

FCC TEST REPORT (PART 24)

REPORT NO.: RF140707C19-7

MODEL NO.: E6762

FCC ID: V65E6762

RECEIVED: Jul. 07, 2014

TESTED: Jul. 17, 2014 ~ Aug. 08, 2014

ISSUED: Aug. 18, 2014

APPLICANT: Kyocera Corporation c/o Kyocera Communications, Inc.

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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.

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Report No.: RF140707C19-7 1 of 60 Report Format Version 5.0.0



TABLE OF CONTENTS

	ELEASE CONTROL RECORD	_
	CERTIFICATION	
2	SUMMARY OF TEST RESULTS	5
	2.1 MEASUREMENT UNCERTAINTY	5
	2.2 TEST SITE AND INSTRUMENTS	6
3	GENERAL INFORMATION	7
	3.1 GENERAL DESCRIPTION OF EUT	
	3.2 CONFIGURATION OF SYSTEM UNDER TEST	
	3.3 DESCRIPTION OF SUPPORT UNITS	
	3.4 TEST ITEM AND TEST CONFIGURATION	
	3.5 EUT OPERATING CONDITIONS	
	3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS	
4	TEST TYPES AND RESULTS	
4	4.1 OUTPUT POWER MEASUREMENT	
	4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	
	4.1.2 TEST PROCEDURES	
	4.1.3 TEST SETUP	
	4.1.4 TEST RESULTS	
	4.2 FREQUENCY STABILITY MEASUREMENT	
	4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	. 24
	4.2.2 TEST PROCEDURE	. 24
	4.2.3 TEST SETUP	. 24
	4.2.4 TEST RESULTS	. 25
	4.3 OCCUPIED BANDWIDTH MEASUREMENT	. 27
	4.3.1 TEST PROCEDURES	
	4.3.2 TEST SETUP	
	4.3.3 TEST RESULTS	
	4.4 PEAK TO AVERAGE RATIO	
	4.4.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	
	4.4.2 TEST SETUP	
	4.4.3 TEST PROCEDURES	
	4.4.4 TEST RESULTS	
	4.5 BAND EDGE MEASUREMENT	
	4.5.1 LIMITS OF BAND EDGE MEASUREMENT	
	4.5.2 TEST SETUP	
	4.5.3 TEST PROCEDURES	
	4.5.4 TEST RESULTS	
	4.6 CONDUCTED SPURIOUS EMISSIONS	
	4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	. 43
	4.6.2 TEST PROCEDURE	. 43
	4.6.3 TEST SETUP	. 43
	4.6.4 TEST RESULTS	. 44
	4.7 RADIATED EMISSION MEASUREMENT	. 46
	4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT	. 46
	4.7.2 TEST PROCEDURES	
	4.7.3 DEVIATION FROM TEST STANDARD	_
	4.7.4 TEST SETUP	
	4.7.5 TEST RESULTS	
E	PHOTOGRAPHS OF THE TEST CONFIGURATION	
	INFORMATION ON THE TESTING LABORATORIES	
	APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT I	
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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140707C19-7	Original release	Aug. 18, 2014

Report No.: RF140707C19-7 3 of 60 Report Format Version 5.0.0



1 CERTIFICATION

PRODUCT: PDA Phone

MODEL: E6762

BRAND: Kyocera

APPLICANT: Kyocera Corporation c/o Kyocera Communications, Inc.

TESTED: Jul. 17, 2014 ~ Aug. 08, 2014

TEST SAMPLE: Identical Prototype

STANDARDS: FCC Part 24, Subpart E

The above equipment (model: E6762) 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: Aug. 18, 2014

Vera Huang / Specialist

APPROVED BY: , DATE: Aug. 18, 2014

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 Isotropically Radiated Power		Meet the requirement of limit.		
2.1055 24.235	Frequency Stability	PASS	Meet the requirement of limit.		
2.1049 24.238(b)	Occupied Bandwidth		Meet the requirement of limit.		
24.232(d)	2(d) Peak to average ratio		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 -13.54dB at 3760.00MHz.		

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	150kHz~30MHz	2.44 dB
	30MHz ~ 200MHz	2.93 dB
Radiated emissions	200MHz ~1000MHz	2.95 dB
Radiated emissions	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. 17, 2014	Jan. 16, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2013	Dec. 20, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 27. 2014	Feb. 26, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 19, 2014	Feb. 18, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 18, 2013	Dec. 17, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 26, 2013	Dec. 25, 2014
Preamplifier EMCI	EMC 184045	980116	Jan. 13, 2014	Jan. 12, 2015
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2013	Dec. 26, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2013	Oct. 17, 2014
RF signal cable Worken	RG-213	NA	Nov. 07, 2013	Nov. 06, 2014
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
Power Splitter Woken	2-18GHz 2Way SMA Fwd.:30W/Rev.:2W Isolated Power	COM412W5E3	Apr. 17, 2014	Apr. 16, 2015
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY52102544	Sep. 05, 2012	Sep. 04, 2014
Radio Communication Analyzer	MT8820C	6201300640	Aug. 01, 2013	Jul. 31, 2015

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 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	PDA Phone			
MODEL NO.	E6762			
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.8Vdc (battery)			
	GSM/GPRS	GMSK		
	EDGE	GMSK, 8PSK		
MODULATION TYPE	WCDMA	BPSK		
	CDMA	QPSK, OQPSK, HPSK		
	LTE Band 2	QPSK, 16QAM		
	GSM/GPRS/EDGE	1850.2MHz ~ 1909.8MHz		
	WCDMA	1852.4MHz ~ 1907.6MHz		
	CDMA	1851.3MHz ~ 1908.8MHz		
FREQUENCY RANGE	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		
	GSM	498.08mW		
	EDGE	241.55mW		
	WCDMA	107.65mW		
MAX. EIRP POWER	CDMA	107.40mW		
WAX. LIKE FOWER	LTE Band 2 (Channel Bandwidth: 5MHz)	116.76mW		
	LTE Band 2 (Channel Bandwidth: 10MHz)	124.25mW		
	LTE Band 2 (Channel Bandwidth: 15MHz)	120.31mW		
	LTE Band 2 (Channel Bandwidth: 20MHz)	129.21mW		
	GSM	243KGXW		
	EDGE	245KG7W		
	WCDMA	4M16F9W		
EMISSION	CDMA	1M27F9W		
DESIGNATOR	LTE Band 2 (Channel Bandwidth: 5MHz)	4M50W7D		
	LTE Band 2 (Channel Bandwidth: 10MHz)	8M93W7D		
	LTE Band 2 (Channel Bandwidth: 15MHz)	13M4G7D		
	LTE Band 2 (Channel Bandwidth: 20MHz)	17M9W7D		



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. The EUT contains following accessory devices.

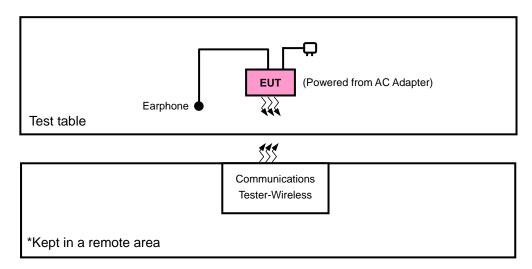
ITEM BRAND		MODEL	SPECIFICATION
Adapter Kyocera		CCD AAADT	I/P: 100-240Vac, 50/60Hz, 0.25A O/P: 5Vdc, 1.5A
Battery	Sanyo	SCP-60LBPS	3.8Vdc, 3000mAh
USB Cable	Kyocera	SCP-17SDC	1m non-shielded cable w/o core

2. 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.

