



RF TEST REPORT

Report No.: SET2022-06945

Product Name: METAVERTU 5G digital mobile phone

Model No.: VTL-202201

FCC ID: 2A6IQ-VTL202201

IC: 28629-VTL202201

Applicant: VERTU INTERNATIONAL CORPORATION LIMITED

Address: 25 St Thomas Street, Winchester, Hampshire, SO23 9HJ, United Kingdom

Dates of Testing: 05/09/2022 - 07/12/2022

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

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Test Report

Product: METAVERTU 5G digital mobile phone

Brand Name.....: VERTU

Trade Name: VERTU

Applicant.....: VERTU INTERNATIONAL CORPORATION LIMITED

Applicant Address: 25 St Thomas Street, Winchester, Hampshire, SO23 9HJ, United Kingdom

Manufacturer: Chengdu Vertu Business and Service Management Co., Ltd.

Manufacturer Address: 1601,16th Floor, No. 1577 Middle Section of Tianfu Avenue, Chengdu High-tech Zone, China (Sichuan) Pilot Free Trade Zone

Test Standards: 47 CFR Part 2/22/27
RSS-Gen, Issue 5: Feb 2021
RSS-130, issue 2: Feb 2019
RSS-132, Issue 3: Jan 2013
RSS-139, issue 3: Jul 2015
RSS-199, issue 3: Dec 2016

Test Result.....: Pass

Tested by:  2022.08.01
Chuiwang Zhang, Test Engineer

Reviewed by:  2022.08.01
Chris You, Senior Engineer

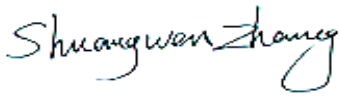
Approved by:  2022.08.01
Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2022.08.01	First edition

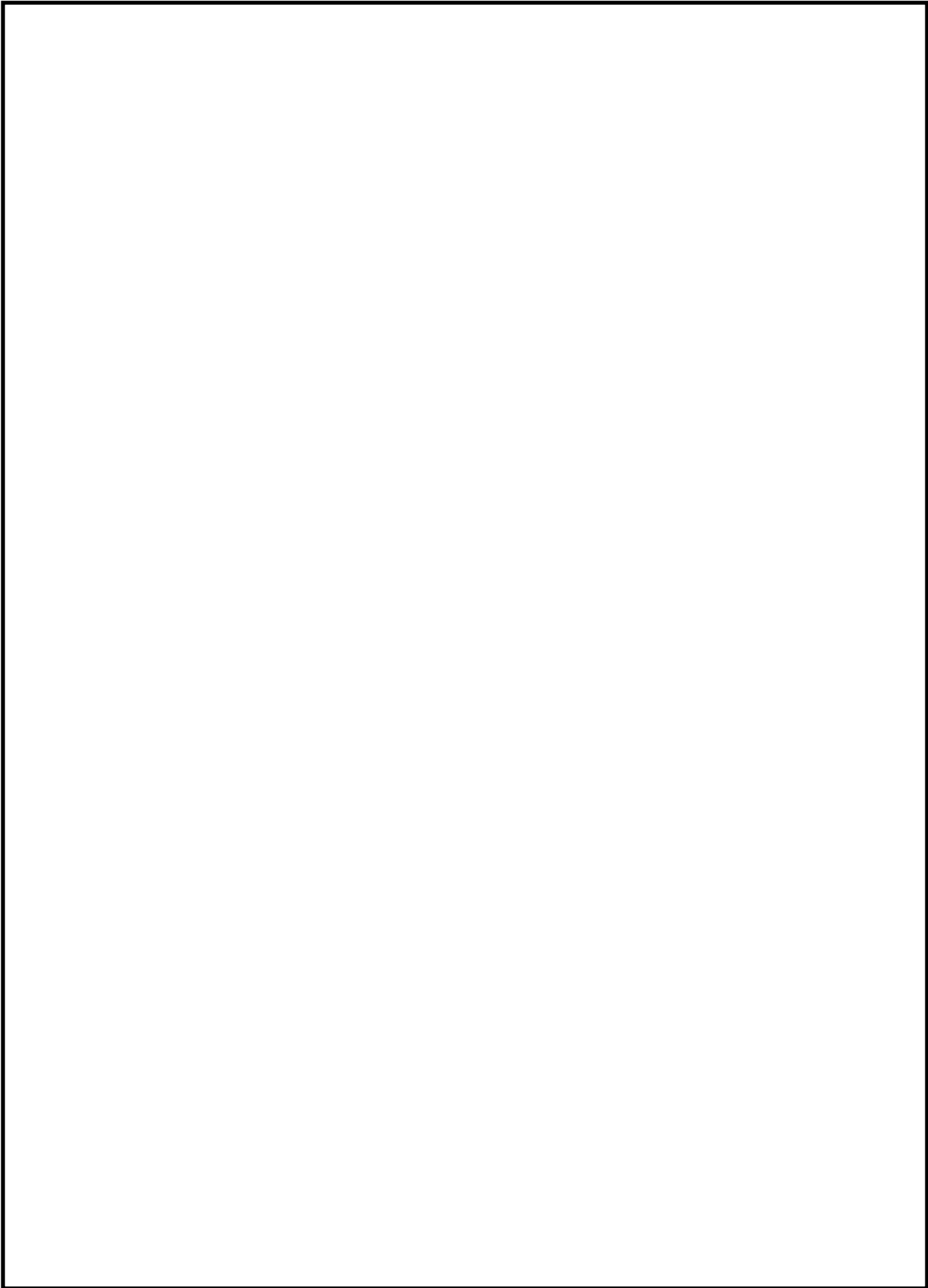
1. GENERAL INFORMATION

1.1. EUT Description

Product Name	METAVERTU 5G digital mobile phone	
Model No.	VTL-202201	
Hardware Version	P10	
Software Version	12.0.0_6.01.01.01	
EUT supports Radios application	LTE Band 4/5/7/12/17/41	
Frequency Range(Tx)	LTE Band 4: 1710.7MHz~1754.3MHz LTE Band 5: 824.7MHz~848.3MHz LTE Band 7: 2502.5MHz~2567.5MHz LTE Band 12: 699.7MHz~715.3MHz LTE Band 17: 704.7MHz~715.3MHz LTE Band 41: 2498.5MHz~2687.5MHz	
Channel Bandwidth	LTE Band 4: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 5: 1.4MHz/3MHz/5MHz/10MHz LTE Band 7: 5MHz/10MHz/15MHz/20MHz LTE Band 12: 1.4MHz/3MHz/5MHz/10MHz LTE Band 17: 5MHz/10MHz LTE Band 41: 5MHz/10MHz/15MHz/20MHz	
Modulation Type	QPSK/16QAM/64QAM(downlink only)	
Maximum ERP/EIRP	LTE Band 4: 23.30dBm LTE Band 5: 16.70dBm (FCC) LTE Band 5: 18.85dBm (IC) LTE Band 7: 23.71dBm LTE Band 12: 14.95dBm LTE Band 17: 14.91dBm LTE Band 41: 24.43dBm	
Antenna Type	Internal Antenna	
Antenna gain	Antenna 1	LTE Band 5: -6.0 dBi, LTE Band 12/17: -7.9 dBi
	Antenna 2	LTE Band 4: -1.1 dBi, LTE Band 7/41: -0.7 dBi
	Antenna 3	LTE Band 4: -3.5 dBi, LTE Band 7: -6.0 dBi
	Antenna 4	LTE Band 41: -0.9 dBi
Power supply	Rechargeable Li-ion Polymer Battery DC3.87V/4500mAh	

1.2. Maximum ERP/EIRP, Frequency Tolerance and Emission Designator

FCC/IC					
Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
LTE Band 4	QPSK	1.4	1M09G7D	—	0.214
LTE Band 4	16QAM	1.4	1M09W7D	—	0.172
LTE Band 4	QPSK	3	2M68G7D	—	0.207
LTE Band 4	16QAM	3	2M68W7D	—	0.179
LTE Band 4	QPSK	5	4M49G7D	—	0.207
LTE Band 4	16QAM	5	4M49W7D	—	0.172
LTE Band 4	QPSK	10	8M93G7D	0.004	0.209
LTE Band 4	16QAM	10	8M94W7D	—	0.167
LTE Band 4	QPSK	15	13M5G7D	—	0.197
LTE Band 4	16QAM	15	13M5W7D	—	0.166
LTE Band 4	QPSK	20	17M9G7D	—	0.208
LTE Band 4	16QAM	20	17M9W7D	—	0.162
LTE Band 7	QPSK	5	4M49G7D	—	0.233
LTE Band 7	16QAM	5	4M49W7D	—	0.184
LTE Band 7	QPSK	10	8M93G7D	0.004	0.235
LTE Band 7	16QAM	10	8M93W7D	—	0.183
LTE Band 7	QPSK	15	13M5G7D	—	0.225
LTE Band 7	16QAM	15	13M5W7D	—	0.190
LTE Band 7	QPSK	20	17M9G7D	—	0.233
LTE Band 7	16QAM	20	17M9W7D	—	0.184
LTE Band 41	QPSK	5	4M49G7D	—	0.277
LTE Band 41	16QAM	5	4M49W7D	—	0.220
LTE Band 41	QPSK	10	8M92G7D	0.003	0.275
LTE Band 41	16QAM	10	8M93W7D	—	0.239
LTE Band 41	QPSK	15	13M5G7D	—	0.271
LTE Band 41	16QAM	15	13M5W7D	—	0.214
LTE Band 41	QPSK	20	17M9G7D	—	0.277
LTE Band 41	16QAM	20	17M9W7D	—	0.224



FCC					
Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP(W)
LTE Band 5	QPSK	1.4	1M09G7D	—	0.046
LTE Band 5	16QAM	1.4	1M09W7D	—	0.040
LTE Band 5	QPSK	3	2M68G7D	—	0.046
LTE Band 5	16QAM	3	2M68W7D	—	0.039
LTE Band 5	QPSK	5	4M49G7D	—	0.047
LTE Band 5	16QAM	5	4M49W7D	—	0.039
LTE Band 5	QPSK	10	8M92G7D	0.004	0.046
LTE Band 5	16QAM	10	8M93W7D	—	0.038

IC					
Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
LTE Band 5	QPSK	1.4	1M09G7D	—	0.075
LTE Band 5	16QAM	1.4	1M09W7D	—	0.066
LTE Band 5	QPSK	3	2M68G7D	—	0.076
LTE Band 5	16QAM	3	2M68W7D	—	0.063
LTE Band 5	QPSK	5	4M49G7D	—	0.077
LTE Band 5	16QAM	5	4M49W7D	—	0.064
LTE Band 5	QPSK	10	8M92G7D	0.004	0.075
LTE Band 5	16QAM	10	8M93W7D	—	0.063

FCC/IC					
Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP(W)
LTE Band 12	QPSK	1.4	1M09G7D	—	0.030
LTE Band 12	16QAM	1.4	1M09W7D	—	0.024
LTE Band 12	QPSK	3	2M68G7D	—	0.030
LTE Band 12	16QAM	3	2M68W7D	—	0.024
LTE Band 12	QPSK	5	4M49G7D	—	0.031
LTE Band 12	16QAM	5	4M49W7D	—	0.026
LTE Band 12	QPSK	10	8M92G7D	0.005	0.031
LTE Band 12	16QAM	10	8M91W7D	—	0.024
LTE Band 17	QPSK	5	4M48G7D	—	0.031
LTE Band 17	16QAM	5	4M49W7D	—	0.025
LTE Band 17	QPSK	10	8M92G7D	0.007	0.031
LTE Band 17	16QAM	10	8M92W7D	—	0.027

1.3. Test Standards and Results

The purpose of the report is to conduct testing according to the following FCC/IC certification standards:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 27	Miscellaneous Wireless Communications Services
4	RSS-Gen-Issue 5: Feb 2021	General Requirements for Compliance of Radio Apparatus
5	RSS-130-Issue 2: Feb 2019	Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz
6	RSS-132-Issue 3: Jan 2013	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz
7	RSS-139-Issue 3: Jul 2015	Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz
8	RSS-199-Issue 3: Dec 2016	Broadband Radio Service (BRS) Equipment Operating in the Band 2500 – 2690 MHz
9	KDB 971168 D01 Power Meas License Digital Systems v03r01	Measurement Guidance For Certification of Licensed Digital Transmitters
10	KDB 412172 D01 Determining ERP and EIRP v01r01	Guidelines for Determining the Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) of an RF Transmitting Systems
11	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
12	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Test detailed items/section required by FCC/IC rules and results are as below:

No.	FCC Rule	IC Rule	Description	Limit	Result
1	2.1046	N/A	Conducted Output Power	Reporting Only	PASS
2	24.232 (d) 27.50 (d)(5)	RSS-130, 4.4 RSS-132, 5.4 RSS-139, 6.5 RSS-199, 4.4	Peak to Average Ratio	< 13dB	PASS
3	22.913 (a)(5)	RSS-132, 5.4	Effective Radiated Power (FCC Band 5) Equivalent Isotropic Radiated Power (IC Band 5)	ERP < 7W EIRP < 11.5W	PASS
	27.50 (c)(10)	RSS-130,4.6	Effective Radiated Power (Band 12/17)	ERP < 3W	PASS
	27.50 (d)(4)	RSS-139,6.5	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1W	PASS
	27.50 (h)(2)	RSS-199,4.4	Equivalent Isotropic Radiated Power (Band 7/41)	EIRP < 2W	PASS
4	2.1049	RSS-GEN,6.7	Occupied Bandwidth	Reporting Only	PASS
5	2.1051 22.917 (a) 27.53 (g)	RSS-GEN, 6.13 RSS-130,4.7 RSS-132,5.5	Conducted Spurious Emission and Conducted Band Edge (Band 4/5/12/17)	< 43+10log ₁₀ (P[watt])	PASS
	27.53 (h) 27.53 (m)(4)	RSS-139,6.6 RSS-199,4.5	Conducted Spurious Emission and Conducted Band Edge (Band 7/41)	Refer to 27.53(m)(4)	PASS
6	2.1053 22.917 (a) 27.53 (g)	RSS-GEN, 6.13 RSS-130,4.7 RSS-132,5.5	Radiated Spurious Emission (Band 4/5/12/17)	< 43+10log ₁₀ (P[Watts])	PASS
	27.53 (h) 27.53 (m)(4)	RSS-139,6.6 RSS-199,4.5	Radiated Spurious Emission (Band 7/41)	< 55+10log ₁₀ (P[watt])	PASS
7	2.1055 22.335	RSS-GEN,6.11 RSS-132,5.3 RSS-130,4.5	Frequency Stability (Band 5)	< ±2.5ppm	PASS
	27.54	RSS-139,6.4 RSS-199, 4.3	Frequency Stability (Band 4/7/12/17/41)	Within the Authorized Band	PASS

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B and ICES-003 Issue 7 October 2020, recorded in a separate test report.

1.4. Test Configuration of Equipment Under Test

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth(MHz)						Modulation		RB Configuration			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Conducted Output Power and ERP/EIRP	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	7			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	17			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	41			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peak-to-Average Ratio	4						✓		✓	✓		✓	✓	✓	✓
	5				✓				✓	✓		✓	✓	✓	✓
	7						✓		✓	✓		✓	✓	✓	✓
	12				✓				✓	✓		✓	✓	✓	✓
	17				✓				✓	✓		✓	✓	✓	✓
	41						✓		✓	✓		✓	✓	✓	✓
99% OBW and 26dB EBW	4	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	
	5	✓	✓	✓	✓			✓	✓			✓		✓	
	7			✓	✓	✓	✓	✓	✓			✓		✓	
	12	✓	✓	✓	✓			✓	✓			✓		✓	
	17			✓	✓			✓	✓			✓		✓	
	41			✓	✓	✓	✓	✓	✓			✓		✓	
Conducted Band Edge	4	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	5	✓	✓	✓	✓			✓	✓	✓		✓	✓		✓
	7			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	12	✓	✓	✓	✓			✓	✓	✓		✓	✓		✓
	17			✓	✓			✓	✓	✓		✓	✓		✓
	41			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
Conducted Spurious Emission	4						✓	✓		✓			✓	✓	✓
	5				✓			✓		✓			✓	✓	✓
	7						✓	✓		✓			✓	✓	✓
	12				✓			✓		✓			✓	✓	✓
	17				✓			✓		✓			✓	✓	✓
	41						✓	✓		✓			✓	✓	✓
Frequency Stability	4				✓			✓				✓		✓	
	5				✓			✓				✓		✓	
	7				✓			✓				✓		✓	
	12				✓			✓				✓		✓	

	17				✓			✓				✓		✓	
	41				✓			✓				✓		✓	
Radiated Spurious Emission	4	Worst case												✓	
	5	Worst case												✓	
	7	Worst case												✓	
	12	Worst case												✓	
	17	Worst case												✓	
	41	Worst case												✓	
Note 1: The mark “ ✓ ” means that this configuration is chosen for testing.															
Note 2: LTE Band 4/41 has two transmit antennas and reports peak-to-average ratio, occupied bandwidth, conducted band edge, conducted spurious emissions, and frequency stability for only the worst antenna data.															

