TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 24** **47 CFR FCC Part 27** **47 CFR FCC Part 2**
Report No.:	RFBCMA-WTW-P25030861-10
FCC ID:	RAXTMOG5AR
Product:	5G Gateway
Brand:	T-Mobile
Model No.:	TMO-G5AR
Received Date:	2025/3/24
Test Date:	2025/5/12 ~ 2025/5/16
Issued Date:	2025/5/29
Applicant:	Arcadyan Technology Corporation
Address:	No. 8, Sec. 2, Guangfu Rd., Hsinchu City 30071, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** 2025/5/29

Jeremy Lin / Project Engineer

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Prepared by : Celine Chou / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCMA-WTW-P25030861-10	Original release.	2025/5/29

1 Certificate

Product:	5G Gateway
Brand:	T-Mobile
Test Model:	TMO-G5AR
Sample Status:	Engineering sample
Applicant:	Arcadyan Technology Corporation
Test Date:	2025/5/12 ~ 2025/5/16
Standard:	47 CFR FCC Part 24 47 CFR FCC Part 27 47 CFR FCC Part 2
Measurement procedure:	ANSI/TIA/EIA-603-E 2016 ANSI C63.26-2015 KDB 971168 D01 Power Meas License Digital Systems v03r01 KDB 971168 D02 Misc Rev Approv License Devices v02r02

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

2 Summary of Test Results

Standard / Clause	Test Item	Result	Remark
Part 2.1046 Part 24.232 (c) Part 27.50(d)	Effective Radiated Power and Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit.
Part 2.1047	Modulation Characteristics	N/A	Refer to Note 2
Part 24.232 (d) Part 27.50(d)	Peak to Average Ratio	Pass	Meet the requirement of limit.
Part 2.1049	Bandwidth	Pass	Meet the requirement of limit.
Part 2.1051 Part 24.238 Part 27.53(h)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
Part 2.1053 Part 24.238 Part 27.53(h)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -33.97 dB at 42.61 MHz
Part 2.1053 Part 24.238 Part 27.53(h)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -33.21 dB at 3530.20 MHz
Part 2.1055 Part 24.235 Part 27.54	Frequency Stability	Pass	Meet the requirement of limit.

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. LTE CA mode is similar to digital modulation in LTE single frequency band, so please refer to BV CPS report no.: RFBCMA-WTW-P25030861-7 for the modulation characteristics data of CA mode.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Parameter	Specification	Uncertainty (±)
Effective Radiated Power and Equivalent Isotropically Radiated Power	-	1.371 dB
Peak to Average Ratio	-	0.920 dB
Bandwidth	-	960 Hz
Conducted Spurious Emissions	-	2.12 dB
Radiated Spurious Emissions below 1GHz	30 MHz ~ 1 GHz	3.64 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB
Frequency Stability	-	0.176 ppm

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	5G Gateway
Brand	T-Mobile
Test Model	TMO-G5AR
Status of EUT	Engineering sample
Power Supply Rating	100-240 Vac
EUT Category	Mobile station
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM
LTE bands support CA mode	2C, 66B, 66C

Note:

1. EUT Overview

Mode	Bandwidth	Modulation	Max. EIRP (W)	Max. EIRP (dBm)	Emission Designator
LTE Band 2C	20 MHz + 20 MHz	QPSK	0.222	23.47	37M5G7D
		16QAM	0.173	22.39	37M5D7W
		64QAM	0.136	21.33	37M5D7W
		256QAM	0.067	18.28	37M5D7W
LTE Band 66B	10 MHz + 10 MHz	QPSK	0.500	26.99	18M8G7D
		16QAM	0.394	25.95	18M8D7W
		64QAM	0.306	24.86	18M8D7W
		256QAM	0.151	21.79	18M8D7W
LTE Band 66C	20 MHz + 20 MHz	QPSK	0.482	26.83	37M4G7D
		16QAM	0.374	25.73	37M4D7W
		64QAM	0.292	24.66	37M4D7W
		256QAM	0.145	21.60	37M5D7W

2. The EUT uses following accessories.

Item	Brand	Model	Specification
AC Adapter 1	MOSO	P30-V3000R200-060Q0-US	AC Input: 100~240 Vac, 1.7 A, 50/60 Hz DC Output: 5.0 Vdc, 3.0 A; 9.0 Vdc, 3.0 A; 12.0 Vdc, 3.0 A;15.0 Vdc, 3.0 A; 20.0 Vdc, 3.0 A DC Output Cable: 1.85 m, non-shielded cable, W/O ferrite core Plug: US
AC Adapter 2	MASS POWER	PD065E-D1C0AVU	AC Input: 100~240 Vac, 1.5 A, 50/60 Hz DC Output: 5.0 Vdc, 3.0 A; 9.0 Vdc, 3.0 A; 12.0 Vdc, 3.0 A; 15.0 Vdc, 3.0 A; 20.0 Vdc, 2.25 A DC Output Cable: 1.8 m, non-shielded cable, W/O ferrite core Plug: US

3. E-UTRA CA configuration / Bandwidth combination set.

E-UTRA CA configuration / Bandwidth combination set					
E-UTRA CA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency		Maximum aggregated bandwidth (MHz)	Bandwidth combination set
		Channel bandwidths for carrier (MHz)	Channel bandwidths for carrier (MHz)		
CA_2C	CA_2C	5	20	40	0
		10	15, 20		
		15	10, 15, 20		
		20	5, 10, 15, 20		
CA_66B	CA_66B	5	5, 10, 15	20	0
		10	5, 10		
		15	5		
CA_66C	CA_66C	5	20	40	0
		10	15, 20		
		15	10, 15, 20		
		20	5, 10, 15, 20		

* 2C/66C are continuous CA and maximum combination is 20M+20M.

* 66B is continuous CA and maximum combination is 10M+10M.

4. For detailed information about each WWAN bands frequency range, bandwidth mode of the product, please refer to section 3.3 of the report.

5. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	Brand	Model	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
ANT0	ARC	120800158700J	TX0	0.95	FDD B2	Monopole	MHF1
				1.02	FDD B4		
				2.06	FDD B5		
				2.46	FDD B12		
				0.95	FDD n25		
			RX	3.93	TDD n41		
				3.79	TDD n48		
			TX0/ TX0	1.02	FDD B66/n66		
				1.90	FDD B71/n71		
			RX	3.79	TDD n77		
ANT1	ARC	120800158800J	RX	1.08	FDD B2	Monopole	MHF1
				0.95	FDD B4		
				1.68	FDD B5		
				1.55	FDD B12		
			TX1	1.08	FDD n25		
				1.04	TDD n41		
				1.00	TDD n48		
			RX/ TX1	0.95	FDD B66/n66		
				3.54	FDD B71/n71		
			TX1	0.79	TDD n77		
ANT2	ARC	120800158900J	RX	5.13	FDD B2	Monopole	MHF1
				4.51	FDD B4		
				2.14	FDD B5		
				2.36	FDD B12		
				5.13	FDD n25		
			TX0	1.05	TDD n41		
				0.72	TDD n48		
			RX/ RX	4.51	FDD B66/n66		
				2.16	FDD B71/n71		
			TX0	0.96	TDD n77		
ANT3	ARC	120800159000J	RX	1.63	FDD B2	Monopole	MHF1
				4.70	FDD B4		
				1.79	FDD B5		
				2.08	FDD B12		
				1.63	FDD n25		
				2.04	TDD n41		
				4.16	TDD n48		
				4.70	FDD B66/n66		
				2.87	FDD B71/n71		
				4.16	TDD n77		

Antenna No.	Antenna Type	Antenna Connector	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
ANT4	ARC	120800159100J	RX	4.66	FDD B2	Dipole	MHF1
				3.77	FDD B4		
				4.66	FDD n25		
				3.45	TDD n41		
				4.32	TDD n48		
				3.77	FDD B66/n66		
				4.32	TDD n77		
ANT5	ARC	120800159200J	RX	3.95	FDD B2	Dipole	MHF1
				5.35	FDD B4		
				3.95	FDD n25		
				4.89	TDD n41		
				3.50	TDD n48		
				5.35	FDD B66/n66		
				3.50	TDD n77		
ANT6	ARC	120800159400J	RX	5.87	FDD B2	Dipole	MHF1
				4.40	FDD B4		
				5.87	FDD B25/n25		
				4.76	TDD n41		
				3.44	TDD n48		
				4.40	FDD B66/n66		
				3.44	TDD n77		
ANT7	ARC	120800159500J	RX	4.79	FDD B2	Dipole	MHF1
				4.62	FDD B4		
				4.79	FDD n25		
				5.64	TDD n41		
				3.88	TDD n48		
				4.62	FDD B66/n66		
				3.88	TDD n77		

* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. The AC Adapter has the following models: MOSO P30-V3000R200-060Q0-US / MASS POWER PD065E-D1C0AVU. Pre-scan these models of AC Adapters and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all bandwidths, RB configurations and modulations.
Worst Case:	1. AC Adapter Worst Condition: MASS POWER PD065E-D1C0AVU 2. The EUT is designed to be positioned on the Z-axis only.

