FCC Test Report (PART 27)

Report No.:	RF180321E03-2
FCC ID:	MCLT77W968
Test Model:	T77W968
Received Date:	Mar. 21, 2018
Test Date:	Mar. 31 to Apr. 30, 2018
Issued Date:	May 17, 2018
Applicant:	HON HAI PRECISION IND. CO., LTD.
Address:	5F-1,5 Hsin-An Road Hsinchu, Science-Based Industrial Park Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
FCC Registration / Designation Number:	723255 / TW2022

Testing Laboratory
2022

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Release Control Record

Issue No.	Description	Date Issued
RF180321E03-2	Original release.	May 17, 2018

1 Certificate of Conformity

Product:	LTE M.2 Module
Brand:	FOXCONN
Test Model:	T77W968
Sample Status:	ENGINEERING SAMPLE
Applicant:	HON HAI PRECISION IND. CO., LTD.
Test Date:	Mar. 31 to Apr. 30, 2018
Standards:	FCC Part 27, Subpart D / F / H / L / M FCC Part 2

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 EMC characteristics under the conditions specified in this report.

Prepared by : Wendy Wu , **Date:** May 17, 2018

Wendy Wu / Specialist

Approved by : , **Date:** May 17, 2018

May Chen / Manager

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50	Radiated Power	PASS	Meet the requirement of limit.
2.1047	Modulation characteristics	PASS	Meet the requirement
2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	PASS	Meet the requirement of limit.
2.1049 27.53	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.53	Band Edge Measurements	PASS	Meet the requirement of limit.
---	Peak To Average Ratio	PASS	Meet the requirement of limit.
2.1051 27.53	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -3.68dB at 13845MHz.

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	30MHz ~ 1GHz	5.53 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.08 dB
	6GHz ~ 18GHz	4.98 dB
	18GHz ~ 40GHz	5.19 dB

2.2 Test Site and Instruments

For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	July 12, 2017	July 11, 2018
Pre-Amplifier EMCI	EMC001340	980142	Feb. 09, 2018	Feb. 08, 2019
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 15, 2018	Jan. 14, 2019
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	May 06, 2017	May 05, 2018
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 29, 2017	Nov. 28, 2018
RF Cable	8D	966-3-1 966-3-2 966-3-3	Mar. 20, 2018	Mar. 19, 2019
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Oct. 03, 2017	Oct. 02, 2018
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Dec. 12, 2017	Dec. 11, 2018
Pre-Amplifier EMCI	EMC12630SE	980384	Jan. 29, 2018	Jan. 28, 2019
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160922 150317 150322	Jan. 29, 2018	Jan. 28, 2019
Spectrum Analyzer Keysight	N9030A	MY54490679	July 25, 2017	July 24, 2018
Pre-Amplifier EMCI	EMC184045SE	980386	Jan. 29, 2018	Jan. 28, 2019
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 14, 2017	Dec. 13, 2018
RF Cable	EMC102-KM-KM-1200	160924	Jan. 29, 2018	Jan. 28, 2019
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	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 calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 3.
4. The CANADA Site Registration No. is 20331-1
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Mar. 31 to Apr. 25, 2018

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV40	100964	July 1, 2017	June 30, 2018
Spectrum Analyzer Agilent	E4446A	MY48250254	Nov. 21, 2017	Nov. 20, 2018
Power meter Anritsu	ML2495A	1014008	May 11, 2017	May 10, 2018
Power sensor Anritsu	MA2411B	0917122	May 11, 2017	May 10, 2018
AC Power Source Extech Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 10, 2018	Jan. 09, 2019
DC Power Supply Topward	6603D	795558	NA	NA
True RMS Clamp Meter FLUKE	325	31130711WS	May 29, 2017	May 28, 2018
ESG Vector signal generator Agilent	E4438C	MY45094468/0 05 506 602 UK6 UNJ	Nov. 26, 2017	Nov. 25, 2018
ESG Vector signal generator Agilent	E4438C	MY47271330 506 602 UNJ	Oct. 11, 2017	Oct. 10, 2018
Mech Switch Absorptive Mini-Circuits	MSP4TA-18+	0140	Feb. 12, 2018	Feb. 11, 2019
FXD ATTEN Mini-Circuits	BW-S3W2+	MN71981	Feb. 12, 2018	Feb. 11, 2019
Software	ADT_RF Test Software V6.6.5.4	NA	NA	NA

NOTE: 1. The test was performed in Oven room 2.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Apr. 01 to 30, 2018

3 General Information

3.1 General Description of EUT

Product	LTE M.2 Module	
Brand	FOXCONN	
Test Model	T77W968	
Status of EUT	ENGINEERING SAMPLE	
Power Supply Rating	DC 3.3V from host equipment	
Modulation Type	WCDMA, HSDPA, HSUPA	BPSK
	LTE	QPSK, 16QAM, 64QAM
Operating Frequency	WCDMA Band 4	1712.4 ~ 1752.6 MHz
	LTE Band 4	1710.7 ~ 1754.3 MHz
	LTE Band 7	2502.5 ~ 2567.5 MHz
	LTE Band 12	699.7 ~ 715.3 MHz
	LTE Band 13	779.5 ~ 784.5 MHz
	LTE Band 17	706.5 ~ 713.5 MHz
	LTE Band 30	2307.5 ~ 2312.5MHz
	LTE Band 38	2572.5 ~ 2617.5MHz
	LTE Band 41	2498.5 ~ 2687.5MHz
	LTE Band 66	1710.7 ~ 1779.3MHz
Max. EIRP Power	WCDMA Band 4	29.82dBm
	LTE Band 4 (Channel Bandwidth 1.4MHz)	29.76dBm
	LTE Band 4 (Channel Bandwidth 3MHz)	29.77dBm
	LTE Band 4 (Channel Bandwidth 5MHz)	29.73dBm
	LTE Band 4 (Channel Bandwidth 10MHz)	29.81dBm
	LTE Band 4 (Channel Bandwidth 15MHz)	29.77dBm
	LTE Band 4 (Channel Bandwidth 20MHz)	29.82dBm
	LTE Band 7 (Channel Bandwidth 5MHz)	28.77dBm
	LTE Band 7 (Channel Bandwidth 10MHz)	28.81dBm
	LTE Band 7 (Channel Bandwidth 15MHz)	28.89dBm
	LTE Band 7 (Channel Bandwidth 20MHz)	28.82dBm
	LTE Band 7 (Channel Bandwidth 15+20MHz)	28.61dBm
	LTE Band 7 (Channel Bandwidth 20+20MHz)	25.88dBm

Max. EIRP Power	LTE Band 38 (Channel Bandwidth 5MHz)	28.41dBm
	LTE Band 38 (Channel Bandwidth 10MHz)	28.34dBm
	LTE Band 38 (Channel Bandwidth 15MHz)	28.40dBm
	LTE Band 38 (Channel Bandwidth 20MHz)	28.40dBm
	LTE Band 38 (Channel Bandwidth 15+15MHz)	27.96dBm
	LTE Band 38 (Channel Bandwidth 20+20MHz)	25.84dBm
	LTE Band 41 (Channel Bandwidth 5MHz)	29.07dBm
	LTE Band 41 (Channel Ban1dwidth 10MHz)	29.03dBm
	LTE Band 41 (Channel Bandwidth 15MHz)	29.04dBm
	LTE Band 41 (Channel Bandwidth 20MHz)	28.99dBm
	LTE Band 41 (Channel Bandwidth 10+5MHz)	28.71dBm
	LTE Band 41 (Channel Bandwidth 20+20MHz)	27.11dBm
	LTE Band 66 (Channel Bandwidth 1.4MHz)	29.66dBm
	LTE Band 66 (Channel Bandwidth 3MHz)	29.68dBm
	LTE Band 66 (Channel Bandwidth 5MHz)	29.70dBm
	LTE Band 66 (Channel Bandwidth 10MHz)	29.66dBm
	LTE Band 66 (Channel Bandwidth 15MHz)	29.65dBm
	LTE Band 66 (Channel Bandwidth 20MHz)	29.70dBm

Max. ERP Power	LTE Band 12 (Channel Bandwidth 1.4MHz)	25.95dBm
	LTE Band 12 (Channel Bandwidth 3MHz)	25.94dBm
	LTE Band 12 (Channel Bandwidth 5MHz)	25.93dBm
	LTE Band 12 (Channel Bandwidth 10MHz)	25.93dBm
	LTE Band 13 (Channel Bandwidth 5MHz)	24.68dBm
	LTE Band 13 (Channel Bandwidth 10MHz)	24.61dBm
	LTE Band 17 (Channel Bandwidth 5MHz)	25.97dBm
	LTE Band 17 (Channel Bandwidth 10MHz)	25.91dBm
Max. EIRP Power Density	LTE Band 30 (Channel Bandwidth 5MHz)	248.31mW/5MHz (23.95dBm/5MHz)
	LTE Band 30 (Channel Bandwidth 10MHz)	234.42mW/5MHz (23.70dBm/5MHz)

Emission Designator	WCDMA Band 4	4M15F9W
	LTE Band 4 (Channel Bandwidth 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09D7W
		64QAM: 1M09D7W
	LTE Band 4 (Channel Bandwidth 3MHz)	QPSK: 2M70G7D
		16QAM: 2M70D7W
		64QAM: 2M70D7W
	LTE Band 4 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M50D7W
		64QAM: 4M50D7W
	LTE Band 4 (Channel Bandwidth 10MHz)	QPSK: 8M98G7D
		16QAM: 8M98D7W
		64QAM: 8M98D7W
	LTE Band 4 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5D7W
		64QAM: 13M5D7W
	LTE Band 4 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 18M0D7W
		64QAM: 18M0D7W
	LTE Band 7 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M49D7W
	LTE Band 7 (Channel Bandwidth 10MHz)	QPSK: 8M97G7D
		16QAM: 8M98D7W
		64QAM: 8M97D7W
	LTE Band 7 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5D7W
		64QAM: 13M5D7W
	LTE Band 7 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 18M0D7W
		64QAM: 18M0D7W
	LTE Band 7 (Channel Bandwidth 15+20MHz)	QPSK: 32M8G7D
	LTE Band 7 (Channel Bandwidth 20+20MHz)	QPSK: 37M4G7D
	LTE Band 12 (Channel Bandwidth 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09D7W
		64QAM: 1M09D7W
	LTE Band 12 (Channel Bandwidth 3MHz)	QPSK: 2M70G7D
		16QAM: 2M70D7W
		64QAM: 2M71D7W
	LTE Band 12 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M49D7W
	LTE Band 12 (Channel Bandwidth 10MHz)	QPSK: 8M98G7D
		16QAM: 8M98D7W
		64QAM: 8M98D7W

Emission Designator	LTE Band 13 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M49D7W
	LTE Band 13 (Channel Bandwidth 10MHz)	QPSK: 8M96G7D
		16QAM: 8M96D7W
		64QAM: 8M95D7W
	LTE Band 17 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M50D7W
	LTE Band 17 (Channel Bandwidth 10MHz)	QPSK: 8M98G7D
		16QAM: 8M99D7W
		64QAM: 8M98D7W
	LTE Band 30 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M49D7W
	LTE Band 30 (Channel Bandwidth 10MHz)	QPSK: 8M97G7D
		16QAM: 8M96D7W
		64QAM: 8M97D7W
	LTE Band 38 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M48D7W
	LTE Band 38 (Channel Bandwidth 10MHz)	QPSK: 8M95G7D
		16QAM: 8M97D7W
		64QAM: 8M96D7W
	LTE Band 38 (Channel Bandwidth 15MHz)	QPSK: 13M4G7D
		16QAM: 13M4D7W
		64QAM: 13M4D7W
	LTE Band 38 (Channel Bandwidth 20MHz)	QPSK: 17M9G7D
		16QAM: 17M9D7W
		64QAM: 17M9D7W
	LTE Band 38 (Channel Bandwidth 15+15MHz)	QPSK: 28M4G7D
	LTE Band 38 (Channel Bandwidth 20+20MHz)	QPSK: 37M5G7D

Emission Designator	LTE Band 41 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M48D7W
	LTE Band 41 (Channel Bandwidth 10MHz)	QPSK: 8M95G7D
		16QAM: 8M96D7W
		64QAM: 8M96D7W
	LTE Band 41 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M4D7W
		64QAM: 13M4D7W
	LTE Band 41 (Channel Bandwidth 20MHz)	QPSK: 17M9G7D
		16QAM: 17M9D7W
		64QAM: 17M9D7W
	LTE Band 41 (Channel Bandwidth 10+5MHz)	QPSK: 13M9G7D
	LTE Band 41 (Channel Bandwidth 20+20MHz)	QPSK: 37M5G7D
	LTE Band 66 (Channel Bandwidth 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09D7W
		64QAM: 1M09D7W
	LTE Band 66 (Channel Bandwidth 3MHz)	QPSK: 2M70G7D
		16QAM: 2M69D7W
		64QAM: 2M70D7W
	LTE Band 66 (Channel Bandwidth 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49D7W
		64QAM: 4M50D7W
	LTE Band 66 (Channel Bandwidth 10MHz)	QPSK: 8M97G7D
		16QAM: 8M98D7W
		64QAM: 8M99D7W
	LTE Band 66 (Channel Bandwidth 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5D7W
		64QAM: 13M5D7W
	LTE Band 66 (Channel Bandwidth 20MHz)	QPSK: 18M0G7D
		16QAM: 18M0D7W
		64QAM: 18M0D7W
Antenna Type	Refer to Note	
Antenna Connector	Refer to Note	
Accessory Device	NA	
Data Cable Supplied	NA	

Note:

1. The antennas provided to the EUT, please refer to the following table:

Antenna No.	Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connecter Type	Cable Length
1	Please refer to below table	699~803	PIFA	i-pex(MHF)	100mm
2	Please refer to below table	791~960 1447.9~1606	PIFA	i-pex(MHF)	100mm
3	Please refer to below table	1710~2170 2500~2690	PIFA	i-pex(MHF)	100mm
4	Please refer to below table	5110~5925 (for LAA RX)	PIFA	i-pex(MHF)	100mm
5	Please refer to below table	2305~2315	Dipole	i-pex(MHF)	80mm

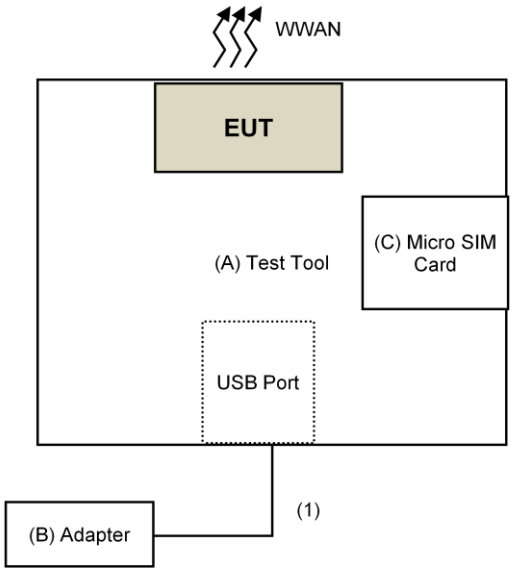
Antenna gain list			
Antenna No.	Band	Freq. Range (MHz)	Gain (dBi)
3	WCDMA II (B2)	1850~1910	4.92
3	WCDMA IV (B4)	1710~1755	5.99
2	WCDMA V (B5)	824~849	2.68
3	LTE Band (2)	1850~1910	4.92
3	LTE Band (4)	1710~1755	5.99
2	LTE Band (5)	824~849	2.68
3	LTE Band (7)	2500~2570	5.2
1	LTE Band (12)	698~716	4.17
1	LTE Band (13)	777~787	3.05
1	LTE Band (14)	788~798	2.87
1	LTE Band (17)	704~716	4.17
3	LTE Band (25)	1850~1915	4.92
2	LTE Band (26)	814~849	2.92
5	LTE Band (30)	2305~2315	3.02
3	LTE Band (38)	2570~2620	4.82
3	LTE Band (41)	2496~2690	5.38
3	LTE Band (66)	1710~1780	5.99

