

FCC TEST REPORT (PART 22)

REPORT NO.: RF120713C03

MODEL NO.: PM36100

FCC ID: NM8PM36100

RECEIVED: Jul. 13, 2012

TESTED: Jul. 25 ~ Jul. 30, 2012

ISSUED: Aug. 08, 2012

APPLICANT: HTC Corporation

ADDRESS: 23, Xinghua Rd., Taoyuan 330, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New

Taipei City, Taiwan (R.O.C.)

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

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

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





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.: RF120713C03 1 of 56 Report Format Version 5.0.0



TABLE OF CONTENTS

RELEAS	SE CONTROL RECORD	
1	CERTIFICATION	4
2	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	5
2.2	TEST SITE AND INSTRUMENTS	6
3	GENERAL INFORMATION	7
3.1	GENERAL DESCRIPTION OF EUT	7
3.2	CONFIGURATION OF SYSTEM UNDER TEST	8
3.3	DESCRIPTION OF SUPPORT UNITS	
3.4	TEST ITEM AND TEST CONFIGURATION	
3.5	EUT OPERATING CONDITIONS	.11
3.6	GENERAL DESCRIPTION OF APPLIED STANDARDS	.11
4	TEST 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	24
4.4.4	TEST RESULTS	25
4.5	CONDUCTED SPURIOUS EMISSIONS	28
4.5.1	LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	28
4.5.2	TEST PROCEDURE	28
4.5.3	TEST SETUP	28
4.5.4	TEST RESULTS	
4.6	RADIATED EMISSION MEASUREMENT	30
4.6.1	LIMITS OF RADIATED EMISSION MEASUREMENT	30
4.6.2	TEST PROCEDURES	
4.6.3	DEVIATION FROM TEST STANDARD	30
4.6.4	TEST SETUP	
4.6.5	TEST RESULTS	
5	PHOTOGRAPHS OF THE TEST CONFIGURATION	
6	INFORMATION ON THE TESTING LABORATORIES	
7	APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES THE EUT BY THE LAB	



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120713C03	Original release	Aug. 08, 2012

Report No.: RF120713C03 3 of 56 Report Format Version 5.0.0



CERTIFICATION

PRODUCT: Smart Phone

MODEL: PM36100

BRAND: HTC

APPLICANT: HTC Corporation

TESTED: Jul. 25 ~ Jul. 30, 2012

TEST SAMPLE: Production Unit

STANDARDS: FCC PART 22, Subpart H

The above equipment (model: PM36100) 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.

Andrea Hsia / Specialist Aug. 08, 2012

APPROVED BY



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 TRESULT		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		Meet the requirement of limit. Minimum passing margin is -25.12dB at 226.29MHz.		

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz~30MHz	2.44 dB
	30MHz ~ 200MHz	2.93 dB
Radiated emissions	200MHz ~1000MHz	2.95 dB
Radiated emissions	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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



2.2 TEST SITE AND INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Dec. 22, 2011	Dec. 21, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2011	Dec. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 20, 2011	Dec. 19, 2012
ORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 20, 2011	Dec. 19, 2012
Preamplifier EMCI	EMC 012645	980115	Dec. 30, 2011	Dec. 29, 2012
Preamplifier EMCI	EMC 330H	980112	Dec. 30, 2011	Dec. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 21, 2011	Oct. 20, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Jan. 02, 2012	Jan. 01, 2013
RF signal cable Worken	RG-213	NA	Jan. 02, 2012	Jan. 01, 2013
Software	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
Mini-Circuits Power Splitter	ZN2PD-9G	NA	Mar. 23, 2012	Mar. 22, 2013
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY50266653	Sep. 28, 2011	Sep. 27, 2012
Radio Communication Analyzer	MT8820C	6201010284	Aug. 01, 2011	Jul. 31, 2012

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

- 2. The test was performed in HwaYa Chamber 9.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 460141.
- 5. The IC Site Registration No. is IC 7450F-4.



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Smart Phone				
MODEL NO.	PM36100				
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.8Vdc (battery)				
	GSM/GPRS	GMSK			
MODULATION TYPE	EDGE	8PSK			
MODULATION TIPE	WCDMA	BPSK			
	LTE	QPSK, 16QAM			
	GSM/GPRS/EDGE	824.2MHz ~ 848.8MHz			
	WCDMA	826.4MHz ~ 846.6MHz			
FREQUENCY RANGE	LTE (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz			
	LTE (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz			
	GSM	1083.93mW			
	EDGE	239.88mW			
	WCDMA	100.46mW			
MAX. ERP POWER	LTE (Channel Bandwidth: 5MHz)	83.95mW			
	LTE (Channel Bandwidth: 10MHz)	92.68mW			
	GSM	245KGXW			
	EDGE	248KG7W			
EMISSION	WCDMA	4M19F9W			
DESIGNATOR	LTE (Channel Bandwidth: 5MHz)	4M50G7D			
	LTE (Channel Bandwidth: 10MHz)	8M93W7D			
MULTI-SLOTS CLASS	10				
WCDMA RELEASE VERSION	6				
	GSM				
ANTENNA TYPE	EDGE	Fixed Internal antenna with -1.26dBi			
ANTENNA ITE	WCDMA	gain			
	LTE				
I/O PORTS	Refer to users' manual				
DATA CABLE	Refer to NOTE as below				
ACCESSORY DEVICES	Refer to NOTE as below				

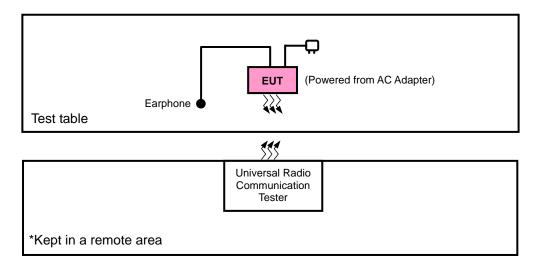


NOTE:

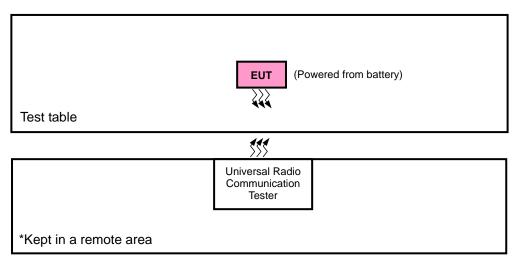
- 1. The EUT's accessories list refers to Ext Pho.pdf.
- 2. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

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	Earphone	Merry	HS S250	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.1m non-shielded cable

NOTE: All power cords of the above support units are non shielded (1.8m).

