Certificate #6613.01

FCC TEST REPORT

(PART 27)

Applicant:	Beijing InHand Networks Technology Co., Ltd.
Address:	Room 501, floor 5, building 3, yard 18, ziyue road, chaoyang district, Beijing China

Manufacturer or Supplier:	Beijing InHand Networks Technology Co., Ltd.
Address:	Room 501, floor 5, building 3, yard 18, ziyue road, chaoyang district, Beijing China
Product:	5G Fixed Wireless Access
Brand Name:	inhand
Model Name:	FWA12-NANR
FCC ID:	2AANY-FWA12
Date of tests:	Jan. 17, 2025 ~ Apr. 08, 2025

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

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

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

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
Date: Apr. 08, 2025	Date: Apr. 08, 2025

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

TABLE OF CONTENTS

RELEASE CONTROL RECORD 4

1 SUMMARY OF TEST RESULTS 5

1.1 MEASREMENT UNCERTAINTY 7
1.2 TEST SITE AND INSTRUMENTS 8

2 GENERAL INFORMATION 10

2.1 GENERAL DESCRIPTION OF EUT 10
2.2 CONFIGURATION OF SYSTEM UNDER TEST 12
2.3 DESCRIPTION OF SUPPORT UNITS 13
2.4 TEST ITEM AND TEST CONFIGURATION 13
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS 20

3 TEST TYPES AND RESULTS 21

3.1 OUTPUT POWER MEASUREMENT 21
3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT 21
3.1.2 TEST PROCEDURES 21
3.1.3 TEST SETUP 22
3.1.4 TEST RESULTS 23
3.2 FREQUENCY STABILITY MEASUREMENT 51
3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT 51
3.2.2 TEST PROCEDURE 51
3.2.3 TEST SETUP 51
3.2.4 TEST RESULTS 51
3.3 OCCUPIED BANDWIDTH MEASUREMENT 52
3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT 52
3.3.2 TEST SETUP 52
3.3.3 TEST PROCEDURES 52
3.3.4 TEST RESULTS 52
3.4 BAND EDGE MEASUREMENT 53
3.4.1 LIMITS OF BAND EDGE MEASUREMENT 53
3.4.2 TEST SETUP 54
3.4.3 TEST PROCEDURES 55
3.4.4 TEST RESULTS 55
3.5 CONDUCTED SPURIOUS EMISSIONS 56
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT 56
3.5.2 TEST PROCEDURE 56
3.5.3 TEST SETUP 56
3.5.4 TEST RESULTS 57
3.6 RADIATED EMISSION MEASUREMENT 58
3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT 58
3.6.2 TEST PROCEDURES 58
3.6.3 DEVIATION FROM TEST STANDARD 58
3.6.4 TEST SETUP 59
3.6.5 TEST RESULTS 61
3.7 PEAK TO AVERAGE RATIO 64
3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT 64
3.7.2 TEST SETUP 64
3.7.3 TEST PROCEDURES 64
3.7.4 TEST RESULTS 64

4 INFORMATION ON THE TESTING LABORATORIES 65

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB 65

6 APPENDIX 65

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-NQN2502170113RF03	Original release	Apr. 08, 2025

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**TEST LAB***
§2.1046	Conducted Output Power	Compliance	A
§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)	Compliance	A
§27.50(d)(4) §27.50(h)(2) §27.50(a)(3)	Equivalent Isotropically Radiated Power (WCMDA Band 4)(Band 7)(Band 30)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h) §27.53(m)(4)(6) §27.53(a)(4)	Conducted Band Edge Measurements (WCMDA Band 4) (Band 7) (Band 12) (Band 13) (Band 17) (Band 30) (Band 71)	Compliance	A
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h) §27.53(m)(4)(6) §27.53(a)(4)	Conducted Spurious Emissions (WCMDA Band 4)(Band 7) (Band 12) (Band 13) (Band 17) (Band 30) (Band 71)	Compliance	A
§2.1053 §27.53(c)(2)(4) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4)(6) §27.53(a)(4)	Radiated Spurious Emissions (WCMDA Band 4)(Band 7) (Band 12) (Band 13) (Band 17) (Band 30) (Band 71)	Compliance	A
NA	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

Accredited Test Lab Cert 6613.01

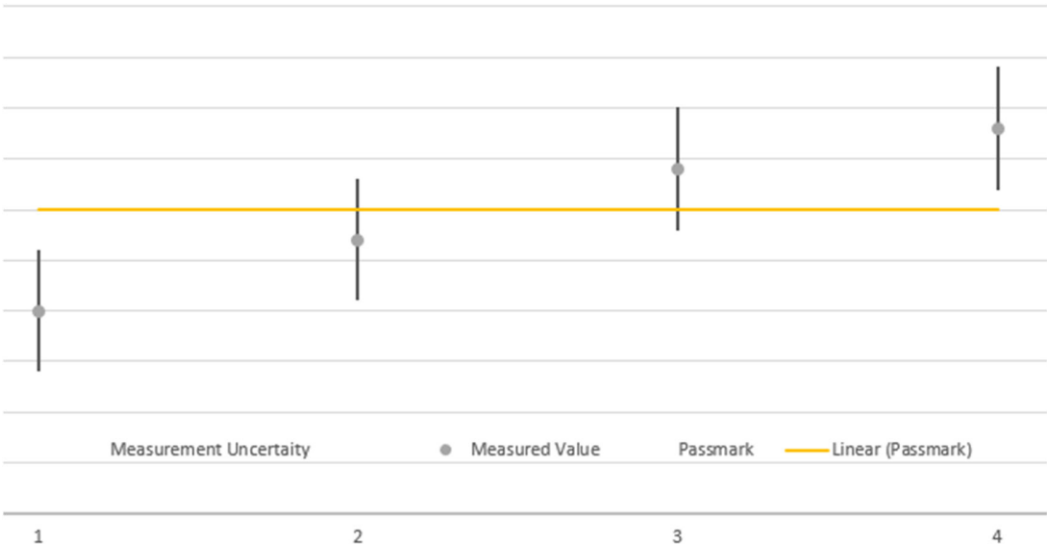
The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASREMENT 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.30,23	Aug.29,25
Pre-Amplifier	R&S	SCU08F1	101028	Jan.22,24	Jan.21,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Dec.26,23	Dec.25,25
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22,23	Aug.21,25
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.22,23	Aug.21,25
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.23,25	Feb.22,27
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	N/A	N/A
DC Source	HYELEC	HY3010B	551016	Aug.31,23	Aug.30,25
Hygrothermograph	DELI	20210528	SZ014	Sep.06,23	Sep.05,25
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26

NOTE: 1. The calibration interval of the above test instruments is 12 / 24/ 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

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

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	5G Fixed Wireless Access	
BRAND NAME**	inhand	
MODEL NAME*	FWA12-NANR	
NOMINAL VOLTAGE*	12.0Vdc(adapter or host equipment)	
MODULATION TECHNOLOGY*	**LTE**	QPSK, 16QAM, 64QAM, 256QAM
FREQUENCY RANGE	**LTE Band 7 Channel Bandwidth: 5MHz**	2502.5MHz ~ 2567.5MHz
	LTE Band 7 Channel Bandwidth: 10MHz	2505MHz ~ 2565MHz
	LTE Band 7 Channel Bandwidth: 15MHz	2507.5MHz ~ 2562.5MHz
	LTE Band 7 Channel Bandwidth: 20MHz	2510MHz ~ 2560MHz
	LTE Band 12 Channel Bandwidth: 1.4MHz	699.7MHz ~ 715.3MHz
	LTE Band 12 Channel Bandwidth: 3MHz	700.5MHz ~ 714.5MHz
	LTE Band 12 Channel Bandwidth: 5MHz	701.5MHz ~ 713.5MHz
	LTE Band 12 Channel Bandwidth: 10MHz	704MHz ~ 711MHz
	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz ~ 784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782MHz
	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711 MHz
	LTE Band 30 Channel Bandwidth: 5MHz	2307.5MHz ~ 2312.5MHz
	LTE Band 30 Channel Bandwidth: 10MHz	2310MHz
	LTE Band 71 Channel Bandwidth: 5MHz	665.5MHz ~ 695.5MHz
	LTE Band 71 Channel Bandwidth: 10MHz	668MHz ~ 693MHz
	LTE Band 71 Channel Bandwidth: 15MHz	670.5MHz ~ 690.5MHz
	LTE Band 71 Channel Bandwidth: 20MHz	673MHz ~ 688MHz

MAX. EIRP POWER	**LTE Band 7 Channel Bandwidth: 15MHz**	518.8mW
	LTE Band 12 Channel Bandwidth: 10MHz	184.1mW
	LTE Band 13 Channel Bandwidth: 10MHz	207mW
	LTE Band 17 Channel Bandwidth: 10MHz	201.8mW
	LTE Band 30 Channel Bandwidth: 5MHz	235.5mW
	LTE Band 71 Channel Bandwidth: 20MHz	182.8mW
ANTENNA TYPE*	5G external antenna with 3.62dBi(Max) gain for LTE B7 5G external antenna with 0.48dBi(Max) gain for LTE B30 5G external antenna with 1.21dBi(Max) gain for LTE B12 5G external antenna with 1.68dBi(Max) gain for LTE B13 5G external antenna with 1.45dBi(Max) gain for LTE B17/B71	
HW VERSION	N/A	
SW VERSION**	V2.0	
I/O PORTS*	Refer to user's manual	
EXTREME TEMPERATURE*	-10°C~50 °C	
EXTREME VOLTAGE*	9 Vdc~14Vdc	

NOTE1: This product uses the module model RG620T-NA and supports LTE frequenc y bands 2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/70/71. Therefore, for this pr oduct, we referred to the test data reported by the RG620T-NA module and revaluate d the spectrum of radiated emissions and EIRP.

For module RG620T-NA: Report No.: SEWM2311000473RG

FCC ID：XMR2024RG620TNA

NOTE2:

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.

