FCC Test Report

(Part 27 – WCDMA B4, LTE B4/B7/B12/B13/B38/B41/B66/B71)

Report No.:	RFBCKT-WTW-P21031102-5
FCC ID:	HFSQTAD53
Test Model:	QTAD53
Received Date:	Mar. 31, 2021
Test Date:	Apr. 19 ~ May 21, 2021
Issued Date:	May 26, 2021
Applicant:	QUANTA COMPUTER INC
Address:	No. 211, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN
FCC Registration / Designation Number:	788550 / TW0003

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

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Release Control Record

Issue No.	Description	Date Issued
RFBCKT-WTW-P21031102-5	Original release	May 26, 2021

1 Certificate of Conformity

Product:	5G Hotspot
Brand:	T-Mobile
Test Model:	QTAD53
Sample Status:	Engineering sample
Applicant:	QUANTA COMPUTER INC
Test Date:	Apr. 19 ~ May 21, 2021
Standards:	FCC Part 27, Subpart C, F, H, L, M, N

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** May 26, 2021

Polly Chien / Specialist

Approved by : _____ , **Date:** May 26, 2021

Bruce Chen / Senior Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2							
FCC Clause					Test Item	Result	Remarks
WCDMA B4 / LTE B4	LTE B12 / LTE B71	LTE B13	LTE B7 / LTE B38 / LTE B41	LTE B66			
2.1046 27.50 (d)(4)	2.1046 27.50 (c)	2.1046 27.50 (b)	2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1047	2.1047	2.1047	2.1047	2.1047	Modulation Characteristics	Pass	Meet the requirement of limit.
27.50 (d)(5)	----	----	----	27.50 (d)(5)	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	Pass	Meet the requirement of limit.
2.1049	2.1049	2.1049	2.1049	2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	Band Edge / Out of Band Emissions Measurements	Pass	Meet the requirement of limit.
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)(f)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 27.53 (h)	2.1053 27.53 (g)	2.1053 27.53 (c)(f)	2.1053 27.53 (m)(4)(6)	2.1053 27.53 (h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -14.80dB at 5005.00MHz & 5375.00MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 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	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102579	Jul. 07, 2020	Jul. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 09, 2020	Jun. 08, 2021
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2020	Nov. 24, 2021
Radio Communication Analyzer Anritsu	MT8821C	6261806803	Jan. 22, 2021	Jan. 21, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 04, 2020	Nov. 03, 2021
HORN Antenna SCHWARZBECK	9120D	209	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Loop Antenna TESEQ	HLA 6121	45745	Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 16, 2020	Aug. 15, 2021
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 22, 2021	Mar. 21, 2022
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM-S M-8000	Cable-CH3-03 (309224+170907)	Aug. 16, 2020	Aug. 15, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Standard Temperature And Humidity Chamber GIANT FORCE	GTH-120-40-CP-AR	MAA1306-019	Sep. 10, 2020	Sep. 09, 2021
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun 06, 2020	Jun 05, 2021
DC power supply Keysight	U8002A	MY56330015	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 3.

3 General Information

3.1 General Description of EUT

Product	5G Hotspot
Brand	T-Mobile
Test Model	QTAD53
Sample Status	Engineering sample
Power Supply Rating	5Vdc / 9Vdc / 12Vdc (Adapter) 3.85Vdc (Battery)
Modulation Type	WCDMA: BPSK, QPSK HSDPA: BPSK HSUPA: QPSK LTE: QPSK, 16QAM, 64QAM, 256QAM

Operating Frequency	WCDMA Band 4	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)	1715.0MHz ~ 1750.0MHz
	LTE Band 4 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1747.5MHz
	LTE Band 4 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1745.0MHz
	LTE Band 7 (Channel Bandwidth 5MHz)	2502.5MHz ~ 2567.5MHz
	LTE Band 7 (Channel Bandwidth 10MHz)	2505.0MHz ~ 2565.0MHz
	LTE Band 7 (Channel Bandwidth 15MHz)	2507.5MHz ~ 2562.5MHz
	LTE Band 7 (Channel Bandwidth 20MHz)	2510.0MHz ~ 2560.0MHz
	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)	704.0MHz ~ 711.0MHz
	LTE Band 13 (Channel Bandwidth 5MHz)	779.5MHz ~ 784.5MHz
	LTE Band 13 (Channel Bandwidth 10MHz)	782.0MHz
	LTE Band 38 (Channel Bandwidth 5MHz)	2572.5MHz ~ 2617.5MHz
	LTE Band 38 (Channel Bandwidth 10MHz)	2575.0MHz ~ 2615.0MHz
	LTE Band 38 (Channel Bandwidth 15MHz)	2577.5MHz ~ 2612.5MHz
	LTE Band 38 (Channel Bandwidth 20MHz)	2580.0MHz ~ 2610.0MHz
	LTE Band 41 (Channel Bandwidth 5MHz)	2498.5MHz ~ 2687.5MHz
	LTE Band 41 (Channel Bandwidth 10MHz)	2501.0MHz ~ 2685.0 MHz
	LTE Band 41 (Channel Bandwidth 15MHz)	2503.5MHz ~ 2682.5MHz
	LTE Band 41 (Channel Bandwidth 20MHz)	2506.0MHz ~ 2680.0 MHz
	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)	1715.0MHz ~ 1775.0MHz
	LTE Band 66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz
	LTE Band 66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz
	LTE Band 71 (Channel Bandwidth 5MHz)	665.5MHz ~ 695.5MHz
	LTE Band 71 (Channel Bandwidth 10MHz)	668.0MHz ~ 693.0MHz
	LTE Band 71 (Channel Bandwidth 15MHz)	670.5MHz ~ 690.5MHz
	LTE Band 71 (Channel Bandwidth 20MHz)	673.0MHz ~ 688.0MHz

	WCDMA Band 4	435.512mW (26.39dBm)			
Max. EIRP Power		QPSK	16QAM	64QAM	256QAM
	LTE Band 4 (Channel Bandwidth 1.4MHz)	458.142mW (26.61dBm)	375.837mW (25.75dBm)	295.801mW (24.71dBm)	150.661mW (21.78dBm)
	LTE Band 4 (Channel Bandwidth 3MHz)	457.088mW (26.60dBm)	379.315mW (25.79dBm)	299.226mW (24.76dBm)	151.356mW (21.80dBm)
	LTE Band 4 (Channel Bandwidth 5MHz)	466.659mW (26.69dBm)	370.681mW (25.69dBm)	295.121mW (24.70dBm)	150.661mW (21.78dBm)
	LTE Band 4 (Channel Bandwidth 10MHz)	460.257mW (26.63dBm)	376.704mW (25.76dBm)	294.442mW (24.69dBm)	149.624mW (21.75dBm)
	LTE Band 4 (Channel Bandwidth 15MHz)	461.318mW (26.64dBm)	372.392mW (25.71dBm)	293.765mW (24.68dBm)	151.705mW (21.81dBm)
	LTE Band 4 (Channel Bandwidth 20MHz)	458.142mW (26.61dBm)	379.315mW (25.79dBm)	299.916mW (24.77dBm)	152.757mW (21.84dBm)
	LTE Band 7 (Channel Bandwidth 5MHz)	260.016mW (24.15dBm)	214.289mW (23.31dBm)	165.577mW (22.19dBm)	85.310mW (19.31dBm)
	LTE Band 7 (Channel Bandwidth 10MHz)	260.016mW (24.15dBm)	214.289mW (23.31dBm)	164.816mW (22.17dBm)	85.310mW (19.31dBm)
	LTE Band 7 (Channel Bandwidth 15MHz)	262.422mW (24.19dBm)	210.863mW (23.24dBm)	162.930mW (22.12dBm)	85.114mW (19.30dBm)
	LTE Band 7 (Channel Bandwidth 20MHz)	263.027mW (24.20dBm)	214.289mW (23.31dBm)	166.725mW (22.22dBm)	86.298mW (19.36dBm)
	LTE Band 38 (Channel Bandwidth 5MHz)	246.604mW (23.92dBm)	201.372mW (23.04dBm)	150.661mW (21.78dBm)	79.068mW (18.98dBm)
	LTE Band 38 (Channel Bandwidth 10MHz)	250.611mW (23.99dBm)	198.609mW (22.98dBm)	149.624mW (21.75dBm)	79.250mW (18.99dBm)
	LTE Band 38 (Channel Bandwidth 15MHz)	250.035mW (23.98dBm)	200.909mW (23.03dBm)	149.968mW (21.76dBm)	78.886mW (18.97dBm)
	LTE Band 38 (Channel Bandwidth 20MHz)	251.768mW (24.01dBm)	202.302mW (23.06dBm)	151.008mW (21.79dBm)	79.983mW (19.03dBm)
		QPSK	16QAM	64QAM	256QAM
	LTE Band 41 (Channel Bandwidth 5MHz)	613.762mW (27.88dBm)	502.343mW (27.01dBm)	390.841mW (25.92dBm)	200.909mW (23.03dBm)
	LTE Band 41 (Channel Bandwidth 10MHz)	613.762mW (27.88dBm)	500.035mW (26.99dBm)	384.592mW (25.85dBm)	200.447mW (23.02dBm)
	LTE Band 41 (Channel Bandwidth 15MHz)	610.942mW (27.86dBm)	502.343mW (27.01dBm)	392.645mW (25.94dBm)	198.609mW (22.98dBm)
	LTE Band 41 (Channel Bandwidth 20MHz)	616.595mW (27.90dBm)	504.661mW (27.03dBm)	393.550mW (25.95dBm)	199.526mW (23.00dBm)
	LTE Band 66 (Channel Bandwidth 1.4MHz)	465.586mW (26.68dBm)	379.315mW (25.79dBm)	284.446mW (24.54dBm)	153.815mW (21.87dBm)
	LTE Band 66 (Channel Bandwidth 3MHz)	460.257mW (26.63dBm)	377.572mW (25.77dBm)	283.139mW (24.52dBm)	154.882mW (21.90dBm)
	LTE Band 66 (Channel Bandwidth 5MHz)	461.318mW (26.64dBm)	379.315mW (25.79dBm)	285.102mW (24.55dBm)	153.109mW (21.85dBm)
	LTE Band 66 (Channel Bandwidth 10MHz)	458.142mW (26.61dBm)	380.189mW (25.80dBm)	282.488mW (24.51dBm)	153.815mW (21.87dBm)
	LTE Band 66 (Channel Bandwidth 15MHz)	460.257mW (26.63dBm)	376.704mW (25.76dBm)	285.102mW (24.55dBm)	153.109mW (21.85dBm)
	LTE Band 66 (Channel Bandwidth 20MHz)	466.659mW (26.69dBm)	381.066mW (25.81dBm)	287.740mW (24.59dBm)	154.882mW (21.90dBm)

		QPSK	16QAM	64QAM	256QAM
Max. ERP Power	LTE Band 12 (Channel Bandwidth 1.4MHz)	160.694mW (22.06dBm)	132.739mW (21.23dBm)	96.828mW (19.86dBm)	46.238mW (16.65dBm)
	LTE Band 12 (Channel Bandwidth 3MHz)	159.588mW (22.03dBm)	133.968mW (21.27dBm)	98.175mW (19.92dBm)	46.026mW (16.63dBm)
	LTE Band 12 (Channel Bandwidth 5MHz)	159.221mW (22.02dBm)	133.660mW (21.26dBm)	97.499mW (19.89dBm)	46.238mW (16.65dBm)
	LTE Band 12 (Channel Bandwidth 10MHz)	162.555mW (22.11dBm)	133.968mW (21.27dBm)	98.628mW (19.94dBm)	46.452mW (16.67dBm)
	LTE Band 13 (Channel Bandwidth 5MHz)	67.764mW (18.31dBm)	54.828mW (17.39dBm)	42.756mW (16.31dBm)	21.380mW (13.30dBm)
	LTE Band 13 (Channel Bandwidth 10MHz)	68.549mW (18.36dBm)	54.954mW (17.40dBm)	43.251mW (16.36dBm)	21.677mW (13.36dBm)
	LTE Band 71 (Channel Bandwidth 5MHz)	151.008mW (21.79dBm)	119.124mW (20.76dBm)	93.111mW (19.69dBm)	45.814mW (16.61dBm)
	LTE Band 71 (Channel Bandwidth 10MHz)	151.008mW (21.79dBm)	117.490mW (20.70dBm)	93.325mW (19.70dBm)	45.604mW (16.59dBm)
	LTE Band 71 (Channel Bandwidth 15MHz)	149.968mW (21.76dBm)	118.850mW (20.75dBm)	94.189mW (19.74dBm)	45.709mW (16.60dBm)
	LTE Band 71 (Channel Bandwidth 20MHz)	151.705mW (21.81dBm)	119.399mW (20.77dBm)	94.406mW (19.75dBm)	46.238mW (16.65dBm)

Emission Designator	WCDMA Band 4	4M19F9W			
		QPSK	16QAM	64QAM	256QAM
	LTE Band 4 (Channel Bandwidth 1.4MHz)	1M09G7D	1M09D7W	1M09D7W	1M09D7W
	LTE Band 4 (Channel Bandwidth 3MHz)	2M70G7D	2M70D7W	2M70D7W	2M70D7W
	LTE Band 4 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M50D7W	4M49D7W
	LTE Band 4 (Channel Bandwidth 10MHz)	8M99G7D	8M97D7W	8M97D7W	8M97D7W
	LTE Band 4 (Channel Bandwidth 15MHz)	13M5G7D	13M5D7W	13M5D7W	13M5D7W
	LTE Band 4 (Channel Bandwidth 20MHz)	18M0G7D	18M0D7W	18M0D7W	18M0D7W
	LTE Band 7 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W	4M49D7W
	LTE Band 7 (Channel Bandwidth 10MHz)	8M99G7D	8M98D7W	8M98D7W	8M98D7W
	LTE Band 7 (Channel Bandwidth 15MHz)	13M5G7D	13M5D7W	13M5D7W	13M5D7W
	LTE Band 7 (Channel Bandwidth 20MHz)	18M0G7D	18M0D7W	18M0D7W	18M0D7W
	LTE Band 12 (Channel Bandwidth 1.4MHz)	1M09G7D	1M09D7W	1M09D7W	1M09D7W
	LTE Band 12 (Channel Bandwidth 3MHz)	2M70G7D	2M70D7W	2M70D7W	2M70D7W
	LTE Band 12 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W	4M49D7W
	LTE Band 12 (Channel Bandwidth 10MHz)	8M99G7D	8M98D7W	8M99D7W	8M98D7W
	LTE Band 13 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W	4M49D7W
	LTE Band 13 (Channel Bandwidth 10MHz)	8M97G7D	8M95D7W	8M95D7W	8M95D7W
	LTE Band 38 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M48D7W	4M48D7W
	LTE Band 38 (Channel Bandwidth 10MHz)	8M97G7D	8M97D7W	8M97D7W	8M96D7W
	LTE Band 38 (Channel Bandwidth 15MHz)	13M5G7D	13M4D7W	13M5D7W	13M4D7W
	LTE Band 38 (Channel Bandwidth 20MHz)	17M9G7D	17M9D7W	17M9D7W	17M9D7W
	LTE Band 41 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W	4M48D7W
	LTE Band 41 (Channel Bandwidth 10MHz)	8M97G7D	8M95D7W	8M97D7W	8M97D7W
	LTE Band 41 (Channel Bandwidth 15MHz)	13M5G7D	13M5D7W	13M5D7W	13M5D7W
	LTE Band 41 (Channel Bandwidth 20MHz)	17M9G7D	17M9D7W	18M0D7W	17M9D7W
Emission Designator		QPSK	16QAM	64QAM	256QAM
	LTE Band 66 (Channel Bandwidth 1.4MHz)	1M09G7D	1M09D7W	1M09D7W	1M09D7W
	LTE Band 66 (Channel Bandwidth 3MHz)	2M70G7D	2M70D7W	2M70D7W	2M70D7W
	LTE Band 66 (Channel Bandwidth 5MHz)	4M49G7D	4M50D7W	4M49D7W	4M49D7W
	LTE Band 66 (Channel Bandwidth 10MHz)	8M99G7D	8M97D7W	8M97D7W	8M97D7W
	LTE Band 66 (Channel Bandwidth 15MHz)	13M5G7D	13M4D7W	13M4D7W	13M4D7W
	LTE Band 66 (Channel Bandwidth 20MHz)	17M9G7D	17M9D7W	17M9D7W	17M9D7W
	LTE Band 71 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W	4M49D7W
	LTE Band 71 (Channel Bandwidth 10MHz)	8M98G7D	8M97D7W	8M97D7W	8M97D7W
	LTE Band 71 (Channel Bandwidth 15MHz)	13M5G7D	13M5D7W	13M5D7W	13M5D7W
	LTE Band 71 (Channel Bandwidth 20MHz)	17M9G7D	17M9D7W	18M0D7W	18M0D7W
Antenna Type	Refer to Note as below				
Antenna Connector	Refer to Note as below				
Accessory Device	Refer to Note as below				
Cable Supplied	Refer to Note as below				

Note:

1. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter 1	TEN PAO INTERNATIONAL LTD.	S018BYU1200150	I/P: 100-240Vac, 50/60Hz, 600mA O/P: 5Vdc/9Vdc/12Vdc⎓3A/2A/1.5A
Adapter 2	Aohai Technology Co., Ltd	A138A-120150U-US2	I/P: 100-240V~50/60Hz, 0.5A O/P: 5Vdc, 2.5A/9Vdc, 2A/12Vdc, 1.5A
USB Cable	Electronics Taiwai Ltd.	DDEMU110079	0.95m shielded USB cable without core
Battery	VEKEN	141033	3.85Vdc, 6240mAh, 24.02Wh

2. There are two sources for EUT's main board and memory. Only the supplier is different and the rest of the specifications are the same.

