	26.60	457.09	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	515000	2575	25.52	0.97	26.49	445.66	2
	519000	2595	25.64	0.97	26.61	458.14	2
	523000	2615	25.63	0.97	26.60	457.09	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	514500	2572.5	25.64	0.97	26.61	458.14	2
	519000	2595	25.70	0.97	26.67	464.52	2
	523500	2617.5	25.55	0.97	26.52	448.75	2



n41 (SCS 30kHz)_PC3							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-Pi/2 BPSK	501204	2506.02	22.57	1.3	23.87	243.78	2
	518598	2592.99	22.93	1.3	24.23	264.85	2
	535998	2679.99	23.18	1.3	24.48	280.54	2
20M-QPSK	501204	2506.02	22.61	1.3	23.91	246.04	2
	518598	2592.99	22.97	1.3	24.27	267.30	2
	535998	2679.99	23.24	1.3	24.54	284.45	2
20M- 16QAM	501204	2506.02	21.55	1.3	22.85	192.75	2
	518598	2592.99	21.83	1.3	23.13	205.59	2
	535998	2679.99	22.10	1.3	23.40	218.78	2
20M- 64QAM	501204	2506.02	20.19	1.3	21.49	140.93	2
	518598	2592.99	20.46	1.3	21.76	149.97	2
	535998	2679.99	20.63	1.3	21.93	155.96	2
20M- 256QAM	501204	2506.02	18.09	1.3	19.39	86.90	2
	518598	2592.99	18.44	1.3	19.74	94.19	2
	535998	2679.99	18.57	1.3	19.87	97.05	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	500700	2503.5	22.56	1.3	23.86	243.22	2
	518598	2592.99	22.87	1.3	24.17	261.22	2
	536496	2682.48	23.11	1.3	24.41	276.06	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	500202	2501.01	22.51	1.3	23.81	240.44	2
	518598	2592.99	22.78	1.3	24.08	255.86	2
	537000	2685	23.06	1.3	24.36	272.90	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	499704	2498.52	22.57	1.3	23.87	243.78	2
	518598	2592.99	22.78	1.3	24.08	255.86	2
	537498	2687.49	23.06	1.3	24.36	272.90	2



n41 (SCS 30kHz)_PC2							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-Pi/2 BPSK	501204	2506.02	24.50	1.3	25.80	380.19	2
	518598	2592.99	24.98	1.3	26.28	424.62	2
	535998	2679.99	25.38	1.3	26.68	465.59	2
20M-QPSK	501204	2506.02	24.54	1.3	25.84	383.71	2
	518598	2592.99	25.04	1.3	26.34	430.53	2
	535998	2679.99	25.42	1.3	26.72	469.89	2
20M- 16QAM	501204	2506.02	23.63	1.3	24.93	311.17	2
	518598	2592.99	24.11	1.3	25.41	347.54	2
	535998	2679.99	24.31	1.3	25.61	363.92	2
20M- 64QAM	501204	2506.02	22.11	1.3	23.41	219.28	2
	518598	2592.99	22.58	1.3	23.88	244.34	2
	535998	2679.99	22.80	1.3	24.10	257.04	2
20M- 256QAM	501204	2506.02	20.10	1.3	21.40	138.04	2
	518598	2592.99	20.55	1.3	21.85	153.11	2
	535998	2679.99	20.77	1.3	22.07	161.06	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	500700	2503.5	24.35	1.3	25.65	367.28	2
	518598	2592.99	24.93	1.3	26.23	419.76	2
	536496	2682.48	25.29	1.3	26.59	456.04	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	500202	2501.01	24.45	1.3	25.75	375.84	2
	518598	2592.99	24.96	1.3	26.26	422.67	2
	537000	2685	25.39	1.3	26.69	466.66	2
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	499704	2498.52	24.38	1.3	25.68	369.83	2
	518598	2592.99	25.04	1.3	26.34	430.53	2
	537498	2687.49	25.36	1.3	26.66	463.45	2


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

n66 (SCS 15kHz)							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20M-Pi/2 BPSK	344000	1720	22.99	2.11	25.10	323.59	1
	349000	1745	22.99	2.11	25.10	323.59	1
	354000	1770	22.91	2.11	25.02	317.69	1
20M-QPSK	344000	1720	23.02	2.11	25.13	325.84	1
	349000	1745	23.04	2.11	25.15	327.34	1
	354000	1770	23.01	2.11	25.12	325.09	1
20M- 16QAM	344000	1720	22.17	2.11	24.28	267.92	1
	349000	1745	22.23	2.11	24.34	271.64	1
	354000	1770	22.02	2.11	24.13	258.82	1
20M- 64QAM	344000	1720	20.42	2.11	22.53	179.06	1
	349000	1745	20.53	2.11	22.64	183.65	1
	354000	1770	20.38	2.11	22.49	177.42	1
20M- 256QAM	344000	1720	18.94	2.11	21.05	127.35	1
	349000	1745	19.07	2.11	21.18	131.22	1
	354000	1770	19.04	2.11	21.15	130.32	1
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
15M-QPSK	343500	1717.5	22.85	2.11	24.96	313.33	1
	349000	1745	22.90	2.11	25.01	316.96	1
	354500	1772.5	22.91	2.11	25.02	317.69	1
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
10M-QPSK	343000	1715	22.85	2.11	24.96	313.33	1
	349000	1745	23.03	2.11	25.14	326.59	1
	355000	1775	22.83	2.11	24.94	311.89	1
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
5M-QPSK	342500	1712.5	22.88	2.11	24.99	315.50	1
	349000	1745	22.96	2.11	25.07	321.37	1
	355500	1777.5	23.02	2.11	25.13	325.84	1

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



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

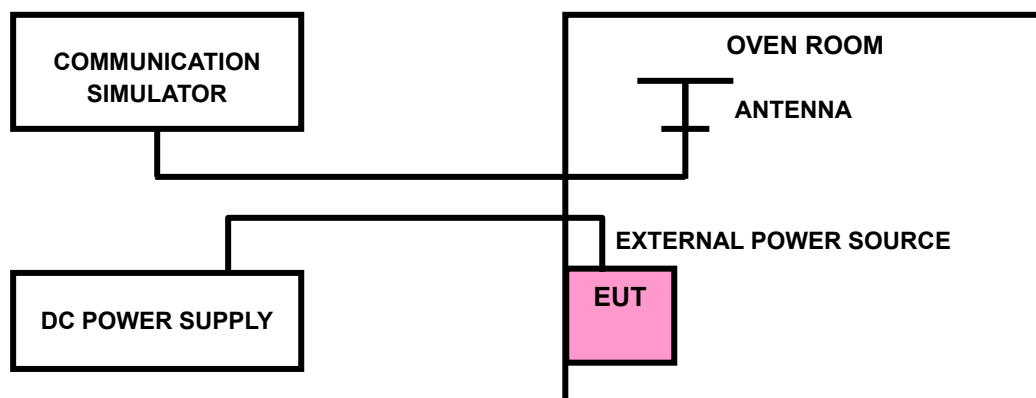
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

- 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.

Note: VL = Low voltage(3.3V); VN/NV = Normal voltage(3.8V); VH = High voltage(4.35V); NT = Normal temperature (25°C)

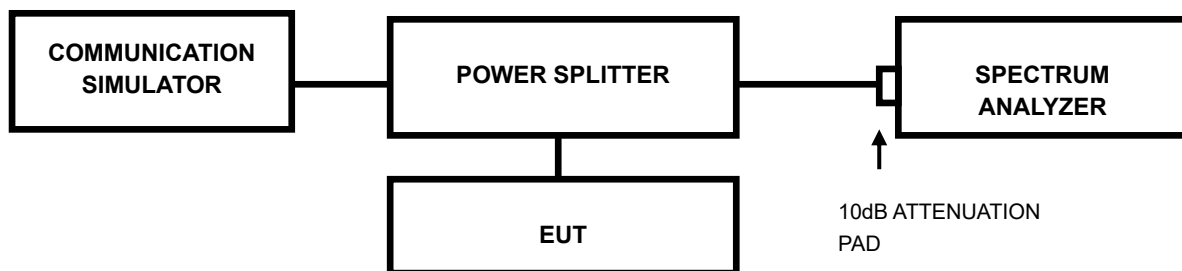


3.3 OCCUPIED BANDWIDTH MEASUREMENT

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

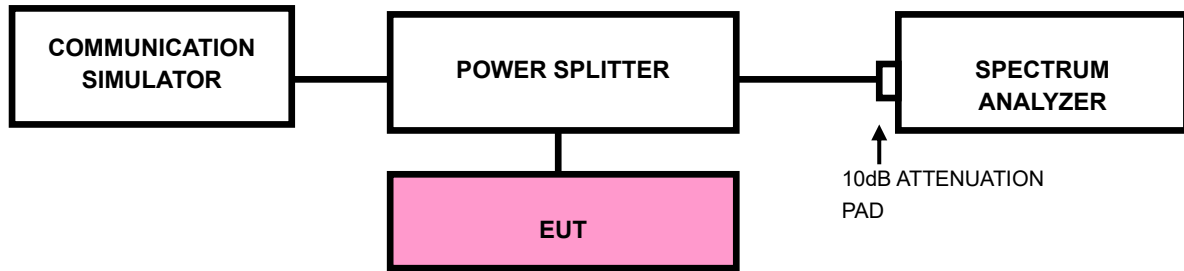
According to FCC Part 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ 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 Part 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 than $43 + 10 \log (P)$ 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.

According to FCC Part 27.53 (n)(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.



3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

- a) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- b) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
- c) Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- e) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- f) Select the average power (RMS) display detector.
- g) Set the number of measurement points to ≥ 1001 .
- h) Use auto-coupled sweep time.
- i) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- j) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- k) 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

For LTE Band4/66

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 is equal to -13dBm .

For: LTE Band42

For mobile operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz .

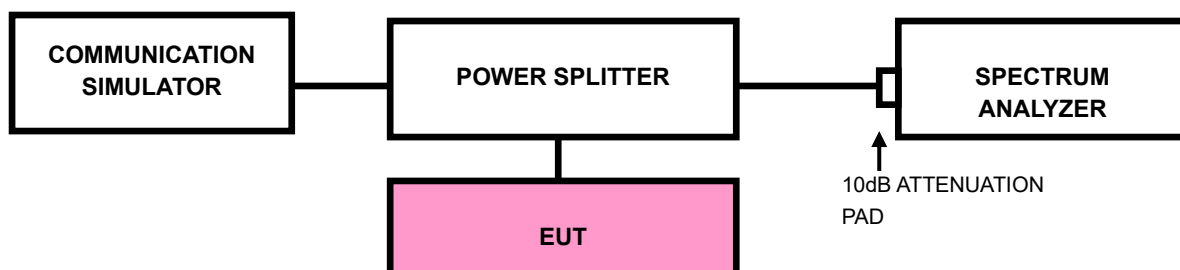
For LTE Band38/41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

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

For LTE Band4/66

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 is equal to -13dBm .

For: LTE Band42

For mobile operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz .

For LTE Band38/41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

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 of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

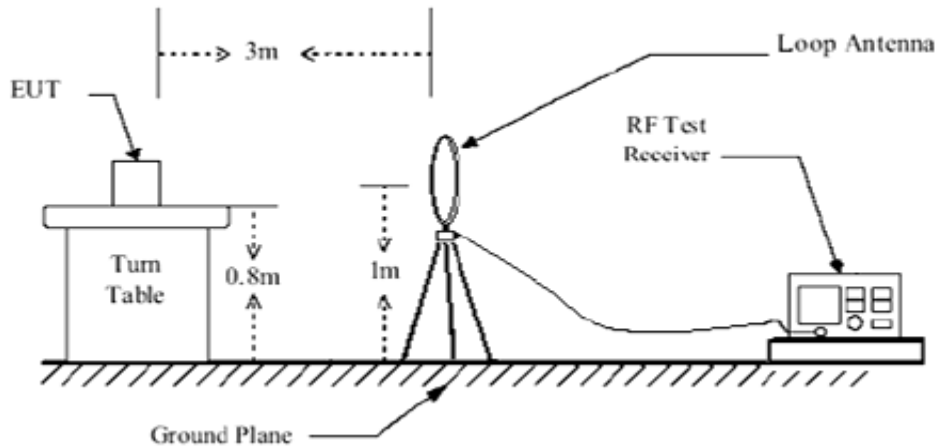
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

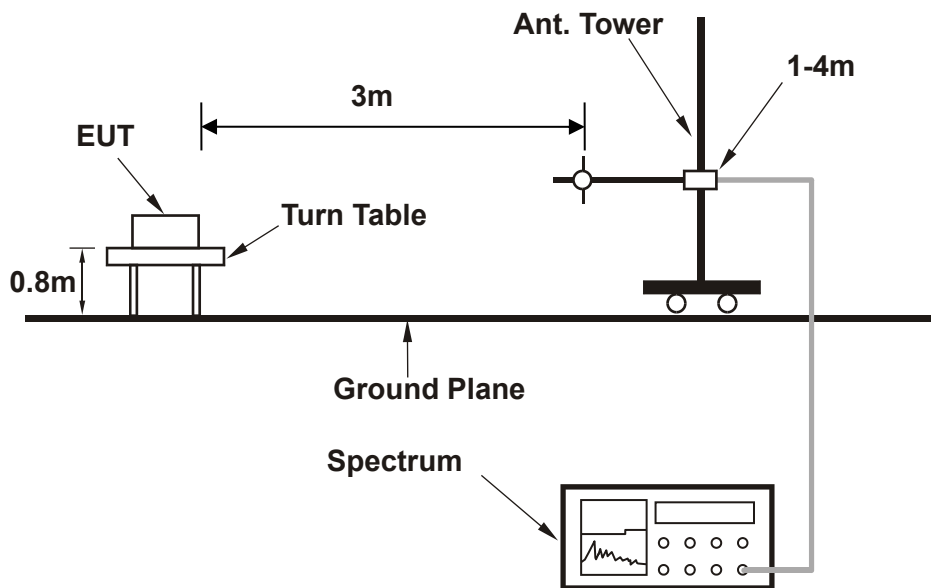


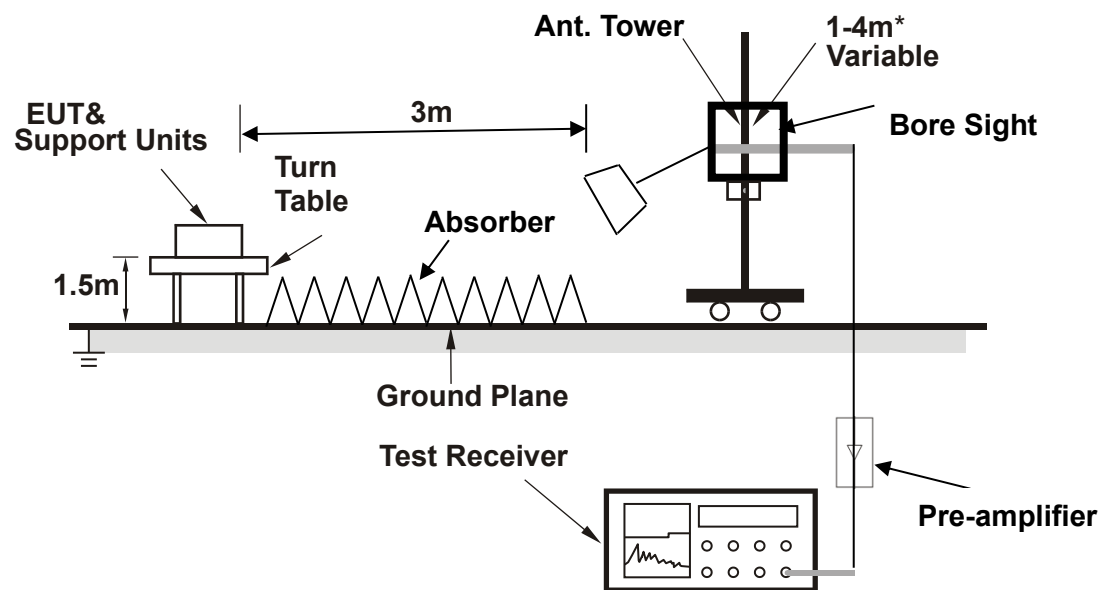
3.6.4 TEST SETUP

< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >





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.

