

FCC TEST REPORT

(PART 27)

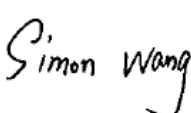
Applicant:	HMD Global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland

Manufacturer or Supplier:	HMD Global Oy
Address:	Bertel Jungin aukio 9, 02600 Espoo, Finland
Product:	Tablet PC
Brand Name:	NOKIA
Model Name:	TA-1505
FCC ID:	2AJOTTA-1505
Date of tests:	Aug. 03, 2022 ~ Aug. 31, 2022

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: Aug. 31, 2022	 Date: Aug. 31, 2022

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WCMDA BAND4	207
LTE BAND7	220
LTE BAND12	314
LTE BAND13	415
LTE BAND41	458
LTE BAND66	563
LTE BAND CA_7C	712



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P22070038RF06	Original release	Aug. 31, 2022

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) §27.50(h)(2)	Equivalent Isotropically Radiated Power (Band 4) (Band 7/7C) (Band 38) (Band 41) (Band 66)	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) §27.53(m)(4)(6)	Conducted Band Edge Measurements (Band 4) (Band 7/7C) (Band 38) (Band 41) (Band 66)	Compliance
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h) §27.53(m)(4)(6)	Conducted Spurious Emissions (Band 4) (Band 7/7C) (Band 38) (Band 41) (Band 66)	Compliance
§2.1053 §27.53(c)(2)(4) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4)(6)	Radiated Spurious Emissions (Band 4) (Band 7/7C) (Band 38) (Band 41) (Band 66)	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	$\pm 76.97\text{Hz}$
Radiated emissions & Radiated Power (30MHz~1GMHz)	$\pm 4.98\text{dB}$
Radiated emissions & Radiated Power (1GMHz ~6GMHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GMHz ~18GMHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GMHz ~40GMHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Band Edge Measurements	$\pm 4.70\text{dB}$

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.05,21	Sep.04,22
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. 25, 21	Aug. 24, 22
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
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 Microwave 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. 25,21	Aug. 24,22
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

PRODUCT	Tablet PC	
BRAND NAME	NOKIA	
MODEL NAME	TA-1505	
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.85Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	WCDMA IV	BPSK, QPSK
	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	WCDMA IV	1712.4MHz ~ 1752.6MHz
	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~ 1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~ 1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715MHz ~ 1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5 MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~ 1745MHz
	LTE Band 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

FREQUENCY RANGE	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711 MHz
	LTE Band 38 Channel Bandwidth: 5MHz	2572.5MHz ~ 2617.5MHz
	LTE Band 38 Channel Bandwidth: 10MHz	2575MHz ~ 2615MHz
	LTE Band 38 Channel Bandwidth: 15MHz	2577.5MHz ~ 2612.5MHz
	LTE Band 38 Channel Bandwidth: 20MHz	2580MHz ~ 2610MHz
	LTE Band 41 Channel Bandwidth: 5MHz	2498.5MHz ~ 2687.5MHz
	LTE Band 41 Channel Bandwidth: 10MHz	2501MHz ~ 2685MHz
	LTE Band 41 Channel Bandwidth: 15MHz	2503.5MHz ~ 2682.5MHz
	LTE Band 41 Channel Bandwidth: 20MHz	2506MHz ~ 2680MHz
	LTE Band 66 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1779.3MHz
	LTE Band 66 Channel Bandwidth: 3MHz	1711.5MHz ~ 1778.5MHz
	LTE Band 66 Channel Bandwidth: 5MHz	1712.5MHz ~ 1777.5MHz
	LTE Band 66 Channel Bandwidth: 10MHz	1715MHz ~ 1775MHz
	LTE Band 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz
	LTE Band 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz
	LTE Band CA_7C Channel Bandwidth: 10MHz+20MHz	2505.5MHz ~ 2560MHz
	LTE Band CA_7C Channel Bandwidth: 15MHz+10MHz	2507.5MHz ~ 2564.7MHz
	LTE Band CA_7C Channel Bandwidth: 15MHz+15MHz	2507.5MHz ~ 2562.5MHz
	LTE Band CA_7C Channel Bandwidth: 15MHz+20MHz	2507.8MHz ~ 2560MHz
	LTE Band CA_7C Channel Bandwidth: 20MHz+10MHz	2510MHz ~ 2564.5MHz



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FREQUENCY RANGE	LTE Band CA_7C Channel Bandwidth: 20MHz+15MHz	2510MHz ~ 2562.5MHz
	LTE Band CA_7C Channel Bandwidth: 20MHz+20MHz	2510MHz ~ 2560MHz
MAX. EIRP POWER	WCDMA IV	203.24mW
	LTE Band 4 Channel Bandwidth: 1.4MHz	285.10mW
	LTE Band 4 Channel Bandwidth: 3MHz	281.84mW
	LTE Band 4 Channel Bandwidth: 5MHz	282.49mW
	LTE Band 4 Channel Bandwidth: 10MHz	280.54mW
	LTE Band 4 Channel Bandwidth: 15MHz	283.14mW
	LTE Band 4 Channel Bandwidth: 20MHz	285.76mW
	LTE Band 7 Channel Bandwidth: 5MHz	144.88mW
	LTE Band 7 Channel Bandwidth: 10MHz	143.55mW
	LTE Band 7 Channel Bandwidth: 15MHz	144.88mW
	LTE Band 7 Channel Bandwidth: 20MHz	145.88mW
	LTE Band 12 Channel Bandwidth: 1.4MHz	51.17mW
	LTE Band 12 Channel Bandwidth: 3MHz	50.70mW
	LTE Band 12 Channel Bandwidth: 5MHz	50.82mW
	LTE Band 12 Channel Bandwidth: 10MHz	51.40mW
	LTE Band 13 Channel Bandwidth: 5MHz	39.17mW
	LTE Band 13 Channel Bandwidth: 10MHz	39.54mW
	LTE Band 17 Channel Bandwidth: 5MHz	52.72mW
	LTE Band 17 Channel Bandwidth: 10MHz	53.33mW
	LTE Band 38 Channel Bandwidth: 5MHz	138.36mW

MAX. EIRP POWER	LTE Band 38 Channel Bandwidth: 10MHz	138.68mW
	LTE Band 38 Channel Bandwidth: 15MHz	139.00mW
	LTE Band 38 Channel Bandwidth: 20MHz	139.96mW
	LTE Band 41 Channel Bandwidth: 5MHz	147.23mW
	LTE Band 41 Channel Bandwidth: 10MHz	146.22mW
	LTE Band 41 Channel Bandwidth: 15MHz	148.59mW
	LTE Band 41 Channel Bandwidth: 20MHz	148.94mW
	LTE Band 66 Channel Bandwidth: 1.4MHz	310.46mW
	LTE Band 66 Channel Bandwidth: 3MHz	311.89mW
	LTE Band 66 Channel Bandwidth: 5MHz	312.61mW
	LTE Band 66 Channel Bandwidth: 10MHz	314.05mW
	LTE Band 66 Channel Bandwidth: 15MHz	311.89mW
	LTE Band 66 Channel Bandwidth: 20MHz	316.23mW
	LTE Band CA_7C Channel Bandwidth: 10MHz+20MHz	141.58mW
	LTE Band CA_7C Channel Bandwidth: 15MHz+10MHz	142.89mW
	LTE Band CA_7C Channel Bandwidth: 15MHz+15MHz	141.58mW
	LTE Band CA_7C Channel Bandwidth: 15MHz+20MHz	140.28mW
	LTE Band CA_7C Channel Bandwidth: 20MHz+10MHz	143.22mW
	LTE Band CA_7C Channel Bandwidth: 20MHz+15MHz	142.56mW
	LTE Band CA_7C Channel Bandwidth: 20MHz+20MHz	143.55mW

EMISSION DESIGNATOR	WCDMA IV	4M17F9W
	LTE Band 7 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M49W7D
	LTE Band 7 Channel Bandwidth: 10MHz	QPSK: 8M99G7D
		16QAM: 8M98W7D
		64QAM: 8M98W7D
	LTE Band 7 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 7 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 1M10G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 2M70G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 4M51G7D
		16QAM: 4M51W7D
		64QAM: 4M49W7D
	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M00W7D
		64QAM: 8M99W7D
	LTE Band 13 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M51W7D
		64QAM: 4M50W7D
	LTE Band 13 Channel Bandwidth: 10MHz	QPSK: 8M97G7D
		16QAM: 8M95W7D
		64QAM: 8M94W7D



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EMISSION DESIGNATOR	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M49W7D
		64QAM: 4M50W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 8M99G7D
		16QAM: 8M98W7D
		64QAM: 8M97W7D
	LTE Band 41 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 17M9G7D
		16QAM: 17M9W7D
		64QAM: 18M0W7D
	LTE Band 66 Channel Bandwidth: 1.4MHz	QPSK: 1M09G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
	LTE Band 66 Channel Bandwidth: 3MHz	QPSK: 2M70G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
	LTE Band 66 Channel Bandwidth: 5MHz	QPSK: 4M49G7D
		16QAM: 4M50W7D
		64QAM: 4M49W7D
	LTE Band 66 Channel Bandwidth: 10MHz	QPSK: 8M98G7D
		16QAM: 8M97W7D
		64QAM: 8M98W7D
	LTE Band 66 Channel Bandwidth: 15MHz	QPSK: 13M4G7D
		16QAM: 13M4W7D
		64QAM: 13M4W7D
	LTE Band 66 Channel Bandwidth: 20MHz	QPSK: 17M9G7D
		16QAM: 17M9W7D
		64QAM: 17M9W7D

