FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

Confidant Hawaii, LLC.

GSM/SERIALConverter

Model No.: Confidant 3.0

FCC ID: ZOHCONFIDANT30

Prepared for : Confidant Hawaii, LLC.
820 Mililani Street, Suite 600, Honolulu, Hawaii, US

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number	:	ACS-F11221
Date of Test	:	Oct.06~08, 2011
Date of Report	:	Oct.10, 2011

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	:	Confidant Hawaii, LLC.
Manufacturer	:	SUN WISE INDUSTRIAL LIMITED
EUT Description	:	GSM/SERIALConverter
FCC ID	:	ZOHCONFIDANT30

(A) MODEL NO. : Confidant 3.0
(B) SERIAL NO. : N/A
(C) POWER SUPPLY : DC 5V
(D) TEST VOLTAGE : DC 5V From Adapter Input AC 120V/60Hz

Tested for comply with:
FCC part 2, 22H & 24E

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC part 2, 22H & 24E requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC part 2, 22H & 24E. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Oct.06~08, 2011 Report of date: Oct.10, 2011

Prepared by : Cerry He/ Assistant

Reviewer by : Sunny Lu / Supervisor

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature:

Approved & Authorized Signer : Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

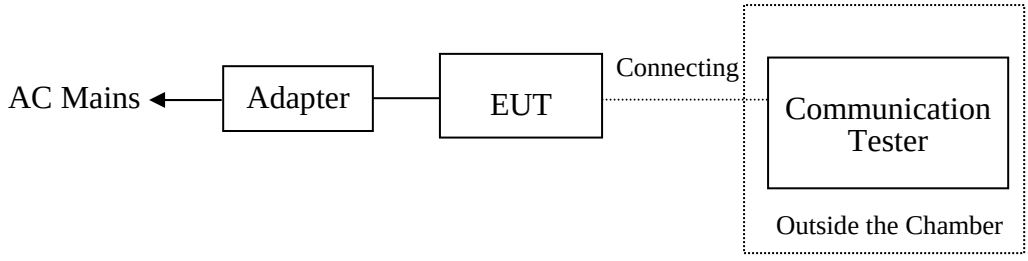
EMISSION		
Description of Test Item	**Standard**	**Results**
Effective Isotropic Radiated Power	2.1046(a) 22.913(a) 24.232(b)	PASS
Out of Band Emissions at antenna Terminals and Band Edge	2.1051 22.917(a) 24.238(a)	PASS
99% Occupied Bandwidth	2.1049(h)	PASS
RF Output Power	2.1046(a) 22.913(a) 24.232(b)	PASS
Field Strength of Spurious Emissions	2.1053 22.917(a) 24.238(a)	PASS
Frequency Stability vs. Temperature and Voltage	2.1055	PASS

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name	:	GSM/SERIALConverter
Model Number	:	Confidant 3.0
FCC ID	:	ZOHCONFIDANT30
Operating Frequency	:	GPRS 850 824.2-848.8MHz GPRS 1900 1850.2-1909.8MHz
Applicant	:	Confidant Hawaii, LLC. 820 Mililani Street, Suite 600, Honolulu, Hawaii, US
Manufacturer	:	SUN WISE INDUSTRIAL LIMITED 1902A, 38 Plaza, 38 Shan Tung Street, Kowloon, Hong Kong
Power Adapter	:	Manufacture: LISTED, M/N: YMK-6W0900300B Unshielded, Detachable,1.5m
Date of Test	:	Oct.06~08, 2011
Date of Receipt	:	Oct.06, 2011
Sample Type	:	Prototype production
Note	:	The GSM part was disabled for this device

2.2.Block diagram of connection between the EUT and simulators



(EUT: GSM/SERIALConverter)

2.3. Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Mar.31, 2012
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Dec.30, 2012
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: Jul. 02, 2011
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-01 Valid Date: Feb.01, 2014
		Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2012

2.4.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. EFFECTIVE ISOTROPIC RADIATED POWER

3.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Signal Generator	HP	83732B	VS34490501	May.08, 11	1 Year
3.	Power meter	Anritsu	ML2487A	6K00002472	May.08, 11	1Year
4.	Power sensor	Anritsu	MA2491A	0033005	May.08, 11	1Year
5.	Attenuator(10dB)	Agilent	8491A	MY39264375	May.08, 11	1 Year
6.	Attenuator(20dB)	Agilent	8491B	MY39262165	May.08, 11	1 Year
7.	Attenuator (0dB-110dB)	Agilent	8496A	MY42143100	May.08, 11	1 Year
8.	Universal Radio Communication Tester	R&S	CUM200	1100.008K02	May.08, 11	1 Year
9.	Network Analyzer	Agilent	E5071B	MY42403549	May.08, 11	1 Year
10.	Bluetooth Test set	Anritsu	MT8852B	6K00005966	May.08, 11	1 Year
11.	Wireless Communication Test set	Agilent	E5515C	GB44300243	May.09, 11	1 Year
12.	DC Power supply	King	DPS-1303D	821956	N/A	N/A
13.	PREAmplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
14.	PREAmplifier	Agilent	8447D	2944A11159	May.08, 11	1Year
15.	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 10	1.5 Year
16.	Horn Antenna	EMCO	3115	9607-4877	Nov. 25, 10	1.5 Year
17.	Bilog Antenna	Schaffner	CBL6111C	2768	Dec.14, 10	1 Year
18.	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
19.	Power divider	Mini-Circuits	ZA3PD-4-S+	347100912	N/A	N/A
20.	Power divider	Mini-Circuits	ZA4PD-4-S+	544000937	N/A	N/A
21.	Antenna and turn table controller	CT	SC100	CT-0091	N/A	N/A
22.	Temperature controller	Terchy	MHQ	120	May.08, 11	1Year
23.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 11	1 Year
24.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
25.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year
26.	RF Cable	Hubersuhner	SUCOFLEX102	NO.1	May.08,11	1 Year
27.	Horn Antenna	EMCO	3116	00060089	Nov.25, 10	1.5 Year
28.	Horn Antenna	EMCO	3116	00060088	Nov.25, 10	1.5 Year

3.1.Limit

22.913(a) Mobile station are limited to 7W ERP.
Part 24.232(b) Mobile station are Limited to 2W EIRP.

3.2.Test Procedure:

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength(E in dBuV/m) was calculated.

ERP in frequency band 824.2-848.8MHz were measured using substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follow:

EIRP in frequency band 1850.2-1909.8MHz were measured using a substitution method. The EUT was replaced by a horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

ERP=S.G. output (dBm) + Antenna Gain (dBd) - Cable Loss(dB)

EIRP= S.G. output (dBm) + Antenna Gain (dBi) - Cable Loss(dB)

The field strength(E in dBuv/m) was calculated as below:

3m field strength (E in dBuv/m)=SPA Reading(dBuv)+Receive Antenna Factor(dB/m)+ Receive Cable Loss(dB)

3.3.Test Results

EUT: GSM/SERIALConverter		
M/N: Confidant 3.0		
Test date:2011-10-06	Pressure: 101.5kpa	Humidity: 53.7 %
Tested by:Leo-Li	Test site: RF site	Temperature: 24.8℃

GPRS 850

Test Result：

The RBW,VBW of SPA for frequency

Below 1GHz was RBW=300KHz,VBW=1MHz;

Above 1GHz was RBW=1MHz,VBW=3MHz;

EUT Mode	Frequency (MHz)	CH	Antenna Pol.	SPA Reading (dBuv)	Receive Antenna Factor (dB/m)	Receive Cable Loss (dB)	Field Strength (dBuv/m)
GPRS 850	824.2	128	V	106.63	22.5	3.67	132.80
			H	108.25	22.5	3.67	134.42
	836.6	190	V	104.30	22.7	3.69	130.69
			H	106.85	22.7	3.69	133.24
	848.8	251	V	102.96	22.8	3.70	129.46
			H	105.67	22.8	3.70	132.17

S.G.output (dBm)	Antenna Gain (dBd)	Tx Cable loss (dB)	Result ERP/EIRP (dBm)	Limit ERP/EIRP (dBm)
18.65	8.60	3.20	30.45	38.45
21.79	8.60	3.20	33.59	38.45
17.22	8.82	3.52	29.56	38.45
20.61	8.82	3.52	32.95	38.45
16.41	8.96	3.79	29.16	38.45
19.82	8.96	3.79	32.57	38.45
Conclusion:Pass				

GPRS 1900
Test Result：
The RBW,VBW of SPA for frequency
Below 1GHz was RBW=300KHz,VBW=1MHz;
Above 1GHz was RBW=1MHz,VBW=3MHz;

EUT Mode	Frequency (MHz)	CH	Antenna Pol.	SPA Reading (dBuv)	Receive Antenna Factor (dB/m)	Receive Cable Loss (dB)	Field Strength (dBuv/m)
GPRS 1900	1850.2	512	V	101.23	22.77	5.79	129.79
			H	103.65	22.77	5.79	132.21
	1880.0	661	V	100.56	22.82	5.92	129.30
			H	103.08	22.82	5.92	131.82
	1909.8	810	V	99.98	22.89	6.05	128.92
			H	102.35	22.89	6.05	131.29

S.G.output (dBm)	Antenna Gain (dBd)	Tx Cable loss (dB)	Result ERP/EIRP (dBm)	Limit ERP/EIRP (dBm)
16.91	7.20	5.25	29.36	38.45
19.09	7.20	5.25	31.54	38.45
16.47	7.32	5.42	29.21	38.45
18.52	7.32	5.42	31.26	38.45
15.82	7.54	5.60	28.96	38.45
18.26	7.54	5.60	31.40	38.45
Conclusion:Pass				

4. OUT OF BAND EMISSIONS AT ANTENNA TERMINALS AND BAND EDGE

4.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1Year
6	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
7	WWireless Communication Test set	Agilent	E5515C	GB44300243	May.09,11	1Year

4.2.Limit

FCC part 22.917(a), 24.238(a) the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specification in the instruction manual and/or alignment procedure, shall not be less than 43+10log(Mean power in watts) dBc below the mean power output outside a license's frequency block(-13dBm).

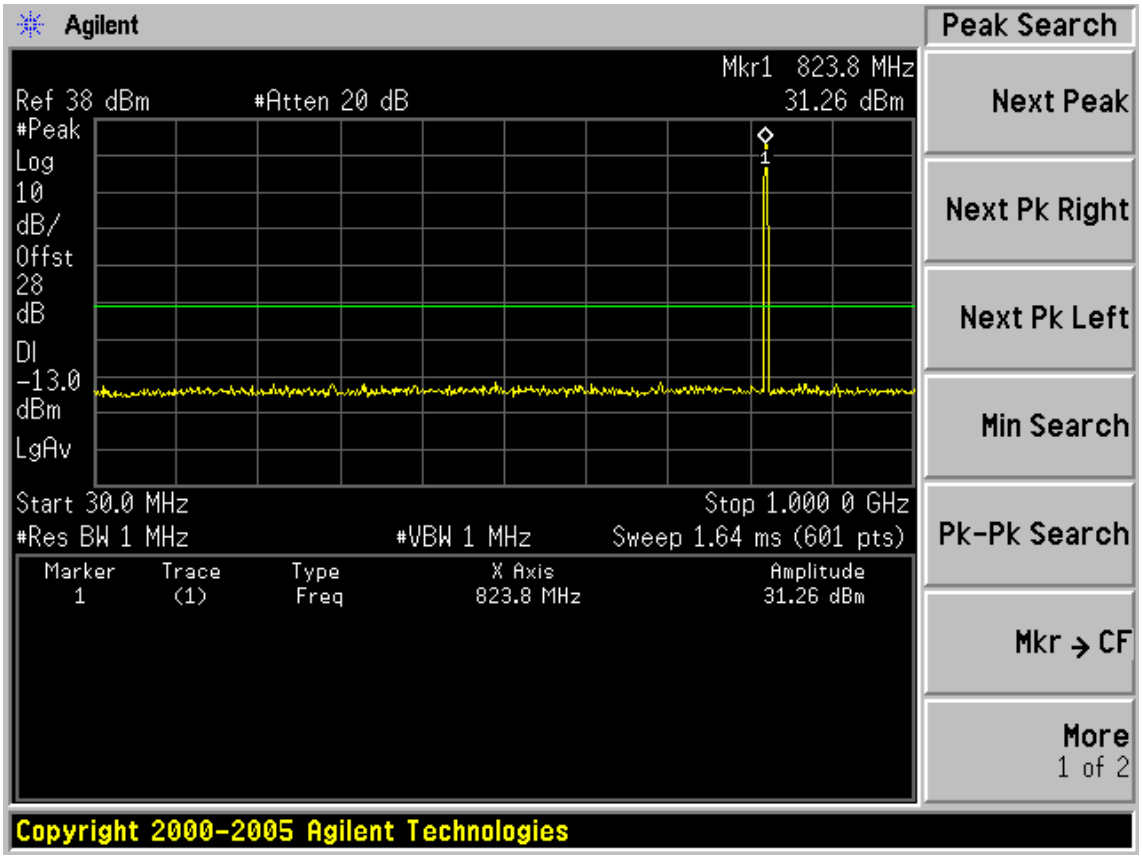
4.3.Test Procedure

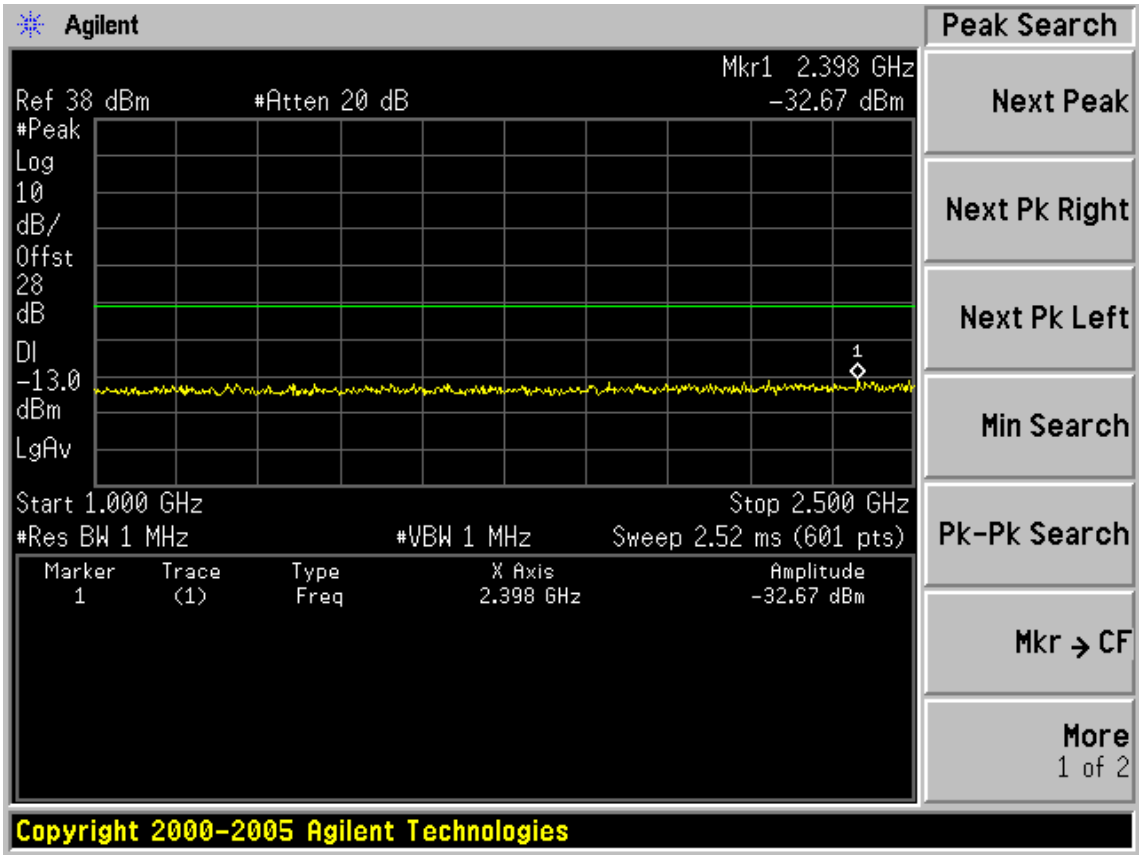
The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emission is any up to 10th harmonic. For the out of band: set RBW, VBW=1MHz, stat=30MHz, stop= 10 th harmonic. Limit= -13dBm Band Edge requirements: In 1Mhz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 % of bandwidth of fundamental emission of the transmitter any be employed to measure the out of band emission. Limit=-13dBm.

