



FCC TEST REPORT

Applicant : IFLYTEK CO.,LTD
Address : West Wangjiang Rd.666,Hefei,Anhui, China
Manufacturer : IFLYTEK CO.,LTD
Address : West Wangjiang Rd.666,Hefei,Anhui, China
Equipment : iflytek translating machine
Model No. : Easy trans600
FCC ID : 2AMI5-EASYTRANS-600
Test Period : Jun.05,2017~ Jun.18, 2017

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of **CerpPASS Technology Corp.** the test report shall not be reproduced except in full.

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **FCC CFR Title 47 Part 2, TIA/EIA 603-C, FCC Part22 Subpart H, FCC Part24 Subpart E** and the energy emitted by this equipment was **passed**.

Prepared By:

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Approved by:

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Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory

| | |
|------------------------|-----------------|
| NVLAP LAB Code: | 200954-0 |
| TAF LAB Code: | 1439 |

CerpPASS Technology (SuZhou) Co., Ltd.

| | |
|------------------------|-----------------|
| NVLAP LAB Code: | 200814-0 |
| CNAS LAB Code: | L5515 |



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History of this Test Report

| Report No. | Version | Issue Date | Description |
|---------------|---------|--------------|-------------|
| SEFI1705161-A | Rev 01 | Jun.23, 2017 | Original. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



1. Report of Measurements and Examinations

For CDMA 2000 1X BC0/CDMA 2000 1XEVD0 BC0 (FCC Part 22 Subpart H & Part 2)

| Performed Item | FCC Rule | Limit | Result |
|--|----------|-----------|--------|
| Maximum Output Power | §2.1033 | < 7 Watts | Pass |
| | §2.1046 | | |
| | §22.913 | | |
| Equivalent Isotropic Radiated Power | §22.913 | < 7 Watts | Pass |
| Modulation characteristics | §2.1047 | N/A | Pass |
| Occupied Bandwidth | §2.1049 | N/A | Pass |
| Conducted Band Edge Emissions | §22.917 | < -13dBm | Pass |
| Field Strength of Spurious Radiation | §2.1053 | < -13dBm | Pass |
| | §22.917 | | |
| Frequency Stability Under Temperature & Voltage Variations | §2.1055 | < 2.5 ppm | Pass |
| | §22.335 | | |



2. General Info

2.1 Description of EUT

| | | |
|--------------|-----------------------------|---------------------------------|
| Product name | iflytek translating machine | |
| Model No. | Easy trans600 | |
| Power supply | Model: | XHY050100UCA |
| | Input: | 100~240V AC 50/60Hz 0.2A MAX |
| | Output: | 5V $\overline{\text{---}}$ 1.0A |



2.2 Description of wireless module

| | |
|--------------------|--------------------------------------|
| Product Name | iflytek translating machine |
| Model No. | Easy trans600 |
| EUT Voltage | Low: 3.4V, High: 4.2V, Normal: 3.65V |
| 1XEVD0 | |
| Support Band | BC0 |
| Uplink | BC0: 824~849MHz |
| Downlink | BC0: 869~894MHz |
| Release Version | Rel-A |
| Type of Modulation | GMSK,QPSK |
| Antenna Type | PCB |
| Peak Antenna Gain | BC0: -5.24dBi |

Note: For more details, please refer to the EUT User manual.



2.3 The Worst Case Configuration

| |
|---|
| Test Mode |
| Mode 1: CDMA 2000 1X BC0 Link |
| Mode 2: CDMA 2000 1XEVD0 BC0 Rel-0 Link |
| Mode 3: CDMA 2000 1XEVD0 BC0 Rel A Link |

Note:

1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. For the ERP/EIRP and radiated emission test, every axis (X, Y, Z) was verified, and show the worst result on this report.

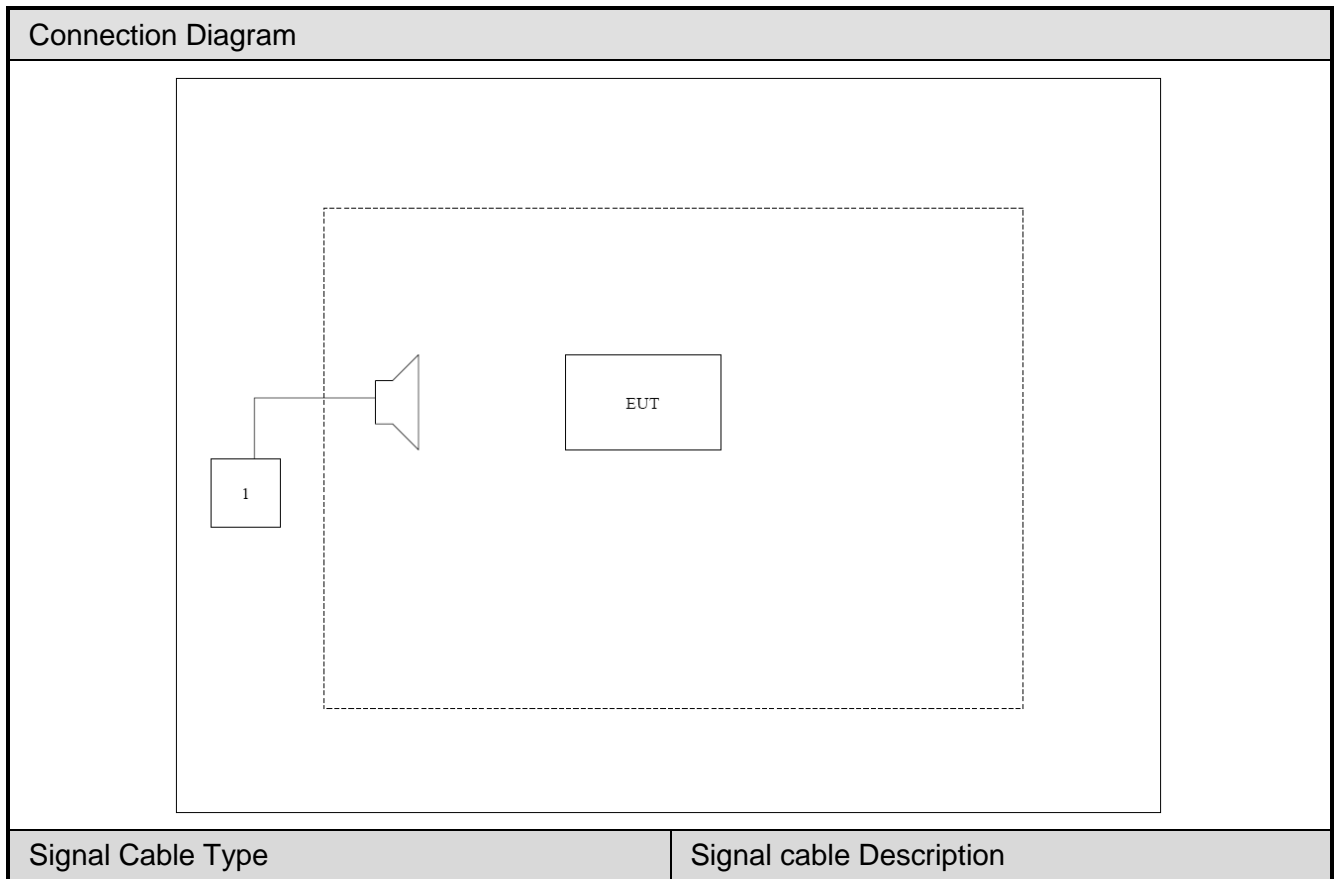
2.4 EUT Exercise Software

| | |
|---|---|
| 1 | Setup the EUT and simulators as shown on above. |
| 2 | Turn on the power of all equipment. |
| 3 | EUT Communicate with CMW500, then select channel to test. |



2.5 Support equipment

| Number | Product | Manufacturer | Model No. | Serial No. |
|--------|-------------------------------------|--------------|-----------|------------|
| 1 | Wideband Radio Communication Tester | R&S | CMW500 | 102313 |





3. General Information of Test Site

3.1 Information of Test Site

| | |
|--------------------------|--|
| Test Site | CerpPASS Technology(Suzhou) Co., Ltd. |
| Test Site Location | No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China |
| NVLAP LAB Code | 200814-0 |
| FCC Registration Number | 916572, 331395 |
| IC Registration Number | 7290A-1, 7290A-2 |
| VCCI Registration Number | T-1945 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test below 1GHz G-227 for Radiated emission test above 1GHz |

3.2 Measuring Equipment

| RF Conducted Measuring Equipment-AC104 | | | | | |
|--|--------------|-----------|------------|------------------|-------------|
| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date. |
| Peak Power Sensor | Boonton | 55006 | 9778 | 2017.06.08 | 2018.06.07 |
| Series Power Meter | ANRITSU | ML2495A | 1224005 | 2017.03.27 | 2018.03.26 |
| Wideband Radio Communication Tester | R&S | CMW500 | 102313 | 2016.08.31 | 2017.08.30 |
| Spectrum Analyzer | N9010A | Agilent | MY53400169 | 2015.11.11 | 2016.11.11 |
| Spectrum Analyzer | E4407B | Agilent | MY44211883 | 2016.10.15 | 2017.10.14 |
| Temperature/Humidity Meter | Zhicheng | ZC1-11 | CEP-TH-003 | 2017.03.31 | 2018.03.30 |

| AC Conducted Emission Measuring Equipment-SR101 | | | | | |
|---|--------------|----------------------|------------|------------------|-------------|
| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date. |
| EZ-EMC | Fala | Ver CT3A1 | N/A | N/A | N/A |
| EMI Test Receiver | R&S | ESCI | 100565 | 2017.03.26 | 2018.03.25 |
| Artificial-Mains-Network | R&S | ESH2-Z5 | 100182 | 2016.08.31 | 2017.08.30 |
| Line Impedance Stabilization Network | FCC | FCC-LISN-50-200-2-02 | 112087 | 2016.08.31 | 2017.08.30 |
| Temperature/Humidity Meter | Zhicheng | ZC1-11 | CEP-TH-004 | 2017.03.29 | 2018.03.28 |



| Radiated Measuring Equipment-AC102 | | | | | |
|-------------------------------------|---------------|------------|------------|------------------|-------------|
| Instrument/Ancillary | Manufacturer | Model No. | Serial No. | Calibration Date | Valid Date. |
| Loop Antenna | R&S | HFH2-Z2 | 100150 | 2016.08.31 | 2017.08.30 |
| Bilog Antenna | Sunol Science | JB1 | A072414-1 | 2017.04.16 | 2018.04.15 |
| Broad-Band Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-619 | 2016.07.16 | 2017.07.15 |
| Broad-Band Horn Antenna | Schwarzbeck | BBHA9170 | 9170-348 | 2017.05.07 | 2018.05.06 |
| Preamplifier | HP | 8447F | 3113A05582 | 2017.03.26 | 2018.03.25 |
| Preamplifier | EMCI | EMC-051835 | 980085 | 2016.09.06 | 2017.09.05 |
| Preamplifier | COM-POWER | PA-840 | 711885 | 2017.03.26 | 2018.03.25 |
| Wideband Radio Communication Tester | R&S | CMW500 | 102313 | 2016.08.31 | 2017.08.30 |
| EMI Test Receiver | R&S | ESCI-3 | 101183 | 2016.06.29 | 2017.06.28 |
| Spectrum Analyzer | N9010A | Agilent | MY53400169 | 2016.11.11 | 2017.11.11 |
| Spectrum Analyzer | R&S | FS040 | 100324 | 2017.03.26 | 2018.03.25 |
| Temperature/ Humidity Meter | Zhicheng | ZC1-11 | CEP-TH-002 | 2017.03.31 | 2018.03.30 |

3.3 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

RF Conducted Measurement

| Test Item | Uncertainty | Limit |
|-------------------------------|--------------------------|------------------------|
| Radio Frequency | $\pm 8.7 \times 10^{-7}$ | $\pm 1 \times 10^{-5}$ |
| RF output power, conducted | $\pm 0.63\text{dB}$ | $\pm 1.5\text{dB}$ |
| Power density, conducted | $\pm 1.21\text{dB}$ | $\pm 3\text{dB}$ |
| Unwanted emissions, conducted | 30-1000MHz | $\pm 0.51\text{dB}$ |
| | 1-25GHz | $\pm 0.67\text{dB}$ |
| All emissions, radiated | 30-1000MHz | $\pm 2.28\text{dB}$ |
| | 1-25GHz | $\pm 2.59\text{dB}$ |
| Temperature | $\pm 0.8^\circ\text{C}$ | $\pm 1^\circ\text{C}$ |
| Humidity | $\pm 3\%$ | $\pm 5\%$ |
| DC and low frequency voltages | $\pm 3\%$ | $\pm 3\%$ |



AC Conducted Measurement

| Measurement | Frequency | Uncertainty |
|-------------------------------|--------------|---------------|
| Conducted emissions(LINE) | 9KHz-30MHz | +/- 0.7738 dB |
| Conducted emissions(NEUTRAL) | 9KHz-30MHz | +/- 0.7886 dB |
| Conducted emissions(10Mbps) | 150KHz-30MHz | +/- 1.3013dB |
| Conducted emissions(100Mbps) | 150KHz-30MHz | +/- 1.3197 dB |
| Conducted emissions(1000Mbps) | 150KHz-30MHz | +/- 1.2987 dB |

Radiated Measurement

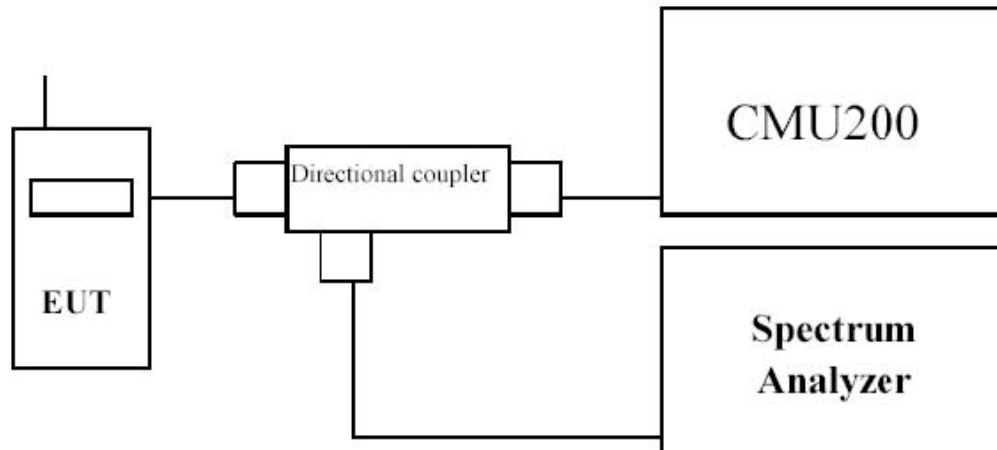
| Measurement | Polarity | Frequency | Uncertainty |
|--------------------|------------|------------|----------------|
| Radiated emissions | Horizontal | below 1GHz | +/- 3.8936 dB |
| | Vertical | below 1GHz | +/- 3.8928 dB |
| | Horizontal | above 1GHz | +/- 5.18858dB |
| | Vertical | above 1GHz | +/- 5.18928 dB |



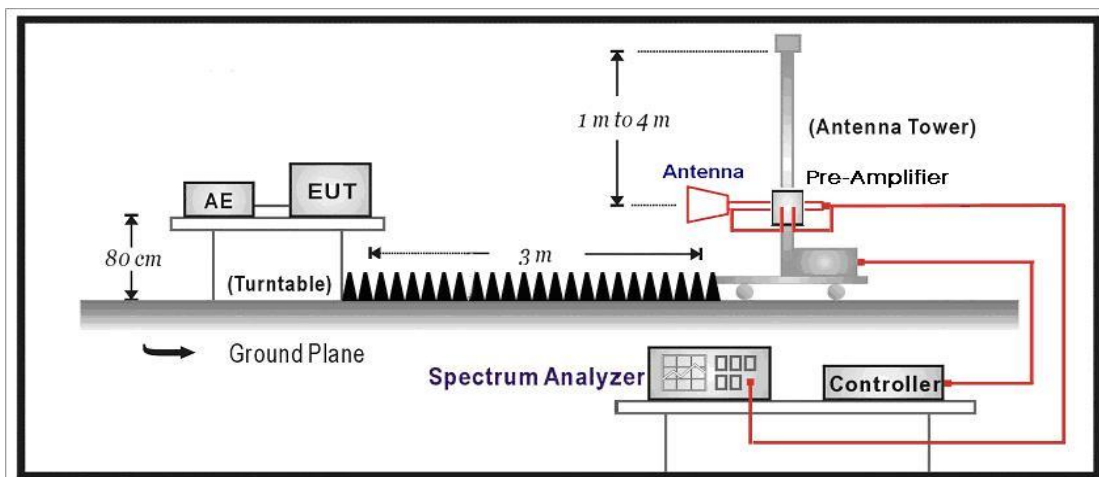
4. Maximum Output Power and Effective Isotropic Radiated Power Measurement

4.1 Test Setup

Conducted Power Measurement:



Radiated Power Measurement:



4.2 Test Procedure

For Conducted Power Measurement:

- The RF output of the transmitter was connected to base station simulator.
- The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement..
- Set EUT at maximum average power by base station simulator.
- Measure lowest, middle, and highest channels for each bandwidth and different modulation.