3.3.1 LTE Band 2C

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	18700(1860.00 MHz) + 18898(1879.80 MHz) 18801(1870.10 MHz) + 18999(1889.90 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Peak to Average Ratio	18700(1860.00 MHz) + 18898(1879.80 MHz) 18801(1870.10 MHz) + 18999(1889.90 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Bandwidth	18700(1860.00 MHz) + 18898(1879.80 MHz) 18801(1870.10 MHz) + 18999(1889.90 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Conducted Spurious Emissions	18700(1860.00 MHz) + 18898(1879.80 MHz) 18801(1870.10 MHz) + 18999(1889.90 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Full RB
Radiated Spurious Emissions below 1GHz	18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK	1 RB / 99 RB 1 RB / 0 RB
Radiated Spurious Emissions above 1GHz	18700(1860.00 MHz) + 18898(1879.80 MHz) 18801(1870.10 MHz) + 18999(1889.90 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK	1 RB / 99 RB 1 RB / 0 RB
Frequency Stability	18700(1860.00 MHz) + 18898(1879.80 MHz) 18902(1880.20 MHz) + 19100(1900.00 MHz)	20 MHz + 20 MHz	QPSK	Full RB

3.3.2 LTE Band 66B

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	132022(1715.00 MHz) + 132121(1724.90 MHz) 132373(1750.10 MHz) + 132472(1760.00 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 49 RB
Peak to Average Ratio	132022(1715.00 MHz) + 132121(1724.90 MHz) 132373(1750.10 MHz) + 132472(1760.00 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 49 RB
Bandwidth	132022(1715.00 MHz) + 132121(1724.90 MHz) 132373(1750.10 MHz) + 132472(1760.00 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 49 RB
Conducted Spurious Emissions	132022(1715.00 MHz) + 132121(1724.90 MHz) 132373(1750.10 MHz) + 132472(1760.00 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Full RB
Radiated Spurious Emissions below 1GHz	132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK	1 RB / 49 RB 1 RB / 0 RB
Radiated Spurious Emissions above 1GHz	132022(1715.00 MHz) + 132121(1724.90 MHz) 132373(1750.10 MHz) + 132472(1760.00 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK	1 RB / 49 RB 1 RB / 0 RB
Frequency Stability	132022(1715.00 MHz) + 132121(1724.90 MHz) 132523(1765.10 MHz) + 132622(1775.00 MHz)	10 MHz + 10 MHz	QPSK	Full RB

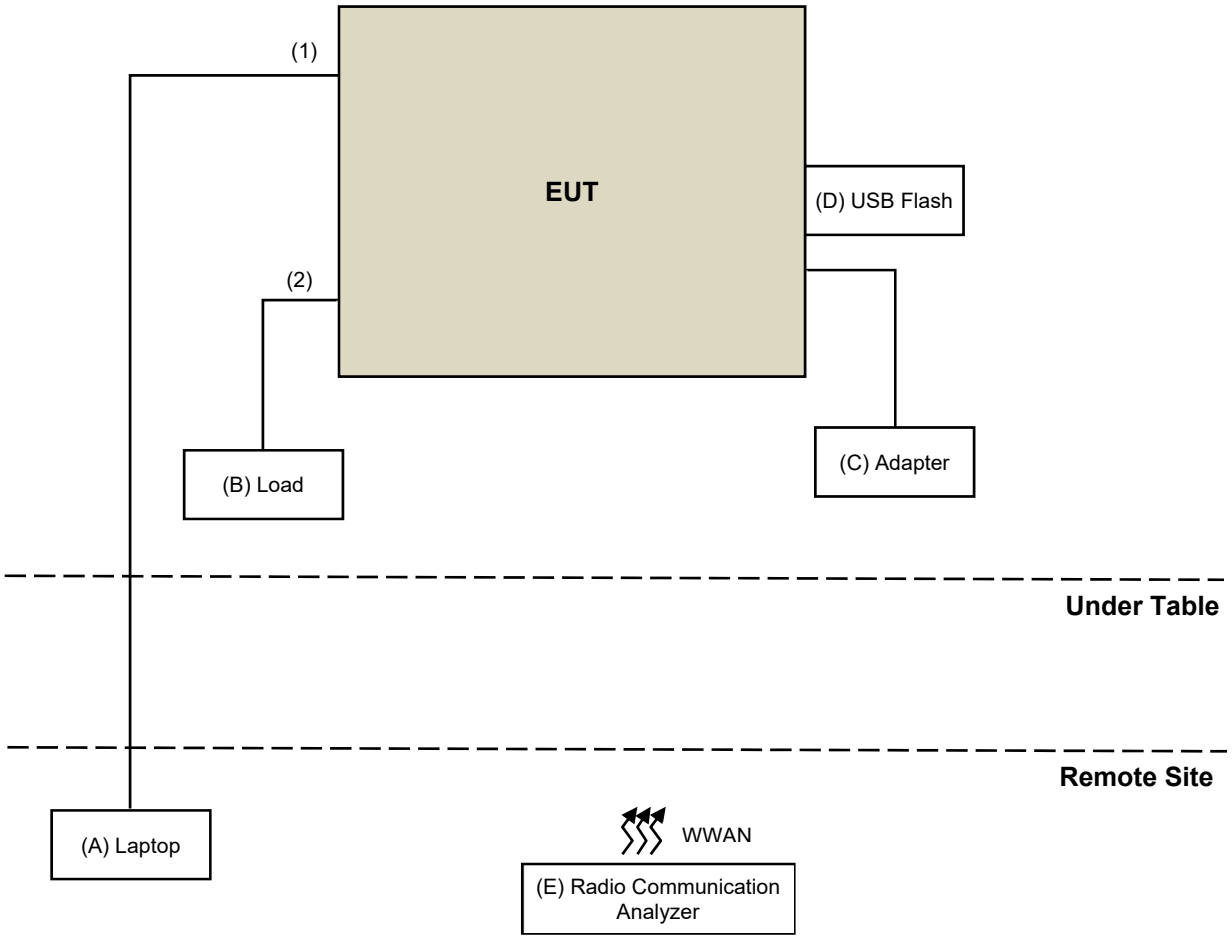
3.3.3 LTE Band 66C

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
Equivalent Isotropically Radiated Power	132072(1720.00 MHz) + 132270(1739.80 MHz) 132323(1745.10 MHz) + 132521(1764.90 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Peak to Average Ratio	132072(1720.00 MHz) + 132270(1739.80 MHz) 132323(1745.10 MHz) + 132521(1764.90 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Bandwidth	132072(1720.00 MHz) + 132270(1739.80 MHz) 132323(1745.10 MHz) + 132521(1764.90 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB 1 RB / 99 RB
Conducted Spurious Emissions	132072(1720.00 MHz) + 132270(1739.80 MHz) 132323(1745.10 MHz) + 132521(1764.90 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Full RB
Radiated Spurious Emissions below 1GHz	132323(1745.10 MHz) + 132521(1764.90 MHz)	20 MHz + 20 MHz	QPSK	1 RB / 99 RB 1 RB / 0 RB
Radiated Spurious Emissions above 1GHz	132072(1720.00 MHz) + 132270(1739.80 MHz) 132323(1745.10 MHz) + 132521(1764.90 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK	1 RB / 99 RB 1 RB / 0 RB
Frequency Stability	132072(1720.00 MHz) + 132270(1739.80 MHz) 132374(1750.20 MHz) + 132572(1770.00 MHz)	20 MHz + 20 MHz	QPSK	Full RB

3.4 Test Program Used and Operation Descriptions

EUT link Simulator has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
B	Load	N/A	N/A	N/A	N/A	Provided by Lab
C	Adapter	MASS POWER	PD065E-D1C0AVU	N/A	N/A	Supplied by applicant
D	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	10	N	0	Provided by Lab
2	RJ-45 Cable	1	1.5	N	0	Provided by Lab

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
PXA Signal Analyzer Keysight	N9030B	MY57140938	2025/3/24	2026/3/23
Radio Communication Analyzer Anritsu	MT8821C	6261806803	2025/2/19	2026/2/18
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/12 ~ 2025/5/16

4.2 Peak to Average Ratio

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.4 Conducted Spurious Emissions

Refer to section 4.1 to get the tested date and information of the instruments.

