FCC Test Report

Report No.: AGC01689210803FE07

FCC ID	:	2A2UU-P3
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	POS terminal
BRAND NAME	:	Dejavoo, Kozen, Kobile, Kripto
MODEL NAME	:	P3
APPLICANT	:	Shanghai Xiangcheng Communication Technology Co., LTD
DATE OF ISSUE	:	Sep. 03, 2021
STANDARD(S)	:	FCC Part 22 Rules FCC Part 24 Rules FCC Part 27 Rules FCC Part 90 Rules
REPORT VERSION	:	V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd.

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Aug. 25, 2021	Valid	Initial Release

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1. GENERAL INFORMATION

Applicant	Shanghai Xiangcheng Communication Technology Co., LTD
Address	Room 401, Building 5, No.3000 Longdong Avenue, Pudong New District, Shanghai 201203 CHINA
Manufacturer	Shanghai Xiangcheng Communication Technology Co., LTD
Address	Room 401, Building 5, No.3000 Longdong Avenue, Pudong New District, Shanghai 201203 CHINA
Factory	Sichuan Xiangcheng Intelligent Technology Co., Ltd.
Address	Factory No. 2, Zone A, Intelligent Terminal Demonstration Park, West Section of Gangyuan Road, Lingang Economic Development Zone, Yibin City, Sichuan Province
Product Designation	POS terminal
Brand Name	Dejavoo, Kozen, Kobile, Kripto
Test Model	P3
Date of test	Aug. 11, 2021~Aug. 26, 2021
Deviation	No any deviation from the test method.
Condition of Test Sample	Normal

WE HEREBY CERTIFY THAT:

The above equipment was tested by Attestation of Global Compliance(Shenzhen) Co., Ltd. The data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI/TIA-603-E-2016. The sample tested as described in this report is in compliance with the FCC Rules Part 22, 24, 27and 90. The test results of this report relate only to the tested sample identified in this report.

Prepared By

Bibo Zhang
(Project Engineer) Aug. 26, 2021

Reviewed By

Calvin Liu
(Reviewer) Sep. 03, 2021

Approved By

Forrest Lei
Authorized Officer Sep. 03, 2021

2. PRODUCT INFORMATION

2.1 PRODUCT TECHNICAL DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	POS terminal			
Hardware Version:	Dejavoo, kozen, kobile			
Software Version:	P3			
Radio System Type:	LTE FUNCTION			
Frequency Bands:	☒FDD Band 2 ☒FDD Band 12 ☒FDD Band 26 ☐FDD Band 66 ☒FDD Band 1 ☒FDD Band 28 (Non-U.S. Bands)	☒FDD Band 4 ☐FDD Band 13 ☒TDD Band 38 ☐TDD Band 71 ☒FDD Band 3 ☒FDD Band 38	☒FDD Band 5 ☒FDD Band 17 ☐TDD Band 40 (U.S. Bands) ☒FDD Band 7 ☐TDD Band 40	☒FDD Band 7 ☒FDD Band 25 ☒TDD Band 41 ☐FDD Band 20 ☐TDD Band 41

Transmission Frequency Range:	LTE-Band 2	1850.7 MHz – 1909.3 MHz---(1.4MHz)
		1851.5 MHz – 1908.5 MHz---(3.0MHz)
		1852.5 MHz – 1907.5 MHz---(5.0MHz)
		1855.0 MHz – 1905.0 MHz---(10.0MHz)
		1857.5 MHz – 1902.5 MHz---(15.0MHz)
		1860.0 MHz – 1900.0 MHz---(20.0MHz)
	LTE-Band 4	1710.7 MHz – 1754.3 MHz---(1.4MHz)
		1711.5 MHz – 1753.5 MHz---(3.0MHz)
		1712.5 MHz – 1752.5 MHz---(5.0MHz)
		1715.0 MHz – 1750.0 MHz---(10.0MHz)
		1717.5 MHz – 1747.5 MHz---(15.0MHz)
		1720.0 MHz – 1745.0 MHz---(20.0MHz)
	LTE-Band 5	824.7 MHz – 848.3 MHz---(1.4MHz)
		825.5 MHz – 847.7 MHz---(3.0MHz)
		826.5 MHz – 846.5 MHz---(5.0MHz)
		829.0 MHz – 844.0 MHz---(10.0MHz)
	LTE-Band 7	2502.5 MHz – 2567.5 MHz---(5.0MHz)
		2505.0 MHz – 2565.0 MHz---(10.0MHz)
		2507.5 MHz – 2562.5 MHz---(15.0MHz)
		2510.0 MHz – 2560.0 MHz---(20.0MHz)
	LTE-Band 12	699.7 MHz – 715.3 MHz---(1.4MHz)

		700.5 MHz – 714.5 MHz---(3.0MHz)		
		701.5 MHz – 713.5 MHz---(5.0MHz)		
		704.0 MHz – 711.0 MHz---(10.0MHz)		
	LTE-Band 17	706.5 MHz – 713.5 MHz---(5.0MHz)		
		709.0 MHz – 711.0 MHz---(10.0MHz)		
	LTE-Band 25	1850.7 MHz – 1914.3 MHz---(1.4MHz)		
		1851.5 MHz – 1913.5 MHz---(3.0MHz)		
		1852.5 MHz – 1912.5 MHz---(5.0MHz)		
		1855.0 MHz – 1910.0 MHz---(10.0MHz)		
		1857.5 MHz – 1907.5 MHz---(15.0MHz)		
	LTE-Band 26A	824.7 MHz –848.3 MHz---(1.4MHz)		
		825.5 MHz–847.5 MHz---(3.0MHz)		
		826.5 MHz-846.5 MHz ---(5.0MHz)		
		829 MHz-844 MHz---(10.0MHz)		
		831.5 MHz-841.5 MHz ---(15.0MHz)		
	LTE-Band 26B	814.7 MHz-823.3 MHz ---(1.4MHz)		
		815.5 MHz -822.5 MHz---(3.0MHz)		
		816.5 MHz -821.5 MHz---(5.0MHz)		
		819.0 MHz -819.0 MHz---(10.0MHz)		
		821.5 MHz -821.5 MHz ---(15.0MHz)		
	LTE-Band 38	2572.5 MHz-2617.5 MHz ---(5.0MHz)		
		2575 MHz-2615MHz---(10.0MHz)		
		2577.5 MHz-2612.5 MHz ---(15.0MHz)		
		2580 MHz-2610 MHz---(20.0MHz)		
	LTE-Band 41	2498.5 MHz –2687.5 MHz---(5.0MHz)		
		2501.0 MHz –2685.0 MHz---(10.0MHz)		
		2503.5 MHz –2682.5 MHz---(15.0MHz)		
		2506.0 MHz –2680.0 MHz---(20.0MHz)		
Antenna Type:	PIFA Antenna			
Type of Modulation:	QPSK/16QAM			
Antenna gain:	Band 2: 2.00dBi	Band 4: 1.89dBi	Band 5:2.00dBi	Band 7:1.26dBi
	Band 12:1.15dBi	Band 17:1.33dBi	Band 25: 1.45dBi	Band 26: 1.42dBi
	Band 38: 1.26dBi	Band 41: 1.22dBi		
Diversity Antenna gain:	Band 2: 1.78dBi	Band 4: 1.74dBi	Band 5: 1.58dBi	Band 7: 1.10dBi
	Band 12: 1.10dBi	Band 17: 1.26dBi	Band 25: 1.38dBi	Band 26: 1.39dBi

	Band 38: 1.11dBi	Band 41: 1.17dBi	
Power Supply:	DC 7.2V by battery		
Category	NB1		
Deployment	Stand-alone		
Sub-carrier spacing	3.75KHz, 15KHz		
Ntones	Single, Multi-tone		
Dual Card:	WCDMA/LTE Card Slot		
Power Class:	3		
Extreme Vol. Limits:	DC6.12V to 8.28V (Normal: DC 7.20V)		
Temperature range:	-10℃ to +40℃		
Note1: The High Voltage DC 8.28V and Low Voltage DC7.20V were declared by manufacturer, The EUT couldn't be operating normally with higher or lower voltage.			

2.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2A2UU-P3**, filing to comply with the FCC Part 22, Part 24 and Pant 27 requirements.

2.3 TEST METHODOLOGY

The tests were performed according to following standards:

No.	Identity	Document Title
1	47 CFR FCC Part 2	Frequency allocations and radio treaty matters, general rules and regulations.
2	47 CFR FCC Part 22	Public Mobile Services.
3	47 CFR FCC Part 24	Personal Communications Services.
4	47 CFR FCC Part 27	Miscellaneous Wireless Communications Services.
5	47 CFR FCC Part 90	Private Land Mobile Radio Services.
6	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
7	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
8	KDB 971168	D01 v03r01 Measurement Guidance For Certification Of Licensed Digital Transmitters.

2.4 DEVICE CAPABILITIES

This device contains the following capabilities:
850/1900 GSM/GPRS/EGPRS,850/1700/1900 WCDMA/HSPA, Multi-Band LTE,802.11 b/g/n for WLAN,802.11 a/n/ac for UNII,Bluetooth (1X,EDR,LE),GPS,NFC,etc.
This device uses a tuner circuit that dynamically updates the antenna impedance parameters to optimize antenna performance for certain bands and modes of operation. The tuner for this device was set to simulate a "free space"condition where the transmit antenna is matched to the medium into which it is transmitting and, thus, the power is at its maximum level.
LTE Band 12 (698 - 716 MHz) overlaps the entire frequency range of LTE Band 17 (704 - 716 MHz).
Therefore,test data provided in this report covers Band 17 as well as Band 12.
LTE Band 26 (814.7-849 MHz) overlaps the entire frequency range of LTE Band 5 (824 – 849 MHz).
Therefore,test data provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
LTE Band 66 (1710-1780 MHz) overlaps the entire frequency range of LTE Band 4 (1710 - 1755 MHz).
Therefore,test data provided in this report covers Band 4 as well as Band 66.
LTE Band 25 (1850-1915 MHz) overlaps the entire frequency range of LTE Band 2 (1850 - 1910 MHz).
Therefore, test data provided in this report covers Band 2 as well as Band 25.
LTE Band 41 (2496-2690 MHz) overlaps the entire frequency range of LTE Band 38 (2560 - 2620 MHz).
Therefore, test data provided in this report covers Band 41 as well as Band 38.
For emissions from 1GHz – 18GHz, low, mid, and high channels were tested with highest power and worst case configuration.

The emissions below 1GHz and above 18GHz were tested with the highest transmitting power channel and the worst case configuration.
The EUT was manipulated through three orthogonal planes of X-orientation (flatbed), Y-orientation (landscape),and Z-orientation (portrait) during the testing. Only the worst case emissions were reported in this test report.

2.5 SPECIAL ACCESSORIES

The battery was supplied by the applicant were used as accessories and being tested with EUT intended for FCC grant together.

2.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.7 EMISSION DESIGNATOR

GSM Emission Designator

Emission Designator = 249KGXW
GSM BW = 249 kHz
G = Phase Modulation
X = Cases not otherwise covered
W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W
GSM BW = 249 kHz
G = Phase Modulation
7 = Quantized/Digital Info
W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W
WCDMA BW = 4.17 MHz
F = Frequency Modulation
9 = Composite Digital Info
W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D
LTE BW = 4.48 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D
LTE BW = 4.48 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

3. TEST ENVIRONMENT

3.1 ADDRESS OF THE TEST LABORATORY

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842 (CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

3.3 ENVIRONMENTAL CONDITIONS

	NORMAL CONDITIONS	EXTREME CONDITIONS
Temperature range	15~35℃	-20℃~50℃
Humidty range	20 % to 75 %.	20 % to 75 %.
Pressure range	86-106kPa	86-106kPa
Power supply	DC7.2V	DC6.12V or 8.28V
Note: The Extreme Temperature and Extreme Voltages declared by the manufacturer.		

3.4 MEASUREMENT UNCERTAINTY

Test	Measurement Uncertainty	Notes
Transmitter power conducted	±0.57 dB	(1)
Transmitter power Radiated	±2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	±2.20 dB	(1)
Occupied Bandwidth	±0.01ppm	(1)
Radiated Emission 30~1000MHz	±4.10dB	(1)
Radiated Emission Above 1GHz	±4.32dB	(1)
Conducted Disturbance0.15~30MHz	±3.20dB	(1)
Radio Frequency	± 6.5 x 10-8	(1)
RF Power, Conducted	± 0.9 dB	(1)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5 LIST OF TEST EQUIPMENT

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 11, 2021	May 10, 2022
LISN	R&S	ESH2-Z5	100086	Jun. 09, 2021	Jun. 08, 2022
TEST RECEIVER	R&S	ESCI	10096	Apr. 14, 2021	Apr. 13, 2022
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
EXA Signal Analyzer	Aglient	N9020B	MY56101792	Jun. 09, 2021	Jun. 08, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 20, 2019	Oct. 19, 2022
preamplifier	ChengYi	EMC184045SE	980508	Sep. 21, 2020	Sep. 20, 2021
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	SCHWARZBECK	00073	BBHA 9120 J	Sep. 27, 2019	Sep. 26, 2021
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep.20, 2019	Sep.19, 2021
SIGNAL ANALYZER	Agilent	N9020A	MY52090123	Sep. 03, 2020	Sep. 02, 2021
USB Wideband Power Sensor	Agilent	U2021XA	MY54110007	May 11, 2021	May 10, 2025
Wireless communicationtest	R&S	CMW500	120909	Oct. 24, 2020	Oct. 23, 2021
Power Splitter	Agilent	11636A	34	Jun.08, 2021	Jun.07, 2022
Attenuator	JFW	50FHC-006-50	N/A	Jun.08, 2021	Jun.07, 2022

4. SYSTEM TEST CONFIGURATION

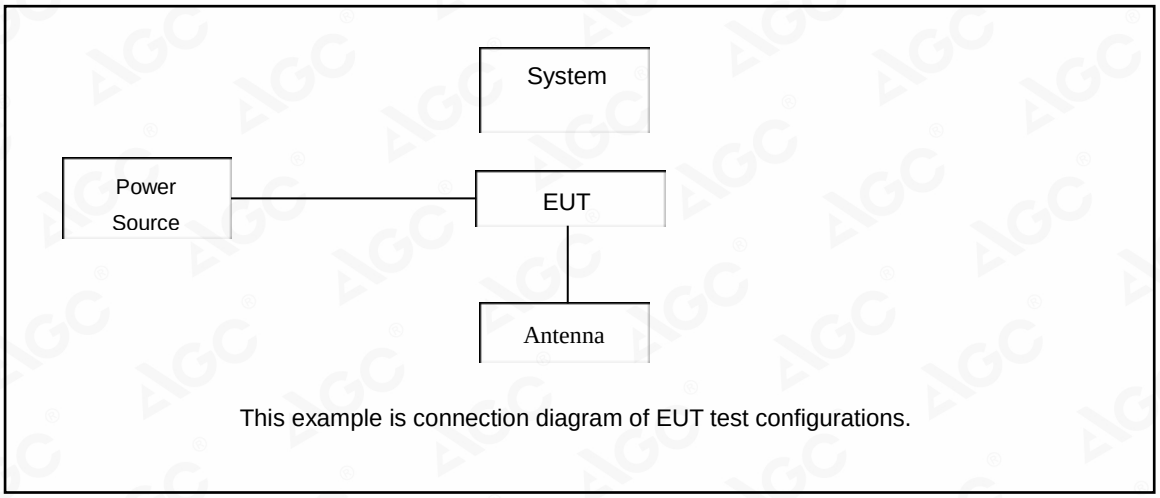
4.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

4.2 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

4.3 CONFIGURATION OF EUT SYSTEM



This example is connection diagram of EUT test configurations.

Table 2-1 Equipment Used in EUT System

4.4 EQUIPMENT USED IN TESTED SYSTEM

The Following Peripheral Devices And Interface Cables Were Connected During The Measurement:

☐ Test Accessories Come From The Laboratory

☒ Test Accessories Come From The Manufacturer

Item	Equipment	Model No.	Identifier	Note
1	POS terminal	P3	FCC ID: 2A2UU-P3	EUT
2	Adapter	ES518-U050200XYE	DC 5V 2A	AE
3	Battery	JKLY-B	DC 7.2V 2500mAh	AE

5. SUMMARY OF TEST RESULTS

5.1 TEST CONDITION : CONDUCTED TEST

Item	Test Description	FCC Rules	Result
1	Occupied Bandwidth	§2.1049	Pass
2	Band Edge / Spurious and Harmonic Emissions at Antenna Terminal	§2.1051, §22.917(a), §90.691 §27.53(g), §27.53(h), §24.238(a), §27.53(m)(4)	Pass
3	Conducted Output Power	§2.1046, §90.635	Pass
4	Frequency stability / variation of ambient temperature	§2.1055, §90.213, §22.355, §27.54, §24.235	Pass
5	Peak- to- Average Ratio	27.50(d)(5), §24.232(d)	Pass

5.2 TEST CONDITION : RADIATED TEST

Item	Test Description	FCC Rules	Result
1	Effective Radiated Power Equivalent Isotropic Radiated Power	§90.635, §22.913(a)(5), §27.50(c)(10), §27.50(h)(2), 27.50(d)(4), §24.232(c)	Pass
2	Radiated Spurious and Harmonic Emissions	§2.1053, §90.691, §22.917(a), §27.53(g), § 27.53(m) (4), §27.53(h), §24.238(a)	Pass

6. DESCRIPTION OF TEST MODES

During the testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication Tester (CMW 500) to ensure max power transmission and proper modulation. Three channels (The top channel, the middle channel and the bottom channel) were chosen for testing on both LTE frequency band.

The worst condition was recorded in the test report if no other modes test data.

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5

LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	26140	26365	26590
	Frequency	1860	1882.5	1905
15	Channel	26115	26365	26615
	Frequency	1857.5	1882.5	1907.5
10	Channel	26090	26365	26640
	Frequency	1855	1882.5	1910
5	Channel	26065	26365	26665
	Frequency	1852.5	1882.5	1912.5
3	Channel	26055	26365	26675
	Frequency	1851.5	1882.5	1913.5
1.4	Channel	26047	26365	26683
	Frequency	1850.7	1882.5	1914.3

LTE Band 26A Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 26B Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
15	Channel	--	26765	--
	Frequency	--	821.5	--
10	Channel	--	26740	--
	Frequency	--	819.0	--
5	Channel	26715	26740	26765
	Frequency	816.5	819.0	821.5
3	Channel	26705	26740	26775
	Frequency	815.5	819.0	822.5
1.4	Channel	26697	26740	26783
	Frequency	814.7	819.0	823.3

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506.0	2593.0	2680.0
15	Channel	39725	40620	41515
	Frequency	2503.5	2593.0	2682.5
10	Channel	39700	40620	41540
	Frequency	2501.0	2593.0	2685.0
5	Channel	39675	40620	41565
	Frequency	2498.5	2593.0	2687.5

Test Mode	Test Modes Description
LTE BAND 2	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 4	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 5	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 7	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 12	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 17	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 25	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 26A	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 26B	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 38	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 41	LTE system, QPSK modulation
	LTE system, 16QAM modulation

ACCORDING TO 3GPP 36.521 SUB-CLAUSE 6.2.3.3, THE MAXIMUM OUTPUT POWER IS ALLOWED TO BE REDUCED BY FOLLOWING THE TABLE.

TABLE 6.2.3.3-1: MAXIMUM POWER REDUCTION (MPR) FOR POWER CLASS 3

Modulation	Channel bandwidth / Transmission bandwidth configuration [RB]						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (For PRACH, PUCCH and SRS transmission, the allowed MPR is according to that specified for PUSCH QPSK modulation for the corresponding transmission bandwidth.).

When PRACH, PUCCH are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

For each subframe, the MPR is evaluated per slot and given by the maximum value taken over the transmission(s) within the slot, the maximum MPR over the two slots is then applied for the entire subframe.

For the UE maximum output power modified by MPR, the power limits specified in subclause 6.2.5.3 apply. The normative reference for this requirement is TS 36.101 clause 6.2.3.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

7. CONDUCTED OUTPUT POWER

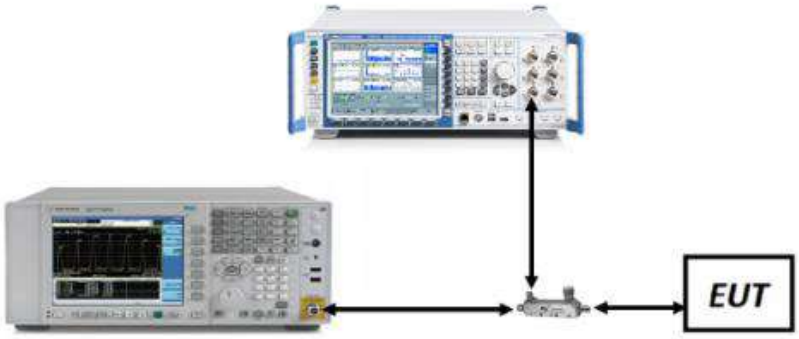
7.1 PROVISIONS APPLICABLE

The conduction test is carried out in a shielded room.
According to the test, connect the device under test to the antenna port on the non-conductive platform directly to the test device for evaluation and measurement (ANSI-C63.26-2015 Clause 5.4)

7.2 MEASUREMENT METHOD

-The transmitter output port was connected to base station.
-Set EUT at maximum power through base station.
-Select lowest, middle, and highest channels for each band and different test mode.

7.3 MEASUREMENT SETUP



7.4 MEASUREMENT RESULT

Please refer to the next page for test result data.

LTE Band 2

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	18700	1860.0	QPSK	1	0	0	22.37
				1	49	0	22.10
				1	99	0	21.95
				50	0	1	20.96
				50	25	1	21.02
				50	49	1	21.03
				100	0	1	21.00
			16QAM	1	0	1	20.87
				1	49	1	21.00
				1	99	1	20.84
				50	0	2	19.97
				50	25	2	19.95
				50	49	2	20.03
				100	0	2	19.93
	18900	1880.0	QPSK	1	0	0	22.06
				1	49	0	22.44
				1	99	0	21.76
				50	0	1	21.50
				50	25	1	21.49
				50	49	1	21.14
				100	0	1	21.30
			16QAM	1	0	1	21.22
				1	49	1	21.63
				1	99	1	20.86
				50	0	2	20.46
				50	25	2	20.44
				50	49	2	20.10
				100	0	2	20.22
	19100	1900.0	QPSK	1	0	0	21.70
				1	49	0	22.16
				1	99	0	21.57
				50	0	1	21.01
				50	25	1	20.99
				50	49	1	21.08
				100	0	1	21.03
			16QAM	1	0	1	20.56
				1	49	1	21.11
				1	99	1	20.44
				50	0	2	20.01
				50	25	2	20.05
				50	49	2	20.05
				100	0	2	19.99

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	18675	1857.5	QPSK	1	0	0	22.69
				1	38	0	22.02
				1	74	0	21.88
				38	0	1	21.16
				38	18	1	21.03
				38	37	1	20.92
				75	0	1	21.15
			16QAM	1	0	1	21.41
				1	38	1	21.04
				1	74	1	20.92
				38	0	2	21.20
				38	18	2	21.03
				38	37	2	20.91
				75	0	2	20.03
	18900	1880.0	QPSK	1	0	0	22.31
				1	38	0	22.31
				1	74	0	21.88
				38	0	1	21.44
				38	18	1	21.46
				38	37	1	21.03
				75	0	1	21.40
			16QAM	1	0	1	21.41
				1	38	1	21.42
				1	74	1	21.06
				38	0	2	21.37
				38	18	2	21.51
				38	37	2	21.07
				75	0	2	20.36
	19125	1902.5	QPSK	1	0	0	21.94
				1	38	0	22.16
				1	74	0	21.77
				38	0	1	20.74
				38	18	1	20.95
				38	37	1	20.58
				75	0	1	21.16
			16QAM	1	0	1	20.72
				1	38	1	20.97
				1	74	1	20.56
				38	0	2	20.71
				38	18	2	20.95
				38	37	2	20.60
				75	0	2	20.09

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	18650	1855.0	QPSK	1	0	0	22.78
				1	24	0	22.77
				1	49	0	21.96
				25	0	1	21.30
				25	12	1	21.34
				25	25	1	21.18
				50	0	1	21.21
			16QAM	1	0	1	21.85
				1	24	1	21.41
				1	49	1	21.00
				25	0	2	20.24
				25	12	2	20.24
				25	25	2	20.09
				50	0	2	20.17
	18900	1880.0	QPSK	1	0	0	22.52
				1	24	0	22.44
				1	49	0	22.21
				25	0	1	21.59
				25	12	1	21.60
				25	25	1	21.35
				50	0	1	21.43
			16QAM	1	0	1	21.40
				1	24	1	21.52
				1	49	1	21.08
				25	0	2	20.55
				25	12	2	20.55
				25	25	2	20.28
				50	0	2	20.39
	19150	1905.0	QPSK	1	0	0	22.10
				1	24	0	22.17
				1	49	0	21.84
				25	0	1	21.24
				25	12	1	21.26
				25	25	1	21.08
				50	0	1	21.13
			16QAM	1	0	1	20.97
				1	24	1	21.05
				1	49	1	20.70
				25	0	2	20.17
				25	12	2	20.22
				25	25	2	20.07
				50	0	2	20.09

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	18625	1852.5	QPSK	1	0	0	22.89
				1	12	0	22.80
				1	24	0	22.57
				12	0	1	21.84
				12	6	1	21.84
				12	13	1	21.71
				25	0	1	21.79
			16QAM	1	0	1	21.77
				1	12	1	21.70
				1	24	1	21.51
				12	0	2	20.79
				12	6	2	20.79
				12	13	2	20.60
				25	0	2	20.74
	18900	1880.0	QPSK	1	0	0	22.90
				1	12	0	22.94
				1	24	0	22.43
				12	0	1	21.50
				12	6	1	21.90
				12	13	1	21.78
				25	0	1	21.81
			16QAM	1	0	1	21.90
				1	12	1	21.75
				1	24	1	21.54
				12	0	2	20.70
				12	6	2	20.82
				12	13	2	20.60
				25	0	2	20.63
	19175	1907.5	QPSK	1	0	0	22.19
				1	12	0	22.08
				1	24	0	21.94
				12	0	1	21.10
				12	6	1	21.10
				12	13	1	20.98
				25	0	1	21.19
			16QAM	1	0	1	21.10
				1	12	1	21.00
				1	24	1	20.82
				12	0	2	20.17
				12	6	2	20.07
				12	13	2	20.07
				25	0	2	20.13

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	18615	1851.5	QPSK	1	0	0	22.78
				1	8	0	22.75
				1	14	0	22.69
				8	0	1	21.88
				8	4	1	21.88
				8	8	1	21.79
				15	0	1	21.79
			16QAM	1	0	1	21.90
				1	8	1	21.76
				1	14	1	21.77
				8	0	2	20.86
				8	4	2	20.84
				8	8	2	20.70
				15	0	2	20.77
	18900	1880.0	QPSK	1	0	0	22.98
				1	8	0	23.01
				1	14	0	22.97
				8	0	1	22.00
				8	4	1	22.02
				8	7	1	21.96
				15	0	1	21.96
			16QAM	1	0	1	21.87
				1	8	1	21.78
				1	14	1	21.72
				8	0	2	20.94
				8	4	2	20.92
				8	8	2	20.93
				15	0	2	20.86
	19185	1908.5	QPSK	1	0	0	22.56
				1	8	0	22.46
				1	14	0	22.43
				8	0	1	21.53
				8	4	1	21.59
				8	8	1	21.49
				15	0	1	21.41
			16QAM	1	0	1	21.34
				1	8	1	21.28
				1	14	1	21.15
				8	0	2	20.49
				8	4	2	20.49
				8	8	2	20.36
				15	0	2	20.28

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	18607	1850.7	QPSK	1	0	0	22.77
				1	2	0	22.85
				1	5	0	22.71
				3	0	0	22.81
				3	1	0	22.80
				3	2	0	22.76
				6	0	1	21.84
			16QAM	1	0	1	21.76
				1	2	1	21.79
				1	5	1	21.67
				3	0	1	21.65
				3	1	1	21.68
				3	2	1	21.58
				6	0	2	20.78
	18900	1880.0	QPSK	1	0	0	22.85
				1	2	0	22.99
				1	5	0	22.86
				3	0	0	22.96
				3	1	0	22.92
				3	2	0	22.90
				6	0	1	22.06
			16QAM	1	0	1	21.81
				1	2	1	21.95
				1	5	1	21.80
				3	0	1	21.79
				3	1	1	21.80
				3	2	1	21.75
				6	0	2	20.95
	19193	1909.3	QPSK	1	0	0	22.43
				1	2	0	22.67
				1	5	0	22.41
				3	0	0	22.42
				3	1	0	22.43
				3	2	0	22.42
				6	0	1	21.62
			16QAM	1	0	1	21.36
				1	2	1	21.34
				1	5	1	21.29
				3	0	1	21.29
				3	1	1	21.32
				3	2	1	21.26
				6	0	2	20.48

LTE Band 4

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	20050	1720.0	QPSK	1	0	0	24.32
				1	49	0	24.06
				1	99	0	23.75
				50	0	1	23.25
				50	25	1	23.27
				50	49	1	23.11
				100	0	1	23.15
			16QAM	1	0	1	23.20
				1	49	1	23.08
				1	99	1	22.67
				50	0	2	22.24
				50	25	2	22.20
				50	49	2	22.03
				100	0	2	22.12
	20175	1732.5	QPSK	1	0	0	23.03
				1	49	0	23.58
				1	99	0	23.25
				50	0	1	22.36
				50	25	1	22.36
				50	49	1	22.56
				100	0	1	22.45
			16QAM	1	0	1	21.99
				1	49	1	22.52
				1	99	1	22.17
				50	0	2	21.32
				50	25	2	21.35
				50	49	2	21.53
				100	0	2	21.39
	20300	1745.0	QPSK	1	0	0	23.23
				1	49	0	23.49
				1	99	0	22.86
				50	0	1	22.67
				50	25	1	22.67
				50	49	1	22.17
				100	0	1	22.46
			16QAM	1	0	1	22.37
				1	49	1	22.63
				1	99	1	22.00
				50	0	2	21.63
				50	25	2	21.61
				50	49	2	21.12
				100	0	2	21.38

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	20025	1717.5	QPSK	1	0	0	24.51
				1	37	0	24.17
				1	74	0	23.72
				36	0	1	23.46
				36	16	1	23.14
				36	35	1	22.84
				75	0	1	23.32
			16QAM	1	0	1	23.55
				1	37	1	23.13
				1	74	1	22.78
				36	0	2	23.51
				36	16	2	23.15
				36	35	2	22.80
				75	0	2	22.21
	20175	1732.5	QPSK	1	0	0	23.17
				1	37	0	23.47
				1	74	0	23.41
				36	0	1	22.20
				36	16	1	22.53
				36	35	1	22.47
				75	0	1	22.63
			16QAM	1	0	1	22.22
				1	37	1	22.54
				1	74	1	22.46
				36	0	2	22.21
				36	16	2	22.55
				36	35	2	22.43
				75	0	2	21.50
	20325	1747.5	QPSK	1	0	0	23.28
				1	37	0	23.17
				1	74	0	22.95
				36	0	1	22.50
				36	16	1	22.35
				36	35	1	22.06
				75	0	1	22.43
			16QAM	1	0	1	22.49
				1	37	1	22.34
				1	74	1	22.09
				36	0	2	22.46
				36	16	2	22.34
				36	35	2	22.10
				75	0	2	21.38

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	20000	1715.0	QPSK	1	0	0	24.60
				1	24	0	24.44
				1	49	0	24.03
				25	0	1	23.63
				25	12	1	23.65
				25	25	1	23.30
				50	0	1	23.45
			16QAM	1	0	1	23.63
				1	24	1	23.47
				1	49	1	23.02
				25	0	2	22.57
				25	12	2	22.54
				25	25	2	22.24
				50	0	2	22.39
	20175	1732.5	QPSK	1	0	0	23.34
				1	24	0	23.58
				1	49	0	23.53
				25	0	1	22.52
				25	12	1	22.52
				25	25	1	22.65
				50	0	1	22.60
			16QAM	1	0	1	22.34
				1	24	1	22.65
				1	49	1	22.58
				25	0	2	21.47
				25	12	2	21.48
				25	25	2	21.56
				50	0	2	21.53
	20350	1750.0	QPSK	1	0	0	23.31
				1	24	0	23.35
				1	49	0	23.13
				25	0	1	22.36
				25	12	1	22.39
				25	25	1	22.18
				50	0	1	22.26
			16QAM	1	0	1	22.12
				1	24	1	22.12
				1	49	1	21.99
				25	0	2	21.36
				25	12	2	21.35
				25	25	2	21.17
				50	0	2	21.26

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	19975	1712.5	QPSK	1	0	0	24.93
				1	12	0	24.58
				1	24	0	24.36
				12	0	1	23.61
				12	6	1	23.62
				12	11	1	23.48
				25	0	1	23.60
			16QAM	1	0	1	23.52
				1	12	1	23.48
				1	24	1	23.32
				12	0	2	22.57
				12	6	2	22.55
				12	11	2	22.41
				25	0	2	22.54
	20175	1732.5	QPSK	1	0	0	23.44
				1	12	0	23.59
				1	24	0	23.49
				12	0	1	22.50
				12	6	1	22.50
				12	11	1	22.61
				25	0	1	22.58
			16QAM	1	0	1	22.36
				1	12	1	22.50
				1	24	1	22.44
				12	0	2	21.48
				12	6	2	21.44
				12	11	2	21.52
				25	0	2	21.50
	20375	1752.5	QPSK	1	0	0	23.02
				1	12	0	23.13
				1	24	0	23.05
				12	0	1	22.09
				12	6	1	22.11
				12	11	1	22.18
				25	0	1	22.13
			16QAM	1	0	1	22.09
				1	12	1	22.23
				1	24	1	22.11
				12	0	2	21.16
				12	6	2	21.11
				12	11	2	21.15
				25	0	2	21.09

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	19965	1711.5	QPSK	1	0	0	24.80
				1	7	0	24.55
				1	14	0	24.48
				8	0	1	23.70
				8	4	1	23.68
				8	7	1	23.66
				15	0	1	23.57
			16QAM	1	0	1	23.66
				1	7	1	23.57
				1	14	1	23.51
				8	0	2	22.68
				8	4	2	22.64
				8	7	2	22.58
				15	0	2	22.57
	20175	1732.5	QPSK	1	0	0	23.45
				1	7	0	23.45
				1	14	0	23.55
				8	0	1	22.55
				8	4	1	22.57
				8	7	1	22.58
				15	0	1	22.48
			16QAM	1	0	1	22.46
				1	7	1	22.49
				1	14	1	22.56
				8	0	2	21.50
				8	4	2	21.48
				8	7	2	21.53
				15	0	2	21.51
	20385	1753.5	QPSK	1	0	0	23.12
				1	7	0	23.15
				1	14	0	23.15
				8	0	1	22.13
				8	4	1	22.15
				8	7	1	22.18
				15	0	1	22.11
			16QAM	1	0	1	22.00
				1	7	1	21.94
				1	14	1	21.95
				8	0	2	21.07
				8	4	2	21.09
				8	7	2	21.10
				15	0	2	20.97

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	19957	1710.7	QPSK	1	0	0	24.55
				1	2	0	24.66
				1	5	0	24.51
				3	0	0	24.59
				3	1	0	24.60
				3	2	0	24.57
				6	0	1	23.64
			16QAM	1	0	1	23.44
				1	2	1	23.60
				1	5	1	23.45
				3	0	1	23.48
				3	1	1	23.47
				3	2	1	23.43
				6	0	2	22.63
	20175	1732.5	QPSK	1	0	0	23.42
				1	2	0	23.61
				1	5	0	23.42
				3	0	0	23.44
				3	1	0	23.41
				3	2	0	23.46
				6	0	1	22.59
			16QAM	1	0	1	22.31
				1	2	1	22.52
				1	5	1	22.35
				3	0	1	22.33
				3	1	1	22.35
				3	2	1	22.32
				6	0	2	21.48
	20393	1754.3	QPSK	1	0	0	23.08
				1	2	0	23.13
				1	5	0	23.11
				3	0	0	23.07
				3	1	0	23.05
				3	2	0	23.12
				6	0	1	22.14
			16QAM	1	0	1	21.92
				1	2	1	22.05
				1	5	1	21.91
				3	0	1	21.96
				3	1	1	21.99
				3	2	1	21.99
				6	0	2	20.94

