

# FCC TEST REPORT (PART 22)

**REPORT NO.:** RF141117C22-4

**MODEL NO.:** TC75AH

FCC ID: H9PTC75AH

**RECEIVED:** Nov. 17, 2014

**TESTED:** Nov. 27, 2014 ~ Jan. 26, 2015

**ISSUED:** Feb. 16, 2015

APPLICANT: Symbol Technologies, Inc.

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

**USA** 

**ISSUED BY:** Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47-2, 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 Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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





This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

Report No.: RF141117C22-4 1 of 84 Report Format Version 5.0.0



# **TABLE OF CONTENTS**

ΚĿ		ASE CONTROL RECORD	_
1	CEF	RTIFICATION	4
2		MMARY OF TEST RESULTS	
		MEASUREMENT UNCERTAINTY	
		TEST SITE AND INSTRUMENTS	
3		NERAL INFORMATION	
		GENERAL DESCRIPTION OF EUT	
		CONFIGURATION OF SYSTEM UNDER TEST	
		DESCRIPTION OF SUPPORT UNITS	
		TEST ITEM AND TEST CONFIGURATION	
		EUT OPERATING CONDITIONS	
		GENERAL DESCRIPTION OF APPLIED STANDARDS	
4		ST TYPES AND RESULTS	
	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	
		4.2.2 TEST PROCEDURE	
		4.2.3 TEST SETUP	
		4.2.4 TEST RESULTS	
	4.3	OCCUPIED BANDWIDTH MEASUREMENT	
		4.3.1 TEST PROCEDURES	
		4.3.2 TEST SETUP	
		4.3.3 TEST RESULTS	
	4.4	BAND EDGE MEASUREMENT	
		4.4.1 LIMITS OF BAND EDGE MEASUREMENT	
		4.4.2 TEST SETUP	
		4.4.3 TEST PROCEDURES	29
		4.4.4 TEST RESULTS	
	4.5	CONDUCTED SPURIOUS EMISSIONS	
		4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	
		4.5.2 TEST PROCEDURE	
		4.5.3 TEST SETUP	35
		4.5.4 TEST RESULTS	36
	4.6	RADIATED EMISSION MEASUREMENT	38
		4.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT	38
		4.6.2 TEST PROCEDURES	38
		4.6.3 DEVIATION FROM TEST STANDARD	38
		4.6.4 TEST SETUP	39
		4.6.5 TEST RESULTS	
		OTOGRAPHS OF THE TEST CONFIGURATION	
6	INF	ORMATION ON THE TESTING LABORATORIES	83
7		PENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT E	
	THE	ELAB	84

2 of 84



# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF141117C22-4	Original release	Feb. 16, 2015

Report No.: RF141117C22-4 3 of 84 Report Format Version 5.0.0



#### 1 CERTIFICATION

**PRODUCT:** Touch Computer

MODEL: TC75AH

BRAND: Symbol

**APPLICANT:** Symbol Technologies, Inc.

**TESTED:** Nov. 27, 2014 ~ Jan. 26, 2015

TEST SAMPLE: ENGINEERING SAMPLE STANDARDS: FCC PART 22, Subpart H

The above equipment (model: TC75AH) 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: Feb. 16, 2015

Gina Liu / Specialist

APPROVED BY : , DATE : Feb. 16, 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 22 & Part 2						
STANDARD SECTION	TEST TYPE	RESULT	REMARK				
2.1046 22.913 (a)	Effective Radiated Power	PASS	Meet the requirement of limit.				
2.1055 22.355	Frequency Stability	PASS	Meet the requirement of limit.				
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.				
22.917	Band Edge Measurements	PASS	Meet the requirement of limit.				
2.1051 22.917	Conducted Spurious Emissions PASS		Meet the requirement of limit.				
2.1053 22.917	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -21.04dB at 2496.30MHz.				

#### 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 ROHDE & SCHWARZ	ESCI	100744	Apr. 15, 2014	Apr. 14, 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	Aug. 27, 2014	Aug. 26, 2015
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, 2014	Oct. 17, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2014	Oct. 17, 2015
RF signal cable Worken	RG-213	NA	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
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. 11, 2014	Sep. 10, 2016
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 calibration interval of the Communications Tester-Wireless and Radio Communication Analyzer are 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 3. The test was performed in HwaYa Chamber 10.
- 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 5. The FCC Site Registration No. is 690701.
- 6. The IC Site Registration No. is IC 7450F-10.



DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 15, 2014	Apr. 14, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 10, 2014	Dec. 09, 2015
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	Aug. 27, 2014	Aug. 26, 2015
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. 25, 2014	Dec. 24, 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 signal cable Worken	RG-213	NA	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
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. 11, 2014	Sep. 10, 2016
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 calibration interval of the Communications Tester-Wireless and Radio Communication Analyzer are 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 3. The test was performed in HwaYa Chamber 10.
- 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 5. The FCC Site Registration No. is 690701.
- 6. The IC Site Registration No. is IC 7450F-10.



# **3 GENERAL INFORMATION**

# 3.1 GENERAL DESCRIPTION OF EUT

EUT	Touch Computer		
MODEL NO.	TC75AH		
POWER SUPPLY	5.4Vdc (adapter or host equipment) 3.7Vdc (Li-ion battery)		
	GSM	GMSK	
MODULATION TYPE	EDGE	GMSK, 8PSK	
MODULATION TIFE	WCDMA	BPSK	
	LTE	QPSK, 16QAM	
	GSM/EDGE	824.2MHz ~ 848.8MHz	
	WCDMA	826.4MHz ~ 846.6MHz	
FREQUENCY RANGE	LTE 5 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz	
TREGOLINOT RANGE	LTE 5 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz	
	LTE 5 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz	
	LTE 5 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz	
	GSM	939.72mW	
	EDGE	779.83mW	
	WCDMA	116.68mW	
MAX. ERP POWER	LTE 5 (Channel Bandwidth: 1.4MHz)	101.86mW	
	LTE 5 (Channel Bandwidth: 3MHz)	107.65mW	
	LTE 5 (Channel Bandwidth: 5MHz)	99.08mW	
	LTE 5 (Channel Bandwidth: 10MHz)	109.40mW	
	GSM	246KGXW	
	EDGE	247KG7W	
	WCDMA	4M18F9W	
EMISSION DESIGNATOR	LTE 5 (Channel Bandwidth: 1.4MHz)	1M09G7D	
	LTE 5 (Channel Bandwidth: 3MHz)	2M69G7D	
	LTE 5 (Channel Bandwidth: 5MHz)	4M49G7D	
	LTE 5 (Channel Bandwidth: 10MHz)	8M96W7D	
ANTENNA TYPE	Loop Antenna		
I/O PORTS	Refer to users' manual		
DATA CABLE	Refer to NOTE as below		
ACCESSORY DEVICES	Refer to NOTE as below		
HW VERSION	DV3		
SW VERSION	Android version : 4.4.3 Build number : 91-23257-K-07-04-00-D3		



#### NOTE:

1. The EUT contains following accessory devices.

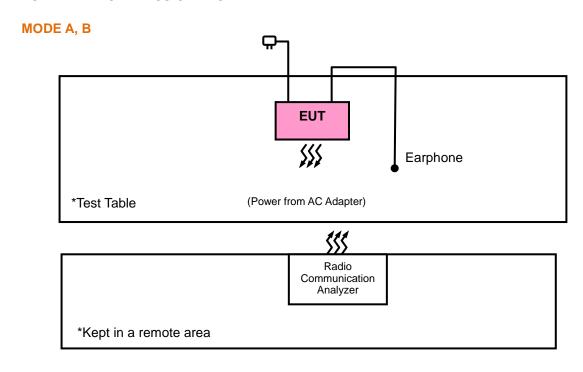
ITEM	BRAND	MODEL	SPECIFICATION
Adapter	Motorola	86-14000-249R	I/P: 100-240Vac, 50/60Hz, 0.6A O/P: 5.4Vdc, 3A
Battery	Symbol	82-171249-02	3.7Vdc, 4500mAh
Charging only Cable Cup	Symbol	CHG-TC7X-CBL1-01	0.2m non-shielded cable w/o core
Earphone 1	Symbol / Zebra	HDST-25MM-PTVP-01	1.3m non-shielded cable w/o core
Earphone 2	Symbol / Zebra	RCH51	1.05m shielded cable w/o core
TC7X SNAP ON AUDIO ADAPTER	Symbol / Zebra	ADP-TC7X-AUDIO1-01	
Snap On USB Cable	Symbol / Zebra	CBL-TC7X-USB1-01	1.8m non-shielded cable with core

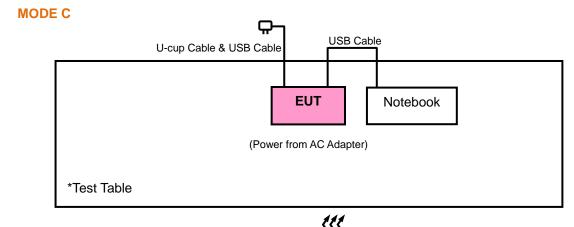
2. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

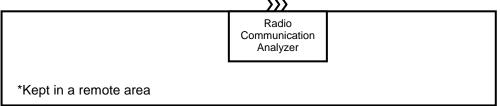


#### 3.2 CONFIGURATION OF SYSTEM UNDER TEST

#### FOR RADIATION EMISSION TEST

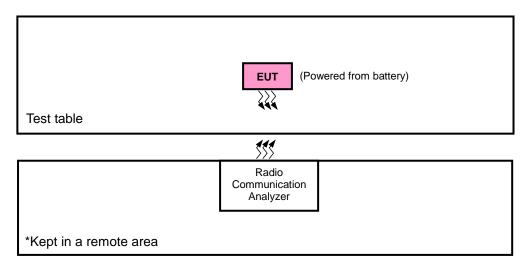








#### FOR E.R.P. TEST



#### 3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. 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	Radio Communication Analyzer	Anritsu	MT8820C	6201240431	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

#### NOTE:

- 1. All power cords of the above support units are non shielded (1.8m).
- 2. Item 1 as a communication partner to transfer data.



#### 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 when positioned on X-plane for ERP and Y-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
А	EUT + Earphone 1
В	EUT + Earphone 2
С	EUT + U-cup cable + USB cable

#### **GSM MODE**

COM MODE	SOM MODE					
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE		
-	ERP	128 to 251	128, 189, 251	GSM, EDGE		
-	FREQUENCY STABILITY	128 to 251	189	GSM, EDGE		
-	OCCUPIED BANDWIDTH	128 to 251	128, 189, 251	GSM, EDGE		
-	BAND EDGE	128 to 251	128, 251	GSM, EDGE		
-	CONDUCTED EMISSION	128 to 251	189	GSM, EDGE		
Α	RADIATED EMISSION	128 to 251	189	GSM, EDGE		
B, C	RADIATED EMISSION	128 to 251	189	GSM		

#### **WCDMA MODE**

EUT		AVAII ABI E			
CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE	
-	ERP	4132 to 4233	4132, 4182, 4233	WCDMA	
-	FREQUENCY STABILITY	4132 to 4233	4182	WCDMA	
-	OCCUPIED BANDWIDTH	4132 to 4233	4132, 4182, 4233	WCDMA	
-	BAND EDGE	4132 to 4233	4132, 4233	WCDMA	
-	CONDUCTED EMISSION	4132 to 4233	4182	WCDMA	
А	RADIATED EMISSION	4132 to 4233	4182	WCDMA	



#### LTE BAND 5 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
		20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK, 16QAM	1 RB / 2 RB Offset
	EDD	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM	1 RB / 7 RB Offset
-	ERP	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM	1 RB / 12 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM	1 RB / 24 RB Offset
		20407 to 20643	20525	1.4MHz	QPSK	1 RB / 2 RB Offset
	FREQUENCY	20415 to 20635	20525	3MHz	QPSK	1 RB / 7 RB Offset
-	STABILITY	20425 to 20625	20525	5MHz	QPSK	1 RB / 12 RB Offset
		20450 to 20600	20525	10MHz	QPSK	1 RB / 24 RB Offset
		20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	OCCUPIED		20415, 20525, 20635	3MHz	QPSK, 16QAM	15 RB / 0 RB Offset
-	BANDWIDTH	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
						1 RB / 0 RB Offset
		20407 to 20643	20407	1.4MHz	QPSK	6 RB / 0 RB Offset
				4 45411		1 RB / 5 RB Offset
			20643	1.4MHz	QPSK	6 RB / 0 RB Offset
		20415 to 20635	20415			1 RB / 0 RB Offset
				3MHz	QPSK	15 RB / 0 RB Offset
						1 RB / 14 RB Offset
			20635	3MHz	QPSK	15 RB / 0 RB Offset
-	BAND EDGE					1 RB / 0 RB Offset
			20425	5MHz	QPSK	25 RB / 0 RB Offset
		20425 to 20626				1 RB / 24 RB Offset
			20600	5MHz	QPSK	25 RB / 0 RB Offset
						1 RB / 0 RB Offset
			20450	10MHz	QPSK	
		20450 to 20600				50 RB / 0 RB Offset
			20600	10MHz	QPSK	1 RB / 49 RB Offset
					0.0017	50 RB / 0 RB Offset
	CONDUCTED	20407 to 20643	20525 20525	1.4MHz 3MHz	QPSK QPSK	1 RB / 2 RB Offset 1 RB / 7 RB Offset
-	CONDUCTED EMISSION	20415 to 20635 20425 to 20625	20525	5MHz	QPSK	1 RB / 12 RB Offset
		20423 to 20023 20450 to 20600	20525	10MHz	QPSK	1 RB / 24 RB Offset
						1 RB / 0 RB Offset
		20407 to 20643	20525	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
		20415 to 20635	20525	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
Α	RADIATED			J 12		15 RB / 0 RB Offset
	EMISSION	20425 to 20625	20525	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset 1 RB / 0 RB Offset
		20450 to 20600	20525	10MHz	QPSK, 16QAM	50 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	3.7Vdc	Anson Lin
FREQUENCY STABILITY	26deg. C, 58%RH	3.7Vdc	Luke Chen
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.7Vdc	Luke Chen
BAND EDGE	26deg. C, 58%RH	3.7Vdc	Luke Chen
CONDUCTED EMISSION	26deg. C, 58%RH	3.7Vdc	Luke Chen
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Anson Lin, Gavin Wu

#### 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 22 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 / Portable station are limited to 7 watts e.r.p.

