



Part 22

TEST REPORT

Product Name	Tablet PC
Model Name	R8
FCC ID	NV8-R8
Client	Estone Technology Inc

TA Technology (Shanghai) Co., Ltd.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXC1209-0833RF03R3

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GENERAL SUMMARY

Product Name	Tablet PC	Model Name	R8
FCC ID	NV8-R8		
Report No.	RXC1209-0833RF03R3		
Client	Estone Technology Inc		
Manufacturer	Shenzhen Shi ChuangZhiCheng Technology Co., Ltd Manufacturing Center		
Reference Standard(s)	<p>FCC CFR47 Part 2 (2012-12) Frequency Allocations And Radio Treaty Matters; General Rules And Regulations</p> <p>FCC CFR 47 Part 22H (2012-12) Public Mobile Services(850MHz)</p> <p>ANSI/TIA-603-C(2004) Land mobile FM or PM Communications Equipment Measurements and Performance Standards.</p>		
Conclusion	<p>This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 2 of this test report are below limits specified in the relevant standards.</p> <p>General Judgment: Pass</p> <p style="text-align: right;">(Stamp)</p> <p style="text-align: right;">Date of issue: December 21st, 2012</p>		
Comment	The test result only responds to the measured sample.		

Approved by 徐伟中
Director

Revised by 徐凯
RF Manager

Performed by 王峰
RF Engineer

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1. General Information

1.1. Notes of the test report

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

TA Technology (Shanghai) Co., Ltd. is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. This report only refers to the item that has undergone the test.

This report standalone dose not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of **TA Technology (Shanghai) Co., Ltd.** and the Accreditation Bodies, if it applies.

If the electrical report is inconsistent with the printed one, it should be subject to the latter.

1.2. Testing laboratory

Company:	TA Technology (Shanghai) Co., Ltd.
Registration Number:	428261
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Yang Weizhong
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	yangweizhong@ta-shanghai.com

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1.3. Applicant Information

Company: Estone Technology Inc
Address: 3324 secor road #8, Toledo, OH 43606
City: Toledo
Postal Code: /
Country: America

1.4. Manufacturer Information

Company: Shenzhenshi ChuangZhiCheng Technology Co., Ltd Manufacturing Center
Address: 3F, Block A2, A3, Beida Funder Hi-tech park, Songbai Road, ShiyianStreet, Baoan District, Shenzhen
City: Shenzhen
Postal Code: 518000
Country: China

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1.5. Information of EUT

General information

Name of EUT:	Tablet PC		
IMEI :	CZC1260024620010		
Hardware Version:	VerD		
Software Version:	R802R007		
Antenna Type:	Internal Antenna		
Device Operating Configurations:			
Operating Mode(s):	CDMA Cellular:(tested)		
Support mode:	1x RTT/EVDO Rev.0/ Rev.A		
Test Modulation:	(CDMA)BPSK,QPSK,HPSK		
Maximum E.R.P.	CDMA Cellular: 21.44 dBm		
Power Supply:	Battery or Charger (AC adaptor)		
Rated Power Supply Voltage:	10.8V		
Extreme Voltage:	Minimum: 9V Maximum: 12.6V		
Extreme Temperature:	Lowest: -10°C Highest: +50°C		
Test Channel: (Low - Middle - High)	1013 - 384 - 777	(CDMA Cellular)	(tested)
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	CDMA Cellular	824.7 ~ 848.31	869.7 ~ 893.31

Equipment Under Test (EUT) is Tablet PC with internal antenna. The EUT is tested CDMA Cellular in this report.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

1.6. Test Date

The test is performed from October 26, 2012 to November 15, 2012.

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2. Test Information

2.1. Summary of test results

Number	Test Case	Clause in FCC rules	Verdict
1	RF power output	2.1046	PASS
2	Effective Radiated Power	22.913(a)(2)	PASS
3	Occupied Bandwidth	2.1049	PASS
4	Band Edge Compliance	22.917	PASS
5	Frequency Stability	2.1055 / 22.355	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 22.917(a)	PASS
7	Radiates Spurious Emission	2.1053 / 22.917 (a)	PASS

PASS: The EUT complies with the essential requirements in the standard.

FAIL: The EUT does not comply with the essential requirements in the standard.

2.2. Test Mode

During the process of the testing, The EUT is controlled by the Base Station Simulator to ensure max power transmission and proper modulation.

The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

During the ERP measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.

Test Modes		
Band	Radiated Test Cases	Conducted Test Cases
CDMA Cellular	1x RTT(RC1 SO2)	1x RTT(RC1 SO2)
	EVDO (Rev.0) RTAP153.6 kbps	EVDO (Rev.0) RTAP153.6 kbps
	EVDO(Rev.A) RETAP 4096 bits	EVDO(Rev.A) RETAP 4096 bits

Note: The maximum RF output power levels are RC1 SO2 for 1x RTT mode, RTAP153.6 kbps for EVDO (Rev.0) mode, RETAP 4096 bits For EVDO (Rev.A) mode, only these modes were used for all tests.

For RSE and CSE, only the maximum RF output power level is chosen.

2.3. RF Power Output

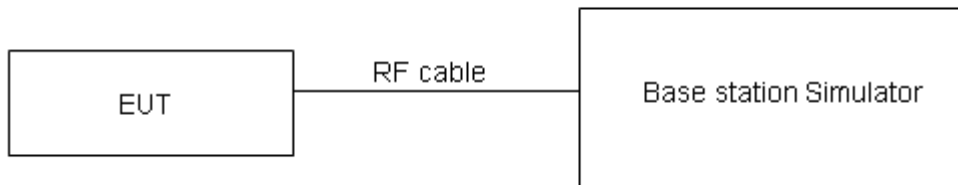
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

During the process of the testing, The EUT is controlled by the Base Station Simulator to ensure max power transmission and proper modulation.

Test Setup



The loss between RF output port of the EUT and the input port of the tester has been taken into consideration.

Limits

No specific RF power output requirements in part 2.1046.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4$ dB.

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Test Results

CDMA Cellular			Conducted Power(dBm)		
			Channel 1013	Channel 384	Channel 777
1x RTT	RC1	SO55	24.28	24.15	24.06
		SO2	24.35	24.21	24.13
	RC3	SO55	24.15	24.17	24.16
		SO2	24.22	24.27	24.24
		SO32(+F-SCH)	24.21	24.16	24.07
		SO32(+SCH)	24.18	24.14	24.08
EVDO (Rev.0)	RTAP	9.6 kbps	24.31	24.31	24.02
		38.4 kbps	24.37	24.23	23.99
		153.6 kbps	24.38	24.28	24.04
EVDO (Rev.A)	RETAP	128 bits	24.28	24.21	24.01
		2048 bits	24.26	24.19	24.04
		4096 bits	24.32	24.23	24.03

Note:

1) The maximum RF Output Power is marking in bold.

2.4. Effective Radiated Power

Ambient condition

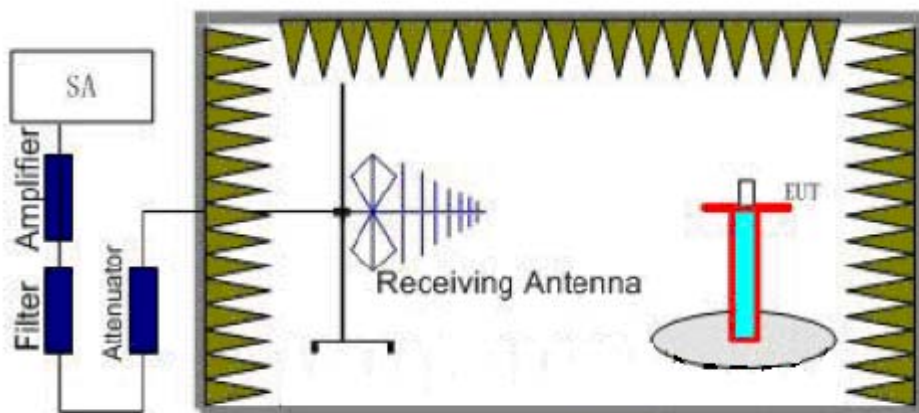
Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

The measurement procedures in TIA- 603C are used.

Step 1:

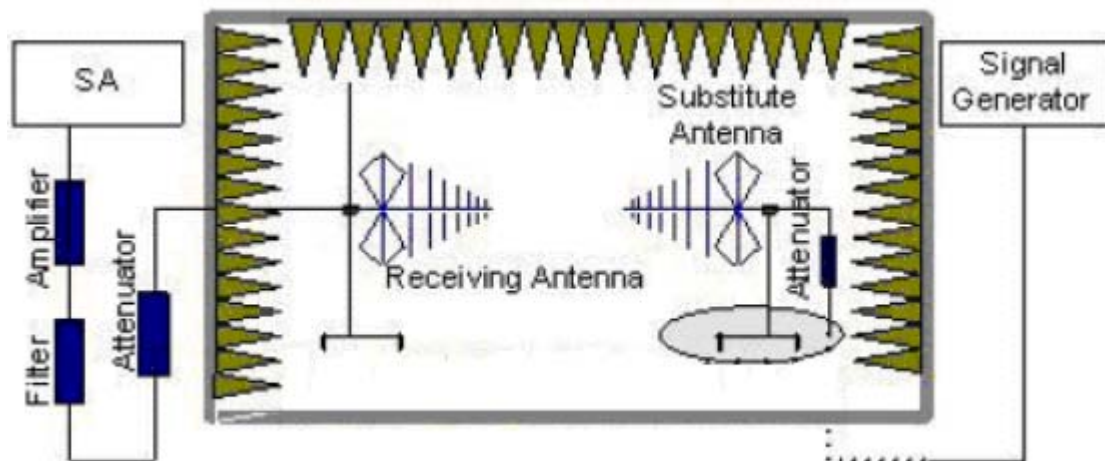
The measurement is carried out in the semi-anechoic chamber. EUT was placed on a 0.8 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used while RBW and VBW are both set to 3MHz. During the measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations. The test setup refers to figure below.



Step 2:

A dipole antenna shall be substituted in place of the EUT. The antenna will be driven by a signal generator with a adjustable S.G. applied through a 30dB amplifier and a Tx cable. Then the Analyzer reading which is equal to LVL is recorded while the antenna was moving up and down. The E.R.P. /E.I.R.P. of the EUT can be calculated through the level of the signal generator, Tx cable loss and the gain of the substitution antenna. The test setup refers to figure below.

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$$E.R.P = S.G + 30 - Tx \text{ Cable loss} + \text{Substitution antenna gain} - 2.15.$$

$$EIRP = E.R.P + 2.15$$

Limits

Rule Part 22.913(a) specifies that "Mobile/portable stations are limited to 7 watts ERP".

Limit	$\leq 7 \text{ W}$ (38.45 dBm)
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 1.19 \text{ dB}$

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Test Results:Pass

CDMA Cellular	Channel	Polarization	LVL (dBm)	SG+30 (dBm)	Gain (dBi)	Cable Loss (dB)	E.R.P. (dBm)
RC1 (SO2)	1013	Vertical	-25.34	36.67	1.06	15.17	20.41
	384	Vertical	-24.32	37.13	1.24	15.2	21.02
	777	Vertical	-25.49	36.07	1.38	15.24	20.06
EVDO (Rev.0)	1013	Vertical	-25.54	36.87	1.06	15.17	20.61
	384	Vertical	-24.52	37.33	1.24	15.2	21.22
	777	Vertical	-25.69	36.27	1.38	15.24	20.26
EVDO (Rev.A)	1013	Vertical	-25.91	37.24	1.06	15.17	20.98
	384	Vertical	-24.74	37.55	1.24	15.2	21.44
	777	Vertical	-25.81	36.39	1.38	15.24	20.38

Note: 1. E.R.P =S.G+30. - Tx Cable loss + Substitution antenna gain – 2.15.

