



Test Report No.: W7L-P23010024RF06



# FCC TEST REPORT (PART 27)

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Manufacturer or Supplier:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address:	401 and 402, Building 3, Shenzhen Software Park, Nanshan District, Shenzhen City, Guangdong Province, P.R.C
Product:	Smart Mobile Payment Terminal
Brand Name:	PAX
Model Name:	A930RTX
FCC ID:	V5PA930RTX
Date of tests:	Jan. 16, 2023 ~ Feb. 15, 2023

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 Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Date: Feb. 15, 2023	Date: Feb. 15, 2023

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P23010024RF06	Original release	Feb. 15, 2023



# 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
§2.1046	Conducted Output Power	Compliance
§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17)	Compliance
§27.50(d)(4)	Equivalent Isotropically Radiated Power (Band 4)	Compliance
§2.1055 §27.54	Frequency Stability	Compliance
§2.1049	Occupied Bandwidth	Compliance
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurements (Band 4) (Band 12) (Band 13) (Band 17)	Compliance
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(f) §27.53(h)	Conducted Spurious Emissions (Band 4) (Band 12) (Band 13) (Band 17)	Compliance
§2.1053 §27.53(c)(2)(4) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emissions (Band 4) (Band 12) (Band 13) (Band 17)	Compliance
NA	Peak to average ratio	Compliance

## 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.

## 1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 21,22	Feb. 20,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,22	May.14,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.04,22	Sep.03,23
Bilog Antenna	ETS-LINDGRE N	3143B	00161965	Mar. 06,22	Mar. 05,23
Horn Antenna	ETS-LINDGRE N	3117	00168692	Mar. 06,22	Mar. 05,23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K- SG/QMS-00361	15433	Aug. 24, 22	Aug. 23, 23
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 15,22	Feb. 14,23
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 14,23	Feb. 13,24
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,22	Feb.20,23
3m Semi-anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	Euroshieldpn- CT0001143-121 6	May. 19,20	May. 18,23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	May. 07,22	May. 06,23
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,22	Feb. 21,23
Power Sensor	Anritsu	MA2411B	1339352	May. 07,22	May. 06,23
Temperature Chamber	ESPEC	SH-242	93000855	May. 12,22	May. 11,23
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 18,22	Feb. 17,23
Base station R&S CMW500	Rohde&Schwa rz	CMW500	153085	May.12,22	May.11,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,22	Aug. 23,23

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
  3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
  4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Smart Mobile Payment Terminal	
<b>BRAND NAME</b>	PAX	
<b>MODEL NAME</b>	A930RTX	
<b>NOMINAL VOLTAGE</b>	5.0Vdc(adapter or host equipment) 7.2Vdc (Li-ion, battery)	
<b>MODULATION TECHNOLOGY</b>	<b>WCDMA IV</b>	BPSK, QPSK
	<b>LTE</b>	QPSK, 16QAM, 64QAM
<b>FREQUENCY RANGE</b>	<b>WCDMA IV</b>	1712.4MHz ~ 1752.6MHz
	<b>LTE Band 4 Channel Bandwidth: 1.4MHz</b>	1710.7MHz ~ 1754.3MHz
	<b>LTE Band 4 Channel Bandwidth: 3MHz</b>	1711.5MHz ~ 1753.5MHz
	<b>LTE Band 4 Channel Bandwidth: 5MHz</b>	1712.5MHz ~ 1752.5MHz
	<b>LTE Band 4 Channel Bandwidth: 10MHz</b>	1715MHz ~ 1750MHz
	<b>LTE Band 4 Channel Bandwidth: 15MHz</b>	1717.5MHz ~ 1747.5 MHz
	<b>LTE Band 4 Channel Bandwidth: 20MHz</b>	1720MHz ~ 1745MHz
	<b>LTE Band 12 Channel Bandwidth: 1.4MHz</b>	699.7MHz ~ 715.3MHz
	<b>LTE Band 12 Channel Bandwidth: 3MHz</b>	700.5MHz ~ 714.5MHz
	<b>LTE Band 12 Channel Bandwidth: 5MHz</b>	701.5MHz ~ 713.5MHz
	<b>LTE Band 12 Channel Bandwidth: 10MHz</b>	704MHz ~ 711MHz
	<b>LTE Band 13 Channel Bandwidth: 5MHz</b>	779.5MHz ~ 784.5MHz
	<b>LTE Band 13 Channel Bandwidth: 10MHz</b>	782MHz
	<b>LTE Band 17 Channel Bandwidth: 5MHz</b>	706.5MHz ~ 713.5MHz
	<b>LTE Band 17 Channel Bandwidth: 10MHz</b>	709MHz ~ 711 MHz