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 Y-plane for ERP and X-axis for GSM/WCDMA and Y-axis for LTE for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

GSM 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
RADIATED EMISSION	128 to 251	189	GSM, EDGE

WCDMA 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
CONDCUDETED EMISSION	4132 to 4233	4182	WCDMA
RADIATED EMISSION	4132 to 4233	4182	WCDMA

Report No.: RF120713C03 9 of 56 Report Format Version 5.0.0



LTE BAND 5 MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	20425 to 20625	20425, 20525, 20625	5MHz	QPSK	1 RB / 0 RB Offset
ERP	20450 to 20600	20450, 20525, 20600	10MHz	QPSK	1 RB / 0 RB Offset
FREQUENCY STABILITY	23755 to 23825	20525	5MHz	QPSK	1 RB / 0 RB Offset
PREQUENCY STABILITY	23780 to 23800	20525	10MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	23755 to 23825	20525	5MHz	QPSK	25 RB / 0 RB Offset
OCCOPIED BANDWIDTH	23780 to 23800	20525	10MHz	QPSK	50 RB / 0 RB Offset
	22755 to 22825	20425 20625	5MHz	QPSK	1 RB / 0 RB Offset
BAND EDGE	23755 to 23825	20425, 20625	SIVIHZ	QPSK	25 RB / 0 RB Offset
BAIND EDGE	23780 to 23800	20450, 20600	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDETED EMISSION	23755 to 23825	20525	5MHz	QPSK	1 RB / 0 RB Offset
CONDCODE LED EINIGSION	23780 to 23800	20525	10MHz	QPSK	1 RB / 0 RB Offset
				QPSK	1 RB / 0 RB Offset
	23755 to 23825	20525	5MHz		25 RB / 0 RB Offset
	23733 10 23023	20323	SIVIHZ	16QAM	1 RB / 24 RB Offset
RADIATED EMISSION					25 RB / 0 RB Offset
RADIATED LIVIIGGION				QPSK	1 RB / 0 RB Offset
	23780 to 23800	20525	10MHz		50 RB / 0 RB Offset
	23700 10 23000	20323	TOIVIEZ		1 RB / 0 RB Offset
				16QAM	50 RB / 0 RB Offset

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	26deg. C, 58%RH	3.8Vdc	Phoenix Chen
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Phoenix Chen
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.8Vdc	Phoenix Chen
BAND EDGE	26deg. C, 58%RH	3.8Vdc	Phoenix Chen
CONDCUDETED EMISSION	26deg. C, 58%RH	3.8Vdc	Phoenix Chen
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Kay 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, 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.P.R power 2.15dBi.

CONDUCTED POWER MEASUREMENT:

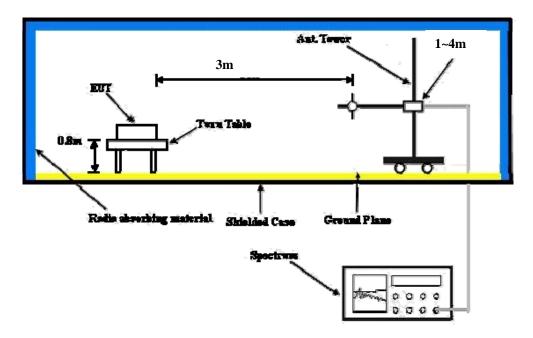
The EUT was set up for the maximum power with GSM, GPRS, EDGE & WCDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Report No.: RF120713C03 12 of 56 Report Format Version 5.0.0



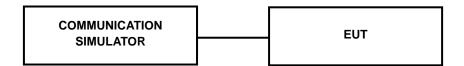
4.1.3 TEST SETUP

EIRP/ERP MEASUREMENT:



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

CONDUCTED POWER MEASUREMENT:



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



4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band		GPRS850	
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM	34.55	34.48	34.74
GPRS 8 (GMSK, 1 slot)	34.67	34.59	34.73
GPRS 10 (GMSK, 2 slot)	32.55	32.52	32.56
EDGE 8 (GMSK, 1 slot)	34.62	34.55	34.70
EDGE 10 (GMSK, 2 slot)	32.51	32.49	32.47
EDGE 8 (8PSK, 1 slot)	27.63	27.58	27.65
EDGE 10 (8PSK, 2 slot)	27.41	27.45	27.43

Band		WCDMA V	
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.95	23.82	23.97
HSDPA Subtest-1	23.07	23.03	23.05
HSDPA Subtest-2	23.00	22.93	23.10
HSDPA Subtest-3	22.46	22.49	22.59
HSDPA Subtest-4	22.47	22.58	22.54
HSUPA Subtest-1	22.80	22.85	22.76
HSUPA Subtest-2	20.90	20.86	21.03
HSUPA Subtest-3	21.68	21.25	21.22
HSUPA Subtest-4	21.87	21.92	21.88
HSUPA Subtest-5	23.02	23.00	22.97

Report No.: RF120713C03 14 of 56 Report Format Version 5.0.0



				LTE Band	d 5			
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
		20425	826.5	1	0	0	24.7	24.19
		20525	836.5	1	0	0	24.7	24.47
		20625	846.5	1	0	0	24.7	24.44
		20425	826.5	1	24	0	24.7	24.48
		20525	836.5	1	24	0	24.7	24.58
	o Dole	20625	846.5	1	24	0	24.7	24.56
	QPSK	20425	826.5	12	6	1	24.7	23.38
		20525	836.5	12	6	1	24.7	23.49
		20625	846.5	12	6	1	24.7	23.47
		20425	826.5	25	0	1	24.7	23.3
		20525	836.5	25	0	1	24.7	23.37
5 NALL-		20625	846.5	25	0	1	24.7	23.33
5 MHz		20425	826.5	1	0	1	24.7	23.10
		20525	836.5	1	0	1	24.7	23.40
		20625	846.5	1	0	1	24.7	23.20
		20425	826.5	1	24	1	24.7	23.43
		20525	836.5	1	24	1	24.7	23.45
		20625	846.5	1	24	1	24.7	23.33
	16QAM	20425	826.5	12	6	2	24.7	22.25
		20525	836.5	12	6	2	24.7	22.46
		20625	846.5	12	6	2	24.7	22.45
		20425	826.5	25	0	2	24.7	22.15
		20525	836.5	25	0	2	24.7	22.28
		20625	846.5	25	0	2	24.7	22.27



				LTE Band	15			
D14/		011	Frequency		DD 0" 1	was	Target	Measured
BW	Modulation	СН	(MHz)	RB	RB Offset	MPR	Power	Power
		20450	829	1	0	0	24.7	24.60
		20525	836.5	1	0	0	24.7	24.63
		20600	844	1	0	0	24.7	24.52
		20450	829	1	49	0	24.7	24.43
		20525	836.5	1	49	0	24.7	24.48
	ODCK	20600	844	1	49	0	24.7	24.46
	QPSK	20450	829	25	12	1	24.7	23.32
		20525	836.5	25	12	1	24.7	23.42
		20600	844	25	12	1	24.7	23.33
		20450	829	50	0	1	24.7	23.16
		20525	836.5	50	0	1	24.7	23.18
10MHz		20600	844	50	0	1	24.7	23.01
TUNIHZ		20450	829	1	0	1	24.7	23.17
		20525	836.5	1	0	1	24.7	23.38
		20600	844	1	0	1	24.7	23.22
		20450	829	1	49	1	24.7	23.59
		20525	836.5	1	49	1	24.7	23.61
	460 414	20600	844	1	49	1	24.7	23.51
	16QAM	20450	829	25	12	2	24.7	22.15
		20525	836.5	25	12	2	24.7	22.26
		20600	844	25	12	2	24.7	21.96
		20450	829	50	0	2	24.7	21.98
		20525	836.5	50	0	2	24.7	22.11
		20600	844	50	0	2	24.7	22.09



ERP POWER (dBm)

GSM

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB) ERP(dBm)		ERP(mW)	Polarization (H/V)
	128	824.2	-0.12	32.62	30.35	1083.93	Н
	189	836.4	-0.76	32.52	29.61	914.11	Н
v	251	848.8	-0.57	32.65	29.93	984.01	Н
ľ	128	824.2	-10.30	32.76	20.31	107.40	V
	189	836.4	-10.65	32.39	19.59	90.99	V
	251	848.8	-10.08	32.54	20.31	107.40	V

