FCC Test Report

Report Reference No.: **HK2502110488-18E**

FCC ID : **2BNQ8-K8ACTIVE**

Compiled by
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Date of issue ..... : Mar. 27, 2025

Testing Laboratory Name..... : **Shenzhen HUAK Testing Technology Co., Ltd.**

Address ..... : 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Applicant's name ..... : **AOZORA WIRELESS INC.**

Address ..... : 8605 Santa Monica Blvd 30327, West Hollywood California 90069 United States

Test specification ..... **:**

Standard..... **: FCC CFR Title 47 Part 2, Part 22H**

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Test item description ..... **:** Rugged Tablet

Trade Mark ..... : AOZORA

Manufacturer ..... : **AOZORA WIRELESS INC.**

Model/Type reference ..... : K8 Active

Series Models ..... : K8

Ratings ..... : DC 5V from Type-C or DC 3.86V from Battery

Modulation ..... : QPSK, 16QAM

Hardware version ..... : V2.0

Software version ..... : V2.0

Frequency ..... : LTE Band 26

Result ..... : **PASS**

TESTREPORT

Test Report No. :	HK2502110488-18E	Mar. 27, 2025 Date of issue

Equipment under Test	:	Rugged Tablet
Model /Type	:	K8 Active
Series Models	:	K8
Applicant	:	**AOZORA WIRELESS INC.**
Address	:	8605 Santa Monica Blvd 30327, West Hollywood California 90069 United States
Manufacturer	:	**AOZORA WIRELESS INC.**
Address	:	8605 Santa Monica Blvd 30327, West Hollywood California 90069 United States

Test result	Pass

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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** Modified History **

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Mar. 27, 2025	Jason Zhou

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1. Summary

1.1 Test Standards

The tests were performed according to following standards:

FCC Part 2: Frequency Alloca-Tions And Radio Treaty Mat-Ters; General Rules And Reg-Ulations.

FCC Part 22Subpart H: Private Land Mobile Radio Services.

ANSI/TIA-603-E-2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

ANSI C63.26-2015: IEEE/ANSI Standard for Compliance Testing of Transmitters Used in Licensed Radio
Services.

FCC KDB 971168D01 v03r01 Power Meas License Digital Systems.

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1.2 Test Description

Test Item	FCC Rule No.	Requirements	Verdict
Effective(Isotropic) Radiated Output Power	§2.1046, §22.913	EIRP ≤ 7W	Pass
Peak-Average Ratio	§22.917	FCC:Limit≤13dB	Pass
Modulation Characteristics	§2.1047	Digital modulation	Pass
Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	§2.1051, §22.917	≤ -13dBm/1%*EBW, In1MHz bands immediately outside and adjacent to The frequency block.	Pass
Spurious Emission at Antenna Terminals	§2.1051, §22.917	≤-13dBm/1MHz, from9kHz to 10th harmonics but outside authorized Operating frequency ranges.	Pass
Field Strength of Spurious Radiation	§2.1051, §22.917	≤ -13dBm/1MHz.	Pass
Frequency Stability	§2.1055, §22.355,	FCC: within authorized frequency block.	Pass
NOTE 1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

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2. EUT Description

Product Name:	Rugged Tablet
Model :	K8 Active
Series Models:	K8
Trade Mark:	AOZORA
Tx Frequency:	LTE Band 26: 824 MHz ~ 849 MHz
Rx Frequency:	LTE Band 26: 869MHz ~ 894 MHz
Bandwidth:	LTE Band 26: 1.4MHz /3MHz /5MHz /10MHz /15MHz
Type of Modulation:	QPSK/16QAM
Antenna Type:	FPC Antenna
Antenna Gain:	LTE Band 26: 0.81dBi
Power Supply:	DC 5V from Type-C or DC 3.86V from Battery

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3. General Information

3.1. Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test Mode:	
Operation mode:	Keep the EUT in continuous transmitting with modulation
The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.	

Description Operation Frequency

LTE Band 26(1.4MHz)		LTE Band 26(3MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26797	824.7	26805	825.5
26915	836.5	26915	836.5
27033	848.3	27025	847.5
LTE Band 26(5MHz)		LTE Band 26(10MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
26815	826.5	26840	829.0
26915	836.5	26915	836.5
27015	846.5	26990	844.0
LTE Band 26(15MHz)			
Channel	Frequency (MHz)		
26865	831.5		
26915	836.5		
26965	841.5		

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3.2. Test Mode

All modes and data rates and positions were investigated.
Test modes are chosen to be reported as the worst case configuration below:

Test Mode		
Band	**Radiated TCs**	**Conducted TCs**
LTE Band 26	QPSK Link (1.4MHz / 3MHz / 5MHz / 10MHz/ 15MHz)	16QAM Link (1.4MHz / 3MHz / 5MHz / 10MHz/ 15MHz)

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas License Digital Systems v03 with maximum output power. Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

3.3. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

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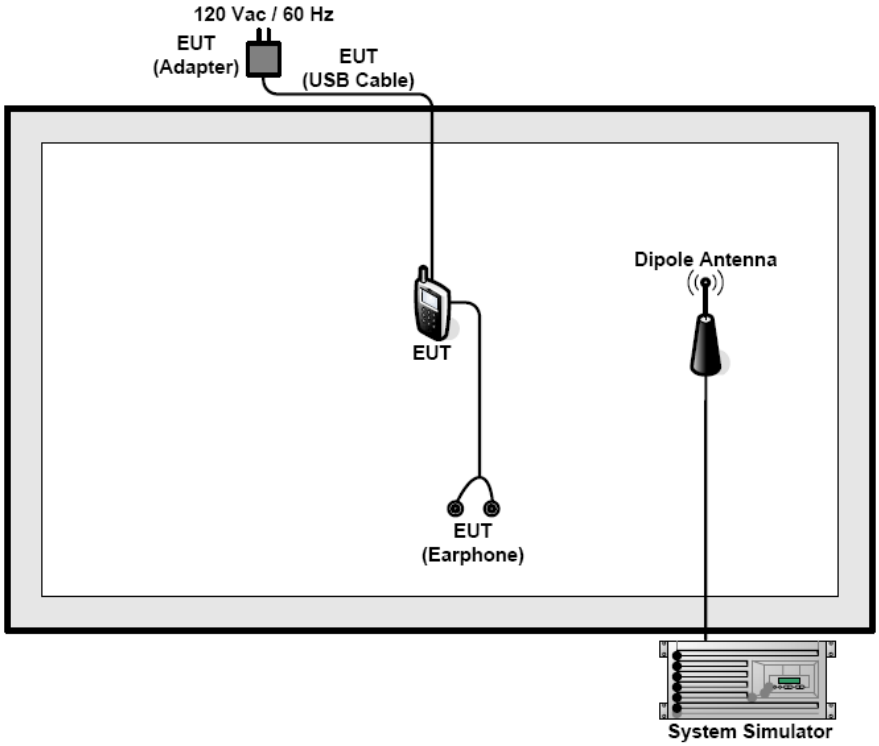
3.4. Configuration of Tested System



3.5. Measurement Results Explanation Example

For all conducted test items:

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

Offset = RF cable loss + attenuator factor.

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3.6. Equipments Used during the Test

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	L.I.S.N.	R&S	ENV216	HKE-002	2024/02/20	2025/02/19
2	L.I.S.N.	R&S	ENV216	HKE-059	2024/02/20	2025/02/19
3	EMI Test Receiver	R&S	ESR	HKE-005	2024/02/20	2025/02/19
4	Spectrum analyzer	Agilent	N9020A	HKE-117	2024/02/20	2025/02/19
5	Spectrum analyzer	R&S	FSV3044	HKE-126	2024/02/20	2025/02/19
6	Preamplifier	EMCI	EMC051845S	HKE-006	2024/02/20	2025/02/19
7	Preamplifier	Schwarzbeck	BBV 9743	HKE-016	2024/02/20	2025/02/19
8	Preamplifier	A.H. Systems	SAS-574	HKE-182	2024/02/20	2025/02/19
9	6dB Attenuator	Pasternack	6db	HKE-184	2024/02/20	2025/02/19
10	EMI Test Receiver	Rohde & Schwarz	ESR-7	HKE-010	2024/02/20	2025/02/19
11	Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	2024/02/21	2026/02/20
12	Loop Antenna	COM-POWER	AL-130R	HKE-014	2024/02/21	2026/02/20
13	Horn Antenna	Schwarzbeck	9120D	HKE-013	2024/02/21	2026/02/20
14	EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	/	/
15	EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	/	/
16	RF Automatic control unit	Tonscend	JS0806-1	HKE-096	2024/02/20	2025/02/19
17	High pass filter unit	Tonscend	JS0806-F	HKE-055	2024/02/20	2025/02/19
18	Wireless Communication Test Set	R&S	CMU200	HKE-026	2024/02/20	2025/02/19
19	Wireless Communication Test Set	R&S	CMW500	HKE-027	2024/02/20	2025/02/19
20	High-low temperature chamber	Guangke	HT-80L	HKE-118	2024/06/10	2025/06/09
21	Temperature and humidity meter	Boyang	HTC-1	HKE-075	2024/06/10	2025/06/09
22	RF Test Software	Tonscend	JS1120 Version 3.1.46	HKE-183	/	/
23	RSE Test Software	Tonscend	JS36-RSE 5.0.0	HKE-184	/	/

