FCC TEST REPORT

(PART 27)

REPORT NO.:	RF120524C18-5
MODEL NO.:	LEX 700
FCC ID:	UZ7LEX700
RECEIVED:	May 18, 2012
TESTED:	May 23 ~ Jun. 18, 2012
ISSUED:	Jul. 04, 2012

APPLICANT: Motorola Solutions, Inc.

ADDRESS: One Motorola Plaza, Holtsville, NY 11742-1300 USA

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C)

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120524C18-5	Original release	Jul. 04, 2012

1 CERTIFICATION

PRODUCT :	MISSION CRITICAL HANDHELD
MODEL NO. :	LEX 700
BRAND :	Motorola
APPLICANT :	Motorola Solutions, Inc.
TESTED :	May 23 ~ Jun. 18, 2012
TEST SAMPLE :	ENGINEERING SAMPLE
TEST STANDARDS :	**FCC Part 27**
	FCC Part 2

The above equipment (model: LEX 700) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , **DATE :** Jul. 04, 2012
Pettie Chen / Specialist

APPROVED BY : _____ , **DATE :** Jul. 04, 2012
Gary Chang / Technical Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

OPERATING BAND: 776-788 MHz			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
2.1046 27.50(b)(10)	Maximum Peak Output Power Limit: max. 3 watts e.r.p peak power	PASS	Meet the requirement of limit. Maximum ERP is 23.45dBm at 784.5MHz.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50(d)(5)	Peak to average ratio	PASS	Meet the requirement of limit.
27.53(c)(2)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(c)(2)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1051 27.53(c)(4)	Emission in the 763–775 MHz and 793–805 MHz band	PASS	Meet the requirement of limit.
2.1053 27.53(c)(2)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -28.2dB at 3146.80MHz.
2.1053 27.53(f)	Emissions in the band 1559–1610 MHz	PASS	Meet the requirement of limit. Minimum passing margin is -11.1dB at 1572.8MHz.

OPERATING BAND: 788-793MHz			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
2.1046 27.50(C)(10)	Maximum Peak Output Power Limit: max. 3 watts e.r.p peak power	PASS	Meet the requirement of limit. Maximum ERP is 21.75dBm at 790.5MHz.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50	Peak to average ratio	PASS	Meet the requirement of limit.
27.53(d)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(d)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1051 27.53(d)(2)	Emission in the 769–775 MHz and 799–805 MHz band	PASS	Meet the requirement of limit.
2.1053 27.53(d)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -30.2dB at 3170.80MHz.
2.1053 27.53(f)	Emissions in the band 1559–1610 MHz	PASS	Meet the requirement of limit. Minimum passing margin is -16.7dB at 1585.20MHz.

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	MISSION CRITICAL HANDHELD	
MODEL NO.	LEX 700	
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.7Vdc (Li-ion battery)	
OPERATION TEMPERATURE RANGE	-30°C ~ 60°C	
MODULATION TECHNOLOGY	LTE Band 13	QPSK, 16QAM, 64QAM
	LTE Band 14	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz ~ 784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782MHz
	LTE Band 14 Channel Bandwidth: 5MHz	790.5MHz
MAX. ERP POWER (W)	LTE Band 13 Channel Bandwidth: 5MHz	0.221W (23.45dBm)
	LTE Band 13 Channel Bandwidth: 10MHz	0.211W (23.25dBm)
	LTE Band 14 Channel Bandwidth: 5MHz	0.150W (21.75dBm)
CATEGORY	LTE: 3	
ANTENNA TYPE	Refer to NOTE as below	
DATA CABLE	Refer to NOTE as below	
I/O PORTS	Refer to user's manual	
ACCESSORY DEVICES	Refer to NOTE as below	

NOTE:

1. The EUT has following accessories.

Battery 1	
P/N	82-154162-01
RATING	3.7V, 1880mAh/7.0Wh

Battery 2	
P/N	82-154162-02
RATING	3.7V, 3760mAh/13.9Wh

*Battery 2 was the worst for final test.

ADAPTER	
BRAND	MOTOROLA
MODEL	IU08-2050120-WP
INPUT	100-240Vac, 50/60Hz, 0.2A
OUTPUT	5Vdc, 1.2A

USB charging cable	
BRAND	MOTOROLA
MODEL	25-128458-01R
CABLE	1.5m shielded cable without core

2. EUT software and firmware version.

OEM NAME	Motorola LEX700
OEM VERSION	0.20.0059
WIRELESS PART NUMBER	31-FUSION-X2.00
WIRELESS FUSION	X_2.00.0.0.041E

3. The following antennas for the EUT.

Item	Type	Gain(dBi)	Connector
Main	Inverted-F	-0.6	NA
Diversity	Inverted-F	-1.0	NA
Monitoring	Inverted-F	-2.5	NA

*Main antenna was the worst for the final test.

4. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

LTE Band 13:

Three channels had been tested for each channel bandwidth.

CHANNEL BANDWIDTH	5MHz	
	Channel	Frequency(MHz)
Low channel (L)	23205	779.5
Middle channel (M)	23230	782
High channel (H)	23255	784.5

CHANNEL BANDWIDTH	10MHz	
	Channel	Frequency(MHz)
-	23230	782

LTE Band 14:

One channel had been tested.

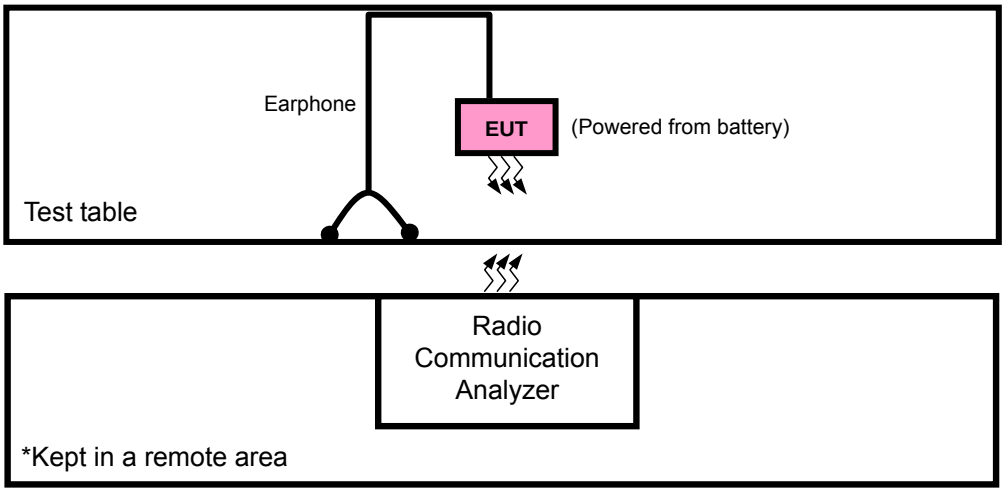
CHANNEL BANDWIDTH	5MHz	
	Channel	Frequency(MHz)
-	23305	790.5

NOTE:

1. After pretest of output power and spurious emission under below configurations, **QPSK with 1RB at upper edge** was found to be worst case and was selected for the final test.

MODULATION	RB SETTING
QPSK	1 RB allocated at the upper edge
QPSK	1 RB allocated at the lower edge
QPSK	50% RB allocation centered
QPSK	100% RB allocation
16QAM	1 RB allocated at the upper edge
16QAM	1 RB allocated at the lower edge
16QAM	50% RB allocation centered
16QAM	100% RB allocation

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports The worst case was found when positioned on X-plane for ERP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

LTE Band 13: CHANNEL BANDWIDTH: 5MHz

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	ERP	23205 to 23255	23205, 23230, 23255	QPSK
-	FREQUENCY STABILITY	23205 to 23255	23230	QPSK
-	OCCUPIED BANDWIDTH	23205 to 23255	23205, 23230, 23255	QPSK, 16QAM
-	PEAK TO AVERAGE RATIO	23205 to 23255	23205, 23230, 23255	QPSK, 16QAM
-	BAND EDGE	23205 to 23255	23205, 23230, 23255	QPSK, 16QAM
-	CONDCUDETED EMISSION	23205 to 23255	23205, 23230, 23255	QPSK, 16QAM
-	RADIATED EMISSION<1G	23205 to 23255	23255	QPSK
	RADIATED EMISSION ≥1G	23205 to 23255	23205, 23230, 23255	QPSK

LTE Band 13: CHANNEL BANDWIDTH: 10MHz

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	ERP	23230	23230	QPSK
-	FREQUENCY STABILITY	23230	23230	QPSK
-	OCCUPIED BANDWIDTH	23230	23230	QPSK, 16QAM
-	PEAK TO AVERAGE RATIO	23230	23230	QPSK, 16QAM
-	BAND EDGE	23230	23230	QPSK, 16QAM
-	CONDCUDETED EMISSION	23230	23230	QPSK, 16QAM
-	RADIATED EMISSION	23230	23230	QPSK

LTE Band 14

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	ERP	23305	23305	QPSK
-	FREQUENCY STABILITY	23305	23305	QPSK
-	OCCUPIED BANDWIDTH	23305	23305	QPSK, 16QAM
-	PEAK TO AVERAGE RATIO	23305	23305	QPSK, 16QAM
-	BAND EDGE	23305	23305	QPSK, 16QAM
-	CONDCUDETED EMISSION	23305	23305	QPSK, 16QAM
-	RADIATED EMISSION	23305	23305	QPSK

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	25deg. C, 68%RH	3.7Vdc	Anderson Hong
FREQUENCY STABILITY	25deg. C, 65%RH	3.7Vdc	Mark Liao
OCCUPIED BANDWIDTH	25deg. C, 68%RH	3.7Vdc	Anderson Hong
PEAK TO AVERAGE RATIO	25deg. C, 68%RH	3.7Vdc	Anderson Hong
BAND EDGE	25deg. C, 68%RH	3.7Vdc	Anderson Hong
CONDCUDETED EMISSION	25deg. C, 68%RH	3.7Vdc	Anderson Hong
RADIATED EMISSION	25deg. C, 65%RH	3.7Vdc	Anderson Hong

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-C 2004

NOTE: All test items have been performed and recorded as per the above standards.

3.4 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Earphone	Nokia	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.4m shielded cable without core

NOTE: 1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 was provided by client.

4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Portable stations (hand-held devices) operating in the 777-787MHz, 776-793 MHz band are limited to 3 watts ERP

4.1.2 TEST INSTRUMENTS

DESCRIPTION / MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver / ROHDE & SCHWARZ	ESCI	100744	Apr. 19, 2012	Apr. 18, 2013
Spectrum Analyzer / ROHDE & SCHWARZ	FSP40	100040	Aug. 04, 2011	Aug. 03, 2012
BILOG Antenna / SCHWARZBECK	VULB9168	9168-156	Apr. 03, 2012	Apr. 02, 2013
HORN Antenna / SCHWARZBECK	BBHA 9120 D	9120D-563	Sep. 06, 2011	Sep. 05, 2012
HORN Antenna / SCHWARZBECK	BBHA 9170	148	Jul. 20, 2011	Jul. 19, 2012
Preamplifier / Agilent	8449B	3008A01911	Oct. 29, 2011	Oct. 28, 2012
Preamplifier / Agilent	8447D	2944A10638	Oct. 29, 2011	Oct. 28, 2012
RF signal cable / HUBER+SUHNNER	SUCOFLEX 104	295013/4 283403/4	Aug. 19, 2011	Aug. 18, 2012
RF signal cable / Worken	8D-FB	Cable-HYCH9-01	Aug. 13, 2011	Aug. 12, 2012
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower / EMCO	2070/2080	512.835.4684	NA	NA
Turn Table / EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn Table Controller / EMCO	2090	NA	NA	NA
Radio Communication Analyzer / Anritsu	MT8820C	6201010284	Aug. 01, 2011	Jul. 31, 2012
RF cable / Hewlett Packard	8120-6192	01428251	NA	NA
RF cable / Suhner	Sucoflex104	257029	Sep. 11, 2011	Sep. 10, 2012
RF cable / Suhner	Sucoflex104	274403/4	Aug. 20, 2011	Aug. 19, 2012
Standard Temperature & Humidity Chamber / WIT	MHU-225AU	911033	Dec. 11, 2011	Dec. 10, 2012
Power Splitter/Mini-Circuits	ZAPD-4	NA	Mar. 23, 2012	Mar. 22, 2013
20dB attenuation / JFW	50HF-020-SMA	NA	NA	NA
Spectrum Analyzer / ROHDE & SCHWARZ	E4446A	MY44360128	Feb. 20, 2012	Feb. 19, 2013
Power Splitter / Mini-Circuits	ZN2PD-9G	NA	Mar. 23, 2012	Mar. 22, 2013
Band Reject Filter / Wainwright Instruments	WRCG 1710/1785-1690/1805 -60/12SS	SN1	Oct. 28, 2011	Oct. 27, 2012
High Pass Filter / Wainwright Instruments	WHK3.1/18G-10SS	SN3	NA	NA

NOTE:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 460141.
5. The IC Site Registration No. is IC 7450F-4.

4.1.3 TEST PROCEDURES

ERP MEASUREMENT:

a. The EUT was set up for the maximum power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 10MHz for LTE mode.

b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G

d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn

e. E.R.P = E.I.R.P- 2.15 dB

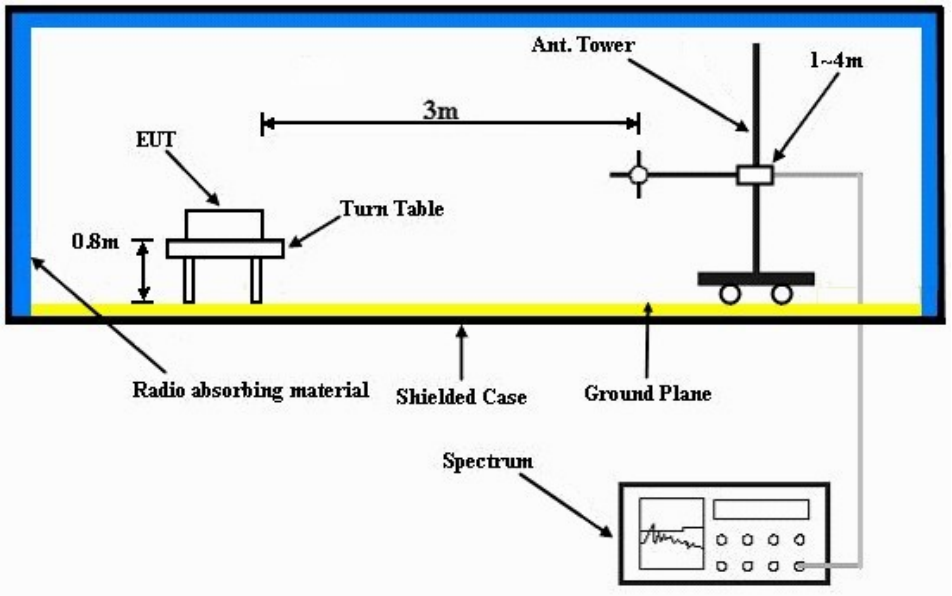
CONDUCTED POWER MEASUREMENT:

a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.

b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

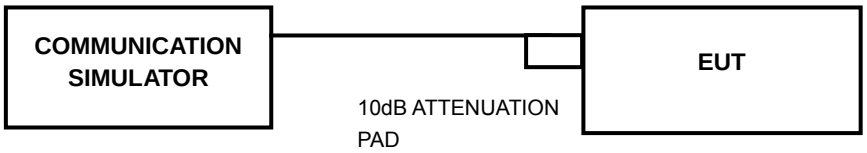
4.1.4 TEST SETUP

ERP MEASUREMENT:



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

CONDUCTED POWER MEASUREMENT:



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

4.1.5 EUT OPERATING CONDITIONS

a. The EUT makes a call to the communication simulator.

b. The communication simulator station system controlled an EUT to export maximum output power under transmission mode and specific channel frequency.

4.1.6 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

LTE Band 13							
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Power
5 MHz	QPSK	23205	779.5	1	0	0	22.94
		23230	782.0	1	0	0	22.85
		23255	784.5	1	0	0	22.81
		23205	779.5	1	24	0	22.97
		23230	782.0	1	24	0	22.90
		23255	784.5	1	24	0	22.99
		23205	779.5	12	6	1	22.70
		23230	782.0	12	6	1	22.47
		23255	784.5	12	6	1	22.41
		23205	779.5	25	0	1	22.70
		23230	782.0	25	0	1	22.58
		23255	784.5	25	0	1	22.71
	16QAM	23205	779.5	1	0	1	23.38
		23230	782.0	1	0	1	23.40
		23255	784.5	1	0	1	23.21
		23205	779.5	1	24	1	23.18
		23230	782.0	1	24	1	23.25
		23255	784.5	1	24	1	23.31
		23205	779.5	12	6	2	21.41
		23230	782.0	12	6	2	21.32
		23255	784.5	12	6	2	21.36
		23205	779.5	25	0	2	21.61
		23230	782.0	25	0	2	21.59
		23255	784.5	25	0	2	21.66
10 MHz	QPSK	23230	782.0	1	0	0	22.92
		23230	782.0	1	49	0	23.01
		23230	782.0	25	12	1	22.82
		23230	782.0	50	0	1	22.80
	16QAM	23230	782.0	1	0	1	23.00
		23230	782.0	1	49	1	23.03
		23230	782.0	25	12	2	21.55
		23230	782.0	50	0	2	21.38

LTE Band 14							
BW	Modulation	CH	Frequency (MHz)	RB	RB Offset	MPR	Power
5 MHz	QPSK	23305	790.5	1	0	0	22.91
		23305	790.5	1	24	0	23.10
		23305	790.5	12	6	1	22.69
		23305	790.5	25	0	1	22.66
	16QAM	23305	790.5	1	0	1	23.19
		23305	790.5	1	24	1	23.25
		23305	790.5	12	6	2	21.38
		23305	790.5	25	0	2	21.71

FOR LTE BAND 13:

CHANNEL BANDWIDTH: 5MHz / QPSK (RB: 1; RB offset: 24)

Channel	Freq. (MHz)	Antenna polarity	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
23205	779.5	H	-8.0	25.6	-1.1	22.35	34.8	-12.45
23205	779.5	V	-15.5	15.9	-1.1	12.65	34.8	-22.15
23230	782	H	-7.7	25.3	-0.5	22.65	34.8	-12.15
23230	782	V	-15.0	16.3	-0.5	13.65	34.8	-21.15
23255	784.5	H	-6.8	26.1	-0.5	23.45	34.8	-11.35
23255	784.5	V	-14.4	16.9	-0.5	14.25	34.8	-20.55

NOTE: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB)-2.15dB.

CHANNEL BANDWIDTH: 10MHz / QPSK (RB: 1; RB offset: 49)

Channel	Freq. (MHz)	Antenna polarity	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
23230	782	H	-7.1	25.9	-0.5	23.25	34.8	-11.55
23230	782	V	-14.4	16.9	-0.5	14.25	34.8	-20.55

NOTE: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB)-2.15dB.

FOR LTE BAND 14:

CHANNEL BANDWIDTH: 5MHz / QPSK (RB: 1; RB offset: 24)

Channel	Freq. (MHz)	Antenna polarity	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
23305	790.5	H	-7.7	24.4	-0.5	21.75	34.8	-13.05
23305	790.5	V	-15.3	16	-0.5	13.35	34.8	-21.45

NOTE: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB)-2.15dB.

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

According to the FCC part 27.54 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation. The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with the 2.1055(a)(1) –30℃~60℃.

4.2.2 TEST PROCEDURE

a. Because of the measure the carrier frequency under the condition of the AFC lock, it shall be used the mobile station in the LTE link mode. This is accomplished with the use of the communication simulator station. The oven room could control the temperatures and humidity.

b. Power must be removed when changing from one temperature to another or one voltage to another voltage. Power warm up is at least 15 min and power applied should perform before recording frequency error.

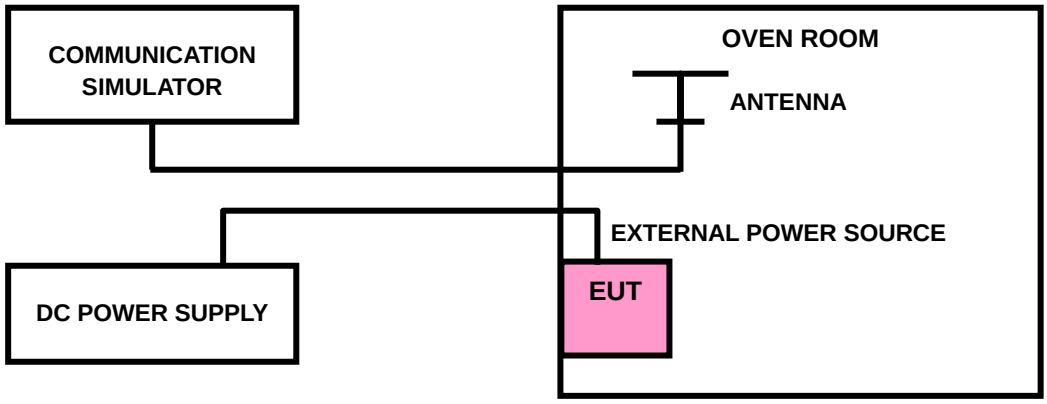
c. Laptop pc is connected the external power supply to control the DC input power. The various Volts from the minimum to maximum working voltage. Each step shall be record the frequency error rate.

d. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing.

e. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

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

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

FOR LTE BAND 13:

CHANNEL BANDWIDTH: 5MHz

AFC FREQUENCY ERROR vs. VOLTAGE			
VOLTAGE (Volts)	**FREQUENCY ERROR (Hz)**	**FREQUENCY ERROR (ppm)**	**LIMIT (ppm)**
4.255	22	0.028	2.5
3.28	18	0.023	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.28Vdc to 4.255Vdc.

AFC FREQUENCY ERROR vs. TEMP.			
TEMP. (℃)	**FREQUENCY ERROR (Hz)**	**FREQUENCY ERROR (ppm)**	**LIMIT (ppm)**
60	30	0.038	2.5
50	26	0.033	2.5
40	23	0.029	2.5
30	19	0.024	2.5
20	15	0.019	2.5
10	18	0.023	2.5
0	16	0.020	2.5
-10	11	0.014	2.5
-20	17	0.022	2.5
-30	22	0.028	2.5

CHANNEL BANDWIDTH: 10MHz

AFC FREQUENCY ERROR vs. VOLTAGE			
VOLTAGE (Volts)	FREQUENCY ERROR (Hz)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
4.255	23	0.029	2.5
3.28	28	0.036	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.28Vdc to 4.255Vdc.

