

FCC Test Report

FCC ID : VQK-M02
Equipment : Mobile Phone
Model No. : M02
Brand Name : FUJITSU
Applicant : FUJITSU LIMITED
Address : 1-1, Kamikodanaka 4-chome, Nakahara-ku,
Kawasaki 211-8588, Japan
Standard : 47 CFR FCC Part 90
Received Date : Nov. 24, 2015
Tested Date : Nov. 27 ~ Dec. 01, 2015

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:



Gary Chang / Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	8
1.3	Test Setup Chart	8
1.4	The Equipment List	9
1.5	Test Standards	10
1.6	Measurement Uncertainty	10
2	TEST CONFIGURATION.....	11
2.1	Testing Condition and Location Information.....	11
2.2	The Worst Test Modes and Channel Details	11
3	TEST RESULTS.....	12
3.1	Effective Radiated Power	12
3.2	Radiated Emissions.....	18
3.3	Conducted Emissions.....	28
3.4	Band edge	33
3.5	Occupied Bandwidth	42
3.6	Peak to Average Ratio	47
3.7	Frequency Stability	52
4	TEST LABORATORY INFORMATION	55

Release Record

Report No.	Version	Description	Issued Date
FW560301-02	Rev. 01	Initial issue	Dec. 17, 2015

Summary of Test Results

FCC Rules	Test Items	Measured	Result
2.1046 / 90.635(b)	Effective Radiated Power	Power[dBm]: 15.91	Pass
2.1053 / 90.691	Radiated Emissions	Meet the requirement of limit	Pass
2.1051 / 90.691	Conducted Emissions	Meet the requirement of limit	Pass
2.1051 / 90.691	Band edge	Meet the requirement of limit	Pass
2.1049	Occupied Bandwidth	Meet the requirement of limit	Pass
-	Peak to average ratio	Meet the requirement of limit	Pass
2.1055 / 90.213	Frequency Stability	Meet the requirement of limit	Pass

1 General Description

1.1 Information

1.1.1 Product Details

Product Name	Mobile Phone
Brand Name	FUJITSU
Model Name	M02
IMEI Code	353546071500032
H/W Version	v3.0.0
S/W Version	R021.3

1.1.2 Specification of the Equipment under Test (EUT)

Operating Frequency (MHz)	LTE Band 26 Channel Bandwidth: 1.4MHz: 814.7~823.3 Channel Bandwidth: 3MHz: 815.5~822.5 Channel Bandwidth: 5MHz: 816.5~821.5 Channel Bandwidth: 10MHz: 819
Modulation	QPSK, 16QAM (Uplink)
Release Version	10
Duplex Mode	FDD
UE Category	4

1.1.3 Maximum ERP and Emission Designator

Mode	Modulation	Maximum ERP(dBm)	Maximum ERP(W)	Emission Designator
LTE Band 5, CB: 1.4MHz	QPSK	15.58	0.0361	1M10G7D
LTE Band 5, CB: 1.4MHz	16QAM	14.97	0.0314	1M10W7D
LTE Band 5, CB: 3MHz	QPSK	15.91	0.0390	2M68G7D
LTE Band 5, CB: 3MHz	16QAM	15.29	0.0338	2M68W7D
LTE Band 5, CB: 5MHz	QPSK	15.86	0.0385	4M49G7D
LTE Band 5, CB: 5MHz	16QAM	15.00	0.0316	4M49W7D
LTE Band 5, CB: 10MHz	QPSK	15.27	0.0337	8M94G7D
LTE Band 5, CB: 10MHz	16QAM	14.62	0.0290	8M91W7D

1.1.4 Antenna Details

Ant. No.	Type	Gain (dBi)	Connector	Remark
1	$\lambda/4$ Monopole Antenna	-5.71	No	---

1.1.5 EUT Operational Condition

Supply Voltage	5.0Vdc from AC adapter 3.8Vdc from Battery		
Operational Voltage	<input checked="" type="checkbox"/> Vnom (3.9 V)	<input checked="" type="checkbox"/> Vmax (4.29 V)	<input checked="" type="checkbox"/> Vmin (3.51 V)
Operational Climatic	<input checked="" type="checkbox"/> Tnom (20°C)	<input checked="" type="checkbox"/> Tmax (55°C)	<input checked="" type="checkbox"/> Tmin (-30°C)

1.1.6 Accessories

No.	Equipment	Description
1	Adapter	Brand Name: Fujitsu Limited Model Name: FMV-AC346 Input rating: 100-240Vac, 50/60Hz, 0.3A Output rating: 5.0Vdc, 2A 1.1m USB shielded cable without core (for charging use)
2	Cradle	Brand Name: Fujitsu Limited Model Name: FAR-CR105 Input rating: 5Vdc, 1.5A Output rating: 5.0Vdc, 1.5A
3	Battery (Unremovable)	Brand Name: Fujitsu Limited Model Name: CA54310-0064 Power Rating: 3.8Vdc, 2330mAh, 8.9Wh

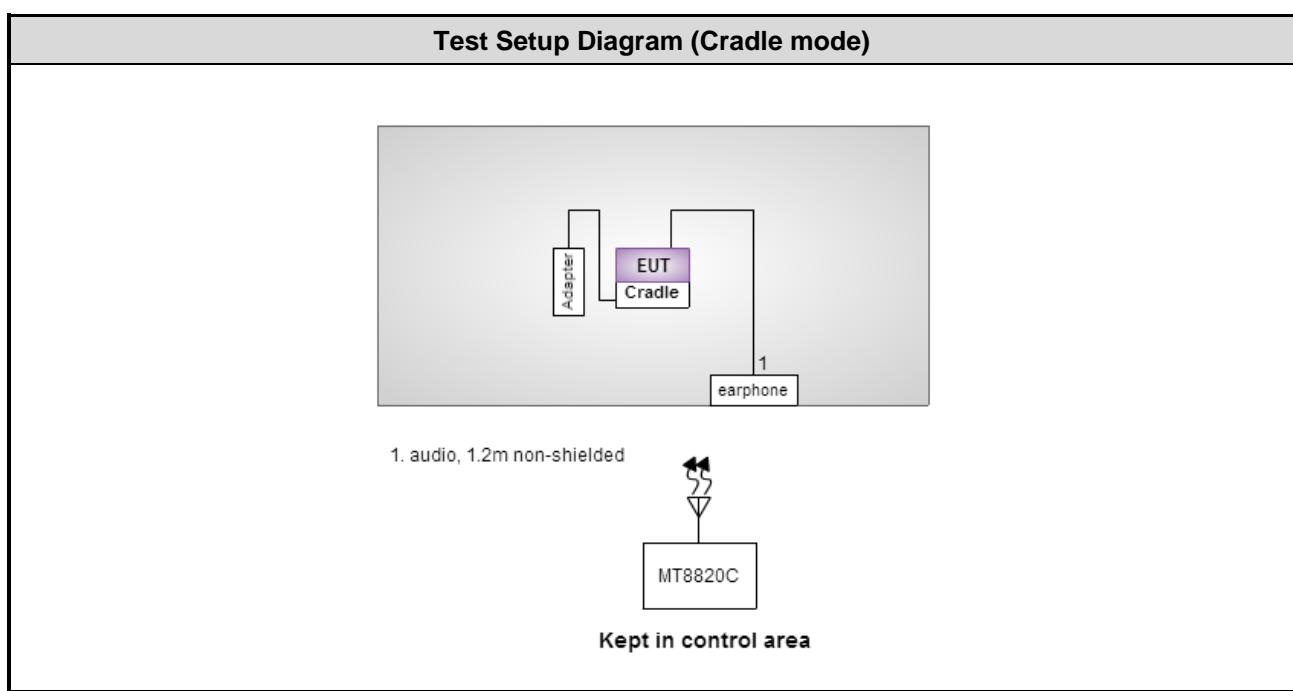
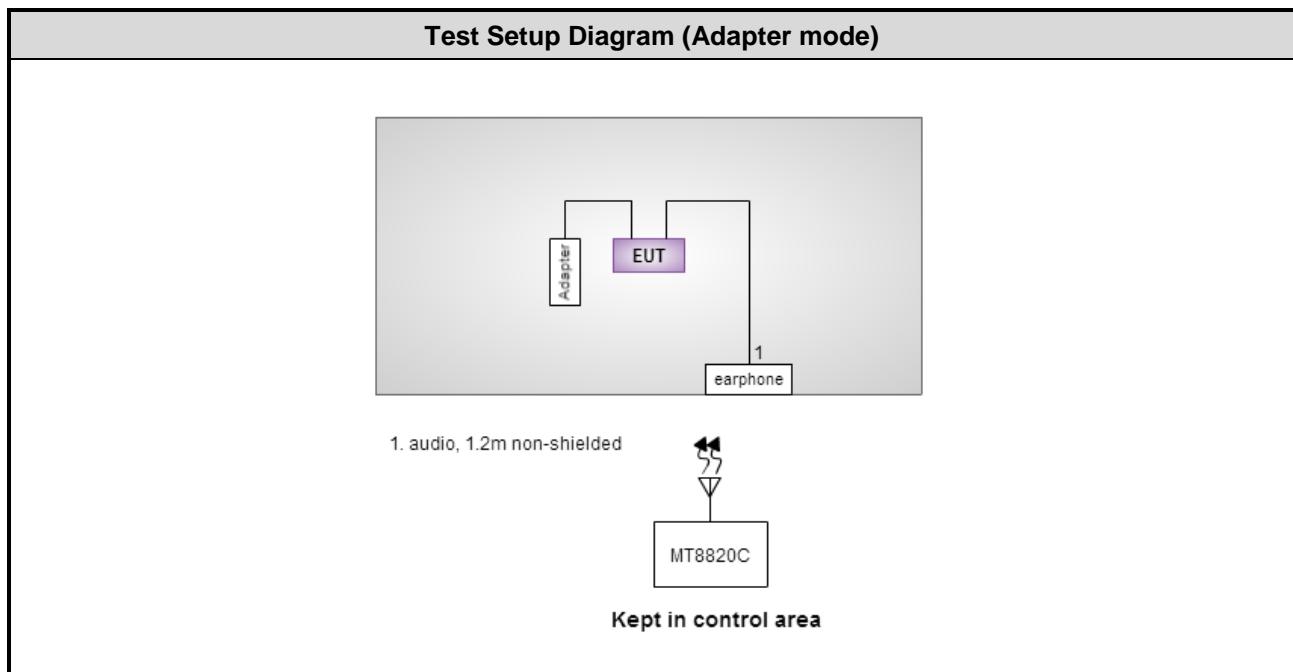
1.1.7 Operating Channel List

LTE Band 26		
Channel Bandwidths (MHz)	Channel	Frequency (MHz)
1.4	26697	814.7
1.4	26740	819.0
1.4	26783	823.3
3	26705	815.5
3	26740	819.0
3	26775	822.5
5	26715	816.5
5	26740	819.0
5	26765	821.5
10	26740	819.0

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	S/N	Signal cable / Length (m)
1	Earphone	APPLE	MD827FE/A	6	1.2m non-shielded.

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 14, 2015	Sep. 13, 2016
Receiver	Agilent	N9038A	MY53290044	Oct. 14, 2015	Oct. 13, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-563	Dec. 30, 2014	Dec. 29, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 03, 2015	Feb. 02, 2016
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 04, 2015	Nov. 03, 2016
Loop Antenna	R&S	HFH2-Z2	11900	Nov. 16, 2015	Nov. 15, 2016
Preamplifier	EMC	EMC02325	980187	Sep. 21, 2015	Sep. 20, 2016
Preamplifier	Agilent	83017A	MY53270014	Sep. 07, 2015	Sep. 06, 2016
Preamplifier	EMC	EMC184045B	980192	Sep. 01, 2015	Aug. 31, 2016
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 09, 2015	Feb. 08, 2016
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22601/4	Feb. 09, 2015	Feb. 08, 2016
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 09, 2015	Feb. 08, 2016
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 09, 2015	Feb. 08, 2016
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 09, 2015	Feb. 08, 2016
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 09, 2015	Feb. 08, 2016
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 09, 2015	Feb. 08, 2016
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	Mar. 19, 2015	Mar. 18, 2016
Measurement Software	AUDIX	e3	6.120210g	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Feb. 03, 2015	Feb. 02, 2016
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GTH-150-40-CP-AR-T	MAA1407-012	Aug. 05, 2015	Aug. 04, 2016
Power Meter	Anritsu	ML2495A	1241002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor	Anritsu	MA2411B	1207366	Sep. 21, 2015	Sep. 20, 2016
DC POWER SOURCE	GW INSTEK	GPC-3060D	EM884797	Oct. 20, 2015	Oct. 19, 2016
Radio Communication Analyzer	Anritsu	MT8820C	6201240341	Mar. 19, 2015	Mar. 18, 2016
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA

Note: Calibration Interval of instruments listed above is one year.

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards.

47 CFR FCC Part 90

47 CFR FCC Part 2

ANSI C63.4-2003

ANSI / TIA / EIA-603-C -2010

KDB 971168 D01 Power Meas License Digital Systems v02r02

KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Temperature	±0.6 °C
Conducted emission	±2.670 dB
Radiated emission ≤ 1GHz	±3.62 dB
Radiated emission > 1GHz	±5.60 dB

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
RF conducted	TH01-WS	22°C / 63%	Felix Sung
Radiated Emissions	03CH03-WS	22°C / 61%	Anderson Hung

➤ FCC site registration No.: 390588

➤ IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Test item	Channel Bandwidths	Modulation	Test channel
Effective Radiated Power	1.4 MHz	QPSK / 16QAM	26697 / 26740 / 26783
Conducted Emissions	3 MHz	QPSK / 16QAM	26705 / 26740 / 26775
Occupied Bandwidth	5 MHz	QPSK / 16QAM	26715 / 26740 / 26765
Peak to Average Ratio	10 MHz	QPSK / 16QAM	26740
Radiated Emission ≤ 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	26697 26775 26740 26740
Radiated Emission > 1GHz	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	26697 / 26740 / 26783 26705 / 26740 / 26775 26715 / 26740 / 26765 26740
Band Edge	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM QPSK / 16QAM	26697 / 26783 26705 / 26775 26715 / 26765 26740
Frequency Stability	1.4 MHz 3 MHz 5 MHz 10 MHz	QPSK QPSK QPSK QPSK	26740 26740 26740 26740

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. The EUT had been tested by following test configurations for spurious emission below 1GHz.
 - 1) Configuration 1 : Adapter mode
 - 2) Configuration 2 : Cradle mode

3 Test Results

3.1 Effective Radiated Power

3.1.1 Limit of Effective Radiated Power

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 100 Watts.