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Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	L.I.S.N.	R&S	ENV216	HKE-002	2025/02/19	2026/02/18
2	L.I.S.N.	R&S	ENV216	HKE-059	2025/02/19	2026/02/18
3	EMI Test Receiver	R&S	ESR	HKE-005	2025/02/19	2026/02/18
4	Spectrum analyzer	Agilent	N9020A	HKE-117	2025/02/19	2026/02/18
5	Spectrum analyzer	R&S	FSV3044	HKE-126	2025/02/19	2026/02/18
6	Preamplifier	EMCI	EMC051845S	HKE-006	2025/02/19	2026/02/18
7	Preamplifier	Schwarzbeck	BBV 9743	HKE-016	2025/02/19	2026/02/18
8	Preamplifier	A.H. Systems	SAS-574	HKE-182	2025/02/19	2026/02/18
9	6dB Attenuator	Pasternack	6db	HKE-184	2025/02/19	2026/02/18
10	EMI Test Receiver	Rohde & Schwarz	ESR-7	HKE-010	2025/02/19	2026/02/18
11	Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	2024/02/21	2026/02/20
12	Loop Antenna	COM-POWER	AL-130R	HKE-014	2024/02/21	2026/02/20
13	Horn Antenna	Schwarzbeck	9120D	HKE-013	2024/02/21	2026/02/20
14	EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	/	/
15	EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	/	/
16	RF Automatic control unit	Tonscend	JS0806-1	HKE-096	2025/02/19	2026/02/18
17	High pass filter unit	Tonscend	JS0806-F	HKE-055	2025/02/19	2026/02/18
18	Wireless Communication Test Set	R&S	CMU200	HKE-026	2025/02/19	2026/02/18
19	Wireless Communication Test Set	R&S	CMW500	HKE-027	2025/02/19	2026/02/18
20	High-low temperature chamber	Guangke	HT-80L	HKE-118	2025/02/19	2026/02/18
21	Temperature and humidity meter	Boyang	HTC-1	HKE-075	2025/02/19	2026/02/18
22	RF Test Software	Tonscend	JS1120 Version 3.1.46	HKE-183	/	/
23	RSE Test Software	Tonscend	JS36-RSE 5.0.0	HKE-184	/	/

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4. Facilities and Accreditations

4.1. Information of the Test Laboratory

Shenzhen HUAK Testing Technology Co., Ltd.
Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization：

A2LA Accreditation Code is 4781.01.
FCC Designation Number is CN1229.
Canada IC CAB identifier is CN0045.
CNAS Registration Number is L9589.

4.2. Measurement Uncertainty

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	Above 1GHz	4.32dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

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

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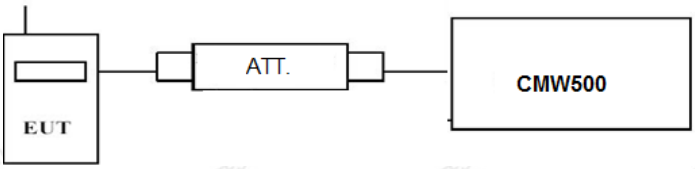
5. Test Results and Measurement Data

5.1. Conducted Output Power Measurement

Test Applicable

During the process of testing, the EUT was controlled via R&S Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation. This result contains output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

Test Configuration



Test Procedure

Conducted Power Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a CMW500 by an Att.
c) EUT Communicate with CMW500 then selects a channel for testing.
d) Add a correction factor to the display CMW500, and then test.

Test Results

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Conducted Measurement:

LTE FDD Band 26				
TX Channel Bandwidth	RB Size/Offset	Frequency (MHz)	Average Power [dBm]	
			QPSK	16QAM
1.4 MHz	1 RB low	824.7	23.85	22.87
		836.5	23.84	22.78
		848.3	23.83	22.84
	1 RB high	824.7	24.39	23.15
		836.5	24.36	23.16
		848.3	24.42	23.15
	50% RB mid	824.7	24.36	23.26
		836.5	24.54	23.20
		848.3	24.43	23.11
	100% RB	824.7	24.51	23.26
		836.5	24.54	23.19
		848.3	24.49	23.20
3 MHz	1 RB low	825.5	23.97	22.86
		836.5	23.94	22.92
		847.5	23.98	22.84
	1 RB high	825.5	24.43	23.22
		836.5	24.36	23.17
		847.5	24.41	23.27
	50% RB mid	825.5	24.61	23.37
		836.5	24.70	23.45
		847.5	24.45	23.28
	100% RB	825.5	23.65	22.64
		836.5	23.66	22.65
		847.5	23.62	22.64
5 MHz	1 RB low	826.5	24.13	23.02
		836.5	24.13	22.96
		846.5	24.04	23.02
	1 RB high	826.5	24.50	23.44
		836.5	24.47	23.41
		846.5	24.52	23.54
	50% RB mid	826.5	24.86	23.88
		836.5	24.85	23.68
		846.5	24.78	23.67
	100% RB	826.5	23.75	23.02
		836.5	23.77	22.96
		846.5	23.82	23.02

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10 MHz	1 RB low	829.0	24.11	23.14
		836.5	23.90	22.90
		844.0	24.33	23.23
	1 RB high	829.0	24.53	23.38
		836.5	24.35	23.15
		844.0	24.71	23.52
	50% RB mid	829.0	24.86	23.65
		836.5	24.68	23.48
		844.0	25.08	23.80
	100% RB	829.0	23.81	22.77
		836.5	23.83	22.83
		844.0	23.85	22.85
15 MHz	1 RB low	831.5	24.45	23.41
		836.5	24.23	23.23
		841.5	24.74	23.70
	1 RB high	831.5	24.51	23.67
		836.5	24.19	23.31
		841.5	24.80	24.00
	50% RB mid	831.5	24.60	23.48
		836.5	24.52	23.31
		841.5	24.91	23.76
	100% RB	831.5	23.58	23.41
		836.5	23.71	23.23
		841.5	23.71	23.70

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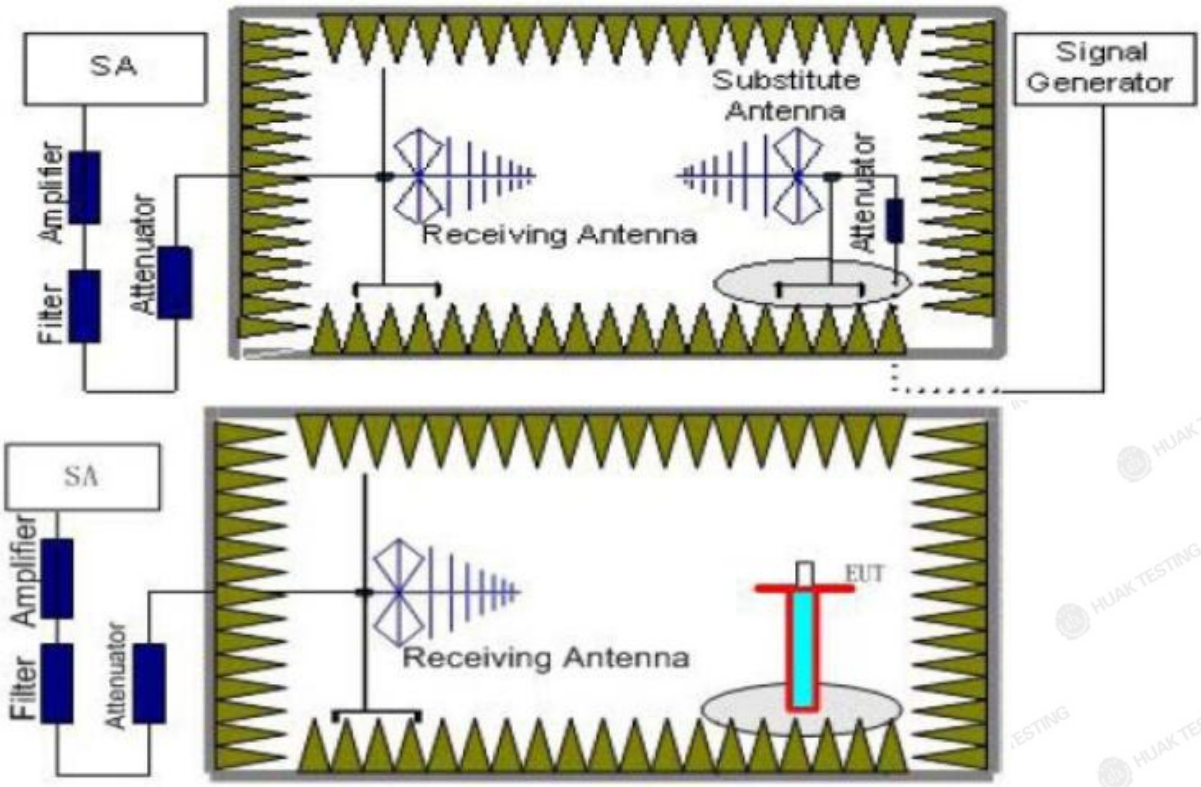
5.2. Radiated Output Power

LIMIT

This is the test for the maximum radiated power from the EUT.
Rule Part 22H.232(b) specifies, "Mobile/portable stations are limited to 7 watts e.i.r.p.