EMISSION DESIGNATOR	LTE Band CA_7C Channel Bandwidth: 10MHz+20MHz	QPSK: 28M0G7D
		16QAM: 28M0W7D
		64QAM: 28M0W7D
	LTE Band CA_7C Channel Bandwidth: 15MHz +10MHz	QPSK: 23M5G7D
		16QAM: 23M4W7D
		64QAM: 23M4W7D
	LTE Band CA_7C Channel Bandwidth: 15MHz +15MHz	QPSK: 28M5G7D
		16QAM: 28M5W7D
		64QAM: 28M5W7D
	LTE Band CA_7C Channel Bandwidth: 15MHz +20MHz	QPSK: 32M8G7D
		16QAM: 32M7W7D
		64QAM: 32M7W7D
	LTE Band CA_7C Channel Bandwidth: 20MHz +10MHz	QPSK: 28M0G7D
		16QAM: 28M0W7D
		64QAM: 28M0W7D
	LTE Band CA_7C Channel Bandwidth: 20MHz +15MHz	QPSK: 32M9G7D
		16QAM: 32M9W7D
		64QAM: 32M9W7D
	LTE Band CA_7C Channel Bandwidth: 20MHz +20MHz	QPSK: 37M7G7D
		16QAM: 37M7W7D
		64QAM: 37M7W7D



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ANTENNA TYPE	Fixed Internal Antenna with 1.13dBi gain for WCDMA IV Fixed Internal Antenna with 1.13dBi gain for LTE4 Fixed Internal Antenna with -0.85dBi gain for LTE7/ LTE7C Fixed Internal Antenna with -4.16dBi gain for LTE12 Fixed Internal Antenna with -4.67dBi gain for LTE13 Fixed Internal Antenna with -4.16dBi gain for LTE17 Fixed Internal Antenna with -0.85dBi gain for LTE38 Fixed Internal Antenna with -0.85dBi gain for LTE41 Fixed Internal Antenna with 1.13dBi gain for LTE66
HW VERSION	EM_U1630_V1.2 L20
SW VERSION	V0.492_B01
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: non-shielded cable, with w/o ferrite core, 1 meter Earphone: non-shielded cable, with w/o ferrite core, 1.5 meter
EXTREME TEMPERATURE	0-40 °C
EXTREME VOLTAGE	3.6V - 4. 4V

NOTE:

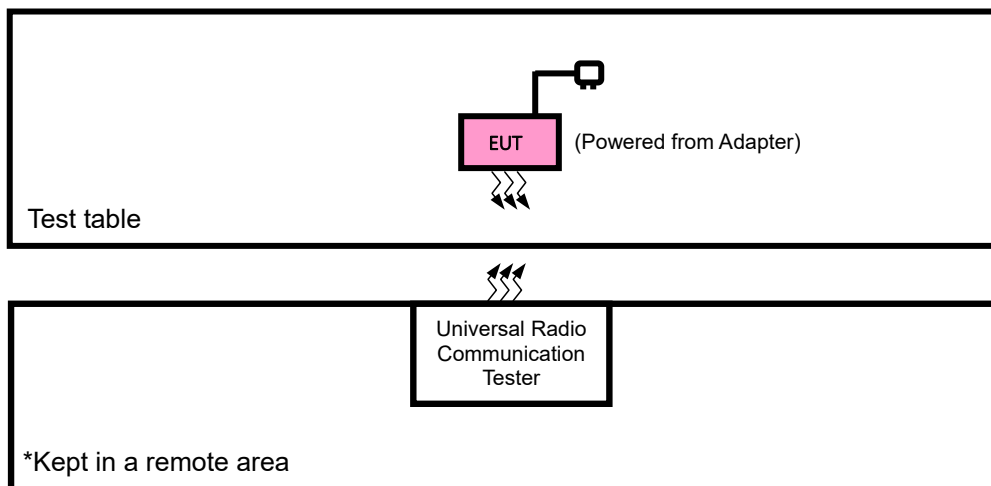
1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	NOKIA	Guangdong Fenghua New Energy Co., Ltd.	WTT80	Capacity: 3.8 Vdc, 8000mAh
AC Adapter	NOKIA	Shenzhen Baijunda Electronic Co., Ltd	AD-010U	I/P: 100-240Vac, 0.35A, O/P: 5.0Vdc, 2.0A
Earphone	NOKIA	JUWEI ELECTRONICS CO., LTD	JWEP1242-W09 H	Signal Line, 1.5meter
USB Cable	NOKIA	Saibao (Jiangxi) Industrial Co., Ltd	AC-2A	Signal Line, 1.0meter

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	LONG WEI	PS-6403D	010934269	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 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, 1413, 1513	1312, 1513	WCDMA
A	PEAK TO AVERAGE RATIO	1312 to 1513	1312, 1413, 1513	WCDMA
A	CONDUCTED 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
A	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	CONDCUDETED EMISSION	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset

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

2. LTE Band 4 are covered by LTE Band 66, Because it is a subset of LTE Band 66 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 66

LTE BAND 7 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDT H	MODULATION	MODE
A	EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	BAND EDGE	20775 to 21425	20775	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			21425	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		20800 to 21400	20800	10MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
			21400	10MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		20825 to 21375	20825	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			21375	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20850 to 21350	20850	20MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
			21350	20MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		20825 to 21375	20825	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			21375	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		20850 to 21350	20850	20MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
			21350	20MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
A	CONDCUDE TED EMISSION	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB / 0 RB Offset
		20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB Offset
		20850 to 21350	21100	20MHz	QPSK	1 RB / 0 RB Offset

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

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	1 RB / 0 RB Offset 6 RB / 0 RB Offset
			23173	1.4MHz	QPSK	1 RB / 5 RB Offset 6 RB / 0 RB Offset
		23025 to 23165	23025	3MHz	QPSK	1 RB / 0 RB Offset 15 RB / 0 RB Offset
			23165	3MHz	QPSK	1 RB / 14 RB Offset 15 RB / 0 RB Offset
		23035 to 23155	23035	5MHz	QPSK	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			23155	5MHz	QPSK	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		23060 to 23130	23060	10MHz	QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			23130	10MHz	QPSK	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	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	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
			23255	5MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
						1 RB / 0 RB Offset
						50 RB / 0 RB Offset
A	CONDCUDED EMISSION	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
A	RADIATED EMISSION	23205 to 23255	20025, 20175, 20325	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	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
A	CONDCUDED EMISSION	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

LTE BAND 38 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	CONDUCTED EMISSION	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset

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

2. LTE Band 38 are covered by LTE Band 41, Because it is a subset of LTE Band 41 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 41

LTE BAND 41 MODE

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

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

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

LTE BAND 66 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	131979 to 132665	131979,132322,132665	1.4MHz	25 RB / 0 RB Offset	6 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	50 RB / 0 RB Offset	15 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	25 RB / 0 RB Offset	25 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	50 RB / 0 RB Offset	50 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	25 RB / 0 RB Offset	75 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	50 RB / 0 RB Offset	6 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	15 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	25 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	50 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	75 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	100 RB / 0 RB Offset
A	BAND EDGE	131979 to 132322	131979	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132322	1.4MHz	QPSK,16QAM, 64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987	3MHz	QPSK,16QAM, 64QAM	1 RB / 5 RB Offset
			132657	3MHz	QPSK,16QAM, 64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132657	5MHz	QPSK,16QAM, 64QAM	15 RB / 0 RB Offset
		131997 to 132647	131997	10MHz	QPSK,16QAM, 64QAM	1 RB / 14 RB Offset
			132647	10MHz	QPSK,16QAM, 64QAM	15 RB / 0 RB Offset
		132047 to 132597	132047	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132597	15MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
		132072 to 132572	132072	20MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
			132572	20MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
		131979 to 132322	131979	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132322	1.4MHz	QPSK,16QAM, 64QAM	50 RB / 0 RB Offset
		131987 to 132657	131987	3MHz	QPSK,16QAM, 64QAM	1 RB / 49 RB Offset
			132657	3MHz	QPSK,16QAM, 64QAM	50 RB / 0 RB Offset
		131997 to 132647	131997	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132647	10MHz	QPSK,16QAM, 64QAM	75 RB / 0 RB Offset
		132047 to 132597	132047	15MHz	QPSK,16QAM, 64QAM	1 RB / 74 RB Offset
			132597	15MHz	QPSK,16QAM, 64QAM	75 RB / 0 RB Offset
		132072 to 132572	132072	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
			132572	20MHz	QPSK,16QAM, 64QAM	100 RB / 0 RB Offset

A	CONDCUDED EMISSION	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	131979 to 132665	132322	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	132322	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132322	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132322	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132322	20MHz	QPSK	1 RB / 0 RB Offset