2. EIRP= E.R.P+2.15

2.5. Occupied Bandwidth

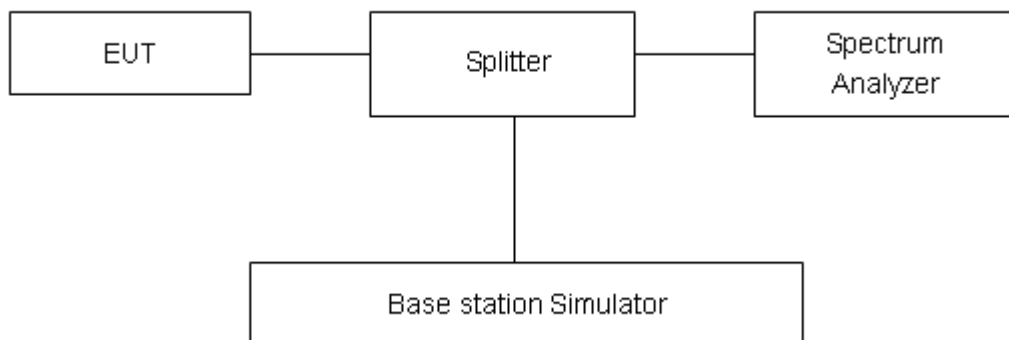
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer. RBW is set to 30kHz, VBW is set to 300kHz for CDMA Cellular. 99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 624\text{Hz}$.

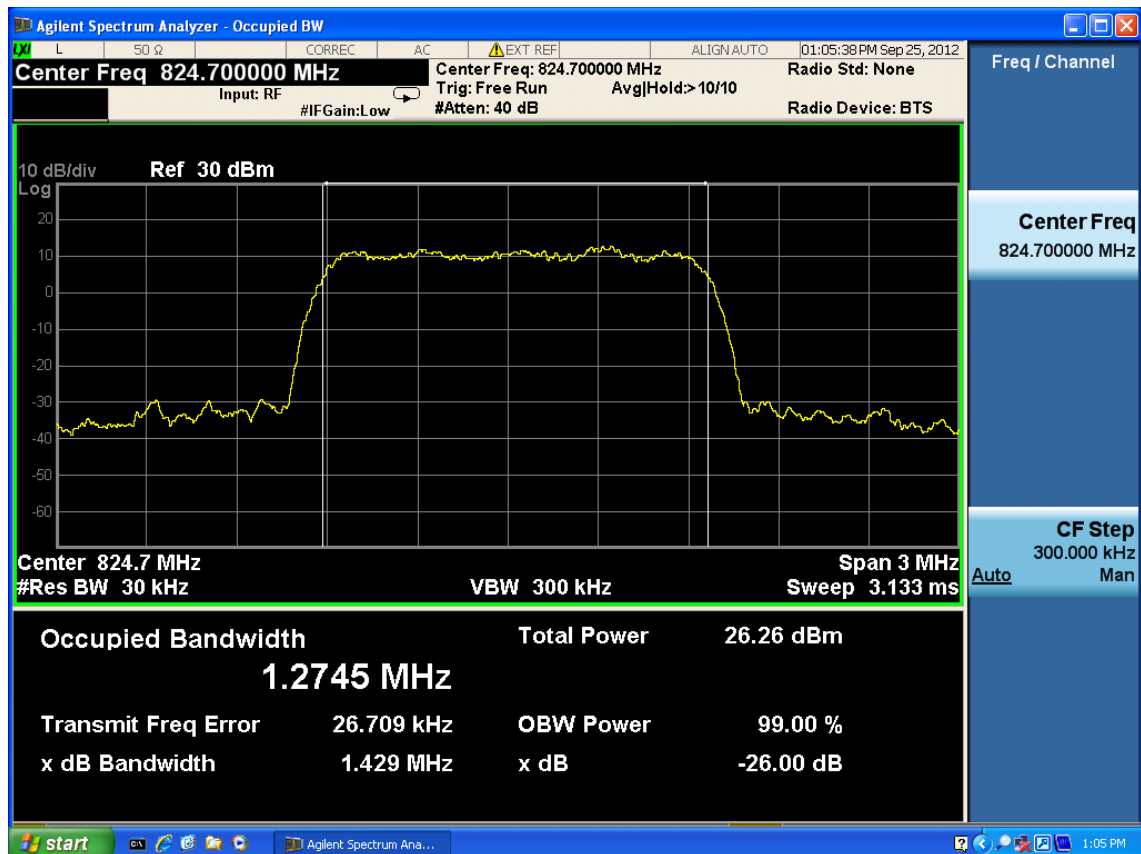
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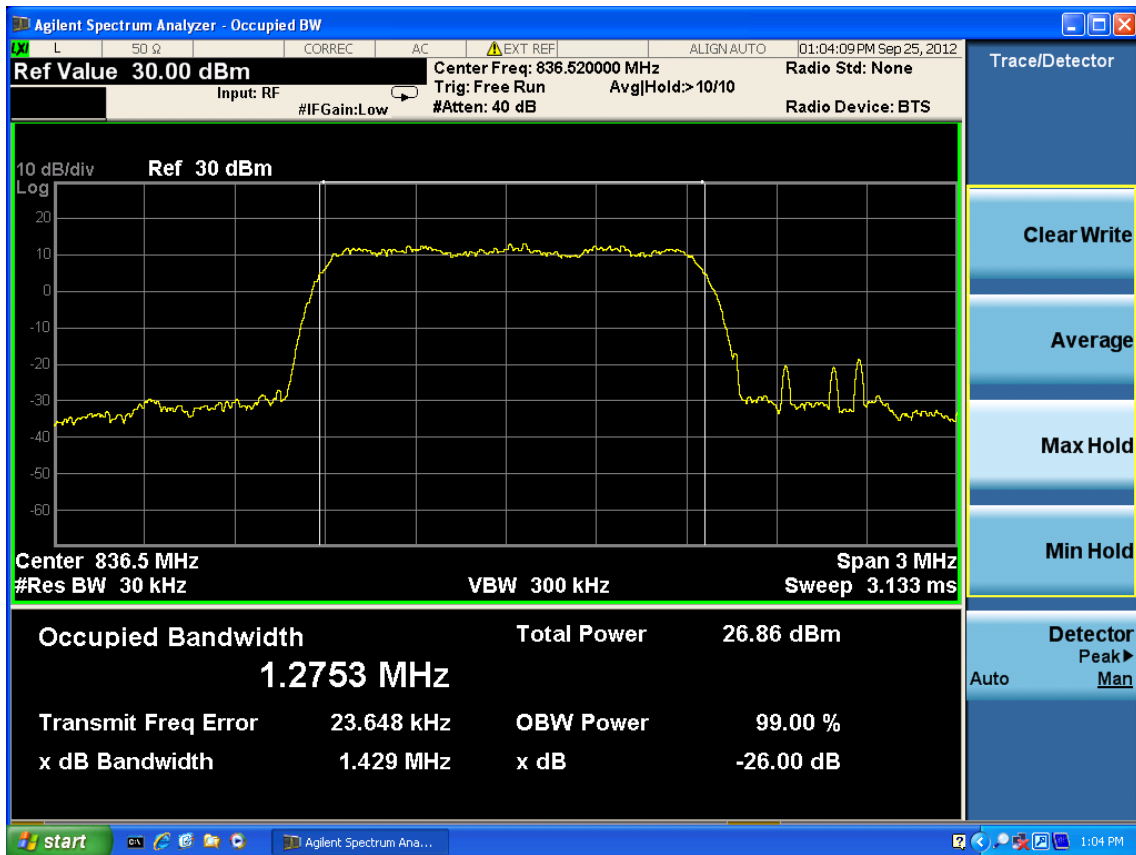
Test Result

CDMA Cellular	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
RC1 (SO2)	1013	824.7	1.2745	1.429
	384	836.52	1.2753	1.429
	777	848.31	1.2713	1.433
EVDO (Rev.0)	1013	824.7	1.2803	1.436
	384	836.52	1.2801	1.431
	777	848.31	1.2752	1.439
EVDO (Rev.A)	1013	824.7	1.2862	1.444
	384	836.52	1.2850	1.441
	777	848.31	1.2890	1.439

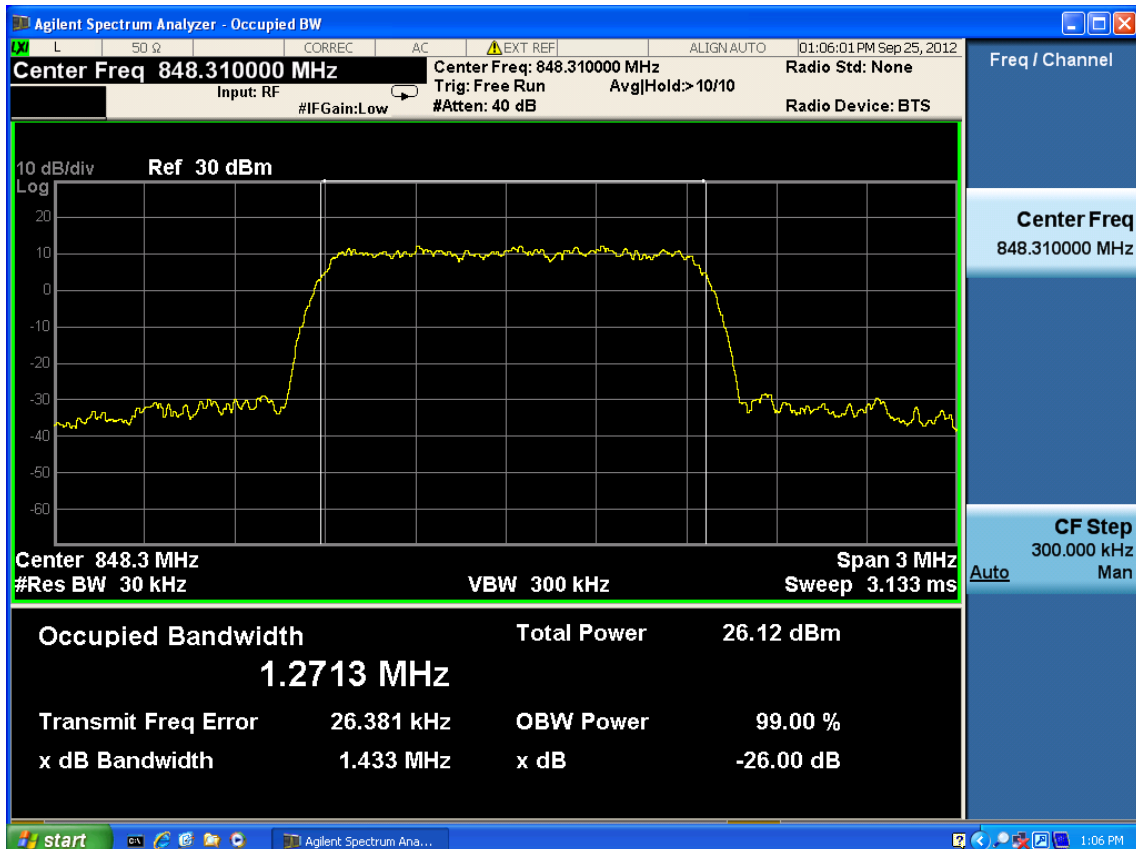


CDMA Cellular RC1 (SO2) CH1013 Occupied Bandwidth

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CDMA Cellular RC1 (SO2) CH384 Occupied Bandwidth