1.5. Measurement Results Explanation Example

For all conduction test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + Power Splitter + attenuator factor..

Following shows an offset computation example with cable loss 1dB, 3dB Power Splitter, 10dB attenuator.

Example: Offset (dB) = RF cable loss(dB) + Power Splitter(dB) + attenuator factor(dB).

$$= 1 + 3 + 10 = 14 \text{ (dB)}$$



1.6. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing 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. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.7. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15°C - 35°C
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

2. 47 CFR Part 2 Requirements

2.1. Conducted Output Power and ERP/EIRP

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5(Part 22).

The EIRP of mobile transmitters must not exceed 11.5 Watts for LTE Band 5(RSS-132).

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12/17.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7/41.

According to KDB 412172 D01 Determining ERP and EIRP v01r01.

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm;

G_T = gain of the transmitting antenna in dBi;

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

2.1.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.3. Test Setup



2.1.4. Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



2.1.5. Test Results of Conducted Output Power and ERP/EIRP

Please refer to Appendix A for detail

2.2. Peak-to-average power ratio (PAPR)

2.2.1. Requirement

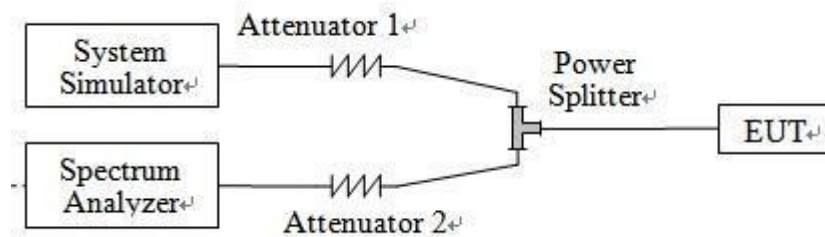
Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth.

In measuring transmissions in this band using an average power technique, the Peak-to-average power ratio (PAPR) of the transmission may not exceed 13 dB.

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Description



2.2.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 5.7.2 and ANSI C63.26-2015 Section 5.2.3.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. Set resolution/measurement bandwidth $\geq$ OBW or specified reference bandwidth.
5. Set the number of counts to a value that stabilizes the measured CCDF curve.
6. Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.
7. Repeat step 3~6 at other frequency and modulations.

2.2.5. Test Results of Peak-to-average power ratio (PAPR)

Please refer to Appendix A for detail

2.3. 99% Occupied Bandwidth and 26dB Emission Bandwidth

2.3.1. Requirement

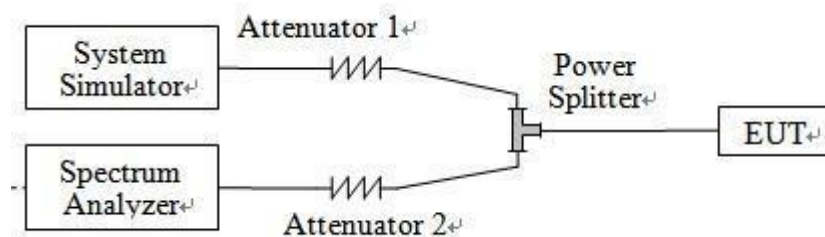
The Occupied Bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

2.3.2. Measuring Instruments

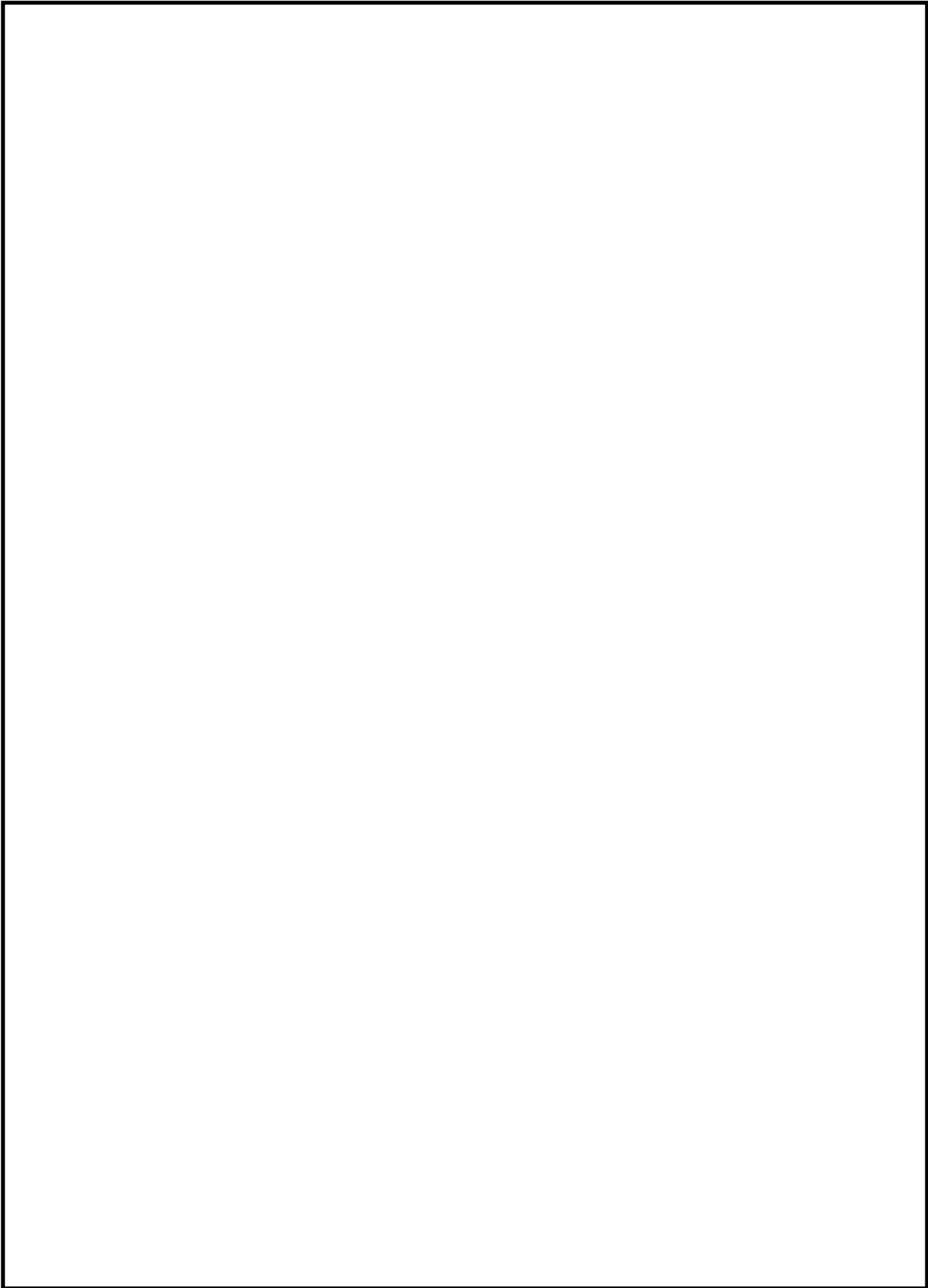
The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 4 and ANSI C63.26-2015 Section 5.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency.
4. Set span to be approximately 1.5 to 5 times the OBW.
5. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW.
6. Set $VBW \geq 3 \times RBW$.
7. Set Detection mode = peak.
8. Set Trace mode = max hold.
9. Allow trace to stabilize.
10. Repeat step 3~9 at other frequency and modulations.



2.3.5. Test Result of 99% Occupied Bandwidth and 26dB Emission Bandwidth

Please refer to Appendix A for detail

2.4. Conducted Band Edge

2.4.1. Requirement

For Band 4 [Part 27.53 (h) and RSS-139, 6.6]:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 5 [Part 22.917(a) and RSS-132, 5.5]:

Out of band emissions. The 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 spectrum below 1 GHz, instrumentation should employ a reference bandwidth of 100 kHz or greater. 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy, provided that the measured power is integrated over the full required reference bandwidth (i.e., 100 kHz or 1 percent of emission bandwidth, as specified).

For Band 12 & 17 [Part 27.53 (g) and RSS-130, 4.7.1]:

For operations in the 698 - 746 MHz band, the FCC limit is $43 + 10 \log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100kHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least 30kHz may be employed.

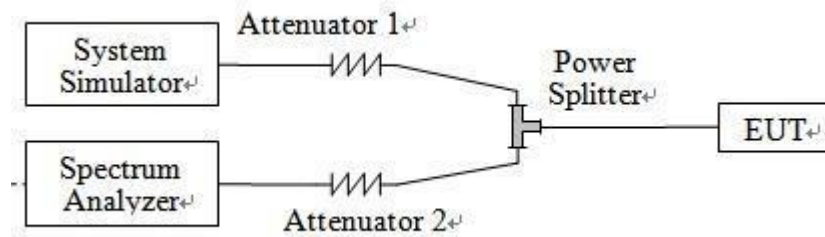
For Band 7 & 41 [Part 27.53 (m)(4) and RSS-199, 4.5]:

For mobile digital stations, 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, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



2.4.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Span was set large enough so as to capture all out of band emissions near the Channel Edge.
4. Use $RBW \geq 1\%$ EBW in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, and use $RBW = 1$ MHz outside 1 MHz of the authorized frequency channel.
5. Set $VBW \geq 3 \times RBW$
6. Set Detector = power averaging (rms).
7. Set the number of points in sweep $\geq 2 \times \text{span} / RBW$.
8. Set sweep trigger to "free run."
9. Set the Sweep time $> (\text{number of points in sweep}) \times (\text{transmitter period})$ (i.e., the transmit on-time + the off-time).
10. Perform a trace average of at least 100 traces.
11. Repeat step 3~10 at other frequency and modulations.



2.4.5. Test Result of Conducted Band Edge

Please refer to Appendix A for detail

2.5. Conducted Spurious Emission

2.5.1. Requirement

For Band 4 & 5 & 12 & 17:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

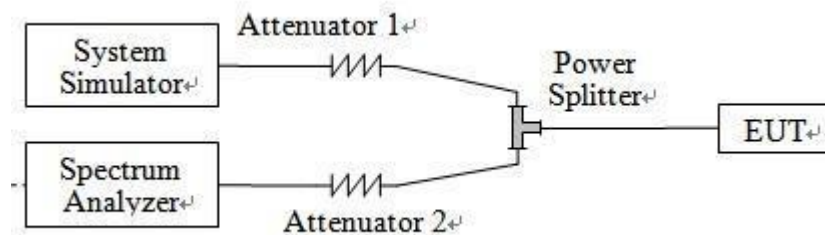
For Band 7 & 41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup



2.5.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the spectrum analyzer start frequency to 9kHz and stop frequency to the tenth harmonic of the highest fundamental frequency.
4. Set $RBW = 1\text{MHz}$, $VBW \geq 3 \times RBW$
5. Set Detector = peak.
6. Set Trace mode = max hold.
7. Set Sweep time = auto-couple.
8. Identify and measure the highest spurious emission levels in each frequency range.
9. Compare the results with the corresponding limit in the applicable regulation.
10. Repeat step 3~9 at other frequency and modulations.



2.5.5. Test Result of Conducted Spurious Emission

Please refer to Appendix A for detail

2.6. Radiated Spurious Emission

2.6.1. Requirement

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E-2016.

For Band 4 & 5 & 12 & 17:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7 & 41:

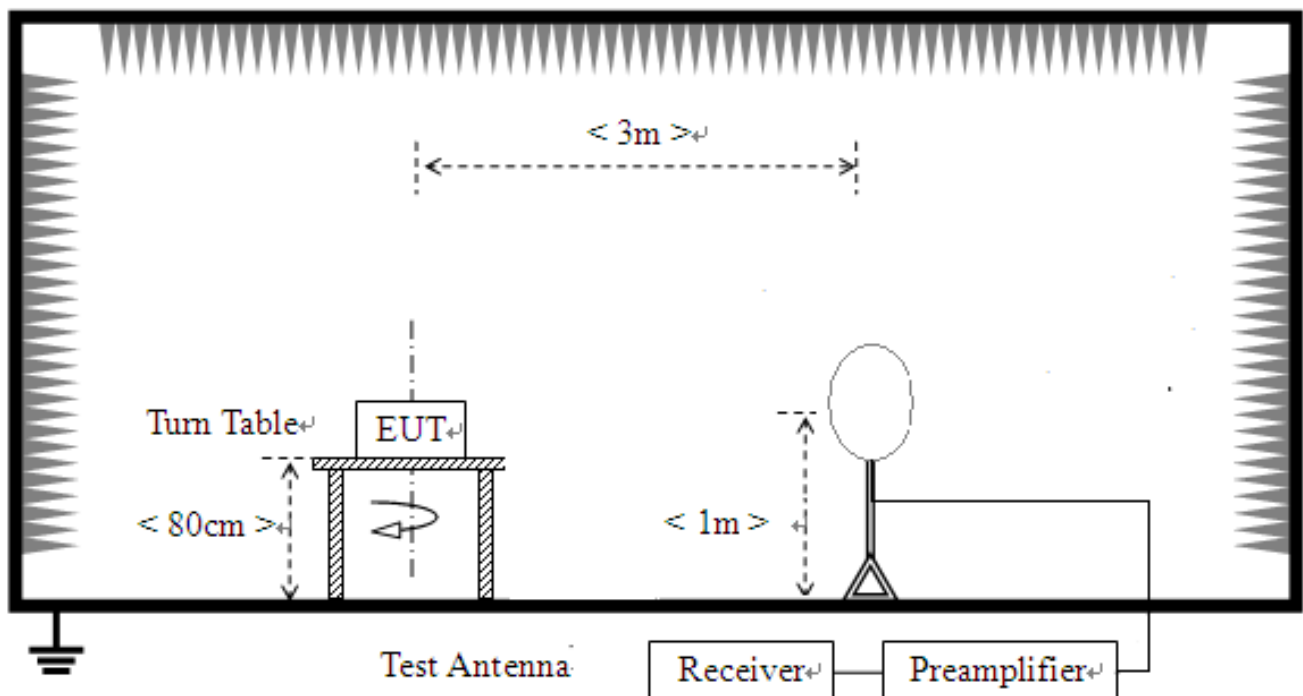
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.6.2. Measuring Instruments

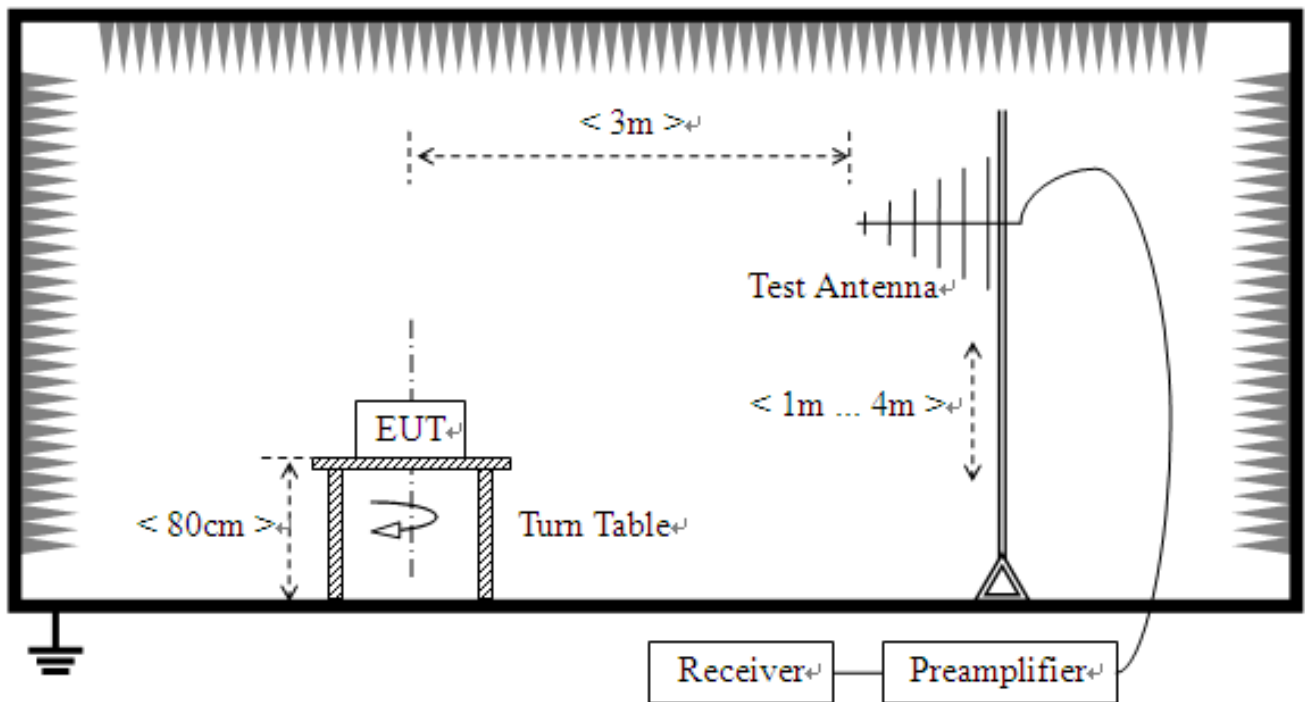
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