AFC FREQUENCY ERROR vs. TEMP.			
TEMP. (℃)	FREQUENCY ERROR (Hz)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
60	25	0.032	2.5
50	27	0.035	2.5
40	24	0.031	2.5
30	22	0.028	2.5
20	18	0.023	2.5
10	19	0.024	2.5
0	16	0.020	2.5
-10	13	0.017	2.5
-20	15	0.019	2.5
-30	20	0.026	2.5

FOR LTE BAND 14:

CHANNEL BANDWIDTH: 5MHz

AFC FREQUENCY ERROR vs. VOLTAGE			
VOLTAGE (Volts)	FREQUENCY ERROR (Hz)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
4.255	44	0.056	2.5
3.28	34	0.043	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.18Vdc to 4.255Vdc.

AFC FREQUENCY ERROR vs. TEMP.			
TEMP. (℃)	FREQUENCY ERROR (Hz)	FREQUENCY ERROR (ppm)	LIMIT (ppm)
60	-65	-0.082	2.5
50	-58	-0.073	2.5
40	-33	-0.042	2.5
30	-25	-0.032	2.5
20	38	0.048	2.5
10	42	0.053	2.5
0	64	0.081	2.5
-10	28	0.035	2.5
-20	47	0.059	2.5
-30	25	0.032	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.3.2 TEST SETUP

Same as Item 4.1.4 (Conducted Power Setup)

4.3.3 TEST PROCEDURES

a. The EUT makes a phone call to the communication simulator. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels. (low, middle and high operational frequency range.)
b. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
c. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.3.4 TEST RESULTS

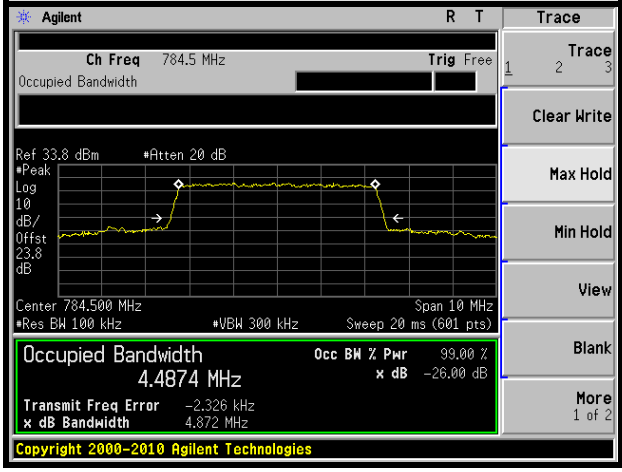
LTE Band 13

CHANNEL BANDWIDTH: 5MHz

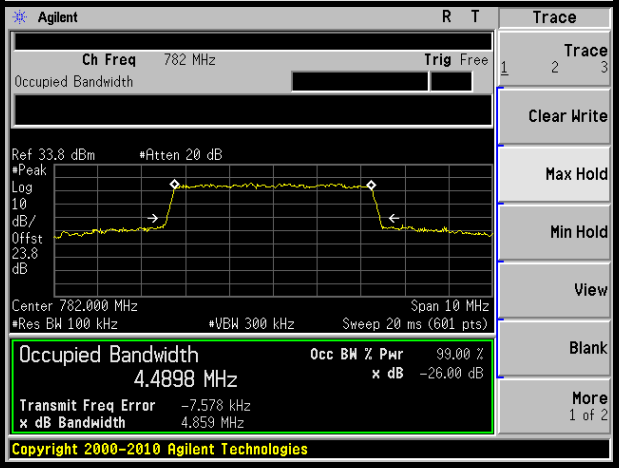
FREQUENCY (MHz)	MAX. OUTPUT POWER -26 dBc BANDWIDTH (MHz)	
	QPSK	16QAM
779.5	4.4820	4.4867
782.0	4.4830	4.4898
784.5	4.4874	4.4834

SPECTRUM PLOT OF WORST VALUE

QPSK



16QAM



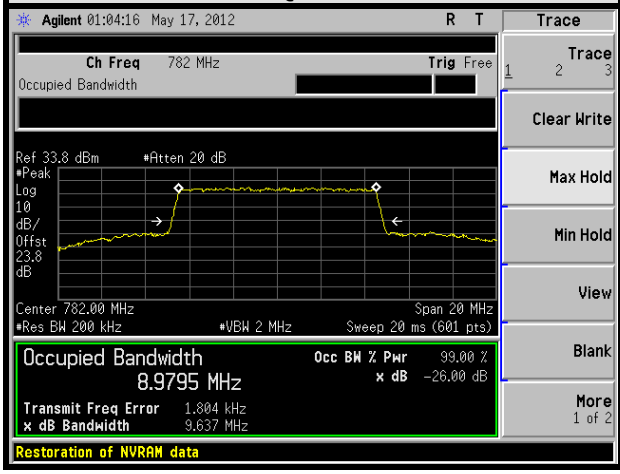
LTE Band 13

CHANNEL BANDWIDTH: 10MHz

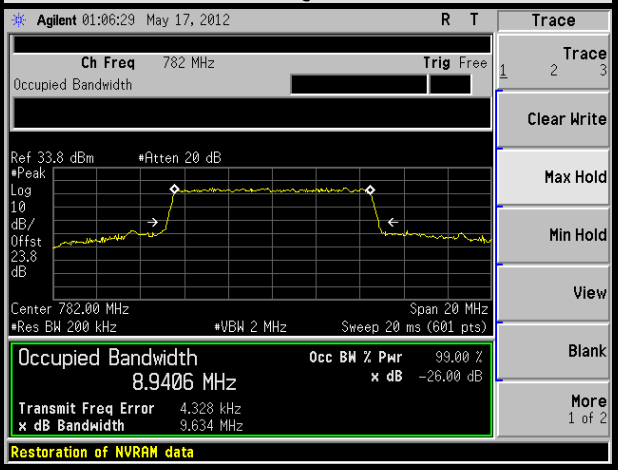
FREQUENCY (MHz)	MAX. OUTPUT POWER -26 dBc BANDWIDTH (MHz)	
	QPSK	16QAM
782.0	8.9795	8.9406

SPECTRUM PLOT OF WORST VALUE

QPSK



16QAM



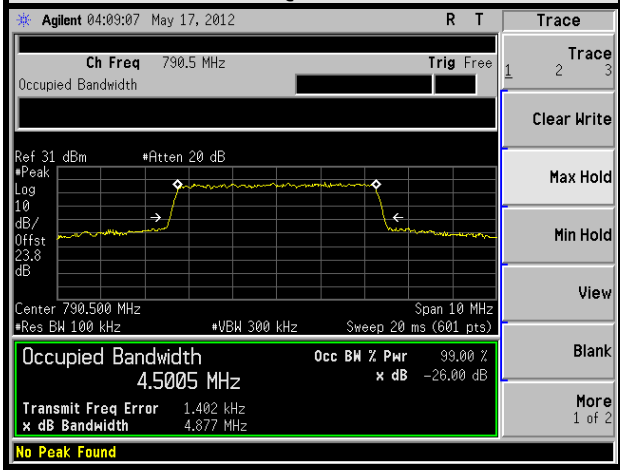
LTE Band 14

CHANNEL BANDWIDTH: 5MHz

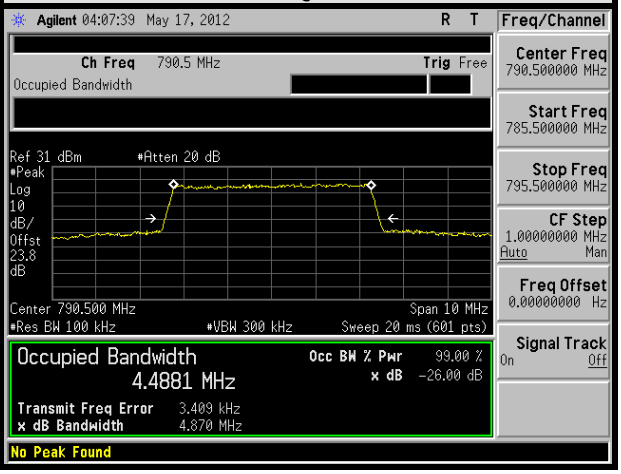
FREQUENCY (MHz)	MAX. OUTPUT POWER -26 dBc BANDWIDTH (MHz)	
	QPSK	16QAM
790.5	4.5005	4.4881

SPECTRUM PLOT OF WORST VALUE

QPSK



16QAM



4.4 PEAK TO AVERAGE RATIO

4.4.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

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

4.4.2 TEST SETUP

Same as Item 4.2.4 (Conducted Power Setup)

4.4.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
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%.

4.4.4 EUT OPERATING CONDITION

Same as Item 4.1.5

4.4.5 TEST RESULTS

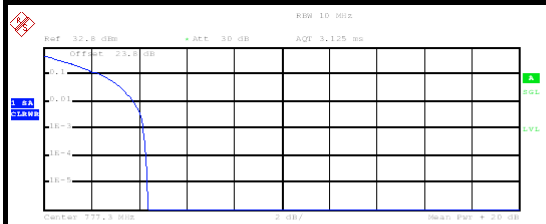
LTE Band 13

CHANNEL BANDWIDTH: 5MHz / QPSK

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
779.5	4.20	3.80	3.72	4.44
782.0	3.44	4.28	4.04	4.68
784.5	3.96	4.28	4.72	5.20

SPECTRUM PLOT OF WORST VALUE

1RB LOWER

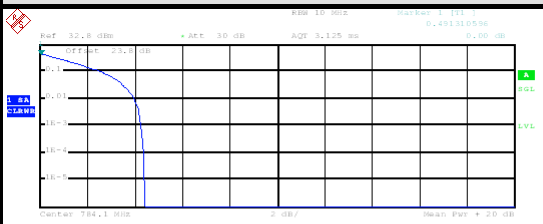


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.71 dBm
Peak	27.08 dBm
Crest	4.37 dB
10 %	2.40 dB
1 %	3.80 dB
.1 %	4.20 dB
.01 %	4.32 dB

1RB UPPER

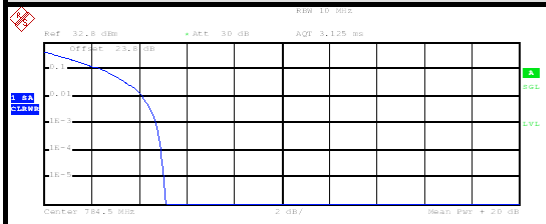


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.66 dBm
Peak	27.08 dBm
Crest	4.42 dB
10 %	2.60 dB
1 %	4.00 dB
.1 %	4.28 dB
.01 %	4.40 dB

50% RB

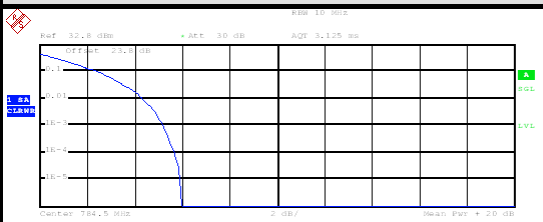


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.23 dBm
Peak	27.36 dBm
Crest	5.13 dB
10 %	2.48 dB
1 %	4.16 dB
.1 %	4.72 dB
.01 %	4.92 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.51 dBm
Peak	28.49 dBm
Crest	5.98 dB
10 %	2.48 dB
1 %	4.36 dB
.1 %	5.20 dB
.01 %	5.68 dB

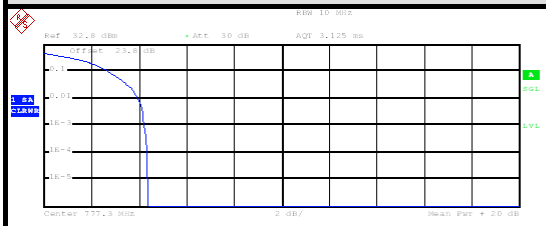
LTE Band 13

CHANNEL BANDWIDTH: 5MHz / 16QAM

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
779.5	4.24	3.60	4.36	4.96
782.0	3.08	4.20	4.80	5.28
784.5	3.68	5.16	4.80	5.88

SPECTRUM PLOT OF WORST VALUE

1RB LOWER

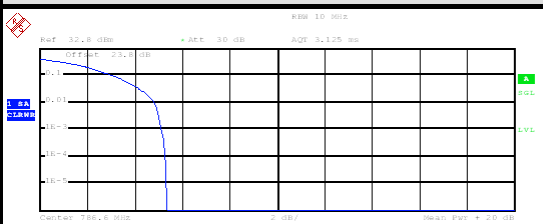


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	23.13 dBm
Peak	27.50 dBm
Crest	4.37 dB
10 %	2.72 dB
1 %	3.96 dB
.1 %	4.24 dB
.01 %	4.36 dB

1RB UPPER

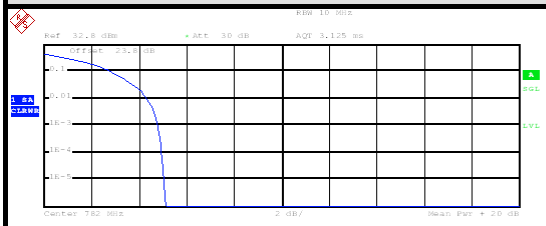


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	23.14 dBm
Peak	28.49 dBm
Crest	5.34 dB
10 %	3.12 dB
1 %	4.84 dB
.1 %	5.16 dB
.01 %	5.28 dB

50% RB

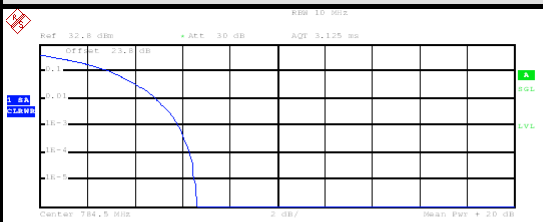


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	21.10 dBm
Peak	26.23 dBm
Crest	5.12 dB
10 %	2.84 dB
1 %	4.36 dB
.1 %	4.80 dB
.01 %	4.96 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	21.43 dBm
Peak	28.06 dBm
Crest	6.63 dB
10 %	3.04 dB
1 %	4.92 dB
.1 %	5.88 dB
.01 %	6.32 dB

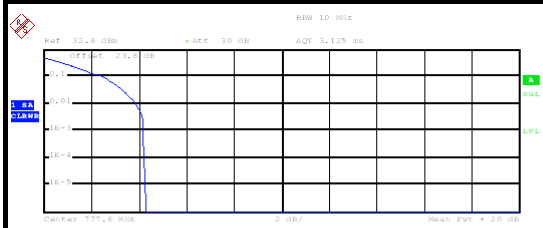
LTE Band 13

CHANNEL BANDWIDTH: 10MHz / QPSK

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
782.0	4.20	5.08	4.64	5.40

SPECTRUM PLOT OF WORST VALUE

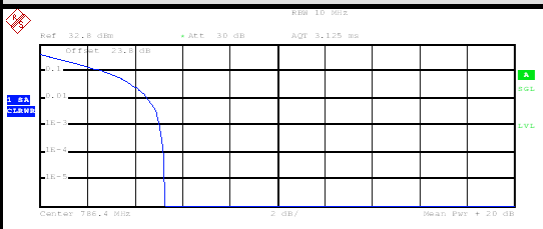
1RB LOWER



Complementary Cumulative Distribution Function (100000 samples)

Trace 1	
Mean	22.72 dBm
Peak	27.01 dBm
Crest	4.29 dB
10 %	2.48 dB
1 %	3.88 dB
.1 %	4.20 dB
.01 %	4.24 dB

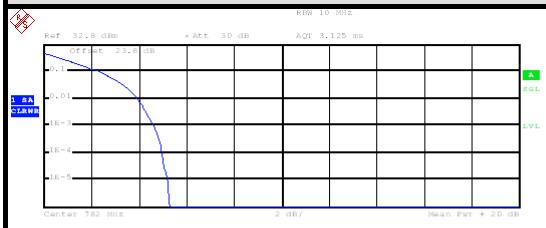
1RB UPPER



Complementary Cumulative Distribution Function (100000 samples)

Trace 1	
Mean	22.80 dBm
Peak	28.06 dBm
Crest	5.27 dB
10 %	2.76 dB
1 %	4.56 dB
.1 %	5.08 dB
.01 %	5.24 dB

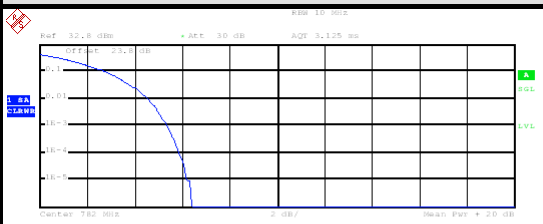
50% RB



Complementary Cumulative Distribution Function (100000 samples)

Trace 1	
Mean	22.64 dBm
Peak	27.92 dBm
Crest	5.28 dB
10 %	2.36 dB
1 %	3.96 dB
.1 %	4.64 dB
.01 %	5.00 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

Trace 1	
Mean	22.61 dBm
Peak	28.98 dBm
Crest	6.37 dB
10 %	2.80 dB
1 %	4.56 dB
.1 %	5.40 dB
.01 %	5.88 dB

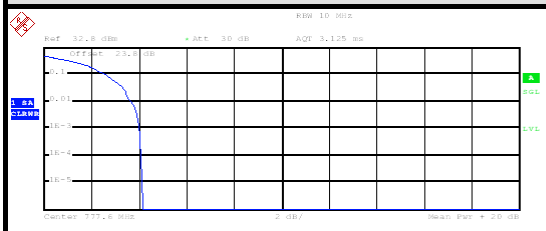
LTE Band 13

CHANNEL BANDWIDTH: 10MHz / 16QAM

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
782.0	4.00	4.88	5.20	6.04

SPECTRUM PLOT OF WORST VALUE

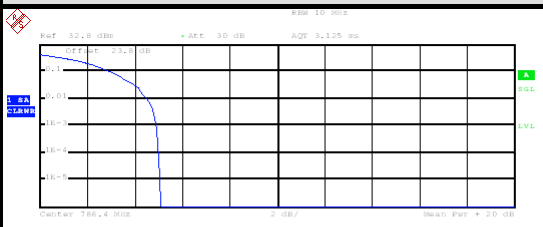
1RB LOWER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.81 dBm
Peak	26.94 dBm
Crest	4.13 dB
10 %	2.60 dB
1 %	3.68 dB
.1 %	4.00 dB
.01 %	4.08 dB

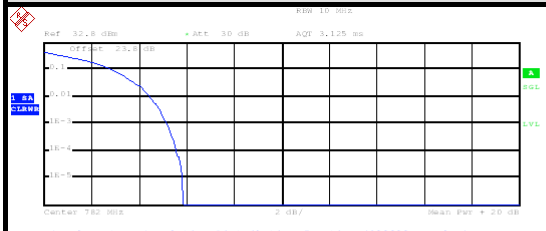
1RB UPPER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.83 dBm
Peak	27.92 dBm
Crest	5.09 dB
10 %	3.00 dB
1 %	4.52 dB
.1 %	4.88 dB
.01 %	5.04 dB

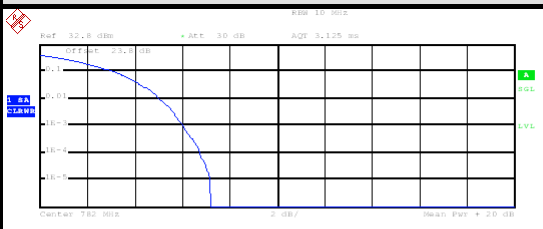
50% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.35 dBm
Peak	27.22 dBm
Crest	5.87 dB
10 %	2.92 dB
1 %	4.48 dB
.1 %	5.20 dB
.01 %	5.56 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.17 dBm
Peak	28.35 dBm
Crest	7.18 dB
10 %	3.20 dB
1 %	5.08 dB
.1 %	6.04 dB
.01 %	6.76 dB

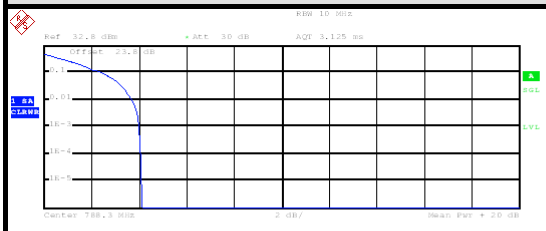
LTE Band 14

CHANNEL BANDWIDTH: 5MHz / QPSK

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
790.5	4.00	5.52	5.04	5.40

SPECTRUM PLOT OF WORST VALUE

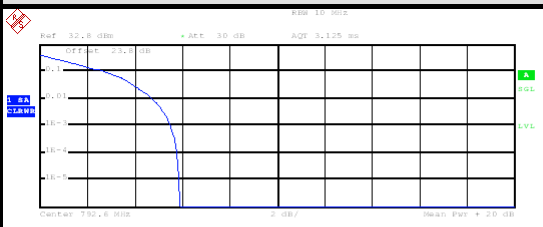
1RB LOWER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.71 dBm
Peak	26.79 dBm
Crest	4.08 dB
10 %	2.44 dB
1 %	3.72 dB
.1 %	4.00 dB
.01 %	4.08 dB

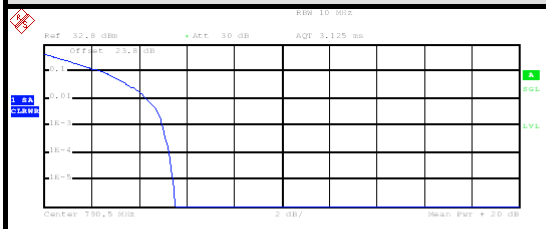
1RB UPPER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.89 dBm
Peak	28.78 dBm
Crest	5.89 dB
10 %	2.80 dB
1 %	4.76 dB
.1 %	5.52 dB
.01 %	5.80 dB

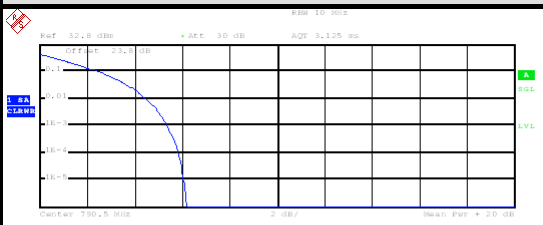
50% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.49 dBm
Peak	27.99 dBm
Crest	5.50 dB
10 %	2.48 dB
1 %	4.36 dB
.1 %	5.04 dB
.01 %	5.28 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.47 dBm
Peak	28.63 dBm
Crest	6.16 dB
10 %	2.56 dB
1 %	4.48 dB
.1 %	5.40 dB
.01 %	5.88 dB

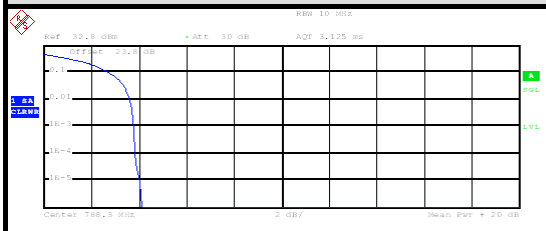
LTE Band 14

CHANNEL BANDWIDTH: 5MHz / 16QAM

FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)			
	1RB LOWER	1RB UPPER	50% RB	100% RB
790.5	3.80	5.76	5.88	6.00

SPECTRUM PLOT OF WORST VALUE

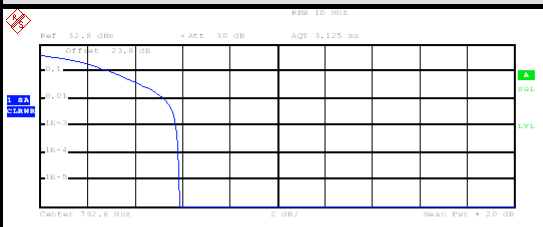
1RB LOWER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.98 dBm
Peak	27.08 dBm
Crest	4.09 dB
10 %	2.76 dB
1 %	3.64 dB
.1 %	3.80 dB
.01 %	3.84 dB

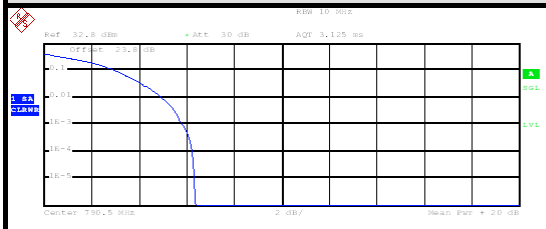
1RB UPPER



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.04 dBm
Peak	28.91 dBm
Crest	5.87 dB
10 %	3.04 dB
1 %	5.28 dB
.1 %	5.76 dB
.01 %	5.88 dB

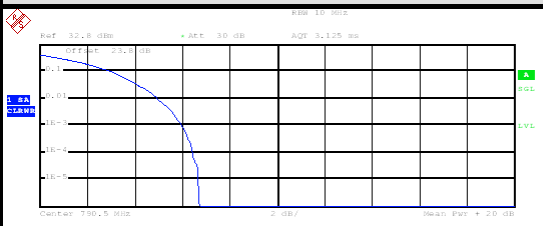
50% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.15 dBm
Peak	27.50 dBm
Crest	6.35 dB
10 %	3.04 dB
1 %	5.00 dB
.1 %	5.88 dB
.01 %	6.24 dB

100% RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.50 dBm
Peak	28.20 dBm
Crest	6.71 dB
10 %	3.04 dB
1 %	5.00 dB
.1 %	6.00 dB
.01 %	6.44 dB

4.5 BAND EDGE MEASUREMENT

4.5.1 LIMITS OF BAND EDGE MEASUREMENT

For operations in the 788-793 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

4.5.2 TEST SETUP

Same as Item 4.1.4 (Conducted Power Setup)

4.5.3 TEST PROCEDURES

a. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).

b. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

c. The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 50kHz and VB of the spectrum is 200kHz.

d. Record the max trace plot into the test report.

