

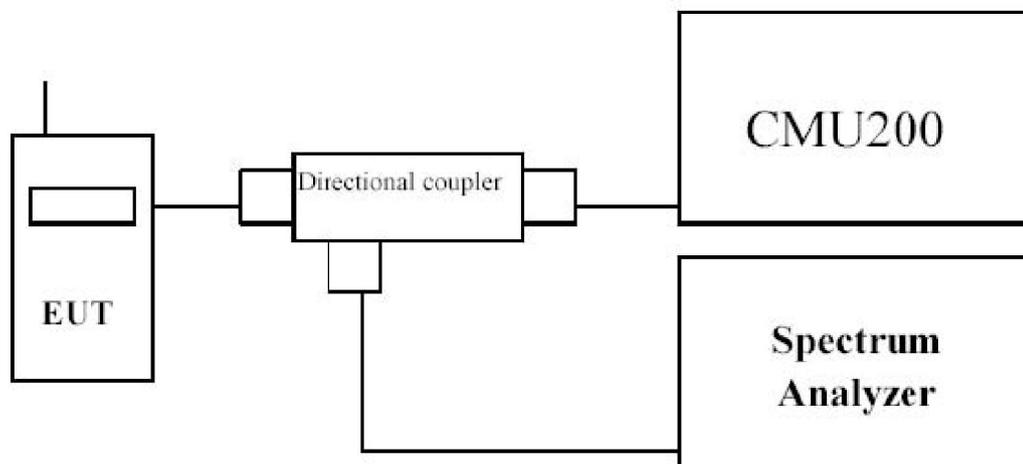
6. Spurious Emission At Antenna Terminals (+/- 1MHz)

6.1. Test Equipment

Spurious Emission At Antenna Terminals (+/- 1MHz) / AC-6

Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2014.03.30
Radio Communication Tester	R&S	CMU 200	117088	2014.03.30
Dual Directional Coupler	Agilent	778D	20160	2014.03.30
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2014.03.30
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC6-TH	2014.01.11

6.2. Test Setup



6.3. Limit

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.

6.4. Test Procedure

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.

6.5. Uncertainty

The measurement uncertainty is defined as ± 1.2 dB.

6.6. Test Result

Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 1: GSM 850 Link		
Date of Test	2013/04/01	Test Site	AC-6

Figure Channel 128 (824.20MHz)

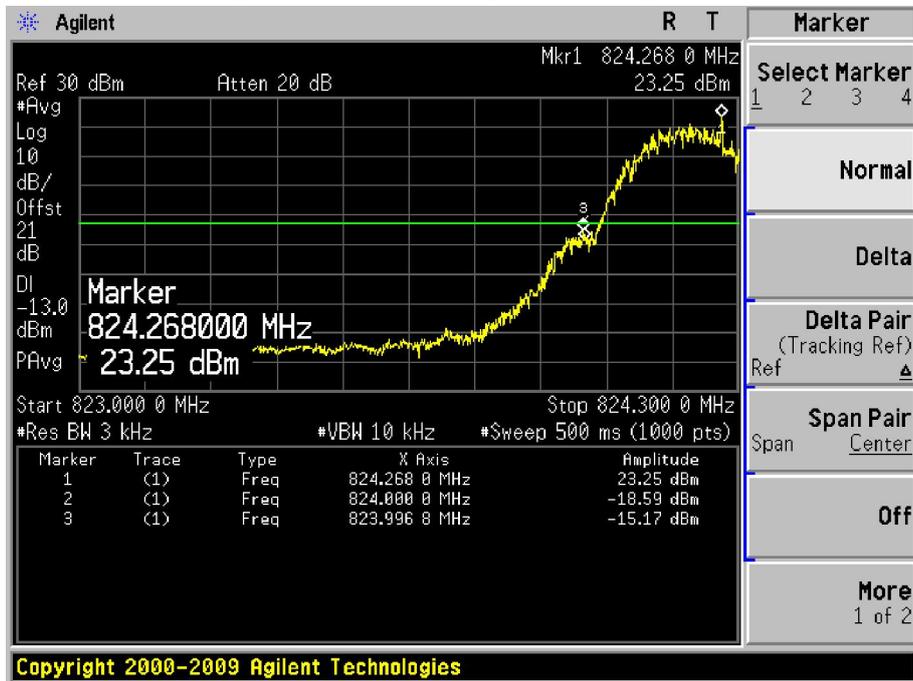
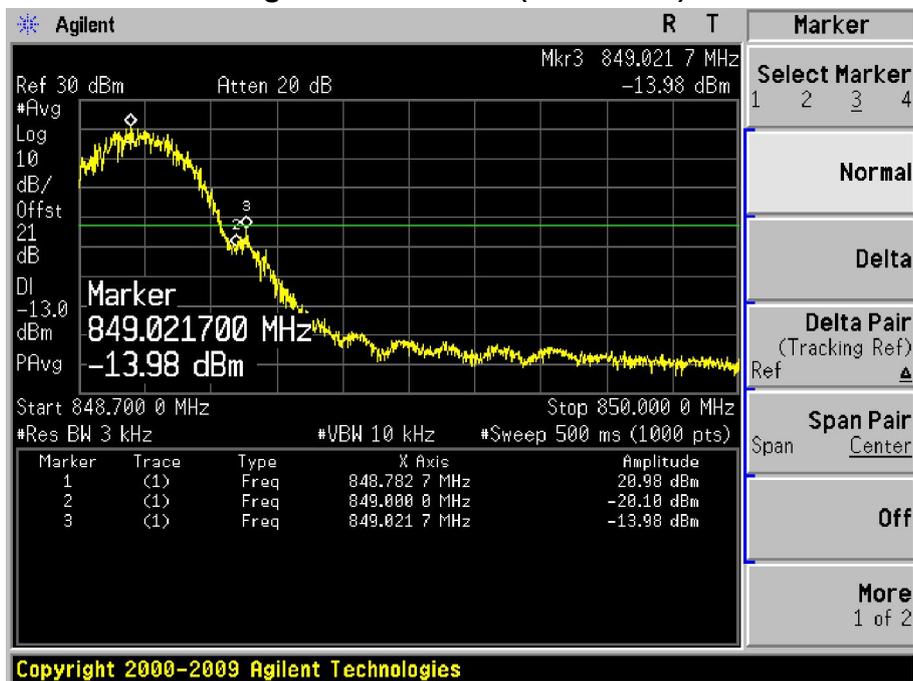


Figure Channel 251 (848.80MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 2: PCS1900 Link		
Date of Test	2013/04/01	Test Site	AC-6

Figure Channel 512 (1850.20MHz)

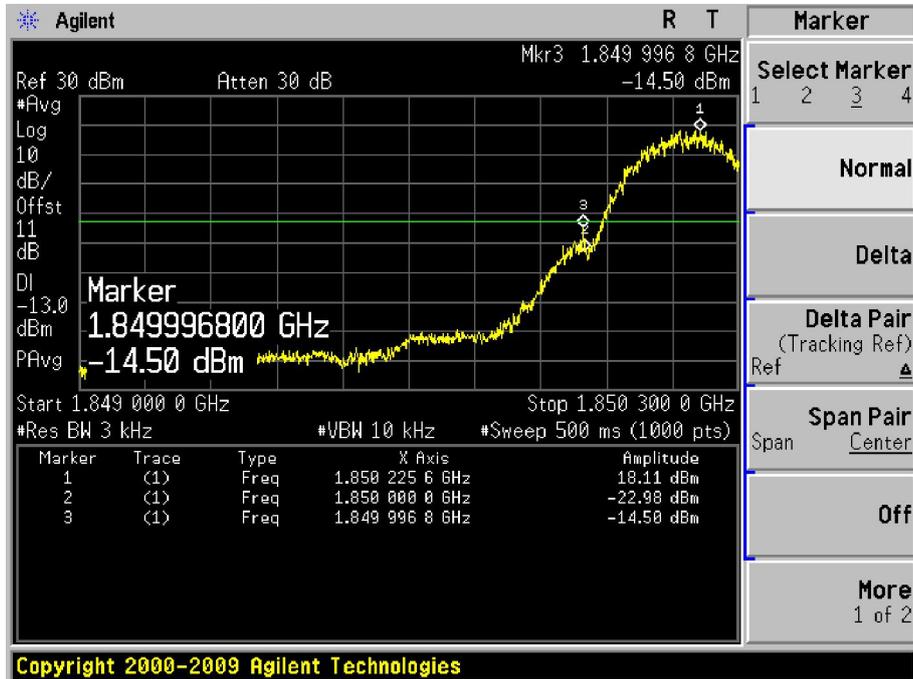


Figure Channel 810 (1909.80MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 3: EDGE 850 Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 128 (824.20MHz)

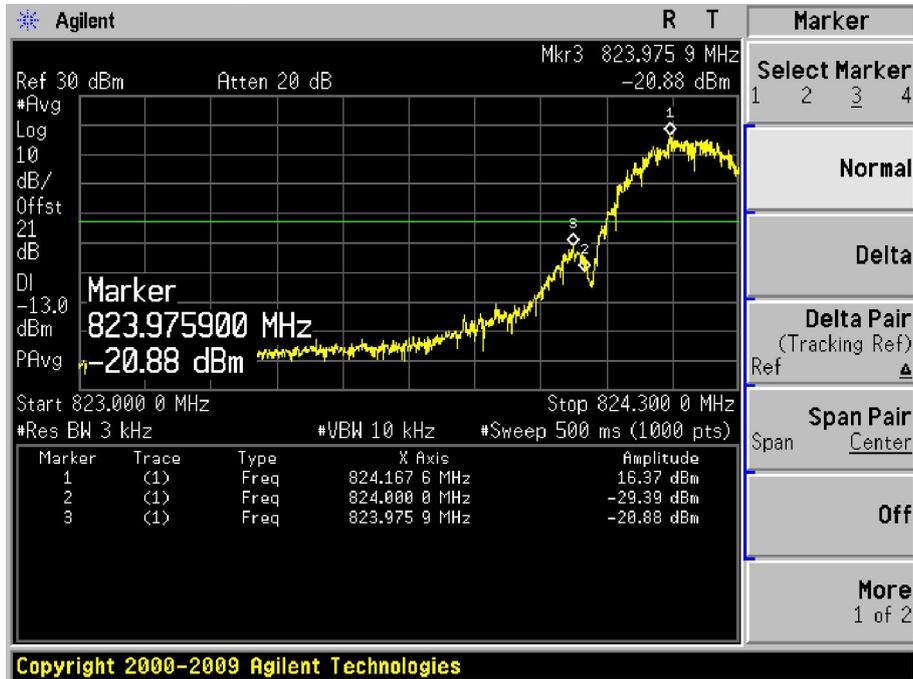
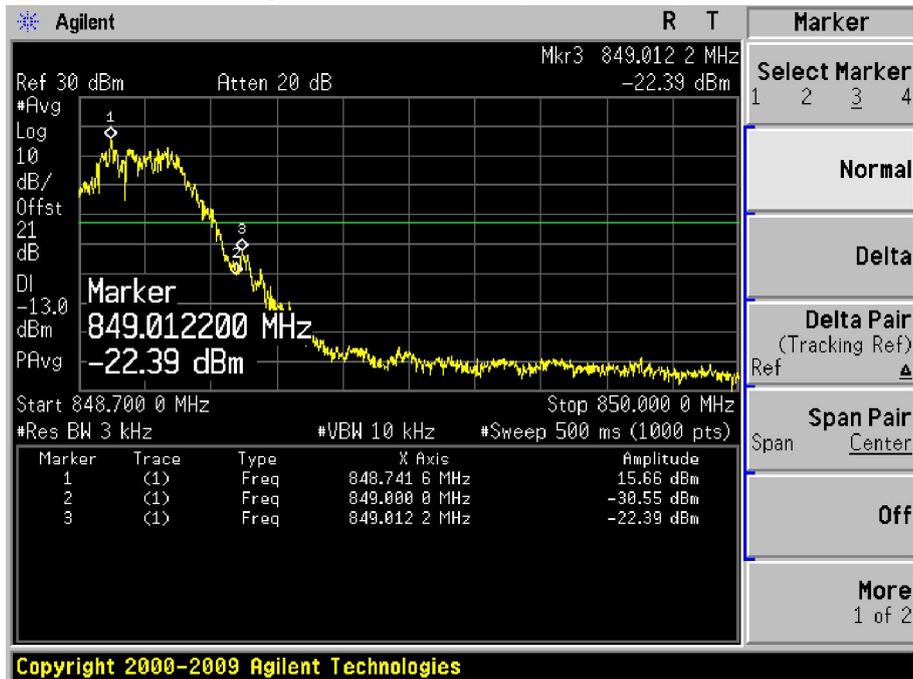