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

LTE BAND CA_7C MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABL E PCC CHANNEL	AVAILABL E SCC CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(PCC)	MODE(SCC)
A	EIRP	20805 to 21206	20949 to 21350	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		20825 to 21277	20945 to 21397	Low, Middle, High	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20825 to 21225	20975 to 21375	Low, Middle, High	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20828 to 21179	20999 to 21350	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20850 to 21251	20994 to 21395	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21201	21201 to 21372	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21152	21048 to 21350	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	OCCUPIED BANDWIDTH	20805 to 21206	20949 to 21350	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	50RB/ 0RB Offset	100RB/ 0RB Offset
		20825 to 21277	20945 to 21397	Low, Middle, High	15MHz+10MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	50RB/ 0RB Offset
		20825 to 21225	20975 to 21375	Low, Middle, High	15MHz+15MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	75RB/ 0RB Offset
		20828 to 21179	20999 to 21350	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	100RB/ 0RB Offset
		20850 to 21251	20994 to 21395	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	50RB/ 0RB Offset
		20850 to 21201	21201 to 21372	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	75RB/ 0RB Offset
		20850 to 21152	21048 to 21350	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	100RB/ 0RB Offset
A	BAND EDGE	20805 to 21206	20949 to 21350	Low	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 49RB Offset	1RB/ 0RB Offset
							50RB/ 0RB Offset	100RB/ 0RB Offset
				High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 49RB Offset	1RB/ 0RB Offset
							50RB/ 0RB Offset	100RB/ 0RB Offset
		20825 to 21277	20945 to 21397	Low	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	50RB/ 0RB Offset
				High	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	50RB/ 0RB Offset
		20825 to 21225	20975 to 21375	Low	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset

				High	15MHz+15MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	75RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	75RB/ 0RB Offset
		20828 to 21179	20999 to 21350	Low	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	100RB/ 0RB Offset
				High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	100RB/ 0RB Offset
		20850 to 21251	20994 to 21395	Low	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	50RB/ 0RB Offset
				High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	50RB/ 0RB Offset
		20850 to 21201	21201 to 21372	Low	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	75RB/ 0RB Offset
				High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	75RB/ 0RB Offset
		20850 to 21152	21048 to 21350	Low	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
				High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
A	CONDCUDE TED EMISSION	20805 to 21206	20949 to 21350	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset



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		20825 to 21277	20945 to 21397	Low, Middle, High	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20825 to 21225	20975 to 21375	Low, Middle, High	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20828 to 21179	20999 to 21350	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		20850 to 21251	20994 to 21395	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21201	21201 to 21372	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21152	21048 to 21350	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	RADIATED EMISSION	20805 to 21206	20949 to 21350	Middle	10MHz+20MHz	QPSK	1RB/ 49RB Offset	1RB/ 0RB Offset
		20825 to 21277	20945 to 21397	Middle	15MHz+10MHz	QPSK	1RB/ 74RB Offset	1RB/ 0RB Offset
		20825 to 21225	20975 to 21375	Middle	15MHz+15MHz	QPSK	1RB/ 74RB Offset	1RB/ 0RB Offset
		20828 to 21179	20999 to 21350	Low, Middle, High	15MHz+20MHz	QPSK	1RB/ 74RB Offset	1RB/ 0RB Offset
		20850 to 21251	20994 to 21395	Middle	20MHz+10MHz	QPSK	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21201	21201 to 21372	Middle	20MHz+15MHz	QPSK	1RB/ 99RB Offset	1RB/ 0RB Offset
		20850 to 21152	21048 to 21350	Middle	20MHz+20MHz	QPSK	1RB/ 99RB Offset	1RB/ 0RB Offset

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



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC 5V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.8V By Battery	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC5V By Adapter	James Fu
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	James Fu
CONDCUDED EMISSION	23deg. C, 70%RH	DC5V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%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

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.

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:

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

Where:

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

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

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

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

CONDUCTED POWER MEASUREMENT:

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

3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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

3.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA IV		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2K	21.95	21.59	21.83
HSDPA Subtest-1	20.88	20.54	20.75
HSDPA Subtest-2	20.87	20.57	20.79
HSDPA Subtest-3	20.93	20.51	20.77
HSDPA Subtest-4	20.87	20.53	20.76
DC-HSDPA Subtest-1	19.90	19.51	19.75
DC-HSDPA Subtest-2	19.94	19.57	19.78
DC-HSDPA Subtest-3	19.90	19.51	19.82
DC-HSDPA Subtest-4	19.93	19.56	19.78
HSUPA Subtest-1	19.94	19.57	19.81
HSUPA Subtest-2	19.90	19.51	19.78
HSUPA Subtest-3	19.93	19.56	19.81
HSUPA Subtest-4	19.87	19.55	19.81
HSUPA Subtest-5	19.92	19.53	19.78
HSPA+ Subtest-1	19.94	19.54	19.81



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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	23.42	23.12	22.87
		1	2	23.10	22.82	22.57
		1	5	22.81	22.51	22.31
		3	0	23.33	23.04	22.81
		3	1	23.07	22.81	22.54
		3	3	22.91	22.59	22.36
		6	0	22.19	21.90	21.63
	16QAM	1	0	23.01	22.72	22.51
		1	2	22.73	22.45	22.24
		1	5	22.38	22.03	21.91
		3	0	22.28	22.05	21.78
		3	1	22.13	21.91	21.65
		3	3	22.03	21.72	21.47
		6	0	21.19	21.00	20.70
	64QAM	1	0	21.47	21.18	20.97
		1	2	21.20	20.98	20.75
		1	5	21.05	20.72	20.46
		3	0	21.32	21.07	20.81
		3	1	21.26	21.05	20.72
		3	3	21.07	20.72	20.60
		6	0	20.30	19.97	19.78

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	23.37	23.11	22.84
		1	7	23.06	22.83	22.57
		1	14	22.75	22.56	22.30
		8	0	22.31	22.11	21.81
		8	3	22.04	21.78	21.54
		8	7	21.88	21.66	21.40
		15	0	22.15	21.91	21.61
	16QAM	1	0	23.04	22.71	22.55
		1	7	22.67	22.49	22.21
		1	14	22.40	22.05	21.90
		8	0	21.30	21.03	20.78
		8	3	21.15	20.84	20.68
		8	7	21.06	20.75	20.40
		15	0	21.20	20.94	20.69
	64QAM	1	0	21.53	21.17	20.97
		1	7	21.23	20.98	20.73
		1	14	21.05	20.72	20.47
		8	0	20.32	20.09	19.84
		8	3	20.30	19.99	19.77
		8	7	20.04	19.76	19.56
		15	0	20.32	19.94	19.82

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	23.38	23.10	22.88
		1	12	23.09	22.83	22.54
		1	24	22.75	22.57	22.31
		12	0	22.35	22.07	21.82
		12	6	22.02	21.81	21.57
		12	13	21.89	21.62	21.40
		25	0	22.12	21.94	21.60
	16QAM	1	0	23.04	22.71	22.54
		1	12	22.67	22.47	22.18
		1	24	22.37	22.09	21.86
		12	0	21.25	21.05	20.81
		12	6	21.15	20.85	20.65
		12	13	21.00	20.72	20.46
		25	0	21.17	21.00	20.69
	64QAM	1	0	21.46	21.22	20.97
		1	12	21.24	20.95	20.72
		1	24	20.99	20.79	20.46
		12	0	20.36	20.08	19.81
		12	6	20.26	20.05	19.75
		12	13	20.08	19.75	19.53
		25	0	20.28	20.00	19.80

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	23.35	23.14	22.84
		1	24	23.10	22.82	22.57
		1	49	22.81	22.51	22.31
		25	0	22.33	22.04	21.81
		25	12	22.07	21.81	21.54
		25	25	21.89	21.59	21.36
		50	0	22.17	21.90	21.63
	16QAM	1	0	23.04	22.72	22.51
		1	24	22.69	22.45	22.24
		1	49	22.41	22.03	21.91
		25	0	21.24	21.06	20.78
		25	12	21.19	20.84	20.69
		25	25	20.99	20.73	20.43
		50	0	21.22	20.96	20.73
	64QAM	1	0	21.52	21.16	20.94
		1	24	21.22	20.92	20.78
		1	49	21.06	20.78	20.40
		25	0	20.35	20.05	19.83
		25	12	20.31	20.01	19.76
		25	25	20.07	19.72	19.55
		50	0	20.33	19.96	19.81

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	23.39	23.15	22.83
		1	37	23.11	22.87	22.55
		1	74	22.77	22.53	22.35
		36	0	22.38	22.10	21.78
		36	19	22.00	21.76	21.60
		36	39	21.95	21.63	21.39
		75	0	22.17	21.95	21.59
	16QAM	1	0	23.02	22.74	22.54
		1	37	22.69	22.51	22.23
		1	74	22.41	22.03	21.91
		36	0	21.24	21.06	20.78
		36	19	21.18	20.86	20.68
		36	39	21.06	20.72	20.40
		75	0	21.19	20.99	20.71
	64QAM	1	0	21.52	21.16	20.94
		1	37	21.22	20.92	20.78
		1	74	21.06	20.78	20.40
		36	0	20.33	20.05	19.83
		36	19	20.30	20.06	19.74
		36	39	20.10	19.72	19.60
		75	0	20.32	19.94	19.82

Band/BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300
				Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz
4/ 20	QPSK	1	0	23.43	23.18	22.89
		1	50	23.13	22.88	22.59
		1	99	22.83	22.58	22.36
		50	0	22.39	22.12	21.83
		50	25	22.08	21.83	21.62
		50	50	21.96	21.67	21.42
		100	0	22.20	21.96	21.65
	16QAM	1	0	23.06	22.79	22.56
		1	50	22.75	22.53	22.26
		1	99	22.43	22.11	21.92
		50	0	21.32	21.10	20.83
		50	25	21.21	20.92	20.70
		50	50	21.07	20.77	20.48
		100	0	21.25	21.02	20.75
	64QAM	1	0	21.54	21.23	20.99
		1	50	21.28	21.00	20.80
		1	99	21.07	20.80	20.48
		50	0	20.40	20.13	19.89
		50	25	20.32	20.07	19.78
		50	50	20.12	19.80	19.61
		100	0	20.34	20.02	19.83