Sample	Item	Brand	Model
A	PCB - Main	Unimicron Technology Corporation.	12VPL4024C for MODEM board,06VPL4028C for Main board
	Memory - Main	Nanya Technology Corporation	NM4888KSPAXAI-3E
B	PCB -Second	AKM Meadville	HI12C124A for MODEM board, HI06T221A for Main board
	Memory - Second	Jeju Semiconductor Corp.	JSFDDQ5QHAFGD-405

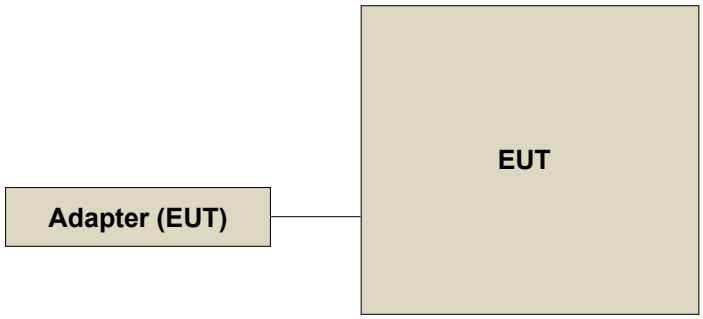
* After pre-tested, sample A was the worse and chosen for final test.

3. The following antennas were provided to the EUT.

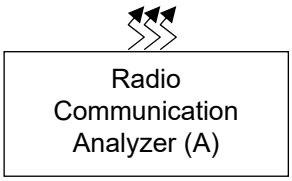
LTE Band										
Ant. No.	Type	Connector	Gain (dBi)								
			WCDMA B4	B4	B7	B12	B13	B38	B41	B66	B71
0	PIFA	MUR	3.16163	3.16163	1.15435	0.154297	-3.23099	0.371642	1.15435	3.16163	0.426023
1	PIFA	IPEX	-	-	-		-	-	-	-	-
2	PIFA	IPEX	0.805343	0.805343	0.854078		-	0.910513	0.854078	0.805343	-
3	PIFA	MUR	-	-	-		-	-	-	-	-
4	PIFA	IPEX	-	-	-		-	-	0.283214	-	-

* There are diversity on WCDMA and LTE mode. The max. gain are chosen for final test.
* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Configuration of System under Test



Remote site



3.2.1 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.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Radio Communication Analyzer	Anritsu	MT8821C	6261806803	NA	-

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

3.3 Test Mode Applicability and Tested Channel Detail

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 as the table below. Following channel(s) was (were) selected for the final test as listed below:

Band	Radiated Emission
WCDMA Band 4	X-plane
LTE Band 4	X-plane
LTE Band 7	X-plane
LTE Band 12	X-plane
LTE Band 13	X-plane
LTE Band 38	X-plane
LTE Band 41	X-plane
LTE Band 66	X-plane
LTE Band 71	X-plane

WCDMA Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	EIRP	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Modulation Characteristics	1312 to 1513	1413 (1732.6MHz)	WCDMA, HSDPA, HSUPA
-	Frequency Stability	1312 to 1513	1312 (1712.4MHz), 1513 (1752.6MHz)	WCDMA
-	Occupied Bandwidth	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Band Edge	1312 to 1513	1312 (1712.4MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Peak To Average Ratio	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Conducted Emission	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Radiated Emission Below 1GHz	1312 to 1513	1413 (1732.6MHz)	WCDMA
-	Radiated Emission Above 1GHz	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA

Note: For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	20050 to 20300	20175 (1732.5MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Frequency Stability	19957 to 20393	19957 (1710.7MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	6 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20385 (1753.5MHz)	3MHz	QPSK	15 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20350 (1750.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20325 (1747.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20300 (1745.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	6 RB / 0RB Offset
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	15 RB / 0RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25RB / 0RB Offset
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50RB / 0RB Offset
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Band Edge	19957 to 20393	19957 (1710.7MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20385 (1753.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20350 (1750.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20325 (1747.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20300 (1745.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Peak To Average Ratio	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	3 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 24 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 24 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	3 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	1 RB / 24 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK	1 RB / 24 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	20050 to 20300	20050 (1720.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	3 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	1 RB / 24 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 7

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21100 (2535.0MHz), 21400 (2565.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21100 (2535.0MHz), 21375 (2562.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	20850 to 21350	21100 (2535.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Frequency Stability	20775 to 21425	20775 (2502.5MHz), 21425 (2567.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21400 (2565.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21375 (2562.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21350 (2560.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21100 (2535.0MHz), 21400 (2565.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21100 (2535.0MHz), 21375 (2562.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	20775 to 21425	20775 (2502.5MHz), 21425 (2567.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21400 (2565.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21375 (2562.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21350 (2560.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21100 (2535.0MHz), 21400 (2565.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21100 (2535.0MHz), 21375 (2562.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		20800 to 21400	20800 (2505.0MHz), 21100 (2535.0MHz), 21400 (2565.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		20825 to 21375	20825 (2507.5MHz), 21100 (2535.0MHz), 21375 (2562.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	20850 to 21350	20775 (2502.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 12

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0 MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
-	Modulation Characteristics	23060 to 23130	23095 (707.5MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
-	Frequency Stability	23017 to 23173	23017 (699.7MHz), 23173 (715.3MHz)	1.4MHz	QPSK	6 RB / 0 RB Offset
		23025 to 23165	23025 (700.5MHz), 23165 (714.5MHz)	3MHz	QPSK	15 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23155 (713.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23130 (711.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
-	Emission Bandwidth	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	6 RB / 0 RB Offset
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	15 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Band Edge	23017 to 23173	23017 (699.7MHz), 23173 (715.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		23025 to 23165	23025 (700.5MHz), 23165 (714.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23155 (713.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23130 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
-	Peak to Average Ratio	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 2 RB Offset
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 7 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 12 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK	1 RB / 2 RB Offset
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK	1 RB / 7 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK	1 RB / 12 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	23060 to 23130	23095 (707.5MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK	1 RB / 2 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK	1 RB / 12 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 13

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
-	Modulation Characteristics	23230	23230 (782.0MHz),	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
-	Frequency Stability	23205 to 23255	23205 (779.5MHz), 23255 (784.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		23230	23230 (782.0MHz),	10MHz	QPSK	50 RB / 0 RB Offset
-	Emission Bandwidth	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
-	Band Edge	23205 to 23255	23205 (779.5MHz), 23255 (784.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
-	Peak to Average Ratio	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

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EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	37775 to 38225	37775 (2572.5MHz), 38000 (2595.0MHz), 38225 (2617.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38000 (2595.0MHz), 38200 (2615.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38000 (2595.0MHz), 38175 (2612.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38000 (2595.0MHz), 38150 (2610.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	37850 to 38150	38000 (2595.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Frequency Stability	37775 to 38225	37775 (2572.5MHz), 38225 (2617.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38200 (2615.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38175 (2612.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38150 (2610.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	37775 to 38225	37775 (2572.5MHz), 38000 (2595.0MHz), 38225 (2617.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38000 (2595.0MHz), 38200 (2615.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38000 (2595.0MHz), 38175 (2612.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38000 (2595.0MHz), 38150 (2610.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	37775 to 38225	37775 (2572.5MHz), 38225 (2617.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38200 (2615.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38175 (2612.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38150 (2610.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	37775 to 38225	37775 (2572.5MHz), 38000 (2595.0MHz), 38225 (2617.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38000 (2595.0MHz), 38200 (2615.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38000 (2595.0MHz), 38175 (2612.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38000 (2595.0MHz), 38150 (2610.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	37775 to 38225	37775 (2572.5MHz), 38000 (2595.0MHz), 38225 (2617.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		37800 to 38200	37800 (2575.0MHz), 38000 (2595.0MHz), 38200 (2615.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		37825 to 38175	37825 (2577.5MHz), 38000 (2595.0MHz), 38175 (2612.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38000 (2595.0MHz), 38150 (2610.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	37850 to 38150	38225 (2617.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	37775 to 38225	37775 (2572.5MHz), 38000 (2595.0MHz), 38225 (2617.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		37850 to 38150	37850 (2580.0MHz), 38000 (2595.0MHz), 38150 (2610.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	39750 to 41490	40620 (2593.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Frequency Stability	39675 to 41565	39675 (2498.5MHz), 41565 (2687.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 41540 (2685.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 41515 (2682.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 41490 (2680.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	39675 to 41565	39675 (2498.5MHz), 41565 (2687.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 41540 (2685.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 41515 (2682.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 41490 (2680.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	39750 to 41490	40620 (2593.0MHz)	5MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

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EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	132072 to 132572	132322 (1745.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Frequency Stability	131979 to 132665	131979 (1710.7MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132657 (1778.5MHz)	3MHz	QPSK	15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132647 (1777.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132622 (1775.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132597 (1772.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	6 RB / 0RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	15 RB / 0RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25RB / 0RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50RB / 0RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Band Edge	131979 to 132665	131979 (1710.7MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132657 (1778.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132647 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132622 (1775.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132597 (1772.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	3 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	3 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	131979 to 132665	132647 (1777.5MHz)	5MHz	QPSK	3 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	3 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 71

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	133147 to 133447	133147 (665.5MHz), 133297 (680.5MHz), 133447 (695.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133297 (680.5MHz), 133422 (693.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133297 (680.5MHz), 133397 (690.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133297 (680.5MHz), 133372 (688.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	133222 to 133372	133297 (680.5MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Frequency Stability	133147 to 133447	133147 (665.5MHz), 133447 (695.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133422 (693.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133397 (690.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133372 (688.0MHz)	20MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	133147 to 133447	133147 (665.5MHz), 133297 (680.5MHz), 133447 (695.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133297 (680.5MHz), 133422 (693.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133297 (680.5MHz), 133397 (690.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133297 (680.5MHz), 133372 (688.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Band Edge	133147 to 133447	133147 (665.5MHz), 133447 (695.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133422 (693.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133397 (690.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133372 (688.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	133147 to 133447	133147 (665.5MHz), 133297 (680.5MHz), 133447 (695.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133297 (680.5MHz), 133422 (693.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133297 (680.5MHz), 133397 (690.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133297 (680.5MHz), 133372 (688.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	133147 to 133447	133147 (665.5MHz), 133297 (680.5MHz), 133447 (695.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		133172 to 133422	133172 (668.0MHz), 133297 (680.5MHz), 133422 (693.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		133197 to 133397	133197 (670.5MHz), 133297 (680.5MHz), 133397 (690.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133297 (680.5MHz), 133372 (688.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	133222 to 133372	133297 (680.5MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	133147 to 133447	133147 (665.5MHz), 133297 (680.5MHz), 133447 (695.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		133222 to 133372	133222 (673.0MHz), 133297 (680.5MHz), 133372 (688.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Modulation Characteristics	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Frequency Stability	25deg. C, 60%RH	3.85Vdc	James Yang
Occupied Bandwidth	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Band Edge	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Peak To Average Ratio	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Conducted Emission	25deg. C, 60%RH	120Vac, 60Hz	Willy Cheng
Radiated Emission	25deg. C, 70%RH	120Vac, 60Hz	Edison Lee, Noah Chang, Hans Wu

3.4 EUT Operating Conditions

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

3.5 General Description of Applied Standards and References

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

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For WCDMA Band 4, LTE Band 4, LTE Band 66:
Mobile / Portable station are limited to 1 watts e.i.r.p.

For LTE Band 12, LTE Band 13, LTE Band 71:
Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.
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, 746-757 MHz,787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

For LTE Band 7, LTE Band 38, LTE Band 41:
Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with WCDMA, 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.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$EIRP = P_{Meas} + G_T$

$ERP = P_{Meas} + G_T - 2.15$

where

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

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)

4.1.3 Test Setup

Conducted Power Measurement:

4.1.4 Test Results

Conducted Output Power (dBm)

Band	WCDMA IV		
TX Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	23.23	23.20	23.15
HSDPA Subtest-1	22.23	22.21	22.20
HSDPA Subtest-2	22.19	22.17	22.18
HSDPA Subtest-3	21.79	21.72	21.76
HSDPA Subtest-4	21.72	21.70	21.69
DC-HSDPA Subtest-1	22.10	22.08	22.07
DC-HSDPA Subtest-2	22.06	22.04	22.06
DC-HSDPA Subtest-3	21.61	21.59	21.63
DC-HSDPA Subtest-4	21.55	21.57	21.56
HSUPA Subtest-1	23.00	22.92	22.88
HSUPA Subtest-2	20.59	20.57	20.55
HSUPA Subtest-3	21.45	21.44	21.47
HSUPA Subtest-4	20.14	20.05	20.14
HSUPA Subtest-5	23.20	23.11	22.93
HSPA+ Subtest-1	19.64	19.55	19.64

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	23.41	23.44	23.45
		1	50	23.31	23.39	23.36
		1	99	23.37	23.27	23.24
		50	0	22.43	22.46	22.56
		50	25	22.51	22.41	22.38
		50	50	22.46	22.36	22.33
		100	0	22.28	22.31	22.41
20M	16QAM	1	0	22.63	22.53	22.5
		1	50	22.58	22.48	22.45
		1	99	22.56	22.46	22.43
		50	0	21.48	21.38	21.35
		50	25	21.43	21.33	21.3
		50	50	21.36	21.26	21.23
		100	0	21.34	21.24	21.21
20M	64QAM	1	0	21.61	21.51	21.48
		1	50	21.58	21.48	21.45
		1	99	21.52	21.42	21.39
		50	0	20.44	20.34	20.31
		50	25	20.56	20.46	20.43
		50	50	20.49	20.39	20.36
		100	0	20.46	20.36	20.33
20M	256QAM	1	0	18.68	18.58	18.55
		1	50	18.64	18.54	18.51
		1	99	18.57	18.47	18.44
		50	0	18.47	18.37	18.34
		50	25	18.54	18.44	18.41
		50	50	18.44	18.34	18.31
		100	0	18.41	18.31	18.28

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	23.48	23.40	23.39
		1	37	23.46	23.38	23.33
		1	74	23.32	23.19	23.15
		36	0	22.51	22.45	22.38
		36	19	22.43	22.36	22.36
		36	39	22.45	22.35	22.32
		75	0	22.31	22.30	22.24
15M	16QAM	1	0	22.55	22.52	22.49
		1	37	22.53	22.41	22.41
		1	74	22.49	22.38	22.39
		36	0	21.40	21.33	21.30
		36	19	21.36	21.28	21.30
		36	39	21.35	21.23	21.17
		75	0	21.29	21.20	21.21
15M	64QAM	1	0	21.51	21.44	21.41
		1	37	21.52	21.45	21.41
		1	74	21.43	21.39	21.39
		36	0	20.40	20.28	20.26
		36	19	20.51	20.42	20.35
		36	39	20.49	20.32	20.32
		75	0	20.46	20.30	20.26
15M	256QAM	1	0	18.65	18.48	18.46
		1	37	18.60	18.51	18.41
		1	74	18.51	18.43	18.36
		36	0	18.45	18.30	18.34
		36	19	18.47	18.35	18.35
		36	39	18.36	18.26	18.22
		75	0	18.31	18.23	18.19

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	23.47	23.42	23.32
		1	24	23.42	23.33	23.28
		1	49	23.30	23.22	23.20
		25	0	22.53	22.46	22.38
		25	12	22.47	22.33	22.31
		25	25	22.38	22.31	22.28
		50	0	22.39	22.29	22.25
10M	16QAM	1	0	22.60	22.51	22.47
		1	24	22.51	22.43	22.35
		1	49	22.56	22.37	22.43
		25	0	21.42	21.30	21.32
		25	12	21.41	21.30	21.22
		25	25	21.28	21.25	21.20
		50	0	21.24	21.23	21.11
10M	64QAM	1	0	21.53	21.45	21.48
		1	24	21.53	21.40	21.45
		1	49	21.49	21.35	21.37
		25	0	20.38	20.28	20.22
		25	12	20.48	20.43	20.38
		25	25	20.46	20.32	20.32
		50	0	20.40	20.28	20.30
10M	256QAM	1	0	18.59	18.57	18.46
		1	24	18.58	18.48	18.44
		1	49	18.54	18.47	18.43
		25	0	18.37	18.27	18.26
		25	12	18.53	18.37	18.41
		25	25	18.36	18.26	18.29
		50	0	18.36	18.29	18.18

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	23.53	23.44	23.38
		1	12	23.39	23.32	23.35
		1	24	23.36	23.21	23.16
		12	0	22.48	22.38	22.39
		12	6	22.42	22.36	22.35
		12	13	22.36	22.36	22.28
		25	0	22.36	22.24	22.18
5M	16QAM	1	0	22.53	22.51	22.41
		1	12	22.53	22.38	22.45
		1	24	22.46	22.40	22.34
		12	0	21.41	21.36	21.32
		12	6	21.36	21.28	21.24
		12	13	21.26	21.21	21.22
		25	0	21.30	21.19	21.11
5M	64QAM	1	0	21.54	21.50	21.46
		1	12	21.53	21.39	21.38
		1	24	21.47	21.41	21.39
		12	0	20.43	20.25	20.25
		12	6	20.47	20.44	20.39
		12	13	20.43	20.32	20.28
		25	0	20.36	20.27	20.28
5M	256QAM	1	0	18.60	18.51	18.46
		1	12	18.62	18.45	18.44
		1	24	18.55	18.41	18.36
		12	0	18.40	18.29	18.26
		12	6	18.51	18.34	18.38
		12	13	18.38	18.27	18.28
		25	0	18.31	18.23	18.26