#### **4.1.2 TEST PROCEDURES**

#### **EIRP / ERP 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 WCDMA & 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. 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.

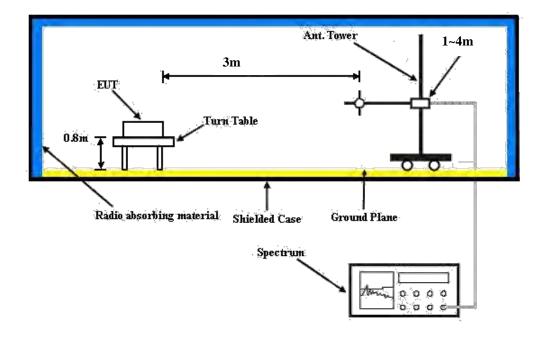
#### **CONDUCTED POWER MEASUREMENT:**

The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA & 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		GSM850					
Channel	128	189	251				
Frequency (MHz)	824.2	836.4	848.8				
GSM (1 Uplink)	32.95	32.99	33.01				
GPRS 8 (GMSK, 1 slot)	32.87	32.91	32.95				
GPRS 10 (GMSK, 2 slot)	32.60	32.64	32.65				
EDGE 8 (GMSK, 1 Uplink)	26.71	26.75	26.74				
EDGE 10 (GMSK, 2 Uplink)	26.58	26.63	26.62				

Band		WCDMA V	
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.98	23.71	23.84
HSDPA Subtest-1	22.58	22.20	22.52
HSDPA Subtest-2	22.67	22.23	22.59
HSDPA Subtest-3	22.16	21.73	22.10
HSDPA Subtest-4	22.15	21.36	22.09
HSUPA Subtest-1	22.78	21.68	21.89
HSUPA Subtest-2	21.52	20.52	20.76
HSUPA Subtest-3	21.32	21.00	21.17
HSUPA Subtest-4	21.58	20.51	20.66
HSUPA Subtest-5	22.80	22.30	22.50



				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 20407	Mid CH 20525	High CH 20643	3GPP MPR	Low CH 20407	Mid CH 20525	High CH 20643	3GPP MPR
BVV	Size	Oliset	824.7 MHz	836.5 MHz	848.3 MHz	(dB)	824.7 MHz	836.5 MHz	848.3 MHz	(dB)
	1	0	23.67	23.33	23.63	0	22.66	22.32	22.62	1
	1	2	23.64	23.23	23.34	0	22.63	22.22	22.33	1
	1	5	23.59	23.55	23.30	0	22.58	22.54	22.29	1
5 / 1.4M	3	0	23.05	22.73	22.95	0	22.04	21.72	21.94	1
	3	1	23.01	22.63	22.94	0	22.00	21.62	21.93	1
	3	3	23.00	22.68	22.79	0	21.99	21.67	21.78	1
	6	0	22.40	22.08	22.34	1	21.39	21.07	21.33	2

				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)	Low CH 20415 825.5 MHz	Mid CH 20525 836.5 MHz	High CH 20635 847.5 MHz	3GPP MPR (dB)
	1	0	23.74	23.40	23.70	0	22.73	22.39	22.69	1
	<u>'</u>									<u>'</u>
	1	7	23.71	23.30	23.41	0	22.70	22.29	22.40	1
	1	14	23.66	23.62	23.37	0	22.65	22.61	22.36	1
5 / 3M	8	0	22.62	22.30	22.52	1	21.61	21.29	21.51	2
	8	3	22.58	22.20	22.51	1	21.57	21.19	21.50	2
	8	7	22.57	22.25	22.36	1	21.56	21.24	21.35	2
	15	0	22.47	22.15	22.41	1	21.46	21.14	21.40	2

				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 20425	Mid CH 20525	High CH 20625	3GPP MPR	Low CH 20425	Mid CH 20525	High CH 20625	3GPP MPR
BVV	Size	Oliset	826.5 MHz	836.5 MHz	846.5 MHz	(dB)	826.5 MHz	836.5 MHz	846.5 MHz	(dB)
	1	0	23.81	23.47	23.77	0	22.80	22.46	22.76	1
	1	12	23.78	23.37	23.48	0	22.77	22.36	22.47	1
	1	24	23.73	23.69	23.44	0	22.72	22.68	22.43	1
5 / 5M	12	0	22.69	22.37	22.59	1	21.68	21.36	21.58	2
	12	6	22.65	22.27	22.58	1	21.64	21.26	21.57	2
	12	13	22.64	22.32	22.43	1	21.63	21.31	21.42	2
	25	0	22.54	22.22	22.48	1	21.53	21.21	21.47	2

	RB Size	RB Offset		QPSK				16QAM		
Band / BW			Low CH 20450	Mid CH 20525	High CH 20600	3GPP MPR	Low CH 20450	Mid CH 20525	High CH 20600	3GPP MPR
			829.0 MHz	836.5 MHz	844.0 MHz	(dB)	829.0 MHz	836.5 MHz	844.0 MHz	(dB)
	1	0	23.86	23.52	23.82	0	22.85	22.51	22.81	1
	1	24	23.83	23.42	23.53	0	22.82	22.41	22.52	1
	1	49	23.78	23.74	23.49	0	22.77	22.73	22.48	1
5 / 10M	25	0	22.74	22.42	22.64	1	21.73	21.41	21.63	2
	25	12	22.70	22.32	22.63	1	21.69	21.31	21.62	2
	25	25	22.69	22.37	22.48	1	21.68	21.36	21.47	2
	50	0	22.59	22.27	22.53	1	21.58	21.26	21.52	2



#### **ERP POWER (dBm)**

	<b>\</b>	,		GSM			
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	128	824.2	-0.74	32.62	29.73	939.72	Н
	189	836.4	-0.95	32.52	29.42	874.98	Н
x	251	848.8	-1.18	32.65	29.32	855.07	Н
^	128	824.2	-10.93	32.76	19.68	92.90	V
	189	836.4	-10.38	32.39	19.86	96.83	V
	251	848.8	-10.60	32.54	19.79	95.28	V

	EDGE												
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)						
	128	824.2	-2.26	32.62	28.21	662.22	Н						
	189	836.4	-2.02	32.52	28.35	683.91	Н						
x	251	848.8	-1.58	32.65	28.92	779.83	Н						
^	128	824.2	-11.33	32.76	19.28	84.72	V						
	189	836.4	-11.06	32.39	19.18	82.79	V						
	251	848.8	-11.02	32.54	19.37	86.50	V						

				WCDMA			
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	4132	826.4	-9.80	32.62	20.67	116.68	Н
	4182	836.4	-9.94	32.52	20.43	110.41	Н
l x	4233	846.6	-9.95	32.65	20.55	113.50	Н
^	4132	826.4	-19.49	32.76	11.12	12.94	V
	4182	836.4	-19.27	32.39	10.97	12.50	V
	4233	846.6	-19.23	32.54	11.16	13.06	V



	LTE Band 5											
	Channel Bandwidth: 1.4MHz / QPSK											
Plane	ne Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polariza											
	20407	824.7	-10.99	32.62	19.48	88.72	Н					
	20525	836.5	-11.35	32.52	19.02	79.80	Н					
x	20643	848.3	-10.42	32.65	20.08	101.86	Н					
^	20407	824.7	-20.63	32.76	9.98	9.95	V					
	20525	836.5	-20.16	32.39	10.08	10.19	V					
	20643	848.3	-19.76	32.54	10.63	11.56	V					

	LTE Band 5											
	Channel Bandwidth: 1.4MHz / 16QAM											
Plane	Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polarizat (H/V)											
	20407	824.7	-11.81	32.62	18.66	73.45	Н					
	20525	836.5	-11.48	32.52	18.89	77.45	Н					
x	20643	848.3	-10.77	32.65	19.73	93.97	Н					
^	20407	824.7	-21.46	32.76	9.15	8.22	V					
	20525	836.5	-21.16	32.39	9.08	8.09	V					
	20643	848.3	-20.07	32.54	10.32	10.76	V					



	LTE Band 5											
	Channel Bandwidth: 3MHz / QPSK											
Plane	ne Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polarizat (H/V)											
	20415	825.5	-10.98	32.62	19.49	88.92	Н					
	20525	836.5	-11.10	32.52	19.27	84.53	Н					
x	20635	847.5	-10.18	32.65	20.32	107.65	Н					
^	20415	825.5	-20.57	32.76	10.04	10.09	V					
	20525	836.5	-19.87	32.39	10.37	10.89	V					
	20635	847.5	-19.29	32.54	11.10	12.88	V					

	LTE Band 5											
Channel Bandwidth: 3MHz / 16QAM												
Plane	ne Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polarization (H/V)											
	20415	825.5	-11.61	32.62	18.86	76.91	Н					
	20525	836.5	-11.63	32.52	18.74	74.82	Н					
x	20635	847.5	-10.82	32.65	19.68	92.90	Н					
^	20415	825.5	-21.48	32.76	9.13	8.18	V					
	20525	836.5	-20.76	32.39	9.48	8.87	V					
	20635	847.5	-20.42	32.54	9.97	9.93	V					

				LTE Band 5								
	Channel Bandwidth: 5MHz / QPSK											
Plane	e Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polarization (H/V)											
	20425	826.5	-10.95	32.62	19.52	89.54	Н					
	20525	836.5	-10.41	32.52	19.96	99.08	Н					
	20625	846.5	-11.31	32.65	19.19	82.99	Н					
Х	20425	826.5	-20.24	32.76	10.37	10.89	V					
	20525	836.5	-19.46	32.39	10.78	11.97	V					
	20625	846.5	-19.46	32.54	10.93	12.39	V					



	LTE Band 5											
Channel Bandwidth: 5MHz / 16QAM												
Plane	ane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW)											
	20425	826.5	-11.93	32.62	18.54	71.45	Н					
	20525	836.5	-11.23	32.52	19.14	82.04	Н					
x	20625	846.5	-11.28	32.65	19.22	83.56	Н					
^	20425	826.5	-21.60	32.76	9.01	7.96	V					
	20525	836.5	-20.37	32.39	9.87	9.71	V					
	20625	846.5	-20.59	32.54	9.80	9.55	V					

	LTE Band 5											
	Channel Bandwidth: 10MHz / QPSK											
Plane	e Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polarization (H/V)											
	20450	829.0	-10.91	32.62	19.56	90.36	Н					
	20525	836.5	-9.98	32.52	20.39	109.40	Н					
x	20600	844.0	-11.35	32.65	19.15	82.22	Н					
^	20450	829.0	-19.71	32.76	10.90	12.30	V					
	20525	836.5	-19.31	32.39	10.93	12.39	V					
	20600	844.0	-19.91	32.54	10.48	11.17	V					

	LTE Band 5											
Channel Bandwidth: 10MHz / 16QAM												
Plane	lane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polar (H											
	20450	829.0	-11.76	32.62	18.71	74.30	Н					
	20525	836.5	-10.84	32.52	19.53	89.74	Н					
x	20600	844.0	-11.42	32.65	19.08	80.91	Н					
^	20450	829.0	-20.53	32.76	10.08	10.19	V					
	20525	836.5	-19.30	32.39	10.94	12.42	V					
	20600	844.0	-20.85	32.54	9.54	8.99	V					



#### 4.2 FREQUENCY STABILITY MEASUREMENT

#### 4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

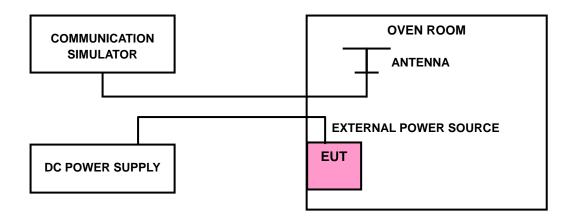
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

#### 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 ERROR (ppm)										
VOLTAGE (Volts)	0014	FDOF	WODMA		LTE B	and 5		LIMIT (ppm)			
(10110)	GSM	EDGE	WCDMA	1.4MHz	1.4MHz 3MHz 5MHz 10MHz						
3.7	-0.002	-0.003	-0.002	-0.002151823	-0.002390915	-0.003586372	-0.002151823	2.5			
3.4	-0.003	-0.002	-0.002	-0.002869097	-0.002032277	-0.002869097	-0.003705918	2.5			
4.2	-0.003	-0.002	-0.003	-0.001912732	-0.00251046	-0.001912732	-0.002749552	2.5			