LTE Band 7

Band/BW	Modulation	RB Size	RB Offset	Low CH 20775	Mid CH 21100	High CH 21425
				Frequency 2502.5 MHz	Frequency 2535 MHz	Frequency 2567.5 MHz
7/5	QPSK	1	0	22.32	22.09	22.21
		1	12	22.28	22.13	22.29
		1	24	22.45	22.20	22.46
		12	0	21.20	20.98	21.15
		12	6	21.18	20.97	21.24
		12	13	21.28	21.07	21.29
		25	0	21.19	20.96	21.19
	16QAM	1	0	21.37	21.12	21.35
		1	12	21.41	21.28	21.41
		1	24	21.53	21.31	21.56
		12	0	20.31	20.04	20.26
		12	6	20.31	20.10	20.37
		12	13	20.39	20.23	20.31
		25	0	20.33	20.16	20.35
	64QAM	1	0	20.71	20.44	20.63
		1	12	20.68	20.49	20.68
		1	24	20.70	20.46	20.67
		12	0	19.34	19.16	19.27
		12	6	19.30	19.15	19.34
		12	13	19.50	19.29	19.41
		25	0	19.36	19.22	19.27

Band/BW	Modulation	RB Size	RB Offset	Low CH 20800	Mid CH 21100	High CH 21400
				Frequency 2505 MHz	Frequency 2535 MHz	Frequency 2565 MHz
7/ 10	QPSK	1	0	22.30	22.06	22.24
		1	24	22.34	22.06	22.33
		1	49	22.41	22.21	22.42
		25	0	21.24	20.92	21.19
		25	12	21.17	20.98	21.21
		25	25	21.33	21.03	21.32
		50	0	21.19	20.97	21.16
	16QAM	1	0	21.39	21.10	21.41
		1	24	21.46	21.28	21.39
		1	49	21.55	21.28	21.52
		25	0	20.36	20.05	20.29
		25	12	20.36	20.07	20.38
		25	25	20.39	20.21	20.32
		50	0	20.39	20.09	20.36
	64QAM	1	0	20.67	20.45	20.66
		1	24	20.73	20.44	20.68
		1	49	20.72	20.44	20.70
		25	0	19.34	19.10	19.28
		25	12	19.37	19.14	19.28
		25	25	19.49	19.26	19.43
		50	0	19.41	19.18	19.28

Band/BW	Modulation	RB Size	RB Offset	Low CH 20825	Mid CH 21100	High CH 21375
				Frequency 2507.5 MHz	Frequency 2535 MHz	Frequency 2562.5 MHz
7/ 15	QPSK	1	0	22.35	22.12	22.18
		1	37	22.29	22.06	22.28
		1	74	22.46	22.19	22.45
		36	0	21.24	20.93	21.15
		36	19	21.19	20.94	21.24
		36	39	21.34	21.01	21.33
		75	0	21.13	21.00	21.16
	16QAM	1	0	21.43	21.10	21.42
		1	37	21.39	21.26	21.42
		1	74	21.57	21.30	21.56
		36	0	20.35	20.04	20.26
		36	19	20.32	20.07	20.37
		36	39	20.46	20.23	20.29
		75	0	20.36	20.09	20.31
	64QAM	1	0	20.74	20.43	20.69
		1	37	20.74	20.43	20.65
		1	74	20.68	20.43	20.73
		36	0	19.39	19.16	19.22
		36	19	19.31	19.08	19.30
		36	39	19.52	19.33	19.45
		75	0	19.40	19.16	19.29

Band/BW	Modulation	RB Size	RB Offset	Low CH 20850	Mid CH 21100	High CH 21350
				Frequency 2510 MHz	Frequency 2535 MHz	Frequency 2560 MHz
7/ 20	QPSK	1	0	22.36	22.14	22.26
		1	50	22.36	22.14	22.34
		1	99	22.49	22.25	22.47
		50	0	21.26	21.00	21.20
		50	25	21.25	21.02	21.26
		50	50	21.36	21.09	21.34
		100	0	21.21	21.04	21.21
	16QAM	1	0	21.45	21.18	21.43
		1	50	21.47	21.30	21.47
		1	99	21.60	21.36	21.58
		50	0	20.37	20.11	20.31
		50	25	20.38	20.15	20.39
		50	50	20.47	20.25	20.37
		100	0	20.41	20.17	20.37
	64QAM	1	0	20.75	20.49	20.71
		1	50	20.76	20.50	20.70
		1	99	20.74	20.51	20.75
		50	0	19.40	19.18	19.30
		50	25	19.38	19.16	19.36
		50	50	19.54	19.34	19.49
		100	0	19.42	19.24	19.30



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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	23.31	23.27	23.18
		1	2	23.31	23.16	23.16
		1	5	23.40	23.26	23.25
		3	0	23.37	23.28	23.24
		3	1	23.26	23.26	23.06
		3	3	23.29	23.19	23.15
		6	0	22.28	22.21	22.12
	16QAM	1	0	22.90	22.84	22.79
		1	2	22.96	22.90	22.83
		1	5	23.06	22.91	22.94
		3	0	22.34	22.29	22.17
		3	1	22.33	22.38	22.20
		3	3	22.40	22.35	22.32
		6	0	21.32	21.29	21.18
	64QAM	1	0	21.35	21.33	21.29
		1	2	21.20	21.26	21.09
		1	5	21.41	21.36	21.31
		3	0	21.32	21.27	21.12
		3	1	21.22	21.27	21.12
		3	3	21.40	21.30	21.24
		6	0	20.45	20.42	20.31

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	23.33	23.29	23.17
		1	7	23.27	23.17	23.16
		1	14	23.36	23.26	23.25
		8	0	22.36	22.31	22.24
		8	3	22.19	22.26	22.08
		8	7	22.26	22.26	22.19
		15	0	22.25	22.22	22.06
	16QAM	1	0	22.87	22.90	22.82
		1	7	22.93	22.93	22.81
		1	14	23.09	22.91	22.94
		8	0	21.30	21.30	21.17
		8	3	21.38	21.33	21.23
		8	7	21.42	21.33	21.28
		15	0	21.32	21.23	21.21
	64QAM	1	0	21.41	21.36	21.23
		1	7	21.23	21.20	21.08
		1	14	21.42	21.38	21.31
		8	0	20.35	20.31	20.13
		8	3	20.26	20.21	20.17
		8	7	20.37	20.34	20.20
		15	0	20.47	20.39	20.35

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	23.34	23.24	23.18
		1	12	23.32	23.14	23.16
		1	24	23.37	23.25	23.29
		12	0	22.39	22.31	22.21
		12	6	22.19	22.27	22.09
		12	13	22.30	22.22	22.20
		25	0	22.23	22.25	22.09
	16QAM	1	0	22.88	22.86	22.82
		1	12	22.90	22.96	22.80
		1	24	23.09	22.91	22.93
		12	0	21.30	21.28	21.14
		12	6	21.35	21.37	21.19
		12	13	21.37	21.35	21.31
		25	0	21.32	21.24	21.18
	64QAM	1	0	21.35	21.33	21.29
		1	12	21.20	21.26	21.08
		1	24	21.35	21.43	21.31
		12	0	20.36	20.28	20.12
		12	6	20.20	20.28	20.16
		12	13	20.41	20.33	20.17
		25	0	20.43	20.45	20.33

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	23.39	23.31	23.23
		1	24	23.34	23.22	23.18
		1	49	23.42	23.33	23.30
		25	0	22.43	22.36	22.26
		25	12	22.27	22.28	22.14
		25	25	22.34	22.27	22.21
		50	0	22.29	22.27	22.14
	16QAM	1	0	22.95	22.91	22.84
		1	24	22.98	22.98	22.85
		1	49	23.11	22.99	22.95
		25	0	21.38	21.34	21.22
		25	12	21.41	21.39	21.25
		25	25	21.44	21.40	21.33
		50	0	21.38	21.31	21.23
	64QAM	1	0	21.42	21.38	21.31
		1	24	21.28	21.28	21.14
		1	49	21.43	21.44	21.33
		25	0	20.40	20.33	20.20
		25	12	20.28	20.29	20.18
		25	25	20.45	20.38	20.25
		50	0	20.49	20.47	20.36



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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	22.69	22.73	22.72
		1	12	22.73	22.67	22.74
		1	24	22.71	22.75	22.74
		12	0	21.60	21.57	21.61
		12	6	21.53	21.48	21.50
		12	13	21.33	21.31	21.37
		25	0	21.55	21.54	21.48
	16QAM	1	0	21.48	21.47	21.49
		1	12	21.47	21.44	21.48
		1	24	21.55	21.50	21.52
		12	0	21.05	21.03	21.09
		12	6	20.88	20.82	20.89
		12	13	20.64	20.68	20.67
		25	0	20.65	20.59	20.66
	64QAM	1	0	20.72	20.76	20.75
		1	12	20.83	20.80	20.84
		1	24	20.86	20.81	20.83
		12	0	18.54	18.52	18.58
		12	6	18.78	18.77	18.71
		12	13	18.65	18.62	18.64
		25	0	18.66	18.61	18.65