4.5 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2024/10/14	2025/10/13
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Preamplifier Agilent	8447D	2944A10631	2025/4/27	2026/4/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2024/7/6	2025/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/5/13

4.6 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
	BBHA 9170	9170-480	2024/11/10	2025/11/9
		BBHA9170241	2024/10/18	2025/10/17
		BBHA9170243	2024/11/10	2025/11/9
Preamplifier EMCI	EMC 184045	980116	2024/9/24	2025/9/23
Preamplifier Keysight	83017A	MY53270295	2025/4/27	2026/4/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
RF Coaxial Cable HUBER+SUHNER	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2025/4/27	2026/4/26
	SUCOFLEX 104	Cable-CH4-03(250724)	2025/4/27	2026/4/26
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/5/15

4.7 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Supply Extech Electronics Co.	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	8050A	4660081	2024/6/14	2025/6/13
PXA Signal Analyzer Keysight	N9030B	MY57140938	2025/3/24	2026/3/23
Radio Communication Analyzer Anritsu	MT8821C	6261806803	2025/2/19	2026/2/18
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	MHU-225AU	920842	2024/6/21	2025/6/20

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/16

5 Limits of Test Items

5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

For LTE Band 2C:

Mobile and portable stations are limited to 2 watts EIRP.

For LTE Band 66B, LTE Band 66C:

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

5.2 Peak to Average Ratio

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

5.3 Bandwidth

According to FCC 47 CFR part 2.1049, the occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.

5.4 Conducted Spurious Emissions

For LTE Band 2C:

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. The emission limit equal to –13 dBm.

For LTE Band 66B, LTE Band 66C:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

5.5 Radiated Spurious Emissions below 1GHz

For LTE Band 2C:

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. The emission limit equal to –13 dBm.

For LTE Band 66B, LTE Band 66C:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. The limit of emission is equal to -13 dBm.

5.6 Radiated Spurious Emissions above 1GHz

For LTE Band 2C:

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. The emission limit equal to –13 dBm.

For LTE Band 66B, LTE Band 66C:

According to FCC 47 CFR part 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB. The limit of emission is equal to -13 dBm.

5.7 Frequency Stability

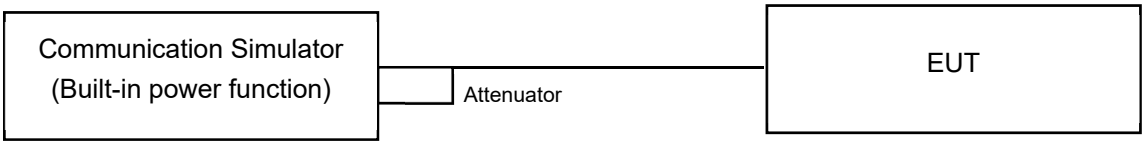
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (authorized frequency block).

6 Test Arrangements

6.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

6.1.1 Test Setup

Conducted Power Measurement:



6.1.2 Test Procedure

Conducted Power Measurement:

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology. The average (rms) power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Maximum EIRP / ERP

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

$EIRP = P_{Meas} + G_T$

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

where

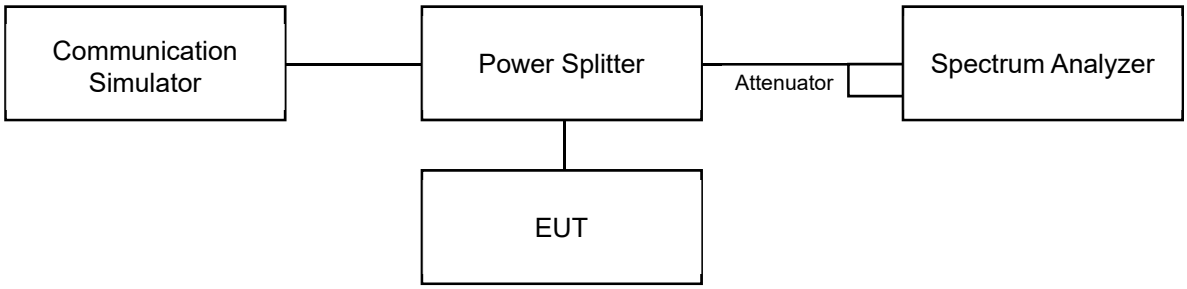
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

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

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

6.2 Peak to Average Ratio

6.2.1 Test Setup

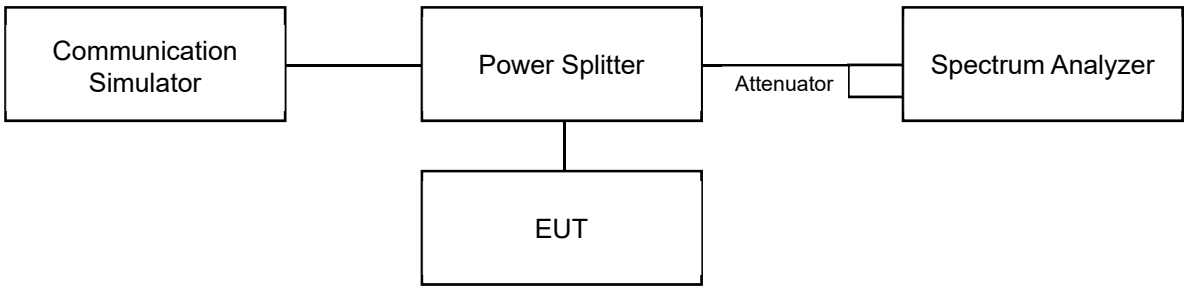


6.2.2 Test Procedure

a. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
b. Set the number of counts to a value that stabilizes the measured CCDF curve;
c. Record the maximum PAPR level associated with a probability of 0.1%.

6.3 Bandwidth

6.3.1 Test Setup



6.3.2 Test Procedure

For the 26 dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

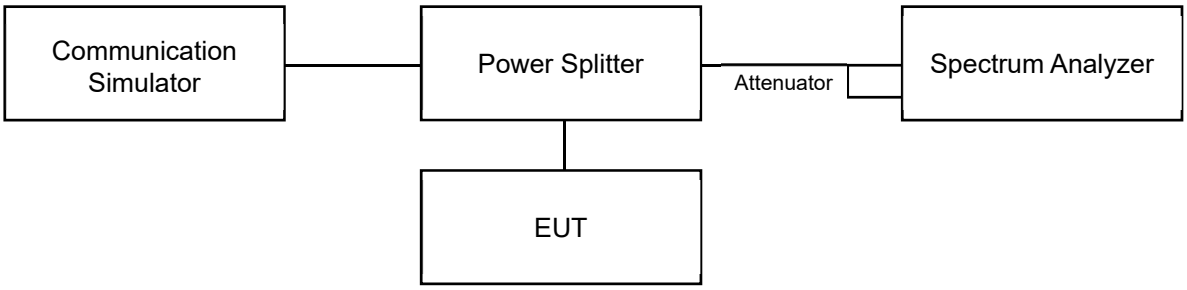
a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target "−X dB" requirement, i.e., if the requirement calls for measuring the −26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
f. Determine the following reference values: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
g. Determine the "−X dB amplitude" as equal to (Reference Value − X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
h. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "−X dB amplitude" determined in step f). If a marker is below this "−X dB amplitude" value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers.
i. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

For the occupied bandwidth measurement method, please refer to section 5.4.4 of ANSI C63.26.

a. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c. Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation. See guidance provided in 4.2.3.
d. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target "−X dB" requirement, i.e., if the requirement calls for measuring the −26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
e. Set spectrum analyzer detection mode to peak, and the trace mode to max hold.
f. Determine the reference value by either of the following:
g. 1) Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
h. 2) Set the EUT to transmit an unmodulated carrier. Set the spectrum analyzer marker to the level of the carrier.
i. Determine the "−X dB amplitude" as equal to (Reference Value − X). Alternatively, this calculation can be performed on the spectrum analyzer using the delta-marker measurement function.
j. If the reference value was determined using an unmodulated carrier, turn the EUT modulation on, then either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise the trace from step f) shall be used for step i).
k. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "−X dB amplitude" determined in step f). If a marker is below this "−X dB amplitude" value it should be as close as possible to this value. The OBW is the positive frequency difference between the two markers. The spectral envelope can cross the "−X dB amplitude" at multiple points. The lowest or highest frequency shall be selected as the frequencies that are the farthest away from the center frequency at which the spectral envelope crosses the "−X dB amplitude."
l. The OBW shall be reported by providing plot(s) of the measuring instrument display, to include markers depicting the relevant frequency and amplitude information (e.g., marker table). The frequency and amplitude axis and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