Figure Channel 251 (848.80MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 4: EDGE1900 Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 512 (1850.20MHz)

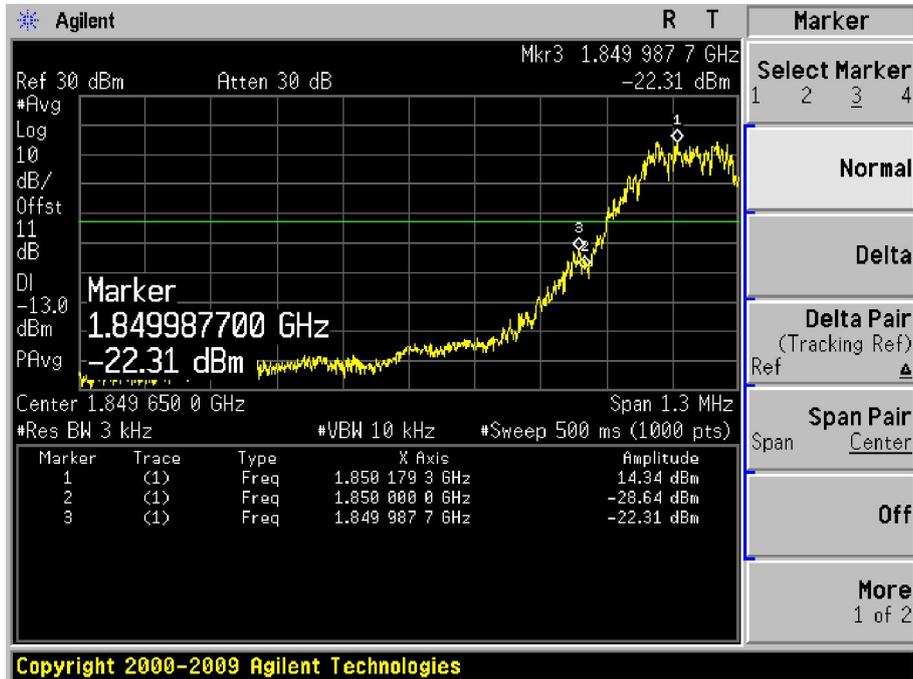


Figure Channel 810 (1909.80MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 5: WCDMA Band II Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 9262 (1852.40MHz)

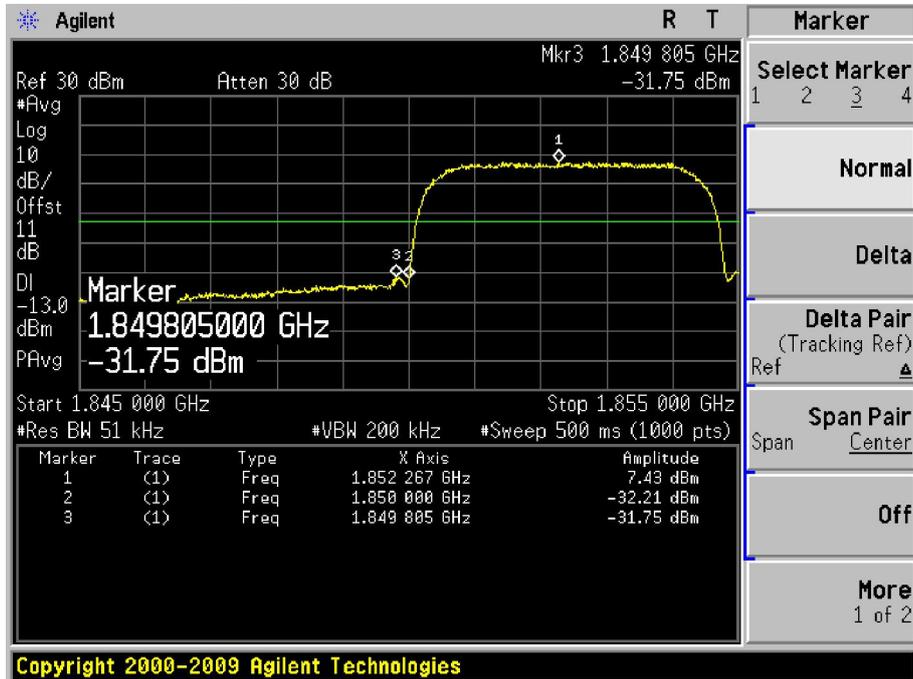
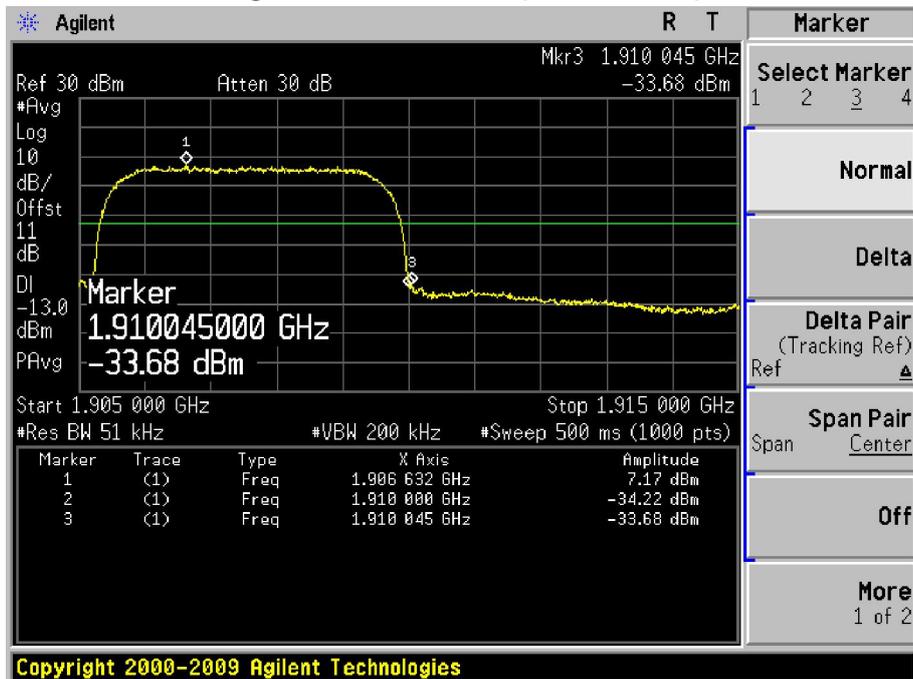


Figure Channel 9538 (1907.60MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 6: WCDMA Band V Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 4132 (826.40MHz)

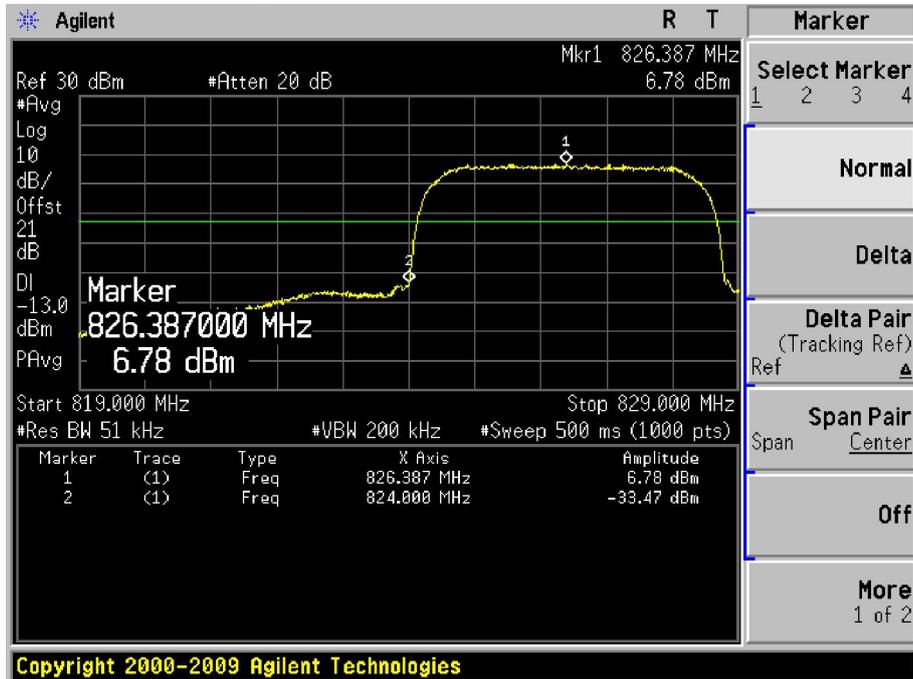
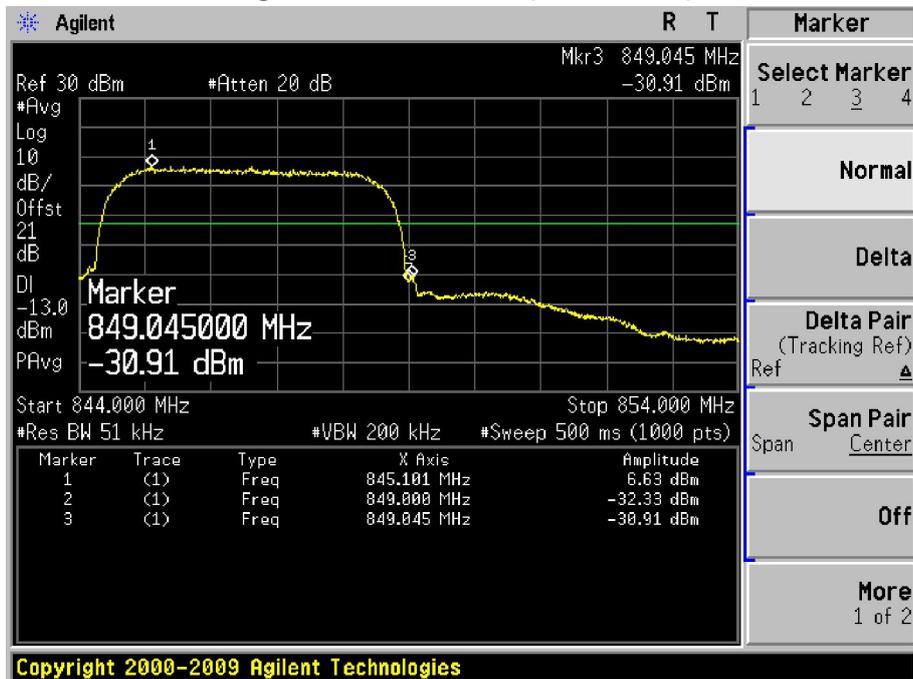


Figure Channel 4233 (846.60MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 7: HSDPA Band II Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 9262 (1852.40MHz)

