FCC TEST REPORT

(PART 24)

REPORT NO.:	RF150324C18-1
MODEL NAME:	0PM9200
FCC ID:	NM80PM9200
RECEIVED:	Mar. 24, 2015
TESTED:	Apr. 17, 2015 ~ Jun. 04, 2015
ISSUED:	Jun. 04, 2015

APPLICANT:	HTC Corporation
ADDRESS:	1F, 6-3 Baoqiang Road, Xindian District, New Taipei City, Taiwan 231

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47-2, 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 Vil., Kwei Shan Dist., Taoyuan City 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
RF150324C18-1	Original release	Jun. 04, 2015

1 CERTIFICATION

PRODUCT:	Smartphone
MODEL:	0PM9200
BRAND:	HTC
APPLICANT:	HTC Corporation
TESTED:	Apr. 17, 2015 ~ Jun. 04, 2015
TEST SAMPLE:	Production Unit
STANDARDS:	**FCC Part 24, Subpart E**

The above equipment (model: 0PM9200) 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 :** Jun. 04, 2015

Ivonne Wu / Supervisor

APPROVED BY : _____ , **DATE :** Jun. 04, 2015

Sam Chen / Senior Project Engineer

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 24 & Part 2			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
2.1046 24.232	Equivalent Isotropic Radiated Power	PASS	Meet the requirement of limit.
2.1055 24.235	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 24.238(b)	Occupied Bandwidth	PASS	Meet the requirement of limit.
24.232(d)	Peak to average ratio	PASS	Meet the requirement of limit.
24.238(b)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 24.238	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 24.238	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -27.95dB at 31.35MHz.

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.

2.2 TEST SITE AND INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Jan. 21, 2015	Jan. 21, 2016
Spectrum Analyzer Agilent	N9010A	MY52220314	Sep. 03, 2014	Sep. 02, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 10, 2014	Dec. 09, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 04, 2015	Feb. 04, 2016
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 09, 2015	Feb. 09, 2016
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Feb. 04, 2015	Feb. 04, 2016
Preamplifier EMCI	EMC 012645	980115	Dec. 12, 2014	Dec. 11, 2015
Preamplifier EMCI	EMC 184045	980116	Jan. 09, 2015	Jan. 08, 2016
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2014	Dec. 26, 2015
Power Meter Anritsu	ML2495A	1232002	Sep. 17, 2014	Sep. 16, 2015
Power Sensor Anritsu	MA2411B	1207325	Sep. 17, 2014	Sep. 16, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2014	Oct. 17, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2014	Oct. 17, 2015
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Nov. 07, 2014	Nov. 06, 2015
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA
Radio Communication Analyzer	MT8820C	6201300640	Aug. 01, 2013	Jul. 31, 2015

NOTE: 1. The calibration interval of the above test instruments is 12 / 24 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 10.
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 690701.
5. The IC Site Registration No. is IC 7450F-10.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Smartphone	
MODEL NAME	0PM9200	
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.85Vdc or 3.8Vdc(battery)	
MODULATION TYPE	**CDMA**	QPSK, OQPSK, HPSK
	LTE Band 2	QPSK, 16QAM
	LTE Band 25	QPSK, 16QAM
FREQUENCY RANGE	**CDMA**	1851.3MHz ~ 1908.8MHz
	LTE Band 2 (Channel Bandwidth: 1.4MHz)	1850.7MHz ~ 1909.3MHz
	LTE Band 2 (Channel Bandwidth: 3MHz)	1851.5MHz ~ 1908.5MHz
	LTE Band 2 (Channel Bandwidth: 5MHz)	1852.5MHz ~ 1907.5MHz
	LTE Band 2 (Channel Bandwidth: 10MHz)	1855.0MHz ~ 1905.0MHz
	LTE Band 2 (Channel Bandwidth: 15MHz)	1857.5MHz ~ 1902.5MHz
	LTE Band 2 (Channel Bandwidth: 20MHz)	1860.0MHz ~ 1900.0MHz
	LTE Band 25 (Channel Bandwidth: 1.4MHz)	1850.7MHz ~ 1914.3MHz
	LTE Band 25 (Channel Bandwidth: 3MHz)	1851.5MHz ~ 1913.5MHz
	LTE Band 25 (Channel Bandwidth: 5MHz)	1852.5MHz ~ 1912.5MHz
	LTE Band 25 (Channel Bandwidth: 10MHz)	1855.0MHz ~ 1910.0MHz
	LTE Band 25 (Channel Bandwidth: 15MHz)	1857.5MHz ~ 1907.5MHz
	LTE Band 25 (Channel Bandwidth: 20MHz)	1860.0MHz ~ 1905.0MHz
MAX. EIRP POWER	**CDMA**	230.67mW
	LTE Band 2 (Channel Bandwidth: 1.4MHz)	154.63mW
	LTE Band 2 (Channel Bandwidth: 3MHz)	143.32mW
	LTE Band 2 (Channel Bandwidth: 5MHz)	163.42mW
	LTE Band 2 (Channel Bandwidth: 10MHz)	174.70mW
	LTE Band 2 (Channel Bandwidth: 15MHz)	179.60mW
	LTE Band 2 (Channel Bandwidth: 20MHz)	184.08mW
	LTE Band 25 (Channel Bandwidth: 1.4MHz)	157.04mW
	LTE Band 25 (Channel Bandwidth: 3MHz)	164.93mW
	LTE Band 25 (Channel Bandwidth: 5MHz)	165.96mW
	LTE Band 25 (Channel Bandwidth: 10MHz)	165.20mW
	LTE Band 25 (Channel Bandwidth: 15MHz)	168.66mW
	LTE Band 25 (Channel Bandwidth: 20MHz)	169.82mW

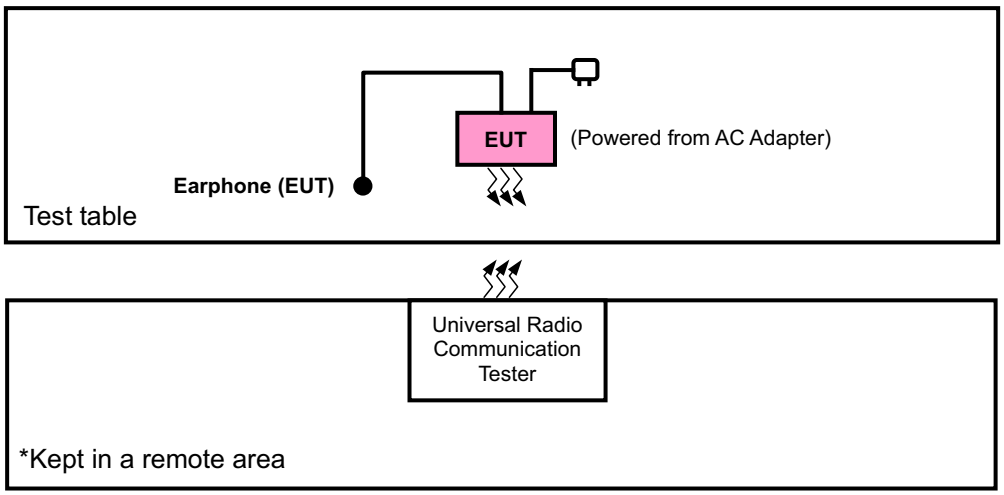
EMISSION DESIGNATOR	**CDMA**	1M28F9W
	LTE Band 2 (Channel Bandwidth: 1.4MHz)	1M09G7D
	LTE Band 2 (Channel Bandwidth: 3MHz)	2M70G7D
	LTE Band 2 (Channel Bandwidth: 5MHz)	4M50G7D
	LTE Band 2 (Channel Bandwidth: 10MHz)	8M97W7D
	LTE Band 2 (Channel Bandwidth: 15MHz)	13M5G7D
	LTE Band 2 (Channel Bandwidth: 20MHz)	18M0W7D
	LTE Band 25 (Channel Bandwidth: 1.4MHz)	1M09G7D
	LTE Band 25 (Channel Bandwidth: 3MHz)	2M70W7D
	LTE Band 25 (Channel Bandwidth: 5MHz)	4M50G7D
	LTE Band 25 (Channel Bandwidth: 10MHz)	8M97G7D
	LTE Band 25 (Channel Bandwidth: 15MHz)	13M5W7D
	LTE Band 25 (Channel Bandwidth: 20MHz)	18M0W7D
ANTENNA TYPE	Fixed Internal Antenna	
I/O PORTS	Refer to users' manual	
DATA CABLE	Refer to NOTE as below	
ACCESSORY DEVICES	Refer to NOTE as below	

NOTE:

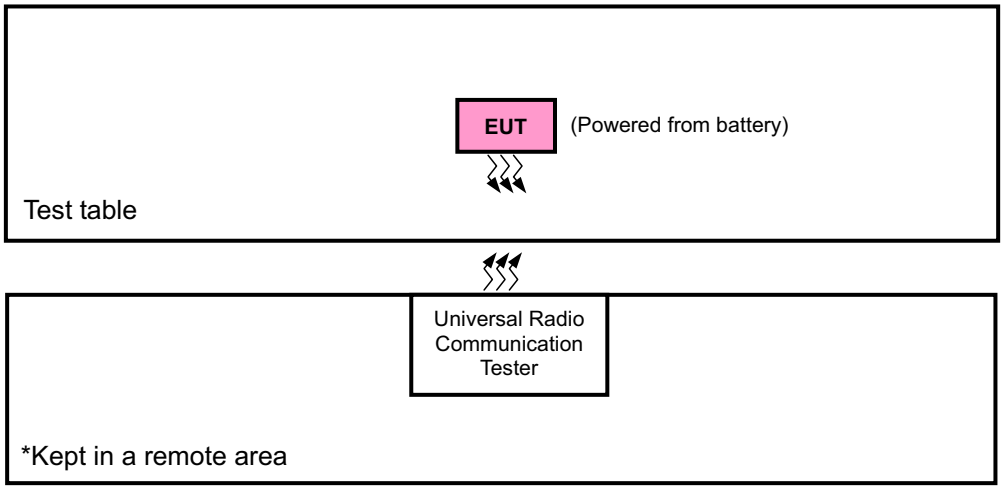
1. There're 2 configurations for the EUT listed as below.
   Main sample (A): Phone + Battery 1 + LCD Panel 1
   2nd sample (B): Phone + Battery 2 + LCD Panel 2
   ✧Only the worst test data was presented in the report.
2. The EUT's accessories list refers to Ext. Pho.
3. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST



FOR E.I.R.P. TEST



3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.4 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 as the list below. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	Main sample
B	2nd sample

EUT CONFIGURE MODE	EIRP	RADIATED EMISSION
A	Z-plane (CDMA) X-plane (LTE)	Z-axis (CDMA & LTE 2) X-axis (LTE 25)
B	Z-plane (CDMA) X-plane (LTE 2 & LTE 25)	Z-axis (CDMA & LTE 25)

CDMA MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A, B	EIRP	25 to 1175	25, 600, 1175	1xRTT
A	FREQUENCY STABILITY	25 to 1175	600	1xRTT
A	OCCUPIED BANDWIDTH	25 to 1175	25, 600, 1175	1xRTT
A	PEAK TO AVERAGE RATIO	25 to 1175	25, 600, 1175	1xRTT
A	BAND EDGE	25 to 1175	25, 1175	1xRTT
A	CONDUCTED EMISSION	25 to 1175	600	1xRTT
A, B	RADIATED EMISSION	25 to 1175	600	1xRTT

LTE BAND 2 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
B	EIRP	18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	FREQUENCY STABILITY	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
		18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
		18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
		18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
		18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
		18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
		18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	15 RB / 0 RB Offset
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
		18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
		18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
		18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	BAND EDGE	18607 to 19193	18607	1.4MHz	QPSK	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			19193	1.4MHz	QPSK	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		18615 to 19185	18615	3MHz	QPSK	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
			19185	3MHz	QPSK	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		18625 to 19175	18625	5MHz	QPSK	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			19175	5MHz	QPSK	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		18650 to 19150	18650	10MHz	QPSK	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			19150	10MHz	QPSK	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		18675 to 19125	18675	15MHz	QPSK	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
			19125	15MHz	QPSK	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		18700 to 19100	18700	20MHz	QPSK	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			19100	20MHz	QPSK	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
A	CONDUCTED EMISSION	18607 to 19193	18900	1.4MHz	QPSK	1 RB / 0 RB Offset
		18615 to 19185	18900	3MHz	QPSK	1 RB / 0 RB Offset
		18625 to 19175	18900	5MHz	QPSK	1 RB / 0 RB Offset
		18650 to 19150	18900	10MHz	QPSK	1 RB / 0 RB Offset
		18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
		18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

LTE BAND 25 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	1 RB / 0 RB Offset
B	EIRP	26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	1 RB / 0 RB Offset
A	FREQUENCY STABILITY	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
		26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
		26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
		26090 to 26640	26365	10MHz	QPSK	1 RB / 0 RB Offset
		26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
		26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	6 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	15 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	25 RB / 0 RB Offset
		26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	50 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	75 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK / 16QAM	1 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK / 16QAM	1 RB / 7 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK / 16QAM	1 RB / 12 RB Offset
		26090 to 26640	26090, 26365, 26640	10MHz	QPSK / 16QAM	1 RB / 24 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK / 16QAM	75 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK / 16QAM	100 RB / 0 RB Offset

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	BAND EDGE	26047 to 26683	26047	1.4MHz	QPSK	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			26683	1.4MHz	QPSK	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		26055 to 26675	26055	3MHz	QPSK	1 RB / 0 RB Offset
						1 RB / 0 RB Offset
			26675	3MHz	QPSK	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		26065 to 26665	26065	5MHz	QPSK	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			26665	5MHz	QPSK	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		26090 to 26640	26090	10MHz	QPSK	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			26640	10MHz	QPSK	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		26115 to 26615	26115	15MHz	QPSK	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
			26615	15MHz	QPSK	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		26140 to 26590	26140	20MHz	QPSK	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			26590	20MHz	QPSK	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
A	CONDUCTED EMISSION	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 5 RB Offset
		26055 to 26675	26365	3MHz	QPSK	1 RB / 7 RB Offset
		26065 to 26665	26365	5MHz	QPSK	1 RB / 12 RB Offset
		26090 to 26640	26365	10MHz	QPSK	1 RB / 24 RB Offset
		26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
		26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset
A, B	RADIATED EMISSION	26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	26deg. C, 58%RH	3.8Vdc	Hwa Chiang
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Taylor Liu
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.8Vdc	Taylor Liu
PEAK TO AVERAGE RATIO	26deg. C, 58%RH	3.8Vdc	Taylor Liu
BAND EDGE	26deg. C, 58%RH	3.8Vdc	Taylor Liu
CONDUCTED EMISSION	26deg. C, 58%RH	3.8Vdc	Taylor Liu
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Hwa Chiang

3.5 EUT OPERATING CONDITIONS

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

3.6 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 24
ANSI/TIA/EIA-603-C 2004

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

4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile and portable stations are limited to 2 watts EIRP.

4.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

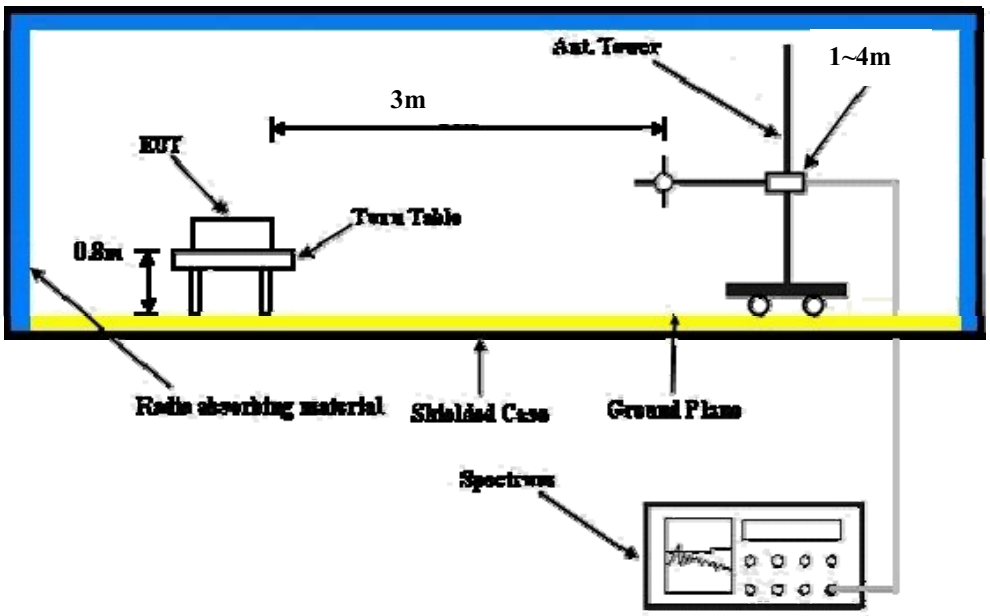
a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 5MHz for CDMA, and 10MHz for LTE mode.
b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees 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 b. Record the power level of S.G
d. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

CONDUCTED POWER MEASUREMENT:

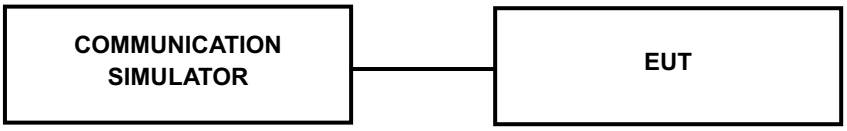
The EUT was set up for the maximum power with CDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 TEST SETUP

EIRP / ERP MEASUREMENT:



CONDUCTED POWER MEASUREMENT:



4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	CDMA		
Channel	25	600	1175
Frequency (MHz)	1851.25	1880	1908.75
RC1+SO55	23.51	23.31	23.21
RC3+SO55	**23.78**	23.68	23.58
RC3+SO32(+ F-SCH)	23.54	23.34	23.24
RC3+SO32(+SCH)	23.52	23.32	23.22
RTAP 153.6	23.55	23.35	23.25
RETAP 4096	23.53	23.33	23.23