2. This device is UE LTE module that can support carrier aggregation (two carrier) uplink Intra-Band contiguous, specification following as below:

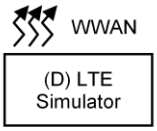
Uplink CA Configurations	Component carriers in order of increasing carrier frequency		Maximum Aggregated Bandwidth [MHz]	Bandwidth Combination Set
	Channel bandwidths for carrier-1 [MHz]	Channel bandwidths for carrier-2 [MHz]		
CA_7C	15	15	40	0
	20	20		
	10	20	40	1
	15	15, 20		
	20	10, 15, 20		
	15	10, 15	40	2
	20	15, 20		
CA_38C	15	15	40	0
	20	20		
CA_41C	10	20	40	0
	15	15, 20		
	20	10, 15, 20		
	5, 10	20	40	1
	15	15, 20		
	20	5, 10, 15, 20		
	10	15, 20	40	2
	15	10, 15, 20		
	20	10, 15, 20		
	10	20	40	3
	20	20		

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

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.	Test Tool	Foxconn	T77W968	NA	NA	Supplied by client
B.	Adapter	ASUS	EXA1205UA	NA	NA	Provided by Lab
C.	SIM Card	NA	NA	NA	NA	Provided by Lab
D.	Simulator	Keysight	E7515A	MY56030229	NA	Provided by Lab

Note:

1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB Cable	1	1	Yes	0	Provided by Lab

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 on X-plane. Following channel(s) was (were) selected for the final test as listed below:

WCDMA Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
Frequency Stability	1312 to 1513	1413	WCDMA
Occupied Bandwidth	1312 to 1513	1312, 1413, 1513	WCDMA
Peak to Average Ratio	1312 to 1513	1312, 1413, 1513	WCDMA
Band Edge	1312 to 1513	1312, 1513	WCDMA
Conducted Emission	1312 to 1513	1312, 1413, 1513	WCDMA
Radiated Emission	1312 to 1513	1312, 1413, 1513	WCDMA

LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	19957 to 20393	20175	1.4MHz	QPSK	-
	19965 to 20385	20175	3MHz	QPSK	-
	19975 to 20375	20175	5MHz	QPSK	-
	20000 to 20350	20175	10MHz	QPSK	-
	20025 to 20325	20175	15MHz	QPSK	-
	20050 to 20300	20175	20MHz	QPSK	-
Occupied Bandwidth	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK/16QAM/64QAM	Full RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK/16QAM/64QAM	Full RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK/16QAM/64QAM	Full RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK/16QAM/64QAM	Full RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK/16QAM/64QAM	Full RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	19957 to 20393	19957	1.4MHz	QPSK	1 RB / 0 RB Offset
		20393			1 RB / 5 RB Offset
		19957, 20393			6 RB / 0 RB Offset
	19965 to 20385	19965	3MHz	QPSK	1 RB / 0 RB Offset
		20385			1 RB / 14 RB Offset
		19965 , 20385			15 RB / 0 RB Offset
	19975 to 20375	19975	5MHz	QPSK	1 RB / 0 RB Offset
		20375			1 RB / 24 RB Offset
		19975, 20375			25 RB / 0 RB Offset
	20000 to 20350	20000	10MHz	QPSK	1 RB / 0 RB Offset
		20350			1 RB / 49 RB Offset
		20000, 20350			50 RB / 0 RB Offset
	20025 to 20325	20025	15MHz	QPSK	1 RB / 0 RB Offset
		20325			1 RB / 74 RB Offset
		20025, 20325			75 RB / 0 RB Offset
	20050 to 20300	20050	20MHz	QPSK	1 RB / 0 RB Offset
		20300			1 RB / 99 RB Offset
		20050, 20300			100 RB / 0 RB Offset

Conducted Emission	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK	1 RB / 0 RB Offset
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 0 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK	1 RB / 0 RB Offset
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK	1 RB / 0 RB Offset

LTE Band 7

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	20775 to 21425	21100	5MHz	QPSK	-
	20800 to 21400	21100	10MHz	QPSK	-
	20825 to 21375	21100	15MHz	QPSK	-
	20850 to 21350	21100	20MHz	QPSK	-
Occupied Bandwidth	20775 to 21425	20775, 21100, 21425	5MHz	QPSK/16QAM/64QAM	Full RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK/16QAM/64QAM	Full RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK/16QAM/64QAM	Full RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	20775 to 21425	20775, 21100, 21425	5MHz	QPSK/16QAM/64QAM	Full RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK/16QAM/64QAM	Full RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK/16QAM/64QAM	Full RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	20775 to 21425	20775	5MHz	QPSK	1 RB / 0 RB Offset
		21425			1 RB / 24 RB Offset
		20775, 21425			25 RB / 0 RB Offset
	20800 to 21400	20800	10MHz	QPSK	1 RB / 0 RB Offset
		21400			1 RB / 49 RB Offset
		20800, 21400			50 RB / 0 RB Offset
	20825 to 21375	20825	15MHz	QPSK	1 RB / 0 RB Offset
		21375			1 RB / 74 RB Offset
		20825, 21375			75 RB / 0 RB Offset
	20850 to 21350	20850	20MHz	QPSK	1 RB / 0 RB Offset
		21350			1 RB / 99 RB Offset
		20850, 21350			100 RB / 0 RB Offset
Conducted Emission	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK	1 RB / 0 RB Offset

LTE CA_7C

TEST ITEM	MODULATION	PCC			SCC		
		CHANNEL BANDWIDTH	TESTED CHANNEL	MODE	CHANNEL BANDWIDTH	TESTED CHANNEL	MODE
EIRP	QPSK	15MHz	21100	1RB / 0 RB offset	20MHz	21271	0RB / 0 RB offset
Frequency Stability	QPSK	15MHz	21100	-	20MHz	21271	-
Occupied Bandwidth	QPSK	15MHz	21100	75RB / 0 RB offset	20MHz	21271	100RB / 0 RB offset
Peak to Average Ratio	QPSK	15MHz	21100	75RB / 0 RB offset	20MHz	21271	100RB / 0 RB offset
Band Edge	QPSK	15MHz	20825	75RB / 0 RB offset	20MHz	20996	100RB / 0 RB offset
				1RB / 0 RB offset			0RB / 0 RB offset
			21179	75RB / 0 RB offset		21350	100RB / 0 RB offset
				0RB / 0 RB offset			1RB / 99 RB offset
Conducted Emission	QPSK	15MHz	21100	1RB / 0 RB offset	20MHz	21271	0RB / 0 RB offset
Radiated Emission	QPSK	15MHz	21100	1RB / 0 RB offset	20MHz	21271	0RB / 0 RB offset

Note: This product supports multiple carriers in intra-band contiguous spectrum operation, therefore test mode and test configurations follow KDB inquiry (more detail infromatmion refer “Operation Description.pdf).

LTE Band 12

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	23017 to 23173	23095	1.4MHz	QPSK	-
	23025 to 23165	23095	3MHz	QPSK	-
	23035 to 23155	23095	5MHz	QPSK	-
	23060 to 23130	23095	10MHz	QPSK	-
Occupied Bandwidth	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK/16QAM/64QAM	Full RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK/16QAM/64QAM	Full RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK/16QAM/64QAM	Full RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	23017 to 23173	23017	1.4MHz	QPSK	1 RB / 0 RB Offset
		23173			1 RB / 5 RB Offset
		23017, 23173			6 RB / 0 RB Offset
	23025 to 23165	23025	3MHz	QPSK	1 RB / 0 RB Offset
		23165			1 RB / 14 RB Offset
		23025, 23165			15 RB / 0 RB Offset
	23035 to 23155	23035	5MHz	QPSK	1 RB / 0 RB Offset
		23155			1 RB / 24 RB Offset
		23035, 23155			25 RB / 0 RB Offset
	23060 to 23130	23060	10MHz	QPSK	1 RB / 0 RB Offset
		23130			1 RB / 49 RB Offset
		23060, 23130			50 RB / 0 RB Offset
Conducted Emission	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	1RB / 0 RB offset
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK	1RB / 0 RB offset
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK	1RB / 0 RB offset
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK	1RB / 0 RB offset

LTE Band 13

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23230	23230	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	23205 to 23255	23230	5MHz	QPSK	-
	23230	23230	10MHz	QPSK	-
Occupied Bandwidth	23205 to 23255	23205, 23230, 23255	5MHz	QPSK/16QAM/64QAM	Full RB
	23230	23230	10MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	23205 to 23255	23205, 23230, 23255	5MHz	QPSK/16QAM/64QAM	Full RB
	23230	23230	10MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	23205 to 23255	23205	5MHz	QPSK	1 RB / 0 RB Offset
		23255			1 RB / 24 RB Offset
		23205, 23255			25 RB / 0 RB Offset
	23230	23230	10MHz	QPSK	1 RB / 0 RB Offset
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset
Conducted Emission	23205 to 23255	23205, 23230, 23255	5MHz	QPSK	1RB / 0 RB offset
	23230	23230	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	23205 to 23255	23205, 23230, 23255	5MHz	QPSK	1RB / 0 RB offset
	23230	23230	10MHz	QPSK	1RB / 0 RB offset

LTE Band 17

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	23755 to 23825	23790	5MHz	QPSK	-
	23780 to 23800	23790	10MHz	QPSK	-
Occupied Bandwidth	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Peak to Average Ratio	23755 to 23825	23755, 23790, 23825	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Band Edge	23755 to 23825	23755	5MHz	QPSK	1 RB / 0 RB Offset
		23825			1 RB / 24 RB Offset
		23755, 23825			25 RB / 0 RB Offset
	23780 to 23800	23780	10MHz	QPSK	1 RB / 0 RB Offset
		23825			1 RB / 49 RB Offset
		23755, 23825			50 RB / 0 RB Offset
Conducted Emission	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1RB / 0 RB offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1RB / 0 RB offset

LTE Band 30

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	27685 to 27735	27685, 27710, 27735	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	27710 to 27710	27710	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	27685 to 27735	27710	5MHz	QPSK	-
	27710 to 27710	27710	10MHz	QPSK	-
Occupied Bandwidth	27685 to 27735	27685, 27710, 27735	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	27710 to 27710	27710	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Peak to Average Ratio	27685 to 27735	27685, 27710, 27735	5MHz	QPSK/16QAM/64QAM	25 RB / 0 RB Offset
	27710 to 27710	27710	10MHz	QPSK/16QAM/64QAM	50 RB / 0 RB Offset
Band Edge	27685 to 27735	27685	5MHz	QPSK	1 RB / 0 RB Offset
		27735			1 RB / 24 RB Offset
		27685, 27735			25 RB / 0 RB Offset
	27710 to 27710	27710	10MHz	QPSK	1 RB / 0 RB Offset
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset
Conducted Emission	27685 to 27735	27685, 27710, 27735	5MHz	QPSK	1RB / 0 RB offset
	27710 to 27710	27710	10MHz	QPSK	1RB / 0 RB offset
Radiated Emission	27685 to 27735	27685, 27710, 27735	5MHz	QPSK	1RB / 0 RB offset
	27710 to 27710	27710	10MHz	QPSK	1RB / 0 RB offset

LTE Band 38

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	37775 to 38225	38000	5MHz	QPSK	-
	37800 to 38200	38000	10MHz	QPSK	-
	37825 to 38175	38000	15MHz	QPSK	-
	37850 to 38150	38000	20MHz	QPSK	-
Occupied Bandwidth	37775 to 38225	37775, 38000, 38225	5MHz	QPSK/16QAM/64QAM	Full RB
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK/16QAM/64QAM	Full RB
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK/16QAM/64QAM	Full RB
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	37775 to 38225	37775, 38000, 38225	5MHz	QPSK/16QAM/64QAM	Full RB
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK/16QAM/64QAM	Full RB
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK/16QAM/64QAM	Full RB
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	37775 to 38225	37775	5MHz	QPSK	1 RB / 0 RB Offset
		38225			1 RB / 24 RB Offset
		37775, 38225			25 RB / 0 RB Offset
	37800 to 38200	37800	10MHz	QPSK	1 RB / 0 RB Offset
		38200			1 RB / 49 RB Offset
		37800, 38200			50 RB / 0 RB Offset
	37825 to 38175	37825	15MHz	QPSK	1 RB / 0 RB Offset
		38175			1 RB / 74 RB Offset
		37825, 38175			75 RB / 0 RB Offset
	37850 to 38150	37850	20MHz	QPSK	1 RB / 0 RB Offset
		38150			1 RB / 99 RB Offset
		37850, 38150			100 RB / 0 RB Offset
Conducted Emission	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB / 0 RB Offset
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK	1 RB / 0 RB Offset
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK	1 RB / 0 RB Offset
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB / 0 RB Offset
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK	1 RB / 0 RB Offset
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK	1 RB / 0 RB Offset
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK	1 RB / 0 RB Offset

LTE CA_38C

TEST ITEM	MODULATION	PCC			SCC		
		CHANNEL BANDWIDTH	TESTED CHANNEL	MODE	CHANNEL BANDWIDTH	TESTED CHANNEL	MODE
EIRP	QPSK	15MHz	38000	1RB / 0 RB offset	15MHz	38150	0RB / 0 RB offset
Frequency Stability	QPSK	15MHz	38000	-	15MHz	38150	-
Occupied Bandwidth	QPSK	15MHz	38000	75RB / 0 RB offset	15MHz	38150	75RB / 0 RB offset
Peak to Average Ratio	QPSK	15MHz	38000	75RB / 0 RB offset	15MHz	38150	75RB / 0 RB offset
Band Edge	QPSK	15MHz	37825	75RB / 0 RB offset	15MHz	37975	75RB / 0 RB offset
				1RB / 0 RB offset			0RB / 0 RB offset
			38025	75RB / 0 RB offset		38175	75RB / 0 RB offset
				0RB / 0 RB offset			1RB / 74 RB offset
Conducted Emission	QPSK	15MHz	38000	1RB / 0 RB offset	15MHz	38150	0RB / 0 RB offset
Radiated Emission	QPSK	15MHz	38000	1RB / 0 RB offset	15MHz	38150	0RB / 0 RB offset

Note: This product supports multiple carriers in intra-band contiguous spectrum operation, therefore test mode and test configurations follow KDB inquiry (more detail infromatmion refer “Operation Description.pdf).