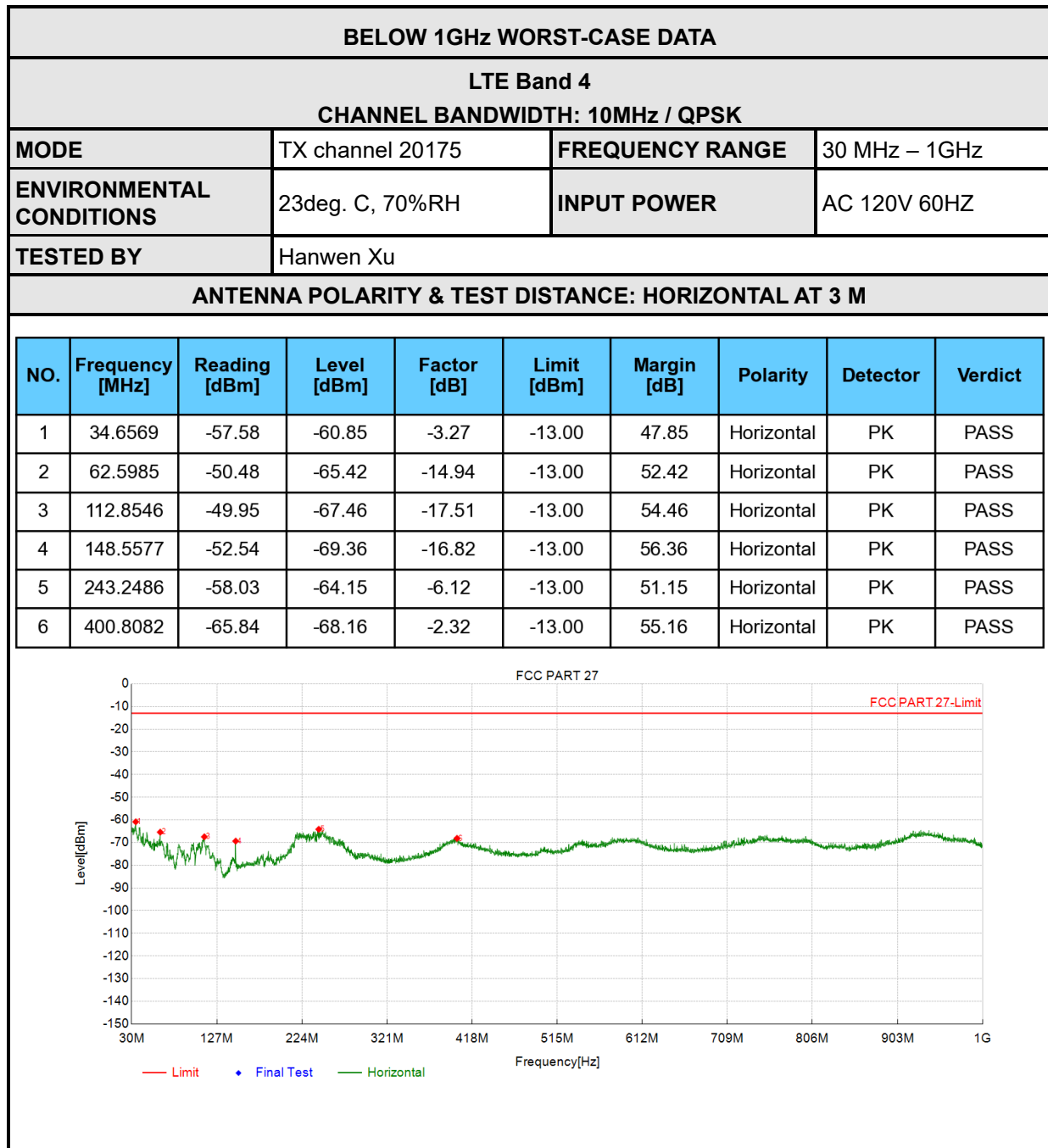
For the actual test configuration, please refer to the attached file (Test Setup Photo).



BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

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.

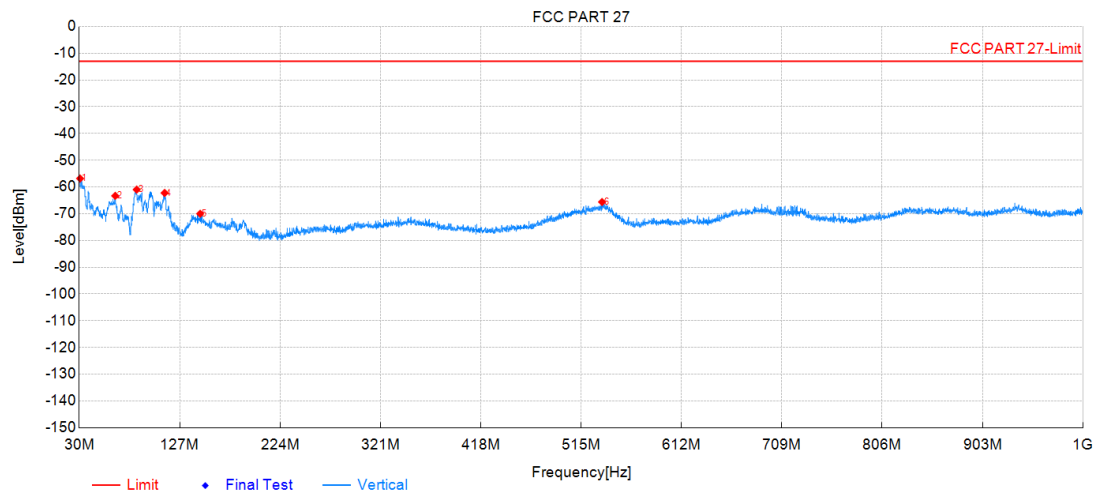




MODE	TX channel 20175	FREQUENCY RANGE	30 MHz – 1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	30.7762	-48.14	-56.82	-8.68	-13.00	43.82	Vertical	PK	PASS
2	64.7329	-44.13	-63.30	-19.17	-13.00	50.30	Vertical	PK	PASS
3	85.4951	-46.25	-60.97	-14.72	-13.00	47.97	Vertical	PK	PASS
4	112.4665	-51.01	-62.22	-11.21	-13.00	49.22	Vertical	PK	PASS
5	146.8114	-60.77	-69.99	-9.22	-13.00	56.99	Vertical	PK	PASS
6	535.2771	-65.57	-65.62	-0.05	-13.00	52.62	Vertical	PK	PASS





ABOVE 1GHz

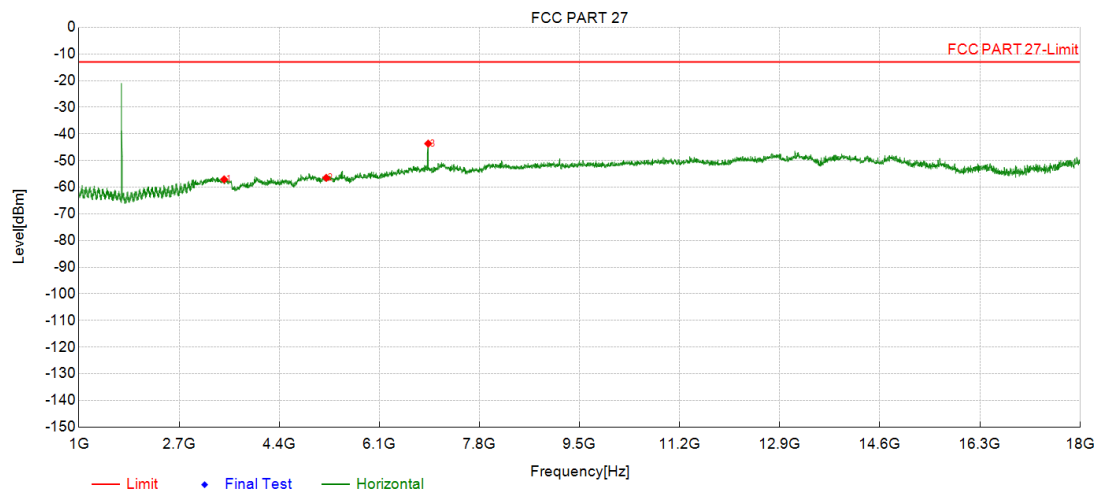
Note: For higher frequency, the emission is too low to be detected.

LTE BAND 4

CHANNEL BANDWIDTH	1.4MHz / QPSK	MODE	TX channel 20175
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3465.093	-54.88	-57.06	-2.18	-13.00	44.06	Horizontal	PK	PASS
2	5199.4399	-59.95	-56.48	3.47	-13.00	43.48	Horizontal	PK	PASS
3	6930.7862	-51.85	-43.61	8.24	-13.00	30.61	Horizontal	PK	PASS





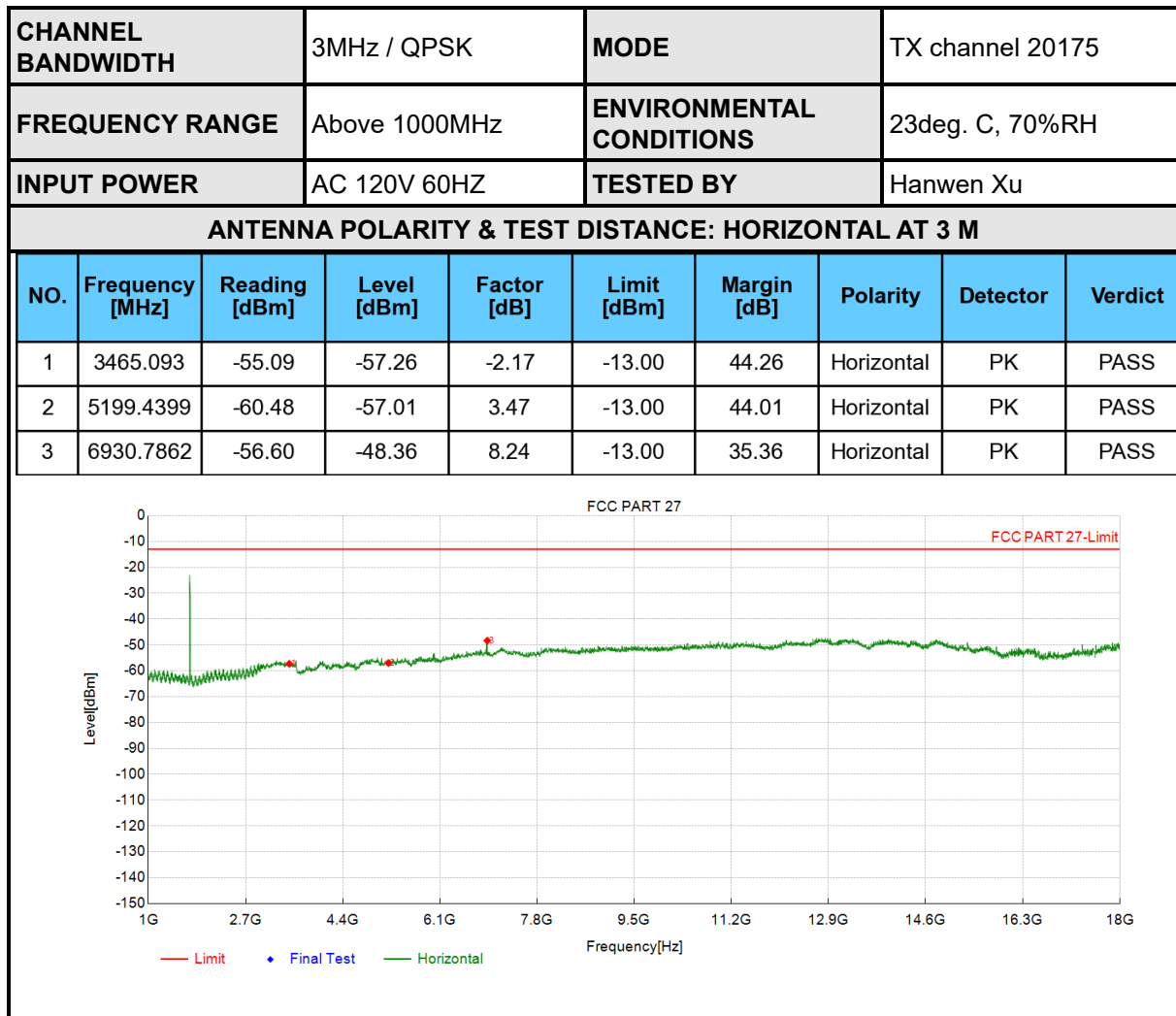
CHANNEL BANDWIDTH		1.4MHz / QPSK		MODE		TX channel 20175			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3465.093	-52.98	-55.20	-2.22	-13.00	42.20	Vertical	PK	PASS
2	5199.4399	-59.14	-55.19	3.95	-13.00	42.19	Vertical	PK	PASS
3	6930.7862	-54.47	-46.04	8.43	-13.00	33.04	Vertical	PK	PASS