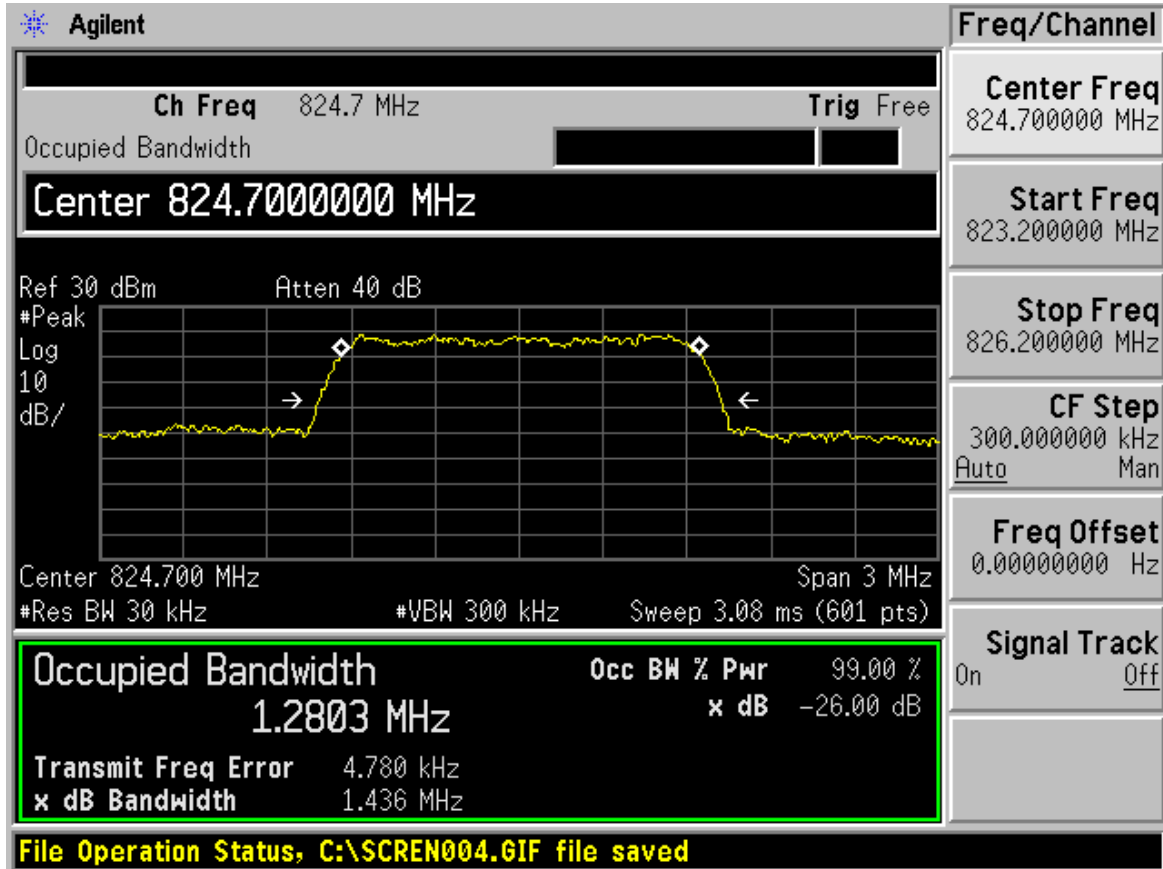


CDMA Cellular RC1 (SO2) CH777 Occupied Bandwidth

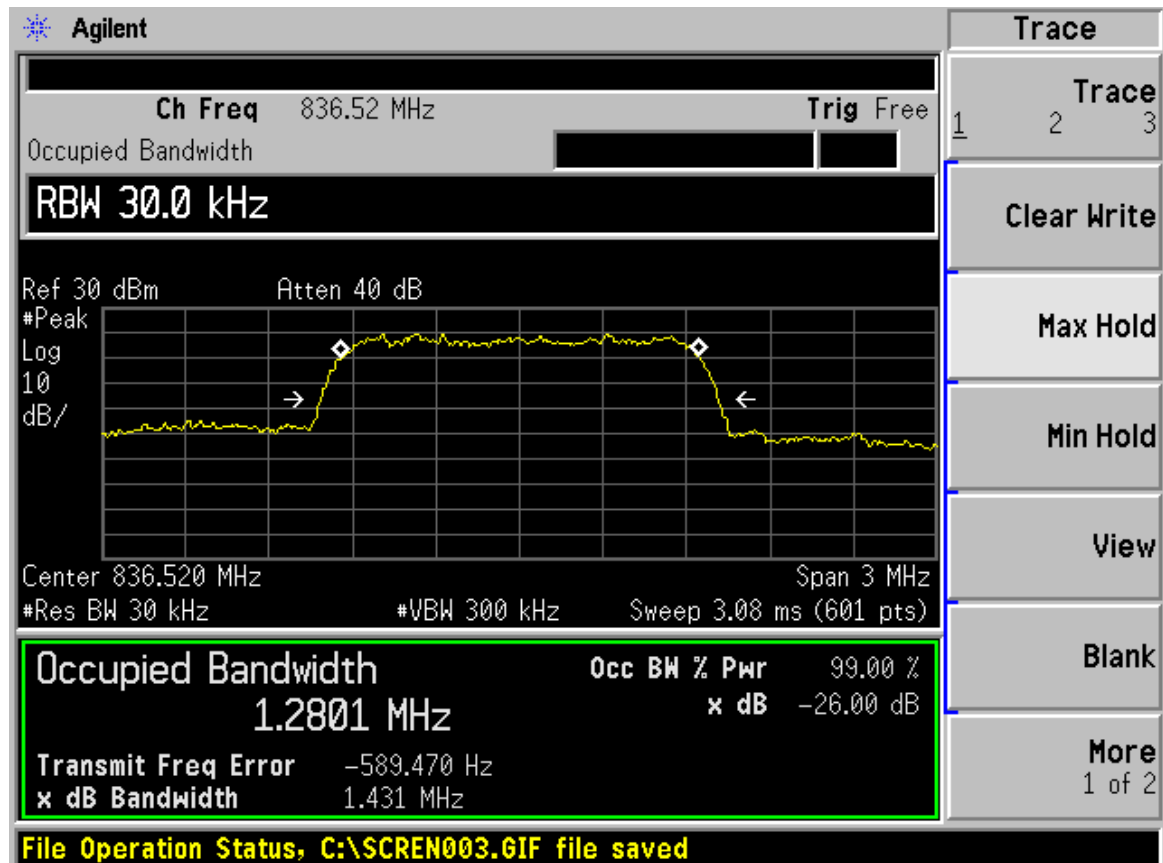
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CDMA Cellular EVDO (Rev.0)CH1013 Occupied Bandwidth

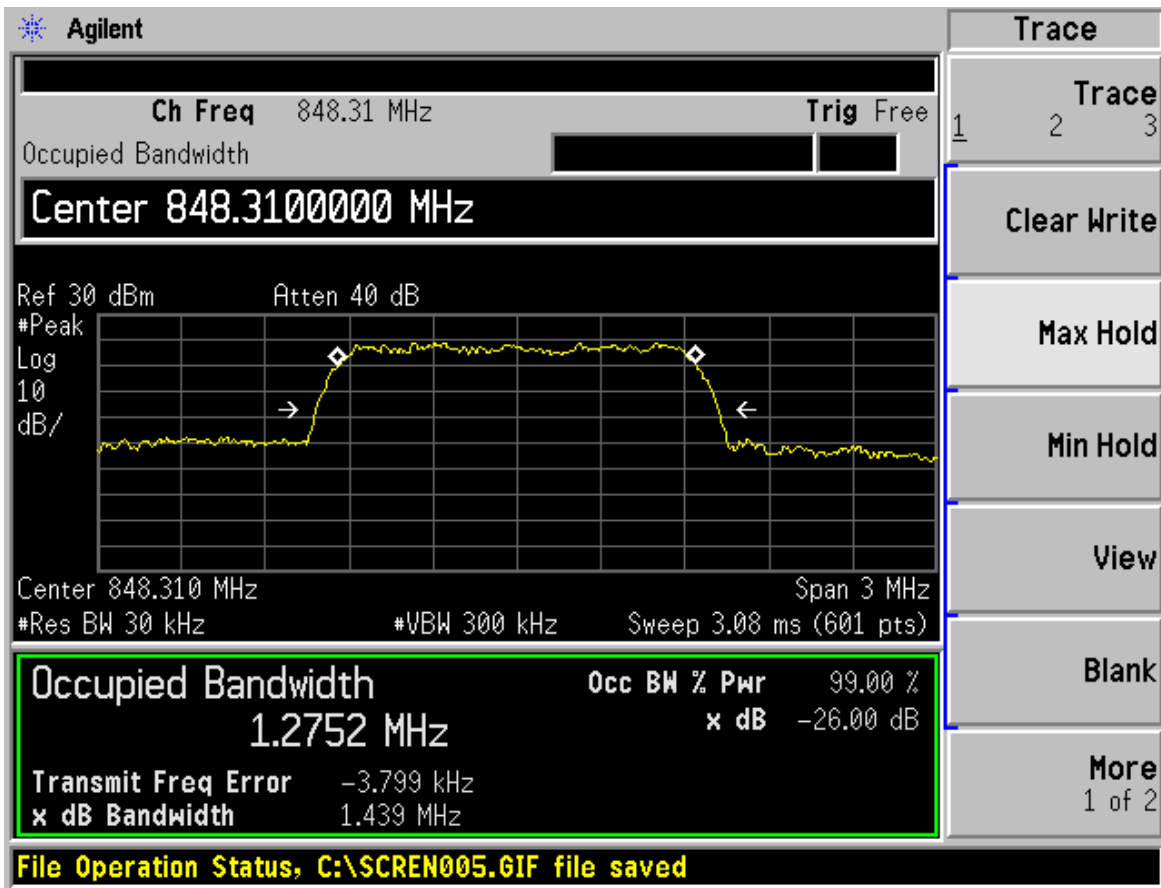


CDMA Cellular EVDO (Rev.0) CH384 Occupied Bandwidth

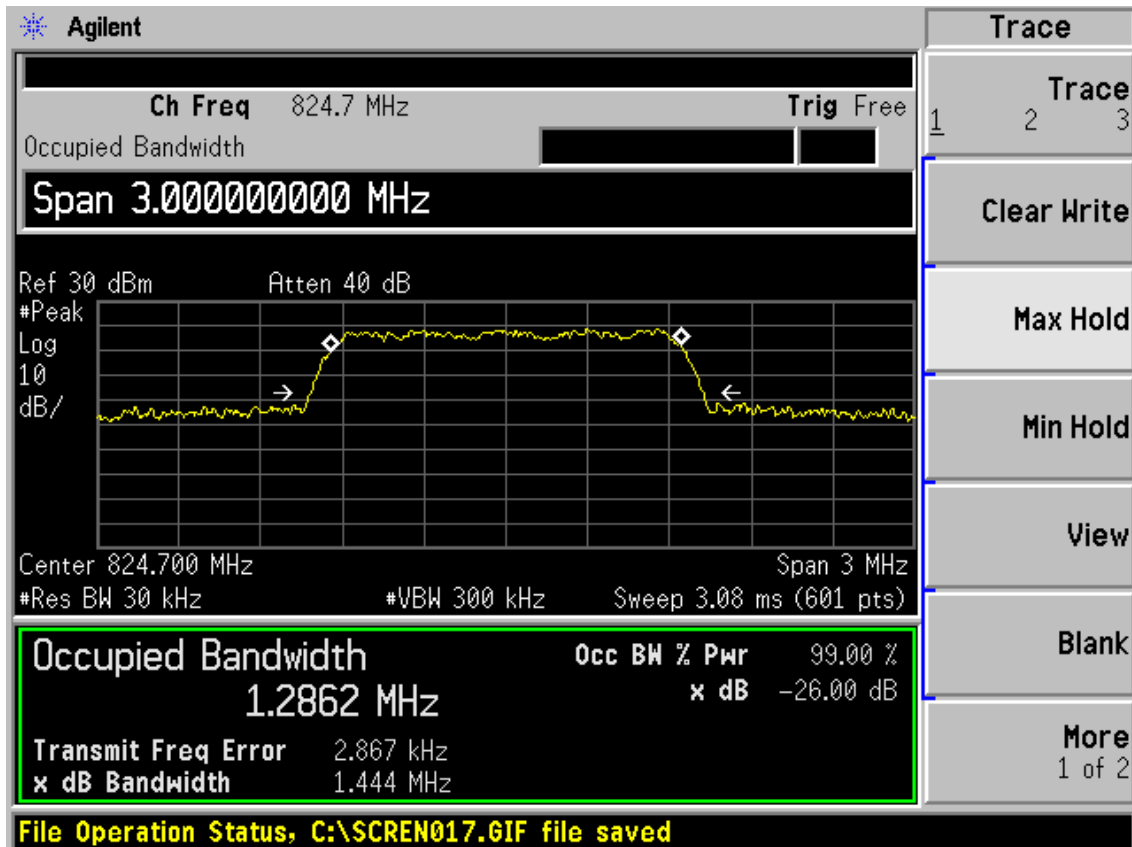
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CDMA Cellular EVDO (Rev.0) CH777 Occupied Bandwidth