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<b>MAX. EIRP/ERP POWER</b>	<b>WCDMA IV</b>	164.82mW
	<b>LTE Band 4 Channel Bandwidth: 1.4MHz</b>	170.22mW
	<b>LTE Band 4 Channel Bandwidth: 3MHz</b>	169.04mW
	<b>LTE Band 4 Channel Bandwidth: 5MHz</b>	170.61mW
	<b>LTE Band 4 Channel Bandwidth: 10MHz</b>	169.04mW
	<b>LTE Band 4 Channel Bandwidth: 15MHz</b>	169.43mW
	<b>LTE Band 4 Channel Bandwidth: 20MHz</b>	171mW
	<b>LTE Band 12 Channel Bandwidth: 1.4MHz</b>	53.33mW
	<b>LTE Band 12 Channel Bandwidth: 3MHz</b>	52.6mW
	<b>LTE Band 12 Channel Bandwidth: 5MHz</b>	52.48mW
	<b>LTE Band 12 Channel Bandwidth: 10MHz</b>	52.84mW
	<b>LTE Band 13 Channel Bandwidth: 5MHz</b>	63.53mW
	<b>LTE Band 13 Channel Bandwidth: 10MHz</b>	63.68mW
	<b>LTE Band 17 Channel Bandwidth: 5MHz</b>	53.46mW
	<b>LTE Band 17 Channel Bandwidth: 10MHz</b>	53.83mW
	<b>EMISSION DESIGNATOR</b>	<b>WCDMA IV</b>
<b>LTE Band 4 Channel Bandwidth: 1.4MHz</b>		QPSK: 1M09G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
<b>LTE Band 4 Channel Bandwidth: 3MHz</b>		QPSK:2M70G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
<b>LTE Band 4 Channel Bandwidth: 5MHz</b>		QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M50W7D

<b>EMISSION DESIGNATOR</b>	<b>LTE Band 4 Channel Bandwidth: 10MHz</b>	QPSK: 9M00G7D
		16QAM: 8M99W7D
		64QAM: 8M99W7D
	<b>LTE Band 4 Channel Bandwidth: 15MHz</b>	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	<b>LTE Band 4 Channel Bandwidth: 20MHz</b>	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
	<b>LTE Band 12 Channel Bandwidth: 1.4MHz</b>	QPSK: 1M09G7D
		16QAM: 1M10W7D
		64QAM: 1M09W7D
	<b>LTE Band 12 Channel Bandwidth: 3MHz</b>	QPSK: 2M70G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
	<b>LTE Band 12 Channel Bandwidth: 5MHz</b>	QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M50W7D
	<b>LTE Band 12 Channel Bandwidth: 10MHz</b>	QPSK: 8M98G7D
		16QAM: 8M98W7D
		64QAM: 8M98W7D
	<b>LTE Band 13 Channel Bandwidth: 5MHz</b>	QPSK: 4M49G7D
		16QAM: 4M50W7D
		64QAM: 4M50W7D
<b>LTE Band 13 Channel Bandwidth: 10MHz</b>	QPSK: 8M96G7D	
	16QAM: 8M96W7D	
	64QAM: 8M96W7D	



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<b>ANTENNA TYPE</b>	Fixed Internal Antenna with 0.23dBi gain for WCDMA IV Fixed Internal Antenna with 0.25dBi gain for LTE4 Fixed Internal Antenna with -2.8dBi gain for LTE12 Fixed Internal Antenna a with -1.9dBi gain for LTE13 Fixed Internal Antenna with -2.8dBi gain for LTE17
<b>HW VERSION</b>	A930RTX
<b>SW VERSION</b>	N/A
<b>I/O PORTS</b>	Refer to user's manual
<b>CABLE SUPPLIED</b>	USB cable: non-shielded cable, with w/o ferrite core, 1.0 meter
<b>EXTREME TEMPERATURE</b>	0-45 °C
<b>EXTREME VOLTAGE</b>	6.4V – 8.26V

