FCC PART 22 TEST REPORT

FCC Part 22H

Report Reference No.....: UNIA2018050831-3FR-01

FCC ID.....: 2AQP8-C50

Compiled by
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Supervised by
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Approved by
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Date of issue.....: Aug 02, 2018

Testing Laboratory Name .....:	**Shenzhen United Testing Technology Co., Ltd.**
Address .....:	2F, Annex Bldg, Jiahuangyuan Tech Park, #365 Baotian 1 Rd, Tiegang Community, Xixiang Str, Bao'an District, Shenzhen, China
Applicant's name.....:	**Shenzhen JOAN Technology Co., Ltd.**
Address .....:	Rm 201, No. 22.1 Area, 5th Industrial Zone, Shangfen, Minzhi, Longhua District, Shenzhen,China
Test specification .....**:**	
Standard .....:	**FCC CFR Title 47 Part 2, Part 22H** **EIA/TIA 603-D: 2010** **KDB 971168 D01**

Test item description .....:	Bar code Hand Terminal
Trade Mark .....:	/
Manufacturer.....:	**Shenzhen JOAN Technology Co., Ltd.**
Model/Type reference.....:	C50
Listed Models .....:	C40,C43,C60,C70,C80,C90,R30,R40,R50,R60,R70,R80,R90,MS8288W,MS8288F,MS8588
Modulation Type.....:	QPSK, 16QAM
Rating .....:	DC 3.8V From Battery;
Hardware version .....:	V1.0
Software version.....:	V1.0
Result.....:	**PASS**

TEST REPORT

Test Report No. :	UNIA2018050831-3FR-01	Aug.02, 2018 Date of issue

Equipment under Test	:	Bar code Hand Terminal
Model /Type	:	C50
Listed Models	:	C40,C43,C60,C70,C80,C90,R30,R40,R50,R60,R70,R80, R90,MS8288W,MS8288F,MS8588
Applicant	:	**Shenzhen JOAN Technology Co., Ltd.**
Address	:	Rm 201, No. 22.1 Area, 5th Industrial Zone, Shangfen, Minzhi, Longhua District, Shenzhen,China
Manufacturer	:	**Shenzhen JOAN Technology Co., Ltd.**
Address	:	Rm 201, No. 22.1 Area, 5th Industrial Zone, Shangfen, Minzhi, Longhua District, Shenzhen,China

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.

Revison History

Revision	Issue Date	Revisions	Revised By
V1.0	2018-08-02	Initial Issue	James Zhou

Contents

1 TEST STANDARDS

The tests were performed according to following standards:

FCC Part 22 : PUBLIC MOBILE SERVICES
TIA/EIA 603 D June 2010:Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.
FCC Part 2: FREQUENCY ALLOCA-TIONS AND RADIO TREATY MAT-TERS; GENERAL RULES AND REG-ULATIONS
KDB971168 D01:v02r02MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	July 02, 2018
Testing commenced on	:	July 02, 2018
Testing concluded on	:	Aug. 02, 2018

2.2 Product Description

The Bar code Hand Terminal's Model:C50or the "EUT" as referred to in this report; more general information as follows,for more details, refer to the user's manual of the EUT.

Name of EUT	Bar code Hand Terminal
Model/Type reference:	C50
List Model:	C40,C43,C60,C70,C80,C90,R30,R40,R50,R60,R70,R80,R90, MS8288W,MS8288F,MS8588
Power supply:	DC 3.80V
Adapter Information	/
Modilation Type	QPSK,16QAM
Antenna Type	Internal
Antenna Gain	-0.68dBi
Operation Frequency Band	LTE Band 5
Operation frequency	LTE Band 5: 824~849MHz
LTE Release	R8
Extreme temp. Tolerance	-30°C to +50°C
Extreme vol. Limits	3.40VDC to 4.20VDC (nominal: 3.80VDC)

2.3 Equipment under Test

Power supply system utilised

Power supply voltage	:	○	120V/ 60 Hz	○	115V/60Hz
		○	12 V DC	○	24 V DC
		●	Other (specified in blank below)		

DC 3.8V From Battery;

2.4 Short description of the Equipment under Test (EUT)

2.4.1 GeneralDescription

This is a Bar code Hand Terminal.

For more details, refer to the user's manual of the EUT.

2.5 Normal Accessory setting

Fully charged battery was used during the test.

2.6 EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

○	Power Cable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

2.7 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: 2AQP8-C50** filing to comply with FCC Part 22, Rules.

2.8 Modifications

No modifications were implemented to meet testing criteria.

2.9 GeneralTest Conditions/Configurations

2.10.1 TestEnvironment

EnvironmentParameter	SelectedValuesDuringTests	
Relative Humidity	Ambient	
Temperature	TN	Ambient
Voltage	VL	3.40V
	VN	3.80V
	VH	4.20V

NOTE:VL=lowerextreme testvoltageVN=nominalvoltage
VH=upperextreme testvoltageTN=normaltemperature

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen HUAK Testing Technology Co., Ltd.
1F, Building No. 13A, Zhonghaixin Science and Technology City, No.12,6 Road, Ganli Industrial Park, Buji Street, Longgang District, Shenzhen, Guangdong

3.2 Environmental conditions

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

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.3 Test Description

Test Item	Section in CFR 47	Result
RF Output Power	Part 2.1046 Part 22.913(a)	Pass
Peak-to-Average Ratio	n/a	Pass
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917(b)	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 22.917(b)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917(b)	Pass
Out of band emission, Band Edge	Part 2.1051 Part 22.917(b)	Pass
Frequency stability	Part 2.1055 22.917	Pass

Remark:
1. The measurement uncertainty is not included in the test result.