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18607	Mid CH 18900	High CH 19193		Low CH 18607	Mid CH 18900	High CH 19193	
			1850.7 MHz	1880.0 MHz	1909.3 MHz		1850.7 MHz	1880.0 MHz	1909.3 MHz	
2 / 1.4M	1	0	22.06	22.02	21.97	0	21.04	21.00	20.95	1
	1	2	21.94	21.90	21.85	0	20.92	20.88	20.83	1
	1	5	21.80	21.76	21.71	0	20.78	20.74	20.69	1
	3	0	21.77	21.73	21.68	0	20.75	20.71	20.66	1
	3	1	21.74	21.70	21.65	0	20.72	20.68	20.63	1
	3	3	21.65	21.61	21.56	0	20.63	20.59	20.54	1
	6	0	20.87	20.83	20.78	1	19.85	19.81	19.76	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18615	Mid CH 18900	High CH 19185		Low CH 18615	Mid CH 18900	High CH 19185	
			1851.5 MHz	1880.0 MHz	1908.5 MHz		1851.5 MHz	1880.0 MHz	1908.5 MHz	
2 / 3M	1	0	22.11	22.07	22.02	0	21.09	21.05	21.00	1
	1	7	21.99	21.95	21.90	0	20.97	20.93	20.88	1
	1	14	21.85	21.81	21.76	0	20.83	20.79	20.74	1
	8	0	21.02	20.98	20.93	1	20.00	19.96	19.91	2
	8	3	20.99	20.95	20.90	1	19.97	19.93	19.88	2
	8	7	20.90	20.86	20.81	1	19.88	19.84	19.79	2
	15	0	20.92	20.88	20.83	1	19.90	19.86	19.81	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18625	Mid CH 18900	High CH 19175		Low CH 18625	Mid CH 18900	High CH 19175	
			1852.5 MHz	1880.0 MHz	1907.5 MHz		1852.5 MHz	1880.0 MHz	1907.5 MHz	
2 / 5M	1	0	22.18	22.14	22.09	0	21.16	21.12	21.07	1
	1	12	22.06	22.02	21.97	0	21.04	21.00	20.95	1
	1	24	21.92	21.88	21.83	0	20.90	20.86	20.81	1
	12	0	21.09	21.05	21.00	1	20.07	20.03	19.98	2
	12	6	21.06	21.02	20.97	1	20.04	20.00	19.95	2
	12	13	20.97	20.93	20.88	1	19.95	19.91	19.86	2
	25	0	20.99	20.95	20.90	1	19.97	19.93	19.88	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18650	Mid CH 18900	High CH 19150		Low CH 18650	Mid CH 18900	High CH 19150	
			1855.0 MHz	1880.0 MHz	1905.0 MHz		1855.0 MHz	1880.0 MHz	1905.0 MHz	
2 / 10M	1	0	22.28	22.24	22.19	0	21.26	21.22	21.17	1
	1	24	22.16	22.12	22.07	0	21.14	21.10	21.05	1
	1	49	22.02	21.98	21.93	0	21.00	20.96	20.91	1
	25	0	21.19	21.15	21.10	1	20.17	20.13	20.08	2
	25	12	21.16	21.12	21.07	1	20.14	20.10	20.05	2
	25	25	21.07	21.03	20.98	1	20.05	20.01	19.96	2
	50	0	21.09	21.05	21.00	1	20.07	20.03	19.98	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18675	Mid CH 18900	High CH 19125		Low CH 18675	Mid CH 18900	High CH 19125	
			1857.5 MHz	1880.0 MHz	1902.5 MHz		1857.5 MHz	1880.0 MHz	1902.5 MHz	
2 / 15M	1	0	22.36	22.32	22.27	0	21.34	21.30	21.25	1
	1	37	22.24	22.20	22.15	0	21.22	21.18	21.13	1
	1	74	22.10	22.06	22.01	0	21.08	21.04	20.99	1
	36	0	21.27	21.23	21.18	1	20.25	20.21	20.16	2
	36	19	21.24	21.20	21.15	1	20.22	20.18	20.13	2
	36	39	21.15	21.11	21.06	1	20.13	20.09	20.04	2
	75	0	21.17	21.13	21.08	1	20.15	20.11	20.06	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 18700	Mid CH 18900	High CH 19100		Low CH 18700	Mid CH 18900	High CH 19100	
			1860.0 MHz	1880.0 MHz	1900.0 MHz		1860.0 MHz	1880.0 MHz	1900.0 MHz	
2 / 20M	1	0	22.42	22.38	22.33	0	21.40	21.36	21.31	1
	1	50	22.30	22.26	22.21	0	21.28	21.24	21.19	1
	1	99	22.16	22.12	22.07	0	21.14	21.10	21.05	1
	50	0	21.33	21.29	21.24	1	20.31	20.27	20.22	2
	50	25	21.30	21.26	21.21	1	20.28	20.24	20.19	2
	50	50	21.21	21.17	21.12	1	20.19	20.15	20.10	2
	100	0	21.23	21.19	21.14	1	20.21	20.17	20.12	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26047	Mid CH 26365	High CH 26683		Low CH 26047	Mid CH 26365	High CH 26683	
			1850.7 MHz	1882.5 MHz	1914.3 MHz		1850.7 MHz	1882.5 MHz	1914.3 MHz	
25 / 1.4M	1	0	21.68	21.77	21.81	0	20.63	20.72	20.76	1
	1	2	21.58	21.67	21.71	0	20.53	20.62	20.66	1
	1	5	21.27	21.36	21.40	0	20.22	20.31	20.35	1
	3	0	21.37	21.46	21.50	0	20.32	20.41	20.45	1
	3	1	21.26	21.35	21.39	0	20.21	20.30	20.34	1
	3	3	21.28	21.37	21.41	0	20.23	20.32	20.36	1
	6	0	20.45	20.54	20.58	1	19.40	19.49	19.53	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26055	Mid CH 26365	High CH 26675		Low CH 26055	Mid CH 26365	High CH 26675	
			1851.5 MHz	1882.5 MHz	1913.5 MHz		1851.5 MHz	1882.5 MHz	1913.5 MHz	
25 / 3M	1	0	21.73	21.82	21.86	0	20.68	20.77	20.81	1
	1	7	21.63	21.72	21.76	0	20.58	20.67	20.71	1
	1	14	21.32	21.41	21.45	0	20.27	20.36	20.40	1
	8	0	20.62	20.71	20.75	1	19.57	19.66	19.70	2
	8	3	20.51	20.60	20.64	1	19.46	19.55	19.59	2
	8	7	20.53	20.62	20.66	1	19.48	19.57	19.61	2
	15	0	20.50	20.59	20.63	1	19.45	19.54	19.58	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26065	Mid CH 26365	High CH 26665		Low CH 26065	Mid CH 26365	High CH 26665	
			1852.5 MHz	1882.5 MHz	1912.5 MHz		1852.5 MHz	1882.5 MHz	1912.5 MHz	
25 / 5M	1	0	21.83	21.92	21.96	0	20.78	20.87	20.91	1
	1	12	21.73	21.82	21.86	0	20.68	20.77	20.81	1
	1	24	21.42	21.51	21.55	0	20.37	20.46	20.50	1
	12	0	20.72	20.81	20.85	1	19.67	19.76	19.80	2
	12	6	20.61	20.70	20.74	1	19.56	19.65	19.69	2
	12	13	20.63	20.72	20.76	1	19.58	19.67	19.71	2
	25	0	20.60	20.69	20.73	1	19.55	19.64	19.68	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26090	Mid CH 26365	High CH 26640		Low CH 26090	Mid CH 26365	High CH 26640	
			1855.0 MHz	1882.5 MHz	1910.0 MHz		1855.0 MHz	1882.5 MHz	1910.0 MHz	
25 / 10M	1	0	21.89	21.98	22.02	0	20.84	20.93	20.97	1
	1	24	21.79	21.88	21.92	0	20.74	20.83	20.87	1
	1	49	21.48	21.57	21.61	0	20.43	20.52	20.56	1
	25	0	20.78	20.87	20.91	1	19.73	19.82	19.86	2
	25	12	20.67	20.76	20.80	1	19.62	19.71	19.75	2
	25	25	20.69	20.78	20.82	1	19.64	19.73	19.77	2
	50	0	20.66	20.75	20.79	1	19.61	19.70	19.74	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26115	Mid CH 26365	High CH 26615		Low CH 26115	Mid CH 26365	High CH 26615	
			1857.5 MHz	1882.5 MHz	1907.5 MHz		1857.5 MHz	1882.5 MHz	1907.5 MHz	
25 / 15M	1	0	21.97	22.06	22.10	0	20.92	21.01	21.05	1
	1	37	21.87	21.96	22.00	0	20.82	20.91	20.95	1
	1	74	21.56	21.65	21.69	0	20.51	20.60	20.64	1
	36	0	20.86	20.95	20.99	1	19.81	19.90	19.94	2
	36	19	20.75	20.84	20.88	1	19.70	19.79	19.83	2
	36	39	20.77	20.86	20.90	1	19.72	19.81	19.85	2
	75	0	20.74	20.83	20.87	1	19.69	19.78	19.82	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 26140	Mid CH 26365	High CH 26590		Low CH 26140	Mid CH 26365	High CH 26590	
			1860.0 MHz	1882.5 MHz	1905.0 MHz		1860.0 MHz	1882.5 MHz	1905.0 MHz	
25 / 20M	1	0	22.08	22.17	22.21	0	21.03	21.12	21.16	1
	1	50	21.98	22.07	22.11	0	20.93	21.02	21.06	1
	1	99	21.67	21.76	21.80	0	20.62	20.71	20.75	1
	50	0	20.97	21.06	21.10	1	19.92	20.01	20.05	2
	50	25	20.86	20.95	20.99	1	19.81	19.90	19.94	2
	50	50	20.88	20.97	21.01	1	19.83	19.92	19.96	2
	100	0	20.85	20.94	20.98	1	19.80	19.89	19.93	2

EIRP POWER (dBm)

MODE A

CDMA							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor(dB)**	**EIRP(dBm)**	**EIRP(mW)**	**Polarization (H/V)**
Z	25	1851.25	-21.79	44.70	22.91	195.43	H
	600	1880.00	-21.41	44.70	23.29	213.30	H
	1175	1908.75	-21.16	44.57	23.41	219.43	H
	25	1851.25	-23.54	44.27	20.73	118.30	V
	600	1880.00	-23.88	44.87	20.99	125.60	V
	1175	1908.75	-24.12	44.61	20.49	112.02	V

LTE Band 2							
Channel Bandwidth: 1.4MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor(dB)**	**EIRP(dBm)**	**EIRP(mW)**	**Polarization (H/V)**
X	18607	1850.7	-23.48	44.70	21.22	132.43	H
	18900	1880.0	-23.11	44.70	21.59	144.21	H
	19193	1909.3	-22.68	44.57	21.89	154.63	H
	18607	1850.7	-26.66	44.27	17.61	57.68	V
	18900	1880.0	-26.86	44.87	18.01	63.24	V
	19193	1909.3	-27.06	44.61	17.55	56.92	V

LTE Band 2							
Channel Bandwidth: 1.4MHz / 16QAM							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor(dB)**	**EIRP(dBm)**	**EIRP(mW)**	**Polarization (H/V)**
X	18607	1850.7	-24.19	44.70	20.51	112.46	H
	18900	1880.0	-23.78	44.70	20.92	123.59	H
	19193	1909.3	-24.35	44.57	20.22	105.27	H
	18607	1850.7	-27.75	44.27	16.52	44.87	V
	18900	1880.0	-28.56	44.87	16.31	42.76	V
	19193	1909.3	-27.56	44.61	17.05	50.73	V

LTE Band 2							
Channel Bandwidth: 3MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18615	1851.5	-23.22	44.70	21.48	140.60	H
	18900	1880.0	-23.20	44.70	21.50	141.25	H
	19185	1908.5	-23.01	44.57	21.56	143.32	H
	18615	1851.5	-26.76	44.27	17.51	56.36	V
	18900	1880.0	-26.78	44.87	18.09	64.42	V
	19185	1908.5	-27.11	44.61	17.50	56.27	V

LTE Band 2							
Channel Bandwidth: 3MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18615	1851.5	-23.54	44.70	21.16	130.62	H
	18900	1880.0	-23.95	44.70	20.75	118.85	H
	19185	1908.5	-23.53	44.57	21.04	127.15	H
	18615	1851.5	-27.54	44.27	16.73	47.10	V
	18900	1880.0	-28.60	44.87	16.27	42.36	V
	19185	1908.5	-27.56	44.61	17.05	50.73	V

LTE Band 2							
Channel Bandwidth: 5MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18625	1852.5	-23.09	44.70	21.61	144.88	H
	18900	1880.0	-22.58	44.70	22.12	162.93	H
	19175	1907.5	-22.44	44.57	22.13	163.42	H
	18625	1852.5	-26.51	44.27	17.76	59.70	V
	18900	1880.0	-26.93	44.87	17.94	62.23	V
	19175	1907.5	-26.34	44.61	18.27	67.19	V

LTE Band 2							
Channel Bandwidth: 5MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18625	1852.5	-23.78	44.70	20.92	123.59	H
	18900	1880.0	-23.55	44.70	21.15	130.32	H
	19175	1907.5	-23.58	44.57	20.99	125.69	H
	18625	1852.5	-27.66	44.27	16.61	45.81	V
	18900	1880.0	-28.21	44.87	16.66	46.34	V
	19175	1907.5	-27.81	44.61	16.80	47.90	V

LTE Band 2							
Channel Bandwidth: 10MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18650	1855.0	-22.75	44.70	21.95	156.68	H
	18900	1880.0	-23.03	44.70	21.67	146.89	H
	19150	1905.0	-22.15	44.57	22.42	174.70	H
	18650	1855.0	-26.80	44.27	17.47	55.85	V
	18900	1880.0	-26.83	44.87	18.04	63.68	V
	19150	1905.0	-26.29	44.61	18.32	67.97	V

LTE Band 2							
Channel Bandwidth: 10MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18650	1855.0	-23.60	44.70	21.10	128.82	H
	18900	1880.0	-23.64	44.70	21.06	127.64	H
	19150	1905.0	-23.34	44.57	21.23	132.83	H
	18650	1855.0	-27.65	44.27	16.62	45.92	V
	18900	1880.0	-28.17	44.87	16.70	46.77	V
	19150	1905.0	-27.56	44.61	17.05	50.73	V

LTE Band 2							
Channel Bandwidth: 15MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18675	1857.5	-22.71	44.70	21.99	158.12	H
	18900	1880.0	-22.60	44.70	22.10	162.18	H
	19125	1902.5	-22.03	44.57	22.54	179.60	H
	18675	1857.5	-26.04	44.27	18.23	66.53	V
	18900	1880.0	-26.77	44.87	18.10	64.57	V
	19125	1902.5	-27.18	44.61	17.43	55.37	V

LTE Band 2							
Channel Bandwidth: 15MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18675	1857.5	-24.17	44.70	20.53	112.98	H
	18900	1880.0	-23.70	44.70	21.00	125.89	H
	19125	1902.5	-23.33	44.57	21.24	133.14	H
	18675	1857.5	-27.64	44.27	16.63	46.03	V
	18900	1880.0	-28.43	44.87	16.44	44.06	V
	19125	1902.5	-27.72	44.61	16.89	48.90	V

LTE Band 2							
Channel Bandwidth: 20MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18700	1860.0	-22.40	44.70	22.30	169.82	H
	18900	1880.0	-23.05	44.70	21.65	146.22	H
	19100	1900.0	-22.05	44.57	22.52	178.77	H
	18700	1860.0	-26.69	44.27	17.58	57.28	V
	18900	1880.0	-26.73	44.87	18.14	65.16	V
	19100	1900.0	-26.89	44.61	17.72	59.20	V

LTE Band 2							
Channel Bandwidth: 20MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18700	1860.0	-23.73	44.70	20.97	125.03	H
	18900	1880.0	-23.34	44.70	21.36	136.77	H
	19100	1900.0	-23.74	44.57	20.83	121.14	H
	18700	1860.0	-27.22	44.27	17.05	50.70	V
	18900	1880.0	-28.48	44.87	16.39	43.55	V
	19100	1900.0	-27.32	44.61	17.29	53.62	V

LTE Band 25							
Channel Bandwidth: 1.4MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26047	1850.7	-23.25	44.70	21.45	139.64	H
	26365	1882.5	-22.74	44.70	21.96	157.04	H
	26683	1914.3	-23.34	44.57	21.23	132.83	H
	26047	1850.7	-27.18	44.27	17.09	51.17	V
	26365	1882.5	-27.28	44.87	17.59	57.41	V
	26683	1914.3	-27.22	44.61	17.39	54.87	V

LTE Band 25							
Channel Bandwidth: 1.4MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26047	1850.7	-23.73	44.70	20.97	125.03	H
	26365	1882.5	-23.93	44.70	20.77	119.40	H
	26683	1914.3	-23.69	44.57	20.88	122.55	H
	26047	1850.7	-27.57	44.27	16.70	46.77	V
	26365	1882.5	-28.70	44.87	16.17	41.40	V
	26683	1914.3	-28.00	44.61	16.61	45.85	V

LTE Band 25							
Channel Bandwidth: 3MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26055	1851.5	-23.03	44.70	21.67	146.89	H
	26365	1882.5	-23.31	44.70	21.39	137.72	H
	26675	1913.5	-22.40	44.57	22.17	164.93	H
	26055	1851.5	-27.18	44.27	17.09	51.17	V
	26365	1882.5	-27.37	44.87	17.50	56.23	V
	26675	1913.5	-27.24	44.61	17.37	54.61	V

LTE Band 25							
Channel Bandwidth: 3MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26055	1851.5	-24.12	44.70	20.58	114.29	H
	26365	1882.5	-23.87	44.70	20.83	121.06	H
	26675	1913.5	-24.11	44.57	20.46	111.25	H
	26055	1851.5	-28.23	44.27	16.04	40.18	V
	26365	1882.5	-28.61	44.87	16.26	42.27	V
	26675	1913.5	-27.92	44.61	16.69	46.70	V

LTE Band 25							
Channel Bandwidth: 5MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26065	1852.5	-22.50	44.70	22.20	165.96	H
	26365	1882.5	-23.01	44.70	21.69	147.57	H
	26665	1912.5	-22.66	44.57	21.91	155.35	H
	26065	1852.5	-26.50	44.27	17.77	59.84	V
	26365	1882.5	-27.63	44.87	17.24	52.97	V
	26665	1912.5	-26.70	44.61	17.91	61.84	V

LTE Band 25							
Channel Bandwidth: 5MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26065	1852.5	-23.77	44.70	20.93	123.88	H
	26365	1882.5	-24.22	44.70	20.48	111.69	H
	26665	1912.5	-24.19	44.57	20.38	109.22	H
	26065	1852.5	-27.73	44.27	16.54	45.08	V
	26365	1882.5	-27.74	44.87	17.13	51.64	V
	26665	1912.5	-27.83	44.61	16.78	47.68	V

LTE Band 25							
Channel Bandwidth: 10MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26090	1855	-22.93	44.70	21.77	150.31	H
	26365	1882.5	-22.52	44.70	22.18	165.20	H
	26640	1910	-23.02	44.57	21.55	142.99	H
	26090	1855	-27.08	44.27	17.19	52.36	V
	26365	1882.5	-27.56	44.87	17.31	53.83	V
	26640	1910	-26.81	44.61	17.80	60.30	V

LTE Band 25							
Channel Bandwidth: 10MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26090	1855	-23.43	44.70	21.27	133.97	H
	26365	1882.5	-24.24	44.70	20.46	111.17	H
	26640	1910	-24.12	44.57	20.45	110.99	H
	26090	1855	-27.84	44.27	16.43	43.95	V
	26365	1882.5	-27.95	44.87	16.92	49.20	V
	26640	1910	-27.89	44.61	16.72	47.02	V

LTE Band 25							
Channel Bandwidth: 15MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26115	1857.5	-22.43	44.70	22.27	168.66	H
	26365	1882.5	-23.16	44.70	21.54	142.56	H
	26615	1907.5	-23.09	44.57	21.48	140.70	H
	26115	1857.5	-26.49	44.27	17.78	59.98	V
	26365	1882.5	-27.66	44.87	17.21	52.60	V
	26615	1907.5	-26.50	44.61	18.11	64.76	V

LTE Band 25							
Channel Bandwidth: 15MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26115	1857.5	-23.54	44.70	21.16	130.62	H
	26365	1882.5	-23.74	44.70	20.96	124.74	H
	26615	1907.5	-23.27	44.57	21.30	134.99	H
	26115	1857.5	-27.37	44.27	16.90	48.98	V
	26365	1882.5	-28.22	44.87	16.65	46.24	V
	26615	1907.5	-27.52	44.61	17.09	51.20	V

LTE Band 25							
Channel Bandwidth: 20MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26140	1860	-22.87	44.70	21.83	152.41	H
	26365	1882.5	-22.40	44.70	22.30	169.82	H
	26590	1905	-22.53	44.57	22.04	160.07	H
	26140	1860	-26.14	44.27	18.13	65.01	V
	26365	1882.5	-26.70	44.87	18.17	65.61	V
	26590	1905	-27.33	44.61	17.28	53.49	V

LTE Band 25							
Channel Bandwidth: 20MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26140	1860	-23.34	44.70	21.36	136.77	H
	26365	1882.5	-23.72	44.70	20.98	125.31	H
	26590	1905	-23.81	44.57	20.76	119.21	H
	26140	1860	-26.82	44.27	17.45	55.59	V
	26365	1882.5	-27.82	44.87	17.05	50.70	V
	26590	1905	-27.49	44.61	17.12	51.56	V

MODE B

CDMA							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	25	1851.25	-21.26	44.70	23.44	220.80	H
	600	1880.00	-21.07	44.70	23.63	230.67	H
	1175	1908.75	-21.52	44.57	23.05	201.98	H
	25	1851.25	-23.18	44.27	21.09	128.53	V
	600	1880.00	-24.31	44.87	20.56	113.76	V
	1175	1908.75	-23.71	44.61	20.90	123.11	V

LTE Band 2							
Channel Bandwidth: 20MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18700	1860.0	-22.05	44.70	22.65	184.08	H
	18900	1880.0	-22.82	44.70	21.88	154.17	H
	19100	1900.0	-22.47	44.57	22.10	162.29	H
	18700	1860.0	-26.74	44.27	17.53	56.62	V
	18900	1880.0	-27.44	44.87	17.43	55.34	V
	19100	1900.0	-26.82	44.61	17.79	60.16	V

LTE Band 2							
Channel Bandwidth: 20MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	18700	1860.0	-23.56	44.70	21.14	130.02	H
	18900	1880.0	-23.73	44.70	20.97	125.03	H
	19100	1900.0	-23.45	44.57	21.12	129.51	H
	18700	1860.0	-27.82	44.27	16.45	44.16	V
	18900	1880.0	-27.85	44.87	17.02	50.35	V
	19100	1900.0	-27.78	44.61	16.83	48.23	V

LTE Band 25							
Channel Bandwidth: 20MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26140	1860	-22.99	44.70	21.71	148.25	H
	26365	1882.5	-22.87	44.70	21.83	152.41	H
	26590	1905	-22.64	44.57	21.93	156.06	H
	26140	1860	-26.39	44.27	17.88	61.38	V
	26365	1882.5	-26.81	44.87	18.06	63.97	V
	26590	1905	-27.14	44.61	17.47	55.89	V

LTE Band 25							
Channel Bandwidth: 20MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
X	26140	1860	-23.66	44.70	21.04	127.06	H
	26365	1882.5	-23.81	44.70	20.89	122.74	H
	26590	1905	-23.76	44.57	20.81	120.59	H
	26140	1860	-27.09	44.27	17.18	52.24	V
	26365	1882.5	-27.95	44.87	16.92	49.20	V
	26590	1905	-27.60	44.61	17.01	50.27	V

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

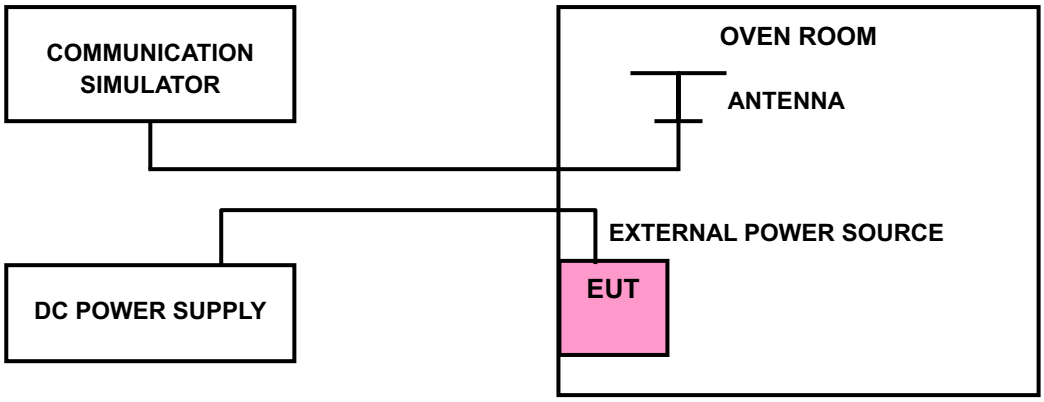
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

4.2.2 TEST PROCEDURE

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

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

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)							LIMIT (ppm)
	CDMA	LTE Band 2						
		1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
3.8	0.001	0.001	0.001	0.001	0.001	0.002	0.001	2.5
3.6	0.001	0.002	0.002	0.001	0.001	0.001	0.001	2.5
4.4	0.002	0.001	0.001	0.002	0.002	0.001	0.002	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.6Vdc to 4.4Vdc.