TEST CONFIGURATION



TEST PROCEDURE

1. EUT was placed on a 0.1 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 0.1m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P_r).
4. The EUT shall be replaced by a substitution antenna.In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest isconnected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver.

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5. reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) ,the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test.
   The measurement results are obtained as described below: Power(EIRP)=P_{Mea}- P_{Ag} - P_{cl}+ G_a
   We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power
   Amplifier for substituation test; The measurement results are amend as described below:
   Power(EIRP)=P_{Mea}- P_{cl}+ G_a
7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
8. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST RESULTS

Radiated Measurement:

Remark:

1. *We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case for each Channel Bandwidth of LTE FDD Band 26.*
2. *EIRP=P_{Mea}(dBm)-P_{cl}(dB)+P_{Ag}(dB)+G_a(dBi)*
3. *We measured both Horizontal and Vertical direction, recorded worst case direction.*

LTE FDDBand 26_Channel Bandwidth 1.4MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-18.4	2.42	8.45	36.82	24.45	22.3	38.45	16.15	V
836.5	-17.06	2.46	8.45	36.82	25.75	23.6	38.45	14.85	V
848.3	-18.43	2.53	8.36	36.82	24.22	22.07	38.45	16.38	V

LTE FDDBand 26_Channel Bandwidth 3MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.5	-18.69	2.42	8.45	36.82	24.16	22.01	38.45	16.44	V
836.5	-17.76	2.46	8.45	36.82	25.05	22.9	38.45	15.55	V
847.5	-18.21	2.53	8.36	36.82	24.44	22.29	38.45	16.16	V

LTE FDD Band 26_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-18.3	2.42	8.45	36.82	24.55	22.4	38.45	16.05	V
836.5	-17.19	2.46	8.45	36.82	25.62	23.47	38.45	14.98	V
846.5	-17.89	2.53	8.36	36.82	24.76	22.61	38.45	15.84	V

LTE FDD Band 26_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-18.12	2.42	8.45	36.82	24.73	22.58	38.45	15.87	V
836.5	-17.53	2.46	8.45	36.82	25.28	23.13	38.45	15.32	V
844.0	-17.82	2.53	8.36	36.82	24.83	22.68	38.45	15.77	V

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LTE FDD Band 26_Channel Bandwidth 15MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
831.5	-18.61	2.42	8.45	36.82	24.24	22.09	38.45	16.36	V
836.5	-16.4	2.46	8.45	36.82	26.41	24.26	38.45	14.19	V
841.5	-18.53	2.53	8.36	36.82	24.12	21.97	38.45	16.48	V

LTE FDD Band 26_Channel Bandwidth 1.4MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-18.34	2.42	8.45	36.82	24.51	22.36	38.45	16.09	V
836.5	-17.14	2.46	8.45	36.82	25.67	23.52	38.45	14.93	V
848.3	-17.81	2.53	8.36	36.82	24.84	22.69	38.45	15.76	V

LTE FDD Band 26_Channel Bandwidth 3MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.5	-18.62	2.42	8.45	36.82	24.23	22.08	38.45	16.37	V
836.5	-18.18	2.46	8.45	36.82	24.63	22.48	38.45	15.97	V
847.5	-18.65	2.53	8.36	36.82	24	21.85	38.45	16.6	V

LTE FDD Band 26_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-18.83	2.42	8.45	36.82	24.02	21.87	38.45	16.58	V
836.5	-16.93	2.46	8.45	36.82	25.88	23.73	38.45	14.72	V
846.5	-18.59	2.53	8.36	36.82	24.06	21.91	38.45	16.54	V

LTE FDD Band 26_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-18.74	2.42	8.45	36.82	24.11	21.96	38.45	16.49	V
836.5	-17.73	2.46	8.45	36.82	25.08	22.93	38.45	15.52	V
844.0	-17.82	2.53	8.36	36.82	24.83	22.68	38.45	15.77	V

LTE FDD Band 26_Channel Bandwidth 15MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	EIRP (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
831.5	-17.89	2.42	8.45	36.82	24.96	22.81	38.45	15.64	V
836.5	-16.31	2.46	8.45	36.82	26.5	24.35	38.45	14.1	V
841.5	-18.24	2.53	8.36	36.82	24.41	22.26	38.45	16.19	V

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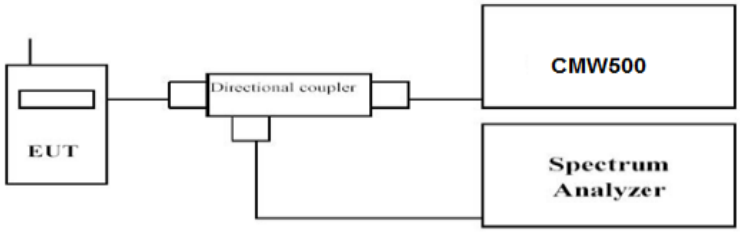
5.3. Peak to Average Ratio

LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

TEST CONFIGURATION



TEST PROCEDURE

1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
3. Set the number of counts to a value that stabilizes the measured CCDF curve;
4. Set the measurement interval as follows:
   1). for continuous transmissions, set to 1 ms;
   2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
5. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS

Remark:

1. *We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case for each Channel Bandwidth of LTE FDD Band 26.*

LTE FDD Band 26				
TX Channel Bandwidth	Frequency (MHz)	RB Size/Offset	PAPR (dB)	
			QPSK	16QAM
1.4 MHz	824.7	*1RB#0*	5.17	6.30
	836.5		5.19	6.18
	848.3		4.55	5.36
3 MHz	825.5	*1RB#0*	5.14	6.31
	836.5		5.24	6.12
	847.5		4.66	5.44
5 MHz	826.5	*1RB#0*	6.31	5.70
	836.5		6.12	5.84
	846.5		5.44	5.37
10 MHz	829.0	*1RB#0*	5.04	6.22
	836.5		5.23	6.13
	844.0		4.64	5.46
15 MHz	831.5	*1RB#0*	4.93	6.04
	836.5		5.13	6.04
	841.5		5.02	5.92

