

Variant FCC RF Test Report

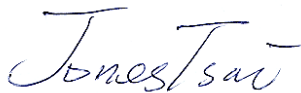
APPLICANT : Mobile Devices Ingénierie
EQUIPMENT : Telematics embedded system
BRAND NAME : Mobile Devices Ingenierie
MODEL NAME : C4Max-3GNA-E
MARKETING NAME : C4Max-3GNA-E V2
FCC ID : A6GC4MAX-3GNA
STANDARD : FCC 47 CFR Part 2, 22(H), 24(E)
CLASSIFICATION : PCS Licensed Transmitter (PCB)

This is a variant report which is only valid together with the original test report. The product was received on Mar. 31, 2015 and testing was completed on May 20, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL (SHENZHEN) INC.

1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town,
Nanshan District, Shenzhen, Guangdong, P. R. China



TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant.....	5
1.2 Manufacturer	5
1.3 Product Feature of Equipment Under Test	5
1.4 Product Specification subjective to this standard.....	6
1.5 Modification of EUT	7
1.6 Maximum ERP/EIRP Power.....	7
1.7 Testing Location	8
1.8 Applicable Standards	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	9
2.1 Test Mode.....	9
2.2 Connection Diagram of Test System	11
2.3 Support Unit used in test configuration	11
3 TEST RESULT	12
3.1 Conducted Output Power Measurement.....	12
3.2 Effective Radiated Power and Effective Isotropic Radiated Power Measurement	14
3.3 Field Strength of Spurious Radiation Measurement	18
4 LIST OF MEASURING EQUIPMENT	38
5 UNCERTAINTY OF EVALUATION	39
APPENDIX A. SETUP PHOTOGRAPHS	
APPENDIX B. PRODUCT EQUALITY DECLARATION	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG533103-01	Rev. 01	This is a variant report for C4Max-3GNA-E. The product equality declaration could be referred to Appendix B. All the test cases were performed on the original test report which can be referred to Sporton Report Number FG533103. Based on the original test report, only the conducted Power, ERP/EIRP and radiated spurious emission were verified for the differences.	Jun. 24, 2015

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	RSS-132 (5.4) RSS-133 (6.4)	Conducted Output Power	N/A	PASS	-
3.2	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS	-
	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
3.3	§2.1053 §22.917(a) §24.238(a)	RSS-132 (5.5) RSS-133 (6.5)	Field Strength of Spurious Radiation	$< 43 + 10\log_{10}(P[\text{Watts}])$	PASS	Under limit 21.21 dB at 7400.800 MHz

1 General Description

1.1 Applicant

Mobile Devices Ingénierie

100 Avenue de Stalingrad 94800 Villejuif FRANCE

1.2 Manufacturer

Mobile Devices Ingénierie

100 Avenue de Stalingrad 94800 Villejuif FRANCE

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Telematics embedded system
Brand Name	Mobile Devices Ingenierie
Model Name	C4Max-3GNA-E
Marketing Name	C4Max-3GNA-E V2
FCC ID	A6GC4MAX-3GNA
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA WLAN2.4GHz 802.11b/g/n HT20/HT40 Bluetooth v3.0+EDR Bluetooth v4.0 LE
HW Version	SAP00256
SW Version	V1944
IMEI Code	Radiation:354676050519874 Conducted: 354676050530459 ERP/EIRP: 354676050519874
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz
Maximum Output Power to Antenna	GSM850 : 32.35 dBm GSM1900 : 29.42 dBm WCDMA Band V : 23.14 dBm WCDMA Band II : 23.34 dBm
Antenna Type	Dipo Antenna
Type of Modulation	GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink)

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum ERP/EIRP Power

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)
Part 22	GSM850 GPRS class 8	GMSK	0.1968
Part 22	GSM850 EDGE class 8	8PSK	0.0644
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.0259
Part 24	GSM1900 GPRS class 8	GMSK	0.1932
Part 24	GSM1900 EDGE class 10	8PSK	0.1871
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.0320

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	Sporton Site No.	FCC/IC Registration No.
	03CH01-SZ	831040/4086F

Note: The test site complies with ANSI C63.4 2009 requirement.