For Effective Isotropic Radiated Power Measurement:

Radiated Power Measurement:

- The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- The test antenna shall be oriented initially for vertical polarization and shall be chosen to



correspond to the frequency of the transmitter

- c) The output of the test antenna shall be connected to the measuring receiver.
- d) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- e) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
- f) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- g) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
- h) The maximum signal level detected by the measuring receiver shall be noted.
- i) The transmitter shall be replaced by a substitution antenna.
- j) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
- k) The substitution antenna shall be connected to a calibrated signal generator.
- l) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- m) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- n) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
- o) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
- p) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- q) Test site anechoic chamber refer to ANSI C63.4: 2009.

**4.3 Test Result**

| | | | |
|--------------|-----------------------------|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Maximum Output Power | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

| Mode | Test Case | | | BC0 (850MHz) Channel | | |
|----------------------|------------------------------|--|-----------------------------|-----------------------|-------|-------|
| | Num. | FWD RC/TAP | REV RC/TAP | Conducted Power (dBm) | | |
| | | | | 1013 | 384 | 777 |
| 1x | 1 | RC1 | RC1 (SO2) | 23.07 | 23.11 | 23.15 |
| | 2 | RC1 | RC1 (SO55) | 23.12 | 23.15 | 23.23 |
| | 3 | RC2 | RC2 (SO9) | 23.13 | 23.18 | 23.25 |
| | 4 | RC2 | RC2 (SO55) | 23.05 | 23.11 | 23.17 |
| | 5 | RC3 | RC3 (SO55) | 23.09 | 23.12 | 23.18 |
| | 6 | RC3 | RC3 (SO32) | 23.08 | 23.13 | 23.20 |
| 1x EV-DO Rel0 | 7a | FTAP rate = 307kbps (2 slot, QPSK) | RTAP rate = 9.6kbps | 22.88 | 22.93 | 22.96 |
| | 7b | | RTAP rate = 19.2kbps | 22.75 | 22.81 | 22.93 |
| | 7c | | RTAP rate = 38.4kbps | 22.73 | 22.82 | 22.89 |
| | 7d | | RTAP rate = 76.8kbps | 22.77 | 22.83 | 22.88 |
| | 7e | | RTAP rate = 153.6kbps | 22.81 | 22.85 | 22.92 |
| 1x EV-DO Rev A | 8a | FETAP rate = 307kbps (2 slot, ACK channel is transmitted at all the slots) | RETAP – payload size = 128 | 22.47 | 22.69 | 22.87 |
| | 8b | | RETAP – payload size = 256 | 22.48 | 22.67 | 22.86 |
| | 8c | | RETAP – payload size = 512 | 22.50 | 22.66 | 22.85 |
| | 8d | | RETAP – payload size = 768 | 22.53 | 22.62 | 22.83 |
| | 8e | | RETAP – payload size = 1024 | 22.55 | 22.73 | 22.84 |
| | 8f | | RETAP – payload size = 1536 | 22.61 | 22.63 | 22.89 |
| | 8g | | RETAP – payload size = 2048 | 22.62 | 22.64 | 22.93 |
| | 8h | | RETAP – payload size = 3072 | 22.53 | 22.67 | 22.87 |
| | 8i | | RETAP – payload size = 4096 | 22.55 | 22.66 | 22.89 |
| | 8j | | RETAP – payload size = 6144 | 22.60 | 22.73 | 22.88 |
| | 8k | | RETAP – payload size = 8192 | 22.63 | 22.74 | 22.94 |
| 8l | RETAP – payload size = 12288 | 22.64 | 22.75 | 22.96 | | |

Note: All conducted measurements are based on a RMS detector.



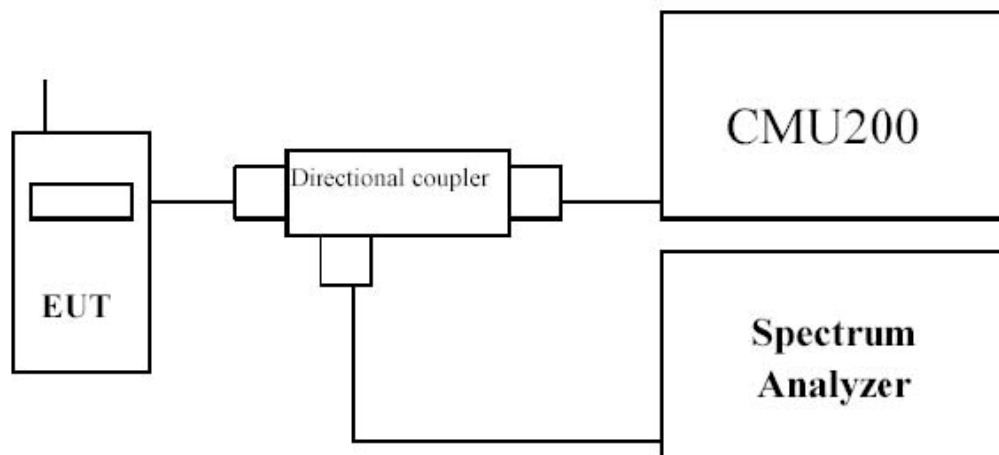
| | | | |
|--------------|------------------------------------|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Effective Isotropic Radiated Power | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

| Radiated Power EIRP/ERP | | | | |
|-----------------------------|------------|-------------|------------|-----|
| Band | Modulation | Freq. (MHz) | EIRP (dBm) | H/V |
| CDMA 2000 1X BC0 | GMSK | 824.70 | 19.05 | H |
| | | 836.52 | 19.11 | H |
| | | 848.31 | 19.15 | H |
| | | 824.70 | 16.54 | V |
| | | 836.52 | 16.68 | V |
| | | 848.31 | 16.73 | V |
| CDMA 2000 1X EVDO Rel-0 BC0 | QPSK | 824.70 | 18.77 | H |
| | | 836.52 | 18.84 | H |
| | | 848.31 | 18.93 | H |
| | | 824.70 | 15.23 | V |
| | | 836.52 | 15.36 | V |
| | | 848.31 | 15.41 | V |
| CDMA 2000 1X EVDO Rel-A | QPSK | 824.70 | 18.55 | H |
| | | 836.52 | 18.61 | H |
| | | 848.31 | 18.73 | H |
| | | 824.70 | 15.04 | V |
| | | 836.52 | 15.11 | V |
| | | 848.31 | 15.23 | V |



5. Modulation Characteristic

5.1 Test Setup



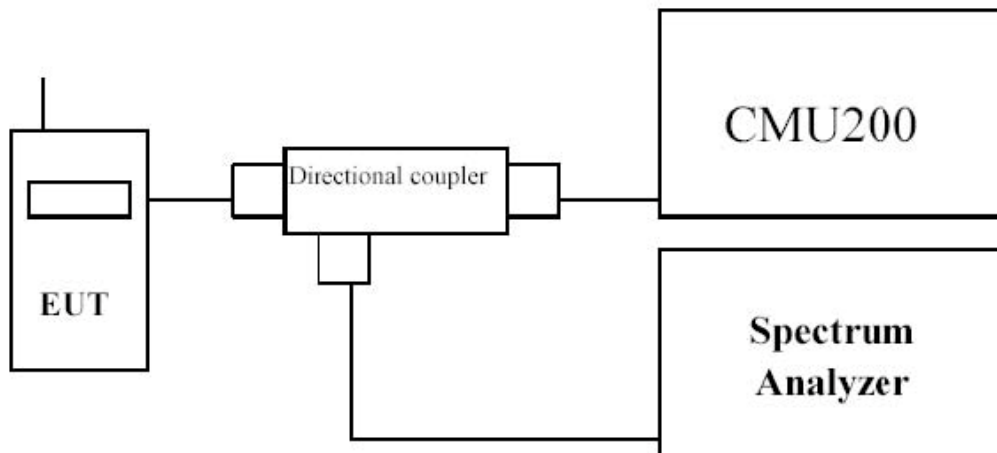
5.2 Test Result

The modulation of GSM/WCDMA was verified and confirmed compliance with requirement.



6. Occupied Bandwidth

6.1 Test Setup



6.2 Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 99% occupied bandwidth and 26 dB bandwidth of the low & middle & high channel for the highest RF powers were measured.



6.3 Test Result

| | | | |
|--------------|-------------------------------|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 1: CDMA 2000 1X BC0 Link | | |
| Date of Test | 2017/06/12 | Test Site | AC102 |

| Channel No. | Frequency (MHz) | -26dB Occupied Bandwidth (kHz) | 99% Occupied Bandwidth (kHz) |
|-------------|-----------------|--------------------------------|------------------------------|
| 1013 | 824.70 | 1927.00 | 1282.90 |
| 384 | 836.52 | 1421.00 | 1269.20 |
| 777 | 848.31 | 1422.00 | 1266.10 |

Figure Channel 9262 (1852.40MHz)

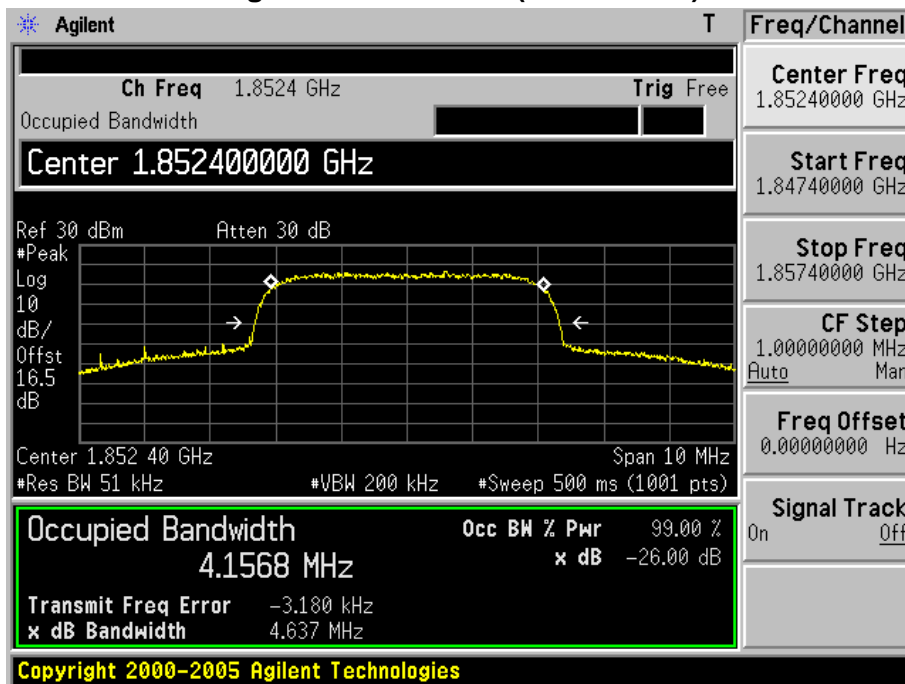




Figure Channel 9400 (1880.0MHz)

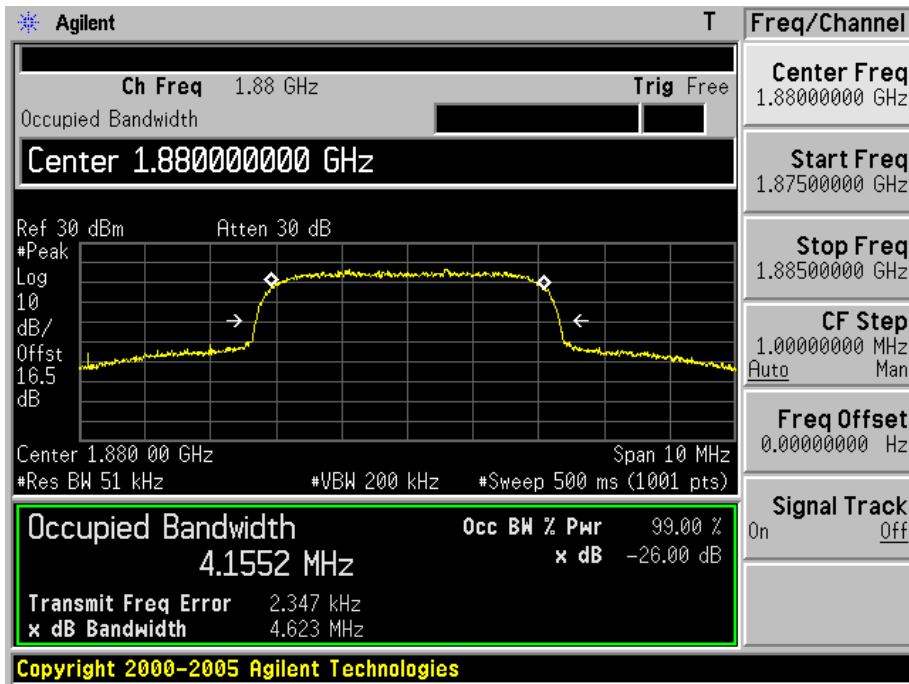
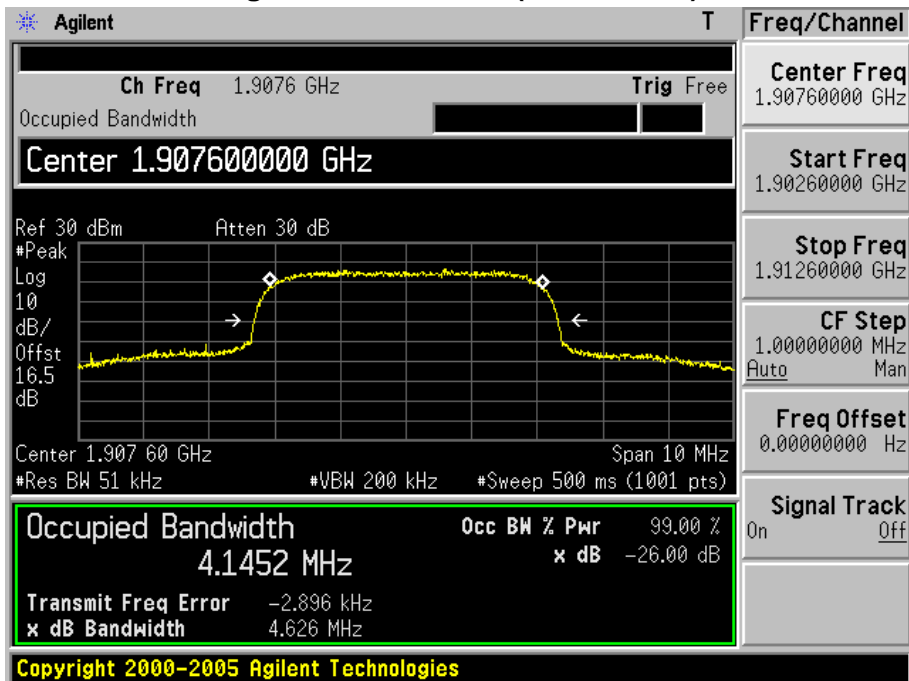


Figure Channel 9538 (1907.60MHz)





| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 2: CDMA 2000 1XEVD0 Rel-0 BC0 Link | | |
| Date of Test | 2017/06/12 | Test Site | AC102 |

| Channel No. | Frequency (MHz) | -26dB Occupied Bandwidth (kHz) | 99% Occupied Bandwidth (kHz) |
|-------------|-----------------|--------------------------------|------------------------------|
| 1013 | 824.70 | 1424.00 | 1268.10 |
| 384 | 836.52 | 1427.00 | 1268.40 |
| 777 | 848.31 | 1423.00 | 1265.70 |

Figure Channel 1013 (824.70MHz)

