

FCC TEST REPORT (PART 22)

REPORT NO.: RF140707C19-6

MODEL NO.: E6762

FCC ID: V65E6762

RECEIVED: Jul. 07, 2014

TESTED: Jul. 17, 2014 ~ Aug. 13, 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

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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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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140707C19-6	Original release	Aug. 18, 2014

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1 CERTIFICATION

PRODUCT: PDA Phone

MODEL: E6762

BRAND: Kyocera

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

TESTED: Jul. 17, 2014 ~ Aug. 13, 2014

TEST SAMPLE: Identical Prototype

STANDARDS: FCC PART 22, Subpart H

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 22 & Part 2					
STANDARD SECTION	TEST TYPE I R		REMARK		
2.1046 22.913 (a)	Effective Radiated Power	PASS	Meet the requirement of limit.		
2.1055 22.355	Frequency Stability		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 Sourious Emissions		Meet the requirement of limit.		
2.1053 22.917	Radiated Spurious Emissions		Meet the requirement of limit. Minimum passing margin is -19.34dB at 2509.20MHz.		

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	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	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	QPSK, 16QAM		
	GSM/GPRS/EDGE	824.2MHz ~ 848.8MHz		
	WCDMA	826.4MHz ~ 846.6MHz		
	CDMA	824.7MHz ~ 848.31MHz		
FREQUENCY RANGE	LTE 5 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz		
	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	1000.46mW		
	EDGE	251.88mW		
	WCDMA	116.63mW		
MAX. ERP POWER	CDMA	114.87mW		
WAX. ERP POWER	LTE 5 (Channel Bandwidth: 1.4MHz)	96.43mW		
	LTE 5 (Channel Bandwidth: 3MHz)	99.82mW		
	LTE 5 (Channel Bandwidth: 5MHz)	98.90mW		
	LTE 5 (Channel Bandwidth: 10MHz)	96.43mW		
	GSM	244KGXW		
	EDGE	245KG7W		
	WCDMA	4M17F9W		
EMISSION DESIGNATOR	CDMA	1M27F9W		
LINIOGICIT DEGIGITATOR	LTE 5 (Channel Bandwidth: 1.4MHz)	1M08G7D		
	LTE 5 (Channel Bandwidth: 3MHz)	2M68G7D		
	LTE 5 (Channel Bandwidth: 5MHz)	4M49W7D		
	LTE 5 (Channel Bandwidth: 10MHz)	8M93W7D		



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.

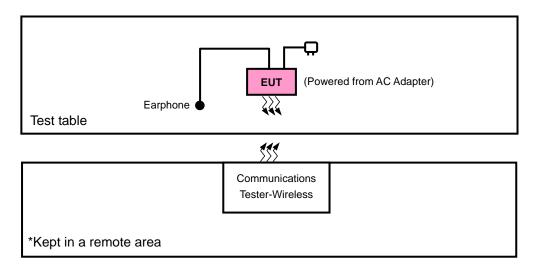
ITEM BRAND		MODEL	SPECIFICATION
Adapter Kyocera S		COD AAADT	I/P: 100-240Vac, 50/60Hz, 0.25A O/P: 5Vdc, 1.5A
Battery	Sanyo	SCP-60LBPS	3.8Vdc, 3000mAh
USB Cable	Kyocera	SCP-17SDC	1m non-shielded cable w/o core

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.



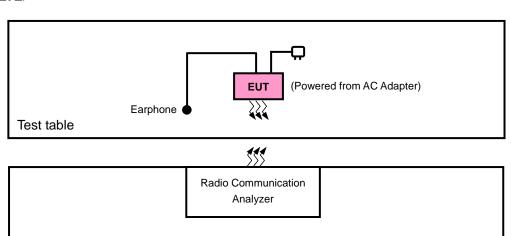
3.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST <GSM/WCDMA/CDMA>



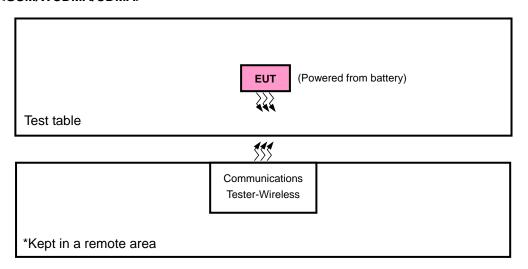
<LTE>

*Kept in a remote area

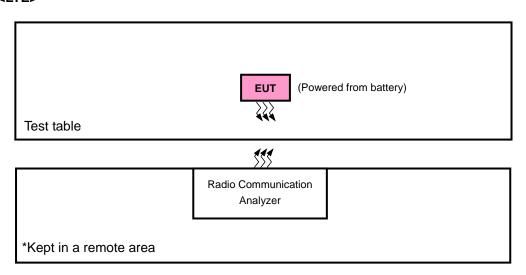




FOR E.R.P. TEST <GSM/WCDMA/CDMA>



<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	ERP	RADIATED EMISSION	
GSM Y-plane		X-axis	
WCDMA Y-plane		X-axis	
CDMA	Y-plane	X-axis	
LTE	Y-plane	X-axis	

GSM 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
-	CONDCUDETED EMISSION	128 to 251	189	GSM, EDGE
-	RADIATED EMISSION	128 to 251	189	GSM, EDGE

WCDMA MODE

EUT CONFIGURE MODE	TEST ITEM	TEST ITEM AVAILABLE 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
-	CONDCUDETED EMISSION	4132 to 4233	4182	WCDMA
-	RADIATED EMISSION	4132 to 4233	4182	WCDMA



CDMA MODE

EUT CONFIGURE MODE	TEST ITEM AVAILABLE CHANNEL		TESTED CHANNEL	MODE
-	ERP	1013 to 777	1013, 384, 777	1xRTT
-	FREQUENCY STABILITY	1013 to 777	384	1xRTT
-	OCCUPIED BANDWIDTH	1013 to 777	1013, 384, 777	1xRTT
-	BAND EDGE	1013 to 777	1013, 777	1xRTT
-	CONDCUDETED EMISSION	1013 to 777	384	1xRTT
-	RADIATED EMISSION	1013 to 777	384	1xRTT