3.4 Equipments Used during the Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Horn Antenna	Sunol	DRH-118	A101415	2018.9.29
2	BicoNILog Antenna	Sunol	JB1 Antenna	A090215	2018.9.29
3	PREAMP	HP	8449B	3008A00160	2018.9.9
4	PREAMP	HP	8447D	2944A07999	2018.9.9
5	EMI TEST RECEIVER	Rohde&Schwarz	ESR3	101891	2018.9.9
6	VECTOR Signal Generator	Rohde&Schwarz	SMU200A	101521	2018.9.28
7	Signal Generator	Agilent	E4421B	MY4335105	2018.9.28
8	MXA Signal Analyzer	Agilent	N9020A	MY50510140	2018.9.28
9	MXA Signal Analyzer	Agilent	N9020A	MY51110104	2018.9.9
10	ANT Tower&Turn table Controller	Champro	EM 1000	60764	2018.9.28
11	Anechoic Chamber	Taihe Maorui	9m*6m*6m	966A0001	2018.9.9
12	Shielding Room	Taihe Maorui	6.4m*4m*3m	643A0001	2018.9.9
13	RF Power sensor	DARE	RPR3006W	15I00041SNO88	2019.3.14
14	RF Power sensor	DARE	RPR3006W	15I00041SNO89	2019.3.14
15	RF power divider	Anritsu	K241B	992289	2018.9.28
16	Wideband radio communication tester	Rohde&Schwarz	CMW500	154987	2018.9.28
17	Biconical antenna	Schwarzbeck	VHA 9103	91032360	2018.9.8
18	Biconical antenna	Schwarzbeck	VHA 9103	91032361	2018.9.8
19	Broadband Hybrid Antennas	Schwarzbeck	VULB9163	VULB9163#958	2018.9.8
20	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1680	2019.1.12
21	Active Receive Loop Antenna	Schwarzbeck	FMZB 1919B	00023	2018.11.02
22	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170651	2019.03.14
23	Microwave Broadband Preamplifier	Schwarzbeck	BBV 9721	100472	2018.10.24
24	Active Loop Antenna	Com-Power	AL-130R	10160009	2019.05.10
25	Power Meter	KEYSIGHT	N1911A	MY50520168	2019.05.10
26	Frequency Meter	VICTOR	VC2000	997406086	2019.05.10
27	DC Power Source	HYELEC	HY5020E	055161818	2019.05.10

4 TEST CONDITIONS AND RESULTS

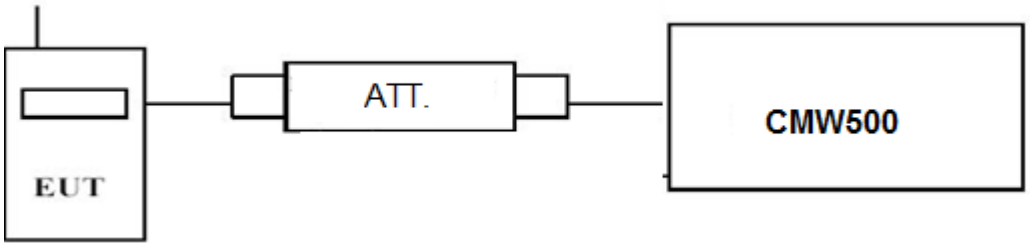
4.1 Output Power

4.1.1 Coducted Output Power

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

Remark:
1. We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 5;

LTE FDD Band 5				
TX Channel Bandwidth	Frequency (MHz)	RB Size/Offset	Burst Average Power [dBm]	
			QPSK	16QAM
1.4 MHz	824.7	1 RB low	22.63	21.85
		1 RB high	22.46	21.68
		50% RB mid	22.40	21.46
		100% RB	21.42	20.41
	836.5	1 RB low	22.73	22.00
		1 RB high	22.71	21.99
		50% RB mid	22.73	21.65
		100% RB	21.67	20.68
	848.3	1 RB low	22.50	21.69
		1 RB high	22.56	21.70
		50% RB mid	22.63	21.55
		100% RB	21.70	20.60
3 MHz	825.5	1 RB low	22.62	21.11
		1 RB high	21.85	21.20
		50% RB mid	20.91	19.92
		100% RB	21.93	20.87
	836.5	1 RB low	22.75	22.01
		1 RB high	22.62	21.92
		50% RB mid	21.73	20.68
		100% RB	21.75	20.71