Band/BW	Modulation	RB Size	RB Offset	/	Mid CH 23230	/
				/	Frequency 782.0 MHz	/
13/ 10	QPSK	1	0	/	22.77	/
		1	24	/	22.75	/
		1	49	/	22.79	/
		25	0	/	21.63	/
		25	12	/	21.55	/
		25	25	/	21.39	/
		50	0	/	21.56	/
	16QAM	1	0	/	21.55	/
		1	24	/	21.50	/
		1	49	/	21.57	/
		25	0	/	21.11	/
		25	12	/	20.90	/
		25	25	/	20.72	/
		50	0	/	20.67	/
	64QAM	1	0	/	20.80	/
		1	24	/	20.86	/
		1	49	/	20.88	/
		25	0	/	18.60	/
		25	12	/	18.79	/
		25	25	/	18.70	/
		50	0	/	18.67	/



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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	23.29	23.23	23.33
		1	12	23.29	23.33	23.29
		1	24	23.51	23.48	23.53
		12	0	22.15	22.23	22.19
		12	6	22.31	22.15	22.29
		12	13	22.41	22.41	22.39
		25	0	22.32	22.36	22.30
	16QAM	1	0	22.80	22.80	22.88
		1	12	22.89	22.83	22.89
		1	24	23.11	23.11	23.19
		12	0	21.24	21.32	21.26
		12	6	21.28	21.38	21.38
		12	13	21.52	21.46	21.42
		25	0	21.33	21.43	21.43
	64QAM	1	0	21.20	21.14	21.10
		1	12	21.29	21.33	21.33
		1	24	21.53	21.47	21.53
		12	0	20.27	20.27	20.35
		12	6	20.22	20.30	20.24
		12	13	20.44	20.44	20.42
		25	0	20.39	20.33	20.29

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	23.33	23.28	23.34
		1	24	23.35	23.35	23.34
		1	49	23.58	23.53	23.55
		25	0	22.23	22.25	22.24
		25	12	22.33	22.23	22.31
		25	25	22.49	22.47	22.47
		50	0	22.38	22.38	22.36
	16QAM	1	0	22.87	22.85	22.90
		1	24	22.95	22.90	22.94
		1	49	23.18	23.16	23.21
		25	0	21.32	21.34	21.32
		25	12	21.36	21.39	21.40
		25	25	21.56	21.51	21.50
		50	0	21.41	21.44	21.45
	64QAM	1	0	21.24	21.19	21.18
		1	24	21.35	21.35	21.36
		1	49	21.59	21.54	21.58
		25	0	20.34	20.32	20.37
		25	12	20.30	20.32	20.30
		25	25	20.52	20.50	20.50
		50	0	20.43	20.38	20.37

LTE Band 38

Band/BW	Modulation	RB Size	RB Offset	Low CH 37775	Mid CH 38000	High CH 38225
				Frequency 2572.5 MHz	Frequency 2595 MHz	Frequency 2617.5MHz
38/ 5	QPSK	1	0	22.26	22.09	22.23
		1	12	22.22	22.05	22.10
		1	24	22.17	22.11	22.16
		12	0	21.36	21.23	21.24
		12	6	21.23	21.15	21.17
		12	13	21.33	21.21	21.31
		25	0	21.24	21.14	21.16
	16QAM	1	0	21.62	21.43	21.58
		1	12	21.81	21.66	21.74
		1	24	21.58	21.55	21.53
		12	0	20.44	20.29	20.42
		12	6	20.44	20.36	20.40
		12	13	20.39	20.27	20.37
		25	0	20.46	20.36	20.37
	64QAM	1	0	19.98	19.92	20.00
		1	12	19.99	19.86	19.80
		1	24	19.84	19.77	19.81
		12	0	19.60	19.43	19.47
		12	6	19.43	19.35	19.31
		12	13	19.37	19.32	19.28
		25	0	19.49	19.35	19.43

Band/BW	Modulation	RB Size	RB Offset	Low CH 37800	Mid CH 38000	High CH 38200
				Frequency 2575 MHz	Frequency 2595 MHz	Frequency 2615 MHz
38/ 10	QPSK	1	0	22.27	22.12	22.23
		1	24	22.20	22.08	22.10
		1	49	22.18	22.07	22.19
		25	0	21.32	21.26	21.20
		25	12	21.27	21.09	21.20
		25	25	21.32	21.20	21.25
		50	0	21.26	21.14	21.15
	16QAM	1	0	21.57	21.46	21.58
		1	24	21.83	21.65	21.77
		1	49	21.57	21.52	21.57
		25	0	20.43	20.32	20.38
		25	12	20.42	20.42	20.43
		25	25	20.42	20.27	20.31
		50	0	20.46	20.37	20.41
	64QAM	1	0	20.02	19.88	19.94
		1	24	19.97	19.89	19.85
		1	49	19.84	19.77	19.81
		25	0	19.57	19.43	19.53
		25	12	19.41	19.35	19.29
		25	25	19.43	19.25	19.28
		50	0	19.50	19.38	19.42

Band/BW	Modulation	RB Size	RB Offset	Low CH 37825	Mid CH 38000	High CH 38175
				Frequency 2577.5 MHz	Frequency 2595 MHz	Frequency 2612.5MHz
38/ 15	QPSK	1	0	22.28	22.11	22.22
		1	37	22.24	22.03	22.10
		1	74	22.19	22.04	22.19
		36	0	21.39	21.26	21.17
		36	19	21.22	21.09	21.16
		36	39	21.37	21.20	21.31
		75	0	21.30	21.09	21.16
	16QAM	1	0	21.58	21.43	21.58
		1	37	21.87	21.64	21.81
		1	74	21.56	21.53	21.54
		36	0	20.49	20.26	20.43
		36	19	20.42	20.39	20.40
		36	39	20.43	20.26	20.37
		75	0	20.52	20.31	20.38
	64QAM	1	0	20.00	19.85	20.00
		1	37	20.02	19.89	19.80
		1	74	19.87	19.70	19.77
		36	0	19.63	19.42	19.53
		36	19	19.48	19.35	19.26
		36	39	19.44	19.31	19.22
		75	0	19.54	19.33	19.40

Band/BW	Modulation	RB Size	RB Offset	Low CH 37850	Mid CH 38000	High CH 38150
				Frequency 2580 MHz	Frequency 2595 MHz	Frequency 2610 MHz
38/ 20	QPSK	1	0	22.31	22.17	22.24
		1	50	22.26	22.10	22.15
		1	99	22.25	22.12	22.21
		50	0	21.40	21.28	21.25
		50	25	21.29	21.17	21.22
		50	50	21.40	21.26	21.33
		100	0	21.32	21.16	21.21
	16QAM	1	0	21.64	21.51	21.60
		1	50	21.89	21.72	21.82
		1	99	21.64	21.57	21.59
		50	0	20.51	20.34	20.44
		50	25	20.50	20.43	20.45
		50	50	20.46	20.32	20.39
		100	0	20.54	20.38	20.43
	64QAM	1	0	20.06	19.93	20.02
		1	50	20.03	19.91	19.88
		1	99	19.92	19.78	19.83
		50	0	19.64	19.48	19.55
		50	25	19.49	19.37	19.34
		50	50	19.45	19.33	19.30
		100	0	19.56	19.40	19.45



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LTE Band 41

Band/BW	Modulation	RB Size	RB Offset	Low CH (39675)	Mid CH (40620)	High CH (41565)
				Frequency (2498.5)MHz	Frequency (2593)MHz	Frequency (2687.5)MHz
41/ 5	QPSK	1	0	22.53	22.34	22.33
		1	12	22.37	22.23	22.20
		1	24	22.30	22.20	22.11
		12	0	21.48	21.40	21.36
		12	6	21.45	21.32	21.25
		12	13	21.48	21.45	21.38
		25	0	21.38	21.25	21.24
	16QAM	1	0	21.59	21.49	21.48
		1	12	21.75	21.68	21.65
		1	24	21.82	21.73	21.67
		12	0	20.39	20.28	20.32
		12	6	20.34	20.25	20.24
		12	13	20.42	20.36	20.34
		25	0	20.47	20.29	20.33
	64QAM	1	0	20.15	20.10	20.08
		1	12	20.11	19.98	19.94
		1	24	20.11	20.09	20.09
		12	0	19.51	19.28	19.37
		12	6	19.28	19.23	19.20
		12	13	19.45	19.27	19.31
		25	0	19.40	19.32	19.23

Band/BW	Modulation	RB Size	RB Offset	Low CH (39700)	Mid CH (40620)	High CH (41540)
				Frequency (2501)MHz	Frequency (2593)MHz	Frequency (2685)MHz
41/ 10	QPSK	1	0	22.50	22.34	22.31
		1	24	22.37	22.24	22.25
		1	49	22.27	22.16	22.09
		25	0	21.49	21.43	21.40
		25	12	21.51	21.32	21.31
		25	25	21.46	21.44	21.39
		50	0	21.43	21.22	21.24
	16QAM	1	0	21.59	21.45	21.48
		1	24	21.80	21.71	21.64
		1	49	21.82	21.70	21.64
		25	0	20.41	20.34	20.28
		25	12	20.38	20.30	20.23
		25	25	20.41	20.33	20.29
		50	0	20.51	20.33	20.26
	64QAM	1	0	20.14	20.07	20.11
		1	24	20.16	20.02	19.91
		1	49	20.17	20.06	20.04
		25	0	19.49	19.34	19.32
		25	12	19.35	19.17	19.22
		25	25	19.44	19.29	19.33
		50	0	19.45	19.33	19.25