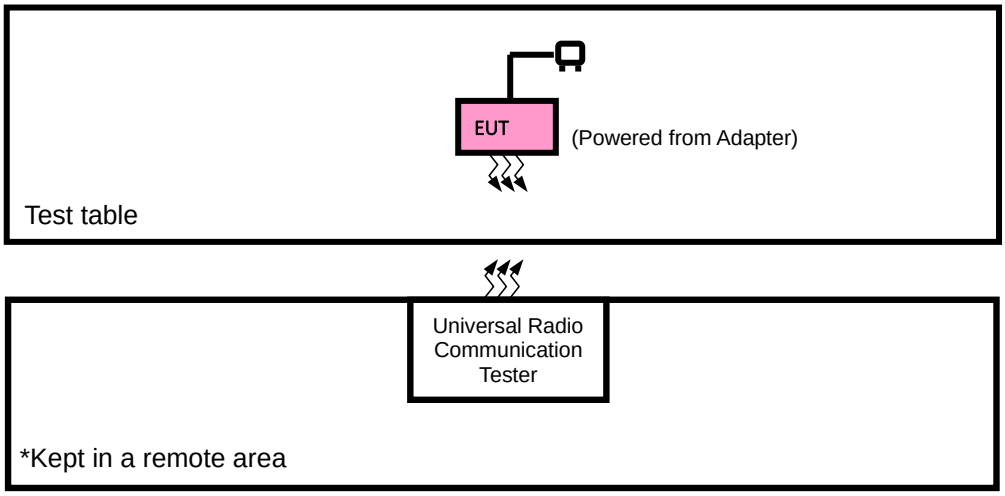
2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. The EUT incorporates a SISO function. Physically, the EUT provides eight completed transmitter and eight receiver.

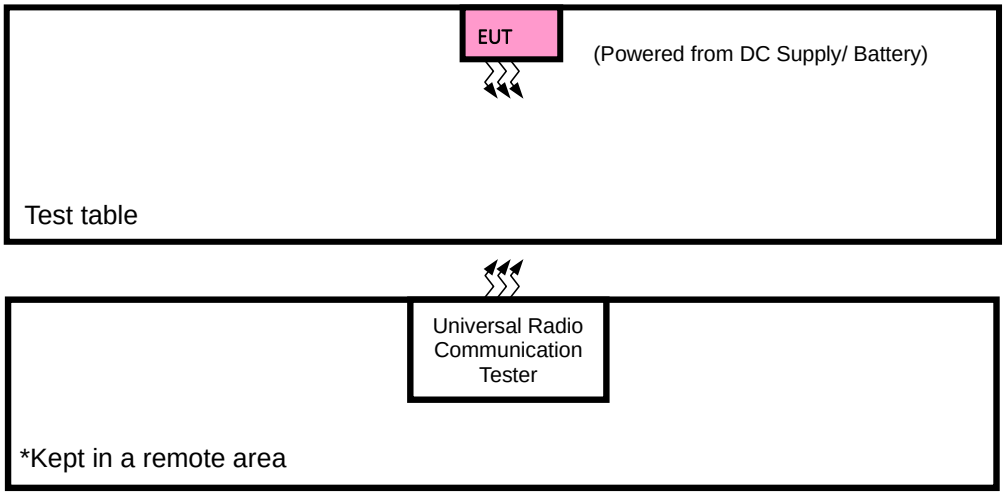
MODULATION MODE	TX FUNCTION
LTE	8TX/8RX

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
5. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters

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	DC Source	HYELEC	HY3010B	551016	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.8m

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 + USB Cable with LTE link**
B	**EUT + DC Supply with LTE link**

LTE BAND 7 MODE

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

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

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

LTE BAND 12 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	6 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	15 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		23025 to 23165	23025	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
			23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		23035 to 23155	23035	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		23060 to 23130	23060	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
A	CONDUCTED EMISSION	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23017 to 23173	23095	1.4MHz	QPSK	1 RB / 0 RB Offset
		23025 to 23165	23095	3MHz	QPSK	1 RB / 0 RB Offset
		23035 to 23155	23095	5MHz	QPSK	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	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 13 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23205 to 23255	23205	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			23255	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						1 RB / 49 RB Offset
					QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	CONDUCTED EMISSION	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23205 to 23255	23230	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230	10MHz	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 17 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	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.

2. LTE Band 17 are covered by LTE Band 12, Because it is a subset of LTE Band 12 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 12

LTE BAND 30

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25 RB / 0 RB Offset
		27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	27685 to 27735	27685	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			27735	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
					QPSK, 16QAM, 64QAM, 256QAM	1 RB / 49 RB Offset
						/
A	CONDUCTED EMISSION	27685 to 27735	27685, 27710, 27735	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		27710	27710	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	27685 to 27735	27685, 27710, 27735	5MHz	QPSK	1 RB / 0 RB Offset
		27710	27710	10MHz	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 71

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	133147 to 133447	133147, 133297, 133447	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	133172 to 133422	133172, 133297 133422	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	133147 to 133447	133147, 133297, 133447	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK, 16QAM, 64QAM, 256QAM	75 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK, 16QAM, 64QAM, 256QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	133222 to 133372	133222, 133322, 133372	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	133147 to 133447	133147	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			133447	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		133172 to 133422	133172	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			133422	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		133197 to 133397	133197	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
			133397	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		133222 to 133372	133222	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			133372	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
A	CONDUCTED EMISSION	133147 to 133447	133147, 133297, 133447	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	133147 to 133447	133297	5MHz	QPSK	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK	1 RB / 0 RB Offset
		133197 to 133397	133297	15MHz	QPSK	1 RB / 0 RB Offset
		133222 to 133372	133322	20MHz	QPSK	1 RB / 0 RB Offset

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

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC12V By Adapter	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 9V/12V/14V By DC Supply	--
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC12V By Adapter	--
BAND EDGE	23deg. C, 70%RH	DC 12V By Adapter	--
CONDUCTED EMISSION	23deg. C, 70%RH	DC12V By Adapter	--
RADIATED EMISSION	23deg. C, 70%RH	DC12V By Adapter	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC12V By Adapter	--

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC 47 CFR Part 2

FCC 47 CFR Part 27

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

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

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

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

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

According to the specific rule Part 27.50(b)(10) and 27.50(c)(10) Fixed, mobile, and Portable stations (hand-held devices) transmitting in the 698-746 MHz, 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

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:

ERP or EIRP = $P_{Meas} + G_T – L_C$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, typically dBW or dBm);

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

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

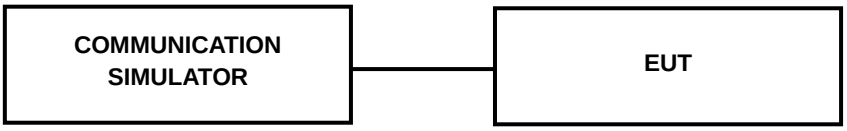
L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

CONDUCTED POWER MEASUREMENT:

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

3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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

3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

LTE Band 7

MAX Power

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band7	15MHz	QPSK	21100	1RB#0	23.53	27.15	33	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band7	20MHz	QPSK	20850	1RB#0	22.67	26.29	33	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band7	20MHz	16QAM	21100	1RB#99	21.61	25.23	33	PASS

Band7	5MHz	QPSK	20775	1RB#0	22.40	26.02	33	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.63	26.25	33	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.17	25.79	33	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.13	24.75	33	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.64	26.26	33	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.25	25.87	33	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.36	25.98	33	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.15	24.77	33	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.59	26.21	33	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.20	25.82	33	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.22	25.84	33	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.35	24.97	33	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.34	24.96	33	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.41	25.03	33	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.38	25.00	33	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.13	23.75	33	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.39	25.01	33	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.32	24.94	33	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.31	24.93	33	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.22	23.84	33	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.33	24.95	33	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.29	24.91	33	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.33	24.95	33	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.25	23.87	33	PASS
Band7	5MHz	64QAM	20775	1RB#0	20.23	23.85	33	PASS
Band7	5MHz	64QAM	20775	1RB#12	20.30	23.92	33	PASS
Band7	5MHz	64QAM	20775	1RB#24	20.37	23.99	33	PASS
Band7	5MHz	64QAM	20775	25RB#0	19.13	22.75	33	PASS
Band7	5MHz	64QAM	21100	1RB#0	20.29	23.91	33	PASS
Band7	5MHz	64QAM	21100	1RB#12	20.34	23.96	33	PASS
Band7	5MHz	64QAM	21100	1RB#24	20.52	24.14	33	PASS
Band7	5MHz	64QAM	21100	25RB#0	19.12	22.74	33	PASS
Band7	5MHz	64QAM	21425	1RB#0	20.45	24.07	33	PASS
Band7	5MHz	64QAM	21425	1RB#12	20.34	23.96	33	PASS
Band7	5MHz	64QAM	21425	1RB#24	20.57	24.19	33	PASS
Band7	5MHz	64QAM	21425	25RB#0	19.22	22.84	33	PASS
Band7	5MHz	256QAM	20775	1RB#0	17.17	20.79	33	PASS
Band7	5MHz	256QAM	20775	1RB#12	17.08	20.70	33	PASS
Band7	5MHz	256QAM	20775	1RB#24	17.28	20.90	33	PASS
Band7	5MHz	256QAM	20775	25RB#0	17.31	20.93	33	PASS
Band7	5MHz	256QAM	21100	1RB#0	17.22	20.84	33	PASS
Band7	5MHz	256QAM	21100	1RB#12	17.32	20.94	33	PASS
Band7	5MHz	256QAM	21100	1RB#24	17.30	20.92	33	PASS

Band7	5MHz	256QAM	21100	25RB#0	17.19	20.81	33	PASS
Band7	5MHz	256QAM	21425	1RB#0	17.44	21.06	33	PASS
Band7	5MHz	256QAM	21425	1RB#12	17.30	20.92	33	PASS
Band7	5MHz	256QAM	21425	1RB#24	17.52	21.14	33	PASS
Band7	5MHz	256QAM	21425	25RB#0	17.42	21.04	33	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.47	26.09	33	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.31	25.93	33	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.12	25.74	33	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.12	24.74	33	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.24	25.86	33	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.18	25.80	33	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.34	25.96	33	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.26	24.88	33	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.61	26.23	33	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.10	25.72	33	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.28	25.90	33	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.28	24.90	33	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.30	24.92	33	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.29	24.91	33	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.23	24.85	33	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.09	23.71	33	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.34	24.96	33	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.43	25.05	33	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.31	24.93	33	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.18	23.80	33	PASS
Band7	10MHz	16QAM	21400	1RB#0	21.40	25.02	33	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.36	24.98	33	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.38	25.00	33	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.29	23.91	33	PASS
Band7	10MHz	64QAM	20800	1RB#0	20.23	23.85	33	PASS
Band7	10MHz	64QAM	20800	1RB#24	20.30	23.92	33	PASS
Band7	10MHz	64QAM	20800	1RB#49	20.42	24.04	33	PASS
Band7	10MHz	64QAM	20800	50RB#0	19.20	22.82	33	PASS
Band7	10MHz	64QAM	21100	1RB#0	20.13	23.75	33	PASS
Band7	10MHz	64QAM	21100	1RB#24	20.45	24.07	33	PASS
Band7	10MHz	64QAM	21100	1RB#49	20.40	24.02	33	PASS
Band7	10MHz	64QAM	21100	50RB#0	19.29	22.91	33	PASS
Band7	10MHz	64QAM	21400	1RB#0	20.33	23.95	33	PASS
Band7	10MHz	64QAM	21400	1RB#24	20.53	24.15	33	PASS
Band7	10MHz	64QAM	21400	1RB#49	20.52	24.14	33	PASS
Band7	10MHz	64QAM	21400	50RB#0	19.13	22.75	33	PASS
Band7	10MHz	256QAM	20800	1RB#0	17.21	20.83	33	PASS
Band7	10MHz	256QAM	20800	1RB#24	17.31	20.93	33	PASS
Band7	10MHz	256QAM	20800	1RB#49	17.37	20.99	33	PASS