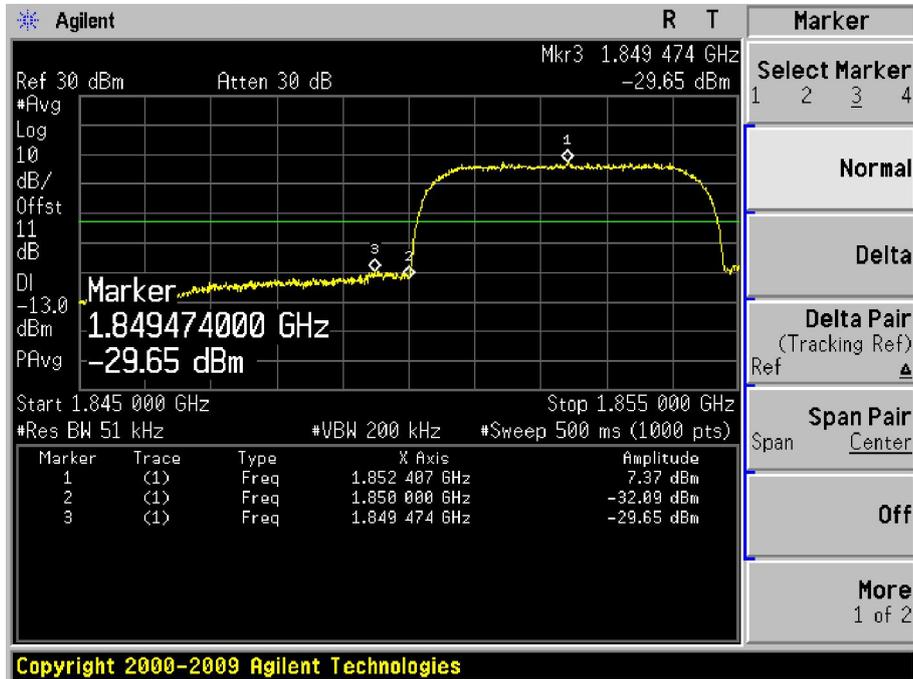
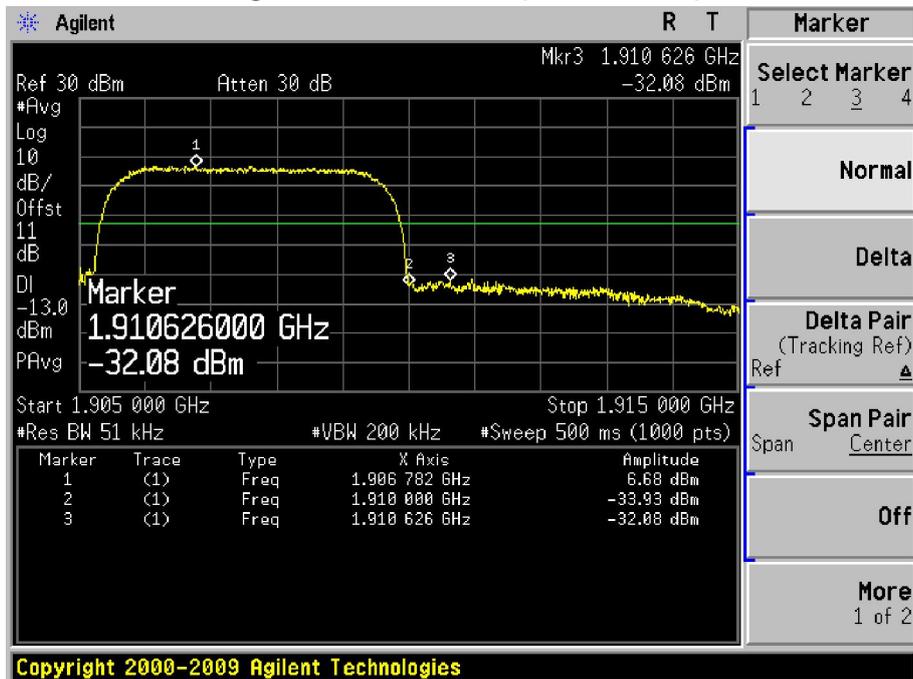


Figure Channel 9538 (1907.60MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 8: HSDPA Band V Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 4132 (826.40MHz)

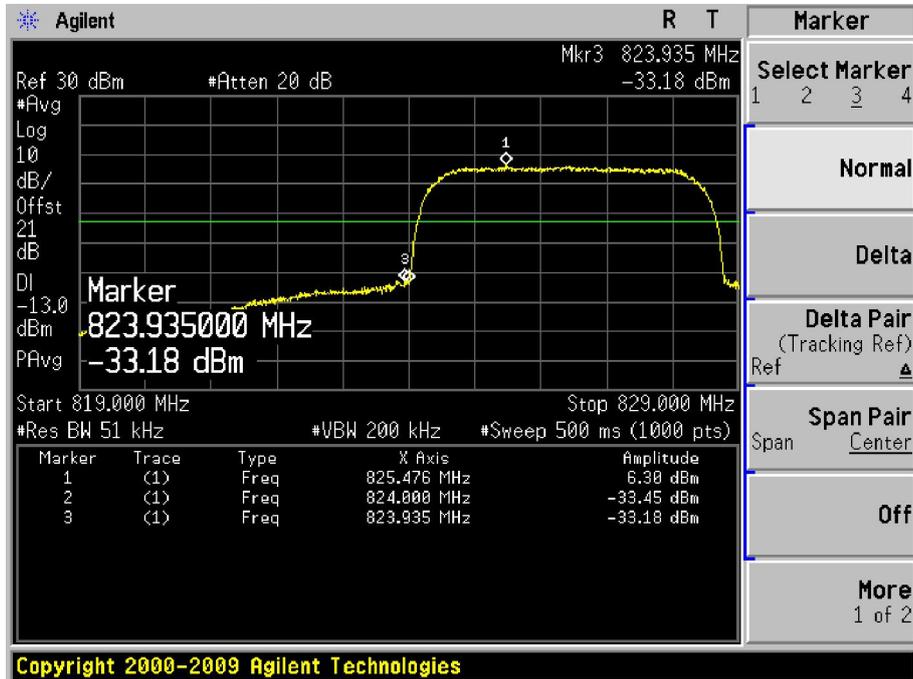
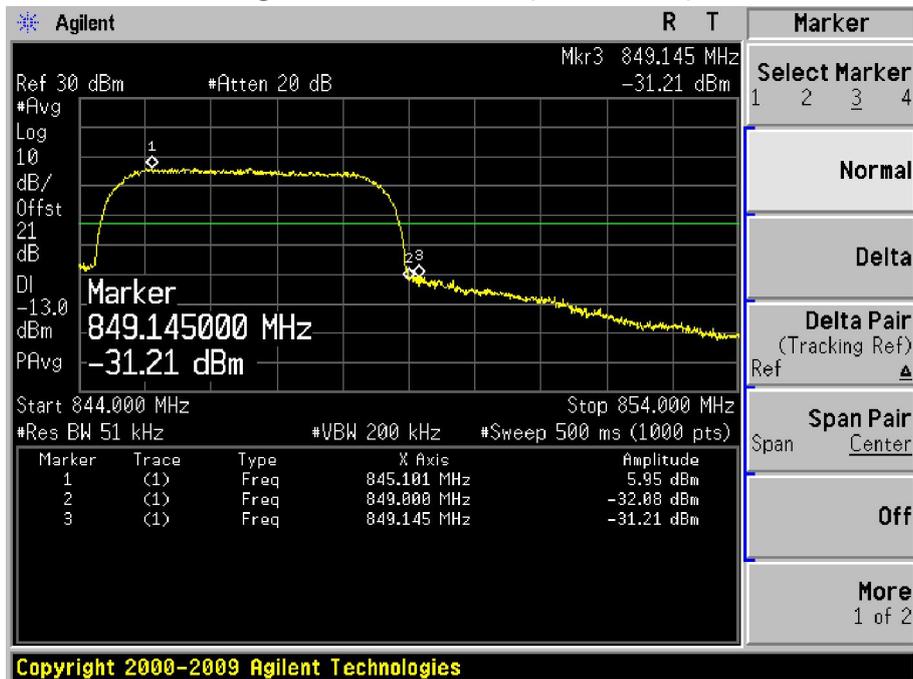


Figure Channel 4233 (846.60MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 9: HSPA Band II Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 9262 (1852.40MHz)

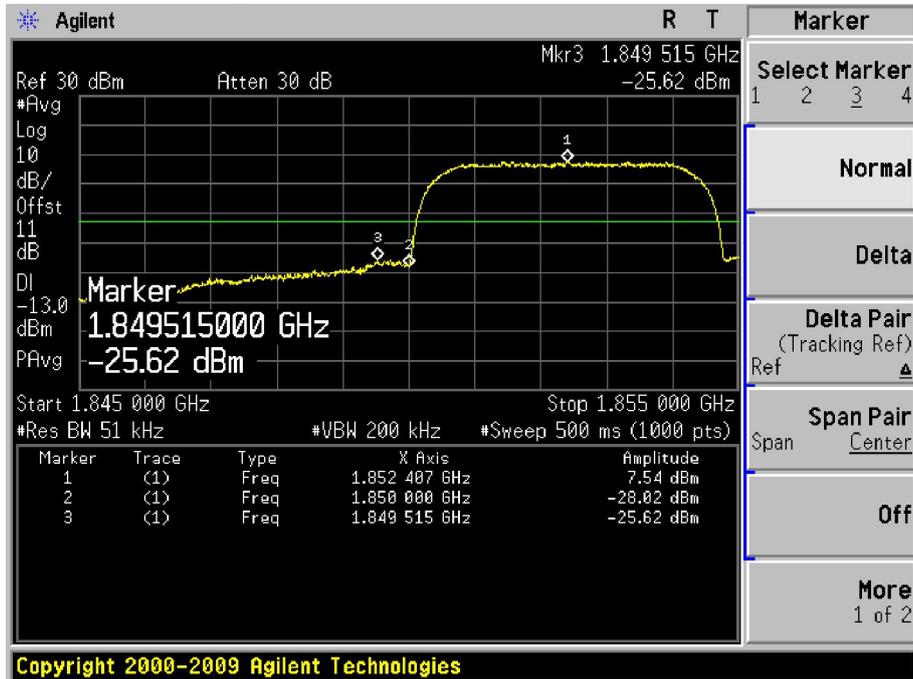
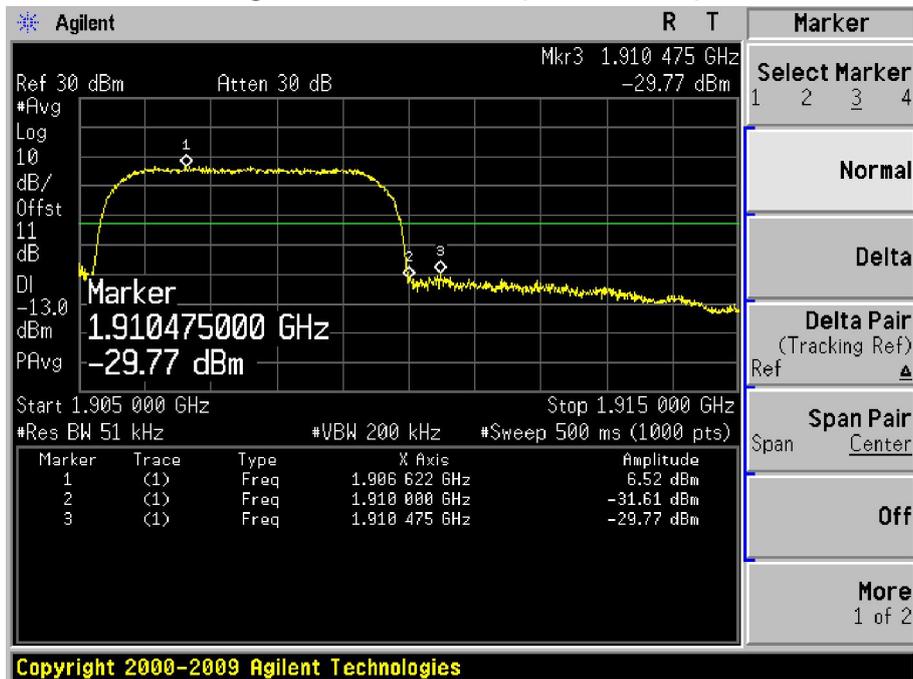


Figure Channel 9538 (1907.60MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 10: HSUPA Band V Link		
Date of Test	2013/04/01	Test Site	AC6

Figure Channel 4132 (826.40MHz)