6.4 Conducted Spurious Emissions

6.4.1 Test Setup



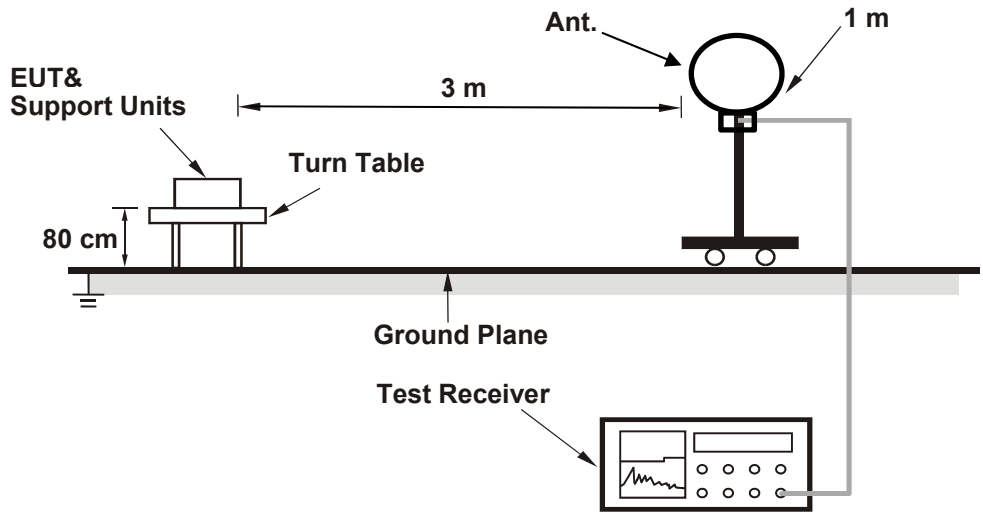
6.4.2 Test Procedure

a. Measurement refer to ANSI C63.26 section 5.7.
b. All measurements were done at 3 channels: low, middle and high operational frequency range.
c. Measuring frequency range is from 9 kHz up to the tenth harmonic of the hightest fundamental frequency or to 40 GHz, whichever is lower. 20 dB attenuation pad is connected with spectrum.
d. The fundamental frequency above 1 GHz, the spectrum set RBW = 1 MHz, VBW = 3 MHz, Detector = Average.
e. The fundamental frequency below 1 GHz, the spectrum set RBW ≥ 100 kHz, VBW ≥ 3 x RBW, Detector = Average.
f. Measuring frequency band edge, narrow RBW (no less than 1% of the OBW) is used for conducted emission measurement.
g. For the emissions measurement method, certain channel BW modes demonstrate compliance by integrating with the smaller RBW allowed by the rule.
For example: Where Reference RBW = 1 MHz and a smaller RBW = 100 kHz is used, worst-case integrated BW power = [Max Measured Value (dBm) with RBW = 100 kHz] + 10* log(1000/100). To compensate for this integration before comparison to the value, the adjusted reference level offset was increase by 10 dB accordingly.
h. Record the maximum power value test plot.

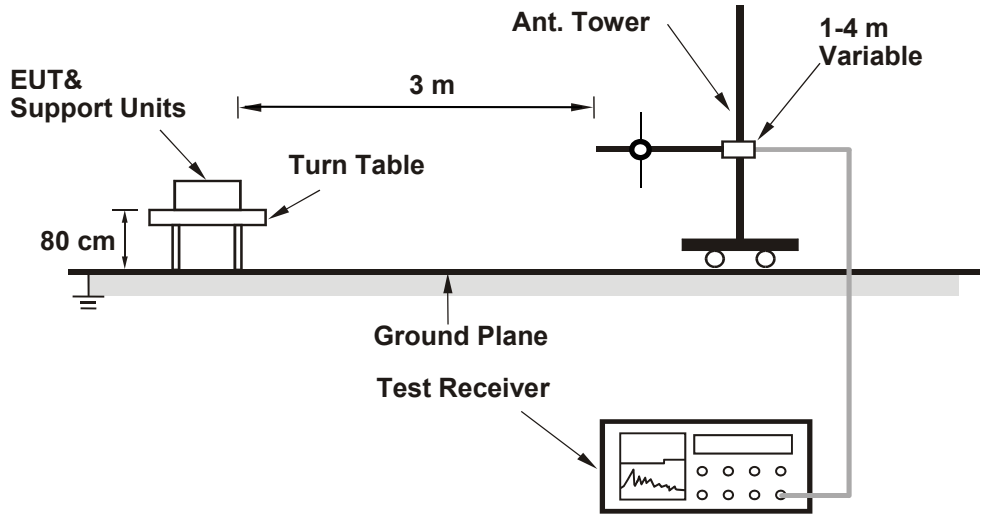
6.5 Radiated Spurious Emissions below 1GHz

6.5.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.5.2 Test Procedure

The EUT is configured to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following ANSI C63.26 section 5.5 and 5.2.7

e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

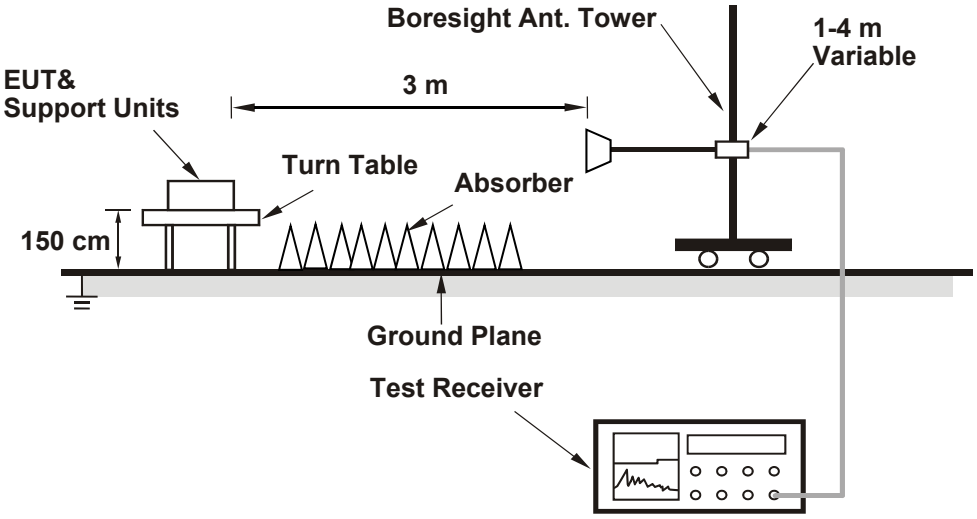
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.
2. The amplitude of spurious emissions in the range 9 kHz to 30 MHz which are attenuated more than 20 dB below the permissible value need not be reported.

6.6 Radiated Spurious Emissions above 1GHz

6.6.1 Test Setup

For radiated emission above 1 GHz



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

6.6.2 Test Procedure

The EUT is configured to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following ANSI C63.26 section 5.5 and 5.2.7

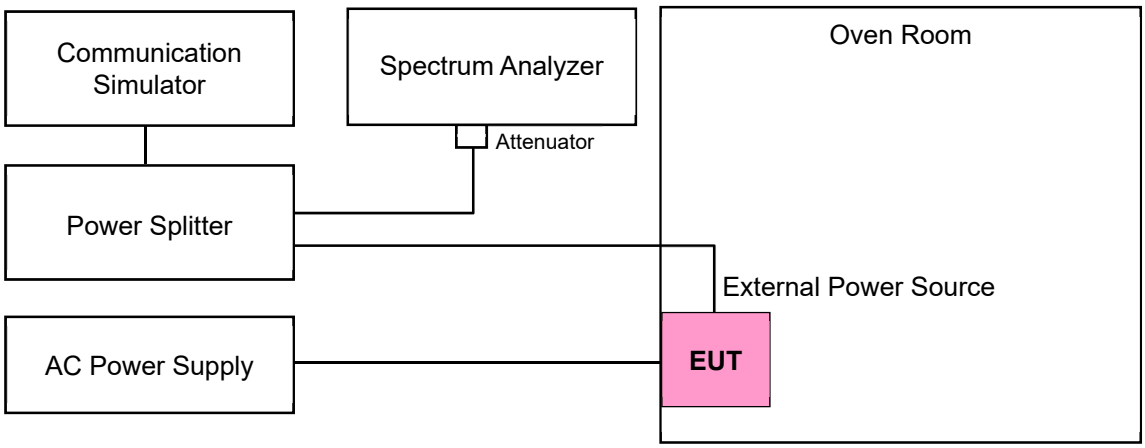
e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.

6.7 Frequency Stability

6.7.1 Test Setup



6.7.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.

c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

Note: The frequency error was recorded frequency error from the communication simulator.