FREQUENCY ERROR vs. TEMPERATURE

TEMP. (℃)	FREQUENCY ERROR (ppm)							LIMIT (ppm)
	CDMA	LTE Band 2						
		1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
-30	-0.002	0.001	-0.003	0.002	0.001	-0.002	0.001	2.5
-20	0.002	0.001	0.001	0.001	0.001	0.002	0.001	2.5
-10	0.001	0.001	0.001	0.002	0.001	0.001	0.002	2.5
0	-0.001	0.002	-0.002	-0.002	-0.002	-0.001	0.002	2.5
10	-0.001	0.002	-0.001	-0.001	-0.001	-0.001	0.001	2.5
20	-0.001	-0.001	-0.001	-0.001	-0.002	-0.001	-0.002	2.5
30	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	2.5
40	-0.001	-0.002	-0.002	-0.002	-0.001	-0.002	-0.001	2.5
50	0.002	-0.001	0.002	0.001	0.001	0.002	-0.001	2.5
55	0.001	-0.001	0.001	0.001	0.001	0.001	-0.001	2.5

FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)						LIMIT (ppm)
	LTE Band 25						
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
3.8	0.001	0.002	0.001	0.001	0.001	0.002	2.5
3.6	0.002	0.001	0.001	0.001	0.001	0.002	2.5
4.4	0.001	0.001	0.002	0.002	0.002	0.001	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.6Vdc to 4.4Vdc.

FREQUENCY ERROR vs. TEMPERATURE

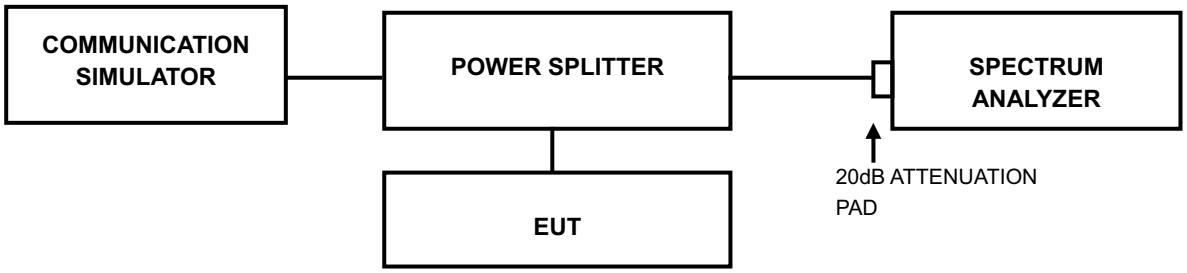
TEMP. (℃)	FREQUENCY ERROR (ppm)						LIMIT (ppm)
	LTE Band 25						
	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz	
-30	0.001	0.001	0.002	0.002	-0.002	-0.001	2.5
-20	0.001	0.002	0.001	0.002	0.001	0.001	2.5
-10	0.002	0.002	0.001	0.001	-0.001	0.001	2.5
0	-0.001	-0.001	0.002	0.002	-0.001	0.002	2.5
10	-0.002	-0.002	0.001	0.001	-0.002	-0.001	2.5
20	-0.001	-0.002	-0.001	-0.002	-0.001	-0.001	2.5
30	-0.001	-0.002	-0.001	-0.002	-0.001	-0.002	2.5
40	-0.002	-0.001	-0.002	-0.001	0.001	-0.001	2.5
50	0.001	0.002	-0.001	-0.001	0.002	-0.001	2.5
55	0.001	0.002	-0.001	-0.002	0.001	0.001	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 TEST PROCEDURES

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. 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.

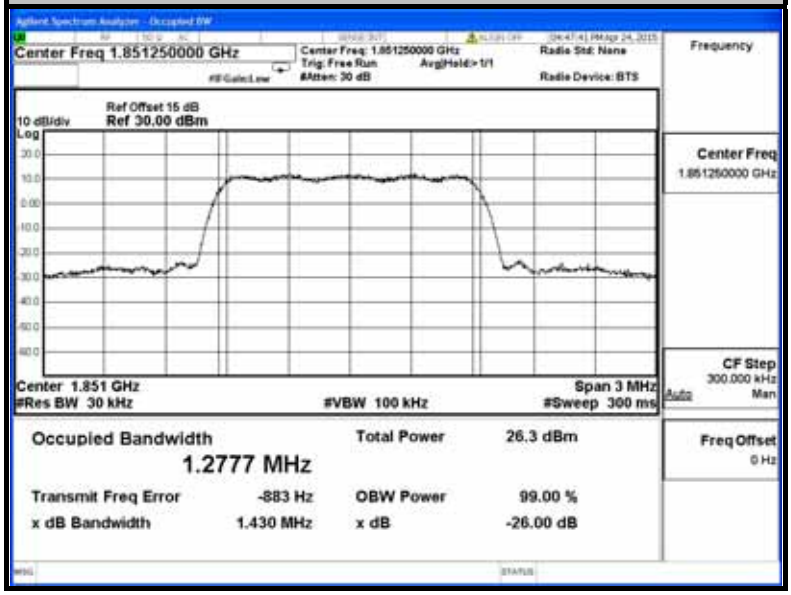
4.3.2 TEST SETUP



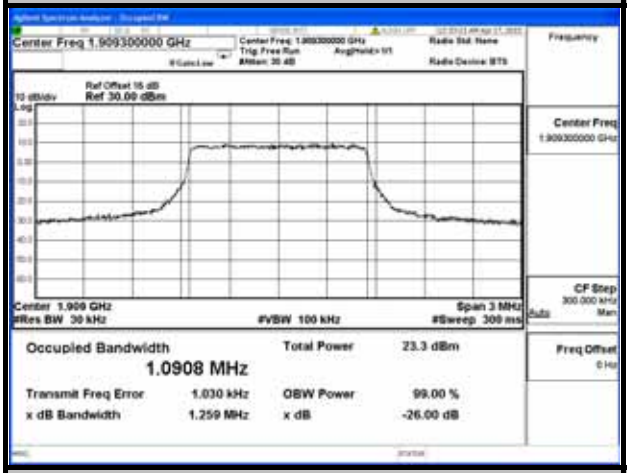
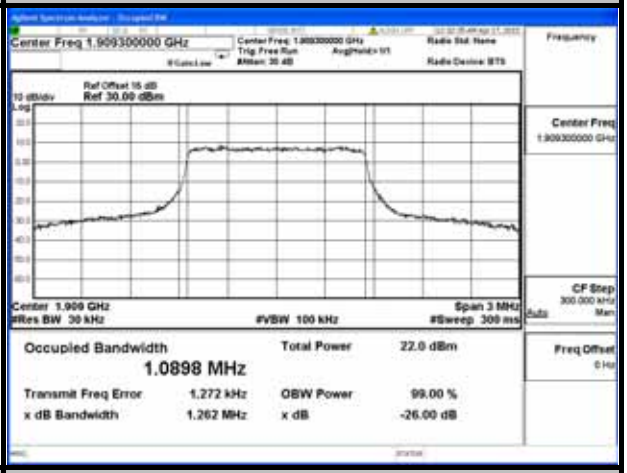
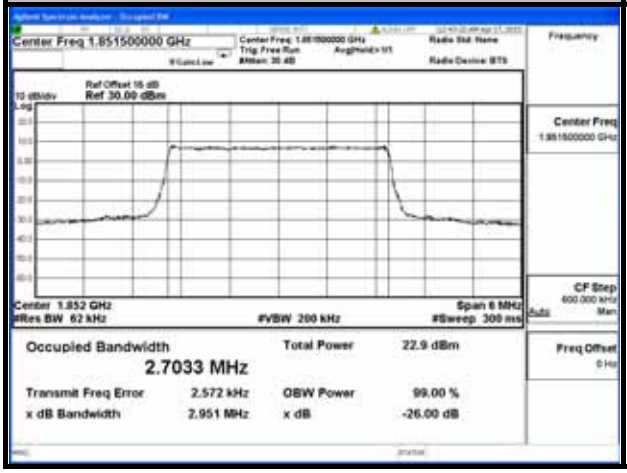
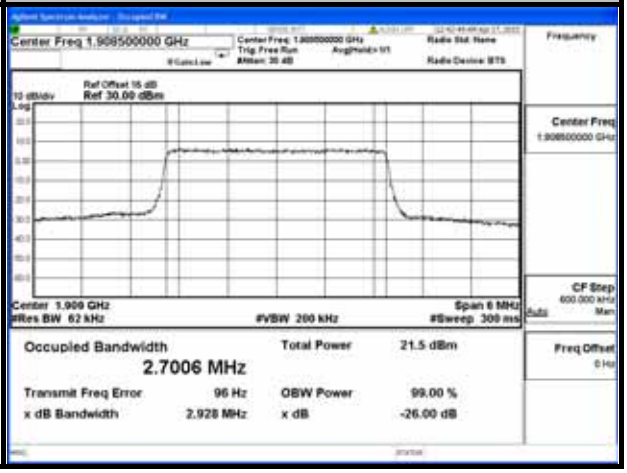
4.3.3 TEST RESULTS

CDMA			
CHANNEL	FREQUENCY (MHZ)	99% OCCUPIED BANDWIDTH (MHz)	26dB BANDWIDTH (MHz)
25	1851.25	1.2777	1.430
600	1880.00	1.2769	1.435
1175	1908.75	1.2764	1.434

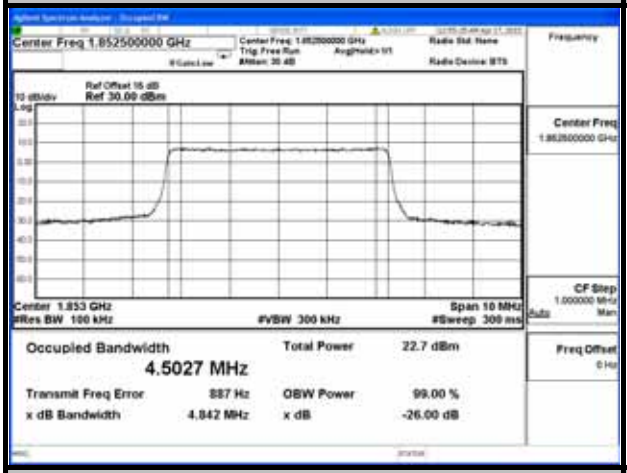
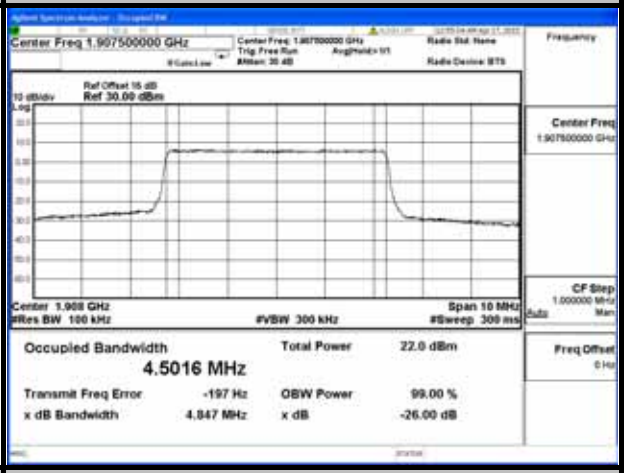
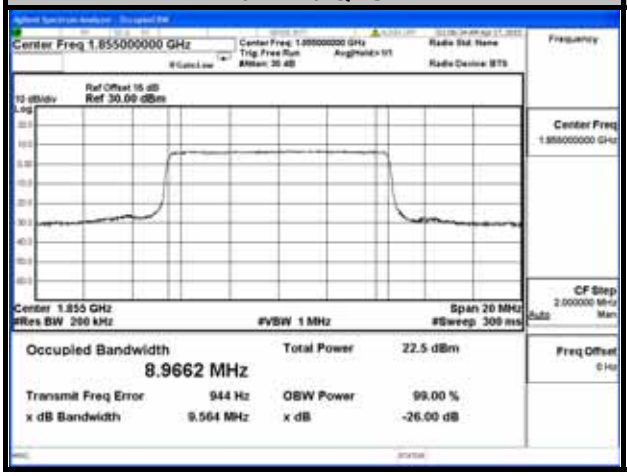
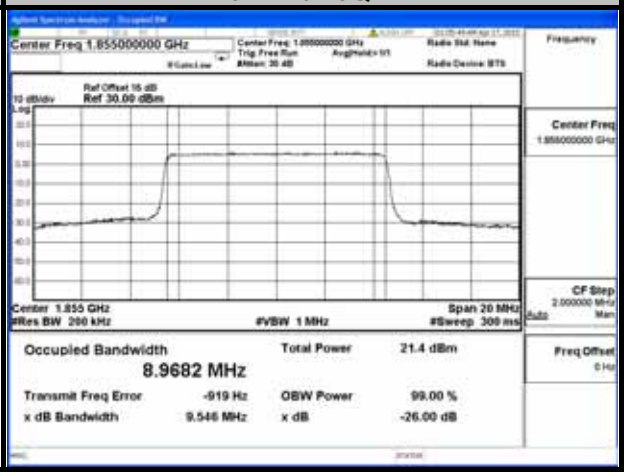
SPECTRUM PLOT OF WORST VALUE
CDMA



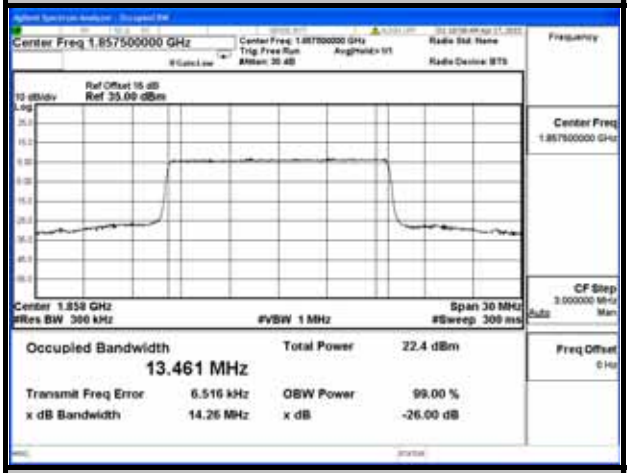
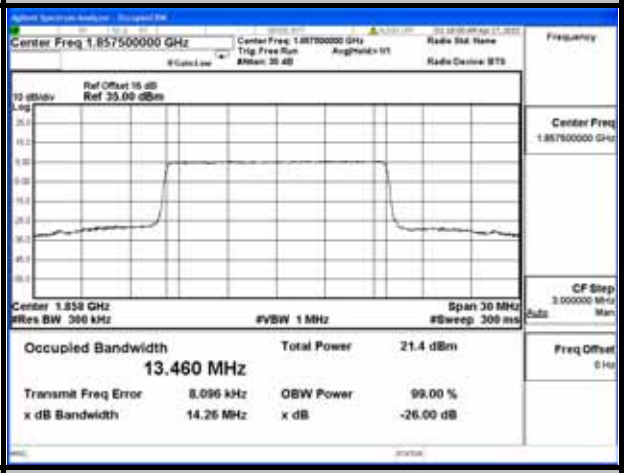
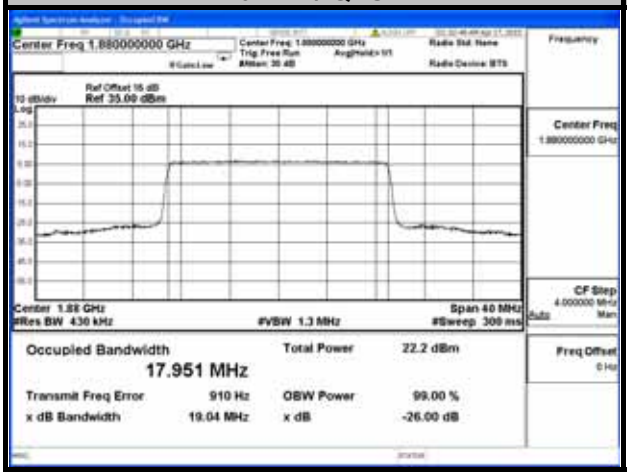
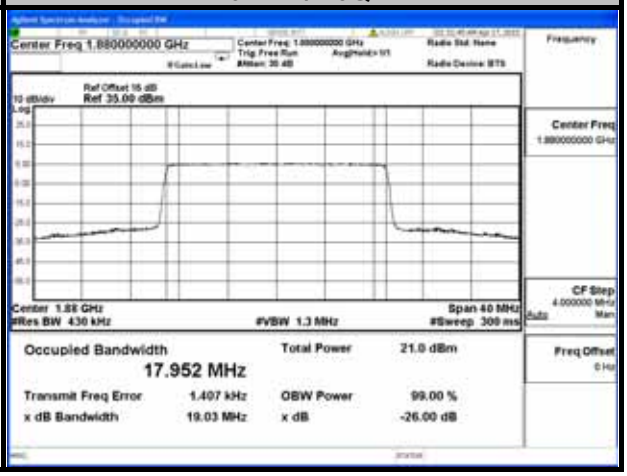
LTE BAND 2							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18607	1850.7	1.0889	1.0892	18615	1851.5	2.7033	2.6983
18900	1880.0	1.0900	1.0897	18900	1880.0	2.7028	2.7001
19193	1909.3	1.0908	1.0898	19185	1908.5	2.7021	2.7006
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18607	1850.7	1.262	1.261	18615	1851.5	2.951	2.929
18900	1880.0	1.262	1.256	18900	1880.0	2.942	2.931
19193	1909.3	1.259	1.262	19185	1908.5	2.944	2.928

