

Partial FCC Test Report

(PART 22)

Report No.: RF161003C38-5

FCC ID: QYLEM7355Z

Test Model: EM7355Z

Received Date: Oct. 03, 2016

Test Date: Oct. 26, 2016 ~ Nov.02, 2016

Issued Date: Nov. 14, 2016

Applicant: Getac Technology Corporation.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Release Control Record

Issue No.	Description	Date Issued
RF161003C38-5	Original Release	Nov. 14, 2016

1 Certificate of Conformity

Product: Radio Module

Brand: Getac

Test Model: EM7355Z

Sample Status: Identical Prototype

Applicant: Getac Technology Corporation.

Test Date: Oct. 26, 2016 ~ Nov.02, 2016

Standards: FCC Part 22, Subpart H

The above equipment 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 :

Gina Liu

Date:

Nov. 14, 2016

Gina Liu / Specialist

Approved by :

Stanley Wu

Date:

Nov. 14, 2016

Stanley Wu / Assistant Manager

2 Summary of Test Results

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective Radiated Power	Pass	Meet the requirement of limit.
---	Peak to Average Ratio	N/A	Refer to Note
2.1055 22.355	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
22.917	Band Edge Measurements	N/A	Refer to Note
2.1051 22.917	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 22.917	Radiated Spurious Emissions	N/A	Refer to Note

Note: Only test item of ERP was performed for this report. Other testing data please refer to Sierra Wireless, Inc. EM7355 2G/3G/4G/CDMA Reports for module (FCC ID: E7NEM7355)

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	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Jan. 21, 2016	Jan. 20, 2017
Signal Generator Agilent	N5182B	MY53050430	Oct. 19, 2016	Oct. 18, 2017
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2015	Dec. 16, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Jan. 07, 2016	Jan. 06, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Jan. 04, 2016	Jan. 03, 2017
Double Ridge Guide Horn Antenna EMCO	3115	5619	Jan. 04, 2016	Jan. 03, 2017
BILOG Antenna SCHWARZBECK	VULB 9168	9168-153	Jan. 07, 2016	Jan. 06, 2017
Agilent Communications Tester-Wireless	8960 Series 10	MY53201073	Jul. 03, 2015	Jul. 02, 2017
Preamplifier EMCI	EMC 012645	980115	Dec. 21, 2015	Dec. 20, 2016
Preamplifier EMCI	EMC 184045	980116	Dec. 21, 2015	Dec. 20, 2016
Preamplifier EMCI	EMC 330H	980112	Dec. 28, 2015	Dec. 27, 2016
Power Meter Anritsu	ML2495A	1232002	Sep. 08, 2016	Sep. 07, 2017
Power Sensor Anritsu	MA2411B	1207325	Sep. 08, 2016	Sep. 07, 2017
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 21, 2016	Oct. 20, 2017
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 21, 2016	Oct. 20, 2017
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Oct. 21, 2016	Oct. 20, 2017
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
Radio Communication Analyzer	MT8820C	6201300640	Aug. 10, 2015	Aug. 09, 2017
Temperature & Humidity Chamber	GTH-120-40-CP-A R	MAA1306-019	Sep. 02, 2016	Sep. 01, 2017
DC Power Supply Topward	33010D	807748	Oct. 27, 2015 Oct. 25, 2016	Oct. 26, 2016 Oct. 24, 2017
Digital Multimeter Fluke	87-III	70360742	Jul. 01, 2016	Jun. 30, 2017

- Note: 1. The calibration interval of the above test instruments is 12 / 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 10.
3. The horn antenna and preamplifier (model: EMC 184045) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The FCC Site Registration No. is 690701.
5. The IC Site Registration No. is IC7450F-10.