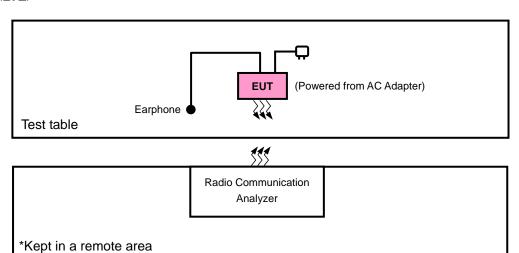


3.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST <GSM/WCDMA/CDMA>

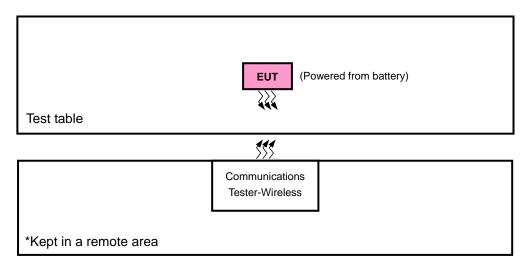


<LTE>

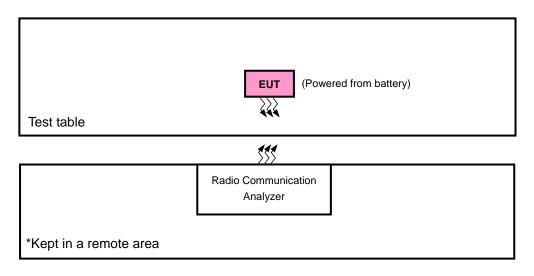




FOR E.I.R.P. TEST <GSM/WCDMA/CDMA>



<LTE>





3.3 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Earphone	GALIEN	HF-HB04D	NA	NA
2	Communications Tester-Wireless	Agilent	8960	MY50260642	NA
3	Radio Communication Analyzer	Anritsu	MT8820C	6201240431	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	N/A

NOTE:

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



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

BAND	EIRP	RADIATED EMISSION
GSM	Y-plane	Z-axis
WCDMA	Y-plane	Z-axis
CDMA	Y-plane	Z-axis
LTE	Y-plane	Z-axis

GSM MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	512 to 810	512, 661, 810	GSM, EDGE
-	FREQUENCY STABILITY	512 to 810	661	GSM, EDGE
-	OCCUPIED BANDWIDTH	512 to 810	512, 661, 810	GSM, EDGE
-	PEAK TO AVERAGE RATIO	512 to 810	512, 661, 810	GSM, EDGE
-	BAND EDGE	512 to 810	512, 810	GSM, EDGE
-	CONDCUDETED EMISSION	512 to 810	661	GSM, EDGE
-	RADIATED EMISSION	512 to 810	661	GSM, EDGE

WCDMA MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	9262 to 9538	9262, 9400, 9538	WCDMA
-	FREQUENCY STABILITY	9262 to 9538	9400	WCDMA
-	OCCUPIED BANDWIDTH	9262 to 9538	9262, 9400, 9538	WCDMA
-	PEAK TO AVERAGE RATIO	9262 to 9538	9262, 9400, 9538	WCDMA
-	BAND EDGE	9262 to 9538	9262, 9538	WCDMA
-	CONDCUDETED EMISSION	9262 to 9538	9400	WCDMA
-	RADIATED EMISSION	9262 to 9538	9400	WCDMA



CDMA MODE

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

LTE BAND 2 MODE

EUT CONFIGURE MODE	TEST ITEM	I TESTED CHANNEL I		CHANNEL BANDWIDTH	MODULATION	MODE
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 12 RB Offset
_	EIRP	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 24 RB Offset
_	LIIXI	18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM	1 RB / 37 RB Offset
		18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM	1 RB / 50 RB Offset
		18625 to 19175	18900	5MHz	QPSK	1 RB / 12 RB Offset
	FREQUENCY	18650 to 19150	18900	10MHz	QPSK	1 RB / 24 RB Offset
_	STABILITY	18675 to 19125	18900	15MHz	QPSK	1 RB / 37 RB Offset
		18700 to 19100	18900	20MHz	QPSK	1 RB / 50 RB Offset
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	OCCUPIED	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
-	BANDWIDTH	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
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM	1 RB / 12 RB Offset
	PEAK TO AVERAGE	18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM	1 RB / 24 RB Offset
-	RATIO	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
			18625	5MHz	QPSK	1 RB / 0 RB Offset
		18625 to 19175	10020	OWN 12	QI OIX	25 RB / 0 RB Offset
		10020 10 10170	19175	5MHz	QPSK	1 RB / 24 RB Offset
			10170	0111112	α. σ.τ	25 RB / 0 RB Offset
			18650	10MHz	QPSK	1 RB / 0 RB Offset
		18650 to 19150	10000	TOWNIZ	QI OIL	50 RB / 0 RB Offset
			19150	10MHz	QPSK	1 RB / 49 RB Offset
	BAND EDGE		19150	TOWNIZ	QI OIL	50 RB / 0 RB Offset
-		18675 to 19125	18675 15M	15MHz	QPSK	1 RB / 0 RB Offset
			10073	TOWNTZ	QI OIX	75 RB / 0 RB Offset
			19125	15MHz	QPSK	1 RB / 74 RB Offset
					QI SIC	75 RB / 0 RB Offset
			18700	20MHz	QPSK	1 RB / 0 RB Offset
		18700 to 19100	10700	ZOWII IZ	QI OIX	100 RB / 0 RB Offset
		10700 10 13100	19100	20MHz	QPSK	1 RB / 99 RB Offset
			19100	ZOWII IZ	QI OIX	100 RB / 0 RB Offset
		18625 to 19175	18900	5MHz	QPSK	1 RB / 12 RB Offset
	- CONDCUDETED EMISSION	18650 to 19150	18900	10MHz	QPSK	1 RB / 24 RB Offset
		18675 to 19125	18900	15MHz	QPSK	1 RB / 0 RB Offset
		18700 to 19100	18900	20MHz	QPSK	1 RB / 0 RB Offset
-	RADIATED EMISSION	18700 to 19100	18900	20MHz	QPSK	1 RB / 50 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
EIRP	26deg. C, 58%RH	3.8Vdc	Howard Kao
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Howard Kao
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.8Vdc	Howard Kao
PEAK TO AVERAGE RATIO	26deg. C, 58%RH	3.8Vdc	Howard Kao
BAND EDGE	26deg. C, 58%RH	3.8Vdc	Howard Kao
CONDCUDETED EMISSION	26deg. C, 58%RH	3.8Vdc	Howard Kao
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Will Chen / Harry Hsueh



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 1MHz for GSM, GPRS & EDGE, 5MHz for CDMA & WCDMA, 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:

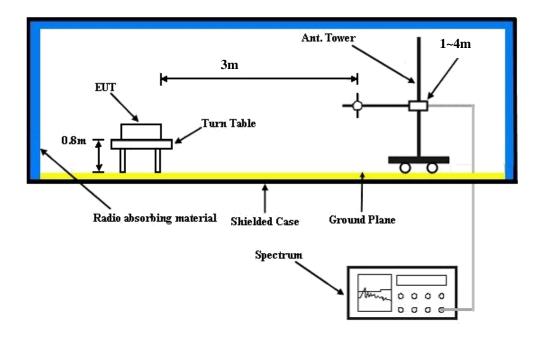
The EUT was set up for the maximum power with GSM, GPRS, EDGE & WCDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Report No.: RF140707C19-7 16 of 60 Report Format Version 5.0.0



4.1.3 TEST SETUP

EIRP / ERP MEASUREMENT:



CONDUCTED POWER MEASUREMENT:





4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	·	GSM1900	
Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8
GSM (1 Uplink)	29.80	30.13	30.05
GPRS 8 (GMSK, 1 slot)	29.79	30.12	30.04
GPRS 10 (GMSK, 2 slot)	26.75	27.08	27.00
GPRS 11 (GMSK, 3 slot)	24.97	25.30	25.22
GPRS 12 (GMSK, 4 slot)	23.63	23.96	23.88
EDGE 8 (GMSK, 1 Uplink)	29.65	29.98	29.90
EDGE 10 (GMSK, 2 Uplink)	26.64	26.97	26.89
EDGE 11 (GMSK, 3 Uplink)	24.92	25.25	25.17
EDGE 12 (GMSK, 4 Uplink)	23.65	23.98	23.90
EDGE 8 (8PSK, 1 Uplink)	25.95	26.28	26.20
EDGE 10 (8PSK, 2 Uplink)	22.97	23.30	23.22
EDGE 11 (8PSK, 3 Uplink)	21.39	21.72	21.64
EDGE 12 (8PSK, 4 Uplink)	20.18	20.51	20.43

Band		WCDMA II	
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2K	23.06	23.20	23.02
HSDPA Subtest-1	22.34	22.48	22.30
HSDPA Subtest-2	22.29	22.43	22.25
HSDPA Subtest-3	21.81	21.95	21.77
HSDPA Subtest-4	21.79	21.93	21.75
HSUPA Subtest-1	22.30	22.44	22.26
HSUPA Subtest-2	21.24	21.38	21.20
HSUPA Subtest-3	21.80	21.94	21.76
HSUPA Subtest-4	20.72	20.86	20.68
HSUPA Subtest-5	22.13	22.27	22.09