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC 47 CFR Part 2, 22(H), 24(E)
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- ♦ IC RSS-132 Issue 3
- ♦ IC RSS-133 Issue 6
- ♦ IC RSS-Gen Issue 4

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

Frequency range investigated for radiated emission: 30MHz to 10th harmonic.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

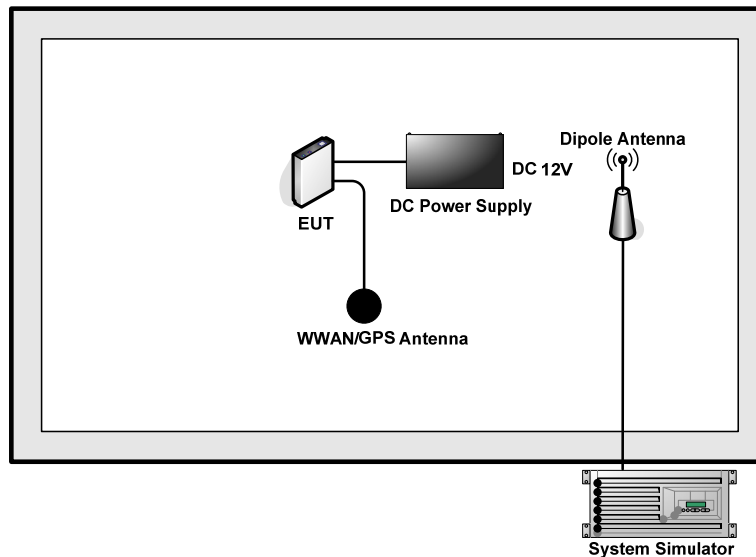
Test Modes		
Band	Radiated TCs	Conducted TCs
GSM 850	■ GPRS class 8 Link	■ GPRS class 8 Link
	■ EDGE class 8 Link	■ EDGE class 8 Link
GSM 1900	■ GPRS class 8 Link	■ GPRS class 8 Link
	■ EDGE class 10 Link	■ EDGE class 10 Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

**Conducted Power Measurement Results:**

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880.0	1909.8
GPRS class 8	32.35	32.14	31.97	29.36	29.33	29.42
GPRS class 10	32.34	32.14	31.97	29.35	29.32	29.41
EGPRS class 8	26.98	26.82	26.67	25.45	25.44	25.54
EGPRS class 10	26.97	26.80	26.65	25.73	25.72	25.81

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880.0	1907.6
RMC 12.2K	23.14	23.08	22.82	22.92	23.34	22.32
HSDPA Subtest-1	22.79	22.84	22.63	22.39	22.96	21.98
HSDPA Subtest-2	22.06	22.09	21.88	21.65	22.19	21.19
HSDPA Subtest-3	21.80	21.83	21.64	21.42	21.95	20.91
HSDPA Subtest-4	21.58	21.58	21.40	21.13	21.69	20.64
HSUPA Subtest-1	21.93	21.80	21.67	21.29	21.87	20.89
HSUPA Subtest-2	20.01	20.09	19.92	19.52	20.03	19.12
HSUPA Subtest-3	20.76	20.82	20.83	20.34	21.08	19.92
HSUPA Subtest-4	20.22	20.33	20.01	19.54	20.31	19.36
HSUPA Subtest-5	22.10	22.20	22.00	21.70	22.30	21.30

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	DC Power Supply	Solite	36B20L	Fcc DoC	N/A	N/A
3.	WWAN/GPS Antenna	N/A	N/A	N/A	N/A	N/A

3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

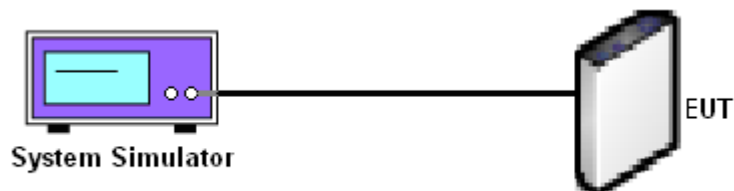
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

Cellular Band									
Modes	GSM850 (GPRS class 8)			GSM850 (EDGE class 8)			WCDMA Band V (RMC 12.2Kbps)		
Channel	128 (Low)	189 (Mid)	251 (High)	128 (Low)	189 (Mid)	251 (High)	4132 (Low)	4182 (Mid)	4233 (High)
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8	826.4	836.4	846.6
Conducted Power (dBm)	32.35	32.14	31.97	26.98	26.82	26.67	23.14	23.08	22.82