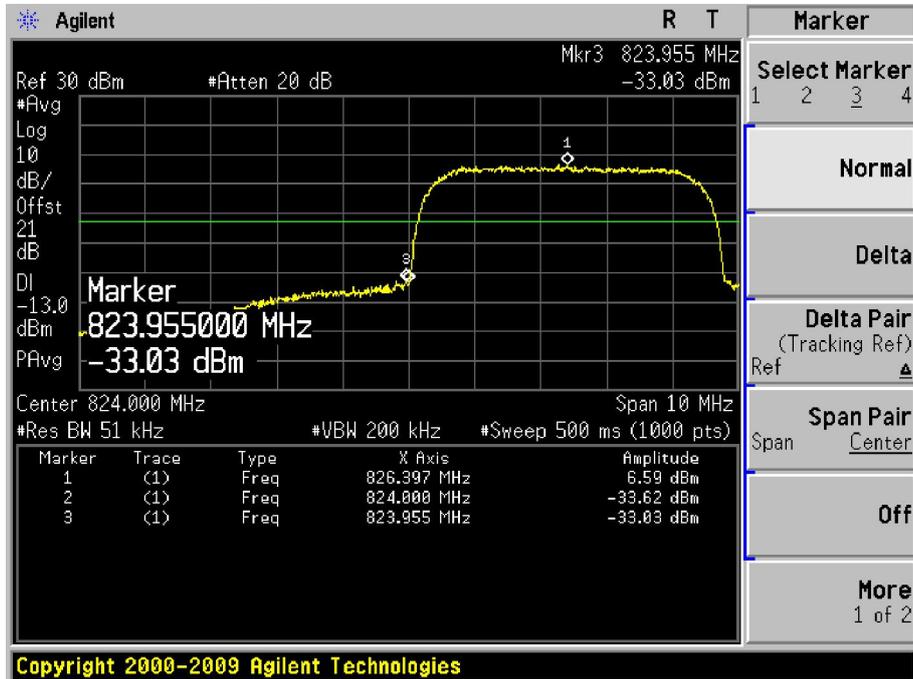
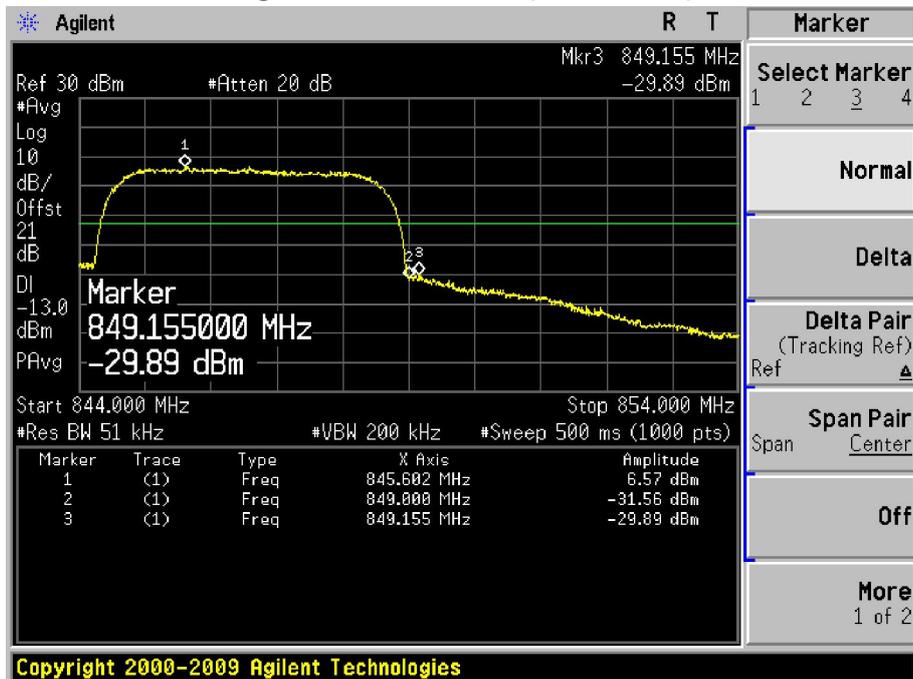


Figure Channel 4233 (846.60MHz)



7. Spurious Emission

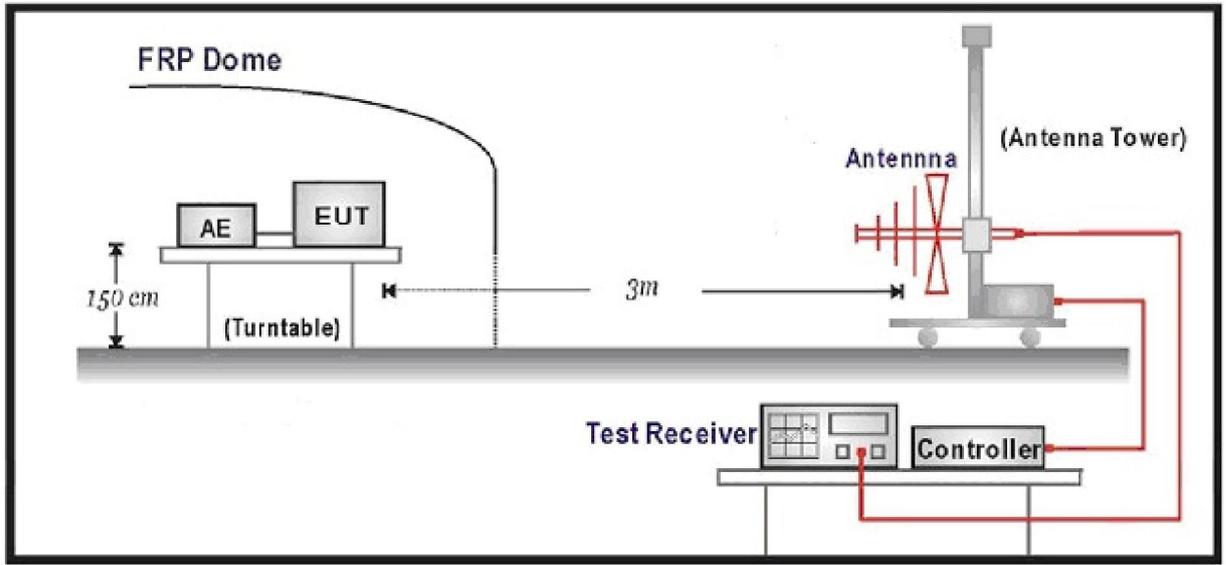
7.1. Test Equipment

Spurious Emission / AC-5

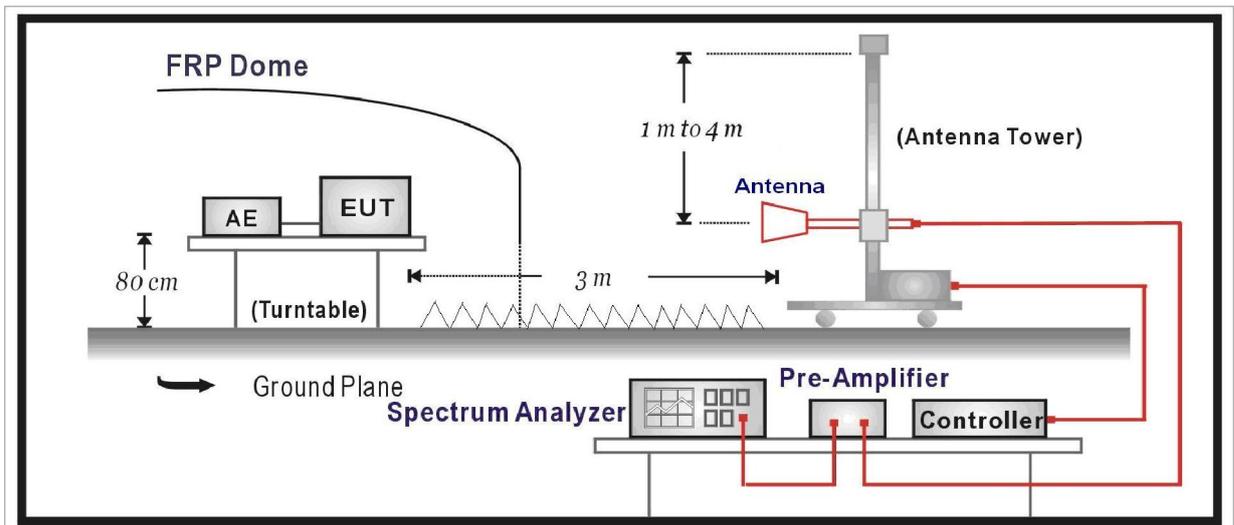
Instrument	Manufacturer	Type No.	Serial No	Cali. Due Date
PSA Series Spectrum Analyzer	Agilent	E4440A	MY49420184	2014.03.30
Radio Communication Tester	R&S	CMU 200	117088	2014.03.30
Dual Directional Coupler	Agilent	778D	20160	2014.03.30
10dB Coaxial Coupler	Agilent	87300C	MY44300299	2014.03.30
PSG Analog Signal Generator	Agilent	E8257D	MY44321116	2014.03.30
Preamplifier	QuieTek	AP-025C	CHM-0503006	2014.04.11
Preamplifier	Miteq	NSP1800-25	1364185	2013.05.04
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2013.10.15
Half Wave Tuned Dipole Antenna	COM-POWER	AD-100	40137	2013.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	737	2013.11.24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2014.06.08
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2014.01.11

7.2. Test Setup

Radiated Spurious Measurement: below 1GHz



Radiated Spurious Measurement: above 1GHz



7.3. Limit

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.

7.4. Test Procedure

Conducted Spurious Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
- c) EUT Communicate with CMU200, then select a channel for testing.
- d) Add a correction factor to the display of spectrum, and then test.
- e) 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:

- a) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
- b) 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.
- v) The maximum signal level detected by the measuring receiver shall be noted.
- h) The transmitter shall be replaced by a substitution antenna.
- i) 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.
- j) The substitution antenna shall be connected to a calibrated signal generator.
- k) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- l) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
- m) 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.
- n) The measurement shall be repeated with the test antenna and the substitution antenna

orientated for horizontal polarization.

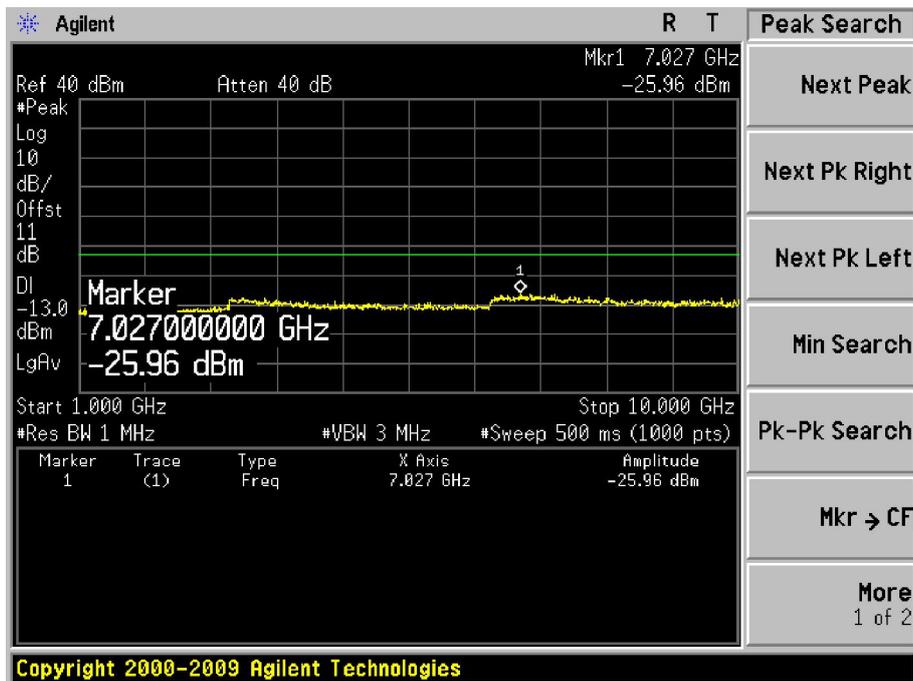
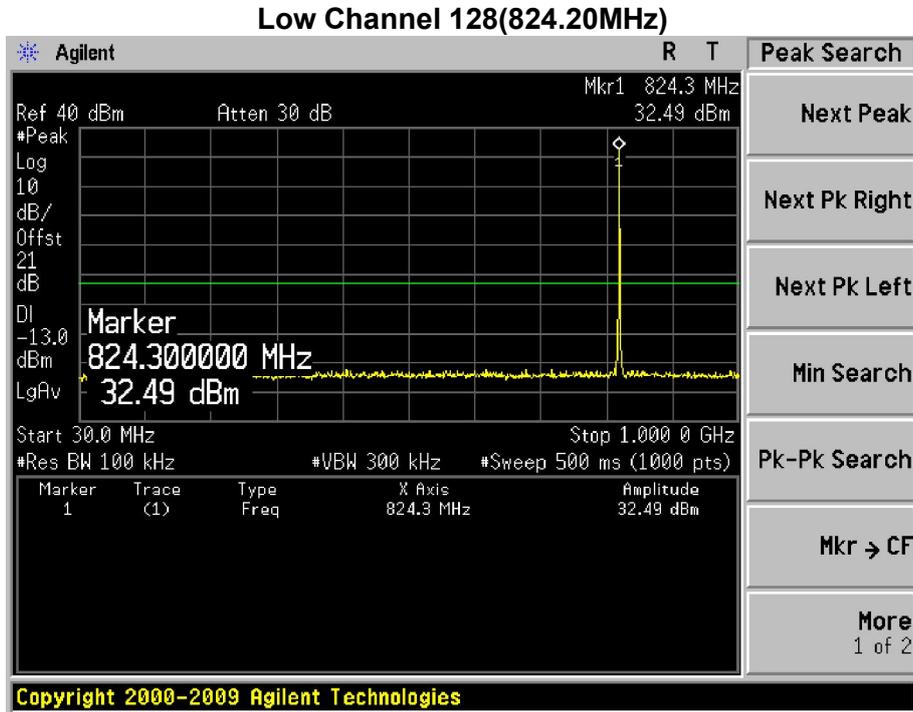
- o) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
- p) The frequency range was checked up to 10th harmonic.
- q) Test site anechoic chamber refer to ANSI C63.4: 2009