7 Test Results of Test Item

7.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	22°C, 68% RH	Tested By:	Willy Cheng

7.1.1 LTE Band 2C

Confugure	Combination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Contiguous	CA_2C	2	20	QPSK	1	0	18700	1860	2	20	QPSK	1	99	18898	1879.8	12.72
					1	99						1	0			21.86
		2	20	QPSK	1	0	18801	1870.1	2	20	QPSK	1	99	18999	1889.9	12.85
					1	99						1	0			22.30
		2	20	QPSK	1	0	18902	1880.2	2	20	QPSK	1	99	19100	1900	13.27
					1	99						1	0			22.52
Intra Band Contiguous	CA_2C	2	20	16QAM	1	0	18700	1860	2	20	16QAM	1	99	18898	1879.8	11.67
					1	99						1	0			20.75
		2	20	16QAM	1	0	18801	1870.1	2	20	16QAM	1	99	18999	1889.9	11.83
					1	99						1	0			21.29
		2	20	16QAM	1	0	18902	1880.2	2	20	16QAM	1	99	19100	1900	12.22
					1	99						1	0			21.44
Intra Band Contiguous	CA_2C	2	20	64QAM	1	0	18700	1860	2	20	64QAM	1	99	18898	1879.8	10.53
					1	99						1	0			19.64
		2	20	64QAM	1	0	18801	1870.1	2	20	64QAM	1	99	18999	1889.9	10.76
					1	99						1	0			20.23
		2	20	64QAM	1	0	18902	1880.2	2	20	64QAM	1	99	19100	1900	11.16
					1	99						1	0			20.38
Intra Band Contiguous	CA_2C	2	20	256QAM	1	0	18700	1860	2	20	256QAM	1	99	18898	1879.8	7.47
					1	99						1	0			16.51
		2	20	256QAM	1	0	18801	1870.1	2	20	256QAM	1	99	18999	1889.9	7.72
					1	99						1	0			17.18
		2	20	256QAM	1	0	18902	1880.2	2	20	256QAM	1	99	19100	1900	8.13
					1	99						1	0			17.33

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	12.72	22.52	13.67	23.47	33.01
16QAM	11.67	21.44	12.62	22.39	33.01
64QAM	10.53	20.38	11.48	21.33	33.01
256QAM	7.47	17.33	8.42	18.28	33.01

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.2 LTE Band 66B

Confugure	Combination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Contiguous	CA_66B	66	10	QPSK	1	0	132022	1715	66	10	QPSK	1	49	132121	1724.9	17.62
					1	49						1	0			25.97
		66	10	QPSK	1	0	132373	1750.1	66	10	QPSK	1	49	132472	1760	17.12
					1	49						1	0			25.25
		66	10	QPSK	1	0	132523	1765.1	66	10	QPSK	1	49	132622	1775	16.80
					1	49						1	0			24.92
Intra Band Contiguous	CA_66B	66	10	16QAM	1	0	132022	1715	66	10	16QAM	1	49	132121	1724.9	16.61
					1	49						1	0			24.93
		66	10	16QAM	1	0	132373	1750.1	66	10	16QAM	1	49	132472	1760	16.11
					1	49						1	0			24.13
		66	10	16QAM	1	0	132523	1765.1	66	10	16QAM	1	49	132622	1775	15.72
					1	49						1	0			23.86
Intra Band Contiguous	CA_66B	66	10	64QAM	1	0	132022	1715	66	10	64QAM	1	49	132121	1724.9	15.50
					1	49						1	0			23.84
		66	10	64QAM	1	0	132373	1750.1	66	10	64QAM	1	49	132472	1760	15.02
					1	49						1	0			23.08
		66	10	64QAM	1	0	132523	1765.1	66	10	64QAM	1	49	132622	1775	14.64
					1	49						1	0			22.74
Intra Band Contiguous	CA_66B	66	10	256QAM	1	0	132022	1715	66	10	256QAM	1	49	132121	1724.9	12.40
					1	49						1	0			20.77
		66	10	256QAM	1	0	132373	1750.1	66	10	256QAM	1	49	132472	1760	11.92
					1	49						1	0			19.98
		66	10	256QAM	1	0	132523	1765.1	66	10	256QAM	1	49	132622	1775	11.58
					1	49						1	0			19.71

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	EIRP Limit (dBm)
QPSK	16.80	25.97	17.82	26.99	30.00
16QAM	15.72	24.93	16.74	25.95	30.00
64QAM	14.64	23.84	15.66	24.86	30.00
256QAM	11.58	20.77	12.60	21.79	30.00

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.3 LTE Band 66C

Confugure	Combination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Band	BW (MHz)	Modulation	RB Size	RB Offset	UL Channel	UL Frequency (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Contiguous	CA_66C	66	20	QPSK	1	0	132072	1720	66	20	QPSK	1	99	132270	1739.8	17.57
					1	99						1	0			25.81
		66	20	QPSK	1	0	132323	1745.1	66	20	QPSK	1	99	132521	1764.9	17.34
					1	99						1	0			25.36
		66	20	QPSK	1	0	132374	1750.2	66	20	QPSK	1	99	132572	1770	17.25
					1	99						1	0			25.25
Intra Band Contiguous	CA_66C	66	20	16QAM	1	0	132072	1720	66	20	16QAM	1	99	132270	1739.8	16.50
					1	99						1	0			24.71
		66	20	16QAM	1	0	132323	1745.1	66	20	16QAM	1	99	132521	1764.9	16.25
					1	99						1	0			24.27
		66	20	16QAM	1	0	132374	1750.2	66	20	16QAM	1	99	132572	1770	16.21
					1	99						1	0			24.12
Intra Band Contiguous	CA_66C	66	20	64QAM	1	0	132072	1720	66	20	64QAM	1	99	132270	1739.8	15.43
					1	99						1	0			23.64
		66	20	64QAM	1	0	132323	1745.1	66	20	64QAM	1	99	132521	1764.9	15.24
					1	99						1	0			23.22
		66	20	64QAM	1	0	132374	1750.2	66	20	64QAM	1	99	132572	1770	15.15
					1	99						1	0			23.04
Intra Band Contiguous	CA_66C	66	20	256QAM	1	0	132072	1720	66	20	256QAM	1	99	132270	1739.8	12.41
					1	99						1	0			20.58
		66	20	256QAM	1	0	132323	1745.1	66	20	256QAM	1	99	132521	1764.9	12.18
					1	99						1	0			20.18
		66	20	256QAM	1	0	132374	1750.2	66	20	256QAM	1	99	132572	1770	12.11
					1	99						1	0			19.99

Output Power					
Modulation	Minimum Cond. Power (dBm)	Maximum Cond. Power (dBm)	Minimum EIRP (dBm)	Maximum EIRP (dBm)	ERP Limit (dBm)
QPSK	17.25	25.81	18.27	26.83	30.00
16QAM	16.21	24.71	17.23	25.73	30.00
64QAM	15.15	23.64	16.17	24.66	30.00
256QAM	12.11	20.58	13.13	21.60	30.00

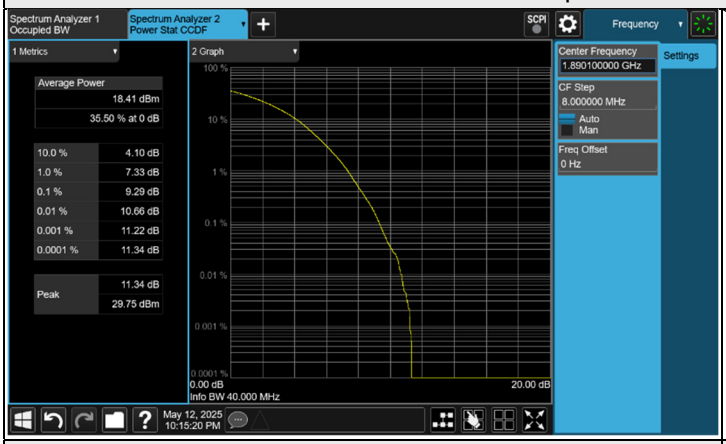
Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.2 Peak to Average Ratio

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng

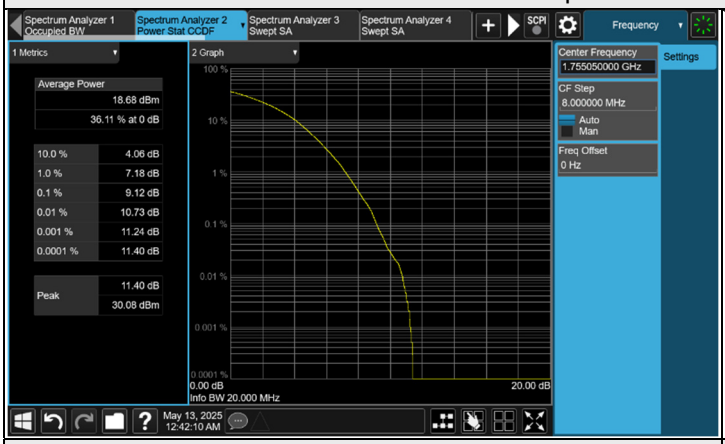
7.2.1 LTE Band 2C

Channel	Frequency (MHz)		Peak to Average Ratio (dB)				Limit
			QPSK	16QAM	64QAM	256QAM	
18700 + 18898	1860	1879.8	6.52	7.39	8.88	8.78	13.00
18801 + 18999	1870.1	1889.9	6.54	7.36	8.94	9.11	
18902 + 19100	1880.2	1900	7.07	8.01	9.25	9.29	

Spectrum Plot of Worst Value	
	
256QAM CH 18902(1880.2 MHz) + 19100(1900 MHz)	