**NOTE:** The applicant defined the normal working voltage of the battery is from 3.4Vdc to 4.2Vdc.

#### FREQUENCY ERROR vs. TEMPERATURE

		FREQUENCY ERROR (ppm)									
<b>TEMP.</b> (°C)		EDGE	WCDMA		LTE B	and 5		LIMIT (ppm)			
	GSM	EDGE	WCDIVIA	1.4MHz	3MHz	5MHz	10MHz	(I-1- )			
-30	-0.002	-0.002	-0.003	0.001912732	-0.00334728	0.003705918	0.005020921	2.5			
-20	0.003	0.004	0.006	0.002988643	0.001912732	0.001793186	0.003825463	2.5			
-10	0.004	0.003	0.003	0.003825463	0.002390915	0.003466826	0.003108189	2.5			
0	-0.003	0.001	-0.002	-0.002151823	0.002151823	0.003586372	0.002271369	2.5			
10	-0.001	-0.003	-0.003	-0.003108189	-0.002390915	-0.005020921	-0.002390915	2.5			
20	-0.003	-0.004	-0.004	-0.003586372	-0.004901375	-0.002032277	-0.003825463	2.5			
30	0.005	-0.002	0.004	0.006455469	-0.002630006	-0.002390915	-0.001793186	2.5			
40	0.002	0.005	0.002	0.004303646	0.004662283	0.003586372	0.002271369	2.5			
50	0.007	0.003	0.003	0.00251046	0.002869097	0.002032277	0.006575015	2.5			

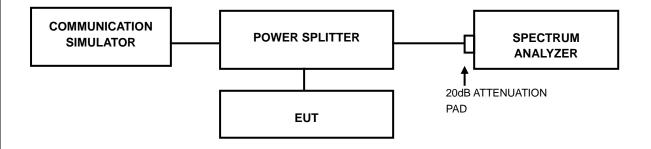


#### 4.3 OCCUPIED BANDWIDTH MEASUREMENT

#### 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.

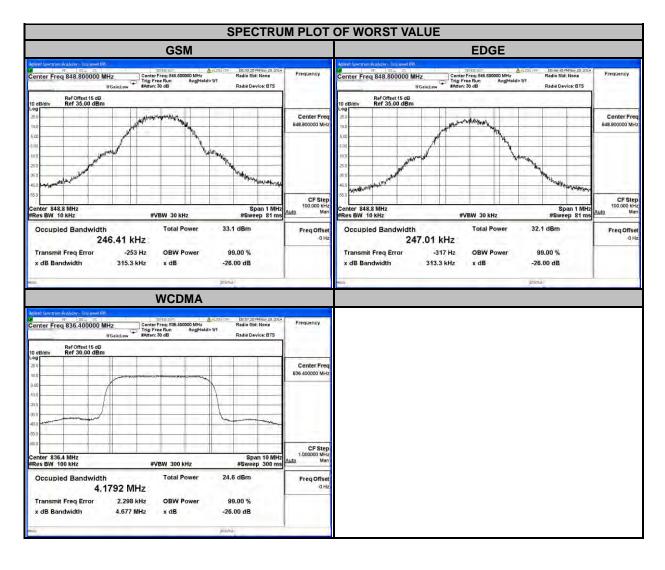
#### 4.3.2 TEST SETUP





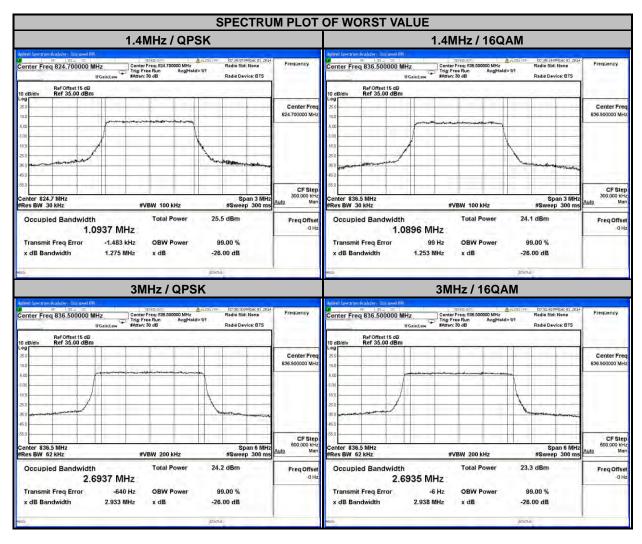
#### 4.3.3 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (kHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)
	, ,	GSM	EDGE		, ,	WCDMA
128	824.2	246.00	244.61	4132	826.4	4.17
189	836.4	242.28	245.11	4182	836.4	4.18
251	848.8	246.41	247.01	4233	846.6	4.18
CHANNEL	FREQUENCY	26dB BANDWIDTH (kHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)
	(MHz)	GSM	EDGE		(MHz)	WCDMA
128	824.2	318.80	316.70	4132	826.4	4.67
189	836.4	308.20	316.50	4182	836.4	4.68
251	848.8	315.30	313.30	4233	846.6	4.68



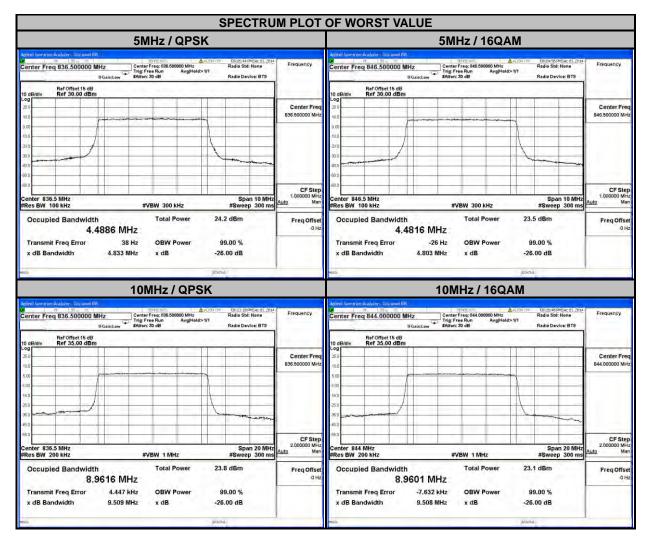


	LTE BAND 5												
C	CHANNEL BANDWIDTH: 1.4MHz CHANNEL BANDWIDTH: 3MHz												
CHANNEL	FREQUENCY	99% OC BANDWID		CHANNEL	FREQUENCY		CUPIED OTH (MHz)						
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM						
20407	824.7	1.09	1.09	20415	825.5	2.69	2.69						
20525	836.5	1.09	1.09	20525	836.5	2.69	2.69						
20643	848.3	1.09	1.09	20635	847.5	2.69	2.69						
CHANNEL	FREQUENCY	26dB BANDV	WIDTH (MHz)	CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)							
	(MHz) QPSK 16QAM				(MHz)	QPSK	16QAM						
20407	824.7	1.28	1.27	20415	825.5	2.92	2.93						
20525	836.5	1.27	1.25	20525	836.5	2.93	2.94						
20643	848.3	1.28	1.27	20635	847.5	2.92	2.92						





LTE BAND 5							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM		(MHz)	QPSK	16QAM
20425	826.5	4.48	4.48	20450	829.0	8.96	8.95
20525	836.5	4.49	4.48	20525	836.5	8.96	8.96
20625	846.5	4.48	4.48	20600	844.0	8.95	8.96
CHANNEL	FREQUENCY (MHz)	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)	
		QPSK	16QAM		(MHz)	QPSK	16QAM
20425	826.5	4.84	4.82	20450	829.0	9.50	9.52
20525	836.5	4.83	4.81	20525	836.5	9.51	9.51
20625	846.5	4.84	4.80	20600	844.0	9.50	9.51



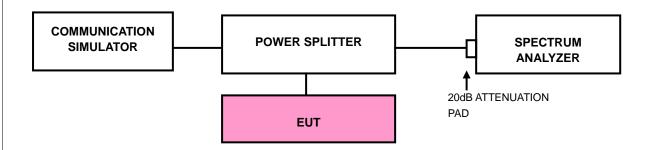


#### 4.4 BAND EDGE MEASUREMENT

#### 4.4.1 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.

#### 4.4.2 TEST SETUP

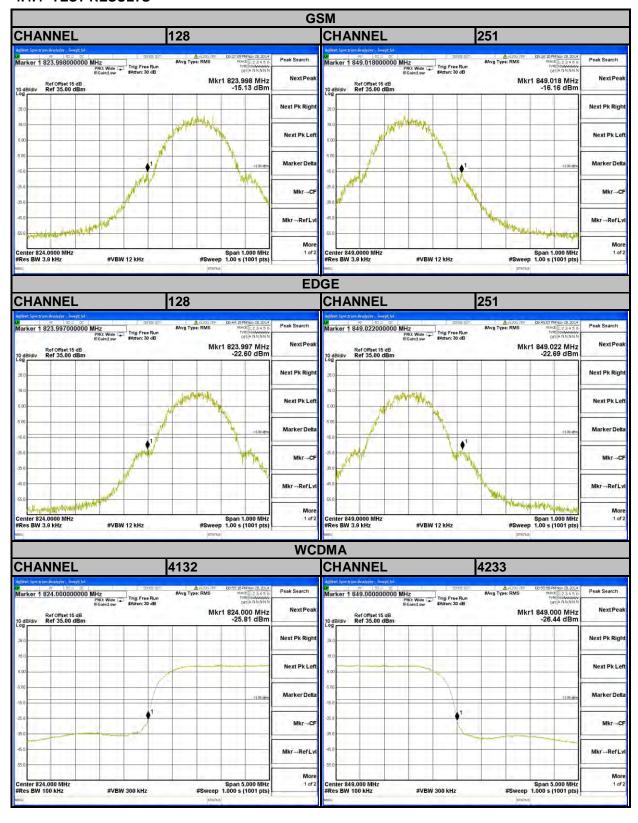


#### 4.4.3 TEST PROCEDURES

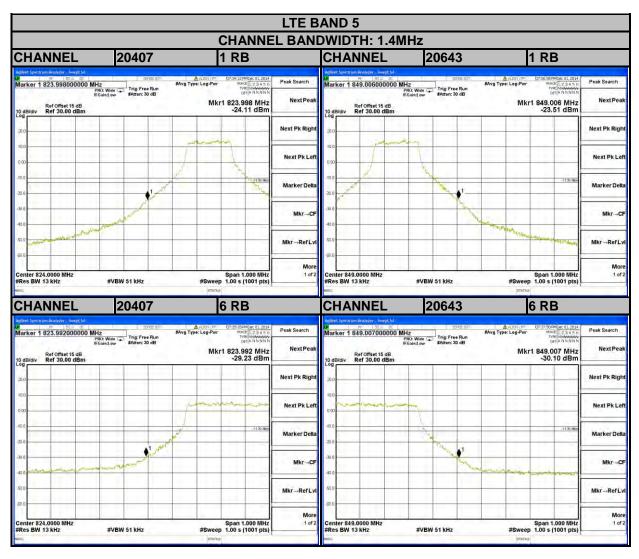
- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/ EDGE).
- c. The center frequency of spectrum is the band edge frequency and span is 5MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA/LTE).
- d. The center frequency of spectrum is the band edge frequency and span is 2MHz. RB of the spectrum is 13kHz and VB of the spectrum is 51kHz (CDMA).
- e. Record the max trace plot into the test report.



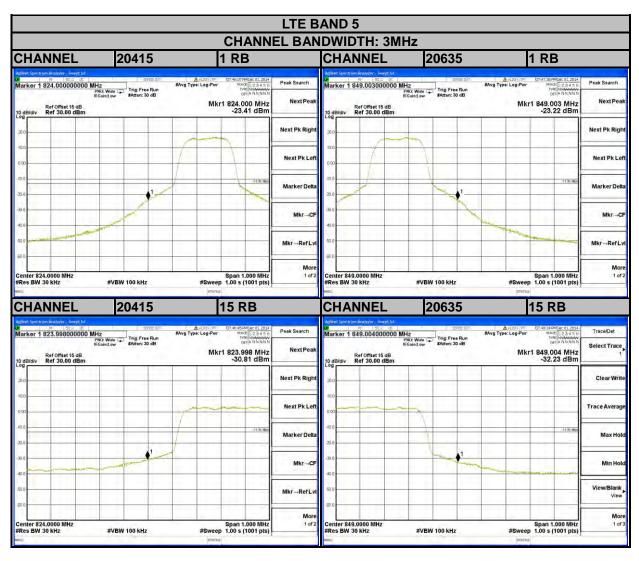
#### 4.4.4 TEST RESULTS



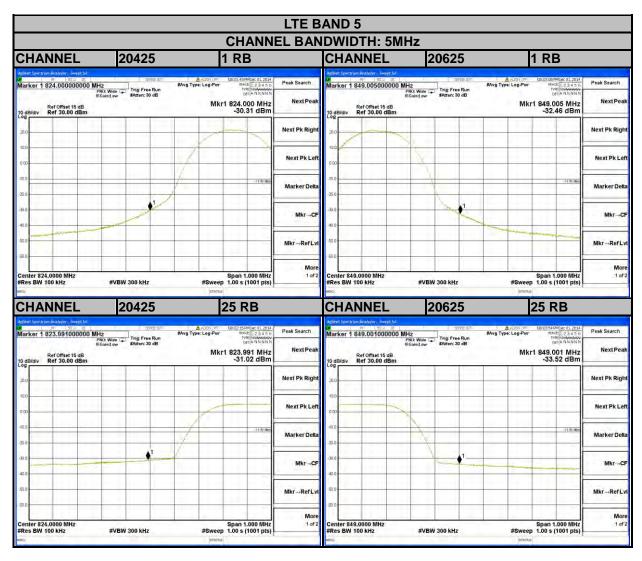




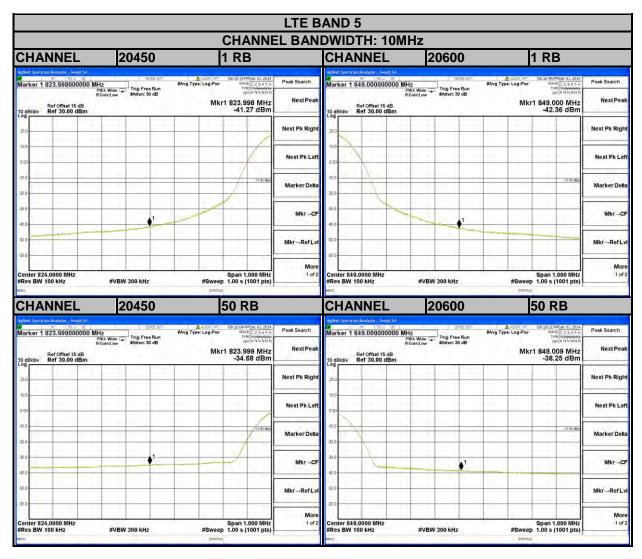














#### 4.5 CONDUCTED SPURIOUS EMISSIONS

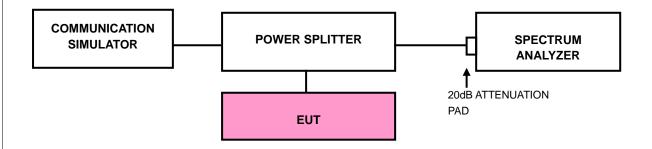
#### 4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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.