LTE BAND 5 MODE

EUT CONFIGURE MODE		AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
		20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
	ERP	20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
-	LINE	20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20407 to 20643	20525	1.4MHz	QPSK	1 RB / 0 RB Offset
	FREQUENCY	20415 to 20635	20525	3MHz	QPSK	1 RB / 0 RB Offset
-	STABILITY	20425 to 20625	20525	5MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20525	10MHz	QPSK	1 RB / 0 RB Offset
		20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	OCCUPIED	20415 to 20635	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
		20407 to 20643	20407	1.4MHz	QPSK	1 RB / 0 RB Offset 6 RB / 0 RB Offset
						1 RB / 5 RB Offset
			20643	1.4MHz	QPSK	6 RB / 0 RB Offset
			20415	3MHz	QPSK	1 RB / 0 RB Offset
		20415 to 20635	20410	OWII 12	QI OIL	15 RB / 0 RB Offset
		20413 to 20033	20635	3MHz	QPSK	1 RB / 14 RB Offset
	DAND EDGE		20033	SIVII IZ	QFSK	15 RB / 0 RB Offset
-	BAND EDGE		20425	5MHz	QPSK	1 RB / 0 RB Offset
		20425 to 20626	20425	SIVII IZ	QFSK	25 RB / 0 RB Offset
		20423 10 20020	20600	5MHz	QPSK	1 RB / 24 RB Offset
			20000	SIVIFIZ	QFSK	25 RB / 0 RB Offset
			20450	40141-	ODSK	1 RB / 0 RB Offset
		20450 to 20000	20450	10MHz	QPSK	50 RB / 0 RB Offset
		20450 to 20600	00000		0.001/	1 RB / 49 RB Offset
			20600	10MHz	QPSK	50 RB / 0 RB Offset



EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
		20407 to 20643	20525	1.4MHz	QPSK	1 RB / 0 RB Offset
	CONDCUDETED	20415 to 20635	20525	3MHz	QPSK	1 RB / 0 RB Offset
-	EMISSION	20425 to 20625	20525	5MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20525	10MHz	QPSK	1 RB / 0 RB Offset
-	RADIATED EMISSION	20450 to 20600	20525	10MHz	QPSK	1 RB / 0 RB Offset

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

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	26deg. C, 58%RH	3.8Vdc	Howard Kao
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Howard Kao
OCCUPIED BANDWIDTH	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 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:

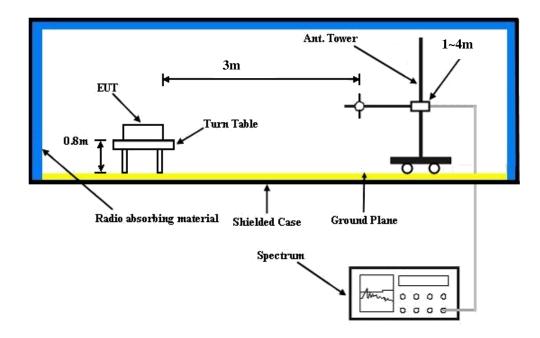
The EUT was set up for the maximum power with GSM, GPRS, EDGE, WCDMA & CDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

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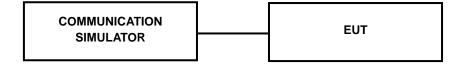


4.1.3 TEST SETUP

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)	33.15	32.79	32.76
GPRS 8 (GMSK, 1 slot)	33.12	32.76	32.73
GPRS 10 (GMSK, 2 slot)	30.39	30.03	30.00
GPRS 11 (GMSK, 3 slot)	28.23	27.87	27.84
GPRS 12 (GMSK, 4 slot)	27.01	26.65	26.62
EDGE 8 (GMSK, 1 Uplink)	33.13	32.77	32.74
EDGE 10 (GMSK, 2 Uplink)	29.88	29.52	29.49
EDGE 11 (GMSK, 3 Uplink)	28.32	27.96	27.93
EDGE 12 (GMSK, 4 Uplink)	27.09	26.73	26.70
EDGE 8 (8PSK, 1 Uplink)	27.56	27.20	27.17
EDGE 10 (8PSK, 2 Uplink)	24.79	24.43	24.40
EDGE 11 (8PSK, 3 Uplink)	22.99	22.63	22.60
EDGE 12 (8PSK, 4 Uplink)	21.81	21.45	21.42

Band		WCDMA V	
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.79	23.63	23.73
HSDPA Subtest-1	22.57	22.41	22.51
HSDPA Subtest-2	22.54	22.38	22.48
HSDPA Subtest-3	22.08	21.92	22.02
HSDPA Subtest-4	22.04	21.88	21.98
HSUPA Subtest-1	22.53	22.37	22.47
HSUPA Subtest-2	21.07	20.91	21.01
HSUPA Subtest-3	22.07	21.91	22.01
HSUPA Subtest-4	20.76	20.60	20.70
HSUPA Subtest-5	22.34	22.18	22.28

Band		CDMA	
Channel	1013	384	777
Frequency (MHz)	824.70	836.52	848.31
RC1+SO55	24.42	24.36	24.39
RC3+SO55	24.48	24.34	24.37
RC3+SO32(+ F-SCH)	24.39	24.33	24.36
RC3+SO32(+SCH)	24.38	24.32	24.35
RTAP 153.6	24.45	24.42	24.40
RETAP 4096	24.44	24.38	24.41



			QPSK							
Band / BW	RB Size	RB Offset	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)	Low CH 20407 824.7 MHz	Mid CH 20525 836.5 MHz	High CH 20643 848.3 MHz	3GPP MPR (dB)
	1	0	22.96	22.72	22.81	0	21.90	21.66	21.75	1
	1	2	22.90	22.84	22.82	0	21.84	21.78	21.76	1
	1	5	22.74	22.74	22.74	0	21.68	21.68	21.68	1
5 / 1.4M	3	0	21.90	21.87	21.82	0	20.84	20.81	20.76	1
	3	1	21.84	21.86	21.77	0	20.78	20.80	20.71	1
	3	3	21.83	21.82	21.85	0	20.77	20.76	20.79	1
	6	0	21.90	21.94	21.93	1	20.84	20.88	20.87	2

				QPSK						
Band / BW	RB Size	RB Offset	Low CH 20415 825.5	Mid CH 20525 836.5	High CH 20635 847.5	3GPP MPR (dB)	Low CH 20415 825.5	Mid CH 20525 836.5	High CH 20635 847.5	3GPP MPR (dB)
			MHz	MHz	MHz	(dB)	MHz	MHz	MHz	(GD)
	1	0	23.08	22.84	22.93	0	22.02	21.78	21.87	1
	1	7	23.02	22.96	22.94	0	21.96	21.90	21.88	1
	1	14	22.86	22.86	22.86	0	21.80	21.80	21.80	1
5 / 3M	8	0	22.02	21.99	21.94	1	20.96	20.93	20.88	2
	8	3	21.96	21.98	21.89	1	20.90	20.92	20.83	2
	8	7	21.95	21.94	21.97	1	20.89	20.88	20.91	2
	15	0	22.02	22.06	22.05	1	20.96	21.00	20.99	2