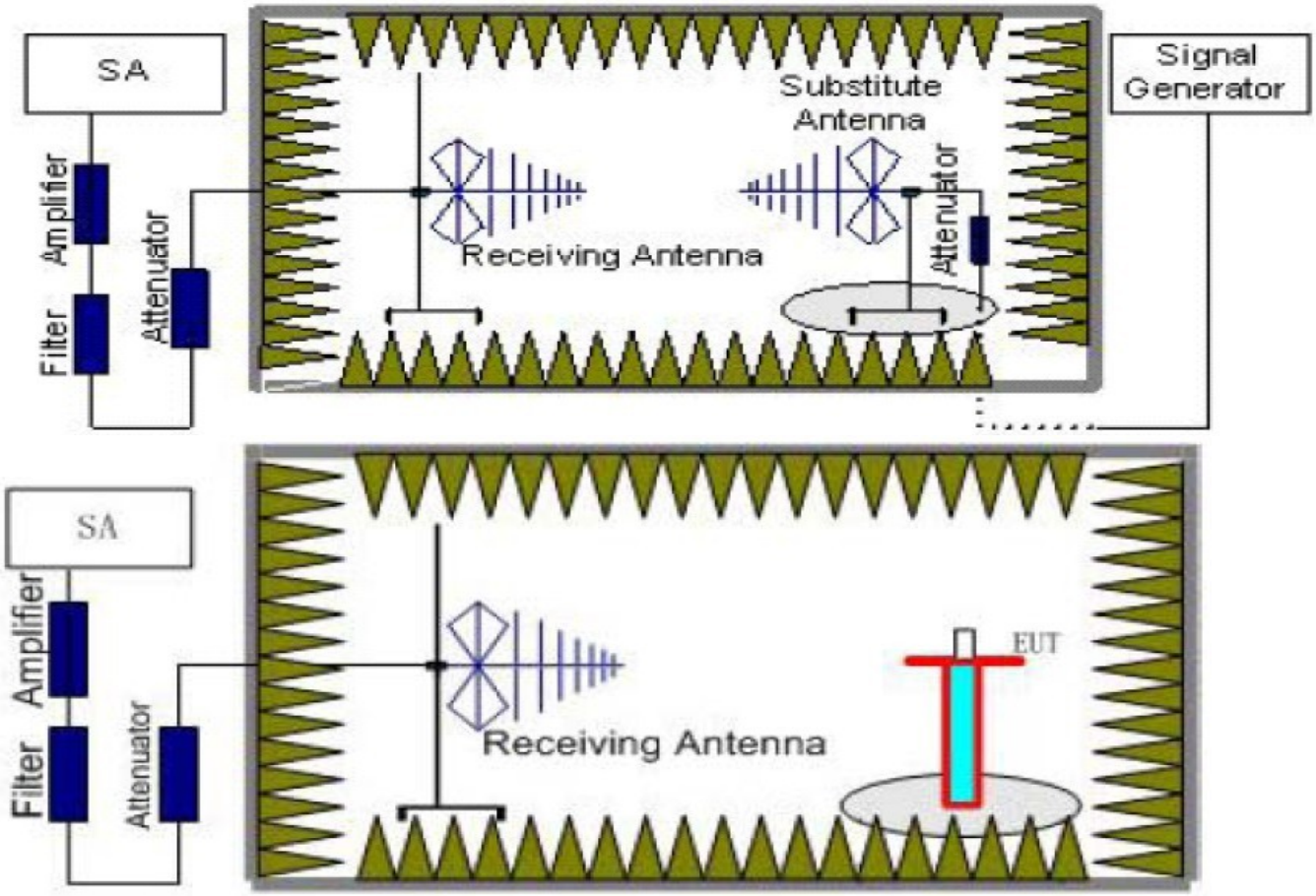
	847.5	1 RB low	22.60	21.74
		1 RB high	22.23	21.53
		50% RB mid	21.63	20.59
		100% RB	21.63	20.61
5 MHz	826.5	1 RB low	21.70	20.96
		1 RB high	21.78	21.03
		50% RB mid	21.53	20.45
		100% RB	21.46	20.43
	836.5	1 RB low	22.85	21.99
		1 RB high	22.74	21.90
		50% RB mid	21.75	20.83
		100% RB	21.76	20.77
	836.5	1 RB low	22.73	21.85
		1 RB high	22.17	21.38
		50% RB mid	21.73	20.76
		100% RB	22.15	21.35
10 MHz	829.0	1 RB low	22.95	22.10
		1 RB high	22.47	21.95
		50% RB mid	21.57	20.59
		100% RB	21.50	20.54
	836.5	1 RB low	23.13	22.49
		1 RB high	23.08	22.33
		50% RB mid	22.12	21.09
		100% RB	22.15	21.17
	844.0	1 RB low	22.42	21.67
		1 RB high	21.87	21.18
		50% RB mid	21.60	20.54
		100% RB	22.07	21.03

4.1.2. Radiated Output Power

LIMIT

This is the test for the maximum radiated power from the EUT.
Rule Part 24.232(b) specifies, "Mobile/portable stations are limited to 2 watts e.i.r.p.

TEST CONFIGURATION



TEST PROCEDURE

1. EUT was placed on a 0.80 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 1.50m. 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

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.

5. 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
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
7. 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 5;*
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 FDD Band 5_Channel Bandwidth 1.4MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-21.53	2.42	8.45	2.15	36.82	19.17	38.45	19.28	V
836.5	-19.26	2.46	8.45	2.15	36.82	21.40	38.45	17.05	V
848.3	-20.34	2.53	8.36	2.15	36.82	20.16	38.45	18.29	V

LTE FDD Band 5_Channel Bandwidth 3MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.5	-21.42	2.42	8.45	2.15	36.82	19.28	38.45	19.17	V
836.5	-19.56	2.46	8.45	2.15	36.82	21.10	38.45	17.35	V
847.5	-20.41	2.53	8.36	2.15	36.82	20.09	38.45	18.36	V

LTE FDD Band 5_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-21.42	2.42	8.45	2.15	36.82	19.28	38.45	19.17	V
836.5	-19.19	2.46	8.45	2.15	36.82	21.47	38.45	16.98	V
846.5	-20.11	2.53	8.36	2.15	36.82	20.39	38.45	18.06	V

LTE FDD Band 5_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-21.26	2.42	8.45	2.15	36.82	19.44	38.45	19.01	V
836.5	-19.17	2.46	8.45	2.15	36.82	21.49	38.45	16.96	V
844.0	-20.05	2.53	8.36	2.15	36.82	20.45	38.45	18.00	V

LTE FDD Band 5_Channel Bandwidth 1.4MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-22.07	2.42	8.45	2.15	36.82	18.63	38.45	19.82	V
836.5	-20.21	2.46	8.45	2.15	36.82	20.45	38.45	18.00	V
848.3	-21.02	2.53	8.36	2.15	36.82	19.48	38.45	18.97	V

LTE FDD Band 5_Channel Bandwidth 3MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.5	-21.26	2.42	8.45	2.15	36.82	19.44	38.45	19.01	V
836.5	-20.19	2.46	8.45	2.15	36.82	20.47	38.45	17.98	V
847.5	-21.08	2.53	8.36	2.15	36.82	19.42	38.45	19.03	V

LTE FDD Band 5_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-21.27	2.42	8.45	2.15	36.82	19.43	38.45	19.02	V
836.5	-20.74	2.46	8.45	2.15	36.82	19.92	38.45	18.53	V
846.5	-21.28	2.53	8.36	2.15	36.82	19.22	38.45	19.23	V

LTE FDD Band 5_Channel Bandwidth 10MHz_16QAM

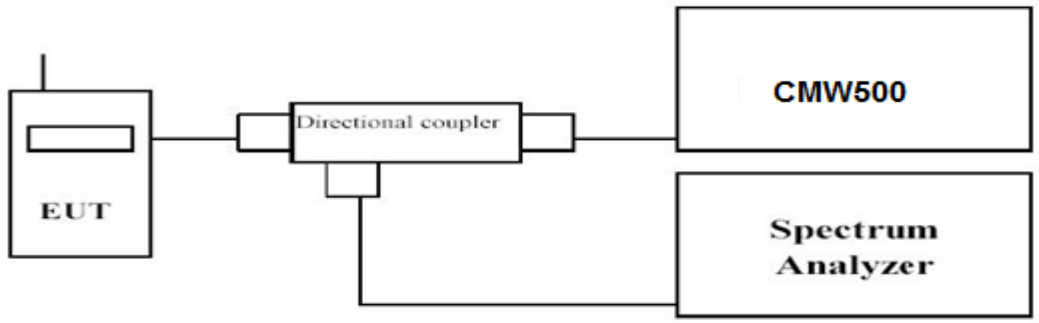
Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	Correction (dB)	P_{Ag} (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-20.46	2.42	8.45	2.15	36.82	20.24	38.45	18.21	V
836.5	-20.11	2.46	8.45	2.15	36.82	20.55	38.45	17.90	V
844.0	-21.09	2.53	8.36	2.15	36.82	19.41	38.45	19.04	V