Band		CDMA	
Channel	25	600	1175
Frequency (MHz)	1851.25	1880	1908.75
RC1+SO55	23.10	23.20	23.06
RC3+SO55	23.17	23.27	23.13
RC3+SO32(+ F-SCH)	23.13	23.23	23.09
RC3+SO32(+SCH)	23.12	23.22	23.08
RTAP 153.6	23.02	23.12	22.98
RETAP 4096	23.09	23.26	23.06



				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 18625	Mid CH 18900	High CH 19175	3GPP MPR	Low CH 18625	Mid CH 18900	High CH 19175	3GPP MPR
	Size	Oliset	1852.5 MHz	1880.0 MHz	1907.5 MHz	(dB)	1852.5 MHz	1880.0 MHz	1907.5 MHz	(dB)
	1	0	23.05	23.31	23.19	0	22.01	22.27	22.15	1
	1	12	23.19	23.40	23.15	0	22.15	22.36	22.11	1
	1	24	23.11	23.24	22.78	0	22.07	22.20	21.74	1
2 / 5M	12	0	22.37	22.50	22.32	1	21.33	21.46	21.28	2
	12	6	22.21	22.42	22.29	1	21.17	21.38	21.25	2
	12	13	22.20	22.46	22.14	1	21.16	21.42	21.10	2
	25	0	22.41	22.68	22.42	1	21.37	21.64	21.38	2

			QPSK			16QAM				
Band / BW	RB Size	RB Offset	Low CH 18650 1855.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19150 1905.0 MHz	3GPP MPR (dB)	Low CH 18650 1855.0 MHz	Mid CH 18900 1880.0 MHz	High CH 19150 1905.0 MHz	3GPP MPR (dB)
	1	0	23.13	23.39	23.27	0	22.09	22.35	22.23	1
	1	24	23.27	23.48	23.23	0	22.23	22.44	22.19	1
	1	49	23.19	23.32	22.86	0	22.15	22.28	21.82	1
2 / 10M	25	0	22.45	22.58	22.40	1	21.41	21.54	21.36	2
	25	12	22.29	22.50	22.37	1	21.25	21.46	21.33	2
	25	25	22.28	22.54	22.22	1	21.24	21.50	21.18	2
	50	0	22.49	22.76	22.50	1	21.45	21.72	21.46	2

				QPSK						
Band / BW	RB Size	RB Offset	Low CH 18675 1857.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19125 1902.5 MHz	3GPP MPR (dB)	Low CH 18675 1857.5 MHz	Mid CH 18900 1880.0 MHz	High CH 19125 1902.5 MHz	3GPP MPR (dB)
	1	0	23.16	23.42	23.30	0	22.12	22.38	22.26	1
	1	37	23.30	23.51	23.26	0	22.26	22.47	22.22	1
	1	74	23.22	23.35	22.89	0	22.18	22.31	21.85	1
2 / 15M	36	0	22.48	22.61	22.43	1	21.44	21.57	21.39	2
	36	19	22.32	22.53	22.40	1	21.28	21.49	21.36	2
	36	39	22.31	22.57	22.25	1	21.27	21.53	21.21	2
	75	0	22.52	22.79	22.53	1	21.48	21.75	21.49	2

				QPSK						
Band / BW	RB Size	RB Offset	Low CH 18700 1860.0	Mid CH 18900 1880.0	High CH 19100 1900.0	3GPP MPR (dB)	Low CH 18700 1860.0	Mid CH 18900 1880.0	High CH 19100 1900.0	3GPP MPR (dB)
			MHz	MHz	MHz	` '	MHz	MHz	MHz	` ,
	1	0	23.20	23.46	23.34	0	22.16	22.42	22.30	1
	1	50	23.34	23.55	23.30	0	22.30	22.51	22.26	1
	1	99	23.26	23.39	22.93	0	22.22	22.35	21.89	1
2 / 20M	50	0	22.52	22.65	22.47	1	21.48	21.61	21.43	2
	50	25	22.36	22.57	22.44	1	21.32	21.53	21.40	2
	50	50	22.35	22.61	22.29	1	21.31	21.57	21.25	2
	100	0	22.56	22.83	22.57	1	21.52	21.79	21.53	2



EIRP POWER (dBm)

	GSM										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)				
	512	1850.2	-20.79	44.70	23.91	246.04	Н				
	661	1880.0	-20.89	44.70	23.81	240.44	Н				
Y	810	1909.8	-21.46	44.57	23.11	204.79	Н				
ľ	512	1850.2	-17.37	44.27	26.90	489.78	V				
	661	1880.0	-18.08	44.87	26.79	477.53	V				
	810	1909.8	-17.64	44.61	26.97	498.08	V				

	EDGE										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)				
	512	1850.2	-24.09	44.70	20.61	115.08	Н				
	661	1880.0	-24.10	44.70	20.60	114.82	Н				
v	810	1909.8	-24.72	44.57	19.85	96.67	Н				
ľ	512	1850.2	-20.93	44.27	23.34	215.77	V				
	661	1880.0	-21.04	44.87	23.83	241.55	V				
	810	1909.8	-21.46	44.61	23.15	206.68	V				

	WCDMA										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)				
	9262	1852.4	-27.64	44.70	17.06	50.82	Н				
	9400	1880.0	-27.36	44.70	17.34	54.20	Н				
v	9538	1907.6	-28.13	44.57	16.44	44.09	Н				
Ť	9262	1852.4	-24.10	44.27	20.17	103.99	V				
	9400	1880.0	-24.55	44.87	20.32	107.65	V				
	9538	1907.6	-24.96	44.61	19.65	92.32	V				



	CDMA										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)				
	25	1851.25	-27.85	44.70	16.85	48.42	Н				
	600	1880.00	-28.04	44.70	16.66	46.34	Н				
,	1175	1908.75	-27.86	44.57	16.71	46.91	Н				
ľ	25	1851.25	-24.39	44.27	19.88	97.27	V				
	600	1880.00	-24.56	44.87	20.31	107.40	V				
	1175	1908.75	-24.79	44.61	19.82	96.01	V				

			LTI	E Band 2								
	Channel Bandwidth: 5MHz / QPSK											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18625	1852.5	-27.63	44.70	17.07	50.93	Н					
	18900	1880.0	-27.71	44.70	16.99	50.00	Н					
Y	19175	1907.5	-27.14	44.57	17.43	55.37	Н					
T .	18625	1852.5	-23.76	44.27	20.51	112.46	V					
	18900	1880.0	-24.26	44.87	20.61	115.08	V					
	19175	1907.5	-23.94	44.61	20.67	116.76	V					

	LTE Band 2											
	Channel Bandwidth: 5MHz / 16QAM											
Plane	Plane Channel Frequency (MHz) LVL Correction Factor(dB) EIRP(dBm) EIRP(mW) Polar (H											
	18625	1852.5	-29.33	44.70	15.37	34.43	Н					
	18900	1880.0	-28.46	44.70	16.24	42.07	Н					
Y	19175	1907.5	-28.82	44.57	15.75	37.61	Н					
Y	18625	1852.5	-25.42	44.27	18.85	76.74	V					
	18900	1880.0	-25.27	44.87	19.60	91.20	V					
	19175	1907.5	-25.65	44.61	18.96	78.76	V					



	LTE Band 2											
	Channel Bandwidth: 10MHz / QPSK											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18650	1855.0	-27.38	44.70	17.32	53.95	Н					
	18900	1880.0	-27.62	44.70	17.08	51.05	Н					
v	19150	1905.0	-26.72	44.57	17.85	61.00	Н					
ľ	18650	1855.0	-23.81	44.27	20.46	111.17	V					
	18900	1880.0	-24.42	44.87	20.45	110.92	V					
	19150	1905.0	-23.67	44.61	20.94	124.25	V					

	LTE Band 2											
	Channel Bandwidth: 10MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18650	1855.0	-28.21	44.70	16.49	44.57	Н					
	18900	1880.0	-28.60	44.70	16.10	40.74	Н					
V	19150	1905.0	-28.59	44.57	15.98	39.66	Н					
, i	18650	1855.0	-24.63	44.27	19.64	92.04	V					
	18900	1880.0	-25.28	44.87	19.59	90.99	V					
	19150	1905.0	-25.48	44.61	19.13	81.90	V					