3 General Information

3.1 General Description of EUT

Product	Radio Module	
Brand	Getac	
Test Model	EM7355Z	
Status of EUT	Identical Prototype	
Power Supply Rating	12.0 Vdc (adapter) 3.8 Vdc (Li-ion battery)	
Modulation Type	GSM/GPRS	GMSK
	EDGE	GMSK, 8PSK
	WCDMA	BPSK
	CDMA	QPSK, OPQKS, HPSK
	LTE	QPSK, 16QAM
Frequency Range	GSM/GPRS/EDGE	824.2 ~ 848.8 MHz
	WCDMA	826.4 ~ 846.6 MHz
	CDMA	824.7 ~ 848.31 MHz
	LTE 5 (Channel Bandwidth: 1.4 MHz)	824.7 ~ 848.3 MHz
	LTE 5 (Channel Bandwidth: 3 MHz)	825.5 ~ 847.5 MHz
	LTE 5 (Channel Bandwidth: 5 MHz)	826.5 ~ 846.5 MHz
	LTE 5 (Channel Bandwidth: 10 MHz)	829 ~ 844 MHz
Max. ERP Power	GSM/GPRS	700.16 mW
	EDGE	290.40 mW
	WCDMA	115.08 mW
	CDMA	133.29 mW
	LTE 5 (Channel Bandwidth: 1.4 MHz)	103.94 mW
	LTE 5 (Channel Bandwidth: 3 MHz)	106.66 mW
	LTE 5 (Channel Bandwidth: 5 MHz)	106.95 mW
	LTE 5 (Channel Bandwidth: 10 MHz)	106.71 mW
Antenna Type	PIFA Antenna	
Accessory Device	Refer to Note as below	
Data Cable Supplied	Refer to Note as below	

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below table for more details.

Item	Brand	Model
Tablet	Getac	ZX70

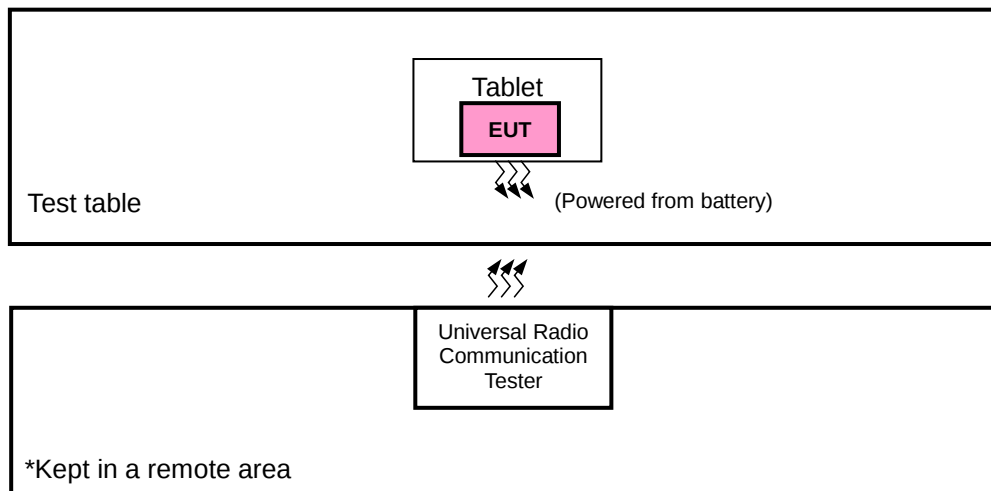
2. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter	APD	WA24Q12R	I/P: 100-240 Vac, 50/60 Hz, 0.7 A O/P: 12 Vdc, 2 A 1.75m shielded cable with 1 core
Battery	Getac	BP1S2P4240L	3.8 Vdc, 8480 mAh
LCD Panel	Truly	TDO-HD0698K61701	7"
Photo Camera	Chicony	CWFFF2520005340LH	2MPs HD Fix focus camera
Video Camera	Chicony	CYAF82520005340LH	8MPs auto focus camera
CPU	intel	Atom Z8350	592 PIN
Memory	Samsung	K4E6E304EE-EGCE	DDR3 4G (2G*2)
Storage	Samsung	KLMBG4GEND-B031	32G
GPS	U-blox	MAX-M8N	
BT/WLAN Module	AMPAK	AP6234	
RFID	Jogtek	TRF7970A	
WWAN Module	Sierra	EM7355Z	
Fingerprint	IMD	SF1115	

3. The above EUT information is 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

<E.R.P. Test>



3.2.1 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.	Tablet	Getac	ZX70	N/A	N/A

No.	Signal Cable Description Of The Above Support Units
1.	N/A

Note:

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

3.3 Test Mode Applicability and Tested Channel Detail

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

Band	ERP	Band	ERP
GSM	X-plane	CDMA	Y-plane
EDGE	X-plane	LTE Band 5	X-plane
WCDMA	X-plane		

GSM

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	128 to 251	128, 189, 251	GSM, EDGE

WCDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	4132 to 4233	4132, 4182, 4233	WCDMA

CDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	1013 to 777	1013, 384, 777	1xRTT

LTE Band 5

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK, 16QAM	1 RB / 2 RB Offset
		20415 to 20635	20415, 20525, 20635	3 MHz	QPSK, 16QAM	1 RB / 7 RB Offset
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK, 16QAM	1 RB / 12 RB Offset
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK, 16QAM	1 RB / 24 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	25 deg. C, 65 % RH	3.8 Vdc	Getaz Yang

3.4 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.