LTE Band 5

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	20450	829	QPSK	1	0	0	22.55
				1	24	0	22.38
				1	49	0	22.84
				25	0	1	21.12
				25	12	1	21.13
				25	25	1	21.70
				50	0	1	21.37
			16QAM	1	0	1	21.25
				1	24	1	21.48
				1	49	1	21.79
				25	0	2	20.05
				25	12	2	20.04
				25	25	2	20.61
				50	0	2	20.33
	20525	836.5	QPSK	1	0	0	22.77
				1	24	0	23.21
				1	49	0	23.16
				25	0	1	21.99
				25	12	1	21.99
				25	25	1	22.17
				50	0	1	22.15
			16QAM	1	0	1	21.59
				1	24	1	21.92
				1	49	1	21.96
				25	0	2	20.93
				25	12	2	20.98
				25	25	2	21.17
				50	0	2	21.09
	20600	844	QPSK	1	0	0	23.20
				1	24	0	23.20
				1	49	0	23.12
				25	0	1	22.16
				25	12	1	22.17
				25	25	1	21.94
				50	0	1	22.05
			16QAM	1	0	1	21.87
				1	24	1	21.95
				1	49	1	21.83
				25	0	2	21.11
				25	12	2	21.14
				25	25	2	20.96
				50	0	2	21.01

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	20425	826.5	QPSK	1	0	0	23.36
				1	12	0	23.04
				1	24	0	23.03
				12	0	1	21.90
				12	6	1	21.90
				12	11	1	21.98
				25	0	1	21.96
			16QAM	1	0	1	21.84
				1	12	1	21.95
				1	24	1	21.94
				12	0	2	20.84
				12	6	2	20.84
				12	11	2	20.92
				25	0	2	20.90
	20525	836.5	QPSK	1	0	0	22.95
				1	12	0	23.19
				1	24	0	23.06
				12	0	1	21.91
				12	6	1	21.95
				12	11	1	22.06
				25	0	1	22.08
			16QAM	1	0	1	21.79
				1	12	1	22.07
				1	24	1	21.90
				12	0	2	20.92
				12	6	2	20.92
				12	11	2	21.04
				25	0	2	21.03
	20625	846.5	QPSK	1	0	0	22.98
				1	12	0	23.14
				1	24	0	22.97
				12	0	1	22.16
				12	6	1	22.15
				12	11	1	22.00
				25	0	1	22.07
			16QAM	1	0	1	22.03
				1	12	1	22.19
				1	24	1	22.04
				12	0	2	21.11
				12	6	2	21.14
				12	11	2	21.01
				25	0	2	21.03

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	20415	825.5	QPSK	1	0	0	23.42
				1	7	0	22.95
				1	14	0	22.92
				8	0	1	21.91
				8	4	1	21.90
				8	7	1	21.90
				15	0	1	21.90
			16QAM	1	0	1	22.56
				1	7	1	21.95
				1	14	1	21.96
				8	0	2	20.96
				8	4	2	20.94
				8	7	2	20.89
				15	0	2	20.89
	20525	836.5	QPSK	1	0	0	23.01
				1	7	0	23.08
				1	14	0	23.13
				8	0	1	22.03
				8	4	1	22.04
				8	7	1	22.08
				15	0	1	22.05
			16QAM	1	0	1	22.01
				1	7	1	22.08
				1	14	1	22.09
				8	0	2	21.02
				8	4	2	21.00
				8	7	2	21.07
				15	0	2	20.98
	20635	847.5	QPSK	1	0	0	23.15
				1	7	0	23.17
				1	14	0	23.13
				8	0	1	22.09
				8	4	1	22.09
				8	7	1	22.07
				15	0	1	22.07
			16QAM	1	0	1	21.96
				1	7	1	21.88
				1	14	1	21.89
				8	0	2	21.05
				8	4	2	21.05
				8	7	2	21.01
				15	0	2	20.98

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	20407	824.7	QPSK	1	0	0	23.03
				1	2	0	23.11
				1	5	0	22.96
				3	0	0	23.05
				3	1	0	23.08
				3	2	0	23.05
				6	0	1	21.98
			16QAM	1	0	1	21.91
				1	2	1	22.03
				1	5	1	21.74
				3	0	1	21.90
				3	1	1	21.90
				3	2	1	21.81
				6	0	2	20.78
	20525	836.5	QPSK	1	0	0	23.08
				1	2	0	23.17
				1	5	0	23.04
				3	0	0	23.12
				3	1	0	23.12
				3	2	0	23.12
				6	0	1	22.14
			16QAM	1	0	1	21.95
				1	2	1	22.19
				1	5	1	21.95
				3	0	1	21.96
				3	1	1	21.94
				3	2	1	21.95
				6	0	2	21.10
	20643	848.3	QPSK	1	0	0	23.14
				1	2	0	23.22
				1	5	0	23.11
				3	0	0	23.12
				3	1	0	23.14
				3	2	0	23.17
				6	0	1	22.13
			16QAM	1	0	1	21.88
				1	2	1	22.06
				1	5	1	21.92
				3	0	1	21.98
				3	1	1	21.95
				3	2	1	21.96
				6	0	2	20.94

LTE Band 7

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	20850	2510	QPSK	1	0	0	23.72
				1	49	0	23.81
				1	99	0	23.64
				50	0	1	22.73
				50	25	1	22.77
				50	49	1	22.87
				100	0	1	22.83
			16QAM	1	0	1	22.52
				1	49	1	22.67
				1	99	1	22.48
				50	0	2	21.71
				50	25	2	21.66
				50	49	2	21.82
				100	0	2	21.78
	21100	2535	QPSK	1	0	0	23.55
				1	49	0	23.61
				1	99	0	23.30
				50	0	1	22.58
				50	25	1	22.57
				50	49	1	22.42
				100	0	1	22.50
			16QAM	1	0	1	22.59
				1	49	1	22.59
				1	99	1	22.39
				50	0	2	21.55
				50	25	2	21.54
				50	49	2	21.33
				100	0	2	21.46
	21350	2560	QPSK	1	0	0	22.39
				1	49	0	22.54
				1	99	0	22.23
				50	0	1	21.30
				50	25	1	21.35
				50	49	1	21.36
				100	0	1	21.33
			16QAM	1	0	1	21.24
				1	49	1	21.27
				1	99	1	21.06
				50	0	2	20.28
				50	25	2	20.24
				50	49	2	20.29
				100	0	2	20.28

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	20825	2507.5	QPSK	1	0	0	23.90
				1	37	0	23.79
				1	74	0	23.71
				36	0	1	22.82
				36	16	1	22.73
				36	35	1	22.70
				75	0	1	22.94
			16QAM	1	0	1	22.84
				1	37	1	22.74
				1	74	1	22.68
				36	0	2	22.79
				36	16	2	22.74
				36	35	2	22.70
				75	0	2	21.82
	21100	2535	QPSK	1	0	0	23.47
				1	37	0	23.45
				1	74	0	23.32
				36	0	1	22.55
				36	16	1	22.54
				36	35	1	22.43
				75	0	1	22.59
			16QAM	1	0	1	22.57
				1	37	1	22.50
				1	74	1	22.39
				36	0	2	22.59
				36	16	2	22.51
				36	35	2	22.42
				75	0	2	21.51
	21375	2562.5	QPSK	1	0	0	22.29
				1	37	0	22.39
				1	74	0	22.38
				36	0	1	21.23
				36	16	1	21.31
				36	35	1	21.32
				75	0	1	21.44
			16QAM	1	0	1	21.24
				1	37	1	21.34
				1	74	1	21.28
				36	0	2	21.21
				36	16	2	21.33
				36	35	2	21.33
				75	0	2	20.30

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	20800	2505	QPSK	1	0	0	24.00
				1	24	0	23.90
				1	49	0	23.78
				25	0	1	22.94
				25	12	1	22.92
				25	25	1	22.80
				50	0	1	22.87
			16QAM	1	0	1	22.97
				1	24	1	22.86
				1	49	1	22.74
				25	0	2	21.83
				25	12	2	21.88
				25	25	2	21.72
				50	0	2	21.78
	21100	2535	QPSK	1	0	0	23.58
				1	24	0	23.65
				1	49	0	23.51
				25	0	1	22.53
				25	12	1	22.52
				25	25	1	22.47
				50	0	1	22.50
			16QAM	1	0	1	22.31
				1	24	1	22.33
				1	49	1	22.28
				25	0	2	21.48
				25	12	2	21.51
				25	25	2	21.46
				50	0	2	21.41
	21400	2565	QPSK	1	0	0	22.32
				1	24	0	22.53
				1	49	0	22.49
				25	0	1	21.34
				25	12	1	21.32
				25	25	1	21.46
				50	0	1	21.40
			16QAM	1	0	1	21.24
				1	24	1	21.48
				1	49	1	21.44
				25	0	2	20.22
				25	12	2	20.21
				25	25	2	20.36
				50	0	2	20.26

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	20775	2502.5	QPSK	1	0	0	24.01
				1	12	0	24.02
				1	24	0	23.78
				12	0	1	22.92
				12	6	1	22.97
				12	13	1	22.79
				25	0	1	22.86
			16QAM	1	0	1	22.83
				1	12	1	22.85
				1	24	1	22.60
				12	0	2	21.88
				12	6	2	21.90
				12	13	2	21.74
				25	0	2	21.83
	21100	2535	QPSK	1	0	0	23.38
				1	12	0	23.50
				1	24	0	23.36
				12	0	1	22.43
				12	6	1	22.43
				12	13	1	22.36
				25	0	1	22.41
			16QAM	1	0	1	22.36
				1	12	1	22.51
				1	24	1	22.38
				12	0	2	21.42
				12	6	2	21.42
				12	13	2	21.36
				25	0	2	21.34
	21425	2567.5	QPSK	1	0	0	22.34
				1	12	0	22.53
				1	24	0	22.48
				12	0	1	21.35
				12	6	1	21.32
				12	13	1	21.40
				25	0	1	21.40
			16QAM	1	0	1	21.17
				1	12	1	21.38
				1	24	1	21.33
				12	0	2	20.28
				12	6	2	20.26
				12	13	2	20.34
				25	0	2	20.32

LTE Band 12

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	23060	704.0	QPSK	1	0	0	23.32
				1	24	0	23.40
				1	49	0	22.51
				25	0	1	22.24
				25	12	1	22.24
				25	25	1	22.00
				50	0	1	22.11
			16QAM	1	0	1	22.07
				1	24	1	22.19
				1	49	1	21.22
				25	0	2	21.32
				25	12	2	21.30
				25	25	2	21.03
				50	0	2	21.13
	23095	707.5	QPSK	1	0	0	23.25
				1	24	0	22.82
				1	49	0	22.16
				25	0	1	21.96
				25	12	1	21.97
				25	25	1	21.23
				50	0	1	21.68
			16QAM	1	0	1	22.24
				1	24	1	21.88
				1	49	1	21.14
				25	0	2	20.99
				25	12	2	20.98
				25	25	2	20.26
				50	0	2	20.65
	23130	711.0	QPSK	1	0	0	22.82
				1	24	0	22.43
				1	49	0	22.11
				25	0	1	21.68
				25	12	1	21.69
				25	25	1	21.21
				50	0	1	21.47
			16QAM	1	0	1	21.64
				1	24	1	21.21
				1	49	1	20.91
				25	0	2	20.72
				25	12	2	20.72
				25	25	2	20.25
				50	0	2	20.54

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	23035	701.5	QPSK	1	0	0	23.29
				1	12	0	23.46
				1	24	0	23.29
				12	0	1	22.25
				12	6	1	22.22
				12	13	1	22.30
				25	0	1	22.25
			16QAM	1	0	1	22.18
				1	12	1	22.32
				1	24	1	22.13
				12	0	2	21.25
				12	6	2	21.22
				12	13	2	21.36
				25	0	2	21.34
	23095	707.5	QPSK	1	0	0	22.93
				1	12	0	22.61
				1	24	0	22.24
				12	0	1	21.84
				12	6	1	21.81
				12	13	1	21.34
				25	0	1	21.62
			16QAM	1	0	1	21.99
				1	12	1	21.68
				1	24	1	21.29
				12	0	2	20.86
				12	6	2	20.91
				12	13	2	20.39
				25	0	2	20.58
	23155	713.5	QPSK	1	0	0	22.10
				1	12	0	22.12
				1	24	0	22.05
				12	0	1	21.04
				12	6	1	21.03
				12	13	1	21.05
				25	0	1	21.07
			16QAM	1	0	1	20.92
				1	12	1	21.02
				1	24	1	20.88
				12	0	2	20.06
				12	6	2	20.07
				12	13	2	20.10
				25	0	2	20.13

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	23025	700.5	QPSK	1	0	0	23.43
				1	7	0	23.29
				1	14	0	23.35
				8	0	1	22.27
				8	4	1	22.28
				8	7	1	22.30
				15	0	1	22.25
			16QAM	1	0	1	22.33
				1	7	1	22.34
				1	14	1	22.36
				8	0	2	21.31
				8	4	2	21.31
				8	7	2	21.35
				15	0	2	21.31
	23095	707.5	QPSK	1	0	0	22.90
				1	7	0	22.70
				1	14	0	22.47
				8	0	1	21.73
				8	4	1	21.72
				8	7	1	21.45
				15	0	1	21.59
			16QAM	1	0	1	21.76
				1	7	1	21.45
				1	14	1	21.24
				8	0	2	20.68
				8	4	2	20.71
				8	7	2	20.45
				15	0	2	20.54
	23165	714.5	QPSK	1	0	0	22.13
				1	7	0	22.10
				1	14	0	22.06
				8	0	1	21.05
				8	4	1	21.12
				8	7	1	21.06
				15	0	1	21.04
			16QAM	1	0	1	20.78
				1	7	1	20.84
				1	14	1	20.86
				8	0	2	20.04
				8	4	2	20.06
				8	7	2	20.06
				15	0	2	20.00

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	23017	699.7	QPSK	1	0	0	23.21
				1	2	0	23.30
				1	5	0	23.21
				3	0	0	23.28
				3	1	0	23.28
				3	2	0	23.31
				6	0	1	22.22
			16QAM	1	0	1	22.09
				1	2	1	22.26
				1	5	1	22.11
				3	0	1	22.13
				3	1	1	22.09
				3	2	1	22.08
				6	0	2	21.25
	23095	707.5	QPSK	1	0	0	22.75
				1	2	0	22.76
				1	5	0	22.53
				3	0	0	22.65
				3	1	0	22.69
				3	2	0	22.60
				6	0	1	21.64
			16QAM	1	0	1	21.49
				1	2	1	21.47
				1	5	1	21.31
				3	0	1	21.48
				3	1	1	21.50
				3	2	1	21.41
				6	0	2	20.48
	23173	715.3	QPSK	1	0	0	23.37
				1	2	0	23.44
				1	5	0	23.32
				3	0	0	23.44
				3	1	0	23.42
				3	2	0	23.40
				6	0	1	22.37
			16QAM	1	0	1	22.21
				1	2	1	22.34
				1	5	1	22.23
				3	0	1	22.22
				3	1	1	22.21
				3	2	1	22.22
				6	0	2	21.43

LTE Band 17

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	23780	709.0	QPSK	1	0	0	23.60
				1	24	0	22.50
				1	49	0	22.01
				25	0	1	21.77
				25	12	1	21.81
				25	25	1	21.08
				50	0	1	21.54
			16QAM	1	0	1	22.08
				1	24	1	21.42
				1	49	1	21.01
				25	0	2	20.78
				25	12	2	20.76
				25	25	2	20.08
				50	0	2	20.50
	23790	710	QPSK	1	0	0	22.97
				1	24	0	22.32
				1	49	0	21.98
				25	0	1	21.74
				25	12	1	21.72
				25	25	1	21.12
				50	0	1	21.47
			16QAM	1	0	1	21.74
				1	24	1	21.09
				1	49	1	20.82
				25	0	2	20.76
				25	12	2	20.75
				25	25	2	20.13
				50	0	2	20.47
	23800	711.0	QPSK	1	0	0	22.76
				1	24	0	22.19
				1	49	0	22.04
				25	0	1	21.60
				25	12	1	21.61
				25	25	1	21.16
				50	0	1	21.36
			16QAM	1	0	1	21.47
				1	24	1	20.85
				1	49	1	20.75
				25	0	2	20.64
				25	12	2	20.62
				25	25	2	20.19
				50	0	2	20.37

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	23755	706.5	QPSK	1	0	0	23.03
				1	12	0	22.75
				1	24	0	22.33
				12	0	1	21.94
				12	6	1	21.89
				12	13	1	21.51
				25	0	1	21.69
			16QAM	1	0	1	22.09
				1	12	1	21.83
				1	24	1	21.36
				12	0	2	20.98
				12	6	2	20.98
				12	13	2	20.56
				25	0	2	20.67
	23095	710.0	QPSK	1	0	0	22.49
				1	12	0	22.25
				1	24	0	21.94
				12	0	1	21.41
				12	6	1	21.41
				12	13	1	21.00
				25	0	1	21.22
			16QAM	1	0	1	21.34
				1	12	1	21.11
				1	24	1	20.84
				12	0	2	20.43
				12	6	2	20.44
				12	13	2	20.05
				25	0	2	20.29
	23825	712.6	QPSK	1	0	0	22.05
				1	12	0	22.09
				1	24	0	21.98
				12	0	1	20.90
				12	6	1	20.94
				12	13	1	21.04
				25	0	1	21.00
			16QAM	1	0	1	20.96
				1	12	1	20.99
				1	24	1	20.92
				12	0	2	19.93
				12	6	2	19.99
				12	13	2	20.05
				25	0	2	20.02

LTE Band 25

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	26140	1860	QPSK	1	0	0	21.99
				1	49	0	22.01
				1	99	0	21.81
				50	0	1	20.89
				50	25	1	20.88
				50	49	1	20.86
				100	0	1	20.90
			16QAM	1	0	1	20.81
				1	49	1	20.86
				1	99	1	20.60
				50	0	2	19.81
				50	25	2	19.83
				50	49	2	19.90
				100	0	2	19.84
	26365	1882.5	QPSK	1	0	0	22.06
				1	49	0	22.23
				1	99	0	21.56
				50	0	1	21.33
				50	25	1	21.35
				50	49	1	20.97
				100	0	1	21.15
			16QAM	1	0	1	21.14
				1	49	1	21.41
				1	99	1	20.70
				50	0	2	20.32
				50	25	2	20.34
				50	49	2	19.92
				100	0	2	20.07
	26590	1905	QPSK	1	0	0	21.52
				1	49	0	22.05
				1	99	0	21.36
				50	0	1	20.96
				50	25	1	20.93
				50	49	1	20.67
				100	0	1	20.78
			16QAM	1	0	1	20.42
				1	49	1	20.86
				1	99	1	20.23
				50	0	2	19.95
				50	25	2	19.90
				50	49	2	19.68
				100	0	2	19.75

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	26115	1857.5	QPSK	1	0	0	22.15
				1	38	0	21.97
				1	74	0	21.73
				38	0	1	21.08
				38	18	1	20.93
				38	37	1	20.71
				75	0	1	20.98
			16QAM	1	0	1	21.05
				1	38	1	20.92
				1	74	1	20.73
				38	0	2	21.07
				38	18	2	20.92
				38	37	2	20.73
				75	0	2	19.92
	26365	1882.5	QPSK	1	0	0	22.16
				1	38	0	22.04
				1	74	0	21.71
				38	0	1	21.33
				38	18	1	21.22
				38	37	1	20.85
				75	0	1	21.28
			16QAM	1	0	1	21.29
				1	38	1	21.27
				1	74	1	20.86
				38	0	2	21.31
				38	18	2	21.23
				38	37	2	20.88
				75	0	2	20.20
	26615	1907.5	QPSK	1	0	0	21.86
				1	38	0	21.86
				1	74	0	21.54
				38	0	1	20.66
				38	18	1	20.66
				38	37	1	20.30
				75	0	1	20.91
			16QAM	1	0	1	20.66
				1	38	1	20.65
				1	74	1	20.31
				38	0	2	20.63
				38	18	2	20.67
				38	37	2	20.31
				75	0	2	19.85

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	26090	1855	QPSK	1	0	0	22.23
				1	24	0	22.10
				1	49	0	21.87
				25	0	1	21.17
				25	12	1	21.18
				25	25	1	21.00
				50	0	1	21.07
			16QAM	1	0	1	21.21
				1	24	1	21.09
				1	49	1	20.80
				25	0	2	20.05
				25	12	2	20.09
				25	25	2	19.91
				50	0	2	19.99
	26365	1882.5	QPSK	1	0	0	22.30
				1	24	0	22.19
				1	49	0	21.93
				25	0	1	21.32
				25	12	1	21.30
				25	25	1	21.13
				50	0	1	21.23
			16QAM	1	0	1	21.13
				1	24	1	21.14
				1	49	1	20.80
				25	0	2	20.25
				25	12	2	20.31
				25	25	2	20.07
				50	0	2	20.17
	26640	1910	QPSK	1	0	0	21.83
				1	24	0	21.84
				1	49	0	21.58
				25	0	1	20.91
				25	12	1	20.92
				25	25	1	20.64
				50	0	1	20.81
			16QAM	1	0	1	20.66
				1	24	1	20.62
				1	49	1	20.38
				25	0	2	19.90
				25	12	2	19.85
				25	25	2	19.59
				50	0	2	19.69

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	26065	1852.5	QPSK	1	0	0	22.27
				1	12	0	22.26
				1	24	0	22.00
				12	0	1	21.22
				12	6	1	21.18
				12	13	1	21.04
				25	0	1	21.13
			16QAM	1	0	1	21.13
				1	12	1	21.07
				1	24	1	20.88
				12	0	2	20.12
				12	6	2	20.16
				12	13	2	19.94
				25	0	2	20.08
	26365	1882.5	QPSK	1	0	0	22.13
				1	12	0	22.10
				1	24	0	21.95
				12	0	1	21.22
				12	6	1	21.21
				12	13	1	21.08
				25	0	1	21.17
			16QAM	1	0	1	21.25
				1	12	1	21.21
				1	24	1	21.09
				12	0	2	20.23
				12	6	2	20.19
				12	13	2	20.12
				25	0	2	20.07
	26665	1912.5	QPSK	1	0	0	21.78
				1	12	0	21.76
				1	24	0	21.74
				12	0	1	20.82
				12	6	1	20.83
				12	13	1	20.58
				25	0	1	20.71
			16QAM	1	0	1	20.64
				1	12	1	20.65
				1	24	1	20.49
				12	0	2	19.77
				12	6	2	19.78
				12	13	2	19.58
				25	0	2	19.72

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	26055	1851.5	QPSK	1	0	0	22.28
				1	8	0	22.18
				1	14	0	22.13
				8	0	1	21.24
				8	4	1	21.23
				8	8	1	21.16
				15	0	1	21.17
			16QAM	1	0	1	21.26
				1	8	1	21.11
				1	14	1	21.08
				8	0	2	20.20
				8	4	2	20.15
				8	8	2	20.14
				15	0	2	20.12
	26365	1882.5	QPSK	1	0	0	22.25
				1	8	0	22.17
				1	14	0	22.14
				8	0	1	21.23
				8	4	1	21.20
				8	7	1	21.17
				15	0	1	21.15
			16QAM	1	0	1	21.11
				1	8	1	20.97
				1	14	1	20.93
				8	0	2	20.13
				8	4	2	20.12
				8	8	2	20.05
				15	0	2	20.00
	26675	1913.5	QPSK	1	0	0	21.68
				1	8	0	21.67
				1	14	0	21.71
				8	0	1	20.78
				8	4	1	20.83
				8	8	1	20.78
				15	0	1	20.69
			16QAM	1	0	1	20.46
				1	8	1	20.48
				1	14	1	20.44
				8	0	2	19.71
				8	4	2	19.70
				8	8	2	19.64
				15	0	2	19.56

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	26047	1850.7	QPSK	1	0	0	22.22
				1	2	0	22.27
				1	5	0	22.14
				3	0	0	22.21
				3	1	0	22.20
				3	2	0	22.19
				6	0	1	21.26
			16QAM	1	0	1	21.03
				1	2	1	21.18
				1	5	1	21.02
				3	0	1	21.00
				3	1	1	21.00
				3	2	1	20.99
				6	0	2	20.16
	26365	1882.5	QPSK	1	0	0	22.12
				1	2	0	22.16
				1	5	0	22.05
				3	0	0	22.14
				3	1	0	21.35
				3	2	0	22.04
				6	0	1	21.26
			16QAM	1	0	1	21.04
				1	2	1	21.17
				1	5	1	21.02
				3	0	1	20.98
				3	1	1	20.99
				3	2	1	20.97
				6	0	2	20.16
	26683	1914.3	QPSK	1	0	0	21.71
				1	2	0	21.88
				1	5	0	21.73
				3	0	0	22.24
				3	1	0	21.62
				3	2	0	21.61
				6	0	1	20.88
			16QAM	1	0	1	20.56
				1	2	1	20.63
				1	5	1	20.46
				3	0	1	20.46
				3	1	1	20.47
				3	2	1	20.41
				6	0	2	19.73

LTE Band 26A

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	26865	831.5	QPSK	1	0	0	22.39
				1	38	0	22.97
				1	74	0	23.27
				38	0	1	21.47
				38	18	1	22.11
				38	37	1	22.35
				75	0	1	21.98
			16QAM	1	0	1	21.53
				1	38	1	22.09
				1	74	1	22.43
				38	0	2	21.50
				38	18	2	22.11
				38	37	2	22.36
				75	0	2	21.00
	26915	836.5	QPSK	1	0	0	22.80
				1	38	0	23.48
				1	74	0	23.41
				38	0	1	21.54
				38	18	1	22.18
				38	37	1	22.18
				75	0	1	22.42
			16QAM	1	0	1	21.55
				1	38	1	22.21
				1	74	1	22.12
				38	0	2	21.50
				38	18	2	22.16
				38	37	2	22.12
				75	0	2	21.32
	26965	841.5	QPSK	1	0	0	23.26
				1	38	0	23.51
				1	74	0	23.30
				38	0	1	22.25
				38	18	1	22.50
				38	37	1	22.24
				75	0	1	22.42
			16QAM	1	0	1	22.26
				1	38	1	22.52
				1	74	1	22.34
				38	0	2	22.26
				38	18	2	22.48
				38	37	2	22.34
				75	0	2	21.40

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	26840	829	QPSK	1	0	0	22.53
				1	24	0	22.88
				1	49	0	23.17
				25	0	1	21.56
				25	12	1	21.60
				25	25	1	22.07
				50	0	1	21.79
			16QAM	1	0	1	21.33
				1	24	1	21.77
				1	49	1	22.05
				25	0	2	20.59
				25	12	2	20.58
				25	25	2	21.07
				50	0	2	20.82
	26915	836.5	QPSK	1	0	0	23.14
				1	24	0	23.60
				1	49	0	23.50
				25	0	1	22.43
				25	12	1	22.41
				25	25	1	22.47
				50	0	1	22.45
			16QAM	1	0	1	21.92
				1	24	1	22.27
				1	49	1	22.24
				25	0	2	21.40
				25	12	2	21.38
				25	25	2	21.52
				50	0	2	21.46
	26990	844	QPSK	1	0	0	23.44
				1	24	0	23.62
				1	49	0	23.44
				25	0	1	22.54
				25	12	1	22.56
				25	25	1	22.26
				50	0	1	22.44
			16QAM	1	0	1	22.45
				1	24	1	22.55
				1	49	1	22.44
				25	0	2	21.48
				25	12	2	21.48
				25	25	2	21.24
				50	0	2	21.42

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	26815	826.5	QPSK	1	0	0	23.23
				1	12	0	23.39
				1	24	0	23.41
				12	0	1	22.30
				12	6	1	22.29
				12	13	1	22.38
				25	0	1	22.34
			16QAM	1	0	1	22.30
				1	12	1	22.43
				1	24	1	22.49
				12	0	2	21.33
				12	6	2	21.28
				12	13	2	21.47
				25	0	2	21.36
	26915	836.5	QPSK	1	0	0	23.26
				1	12	0	23.49
				1	24	0	23.45
				12	0	1	22.31
				12	6	1	22.34
				12	13	1	22.42
				25	0	1	22.40
			16QAM	1	0	1	22.10
				1	12	1	22.42
				1	24	1	22.28
				12	0	2	21.29
				12	6	2	21.29
				12	13	2	21.40
				25	0	2	21.36
	27015	846.5	QPSK	1	0	0	23.37
				1	12	0	23.43
				1	24	0	23.33
				12	0	1	22.47
				12	6	1	22.47
				12	13	1	22.29
				25	0	1	22.45
			16QAM	1	0	1	22.40
				1	12	1	22.52
				1	24	1	22.35
				12	0	2	21.54
				12	6	2	21.59
				12	13	2	21.36
				25	0	2	21.41

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	26805	825.5	QPSK	1	0	0	23.40
				1	8	0	23.33
				1	14	0	23.37
				8	0	1	22.32
				8	4	1	22.26
				8	8	1	22.30
				15	0	1	22.24
			16QAM	1	0	1	22.37
				1	8	1	22.32
				1	14	1	22.33
				8	0	2	21.28
				8	4	2	21.31
				8	8	2	21.08
				15	0	2	21.25
	26915	836.5	QPSK	1	0	0	23.25
				1	8	0	23.30
				1	14	0	23.33
				8	0	1	22.19
				8	4	1	22.37
				8	7	1	22.40
				15	0	1	22.32
			16QAM	1	0	1	22.36
				1	8	1	22.19
				1	14	1	22.00
				8	0	2	21.34
				8	4	2	21.33
				8	8	2	21.37
				15	0	2	21.35
	27025	847.5	QPSK	1	0	0	23.43
				1	8	0	23.39
				1	14	0	22.96
				8	0	1	22.06
				8	4	1	22.15
				8	8	1	22.10
				15	0	1	22.19
			16QAM	1	0	1	22.19
				1	8	1	22.19
				1	14	1	21.68
				8	0	2	21.16
				8	4	2	21.41
				8	8	2	21.11
				15	0	2	21.24

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	26797	824.7	QPSK	1	0	0	22.80
				1	2	0	22.84
				1	5	0	22.72
				3	0	0	22.82
				3	1	0	22.79
				3	2	0	22.78
				6	0	1	21.73
			16QAM	1	0	1	21.60
				1	2	1	21.68
				1	5	1	21.54
				3	0	1	21.64
				3	1	1	21.64
				3	2	1	21.63
				6	0	2	20.56
	26915	836.5	QPSK	1	0	0	22.74
				1	2	0	22.97
				1	5	0	22.84
				3	0	0	22.95
				3	1	0	22.92
				3	2	0	22.90
				6	0	1	21.99
			16QAM	1	0	1	21.67
				1	2	1	21.85
				1	5	1	21.75
				3	0	1	21.70
				3	1	1	21.71
				3	2	1	21.75
				6	0	2	21.06
	27033	848.3	QPSK	1	0	0	22.87
				1	2	0	23.03
				1	5	0	22.91
				3	0	0	22.94
				3	1	0	22.94
				3	2	0	22.96
				6	0	1	21.88
			16QAM	1	0	1	21.67
				1	2	1	21.84
				1	5	1	21.68
				3	0	1	21.80
				3	1	1	21.77
				3	2	1	21.77
				6	0	2	20.70

LTE BAND 26B

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	26765	821.5	QPSK	1	0	0	23.81
				1	38	0	22.99
				1	74	0	22.81
				38	0	1	22.08
				38	18	1	21.74
				38	37	1	21.53
				75	0	1	22.07
			16QAM	1	0	1	22.23
				1	38	1	21.74
				1	74	1	21.47
				38	0	2	22.07
				38	18	2	21.75
				38	37	2	21.49
				75	0	2	20.98

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	26740	819.0	QPSK	1	0	0	23.34
				1	24	0	23.42
				1	49	0	22.77
				25	0	1	22.36
				25	12	1	22.33
				25	25	1	21.98
				50	0	1	22.11
			16QAM	1	0	1	22.08
				1	24	1	22.02
				1	49	1	21.59
				25	0	2	21.36
				25	12	2	21.31
				25	25	2	20.99
				50	0	2	21.07

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	26715	816.5	QPSK	1	0	0	23.44
				1	12	0	23.34
				1	24	0	23.13
				12	0	1	22.31
				12	6	1	22.23
				12	13	1	22.17
				25	0	1	22.29
			16QAM	1	0	1	22.21
				1	12	1	22.24
				1	24	1	21.97
				12	0	2	21.27
				12	6	2	21.23
				12	13	2	21.12
				25	0	2	21.30
	26740	819.0	QPSK	1	0	0	23.09
				1	12	0	23.18
				1	24	0	22.87
				12	0	1	22.17
				12	6	1	22.18
				12	13	1	21.90
				25	0	1	22.13
			16QAM	1	0	1	22.12
				1	12	1	22.17
				1	24	1	21.90
				12	0	2	21.17
				12	6	2	21.19
				12	13	2	20.96
				25	0	2	21.08
	26765	821.5	QPSK	1	0	0	23.04
				1	12	0	22.96
				1	24	0	22.71
				12	0	1	21.97
				12	6	1	21.94
				12	13	1	21.77
				25	0	1	21.97
			16QAM	1	0	1	21.89
				1	12	1	21.79
				1	24	1	21.57
				12	0	2	21.00
				12	6	2	21.00
				12	13	2	20.77
				25	0	2	20.93

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
3MHz	26705	815.5	QPSK	1	0	0	23.40
				1	8	0	23.29
				1	14	0	23.29
				8	0	1	22.29
				8	4	1	22.26
				8	8	1	22.23
				15	0	1	22.22
			16QAM	1	0	1	22.26
				1	8	1	22.09
				1	14	1	22.05
				8	0	2	21.25
				8	4	2	21.22
				8	8	2	21.17
				15	0	2	21.14
	26740	819.0	QPSK	1	0	0	23.18
				1	8	0	23.14
				1	14	0	23.06
				8	0	1	22.07
				8	4	1	22.11
				8	7	1	22.05
				15	0	1	22.07
			16QAM	1	0	1	21.89
				1	8	1	21.85
				1	14	1	21.85
				8	0	2	21.05
				8	4	2	21.04
				8	8	2	20.99
				15	0	2	20.94
	26775	822.5	QPSK	1	0	0	22.90
				1	8	0	22.80
				1	14	0	22.77
				8	0	1	21.85
				8	4	1	21.83
				8	8	1	21.77
				15	0	1	21.76
			16QAM	1	0	1	21.96
				1	8	1	21.78
				1	14	1	21.79
				8	0	2	20.85
				8	4	2	20.84
				8	8	2	20.71
				15	0	2	20.76

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
1.4MHz	26697	814.7	QPSK	1	0	0	23.79
				1	2	0	23.45
				1	5	0	23.16
				3	0	0	23.36
				3	1	0	23.37
				3	2	0	23.35
				6	0	1	22.30
			16QAM	1	0	1	22.20
				1	2	1	22.33
				1	5	1	22.10
				3	0	1	22.15
				3	1	1	22.20
				3	2	1	22.13
				6	0	2	21.25
	26740	819.0	QPSK	1	0	0	23.08
				1	2	0	23.24
				1	5	0	22.99
				3	0	0	23.17
				3	1	0	23.18
				3	2	0	23.13
				6	0	1	22.12
			16QAM	1	0	1	22.01
				1	2	1	22.27
				1	5	1	21.91
				3	0	1	22.00
				3	1	1	22.02
				3	2	1	21.95
				6	0	2	21.08
	26783	823.3	QPSK	1	0	0	22.71
				1	2	0	22.84
				1	5	0	22.68
				3	0	0	22.85
				3	1	0	22.86
				3	2	0	22.75
				6	0	1	21.77
			16QAM	1	0	1	21.65
				1	2	1	21.83
				1	5	1	21.59
				3	0	1	21.67
				3	1	1	21.67
				3	2	1	21.56
				6	0	2	20.75