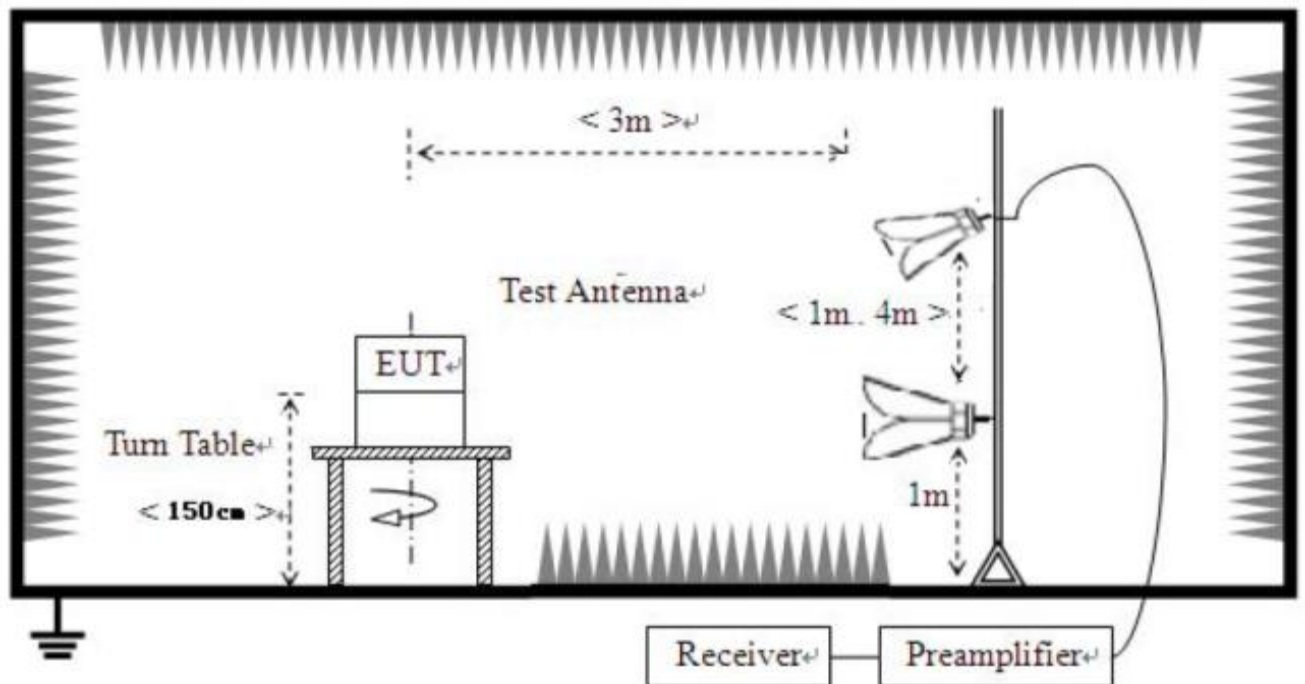
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter (for below 1GHz) / 1.5 meters (for above 1GHz) above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
13. The maximum RB configurations of the Radiated Spurious Emissions as RB Size full, RB Offset 0.

2.6.5. Test Result of Radiated Spurious Emission

Note: 1. The emission levels of above 18GHz are lower than the limit 20dB and not show in test report.

Note: 2. Absolute Level = Reading Level + Factor

LTE Band 4 QPSK 20MHz BW Middle Channel - ANT2							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	65.4227	-91.40	-72.05	-13.00	59.05	19.35	Horizontal
2	74.6423	-83.38	-64.14	-13.00	51.14	19.24	Horizontal
3	140.150	-95.73	-75.09	-13.00	62.09	20.64	Horizontal
4	523.006	-104.27	-72.05	-13.00	59.05	32.22	Horizontal
5	909.259	-103.75	-66.72	-13.00	53.72	37.03	Horizontal
6	7743.87	-70.06	-53.94	-13.00	40.94	16.12	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	56.6883	-95.66	-76.01	-13.00	63.01	19.65	Vertical
2	69.3047	-90.58	-69.45	-13.00	56.45	21.13	Vertical
3	75.6128	-82.51	-60.81	-13.00	47.81	21.70	Vertical
4	131.415	-95.55	-73.97	-13.00	60.97	21.58	Vertical
5	250.300	-101.68	-77.23	-13.00	64.23	24.45	Vertical
6	7165.58	-69.94	-53.82	-13.00	40.82	16.12	Vertical

LTE Band 4 QPSK 20MHz BW Middle Channel - ANT3							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	70.7604	-90.69	-71.35	-13.00	58.35	19.34	Horizontal
2	153.736	-95.09	-73.89	-13.00	60.89	21.20	Horizontal
3	886.938	-104.13	-67.04	-13.00	54.04	37.09	Horizontal
4	4588.79	-68.03	-57.12	-13.00	44.12	10.91	Horizontal
5	5736.86	-69.87	-57.62	-13.00	44.62	12.25	Horizontal
6	7973.48	-70.19	-54.45	-13.00	41.45	15.74	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	75.1276	-88.84	-67.18	-13.00	54.18	21.66	Vertical
2	79.98	-97.04	-74.95	-13.00	61.95	22.09	Vertical
3	129.474	-94.18	-72.41	-13.00	59.41	21.77	Vertical
4	153.251	-94.92	-75.04	-13.00	62.04	19.88	Vertical
5	785.037	-104.57	-68.50	-13.00	55.50	36.07	Vertical
6	7199.59	-70.32	-54.03	-13.00	41.03	16.29	Vertical

LTE Band 5 QPSK 10MHz BW Middle Channel - ANT1							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	64.9375	-92.10	-72.76	-13.00	59.76	19.34	Horizontal
2	73.1866	-89.43	-70.15	-13.00	57.15	19.28	Horizontal
3	75.6128	-84.66	-65.44	-13.00	52.44	19.22	Horizontal
4	130.445	-95.28	-74.95	-13.00	61.95	20.33	Horizontal
5	498.259	-104.01	-71.49	-13.00	58.49	32.52	Horizontal
6	4741.87	-67.37	-55.16	-13.00	42.16	12.21	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	65.908	-92.61	-71.87	-13.00	58.87	20.74	Vertical
2	73.6718	-88.58	-67.05	-13.00	54.05	21.53	Vertical
3	110.065	-94.59	-71.09	-13.00	58.09	23.50	Vertical
4	4223.11	-69.93	-61.72	-13.00	48.72	8.21	Vertical
5	7709.85	-70.31	-54.44	-13.00	41.44	15.87	Vertical
6	13144.0	-73.04	-53.79	-13.00	40.79	19.25	Vertical

LTE Band 7 QPSK 20MHz BW Middle Channel - ANT2							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.9404	-92.94	-71.67	-25.00	46.67	21.27	Horizontal
2	43.7768	-92.29	-72.64	-25.00	47.64	19.65	Horizontal
3	1418.08	-57.78	-60.59	-25.00	35.59	-2.81	Horizontal
4	4661.73	-56.78	-45.12	-25.00	20.12	11.66	Horizontal
5	6116.72	-59.50	-41.84	-25.00	16.84	17.66	Horizontal
6	7959.84	-60.56	-37.90	-25.00	12.90	22.66	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.9404	-92.94	-71.67	-25.00	46.67	21.27	Vertical
2	43.7768	-92.29	-72.64	-25.00	47.64	19.65	Vertical
3	1418.08	-57.78	-60.59	-25.00	35.59	-2.81	Vertical
4	4661.73	-56.78	-45.12	-25.00	20.12	11.66	Vertical
5	6116.72	-59.50	-41.84	-25.00	16.84	17.66	Vertical
6	7959.84	-60.56	-37.90	-25.00	12.90	22.66	Vertical

LTE Band 7 QPSK 20MHz BW Middle Channel - ANT3							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7914	-91.19	-68.84	-25.00	43.84	22.35	Horizontal
2	49.4039	-90.80	-71.43	-25.00	46.43	19.37	Horizontal
3	365.493	-98.82	-70.40	-25.00	45.40	28.42	Horizontal
4	3856.22	-58.09	-48.16	-25.00	23.16	9.93	Horizontal
5	8878.47	-61.54	-35.89	-25.00	10.89	25.65	Horizontal
6	14296.8	-62.31	-32.60	-25.00	7.60	29.71	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7914	-90.39	-69.80	-25.00	44.80	20.59	Vertical
2	106.063	-105.23	-81.35	-25.00	56.35	23.88	Vertical
3	634.236	-103.90	-70.82	-25.00	45.82	33.08	Vertical
4	1250.45	-57.55	-59.63	-25.00	34.63	-2.08	Vertical
5	6592.61	-59.41	-41.62	-25.00	16.62	17.79	Vertical
6	7959.84	-60.56	-37.90	-25.00	12.90	22.66	Vertical

LTE Band 12 QPSK 10MHz BW Middle Channel - ANT1							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	30.0	-94.35	-70.35	-13.00	57.35	24.00	Horizontal
2	41.6517	-95.87	-74.68	-13.00	61.68	21.19	Horizontal
3	111.561	-95.44	-75.82	-13.00	62.82	19.62	Horizontal
4	1475.23	-53.13	-55.19	-13.00	42.19	-2.06	Horizontal
5	7819.91	-63.44	-43.73	-13.00	30.73	19.71	Horizontal
6	15567.5	-65.45	-37.41	-13.00	24.41	28.04	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	33.8839	-94.14	-73.14	-13.00	60.14	21.00	Vertical
2	81.4615	-93.76	-71.49	-13.00	58.49	22.27	Vertical
3	113.503	-98.90	-75.69	-13.00	62.69	23.21	Vertical
4	1475.23	-57.84	-59.90	-13.00	46.90	-2.06	Vertical
5	7713.60	-64.20	-44.52	-13.00	31.52	19.68	Vertical
6	11659.3	-62.89	-38.59	-13.00	25.59	24.30	Vertical

LTE Band 17 QPSK 10MHz BW Middle Channel - ANT1							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.6423	-88.65	-69.41	-13.00	56.41	19.24	Horizontal
2	213.421	-104.74	-81.77	-13.00	68.77	22.97	Horizontal
3	1901.45	-69.09	-69.52	-13.00	56.52	-0.43	Horizontal
4	5082.04	-68.90	-55.98	-13.00	42.98	12.92	Horizontal
5	7820.41	-70.72	-54.28	-13.00	41.28	16.44	Horizontal
6	12752.8	-70.82	-51.78	-13.00	38.78	19.04	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.6423	-90.07	-68.45	-13.00	55.45	21.62	Vertical
2	133.356	-95.92	-74.52	-13.00	61.52	21.40	Vertical
3	913.141	-104.75	-67.31	-13.00	54.31	37.44	Vertical
4	4945.97	-73.30	-60.69	-13.00	47.69	12.61	Vertical
5	7276.13	-70.88	-54.32	-13.00	41.32	16.56	Vertical
6	12429.7	-71.45	-52.67	-13.00	39.67	18.78	Vertical

LTE Band 41 QPSK 20MHz BW Middle Channel - ANT2							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	71.2456	-88.27	-68.94	-25.00	43.94	19.33	Horizontal
2	132.871	-94.49	-74.08	-25.00	49.08	20.41	Horizontal
3	495.347	-104.25	-71.95	-25.00	46.95	32.30	Horizontal
4	677.313	-103.89	-69.26	-25.00	44.26	34.63	Horizontal
5	4809.90	-67.67	-55.07	-25.00	30.07	12.60	Horizontal
6	7446.22	-70.46	-54.02	-25.00	29.02	16.44	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	61.5408	-96.01	-75.78	-25.00	50.78	20.23	Vertical
2	77.5538	-91.16	-69.29	-25.00	44.29	21.87	Vertical
3	113.461	-96.62	-73.41	-25.00	48.41	23.21	Vertical
4	805.417	-104.26	-68.15	-25.00	43.15	36.11	Vertical
5	5235.11	-69.13	-56.70	-25.00	31.70	12.43	Vertical
6	7301.65	-70.20	-53.57	-25.00	28.57	16.63	Vertical

LTE Band 41 QPSK 20MHz BW Middle Channel - ANT4							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	48.9245	-100.94	-81.46	-25.00	56.46	19.48	Horizontal
2	128.989	-95.29	-75.01	-25.00	50.01	20.28	Horizontal
3	785.037	-104.57	-68.52	-25.00	43.52	36.05	Horizontal
4	5031.01	-70.70	-57.84	-25.00	32.84	12.86	Horizontal
5	7446.22	-70.46	-54.02	-25.00	29.02	16.44	Horizontal
6	14275.1	-72.87	-52.24	-25.00	27.24	20.63	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	132.871	-95.20	-73.76	-25.00	48.76	21.44	Vertical
2	599.674	-104.24	-71.27	-25.00	46.27	32.97	Vertical
3	805.417	-104.26	-68.15	-25.00	43.15	36.11	Vertical
4	4809.90	-69.34	-56.74	-25.00	31.74	12.60	Vertical
5	7301.65	-70.20	-53.57	-25.00	28.57	16.63	Vertical
6	14504.7	-73.14	-52.11	-25.00	27.11	21.03	Vertical

2.7. Frequency Stability

2.7.1. Requirement

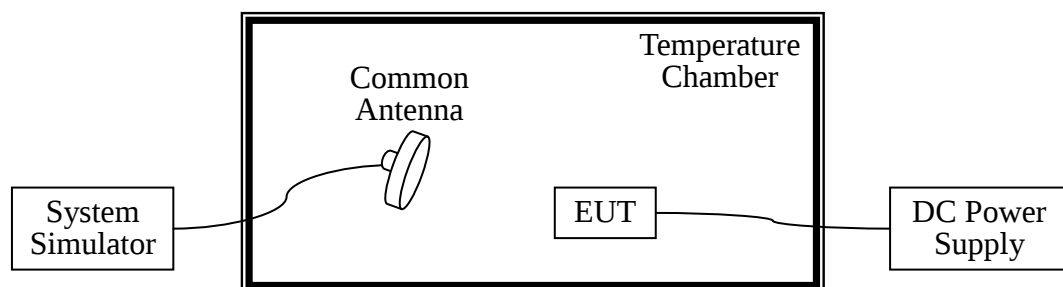
According to FCC requirement, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency. According to FCC section 2.1055, the test conditions are:

- (1) The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- (2) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

2.7.2. Measuring Instruments

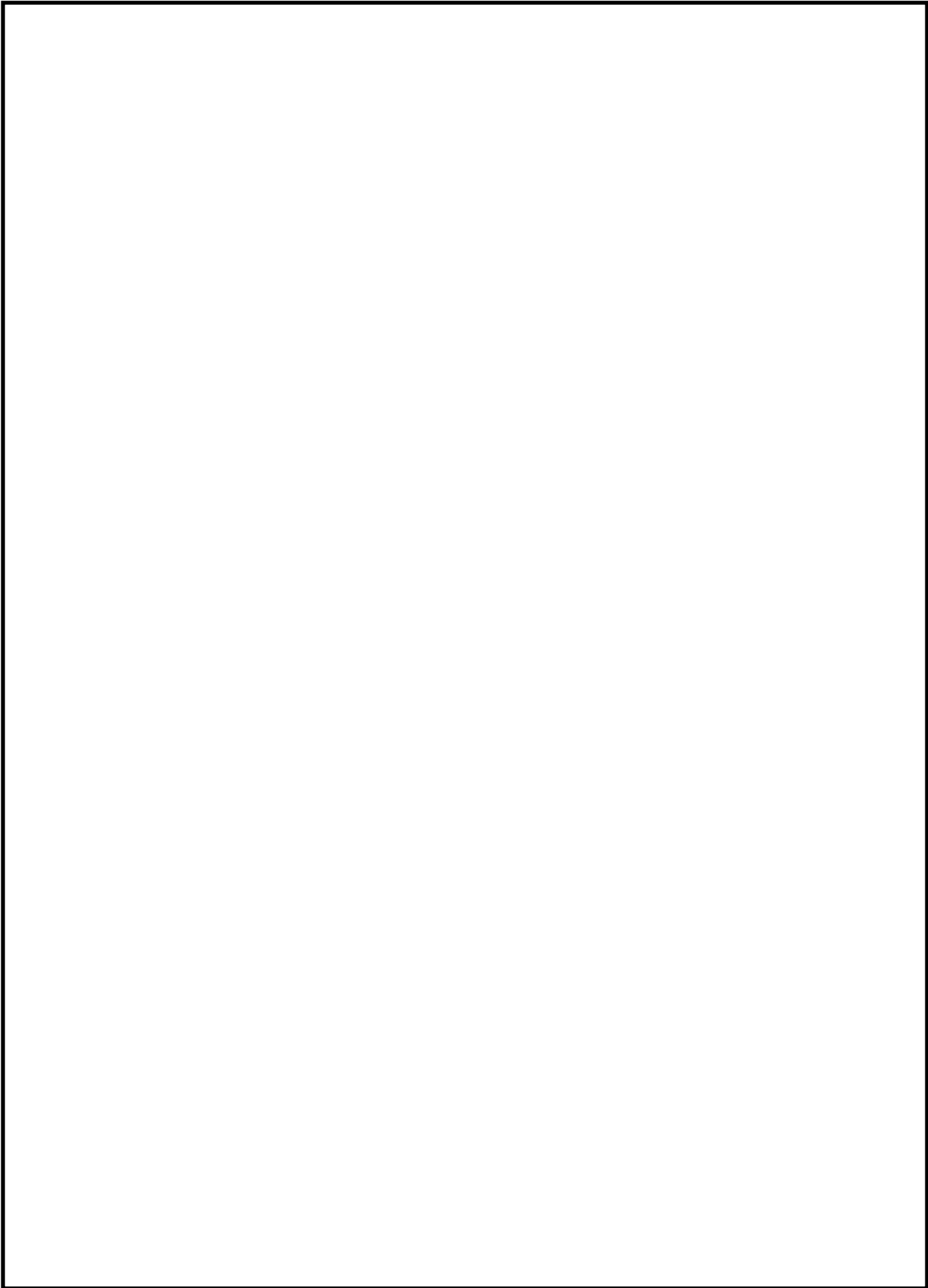
The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup



2.7.4. Test Procedures

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. The nominal, highest and lowest extreme voltages were tested, which are specified by the applicant; the normal temperature here used is 20°C .
5. The variation in frequency was measured for the worst case.