3.1.2 Test Procedures

For E.R.P measurement

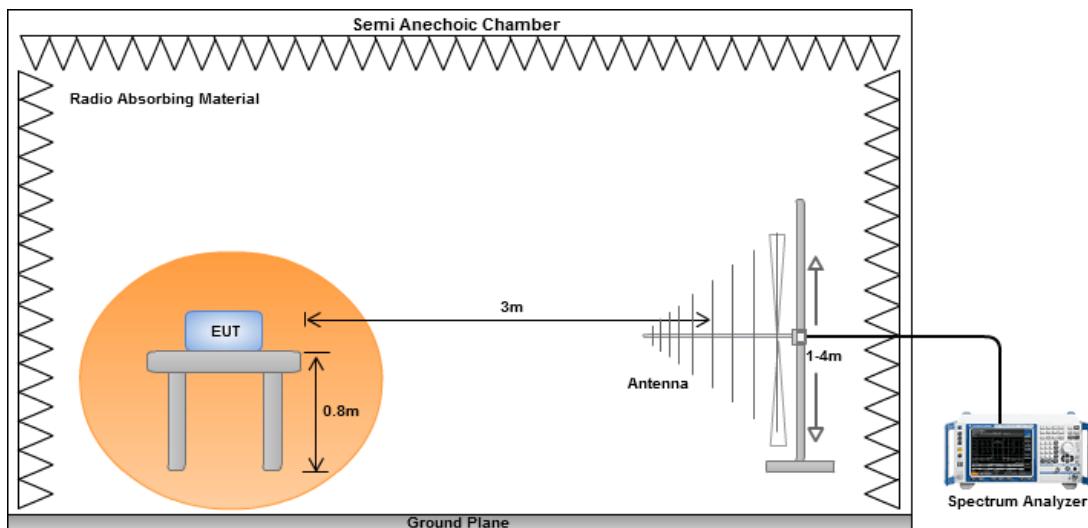
1. The EUT links up with simulator and is set to maximum output power level at low / high channel. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
$$E.R.P = E.I.R.P - 2.15dB$$

For Conducted power measurement

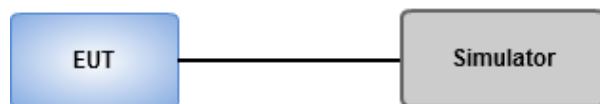
1. The EUT links up with simulator and is set to maximum output power level at low / high channel.
2. Measure the output power of low / high channel of the EUT

3.1.3 Test Setup

Effective Radiated Power Measurement



Conducted Power Measurement



3.1.4 Test Result of Conducted Output Power (dBm)

Band / Channel Bandwidth			LTE Band 26 / CB: 1.4MHz		
Channel			26697	26740	26783
Frequency (MHz)			814.7	819	823.3
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.95	22.89	22.81
	1	2	22.74	22.73	22.73
	1	5	22.66	22.51	22.61
	3	0	22.85	22.75	22.80
	3	1	22.73	22.82	22.79
	3	2	22.80	22.80	22.74
	6	0	21.72	21.71	21.77
16QAM	1	0	22.03	22.08	22.25
	1	2	21.88	21.85	22.18
	1	5	21.89	21.96	22.40
	3	0	21.89	21.84	21.65
	3	1	21.98	21.98	21.97
	3	2	21.96	21.86	22.07
	6	0	20.55	20.51	20.56

Band / Channel Bandwidth			LTE Band 26 / CB: 3MHz		
Channel			26705	26740	26775
Frequency (MHz)			815.5	819	822.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.85	22.95	22.97
	1	7	22.83	22.90	22.94
	1	14	22.57	22.67	22.80
	8	0	21.79	21.76	21.86
	8	4	21.79	21.79	21.93
	8	7	21.80	21.95	21.85
	15	0	21.76	21.81	21.81
16QAM	1	0	22.44	22.43	22.48
	1	7	22.34	22.34	22.37
	1	14	22.37	21.96	22.47
	8	0	20.90	20.78	20.73
	8	4	20.70	20.67	20.78
	8	7	20.62	20.75	20.75
	15	0	20.77	20.65	20.53

Band / Channel Bandwidth			LTE Band 26 / CB: 5MHz		
Channel			26715	26740	26765
Frequency (MHz)			816.5	819	821.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	22.98	23.04	22.91
	1	12	22.89	22.81	22.86
	1	24	22.64	22.74	22.78
	12	0	21.77	21.77	21.85
	12	6	21.73	21.86	21.89
	12	11	21.79	21.93	21.78
	25	0	21.81	21.75	21.90
16QAM	1	0	22.47	22.14	22.11
	1	12	22.27	21.90	21.97
	1	24	22.23	21.52	21.95
	12	0	20.82	20.80	20.88
	12	6	20.79	20.78	20.68
	12	11	20.83	20.84	20.79
	25	0	20.97	20.80	20.81

Band / Channel Bandwidth			LTE Band 26 / CB: 10MHz		
Channel			---	26740	---
Frequency (MHz)			---	819	---
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	---	23.09	---
	1	24	---	22.85	---
	1	49	---	22.78	---
	25	0	---	21.84	---
	25	12	---	21.76	---
	25	24	---	21.83	---
	50	0	---	21.74	---
16QAM	1	0	---	22.47	---
	1	24	---	22.31	---
	1	49	---	21.64	---
	25	0	---	20.91	---
	25	12	---	20.75	---
	25	24	---	20.83	---
	50	0	---	20.71	---

3.1.5 Test Result of Effective Radiated Power (dBm)

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset: 0, QPSK						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26697	814.7	15.07	38.45	-23.38	-14.41	13.79	3.43
26740	819.0	15.35	38.45	-23.1	-14.17	14.09	3.41
26783	823.3	15.58	38.45	-22.87	-13.98	14.35	3.38

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset: 0, 16QAM						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26697	814.7	14.23	38.45	-24.22	-15.25	12.95	3.43
26740	819.0	14.59	38.45	-23.86	-14.93	13.33	3.41
26783	823.3	14.97	38.45	-23.48	-14.59	13.74	3.38

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset: 0, QPSK						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26705	815.5	15.50	38.45	-22.95	-13.99	14.23	3.42
26740	819.0	15.78	38.45	-22.67	-13.74	14.52	3.41
26775	822.5	15.91	38.45	-22.54	-13.64	14.67	3.39

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset: 0, 16QAM						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26705	815.5	14.94	38.45	-23.51	-14.55	13.67	3.42
26740	819.0	15.19	38.45	-23.26	-14.33	13.93	3.41
26775	822.5	15.29	38.45	-23.16	-14.26	14.05	3.39

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset: 0, QPSK						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26715	816.5	15.24	38.45	-23.21	-14.26	13.97	3.42
26740	819.0	15.86	38.45	-22.59	-13.66	14.60	3.41
26765	821.5	15.82	38.45	-22.63	-13.72	14.58	3.39

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset: 0, 16QAM						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26715	816.5	14.59	38.45	-23.86	-14.91	13.32	3.42
26740	819.0	15.00	38.45	-23.45	-14.52	13.74	3.41
26765	821.5	14.98	38.45	-23.47	-14.56	13.74	3.39

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 10MHz, 1RB, Offset: 0, QPSK						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26740	819	15.27	38.45	-23.18	-14.25	14.01	3.41

Mode	LTE Band 26, CB: 10MHz, 1RB, Offset: 0, 16QAM						
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
26740	819	14.62	38.45	-23.83	-14.90	13.36	3.41

NOTE: ERP = S.G power value + correction factor - 2.15.

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

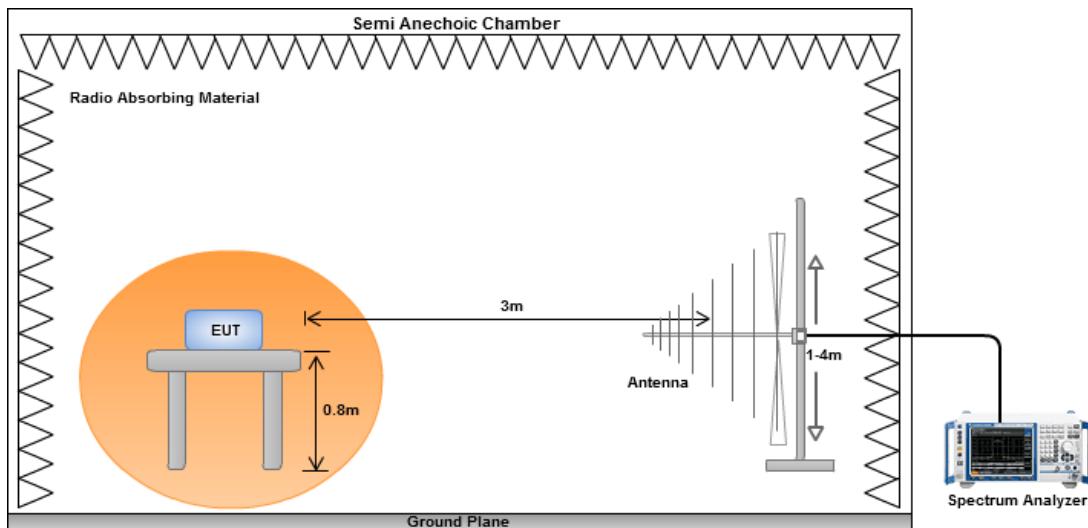
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

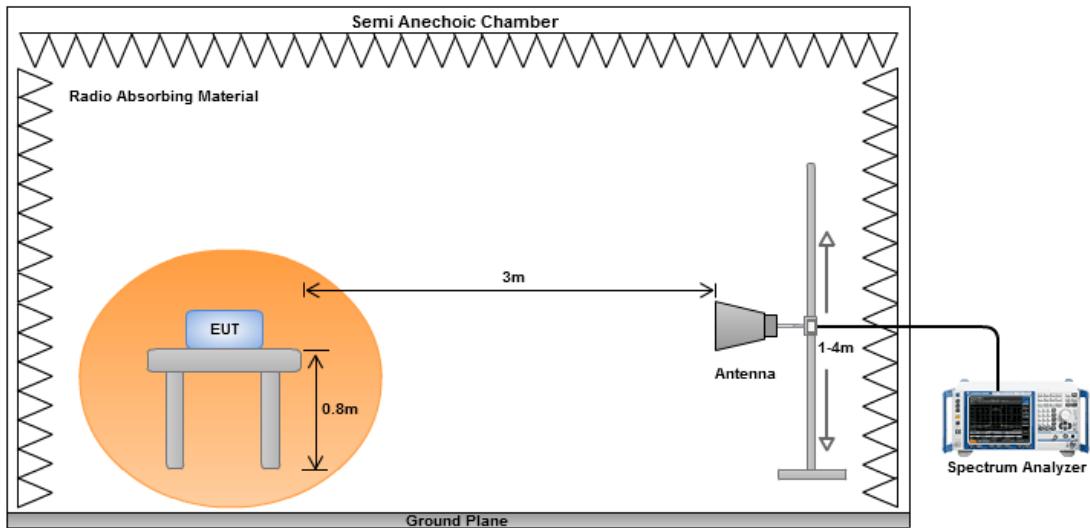
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable. ERP can be calculated by below formula:
$$E.R.P = E.I.R.P - 2.15dB$$

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.2.4 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset 0, Channel: 26697, Adapter mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-58.74	-13.00	-45.74	-55.68	-42.38	-14.21
41.64	H	-65.68	-13.00	-52.68	-62.12	-51.34	-12.19
117.30	H	-67.51	-13.00	-54.51	-55.23	-64.65	-0.71
151.25	H	-63.24	-13.00	-50.24	-52.33	-60.11	-0.98
212.36	H	-64.48	-13.00	-51.48	-50.20	-66.82	4.49
251.16	H	-62.08	-13.00	-49.08	-48.92	-64.36	4.43
30.00	V	-54.18	-13.00	-41.18	-42.96	-37.82	-14.21
45.52	V	-56.84	-13.00	-43.84	-45.52	-43.05	-11.64
59.10	V	-60.28	-13.00	-47.28	-47.82	-49.61	-8.52
110.51	V	-57.11	-13.00	-44.11	-45.82	-54.66	-0.30
151.16	V	-61.54	-13.00	-48.54	-53.27	-58.41	-0.98
250.19	V	-64.78	-13.00	-51.78	-56.94	-67.06	4.43

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset 0, Channel: 26697, Cradle mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.84	-13.00	-44.84	-54.78	-41.48	-14.21
45.52	H	-64.40	-13.00	-51.40	-60.56	-50.61	-11.64
114.39	H	-67.96	-13.00	-54.96	-55.70	-65.28	-0.53
142.52	H	-61.35	-13.00	-48.35	-50.48	-57.75	-1.45
205.57	H	-65.98	-13.00	-52.98	-51.50	-68.33	4.50
242.43	H	-66.50	-13.00	-53.50	-53.09	-68.79	4.44
30.00	V	-53.37	-13.00	-40.37	-42.15	-37.01	-14.21
102.75	V	-57.63	-13.00	-44.63	-46.43	-55.65	0.17
161.92	V	-59.67	-13.00	-46.67	-51.73	-57.29	-0.23
202.66	V	-62.95	-13.00	-49.95	-53.20	-65.31	4.51
239.52	V	-63.37	-13.00	-50.37	-55.10	-65.67	4.45
714.82	V	-54.15	-13.00	-41.15	-52.81	-55.54	3.54

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset 0, Channel: 26775, Adapter mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-56.82	-13.00	-43.82	-53.76	-40.46	-14.21
45.52	H	-64.68	-13.00	-51.68	-60.84	-50.89	-11.64
115.36	H	-68.59	-13.00	-55.59	-56.32	-65.85	-0.59
151.25	H	-63.24	-13.00	-50.24	-52.33	-60.11	-0.98
211.39	H	-64.65	-13.00	-51.65	-50.34	-66.99	4.49
249.22	H	-63.28	-13.00	-50.28	-50.06	-65.56	4.43
30.00	V	-54.04	-13.00	-41.04	-42.82	-37.68	-14.21
43.58	V	-55.69	-13.00	-42.69	-44.13	-41.61	-11.93
59.10	V	-61.28	-13.00	-48.28	-48.82	-50.61	-8.52
104.69	V	-58.37	-13.00	-45.37	-47.16	-56.27	0.05
149.31	V	-61.40	-13.00	-48.40	-52.77	-58.17	-1.08
246.31	V	-64.56	-13.00	-51.56	-56.56	-66.85	4.44

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset 0, Channel: 26775, Cradle mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.41	-13.00	-44.41	-54.35	-41.05	-14.21
39.70	H	-64.26	-13.00	-51.26	-60.56	-49.65	-12.46
121.18	H	-66.99	-13.00	-53.99	-54.79	-63.93	-0.91
151.25	H	-65.28	-13.00	-52.28	-54.37	-62.15	-0.98
208.48	H	-64.21	-13.00	-51.21	-49.82	-66.56	4.50
242.43	H	-65.79	-13.00	-52.79	-52.38	-68.08	4.44
30.00	V	-53.58	-13.00	-40.58	-42.36	-37.22	-14.21
45.52	V	-56.09	-13.00	-43.09	-44.77	-42.30	-11.64
85.29	V	-61.31	-13.00	-48.31	-48.84	-58.44	-0.72
104.69	V	-56.39	-13.00	-43.39	-45.18	-54.29	0.05
151.25	V	-61.98	-13.00	-48.98	-53.49	-58.85	-0.98
240.49	V	-62.85	-13.00	-49.85	-54.62	-65.15	4.45