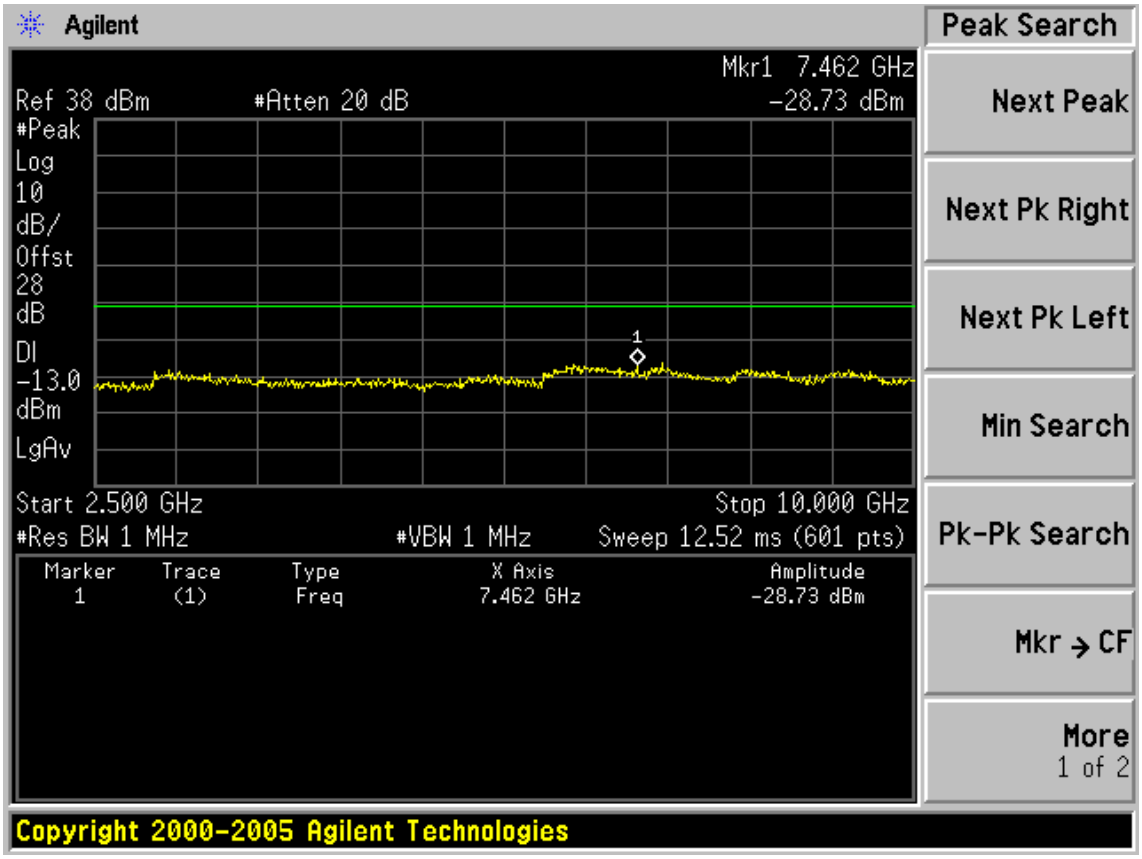
4.4.Test result

PASS (The testing data was attached in the next pages.)

Test GPRS 850 CH128



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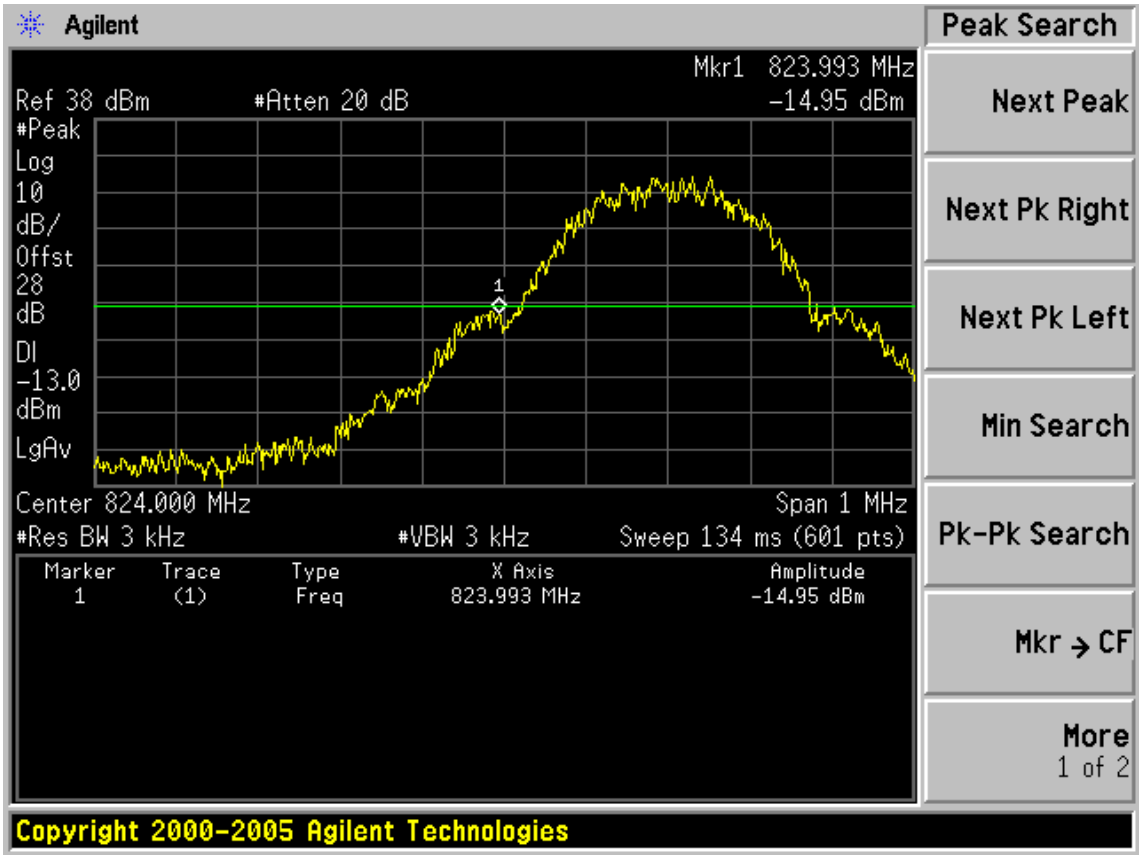
Peak Search
Mkr1 7.462 GHz
Ref 38 dBm
#Atten 20 dB
-28.73 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.500 GHz
Stop 10.000 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 12.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.462 GHz -28.73 dBm
Copyright 2000-2005 Agilent Technologies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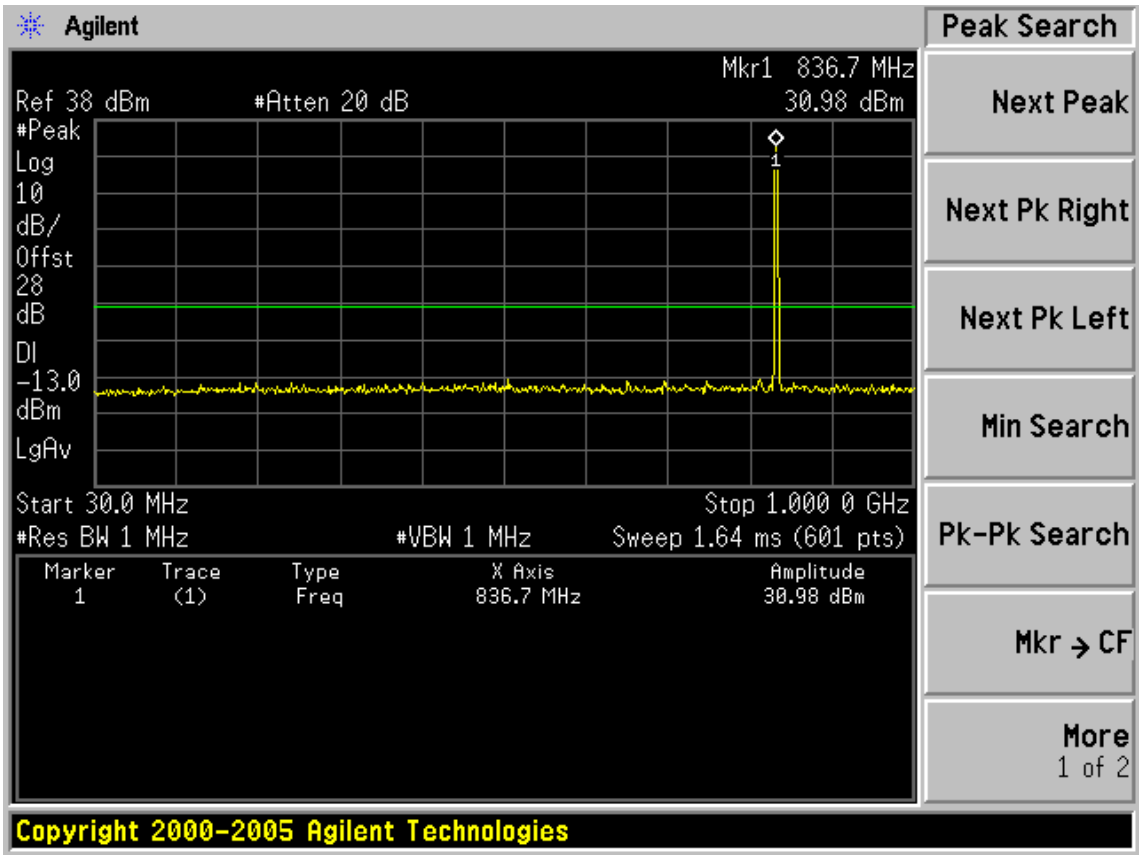
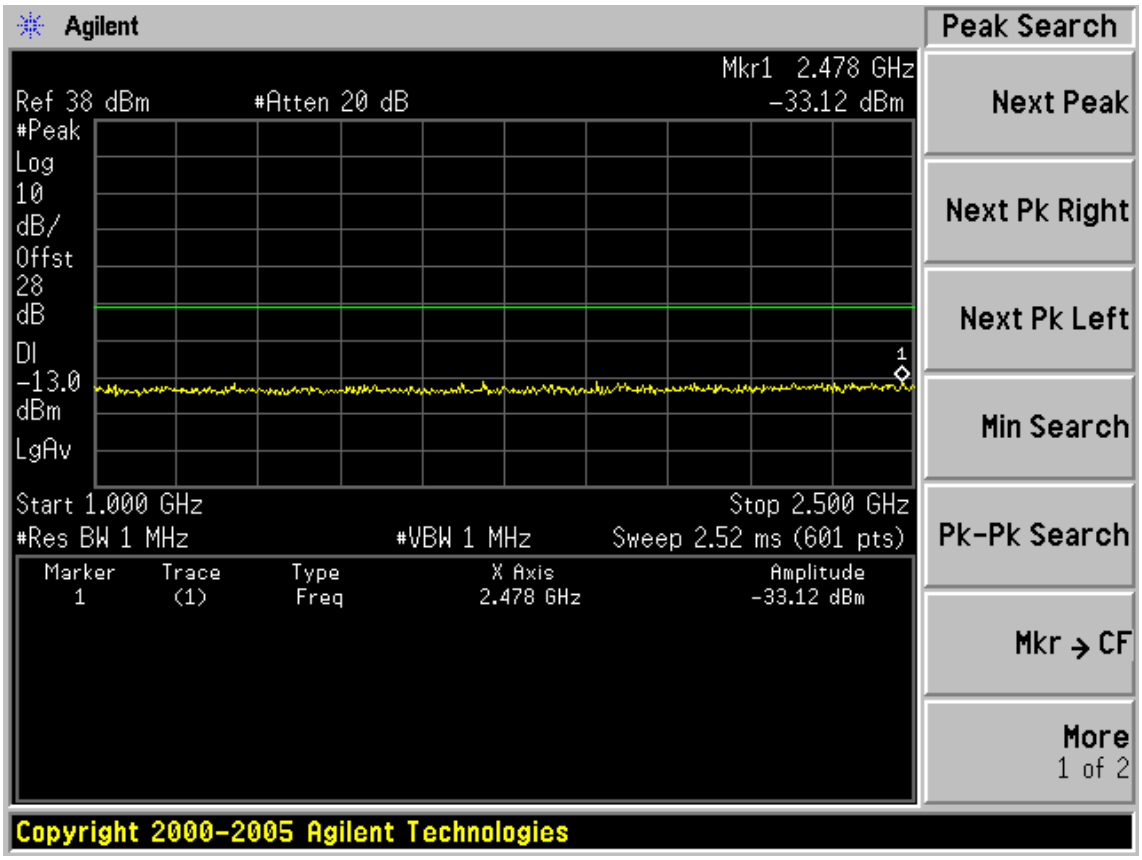
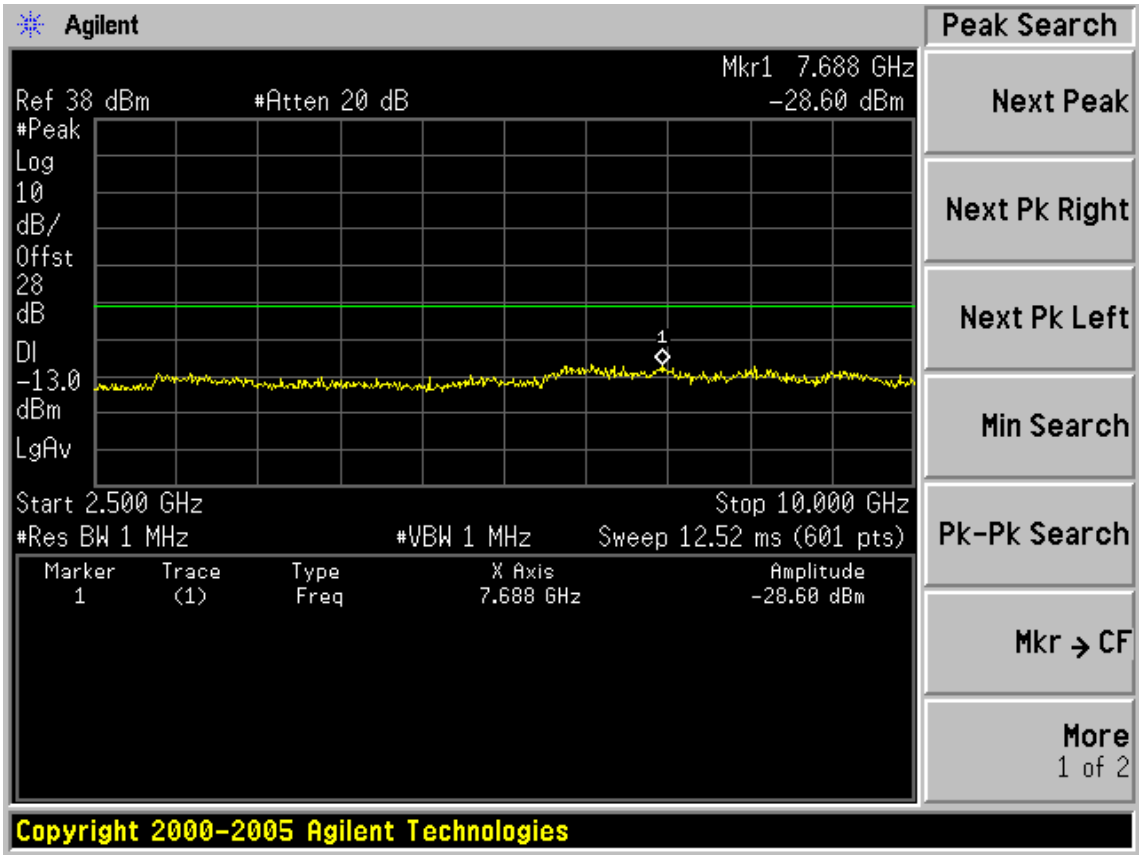
Peak Search
Mkr1 823.993 MHz
Ref 38 dBm
#Atten 20 dB
-14.95 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 824.000 MHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 134 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 823.993 MHz -14.95 dBm
Copyright 2000-2005 Agilent Technologies