Band7	10MHz	256QAM	20800	50RB#0	17.07	20.69	33	PASS
Band7	10MHz	256QAM	21100	1RB#0	17.26	20.88	33	PASS
Band7	10MHz	256QAM	21100	1RB#24	17.33	20.95	33	PASS
Band7	10MHz	256QAM	21100	1RB#49	17.54	21.16	33	PASS
Band7	10MHz	256QAM	21100	50RB#0	17.22	20.84	33	PASS
Band7	10MHz	256QAM	21400	1RB#0	17.27	20.89	33	PASS
Band7	10MHz	256QAM	21400	1RB#24	17.48	21.10	33	PASS
Band7	10MHz	256QAM	21400	1RB#49	17.38	21.00	33	PASS
Band7	10MHz	256QAM	21400	50RB#0	17.35	20.97	33	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.63	26.25	33	PASS
Band7	15MHz	QPSK	20825	1RB#38	22.14	25.76	33	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.06	25.68	33	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.21	24.83	33	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.53	27.15	33	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.44	26.06	33	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.32	25.94	33	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.09	24.71	33	PASS
Band7	15MHz	QPSK	21375	1RB#0	21.43	25.05	33	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.24	25.86	33	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.24	25.86	33	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.17	24.79	33	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.17	24.79	33	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.12	24.74	33	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.29	24.91	33	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.07	23.69	33	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.10	24.72	33	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.34	24.96	33	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.50	25.12	33	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.11	23.73	33	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.36	24.98	33	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.40	25.02	33	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.34	24.96	33	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.26	23.88	33	PASS
Band7	15MHz	64QAM	20825	1RB#0	20.28	23.90	33	PASS
Band7	15MHz	64QAM	20825	1RB#38	20.35	23.97	33	PASS
Band7	15MHz	64QAM	20825	1RB#74	20.35	23.97	33	PASS
Band7	15MHz	64QAM	20825	75RB#0	19.07	22.69	33	PASS
Band7	15MHz	64QAM	21100	1RB#0	20.10	23.72	33	PASS
Band7	15MHz	64QAM	21100	1RB#38	20.29	23.91	33	PASS
Band7	15MHz	64QAM	21100	1RB#74	20.48	24.10	33	PASS
Band7	15MHz	64QAM	21100	75RB#0	19.06	22.68	33	PASS
Band7	15MHz	64QAM	21375	1RB#0	20.47	24.09	33	PASS
Band7	15MHz	64QAM	21375	1RB#38	20.33	23.95	33	PASS
Band7	15MHz	64QAM	21375	1RB#74	20.34	23.96	33	PASS

Band7	15MHz	64QAM	21375	75RB#0	19.11	22.73	33	PASS
Band7	15MHz	256QAM	20825	1RB#0	17.29	20.91	33	PASS
Band7	15MHz	256QAM	20825	1RB#38	17.22	20.84	33	PASS
Band7	15MHz	256QAM	20825	1RB#74	17.24	20.86	33	PASS
Band7	15MHz	256QAM	20825	75RB#0	17.15	20.77	33	PASS
Band7	15MHz	256QAM	21100	1RB#0	17.07	20.69	33	PASS
Band7	15MHz	256QAM	21100	1RB#38	17.21	20.83	33	PASS
Band7	15MHz	256QAM	21100	1RB#74	17.34	20.96	33	PASS
Band7	15MHz	256QAM	21100	75RB#0	17.18	20.80	33	PASS
Band7	15MHz	256QAM	21375	1RB#0	17.53	21.15	33	PASS
Band7	15MHz	256QAM	21375	1RB#38	17.33	20.95	33	PASS
Band7	15MHz	256QAM	21375	1RB#74	17.31	20.93	33	PASS
Band7	15MHz	256QAM	21375	75RB#0	17.28	20.90	33	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.67	26.29	33	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.00	25.62	33	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.15	25.77	33	PASS
Band7	20MHz	QPSK	20850	100RB#0	21.00	24.62	33	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.55	26.17	33	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.11	25.73	33	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.33	25.95	33	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.20	24.82	33	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.62	26.24	33	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.18	25.80	33	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.05	25.67	33	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.23	24.85	33	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.26	24.88	33	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.23	24.85	33	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.14	24.76	33	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.10	23.72	33	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.21	24.83	33	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.37	24.99	33	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.61	25.23	33	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.11	23.73	33	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.51	25.13	33	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.22	24.84	33	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.27	24.89	33	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.13	23.75	33	PASS
Band7	20MHz	64QAM	20850	1RB#0	20.27	23.89	33	PASS
Band7	20MHz	64QAM	20850	1RB#49	20.49	24.11	33	PASS
Band7	20MHz	64QAM	20850	1RB#99	20.27	23.89	33	PASS
Band7	20MHz	64QAM	20850	100RB#0	19.02	22.64	33	PASS
Band7	20MHz	64QAM	21100	1RB#0	20.05	23.67	33	PASS
Band7	20MHz	64QAM	21100	1RB#49	20.28	23.90	33	PASS
Band7	20MHz	64QAM	21100	1RB#99	20.53	24.15	33	PASS

Band7	20MHz	64QAM	21100	100RB#0	19.25	22.87	33	PASS
Band7	20MHz	64QAM	21350	1RB#0	20.40	24.02	33	PASS
Band7	20MHz	64QAM	21350	1RB#49	20.47	24.09	33	PASS
Band7	20MHz	64QAM	21350	1RB#99	20.51	24.13	33	PASS
Band7	20MHz	64QAM	21350	100RB#0	19.32	22.94	33	PASS
Band7	20MHz	256QAM	20850	1RB#0	17.14	20.76	33	PASS
Band7	20MHz	256QAM	20850	1RB#49	17.17	20.79	33	PASS
Band7	20MHz	256QAM	20850	1RB#99	17.29	20.91	33	PASS
Band7	20MHz	256QAM	20850	100RB#0	17.09	20.71	33	PASS
Band7	20MHz	256QAM	21100	1RB#0	17.17	20.79	33	PASS
Band7	20MHz	256QAM	21100	1RB#49	17.21	20.83	33	PASS
Band7	20MHz	256QAM	21100	1RB#99	17.34	20.96	33	PASS
Band7	20MHz	256QAM	21100	100RB#0	17.19	20.81	33	PASS
Band7	20MHz	256QAM	21350	1RB#0	17.50	21.12	33	PASS
Band7	20MHz	256QAM	21350	1RB#49	17.42	21.04	33	PASS
Band7	20MHz	256QAM	21350	1RB#99	17.31	20.93	33	PASS
Band7	20MHz	256QAM	21350	100RB#0	17.24	20.86	33	PASS

LTE Band 12

MAX Power

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band12	10MHz	QPSK	23130	1RB#0	23.59	22.65	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band12	10MHz	16QAM	23060	1RB#0	22.61	21.67	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band12	1.4MHz	QPSK	23017	1RB#0	23.38	22.44	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.40	22.46	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.27	22.33	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.46	21.52	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.16	22.22	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.25	22.31	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.37	22.43	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.28	21.34	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.43	22.49	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.27	22.33	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.33	22.39	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.45	21.51	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.48	21.54	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.48	21.54	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.43	21.49	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.43	20.49	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.47	21.53	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.38	21.44	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.49	21.55	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.39	20.45	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.41	21.47	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.41	21.47	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.54	21.60	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.28	20.34	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	21.54	20.60	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#2	21.52	20.58	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#5	21.52	20.58	34.77	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	20.20	19.26	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	21.48	20.54	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#2	21.70	20.76	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#5	21.63	20.69	34.77	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	20.39	19.45	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	21.44	20.50	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#2	21.40	20.46	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#5	21.48	20.54	34.77	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	20.42	19.48	34.77	PASS
Band12	1.4MHz	256QAM	23017	1RB#0	18.59	17.65	34.77	PASS
Band12	1.4MHz	256QAM	23017	1RB#2	18.68	17.74	34.77	PASS
Band12	1.4MHz	256QAM	23017	1RB#5	18.49	17.55	34.77	PASS
Band12	1.4MHz	256QAM	23017	6RB#0	18.28	17.34	34.77	PASS
Band12	1.4MHz	256QAM	23095	1RB#0	18.48	17.54	34.77	PASS
Band12	1.4MHz	256QAM	23095	1RB#2	18.51	17.57	34.77	PASS
Band12	1.4MHz	256QAM	23095	1RB#5	18.47	17.53	34.77	PASS

Band12	1.4MHz	256QAM	23095	6RB#0	18.21	17.27	34.77	PASS
Band12	1.4MHz	256QAM	23173	1RB#0	18.51	17.57	34.77	PASS
Band12	1.4MHz	256QAM	23173	1RB#2	18.46	17.52	34.77	PASS
Band12	1.4MHz	256QAM	23173	1RB#5	18.42	17.48	34.77	PASS
Band12	1.4MHz	256QAM	23173	6RB#0	18.23	17.29	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.50	22.56	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.37	22.43	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.33	22.39	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.31	21.37	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	22.90	21.96	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.45	22.51	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.20	22.26	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.34	21.40	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.41	22.47	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.42	22.48	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.27	22.33	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.21	21.27	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.45	21.51	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.50	21.56	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.35	21.41	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.37	20.43	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.58	21.64	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.34	21.40	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.46	21.52	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.38	20.44	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.33	21.39	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.44	21.50	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.48	21.54	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.36	20.42	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#0	21.46	20.52	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#8	21.48	20.54	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#14	21.44	20.50	34.77	PASS
Band12	3MHz	64QAM	23025	15RB#0	20.51	19.57	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#0	21.43	20.49	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#8	21.56	20.62	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#14	21.61	20.67	34.77	PASS
Band12	3MHz	64QAM	23095	15RB#0	20.25	19.31	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#0	21.56	20.62	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#8	21.38	20.44	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#14	21.38	20.44	34.77	PASS
Band12	3MHz	64QAM	23165	15RB#0	20.33	19.39	34.77	PASS
Band12	3MHz	256QAM	23025	1RB#0	18.71	17.77	34.77	PASS
Band12	3MHz	256QAM	23025	1RB#8	18.55	17.61	34.77	PASS
Band12	3MHz	256QAM	23025	1RB#14	18.51	17.57	34.77	PASS