**NOTE:**

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

MODULATION MODE	TX FUNCTION
WCDMA	1TX/1RX
LTE	1TX/1RX

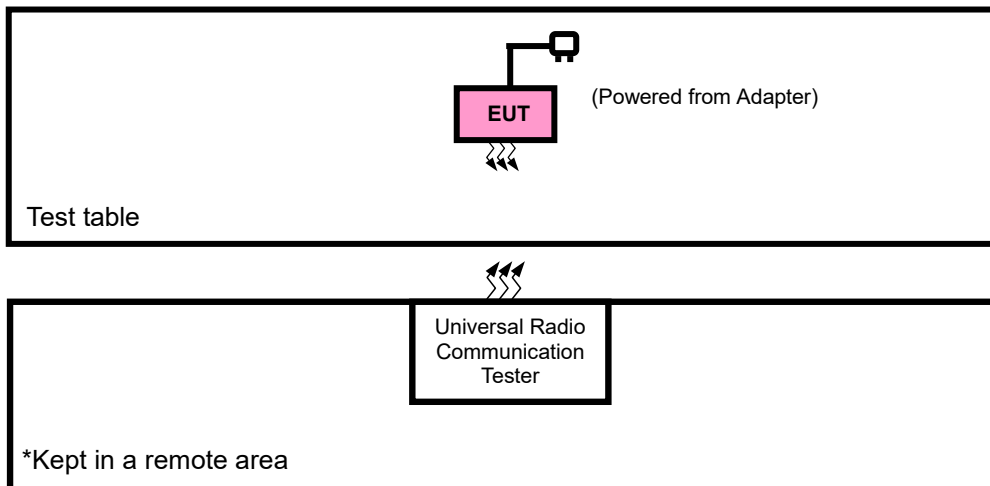
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

**List of Accessory:**

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	VEKEN	N/A	YW-003C	Capacity: 7.2Vdc, 3350mAh
AC Adapter	PAX	Shenzhen Sorghum red Electronics Technology Co.,Ltd	GLH50E2000HW	I/P: 100-240Vac, 0.4A, O/P: 5.0Vdc, 2A
USB Cable	N/A	N/A	N/A	Signal Line,1.0meter

## 2.2 CONFIGURATION OF SYSTEM UNDER TEST

### FOR RADIATION EMISSION



## 2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

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

## 2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case 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 WCDMA or LTE link
B	EUT + Battery with WCDMA or LTE link

### WCDMA MODE

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

**LTE BAND 4 MODE**

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
B	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
B	FREQUENCY STABILITY	19957 to 20393	19957, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	OCCUPIED BANDWIDTH	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
B	PEAK TO AVERAGE RATIO	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
B	BAND EDGE	19957 to 20393	19957	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		19965 to 20385	19965	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
			20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		19975 to 20375	19975	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
20000 to 20350	20000	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset		
				50 RB / 0 RB Offset		
	20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset		
				50 RB / 0 RB Offset		

B	BAND EDGE	20025 to 20325	20025	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
		20050 to 20300	20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		20050 to 20300	20050	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
		20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset	
B	CONDCUDED EMISSION	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
A	RADIATED EMISSION	19957 to 20393	20175	1.4MHz	QPSK	1 RB / 0 RB Offset
		19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
		20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20175	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	1 RB / 0 RB Offset		
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset		
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset		
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset		
B	FREQUENCY STABILITY	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset		
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset		
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset		
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset		
A	OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset		
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset		
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset		
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset		
A	PEAK TO AVERAGE RATIO	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset		
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset		
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset		
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset		
A	BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset		
			23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB Offset 6 RB / 0 RB Offset		
		23025 to 23165	23025	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset		
			23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB Offset 15 RB / 0 RB Offset		
		23035 to 23155	23035	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset		
			23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset		
		23060 to 23130	23060	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset		
			23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset		
		A	CONDCUDED EMISSION	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
				23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
				23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
				23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	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	23035, 23095 ,23155	5MHz	QPSK	1 RB / 0 RB Offset		
		23060 to 23130	23095	10MHz	QPSK	1 RB / 0 RB Offset		





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**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	20025, 20175, 20325	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23205 to 23255	20025, 20325	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23205 to 23255	20025, 20175, 20325	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	BAND EDGE	23205 to 23255	23250	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			23255	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 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	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	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 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