EDGE

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	128	824.2	-6.67	32.62	23.80	239.88	Н
	189	836.4	-7.25	32.52	23.12	205.12	Н
v	251	848.8	-6.97	32.65	23.53	225.42	Н
Y	128	824.2	-16.99	32.76	13.62	23.01	V
	189	836.4	-16.68	32.39	13.56	22.70	V
	251	848.8	-16.36	32.54	14.03	25.29	V

WCDMA

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	4132	826.4	-10.51	32.62	19.96	99.08	Н
	4182	836.4	-10.35	32.52	20.02	100.46	Н
\ _{\ \}	4233	846.6	-10.66	32.65	19.84	96.38	Н
1	4132	826.4	-20.85	32.76	9.76	9.46	V
	4182	836.4	-20.55	32.39	9.69	9.31	V
	4233	846.6	-20.73	32.54	9.66	9.25	V



LTE BAND 5

CHANNEL BANDWIDTH: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	20425	826.5	-11.28	32.62	19.19	82.99	Н
	20525	836.5	-11.13	32.52	19.24	83.95	Н
Y	20625	846.5	-11.39	32.65	19.11	81.47	Н
ľ	20425	826.5	-18.73	32.76	11.88	15.42	V
	20525	836.5	-18.10	32.39	12.14	16.37	V
	20625	846.5	-18.90	32.54	11.49	14.09	V

CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
	20450	829	-11.47	32.62	19.00	79.43	Н
	20525	836.5	-11.05	32.52	19.32	85.51	Н
v	20600	844	-10.83	32.65	19.67	92.68	Н
ľ	20450	829	-15.17	32.76	15.44	34.99	V
	20525	836.5	-15.09	32.39	15.15	32.73	V
	20600	844	-15.24	32.54	15.15	32.73	V



4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

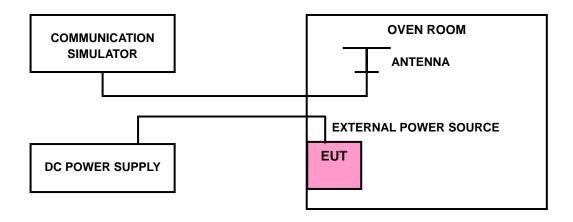
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

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



Report No.: RF120713C03 19 of 56 Report Format Version 5.0.0



4.2.4 TEST RESULTS

FREQUENCY ERROR VS. VOLTAGE

		FREQUENCY ERROR (ppm)						
VOLTAGE (Volts)	CDDS	EDGE	WODMA	LTE B	and 5	LIMIT (ppm)		
	GPRS	EDGE	WCDMA	5MHz	10MHz			
3.8	-0.03	-0.04	-0.06	0.00	0.00	2.5		
3.6	-0.02	-0.04	-0.05	0.00	0.00	2.5		
4.2	-0.03	-0.04	-0.06	0.00	0.00	2.5		

NOTE: The applicant defined the normal working voltage of the battery is from 3.6Vdc to 4.2Vdc.

FREQUENCY ERROR vs. TEMPERATURE.

		FREQUE	NCY ERROF	R (ppm)		
TEMP. (°C)	GPRS	EDGE	WCDMA	LTE B	and 5	LIMIT (ppm)
	GPKS	EDGE	WCDIVIA	5MHz	10MHz	
-10	-0.02	-0.03	-0.05	0.00	0.00	2.5
0	-0.02	-0.03	-0.05	0.00	0.00	2.5
10	-0.03	-0.04	-0.06	-0.01	0.00	2.5
20	-0.02	-0.03	-0.06	-0.01	0.00	2.5
30	-0.03	-0.04	-0.07	0.00	0.00	2.5
40	-0.03	-0.03	-0.06	0.00	0.00	2.5
50	-0.02	-0.03	-0.07	-0.01	0.00	2.5
55	-0.03	-0.04	-0.06	-0.01	0.00	2.5

Report No.: RF120713C03 20 of 56 Report Format Version 5.0.0

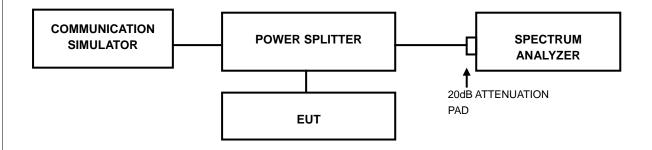


4.3 OCCUPIED BANDWIDTH MEASUREMENT

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.

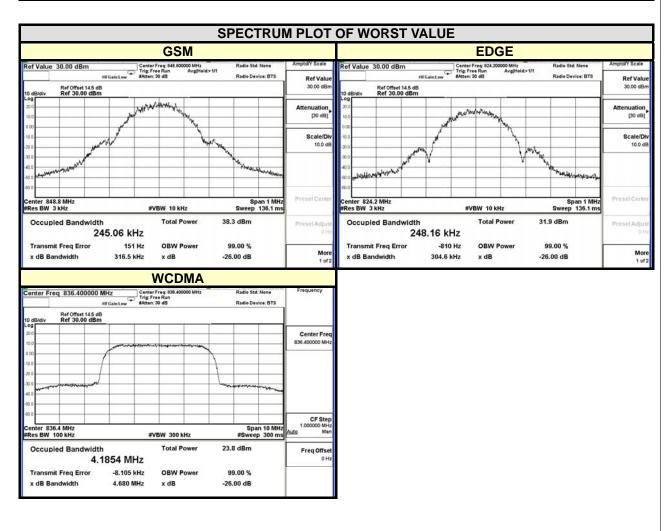
4.3.2 TEST SETUP





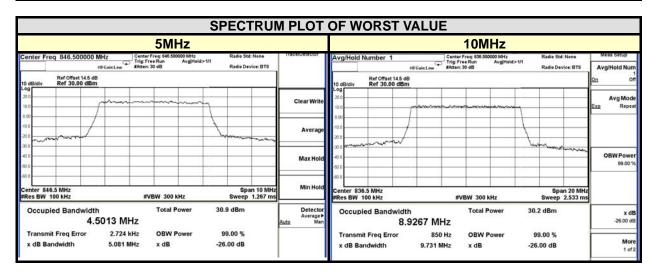
4.3.3 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	00,000	CUPIED OTH (kHz) EDGE	CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz) WCDMA
128	824.2	243.49	248.16	4132	826.4	4.1678
189	836.4	244.00	246.38	4182	836.4	4.1854
251	848.8	245.06	245.09	4233	846.6	4.1800





LTE BAND 5						
С	HANNEL BAND	WIDTH: 5MHz	CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
20425	826.5	4.4986	20450	829	8.9112	
20525	836.5	4.5008	20525	836.5	8.9267	
20625	846.5	4.5013	20600	844	8.9147	