Band12	3MHz	256QAM	23025	15RB#0	18.51	17.57	34.77	PASS
Band12	3MHz	256QAM	23095	1RB#0	18.26	17.32	34.77	PASS
Band12	3MHz	256QAM	23095	1RB#8	18.40	17.46	34.77	PASS
Band12	3MHz	256QAM	23095	1RB#14	18.51	17.57	34.77	PASS
Band12	3MHz	256QAM	23095	15RB#0	18.40	17.46	34.77	PASS
Band12	3MHz	256QAM	23165	1RB#0	18.45	17.51	34.77	PASS
Band12	3MHz	256QAM	23165	1RB#8	18.39	17.45	34.77	PASS
Band12	3MHz	256QAM	23165	1RB#14	18.34	17.40	34.77	PASS
Band12	3MHz	256QAM	23165	15RB#0	18.28	17.34	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.51	22.57	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.47	22.53	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.28	22.34	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.29	21.35	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.23	22.29	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.50	22.56	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.46	22.52	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.22	21.28	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.40	22.46	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.36	22.42	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.46	22.52	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.46	21.52	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.54	21.60	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.64	21.70	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.36	21.42	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.28	20.34	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.49	21.55	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.58	21.64	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.42	21.48	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.36	20.42	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.39	21.45	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.53	21.59	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.59	21.65	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.40	20.46	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#0	21.63	20.69	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#12	21.60	20.66	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#24	21.52	20.58	34.77	PASS
Band12	5MHz	64QAM	23035	25RB#0	20.37	19.43	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#0	21.52	20.58	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#12	21.51	20.57	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#24	21.45	20.51	34.77	PASS
Band12	5MHz	64QAM	23095	25RB#0	20.29	19.35	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#0	21.51	20.57	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#12	21.56	20.62	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#24	21.45	20.51	34.77	PASS

Band12	5MHz	64QAM	23155	25RB#0	20.34	19.40	34.77	PASS
Band12	5MHz	256QAM	23035	1RB#0	18.65	17.71	34.77	PASS
Band12	5MHz	256QAM	23035	1RB#12	18.51	17.57	34.77	PASS
Band12	5MHz	256QAM	23035	1RB#24	18.43	17.49	34.77	PASS
Band12	5MHz	256QAM	23035	25RB#0	18.44	17.50	34.77	PASS
Band12	5MHz	256QAM	23095	1RB#0	18.42	17.48	34.77	PASS
Band12	5MHz	256QAM	23095	1RB#12	18.61	17.67	34.77	PASS
Band12	5MHz	256QAM	23095	1RB#24	18.60	17.66	34.77	PASS
Band12	5MHz	256QAM	23095	25RB#0	18.35	17.41	34.77	PASS
Band12	5MHz	256QAM	23155	1RB#0	18.63	17.69	34.77	PASS
Band12	5MHz	256QAM	23155	1RB#12	18.39	17.45	34.77	PASS
Band12	5MHz	256QAM	23155	1RB#24	18.55	17.61	34.77	PASS
Band12	5MHz	256QAM	23155	25RB#0	18.36	17.42	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.48	22.54	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.35	22.41	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.24	22.30	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.34	21.40	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.48	22.54	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.44	22.50	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.41	22.47	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.27	21.33	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.59	22.65	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.36	22.42	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.28	22.34	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.44	21.50	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.61	21.67	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.43	21.49	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.56	21.62	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.40	20.46	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.44	21.50	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.52	21.58	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.43	21.49	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.16	20.22	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.45	21.51	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.45	21.51	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.48	21.54	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.25	20.31	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#0	21.65	20.71	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#24	21.40	20.46	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#49	21.56	20.62	34.77	PASS
Band12	10MHz	64QAM	23060	50RB#0	20.27	19.33	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#0	21.52	20.58	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#24	21.58	20.64	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#49	21.58	20.64	34.77	PASS

Band12	10MHz	64QAM	23095	50RB#0	20.17	19.23	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#0	21.69	20.75	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#24	21.67	20.73	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#49	21.41	20.47	34.77	PASS
Band12	10MHz	64QAM	23130	50RB#0	20.33	19.39	34.77	PASS
Band12	10MHz	256QAM	23060	1RB#0	18.59	17.65	34.77	PASS
Band12	10MHz	256QAM	23060	1RB#24	18.50	17.56	34.77	PASS
Band12	10MHz	256QAM	23060	1RB#49	18.48	17.54	34.77	PASS
Band12	10MHz	256QAM	23060	50RB#0	18.38	17.44	34.77	PASS
Band12	10MHz	256QAM	23095	1RB#0	18.38	17.44	34.77	PASS
Band12	10MHz	256QAM	23095	1RB#24	18.55	17.61	34.77	PASS
Band12	10MHz	256QAM	23095	1RB#49	18.62	17.68	34.77	PASS
Band12	10MHz	256QAM	23095	50RB#0	18.31	17.37	34.77	PASS
Band12	10MHz	256QAM	23130	1RB#0	18.44	17.50	34.77	PASS
Band12	10MHz	256QAM	23130	1RB#24	18.54	17.60	34.77	PASS
Band12	10MHz	256QAM	23130	1RB#49	18.42	17.48	34.77	PASS
Band12	10MHz	256QAM	23130	50RB#0	18.36	17.42	34.77	PASS

LTE Band 13

MAX Power

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band13	5MHz	QPSK	23255	1RB#0	23.63	23.16	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band13	10MHz	QPSK	23230	1RB#24	23.46	22.99	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band13	5MHz	16QAM	23255	1RB#0	22.62	22.15	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band13	10MHz	16QAM	23230	1RB#24	22.61	22.14	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band13	5MHz	QPSK	23205	1RB#0	23.22	22.75	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.35	22.88	34.77	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.25	22.78	34.77	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.37	21.90	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.51	23.04	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.46	22.99	34.77	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.36	22.89	34.77	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.25	21.78	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.63	23.16	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.31	22.84	34.77	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.32	22.85	34.77	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.39	21.92	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.33	21.86	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.56	22.09	34.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.46	21.99	34.77	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.37	20.90	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.51	22.04	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.50	22.03	34.77	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.37	21.90	34.77	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.32	20.85	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.62	22.15	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.48	22.01	34.77	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.39	21.92	34.77	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.32	20.85	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#0	21.60	21.13	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#12	21.54	21.07	34.77	PASS
Band13	5MHz	64QAM	23205	1RB#24	21.63	21.16	34.77	PASS
Band13	5MHz	64QAM	23205	25RB#0	20.13	19.66	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#0	21.66	21.19	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#12	21.68	21.21	34.77	PASS
Band13	5MHz	64QAM	23230	1RB#24	21.41	20.94	34.77	PASS
Band13	5MHz	64QAM	23230	25RB#0	20.30	19.83	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#0	21.59	21.12	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#12	21.57	21.10	34.77	PASS
Band13	5MHz	64QAM	23255	1RB#24	21.62	21.15	34.77	PASS
Band13	5MHz	64QAM	23255	25RB#0	20.20	19.73	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#0	18.28	17.81	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#12	18.44	17.97	34.77	PASS
Band13	5MHz	256QAM	23205	1RB#24	18.32	17.85	34.77	PASS
Band13	5MHz	256QAM	23205	25RB#0	18.23	17.76	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#0	18.43	17.96	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#12	18.41	17.94	34.77	PASS
Band13	5MHz	256QAM	23230	1RB#24	18.31	17.84	34.77	PASS

Band13	5MHz	256QAM	23230	25RB#0	18.18	17.71	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#0	18.29	17.82	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#12	18.23	17.76	34.77	PASS
Band13	5MHz	256QAM	23255	1RB#24	18.36	17.89	34.77	PASS
Band13	5MHz	256QAM	23255	25RB#0	18.31	17.84	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.25	22.78	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.46	22.99	34.77	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.36	22.89	34.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.25	21.78	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.52	22.05	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.61	22.14	34.77	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.48	22.01	34.77	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.18	20.71	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#0	21.52	21.05	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#24	21.56	21.09	34.77	PASS
Band13	10MHz	64QAM	23230	1RB#49	21.47	21.00	34.77	PASS
Band13	10MHz	64QAM	23230	50RB#0	20.24	19.77	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#0	18.53	18.06	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#24	18.45	17.98	34.77	PASS
Band13	10MHz	256QAM	23230	1RB#49	18.21	17.74	34.77	PASS
Band13	10MHz	256QAM	23230	50RB#0	18.18	17.71	34.77	PASS