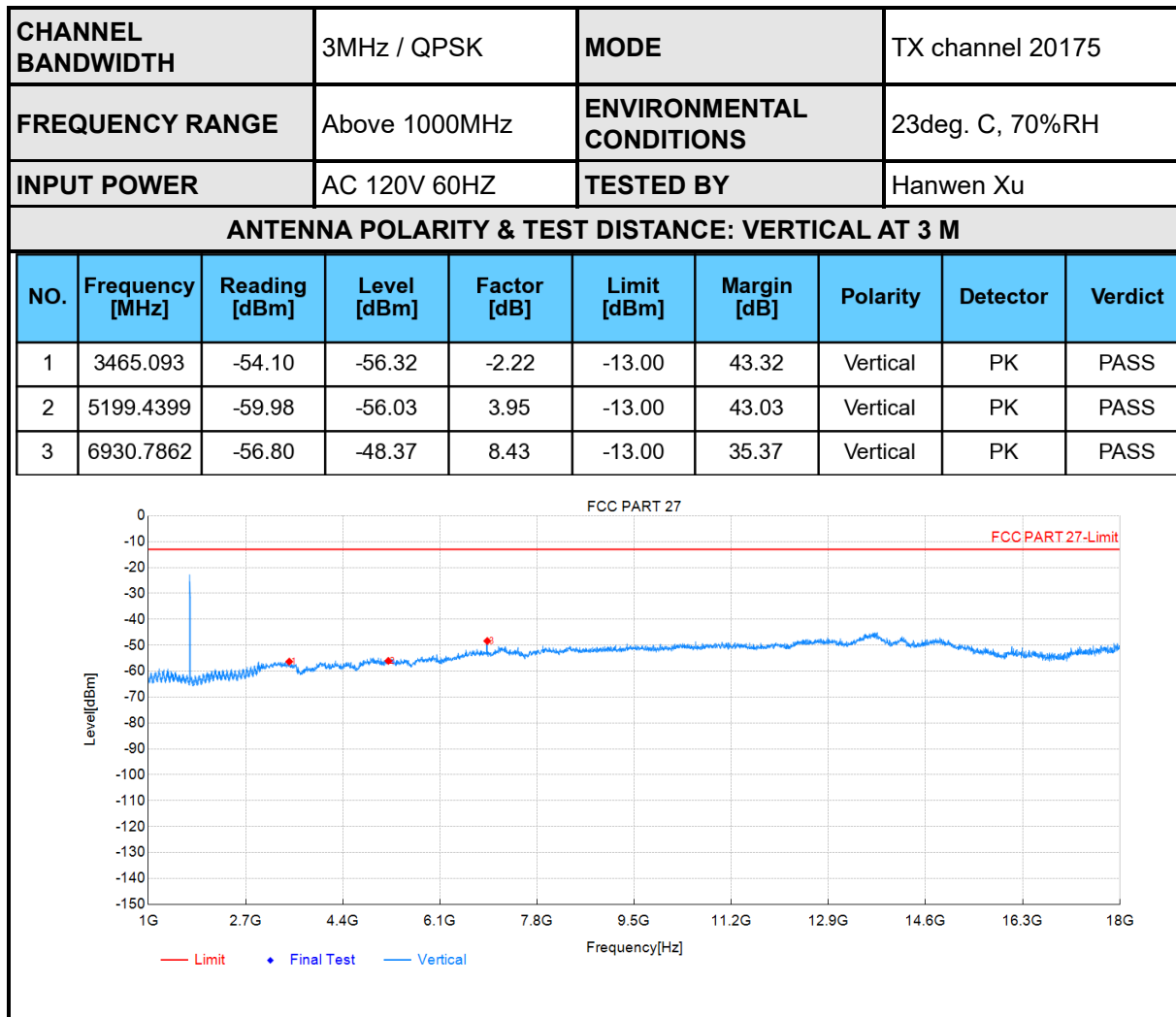
FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit • Final Test — Vertical



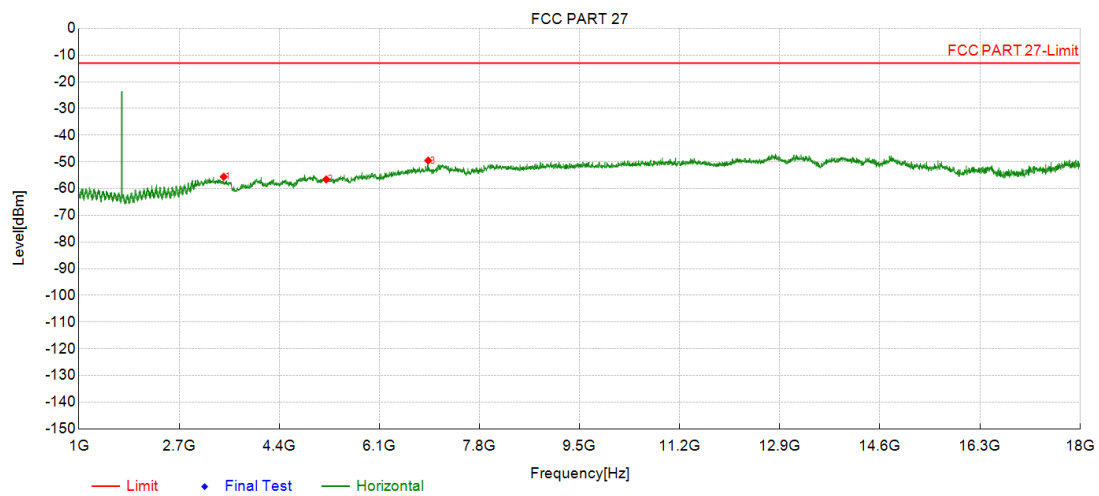




CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 20175
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3459.0918	-53.38	-55.55	-2.17	-13.00	42.55	Horizontal	PK	PASS
2	5199.4399	-60.03	-56.56	3.47	-13.00	43.56	Horizontal	PK	PASS
3	6930.7862	-57.73	-49.49	8.24	-13.00	36.49	Horizontal	PK	PASS





CHANNEL BANDWIDTH		5MHz / QPSK		MODE		TX channel 20175			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3465.093	-54.21	-56.43	-2.22	-13.00	43.43	Vertical	PK	PASS
2	5199.4399	-59.35	-55.40	3.95	-13.00	42.40	Vertical	PK	PASS
3	6930.7862	-59.13	-50.70	8.43	-13.00	37.70	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

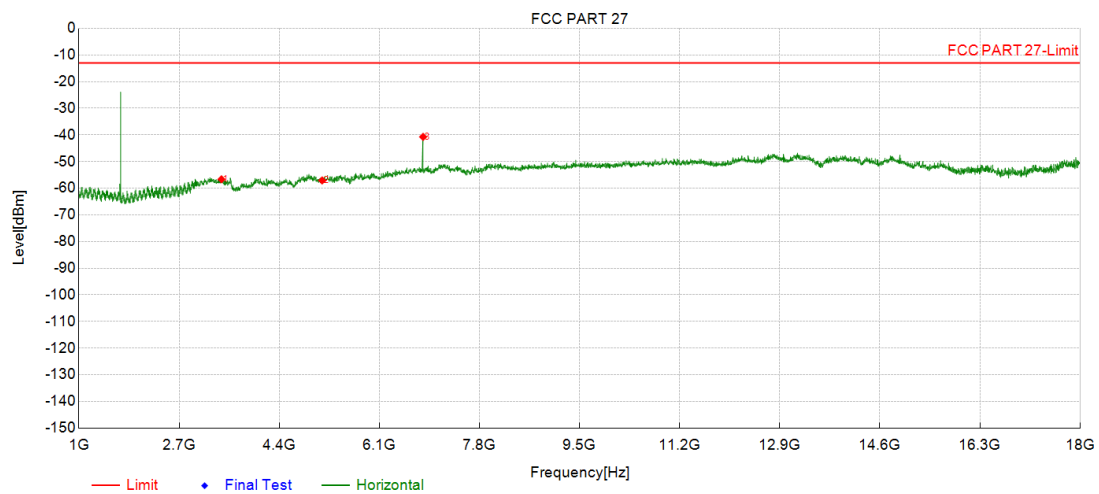
— Limit ◆ Final Test — Vertical



CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20000
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3420.084	-54.49	-56.64	-2.15	-13.00	43.64	Horizontal	PK	PASS
2	5130.4261	-60.69	-57.06	3.63	-13.00	44.06	Horizontal	PK	PASS
3	6843.7688	-48.99	-40.72	8.27	-13.00	27.72	Horizontal	PK	PASS

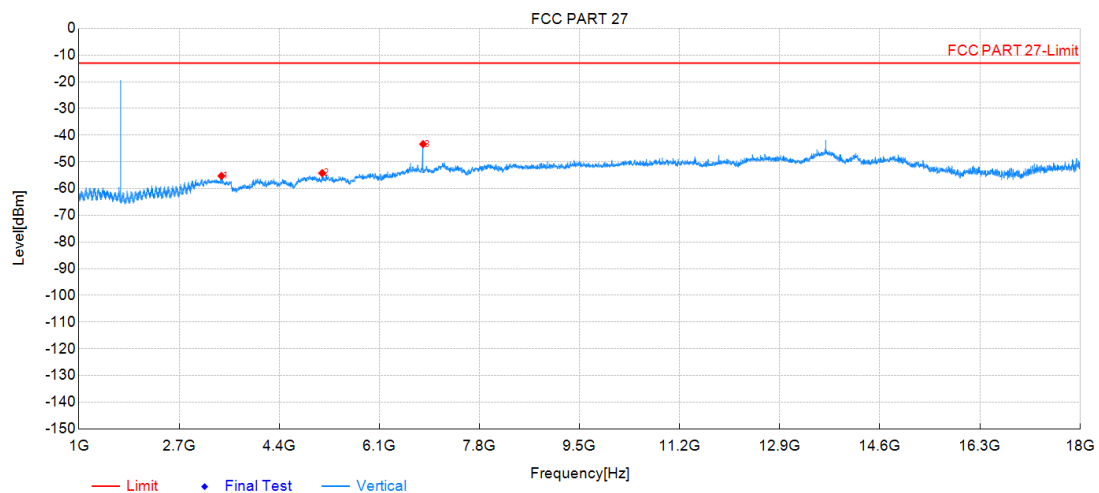




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20000
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3420.084	-53.00	-55.24	-2.24	-13.00	42.24	Vertical	PK	PASS
2	5130.4261	-58.13	-54.18	3.95	-13.00	41.18	Vertical	PK	PASS
3	6843.7688	-51.76	-43.32	8.44	-13.00	30.32	Vertical	PK	PASS



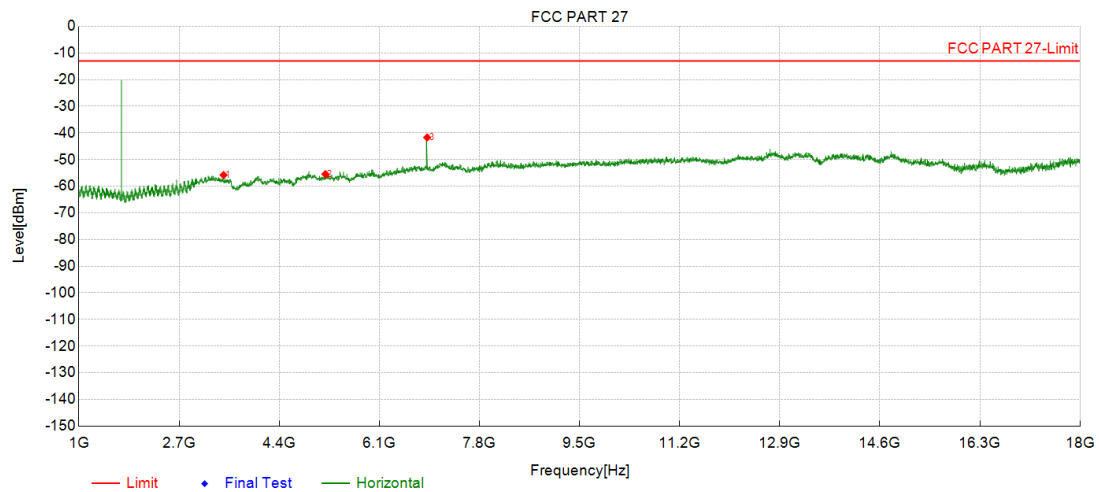


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20175
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3456.0912	-53.62	-55.78	-2.16	-13.00	42.78	Horizontal	PK	PASS
2	5184.4369	-58.95	-55.45	3.50	-13.00	42.45	Horizontal	PK	PASS
3	6912.7826	-49.94	-41.69	8.25	-13.00	28.69	Horizontal	PK	PASS





CHANNEL BANDWIDTH		10MHz / QPSK		MODE		TX channel 20175			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3456.0912	-52.67	-54.89	-2.22	-13.00	41.89	Vertical	PK	PASS
2	5184.4369	-56.95	-53.00	3.95	-13.00	40.00	Vertical	PK	PASS
3	6912.7826	-53.04	-44.60	8.44	-13.00	31.60	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit • Final Test — Vertical

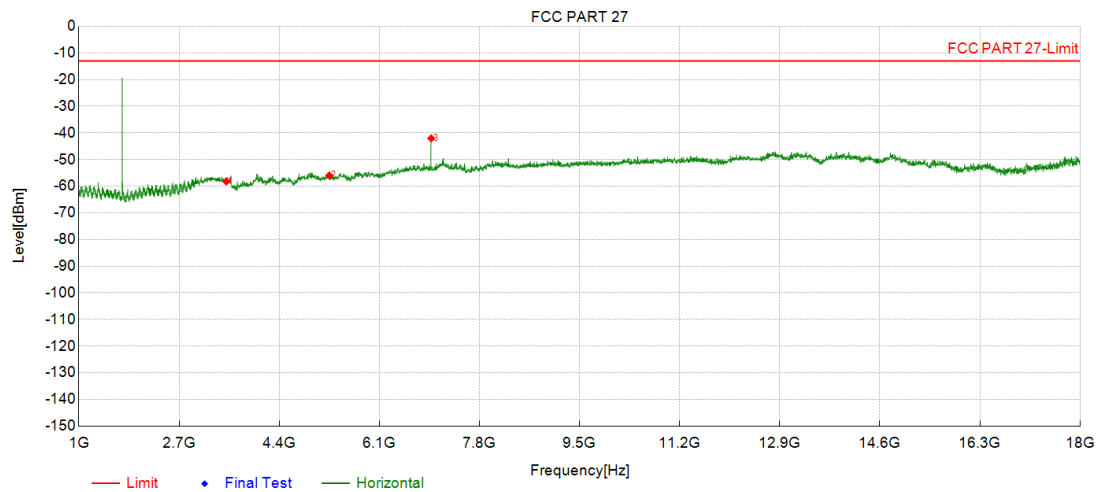


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 20350
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3501.1002	-55.99	-58.18	-2.19	-13.00	45.18	Horizontal	PK	PASS
2	5250.4501	-59.60	-55.97	3.63	-13.00	42.97	Horizontal	PK	PASS
3	6981.7964	-50.23	-42.01	8.22	-13.00	29.01	Horizontal	PK	PASS