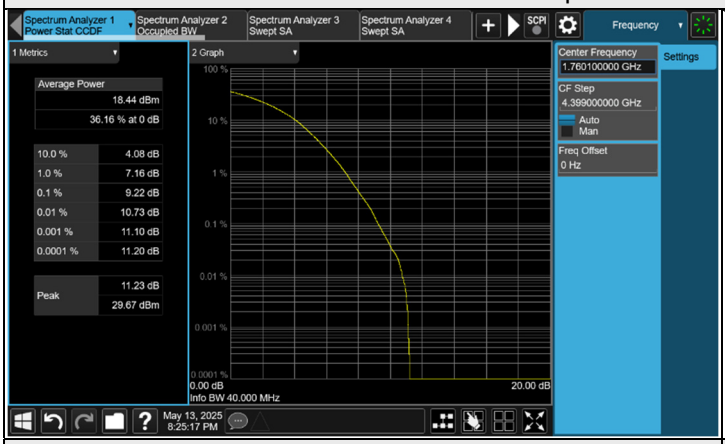
7.2.2 LTE Band 66B

Channel	Frequency (MHz)		Peak to Average Ratio (dB)				Limit
			QPSK	16QAM	64QAM	256QAM	
132022 + 132121	1715	1724.9	7.00	7.77	8.86	8.86	13.00
132373 + 132472	1750.1	1760	7.21	8.05	8.94	9.12	
132523 + 132622	1765.1	1775	6.08	6.98	8.20	8.70	

Spectrum Plot of Worst Value	
	
256QAM CH 132373(1750.1 MHz) + 132472(1760 MHz)	

7.2.3 LTE Band 66C

Channel	Frequency (MHz)		Peak to Average Ratio (dB)				Limit
			QPSK	16QAM	64QAM	256QAM	
132072 + 132270	1720	1739.8	6.32	7.20	8.22	8.75	13.00
132323 + 132521	1745.1	1764.9	7.65	8.39	9.10	9.17	
132374 + 132572	1750.2	1770	7.05	7.88	8.86	9.22	

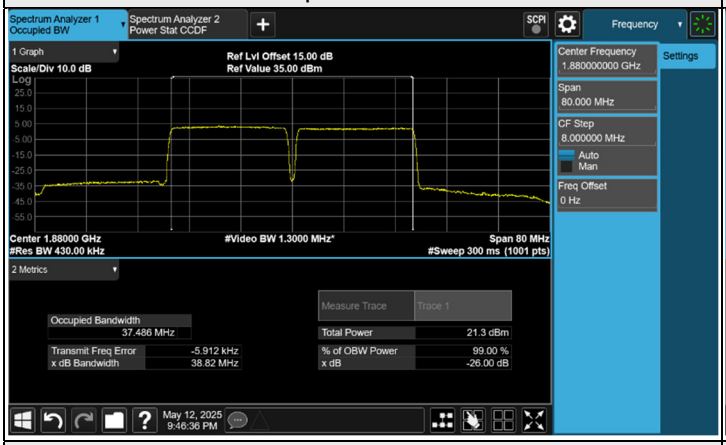
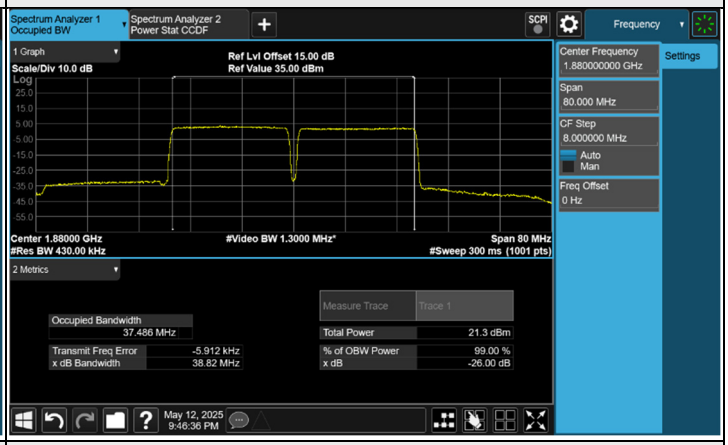
Spectrum Plot of Worst Value	
	
256QAM CH 132374(1750.2 MHz) + 132572(1770 MHz)	

7.3 Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng

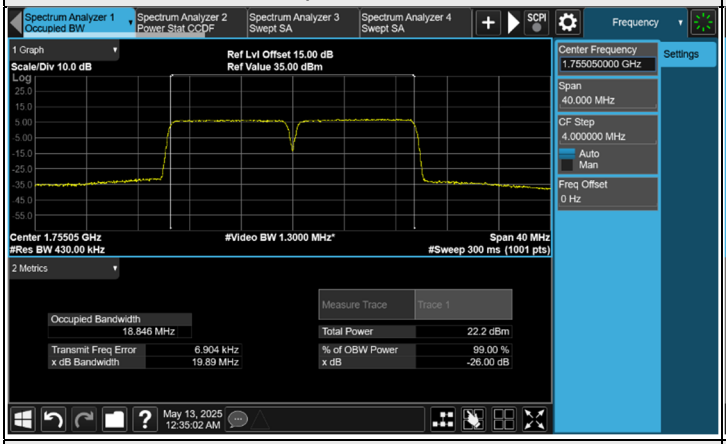
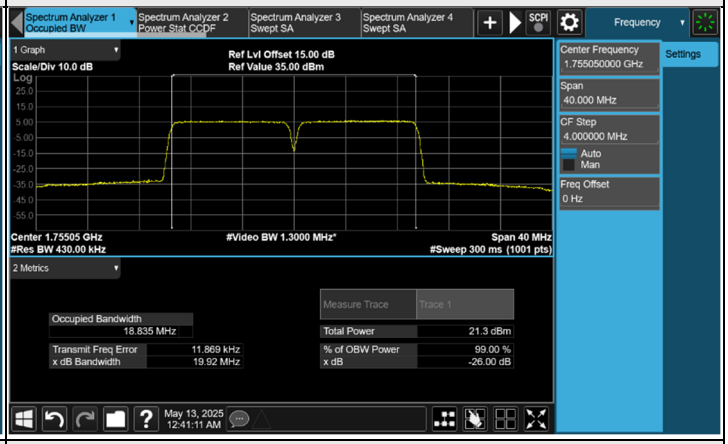
7.3.1 LTE Band 2C

Channel	Frequency (MHz)		Occupied Bandwidth (MHz)				26 dB Bandwidth (MHz)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
18700 + 18898	1860	1879.8	37.394	37.404	37.379	37.377	38.80	38.78	38.80	38.76
18801 + 18999	1870.1	1889.9	37.459	37.486	37.477	37.469	38.82	38.82	38.82	38.81
18902 + 19100	1880.2	1900	37.405	37.418	37.439	37.405	38.81	38.78	38.81	38.80

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 18801(1870.1 MHz) + 18999(1889.9 MHz)	16QAM CH 18801(1870.1 MHz) + 18999(1889.9 MHz)

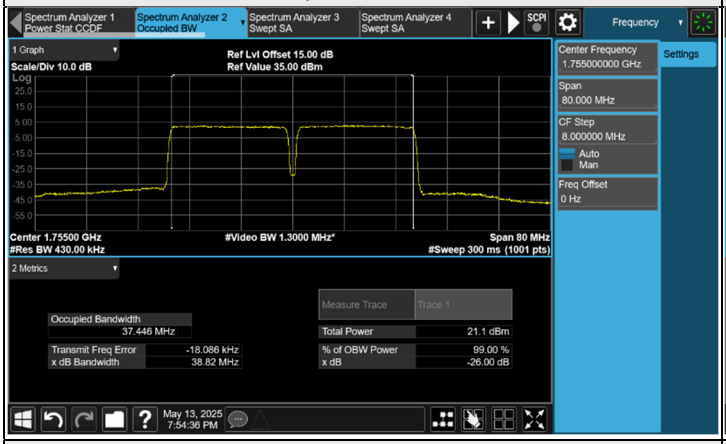
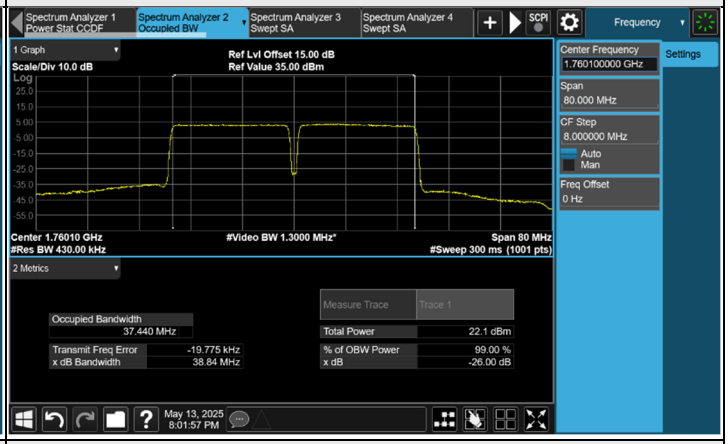
7.3.2 LTE Band 66B

Channel	Frequency (MHz)		Occupied Bandwidth (MHz)				26 dB Bandwidth (MHz)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
132022 + 132121	1715	1724.9	18.842	18.813	18.827	18.817	19.89	19.87	19.89	19.89
132373 + 132472	1750.1	1760	18.846	18.816	18.835	18.826	19.89	19.89	19.92	19.89
132523 + 132622	1765.1	1775	18.823	18.801	18.817	18.808	19.88	19.86	19.88	19.88