LTE Band 41

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	39675 to 41565	39675, 40620, 41565	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	39675 to 41565	40620	5MHz	QPSK	-
	39700 to 41540	40620	10MHz	QPSK	-
	39725 to 41515	40620	15MHz	QPSK	-
	39750 to 41490	40620	20MHz	QPSK	-
Occupied Bandwidth	39675 to 41565	39675, 40620, 41565	5MHz	QPSK/16QAM/64QAM	Full RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK/16QAM/64QAM	Full RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK/16QAM/64QAM	Full RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	39675 to 41565	39675, 40620, 41565	5MHz	QPSK/16QAM/64QAM	Full RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK/16QAM/64QAM	Full RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK/16QAM/64QAM	Full RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	39675 to 41565	39675	5MHz	QPSK	1 RB / 0 RB Offset
		41565			1 RB / 24 RB Offset
		39675, 41565			25 RB / 0 RB Offset
	39700 to 41540	39700	10MHz	QPSK	1 RB / 0 RB Offset
		41540			1 RB / 49 RB Offset
		39700, 41540			50 RB / 0 RB Offset
	39725 to 41515	39725	15MHz	QPSK	1 RB / 0 RB Offset
		41515			1 RB / 74 RB Offset
		39725, 41515			75 RB / 0 RB Offset
	39750 to 41490	39750	20MHz	QPSK	1 RB / 0 RB Offset
		41490			1 RB / 99 RB Offset
		39750, 41490			100 RB / 0 RB Offset
Conducted Emission	39675 to 41565	39675, 40620, 41565	5MHz	QPSK	1 RB / 0 RB Offset
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0 RB Offset
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK	1 RB / 0 RB Offset
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	39675 to 41565	39675, 40620, 41565	5MHz	QPSK	1 RB / 0 RB Offset
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0 RB Offset
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK	1 RB / 0 RB Offset
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK	1 RB / 0 RB Offset

LTE CA_41C

TEST ITEM	MODULATION	PCC			SCC		
		CHANNEL BANDWIDTH	TESTED CHANNEL	MODE	CHANNEL BANDWIDTH	TESTED CHANNEL	MODE
EIRP	QPSK	10MHz	40620	0RB / 0 RB offset	5MHz	40692	1RB / 24 RB offset
Frequency Stability	QPSK	10MHz	40620	-	5MHz	40692	-
Occupied Bandwidth	QPSK	10MHz	40620	50RB / 0 RB offset	5MHz	40692	25RB / 0 RB offset
Peak to Average Ratio	QPSK	10MHz	40620	50RB / 0 RB offset	5MHz	40692	25RB / 0 RB offset
Band Edge	QPSK	10MHz	39700	50RB / 0 RB offset	5MHz	39772	25RB / 0 RB offset
				1RB / 0 RB offset			0RB / 0 RB offset
			41493	50RB / 0 RB offset		41565	25RB / 0 RB offset
				0RB / 0 RB offset			1RB / 24 RB offset
Conducted Emission	QPSK	10MHz	40620	0RB / 0 RB offset	5MHz	40692	1RB / 24 RB offset
Radiated Emission	QPSK	10MHz	40620	0RB / 0 RB offset	5MHz	40692	1RB / 24 RB offset

Note: This product supports multiple carriers in intra-band contiguous spectrum operation, therefore test mode and test configurations follow KDB inquiry (more detail infromatmion refer “Operation Description.pdf).

LTE Band 66

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Frequency Stability	131979 to 132665	132322	1.4MHz	QPSK	-
	131987 to 132657	132322	3MHz	QPSK	-
	131997 to 132647	132322	5MHz	QPSK	-
	132022 to 132622	132322	10MHz	QPSK	-
	132047 to 132597	132322	15MHz	QPSK	-
	132072 to 132572	132322	20MHz	QPSK	-
Occupied Bandwidth	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK/16QAM/64QAM	Full RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK/16QAM/64QAM	Full RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK/16QAM/64QAM	Full RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK/16QAM/64QAM	Full RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK/16QAM/64QAM	Full RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK/16QAM/64QAM	Full RB
Peak to Average Ratio	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK/16QAM/64QAM	Full RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK/16QAM/64QAM	Full RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK/16QAM/64QAM	Full RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK/16QAM/64QAM	Full RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK/16QAM/64QAM	Full RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK/16QAM/64QAM	Full RB
Band Edge	131979 to 132665	131979	1.4MHz	QPSK	1 RB / 0 RB Offset
		132665			1 RB / 5 RB Offset
		131979, 132665			6 RB / 0 RB Offset
	131987 to 132657	131987	3MHz	QPSK	1 RB / 0 RB Offset
		132657			1 RB / 14 RB Offset
		131987 , 132657			15 RB / 0 RB Offset
	131997 to 132647	131997	5MHz	QPSK	1 RB / 0 RB Offset
		132647			1 RB / 24 RB Offset
		131997, 132647			25 RB / 0 RB Offset
	132022 to 132622	132022	10MHz	QPSK	1 RB / 0 RB Offset
		132622			1 RB / 49 RB Offset
		132022, 132622			50 RB / 0 RB Offset
	132047 to 132597	132047	15MHz	QPSK	1 RB / 0 RB Offset
		132597			1 RB / 74 RB Offset
		132047, 132597			75 RB / 0 RB Offset
	132072 to 132572	132072	20MHz	QPSK	1 RB / 0 RB Offset
		132572			1 RB / 99 RB Offset
		132072, 132572			100 RB / 0 RB Offset

Conducted Emission	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK	1 RB / 0 RB Offset
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK	1 RB / 0 RB Offset
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK	1 RB / 0 RB Offset
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK	1 RB / 0 RB Offset
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK	1 RB / 0 RB Offset
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK	1 RB / 0 RB Offset
Radiated Emission	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK	1 RB / 0 RB Offset
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK	1 RB / 0 RB Offset
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK	1 RB / 0 RB Offset
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK	1 RB / 0 RB Offset
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK	1 RB / 0 RB Offset
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK	1 RB / 0 RB Offset

NOTE:
All supported modulation types were evaluated.The Worst case of QPSK was selected. Therefore, the Frequency Stability, Band Edge, Condcudeted Emission and Radiated Emission were presented under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
EIRP	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Frequency Stability	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Occupied Bandwidth	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Band Edge	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Peak to Average Ratio	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Condcudeted Emission	25deg. C, 60%RH	120Vac, 60Hz	Jynuchun Lin
Radiated Emission Below 1GHz	21deg. C, 68%RH	120Vac, 60Hz	Eason Tseng
Radiated Emission Above 1GHz	21deg. C, 68%RH	120Vac, 60Hz	Eason Tseng

3.4 EUT Operating Conditions

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

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

FCC 47 CFR Part 2

FCC 47 CFR Part 27, Subpart D / F / H / L / M

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For section 27.50(d)(4): Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

For section 27.50(b)(10): Portable stations (hand-held devices) operating in the 698-787 MHz band are limited to 3 watts ERP. In the BRS and EBS Band, Mobile and other user stations are limited to 2.0 watts EIRP.

For section 27.50(h)(2): In the BRS and EBS: Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For section 27.50(a)(3): For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

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 difference RB size/ RB offset for difference bandwidth record the power level shown on power meter.

EIRP / ERP Measurement:

a. EIRP = Conducted Output power level + Antenna gain.
b. ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIPR power - 2.15dBi.
c. ERP = Conducted Output power level + Antenna gain (dBi) - Isotropically Factor (2.15dB)

EIRP Power Density Measurement (For LTE Band 30):

a. The power was measured with Spectrum Analyzer.

b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m/1.5m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. The substitution antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step b. Record the power level of S.G

d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution antenna.

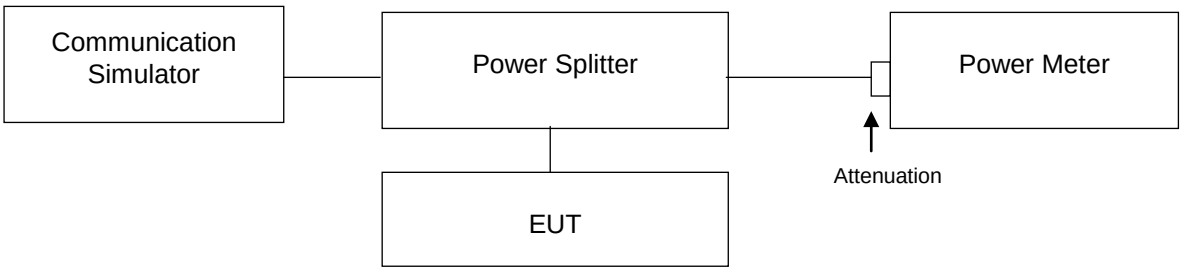
The testing follows FCC KDB 971168 v03r01 Section 5.4.

1. Set the analyzer center frequency to the OBW center frequency.
2. Set the span to 2× to 3× times the OBW bandwidth.
3. Set the RBW to 1% to 5% of the OBW.
4. Set the VBW ≥ 3 × RBW.
5. Set the number of points in sweep ≥ 2×span / RBW.
6. Detector = power averaging (rms).
7. Sweep time = auto couple.
8. Trace mode = Trace average at least 100 traces in power averaging (rms) mode.
9. Allow trace to fully stabilize.
10. Use the integral function to determine the maximum amplitude level within the specified reference bandwidth (PSD).

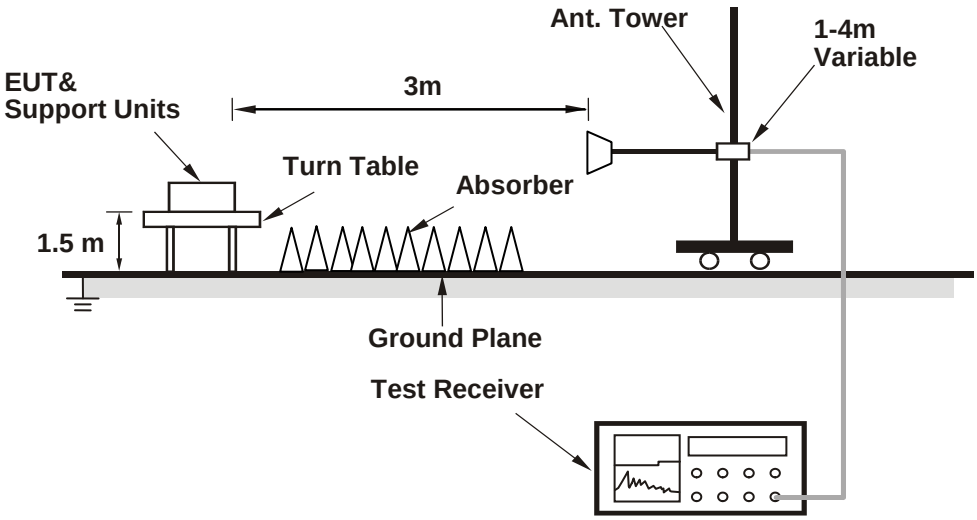
Note: The worst case vertical or horizontal polarization have been investigated and reported in this report

4.1.3 Test Setup

Conducted Power Measurement:



EIRP Power Density Measurement:



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

4.1.4 Test Results

CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA B4		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC	24.04	24.13	24.07
HSDPA Subtest-1	23.51	23.53	23.46
HSDPA Subtest-2	23.71	23.76	23.66
HSDPA Subtest-3	23.45	23.52	23.43
HSDPA Subtest-4	23.47	23.42	23.41
HSUPA Subtest-1	23.34	23.40	23.36
HSUPA Subtest-2	23.74	23.70	23.67
HSUPA Subtest-3	23.56	23.57	23.59
HSUPA Subtest-4	23.37	23.43	23.34
HSUPA Subtest-5	23.73	23.80	23.71

LTE Band 4

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19957	20175	20393		19957	20175	20393		19957	20175	20393	
			1710.7	1732.5	1754.3		1710.7	1732.5	1754.3		1710.7	1732.5	1754.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 1.4M	1	0	23.57	23.77	23.53	0	22.40	22.63	22.26	1	21.55	21.48	21.48	2
	1	2	23.59	23.67	23.52	0	22.33	22.59	22.33	1	21.48	21.32	21.40	2
	1	5	23.59	23.58	23.53	0	22.21	22.53	22.30	1	21.52	21.40	21.50	2
	3	0	23.26	23.63	23.44	0	22.14	22.57	22.42	1	21.49	21.45	21.42	2
	3	1	23.41	23.65	23.42	0	22.32	22.55	22.48	1	21.40	21.49	21.48	2
	3	3	23.28	23.63	23.40	0	22.33	22.49	22.47	1	21.46	21.51	21.55	2
	6	0	22.22	22.59	22.48	1	21.22	21.58	21.42	2	20.52	20.38	20.40	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19965	20175	20385		19965	20175	20385		19965	20175	20385	
			1711.5	1732.5	1753.5		1711.5	1732.5	1753.5		1711.5	1732.5	1753.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 3M	1	0	23.53	23.78	23.57	0	22.56	22.68	22.66	1	21.45	21.55	21.58	2
	1	7	23.51	23.64	23.51	0	22.61	22.55	22.56	1	21.38	21.38	21.61	2
	1	14	23.52	23.72	23.55	0	22.57	22.66	22.55	1	21.40	21.42	21.60	2
	8	0	22.34	22.73	22.52	1	21.40	21.67	21.54	2	20.42	20.39	20.50	3
	8	3	22.34	22.68	22.53	1	21.35	21.64	21.53	2	20.38	20.45	20.52	3
	8	7	22.31	22.65	22.51	1	21.32	21.65	21.52	2	20.33	20.52	20.48	3
	15	0	22.38	22.66	22.63	1	21.44	21.67	21.56	2	20.45	20.50	20.62	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19975	20175	20375		19975	20175	20375		19975	20175	20375	
			1712.5	1732.5	1752.5		1712.5	1732.5	1752.5		1712.5	1732.5	1752.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 5M	1	0	23.54	23.74	23.60	0	22.54	22.67	22.41	1	21.48	21.62	21.58	2
	1	12	23.55	23.66	23.54	0	22.26	22.62	22.35	1	21.45	21.60	21.55	2
	1	24	23.58	23.61	23.50	0	22.17	22.60	22.32	1	21.50	21.57	21.45	2
	12	0	22.39	22.65	22.61	1	21.41	21.62	21.61	2	20.32	20.52	20.52	3
	12	6	22.34	22.67	22.58	1	21.40	21.68	21.63	2	20.38	20.48	20.59	3
	12	13	22.50	22.73	22.55	1	21.41	21.71	21.62	2	20.42	20.55	20.65	3
	25	0	22.48	22.65	22.57	1	21.58	21.62	21.62	2	20.49	20.45	20.61	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20000	20175	20350		20000	20175	20350		20000	20175	20350	
			1715	1732.5	1750		1715	1732.5	1750		1715	1732.5	1750	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 10M	1	0	23.50	23.82	23.58	0	22.73	22.70	22.72	1	21.60	21.68	21.52	2
	1	24	23.54	23.65	23.52	0	22.69	22.55	22.71	1	21.63	21.59	21.48	2
	1	49	23.57	23.68	23.60	0	22.72	22.64	22.65	1	21.65	21.62	21.55	2
	25	0	22.61	22.63	22.58	1	21.74	21.73	21.71	2	20.51	20.43	20.48	3
	25	12	22.50	22.77	22.54	1	21.69	21.72	21.70	2	20.45	20.48	20.51	3
	25	25	22.54	22.76	22.63	1	21.63	21.76	21.65	2	20.48	20.42	20.47	3
	50	0	22.51	22.73	22.59	1	21.65	21.74	21.66	2	20.40	20.38	20.55	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20025	20175	20325		20025	20175	20325		20025	20175	20325	
			1717.5	1732.5	1747.5		1717.5	1732.5	1747.5		1717.5	1732.5	1747.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 15M	1	0	23.61	23.62	23.78	0	22.61	22.65	22.67	1	21.58	21.63	21.58	2
	1	37	23.53	23.54	23.55	0	22.46	22.56	22.41	1	21.62	21.65	21.51	2
	1	74	23.69	23.68	23.56	0	22.54	22.62	22.41	1	21.50	21.62	21.53	2
	36	0	22.54	22.58	22.52	1	21.64	21.63	21.69	2	20.62	20.55	20.48	3
	36	19	22.61	22.58	22.56	1	21.73	21.64	21.63	2	20.56	20.50	20.45	3
	36	39	22.64	22.55	22.62	1	21.67	21.55	21.61	2	20.54	20.54	20.56	3
	75	0	22.68	22.57	22.54	1	21.56	21.65	21.66	2	20.59	20.61	20.51	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20050	20175	20300		20050	20175	20300		20050	20175	20300	
			1720	1732.5	1745		1720	1732.5	1745		1720	1732.5	1745	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 20M	1	0	23.53	23.83	23.75	0	22.65	22.75	22.73	1	21.58	21.63	21.65	2
	1	50	23.60	23.77	23.70	0	22.61	22.55	22.47	1	21.62	21.68	21.60	2
	1	99	23.51	23.71	23.77	0	22.53	22.62	22.39	1	21.68	21.66	21.58	2
	50	0	22.63	22.67	22.61	1	21.34	21.58	21.70	2	20.52	20.44	20.62	3
	50	25	22.62	22.75	22.61	1	21.57	21.65	21.68	2	20.48	20.58	20.55	3
	50	50	22.69	22.69	22.70	1	21.62	21.74	21.76	2	20.38	20.61	20.42	3
	100	0	22.65	22.70	22.55	1	21.64	21.71	21.78	2	20.42	20.52	20.56	3