CHANNEL BANDWIDTH		10MHz / QPSK		MODE		TX channel 20350			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3501.1002	-55.81	-58.02	-2.21	-13.00	45.02	Vertical	PK	PASS
2	5235.4471	-57.30	-53.36	3.94	-13.00	40.36	Vertical	PK	PASS
3	6981.7964	-53.66	-45.23	8.43	-13.00	32.23	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit • Final Test — Vertical

FCC PART 27-Limit

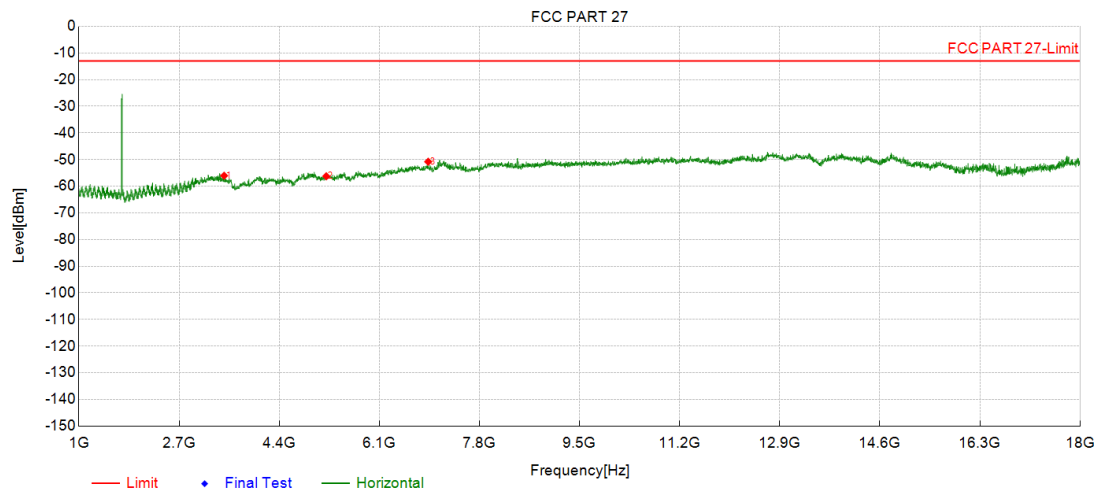


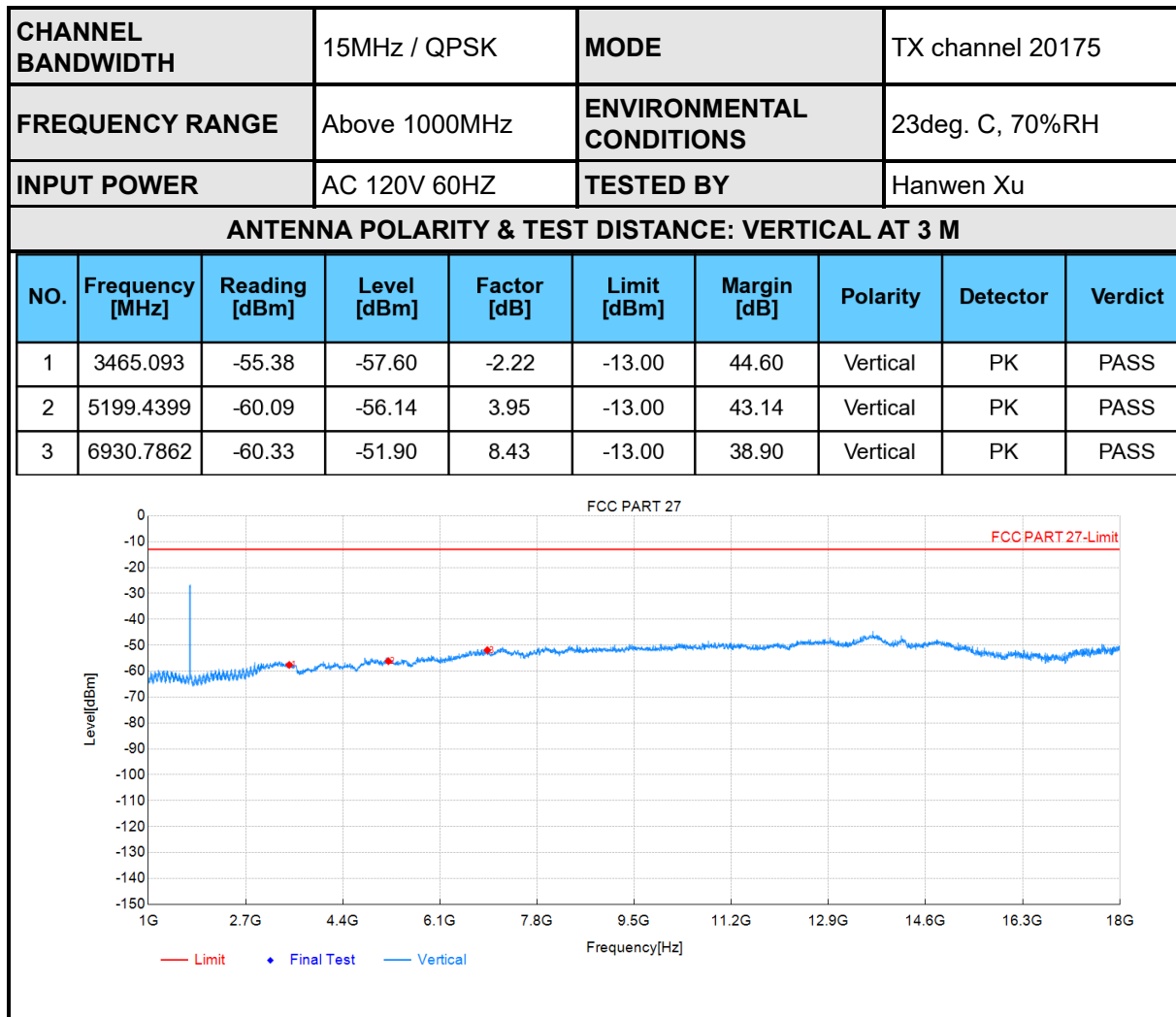
BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 20175
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3465.093	-53.88	-56.05	-2.17	-13.00	43.05	Horizontal	PK	PASS
2	5199.4399	-59.73	-56.26	3.47	-13.00	43.26	Horizontal	PK	PASS
3	6930.7862	-59.04	-50.80	8.24	-13.00	37.80	Horizontal	PK	PASS





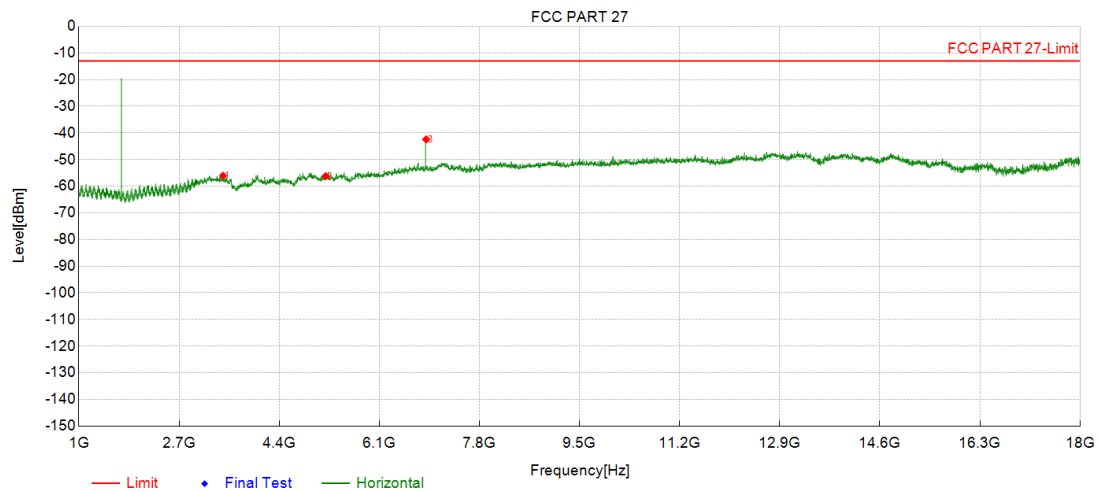


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 20175
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3447.0894	-53.88	-56.05	-2.17	-13.00	43.05	Horizontal	PK	PASS
2	5184.4369	-59.77	-56.27	3.50	-13.00	43.27	Horizontal	PK	PASS
3	6894.779	-50.66	-42.41	8.25	-13.00	29.41	Horizontal	PK	PASS





CHANNEL BANDWIDTH		20MHz / QPSK		MODE		TX channel 20175			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	3447.0894	-52.99	-55.22	-2.23	-13.00	42.22	Vertical	PK	PASS
2	5172.4345	-56.38	-52.43	3.95	-13.00	39.43	Vertical	PK	PASS
3	6894.779	-53.87	-45.44	8.43	-13.00	32.44	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit ♦ Final Test — Vertical

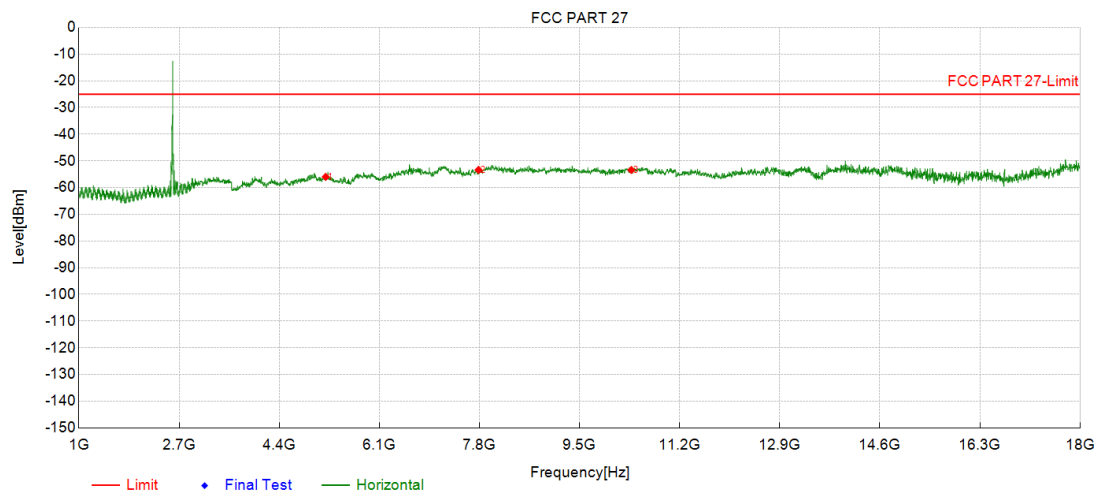
FCC PART 27-Limit

**LTE BAND 38**

CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 38000
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-59.46	-55.98	3.48	-25.00	30.98	Horizontal	PK	PASS
2	7785.5571	-62.45	-53.36	9.09	-25.00	28.36	Horizontal	PK	PASS
3	10380.4761	-66.48	-53.41	13.07	-25.00	28.41	Horizontal	PK	PASS





CHANNEL BANDWIDTH		5MHz / QPSK		MODE		TX channel 38000			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-59.63	-55.68	3.95	-25.00	30.68	Vertical	PK	PASS
2	7785.5571	-62.96	-52.92	10.04	-25.00	27.92	Vertical	PK	PASS
3	10380.4761	-65.26	-51.57	13.69	-25.00	26.57	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit ♦ Final Test — Vertical



CHANNEL BANDWIDTH		10MHz / QPSK		MODE		TX channel 38000			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-59.31	-55.82	3.49	-25.00	30.82	Horizontal	PK	PASS
2	7785.5571	-63.25	-54.17	9.08	-25.00	29.17	Horizontal	PK	PASS
3	10380.4761	-65.71	-52.64	13.07	-25.00	27.64	Horizontal	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit ♦ Final Test — Horizontal



CHANNEL BANDWIDTH		10MHz / QPSK		MODE		TX channel 38000			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-60.33	-56.38	3.95	-25.00	31.38	Vertical	PK	PASS
2	7785.5571	-62.17	-52.16	10.01	-25.00	27.16	Vertical	PK	PASS
3	10361.6723	-59.02	-45.32	13.70	-25.00	20.32	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

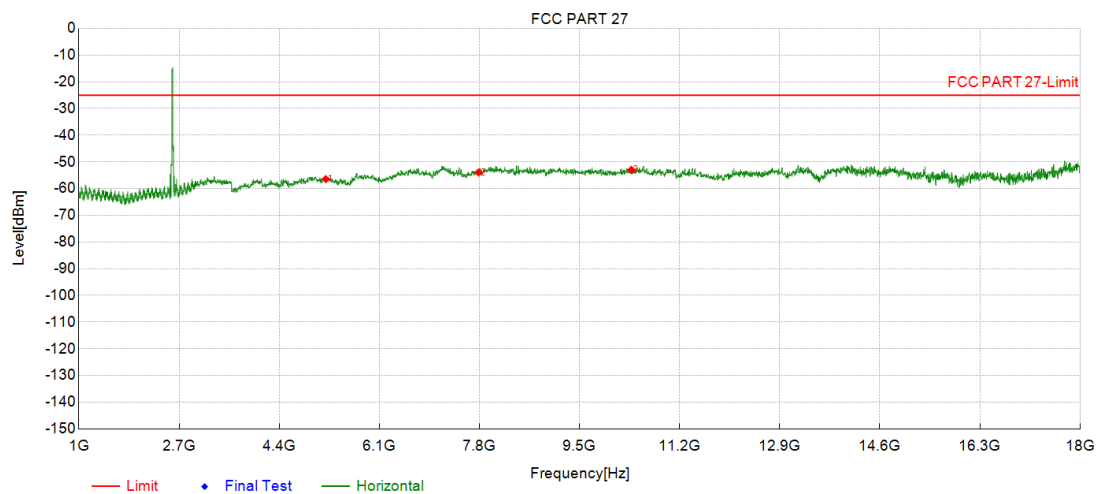
— Limit ♦ Final Test — Vertical



CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 38000
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-59.94	-56.45	3.49	-25.00	31.45	Horizontal	PK	PASS
2	7785.5571	-63.03	-53.95	9.08	-25.00	28.95	Horizontal	PK	PASS
3	10380.4761	-66.01	-52.94	13.07	-25.00	27.94	Horizontal	PK	PASS