2.7.5. Test Result of Frequency Stability

Please refer to Appendix A for detail

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2021.08.03	2022.08.02
2	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2019.03.25	2023.03.24
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2020.06.19	2023.06.18
5	EMI Horn Ant. (1-18G)	ETC	1209	A150402241	2021.01.02	2024.01.01
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2020.06.19	2023.06.18
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2020.09.22	2023.09.21
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2021.12.23	2022.12.22
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2022.03.25	2023.03.24
10	Test Receiver	R&S	ESIB7	A0501375	2022.04.18	2023.04.17
11	Broadband Ant.	2786	ETC	A150402240	2021.09.16	2024.03.03
12	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2019.03.26	2023.03.25
13	Temperature chamber	TABAI	PS-232	A8708054	2021.09.24	2022.09.23
14	Wideband Radio Communication tester	R&S	CMW500	A130101034	2021.01.26	2023.01.25
15	Wideband Radio Communication tester	R&S	CMW500	A150802214	2021.07.23	2022.07.22
16	Test Receiver	KEYSIGHT	N9038A	A141202036	2021.09.20	2022.08.04
17	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2021.09.21	2022.08.02
18	Cable	MATCHING PAD	W7	/	2021.08.01	2022.08.02

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	2.8dB
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Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	3.5dB
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Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	3.91dB
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Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.9dB
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Uncertainty of RF Conducted Measurement (9kHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	1.2dB
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APPENDIX A

Conducted Output Power and ERP/EIRP

LTE Band 4 - ANT2:

LTE Band 4 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19957	20175	20393			
			1710.7MHz	1732.5MHz	1754.3MHz			
QPSK	1	0	24.40	24.13	24.06	-1.10	23.30	30.00
	1	2	24.07	24.15	24.12			
	1	5	24.21	23.95	24.22			
	3	0	23.13	23.15	23.22			
	3	1	23.22	23.19	23.03			
	3	2	23.20	23.07	23.11			
	6	0	23.15	23.18	23.06			
16QAM	1	0	22.78	23.30	23.46	-1.10	22.36	30.00
	1	2	22.82	23.22	23.11			
	1	5	23.44	23.11	23.22			
	3	0	22.28	22.37	22.20			
	3	1	22.33	22.29	22.18			
	3	2	22.15	22.14	22.32			
	6	0	22.15	22.25	22.29			
LTE Band 4 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19965	20175	20385			
			1711.5MHz	1732.5MHz	1753.5MHz			
QPSK	1	0	24.23	24.04	23.88	-1.10	23.17	30.00
	1	7	24.15	24.08	24.21			
	1	14	24.27	24.17	24.11			
	8	0	23.21	23.17	23.13			
	8	4	23.12	23.17	23.11			
	8	7	23.26	23.16	23.17			
	15	0	23.11	23.17	23.10			
16QAM	1	0	23.62	23.42	23.21	-1.10	22.52	30.00
	1	7	23.37	23.30	23.39			
	1	14	23.45	23.33	23.22			
	8	0	22.34	22.14	22.12			
	8	4	22.33	22.29	22.12			
	8	7	22.18	22.28	22.30			
	15	0	22.07	22.24	22.19			

LTE Band 4 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19975	20175	20375			
			1712.5MHz	1732.5MHz	1752.5MHz			
QPSK	1	0	24.05	24.23	24.12	-1.10	23.17	30.00
	1	12	24.19	24.15	24.15			
	1	24	24.10	24.27	24.05			
	12	0	23.16	23.21	23.16			
	12	6	23.18	23.12	23.11			
	12	11	23.22	23.26	23.21			
	25	0	23.16	23.11	23.09			
16QAM	1	0	23.20	23.32	23.06	-1.10	22.35	30.00
	1	12	23.07	22.97	23.25			
	1	24	23.15	23.45	23.28			
	12	0	22.16	22.34	22.05			
	12	6	22.12	22.33	22.03			
	12	11	22.43	22.18	22.10			
	25	0	22.18	22.07	22.13			
LTE Band 4 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20000	20175	20350			
			1715.0MHz	1732.5MHz	1750.0MHz			
QPSK	1	0	24.07	24.24	23.96	-1.10	23.21	30.00
	1	24	24.07	24.31	24.22			
	1	49	23.77	24.09	23.99			
	25	0	23.12	23.33	23.07			
	25	12	23.09	23.18	23.19			
	25	24	23.18	23.25	23.14			
	50	0	23.01	23.23	23.19			
16QAM	1	0	23.29	23.30	23.33	-1.10	22.23	30.00
	1	24	23.13	23.02	23.23			
	1	49	22.51	23.21	23.19			
	25	0	22.16	22.26	22.17			
	25	12	22.05	22.37	22.08			
	25	24	22.24	22.19	22.26			
	50	0	22.19	22.28	22.21			

LTE Band 4 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20025	20175	20325			
			1717.5MHz	1732.5MHz	1747.5MHz			
QPSK	1	0	23.79	23.94	23.91	-1.10	22.94	30.00
	1	37	24.04	23.96	24.02			
	1	74	23.93	23.90	24.01			
	36	0	23.02	23.05	23.05			
	36	16	22.98	23.11	22.93			
	36	35	23.00	23.00	23.05			
	75	0	22.97	23.04	22.93			
16QAM	1	0	23.30	23.27	23.26	-1.10	22.21	30.00
	1	37	23.18	23.06	23.25			
	1	74	23.03	23.31	22.94			
	36	0	22.03	21.95	22.03			
	36	16	22.07	21.99	22.00			
	36	35	22.07	22.13	21.95			
	75	0	21.97	22.15	21.95			
LTE Band 4 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20050	20175	20300			
			1720.0MHz	1732.5MHz	1745.0MHz			
QPSK	1	0	23.91	24.15	24.28	-1.10	23.18	30.00
	1	49	23.98	23.97	24.11			
	1	99	24.08	24.05	23.92			
	50	0	23.07	23.04	22.99			
	50	24	22.99	23.11	23.05			
	50	49	23.09	23.13	23.06			
	100	0	23.00	22.99	23.11			
16QAM	1	0	23.12	23.04	23.17	-1.10	22.10	30.00
	1	49	23.13	23.15	23.20			
	1	99	23.12	23.03	22.14			
	50	0	22.01	22.09	21.95			
	50	24	22.00	22.04	21.93			
	50	49	21.96	21.96	22.15			
	100	0	21.99	22.08	22.06			

LTE Band 4 - ANT3:

LTE Band 4 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19957	20175	20393			
			1710.7MHz	1732.5MHz	1754.3MHz			
QPSK	1	0	23.70	23.63	23.58	-3.50	20.20	30.00
	1	2	23.50	23.51	23.52			
	1	5	23.69	23.53	23.52			
	3	0	22.60	22.62	22.58			
	3	1	22.69	22.58	22.70			
	3	2	22.72	22.66	22.52			
	6	0	22.62	22.60	22.52			
16QAM	1	0	22.79	22.37	22.52	-3.50	19.29	30.00
	1	2	22.74	22.46	22.38			
	1	5	22.55	22.26	22.67			
	3	0	21.61	21.71	21.44			
	3	1	21.61	21.53	21.52			
	3	2	21.74	21.62	21.46			
	6	0	21.75	21.54	21.49			
LTE Band 4 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19965	20175	20385			
			1711.5MHz	1732.5MHz	1753.5MHz			
QPSK	1	0	23.56	23.38	23.45	-3.50	20.23	30.00
	1	7	23.73	23.69	23.37			
	1	14	23.59	23.58	23.47			
	8	0	22.61	22.63	22.60			
	8	4	22.59	22.52	22.55			
	8	7	22.64	22.60	22.53			
	15	0	22.59	22.58	22.49			
16QAM	1	0	22.60	22.49	22.59	-3.50	19.23	30.00
	1	7	22.67	22.44	22.66			
	1	14	22.45	22.73	22.64			
	8	0	21.44	21.55	21.67			
	8	4	21.52	21.51	21.71			
	8	7	21.67	21.44	21.71			
	15	0	21.61	21.56	21.60			

LTE Band 4 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19975	20175	20375			
			1712.5MHz	1732.5MHz	1752.5MHz			
QPSK	1	0	23.42	23.56	23.49	-3.50	20.21	30.00
	1	12	23.46	23.71	23.66			
	1	24	23.66	23.59	23.56			
	12	0	22.50	22.61	22.55			
	12	6	22.44	22.59	22.56			
	12	11	22.50	22.64	22.51			
	25	0	22.54	22.59	22.49			
16QAM	1	0	22.93	22.60	22.68	-3.50	19.59	30.00
	1	12	22.66	23.09	22.52			
	1	24	22.42	22.95	22.62			
	12	0	21.45	21.44	21.69			
	12	6	21.48	21.52	21.54			
	12	11	21.33	21.67	21.57			
	25	0	21.62	21.61	21.59			
LTE Band 4 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20000	20175	20350			
			1715.0MHz	1732.5MHz	1750.0MHz			
QPSK	1	0	23.47	23.61	23.42	-3.50	20.21	30.00
	1	24	23.62	23.71	23.68			
	1	49	23.42	23.55	23.46			
	25	0	22.52	22.74	22.63			
	25	12	22.47	22.59	22.60			
	25	24	22.59	22.62	22.55			
	50	0	22.54	22.53	22.59			
16QAM	1	0	22.55	22.78	22.17	-3.50	19.32	30.00
	1	24	22.31	22.66	22.29			
	1	49	22.55	22.82	22.33			
	25	0	21.51	21.63	21.67			
	25	12	21.51	21.55	21.63			
	25	24	21.58	21.60	21.58			
	50	0	21.59	21.63	21.53			

LTE Band 4 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20025	20175	20325			
			1717.5MHz	1732.5MHz	1747.5MHz			
QPSK	1	0	23.32	23.53	23.28	-3.50	20.03	30.00
	1	37	23.38	23.46	23.46			
	1	74	23.47	23.35	23.19			
	36	0	22.30	22.48	22.50			
	36	16	22.30	22.44	22.41			
	36	35	22.36	22.54	22.44			
	75	0	22.42	22.43	22.48			
16QAM	1	0	22.42	22.60	22.57	-3.50	19.24	30.00
	1	37	22.49	22.54	22.62			
	1	74	22.74	22.53	22.32			
	36	0	21.31	21.46	21.55			
	36	16	21.33	21.58	21.53			
	36	35	21.38	21.49	21.46			
	75	0	21.42	21.48	21.45			
LTE Band 4 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20050	20175	20300			
			1720.0MHz	1732.5MHz	1745.0MHz			
QPSK	1	0	23.36	23.39	23.67	-3.50	20.17	30.00
	1	49	23.27	23.59	23.43			
	1	99	23.52	23.44	23.24			
	50	0	22.38	22.48	22.57			
	50	24	22.35	22.51	22.51			
	50	49	22.45	22.46	22.42			
	100	0	22.50	22.48	22.48			
16QAM	1	0	22.47	22.39	22.35	-3.50	18.99	30.00
	1	49	22.31	22.49	22.40			
	1	99	22.44	22.41	22.21			
	50	0	21.37	21.44	21.52			
	50	24	21.45	21.63	21.54			
	50	49	21.44	21.46	21.46			
	100	0	21.46	21.36	21.38			

FCC LTE Band 5 - ANT1:

LTE Band 5 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20407	20525	20643			
			824.7MHz	836.5MHz	848.3MHz			
QPSK	1	0	24.51	24.66	24.47	-6.00	16.60	38.45
	1	2	24.66	24.68	24.52			
	1	5	24.74	24.75	24.44			
	3	0	23.68	23.59	23.55			
	3	1	23.65	23.62	23.53			
	3	2	23.62	23.73	23.58			
	6	0	23.66	23.63	23.55			
16QAM	1	0	23.89	23.70	23.65	-6.00	16.03	38.45
	1	2	24.08	23.53	23.54			
	1	5	24.18	23.47	23.54			
	3	0	22.81	22.65	22.66			
	3	1	22.98	22.53	22.48			
	3	2	22.83	22.72	22.53			
	6	0	22.91	22.60	22.58			
LTE Band 5 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20415	20525	20635			
			825.5MHz	836.5MHz	847.5MHz			
QPSK	1	0	24.76	24.56	24.69	-6.00	16.64	38.45
	1	7	24.63	24.79	24.57			
	1	14	24.58	24.55	24.43			
	8	0	23.66	23.61	23.62			
	8	4	23.64	23.63	23.64			
	8	7	23.76	23.72	23.67			
	15	0	23.70	23.62	23.58			
16QAM	1	0	23.35	23.51	23.49	-6.00	15.86	38.45
	1	7	23.93	23.79	23.96			
	1	14	23.62	23.87	24.01			
	8	0	22.87	22.50	22.56			
	8	4	22.64	22.61	22.57			
	8	7	22.70	22.68	22.75			
	15	0	22.70	22.61	22.60			

LTE Band 5 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20425	20525	20625			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	24.68	24.81	24.51	-6.00	16.70	38.45
	1	12	24.75	24.85	24.84			
	1	24	24.76	24.67	24.30			
	12	0	23.66	23.74	23.61			
	12	6	23.69	23.75	23.69			
	12	11	23.78	23.77	23.71			
	25	0	23.76	23.64	23.56			
16QAM	1	0	23.85	23.84	24.08	-6.00	15.93	38.45
	1	12	23.81	24.01	24.02			
	1	24	23.61	23.72	23.96			
	12	0	22.58	22.68	22.67			
	12	6	22.48	22.66	22.65			
	12	11	22.71	22.72	22.75			
	25	0	22.66	22.70	22.57			
LTE Band 5 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20450	20525	20600			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	24.75	24.68	24.62	-6.00	16.62	38.45
	1	24	24.53	24.57	24.77			
	1	49	24.71	24.68	24.61			
	25	0	23.69	23.81	23.67			
	25	12	23.77	23.69	23.64			
	25	24	23.65	23.75	23.58			
	50	0	23.72	23.71	23.59			
16QAM	1	0	23.34	23.74	23.61	-6.00	15.81	38.45
	1	24	23.78	23.96	23.52			
	1	49	23.63	23.78	23.56			
	25	0	22.58	22.78	22.56			
	25	12	22.76	22.73	22.69			
	25	24	22.64	22.69	22.64			
	50	0	22.71	22.63	22.62			