Test GPRS 850 CH190







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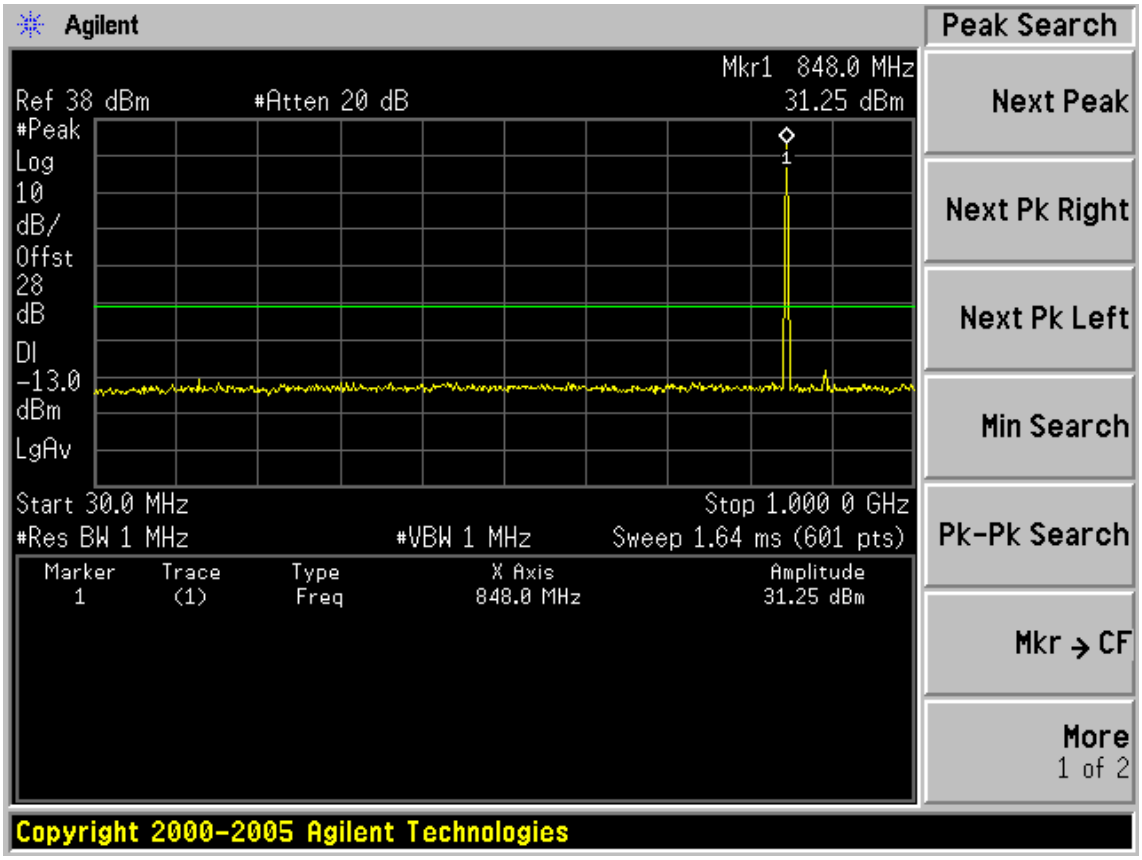
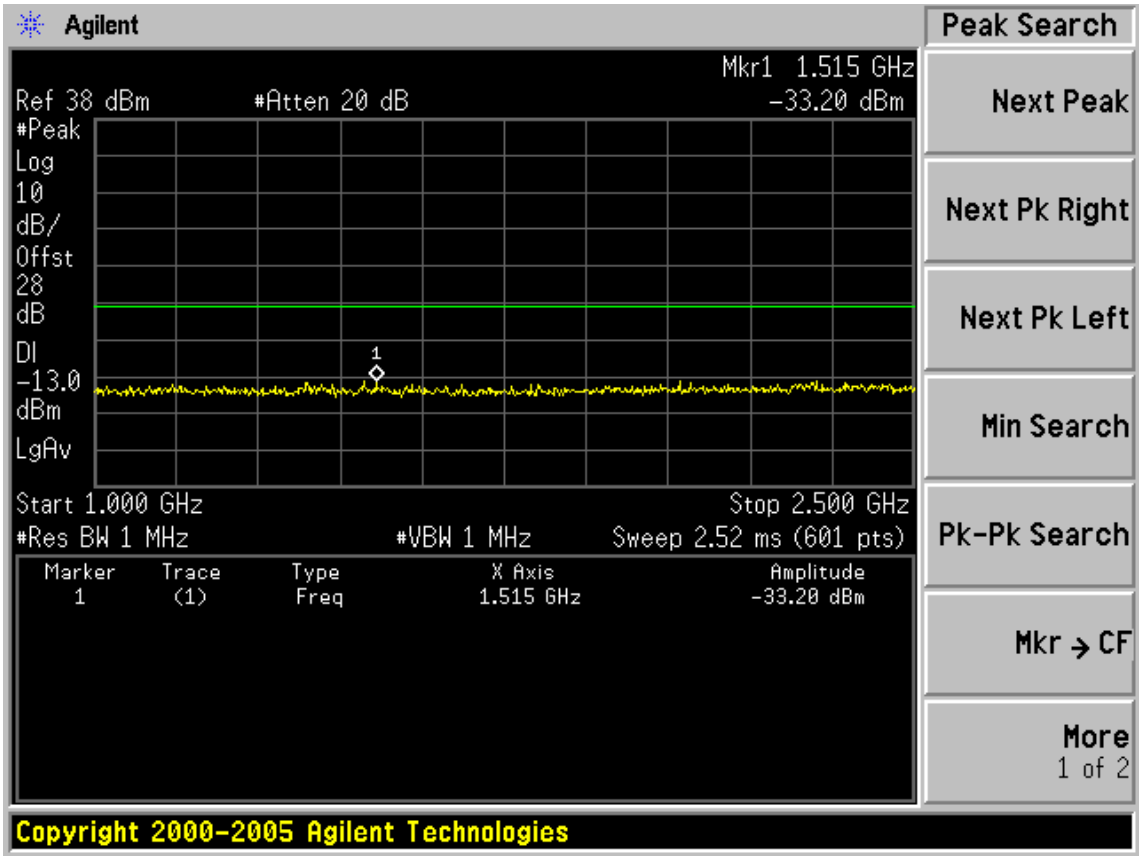
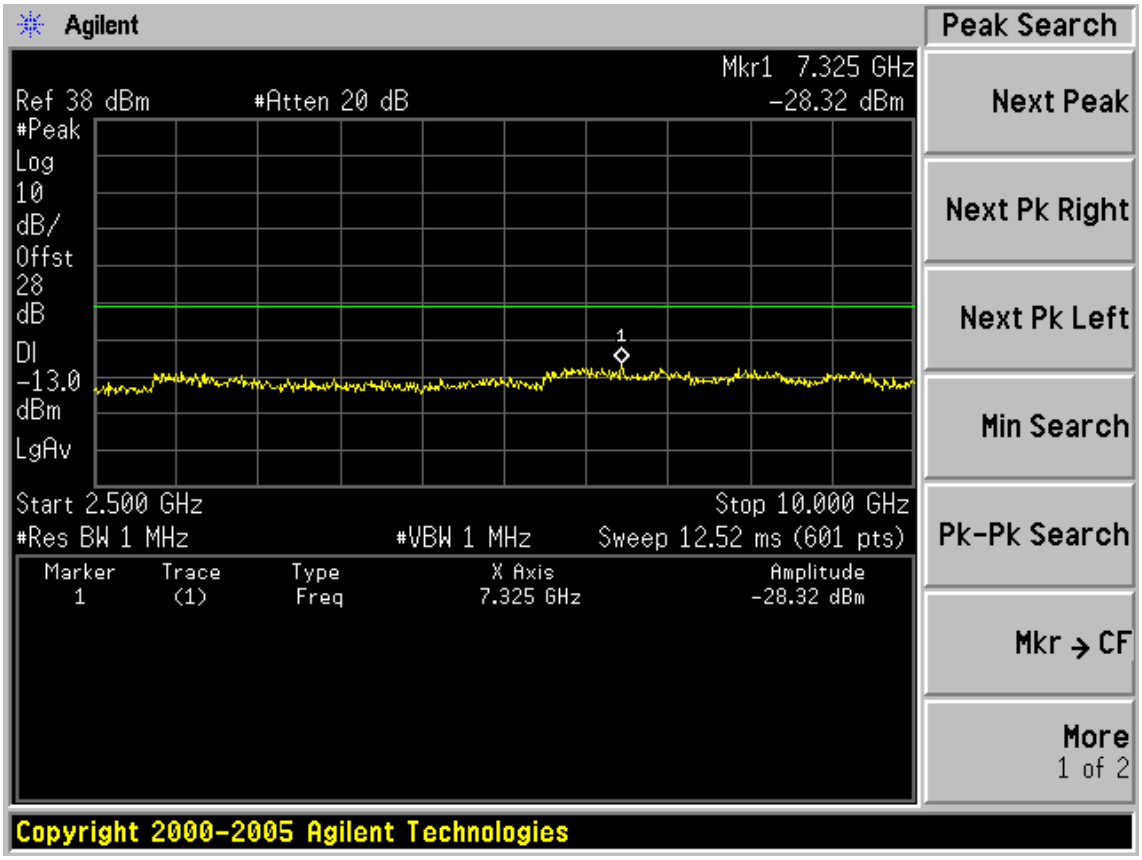



Agilent
Peak Search
Mkr1 1.515 GHz
Ref 38 dBm
#Atten 20 dB
-33.20 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 2.500 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 2.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 1.515 GHz -33.20 dBm
Copyright 2000-2005 Agilent Technologies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Peak Search
Mkr1 7.325 GHz
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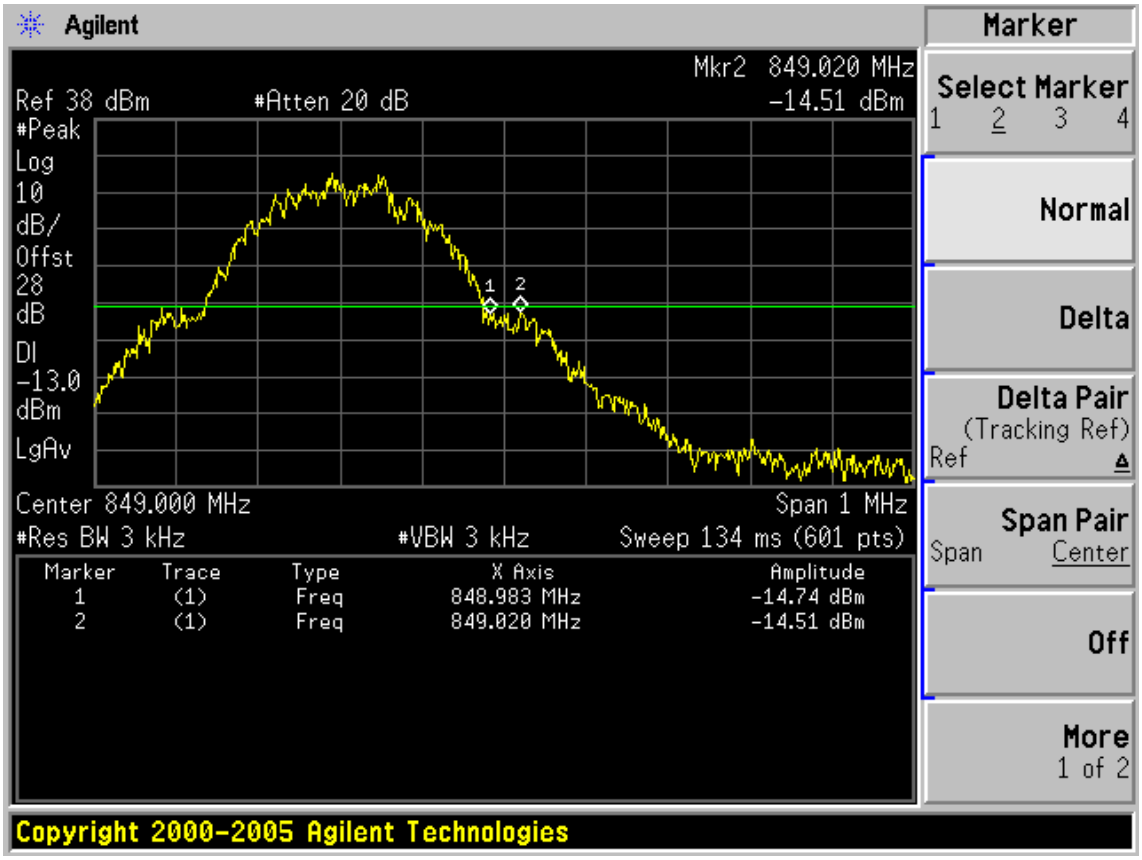
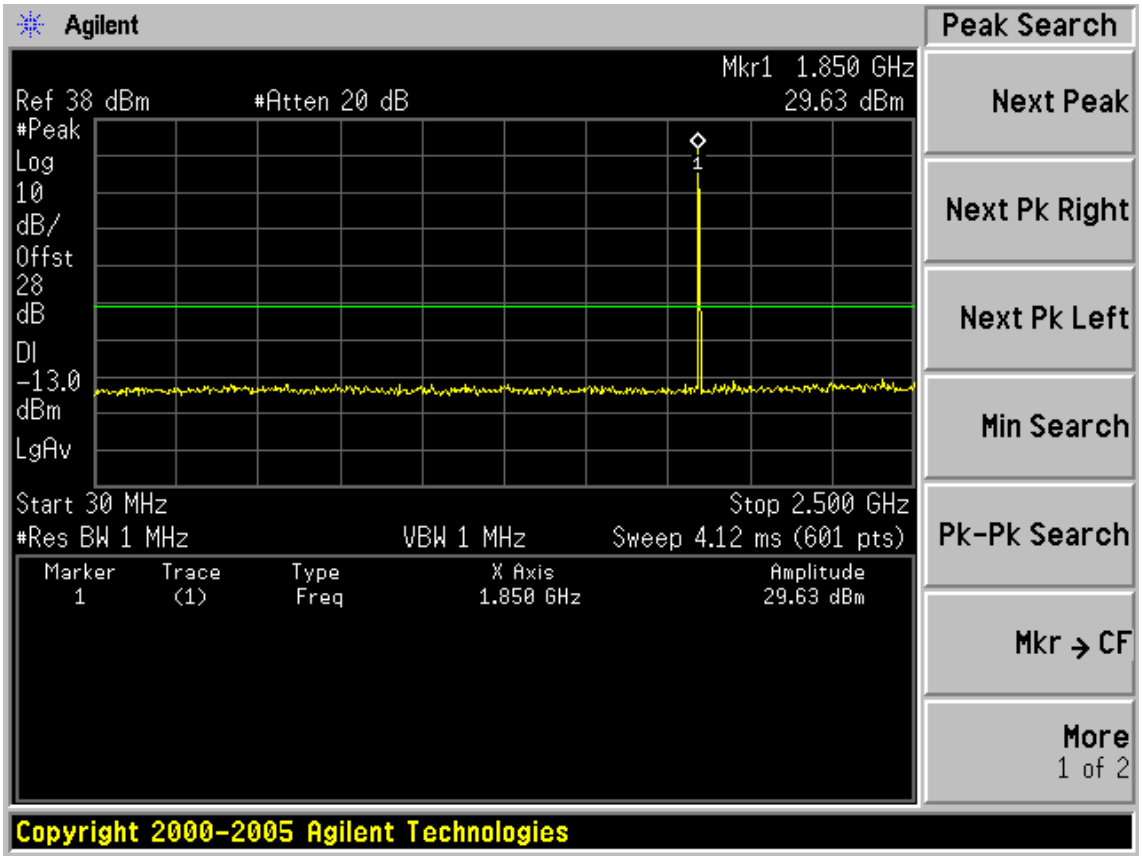
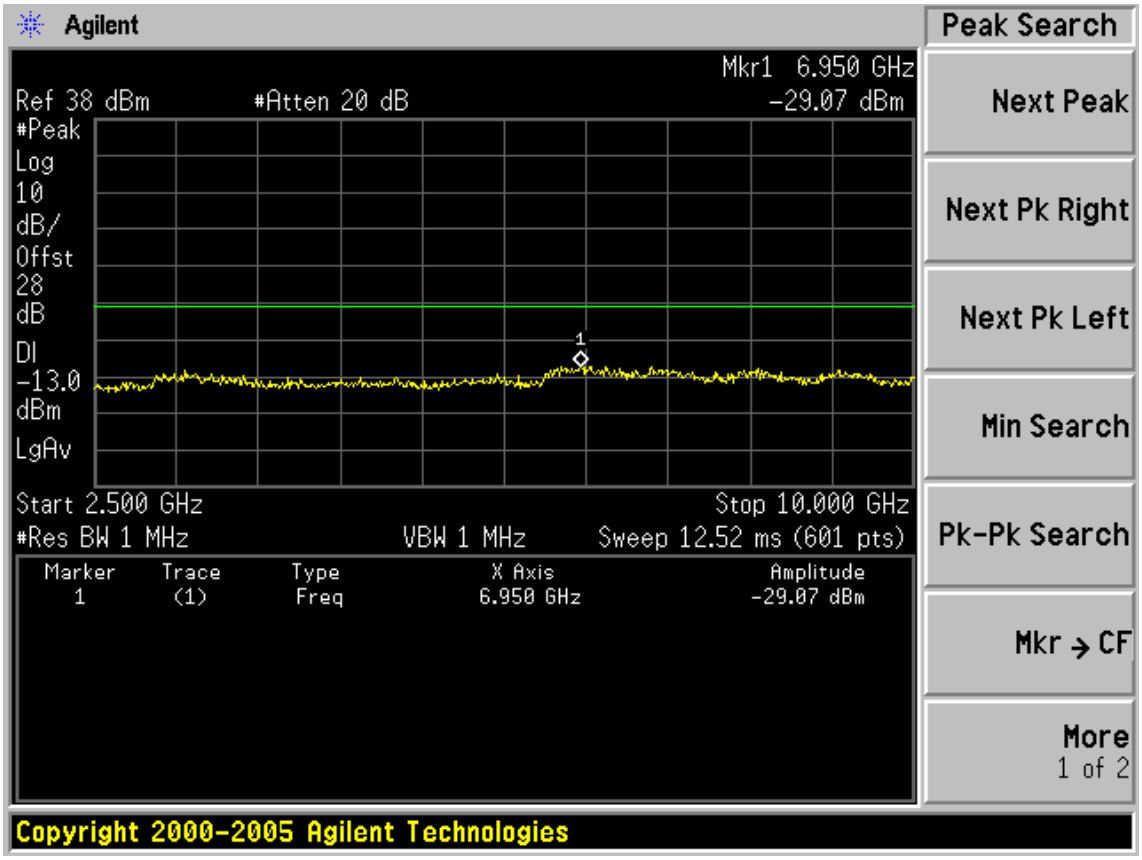
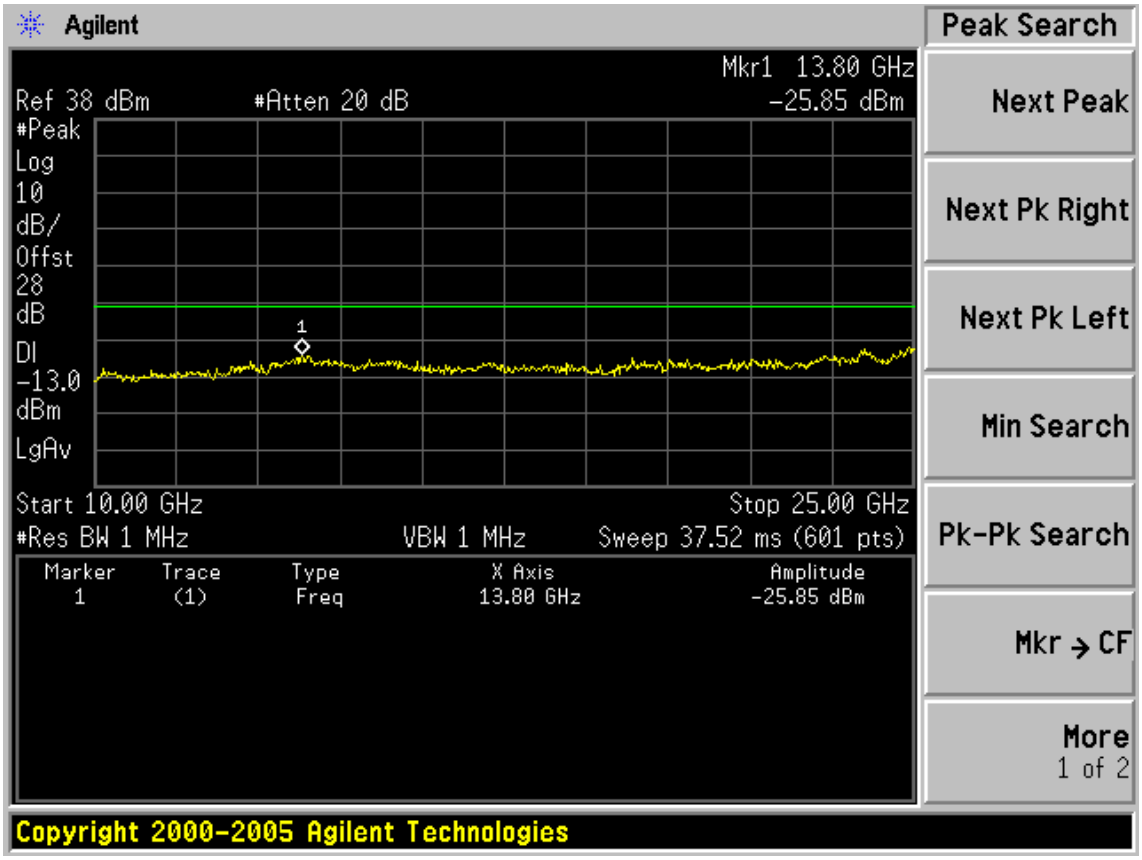
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.500 GHz
Stop 10.000 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 12.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.325 GHz -28.32 dBm
Copyright 2000-2005 Agilent Technologies