PCS Band									
Modes	GSM1900 (GPRS class 8)			GSM1900 (EDGE class 10)			WCDMA Band II (RMC 12.2Kbps)		
Channel	512 (Low)	661 (Mid)	810 (High)	512 (Low)	661 (Mid)	810 (High)	9262 (Low)	9400 (Mid)	9538 (High)
Frequency (MHz)	1850.2	1880	1909.8	1850.2	1880	1909.8	1852.4	1880	1907.6
Conducted Power (dBm)	29.36	29.33	29.42	25.73	25.72	25.81	22.92	23.34	22.32

Note: maximum burst average power for GSM, and maximum average power for WCDMA.

3.2 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

3.2.1 Description of the ERP/EIRP Measurement

The substitution method, in ANSI / TIA / EIA-603-C-2004, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-C-2004 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, $EIRP = LVL + \text{Correction factor}$ and $ERP = EIRP - 2.15$. Take the record of the output power at substitution antenna.



	GSM/GPRS/EDGE	WCDMA/HSPA
SPAN	500kHz	10MHz
RBW	10kHz	100kHz
VBW	30kHz	300kHz
Detector	RMS	RMS
Trace	Average	Average
Average Type	Power	Power
Sweep Count	100	100

3.2.4 Test Result of ERP

GSM850 (GPRS class 8) Radiated Power ERP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	824.2	21.01	0.1262	17.74	0.0594
Middle	836.4	22.43	0.1750	20.01	0.1002
Highest	848.8	22.94	0.1968	21.01	0.1262
Limit	ERP < 7W	Result		PASS	

GSM850 (EDGE class 8) Radiated Power ERP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	824.2	15.65	0.0367	11.70	0.0148
Middle	836.4	17.00	0.0501	14.38	0.0274
Highest	848.8	18.09	0.0644	16.84	0.0483
Limit	ERP < 7W	Result		PASS	

WCDMA Band V (RMC 12.2Kbps) Radiated Power ERP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	826.4	12.16	0.0164	8.40	0.0069
Middle	836.4	14.14	0.0259	10.96	0.0125
Highest	846.6	13.65	0.0232	11.10	0.0129
Limit	ERP < 7W	Result		PASS	

3.2.5 Test Result of EIRP

GSM1900 (GPRS class 8) Radiated Power EIRP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	1850.2	20.80	0.1202	22.86	0.1932
Middle	1880.0	20.92	0.1236	22.45	0.1758
Highest	1909.8	19.98	0.0995	22.06	0.1607
Limit	EIRP < 2W	Result		PASS	

GSM1900 (EDGE class 10) Radiated Power EIRP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	1850.2	19.67	0.0927	22.72	0.1871
Middle	1880.0	19.84	0.0964	22.23	0.1671
Highest	1909.8	19.08	0.0809	21.68	0.1472
Limit	EIRP < 2W	Result		PASS	

WCDMA Band II (RMC 12.2Kbps) Radiated Power EIRP					
Channel	Frequency (MHz)	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	1852.4	14.53	0.0284	15.05	0.0320
Middle	1880.0	13.13	0.0206	13.49	0.0223
Highest	1907.6	11.87	0.0154	11.46	0.0140
Limit	EIRP < 2W	Result		PASS	

3.3 Field Strength of Spurious Radiation Measurement

3.3.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.3.2 Measuring Instruments

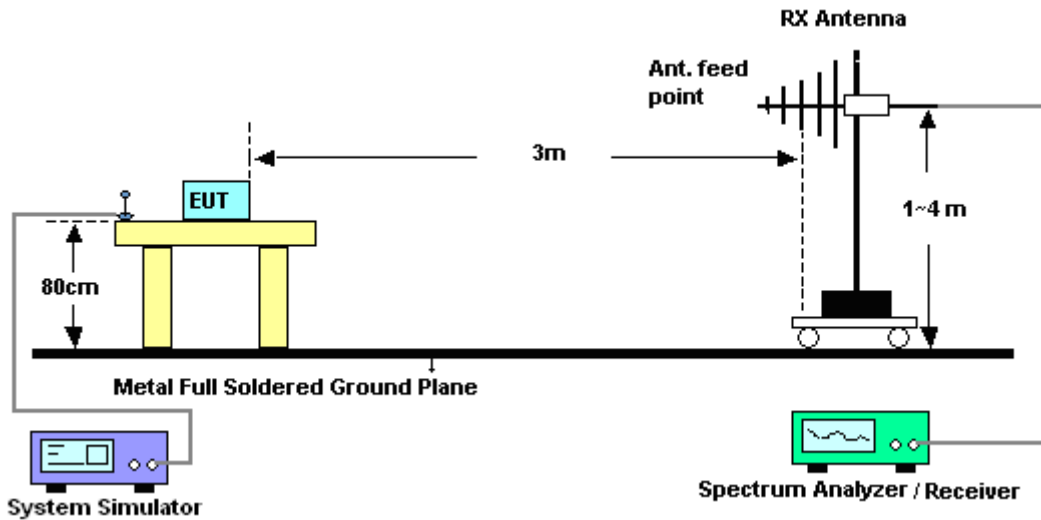
The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