4.5.4 EUT OPERATING CONDITION

a. The EUT makes a call to the communication simulator.

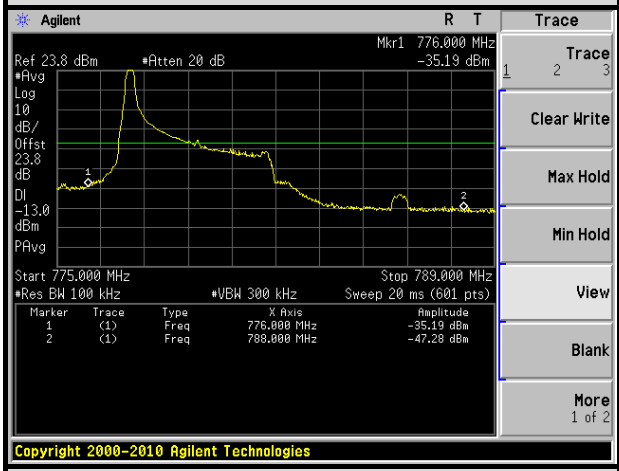
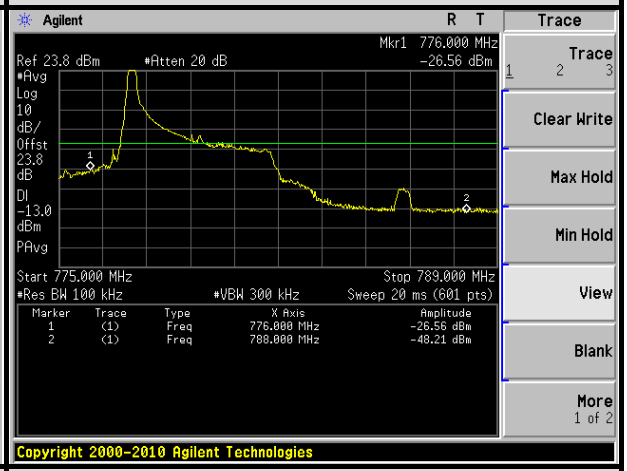
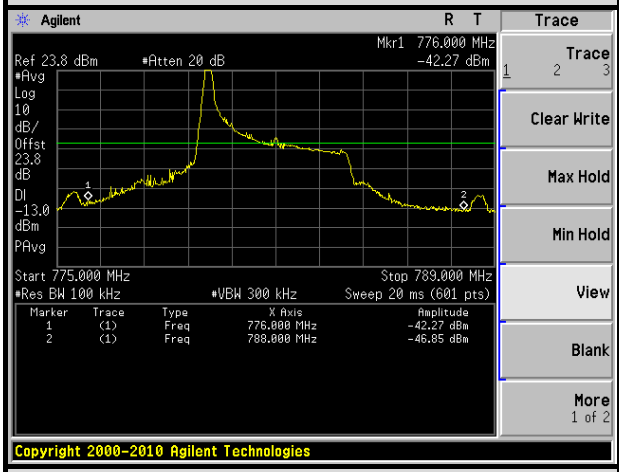
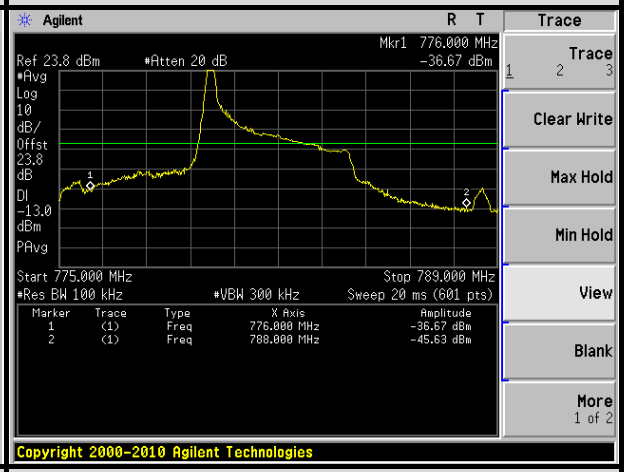
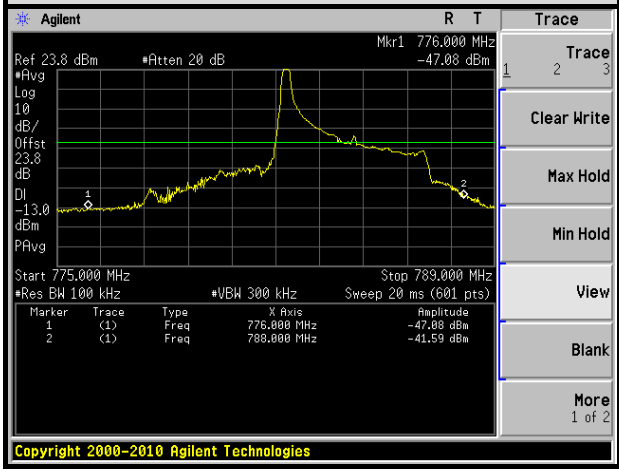
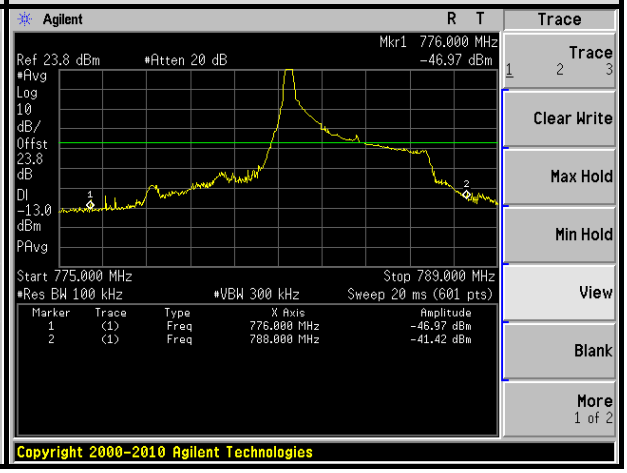
b. The communication simulator station system controlled an EUT to export maximum output power under transmission mode and specific channel frequency.

4.5.5 TEST RESULTS

LTE Band 13

CHANNEL BANDWIDTH: 5MHz

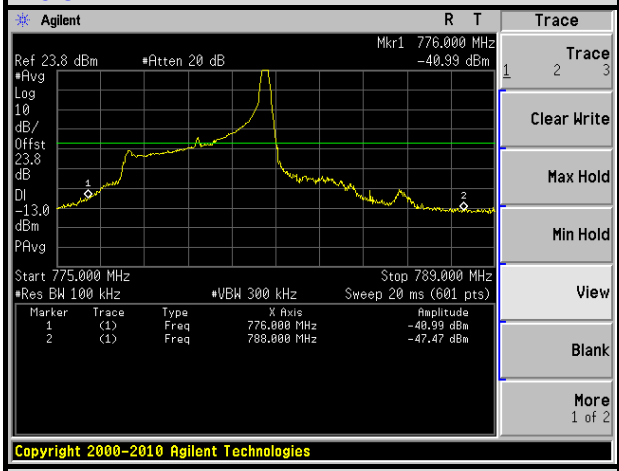
1 RB ALLOCATED AT THE LOWER EDGE

QPSK	16QAM
779.5MHz	779.5MHz
	
782MHz	782MHz
	
784.5MHz	784.5MHz
	

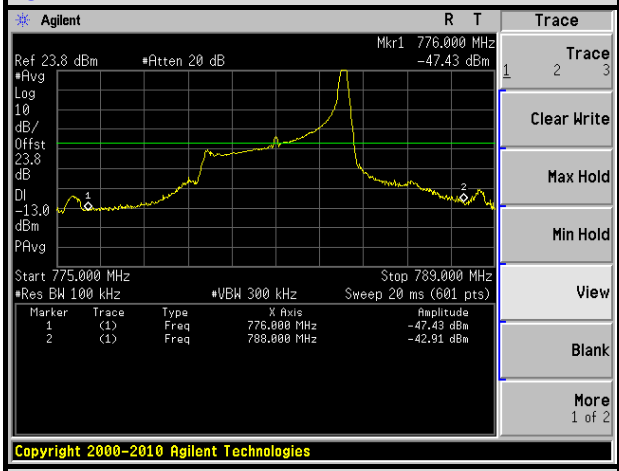
1 RB ALLOCATED AT THE UPPER EDGE

QPSK

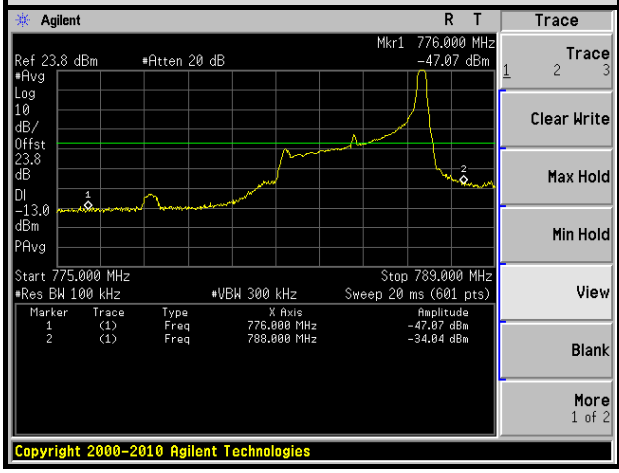
779.5MHz



782MHz

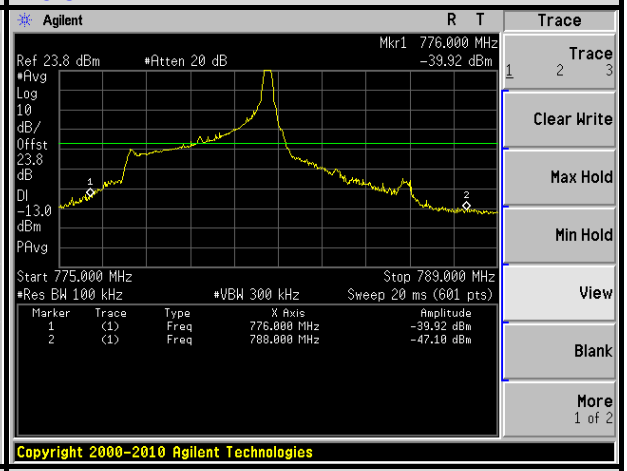


784.5MHz

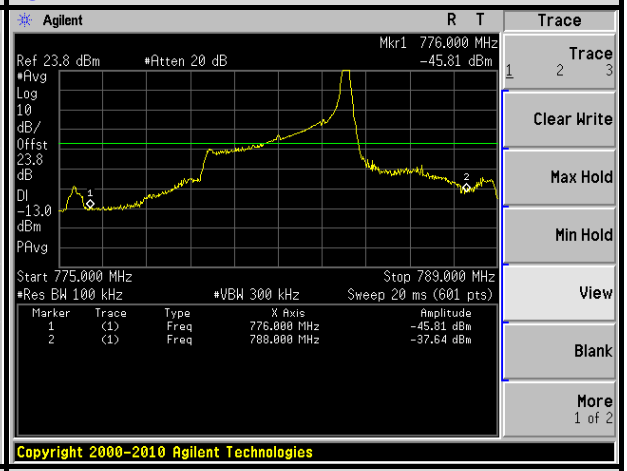


16QAM

779.5MHz



782MHz

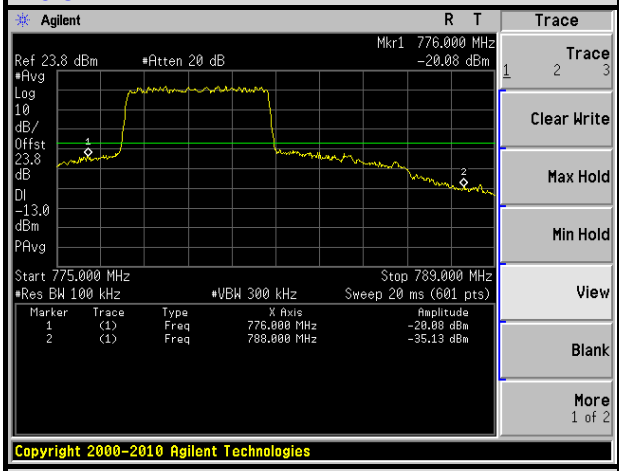


784.5MHz

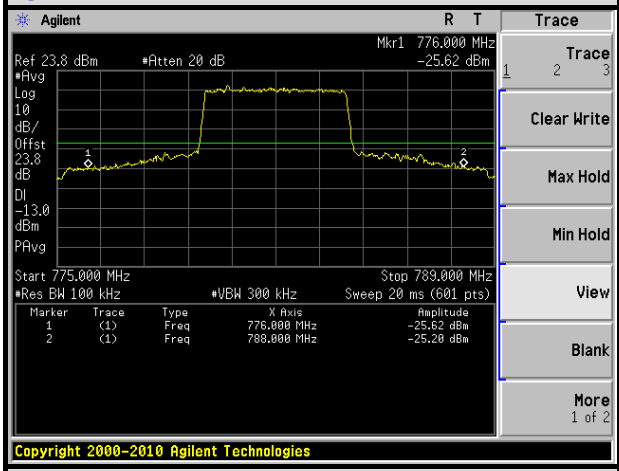
100% RB ALLOCATION

QPSK

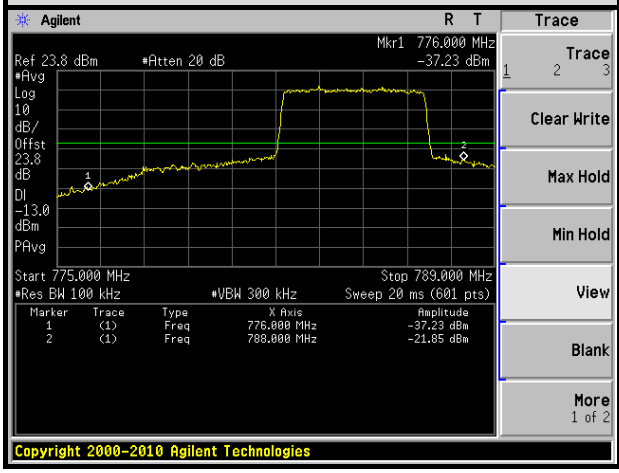
779.5MHz



782MHz

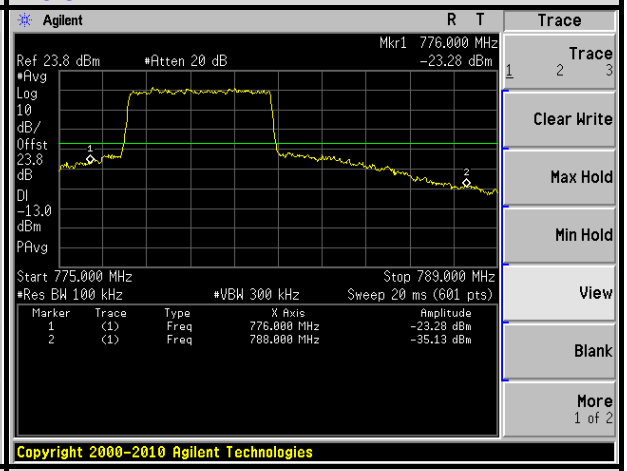


784.5MHz

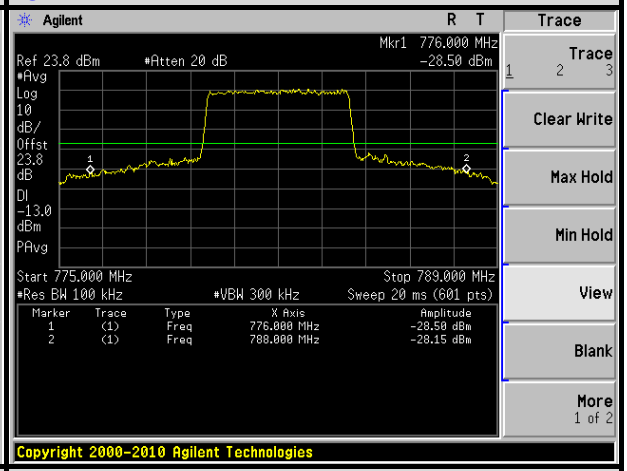


16QAM

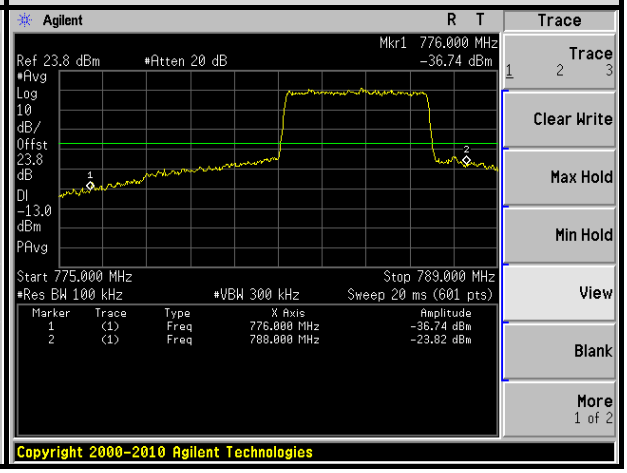
779.5MHz



782MHz



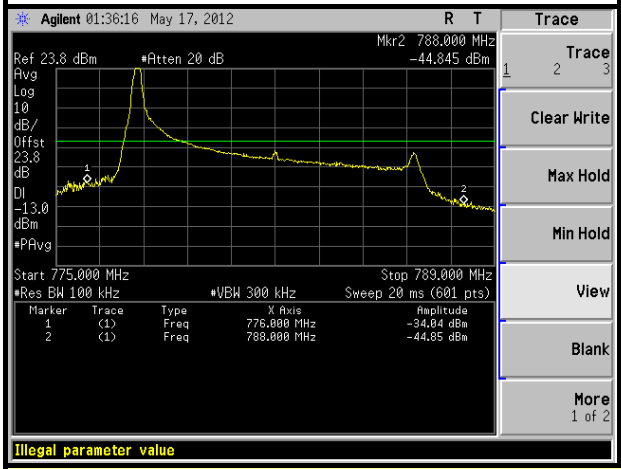
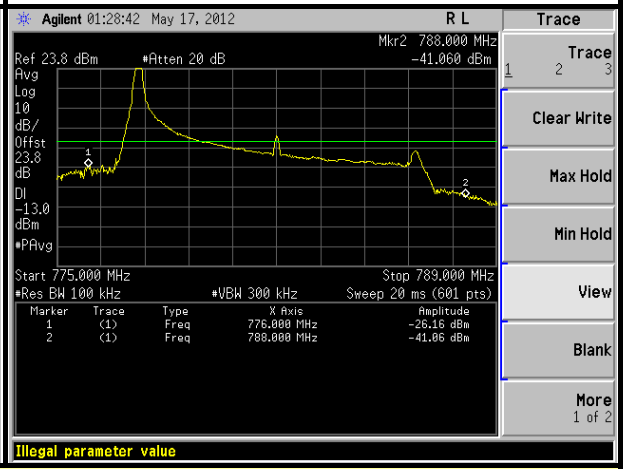
784.5MHz