Test GPRS1900 CH512




Agilent
Peak Search
Mkr1 6.950 GHz
Ref 38 dBm
#Atten 20 dB
-29.07 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 2.500 GHz
Stop 10.000 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 12.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.950 GHz -29.07 dBm
Copyright 2000-2005 Agilent Technologies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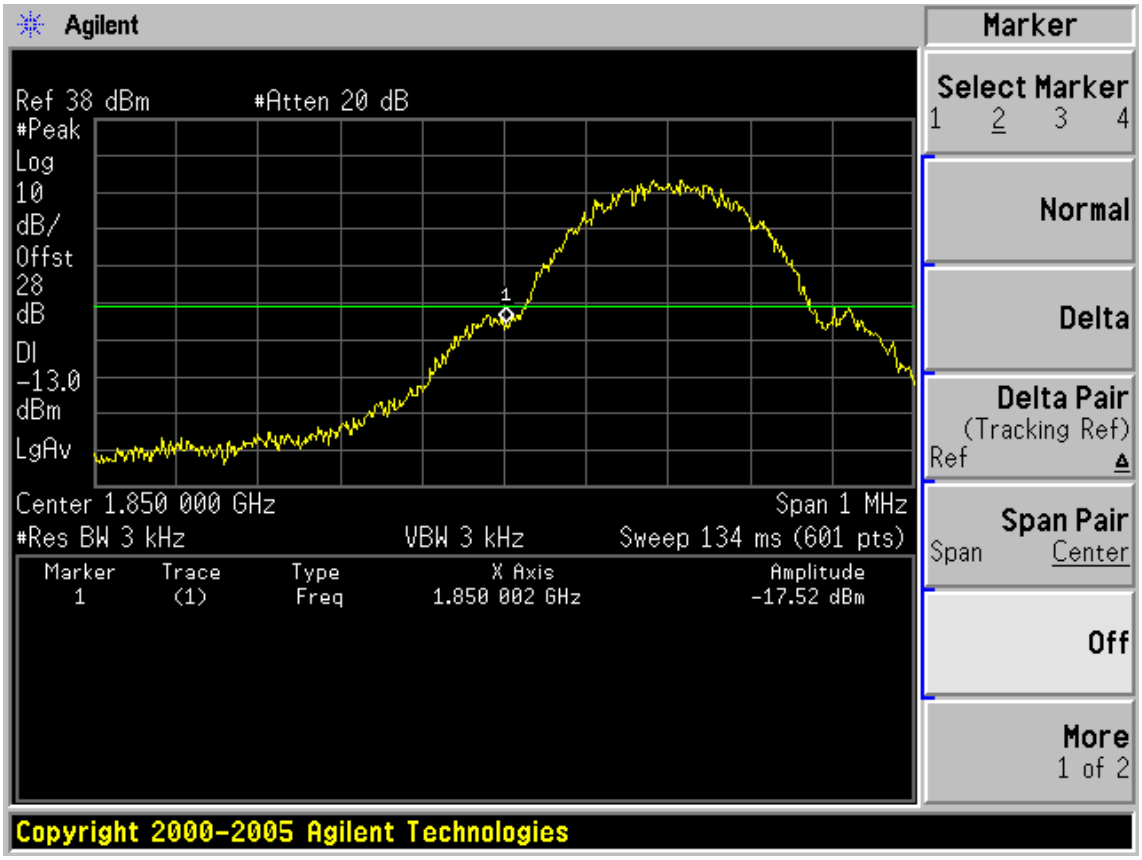
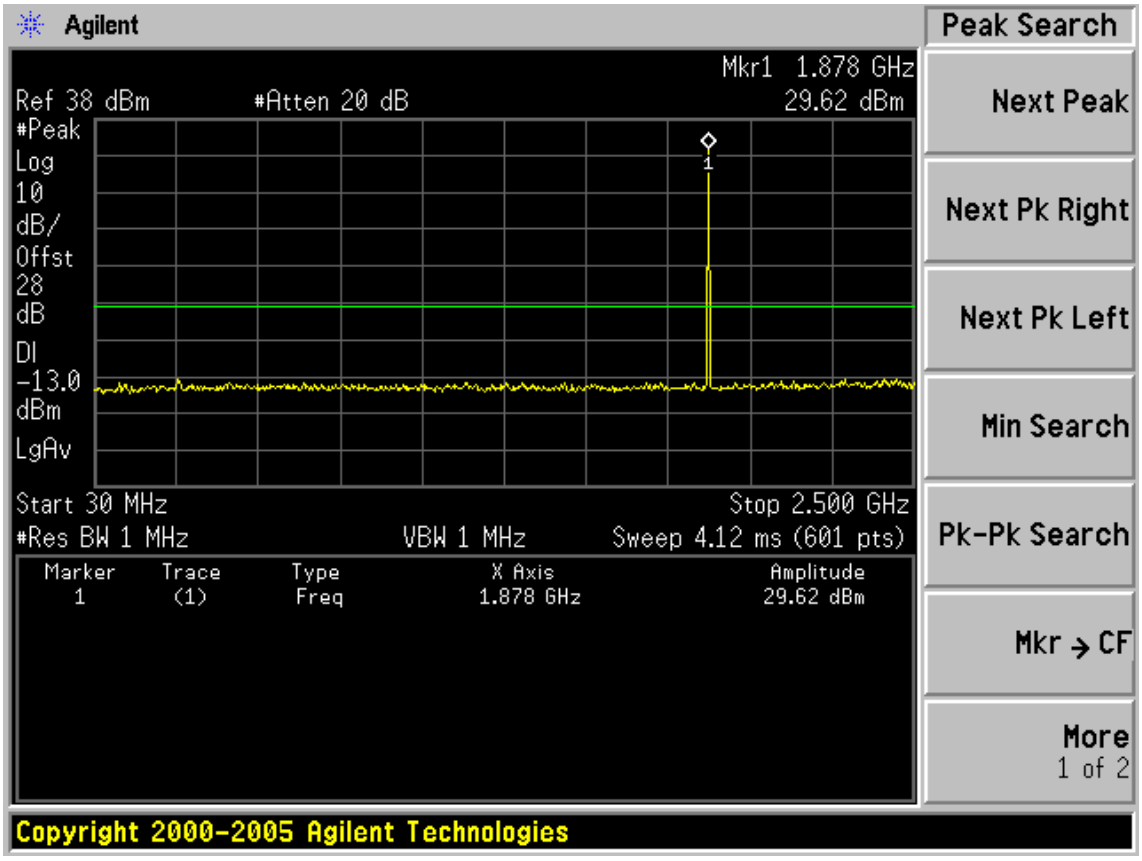
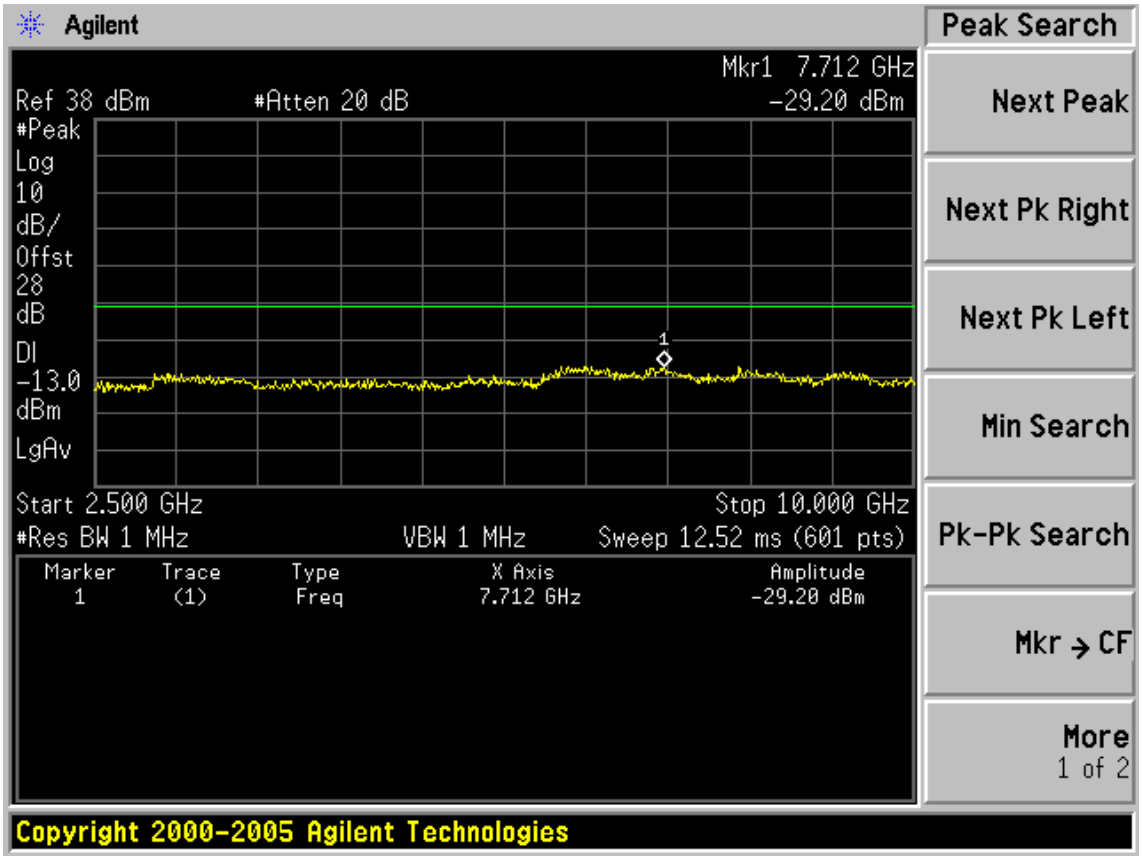
-25.85 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 37.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 13.80 GHz -25.85 dBm
Copyright 2000-2005 Agilent Technologies



Test GPRS1900 CH661

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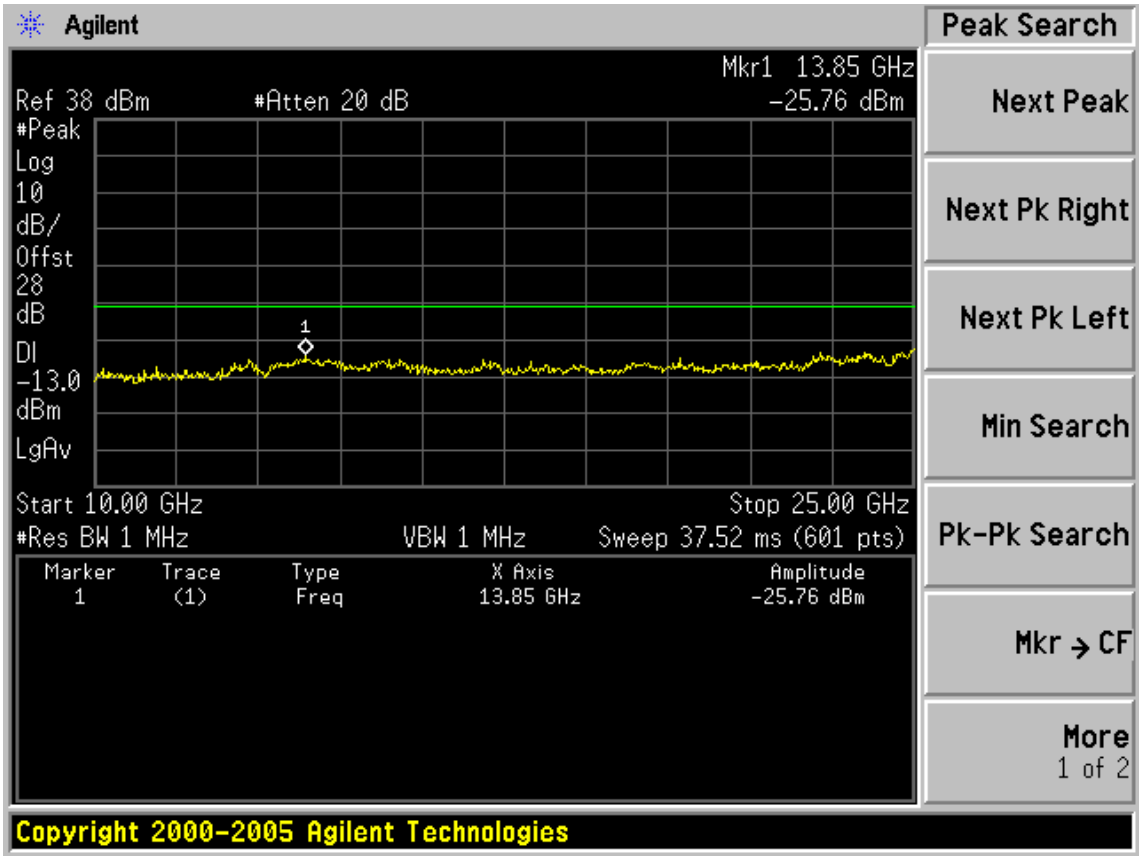
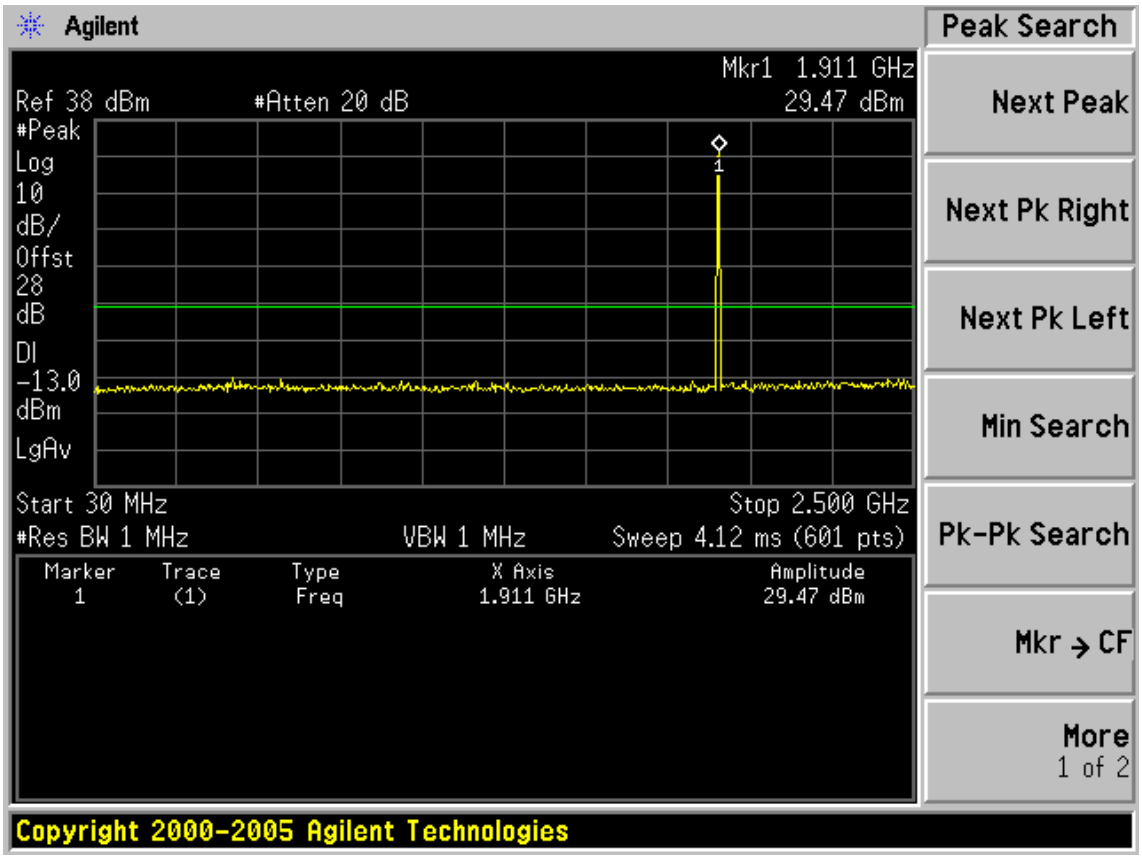
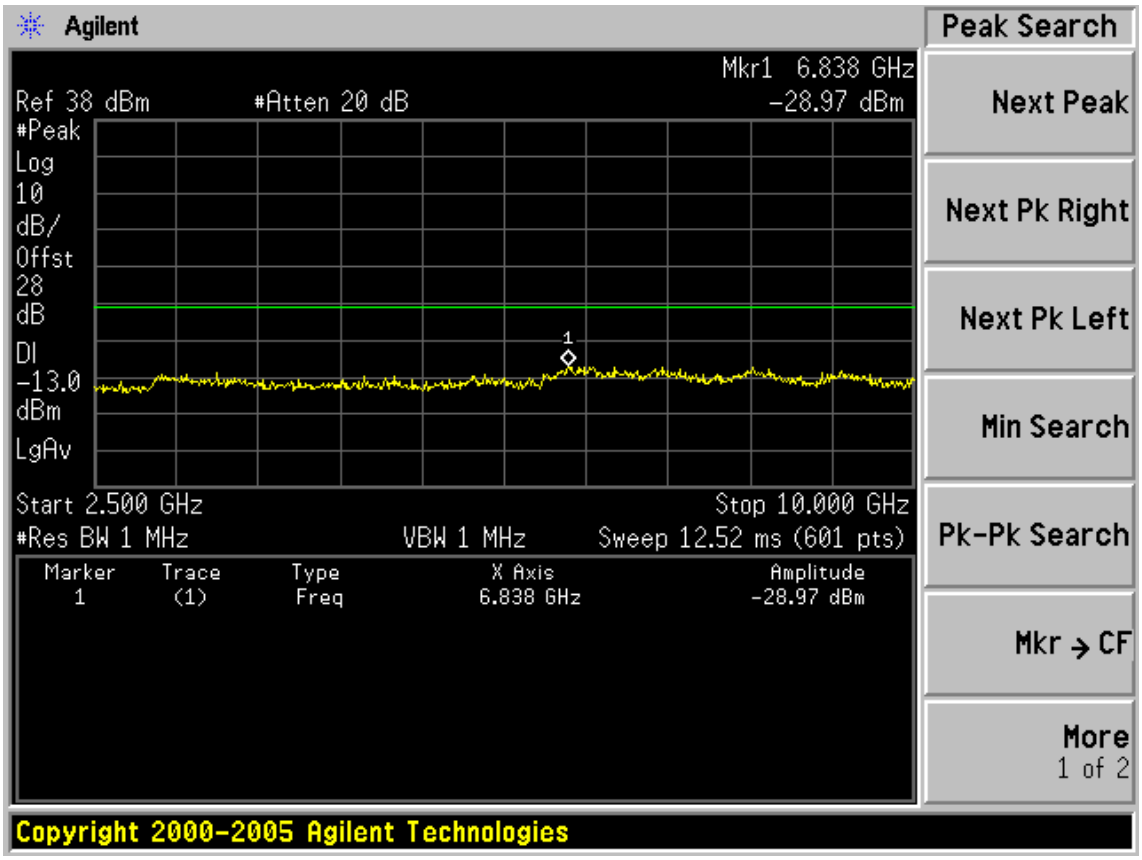
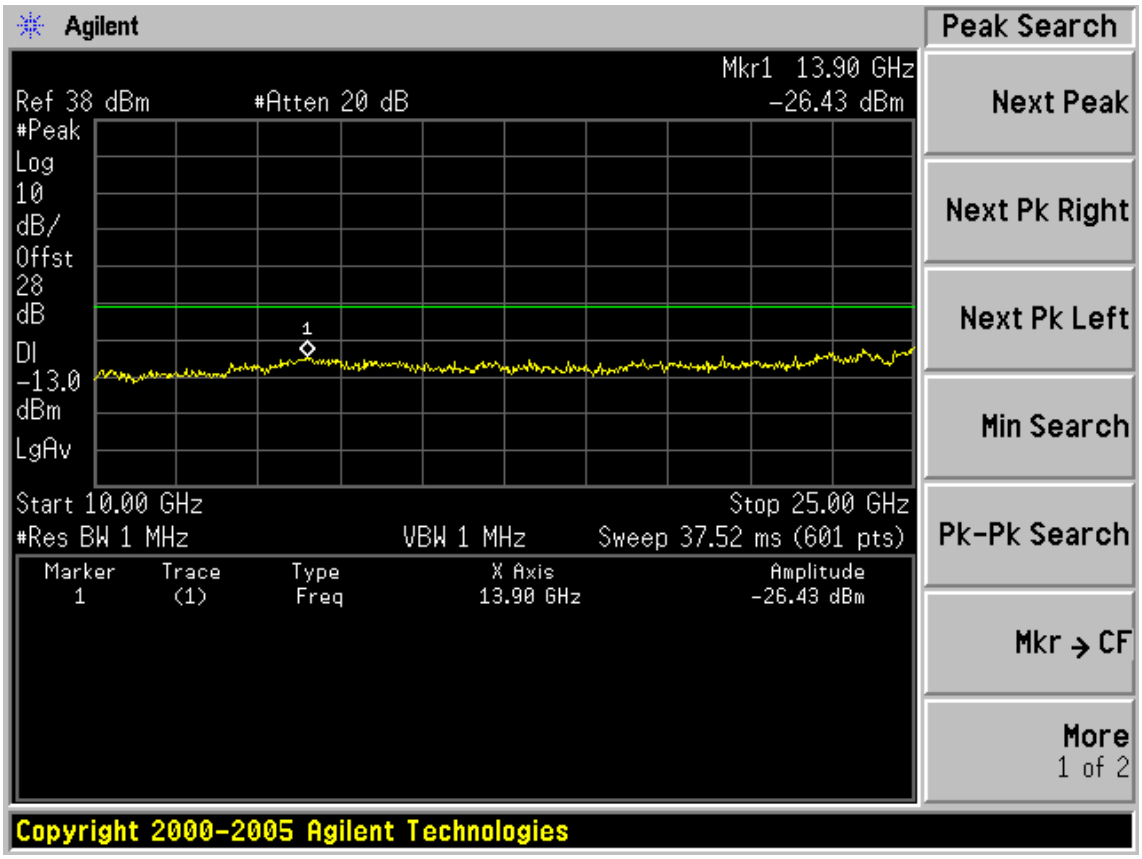
Peak Search
Mkr1 7.712 GHz
Ref 38 dBm
#Atten 20 dB
-29.20 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Start 2.500 GHz
Stop 10.000 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 12.52 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.712 GHz -29.20 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