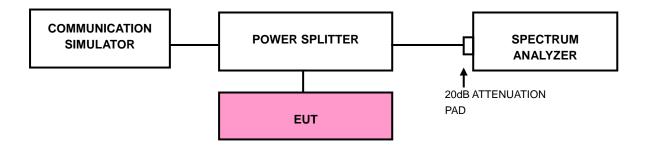


4.4 BAND EDGE MEASUREMENT

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

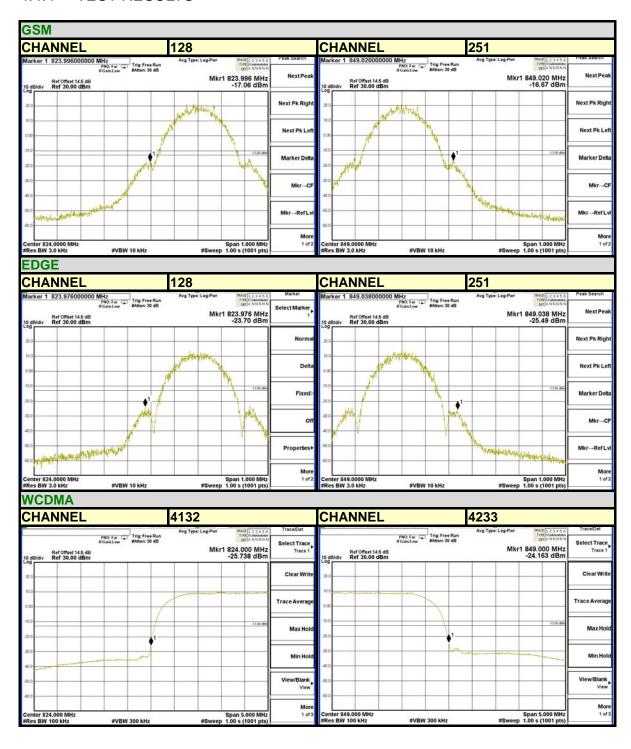


4.4.3 TEST PROCEDURES

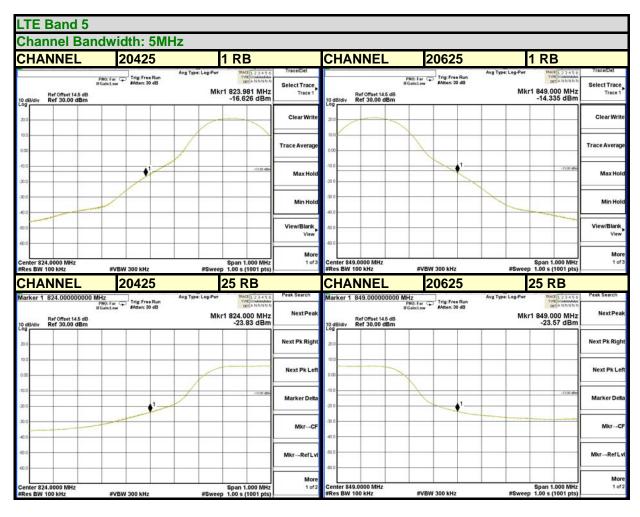
- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1.5 MHz. RB of the spectrum is 3kHz and VB of the spectrum is 3kHz (GSM/GPRS/ EDGE).
- c. The center frequency of spectrum is the band edge frequency and span is 10MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA/LTE).
- d. Record the max trace plot into the test report.



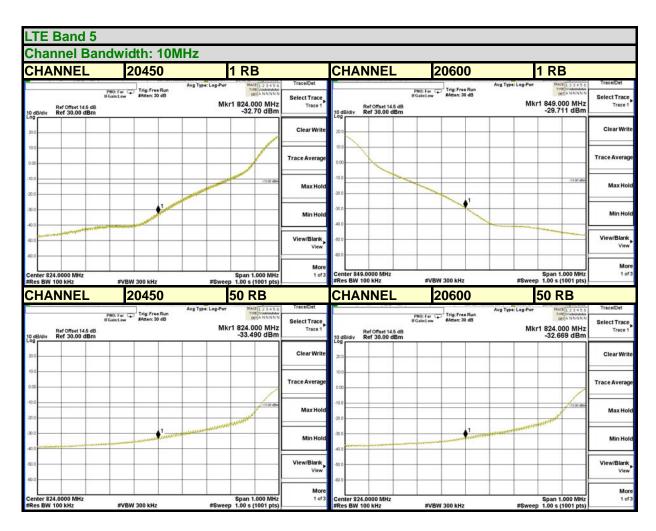
4.4.4 TEST RESULTS













4.5 CONDUCTED SPURIOUS EMISSIONS

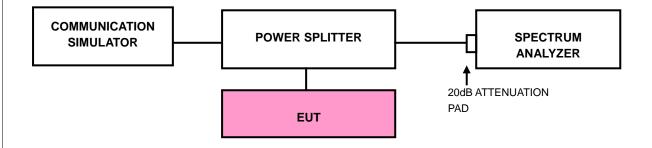
4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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 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.
- 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.

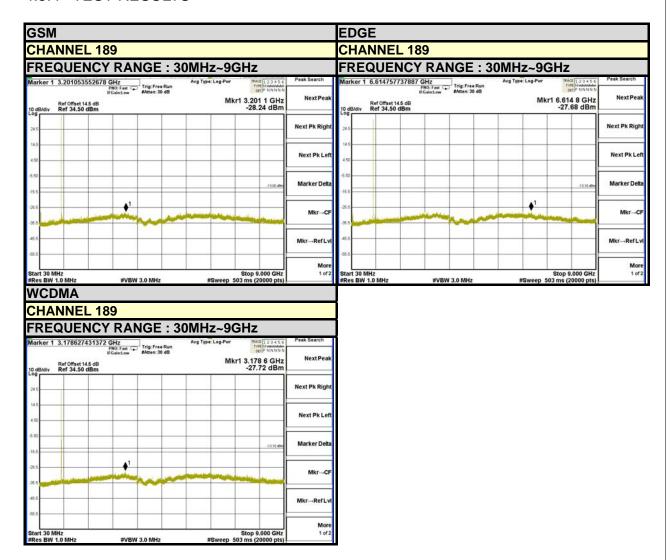
4.5.3 TEST SETUP

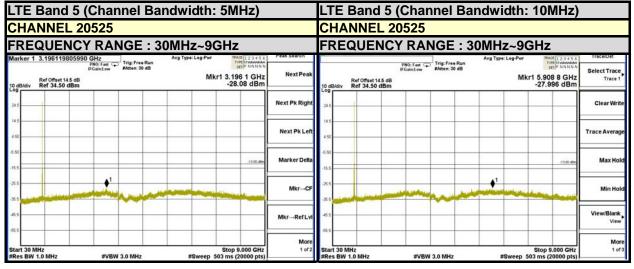


Report No.: RF120713C03 28 of 56 Report Format Version 5.0.0



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 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.P.R power 2.15dBi.

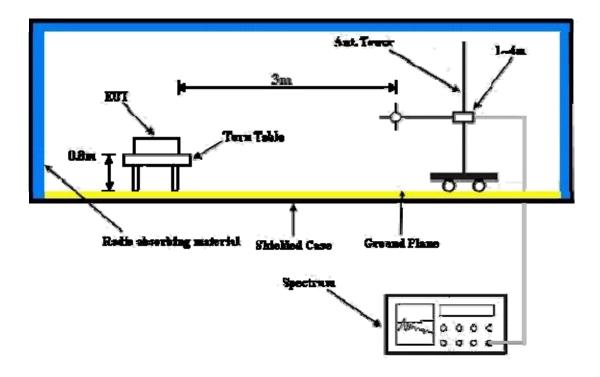
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

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).

