





# TEST REPORT

for

**SAMSUNG Electronics Co., Ltd.** 

Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN

Model Name: SM-A215U1

FCC ID: ZCASMA215U

with

**Hardware Version: REV1.0** 

Software Version: A215U1.001

Issued Date: 2020-03-20

#### Note:

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#### **Test Laboratory:**

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# **REPORT HISTORY**

Report Number Revision		Description	Issue Date	
I19Z62374-EMC08	Rev.0	1 <sup>st</sup> edition	2020-03-20	

Note: the latest revision of the test report supersedes all previous versions.





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# 1. Test Laboratory

#### 1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2005 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

## 1.2. <u>Testing Location</u>

Location 1: CTTL(Shouxiang)

Address: No. 51 Shouxiang Science Building, Xueyuan Road, Haidian

District, Beijing, P. R. China 100191

Location 2: CTTL (BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development

Area, Beijing, P. R. China 100176

1.3. <u>Testing Environment</u>

Normal Temperature:  $15-35^{\circ}$ C Relative Humidity: 20-75%

Air pressure 980 - 1040 hPa

The climatic requirements above are general exclude the special requirements for dedicated test environments listed in section 5 and some specific test cases in other parts of this report.

1.4. Project data

Testing Start Date: 2020-01-15
Testing End Date: 2020-03-06

1.5. Signature

Li Yan

(Prepared this test report)

张颖

**Zhang Ying** 

(Reviewed this test report)

1

Liu Baodian

**Deputy Director of the laboratory** 

(Approved this test report)





# 2. Client Information

# 2.1. Applicant Information

Company Name: SAMSUNG Electronics Co., Ltd.

19 Chapin Road, Building D, Pine Brook New Jersey United States, Address:

07058

City: Postal Code: / Country:

Contact: Jenni Chun

Email: j1.chun@samsung.com

Telephone: 1-973-808-6375

## 2.2. Manufacturer Information

Company Name: SAMSUNG Electronics Co., Ltd.

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Address:

Korea

City: / Postal Code: Country:

Contact: JP KIM

Email: jp426.kim@samsung.com

Telephone:





# 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

# 3.1. About EUT

Description Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN

FCC ID ZCASMA215U

Antenna Internal Power supply Battery

Extreme vol. Limits 3.5VDC to 4.4VDC (nominal: 3.8VDC)

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL, Telecommunication Technology Labs, CAICT.

## 3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	<b>HW Version</b>	SW Version
EUT4	/	/	/

<sup>\*</sup>EUT ID: is used to identify the test sample in the lab internally.

# 3.3. Internal Identification of AE used during the test

AE ID*	Description	SN	Note
AE1	battery	/	/

AE1

Model NVT-WT-N6

Manufacturer Dongguan NVT Technology Co., Ltd.

Capacitance 3900mAh Nominal voltage 3.82V

<sup>\*</sup>AE ID: is used to identify the test sample in the lab internally.





# 3.4. General Description

Equipment Under Test (EUT) is a model of Multi-band GSM/WCDMA/LTE phone with Bluetooth, WLAN with integrated antenna.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the client.

# 3.5. EUT set-ups

EUT Set-up No. Combination of EUT and AE		Remarks	
Set.10	EUT4 + AE1	ERP/EIRP/RSE tests	





# 4. Reference Documents

# 4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-19
		Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-19
		Edition
ANSI C63.26	American National Standard for Compliance Testing of	2015
	Transmitters Used in Licensed Radio Services	
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment	2016
	Measurement and Performance Standards	
KDB 971168 D01	Measurement Guidance for Certification of Licensed Digital	v03r01
	Transmitters	





# 5. LABORATORY ENVIRONMENT

**Fully-anechoic chamber FAC-3** (9 meters × 6.5 meters × 4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C		
Relative humidity	Min. = 15 %, Max. = 75 %		
Shielding effectiveness	0.014MHz - 1MHz, >60dB;		
	1MHz - 1000MHz, >90dB.		
Electrical insulation	> 2 MΩ		
Ground system resistance	< 4 Ω		
Site voltage standing-wave ratio ( $S_{VSWR}$ )	Between 0 and 6 dB, from 1GHz to 18GHz		
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz		