7.5. Uncertainty

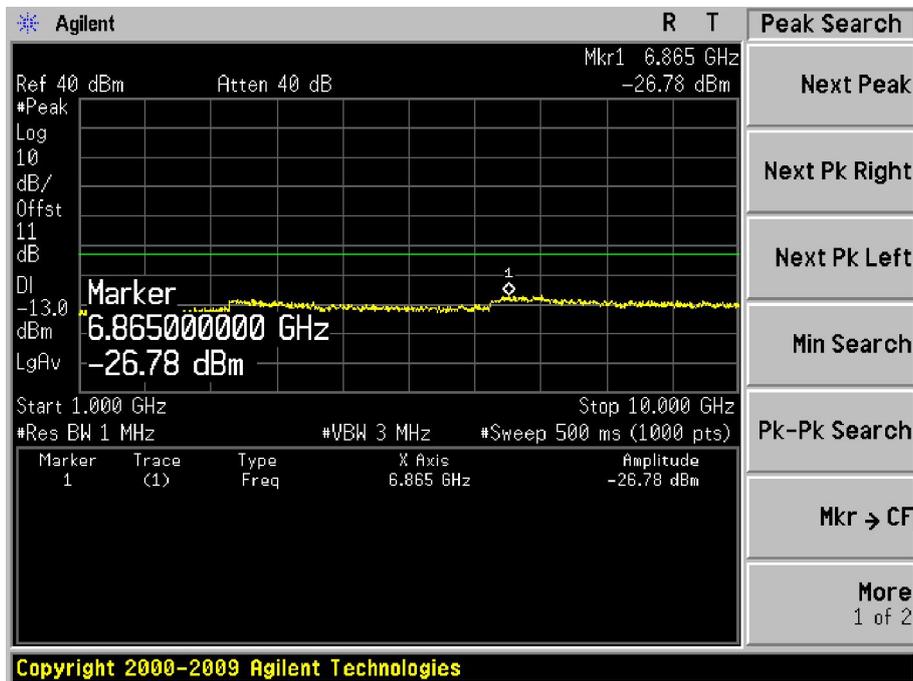
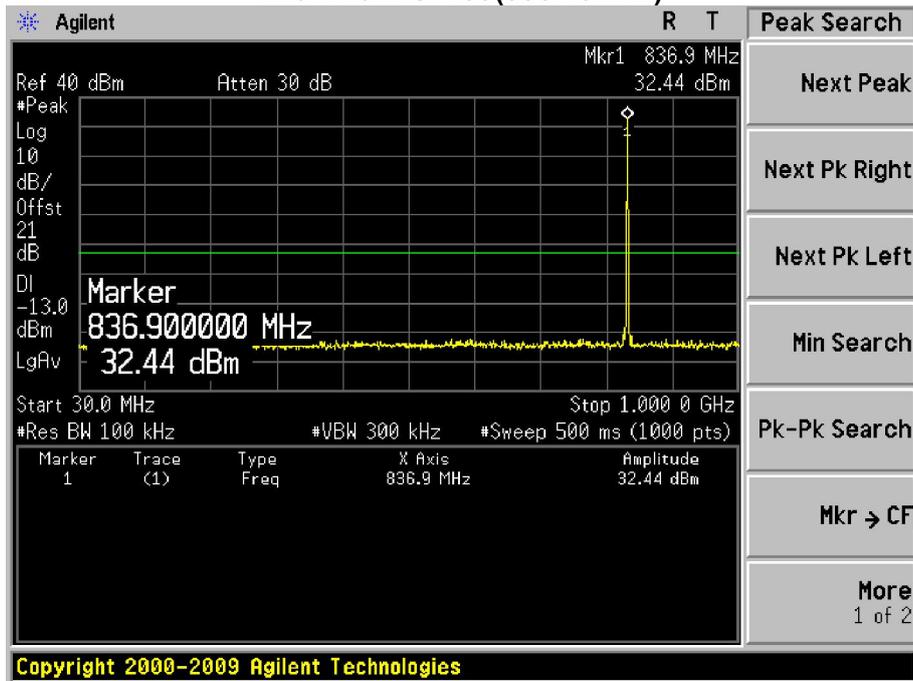
The measurement uncertainty is defined as 3.2 dB for Radiated Power Measurement.

7.6. Test Result

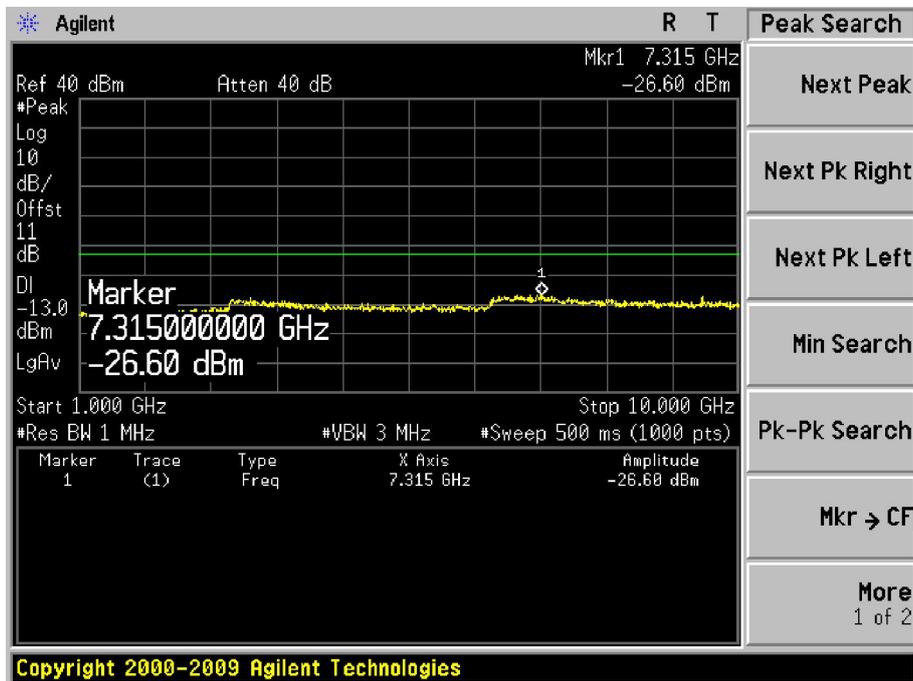
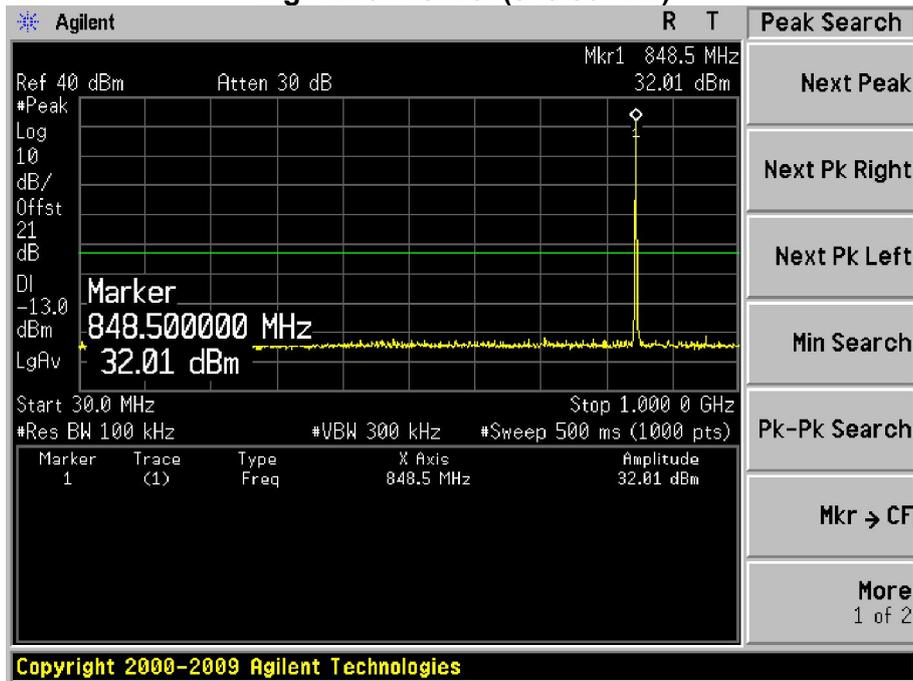
Product	WCDMA Digital Mobile Phone		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 1: GSM 850 Link		
Date of Test	2013/04/01	Test Site	TR-8



Mid Channel 189(836.40MHz)