SPECTRUM PLOT OF WORST VALUE	
1.4MHz / QPSK	1.4MHz / 16QAM
	
3MHz / QPSK	3MHz / 16QAM
	

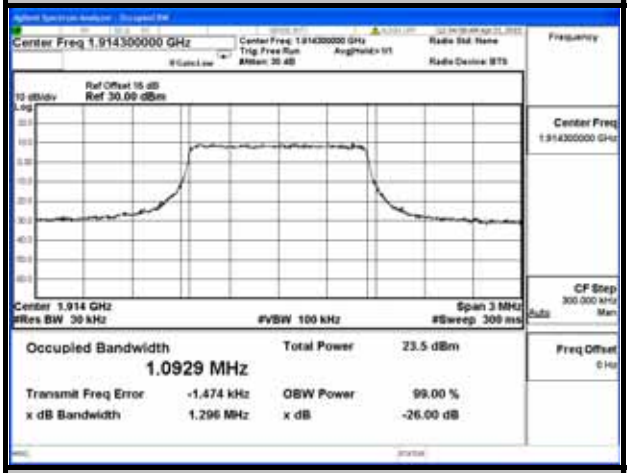
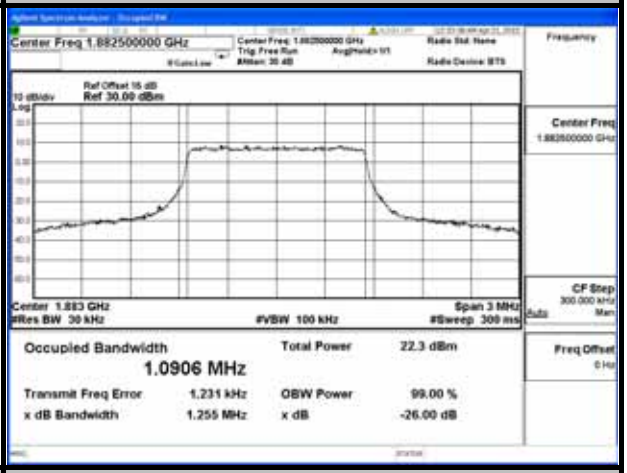
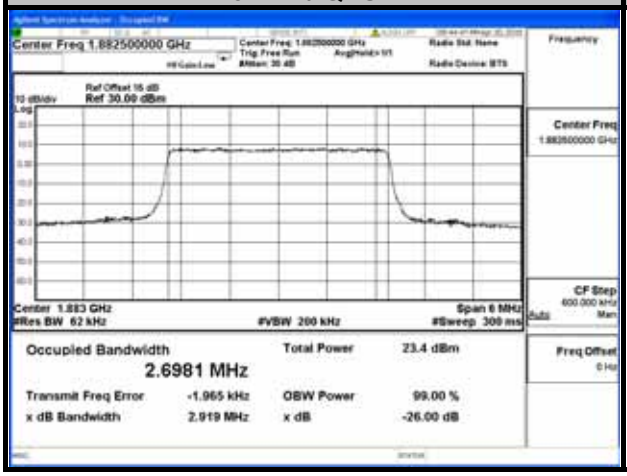
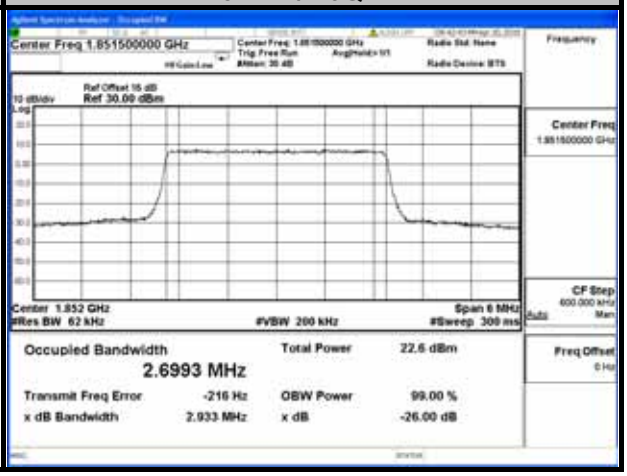
LTE BAND 2							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18625	1852.5	4.5027	4.4955	18650	1855.0	8.9662	8.9682
18900	1880.0	4.4999	4.4949	18900	1880.0	8.9628	8.9577
19175	1907.5	4.5025	4.5016	19150	1905.0	8.9655	8.9624
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18625	1852.5	4.842	4.828	18650	1855.0	9.564	9.546
18900	1880.0	4.831	4.844	18900	1880.0	9.554	9.507
19175	1907.5	4.844	4.847	19150	1905.0	9.532	9.540

SPECTRUM PLOT OF WORST VALUE	
5MHz / QPSK	5MHz / 16QAM
	
10MHz / QPSK	10MHz / 16QAM
	

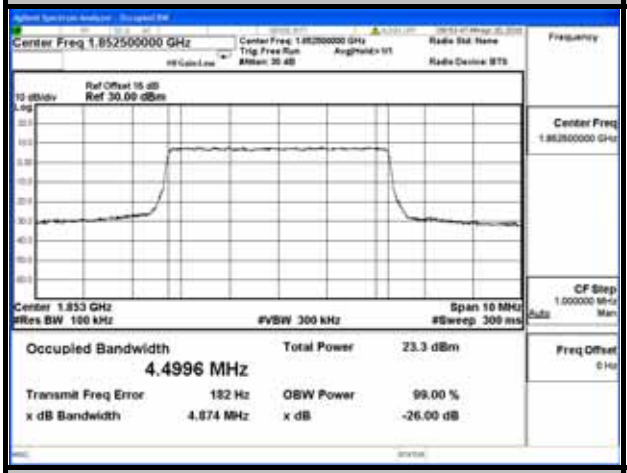
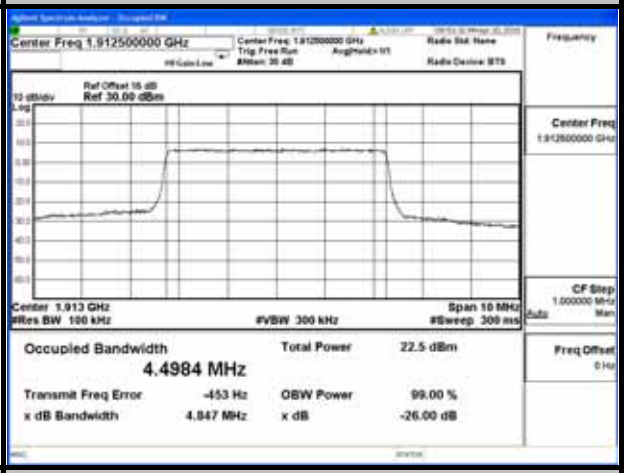
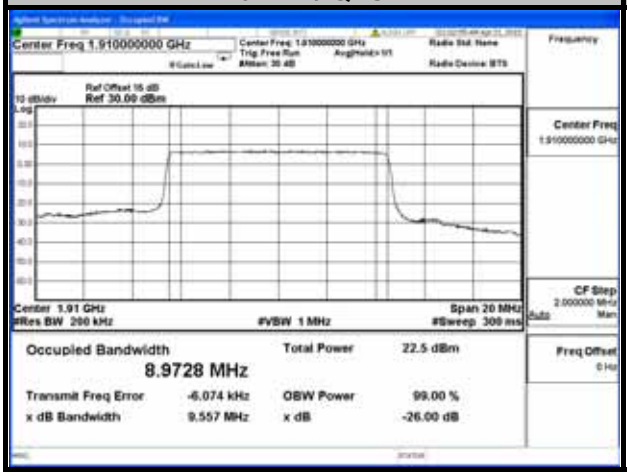
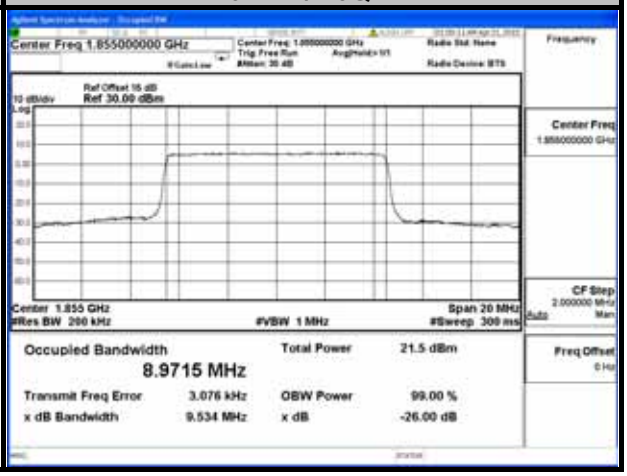
LTE BAND 2							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18675	1857.5	13.461	13.460	18700	1860.0	17.946	17.942
18900	1880.0	13.461	13.458	18900	1880.0	17.951	17.952
19125	1902.5	13.460	13.460	19100	1900.0	17.936	17.933
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
18675	1857.5	14.26	14.26	18700	1860.0	19.04	19.02
18900	1880.0	14.25	14.27	18900	1880.0	19.04	19.03
19125	1902.5	14.25	14.24	19100	1900.0	19.03	19.02

SPECTRUM PLOT OF WORST VALUE	
15MHz / QPSK	15MHz / 16QAM
	
20MHz / QPSK	20MHz / 16QAM
	

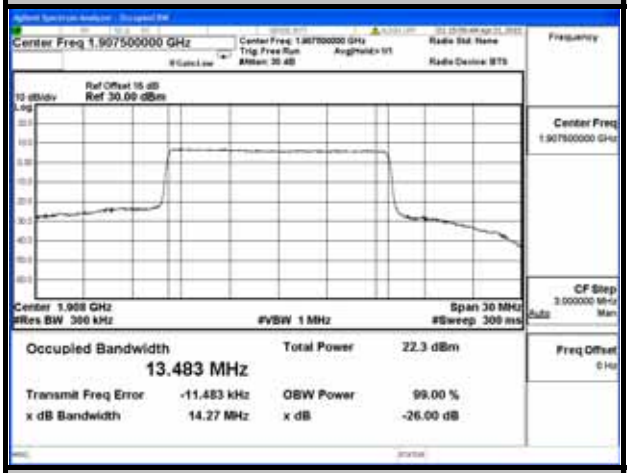
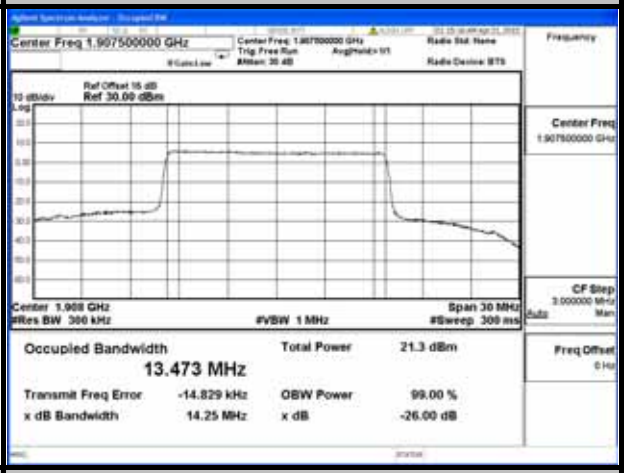
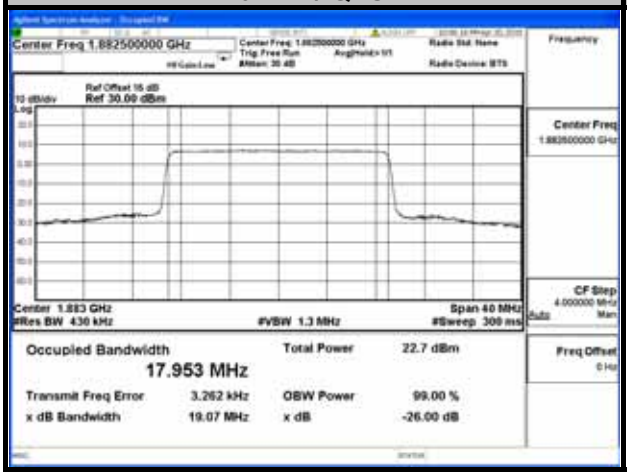
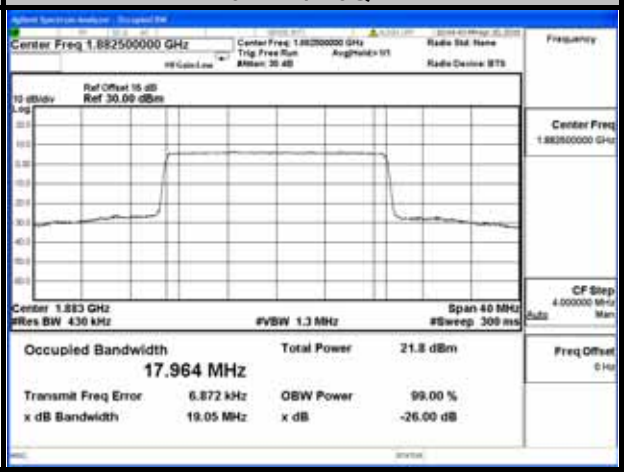
LTE BAND 25							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26047	1850.7	1.0922	1.0905	26055	1851.5	2.6969	2.6993
26365	1882.5	1.0918	1.0906	26365	1882.5	2.6981	2.6982
26683	1914.3	1.0929	1.0897	26675	1913.5	2.6953	2.6975
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26047	1850.7	1.282	1.262	26055	1851.5	2.907	2.933
26365	1882.5	1.280	1.255	26365	1882.5	2.919	2.924
26683	1914.3	1.296	1.262	26675	1913.5	2.907	2.937

SPECTRUM PLOT OF WORST VALUE	
1.4MHz / QPSK	1.4MHz / 16QAM
	
3MHz / QPSK	3MHz / 16QAM
	

LTE BAND 25							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26065	1852.5	4.4996	4.4950	26090	1855.0	8.9724	8.9715
26365	1882.5	4.4966	4.4948	26365	1882.5	8.9716	8.9703
26665	1912.5	4.4971	4.4984	26640	1910.0	8.9728	8.9698
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26065	1852.5	4.874	4.836	26090	1855.0	9.516	9.534
26365	1882.5	4.858	4.839	26365	1882.5	9.551	9.526
26665	1912.5	4.835	4.847	26640	1910.0	9.557	9.552

SPECTRUM PLOT OF WORST VALUE	
5MHz / QPSK	5MHz / 16QAM
	
10MHz / QPSK	10MHz / 16QAM
	

LTE BAND 25							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26115	1857.5	13.466	13.462	26140	1860	17.941	17.956
26365	1882.5	13.472	13.461	26365	1882.5	17.953	17.964
26615	1907.5	13.483	13.473	26590	1905	17.947	17.951
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
26115	1857.5	14.26	14.30	26140	1860	19.06	19.05
26365	1882.5	14.26	14.27	26365	1882.5	19.07	19.05
26615	1907.5	14.27	14.25	26590	1905	19.05	19.05

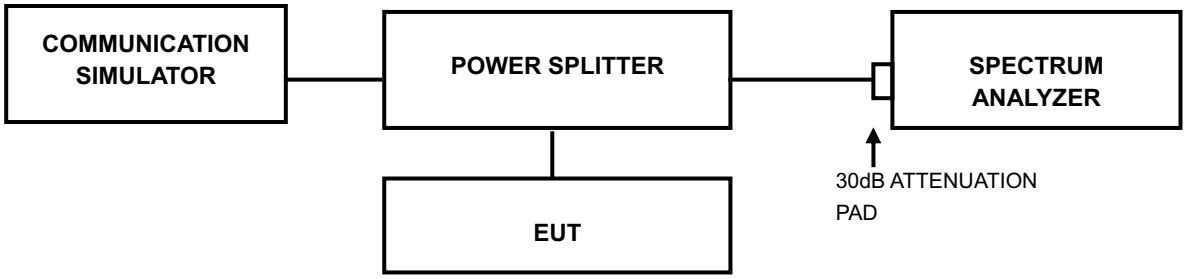
SPECTRUM PLOT OF WORST VALUE	
15MHz / QPSK	15MHz / 16QAM
	
20MHz / QPSK	20MHz / 16QAM
	

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



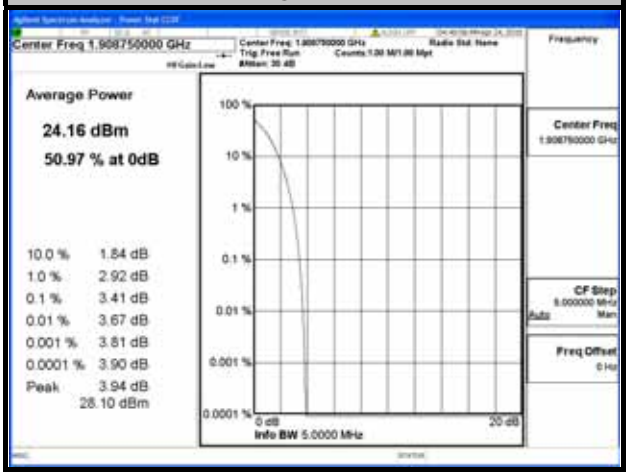
4.4.3 TEST PROCEDURES

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 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
		CDMA
25	1851.25	3.37
600	1880.00	3.22
1175	1908.75	3.41

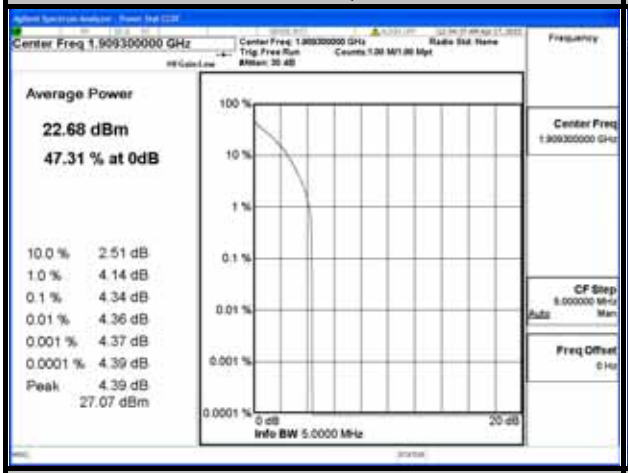
SPECTRUM PLOT OF WORST VALUE
CDMA



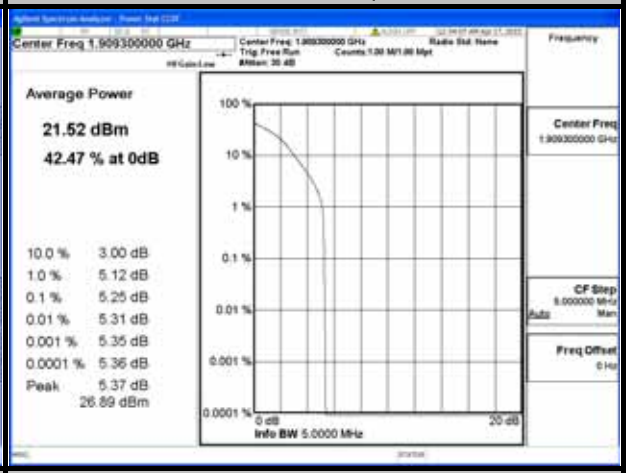
LTE BAND 2							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
18607	1850.7	3.99	5.06	18615	1851.5	4.21	4.73
18900	1880.0	4.03	4.76	18900	1880.0	3.77	4.51
19193	1909.3	4.34	5.25	19185	1908.5	4.20	5.23