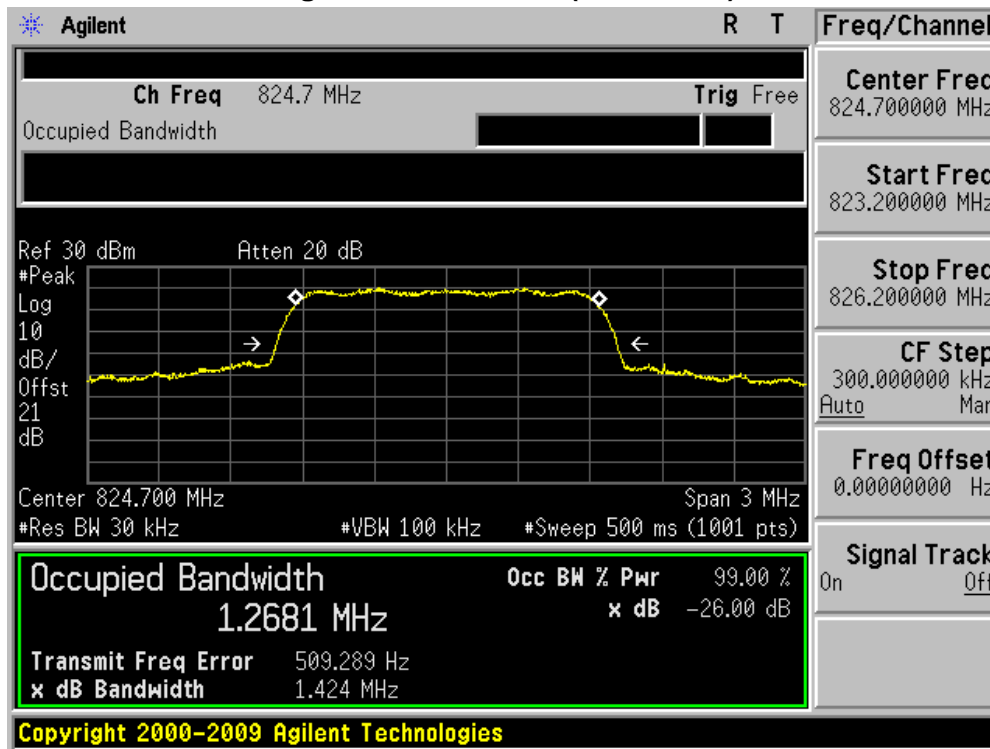




Figure Channel 384 (836.52MHz)

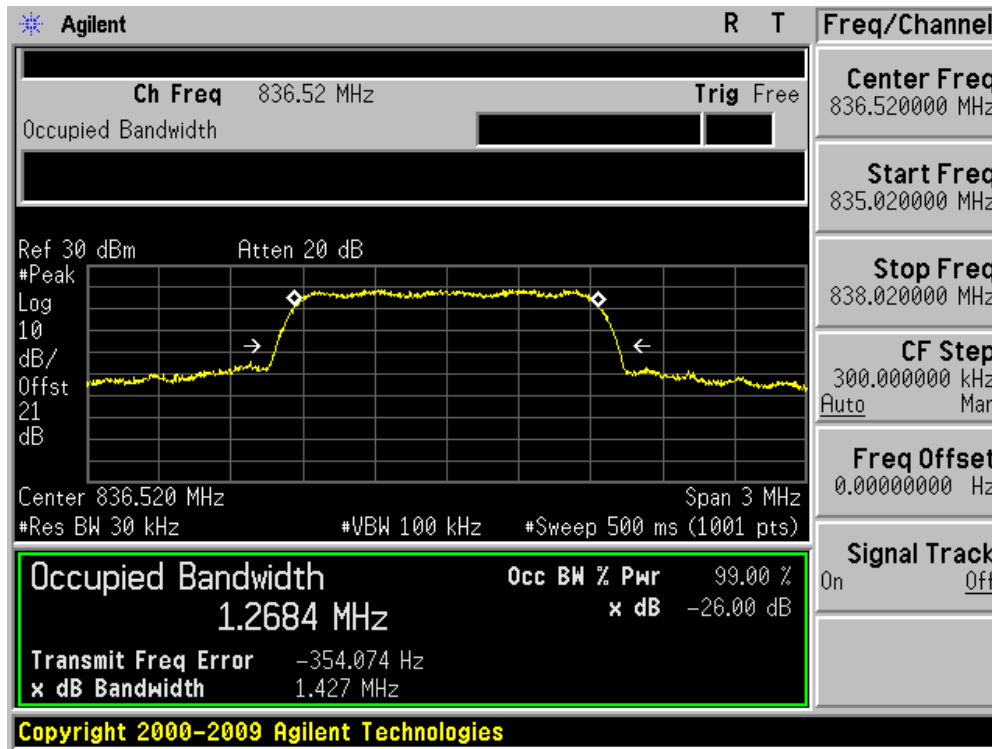
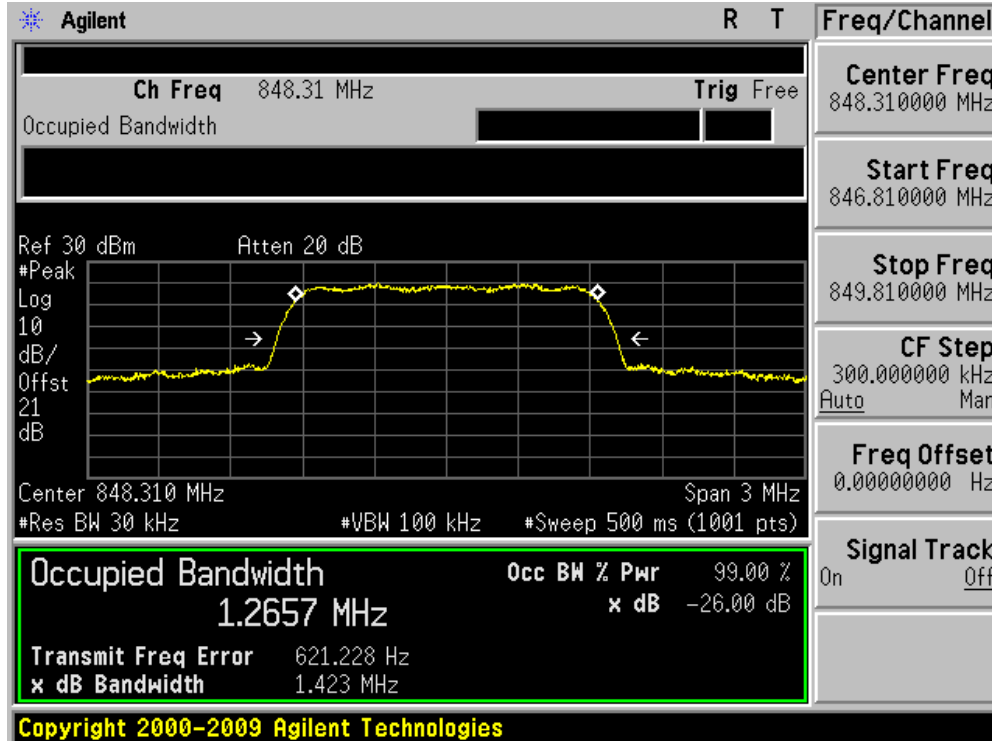


Figure Channel 777 (848.31MHz)





| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 3: CDMA 2000 1XEVD0 Rel-A BC0 Link | | |
| Date of Test | 2017/06/12 | Test Site | AC102 |

| Channel No. | Frequency (MHz) | -26dB Occupied Bandwidth (kHz) | 99% Occupied Bandwidth (kHz) |
|-------------|-----------------|--------------------------------|------------------------------|
| 1013 | 824.70 | 1422.00 | 1267.50 |
| 384 | 836.52 | 1423.00 | 1268.60 |
| 777 | 848.31 | 1416.00 | 1266.70 |

Figure Channel 1013 (824.70MHz)

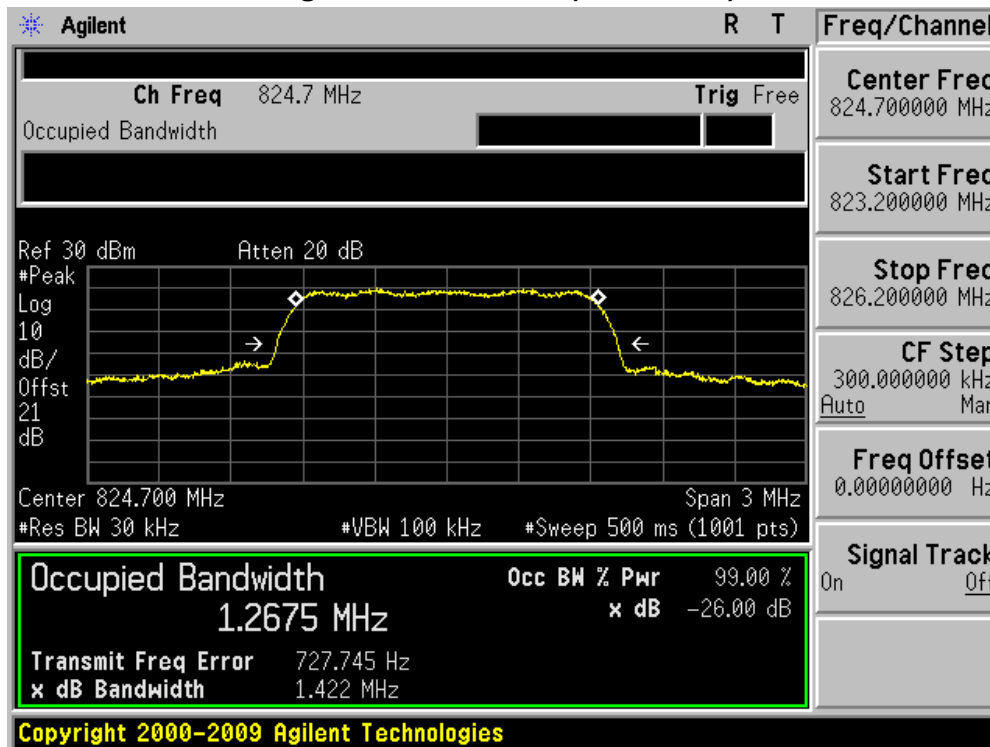




Figure Channel 384 (836.52MHz)

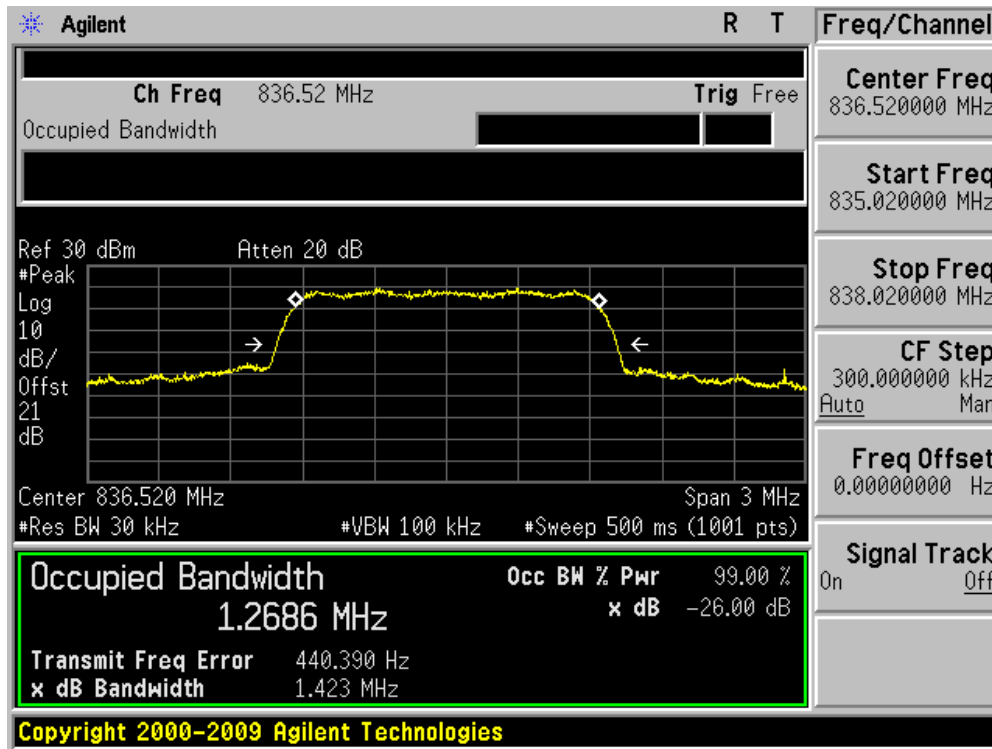
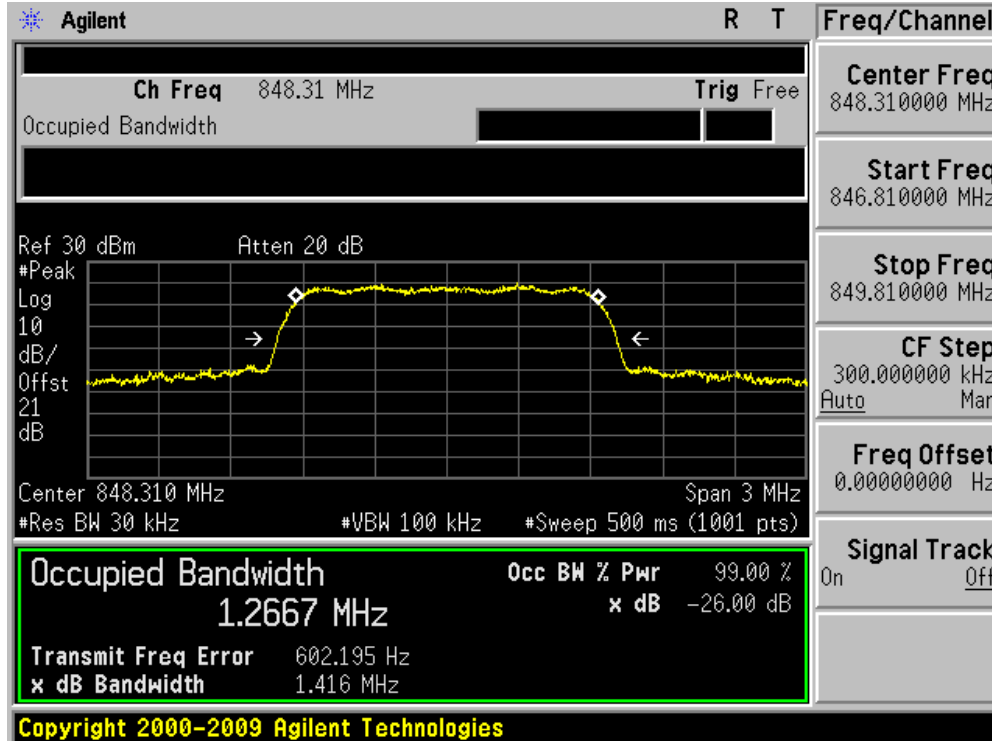


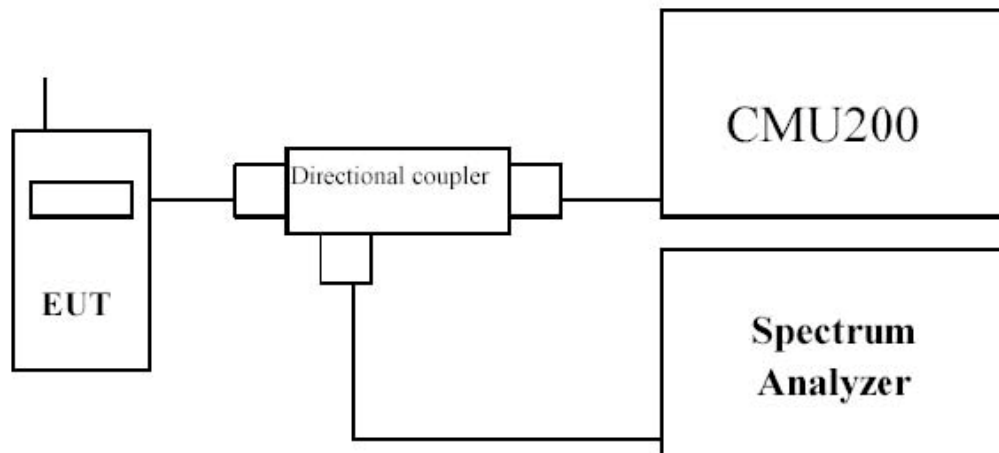
Figure Channel 777 (848.31MHz)





7. Conducted Band Edge

7.1 Test Setup



7.2 Test Procedure

1. The EUT was connected to spectrum analyzer and System Simulator via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The conducted spurious emission for the whole frequency range was taken.
4. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.