4.2 Peak-to-Average Ratio (PAR)

LIMIT

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

TEST CONFIGURATION



TEST PROCEDURE

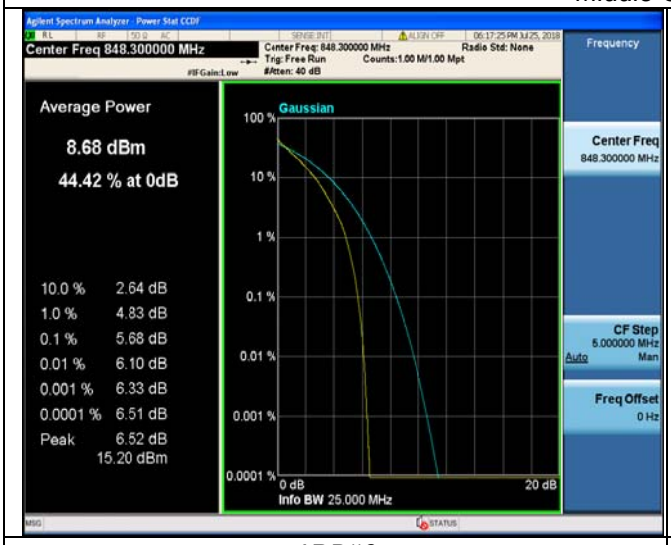
1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
3. Set the number of counts to a value that stabilizes the measured CCDF curve;
4. Set the measurement interval as 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%.

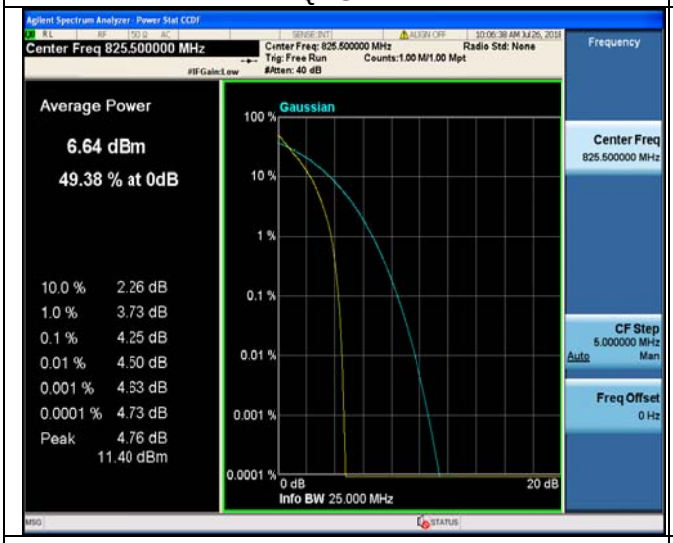
TEST RESULTS

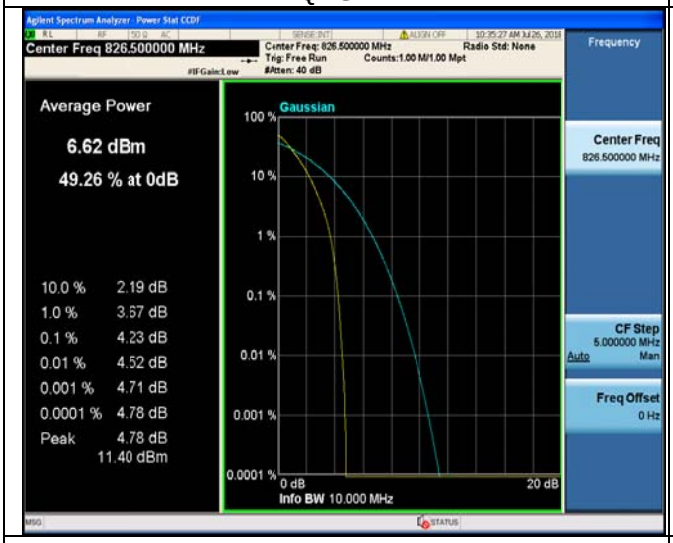
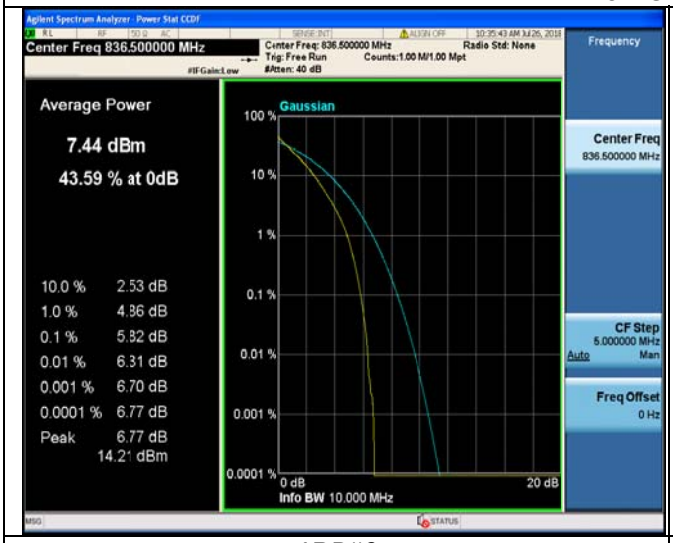
Remark:

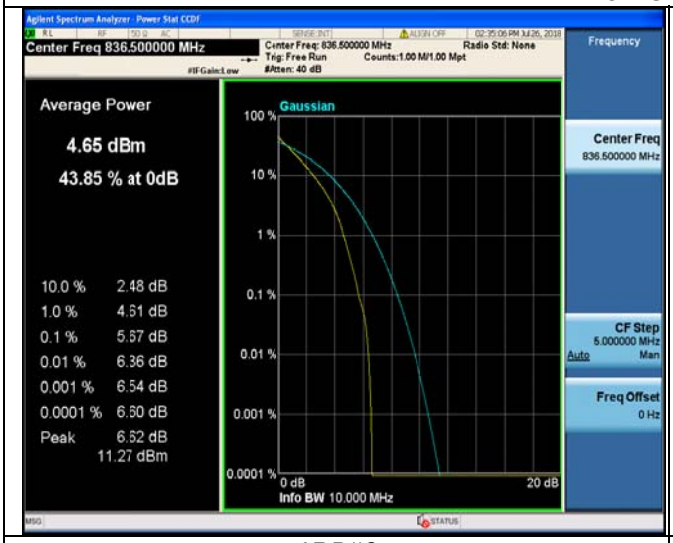
1. *We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 5;*

LTE FDD Band 5				
TX Channel Bandwidth	Frequency (MHz)	RB Size/Offset	PAPR(dB)	
			QPSK	16QAM
1.4 MHz	824.7	*1RB#0*	4.63	5.15
	836.5		5.82	6.72
	848.3		5.68	6.50
3 MHz	825.5	*1RB#0*	4.25	4.95
	836.5		6.04	6.97
	847.5		5.66	6.41
5 MHz	826.5	*1RB#0*	4.23	5.00
	836.5		5.82	6.68
	846.5		5.01	5.88
10 MHz	829.0	*1RB#0*	5.00	5.65
	836.5		5.67	6.44
	844.0		4.71	5.51

LTE FDD Band 5-1.4MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

LTE FDD Band 5-3MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

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

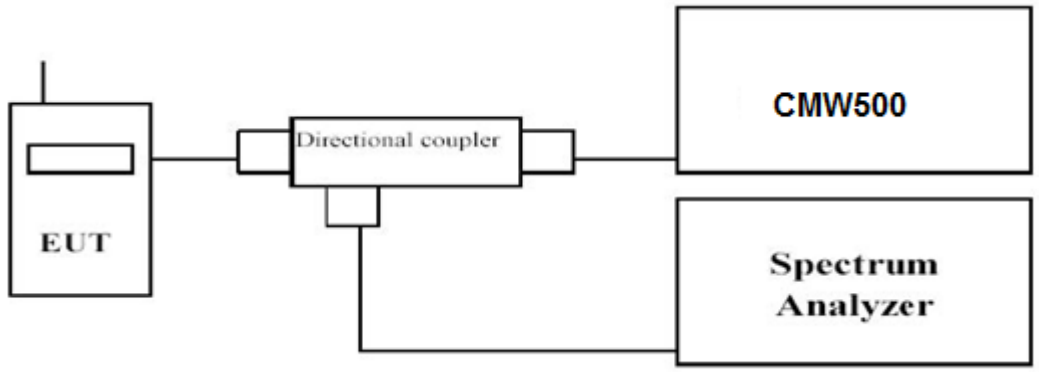
LTE FDD Band 5-10MHz Channel Bandwidth PAPR	
QPSK	16QAM
	