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset 0, Channel: 26740, Adapter mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.37	-13.00	-44.37	-54.31	-41.01	-14.21
104.69	H	-67.34	-13.00	-54.34	-55.12	-65.24	0.05
145.43	H	-63.36	-13.00	-50.36	-52.47	-59.92	-1.29
215.27	H	-64.22	-13.00	-51.22	-50.02	-66.56	4.49
251.16	H	-63.44	-13.00	-50.44	-50.28	-65.72	4.43
308.39	H	-68.74	-13.00	-55.74	-57.51	-70.88	4.29
30.00	V	-53.85	-13.00	-40.85	-42.63	-37.49	-14.21
45.52	V	-57.81	-13.00	-44.81	-46.49	-44.02	-11.64
59.10	V	-60.13	-13.00	-47.13	-47.67	-49.46	-8.52
104.69	V	-58.82	-13.00	-45.82	-47.61	-56.72	0.05
154.16	V	-61.85	-13.00	-48.85	-53.58	-58.88	-0.82
248.25	V	-64.61	-13.00	-51.61	-56.69	-66.89	4.43

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset 0, Channel: 26740, Cradle mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.41	-13.00	-44.41	-54.35	-41.05	-14.21
46.49	H	-64.61	-13.00	-51.61	-60.02	-51.02	-11.44
121.18	H	-66.99	-13.00	-53.99	-54.79	-63.93	-0.91
151.25	H	-65.28	-13.00	-52.28	-54.37	-62.15	-0.98
208.48	H	-64.21	-13.00	-51.21	-49.82	-66.56	4.50
242.43	H	-65.79	-13.00	-52.79	-52.38	-68.08	4.44
30.00	V	-54.09	-13.00	-41.09	-42.87	-37.73	-14.21
45.52	V	-54.85	-13.00	-41.85	-43.53	-41.06	-11.64
102.75	V	-55.35	-13.00	-42.35	-44.15	-52.95	-0.25
159.01	V	-60.74	-13.00	-47.74	-52.85	-58.04	-0.55
208.48	V	-63.30	-13.00	-50.30	-53.79	-65.65	4.50
237.58	V	-62.28	-13.00	-49.28	-53.94	-64.58	4.45

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 10MHz, 1RB, Offset 0, Channel: 26740, Adapter mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.30	-13.00	-44.30	-54.24	-40.94	-14.21
44.55	H	-64.63	-13.00	-51.63	-61.18	-50.68	-11.80
115.36	H	-69.18	-13.00	-56.18	-56.91	-66.44	-0.59
149.31	H	-63.48	-13.00	-50.48	-52.58	-60.25	-1.08
211.39	H	-63.81	-13.00	-50.81	-49.50	-66.15	4.49
251.16	H	-62.80	-13.00	-49.80	-49.64	-65.08	4.43
30.00	V	-53.86	-13.00	-40.86	-42.64	-37.50	-14.21
45.52	V	-57.00	-13.00	-44.00	-45.68	-43.21	-11.64
59.10	V	-63.06	-13.00	-50.06	-50.60	-52.39	-8.52
104.69	V	-57.80	-13.00	-44.80	-46.59	-55.70	0.05
151.25	V	-60.84	-13.00	-47.84	-52.35	-57.71	-0.98
167.74	V	-56.03	-13.00	-43.03	-47.72	-54.45	0.57

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 10MHz, 1RB, Offset 0, Channel: 26740, Cradle mode						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
30.00	H	-57.05	-13.00	-44.05	-53.99	-40.69	-14.21
120.21	H	-67.64	-13.00	-54.64	-55.36	-64.61	-0.88
152.22	H	-64.72	-13.00	-51.72	-53.80	-60.99	-1.58
208.48	H	-63.83	-13.00	-50.83	-49.44	-66.18	4.50
239.52	H	-65.46	-13.00	-52.46	-51.96	-67.76	4.45
291.90	H	-66.97	-13.00	-53.97	-55.03	-69.12	4.30
30.00	V	-53.63	-13.00	-40.63	-42.41	-37.27	-14.21
44.55	V	-56.34	-13.00	-43.34	-45.07	-42.39	-11.80
104.69	V	-56.16	-13.00	-43.16	-44.95	-54.06	0.05
152.22	V	-61.82	-13.00	-48.82	-53.41	-58.75	-0.92
205.57	V	-63.35	-13.00	-50.35	-53.71	-65.70	4.50
239.52	V	-63.12	-13.00	-50.12	-54.85	-65.42	4.45

NOTE: ERP = S.G power value + correction factor - 2.15.

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset 0, Channel:26697						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1628.50	H	-61.20	-13.00	-48.20	-62.43	-64.17	5.12
2442.75	H	-54.03	-13.00	-41.03	-60.13	-58.18	6.30
3257.00	H	-55.78	-13.00	-42.78	-64.86	-60.31	6.68
1628.50	V	-60.79	-13.00	-47.79	-61.46	-63.76	5.12
2442.75	V	-53.35	-13.00	-40.35	-60.22	-57.50	6.30
3257.00	V	-53.94	-13.00	-40.94	-62.43	-58.47	6.68

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset 0, Channel:26740						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1637.10	H	-61.08	-13.00	-48.08	-62.35	-64.07	5.14
2455.65	H	-53.50	-13.00	-40.50	-59.62	-57.65	6.30
3274.20	H	-54.98	-13.00	-41.98	-63.98	-59.53	6.70
1637.10	V	-60.52	-13.00	-47.52	-61.21	-63.51	5.14
2455.65	V	-53.97	-13.00	-40.97	-60.85	-58.12	6.30
3274.20	V	-55.14	-13.00	-42.14	-63.63	-59.69	6.70

Mode	LTE Band 26, CB: 1.4MHz, 1RB, Offset 0, Channel:26783						
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1645.70	H	-60.24	-13.00	-47.24	-61.56	-63.25	5.16
2468.55	H	-53.26	-13.00	-40.26	-59.42	-57.42	6.31
3291.40	H	-53.57	-13.00	-40.57	-62.48	-58.14	6.72
1645.70	V	-60.53	-13.00	-47.53	-61.25	-63.54	5.16
2468.55	V	-53.53	-13.00	-40.53	-60.44	-57.69	6.31
3291.40	V	-54.73	-13.00	-41.73	-63.21	-59.30	6.72

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset 0, Channel:26705						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1628.48	H	-60.63	-13.00	-47.63	-61.86	-63.60	5.12
2442.72	H	-53.93	-13.00	-40.93	-60.02	-58.08	6.30
3252.96	H	-54.22	-13.00	-41.22	-63.33	-58.74	6.67
1628.48	V	-60.36	-13.00	-47.36	-61.03	-63.33	5.12
2442.72	V	-53.17	-13.00	-40.17	-60.02	-57.32	6.30
3252.96	V	-53.94	-13.00	-40.94	-62.44	-58.46	6.67

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset 0, Channel:26740						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1635.48	H	-60.18	-13.00	-47.18	-61.45	-63.17	5.14
2453.22	H	-53.11	-13.00	-40.11	-59.23	-57.26	6.30
3270.96	H	-53.51	-13.00	-40.51	-62.53	-58.05	6.69
1635.48	V	-60.17	-13.00	-47.17	-60.86	-63.16	5.14
2453.22	V	-53.44	-13.00	-40.44	-60.32	-57.59	6.30
3270.96	V	-53.93	-13.00	-40.93	-62.42	-58.47	6.69

Mode	LTE Band 26, CB: 3MHz, 1RB, Offset 0, Channel:26775						
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1642.48	H	-59.26	-13.00	-46.26	-60.57	-62.26	5.15
2463.72	H	-53.09	-13.00	-40.09	-59.24	-57.25	6.31
3284.96	H	-52.40	-13.00	-39.40	-61.34	-56.96	6.71
1642.48	V	-59.82	-13.00	-46.82	-60.53	-62.82	5.15
2463.72	V	-53.43	-13.00	-40.43	-60.33	-57.59	6.31
3284.96	V	-53.54	-13.00	-40.54	-62.02	-58.10	6.71

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset 0, Channel:26715						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1628.68	H	-60.45	-13.00	-47.45	-61.68	-63.42	5.12
2443.02	H	-54.34	-13.00	-41.34	-60.43	-58.49	6.30
3257.36	H	-54.24	-13.00	-41.24	-63.33	-58.77	6.68
1628.68	V	-60.59	-13.00	-47.59	-61.26	-63.56	5.12
2443.02	V	-53.27	-13.00	-40.27	-60.12	-57.42	6.30
3257.36	V	-52.85	-13.00	-39.85	-61.35	-57.38	6.68

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset 0, Channel:26740						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1633.68	H	-60.40	-13.00	-47.40	-61.65	-63.38	5.13
2450.52	H	-53.20	-13.00	-40.20	-59.31	-57.35	6.30
3267.36	H	-53.21	-13.00	-40.21	-62.25	-57.75	6.69
1633.68	V	-59.97	-13.00	-46.97	-60.65	-62.95	5.13
2450.52	V	-53.44	-13.00	-40.44	-60.31	-57.59	6.30
3267.36	V	-52.86	-13.00	-39.86	-61.36	-57.40	6.69

Mode	LTE Band 26, CB: 5MHz, 1RB, Offset 0, Channel:26765						
Frequency (MHz)	Antenna Polarity.	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
1638.68	H	-59.75	-13.00	-46.75	-61.03	-62.74	5.14
2458.02	H	-53.10	-13.00	-40.10	-59.23	-57.25	6.30
3277.36	H	-52.32	-13.00	-39.32	-61.31	-56.87	6.70
1638.68	V	-60.32	-13.00	-47.32	-61.02	-63.31	5.14
2458.02	V	-53.49	-13.00	-40.49	-60.37	-57.64	6.30
3277.36	V	-53.83	-13.00	-40.83	-62.32	-58.38	6.70

NOTE: ERP = S.G power value + correction factor - 2.15.

Mode	LTE Band 26, CB: 10MHz, 1RB, Offset 0, Channel:26740						
Frequency (MHz)	Antenna Polarity	E.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
1629.16	H	-59.30	-13.00	-46.30	-60.53	-62.27	5.12
2443.74	H	-53.03	-13.00	-40.03	-59.13	-57.18	6.30
3258.32	H	-52.26	-13.00	-39.26	-61.34	-56.79	6.68
1629.16	V	-59.72	-13.00	-46.72	-60.39	-62.69	5.12
2443.74	V	-53.47	-13.00	-40.47	-60.33	-57.62	6.30
3258.32	V	-52.13	-13.00	-39.13	-60.62	-56.66	6.68

NOTE: ERP = S.G power value + correction factor - 2.15.

3.3 Conducted Emissions

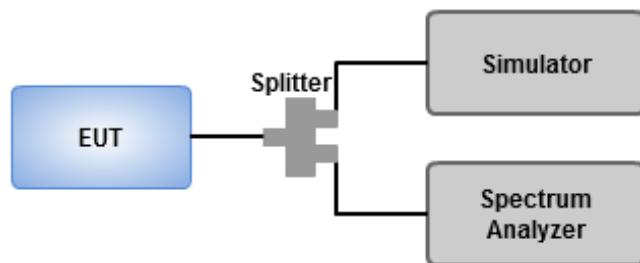
3.3.1 Limit of Conducted Emissions

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

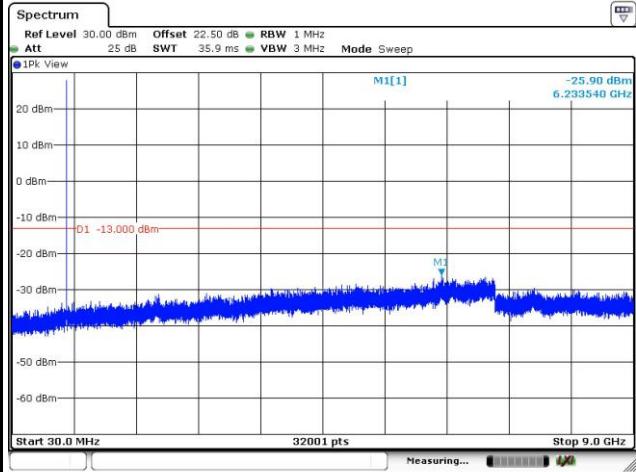
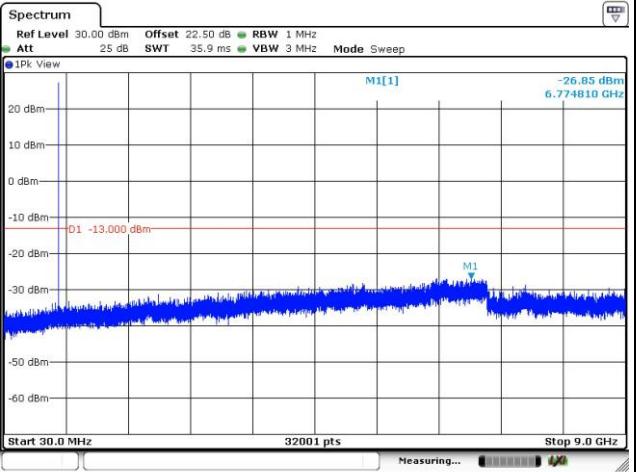
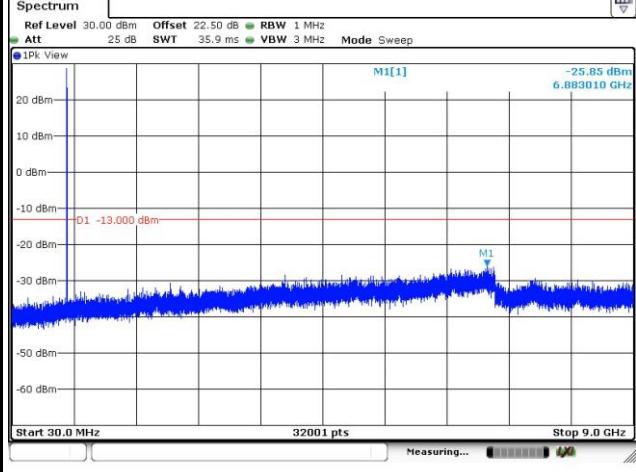
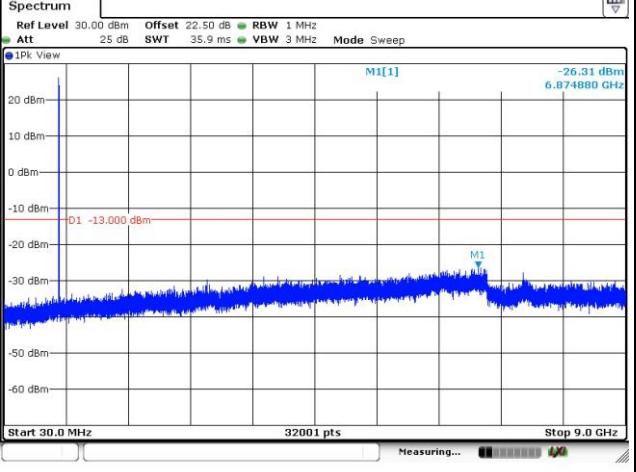
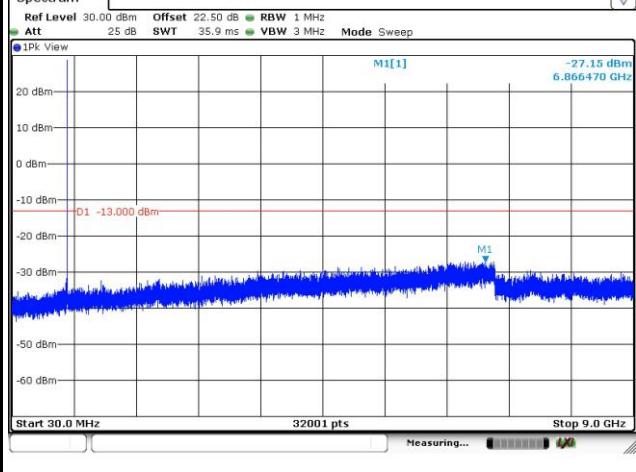
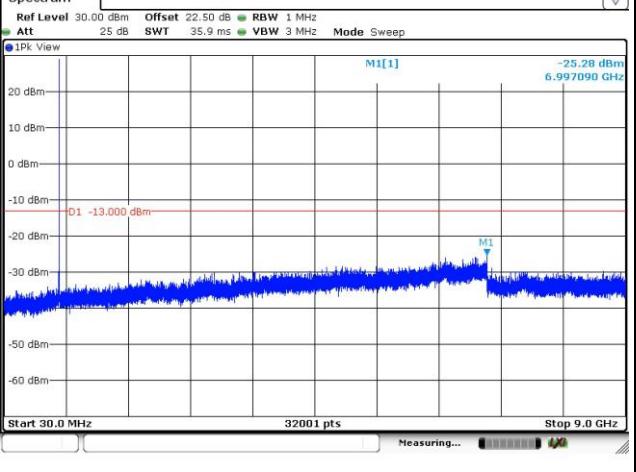
3.3.2 Test Procedures