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BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	37850	2580.0	QPSK	1	0	0	23.02
				1	49	0	23.62
				1	99	0	22.79
				50	0	1	22.24
				50	25	1	22.25
				50	49	1	22.13
				100	0	1	22.16
			16QAM	1	0	1	21.86
				1	49	1	22.41
				1	99	1	21.60
				50	0	2	21.18
				50	25	2	21.18
				50	49	2	21.06
				100	0	2	21.10
	38000	2595	QPSK	1	0	0	22.79
				1	49	0	23.29
				1	99	0	22.97
				50	0	1	21.88
				50	25	1	21.85
				50	49	1	22.02
				100	0	1	21.93
			16QAM	1	0	1	21.86
				1	49	1	22.29
				1	99	1	22.00
				50	0	2	20.79
				50	25	2	20.81
				50	49	2	20.96
				100	0	2	20.88
	38150	2610.0	QPSK	1	0	0	22.79
				1	49	0	23.18
				1	99	0	22.70
				50	0	1	22.04
				50	25	1	22.07
				50	49	1	21.90
				100	0	1	22.00
			16QAM	1	0	1	21.55
				1	49	1	21.96
				1	99	1	21.49
				50	0	2	21.05
				50	25	2	21.07
				50	49	2	20.88
				100	0	2	20.89

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	37825	2577.5	QPSK	1	0	0	23.16
				1	38	0	23.46
				1	74	0	23.05
				38	0	1	22.15
				38	18	1	22.34
				38	37	1	22.00
				75	0	1	22.38
			16QAM	1	0	1	22.11
				1	38	1	22.39
				1	74	1	21.97
				38	0	2	22.09
				38	18	2	22.38
				38	37	2	21.99
				75	0	2	21.24
	38000	2595	QPSK	1	0	0	22.82
				1	38	0	22.94
				1	74	0	22.96
				38	0	1	21.88
				38	18	1	22.06
				38	37	1	22.01
				75	0	1	22.01
			16QAM	1	0	1	21.90
				1	38	1	22.03
				1	74	1	22.06
				38	0	2	21.90
				38	18	2	22.06
				38	37	2	22.02
				75	0	2	20.96
	38175	2612.5	QPSK	1	0	0	23.11
				1	38	0	23.01
				1	74	0	22.97
				38	0	1	21.82
				38	18	1	21.74
				38	37	1	21.69
				75	0	1	22.12
			16QAM	1	0	1	21.83
				1	38	1	21.76
				1	74	1	21.61
				38	0	2	21.82
				38	18	2	21.74
				38	37	2	21.66
				75	0	2	21.04

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	37800	2575.0	QPSK	1	0	0	23.22
				1	24	0	23.70
				1	49	0	23.36
				25	0	1	22.31
				25	12	1	22.31
				25	25	1	22.47
				50	0	1	22.36
			16QAM	1	0	1	22.15
				1	24	1	22.65
				1	49	1	22.36
				25	0	2	21.22
				25	12	2	21.23
				25	25	2	21.38
				50	0	2	21.31
	38000	2595.0	QPSK	1	0	0	22.98
				1	24	0	23.30
				1	49	0	23.08
				25	0	1	22.02
				25	12	1	21.99
				25	25	1	22.02
				50	0	1	21.97
			16QAM	1	0	1	21.76
				1	24	1	22.05
				1	49	1	21.82
				25	0	2	20.88
				25	12	2	20.90
				25	25	2	20.99
				50	0	2	20.95
	38200	2615.0	QPSK	1	0	0	23.01
				1	24	0	23.31
				1	49	0	23.05
				25	0	1	22.01
				25	12	1	22.02
				25	25	1	22.03
				50	0	1	22.05
			16QAM	1	0	1	21.71
				1	24	1	22.03
				1	49	1	21.82
				25	0	2	21.00
				25	12	2	20.99
				25	25	2	20.96
				50	0	2	20.98

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	37775	2572.5	QPSK	1	0	0	23.17
				1	12	0	23.44
				1	24	0	23.34
				12	0	1	22.21
				12	6	1	22.24
				12	13	1	22.37
				25	0	1	22.30
			16QAM	1	0	1	22.13
				1	12	1	22.41
				1	24	1	22.34
				12	0	2	21.22
				12	6	2	21.18
				12	13	2	21.37
				25	0	2	21.22
	38000	2595	QPSK	1	0	0	22.90
				1	12	0	23.09
				1	24	0	22.97
				12	0	1	21.91
				12	6	1	21.91
				12	13	1	21.95
				25	0	1	21.99
			16QAM	1	0	1	21.75
				1	12	1	21.91
				1	24	1	21.78
				12	0	2	20.84
				12	6	2	20.86
				12	13	2	20.89
				25	0	2	20.92
	38225	2617.5	QPSK	1	0	0	22.95
				1	12	0	23.21
				1	24	0	23.02
				12	0	1	22.05
				12	6	1	22.00
				12	13	1	21.95
				25	0	1	21.98
			16QAM	1	0	1	21.81
				1	12	1	22.05
				1	24	1	21.92
				12	0	2	20.96
				12	6	2	20.95
				12	13	2	20.98
				25	0	2	20.98

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BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
20MHz	39750	2506.0	QPSK	1	0	0	24.39
				1	49	0	23.45
				1	99	0	23.74
				50	0	1	22.85
				50	25	1	22.85
				50	49	1	22.52
				100	0	1	22.68
			16QAM	1	0	1	23.38
				1	49	1	22.43
				1	99	1	22.72
				50	0	2	21.90
				50	25	2	21.90
				50	49	2	21.55
				100	0	2	21.71
	40620	2593.0	QPSK	1	0	0	22.95
				1	49	0	22.36
				1	99	0	22.43
				50	0	1	21.71
				50	25	1	21.71
				50	49	1	21.41
				100	0	1	21.56
			16QAM	1	0	1	21.92
				1	49	1	21.32
				1	99	1	21.38
				50	0	2	20.72
				50	25	2	20.73
				50	49	2	20.42
				100	0	2	20.56
	41490	2680.0	QPSK	1	0	0	22.06
				1	49	0	21.66
				1	99	0	21.81
				50	0	1	20.83
				50	25	1	20.84
				50	49	1	20.65
				100	0	1	20.73
			16QAM	1	0	1	21.07
				1	49	1	20.68
				1	99	1	20.83
				50	0	2	19.90
				50	25	2	19.90
				50	49	2	19.70
				100	0	2	19.77

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
15MHz	39725	2503.5	QPSK	1	0	0	24.17
				1	38	0	23.40
				1	74	0	23.43
				38	0	1	23.30
				38	18	1	22.55
				38	37	1	22.61
				75	0	1	22.45
			16QAM	1	0	1	23.34
				1	38	1	22.57
				1	74	1	22.61
				38	0	2	23.29
				38	18	2	22.55
				38	37	2	22.60
				75	0	2	21.47
	40620	2593.0	QPSK	1	0	0	22.66
				1	38	0	22.14
				1	74	0	22.26
				38	0	1	21.74
				38	18	1	21.24
				38	37	1	21.38
				75	0	1	21.30
			16QAM	1	0	1	21.77
				1	38	1	21.26
				1	74	1	21.39
				38	0	2	21.74
				38	18	2	21.25
				38	37	2	21.38
				75	0	2	20.30
	41515	2682.5	QPSK	1	0	0	21.86
				1	38	0	21.74
				1	74	0	21.63
				38	0	1	20.97
				38	18	1	20.90
				38	37	1	20.83
				75	0	1	20.48
			16QAM	1	0	1	21.02
				1	38	1	20.92
				1	74	1	20.84
				38	0	2	20.97
				38	18	2	20.89
				38	37	2	20.83
				75	0	2	19.52

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
10MHz	39700	2501.0	QPSK	1	0	0	22.72
				1	24	0	22.65
				1	49	0	22.43
				25	0	1	21.91
				25	12	1	21.92
				25	25	1	21.76
				50	0	1	21.88
			16QAM	1	0	1	21.99
				1	24	1	21.90
				1	49	1	21.75
				25	0	2	20.88
				25	12	2	20.89
				25	25	2	20.73
				50	0	2	20.88
	40620	2593.0	QPSK	1	0	0	21.47
				1	24	0	21.31
				1	49	0	21.43
				25	0	1	20.46
				25	12	1	20.47
				25	25	1	20.53
				50	0	1	20.45
			16QAM	1	0	1	19.81
				1	24	1	19.75
				1	49	1	19.92
				25	0	2	19.08
				25	12	2	19.04
				25	25	2	19.06
				50	0	2	19.07
	41540	2685.0	QPSK	1	0	0	21.07
				1	24	0	21.05
				1	49	0	20.82
				25	0	1	20.28
				25	12	1	20.29
				25	25	1	20.11
				50	0	1	20.23
			16QAM	1	0	1	20.65
				1	24	1	20.66
				1	49	1	20.41
				25	0	2	19.52
				25	12	2	19.48
				25	25	2	19.56
				50	0	2	19.54

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)
5MHz	39675	2498.5	QPSK	1	0	0	21.00
				1	12	0	21.19
				1	24	0	21.00
				12	0	1	21.83
				12	6	1	21.92
				12	13	1	21.89
				25	0	1	21.88
			16QAM	1	0	1	21.00
				1	12	1	21.84
				1	24	1	21.00
				12	0	2	21.00
				12	6	2	20.98
				12	13	2	20.86
				25	0	2	20.93
	40620	2593.0	QPSK	1	0	0	21.49
				1	12	0	21.46
				1	24	0	21.55
				12	0	1	20.57
				12	6	1	20.56
				12	13	1	20.45
				25	0	1	20.49
			16QAM	1	0	1	20.58
				1	12	1	20.58
				1	24	1	20.52
				12	0	2	19.55
				12	6	2	19.53
				12	13	2	19.53
				25	0	2	19.53
	41565	2687.5	QPSK	1	0	0	21.21
				1	12	0	21.13
				1	24	0	20.94
				12	0	1	20.18
				12	6	1	20.18
				12	13	1	20.08
				25	0	1	20.12
			16QAM	1	0	1	20.45
				1	12	1	20.18
				1	24	1	20.22
				12	0	2	19.21
				12	6	2	19.19
				12	13	2	19.09
				25	0	2	19.13

8. RADIATED OUTPUT POWER

8.1 PROVISIONS APPLICABLE

The radiation test is carried out in a semi-anechoic chamber.

According to the test, put the device under test on a non-conductive platform 3 meters away from the receiving antenna (ANSI/TIA-603-E-2016 Article 2.2.17).

The following rules are for the maximum radiated power limit requirements of the product:

Mode	Nominal Peak Power
LTE Band 2	< 2 Watts max. EIRP (33dBm)
LTE Band 4	< 1 Watts max. EIRP (30dBm)
LTE Band 5	< 7 Watts max. ERP (38.45dBm)
LTE Band 7	< 2 Watts max. EIRP (33dBm)
LTE Band 12	< 3 Watts max. ERP (34.77dBm)
LTE Band 17	< 3 Watts max. ERP (34.77dBm)
LTE Band 25	< 2 Watts max. EIRP (33dBm)
LTE Band 26A	< 7 Watts max. ERP (38.45dBm)
LTE Band 26B	< 7 Watts max. ERP (38.45dBm)
LTE Band 38	< 2 Watts max. EIRP (33dBm)
LTE Band 41	< 2 Watts max. EIRP (33dBm)

8.2 MEASUREMENT METHOD

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

RADIATION CONSTRUCTION METHOD:

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously

recorded signal was duplicated.

The power is calculated by the following formula：

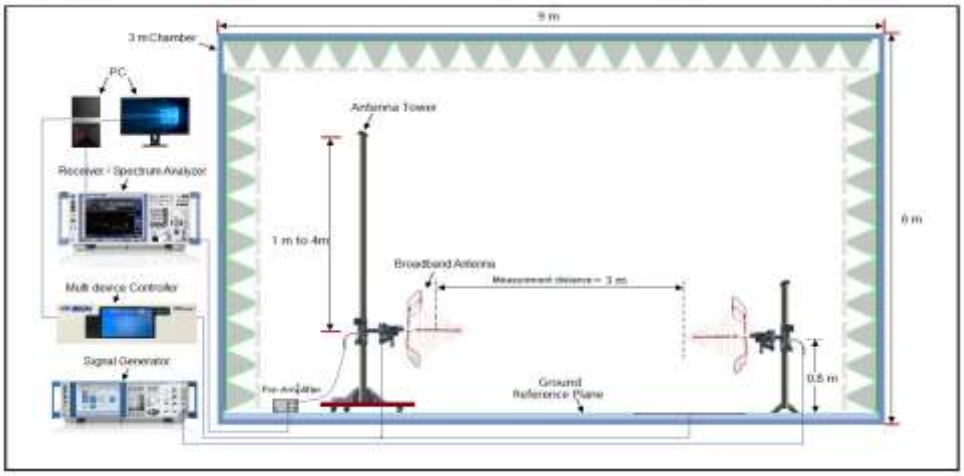
Pd(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dB)

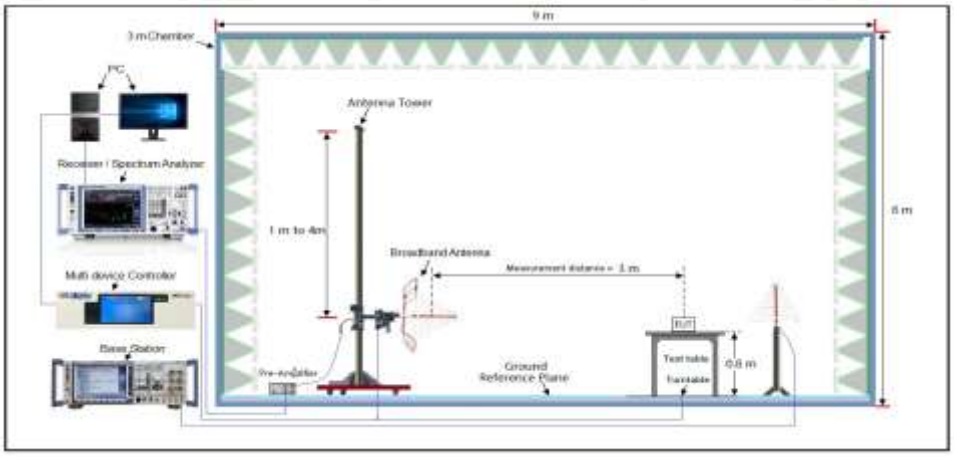
Where: Pd is the dipole equivalent power and Pg is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value. These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration
4. The EUT was tested in three orthogonal planes (X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

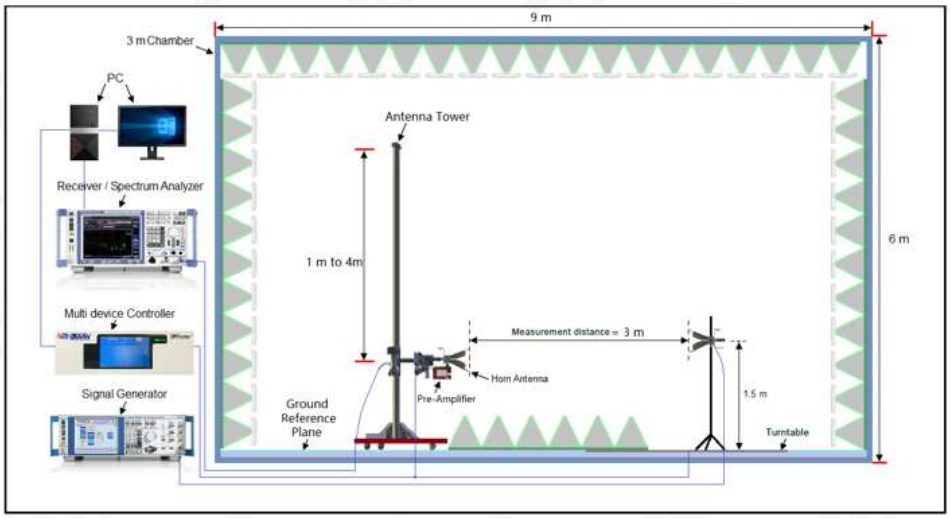
8.3 MEASUREMENT SETUP

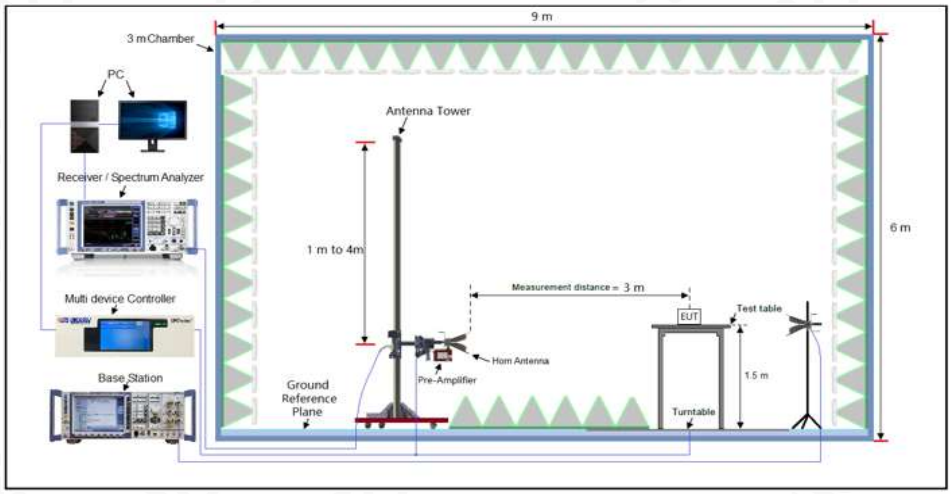
Radiated Power 30MHz to 1GHz Test setup





Radiated Power Above 1GHz Test setup





8.4 MEASUREMENT RESULT

EIRP for LTE Band 2

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
1850.7	1.4	QPSK	1/0	14.37	V	7.95	0.79	20.33	33
1880.0	1.4	QPSK	1/0	14.45	V	7.95	0.79	20.32	33
1909.3	1.4	QPSK	1/0	14.31	V	7.95	0.79	19.86	33
1850.7	1.4	QPSK	1/0	14.41	H	7.95	0.79	21.57	33
1880.0	1.4	QPSK	1/0	14.40	H	7.95	0.79	21.56	33
1909.3	1.4	QPSK	1/0	14.36	H	7.95	0.79	21.52	33
1850.7	1.4	16-QAM	1/5	13.44	V	7.95	0.79	19.19	33
1880.0	1.4	16-QAM	1/0	13.36	V	7.95	0.79	18.97	33
1909.3	1.4	16-QAM	1/0	13.39	V	7.95	0.79	19.27	33
1850.7	1.4	16-QAM	1/5	13.27	H	7.95	0.79	20.43	33
1880.0	1.4	16-QAM	1/0	13.25	H	7.95	0.79	20.41	33
1909.3	1.4	16-QAM	1/0	13.28	H	7.95	0.79	20.44	33
1851.5	3	QPSK	1/0	13.18	V	7.95	0.79	20.17	33
1880.0	3	QPSK	1/0	12.38	V	7.95	0.79	20.26	33
1908.5	3	QPSK	1/0	14.45	V	7.95	0.79	20.45	33
1851.5	3	QPSK	1/0	14.59	H	7.95	0.79	21.75	33
1880.0	3	QPSK	1/0	14.46	H	7.95	0.79	21.62	33
1908.5	3	QPSK	1/0	14.56	H	7.95	0.79	21.72	33
1851.5	3	16-QAM	1/0	14.52	V	7.95	0.79	20.35	33
1880.0	3	16-QAM	1/0	14.50	V	7.95	0.79	20.61	33
1908.5	3	16-QAM	1/0	13.66	V	7.95	0.79	19.78	33
1851.5	3	16-QAM	1/0	13.41	H	7.95	0.79	21.68	33
1880.0	3	16-QAM	1/0	13.55	H	7.95	0.79	21.66	33
1908.5	3	16-QAM	1/0	13.40	H	7.95	0.79	20.82	33
1852.5	5	QPSK	1/0	13.39	V	7.95	0.79	19.95	33
1880.0	5	QPSK	1/0	13.40	V	7.95	0.79	20.12	33
1907.5	5	QPSK	1/24	13.35	V	7.95	0.79	20.03	33
1852.5	5	QPSK	1/0	12.55	H	7.95	0.79	21.19	33
1880.0	5	QPSK	1/0	14.03	H	7.95	0.79	21.43	33
1907.5	5	QPSK	1/24	14.27	H	7.95	0.79	21.17	33
1852.5	5	16-QAM	1/0	14.01	V	7.95	0.79	19.83	33
1880.0	5	16-QAM	1/0	14.02	V	7.95	0.79	19.95	33

1907.5	5	16-QAM	1/24	14.03	V	7.95	0.79	19.27	33
1852.5	5	16-QAM	1/0	14.02	H	7.95	0.79	21.18	33
1880.0	5	16-QAM	1/0	13.22	H	7.95	0.79	21.19	33
1907.5	5	16-QAM	1/24	12.96	H	7.95	0.79	20.38	33
1855	10	QPSK	1/0	12.94	V	7.95	0.79	18.88	33
1880	10	QPSK	1/49	12.89	V	7.95	0.79	18.81	33
1905	10	QPSK	1/0	12.89	V	7.95	0.79	18.91	33
1855	10	QPSK	1/0	12.92	H	7.95	0.79	20.10	33
1880	10	QPSK	1/49	12.86	H	7.95	0.79	20.05	33
1905	10	QPSK	1/0	12.08	H	7.95	0.79	20.05	33
1855	10	16-QAM	1/0	14.38	V	7.95	0.79	20.30	33
1880	10	16-QAM	1/49	14.35	V	7.95	0.79	20.24	33
1905	10	16-QAM	1/0	14.29	V	7.95	0.79	20.17	33
1855	10	16-QAM	1/0	13.48	H	7.95	0.79	21.54	33
1880	10	16-QAM	1/49	13.48	H	7.95	0.79	21.51	33
1905	10	16-QAM	1/0	13.39	H	7.95	0.79	21.45	33
1857.5	15	QPSK	1/0	13.39	V	7.95	0.79	19.22	33
1880	15	QPSK	1/74	13.50	V	7.95	0.79	19.42	33
1902.5	15	QPSK	1/0	13.36	V	7.95	0.79	19.36	33
1857.5	15	QPSK	1/0	13.37	H	7.95	0.79	20.55	33
1880	15	QPSK	1/74	12.46	H	7.95	0.79	20.66	33
1902.5	15	QPSK	1/0	12.44	H	7.95	0.79	20.52	33
1857.5	15	16-QAM	1/0	12.30	V	7.95	0.79	20.63	33
1880	15	16-QAM	1/74	12.37	V	7.95	0.79	20.54	33
1902.5	15	16-QAM	1/0	14.58	V	7.95	0.79	20.49	33
1857.5	15	16-QAM	1/0	14.61	H	7.95	0.79	21.74	33
1880	15	16-QAM	1/74	14.57	H	7.95	0.79	21.77	33
1902.5	15	16-QAM	1/0	13.60	H	7.95	0.79	21.73	33
1860	20	QPSK	1/99	13.62	V	7.95	0.79	19.42	33
1880	20	QPSK	1/99	13.56	V	7.95	0.79	19.45	33
1900	20	QPSK	1/0	13.56	V	7.95	0.79	19.53	33
1860	20	QPSK	1/99	13.47	H	7.95	0.79	20.78	33
1880	20	QPSK	1/99	13.38	H	7.95	0.79	20.72	33
1900	20	QPSK	1/0	13.32	H	7.95	0.79	20.72	33
1860	20	16-QAM	1/99	12.54	V	7.95	0.79	20.11	33
1880	20	16-QAM	1/99	12.52	V	7.95	0.79	19.93	33

1900	20	16-QAM	1/0	12.53	V	7.95	0.79	19.92	33
1860	20	16-QAM	1/99	12.46	H	7.95	0.79	21.32	33
1880	20	16-QAM	1/99	14.16	H	7.95	0.79	21.22	33
1900	20	16-QAM	1/0	14.06	H	7.95	0.79	21.19	33

EIRP for LTE Band 4

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
1710.7	1.4	QPSK	1/0	14.04	V	7.95	0.79	21.20	30
1732.5	1.4	QPSK	1/0	14.02	V	7.95	0.79	21.18	30
1754.3	1.4	QPSK	1/0	13.46	V	7.95	0.79	20.62	30
1710.7	1.4	QPSK	1/0	15.50	H	7.95	0.79	22.66	30
1732.5	1.4	QPSK	1/0	15.24	H	7.95	0.79	22.40	30
1754.3	1.4	QPSK	1/0	14.93	H	7.95	0.79	22.09	30
1710.7	1.4	16-QAM	1/5	13.16	V	7.95	0.79	20.32	30
1732.5	1.4	16-QAM	1/0	12.84	V	7.95	0.79	20.00	30
1754.3	1.4	16-QAM	1/0	12.61	V	7.95	0.79	19.77	30
1710.7	1.4	16-QAM	1/5	14.38	H	7.95	0.79	21.54	30
1732.5	1.4	16-QAM	1/0	14.26	H	7.95	0.79	21.42	30
1754.3	1.4	16-QAM	1/0	13.85	H	7.95	0.79	21.01	30
1711.5	3	QPSK	1/0	12.89	V	7.95	0.79	20.05	30
1732.5	3	QPSK	1/0	13.55	V	7.95	0.79	20.71	30
1753.5	3	QPSK	1/0	12.96	V	7.95	0.79	20.12	30
1711.5	3	QPSK	1/0	14.21	H	7.95	0.79	21.37	30
1732.5	3	QPSK	1/0	14.76	H	7.95	0.79	21.92	30
1753.5	3	QPSK	1/0	14.43	H	7.95	0.79	21.59	30
1711.5	3	16-QAM	1/0	12.18	V	7.95	0.79	19.34	30
1732.5	3	16-QAM	1/0	12.50	V	7.95	0.79	19.66	30
1753.5	3	16-QAM	1/0	12.22	V	7.95	0.79	19.38	30
1711.5	3	16-QAM	1/0	13.54	H	7.95	0.79	20.70	30
1732.5	3	16-QAM	1/0	13.74	H	7.95	0.79	20.90	30
1753.5	3	16-QAM	1/0	13.63	H	7.95	0.79	20.79	30
1712.5	5	QPSK	1/0	13.19	V	7.95	0.79	20.35	30
1732.5	5	QPSK	1/0	13.57	V	7.95	0.79	20.73	30
1752.5	5	QPSK	1/24	12.80	V	7.95	0.79	19.96	30
1712.5	5	QPSK	1/0	14.41	H	7.95	0.79	21.57	30
1732.5	5	QPSK	1/0	14.67	H	7.95	0.79	21.83	30
1752.5	5	QPSK	1/24	14.04	H	7.95	0.79	21.20	30
1712.5	5	16-QAM	1/0	12.61	V	7.95	0.79	19.77	30
1732.5	5	16-QAM	1/0	12.49	V	7.95	0.79	19.65	30
1752.5	5	16-QAM	1/24	12.10	V	7.95	0.79	19.26	30
1712.5	5	16-QAM	1/0	13.85	H	7.95	0.79	21.01	30
1732.5	5	16-QAM	1/0	13.85	H	7.95	0.79	21.01	30
1752.5	5	16-QAM	1/24	13.35	H	7.95	0.79	20.51	30

1715	10	QPSK	1/0	12.26	V	7.95	0.79	19.42	30
1732.5	10	QPSK	1/49	12.57	V	7.95	0.79	19.73	30
1750	10	QPSK	1/0	11.84	V	7.95	0.79	19.00	30
1715	10	QPSK	1/0	13.55	H	7.95	0.79	20.71	30
1732.5	10	QPSK	1/49	13.81	H	7.95	0.79	20.97	30
1750	10	QPSK	1/0	13.18	H	7.95	0.79	20.34	30
1715	10	16-QAM	1/0	13.08	V	7.95	0.79	20.24	30
1732.5	10	16-QAM	1/49	12.66	V	7.95	0.79	19.82	30
1750	10	16-QAM	1/0	13.26	V	7.95	0.79	20.42	30
1715	10	16-QAM	1/0	14.32	H	7.95	0.79	21.48	30
1732.5	10	16-QAM	1/49	14.02	H	7.95	0.79	21.18	30
1750	10	16-QAM	1/0	14.50	H	7.95	0.79	21.66	30
1717.5	15	QPSK	1/0	12.83	V	7.95	0.79	19.99	30
1732.5	15	QPSK	1/74	13.33	V	7.95	0.79	20.49	30
1747.5	15	QPSK	1/0	13.12	V	7.95	0.79	20.28	30
1717.5	15	QPSK	1/0	13.96	H	7.95	0.79	21.12	30
1732.5	15	QPSK	1/74	14.69	H	7.95	0.79	21.85	30
1747.5	15	QPSK	1/0	14.33	H	7.95	0.79	21.49	30
1717.5	15	16-QAM	1/0	11.43	V	7.95	0.79	18.59	30
1732.5	15	16-QAM	1/74	11.38	V	7.95	0.79	18.54	30
1747.5	15	16-QAM	1/0	11.42	V	7.95	0.79	18.58	30
1717.5	15	16-QAM	1/0	12.76	H	7.95	0.79	19.92	30
1732.5	15	16-QAM	1/74	12.62	H	7.95	0.79	19.78	30
1747.5	15	16-QAM	1/0	12.97	H	7.95	0.79	20.13	30
1720	20	QPSK	1/99	12.41	V	7.95	0.79	19.57	30
1732.5	20	QPSK	1/99	12.48	V	7.95	0.79	19.64	30
1745	20	QPSK	1/0	12.39	V	7.95	0.79	19.55	30
1720	20	QPSK	1/99	13.65	H	7.95	0.79	20.81	30
1732.5	20	QPSK	1/99	13.81	H	7.95	0.79	20.97	30
1745	20	QPSK	1/0	13.64	H	7.95	0.79	20.80	30
1720	20	16-QAM	1/99	12.41	V	7.95	0.79	19.57	30
1732.5	20	16-QAM	1/99	13.21	V	7.95	0.79	20.37	30
1745	20	16-QAM	1/0	13.01	V	7.95	0.79	20.17	30
1720	20	16-QAM	1/99	13.61	H	7.95	0.79	20.77	30
1732.5	20	16-QAM	1/99	14.46	H	7.95	0.79	21.62	30
1745	20	16-QAM	1/0	14.35	H	7.95	0.79	21.51	30

ERP for LTE Band 5

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
824.7	1.4	QPSK	1/0	15.01	V	6.7	0.49	21.22	38.45
836.5	1.4	QPSK	1/0	14.65	V	6.7	0.49	20.86	38.45
848.3	1.4	QPSK	1/0	15.00	V	6.7	0.49	21.21	38.45
824.7	1.4	QPSK	1/0	16.34	H	6.7	0.49	22.55	38.45
836.5	1.4	QPSK	1/0	16.17	H	6.7	0.49	22.38	38.45
848.3	1.4	QPSK	1/0	16.63	H	6.7	0.49	22.84	38.45
824.7	1.4	16-QAM	1/0	13.61	V	6.7	0.49	19.82	38.45
836.5	1.4	16-QAM	1/0	13.63	V	6.7	0.49	19.84	38.45
848.3	1.4	16-QAM	1/0	13.86	V	6.7	0.49	20.07	38.45
824.7	1.4	16-QAM	1/0	15.16	H	6.7	0.49	21.37	38.45
836.5	1.4	16-QAM	1/0	15.04	H	6.7	0.49	21.25	38.45
848.3	1.4	16-QAM	1/0	15.27	H	6.7	0.49	21.48	38.45
825.5	3	QPSK	1/0	15.31	V	6.7	0.49	21.52	38.45
836.5	3	QPSK	1/0	15.86	V	6.7	0.49	22.07	38.45
847.5	3	QPSK	1/0	15.62	V	6.7	0.49	21.83	38.45
825.5	3	QPSK	1/0	16.56	H	6.7	0.49	22.77	38.45
836.5	3	QPSK	1/0	17.00	H	6.7	0.49	23.21	38.45
847.5	3	QPSK	1/0	16.95	H	6.7	0.49	23.16	38.45
825.5	3	16-QAM	1/0	14.17	V	6.7	0.49	20.38	38.45
836.5	3	16-QAM	1/0	14.57	V	6.7	0.49	20.78	38.45
847.5	3	16-QAM	1/0	14.12	V	6.7	0.49	20.33	38.45
825.5	3	16-QAM	1/0	15.38	H	6.7	0.49	21.59	38.45
836.5	3	16-QAM	1/0	15.71	H	6.7	0.49	21.92	38.45
847.5	3	16-QAM	1/0	15.75	H	6.7	0.49	21.96	38.45
826.5	5	QPSK	1/0	13.69	V	6.7	0.49	19.90	38.45
836.5	5	QPSK	1/0	15.54	V	6.7	0.49	21.75	38.45
846.5	5	QPSK	1/0	15.46	V	6.7	0.49	21.67	38.45
826.5	5	QPSK	1/0	15.24	H	6.7	0.49	21.45	38.45
836.5	5	QPSK	1/0	16.99	H	6.7	0.49	23.20	38.45
846.5	5	QPSK	1/0	16.99	H	6.7	0.49	23.20	38.45
826.5	5	16-QAM	1/0	14.28	V	6.7	0.49	20.49	38.45
836.5	5	16-QAM	1/0	14.70	V	6.7	0.49	20.91	38.45
846.5	5	16-QAM	1/0	14.14	V	6.7	0.49	20.35	38.45
826.5	5	16-QAM	1/0	15.73	H	6.7	0.49	21.94	38.45
836.5	5	16-QAM	1/0	15.84	H	6.7	0.49	22.05	38.45
846.5	5	16-QAM	1/0	15.66	H	6.7	0.49	21.87	38.45

829	10	QPSK	1/0	14.60	V	6.7	0.49	20.81	38.45
836.5	10	QPSK	1/0	14.40	V	6.7	0.49	20.61	38.45
844	10	QPSK	1/0	13.23	V	6.7	0.49	19.44	38.45
829	10	QPSK	1/0	15.74	H	6.7	0.49	21.95	38.45
836.5	10	QPSK	1/0	15.62	H	6.7	0.49	21.83	38.45
844	10	QPSK	1/0	14.75	H	6.7	0.49	20.96	38.45
829	10	16-QAM	1/0	15.50	V	6.7	0.49	21.71	38.45
836.5	10	16-QAM	1/0	15.41	V	6.7	0.49	21.62	38.45
844	10	16-QAM	1/0	14.41	V	6.7	0.49	20.62	38.45
829	10	16-QAM	1/0	16.83	H	6.7	0.49	23.04	38.45
836.5	10	16-QAM	1/0	16.82	H	6.7	0.49	23.03	38.45
844	10	16-QAM	1/0	15.77	H	6.7	0.49	21.98	38.45

ERP for LTE Band 7

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2502.5	5	QPSK	1/0	13.50	V	8.23	1.12	20.61	33
2535	5	QPSK	1/0	13.37	V	8.23	1.12	20.48	33
2567.5	5	QPSK	1/24	13.10	V	8.23	1.12	20.21	33
2502.5	5	QPSK	1/0	14.51	H	8.23	1.12	21.62	33
2535	5	QPSK	1/0	14.60	H	8.23	1.12	21.71	33
2567.5	5	QPSK	1/24	14.43	H	8.23	1.12	21.54	33
2502.5	5	16-QAM	1/0	12.58	V	8.23	1.12	19.69	33
2535	5	16-QAM	1/0	11.95	V	8.23	1.12	19.06	33
2567.5	5	16-QAM	1/24	11.95	V	8.23	1.12	19.06	33
2502.5	5	16-QAM	1/0	13.62	H	8.23	1.12	20.73	33
2535	5	16-QAM	1/0	13.31	H	8.23	1.12	20.42	33
2567.5	5	16-QAM	1/24	13.20	H	8.23	1.12	20.31	33
2505	10	QPSK	1/0	13.04	V	8.23	1.12	20.15	33
2535	10	QPSK	1/49	13.04	V	8.23	1.12	20.15	33
2565	10	QPSK	1/0	12.35	V	8.23	1.12	19.46	33
2505	10	QPSK	1/0	14.40	H	8.23	1.12	21.51	33
2535	10	QPSK	1/49	14.09	H	8.23	1.12	21.20	33
2565	10	QPSK	1/0	13.37	H	8.23	1.12	20.48	33
2505	10	16-QAM	1/0	11.86	V	8.23	1.12	18.97	33
2535	10	16-QAM	1/49	12.24	V	8.23	1.12	19.35	33
2565	10	16-QAM	1/0	11.62	V	8.23	1.12	18.73	33
2505	10	16-QAM	1/0	13.38	H	8.23	1.12	20.49	33
2535	10	16-QAM	1/49	13.38	H	8.23	1.12	20.49	33
2565	10	16-QAM	1/0	13.18	H	8.23	1.12	20.29	33
2507.5	15	QPSK	1/0	10.89	V	8.23	1.12	18.00	33
2535	15	QPSK	1/74	12.16	V	8.23	1.12	19.27	33
2562.5	15	QPSK	1/0	11.75	V	8.23	1.12	18.86	33
2507.5	15	QPSK	1/0	12.25	H	8.23	1.12	19.36	33
2535	15	QPSK	1/74	13.18	H	8.23	1.12	20.29	33
2562.5	15	QPSK	1/0	13.33	H	8.23	1.12	20.44	33
2507.5	15	16-QAM	1/0	11.03	V	8.23	1.12	18.14	33
2535	15	16-QAM	1/74	10.82	V	8.23	1.12	17.93	33
2562.5	15	16-QAM	1/0	10.67	V	8.23	1.12	17.78	33
2507.5	15	16-QAM	1/0	12.14	H	8.23	1.12	19.25	33
2535	15	16-QAM	1/74	12.12	H	8.23	1.12	19.23	33
2562.5	15	16-QAM	1/0	12.03	H	8.23	1.12	19.14	33