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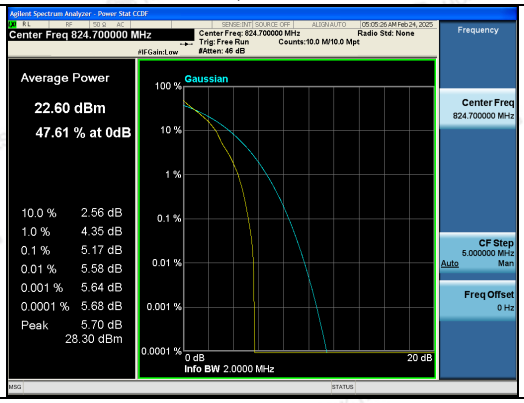
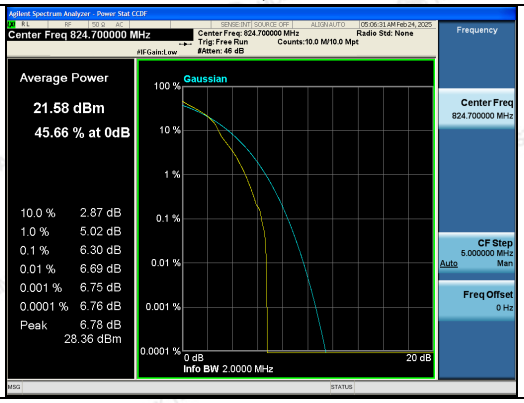
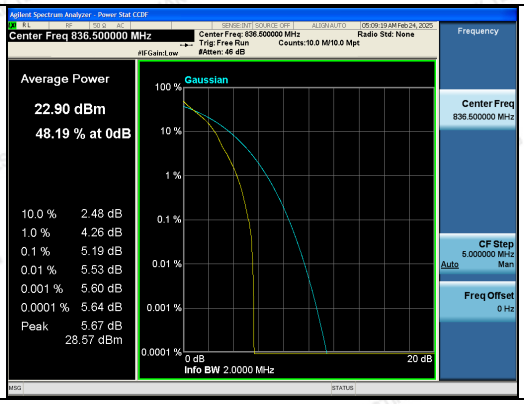
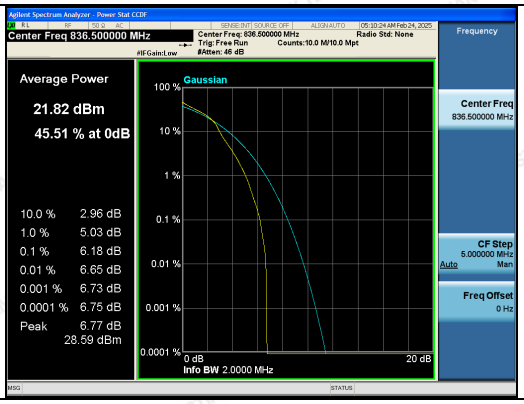
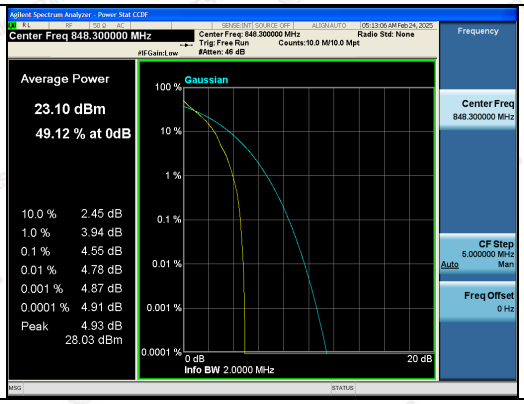
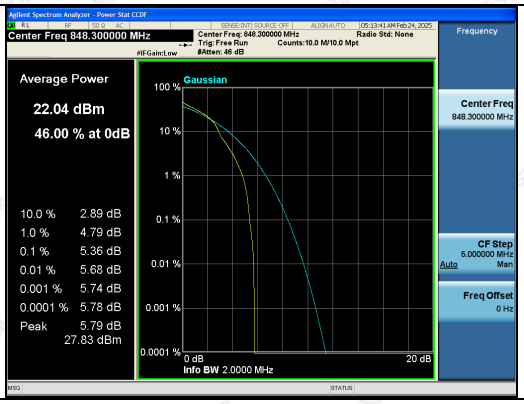
LTE FDD Band 26-1.4MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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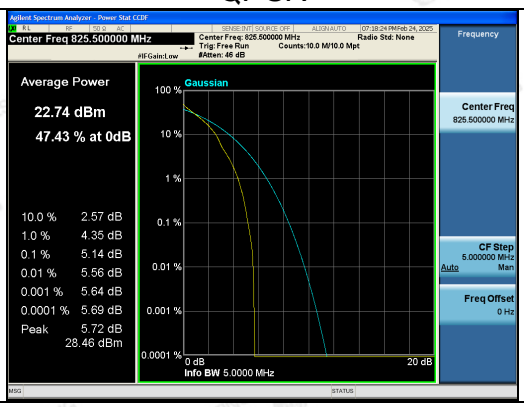
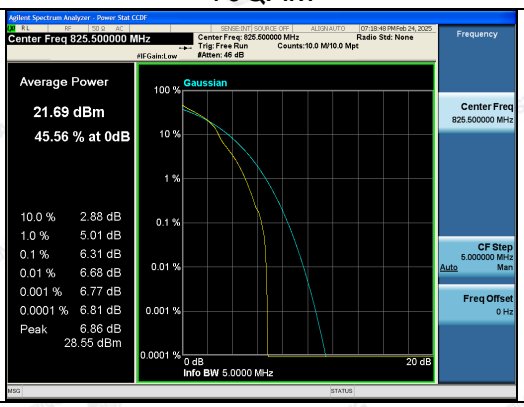
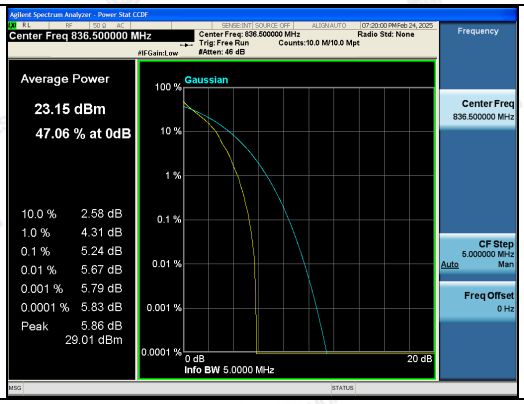
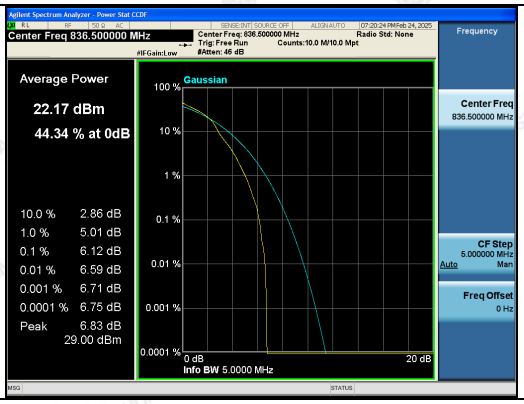
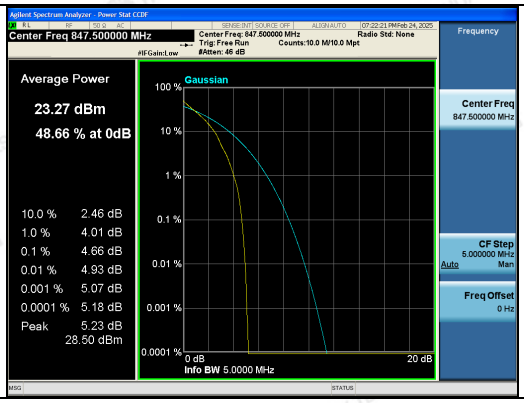
LTE FDD Band 26-3MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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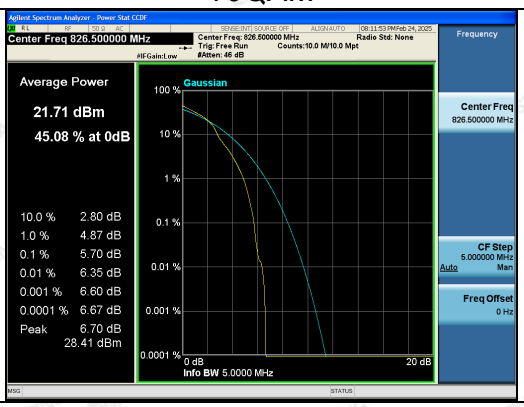
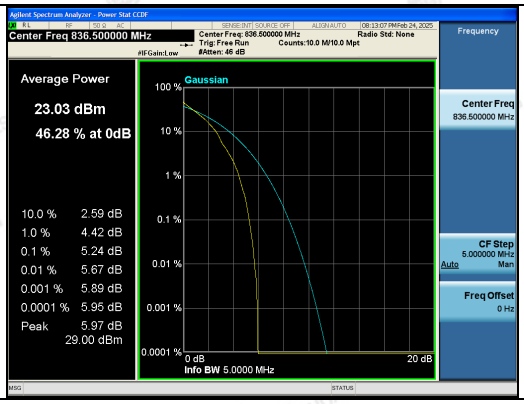
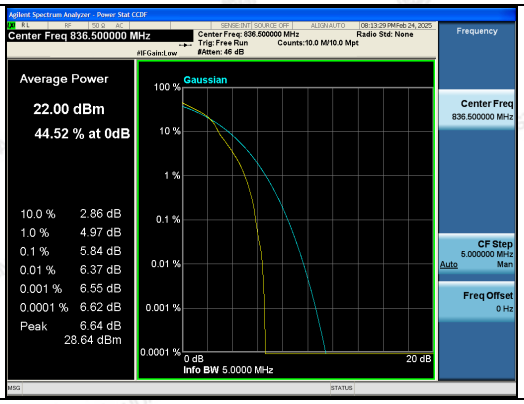
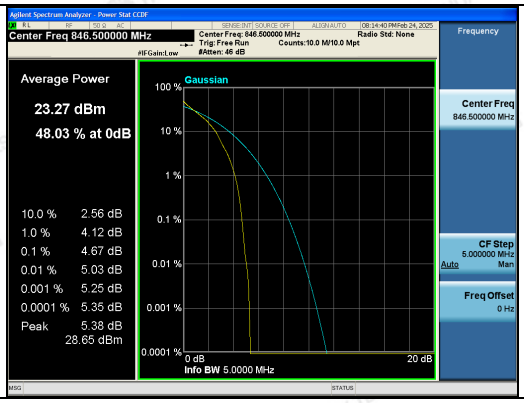
LTE FDD Band 26-5MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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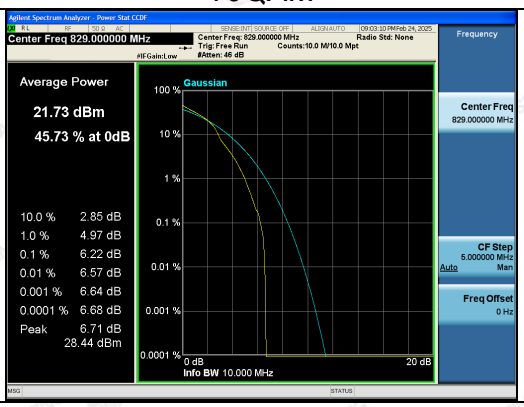
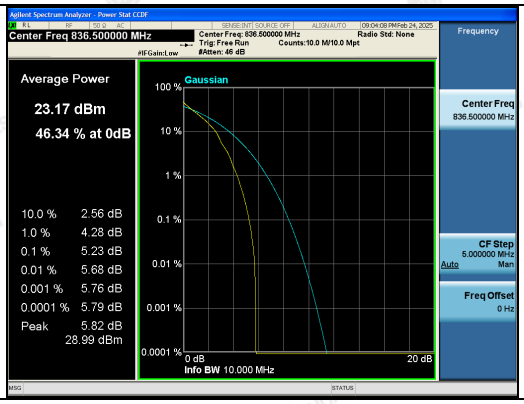
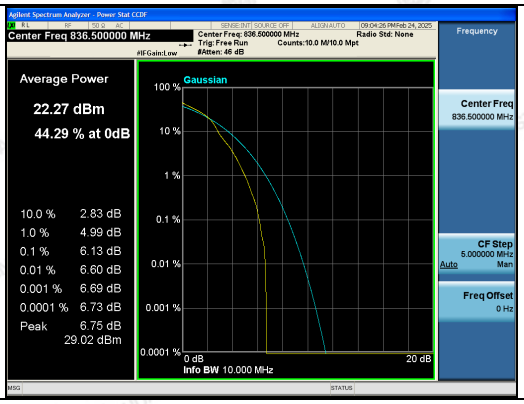
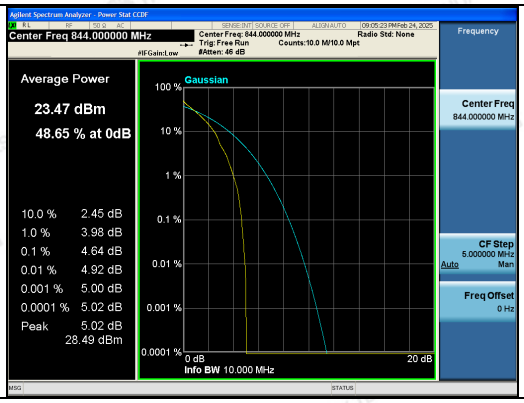
LTE FDD Band 26-10MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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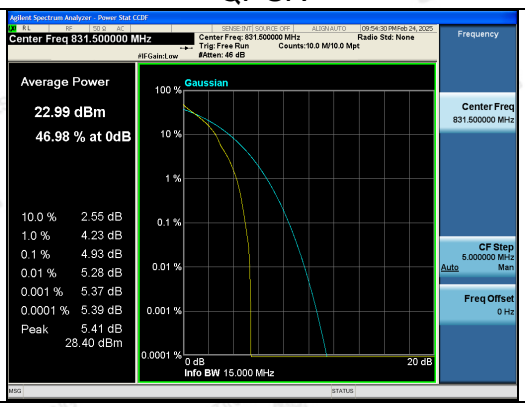
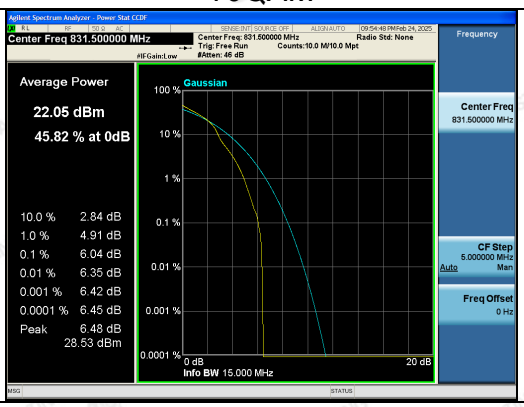
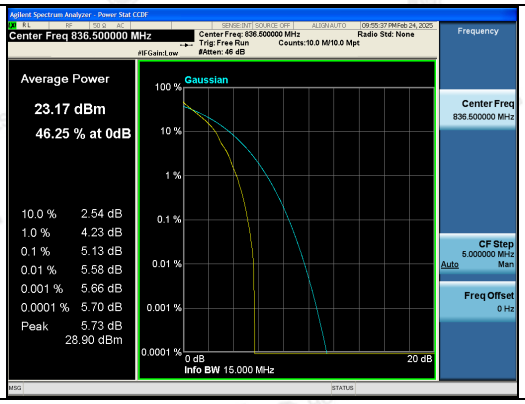
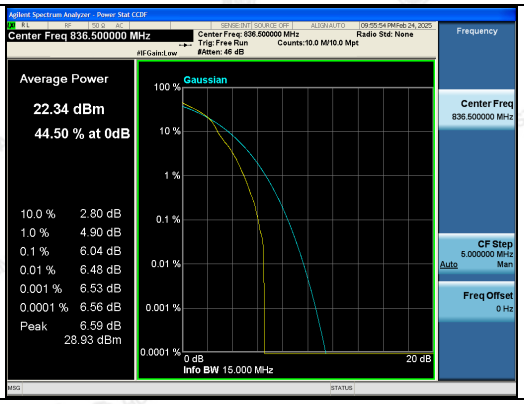
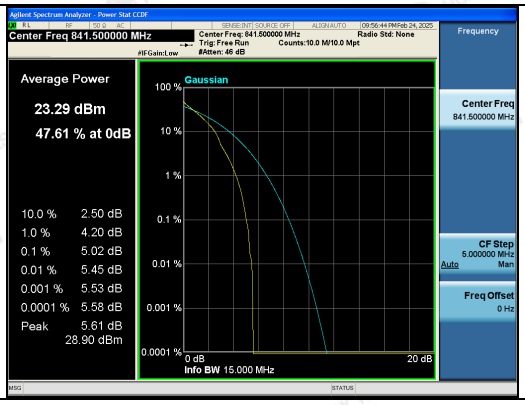
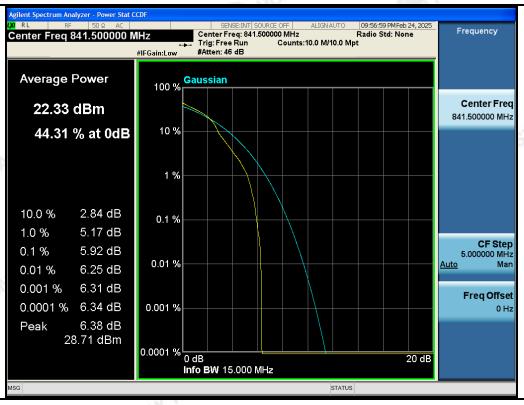
LTE FDD Band 26-15MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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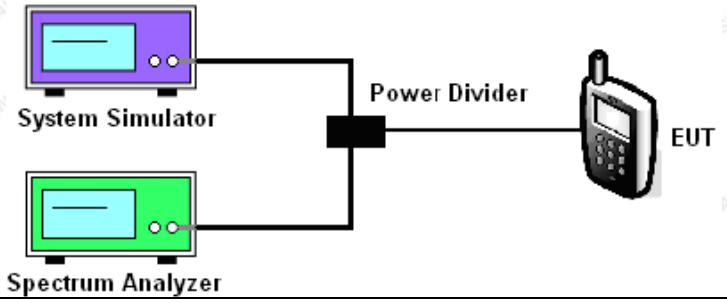
5.4. 99% Occupied Bandwidth and 26dB Bandwidth Measurement