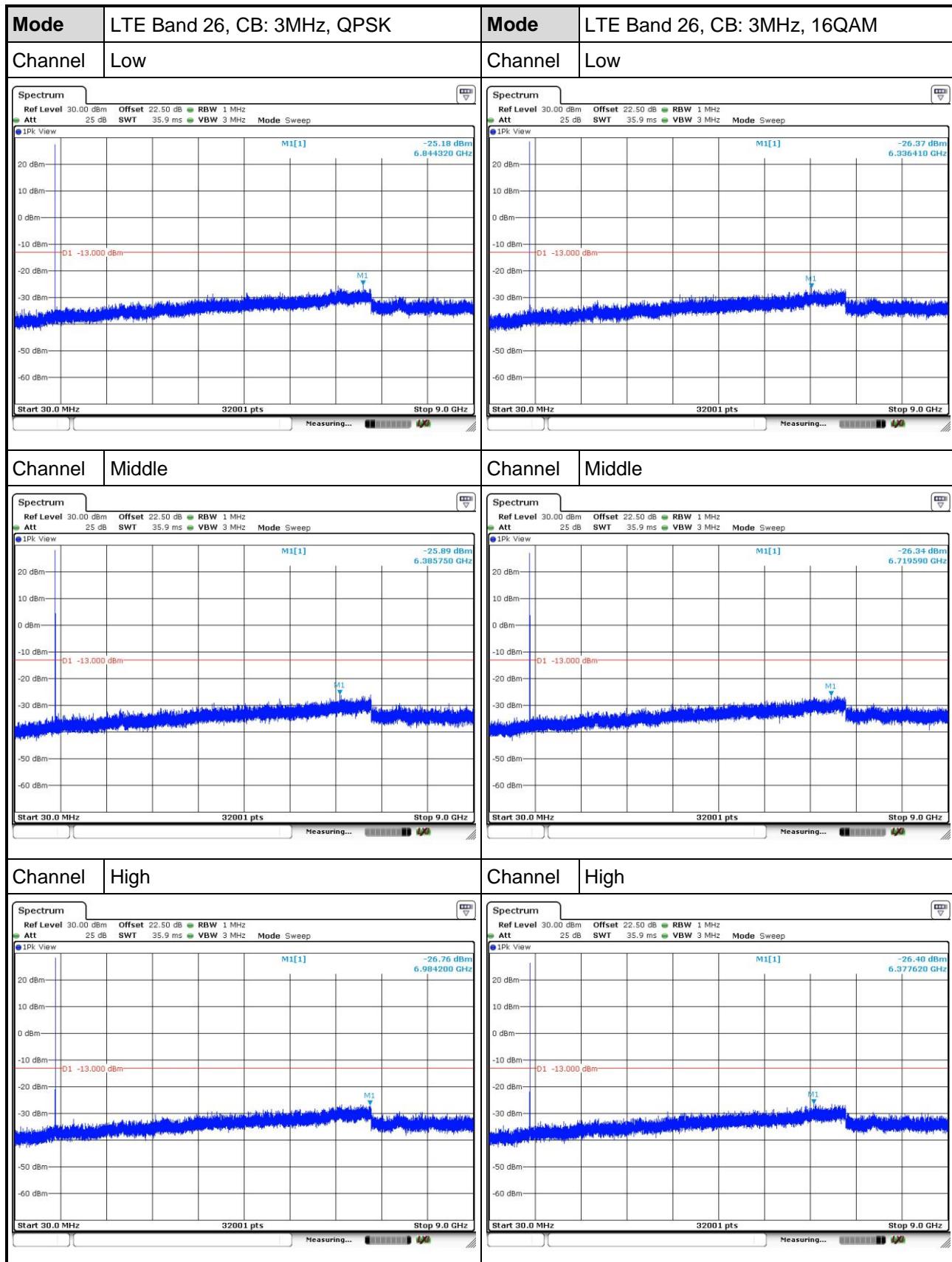
1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30MHz~9GHz.
3. Set RBW = 1MHz, VBW = 3MHz, detector = RMS, sweep time = auto.
4. Record the max trace value and capture the test plot of each sub frequency band.

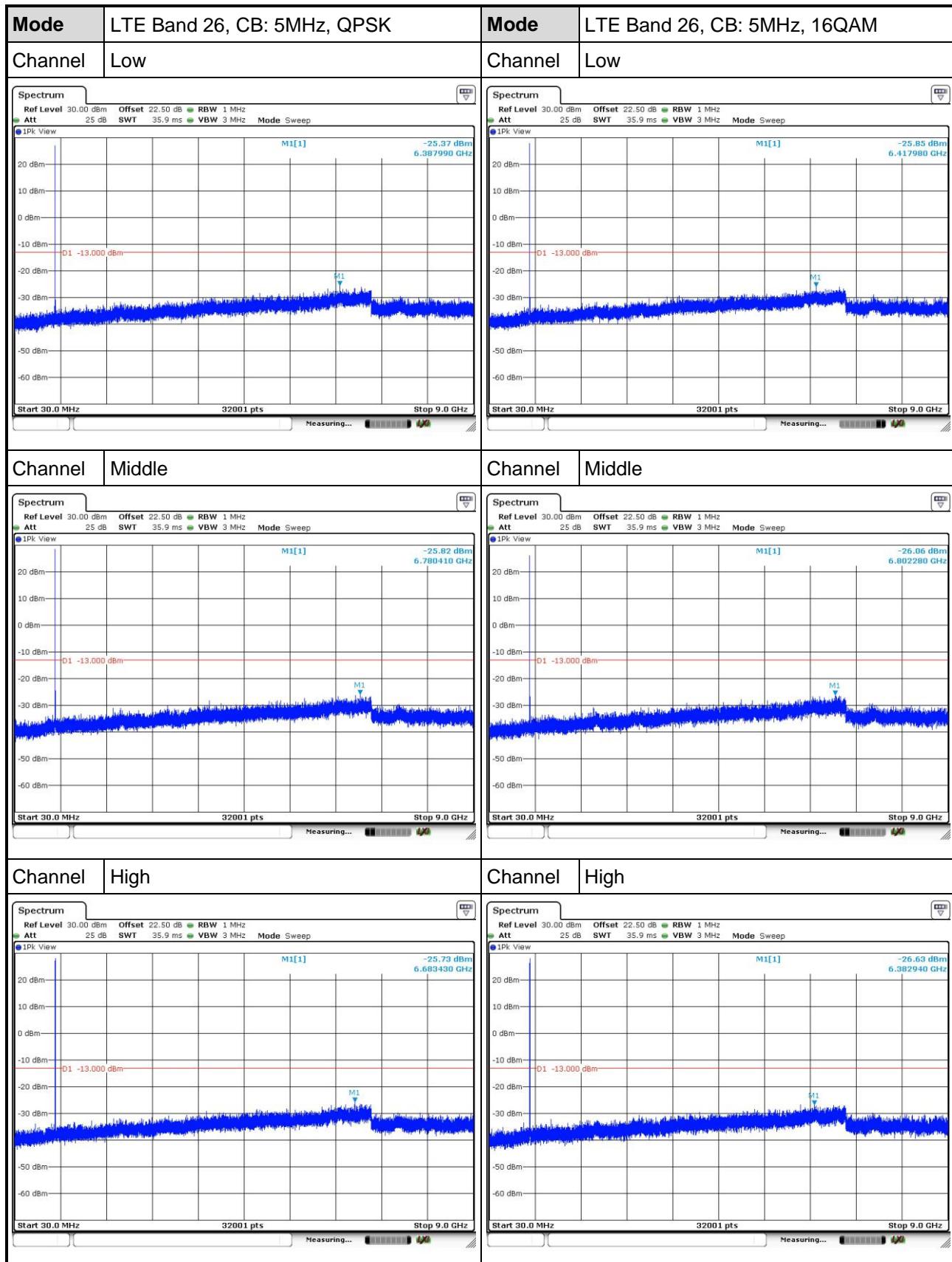
3.3.3 Test Setup

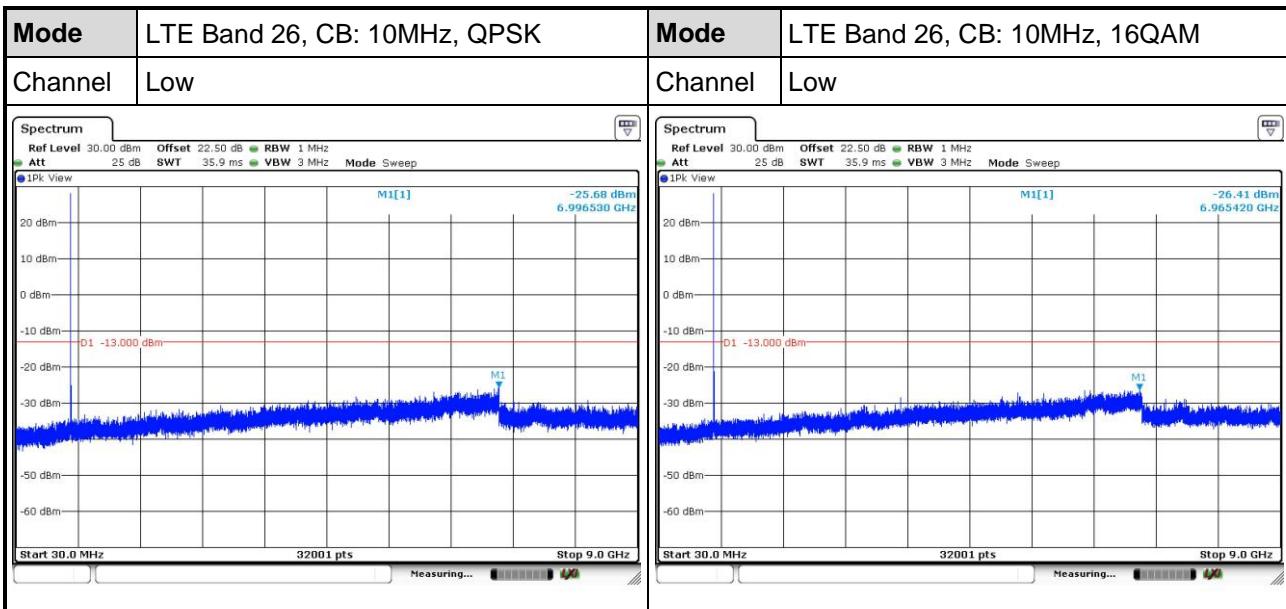


3.3.4 Test Result of Conducted Emissions

Mode	LTE Band 26, CB: 1.4MHz, QPSK	Mode	LTE Band 26, CB: 1.4MHz, 16QAM
Channel	Low	Channel	Low
	 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -25.90 dBm 6.233540 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>		 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -26.85 dBm 6.774810 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>
Channel	Middle	Channel	Middle
	 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -25.85 dBm 6.883010 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>		 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -26.31 dBm 6.874880 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>
Channel	High	Channel	High
	 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -27.15 dBm 6.866470 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>		 <p>Spectrum Ref Level 30.00 dBm Offset 22.50 dB RBW 1 MHz Att 25 dB SWT 35.9 ms VBW 3 MHz Mode Sweep 1Pk View</p> <p>M1[1] -25.28 dBm 6.997090 GHz</p> <p>D1 -13.000 dBm</p> <p>Start 30.0 MHz 32001 pts Stop 9.0 GHz Measuring...</p>







3.4 Band edge

3.4.1 Limit of band edge

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz

3.4.2 Test Procedures

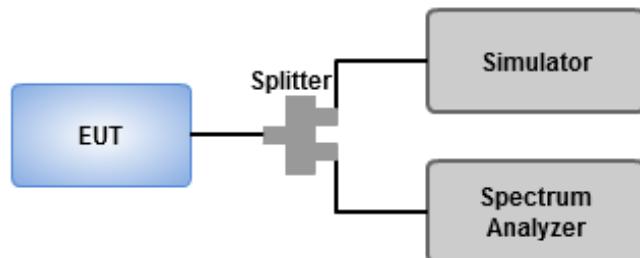
For out-of band emission except emission within 1MHz band immediately outside and adjacent to the edge

- 1 Lowest and highest operating channels are tested for this item.
- 2 Set RBW = 100 kHz, VBW = 300 kHz detector = RMS, sweep time = auto to measure trace.