#### 4.5.2 TEST PROCEDURE

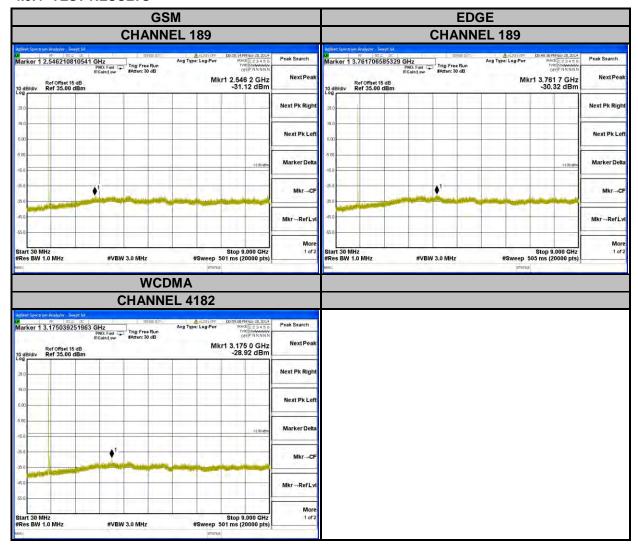
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 30 MHz to 9GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

#### 4.5.3 TEST SETUP

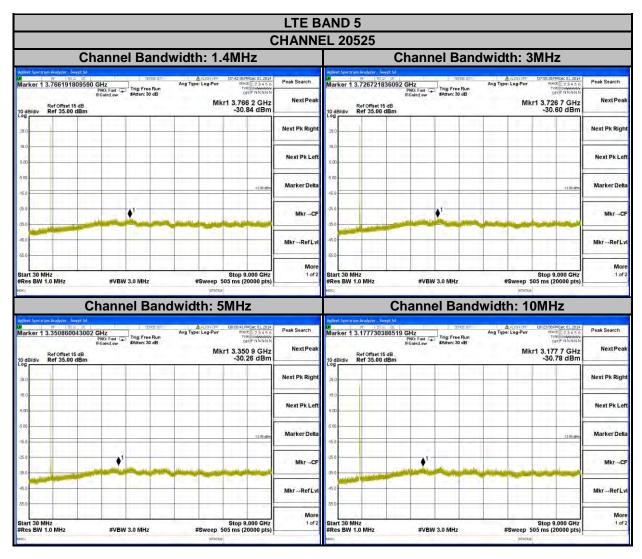




#### 4.5.4 TEST RESULTS









#### 4.6 RADIATED EMISSION MEASUREMENT

#### 4.6.1 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.

## 4.6.2 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.

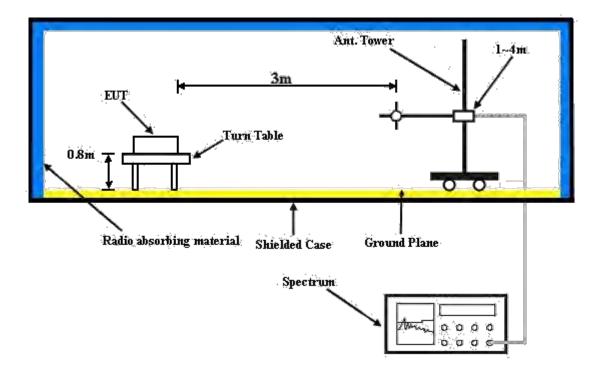
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

### 4.6.3 DEVIATION FROM TEST STANDARD

No deviation



## 4.6.4 TEST SETUP



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



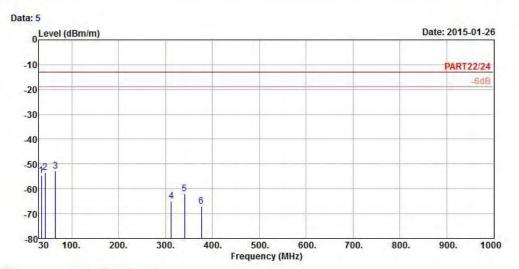
### 4.6.5 TEST RESULTS

### **MODE A**

### GSM:



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

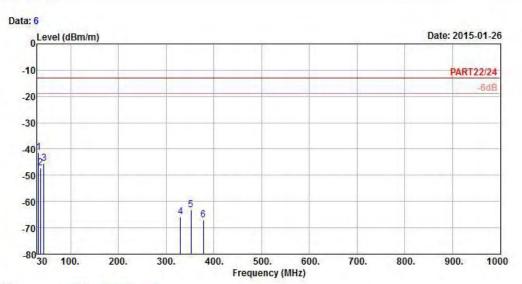
Remark : GSM850 Link Tested by: Gavin Wu

Plane : Y

	Freq	Level		Line		Factor	Remark
1	MHz	dBm/m	dBm	dBm/m	dB	dB/m	-
1	34.86	-54.56	-51.99	-13.00	-41.56	-2.57	Peak
2	43.50	-53.57	-52.31	-13.00	-40.57	-1.26	Peak
3 pp	65.10	-52.91	-45.19	-13.00	-39.91	-7.72	Peak
4	312.60	-64.94	-58.65	-13.00	-51.94	-6.29	Peak
5	340.60	-62.00	-55.92	-13.00	-49.00	-6.08	Peak
6	376.30	-67.12	-61.31	-13.00	-54.12	-5.81	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : GSM850 Link Tested by: Gavin Wu

Plane : Y

: Earphone 1

Read Limit Over

Freq Level Line Limit Factor Remark

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

 1 pp
 32.43 -41.20 -40.09 -13.00 -28.20 -1.11 Peak

 2
 36.48 -47.27 -45.12 -13.00 -34.27 -2.15 Peak

 3
 44.04 -45.35 -44.09 -13.00 -32.35 -1.26 Peak

 4
 330.10 -65.86 -59.70 -13.00 -52.86 -6.16 Peak

 5
 351.80 -63.06 -57.07 -13.00 -50.06 -5.99 Peak

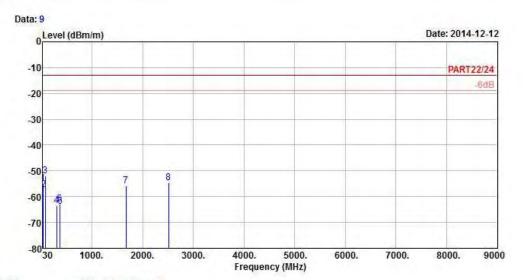
 6
 378.40 -66.97 -61.17 -13.00 -53.97 -5.80 Peak



### **EDGE:**



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



: 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : EDGE850 Link Tested by: Anson Lin Plane : Y

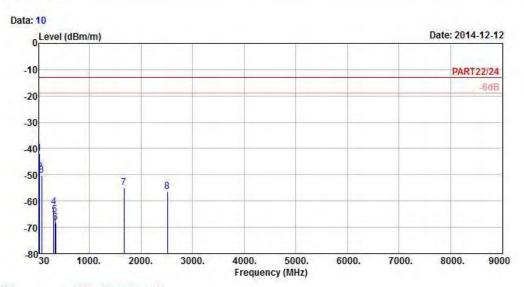
: Earphone 1

Read Limit Over Line Limit Factor Remark Freq Level Level

MHz dBm/m dBm dBm/m dB dB/m 1 30.27 -54.80 -55.87 -13.00 -41.80 1.07 Peak 2 42.42 -57.34 -56.01 -13.00 -44.34 -1.33 Peak 3 pp 74.55 -52.05 -42.29 -13.00 -39.05 -9.76 Peak 302.80 -63.37 -57.01 -13.00 -50.37 -6.36 Peak 4 363.00 -62.88 -56.97 -13.00 -49.88 -5.91 Peak 6 370.00 -63.85 -57.99 -13.00 -50.85 -5.86 Peak 7 1672.80 -55.86 -42.02 -13.00 -42.86 -13.84 Peak 2509.20 -54.76 -44.77 -13.00 -41.76 -9.99 Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : EDGE850 Link Tested by: Anson Lin

Plane : Y

: Earphone 1

Read Limit Over
Freq Level Level Line Limit Factor Remark

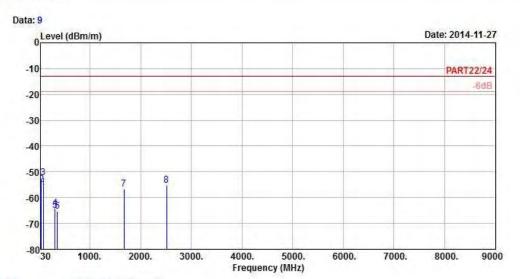
MHz dBm/m dBm dBm/m dB/m 1 pp 30.00 -41.95 -43.02 -13.00 -28.95 1.07 Peak 42.15 -49.10 -47.77 -13.00 -36.10 -1.33 Peak 2 3 75.63 -50.21 -40.36 -13.00 -37.21 -9.85 Peak 307.00 -62.27 -55.95 -13.00 -49.27 -6.32 Peak 4 331.50 -65.18 -59.04 -13.00 -52.18 -6.14 Peak 351.10 -68.18 -62.18 -13.00 -55.18 -6.00 Peak 6 7 1672.80 -54.93 -41.09 -13.00 -41.93 -13.84 Peak 8 2509.20 -56.36 -46.37 -13.00 -43.36 -9.99 Peak



## WCDMA:



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

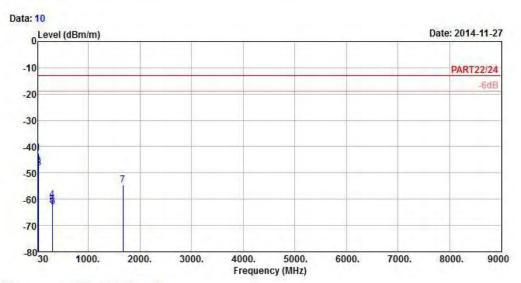
Remark : WCDMA V Link Tested by: Anson Lin

Plane : Y

	LUI	prione	-				
	Freq	Level	Read Level		Over Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	31.35	-56.64	-56.98	-13.00	-43.64	0.34	Peak
2	43.50	-54.83	-53.57	-13.00	-41.83	-1.26	Peak
3 pp	74.55	-52.16	-42.40	-13.00	-39.16	-9.76	Peak
4	307.00	-64.07	-57.75	-13.00	-51.07	-6.32	Peak
5	314.00	-64.81	-58.54	-13.00	-51.81	-6.27	Peak
6	354.60	-65.20	-59.23	-13.00	-52.20	-5.97	Peak
7	1672.80	-56.66	-42.82	-13.00	-43.66	-13.84	Peak
8	2509.20	-55.30	-45.31	-13.00	-42.30	-9.99	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : WCDMA V Link Tested by: Anson Lin

Plane : Y

: Earphone 1

Read Limit Over
Freq Level Level Line Limit Factor Remark

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

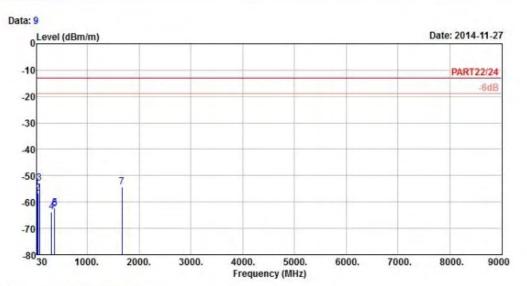
1 pp	31.08	-42.50	-42.84	-13.00	-29.50	0.34	Peak	
2	32.43	-47.35	-46.24	-13.00	-34.35	-1.11	Peak	
3	42.96	-48.07	-46.74	-13.00	-35.07	-1.33	Peak	
4	302.10	-60.32	-53.96	-13.00	-47.32	-6.36	Peak	
5	306.30	-62.20	-55.87	-13.00	-49.20	-6.33	Peak	
6	313.30	-62.81	-56.53	-13.00	-49.81	-6.28	Peak	
7	1672 80	-54 60	-10 76	-13 00	-41 60	-13 8/	Pook	