IC LTE Band 5 - ANT1:

LTE Band 5 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20407	20525	20643			
			824.7MHz	836.5MHz	848.3MHz			
QPSK	1	0	24.51	24.66	24.47	-6.00	18.75	40.61
	1	2	24.66	24.68	24.52			
	1	5	24.74	24.75	24.44			
	3	0	23.68	23.59	23.55			
	3	1	23.65	23.62	23.53			
	3	2	23.62	23.73	23.58			
	6	0	23.66	23.63	23.55			
16QAM	1	0	23.89	23.70	23.65	-6.00	18.18	40.61
	1	2	24.08	23.53	23.54			
	1	5	24.18	23.47	23.54			
	3	0	22.81	22.65	22.66			
	3	1	22.98	22.53	22.48			
	3	2	22.83	22.72	22.53			
	6	0	22.91	22.60	22.58			
LTE Band 5 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20415	20525	20635			
			825.5MHz	836.5MHz	847.5MHz			
QPSK	1	0	24.76	24.56	24.69	-6.00	18.79	40.61
	1	7	24.63	24.79	24.57			
	1	14	24.58	24.55	24.43			
	8	0	23.66	23.61	23.62			
	8	4	23.64	23.63	23.64			
	8	7	23.76	23.72	23.67			
	15	0	23.70	23.62	23.58			
16QAM	1	0	23.35	23.51	23.49	-6.00	18.01	40.61
	1	7	23.93	23.79	23.96			
	1	14	23.62	23.87	24.01			
	8	0	22.87	22.50	22.56			
	8	4	22.64	22.61	22.57			
	8	7	22.70	22.68	22.75			
	15	0	22.70	22.61	22.60			

LTE Band 5 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20425	20525	20625			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	24.68	24.81	24.51	-6.00	18.85	40.61
	1	12	24.75	24.85	24.84			
	1	24	24.76	24.67	24.30			
	12	0	23.66	23.74	23.61			
	12	6	23.69	23.75	23.69			
	12	11	23.78	23.77	23.71			
	25	0	23.76	23.64	23.56			
16QAM	1	0	23.85	23.84	24.08	-6.00	18.08	40.61
	1	12	23.81	24.01	24.02			
	1	24	23.61	23.72	23.96			
	12	0	22.58	22.68	22.67			
	12	6	22.48	22.66	22.65			
	12	11	22.71	22.72	22.75			
	25	0	22.66	22.70	22.57			
LTE Band 5 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20450	20525	20600			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	24.75	24.68	24.62	-6.00	18.77	40.61
	1	24	24.53	24.57	24.77			
	1	49	24.71	24.68	24.61			
	25	0	23.69	23.81	23.67			
	25	12	23.77	23.69	23.64			
	25	24	23.65	23.75	23.58			
	50	0	23.72	23.71	23.59			
16QAM	1	0	23.34	23.74	23.61	-6.00	17.96	40.61
	1	24	23.78	23.96	23.52			
	1	49	23.63	23.78	23.56			
	25	0	22.58	22.78	22.56			
	25	12	22.76	22.73	22.69			
	25	24	22.64	22.69	22.64			
	50	0	22.71	22.63	22.62			

LTE Band 7 - ANT2:

LTE Band 7 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20775	21100	21425			
			2502.5MHz	2535.0MHz	2567.5MHz			
QPSK	1	0	24.14	24.11	24.25	-0.70	23.67	33.00
	1	12	24.09	24.37	24.16			
	1	24	24.24	24.27	24.11			
	12	0	23.25	23.20	23.32			
	12	6	23.23	23.19	23.13			
	12	11	23.35	23.38	23.25			
	25	0	23.27	23.28	23.27			
16QAM	1	0	23.12	23.09	23.07	-0.70	22.64	33.00
	1	12	23.34	23.11	23.19			
	1	24	23.27	23.08	23.18			
	12	0	22.33	22.11	22.14			
	12	6	22.09	22.17	21.92			
	12	11	22.42	22.34	22.18			
	25	0	22.32	22.22	22.16			
LTE Band 7 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20800	21100	21400			
			2505.0MHz	2535.0MHz	2565.0MHz			
QPSK	1	0	24.28	24.05	24.18	-0.70	23.71	33.00
	1	24	24.20	24.41	24.20			
	1	49	24.06	24.41	24.26			
	25	0	23.23	23.12	23.17			
	25	12	23.28	23.24	23.13			
	25	24	23.17	23.16	23.21			
	50	0	23.18	23.19	23.19			
16QAM	1	0	23.29	23.08	23.20	-0.70	22.63	33.00
	1	24	23.14	23.21	23.33			
	1	49	23.08	23.30	23.14			
	25	0	22.25	22.24	22.27			
	25	12	22.12	22.17	22.19			
	25	24	22.19	22.27	22.21			
	50	0	22.18	22.20	22.12			

LTE Band 7 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20825	21100	21375			
			2507.5MHz	2535.0MHz	2562.5MHz			
QPSK	1	0	24.19	24.03	24.23	-0.70	23.53	33.00
	1	37	24.02	24.15	24.14			
	1	74	24.06	23.97	24.02			
	36	0	23.13	23.04	23.16			
	36	16	23.12	23.13	23.04			
	36	35	23.13	23.09	23.09			
	75	0	23.08	23.10	23.06			
16QAM	1	0	23.18	23.48	23.15	-0.70	22.78	33.00
	1	37	23.31	23.24	23.22			
	1	74	23.04	23.22	23.10			
	36	0	22.10	22.19	22.18			
	36	16	22.19	22.22	22.09			
	36	35	22.05	22.09	22.10			
	75	0	22.12	22.16	22.14			
LTE Band 7 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20850	21100	21350			
			2510.0MHz	2535.0MHz	2560.0MHz			
QPSK	1	0	24.16	24.13	24.22	-0.70	23.67	33.00
	1	49	24.31	24.10	24.11			
	1	99	24.19	23.96	24.37			
	50	0	23.05	23.02	22.97			
	50	24	23.17	23.12	23.00			
	50	49	23.07	23.18	23.01			
	100	0	23.16	23.12	23.06			
16QAM	1	0	23.34	23.31	23.24	-0.70	22.64	33.00
	1	49	23.28	23.06	23.10			
	1	99	23.14	23.22	23.26			
	50	0	22.16	22.12	22.05			
	50	24	21.99	22.09	22.07			
	50	49	22.11	22.03	22.04			
	100	0	22.15	22.13	21.98			

LTE Band 7 - ANT3:

LTE Band 7 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20775	21100	21425			
			2502.5MHz	2535.0MHz	2567.5MHz			
QPSK	1	0	23.49	23.61	23.72	-6.00	17.72	33.00
	1	12	23.63	23.44	23.70			
	1	24	23.57	23.51	23.44			
	12	0	22.55	22.35	22.42			
	12	6	22.57	22.43	22.36			
	12	11	22.56	22.52	22.57			
	25	0	22.48	22.37	22.43			
16QAM	1	0	22.43	22.50	22.61	-6.00	16.61	33.00
	1	12	22.41	22.42	22.58			
	1	24	22.53	22.60	22.44			
	12	0	21.60	21.26	21.42			
	12	6	21.63	21.52	21.47			
	12	11	21.73	21.57	21.66			
	25	0	21.64	21.55	21.43			
LTE Band 7 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20800	21100	21400			
			2505.0MHz	2535.0MHz	2565.0MHz			
QPSK	1	0	23.47	23.50	23.34	-6.00	17.64	33.00
	1	24	23.61	23.45	23.64			
	1	49	23.51	23.46	23.50			
	25	0	22.48	22.43	22.44			
	25	12	22.47	22.45	22.49			
	25	24	22.51	22.39	22.43			
	50	0	22.49	22.37	22.40			
16QAM	1	0	22.43	22.43	22.59	-6.00	16.63	33.00
	1	24	22.57	22.52	22.63			
	1	49	22.48	22.60	22.34			
	25	0	21.48	21.62	21.62			
	25	12	21.56	21.54	21.51			
	25	24	21.40	21.59	21.58			
	50	0	21.48	21.54	21.53			

LTE Band 7 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20825	21100	21375			
			2507.5MHz	2535.0MHz	2562.5MHz			
QPSK	1	0	23.40	23.42	23.53	-6.00	17.64	33.00
	1	37	23.53	23.51	23.45			
	1	74	23.41	23.38	23.64			
	36	0	22.39	22.36	22.37			
	36	16	22.42	22.43	22.31			
	36	35	22.44	22.49	22.35			
	75	0	22.43	22.40	22.33			
16QAM	1	0	22.45	22.48	22.28	-6.00	16.50	33.00
	1	37	22.49	22.44	22.43			
	1	74	22.39	22.32	22.50			
	36	0	21.37	21.33	21.39			
	36	16	21.44	21.40	21.28			
	36	35	21.26	21.37	21.35			
	75	0	21.33	21.35	21.33			
LTE Band 7 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20850	21100	21350			
			2510.0MHz	2535.0MHz	2560.0MHz			
QPSK	1	0	23.64	23.60	23.51	-6.00	17.64	33.00
	1	49	23.37	23.43	23.24			
	1	99	23.50	23.39	23.49			
	50	0	22.40	22.40	22.46			
	50	24	22.48	22.31	22.37			
	50	49	22.30	22.47	22.42			
	100	0	22.40	22.39	22.36			
16QAM	1	0	22.34	22.38	22.36	-6.00	16.55	33.00
	1	49	22.52	22.55	22.48			
	1	99	22.47	22.44	22.23			
	50	0	21.36	21.25	21.29			
	50	24	21.36	21.45	21.15			
	50	49	21.44	21.34	21.24			
	100	0	21.38	21.34	21.25			

LTE Band 12 - ANT1:

LTE Band 12 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23017	23095	23173			
			699.7MHz	707.5MHz	715.3MHz			
QPSK	1	0	24.75	24.89	24.72	-7.90	14.84	33.77
	1	2	24.79	24.76	24.70			
	1	5	24.87	24.79	24.68			
	3	0	23.79	23.82	23.70			
	3	1	23.75	23.70	23.68			
	3	2	23.64	23.87	23.74			
	6	0	23.68	23.71	23.72			
16QAM	1	0	23.68	23.86	23.74	-7.90	13.86	33.77
	1	2	23.52	23.91	23.43			
	1	5	23.78	23.87	23.76			
	3	0	22.60	22.88	22.78			
	3	1	22.76	22.65	22.85			
	3	2	22.54	22.82	22.90			
	6	0	22.54	22.67	22.82			
LTE Band 12 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23025	23095	23165			
			700.5MHz	707.5MHz	714.5MHz			
QPSK	1	0	24.57	24.77	24.73	-7.90	14.80	33.77
	1	7	24.85	24.84	24.70			
	1	14	24.61	24.69	24.63			
	8	0	23.81	23.76	23.70			
	8	4	23.87	23.68	23.72			
	8	7	23.70	23.74	23.71			
	15	0	23.72	23.76	23.68			
16QAM	1	0	23.89	23.60	23.85	-7.90	13.84	33.77
	1	7	23.85	23.86	23.79			
	1	14	23.71	23.46	23.46			
	8	0	22.84	22.74	22.66			
	8	4	22.84	22.81	22.65			
	8	7	22.68	22.83	22.78			
	15	0	22.88	22.82	22.61			

LTE Band 12 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23035	23095	23155			
			701.5MHz	707.5MHz	713.5MHz			
QPSK	1	0	24.81	24.73	24.64	-7.90	14.87	33.77
	1	12	24.85	24.92	24.42			
	1	24	24.74	24.73	24.68			
	12	0	23.70	23.85	23.72			
	12	6	23.70	23.78	23.67			
	12	11	23.77	23.79	23.82			
	25	0	23.87	23.73	23.63			
16QAM	1	0	23.68	23.87	23.24	-7.90	14.11	33.77
	1	12	23.69	23.69	23.55			
	1	24	23.54	24.16	23.88			
	12	0	22.63	22.77	22.79			
	12	6	22.78	22.77	22.65			
	12	11	22.71	22.82	22.68			
	25	0	22.88	22.76	22.82			
LTE Band 12 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23060	23095	23130			
			704.0MHz	707.5MHz	711.0MHz			
QPSK	1	0	24.66	24.81	24.70	-7.90	14.95	33.77
	1	24	24.74	24.79	25.00			
	1	49	24.75	24.72	24.64			
	25	0	23.68	23.70	23.74			
	25	12	23.79	23.82	23.77			
	25	24	23.70	23.78	23.68			
	50	0	23.77	23.74	23.77			
16QAM	1	0	23.73	23.90	23.86	-7.90	13.87	33.77
	1	24	23.65	23.71	23.69			
	1	49	23.92	23.86	23.79			
	25	0	22.73	22.73	22.93			
	25	12	22.79	22.78	22.74			
	25	24	22.85	22.69	22.87			
	50	0	22.90	22.73	22.76			

LTE Band 17 - ANT1:

LTE Band 17 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23755	23790	23825			
			706.5MHz	710.0MHz	713.5MHz			
QPSK	1	0	24.75	24.96	24.74	-7.90	14.91	33.77
	1	12	24.83	24.70	24.75			
	1	24	24.77	24.84	24.68			
	12	0	23.80	23.85	23.86			
	12	6	23.77	23.87	23.75			
	12	11	23.74	23.76	23.62			
	25	0	23.73	23.87	23.69			
16QAM	1	0	23.81	24.08	23.93	-7.90	14.03	33.77
	1	12	24.06	23.80	23.66			
	1	24	23.46	23.72	23.72			
	12	0	22.76	22.85	22.81			
	12	6	22.62	22.75	22.75			
	12	11	22.83	22.72	22.81			
	25	0	22.91	22.72	22.66			
LTE Band 17 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23780	23790	23800			
			709.0MHz	710.0MHz	711.0MHz			
QPSK	1	0	24.85	24.95	24.71	-7.90	14.90	33.77
	1	24	24.73	24.83	24.77			
	1	49	24.74	24.69	24.62			
	25	0	23.74	23.81	23.77			
	25	12	23.84	23.83	23.84			
	25	24	23.93	22.75	23.92			
	50	0	23.91	23.78	23.85			
16QAM	1	0	23.95	23.56	24.12	-7.90	14.33	33.77
	1	24	24.38	23.85	23.95			
	1	49	23.70	23.92	24.26			
	25	0	22.85	22.77	22.81			
	25	12	22.88	22.67	22.76			
	25	24	22.79	22.85	22.87			
	50	0	22.86	22.80	22.82			

LTE Band 41 - ANT2:

LTE Band 41 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39675	40620	41565			
			2498.5MHz	2593.0MHz	2687.5MHz			
QPSK	1	0	25.12	25.07	24.84	-0.70	24.42	33.00
	1	12	25.08	25.05	25.07			
	1	24	24.97	25.09	24.92			
	12	0	24.22	23.97	23.95			
	12	6	24.16	23.95	23.79			
	12	11	24.13	24.13	23.99			
	25	0	24.03	24.07	23.88			
16QAM	1	0	23.86	23.92	23.64	-0.70	23.42	33.00
	1	12	24.12	23.99	23.97			
	1	24	24.05	24.00	23.76			
	12	0	23.13	23.06	22.91			
	12	6	23.21	23.09	23.03			
	12	11	23.17	23.19	22.85			
	25	0	23.01	23.20	22.96			
LTE Band 41 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39700	40620	41540			
			2501.0MHz	2593.0MHz	2685.0MHz			
QPSK	1	0	25.08	24.97	24.93	-0.70	24.40	33.00
	1	24	25.08	25.10	24.85			
	1	49	25.02	24.89	24.79			
	25	0	24.08	23.96	23.91			
	25	12	24.20	24.03	23.98			
	25	24	24.15	23.92	23.85			
	50	0	24.17	24.12	23.87			
16QAM	1	0	24.11	23.88	23.92	-0.70	23.78	33.00
	1	24	24.05	24.10	23.96			
	1	49	24.08	24.48	24.06			
	25	0	23.15	23.10	23.03			
	25	12	23.04	23.00	22.97			
	25	24	23.18	23.12	23.05			
	50	0	23.15	23.15	23.00			