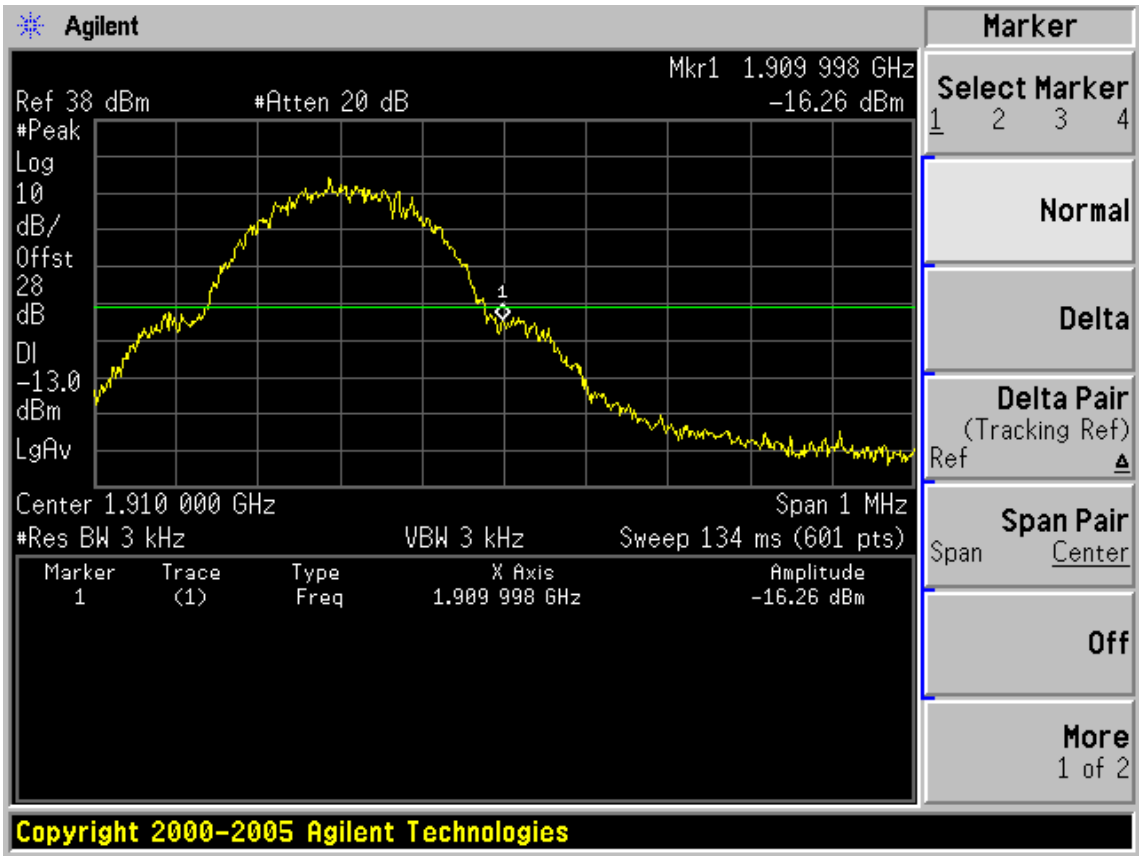

Agilent
Peak Search
Mkr1 13.85 GHz
Ref 38 dBm
#Atten 20 dB
-25.76 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 37.52 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 13.85 GHz -25.76 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

Test GPRS1900 CH810






Agilent
Peak Search
Mkr1 13.90 GHz
Ref 38 dBm
#Atten 20 dB
-26.43 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 1 MHz
VBW 1 MHz
Sweep 37.52 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 13.90 GHz -26.43 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr1 1.909 998 GHz
Ref 38 dBm
#Atten 20 dB
-16.26 dBm
#Peak
Log
10
dB/
Offst
28
dB
Dl
-13.0
dBm
LgAv
1
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Center 1.910 000 GHz
Span 1 MHz
#Res BW 3 kHz
VBW 3 kHz
Sweep 134 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 1.909 998 GHz -16.26 dBm
Copyright 2000-2005 Agilent Technologies

5. 99% Occupied Bandwidth Test

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1Year
6	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
7	Wireless Communication Test set	Agilent	E5515C	GB44300243	May.09,11	1Year

5.2.Test Procedure

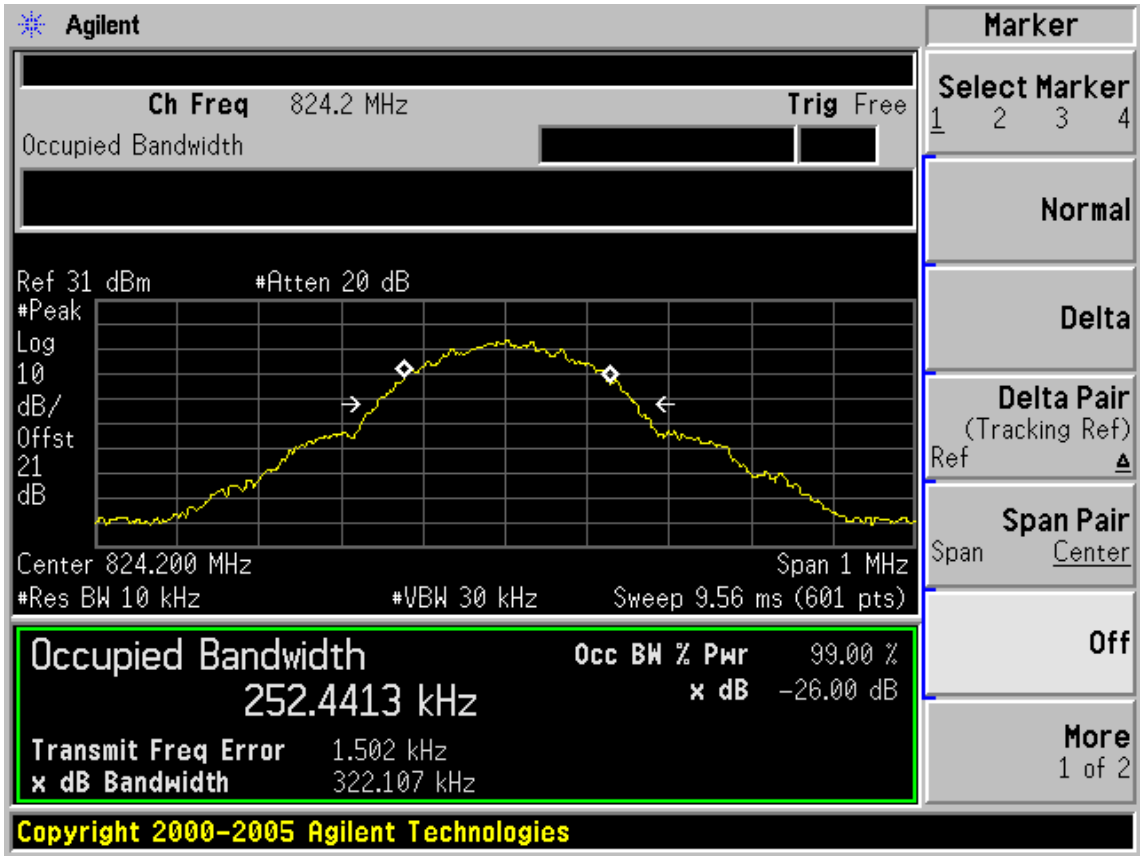
The EUT output RF connector was connected with a short a cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW>=3 times RBW, 99% bandwidth were measured, the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

5.3.Test Results

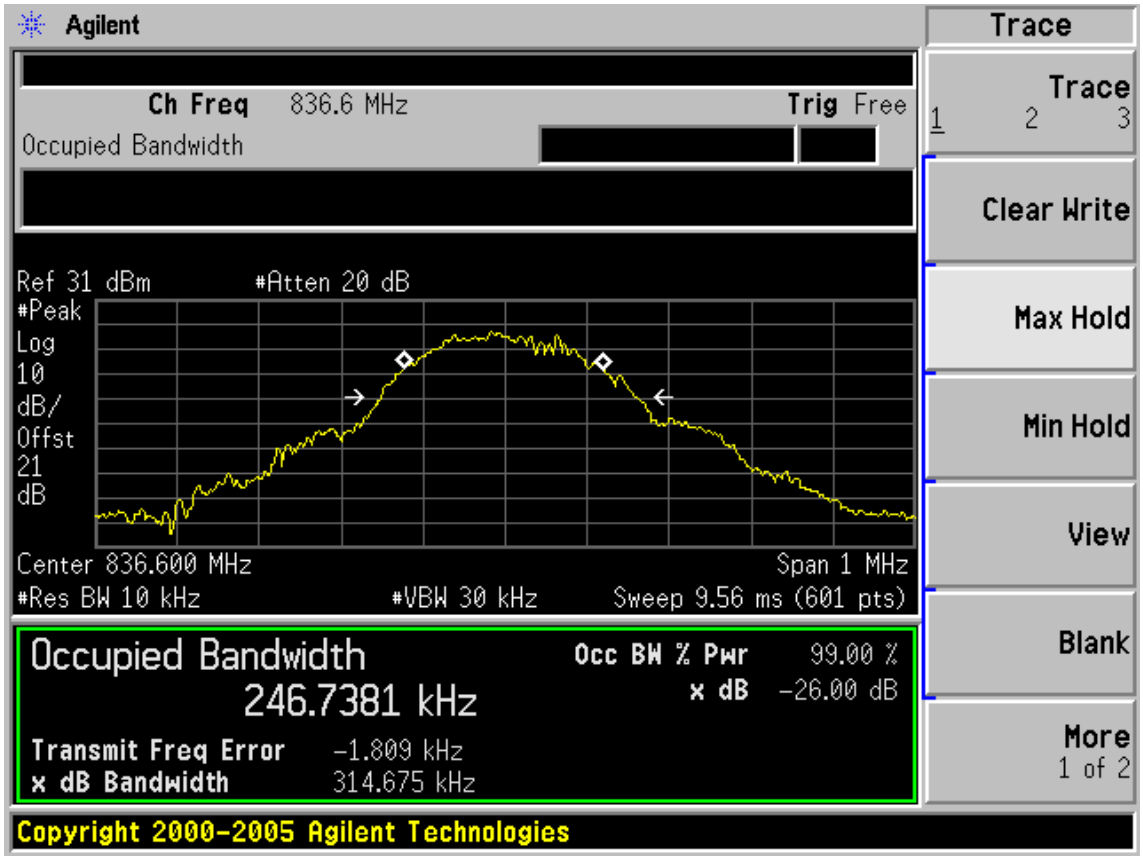
EUT: GSM/SERIALConverter		
M/N: Confidant 3.0		
Test date:2011-10-07	Pressure: 101.2 kpa	Humidity: 56%
Tested by: Leo-Li	Test site: RF Site	Temperature：24.8 ℃

Test Mode	Frequency（MHz）	CH	99% Occupied bandwidth (KHz)	Limit (KHz)
GPRS 850	824.2	128	252.4413	N/A
	836.6	190	246.7381	N/A
	848.8	251	235.9059	N/A
GPRS 1900	1850.2	512	246.5128	N/A
	1880.0	661	245.7395	N/A
	1909.8	810	240.1720	N/A
Conclusion：PASS				