SPECTRUM PLOT OF WORST VALUE

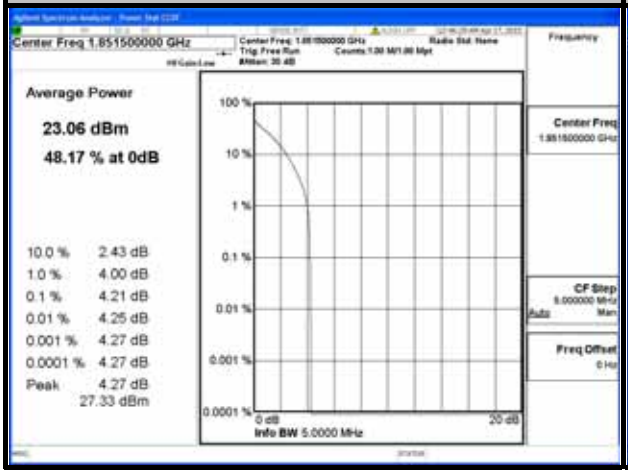
1.4MHz / QPSK



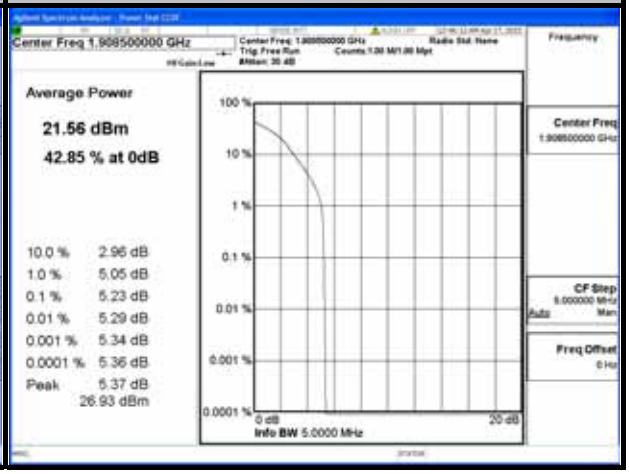
1.4MHz / 16QAM



3MHz / QPSK



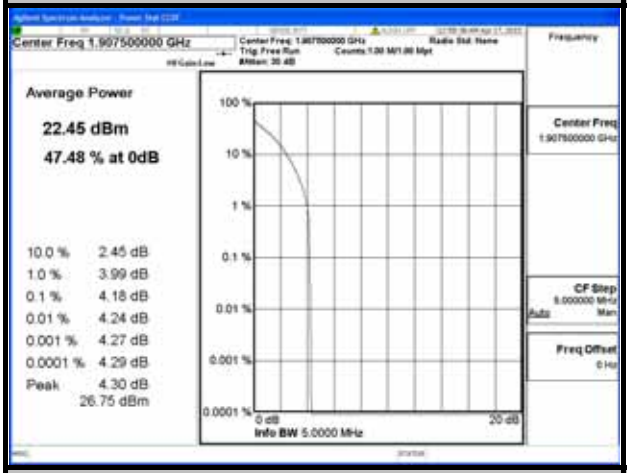
3MHz / 16QAM



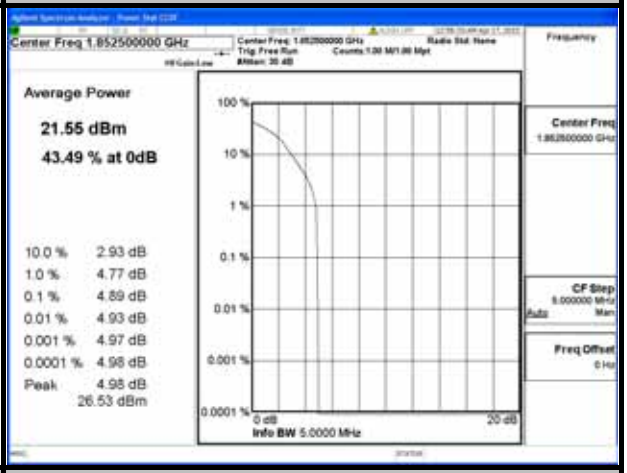
LTE BAND 2							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
18625	1852.5	3.89	4.89	18650	1855.0	4.30	4.94
18900	1880.0	3.59	4.39	18900	1880.0	3.60	4.42
19175	1907.5	4.18	4.80	19150	1905.0	3.47	4.60

SPECTRUM PLOT OF WORST VALUE

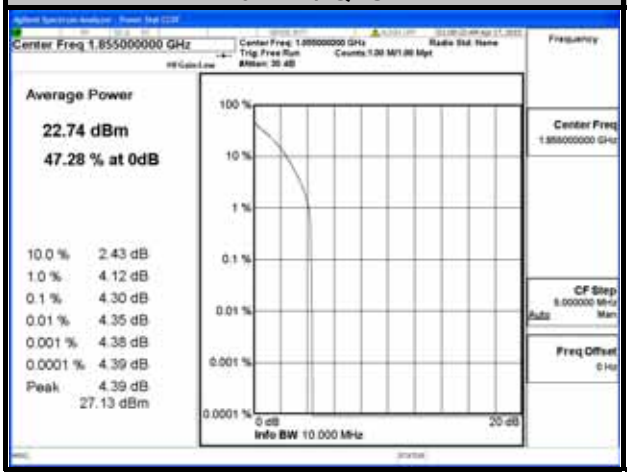
5MHz / QPSK



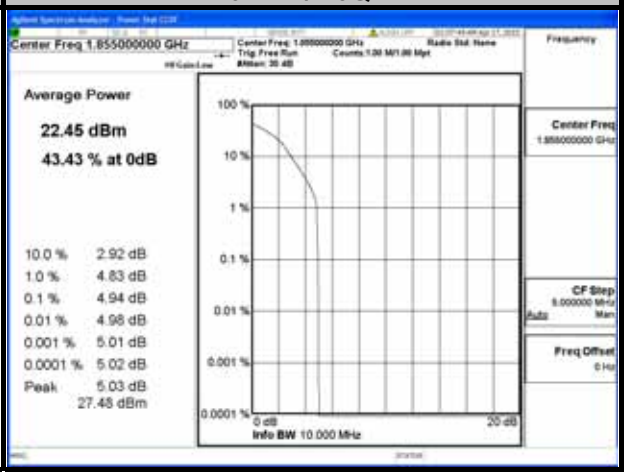
5MHz / 16QAM



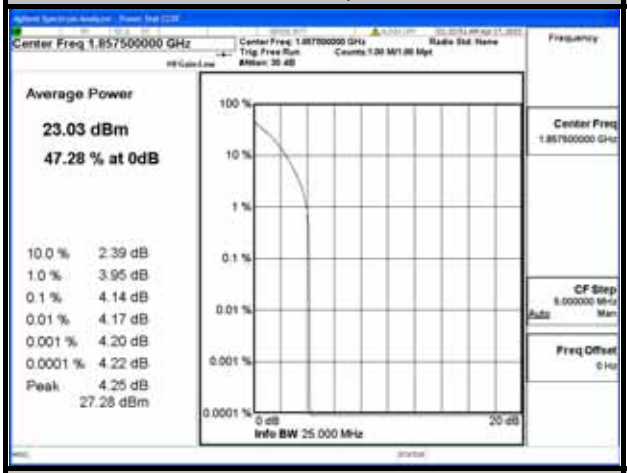
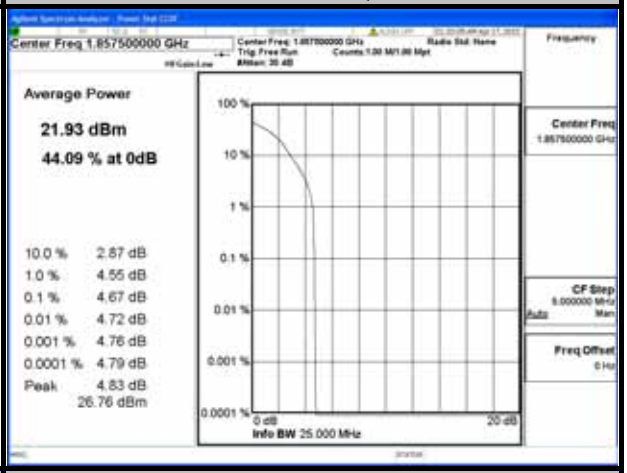
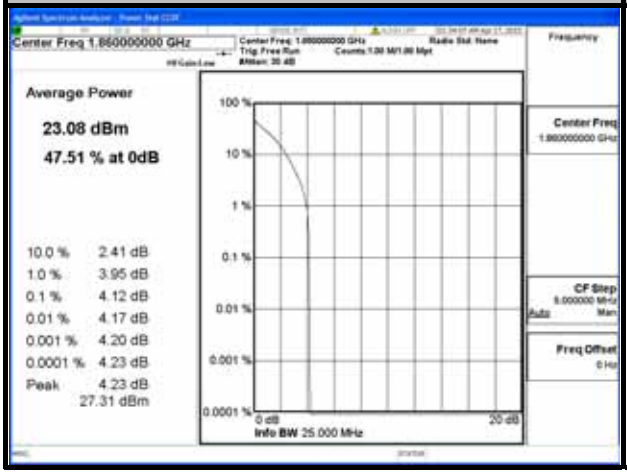
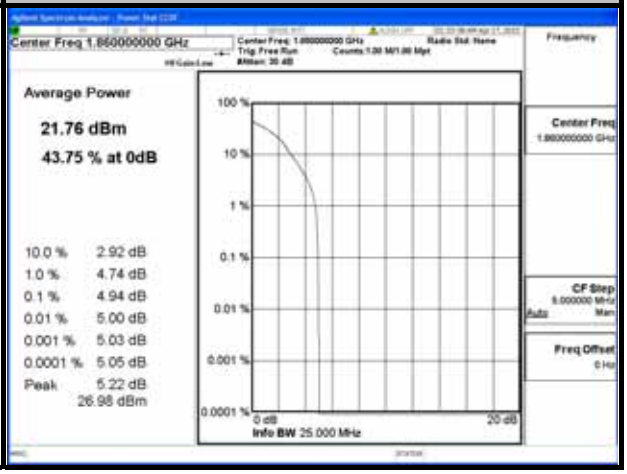
10MHz / QPSK



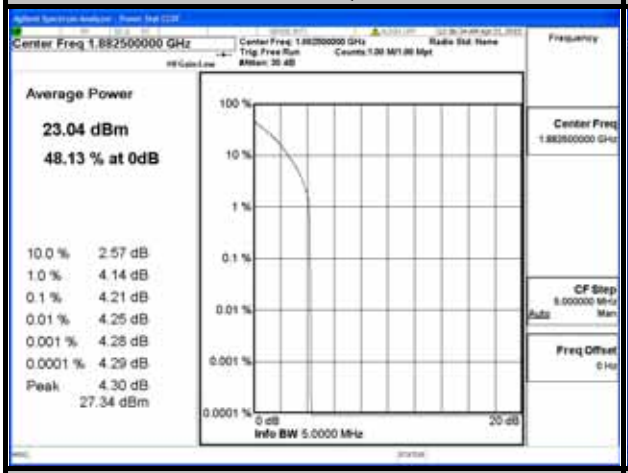
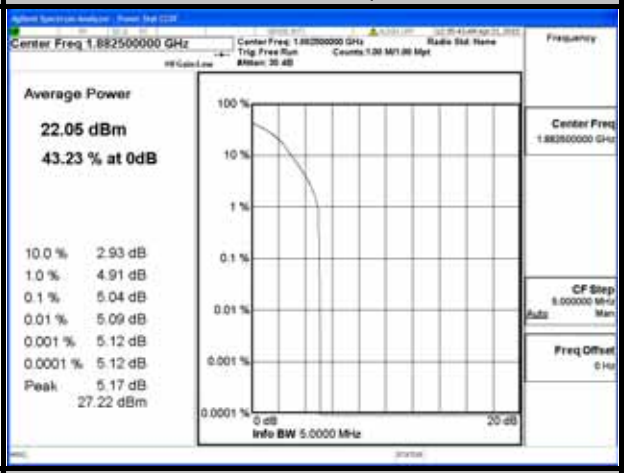
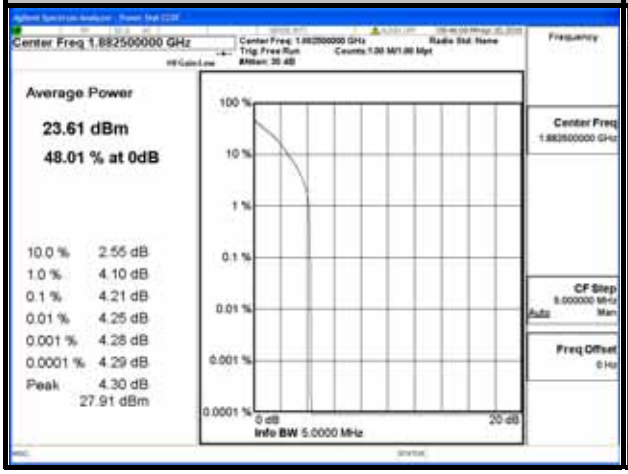
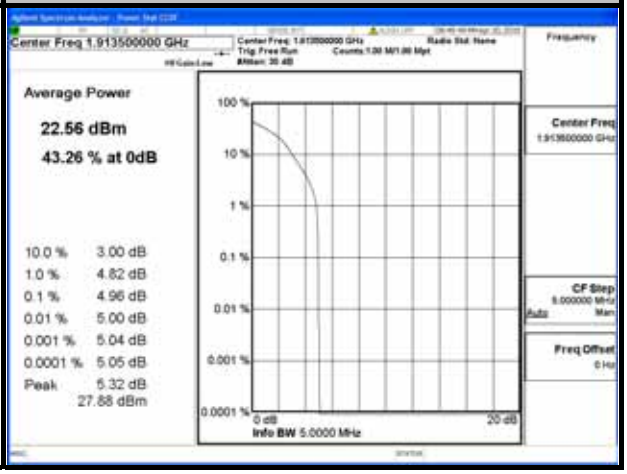
10MHz / 16QAM



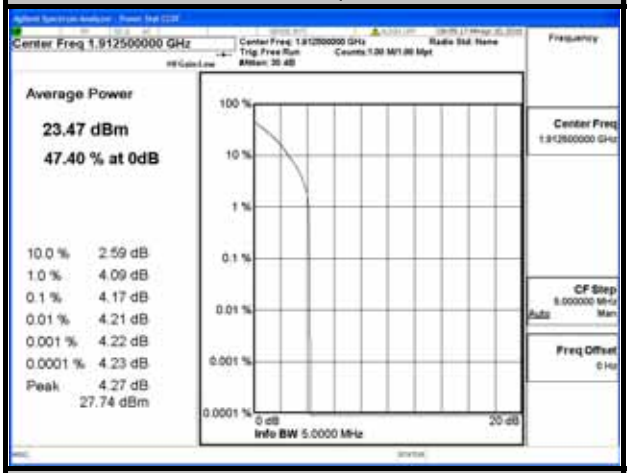
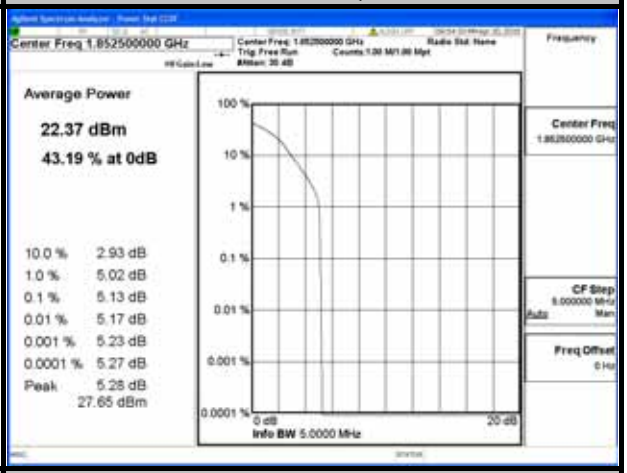
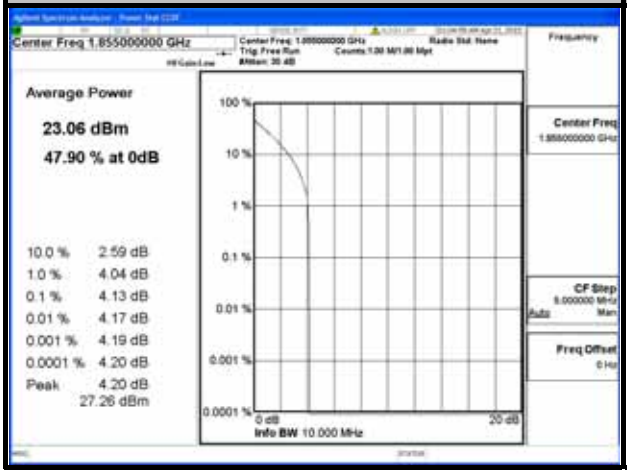
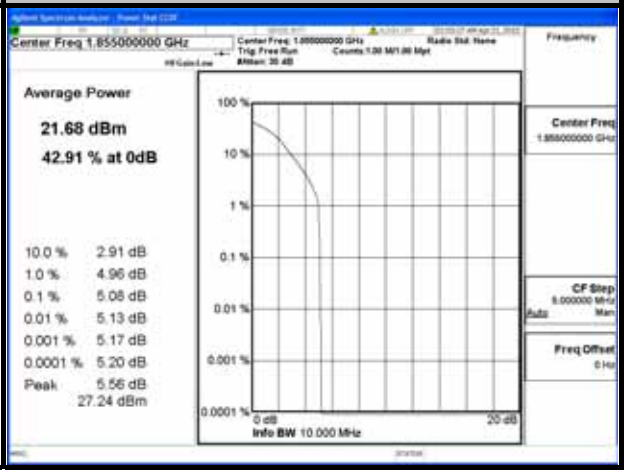
LTE BAND 2							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
18675	1857.5	4.14	4.67	18700	1860.0	4.12	4.94
18900	1880.0	3.63	4.50	18900	1880.0	3.92	4.50
19125	1902.5	3.63	4.53	19100	1900.0	4.02	4.73

SPECTRUM PLOT OF WORST VALUE	
15MHz / QPSK	15MHz / 16QAM
	
20MHz / QPSK	20MHz / 16QAM
	

LTE BAND 25							
CHANNEL BANDWIDTH: 1.4MHz				CHANNEL BANDWIDTH: 3MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
26047	1850.7	4.13	4.94	26055	1851.5	3.92	4.84
26365	1882.5	4.21	5.04	26365	1882.5	4.21	4.88
26683	1914.3	3.83	4.91	26675	1913.5	4.05	4.96

SPECTRUM PLOT OF WORST VALUE	
1.4MHz / QPSK	1.4MHz / 16QAM
	
3MHz / QPSK	3MHz / 16QAM
	

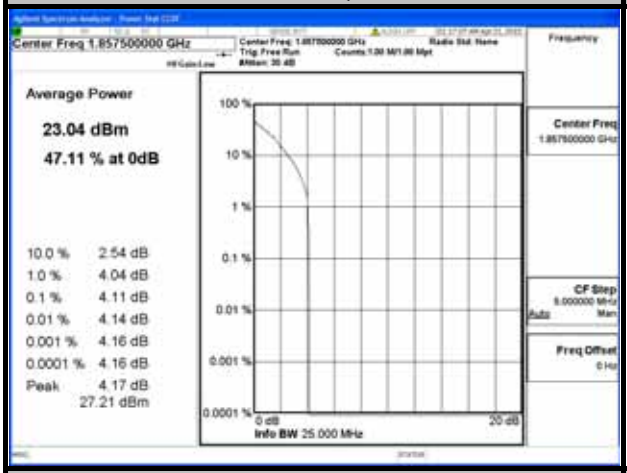
LTE BAND 25							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
26065	1852.5	3.99	5.13	26090	1855.0	4.13	5.08
26365	1882.5	4.10	4.62	26365	1882.5	3.96	4.75
26665	1912.5	4.17	4.94	26640	1910.0	3.87	4.80

SPECTRUM PLOT OF WORST VALUE	
5MHz / QPSK	5MHz / 16QAM
	
10MHz / QPSK	10MHz / 16QAM
	

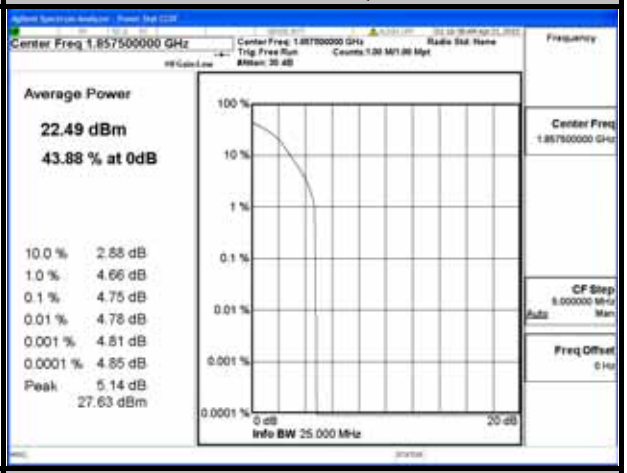
LTE BAND 25							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
26115	1857.5	4.11	4.75	26140	1860.0	4.12	4.93
26365	1882.5	3.72	4.67	26365	1882.5	3.97	4.64
26615	1907.5	3.59	4.47	26590	1905.0	3.87	4.73