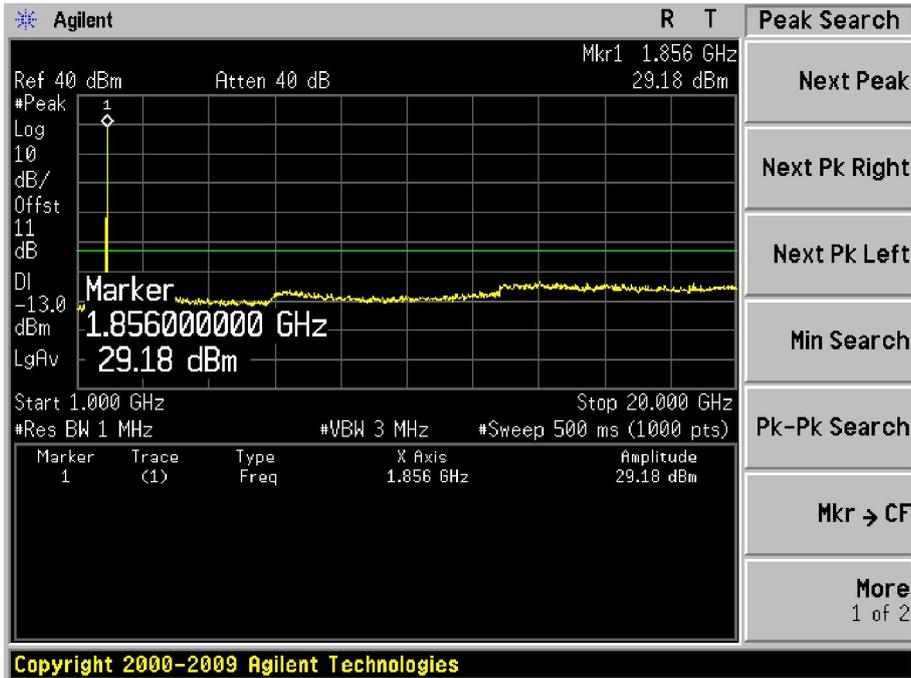
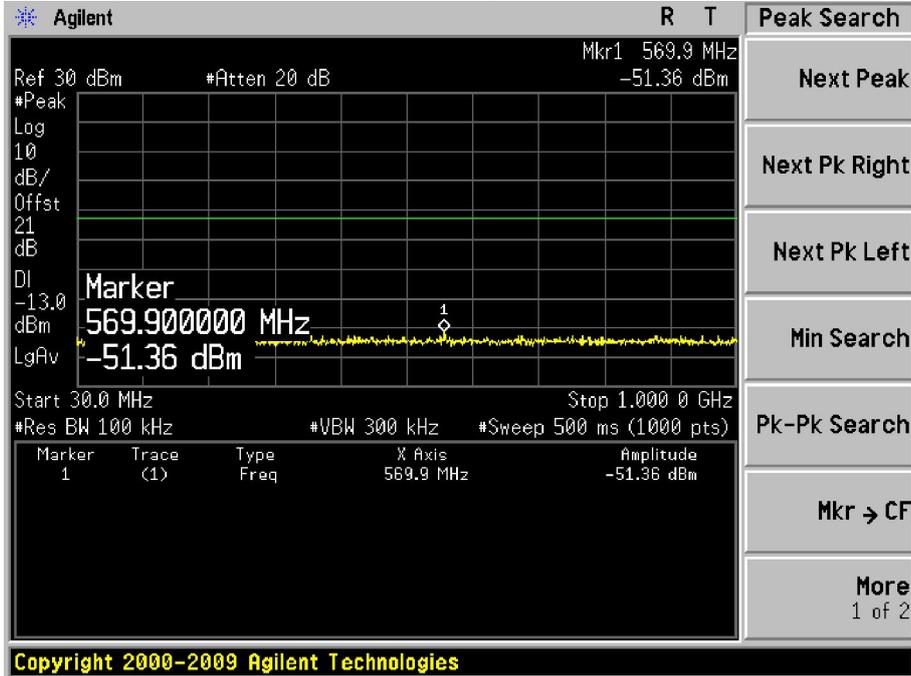


High Channel 251(848.80MHz)

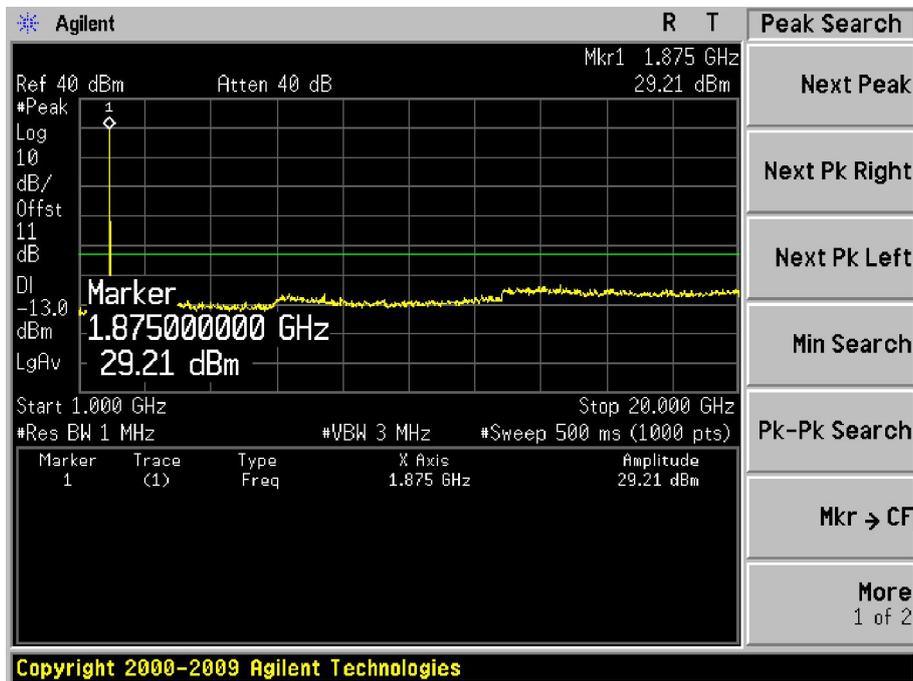
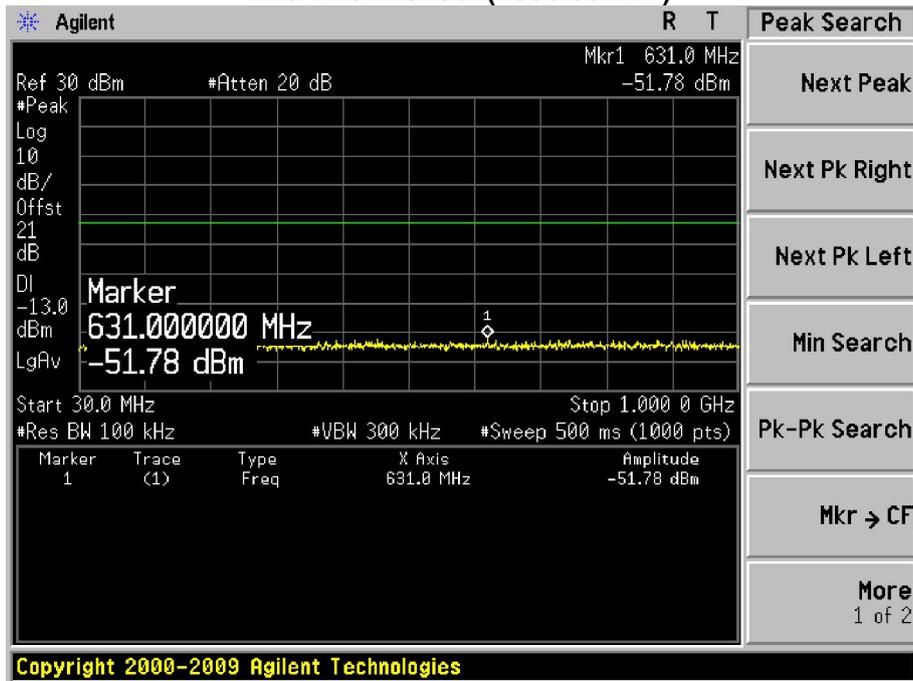


Product	WCDMA Digital Mobile Phone		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 2: PCS 1900 Link		
Date of Test	2013/04/01	Test Site	TR-8

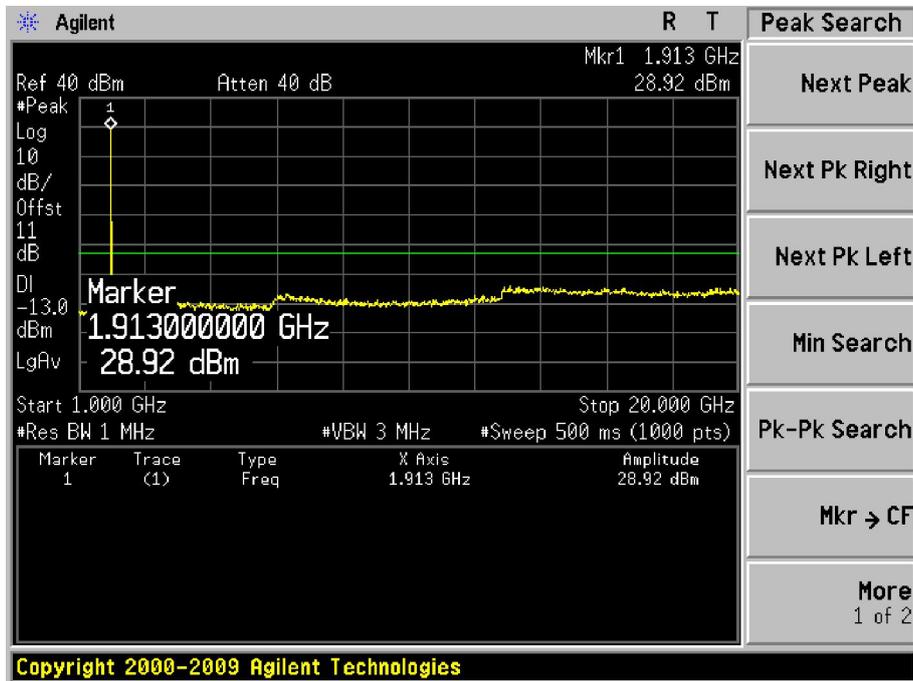
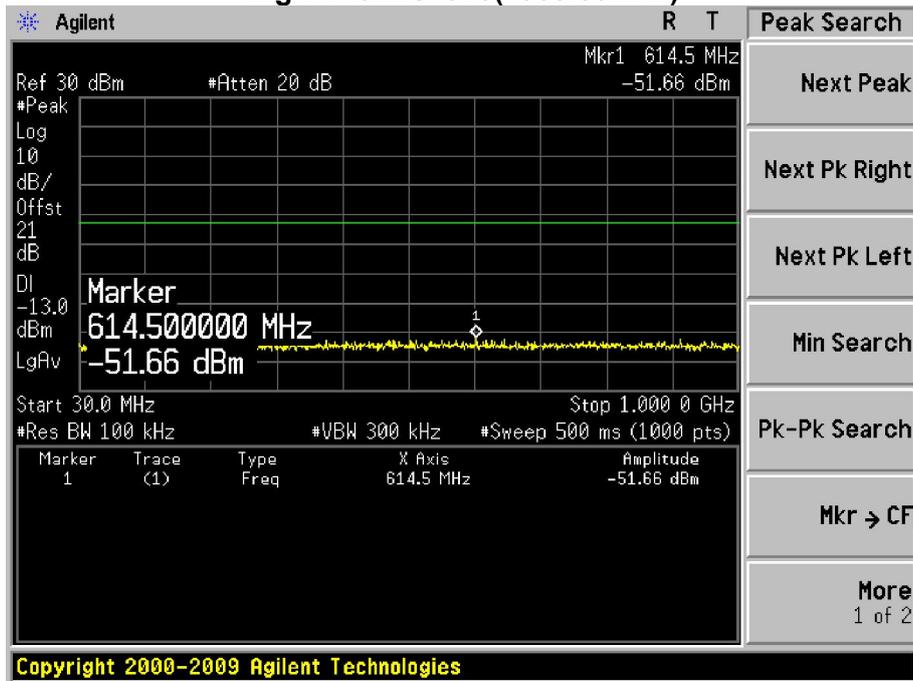
Low Channel 512(1850.20MHz)



Mid Channel 661(1880.00MHz)