5.4.1. Test Specification

Test Method:	FCC part 2.1049
Limit:	N/A
Test Setup:	
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03 Section 4.2. 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider. 3. The RF output of the EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 4. The 99% occupied bandwidth were measured, set RBW= 1% of OBW, VBW= 3*RBW, sample detector, trace maximum hold. 5. The 26dB bandwidth were measured, set RBW= 1% of EBW, VBW= 3*RBW, peak detector, trace maximum hold.
Test Result:	PASS

TEST RESULTS

Remark:

1. *We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case for each Channel Bandwidth of LTE FDD Band 26.*

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LTE FDD Band 26						
TX Channel Bandwidth	RB Size/Offset	Frequency (MHz)	-26dBc Emission bandwidth (MHz)		99% Occupied bandwidth (MHz)	
			QPSK	16QAM	QPSK	16QAM
1.4 MHz	*6RB#0*	824.7	1.302	1.315	1.0945	1.0987
		836.5	1.291	1.306	1.0979	1.0968
		848.3	1.303	1.273	1.0968	1.0897
3 MHz	*15RB#0*	825.5	2.970	2.979	2.7015	2.6955
		836.5	2.969	2.969	2.6988	2.6968
		847.5	2.976	2.971	2.7029	2.6958
5 MHz	*25RB#0*	826.5	5.042	4.991	4.5112	4.5051
		836.5	5.010	5.027	4.5012	4.5098
		846.5	5.012	5.029	4.5086	4.5288
10 MHz	*50RB#0*	829.0	9.983	9.871	9.0018	9.0041
		836.5	9.949	9.908	8.9811	8.9645
		844.0	9.925	9.857	8.9649	8.9642
15 MHz	*75RB#0*	831.5	14.79	14.76	13.512	13.515
		836.5	14.81	14.79	13.471	13.469
		841.5	14.67	14.69	13.416	13.481