**Semi-anechoic chamber SAC-2** (10 meters  $\times$  6.7 meters  $\times$  6.1 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding offestiveness	0.014MHz - 1MHz, >60dB;
Shielding effectiveness	1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (S <sub>VSWR</sub> )	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz





# 6. SUMMARY OF TEST RESULTS

# 6.1. Summary of test results

Abbreviations used in this clause:			
	Р	Pass	
	F	Fail	
Verdict Column	NA	Not applicable	
	NM	Not measured	
	BR	Re-use test data from basic model report.	
Location Column	1/2/2/4	The test is performed in test location 1, 2, 3 or 4 which	
Location Column 1/2/3/4		are described in section 1.1 of this report	

#### **CDMA800**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	22.913(a.2)	5.4	BR
2	Emission Limit	22.917(a), 2.1051	5.5	BR

#### **CDMA1900**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	24.232(c)	5.4	BR
2	Emission Limit	24.238(a), 2.1051	5.5	BR

## 6.2. Statements

The test cases listed in section 6.1 of this report for the EUT specified in section 3 were performed by CTTL according to the standards or reference documents in section 4.1

The EUT met all applicable requirements of the standards or reference documents in section 4.1. This report only deals with the CDMA functions among the features described in section 3.

SM-A215U1 is a variant product of SM-A215U, according to the declaration of changes provided by the applicant and FCC KDB publication 178919 D01, all results are cited from the initial model. The report number for initial model is I19Z62374-EMC06.

For detail differences between two models please refer the Declaration of Changes document.





# 7. Test Equipments Utilized

NO.	NAME	TYPE	PRODUCER	SERIES NUMBER	CAL. DUE DATE	CAL. INTERVAL
1.	EMI Antenna	VULB9163	9163-483	Schwarzbeck	2020-09-16	1 year
2.	EMI Antenna	3117	00058889	ETS-Lindgren	2020-11-18	1 year
3.	EMI Antenna	3117	00139065	ETS-Lindgren	2020-10-15	1 year
4.	EMI Antenna	9117	167	Schwarzbeck	2020-05-27	1 year
5.	Signal Generator	N5183A	MY49060052	R&S	2020-06-24	1 year
6.	Test Receiver	E4440A	MY48250642	Agilent	2020-03-18	1 year
7.	Universal Radio Communication Tester	8960	MY48363198	Agilent	2020-06-26	1 year
8.	Power Amplifier	5S1G4	0341863	AR	/	

# **Test Software Utilized**

Test Item	Test Software and Version	Software Vendor
ERP/EIRP/RSE	Tile V7.2.3.5	ETS-Lindgren





# ANNEX A: MEASUREMENT RESULTS

#### **A.1 OUTPUT POWER**

#### Reference

FCC: CFR Part 22.913

#### A.1.1 Summary

During the process of testing, the EUT was controlled via Agilent Universal Radio Communication Tester to ensure max power transmission and proper modulation.

This result contains peak output power and ERP/EIRP measurements for the EUT. In all cases, output power is within the specified limits.

#### A.1.2 Radiated

#### A.1.2.1 Description

This is the test for the maximum radiated power from the EUT.

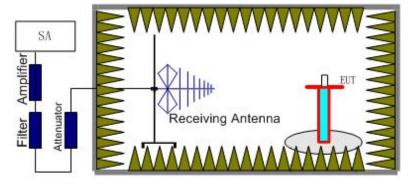
Rule Part 22.913(a) (2) specifies" The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts."

Rule Part 24.232 specifies, "Mobile/portable stations are limited to 2 watts EIRP. Peak power" and 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."

#### A.1.2.2 Method of Measurement

The measurements procedures in TIA-603-E-2016 are used.