	LTE Band 2											
	Channel Bandwidth: 15MHz / QPSK											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18675	1857.5	-27.37	44.70	17.33	54.08	Н					
	18900	1880.0	-27.00	44.70	17.70	58.88	Н					
_	19125	1902.5	-26.71	44.57	17.86	61.14	Н					
ľ	18675	1857.5	-23.63	44.27	20.64	115.88	V					
	18900	1880.0	-24.35	44.87	20.52	112.72	V					
	19125	1902.5	-23.81	44.61	20.80	120.31	V					



	LTE Band 2											
	Channel Bandwidth: 15MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18675	1857.5	-28.99	44.70	15.71	37.24	Н					
	18900	1880.0	-28.77	44.70	15.93	39.17	Н					
 	19125	1902.5	-28.78	44.57	15.79	37.96	Н					
ľ	18675	1857.5	-25.16	44.27	19.11	81.47	V					
	18900	1880.0	-25.48	44.87	19.39	86.90	V					
	19125	1902.5	-25.45	44.61	19.16	82.47	V					

	LTE Band 2											
	Channel Bandwidth: 20MHz / QPSK											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18700	1860.0	-27.81	44.70	16.89	48.87	Н					
	18900	1880.0	-27.57	44.70	17.13	51.64	Н					
V	19100	1900.0	-26.73	44.57	17.84	60.86	Н					
T	18700	1860.0	-23.94	44.27	20.33	107.89	V					
	18900	1880.0	-24.53	44.87	20.34	108.14	V					
	19100	1900.0	-23.50	44.61	21.11	129.21	V					

	LTE Band 2											
	Channel Bandwidth: 20MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)					
	18700	1860.0	-28.53	44.70	16.17	41.40	Н					
	18900	1880.0	-28.66	44.70	16.04	40.18	Н					
_	19100	1900.0	-28.58	44.57	15.99	39.75	Н					
ľ	18700	1860.0	-25.28	44.27	18.99	79.25	V					
	18900	1880.0	-25.34	44.87	19.53	89.74	V					
	19100	1900.0	-25.37	44.61	19.24	84.00	V					



4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

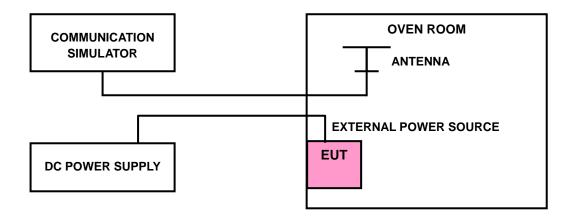
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

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°C 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

		FREQUENCY			
VOLTAGE (Volts)	GSM	EDGE	WCDMA	CDMA	LIMIT (ppm)
3.8	0.005	0.005	0.001	-0.003	2.5
3.4	-0.004	0.006	0.002	-0.003	2.5
4.35	-0.001	-0.003	0.004	-0.002	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.4Vdc to 4.35Vdc.

FREQUENCY ERROR vs. TEMPERATURE

		FREQUENCY	ERROR (ppm)		
TEMP. (° C)	GSM	EDGE	WCDMA	CDMA	LIMIT (ppm)
-30	0.005	0.006	0.005	-0.002	2.5
-20	-0.001	0.007	0.007	-0.002	2.5
-10	-0.003	0.010	-0.004	-0.001	2.5
0	-0.005	-0.005	0.002	-0.002	2.5
10	-0.011	-0.007	0.002	-0.003	2.5
20	0.012	-0.006	-0.005	-0.003	2.5
30	0.013	0.008	-0.006	-0.002	2.5
40	0.004	0.006	-0.002	-0.002	2.5
50	0.002	0.004	0.009	-0.003	2.5



FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volts)		LIMIT (ppm)			
	5MHz	10MHz	15MHz	20MHz	
3.8	-0.002925532	0.000106383	-0.002393617	-0.001329787	2.5
3.4	-0.0025	0.000585106	-0.001702128	-0.001648936	2.5
4.35	-0.001755319	-0.000957447	-0.001968085	-0.001542553	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.4Vdc to 4.35Vdc.

FREQUENCY ERROR vs. TEMPERATURE

		FREQUENCY	ERROR (ppm)		
TEMP. (℃)			LIMIT (ppm)		
	5MHz	10MHz	15MHz	20MHz	
-30	0.000957447	0.000638298	-0.001755319	-0.001489362	2.5
-20	0.000691489	0.000478723	-0.003031915	-0.002287234	2.5
-10	0.001223404	-0.001117021	-0.001382979	-0.002978723	2.5
0	-0.000585106	-0.000478723	-0.002606383	-0.001702128	2.5
10	-0.001489362	0.000265957	-0.002234043	-0.000851064	2.5
20	-0.001648936	-0.002340426	-0.000638298	-0.001702128	2.5
30	-0.0025	-0.002180851	-0.001489362	-0.002021277	2.5
40	-0.004148936	-0.001702128	-0.001223404	-0.002393617	2.5
50	-0.003670213	-0.000585106	-0.002074468	-0.002553191	2.5

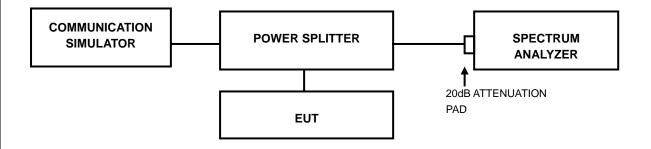


4.3 OCCUPIED BANDWIDTH MEASUREMENT

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



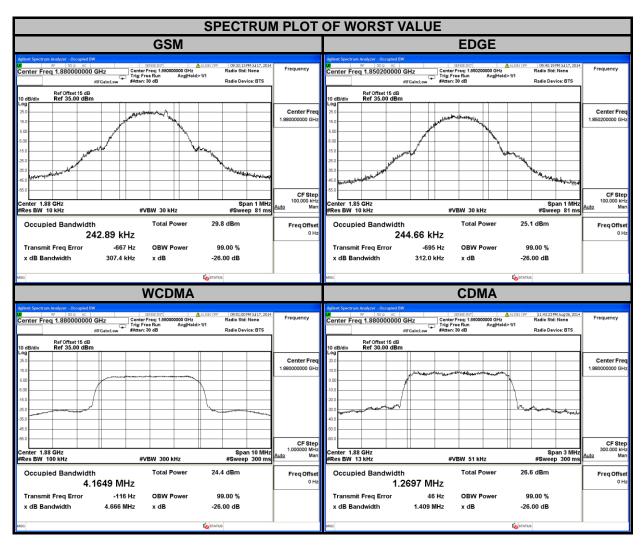


4.3.3 TEST RESULTS

CHANNEL	99% OCCUPIED BANDWIDTH (kHz) CHANNEL FREQUENCY		FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		
		GSM	EDGE			WCDMA
512	1850.2	242.46	244.66	9262	1852.4	4.1630
661	1880.0	242.89	242.91	9400	1880.0	4.1649
810	1909.8	241.83	243.26	9538	1907.6	4.1638
CHANNEL	FREQUENCY	26dB BAND	WIDTH (kHz)	CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)
		GSM	EDGE			WCDMA
512	1850.2	314.00	312.00	9262	1852.4	4.667
661	1880.0	307.40	316.10	9400	1880.0	4.666
810	1909.8	312.50	315.80	9538	1907.6	4.669

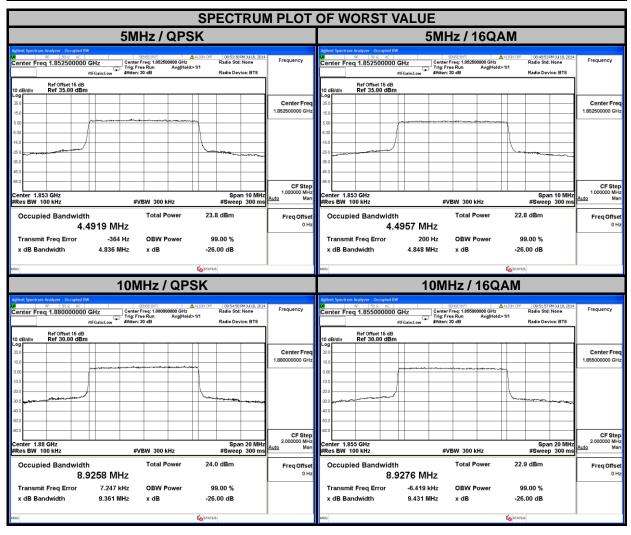
CDMA							
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	26dB BANDWIDTH (MHz)				
25	1851.25	1.2674	1.409				
600	1880.00	1.2697	1.409				
1175	1908.75	1.2680	1.405				