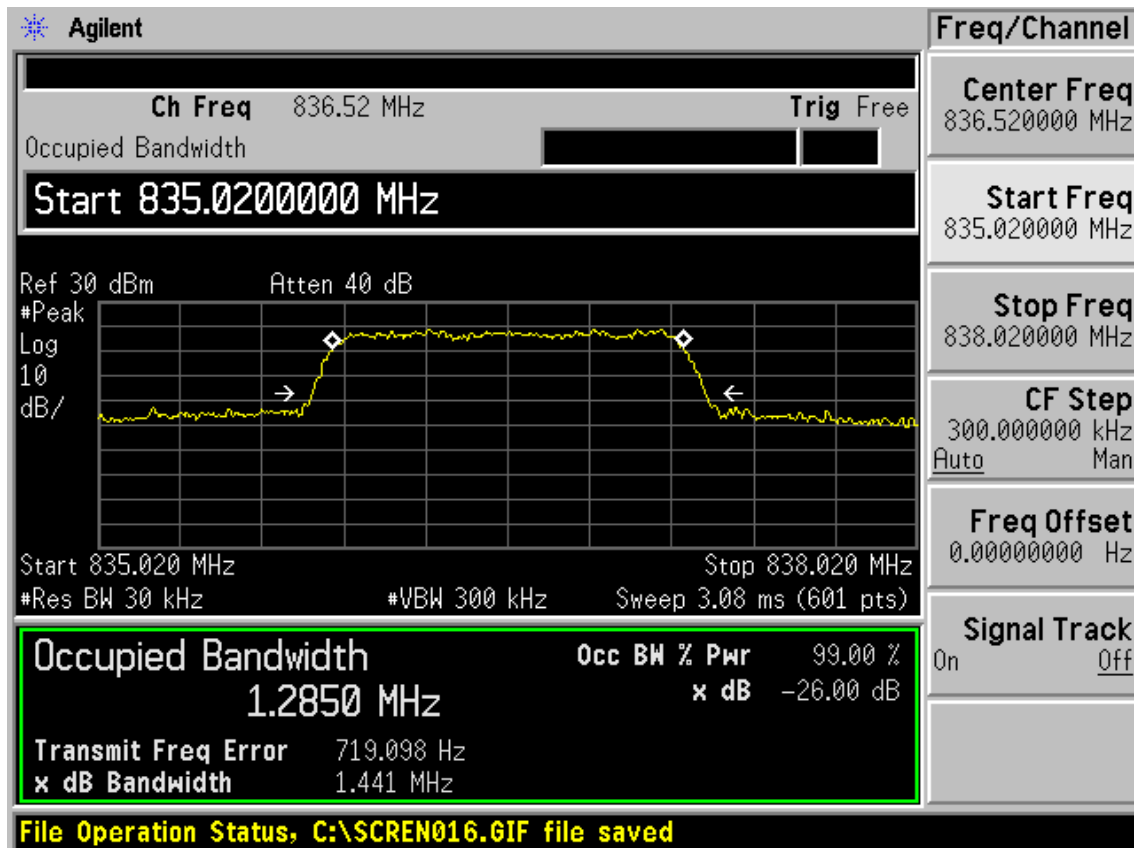


CDMA Cellular EVDO (Rev.A) CH1013 Occupied Bandwidth

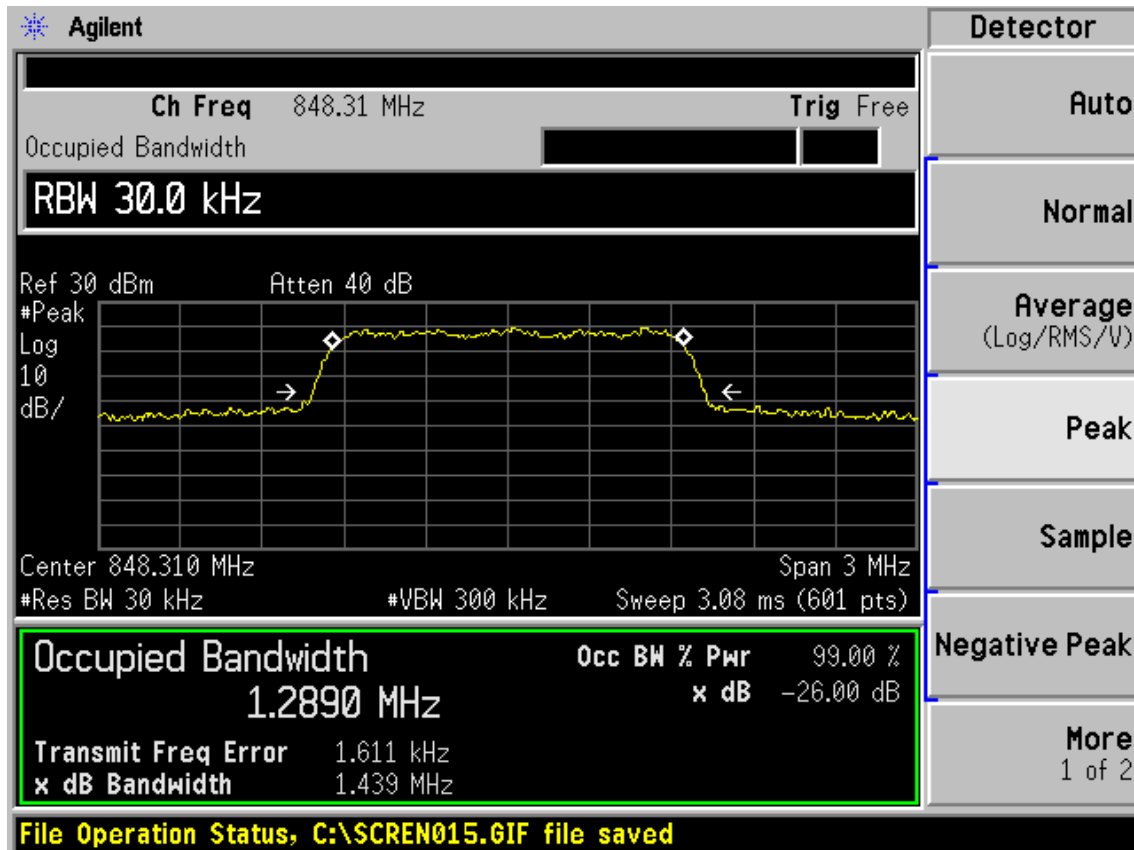
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CDMA Cellular EVDO (Rev.A) CH384 Occupied Bandwidth



CDMA Cellular EVDO (Rev.A) CH777 Occupied Bandwidth

2.6. Band Edge Compliance

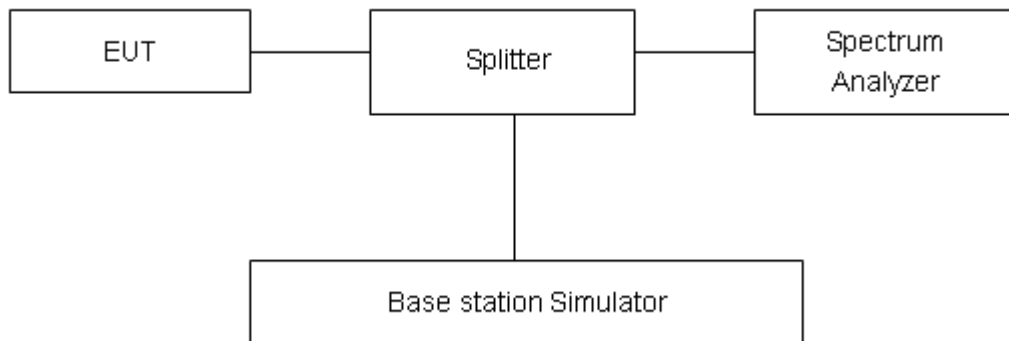
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The average detector is used. RBW is set to 30kHz, VBW is set to 300kHz for CDMA Cellular. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 22.917(a) specifies 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.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U=0.684$ dB.

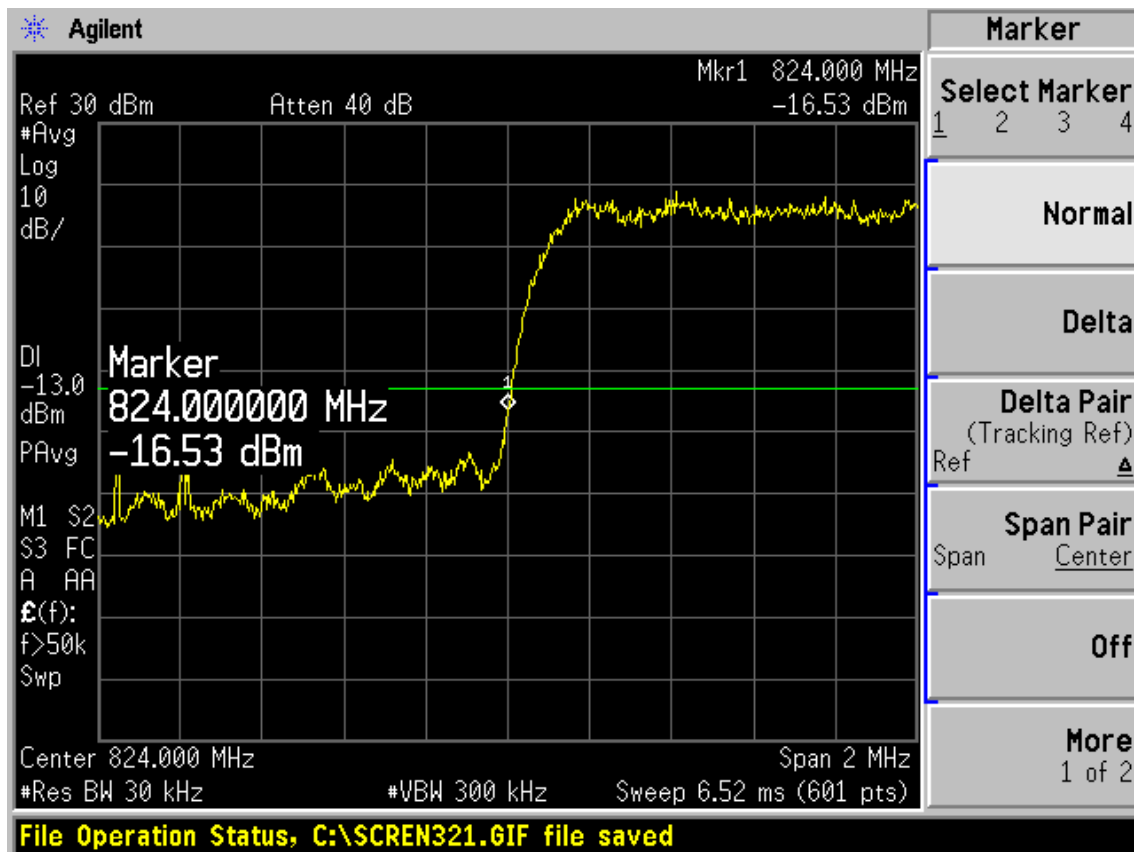
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Test Result:

CDMA Cellular	Carrier frequency (MHz)	Reference value (dBm)	Limit	Conclusion
RC1 (SO2)	824.0	-16.53	-13	PASS
	849.0	-15.60	-13	PASS
EV-DO(Rev.0)	824.0	-14.77	-13	PASS
	849.0	-16.38	-13	PASS
EV-DO(Rev.A)	824.0	-16.16	-13	PASS
	849.0	-14.72	-13	PASS