CHANNEL BANDWIDTH		15MHz / QPSK		MODE		TX channel 38000			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-59.88	-55.93	3.95	-25.00	30.93	Vertical	PK	PASS
2	7785.5571	-62.41	-52.40	10.01	-25.00	27.40	Vertical	PK	PASS
3	10380.4761	-66.40	-52.71	13.69	-25.00	27.71	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit ♦ Final Test — Vertical

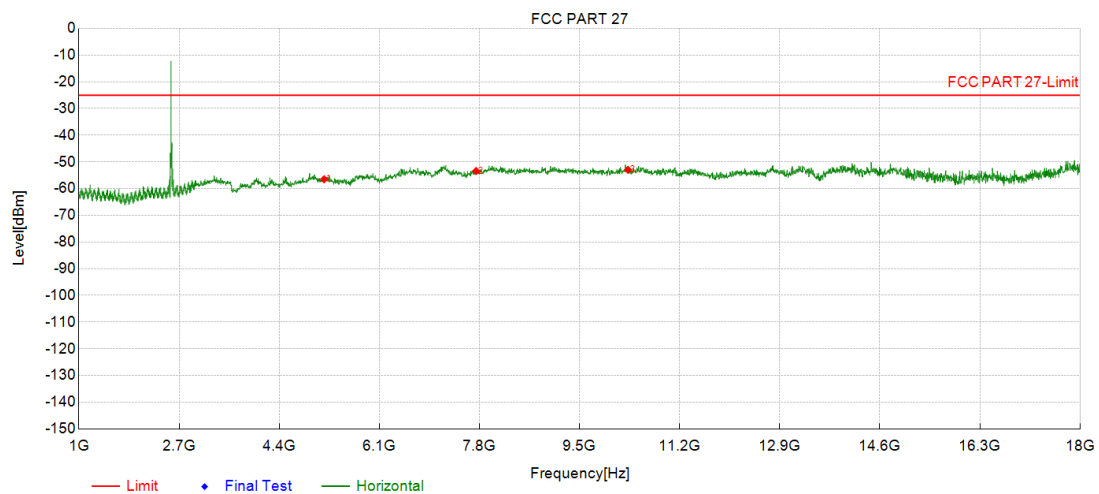
FCC PART 27-Limit



CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 37850
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5162.4325	-60.04	-56.49	3.55	-25.00	31.49	Horizontal	PK	PASS
2	7743.2486	-62.38	-53.40	8.98	-25.00	28.40	Horizontal	PK	PASS
3	10324.0648	-66.18	-52.97	13.21	-25.00	27.97	Horizontal	PK	PASS

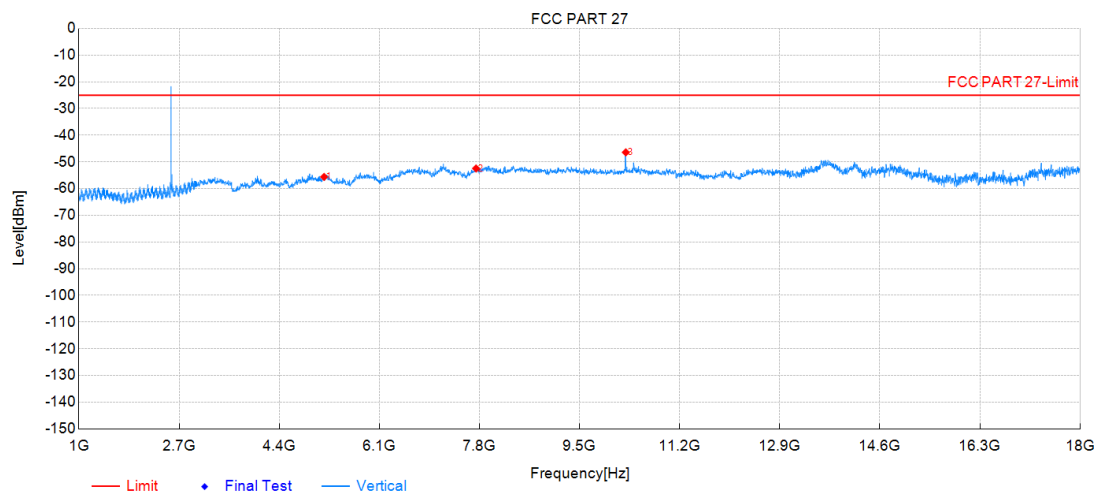




CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 37850
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5162.4325	-59.56	-55.61	3.95	-25.00	30.61	Vertical	PK	PASS
2	7743.2486	-62.15	-52.45	9.70	-25.00	27.45	Vertical	PK	PASS
3	10286.4573	-60.15	-46.41	13.74	-25.00	21.41	Vertical	PK	PASS



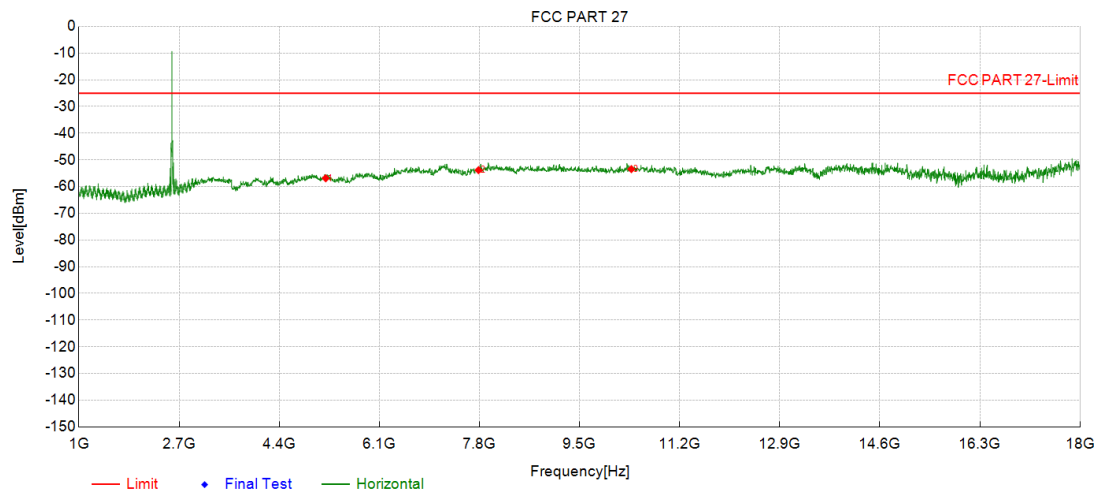


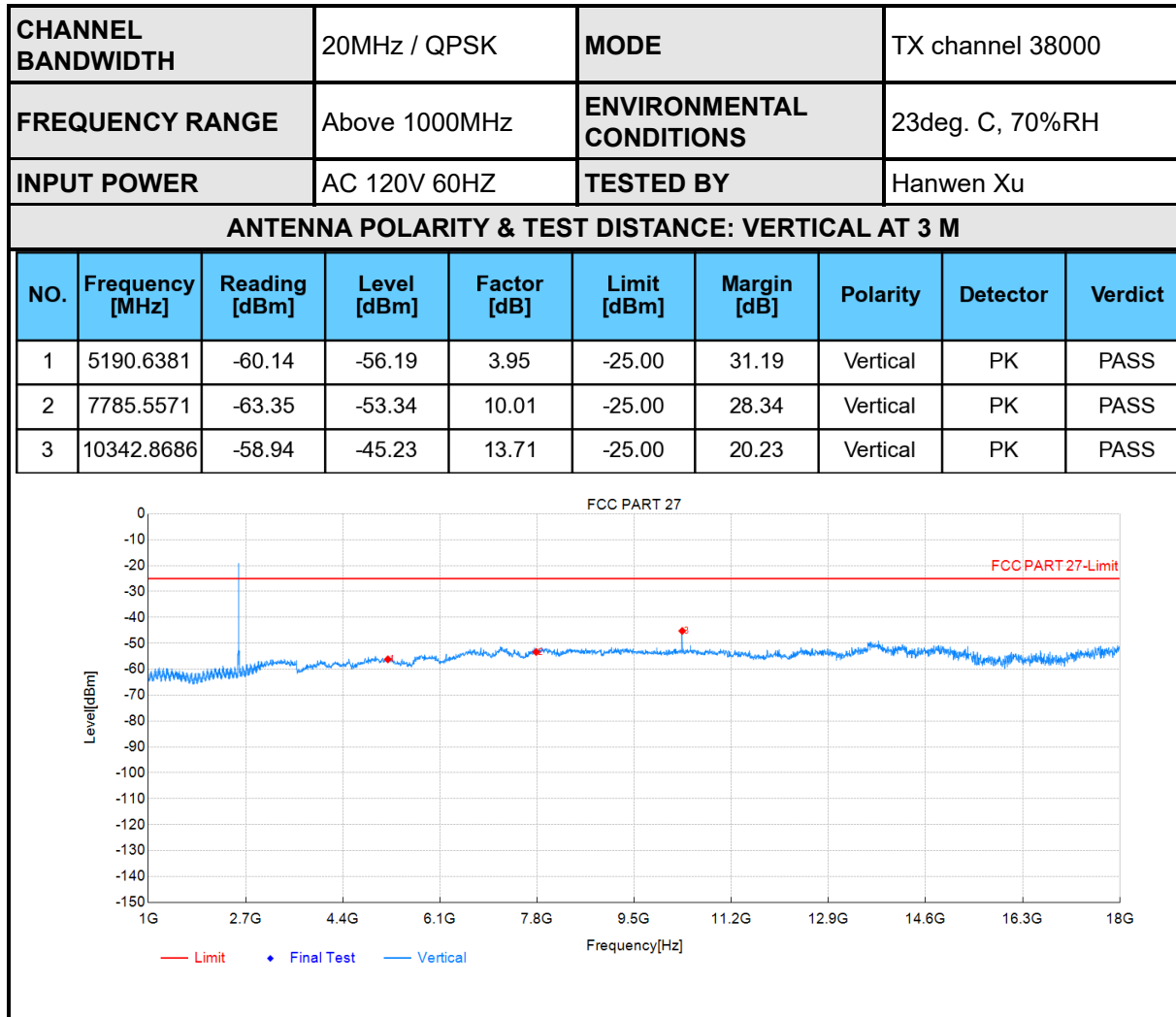
BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 38000
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5190.6381	-60.36	-56.87	3.49	-25.00	31.87	Horizontal	PK	PASS
2	7785.5571	-62.91	-53.82	9.09	-25.00	28.82	Horizontal	PK	PASS
3	10380.4761	-66.51	-53.43	13.08	-25.00	28.43	Horizontal	PK	PASS





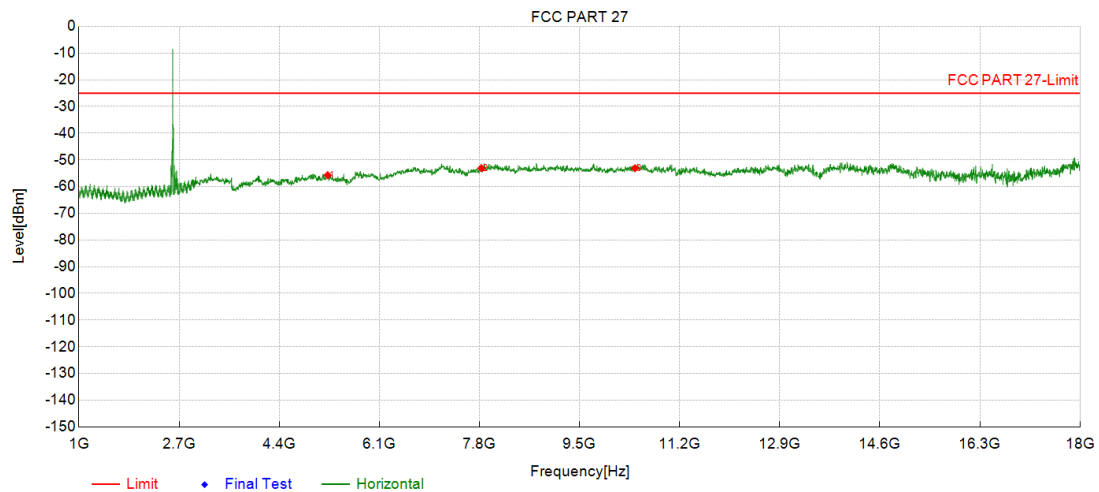


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 38150
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5223.5447	-59.26	-55.72	3.54	-25.00	30.72	Horizontal	PK	PASS
2	7832.5665	-62.40	-53.09	9.31	-25.00	28.09	Horizontal	PK	PASS
3	10441.5883	-66.36	-53.13	13.23	-25.00	28.13	Horizontal	PK	PASS





CHANNEL BANDWIDTH		20MHz / QPSK		MODE		TX channel 38150			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5223.5447	-59.95	-56.01	3.94	-25.00	31.01	Vertical	PK	PASS
2	7832.5665	-63.57	-53.39	10.18	-25.00	28.39	Vertical	PK	PASS
3	10403.9808	-58.50	-44.81	13.69	-25.00	19.81	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit ♦ Final Test — Vertical