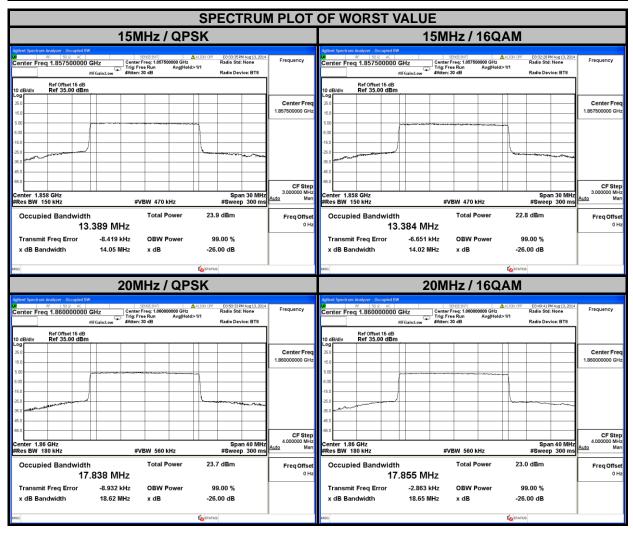


	LTE BAND 2									
CH	IANNEL BAND	WIDTH: 5MH	z	СН	ANNEL BANDW	IDTH: 10MH	z			
CHANNEL	99% OCCUPIED BANDWIDTH (MHz) CHANI	CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)						
		QPSK	16QAM			QPSK	16QAM			
18625	1852.5	4.4919	4.4957	18650	1855.0	8.9234	8.9276			
18900	1880.0	4.4916	4.4930	18900	1880.0	8.9258	8.9217			
19175	1907.5	4.4906	4.4942	19150	1905.0	8.9215	8.9265			
CHANNEL	FREQUENCY	26dB BAI (Mi	NDWIDTH Hz)	CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)				
		QPSK	16QAM			QPSK	16QAM			
18625	1852.5	4.836	4.848	18650	1855.0	9.380	9.431			
18900	1880.0	4.821	4.838	18900	1880.0	9.361	9.414			
19175	1907.5	4.844	4.853	19150	1905.0	9.439	9.417			





	LTE BAND 2									
СН	ANNEL BANDV	VIDTH: 15MH	lz	СН	ANNEL BANDW	IDTH: 20MH	z			
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz) CHANNEL FREQUENCY	PANDWIDTH (MH-)		99% OC BANDWIE	CUPIED OTH (MHz)				
		QPSK	16QAM			QPSK	16QAM			
18675	1857.5	13.389	13.384	18700	1860.0	17.838	17.855			
18900	1880.0	13.378	13.382	18900	1880.0	17.817	17.819			
19125	1902.5	13.389	13.384	19100	1900.0	17.832	17.824			
CHANNEL	FREQUENCY		NDWIDTH Hz)	CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)				
		QPSK	16QAM			QPSK	16QAM			
18675	1857.5	14.05	14.02	18700	1860.0	18.62	18.65			
18900	1880.0	13.99	14.05	18900	1880.0	18.48	18.52			
19125	1902.5	14.05	14.06	19100	1900.0	18.60	18.54			



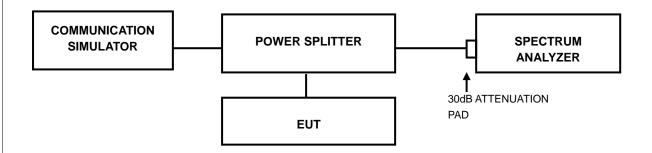


4.4 PEAK TO AVERAGE RATIO

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

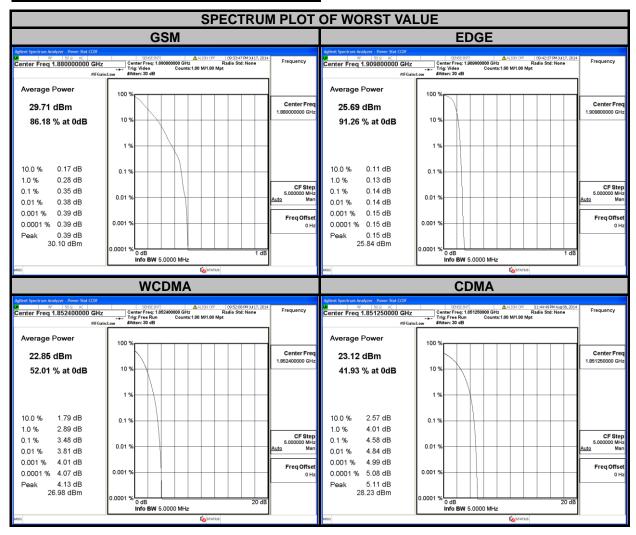
- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 3. Record the maximum PAPR level associated with a probability of 0.1%.



4.4.4 TEST RESULTS

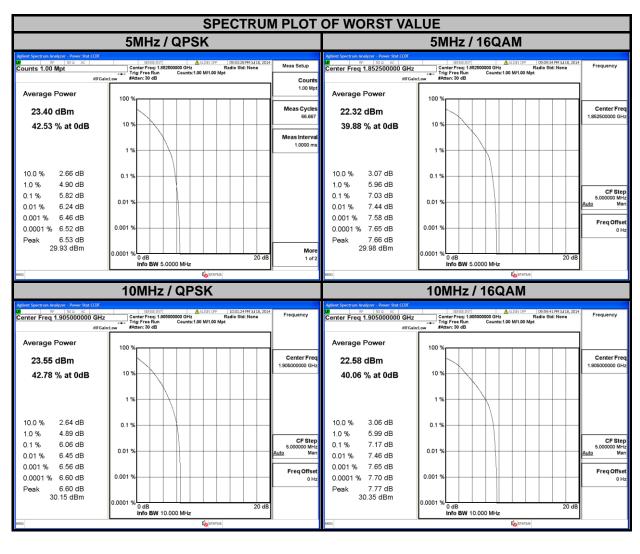
CHANNEL	FREQUENCY	PEAK TO RATIO	AVERAGE (dB)	CHANNEL	FREQUENCY	PEAK TO AVERAGE RATIO (dB)
	(MHz)	GSM	EDGE		(MHz)	WCDMA
512	1850.2	0.34	0.12	9262	1852.4	3.48
661	1880.0	0.35	0.12	9400	1880.0	3.46
810	1909.8	0.24	0.14	9538	1907.6	3.44

CHANNEL	FREQUENCY	PEAK TO AVERAGE RATIO (dB)
	(MHz)	CDMA
25	1851.25	4.58
600	1880.00	4.34
1175	1908.75	4.52



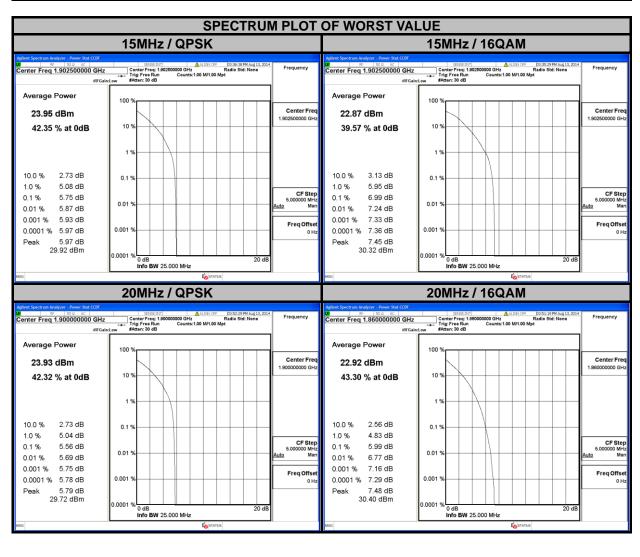


	LTE BAND 2									
	CHANNEL BAN	DWIDTH: 5MI	·lz	C	HANNEL BANI	OWIDTH: 10M	Hz			
CHANNEL	FREQUENCY		PEAK TO AVERAGE RATIO (dB)		FREQUENCY	PEAK TO AVERAGE RATIO (dB)				
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM			
18625	1852.5	5.82	7.03	18650	1855.0	5.97	7.07			
18900	1880.0	5.62	6.68	18900	1880.0	5.69	6.85			
19175	1907.5	5.77	7.00	19150	1905.0	6.06	7.17			