LTE Band 41 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39725	40620	41515			
			2503.5MHz	2593.0MHz	2682.5MHz			
QPSK	1	0	24.71	25.03	24.76	-0.70	24.33	33.00
	1	37	24.82	24.83	24.89			
	1	74	24.96	24.92	24.83			
	36	0	23.93	23.84	23.72			
	36	16	23.88	23.93	23.81			
	36	35	23.95	23.87	23.76			
	75	0	23.86	23.84	23.68			
16QAM	1	0	23.73	23.91	23.82	-0.70	23.30	33.00
	1	37	23.54	23.80	23.96			
	1	74	23.84	24.00	23.76			
	36	0	22.98	22.81	22.92			
	36	16	22.92	22.94	22.82			
	36	35	23.04	22.81	22.86			
	75	0	23.07	22.77	22.78			
LTE Band 41 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39750	40620	41490			
			2506.0MHz	2593.0MHz	2680.0MHz			
QPSK	1	0	25.13	25.03	24.98	-0.70	24.43	33.00
	1	49	24.94	24.64	24.74			
	1	99	24.86	24.97	24.83			
	50	0	23.98	23.96	23.84			
	50	24	24.05	23.93	23.79			
	50	49	23.96	23.99	23.89			
	100	0	24.02	23.91	23.95			
16QAM	1	0	24.04	24.19	23.95	-0.70	23.51	33.00
	1	49	23.63	24.20	23.73			
	1	99	23.41	24.21	24.09			
	50	0	23.05	23.00	22.96			
	50	24	22.92	22.92	22.85			
	50	49	22.99	23.02	22.86			
	100	0	23.03	22.92	22.83			

LTE Band 41 - ANT4:

LTE Band 41 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39675	40620	41565			
			2498.5MHz	2593.0MHz	2687.5MHz			
QPSK	1	0	24.35	24.55	24.35	-0.90	23.85	33.00
	1	12	24.23	24.67	24.40			
	1	24	24.44	24.75	24.22			
	12	0	23.42	23.74	23.56			
	12	6	23.45	23.70	23.52			
	12	11	23.63	23.76	23.49			
	25	0	23.39	23.66	23.37			
16QAM	1	0	23.28	23.46	23.22	-0.90	23.07	33.00
	1	12	23.11	23.97	23.58			
	1	24	23.51	23.57	23.38			
	12	0	22.46	22.73	22.47			
	12	6	22.38	22.61	22.58			
	12	11	22.51	22.68	22.49			
	25	0	22.45	22.68	22.48			
LTE Band 41 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39700	40620	41540			
			2501.0MHz	2593.0MHz	2685.0MHz			
QPSK	1	0	24.39	24.97	24.46	-0.90	24.07	33.00
	1	24	24.63	24.75	24.19			
	1	49	24.63	24.49	24.25			
	25	0	23.58	23.72	23.63			
	25	12	23.69	23.68	23.68			
	25	24	23.55	23.58	23.42			
	50	0	23.66	22.68	23.49			
16QAM	1	0	23.37	23.52	23.42	-0.90	22.93	33.00
	1	24	23.83	23.79	23.67			
	1	49	23.54	23.11	23.40			
	25	0	22.55	22.82	22.73			
	25	12	22.56	22.68	22.75			
	25	24	22.43	22.75	22.63			
	50	0	22.55	22.77	22.59			

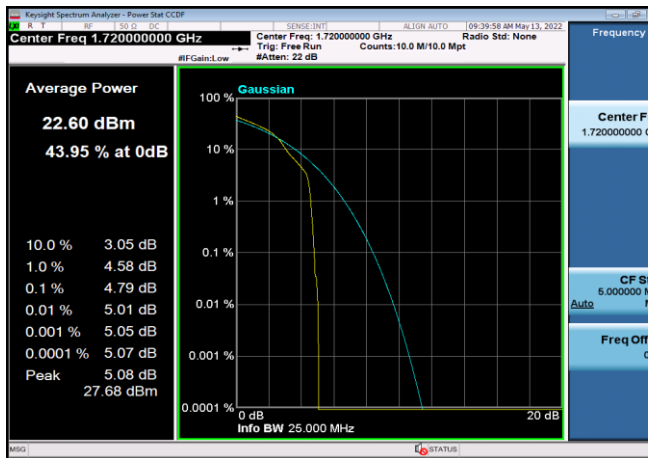
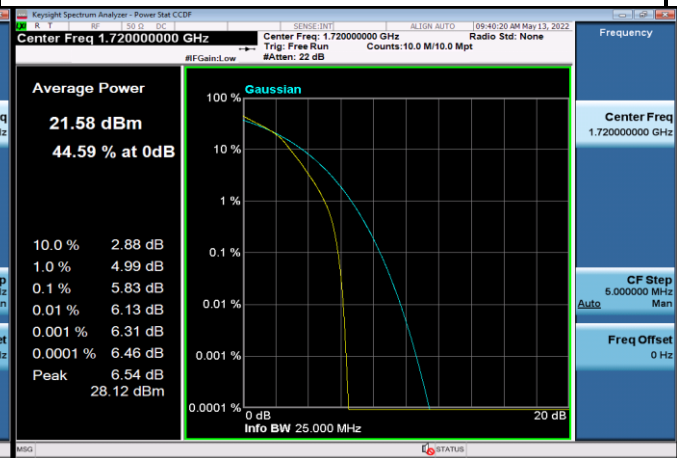
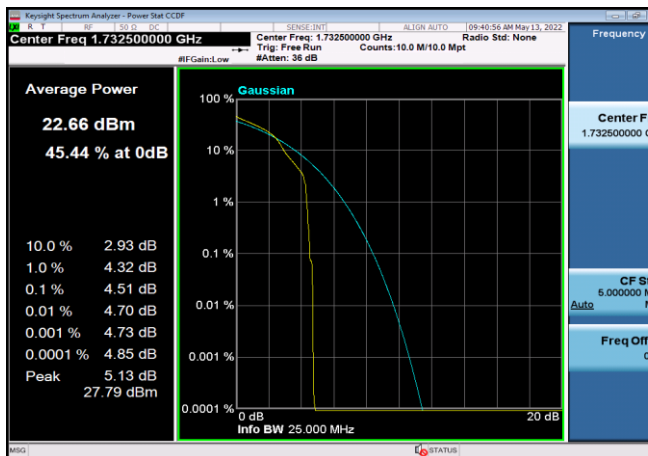
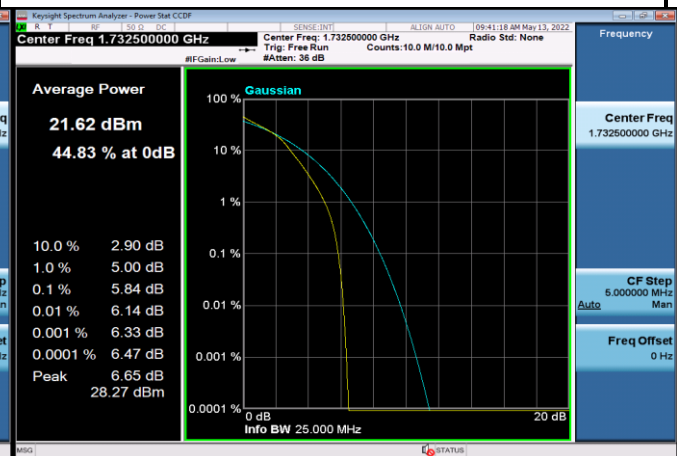
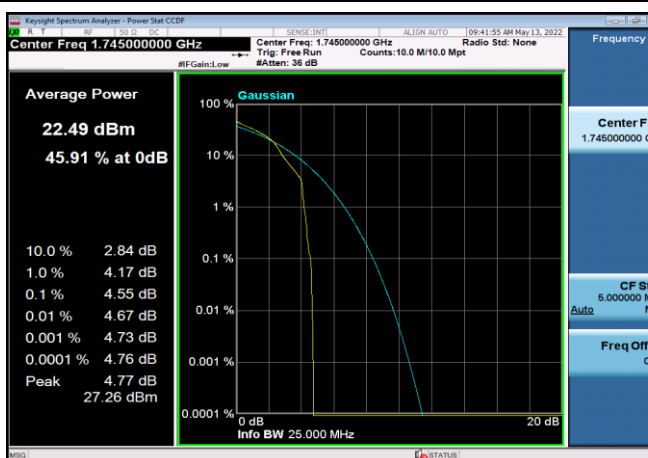
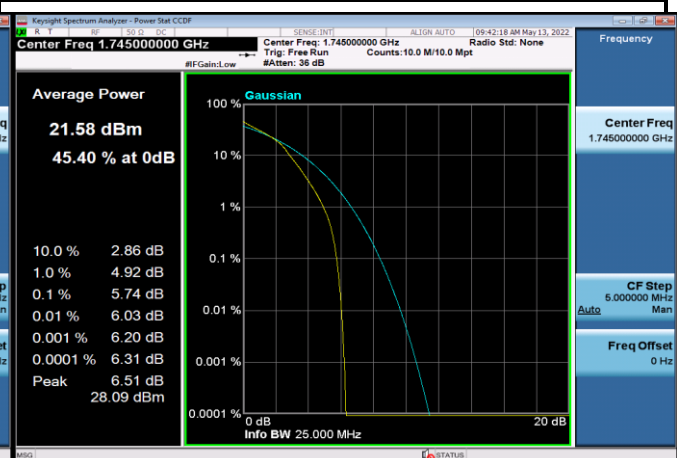
LTE Band 41 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39725	40620	41515			
			2503.5MHz	2593.0MHz	2682.5MHz			
QPSK	1	0	23.68	24.64	24.54	-0.90	23.74	33.00
	1	37	24.22	24.50	24.26			
	1	74	24.56	24.62	24.40			
	36	0	23.33	23.51	23.51			
	36	16	23.29	23.56	23.53			
	36	35	23.34	23.55	23.52			
	75	0	23.36	23.61	23.19			
16QAM	1	0	23.38	23.43	23.38	-0.90	22.68	33.00
	1	37	23.14	23.58	23.36			
	1	74	23.30	23.35	23.41			
	36	0	22.25	22.57	22.48			
	36	16	22.45	22.63	22.53			
	36	35	22.36	22.57	22.43			
	75	0	22.51	22.61	22.30			
LTE Band 41 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			39750	40620	41490			
			2506.0MHz	2593.0MHz	2680.0MHz			
QPSK	1	0	24.30	24.78	24.58	-0.90	23.88	33.00
	1	49	24.40	24.40	24.39			
	1	99	24.42	24.46	24.26			
	50	0	23.41	23.57	23.55			
	50	24	23.43	23.55	23.46			
	50	49	23.42	23.68	23.23			
	100	0	23.50	23.65	23.53			
16QAM	1	0	23.32	23.87	23.88	-0.90	22.98	33.00
	1	49	23.41	23.59	23.67			
	1	99	23.35	23.40	23.28			
	50	0	22.45	22.66	22.60			
	50	24	22.33	22.63	22.53			
	50	49	22.41	22.61	22.49			
	100	0	22.47	22.65	22.55			

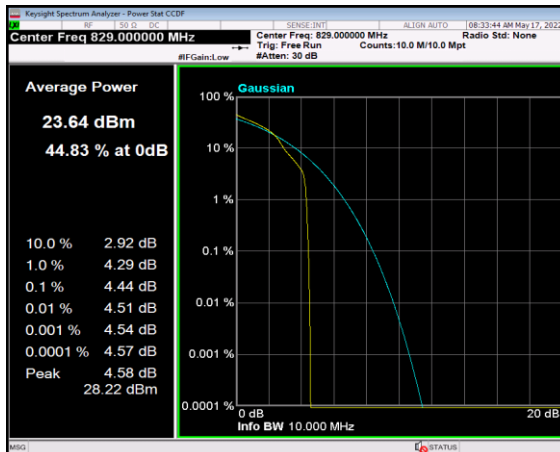
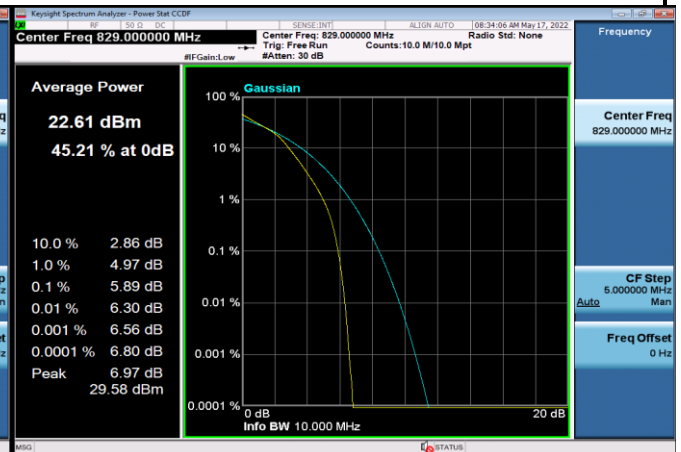
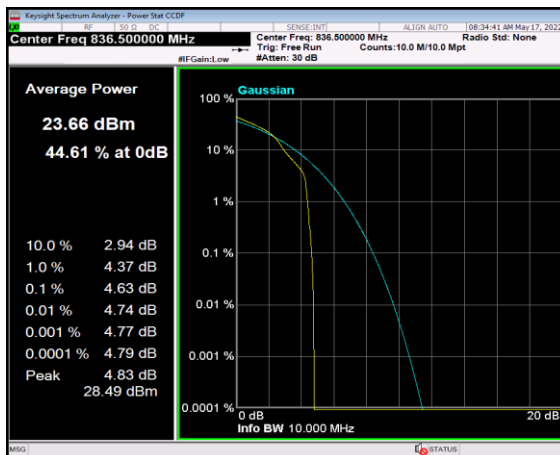
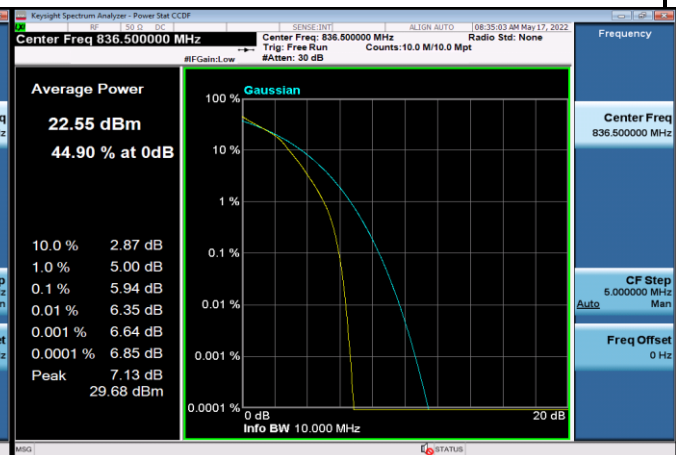
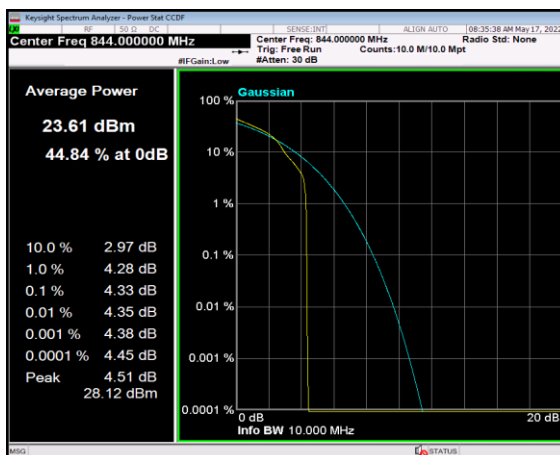
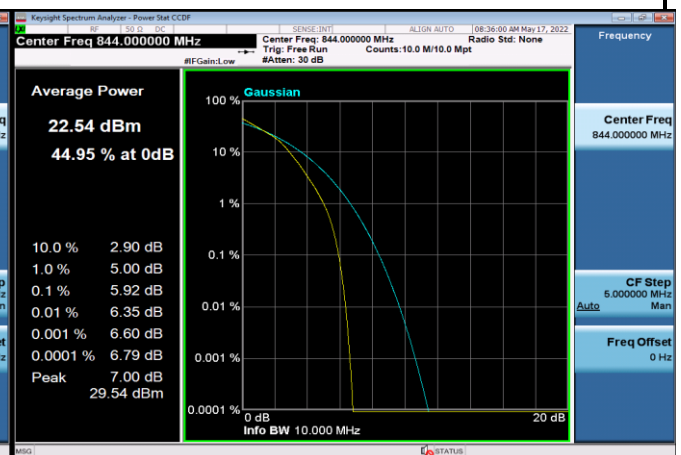
Peak To Average Ratio