LTE Band 17

MAX Power

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band17	10MHz	QPSK	23800	1RB#0	23.75	23.05	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band17	5MHz	16QAM	23825	1RB#12	22.68	21.98	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band17	10MHz	16QAM	23790	1RB#0	22.63	21.93	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band17	5MHz	QPSK	23755	1RB#0	23.38	22.68	34.77	PASS
Band17	5MHz	QPSK	23755	1RB#12	23.20	22.50	34.77	PASS
Band17	5MHz	QPSK	23755	1RB#24	23.25	22.55	34.77	PASS
Band17	5MHz	QPSK	23755	25RB#0	22.35	21.65	34.77	PASS
Band17	5MHz	QPSK	23790	1RB#0	23.66	22.96	34.77	PASS
Band17	5MHz	QPSK	23790	1RB#12	23.40	22.70	34.77	PASS
Band17	5MHz	QPSK	23790	1RB#24	23.38	22.68	34.77	PASS
Band17	5MHz	QPSK	23790	25RB#0	22.33	21.63	34.77	PASS
Band17	5MHz	QPSK	23825	1RB#0	23.32	22.62	34.77	PASS
Band17	5MHz	QPSK	23825	1RB#12	23.53	22.83	34.77	PASS
Band17	5MHz	QPSK	23825	1RB#24	23.33	22.63	34.77	PASS
Band17	5MHz	QPSK	23825	25RB#0	22.36	21.66	34.77	PASS
Band17	5MHz	16QAM	23755	1RB#0	22.56	21.86	34.77	PASS
Band17	5MHz	16QAM	23755	1RB#12	22.42	21.72	34.77	PASS
Band17	5MHz	16QAM	23755	1RB#24	22.51	21.81	34.77	PASS
Band17	5MHz	16QAM	23755	25RB#0	21.33	20.63	34.77	PASS
Band17	5MHz	16QAM	23790	1RB#0	22.37	21.67	34.77	PASS
Band17	5MHz	16QAM	23790	1RB#12	22.53	21.83	34.77	PASS
Band17	5MHz	16QAM	23790	1RB#24	22.47	21.77	34.77	PASS
Band17	5MHz	16QAM	23790	25RB#0	21.39	20.69	34.77	PASS
Band17	5MHz	16QAM	23825	1RB#0	22.54	21.84	34.77	PASS
Band17	5MHz	16QAM	23825	1RB#12	22.68	21.98	34.77	PASS
Band17	5MHz	16QAM	23825	1RB#24	22.64	21.94	34.77	PASS
Band17	5MHz	16QAM	23825	25RB#0	21.24	20.54	34.77	PASS
Band17	5MHz	64QAM	23755	1RB#0	21.57	20.87	34.77	PASS
Band17	5MHz	64QAM	23755	1RB#12	21.62	20.92	34.77	PASS
Band17	5MHz	64QAM	23755	1RB#24	21.41	20.71	34.77	PASS
Band17	5MHz	64QAM	23755	25RB#0	20.41	19.71	34.77	PASS
Band17	5MHz	64QAM	23790	1RB#0	21.53	20.83	34.77	PASS
Band17	5MHz	64QAM	23790	1RB#12	21.57	20.87	34.77	PASS
Band17	5MHz	64QAM	23790	1RB#24	21.44	20.74	34.77	PASS
Band17	5MHz	64QAM	23790	25RB#0	20.32	19.62	34.77	PASS
Band17	5MHz	64QAM	23825	1RB#0	21.54	20.84	34.77	PASS
Band17	5MHz	64QAM	23825	1RB#12	21.53	20.83	34.77	PASS
Band17	5MHz	64QAM	23825	1RB#24	21.56	20.86	34.77	PASS
Band17	5MHz	64QAM	23825	25RB#0	20.38	19.68	34.77	PASS
Band17	5MHz	256QAM	23755	1RB#0	18.52	17.82	34.77	PASS
Band17	5MHz	256QAM	23755	1RB#12	18.56	17.86	34.77	PASS
Band17	5MHz	256QAM	23755	1RB#24	18.40	17.70	34.77	PASS
Band17	5MHz	256QAM	23755	25RB#0	18.36	17.66	34.77	PASS
Band17	5MHz	256QAM	23790	1RB#0	18.67	17.97	34.77	PASS
Band17	5MHz	256QAM	23790	1RB#12	18.48	17.78	34.77	PASS
Band17	5MHz	256QAM	23790	1RB#24	18.67	17.97	34.77	PASS

Band17	5MHz	256QAM	23790	25RB#0	18.28	17.58	34.77	PASS
Band17	5MHz	256QAM	23825	1RB#0	18.43	17.73	34.77	PASS
Band17	5MHz	256QAM	23825	1RB#12	18.44	17.74	34.77	PASS
Band17	5MHz	256QAM	23825	1RB#24	18.51	17.81	34.77	PASS
Band17	5MHz	256QAM	23825	25RB#0	18.49	17.79	34.77	PASS
Band17	10MHz	QPSK	23780	1RB#0	23.32	22.62	34.77	PASS
Band17	10MHz	QPSK	23780	1RB#24	23.36	22.66	34.77	PASS
Band17	10MHz	QPSK	23780	1RB#49	23.40	22.70	34.77	PASS
Band17	10MHz	QPSK	23780	50RB#0	22.32	21.62	34.77	PASS
Band17	10MHz	QPSK	23790	1RB#0	23.48	22.78	34.77	PASS
Band17	10MHz	QPSK	23790	1RB#24	23.40	22.70	34.77	PASS
Band17	10MHz	QPSK	23790	1RB#49	23.44	22.74	34.77	PASS
Band17	10MHz	QPSK	23790	50RB#0	22.32	21.62	34.77	PASS
Band17	10MHz	QPSK	23800	1RB#0	23.75	23.05	34.77	PASS
Band17	10MHz	QPSK	23800	1RB#24	23.38	22.68	34.77	PASS
Band17	10MHz	QPSK	23800	1RB#49	23.35	22.65	34.77	PASS
Band17	10MHz	QPSK	23800	50RB#0	22.32	21.62	34.77	PASS
Band17	10MHz	16QAM	23780	1RB#0	22.51	21.81	34.77	PASS
Band17	10MHz	16QAM	23780	1RB#24	22.55	21.85	34.77	PASS
Band17	10MHz	16QAM	23780	1RB#49	22.54	21.84	34.77	PASS
Band17	10MHz	16QAM	23780	50RB#0	21.39	20.69	34.77	PASS
Band17	10MHz	16QAM	23790	1RB#0	22.63	21.93	34.77	PASS
Band17	10MHz	16QAM	23790	1RB#24	22.42	21.72	34.77	PASS
Band17	10MHz	16QAM	23790	1RB#49	22.53	21.83	34.77	PASS
Band17	10MHz	16QAM	23790	50RB#0	21.36	20.66	34.77	PASS
Band17	10MHz	16QAM	23800	1RB#0	22.54	21.84	34.77	PASS
Band17	10MHz	16QAM	23800	1RB#24	22.60	21.90	34.77	PASS
Band17	10MHz	16QAM	23800	1RB#49	22.58	21.88	34.77	PASS
Band17	10MHz	16QAM	23800	50RB#0	21.24	20.54	34.77	PASS
Band17	10MHz	64QAM	23780	1RB#0	21.62	20.92	34.77	PASS
Band17	10MHz	64QAM	23780	1RB#24	21.59	20.89	34.77	PASS
Band17	10MHz	64QAM	23780	1RB#49	21.54	20.84	34.77	PASS
Band17	10MHz	64QAM	23780	50RB#0	20.41	19.71	34.77	PASS
Band17	10MHz	64QAM	23790	1RB#0	21.49	20.79	34.77	PASS
Band17	10MHz	64QAM	23790	1RB#24	21.51	20.81	34.77	PASS
Band17	10MHz	64QAM	23790	1RB#49	21.67	20.97	34.77	PASS
Band17	10MHz	64QAM	23790	50RB#0	20.34	19.64	34.77	PASS
Band17	10MHz	64QAM	23800	1RB#0	21.47	20.77	34.77	PASS
Band17	10MHz	64QAM	23800	1RB#24	21.57	20.87	34.77	PASS
Band17	10MHz	64QAM	23800	1RB#49	21.40	20.70	34.77	PASS
Band17	10MHz	64QAM	23800	50RB#0	20.35	19.65	34.77	PASS
Band17	10MHz	256QAM	23780	1RB#0	18.50	17.80	34.77	PASS
Band17	10MHz	256QAM	23780	1RB#24	18.41	17.71	34.77	PASS
Band17	10MHz	256QAM	23780	1RB#49	18.62	17.92	34.77	PASS

Band17	10MHz	256QAM	23780	50RB#0	18.32	17.62	34.77	PASS
Band17	10MHz	256QAM	23790	1RB#0	18.57	17.87	34.77	PASS
Band17	10MHz	256QAM	23790	1RB#24	18.40	17.70	34.77	PASS
Band17	10MHz	256QAM	23790	1RB#49	18.54	17.84	34.77	PASS
Band17	10MHz	256QAM	23790	50RB#0	18.46	17.76	34.77	PASS
Band17	10MHz	256QAM	23800	1RB#0	18.63	17.93	34.77	PASS
Band17	10MHz	256QAM	23800	1RB#24	18.65	17.95	34.77	PASS
Band17	10MHz	256QAM	23800	1RB#49	18.39	17.69	34.77	PASS
Band17	10MHz	256QAM	23800	50RB#0	18.44	17.74	34.77	PASS

LTE Band 30

MAX Power

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band30	10MHz	QPSK	27710	1RB#0	23.24	23.72	23.98	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band30	5MHz	16QAM	27685	1RB#24	22.38	22.86	23.98	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	EIRP(dBm)	Limit(dBm)	Verdict
Band30	10MHz	16QAM	27710	1RB#0	22.36	22.84	23.98	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band30	5MHz	QPSK	27685	1RB#0	23.10	23.58	23.98	PASS
Band30	5MHz	QPSK	27685	1RB#12	23.09	23.57	23.98	PASS
Band30	5MHz	QPSK	27685	1RB#24	23.05	23.53	23.98	PASS
Band30	5MHz	QPSK	27685	25RB#0	22.15	22.63	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#0	22.47	22.95	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#12	23.11	23.59	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#24	22.97	23.45	23.98	PASS
Band30	5MHz	QPSK	27710	25RB#0	22.11	22.59	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#0	22.77	23.25	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#12	23.01	23.49	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#24	23.15	23.63	23.98	PASS
Band30	5MHz	QPSK	27735	25RB#0	22.13	22.61	23.98	PASS
Band30	5MHz	16QAM	27685	1RB#0	22.23	22.71	23.98	PASS
Band30	5MHz	16QAM	27685	1RB#12	22.34	22.82	23.98	PASS
Band30	5MHz	16QAM	27685	1RB#24	22.38	22.86	23.98	PASS
Band30	5MHz	16QAM	27685	25RB#0	21.26	21.74	23.98	PASS
Band30	5MHz	16QAM	27710	1RB#0	22.29	22.77	23.98	PASS
Band30	5MHz	16QAM	27710	1RB#12	22.28	22.76	23.98	PASS
Band30	5MHz	16QAM	27710	1RB#24	22.24	22.72	23.98	PASS
Band30	5MHz	16QAM	27710	25RB#0	21.11	21.59	23.98	PASS
Band30	5MHz	16QAM	27735	1RB#0	22.29	22.77	23.98	PASS
Band30	5MHz	16QAM	27735	1RB#12	22.08	22.56	23.98	PASS
Band30	5MHz	16QAM	27735	1RB#24	22.21	22.69	23.98	PASS
Band30	5MHz	16QAM	27735	25RB#0	21.19	21.67	23.98	PASS
Band30	5MHz	64QAM	27685	1RB#0	21.35	21.83	23.98	PASS
Band30	5MHz	64QAM	27685	1RB#12	21.25	21.73	23.98	PASS
Band30	5MHz	64QAM	27685	1RB#24	21.37	21.85	23.98	PASS
Band30	5MHz	64QAM	27685	25RB#0	20.00	20.48	23.98	PASS
Band30	5MHz	64QAM	27710	1RB#0	21.24	21.72	23.98	PASS
Band30	5MHz	64QAM	27710	1RB#12	21.23	21.71	23.98	PASS
Band30	5MHz	64QAM	27710	1RB#24	21.10	21.58	23.98	PASS
Band30	5MHz	64QAM	27710	25RB#0	20.09	20.57	23.98	PASS
Band30	5MHz	64QAM	27735	1RB#0	21.28	21.76	23.98	PASS
Band30	5MHz	64QAM	27735	1RB#12	21.29	21.77	23.98	PASS
Band30	5MHz	64QAM	27735	1RB#24	21.29	21.77	23.98	PASS
Band30	5MHz	64QAM	27735	25RB#0	20.08	20.56	23.98	PASS
Band30	5MHz	256QAM	27685	1RB#0	18.27	18.75	23.98	PASS
Band30	5MHz	256QAM	27685	1RB#12	18.15	18.63	23.98	PASS
Band30	5MHz	256QAM	27685	1RB#24	18.40	18.88	23.98	PASS
Band30	5MHz	256QAM	27685	25RB#0	18.10	18.58	23.98	PASS
Band30	5MHz	256QAM	27710	1RB#0	18.31	18.79	23.98	PASS
Band30	5MHz	256QAM	27710	1RB#12	18.27	18.75	23.98	PASS
Band30	5MHz	256QAM	27710	1RB#24	18.12	18.60	23.98	PASS