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**TEST CONDITION:**

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 56%RH	DC 5V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 56%RH	DC 6.4V/7.2V/8.26V By DC Source	James Fu
OCCUPIED BANDWIDTH	23deg. C, 56%RH	DC5V By Adapter	James Fu
BAND EDGE	23deg. C, 56%RH	DC 5V By Adapter	James Fu
CONDCUDED EMISSION	23deg. C, 56%RH	DC5V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 56%RH	DC5V By Adapter	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 56%RH	DC5V By Adapter	James Fu



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## 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

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

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.

##### 3.1.2 TEST PROCEDURES

###### EIRP MEASUREMENT:

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

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

Where:

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

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

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

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

###### CONDUCTED POWER MEASUREMENT:

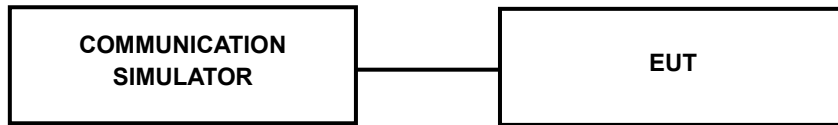
- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



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### 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

#### AVERAGE CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA IV		
	1312	1413	1513
Channel	1712.4	1732.6	1752.6
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2K	21.94	21.89	21.85
HSDPA Subtest-1	20.87	20.84	20.83
HSDPA Subtest-2	20.88	20.82	20.80
HSDPA Subtest-3	20.31	20.27	20.28
HSDPA Subtest-4	20.29	20.32	20.27
DC-HSDPA Subtest-1	20.79	20.83	20.81
DC-HSDPA Subtest-2	20.84	20.77	20.72
DC-HSDPA Subtest-3	20.21	20.31	20.25
DC-HSDPA Subtest-4	20.30	20.25	20.23
HSUPA Subtest-1	20.86	20.82	20.83
HSUPA Subtest-2	18.93	18.85	18.82
HSUPA Subtest-3	19.90	19.84	19.76
HSUPA Subtest-4	18.89	18.80	18.80
HSUPA Subtest-5	20.80	20.80	20.80
HSPA+ Subtest-1	18.52	18.40	18.37



**BUREAU  
VERITAS**

**Test Report No.: W7L-P23010024RF06**

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	21.98	21.91	22.06
		1	2	21.91	21.86	21.97
		1	5	21.91	21.84	22.00
		3	0	21.86	21.80	21.93
		3	1	21.63	21.60	21.69
		3	3	21.67	21.58	21.71
		6	0	20.83	20.77	20.86
	16QAM	1	0	21.60	21.54	21.69
		1	2	21.49	21.44	21.59
		1	5	21.45	21.33	21.57
		3	0	20.88	20.88	20.97
		3	1	20.81	20.82	20.92
		3	3	20.95	20.87	20.98
		6	0	19.77	19.81	19.87
	64QAM	1	0	19.59	19.53	19.68
		1	2	19.45	19.44	19.57
		1	5	19.51	19.41	19.51
		3	0	19.78	19.76	19.86
		3	1	19.90	19.92	19.95
		3	3	20.20	20.08	20.32
		6	0	19.02	18.92	19.09

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	21.93	21.90	22.03
		1	7	21.87	21.87	21.97
		1	14	21.85	21.89	21.99
		8	0	20.84	20.87	20.93
		8	3	20.60	20.57	20.69
		8	7	20.64	20.65	20.75
		15	0	20.79	20.78	20.84
	16QAM	1	0	21.63	21.53	21.73
		1	7	21.43	21.48	21.56
		1	14	21.47	21.35	21.56
		8	0	19.90	19.86	19.97
		8	3	19.83	19.75	19.95
		8	7	19.98	19.90	19.91
		15	0	19.78	19.75	19.86
	64QAM	1	0	19.65	19.52	19.68
		1	7	19.46	19.44	19.55
		1	14	19.51	19.41	19.52
		8	0	18.78	18.78	18.89
		8	3	18.94	18.86	19.00
		8	7	19.17	19.12	19.28
		15	0	19.04	18.89	19.13