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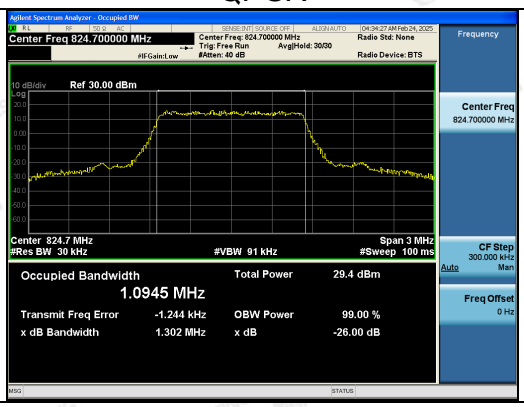
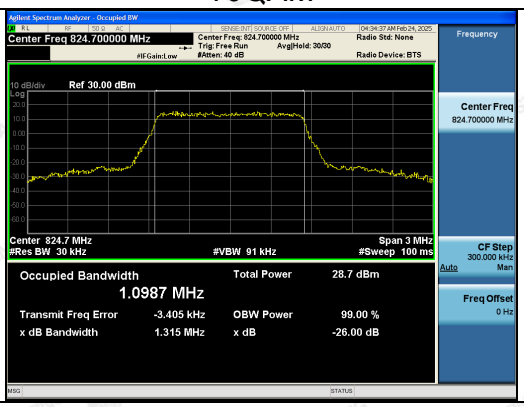
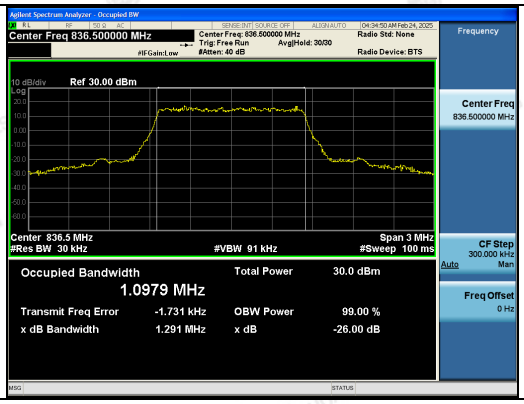
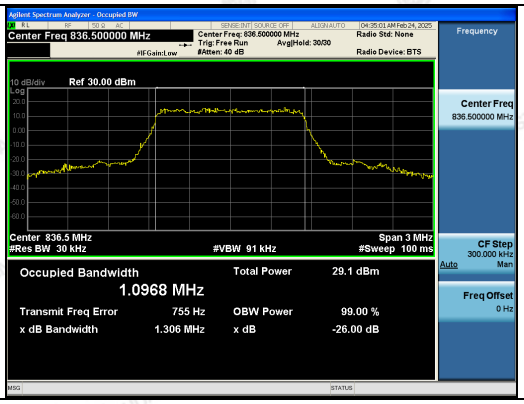
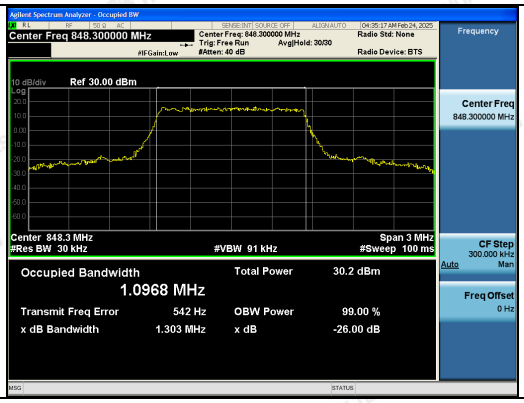
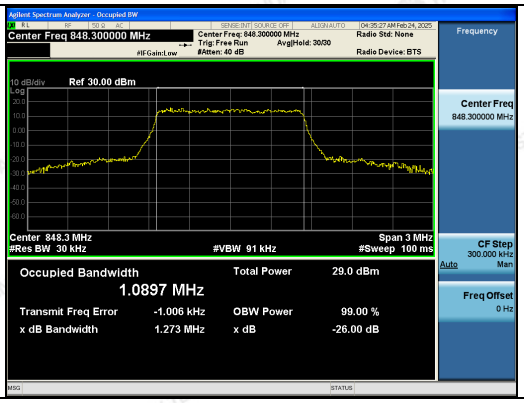
LTE FDD Band 26-1.4MHz Channel Bandwidth	
QPSK	16QAM
	
6RB#0	6RB#0
Low Channel	
	
6RB#0	6RB#0
Middle Channel	
	
6RB#0	6RB#0
High Channel	

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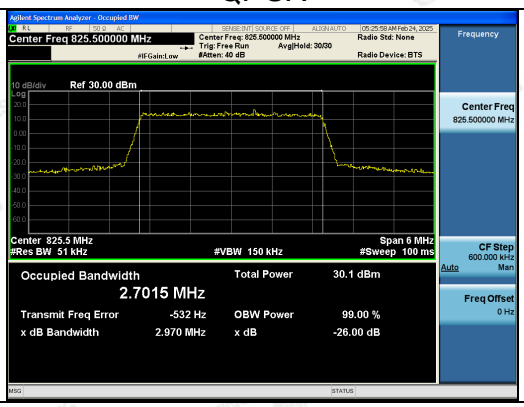
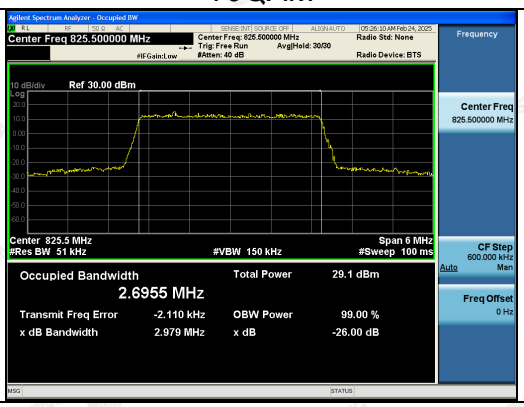
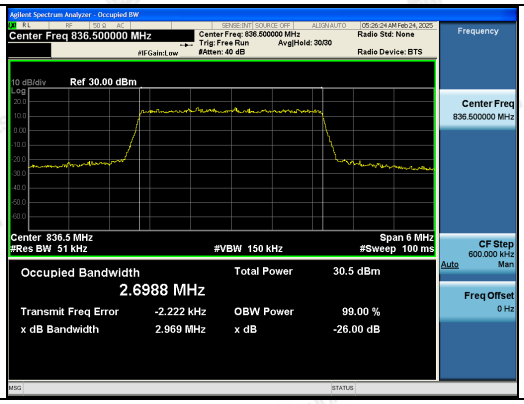
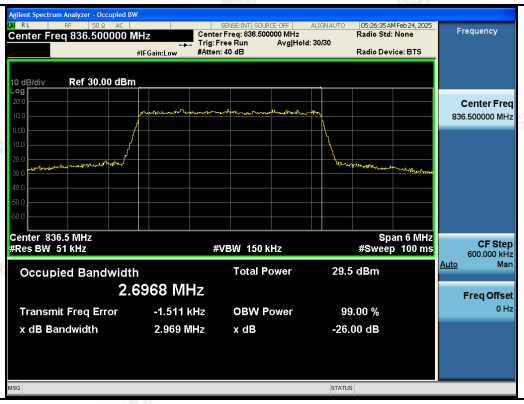
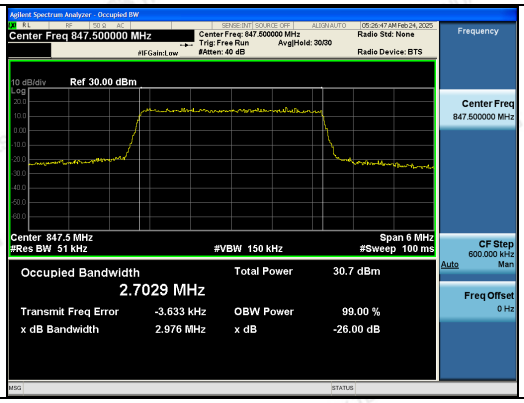
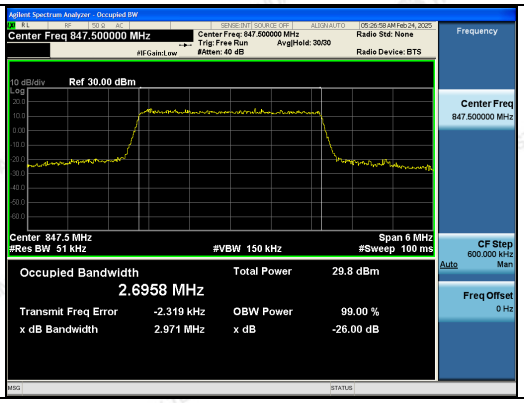
LTE FDD Band 26-3MHz Channel Bandwidth	
QPSK	16QAM
	