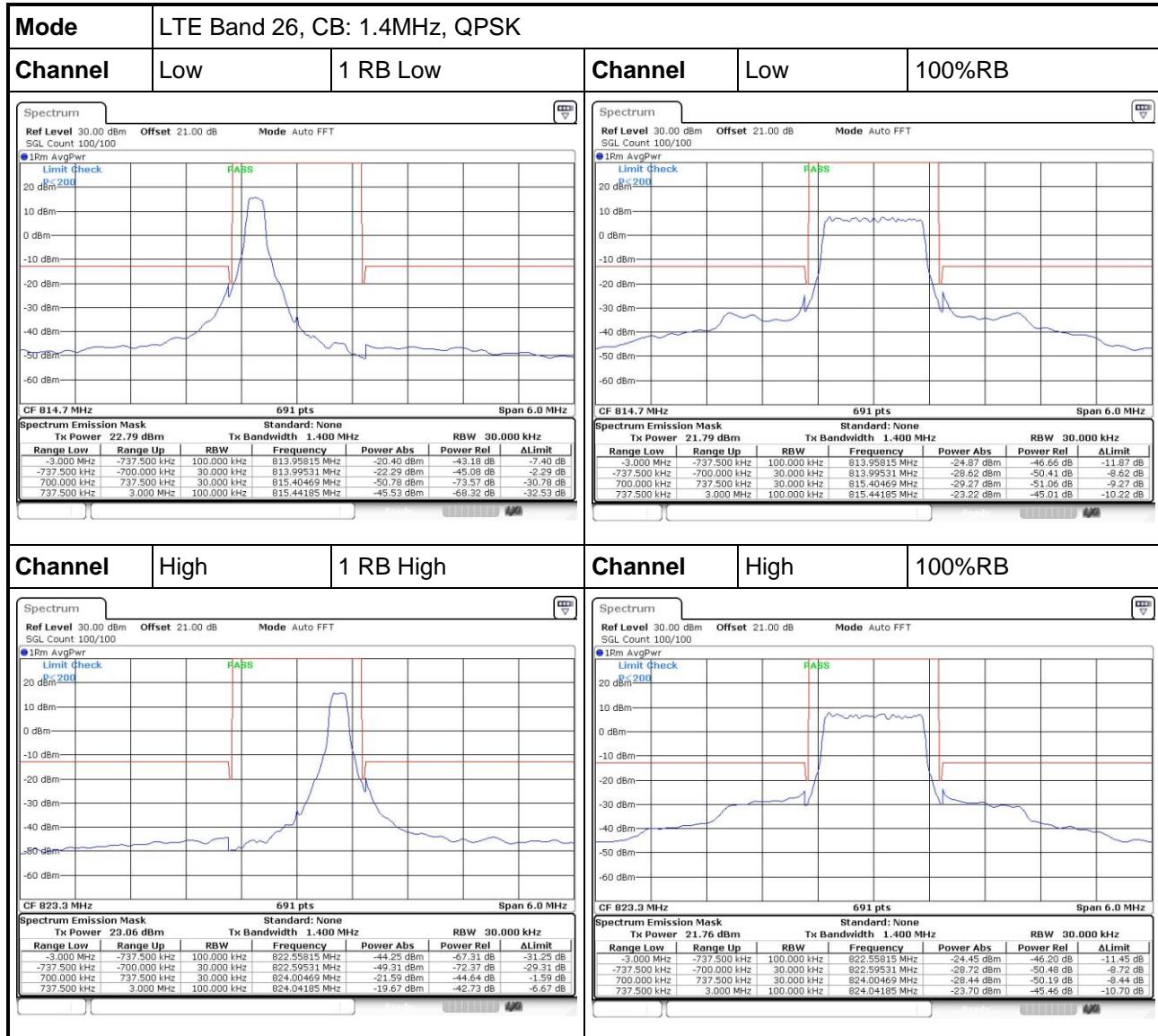
For emission within 1MHz band immediately outside and adjacent to the edge

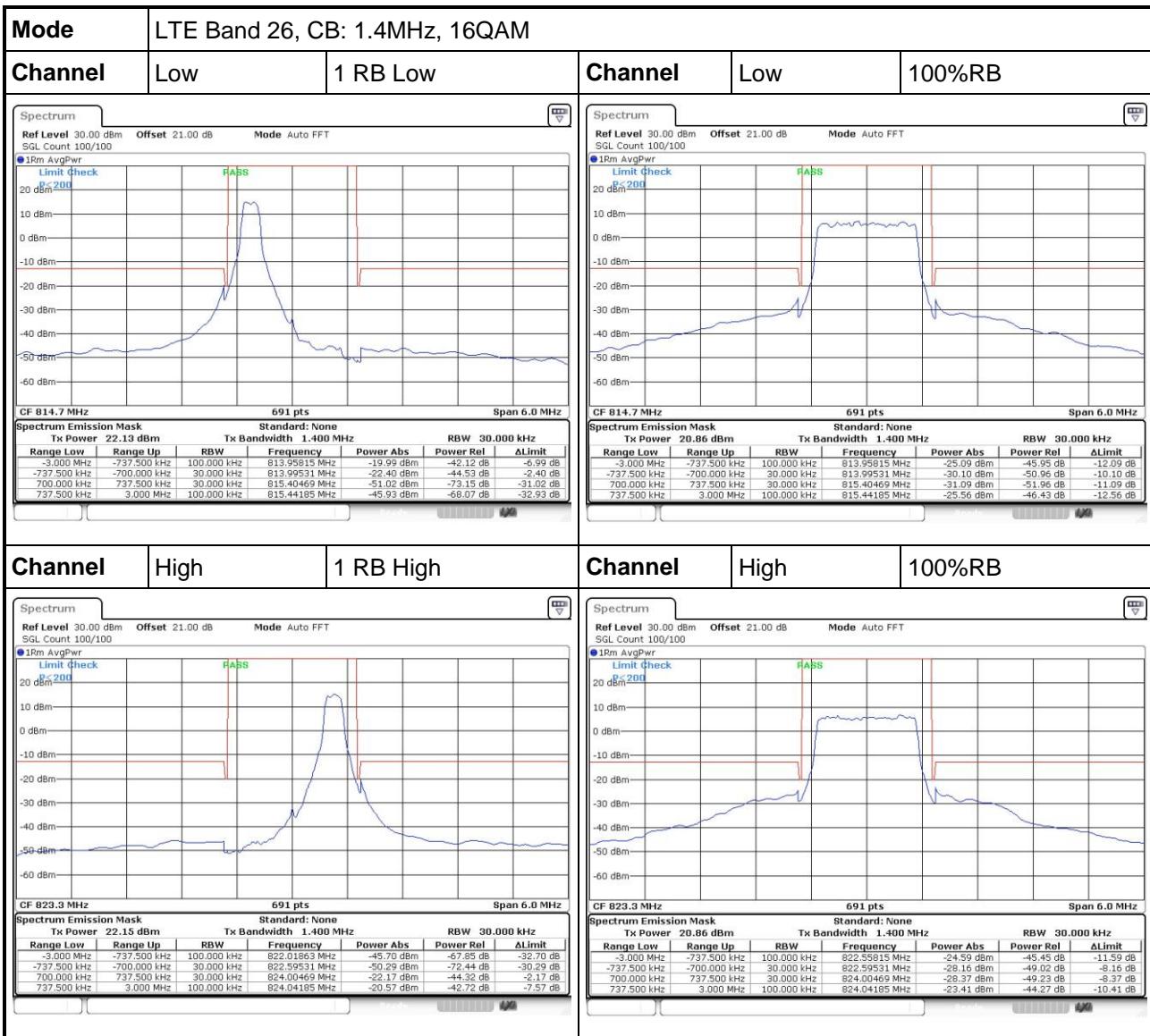
- 1 Lowest and highest operating channels are tested for this item.
- 2 Set RBW = at least 1% of 26dB bandwidth, VBW = 3 X RBW detector = RMS, sweep time = auto to measure trace.