3.5 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

KDB 971168 D01 Power Meas License Digital Systems v02r02

ANSI/TIA/EIA-603-D 2010

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:

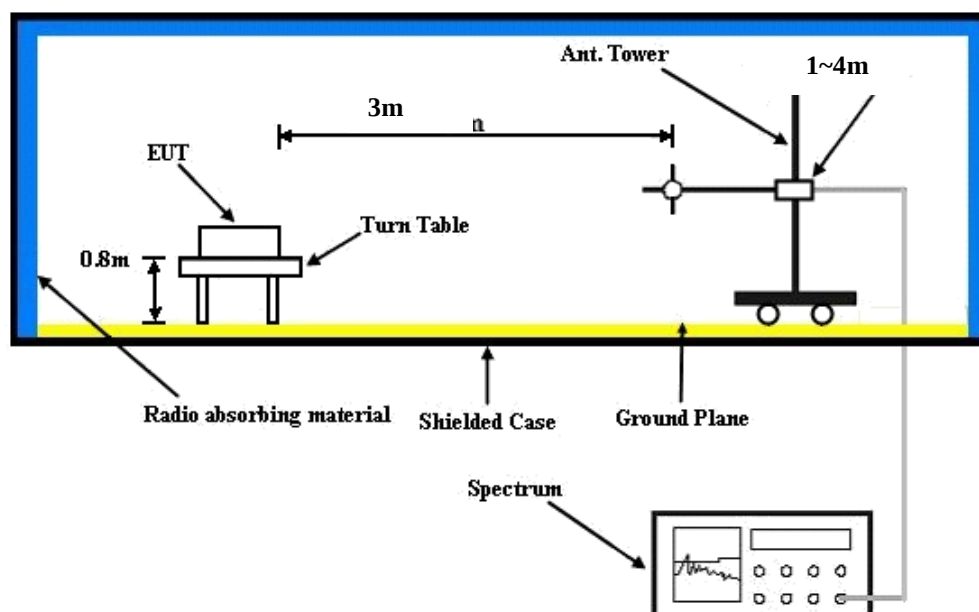
- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1 MHz for GSM, GPRS & EDGE, and 5 MHz for WCDMA and CDMA, and 10 MHz for LTE mode.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m height 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 1 m to 4 m 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. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. E.R.P power can be calculated from E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.P.R \text{ power} - 2.15 \text{ dBi}$.

Conducted Power Measurement:

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

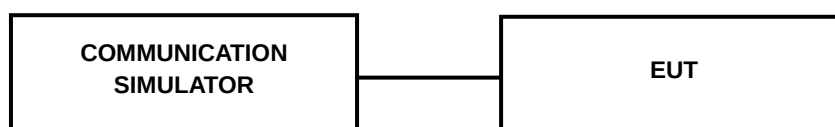
4.1.3 Test Setup

EIRP / ERP Measurement:



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

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
GPRS (GMSK, 1Tx-slot)	32.20	32.25	32.16
GPRS (GMSK, 2Tx-slot)	32.03	32.08	31.99
EDGE (8PSK, 1Tx-slot)	26.75	26.80	26.71
EDGE (8PSK, 2Tx-slot)	26.73	26.78	26.69
EDGE (8PSK, 3Tx-slot)	26.59	26.64	26.55
EDGE (8PSK, 4Tx-slot)	26.46	26.51	26.42

Band	WCDMA V		
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	22.91	23.02	22.98
HSDPA Subtest-1	22.50	22.59	22.57
HSDPA Subtest-2	22.45	22.54	22.52
HSDPA Subtest-3	22.04	22.13	22.11
HSDPA Subtest-4	22.00	22.09	22.07
HSUPA Subtest-1	21.17	21.26	21.24
HSUPA Subtest-2	20.00	20.09	20.07
HSUPA Subtest-3	20.70	20.79	20.77
HSUPA Subtest-4	19.90	20.01	19.97
HSUPA Subtest-5	21.00	21.09	21.07

Band	CDMA		
Channel	1013	384	777
Frequency (MHz)	824.70	836.52	848.31
RC1+SO55	23.83	23.92	23.64
RC3+SO55	23.86	23.95	23.67
RC3+SO32(+ F-SCH)	23.85	23.94	23.66
RC3+SO32(+SCH)	23.84	23.93	23.65
RTAP 153.6	23.82	23.91	23.63
RETAP 4096	23.81	23.90	23.62