				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)	Low CH 20425 826.5 MHz	Mid CH 20525 836.5 MHz	High CH 20625 846.5 MHz	3GPP MPR (dB)
	1	0	23.17	22.93	23.02	0	22.11	21.87	21.96	1
	1	12	23.11	23.05	23.03	0	22.05	21.99	21.97	1
	1	24	22.95	22.95	22.95	0	21.89	21.89	21.89	1
5 / 5M	12	0	22.11	22.08	22.03	1	21.05	21.02	20.97	2
	12	6	22.05	22.07	21.98	1	20.99	21.01	20.92	2
	12	13	22.04	22.03	22.06	1	20.98	20.97	21.00	2
	25	0	22.11	22.15	22.14	1	21.05	21.09	21.08	2

				QPSK				16QAM		
Band / BW	RB Size	RB Offset	Low CH 20450 829.0	Mid CH 20525 836.5	High CH 20600 844.0	3GPP MPR (dB)	Low CH 20450 829.0	Mid CH 20525 836.5	High CH 20600 844.0	3GPP MPR (dB)
	1	0	MHz 23.27	MHz 23.03	MHz 23.12	0	MHz 22.21	MHz 21.97	MHz 22.06	1
	1	24	23.21	23.15	23.12	0	22.15	22.09	22.07	1
	1	49	23.05	23.05	23.05	0	21.99	21.99	21.99	1
5 / 10M	25	0	22.21	22.18	22.13	1	21.15	21.12	21.07	2
	25	12	22.15	22.17	22.08	1	21.09	21.11	21.02	2
	25	25	22.14	22.13	22.16	1	21.08	21.07	21.10	2
	50	0	22.21	22.25	22.24	1	21.15	21.19	21.18	2



ERP POWER (dBm)

	GSM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)					
	128	824.2	0.72	31.208	29.78	950.17	Н					
	189	836.4	0.27	31.3	29.42	874.98	Н					
	251	848.8	0.93	31.222	30.00	1000.46	Н					
, r	128	824.2	-7.23	31.504	22.12	163.08	V					
	189	836.4	-6.33	31.117	22.64	183.53	V					
	251	848.8	-7.00	31.922	22.77	189.32	V					

	EDGE										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)				
	128	824.2	-5.54	31.208	23.52	224.80	Н				
	189	836.4	-5.84	31.3	23.31	214.29	Н				
Y	251	848.8	-5.06	31.222	24.01	251.88	Н				
Y	128	824.2	-13.54	31.504	15.81	38.14	V				
	189	836.4	-13.25	31.117	15.72	37.30	V				
	251	848.8	-13.62	31.922	16.15	41.23	V				

	WCDMA										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)				
	4132	826.4	-8.39	31.208	20.67	116.63	Н				
	4182	836.4	-8.86	31.3	20.29	106.91	Н				
Y	4233	846.6	-8.73	31.222	20.34	108.19	Н				
Y	4132	826.4	-16.50	31.504	12.85	19.29	V				
	4182	836.4	-16.93	31.117	12.04	15.98	V				
	4233	846.6	-16.91	31.922	12.86	19.33	V				



	CDMA										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)				
	1013	824.7	-8.62	31.208	20.44	110.61	Н				
	384	836.52	-9.06	31.3	20.09	102.09	Н				
v	777	848.31	-8.47	31.222	20.60	114.87	Н				
Ť	1013	824.7	-16.88	31.504	12.47	17.68	V				
	384	836.52	-16.84	31.117	12.13	16.32	V				
	777	848.31	-17.25	31.922	12.52	17.87	V				

	LTE Band 5										
	Channel Bandwidth: 1.4MHz / QPSK										
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)				
	20407	824.7	-9.30	31.208	19.76	94.58	Н				
	20525	836.5	-9.71	31.3	19.44	87.90	Н				
Y	20643	848.3	-9.23	31.222	19.84	96.43	Н				
ĭ	20407	824.7	-17.17	31.504	12.18	16.53	V				
	20525	836.5	-17.08	31.117	11.89	15.44	V				
	20643	848.3	-18.03	31.922	11.74	14.93	V				

	LTE Band 5											
	Channel Bandwidth: 1.4MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)					
	20407	824.7	-10.32	31.208	18.74	74.78	Н					
	20525	836.5	-10.71	31.3	18.44	69.82	Н					
Y	20643	848.3	-10.10	31.222	18.97	78.92	Н					
ĭ	20407	824.7	-18.11	31.504	11.24	13.32	V					
	20525	836.5	-18.00	31.117	10.97	12.49	V					
	20643	848.3	-18.89	31.922	10.88	12.25	V					



	LTE Band 5											
	Channel Bandwidth: 3MHz / QPSK											
Plane	Plane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polariza (H/V											
	20415	825.5	-9.38	31.208	19.68	92.85	Н					
	20525	836.5	-9.58	31.3	19.57	90.57	Н					
V	20635	847.5	-9.08	31.222	19.99	99.82	Н					
, i	20415	825.5	-17.10	31.504	12.25	16.80	V					
	20525	836.5	-16.91	31.117	12.06	16.06	V					
	20635	847.5	-18.02	31.922	11.75	14.97	V					

	LTE Band 5											
	Channel Bandwidth: 3MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)					
	20415	825.5	-10.31	31.208	18.75	74.95	Н					
	20525	836.5	-10.72	31.3	18.43	69.66	Н					
Y	20635	847.5	-10.12	31.222	18.95	78.56	Н					
ĭ	20415	825.5	-18.12	31.504	11.23	13.29	V					
	20525	836.5	-17.96	31.117	11.01	12.61	V					
	20635	847.5	-18.80	31.922	10.97	12.51	V					

	LTE Band 5											
	Channel Bandwidth: 5MHz / QPSK											
Plane	Plane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polariz											
	20425	826.5	-9.22	31.208	19.84	96.34	Н					
	20525	836.5	-9.74	31.3	19.41	87.30	Н					
v	20625	846.5	-9.12	31.222	19.95	98.90	Н					
ĭ	20425	826.5	-17.70	31.504	11.65	14.64	V					
	20525	836.5	-17.06	31.117	11.91	15.51	V					
	20625	846.5	-17.97	31.922	11.80	15.14	V					



	LTE Band 5											
	Channel Bandwidth: 5MHz / 16QAM											
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)					
	20425	826.5	-10.32	31.208	18.74	74.78	Н					
	20525	836.5	-10.75	31.3	18.40	69.18	Н					
Y	20625	846.5	-10.71	31.222	18.36	68.58	Н					
T .	20425	826.5	-18.98	31.504	10.37	10.90	V					
	20525	836.5	-18.08	31.117	10.89	12.27	V					
	20625	846.5	-18.84	31.922	10.93	12.39	V					

	LTE Band 5											
	Channel Bandwidth: 10MHz / QPSK											
Plane	Plane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Polariza											
	20450	829.0	-9.23	31.208	19.83	96.12	Н					
	20525	836.5	-9.69	31.3	19.46	88.31	Н					
Y	20600	844.0	-9.23	31.222	19.84	96.43	Н					
ľ	20450	829.0	-17.03	31.504	12.32	17.08	V					
	20525	836.5	-16.84	31.117	12.13	16.32	V					
	20600	844.0	-17.40	31.922	12.37	17.27	V					