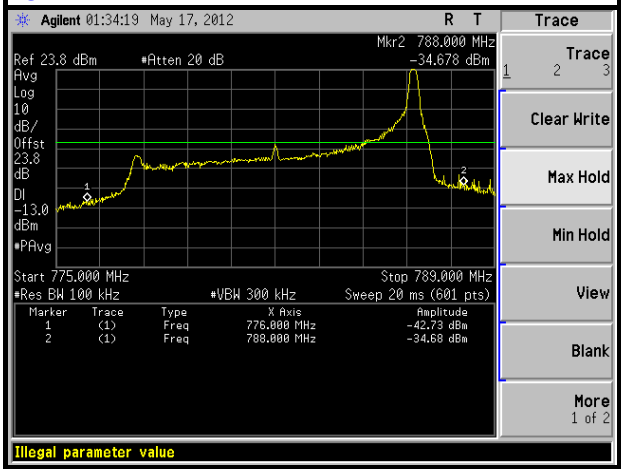
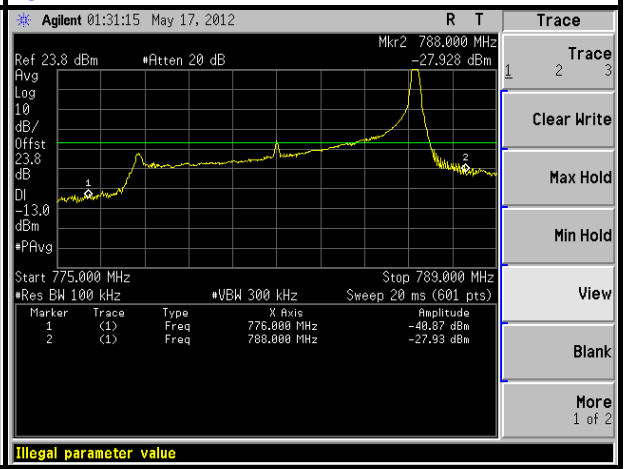
LTE Band 13

CHANNEL BANDWIDTH: 10MHz

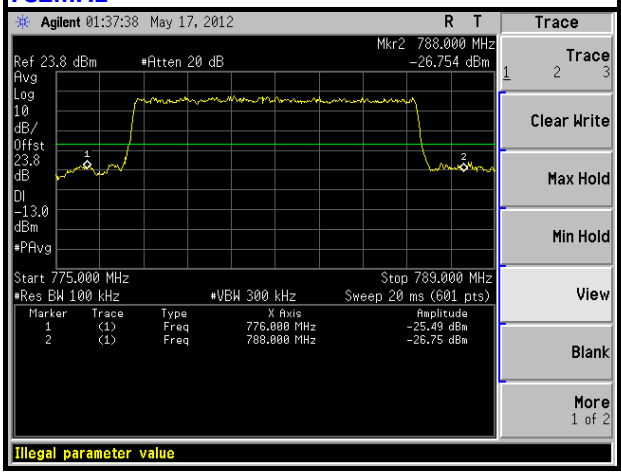
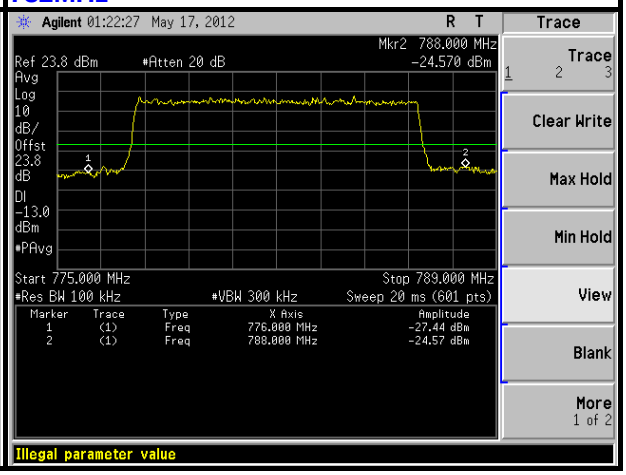
1 RB ALLOCATED AT THE LOWER EDGE

QPSK	16QAM
782MHz	782MHz
	

1 RB ALLOCATED AT THE UPPER EDGE

782MHz	782MHz
	

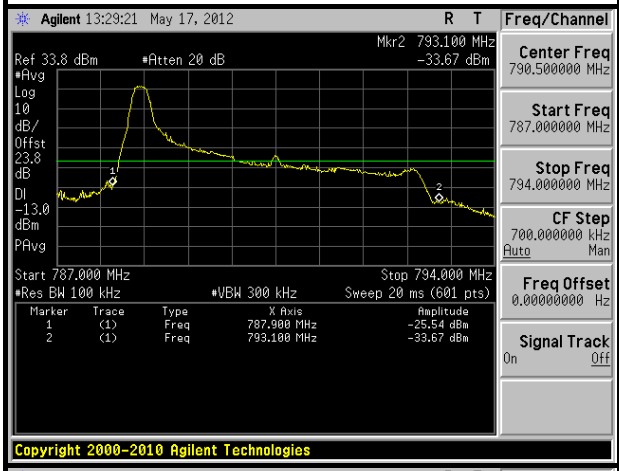
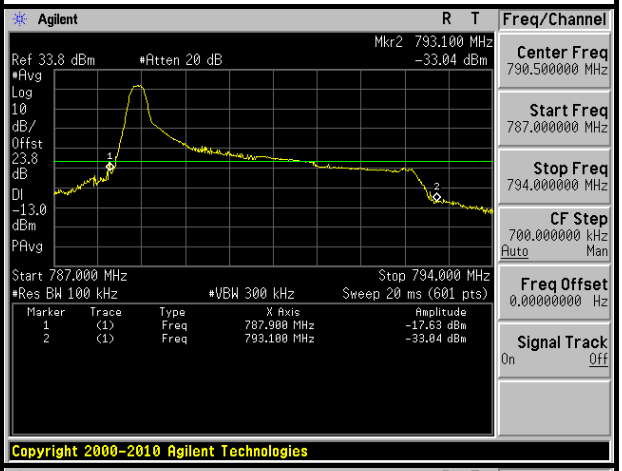
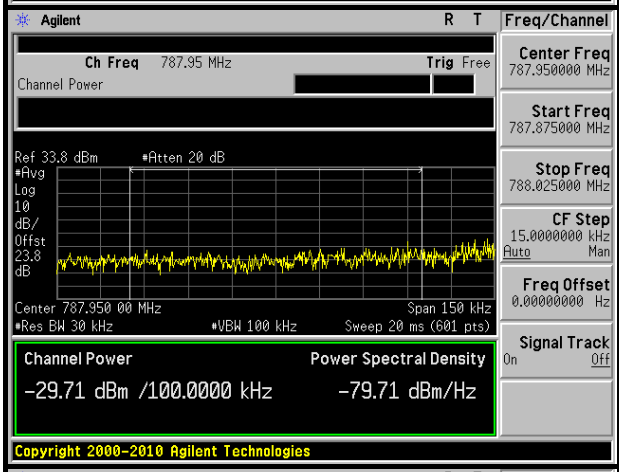
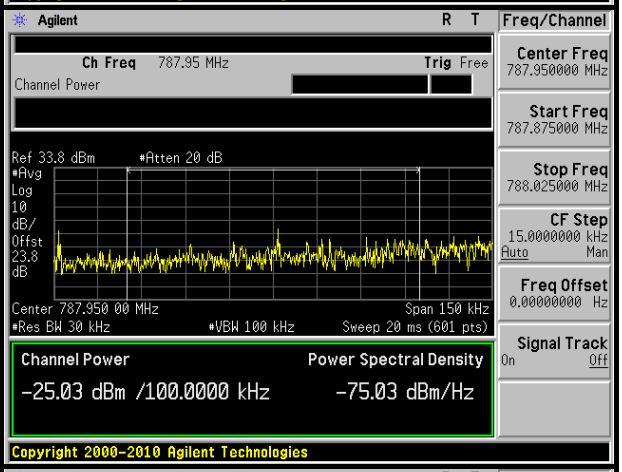
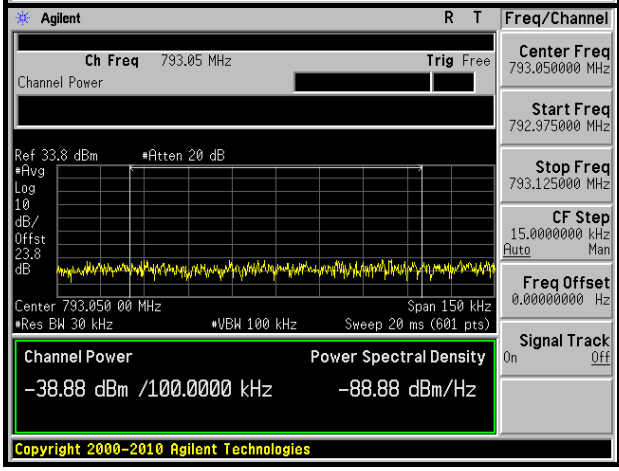
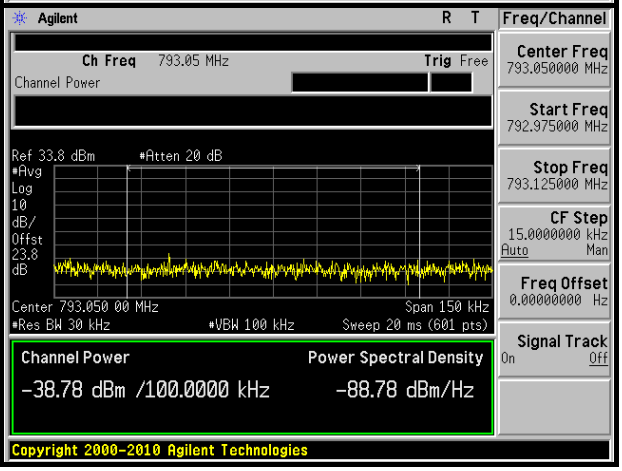
100% RB ALLOCATION

782MHz	782MHz
	

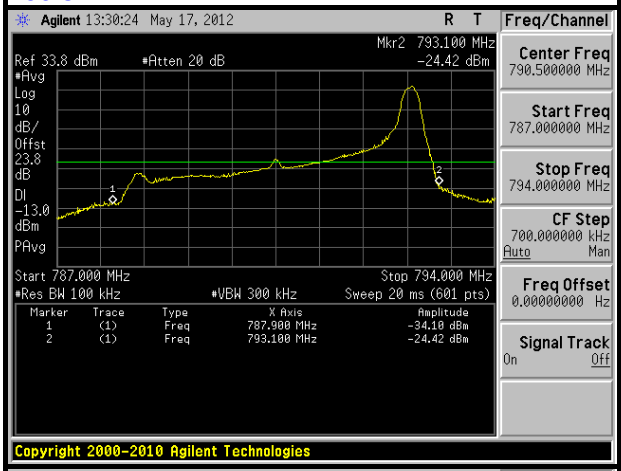
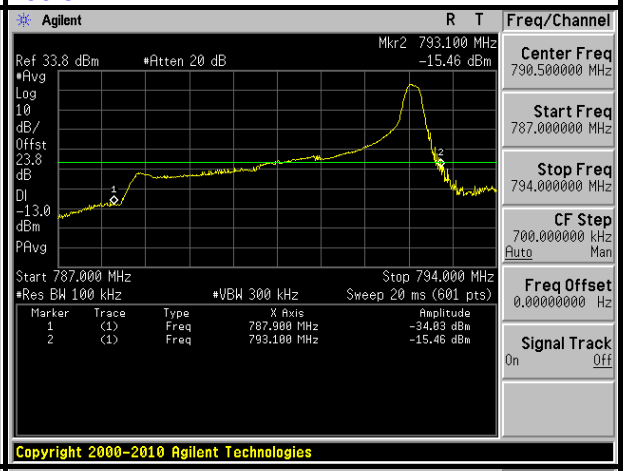
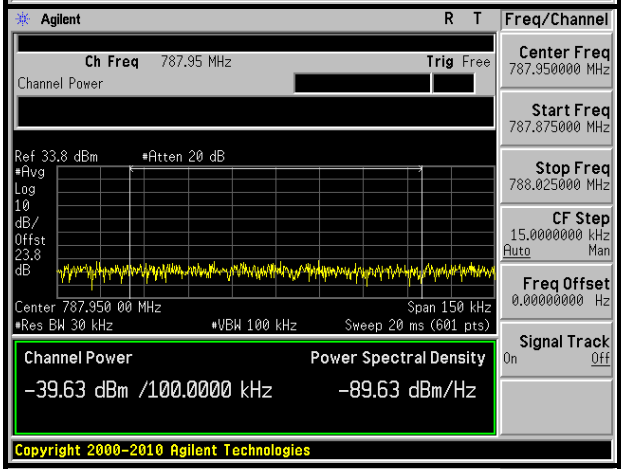
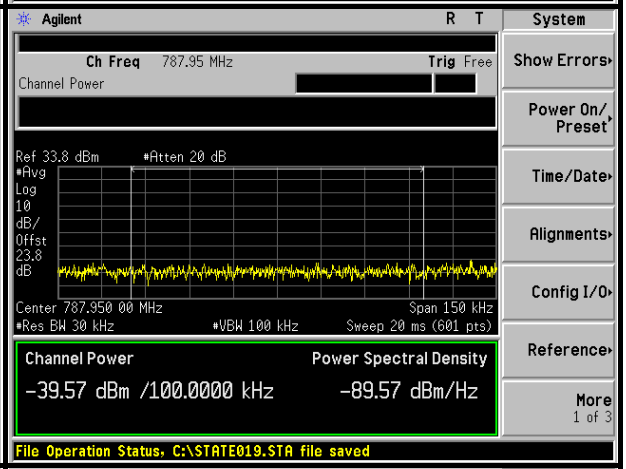
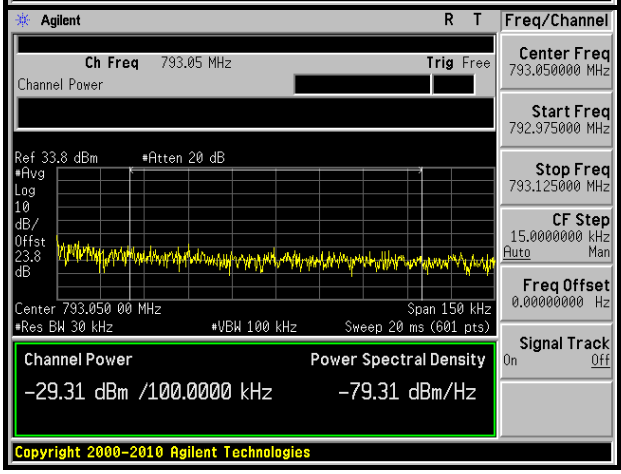
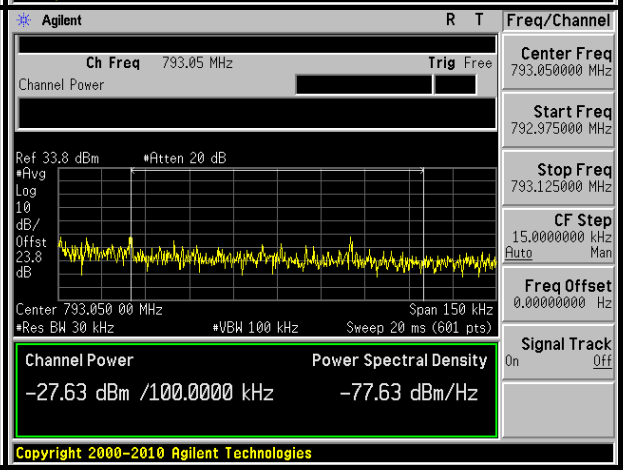
LTE Band 14

CHANNEL BANDWIDTH: 5MHz

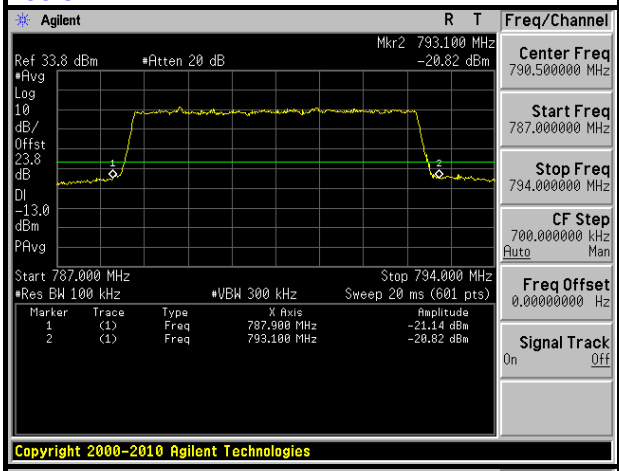
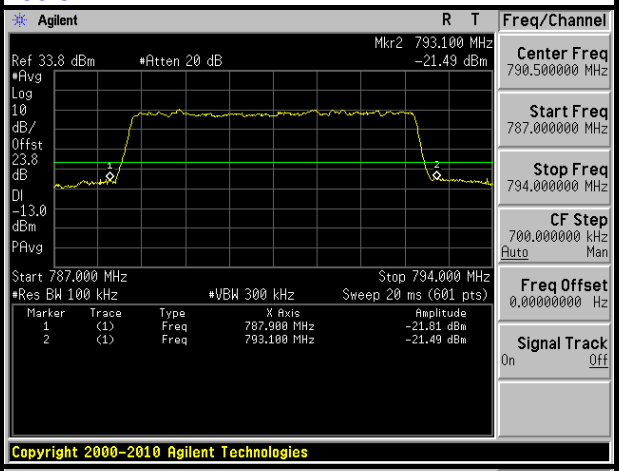
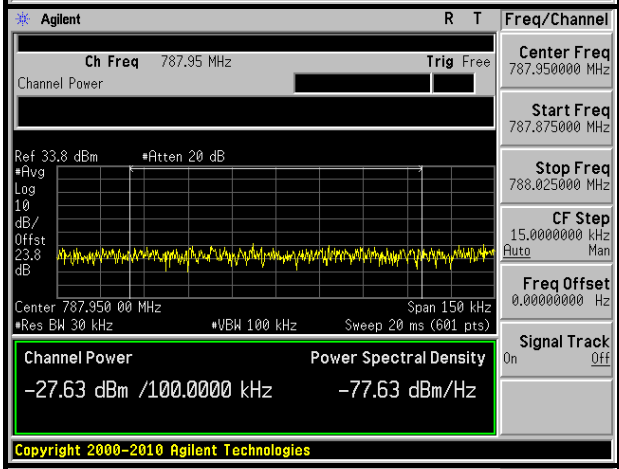
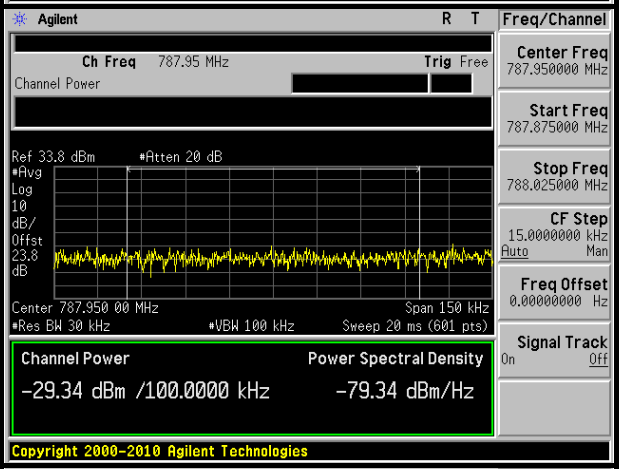
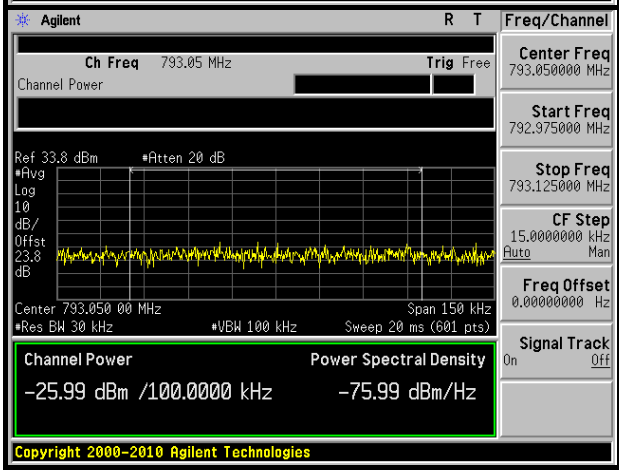
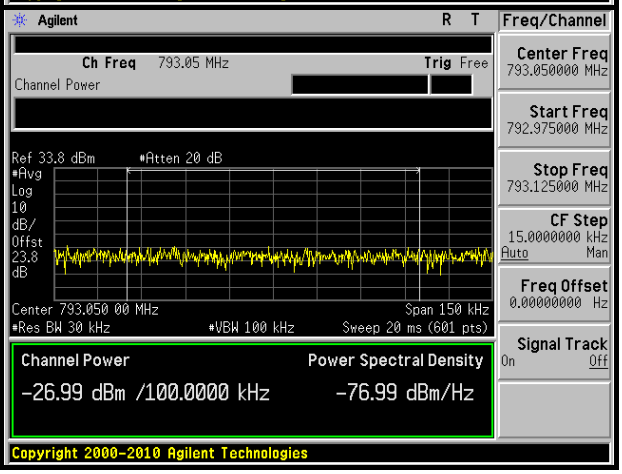
1 RB ALLOCATED AT THE LOWER EDGE

QPSK	16QAM
790.5MHz	790.5MHz
	
	
	

1 RB ALLOCATED AT THE UPPER EDGE

QPSK	16QAM
790.5MHz	790.5MHz
	
	
	

100% RB ALLOCATION

QPSK	16QAM
790.5MHz	790.5MHz
	
	
	

4.6 CONDUCTED SPURIOUS EMISSIONS

4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power(P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz , by a factor not les s than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

For operations in the 758–763 MHz and 788–793 MHz bands, the power of any emission outside the Licensee's frequency bands of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not les s than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(2) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10log (P) dB.