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low Ch 20407	Mid Ch 20525	High Ch 20643		Low Ch 20407	Mid Ch 20525	High Ch 20643	
			824.7 MHz	836.5 MHz	848.3 MHz		824.7 MHz	836.5 MHz	848.3 MHz	
5 / 1.4M	1	0	22.45	22.49	22.51	0	21.38	21.42	21.44	1
	1	2	22.48	22.52	22.54	0	21.41	21.45	21.47	1
	1	5	22.47	22.51	22.53	0	21.40	21.44	21.46	1
	3	0	22.33	22.37	22.39	0	21.26	21.30	21.32	1
	3	1	22.41	22.45	22.47	0	21.34	21.38	21.40	1
	3	3	22.35	22.39	22.41	0	21.28	21.32	21.34	1
	6	0	21.51	21.55	21.57	1	20.44	20.48	20.50	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low Ch 20415	Mid Ch 20525	High Ch 20635		Low Ch 20415	Mid Ch 20525	High Ch 20635	
			825.5 MHz	836.5 MHz	847.5 MHz		825.5 MHz	836.5 MHz	847.5 MHz	
5 / 3M	1	0	22.64	22.68	22.70	0	21.57	21.61	21.63	1
	1	7	22.67	22.71	22.73	0	21.60	21.64	21.66	1
	1	14	22.66	22.70	22.72	0	21.59	21.63	21.65	1
	8	0	21.73	21.77	21.79	1	20.66	20.70	20.72	2
	8	3	21.81	21.85	21.87	1	20.74	20.78	20.80	2
	8	7	21.75	21.79	21.81	1	20.68	20.72	20.74	2
	15	0	21.70	21.74	21.76	1	20.63	20.67	20.69	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low Ch 20425	Mid Ch 20525	High Ch 20625		Low Ch 20425	Mid Ch 20525	High Ch 20625	
			826.5 MHz	836.5 MHz	846.5 MHz		826.5 MHz	836.5 MHz	846.5 MHz	
5 / 5M	1	0	22.87	22.91	22.93	0	21.80	21.84	21.86	1
	1	12	22.90	22.94	22.96	0	21.83	21.87	21.89	1
	1	24	22.89	22.93	22.95	0	21.82	21.86	21.88	1
	12	0	21.96	22.00	22.02	1	20.89	20.93	20.95	2
	12	6	22.04	22.08	22.10	1	20.97	21.01	21.03	2
	12	13	21.98	22.02	22.04	1	20.91	20.95	20.97	2
	25	0	21.93	21.97	21.99	1	20.86	20.90	20.92	2

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low Ch 20450	Mid Ch 20525	High Ch 20600		Low Ch 20450	Mid Ch 20525	High Ch 20600	
			829.0 MHz	836.5 MHz	844.0 MHz		829.0 MHz	836.5 MHz	844.0 MHz	
5 / 10M	1	0	23.02	23.06	23.08	0	21.95	21.99	22.01	1
	1	24	23.05	23.09	23.11	0	21.98	22.02	22.04	1
	1	49	23.04	23.08	23.10	0	21.97	22.01	22.03	1
	25	0	22.11	22.15	22.17	1	21.04	21.08	21.10	2
	25	12	22.19	22.23	22.25	1	21.12	21.16	21.18	2
	25	25	22.13	22.17	22.19	1	21.06	21.10	21.12	2
	50	0	22.08	22.12	22.14	1	21.01	21.05	21.07	2

ERP Power (dBm)

GSM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	128	824.2	-0.95	31.208	28.11	646.84	H
	189	836.4	-0.75	31.3	28.40	691.83	
	251	848.8	-0.62	31.222	28.45	700.16	
	128	824.2	-6.48	31.504	22.87	193.82	V
	189	836.4	-6.32	31.117	22.65	183.95	
	251	848.8	-6.85	31.922	22.92	195.97	

EDGE							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	128	824.2	-4.55	31.208	24.51	282.36	H
	189	836.4	-4.52	31.3	24.63	290.40	
	251	848.8	-4.85	31.222	24.22	264.36	
	128	824.2	-11.26	31.504	18.09	64.48	V
	189	836.4	-10.85	31.117	18.12	64.82	
	251	848.8	-11.68	31.922	18.09	64.45	