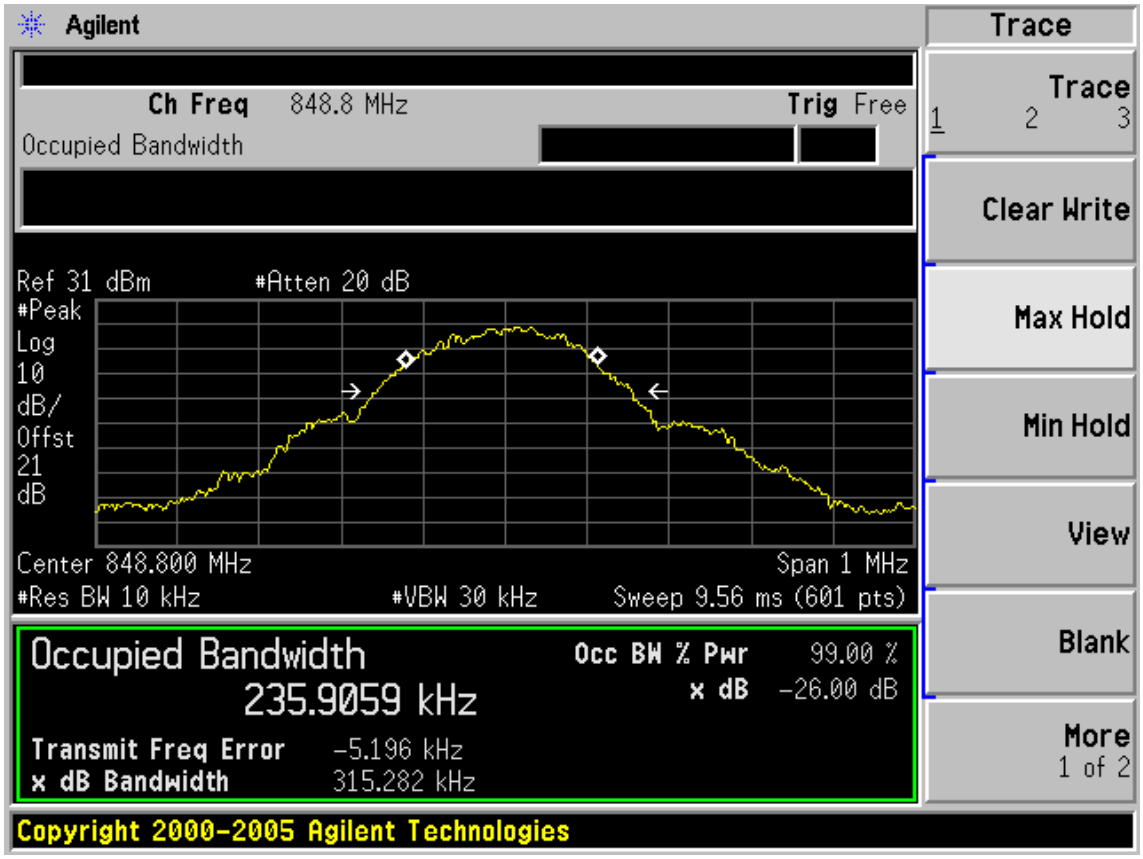
Test GPRS 850 CH128



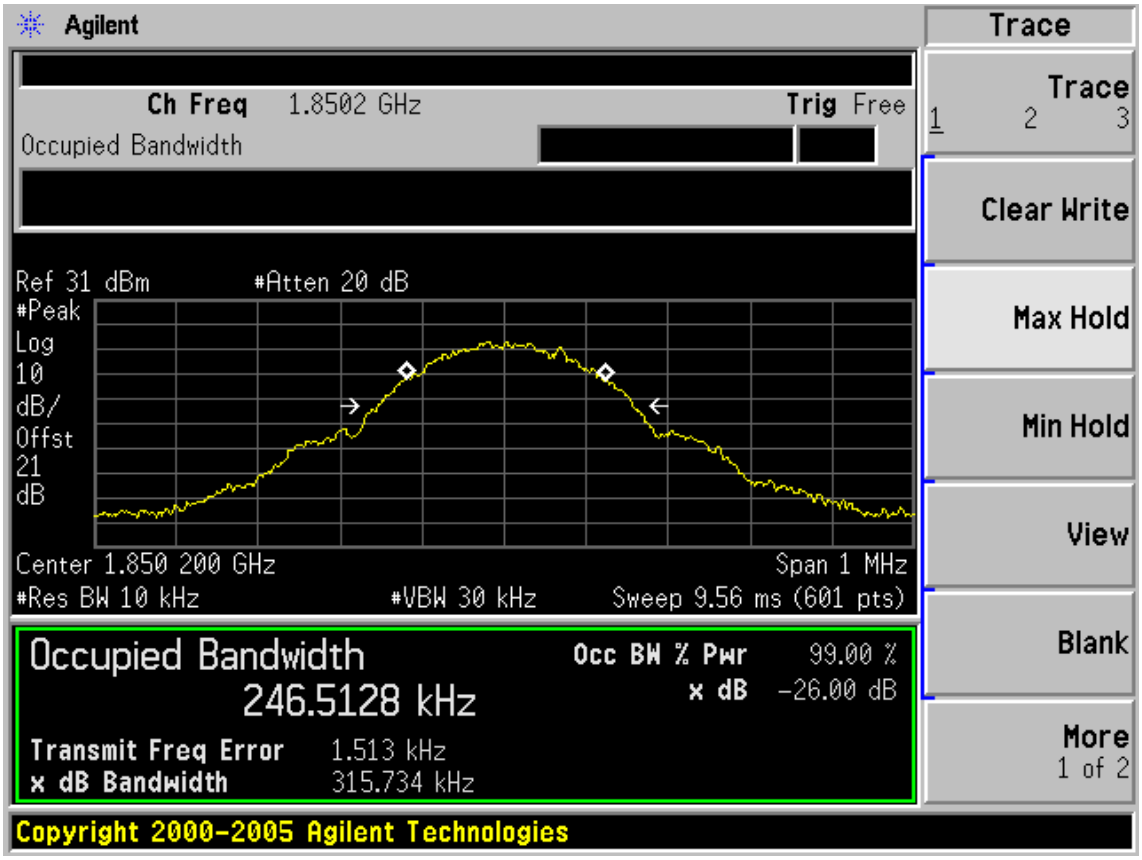
Test GPRS 850 CH190



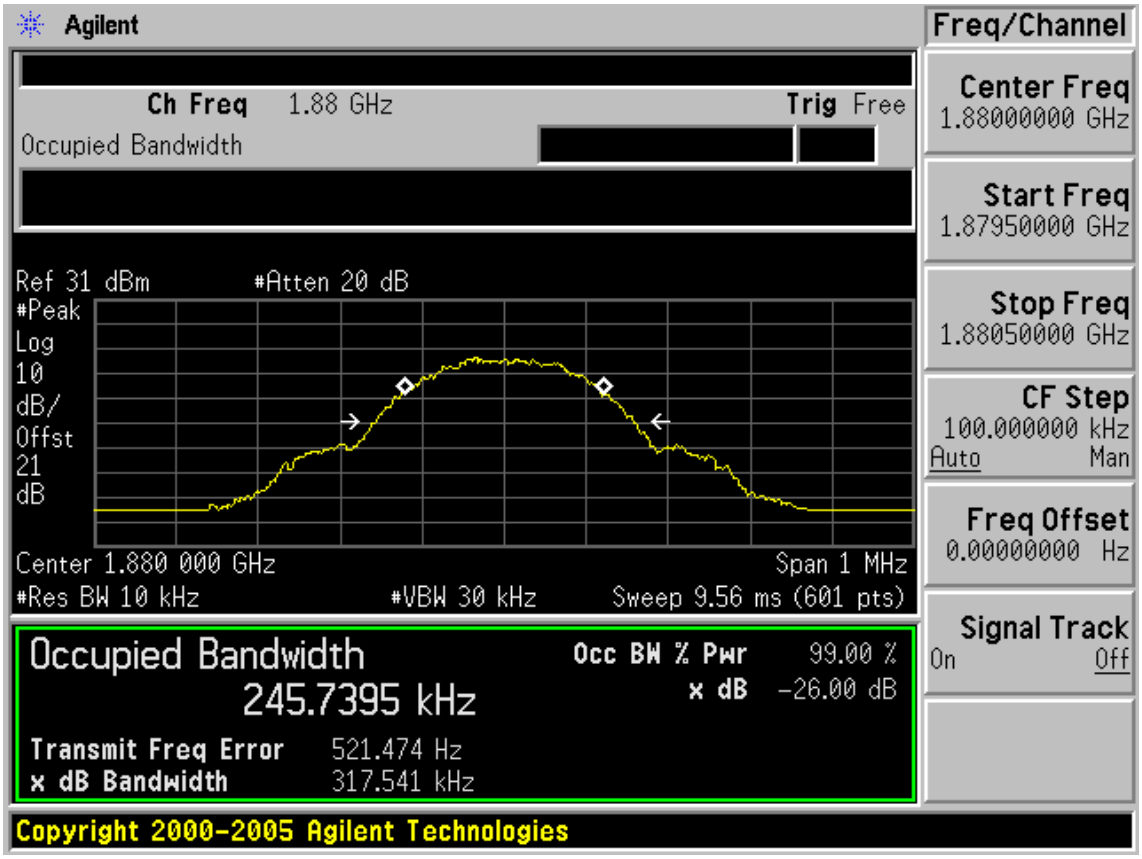
Test GPRS 850 CH251



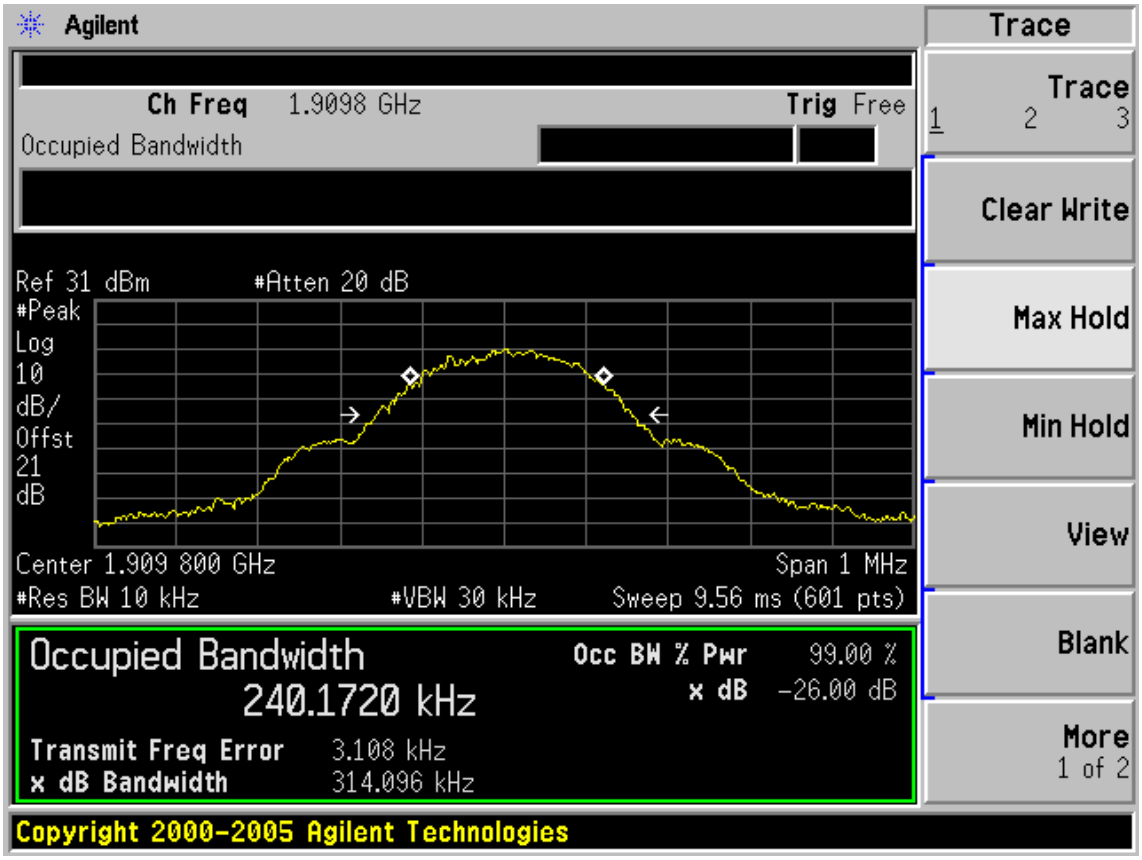
Test GPRS 1900 CH512



Test GPRS 1900 CH661



Test GPRS 1900 CH810



6. RF POWER OUTPUT TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,11	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,11	1Year
3.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1Year
7.	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
8.	Wireless Communication Test set	Agilent	E5515C	GB44300243	May.09,11	1Year

6.2.Limit

Part 22.913(a) Mobile station are limited to 7W
Part 24.232(b) Peak power measurement, Mobile station are limited to 2W

6.3.Test Procedure

The transmitter output was connected to calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power in dBm. The power output at the transmitter antenna port was determined by adding the value of attenuator to the power meter reading.

6.4.Test Results

EUT: GSM/SERIALConverter		
M/N: Confidant 3.0		
Test date:2011-10-07	Pressure: 101.5kpa	Humidity: 59 %
Tested by:Leo-Li	Test site: RF site	Temperature: 25 ℃
Cable loss: 2dB	Attenuator loss: 20 dB	Spliter attenuation:6dB

Mode	Frequency (MHz)	CH	1 Time Slot		2 Time Slot	
			Peak power (dBm)	AV Power (dBm)	Peak power (dBm)	AV Power (dBm)
GPRS 850	824.2	128	31.39	22.36	29.79	23.77
	836.6	190	31.07	22.04	29.51	23.49
	848.8	251	31.25	22.22	29.69	23.67
GPRS 1900	1850.2	512	29.63	20.60	27.08	21.06
	1880.0	661	29.57	20.54	27.02	21.00
	1909.8	810	29.40	20.37	26.98	20.96
Conclusion：PASS						

7. FIELD STRENGTH OF RADIATED SPURIOUS EMISSIONS

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Signal Generator	HP	83732B	VS34490501	May.08, 11	1 Year
3.	Power meter	Anritsu	ML2487A	6K00002472	May.08, 11	1Year
4.	Power sensor	Anritsu	MA2491A	0033005	May.08, 11	1Year
5.	Attenuator(10dB)	Agilent	8491A	MY39264375	May.08, 11	1 Year
6.	Attenuator(20dB)	Agilent	8491B	MY39262165	May.08, 11	1 Year
7.	Attenuator (0dB-110dB)	Agilent	8496A	MY42143100	May.08, 11	1 Year
8.	Universal Radio Communication Tester	R&S	CUM200	1100.008K02	May.08, 11	1 Year
9.	Network Analyzer	Agilent	E5071B	MY42403549	May.08, 11	1 Year
10.	Bluetooth Test set	Anritsu	MT8852B	6K00005966	May.08, 11	1 Year
11.	Wireless Communication Test set	Agilent	E5515C	GB44300243	May.09, 11	1 Year
12.	DC Power supply	King	DPS-1303D	821956	N/A	N/A
13.	PREAmplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
14.	PREAmplifier	Agilent	8447D	2944A11159	May.08, 11	1Year
15.	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 10	1.5 Year
16.	Horn Antenna	EMCO	3115	9607-4877	Nov. 25, 10	1.5 Year
17.	Bilog Antenna	Schaffner	CBL6111C	2768	Dec.14, 10	1 Year
18.	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
19.	Power divider	Mini-Circuits	ZA3PD-4-S+	347100912	N/A	N/A
20.	Power divider	Mini-Circuits	ZA4PD-4-S+	544000937	N/A	N/A
21.	Antenna and turn table controller	CT	SC100	CT-0091	N/A	N/A
22.	Temperature controller	Terchy	MHQ	120	May.08, 11	1Year
23.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 11	1 Year
24.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
25.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year
26.	RF Cable	Hubersuhner	SUCOFLEX102	NO.1	May.08,11	1 Year
27.	Horn Antenna	EMCO	3116	00060089	Nov.25, 10	1.5 Year
28.	Horn Antenna	EMCO	3116	00060088	Nov.25, 10	1.5 Year

7.2. Limit

FCC part 22.917(a), 24.238(a) the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specification in the instruction manual and/or alignment procedure, shall not be less than 43+10log(Mean power in watts) dBc below the mean power output outside a license's frequency block(-13dBm).

7.3. Test Procedure

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and lowering of the test antenna from 4m to 1m.