7.3 Test Result

| | | | |
|--------------|-------------------------------|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Conducted Band Edge | | |
| Test Mode | Mode 1: CDMA 2000 1X BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Figure Channel 1013 (824.70MHz)

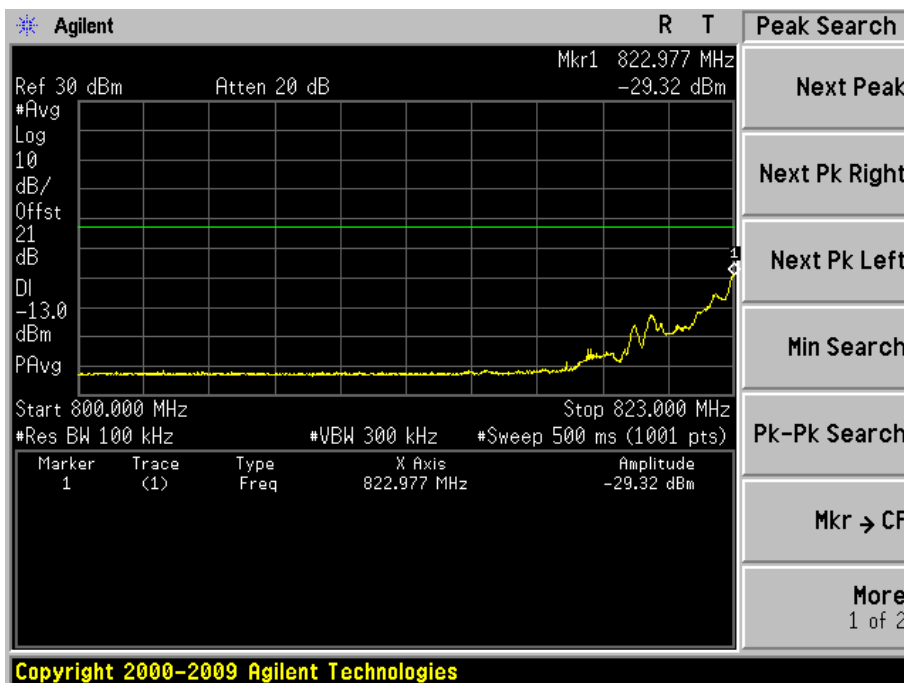
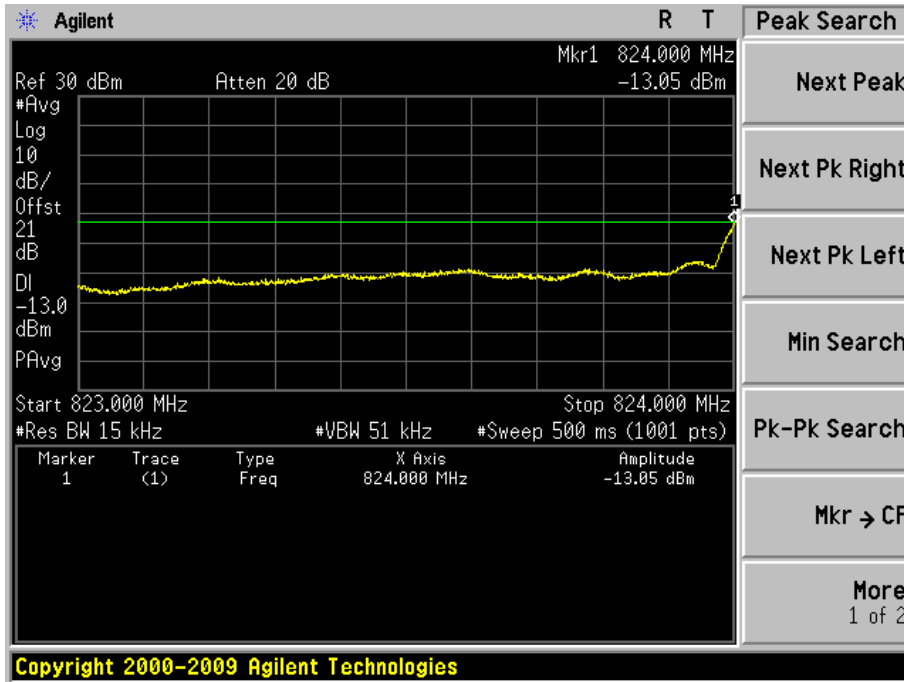
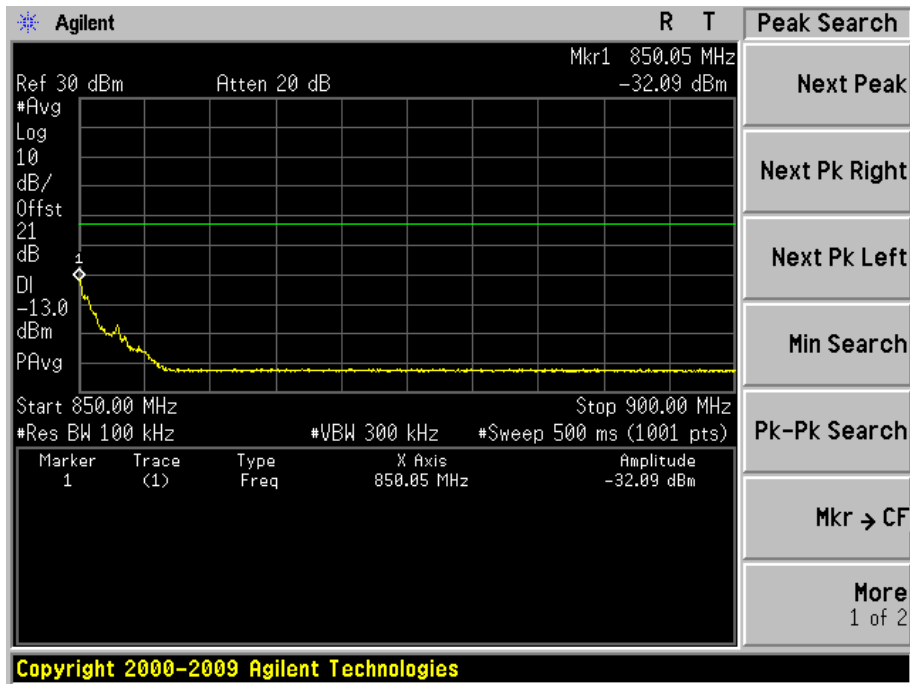
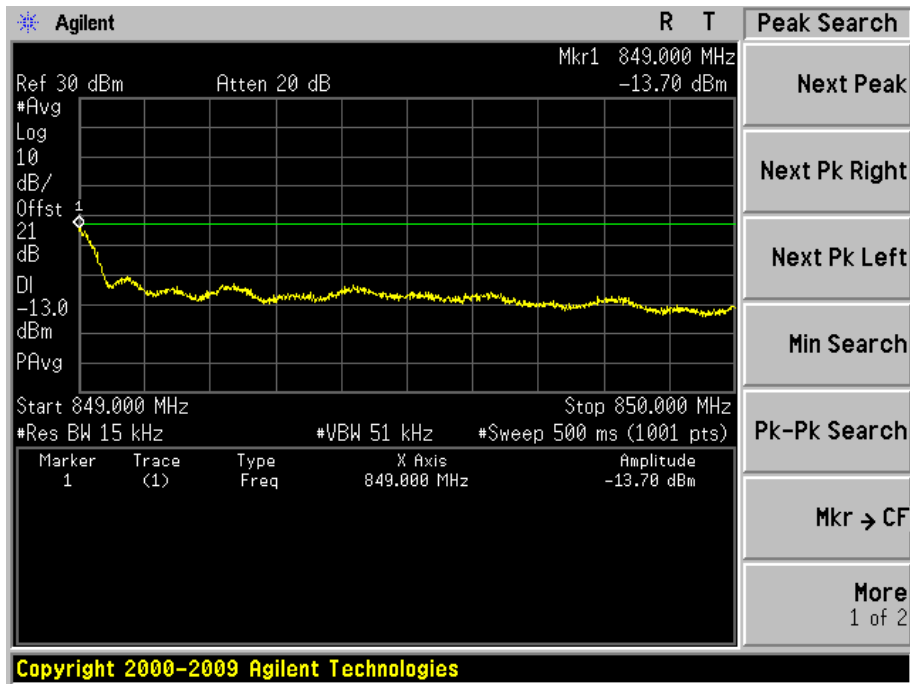




Figure Channel 777 (848.31MHz)





| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Conducted Band Edge | | |
| Test Mode | Mode 2: CDMA 2000 1XEVD0 Rel 0 BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Figure Channel 1013 (824.70MHz)

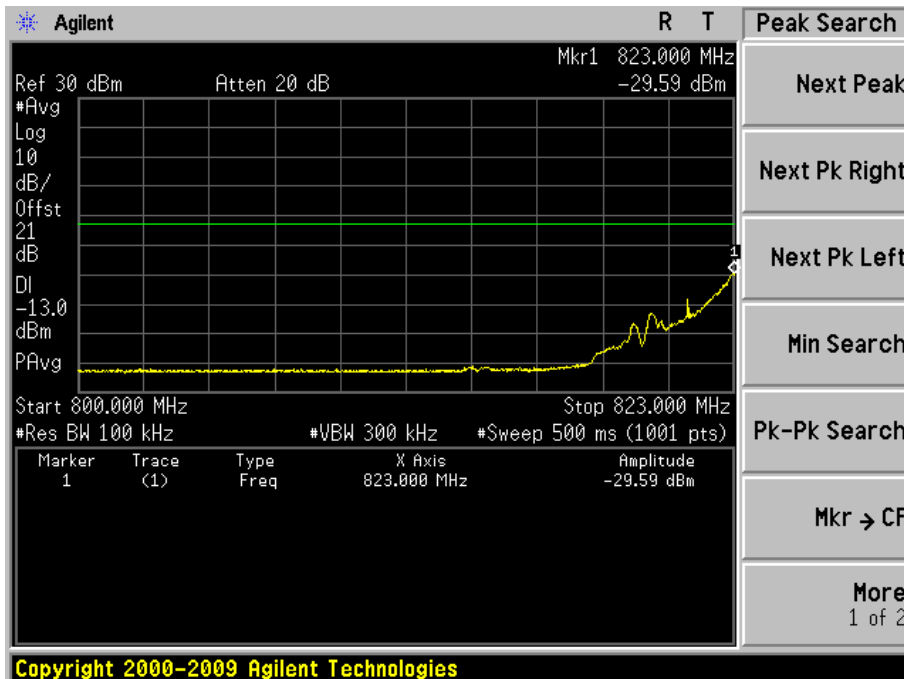
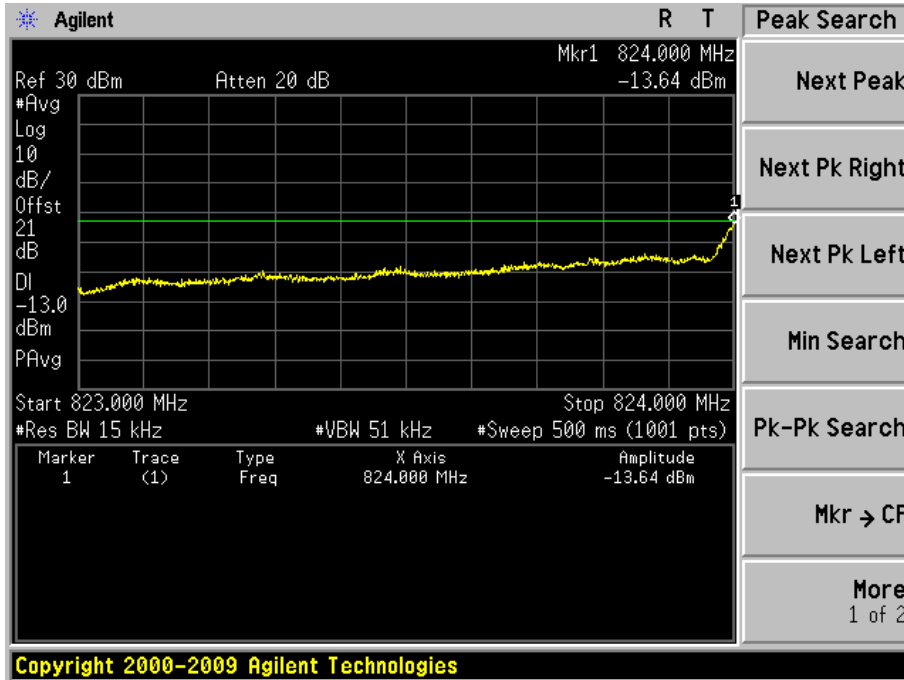
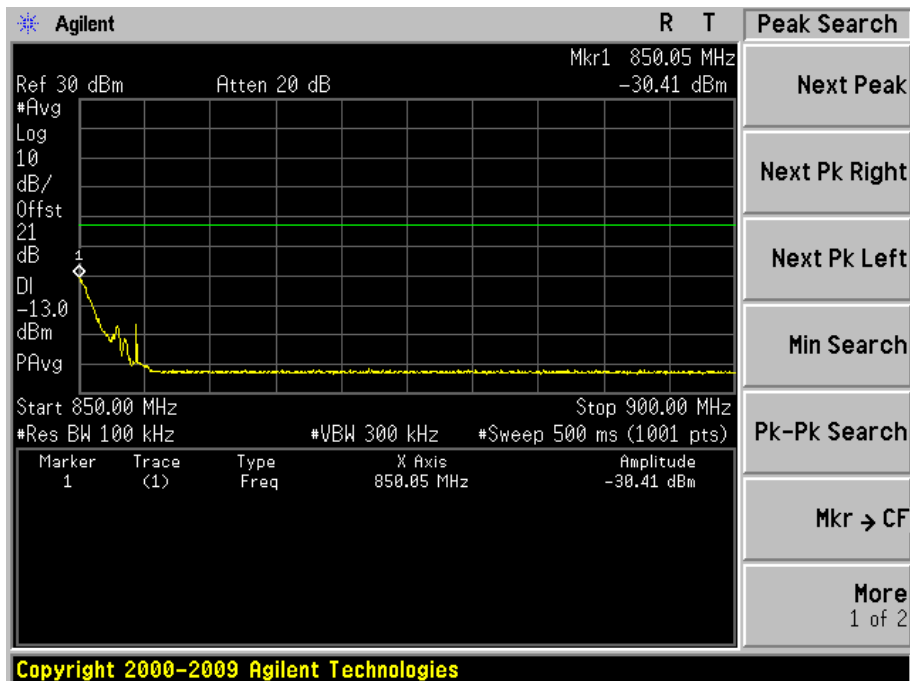
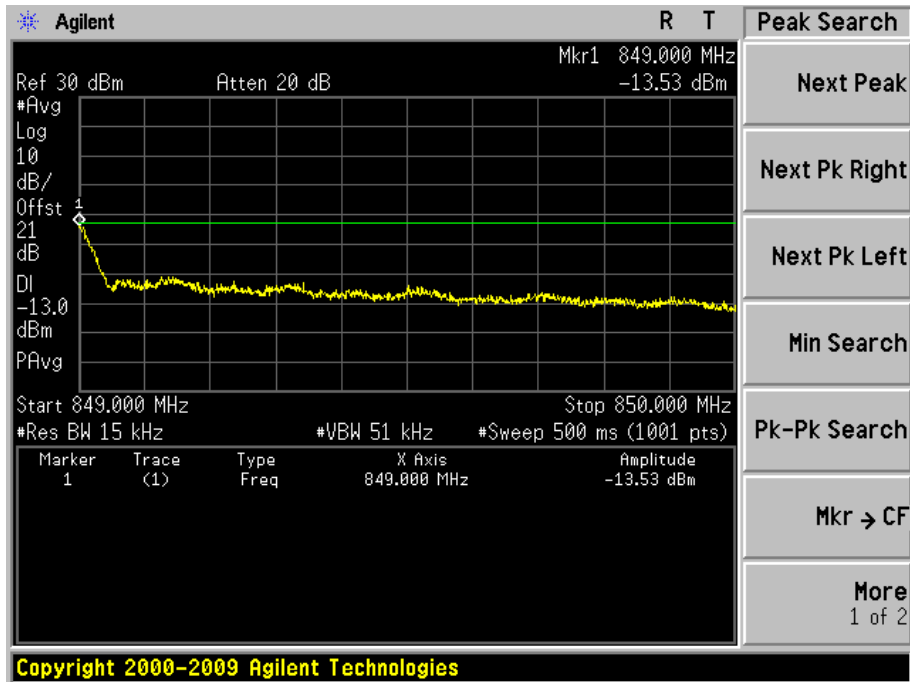