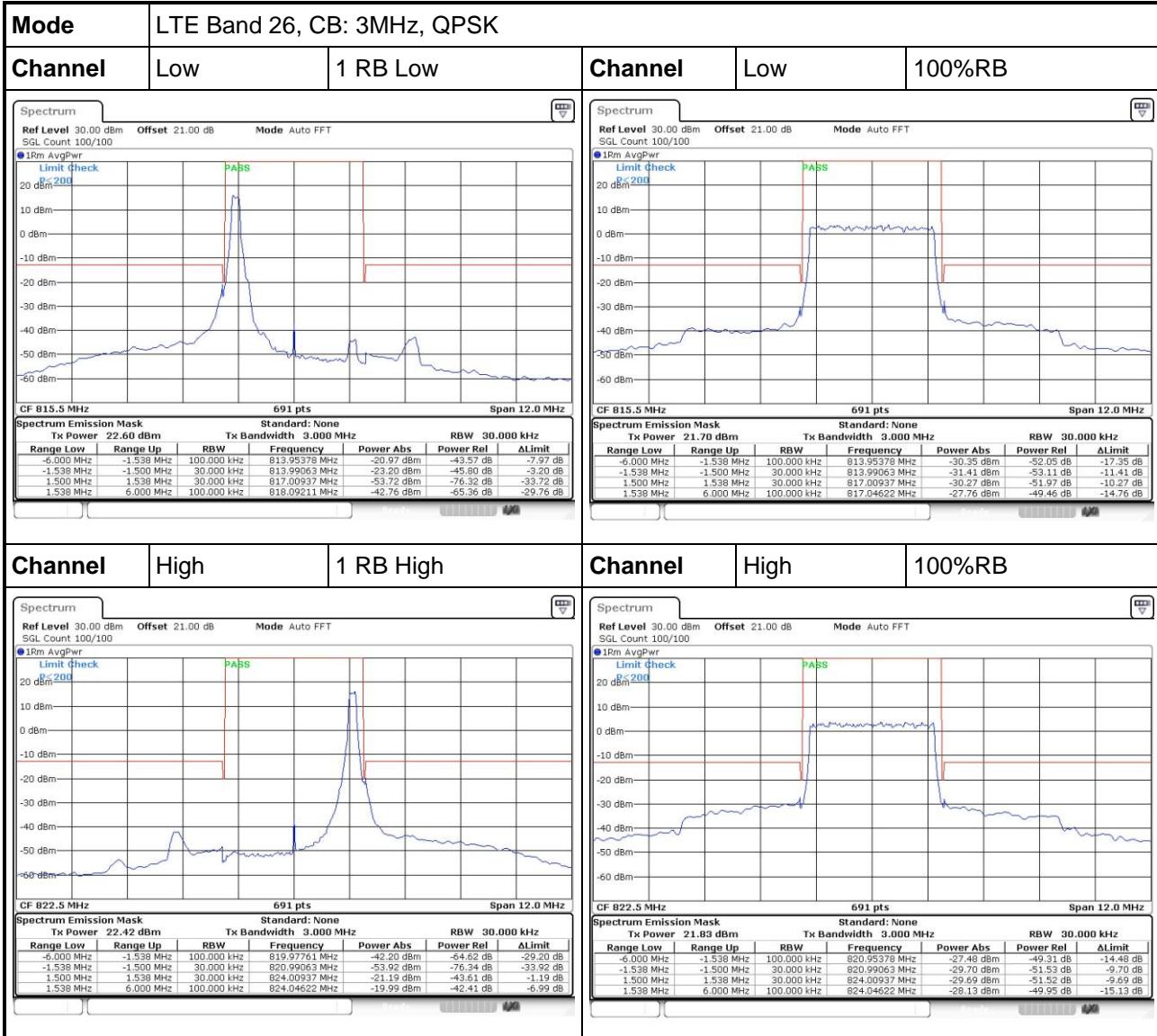
3.4.3 Test Setup

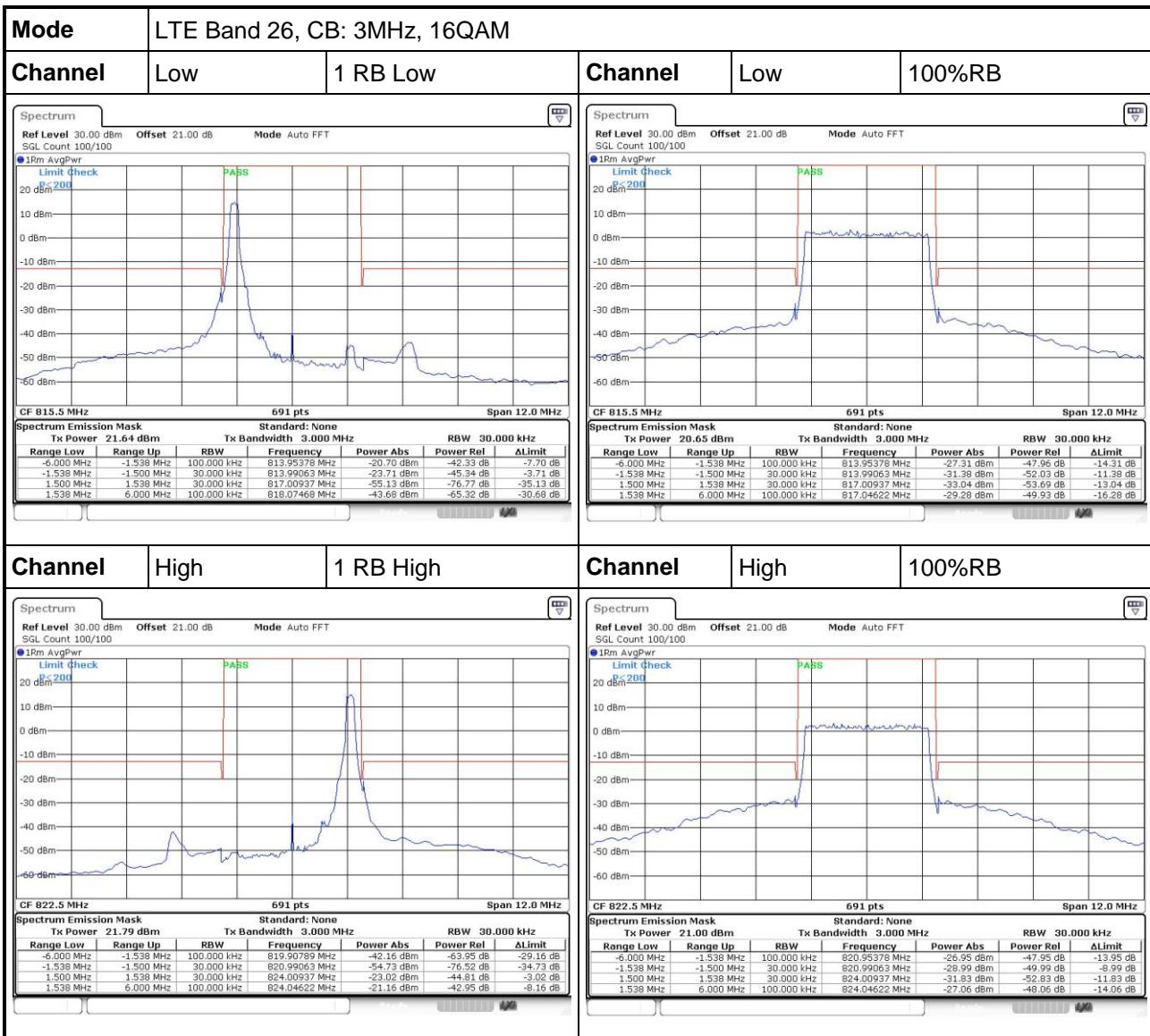


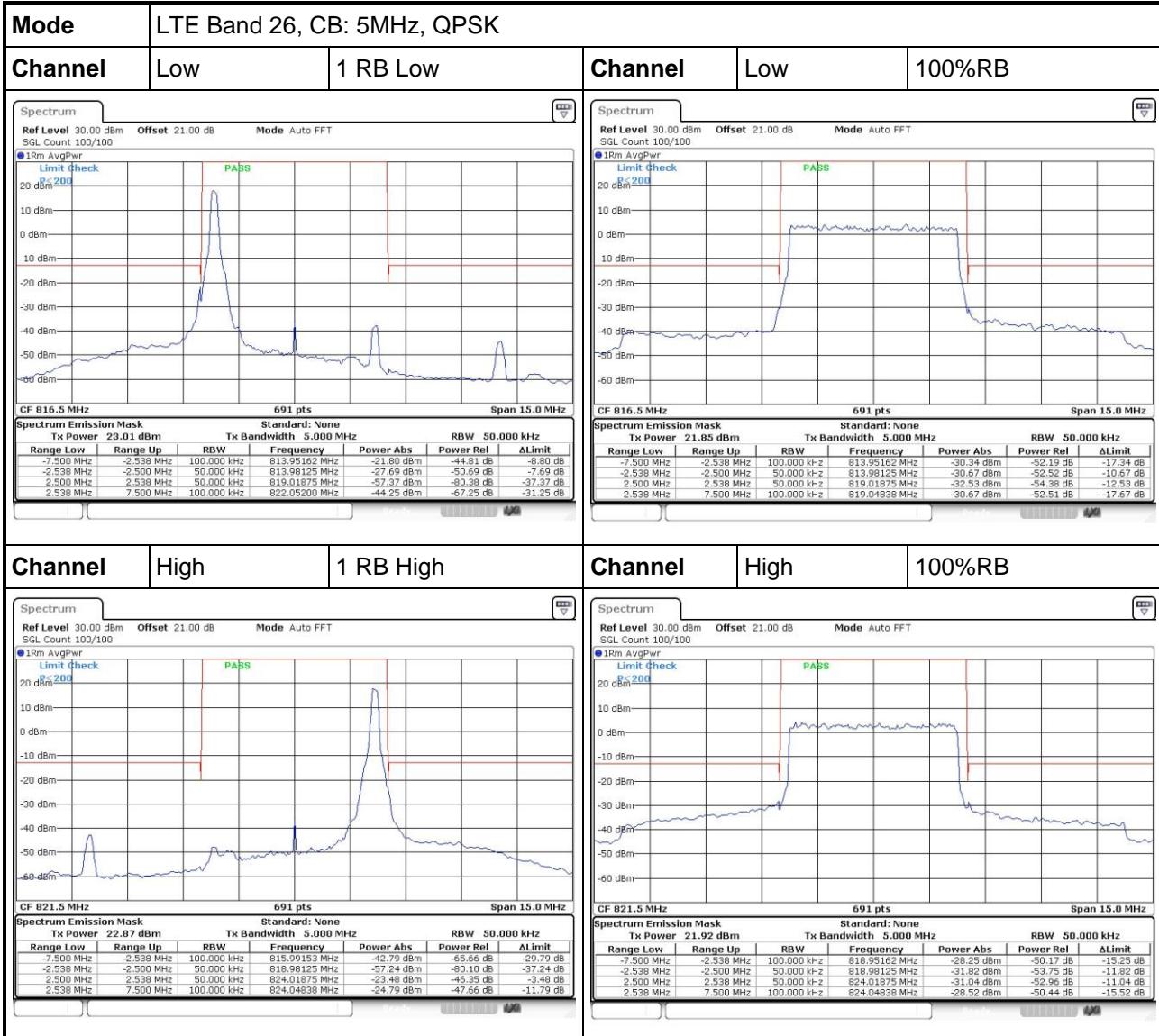
3.4.4 Test Result of Band Edge

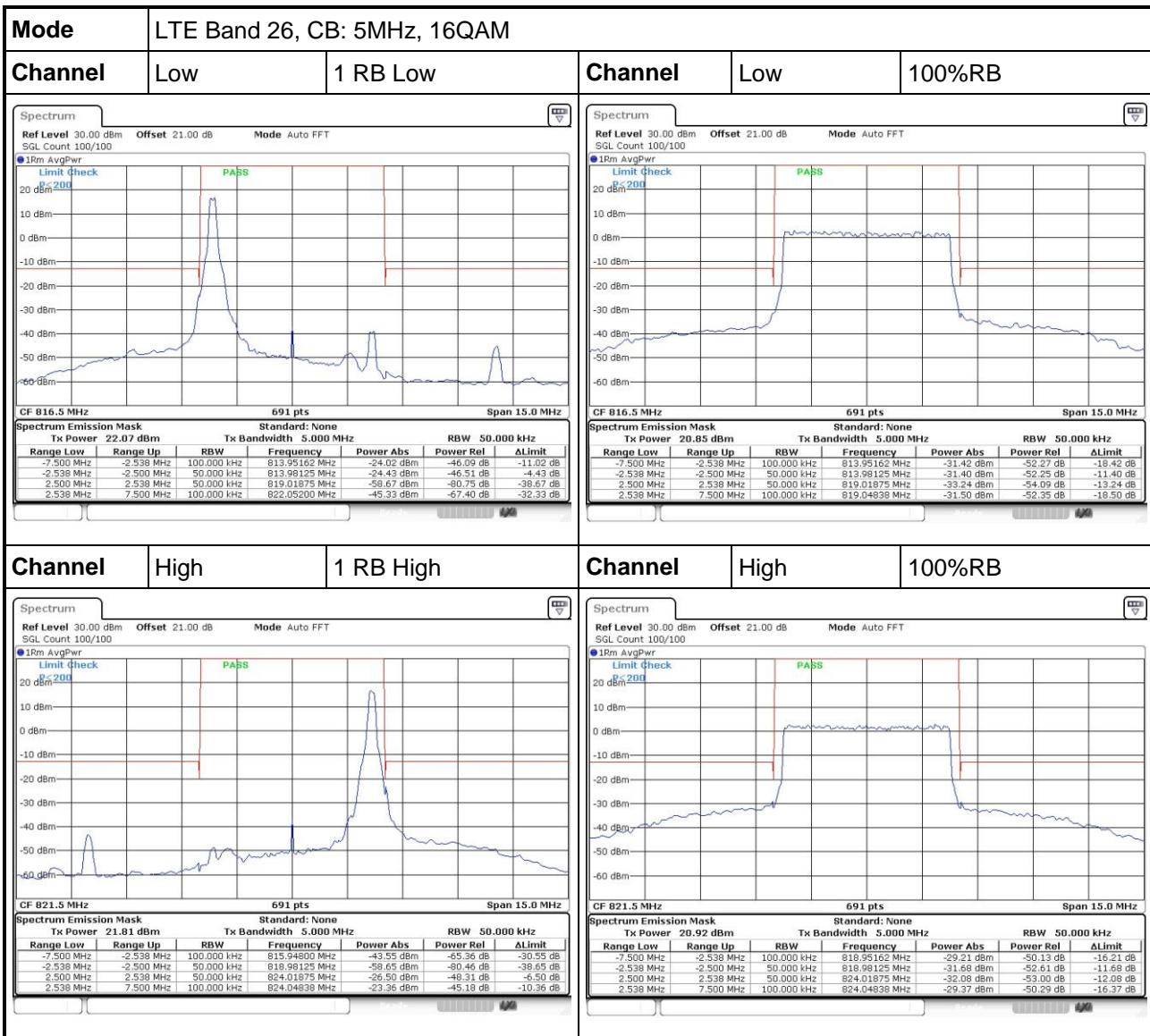


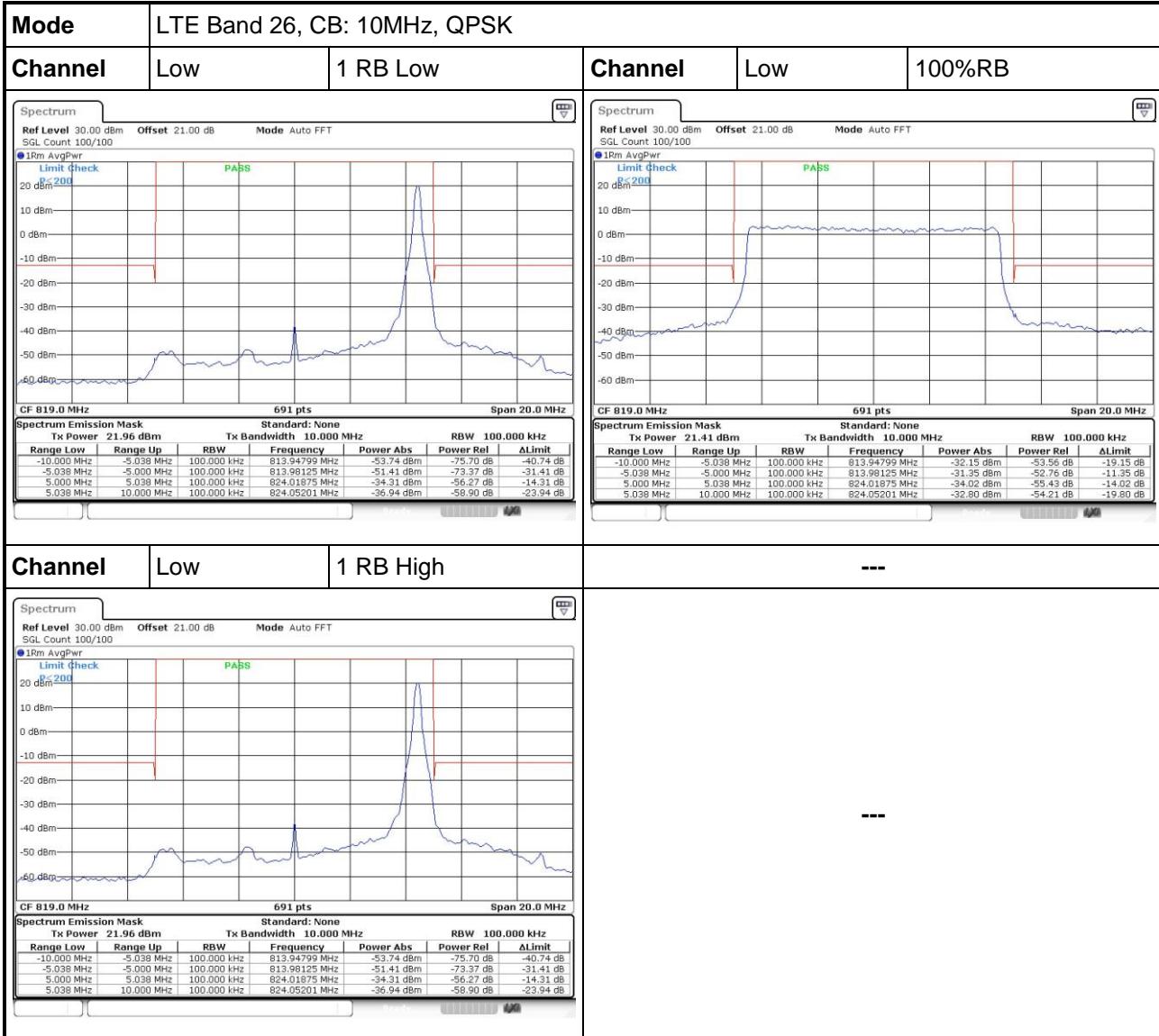


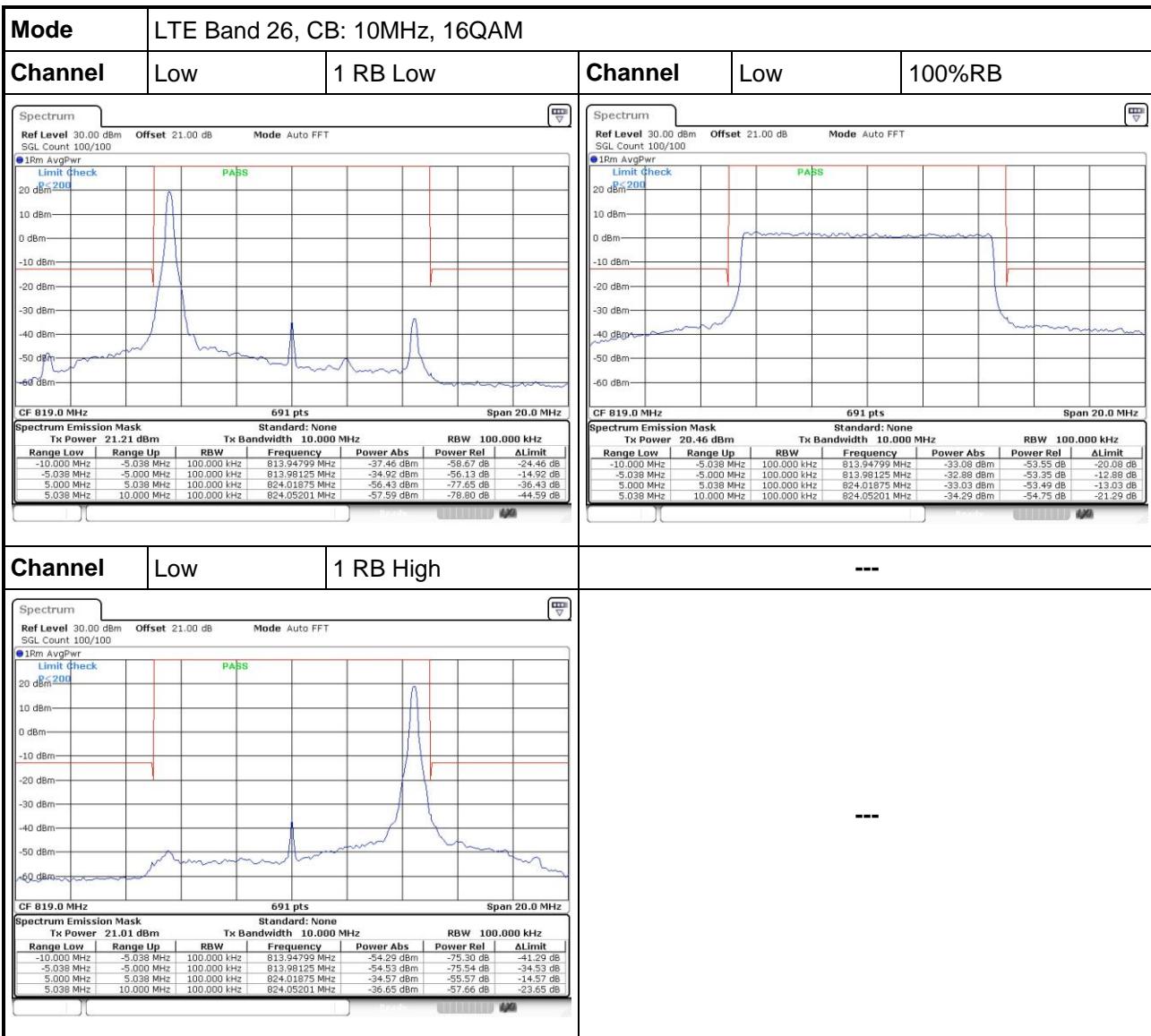










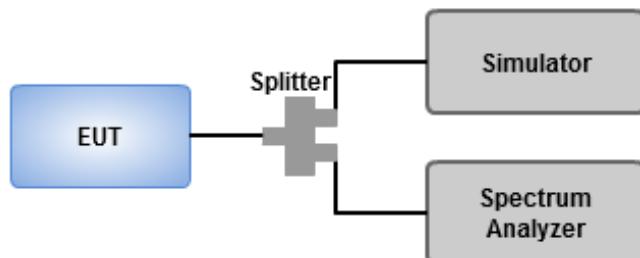


3.5 Occupied Bandwidth

3.5.1 Test Procedures

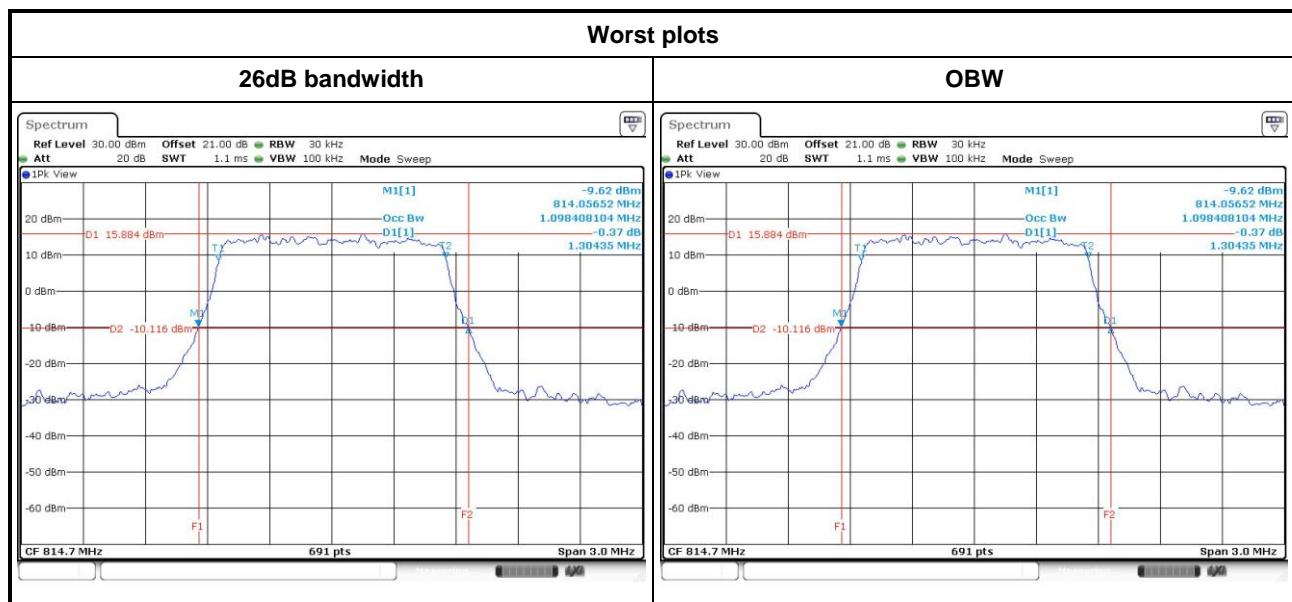
1. Set RBW = 30 / 30 / 50 / 100 kHz, VBW = 100 / 100 / 200 / 300 kHz for channel bandwidth 1.4 / 3 / 5 / 10MHz.
2. Detector = Sample, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Using occupied bandwidth measurement function of spectrum analyzer to measure occupied bandwidth

3.5.2 Test Setup



3.5.3 Test Result of Occupied Bandwidth

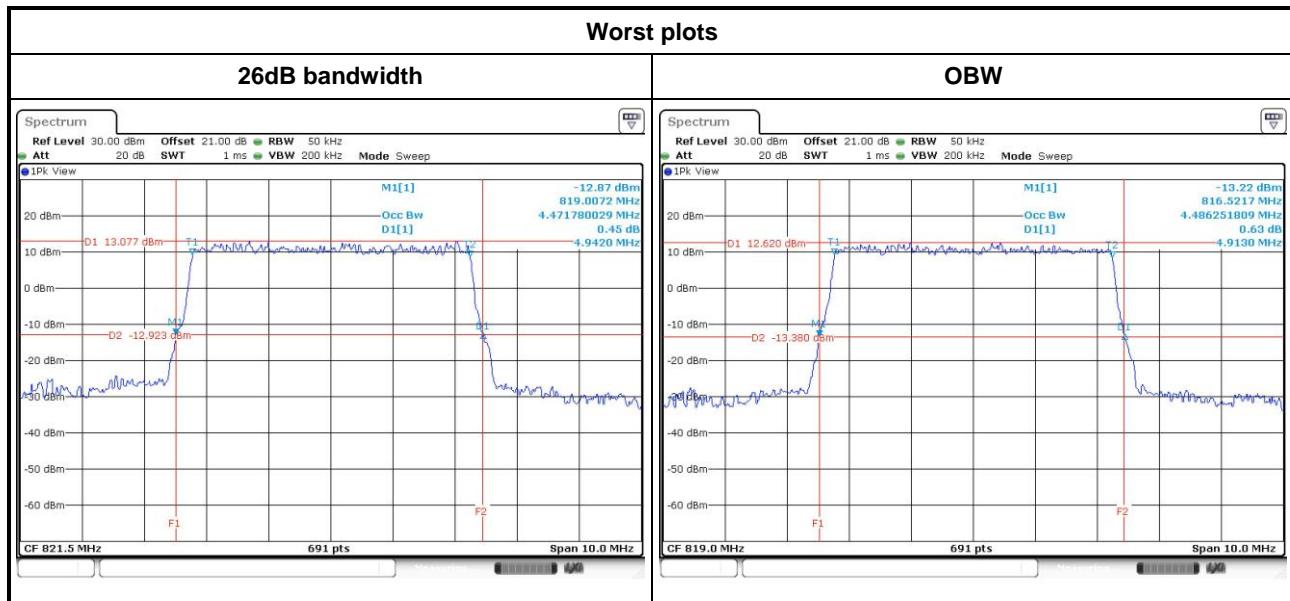
Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
LTE Band 26	1.4	QPSK	26697	814.7	1.28696	1.10
LTE Band 26	1.4	QPSK	26740	819.0	1.28696	1.10
LTE Band 26	1.4	QPSK	26783	823.3	1.28696	1.09
LTE Band 26	1.4	16QAM	26697	814.7	1.30435	1.10
LTE Band 26	1.4	16QAM	26740	819.0	1.29565	1.10
LTE Band 26	1.4	16QAM	26783	823.3	1.28696	1.09