	LTE BAND 2									
	CHANNEL BANI	DWIDTH: 15M	Hz	C	HANNEL BANI	OWIDTH: 20M	Hz			
CHANNEL	FREQUENCY	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY	PEAK TO AVERAGE RATIO (dB)				
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM			
18675	1857.5	5.47	6.72	18700	1860.0	5.46	5.99			
18900	1880.0	5.30	6.57	18900	1880.0	5.50	5.79			
19125	1902.5	5.75	6.99	19100	1900.0	5.56	5.96			



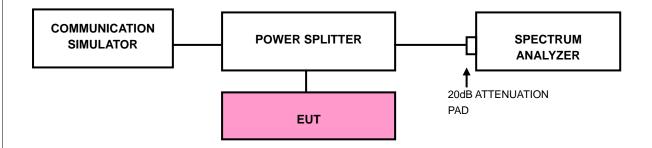


4.5 BAND EDGE MEASUREMENT

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

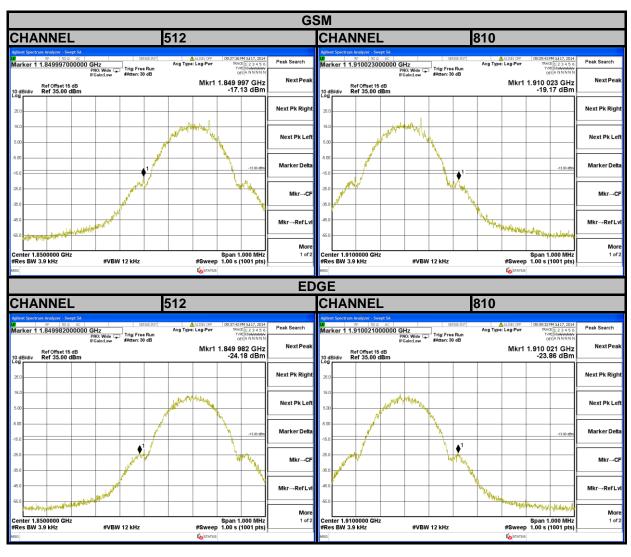


4.5.3 TEST PROCEDURES

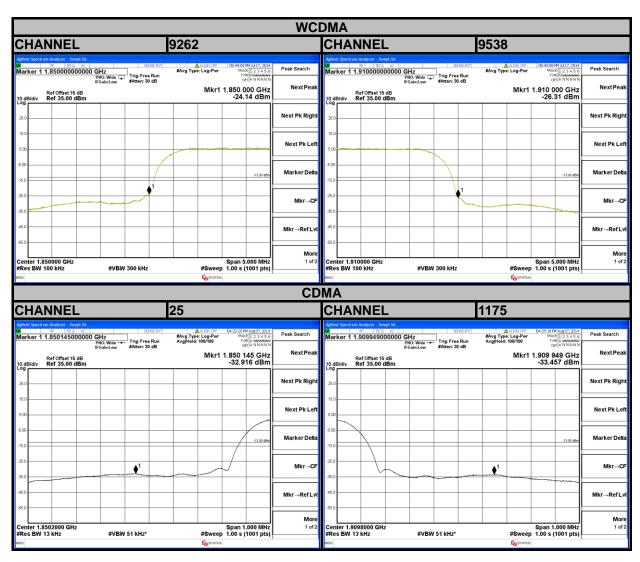
- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/EDGE).
- c. The center frequency of spectrum is the band edge frequency and span is 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA/LTE).
- d. Record the max trace plot into the test report.



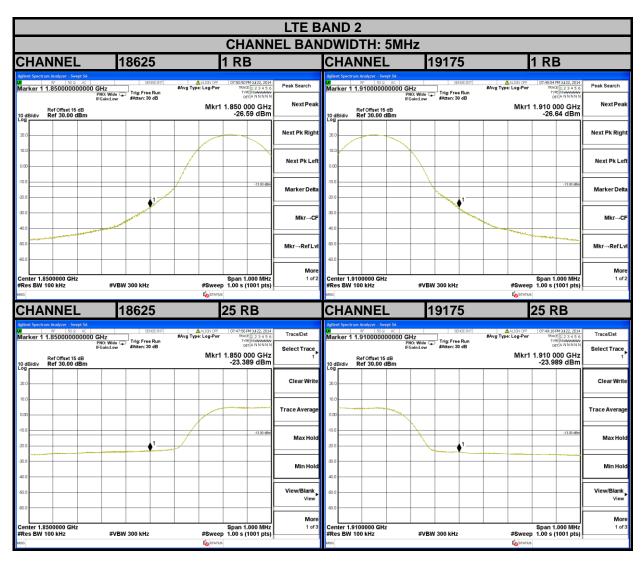
4.5.4 TEST RESULTS



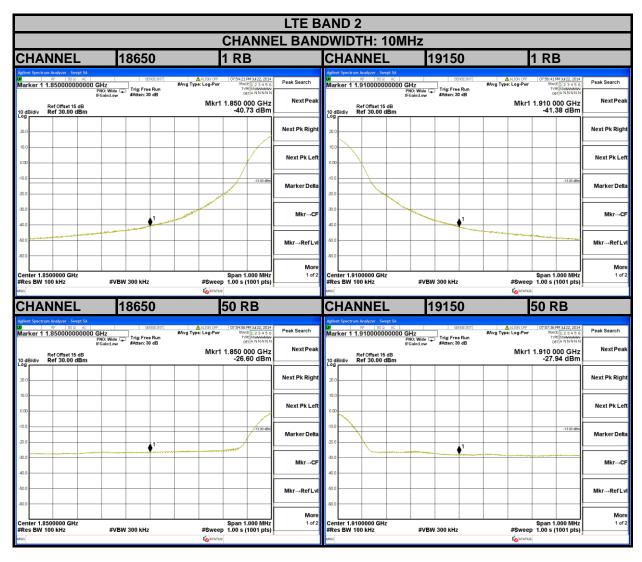




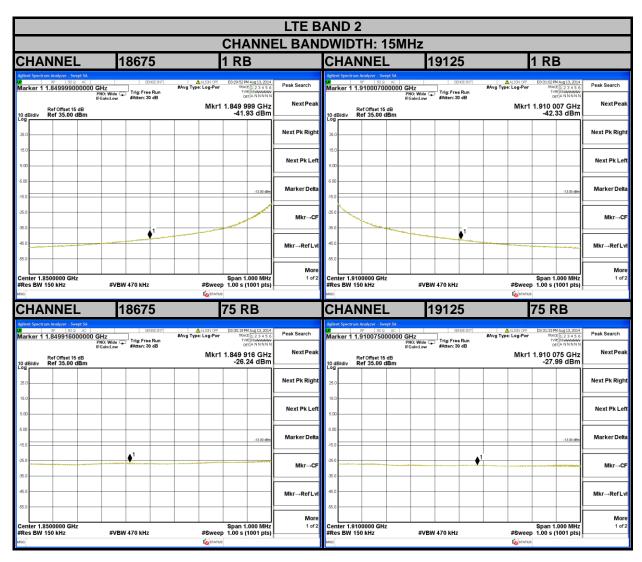




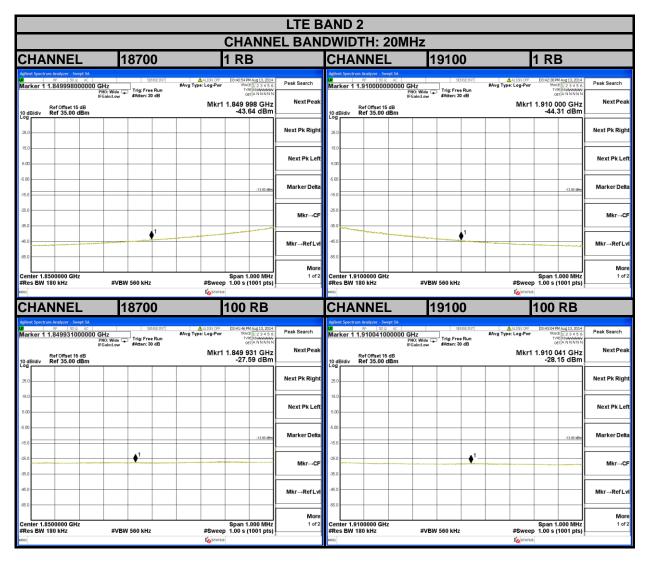














4.6 CONDUCTED SPURIOUS EMISSIONS

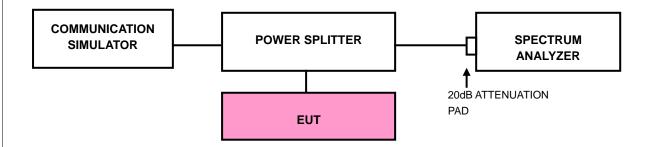
4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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