# LTE BAND 5 CHANNEL BANDWIDTH: 1.4MHz / QPSK



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_1.4M\_QPSK(1,0) Link

Tested by: Anson Lin

Plane : Y

1

2

: Earphone 1

Read Limit Over Limit Factor Remark

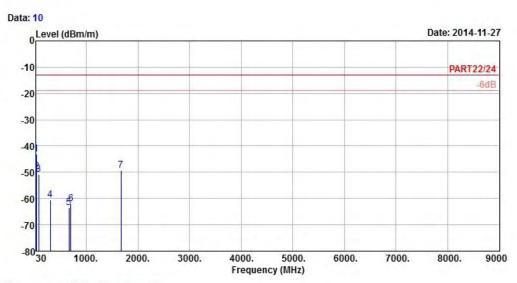
MHz dBm/m dBm dBm/m dB dB/m

30.54 -54.73 -55.07 -13.00 -41.73 0.34 Peak
44.04 -56.72 -55.46 -13.00 -43.72 -1.26 Peak
76.71 -52.83 -42.90 -13.00 -39.83 -9.93 Peak
310.50 -63.72 -57.42 -13.00 -50.72 -6.30 Peak
367.90 -62.38 -56.50 -13.00 -49.38 -5.88 Peak
371.40 -62.71 -56.86 -13.00 -49.71 -5.85 Peak

1671.90 -54.44 -40.60 -13.00 -41.44 -13.84 Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_1.4M\_QPSK(1,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

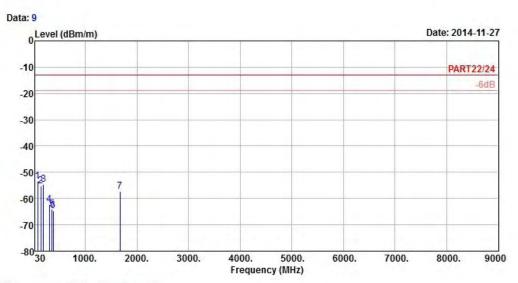
Read Limit Over
Freq Level Level Line Limit Factor Remark

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

1 pp	30.81	-43.14	-43.48	-13.00	-30.14	0.34 F	Peak
2	42.96	-49.98	-48.65	-13.00	-36.98	-1.33 F	Peak
3	76.17	-50.76	-40.83	-13.00	-37.76	-9.93 F	Peak
4	300.00	-60.61	-54.23	-13.00	-47.61	-6.38 F	Peak
5	660.50	-63.37	-64.10	-13.00	-50.37	0.73 F	Peak
6	698.30	-62.13	-63.55	-13.00	-49.13	1.42	Peak
7	1671.90	-49.32	-35.48	-13.00	-36.32	-13.84 F	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_1.4M\_QPSK(6,0) Link

Tested by: Anson Lin

Plane : Y

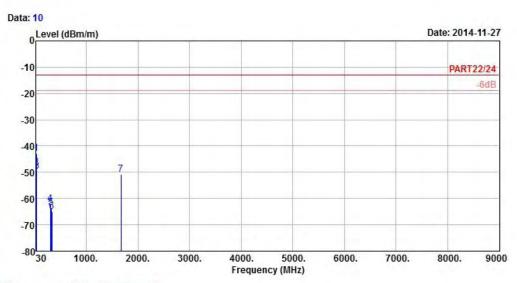
: Earphone 1

Freg Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 76.71 -53.48 -43.55 -13.00 -40.48 -9.93 Peak 1 pp 139.35 -55.34 -49.67 -13.00 -42.34 -5.67 Peak 3 186.60 -54.68 -48.33 -13.00 -41.68 -6.35 Peak 300.00 -62.42 -56.04 -13.00 -49.42 -6.38 Peak 5 353.90 -64.14 -58.16 -13.00 -51.14 -5.98 Peak 6 375.60 -64.70 -58.88 -13.00 -51.70 -5.82 Peak 1673.00 -57.24 -43.40 -13.00 -44.24 -13.84 Peak

Read Limit Over







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

: LTE Band 5\_1.4M\_QPSK(6,0) Link

Tested by: Anson Lin

: Y Plane

3

5

6

: Earphone 1

Freq Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 30.27 -42.89 -43.96 -13.00 -29.89 1.07 Peak 1 pp 32.16 -48.19 -47.80 -13.00 -35.19 -0.39 Peak 41.61 -49.67 -48.28 -13.00 -36.67 -1.39 Peak 305.60 -61.89 -55.55 -13.00 -48.89 -6.34 Peak 314.70 -63.38 -57.11 -13.00 -50.38 -6.27 Peak 332.20 -65.09 -58.95 -13.00 -52.09 -6.14 Peak

1673.00 -50.80 -36.96 -13.00 -37.80 -13.84 Peak

Over

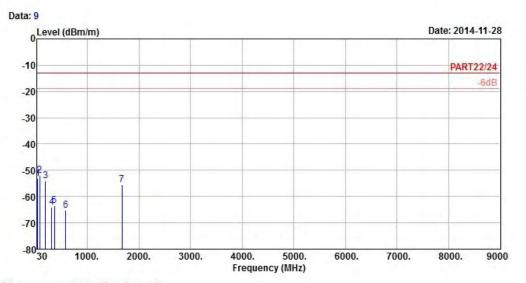
Read Limit



### **CHANNEL BANDWIDTH: 1.4MHz / 16QAM**



## Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_1.4M\_16QAM(1,0) Link

Tested by: Anson Lin

Plane : Y

7

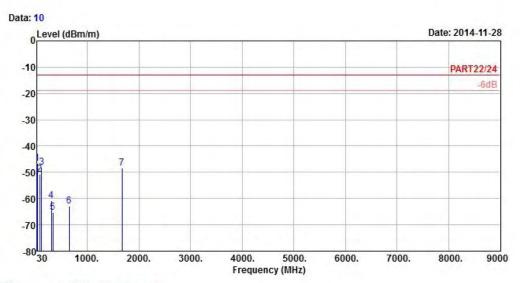
: Earphone 1

Freq	Level		Limit Line		Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
43.50	-53.05	-51.79	-13.00	-40.05	-1.26	Peak
74.82	-51.82	-42.06	-13.00	-38.82	-9.76	Peak
186.87	-54.02	-47.55	-13.00	-41.02	-6.47	Peak
309.80	-63.96	-57.65	-13.00	-50.96	-6.31	Peak
362.30	-63.56	-57.65	-13.00	-50.56	-5.91	Peak
582.10	-65.33	-64.47	-13.00	-52.33	-0.86	Peak

1671.90 -55.59 -41.75 -13.00 -42.59 -13.84 Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_1.4M\_16QAM(1,0) Link

Tested by: Anson Lin

Plane : Y

1 pp

3

5

: Earphone 1

Freq Level Level Line Limit Factor Remark

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

30.00 -46.50 -47.57 -13.00 -33.50 1.07 Peak
75.36 -50.74 -40.89 -13.00 -37.74 -9.85 Peak
112.08 -48.22 -37.55 -13.00 -35.22 -10.67 Peak
302.80 -60.80 -54.44 -13.00 -47.80 -6.36 Peak

336.40 -65.11 -59.00 -13.00 -52.11 -6.11 Peak 645.80 -62.96 -63.43 -13.00 -49.96 0.47 Peak 1671.90 -48.50 -34.66 -13.00 -35.50 -13.84 Peak

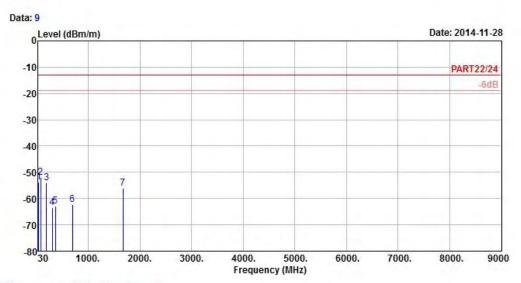
Over

Read Limit

Report No.: RF141117C22-4







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_1.4M\_16QAM(6,0) Link

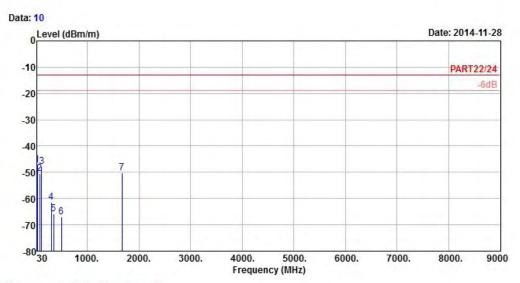
Tested by: Anson Lin

Plane : Y

	Freq	Level	Read Level		Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	43.50	-53.79	-52.53	-13.00	-40.79	-1.26	Peak
2 pp	75.09	-51.87	-42.11	-13.00	-38.87	-9.76	Peak
3	187.41	-53.94	-47.47	-13.00	-40.94	-6.47	Peak
4	300.70	-63.36	-56.99	-13.00	-50.36	-6.37	Peak
5	360.20	-62.89	-56.96	-13.00	-49.89	-5.93	Peak
6	689.90	-62.31	-63.57	-13.00	-49.31	1.26	Peak
7	1673.00	-56.13	-42.29	-13.00	-43.13	-13.84	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_1.4M\_16QAM(6,0) Link

Tested by: Anson Lin

Plane : Y

3

5

6

: Earphone 1

Freq Level Level Line Limit Factor Remark

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

p 31.89 -47.35 -46.96 -13.00 -34.35 -0.39 Peak
 75.09 -50.57 -40.81 -13.00 -37.57 -9.76 Peak
 112.89 -47.79 -37.12 -13.00 -34.79 -10.67 Peak
 301.40 -61.26 -54.89 -13.00 -48.26 -6.37 Peak
 350.40 -65.78 -59.77 -13.00 -52.78 -6.01 Peak
 496.70 -66.94 -63.75 -13.00 -53.94 -3.19 Peak
 1673.00 -50.22 -36.38 -13.00 -37.22 -13.84 Peak

Read Limit

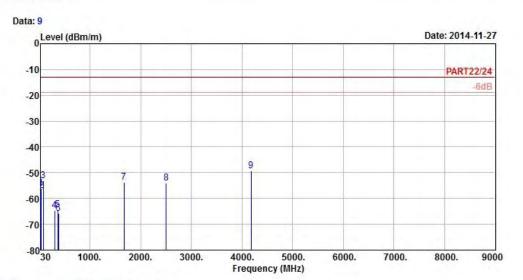
Over



# LTE BAND 5 CHANNEL BANDWIDTH: 3MHz / QPSK



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL
Remark : LTE Band 5\_3M\_QPSK(1,0) Link

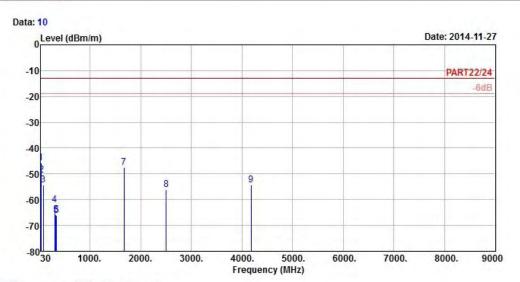
Tested by: Anson Lin

Plane : Y

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	V 5.
1	30.00	-56.19	-57.26	-13.00	-43.19	1.07	Peak
2	42.42	-56.89	-55.56	-13.00	-43.89	-1.33	Peak
3	74.28	-53.15	-43.39	-13.00	-40.15	-9.76	Peak
4	302.10	-64.53	-58.17	-13.00	-51.53	-6.36	Peak
4 5	359.50	-64.21	-58.28	-13.00	-51.21	-5.93	Peak
6	377.70	-65.87	-60.06	-13.00	-52.87	-5.81	Peak
7	1670.80	-53.80	-39.96	-13.00	-40.80	-13.84	Peak
8	2506.20	-53.96	-43.97	-13.00	-40.96	-9.99	Peak
9 pp	4177.00	-49.40	-42.08	-13.00	-36.40	-7.32	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_3M\_QPSK(1,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

Read Limit Over

Freq Level Line Limit Factor Remark

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

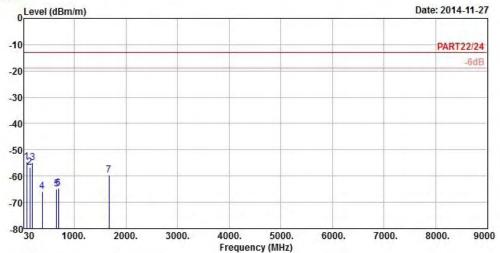
31.62 -45.81 -45.42 -13.00 -32.81 -0.39 Peak

2 43.23 -50.33 -49.07 -13.00 -37.33 -1.26 Peak
3 77.52 -54.31 -44.29 -13.00 -41.31 -10.02 Peak
4 304.20 -62.12 -55.78 -13.00 -49.12 -6.34 Peak
5 328.70 -65.95 -59.79 -13.00 -52.95 -6.16 Peak
6 339.90 -66.05 -59.96 -13.00 -53.05 -6.09 Peak
7 1670.80 -47.42 -33.58 -13.00 -34.42 -13.84 Peak
8 2506.20 -56.01 -46.02 -13.00 -43.01 -9.99 Peak
9 4177.00 -54.38 -47.06 -13.00 -41.38 -7.32 Peak









Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_3M\_QPSK(15,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