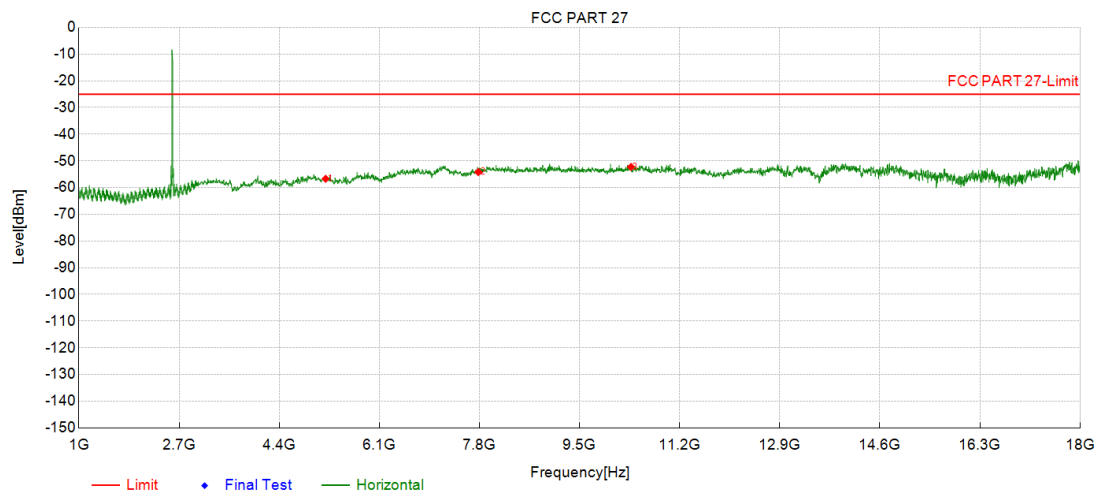


LTE BAND 41

CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-60.18	-56.68	3.50	-25.00	31.68	Horizontal	PK	PASS
2	7781.7564	-63.25	-54.17	9.08	-25.00	29.17	Horizontal	PK	PASS
3	10374.2749	-65.34	-52.25	13.09	-25.00	27.25	Horizontal	PK	PASS





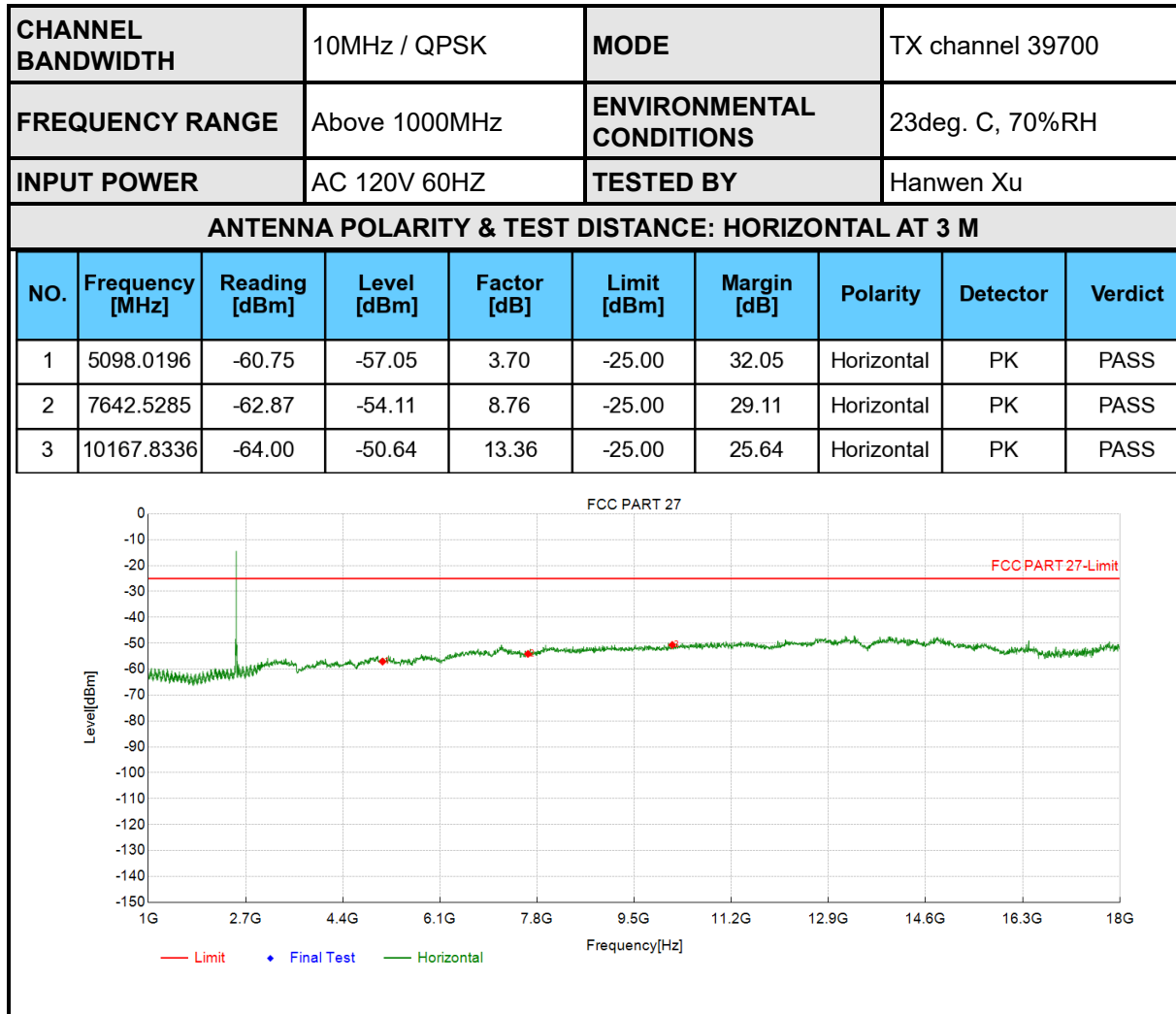
CHANNEL BANDWIDTH		5MHz / QPSK		MODE		TX channel 40620			
FREQUENCY RANGE		Above 1000MHz		ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			
INPUT POWER		AC 120V 60HZ		TESTED BY		Hanwen Xu			
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M									
NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-60.58	-56.63	3.95	-25.00	31.63	Vertical	PK	PASS
2	7781.7564	-61.90	-51.92	9.98	-25.00	26.92	Vertical	PK	PASS
3	10364.6729	-58.25	-44.54	13.71	-25.00	19.54	Vertical	PK	PASS

FCC PART 27

Level[dBm]

Frequency[Hz]

— Limit • Final Test — Vertical

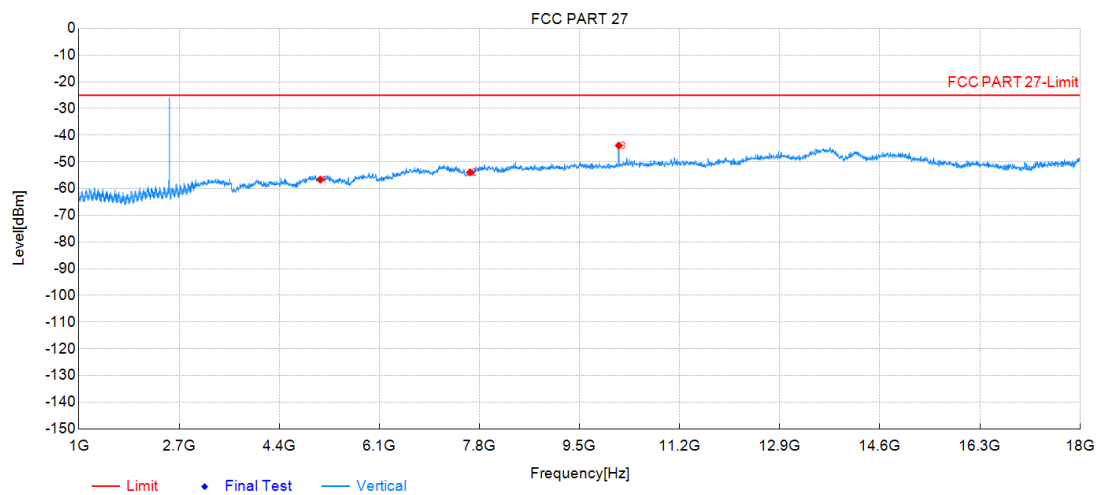




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 39700
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5098.0196	-60.59	-56.63	3.96	-25.00	31.63	Vertical	PK	PASS
2	7642.5285	-62.81	-53.91	8.90	-25.00	28.91	Vertical	PK	PASS
3	10167.8336	-57.53	-43.87	13.66	-25.00	18.87	Vertical	PK	PASS



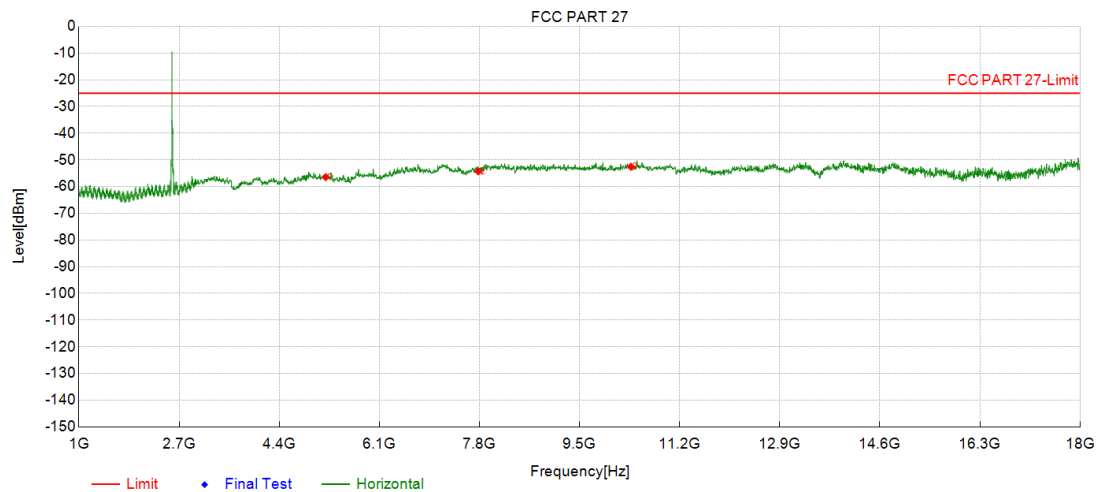


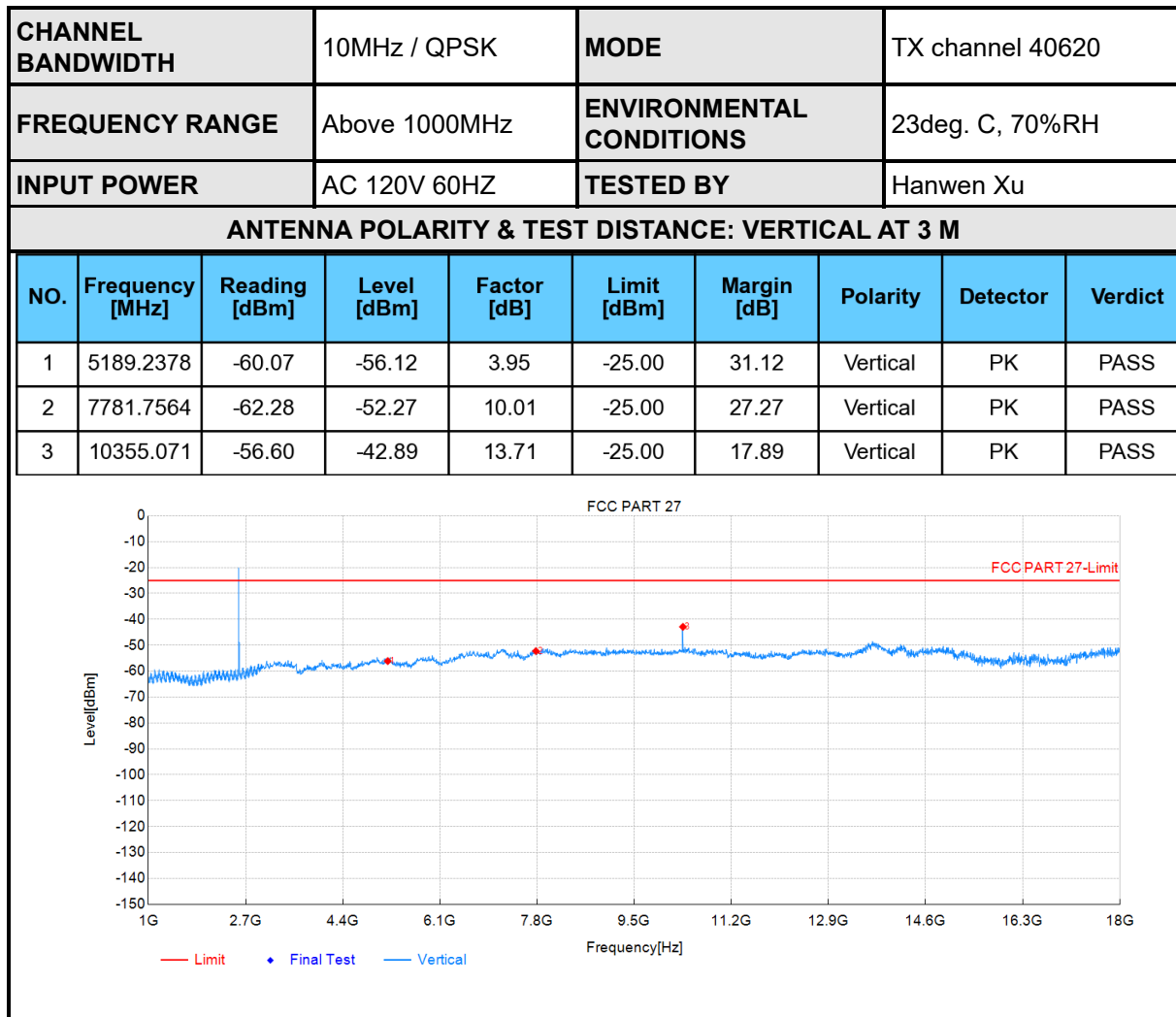
BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-59.92	-56.44	3.48	-25.00	31.44	Horizontal	PK	PASS
2	7781.7564	-63.36	-54.28	9.08	-25.00	29.28	Horizontal	PK	PASS
3	10374.2749	-65.63	-52.54	13.09	-25.00	27.54	Horizontal	PK	PASS