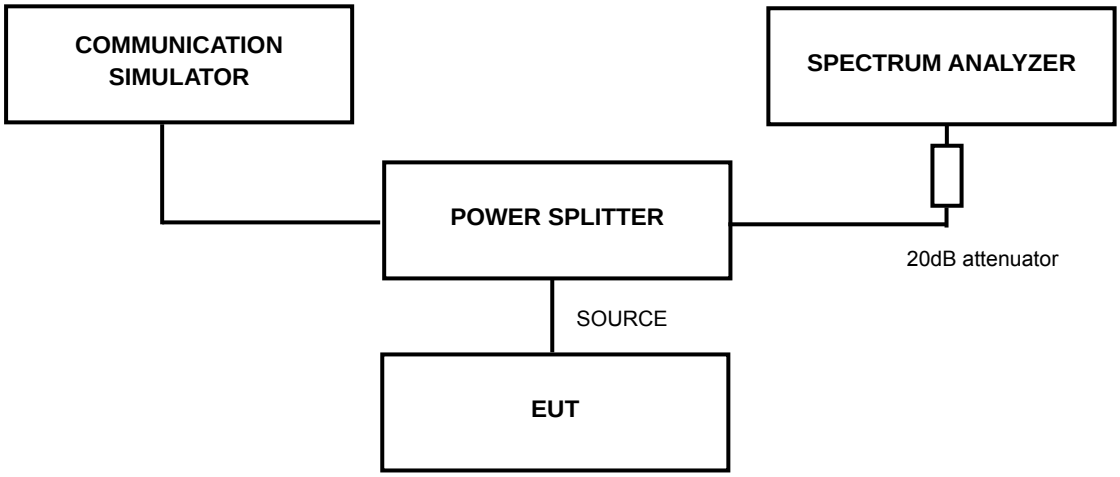
4.6.2 TEST PROCEDURE

a. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).

b. The conducted spurious emission used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

c. When the spectrum scanned from 30MHz to 8GHz, it shall be connected to the band reject filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

4.6.3 TEST SETUP



4.6.4 EUT OPERATING CONDITIONS

a. The EUT makes a phone call to the communication simulator.

b. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

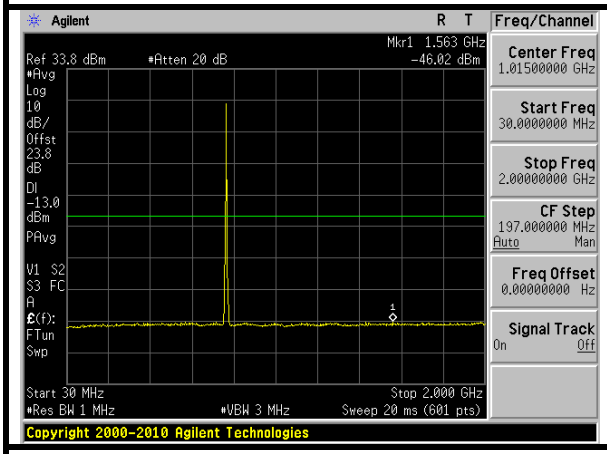
4.6.5 TEST RESULTS

LTE Band 13

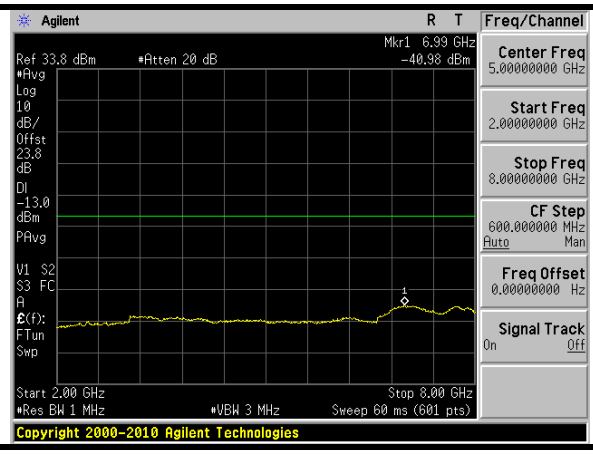
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

779.5MHz

30MHz ~ 2GHz

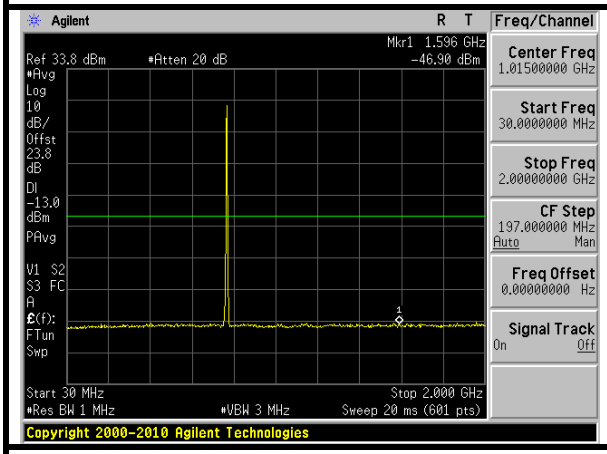


2GHz ~ 8GHz

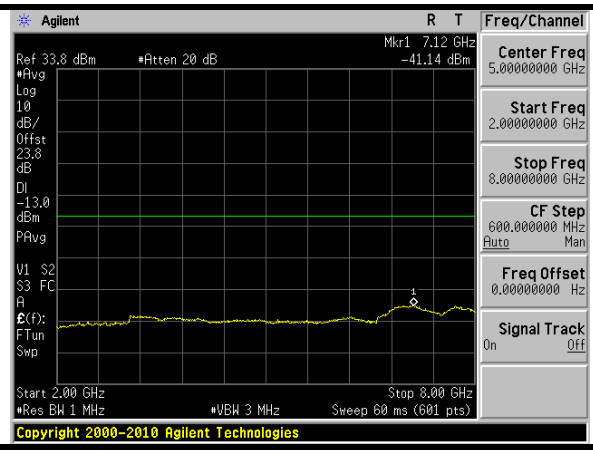


782MHz

30MHz ~ 2GHz

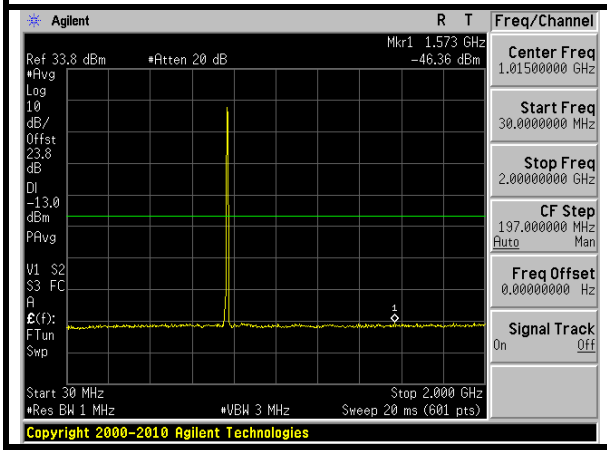


2GHz ~ 8GHz

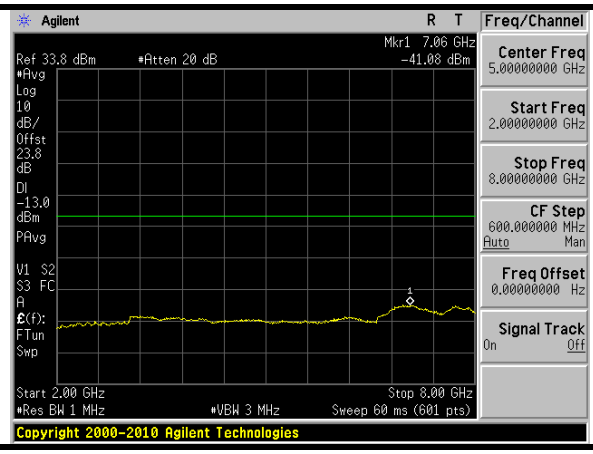


784.5MHz

30MHz ~ 2GHz



2GHz ~ 8GHz

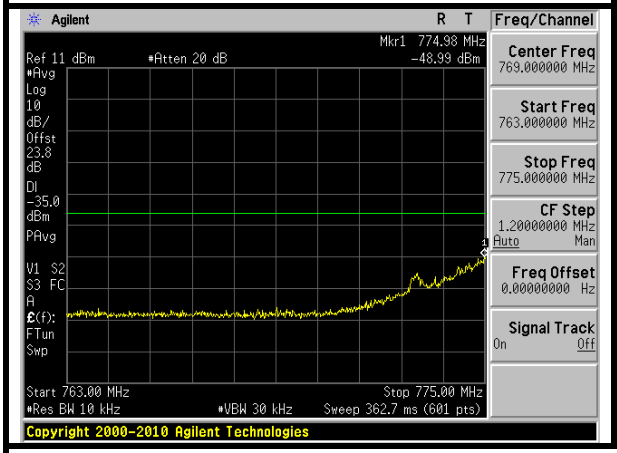


Emission in the 763–775 MHz and 793–805 MHz band

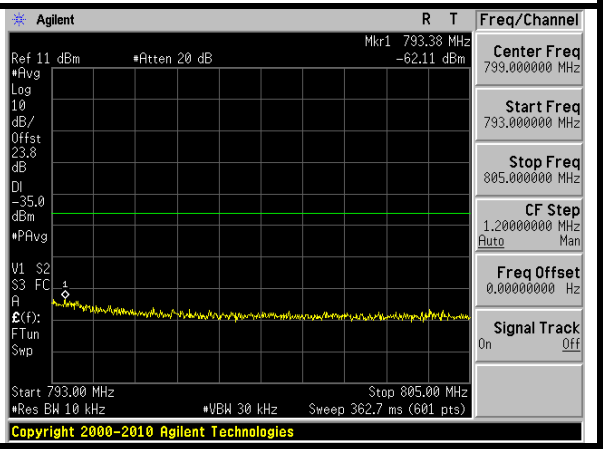
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE LOWER EDGE

779.5MHz

763MHz ~ 775MHz

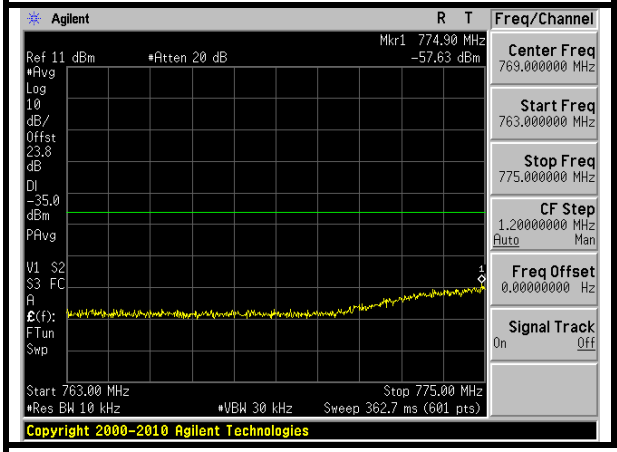


793MHz ~ 805MHz

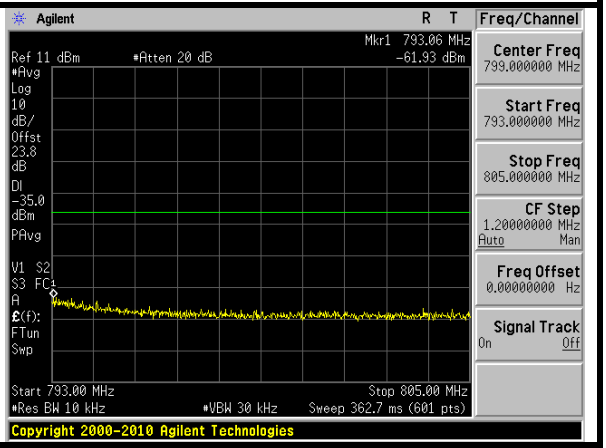


782MHz

763MHz ~ 775MHz

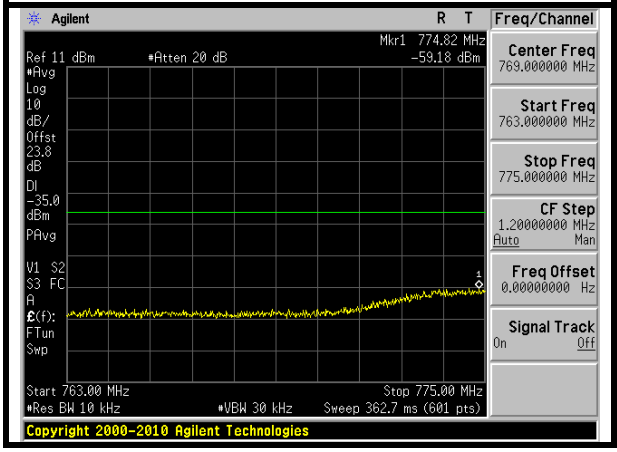


793MHz ~ 805MHz

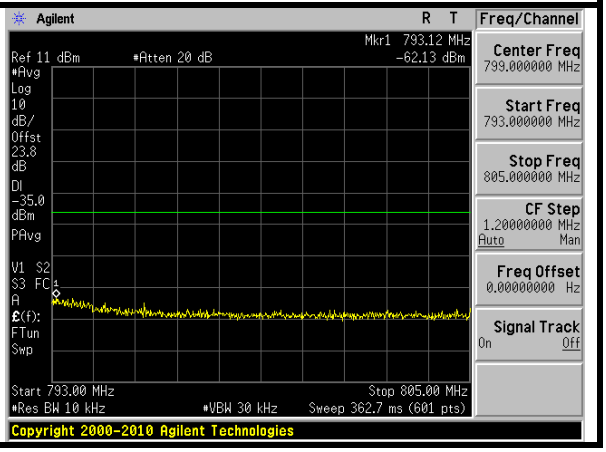


784.5MHz

763MHz ~ 775MHz



793MHz ~ 805MHz

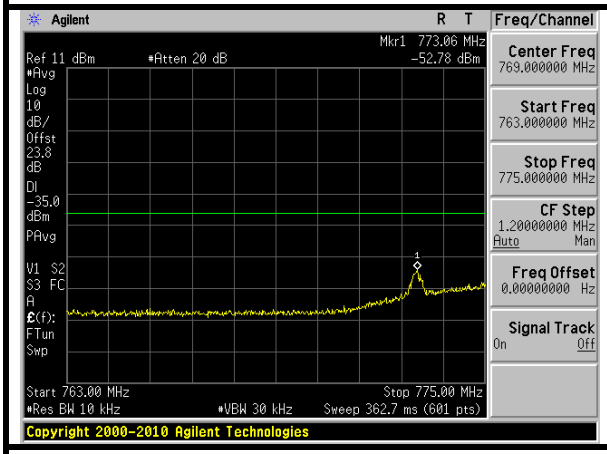


Emission in the 763–775 MHz and 793–805 MHz band

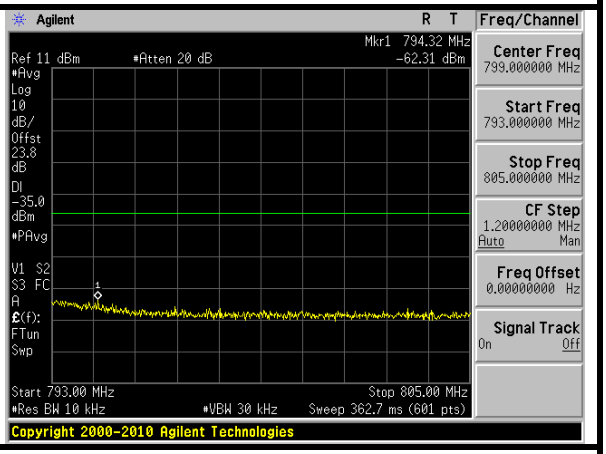
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

779.5MHz

763MHz ~ 775MHz

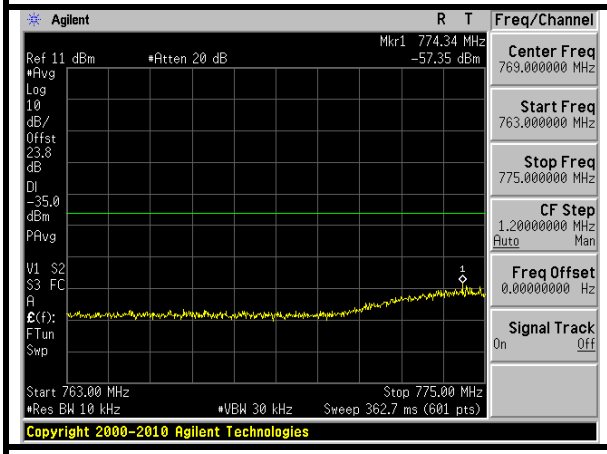


793MHz ~ 805MHz

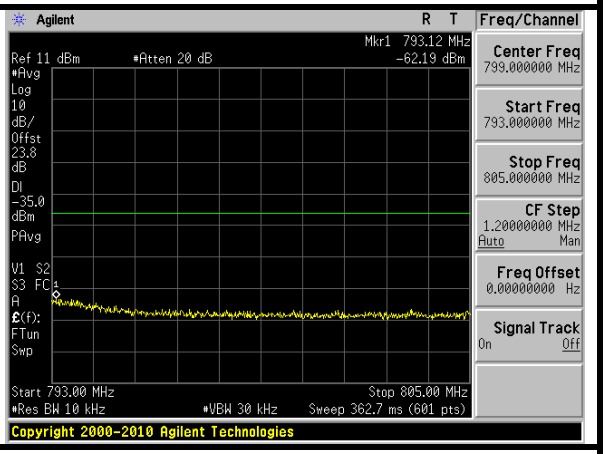


782MHz

763MHz ~ 775MHz

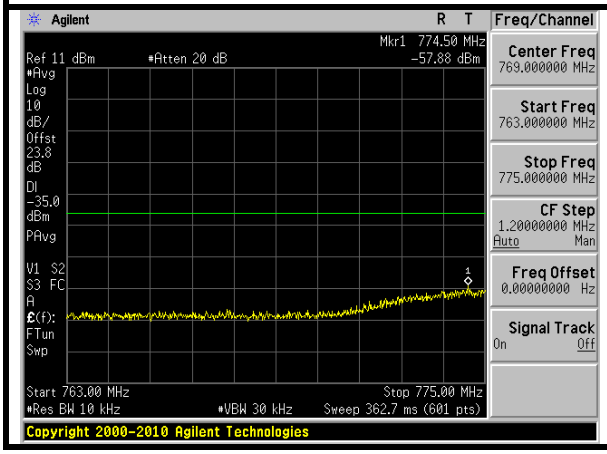


793MHz ~ 805MHz

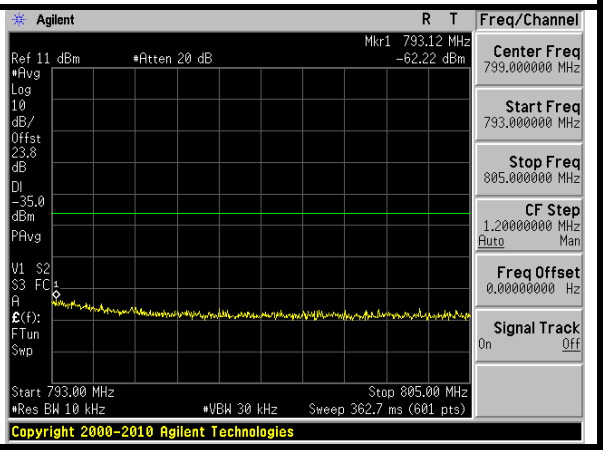


784.5MHz

763MHz ~ 775MHz



793MHz ~ 805MHz

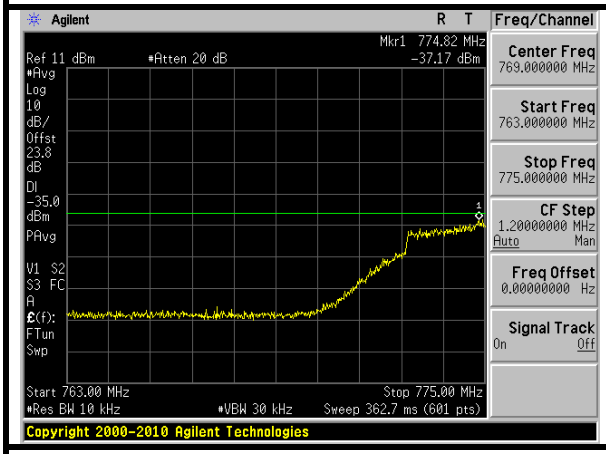


Emission in the 763–775 MHz and 793–805 MHz band

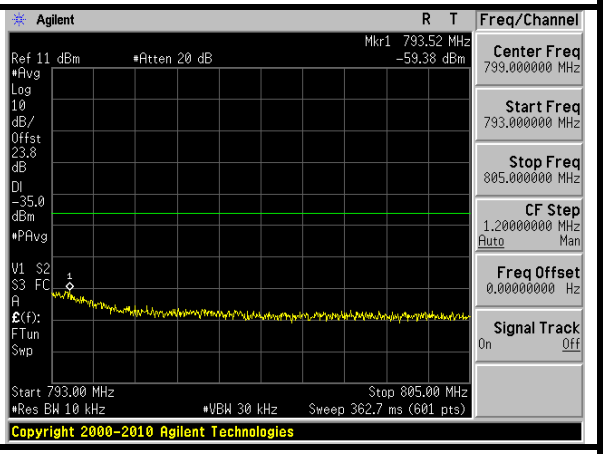
CHANNEL BANDWIDTH: 5MHz / QPSK / 100% RB ALLOCATION