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	21.94	21.89	22.07
		1	12	21.90	21.87	21.94
		1	24	21.85	21.90	22.00
		12	0	20.88	20.83	20.94
		12	6	20.58	20.60	20.72
		12	13	20.65	20.61	20.75
		25	0	20.76	20.81	20.83
	16QAM	1	0	21.63	21.53	21.72
		1	12	21.43	21.46	21.53
		1	24	21.44	21.39	21.52
		12	0	19.85	19.88	20.00
		12	6	19.83	19.76	19.92
		12	13	19.92	19.87	19.97
		25	0	19.75	19.81	19.86
	64QAM	1	0	19.58	19.57	19.68
		1	12	19.47	19.41	19.54
		1	24	19.45	19.48	19.51
		12	0	18.82	18.77	18.86
		12	6	18.90	18.92	18.98
		12	13	19.21	19.11	19.25
		25	0	19.00	18.95	19.11

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	21.91	21.93	22.03
		1	24	21.91	21.86	21.97
		1	49	21.91	21.84	22.00
		25	0	20.86	20.80	20.93
		25	12	20.63	20.60	20.69
		25	25	20.65	20.58	20.71
		50	0	20.81	20.77	20.86
	16QAM	1	0	21.63	21.54	21.69
		1	24	21.45	21.44	21.59
		1	49	21.48	21.33	21.57
		25	0	19.84	19.89	19.97
		25	12	19.87	19.75	19.96
		25	25	19.91	19.88	19.94
		50	0	19.80	19.77	19.90
	64QAM	1	0	19.64	19.51	19.65
		1	24	19.45	19.38	19.60
		1	49	19.52	19.47	19.45
		25	0	18.81	18.74	18.88
		25	12	18.95	18.88	18.99
		25	25	19.20	19.08	19.27
		50	0	19.05	18.91	19.12

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	21.95	21.94	22.02
		1	37	21.92	21.91	21.95
		1	74	21.87	21.86	22.04
		36	0	20.91	20.86	20.90
		36	19	20.56	20.55	20.75
		36	39	20.71	20.62	20.74
		75	0	20.81	20.82	20.82
	16QAM	1	0	21.61	21.56	21.72
		1	37	21.45	21.50	21.58
		1	74	21.48	21.33	21.57
		36	0	19.84	19.89	19.97
		36	19	19.86	19.77	19.95
		36	39	19.98	19.87	19.91
		75	0	19.77	19.80	19.88
	64QAM	1	0	19.64	19.51	19.65
		1	37	19.45	19.38	19.60
		1	74	19.52	19.47	19.45
		36	0	18.79	18.74	18.88
		36	19	18.94	18.93	18.97
		36	39	19.23	19.08	19.32
		75	0	19.04	18.89	19.13

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	21.99	21.97	22.08
		1	50	21.94	21.92	21.99
		1	99	21.93	21.91	22.05
		50	0	20.92	20.88	20.95
		50	25	20.64	20.62	20.77
		50	50	20.72	20.66	20.77
		100	0	20.84	20.83	20.88
	16QAM	1	0	21.65	21.61	21.74
		1	50	21.51	21.52	21.61
		1	99	21.50	21.41	21.58
		50	0	19.92	19.93	20.02
		50	25	19.89	19.83	19.97
		50	50	19.99	19.92	19.99
		100	0	19.83	19.83	19.92
	64QAM	1	0	19.66	19.58	19.70
		1	50	19.51	19.46	19.62
		1	99	19.53	19.49	19.53
		50	0	18.86	18.82	18.94
		50	25	18.96	18.94	19.01
		50	50	19.25	19.16	19.33
		100	0	19.06	18.97	19.14

LTE Band 12

Band/BW	Modulation	RB Size	RB Offset	Low CH 23017	Mid CH 23095	High CH 23173
				Frequency 699.7 MHz	Frequency 707.5 MHz	Frequency 715.3 MHz
12/ 1.4	QPSK	1	0	22.09	22.14	22.06
		1	2	22.14	22.08	22.09
		1	5	21.94	21.89	21.89
		3	0	21.98	21.98	21.95
		3	1	21.96	22.05	21.86
		3	3	22.22	22.21	22.18
		6	0	21.01	21.03	20.95
	16QAM	1	0	21.04	21.07	21.03
		1	2	21.07	21.10	21.04
		1	5	21.02	20.96	21.00
		3	0	20.77	20.81	20.70
		3	1	21.14	21.28	21.11
		3	3	21.20	21.24	21.22
		6	0	20.11	20.17	20.07
	64QAM	1	0	19.80	19.87	19.84
		1	2	19.85	20.00	19.84
		1	5	20.00	20.04	20.00
		3	0	18.47	18.51	18.37
		3	1	18.71	18.85	18.71
		3	3	18.75	18.74	18.69
		6	0	17.63	17.69	17.59