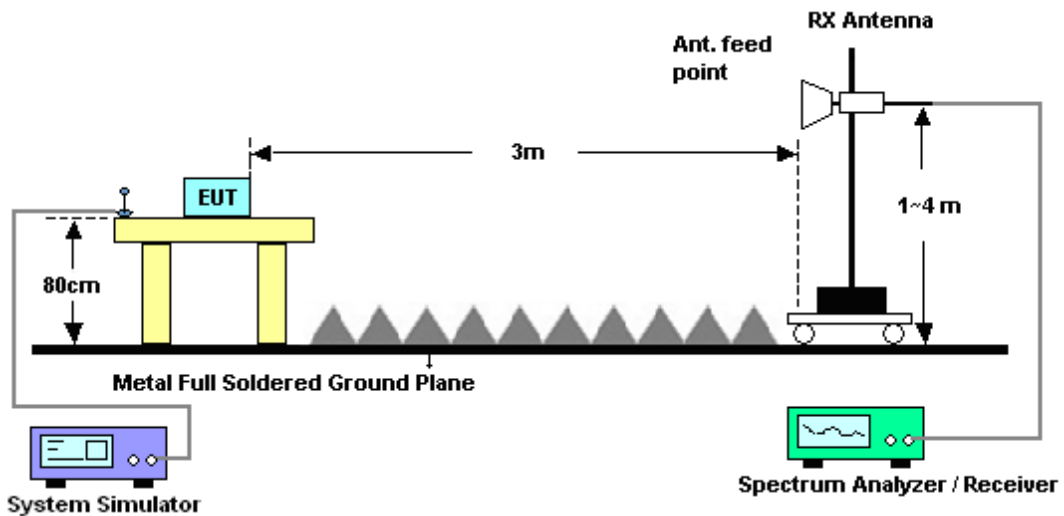
1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table 0.8 meters above the ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
12. $ERP \text{ (dBm)} = EIRP - 2.15$
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$

3.3.4 Test Setup

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



**3.3.5 Test Result of Field Strength of Spurious Radiated**

Band :	GSM850 for CH128					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648.4	-49.57	-13	-36.57	-52.06	-56.26	0.56	9.40	H	Pass
2472.6	-51.29	-13	-38.29	-55.60	-58.99	0.75	10.60	H	Pass
3296.8	-55.41	-13	-42.41	-64.71	-65.01	0.85	12.60	H	Pass

Band :	GSM850 for CH128					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648.4	-48.57	-13	-35.57	-52.76	-55.26	0.56	9.40	V	Pass
2472.6	-52.88	-13	-39.88	-57.32	-60.58	0.75	10.60	V	Pass
3296.8	-57.25	-13	-44.25	-64.11	-66.85	0.85	12.60	V	Pass



Band :	GSM850 for CH189					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-52.57	-13	-39.57	-55.12	-59.26	0.56	9.40	H	Pass
2510	-53.18	-13	-40.18	-57.08	-60.88	0.75	10.60	H	Pass
3346	-54.78	-13	-41.78	-64.08	-64.38	0.85	12.60	H	Pass

Band :	GSM850 for CH189					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-53.88	-13	-40.88	-56.83	-60.57	0.56	9.40	V	Pass
2510	-51.98	-13	-38.98	-56.85	-59.68	0.75	10.60	V	Pass
3346	-56.85	-13	-43.85	-63.71	-66.45	0.85	12.60	V	Pass