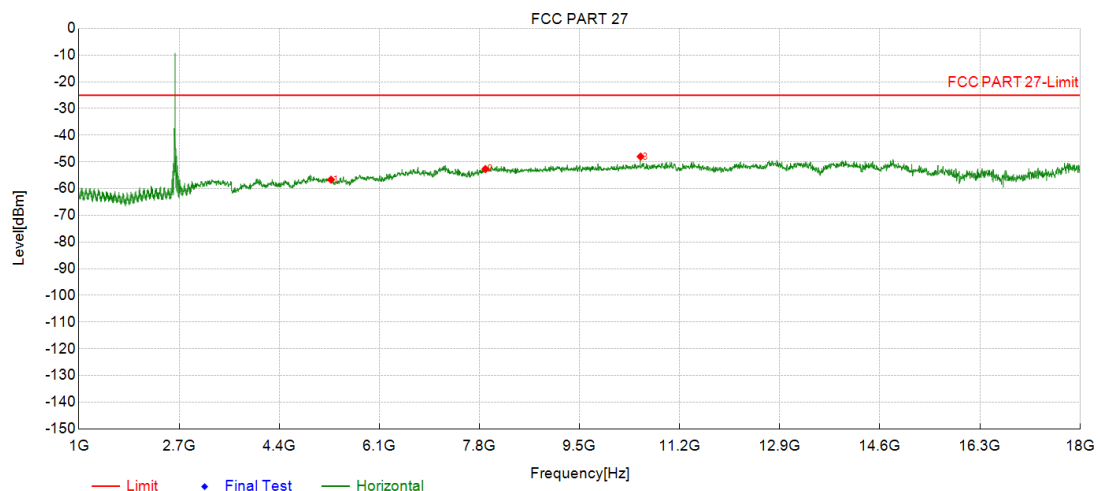


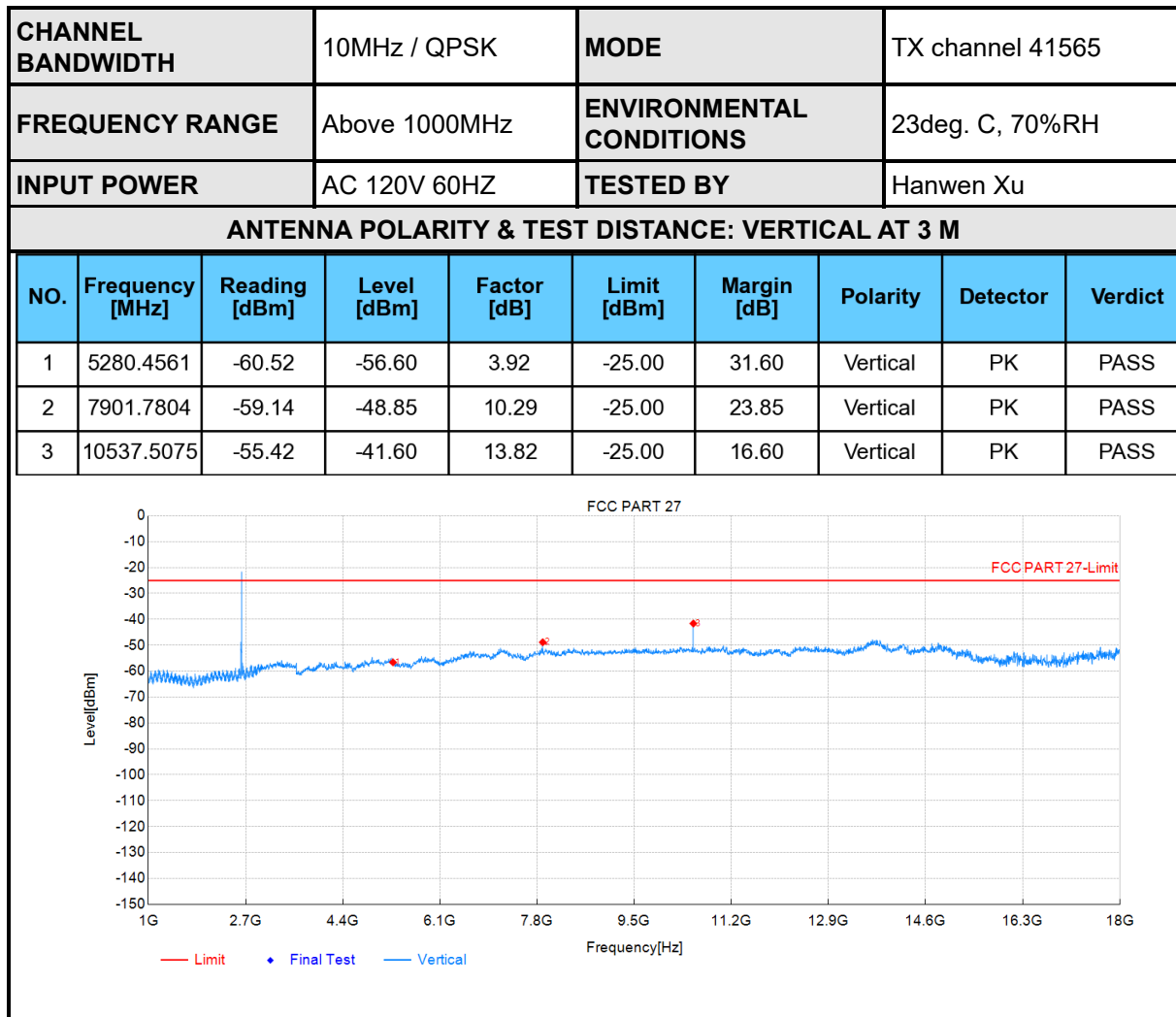
BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 41565
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5280.4561	-60.37	-56.65	3.72	-25.00	31.65	Horizontal	PK	PASS
2	7901.7804	-62.43	-52.69	9.74	-25.00	27.69	Horizontal	PK	PASS
3	10537.5075	-61.71	-48.00	13.71	-25.00	23.00	Horizontal	PK	PASS



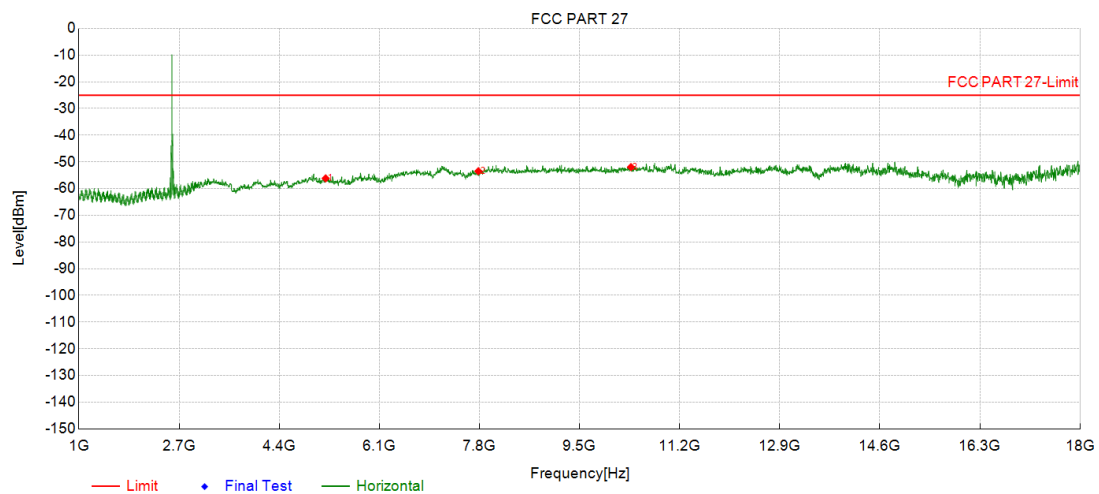




CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-59.64	-56.16	3.48	-25.00	31.16	Horizontal	PK	PASS
2	7781.7564	-62.54	-53.47	9.07	-25.00	28.47	Horizontal	PK	PASS
3	10374.2749	-65.01	-51.93	13.08	-25.00	26.93	Horizontal	PK	PASS

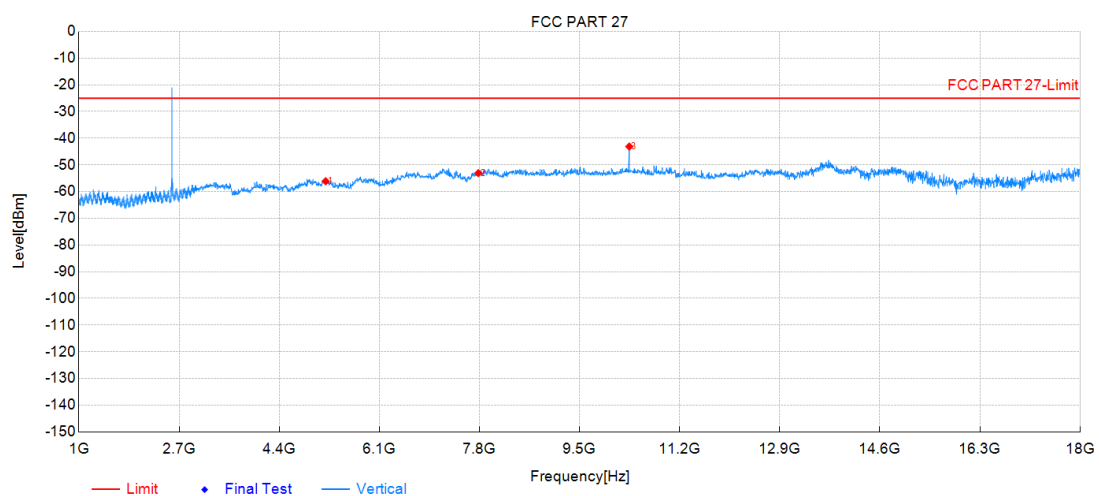




CHANNEL BANDWIDTH	15MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-60.07	-56.12	3.95	-25.00	31.12	Vertical	PK	PASS
2	7781.7564	-63.04	-53.06	9.98	-25.00	28.06	Vertical	PK	PASS
3	10345.4691	-56.83	-43.11	13.72	-25.00	18.11	Vertical	PK	PASS