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	23.44	23.40	23.37
		1	7	23.41	23.37	23.27
		1	14	23.37	23.27	23.15
		8	0	22.47	22.46	22.41
		8	3	22.46	22.41	22.28
		8	7	22.46	22.32	22.32
		15	0	22.32	22.23	22.23
3M	16QAM	1	0	22.63	22.51	22.45
		1	7	22.54	22.48	22.43
		1	14	22.46	22.36	22.43
		8	0	21.39	21.37	21.27
		8	3	21.40	21.29	21.29
		8	7	21.29	21.18	21.20
		15	0	21.32	21.21	21.20
3M	64QAM	1	0	21.60	21.51	21.44
		1	7	21.53	21.39	21.42
		1	14	21.46	21.35	21.31
		8	0	20.43	20.24	20.31
		8	3	20.54	20.46	20.34
		8	7	20.49	20.38	20.26
		15	0	20.41	20.33	20.29
3M	256QAM	1	0	18.64	18.49	18.45
		1	7	18.54	18.54	18.50
		1	14	18.49	18.37	18.35
		8	0	18.45	18.29	18.27
		8	3	18.49	18.39	18.34
		8	7	18.39	18.29	18.26
		15	0	18.35	18.24	18.26

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	23.45	23.43	23.39
		1	2	23.42	23.32	23.27
		1	5	23.34	23.23	23.19
		3	0	22.53	22.41	22.36
		3	1	22.51	22.37	22.33
		3	3	22.44	22.32	22.28
		6	0	22.38	22.26	22.26
1.4M	16QAM	1	0	22.59	22.50	22.45
		1	2	22.48	22.44	22.37
		1	5	22.55	22.44	22.37
		3	0	21.48	21.28	21.27
		3	1	21.34	21.27	21.24
		3	3	21.34	21.17	21.17
		6	0	21.31	21.24	21.19
1.4M	64QAM	1	0	21.55	21.45	21.41
		1	2	21.49	21.43	21.45
		1	5	21.49	21.36	21.35
		3	0	20.39	20.34	20.26
		3	1	20.50	20.38	20.41
		3	3	20.44	20.39	20.34
		6	0	20.37	20.33	20.28
1.4M	256QAM	1	0	18.62	18.51	18.54
		1	2	18.56	18.49	18.46
		1	5	18.52	18.47	18.40
		3	0	18.43	18.30	18.24
		3	1	18.44	18.41	18.33
		3	3	18.40	18.28	18.23
		6	0	18.37	18.23	18.28

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	23.05	22.97	22.86
		1	50	22.98	22.94	22.83
		1	99	22.97	22.89	22.78
		50	0	22.22	22.14	22.03
		50	25	22.17	22.09	21.98
		50	50	22.13	22.05	21.94
		100	0	22.11	22.03	21.92
20M	16QAM	1	0	22.16	22.08	21.97
		1	50	22.11	22.03	21.92
		1	99	22.08	22.00	21.89
		50	0	21.06	20.98	20.87
		50	25	21.03	20.95	20.84
		50	50	21.01	20.93	20.82
		100	0	20.87	20.79	20.68
20M	64QAM	1	0	21.07	20.99	20.88
		1	50	21.05	20.97	20.86
		1	99	21.03	20.95	20.84
		50	0	20.06	19.98	19.87
		50	25	20.04	19.96	19.85
		50	50	20.03	19.95	19.84
		100	0	20.01	19.93	19.82
20M	256QAM	1	0	18.21	18.13	18.02
		1	50	18.18	18.10	17.99
		1	99	18.15	18.07	17.96
		50	0	18.12	18.04	17.93
		50	25	18.14	18.06	17.95
		50	50	18.11	18.03	17.92
		100	0	18.07	17.99	17.88

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	23.04	22.95	22.77
		1	37	22.96	22.92	22.76
		1	74	22.95	22.89	22.73
		36	0	22.20	22.10	21.93
		36	19	22.17	22.04	21.95
		36	39	22.09	21.98	21.93
		75	0	22.04	21.99	21.89
15M	16QAM	1	0	22.09	22.05	21.92
		1	37	22.07	22.03	21.85
		1	74	22.07	22.00	21.82
		36	0	21.00	20.92	20.87
		36	19	20.96	20.94	20.74
		36	39	20.94	20.86	20.75
		75	0	20.80	20.79	20.59
15M	64QAM	1	0	20.97	20.90	20.83
		1	37	20.95	20.88	20.82
		1	74	20.93	20.89	20.84
		36	0	19.99	19.89	19.84
		36	19	20.00	19.88	19.75
		36	39	19.99	19.86	19.77
		75	0	19.95	19.83	19.76
15M	256QAM	1	0	18.12	18.09	18.02
		1	37	18.15	18.05	17.91
		1	74	18.06	18.06	17.88
		36	0	18.03	18.01	17.86
		36	19	18.10	18.02	17.93
		36	39	18.10	17.97	17.82
		75	0	17.98	17.91	17.86

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	22.99	22.97	22.78
		1	24	23.00	22.93	22.79
		1	49	22.88	22.83	22.73
		25	0	22.12	22.12	21.95
		25	12	22.11	22.08	21.98
		25	25	22.10	21.95	21.85
		50	0	22.11	21.97	21.90
10M	16QAM	1	0	22.16	21.98	21.87
		1	24	22.06	21.96	21.90
		1	49	22.08	21.96	21.83
		25	0	21.00	20.90	20.86
		25	12	20.98	20.89	20.80
		25	25	20.91	20.83	20.75
		50	0	20.85	20.77	20.62
10M	64QAM	1	0	20.99	20.91	20.88
		1	24	21.02	20.96	20.82
		1	49	21.02	20.91	20.82
		25	0	20.03	19.93	19.81
		25	12	20.03	19.95	19.80
		25	25	20.00	19.88	19.78
		50	0	19.97	19.89	19.79
10M	256QAM	1	0	18.16	18.03	17.92
		1	24	18.15	18.10	17.94
		1	49	18.13	18.02	17.92
		25	0	18.12	18.00	17.90
		25	12	18.13	17.98	17.85
		25	25	18.11	17.97	17.88
		50	0	17.99	17.98	17.82

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	23.00	22.90	22.84
		1	12	22.93	22.89	22.73
		1	24	22.91	22.86	22.75
		12	0	22.21	22.08	22.02
		12	6	22.08	21.99	21.90
		12	13	22.13	21.99	21.89
		25	0	22.06	22.01	21.86
5M	16QAM	1	0	22.16	22.01	21.94
		1	12	22.08	22.02	21.90
		1	24	22.08	21.90	21.85
		12	0	21.04	20.89	20.83
		12	6	20.96	20.86	20.80
		12	13	21.00	20.83	20.81
		25	0	20.80	20.73	20.63
5M	64QAM	1	0	21.04	20.92	20.78
		1	12	21.01	20.88	20.85
		1	24	21.03	20.94	20.74
		12	0	19.96	19.90	19.84
		12	6	20.00	19.88	19.79
		12	13	20.00	19.85	19.78
		25	0	19.97	19.87	19.72
5M	256QAM	1	0	18.16	18.12	17.99
		1	12	18.09	18.09	17.95
		1	24	18.14	18.06	17.91
		12	0	18.02	17.96	17.90
		12	6	18.06	17.96	17.87
		12	13	18.02	18.02	17.87
		25	0	18.03	17.92	17.79

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	24.11	24.04	24.02
		1	24	24.07	24	23.98
		1	49	24.04	23.97	23.95
		25	0	23.33	23.26	23.24
		25	12	23.31	23.24	23.22
		25	25	23.24	23.17	23.15
		50	0	23.21	23.14	23.12
10M	16QAM	1	0	23.27	23.2	23.18
		1	24	23.24	23.17	23.15
		1	49	23.15	23.08	23.06
		25	0	21.99	21.92	21.9
		25	12	21.98	21.91	21.89
		25	25	21.92	21.85	21.83
		50	0	21.91	21.84	21.82
10M	64QAM	1	0	21.94	21.87	21.85
		1	24	21.91	21.84	21.82
		1	49	21.87	21.80	21.78
		25	0	20.98	20.91	20.89
		25	12	20.96	20.89	20.87
		25	25	20.93	20.86	20.84
		50	0	20.91	20.84	20.82
10M	256QAM	1	0	18.67	18.60	18.58
		1	24	18.65	18.58	18.56
		1	49	18.64	18.57	18.55
		25	0	18.63	18.56	18.54
		25	12	18.59	18.52	18.50
		25	25	18.57	18.50	18.48
		50	0	18.54	18.47	18.45

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	24.02	23.99	23.98
		1	12	24.01	23.93	23.95
		1	24	24.02	23.87	23.86
		12	0	23.33	23.17	23.20
		12	6	23.26	23.24	23.22
		12	13	23.19	23.09	23.08
		25	0	23.14	23.10	23.06
5M	16QAM	1	0	23.26	23.11	23.16
		1	12	23.22	23.16	23.08
		1	24	23.11	23.01	23.04
		12	0	21.89	21.84	21.84
		12	6	21.89	21.91	21.82
		12	13	21.88	21.76	21.81
		25	0	21.83	21.80	21.75
5M	64QAM	1	0	21.87	21.80	21.80
		1	12	21.89	21.75	21.75
		1	24	21.82	21.78	21.77
		12	0	20.90	20.88	20.82
		12	6	20.90	20.88	20.77
		12	13	20.93	20.78	20.76
		25	0	20.91	20.77	20.80
5M	256QAM	1	0	18.58	18.57	18.57
		1	12	18.65	18.58	18.54
		1	24	18.54	18.50	18.53
		12	0	18.58	18.48	18.47
		12	6	18.50	18.46	18.46
		12	13	18.51	18.40	18.45
		25	0	18.49	18.37	18.45

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	24.03	24.01	24.02
		1	7	24.02	23.99	23.91
		1	14	23.96	23.91	23.85
		8	0	23.25	23.20	23.20
		8	3	23.21	23.21	23.17
		8	7	23.16	23.07	23.09
		15	0	23.12	23.06	23.06
3M	16QAM	1	0	23.27	23.16	23.18
		1	7	23.16	23.11	23.08
		1	14	23.08	23.00	23.05
		8	0	21.89	21.88	21.80
		8	3	21.97	21.83	21.82
		8	7	21.82	21.84	21.79
		15	0	21.87	21.79	21.82
3M	64QAM	1	0	21.92	21.85	21.75
		1	7	21.90	21.77	21.75
		1	14	21.77	21.72	21.70
		8	0	20.94	20.87	20.88
		8	3	20.89	20.82	20.77
		8	7	20.87	20.78	20.75
		15	0	20.81	20.81	20.82
3M	256QAM	1	0	18.63	18.58	18.54
		1	7	18.60	18.53	18.50
		1	14	18.59	18.53	18.49
		8	0	18.54	18.51	18.44
		8	3	18.59	18.51	18.50
		8	7	18.53	18.45	18.46
		15	0	18.46	18.37	18.44

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	24.06	23.96	24.01
		1	2	24.05	23.96	23.88
		1	5	24.00	23.93	23.86
		3	0	23.27	23.23	23.24
		3	1	23.30	23.15	23.22
		3	3	23.20	23.11	23.14
		6	0	23.21	23.13	23.06
1.4M	16QAM	1	0	23.19	23.11	23.18
		1	2	23.23	23.17	23.08
		1	5	23.08	22.98	23.05
		3	0	21.99	21.83	21.87
		3	1	21.91	21.81	21.79
		3	3	21.82	21.81	21.74
		6	0	21.86	21.81	21.74
1.4M	64QAM	1	0	21.86	21.83	21.77
		1	2	21.83	21.78	21.73
		1	5	21.79	21.77	21.78
		3	0	20.88	20.85	20.89
		3	1	20.95	20.82	20.86
		3	3	20.84	20.85	20.74
		6	0	20.88	20.76	20.80
1.4M	256QAM	1	0	18.65	18.51	18.55
		1	2	18.64	18.53	18.56
		1	5	18.61	18.54	18.55
		3	0	18.57	18.56	18.46
		3	1	18.54	18.46	18.44
		3	3	18.47	18.47	18.38
		6	0	18.52	18.45	18.45

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Low
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	23.74
		1	24	23.72
		1	49	23.68
		25	0	22.85
		25	12	22.73
		25	25	22.66
		50	0	22.64
10M	16QAM	1	0	22.78
		1	24	22.74
		1	49	22.66
		25	0	21.77
		25	12	21.75
		25	25	21.72
		50	0	21.67
10M	64QAM	1	0	21.74
		1	24	21.72
		1	49	21.69
		25	0	20.67
		25	12	20.65
		25	25	20.64
		50	0	20.63
10M	256QAM	1	0	18.74
		1	24	18.71
		1	49	18.65
		25	0	18.58
		25	12	18.56
		25	25	18.54
		50	0	18.52

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	23.66	23.68	23.69
		1	12	23.69	23.61	23.62
		1	24	23.63	23.65	23.66
		12	0	22.85	22.84	22.81
		12	6	22.63	22.67	22.64
		12	13	22.59	22.61	22.59
		25	0	22.56	22.55	22.59
5M	16QAM	1	0	22.73	22.75	22.77
		1	12	22.73	22.74	22.67
		1	24	22.64	22.64	22.63
		12	0	21.67	21.71	21.71
		12	6	21.68	21.68	21.67
		12	13	21.64	21.64	21.64
		25	0	21.57	21.66	21.61
5M	64QAM	1	0	21.64	21.68	21.65
		1	12	21.69	21.67	21.62
		1	24	21.61	21.63	21.67
		12	0	20.62	20.59	20.61
		12	6	20.58	20.61	20.55
		12	13	20.55	20.58	20.58
		25	0	20.55	20.61	20.53
5M	256QAM	1	0	18.67	18.68	18.66
		1	12	18.64	18.62	18.66
		1	24	18.63	18.56	18.62
		12	0	18.53	18.50	18.48
		12	6	18.55	18.46	18.56
		12	13	18.49	18.45	18.52
		25	0	18.50	18.43	18.50

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37850	38000	38150
		Frequency (MHz)		2580	2595	2610
20M	QPSK	1	0	23.64	23.52	23.49
		1	50	23.56	23.46	23.43
		1	99	23.48	23.38	23.35
		50	0	23.02	22.92	22.89
		50	25	22.97	22.87	22.84
		50	50	22.87	22.77	22.74
		100	0	22.76	22.66	22.63
20M	16QAM	1	0	22.69	22.59	22.56
		1	50	22.59	22.49	22.46
		1	99	22.49	22.39	22.36
		50	0	21.46	21.36	21.33
		50	25	21.38	21.28	21.25
		50	50	21.37	21.27	21.24
		100	0	21.24	21.14	21.11
20M	64QAM	1	0	21.42	21.32	21.29
		1	50	21.41	21.31	21.28
		1	99	21.38	21.28	21.25
		50	0	20.74	20.64	20.61
		50	25	20.71	20.61	20.58
		50	50	20.67	20.57	20.54
		100	0	20.63	20.53	20.50
20M	256QAM	1	0	18.66	18.56	18.53
		1	50	18.65	18.55	18.52
		1	99	18.64	18.54	18.51
		50	0	18.62	18.52	18.49
		50	25	18.59	18.49	18.46
		50	50	18.57	18.47	18.44
		100	0	18.55	18.45	18.42

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37825	38000	38175
		Frequency (MHz)		2577.5	2595	2612.5
15M	QPSK	1	0	23.61	23.45	23.39
		1	37	23.51	23.43	23.33
		1	74	23.41	23.37	23.32
		36	0	23.01	22.88	22.84
		36	19	22.95	22.83	22.76
		36	39	22.87	22.74	22.66
		75	0	22.74	22.57	22.60
15M	16QAM	1	0	22.66	22.53	22.50
		1	37	22.54	22.44	22.43
		1	74	22.41	22.30	22.36
		36	0	21.43	21.32	21.24
		36	19	21.38	21.20	21.16
		36	39	21.34	21.27	21.23
		75	0	21.14	21.12	21.03
15M	64QAM	1	0	21.39	21.25	21.25
		1	37	21.38	21.21	21.23
		1	74	21.37	21.25	21.15
		36	0	20.73	20.57	20.61
		36	19	20.68	20.57	20.49
		36	39	20.66	20.47	20.45
		75	0	20.63	20.46	20.41
15M	256QAM	1	0	18.58	18.55	18.48
		1	37	18.56	18.55	18.43
		1	74	18.60	18.46	18.41
		36	0	18.52	18.44	18.40
		36	19	18.50	18.42	18.37
		36	39	18.49	18.42	18.37
		75	0	18.45	18.41	18.36

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37800	38000	38200
		Frequency (MHz)		2575	2595	2615
10M	QPSK	1	0	23.62	23.48	23.47
		1	24	23.55	23.39	23.33
		1	49	23.46	23.38	23.28
		25	0	22.98	22.82	22.89
		25	12	22.94	22.82	22.77
		25	25	22.78	22.72	22.64
		50	0	22.74	22.59	22.59
10M	16QAM	1	0	22.61	22.54	22.55
		1	24	22.57	22.39	22.46
		1	49	22.43	22.37	22.31
		25	0	21.42	21.33	21.31
		25	12	21.33	21.20	21.19
		25	25	21.32	21.27	21.22
		50	0	21.18	21.06	21.01
10M	64QAM	1	0	21.38	21.32	21.21
		1	24	21.31	21.22	21.26
		1	49	21.30	21.21	21.25
		25	0	20.70	20.62	20.55
		25	12	20.69	20.61	20.50
		25	25	20.64	20.52	20.48
		50	0	20.59	20.53	20.40
10M	256QAM	1	0	18.62	18.54	18.51
		1	24	18.62	18.48	18.50
		1	49	18.57	18.51	18.50
		25	0	18.61	18.49	18.48
		25	12	18.57	18.43	18.43
		25	25	18.53	18.42	18.41
		50	0	18.55	18.35	18.34