Band :	GSM850 for CH251					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1697.6	-55.05	-13	-42.05	-56.66	-61.74	0.56	9.40	H	Pass
2546.4	-48.26	-13	-35.26	-53.19	-55.96	0.75	10.60	H	Pass
3395.2	-57.13	-13	-44.13	-66.43	-66.73	0.85	12.60	H	Pass

Band :	GSM850 for CH251					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1697.6	-55.55	-13	-42.55	-58.00	-62.24	0.56	9.40	V	Pass
2546.4	-45.09	-13	-32.09	-52.20	-52.79	0.75	10.60	V	Pass
3395.2	-57.96	-13	-44.96	-64.82	-67.56	0.85	12.60	V	Pass



Band :	GSM850 for CH128					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648.4	-48.22	-13	-35.22	-50.95	-54.91	0.56	9.40	H	Pass
2472.6	-55.35	-13	-42.35	-59.25	-63.05	0.75	10.60	H	Pass
3296.8	-54.17	-13	-41.17	-63.47	-63.77	0.85	12.60	H	Pass

Band :	GSM850 for CH128					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1648.4	-47.14	-13	-34.14	-51.74	-53.83	0.56	9.40	V	Pass
2472.6	-55.26	-13	-42.26	-59.64	-62.96	0.75	10.60	V	Pass
3296.8	-56.81	-13	-43.81	-63.67	-66.41	0.85	12.60	V	Pass



Band :	GSM850 for CH189					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-52.72	-13	-39.72	-54.28	-59.41	0.56	9.40	H	Pass
2510	-50.00	-13	-37.00	-54.74	-57.70	0.75	10.60	H	Pass
3346	-52.42	-13	-39.42	-61.72	-62.02	0.85	12.60	H	Pass

Band :	GSM850 for CH189					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-56.51	-13	-43.51	-58.96	-63.20	0.56	9.40	V	Pass
2510	-47.39	-13	-34.39	-53.91	-55.09	0.75	10.60	V	Pass
3346	-54.77	-13	-41.77	-61.63	-64.37	0.85	12.60	V	Pass



Band :	GSM850 for CH251					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1697.6	-54.97	-13	-41.97	-56.58	-61.66	0.56	9.40	H	Pass
2546.4	-53.68	-13	-40.68	-57.58	-61.38	0.75	10.60	H	Pass
3395.2	-56.36	-13	-43.36	-65.66	-65.96	0.85	12.60	H	Pass

Band :	GSM850 for CH251					Temperature :	23~24°C		
Test Mode :	EDGE class 8 Link (8PSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1697.6	-55.32	-13	-42.32	-57.77	-62.01	0.56	9.40	V	Pass
2546.4	-55.50	-13	-42.50	-59.88	-63.20	0.75	10.60	V	Pass
3395.2	-58.14	-13	-45.14	-65.00	-67.74	0.85	12.60	V	Pass



Band :	GSM1900 for CH512	Temperature :	23~24°C						
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700.4	-45.47	-13	-32.47	-56.72	-57.20	0.87	12.60	H	Pass
5550.6	-49.47	-13	-36.47	-65.35	-61.50	1.07	13.10	H	Pass
7400.8	-37.29	-13	-24.29	-56.61	-46.90	1.69	11.30	H	Pass

Band :	GSM1900 for CH512	Temperature :	23~24°C						
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700.4	-46.42	-13	-33.42	-58.89	-58.15	0.87	12.6	V	Pass
5550.6	-49.63	-13	-36.63	-65.95	-61.66	1.07	13.1	V	Pass
7400.8	-34.21	-13	-21.21	-54.04	-43.82	1.69	11.3	V	Pass



Band :	GSM1900 for CH661					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3760	-47.71	-13	-34.71	-58.96	-59.44	0.87	12.60	H	Pass
5640	-50.27	-13	-37.27	-66.15	-62.30	1.07	13.10	H	Pass
7520	-38.45	-13	-25.45	-57.45	-48.06	1.69	11.30	H	Pass

Band :	GSM1900 for CH661					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Vertical		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3760	-44.60	-13	-31.60	-57.07	-56.33	0.87	12.6	V	Pass
5640	-48.76	-13	-35.76	-65.08	-60.79	1.07	13.1	V	Pass
7520	-35.30	-13	-22.30	-55.03	-44.91	1.69	11.3	V	Pass