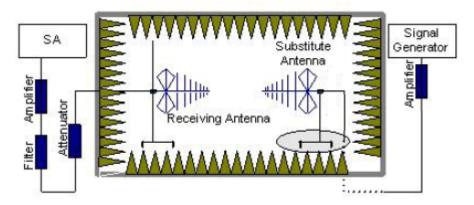
1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with rms detector.



- 2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
- 3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.







In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{\text{Mea}}$ ) is applied to the input of the substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_{\text{r}}$ ). The power of signal source ( $P_{\text{Mea}}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. An amplifier should be connected to the Signal Source output port. And the cable should be connected between the amplifier and the substitution antenna.

The cable loss (P<sub>cl</sub>), the substitution antenna Gain (G<sub>a</sub>) and the amplifier Gain (P<sub>Ag</sub>) should be recorded after test.

The measurement results are obtained as described below:

Power (EIRP) = 
$$P_{Mea} + P_{Ag} - P_{cl} + G_a$$

- 5. This value is EIRP since the measurement is calibrated using an antenna of known gain (Unit dBi) and known input power.
- 6. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15. For test layout photo, please refer to Pic.1 in Annex B.

#### CDMA800- ERP

#### Limits

Band	Peak ERP (dBm)		
CDMA800(BC0)	≤38.45dBm (7W)		

#### Measurement result

#### 1x RTT

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Aq</sub> (dB)	G <sub>a</sub> Antenna	Peak ERP	Limit(dBm)	Margin(dB)	Polarization	
r roquorioy (ivii iz)	i wea(dDiii)	i ci(ab)	· Ag(GD)	Gain(dBi)	(dBm)	Zimi(abin)	(viargin(ab)	1 olanzation	
824.70	-29.19	2.26	45.79	0.95	13.14	38.45	25.31	Н	
836.52	-27.76	2.26	45.66	0.82	14.31	38.45	24.14	Н	
848.31	-27.41	2.27	45.55	0.80	14.52	38.45	23.93	Н	

Sample calculation: 848.31MHz

Peak ERP (dBm) =  $P_{Mea}$  (-27.41dBm) +  $G_a$  (0.80dBi) +  $P_{Ag}$  (45.55 dB) -  $P_{cl}$  (2.27 dB) - 2.15dBm = 14.52 dBm





#### Ev-Do

Frequency(MHz)	Fraguency/MHz) P., (dRm)		$P_{Mea}(dBm)$ $P_{cl}(dB)$ $P_{Ag}(dB)$		tenna Peak ERP		Margin(dB)	Polarization	
Frequency(MFI2)	F Mea(UDIII)	r <sub>cl</sub> (ub)	FAg(UB)	Gain(dBi)	(dBm)	Limit(dBm)	iviargiri(ub)	rolalization	
824.70	-29.07	2.26	45.79	0.95	13.26	38.45	25.19	Н	
836.52	-27.72	2.26	45.66	0.82	14.35	38.45	24.10	Н	
848.31	-27.43	2.27	45.55	0.80	14.50	38.45	23.95	Н	

Sample calculation: 836.52MHz

Peak ERP (dBm) =  $P_{Mea}$ (-27.72dBm) +  $G_a$  (0.82 dBi) + $P_{Ag}$  (45.66 dB) -  $P_{cl}$ (2.26 dB) - 2.15dBm = 14.35 dBm

Note: Expanded measurement uncertainty is U = 2.84dB, k = 2.