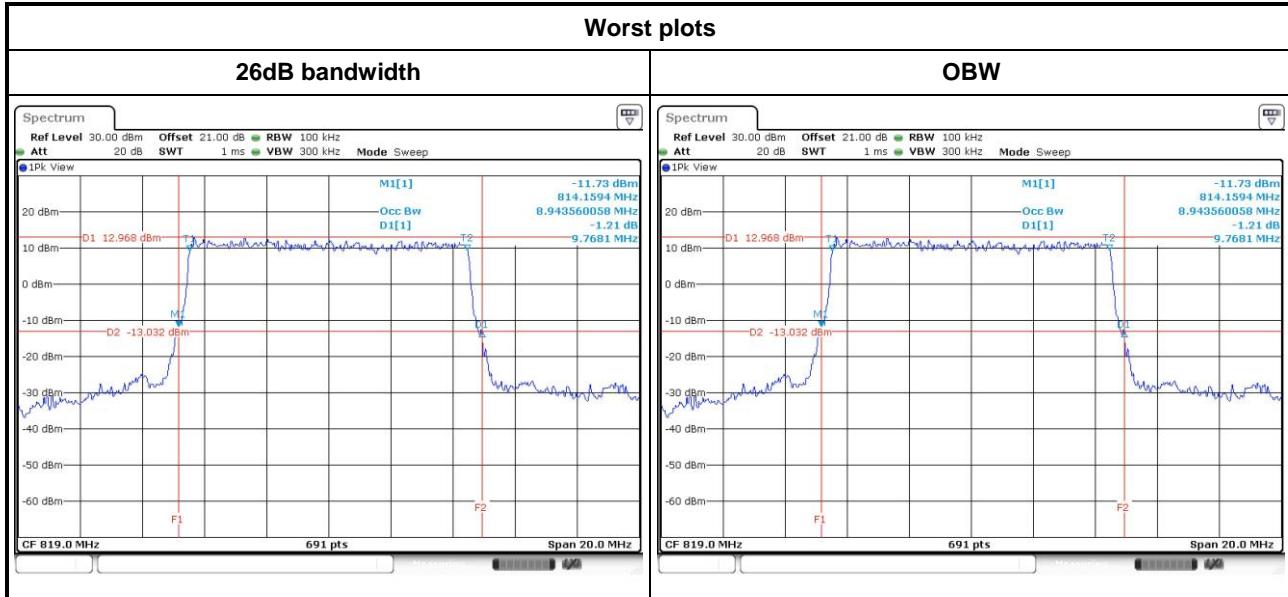
Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
LTE Band 26	3	QPSK	26705	815.5	2.93044	2.67
LTE Band 26	3	QPSK	26740	819.0	2.92174	2.68
LTE Band 26	3	QPSK	26775	822.5	2.92174	2.68
LTE Band 26	3	16QAM	26705	815.5	2.92174	2.67
LTE Band 26	3	16QAM	26740	819.0	2.93044	2.67
LTE Band 26	3	16QAM	26775	822.5	2.92174	2.68



Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
LTE Band 26	5	QPSK	26715	816.5	4.8841	4.47
LTE Band 26	5	QPSK	26740	819.0	4.9130	4.49
LTE Band 26	5	QPSK	26765	821.5	4.9420	4.47
LTE Band 26	5	16QAM	26715	816.5	4.9275	4.46
LTE Band 26	5	16QAM	26740	819.0	4.8841	4.49
LTE Band 26	5	16QAM	26765	821.5	4.9420	4.49



Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
LTE Band 26	10	QPSK	26740	819.0	9.7681	8.94
LTE Band 26	10	16QAM	26740	819.0	9.6522	8.91



3.6 Peak to Average Ratio

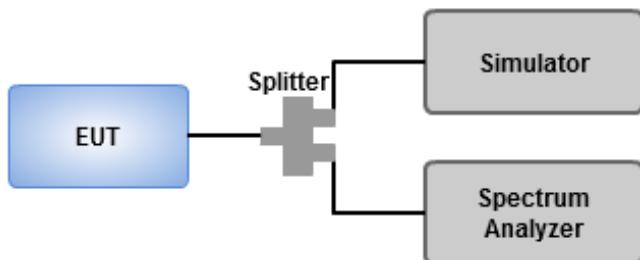
3.6.1 Limit of Peak to Average Ratio

Peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.6.2 Test Procedures

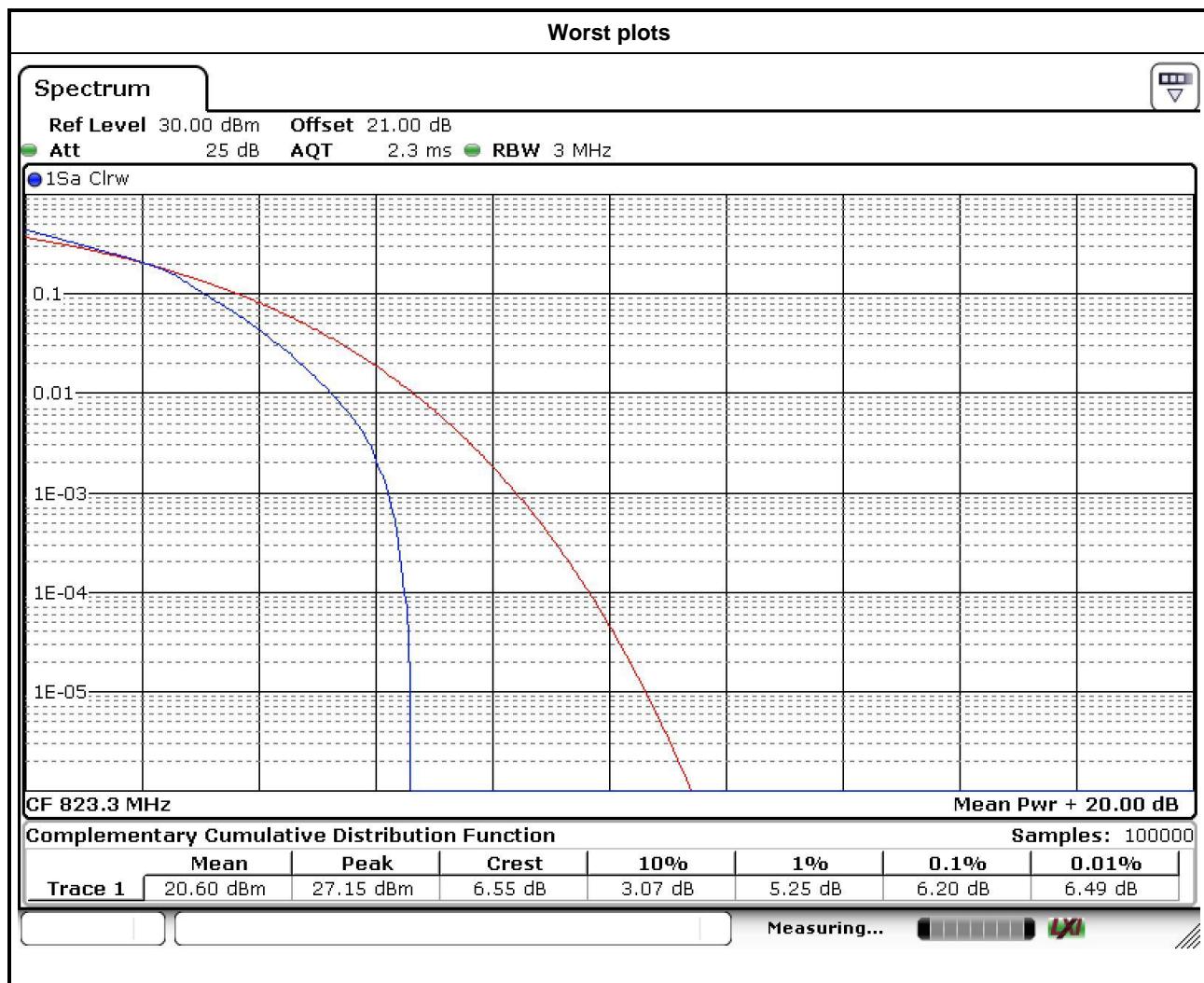
1. Enable CCDF function of spectrum analyzer and set RBW=10MHz.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.6.3 Test Setup