Band/BW	Modulation	RB Size	RB Offset	Low CH 23025	Mid CH 23095	High CH 23165
				Frequency 700.5 MHz	Frequency 707.5 MHz	Frequency 714.5 MHz
12/ 3	QPSK	1	0	22.11	22.16	22.05
		1	7	22.10	22.09	22.09
		1	14	21.90	21.89	21.89
		8	0	20.97	21.01	20.95
		8	3	20.89	21.05	20.88
		8	7	21.19	21.28	21.22
		15	0	20.98	21.04	20.89
	16QAM	1	0	21.01	21.13	21.06
		1	7	21.04	21.13	21.02
		1	14	21.05	20.96	21.00
		8	0	19.73	19.82	19.70
		8	3	20.19	20.23	20.14
		8	7	20.22	20.22	20.18
		15	0	20.11	20.11	20.10
	64QAM	1	0	19.86	19.90	19.78
		1	7	19.88	19.94	19.83
		1	14	20.01	20.06	20.00
		8	0	17.50	17.55	17.38
		8	3	17.75	17.79	17.76
		8	7	17.72	17.78	17.65
		15	0	17.65	17.66	17.63

Band/BW	Modulation	RB Size	RB Offset	Low CH 23035	Mid CH 23095	High CH 23155
				Frequency 701.5 MHz	Frequency 707.5 MHz	Frequency 713.5 MHz
12/ 5	QPSK	1	0	22.12	22.11	22.06
		1	12	22.15	22.06	22.09
		1	24	21.91	21.88	21.93
		12	0	21.00	21.01	20.92
		12	6	20.89	21.06	20.89
		12	13	21.23	21.24	21.23
		25	0	20.96	21.07	20.92
	16QAM	1	0	21.02	21.09	21.06
		1	12	21.01	21.16	21.01
		1	24	21.05	20.96	20.99
		12	0	19.73	19.80	19.67
		12	6	20.16	20.27	20.10
		12	13	20.17	20.24	20.21
		25	0	20.11	20.12	20.07
	64QAM	1	0	19.80	19.87	19.84
		1	12	19.85	20.00	19.83
		1	24	19.94	20.11	20.00
		12	0	17.51	17.52	17.37
		12	6	17.69	17.86	17.75
		12	13	17.76	17.77	17.62
		25	0	17.61	17.72	17.61

Band/BW	Modulation	RB Size	RB Offset	Low CH 23060	Mid CH 23095	High CH 23130
				Frequency 704 MHz	Frequency 707.5 MHz	Frequency 711 MHz
12/ 10	QPSK	1	0	22.17	22.18	22.11
		1	24	22.17	22.14	22.11
		1	49	21.96	21.96	21.94
		25	0	21.04	21.06	20.97
		25	12	20.97	21.07	20.94
		25	25	21.27	21.29	21.24
		50	0	21.02	21.09	20.97
	16QAM	1	0	21.09	21.14	21.08
		1	24	21.09	21.18	21.06
		1	49	21.07	21.04	21.01
		25	0	19.81	19.86	19.75
		25	12	20.22	20.29	20.16
		25	25	20.24	20.29	20.23
		50	0	20.17	20.19	20.12
	64QAM	1	0	19.87	19.92	19.86
		1	24	19.93	20.02	19.89
		1	49	20.02	20.12	20.02
		25	0	17.55	17.57	17.45
		25	12	17.77	17.87	17.77
		25	25	17.80	17.82	17.70
		50	0	17.67	17.74	17.64