WCDMA							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	4132	826.4	-8.63	31.208	20.43	110.36	H
	4182	836.4	-8.54	31.3	20.61	115.08	
	4233	846.6	-8.54	31.222	20.53	113.03	
	4132	826.4	-14.83	31.504	14.52	28.34	V
	4182	836.4	-14.62	31.117	14.35	27.21	
	4233	846.6	-15.26	31.922	14.51	28.26	

CDMA							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
Y	1013	824.7	-7.81	31.208	21.25	133.29	H
	384	836.52	-8.05	31.3	21.10	128.82	
	777	848.31	-7.95	31.222	21.12	129.48	
	1013	824.7	-14.24	31.504	15.11	32.46	V
	384	836.52	-13.82	31.117	15.15	32.71	
	777	848.31	-14.68	31.922	15.09	32.30	

LTE Band 5							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20407	824.7	-8.89	31.208	20.17	103.94	H
	20525	836.5	-9.03	31.3	20.12	102.80	
	20643	848.3	-8.94	31.222	20.13	103.09	
	20407	824.7	-15.26	31.504	14.09	25.67	V
	20525	836.5	-14.92	31.117	14.05	25.39	
	20643	848.3	-15.63	31.922	14.14	25.95	
Channel Bandwidth: 1.4 MHz / 16QAM							
X	20407	824.7	-9.95	31.208	19.11	81.43	H
	20525	836.5	-10.14	31.3	19.01	79.62	
	20643	848.3	-9.98	31.222	19.09	81.13	
	20407	824.7	-16.26	31.504	13.09	20.39	V
	20525	836.5	-15.89	31.117	13.08	20.31	
	20643	848.3	-16.71	31.922	13.06	20.24	

LTE Band 5							
Channel Bandwidth: 3 MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20415	825.5	-8.95	31.208	20.11	102.52	H
	20525	836.5	-8.87	31.3	20.28	106.66	
	20635	847.5	-8.96	31.222	20.11	102.61	
	20415	825.5	-15.09	31.504	14.26	26.69	V
	20525	836.5	-14.95	31.117	14.02	25.22	
	20635	847.5	-15.67	31.922	14.10	25.72	
Channel Bandwidth: 3 MHz / 16QAM							
X	20415	825.5	-10.01	31.208	19.05	80.32	H
	20525	836.5	-10.08	31.3	19.07	80.72	
	20635	847.5	-9.97	31.222	19.10	81.32	
	20415	825.5	-16.26	31.504	13.09	20.39	V
	20525	836.5	-15.92	31.117	13.05	20.17	
	20635	847.5	-16.58	31.922	13.19	20.85	

LTE Band 5							
Channel Bandwidth: 5 MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20425	826.5	-8.86	31.208	20.20	104.66	H
	20525	836.5	-8.92	31.3	20.23	105.44	
	20625	846.5	-8.78	31.222	20.29	106.95	
	20425	826.5	-15.26	31.504	14.09	25.67	V
	20525	836.5	-14.97	31.117	14.00	25.10	
	20625	846.5	-15.62	31.922	14.15	26.01	
Channel Bandwidth: 5 MHz / 16QAM							
X	20425	826.5	-9.97	31.208	19.09	81.06	H
	20525	836.5	-10.06	31.3	19.09	81.10	
	20625	846.5	-9.96	31.222	19.11	81.51	
	20425	826.5	-16.21	31.504	13.14	20.63	V
	20525	836.5	-15.82	31.117	13.15	20.64	
	20625	846.5	-16.62	31.922	13.15	20.66	

LTE Band 5							
Channel Bandwidth: 10 MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20450	829.0	-8.97	31.208	20.09	102.05	H
	20525	836.5	-9.06	31.3	20.09	102.09	
	20600	844.0	-8.79	31.222	20.28	106.71	
	20450	829.0	-15.26	31.504	14.09	25.67	V
	20525	836.5	-14.87	31.117	14.10	25.69	
	20600	844.0	-15.63	31.922	14.14	25.95	
Channel Bandwidth: 10 MHz / 16QAM							
X	20450	829.0	-9.89	31.208	19.17	82.57	H
	20525	836.5	-10.11	31.3	19.04	80.17	
	20600	844.0	-9.54	31.222	19.53	89.78	
	20450	829.0	-16.26	31.504	13.09	20.39	V
	20525	836.5	-15.89	31.117	13.08	20.31	
	20600	844.0	-16.64	31.922	13.13	20.57	

5 Pictures of Test Arrangements

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

Appendix – 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.

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

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