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37775	38000	38225
		Frequency (MHz)		2572.5	2595	2617.5
5M	QPSK	1	0	23.55	23.44	23.42
		1	12	23.54	23.40	23.33
		1	24	23.43	23.28	23.35
		12	0	22.98	22.89	22.88
		12	6	22.92	22.86	22.84
		12	13	22.79	22.76	22.72
		25	0	22.67	22.61	22.59
5M	16QAM	1	0	22.67	22.55	22.56
		1	12	22.52	22.45	22.38
		1	24	22.39	22.29	22.34
		12	0	21.43	21.32	21.30
		12	6	21.30	21.21	21.20
		12	13	21.32	21.19	21.20
		25	0	21.22	21.08	21.03
5M	64QAM	1	0	21.35	21.32	21.21
		1	12	21.41	21.26	21.25
		1	24	21.28	21.20	21.15
		12	0	20.65	20.56	20.53
		12	6	20.68	20.59	20.51
		12	13	20.63	20.48	20.49
		25	0	20.53	20.48	20.44
5M	256QAM	1	0	18.61	18.53	18.43
		1	12	18.57	18.50	18.51
		1	24	18.57	18.49	18.46
		12	0	18.55	18.52	18.44
		12	6	18.52	18.42	18.41
		12	13	18.55	18.39	18.36
		25	0	18.48	18.39	18.41

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	26.58	26.75	26.56
		1	50	26.41	26.69	26.46
		1	99	26.18	26.65	26.42
		50	0	25.32	25.85	25.62
		50	25	25.34	25.83	25.60
		50	50	25.35	25.79	25.56
		100	0	25.53	25.86	25.63
20M	16QAM	1	0	25.50	25.88	25.65
		1	50	25.48	25.87	25.64
		1	99	25.52	25.85	25.62
		50	0	24.33	24.89	24.66
		50	25	24.55	24.85	24.62
		50	50	24.31	24.83	24.60
		100	0	24.17	24.89	24.66
20M	64QAM	1	0	24.02	24.80	24.57
		1	50	24.10	24.73	24.50
		1	99	24.01	24.70	24.47
		50	0	23.73	23.91	23.68
		50	25	23.30	23.88	23.65
		50	50	23.45	23.84	23.61
		100	0	23.29	23.85	23.62
20M	256QAM	1	0	21.60	21.85	21.62
		1	50	21.23	21.81	21.58
		1	99	21.50	21.74	21.51
		50	0	21.47	21.69	21.46
		50	25	21.43	21.65	21.42
		50	50	21.48	21.63	21.40
		100	0	21.27	21.65	21.42

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	26.21	26.71	26.68
		1	37	26.13	26.69	26.61
		1	74	26.28	26.56	26.61
		36	0	25.42	25.75	25.77
		36	19	25.20	25.75	25.77
		36	39	25.33	25.78	25.75
		75	0	25.13	25.85	25.79
15M	16QAM	1	0	25.46	25.86	25.82
		1	37	25.37	25.78	25.84
		1	74	25.40	25.82	25.74
		36	0	24.35	24.81	24.77
		36	19	24.25	24.80	24.77
		36	39	24.38	24.79	24.78
		75	0	24.25	24.80	24.79
15M	64QAM	1	0	24.12	24.79	24.67
		1	37	24.15	24.66	24.66
		1	74	23.91	24.61	24.62
		36	0	23.54	23.83	23.78
		36	19	23.40	23.86	23.78
		36	39	23.37	23.80	23.77
		75	0	23.36	23.77	23.73
15M	256QAM	1	0	21.58	21.75	21.72
		1	37	21.21	21.70	21.63
		1	74	21.20	21.67	21.64
		36	0	21.46	21.82	21.80
		36	19	21.37	21.82	21.79
		36	39	21.16	21.75	21.71
		75	0	21.00	21.83	21.76

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	26.45	26.67	26.73
		1	24	26.41	26.65	26.60
		1	49	26.17	26.56	26.52
		25	0	25.56	25.75	25.78
		25	12	25.26	25.75	25.70
		25	25	25.22	25.73	25.67
		50	0	25.42	25.81	25.77
10M	16QAM	1	0	25.32	25.84	25.78
		1	24	25.34	25.79	25.84
		1	49	25.28	25.81	25.79
		25	0	24.36	24.87	24.86
		25	12	24.22	24.81	24.72
		25	25	24.27	24.80	24.80
		50	0	24.14	24.88	24.86
10M	64QAM	1	0	23.94	24.70	24.67
		1	24	24.13	24.68	24.69
		1	49	23.85	24.62	24.61
		25	0	23.43	23.88	23.80
		25	12	23.25	23.84	23.77
		25	25	23.51	23.80	23.73
		50	0	23.47	23.77	23.74
10M	256QAM	1	0	21.58	21.70	21.68
		1	24	21.18	21.64	21.64
		1	49	21.40	21.70	21.57
		25	0	21.38	21.85	21.84
		25	12	21.17	21.87	21.77
		25	25	21.41	21.82	21.79
		50	0	20.97	21.75	21.80

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	26.33	26.73	26.72
		1	12	26.16	26.61	26.57
		1	24	26.16	26.57	26.58
		12	0	25.42	25.75	25.72
		12	6	25.44	25.74	25.75
		12	13	25.42	25.69	25.73
		25	0	25.30	25.77	25.77
5M	16QAM	1	0	25.33	25.86	25.80
		1	12	25.25	25.86	25.78
		1	24	25.25	25.83	25.73
		12	0	24.32	24.82	24.83
		12	6	24.50	24.81	24.74
		12	13	24.11	24.80	24.70
		25	0	24.09	24.89	24.78
5M	64QAM	1	0	24.05	24.77	24.77
		1	12	24.08	24.65	24.69
		1	24	23.97	24.69	24.66
		12	0	23.53	23.89	23.79
		12	6	23.59	23.79	23.79
		12	13	23.35	23.82	23.81
		25	0	23.36	23.81	23.74
5M	256QAM	1	0	21.31	21.75	21.72
		1	12	21.28	21.69	21.70
		1	24	21.21	21.67	21.57
		12	0	21.46	21.86	21.85
		12	6	21.14	21.88	21.81
		12	13	21.08	21.76	21.80
		25	0	21.27	21.80	21.80

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	26.33	26.73	26.72
		1	12	26.16	26.61	26.57
		1	24	26.16	26.57	26.58
		12	0	25.42	25.75	25.72
		12	6	25.44	25.74	25.75
		12	13	25.42	25.69	25.73
		25	0	25.30	25.77	25.77
5M	16QAM	1	0	25.33	25.86	25.80
		1	12	25.25	25.86	25.78
		1	24	25.25	25.83	25.73
		12	0	24.32	24.82	24.83
		12	6	24.50	24.81	24.74
		12	13	24.11	24.80	24.70
		25	0	24.09	24.89	24.78
5M	64QAM	1	0	24.05	24.77	24.77
		1	12	24.08	24.65	24.69
		1	24	23.97	24.69	24.66
		12	0	23.53	23.89	23.79
		12	6	23.59	23.79	23.79
		12	13	23.35	23.82	23.81
		25	0	23.36	23.81	23.74
5M	256QAM	1	0	21.31	21.75	21.72
		1	12	21.28	21.69	21.70
		1	24	21.21	21.67	21.57
		12	0	21.46	21.86	21.85
		12	6	21.14	21.88	21.81
		12	13	21.08	21.76	21.80
		25	0	21.27	21.80	21.80

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	23.48	23.62	23.34
		1	50	23.43	23.54	23.29
		1	99	23.28	23.39	23.14
		50	0	22.52	22.63	22.38
		50	25	22.50	22.61	22.36
		50	50	22.45	22.56	22.31
		100	0	22.43	22.54	22.29
20M	16QAM	1	0	22.50	22.61	22.36
		1	50	22.48	22.59	22.34
		1	99	22.42	22.53	22.28
		50	0	21.53	21.64	21.39
		50	25	21.45	21.56	21.31
		50	50	21.41	21.52	21.27
		100	0	21.37	21.48	21.23
20M	64QAM	1	0	21.22	21.33	21.08
		1	50	21.20	21.31	21.06
		1	99	21.11	21.22	20.97
		50	0	20.63	20.74	20.49
		50	25	20.50	20.61	20.36
		50	50	20.45	20.56	20.31
		100	0	20.39	20.50	20.25
20M	256QAM	1	0	18.50	18.61	18.36
		1	50	18.43	18.54	18.29
		1	99	18.40	18.51	18.26
		50	0	18.37	18.48	18.23
		50	25	18.43	18.54	18.29
		50	50	18.38	18.49	18.24
		100	0	18.27	18.38	18.13

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	23.41	23.22	23.31
		1	37	23.33	23.16	23.26
		1	74	23.18	23.08	23.10
		36	0	22.42	22.29	22.31
		36	19	22.40	22.23	22.26
		36	39	22.43	22.22	22.29
		75	0	22.33	22.16	22.28
15M	16QAM	1	0	22.46	22.24	22.32
		1	37	22.47	22.27	22.27
		1	74	22.40	22.17	22.23
		36	0	21.45	21.32	21.31
		36	19	21.45	21.25	21.31
		36	39	21.38	21.20	21.26
		75	0	21.35	21.13	21.13
15M	64QAM	1	0	21.22	21.00	21.07
		1	37	21.15	20.98	21.05
		1	74	21.01	20.85	20.90
		36	0	20.54	20.38	20.42
		36	19	20.40	20.21	20.29
		36	39	20.37	20.21	20.25
		75	0	20.36	20.15	20.24
15M	256QAM	1	0	18.48	18.30	18.31
		1	37	18.41	18.14	18.22
		1	74	18.40	18.20	18.26
		36	0	18.36	18.08	18.13
		36	19	18.37	18.14	18.23
		36	39	18.36	18.11	18.16
		75	0	18.20	18.08	18.05

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	23.45	23.28	23.28
		1	24	23.41	23.19	23.27
		1	49	23.27	23.01	23.10
		25	0	22.46	22.31	22.29
		25	12	22.46	22.31	22.28
		25	25	22.42	22.21	22.28
		50	0	22.42	22.15	22.20
10M	16QAM	1	0	22.42	22.30	22.31
		1	24	22.44	22.26	22.33
		1	49	22.38	22.17	22.24
		25	0	21.46	21.30	21.35
		25	12	21.42	21.24	21.30
		25	25	21.37	21.17	21.24
		50	0	21.34	21.10	21.22
10M	64QAM	1	0	21.14	20.93	20.98
		1	24	21.13	20.98	20.98
		1	49	21.05	20.91	20.89
		25	0	20.63	20.36	20.42
		25	12	20.45	20.28	20.31
		25	25	20.41	20.18	20.24
		50	0	20.37	20.16	20.16
10M	256QAM	1	0	18.48	18.23	18.36
		1	24	18.38	18.15	18.19
		1	49	18.40	18.17	18.16
		25	0	18.28	18.12	18.13
		25	12	18.37	18.22	18.22
		25	25	18.31	18.15	18.15
		50	0	18.17	18.00	18.09

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	23.43	23.29	23.25
		1	12	23.36	23.15	23.22
		1	24	23.26	23.06	23.04
		12	0	22.52	22.30	22.30
		12	6	22.44	22.23	22.32
		12	13	22.42	22.16	22.23
		25	0	22.40	22.17	22.26
5M	16QAM	1	0	22.43	22.22	22.32
		1	12	22.45	22.28	22.33
		1	24	22.35	22.22	22.20
		12	0	21.52	21.33	21.36
		12	6	21.40	21.23	21.24
		12	13	21.31	21.18	21.21
		25	0	21.29	21.17	21.15
5M	64QAM	1	0	21.15	20.93	21.05
		1	12	21.18	20.92	20.96
		1	24	21.07	20.87	20.89
		12	0	20.53	20.38	20.42
		12	6	20.49	20.24	20.28
		12	13	20.35	20.21	20.21
		25	0	20.36	20.16	20.21
5M	256QAM	1	0	18.41	18.21	18.31
		1	12	18.38	18.24	18.26
		1	24	18.31	18.16	18.26
		12	0	18.36	18.08	18.15
		12	6	18.34	18.22	18.25
		12	13	18.28	18.19	18.19
		25	0	18.27	18.02	18.09

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	23.53	23.48	23.36
		1	50	23.51	23.46	23.34
		1	99	23.49	23.44	23.32
		50	0	22.72	22.67	22.55
		50	25	22.68	22.63	22.51
		50	50	22.66	22.61	22.49
		100	0	22.56	22.51	22.39
20M	16QAM	1	0	22.65	22.6	22.48
		1	50	22.64	22.59	22.47
		1	99	22.63	22.58	22.46
		50	0	21.56	21.51	21.39
		50	25	21.52	21.47	21.35
		50	50	21.48	21.43	21.31
		100	0	21.42	21.37	21.25
20M	64QAM	1	0	21.43	21.38	21.26
		1	50	21.41	21.36	21.24
		1	99	21.37	21.32	21.20
		50	0	20.67	20.62	20.50
		50	25	20.63	20.58	20.46
		50	50	20.58	20.53	20.41
		100	0	20.56	20.51	20.39
20M	256QAM	1	0	18.74	18.69	18.57
		1	50	18.72	18.67	18.55
		1	99	18.67	18.62	18.50
		50	0	18.66	18.61	18.49
		50	25	18.64	18.59	18.47
		50	50	18.63	18.58	18.46
		100	0	18.62	18.57	18.45

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	23.44	23.47	23.36
		1	37	23.43	23.43	23.29
		1	74	23.44	23.42	23.26
		36	0	22.62	22.65	22.50
		36	19	22.67	22.59	22.49
		36	39	22.57	22.55	22.45
		75	0	22.50	22.50	22.30
15M	16QAM	1	0	22.60	22.53	22.41
		1	37	22.63	22.52	22.40
		1	74	22.55	22.58	22.40
		36	0	21.53	21.47	21.30
		36	19	21.52	21.42	21.35
		36	39	21.44	21.43	21.24
		75	0	21.34	21.37	21.23
15M	64QAM	1	0	21.39	21.38	21.25
		1	37	21.35	21.34	21.22
		1	74	21.27	21.22	21.20
		36	0	20.63	20.57	20.50
		36	19	20.58	20.51	20.44
		36	39	20.58	20.48	20.39
		75	0	20.50	20.48	20.34
15M	256QAM	1	0	18.69	18.62	18.51
		1	37	18.65	18.65	18.49
		1	74	18.66	18.62	18.50
		36	0	18.63	18.60	18.39
		36	19	18.60	18.51	18.41
		36	39	18.58	18.56	18.40
		75	0	18.59	18.55	18.43

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	23.45	23.44	23.29
		1	24	23.42	23.41	23.25
		1	49	23.41	23.39	23.30
		25	0	22.63	22.63	22.55
		25	12	22.63	22.59	22.51
		25	25	22.64	22.57	22.39
		50	0	22.54	22.44	22.31
10M	16QAM	1	0	22.64	22.57	22.48
		1	24	22.59	22.55	22.47
		1	49	22.56	22.51	22.39
		25	0	21.50	21.49	21.32
		25	12	21.43	21.40	21.31
		25	25	21.47	21.35	21.27
		50	0	21.32	21.34	21.19
10M	64QAM	1	0	21.34	21.35	21.23
		1	24	21.32	21.31	21.16
		1	49	21.27	21.24	21.14
		25	0	20.63	20.55	20.46
		25	12	20.55	20.50	20.43
		25	25	20.52	20.46	20.34
		50	0	20.51	20.43	20.30
10M	256QAM	1	0	18.64	18.62	18.48
		1	24	18.71	18.64	18.52
		1	49	18.62	18.56	18.41
		25	0	18.66	18.51	18.45
		25	12	18.57	18.51	18.42
		25	25	18.63	18.57	18.41
		50	0	18.53	18.56	18.40

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	23.48	23.44	23.34
		1	12	23.44	23.41	23.27
		1	24	23.45	23.43	23.27
		12	0	22.63	22.61	22.55
		12	6	22.66	22.56	22.43
		12	13	22.58	22.56	22.43
		25	0	22.56	22.45	22.39
5M	16QAM	1	0	22.63	22.50	22.43
		1	12	22.63	22.58	22.39
		1	24	22.55	22.53	22.45
		12	0	21.46	21.49	21.34
		12	6	21.52	21.47	21.34
		12	13	21.40	21.35	21.21
		25	0	21.39	21.37	21.25
5M	64QAM	1	0	21.34	21.36	21.21
		1	12	21.39	21.32	21.21
		1	24	21.33	21.22	21.12
		12	0	20.65	20.58	20.48
		12	6	20.54	20.50	20.39
		12	13	20.51	20.44	20.32
		25	0	20.52	20.47	20.39
5M	256QAM	1	0	18.67	18.69	18.51
		1	12	18.66	18.59	18.52
		1	24	18.61	18.60	18.45
		12	0	18.66	18.58	18.48
		12	6	18.55	18.57	18.38
		12	13	18.57	18.57	18.42
		25	0	18.56	18.48	18.38

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	23.47	23.41	23.35
		1	7	23.46	23.40	23.32
		1	14	23.45	23.44	23.25
		8	0	22.67	22.65	22.51
		8	3	22.61	22.54	22.41
		8	7	22.60	22.57	22.40
		15	0	22.51	22.41	22.35
3M	16QAM	1	0	22.58	22.57	22.39
		1	7	22.57	22.54	22.38
		1	14	22.61	22.48	22.40
		8	0	21.51	21.43	21.33
		8	3	21.52	21.44	21.29
		8	7	21.41	21.40	21.27
		15	0	21.35	21.36	21.23
3M	64QAM	1	0	21.36	21.31	21.26
		1	7	21.35	21.26	21.16
		1	14	21.36	21.30	21.11
		8	0	20.62	20.58	20.48
		8	3	20.59	20.52	20.38
		8	7	20.56	20.47	20.34
		15	0	20.48	20.49	20.31
3M	256QAM	1	0	18.74	18.61	18.52
		1	7	18.65	18.57	18.53
		1	14	18.66	18.56	18.41
		8	0	18.64	18.51	18.49
		8	3	18.64	18.53	18.40
		8	7	18.63	18.49	18.45
		15	0	18.59	18.57	18.35