Figure Channel 777 (848.31MHz)





| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Conducted Band Edge | | |
| Test Mode | Mode 3: CDMA 2000 1XEVD0 Rel A BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Figure Channel 1013 (824.70MHz)

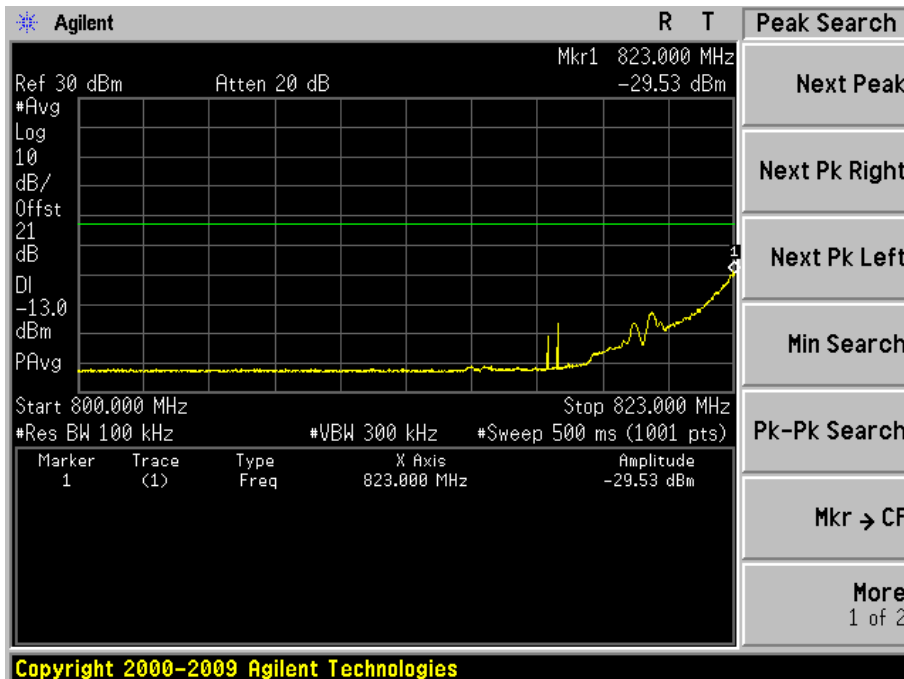
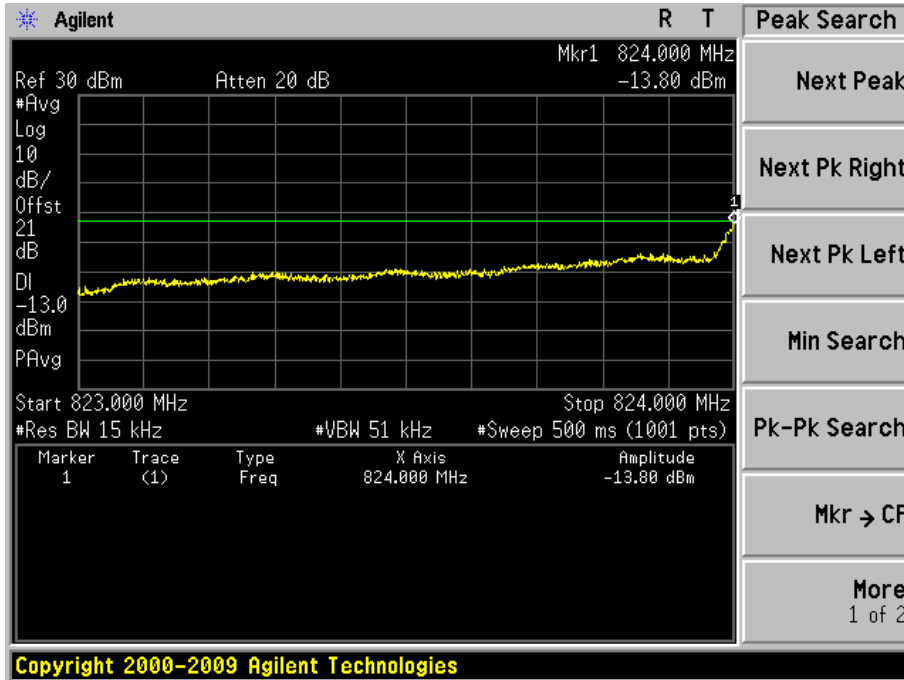
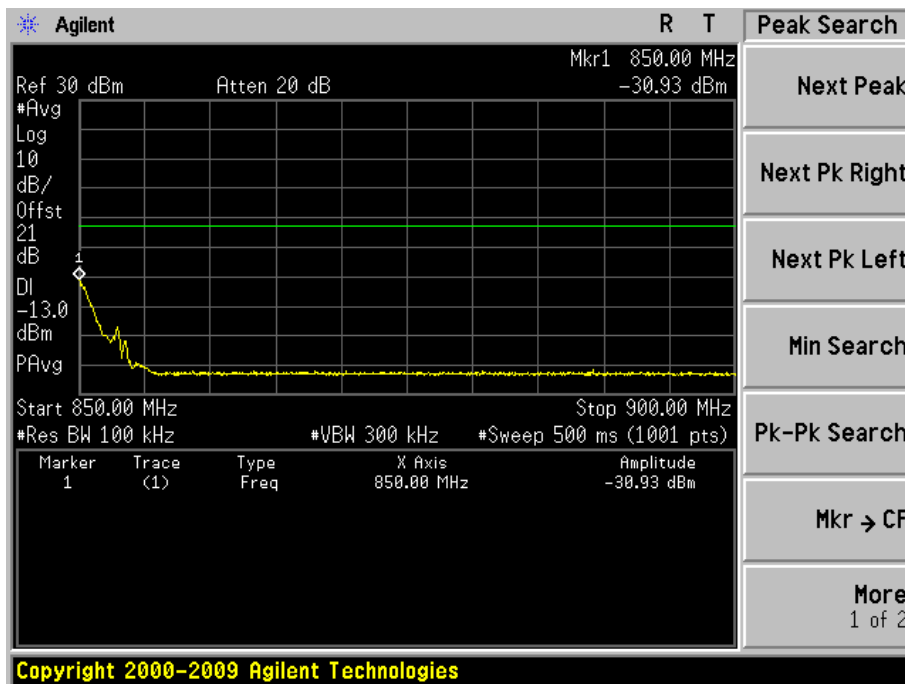
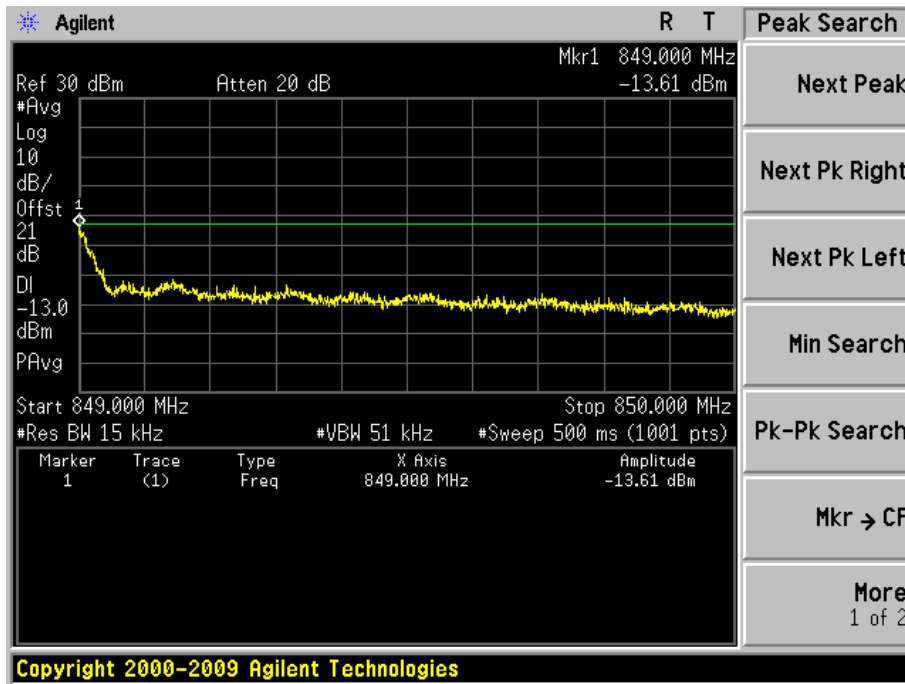




Figure Channel 777 (848.31MHz)

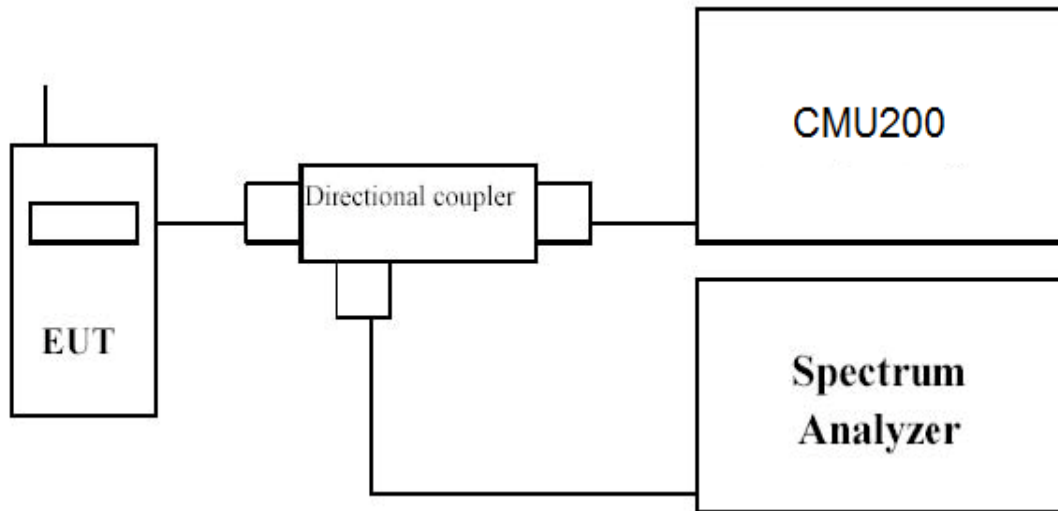




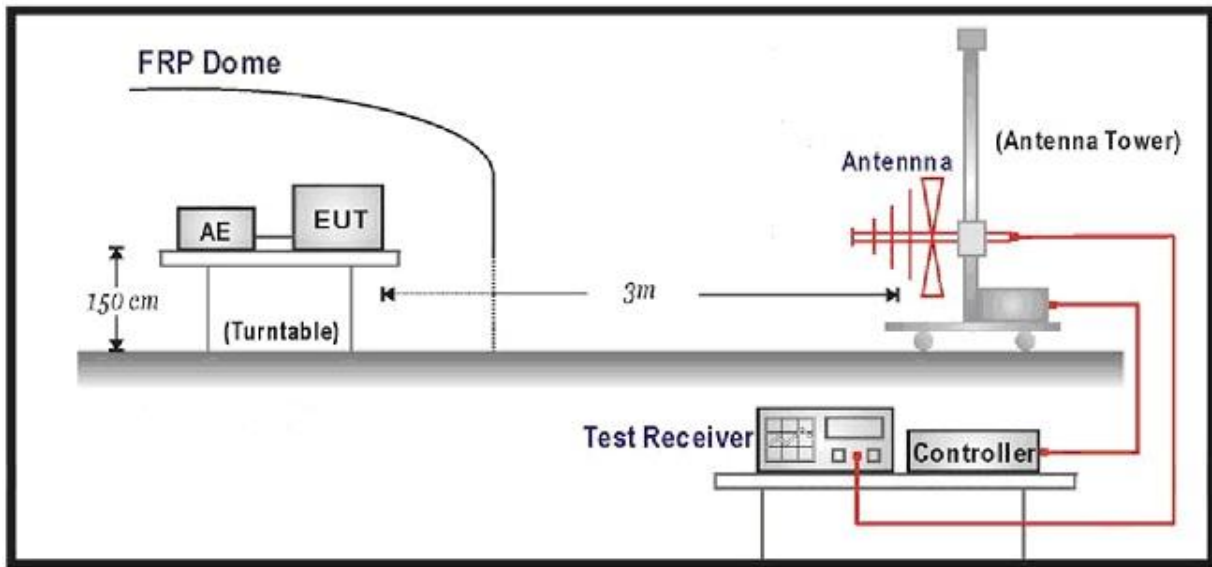
8. Spurious Emission

8.1 Test Setup

Conducted Spurious Measurement: below 1GHz

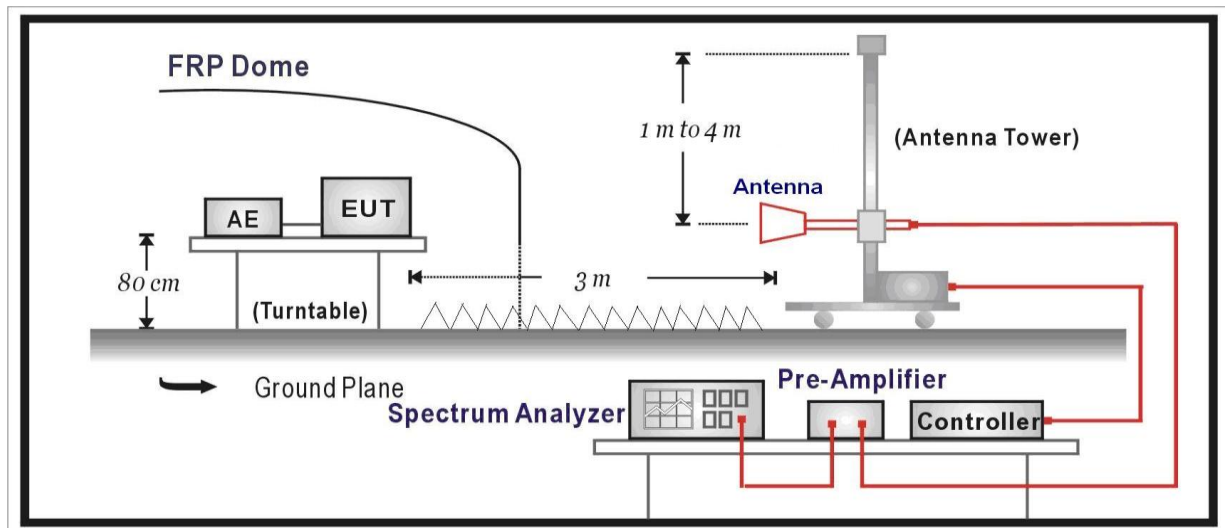


Radiated Spurious Measurement: below 1GHz





Radiated Spurious Measurement: above 1GHz



8.2 Test Procedure

Conducted Spurious Measurement:

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- EUT Communicate with CMU200, then select a channel for testing.
- Add a correction factor to the display of spectrum, and then test.
- The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