SPECTRUM PLOT OF WORST VALUE

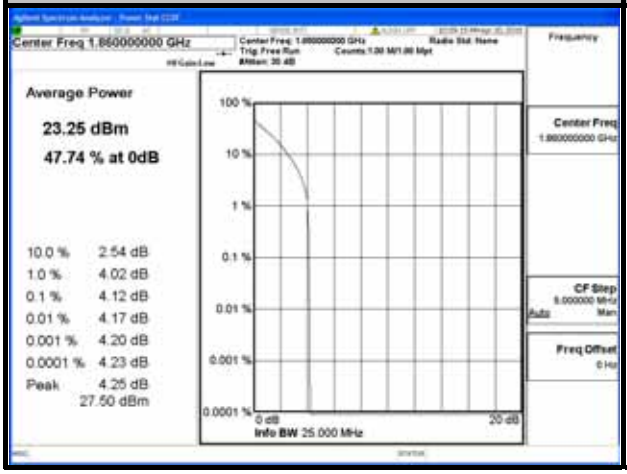
15MHz / QPSK



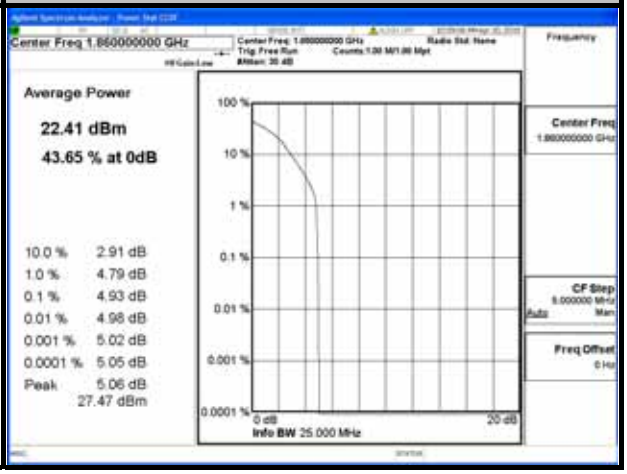
15MHz / 16QAM



20MHz / QPSK



20MHz / 16QAM

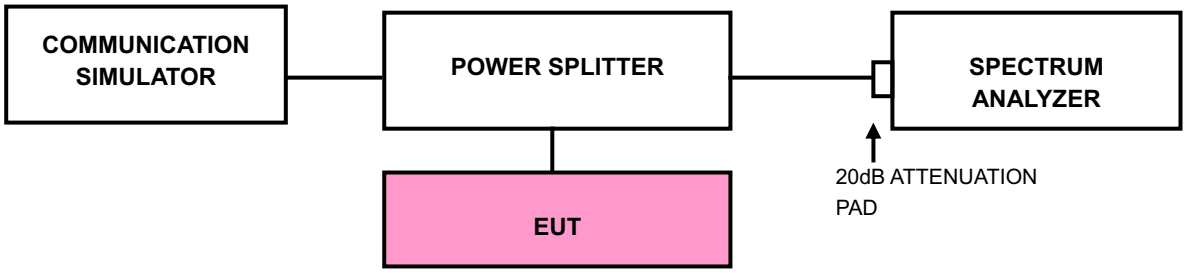


4.5 BAND EDGE MEASUREMENT

4.5.1 LIMITS OF BAND EDGE MEASUREMENT

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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

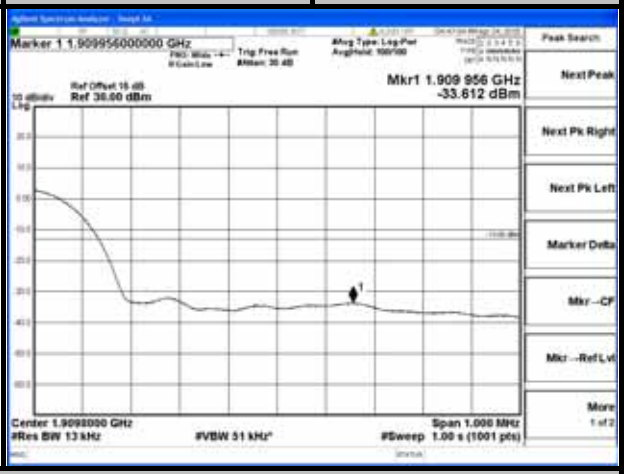
4.5.2 TEST SETUP



4.5.3 TEST PROCEDURES

a. All measurements were done at low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 13kHz and VB of the spectrum is 51kHz (CDMA / LTE Channel Bandwidth 1.4MHz).
c. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Channel Bandwidth 3MHz).
d. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Channel Bandwidth 5MHz / 10MHz).
e. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (LTE Channel Bandwidth 15MHz).
f. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 180kHz and VB of the spectrum is 560kHz (LTE Channel Bandwidth 20MHz).
g. Record the max trace plot into the test report.

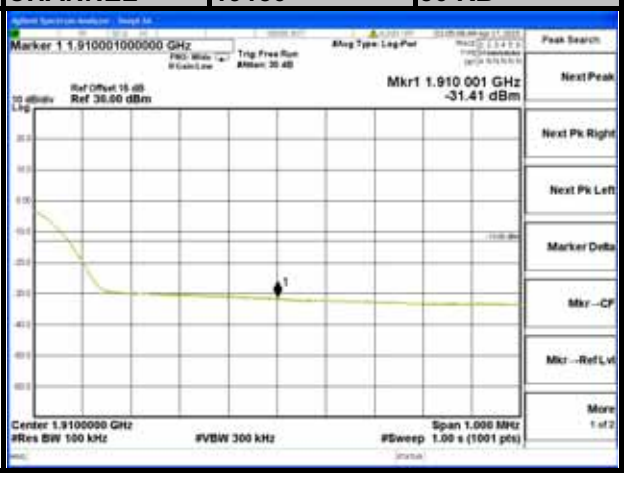
4.5.4 TEST RESULTS

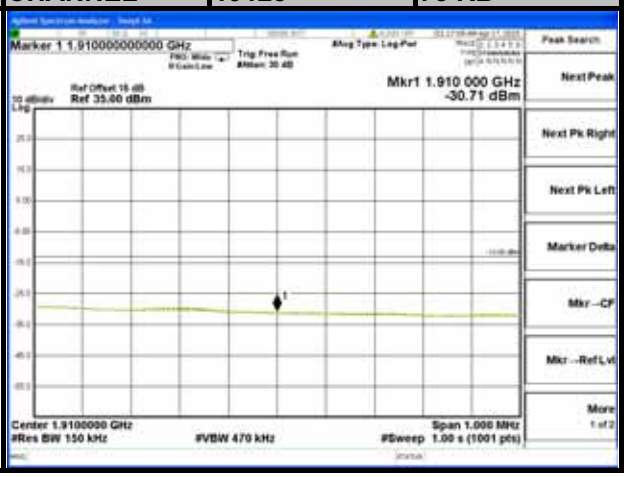
CDMA			
CHANNEL	25	CHANNEL	1175
			

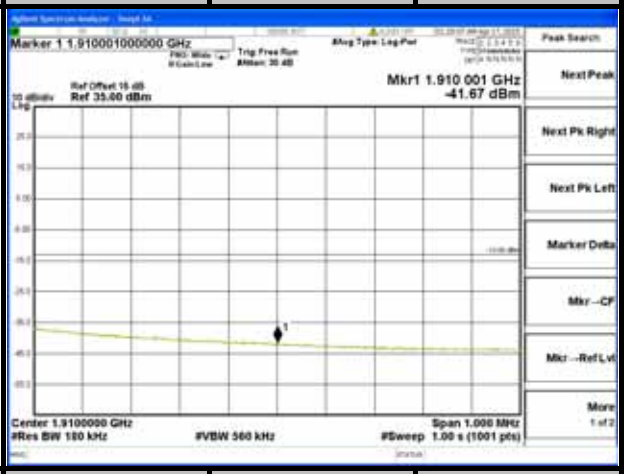
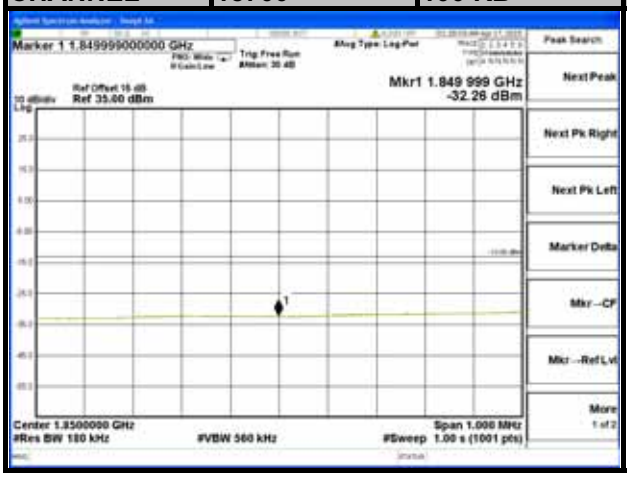
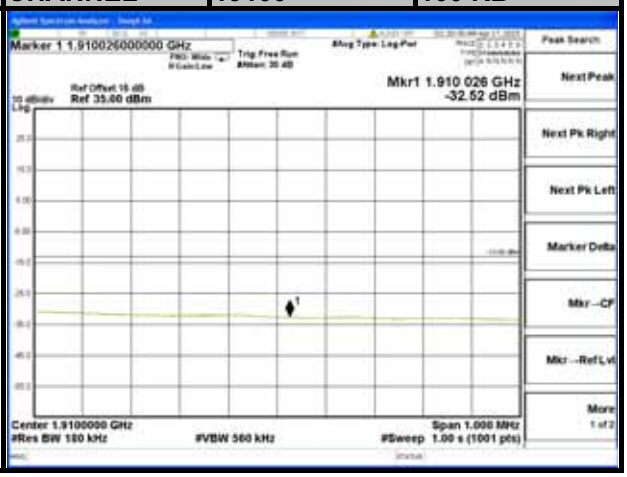
LTE BAND 2					
CHANNEL BANDWIDTH: 1.4MHz					
CHANNEL	18607	1 RB	CHANNEL	19193	1 RB
					
CHANNEL	18607	6 RB	CHANNEL	19193	6 RB
					

LTE BAND 2					
CHANNEL BANDWIDTH: 3MHz					
CHANNEL	18615	1 RB	CHANNEL	19185	1 RB
					
CHANNEL	18615	15 RB	CHANNEL	19185	15 RB
					

LTE BAND 2					
CHANNEL BANDWIDTH: 5MHz					
CHANNEL	18625	1 RB	CHANNEL	19175	1 RB
					
CHANNEL	18625	25 RB	CHANNEL	19175	25 RB
					

LTE BAND 2					
CHANNEL BANDWIDTH: 10MHz					
CHANNEL	18650	1 RB	CHANNEL	19150	1 RB
					
CHANNEL	18650	50 RB	CHANNEL	19150	50 RB
					

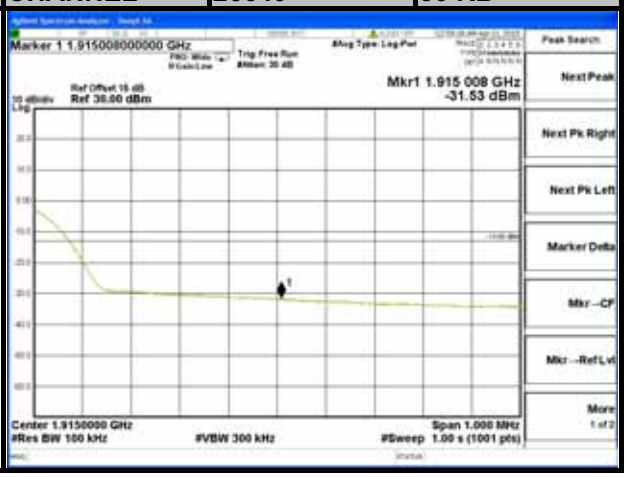
LTE BAND 2					
CHANNEL BANDWIDTH: 15MHz					
CHANNEL	18675	1 RB	CHANNEL	19125	1 RB
					
CHANNEL	18675	75 RB	CHANNEL	19125	75 RB
					

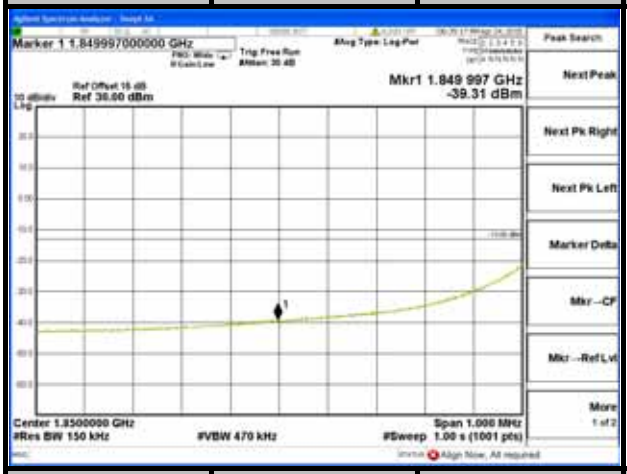
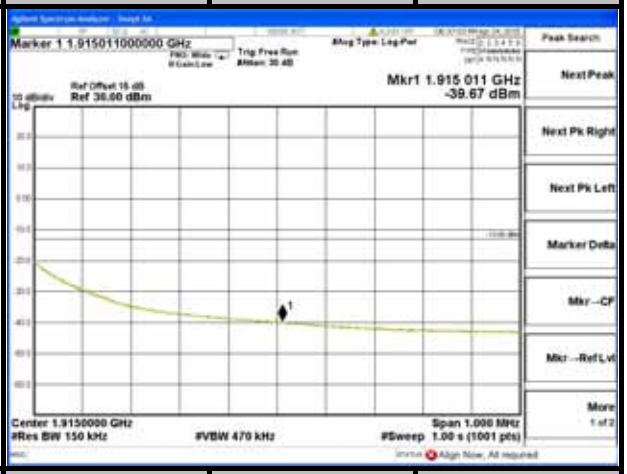
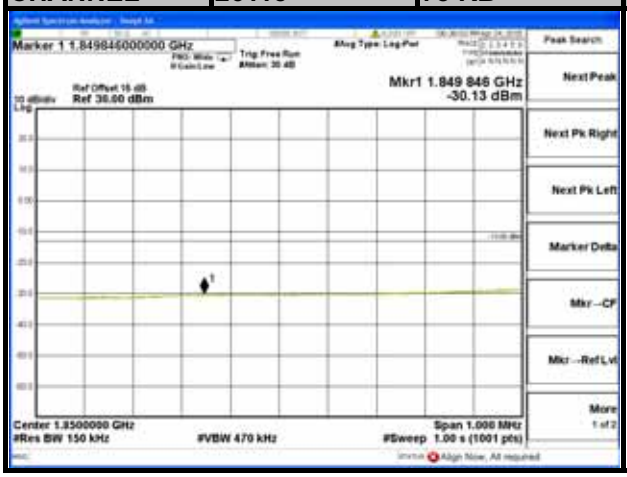
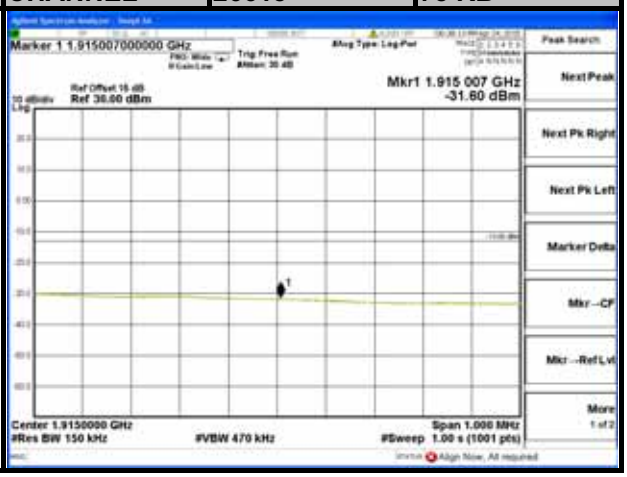
LTE BAND 2					
CHANNEL BANDWIDTH: 20MHz					
CHANNEL	18700	1 RB	CHANNEL	19100	1 RB
					
CHANNEL	18700	100 RB	CHANNEL	19100	100 RB
					

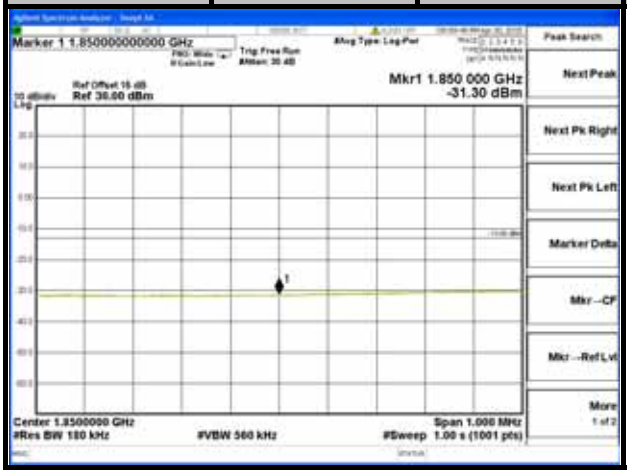
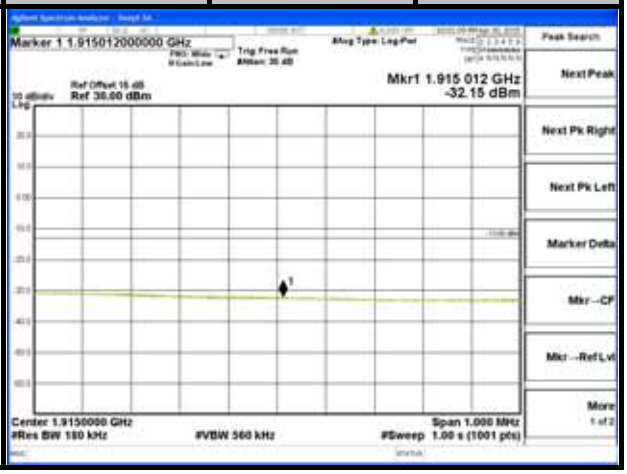
LTE BAND 25					
CHANNEL BANDWIDTH: 1.4MHz					
CHANNEL	26047	1 RB	CHANNEL	26683	1 RB
					
CHANNEL	26047	6 RB	CHANNEL	26683	6 RB
					

LTE BAND 25					
CHANNEL BANDWIDTH: 3MHz					
CHANNEL	26055	1 RB	CHANNEL	26675	1 RB
					
CHANNEL	26055	15 RB	CHANNEL	26675	15 RB
					

LTE BAND 25					
CHANNEL BANDWIDTH: 5MHz					
CHANNEL	26065	1 RB	CHANNEL	26665	1 RB
					
CHANNEL	26065	25 RB	CHANNEL	26665	25 RB
					

LTE BAND 25					
CHANNEL BANDWIDTH: 10MHz					
CHANNEL	26090	1 RB	CHANNEL	26640	1 RB
					
CHANNEL	26090	50 RB	CHANNEL	26640	50 RB
					

LTE BAND 25					
CHANNEL BANDWIDTH: 15MHz					
CHANNEL	26115	1 RB	CHANNEL	26615	1 RB
					
CHANNEL	26115	75 RB	CHANNEL	26615	75 RB
					

LTE BAND 25					
CHANNEL BANDWIDTH: 20MHz					
CHANNEL	26140	1 RB	CHANNEL	26590	1 RB
					
CHANNEL	26140	100 RB	CHANNEL	26590	100 RB
					

4.6 CONDUCTED SPURIOUS EMISSIONS

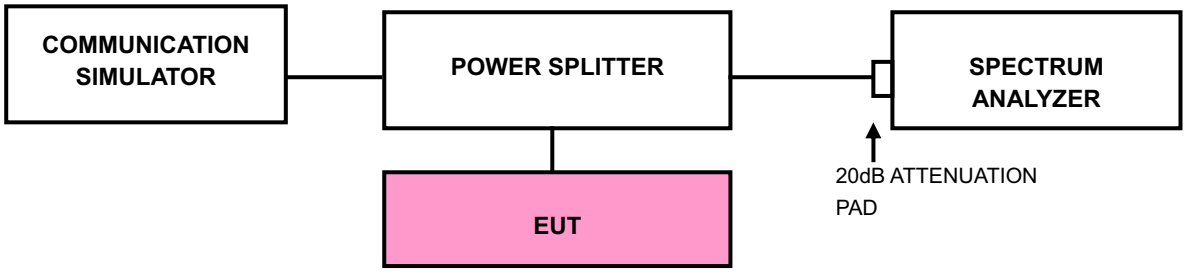
4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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

4.6.2 TEST PROCEDURE

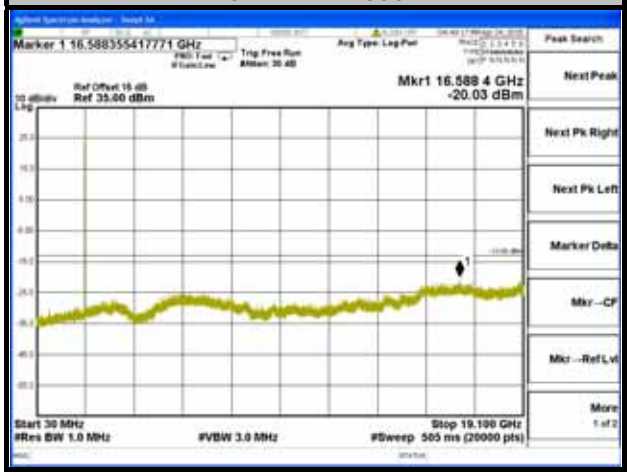
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
b. Measuring frequency range is from 30 MHz to 19.1GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