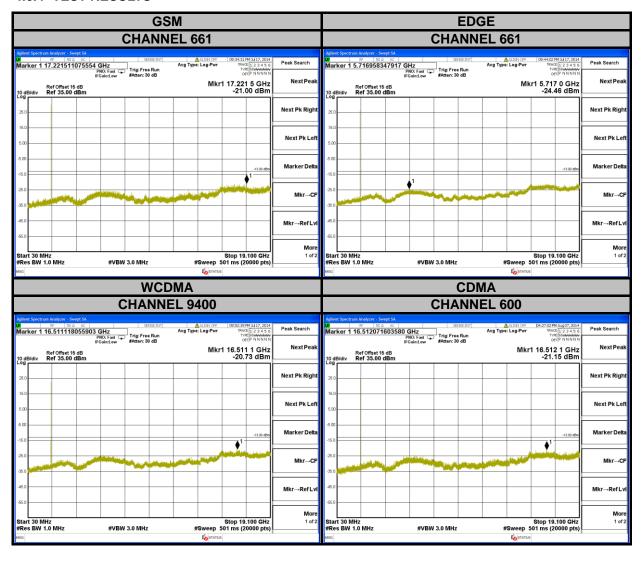
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 30 MHz to 19.1GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission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

4.6.3 TEST SETUP

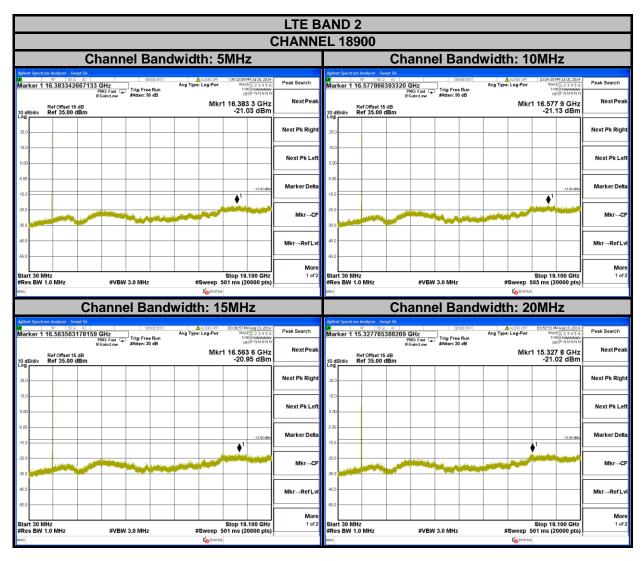




4.6.4 TEST RESULTS









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.

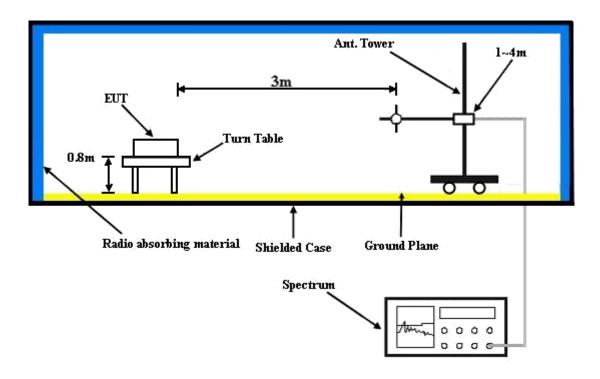
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

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).

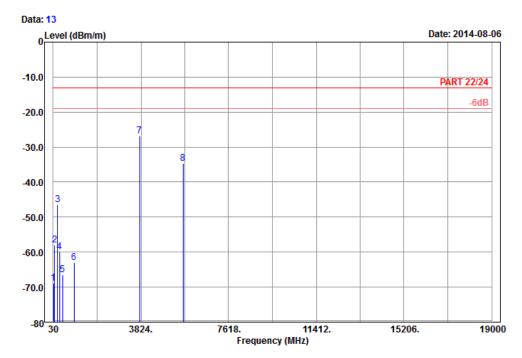


4.7.5 TEST RESULTS

GSM:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

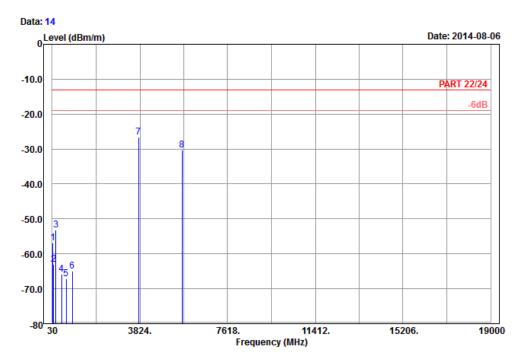
Condition: PART 22/24 3m Horizontal Remark : PCS 1900_Link_CH661

Tested by: Will Chen

				Read	Limit	0ver		
		Freq	Level	Level	Line	Limit	Factor	Remark
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1		44.04	-68.83	-57.25	-13.00	-55.83	-11.58	Peak
2		92.37	-57.91	-47.35	-13.00	-44.91	-10.56	Peak
3		226.83	-46.36	-40.54	-13.00	-33.36	-5.82	Peak
4		304.90	-59.98	-54.08	-13.00	-46.98	-5.90	Peak
5		429.50	-66.42	-63.02	-13.00	-53.42	-3.40	Peak
6		925.80	-62.98	-67.04	-13.00	-49.98	4.06	Peak
7	pp	3760.00	-26.82	-42.96	-13.00	-13.82	16.14	Peak
8		5640.00	-34.65	-55.12	-13.00	-21.65	20.47	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : PCS 1900_Link_CH661

Tested by: Will Chen

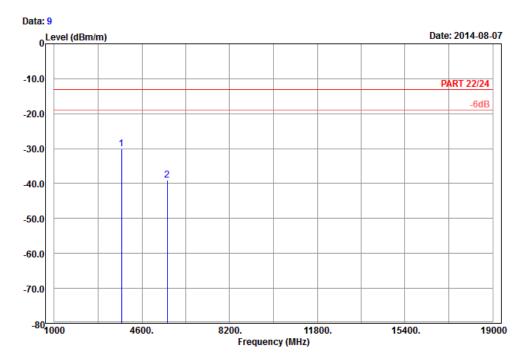
	Freq	Level		Limit Line		Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	48.63	-57.00	-43.57	-13.00	-44.00	-13.43	Peak
2	91.56	-63.03	-52.41	-13.00	-50.03	-10.62	Peak
3	182.55	-53.26	-47.65	-13.00	-40.26	-5.61	Peak
4	427.40	-65.80	-62.44	-13.00	-52.80	-3.36	Peak
5	626.90	-67.21	-67.34	-13.00	-54.21	0.13	Peak
6	900.60	-64.97	-67.90	-13.00	-51.97	2.93	Peak
7 pp	3760.00	-26.54	-42.68	-13.00	-13.54	16.14	Peak
8	5640.00	-30.21	-50.68	-13.00	-17.21	20.47	Peak



EDGE:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal Remark : EDGE 1900_Link_CH661

Tested by: Will Chen

Plane : Z

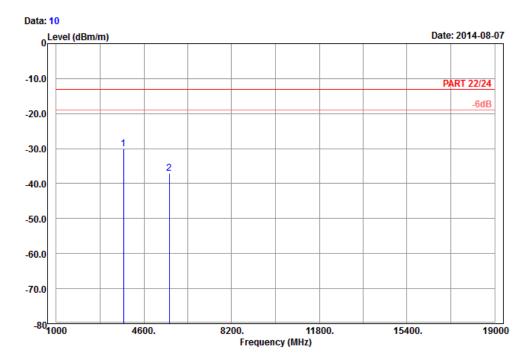
Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm/m dBm dBm/m dB dB/m