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	23.52	23.46	23.26
		1	2	23.41	23.43	23.31
		1	5	23.43	23.37	23.28
		3	0	22.62	22.62	22.55
		3	1	22.62	22.60	22.44
		3	3	22.59	22.56	22.39
		6	0	22.49	22.41	22.37
1.4M	16QAM	1	0	22.57	22.56	22.42
		1	2	22.63	22.58	22.43
		1	5	22.53	22.50	22.45
		3	0	21.52	21.41	21.29
		3	1	21.44	21.39	21.28
		3	3	21.39	21.39	21.28
		6	0	21.40	21.34	21.17
1.4M	64QAM	1	0	21.38	21.37	21.18
		1	2	21.32	21.27	21.24
		1	5	21.30	21.30	21.20
		3	0	20.67	20.52	20.47
		3	1	20.62	20.53	20.39
		3	3	20.51	20.53	20.38
		6	0	20.56	20.51	20.29
1.4M	256QAM	1	0	18.71	18.59	18.50
		1	2	18.71	18.62	18.53
		1	5	18.65	18.58	18.47
		3	0	18.59	18.52	18.45
		3	1	18.60	18.55	18.45
		3	3	18.63	18.53	18.45
		6	0	18.57	18.56	18.44

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133222	133297	133372
		Frequency (MHz)		673	680.5	688
20M	QPSK	1	0	23.53	23.44	23.41
		1	50	23.47	23.40	23.37
		1	99	23.44	23.37	23.34
		50	0	22.52	22.45	22.42
		50	25	22.47	22.40	22.37
		50	50	22.43	22.36	22.33
		100	0	22.41	22.34	22.31
20M	16QAM	1	0	22.49	22.42	22.39
		1	50	22.47	22.40	22.37
		1	99	22.45	22.38	22.35
		50	0	21.53	21.46	21.43
		50	25	21.49	21.42	21.39
		50	50	21.44	21.37	21.34
		100	0	21.42	21.35	21.32
20M	64QAM	1	0	21.47	21.40	21.37
		1	50	21.46	21.39	21.36
		1	99	21.43	21.36	21.33
		50	0	20.45	20.38	20.35
		50	25	20.43	20.36	20.33
		50	50	20.41	20.34	20.31
		100	0	20.37	20.30	20.27
20M	256QAM	1	0	18.37	18.30	18.27
		1	50	18.34	18.27	18.24
		1	99	18.31	18.24	18.21
		50	0	18.24	18.17	18.14
		50	25	18.22	18.15	18.12
		50	50	18.23	18.16	18.13
		100	0	18.21	18.14	18.11

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133197	133297	133397
		Frequency (MHz)		670.5	680.5	690.5
15M	QPSK	1	0	23.48	23.38	23.33
		1	37	23.47	23.30	23.34
		1	74	23.38	23.34	23.28
		36	0	22.48	22.41	22.33
		36	19	22.39	22.33	22.31
		36	39	22.39	22.33	22.29
		75	0	22.35	22.27	22.30
15M	16QAM	1	0	22.46	22.35	22.33
		1	37	22.47	22.40	22.30
		1	74	22.38	22.38	22.34
		36	0	21.45	21.44	21.39
		36	19	21.44	21.38	21.37
		36	39	21.39	21.31	21.31
		75	0	21.39	21.31	21.32
15M	64QAM	1	0	21.46	21.39	21.32
		1	37	21.36	21.35	21.35
		1	74	21.42	21.35	21.29
		36	0	20.39	20.30	20.34
		36	19	20.39	20.26	20.31
		36	39	20.39	20.34	20.27
		75	0	20.30	20.28	20.17
15M	256QAM	1	0	18.32	18.21	18.20
		1	37	18.29	18.18	18.21
		1	74	18.31	18.20	18.15
		36	0	18.18	18.12	18.09
		36	19	18.15	18.10	18.04
		36	39	18.21	18.09	18.04
		75	0	18.17	18.06	18.11

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133172	133297	133422
		Frequency (MHz)		668	680.5	693
10M	QPSK	1	0	23.51	23.35	23.37
		1	24	23.37	23.33	23.34
		1	49	23.38	23.34	23.34
		25	0	22.42	22.43	22.37
		25	12	22.47	22.30	22.32
		25	25	22.40	22.29	22.23
		50	0	22.35	22.25	22.22
10M	16QAM	1	0	22.40	22.36	22.32
		1	24	22.39	22.33	22.35
		1	49	22.42	22.37	22.27
		25	0	21.46	21.41	21.40
		25	12	21.39	21.38	21.36
		25	25	21.34	21.32	21.30
		50	0	21.42	21.35	21.32
10M	64QAM	1	0	21.39	21.35	21.29
		1	24	21.38	21.36	21.35
		1	49	21.42	21.33	21.32
		25	0	20.44	20.29	20.31
		25	12	20.42	20.26	20.30
		25	25	20.38	20.28	20.25
		50	0	20.32	20.28	20.20
10M	256QAM	1	0	18.31	18.21	18.19
		1	24	18.26	18.17	18.14
		1	49	18.21	18.23	18.14
		25	0	18.24	18.17	18.04
		25	12	18.19	18.09	18.11
		25	25	18.19	18.11	18.06
		50	0	18.19	18.13	18.03

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133147	133297	133447
		Frequency (MHz)		665.5	680.5	695.5
5M	QPSK	1	0	23.51	23.34	23.36
		1	12	23.38	23.38	23.34
		1	24	23.41	23.28	23.25
		12	0	22.51	22.45	22.41
		12	6	22.47	22.38	22.30
		12	13	22.42	22.29	22.32
		25	0	22.34	22.31	22.26
5M	16QAM	1	0	22.48	22.42	22.37
		1	12	22.42	22.30	22.35
		1	24	22.42	22.28	22.34
		12	0	21.46	21.36	21.42
		12	6	21.45	21.40	21.29
		12	13	21.39	21.30	21.28
		25	0	21.32	21.27	21.30
5M	64QAM	1	0	21.39	21.39	21.33
		1	12	21.37	21.36	21.35
		1	24	21.41	21.36	21.33
		12	0	20.45	20.31	20.32
		12	6	20.38	20.35	20.23
		12	13	20.33	20.34	20.23
		25	0	20.28	20.20	20.17
5M	256QAM	1	0	18.33	18.25	18.27
		1	12	18.27	18.18	18.14
		1	24	18.28	18.20	18.13
		12	0	18.21	18.17	18.09
		12	6	18.14	18.05	18.08
		12	13	18.18	18.15	18.09
		25	0	18.11	18.04	18.02

EIRP / ERP Power (dBm)

Band	WCDMA IV		
TX Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	**26.39**	26.36	26.31
HSDPA Subtest-1	25.39	25.37	25.36
HSDPA Subtest-2	25.35	25.33	25.34
HSDPA Subtest-3	24.95	24.88	24.92
HSDPA Subtest-4	24.88	24.86	24.85
DC-HSDPA Subtest-1	25.26	25.24	25.23
DC-HSDPA Subtest-2	25.22	25.20	25.22
DC-HSDPA Subtest-3	24.77	24.75	24.79
DC-HSDPA Subtest-4	24.71	24.73	24.72
HSUPA Subtest-1	26.16	26.08	26.04
HSUPA Subtest-2	23.75	23.73	23.71
HSUPA Subtest-3	24.61	24.60	24.63
HSUPA Subtest-4	23.30	23.21	23.30
HSUPA Subtest-5	26.36	26.27	26.09
HSPA+ Subtest-1	22.80	22.71	22.80

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	26.57	26.60	**26.61**
		1	50	26.47	26.55	26.52
		1	99	26.53	26.43	26.40
		50	0	25.59	25.62	25.72
		50	25	25.67	25.57	25.54
		50	50	25.62	25.52	25.49
		100	0	25.44	25.47	25.57
20M	16QAM	1	0	**25.79**	25.69	25.66
		1	50	25.74	25.64	25.61
		1	99	25.72	25.62	25.59
		50	0	24.64	24.54	24.51
		50	25	24.59	24.49	24.46
		50	50	24.52	24.42	24.39
		100	0	24.50	24.40	24.37
20M	64QAM	1	0	**24.77**	24.67	24.64
		1	50	24.74	24.64	24.61
		1	99	24.68	24.58	24.55
		50	0	23.60	23.50	23.47
		50	25	23.72	23.62	23.59
		50	50	23.65	23.55	23.52
		100	0	23.62	23.52	23.49
20M	256QAM	1	0	**21.84**	21.74	21.71
		1	50	21.80	21.70	21.67
		1	99	21.73	21.63	21.60
		50	0	21.63	21.53	21.50
		50	25	21.70	21.60	21.57
		50	50	21.60	21.50	21.47
		100	0	21.57	21.47	21.44

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	**26.64**	26.56	26.55
		1	37	26.62	26.54	26.49
		1	74	26.48	26.35	26.31
		36	0	25.67	25.61	25.54
		36	19	25.59	25.52	25.52
		36	39	25.61	25.51	25.48
		75	0	25.47	25.46	25.40
15M	16QAM	1	0	**25.71**	25.68	25.65
		1	37	25.69	25.57	25.57
		1	74	25.65	25.54	25.55
		36	0	24.56	24.49	24.46
		36	19	24.52	24.44	24.46
		36	39	24.51	24.39	24.33
		75	0	24.45	24.36	24.37
15M	64QAM	1	0	24.67	24.60	24.57
		1	37	**24.68**	24.61	24.57
		1	74	24.59	24.55	24.55
		36	0	23.56	23.44	23.42
		36	19	23.67	23.58	23.51
		36	39	23.65	23.48	23.48
		75	0	23.62	23.46	23.42
15M	256QAM	1	0	**21.81**	21.64	21.62
		1	37	21.76	21.67	21.57
		1	74	21.67	21.59	21.52
		36	0	21.61	21.46	21.50
		36	19	21.63	21.51	21.51
		36	39	21.52	21.42	21.38
		75	0	21.47	21.39	21.35

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	**26.63**	26.58	26.48
		1	24	26.58	26.49	26.44
		1	49	26.46	26.38	26.36
		25	0	25.69	25.62	25.54
		25	12	25.63	25.49	25.47
		25	25	25.54	25.47	25.44
		50	0	25.55	25.45	25.41
10M	16QAM	1	0	**25.76**	25.67	25.63
		1	24	25.67	25.59	25.51
		1	49	25.72	25.53	25.59
		25	0	24.58	24.46	24.48
		25	12	24.57	24.46	24.38
		25	25	24.44	24.41	24.36
		50	0	24.40	24.39	24.27
10M	64QAM	1	0	**24.69**	24.61	24.64
		1	24	**24.69**	24.56	24.61
		1	49	24.65	24.51	24.53
		25	0	23.54	23.44	23.38
		25	12	23.64	23.59	23.54
		25	25	23.62	23.48	23.48
		50	0	23.56	23.44	23.46
10M	256QAM	1	0	**21.75**	21.73	21.62
		1	24	21.74	21.64	21.60
		1	49	21.70	21.63	21.59
		25	0	21.53	21.43	21.42
		25	12	21.69	21.53	21.57
		25	25	21.52	21.42	21.45
		50	0	21.52	21.45	21.34

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	**26.69**	26.60	26.54
		1	12	26.55	26.48	26.51
		1	24	26.52	26.37	26.32
		12	0	25.64	25.54	25.55
		12	6	25.58	25.52	25.51
		12	13	25.52	25.52	25.44
		25	0	25.52	25.40	25.34
5M	16QAM	1	0	**25.69**	25.67	25.57
		1	12	**25.69**	25.54	25.61
		1	24	25.62	25.56	25.50
		12	0	24.57	24.52	24.48
		12	6	24.52	24.44	24.40
		12	13	24.42	24.37	24.38
		25	0	24.46	24.35	24.27
5M	64QAM	1	0	**24.70**	24.66	24.62
		1	12	24.69	24.55	24.54
		1	24	24.63	24.57	24.55
		12	0	23.59	23.41	23.41
		12	6	23.63	23.60	23.55
		12	13	23.59	23.48	23.44
		25	0	23.52	23.43	23.44
5M	256QAM	1	0	21.76	21.67	21.62
		1	12	**21.78**	21.61	21.60
		1	24	21.71	21.57	21.52
		12	0	21.56	21.45	21.42
		12	6	21.67	21.50	21.54
		12	13	21.54	21.43	21.44
		25	0	21.47	21.39	21.42

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	**26.60**	26.56	26.53
		1	7	26.57	26.53	26.43
		1	14	26.53	26.43	26.31
		8	0	25.63	25.62	25.57
		8	3	25.62	25.57	25.44
		8	7	25.62	25.48	25.48
		15	0	25.48	25.39	25.39
3M	16QAM	1	0	**25.79**	25.67	25.61
		1	7	25.70	25.64	25.59
		1	14	25.62	25.52	25.59
		8	0	24.55	24.53	24.43
		8	3	24.56	24.45	24.45
		8	7	24.45	24.34	24.36
		15	0	24.48	24.37	24.36
3M	64QAM	1	0	**24.76**	24.67	24.60
		1	7	24.69	24.55	24.58
		1	14	24.62	24.51	24.47
		8	0	23.59	23.40	23.47
		8	3	23.70	23.62	23.50
		8	7	23.65	23.54	23.42
		15	0	23.57	23.49	23.45
3M	256QAM	1	0	**21.80**	21.65	21.61
		1	7	21.70	21.70	21.66
		1	14	21.65	21.53	21.51
		8	0	21.61	21.45	21.43
		8	3	21.65	21.55	21.50
		8	7	21.55	21.45	21.42
		15	0	21.51	21.40	21.42

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	**26.61**	26.59	26.55
		1	2	26.58	26.48	26.43
		1	5	26.50	26.39	26.35
		3	0	25.69	25.57	25.52
		3	1	25.67	25.53	25.49
		3	3	25.60	25.48	25.44
		6	0	25.54	25.42	25.42
1.4M	16QAM	1	0	**25.75**	25.66	25.61
		1	2	25.64	25.60	25.53
		1	5	25.71	25.60	25.53
		3	0	24.64	24.44	24.43
		3	1	24.50	24.43	24.40
		3	3	24.50	24.33	24.33
		6	0	24.47	24.40	24.35
1.4M	64QAM	1	0	**24.71**	24.61	24.57
		1	2	24.65	24.59	24.61
		1	5	24.65	24.52	24.51
		3	0	23.55	23.50	23.42
		3	1	23.66	23.54	23.57
		3	3	23.60	23.55	23.50
		6	0	23.53	23.49	23.44
1.4M	256QAM	1	0	**21.78**	21.67	21.70
		1	2	21.72	21.65	21.62
		1	5	21.68	21.63	21.56
		3	0	21.59	21.46	21.40
		3	1	21.60	21.57	21.49
		3	3	21.56	21.44	21.39
		6	0	21.53	21.39	21.44

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	**24.20**	24.12	24.01
		1	50	24.13	24.09	23.98
		1	99	24.12	24.04	23.93
		50	0	23.37	23.29	23.18
		50	25	23.32	23.24	23.13
		50	50	23.28	23.20	23.09
		100	0	23.26	23.18	23.07
20M	16QAM	1	0	**23.31**	23.23	23.12
		1	50	23.26	23.18	23.07
		1	99	23.23	23.15	23.04
		50	0	22.21	22.13	22.02
		50	25	22.18	22.10	21.99
		50	50	22.16	22.08	21.97
		100	0	22.02	21.94	21.83
20M	64QAM	1	0	**22.22**	22.14	22.03
		1	50	22.20	22.12	22.01
		1	99	22.18	22.10	21.99
		50	0	21.21	21.13	21.02
		50	25	21.19	21.11	21.00
		50	50	21.18	21.10	20.99
		100	0	21.16	21.08	20.97
20M	256QAM	1	0	**19.36**	19.28	19.17
		1	50	19.33	19.25	19.14
		1	99	19.30	19.22	19.11
		50	0	19.27	19.19	19.08
		50	25	19.29	19.21	19.10
		50	50	19.26	19.18	19.07
		100	0	19.22	19.14	19.03

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	**24.19**	24.10	23.92
		1	37	24.11	24.07	23.91
		1	74	24.10	24.04	23.88
		36	0	23.35	23.25	23.08
		36	19	23.32	23.19	23.10
		36	39	23.24	23.13	23.08
		75	0	23.19	23.14	23.04
15M	16QAM	1	0	**23.24**	23.20	23.07
		1	37	23.22	23.18	23.00
		1	74	23.22	23.15	22.97
		36	0	22.15	22.07	22.02
		36	19	22.11	22.09	21.89
		36	39	22.09	22.01	21.90
		75	0	21.95	21.94	21.74
15M	64QAM	1	0	**22.12**	22.05	21.98
		1	37	22.10	22.03	21.97
		1	74	22.08	22.04	21.99
		36	0	21.14	21.04	20.99
		36	19	21.15	21.03	20.90
		36	39	21.14	21.01	20.92
		75	0	21.10	20.98	20.91
15M	256QAM	1	0	19.27	19.24	19.17
		1	37	**19.30**	19.20	19.06
		1	74	19.21	19.21	19.03
		36	0	19.18	19.16	19.01
		36	19	19.25	19.17	19.08
		36	39	19.25	19.12	18.97
		75	0	19.13	19.06	19.01