2510	20	QPSK	1/99	10.82	V	8.23	1.12	17.93	33
2535	20	QPSK	1/99	10.55	V	8.23	1.12	17.66	33
2560	20	QPSK	1/0	9.53	V	8.23	1.12	16.64	33
2510	20	QPSK	1/99	12.06	H	8.23	1.12	19.17	33
2535	20	QPSK	1/99	11.85	H	8.23	1.12	18.96	33
2560	20	QPSK	1/0	11.03	H	8.23	1.12	18.14	33
2510	20	16-QAM	1/99	13.47	V	8.23	1.12	20.58	33
2535	20	16-QAM	1/99	13.33	V	8.23	1.12	20.44	33
2560	20	16-QAM	1/0	13.26	V	8.23	1.12	20.37	33
2510	20	16-QAM	1/99	14.69	H	8.23	1.12	21.80	33
2535	20	16-QAM	1/99	14.58	H	8.23	1.12	21.69	33
2560	20	16-QAM	1/0	14.50	H	8.23	1.12	21.61	33

ERP for LTE Band 12

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
699.7	1.4	QPSK	1/0	15.09	V	6.6	0.47	21.22	34.77
707.5	1.4	QPSK	1/0	14.73	V	6.6	0.47	20.86	34.77
715.3	1.4	QPSK	1/24	15.08	V	6.6	0.47	21.21	34.77
699.7	1.4	QPSK	1/0	16.42	H	6.6	0.47	22.55	34.77
707.5	1.4	QPSK	1/0	16.25	H	6.6	0.47	22.38	34.77
715.3	1.4	QPSK	1/24	16.71	H	6.6	0.47	22.84	34.77
699.7	1.4	16-QAM	1/0	13.69	V	6.6	0.47	19.82	34.77
707.5	1.4	16-QAM	1/0	13.71	V	6.6	0.47	19.84	34.77
715.3	1.4	16-QAM	1/24	13.94	V	6.6	0.47	20.07	34.77
699.7	1.4	16-QAM	1/0	15.24	H	6.6	0.47	21.37	34.77
707.5	1.4	16-QAM	1/0	15.12	H	6.6	0.47	21.25	34.77
715.3	1.4	16-QAM	1/24	15.35	H	6.6	0.47	21.48	34.77
700.5	3	QPSK	1/0	15.39	V	6.6	0.47	21.52	34.77
707.5	3	QPSK	1/49	15.94	V	6.6	0.47	22.07	34.77
714.5	3	QPSK	1/0	15.70	V	6.6	0.47	21.83	34.77
700.5	3	QPSK	1/0	16.64	H	6.6	0.47	22.77	34.77
707.5	3	QPSK	1/49	17.08	H	6.6	0.47	23.21	34.77
714.5	3	QPSK	1/0	17.03	H	6.6	0.47	23.16	34.77
700.5	3	16-QAM	1/0	14.25	V	6.6	0.47	20.38	34.77
707.5	3	16-QAM	1/49	14.65	V	6.6	0.47	20.78	34.77
714.5	3	16-QAM	1/0	14.20	V	6.6	0.47	20.33	34.77
700.5	3	16-QAM	1/0	15.46	H	6.6	0.47	21.59	34.77
707.5	3	16-QAM	1/49	15.79	H	6.6	0.47	21.92	34.77
714.5	3	16-QAM	1/0	15.83	H	6.6	0.47	21.96	34.77
701.5	5	QPSK	1/0	13.77	V	6.6	0.47	19.90	34.77
707.5	5	QPSK	1/74	15.62	V	6.6	0.47	21.75	34.77
713.5	5	QPSK	1/0	15.54	V	6.6	0.47	21.67	34.77
701.5	5	QPSK	1/0	15.32	H	6.6	0.47	21.45	34.77
707.5	5	QPSK	1/74	17.07	H	6.6	0.47	23.20	34.77
713.5	5	QPSK	1/0	17.07	H	6.6	0.47	23.20	34.77
701.5	5	16-QAM	1/0	14.36	V	6.6	0.47	20.49	34.77
707.5	5	16-QAM	1/74	14.78	V	6.6	0.47	20.91	34.77
713.5	5	16-QAM	1/0	14.22	V	6.6	0.47	20.35	34.77
701.5	5	16-QAM	1/0	15.81	H	6.6	0.47	21.94	34.77
707.5	5	16-QAM	1/74	15.92	H	6.6	0.47	22.05	34.77
713.5	5	16-QAM	1/0	15.74	H	6.6	0.47	21.87	34.77

704.0	10	QPSK	1/99	14.68	V	6.6	0.47	20.81	34.77
707.5	10	QPSK	1/99	14.48	V	6.6	0.47	20.61	34.77
711.0	10	QPSK	1/0	13.31	V	6.6	0.47	19.44	34.77
704.0	10	QPSK	1/99	15.82	H	6.6	0.47	21.95	34.77
707.5	10	QPSK	1/99	15.70	H	6.6	0.47	21.83	34.77
711.0	10	QPSK	1/0	14.83	H	6.6	0.47	20.96	34.77
704.0	10	16-QAM	1/99	15.58	V	6.6	0.47	21.71	34.77
707.5	10	16-QAM	1/99	15.49	V	6.6	0.47	21.62	34.77
711.0	10	16-QAM	1/0	14.49	V	6.6	0.47	20.62	34.77
704.0	10	16-QAM	1/99	16.91	H	6.6	0.47	23.04	34.77
707.5	10	16-QAM	1/99	16.90	H	6.6	0.47	23.03	34.77
711.0	10	16-QAM	1/0	15.85	H	6.6	0.47	21.98	34.77

ERP for LTE Band 17

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
706.5	5	QPSK	1/0	14.90	V	6.6	0.47	21.03	34.77
710.0	5	QPSK	1/74	13.61	V	6.6	0.47	19.74	34.77
713.5	5	QPSK	1/0	13.01	V	6.6	0.47	19.14	34.77
706.5	5	QPSK	1/0	16.23	H	6.6	0.47	22.36	34.77
710.0	5	QPSK	1/74	15.13	H	6.6	0.47	21.26	34.77
713.5	5	QPSK	1/0	14.64	H	6.6	0.47	20.77	34.77
706.5	5	16-QAM	1/0	12.62	V	6.6	0.47	18.75	34.77
710.0	5	16-QAM	1/74	13.30	V	6.6	0.47	19.43	34.77
713.5	5	16-QAM	1/0	12.64	V	6.6	0.47	18.77	34.77
706.5	5	16-QAM	1/0	14.17	H	6.6	0.47	20.30	34.77
710.0	5	16-QAM	1/74	14.71	H	6.6	0.47	20.84	34.77
713.5	5	16-QAM	1/0	14.05	H	6.6	0.47	20.18	34.77
709.0	10	QPSK	1/99	14.35	V	6.6	0.47	20.48	34.77
710.0	10	QPSK	1/99	13.81	V	6.6	0.47	19.94	34.77
711.0	10	QPSK	1/0	13.28	V	6.6	0.47	19.41	34.77
709.0	10	QPSK	1/99	15.60	H	6.6	0.47	21.73	34.77
710.0	10	QPSK	1/99	14.95	H	6.6	0.47	21.08	34.77
711.0	10	QPSK	1/0	14.61	H	6.6	0.47	20.74	34.77
709.0	10	16-QAM	1/99	13.16	V	6.6	0.47	19.29	34.77
710.0	10	16-QAM	1/99	12.58	V	6.6	0.47	18.71	34.77
711.0	10	16-QAM	1/0	11.82	V	6.6	0.47	17.95	34.77
709.0	10	16-QAM	1/99	14.37	H	6.6	0.47	20.50	34.77
710.0	10	16-QAM	1/99	13.72	H	6.6	0.47	19.85	34.77
711.0	10	16-QAM	1/0	13.45	H	6.6	0.47	19.58	34.77

EIRP for LTE Band 25

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
1850.7	1.4	QPSK	1/0	11.93	V	7.95	0.80	19.08	34.77
1882.5	1.4	QPSK	1/0	11.79	V	7.95	0.80	18.94	34.77
1914.3	1.4	QPSK	1/0	11.67	V	7.95	0.80	18.82	34.77
1850.7	1.4	QPSK	1/0	13.18	H	7.95	0.80	20.33	34.77
1882.5	1.4	QPSK	1/0	13.20	H	7.95	0.80	20.35	34.77
1914.3	1.4	QPSK	1/0	13.00	H	7.95	0.80	20.15	34.77
1850.7	1.4	16-QAM	1/5	10.86	V	7.95	0.80	18.01	34.77
1882.5	1.4	16-QAM	1/0	10.45	V	7.95	0.80	17.60	34.77
1914.3	1.4	16-QAM	1/0	10.62	V	7.95	0.80	17.77	34.77
1850.7	1.4	16-QAM	1/5	12.09	H	7.95	0.80	19.24	34.77
1882.5	1.4	16-QAM	1/0	12.00	H	7.95	0.80	19.15	34.77
1914.3	1.4	16-QAM	1/0	12.05	H	7.95	0.80	19.20	34.77
1851.5	3	QPSK	1/0	11.79	V	7.95	0.80	18.94	34.77
1882.5	3	QPSK	1/0	12.21	V	7.95	0.80	19.36	34.77
1913.5	3	QPSK	1/0	11.42	V	7.95	0.80	18.57	34.77
1851.5	3	QPSK	1/0	13.25	H	7.95	0.80	20.40	34.77
1882.5	3	QPSK	1/0	13.42	H	7.95	0.80	20.57	34.77
1913.5	3	QPSK	1/0	12.75	H	7.95	0.80	19.90	34.77
1851.5	3	16-QAM	1/0	10.82	V	7.95	0.80	17.97	34.77
1882.5	3	16-QAM	1/0	10.70	V	7.95	0.80	17.85	34.77
1913.5	3	16-QAM	1/0	11.14	V	7.95	0.80	18.29	34.77
1851.5	3	16-QAM	1/0	12.34	H	7.95	0.80	19.49	34.77
1882.5	3	16-QAM	1/0	12.33	H	7.95	0.80	19.48	34.77
1913.5	3	16-QAM	1/0	12.60	H	7.95	0.80	19.75	34.77
1852.5	5	QPSK	1/0	10.06	V	7.95	0.80	17.21	34.77
1882.5	5	QPSK	1/0	11.30	V	7.95	0.80	18.45	34.77
1912.5	5	QPSK	1/24	11.91	V	7.95	0.80	19.06	34.77
1852.5	5	QPSK	1/0	11.26	H	7.95	0.80	18.41	34.77
1882.5	5	QPSK	1/0	12.71	H	7.95	0.80	19.86	34.77
1912.5	5	QPSK	1/24	13.24	H	7.95	0.80	20.39	34.77
1852.5	5	16-QAM	1/0	10.76	V	7.95	0.80	17.91	34.77
1882.5	5	16-QAM	1/0	10.45	V	7.95	0.80	17.60	34.77
1912.5	5	16-QAM	1/24	10.31	V	7.95	0.80	17.46	34.77
1852.5	5	16-QAM	1/0	12.12	H	7.95	0.80	19.27	34.77
1882.5	5	16-QAM	1/0	11.86	H	7.95	0.80	19.01	34.77
1912.5	5	16-QAM	1/24	11.97	H	7.95	0.80	19.12	34.77

1855.0	10	QPSK	1/0	10.42	V	7.95	0.80	17.57	34.77
1882.5	10	QPSK	1/49	9.90	V	7.95	0.80	17.05	34.77
1910.0	10	QPSK	1/0	9.24	V	7.95	0.80	16.39	34.77
1855.0	10	QPSK	1/0	12.05	H	7.95	0.80	19.20	34.77
1882.5	10	QPSK	1/49	11.42	H	7.95	0.80	18.57	34.77
1910.0	10	QPSK	1/0	10.87	H	7.95	0.80	18.02	34.77
1855.0	10	16-QAM	1/0	11.79	V	7.95	0.80	18.94	34.77
1882.5	10	16-QAM	1/49	12.05	V	7.95	0.80	19.20	34.77
1910.0	10	16-QAM	1/0	11.68	V	7.95	0.80	18.83	34.77
1855.0	10	16-QAM	1/0	13.34	H	7.95	0.80	20.49	34.77
1882.5	10	16-QAM	1/49	13.16	H	7.95	0.80	20.31	34.77
1910.0	10	16-QAM	1/0	12.92	H	7.95	0.80	20.07	34.77
1857.5	15	QPSK	1/0	10.78	V	7.95	0.80	17.93	34.77
1882.5	15	QPSK	1/74	10.72	V	7.95	0.80	17.87	34.77
1907.5	15	QPSK	1/0	11.12	V	7.95	0.80	18.27	34.77
1857.5	15	QPSK	1/0	12.11	H	7.95	0.80	19.26	34.77
1882.5	15	QPSK	1/74	11.92	H	7.95	0.80	19.07	34.77
1907.5	15	QPSK	1/0	12.26	H	7.95	0.80	19.41	34.77
1857.5	15	16-QAM	1/0	12.13	V	7.95	0.80	19.28	34.77
1882.5	15	16-QAM	1/74	11.87	V	7.95	0.80	19.02	34.77
1907.5	15	16-QAM	1/0	11.76	V	7.95	0.80	18.91	34.77
1857.5	15	16-QAM	1/0	13.35	H	7.95	0.80	20.50	34.77
1882.5	15	16-QAM	1/74	13.23	H	7.95	0.80	20.38	34.77
1907.5	15	16-QAM	1/0	12.90	H	7.95	0.80	20.05	34.77
1860.0	20	QPSK	1/99	11.07	V	7.95	0.80	18.22	34.77
1882.5	20	QPSK	1/99	11.21	V	7.95	0.80	18.36	34.77
1905.0	20	QPSK	1/0	10.39	V	7.95	0.80	17.54	34.77
1860.0	20	QPSK	1/99	12.48	H	7.95	0.80	19.63	34.77
1882.5	20	QPSK	1/99	12.46	H	7.95	0.80	19.61	34.77
1905.0	20	QPSK	1/0	12.05	H	7.95	0.80	19.20	34.77
1860.0	20	16-QAM	1/99	11.29	V	7.95	0.80	18.44	34.77
1882.5	20	16-QAM	1/99	10.44	V	7.95	0.80	17.59	34.77
1905.0	20	16-QAM	1/0	11.42	V	7.95	0.80	18.57	34.77
1860.0	20	16-QAM	1/99	12.42	H	7.95	0.80	19.57	34.77
1882.5	20	16-QAM	1/99	12.07	H	7.95	0.80	19.22	34.77
1905.0	20	16-QAM	1/0	13.05	H	7.95	0.80	20.20	34.77

ERP for LTE Band 26A

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
824.7	1.4	QPSK	1/0	13.84	V	6.6	0.48	19.96	34.77
836.5	1.4	QPSK	1/0	14.00	V	6.6	0.48	20.12	34.77
848.3	1.4	QPSK	1/0	14.18	V	6.6	0.48	20.30	34.77
824.7	1.4	QPSK	1/0	15.17	H	6.6	0.48	21.29	34.77
836.5	1.4	QPSK	1/0	15.52	H	6.6	0.48	21.64	34.77
848.3	1.4	QPSK	1/0	15.81	H	6.6	0.48	21.93	34.77
824.7	1.4	16-QAM	1/0	12.88	V	6.6	0.48	19.00	34.77
836.5	1.4	16-QAM	1/0	12.56	V	6.6	0.48	18.68	34.77
848.3	1.4	16-QAM	1/0	13.00	V	6.6	0.48	19.12	34.77
824.7	1.4	16-QAM	1/0	14.43	H	6.6	0.48	20.55	34.77
836.5	1.4	16-QAM	1/0	13.97	H	6.6	0.48	20.09	34.77
848.3	1.4	16-QAM	1/0	14.41	H	6.6	0.48	20.53	34.77
825.5	3	QPSK	1/0	14.53	V	6.6	0.48	20.65	34.77
836.5	3	QPSK	1/0	15.10	V	6.6	0.48	21.22	34.77
847.5	3	QPSK	1/0	14.81	V	6.6	0.48	20.93	34.77
825.5	3	QPSK	1/0	15.78	H	6.6	0.48	21.90	34.77
836.5	3	QPSK	1/0	16.24	H	6.6	0.48	22.36	34.77
847.5	3	QPSK	1/0	16.14	H	6.6	0.48	22.26	34.77
825.5	3	16-QAM	1/0	13.35	V	6.6	0.48	19.47	34.77
836.5	3	16-QAM	1/0	13.77	V	6.6	0.48	19.89	34.77
847.5	3	16-QAM	1/0	13.25	V	6.6	0.48	19.37	34.77
825.5	3	16-QAM	1/0	14.56	H	6.6	0.48	20.68	34.77
836.5	3	16-QAM	1/0	14.91	H	6.6	0.48	21.03	34.77
847.5	3	16-QAM	1/0	14.88	H	6.6	0.48	21.00	34.77
826.5	5	QPSK	1/0	12.96	V	6.6	0.48	19.08	34.77
836.5	5	QPSK	1/0	14.63	V	6.6	0.48	20.75	34.77
846.5	5	QPSK	1/0	14.55	V	6.6	0.48	20.67	34.77
826.5	5	QPSK	1/0	14.51	H	6.6	0.48	20.63	34.77
836.5	5	QPSK	1/0	16.08	H	6.6	0.48	22.20	34.77
846.5	5	QPSK	1/0	16.26	H	6.6	0.48	22.38	34.77
826.5	5	16-QAM	1/0	13.45	V	6.6	0.48	19.57	34.77
836.5	5	16-QAM	1/0	13.94	V	6.6	0.48	20.06	34.77
846.5	5	16-QAM	1/0	13.57	V	6.6	0.48	19.69	34.77

826.5	5	16-QAM	1/0	14.90	H	6.6	0.48	21.02	34.77
836.5	5	16-QAM	1/0	15.08	H	6.6	0.48	21.20	34.77
846.5	5	16-QAM	1/0	15.09	H	6.6	0.48	21.21	34.77
829	10	QPSK	1/0	14.05	V	6.6	0.48	20.17	34.77
836.5	10	QPSK	1/0	13.86	V	6.6	0.48	19.98	34.77
844	10	QPSK	1/0	12.36	V	6.6	0.48	18.48	34.77
829	10	QPSK	1/0	15.19	H	6.6	0.48	21.31	34.77
836.5	10	QPSK	1/0	15.08	H	6.6	0.48	21.20	34.77
844	10	QPSK	1/0	13.88	H	6.6	0.48	20.00	34.77
829	10	16-QAM	1/0	14.70	V	6.6	0.48	20.82	34.77
836.5	10	16-QAM	1/0	14.64	V	6.6	0.48	20.76	34.77
844	10	16-QAM	1/0	13.66	V	6.6	0.48	19.78	34.77
829	10	16-QAM	1/0	16.03	H	6.6	0.48	22.15	34.77
836.5	10	16-QAM	1/0	16.05	H	6.6	0.48	22.17	34.77
844	10	16-QAM	1/0	15.02	H	6.6	0.48	21.14	34.77
831.5	15	QPSK	1/0	13.77	V	6.6	0.48	19.89	34.77
836.5	15	QPSK	1/0	13.83	V	6.6	0.48	19.95	34.77
841.5	15	QPSK	1/0	13.81	V	6.6	0.48	19.93	34.77
831.5	15	QPSK	1/0	14.98	H	6.6	0.48	21.10	34.77
836.5	15	QPSK	1/0	14.94	H	6.6	0.48	21.06	34.77
841.5	15	QPSK	1/0	15.07	H	6.6	0.48	21.19	34.77
831.5	15	16-QAM	1/0	15.00	V	6.6	0.48	21.12	34.77
836.5	15	16-QAM	1/0	14.85	V	6.6	0.48	20.97	34.77
841.5	15	16-QAM	1/0	13.59	V	6.6	0.48	19.71	34.77
831.5	15	16-QAM	1/0	16.13	H	6.6	0.48	22.25	34.77
836.5	15	16-QAM	1/0	16.09	H	6.6	0.48	22.21	34.77
841.5	15	16-QAM	1/0	14.95	H	6.6	0.48	21.07	34.77

ERP for LTE Band 26B

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
814.7	1.4	QPSK	1/0	15.23	V	6.5	0.49	21.24	50
819.0	1.4	QPSK	1/0	14.22	V	6.5	0.49	20.23	50
823.3	1.4	QPSK	1/0	13.93	V	6.5	0.49	19.94	50
814.7	1.4	QPSK	1/0	16.56	H	6.5	0.49	22.57	50
819.0	1.4	QPSK	1/0	15.74	H	6.5	0.49	21.75	50
823.3	1.4	QPSK	1/0	15.56	H	6.5	0.49	21.57	50
814.7	1.4	16-QAM	1/0	13.27	V	6.5	0.49	19.28	50
819.0	1.4	16-QAM	1/0	13.57	V	6.5	0.49	19.58	50
823.3	1.4	16-QAM	1/0	13.08	V	6.5	0.49	19.09	50
814.7	1.4	16-QAM	1/0	14.82	H	6.5	0.49	20.83	50
819.0	1.4	16-QAM	1/0	14.98	H	6.5	0.49	20.99	50
823.3	1.4	16-QAM	1/0	14.49	H	6.5	0.49	20.50	50
815.5	3	QPSK	1/0	14.84	V	6.5	0.49	20.85	50
819.0	3	QPSK	1/0	15.03	V	6.5	0.49	21.04	50
822.5	3	QPSK	1/0	14.19	V	6.5	0.49	20.20	50
815.5	3	QPSK	1/0	16.09	H	6.5	0.49	22.10	50
819.0	3	QPSK	1/0	16.17	H	6.5	0.49	22.18	50
822.5	3	QPSK	1/0	15.52	H	6.5	0.49	21.53	50
815.5	3	16-QAM	1/0	13.62	V	6.5	0.49	19.63	50
819.0	3	16-QAM	1/0	13.63	V	6.5	0.49	19.64	50
822.5	3	16-QAM	1/0	12.71	V	6.5	0.49	18.72	50
815.5	3	16-QAM	1/0	14.83	H	6.5	0.49	20.84	50
819.0	3	16-QAM	1/0	14.77	H	6.5	0.49	20.78	50
822.5	3	16-QAM	1/0	14.34	H	6.5	0.49	20.35	50
816.5	5	QPSK	1/0	12.79	V	6.5	0.49	18.80	50
819.0	5	QPSK	1/0	14.74	V	6.5	0.49	20.75	50
821.5	5	QPSK	1/0	14.66	V	6.5	0.49	20.67	50
816.5	5	QPSK	1/0	14.34	H	6.5	0.49	20.35	50
819.0	5	QPSK	1/0	16.19	H	6.5	0.49	22.20	50
821.5	5	QPSK	1/0	16.09	H	6.5	0.49	22.10	50
816.5	5	16-QAM	1/0	13.47	V	6.5	0.49	19.48	50
819.0	5	16-QAM	1/0	13.90	V	6.5	0.49	19.91	50
821.5	5	16-QAM	1/0	13.44	V	6.5	0.49	19.45	50
816.5	5	16-QAM	1/0	14.92	H	6.5	0.49	20.93	50
819.0	5	16-QAM	1/0	15.04	H	6.5	0.49	21.05	50
821.5	5	16-QAM	1/0	14.96	H	6.5	0.49	20.97	50

819.0	10	QPSK	1/0	13.85	V	6.5	0.49	19.86	50
819.0	10	QPSK	1/0	13.50	H	6.5	0.49	19.51	50
819.0	10	16-QAM	1/0	12.35	V	6.5	0.49	18.36	50
819.0	10	16-QAM	1/0	14.99	H	6.5	0.49	21.00	50

ERP for LTE Band 38

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2572.5	5	QPSK	1/0	13.23	V	8.22	1.10	20.35	33
2595	5	QPSK	1/0	13.49	V	8.22	1.10	20.61	33
2617.5	5	QPSK	1/24	12.60	V	8.22	1.10	19.72	33
2572.5	5	QPSK	1/0	14.58	H	8.22	1.10	21.70	33
2595	5	QPSK	1/0	15.18	H	8.22	1.10	22.30	33
2617.5	5	QPSK	1/24	14.35	H	8.22	1.10	21.47	33
2572.5	5	16-QAM	1/0	12.34	V	8.22	1.10	19.46	33
2595	5	16-QAM	1/0	11.87	V	8.22	1.10	18.99	33
2617.5	5	16-QAM	1/24	12.23	V	8.22	1.10	19.35	33
2572.5	5	16-QAM	1/0	13.72	H	8.22	1.10	20.84	33
2595	5	16-QAM	1/0	13.42	H	8.22	1.10	20.54	33
2617.5	5	16-QAM	1/24	13.97	H	8.22	1.10	21.09	33
2575	10	QPSK	1/0	13.30	V	8.22	1.10	20.42	33
2595	10	QPSK	1/49	11.90	V	8.22	1.10	19.02	33
2615	10	QPSK	1/0	14.35	V	8.22	1.10	21.47	33
2575	10	QPSK	1/0	14.85	H	8.22	1.10	21.97	33
2595	10	QPSK	1/49	13.75	H	8.22	1.10	20.87	33
2615	10	QPSK	1/0	12.66	H	8.22	1.10	19.78	33
2575	10	16-QAM	1/0	13.44	V	8.22	1.10	20.56	33
2595	10	16-QAM	1/49	13.41	V	8.22	1.10	20.53	33
2615	10	16-QAM	1/0	12.24	V	8.22	1.10	19.36	33
2575	10	16-QAM	1/0	13.63	H	8.22	1.10	20.75	33
2595	10	16-QAM	1/49	13.93	H	8.22	1.10	21.05	33
2615	10	16-QAM	1/0	13.49	H	8.22	1.10	20.61	33
2577.5	15	QPSK	1/0	13.42	V	8.22	1.10	20.54	33
2595	15	QPSK	1/74	13.85	V	8.22	1.10	20.97	33
2612.5	15	QPSK	1/0	12.94	V	8.22	1.10	20.06	33
2577.5	15	QPSK	1/0	12.65	H	8.22	1.10	19.77	33
2595	15	QPSK	1/74	14.35	H	8.22	1.10	21.47	33
2612.5	15	QPSK	1/0	14.35	H	8.22	1.10	21.47	33
2577.5	15	16-QAM	1/0	14.74	V	8.22	1.10	21.86	33
2595	15	16-QAM	1/74	14.26	V	8.22	1.10	21.38	33
2612.5	15	16-QAM	1/0	12.35	V	8.22	1.10	19.47	33
2577.5	15	16-QAM	1/0	13.42	H	8.22	1.10	20.54	33
2595	15	16-QAM	1/74	13.63	H	8.22	1.10	20.75	33
2612.5	15	16-QAM	1/0	13.46	H	8.22	1.10	20.58	33

2580	20	QPSK	1/99	11.50	V	8.22	1.10	18.62	33
2595	20	QPSK	1/99	10.59	V	8.22	1.10	17.71	33
2610	20	QPSK	1/0	12.54	V	8.22	1.10	19.66	33
2580	20	QPSK	1/99	13.13	H	8.22	1.10	20.25	33
2595	20	QPSK	1/99	11.66	H	8.22	1.10	18.78	33
2610	20	QPSK	1/0	11.67	H	8.22	1.10	18.79	33
2580	20	16-QAM	1/99	11.35	V	8.22	1.10	18.47	33
2595	20	16-QAM	1/99	11.59	V	8.22	1.10	18.71	33
2610	20	16-QAM	1/0	11.26	V	8.22	1.10	18.38	33
2580	20	16-QAM	1/99	12.93	H	8.22	1.10	20.05	33
2595	20	16-QAM	1/99	13.12	H	8.22	1.10	20.24	33
2610	20	16-QAM	1/0	12.78	H	8.22	1.10	19.90	33

ERP for LTE Band 41

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2498.5	5	QPSK	1/0	14.61	V	8.23	1.12	21.72	33
2593.0	5	QPSK	1/0	13.33	V	8.23	1.12	20.44	33
2687.5	5	QPSK	1/24	13.56	V	8.23	1.12	20.67	33
2498.5	5	QPSK	1/0	15.96	H	8.23	1.12	23.07	33
2593.0	5	QPSK	1/0	15.02	H	8.23	1.12	22.13	33
2687.5	5	QPSK	1/24	15.31	H	8.23	1.12	22.42	33
2498.5	5	16-QAM	1/0	12.87	V	8.23	1.12	19.98	33
2593.0	5	16-QAM	1/0	13.40	V	8.23	1.12	20.51	33
2687.5	5	16-QAM	1/24	12.26	V	8.23	1.12	19.37	33
2498.5	5	16-QAM	1/0	14.25	H	8.23	1.12	21.36	33
2593.0	5	16-QAM	1/0	14.95	H	8.23	1.12	22.06	33
2687.5	5	16-QAM	1/24	14.00	H	8.23	1.12	21.11	33
2501.0	10	QPSK	1/0	12.38	V	8.23	1.12	19.49	33
2593.0	10	QPSK	1/49	11.37	V	8.23	1.12	18.48	33
2685.0	10	QPSK	1/0	14.52	V	8.23	1.12	21.63	33
2501.0	10	QPSK	1/0	13.93	H	8.23	1.12	21.04	33
2593.0	10	QPSK	1/49	13.22	H	8.23	1.12	20.33	33
2685.0	10	QPSK	1/0	12.50	H	8.23	1.12	19.61	33
2501.0	10	16-QAM	1/0	13.28	V	8.23	1.12	20.39	33
2593.0	10	16-QAM	1/49	13.28	V	8.23	1.12	20.39	33
2685.0	10	16-QAM	1/0	11.88	V	8.23	1.12	18.99	33
2501.0	10	16-QAM	1/0	13.70	H	8.23	1.12	20.81	33
2593.0	10	16-QAM	1/49	12.97	H	8.23	1.12	20.08	33
2685.0	10	16-QAM	1/0	13.13	H	8.23	1.12	20.24	33
2503.5	15	QPSK	1/0	13.49	V	8.23	1.12	20.60	33
2593.0	15	QPSK	1/74	12.89	V	8.23	1.12	20.00	33
2682.5	15	QPSK	1/0	12.22	V	8.23	1.12	19.33	33
2503.5	15	QPSK	1/0	12.34	H	8.23	1.12	19.45	33
2593.0	15	QPSK	1/74	13.63	H	8.23	1.12	20.74	33
2682.5	15	QPSK	1/0	13.63	H	8.23	1.12	20.74	33
2503.5	15	16-QAM	1/0	13.23	V	8.23	1.12	20.34	33
2593.0	15	16-QAM	1/74	13.38	V	8.23	1.12	20.49	33
2682.5	15	16-QAM	1/0	11.11	V	8.23	1.12	18.22	33
2503.5	15	16-QAM	1/0	12.18	H	8.23	1.12	19.29	33
2593.0	15	16-QAM	1/74	12.41	H	8.23	1.12	19.52	33
2682.5	15	16-QAM	1/0	12.22	H	8.23	1.12	19.33	33

2506.0	20	QPSK	1/99	10.85	V	8.23	1.12	17.96	33
2593.0	20	QPSK	1/99	9.42	V	8.23	1.12	16.53	33
2680.0	20	QPSK	1/0	11.40	V	8.23	1.12	18.51	33
2506.0	20	QPSK	1/99	12.48	H	8.23	1.12	19.59	33
2593.0	20	QPSK	1/99	10.49	H	8.23	1.12	17.60	33
2680.0	20	QPSK	1/0	10.56	H	8.23	1.12	17.67	33
2506.0	20	16-QAM	1/99	12.51	V	8.23	1.12	19.62	33
2593.0	20	16-QAM	1/99	11.81	V	8.23	1.12	18.92	33
2680.0	20	16-QAM	1/0	11.88	V	8.23	1.12	18.99	33
2506.0	20	16-QAM	1/99	14.09	H	8.23	1.12	21.20	33
2593.0	20	16-QAM	1/99	13.34	H	8.23	1.12	20.45	33
2680.0	20	16-QAM	1/0	13.40	H	8.23	1.12	20.51	33

Note: Above is the worst mode data.

9. PEAK-TO-AVERAGE RATIO

9.1 PROVISIONS APPLICABLE

① CCDF Procedure for PAPR :

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Set the measurement interval as follows:

-for continuous transmissions, set to 1 ms,

-or burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time

that is less than or equal to the burst duration.

4. Record the maximum PAPR level associated with a probability of 0.1%.

② Alternate Procedure for PAPR:

Use one of the procedures presented in 5.2(ANSI C63.26-2015) to measure the total peak power and record as P_{Pk}. Use one of the applicable procedures presented 5.2(ANSI C63.26-2015) to measure the total average power and recordas PAvg. Determine the P.A.R. from:

P.A.R(dB) = PPk (dBm) – PAvg (dBm) (PAvg = Average Power + Duty cycle Factor)

9.2 MEASUREMENT METHOD

Test Settings(Peak Power):

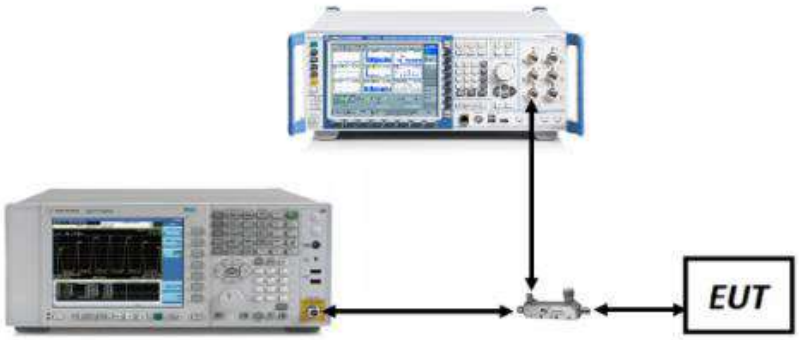
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW ≥ 3 × RBW.

1. Set the RBW ≥ OBW.
2. Set VBW ≥ 3 × RBW.
3. Set span ≥ 2 × OBW.
4. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period).
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the peak amplitude level.

Test Settings(Average Power)

1. Set span to 2 × to 3 × the OBW.
2. Set RBW ≥ OBW.
3. Set VBW ≥ 3 × RBW.
4. Set number of measurement points in sweep ≥ 2 × span / RBW.
5. Sweep time: Set ≥ [10 × (number of points in sweep) × (transmission period)] for single sweep (automation-compatible) measurement. The transmission period is the (on + off) time.
6. Detector = power averaging (rms).
7. Set sweep trigger to “free run.”
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. (To accurately determine the average power over the on and off period of the transmitter, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.)
9. Use the peak marker function to determine the maximum amplitude level.
10. Add [10 log (1/duty cycle)] to the measured maximum power level to compute the average power during continuous transmission. For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is a constant 25%.