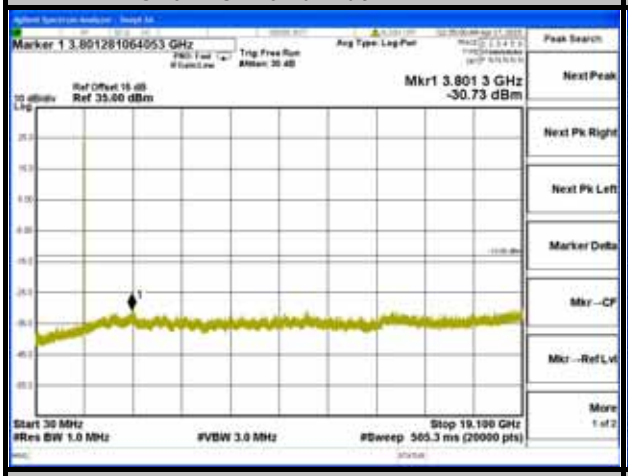
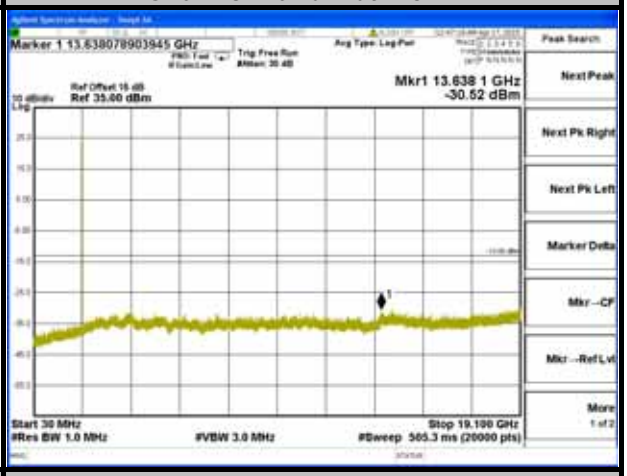
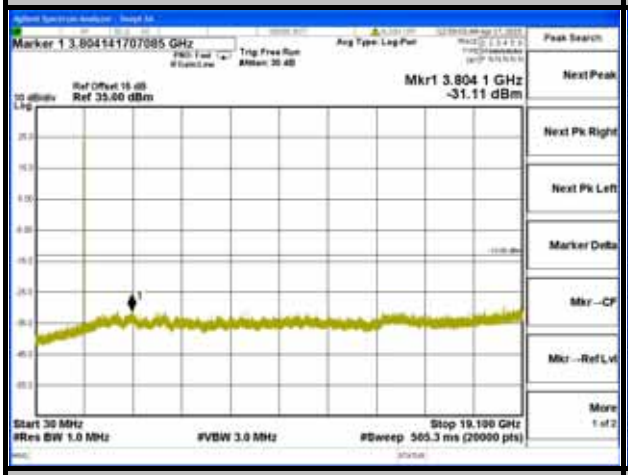
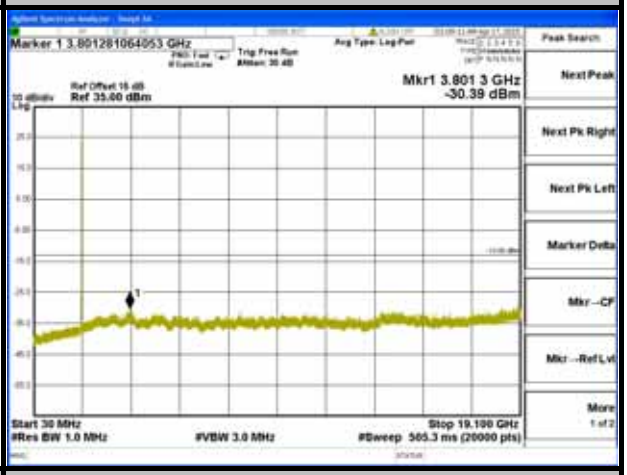
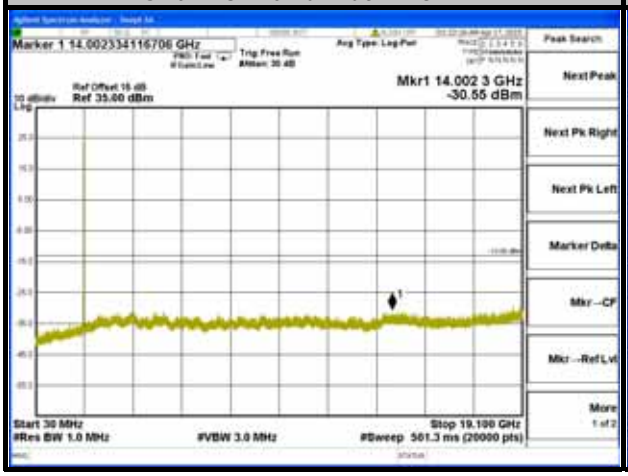
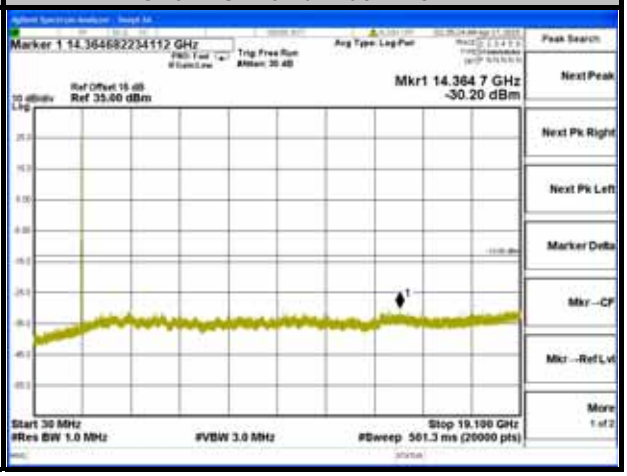
4.6.3 TEST SETUP

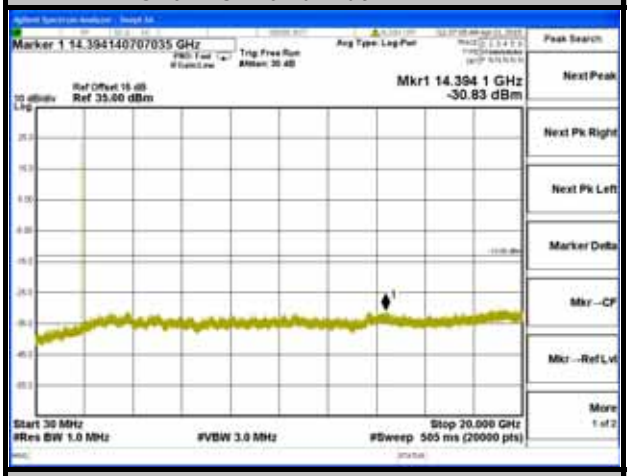
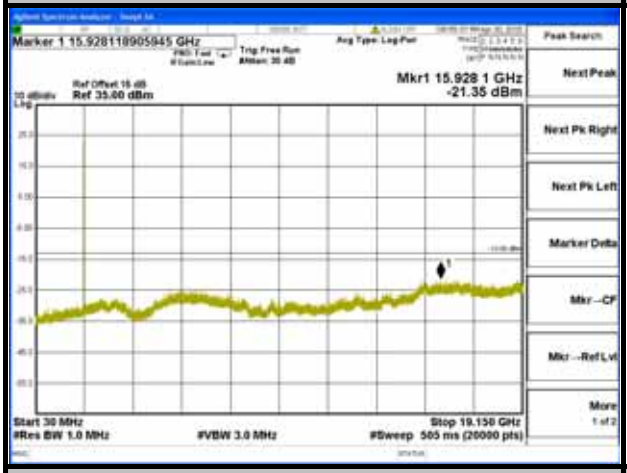
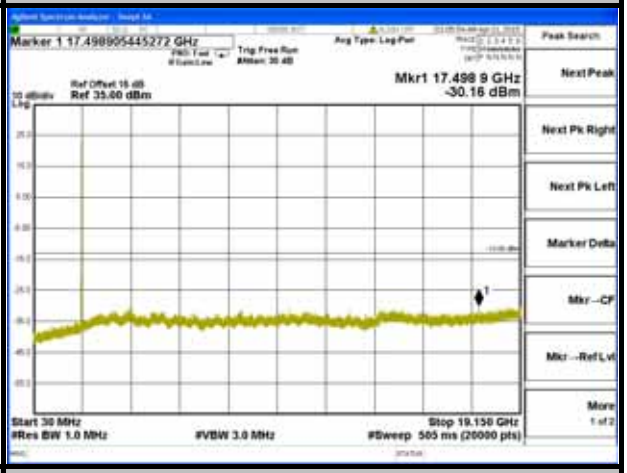
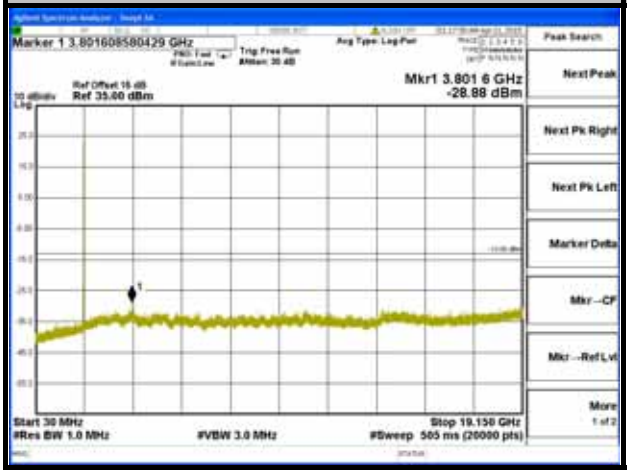


4.6.4 TEST RESULTS

CDMA
CHANNEL 600



LTE BAND 2	
CHANNEL 18900	
Channel Bandwidth: 1.4MHz	Channel Bandwidth: 3MHz
	
Channel Bandwidth: 5MHz	Channel Bandwidth: 10MHz
	
Channel Bandwidth: 15MHz	Channel Bandwidth: 20MHz
	

LTE Band 25	
CHANNEL 26365	
Channel Bandwidth: 1.4MHz	Channel Bandwidth: 3MHz
	
Channel Bandwidth: 5MHz	Channel Bandwidth: 10MHz
	
Channel Bandwidth: 15MHz	Channel Bandwidth: 20MHz
	

4.7 RADIATED EMISSION MEASUREMENT

4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

4.7.2 TEST PROCEDURES

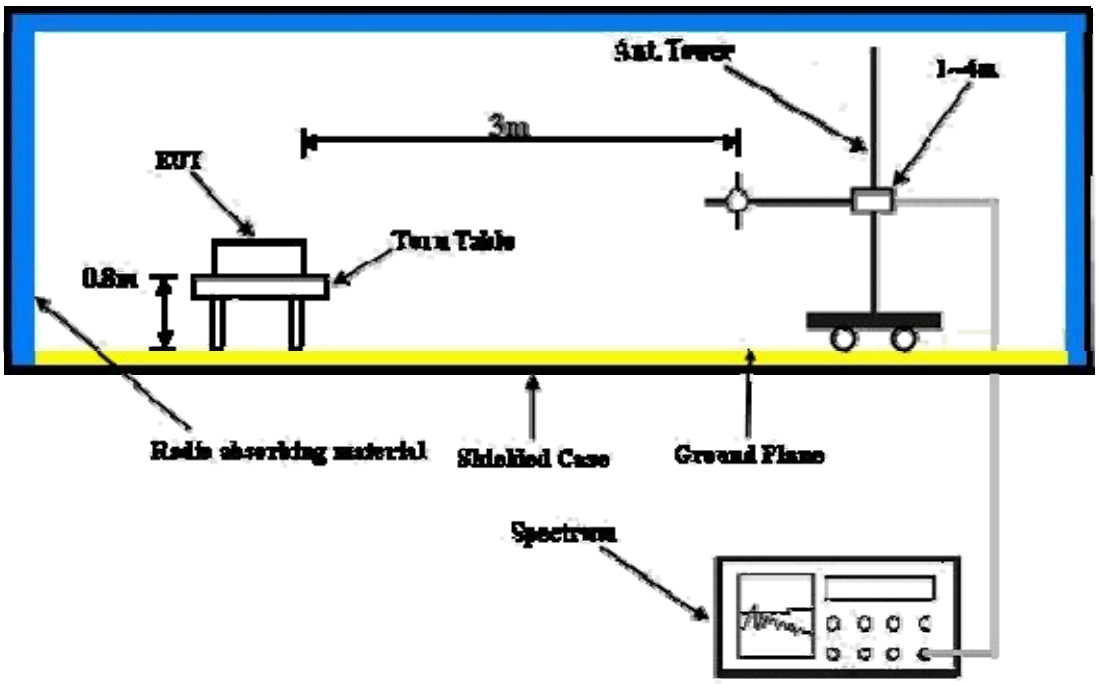
a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. 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
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15dBi.

NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

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 TEST RESULTS

MODE A

CDMA:

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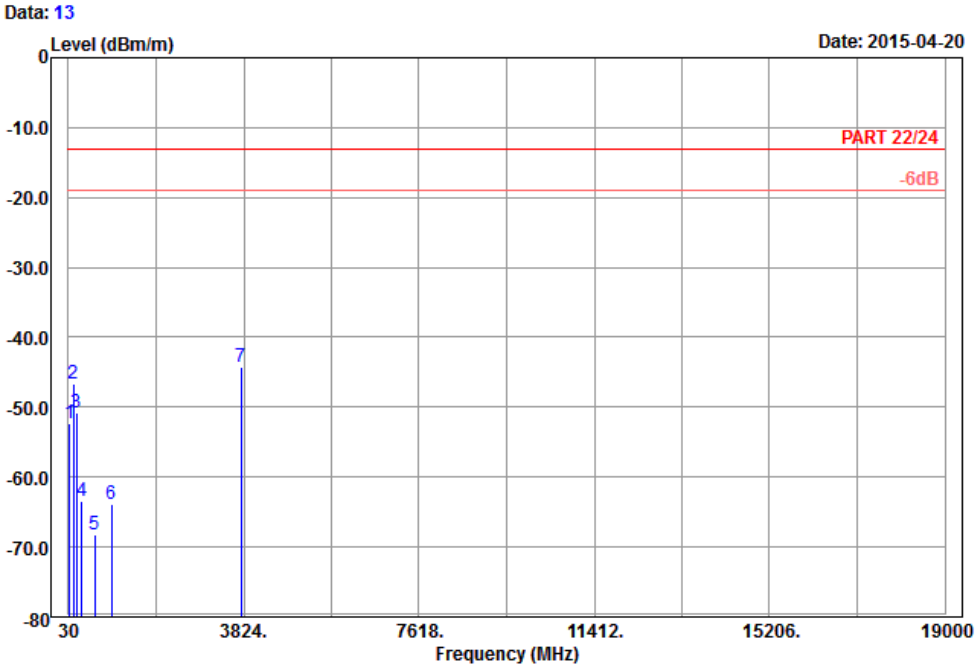
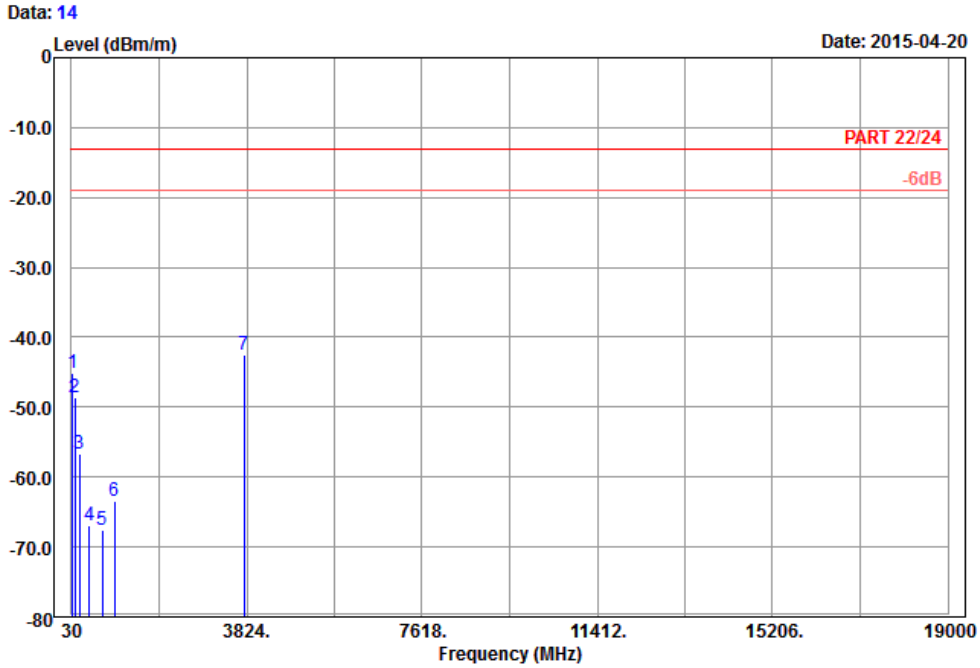


Site : 966 chamber 1
Condition: PART 22/24 3m Horizontal
Remark : BC1_Link_CH600
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	58.08	-52.25	-38.19	-13.00	-39.25	-14.06	Peak
2	138.27	-46.60	-38.91	-13.00	-33.60	-7.69	Peak
3	198.48	-50.81	-44.67	-13.00	-37.81	-6.14	Peak
4	313.30	-63.49	-57.69	-13.00	-50.49	-5.80	Peak
5	599.60	-68.27	-68.66	-13.00	-55.27	0.39	Peak
6	956.60	-63.89	-69.02	-13.00	-50.89	5.13	Peak
7 pp	3760.00	-44.18	-60.32	-13.00	-31.18	16.14	Peak



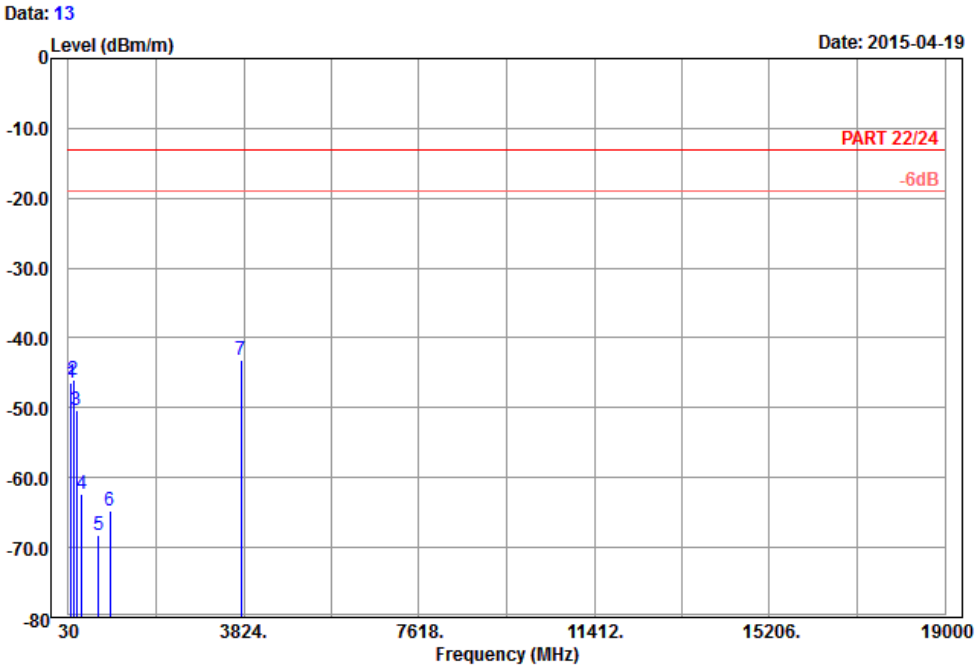
Site : 966 chamber 1
Condition: PART 22/24 3m Vertical
Remark : BC1_Link_CH600
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	46.74	-45.21	-32.41	-13.00	-32.21	-12.80	Peak
2	101.82	-48.66	-38.77	-13.00	-35.66	-9.89	Peak
3	203.61	-56.62	-50.49	-13.00	-43.62	-6.13	Peak
4	420.40	-66.85	-63.66	-13.00	-53.85	-3.19	Peak
5	694.10	-67.67	-67.32	-13.00	-54.67	-0.35	Peak
6	961.50	-63.48	-68.62	-13.00	-50.48	5.14	Peak
7 pp	3760.00	-42.41	-58.55	-13.00	-29.41	16.14	Peak