Band30	5MHz	256QAM	27710	25RB#0	18.20	18.68	23.98	PASS
Band30	5MHz	256QAM	27735	1RB#0	18.36	18.84	23.98	PASS
Band30	5MHz	256QAM	27735	1RB#12	18.20	18.68	23.98	PASS
Band30	5MHz	256QAM	27735	1RB#24	18.33	18.81	23.98	PASS
Band30	5MHz	256QAM	27735	25RB#0	18.09	18.57	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#0	23.24	23.72	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#24	23.12	23.60	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#49	23.13	23.61	23.98	PASS
Band30	10MHz	QPSK	27710	50RB#0	22.23	22.71	23.98	PASS
Band30	10MHz	16QAM	27710	1RB#0	22.36	22.84	23.98	PASS
Band30	10MHz	16QAM	27710	1RB#24	22.36	22.84	23.98	PASS
Band30	10MHz	16QAM	27710	1RB#49	22.20	22.68	23.98	PASS
Band30	10MHz	16QAM	27710	50RB#0	21.00	21.48	23.98	PASS
Band30	10MHz	64QAM	27710	1RB#0	21.32	21.80	23.98	PASS
Band30	10MHz	64QAM	27710	1RB#24	21.37	21.85	23.98	PASS
Band30	10MHz	64QAM	27710	1RB#49	21.33	21.81	23.98	PASS
Band30	10MHz	64QAM	27710	50RB#0	20.13	20.61	23.98	PASS
Band30	10MHz	256QAM	27710	1RB#0	18.10	18.58	23.98	PASS
Band30	10MHz	256QAM	27710	1RB#24	18.39	18.87	23.98	PASS
Band30	10MHz	256QAM	27710	1RB#49	18.19	18.67	23.98	PASS
Band30	10MHz	256QAM	27710	50RB#0	18.16	18.64	23.98	PASS

LTE Band 71

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band71	15MHz	QPSK	133397	1RB#38	23.32	22.62	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band71	20MHz	QPSK	133372	1RB#49	23.26	22.56	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Limit(dBm)	Verdict
Band71	20MHz	16QAM	133322	1RB#49	22.52	21.82	34.77	PASS

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Band71	5MHz	QPSK	133147	1RB#0	23.23	22.53	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#12	23.08	22.38	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#24	23.17	22.47	34.77	PASS
Band71	5MHz	QPSK	133147	25RB#0	22.17	21.47	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#0	22.50	21.80	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#12	23.15	22.45	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#24	23.13	22.43	34.77	PASS
Band71	5MHz	QPSK	133297	25RB#0	22.09	21.39	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#0	22.72	22.02	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#12	23.05	22.35	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#24	23.05	22.35	34.77	PASS
Band71	5MHz	QPSK	133447	25RB#0	22.13	21.43	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#0	22.29	21.59	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#12	22.22	21.52	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#24	22.30	21.60	34.77	PASS
Band71	5MHz	16QAM	133147	25RB#0	21.09	20.39	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#0	22.25	21.55	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#12	22.14	21.44	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#24	22.26	21.56	34.77	PASS
Band71	5MHz	16QAM	133297	25RB#0	21.03	20.33	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#0	22.30	21.60	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#12	22.40	21.70	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#24	22.30	21.60	34.77	PASS
Band71	5MHz	16QAM	133447	25RB#0	21.12	20.42	34.77	PASS
Band71	5MHz	64QAM	133147	1RB#0	21.49	20.79	34.77	PASS
Band71	5MHz	64QAM	133147	1RB#12	21.30	20.60	34.77	PASS
Band71	5MHz	64QAM	133147	1RB#24	21.34	20.64	34.77	PASS
Band71	5MHz	64QAM	133147	25RB#0	19.96	19.26	34.77	PASS
Band71	5MHz	64QAM	133297	1RB#0	21.51	20.81	34.77	PASS
Band71	5MHz	64QAM	133297	1RB#12	21.35	20.65	34.77	PASS
Band71	5MHz	64QAM	133297	1RB#24	21.24	20.54	34.77	PASS
Band71	5MHz	64QAM	133297	25RB#0	19.99	19.29	34.77	PASS
Band71	5MHz	64QAM	133447	1RB#0	21.29	20.59	34.77	PASS
Band71	5MHz	64QAM	133447	1RB#12	21.39	20.69	34.77	PASS
Band71	5MHz	64QAM	133447	1RB#24	21.44	20.74	34.77	PASS
Band71	5MHz	64QAM	133447	25RB#0	20.14	19.44	34.77	PASS
Band71	5MHz	256QAM	133147	1RB#0	18.23	17.53	34.77	PASS
Band71	5MHz	256QAM	133147	1RB#12	18.20	17.50	34.77	PASS
Band71	5MHz	256QAM	133147	1RB#24	18.29	17.59	34.77	PASS
Band71	5MHz	256QAM	133147	25RB#0	18.08	17.38	34.77	PASS
Band71	5MHz	256QAM	133297	1RB#0	18.35	17.65	34.77	PASS
Band71	5MHz	256QAM	133297	1RB#12	18.25	17.55	34.77	PASS
Band71	5MHz	256QAM	133297	1RB#24	18.34	17.64	34.77	PASS

Band71	5MHz	256QAM	133297	25RB#0	18.19	17.49	34.77	PASS
Band71	5MHz	256QAM	133447	1RB#0	18.37	17.67	34.77	PASS
Band71	5MHz	256QAM	133447	1RB#12	18.11	17.41	34.77	PASS
Band71	5MHz	256QAM	133447	1RB#24	18.42	17.72	34.77	PASS
Band71	5MHz	256QAM	133447	25RB#0	18.15	17.45	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#0	23.26	22.56	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#24	23.19	22.49	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#49	23.11	22.41	34.77	PASS
Band71	10MHz	QPSK	133172	50RB#0	22.17	21.47	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#0	22.70	22.00	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#24	23.21	22.51	34.77	PASS
Band71	10MHz	QPSK	133297	1RB#49	23.21	22.51	34.77	PASS
Band71	10MHz	QPSK	133297	50RB#0	22.01	21.31	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#0	22.82	22.12	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#24	23.19	22.49	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#49	23.16	22.46	34.77	PASS
Band71	10MHz	QPSK	133422	50RB#0	22.22	21.52	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#0	22.41	21.71	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#24	22.36	21.66	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#49	22.37	21.67	34.77	PASS
Band71	10MHz	16QAM	133172	50RB#0	21.01	20.31	34.77	PASS
Band71	10MHz	16QAM	133297	1RB#0	22.32	21.62	34.77	PASS
Band71	10MHz	16QAM	133297	1RB#24	22.39	21.69	34.77	PASS
Band71	10MHz	16QAM	133297	1RB#49	22.46	21.76	34.77	PASS
Band71	10MHz	16QAM	133297	50RB#0	21.17	20.47	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#0	22.30	21.60	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#24	22.44	21.74	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#49	22.29	21.59	34.77	PASS
Band71	10MHz	16QAM	133422	50RB#0	21.20	20.50	34.77	PASS
Band71	10MHz	64QAM	133172	1RB#0	21.43	20.73	34.77	PASS
Band71	10MHz	64QAM	133172	1RB#24	21.42	20.72	34.77	PASS
Band71	10MHz	64QAM	133172	1RB#49	21.35	20.65	34.77	PASS
Band71	10MHz	64QAM	133172	50RB#0	20.02	19.32	34.77	PASS
Band71	10MHz	64QAM	133297	1RB#0	21.34	20.64	34.77	PASS
Band71	10MHz	64QAM	133297	1RB#24	21.38	20.68	34.77	PASS
Band71	10MHz	64QAM	133297	1RB#49	21.35	20.65	34.77	PASS
Band71	10MHz	64QAM	133297	50RB#0	19.95	19.25	34.77	PASS
Band71	10MHz	64QAM	133422	1RB#0	21.36	20.66	34.77	PASS
Band71	10MHz	64QAM	133422	1RB#24	21.44	20.74	34.77	PASS
Band71	10MHz	64QAM	133422	1RB#49	21.41	20.71	34.77	PASS
Band71	10MHz	64QAM	133422	50RB#0	20.26	19.56	34.77	PASS
Band71	10MHz	256QAM	133172	1RB#0	18.36	17.66	34.77	PASS
Band71	10MHz	256QAM	133172	1RB#24	18.23	17.53	34.77	PASS
Band71	10MHz	256QAM	133172	1RB#49	18.29	17.59	34.77	PASS