9.3 MEASUREMENT SETUP



9.4 MEASUREMENT RESULT

LTE Band 2

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band2	1.4MHz	QPSK	18607	6RB#0	5.10	13	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	5.20	13	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	4.48	13	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	5.90	13	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	5.97	13	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	5.37	13	PASS
Band2	3MHz	QPSK	18615	15RB#0	5.18	13	PASS
Band2	3MHz	QPSK	18900	15RB#0	5.31	13	PASS
Band2	3MHz	QPSK	19185	15RB#0	4.86	13	PASS
Band2	3MHz	16QAM	18615	15RB#0	6.09	13	PASS
Band2	3MHz	16QAM	18900	15RB#0	6.09	13	PASS
Band2	3MHz	16QAM	19185	15RB#0	5.66	13	PASS
Band2	5MHz	QPSK	18625	25RB#0	5.40	13	PASS
Band2	5MHz	QPSK	18900	25RB#0	5.35	13	PASS
Band2	5MHz	QPSK	19175	25RB#0	4.93	13	PASS
Band2	5MHz	16QAM	18625	25RB#0	6.15	13	PASS
Band2	5MHz	16QAM	18900	25RB#0	6.07	13	PASS
Band2	5MHz	16QAM	19175	25RB#0	5.75	13	PASS
Band2	10MHz	QPSK	18650	50RB#0	5.38	13	PASS
Band2	10MHz	QPSK	18900	50RB#0	5.37	13	PASS
Band2	10MHz	QPSK	19150	50RB#0	5.06	13	PASS
Band2	10MHz	16QAM	18650	50RB#0	6.18	13	PASS
Band2	10MHz	16QAM	18900	50RB#0	6.09	13	PASS
Band2	10MHz	16QAM	19150	50RB#0	5.92	13	PASS
Band2	15MHz	QPSK	18675	75RB#0	5.77	13	PASS
Band2	15MHz	QPSK	18900	75RB#0	5.71	13	PASS
Band2	15MHz	QPSK	19125	75RB#0	5.36	13	PASS
Band2	15MHz	16QAM	18675	75RB#0	6.31	13	PASS
Band2	15MHz	16QAM	18900	75RB#0	6.23	13	PASS
Band2	15MHz	16QAM	19125	75RB#0	5.99	13	PASS
Band2	20MHz	QPSK	18700	100RB#0	5.58	13	PASS
Band2	20MHz	QPSK	18900	100RB#0	5.41	13	PASS
Band2	20MHz	QPSK	19100	100RB#0	5.27	13	PASS
Band2	20MHz	16QAM	18700	100RB#0	6.29	13	PASS
Band2	20MHz	16QAM	18900	100RB#0	6.20	13	PASS
Band2	20MHz	16QAM	19100	100RB#0	6.03	13	PASS

LTE Band 4

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	4.84	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	4.81	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	4.94	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	5.72	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	5.62	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	5.85	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	4.95	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	4.82	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	5.02	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	5.79	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	5.70	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	5.84	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	5.08	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.99	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	5.05	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.89	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	5.82	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	5.82	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	5.12	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	5.01	13	PASS
Band4	10MHz	QPSK	20350	50RB#0	5.05	13	PASS
Band4	10MHz	16QAM	20000	50RB#0	5.93	13	PASS
Band4	10MHz	16QAM	20175	50RB#0	5.84	13	PASS
Band4	10MHz	16QAM	20350	50RB#0	5.91	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	5.51	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	5.26	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	5.43	13	PASS
Band4	15MHz	16QAM	20025	75RB#0	6.07	13	PASS
Band4	15MHz	16QAM	20175	75RB#0	5.98	13	PASS
Band4	15MHz	16QAM	20325	75RB#0	6.08	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	5.34	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.14	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.41	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	6.12	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.01	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	6.13	13	PASS

LTE BAND 5

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	5.54	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.50	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	5.19	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.40	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.23	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	6.07	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.61	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.53	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.29	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.35	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.30	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	6.13	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.67	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.62	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.41	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.32	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.32	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	6.14	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.66	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.68	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.41	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.44	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.38	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.21	13	PASS

LTE BAND 7

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.69	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.03	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.67	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	5.55	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	5.80	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	5.49	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	4.75	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.03	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	4.71	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	5.59	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	5.88	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	5.55	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.11	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.37	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.06	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	5.81	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	5.98	13	PASS
Band7	15MHz	16QAM	21375	75RB#0	5.74	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.18	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.34	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.11	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.94	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.02	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.86	13	PASS

LTE Band 12

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	5.55	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.48	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.32	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.32	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.38	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	6.15	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.48	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.55	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.48	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.32	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.40	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.28	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.63	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.54	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.55	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.35	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.29	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.28	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.45	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.35	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.67	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.27	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.25	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.41	13	PASS

LTE BAND 17

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	5.53	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.63	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	5.61	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	6.25	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	6.36	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	6.35	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	5.49	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	5.60	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	5.64	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	6.33	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	6.39	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	6.40	13	PASS

LTE BAND 25

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band25	1.4MHz	QPSK	26047	6RB#0	5.04	13	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	5.15	13	PASS
Band25	1.4MHz	QPSK	26683	6RB#0	3.70	13	PASS
Band25	1.4MHz	16QAM	26047	6RB#0	5.94	13	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	6.00	13	PASS
Band25	1.4MHz	16QAM	26683	6RB#0	4.82	13	PASS
Band25	3MHz	QPSK	26055	15RB#0	5.11	13	PASS
Band25	3MHz	QPSK	26365	15RB#0	5.11	13	PASS
Band25	3MHz	QPSK	26675	15RB#0	4.20	13	PASS
Band25	3MHz	16QAM	26055	15RB#0	5.98	13	PASS
Band25	3MHz	16QAM	26365	15RB#0	5.95	13	PASS
Band25	3MHz	16QAM	26675	15RB#0	5.14	13	PASS
Band25	5MHz	QPSK	26065	25RB#0	5.24	13	PASS
Band25	5MHz	QPSK	26365	25RB#0	5.29	13	PASS
Band25	5MHz	QPSK	26665	25RB#0	4.44	13	PASS
Band25	5MHz	16QAM	26065	25RB#0	6.06	13	PASS
Band25	5MHz	16QAM	26365	25RB#0	5.96	13	PASS
Band25	5MHz	16QAM	26665	25RB#0	5.35	13	PASS
Band25	10MHz	QPSK	26090	50RB#0	5.29	13	PASS
Band25	10MHz	QPSK	26365	50RB#0	5.29	13	PASS
Band25	10MHz	QPSK	26640	50RB#0	4.78	13	PASS
Band25	10MHz	16QAM	26090	50RB#0	6.08	13	PASS
Band25	10MHz	16QAM	26365	50RB#0	6.02	13	PASS
Band25	10MHz	16QAM	26640	50RB#0	5.64	13	PASS
Band25	15MHz	QPSK	26115	75RB#0	5.70	13	PASS
Band25	15MHz	QPSK	26365	75RB#0	5.57	13	PASS
Band25	15MHz	QPSK	26615	75RB#0	5.19	13	PASS
Band25	15MHz	16QAM	26115	75RB#0	6.22	13	PASS
Band25	15MHz	16QAM	26365	75RB#0	6.13	13	PASS
Band25	15MHz	16QAM	26615	75RB#0	5.81	13	PASS
Band25	20MHz	QPSK	26140	100RB#0	5.54	13	PASS
Band25	20MHz	QPSK	26365	100RB#0	5.40	13	PASS
Band25	20MHz	QPSK	26590	100RB#0	5.14	13	PASS
Band25	20MHz	16QAM	26140	100RB#0	6.26	13	PASS
Band25	20MHz	16QAM	26365	100RB#0	6.19	13	PASS
Band25	20MHz	16QAM	26590	100RB#0	5.93	13	PASS

LTE BAND 26A

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band26	1.4MHz	QPSK	26797	6RB#0	5.89	13	PASS
Band26	1.4MHz	QPSK	26915	6RB#0	5.73	13	PASS
Band26	1.4MHz	QPSK	27033	6RB#0	5.50	13	PASS
Band26	1.4MHz	16QAM	26797	6RB#0	6.60	13	PASS
Band26	1.4MHz	16QAM	26915	6RB#0	6.45	13	PASS
Band26	1.4MHz	16QAM	27033	6RB#0	6.33	13	PASS
Band26	3MHz	QPSK	26805	15RB#0	5.83	13	PASS
Band26	3MHz	QPSK	26915	15RB#0	5.78	13	PASS
Band26	3MHz	QPSK	27025	15RB#0	5.34	13	PASS
Band26	3MHz	16QAM	26805	15RB#0	6.64	13	PASS
Band26	3MHz	16QAM	26915	15RB#0	6.56	13	PASS
Band26	3MHz	16QAM	27025	15RB#0	6.18	13	PASS
Band26	5MHz	QPSK	26815	25RB#0	5.89	13	PASS
Band26	5MHz	QPSK	26915	25RB#0	5.82	13	PASS
Band26	5MHz	QPSK	27015	25RB#0	5.47	13	PASS
Band26	5MHz	16QAM	26815	25RB#0	6.58	13	PASS
Band26	5MHz	16QAM	26915	25RB#0	6.52	13	PASS
Band26	5MHz	16QAM	27015	25RB#0	6.22	13	PASS
Band26	10MHz	QPSK	26840	50RB#0	5.92	13	PASS
Band26	10MHz	QPSK	26915	50RB#0	5.82	13	PASS
Band26	10MHz	QPSK	26990	50RB#0	5.55	13	PASS
Band26	10MHz	16QAM	26840	50RB#0	6.67	13	PASS
Band26	10MHz	16QAM	26915	50RB#0	6.56	13	PASS
Band26	10MHz	16QAM	26990	50RB#0	6.31	13	PASS
Band26	15MHz	QPSK	26865	75RB#0	6.42	13	PASS
Band26	15MHz	QPSK	26915	75RB#0	6.21	13	PASS
Band26	15MHz	QPSK	26965	75RB#0	5.82	13	PASS
Band26	15MHz	16QAM	26865	75RB#0	6.86	13	PASS
Band26	15MHz	16QAM	26915	75RB#0	6.70	13	PASS
Band26	15MHz	16QAM	26965	75RB#0	6.43	13	PASS

LTE BAND 26B

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band26	1.4MHz	QPSK	26697	6RB#0	5.56	13	PASS
Band26	1.4MHz	QPSK	26740	6RB#0	5.79	13	PASS
Band26	1.4MHz	QPSK	26783	6RB#0	5.94	13	PASS
Band26	1.4MHz	16QAM	26697	6RB#0	6.39	13	PASS
Band26	1.4MHz	16QAM	26740	6RB#0	6.56	13	PASS
Band26	1.4MHz	16QAM	26783	6RB#0	6.66	13	PASS
Band26	3MHz	QPSK	26705	15RB#0	5.65	13	PASS
Band26	3MHz	QPSK	26740	15RB#0	5.82	13	PASS
Band26	3MHz	QPSK	26775	15RB#0	5.78	13	PASS
Band26	3MHz	16QAM	26705	15RB#0	6.46	13	PASS
Band26	3MHz	16QAM	26740	15RB#0	6.61	13	PASS
Band26	3MHz	16QAM	26775	15RB#0	6.64	13	PASS
Band26	5MHz	QPSK	26715	25RB#0	5.81	13	PASS
Band26	5MHz	QPSK	26740	25RB#0	5.85	13	PASS
Band26	5MHz	QPSK	26765	25RB#0	5.94	13	PASS
Band26	5MHz	16QAM	26715	25RB#0	6.53	13	PASS
Band26	5MHz	16QAM	26740	25RB#0	6.53	13	PASS
Band26	5MHz	16QAM	26765	25RB#0	6.61	13	PASS
Band26	10MHz	QPSK	26740	50RB#0	5.83	13	PASS
Band26	10MHz	16QAM	26740	50RB#0	6.61	13	PASS
Band26	15MHz	QPSK	26765	75RB#0	6.09	13	PASS
Band26	15MHz	16QAM	26765	75RB#0	6.60	13	PASS

LTE BAND 38

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	6.12	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	5.82	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	6.73	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	6.70	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	6.39	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	6.78	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	6.06	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	6.46	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	5.91	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	7.16	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	6.63	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	6.95	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	7.28	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	7.15	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	7.06	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	7.67	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	7.25	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	8.50	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	6.69	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	7.02	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	6.54	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.78	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	7.74	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	7.98	13	PASS

LTE BAND 41

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.35	13	PASS
Band41	5MHz	QPSK	40265	25RB#0	4.68	13	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.75	13	PASS
Band41	5MHz	QPSK	40690	25RB#0	4.72	13	PASS
Band41	5MHz	QPSK	41215	25RB#0	4.53	13	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.49	13	PASS
Band41	5MHz	16QAM	39675	25RB#0	5.19	13	PASS
Band41	5MHz	16QAM	40265	25RB#0	5.54	13	PASS
Band41	5MHz	16QAM	40620	25RB#0	5.57	13	PASS
Band41	5MHz	16QAM	40690	25RB#0	5.52	13	PASS
Band41	5MHz	16QAM	41215	25RB#0	5.39	13	PASS
Band41	5MHz	16QAM	41565	25RB#0	5.39	13	PASS
Band41	10MHz	QPSK	39700	50RB#0	4.36	13	PASS
Band41	10MHz	QPSK	40290	50RB#0	4.71	13	PASS
Band41	10MHz	QPSK	40620	50RB#0	4.75	13	PASS
Band41	10MHz	QPSK	40690	50RB#0	4.73	13	PASS
Band41	10MHz	QPSK	41190	50RB#0	4.64	13	PASS
Band41	10MHz	QPSK	41540	50RB#0	4.51	13	PASS
Band41	10MHz	16QAM	39700	50RB#0	5.23	13	PASS
Band41	10MHz	16QAM	40290	50RB#0	5.59	13	PASS
Band41	10MHz	16QAM	40620	50RB#0	5.63	13	PASS
Band41	10MHz	16QAM	40690	50RB#0	5.60	13	PASS
Band41	10MHz	16QAM	41190	50RB#0	5.48	13	PASS
Band41	10MHz	16QAM	41540	50RB#0	5.42	13	PASS
Band41	15MHz	QPSK	39725	75RB#0	4.41	13	PASS
Band41	15MHz	QPSK	40315	75RB#0	4.65	13	PASS
Band41	15MHz	QPSK	40620	75RB#0	4.70	13	PASS
Band41	15MHz	QPSK	40690	75RB#0	4.74	13	PASS
Band41	15MHz	QPSK	41165	75RB#0	4.74	13	PASS
Band41	15MHz	QPSK	41515	75RB#0	4.57	13	PASS
Band41	15MHz	16QAM	39725	75RB#0	5.20	13	PASS
Band41	15MHz	16QAM	40315	75RB#0	5.47	13	PASS
Band41	15MHz	16QAM	40620	75RB#0	5.53	13	PASS
Band41	15MHz	16QAM	40690	75RB#0	5.55	13	PASS
Band41	15MHz	16QAM	41165	75RB#0	5.53	13	PASS
Band41	15MHz	16QAM	41515	75RB#0	5.41	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	4.52	13	PASS
Band41	20MHz	QPSK	40340	100RB#0	4.72	13	PASS

Band41	20MHz	QPSK	40620	100RB#0	4.75	13	PASS
Band41	20MHz	QPSK	40690	100RB#0	4.72	13	PASS
Band41	20MHz	QPSK	41140	100RB#0	4.79	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	4.64	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	5.26	13	PASS
Band41	20MHz	16QAM	40340	100RB#0	5.47	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	5.52	13	PASS
Band41	20MHz	16QAM	40690	100RB#0	5.57	13	PASS
Band41	20MHz	16QAM	41140	100RB#0	5.63	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	5.42	13	PASS

10. SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL

10.1 PROVISIONS APPLICABLE

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

10.2 MEASUREMENT METHOD

For Band 2/Band 4/Band 5/Band 7/Band 12/ Band 17/ Band 25/Band 26/Band 38 /Band 41:
The minimum permissible attenuation level of any spurious emission is 43 + log10(P[Watts]), where P is the transmitter power in Watts.
For Band 7:
(i) 40 + 10 log10 p from the channel edges to 5 MHz away
(ii) 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and
(iii) 55 + 10 log10 p at X MHz and beyond from the channel edges
For Band 14:
On all frequencies between 769-775 MHz and 799-805 MHz:< 65 + 10log10 (P[Watts])
For Band 38/41:
1.The attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge,
2. 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge.
3. 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge.
4. The attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz.
5. 55 + 10 log (P) dB at or below 2490.5 MHz.
6. X is the greater of 6MHz or the actual emission bandwidth.

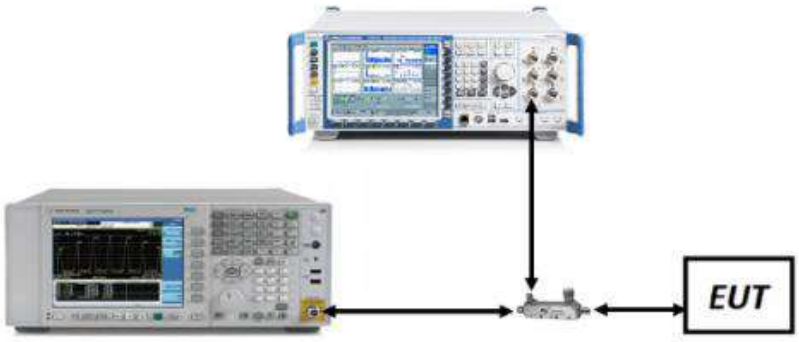
Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
1. RBW = 1 MHz
2. VBW ≥ 3 MHz
3. Detector = RMS
4. Trace Mode = Average
5. Sweep time = auto
6. Number of points in sweep ≥ 2 * Span / RBW

Test Note

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

10.3 MEASUREMENT SETUP



10.4 MEASUREMENT RESULT

Please refer to: appendix a test plots for spurious and harmonic emissions at antenna terminal

Note: 1. No transmission signal is found in standby or receiving mode, and the default value is lower than the limit of 20dB, which is not recorded in this report.

11. RADIATED SPURIOUS EMISSION

11.1 PROVISIONS APPLICABLE

(A) On any frequency outside a licensee's frequency block (e.g. A, D, B, etc.) within the USPCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log(P) dB. The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm.

At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

(B) For specific criteria, please refer to the description in section 9.2 of the report for corresponding evaluation.

11.2 MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.

9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.
11. For spurious emissions above 1GHz, a horn antenna is substituted in place of the EUT.
The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.
The spurious emissions is calculated by the following formula;

Result(dBm) = Pg(dBm) +Factor(dB)

Factor(dB) = Ant Gain(dB)-Cable Loss(dB) + Power Splitter(dB) (Above 1GHz)

Factor(dB) = Ant Gain(dB)-Cable Loss(dB) (Below 1GHz)

Where: Pgis the generator output power into the substitution antenna.
If the fundalmatal frequency is below 1GHz, RF output power has been converted to EIRP.

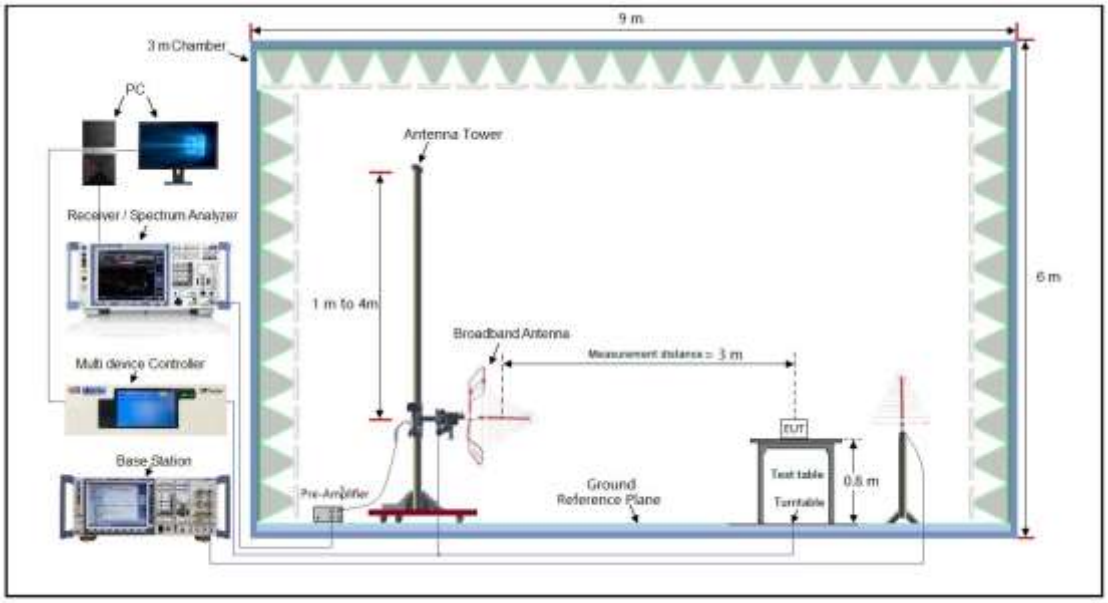
EIRP(dBm) = ERP(dBm) + 2.15

12. Examples of Factor parameters for testing radiation spurious:

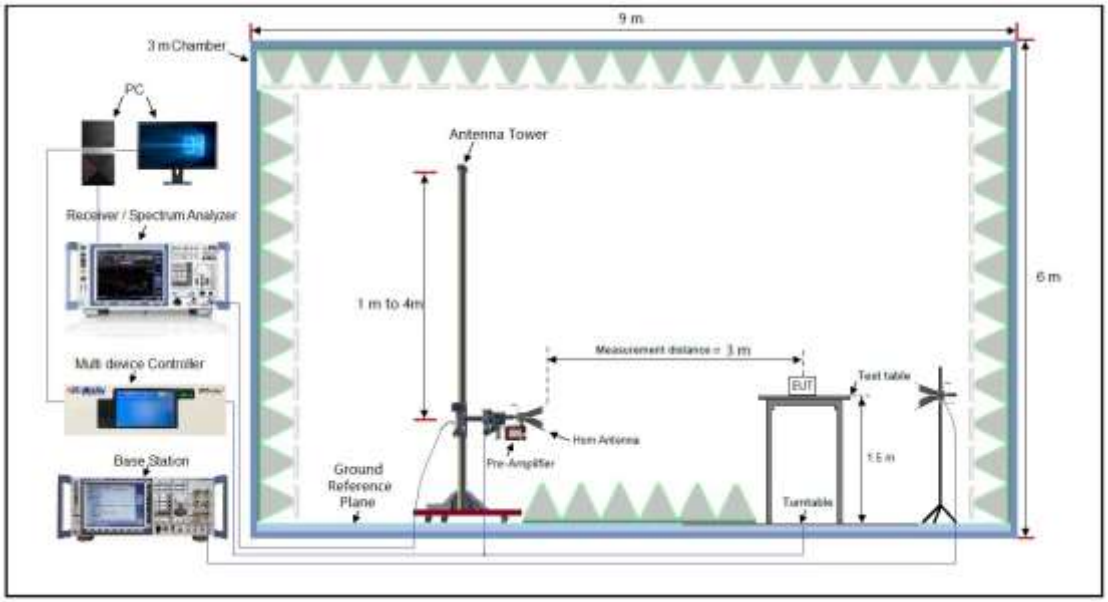
Frequency Range(MHz)	Factor(dB)
30-500	6.18
500-1000	9.37
1000-1500	27.56
1500-2000	28.27
2000-3000	29.45
3000-5000	30.15
5000-10000	31.26
10000-15000	32.78
15000-20000	33.99
Above 20GHz	35.04

11.3 MEASUREMENT SETUP

Radiated Emissions 30MHz to 1GHz Test setup



Radiated Emissions Above 1GHz Test setup



11.4 MEASUREMENT RESULT

LTE Band 2
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5552.1	V	-41.41	-13	-28.41
3701.4	V	-40.05	-13	-27.05
695.5	V	-47.13	-13	-34.13
412.1	V	-50.56	-13	-37.56
5552.1	H	-39.52	-13	-26.52
3701.4	H	-40.86	-13	-27.86
678.3	H	-48.78	-13	-35.78
452.1	H	-49.61	-13	-36.61

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5640	V	-41.96	-13	-28.96
3760	V	-39.13	-13	-26.13
885.1	V	-48.03	-13	-35.03
618.7	V	-48.63	-13	-35.63
5640	H	-49.08	-13	-36.08
3760	H	-41.50	-13	-28.50
851.3	H	-45.43	-13	-32.43
732.5	H	-48.41	-13	-35.41

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5727.9	V	-41.25	-13	-28.25
3818.6	V	-41.37	-13	-28.37
664.5	V	-47.81	-13	-34.81
525.8	V	-47.34	-13	-34.34
5727.9	H	-39.29	-13	-26.29
3818.6	H	-39.65	-13	-26.65
669.8	H	-48.05	-13	-35.05
574.4	H	-47.80	-13	-34.80

LTE Band 4
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5132.1	V	-39.46	-13	-26.46
3421.4	V	-40.02	-13	-27.02
745.5	V	-44.79	-13	-31.79
528.1	V	-47.87	-13	-34.87
5132.1	H	-39.41	-13	-26.41
3421.4	H	-40.10	-13	-27.10
520.5	H	-47.80	-13	-34.80
395.8	H	-43.18	-13	-30.18

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5197.5	V	-38.70	-13	-25.70
3465	V	-39.07	-13	-26.07
669.4	V	-46.04	-13	-33.04
512.5	V	-48.13	-13	-35.13
5197.5	H	-39.01	-13	-26.01
3465	H	-40.26	-13	-27.26
569.4	H	-47.35	-13	-34.35
469.3	H	-46.30	-13	-33.30

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5262.9	V	-38.26	-13	-25.26
3508.6	V	-38.82	-13	-25.82
711.1	V	-47.73	-13	-34.73
528.7	V	-47.19	-13	-34.19
5262.9	H	-37.90	-13	-24.90
3508.6	H	-38.26	-13	-25.26
612.5	H	-45.43	-13	-32.43
553.9	H	-46.11	-13	-33.11

LTE Band 5

Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2474.1	V	-41.30	-13	-28.30
1649.4	V	-41.78	-13	-28.78
512.2	V	-46.95	-13	-33.95
365.5	V	-47.29	-13	-34.29
2474.1	H	-39.73	-13	-26.73
1649.4	H	-40.05	-13	-27.05
521.1	H	-44.58	-13	-31.58
336.5	H	-45.17	-13	-32.17

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2509.5	V	-42.96	-13	-29.96
1673	V	-42.60	-13	-29.60
725.8	V	-46.59	-13	-33.59
616.6	V	-46.68	-13	-33.68
2509.5	H	-40.13	-13	-27.13
1673	H	-41.93	-13	-28.93
705.5	H	-45.26	-13	-32.26
558.9	H	-45.85	-13	-32.85

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2544.9	V	-40.55	-13	-27.55
1696.6	V	-39.63	-13	-26.63
648.3	V	-46.43	-13	-33.43
482.7	V	-47.08	-13	-34.08
2544.9	H	-40.18	-13	-27.18
1696.6	H	-41.11	-13	-28.11
785.6	H	-46.03	-13	-33.03
615.7	H	-47.45	-13	-34.45

LTE Band 7
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7507.5	V	-43.62	-25	-18.62
5005	V	-42.59	-25	-17.59
925.7	V	-49.88	-25	-24.88
678.9	V	-52.20	-25	-27.20
7507.5	H	-42.33	-25	-17.33
5005	H	-41.64	-25	-16.64
873.6	H	-49.81	-25	-24.81
662.7	H	-50.98	-25	-25.98

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBc)	Margin (dB)
7605	V	-43.63	-25	-18.63
5070	V	-41.37	-25	-16.37
833.7	V	-49.38	-25	-24.38
521.2	V	-51.00	-25	-26.00
7605	H	-41.15	-25	-16.15
5070	H	-41.84	-25	-16.84
819.6	H	-50.34	-25	-25.34
520.5	H	-48.80	-25	-23.80

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7702.5	V	-43.29	-25	-18.29
5135	V	-44.55	-25	-19.55
752.6	V	-52.44	-25	-27.44
511.4	V	-51.82	-25	-26.82
7702.5	H	-41.70	-25	-16.70
5135	H	-42.60	-25	-17.60
701.1	H	-49.44	-25	-24.44
507.1	H	-48.93	-25	-23.93

LTE Band 12
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2099.1	V	-43.16	-13	-30.16
1399.4	V	-41.79	-13	-28.79
658.1	V	-50.78	-13	-37.78
516.9	V	-50.33	-13	-37.33
2099.1	H	-41.86	-13	-28.86
1399.4	H	-41.89	-13	-28.89
714.4	H	-49.08	-13	-36.08
669.5	H	-48.58	-13	-35.58

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2122.5	V	-44.68	-13	-31.68
1415	V	-44.41	-13	-31.41
651.5	V	-47.52	-13	-34.52
512.7	V	-50.26	-13	-37.26
2122.5	H	-42.80	-13	-29.80
1415	H	-44.48	-13	-31.48
525.4	H	-49.59	-13	-36.59
498.7	H	-49.18	-13	-36.18

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2145.9	V	-44.52	-13	-31.52
1430.6	V	-43.73	-13	-30.73
653.3	V	-47.09	-13	-34.09
592.7	V	-49.34	-13	-36.34
2145.9	H	-44.63	-13	-31.63
1430.6	H	-44.96	-13	-31.96
641.5	H	-51.28	-13	-38.28
558.3	H	-50.17	-13	-37.17

LTE Band 17
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2119.5	V	-41.57	-13	-28.57
1413	V	-46.01	-13	-33.01
652.8	V	-49.30	-13	-36.30
431.2	V	-46.25	-13	-33.25
2119.5	H	-41.67	-13	-28.67
1413	H	-51.19	-13	-38.19
547.1	H	-47.65	-13	-34.65
425.3	H	-44.31	-13	-31.31

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2130	V	-41.71	-13	-28.71
1420	V	-41.71	-13	-28.71
625.5	V	-47.92	-13	-34.92
498.3	V	-49.79	-13	-36.79
2130	H	-41.94	-13	-28.94
1420	H	-45.89	-13	-32.89
515.3	H	-49.34	-13	-36.34
412.5	H	-48.13	-13	-35.13

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2140.5	V	-39.87	-13	-26.87
1427	V	-46.48	-13	-33.48
577.8	V	-47.92	-13	-34.92
412.3	V	-43.85	-13	-30.85
2140.5	H	-39.23	-13	-26.23
1427	H	-46.76	-13	-33.76
505.6	H	-47.49	-13	-34.49
401.4	H	-47.85	-13	-34.85

LTE Band 25
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5552.1	V	-47.41	-13	-34.41
3701.4	V	-45.49	-13	-32.49
718.5	V	-48.74	-13	-35.74
523.6	V	-52.44	-13	-39.44
5552.1	H	-44.97	-13	-31.97
3701.4	H	-46.20	-13	-33.20
613.3	H	-54.66	-13	-41.66
352.9	H	-49.33	-13	-36.33

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5647.5	V	-44.67	-13	-31.67
3765	V	-46.65	-13	-33.65
596.4	V	-51.31	-13	-38.31
678.8	V	-54.21	-13	-41.21
5647.5	H	-44.32	-13	-31.32
3765	H	-48.28	-13	-35.28
655.8	H	-48.35	-13	-35.35
411.2	H	-51.06	-13	-38.06

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5742.9	V	-46.65	-13	-33.65
3828.6	V	-44.76	-13	-31.76
486.3	V	-51.14	-13	-38.14
256.1	V	-52.93	-13	-39.93
5742.9	H	-45.35	-13	-32.35
3828.6	H	-44.06	-13	-31.06
574.3	H	-50.53	-13	-37.53
398.5	H	-50.87	-13	-37.87

LTE Band 26A
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2474.1	V	-49.84	-13	-36.84
1663	V	-47.33	-13	-34.33
563.4	V	-50.57	-13	-37.57
315.0	V	-55.01	-13	-42.01
2494.5	H	-46.52	-13	-33.52
1663	H	-46.71	-13	-33.71
463.8	H	-55.39	-13	-42.39
367.5	H	-50.01	-13	-37.01

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2509.5	V	-47.05	-13	-34.05
1673	V	-46.83	-13	-33.83
654.5	V	-51.72	-13	-38.72
543.2	V	-54.63	-13	-41.63
2509.5	H	-44.82	-13	-31.82
1673	H	-47.02	-13	-34.02
615.8	H	-49.68	-13	-36.68
363.1	H	-55.03	-13	-42.03

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2544.9	V	-47.00	-13	-34.00
1696.6	V	-45.00	-13	-32.00
526.8	V	-48.79	-13	-35.79
364.5	V	-53.04	-13	-40.04
2544.9	H	-44.66	-13	-31.66
1696.6	H	-44.67	-13	-31.67
683.4	H	-51.07	-13	-38.07
475.9	H	-51.36	-13	-38.36

LTE Band 26B
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2444.1	V	-50.51	-13	-37.51
1638	V	-49.30	-13	-36.30
842.3	V	-53.39	-13	-40.39
596.5	V	-55.38	-13	-42.38
2444.1	H	-48.30	-13	-35.30
1638	H	-47.52	-13	-34.52
774.5	H	-56.37	-13	-43.37
617.2	H	-51.06	-13	-38.06

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2457	V	-47.86	-13	-34.86
1638	V	-47.76	-13	-34.76
745.5	V	-54.95	-13	-41.95
512.8	V	-56.98	-13	-43.98
2457	H	-46.34	-13	-33.34
1638	H	-47.66	-13	-34.66
693.7	H	-50.30	-13	-37.30
497.2	H	-56.27	-13	-43.27

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2469.9	V	-48.80	-13	-35.80
1646.6	V	-45.09	-13	-32.09
882.2	V	-50.30	-13	-37.30
694.7	V	-54.69	-13	-41.69
2469.9	H	-46.44	-13	-33.44
1646.6	H	-46.40	-13	-33.40
745.1	H	-52.52	-13	-39.52
569.3	H	-52.57	-13	-39.57

LTE Band 38
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7717.5	V	-50.54	-25	-25.54
5145	V	-46.42	-25	-21.42
881.2	V	-49.55	-25	-24.55
594.3	V	-53.18	-25	-28.18
7717.5	H	-48.03	-25	-23.03
5145	H	-45.26	-25	-20.26
463.8	H	-55.04	-25	-30.04
367.5	H	-50.17	-25	-25.17

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7785	V	-46.54	-25	-21.54
5190	V	-48.04	-25	-23.04
674.1	V	-53.73	-25	-28.73
493.2	V	-54.10	-25	-29.10
7785	H	-47.28	-25	-22.28
5190	H	-49.09	-25	-24.09
421.8	H	-49.63	-25	-24.63
203.1	H	-53.25	-25	-28.25

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7851	V	-47.26	-25	-22.26
5235	V	-47.49	-25	-22.49
745.3	V	-49.86	-25	-24.86
582.6	V	-52.73	-25	-27.73
7851	H	-45.09	-25	-20.09
5235	H	-46.02	-25	-21.02
742.1	H	-53.34	-25	-28.34
652.7	H	-52.07	-25	-27.07

LTE Band 41
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7495.5	V	-47.82	-25	-22.82
4997	V	-44.70	-25	-19.70
612.1	V	-47.91	-25	-22.91
483.6	V	-53.42	-25	-28.42
7495.5	H	-44.66	-25	-19.66
4997	H	-45.35	-25	-20.35
742.8	H	-53.63	-25	-28.63
563.7	H	-48.91	-25	-23.91

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7779	V	-44.77	-25	-19.77
5186	V	-46.15	-25	-21.15
568.2	V	-51.62	-25	-26.62
341.5	V	-53.91	-25	-28.91
7779	H	-44.04	-25	-19.04
5186	H	-46.54	-25	-21.54
552.7	H	-48.19	-25	-23.19
421.5	H	-52.81	-25	-27.81

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
8062.5	V	-44.70	-25	-19.70
5375	V	-45.15	-25	-20.15
642.9	V	-48.58	-25	-23.58
471.6	V	-51.79	-25	-26.79
8062.5	H	-43.06	-25	-18.06
5375	H	-44.67	-25	-19.67
363.2	H	-50.51	-25	-25.51
274.6	H	-49.97	-25	-24.97

Note: 1. Margin (dB) = Emission Level(dBm) -Limit(dBm)
Emission Level(dBm)= Measurement Reading(dBm)+Factor(dB)
Factor(dB) = ANT Gain -Cable Loss + Power Splitter

2. The test refers to the value of Factor, please refer to the results listed in the test method in this section of the report.
3. Radiated Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0.
4. Below 30MHz, no spurious emission was found, and only the worst mode data above 30MHz is recorded in the report.

12. FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

12.1 PROVISIONS APPLICABLE

12.1.1 For Hand carried battery powered equipment

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. The frequency stability of the transmitter is measured by:

a.) Temperature: The temperature is varied from -10°C to +40°C in 10°C increments using an environmental chamber.

b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency. For Part 24 and Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

12.1.2 For equipment powered by primary supply voltage

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -10°C to +40°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

12.2 MEASUREMENT METHOD

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a “call mode”. This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1 Measure the carrier frequency at room temperature.

2 Subject the EUT to overnight soak at -10℃. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on channel 20175 for LTE band 4 measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.

3 Repeat the above measurements at 10℃ increments from -10℃ to +40℃. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.

4 Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1 1/2 hours unpowered, to allow any self-heating to stabilize, before continuing.

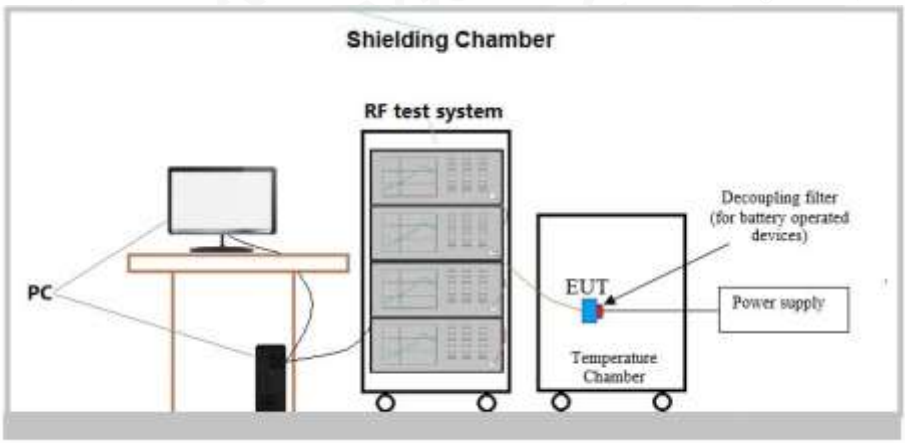
5 Subject the EUT to overnight soak at +40℃.

6 With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.

7 Repeat the above measurements at 10℃ increments from +40℃ to -10℃. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.

8 At all temperature levels hold the temperature to +/- 0.5℃ during the measurement procedure.

12.3 MEASUREMENT SETUP



12.4 MEASUREMENT RESULT

LTE Band 2

Middle Channel, f_O = 1880 MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-17.12	-0.009251
0		-16.41	-0.008867
10		-13.78	-0.007446
20		-14.43	-0.007676
30		-16.02	-0.008521
40		-15.26	-0.008117
25	8.28	-6.41	-0.003357
	6.12	-18.40	-0.009637

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 4

Middle Channel, f_O = 1732.5 MHz				
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)	Temperature (℃)
-10	7.20	-20.01	-0.011697	±2.5
0		-10.29	-0.006015	±2.5
10		6.59	0.003852	±2.5
20		9.88	0.005703	±2.5
30		-12.45	-0.007186	±2.5
40		-13.32	-0.007688	±2.5
25	8.28	6.82	0.003888	±2.5
	6.12	-4.26	-0.002428	±2.5

LTE Band 5

Middle Channel, f_O = 836.5 MHz				
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)	Temperature (℃)
-10	7.20	-8.43	-0.010222	±2.5
0		-10.94	-0.013265	±2.5
10		-7.35	-0.008912	±2.5
20		-10.00	-0.011955	±2.5
30		-14.12	-0.016880	±2.5
40		-7.12	-0.008512	±2.5
25	8.28	-11.49	-0.013545	±2.5
	6.12	-11.27	-0.013285	±2.5

LTE Band 7

Middle Channel, f_O = 2535 MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	15.11	0.006038
0		-6.18	-0.002470
10		-9.48	-0.003788
20		6.41	0.002529
30		-22.40	-0.008836
40		-18.77	-0.007404
25	8.28	-15.92	-0.006201
	6.12	-16.15	-0.006290

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 12

Middle Channel, f_O = 707.5 MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-9.88	-0.014120
0		-13.76	-0.019666
10		-8.74	-0.012491
20		-7.32	-0.010346
30		-8.65	-0.012226
40		-8.27	-0.011689
25	8.28	-14.32	-0.020020
	6.12	-12.93	-0.018076

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 17

Middle Channel, f_O = 710MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-4.55	-0.006440
0		-11.33	-0.016037
10		-8.03	-0.011366
20		-7.41	-0.010437
30		-8.37	-0.011789
40		-12.52	-0.017634
25	8.28	-13.75	-0.019271
	6.12	-18.11	-0.025382

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 25

Middle Channel, f_O = 1882.5MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-16.34	-0.008829
0		-14.99	-0.008100
10		-14.99	-0.008100
20		-19.07	-0.010130
30		-19.96	-0.010603
40		5.35	0.002842
25	8.28	-13.49	-0.007047
	6.12	-19.50	-0.010186

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 26A

Middle Channel, f_O = 836.5MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-11.84	-0.014533
0		-2.02	-0.002479
10		-10.03	-0.012311
20		-2.40	-0.002930
30		-12.29	-0.015006
40		-10.17	-0.012418
25	8.28	-3.59	-0.004361
	6.12	-13.16	-0.015984

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 26B

Middle Channel, f_O = 821.5MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	-9.11	-0.011065
0		-11.93	-0.014466
10		-8.91	-0.010804
20		-15.48	-0.018770
30		-12.90	-0.015421
40		-15.99	-0.019115
25	8.28	-2.59	-0.003096
	6.12	-9.23	-0.010881

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 38

Middle Channel, f_O = 2595.0 MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	15.75	0.006122
0		13.23	0.005143
10		18.05	0.007017
20		-27.22	-0.010489
30		-26.02	-0.010027
40		-32.70	-0.012601
25	8.28	25.82	0.009864
	6.12	23.53	0.008989

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

LTE Band 41

Middle Channel, f_O = 2593.0 MHz			
Temperature (℃)	Power Supplied (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-10	7.20	21.54	0.008621
0		20.48	0.008197
10		-10.71	-0.004287
20		-9.83	-0.003844
30		11.73	0.004587
40		-12.86	-0.005028
25	8.28	16.85	0.006498
	6.12	17.48	0.006741

Note: Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is detemined to remain operating in band over the temperature and voltage range as tested.

Note:1. The device under test maintains the minimum and maximum operating temperature and the required limit voltage according to the manufacturer's requirements.
2. Only the worst working mode data is recorded in the report.

13. OCCUPIED BANDWIDTH

13.1 PROVISIONS APPLICABLE

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

The EUT makes a call to the communication simulator.

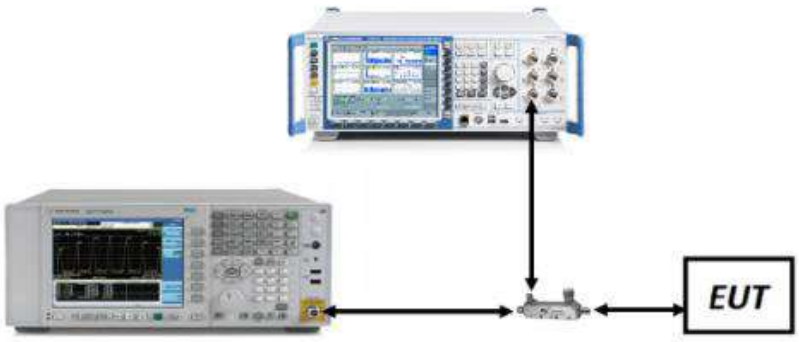
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

13.2 MEASUREMENT METHOD

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

13.3 MEASUREMENT SETUP



13.4 MEASUREMENT RESULT

LTE Band 2

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0883	1.243	PASS
	MCH	6	0	1.0892	1.257	PASS
	HCH	6	0	1.0887	1.251	PASS
16QAM	LCH	6	0	1.0903	1.264	PASS
	MCH	6	0	1.0872	1.260	PASS
	HCH	6	0	1.0878	1.268	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6833	2.830	PASS
	MCH	15	0	2.6910	2.861	PASS
	HCH	15	0	2.6884	2.856	PASS
16QAM	LCH	15	0	2.6864	2.845	PASS
	MCH	15	0	2.6844	2.860	PASS
	HCH	15	0	2.6908	2.861	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5019	4.915	PASS
	MCH	25	0	4.5014	4.929	PASS
	HCH	25	0	4.5095	4.900	PASS
16QAM	LCH	25	0	4.5094	4.934	PASS
	MCH	25	0	4.5026	4.983	PASS
	HCH	25	0	4.5051	4.928	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	9.0048	9.622	PASS
	MCH	50	0	8.9867	9.571	PASS
	HCH	50	0	8.9763	9.569	PASS
16QAM	LCH	50	0	8.9887	9.602	PASS
	MCH	50	0	8.9776	9.610	PASS
	HCH	50	0	8.9761	9.550	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.483	14.33	PASS
	MCH	75	0	13.465	14.28	PASS
	HCH	75	0	13.451	14.29	PASS
16QAM	LCH	75	0	13.489	14.30	PASS
	MCH	75	0	13.459	14.32	PASS
	HCH	75	0	13.456	14.29	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.977	18.98	PASS
	MCH	100	0	17.921	18.98	PASS
	HCH	100	0	17.917	19.01	PASS
16QAM	LCH	100	0	17.975	18.97	PASS
	MCH	100	0	17.928	18.93	PASS
	HCH	100	0	17.927	18.98	PASS

LTE Band 4

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0886	1.248	PASS
	MCH	6	0	1.0889	1.234	PASS
	HCH	6	0	1.0920	1.249	PASS
16QAM	LCH	6	0	1.0895	1.263	PASS
	MCH	6	0	1.0886	1.256	PASS
	HCH	6	0	1.0886	1.258	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6876	2.847	PASS
	MCH	15	0	2.6907	2.841	PASS
	HCH	15	0	2.6957	2.859	PASS
16QAM	LCH	15	0	2.6859	2.859	PASS
	MCH	15	0	2.6874	2.866	PASS
	HCH	15	0	2.6920	2.865	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5043	4.984	PASS
	MCH	25	0	4.5014	4.982	PASS
	HCH	25	0	4.5054	4.969	PASS
16QAM	LCH	25	0	4.5119	4.957	PASS
	MCH	25	0	4.5042	4.966	PASS
	HCH	25	0	4.5077	4.971	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	9.0049	9.609	PASS
	MCH	50	0	8.9858	9.619	PASS
	HCH	50	0	8.9889	9.601	PASS
16QAM	LCH	50	0	8.9890	9.622	PASS
	MCH	50	0	8.9682	9.653	PASS
	HCH	50	0	8.9918	9.562	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.511	14.31	PASS
	MCH	75	0	13.472	14.34	PASS
	HCH	75	0	13.499	14.34	PASS
16QAM	LCH	75	0	13.505	14.27	PASS
	MCH	75	0	13.458	14.27	PASS
	HCH	75	0	13.500	14.30	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.964	18.96	PASS
	MCH	100	0	17.909	18.93	PASS
	HCH	100	0	17.987	19.04	PASS
16QAM	LCH	100	0	17.975	18.97	PASS
	MCH	100	0	17.902	18.94	PASS
	HCH	100	0	18.001	18.98	PASS

LTE Band 5

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0865	1.234	PASS
	MCH	6	0	1.0890	1.245	PASS
	HCH	6	0	1.0903	1.250	PASS
16QAM	LCH	6	0	1.0900	1.265	PASS
	MCH	6	0	1.0899	1.276	PASS
	HCH	6	0	1.0901	1.259	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6848	2.857	PASS
	MCH	15	0	2.6890	2.855	PASS
	HCH	15	0	2.6930	2.862	PASS
16QAM	LCH	15	0	2.6824	2.853	PASS
	MCH	15	0	2.6848	2.862	PASS
	HCH	15	0	2.6889	2.862	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4992	4.951	PASS
	MCH	25	0	4.5038	4.970	PASS
	HCH	25	0	4.4989	4.936	PASS
16QAM	LCH	25	0	4.5072	4.894	PASS
	MCH	25	0	4.5094	4.936	PASS
	HCH	25	0	4.5017	4.975	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9950	9.584	PASS
	MCH	50	0	8.9920	9.571	PASS
	HCH	50	0	8.9639	9.558	PASS
16QAM	LCH	50	0	8.9755	9.553	PASS
	MCH	50	0	8.9921	9.540	PASS
	HCH	50	0	8.9572	9.532	PASS

LTE Band 7

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5039	4.989	PASS
	MCH	25	0	4.5027	4.963	PASS
	HCH	25	0	4.5040	5.008	PASS
16QAM	LCH	25	0	4.5094	4.980	PASS
	MCH	25	0	4.5030	4.991	PASS
	HCH	25	0	4.5137	4.966	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	9.0012	9.651	PASS
	MCH	50	0	8.9952	9.571	PASS
	HCH	50	0	8.9828	9.583	PASS
16QAM	LCH	50	0	8.9923	9.596	PASS
	MCH	50	0	8.9863	9.600	PASS
	HCH	50	0	8.9774	9.612	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.518	14.37	PASS
	MCH	75	0	13.484	14.37	PASS
	HCH	75	0	13.494	14.44	PASS
16QAM	LCH	75	0	13.496	14.31	PASS
	MCH	75	0	13.495	14.37	PASS
	HCH	75	0	13.475	14.35	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.985	19.00	PASS
	MCH	100	0	17.980	19.04	PASS
	HCH	100	0	17.983	19.05	PASS
16QAM	LCH	100	0	17.974	18.98	PASS
	MCH	100	0	17.984	19.00	PASS
	HCH	100	0	17.970	18.99	PASS

Note: Please refers to Appendix B for compliance test plots for Occupied Bandwidth &Emission Bandwidth.

LTE Band 12

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0888	1.252	PASS
	MCH	6	0	1.0887	1.238	PASS
	HCH	6	0	1.0888	1.247	PASS
16QAM	LCH	6	0	1.0868	1.260	PASS
	MCH	6	0	1.0862	1.253	PASS
	HCH	6	0	1.0861	1.264	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6910	2.849	PASS
	MCH	15	0	2.6908	2.848	PASS
	HCH	15	0	2.6921	2.866	PASS
16QAM	LCH	15	0	2.6844	2.857	PASS
	MCH	15	0	2.6848	2.857	PASS
	HCH	15	0	2.6913	2.845	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5007	4.974	PASS
	MCH	25	0	4.4932	4.877	PASS
	HCH	25	0	4.5099	4.943	PASS
16QAM	LCH	25	0	4.5083	4.953	PASS
	MCH	25	0	4.4904	4.920	PASS
	HCH	25	0	4.5148	4.937	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9510	9.552	PASS
	MCH	50	0	8.9333	9.540	PASS
	HCH	50	0	8.9783	9.518	PASS
16QAM	LCH	50	0	8.9502	9.541	PASS
	MCH	50	0	8.9143	9.495	PASS
	HCH	50	0	8.9830	9.531	PASS

LTE Band 17

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4949	4.926	PASS
	MCH	25	0	4.5040	4.929	PASS
	HCH	25	0	4.5008	4.977	PASS
16QAM	LCH	25	0	4.4954	4.928	PASS
	MCH	25	0	4.5032	4.924	PASS
	HCH	25	0	4.5105	4.968	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9477	9.538	PASS
	MCH	50	0	8.9593	9.521	PASS
	HCH	50	0	8.9798	9.545	PASS
16QAM	LCH	50	0	8.9292	9.502	PASS
	MCH	50	0	8.9584	9.552	PASS
	HCH	50	0	8.9772	9.532	PASS

LTE Band 25

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0884	1.232	PASS
	MCH	6	0	1.0882	1.250	PASS
	HCH	6	0	1.0919	1.252	PASS
16QAM	LCH	6	0	1.0898	1.265	PASS
	MCH	6	0	1.0881	1.268	PASS
	HCH	6	0	1.0904	1.282	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6847	2.846	PASS
	MCH	15	0	2.6922	2.856	PASS
	HCH	15	0	2.6895	2.850	PASS
16QAM	LCH	15	0	2.6923	2.850	PASS
	MCH	15	0	2.6871	2.851	PASS
	HCH	15	0	2.6915	2.860	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5047	5.008	PASS
	MCH	25	0	4.5034	4.929	PASS
	HCH	25	0	4.5041	4.913	PASS
16QAM	LCH	25	0	4.5091	4.958	PASS
	MCH	25	0	4.5003	4.985	PASS
	HCH	25	0	4.5093	4.912	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	9.0060	9.621	PASS
	MCH	50	0	8.9975	9.572	PASS
	HCH	50	0	8.9672	9.594	PASS
16QAM	LCH	50	0	8.9886	9.588	PASS
	MCH	50	0	8.9849	9.526	PASS
	HCH	50	0	8.9760	9.537	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.480	14.27	PASS
	MCH	75	0	13.471	14.35	PASS
	HCH	75	0	13.436	14.25	PASS
16QAM	LCH	75	0	13.484	14.32	PASS
	MCH	75	0	13.467	14.32	PASS
	HCH	75	0	13.444	14.29	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.978	18.97	PASS
	MCH	100	0	17.938	18.98	PASS
	HCH	100	0	17.880	18.97	PASS
16QAM	LCH	100	0	17.981	18.97	PASS
	MCH	100	0	17.949	18.95	PASS
	HCH	100	0	17.916	19.00	PASS

LTE Band 26A

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0900	1.251	PASS
	MCH	6	0	1.0882	1.247	PASS
	HCH	6	0	1.0904	1.254	PASS
16QAM	LCH	6	0	1.0903	1.240	PASS
	MCH	6	0	1.0906	1.275	PASS
	HCH	6	0	1.0874	1.260	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6887	2.852	PASS
	MCH	15	0	2.6876	2.860	PASS
	HCH	15	0	2.6905	2.851	PASS
16QAM	LCH	15	0	2.6883	2.859	PASS
	MCH	15	0	2.6846	2.855	PASS
	HCH	15	0	2.6876	2.865	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5006	4.953	PASS
	MCH	25	0	4.5073	4.964	PASS
	HCH	25	0	4.5041	5.017	PASS
16QAM	LCH	25	0	4.5063	4.895	PASS
	MCH	25	0	4.5061	4.930	PASS
	HCH	25	0	4.5021	4.985	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9924	9.585	PASS
	MCH	50	0	8.9890	9.522	PASS
	HCH	50	0	8.9633	9.552	PASS
16QAM	LCH	50	0	8.9938	9.553	PASS
	MCH	50	0	8.9820	9.543	PASS
	HCH	50	0	8.9570	9.537	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.522	14.32	PASS
	MCH	75	0	13.505	14.26	PASS
	HCH	75	0	13.430	14.33	PASS
16QAM	LCH	75	0	13.525	14.36	PASS
	MCH	75	0	13.501	14.26	PASS
	HCH	75	0	13.416	14.23	PASS

LTE Band 26B

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0912	1.250	PASS
	MCH	6	0	1.0878	1.239	PASS
	HCH	6	0	1.0908	1.243	PASS
16QAM	LCH	6	0	1.0895	1.272	PASS
	MCH	6	0	1.0868	1.272	PASS
	HCH	6	0	1.0861	1.268	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6940	2.861	PASS
	MCH	15	0	2.6956	2.853	PASS
	HCH	15	0	2.6926	2.854	PASS
16QAM	LCH	15	0	2.6858	2.854	PASS
	MCH	15	0	2.6921	2.846	PASS
	HCH	15	0	2.6820	2.850	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5017	4.967	PASS
	MCH	25	0	4.4999	4.909	PASS
	HCH	25	0	4.5100	4.937	PASS
16QAM	LCH	25	0	4.5037	4.910	PASS
	MCH	25	0	4.5013	4.992	PASS
	HCH	25	0	4.5097	4.941	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	MCH	50	0	8.9684	9.564	PASS
16QAM	MCH	50	0	8.9674	9.518	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	MCH	75	0	13.440	14.23	PASS
16QAM	MCH	75	0	13.432	14.24	PASS

LTE Band 38

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.5012	4.882	PASS
	MCH	25	0	4.5143	4.852	PASS
	HCH	25	0	4.5049	4.981	PASS
16QAM	LCH	25	0	4.5026	4.862	PASS
	MCH	25	0	4.4951	4.935	PASS
	HCH	25	0	4.4960	4.923	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9628	9.517	PASS
	MCH	50	0	8.9735	9.511	PASS
	HCH	50	0	8.9766	9.561	PASS
16QAM	LCH	50	0	8.9665	9.548	PASS
	MCH	50	0	8.9818	9.542	PASS
	HCH	50	0	8.9623	9.509	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.434	14.28	PASS
	MCH	75	0	13.473	14.29	PASS
	HCH	75	0	13.463	14.26	PASS
16QAM	LCH	75	0	13.443	14.28	PASS
	MCH	75	0	13.460	14.31	PASS
	HCH	75	0	13.468	14.28	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.912	18.96	PASS
	MCH	100	0	17.963	18.98	PASS
	HCH	100	0	17.923	18.96	PASS
16QAM	LCH	100	0	17.878	18.93	PASS
	MCH	100	0	17.957	18.96	PASS
	HCH	100	0	17.909	18.95	PASS

LTE Band 41

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4951	4.888	PASS
	MCH	25	0	4.4959	4.885	PASS
	HCH	25	0	4.4967	4.909	PASS
16QAM	LCH	25	0	4.4889	4.879	PASS
	MCH	25	0	4.4964	4.879	PASS
	HCH	25	0	4.4886	4.876	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9547	9.564	PASS
	MCH	50	0	8.9658	9.540	PASS
	HCH	50	0	8.9632	9.566	PASS
16QAM	LCH	50	0	8.9718	9.563	PASS
	MCH	50	0	8.9731	9.547	PASS
	HCH	50	0	8.9675	9.527	PASS

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.479	14.43	PASS
	MCH	75	0	13.474	14.33	PASS
	HCH	75	0	13.470	14.34	PASS
16QAM	LCH	75	0	13.472	14.31	PASS
	MCH	75	0	13.466	14.29	PASS
	HCH	75	0	13.460	14.28	PASS

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	-26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.964	19.04	PASS
	MCH	100	0	17.970	18.98	PASS
	HCH	100	0	17.934	19.00	PASS
16QAM	LCH	100	0	17.947	19.02	PASS
	MCH	100	0	17.946	19.00	PASS
	HCH	100	0	17.938	18.98	PASS

Note: Please refers to Appendix B for compliance test plots for Occupied Bandwidth &Emission Bandwidth.

14. BAND EDGE

14.1 PROVISIONS APPLICABLE

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

14.2 MEASUREMENT METHOD

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1% of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

TEST NOTE

§90.543(e)

1. On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.
2. On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.
3. On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
4. Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measure ment instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to i ndicate spectral energy in a 6.25 kHz segment.
5. Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instr umentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwid th of 30kHz may be employed.

§27.53(m)

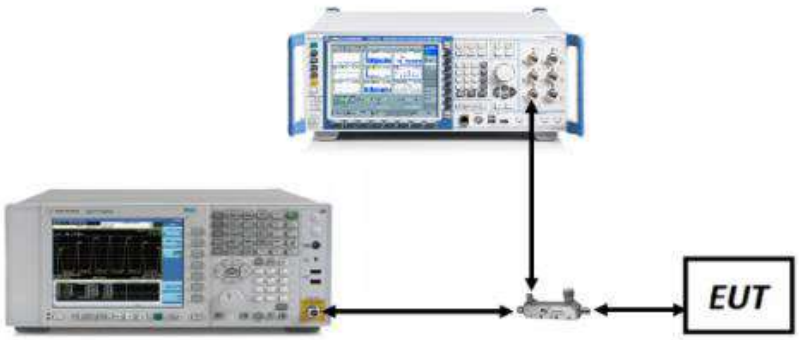
Equipment shall comply with the following unwanted emission limits:

a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least 43 + 10 log10 p

b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dBW), by at least:40 + 10 log10 p from the channel

edges to 5 MHz away 43 + 10 log10 p between 5 MHz and X MHz from the channel edges, and 55 + 10 log10 p at X MHz and beyond from the channel edges In addition, the attenuation shall not be less than 43 + 10 log10 p on all frequencies between 2490.5 MHz and 2496 MHz, and 55 + 10 log10 p at or below 2490.5 MHz.
In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.
According to FCC 22.917, 24.238, 27.53 specified that power of any emission outside of The authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. All measurements were done at 2 channels(low and high operational frequency range.)
The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

14.3 MEASUREMENT METHOD

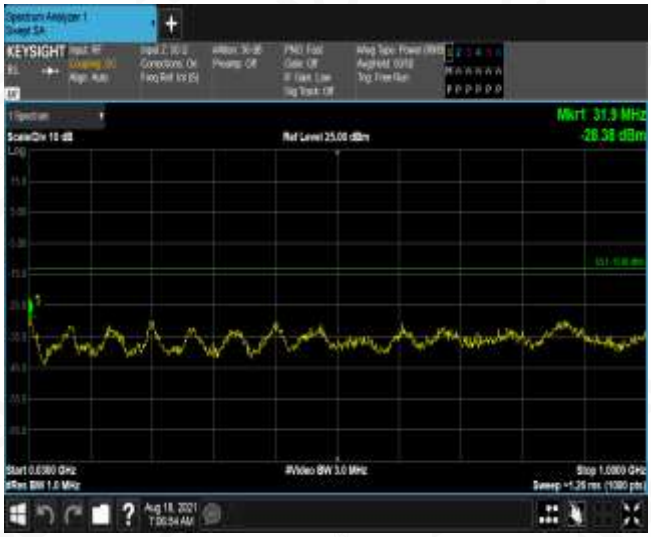
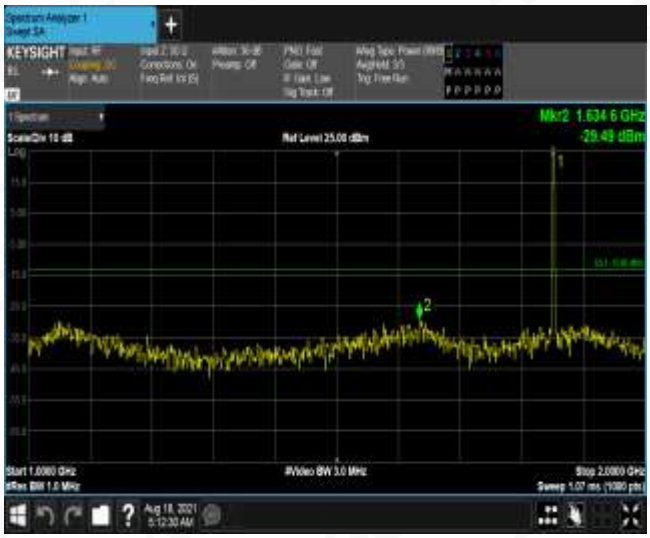
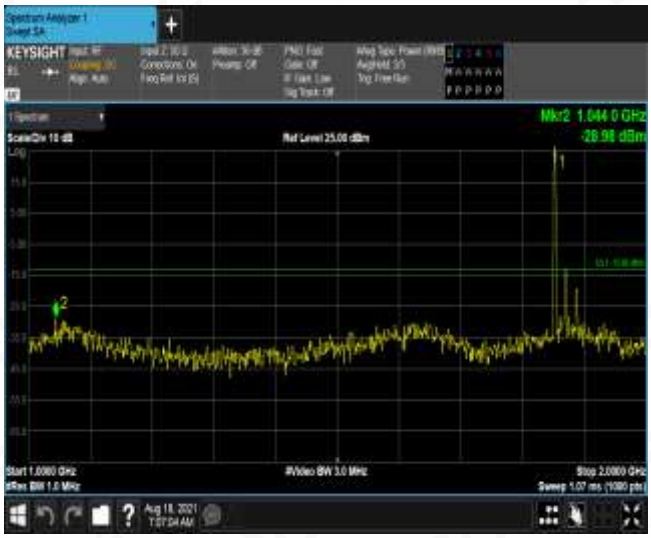


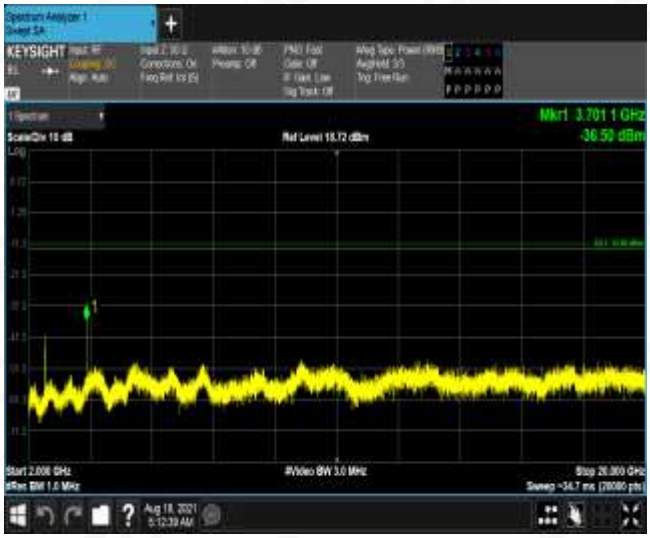
14.4 MEASUREMENT RESULT

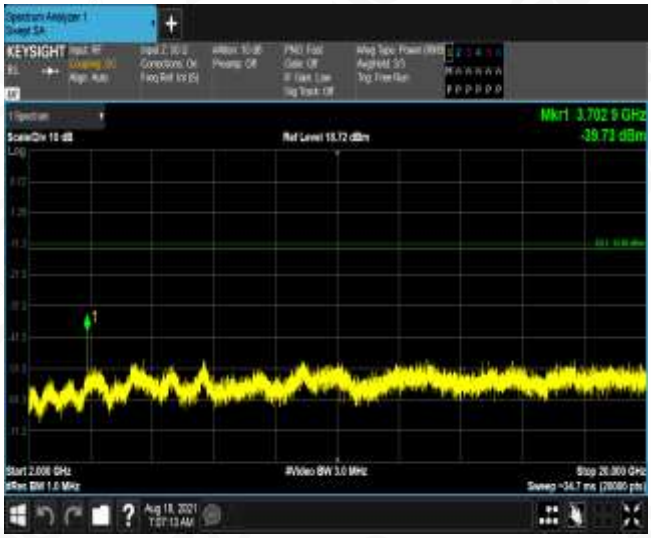
NOTE: Please refers to Appendix C for compliance test plots for band edge

APPENDIX A TEST PLOTS FOR SPURIOUS EMISSIONS AT ANTENNA TERMINALS

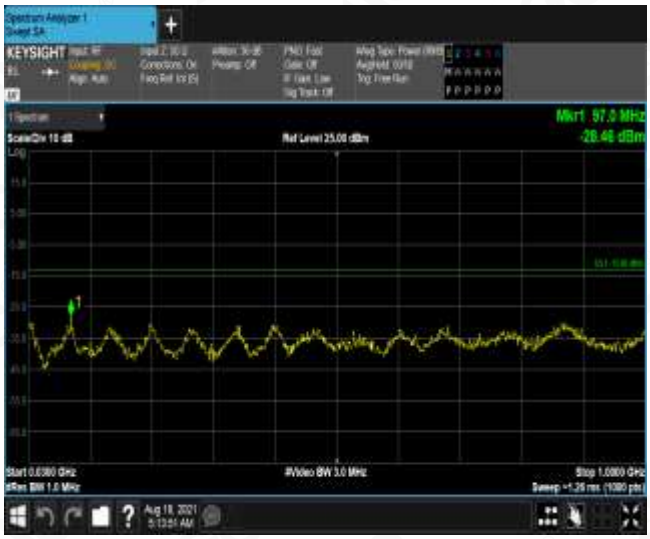
LTE BAND 2

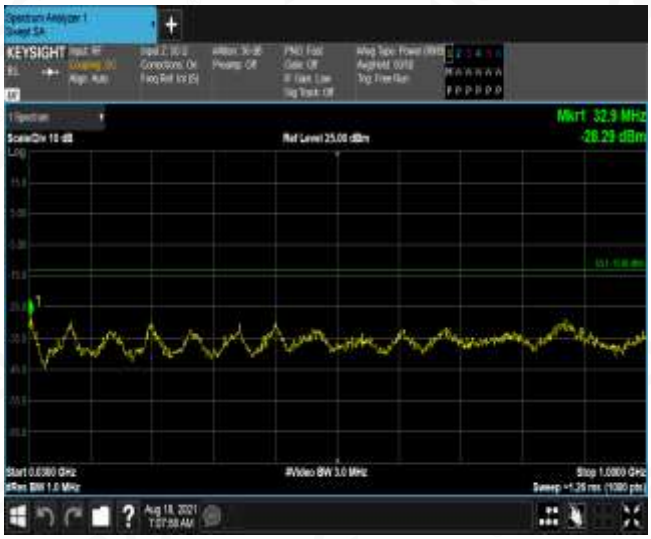
1.4MHz_LCH_QPSK_1RB#0	20MHz_LCH_QPSK_1RB#0
	
	

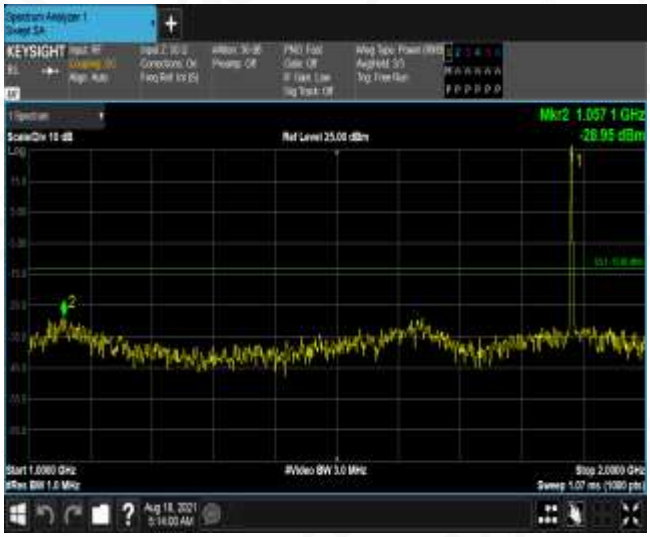


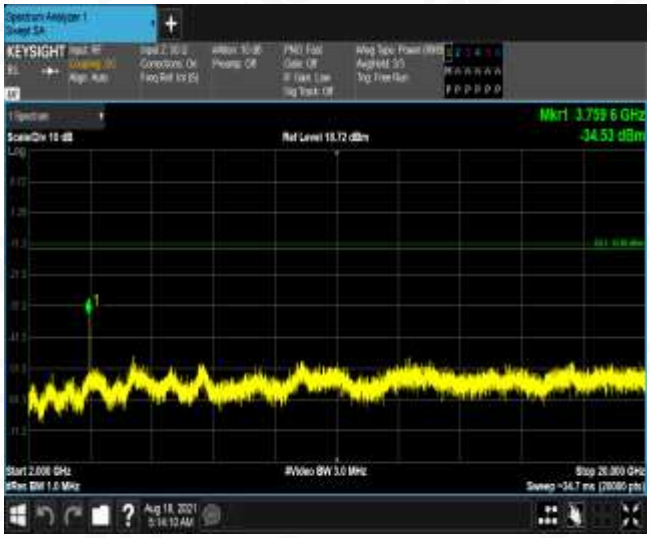


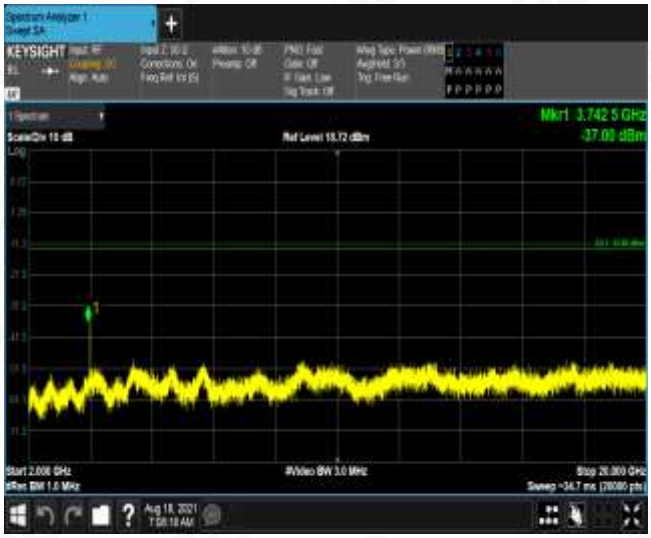
1.4MHz_MCH_QPSK_1RB#0	20MHz_MCH_QPSK_1RB#0