Band :	GSM1900 for CH810					Temperature :	23~24°C		
Test Mode :	GPRS class 8 Link (GMSK)					Relative Humidity :	43~46%		
Test Engineer :	Sam Li					Polarization :	Horizontal		
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3819.6	-43.68	-13	-30.68	-54.93	-55.41	0.87	12.60	H	Pass
5729.4	-49.19	-13	-36.19	-65.07	-61.22	1.07	13.10	H	Pass
7639.2	-39.55	-13	-26.55	-58.05	-49.16	1.69	11.30	H	Pass

Band :	GSM1900 for CH810	Temperature :	23~24°C						
Test Mode :	GPRS class 8 Link (GMSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3819.6	-38.92	-13	-25.92	-52.29	-50.65	0.87	12.6	V	Pass
5729.4	-48.59	-13	-35.59	-64.91	-60.62	1.07	13.1	V	Pass
7639.2	-38.47	-13	-25.47	-57.09	-48.08	1.69	11.3	V	Pass



Band :	GSM1900 for CH512	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3700.4	-55.02	-13	-42.02	-66.27	-66.75	0.87	12.60	H	Pass
5550.6	-52.38	-13	-39.38	-68.26	-64.41	1.07	13.10	H	Pass
7400.8	-50.33	-13	-37.33	-68.65	-59.94	1.69	11.30	H	Pass

Band :	GSM1900 for CH512	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3700.4	-52.18	-13	-39.18	-64.65	-63.91	0.87	12.6	V	Pass
5550.6	-51.29	-13	-38.29	-67.61	-63.32	1.07	13.1	V	Pass
7400.8	-50.33	-13	-37.33	-68.55	-59.94	1.69	11.3	V	Pass



Band :	GSM1900 for CH661	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
3760	-52.19	-13	-39.19	-63.44	-63.92	0.87	12.60	H	Pass
5640	-52.17	-13	-39.17	-68.05	-64.20	1.07	13.10	H	Pass
7520	-49.80	-13	-36.80	-68.12	-59.41	1.69	11.30	H	Pass

Band :	GSM1900 for CH661	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
3760	-50.60	-13	-37.60	-63.07	-62.33	0.87	12.6	V	Pass
5640	-51.37	-13	-38.37	-67.69	-63.40	1.07	13.1	V	Pass
7520	-49.95	-13	-36.95	-68.17	-59.56	1.69	11.3	V	Pass



Band :	GSM1900 for CH810	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3819.6	-50.66	-13	-37.66	-61.91	-62.39	0.87	12.60	H	Pass
5729.4	-52.70	-13	-39.70	-68.58	-64.73	1.07	13.10	H	Pass
7639.2	-49.84	-13	-36.84	-68.16	-59.45	1.69	11.30	H	Pass

Band :	GSM1900 for CH810	Temperature :	23~24°C						
Test Mode :	EDGE class 10 Link (8PSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3819.6	-43.04	-13	-30.04	-55.51	-54.77	0.87	12.6	V	Pass
5729.4	-50.99	-13	-37.99	-67.31	-63.02	1.07	13.1	V	Pass
7639.2	-49.83	-13	-36.83	-68.05	-59.44	1.69	11.3	V	Pass



Band :	WCDMA Band V for CH4132	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1652.8	-47.23	-13	-34.23	-50.06	-53.92	0.56	9.40	H	Pass
2479.2	-58.98	-13	-45.98	-62.88	-66.68	0.75	10.60	H	Pass
3305.6	-56.96	-13	-43.96	-66.26	-66.56	0.85	12.60	H	Pass

Band :	WCDMA Band V for CH4132	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
1652.8	-51.97	-13	-38.97	-55.23	-58.66	0.56	9.40	V	Pass
2479.2	-59.48	-13	-46.48	-63.86	-67.18	0.75	10.60	V	Pass
3305.6	-59.56	-13	-46.56	-66.42	-69.16	0.85	12.60	V	Pass



Band :	WCDMA Band V for CH4182	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1672	-46.65	-13	-33.65	-49.62	-53.34	0.56	9.40	H	Pass
2510	-60.42	-13	-47.42	-64.32	-68.12	0.75	10.60	H	Pass
3346	-56.91	-13	-43.91	-66.21	-66.51	0.85	12.60	H	Pass