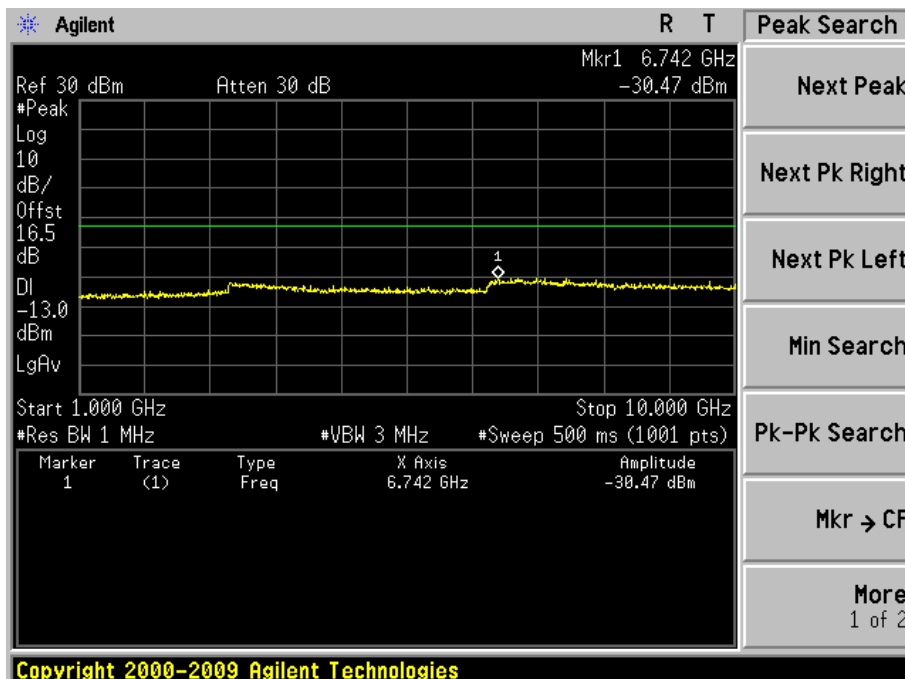
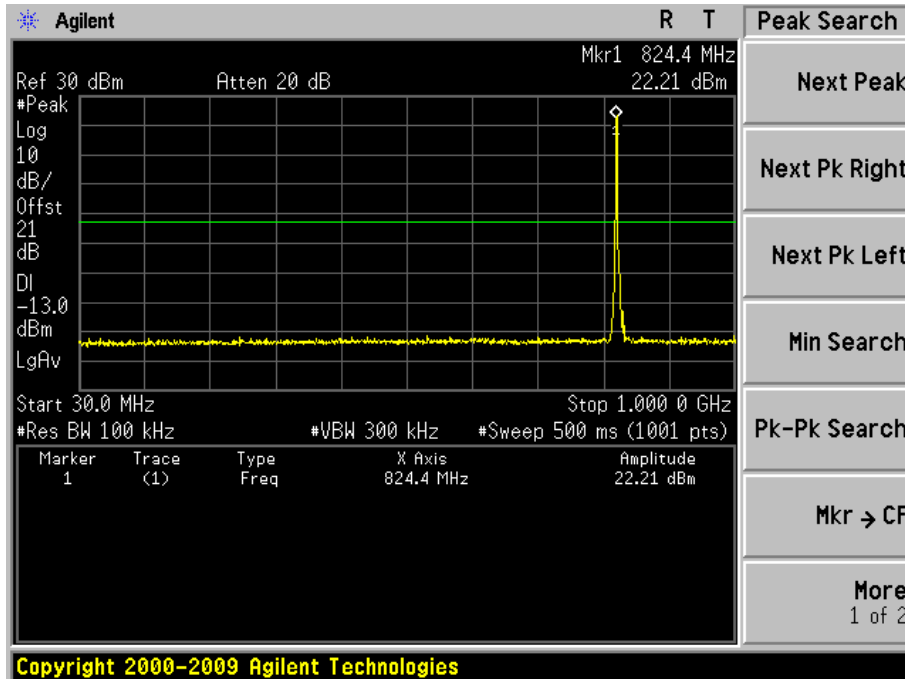
- The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
- The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- The table was rotated 360 degrees to determine the position of the highest spurious emission.
- The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 1MHz, Sweep 500ms, Taking the record of maximum spurious emission.
- A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- Taking the record of output power at antenna port
- Repeat step 7 to step 8 for another polarization. I receiver.
- $EIRP = SG - \text{Cable loss} + \text{Antenna Gain}$



8.3 Test Result

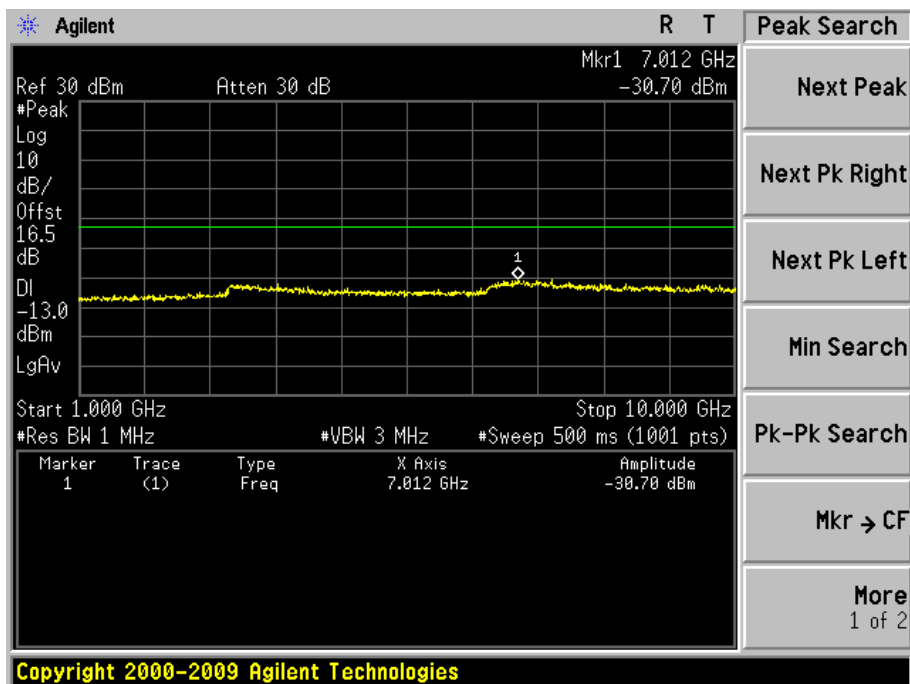
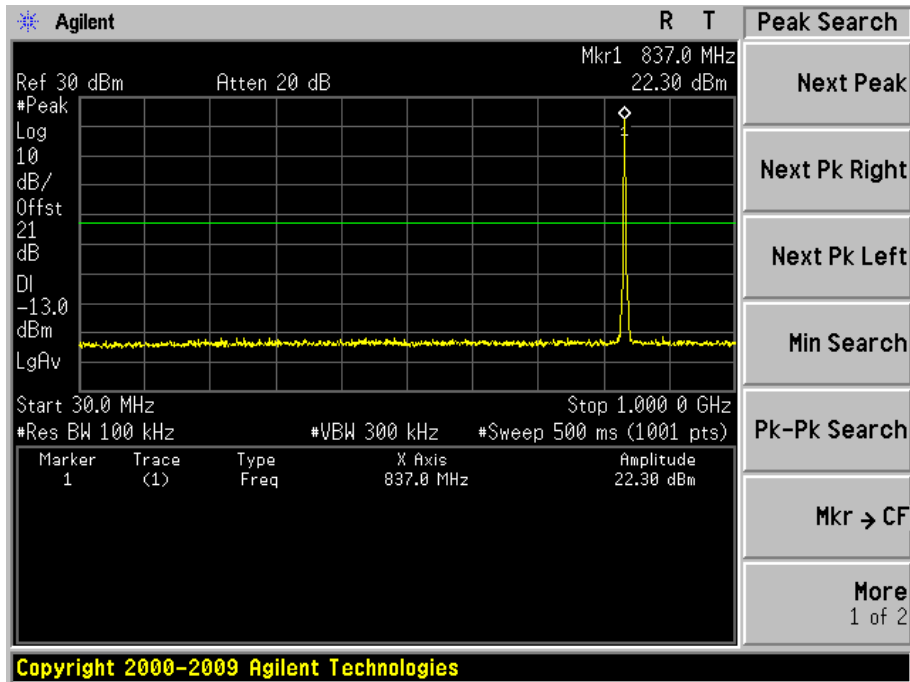
| | | | |
|--------------|-------------------------------|-----------|-----|
| Product | iflytek translating machine | | |
| Test Item | Conducted Spurious Emission | | |
| Test Mode | Mode 1: CDMA 2000 1X BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | TR8 |

Low Channel 1013(824.7MHz)



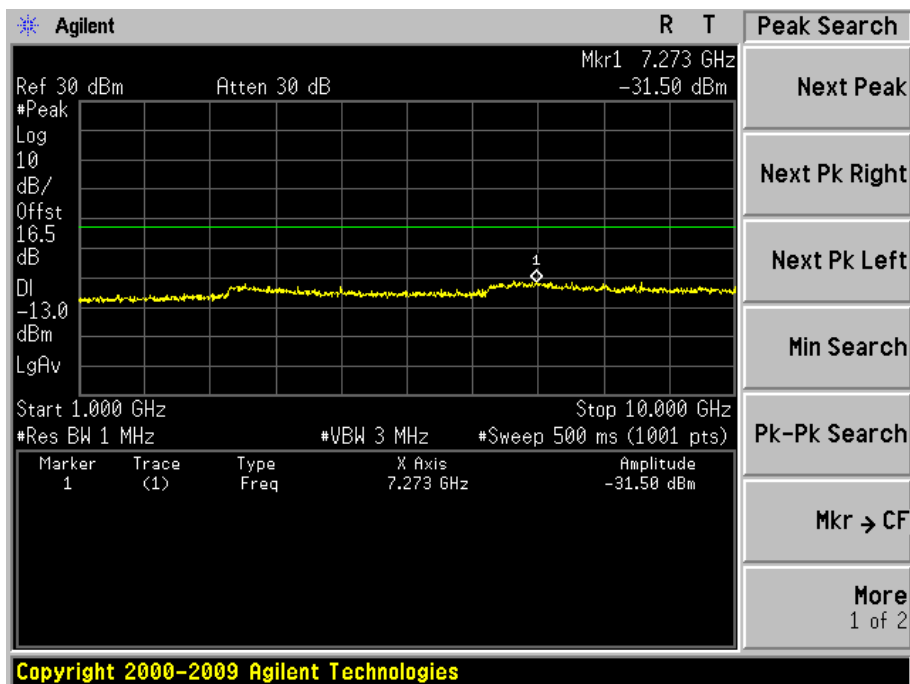
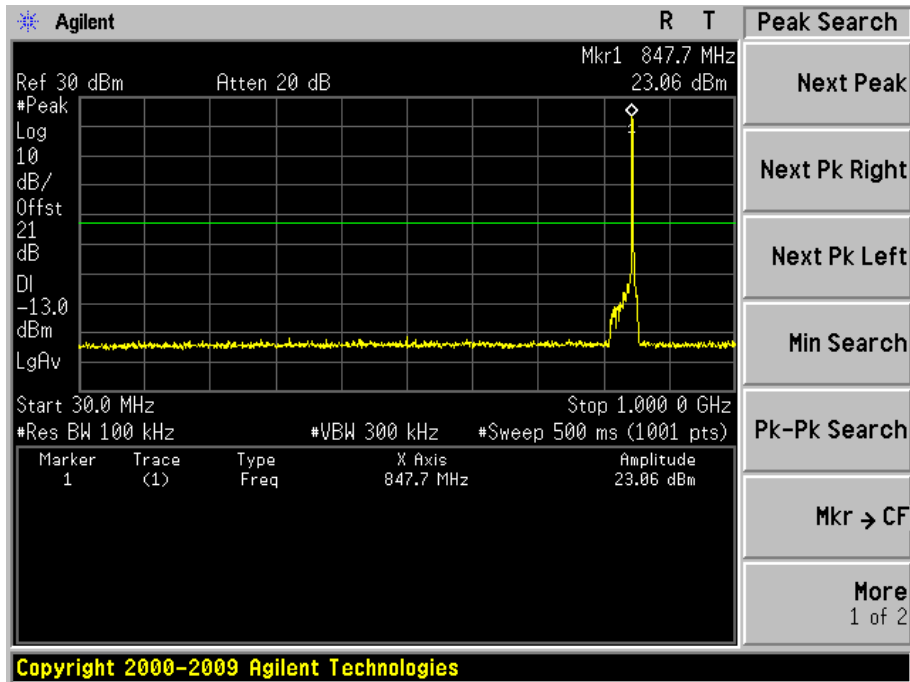


Mid Channel 384(836.52MHz)





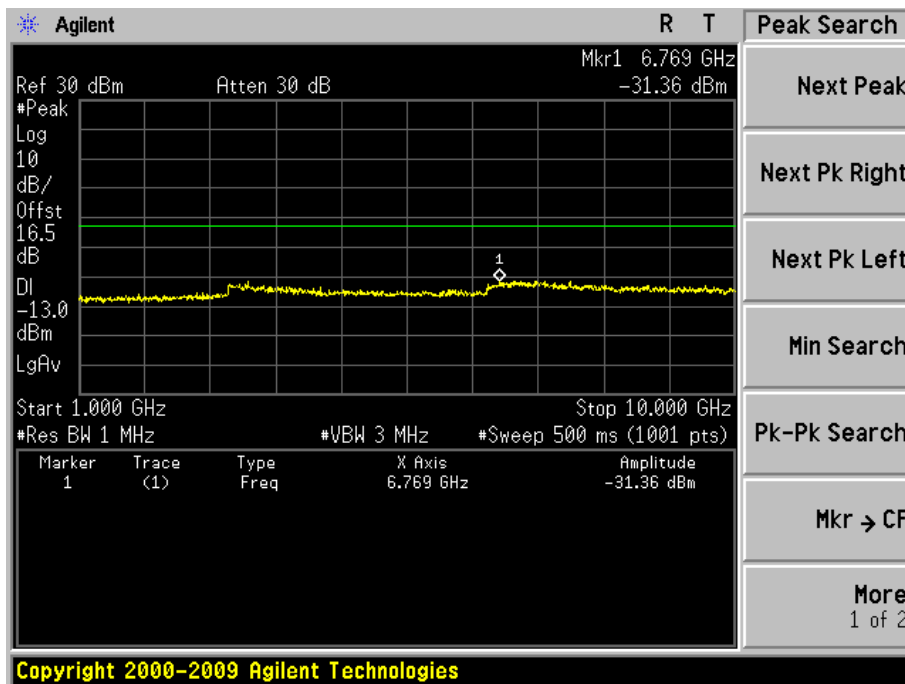
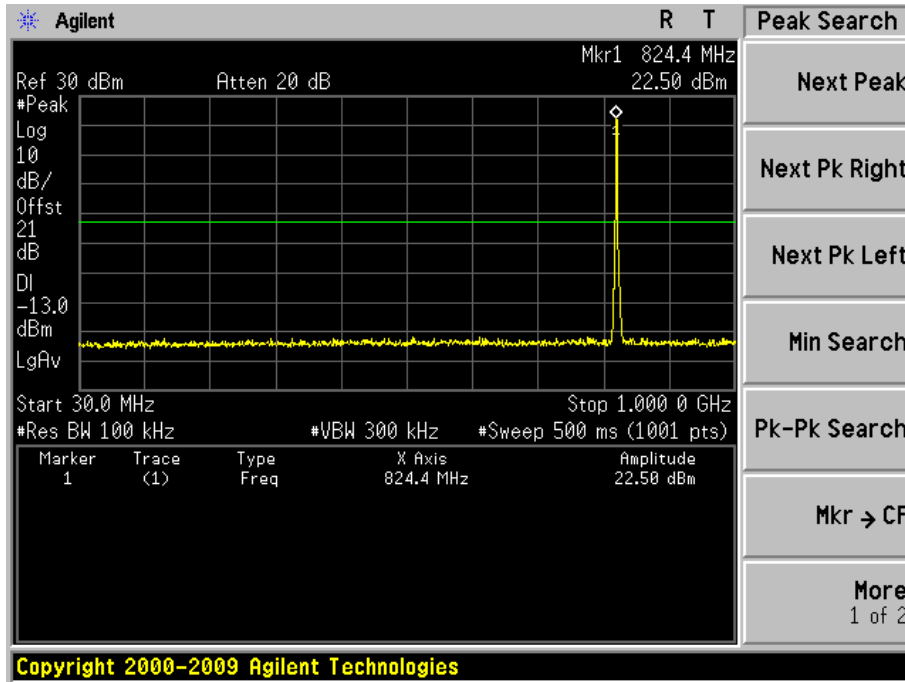
High Channel 777(848.31MHz)