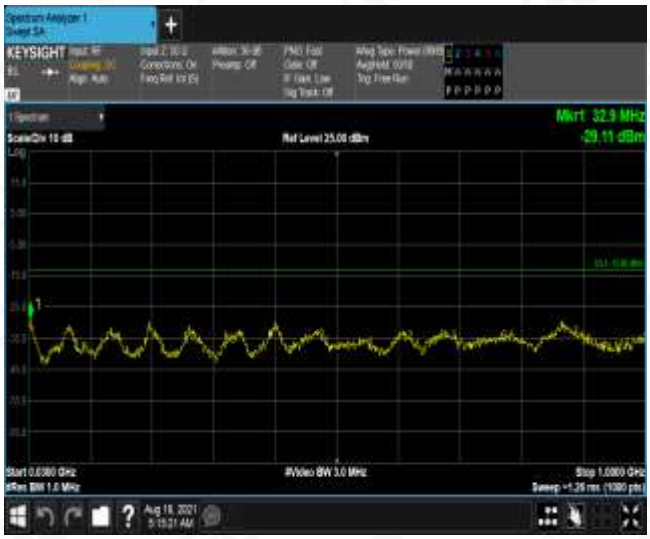


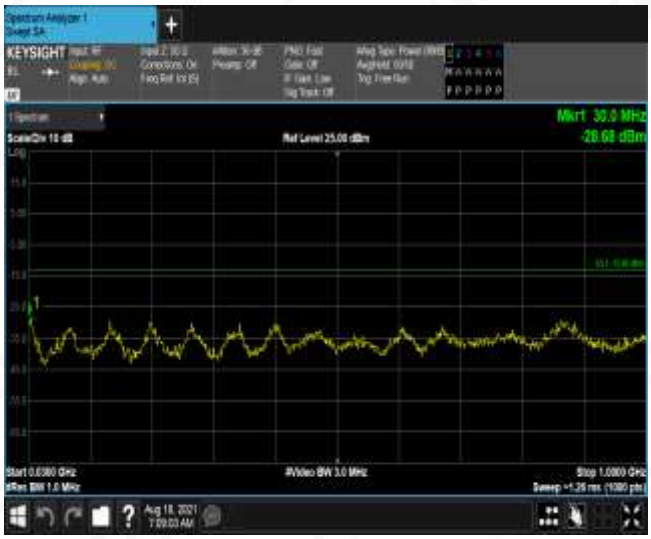


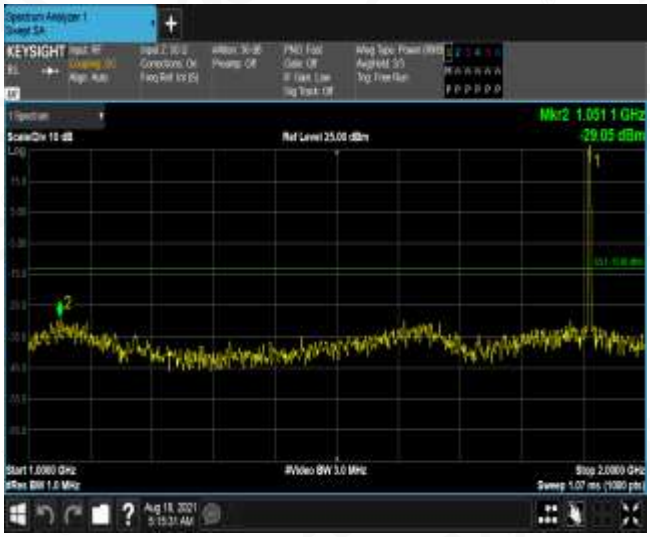


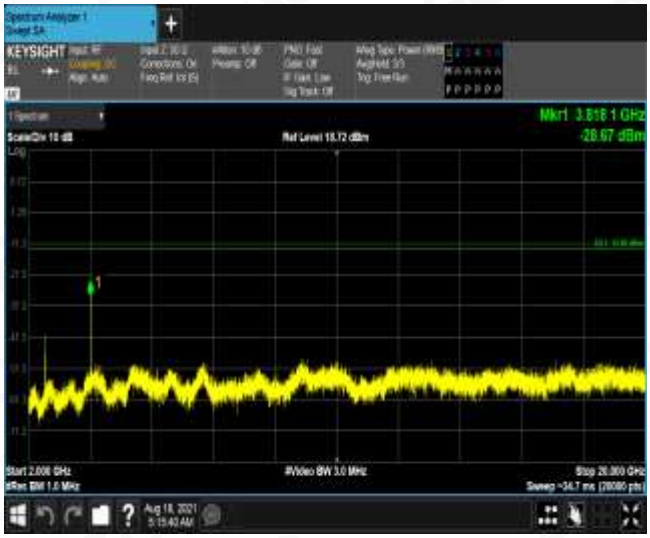
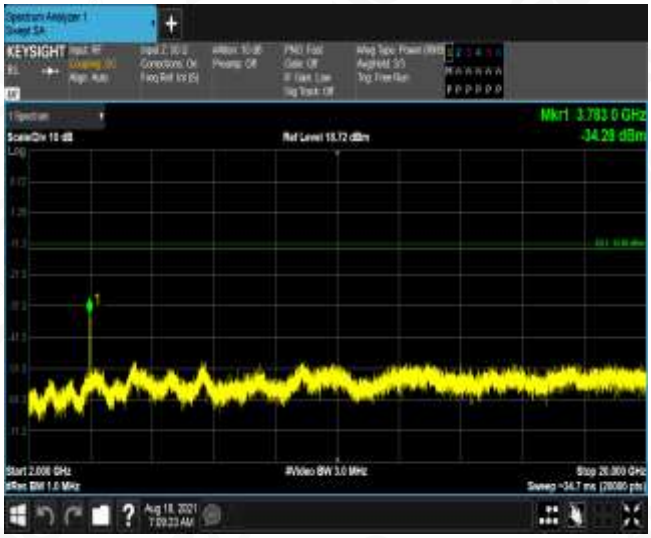


1.4MHz_HCH_QPSK_1RB#0	20MHz_HCH_QPSK_1RB#0

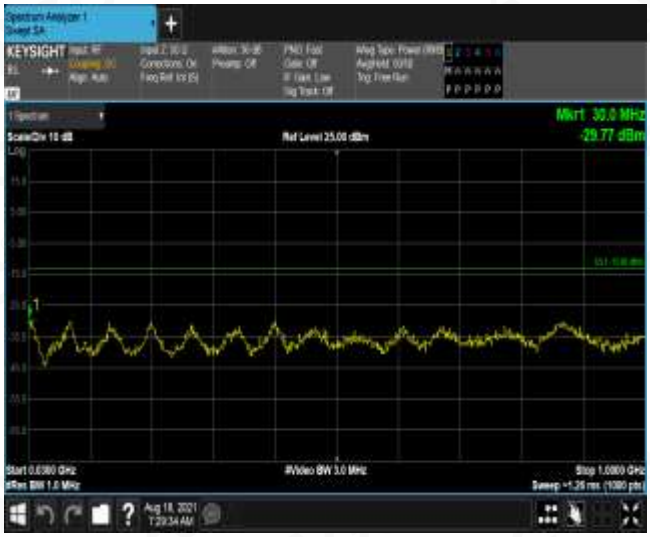


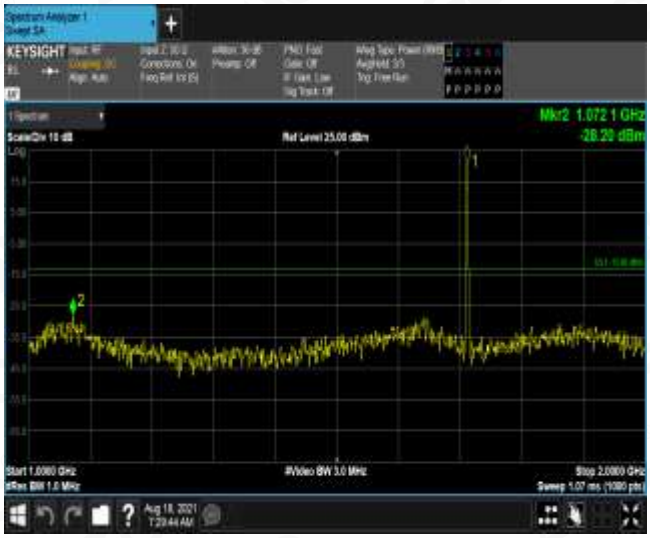


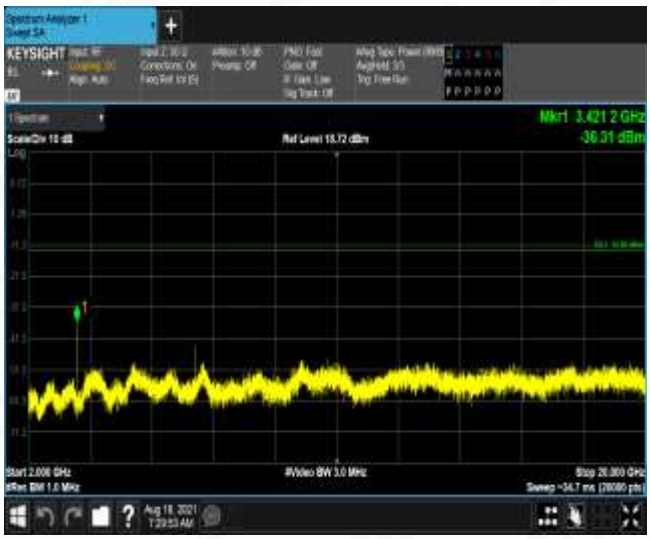


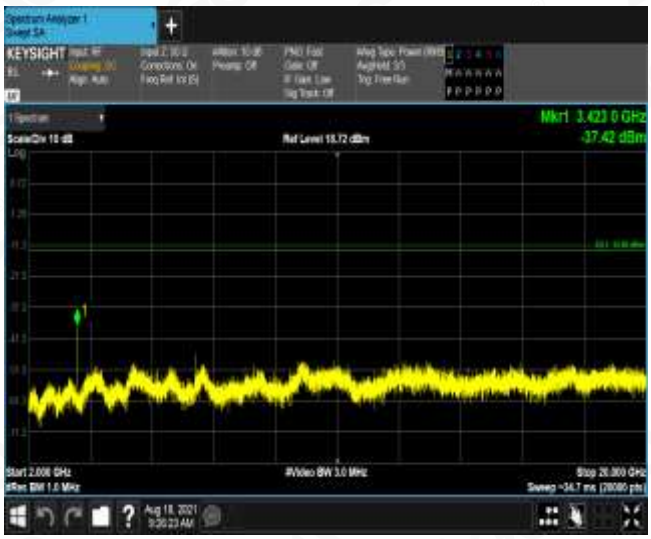
	

LTE BAND 4

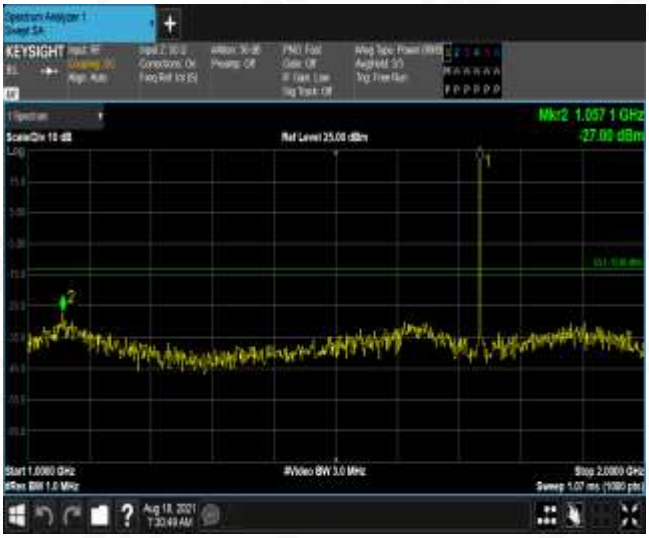
1.4MHz_LCH_QPSK_1RB#0	20MHz_LCH_QPSK_1RB#0
	

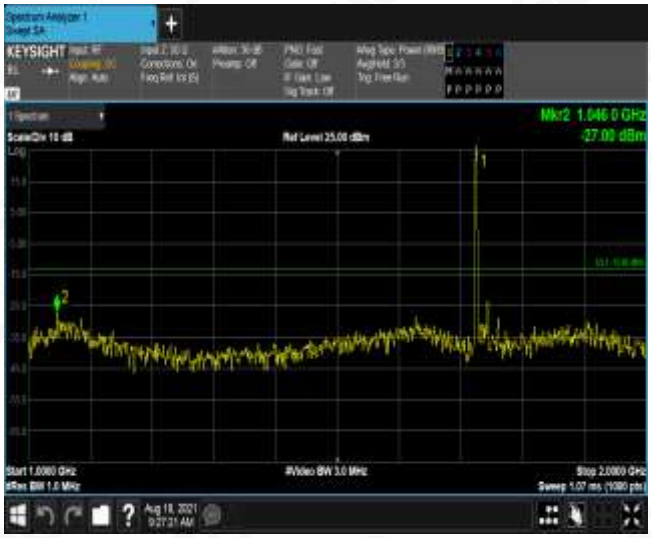


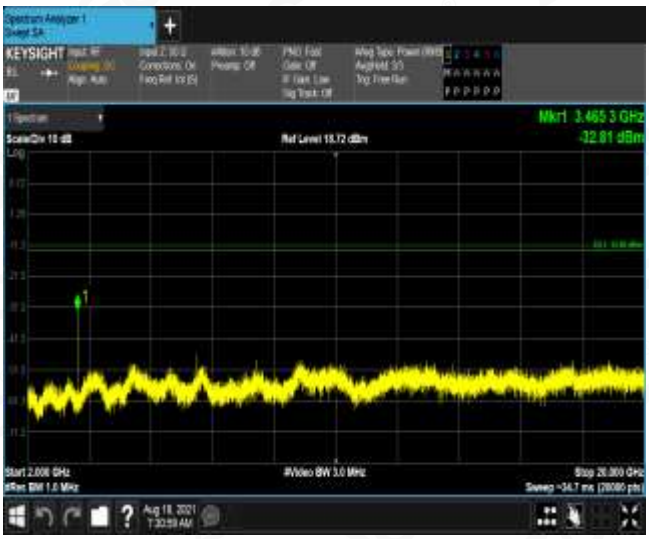


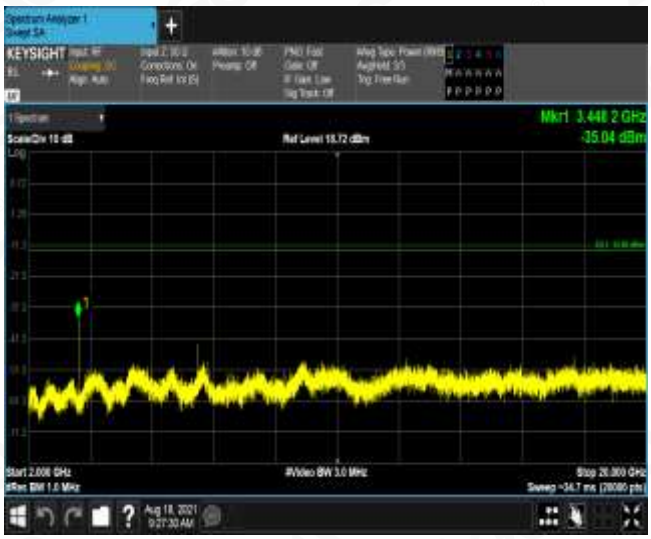


1.4MHz_MCH_QPSK_1RB#0	20MHz_MCH_QPSK_1RB#0

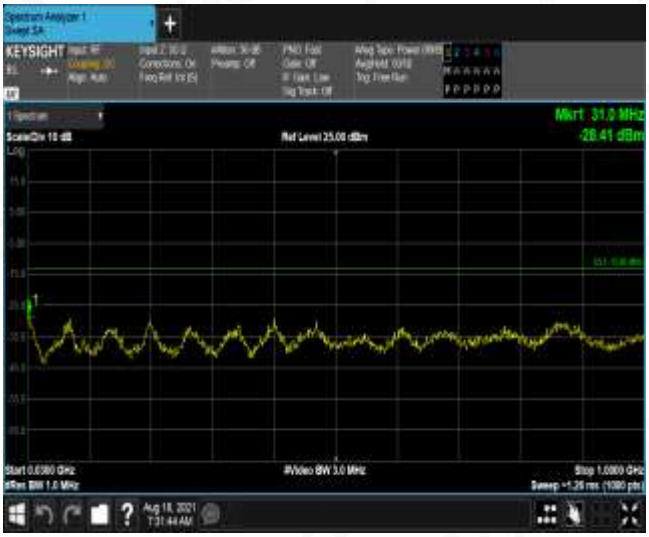


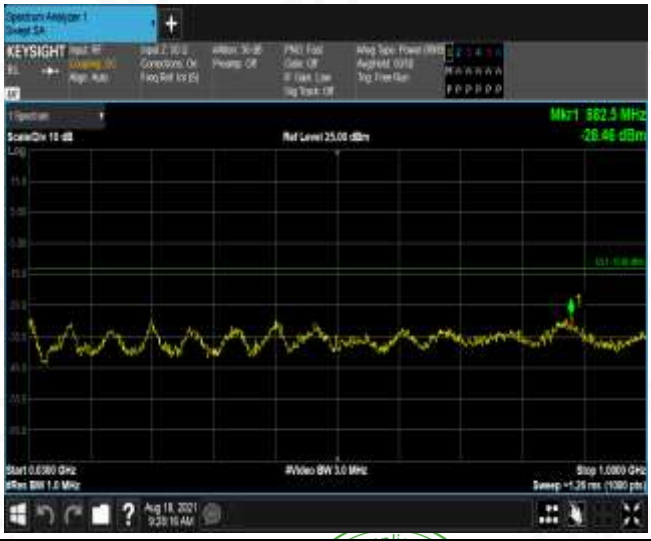


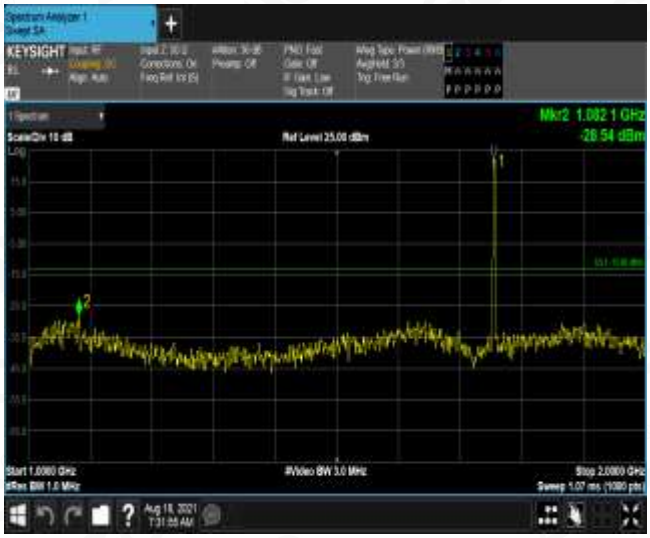


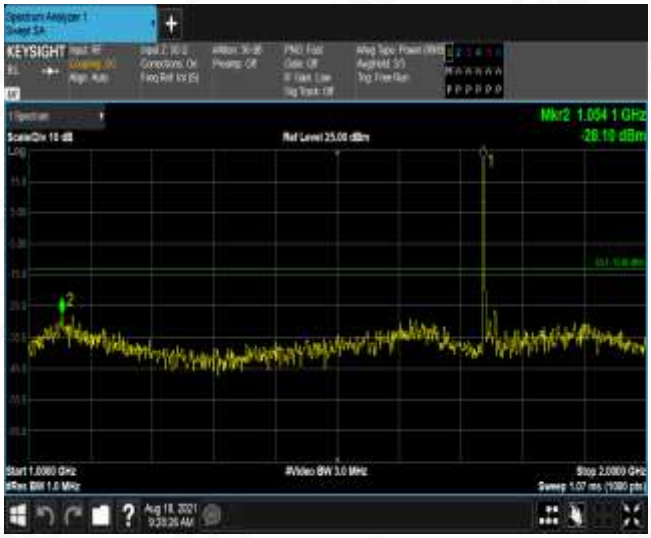


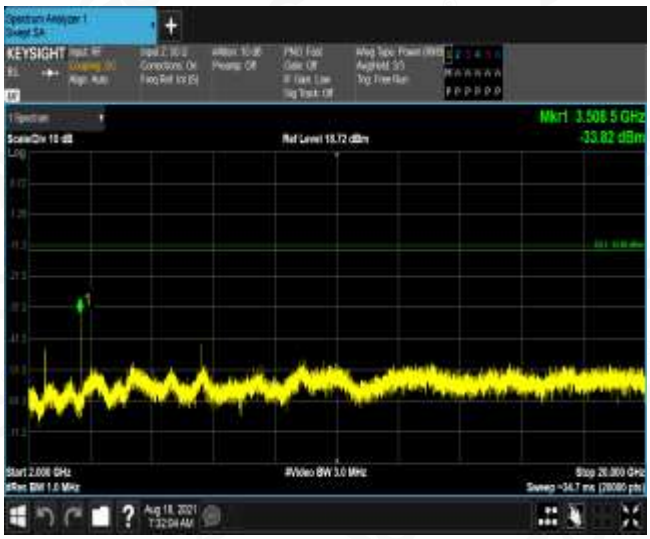
1.4MHz_HCH_QPSK_1RB#0	20MHz_HCH_QPSK_1RB#0

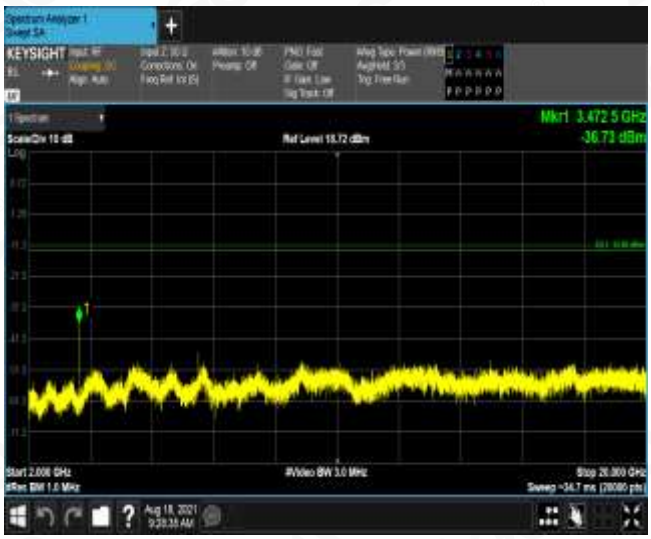




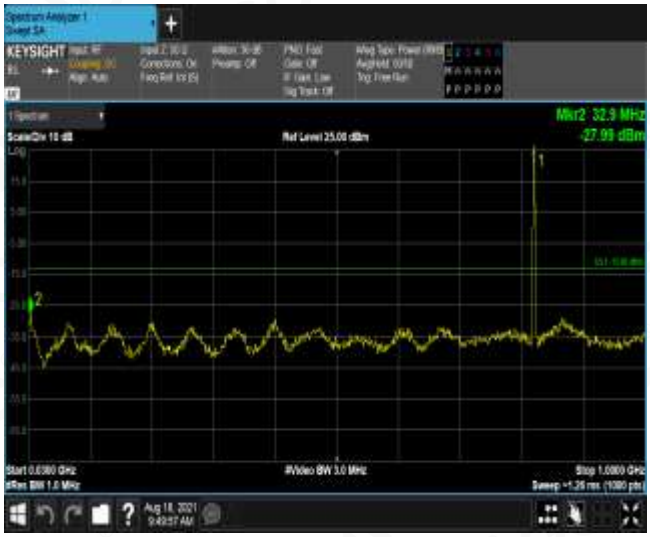
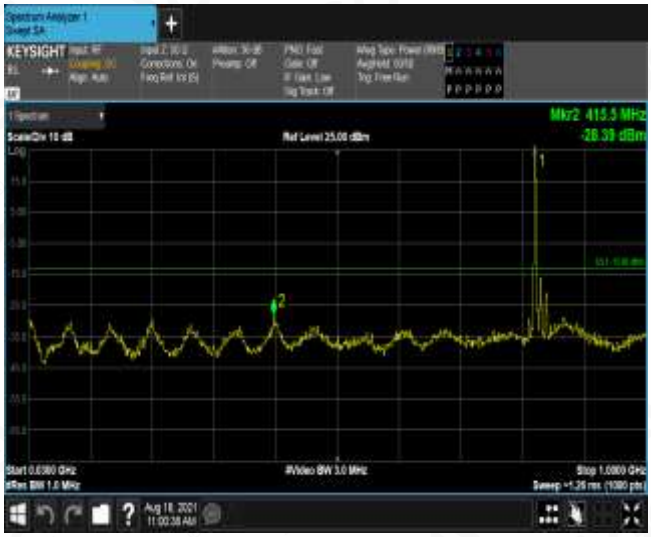
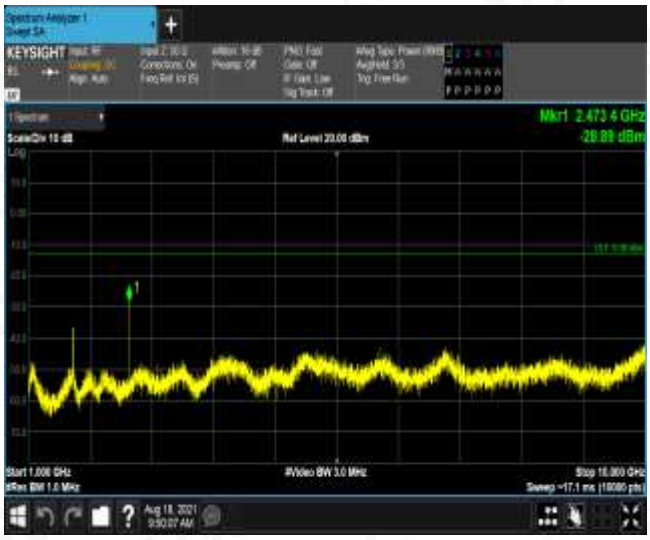
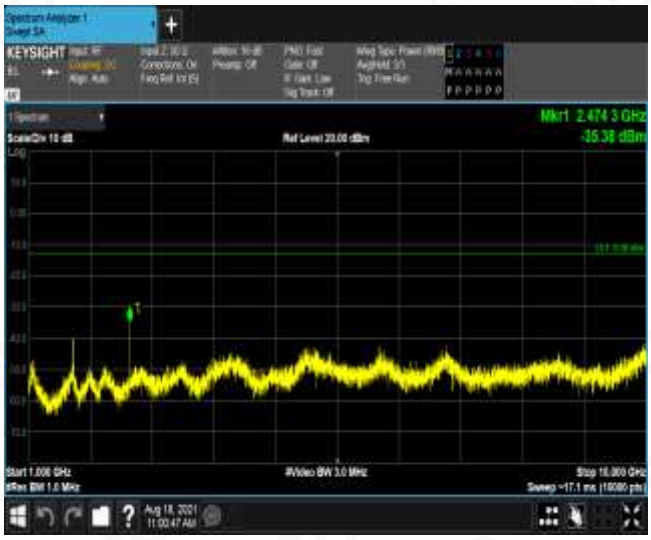


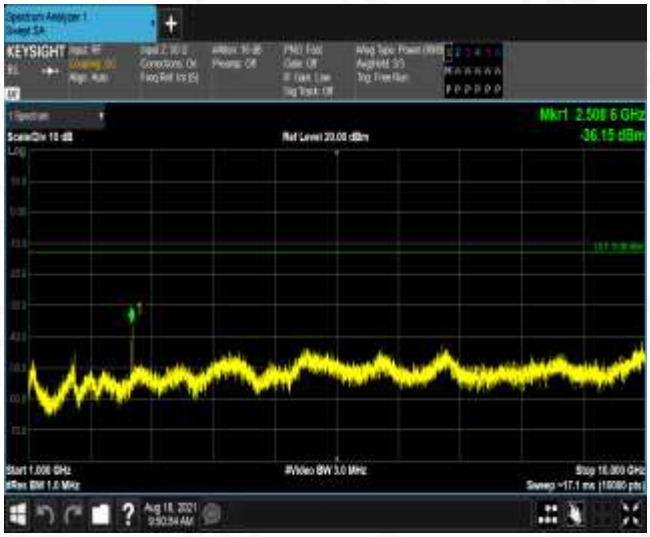
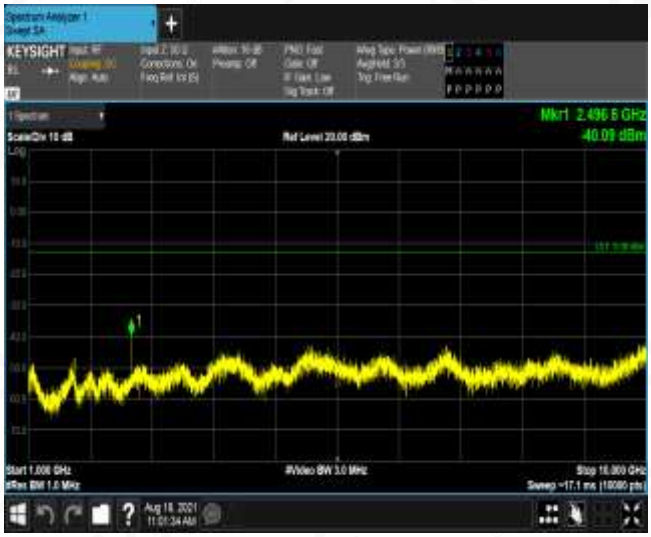


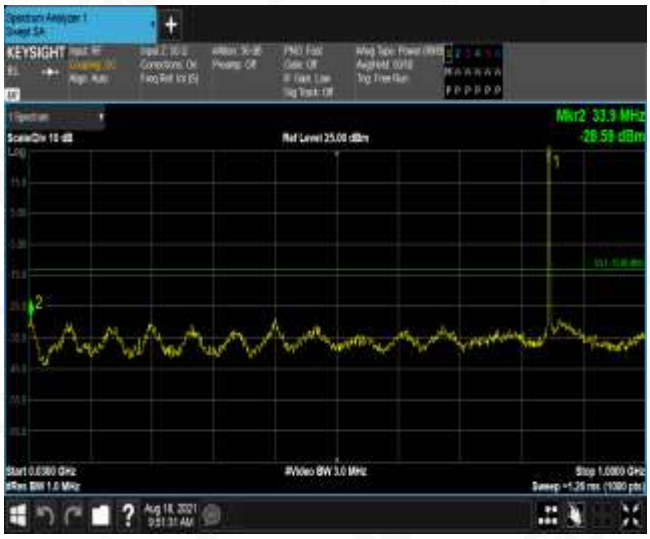
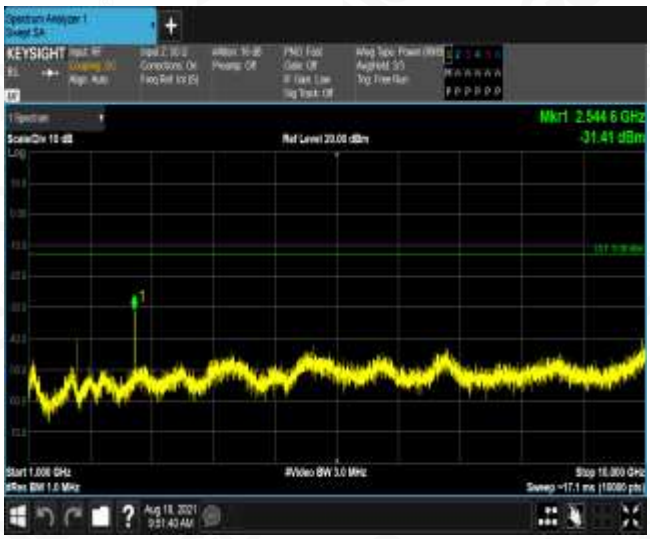
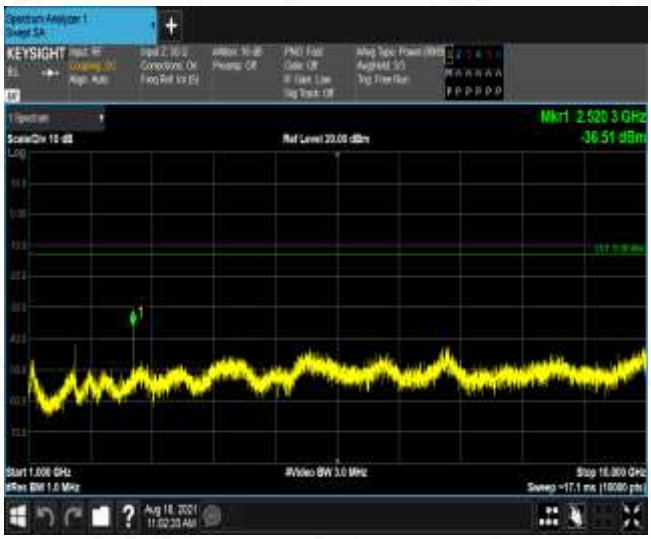




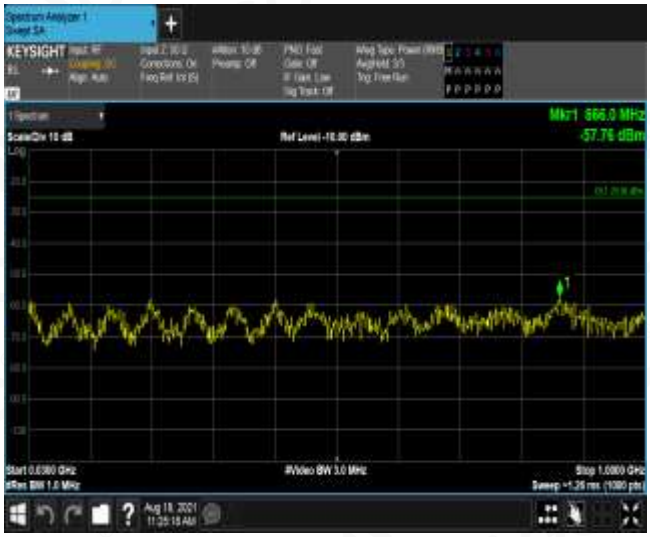
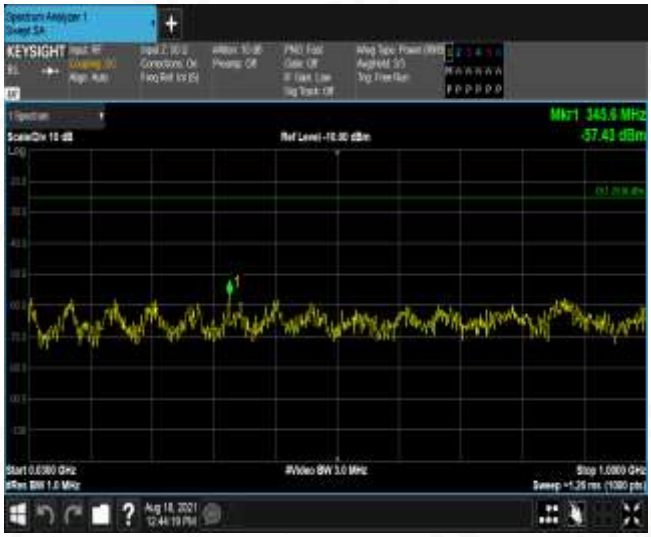
LTE BAND 5