#### CDMA1900- EIRP

#### Limits

Band	Peak EIRP (dBm)
CDMA1900(BC1)	≤33dBm (2W)

#### Measurement result

#### 1x RTT

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Margin(dB)	Polarization
1851.25	-24.82	2.91	43.74	4.87	20.88	33.00	12.12	Н
1880.00	-26.67	2.85	43.75	4.82	19.05	33.00	13.95	Н
1908.75	-25.42	2.86	43.77	4.76	20.25	33.00	12.75	Н

Sample calculation: 1908.75MHz

Peak EIRP (dBm) =  $P_{Mea}$ (-25.42dBm) + $G_a$  (4.76 dBi) + $P_{Ag}$  (43.77dB) -  $P_{cl}$  (2.86 dB) =20.25dBm

#### Ev-Do

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Margin(dB)	Polarization
1851.25	-24.68	2.91	43.74	4.87	21.02	33.00	11.98	Н
1880.00	-26.55	2.85	43.75	4.82	19.17	33.00	13.83	Н
1908.75	-25.35	2.86	43.77	4.76	20.32	33.00	12.68	Н

Sample calculation: 1908.75 MHz

Peak EIRP (dBm) =  $P_{Mea}$ (-25.35dBm) -  $G_a$  (-4.76 dBi) -  $P_{Ag}$  (-43.77dB) -  $P_{cl}$  (2.86 dB) = 20.32dBm

Note: Expanded measurement uncertainty is U = 2.84dB, k=2.





## **A.2 EMISSION LIMT**

#### Reference

FCC: CFR 2.1051, Part 22.917(a), 24.238(a).

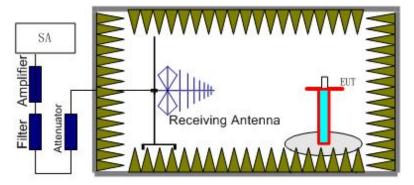
#### A.2.1 Measurement Method

The measurements procedures in TIA-603-E-2016are used. This measurement is carried out in fully-anechoic chamber 3.

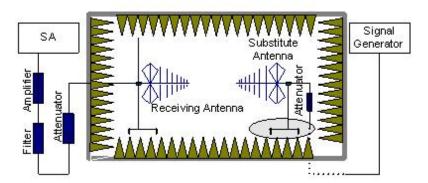
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 1910 MHz. The resolution bandwidth is set 1MHz as outlined in Part 22.917(a) and 24.238(a). The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of CDMA800 and CDMA 1900.

#### The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



- 2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
- 3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.







In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{\text{Mea}}$ ) is applied to the input of the substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_{\text{r}}$ ). The power of signal source ( $P_{\text{Mea}}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss (P<sub>pl</sub>) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (G<sub>a</sub>) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss  $(P_{D})$  is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

Power (EIRP) =  $P_{Mea} - P_{pl} + G_a$ 

- 5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
- 6. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dB.

#### A.2.2 Measurement Limit

Part 22.917(a) and 24.238(a) all specify that 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 specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

#### A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the CDMA BC0 (836.52MHz, 848.31MHz and 824.7MHz). It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the CDMA BC0 or CDMA BC1 into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.





#### The worst cases:

# CDMA BC0, Channel 384/836.52MHz

Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>pl</sub> (dB)	G <sub>a</sub> (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin(dB)	Polarity
1648.01	-59.95	3.56	5.23	-60.43	-13.00	47.40	Н
2476.00	-53.48	4.60	6.03	-54.20	-13.00	41.20	Н
3295.02	-54.94	5.29	7.71	-54.67	-13.00	41.70	V
4130.02	-56.01	6.05	9.03	-55.18	-13.00	42.20	Н
4952.01	-55.96	6.69	9.85	-54.95	-13.00	42.00	V
5775.01	-54.17	7.23	10.54	-53.01	-13.00	40.00	Н

# CDMA BC0, Channel 777/848.31MHz

Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>pl</sub> (dB)	G <sub>a</sub> (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin(dB)	Polarity
1668.01	-60.42	3.58	5.20	-60.95	-13.00	47.90	Н
2518.00	-52.49	4.64	6.13	-53.15	-13.00	40.10	Н
3338.02	-54.33	5.31	7.81	-53.98	-13.00	41.00	Н
4175.02	-55.34	6.15	9.08	-54.56	-13.00	41.60	V
5029.01	-55.73	6.57	9.94	-54.51	-13.00	41.50	Н
5865.01	-53.80	7.28	10.53	-52.70	-13.00	39.70	Н