779.5MHz

763MHz ~ 775MHz

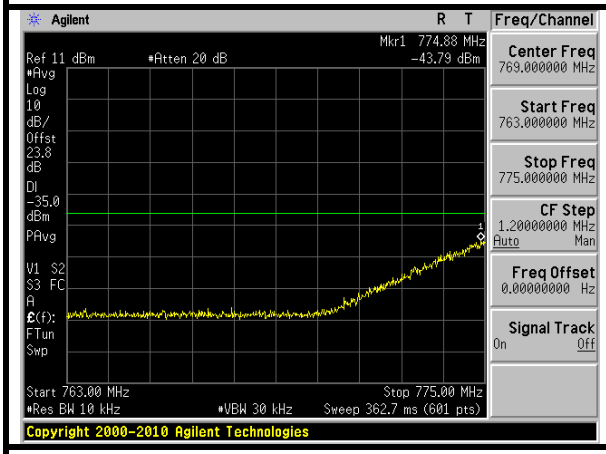


793MHz ~ 805MHz

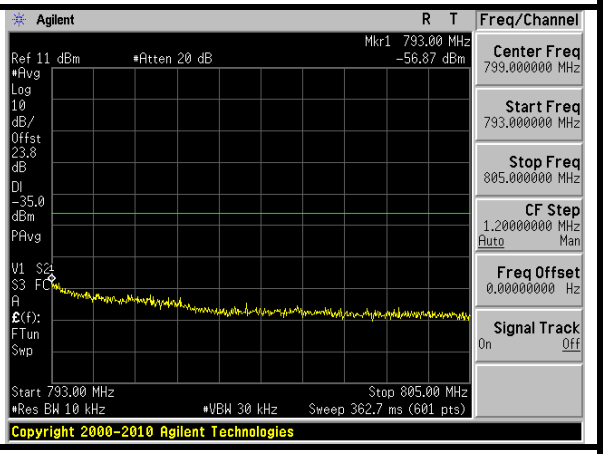


782MHz

763MHz ~ 775MHz

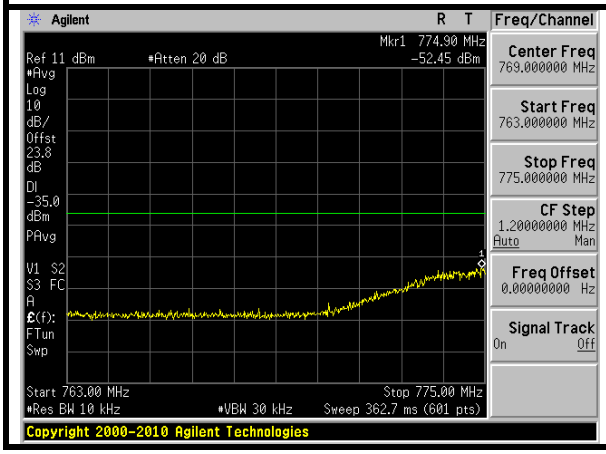


793MHz ~ 805MHz

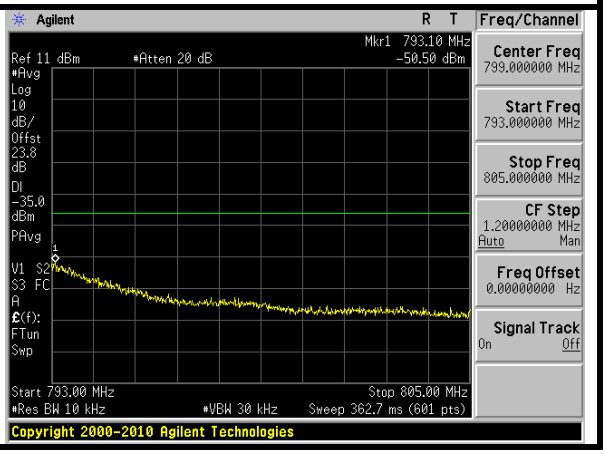


784.5MHz

763MHz ~ 775MHz



793MHz ~ 805MHz

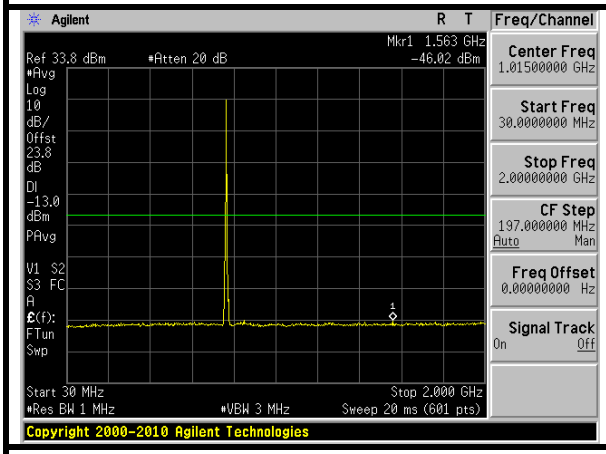


LTE Band 13

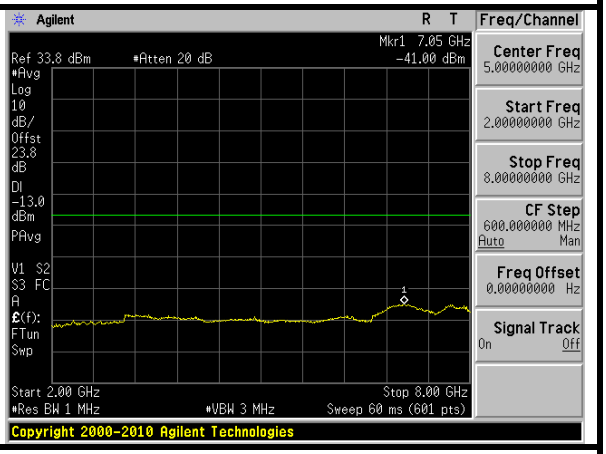
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

779.5MHz

30MHz ~ 2GHz

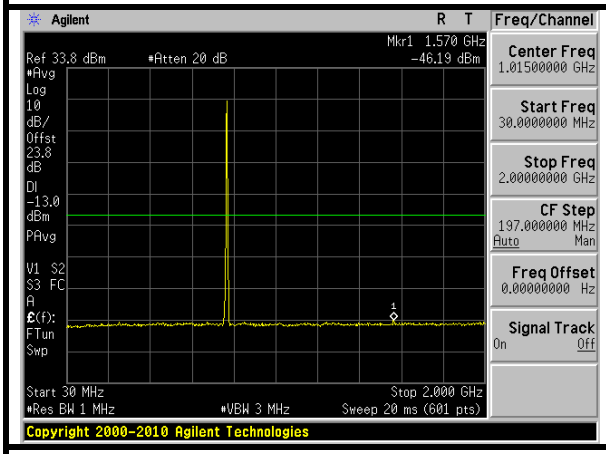


2GHz ~ 8GHz

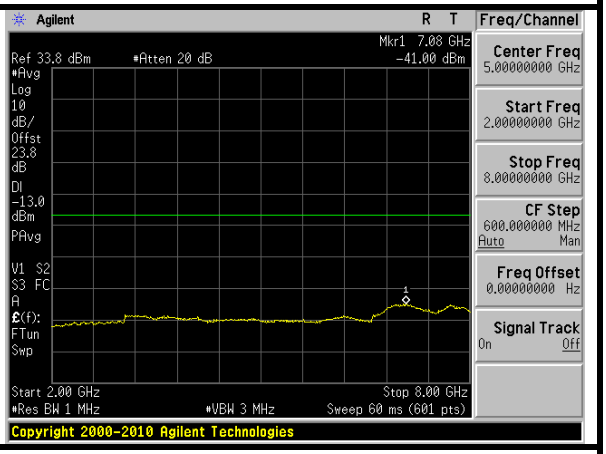


782MHz

30MHz ~ 2GHz

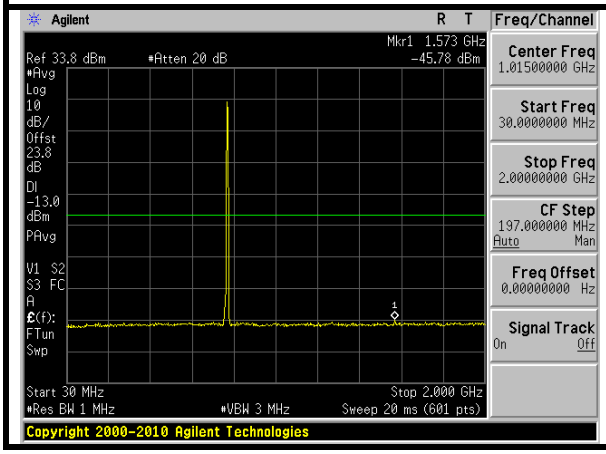


2GHz ~ 8GHz

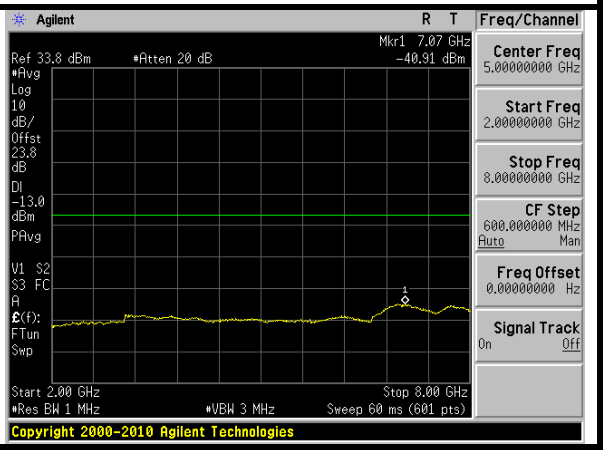


784.5MHz

30MHz ~ 2GHz



2GHz ~ 8GHz

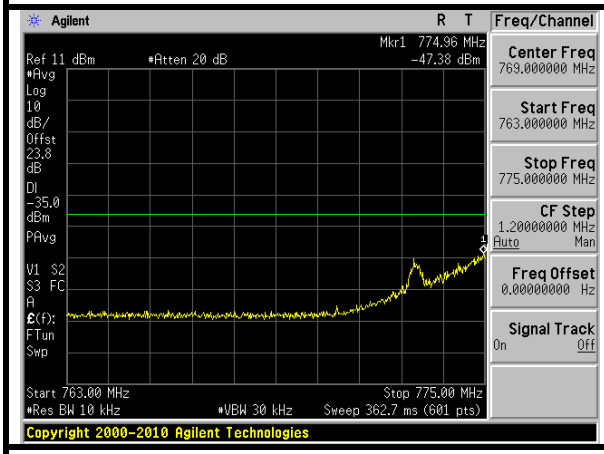


Emission in the 763–775 MHz and 793–805 MHz band

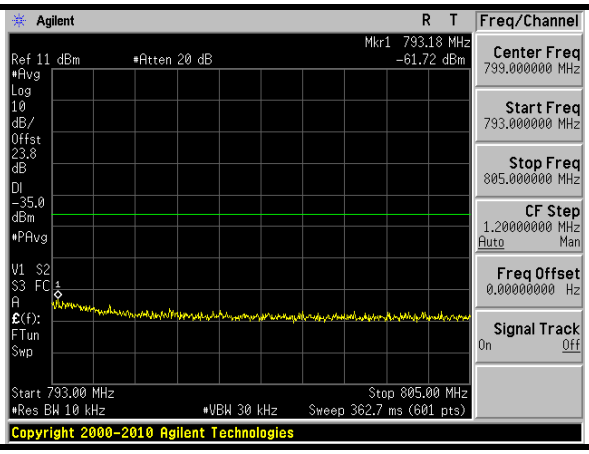
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE LOWER EDGE

779.5MHz

763MHz ~ 775MHz

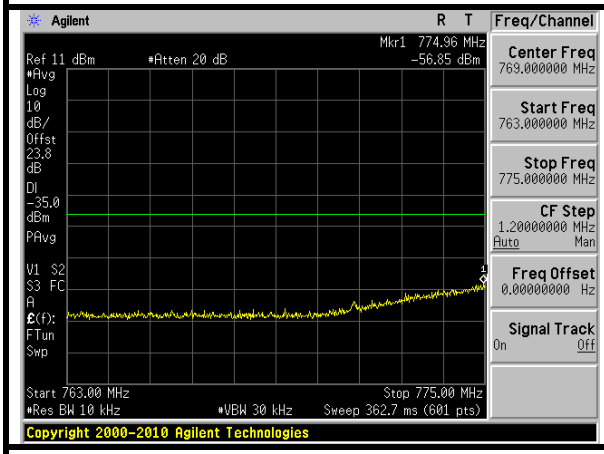


793MHz ~ 805MHz

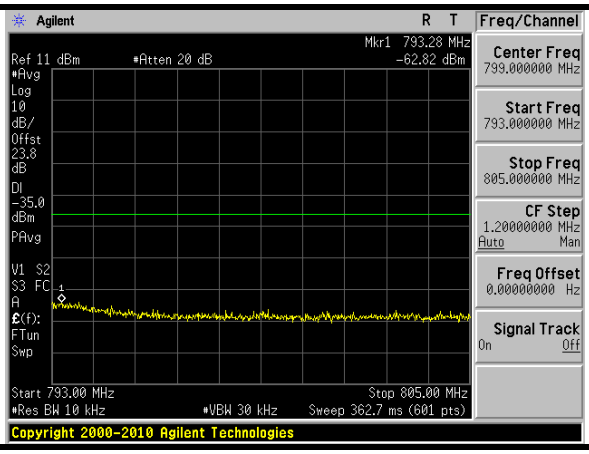


782MHz

763MHz ~ 775MHz

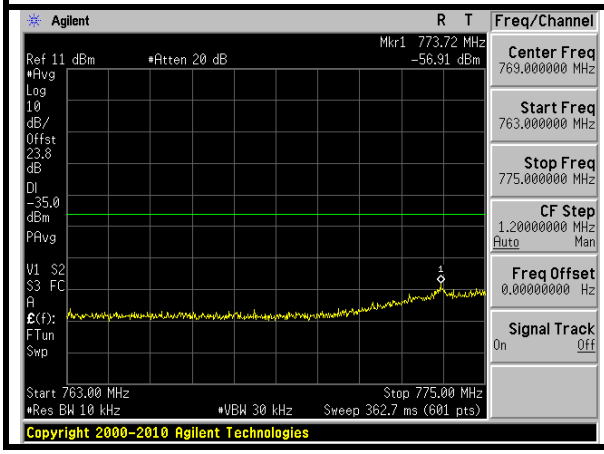


793MHz ~ 805MHz

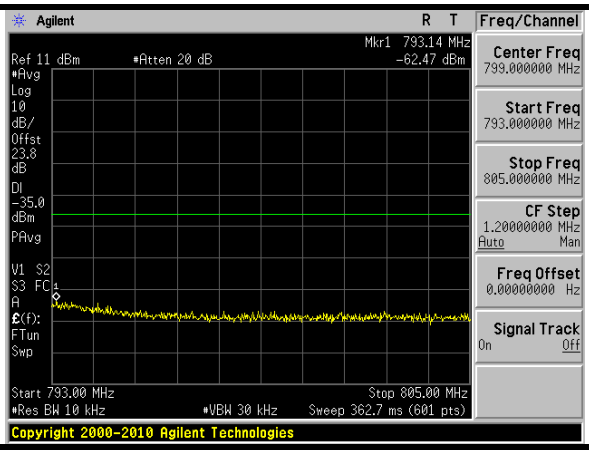


784.5MHz

763MHz ~ 775MHz



793MHz ~ 805MHz

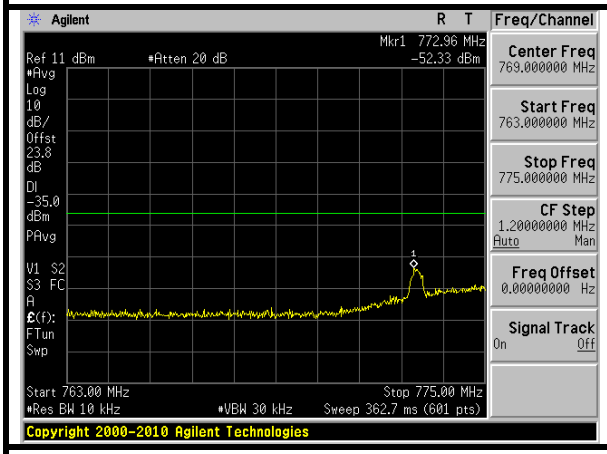


Emission in the 763–775 MHz and 793–805 MHz band

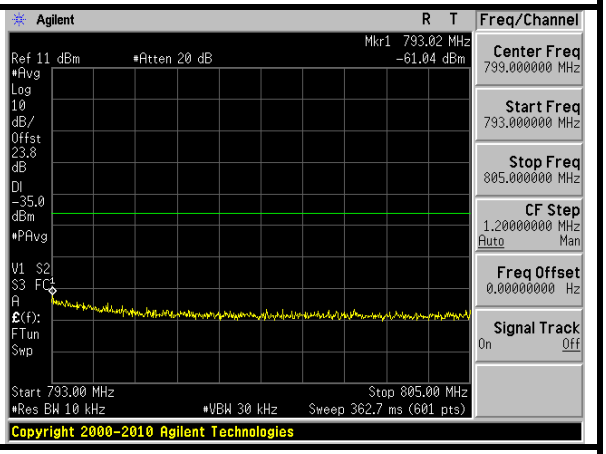
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

779.5MHz

763MHz ~ 775MHz

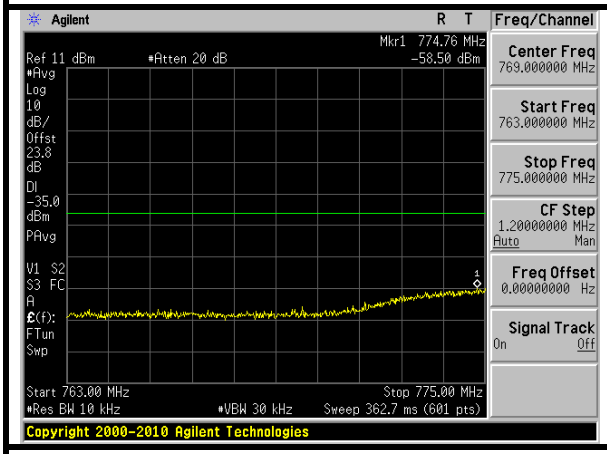


793MHz ~ 805MHz

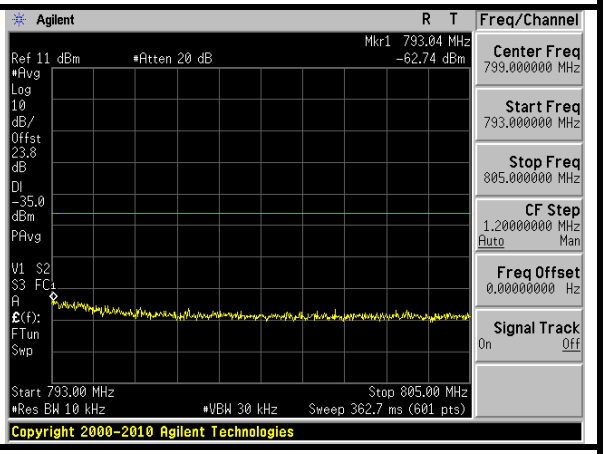


782MHz

763MHz ~ 775MHz

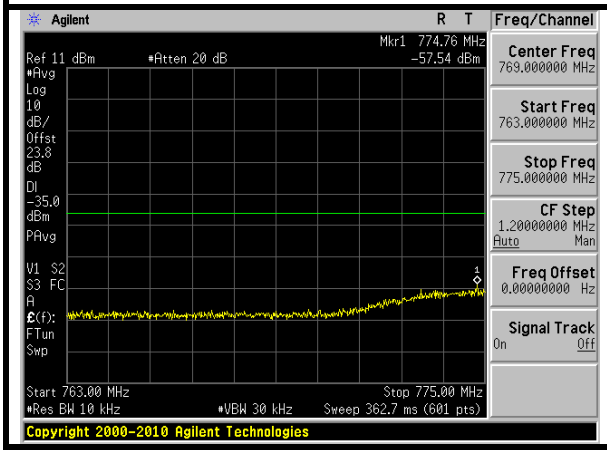


793MHz ~ 805MHz

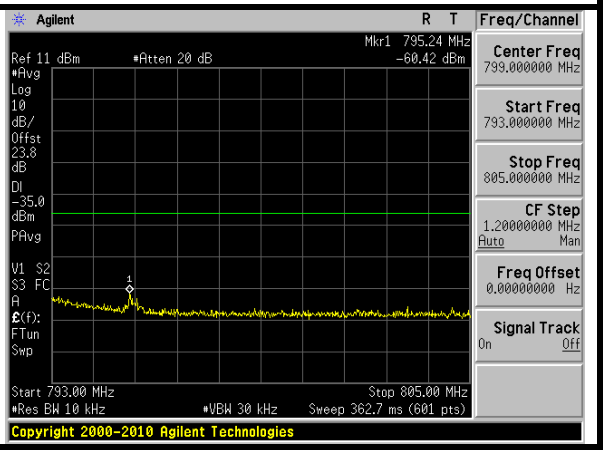


784.5MHz

763MHz ~ 775MHz



793MHz ~ 805MHz

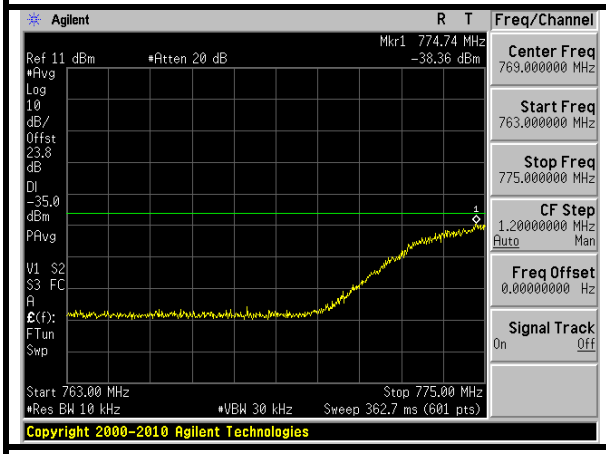


Emission in the 763–775 MHz and 793–805 MHz band

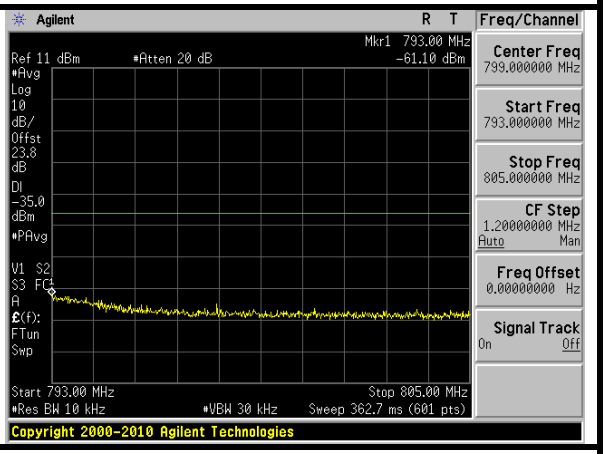
CHANNEL BANDWIDTH: 5MHz / 16QAM / 100% RB ALLOCATION