	LTE Band 5											
	Channel Bandwidth: 10MHz / 16QAM											
Plane	Plane Channel Frequency (MHz) LVL Correction Factor(dB) ERP(dBm) ERP(mW) Pola (
	20450	829.0	-9.92	31.208	19.14	82.00	Н					
	20525	836.5	-10.33	31.3	18.82	76.21	Н					
v	20600	844.0	-10.04	31.222	19.03	80.02	Н					
ĭ	20450	829.0	-17.80	31.504	11.55	14.30	V					
	20525	836.5	-17.91	31.117	11.06	12.76	V					
	20600	844.0	-18.25	31.922	11.52	14.20	V					



4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

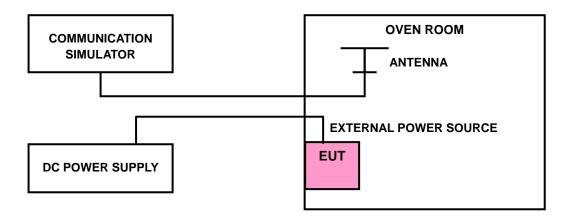
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

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



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4.2.4 TEST RESULTS

FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volts)	GSM	EDGE	WCDMA	CDMA	LIMIT (ppm)
3.8	-0.013	0.019	0.008	-0.005	2.5
3.4	-0.008	0.013	0.005	-0.006	2.5
4.35	-0.011	0.016	0.011	-0.006	2.5

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

FREQUENCY ERROR vs. TEMPERATURE

TEMP. (°C)	GSM	EDGE	WCDMA	CDMA	LIMIT (ppm)
-30	-0.008	0.007	0.022	-0.004	2.5
-20	0.004	0.004	0.004	-0.006	2.5
-10	-0.006	-0.004	0.014	-0.006	2.5
0	-0.010	-0.006	-0.001	-0.002	2.5
10	-0.012	-0.012	-0.013	-0.003	2.5
20	-0.024	-0.018	0.017	-0.005	2.5
30	0.001	0.024	0.001	-0.006	2.5
40	-0.018	0.017	0.011	-0.005	2.5
50	0.024	0.022	0.008	-0.004	2.5



FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volts)		LIMIT (ppm)			
	1.4MHz	3MHz	5MHz	10MHz	
3.8	-0.005738195	-0.004303646	-0.005499103	-0.001075912	2.5
3.4	-0.003945009	-0.002988643	-0.008129109	-0.002151823	2.5
4.35	-0.003227735	-0.00334728	-0.011117753	-0.001554094	2.5

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

FREQUENCY ERROR vs. TEMPERATURE

TEMP. (℃)		LIMIT (ppm)			
	1.4MHz	3MHz	5MHz	10MHz	
-30	-0.004064555	-0.004303646	0.002151823	-0.002271369	2.5
-20	-0.003108189	-0.002749552	0.003227735	-0.003825463	2.5
-10	-0.004901375	-0.006814106	0.00251046	-0.005020921	2.5
0	-0.002988643	-0.005020921	-0.006335923	0.00167364	2.5
10	-0.00334728	-0.002151823	-0.005140466	0.002271369	2.5
20	-0.001793186	-0.00251046	-0.004542738	0.002869097	2.5
30	-0.003705918	-0.003108189	-0.00251046	-0.001315003	2.5
40	-0.005379558	-0.002630006	-0.002032277	-0.000239091	2.5
50	-0.001912732	-0.003705918	-0.008248655	-0.000597729	2.5

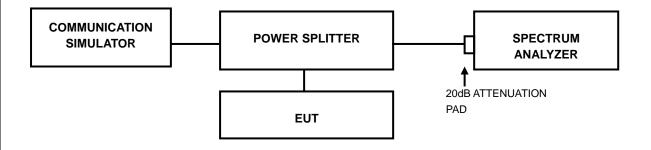


4.3 OCCUPIED BANDWIDTH MEASUREMENT

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





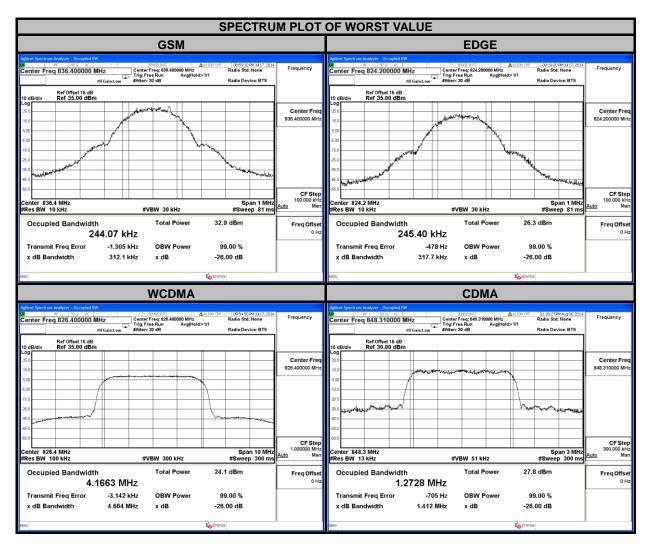
4.3.3 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (kHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)
	,	GSM	EDGE		, ,	WCDMA
128	824.2	242.03	245.40	4132	826.4	4.1663
189	836.4	244.07	243.49	4182	836.4	4.1584
251	848.8	240.81	244.19	4233	846.6	4.1599
CHANNEL	FREQUENCY	26dB BANDWIDTH (kHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)
	(MHz)	GSM	EDGE		(MHz)	WCDMA
128	824.2	305.60	317.70	4132	826.4	4.664
189	836.4	312.10	318.60	4182	836.4	4.671
251	848.8	313.20	320.30	4233	846.6	4.666

CDMA								
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	26dB BANDWIDTH (MHz)					
1013	824.70	1.2689	1.411					
384	836.52	1.2697	1.421					
777	848.31	1.2728	1.412					