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	24.14	24.12	23.93
		1	24	**24.15**	24.08	23.94
		1	49	24.03	23.98	23.88
		25	0	23.27	23.27	23.10
		25	12	23.26	23.23	23.13
		25	25	23.25	23.10	23.00
		50	0	23.26	23.12	23.05
10M	16QAM	1	0	**23.31**	23.13	23.02
		1	24	23.21	23.11	23.05
		1	49	23.23	23.11	22.98
		25	0	22.15	22.05	22.01
		25	12	22.13	22.04	21.95
		25	25	22.06	21.98	21.90
		50	0	22.00	21.92	21.77
10M	64QAM	1	0	22.14	22.06	22.03
		1	24	**22.17**	22.11	21.97
		1	49	**22.17**	22.06	21.97
		25	0	21.18	21.08	20.96
		25	12	21.18	21.10	20.95
		25	25	21.15	21.03	20.93
		50	0	21.12	21.04	20.94
10M	256QAM	1	0	**19.31**	19.18	19.07
		1	24	19.30	19.25	19.09
		1	49	19.28	19.17	19.07
		25	0	19.27	19.15	19.05
		25	12	19.28	19.13	19.00
		25	25	19.26	19.12	19.03
		50	0	19.14	19.13	18.97

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	**24.15**	24.05	23.99
		1	12	24.08	24.04	23.88
		1	24	24.06	24.01	23.90
		12	0	23.36	23.23	23.17
		12	6	23.23	23.14	23.05
		12	13	23.28	23.14	23.04
		25	0	23.21	23.16	23.01
5M	16QAM	1	0	**23.31**	23.16	23.09
		1	12	23.23	23.17	23.05
		1	24	23.23	23.05	23.00
		12	0	22.19	22.04	21.98
		12	6	22.11	22.01	21.95
		12	13	22.15	21.98	21.96
		25	0	21.95	21.88	21.78
5M	64QAM	1	0	**22.19**	22.07	21.93
		1	12	22.16	22.03	22.00
		1	24	22.18	22.09	21.89
		12	0	21.11	21.05	20.99
		12	6	21.15	21.03	20.94
		12	13	21.15	21.00	20.93
		25	0	21.12	21.02	20.87
5M	256QAM	1	0	**19.31**	19.27	19.14
		1	12	19.24	19.24	19.10
		1	24	19.29	19.21	19.06
		12	0	19.17	19.11	19.05
		12	6	19.21	19.11	19.02
		12	13	19.17	19.17	19.02
		25	0	19.18	19.07	18.94

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	**22.11**	22.04	22.02
		1	24	22.07	22.00	21.98
		1	49	22.04	21.97	21.95
		25	0	21.33	21.26	21.24
		25	12	21.31	21.24	21.22
		25	25	21.24	21.17	21.15
		50	0	21.21	21.14	21.12
10M	16QAM	1	0	**21.27**	21.20	21.18
		1	24	21.24	21.17	21.15
		1	49	21.15	21.08	21.06
		25	0	19.99	19.92	19.90
		25	12	19.98	19.91	19.89
		25	25	19.92	19.85	19.83
		50	0	19.91	19.84	19.82
10M	64QAM	1	0	**19.94**	19.87	19.85
		1	24	19.91	19.84	19.82
		1	49	19.87	19.80	19.78
		25	0	18.98	18.91	18.89
		25	12	18.96	18.89	18.87
		25	25	18.93	18.86	18.84
		50	0	18.91	18.84	18.82
10M	256QAM	1	0	**16.67**	16.60	16.58
		1	24	16.65	16.58	16.56
		1	49	16.64	16.57	16.55
		25	0	16.63	16.56	16.54
		25	12	16.59	16.52	16.50
		25	25	16.57	16.50	16.48
		50	0	16.54	16.47	16.45

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	**22.02**	21.99	21.98
		1	12	22.01	21.93	21.95
		1	24	**22.02**	21.87	21.86
		12	0	21.33	21.17	21.20
		12	6	21.26	21.24	21.22
		12	13	21.19	21.09	21.08
		25	0	21.14	21.10	21.06
5M	16QAM	1	0	**21.26**	21.11	21.16
		1	12	21.22	21.16	21.08
		1	24	21.11	21.01	21.04
		12	0	19.89	19.84	19.84
		12	6	19.89	19.91	19.82
		12	13	19.88	19.76	19.81
		25	0	19.83	19.80	19.75
5M	64QAM	1	0	19.87	19.80	19.80
		1	12	**19.89**	19.75	19.75
		1	24	19.82	19.78	19.77
		12	0	18.90	18.88	18.82
		12	6	18.90	18.88	18.77
		12	13	18.93	18.78	18.76
		25	0	18.91	18.77	18.80
5M	256QAM	1	0	16.58	16.57	16.57
		1	12	**16.65**	16.58	16.54
		1	24	16.54	16.50	16.53
		12	0	16.58	16.48	16.47
		12	6	16.50	16.46	16.46
		12	13	16.51	16.40	16.45
		25	0	16.49	16.37	16.45

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	**22.03**	22.01	22.02
		1	7	22.02	21.99	21.91
		1	14	21.96	21.91	21.85
		8	0	21.25	21.20	21.20
		8	3	21.21	21.21	21.17
		8	7	21.16	21.07	21.09
		15	0	21.12	21.06	21.06
3M	16QAM	1	0	**21.27**	21.16	21.18
		1	7	21.16	21.11	21.08
		1	14	21.08	21.00	21.05
		8	0	19.89	19.88	19.80
		8	3	19.97	19.83	19.82
		8	7	19.82	19.84	19.79
		15	0	19.87	19.79	19.82
3M	64QAM	1	0	**19.92**	19.85	19.75
		1	7	19.90	19.77	19.75
		1	14	19.77	19.72	19.70
		8	0	18.94	18.87	18.88
		8	3	18.89	18.82	18.77
		8	7	18.87	18.78	18.75
		15	0	18.81	18.81	18.82
3M	256QAM	1	0	**16.63**	16.58	16.54
		1	7	16.60	16.53	16.50
		1	14	16.59	16.53	16.49
		8	0	16.54	16.51	16.44
		8	3	16.59	16.51	16.50
		8	7	16.53	16.45	16.46
		15	0	16.46	16.37	16.44

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	**22.06**	21.96	22.01
		1	2	22.05	21.96	21.88
		1	5	22.00	21.93	21.86
		3	0	21.27	21.23	21.24
		3	1	21.30	21.15	21.22
		3	3	21.20	21.11	21.14
		6	0	21.21	21.13	21.06
1.4M	16QAM	1	0	21.19	21.11	21.18
		1	2	**21.23**	21.17	21.08
		1	5	21.08	20.98	21.05
		3	0	19.99	19.83	19.87
		3	1	19.91	19.81	19.79
		3	3	19.82	19.81	19.74
		6	0	19.86	19.81	19.74
1.4M	64QAM	1	0	**19.86**	19.83	19.77
		1	2	19.83	19.78	19.73
		1	5	19.79	19.77	19.78
		3	0	18.88	18.85	18.89
		3	1	18.95	18.82	18.86
		3	3	18.84	18.85	18.74
		6	0	18.88	18.76	18.80
1.4M	256QAM	1	0	**16.65**	16.51	16.55
		1	2	16.64	16.53	16.56
		1	5	16.61	16.54	16.55
		3	0	16.57	16.56	16.46
		3	1	16.54	16.46	16.44
		3	3	16.47	16.47	16.38
		6	0	16.52	16.45	16.45

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Low
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	**18.36**
		1	24	18.34
		1	49	18.30
		25	0	17.47
		25	12	17.35
		25	25	17.28
		50	0	17.26
10M	16QAM	1	0	**17.40**
		1	24	17.36
		1	49	17.28
		25	0	16.39
		25	12	16.37
		25	25	16.34
		50	0	16.29
10M	64QAM	1	0	**16.36**
		1	24	16.34
		1	49	16.31
		25	0	15.29
		25	12	15.27
		25	25	15.26
		50	0	15.25
10M	256QAM	1	0	**13.36**
		1	24	13.33
		1	49	13.27
		25	0	13.20
		25	12	13.18
		25	25	13.16
		50	0	13.14

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	18.28	18.30	**18.31**
		1	12	**18.31**	18.23	18.24
		1	24	18.25	18.27	18.28
		12	0	17.47	17.46	17.43
		12	6	17.25	17.29	17.26
		12	13	17.21	17.23	17.21
		25	0	17.18	17.17	17.21
5M	16QAM	1	0	17.35	17.37	**17.39**
		1	12	17.35	17.36	17.29
		1	24	17.26	17.26	17.25
		12	0	16.29	16.33	16.33
		12	6	16.30	16.30	16.29
		12	13	16.26	16.26	16.26
		25	0	16.19	16.28	16.23
5M	64QAM	1	0	16.26	16.30	16.27
		1	12	**16.31**	16.29	16.24
		1	24	16.23	16.25	16.29
		12	0	15.24	15.21	15.23
		12	6	15.20	15.23	15.17
		12	13	15.17	15.20	15.20
		25	0	15.17	15.23	15.15
5M	256QAM	1	0	13.29	**13.30**	13.28
		1	12	13.26	13.24	13.28
		1	24	13.25	13.18	13.24
		12	0	13.15	13.12	13.10
		12	6	13.17	13.08	13.18
		12	13	13.11	13.07	13.14
		25	0	13.12	13.05	13.12

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37850	38000	38150
		Frequency (MHz)		2580	2595	2610
20M	QPSK	1	0	**24.01**	23.89	23.86
		1	50	23.93	23.83	23.80
		1	99	23.85	23.75	23.72
		50	0	23.39	23.29	23.26
		50	25	23.34	23.24	23.21
		50	50	23.24	23.14	23.11
		100	0	23.13	23.03	23.00
20M	16QAM	1	0	**23.06**	22.96	22.93
		1	50	22.96	22.86	22.83
		1	99	22.86	22.76	22.73
		50	0	21.83	21.73	21.70
		50	25	21.75	21.65	21.62
		50	50	21.74	21.64	21.61
		100	0	21.61	21.51	21.48
20M	64QAM	1	0	**21.79**	21.69	21.66
		1	50	21.78	21.68	21.65
		1	99	21.75	21.65	21.62
		50	0	21.11	21.01	20.98
		50	25	21.08	20.98	20.95
		50	50	21.04	20.94	20.91
		100	0	21.00	20.90	20.87
20M	256QAM	1	0	**19.03**	18.93	18.90
		1	50	19.02	18.92	18.89
		1	99	19.01	18.91	18.88
		50	0	18.99	18.89	18.86
		50	25	18.96	18.86	18.83
		50	50	18.94	18.84	18.81
		100	0	18.92	18.82	18.79

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37825	38000	38175
		Frequency (MHz)		2577.5	2595	2612.5
15M	QPSK	1	0	**23.98**	23.82	23.76
		1	37	23.88	23.80	23.70
		1	74	23.78	23.74	23.69
		36	0	23.38	23.25	23.21
		36	19	23.32	23.20	23.13
		36	39	23.24	23.11	23.03
		75	0	23.11	22.94	22.97
15M	16QAM	1	0	**23.03**	22.90	22.87
		1	37	22.91	22.81	22.80
		1	74	22.78	22.67	22.73
		36	0	21.80	21.69	21.61
		36	19	21.75	21.57	21.53
		36	39	21.71	21.64	21.60
		75	0	21.51	21.49	21.40
15M	64QAM	1	0	**21.76**	21.62	21.62
		1	37	21.75	21.58	21.60
		1	74	21.74	21.62	21.52
		36	0	21.10	20.94	20.98
		36	19	21.05	20.94	20.86
		36	39	21.03	20.84	20.82
		75	0	21.00	20.83	20.78
15M	256QAM	1	0	18.95	18.92	18.85
		1	37	18.93	18.92	18.80
		1	74	**18.97**	18.83	18.78
		36	0	18.89	18.81	18.77
		36	19	18.87	18.79	18.74
		36	39	18.86	18.79	18.74
		75	0	18.82	18.78	18.73

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37800	38000	38200
		Frequency (MHz)		2575	2595	2615
10M	QPSK	1	0	**23.99**	23.85	23.84
		1	24	23.92	23.76	23.70
		1	49	23.83	23.75	23.65
		25	0	23.35	23.19	23.26
		25	12	23.31	23.19	23.14
		25	25	23.15	23.09	23.01
		50	0	23.11	22.96	22.96
10M	16QAM	1	0	**22.98**	22.91	22.92
		1	24	22.94	22.76	22.83
		1	49	22.80	22.74	22.68
		25	0	21.79	21.70	21.68
		25	12	21.70	21.57	21.56
		25	25	21.69	21.64	21.59
		50	0	21.55	21.43	21.38
10M	64QAM	1	0	**21.75**	21.69	21.58
		1	24	21.68	21.59	21.63
		1	49	21.67	21.58	21.62
		25	0	21.07	20.99	20.92
		25	12	21.06	20.98	20.87
		25	25	21.01	20.89	20.85
		50	0	20.96	20.90	20.77
10M	256QAM	1	0	**18.99**	18.91	18.88
		1	24	**18.99**	18.85	18.87
		1	49	18.94	18.88	18.87
		25	0	18.98	18.86	18.85
		25	12	18.94	18.80	18.80
		25	25	18.90	18.79	18.78
		50	0	18.92	18.72	18.71

LTE Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		37775	38000	38225
		Frequency (MHz)		2572.5	2595	2617.5
5M	QPSK	1	0	**23.92**	23.81	23.79
		1	12	23.91	23.77	23.70
		1	24	23.80	23.65	23.72
		12	0	23.35	23.26	23.25
		12	6	23.29	23.23	23.21
		12	13	23.16	23.13	23.09
		25	0	23.04	22.98	22.96
5M	16QAM	1	0	**23.04**	22.92	22.93
		1	12	22.89	22.82	22.75
		1	24	22.76	22.66	22.71
		12	0	21.80	21.69	21.67
		12	6	21.67	21.58	21.57
		12	13	21.69	21.56	21.57
		25	0	21.59	21.45	21.40
5M	64QAM	1	0	21.72	21.69	21.58
		1	12	**21.78**	21.63	21.62
		1	24	21.65	21.57	21.52
		12	0	21.02	20.93	20.90
		12	6	21.05	20.96	20.88
		12	13	21.00	20.85	20.86
		25	0	20.90	20.85	20.81
5M	256QAM	1	0	**18.98**	18.90	18.80
		1	12	18.94	18.87	18.88
		1	24	18.94	18.86	18.83
		12	0	18.92	18.89	18.81
		12	6	18.89	18.79	18.78
		12	13	18.92	18.76	18.73
		25	0	18.85	18.76	18.78

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	27.73	**27.90**	27.71
		1	50	27.56	27.84	27.61
		1	99	27.33	27.80	27.57
		50	0	26.47	27.00	26.77
		50	25	26.49	26.98	26.75
		50	50	26.50	26.94	26.71
		100	0	26.68	27.01	26.78
20M	16QAM	1	0	26.65	**27.03**	26.80
		1	50	26.63	27.02	26.79
		1	99	26.67	27.00	26.77
		50	0	25.48	26.04	25.81
		50	25	25.70	26.00	25.77
		50	50	25.46	25.98	25.75
		100	0	25.32	26.04	25.81
20M	64QAM	1	0	25.17	**25.95**	25.72
		1	50	25.25	25.88	25.65
		1	99	25.16	25.85	25.62
		50	0	24.88	25.06	24.83
		50	25	24.45	25.03	24.80
		50	50	24.60	24.99	24.76
		100	0	24.44	25.00	24.77
20M	256QAM	1	0	22.75	**23.00**	22.77
		1	50	22.38	22.96	22.73
		1	99	22.65	22.89	22.66
		50	0	22.62	22.84	22.61
		50	25	22.58	22.80	22.57
		50	50	22.63	22.78	22.55
		100	0	22.42	22.80	22.57

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	27.36	**27.86**	27.83
		1	37	27.28	27.84	27.76
		1	74	27.43	27.71	27.76
		36	0	26.57	26.90	26.92
		36	19	26.35	26.90	26.92
		36	39	26.48	26.93	26.90
		75	0	26.28	27.00	26.94
15M	16QAM	1	0	26.61	**27.01**	26.97
		1	37	26.52	26.93	26.99
		1	74	26.55	26.97	26.89
		36	0	25.50	25.96	25.92
		36	19	25.40	25.95	25.92
		36	39	25.53	25.94	25.93
		75	0	25.40	25.95	25.94
15M	64QAM	1	0	25.27	**25.94**	25.82
		1	37	25.30	25.81	25.81
		1	74	25.06	25.76	25.77
		36	0	24.69	24.98	24.93
		36	19	24.55	25.01	24.93
		36	39	24.52	24.95	24.92
		75	0	24.51	24.92	24.88
15M	256QAM	1	0	22.73	22.90	22.87
		1	37	22.36	22.85	22.78
		1	74	22.35	22.82	22.79
		36	0	22.61	22.97	22.95
		36	19	22.52	22.97	22.94
		36	39	22.31	22.90	22.86
		75	0	22.15	**22.98**	22.91

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	27.60	27.82	**27.88**
		1	24	27.56	27.80	27.75
		1	49	27.32	27.71	27.67
		25	0	26.71	26.90	26.93
		25	12	26.41	26.90	26.85
		25	25	26.37	26.88	26.82
		50	0	26.57	26.96	26.92
10M	16QAM	1	0	26.47	**26.99**	26.93
		1	24	26.49	26.94	**26.99**
		1	49	26.43	26.96	26.94
		25	0	25.51	26.02	26.01
		25	12	25.37	25.96	25.87
		25	25	25.42	25.95	25.95
		50	0	25.29	26.03	26.01
10M	64QAM	1	0	25.09	**25.85**	25.82
		1	24	25.28	25.83	25.84
		1	49	25.00	25.77	25.76
		25	0	24.58	25.03	24.95
		25	12	24.40	24.99	24.92
		25	25	24.66	24.95	24.88
		50	0	24.62	24.92	24.89
10M	256QAM	1	0	22.73	22.85	22.83
		1	24	22.33	22.79	22.79
		1	49	22.55	22.85	22.72
		25	0	22.53	23.00	22.99
		25	12	22.32	**23.02**	22.92
		25	25	22.56	22.97	22.94
		50	0	22.12	22.90	22.95