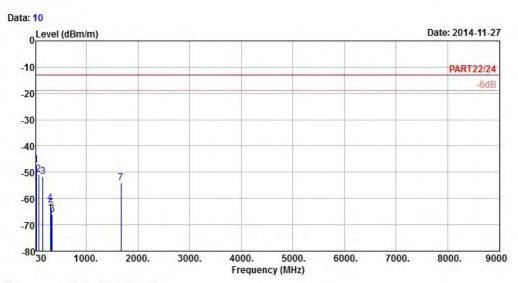
Read Limit Over Freq Level Level Limit Factor Remark

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

1 pp	76.71	-54.52	-44.59	-13.00	-41.52	-9.93	Peak	
2	138.81	-56.74	-50.81	-13.00	-43.74	-5.93	Peak	
3	187.95	-54.76	-48.18	-13.00	-41.76	-6.58	Peak	
4	374.90	-65.72	-59.90	-13.00	-52.72	-5.82	Peak	
5	657.00	-64.88	-65.54	-13.00	-51.88	0.66	Peak	
6	692.70	-64.51	-65.82	-13.00	-51.51	1.31	Peak	
7	1673.00	-59.63	-45.79	-13.00	-46.63	-13.84	Peak	







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_3M\_QPSK(15,0) Link

Tested by: Anson Lin

Plane : Y

3

5

6

: Earphone 1

 Freq Level Level Line Limit Factor Remark

 MHz
 dBm/m
 Limit Factor Remark

 dBm/m
 dBm/m
 dB/m

 32.16 -47.21 -46.82 -13.00 -34.21 -0.39 Peak

 76.17 -50.90 -40.97 -13.00 -37.90 -9.93 Peak

 160.41 -51.70 -45.19 -13.00 -38.70 -6.51 Peak

 302.80 -61.60 -55.24 -13.00 -48.60 -6.36 Peak

 316.10 -63.87 -57.61 -13.00 -50.87 -6.26 Peak

 339.20 -66.17 -60.08 -13.00 -53.17 -6.09 Peak

 1673.00 -53.92 -40.08 -13.00 -40.92 -13.84 Peak

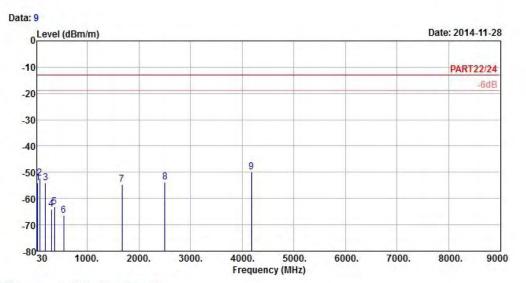
Read Limit Over



### **CHANNEL BANDWIDTH: 3MHz / 16QAM**



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL
Remark : LTE Band 5\_3M\_16QAM(1,0) Link

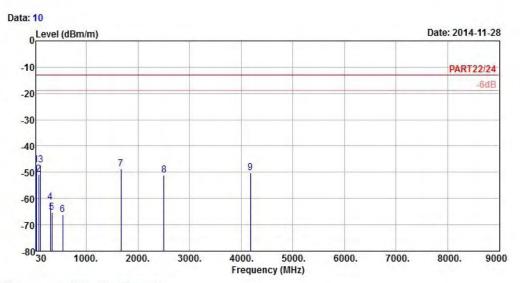
Tested by: Anson Lin

Plane : Y

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	·
43.50	-53.97	-52.71	-13.00	-40.97	-1.26	Peak
75.36	-52.15	-42.30	-13.00	-39.15	-9.85	Peak
187.14	-54.11	-47.64	-13.00	-41.11	-6.47	Peak
300.70	-64.07	-57.70	-13.00	-51.07	-6.37	Peak
363.00	-63.07	-57.16	-13.00	-50.07	-5.91	Peak
540.10	-66.50	-64.50	-13.00	-53.50	-2.00	Peak
1670.80	-54.58	-40.74	-13.00	-41.58	-13.84	Peak
2506.20	-53.74	-43.75	-13.00	-40.74	-9.99	Peak
4177.00	-49.85	-42.53	-13.00	-36.85	-7.32	Peak
	MHz 43.50 75.36 187.14 300.70 363.00 540.10 1670.80 2506.20	MHz dBm/m  43.50 -53.97  75.36 -52.15  187.14 -54.11  300.70 -64.07  363.00 -63.07  540.10 -66.50  1670.80 -54.58  2506.20 -53.74	Freq Level Level  MHz dBm/m dBm  43.50 -53.97 -52.71  75.36 -52.15 -42.30  187.14 -54.11 -47.64  300.70 -64.07 -57.70  363.00 -63.07 -57.16  540.10 -66.50 -64.50  1670.80 -54.58 -40.74  2506.20 -53.74 -43.75	Freq Level Level Line  MHz dBm/m dBm dBm/m  43.50 -53.97 -52.71 -13.00  75.36 -52.15 -42.30 -13.00  187.14 -54.11 -47.64 -13.00  300.70 -64.07 -57.70 -13.00  363.00 -63.07 -57.16 -13.00  540.10 -66.50 -64.50 -13.00  1670.80 -54.58 -40.74 -13.00  2506.20 -53.74 -43.75 -13.00	Freq         Level         Level         Line         Limit           MHz         dBm/m         dBm         dBm/m         dB           43.50         -53.97         -52.71         -13.00         -40.97           75.36         -52.15         -42.30         -13.00         -39.15           187.14         -54.11         -47.64         -13.00         -41.11           300.70         -64.07         -57.70         -13.00         -51.07           363.00         -63.07         -57.16         -13.00         -50.07           540.10         -66.50         -64.50         -13.00         -53.50           1670.80         -54.58         -40.74         -13.00         -41.58           2506.20         -53.74         -43.75         -13.00         -40.74	Freq Level Level Line Limit Factor  MHz dBm/m dBm dBm/m dB dB/m







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_3M\_16QAM(1,0) Link

Tested by: Anson Lin

Plane : Y

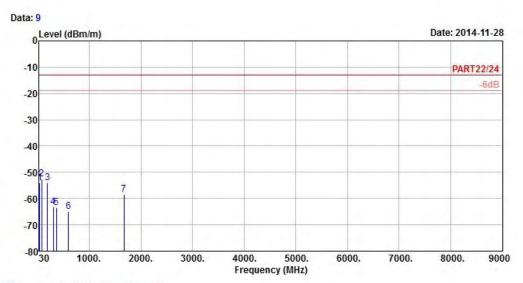
: Earphone 1

		Freq	Level	Level	Line	Limit	Factor	Remark
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	) <del>(</del>
1		31.62	-47.29	-46.90	-13.00	-34.29	-0.39	Peak
2		75.36	-50.69	-40.84	-13.00	-37.69	-9.85	Peak
3	pp	112.62	-47.10	-36.43	-13.00	-34.10	-10.67	Peak
4		300.70	-61.34	-54.97	-13.00	-48.34	-6.37	Peak
5		331.50	-65.09	-58.95	-13.00	-52.09	-6.14	Peak
6		542.90	-66.24	-64.32	-13.00	-53.24	-1.92	Peak
7		1670.80	-48.74	-34.90	-13.00	-35.74	-13.84	Peak
8		2506.20	-51.18	-41.19	-13.00	-38.18	-9.99	Peak
9		4177.00	-50.11	-42.79	-13.00	-37.11	-7.32	Peak

Read Limit Over







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_3M\_16QAM(15,0) Link

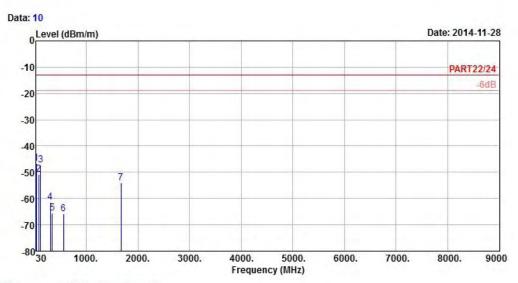
Tested by: Anson Lin

Plane : Y

	Freq	Level	Read Level		37.77.77	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	42.69	-53.96	-52.63	-13.00	-40.96	-1.33	Peak
2 pp	75.36	-52.57	-42.72	-13.00	-39.57	-9.85	Peak
3	186.87	-54.02	-47.55	-13.00	-41.02	-6.47	Peak
4	300.00	-63.10	-56.72	-13.00	-50.10	-6.38	Peak
5	365.10	-63.36	-57.46	-13.00	-50.36	-5.90	Peak
6	595.40	-64.88	-64.40	-13.00	-51.88	-0.48	Peak
7	1673.00	-58.59	-44.75	-13.00	-45.59	-13.84	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_3M\_16QAM(15,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

Freg Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 31.62 -46.60 -46.21 -13.00 -33.60 -0.39 Peak 75.09 -50.78 -41.02 -13.00 -37.78 -9.76 Peak 3 111.81 -47.27 -36.62 -13.00 -34.27 -10.65 Peak 300.00 -61.39 -55.01 -13.00 -48.39 -6.38 Peak 5 338.50 -65.40 -59.31 -13.00 -52.40 -6.09 Peak 555.50 -65.91 -64.34 -13.00 -52.91 -1.57 Peak 6 1673.00 -54.13 -40.29 -13.00 -41.13 -13.84 Peak

Read Limit

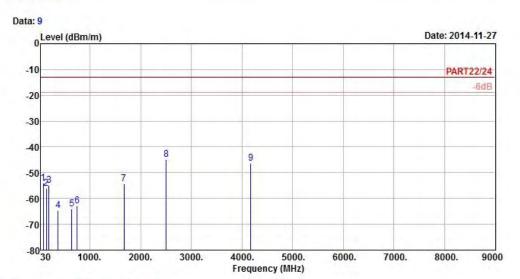
Over



# LTE BAND 5 CHANNEL BANDWIDTH: 5MHz / QPSK



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL
Remark : LTE Band 5\_5M\_QPSK(1,0) Link

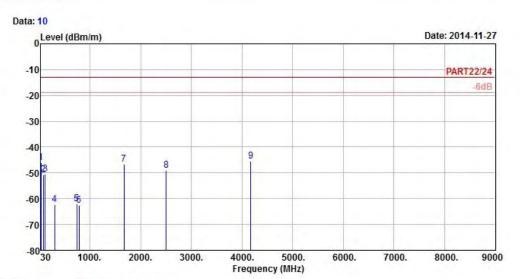
Tested by: Anson Lin

Plane : Y

	Freq	Level	Read Level			Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	8
1	76.71	-54.02	-44.09	-13.00	-41.02	-9.93	Peak
2	139.35	-56.16	-50.49	-13.00	-43.16	-5.67	Peak
3	189.84	-54.94	-48.13	-13.00	-41.94	-6.81	Peak
4 5	372.10	-64.63	-58.79	-13.00	-51.63	-5.84	Peak
5	639.50	-64.20	-64.55	-13.00	-51.20	0.35	Peak
6	743.10	-62.77	-64.51	-13.00	-49.77	1.74	Peak
7	1668.60	-54.27	-40.43	-13.00	-41.27	-13.84	Peak
8 pp	2502.90	-45.00	-35.08	-13.00	-32.00	-9.92	Peak
9	4171.50	-46.36	-39.04	-13.00	-33.36	-7.32	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_5M\_QPSK(1,0) Link

Tested by: Anson Lin

Plane : Y

2

3

: Earphone 1

Read Limit Over
Level Level Line Limit Factor Remark

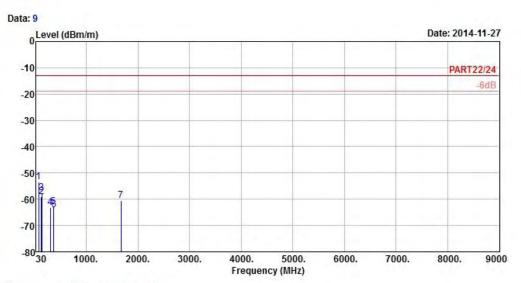
MHz dBm/m dBm dBm/m dB dB/m

31.89 -46.09 -45.70 -13.00 -33.09 -0.39 Peak
74.82 -50.67 -40.91 -13.00 -37.67 -9.76 Peak
114.24 -50.43 -39.72 -13.00 -37.43 -10.71 Peak
304.90 -62.21 -55.87 -13.00 -49.21 -6.34 Peak
735.40 -62.00 -63.69 -13.00 -49.00 1.69 Peak
785.80 -62.55 -64.58 -13.00 -49.55 2.03 Peak
1668.60 -46.60 -32.76 -13.00 -33.60 -13.84 Peak
2502.90 -49.11 -39.19 -13.00 -36.11 -9.92 Peak

9 pp 4171.50 -45.35 -38.03 -13.00 -32.35 -7.32 Peak







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_5M\_QPSK(25,0) Link

Tested by: Anson Lin

Plane : Y

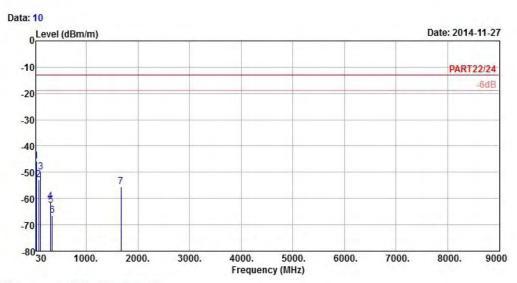
: Earphone 1

Read Limit Over
Freq Level Level Limit Factor Remark

	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	76.44	-53.49	-43.56	-13.00	-40.49	-9.93	Peak
2	132.60	-59.13	-51.65	-13.00	-46.13	-7.48	Peak
3	139.89	-57.56	-51.89	-13.00	-44.56	-5.67	Peak
4	302.80	-63.10	-56.74	-13.00	-50.10	-6.36	Peak
5	365.10	-62.81	-56.91	-13.00	-49.81	-5.90	Peak
6	369.30	-64.09	-58.23	-13.00	-51.09	-5.86	Peak
7	1673.00	-60.56	-46.72	-13.00	-47.56	-13.84	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_5M\_QPSK(25,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