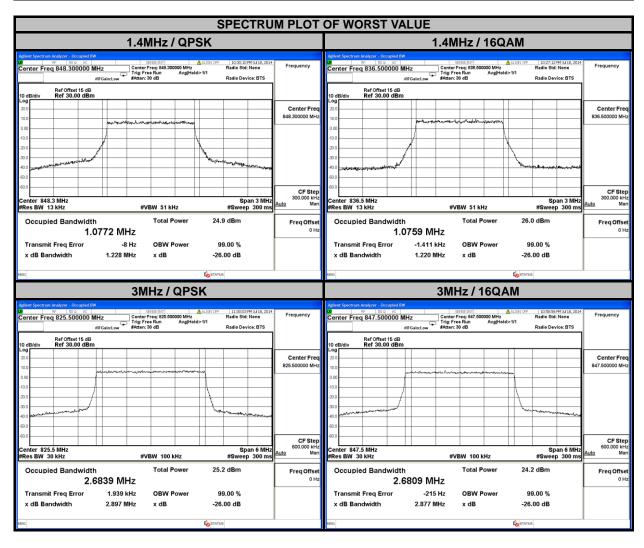






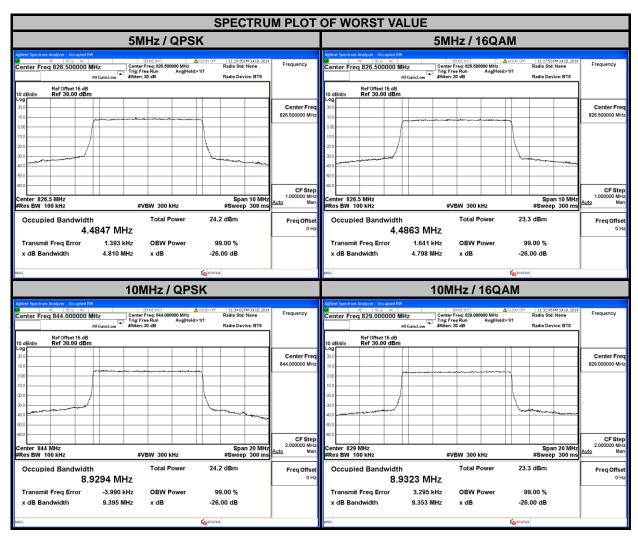


LTE BAND 5									
C	CHANNEL BANDWIDTH: 1.4MHz CHANNEL BANDWIDTH: 3MHz								
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)			
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM		
20407	824.7	1.0769	1.0757	20415	825.5	2.6839	2.6803		
20525	836.5	1.0770	1.0759	20525	836.5	2.6823	2.6788		
20643	848.3	1.0772	1.0754	20635	847.5	2.6835	2.6809		
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)			
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM		
20407	824.7	1.227	1.207	20415	825.5	2.897	2.881		
20525	836.5	1.227	1.220	20525	836.5	2.882	2.879		
20643	848.3	1.228	1.208	20635	847.5	2.883	2.877		





LTE BAND 5								
	CHANNEL BANDWIDTH: 5MHz CHANNEL BANDWIDTH: 10MHz							
CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (MHz)		
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM	
20425	826.5	4.4847	4.4863	20450	829.0	8.9215	8.9323	
20525	836.5	4.4828	4.4829	20525	836.5	8.9206	8.9195	
20625	846.5	4.4817	4.4826	20600	844.0	8.9294	8.9282	
CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		CHANNEL	FREQUENCY	26dB BANDWIDTH (MHz)		
	(MHz)	QPSK	16QAM		(MHz)	QPSK	16QAM	
20425	826.5	4.810	4.798	20450	829.0	9.345	9.353	
20525	836.5	4.796	4.794	20525	836.5	9.346	9.395	
20625	846.5	4.809	4.801	20600	844.0	9.395	9.399	



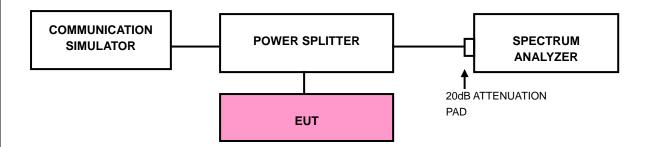


4.4 BAND EDGE MEASUREMENT

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

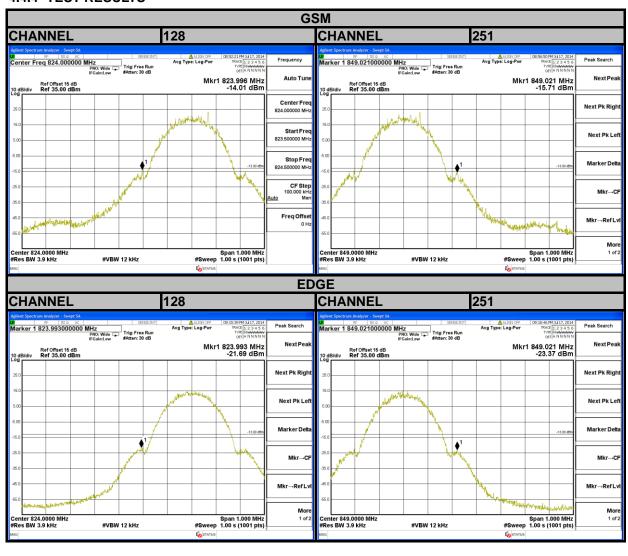


4.4.3 TEST PROCEDURES

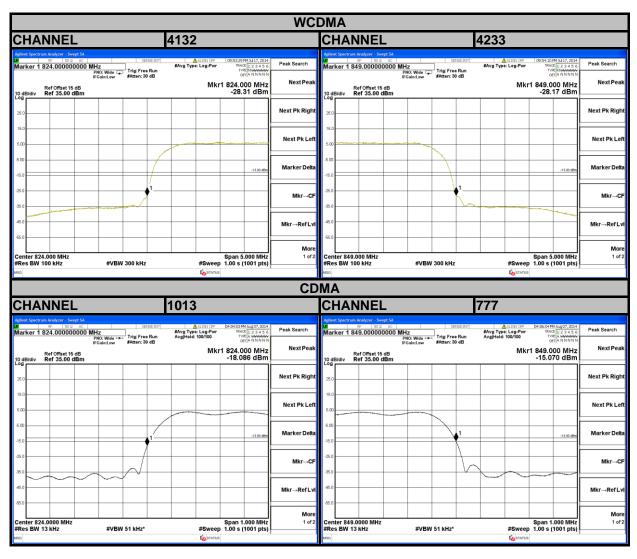
- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/ EDGE).
- c. The center frequency of spectrum is the band edge frequency 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.