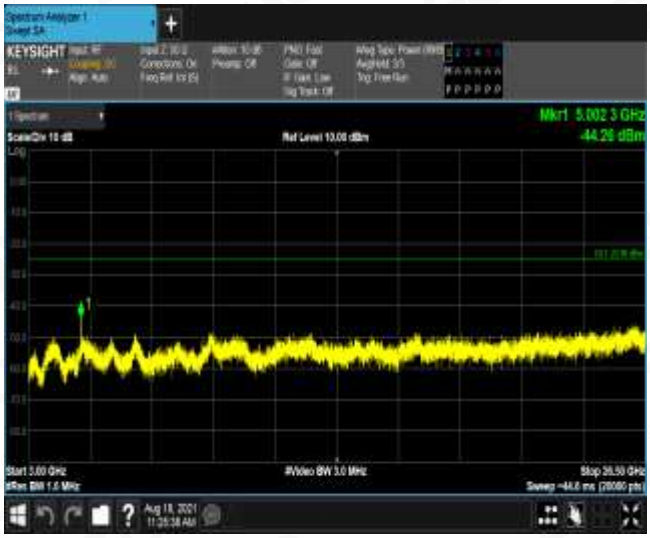
1.4MHz_LCH_QPSK_1RB#0	10MHz_LCH_QPSK_1RB#0
	
	

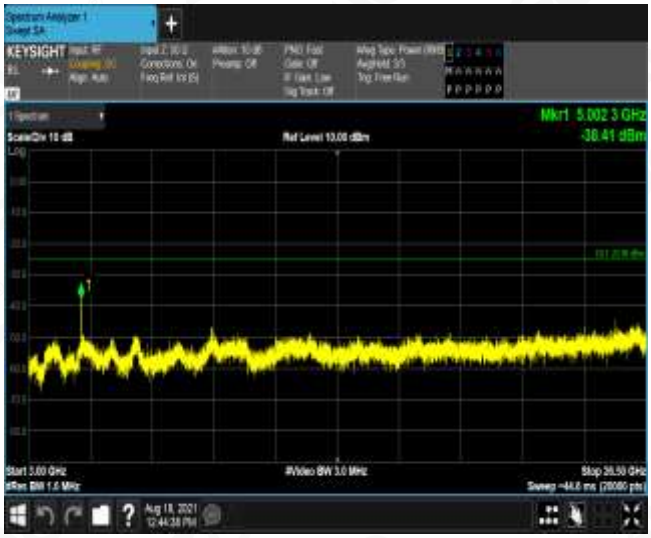
1.4MHz_MCH_QPSK_1RB#0	10MHz_MCH_QPSK_1RB#0
	
	

1.4MHz_HCH_QPSK_1RB#0	10MHz_HCH_QPSK_1RB#0
	
	

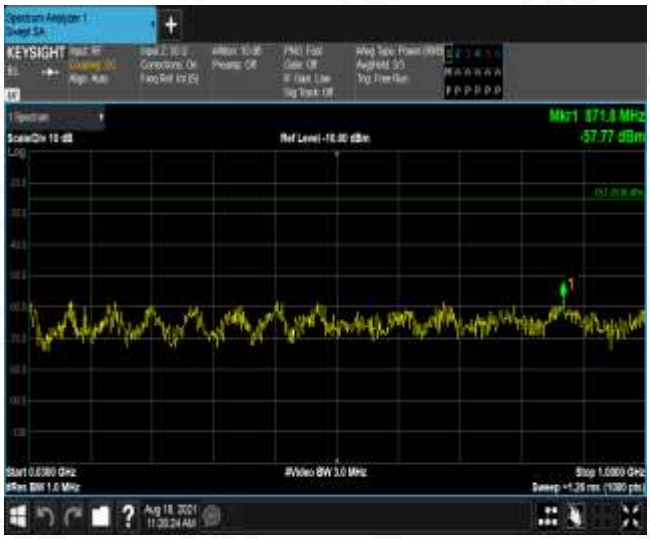
LTE BAND 7

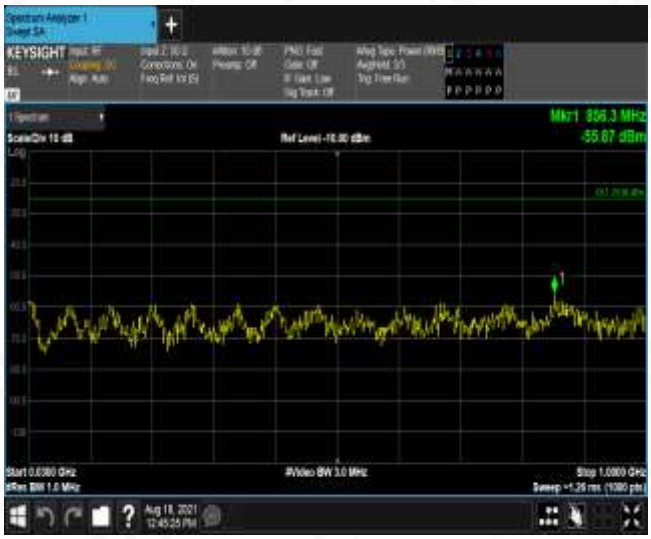
1.4MHz_LCH_QPSK_1RB#0	20MHz_LCH_QPSK_1RB#0
	
	

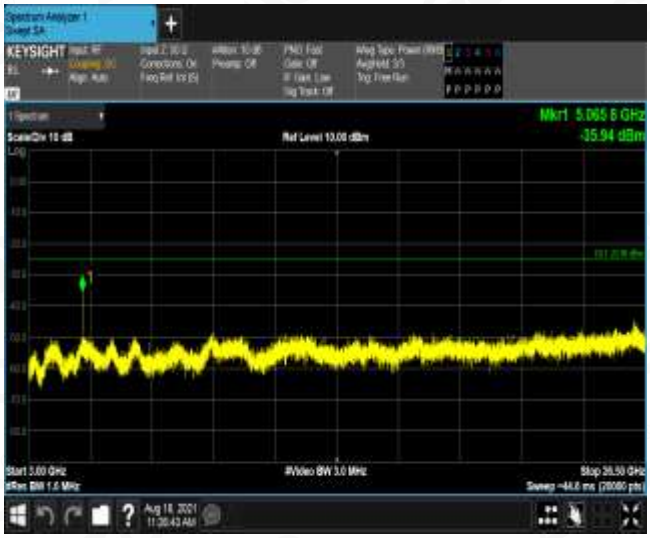


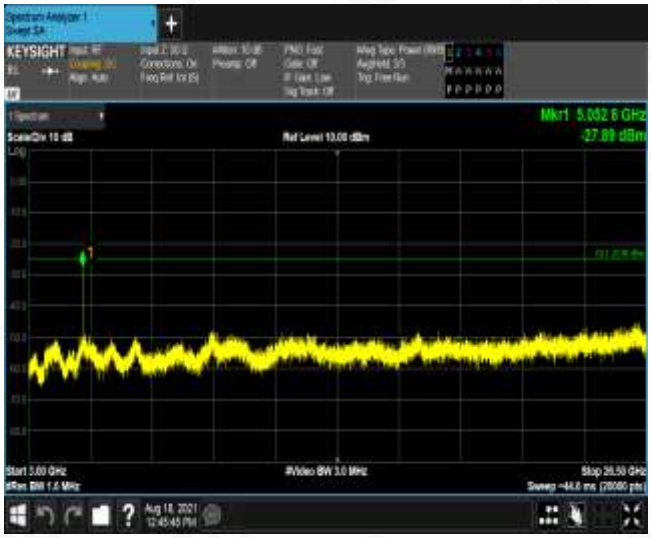


1.4MHz_MCH_QPSK_1RB#0	20MHz_MCH_QPSK_1RB#0

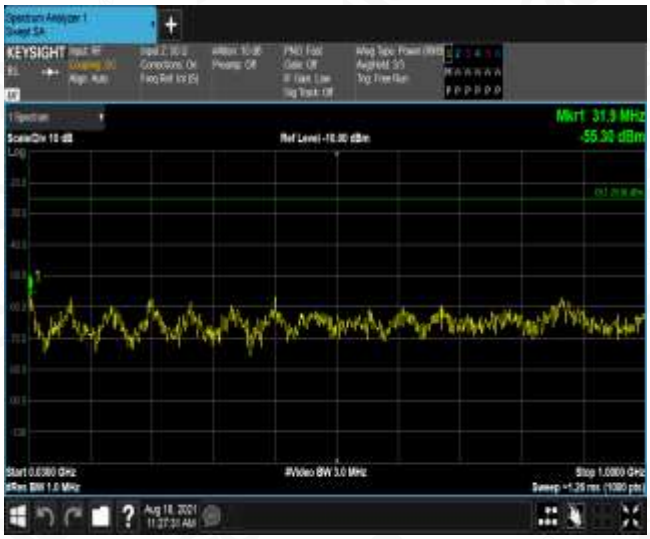


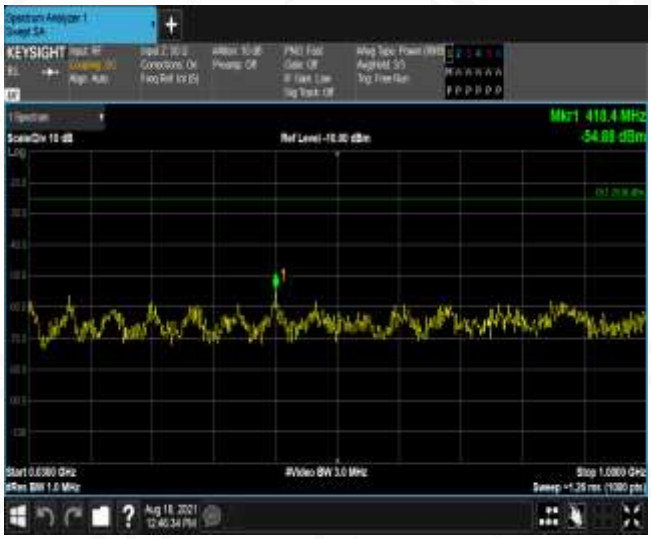


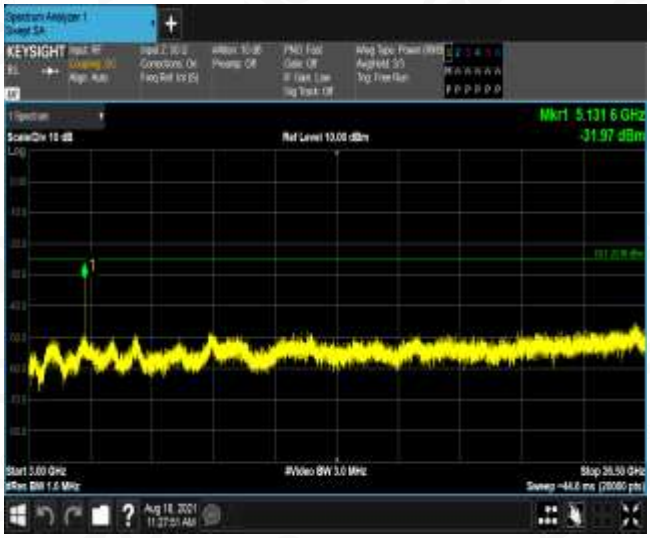


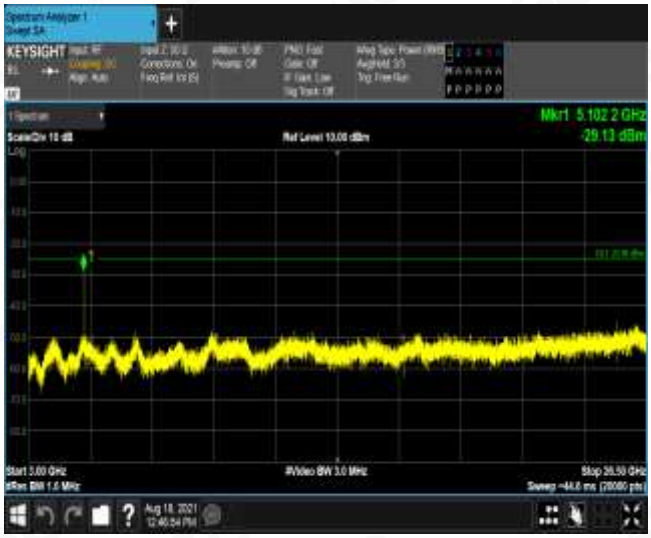


1.4MHz_HCH_QPSK_1RB#0	20MHz_HCH_QPSK_1RB#0

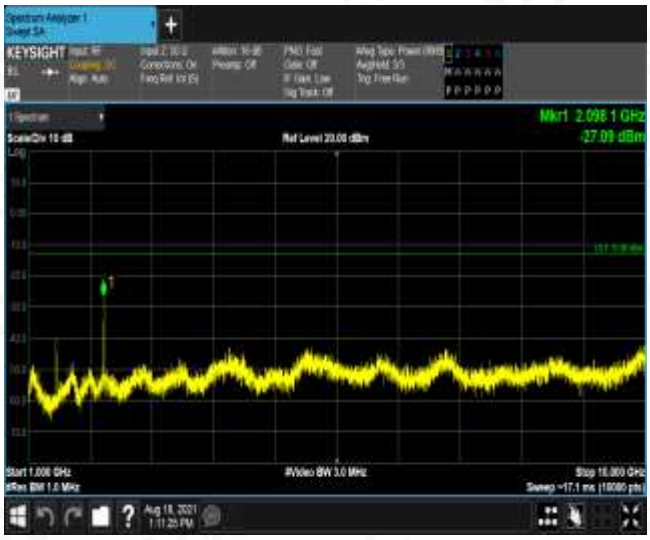
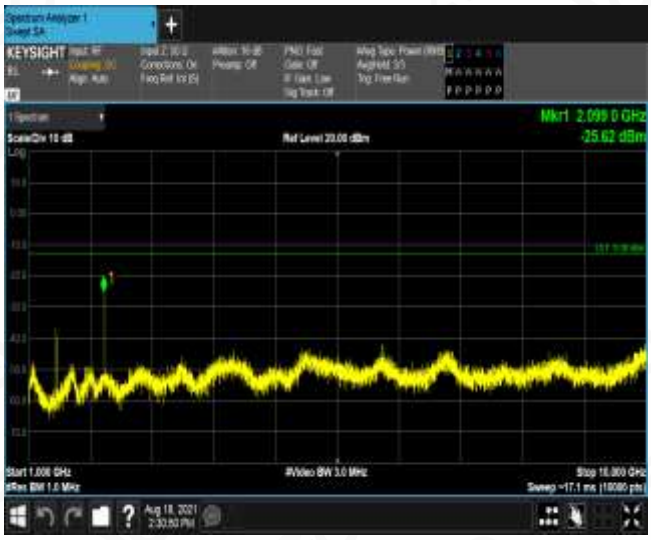


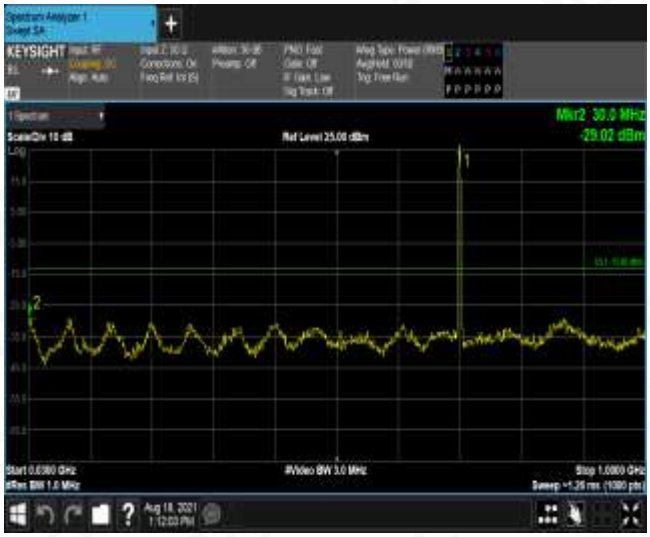
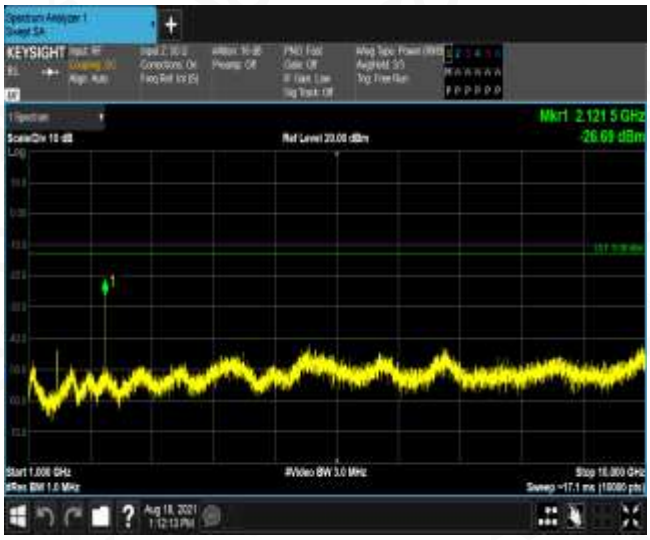
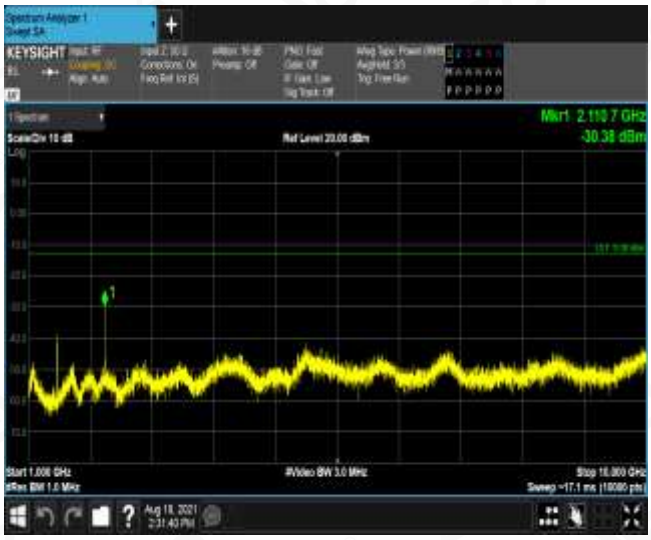


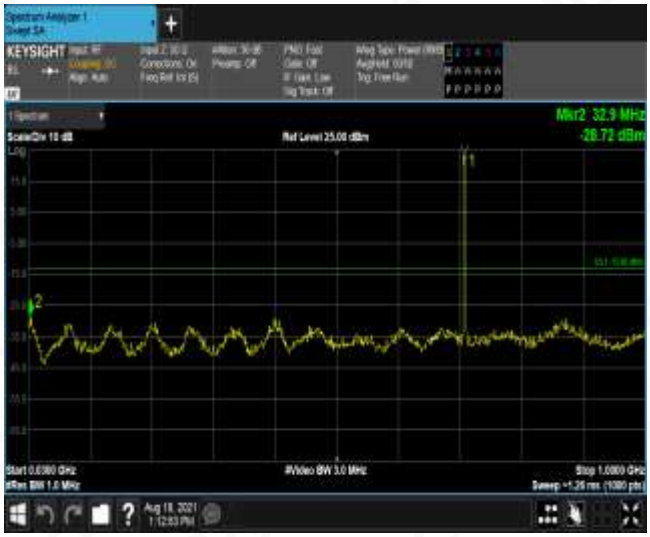
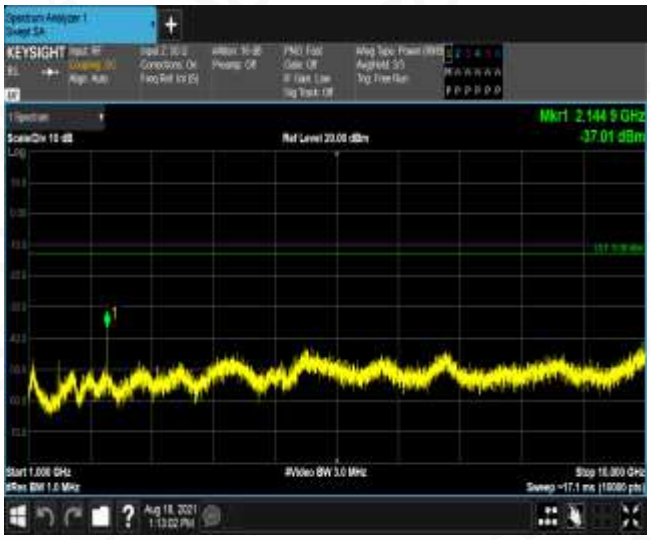
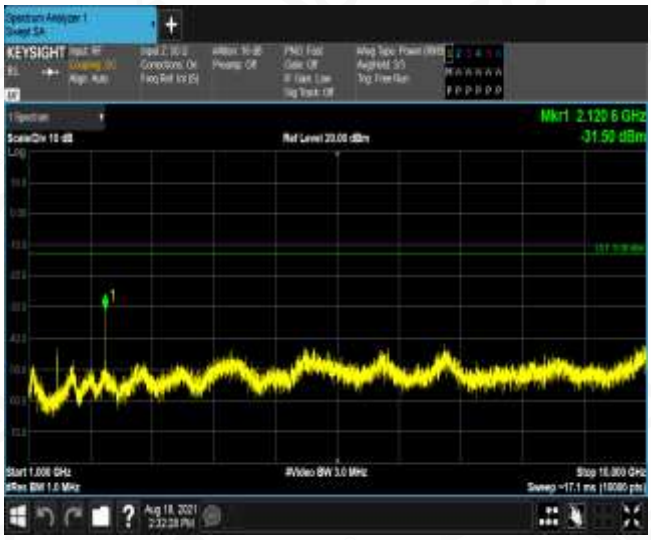




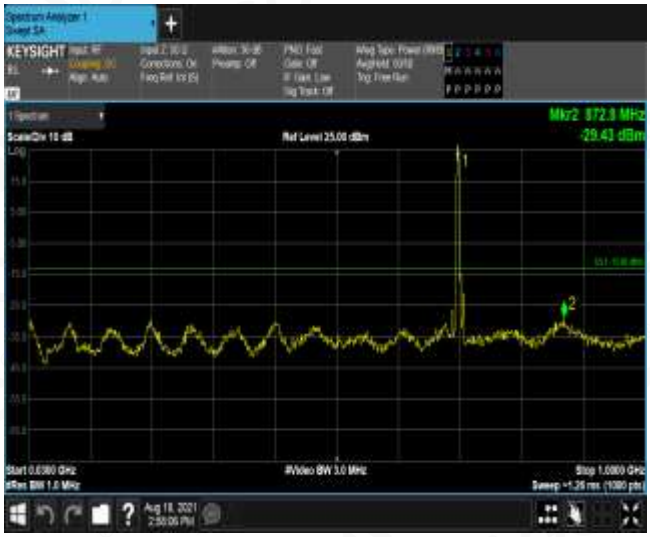
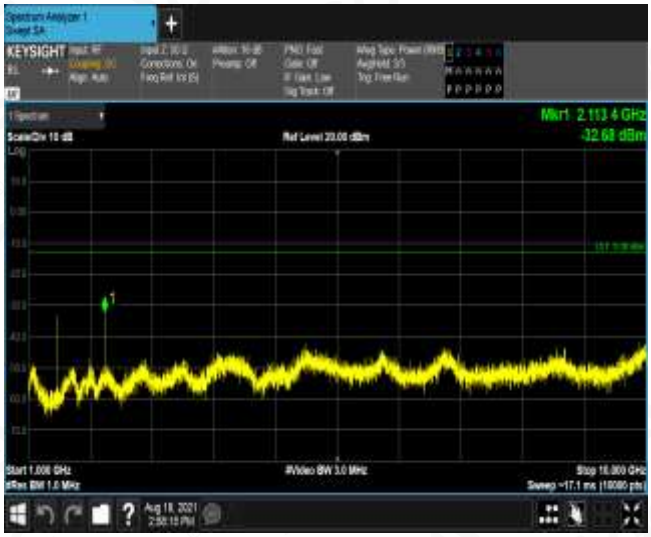
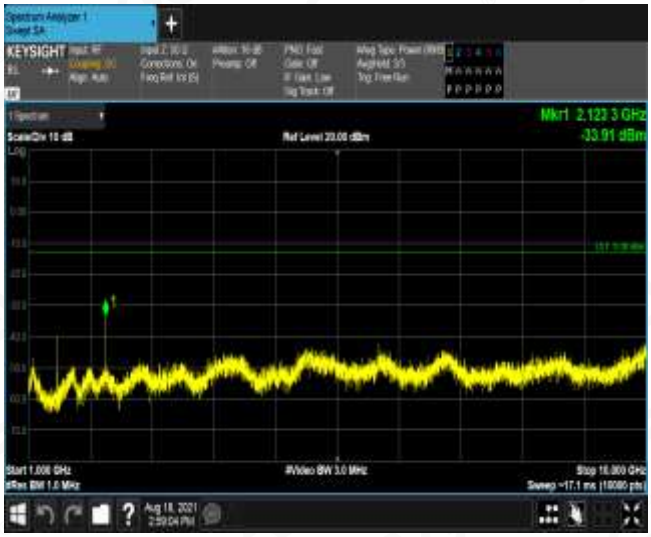
LTE BAND 12

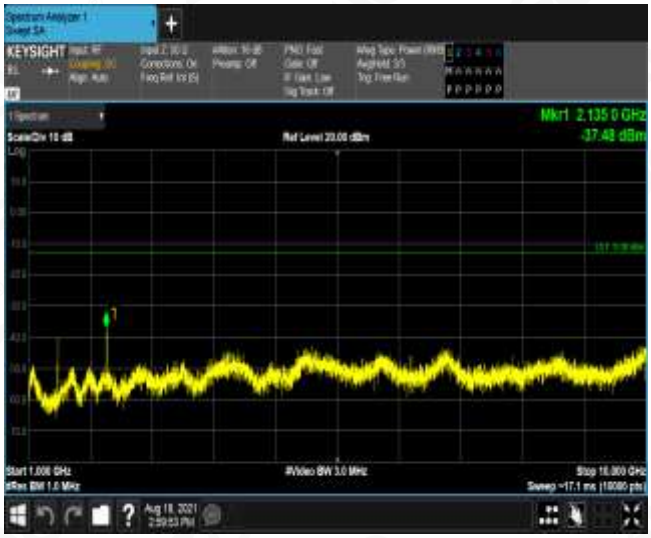
1.4MHz_LCH_QPSK_1RB#0	10MHz_LCH_QPSK_1RB#0
	
	

1.4MHz_MCH_QPSK_1RB#0	10MHz_MCH_QPSK_1RB#0
	
	

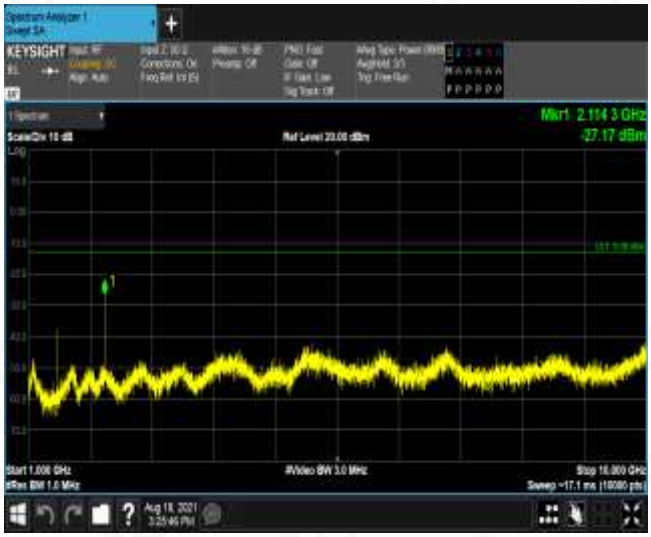
1.4MHz_HCH_QPSK_1RB#0	10MHz_HCH_QPSK_1RB#0
	
	

LTE Band 17

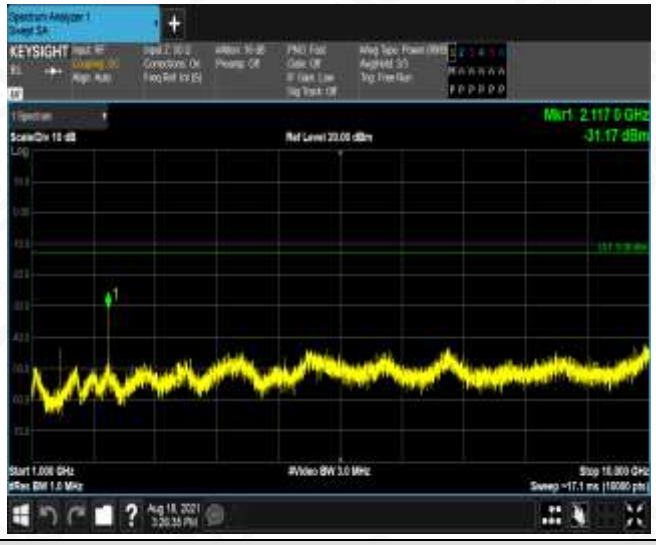
5MHz_LCH_QPSK_1RB#0	
	
5MHz_MCH_QPSK_1RB#0	
	
5MHz_HCH_QPSK_1RB#0	



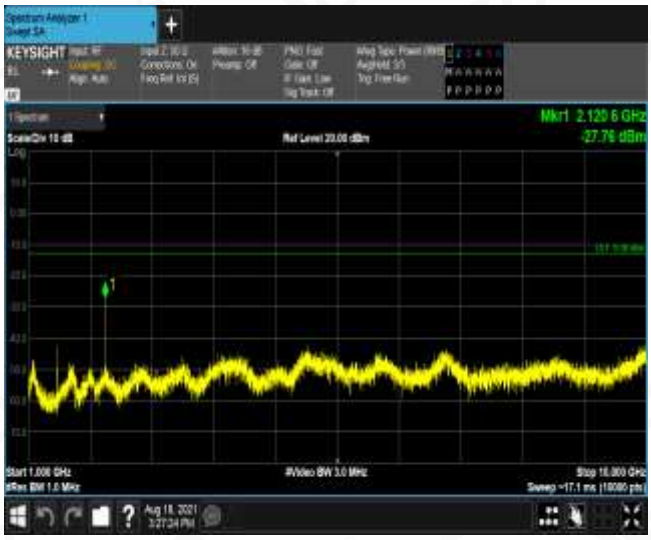
10MHz_LCH_QPSK_1RB#0



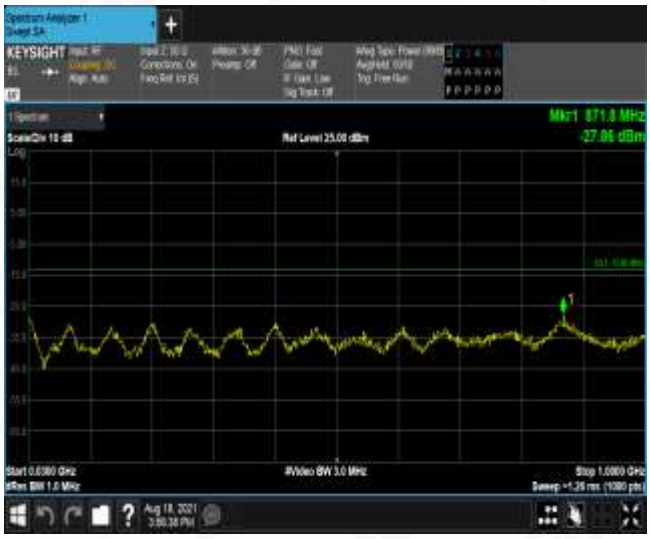
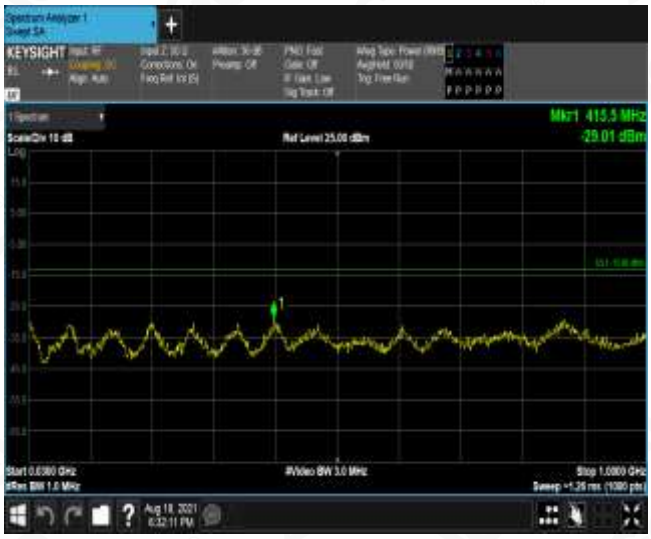
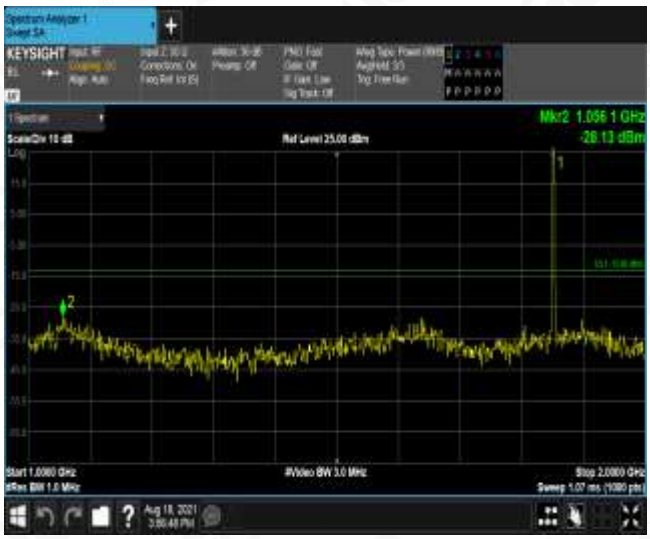
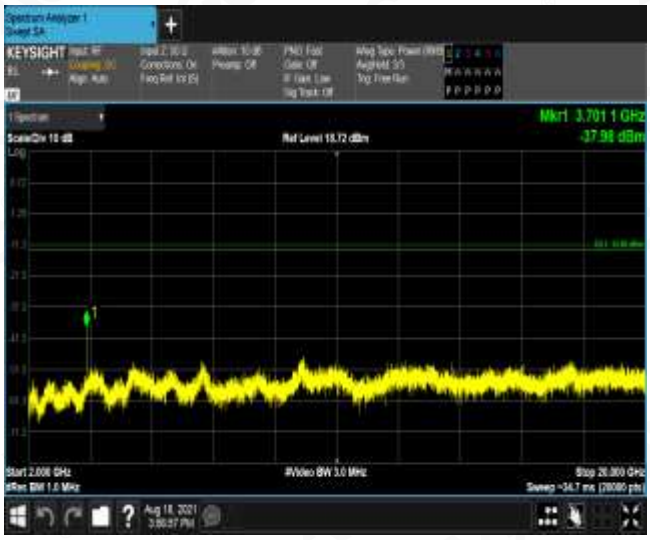
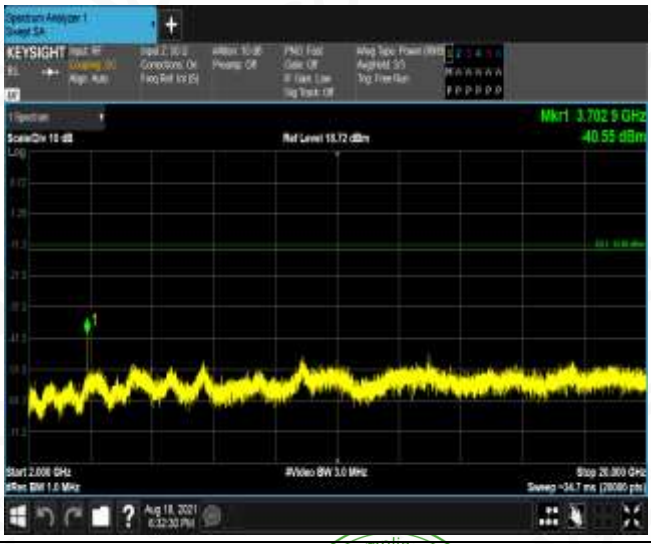
10MHz_MCH_QPSK_1RB#0



10MHz_HCH_QPSK_1RB#0



LTE Band 25

1.4MHz_LCH_QPSK_1RB#0	20MHz_LCH_QPSK_1RB#0
	
	
	

1.4MHz_MCH_QPSK_1RB#0	20MHz_MCH_QPSK_1RB#0