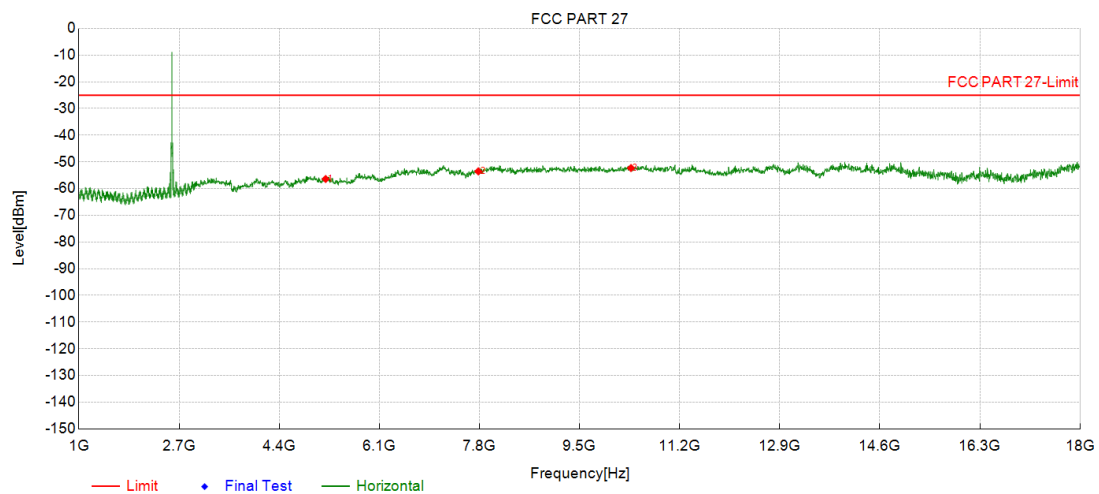


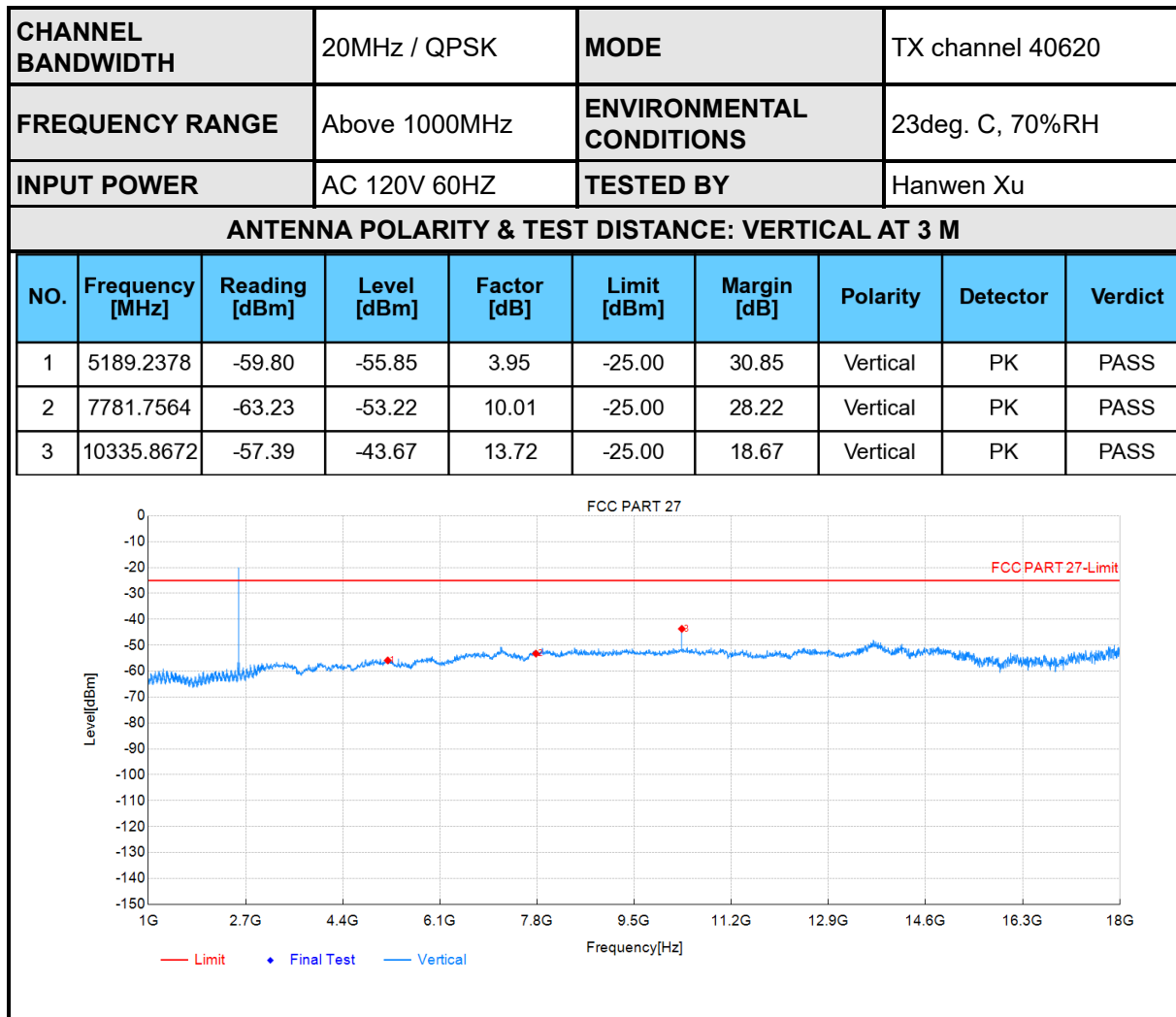


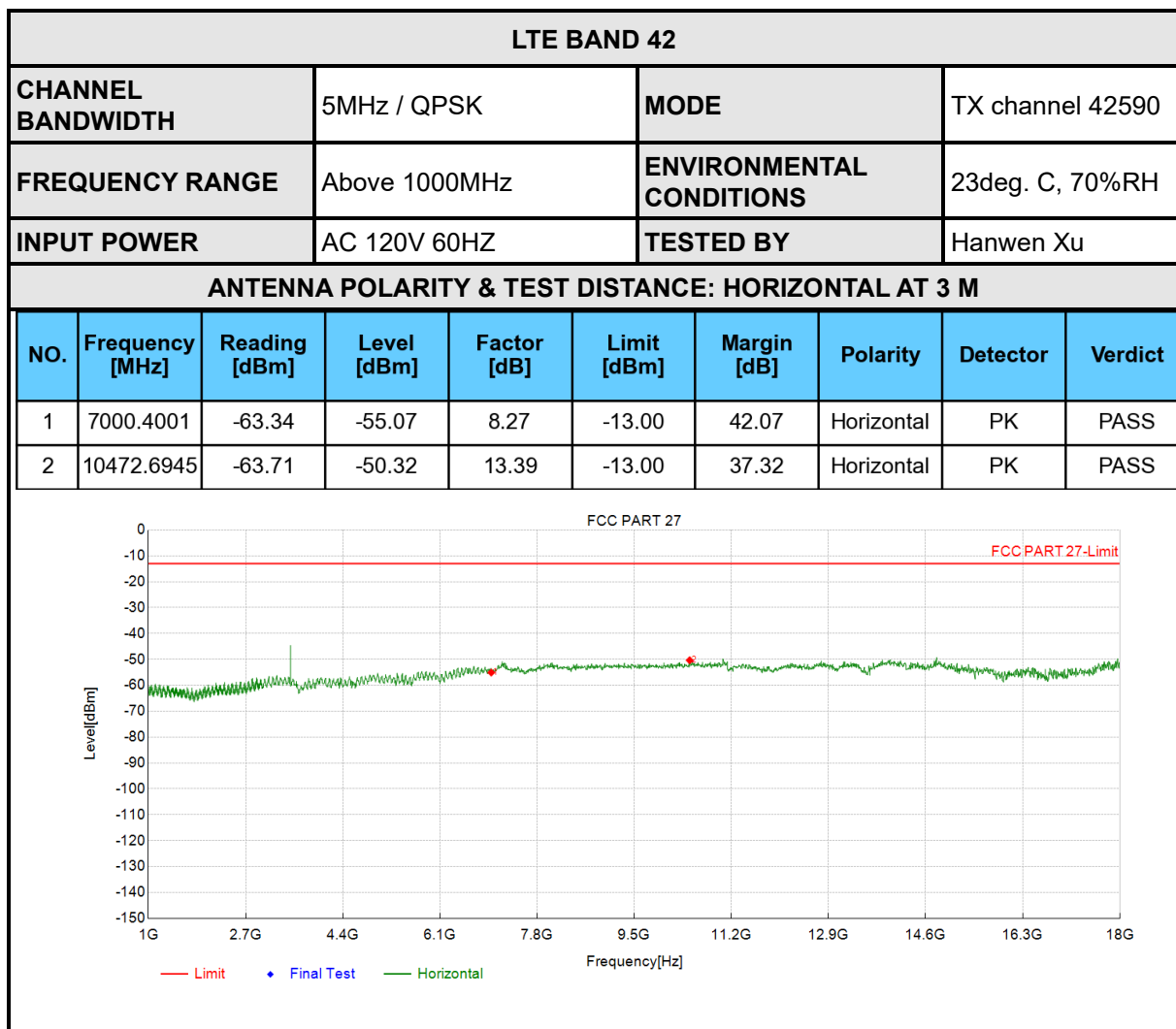
CHANNEL BANDWIDTH	20MHz / QPSK	MODE	TX channel 40620
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	5189.2378	-59.88	-56.40	3.48	-25.00	31.40	Horizontal	PK	PASS
2	7781.7564	-62.61	-53.53	9.08	-25.00	28.53	Horizontal	PK	PASS
3	10374.2749	-65.37	-52.29	13.08	-25.00	27.29	Horizontal	PK	PASS





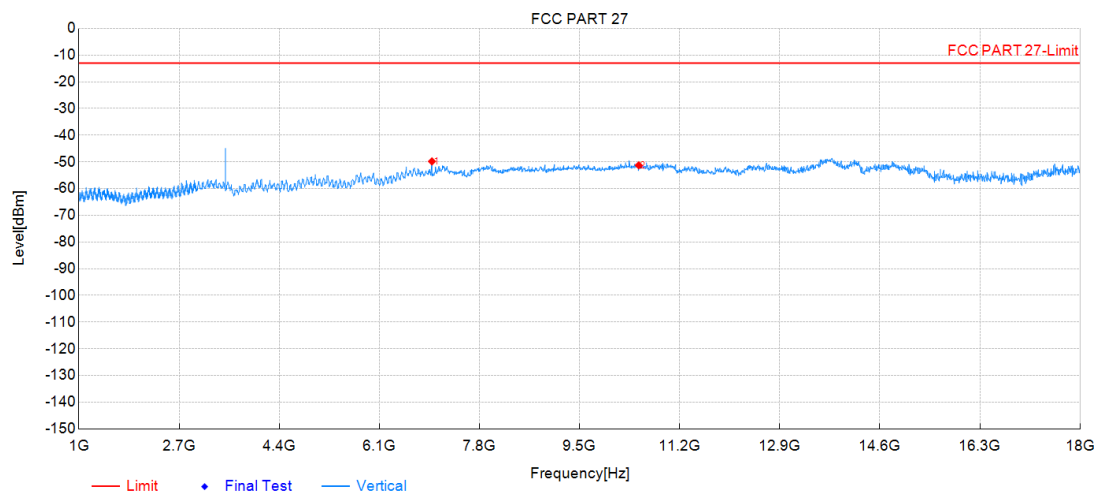


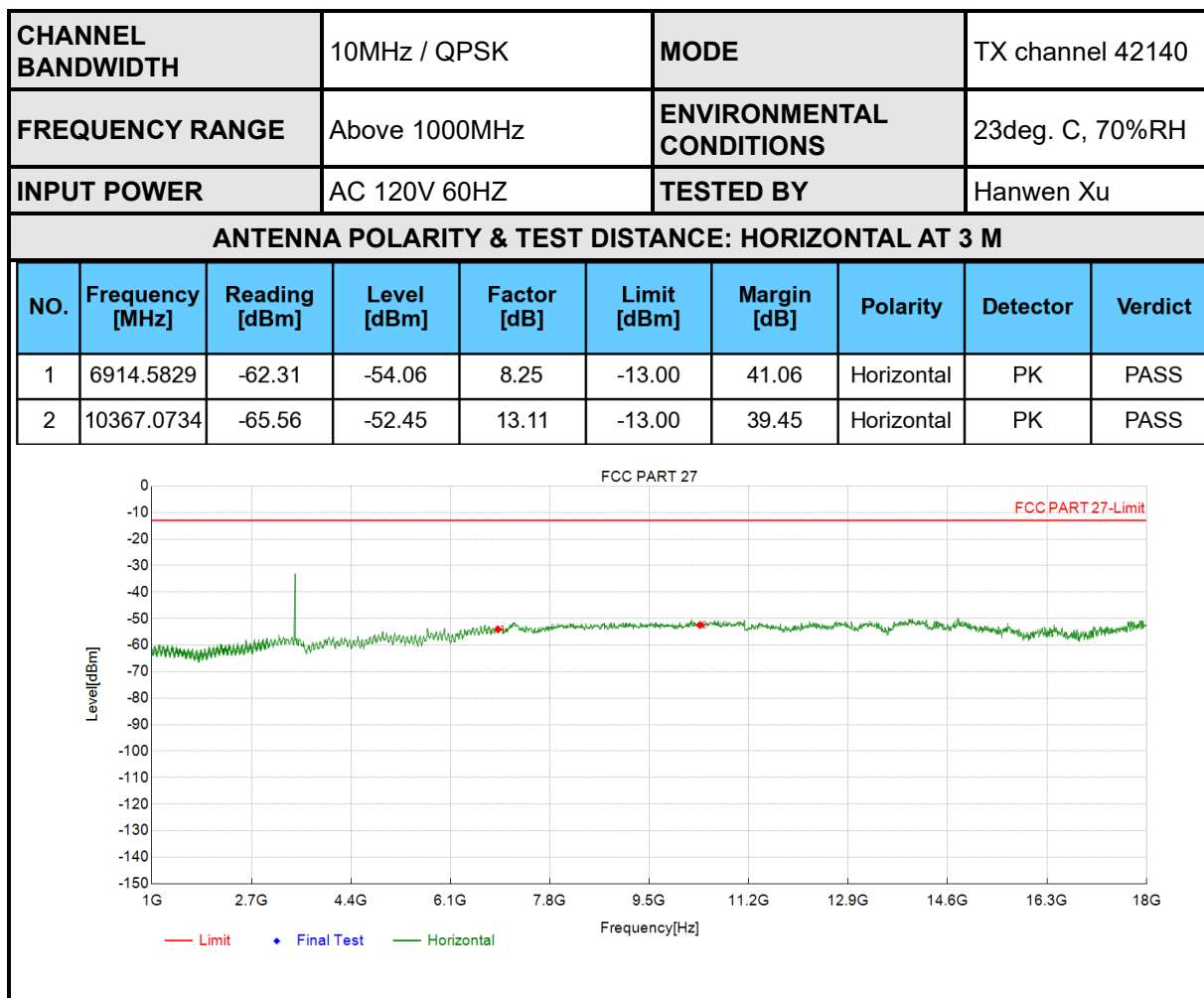


CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 42590
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	6993.7988	-58.23	-49.80	8.43	-13.00	36.80	Vertical	PK	PASS
2	10505.7011	-65.05	-51.26	13.79	-13.00	38.26	Vertical	PK	PASS



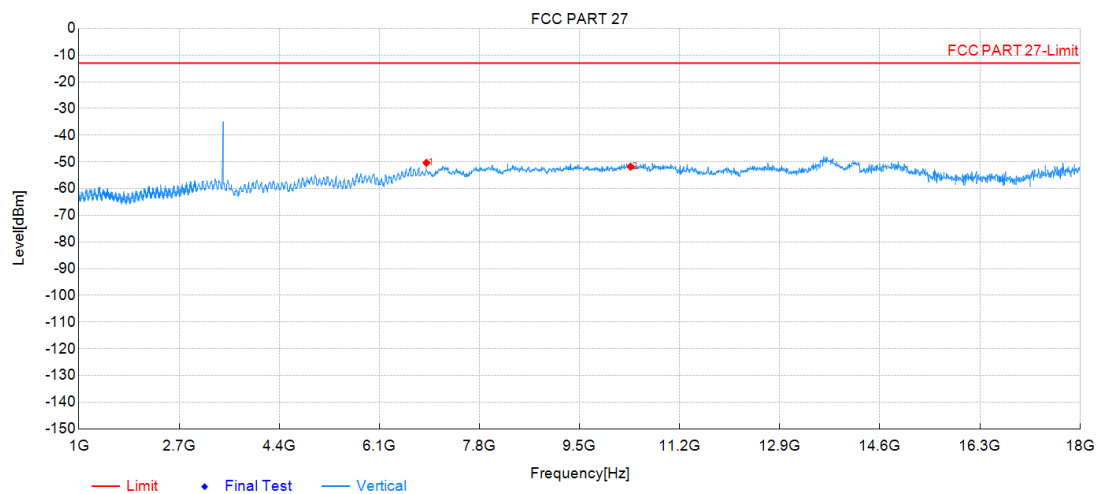




CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 42140
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	6901.3803	-58.77	-50.33	8.44	-13.00	37.33	Vertical	PK	PASS
2	10367.0734	-65.49	-51.79	13.70	-13.00	38.79	Vertical	PK	PASS



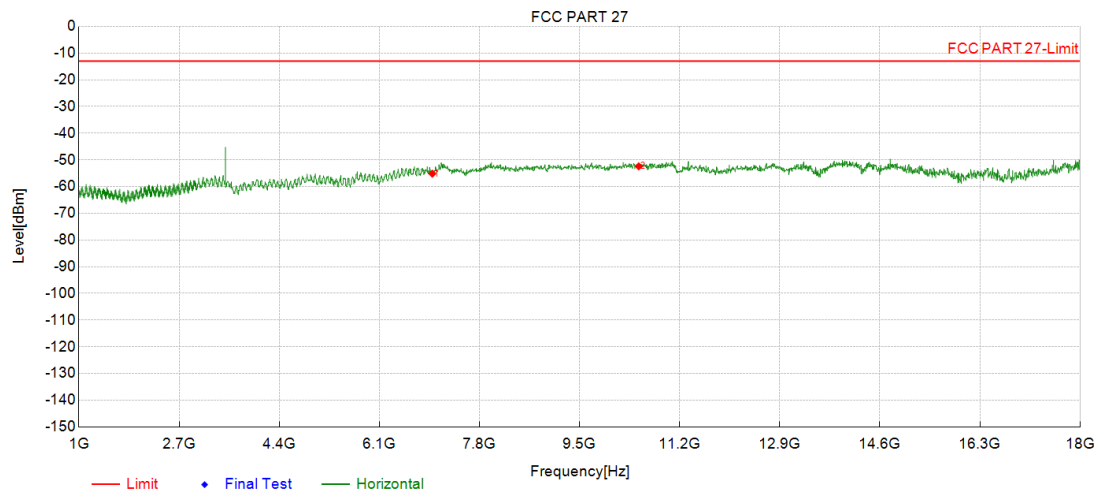


BUREAU VERITAS Test Report No.: PSU-QBJ2512030110RF04

CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 42590
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	7000.4001	-63.37	-55.15	8.22	-13.00	42.15	Horizontal	PK	PASS
2	10505.7011	-65.99	-52.40	13.59	-13.00	39.40	Horizontal	PK	PASS





CHANNEL BANDWIDTH	10MHz / QPSK	MODE	TX channel 42590
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1	6993.7988	-56.29	-47.86	8.43	-13.00	34.86	Vertical	PK	PASS
2	10505.7011	-65.62	-51.83	13.79	-13.00	38.83	Vertical	PK	PASS