LTE Band 41 (Power Class 2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	27.48	**27.88**	27.87
		1	12	27.31	27.76	27.72
		1	24	27.31	27.72	27.73
		12	0	26.57	26.90	26.87
		12	6	26.59	26.89	26.90
		12	13	26.57	26.84	26.88
		25	0	26.45	26.92	26.92
5M	16QAM	1	0	26.48	**27.01**	26.95
		1	12	26.40	**27.01**	26.93
		1	24	26.40	26.98	26.88
		12	0	25.47	25.97	25.98
		12	6	25.65	25.96	25.89
		12	13	25.26	25.95	25.85
		25	0	25.24	26.04	25.93
5M	64QAM	1	0	25.20	**25.92**	**25.92**
		1	12	25.23	25.80	25.84
		1	24	25.12	25.84	25.81
		12	0	24.68	25.04	24.94
		12	6	24.74	24.94	24.94
		12	13	24.50	24.97	24.96
		25	0	24.51	24.96	24.89
5M	256QAM	1	0	22.46	22.90	22.87
		1	12	22.43	22.84	22.85
		1	24	22.36	22.82	22.72
		12	0	22.61	23.01	23.00
		12	6	22.29	**23.03**	22.96
		12	13	22.23	22.91	22.95
		25	0	22.42	22.95	22.95

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	24.63	**24.77**	24.49
		1	50	24.58	24.69	24.44
		1	99	24.43	24.54	24.29
		50	0	23.67	23.78	23.53
		50	25	23.65	23.76	23.51
		50	50	23.60	23.71	23.46
		100	0	23.58	23.69	23.44
20M	16QAM	1	0	23.65	**23.76**	23.51
		1	50	23.63	23.74	23.49
		1	99	23.57	23.68	23.43
		50	0	22.68	22.79	22.54
		50	25	22.60	22.71	22.46
		50	50	22.56	22.67	22.42
		100	0	22.52	22.63	22.38
20M	64QAM	1	0	22.37	**22.48**	22.23
		1	50	22.35	22.46	22.21
		1	99	22.26	22.37	22.12
		50	0	21.78	21.89	21.64
		50	25	21.65	21.76	21.51
		50	50	21.60	21.71	21.46
		100	0	21.54	21.65	21.40
20M	256QAM	1	0	19.65	**19.76**	19.51
		1	50	19.58	19.69	19.44
		1	99	19.55	19.66	19.41
		50	0	19.52	19.63	19.38
		50	25	19.58	19.69	19.44
		50	50	19.53	19.64	19.39
		100	0	19.42	19.53	19.28

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	**24.56**	24.37	24.46
		1	37	24.48	24.31	24.41
		1	74	24.33	24.23	24.25
		36	0	23.57	23.44	23.46
		36	19	23.55	23.38	23.41
		36	39	23.58	23.37	23.44
		75	0	23.48	23.31	23.43
15M	16QAM	1	0	23.61	23.39	23.47
		1	37	**23.62**	23.42	23.42
		1	74	23.55	23.32	23.38
		36	0	22.60	22.47	22.46
		36	19	22.60	22.40	22.46
		36	39	22.53	22.35	22.41
		75	0	22.50	22.28	22.28
15M	64QAM	1	0	**22.37**	22.15	22.22
		1	37	22.30	22.13	22.20
		1	74	22.16	22.00	22.05
		36	0	21.69	21.53	21.57
		36	19	21.55	21.36	21.44
		36	39	21.52	21.36	21.40
		75	0	21.51	21.30	21.39
15M	256QAM	1	0	**19.63**	19.45	19.46
		1	37	19.56	19.29	19.37
		1	74	19.55	19.35	19.41
		36	0	19.51	19.23	19.28
		36	19	19.52	19.29	19.38
		36	39	19.51	19.26	19.31
		75	0	19.35	19.23	19.20

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	**24.60**	24.43	24.43
		1	24	24.56	24.34	24.42
		1	49	24.42	24.16	24.25
		25	0	23.61	23.46	23.44
		25	12	23.61	23.46	23.43
		25	25	23.57	23.36	23.43
		50	0	23.57	23.30	23.35
10M	16QAM	1	0	23.57	23.45	23.46
		1	24	**23.59**	23.41	23.48
		1	49	23.53	23.32	23.39
		25	0	22.61	22.45	22.50
		25	12	22.57	22.39	22.45
		25	25	22.52	22.32	22.39
		50	0	22.49	22.25	22.37
10M	64QAM	1	0	**22.29**	22.08	22.13
		1	24	22.28	22.13	22.13
		1	49	22.20	22.06	22.04
		25	0	21.78	21.51	21.57
		25	12	21.60	21.43	21.46
		25	25	21.56	21.33	21.39
		50	0	21.52	21.31	21.31
10M	256QAM	1	0	**19.63**	19.38	19.51
		1	24	19.53	19.30	19.34
		1	49	19.55	19.32	19.31
		25	0	19.43	19.27	19.28
		25	12	19.52	19.37	19.37
		25	25	19.46	19.30	19.30
		50	0	19.32	19.15	19.24

LTE Band 41 (Power Class 3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	**24.58**	24.44	24.40
		1	12	24.51	24.30	24.37
		1	24	24.41	24.21	24.19
		12	0	23.67	23.45	23.45
		12	6	23.59	23.38	23.47
		12	13	23.57	23.31	23.38
		25	0	23.55	23.32	23.41
5M	16QAM	1	0	23.58	23.37	23.47
		1	12	**23.60**	23.43	23.48
		1	24	23.50	23.37	23.35
		12	0	22.67	22.48	22.51
		12	6	22.55	22.38	22.39
		12	13	22.46	22.33	22.36
		25	0	22.44	22.32	22.30
5M	64QAM	1	0	22.30	22.08	22.20
		1	12	**22.33**	22.07	22.11
		1	24	22.22	22.02	22.04
		12	0	21.68	21.53	21.57
		12	6	21.64	21.39	21.43
		12	13	21.50	21.36	21.36
		25	0	21.51	21.31	21.36
5M	256QAM	1	0	**19.56**	19.36	19.46
		1	12	19.53	19.39	19.41
		1	24	19.46	19.31	19.41
		12	0	19.51	19.23	19.30
		12	6	19.49	19.37	19.40
		12	13	19.43	19.34	19.34
		25	0	19.42	19.17	19.24

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	**26.69**	26.64	26.52
		1	50	26.67	26.62	26.50
		1	99	26.65	26.60	26.48
		50	0	25.88	25.83	25.71
		50	25	25.84	25.79	25.67
		50	50	25.82	25.77	25.65
		100	0	25.72	25.67	25.55
20M	16QAM	1	0	**25.81**	25.76	25.64
		1	50	25.80	25.75	25.63
		1	99	25.79	25.74	25.62
		50	0	24.72	24.67	24.55
		50	25	24.68	24.63	24.51
		50	50	24.64	24.59	24.47
		100	0	24.58	24.53	24.41
20M	64QAM	1	0	**24.59**	24.54	24.42
		1	50	24.57	24.52	24.40
		1	99	24.53	24.48	24.36
		50	0	23.83	23.78	23.66
		50	25	23.79	23.74	23.62
		50	50	23.74	23.69	23.57
		100	0	23.72	23.67	23.55
20M	256QAM	1	0	**21.90**	21.85	21.73
		1	50	21.88	21.83	21.71
		1	99	21.83	21.78	21.66
		50	0	21.82	21.77	21.65
		50	25	21.80	21.75	21.63
		50	50	21.79	21.74	21.62
		100	0	21.78	21.73	21.61

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	26.60	**26.63**	26.52
		1	37	26.59	26.59	26.45
		1	74	26.60	26.58	26.42
		36	0	25.78	25.81	25.66
		36	19	25.83	25.75	25.65
		36	39	25.73	25.71	25.61
		75	0	25.66	25.66	25.46
15M	16QAM	1	0	**25.76**	25.69	25.57
		1	37	25.79	25.68	25.56
		1	74	25.71	25.74	25.56
		36	0	24.69	24.63	24.46
		36	19	24.68	24.58	24.51
		36	39	24.60	24.59	24.40
		75	0	24.50	24.53	24.39
15M	64QAM	1	0	**24.55**	24.54	24.41
		1	37	24.51	24.50	24.38
		1	74	24.43	24.38	24.36
		36	0	23.79	23.73	23.66
		36	19	23.74	23.67	23.60
		36	39	23.74	23.64	23.55
		75	0	23.66	23.64	23.50
15M	256QAM	1	0	**21.85**	21.78	21.67
		1	37	21.81	21.81	21.65
		1	74	21.82	21.78	21.66
		36	0	21.79	21.76	21.55
		36	19	21.76	21.67	21.57
		36	39	21.74	21.72	21.56
		75	0	21.75	21.71	21.59

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	**26.61**	26.60	26.45
		1	24	26.58	26.57	26.41
		1	49	26.57	26.55	26.46
		25	0	25.79	25.79	25.71
		25	12	25.79	25.75	25.67
		25	25	25.80	25.73	25.55
		50	0	25.70	25.60	25.47
10M	16QAM	1	0	**25.80**	25.73	25.64
		1	24	25.75	25.71	25.63
		1	49	25.72	25.67	25.55
		25	0	24.66	24.65	24.48
		25	12	24.59	24.56	24.47
		25	25	24.63	24.51	24.43
		50	0	24.48	24.50	24.35
10M	64QAM	1	0	24.50	**24.51**	24.39
		1	24	24.48	24.47	24.32
		1	49	24.43	24.40	24.30
		25	0	23.79	23.71	23.62
		25	12	23.71	23.66	23.59
		25	25	23.68	23.62	23.50
		50	0	23.67	23.59	23.46
10M	256QAM	1	0	21.80	21.78	21.64
		1	24	**21.87**	21.80	21.68
		1	49	21.78	21.72	21.57
		25	0	21.82	21.67	21.61
		25	12	21.73	21.67	21.58
		25	25	21.79	21.73	21.57
		50	0	21.69	21.72	21.56

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	**26.64**	26.60	26.50
		1	12	26.60	26.57	26.43
		1	24	26.61	26.59	26.43
		12	0	25.79	25.77	25.71
		12	6	25.82	25.72	25.59
		12	13	25.74	25.72	25.59
		25	0	25.72	25.61	25.55
5M	16QAM	1	0	**25.79**	25.66	25.59
		1	12	**25.79**	25.74	25.55
		1	24	25.71	25.69	25.61
		12	0	24.62	24.65	24.50
		12	6	24.68	24.63	24.50
		12	13	24.56	24.51	24.37
		25	0	24.55	24.53	24.41
5M	64QAM	1	0	24.50	24.52	24.37
		1	12	**24.55**	24.48	24.37
		1	24	24.49	24.38	24.28
		12	0	23.81	23.74	23.64
		12	6	23.70	23.66	23.55
		12	13	23.67	23.60	23.48
		25	0	23.68	23.63	23.55
5M	256QAM	1	0	21.83	**21.85**	21.67
		1	12	21.82	21.75	21.68
		1	24	21.77	21.76	21.61
		12	0	21.82	21.74	21.64
		12	6	21.71	21.73	21.54
		12	13	21.73	21.73	21.58
		25	0	21.72	21.64	21.54

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	**26.63**	26.57	26.51
		1	7	26.62	26.56	26.48
		1	14	26.61	26.60	26.41
		8	0	25.83	25.81	25.67
		8	3	25.77	25.70	25.57
		8	7	25.76	25.73	25.56
		15	0	25.67	25.57	25.51
3M	16QAM	1	0	25.74	25.73	25.55
		1	7	25.73	25.70	25.54
		1	14	**25.77**	25.64	25.56
		8	0	24.67	24.59	24.49
		8	3	24.68	24.60	24.45
		8	7	24.57	24.56	24.43
		15	0	24.51	24.52	24.39
3M	64QAM	1	0	**24.52**	24.47	24.42
		1	7	24.51	24.42	24.32
		1	14	**24.52**	24.46	24.27
		8	0	23.78	23.74	23.64
		8	3	23.75	23.68	23.54
		8	7	23.72	23.63	23.50
		15	0	23.64	23.65	23.47
3M	256QAM	1	0	**21.90**	21.77	21.68
		1	7	21.81	21.73	21.69
		1	14	21.82	21.72	21.57
		8	0	21.80	21.67	21.65
		8	3	21.80	21.69	21.56
		8	7	21.79	21.65	21.61
		15	0	21.75	21.73	21.51

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	**26.68**	26.62	26.42
		1	2	26.57	26.59	26.47
		1	5	26.59	26.53	26.44
		3	0	25.78	25.78	25.71
		3	1	25.78	25.76	25.60
		3	3	25.75	25.72	25.55
		6	0	25.65	25.57	25.53
1.4M	16QAM	1	0	25.73	25.72	25.58
		1	2	**25.79**	25.74	25.59
		1	5	25.69	25.66	25.61
		3	0	24.68	24.57	24.45
		3	1	24.60	24.55	24.44
		3	3	24.55	24.55	24.44
		6	0	24.56	24.50	24.33
1.4M	64QAM	1	0	**24.54**	24.53	24.34
		1	2	24.48	24.43	24.40
		1	5	24.46	24.46	24.36
		3	0	23.83	23.68	23.63
		3	1	23.78	23.69	23.55
		3	3	23.67	23.69	23.54
		6	0	23.72	23.67	23.45
1.4M	256QAM	1	0	**21.87**	21.75	21.66
		1	2	**21.87**	21.78	21.69
		1	5	21.81	21.74	21.63
		3	0	21.75	21.68	21.61
		3	1	21.76	21.71	21.61
		3	3	21.79	21.69	21.61
		6	0	21.73	21.72	21.60

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133222	133297	133372
		Frequency (MHz)		673	680.5	688
20M	QPSK	1	0	**21.81**	21.72	21.69
		1	50	21.75	21.68	21.65
		1	99	21.72	21.65	21.62
		50	0	20.80	20.73	20.70
		50	25	20.75	20.68	20.65
		50	50	20.71	20.64	20.61
		100	0	20.69	20.62	20.59
20M	16QAM	1	0	**20.77**	20.70	20.67
		1	50	20.75	20.68	20.65
		1	99	20.73	20.66	20.63
		50	0	19.81	19.74	19.71
		50	25	19.77	19.70	19.67
		50	50	19.72	19.65	19.62
		100	0	19.70	19.63	19.60
20M	64QAM	1	0	**19.75**	19.68	19.65
		1	50	19.74	19.67	19.64
		1	99	19.71	19.64	19.61
		50	0	18.73	18.66	18.63
		50	25	18.71	18.64	18.61
		50	50	18.69	18.62	18.59
		100	0	18.65	18.58	18.55
20M	256QAM	1	0	**16.65**	16.58	16.55
		1	50	16.62	16.55	16.52
		1	99	16.59	16.52	16.49
		50	0	16.52	16.45	16.42
		50	25	16.50	16.43	16.40
		50	50	16.51	16.44	16.41
		100	0	16.49	16.42	16.39

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133197	133297	133397
		Frequency (MHz)		670.5	680.5	690.5
15M	QPSK	1	0	**21.76**	21.66	21.61
		1	37	21.75	21.58	21.62
		1	74	21.66	21.62	21.56
		36	0	20.76	20.69	20.61
		36	19	20.67	20.61	20.59
		36	39	20.67	20.61	20.57
		75	0	20.63	20.55	20.58
15M	16QAM	1	0	20.74	20.63	20.61
		1	37	**20.75**	20.68	20.58
		1	74	20.66	20.66	20.62
		36	0	19.73	19.72	19.67
		36	19	19.72	19.66	19.65
		36	39	19.67	19.59	19.59
		75	0	19.67	19.59	19.60
15M	64QAM	1	0	**19.74**	19.67	19.60
		1	37	19.64	19.63	19.63
		1	74	19.70	19.63	19.57
		36	0	18.67	18.58	18.62
		36	19	18.67	18.54	18.59
		36	39	18.67	18.62	18.55
		75	0	18.58	18.56	18.45
15M	256QAM	1	0	**16.60**	16.49	16.48
		1	37	16.57	16.46	16.49
		1	74	16.59	16.48	16.43
		36	0	16.46	16.40	16.37
		36	19	16.43	16.38	16.32
		36	39	16.49	16.37	16.32
		75	0	16.45	16.34	16.39

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133172	133297	133422
		Frequency (MHz)		668	680.5	693
10M	QPSK	1	0	**21.79**	21.63	21.65
		1	24	21.65	21.61	21.62
		1	49	21.66	21.62	21.62
		25	0	20.70	20.71	20.65
		25	12	20.75	20.58	20.60
		25	25	20.68	20.57	20.51
		50	0	20.63	20.53	20.50
10M	16QAM	1	0	20.68	20.64	20.60
		1	24	20.67	20.61	20.63
		1	49	**20.70**	20.65	20.55
		25	0	19.74	19.69	19.68
		25	12	19.67	19.66	19.64
		25	25	19.62	19.60	19.58
		50	0	19.70	19.63	19.60
10M	64QAM	1	0	19.67	19.63	19.57
		1	24	19.66	19.64	19.63
		1	49	**19.70**	19.61	19.60
		25	0	18.72	18.57	18.59
		25	12	18.70	18.54	18.58
		25	25	18.66	18.56	18.53
		50	0	18.60	18.56	18.48
10M	256QAM	1	0	**16.59**	16.49	16.47
		1	24	16.54	16.45	16.42
		1	49	16.49	16.51	16.42
		25	0	16.52	16.45	16.32
		25	12	16.47	16.37	16.39
		25	25	16.47	16.39	16.34
		50	0	16.47	16.41	16.31