# CDMA BC0, Channel 1013/824.7MHz

Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>pl</sub> (dB)	G <sub>a</sub> (dBi)	Peak ERP (dBm)	Limit (dBm)	Margin(dB)	Polarity
1694.01	-60.14	3.60	5.15	-60.74	-13.00	47.70	V
2540.00	-52.19	4.66	6.17	-52.83	-13.00	39.80	Н
3393.02	-55.05	5.36	7.94	-54.62	-13.00	41.60	V
4233.02	-55.80	6.26	9.13	-55.08	-13.00	42.10	V
5099.01	-54.82	6.77	10.04	-53.70	-13.00	40.70	Н
5938.01	-53.34	7.47	10.51	-52.45	-13.00	39.50	Н

Sample calculation: 1648.01MHz

Peak ERP (dBm) =  $P_{Mea}(-59.95 \text{ dBm}) - P_{cl}(3.56dB) + G_a(5.23 \text{ dBi}) - 2.15dBm$ 

= -60.43 dBm





#### **CDMA BC1, Channel 25/1851.25MHz**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>pl</sub> (dB)	G <sub>a</sub> (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin(dB)	Polarity
3698.02	-56.66	6.43	8.48	-54.61	-13.00	41.61	Н
5556.02	-56.90	7.19	10.59	-53.50	-13.00	40.50	Н
7402.01	-55.24	8.12	12.08	-51.28	-13.00	38.28	Н
9261.01	-55.17	9.06	13.26	-50.97	-13.00	37.97	V
11110.01	-52.02	9.79	13.18	-48.63	-13.00	35.63	Н
12960.01	-50.24	10.48	13.48	-47.24	-13.00	34.24	V

## CDMA BC1, Channel 600/1880.00MHz

		l				I	
Fraguenay	D D	$P_{pl}$	G	Peak	Limit		
Frequency	P <sub>Mea</sub>	(dB)	G <sub>a</sub>	EIRP	(dBm)	Margin(dB)	Polarity
(MHz)	(dBm)		(dBi)	(dBm)			
3758.02	-57.54	6.27	8.56	-55.25	-13.00	42.25	Н
5648.02	-55.94	7.27	10.57	-52.64	-13.00	39.64	Н
7512.01	-55.28	8.34	12.21	-51.41	-13.00	38.41	V
9400.01	-55.22	9.04	13.34	-50.92	-13.00	37.92	Н
11282.01	-52.12	9.89	13.14	-48.87	-13.00	35.87	V
13167.01	-47.71	10.64	13.73	-44.62	-13.00	31.62	Н

# CDMA BC1, Channel 1175/1908.75MHz

Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>pl</sub> (dB)	G <sub>a</sub> (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin(dB)	Polarity
3799.02	-57.71	6.14	8.62	-55.23	-13.00	42.23	Н
5732.02	-55.55	7.29	10.55	-52.29	-13.00	39.29	Н
7619.01	-54.61	8.06	12.30	-50.37	-13.00	37.37	Н
9566.01	-54.38	9.30	13.33	-50.35	-13.00	37.35	H
11469.01	-51.20	9.89	13.11	-47.98	-13.00	34.98	Н
13342.01	-48.27	10.57	13.98	-44.86	-13.00	31.86	V

Sample calculation: 3799.02MHz

Peak EIRP (dBm) =  $P_{Mea}$ (-57.71 dBm) -  $P_{cl}$  (6.14dB) +  $G_a$  (8.62 dBi)

=-55.23dBm

Note: Expanded measurement uncertainty for this test item is U = 5.16 dB, k = 2.





# **ANNEX B: Persons involved in this testing**

Test Item	Tester		
Out Power	Chen Tianwei		
Transmitter Spurious Emission	Chen Tianwei		

\*\*\*END OF REPORT\*\*\*