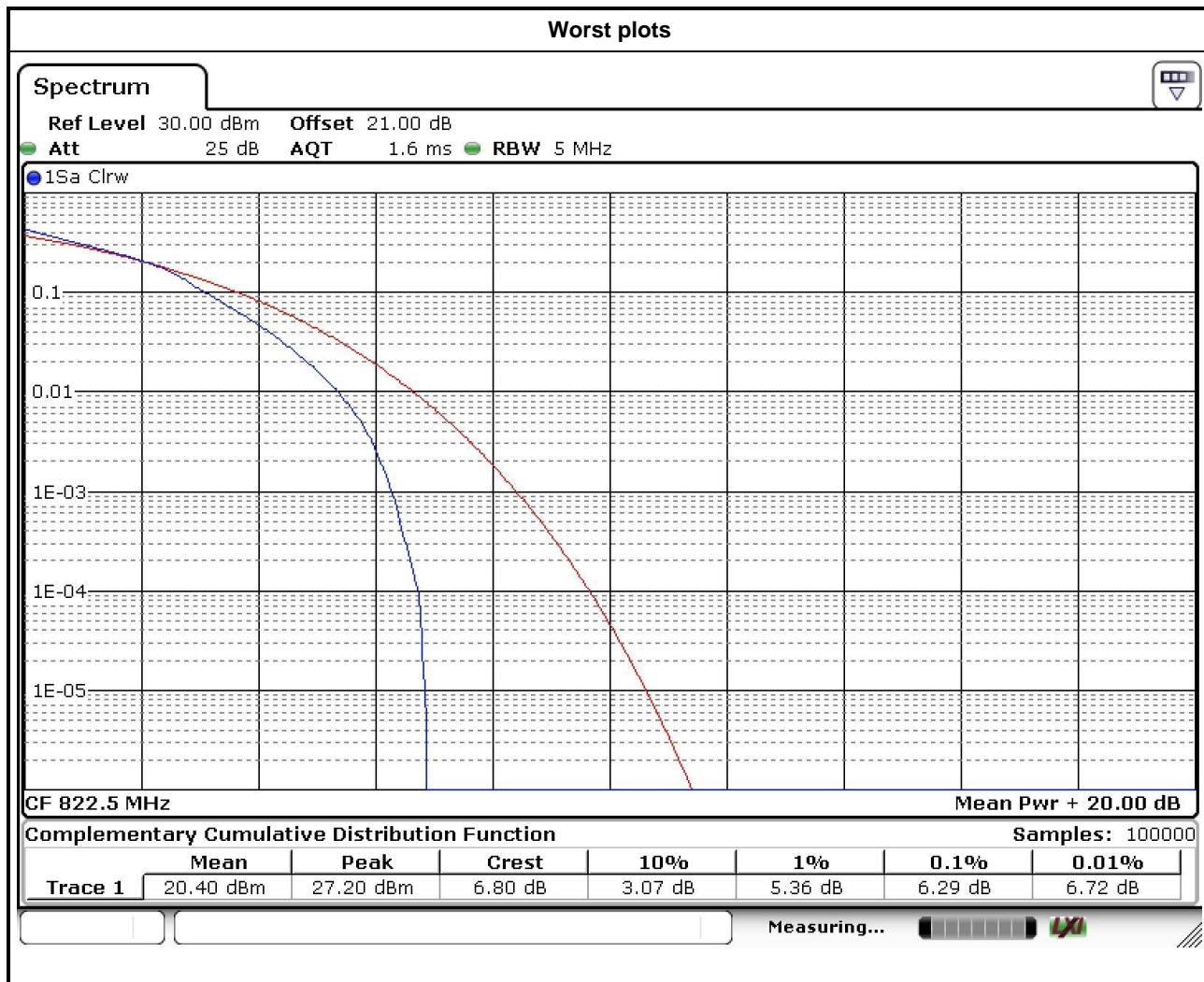


3.6.4 Test Result of Peak to Average Ratio

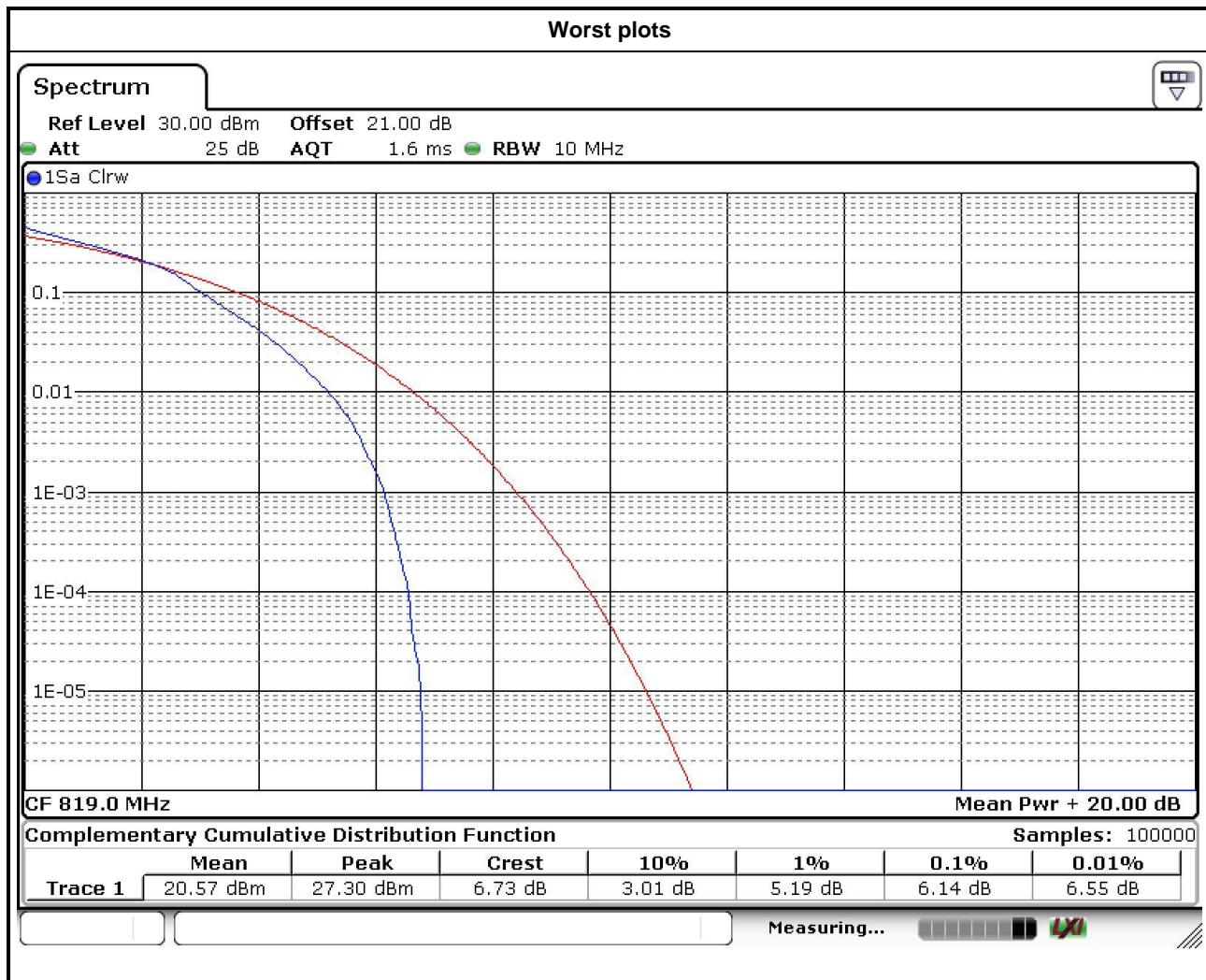
Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	Peak to Average ratio (dB)
LTE Band 26	1.4	QPSK	26697	814.7	5.13
LTE Band 26	1.4	QPSK	26740	819.0	5.13
LTE Band 26	1.4	QPSK	26783	823.3	5.25
LTE Band 26	1.4	16QAM	26697	814.7	5.86
LTE Band 26	1.4	16QAM	26740	819.0	6.17
LTE Band 26	1.4	16QAM	26783	823.3	6.20



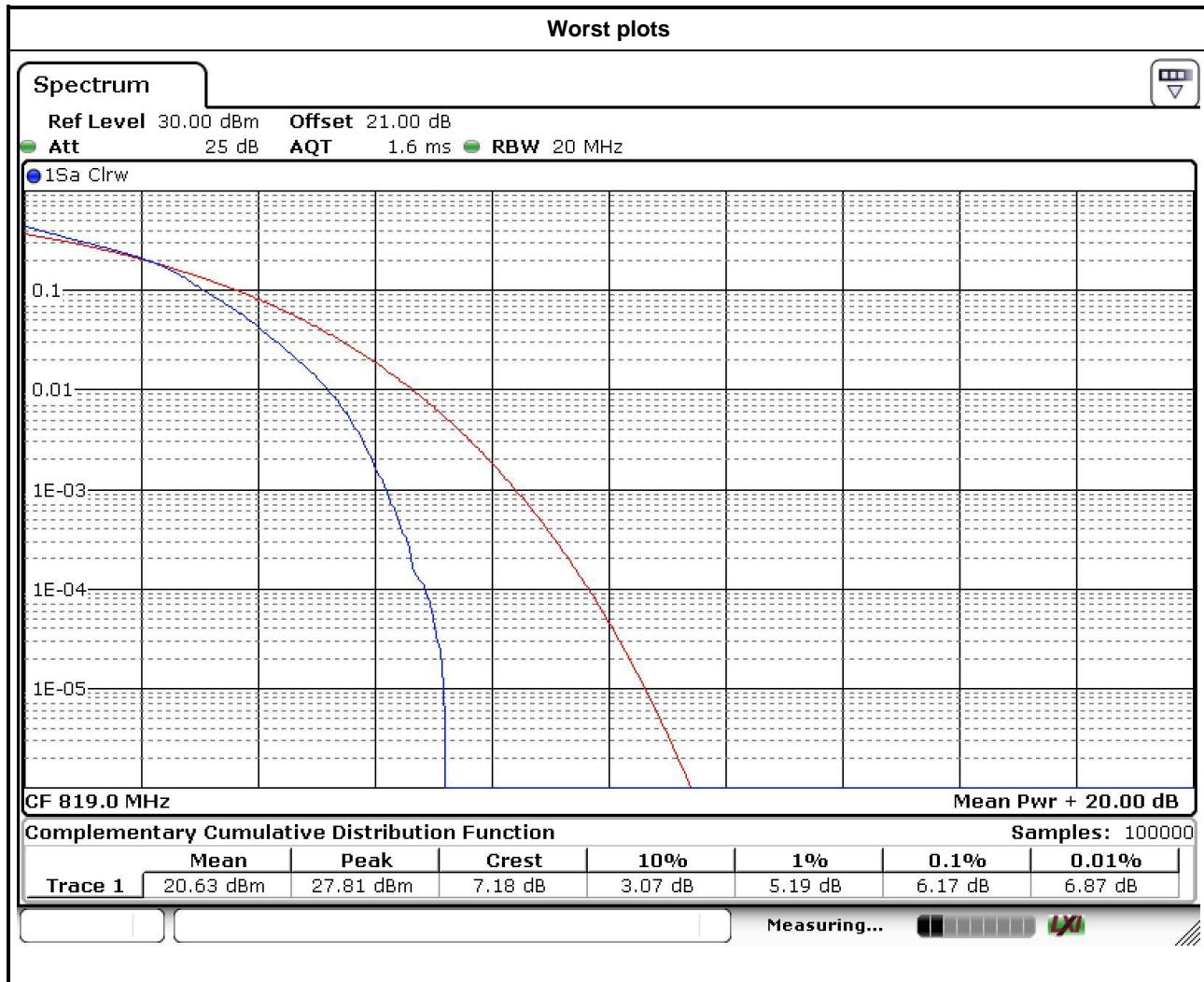
Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	Peak to Average ratio (dB)
LTE Band 26	3	QPSK	26705	815.5	5.16
LTE Band 26	3	QPSK	26740	819.0	5.16
LTE Band 26	3	QPSK	26775	822.5	5.48
LTE Band 26	3	16QAM	26705	815.5	6.09
LTE Band 26	3	16QAM	26740	819.0	6.14
LTE Band 26	3	16QAM	26775	822.5	6.29



Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	Peak to Average ratio (dB)
LTE Band 26	5	QPSK	26715	816.5	5.19
LTE Band 26	5	QPSK	26740	819.0	5.30
LTE Band 26	5	QPSK	26765	821.5	5.33
LTE Band 26	5	16QAM	26715	816.5	6.03
LTE Band 26	5	16QAM	26740	819.0	6.14
LTE Band 26	5	16QAM	26765	821.5	6.12



Mode	CB (MHz)	Modulation	Channel	Frequency (MHz)	Peak to Average ratio (dB)
LTE Band 26	10	QPSK	26740	819.0	5.39
LTE Band 26	10	16QAM	26740	819.0	6.17



3.7 Frequency Stability

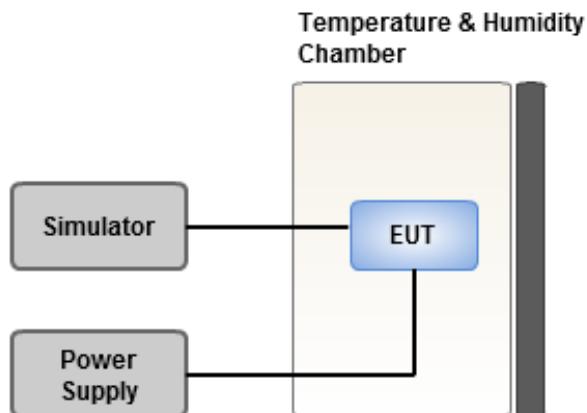
3.7.1 Limit of Frequency Stability

The frequency stability shall be less +/- 2.5ppm.

3.7.2 Test Procedures

1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. Temperature range is from -30~50°C and voltage range is from lowest to highest working voltage.
4. Link up EUT and simulator. Confirm frequency drift value of simulator and record it.

3.7.3 Test Setup



3.7.4 Test Result of Frequency Stability

LTE Band 26, CB: 1.4MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
55	3.9	0.007	2.5
50	3.9	0.006	2.5
40	3.9	0.005	2.5
30	3.9	0.005	2.5
20	3.9	0.004	2.5
10	3.9	-0.002	2.5
0	3.9	-0.002	2.5
-10	3.9	-0.006	2.5
-20	3.9	-0.007	2.5
-30	3.9	-0.009	2.5
20	4.29	0.005	2.5
20	3.51	0.004	2.5

LTE Band 26, CB: 3MHz			
Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
55	3.9	0.009	2.5
50	3.9	0.007	2.5
40	3.9	0.007	2.5
30	3.9	0.007	2.5
20	3.9	0.006	2.5
10	3.9	0.001	2.5
0	3.9	-0.001	2.5
-10	3.9	-0.004	2.5
-20	3.9	-0.006	2.5
-30	3.9	-0.006	2.5
20	4.29	0.006	2.5
20	3.51	0.005	2.5

LTE Band 26, CB: 5MHz

Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
55	3.9	0.010	2.5
50	3.9	0.007	2.5
40	3.9	0.006	2.5
30	3.9	0.004	2.5
20	3.9	0.004	2.5
10	3.9	0.002	2.5
0	3.9	-0.002	2.5
-10	3.9	-0.002	2.5
-20	3.9	-0.005	2.5
-30	3.9	-0.007	2.5
20	4.29	0.005	2.5
20	3.51	0.005	2.5

LTE Band 26, CB: 10MHz

Temperature (°C)	Voltage (dc)	Frequency Drift (ppm)	Limit (ppm)
55	3.9	0.006	2.5
50	3.9	0.005	2.5
40	3.9	0.004	2.5
30	3.9	0.004	2.5
20	3.9	0.004	2.5
10	3.9	-0.004	2.5
0	3.9	-0.005	2.5
-10	3.9	-0.005	2.5
-20	3.9	-0.006	2.5
-30	3.9	-0.006	2.5
20	4.29	0.004	2.5
20	3.51	0.004	2.5

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan,
R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

—END—