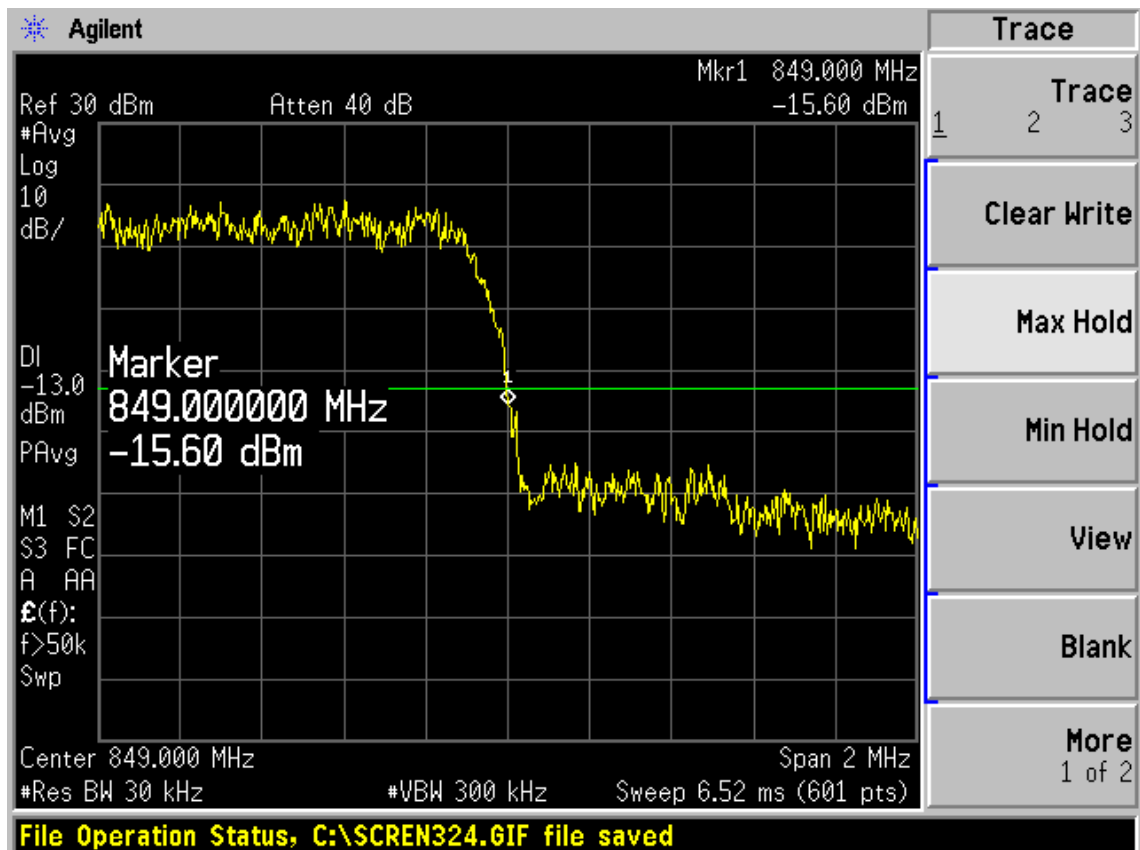


CDMA Cellular RC1 (SO2) CH1013 Channel

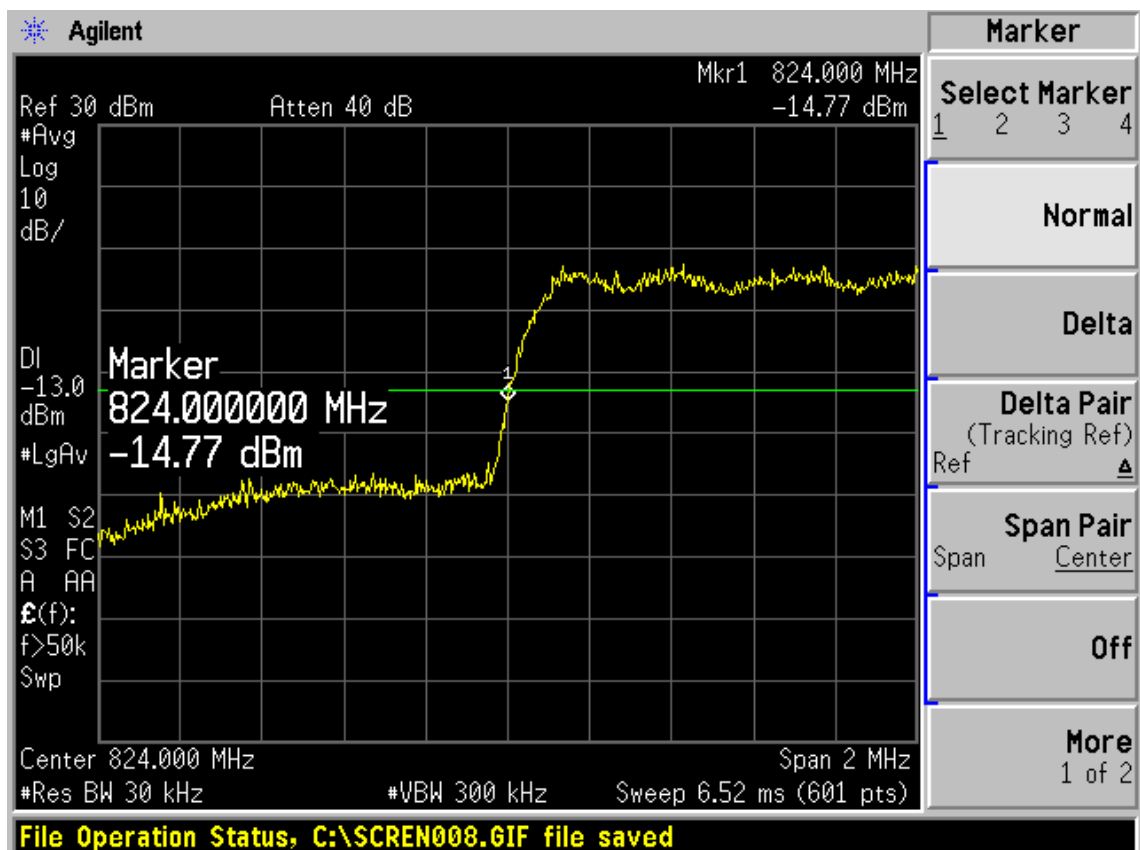
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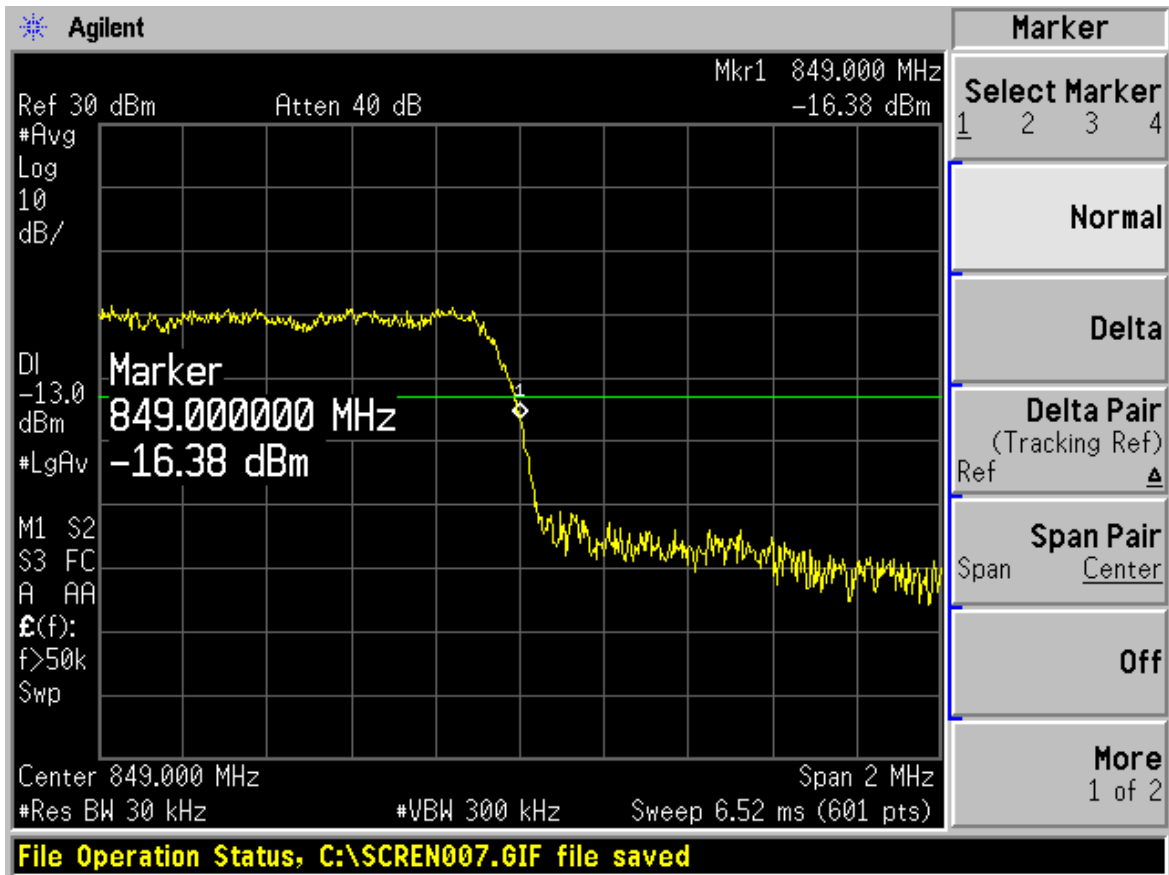


CDMA Cellular RC1 (SO2) CH777 Channel

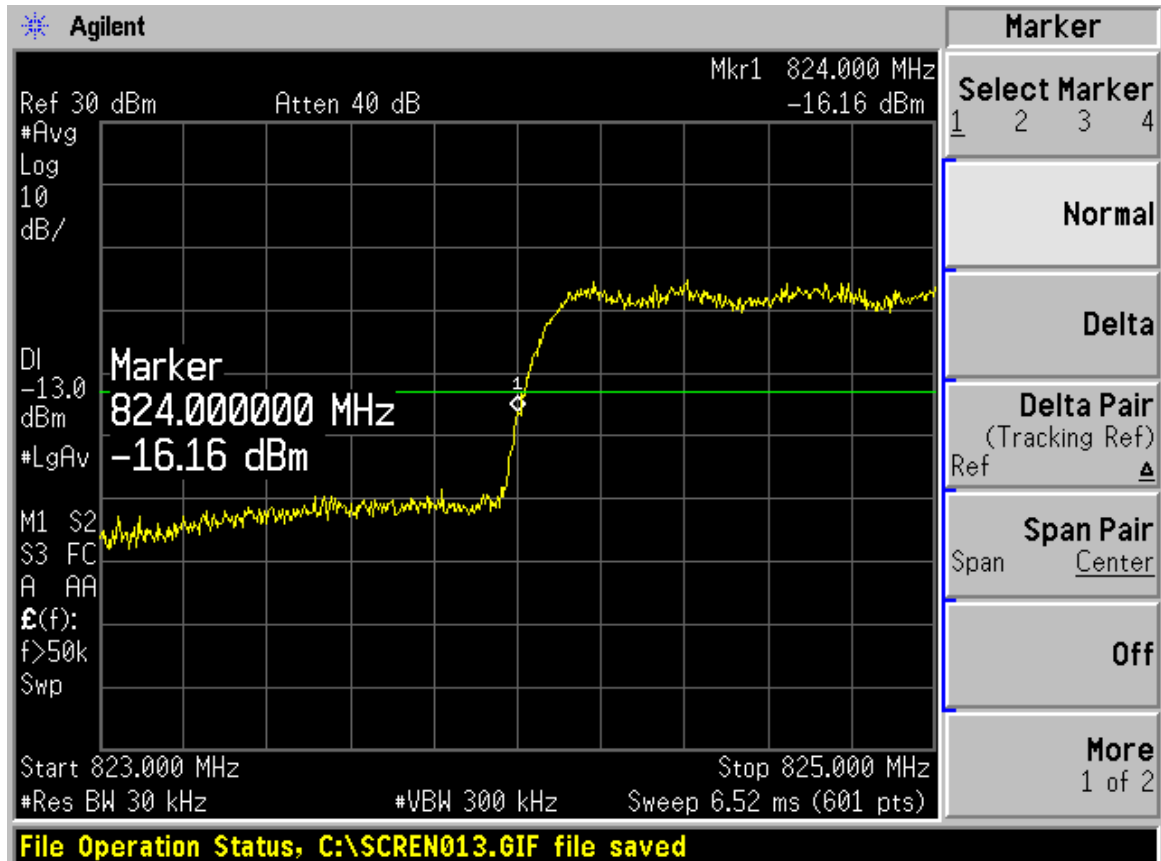


CDMA Cellular EV-DO (Rev.0) CH1013 Channel

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CDMA Cellular EV-DO(Rev.0) CH777 Channel