Freg Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 31.08 -45.89 -46.23 -13.00 -32.89 0.34 Peak 73.74 -52.79 -43.11 -13.00 -39.79 -9.68 Peak 3 113.97 -49.99 -39.28 -13.00 -36.99 -10.71 Peak 301.40 -61.23 -54.86 -13.00 -48.23 -6.37 Peak 5 310.50 -62.56 -56.26 -13.00 -49.56 -6.30 Peak 344.10 -66.42 -60.37 -13.00 -53.42 -6.05 Peak 6 1673.00 -55.58 -41.74 -13.00 -42.58 -13.84 Peak

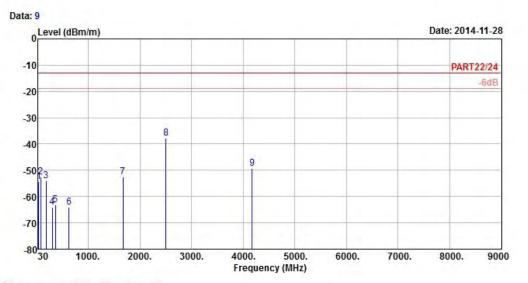
Read Limit Over



### **CHANNEL BANDWIDTH: 5MHz / 16QAM**



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_5M\_16QAM(1,0) Link

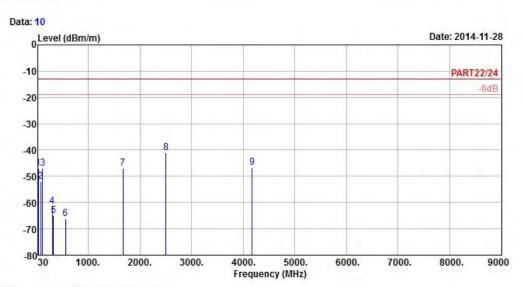
Tested by: Anson Lin

Plane : Y

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	75
1	43.50	-54.32	-53.06	-13.00	-41.32	-1.26	Peak
2	75.09	-52.58	-42.82	-13.00	-39.58	-9.76	Peak
3	186.33	-53.95	-47.60	-13.00	-40.95	-6.35	Peak
4	301.40	-64.07	-57.70	-13.00	-51.07	-6.37	Peak
5	364.40	-63.25	-57.35	-13.00	-50.25	-5.90	Peak
6	629.70	-64.10	-64.27	-13.00	-51.10	0.17	Peak
7	1668.60	-52.68	-38.84	-13.00	-39.68	-13.84	Peak
8 pp	2502.90	-37.74	-27.82	-13.00	-24.74	-9.92	Peak
9	4171.50	-49.33	-42.01	-13.00	-36.33	-7.32	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_5M\_16QAM(1,0) Link

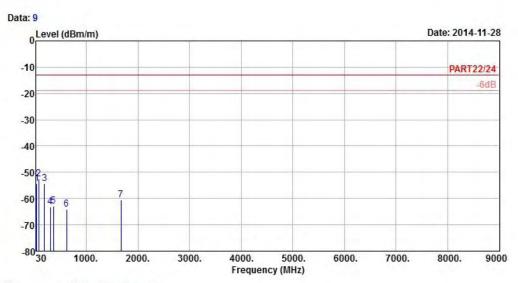
Tested by: Anson Lin

Plane : Y

		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	-
31.35	-46.83	-47.17	-13.00	-33.83	0.34	Peak
74.82	-51.85	-42.09	-13.00	-38.85	-9.76	Peak
112.35	-46.97	-36.30	-13.00	-33.97	-10.67	Peak
301.40	-61.37	-55.00	-13.00	-48.37	-6.37	Peak
327.30	-64.91	-58.73	-13.00	-51.91	-6.18	Peak
554.80	-66.22	-64.62	-13.00	-53.22	-1.60	Peak
1668.60	-46.98	-33.14	-13.00	-33.98	-13.84	Peak
2502.90	-40.89	-30.97	-13.00	-27.89	-9.92	Peak
4171.50	-46.63	-39.31	-13.00	-33.63	-7.32	Peak
	MHz 31.35 74.82 112.35 301.40 327.30 554.80 1668.60 2502.90	MHz dBm/m  31.35 -46.83  74.82 -51.85  112.35 -46.97  301.40 -61.37  327.30 -64.91  554.80 -66.22  1668.60 -46.98  2502.90 -40.89	Freq         Level         Level           MHz         dBm/m         dBm           31.35         -46.83         -47.17           74.82         -51.85         -42.09           112.35         -46.97         -36.30           301.40         -61.37         -55.00           327.30         -64.91         -58.73           554.80         -66.22         -64.62           1668.60         -46.98         -33.14           2502.90         -40.89         -30.97	Freq         Level         Level         Line           MHz         dBm/m         dBm dBm/m           31.35         -46.83         -47.17         -13.00           74.82         -51.85         -42.09         -13.00           112.35         -46.97         -36.30         -13.00           301.40         -61.37         -55.00         -13.00           327.30         -64.91         -58.73         -13.00           554.80         -66.22         -64.62         -13.00           1668.60         -46.98         -33.14         -13.00           2502.90         -40.89         -30.97         -13.00	MHz dBm/m dBm dBm/m dB  31.35 -46.83 -47.17 -13.00 -33.83  74.82 -51.85 -42.09 -13.00 -38.85  112.35 -46.97 -36.30 -13.00 -33.97  301.40 -61.37 -55.00 -13.00 -48.37  327.30 -64.91 -58.73 -13.00 -51.91  554.80 -66.22 -64.62 -13.00 -53.22  1668.60 -46.98 -33.14 -13.00 -33.98  2502.90 -40.89 -30.97 -13.00 -27.89	Freq Level Level Line Limit Factor







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_5M\_16QAM(25,0) Link

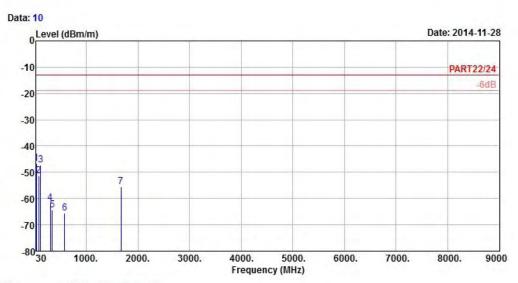
Tested by: Anson Lin

Plane : Y

	Freq	Level	Read Level	100000000000000000000000000000000000000		Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	43.50	-54.18	-52.92	-13.00	-41.18	-1.26	Peak
2 pp	75.09	-52.60	-42.84	-13.00	-39.60	-9.76	Peak
3	186.60	-54.26	-47.91	-13.00	-41.26	-6.35	Peak
4	300.00	-63.20	-56.82	-13.00	-50.20	-6.38	Peak
5	362.30	-62.77	-56.86	-13.00	-49.77	-5.91	Peak
6	617.10	-64.14	-64.09	-13.00	-51.14	-0.05	Peak
7	1673.00	-60.62	-46.78	-13.00	-47.62	-13.84	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

: LTE Band 5\_5M\_16QAM(25,0) Link

Tested by: Anson Lin

: Y Plane

3

5

6

: Earphone 1

Read Limit Freg Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 31.35 -46.77 -47.11 -13.00 -33.77 0.34 Peak 75.09 -51.48 -41.72 -13.00 -38.48 -9.76 Peak 112.35 -47.23 -36.56 -13.00 -34.23 -10.67 Peak 300.70 -61.70 -55.33 -13.00 -48.70 -6.37 Peak 337.80 -64.21 -58.11 -13.00 -51.21 -6.10 Peak 579.30 -65.62 -64.68 -13.00 -52.62 -0.94 Peak

1673.00 -55.60 -41.76 -13.00 -42.60 -13.84 Peak

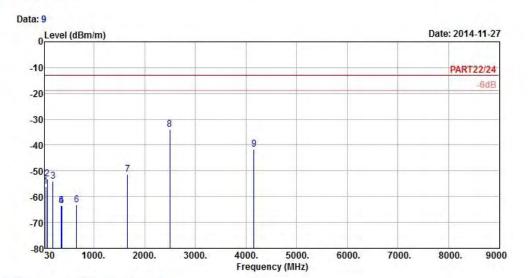
Over



# LTE BAND 5 **CHANNEL BANDWIDTH: 10MHz / QPSK**



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



: 966 Chamber 5 Site

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_10M\_QPSK(1,0) Link

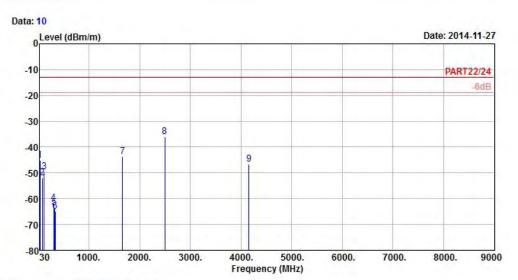
Tested by: Anson Lin

Plane : Y

Lane	: Y						
	: Ear	phone	1				
			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	44.04	-56.04	-54.78	-13.00	-43.04	-1.26	Peak
2	76.71	-53.07	-43.14	-13.00	-40.07	-9.93	Peak
3	187.68	-53.92	-47.34	-13.00	-40.92	-6.58	Peak
4	358.80	-63.36	-57.42	-13.00	-50.36	-5.94	Peak
5	365.10	-63.39	-57.49	-13.00	-50.39	-5.90	Peak
6	656.30	-63.27	-63.93	-13.00	-50.27	0.66	Peak
7	1664.20	-51.26	-37.42	-13.00	-38.26	-13.84	Peak
8 pp	2496.30	-34.04	-24.12	-13.00	-21.04	-9.92	Peak
9	4160.50	-41.63	-34.31	-13.00	-28.63	-7.32	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_10M\_QPSK(1,0) Link

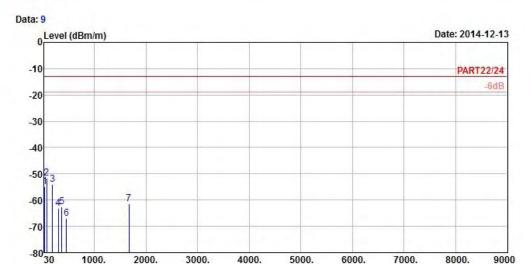
Tested by: Anson Lin

Plane : Y

: Y						
: Ear	phone	1				
		Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
30.54	-45.28	-45.62	-13.00	-32.28	0.34	Peak
74.28	-52.08	-42.32	-13.00	-39.08	-9.76	Peak
113.43	-49.58	-38.89	-13.00	-36.58	-10.69	Peak
304.20	-61.78	-55.44	-13.00	-48.78	-6.34	Peak
315.40	-63.54	-57.27	-13.00	-50.54	-6.27	Peak
329.40	-65.05	-58.89	-13.00	-52.05	-6.16	Peak
1664.20	-43.72	-29.88	-13.00	-30.72	-13.84	Peak
2496.30	-35.99	-26.07	-13.00	-22.99	-9.92	Peak
4160.50	-46.73	-39.41	-13.00	-33.73	-7.32	Peak
	Freq MHz 30.54 74.28 113.43 304.20 315.40 329.40 1664.20 2496.30	: Earphone Freq Level  MHz dBm/m  30.54 -45.28 74.28 -52.08 113.43 -49.58 304.20 -61.78 315.40 -63.54 329.40 -65.05 1664.20 -43.72 2496.30 -35.99	: Earphone 1 Read Freq Level Level  MHz dBm/m dBm  30.54 -45.28 -45.62 74.28 -52.08 -42.32 113.43 -49.58 -38.89 304.20 -61.78 -55.44 315.40 -63.54 -57.27 329.40 -65.05 -58.89 1664.20 -43.72 -29.88 2496.30 -35.99 -26.07	: Earphone 1    Read Limit     Freq Level Level Line     MHz   dBm/m   dBm   dBm/m     30.54   -45.28   -45.62   -13.00     74.28   -52.08   -42.32   -13.00     113.43   -49.58   -38.89   -13.00     304.20   -61.78   -55.44   -13.00     315.40   -63.54   -57.27   -13.00     329.40   -65.05   -58.89   -13.00     1664.20   -43.72   -29.88   -13.00     2496.30   -35.99   -26.07   -13.00	: Earphone 1  Read Limit Over Level Level Line Limit  MHz dBm/m dBm dBm/m dB  30.54 -45.28 -45.62 -13.00 -32.28  74.28 -52.08 -42.32 -13.00 -39.08  113.43 -49.58 -38.89 -13.00 -36.58  304.20 -61.78 -55.44 -13.00 -48.78  315.40 -63.54 -57.27 -13.00 -50.54  329.40 -65.05 -58.89 -13.00 -52.05  1664.20 -43.72 -29.88 -13.00 -30.72  2496.30 -35.99 -26.07 -13.00 -22.99	: Earphone 1  Read Limit Over  Freq Level Level Line Limit Factor  MHz dBm/m dBm dBm/m dB dB/m  30.54 -45.28 -45.62 -13.00 -32.28 0.34  74.28 -52.08 -42.32 -13.00 -39.08 -9.76  113.43 -49.58 -38.89 -13.00 -36.58 -10.69  304.20 -61.78 -55.44 -13.00 -48.78 -6.34  315.40 -63.54 -57.27 -13.00 -50.54 -6.27