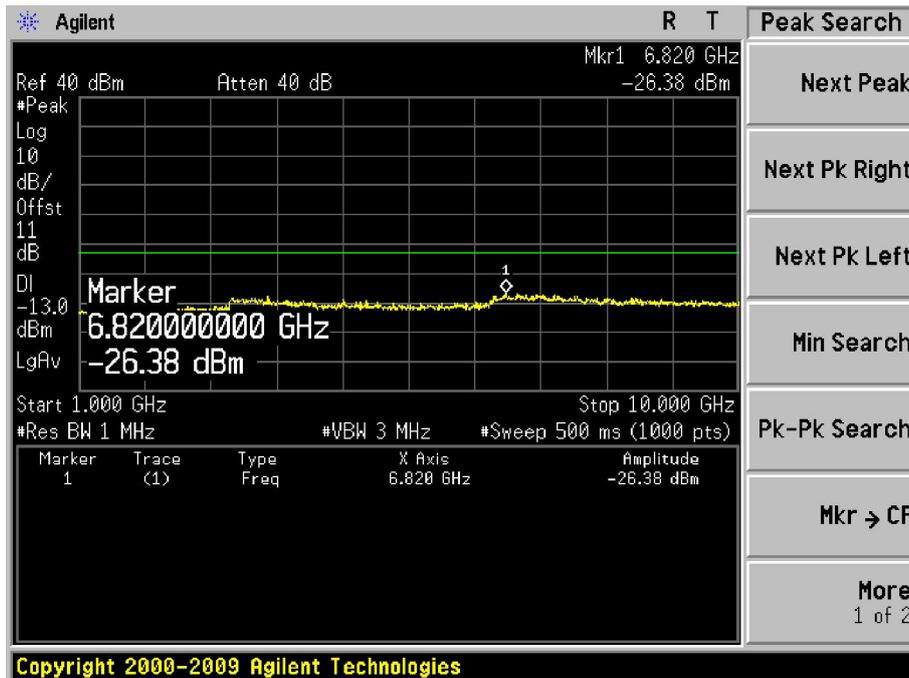
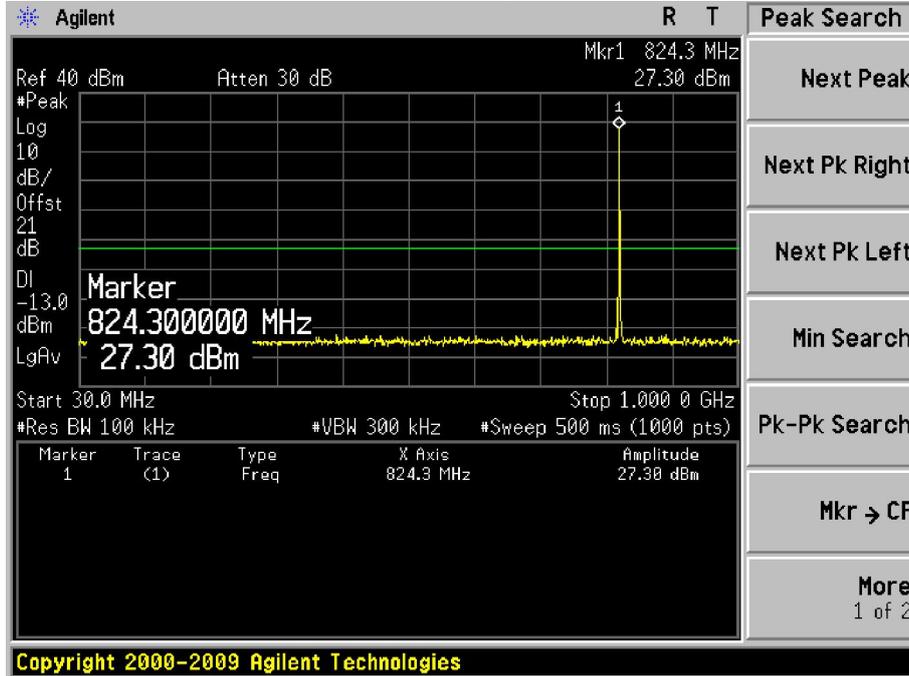


High Channel 810(1909.80MHz)

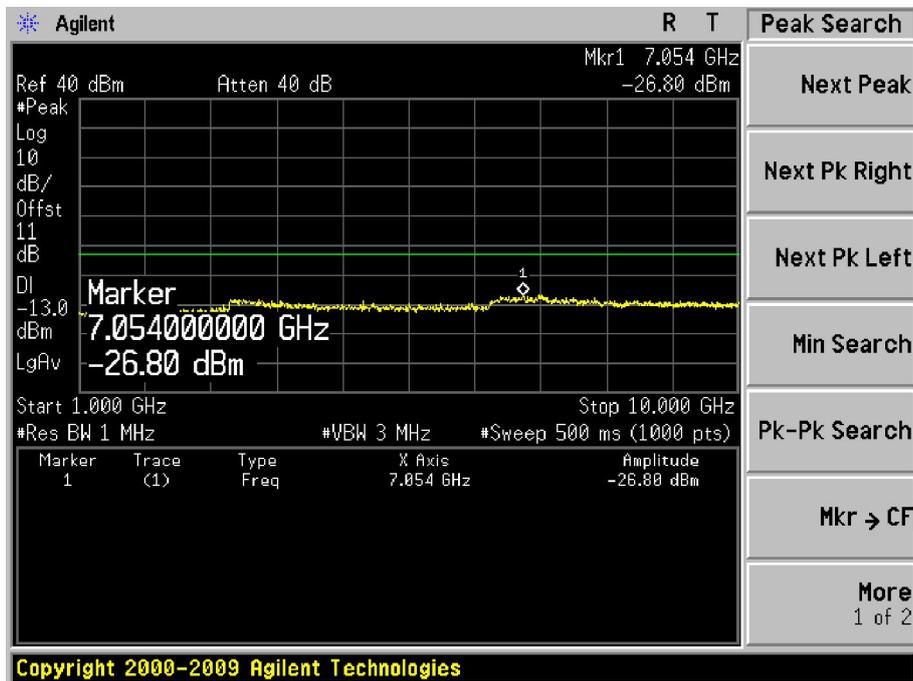
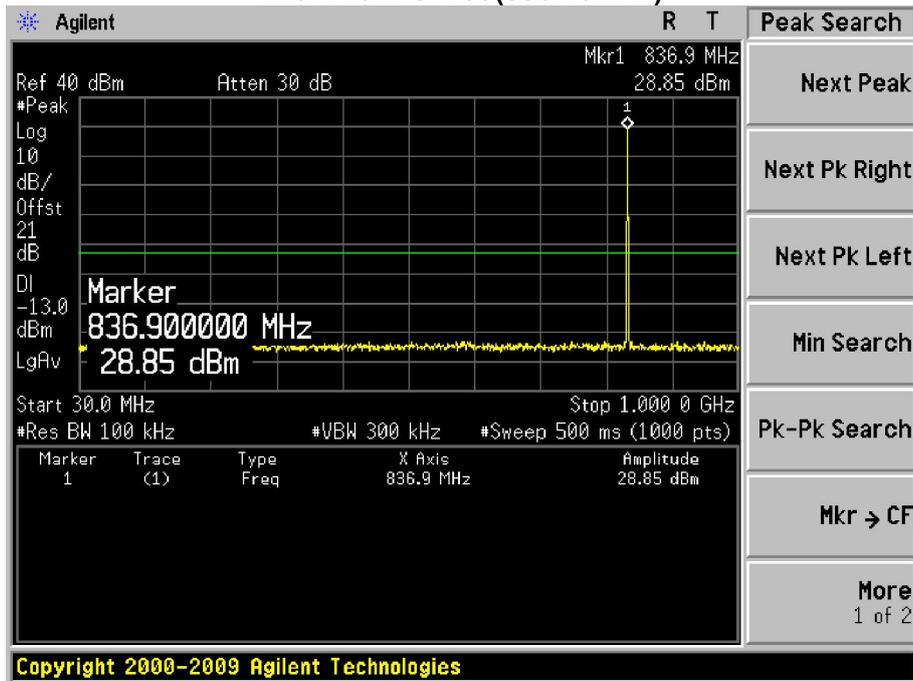


Product	WCDMA Digital Mobile Phone		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 3: EDGE 850 Link		
Date of Test	2013/04/01	Test Site	TR8

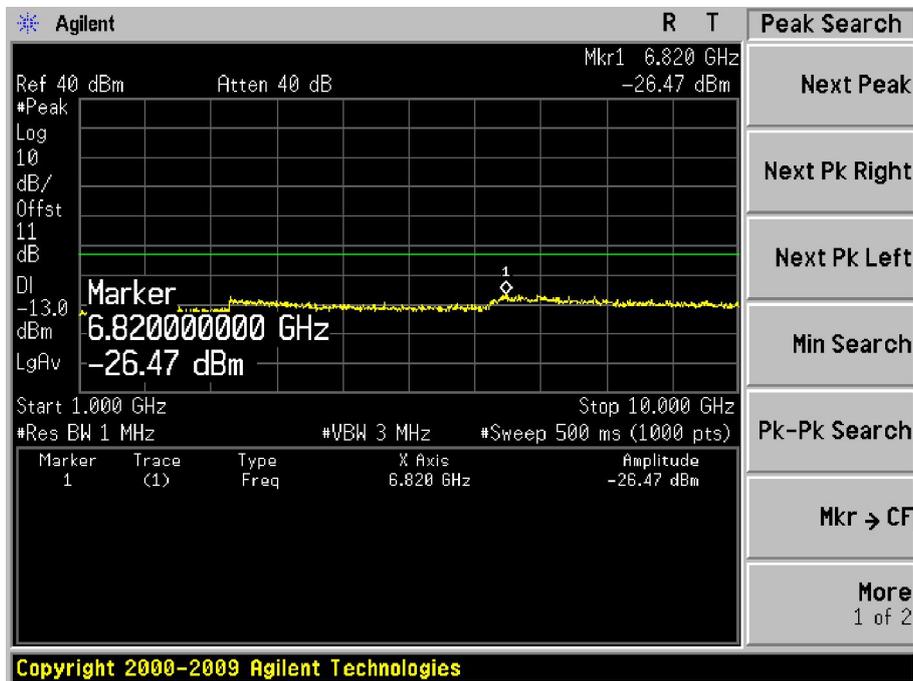
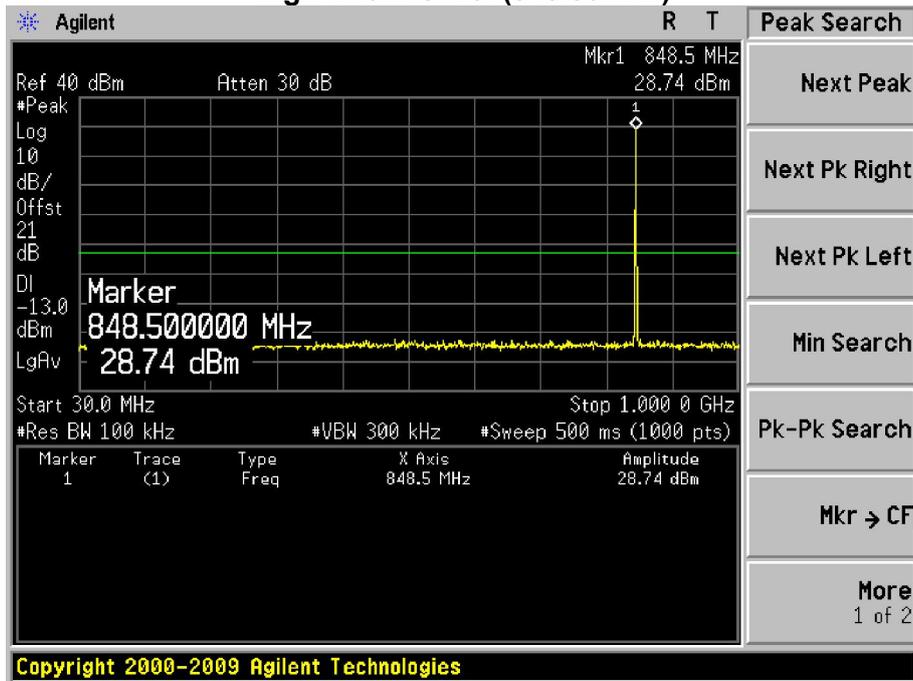
Low Channel 128(824.20MHz)



Mid Channel 189(836.40MHz)