Band :	WCDMA Band V for CH4182	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
1672	-48.80	-13	-35.80	-52.99	-55.49	0.56	9.40	V	Pass
2510	-60.04	-13	-47.04	-64.42	-67.74	0.75	10.60	V	Pass
3346	-59.19	-13	-46.19	-66.05	-68.79	0.85	12.60	V	Pass



Band :	WCDMA Band V for CH4233	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
1693.2	-49.93	-13	-36.93	-52.28	-56.62	0.56	9.40	H	Pass
2539.8	-60.18	-13	-47.18	-64.08	-67.88	0.75	10.60	H	Pass
3386.4	-56.79	-13	-43.79	-66.09	-66.39	0.85	12.60	H	Pass

Band :	WCDMA Band V for CH4233	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit	Reading	Power	loss	Gain	(H/V)	
(dB)			(dB)	(dBm)	(dBm)	(dB)	(dBi)		
1693.2	-53.38	-13	-40.38	-56.43	-60.07	0.56	9.40	V	Pass
2539.8	-59.90	-13	-46.90	-64.28	-67.60	0.75	10.60	V	Pass
3386.4	-58.98	-13	-45.98	-65.84	-68.58	0.85	12.60	V	Pass



Band :	WCDMA Band II for CH9262	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3704.8	-49.76	-13	-36.76	-61.01	-61.49	0.87	12.60	H	Pass
5557.2	-49.30	-13	-36.30	-65.18	-61.33	1.07	13.10	H	Pass
7409.6	-46.93	-13	-33.93	-65.25	-56.54	1.69	11.30	H	Pass

Band :	WCDMA Band II for CH9262	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	loss	Gain	(H/V)	
3704.8	-46.56	-13	-33.56	-59.03	-58.29	0.87	12.6	V	Pass
5557.2	-49.51	-13	-36.51	-65.83	-61.54	1.07	13.1	V	Pass
7409.6	-48.21	-13	-35.21	-66.43	-57.82	1.69	11.3	V	Pass



Band :	WCDMA Band II for CH9400	Temperature :	23~24℃						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3760	-46.75	-13	-33.75	-58.00	-58.48	0.87	12.60	H	Pass
5640	-51.46	-13	-38.46	-67.34	-63.49	1.07	13.10	H	Pass
7520	-49.08	-13	-36.08	-67.40	-58.69	1.69	11.30	H	Pass

Band :	WCDMA Band II for CH9400	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3760	-46.58	-13	-33.58	-59.05	-58.31	0.87	12.6	V	Pass
5640	-49.08	-13	-36.08	-65.4	-61.11	1.07	13.1	V	Pass
7520	-48.93	-13	-35.93	-67.15	-58.54	1.69	11.3	V	Pass



Band :	WCDMA Band II for CH9538	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	Limit (dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3815.2	-46.56	-13	-33.56	-57.81	-58.29	0.87	12.60	H	Pass
5722.8	-51.02	-13	-38.02	-66.90	-63.05	1.07	13.10	H	Pass
7630.4	-46.44	-13	-33.44	-64.76	-56.05	1.69	11.30	H	Pass

Band :	WCDMA Band II for CH9538	Temperature :	23~24°C						
Test Mode :	RMC 12.2Kbps Link (QPSK)	Relative Humidity :	43~46%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.								
Frequency	EIRP	Limit	Over Limit	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
(MHz)	(dBm)	(dBm)	(dB)	Reading (dBm)	Power (dBm)	loss (dB)	Gain (dBi)	(H/V)	
3815.2	-46.03	-13	-33.03	-58.5	-57.76	0.87	12.6	V	Pass
5722.8	-49.67	-13	-36.67	-65.99	-61.70	1.07	13.1	V	Pass
7630.4	-47.53	-13	-34.53	-65.75	-57.14	1.69	11.3	V	Pass



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	May 20, 2015	May 25, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz;Max 30dBm	Sep. 25, 2014	May 20, 2015	Sep. 24, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz-2GHz	Nov. 07, 2014	May 20, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	May 20, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Sep. 04, 2014	May 20, 2015	Sep. 03, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz ~3000MHz / 30 dB	Jan. 28, 2015	May 20, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Jan. 28, 2015	May 20, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 05, 2015	May 20, 2015	May 04, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	May 20, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 20, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 20, 2015	NCR	Radiation (03CH01-SZ)



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.9 dB
---	--------



Appendix B. Product Equality Declaration