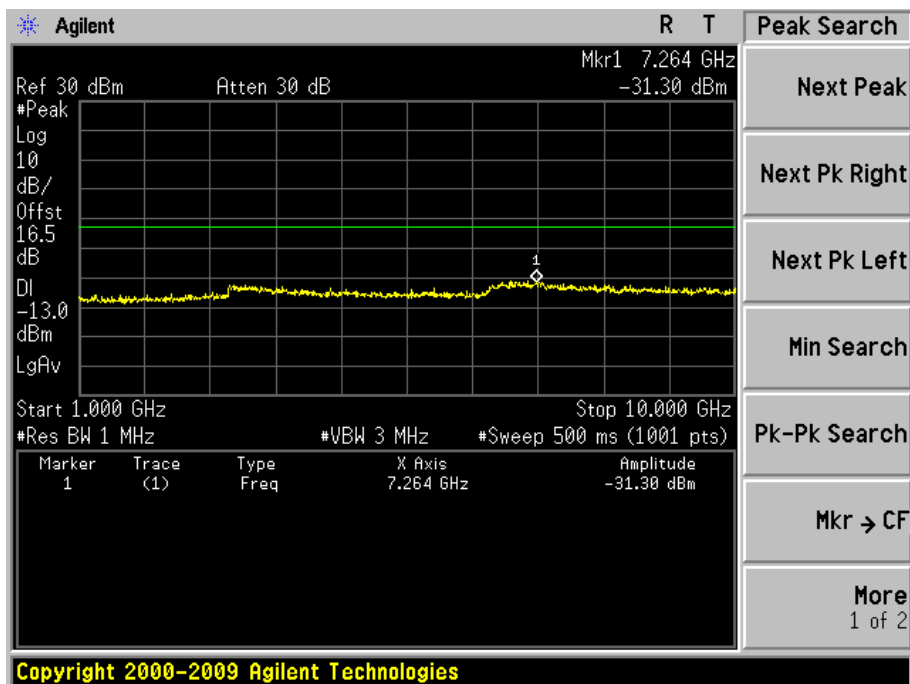
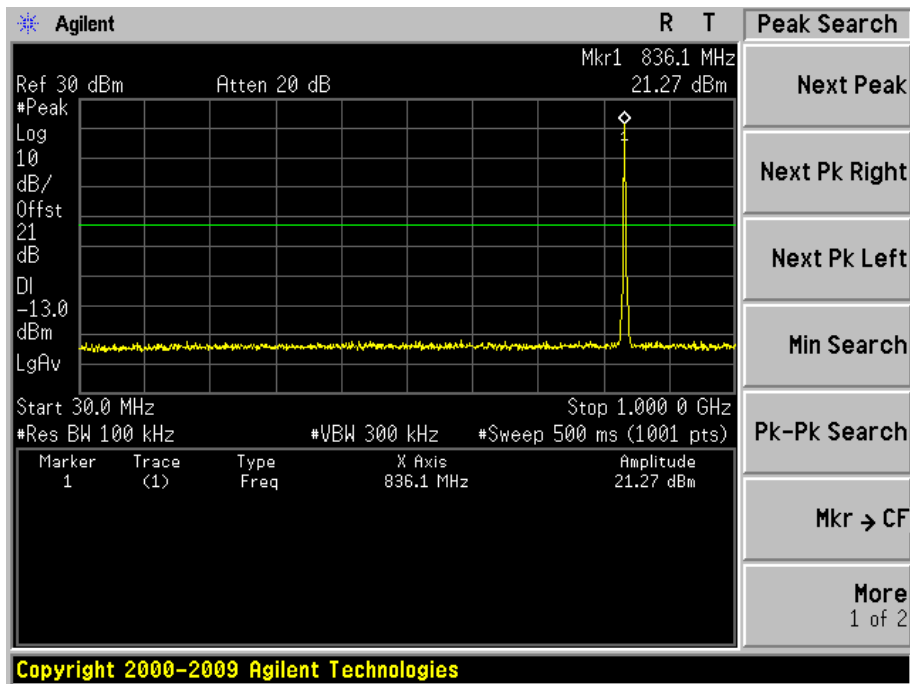
| | | | |
|--------------|---|-----------|-----|
| Product | iflytek translating machine | | |
| Test Item | Conducted Spurious Emission | | |
| Test Mode | Mode 2: CDMA 2000 1XEVD0 Rel-0 BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | TR8 |

Low Channel 1013(824.7MHz)



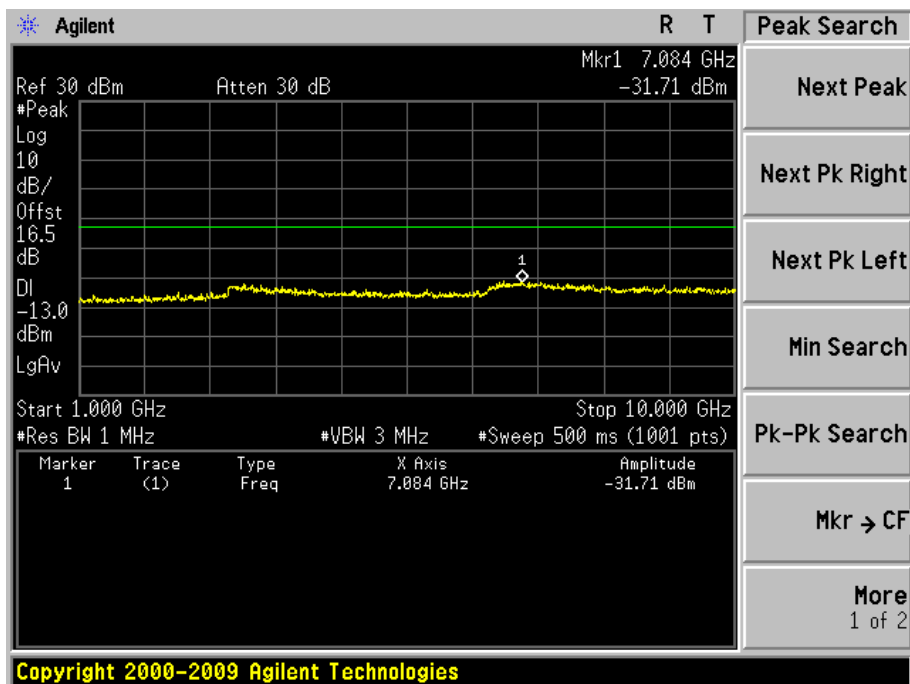
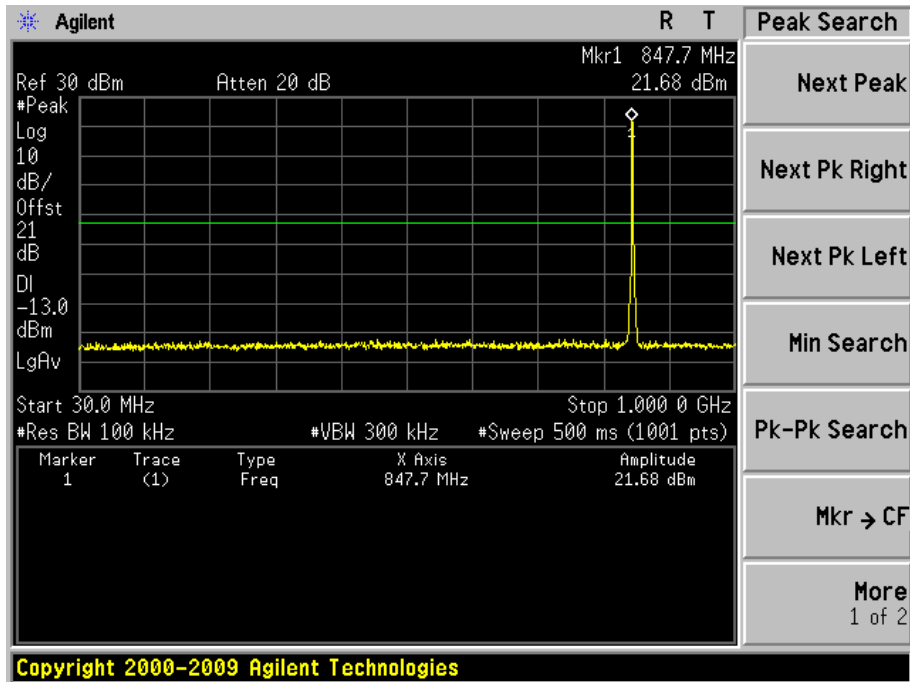


Mid Channel 384(836.52MHz)





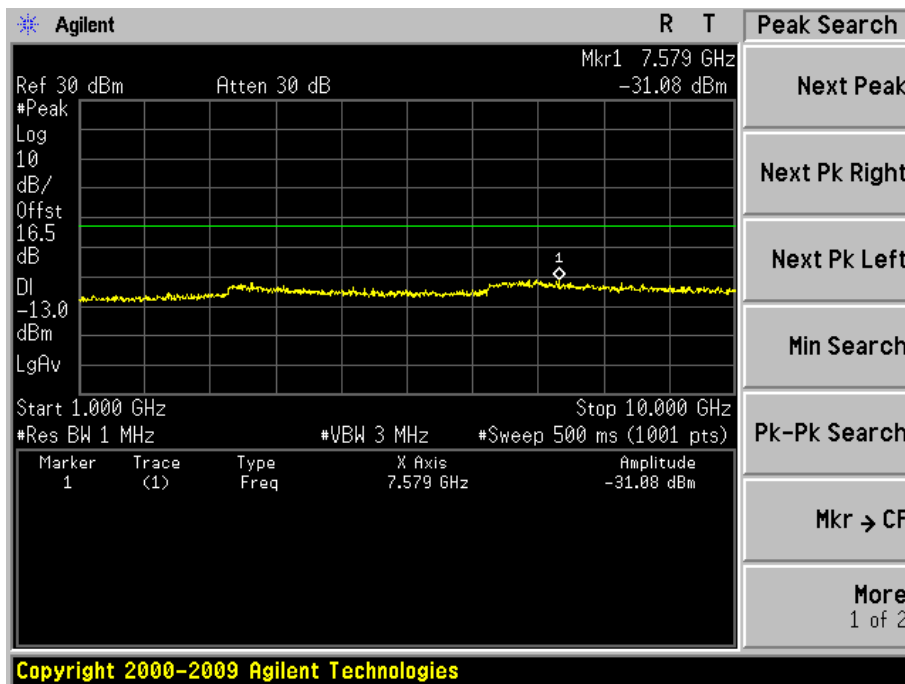
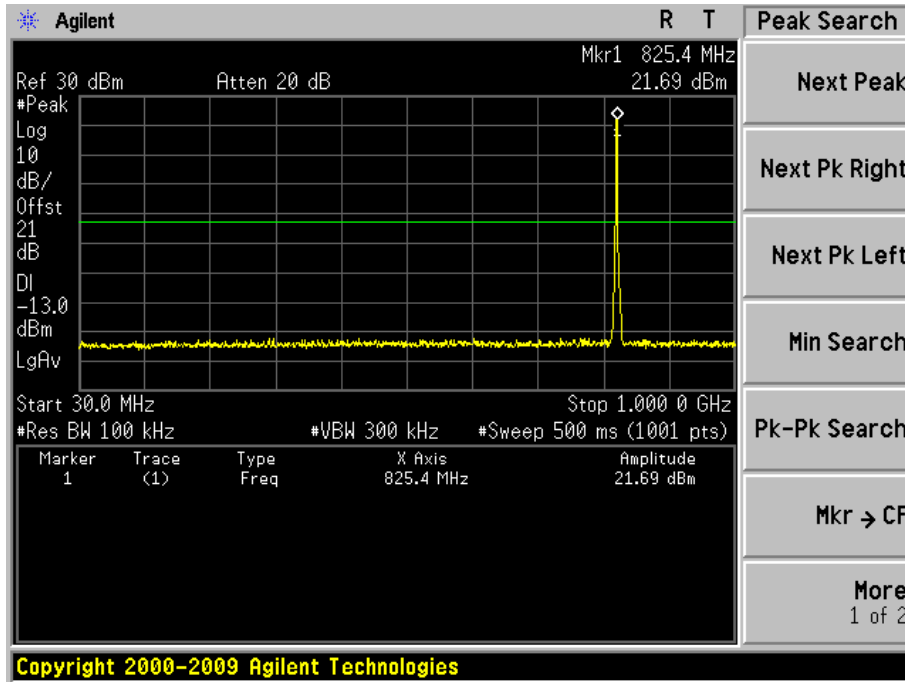
High Channel 777(848.31MHz)





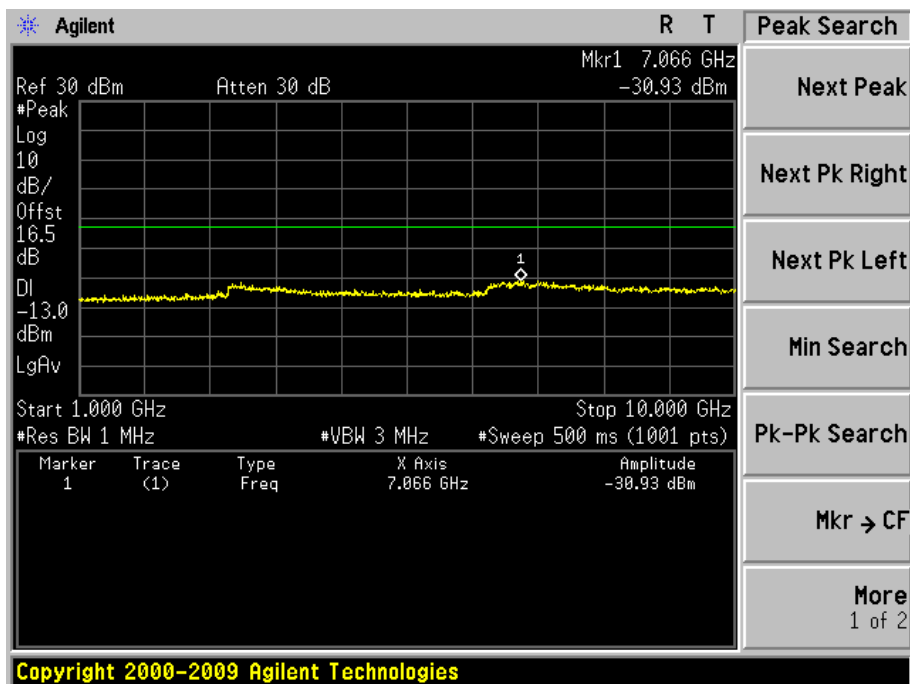
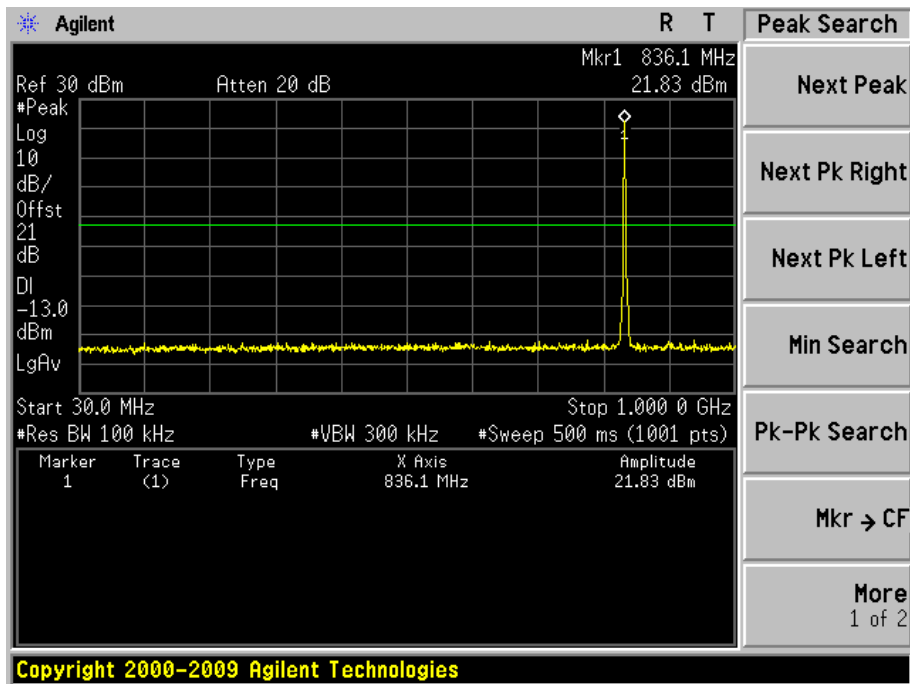
| | | | |
|--------------|---|-----------|-----|
| Product | iflytek translating machine | | |
| Test Item | Conducted Spurious Emission | | |
| Test Mode | Mode 3: CDMA 2000 1XEVD0 Rel-A BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | TR8 |

Low Channel 1013(824.7MHz)