LTE Band 7

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20775	21100	21425		20775	21100	21425		20775	21100	21425	
			2502.5	2535	2567.5		2502.5	2535	2567.5		2502.5	2535	2567.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 5M	1	0	23.55	23.57	23.54	0	22.18	22.47	22.27	1	21.30	21.44	21.30	2
	1	12	23.56	23.54	23.56	0	22.13	22.49	22.53	1	21.25	21.39	21.28	2
	1	24	23.51	23.51	23.55	0	22.20	22.31	22.48	1	21.32	21.45	21.25	2
	12	0	22.17	22.42	22.11	1	21.45	21.38	21.18	2	20.18	20.32	20.28	3
	12	6	22.17	22.46	22.13	1	21.20	21.41	21.23	2	20.22	20.36	20.31	3
	12	13	22.17	22.31	22.17	1	21.24	21.35	21.16	2	20.38	20.30	20.29	3
	25	0	22.12	22.35	22.15	1	21.28	21.44	21.26	2	20.25	20.28	20.35	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20800	21100	21400		20800	21100	21400		20800	21100	21400	
			2505	2535	2565		2505	2535	2565		2505	2535	2565	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 10M	1	0	23.56	23.61	23.58	0	22.38	22.31	22.38	1	21.38	21.45	21.31	2
	1	24	23.55	23.58	23.55	0	22.30	22.18	22.40	1	21.30	21.48	21.28	2
	1	49	23.51	23.50	23.51	0	22.50	22.20	22.37	1	21.26	21.52	21.35	2
	25	0	22.20	22.43	22.24	1	21.34	21.50	21.28	2	20.20	20.38	20.44	3
	25	12	22.28	22.43	22.26	1	21.39	21.50	21.32	2	20.18	20.40	20.35	3
	25	25	22.28	22.30	22.11	1	21.38	21.45	21.28	2	20.25	20.43	20.29	3
	50	0	22.29	22.41	22.20	1	21.41	21.57	21.28	2	20.31	20.41	20.32	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20825	21100	21375		20825	21100	21375		20825	21100	21375	
			2507.5	2535	2562.5		2507.5	2535	2562.5		2507.5	2535	2562.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 15M	1	0	23.52	23.69	23.51	0	22.23	22.47	22.21	1	21.32	21.55	21.45	2
	1	37	23.53	23.54	23.58	0	22.15	22.42	22.18	1	21.28	21.42	21.51	2
	1	74	23.58	23.55	23.56	0	22.11	22.33	22.26	1	21.42	21.45	21.42	2
	36	0	22.32	22.56	22.21	1	21.37	21.19	21.27	2	20.32	20.29	20.38	3
	36	19	22.28	22.31	22.19	1	21.38	21.45	21.22	2	20.18	20.35	20.45	3
	36	39	22.19	22.45	22.17	1	21.34	21.34	21.19	2	20.25	20.41	20.36	3
	75	0	22.31	22.21	22.30	1	21.33	21.44	21.26	2	20.29	20.38	20.33	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20850	21100	21350		20850	21100	21350		20850	21100	21350	
			2510	2535	2560		2510	2535	2560		2510	2535	2560	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 20M	1	0	23.59	23.54	23.62	0	22.49	22.34	22.47	1	21.35	21.28	21.40	2
	1	50	23.58	23.51	23.56	0	22.48	22.13	22.35	1	21.30	21.30	21.32	2
	1	99	23.57	23.53	23.51	0	22.43	22.18	22.31	1	21.28	21.42	21.28	2
	50	0	22.27	22.47	22.28	1	21.46	21.47	21.45	2	20.21	20.26	20.33	3
	50	25	22.26	22.41	22.12	1	21.46	21.43	21.40	2	20.11	20.32	20.28	3
	50	50	22.34	22.38	22.10	1	21.43	21.47	21.21	2	20.15	20.18	20.25	3
	100	0	22.19	22.34	22.22	1	21.29	21.44	21.32	2	20.16	20.22	20.30	3

LTE CA_7C (PCC/SCC: 10M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	10	QPSK	0	0	20800	2505	7	20	QPSK	1	99	20944	2519.4	0	23.22
			1	0						0	0			0	22.81
			50	0						0	0			0-1	21.7
			50	0						100	0			0-2	20.21
			1	0						1	99			0-8.5	15.1
			1	0						1	0			0-4.5	18.86
			1	49						1	0			0	23.37
			50	0						1	99			0-3.5	16.18
7	10	QPSK	0	0	21100	2535	7	20	QPSK	1	99	21244	2549.4	0	23.04
			1	0						0	0			0	22.73
			50	0						0	0			2	22.11
			50	0						100	0			0-2	20.62
			1	0						1	99			0-8.5	14.76
			1	0						1	0			0-4.5	18.95
			1	49						1	0			0	22.96
			50	0						1	99			0-3.5	18.38
7	10	QPSK	0	0	21206	2545.6	7	20	QPSK	1	99	21350	2560	0	22.92
			1	0						0	0			0	23.03
			50	0						0	0			0-1	21.57
			50	0						100	0			0-2	20.76
			1	0						1	99			0-8.5	14.49
			1	0						1	0			0-4.5	18.72
			1	49						1	0			0	22.99
			50	0						1	99			0-3.5	18.32

LTE CA_7C (PCC/SCC: 15M+10M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	15	QPSK	0	0	20825	2507.5	7	10	QPSK	1	49	20945	2519.5	0	22.59
			1	0						0	0			0	22.5
			75	0						0	0			0-1	20.76
			75	0						50	0			0-2	20.24
			1	0						1	49			0-8.5	14.77
			1	0						1	0			0-4.5	17.41
			1	74						1	0			0	22.64
			75	0						1	49			0-3.5	17.52
7	15	QPSK	0	0	21100	2535	7	10	QPSK	1	49	21220	2547	0	23.05
			1	0						0	0			0	23.07
			75	0						0	0			0-1	21.07
			75	0						50	0			0-2	20.57
			1	0						1	49			0-8.5	14.85
			1	0						1	0			0-4.5	17.65
			1	74						1	0			0	22.75
			75	0						1	49			0-3.5	18.17
7	15	QPSK	0	0	21280	2553	7	10	QPSK	1	49	21400	2565	0	23.04
			1	0						0	0			0	23.14
			75	0						0	0			0-1	21.25
			75	0						50	0			0-2	21.25
			1	0						1	49			0-8.5	14.49
			1	0						1	0			0-4.5	17.39
			1	74						1	0			0	22.26
			75	0						1	49			0-3.5	18.68

LTE CA_7C (PCC/SCC: 15M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	15	QPSK	0	0	20825	2507.5	7	15	QPSK	1	74	20975	2522.5	0	23.14
			1	0						0	0			0	22.76
			75	0						0	0			0-1	21.71
			75	0						75	0			0-2	20.27
			1	0						1	74			0-8.5	14.45
			1	0						1	0			0-4.5	18.03
			1	74						1	0			0	22.01
			75	0						1	74			0-3.5	16.51
7	15	QPSK	0	0	21100	2535	7	15	QPSK	1	74	21250	2550	0	22.87
			1	0						0	0			0	22.83
			75	0						0	0			0-1	20.76
			75	0						75	0			0-2	20.99
			1	0						1	74			0-8.5	15.19
			1	0						1	0			0-4.5	19.26
			1	74						1	0			0	22.79
			75	0						1	74			0-3.5	18.73
7	15	QPSK	0	0	21225	2547.5	7	15	QPSK	1	74	21375	2562.5	0	23.12
			1	0						0	0			0	23.33
			75	0						0	0			0-1	21.99
			75	0						75	0			0-2	21
			1	0						1	74			0-8.5	14.82
			1	0						1	0			0-4.5	18.88
			1	74						1	0			0	22.81
			75	0						1	74			0-3.5	18.28

LTE CA_7C (PCC/SCC: 15M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	15	QPSK	0	0	20825	2507.5	7	20	QPSK	1	99	20996	2524.6	0	23.22
			1	0						0	0			0	22.84
			75	0						0	0			0-1	21.61
			75	0						100	0			0-2	19.62
			1	0						1	99			0-8.5	14.87
			1	0						1	0			0-4.5	18.5
			1	74						1	0			0	22.67
			75	0						1	99			0-3.5	16.54
7	15	QPSK	0	0	21100	2535	7	20	QPSK	1	99	21271	2552.1	0	23.07
			1	0						0	0			0	23.41
			75	0						0	0			0-1	21.89
			75	0						100	0			0-2	20.53
			1	0						1	99			0-8.5	14.76
			1	0						1	0			0-4.5	18.88
			1	74						1	0			0	22.77
			75	0						1	99			0-3.5	18.54
7	15	QPSK	0	0	21179	2542.9	7	20	QPSK	1	99	21350	2560	0	22.87
			1	0						0	0			0	22.75
			75	0						0	0			0-1	21.66
			75	0						100	0			0-2	20.95
			1	0						1	99			0-8.5	14.76
			1	0						1	0			0-4.5	18.68
			1	74						1	0			0	22.97
			75	0						1	99			0-3.5	18.23

LTE CA_7C (PCC/SCC: 20M+10M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	20	QPSK	0	0	20850	2510	7	10	QPSK	1	49	20994	2524.4	0	22.91
			1	0						0	0			0	22.35
			100	0						0	0			0-1	21.22
			100	0						50	0			0-2	20.37
			1	0						1	49			0-8.5	14.59
			1	0						1	0			0-4.5	15.62
			1	99						1	0			0	23.06
			100	0						1	49			0-3.5	17.94
7	20	QPSK	0	0	21100	2535	7	10	QPSK	1	49	21244	2549.4	0	23.08
			1	0						0	0			0	23.14
			100	0						0	0			0-1	19.65
			100	0						50	0			0-2	20.55
			1	0						1	49			0-8.5	14.73
			1	0						1	0			0-4.5	15.78
			1	99						1	0			0	22.92
			100	0						1	49			0-3.5	18.2
7	20	QPSK	0	0	21256	2550.6	7	10	QPSK	1	49	21400	2565	0	23
			1	0						0	0			0	23.18
			100	0						0	0			0-1	21.03
			100	0						50	0			0-2	20.92
			1	0						1	49			0-8.5	14.65
			1	0						1	0			0-4.5	15.7
			1	99						1	0			0	23.06
			100	0						1	49			0-3.5	18.69

LTE CA_7C (PCC/SCC: 20M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	20	QPSK	0	0	20850	2510	7	15	QPSK	1	74	21021	2527.1	0	23.12
			1	0						0	0			0	23.02
			100	0						0	0			0-1	21.46
			100	0						75	0			0-2	20.72
			1	0						1	74			0-8.5	14.65
			1	0						1	0			0-4.5	17.48
			1	99						1	0			0	22.46
			100	0						1	74			0-3.5	18
7	20	QPSK	0	0	21100	2535	7	15	QPSK	1	74	21271	2552.1	0	22.97
			1	0						0	0			0	23.25
			100	0						0	0			0-1	21.29
			100	0						75	0			0-2	20.86
			1	0						1	74			0-8.5	14.98
			1	0						1	0			0-4.5	17.66
			1	99						1	0			0	23.29
			100	0						1	74			0-3.5	18.74
7	20	QPSK	0	0	21204	2545.4	7	15	QPSK	1	74	21375	2562.5	0	23.05
			1	0						0	0			0	23.05
			100	0						0	0			0-1	20.77
			100	0						75	0			0-2	20.75
			1	0						1	74			0-8.5	15.85
			1	0						1	0			0-4.5	17.28
			1	99						1	0			0	22.86
			100	0						1	74			0-3.5	18.08

LTE CA_7C (PCC/SCC: 20M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
7	20	QPSK	0	0	20850	2510	7	20	QPSK	1	99	21048	2529.8	0	22.84
			1	0						0	0			0	22.51
			100	0						0	0			0-1	22.07
			100	0						100	0			0-2	20.32
			1	0						1	99			0-8.5	14.59
			1	0						1	0			0-4.5	18.38
			1	99						1	0			0	22.3
			100	0						1	99			0-3.5	18.61
7	20	QPSK	0	0	21100	2535	7	20	QPSK	1	99	21298	2554.8	0	22.79
			1	0						0	0			0	22.85
			100	0						0	0			0-1	20.94
			100	0						100	0			0-2	20.64
			1	0						1	99			0-8.5	14.49
			1	0						1	0			0-4.5	18.83
			1	99						1	0			0	22.03
			100	0						1	99			0-3.5	18.03
7	20	QPSK	0	0	21152	2540.2	7	20	QPSK	1	99	21350	2560	0	22.75
			1	0						0	0			0	22.69
			100	0						0	0			0-1	21.72
			100	0						100	0			0-2	20.68
			1	0						1	99			0-8.5	14.48
			1	0						1	0			0-4.5	18.76
			1	99						1	0			0	22.01
			100	0						1	99			0-3.5	17.68