ERP in frequency band 824.2-848.8MHz were measured using substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follow: EIRP in frequency band 1850.5-1909.8MHz were measured using a substitution method. The EUT was replaced by a horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:
ERP=S.G. output (dBm) + Antenna Gain (dBd)-Cable Loss (dB)
EIRP=S.G. output (dBm) + Antenna Gain (dBi)-Cable Loss (dB)

7.4.Test Results

GPRS 850 Mode

Spurious emissions								
EUT：GSM/SERIALConverter								
M/N: Confidant3.0								
Power: DC 5V From Adapter input AC 230V/50Hz								
Test Date: 2011-10-08		Test site: RF Chamber			Tested by:Leo-Li			
Ambient Temperature: 25.2℃		Relative Humidity: 55%						
Test result								
Test Mode： GPRS 850 TX CH Low Mode 824.2MHz								
Frequency (MHz)	Antenna polarization	S.G Output (dBm)	Antenna Gain (dBi/dBd)	Cable Loss (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Conclusion
154	H	-57.53	2.41	1.2	-56.32	-13	43.32	PASS
180	H	-58.25	2.80	1.4	-56.85	-13	43.85	PASS
296	H	-56.48	2.84	1.5	-55.14	-13	42.14	PASS
427	H	-55.92	2.99	1.7	-54.63	-13	41.63	PASS
1600	H	-53.92	6.96	2.4	-49.36	-13	36.36	PASS
2190	H	-49.92	7.20	2.9	-45.62	-13	32.62	PASS
2825	H	-45.18	8.20	3.3	-40.28	-13	27.28	PASS
136	V	-56.45	2.09	1.0	-55.36	-13	42.36	PASS
154	V	-57.33	2.41	1.2	-56.12	-13	43.12	PASS
180	V	-55.82	2.80	1.4	-54.42	-13	41.42	PASS
427	V	-56.31	2.99	1.7	-55.02	-13	42.02	PASS
1600	V	-53.08	6.96	2.4	-48.52	-13	35.52	PASS
2190	V	-51.42	7.20	2.9	-47.12	-13	34.12	PASS
2825	V	-47.08	8.20	3.3	-42.18	-13	29.18	PASS

Test Mode：GPRS 850 TX CH Mid Mode 836.6MHz								
154	H	-56.99	2.41	1.2	-55.78	-13	42.78	PASS
180	H	-56.52	2.80	1.4	-55.12	-13	42.12	PASS
296	H	-57.57	2.84	1.5	-56.23	-13	43.23	PASS
427	H	-56.87	2.99	1.7	-55.58	-13	42.58	PASS
1610	H	-52.91	7.05	2.4	-48.26	-13	35.26	PASS
2195	H	-51.78	7.23	2.9	-47.45	-13	34.45	PASS
2826	H	-46.53	8.20	3.3	-41.63	-13	28.63	PASS
136	V	-54.34	2.09	1.0	-53.25	-13	40.25	PASS
154	V	-55.46	2.41	1.2	-54.25	-13	41.25	PASS
180	V	-57.72	2.80	1.4	-56.32	-13	43.32	PASS
427	V	-55.41	2.99	1.7	-54.12	-13	41.12	PASS
1610	V	-49.88	7.05	2.4	-45.23	-13	32.23	PASS
2195	V	-46.72	7.23	2.9	-42.39	-13	29.39	PASS
2826	V	-46.79	8.20	3.3	-41.89	-13	28.89	PASS
Test Mode：GPRS 850 TX CH High Mode 848.8MHz								
154	H	-56.45	2.41	1.2	-55.24	-13	42.24	PASS
180	H	-55.66	2.80	1.4	-54.26	-13	41.26	PASS
296	H	-57.55	2.84	1.5	-56.21	-13	43.21	PASS
427	H	-53.47	2.99	1.7	-52.18	-13	39.18	PASS
1650	H	-48.30	7.11	2.5	-43.69	-13	30.69	**PASS**
2190	H	-46.31	7.20	2.9	-42.01	-13	29.01	**PASS**
2825	H	-44.09	8.20	3.3	-39.19	-13	26.19	PASS
136	V	-57.34	2.09	1.0	-56.25	-13	43.25	PASS
154	V	-55.49	2.41	1.2	-54.28	-13	41.28	PASS
180	V	-57.57	2.80	1.4	-56.17	-13	43.17	PASS
427	V	-54.76	2.99	1.7	-53.47	-13	40.47	**PASS**
1650	V	-50.86	7.11	2.5	-46.25	-13	33.25	**PASS**
2190	V	-49.44	7.20	2.9	-45.14	-13	32.14	PASS
2825	V	-48.48	8.20	3.3	-43.58	-13	30.58	PASS
Remark:All the emission were detected belong to narrowband spurious emission								

GPRS 1900 Mode

Spurious emissions								
EUT:GSM/SERIALConverter								
M/N: Confidant3.0								
Power: DC 5V From Adapter input AC 230V/50Hz								
Test Date: 2011-10-08		Test site: RF Chamber			Tested by:Leo-Li			
Ambient Temperature: 25.2℃		Relative Humidity: 55%						
Test result								
Test Mode： GPRS 1900 TX CH Low Mode 1850.2MHz								
Frequency (MHz)	Antenna polarization	S.G Output (dBm)	Antenna Gain (dBi/dBd)	Cable Loss (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Conclusion
154	H	-57.66	2.41	1.2	-56.45	-13	43.45	PASS
180	H	-55.63	2.80	1.4	-54.23	-13	41.23	PASS
296	H	-54.90	2.84	1.5	-53.56	-13	40.56	PASS
427	H	-55.41	2.99	1.7	-54.12	-13	41.12	PASS
2190	H	-49.64	7.20	2.9	-45.34	-13	32.34	PASS
2825	H	-51.66	8.20	3.3	-46.76	-13	33.76	PASS
3650	H	-43.49	8.95	3.8	-38.34	-13	25.34	PASS
136	V	-56.21	2.09	1.0	-55.12	-13	42.12	PASS
154	V	-57.56	2.41	1.2	-56.35	-13	43.35	PASS
180	V	-56.07	2.80	1.4	-54.67	-13	41.67	PASS
427	V	-54.15	2.99	1.7	-52.86	-13	39.86	PASS
2190	V	-50.89	7.20	2.9	-46.59	-13	33.59	PASS
2825	V	-51.24	8.20	3.3	-46.34	-13	33.34	PASS
3650	V	-44.29	8.95	3.8	-39.14	-13	26.14	PASS

Test Mode： GPRS 1900 TX CH Mid Mode 1880.0MHz								
154	H	-56.66	2.41	1.2	-55.45	-13	42.45	PASS
180	H	-57.16	2.80	1.4	-55.76	-13	42.76	PASS
296	H	-55.46	2.84	1.5	-54.12	-13	41.12	PASS
427	H	-54.63	2.99	1.7	-53.34	-13	40.34	PASS
1800	H	-46.70	7.15	2.7	-42.25	-13	29.25	PASS
2195	H	-51.56	7.23	2.9	-47.23	-13	34.23	PASS
3700	H	-45.46	9.01	3.9	-40.35	-13	27.35	PASS
136	V	-54.21	2.09	1.0	-53.12	-13	40.12	PASS
154	V	-53.49	2.41	1.2	-52.28	-13	39.28	PASS
180	V	-52.16	2.80	1.4	-50.76	-13	37.76	PASS
427	V	-52.63	2.99	1.7	-51.34	-13	38.34	PASS
1800	V	-46.72	7.15	2.7	-42.27	-13	29.27	PASS
2195	V	-44.89	7.23	2.9	-40.56	-13	27.56	PASS
3700	V	-43.46	9.01	3.9	-38.35	-13	25.35	PASS
Test Mode： GPRS 1900 TX CH High Mode 1909.8MHz								
154	H	-54.48	2.41	1.2	-53.27	-13	40.27	PASS
180	H	-53.60	2.80	1.4	-52.20	-13	39.20	PASS
296	H	-56.79	2.84	1.5	-55.45	-13	42.45	PASS
427	H	-54.07	2.99	1.7	-52.78	-13	39.78	PASS
1900	H	-45.02	7.17	2.8	-40.65	-13	27.65	**PASS**
2190	H	-45.75	7.22	2.9	-41.43	-13	28.43	**PASS**
3800	H	-42.24	9.08	4.0	-37.16	-13	24.16	PASS
136	V	-55.32	2.09	1.0	-54.23	-13	41.23	PASS
154	V	-53.7	2.41	1.2	-52.49	-13	39.49	PASS
180	V	-52.85	2.80	1.4	-51.45	-13	38.45	PASS
427	V	-54.16	2.99	1.7	-52.87	-13	39.87	**PASS**
1900	V	-46.66	7.17	2.8	-42.29	-13	29.29	**PASS**
2190	V	-47.97	7.22	2.9	-43.65	-13	30.65	PASS
3800	V	-47.36	9.08	4.0	-42.28	-13	29.28	PASS
Remark:All the emission were detected belong to narrowband spurious emission								

8. FREQUENCY STABILITY V.S. TEMPERATURE AND VOLTAGE

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Signal Generator	HP	83732B	VS34490501	May.08, 11	1 Year
3.	Power meter	Anritsu	ML2487A	6K00002472	May.08, 11	1Year
4.	Power sensor	Anritsu	MA2491A	0033005	May.08, 11	1Year
5.	Attenuator(10dB)	Agilent	8491A	MY39264375	May.08, 11	1 Year
6.	Attenuator(20dB)	Agilent	8491B	MY39262165	May.08, 11	1 Year
7.	Attenuator (0dB-110dB)	Agilent	8496A	MY42143100	May.08, 11	1 Year
8.	Universal Radio Communication Tester	R&S	CUM200	1100.008K02	May.08, 11	1 Year
9.	Network Analyzer	Agilent	E5071B	MY42403549	May.08, 11	1 Year
10.	Bluetooth Test set	Anritsu	MT8852B	6K00005966	May.08, 11	1 Year
11.	Wireless Communication Test set	Agilent	E5515C	GB44300243	May.09, 11	1 Year
12.	DC Power supply	King	DPS-1303D	821956	N/A	N/A
13.	PREAmplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
14.	PREAmplifier	Agilent	8447D	2944A11159	May.08, 11	1Year
15.	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 10	1.5 Year
16.	Horn Antenna	EMCO	3115	9607-4877	Nov. 25, 10	1.5 Year
17.	Bilog Antenna	Schaffner	CBL6111C	2768	Dec.14, 10	1 Year
18.	Power divider	Mini-Circuits	ZFRSC-183-S+	572800942	N/A	N/A
19.	Power divider	Mini-Circuits	ZA3PD-4-S+	347100912	N/A	N/A
20.	Power divider	Mini-Circuits	ZA4PD-4-S+	544000937	N/A	N/A
21.	Antenna and turn table controller	CT	SC100	CT-0091	N/A	N/A
22.	Temperature controller	Terchy	MHQ	120	May.08, 11	1Year
23.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 11	1 Year
24.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
25.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year
26.	RF Cable	Hubersuhner	SUCOFLEX102	NO.1	May.08,11	1 Year
27.	Horn Antenna	EMCO	3116	00060089	Nov.25, 10	1.5 Year
28.	Horn Antenna	EMCO	3116	00060088	Nov.25, 10	1.5 Year

8.1.Limit

Frequency Tolerance: +/-2.5ppm for 850MHz band
+/-2.5ppm for 1900MHz band

8.2.Test procedure:

The equipment under test was connected to an external DC power supply and input rated voltage. Reference power supply voltage for these tests is DC 4.0V. 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 25 degree operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30 degree. After the temperature stabilized for approximately 30 minutes record the frequency. Repeat step measure with 10 degree per stage until the highest temperature of 50 degree reached.

Frequency Stability						
EUT: GSM/SERIALConverter						
M/N: Confidant3.0						
Power: DC 5V From Adapter input AC 120V/60Hz						
Test Date: 2011-10-08		Test site: RF Chamber		Tested by: Leo-Li		
Ambient Temperature: 25℃		Relative Humidity: 56%		Pressure:101.7 kpa		
Frequency stability VS Voltage (Temperature:25℃)						
Test Mode: GPRS 850 CH 128 824.2MHz						
Supply Voltage (V)	CH	Frequency (MHz)	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	128	824.2	824.1985	1.8	+/- 2.5	**PASS**
112	128	824.2	824.1986	1.7	+/- 2.5	**PASS**
120	128	824.2	824.1989	1.3	+/- 2.5	**PASS**
130	128	824.2	824.1996	0.5	+/- 2.5	**PASS**
138	128	824.2	824.1992	1.0	+/- 2.5	**PASS**
Test Mode: GPRS 850 CH190 836.6MHz						
Supply Voltage (V)	CH	Frequency (MHz)	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	190	836.6	836.5996	0.5	+/- 2.5	**PASS**
112	190	836.6	836.5989	1.3	+/- 2.5	**PASS**
120	190	836.6	836.5992	1.0	+/- 2.5	**PASS**
130	190	836.6	836.5995	0.6	+/- 2.5	**PASS**
138	190	836.6	836.5991	1.1	+/- 2.5	**PASS**
Test Mode: GPRS 850 CH251 848.8MHz						
Supply Voltage (V)	CH	Frequency (MHz)	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	251	848.8	848.7995	0.6	+/-2.5	**PASS**
112	251	848.8	848.7992	0.9	+/-2.5	**PASS**
120	251	848.8	848.7989	1.3	+/-2.5	**PASS**
130	251	848.8	848.7990	1.2	+/-2.5	**PASS**
138	251	848.8	848.7994	0.7	+/-2.5	**PASS**

Test Mode: GPRS 1900 CH 512 1850.2MHz						
Supply Voltage （V）	CH	Frequency （MHz）	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	512	1850.2	1850.1996	0.2	+/- 2.5	**PASS**
112	512	1850.2	1850.1992	0.4	+/- 2.5	**PASS**
120	512	1850.2	1850.1990	0.5	+/- 2.5	**PASS**
130	512	1850.2	1850.1899	0.5	+/- 2.5	**PASS**
138	512	1850.2	1850.1994	0.3	+/- 2.5	**PASS**
Test Mode: GPRS 1900 CH 661 1880.0MHz						
Supply Voltage （V）	CH	Frequency （MHz）	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	661	1880.0	1879.9986	0.7	+/- 2.5	**PASS**
112	661	1880.0	1879.9979	1.1	+/- 2.5	**PASS**
120	661	1880.0	1879.9989	0.6	+/- 2.5	**PASS**
130	661	1880.0	1879.9992	0.4	+/- 2.5	**PASS**
138	661	1880.0	1879.9987	0.7	+/- 2.5	**PASS**
Test Mode: GPRS 1900 CH 810 1909.8MHz						
Supply Voltage （V）	CH	Frequency （MHz）	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
102	810	1909.8	1909.7982	0.9	+/- 2.5	**PASS**
112	810	1909.8	1909.7980	1.0	+/- 2.5	**PASS**
120	810	1909.8	1909.7985	0.8	+/- 2.5	**PASS**
130	810	1909.8	1909.7979	1.1	+/- 2.5	**PASS**
138	810	1909.8	1909.7988	0.6	+/- 2.5	**PASS**

Frequency stability VS Temperature (Voltage:120V）

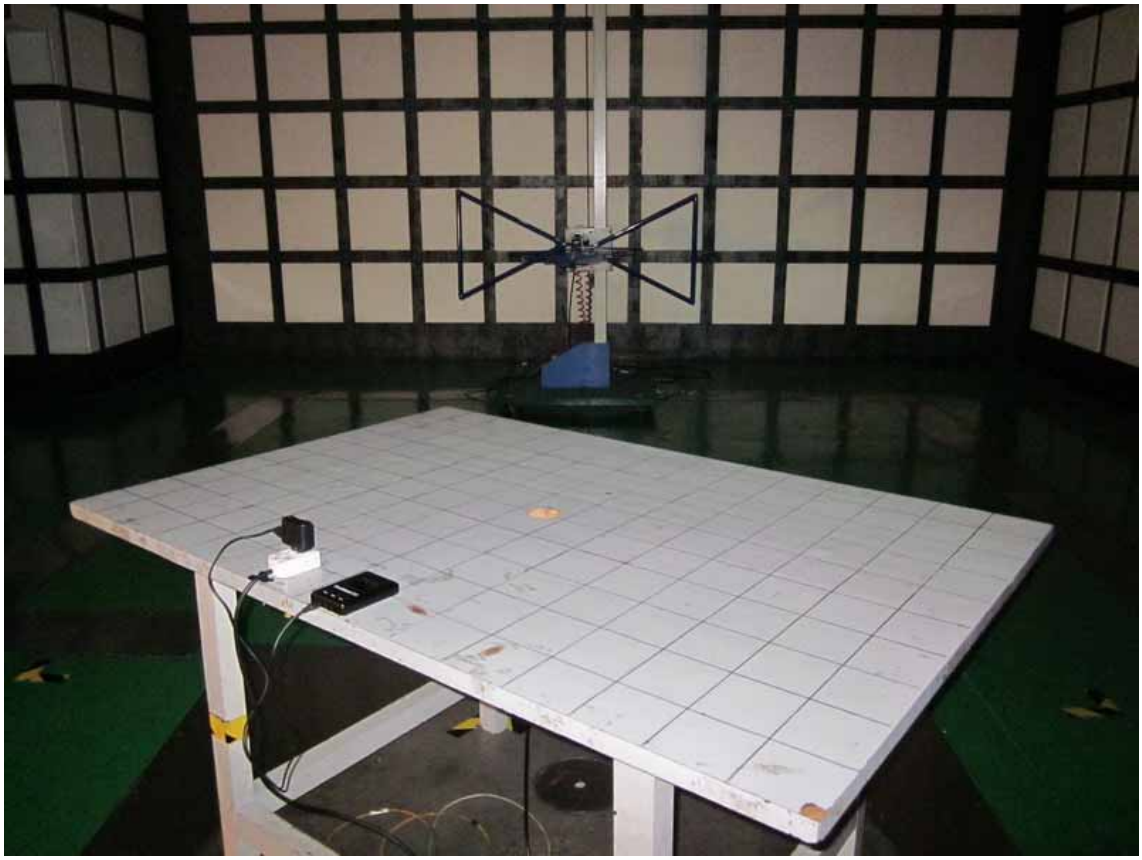
Temperature （℃）	CH	Frequency （MHz）	Test result (MHz)	Deviation (ppm)	Limit (ppm)	**Conclusion**
Test Mode: GPRS 850 CH 128 824.2MHz						
-30	128	824.2	824.1992	1.0	+/- 2.5	**PASS**
-20	128	824.2	824.1998	0.2	+/- 2.5	**PASS**
-10	128	824.2	824.1995	0.6	+/- 2.5	**PASS**
10	128	824.2	824.1996	0.5	+/- 2.5	**PASS**
20	128	824.2	824.1994	0.7	+/- 2.5	**PASS**
30	128	824.2	824.1991	1.0	+/- 2.5	**PASS**
40	128	824.2	824.1997	0.4	+/- 2.5	**PASS**
50	128	824.2	824.1999	0.1	+/- 2.5	**PASS**
Test Mode: GPRS 850 CH190 836.6MHz						
-30	190	836.6	836.5998	0.2	+/- 2.5	**PASS**
-20	190	836.6	836.5994	0.7	+/- 2.5	**PASS**
-10	190	836.6	836.5995	0.6	+/- 2.5	**PASS**
10	190	836.6	836.5997	0.4	+/- 2.5	**PASS**
20	190	836.6	836.5993	0.8	+/- 2.5	**PASS**
30	190	836.6	836.5996	0.5	+/- 2.5	**PASS**
40	190	836.6	836.5992	1.0	+/- 2.5	**PASS**
50	190	836.6	836.5999	0.1	+/- 2.5	**PASS**
Test Mode: GPRS 850 CH251 848.8MHz						
-30	251	848.8	848.7992	0.9	+/-2.5	**PASS**
-20	251	848.8	848.7995	0.6	+/-2.5	**PASS**
-10	251	848.8	848.7997	0.4	+/-2.5	**PASS**
10	251	848.8	848.7993	0.8	+/-2.5	**PASS**
20	251	848.8	848.7999	0.1	+/-2.5	**PASS**
30	251	848.8	848.7996	0.5	+/-2.5	**PASS**
40	251	848.8	848.7998	0.2	+/-2.5	**PASS**
50	251	848.8	848.7994	0.7	+/-2.5	**PASS**