15RB#0	15RB#0
Low Channel	
	
15RB#0	15RB#0
Middle Channel	
	
15RB#0	15RB#0
High Channel	

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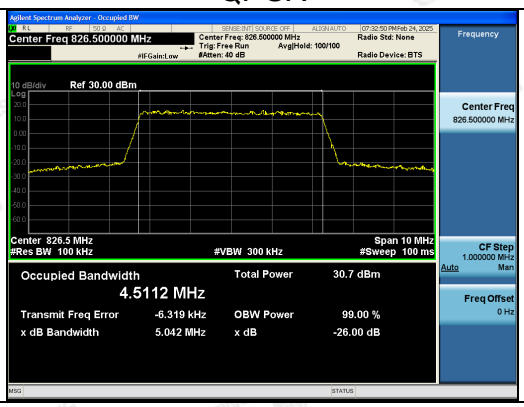
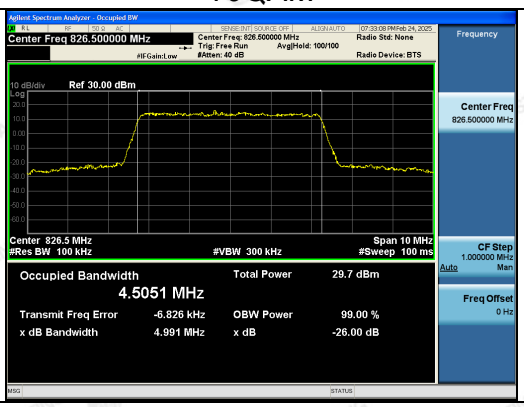
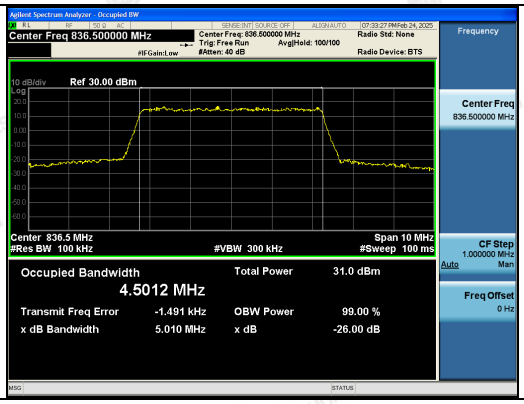
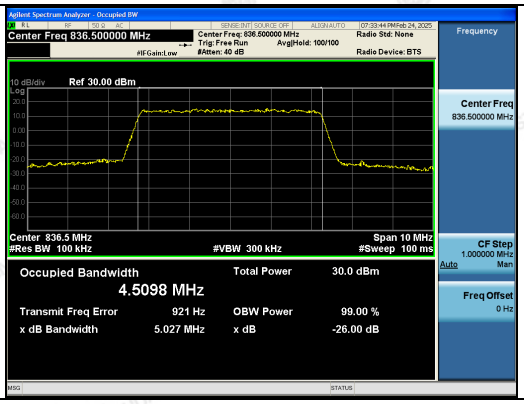
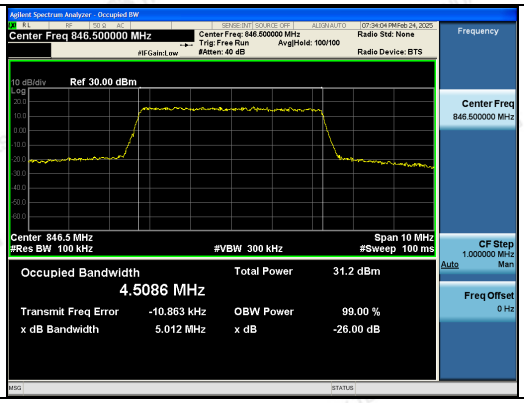
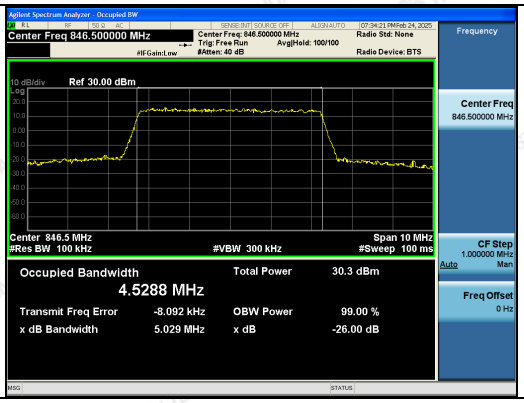
LTE FDD Band 26-5MHz Channel Bandwidth	
QPSK	16QAM
	
25RB#0	25RB#0
Low Channel	
	
25RB#0	25RB#0
Middle Channel	
	
25RB#0	25RB#0
High Channel	

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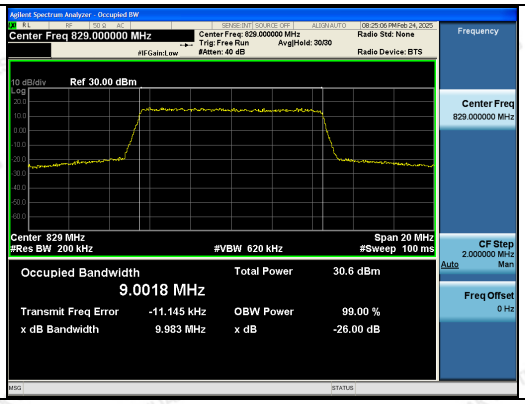
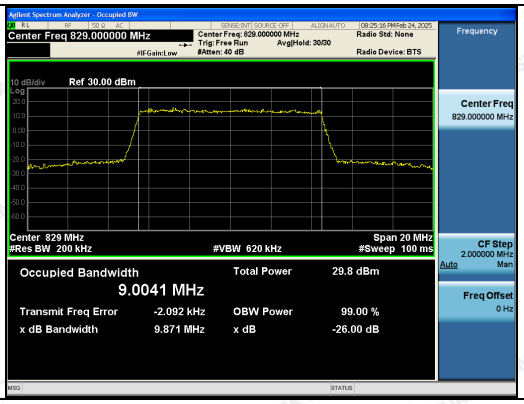
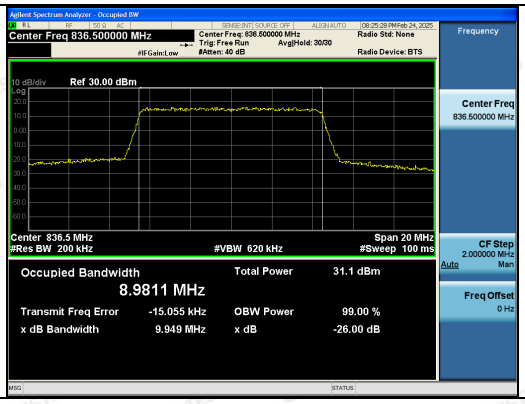
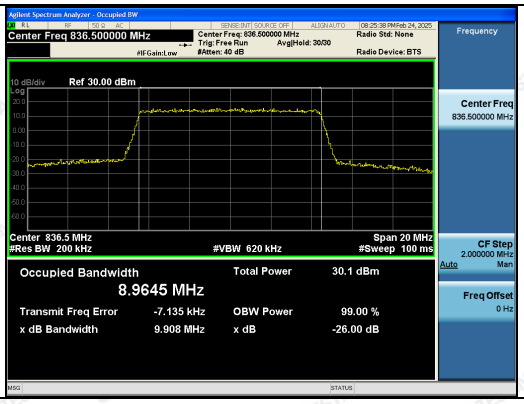
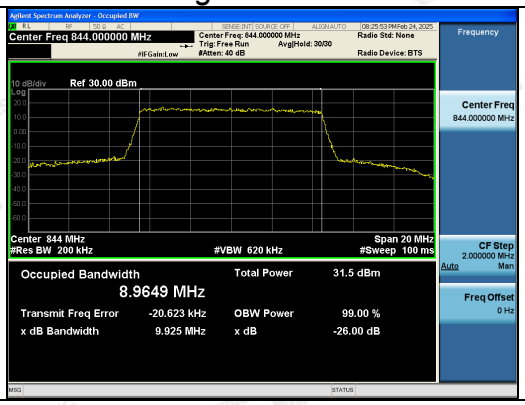
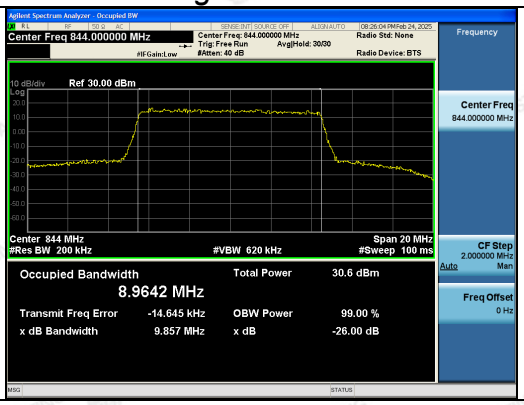
LTE FDD Band 26-10MHz Channel Bandwidth	
QPSK	16QAM
Low Channel	Low Channel
	