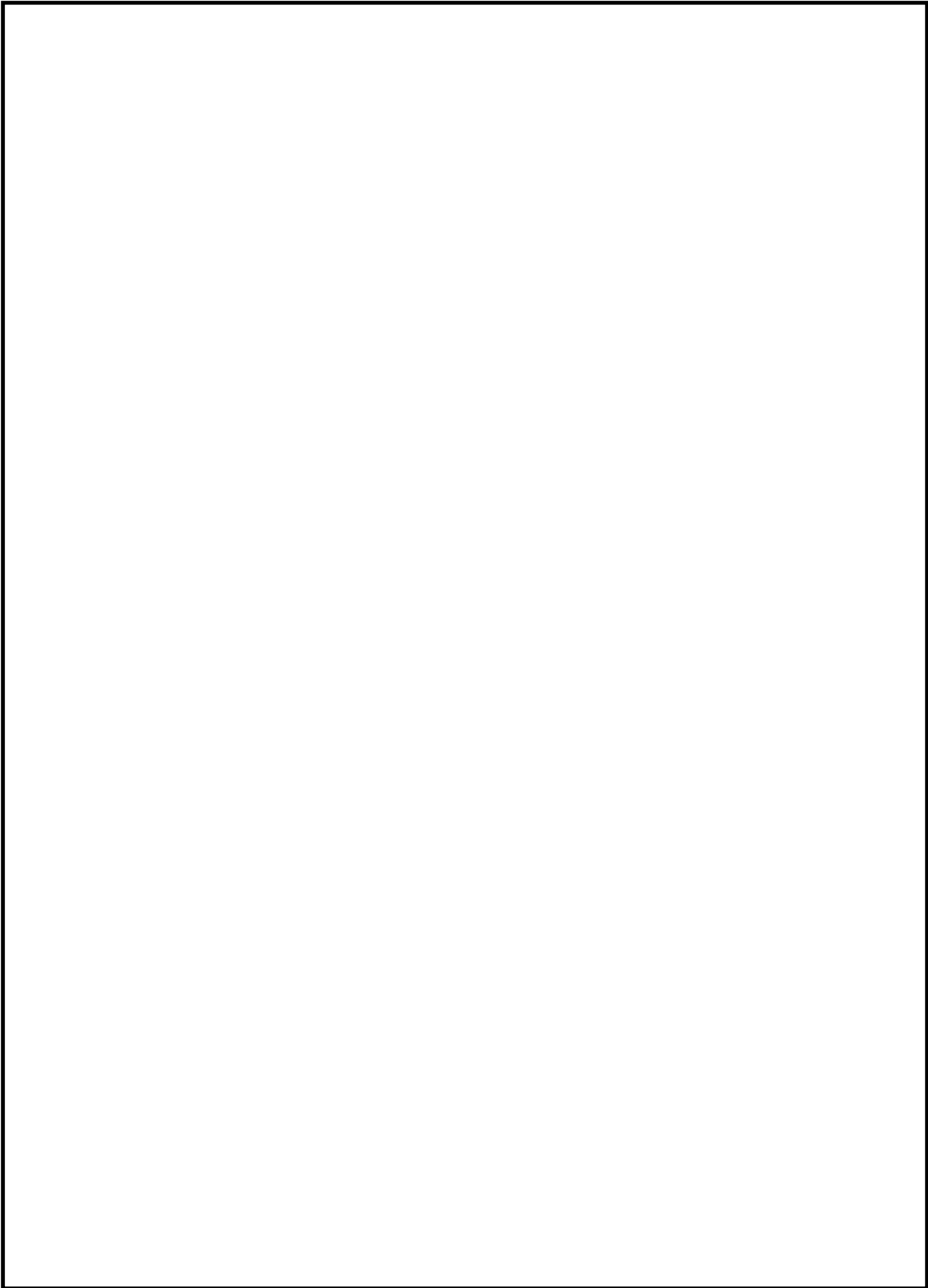
PeakToAveragePowerRatio NormalTC_NormalVol							
Band	Range	BandWidth	RbMode	Modulation	PAPR (dBm)	Limit (dBm)	Result
FDD04	LowRange	20	OneRB_high	16QAM	4.79	13.00	Pass
FDD04	LowRange	20	fullRB	16QAM	5.83	13.00	Pass
FDD04	MidRange	20	OneRB_high	16QAM	4.51	13.00	Pass
FDD04	MidRange	20	fullRB	16QAM	5.84	13.00	Pass
FDD04	HighRange	20	OneRB_high	16QAM	4.55	13.00	Pass
FDD04	HighRange	20	fullRB	16QAM	5.74	13.00	Pass
FDD05	LowRange	10	OneRB_high	16QAM	4.44	13.00	Pass
FDD05	LowRange	10	fullRB	16QAM	5.89	13.00	Pass
FDD05	MidRange	10	OneRB_high	16QAM	4.63	13.00	Pass
FDD05	MidRange	10	fullRB	16QAM	5.94	13.00	Pass
FDD05	HighRange	10	OneRB_high	16QAM	4.33	13.00	Pass
FDD05	HighRange	10	fullRB	16QAM	5.92	13.00	Pass
FDD07	LowRange	20	OneRB_high	16QAM	4.56	13.00	Pass
FDD07	LowRange	20	fullRB	16QAM	5.76	13.00	Pass
FDD07	MidRange	20	OneRB_high	16QAM	4.68	13.00	Pass
FDD07	MidRange	20	fullRB	16QAM	5.76	13.00	Pass
FDD07	HighRange	20	OneRB_high	16QAM	4.57	13.00	Pass
FDD07	HighRange	20	fullRB	16QAM	5.75	13.00	Pass
FDD12	LowRange	10	OneRB_high	16QAM	4.68	13.00	Pass
FDD12	LowRange	10	fullRB	16QAM	5.91	13.00	Pass
FDD12	MidRange	10	OneRB_high	16QAM	4.57	13.00	Pass
FDD12	MidRange	10	fullRB	16QAM	5.92	13.00	Pass
FDD12	HighRange	10	OneRB_high	16QAM	4.46	13.00	Pass
FDD12	HighRange	10	fullRB	16QAM	5.84	13.00	Pass
FDD17	LowRange	10	OneRB_high	16QAM	4.55	13.00	Pass
FDD17	LowRange	10	fullRB	16QAM	5.92	13.00	Pass
FDD17	MidRange	10	OneRB_high	16QAM	4.42	13.00	Pass
FDD17	MidRange	10	fullRB	16QAM	5.90	13.00	Pass
FDD17	HighRange	10	OneRB_high	16QAM	4.51	13.00	Pass
FDD17	HighRange	10	fullRB	16QAM	5.88	13.00	Pass

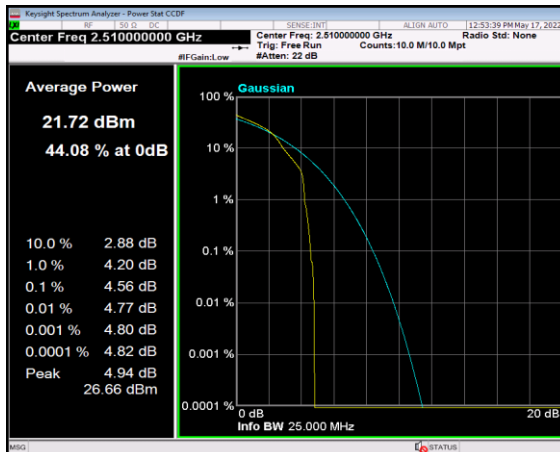
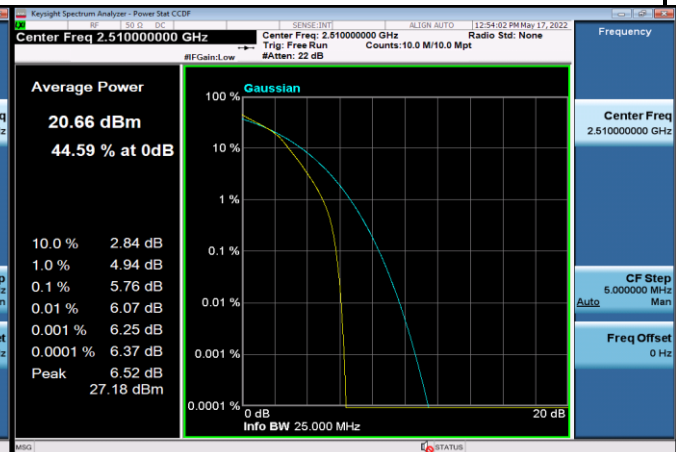
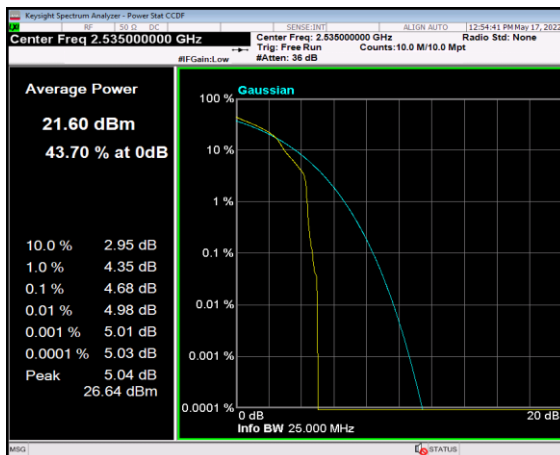
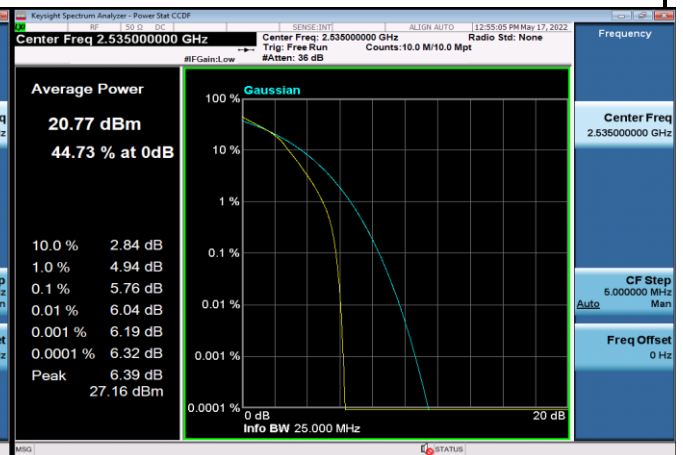
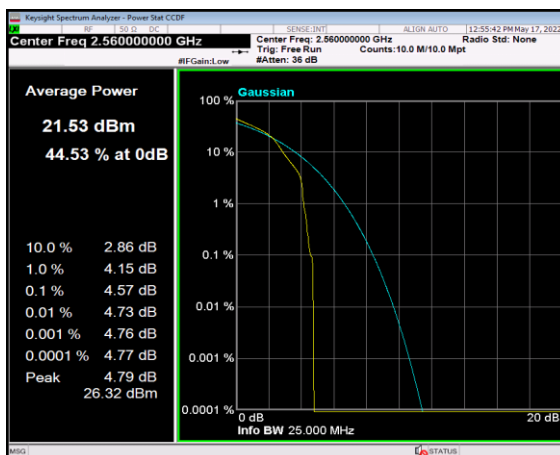
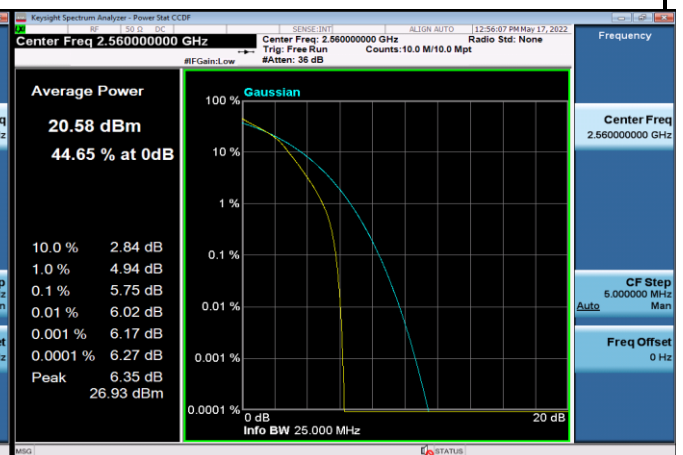


TDD41	LowRange	20	OneRB_high	16QAM	8.86	13.00	Pass
TDD41	LowRange	20	fullRB	16QAM	9.06	13.00	Pass
TDD41	MidRange	20	OneRB_high	16QAM	8.47	13.00	Pass
TDD41	MidRange	20	fullRB	16QAM	9.50	13.00	Pass
TDD41	HighRange	20	OneRB_high	16QAM	8.41	13.00	Pass
TDD41	HighRange	20	fullRB	16QAM	9.77	13.00	Pass

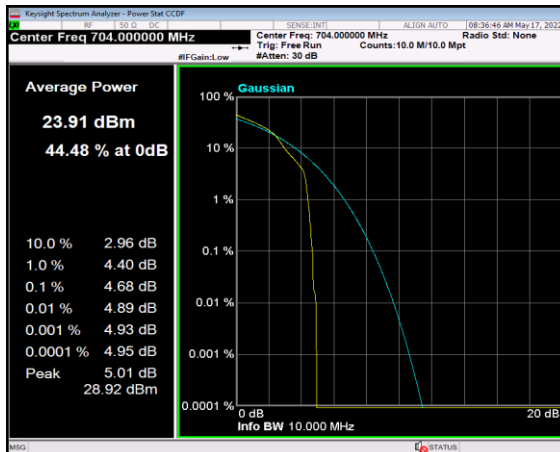
FDD04_LowRange_20MHz_1720_OneRB
_high_16QAM

FDD04_LowRange_20MHz_1720_fullRB
_16QAM

FDD04_MidRange_20MHz_1732.5_OneRB
_high_16QAM

FDD04_MidRange_20MHz_1732.5_fullRB
_16QAM

FDD04_HighRange_20MHz_1745_OneRB
_high_16QAM

FDD04_HighRange_20MHz_1745_fullRB
_16QAM


FDD05_LowRange_10MHz_829_OneRB
_high_16QAM

FDD05_LowRange_10MHz_829_fullIRB
_16QAM

FDD05_MidRange_10MHz_836.5_OneRB
_high_16QAM

FDD05_MidRange_10MHz_836.5_fullIRB
_16QAM

FDD05_HighRange_10MHz_844_OneRB
_high_16QAM

FDD05_HighRange_10MHz_844_fullIRB
_16QAM


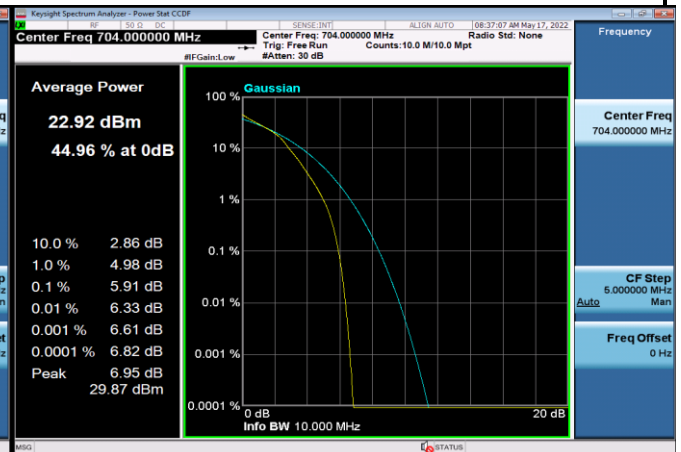


FDD07_LowRange_20MHz_2510_OneRB
_high_16QAM

FDD07_LowRange_20MHz_2510_fullIRB
_16QAM

FDD07_MidRange_20MHz_2535_OneRB
_high_16QAM

FDD07_MidRange_20MHz_2535_fullIRB
_16QAM

FDD07_HighRange_20MHz_2560_OneRB
_high_16QAM

FDD07_HighRange_20MHz_2560_fullIRB
_16QAM


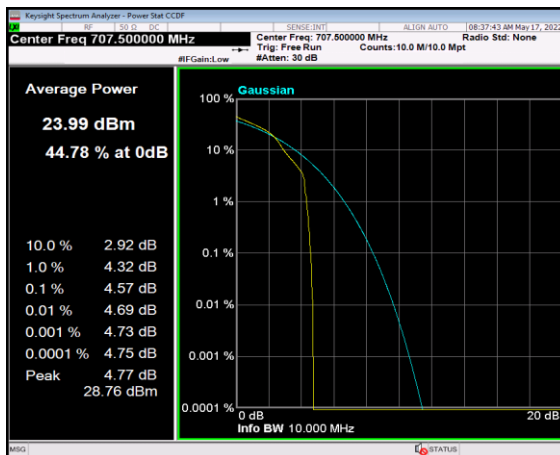
FDD12_LowRange_10MHz_704_OneRB
_high_16QAM