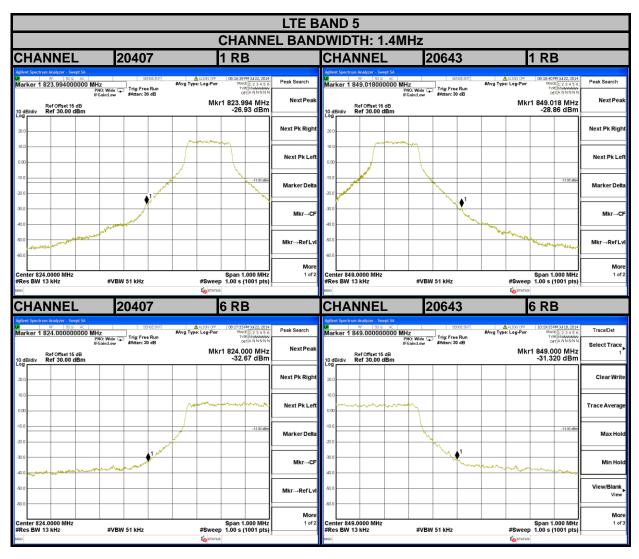
4.4.4 TEST RESULTS



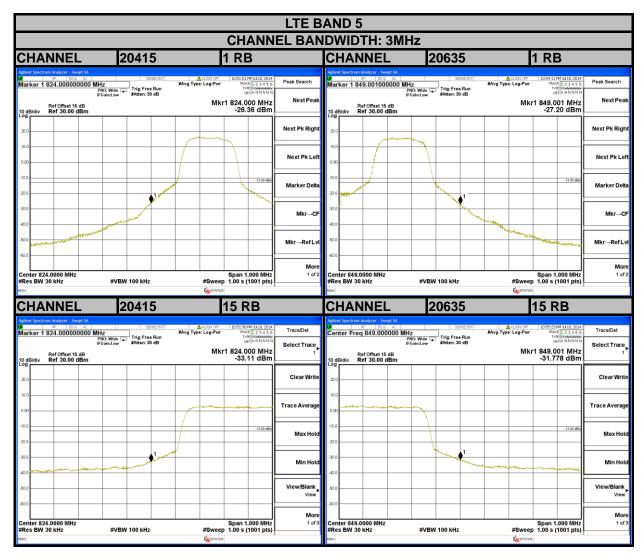




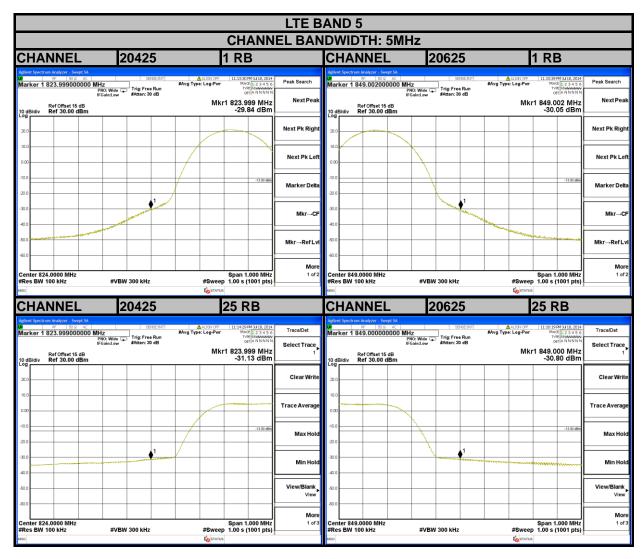




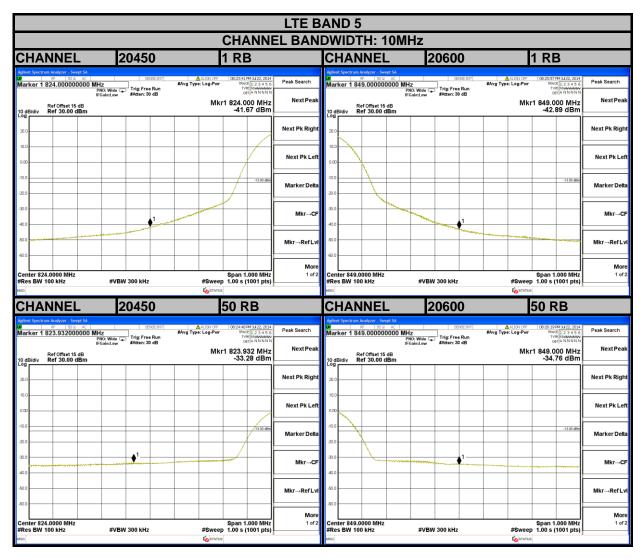














4.5 CONDUCTED SPURIOUS EMISSIONS

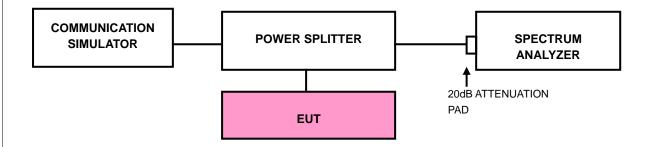
4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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

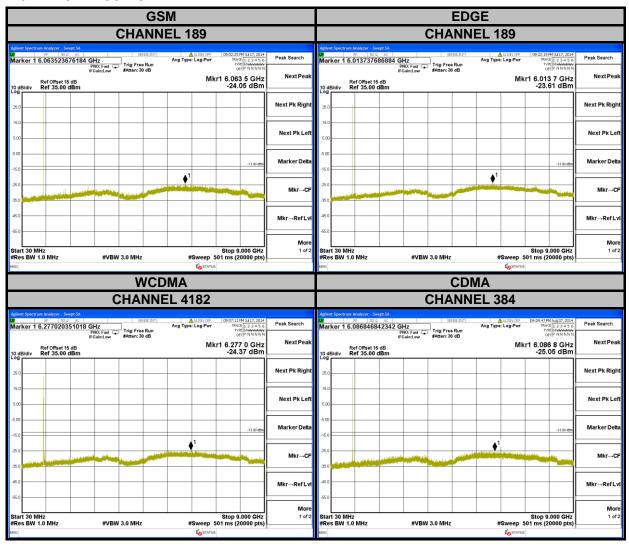
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 30 MHz to 9GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission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

4.5.3 TEST SETUP

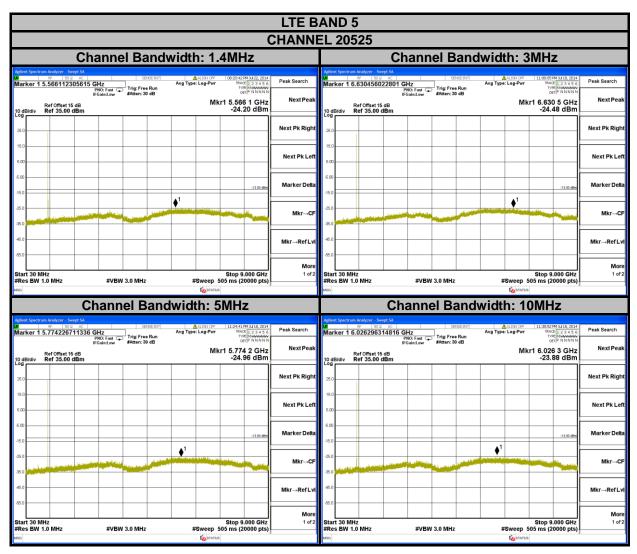




4.5.4 TEST RESULTS









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.