1RB#0	1RB#0
Low Channel	
	
1RB#0	1RB#0
Middle Channel	
	
1RB#0	1RB#0
High Channel	

4.3 Occupied Bandwidth and Emission Bandwidth

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

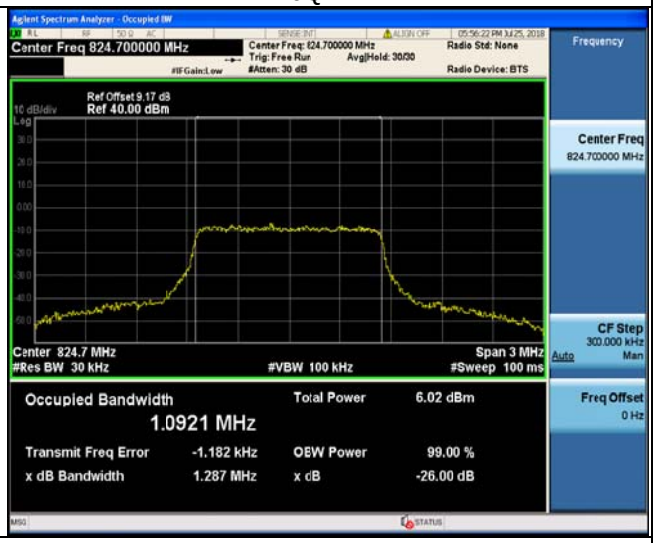
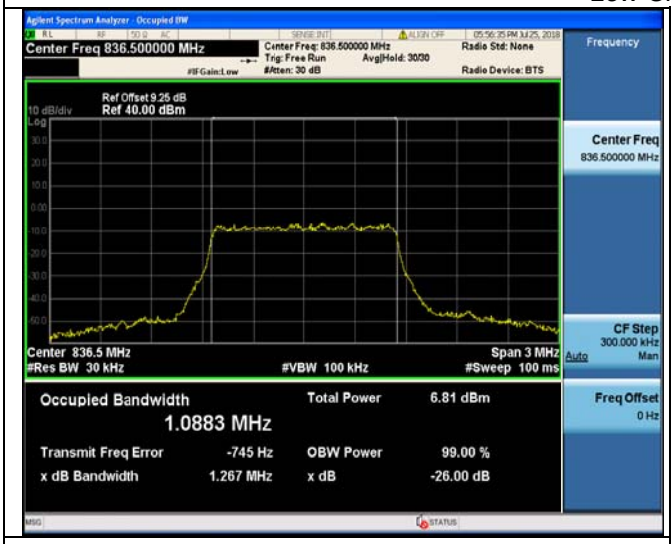
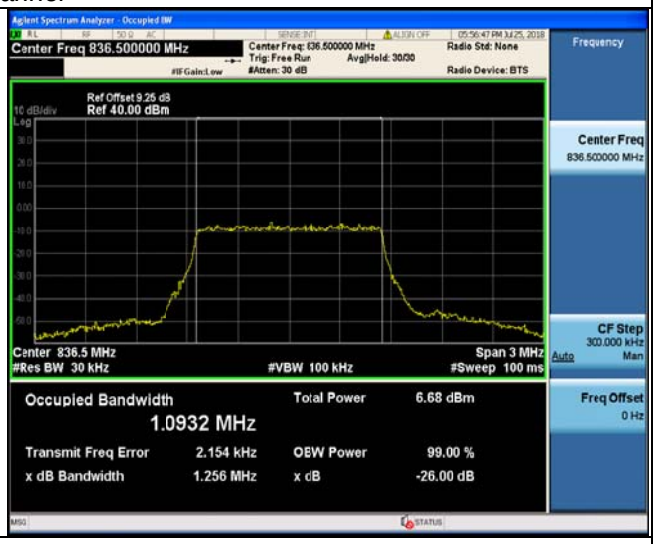
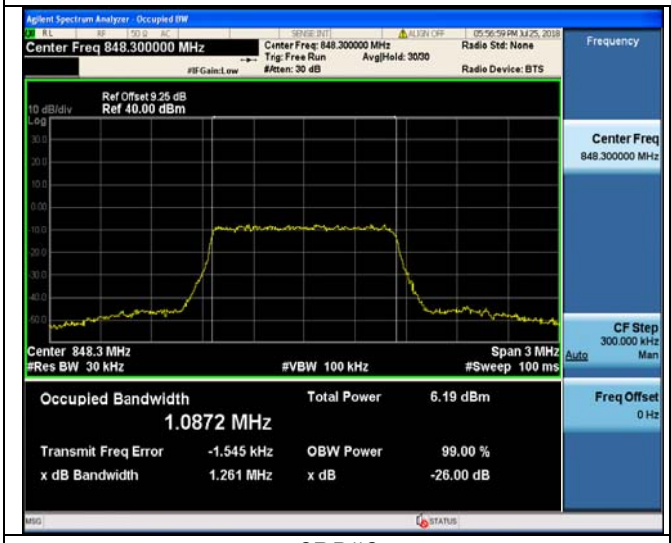
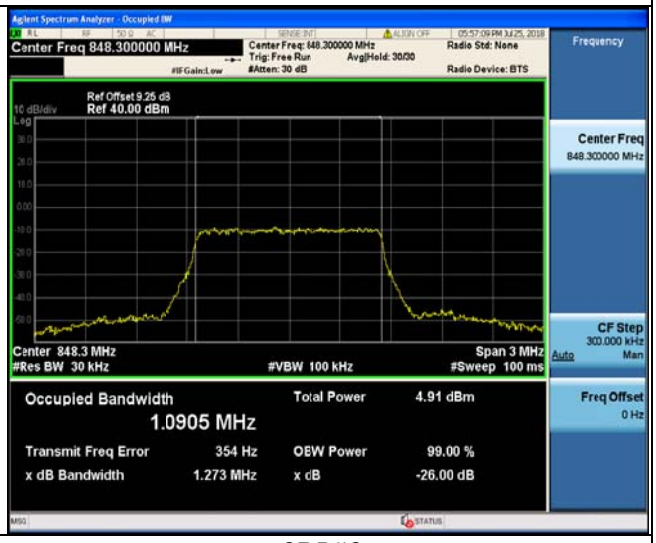
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at low, middle and high channel in each band. The -26dBc Emission bandwidth was also measured and recorded.
Set RBWwas set to about 1% of emission BW, VBW≥3 times RBW.
-26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth isthe delta frequency between the two points where the display line intersects the signal trace.