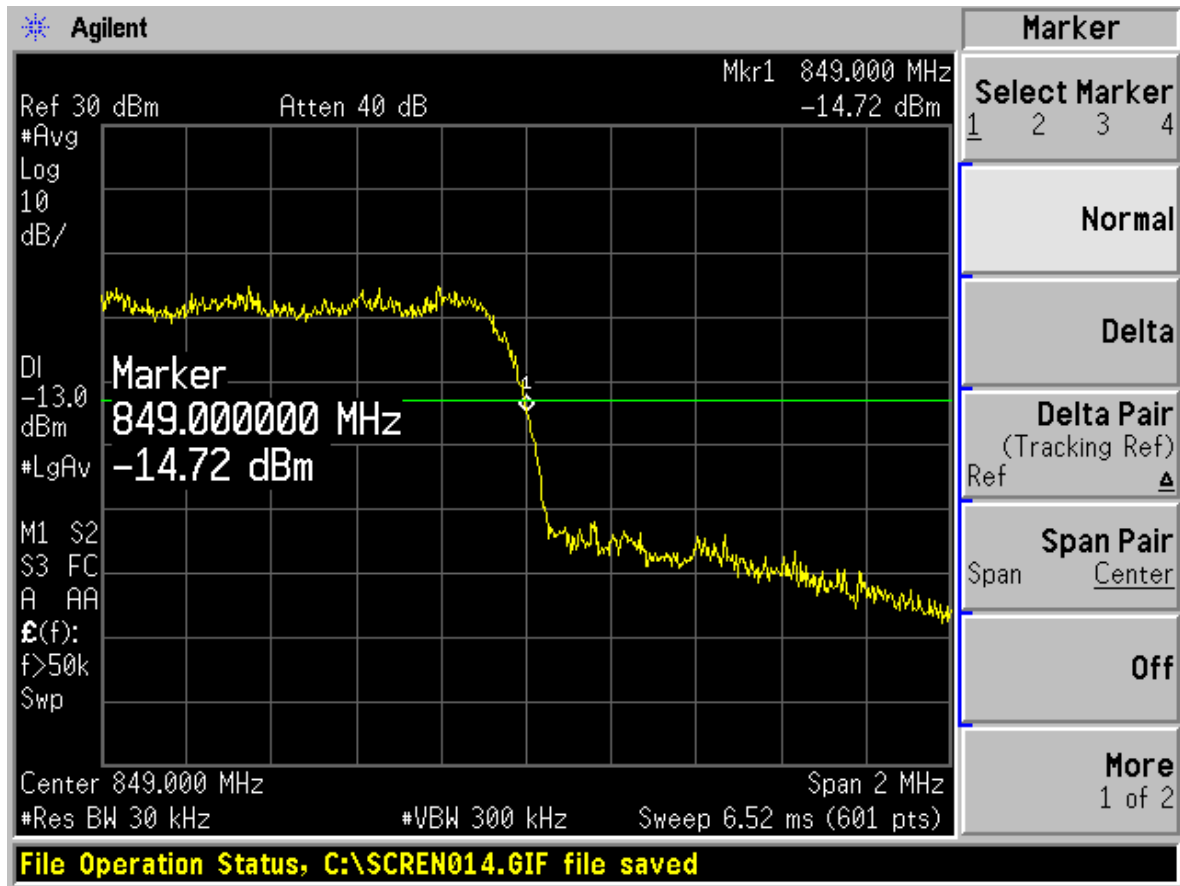


CDMA Cellular EV-DO (Rev.A) CH1013 Channel

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CDMA Cellular EV-DO (Rev.A) CH777 Channel

2.7. Frequency Stability

Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

1. Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,

(1) With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

2. Frequency Stability (Voltage Variation)

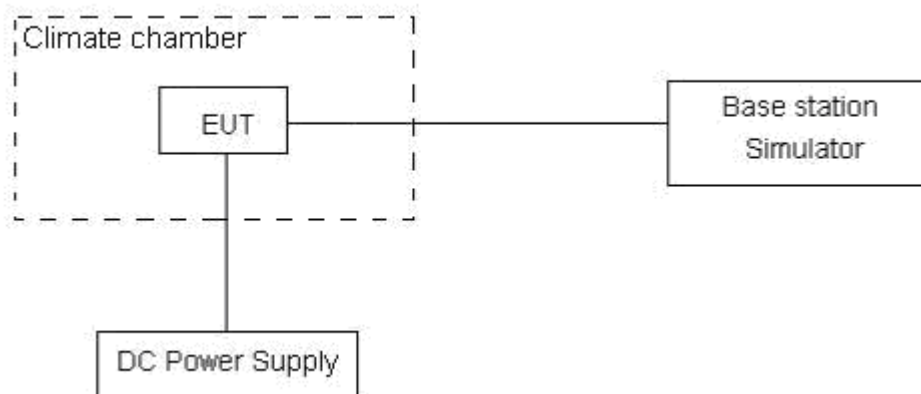
The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery-operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 9 V and 12.6 V, with a nominal voltage of 10.8 V.

Test setup



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Limits

According to the Sec. 22.355, the frequency stability of the carrier shall be accurate to within 2.5 ppm of the received frequency for mobile stations.

Limits	≤ 2.5 ppm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor $k = 3, U = 0.01$ ppm.

Test Result

Temperature (°C)	Test Results (ppm) / 10.8 V Power supply Channel 384		
	RC1 (SO2)	EV-DO(Rev.0)	EV-DO(Rev.A)
-30	0.0089	0.0119	0.0121
-20	0.0076	0.0103	0.0111
-10	0.0080	0.0089	0.0091
0	0.0054	0.0076	0.0100
10	0.0076	0.0069	0.0062
20	0.0065	0.0060	0.0080
30	0.0070	0.0063	0.0086
40	0.0032	0.0083	0.0102
50	0.0045	0.0096	0.0122

Voltage (V)	Test Results(ppm) / 20°C Channel 384		
	RC1 (SO2)	EV-DO(Rev.0)	EV-DO(Rev.A)
9	0.0053	0.0079	0.0115
10.8	0.0065	0.0060	0.0080
12.6	0.0077	0.0092	0.0099

2.8. Spurious Emissions at Antenna Terminals

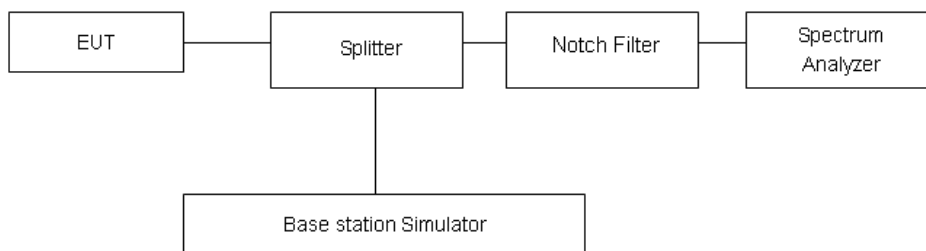
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. For below 1GHz, RBW and VBW are set to 100 kHz, Sweep is set to ATUO. For above 1GHz, RBW and VBW are set to 1MHz, Sweep is set to ATUO.

Test setup



Limits

Rule Part 22.917(a) specifies 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.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75 % confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-12.75GHz	1.407 dB

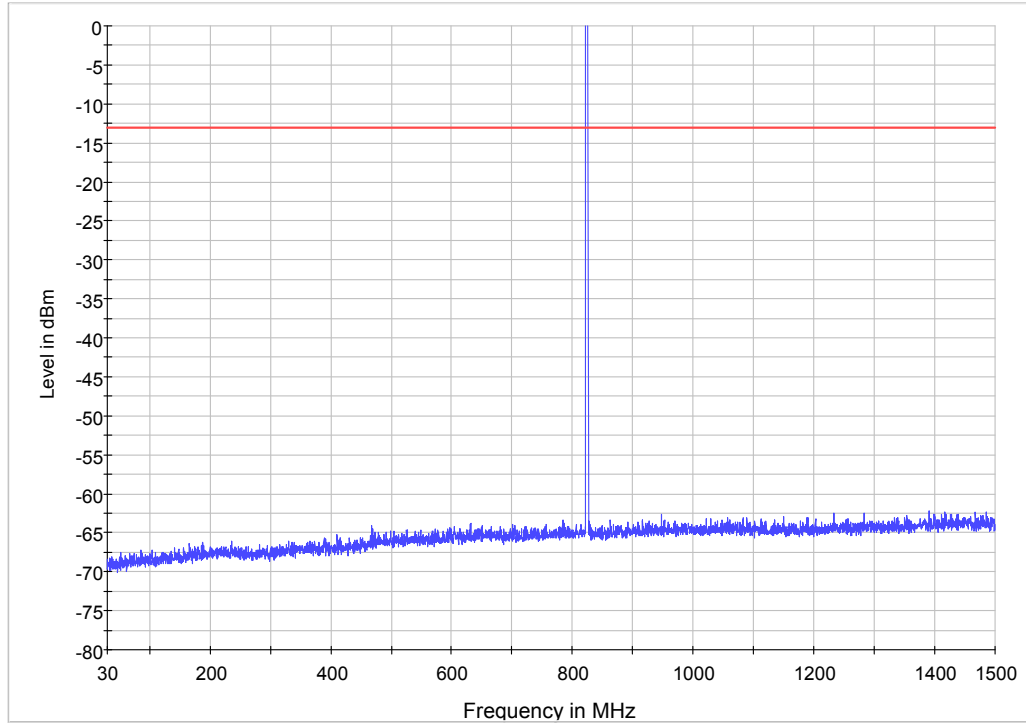
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Test Result (Worst Case EV-DO Rev.0)

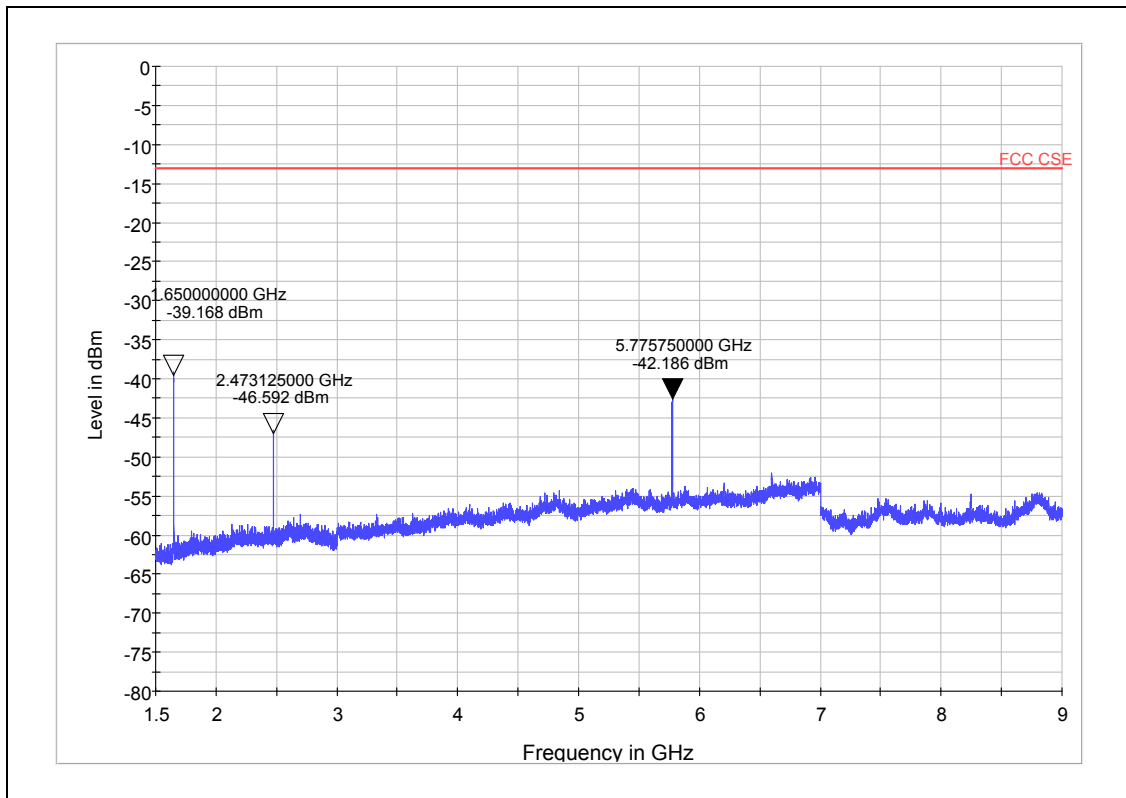
CDMA Cellular CH1013



Note: the plot was out of the highest scale that was the result of software compensation of the path loss factor in carrier frequency band.