Band71	10MHz	256QAM	133172	50RB#0	18.17	17.47	34.77	PASS
Band71	10MHz	256QAM	133297	1RB#0	18.40	17.70	34.77	PASS
Band71	10MHz	256QAM	133297	1RB#24	18.32	17.62	34.77	PASS
Band71	10MHz	256QAM	133297	1RB#49	18.42	17.72	34.77	PASS
Band71	10MHz	256QAM	133297	50RB#0	17.98	17.28	34.77	PASS
Band71	10MHz	256QAM	133422	1RB#0	18.23	17.53	34.77	PASS
Band71	10MHz	256QAM	133422	1RB#24	18.28	17.58	34.77	PASS
Band71	10MHz	256QAM	133422	1RB#49	18.29	17.59	34.77	PASS
Band71	10MHz	256QAM	133422	50RB#0	18.19	17.49	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#0	23.04	22.34	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#38	23.19	22.49	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#74	23.20	22.50	34.77	PASS
Band71	15MHz	QPSK	133197	75RB#0	22.17	21.47	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#0	23.02	22.32	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#38	23.20	22.50	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#74	23.20	22.50	34.77	PASS
Band71	15MHz	QPSK	133297	75RB#0	22.18	21.48	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#0	23.04	22.34	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#38	23.32	22.62	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#74	23.23	22.53	34.77	PASS
Band71	15MHz	QPSK	133397	75RB#0	22.35	21.65	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#0	22.32	21.62	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#38	22.33	21.63	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#74	22.21	21.51	34.77	PASS
Band71	15MHz	16QAM	133197	75RB#0	21.24	20.54	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#0	22.48	21.78	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#38	22.45	21.75	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#74	22.30	21.60	34.77	PASS
Band71	15MHz	16QAM	133297	75RB#0	20.97	20.27	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#0	22.30	21.60	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#38	22.50	21.80	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#74	22.18	21.48	34.77	PASS
Band71	15MHz	16QAM	133397	75RB#0	21.26	20.56	34.77	PASS
Band71	15MHz	64QAM	133197	1RB#0	21.47	20.77	34.77	PASS
Band71	15MHz	64QAM	133197	1RB#38	21.48	20.78	34.77	PASS
Band71	15MHz	64QAM	133197	1RB#74	21.27	20.57	34.77	PASS
Band71	15MHz	64QAM	133197	75RB#0	20.27	19.57	34.77	PASS
Band71	15MHz	64QAM	133297	1RB#0	21.30	20.60	34.77	PASS
Band71	15MHz	64QAM	133297	1RB#38	21.43	20.73	34.77	PASS
Band71	15MHz	64QAM	133297	1RB#74	21.17	20.47	34.77	PASS
Band71	15MHz	64QAM	133297	75RB#0	20.05	19.35	34.77	PASS
Band71	15MHz	64QAM	133397	1RB#0	21.34	20.64	34.77	PASS
Band71	15MHz	64QAM	133397	1RB#38	21.26	20.56	34.77	PASS
Band71	15MHz	64QAM	133397	1RB#74	21.29	20.59	34.77	PASS

Band71	15MHz	64QAM	133397	75RB#0	20.18	19.48	34.77	PASS
Band71	15MHz	256QAM	133197	1RB#0	18.31	17.61	34.77	PASS
Band71	15MHz	256QAM	133197	1RB#38	18.42	17.72	34.77	PASS
Band71	15MHz	256QAM	133197	1RB#74	18.32	17.62	34.77	PASS
Band71	15MHz	256QAM	133197	75RB#0	18.19	17.49	34.77	PASS
Band71	15MHz	256QAM	133297	1RB#0	18.28	17.58	34.77	PASS
Band71	15MHz	256QAM	133297	1RB#38	18.28	17.58	34.77	PASS
Band71	15MHz	256QAM	133297	1RB#74	18.22	17.52	34.77	PASS
Band71	15MHz	256QAM	133297	75RB#0	18.04	17.34	34.77	PASS
Band71	15MHz	256QAM	133397	1RB#0	18.37	17.67	34.77	PASS
Band71	15MHz	256QAM	133397	1RB#38	18.28	17.58	34.77	PASS
Band71	15MHz	256QAM	133397	1RB#74	18.22	17.52	34.77	PASS
Band71	15MHz	256QAM	133397	75RB#0	18.40	17.70	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#0	23.17	22.47	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#49	23.15	22.45	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#99	23.09	22.39	34.77	PASS
Band71	20MHz	QPSK	133222	100RB#0	22.39	21.69	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#0	22.81	22.11	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#49	23.25	22.55	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#99	23.08	22.38	34.77	PASS
Band71	20MHz	QPSK	133322	100RB#0	22.20	21.50	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#0	22.93	22.23	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#49	23.26	22.56	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#99	23.20	22.50	34.77	PASS
Band71	20MHz	QPSK	133372	100RB#0	22.36	21.66	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#0	22.48	21.78	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#49	22.30	21.60	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#99	22.31	21.61	34.77	PASS
Band71	20MHz	16QAM	133222	100RB#0	21.27	20.57	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#0	22.46	21.76	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#49	22.52	21.82	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#99	22.36	21.66	34.77	PASS
Band71	20MHz	16QAM	133322	100RB#0	21.15	20.45	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#0	22.33	21.63	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#49	22.44	21.74	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#99	22.35	21.65	34.77	PASS
Band71	20MHz	16QAM	133372	100RB#0	21.32	20.62	34.77	PASS
Band71	20MHz	64QAM	133222	1RB#0	21.33	20.63	34.77	PASS
Band71	20MHz	64QAM	133222	1RB#49	21.53	20.83	34.77	PASS
Band71	20MHz	64QAM	133222	1RB#99	21.29	20.59	34.77	PASS
Band71	20MHz	64QAM	133222	100RB#0	20.40	19.70	34.77	PASS
Band71	20MHz	64QAM	133322	1RB#0	21.34	20.64	34.77	PASS
Band71	20MHz	64QAM	133322	1RB#49	21.26	20.56	34.77	PASS
Band71	20MHz	64QAM	133322	1RB#99	21.39	20.69	34.77	PASS

Band71	20MHz	64QAM	133322	100RB#0	20.04	19.34	34.77	PASS
Band71	20MHz	64QAM	133372	1RB#0	21.46	20.76	34.77	PASS
Band71	20MHz	64QAM	133372	1RB#49	21.35	20.65	34.77	PASS
Band71	20MHz	64QAM	133372	1RB#99	21.30	20.60	34.77	PASS
Band71	20MHz	64QAM	133372	100RB#0	20.26	19.56	34.77	PASS
Band71	20MHz	256QAM	133222	1RB#0	18.40	17.70	34.77	PASS
Band71	20MHz	256QAM	133222	1RB#49	18.33	17.63	34.77	PASS
Band71	20MHz	256QAM	133222	1RB#99	18.34	17.64	34.77	PASS
Band71	20MHz	256QAM	133222	100RB#0	18.36	17.66	34.77	PASS
Band71	20MHz	256QAM	133322	1RB#0	18.32	17.62	34.77	PASS
Band71	20MHz	256QAM	133322	1RB#49	18.42	17.72	34.77	PASS
Band71	20MHz	256QAM	133322	1RB#99	18.26	17.56	34.77	PASS
Band71	20MHz	256QAM	133322	100RB#0	18.15	17.45	34.77	PASS
Band71	20MHz	256QAM	133372	1RB#0	18.51	17.81	34.77	PASS
Band71	20MHz	256QAM	133372	1RB#49	18.23	17.53	34.77	PASS
Band71	20MHz	256QAM	133372	1RB#99	18.15	17.45	34.77	PASS
Band71	20MHz	256QAM	133372	100RB#0	18.27	17.57	34.77	PASS

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

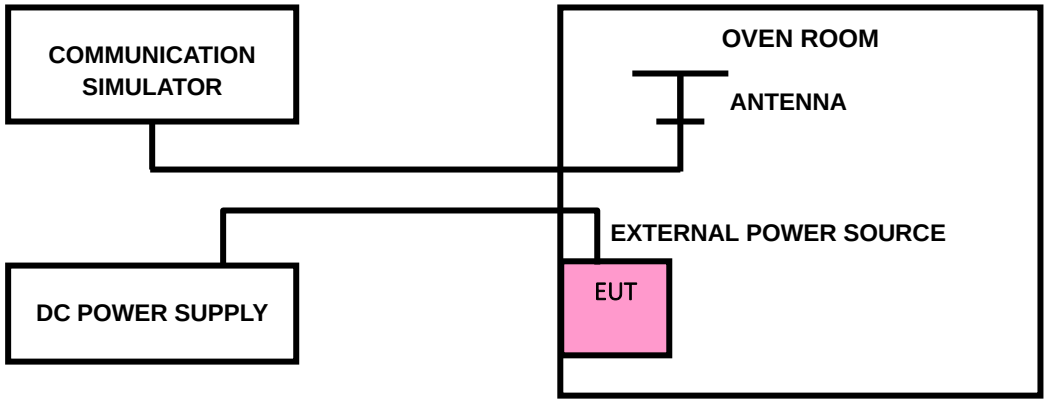
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

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

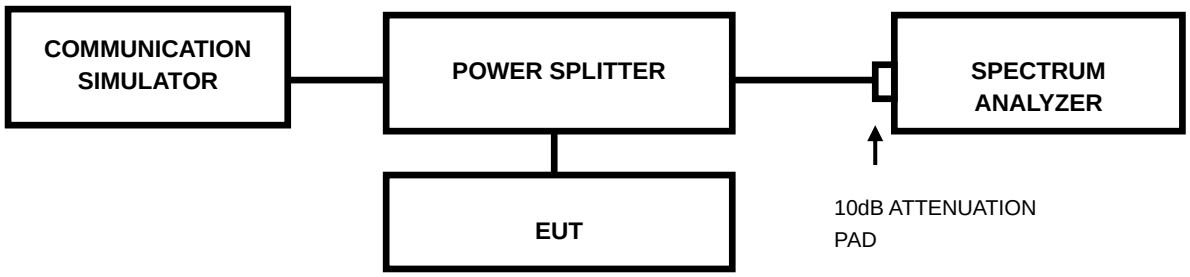
Please Refer to module RG620T-NA report.

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

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

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

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

3.3.4 TEST RESULTS

Please Refer to module RG620T-NA report.

3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(c) specified that For operations in the 746-758 MHz band and the 776-788 MHz band , the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.In addition, the power of any unwanted emission in an 6.25kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power,P(dBW),by at least 65 +10log10p(P),dB,for mobile and portable equipment.

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

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

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

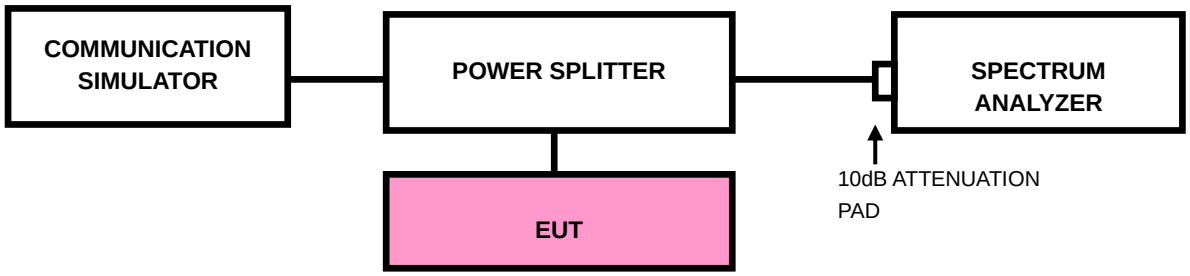
According to FCC 27.53(a)(4) specified that For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

a) All measurements were done at low and high operational frequency range

b) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.

c) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW)

d) .Set the resolution bandwidth (RBW) ≧ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.

e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.

f) Set the video bandwidth (VBW) to ≧3 x RBW.

g) Select the average power (RMS) display detector.

h) Set the number of measurement points to ≧ 1001.

i) Use auto-coupled sweep time.

j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.

k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.

l) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to module RG620T-NA report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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

For: LTE Band7

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

For: LTE Band30

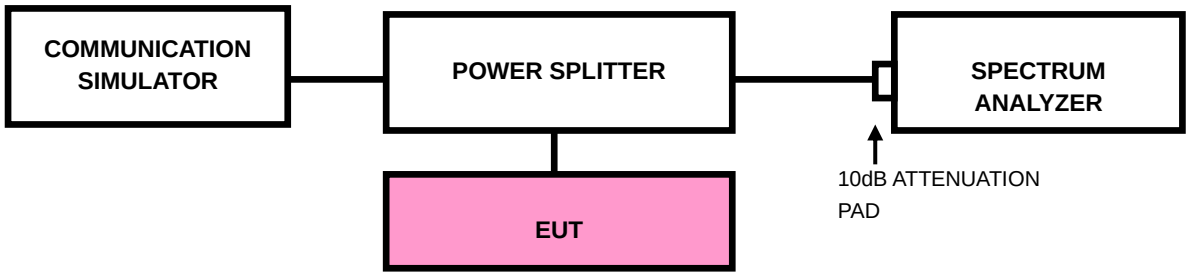
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 70 +10 log10(P) dB. The limit of emission is equal to -40dBm.