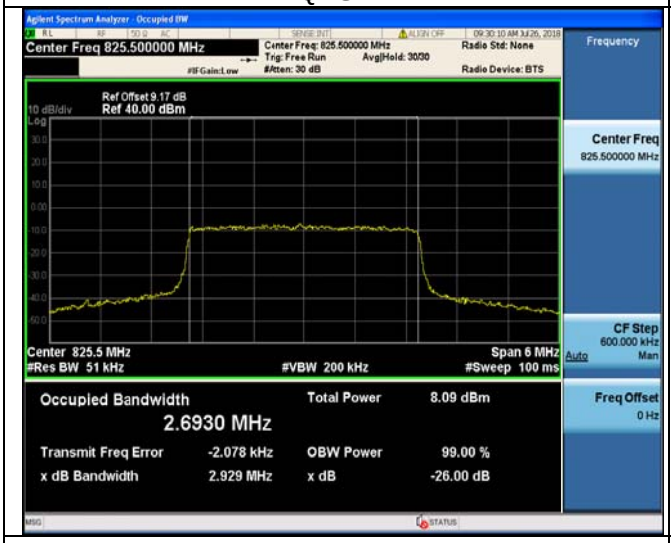
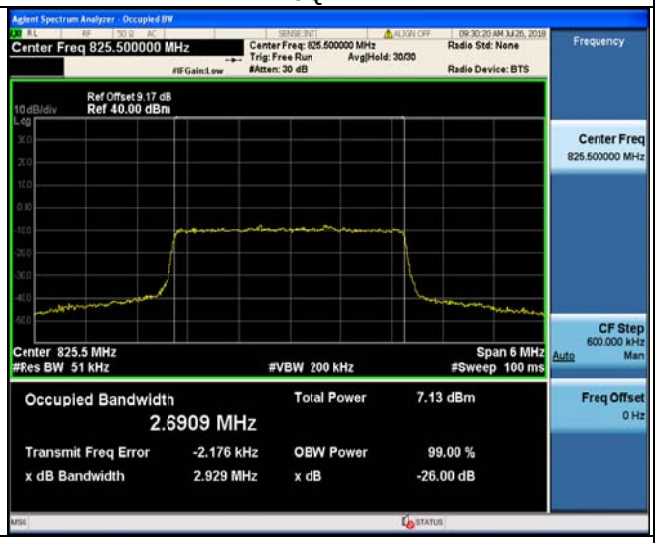
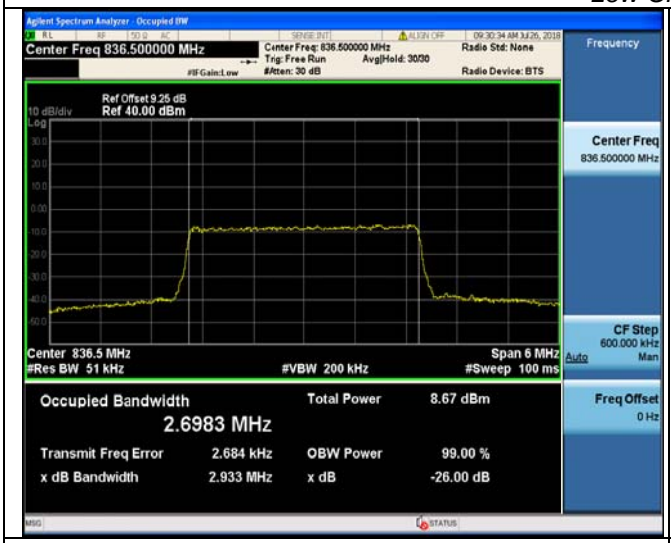
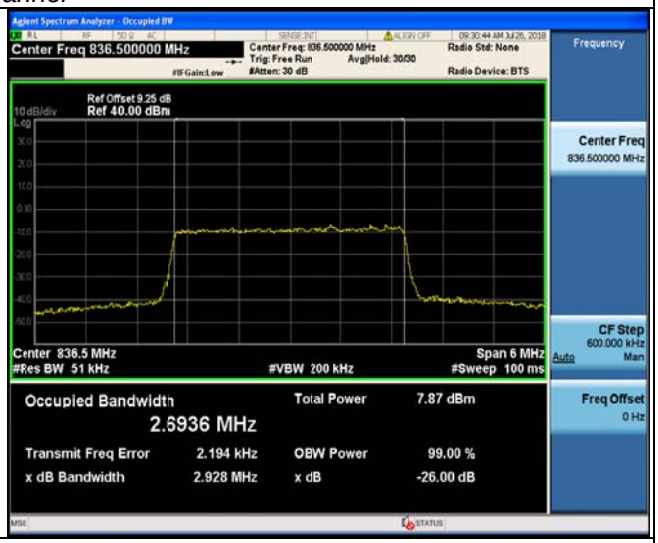
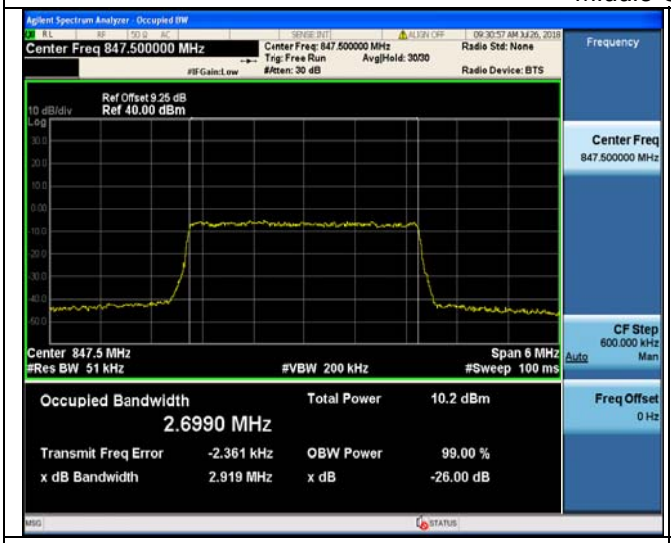
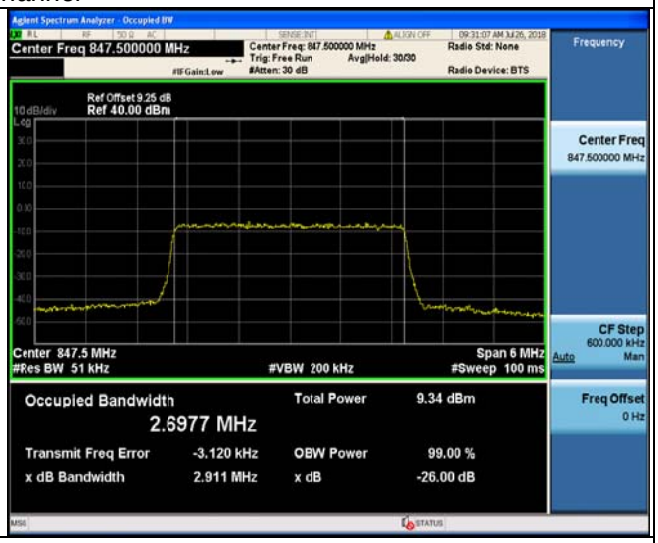
TEST RESULTS