LTE Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133147	133297	133447
		Frequency (MHz)		665.5	680.5	695.5
5M	QPSK	1	0	**21.79**	21.62	21.64
		1	12	21.66	21.66	21.62
		1	24	21.69	21.56	21.53
		12	0	20.79	20.73	20.69
		12	6	20.75	20.66	20.58
		12	13	20.70	20.57	20.60
		25	0	20.62	20.59	20.54
5M	16QAM	1	0	**20.76**	20.70	20.65
		1	12	20.70	20.58	20.63
		1	24	20.70	20.56	20.62
		12	0	19.74	19.64	19.70
		12	6	19.73	19.68	19.57
		12	13	19.67	19.58	19.56
		25	0	19.60	19.55	19.58
5M	64QAM	1	0	19.67	19.67	19.61
		1	12	19.65	19.64	19.63
		1	24	**19.69**	19.64	19.61
		12	0	18.73	18.59	18.60
		12	6	18.66	18.63	18.51
		12	13	18.61	18.62	18.51
		25	0	18.56	18.48	18.45
5M	256QAM	1	0	**16.61**	16.53	16.55
		1	12	16.55	16.46	16.42
		1	24	16.56	16.48	16.41
		12	0	16.49	16.45	16.37
		12	6	16.42	16.33	16.36
		12	13	16.46	16.43	16.37
		25	0	16.39	16.32	16.30

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

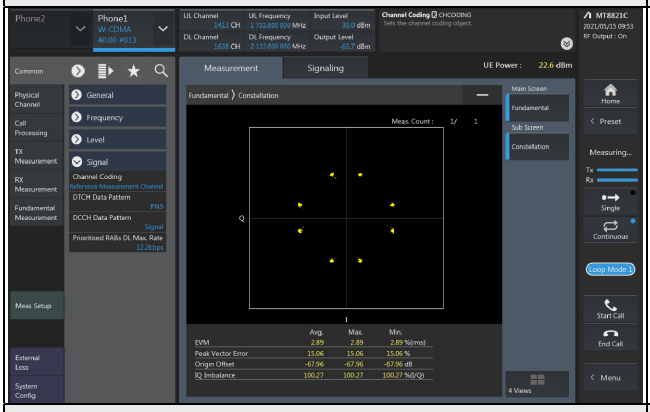
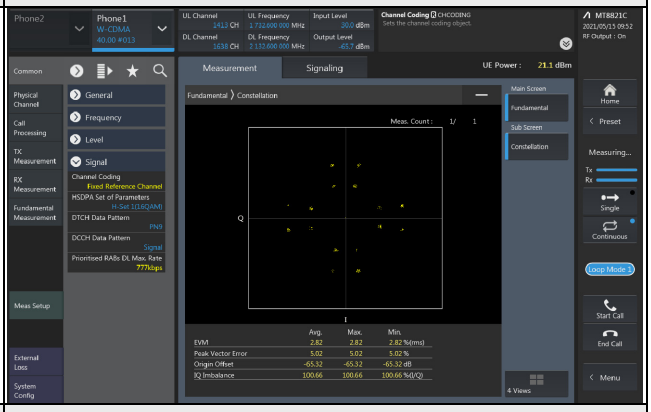
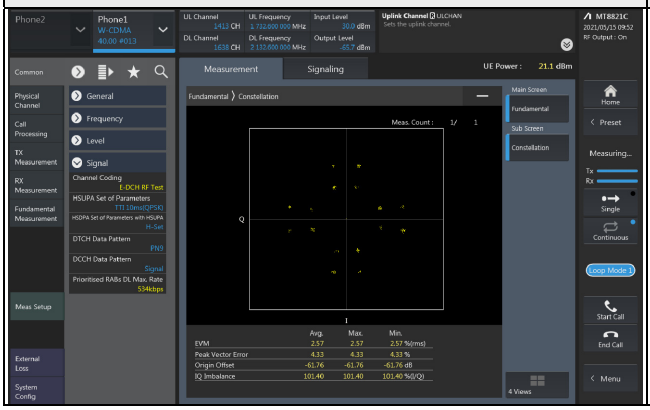
N/A

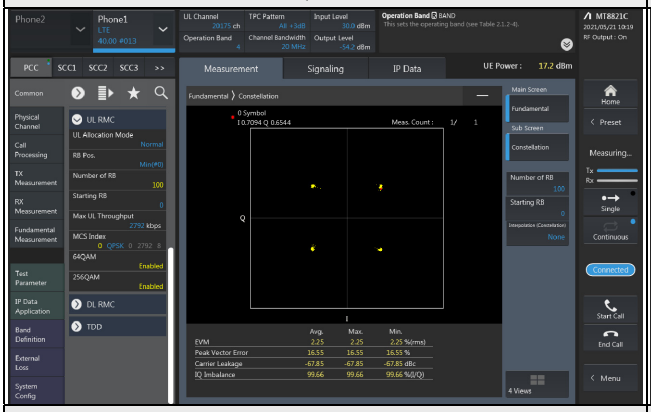
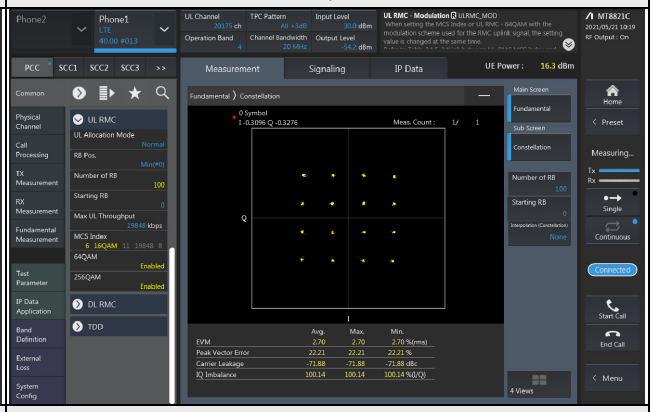
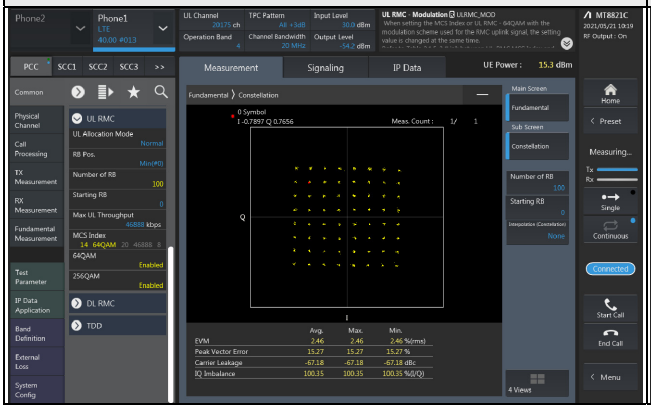
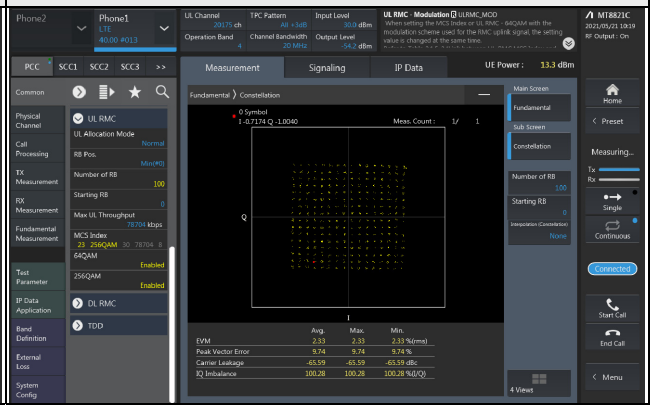
4.2.2 Test Procedure

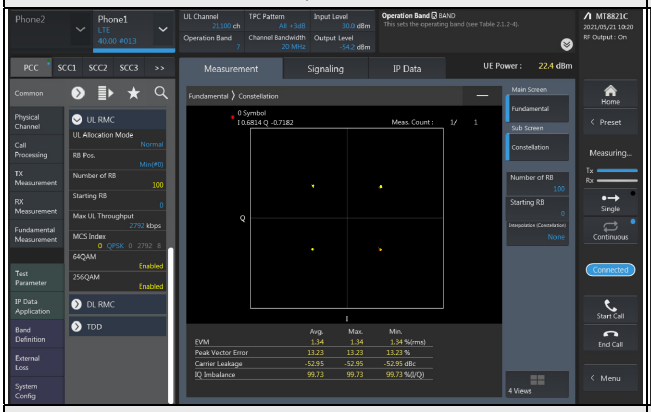
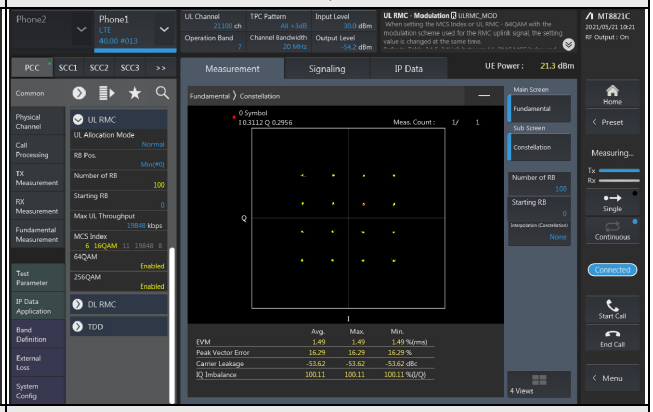
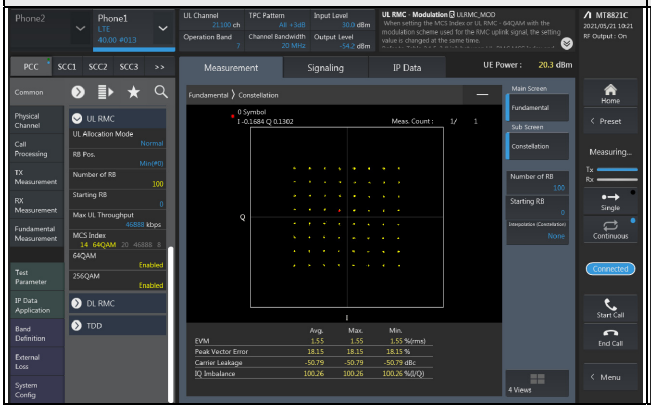
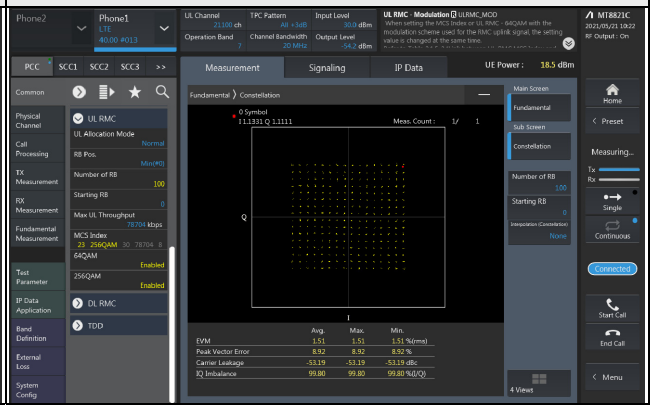
Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

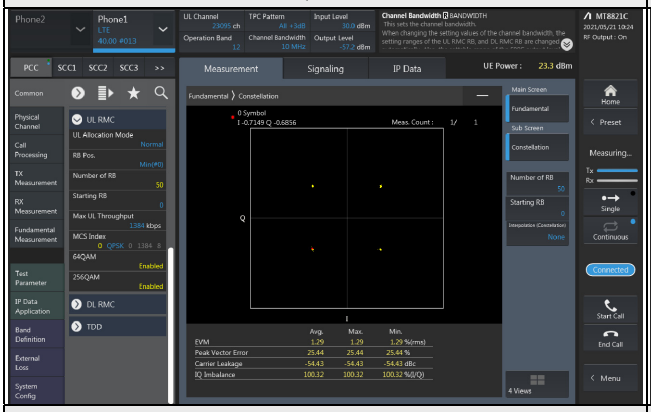
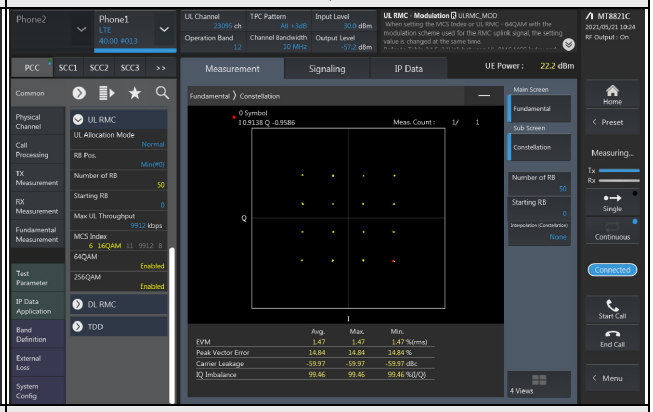
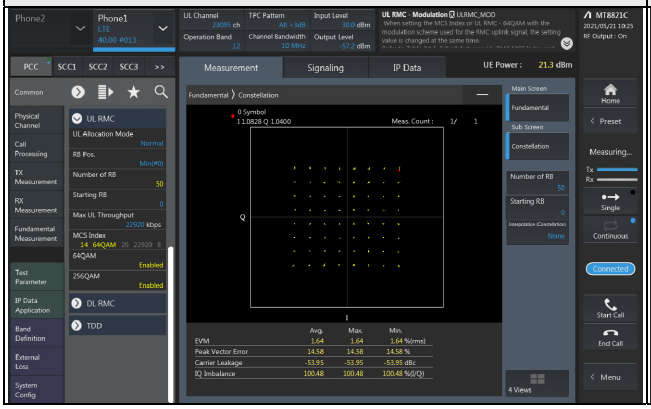
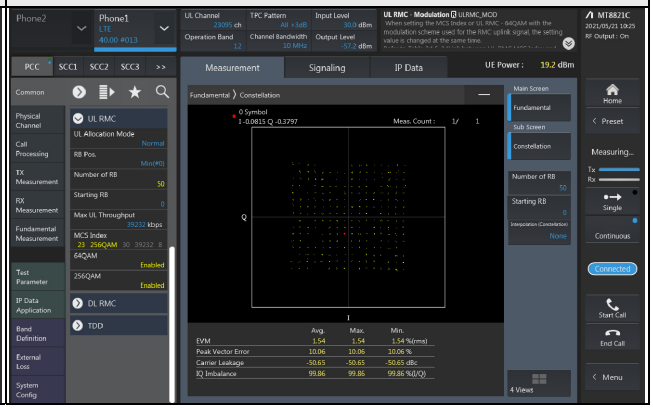
4.2.3 Test Setup

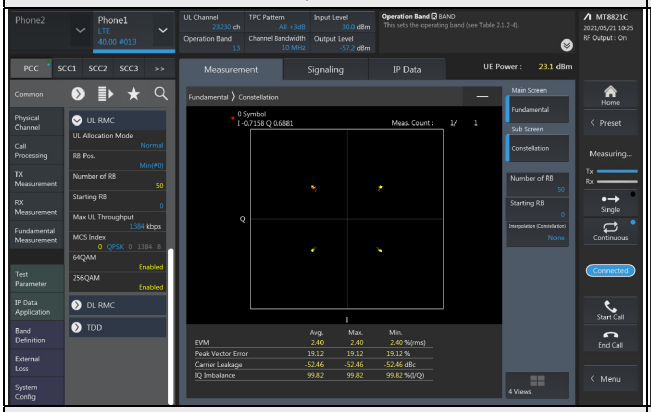
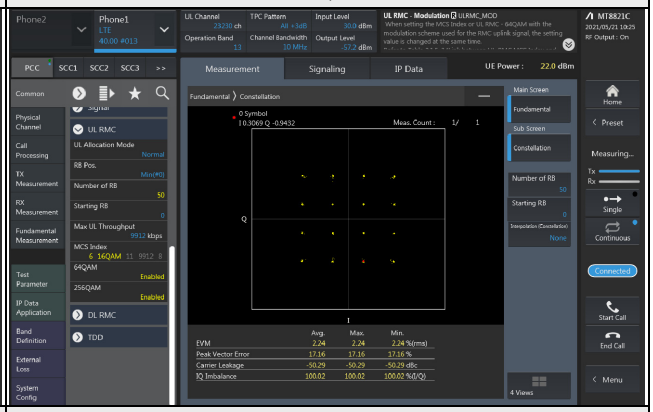
4.2.4 Test Results

WCDMA Band 4	
Spectrum Plot of Measurement Value	
Channel: 1413 / Frequency (MHz): 1732.6MHz	
WCDMA	HSDPA
	
HSUPA	
	

LTE Band 4	
Spectrum Plot of Measurement Value	
Channel: 20175 / Frequency (MHz): 1732.5MHz	
QPSK	16QAM
	
64QAM	256QAM
	

LTE Band 7	
Spectrum Plot of Measurement Value	
Channel: 21100 / Frequency (MHz): 2535.0MHz	
QPSK	16QAM
	
64QAM	256QAM
	

LTE Band 12	
Spectrum Plot of Measurement Value	
Channel: 23095 / Frequency (MHz): 707.5MHz	
QPSK	16QAM
	
64QAM	256QAM
	

LTE Band 13	
Spectrum Plot of Measurement Value	
Channel: 23230 / Frequency (MHz): 782.0MHz	
QPSK	16QAM
	
64QAM	256QAM