Note: The signal beyond the limit is carrier
CDMA Cellular 1013 Channel 30MHz~1.5GHz

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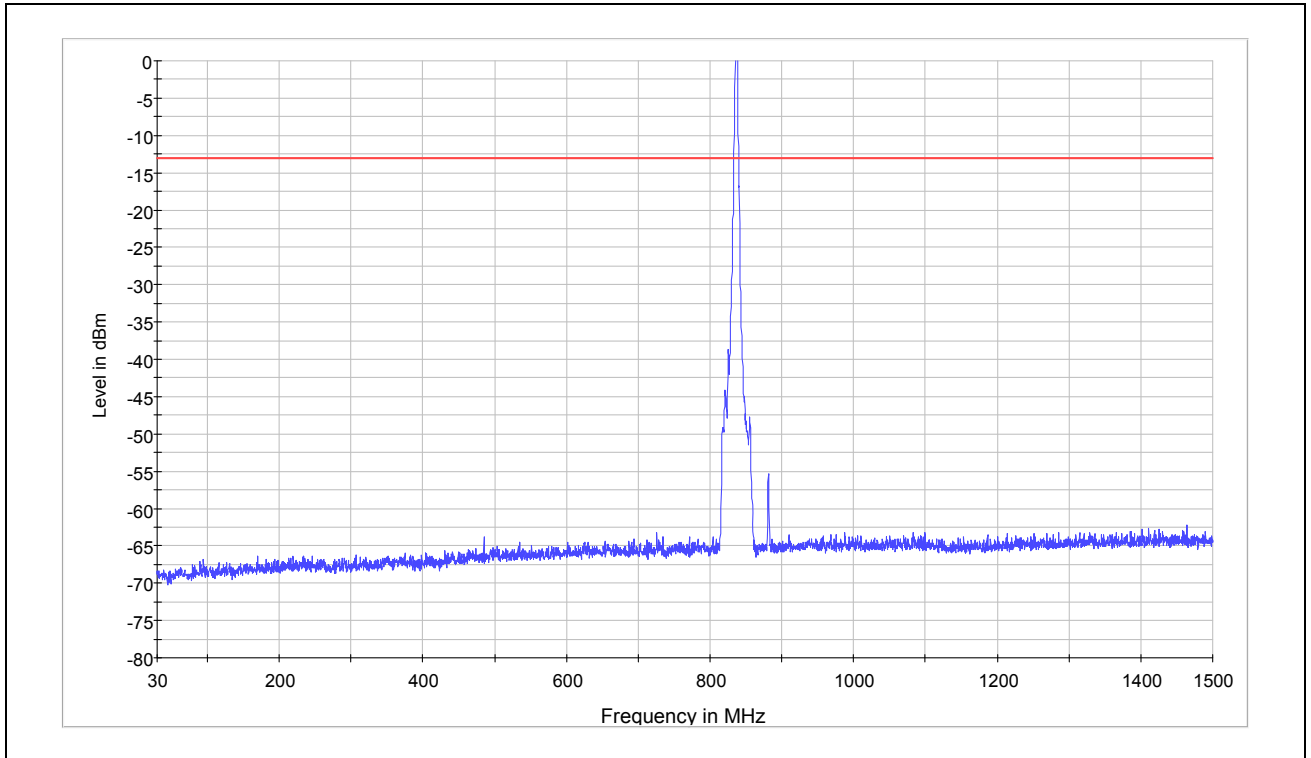
CDMA Cellular 1013 Channel 1.5GHz~9GHz

Harmonic	TX ch.1013 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1650	-39.17	-13	26.17
3	2473.1	-46.59	-13	33.59
4	3298.8	Nf	-13	/
5	4123.5	Nf	-13	/
6	4948.2	Nf	-13	/
7	5775.7	-42.19	-13	29.19
8	6597.6	Nf	-13	/
9	7422.3	Nf	-13	/
10	8247	Nf	-13	/
Nf: noise floor				

Note: The other Spurious RF conducted emissions level is no more than noise floor.

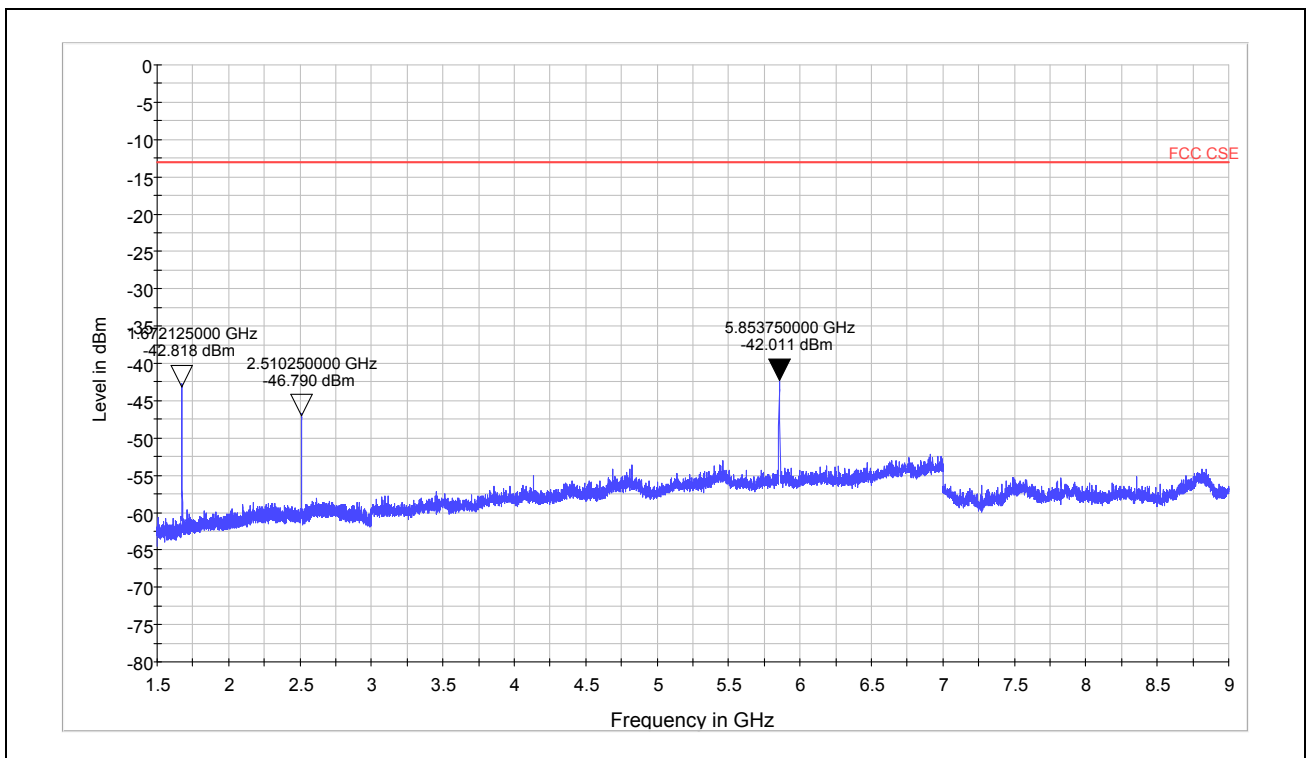
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CDMA Cellular CH384



Note: the plot was out of the highest scale that was the result of software compensation of the path loss factor in carrier frequency band.

Note: The signal beyond the limit is carrier
CDMA Cellular 384 Channel 30MHz~1.5GHz



CDMA Cellular 384 Channel 1.5GHz~9GHz

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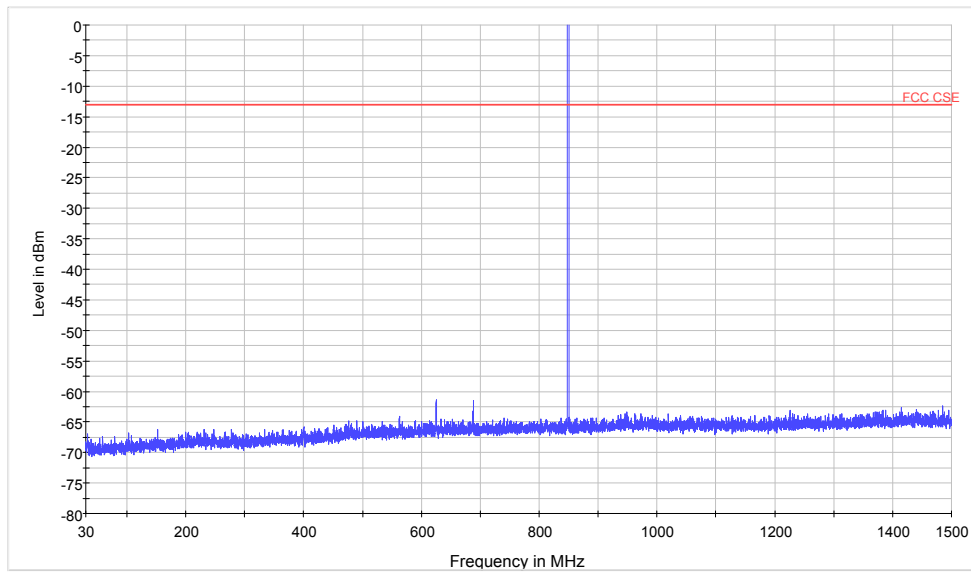
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Harmonic	TX ch.384 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1672.125	-42.82	-13	29.82
3	2510.25	-46.79	-13	33.79
4	3346.08	Nf	-13	/
5	4182.6	Nf	-13	/
6	5019.12	Nf	-13	/
7	5853.75	-42.01	-13	28.01
8	6692.16	Nf	-13	/
9	7528.68	Nf	-13	/
10	8365.2	Nf	-13	/
Nf: noise floor				

Note: The other Spurious RF conducted emissions level is no more than noise floor.

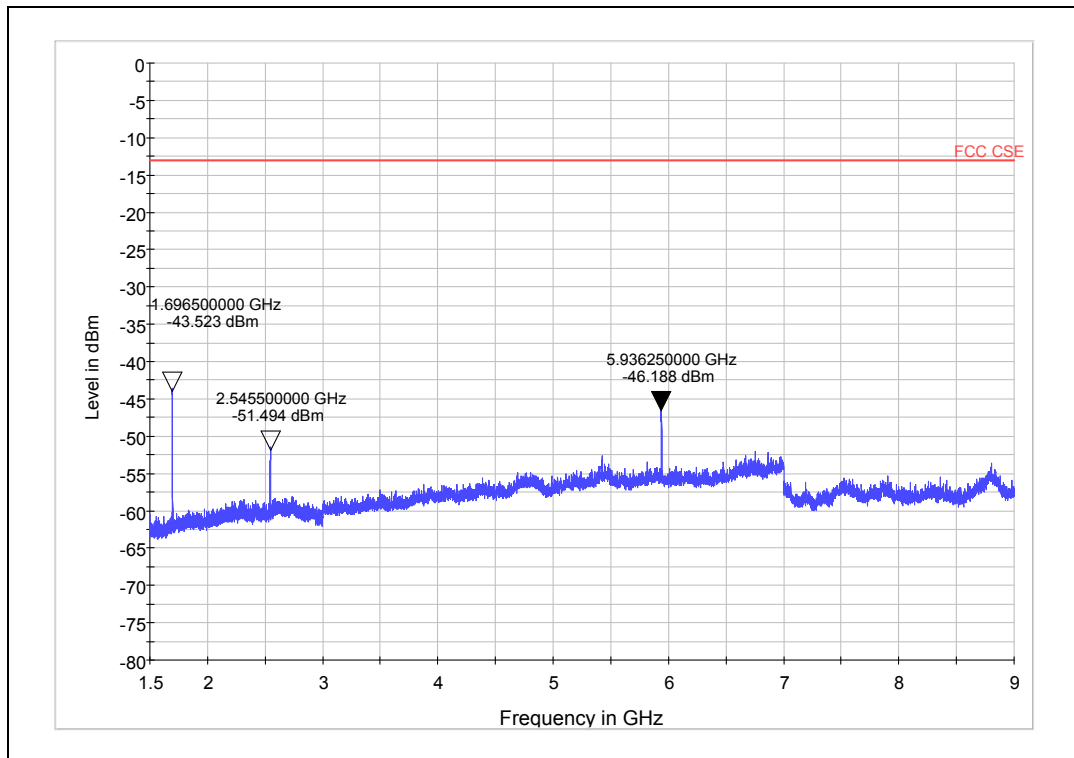
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CDMA Cellular CH777



Note: the plot was out of the highest scale that was the result of software compensation of the path loss factor in carrier frequency band.