50RB#0	50RB#0
Middle Channel	Middle Channel
	
50RB#0	50RB#0
High Channel	High Channel
	
50RB#0	50RB#0

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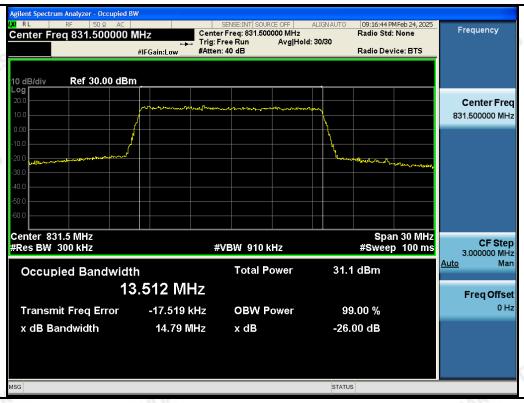
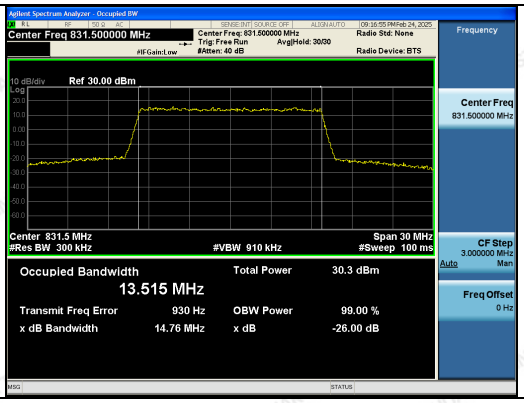
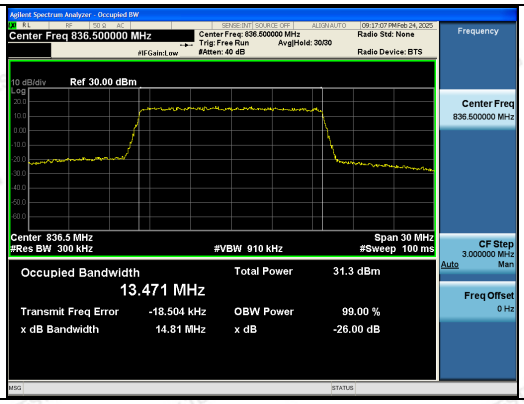
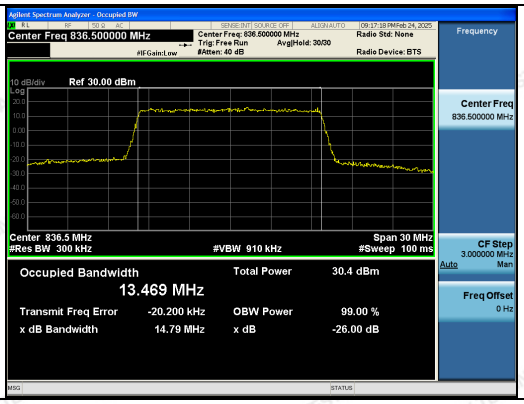
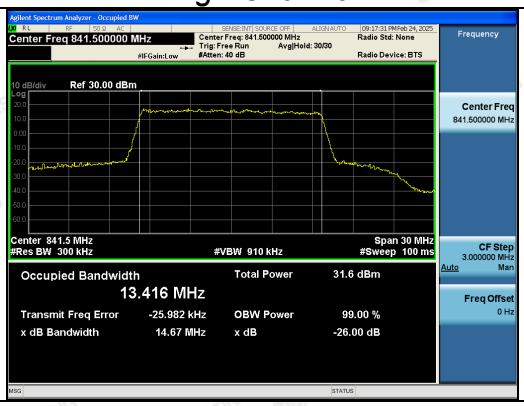
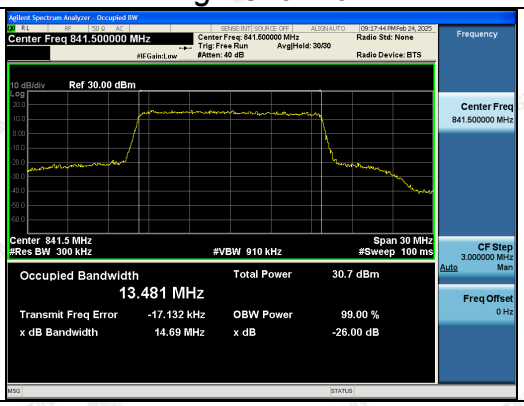
LTE FDD Band 26-15MHz Channel Bandwidth	
QPSK	16QAM
Low Channel	Low Channel
	
75RB#0	75RB#0
Middle Channel	Middle Channel
	
75RB#0	75RB#0
High Channel	High Channel
	
75RB#0	75RB#0

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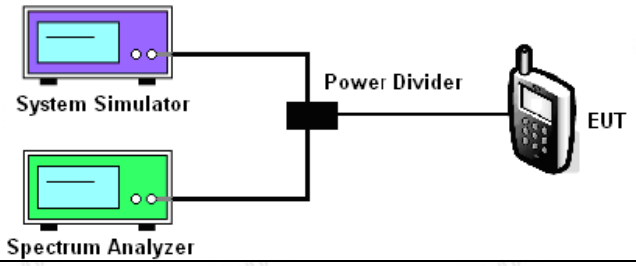
5.5. Band Edge and Conducted Spurious Emission Measurement

5.5.1. Test Specification

Test Requirement:	FCC part 22.917
Test Method:	FCC part2.1051
Limit:	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 + 10log(P) dB.
Test Setup:	
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03 Section 6.0. 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider. 3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement. 4. The band edges of low and high channels for the highest RF powers were measured. 5. The conducted spurious emission for the whole frequency range was taken. 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test Result:	PASS

TEST RESULTS

Remark:

1. *We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case for each Channel Bandwidth of LTE FDD Band 26.*

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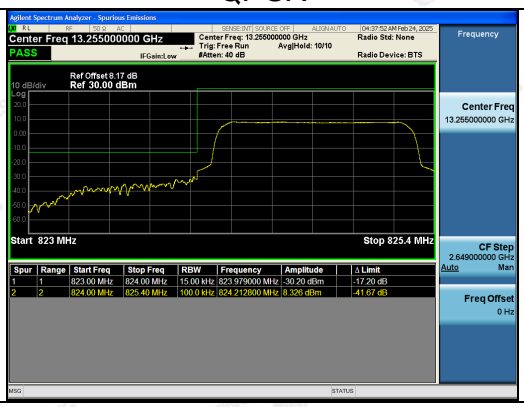
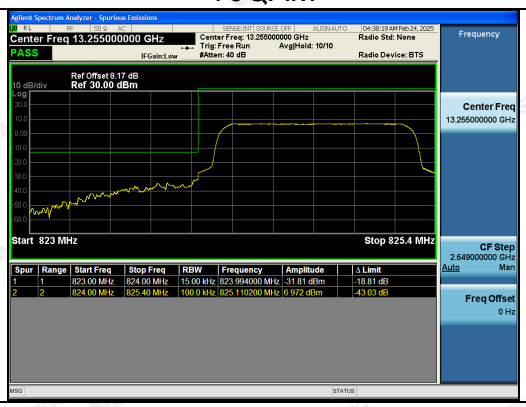
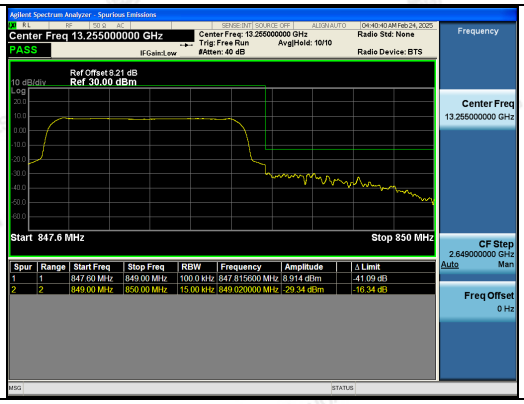
LTE FDD Band 26-1.4MHz Channel Bandwidth Band Edge Compliance	
QPSK	16QAM
	
6RB#0	6RB#0
Low Channel	
	
6RB#0	6RB#0
High Channel	

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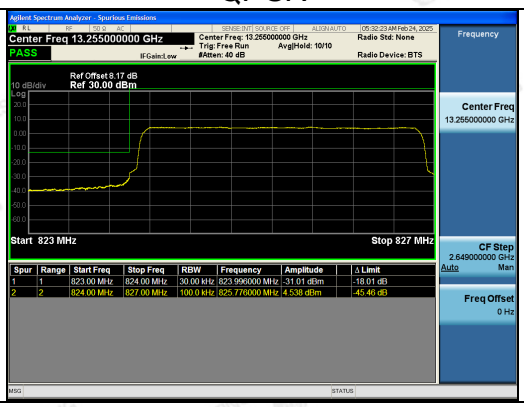
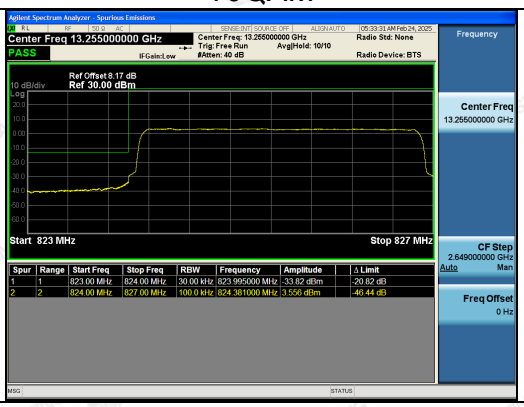
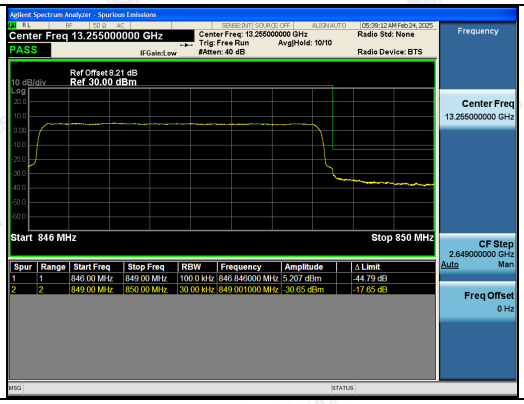
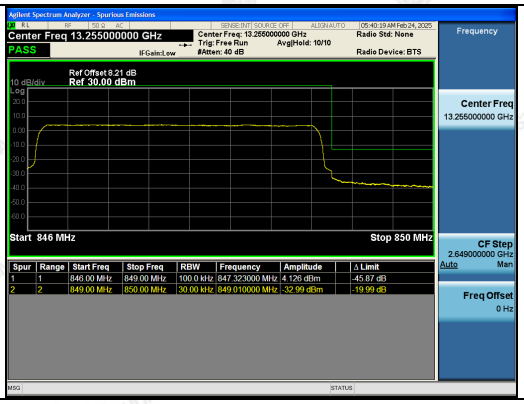
LTE FDD Band 26-3MHz Channel Bandwidth Band Edge Compliance	
QPSK	16QAM
	
15RB#0	15RB#0
Low Channel	
	
15RB#0	15RB#0
High Channel	

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