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 module RG620T-NA report.

3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

For: LTE Band7/ Band41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

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3.6.2 TEST PROCEDURES

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G.
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

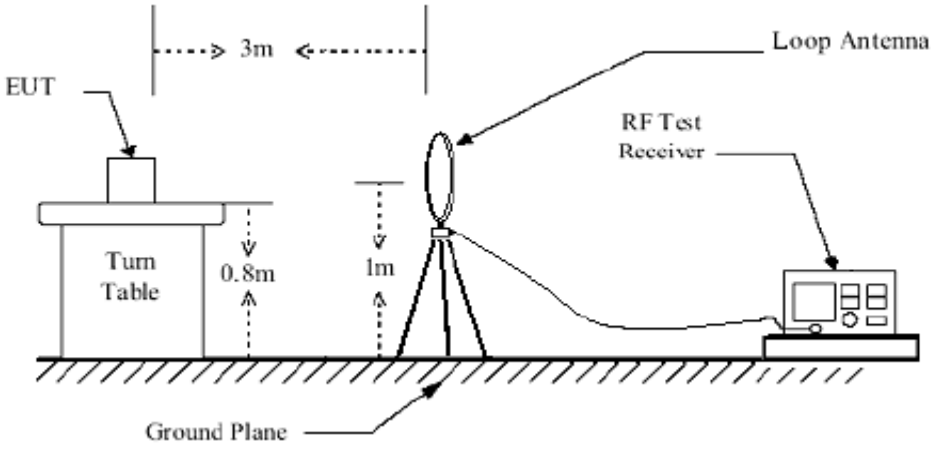
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

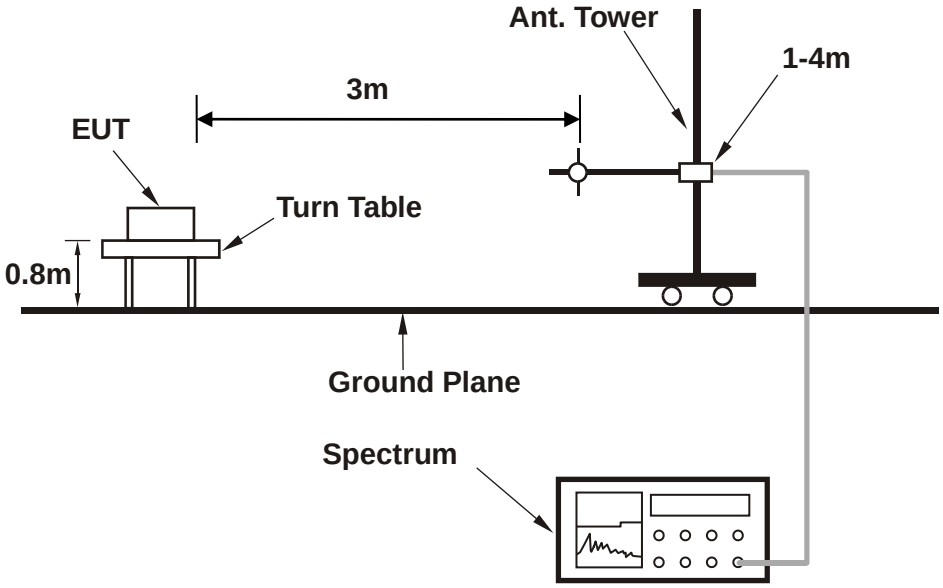
No deviation

3.6.4 TEST SETUP

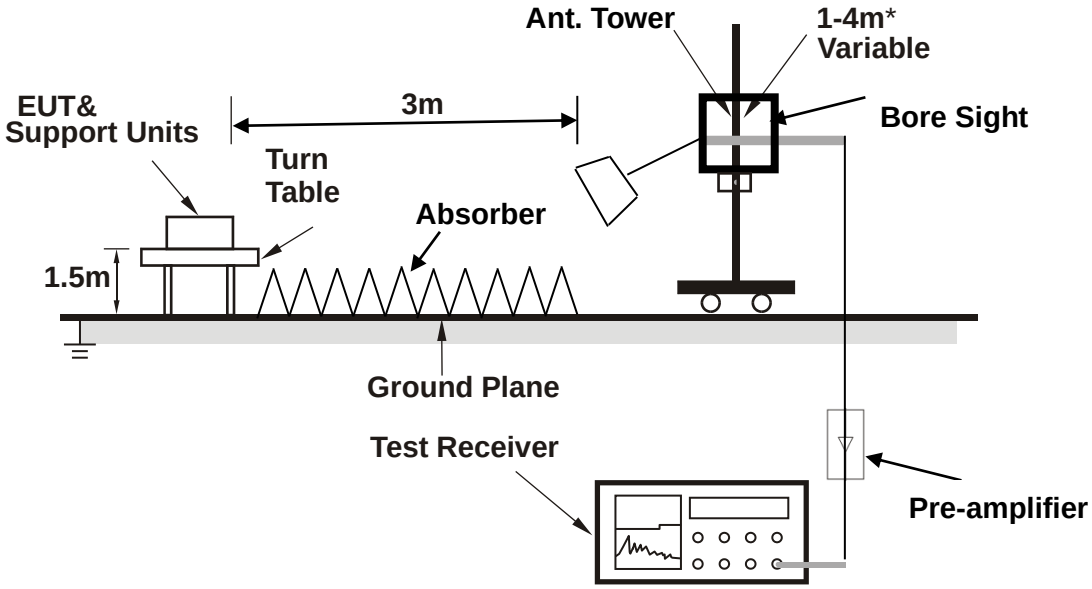
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



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

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

3.6.5 TEST RESULTS

NOTE1：The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

NOTE2：The measurement range is 30M to the tenth harmonic of the highest fundamental frequency, For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report

LTE band 7

Test result：

ANT2 Channel ： 21100

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1144.20	-80.65	-25.00	Vertical
1562.80	-78.57	-25.00	Vertical
2421.63	-72.46	-25.00	Vertical
3129.00	-83.10	-25.00	Vertical
3555.00	-80.74	-25.00	Vertical
4668.00	-87.36	-25.00	Vertical

LTE band 12

Test result：

ANT0 Channel ： 23095

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
3129.00	-83.10	-13.00	Vertical
3555.00	-80.74	-13.00	Vertical
4668.00	-87.36	-13.00	Vertical
3114.00	-82.76	-13.00	Vertical
3576.00	-80.81	-13.00	Vertical
4668.00	-87.47	-13.00	Vertical

LTE band 13

Test result：

ANT0 Channel ： 23230

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1173.60	-80.90	-13.00	Vertical
1520.80	-77.31	-13.00	Vertical
2429.48	-71.91	-13.00	Vertical
3105.00	-82.81	-13.00	Vertical
3354.00	-83.07	-13.00	Vertical
3591.00	-80.71	-13.00	Vertical

LTE band 17

Test result：

ANT0 Channel ： 23790

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1185.890	-79.88	-13.00	Vertical
1533.21	-76.23	-13.00	Vertical
2401.85	-73.23	-13.00	Vertical
3082.00	-81.02	-13.00	Vertical
3550.23	-78.89	-13.00	Vertical
4694.89	-80.59	-13.00	Vertical

LTE band 30

Test result

ANT2 Channel ： 27710

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1149.80	-80.80	-13.00	Vertical
1435.40	-78.43	-13.00	Vertical
1677.60	-80.89	-13.00	Vertical
3120.00	-82.87	-13.00	Vertical
3447.00	-72.35	-13.00	Vertical
4668.00	-87.57	-13.00	Vertical

LTE band 71
Test result

ANT0 Channel： 133297

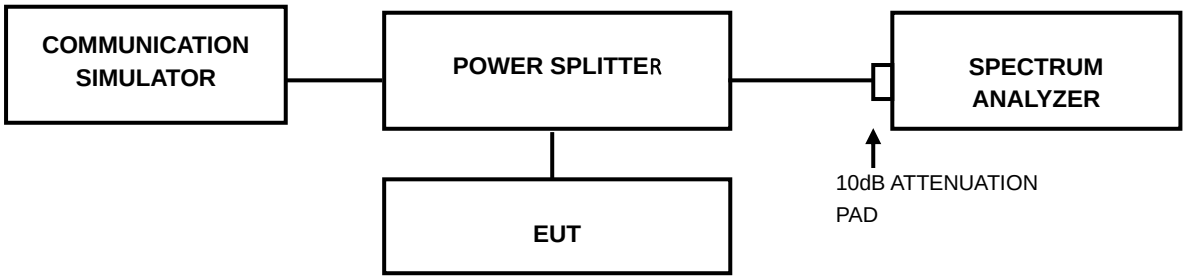
Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1166.60	-80.84	-13.00	Vertical
1522.20	-77.23	-13.00	Vertical
2417.03	-72.17	-13.00	Vertical
3159.00	-83.51	-13.00	Vertical
3540.00	-81.08	-13.00	Vertical
4644.00	-87.54	-13.00	Vertical

3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

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

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

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

3.7.4 TEST RESULTS

Please Refer to module RG620T-NA report.

4 INFORMATION ON THE TESTING LABORATORIES

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

Huarui 7Layers High Technology (Suzhou) Co., Ltd.
Lab Address:
Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province
Accredited Test Lab Cert 6613.01

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

Suzhou EMC/RF Lab:
Tel: +86 (0557) 368 1008

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

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

6 APPENDIX

Please Refer to module RG620T-NA report.

---END---