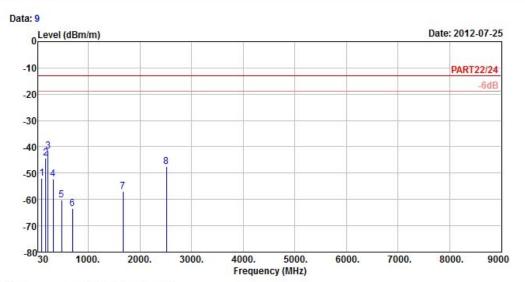


4.6.5 TEST RESULTS

GSM:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100
Remark : GSM850 Link
Tested by : Kay Wu
Temprature : 25℃
Humidity : 65%
Plane : X

		Freq	Level	Level	Line	Limit	Factor	Remark
	8	MHz	dBm/m	dBm	dBm/m	dB	dB/m	<u> </u>
1		103.17	-52.10	-41.64	-13.00	-39.10	-10.46	Peak
2		174.99	-44.37	-37.58	-13.00	-31.37	-6.79	Peak
3	pp	222.78	-41.55	-34.65	-13.00	-28.55	-6.90	Peak
4		319.60	-52.24	-46.01	-13.00	-39.24	-6.23	Peak
5		482.70	-60.13	-56.60	-13.00	-47.13	-3.53	Peak
6		692.00	-63.37	-64.66	-13.00	-50.37	1.29	Peak
7		1672.80	-56.94	-44.12	-13.00	-43.94	-12.82	Peak
8		2509.20	-47.52	-38.35	-13.00	-34.52	-9.17	Peak

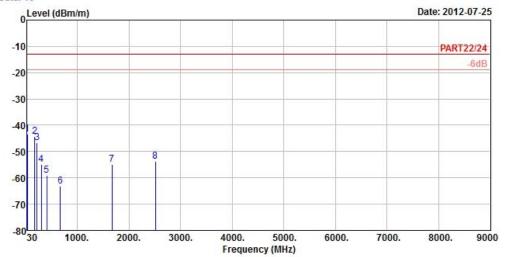
Read Limit Over





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch





Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100
Remark : GSM850 Link
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Read Limit Over Freq Level Level Line Limit Factor Remark

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

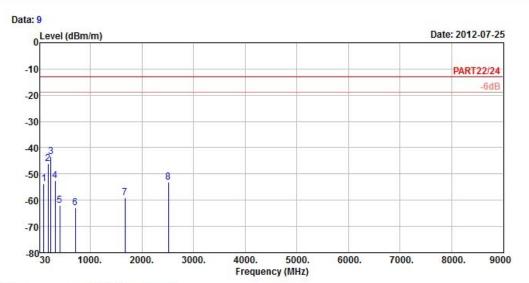
1 pp 33.24 -43.49 -42.38 -13.00 -30.49 -1.11 Peak
2 173.91 -44.26 -37.49 -13.00 -31.26 -6.77 Peak
3 223.05 -46.63 -39.73 -13.00 -33.63 -6.90 Peak
4 300.00 -54.95 -48.57 -13.00 -41.95 -6.38 Peak
5 408.50 -59.07 -53.65 -13.00 -46.07 -5.42 Peak
6 671.70 -63.03 -63.97 -13.00 -50.03 0.94 Peak
7 1672.80 -54.94 -42.12 -13.00 -41.94 -12.82 Peak
8 2509.20 -53.61 -44.44 -13.00 -40.61 -9.17 Peak



EDGE:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100
Remark : EDGE Link
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

	Freq	Level	Level	Line	Limit	Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	494
1	101.01	-53.70	-43.28	-13.00	-40.70	-10.42	Peak
2	179.04	-45.94	-40.08	-13.00	-32.94	-5.86	Peak
3 рр	235.47	-43.35	-37.02	-13.00	-30.35	-6.33	Peak
4	317.50	-52.62	-46.37	-13.00	-39.62	-6.25	Peak
5	407.10	-61.96	-56.52	-13.00	-48.96	-5.44	Peak
6	710.90	-62.80	-64.32	-13.00	-49.80	1.52	Peak
7	1672.80	-59.10	-46.28	-13.00	-46.10	-12.82	Peak
8	2509.20	-53.14	-43.97	-13.00	-40.14	-9.17	Peak

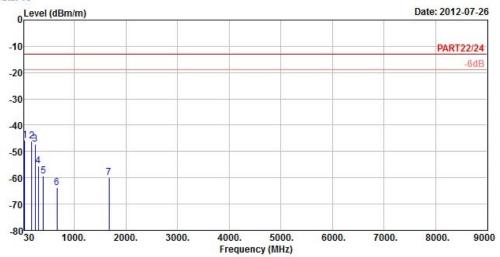
Read Limit Over





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch





Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100
Remark : EDGE Link
Tested by : Kay Wu
Temprature : 25℃
Humidity : 65%
Plane : X

Read Limit Over
Freq Level Level Line Limit Factor Remark

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

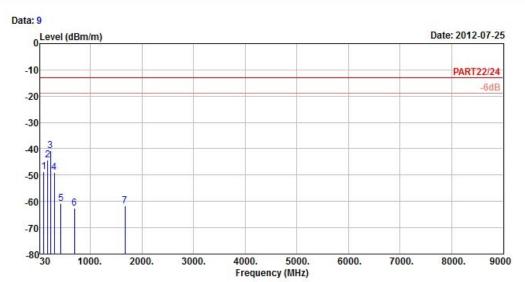
1 pp 42.42 -45.82 -44.49 -13.00 -32.82 -1.33 Peak 2 174.99 -46.05 -39.26 -13.00 -33.05 -6.79 Peak 3 240.87 -47.28 -41.16 -13.00 -34.28 -6.12 Peak 4 300.00 -55.54 -49.16 -13.00 -42.54 -6.38 Peak 5 397.30 -59.42 -53.77 -13.00 -46.42 -5.65 Peak 665.40 -63.83 -64.65 -13.00 -50.83 0.82 Peak 7 1672.80 -59.95 -47.13 -13.00 -46.95 -12.82 Peak



WCDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

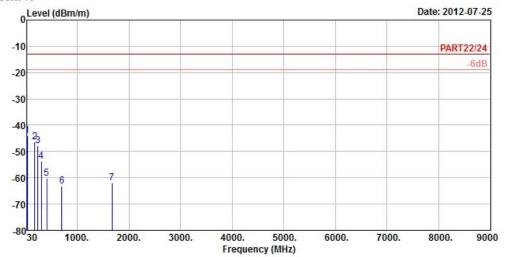
Brand/Model: PM36100
Remark : Band V Link
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : X

Read Limit 0ver Line Limit Factor Remark Freq Level Level MHz dBm/m dBm dBm/m dB/m 1 98.85 -48.61 -38.19 -13.00 -35.61 -10.42 Peak 173.64 -44.21 -37.44 -13.00 -31.21 -6.77 Peak 2 3 рр 228.72 -40.76 -34.12 -13.00 -27.76 -6.64 Peak 304.20 -49.08 -42.74 -13.00 -36.08 -6.34 Peak 4 5 430.90 -60.85 -55.99 -13.00 -47.85 -4.86 Peak 692.00 -62.61 -63.90 -13.00 -49.61 1.29 Peak 1672.80 -61.72 -48.90 -13.00 -48.72 -12.82 Peak









Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100
Remark : Band V Link
Tested by : Kay Wu
Temprature : 25℃
Humidity : 65%
Plane : X

Read Limit Over Freq Level Level Line Limit Factor Remark

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

 1 pp
 33.24 -43.92 -42.81 -13.00 -30.92
 -1.11 Peak

 2
 173.64 -46.33 -39.56 -13.00 -33.33 -6.77 Peak

 3
 235.47 -47.70 -41.37 -13.00 -34.70 -6.33 Peak

 4
 300.00 -53.79 -47.41 -13.00 -40.79 -6.38 Peak

 5
 407.80 -60.22 -54.78 -13.00 -47.22 -5.44 Peak

 6
 698.30 -63.14 -64.56 -13.00 -50.14 1.42 Peak

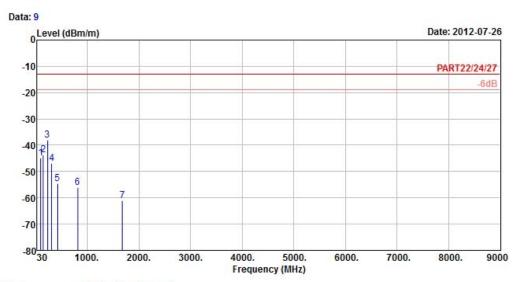
 7
 1672.80 -61.87 -49.05 -13.00 -48.87 -12.82 Peak