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 132373(1750.1 MHz) + 132472(1760 MHz)	64QAM CH 132373(1750.1 MHz) + 132472(1760 MHz)

7.3.3 LTE Band 66C

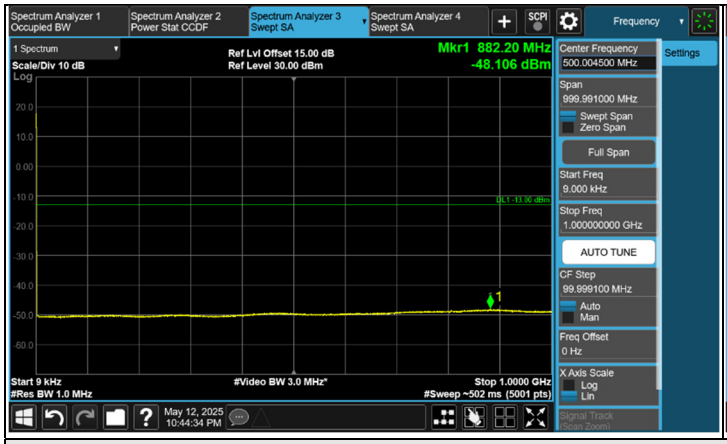
Channel	Frequency (MHz)		Occupied Bandwidth (MHz)				26 dB Bandwidth (MHz)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
132072 + 132270	1720	1739.8	37.430	37.425	37.441	37.400	38.82	38.79	38.82	38.80
132323 + 132521	1745.1	1764.9	37.440	37.446	37.445	37.450	38.82	38.82	38.81	38.80
132374 + 132572	1750.2	1770	37.440	37.435	37.440	37.439	38.84	38.80	38.81	38.83

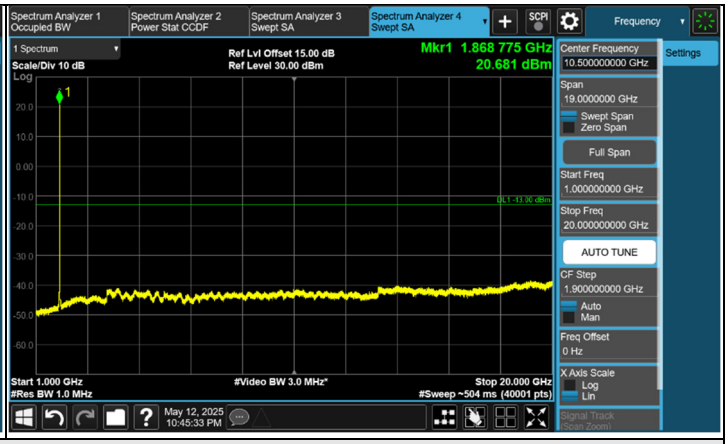
Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 132323(1745.1 MHz) + 132521(1764.9 MHz)	QPSK CH 132374(1750.2 MHz) + 132572(1770 MHz)

7.4 Conducted Spurious Emissions

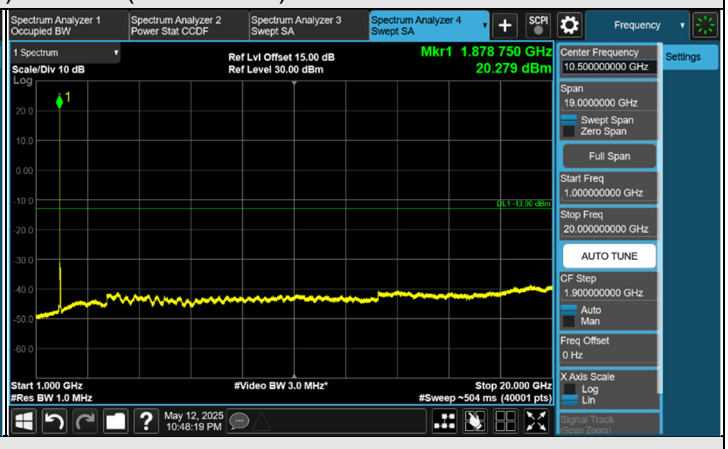
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	21°C, 69% RH	Tested By:	Willy Cheng

7.4.1 LTE Band 2C

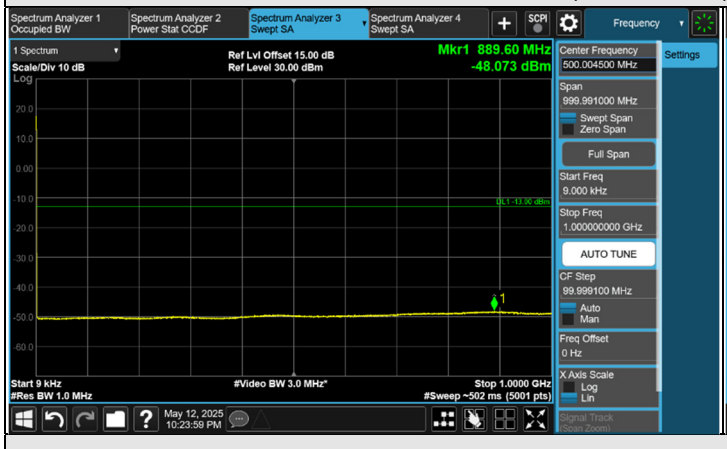


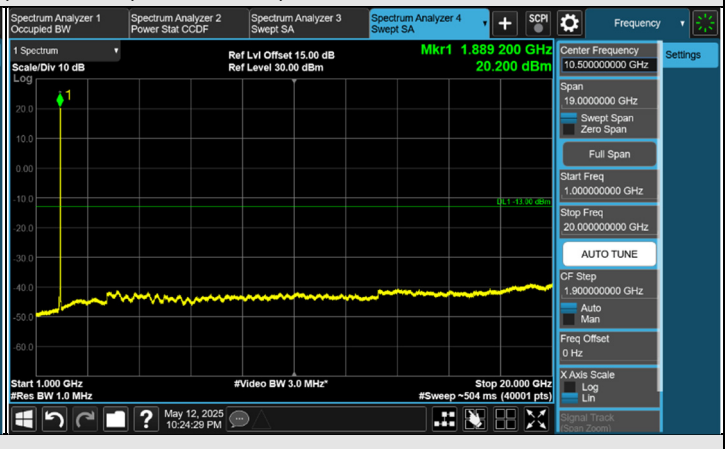


CH 18700 (1860.0 MHz) + 18898 (1879.8 MHz)



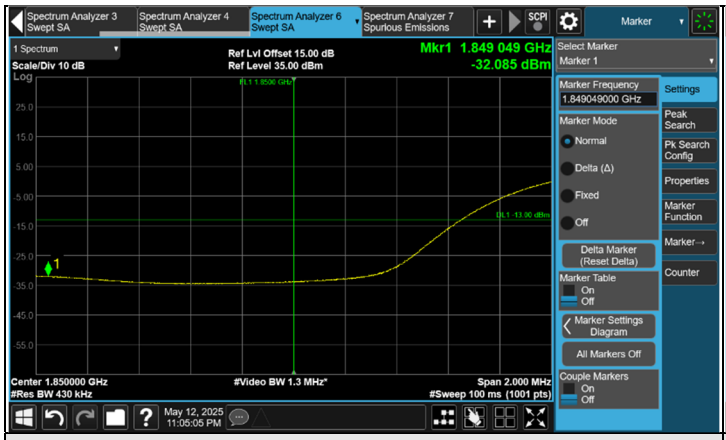
CH 18801 (1870.1 MHz) + 18999 (1889.9 MHz)



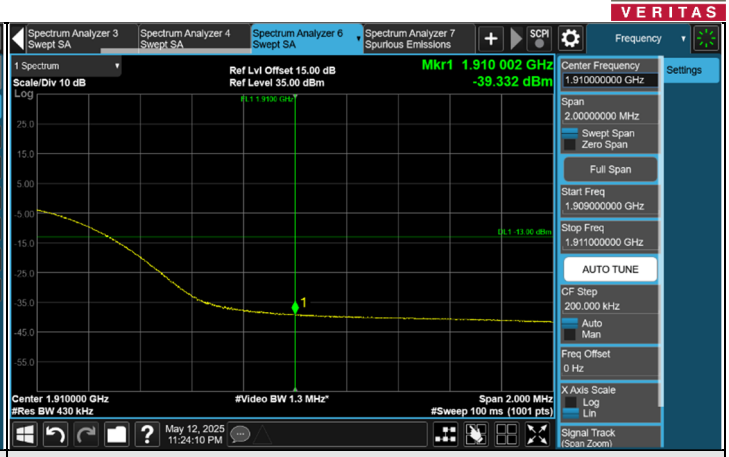


CH 18902 (1880.2 MHz) + 19100 (1900.0 MHz)

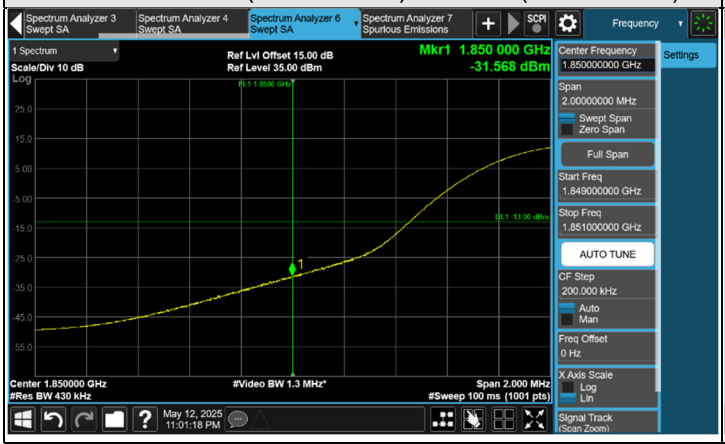
Note: The signal at 9 kHz is IF signal from spectrum analyzer.