779.5MHz

763MHz ~ 775MHz

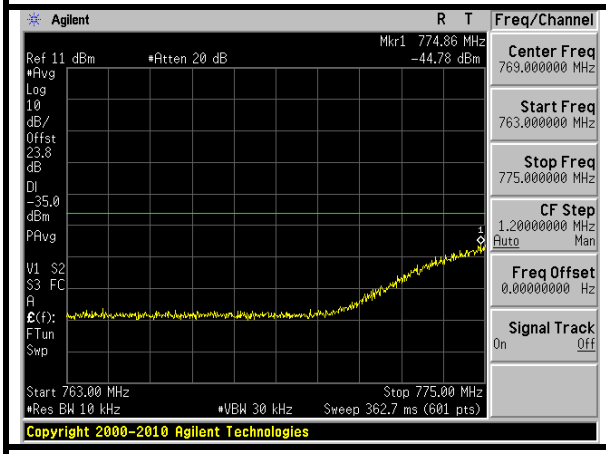


793MHz ~ 805MHz

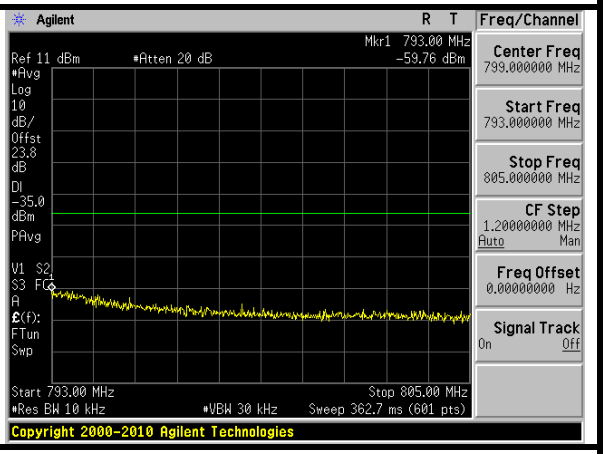


782MHz

763MHz ~ 775MHz

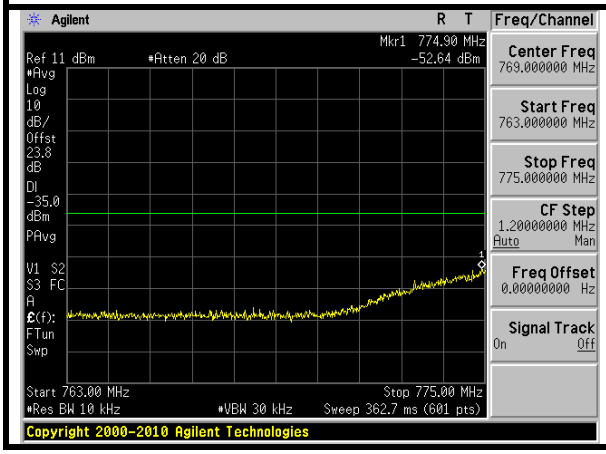


793MHz ~ 805MHz

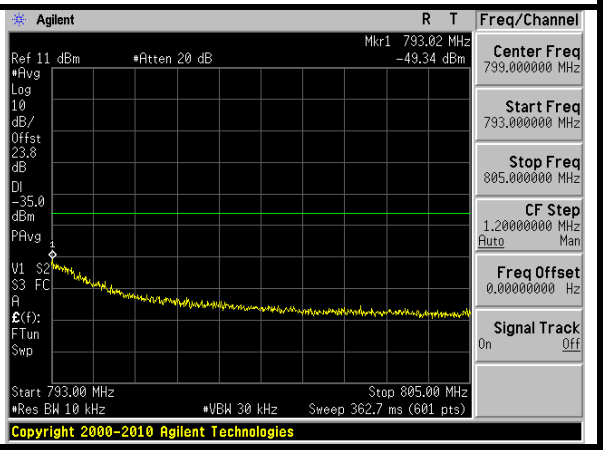


784.5MHz

763MHz ~ 775MHz



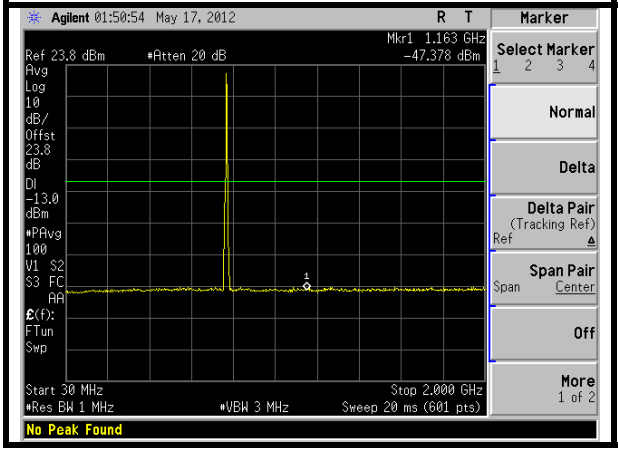
793MHz ~ 805MHz

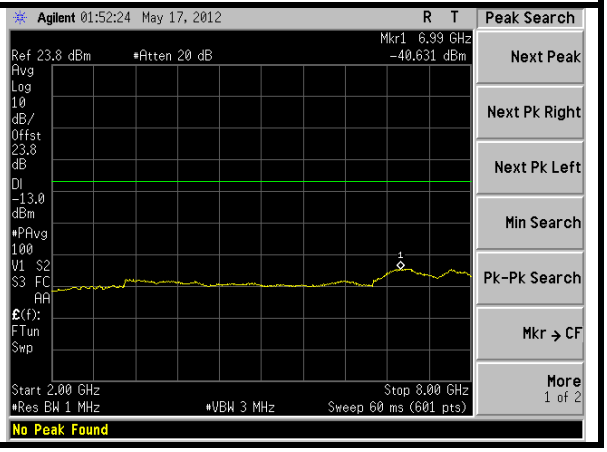


LTE Band 13

CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

782MHz	
30MHz ~ 2GHz	2GHz ~ 8GHz

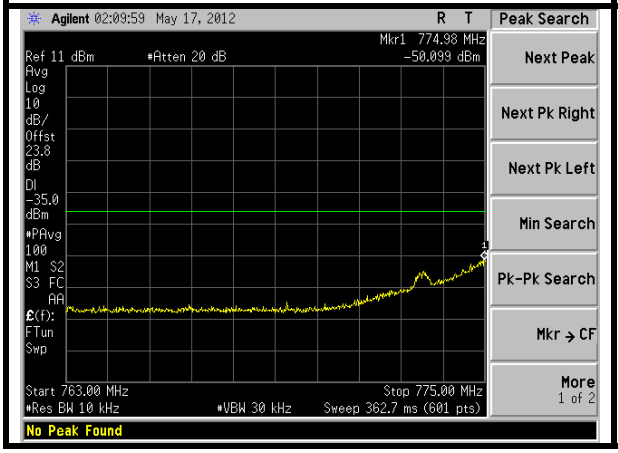


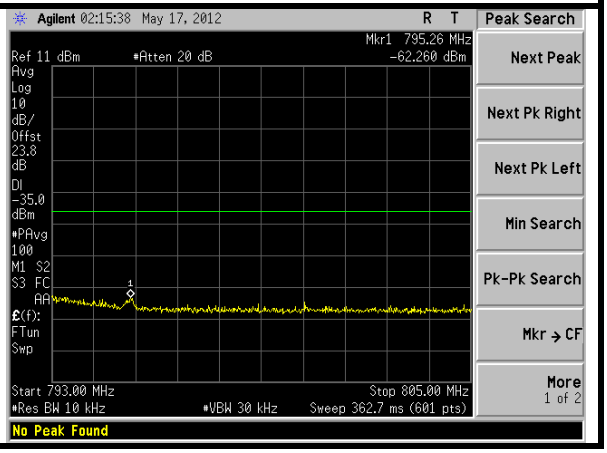


Emission in the 763–775 MHz and 793–805 MHz band

CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED AT THE LOWER EDGE

782MHz	
763MHz ~ 775MHz	793MHz ~ 805MHz

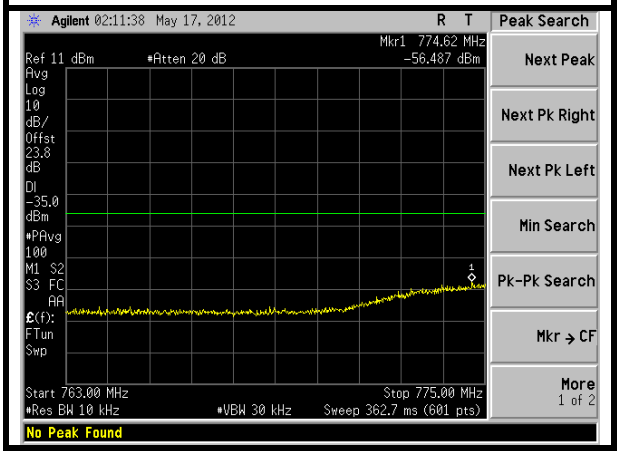




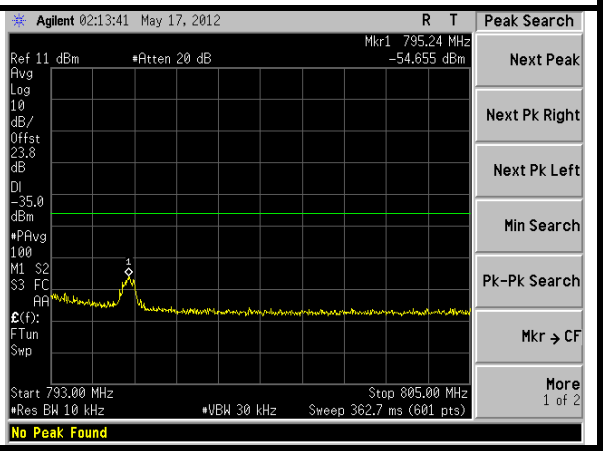
CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

782MHz

763MHz ~ 775MHz



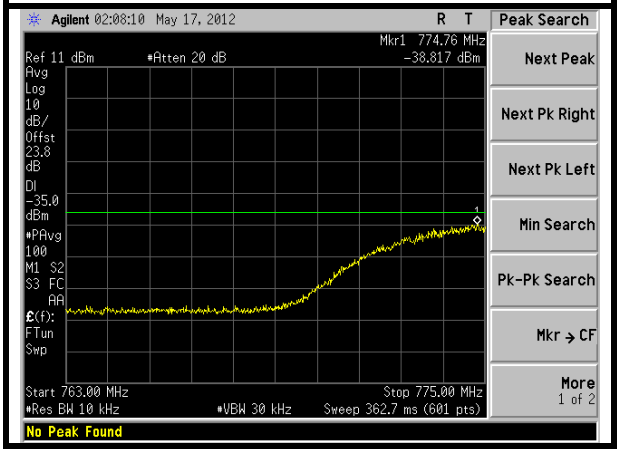
793MHz ~ 805MHz



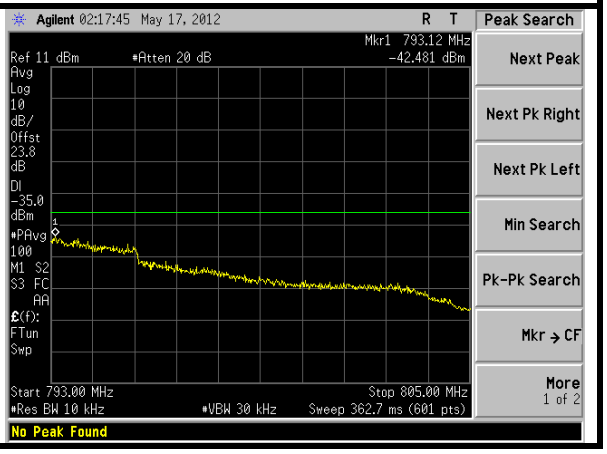
CHANNEL BANDWIDTH: 10MHz / QPSK / 100% RB ALLOCATION

782MHz

763MHz ~ 775MHz

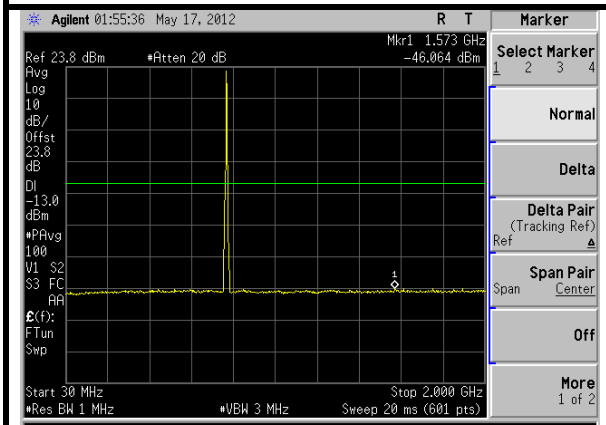
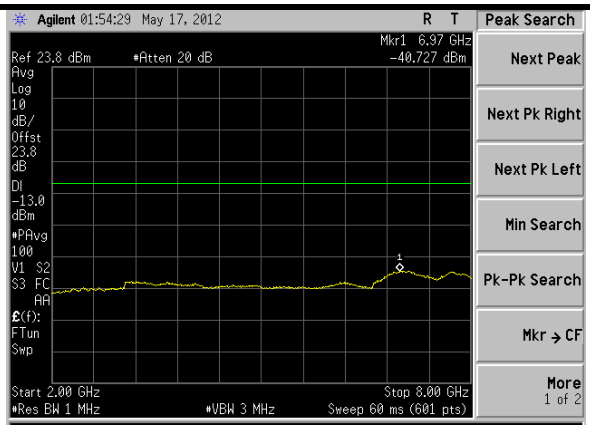


793MHz ~ 805MHz



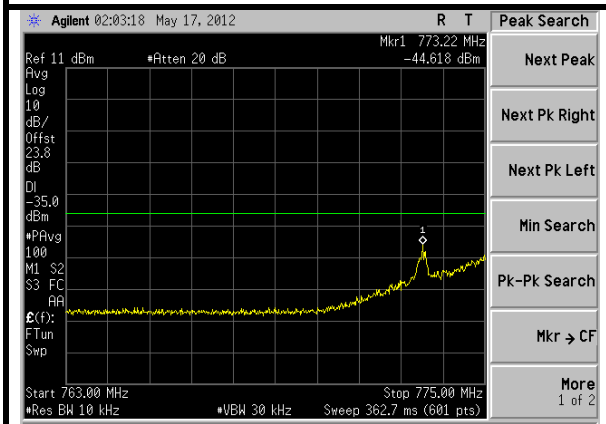
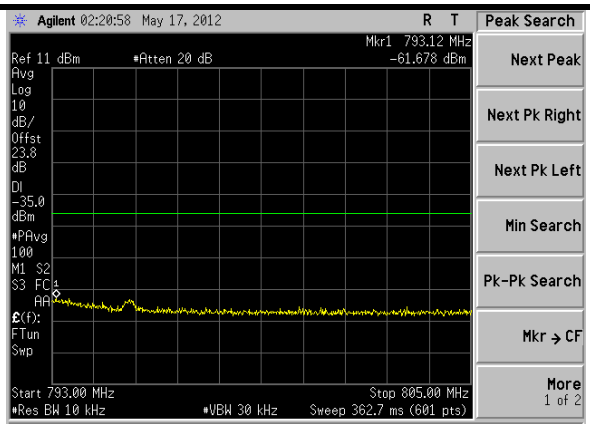
LTE Band 13

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

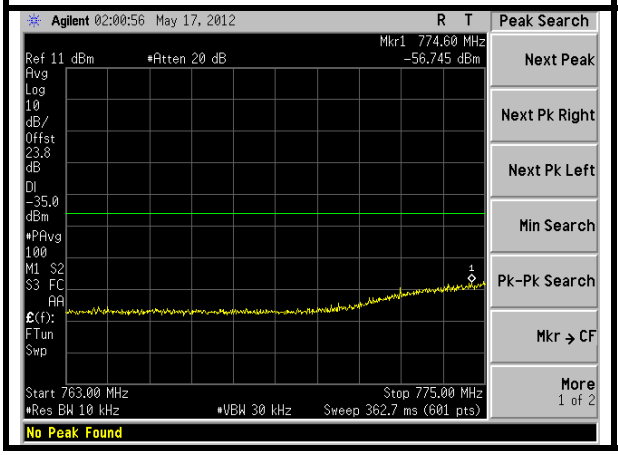
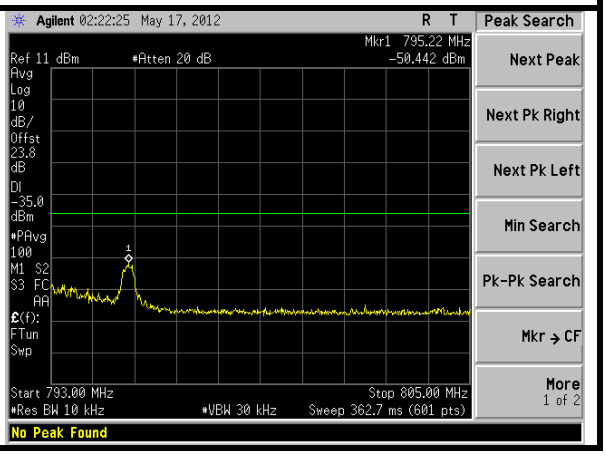
782MHz	
30MHz ~ 2GHz	2GHz ~ 8GHz
	

Emission in the 763–775 MHz and 793–805 MHz band

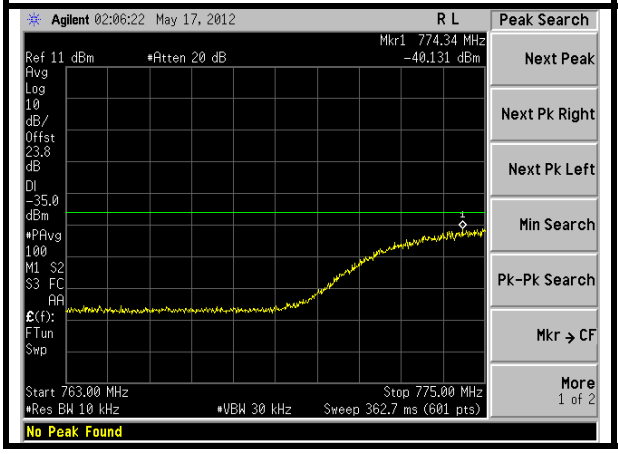
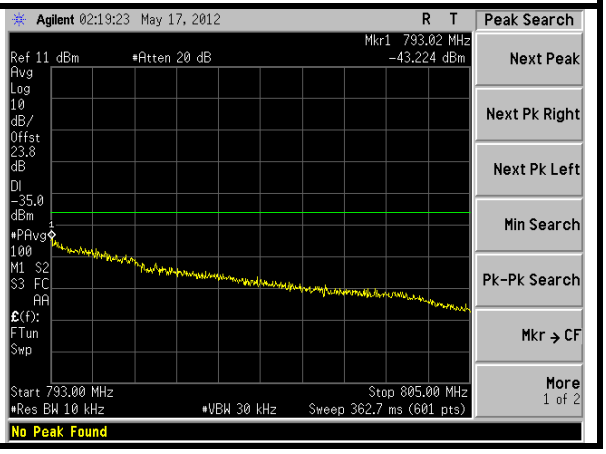
CHANNEL BANDWIDTH: 10MHz / 16QAM / 1 RB ALLOCATED AT THE LOWER EDGE

782MHz	
763MHz ~ 775MHz	793MHz ~ 805MHz
	

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

782MHz	
763MHz ~ 775MHz	793MHz ~ 805MHz
	

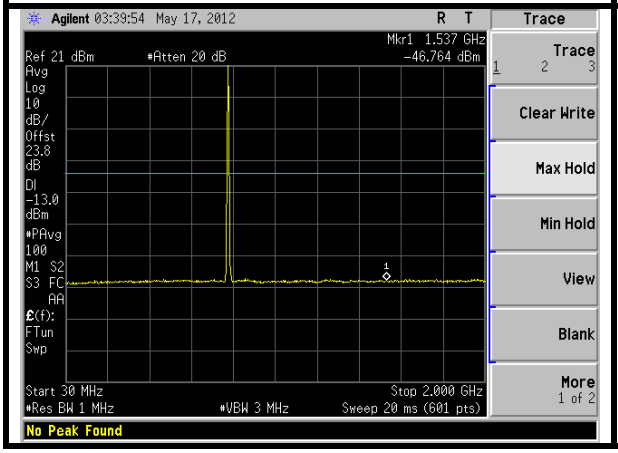
CHANNEL BANDWIDTH: 10MHz / 16QAM / 100% RB ALLOCATION

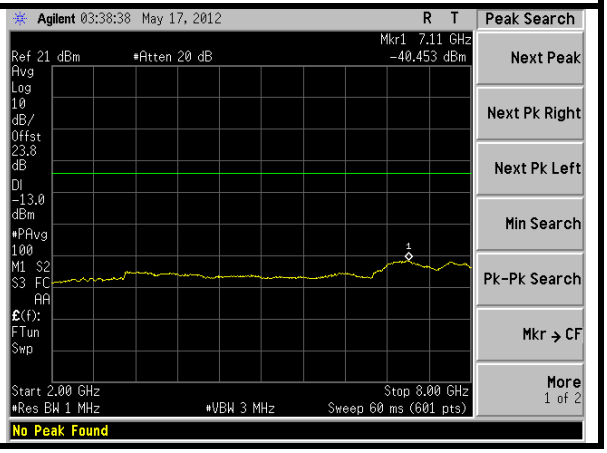
782MHz	
763MHz ~ 775MHz	793MHz ~ 805MHz
	

LTE Band 14

CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

790.5MHz	
30MHz ~ 2GHz	2GHz ~ 8GHz

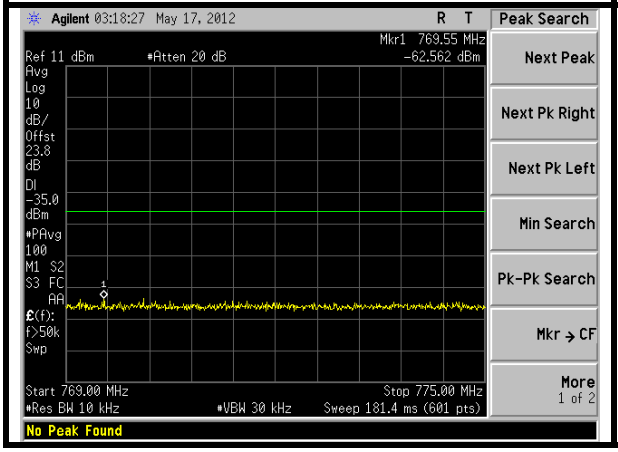


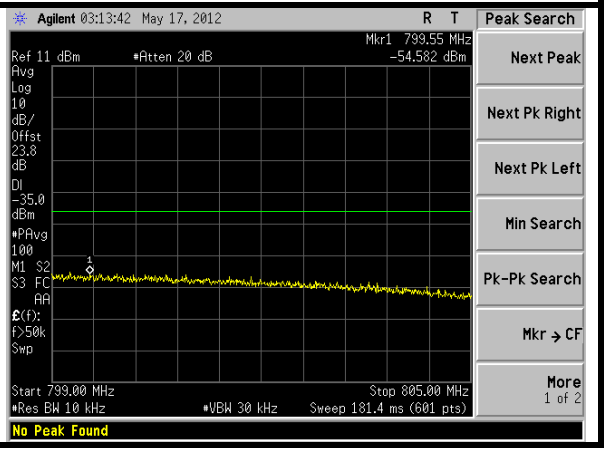


Emission in the 769–775 MHz and 799–805 MHz band

CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE LOWER EDGE

790.5MHz	
769MHz ~ 775MHz	799MHz ~ 805MHz

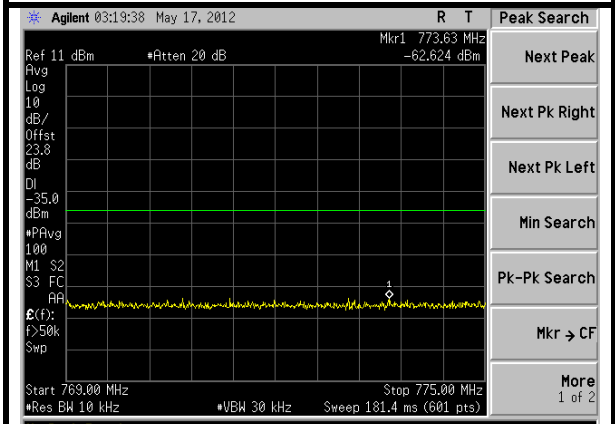




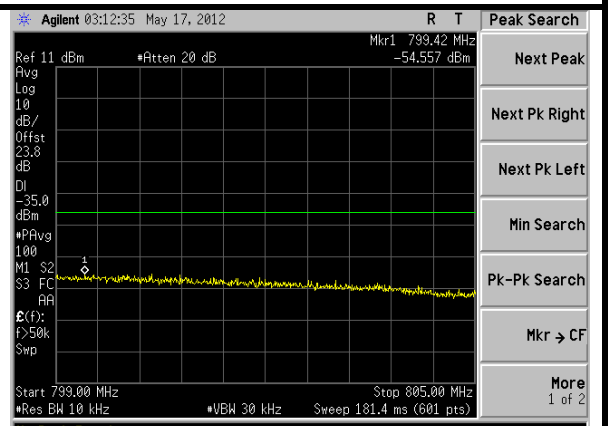
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED AT THE UPPER EDGE