LTE Band 12

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23017	23095	23173		23017	23095	23173		23017	23095	23173	
			699.7	707.5	715.3		699.7	707.5	715.3		699.7	707.5	715.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 1.4M	1	0	23.78	23.93	23.73	0	22.71	22.64	22.60	1	21.58	21.55	21.62	2
	1	2	23.80	23.88	23.84	0	22.65	22.68	22.65	1	21.62	21.48	21.58	2
	1	5	23.72	23.84	23.80	0	22.62	22.59	22.59	1	21.55	21.51	21.55	2
	3	0	23.82	23.80	23.88	0	22.57	22.65	22.75	1	21.60	21.62	21.60	2
	3	1	23.88	23.83	23.79	0	22.79	22.71	22.83	1	21.48	21.45	21.63	2
	3	3	23.77	23.89	23.76	0	22.88	22.75	22.81	1	21.50	21.42	21.48	2
	6	0	22.80	22.82	22.71	1	21.71	21.70	21.69	2	20.45	20.33	20.61	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23025	23095	23165		23025	23095	23165		23025	23095	23165	
			700.5	707.5	714.5		700.5	707.5	714.5		700.5	707.5	714.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 3M	1	0	23.89	23.92	23.86	0	22.85	22.81	22.77	1	21.68	21.77	21.71	2
	1	7	23.85	23.91	23.87	0	22.75	22.69	22.67	1	21.71	21.72	21.70	2
	1	14	23.80	23.91	23.84	0	22.70	22.80	22.85	1	21.66	21.69	21.75	2
	8	0	22.89	22.82	22.82	1	21.88	21.87	21.89	2	20.69	20.68	20.65	3
	8	3	22.82	22.87	22.86	1	21.78	21.84	21.86	2	20.55	20.59	20.69	3
	8	7	22.71	22.85	22.84	1	21.73	21.88	21.77	2	20.62	20.61	20.61	3
	15	0	22.79	22.81	22.83	1	21.74	21.81	21.79	2	20.67	20.55	20.68	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23035	23095	23155		23035	23095	23155		23035	23095	23155	
			701.5	707.5	713.5		701.5	707.5	713.5		701.5	707.5	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 5M	1	0	23.87	23.91	23.82	0	22.82	22.76	22.65	1	21.60	21.69	21.75	2
	1	12	23.91	23.59	23.84	0	22.79	22.81	22.71	1	21.66	21.71	21.71	2
	1	24	23.88	23.56	23.78	0	22.72	22.73	22.83	1	21.71	21.59	21.68	2
	12	0	22.78	22.69	22.89	1	21.80	21.84	21.70	2	20.69	20.66	20.65	3
	12	6	22.80	22.69	22.70	1	21.76	21.80	21.79	2	20.76	20.83	20.79	3
	12	13	22.79	22.78	22.86	1	21.69	21.76	21.86	2	20.73	20.69	20.69	3
	25	0	22.69	22.65	22.81	1	21.72	21.69	21.82	2	20.68	20.71	20.73	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23060	23095	23130		23060	23095	23130		23060	23095	23130	
			704	707.5	711		704	707.5	711		704	707.5	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 10M	1	0	23.78	23.79	23.91	0	22.73	22.75	22.78	1	21.69	21.71	21.72	2
	1	24	23.88	23.75	23.82	0	22.86	22.65	22.85	1	21.77	21.66	21.77	2
	1	49	23.77	23.72	23.80	0	22.79	22.58	22.73	1	21.75	21.63	21.69	2
	25	0	22.82	22.88	22.83	1	21.83	21.80	21.80	2	20.69	20.59	20.75	3
	25	12	22.80	22.83	22.86	1	21.75	21.78	21.75	2	20.71	20.66	20.69	3
	25	25	22.82	22.76	22.80	1	21.77	21.72	21.79	2	20.73	20.69	20.68	3
	50	0	22.81	22.86	22.83	1	21.73	21.81	21.85	2	20.65	20.56	20.72	3

LTE Band 13

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23205	23230	23255		23205	23230	23255		23205	23230	23255	
			779.5	782	784.5		779.5	782	784.5		779.5	782	784.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
13 / 5M	1	0	23.77	23.78	23.67	0	22.55	22.71	22.57	1	21.58	21.69	21.55	2
	1	12	23.76	23.76	23.59	0	22.59	22.69	22.48	1	21.61	21.66	21.48	2
	1	24	23.71	23.58	23.66	0	22.66	22.75	22.47	1	21.55	21.60	21.43	2
	12	0	22.66	22.71	22.66	1	21.67	21.58	21.72	2	21.49	20.62	20.38	3
	12	6	22.58	22.72	22.66	1	21.65	21.69	21.71	2	20.62	20.61	20.44	3
	12	13	22.69	22.68	22.66	1	21.60	21.62	21.66	2	20.61	20.48	20.62	3
	25	0	22.73	22.73	22.67	1	21.72	21.70	21.61	2	20.59	20.59	20.49	3

Band / BW	RB Size	RB Offset	QPSK	3GPP MPR (dB)	16QAM	3GPP MPR (dB)	64QAM	3GPP MPR (dB)
			Mid CH		Mid CH		Mid CH	
			23230		23230		23230	
			782		782		782	
			MHz		MHz		MHz	
13 / 10M	1	0	23.71	0	22.70	1	21.40	2
	1	24	23.64	0	22.67	1	21.45	2
	1	49	23.56	0	22.46	1	21.33	2
	25	0	22.79	1	21.65	2	20.49	3
	25	12	22.64	1	21.64	2	20.55	3
	25	25	22.59	1	21.60	2	20.47	3
	50	0	22.66	1	21.40	2	20.51	3

LTE Band 17

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23755	23790	23825		23755	23790	23825		23755	23790	23825	
			706.5	710	713.5		706.5	710	713.5		706.5	710	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 5M	1	0	23.95	23.89	23.81	0	22.64	22.80	22.84	1	21.75	21.75	21.80	2
	1	12	23.77	23.80	23.83	0	22.85	22.78	22.76	1	21.78	21.68	21.79	2
	1	24	23.93	23.79	23.71	0	22.75	22.79	22.72	1	21.73	21.80	21.81	2
	12	0	22.85	22.87	22.82	1	21.86	21.75	21.82	2	20.69	20.69	20.71	3
	12	6	22.75	22.77	22.85	1	21.90	21.85	21.80	2	20.75	20.72	20.68	3
	12	13	22.88	22.86	22.87	1	21.78	21.88	21.84	2	20.77	20.70	20.72	3
	25	0	22.85	22.82	22.91	1	21.83	21.87	21.88	2	20.73	20.76	20.79	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23780	23790	23800		23780	23790	23800		23780	23790	23800	
			709	710	711		709	710	711		709	710	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 10M	1	0	23.89	23.84	23.82	0	22.75	22.76	22.80	1	21.69	21.77	21.73	2
	1	24	23.82	23.86	23.78	0	22.72	22.68	22.79	1	21.70	21.69	21.75	2
	1	49	23.88	23.83	23.87	0	22.69	22.71	22.75	1	21.59	21.63	21.70	2
	25	0	22.82	22.84	22.82	1	21.74	21.69	21.69	2	20.66	20.69	20.62	3
	25	12	22.78	22.77	22.71	1	21.79	21.73	21.75	2	20.65	20.73	20.60	3
	25	25	22.74	22.83	22.76	1	21.80	21.71	21.70	2	20.67	20.65	20.69	3
	50	0	22.78	22.80	22.79	1	21.76	21.69	21.73	2	20.69	20.58	20.65	3

LTE Band 30

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			27685	27710	27735		27685	27710	27735		27685	27710	27735	
			2307.5	2310	2312.5		2307.5	2310	2312.5		2307.5	2310	2312.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
30 / 5M	1	0	23.05	23.08	23.03	0	21.71	21.75	21.50	1	20.72	20.78	20.53	2
	1	12	22.93	22.93	22.86	0	21.51	21.58	21.44	1	20.75	20.69	20.52	2
	1	24	22.83	22.81	22.96	0	21.66	21.61	21.44	1	20.59	20.79	20.65	2
	12	0	21.63	21.50	21.45	1	20.63	20.53	20.55	2	19.77	19.68	19.54	3
	12	6	21.58	21.45	21.37	1	20.41	20.44	20.52	2	19.83	19.63	19.68	3
	12	13	21.57	21.36	21.48	1	20.60	20.64	20.64	2	19.86	19.68	19.61	3
	25	0	21.32	21.45	21.70	1	20.62	20.50	20.49	2	19.78	19.64	19.72	3

Band / BW	RB Size	RB Offset	QPSK	3GPP MPR (dB)	16QAM	3GPP MPR (dB)	64QAM	3GPP MPR (dB)
			Mid CH		Mid CH		Mid CH	
			27710		27710		27710	
			2310		2310		2310	
			MHz		MHz		MHz	
30 / 10M	1	0	23.07	0	21.36	1	20.60	2
	1	24	22.92	0	21.32	1	20.67	2
	1	49	22.92	0	21.39	1	20.48	2
	25	0	21.52	1	20.51	2	19.54	3
	25	12	21.48	1	20.46	2	19.52	3
	25	25	21.44	1	20.53	2	19.55	3
	50	0	21.44	1	20.47	2	19.56	3

LTE Band 38

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37775	38000	38225		37775	38000	38225		37775	38000	38225	
			2572.5	2595	2617.5		2572.5	2595	2617.5		2572.5	2595	2617.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 5M	1	0	23.59	23.53	23.58	0	21.39	22.52	22.47	1	20.33	21.45	21.53	2
	1	12	23.51	23.51	23.50	0	22.10	22.36	22.33	1	21.06	21.34	21.28	2
	1	24	23.58	23.55	23.60	0	22.22	22.51	22.39	1	21.20	21.41	21.34	2
	12	0	22.28	22.34	22.56	1	22.11	21.36	21.62	2	21.04	20.31	20.67	3
	12	6	22.34	22.32	22.56	1	21.25	21.32	21.61	2	20.21	20.26	20.54	3
	12	13	22.41	22.26	22.51	1	21.33	21.28	21.58	2	20.12	20.26	20.64	3
	25	0	22.42	22.28	22.44	1	21.54	21.32	21.69	2	20.51	20.25	20.69	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37800	38000	38200		37800	38000	38200		37800	38000	38200	
			2575	2595	2615		2575	2595	2615		2575	2595	2615	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 10M	1	0	23.51	23.52	23.52	0	22.59	22.23	22.68	1	21.51	21.17	21.62	2
	1	24	23.56	23.50	23.53	0	22.55	22.03	22.74	1	21.38	20.97	21.68	2
	1	49	23.59	23.55	23.54	0	22.56	22.34	22.70	1	21.55	21.38	21.77	2
	25	0	22.41	22.33	22.58	1	21.51	21.51	21.64	2	20.48	20.46	20.62	3
	25	12	22.35	22.27	22.52	1	21.50	21.42	21.59	2	20.49	20.47	20.49	3
	25	25	22.30	22.27	22.55	1	21.45	21.40	21.66	2	20.43	20.39	20.70	3
	50	0	22.31	22.25	22.50	1	21.46	21.41	21.58	2	20.45	20.40	20.55	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37825	38000	38175		37825	38000	38175		37825	38000	38175	
			2577.5	2595	2612.5		2577.5	2595	2612.5		2577.5	2595	2612.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 15M	1	0	23.55	23.58	23.52	0	22.14	23.42	22.39	1	21.13	22.39	21.40	2
	1	37	23.50	23.52	23.54	0	22.01	22.45	22.18	1	20.94	21.39	21.16	2
	1	74	23.57	23.54	23.57	0	22.10	23.28	22.23	1	21.04	22.22	21.25	2
	36	0	22.30	22.45	22.38	1	21.38	21.10	21.43	2	20.47	20.15	20.37	3
	36	19	22.26	22.18	22.24	1	21.27	21.29	21.42	2	20.24	20.35	20.41	3
	36	39	22.30	22.33	22.34	1	21.30	21.27	21.41	2	20.32	20.36	20.45	3
	75	0	22.37	22.15	22.47	1	21.28	21.25	21.45	2	20.27	20.23	20.35	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37850	38000	38150		37850	38000	38150		37850	38000	38150	
			2580	2595	2610		2580	2595	2610		2580	2595	2610	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 20M	1	0	23.58	23.56	23.58	0	22.58	22.42	22.70	1	21.66	21.41	21.64	2
	1	50	23.54	23.51	23.59	0	22.41	22.23	22.54	1	21.48	21.33	21.47	2
	1	99	23.52	23.52	23.53	0	22.44	22.08	22.64	1	21.49	21.17	21.71	2
	50	0	22.29	22.43	22.29	1	21.34	21.59	21.52	2	20.41	20.54	20.45	3
	50	25	22.28	22.35	22.39	1	21.45	21.47	21.51	2	20.40	20.45	20.55	3
	50	50	22.21	22.25	22.22	1	21.34	21.40	21.46	2	20.38	20.33	20.38	3
	100	0	22.35	22.23	22.43	1	21.40	21.50	21.42	2	20.49	20.49	20.36	3

LTE CA_38C (PCC/SCC: 15M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
38	15	QPSK	0	0	37825	2577.5	38	15	QPSK	1	74	37975	2592.5	0	22.6
			1	0						0	0			0	23.14
			75	0						0	0			0-1	21.95
			75	0						75	0			0-2	20.86
			1	0						1	74			0-8.5	14.46
			1	0						1	0			0-4.5	18.4
			1	74						1	0			0	21.35
			75	0						1	74			0-3.5	18.95
38	15	QPSK	0	0	38000	2595	38	15	QPSK	1	74	38150	2610	0	22.85
			1	0						0	0			0	23.13
			75	0						0	0			0-1	21.84
			75	0						75	0			0-2	20.81
			1	0						1	74			0-8.5	14.42
			1	0						1	0			0-4.5	18.24
			1	74						1	0			0	21.47
			75	0						1	74			0-3.5	19.34
38	15	QPSK	0	0	38025	2597.5	38	15	QPSK	1	74	38175	2612.5	0	22.8
			1	0						0	0			0	23.08
			75	0						0	0			0-1	21.86
			75	0						75	0			0-2	20.9
			1	0						1	74			0-8.5	14.47
			1	0						1	0			0-4.5	18.49
			1	74						1	0			0	21.58
			75	0						1	74			0-3.5	19.42

LTE CA_38C (PCC/SCC: 20M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
38	20	QPSK	0	0	37850	2580	38	20	QPSK	1	99	38048	2599.8	0	22.74
			1	0						0	0			0	22.86
			100	0						0	0			0-1	21.97
			100	0						100	0			0-2	20.88
			1	0						1	99			0-8.5	14.24
			1	0						1	0			0-4.5	18.48
			1	99						1	0			0	21.61
			100	0						1	99			0-3.5	19.41
38	20	QPSK	0	0	37901	2585.1	38	20	QPSK	1	99	38099	2604.9	0	22.91
			1	0						0	0			0	23.12
			100	0						0	0			0-1	22.02
			100	0						100	0			0-2	20.92
			1	0						1	99			0-8.5	14.55
			1	0						1	0			0-4.5	18.52
			1	99						1	0			0	21.57
			100	0						1	99			0-3.5	18.65
38	20	QPSK	0	0	37952	2590.2	38	20	QPSK	1	99	38150	2610	0	22.82
			1	0						0	0			0	23.14
			100	0						0	0			0-1	22.01
			100	0						100	0			0-2	21.02
			1	0						1	99			0-8.5	14.53
			1	0						1	0			0-4.5	18.35
			1	99						1	0			0	21.54
			100	0						1	99			0-3.5	19.5