CHANNEL BANDWIDTH: 5MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24/27 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Read Limit Over

Brand/Model: PM36100

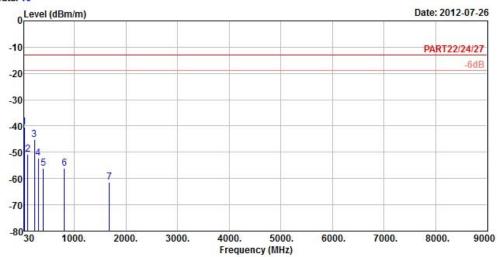
Remark : LTE Band 5_5M_(QPSK1,24)

	Freq	Level	Level	Line	Limit	Factor	Remark
# <u>-</u>	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	97.23	-44.95	-34.50	-13.00	-31.95	-10.45	Peak
2	144.21	-43.66	-37.68	-13.00	-30.66	-5.98	Peak
3 рр	226.29	-38.12	-31.35	-13.00	-25.12	-6.77	Peak
4	311.90	-46.82	-40.53	-13.00	-33.82	-6.29	Peak
5	421.80	-54.74	-49.66	-13.00	-41.74	-5.08	Peak
6	811.70	-56.24	-58.44	-13.00	-43.24	2.20	Peak
7	1677.40	-61.11	-48.37	-13.00	-48.11	-12.74	Peak









Site : 966 Chamber 5

Condition : PART22/24/27 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_5M_(QPSK1,24)

Tested by : Kay Wu Temprature : 25° C Humidity : 65% Plane : Y

Read Limit Over
Freq Level Level Line Limit Factor Remark

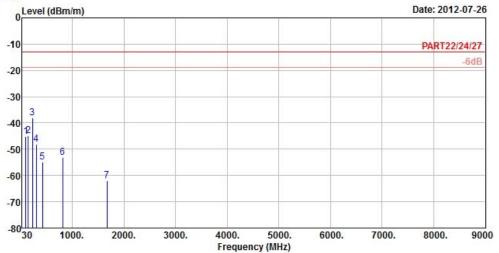
MHz dBm/m dBm dBm/m dB dB/m

1 pp 33.24 -40.57 -39.46 -13.00 -27.57 -1.11 Peak 2 97.23 -50.83 -40.38 -13.00 -37.83 -10.45 Peak 3 229.26 -45.05 -38.41 -13.00 -32.05 -6.64 Peak 4 300.70 -52.37 -46.00 -13.00 -39.37 -6.37 Peak 5 397.30 -56.05 -50.40 -13.00 -43.05 -5.65 Peak 6 808.90 -56.20 -58.38 -13.00 -43.20 2.18 Peak 7 1677.40 -61.31 -48.57 -13.00 -48.31 -12.74 Peak









Site : 966 Chamber 5

Condition : PART22/24/27 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100

Remark : LTE Band 5_5M_(QPSK 25,0)

Tested by : Kay Wu Temprature : 25°℃ Humidity : 65% Plane : Y

Read Limit Over

Freq Level Level Line Limit Factor Remark

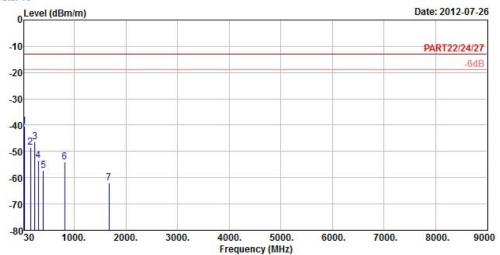
MHz dBm/m dBm dBm/m dB dB/m

1 97.77 -45.06 454.94 -13.00 -32.06-500.00 Peak
2 144.48 -44.73 455.27 -13.00 -31.73-500.00 Peak
3 pp 228.45 -38.22 461.78 -13.00 -25.22-500.00 Peak
4 301.40 -47.97 452.03 -13.00 -34.97-500.00 Peak
5 425.30 -54.77 445.23 -13.00 -41.77-500.00 Peak
6 811.70 -53.05 446.95 -13.00 -40.05-500.00 Peak
7 1673.00 -62.01 -49.19 -13.00 -49.01 -12.82 Peak









Site : 966 Chamber 5

Condition : PART22/24/27 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_5M_(QPSK 25,0)

Tested by : Kay Wu Temprature : 25℃ Humidity : 65% Plane : Y

Read Limit Over

Freq Level Level Line Limit Factor Remark

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

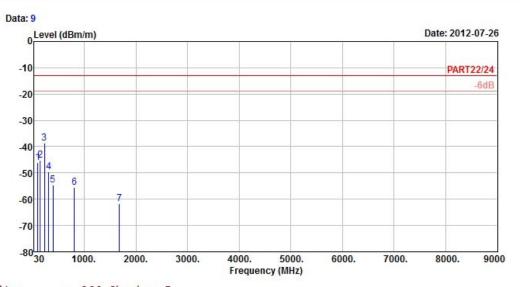
1 pp 32.70 -40.37 459.63 -13.00 -27.37-500.00 Peak 2 149.61 -48.50 451.50 -13.00 -35.50-500.00 Peak 3 236.01 -46.41 453.59 -13.00 -33.41-500.00 Peak 4 300.00 -53.35 446.65 -13.00 -40.35-500.00 Peak 5 400.80 -57.14 442.86 -13.00 -44.14-500.00 Peak 6 812.40 -53.94 446.06 -13.00 -40.94-500.00 Peak 7 1673.00 -61.94 -49.12 -13.00 -48.94 -12.82 Peak



CHANNEL BANDWIDTH: 5MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

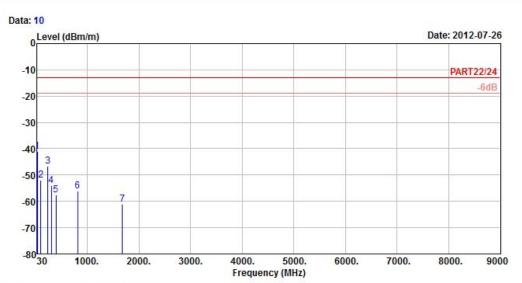
Brand/Model: PM36100

Remark : LTE Band 5_5M_(16QAM 1,24)

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	9 <u>9</u>
1	97.77	-46.10	-35.66	-13.00	-33.10	-10.44	Peak
2	144.48	-45.15	-39.17	-13.00	-32.15	-5.98	Peak
3 pp	230.88	-38.76	-32.21	-13.00	-25.76	-6.55	Peak
4	314.00	-49.48	-43.21	-13.00	-36.48	-6.27	Peak
5	393.80	-54.53	-48.85	-13.00	-41.53	-5.68	Peak
6	809.60	-55.40	-57.59	-13.00	-42.40	2.19	Peak
7	1677.40	-61.76	-49.02	-13.00	-48.76	-12.74	Peak







Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_5M_(16QAM 1,24)
Tested by : Kay Wu