Frequency (MHz)

Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_10M\_QPSK(50,0) Link

Tested by: Anson Lin

Plane : Y

1 2 3

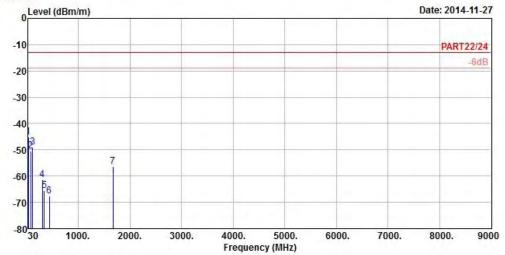
5

	Freq	Level		Limit Line		Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
	42.96	-54.89	-53.56	-13.00	-41.89	-1.33	Peak
pp	75.09	-51.69	-41.93	-13.00	-38.69	-9.76	Peak
	186.87	-54.06	-47.59	-13.00	-41.06	-6.47	Peak
	301.40	-63.29	-56.92	-13.00	-50.29	-6.37	Peak
	368.60	-62.60	-56.73	-13.00	-49.60	-5.87	Peak
	462.40	-67.09	-63.04	-13.00	-54.09	-4.05	Peak
	1673.00	-61.35	-47.51	-13.00	-48.35	-13.84	Peak









Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_10M\_QPSK(50,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

Read Limit Over Freq Level Level Line Limit Factor Remark

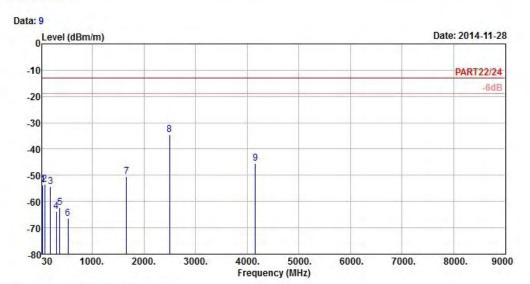
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1 pp	30.00	-45.26	-46.33	-13.00	-32.26	1.07	Peak	
2	75.09	-50.50	-40.74	-13.00	-37.50	-9.76	Peak	
3	113.16	-48.91	-38.22	-13.00	-35.91	-10.69	Peak	
	302.80	-61.31	-54.95	-13.00	-48.31	-6.36	Peak	
5	339.90	-65.43	-59.34	-13.00	-52.43	-6.09	Peak	
6	440.00	-67.47	-62.86	-13.00	-54.47	-4.61	Peak	
7	1673.00	-56.46	-42.62	-13.00	-43.46	-13.84	Peak	



### **CHANNEL BANDWIDTH: 10MHz / 16QAM**



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_10M\_16QAM(1,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

	· Lui	phone	_				
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	0.5
1	43.50	-53.58	-52.32	-13.00	-40.58	-1.26	Peak
2	74.82	-53.54	-43.78	-13.00	-40.54	-9.76	Peak
3	187.95	-54.43	-47.85	-13.00	-41.43	-6.58	Peak
4	300.00	-63.79	-57.41	-13.00	-50.79	-6.38	Peak
5	370.00	-62.43	-56.57	-13.00	-49.43	-5.86	Peak
4 5 6	531.70	-66.31	-64.07	-13.00	-53.31	-2.24	Peak
7	1664.20	-50.57	-36.73	-13.00	-37.57	-13.84	Peak
8 pp	2496.30	-34.62	-24.70	-13.00	-21.62	-9.92	Peak
9	4160.50	-45.53	-38.21	-13.00	-32.53	-7.32	Peak



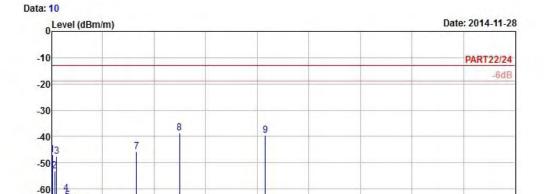


7000.

8000.

9000

6000.



4000.

5000.

Frequency (MHz)

Site : 966 Chamber 5

1000.

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_10M\_16QAM(1,0) Link

2000.

Tested by: Anson Lin

Plane : Y

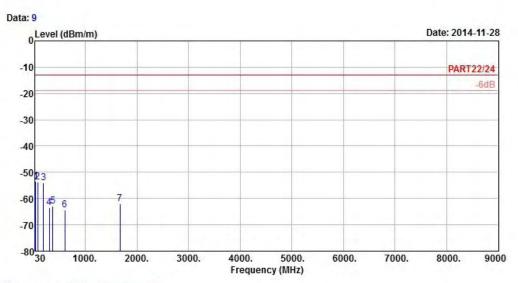
-80<mark>111</mark>

Remark
Remark
Remark
Peak

3000.







Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : LTE Band 5\_10M\_16QAM(50,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

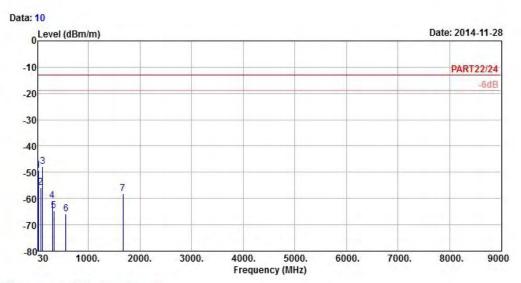
Freg Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB dB/m 43.23 -53.44 -52.18 -13.00 -40.44 -1.26 Peak 75.09 -53.62 -43.86 -13.00 -40.62 -9.76 Peak 3 187.41 -54.09 -47.62 -13.00 -41.09 -6.47 Peak 300.00 -63.41 -57.03 -13.00 -50.41 -6.38 Peak 5 369.30 -62.87 -57.01 -13.00 -49.87 -5.86 Peak 605.20 -64.28 -64.02 -13.00 -51.28 -0.26 Peak 6 1673.00 -62.00 -48.16 -13.00 -49.00 -13.84 Peak

Read Limit

Over







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : LTE Band 5\_10M\_16QAM(50,0) Link

Tested by: Anson Lin

Plane : Y

: Earphone 1

	Freq	Level	Read Level		Over Limit	Factor Rem	r Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	*
1	31.08	-49.41	-49.75	-13.00	-36.41	0.34	Peak
2	75.09	-55.73	-45.97	-13.00	-42.73	-9.76	Peak
3 pp	112.08	-47.80	-37.13	-13.00	-34.80	-10.67	Peak
4	300.70	-60.84	-54.47	-13.00	-47.84	-6.37	Peak
4 5	334.30	-64.69	-58.57	-13.00	-51.69	-6.12	Peak
6	564.60	-65.74	-64.41	-13.00	-52.74	-1.33	Peak
7	1673.00	-58.01	-44.17	-13.00	-45.01	-13.84	Peak

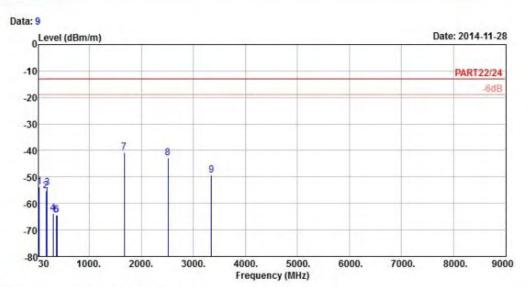


#### **MODE B**

#### GSM:



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : GSM850 Link Tested by: Anson Lin

Plane : Z

: Earphone 2

Read Limit Over Freq Level Line Limit Factor Remark

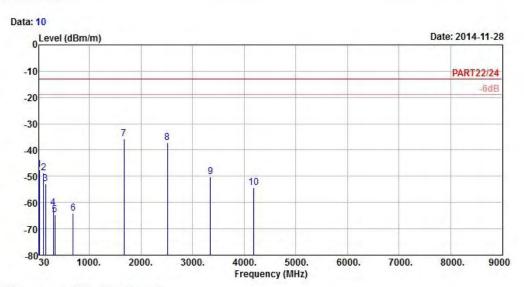
MHz dBm/m dBm dBm/m dB dB/m

1 43.50 -53.62 -52.36 -13.00 -40.62 -1.26 Peak
2 166.08 -55.28 -48.66 -13.00 -42.28 -6.62 Peak

3 186.60 -54.07 -47.72 -13.00 -41.07 -6.35 Peak 4 302.10 -63.71 -57.35 -13.00 -50.71 -6.36 Peak 5 360.20 -64.21 -58.28 -13.00 -51.21 -5.93 Peak 6 374.90 -64.31 -58.49 -13.00 -51.31 -5.82 Peak 7 pp 1672.80 -40.78 -26.94 -13.00 -27.78 -13.84 Peak 8 2509.20 -42.72 -32.73 -13.00 -29.72 -9.99 Peak 9 3345.60 -49.24 -39.88 -13.00 -36.24 -9.36 Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : GSM850 Link Tested by: Anson Lin

Plane : Z

: Earphone 2

		. Lai	phone	2				
		Freq	Level	Read Level	Limit Line		Factor	Remark
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1		31.35	-47.45	-47.79	-13.00	-34.45	0.34	Peak
2		111.54	-48.68	-38.03	-13.00	-35.68	-10.65	Peak
3		151.77	-52.75	-46.36	-13.00	-39.75	-6.39	Peak
4 5		300.70	-62.02	-55.65	-13.00	-49.02	-6.37	Peak
5		335.00	-64.74	-58.62	-13.00	-51.74	-6.12	Peak
6		685.00	-63.94	-65.11	-13.00	-50.94	1.17	Peak
7	pp	1672.80	-35.66	-21.82	-13.00	-22.66	-13.84	Peak
8		2509.20	-37.31	-27.32	-13.00	-24.31	-9.99	Peak
9		3345.60	-50.26	-40.90	-13.00	-37.26	-9.36	Peak
10		4182.00	-54.39	-47.13	-13.00	-41.39	-7.26	Peak

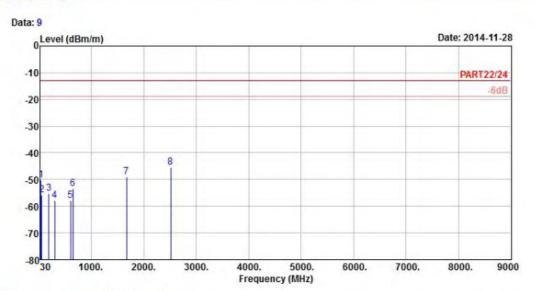


### **MODE C**

### GSM:



# Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : GSM850 Link Tested by: Anson Lin

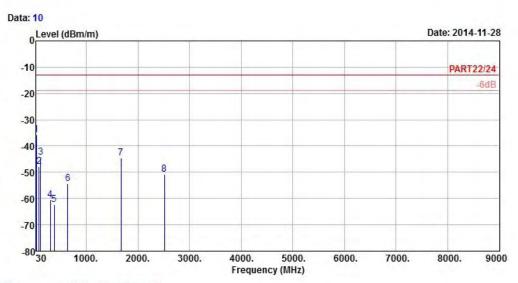
Plane : Y

: USB Cable With NB Read Limit Over

	Freq	Level	Level	Line	Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
	43.50	-50.24	-48.98	-13.00	-37.24	-1.26	Peak
	57.81	-55.73	-49.93	-13.00	-42.73	-5.80	Peak
	186.87	-55.32	-48.85	-13.00	-42.32	-6.47	Peak
	304.90	-57.78	-51.44	-13.00	-44.78	-6.34	Peak
	600.30	-57.84	-57.49	-13.00	-44.84	-0.35	Peak
	648.60	-53.50	-54.02	-13.00	-40.50	0.52	Peak
	1672.80	-49.13	-35.29	-13.00	-36.13	-13.84	Peak
pp	2509.20	-45.58	-35.59	-13.00	-32.58	-9.99	Peak







Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : GSM850 Link Tested by: Anson Lin

Plane : Y

: USB Cable With NB

Read Limit Over
Freq Level Level Line Limit Factor Remark

MHz dBm/m dBm dBm/m dB/m dB 30.54 -35.57 -35.91 -13.00 -22.57 0.34 Peak 1 pp 82.65 -47.82 -37.49 -13.00 -34.82 -10.33 Peak 3 111.27 -44.21 -33.56 -13.00 -31.21 -10.65 Peak 300.70 -60.43 -54.06 -13.00 -47.43 -6.37 Peak 5 378.40 -62.42 -56.62 -13.00 -49.42 -5.80 Peak 638.80 -54.28 -54.63 -13.00 -41.28 0.35 Peak 1672.80 -44.51 -30.67 -13.00 -31.51 -13.84 Peak 7 2509.20 -50.88 -40.89 -13.00 -37.88 -9.99 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: Hsin Chu EMC/RF/Telecom Lab:

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

Hwa Ya EMC/RF/Safety Lab:

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

**Email:** <a href="mailto:service.adt@tw.bureauveritas.com">service.adt@tw.bureauveritas.com</a> **Web Site:** <a href="mailto:www.bureauveritas-adt.com">www.bureauveritas-adt.com</a>

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

Report No.: RF141117C22-4 83 of 84 Report Format Version 5.0.0



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.: RF141117C22-4 84 of 84 Report Format Version 5.0.0