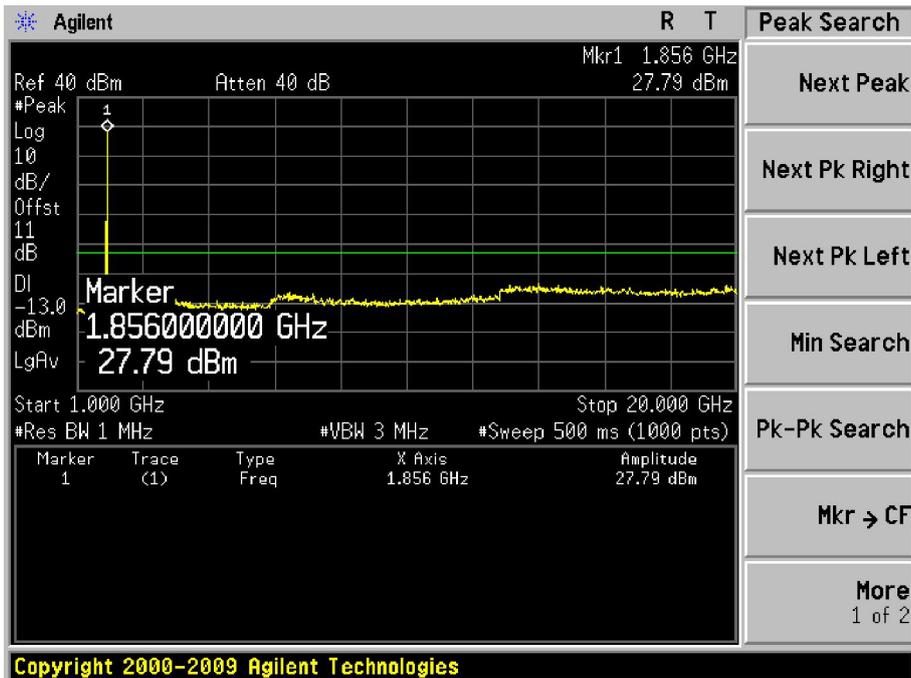
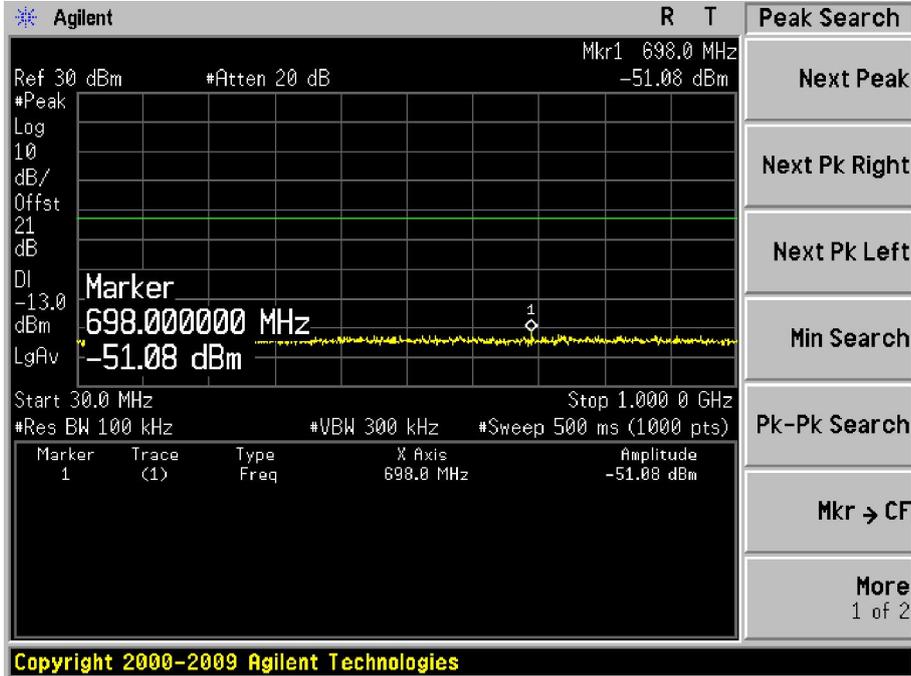


High Channel 251(848.80MHz)

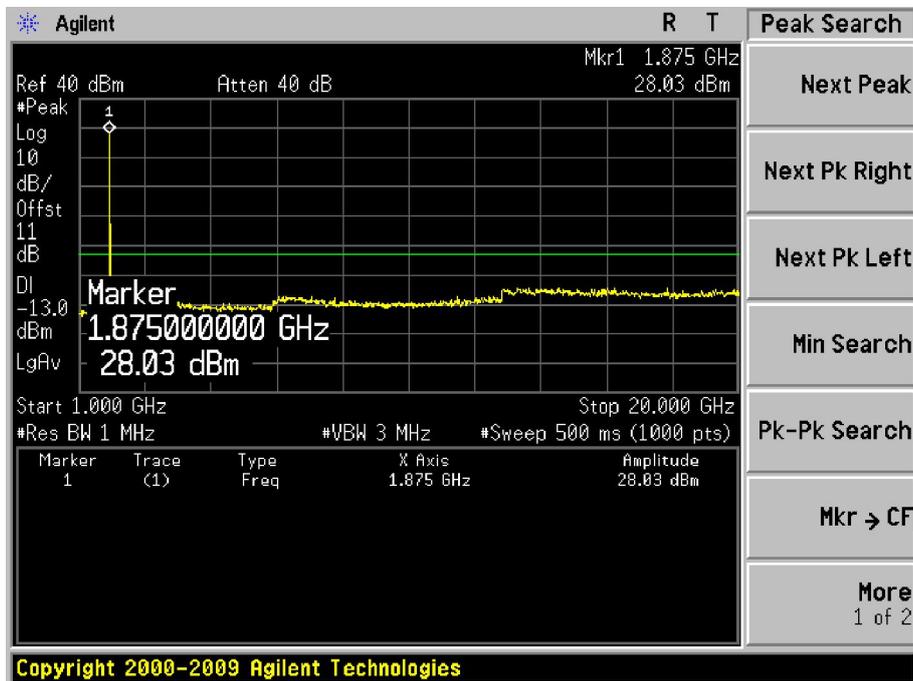
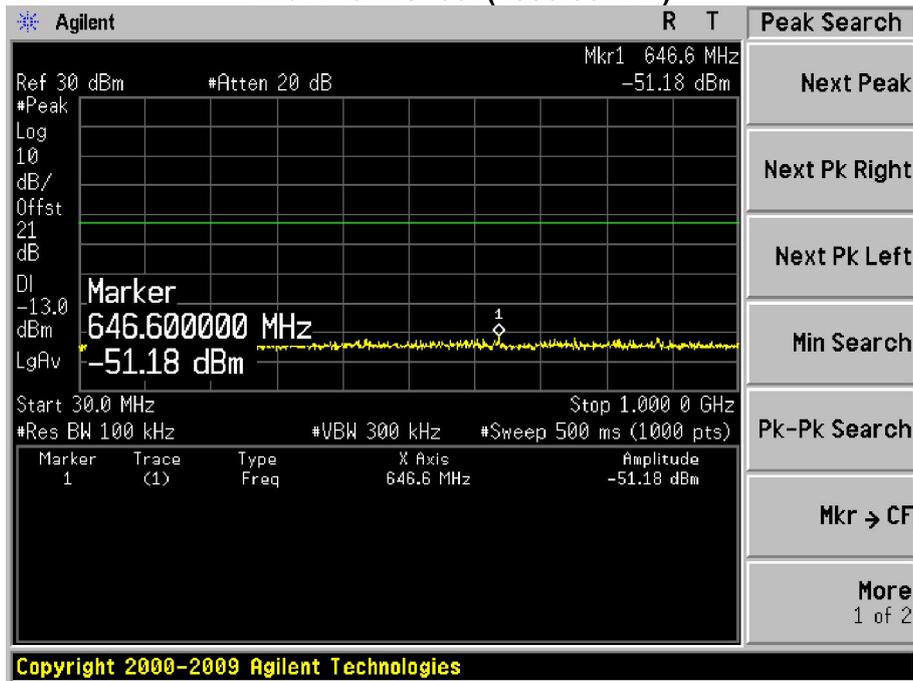


Product	WCDMA Digital Mobile Phone		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 4: EDGE1900 Link		
Date of Test	2013/04/01	Test Site	TR8

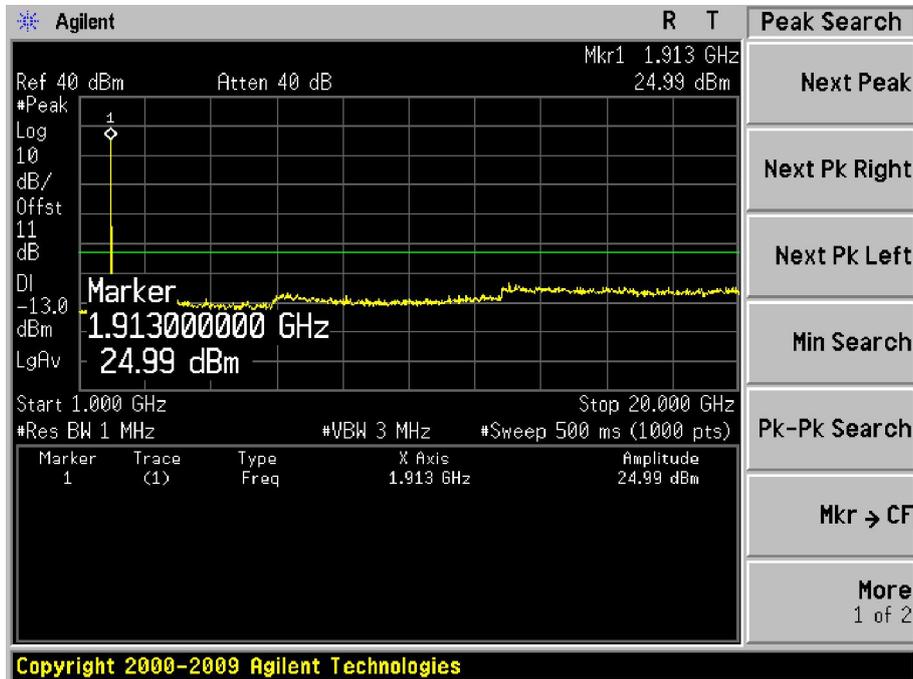
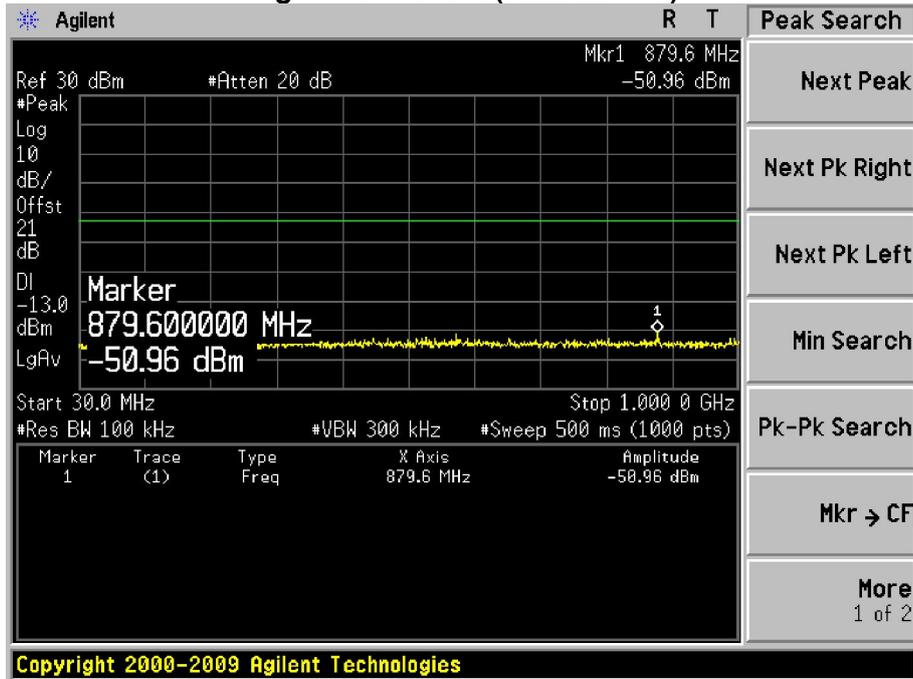
Low Channel 512(1850.20MHz)



Mid Channel 661(1880.00MHz)



High Channel 810(1909.80MHz)



Product	WCDMA Digital Mobile Phone		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 5: WCDMA Band II Link		
Date of Test	2013/04/01	Test Site	TR8

Low Channel 9262(1852.40MHz)