Band/BW	Modulation	RB Size	RB Offset	Low CH (39725)	Mid CH (40620)	High CH (41515)
				Frequency (2503.5)MHz	Frequency (2593)MHz	Frequency (2682.5)MHz
41/ 15	QPSK	1	0	22.57	22.31	22.33
		1	37	22.35	22.19	22.25
		1	74	22.33	22.17	22.11
		36	0	21.46	21.44	21.42
		36	19	21.52	21.32	21.26
		36	39	21.44	21.44	21.42
		75	0	21.43	21.27	21.21
	16QAM	1	0	21.63	21.45	21.51
		1	37	21.79	21.71	21.59
		1	74	21.78	21.72	21.68
		36	0	20.45	20.35	20.33
		36	19	20.32	20.26	20.24
		36	39	20.46	20.36	20.34
		75	0	20.52	20.26	20.28
	64QAM	1	0	20.16	20.08	20.12
		1	37	20.17	19.99	19.91
		1	74	20.13	20.09	20.09
		36	0	19.54	19.28	19.36
		36	19	19.29	19.19	19.21
		36	39	19.47	19.31	19.33
		75	0	19.44	19.34	19.28

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750)	Mid CH (40620)	High CH (41490)
				Frequency (2506)MHz	Frequency (2593)MHz	Frequency (2680)MHz
41/ 20	QPSK	1	0	22.58	22.39	22.39
		1	50	22.39	22.25	22.27
		1	99	22.35	22.21	22.17
		50	0	21.52	21.45	21.43
		50	25	21.53	21.37	21.33
		50	50	21.52	21.46	21.44
		100	0	21.44	21.30	21.26
	16QAM	1	0	21.66	21.51	21.53
		1	50	21.83	21.73	21.66
		1	99	21.84	21.75	21.72
		50	0	20.47	20.36	20.34
		50	25	20.40	20.31	20.29
		50	50	20.49	20.38	20.36
		100	0	20.53	20.34	20.34
	64QAM	1	0	20.22	20.12	20.13
		1	50	20.19	20.04	19.99
		1	99	20.19	20.11	20.10
		50	0	19.55	19.36	19.39
		50	25	19.36	19.25	19.25
		50	50	19.49	19.35	19.35
		100	0	19.46	19.35	19.31

LTE Band 66

Band/BW	Modulation	RB Size	RB Offset	Low CH 131979	Mid CH 132322	High CH 132665
				Frequency 1710.7MHz	Frequency 1745MHz	Frequency 1779.3MHz
66/ 1.4	QPSK	1	0	23.79	23.39	23.55
		1	2	23.61	23.12	23.40
		1	5	23.30	22.76	23.01
		3	0	23.59	23.11	23.41
		3	1	23.50	23.07	23.18
		3	3	23.38	22.94	23.16
		6	0	22.73	22.19	22.41
	16QAM	1	0	23.40	22.97	23.19
		1	2	23.28	22.74	23.02
		1	5	22.94	22.37	22.72
		3	0	22.79	22.34	22.54
		3	1	22.65	22.21	22.42
		3	3	22.54	22.00	22.27
		6	0	21.71	21.25	21.49
	64QAM	1	0	21.88	21.41	21.59
		1	2	21.62	21.17	21.37
		1	5	21.54	20.95	21.26
		3	0	21.84	21.41	21.55
		3	1	21.74	21.24	21.48
		3	3	21.52	21.05	21.32
		6	0	20.79	20.24	20.52

Band/BW	Modulation	RB Size	RB Offset	Low CH 131987	Mid CH 132322	High CH 132657
				Frequency 1711.5MHz	Frequency 1745MHz	Frequency 1778.5MHz
66/ 3	QPSK	1	0	23.81	23.38	23.59
		1	7	23.63	23.16	23.37
		1	14	23.24	22.76	23.04
		8	0	22.64	22.15	22.40
		8	3	22.48	22.08	22.20
		8	7	22.39	21.97	22.20
		15	0	22.68	22.23	22.40
	16QAM	1	0	23.43	22.96	23.23
		1	7	23.22	22.78	22.99
		1	14	22.96	22.39	22.71
		8	0	21.82	21.34	21.51
		8	3	21.67	21.19	21.43
		8	7	21.56	20.98	21.23
		15	0	21.71	21.19	21.52
	64QAM	1	0	21.94	21.44	21.53
		1	7	21.63	21.11	21.36
		1	14	21.54	21.02	21.24
		8	0	20.90	20.39	20.62
		8	3	20.78	20.18	20.53
		8	7	20.55	20.12	20.29
		15	0	20.80	20.28	20.51

Band/BW	Modulation	RB Size	RB Offset	Low CH 131997	Mid CH 132322	High CH 132647
				Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz
66/ 5	QPSK	1	0	23.82	23.36	23.55
		1	12	23.62	23.10	23.40
		1	24	23.27	22.75	23.05
		12	0	22.61	22.14	22.38
		12	6	22.43	22.08	22.21
		12	13	22.39	21.97	22.21
		25	0	22.68	22.23	22.38
	16QAM	1	0	23.38	22.99	23.22
		1	12	23.22	22.80	22.99
		1	24	22.97	22.37	22.71
		12	0	21.75	21.33	21.51
		12	6	21.67	21.20	21.41
		12	13	21.51	21.00	21.26
		25	0	21.71	21.20	21.49
	64QAM	1	0	21.88	21.41	21.59
		1	12	21.62	21.17	21.36
		1	24	21.48	21.02	21.26
		12	0	20.88	20.42	20.55
		12	6	20.72	20.25	20.52
		12	13	20.53	20.08	20.25
		25	0	20.77	20.27	20.54

Band/BW	Modulation	RB Size	RB Offset	Low CH 132022	Mid CH 132322	High CH 132622
				Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz
66/ 10	QPSK	1	0	23.84	23.37	23.58
		1	24	23.62	23.10	23.41
		1	49	23.24	22.79	23.01
		25	0	22.62	22.13	22.41
		25	12	22.49	22.02	22.21
		25	25	22.37	21.94	22.20
		50	0	22.73	22.23	22.35
	16QAM	1	0	23.38	22.96	23.18
		1	24	23.27	22.76	23.02
		1	49	22.97	22.38	22.68
		25	0	21.77	21.31	21.57
		25	12	21.71	21.14	21.46
		25	25	21.50	21.01	21.23
		50	0	21.75	21.19	21.53
	64QAM	1	0	21.87	21.42	21.56
		1	24	21.67	21.13	21.40
		1	49	21.54	20.96	21.23
		25	0	20.86	20.39	20.61
		25	12	20.79	20.24	20.46
		25	25	20.52	20.05	20.27
		50	0	20.82	20.23	20.55

Band/BW	Modulation	RB Size	RB Offset	Low CH 132072	Mid CH 132322	High CH 132572
				Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz
66/ 15	QPSK	1	0	23.81	23.41	23.54
		1	37	23.57	23.13	23.40
		1	74	23.26	22.76	23.01
		36	0	22.58	22.14	22.41
		36	19	22.43	22.07	22.20
		36	39	22.35	22.01	22.20
		75	0	22.70	22.20	22.35
	16QAM	1	0	23.37	23.03	23.22
		1	37	23.25	22.77	23.00
		1	74	22.97	22.37	22.72
		36	0	21.75	21.35	21.54
		36	19	21.70	21.16	21.45
		36	39	21.56	20.98	21.23
		75	0	21.71	21.19	21.52
	64QAM	1	0	21.94	21.44	21.53
		1	37	21.65	21.11	21.36
		1	74	21.55	20.97	21.26
		36	0	20.87	20.45	20.56
		36	19	20.78	20.18	20.53
		36	39	20.49	20.09	20.28
		75	0	20.81	20.21	20.56

Band/BW	Modulation	RB Size	RB Offset	Low CH 132072	Mid CH 132322	High CH 132572
				Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz
66/ 20	QPSK	1	0	23.87	23.43	23.60
		1	50	23.64	23.18	23.42
		1	99	23.32	22.83	23.06
		50	0	22.65	22.19	22.43
		50	25	22.51	22.09	22.26
		50	50	22.43	22.02	22.22
		100	0	22.74	22.25	22.43
	16QAM	1	0	23.45	23.04	23.24
		1	50	23.30	22.82	23.04
		1	99	22.99	22.45	22.73
		50	0	21.83	21.39	21.59
		50	25	21.73	21.22	21.47
		50	50	21.58	21.05	21.28
		100	0	21.77	21.27	21.54
	64QAM	1	0	21.95	21.46	21.61
		1	50	21.70	21.19	21.42
		1	99	21.56	21.03	21.28
		50	0	20.92	20.47	20.63
		50	25	20.80	20.26	20.54
		50	50	20.57	20.13	20.33
		100	0	20.83	20.29	20.57