Note: The signal beyond the limit is carrier
CDMA Cellular 777 Channel 30MHz~1.5GHz



CDMA Cellular 777 Channel 1.5GHz~9GHz

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Harmonic	TX ch.777 Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
2	1696.5	-43.52	-13	30.52
3	2545.5	-51.49	-13	38.49
4	3393.24	Nf	-13	/
5	4241.55	Nf	-13	/
6	5089.86	Nf	-13	/
7	5936.25	-46.19	-13	33.19
8	6786.48	Nf	-13	/
9	7634.79	Nf	-13	/
10	8483.1	Nf	-13	/
Nf: noise floor				

Note: The other Spurious RF conducted emissions level is no more than noise floor.

2.9. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The measurements procedures in TIA -603C are used.

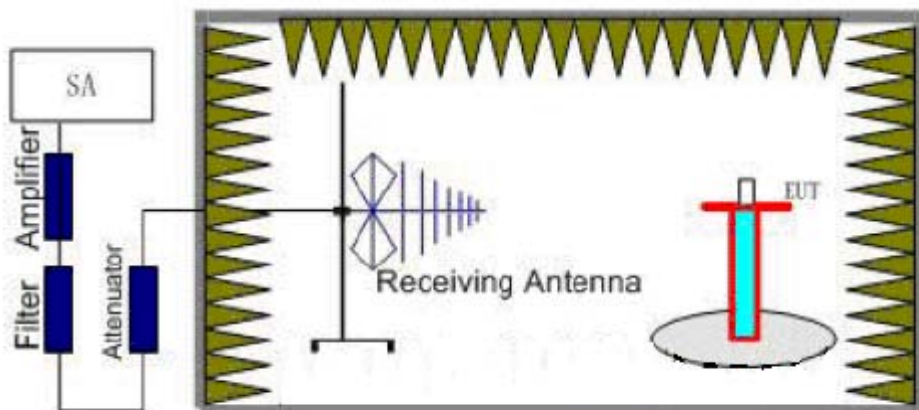
the spectrum is investigated from 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

The emissions less than 20 dB below the permissible value are reported.

The procedure of Radiates Spurious Emission is as follows:

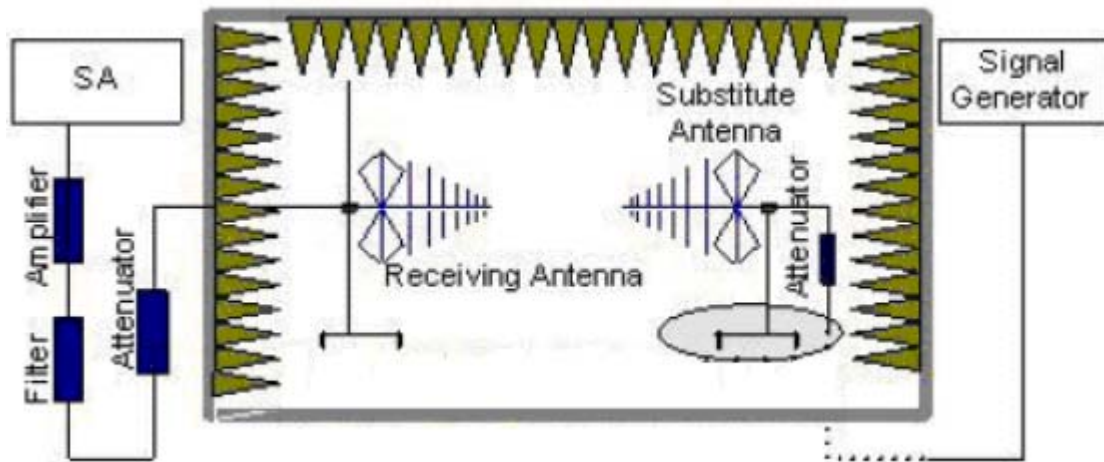
Step 1:

The measurement is carried out in the semi-anechoic chamber. EUT was placed on a 1.5 meters high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used while RBW and VBW are both set to 3MHz. During the measurement, the highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna moved up and down over a range from 1 to 4 meters in both horizontally and vertically polarized orientations. The test setup refers to figure below.



Step 2:

A dipole antenna shall be substituted in place of the EUT. The antenna will be driven by a signal generator with a adjustable S.G. applied through a Tx cable. Adjust the level of the signal generator output until the value of the receiver reach the previously recorded analyzer power level (LVL). Then The E.R.P. /E.I.R.P. of the EUT can be calculated through the level of the signal generator, Tx cable loss and the gain of the substitution antenna. The test setup refers to figure below.



$E.R.P \text{ (peak power)} = S.G. - Tx \text{ Cable loss} + \text{Substitution antenna gain} - 2.15.$
 $EIRP = E.R.P + 2.15$

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Y axis) and the antenna is vertical.

Limits

Rule Part 22.917(a) specifies 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.”

Limit	-13 dBm
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

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Test Result (Worst Case EV-DO Rev.0)

CDMA Cellular CH1013

Harmonic	TX ch.1013 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1649.40	/	/	/	Nf	-13	/	/
3	2474.10	/	/	/	Nf	-13	/	/
4	3298.80	/	/	/	Nf	-13	/	/
5	4123.50	/	/	/	Nf	-13	/	/
6	4948.20	/	/	/	Nf	-13	/	/
7	5772.90	/	/	/	Nf	-13	/	/
8	6597.60	/	/	/	Nf	-13	/	/
9	7422.30	/	/	/	Nf	-13	/	/
10	8247.00	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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CDMA Cellular CH384

Harmonic	TX ch.384 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dB m)	Margin (dB)	Azimuth (deg)
2	1673.04	-48.79	2.00	10.75	-40.04	-13	37.04	225
3	2509.56	/	/	/	Nf	-13	/	/
4	3346.08	/	/	/	Nf	-13	/	/
5	4182.60	/	/	/	Nf	-13	/	/
6	5019.12	/	/	/	Nf	-13	/	/
7	5855.64	/	/	/	Nf	-13	/	/
8	6692.16	/	/	/	Nf	-13	/	/
9	7528.68	/	/	/	Nf	-13	/	/
10	8365.20	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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CDMA Cellular CH777

Harmonic	TX ch.777 Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	ERP Level (dBm)	Limit (dB m)	Margin (dB)	Azimuth (deg)
2	1696.62	-49.75	2.00	10.15	-41.6	-13	38.60	90
3	2544.93	/	/	/	Nf	-13	/	/
4	3393.24	/	/	/	Nf	-13	/	/
5	4241.55	/	/	/	Nf	-13	/	/
6	5089.86	/	/	/	Nf	-13	/	/
7	5938.17	/	/	/	Nf	-13	/	/
8	6786.48	/	/	/	Nf	-13	/	/
9	7634.79	/	/	/	Nf	-13	/	/
10	8483.10	/	/	/	Nf	-13	/	/

Nf: noise floor

Note: The other Spurious RF Radiated emissions level is no more than noise floor.

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3. Main Test Instruments

No.	Name	Type	Manufacturer	Serial Number	Calibration Date	Valid Period
01	Base Station Simulator	CMU200	R&S	118133	2012-06-30	One year
02	Power Splitter	SHX-GF2-2-13	Hua Xiang	10120101	NA	NA
03	Spectrum Analyzer	E4445A	Agilent	MY46181146	2012-06-30	One year
04	Universal Radio Communication Tester	E5515C	Agilent	MY48367192	2012-06-30	One year
05	Signal Analyzer	FSV30	R&S	100815	2012-06-30	One year
06	Signal generator	SMB 100A	R&S	102594	2012-06-30	One year
07	EMI Test Receiver	ESCI	R&S	100948	2012-06-30	One year
08	Trilog Antenna	VUBL 9163	SCHWARZB ECK	9163-201	2010-06-20	Three years
09	Horn Antenna	HF907	R&S	100126	2012-07-01	Three years
10	Loop Antenna	FMZB1516	SCHWARZB ECK	237	2012-06-30	Two years
11	Climatic Chamber	PT-30B	Re Ce	20101891	2010-09-10	Three years
12	Semi-Anechoic Chamber	9.6*6.7*6.6m	ETS-Lindgren	NA	NA	NA
13	EMI test software	ES-K1	R&S	NA	NA	NA

*****END OF REPORT BODY*****

ANNEX A: EUT Appearance and Test Setup

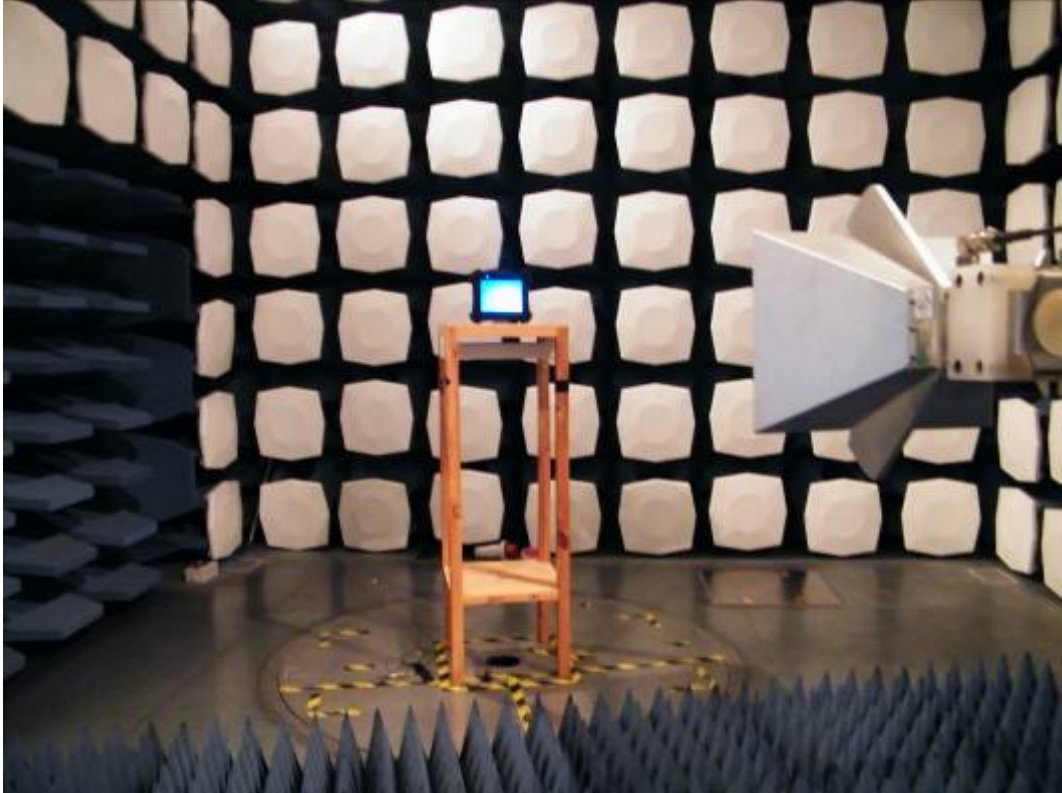
A.1 EUT Appearance



a: EUT

Picture 1 EUT and Auxiliary

A.2 Test Setup



Picture 2: Radiated Spurious Emissions Test setup