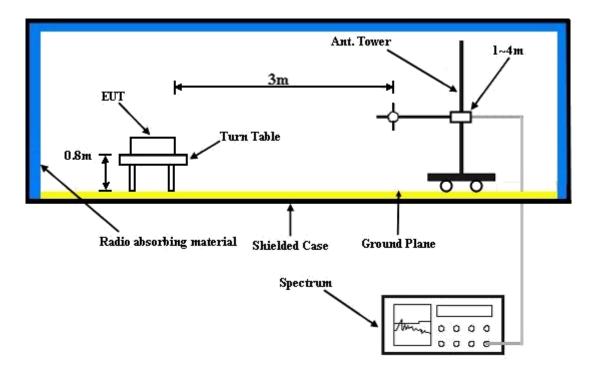
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

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).

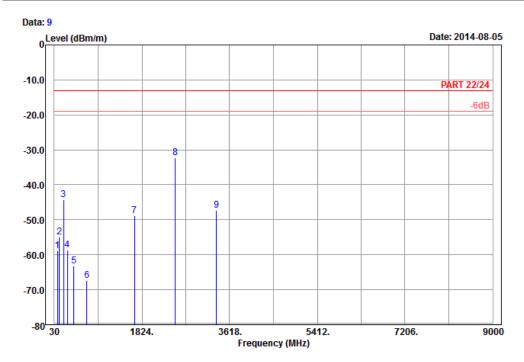


4.6.5 TEST RESULTS

GSM:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal

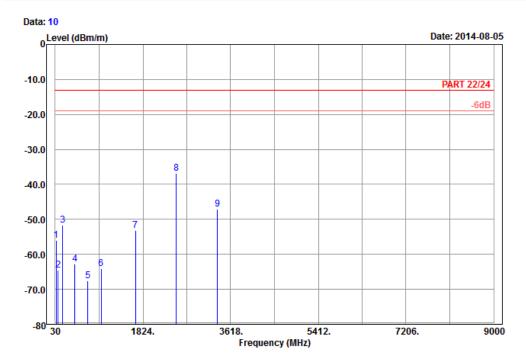
Remark : GSM 850_Link_CH189

Tested by: Will Chen

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_							
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	92.64	-58.79	-48.28	-13.00	-45.79	-10.51	Peak
2	137.19	-54.86	-47.18	-13.00	-41.86	-7.68	Peak
3	219.27	-44.35	-38.43	-13.00	-31.35	-5.92	Peak
4	300.70	-58.64	-52.69	-13.00	-45.64	-5.95	Peak
5	428.80	-63.20	-59.82	-13.00	-50.20	-3.38	Peak
6	694.80	-67.35	-67.00	-13.00	-54.35	-0.35	Peak
7	1672.80	-48.91	-56.82	-13.00	-35.91	7.91	Peak
8 pp	2509.20	-32.34	-43.62	-13.00	-19.34	11.28	Peak
9	3345.60	-47.22	-61.67	-13.00	-34.22	14.45	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : GSM 850_Link_CH189

Tested by: Will Chen

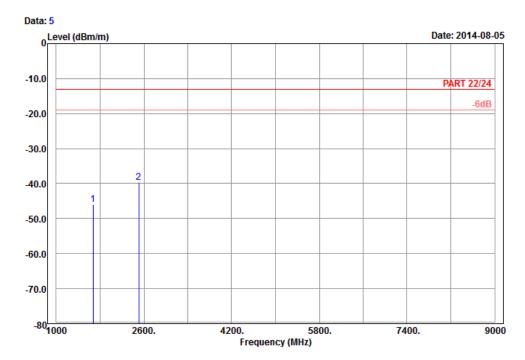
	Freq	Level	Read Level		Over Limit	Factor	Remark
-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	46.47	-55.93	-43.13	-13.00	-42.93	-12.80	Peak
2	90.75	-64.47	-53.85	-13.00	-51.47	-10.62	Peak
3	183.09	-51.66	-46.04	-13.00	-38.66	-5.62	Peak
4	428.80	-62.85	-59.47	-13.00	-49.85	-3.38	Peak
5	695.50	-67.49	-67.14	-13.00	-54.49	-0.35	Peak
6	968.50	-64.00	-69.17	-13.00	-51.00	5.17	Peak
7	1672.80	-53.10	-61.01	-13.00	-40.10	7.91	Peak
8 рр	2509.20	-36.75	-48.03	-13.00	-23.75	11.28	Peak
9	3345.60	-47.08	-61.53	-13.00	-34.08	14.45	Peak



EDGE:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal Remark : EDGE 850_Link_CH189

Tested by: Will Chen

Plane : X

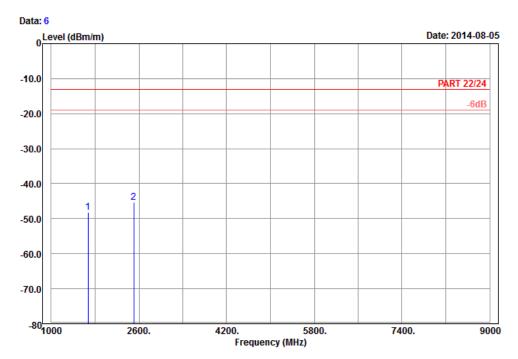
Read Limit Over
Freq Level Level Line Limit Factor Remark

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

1 1672.80 -46.03 -53.94 -13.00 -33.03 7.91 Peak 2 pp 2509.20 -39.57 -50.85 -13.00 -26.57 11.28 Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : EDGE 850_Link_CH189

Tested by: Will Chen

Plane : X

Read Limit Over
Freq Level Level Line Limit Factor Remark

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

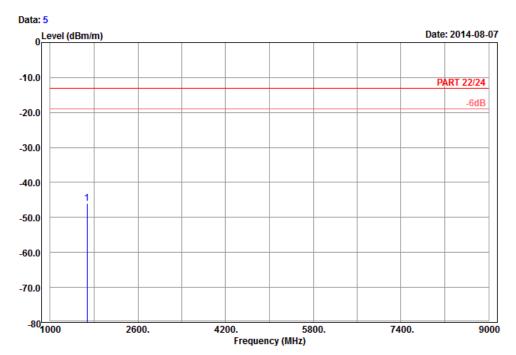
1 1672.80 -48.28 -56.19 -13.00 -35.28 7.91 Peak 2 pp 2509.20 -45.28 -56.56 -13.00 -32.28 11.28 Peak



WCDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal

Remark : Band V_Link_CH4182

Tested by: Will Chen

Plane : X

Read Limit Over

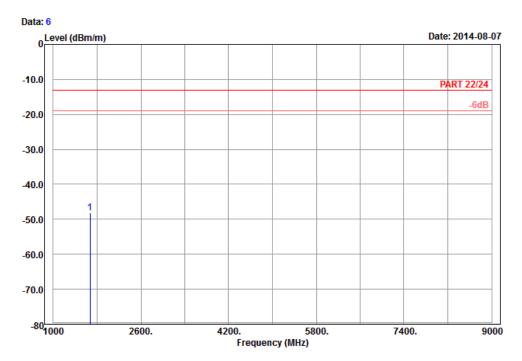
Freq Level Level Line Limit Factor Remark