1 pp 3760.00 -30.08 -46.22 -13.00 -17.08 16.14 Peak 2 5640.00 -39.02 -59.49 -13.00 -26.02 20.47 Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : EDGE 1900_Link_CH661

Tested by: Will Chen

Plane : Z

Read Limit Over
Freq Level Level Limit Factor Remark

MHz dBm/m dBm dBm/m dB dB/m

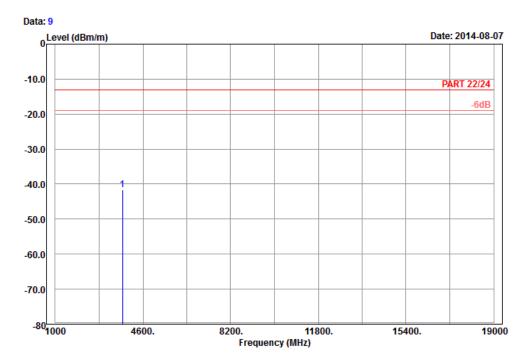
1 pp 3760.00 -29.98 -46.12 -13.00 -16.98 16.14 Peak 2 5640.00 -37.14 -57.61 -13.00 -24.14 20.47 Peak



WCDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal Remark : Band II_Link_CH9400

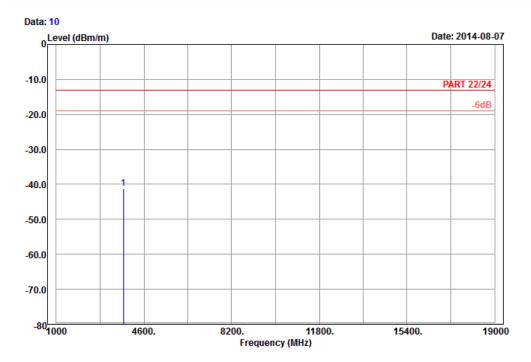
Tested by: Will Chen

Plane : Z

1 pp 3760.00 -41.66 -57.80 -13.00 -28.66 16.14 Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : Band II_Link_CH9400

Tested by: Will Chen

Plane : Z

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm/m dBm dBm/m dB dB/m

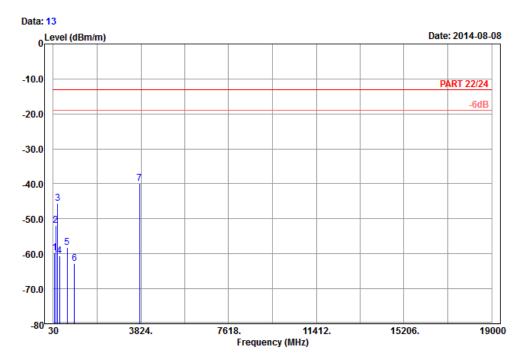
1 pp 3760.00 -41.30 -57.44 -13.00 -28.30 16.14 Peak



CDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

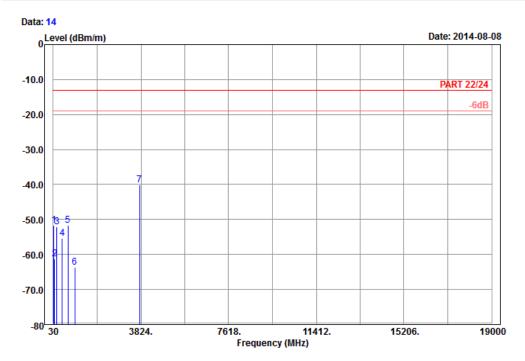
Condition: PART 22/24 3m Horizontal

Remark : BC1_Link_CH600 Tested by: Harry Hsueh

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_							
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	91.83	-59.73	-49.17	-13.00	-46.73	-10.56	Peak
2	143.13	-51.99	-44.20	-13.00	-38.99	-7.79	Peak
3	225.75	-45.51	-39.68	-13.00	-32.51	-5.83	Peak
4	307.00	-60.56	-54.69	-13.00	-47.56	-5.87	Peak
5	639.50	-58.15	-58.14	-13.00	-45.15	-0.01	Peak
6	950.30	-62.69	-67.80	-13.00	-49.69	5.11	Peak
7 pp	3760.00	-39.98	-56.12	-13.00	-26.98	16.14	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical

Remark : BC1_Link_CH600 Tested by: Harry Hsueh

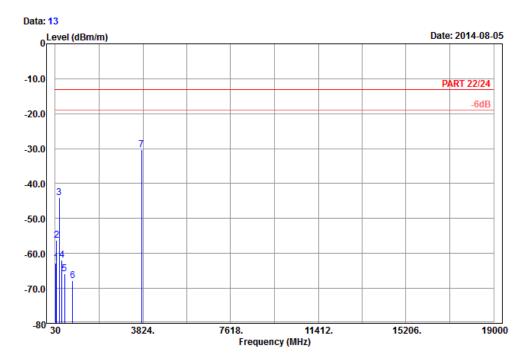
	Freq	Level		Limit Line		Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	47.55	-51.64	-38.53	-13.00	-38.64	-13.11	Peak
2	91.56	-61.26	-50.64	-13.00	-48.26	-10.62	Peak
3	187.95	-52.18	-46.48	-13.00	-39.18	-5.70	Peak
4	420.40	-55.42	-52.23	-13.00	-42.42	-3.19	Peak
5	670.30	-51.71	-51.48	-13.00	-38.71	-0.23	Peak
6	959.40	-63.62	-68.76	-13.00	-50.62	5.14	Peak
7 pp	3760.00	-40.15	-56.29	-13.00	-27.15	16.14	Peak



LTE BAND 2 CHANNEL BANDWIDTH: 20MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal

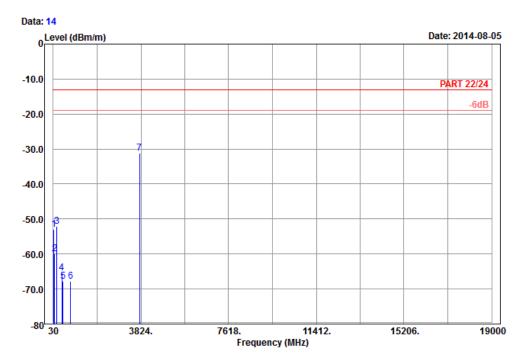
Remark : LTE_Band 2_QPSK(1,50)_20M_CH18900

Tested by: Harry Hsueh

	Freq	Level	Read Level	Limit Line		Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	48.09	-62.77	-49.34	-13.00	-49.77	-13.43	Peak
2	95.07	-56.27	-45.87	-13.00	-43.27	-10.40	Peak
3	196.32	-44.09	-38.09	-13.00	-31.09	-6.00	Peak
4	326.60	-61.94	-56.29	-13.00	-48.94	-5.65	Peak
5	433.00	-65.92	-62.46	-13.00	-52.92	-3.46	Peak
6	783.00	-67.90	-68.76	-13.00	-54.90	0.86	Peak
7 pp	3760.00	-30.38	-46.52	-13.00	-17.38	16.14	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical

Remark : LTE_Band 2_QPSK(1,50)_20M_CH18900

Tested by: Harry Hsueh

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_							
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	49.44	-52.89	-39.15	-13.00	-39.89	-13.74	Peak
2	93.18	-59.93	-49.42	-13.00	-46.93	-10.51	Peak
3	185.25	-52.16	-46.51	-13.00	-39.16	-5.65	Peak
4	398.70	-65.40	-62.61	-13.00	-52.40	-2.79	Peak
5	446.30	-67.80	-64.04	-13.00	-54.80	-3.76	Peak
6	786.50	-67.82	-68.94	-13.00	-54.82	1.12	Peak
7 pp	3760.00	-31.12	-47.26	-13.00	-18.12	16.14	Peak



PHOTOGRAPHS OF THE TEST CONFIGURATION Please refer to the attached file (Test Setup Photo).

Report No.: RF140707C19-7 58 of 60 Report Format Version 5.0.0



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: Hsin Chu EMC/RF Lab:

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26051924 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3270892

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.
END

Report No.: RF140707C19-7 60 of 60 Report Format Version 5.0.0