Tested by : Kay W Temprature : 25°C Humidity : 65% Plane : Y

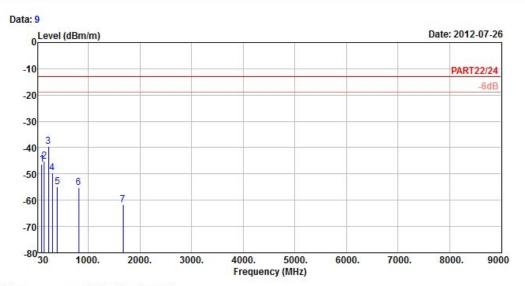
Read Limit Over
Freq Level Level Line Limit Factor Remark

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

1	pp	33.51	-40.94	-39.10	-13.00	-27.94	-1.84	Peak
2		97.50	-52.05	-41.61	-13.00	-39.05	-10.44	Peak
3		236.01	-46.74	-40.41	-13.00	-33.74	-6.33	Peak
4		300.00	-53.93	-47.55	-13.00	-40.93	-6.38	Peak
5		393.80	-57.47	-51.79	-13.00	-44.47	-5.68	Peak
6		811.00	-56.22	-58.41	-13.00	-43.22	2.19	Peak
7		1677.40	-61.03	-48.29	-13.00	-48.03	-12.74	Peak







Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100

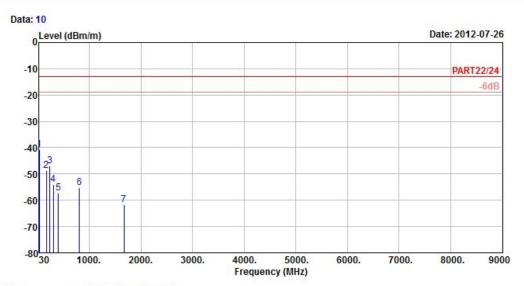
Remark : LTE Band 5_5M_(16QAM 25,0)

Tested by : Kay Wu Temprature : 25°C Humidity : 65% Plane : Y

Read Limit 0ver Freq Level Level Line Limit Factor Remark MHz dBm/m dBm dBm/m dB/m dB 1 97.77 -46.22 -35.78 -13.00 -33.22 -10.44 Peak 2 144.48 -45.20 -39.22 -13.00 -32.20 -5.98 Peak 229.53 -39.50 -32.90 -13.00 -26.50 -6.60 Peak 3 pp 300.70 -49.69 -43.32 -13.00 -36.69 -6.37 Peak 5 400.10 -55.05 -49.43 -13.00 -42.05 -5.62 Peak 811.00 -55.19 -57.38 -13.00 -42.19 2.19 Peak 6 1673.00 -61.56 -48.74 -13.00 -48.56 -12.82 Peak







Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_5M_(16QAM 25,0)

Tested by : Kay Wu Temprature : 25°C Humidity : 65% Plane : Y

1 pp

2

3

5

6

Read Limit Over
Freq Level Level Line Limit Factor Remark

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

33.51 -40.86 -39.02 -13.00 -27.86 -1.84 Peak
168.24 -48.64 -41.96 -13.00 -35.64 -6.68 Peak
234.66 -46.85 -40.47 -13.00 -33.85 -6.38 Peak

300.00 -54.08 -47.70 -13.00 -41.08 -6.38 Peak

400.10 -57.36 -51.74 -13.00 -44.36 -5.62 Peak 809.60 -55.25 -57.44 -13.00 -42.25 2.19 Peak

1673.00 -61.59 -48.77 -13.00 -48.59 -12.82 Peak

45 of 56

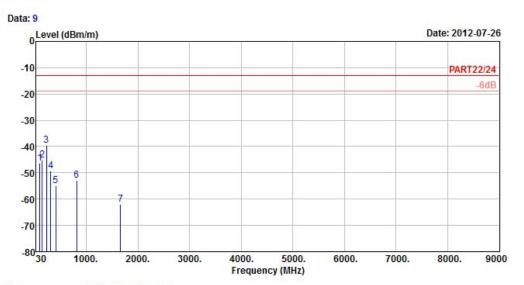
Report No.: RF120713C03



CHANNEL BANDWIDTH: 10MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

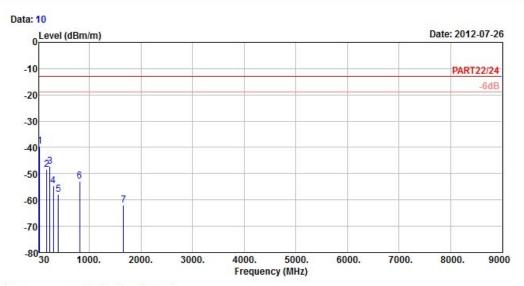
Brand/Model: PM36100

Remark : LTE Band 5_10M_(QPSK1,0)

	Freq	Level		Limit Line		Factor	Remark
9 <u>5</u>	MHz	dBm/m	dBm	dBm/m	——dB	dB/m	<u> </u>
1	97.77	-46.44	-36.00	-13.00	-33.44	-10.44	Peak
2	144.75	-45.25	-39.27	-13.00	-32.25	-5.98	Peak
3 pp	228.72	-39.43	-32.79	-13.00	-26.43	-6.64	Peak
4	312.60	-49.31	-43.02	-13.00	-36.31	-6.29	Peak
5	405.00	-54.80	-49.31	-13.00	-41.80	-5.49	Peak
6	812.40	-52.95	-55.15	-13.00	-39.95	2.20	Peak
7	1664.20	-61.86	-49.04	-13.00	-48.86	-12.82	Peak







Site : 966 Chamber 5

MHz dBm/m

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(QPSK1,0)
Tested by : Kay Wu

Tested by : Kay W Temprature : 25°C Humidity : 65% Plane : Y

Read Limit Over Freq Level Level Line Limit Factor Remark

dBm dBm/m

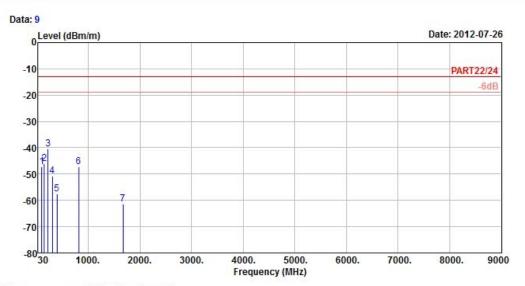
dB

dB/m

1 pp	43.23	-39.49	-38.23	-13.00	-26.49	-1.26	Peak
2	172.83	-48.51	-41.76	-13.00	-35.51	-6.75	Peak
3	236.28	-47.18	-40.89	-13.00	-34.18	-6.29	Peak
4	300.70	-54.50	-48.13	-13.00	-41.50	-6.37	Peak
5	400.10	-57.81	-52.19	-13.00	-44.81	-5.62	Peak
6	812.40	-52.98	-55.18	-13.00	-39.98	2.20	Peak
7	1664.20	-61.93	-49.11	-13.00	-48.93	-12.82	Peak







Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(QPSK 50,0)
Tested by : Kay Wu

Tested by : Kay W Temprature : 25°C Humidity : 65% Plane : Y

1

2

3 pp

Read Limit Over
Level Line Limit Factor Remark

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

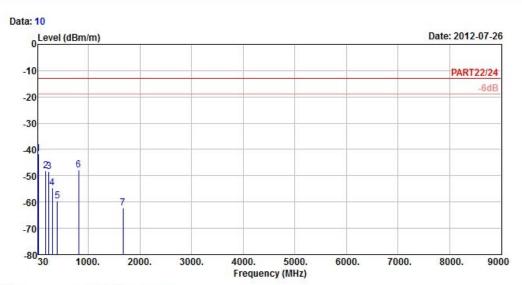
98.58 -47.17 -36.75 -13.00 -34.17 -10.42 Peak
143.13 -45.98 -40.06 -13.00 -32.98 -5.92 Peak
223.59 -40.47 -33.61 -13.00 -27.47 -6.86 Peak