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

1 pp 1672.80 -45.91 -53.82 -13.00 -32.91 7.91 Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical Remark : Band V_Link_CH4182

Tested by: Will Chen

Plane : X

Read Limit Over
Freq Level Level Limit Factor Remark

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

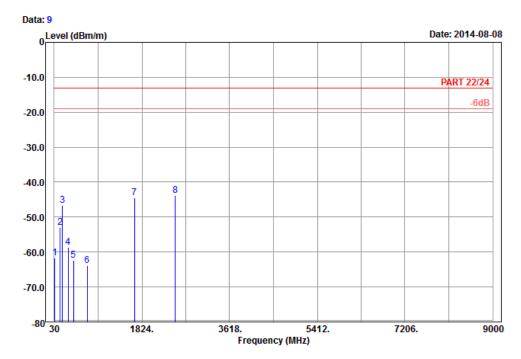
1 pp 1672.80 -48.24 -56.15 -13.00 -35.24 7.91 Peak



CDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

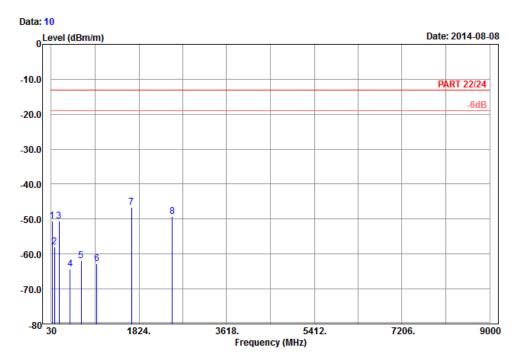
Condition: PART 22/24 3m Horizontal

Remark : BC0_Link_CH384 Tested by: Will Chen

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	45.39	-61.61	-49.13	-13.00	-48.61	-12.48	Peak
2	147.18	-52.91	-45.03	-13.00	-39.91	-7.88	Peak
3	196.32	-46.72	-40.72	-13.00	-33.72	-6.00	Peak
4	316.80	-58.70	-52.94	-13.00	-45.70	-5.76	Peak
5	427.40	-62.26	-58.90	-13.00	-49.26	-3.36	Peak
6	704.60	-63.81	-63.36	-13.00	-50.81	-0.45	Peak
7	1673.04	-44.48	-52.39	-13.00	-31.48	7.91	Peak
8 pp	2509.56	-43.78	-55.06	-13.00	-30.78	11.28	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical

Remark : BC0_Link_CH384 Tested by: Will Chen

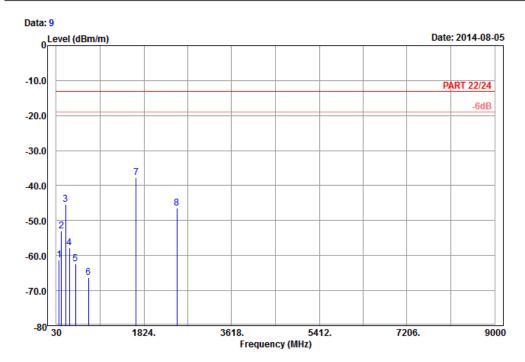
	Freq	Level		Limit Line		Factor	Remark	
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		_
1	47.82	-50.58	-37.47	-13.00	-37.58	-13.11	Peak	
2	93.99	-57.87	-47.42	-13.00	-44.87	-10.45	Peak	
3	188.49	-50.59	-44.89	-13.00	-37.59	-5.70	Peak	
4	419.00	-64.34	-61.17	-13.00	-51.34	-3.17	Peak	
5	638.80	-61.98	-61.97	-13.00	-48.98	-0.01	Peak	
6	965.70	-62.85	-68.01	-13.00	-49.85	5.16	Peak	
7 pp	1673.04	-46.60	-54.51	-13.00	-33.60	7.91	Peak	
8	2509.56	-49.26	-60.54	-13.00	-36.26	11.28	Peak	



LTE BAND 5 CHANNEL BANDWIDTH: 10MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 chamber 5

Condition: PART 22/24 3m Horizontal

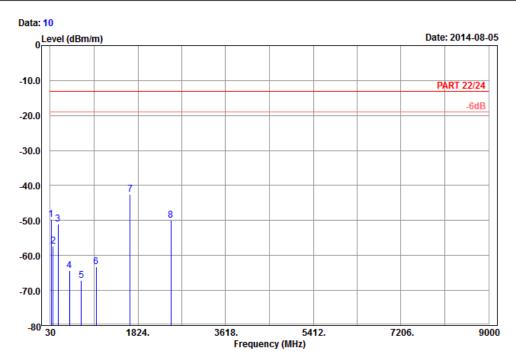
 $Remark \hspace*{0.2cm} : \hspace*{0.2cm} LTE_Band \hspace*{0.2cm} 5_QPSK(1,24)_10M_CH20525$

Tested by: Harry Hsueh

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
_							
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	91.02	-61.16	-50.54	-13.00	-48.16	-10.62	Peak
2	138.00	-52.88	-45.20	-13.00	-39.88	-7.68	Peak
3	223.86	-45.25	-39.39	-13.00	-32.25	-5.86	Peak
4	301.40	-57.73	-51.79	-13.00	-44.73	-5.94	Peak
5	420.40	-62.34	-59.15	-13.00	-49.34	-3.19	Peak
6	688.50	-66.31	-65.99	-13.00	-53.31	-0.32	Peak
7 pp	1664.20	-37.77	-45.68	-13.00	-24.77	7.91	Peak
8	2496.30	-46.45	-57.49	-13.00	-33.45	11.04	Peak







Site : 966 chamber 5

Condition: PART 22/24 3m Vertical

Remark : LTE_Band 5_QPSK(1,24)_10M_CH20525

Tested by: Harry Hsueh

			Read	Limit	0ver		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	48.36	-49.70	-36.27	-13.00	-36.70	-13.43	Peak
2	91.02	-57.39	-46.77	-13.00	-44.39	-10.62	Peak
3	189.03	-51.09	-45.37	-13.00	-38.09	-5.72	Peak
4	427.40	-64.21	-60.85	-13.00	-51.21	-3.36	Peak
5	661.90	-67.14	-66.95	-13.00	-54.14	-0.19	Peak
6	967.10	-63.27	-68.43	-13.00	-50.27	5.16	Peak
7 pp	1664.20	-42.48	-50.39	-13.00	-29.48	7.91	Peak
8	2496 30	-49 97	-61 01	-13.00	-36.97	11 04	Peak



	A D T
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 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.

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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