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**LTE Band 13**

Band/BW	Modulation	RB Size	RB Offset	Low CH 23205	Mid CH 23230	High CH 23255
				Frequency 779.5 MHz	Frequency 782.0 MHz	Frequency 784.5 MHz
13/ 5	QPSK	1	0	21.99	22.03	22.02
		1	12	22.07	22.01	22.08
		1	24	21.85	21.89	21.88
		12	0	21.04	21.01	21.05
		12	6	20.91	20.86	20.88
		12	13	20.81	20.79	20.85
		25	0	20.94	20.93	20.87
	16QAM	1	0	21.18	21.17	21.19
		1	12	21.16	21.13	21.17
		1	24	21.13	21.08	21.10
		12	0	19.79	19.77	19.83
		12	6	20.02	19.96	20.03
		12	13	19.86	19.90	19.89
		25	0	19.97	19.91	19.98
	64QAM	1	0	19.97	20.01	20.00
		1	12	19.95	19.92	19.96
		1	24	20.22	20.17	20.19
		12	0	18.30	18.28	18.34
		12	6	18.72	18.71	18.65
		12	13	18.65	18.62	18.64
		25	0	18.56	18.51	18.55



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Band/BW	Modulation	RB Size	RB Offset	/	Mid CH 23230	/
				/	Frequency 782.0 MHz	/
13/ 10	QPSK	1	0	/	22.07	/
		1	24	/	22.09	/
		1	49	/	21.93	/
		25	0	/	21.07	/
		25	12	/	20.93	/
		25	25	/	20.87	/
		50	0	/	20.95	/
	16QAM	1	0	/	21.25	/
		1	24	/	21.19	/
		1	49	/	21.15	/
		25	0	/	19.85	/
		25	12	/	20.04	/
		25	25	/	19.94	/
		50	0	/	19.99	/
	64QAM	1	0	/	20.05	/
		1	24	/	19.98	/
		1	49	/	20.24	/
		25	0	/	18.36	/
		25	12	/	18.73	/
		25	25	/	18.70	/
		50	0	/	18.57	/



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**LTE Band 17**

Band/BW	Modulation	RB Size	RB Offset	Low CH 23755	Mid CH 23790	High CH 23825
				Frequency 706.5 MHz	Frequency 710 MHz	Frequency 713.5 MHz
17/ 5	QPSK	1	0	22.13	22.03	22.13
		1	12	22.08	22.08	22.04
		1	24	22.19	22.15	22.23
		12	0	20.93	20.97	20.93
		12	6	20.98	20.78	20.92
		12	13	20.71	20.67	20.65
		25	0	20.82	20.82	20.76
	16QAM	1	0	21.09	21.05	21.13
		1	12	20.95	20.85	20.91
		1	24	21.11	21.07	21.15
		12	0	19.69	19.73	19.67
		12	6	20.09	20.15	20.15
		12	13	20.24	20.14	20.10
		25	0	20.06	20.12	20.12
	64QAM	1	0	19.98	19.88	19.84
		1	12	19.91	19.91	19.91
		1	24	19.93	19.83	19.89
		12	0	18.07	18.03	18.11
		12	6	18.11	18.15	18.09
		12	13	17.97	17.93	17.91
		25	0	18.11	18.01	17.97

Band/BW	Modulation	RB Size	RB Offset	Low CH 23780	Mid CH 23790	High CH 23800
				Frequency 709 MHz	Frequency 710 MHz	Frequency 711 MHz
17/ 10	QPSK	1	0	22.17	22.08	22.14
		1	24	22.14	22.10	22.09
		1	49	22.26	22.20	22.25
		25	0	21.01	20.99	20.98
		25	12	21.00	20.86	20.94
		25	25	20.79	20.73	20.73
		50	0	20.88	20.84	20.82
	16QAM	1	0	21.16	21.10	21.15
		1	24	21.01	20.92	20.96
		1	49	21.18	21.12	21.17
		25	0	19.77	19.75	19.73
		25	12	20.17	20.16	20.17
		25	25	20.28	20.19	20.18
		50	0	20.14	20.13	20.14
	64QAM	1	0	20.02	19.93	19.92
		1	24	19.97	19.93	19.94
		1	49	19.99	19.90	19.94
		25	0	18.14	18.08	18.13
		25	12	18.19	18.17	18.15
		25	25	18.05	17.99	17.99
		50	0	18.15	18.06	18.05



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**EIRP**

**WCDMA IV**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	21.94	0.23	22.17	164.82	1
1413	1732.6	21.89	0.23	22.12	162.93	1
1513	1752.6	21.85	0.23	22.08	161.44	1