LTE Band 41

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39675	40620	41565		39675	40620	41565		39675	40620	41565	
			2498.5	2593	2687.5		2498.5	2593	2687.5		2498.5	2593	2687.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41/ 5M	1	0	23.57	23.69	23.59	0	22.24	22.55	22.26	1	21.22	21.42	21.28	2
	1	12	23.55	23.57	23.61	0	22.19	22.48	22.18	1	21.35	21.40	21.32	2
	1	24	23.58	23.51	23.66	0	22.21	22.53	22.21	1	21.28	21.45	21.25	2
	12	0	22.09	22.39	22.14	1	21.97	21.37	21.24	2	20.31	20.29	20.11	3
	12	6	22.12	22.34	22.10	1	21.12	21.42	21.25	2	20.25	20.31	20.25	3
	12	13	22.10	22.37	22.12	1	21.15	21.46	21.17	2	20.18	20.41	20.32	3
	25	0	22.06	22.40	22.08	1	21.19	21.49	21.21	2	20.32	20.35	20.28	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39700	40620	41540		39700	40620	41540		39700	40620	41540	
			2501	2593	2685		2501	2593	2685		2501	2593	2685	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41/ 10M	1	0	23.54	23.65	23.53	0	22.50	22.38	22.59	1	21.35	21.33	21.48	2
	1	12	23.52	23.54	23.57	0	22.32	22.17	22.36	1	21.48	21.28	21.38	2
	1	24	23.58	23.58	23.51	0	22.28	22.22	22.25	1	21.33	21.39	21.36	2
	12	0	22.22	22.42	22.26	1	21.26	21.51	21.39	2	20.28	20.42	20.33	3
	12	6	22.22	22.35	22.19	1	21.28	21.56	21.29	2	20.33	20.38	20.42	3
	12	13	22.19	22.39	22.13	1	21.19	21.48	21.29	2	20.25	20.36	20.38	3
	25	0	22.17	22.38	22.20	1	21.30	21.54	21.27	2	20.35	20.45	20.42	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39725	40620	41515		39725	40620	41515		39725	40620	41515	
			2503.5	2593	2682.5		2503.5	2593	2682.5		2503.5	2593	2682.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41/ 15M	1	0	23.53	23.66	23.53	0	22.23	23.50	22.37	1	21.23	21.35	21.32	2
	1	12	23.60	23.55	23.55	0	22.18	22.47	22.26	1	21.26	21.48	21.40	2
	1	24	23.52	23.51	23.59	0	22.27	22.24	22.21	1	21.18	21.42	21.35	2
	12	0	22.31	22.49	22.24	1	21.30	21.19	21.36	2	20.33	20.32	20.35	3
	12	6	22.28	22.32	22.23	1	21.18	22.39	21.26	2	20.41	20.28	20.33	3
	12	13	22.24	22.50	22.26	1	21.10	21.42	21.24	2	20.35	20.31	20.31	3
	25	0	22.10	22.39	22.44	1	21.16	21.36	21.34	2	20.40	20.42	20.38	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39750	40620	41490		39750	40620	41490		39750	40620	41490	
			2506	2593	2680		2506	2593	2680		2506	2593	2680	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41/ 20M	1	0	23.56	23.61	23.59	0	22.52	22.44	22.49	1	21.41	21.38	21.45	2
	1	12	23.53	23.51	23.56	0	22.41	22.30	22.46	1	21.38	21.35	21.41	2
	1	24	23.59	23.56	23.52	0	22.34	22.12	22.23	1	21.40	21.32	21.38	2
	12	0	22.35	22.45	22.47	1	21.51	21.58	21.53	2	20.35	20.45	20.44	3
	12	6	22.26	22.40	22.22	1	21.30	21.56	21.43	2	20.32	20.41	20.35	3
	12	13	22.13	22.34	22.18	1	21.36	21.45	21.30	2	20.38	20.36	20.42	3
	25	0	22.17	22.32	22.21	1	21.21	21.52	21.39	2	20.42	20.45	20.48	3

LTE CA_41C (PCC/SCC: 5M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	5	QPSK	0	0	39675	2498.5	41	20	QPSK	1	99	39792	2510.2	0	23.04
			1	0						0	0			0	22.62
			25	0						0	0			0-1	21.91
			25	0						100	0			0-2	21.52
			1	0						1	99			0-8.5	15.53
			1	0						1	0			0-4.5	18.4
			1	24						1	0			0	22.63
			25	0						1	99			0-3.5	18.43
41	5	QPSK	0	0	40620	2593	41	20	QPSK	1	99	40737	2604.7	0	23.11
			1	0						0	0			0	23.09
			25	0						0	0			0-1	22.43
			25	0						100	0			0-2	21.51
			1	0						1	99			0-8.5	15.56
			1	0						1	0			0-4.5	19.77
			1	24						1	0			0	22.29
			25	0						1	99			0-3.5	19.52
41	5	QPSK	0	0	41373	2668.3	41	20	QPSK	1	99	41490	2680	0	22.97
			1	0						0	0			0	23.27
			25	0						0	0			0-1	22.31
			25	0						100	0			0-2	21.29
			1	0						1	99			0-8.5	14.96
			1	0						1	0			0-4.5	19.37
			1	24						1	0			0	22.97
			25	0						1	99			0-3.5	18.03

LTE CA_41C (PCC/SCC: 10M+5M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	10	QPSK	0	0	39700	2501	41	5	QPSK	1	24	39772	2508.2	0	22.85
			1	0						0	0			0	22.68
			50	0						0	0			0-1	21.75
			50	0						25	0			0-2	21.51
			1	0						1	24			0-8.5	15.73
			1	0						1	0			0-4.5	18.19
			1	49						1	0			0	22.97
			50	0						1	24			0-3.5	17.96
41	10	QPSK	0	0	40620	2593	41	5	QPSK	1	24	40692	2600.2	0	23.33
			1	0						0	0			0	23.26
			50	0						0	0			0-1	22.92
			50	0						25	0			0-2	21.48
			1	0						1	24			0-8.5	15.12
			1	0						1	0			0-4.5	19.5
			1	49						1	0			0	21.83
			50	0						1	24			0-3.5	19.72
41	10	QPSK	0	0	41493	2680.3	41	5	QPSK	1	24	41565	2687.5	0	22.95
			1	0						0	0			0	22.79
			50	0						0	0			0-1	22.02
			50	0						25	0			0-2	20.91
			1	0						1	24			0-8.5	14.69
			1	0						1	0			0-4.5	19.57
			1	49						1	0			0	22.8
			50	0						1	24			0-3.5	18.43

LTE CA_41C (PCC/SCC: 10M+10M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	10	QPSK	0	0	39700	2501	41	10	QPSK	1	49	39799	2510.9	0	23.38
			1	0						0	0			0	22.84
			50	0						0	0			0-1	21.65
			50	0						50	0			0-2	21.9
			1	0						1	49			0-8.5	15.77
			1	0						1	0			0-4.5	18.1
			1	49						1	0			0	22.9
			50	0						1	49			0-3.5	18.58
41	10	QPSK	0	0	40620	2593	41	10	QPSK	1	49	40719	2602.9	0	23.11
			1	0						0	0			0	22.83
			50	0						0	0			0-1	22.27
			50	0						50	0			0-2	21.58
			1	0						1	49			0-8.5	15.92
			1	0						1	0			0-4.5	19.29
			1	49						1	0			0	22.4
			50	0						1	49			0-3.5	20.13
41	10	QPSK	0	0	41441	2675.1	41	10	QPSK	1	49	41540	2685	0	22.92
			1	0						0	0			0	23.24
			50	0						0	0			0-1	22.42
			50	0						50	0			0-2	20.86
			1	0						1	49			0-8.5	14.64
			1	0						1	0			0-4.5	19.88
			1	49						1	0			0	23.62
			50	0						1	49			0-3.5	17.62

LTE CA_41C (PCC/SCC: 10M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	10	QPSK	0	0	39700	2501	41	15	QPSK	1	74	39820	2513	0	22.74
			1	0						0	0			0	22.35
			50	0						0	0			0-1	22.39
			50	0						75	0			0-2	22.12
			1	0						1	74			0-8.5	16.08
			1	0						1	0			0-4.5	18.03
			1	49						1	0			0	22.93
			50	0						1	74			0-3.5	18.61
41	10	QPSK	0	0	40620	2593	41	15	QPSK	1	74	40740	2605	0	22.86
			1	0						0	0			0	23.11
			50	0						0	0			0-1	22.21
			50	0						75	0			0-2	21.73
			1	0						1	74			0-8.5	15.85
			1	0						1	0			0-4.5	20.43
			1	49						1	0			0	22.81
			50	0						1	74			0-3.5	20.09
41	10	QPSK	0	0	41395	2670.5	41	15	QPSK	1	74	41515	2682.5	0	22.72
			1	0						0	0			0	23.9
			50	0						0	0			0-1	22.9
			50	0						75	0			0-2	21.7
			1	0						1	74			0-8.5	14.78
			1	0						1	0			0-4.5	19.09
			1	49						1	0			0	22.88
			50	0						1	74			0-3.5	17.87

LTE CA_41C (PCC/SCC: 10M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	10	QPSK	0	0	39700	2501	41	20	QPSK	1	99	39844	2515.4	0	22.89
			1	0						0	0			0	23.1
			50	0						0	0			0-1	22.27
			50	0						100	0			0-2	22.18
			1	0						1	99			0-8.5	16.08
			1	0						1	0			0-4.5	18.22
			1	49						1	0			0	22.53
			50	0						1	99			0-3.5	18.91
41	10	QPSK	0	0	40620	2593	41	20	QPSK	1	99	40764	2607.4	0	23.42
			1	0						0	0			0	23.07
			50	0						0	0			0-1	22.13
			50	0						100	0			0-2	21.85
			1	0						1	99			0-8.5	15.35
			1	0						1	0			0-4.5	19.34
			1	49						1	0			0	23.03
			50	0						1	99			0-3.5	19.58
41	10	QPSK	0	0	41346	2665.6	41	20	QPSK	1	99	41490	2680	0	22.6
			1	0						0	0			0	22.83
			50	0						0	0			0-1	21.92
			50	0						100	0			0-2	21.34
			1	0						1	99			0-8.5	14.67
			1	0						1	0			0-4.5	19.72
			1	49						1	0			0	23.07
			50	0						1	99			0-3.5	17.91

LTE CA_41C (PCC/SCC: 15M+5M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	15	QPSK	0	0	39725	2503.5	41	5	QPSK	1	24	39818	2512.8	0	23.05
			1	0						0	0			0	22.57
			75	0						0	0			0-1	22.4
			75	0						25	0			0-2	22.23
			1	0						1	24			0-8.5	15.41
			1	0						1	0			0-4.5	18.33
			1	74						1	0			0	22.16
			75	0						1	24			0-3.5	19.13
41	15	QPSK	0	0	40620	2593	41	5	QPSK	1	24	40713	2602.3	0	23.18
			1	0						0	0			0	23.02
			75	0						0	0			0-1	22.64
			75	0						25	0			0-2	21.61
			1	0						1	24			0-8.5	15.88
			1	0						1	0			0-4.5	19.91
			1	74						1	0			0	21.81
			75	0						1	24			0-3.5	19.32
41	15	QPSK	0	0	41472	2678.2	41	5	QPSK	1	24	41565	2687.5	0	23.25
			1	0						0	0			0	23.78
			75	0						0	0			0-1	21.9
			75	0						25	0			0-2	21.72
			1	0						1	24			0-8.5	15.61
			1	0						1	0			0-4.5	19.43
			1	74						1	0			0	23.44
			75	0						1	24			0-3.5	17.74

LTE CA_41C (PCC/SCC: 15M+10M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	15	QPSK	0	0	39725	2503.5	41	10	QPSK	1	49	39845	2515.5	0	23.11
			1	0						0	0			0	23.29
			75	0						0	0			0-1	22.19
			75	0						50	0			0-2	21.55
			1	0						1	49			0-8.5	16
			1	0						1	0			0-4.5	18.8
			1	74						1	0			0	22.58
			75	0						1	49			0-3.5	18.61
41	15	QPSK	0	0	40620	2593	41	10	QPSK	1	49	40740	2605	0	22.92
			1	0						0	0			0	23.1
			75	0						0	0			0-1	22.19
			75	0						50	0			0-2	22.06
			1	0						1	49			0-8.5	15.33
			1	0						1	0			0-4.5	20.16
			1	74						1	0			0	22.07
			75	0						1	49			0-3.5	19.96
41	15	QPSK	0	0	41420	2673	41	10	QPSK	1	49	41540	2685	0	22.75
			1	0						0	0			0	23.76
			75	0						0	0			0-1	22.22
			75	0						50	0			0-2	21.41
			1	0						1	49			0-8.5	15.15
			1	0						1	0			0-4.5	19.35
			1	74						1	0			0	23.2
			75	0						1	49			0-3.5	18.26

LTE CA_41C (PCC/SCC: 15M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	15	QPSK	0	0	39725	2503.5	41	15	QPSK	1	74	39875	2518.5	0	23.16
			1	0						0	0			0	22.65
			75	0						0	0			0-1	21.81
			75	0						75	0			0-2	22.66
			1	0						1	74			0-8.5	16.74
			1	0						1	0			0-4.5	18.92
			1	74						1	0			0	22.46
			75	0						1	74			0-3.5	18.73
41	15	QPSK	0	0	40620	2593	41	15	QPSK	1	74	40770	2608	0	23.08
			1	0						0	0			0	22.59
			75	0						0	0			0-1	22.72
			75	0						75	0			0-2	21.59
			1	0						1	74			0-8.5	15.27
			1	0						1	0			0-4.5	19.77
			1	74						1	0			0	22.7
			75	0						1	74			0-3.5	19.39
41	15	QPSK	0	0	41365	2667.5	41	15	QPSK	1	74	41515	2682.5	0	22.21
			1	0						0	0			0	23.39
			75	0						0	0			0-1	21.81
			75	0						75	0			0-2	21.85
			1	0						1	74			0-8.5	15.2
			1	0						1	0			0-4.5	19.5
			1	74						1	0			0	23.48
			75	0						1	74			0-3.5	17.47

LTE CA_41C (PCC/SCC: 15M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	15	QPSK	0	0	39725	2503.5	41	20	QPSK	1	99	39896	2520.6	0	22.6
			1	0						0	0			0	23.01
			75	0						0	0			0-1	22.55
			75	0						100	0			0-2	21.82
			1	0						1	99			0-8.5	15.61
			1	0						1	0			0-4.5	18.09
			1	74						1	0			0	22.25
			75	0						1	99			0-3.5	19.21
41	15	QPSK	0	0	40620	2593	41	20	QPSK	1	99	40791	2610.1	0	23.47
			1	0						0	0			0	23.59
			75	0						0	0			0-1	22.34
			75	0						100	0			0-2	21.85
			1	0						1	99			0-8.5	15.36
			1	0						1	0			0-4.5	19.17
			1	74						1	0			0	23.65
			75	0						1	99			0-3.5	19.15
41	15	QPSK	0	0	41319	2662.9	41	20	QPSK	1	99	41490	2680	0	22.32
			1	0						0	0			0	22.41
			75	0						0	0			0-1	21.65
			75	0						100	0			0-2	20.98
			1	0						1	99			0-8.5	14.24
			1	0						1	0			0-4.5	20.43
			1	74						1	0			0	23.73
			75	0						1	99			0-3.5	17.81