300.00 -50.86 -44.48 -13.00 -37.86 -6.38 Peak

5 390.30 -57.54 -51.83 -13.00 -44.54 -5.71 Peak 6 814.50 -47.15 -49.36 -13.00 -34.15 2.21 Peak 7 1673.00 -61.54 -48.72 -13.00 -48.54 -12.82 Peak







Site : 966 Chamber 5

MHz dBm/m

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(QPSK 50,0)
Tested by : Kay Wu

Tested by : Kay W Temprature : 25°C Humidity : 65% Plane : Y

Read Limit Over Freq Level Level Limit Factor Remark

dBm dBm/m

dB

dB/m

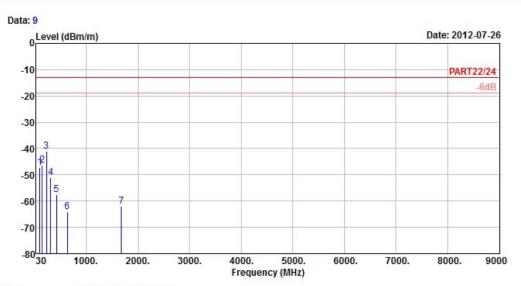
1 pp	33.51	-41.53	-39.69	-13.00	-28.53	-1.84	Peak
2	173.37	-48.21	-41.44	-13.00	-35.21	-6.77	Peak
3	235.47	-48.46	-42.13	-13.00	-35.46	-6.33	Peak
4	300.00	-54.62	-48.24	-13.00	-41.62	-6.38	Peak
5	402.90	-59.62	-54.05	-13.00	-46.62	-5.57	Peak
6	815.20	-47.72	-49.93	-13.00	-34.72	2.21	Peak
7	1673.00	-62.30	-49.48	-13.00	-49.30	-12.82	Peak



CHANNEL BANDWIDTH: 10MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(16QAM 1,49)
Tested by : Kay Wu

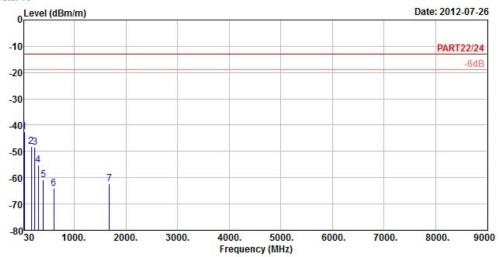
Temprature : 25℃ Humidity : 65% Plane : Y

			Dood	Limit	0		
	Freq	Level				Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	<u>19</u>
1	97.77	-47.33	-36.89	-13.00	-34.33	-10.44	Peak
2	144.75	-46.29	-40.31	-13.00	-33.29	-5.98	Peak
3 pp	228.45	-41.04	-34.40	-13.00	-28.04	-6.64	Peak
4	311.20	-51.15	-44.86	-13.00	-38.15	-6.29	Peak
5	426.00	-57.61	-52.63	-13.00	-44.61	-4.98	Peak
6	636.70	-64.04	-64.34	-13.00	-51.04	0.30	Peak
7	1681.80	-61.93	-49.19	-13.00	-48.93	-12.74	Peak









Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(16QAM 1,49)

Tested by : Kay Wu Temprature : 25℃ Humidity : 65% Plane : Y

Read Limit Over

Freq Level Level Line Limit Factor Remark

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

1 pp 32.97 -42.41 -41.30 -13.00 -29.41 -1.11 Peak 2 167.70 -48.22 -41.56 -13.00 -35.22 -6.66 Peak 3 236.28 -48.32 -42.03 -13.00 -35.32 -6.29 Peak 4 300.00 -55.13 -48.75 -13.00 -42.13 -6.38 Peak 5 400.10 -60.94 -55.32 -13.00 -47.94 -5.62 Peak 601.00 -63.95 -63.62 -13.00 -50.95 -0.33 Peak 7 1681.80 -62.20 -49.46 -13.00 -49.20 -12.74 Peak



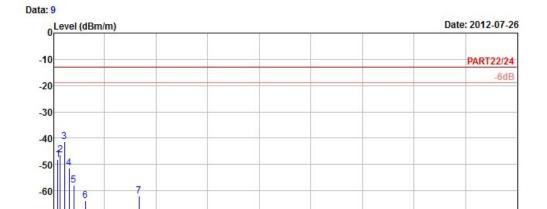


6000.

7000.

8000.

9000



4000.

Frequency (MHz)

5000.

Site : 966 Chamber 5

1000.

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

3000.

Brand/Model: PM36100

-80^{LILL}

Remark : LTE Band 5_10M_(16QAM 50,0)

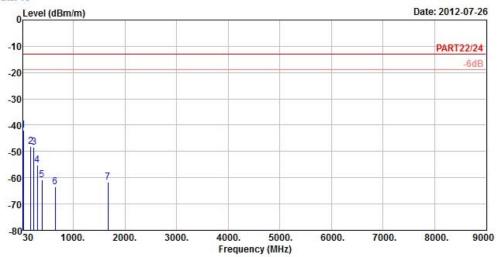
2000.

			Read	Limit	Over		
	Freq	Level				Factor	Remark
# <u>-</u>	MHz	dBm/m	dBm	dBm/m	dB	dB/m	44
1	97.23	-48.16	-37.71	-13.00	-35.16	-10.45	Peak
2	144.48	-46.34	-40.36	-13.00	-33.34	-5.98	Peak
3 pp	228.99	-41.40	-34.76	-13.00	-28.40	-6.64	Peak
4	315.40	-51.43	-45.16	-13.00	-38.43	-6.27	Peak
5	410.60	-57.97	-52.60	-13.00	-44.97	-5.37	Peak
6	634.60	-63.80	-64.06	-13.00	-50.80	0.26	Peak
7	1673.00	-61.93	-49.11	-13.00	-48.93	-12.82	Peak









Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: PM36100

Remark : LTE Band 5_10M_(16QAM 50,0)

Tested by : Kay Wu Temprature : 25°℃ Humidity : 65% Plane : Y

Read Limit Over

Freq Level Level Line Limit Factor Remark

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

1 pp 33.24 -41.79 -40.68 -13.00 -28.79 -1.11 Peak 2 173.37 -48.25 -41.48 -13.00 -35.25 -6.77 Peak 3 235.20 -48.52 -42.19 -13.00 -35.52 -6.33 Peak 4 300.70 -55.20 -48.83 -13.00 -42.20 -6.37 Peak 5 395.90 -60.84 -55.17 -13.00 -47.84 -5.67 Peak 6 649.30 -63.44 -63.96 -13.00 -50.44 0.52 Peak 7 1673.00 -61.81 -48.99 -13.00 -48.81 -12.82 Peak



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

Report No.: RF120713C03 54 of 56 Report Format Version 5.0.0



6 INFORMATION ON THE TESTING LABORATORIES

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

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

Linko EMC/RF Lab: Hsin Chu EMC/RF Lab:

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

Hwa Ya EMC/RF/Safety/Telecom Lab:

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

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

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

Report No.: RF120713C03 55 of 56 Report Format Version 5.0.0



CHANGES TO THE EUT BY THE LAB
No any modifications were made to the EUT by the lab during the test.
END

Report No.: RF120713C03 56 of 56 Report Format Version 5.0.0