790.5MHz

769MHz ~ 775MHz



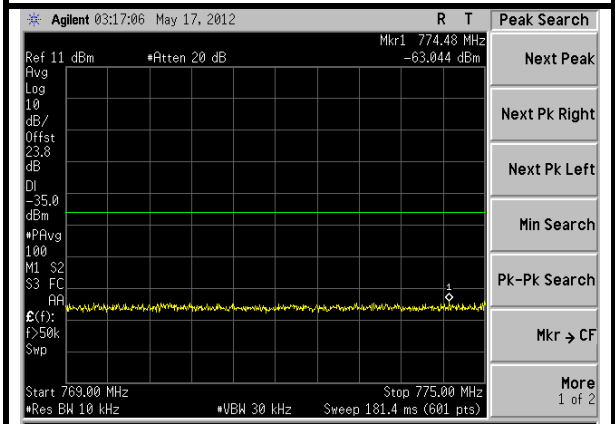
799MHz ~ 805MHz



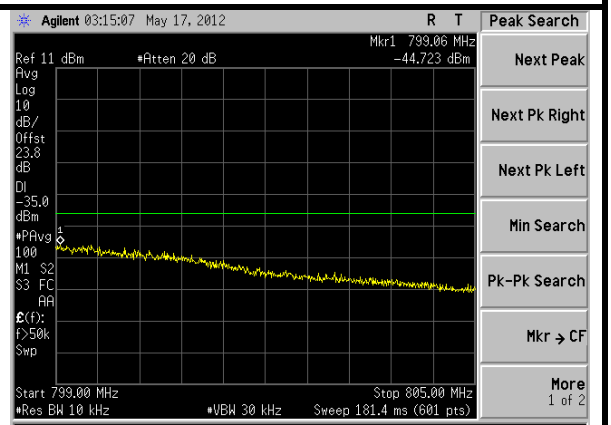
CHANNEL BANDWIDTH: 5MHz / QPSK / 100% RB ALLOCATION

790.5MHz

769MHz ~ 775MHz

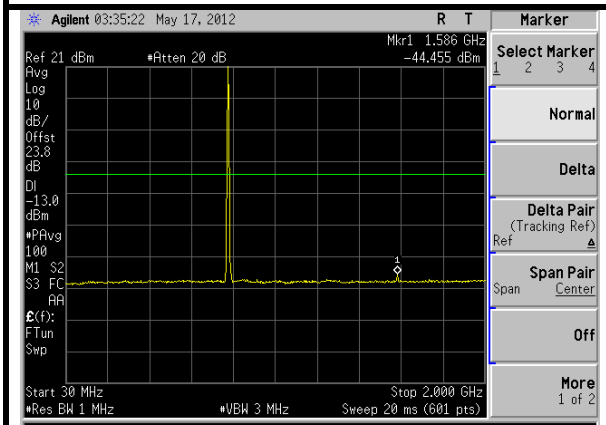
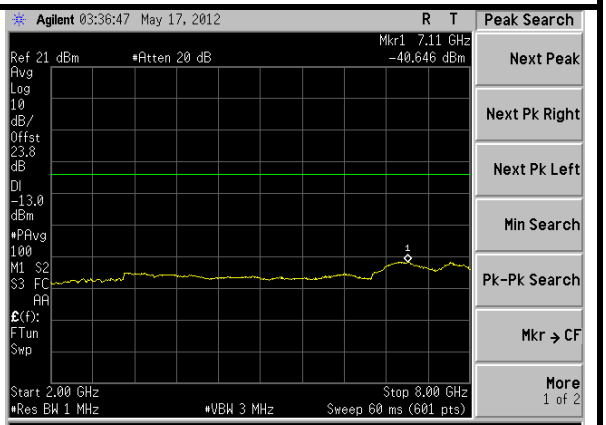


799MHz ~ 805MHz



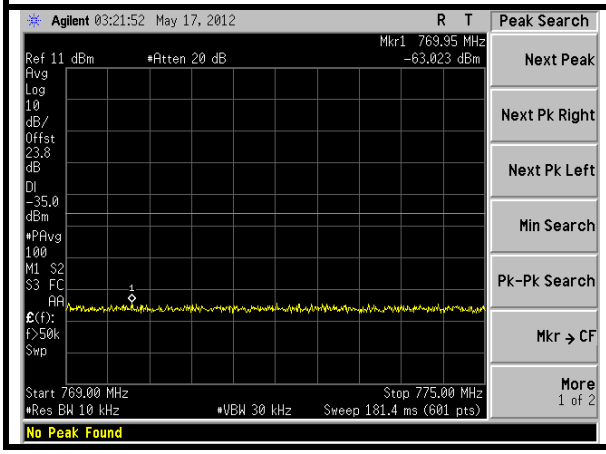
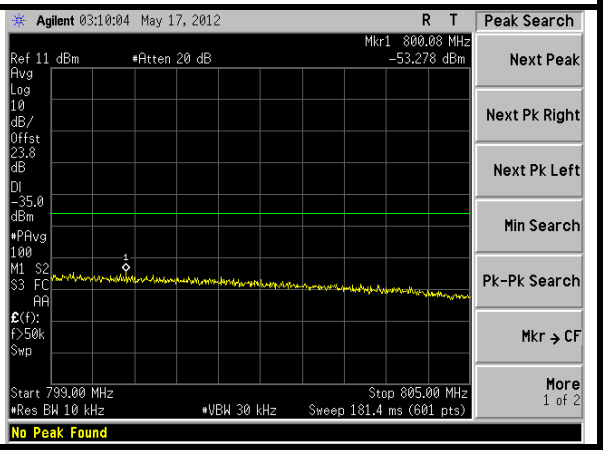
LTE Band 14

CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

790.5MHz	
30MHz ~ 2GHz	2GHz ~ 8GHz
	

Emission in the 769–775 MHz and 799–805 MHz band

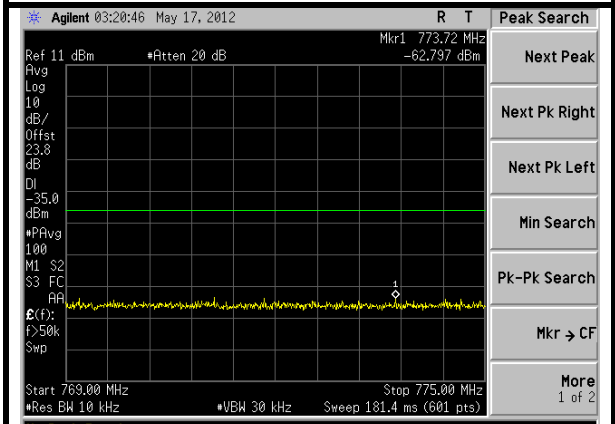
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE LOWER EDGE

790.5MHz	
769MHz ~ 775MHz	799MHz ~ 805MHz
	

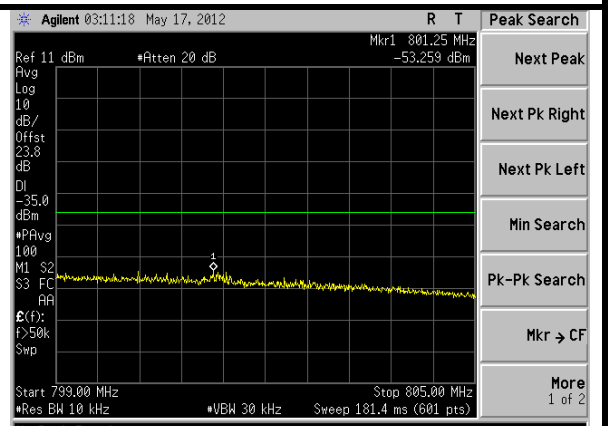
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED AT THE UPPER EDGE

790.5MHz

769MHz ~ 775MHz



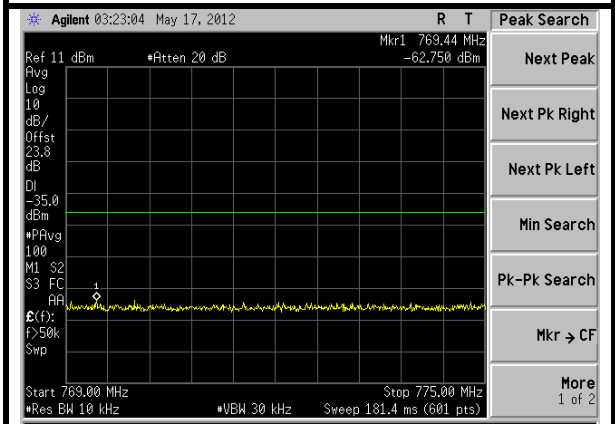
799MHz ~ 805MHz



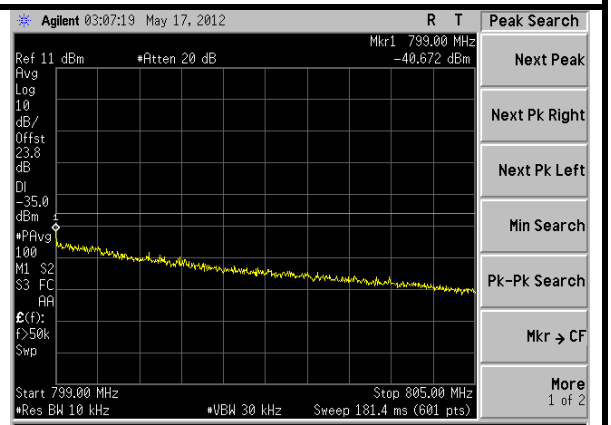
CHANNEL BANDWIDTH: 5MHz / 16QAM / 100% RB ALLOCATION

790.5MHz

769MHz ~ 775MHz



799MHz ~ 805MHz



4.7 RADIATED EMISSION MEASUREMENT

4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

For operations in the 746 – 763 MHz, 775 – 793 MHz, and 805 – 806 MHz bands, emissions in the band 1559 – 1610 MHz shall be limited to − 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

4.7.2 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the receiving antenna, which was mounted on antenna tower and its position at 0.8 m above the ground.

c. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading and recorded the value.

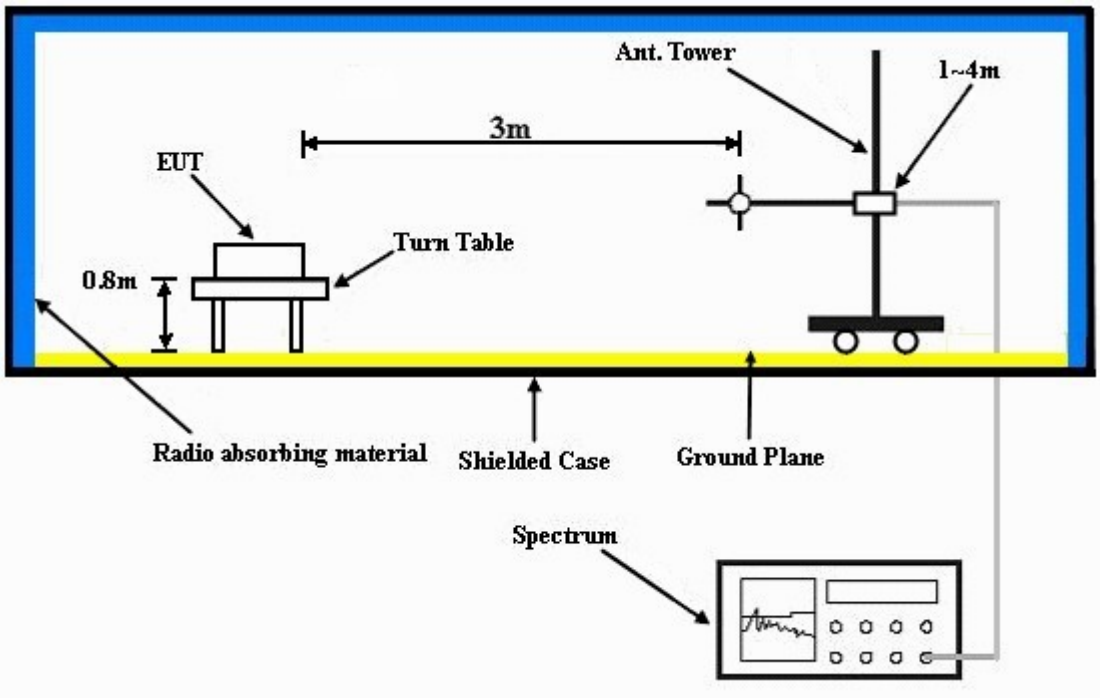
d. Repeat step a ~ c for horizontal polarization.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.7.3 DEVIATION FROM TEST STANDARD

No deviation

4.7.4 TEST SETUP



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

4.7.5 EUT OPERATING CONDITIONS

a. The EUT makes a call to the communication simulator.

b. The communication simulator station system controlled an EUT to export maximum output power under transmission mode and specific channel frequency.

4.7.6 TEST RESULTS (Below 1GHz)

LTE Band 13

CHANNEL BANDWIDTH: 5MHz

MODE	784.5MHz	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	66.86	-49.8	-49.6	-5.8	-57.5	-13.0	-44.5
2	111.48	-49.4	-55.9	0.0	-58.0	-13.0	-45.0
3	200.72	-50.9	-61.9	5.5	-58.5	-13.0	-45.5
4	266.68	-52.8	-62.6	5.3	-59.4	-13.0	-46.4
5	945.68	-61.9	-58.8	3.9	-57.0	-13.0	-44.0
6	992.24	-56.8	-53.1	3.9	-51.4	-13.0	-38.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	30.00	-47.6	-39.8	-12.6	-54.5	-13.0	-41.5
2	72.68	-44.8	-39.2	-4.1	-45.4	-13.0	-32.4
3	97.90	-52.4	-48.3	0.9	-49.5	-13.0	-36.5
4	202.66	-52.1	-49.9	5.5	-46.5	-13.0	-33.5
5	241.46	-56.8	-55.0	5.4	-51.8	-13.0	-38.8
6	266.68	-55.8	-54.1	5.3	-50.9	-13.0	-37.9

NOTE:

1. Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).
2. The other emission levels were very low against the limit.
3. Margin value = ERP value – Limit value.
4. This is valid for all 3 channels.

LTE Band 13

CHANNEL BANDWIDTH: 10MHz

MODE	782MHz	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	30.12	-52.7	-34.8	-12.6	-49.5	-13.0	-36.5
2	66.13	-49.4	-48.7	-6.0	-56.9	-13.0	-43.9
3	112.08	-48.2	-54.7	0.0	-56.9	-13.0	-43.9
4	165.43	-53.3	-58.4	1.1	-59.4	-13.0	-46.4
5	945.47	-61.2	-58.1	3.9	-56.4	-13.0	-43.4
6	980.93	-57.2	-53.6	3.9	-51.9	-13.0	-38.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	30.47	-46.7	-39.0	-12.6	-53.8	-13.0	-40.8
2	72.30	-45.1	-39.5	-4.2	-45.9	-13.0	-32.9
3	97.42	-52.9	-48.7	0.9	-49.9	-13.0	-36.9
4	202.43	-52.9	-50.8	5.5	-47.4	-13.0	-34.4
5	241.34	-56.3	-54.5	5.4	-51.2	-13.0	-38.2
6	266.28	-55.4	-53.7	5.3	-50.5	-13.0	-37.5

NOTE:

1. Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).
2. The other emission levels were very low against the limit.
3. Margin value = ERP value – Limit value.
4. This is valid for all 3 channels.

LTE Band 14

CHANNEL BANDWIDTH: 5MHz

MODE	790.5MHz	FREQUENCY RANGE	Below 1000MHz

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	68.80	-51.8	-52.8	-5.3	-60.2	-13.0	-47.2
2	113.42	-52.5	-59.0	0.0	-61.1	-13.0	-48.1
3	165.80	-53.2	-58.3	1.1	-59.4	-13.0	-46.4
4	210.42	-50.0	-61.5	5.5	-58.1	-13.0	-45.1
5	264.74	-53.1	-62.9	5.3	-59.8	-13.0	-46.8
6	375.32	-65.5	-70.5	5.2	-67.5	-13.0	-54.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	68.80	-49.4	-43.5	-5.3	-50.9	-13.0	-37.9
2	105.66	-55.7	-51.6	0.6	-53.1	-13.0	-40.1
3	140.58	-57.0	-56.3	0.0	-58.4	-13.0	-45.4
4	200.72	-52.5	-50.4	5.5	-47.0	-13.0	-34.0
5	241.46	-57.6	-55.8	5.4	-52.5	-13.0	-39.5
6	264.74	-58.0	-56.2	5.3	-53.0	-13.0	-40.0

NOTE:

1. Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).
2. The other emission levels were very low against the limit.
3. Margin value = ERP value – Limit value.
4. This is valid for all 3 channels.

4.7.7 TEST RESULTS (Above 1GHz)

LTE Band 13

CHANNEL BANDWIDTH: 5MHz

Test channel	779.5MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2344.80	-55.5	-57.1	6.4	-52.9	-13.0	-39.9
2	3126.40	-50.9	-50.5	6.6	-46.0	-13.0	-33.0
3	3908.00	-55.9	-53.3	7.0	-48.4	-13.0	-35.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2344.80	-55.5	-55.3	6.4	-51.0	-13.0	-38.0
2	3126.40	-54.3	-55.0	6.6	-50.5	-13.0	-37.5
3	3908.00	-57.7	-56.3	7.0	-51.4	-13.0	-38.4

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

Test channel	782MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2352.50	-56.4	-58.0	6.4	-53.8	-13.0	-40.8
2	3136.70	-53.2	-52.7	6.6	-48.2	-13.0	-35.2
3	3920.90	-54.6	-52.0	7.0	-47.1	-13.0	-34.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2352.50	-56.8	-56.6	6.4	-52.4	-13.0	-39.4
2	3136.70	-54.2	-54.8	6.6	-50.4	-13.0	-37.4
3	3920.90	-55.8	-54.4	7.0	-49.5	-13.0	-36.5

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

Test channel	784.5MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2360.10	-53.6	-55.1	6.4	-50.9	-13.0	-37.9
2	**3146.80**	**-46.2**	**-45.7**	**6.6**	**-41.2**	**-13.0**	**-28.2**
3	3933.50	-54.5	-51.8	7.0	-46.9	-13.0	-33.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2360.10	-52.7	-52.6	6.4	-48.4	-13.0	-35.4
2	3146.80	-51.8	-52.4	6.6	-47.9	-13.0	-34.9
3	3933.50	-54.8	-53.4	7.0	-48.5	-13.0	-35.5

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 13: GPS Band

CHANNEL BANDWIDTH: 5MHz

Test channel	779.5MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1563.20	-58.1	-61.3	5.3	-56.0	-40.0	-16.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1563.20	-60.0	-66.4	5.3	-61.1	-40.0	-21.1

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

Test channel	782MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1568.30	-60.6	-55.5	-2.9	-58.4	-40.0	-18.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1568.30	-60.8	-59.0	-2.9	-61.9	-40.0	-21.9

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

Test channel	784.5MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1573.40	-53.7	-56.8	5.3	-51.5	-40.0	-11.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1573.40	-59.3	-65.7	5.3	-60.4	-40.0	-20.4

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 13

CHANNEL BANDWIDTH: 10MHz

Test channel	782MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2359.20	-53.6	-55.1	6.4	-50.9	-13.0	-37.9
2	3145.60	-47.0	-46.5	6.6	-42.0	-13.0	-29.0
3	3932.00	-54.0	-51.3	7.0	-46.4	-13.0	-33.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2359.20	-53.6	-53.5	6.4	-49.2	-13.0	-36.2
2	3145.60	-51.2	-51.8	6.6	-47.4	-13.0	-34.4
3	3932.00	-55.2	-53.8	7.0	-48.9	-13.0	-35.9

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 13: GPS Band

CHANNEL BANDWIDTH: 10MHz

Test channel	782MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	**1572.8**	**-53.3**	**-56.4**	**5.3**	**-51.1**	**-40.0**	**-11.1**
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1572.8	-59.0	-65.4	5.3	-60.1	-40.0	-20.1

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 14

CHANNEL BANDWIDTH: 5MHz

Test channel	790.5MHz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2378.10	-54.3	-55.8	6.4	-51.5	-13.0	-38.5
2	**3170.80**	**-48.3**	**-47.8**	**6.7**	**-43.2**	**-13.0**	**-30.2**
3	3693.50	-57.7	-56.0	7.2	-50.9	-13.0	-37.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	2378.10	-52.6	-52.6	6.4	-48.4	-13.0	-35.4
2	3170.80	-52.9	-53.4	6.7	-48.9	-13.0	-35.9
3	3693.50	-56.7	-55.5	7.2	-50.4	-13.0	-37.4

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

LTE Band 14: GPS Band

CHANNEL BANDWIDTH: 5MHz

MODE	790.5Hz / QPSK / 1 RB AT THE UPPER EDGE						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	**1585.20**	**-58.9**	**-62.0**	**5.3**	**-56.7**	**-40.0**	**-16.7**
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	**Freq. (MHz)**	**Reading (dBm)**	**S.G Power Value (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**
1	1585.20	-61.2	-67.6	5.3	-62.3	-40.0	-22.3

NOTE: Power Value (dBum) = S.G Power Value (dBm) + Correction Factor (dB).

5 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The address and road map of all our labs can be found in our web site also.

6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

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