**BUREAU
VERITAS**

Test Report No.: W7L-P22070038RF06

LTE Band CA_7C

CA_7C								
Combination 10MHz+20MHz (50RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20805	20949	QPSK	1	49	0	0	1	22.36
		16QAM	1	49	0	0	1	21.77
		64QAM	1	49	0	0	1	20.98
21006	21150	QPSK	1	49	0	0	1	22.31
		16QAM	1	49	0	0	1	21.73
		64QAM	1	49	0	0	1	21.03
21206	21350	QPSK	1	49	0	0	1	22.32
		16QAM	1	49	0	0	1	21.67
		64QAM	1	49	0	0	1	21.01
Combination 15MHz+10MHz (75RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20825	20975	QPSK	1	74	0	0	1	22.40
		16QAM	1	74	0	0	1	21.74
		64QAM	1	74	0	0	1	20.96
21051	21171	QPSK	1	74	0	0	1	22.37
		16QAM	1	74	0	0	1	21.67
		64QAM	1	74	0	0	1	21.06
21277	21397	QPSK	1	74	0	0	1	22.33
		16QAM	1	74	0	0	1	21.70
		64QAM	1	74	0	0	1	21.00

CA_7C								
Combination 15MHz+15MHz (75RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20825	20975	QPSK	1	74	0	0	1	22.34
		16QAM	1	74	0	0	1	21.77
		64QAM	1	74	0	0	1	21.01
21025	21175	QPSK	1	74	0	0	1	22.34
		16QAM	1	74	0	0	1	21.73
		64QAM	1	74	0	0	1	21.06
21225	21375	QPSK	1	74	0	0	1	22.36
		16QAM	1	74	0	0	1	21.64
		64QAM	1	74	0	0	1	20.99
Combination 15MHz+20MHz (75RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20828	20999	QPSK	1	74	0	0	1	22.32
		16QAM	1	74	0	0	1	21.39
		64QAM	1	74	0	0	1	20.69
21003	21174	QPSK	1	74	0	0	1	22.29
		16QAM	1	74	0	0	1	21.29
		64QAM	1	74	0	0	1	20.62
21179	21350	QPSK	1	74	0	0	1	22.32
		16QAM	1	74	0	0	1	21.42
		64QAM	1	74	0	0	1	20.70

CA_7C								
Combination 20MHz+10MHz (100RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20850	20994	QPSK	1	99	0	0	1	22.41
		16QAM	1	99	0	0	1	21.77
		64QAM	1	99	0	0	1	21.00
21051	21195	QPSK	1	99	0	0	1	22.34
		16QAM	1	99	0	0	1	21.71
		64QAM	1	99	0	0	1	21.03
21251	21395	QPSK	1	99	0	0	1	22.34
		16QAM	1	99	0	0	1	21.66
		64QAM	1	99	0	0	1	20.98
Combination 20MHz+15MHz (100RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
20850	21021	QPSK	1	99	0	0	1	22.39
		16QAM	1	99	0	0	1	21.45
		64QAM	1	99	0	0	1	20.74
21026	21197	QPSK	1	99	0	0	1	22.35
		16QAM	1	99	0	0	1	21.41
		64QAM	1	99	0	0	1	20.71
21201	21372	QPSK	1	99	0	0	1	22.37
		16QAM	1	99	0	0	1	21.46
		64QAM	1	99	0	0	1	20.68

CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	0	0	1	22.42
		16QAM	1	99	0	0	1	21.82
		64QAM	1	99	0	0	1	21.02
21001	21199	QPSK	1	99	0	0	1	22.39
		16QAM	1	99	0	0	1	21.75
		64QAM	1	99	0	0	1	21.11
21152	21350	QPSK	1	99	0	0	1	22.38
		16QAM	1	99	0	0	1	21.72
		64QAM	1	99	0	0	1	21.05

EIRP

WCDMA IV

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	21.95	1.13	23.08	203.24	1
1413	1732.6	21.59	1.13	22.72	187.07	1
1513	1752.6	21.83	1.13	22.96	197.7	1

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.42	1.13	24.55	285.10	1
20175	1732.5	23.12	1.13	24.25	266.07	1
20393	1754.3	22.87	1.13	24	251.19	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.01	1.13	24.14	259.42	1
20175	1732.5	22.72	1.13	23.85	242.66	1
20393	1754.3	22.51	1.13	23.64	231.21	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	21.47	1.13	22.6	181.97	1
20175	1732.5	21.18	1.13	22.31	170.22	1
20393	1754.3	20.97	1.13	22.1	162.18	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.37	1.13	24.5	281.84	1
20175	1732.5	23.11	1.13	24.24	265.46	1
20385	1753.5	22.84	1.13	23.97	249.46	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.04	1.13	24.17	261.22	1
20175	1732.5	22.71	1.13	23.84	242.1	1
20385	1753.5	22.55	1.13	23.68	233.35	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	21.53	1.13	22.66	184.5	1
20175	1732.5	21.17	1.13	22.3	169.82	1
20385	1753.5	20.97	1.13	22.1	162.18	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	23.38	1.13	24.51	282.49	1
20175	1732.5	23.1	1.13	24.23	264.85	1
20375	1752.5	22.88	1.13	24.01	251.77	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	23.04	1.13	24.17	261.22	1
20175	1732.5	22.71	1.13	23.84	242.1	1
20375	1752.5	22.54	1.13	23.67	232.81	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	21.46	1.13	22.59	181.55	1
20175	1732.5	21.22	1.13	22.35	171.79	1
20375	1752.5	20.97	1.13	22.1	162.18	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.35	1.13	24.48	280.54	1
20175	1732.5	23.14	1.13	24.27	267.3	1
20350	1750	22.84	1.13	23.97	249.46	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.04	1.13	24.17	261.22	1
20175	1732.5	22.72	1.13	23.85	242.66	1
20350	1750	22.51	1.13	23.64	231.21	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	21.52	1.13	22.65	184.08	1
20175	1732.5	21.16	1.13	22.29	169.43	1
20350	1750	20.94	1.13	22.07	161.06	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.39	1.13	24.52	283.14	1
20175	1732.5	23.15	1.13	24.28	267.92	1
20325	1747.5	22.83	1.13	23.96	248.89	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.02	1.13	24.15	260.02	1
20175	1732.5	22.74	1.13	23.87	243.78	1
20325	1747.5	22.54	1.13	23.67	232.81	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	21.52	1.13	22.65	184.08	1
20175	1732.5	21.16	1.13	22.29	169.43	1
20325	1747.5	20.94	1.13	22.07	161.06	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.43	1.13	24.56	285.76	1
20175	1732.5	23.18	1.13	24.31	269.77	1
20300	1745	22.89	1.13	24.02	252.35	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.06	1.13	24.19	262.42	1
20175	1732.5	22.79	1.13	23.92	246.6	1
20300	1745	22.56	1.13	23.69	233.88	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	21.54	1.13	22.67	184.93	1
20175	1732.5	21.23	1.13	22.36	172.19	1
20300	1745	20.99	1.13	22.12	162.93	1

LTE BAND 7

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20775	2502.5	22.45	-0.85	21.6	144.54	2
21100	2535.0	22.2	-0.85	21.35	136.46	2
21425	2567.5	22.46	-0.85	21.61	144.88	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20775	2502.5	21.53	-0.85	20.68	116.95	2
21100	2535.0	21.31	-0.85	20.46	111.17	2
21425	2567.5	21.56	-0.85	20.71	117.76	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20775	2502.5	20.71	-0.85	19.86	96.83	2
21100	2535	20.49	-0.85	19.64	92.04	2
21425	2567.5	20.68	-0.85	19.83	96.16	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20800	2505.0	22.41	-0.85	21.56	143.22	2
21100	2535.0	22.21	-0.85	21.36	136.77	2
21400	2565.0	22.42	-0.85	21.57	143.55	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20800	2505.0	21.55	-0.85	20.7	117.49	2
21100	2535.0	21.28	-0.85	20.43	110.41	2
21400	2565.0	21.52	-0.85	20.67	116.68	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20800	2505	20.73	-0.85	19.88	97.27	2
21100	2535	20.45	-0.85	19.6	91.2	2
21400	2565	20.7	-0.85	19.85	96.61	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20825	2507.5	22.46	-0.85	21.61	144.88	2
21100	2535.0	22.19	-0.85	21.34	136.14	2
21375	2562.5	22.45	-0.85	21.6	144.54	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20825	2507.5	21.57	-0.85	20.72	118.03	2
21100	2535.0	21.3	-0.85	20.45	110.92	2
21375	2562.5	21.56	-0.85	20.71	117.76	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20825	2507.5	20.74	-0.85	19.89	97.5	2
21100	2535	20.43	-0.85	19.58	90.78	2
21375	2562.5	20.73	-0.85	19.88	97.27	2



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Test Report No.: W7L-P22070038RF06

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20850	2510.0	22.49	-0.85	21.64	145.88	2
21100	2535.0	22.25	-0.85	21.4	138.04	2
21350	2560.0	22.47	-0.85	21.62	145.21	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20850	2510.0	21.6	-0.85	20.75	118.85	2
21100	2535.0	21.36	-0.85	20.51	112.46	2
21350	2560.0	21.58	-0.85	20.73	118.3	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20850	2510	20.76	-0.85	19.91	97.95	2
21100	2535	20.51	-0.85	19.66	92.47	2
21350	2560	20.75	-0.85	19.9	97.72	2

LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	23.4	-4.16	17.09	51.17	3
23095	707.5	23.28	-4.16	16.97	49.77	3
23173	715.3	23.25	-4.16	16.94	49.43	3

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	23.06	-4.16	16.75	47.32	3
23095	707.5	22.91	-4.16	16.6	45.71	3
23173	715.3	22.94	-4.16	16.63	46.03	3

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	21.41	-4.16	15.1	32.36	3
23095	707.5	21.36	-4.16	15.05	31.99	3
23173	715.3	21.31	-4.16	15	31.62	3