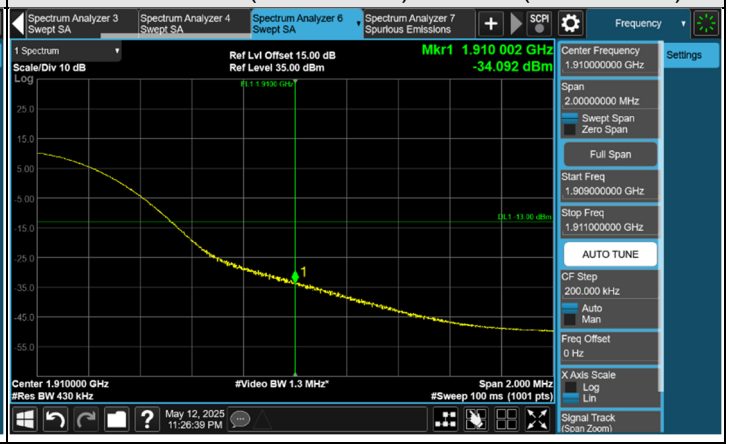
FULL CH 18700 (1860.0 MHz) + 18898 (1879.8 MHz)



FULL CH 18902 (1880.2 MHz) + 19100 (1900.0 MHz)

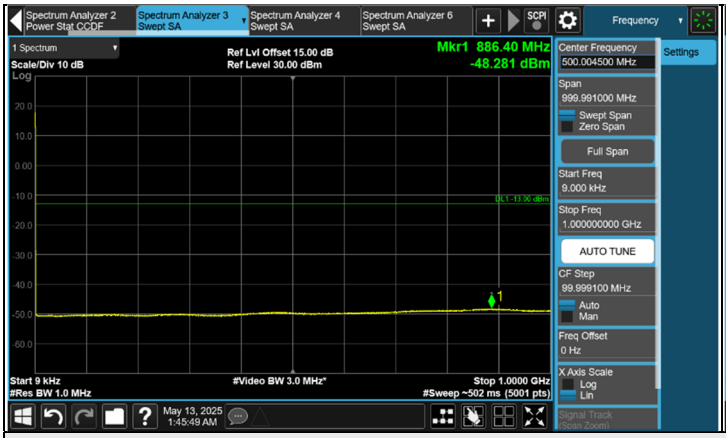


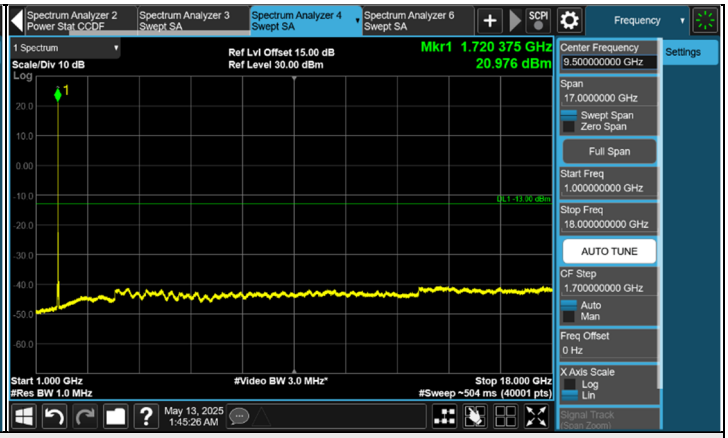
1RB CH 18700 (1860.0 MHz) + 18898 (1879.8 MHz)



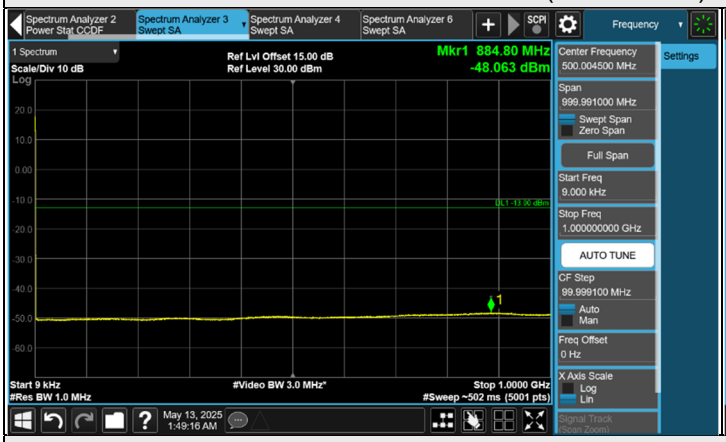
1RB CH 18902 (1880.2 MHz) + 19100 (1900.0 MHz)

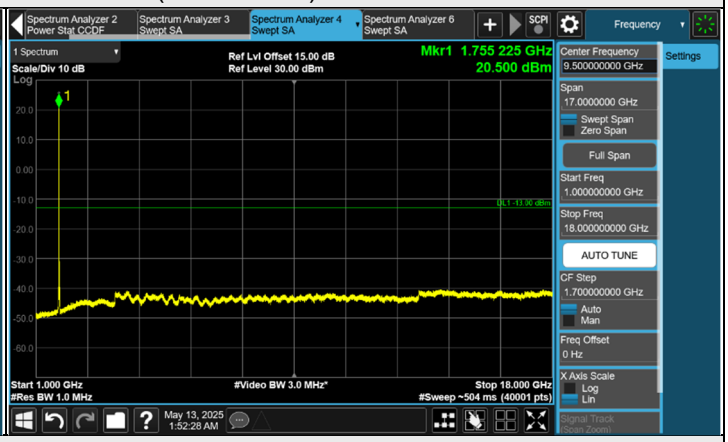
7.4.2 LTE Band 66B



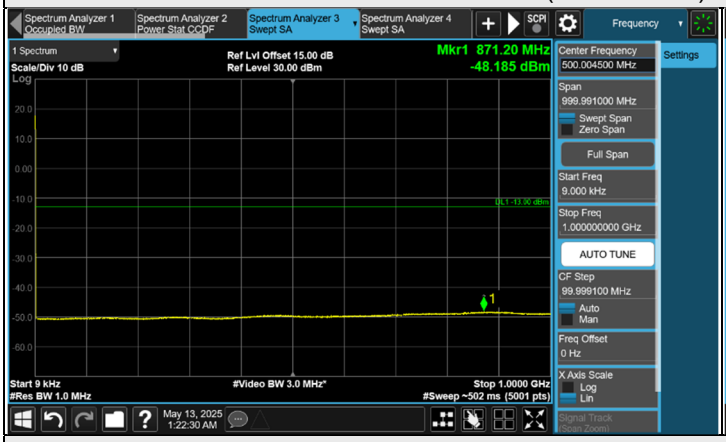


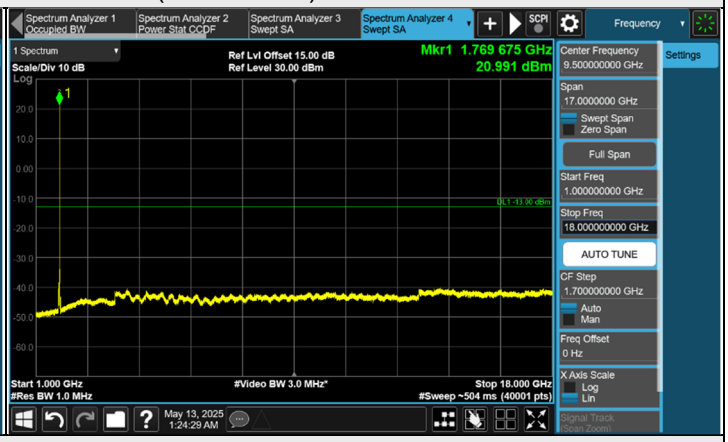
CH 132022(1715.0 MHz) + CH 132121(1724.9 MHz)





CH 132373(1750.1 MHz) + CH 132472(1760.0 MHz)





CH 132523(1765.1 MHz) + CH 132622(1775.0 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.