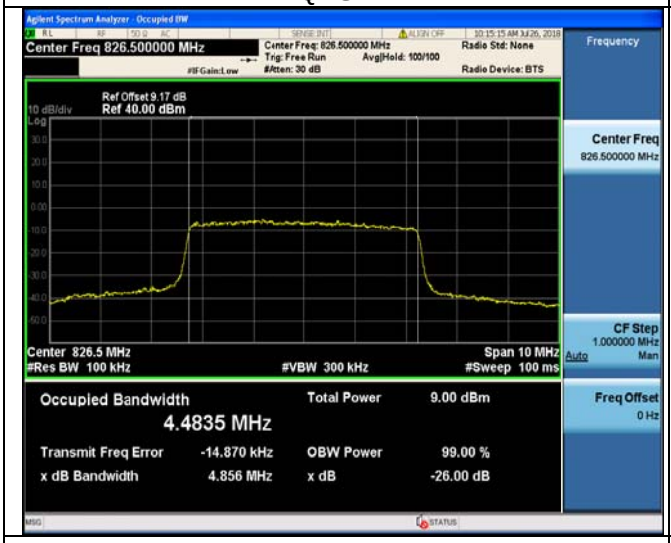
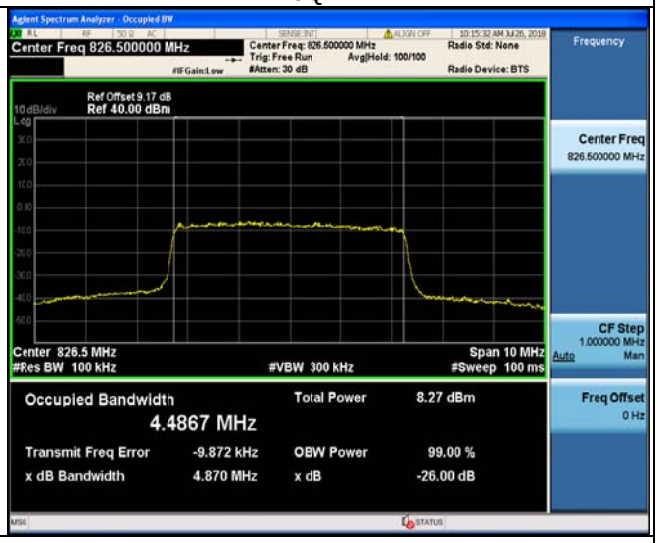
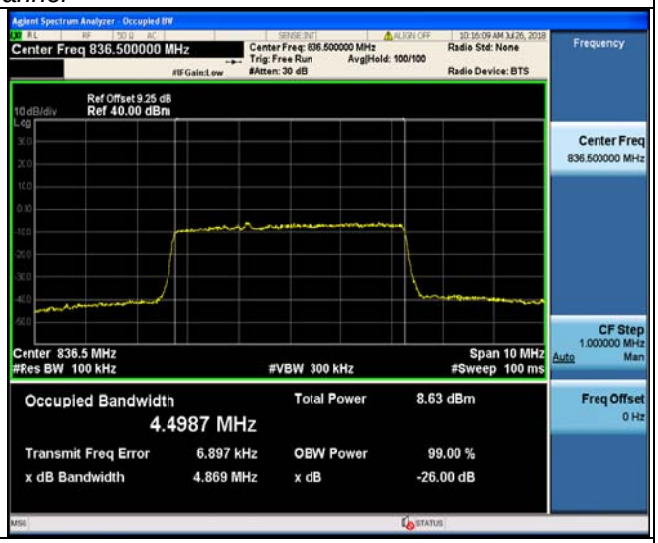
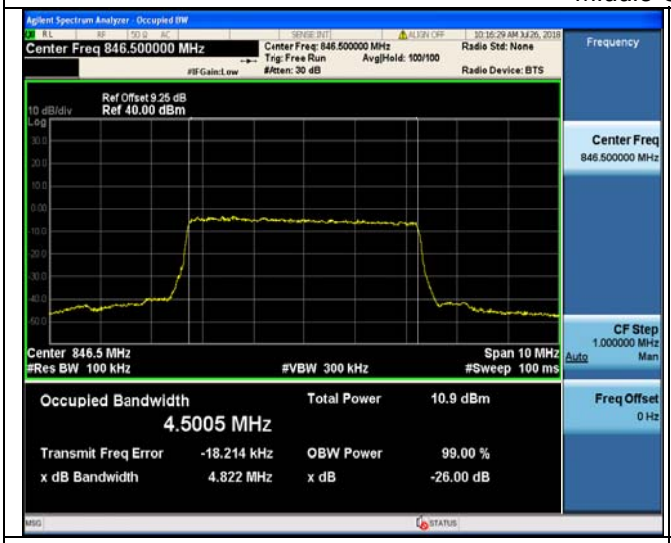
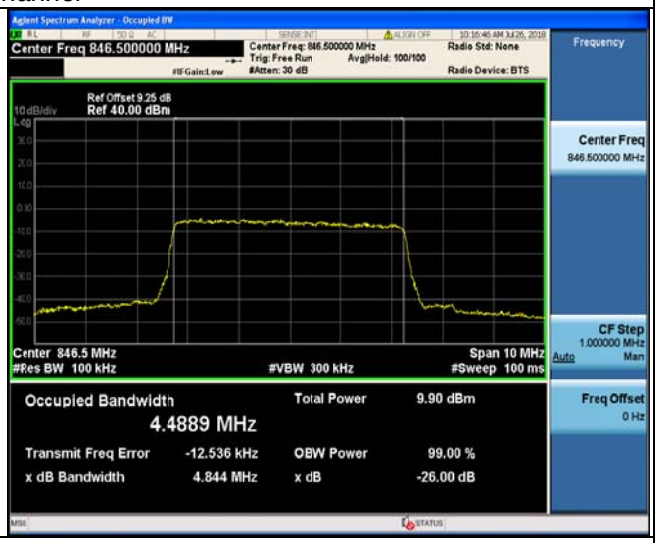
Remark:

1. *We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 5; recorded worst case for each Channel Bandwidth of LTE FDD Band 5*

LTE FDD Band 5						
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	1.286	1.287	1.0890	1.0921
		836.5	1.267	1.256	1.0883	1.0932
		848.3	1.261	1.273	1.0872	1.0905
3 MHz	*15RB#0*	825.5	2.929	2.929	2.6930	2.6909
		836.5	2.933	2.928	2.6983	2.6936
		847.5	2.919	2.911	2.6990	2.6977
5 MHz	*25RB#0*	826.5	4.856	4.870	4.4835	4.4867
		836.5	4.871	4.869	4.5000	4.4987
		846.5	4.822	4.844	4.5005	4.4889
10 MHz	*50RB#0*	829.0	9.324	9.375	8.9021	8.8913
		836.5	9.530	9.466	8.9599	8.9509
		844.0	9.328	9.332	8.8687	8.8526

LTE FDD Band 5-1.4MHz Channel Bandwidth	
QPSK	16QAM
	
6RB#0	6RB#0
Low Channel	
	
6RB#0	6RB#0
Middle Channel	
	
6RB#0	6RB#0
High Channel	

LTE FDD Band 5-3MHz Channel Bandwidth	
QPSK	16QAM
	
15RB#0	15RB#0
Low Channel	
	
15RB#0	15RB#0
Middle Channel	
	
15RB#0	15RB#0
High Channel	

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