**LTE BAND 4**

**CHANNEL BANDWIDTH: 1.4MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	21.98	0.25	22.23	167.11	1
20175	1732.5	21.91	0.25	22.16	164.44	1
20393	1754.3	22.06	0.25	22.31	170.22	1

**CHANNEL BANDWIDTH: 1.4MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	21.6	0.25	21.85	153.11	1
20175	1732.5	21.54	0.25	21.79	151.01	1
20393	1754.3	21.69	0.25	21.94	156.31	1

**CHANNEL BANDWIDTH: 1.4MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	20.2	0.25	20.45	110.92	1
20175	1732.5	20.08	0.25	20.33	107.89	1
20393	1754.3	20.32	0.25	20.57	114.02	1

**CHANNEL BANDWIDTH: 3MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	21.93	0.25	22.18	165.2	1
20175	1732.5	21.9	0.25	22.15	164.06	1
20385	1753.5	22.03	0.25	22.28	169.04	1

**CHANNEL BANDWIDTH: 3MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	21.63	0.25	21.88	154.17	1
20175	1732.5	21.47	0.25	21.72	148.59	1
20385	1753.5	21.47	0.25	21.72	148.59	1

**CHANNEL BANDWIDTH: 3MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	19.65	0.25	19.9	97.72	1
20175	1732.5	19.52	0.25	19.77	94.84	1
20385	1753.5	19.68	0.25	19.93	98.4	1

**CHANNEL BANDWIDTH: 5MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	21.94	0.25	22.19	165.58	1
20175	1732.5	21.9	0.25	22.15	164.06	1
20375	1752.5	22.07	0.25	22.32	170.61	1

**CHANNEL BANDWIDTH: 5MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	21.63	0.25	21.88	154.17	1
20175	1732.5	21.53	0.25	21.78	150.66	1
20375	1752.5	21.72	0.25	21.97	157.4	1

**CHANNEL BANDWIDTH: 5MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	19.58	0.25	19.83	96.16	1
20175	1732.5	19.57	0.25	19.82	95.94	1
20375	1752.5	19.68	0.25	19.93	98.4	1

**CHANNEL BANDWIDTH: 10MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	21.91	0.25	22.16	164.44	1
20175	1732.5	21.93	0.25	22.18	165.2	1
20350	1750	22.03	0.25	22.28	169.04	1

**CHANNEL BANDWIDTH: 10MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	21.63	0.25	21.88	154.17	1
20175	1732.5	21.54	0.25	21.79	151.01	1
20350	1750	21.69	0.25	21.94	156.31	1

**CHANNEL BANDWIDTH: 10MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	19.64	0.25	19.89	97.5	1
20175	1732.5	19.51	0.25	19.76	94.62	1
20350	1750	19.65	0.25	19.9	97.72	1

**CHANNEL BANDWIDTH: 15MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	21.95	0.25	22.2	165.96	1
20175	1732.5	21.94	0.25	22.19	165.58	1
20325	1747.5	22.04	0.25	22.29	169.43	1

**CHANNEL BANDWIDTH: 15MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	21.61	0.25	21.86	153.46	1
20175	1732.5	21.56	0.25	21.81	151.71	1
20325	1747.5	21.72	0.25	21.97	157.4	1

**CHANNEL BANDWIDTH: 15MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	19.64	0.25	19.89	97.5	1
20175	1732.5	19.51	0.25	19.76	94.62	1
20325	1747.5	19.65	0.25	19.9	97.72	1

**CHANNEL BANDWIDTH: 20MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	21.99	0.25	22.24	167.49	1
20175	1732.5	21.97	0.25	22.22	166.72	1
20300	1745	22.08	0.25	22.33	171	1

**CHANNEL BANDWIDTH: 20MHz 16QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	21.65	0.25	21.9	154.88	1
20175	1732.5	21.61	0.25	21.86	153.46	1
20300	1745	21.74	0.25	21.99	158.12	1

**CHANNEL BANDWIDTH: 20MHz 64QAM**

Channel	Frequency (MHz)	Conducted Power (dBm)	G <sub>T</sub> -L <sub>c</sub> (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	19.66	0.25	19.91	97.95	1
20175	1732.5	19.58	0.25	19.83	96.16	1
20300	1745	19.7	0.25	19.95	98.86	1