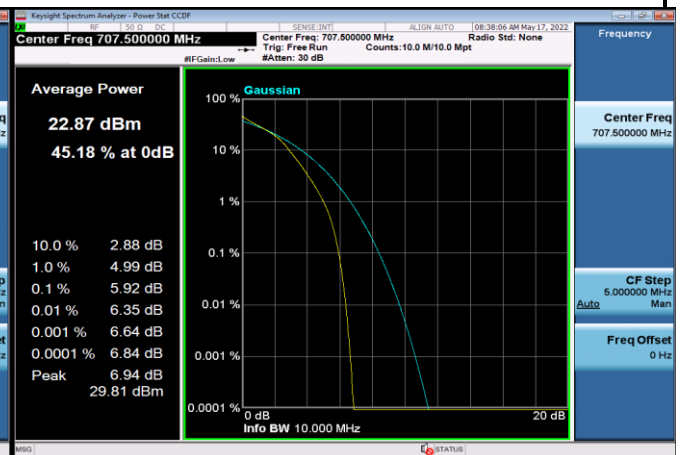
FDD12_LowRange_10MHz_704_fullRB
_16QAM



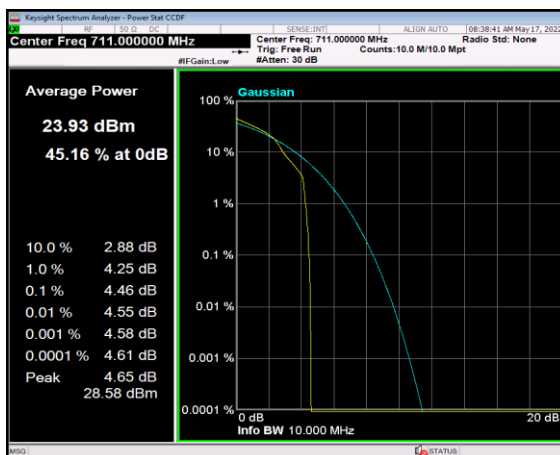
FDD12_MidRange_10MHz_707.5_OneRB
_high_16QAM



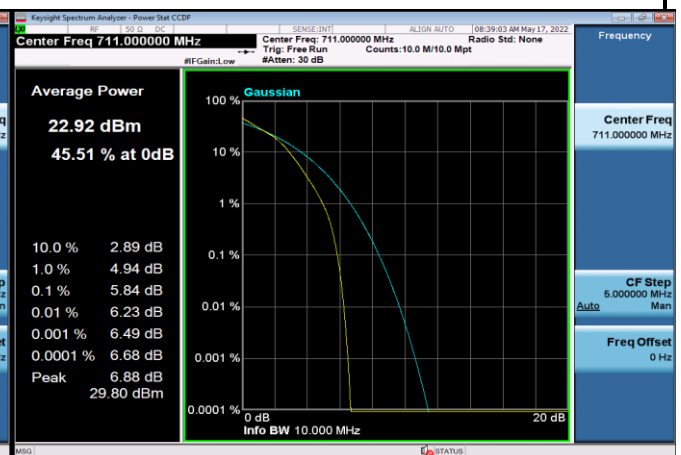
FDD12_MidRange_10MHz_707.5_fullRB
_16QAM

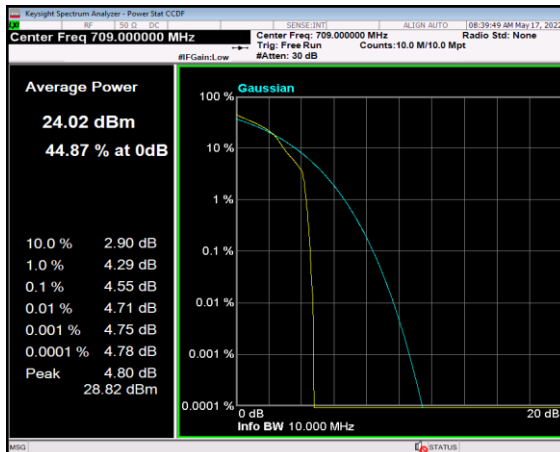
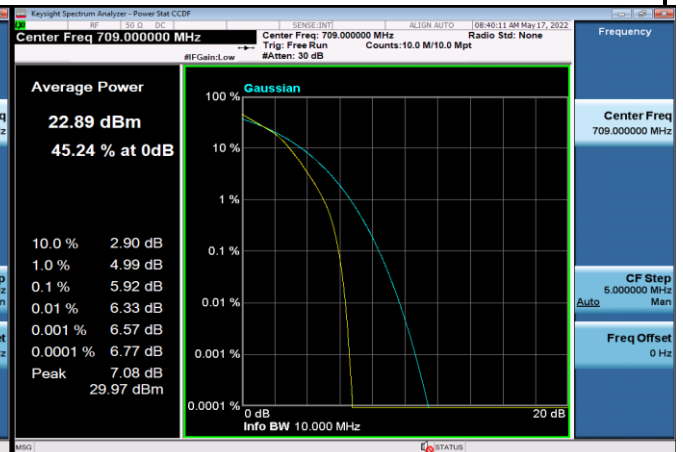
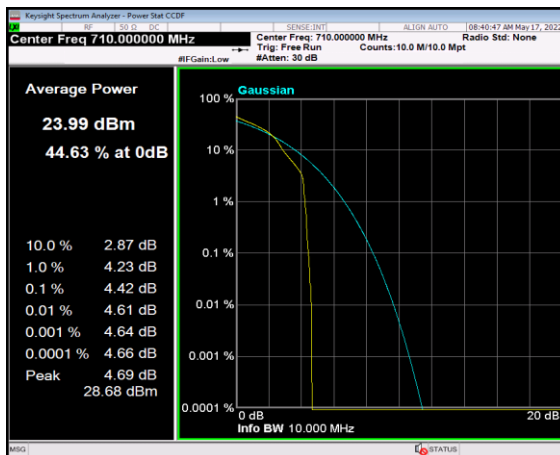
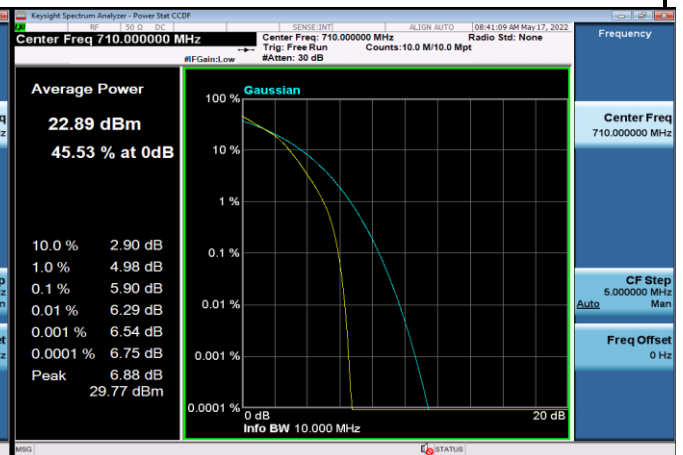
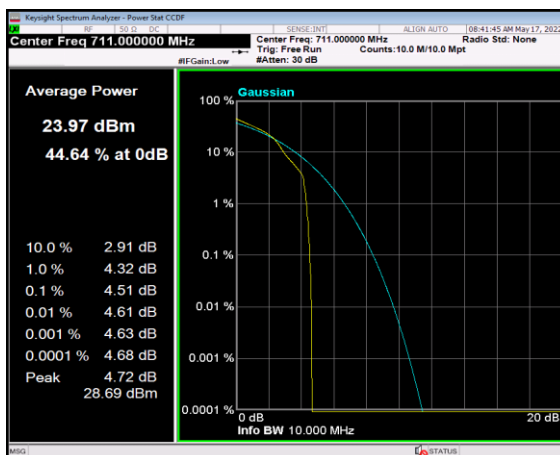
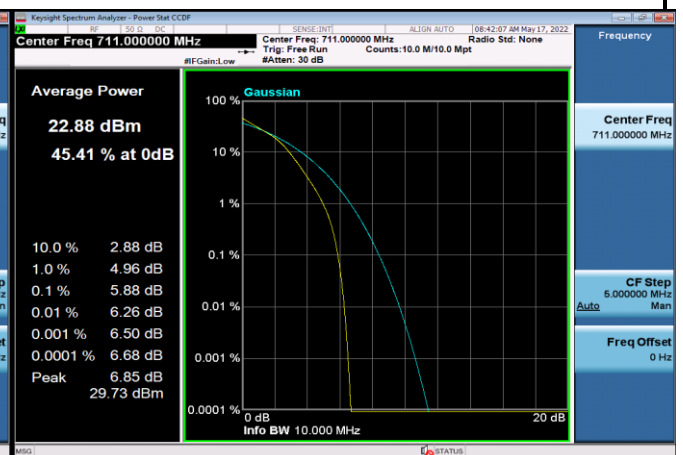


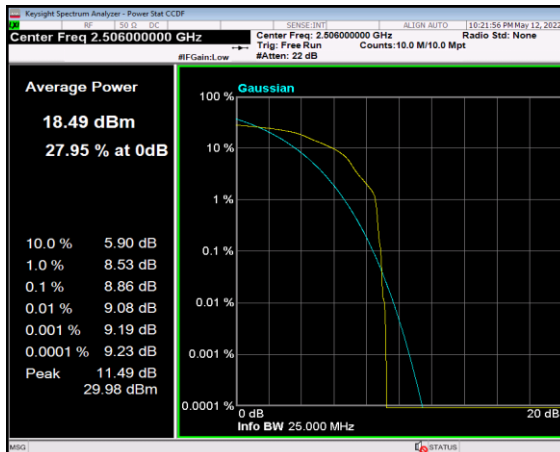
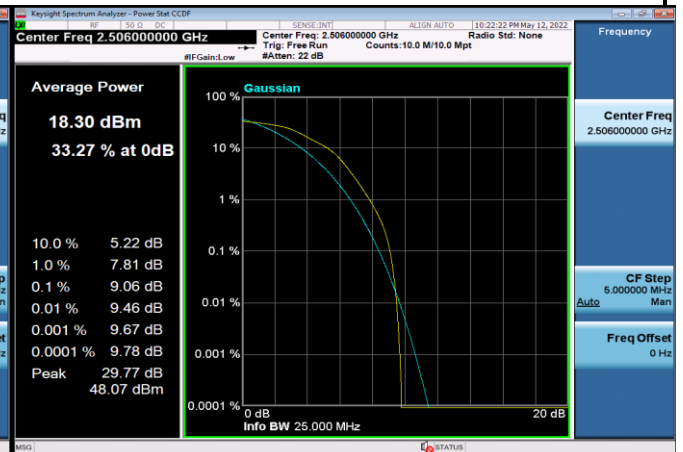
FDD12_HighRange_10MHz_711_OneRB
_high_16QAM

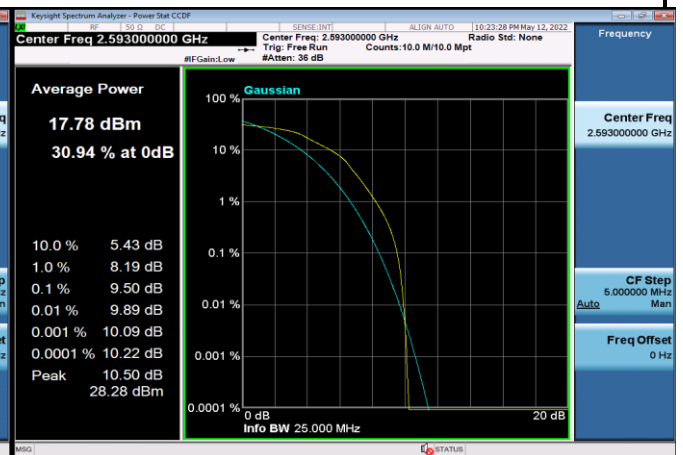
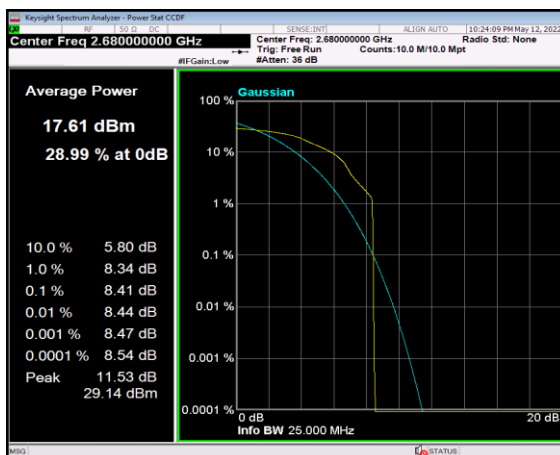


FDD12_HighRange_10MHz_711_fullRB
_16QAM



FDD17_LowRange_10MHz_709_OneRB
_high_16QAM

FDD17_LowRange_10MHz_709_fullRB
_16QAM

FDD17_MidRange_10MHz_710_OneRB
_high_16QAM

FDD17_MidRange_10MHz_710_fullRB
_16QAM

FDD17_HighRange_10MHz_711_OneRB
_high_16QAM

FDD17_HighRange_10MHz_711_fullRB
_16QAM


TDD41_LowRange_20MHz_2506_OneRB
_high_16QAM

TDD41_LowRange_20MHz_2506_fullRB
_16QAM

TDD41_MidRange_20MHz_2593_OneRB
_high_16QAM

TDD41_MidRange_20MHz_2593_fullRB
_16QAM

TDD41_HighRange_20MHz_2680_OneRB
_high_16QAM

TDD41_HighRange_20MHz_2680_fullRB
_16QAM


99% Occupied Bandwidth and 26dB Emission Bandwidth

Occupied Bandwidth NormalTC_NormalVol						
Band	Range	BandWidth	Frequency (MHz)	Modulation	OBW(99%) (MHz)	26dB EBW (MHz)
FDD04	MidRange	1.4	1732.5	QPSK	1.087	1.302
FDD04	MidRange	1.4	1732.5	16QAM	1.09	1.295
FDD04	MidRange	3	1732.5	QPSK	2.68	2.928
FDD04	MidRange	3	1732.5	16QAM	2.681	2.939
FDD04	MidRange	5	1732.5	QPSK	4.493	4.852
FDD04	MidRange	5	1732.5	16QAM	4.493	4.864
FDD04	MidRange	10	1732.5	QPSK	8.933	9.415
FDD04	MidRange	10	1732.5	16QAM	8.935	9.438
FDD04	MidRange	15	1732.5	QPSK	13.474	14.300
FDD04	MidRange	15	1732.5	16QAM	13.478	14.290
FDD04	MidRange	20	1732.5	QPSK	17.915	18.850
FDD04	MidRange	20	1732.5	16QAM	17.917	18.830
FDD05	MidRange	1.4	836.5	QPSK	1.089	1.286
FDD05	MidRange	1.4	836.5	16QAM	1.088	1.324
FDD05	MidRange	3	836.5	QPSK	2.683	2.929
FDD05	MidRange	3	836.5	16QAM	2.684	2.919
FDD05	MidRange	5	836.5	QPSK	4.491	4.870
FDD05	MidRange	5	836.5	16QAM	4.492	4.864
FDD05	MidRange	10	836.5	QPSK	8.92	9.370
FDD05	MidRange	10	836.5	16QAM	8.926	9.387
FDD07	MidRange	5	2535	QPSK	4.49	4.871
FDD07	MidRange	5	2535	Q16	4.49	4.863
FDD07	MidRange	10	2535	QPSK	8.927	9.377
FDD07	MidRange	10	2535	Q16	8.927	9.401
FDD07	MidRange	15	2535	QPSK	13.45	14.28
FDD07	MidRange	15	2535	Q16	13.452	14.27
FDD07	MidRange	20	2535	QPSK	17.878	18.77
FDD07	MidRange	20	2535	Q16	17.881	18.78
FDD12	MidRange	1.4	707.5	QPSK	1.088	1.307
FDD12	MidRange	1.4	707.5	16QAM	1.089	1.300



FDD12	MidRange	3	707.5	QPSK	2.682	2.937
FDD12	MidRange	3	707.5	16QAM	2.68	2.942
FDD12	MidRange	5	707.5	QPSK	4.487	4.867
FDD12	MidRange	5	707.5	16QAM	4.494	4.854
FDD12	MidRange	10	707.5	QPSK	8.924	9.417
FDD12	MidRange	10	707.5	16QAM	8.917	9.404
FDD17	MidRange	5	710	QPSK	4.484	4.866
FDD17	MidRange	5	710	16QAM	4.486	4.852
FDD17	MidRange	10	710	QPSK	8.917	9.368
FDD17	MidRange	10	710	16QAM	8.917	9.384
TDD41	MidRange	5	2593	QPSK	4.487	4.830
TDD41	MidRange	5	2593	16QAM	4.485	4.825
TDD41	MidRange	10	2593	QPSK	8.92	9.389
TDD41	MidRange	10	2593	16QAM	8.932	9.417
TDD41	MidRange	15	2593	QPSK	13.46	14.260
TDD41	MidRange	15	2593	16QAM	13.456	14.260
TDD41	MidRange	20	2593	QPSK	17.866	18.740
TDD41	MidRange	20	2593	16QAM	17.878	18.760