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	23.36	-4.16	17.05	50.70	3
23095	707.5	23.29	-4.16	16.98	49.89	3
23165	714.5	23.25	-4.16	16.94	49.43	3

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	23.09	-4.16	16.78	47.64	3
23095	707.5	22.93	-4.16	16.62	45.92	3
23165	714.5	22.94	-4.16	16.63	46.03	3

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	21.42	-4.16	15.11	32.43	3
23095	707.5	21.38	-4.16	15.07	32.14	3
23165	714.5	21.31	-4.16	15	31.62	3

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	23.37	-4.16	17.06	50.82	3
23095	707.5	23.25	-4.16	16.94	49.43	3
23155	713.5	23.29	-4.16	16.98	49.89	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	23.09	-4.16	16.78	47.64	3
23095	707.5	22.96	-4.16	16.65	46.24	3
23155	713.5	22.93	-4.16	16.62	45.92	3

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	21.35	-4.16	15.04	31.92	3
23095	707.5	21.43	-4.16	15.12	32.51	3
23155	713.5	21.31	-4.16	15	31.62	3



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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	23.42	-4.16	17.11	51.40	3
23095	707.5	23.33	-4.16	17.02	50.35	3
23130	711	23.3	-4.16	16.99	50	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	23.11	-4.16	16.8	47.86	3
23095	707.5	22.99	-4.16	16.68	46.56	3
23130	711	22.95	-4.16	16.64	46.13	3

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	21.43	-4.16	15.12	32.51	3
23095	707.5	21.44	-4.16	15.13	32.58	3
23130	711	21.33	-4.16	15.02	31.77	3

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



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LTE BAND 13

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23205	779.5	22.73	-4.67	15.91	38.99	3
23230	782	22.75	-4.67	15.93	39.17	3
23255	784.5	22.74	-4.67	15.92	39.08	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23205	779.5	21.55	-4.67	14.73	29.72	3
23230	782	21.5	-4.67	14.68	29.38	3
23255	784.5	21.52	-4.67	14.7	29.51	3

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23205	779.5	20.86	-4.67	14.04	25.35	3
23230	782	20.81	-4.67	13.99	25.06	3
23255	784.5	20.84	-4.67	14.02	25.23	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
-	-	-	-	-	-	-
23230	782	22.79	-4.67	15.97	39.54	3
-	-	-	-	-	-	-

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
-	-	-	-	-	-	-
23230	782	21.57	-4.67	14.75	29.85	3
-	-	-	-	-	-	-

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
-	-	-	-	-	-	-
23230	782	20.88	-4.67	14.06	25.47	3
-	-	-	-	-	-	-

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

LTE BAND 17

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	23.51	-4.16	17.2	52.48	3
23790	710	23.48	-4.16	17.17	52.12	3
23825	713.5	23.53	-4.16	17.22	52.72	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	23.11	-4.16	16.8	47.86	3
23790	710	23.11	-4.16	16.8	47.86	3
23825	713.5	23.19	-4.16	16.88	48.75	3

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23755	706.5	21.53	-4.16	15.22	33.27	3
23790	710	21.47	-4.16	15.16	32.81	3
23825	713.5	21.53	-4.16	15.22	33.27	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	23.58	-4.16	17.27	53.33	3
23790	710	23.53	-4.16	17.22	52.72	3
23800	711	23.55	-4.16	17.24	52.97	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	23.18	-4.16	16.87	48.64	3
23790	710	23.16	-4.16	16.85	48.42	3
23800	711	23.21	-4.16	16.9	48.98	3

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23780	709	21.59	-4.16	15.28	33.73	3
23790	710	21.54	-4.16	15.23	33.34	3
23800	711	21.58	-4.16	15.27	33.65	3

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



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LTE BAND 38

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.26	-0.85	21.41	138.36	2
38000	2595.0	22.11	-0.85	21.26	133.66	2
38225	2617.5	22.23	-0.85	21.38	137.4	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	21.81	-0.85	20.96	124.74	2
38000	2595.0	21.66	-0.85	20.81	120.5	2
38225	2617.5	21.74	-0.85	20.89	122.74	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	19.99	-0.85	19.14	82.04	2
38000	2595	19.92	-0.85	19.07	80.72	2
38225	2617.5	20	-0.85	19.15	82.22	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.27	-0.85	21.42	138.68	2
38000	2595.0	22.12	-0.85	21.27	133.97	2
38200	2615.0	22.23	-0.85	21.38	137.4	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	21.83	-0.85	20.98	125.31	2
38000	2595.0	21.65	-0.85	20.8	120.23	2
38200	2615.0	21.77	-0.85	20.92	123.59	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575	20.02	-0.85	19.17	82.6	2
38000	2595	19.89	-0.85	19.04	80.17	2
38200	2615	19.94	-0.85	19.09	81.1	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.28	-0.85	21.43	139.00	2
38000	2595.0	22.11	-0.85	21.26	133.66	2
38175	2612.5	22.22	-0.85	21.37	137.09	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	21.87	-0.85	21.02	126.47	2
38000	2595.0	21.64	-0.85	20.79	119.95	2
38175	2612.5	21.81	-0.85	20.96	124.74	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	20.02	-0.85	19.17	82.6	2
38000	2595	19.89	-0.85	19.04	80.17	2
38175	2612.5	20	-0.85	19.15	82.22	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.31	-0.85	21.46	139.96	2
38000	2595.0	22.17	-0.85	21.32	135.52	2
38150	2610.0	22.24	-0.85	21.39	137.72	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	21.89	-0.85	21.04	127.06	2
38000	2595.0	21.72	-0.85	20.87	122.18	2
38150	2610.0	21.82	-0.85	20.97	125.03	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580	20.06	-0.85	19.21	83.37	2
38000	2595	19.93	-0.85	19.08	80.91	2
38150	2610	20.02	-0.85	19.17	82.6	2



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LTE BAND 41

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.53	-0.85	21.68	147.23	2
40620	2593.0	22.34	-0.85	21.49	140.93	2
41565	2687.5	22.33	-0.85	21.48	140.6	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	21.82	-0.85	20.97	125.03	2
40620	2593.0	21.73	-0.85	20.88	122.46	2
41565	2687.5	21.67	-0.85	20.82	120.78	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	20.15	-0.85	19.3	85.11	2
40620	2593.0	20.1	-0.85	19.25	84.14	2
41565	2687.5	20.09	-0.85	19.24	83.95	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	22.5	-0.85	21.65	146.22	2
40620	2593.0	22.34	-0.85	21.49	140.93	2
41540	2685.0	22.31	-0.85	21.46	139.96	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	21.82	-0.85	20.97	125.03	2
40620	2593.0	21.71	-0.85	20.86	121.9	2
41540	2685.0	21.64	-0.85	20.79	119.95	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	20.17	-0.85	19.32	85.51	2
40620	2593.0	20.07	-0.85	19.22	83.56	2
41540	2685.0	20.11	-0.85	19.26	84.33	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	22.57	-0.85	21.72	148.59	2
40620	2593.0	22.31	-0.85	21.46	139.96	2
41515	2682.5	22.33	-0.85	21.48	140.6	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	21.79	-0.85	20.94	124.17	2
40620	2593.0	21.72	-0.85	20.87	122.18	2
41515	2682.5	21.68	-0.85	20.83	121.06	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	20.17	-0.85	19.32	85.51	2
40620	2593.0	20.09	-0.85	19.24	83.95	2
41515	2682.5	20.12	-0.85	19.27	84.53	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	22.58	-0.85	21.73	148.94	2
40620	2593.0	22.39	-0.85	21.54	142.56	2
41490	2680.0	22.39	-0.85	21.54	142.56	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	21.84	-0.85	20.99	125.6	2
40620	2593.0	21.75	-0.85	20.9	123.03	2
41490	2680.0	21.72	-0.85	20.87	122.18	2

CHANNEL BANDWIDTH: 20 MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	20.22	-0.85	19.37	86.5	2
40620	2593.0	20.12	-0.85	19.27	84.53	2
41490	2680.0	20.13	-0.85	19.28	84.72	2

LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.79	1.13	24.92	310.46	1
132322	1745	23.39	1.13	24.52	283.14	1
132665	1779.3	23.55	1.13	24.68	293.76	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.4	1.13	24.53	283.79	1
132322	1745	22.97	1.13	24.1	257.04	1
132665	1779.3	23.19	1.13	24.32	270.4	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	21.88	1.13	23.01	199.99	1
132322	1745	21.41	1.13	22.54	179.47	1
132665	1779.3	21.59	1.13	22.72	187.07	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.81	1.13	24.94	311.89	1
132322	1745	23.38	1.13	24.51	282.49	1
132657	1778.5	23.59	1.13	24.72	296.48	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.43	1.13	24.56	285.76	1
132322	1745	22.96	1.13	24.09	256.45	1
132657	1778.5	23.23	1.13	24.36	272.9	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	21.94	1.13	23.07	202.77	1
132322	1745	21.44	1.13	22.57	180.72	1
132657	1778.5	21.53	1.13	22.66	184.5	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.82	1.13	24.95	312.61	1
132322	1745	23.36	1.13	24.49	281.19	1
132647	1777.5	23.55	1.13	24.68	293.76	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.38	1.13	24.51	282.49	1
132322	1745	22.99	1.13	24.12	258.23	1
132647	1777.5	23.22	1.13	24.35	272.27	1