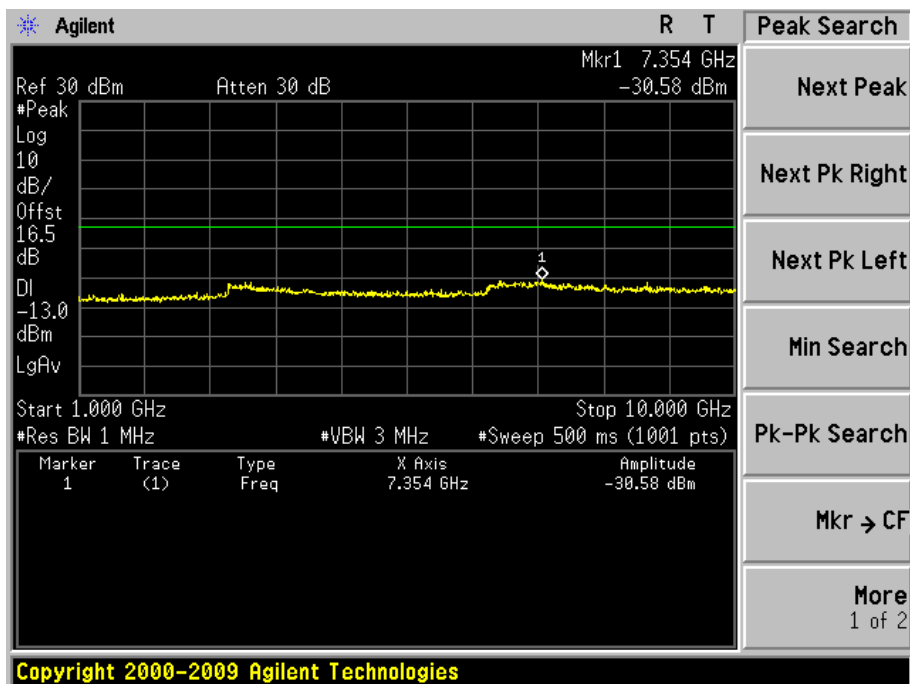
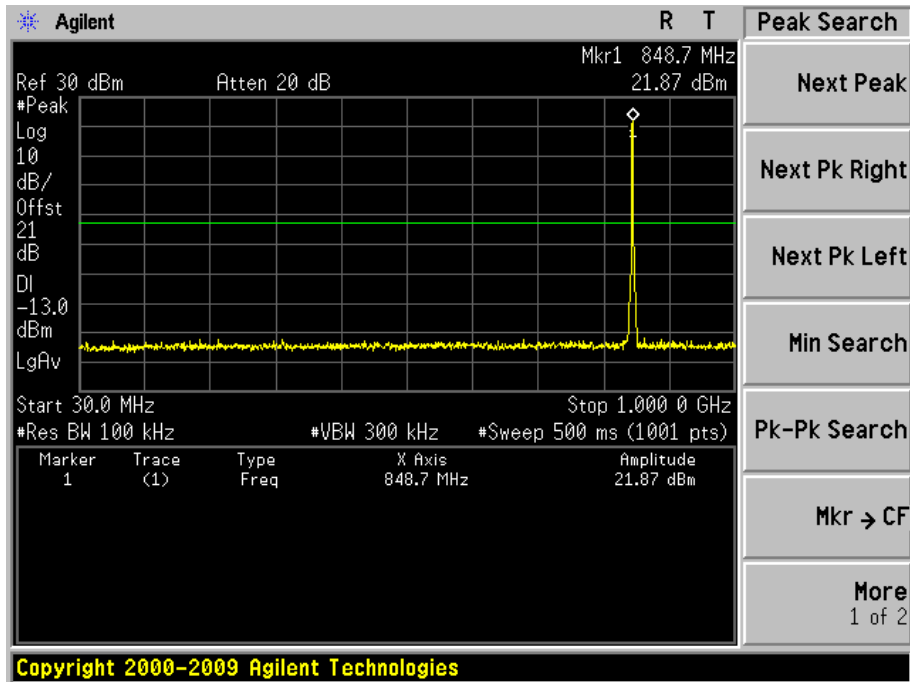


Mid Channel 384(836.52MHz)





High Channel 777(848.31MHz)





| | | | |
|--------------|-------------------------------|-----------|-------|
| Product | ifylytek translating machine | | |
| Test Item | Radiated Spurious Emission | | |
| Test Mode | Mode 1: CDMA 2000 1X BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

| Frequency (MHz) | SA Reading (dBm) | Ant.Pol. (H/V) | SG Reading (dBm) | Cable Loss (dB) | Gain (dBi) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
|--------------------------------|------------------|----------------|------------------|-----------------|------------|------------|-------------|-------------|
| Low Channel 1013 (824.70MHz) | | | | | | | | |
| 1649.40 | -46.52 | H | -49.21 | 2.50 | 9.78 | -41.93 | -13.00 | -28.93 |
| 2474.10 | -59.67 | H | -58.57 | 3.12 | 10.49 | -51.20 | -13.00 | -38.20 |
| 1649.40 | -42.25 | V | -44.84 | 2.50 | 9.78 | -37.56 | -13.00 | -24.56 |
| 2474.10 | -55.73 | V | -54.79 | 3.12 | 10.49 | -47.42 | -13.00 | -34.42 |
| Middle Channel 384 (836.52MHz) | | | | | | | | |
| 1672.64 | -50.83 | H | -53.24 | 2.51 | 9.94 | -45.81 | -13.00 | -32.81 |
| 2508.96 | -59.74 | H | -58.64 | 3.18 | 10.61 | -51.21 | -13.00 | -38.21 |
| 1672.64 | -48.15 | V | -50.81 | 2.51 | 9.94 | -43.38 | -13.00 | -30.38 |
| 2508.96 | -58.96 | V | -58.24 | 3.18 | 10.61 | -50.81 | -13.00 | -37.81 |
| High Channel 777 (848.31MHz) | | | | | | | | |
| 1696.62 | -51.29 | H | -53.34 | 2.53 | 10.10 | -45.77 | -13.00 | -32.77 |
| 2544.93 | -55.05 | H | -53.22 | 3.15 | 10.67 | -45.70 | -13.00 | -32.70 |
| 1696.62 | -46.86 | V | -49.64 | 2.53 | 10.10 | -42.07 | -13.00 | -29.07 |
| 2544.93 | -55.44 | V | -53.86 | 3.15 | 10.67 | -46.34 | -13.00 | -33.34 |



| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Radiated Spurious Emission | | |
| Test Mode | Mode 2: CDMA 2000 1XEVD0 Rel-0 BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

| Frequency (MHz) | SA Reading (dBm) | Ant.Pol. (H/V) | SG Reading (dBm) | Cable Loss (dB) | Gain (dBi) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
|--------------------------------|------------------|----------------|------------------|-----------------|------------|------------|-------------|-------------|
| Low Channel 1013 (824.70MHz) | | | | | | | | |
| 1649.40 | -43.89 | H | -46.57 | 2.50 | 9.78 | -39.29 | -13.00 | -26.29 |
| 2474.10 | -57.85 | H | -56.75 | 3.12 | 10.49 | -49.38 | -13.00 | -36.38 |
| 1649.40 | -40.70 | V | -43.30 | 2.50 | 9.78 | -36.02 | -13.00 | -23.02 |
| 2474.10 | -56.53 | V | -55.59 | 3.12 | 10.49 | -48.22 | -13.00 | -35.22 |
| Middle Channel 384 (836.52MHz) | | | | | | | | |
| 1672.64 | -49.10 | H | -51.51 | 2.51 | 9.94 | -44.08 | -13.00 | -31.08 |
| 2508.96 | -55.71 | H | -54.76 | 3.18 | 10.61 | -47.33 | -13.00 | -34.33 |
| 1672.64 | -46.68 | V | -49.34 | 2.51 | 9.94 | -41.91 | -13.00 | -28.91 |
| 2508.96 | -56.22 | V | -55.66 | 3.18 | 10.61 | -48.23 | -13.00 | -35.23 |
| High Channel 777 (848.31MHz) | | | | | | | | |
| 1696.62 | -50.05 | H | -52.10 | 2.53 | 10.10 | -44.53 | -13.00 | -31.53 |
| 2544.93 | -48.37 | H | -46.54 | 3.15 | 10.67 | -39.02 | -13.00 | -26.02 |
| 1696.62 | -46.87 | V | -49.65 | 2.53 | 10.10 | -42.08 | -13.00 | -29.08 |
| 2544.93 | -50.21 | V | -48.64 | 3.15 | 10.67 | -41.12 | -13.00 | -28.12 |



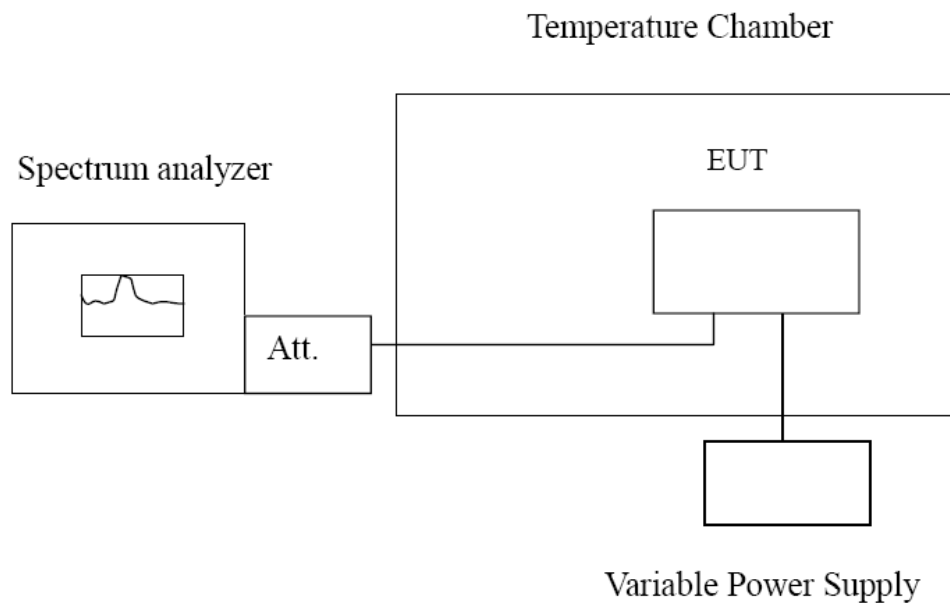
| | | | |
|--------------|---|-----------|-------|
| Product | iflytek translating machine | | |
| Test Item | Radiated Spurious Emission | | |
| Test Mode | Mode 3: CDMA 2000 1XEVD0 Rel-A BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

| Frequency (MHz) | SA Reading (dBm) | Ant.Pol. (H/V) | SG Reading (dBm) | Cable Loss (dB) | Gain (dBi) | EIRP (dBm) | Limit (dBm) | Margin (dB) |
|--------------------------------|------------------|----------------|------------------|-----------------|------------|------------|-------------|-------------|
| Low Channel 1013 (824.70MHz) | | | | | | | | |
| 1649.40 | -44.36 | H | -47.05 | 2.50 | 9.78 | -39.77 | -13.00 | -26.77 |
| 2474.10 | -58.14 | H | -57.05 | 3.12 | 10.49 | -49.68 | -13.00 | -36.68 |
| 1649.40 | -41.07 | V | -43.66 | 2.50 | 9.78 | -36.38 | -13.00 | -23.38 |
| 2474.10 | -57.78 | V | -56.84 | 3.12 | 10.49 | -49.47 | -13.00 | -36.47 |
| Middle Channel 384 (836.52MHz) | | | | | | | | |
| 1672.64 | -50.06 | H | -52.47 | 2.51 | 9.94 | -45.04 | -13.00 | -32.04 |
| 2508.96 | -51.42 | H | -50.47 | 3.18 | 10.61 | -43.04 | -13.00 | -30.04 |
| 1672.64 | -46.39 | V | -49.06 | 2.51 | 9.94 | -41.63 | -13.00 | -28.63 |
| 2508.96 | -56.28 | V | -55.72 | 3.18 | 10.61 | -48.29 | -13.00 | -35.29 |
| High Channel 777 (848.31MHz) | | | | | | | | |
| 1696.62 | -50.05 | H | -52.10 | 2.53 | 10.10 | -44.53 | -13.00 | -31.53 |
| 2544.93 | -48.22 | H | -46.39 | 3.15 | 10.67 | -38.87 | -13.00 | -25.87 |
| 1696.62 | -45.31 | V | -48.09 | 2.53 | 10.10 | -40.52 | -13.00 | -27.52 |
| 2544.93 | -48.80 | V | -47.22 | 3.15 | 10.67 | -39.70 | -13.00 | -26.70 |



9. Frequency Stability Under Temperature & Voltage Variations

9.1 Test Setup



9.2 Test Procedure

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

**9.3 Test Result**

| | | | |
|--------------|--|-----------|-------|
| Product | ifylytek translating machine | | |
| Test Item | Frequency Stability Under Temperature & Voltage Variations | | |
| Test Mode | Mode 1: CDMA 2000 1X BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Frequency Stability under Temperature

| Temperature Interval (°C) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|---------------------------|----------------------|----------------|------------|
| -30 | 836.52 | -33 | ± 2091.3 |
| -20 | 836.52 | 45 | ± 2091.3 |
| -10 | 836.52 | -15 | ± 2091.3 |
| 0 | 836.52 | 25 | ± 2091.3 |
| 10 | 836.52 | 44 | ± 2091.3 |
| 20 | 836.52 | -16 | ± 2091.3 |
| 30 | 836.52 | 28 | ± 2091.3 |
| 40 | 836.52 | -47 | ± 2091.3 |
| 50 | 836.52 | 39 | ± 2091.3 |

Frequency Stability under Voltage

| DC Voltage (V) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|----------------|----------------------|----------------|------------|
| 4.200 | 836.52 | 44 | ± 2091.3 |
| 3.650 | 836.52 | 26 | ± 2091.3 |
| 3.400 | 836.52 | -34 | ± 2091.3 |



| | | | |
|--------------|--|-----------|-------|
| Product | ifylytek translating machine | | |
| Test Item | Frequency Stability Under Temperature & Voltage Variations | | |
| Test Mode | Mode 2: CDMA 2000 1XEVD0 Rel-0 BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Frequency Stability under Temperature

| Temperature Interval (°C) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|---------------------------|----------------------|----------------|------------|
| -30 | 836.52 | 33 | ± 2091.3 |
| -20 | 836.52 | -40 | ± 2091.3 |
| -10 | 836.52 | 26 | ± 2091.3 |
| 0 | 836.52 | -23 | ± 2091.3 |
| 10 | 836.52 | 22 | ± 2091.3 |
| 20 | 836.52 | 47 | ± 2091.3 |
| 30 | 836.52 | -72 | ± 2091.3 |
| 40 | 836.52 | 33 | ± 2091.3 |
| 50 | 836.52 | -37 | ± 2091.3 |

Frequency Stability under Voltage

| DC Voltage (V) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|----------------|----------------------|----------------|------------|
| 4.200 | 836.52 | 54 | ± 2091.3 |
| 3.650 | 836.52 | 35 | ± 2091.3 |
| 3.400 | 836.52 | 33 | ± 2091.3 |



| | | | |
|--------------|--|-----------|-------|
| Product | ifylytek translating machine | | |
| Test Item | Frequency Stability Under Temperature & Voltage Variations | | |
| Test Mode | Mode 3: CDMA 2000 1XEVD0 Rel-A BC0 Link | | |
| Date of Test | 2017/06/11 | Test Site | AC102 |

Frequency Stability under Temperature

| Temperature Interval (°C) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|---------------------------|----------------------|----------------|------------|
| -30 | 836.52 | 30 | ± 2091.3 |
| -20 | 836.52 | 21 | ± 2091.3 |
| -10 | 836.52 | 49 | ± 2091.3 |
| 0 | 836.52 | 23 | ± 2091.3 |
| 10 | 836.52 | 22 | ± 2091.3 |
| 20 | 836.52 | 43 | ± 2091.3 |
| 30 | 836.52 | 37 | ± 2091.3 |
| 40 | 836.52 | -13 | ± 2091.3 |
| 50 | 836.52 | -57 | ± 2091.3 |

Frequency Stability under Voltage

| DC Voltage (V) | Test Frequency (MHz) | Deviation (Hz) | Limit (Hz) |
|----------------|----------------------|----------------|------------|
| 4.200 | 836.52 | 57 | ± 2091.3 |
| 3.650 | 836.52 | -53 | ± 2091.3 |
| 3.400 | 836.52 | -42 | ± 2091.3 |

The End