LTE CA_41C (PCC/SCC: 20M+5M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	20	QPSK	0	0	39750	2506	41	5	QPSK	1	24	39867	2517.7	0	22.72
			1	0						0	0			0	22.32
			100	0						0	0			0-1	22.55
			100	0						25	0			0-2	21.26
			1	0						1	24			0-8.5	15.84
			1	0						1	0			0-4.5	18.32
			1	99						1	0			0	22.94
			100	0						1	24			0-3.5	19.06
41	20	QPSK	0	0	40620	2593	41	5	QPSK	1	24	40737	2604.7	0	22.93
			1	0						0	0			0	23.55
			100	0						0	0			0-1	22.56
			100	0						25	0			0-2	21.73
			1	0						1	24			0-8.5	15.86
			1	0						1	0			0-4.5	19.42
			1	99						1	0			0	22.75
			100	0						1	24			0-3.5	20.15
41	20	QPSK	0	0	41448	2675.8	41	5	QPSK	1	24	41565	2687.5	0	23.3
			1	0						0	0			0	23.26
			100	0						0	0			0-1	22.8
			100	0						25	0			0-2	21.78
			1	0						1	24			0-8.5	15.04
			1	0						1	0			0-4.5	20
			1	99						1	0			0	23.7
			100	0						1	24			0-3.5	18.67

LTE CA_41C (PCC/SCC: 20M+10M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	20	QPSK	0	0	39750	2506	41	10	QPSK	1	49	39894	2520.4	0	23.17
			1	0						0	0			0	23.04
			100	0						0	0			0-1	21.77
			100	0						50	0			0-2	21.6
			1	0						1	49			0-8.5	15.85
			1	0						1	0			0-4.5	19.05
			1	99						1	0			0	22.23
			100	0						1	49			0-3.5	19.16
41	20	QPSK	0	0	40620	2593	41	10	QPSK	1	49	40764	2607.4	0	23.34
			1	0						0	0			0	23.57
			100	0						0	0			0-1	22.98
			100	0						50	0			0-2	21.24
			1	0						1	49			0-8.5	15.71
			1	0						1	0			0-4.5	19.29
			1	99						1	0			0	22.76
			100	0						1	49			0-3.5	19.52
41	20	QPSK	0	0	41396	2670.6	41	10	QPSK	1	49	41540	2685	0	23.01
			1	0						0	0			0	23.43
			100	0						0	0			0-1	22.21
			100	0						50	0			0-2	21.31
			1	0						1	49			0-8.5	15.65
			1	0						1	0			0-4.5	18.95
			1	99						1	0			0	23.22
			100	0						1	49			0-3.5	18.27

LTE CA_41C (PCC/SCC: 20M+15M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	20	QPSK	0	0	39750	2506	41	15	QPSK	1	74	39921	2523.1	0	22.96
			1	0						0	0			0	23.19
			100	0						0	0			0-1	21.52
			100	0						75	0			0-2	21.02
			1	0						1	74			0-8.5	16.2
			1	0						1	0			0-4.5	17.98
			1	99						1	0			0	22.78
			100	0						1	74			0-3.5	18.93
41	20	QPSK	0	0	40620	2593	41	15	QPSK	1	74	40791	2610.1	0	22.9
			1	0						0	0			0	23.44
			100	0						0	0			0-1	22.79
			100	0						75	0			0-2	21.44
			1	0						1	74			0-8.5	15.36
			1	0						1	0			0-4.5	20.47
			1	99						1	0			0	22.67
			100	0						1	74			0-3.5	19.02
41	20	QPSK	0	0	41344	2665.4	41	15	QPSK	1	74	41515	2682.5	0	22.93
			1	0						0	0			0	22.96
			100	0						0	0			0-1	22.86
			100	0						75	0			0-2	20.97
			1	0						1	74			0-8.5	14.96
			1	0						1	0			0-4.5	19.63
			1	99						1	0			0	22.94
			100	0						1	74			0-3.5	18.51

LTE CA_41C (PCC/SCC: 20M+20M)

Intra Band-Contiguous CA															
PCC							SCC							MPR	
Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	MPR Level (dB)	Tx Power with UL-CA Active (dBm) Level (dB)
41	20	QPSK	0	0	39750	2506	41	20	QPSK	1	99	39948	2525.8	0	22.96
			1	0						0	0			0	22.92
			100	0						0	0			0-1	22.24
			100	0						100	0			0-2	21.57
			1	0						1	99			0-8.5	15.17
			1	0						1	0			0-4.5	18.78
			1	99						1	0			0	22.91
			100	0						1	99			0-3.5	18.92
41	20	QPSK	0	0	40620	2593	41	20	QPSK	1	99	40818	2612.8	0	22.94
			1	0						0	0			0	22.91
			100	0						0	0			0-1	22.94
			100	0						100	0			0-2	21.73
			1	0						1	99			0-8.5	15.17
			1	0						1	0			0-4.5	19.52
			1	99						1	0			0	22.96
			100	0						1	99			0-3.5	19.62
41	20	QPSK	0	0	41292	2660.2	41	20	QPSK	1	99	41490	2680	0	23.28
			1	0						0	0			0	23.91
			100	0						0	0			0-1	22.6
			100	0						100	0			0-2	20.93
			1	0						1	99			0-8.5	15.43
			1	0						1	0			0-4.5	19.55
			1	99						1	0			0	23.36
			100	0						1	99			0-3.5	18.4

LTE Band 66

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131979	132322	132665		131979	132322	132665		131979	132322	132665	
			1710.7	1745	1779.3		1710.7	1745	1779.3		1710.7	1745	1779.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 1.4M	1	0	23.60	23.67	23.51	0	22.28	22.48	22.35	1	21.38	21.52	21.36	2
	1	2	23.53	23.66	23.56	0	22.22	22.41	22.31	1	21.42	21.48	21.44	2
	1	5	23.61	23.58	23.53	0	22.18	22.36	22.40	1	21.32	21.36	21.39	2
	3	0	23.22	23.27	23.25	0	22.31	22.40	22.36	1	21.40	21.41	21.33	2
	3	1	23.34	23.31	23.37	0	22.35	22.38	22.33	1	21.33	21.45	21.39	2
	3	3	23.22	23.26	23.26	0	22.28	22.35	22.39	1	21.42	21.38	21.31	2
	6	0	22.35	22.36	22.37	1	21.33	21.42	21.38	2	20.40	20.46	20.44	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131987	132322	132657		131987	132322	132657		131987	132322	132657	
			1711.5	1745	1778.5		1711.5	1745	1778.5		1711.5	1745	1778.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 3M	1	0	23.55	23.69	23.52	0	22.35	22.51	22.48	1	21.30	21.44	21.41	2
	1	7	23.59	23.52	23.54	0	22.41	22.35	22.45	1	21.28	21.36	21.38	2
	1	14	23.61	23.61	23.58	0	22.32	22.45	22.39	1	21.35	21.42	21.35	2
	8	0	22.41	22.35	22.41	1	21.44	21.35	21.52	2	20.42	20.35	20.44	3
	8	3	22.38	22.38	22.36	1	21.40	21.28	21.38	2	20.29	20.40	20.36	3
	8	7	22.36	22.31	22.33	1	21.33	21.33	21.44	2	20.33	20.34	20.39	3
	15	0	22.43	22.48	22.39	1	21.39	21.42	21.41	2	20.39	20.41	20.48	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131997	132322	132647		131997	132322	132647		131997	132322	132647	
			1712.5	1745	1777.5		1712.5	1745	1777.5		1712.5	1745	1777.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 5M	1	0	23.58	23.71	23.54	0	22.43	22.52	22.38	1	21.35	21.44	21.42	2
	1	12	23.59	23.55	23.52	0	22.38	22.48	22.42	1	21.31	21.40	21.36	2
	1	24	23.61	23.61	23.51	0	22.41	22.51	22.45	1	21.40	21.48	21.39	2
	12	0	22.38	22.48	22.38	1	21.38	21.42	21.39	2	20.28	20.39	20.41	3
	12	6	22.35	22.52	22.41	1	21.35	21.38	21.42	2	20.32	20.31	20.34	3
	12	13	22.39	22.39	22.35	1	21.44	21.41	21.35	2	20.19	20.36	20.36	3
	25	0	22.29	22.41	22.40	1	21.38	21.45	21.40	2	20.36	20.40	20.38	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132022	132322	132622		132022	132322	132622		132022	132322	132622	
			1715	1745	1775		1715	1745	1775		1715	1745	1775	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 10M	1	0	23.59	23.62	23.67	0	22.38	22.45	22.51	1	21.28	21.35	21.48	2
	1	24	23.66	23.53	23.52	0	22.40	22.38	22.44	1	21.21	21.30	21.41	2
	1	49	23.62	23.58	23.55	0	22.31	22.40	21.48	1	21.30	21.44	21.45	2
	25	0	22.38	22.36	22.45	1	21.45	21.45	21.35	2	20.36	20.39	20.32	3
	25	12	22.35	22.41	22.41	1	21.38	21.41	21.30	2	20.32	20.43	20.28	3
	25	25	22.28	22.38	22.35	1	21.35	21.35	21.34	2	20.29	20.29	20.36	3
	50	0	22.34	22.43	22.44	1	21.40	21.40	21.39	2	20.35	20.36	20.34	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132047	132322	132597		132047	132322	132597		132047	132322	132597	
			1717.5	1745	1772.5		1717.5	1745	1772.5		1717.5	1745	1772.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 15M	1	0	23.66	23.58	23.54	0	22.49	22.51	22.45	1	21.41	21.50	21.46	2
	1	37	23.52	23.55	23.52	0	22.41	22.45	22.38	1	21.38	21.45	21.38	2
	1	74	23.52	23.56	23.51	0	22.45	22.48	22.34	1	21.36	21.38	21.41	2
	36	0	22.38	22.43	22.37	1	21.38	21.40	21.33	2	20.44	20.41	20.28	3
	36	19	22.41	22.38	22.39	1	21.42	21.35	21.35	2	20.38	20.36	20.32	3
	36	39	22.35	22.40	22.35	1	21.32	21.38	21.31	2	20.40	20.44	20.35	3
	75	0	22.43	22.42	22.40	1	21.40	21.41	21.39	2	20.33	20.38	20.36	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132072	132322	132572		132072	132322	132572		132072	132322	132572	
			1720	1745	1770		1720	1745	1770		1720	1745	1770	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 20M	1	0	23.61	23.71	23.55	0	22.28	22.49	22.47	1	21.33	21.45	21.42	2
	1	50	23.65	23.52	23.50	0	22.22	22.40	22.42	1	21.25	21.48	21.40	2
	1	99	23.54	23.62	23.61	0	22.26	22.38	22.36	1	21.28	21.39	21.45	2
	50	0	22.32	22.39	22.31	1	21.30	21.51	21.41	2	20.31	20.44	20.38	3
	50	25	22.28	22.41	22.38	1	21.36	21.39	21.35	2	20.29	20.39	20.44	3
	50	50	22.35	22.35	22.36	1	21.28	21.42	21.38	2	20.35	20.36	20.36	3
	100	0	22.39	22.43	22.40	1	21.34	21.45	21.43	2	20.41	20.40	20.42	3

EIRP / ERP POWER

Band	WCDMA B4		
Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	23.74	23.83	23.77
Gain (dBi)	5.99	5.99	5.99
Max EIRP Power (dBm)	29.73	29.82	29.76

LTE Band 4

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19957	20175	20393		19957	20175	20393		19957	20175	20393	
			1710.7	1732.5	1754.3		1710.7	1732.5	1754.3		1710.7	1732.5	1754.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 1.4M	1	0	23.57	23.77	23.53	0	22.40	22.63	22.26	1	21.55	21.48	21.48	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.56	29.76	29.52		28.39	28.62	28.25		27.54	27.47	27.47	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19965	20175	20385		19965	20175	20385		19965	20175	20385	
			1711.5	1732.5	1753.5		1711.5	1732.5	1753.5		1711.5	1732.5	1753.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 3M	1	0	23.53	23.78	23.57	0	22.56	22.68	22.66	1	21.45	21.55	21.58	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.52	29.77	29.56		28.55	28.67	28.65		27.44	27.54	27.57	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			19975	20175	20375		19975	20175	20375		19975	20175	20375	
			1712.5	1732.5	1752.5		1712.5	1732.5	1752.5		1712.5	1732.5	1752.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 5M	1	0	23.54	23.74	23.60	0	22.54	22.67	22.41	1	21.48	21.62	21.58	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.53	29.73	29.59		28.53	28.66	28.40		27.47	27.61	27.57	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20000	20175	20350		20000	20175	20350		20000	20175	20350	
			1715	1732.5	1750		1715	1732.5	1750		1715	1732.5	1750	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 10M	1	0	23.50	23.82	23.58	0	22.73	22.70	22.72	1	21.60	21.68	21.52	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.49	29.81	29.57		28.72	28.69	28.71		27.59	27.67	27.51	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20025	20175	20325		20025	20175	20325		20025	20175	20325	
			1717.5	1732.5	1747.5		1717.5	1732.5	1747.5		1717.5	1732.5	1747.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 15M	1	0	23.61	23.62	23.78	0	22.61	22.65	22.67	1	21.58	21.63	21.58	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.60	29.61	29.77		28.60	28.64	28.66		27.57	27.62	27.57	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20050	20175	20300		20050	20175	20300		20050	20175	20300	
			1720	1732.5	1745		1720	1732.5	1745		1720	1732.5	1745	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
4 / 20M	1	0	23.53	23.83	23.75	0	22.65	22.75	22.73	1	21.58	21.63	21.65	2
Gain (dBi)			5.99	5.99	5.99		5.99	5.99	5.99		5.99	5.99	5.99	
Max EIRP Power (dBm)			29.52	29.82	29.74		28.64	28.74	28.72		27.57	27.62	27.64	

LTE Band 7

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20775	21100	21425		20775	21100	21425		20775	21100	21425	
			2502.5	2535	2567.5		2502.5	2535	2567.5		2502.5	2535	2567.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 5M	1	0	23.55	23.57	23.54	0	22.18	22.47	22.27	1	21.30	21.44	21.30	2
Gain (dBi)			5.2	5.2	5.2		5.2	5.2	5.2		5.2	5.2	5.2	
Max EIRP Power (dBm)			28.75	28.77	28.74		27.38	27.67	27.47		26.50	26.64	26.50	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20800	21100	21400		20800	21100	21400		20800	21100	21400	
			2505	2535	2565		2505	2535	2565		2505	2535	2565	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 10M	1	0	23.56	23.61	23.58	0	22.38	22.31	22.38	1	21.38	21.45	21.31	2
Gain (dBi)			5.2	5.2	5.2		5.2	5.2	5.2		5.2	5.2	5.2	
Max EIRP Power (dBm)			28.76	28.81	28.78		27.58	27.51	27.58		26.58	26.65	26.51	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20825	21100	21375		20825	21100	21375		20825	21100	21375	
			2507.5	2535	2562.5		2507.5	2535	2562.5		2507.5	2535	2562.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 15M	1	0	23.52	23.69	23.51	0	22.23	22.47	22.21	1	21.32	21.55	21.45	2
Gain (dBi)			5.2	5.2	5.2		5.2	5.2	5.2		5.2	5.2	5.2	
Max EIRP Power (dBm)			28.72	28.89	28.71		27.43	27.67	27.41		26.52	26.75	26.65	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20850	21100	21350		20850	21100	21350		20850	21100	21350	
			2510	2535	2560		2510	2535	2560		2510	2535	2560	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
7 / 20M	1	0	23.59	23.54	23.62	0	22.49	22.34	22.47	1	21.35	21.28	21.40	2
Gain (dBi)			5.2	5.2	5.2		5.2	5.2	5.2		5.2	5.2	5.2	
Max EIRP Power (dBm)			28.79	28.74	28.82		27.69	27.54	27.67		26.55	26.48	26.60	