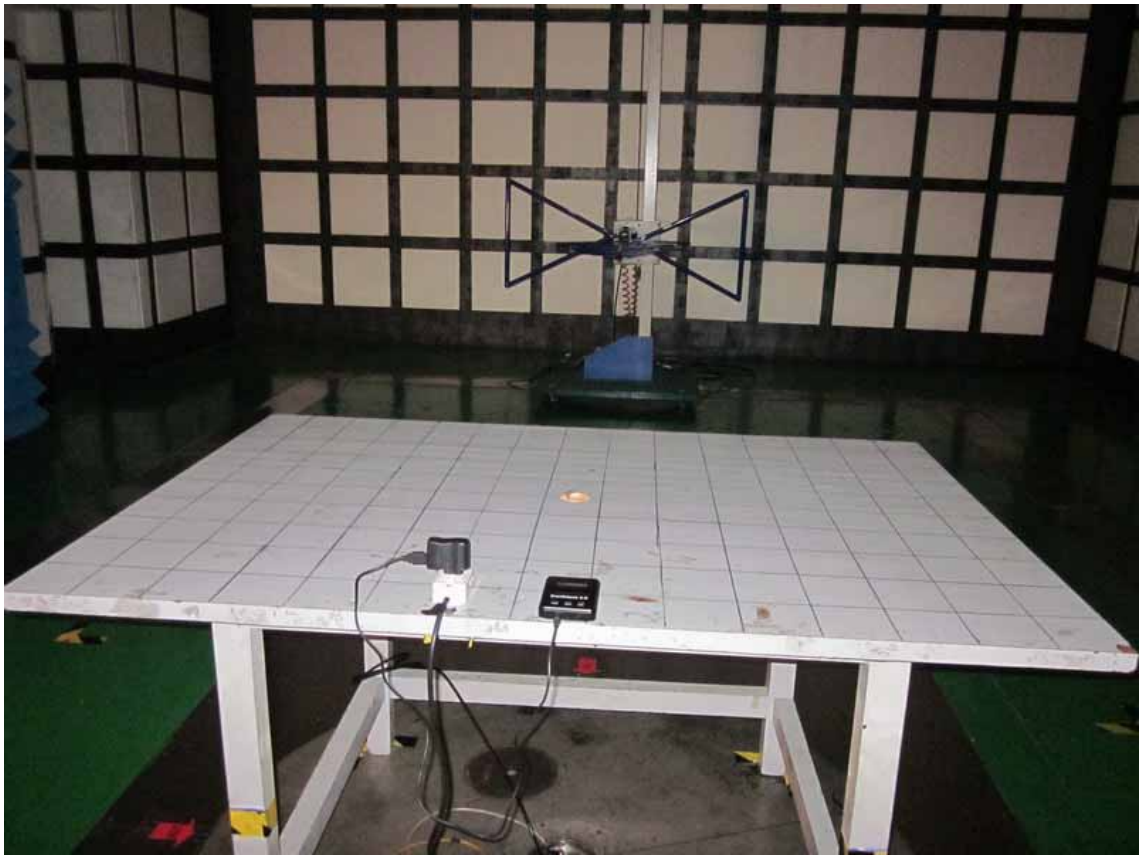
Test Mode: GPRS 1900 CH 512 1850.2MHz						
-30	512	1850.2	1850.1995	0.3	+/- 2.5	**PASS**
-20	512	1850.2	1850.1998	0.1	+/- 2.5	**PASS**
-10	512	1850.2	1850.1996	0.2	+/- 2.5	**PASS**
10	512	1850.2	1850.1997	0.2	+/- 2.5	**PASS**
20	512	1850.2	1850.1992	0.4	+/- 2.5	**PASS**
30	512	1850.2	1850.1991	0.5	+/- 2.5	**PASS**
40	512	1850.2	1850.1993	0.4	+/- 2.5	**PASS**
50	512	1850.2	1850.1994	0.3	+/- 2.5	**PASS**
Test Mode: GPRS 1900 CH 661 1880.0MHz						
-30	661	1880.0	1879.9986	0.7	+/- 2.5	**PASS**
-20	661	1880.0	1879.9975	1.3	+/- 2.5	**PASS**
-10	661	1880.0	1879.9965	1.7	+/- 2.5	**PASS**
10	661	1880.0	1879.9962	2.0	+/- 2.5	**PASS**
20	661	1880.0	1879.9958	2.2	+/- 2.5	**PASS**
30	661	1880.0	1879.9964	1.9	+/- 2.5	**PASS**
40	661	1880.0	1879.9971	1.5	+/- 2.5	**PASS**
50	661	1880.0	1879.9982	1.0	+/- 2.5	**PASS**
Test Mode: GPRS 1900 CH 810 1909.8MHz						
-30	810	1909.8	1909.7984	0.8	+/- 2.5	**PASS**
-20	810	1909.8	1909.7957	2.2	+/- 2.5	**PASS**
-10	810	1909.8	1909.7973	1.4	+/- 2.5	**PASS**
10	810	1909.8	1909.7982	0.9	+/- 2.5	**PASS**
20	810	1909.8	1909.7955	2.3	+/- 2.5	**PASS**
30	810	1909.8	1909.7963	1.9	+/- 2.5	**PASS**
40	810	1909.8	1909.7969	1.6	+/- 2.5	**PASS**
50	810	1909.8	1909.7966	1.8	+/- 2.5	**PASS**

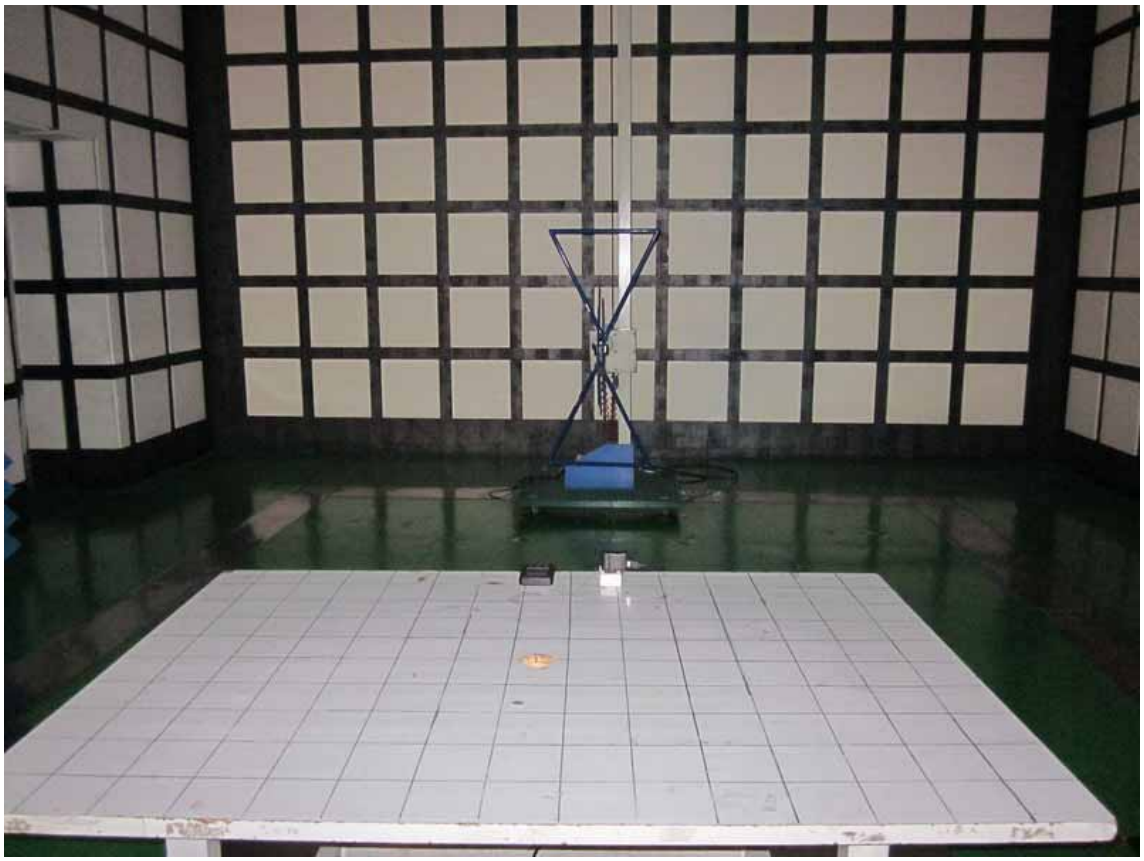
9. DEVIATION TO TEST SPECIFICATIONS

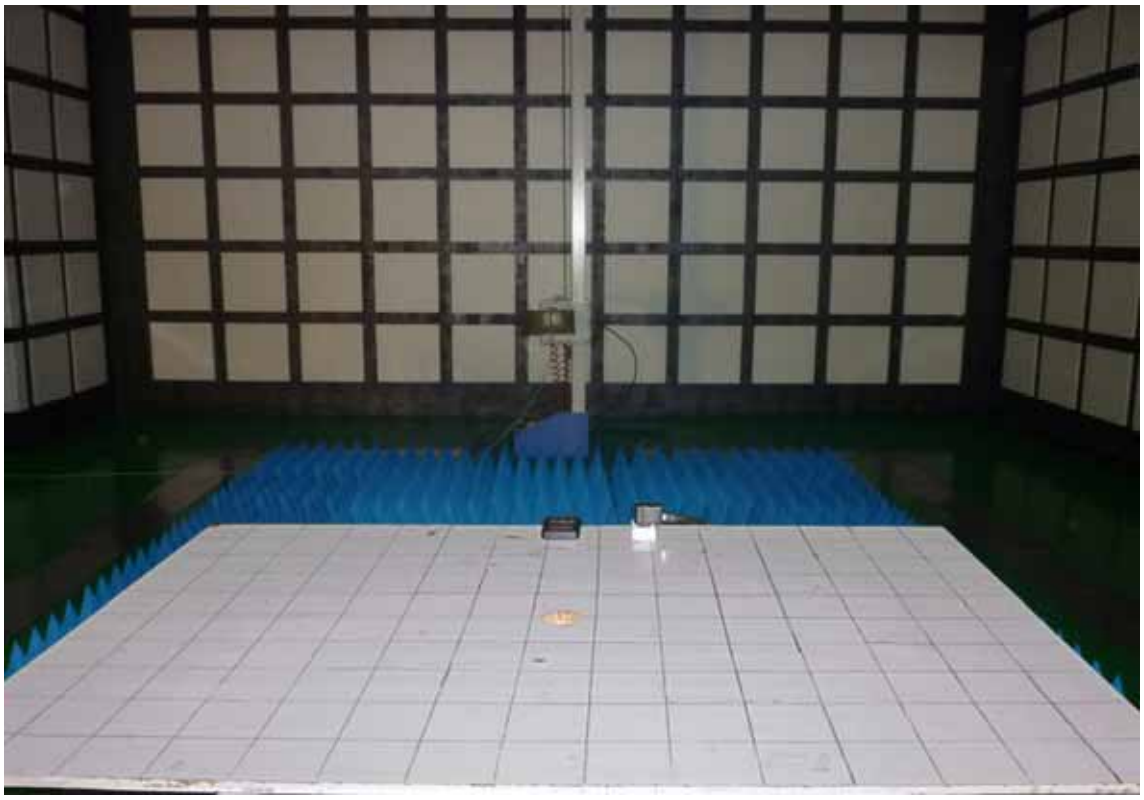
[NONE]

10. PHOTOGRAPH OF TEST









11. PHOTOS OF THE EUT

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT

Figure 3
General Appearance of the EUT

Figure 4
General Appearance of the EUT

Figure 5
General Appearance of the EUT

Figure 6
General Appearance of the EUT

Figure 7
Inside of the EUT

Figure 8
Inside of the EUT

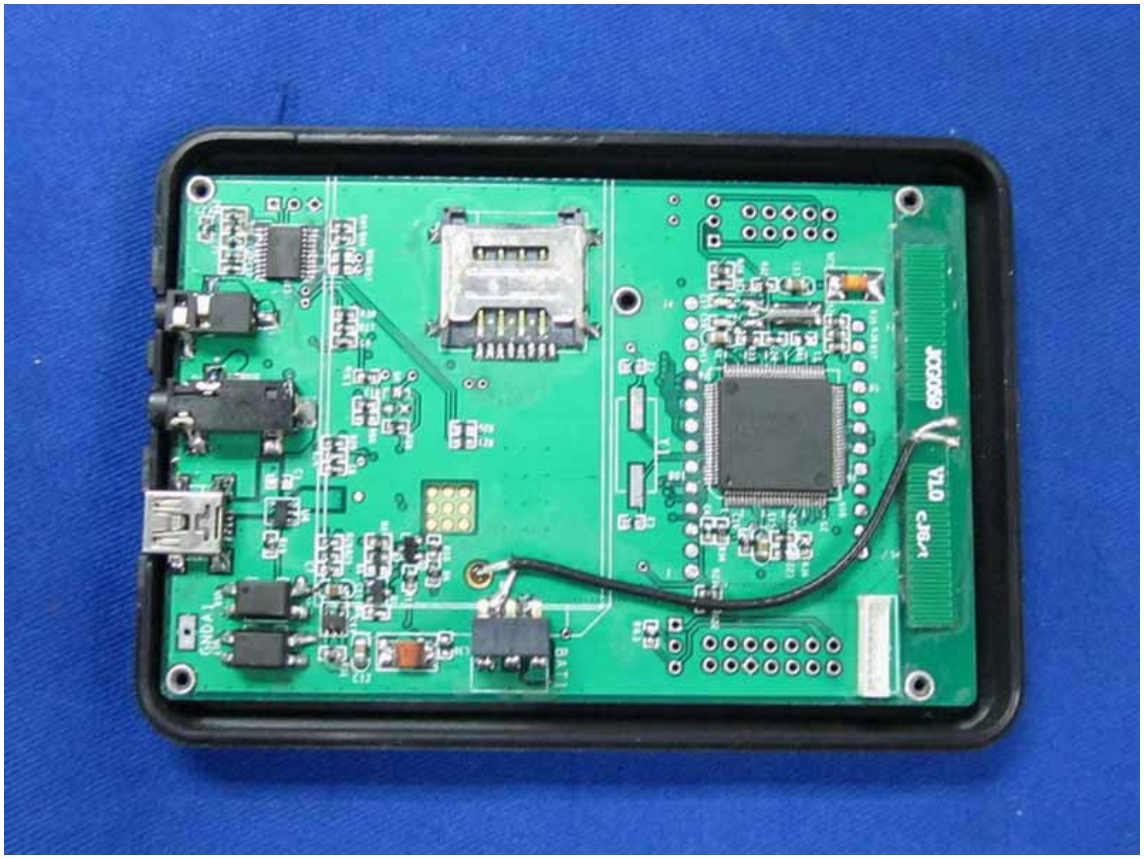


Figure 9
Inside of the EUT

Figure 10
Component side of the PCB

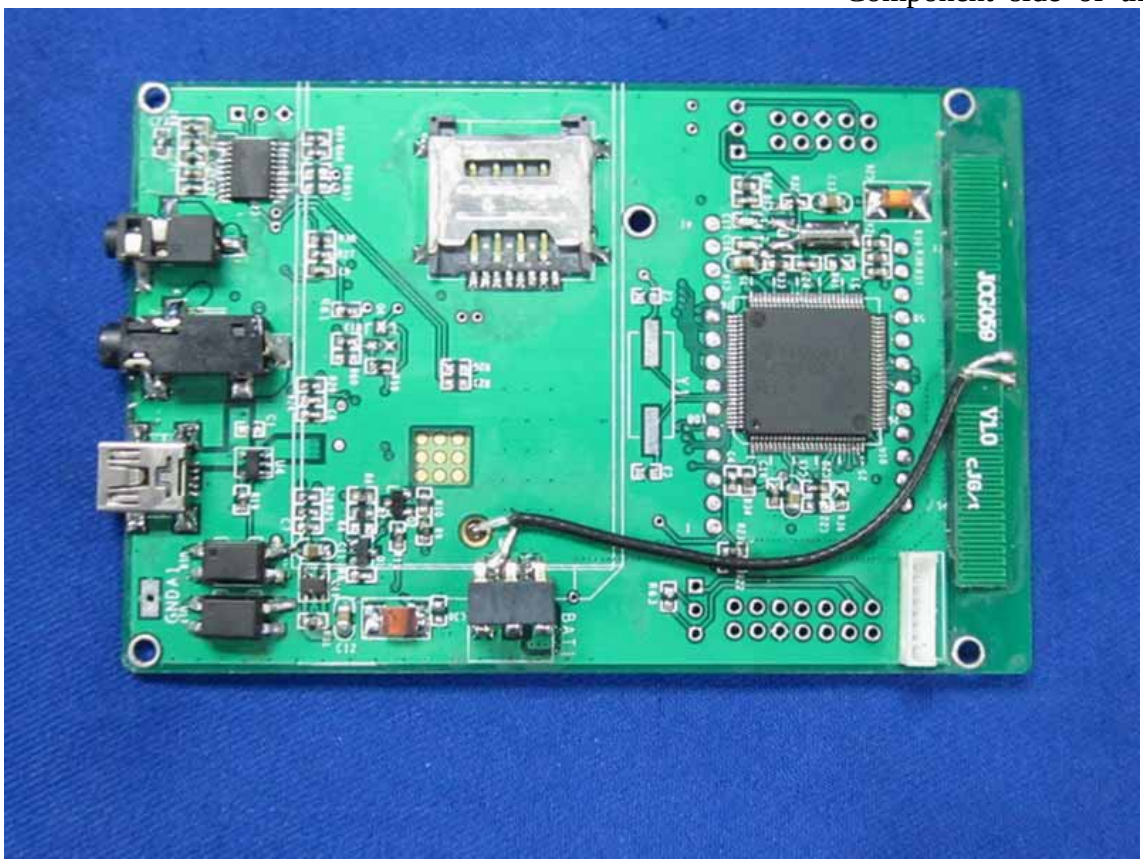


Figure 11
Component side of the PCB

Figure 12
Component side of the PCB

Figure 13
USB Cable

Figure 14
Power Adapter

Figure 15
Power Adapter