LTE BAND 2

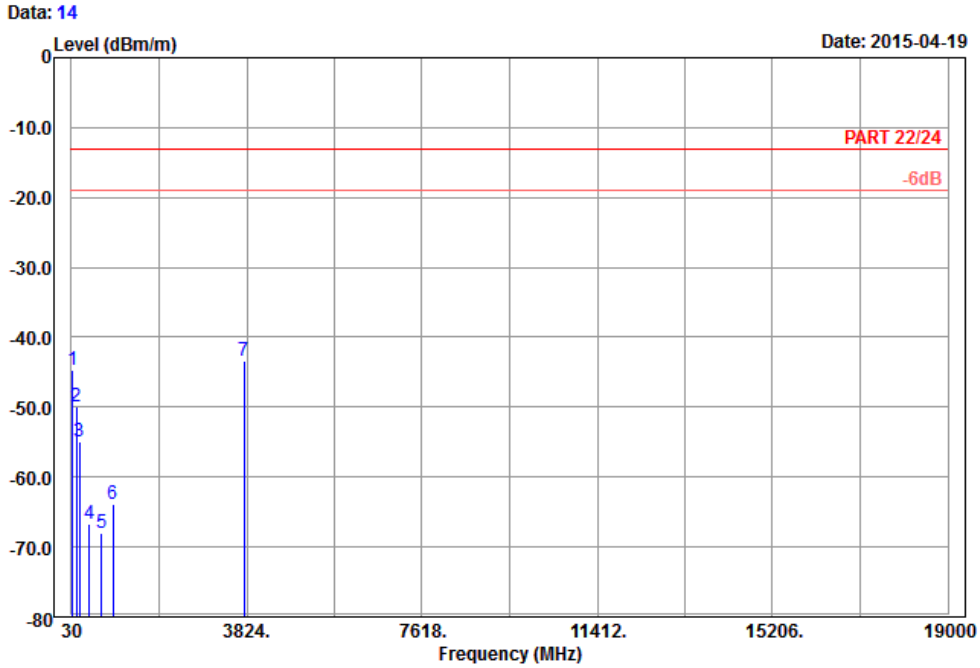
CHANNEL BANDWIDTH: 20MHz / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24 3m Horizontal
Remark : LTE_Band 2_QPSK(1,0)_20M_CH18900
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	94.26	-46.53	-36.08	-13.00	-33.53	-10.45	Peak
2	137.46	-45.91	-38.23	-13.00	-32.91	-7.68	Peak
3	197.67	-50.39	-44.30	-13.00	-37.39	-6.09	Peak
4	320.30	-62.23	-56.51	-13.00	-49.23	-5.72	Peak
5	675.90	-68.17	-67.91	-13.00	-55.17	-0.26	Peak
6	923.70	-64.75	-68.68	-13.00	-51.75	3.93	Peak
7 pp	3760.00	-43.26	-59.40	-13.00	-30.26	16.14	Peak



Site : 966 chamber 1
Condition: PART 22/24 3m Vertical
Remark : LTE_Band 2_QPSK(1,0)_20M_CH18900
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	48.36	-44.60	-31.17	-13.00	-31.60	-13.43	Peak
2	138.54	-49.94	-42.25	-13.00	-36.94	-7.69	Peak
3	205.77	-54.88	-48.77	-13.00	-41.88	-6.11	Peak
4	423.20	-66.67	-63.42	-13.00	-53.67	-3.25	Peak
5	686.40	-68.05	-67.74	-13.00	-55.05	-0.31	Peak
6	934.20	-63.93	-68.34	-13.00	-50.93	4.41	Peak
7 pp	3760.00	-43.38	-59.52	-13.00	-30.38	16.14	Peak

LTE BAND 25

CHANNEL BANDWIDTH: 20MHz / QPSK

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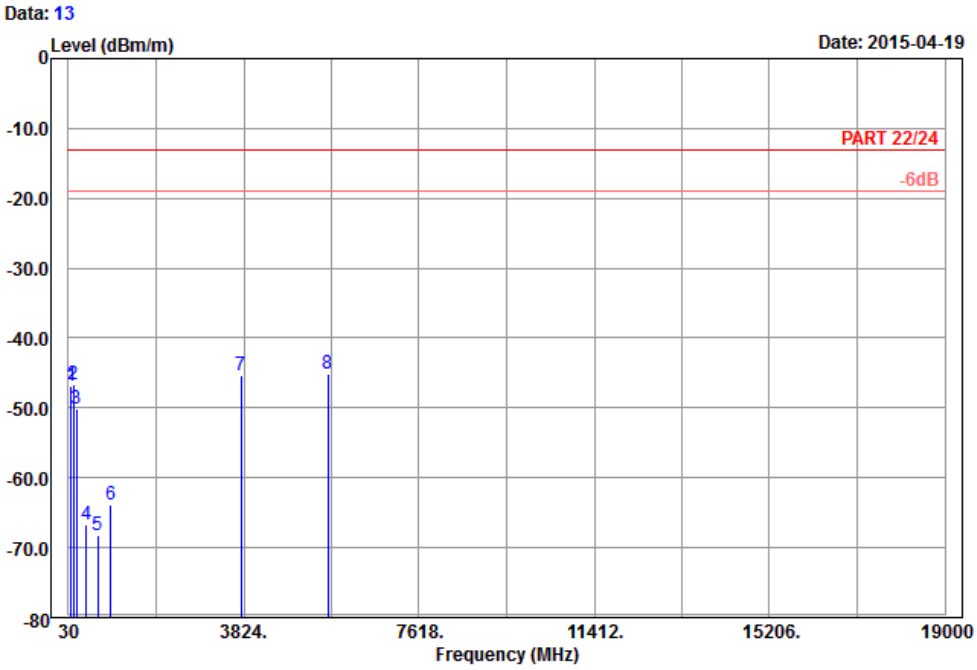
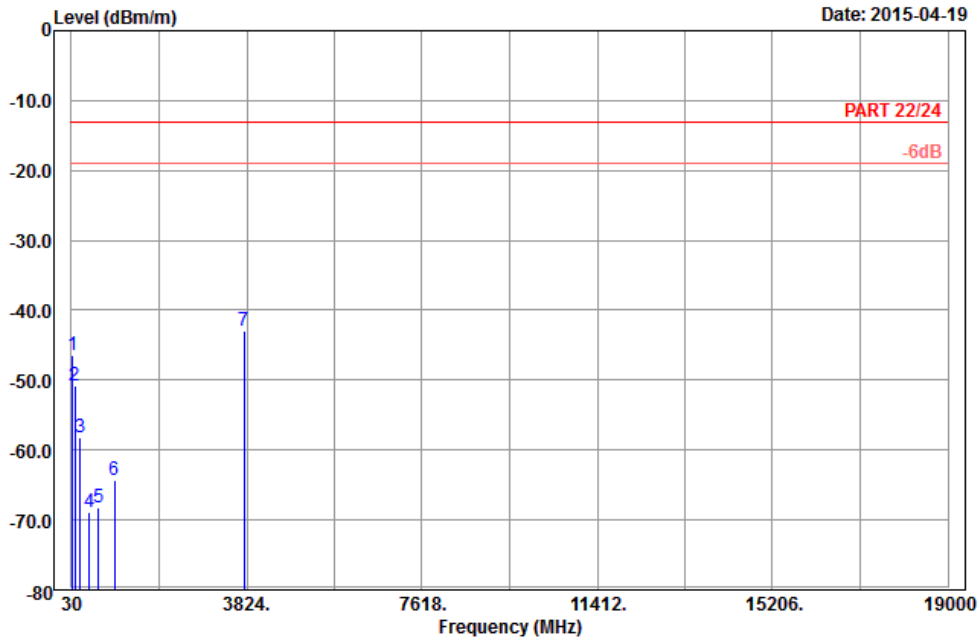


Site : 966 chamber 1
Condition: PART 22/24 3m Horizontal
Remark : LTE_Band 25_QPSK(1,0)_20M_CH26365
Tested by: Hwa Chiang
Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	95.88	-46.86	-36.52	-13.00	-33.86	-10.34	Peak
2	137.19	-46.71	-39.03	-13.00	-33.71	-7.68	Peak
3	199.56	-50.11	-43.93	-13.00	-37.11	-6.18	Peak
4	424.60	-66.75	-63.46	-13.00	-53.75	-3.29	Peak
5	657.00	-68.18	-68.01	-13.00	-55.18	-0.17	Peak
6	952.40	-63.89	-69.01	-13.00	-50.89	5.12	Peak
7	3765.00	-45.26	-61.49	-13.00	-32.26	16.23	Peak
8 pp	5647.50	-45.02	-65.49	-13.00	-32.02	20.47	Peak

Data: 14



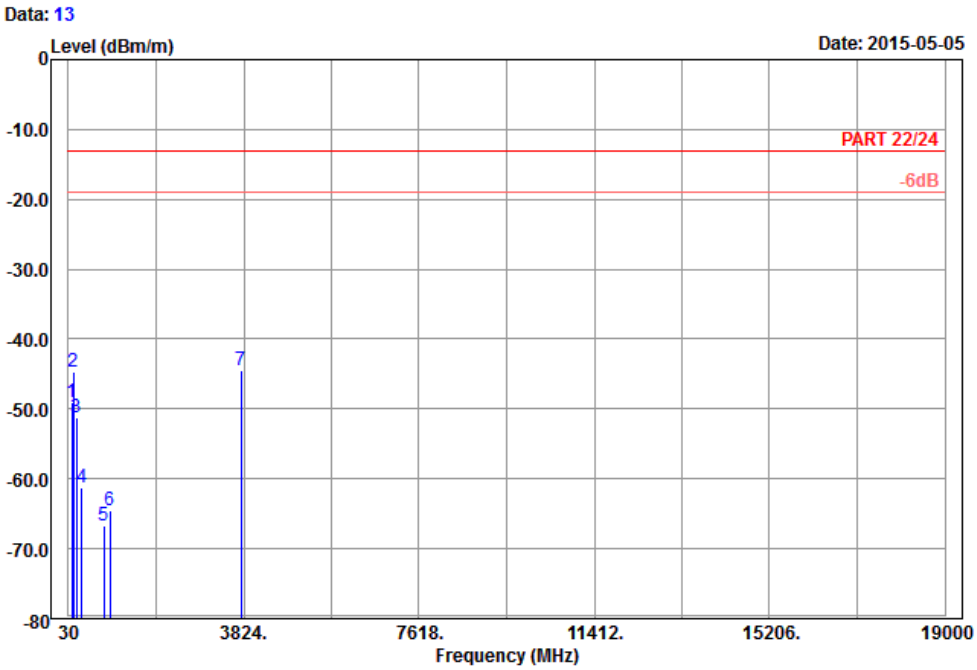
Site : 966 chamber 1
Condition: PART 22/24 3m Vertical
Remark : LTE_Band 25_QPSK(1,0)_20M_CH26365
Tested by: Hwa Chiang
Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	48.09	-46.48	-33.05	-13.00	-33.48	-13.43	Peak
2	101.01	-50.84	-40.84	-13.00	-37.84	-10.00	Peak
3	211.98	-58.26	-52.25	-13.00	-45.26	-6.01	Peak
4	419.70	-68.78	-65.59	-13.00	-55.78	-3.19	Peak
5	613.60	-68.31	-68.58	-13.00	-55.31	0.27	Peak
6	964.30	-64.26	-69.41	-13.00	-51.26	5.15	Peak
7 pp	3765.00	-42.90	-59.13	-13.00	-29.90	16.23	Peak

MODE B

CDMA:

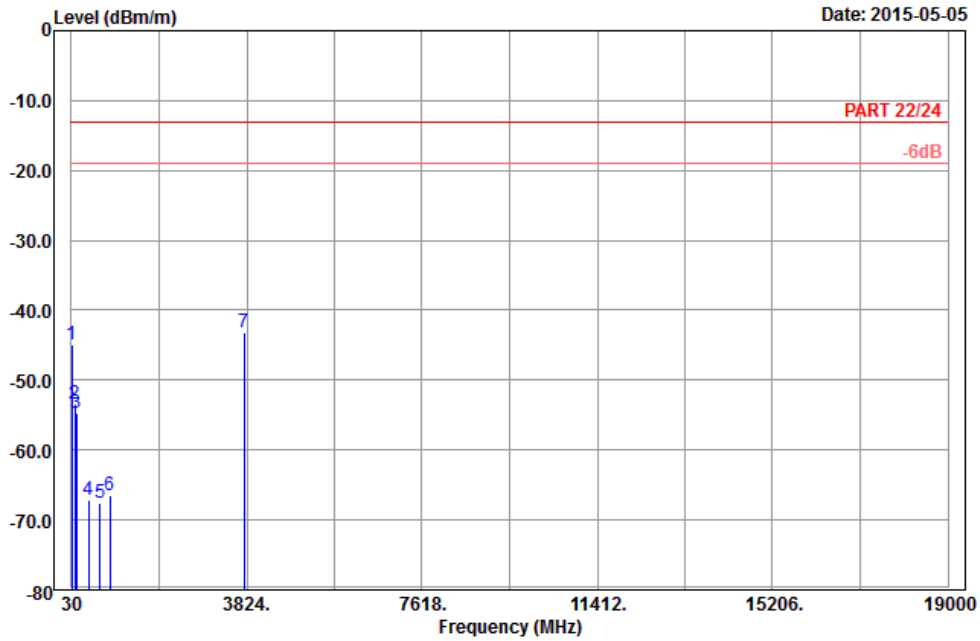
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24 3m Horizontal
Remark : BC1_Link_CH600
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	108.84	-49.05	-39.98	-13.00	-36.05	-9.07	Peak
2	138.81	-44.72	-37.03	-13.00	-31.72	-7.69	Peak
3	209.55	-51.29	-45.24	-13.00	-38.29	-6.05	Peak
4	315.40	-61.19	-55.41	-13.00	-48.19	-5.78	Peak
5	799.80	-66.66	-68.67	-13.00	-53.66	2.01	Peak
6	923.00	-64.42	-68.35	-13.00	-51.42	3.93	Peak
7 pp	3760.00	-44.51	-60.65	-13.00	-31.51	16.14	Peak

Data: 14



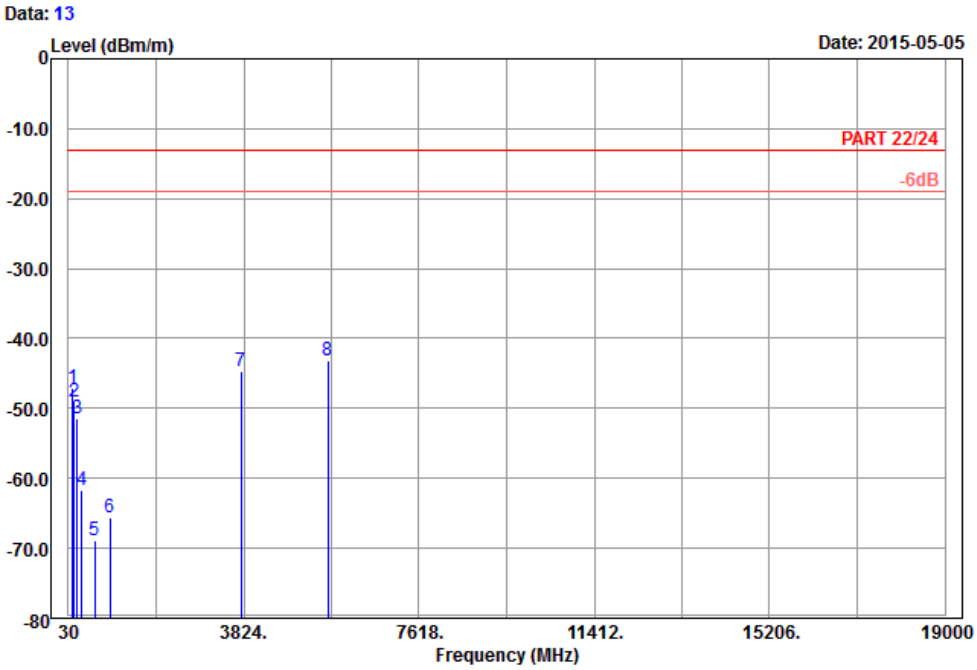
Site : 966 chamber 1
Condition: PART 22/24 3m Vertical
Remark : BC1_Link_CH600
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	46.47	-44.91	-32.11	-13.00	-31.91	-12.80	Peak
2	104.79	-53.50	-43.97	-13.00	-40.50	-9.53	Peak
3	139.89	-54.62	-46.93	-13.00	-41.62	-7.69	Peak
4	394.50	-67.24	-64.24	-13.00	-54.24	-3.00	Peak
5	654.20	-67.54	-67.38	-13.00	-54.54	-0.16	Peak
6	861.40	-66.49	-68.27	-13.00	-53.49	1.78	Peak
7 pp	3760.00	-43.12	-59.26	-13.00	-30.12	16.14	Peak

LTE BAND 25

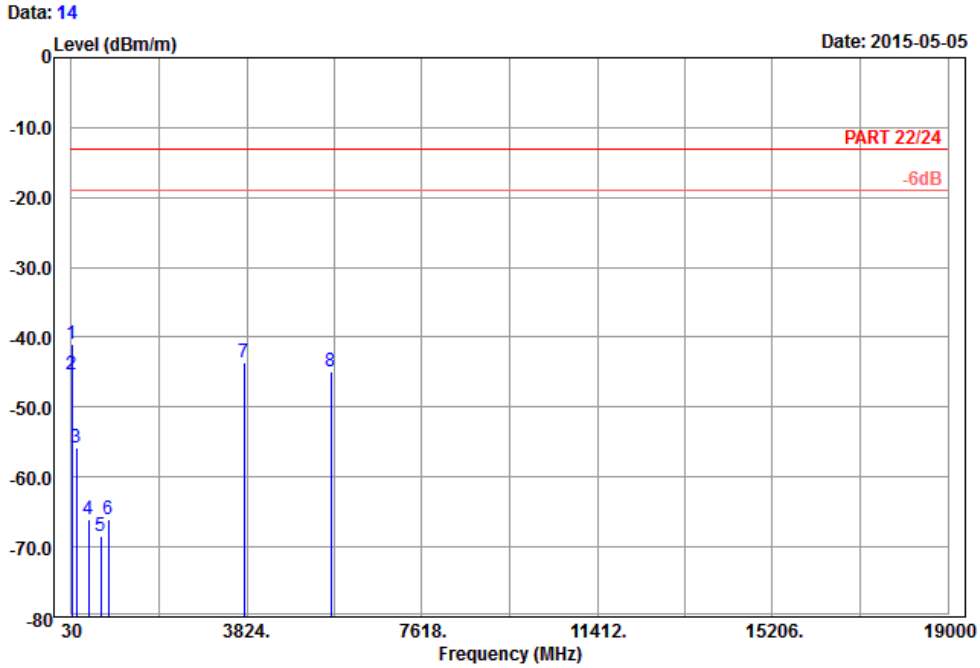
CHANNEL BANDWIDTH: 20MHz / QPSK

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24 3m Horizontal
Remark : LTE_Band 25_QPSK(1,0)_20M_CH26365
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	127.74	-47.01	-39.24	-13.00	-34.01	-7.77	Peak
2	161.76	-49.06	-41.59	-13.00	-36.06	-7.47	Peak
3	215.22	-51.35	-45.37	-13.00	-38.35	-5.98	Peak
4	311.90	-61.68	-55.87	-13.00	-48.68	-5.81	Peak
5	594.00	-68.83	-68.98	-13.00	-55.83	0.15	Peak
6	920.90	-65.57	-69.37	-13.00	-52.57	3.80	Peak
7	3765.00	-44.61	-60.84	-13.00	-31.61	16.23	Peak
8 pp	5647.50	-43.24	-63.71	-13.00	-30.24	20.47	Peak



Site : 966 chamber 1
Condition: PART 22/24 3m Vertical
Remark : LTE_Band 25_QPSK(1,0)_20M_CH26365
Tested by: Hwa Chiang
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	31.35	-40.95	-30.30	-13.00	-27.95	-10.65	Peak
2	45.93	-45.43	-32.95	-13.00	-32.43	-12.48	Peak
3	141.24	-55.91	-48.17	-13.00	-42.91	-7.74	Peak
4	400.10	-65.98	-63.22	-13.00	-52.98	-2.76	Peak
5	668.90	-68.35	-68.12	-13.00	-55.35	-0.23	Peak
6	834.80	-66.13	-67.74	-13.00	-53.13	1.61	Peak
7	3765.00	-43.58	-59.81	-13.00	-30.58	16.23	Peak
8	5647.50	-44.81	-65.28	-13.00	-31.81	20.47	Peak

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 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:

Linko EMC/RF Lab:
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Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab:
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Tel: 886-3-3183232
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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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

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

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