LTE CA_7C (PCC/SCC: 15M+20M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
21100+21271	2535+2552.1	1	0	0	0	23.41	5.20	28.61	726.11

LTE CA_7C (PCC/SCC: 20M+20M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
21152+21350	2540.2+2560	100	0	100	0	20.68	5.20	25.88	387.26

LTE Band 12

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23017	23095	23173		23017	23095	23173		23017	23095	23173	
			699.7	707.5	715.3		699.7	707.5	715.3		699.7	707.5	715.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 1.4M	1	0	23.78	23.93	23.73	0	22.71	22.64	22.60	1	21.58	21.55	21.62	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.80	25.95	25.75		24.73	24.66	24.62		23.60	23.57	23.64	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23025	23095	23165		23025	23095	23165		23025	23095	23165	
			700.5	707.5	714.5		700.5	707.5	714.5		700.5	707.5	714.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 3M	1	0	23.89	23.92	23.86	0	22.85	22.81	22.77	1	21.68	21.77	21.71	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.91	25.94	25.88		24.87	24.83	24.79		23.70	23.79	23.73	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23035	23095	23155		23035	23095	23155		23035	23095	23155	
			701.5	707.5	713.5		701.5	707.5	713.5		701.5	707.5	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 5M	1	0	23.87	23.91	23.82	0	22.82	22.76	22.65	1	21.60	21.69	21.75	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.89	25.93	25.84		24.84	24.78	24.67		23.62	23.71	23.77	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23060	23095	23130		23060	23095	23130		23060	23095	23130	
			704	707.5	711		704	707.5	711		704	707.5	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
12 / 10M	1	0	23.78	23.79	23.91	0	22.73	22.75	22.78	1	21.69	21.71	21.72	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.80	25.81	25.93		24.75	24.77	24.80		23.71	23.73	23.74	

LTE Band 13

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23205	23230	23255		23205	23230	23255		23205	23230	23255	
			779.5	782	784.5		779.5	782	784.5		779.5	782	784.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
13 / 5M	1	0	23.77	23.78	23.67	0	22.55	22.71	22.57	1	21.58	21.69	21.55	2
Gain (dBi)			3.05	3.05	3.05		3.05	3.05	3.05		3.05	3.05	3.05	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			24.67	24.68	24.57		23.45	23.61	23.47		22.48	22.59	22.45	

Band / BW	RB Size	RB Offset	QPSK	3GPP MPR (dB)	16QAM	3GPP MPR (dB)	64QAM	3GPP MPR (dB)
			Mid CH		Mid CH		Mid CH	
			23230		23230		23230	
			782		782		782	
			MHz		MHz		MHz	
13 / 10M	1	0	23.71	0	22.70	1	21.40	2
Gain (dBi)			3.05		3.05		3.05	
Isotropically Factor (dBc)			2.15		2.15		2.15	
Max ERP Power (dBm)			24.61		23.60		22.30	

LTE Band 17

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23755	23790	23825		23755	23790	23825		23755	23790	23825	
			706.5	710	713.5		706.5	710	713.5		706.5	710	713.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 5M	1	0	23.95	23.89	23.81	0	22.64	22.80	22.84	1	21.75	21.75	21.80	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.97	25.91	25.83		24.66	24.82	24.86		23.77	23.77	23.82	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			23780	23790	23800		23780	23790	23800		23780	23790	23800	
			709	710	711		709	710	711		709	710	711	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
17 / 10M	1	0	23.89	23.84	23.82	0	22.75	22.76	22.80	1	21.69	21.77	21.73	2
Gain (dBi)			4.17	4.17	4.17		4.17	4.17	4.17		4.17	4.17	4.17	
Isotropically Factor (dBc)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max ERP Power (dBm)			25.91	25.86	25.84		24.77	24.78	24.82		23.71	23.79	23.75	

LTE Band 38

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37775	38000	38225		37775	38000	38225		37775	38000	38225	
			2572.5	2595	2617.5		2572.5	2595	2617.5		2572.5	2595	2617.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 5M	1	24	23.59	23.53	23.58	0	21.39	22.52	22.47	1	20.33	21.45	21.53	2
Gain (dBi)			4.82	4.82	4.82		4.82	4.82	4.82		4.82	4.82	4.82	
Max EIRP Power (dBm)			28.41	28.35	28.40		26.21	27.34	27.29		25.15	26.27	26.35	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37800	38000	38200		37800	38000	38200		37800	38000	38200	
			2575	2595	2615		2575	2595	2615		2575	2595	2615	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 10M	1	49	23.51	23.52	23.52	0	22.59	22.23	22.68	1	21.51	21.17	21.62	2
Gain (dBi)			4.82	4.82	4.82		4.82	4.82	4.82		4.82	4.82	4.82	
Max EIRP Power (dBm)			28.33	28.34	28.34		27.41	27.05	27.50		26.33	25.99	26.44	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37825	38000	38175		37825	38000	38175		37825	38000	38175	
			2577.5	2595	2612.5		2577.5	2595	2612.5		2577.5	2595	2612.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 15M	1	0	23.55	23.58	23.52	0	22.14	23.42	22.39	1	21.13	22.39	21.40	2
Gain (dBi)			4.82	4.82	4.82		4.82	4.82	4.82		4.82	4.82	4.82	
Max EIRP Power (dBm)			28.37	28.40	28.34		26.96	28.24	27.21		25.95	27.21	26.22	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			37850	38000	38150		37850	38000	38150		37850	38000	38150	
			2580	2595	2610		2580	2595	2610		2580	2595	2610	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
38 / 20M	1	50	23.58	23.56	23.58	0	22.58	22.42	22.70	1	21.66	21.41	21.64	2
Gain (dBi)			4.82	4.82	4.82		4.82	4.82	4.82		4.82	4.82	4.82	
Max EIRP Power (dBm)			28.40	28.38	28.40		27.40	27.24	27.52		26.48	26.23	26.46	

LTE CA_38C (PCC/SCC: 15M+15M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
37825+37975	2577.5+2592.5	1	0	0	0	23.14	4.82	27.96	625.17

LTE CA_38C (PCC/SCC: 20M+20M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
37952+38150	2590.2+2610	100	0	100	0	21.02	4.82	25.84	383.71

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Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39675	40620	41565		39675	40620	41565		39675	40620	41565	
			2498.5	2593	2687.5		2498.5	2593	2687.5		2498.5	2593	2687.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41 / 5M	1	0	23.57	23.69	23.59	0	22.24	22.55	22.26	1	21.22	21.42	21.28	2
Gain (dBi)			5.38	5.38	5.38		5.38	5.38	5.38		5.38	5.38	5.38	
Max EIRP Power (dBm)			28.95	29.07	28.97		27.62	27.93	27.64		26.60	26.80	26.66	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39700	40620	41540		39700	40620	41540		39700	40620	41540	
			2501	2593	2685		2501	2593	2685		2501	2593	2685	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41 / 10M	1	0	23.54	23.65	23.53	0	22.50	22.38	22.59	1	21.35	21.33	21.48	2
Gain (dBi)			5.38	5.38	5.38		5.38	5.38	5.38		5.38	5.38	5.38	
Max EIRP Power (dBm)			28.92	29.03	28.91		27.88	27.76	27.97		26.73	26.71	26.86	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39725	40620	41515		39725	40620	41515		39725	40620	41515	
			2503.5	2593	2682.5		2503.5	2593	2682.5		2503.5	2593	2682.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41 / 15M	1	0	23.53	23.66	23.53	0	22.23	23.50	22.37	1	21.23	21.35	21.32	2
Gain (dBi)			5.38	5.38	5.38		5.38	5.38	5.38		5.38	5.38	5.38	
Max EIRP Power (dBm)			28.91	29.04	28.91		27.61	28.88	27.75		26.61	26.73	26.70	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			39750	40620	41490		39750	40620	41490		39750	40620	41490	
			2506	2593	2680		2506	2593	2680		2506	2593	2680	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
41 / 20M	1	0	23.56	23.61	23.59	0	22.52	22.44	22.49	1	21.41	21.38	21.45	2
Gain (dBi)			5.38	5.38	5.38		5.38	5.38	5.38		5.38	5.38	5.38	
Max EIRP Power (dBm)			28.94	28.99	28.97		27.90	27.82	27.87		26.79	26.76	26.83	

LTE CA_41C (PCC/SCC: 10M+5M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
40620+40692	2593+2600.2	0	0	1	24	23.33	5.38	28.71	743.02

LTE CA_41C (PCC/SCC: 20M+20M)

Channel Number	Freq. (MHz)	QPSK							
		PCC		SCC		Conducted Power	Gain	EIRP(dBm)	EIRP(mW)
		RB Number	RB Set	RB Number	RB Set	Chain 0			
40620+40818	2593+2612.8	100	0	100	0	21.73	5.38	27.11	514.04

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Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131979	132322	132665		131979	132322	132665		131979	132322	132665	
			1710.7	1745	1779.3		1710.7	1745	1779.3		1710.7	1745	1779.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 1.4M	1	0	23.60	23.67	23.51		22.28	22.48	22.35		21.38	21.52	21.36	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.59	29.66	29.50		28.27	28.47	28.34		27.37	27.51	27.35	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131987	132322	132657		131987	132322	132657		131987	132322	132657	
			1711.5	1745	1778.5		1711.5	1745	1778.5		1711.5	1745	1778.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 3M	1	0	23.55	23.69	23.52		22.35	22.51	22.48		21.30	21.44	21.41	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.54	29.68	29.51		28.34	28.50	28.47		27.29	27.43	27.40	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			131997	132322	132647		131997	132322	132647		131997	132322	132647	
			1712.5	1745	1777.5		1712.5	1745	1777.5		1712.5	1745	1777.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 5M	1	0	23.58	23.71	23.54		22.43	22.52	22.38		21.35	21.44	21.42	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.57	29.70	29.53		28.42	28.51	28.37		27.34	27.43	27.41	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132022	132322	132622		132022	132322	132622		132022	132322	132622	
			1715	1745	1775		1715	1745	1775		1715	1745	1775	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 10M	1	0	23.59	23.62	23.67		22.38	22.45	22.51		21.28	21.35	21.48	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.58	29.61	29.66		28.37	28.44	28.50		27.27	27.34	27.47	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132047	132322	132597		132047	132322	132597		132047	132322	132597	
			1717.5	1745	1772.5		1717.5	1745	1772.5		1717.5	1745	1772.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 15M	1	0	23.66	23.58	23.54		22.49	22.51	22.45		21.41	21.50	21.46	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.65	29.57	29.53		28.48	28.50	28.44		27.40	27.49	27.45	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			132072	132322	132572		132072	132322	132572		132072	132322	132572	
			1720	1745	1770		1720	1745	1770		1720	1745	1770	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
66 / 20M	1	0	23.61	23.71	23.55		22.28	22.49	22.47		21.33	21.45	21.42	
Gain (dBi)			5.99	5.99	5.99	0	5.99	5.99	5.99	1	5.99	5.99	5.99	2
Max EIRP Power (dBm)			29.60	29.70	29.54		28.27	28.48	28.46		27.32	27.44	27.41	

EIRP Power Density

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QPSK / 5M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27685	2307.5	H	16.67	6.75	23.85	242.66
27710	2310	H	16.76	6.74	23.95	248.31
27735	2312.5	H	16.44	6.74	23.73	236.05

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

QPSK / 10M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27710	2310	H	16.46	6.74	23.70	234.42

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

16QAM / 5M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27685	2307.5	H	16.47	6.75	23.10	204.17
27710	2310	H	16.56	6.74	23.25	211.35
27735	2312.5	H	16.24	6.74	23.01	199.99

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

16QAM / 10M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27710	2310	H	16.36	6.74	23.16	207.01

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

64QAM / 5M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27685	2307.5	H	16.07	6.75	22.96	197.70
27710	2310	H	16.16	6.74	23.08	203.24
27735	2312.5	H	15.94	6.74	22.87	193.64

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

64QAM / 10M

Channel	Frequency (MHz)	Antenna Polarization	LVL (dBm/5MHz)	Correction Factor(dB)	EIRP Power Density (dBm/5MHz)	EIRP Power Density (mW /5MHz)
27710	2310	H	16.06	6.74	22.82	191.43

Note: The worst case vertical or horizontal polarization have been investigated and find the worst is horizontal.

4.2 Modulation characteristics Measurement

4.2.1 Limits of Modulation characteristics

N/A

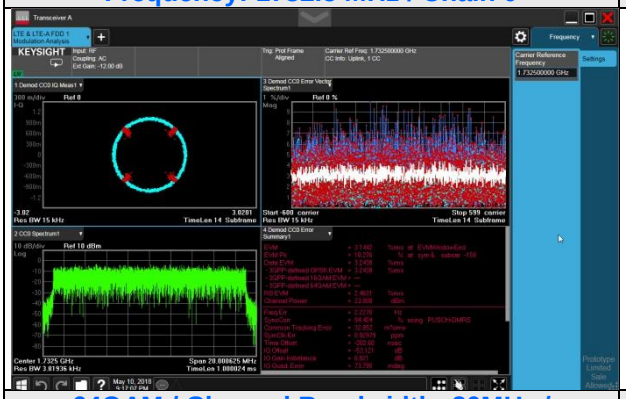
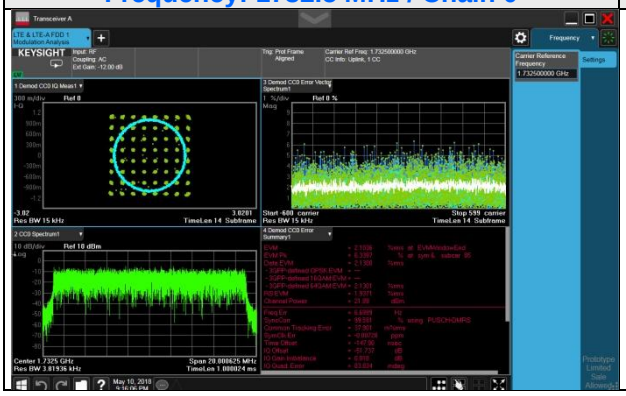
4.2.2 Test Procedure

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

LTE Band 4

QPSK / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0	16QAM / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0
	
64QAM / Channel Bandwidth: 20MHz / Frequency: 1732.5 MHz / Chain 0	
	

LTE Band 7

QPSK / Channel Bandwidth: 20MHz / Frequency: 2560 MHz / Chain 0	16QAM / Channel Bandwidth: 20MHz / Frequency: 2560 MHz / Chain 0
	
64QAM / Channel Bandwidth: 20MHz / Frequency: 2560 MHz / Chain 0