FCC Report (GSM&WCDMA)

Applicant:	MAXCOMM Co., LTD
Address of Applicant:	6Fl, No.120-12,Sec. 3, Zhongshan Road, Zhonghe District., 235, New Taipei, China
Manufacturer:	MAXCOMM Co., LTD
Address of Manufacturer:	6Fl, No.120-12,Sec. 3, Zhongshan Road, Zhonghe District., 235, New Taipei, China
Equipment Under Test (EUT)	
Product Name:	3G FIXED WIRELESS PHONE WITH WIFI HOTSPOT
Model No.:	MW-33W
Trade mark:	MAXCOMM
FCC ID:	2ACKS-MAXCOMM
Applicable standards:	FCC CFR Title 47 Part 2: 2017
	FCC CFR Title 47 Part22 Subpart H: 2017
	FCC CFR Title 47 Part24 Subpart E: 2017
Date of sample receipt:	February 19, 2018
Date of Test:	February 20-28, 2018
Date of report issued:	March 01, 2018
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

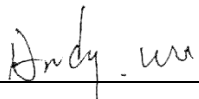
Robinson Lo
Laboratory Manager

1 Version

Version No.	Date	Description
00	*March 01, 2018*	*Original*

Prepared By:  ***Date:*** *March 01, 2018*

Project Engineer

Check By:  ***Date:*** *March 01, 2018*

Reviewer

2 Contents

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3 Test Summary

Test Item	Section in CFR 47	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Pass* (Please refer to SAR Report)
RF Output Power	Part 2.1046 Part 22.913 (a)(2) Part 24.232 (c)	Pass
Peak-to-Average Ratio	Part 2.1046 Part 24.232 (d)	Pass
Modulation Characteristics	Part 2.1047	Pass
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917 Part 24.238	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 22.917 (a) Part 24.238 (a)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917 (a) Part 24.238 (a)	Pass
Out of band emission, Band Edge	Part 22.917 (a) Part 24.238 (a)	Pass
Frequency stability vs. temperature	Part 2.1055(a)(1)(b)	Pass
Frequency stability vs. voltage	Part 2.1055(d)(1)(2)	Pass

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

4 General Information

4.1 General Description of EUT

Product Name:	3G FIXED WIRELESS PHONE WITH WIFI HOTSPOT
Model No.:	MW-33W
Test sample(s) ID:	GTS201801000032-1
Sample(s) Status	Engineer sample
Support Networks:	GSM, GPRS, EGPRS, WCDMA
Support Bands:	GSM850, PCS1900, WCDMA Band V, WCDMA Band II
TX Frequency:	GSM850: 824.20MHz-848.80MHz PCS1900: 1850.20MHz-1909.80MHz WCDMA Band V: 826.40MHz -846.60MHz WCDMA Band II: 1852.40MHz -1907.60MHz
GPRS Class:	12
EGPRS Class	10
Modulation type:	GSM/GPRS: GMSK EGPRS: GMSK/8PSK WCDMA Band II/V: QPSK
Antenna type:	Integral antenna
Antenna gain:	GSM850/ WCDMA Band V: 1.53dBi PCS1900/ WCDMA Band II: 2.24dBi
Power supply:	Adapter Model: HYY-0501000 Input: AC 100-240V ,0.25A Max, 50/60Hz Output: DC 5V, 1.0A Or Li-ion Battery: DC 3.7V, 1000mAh(3.7Wh)

Operation Frequency List:

GSM 850		PCS1900		WCDMA Band V		WCDMA Band II	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
128	824.20	512	1850.20	4132	826.40	9262	1852.40
129	824.40	513	1850.40	4133	826.60	9263	1852.60
· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮
189	836.40	660	1879.80	4181	836.20	9399	1879.80
190	836.60	661	1880.00	4182	836.40	9400	1880.00
191	836.80	662	1880.20	4183	836.60	9401	1880.20
· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮	· ⋮
250	848.60	809	1909.60	4232	846.40	9537	1907.40
251	848.80	810	1909.80	4233	846.60	9538	1907.60

Regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Final test channel:

GSM 850		PCS1900		WCDMA Band V		WCDMA Band II	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
128	824.20	512	1850.20	4132	826.40	9262	1852.40
190	836.60	661	1880.00	4183	836.60	9400	1880.00
251	848.80	810	1909.80	4233	846.60	9538	1907.60

4.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

4.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures document on TIA/EIA 603 and FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

4.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383, January 08, 2018.

● **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2, August 15, 2016.

4.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

5 Test Instruments list

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 28 2017	June 27 2018
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 28 2017	June 27 2018
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 28 2017	June 27 2018
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 28 2017	June 27 2018
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June 28 2017	June 27 2018
9	Coaxial Cable	GTS	N/A	GTS211	June 28 2017	June 27 2018
10	Coaxial cable	GTS	N/A	GTS210	June 28 2017	June 27 2018
11	Coaxial Cable	GTS	N/A	GTS212	June 28 2017	June 27 2018
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 28 2017	June 27 2018
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 28 2017	June 27 2018
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 28 2017	June 27 2018
15	Band filter	Amindeon	82346	GTS219	June 28 2017	June 27 2018
16	Universal radio communication tester	Rohde & Schwarz	CMU200	GTS235	June 28 2017	June 27 2018
17	Signal Generator	Rohde & Schwarz	SML03	GTS236	June 28 2017	June 27 2018
18	Temp. Humidity/ Barometer	Oregon Scientific	BA-888	GTS248	June 28 2017	June 27 2018
19	D.C. Power Supply	Instek	PS-3030	GTS232	NA	NA
20	Splitter	Agilent	11636B	GTS237	June 28 2017	June 27 2018
21	Power meter	Rohde & Schwarz	NRVS	GTS238	June 28 2017	June 27 2018
22	Spectrum Analyzer	Agilent	E4440A	GTS533	June 28 2017	June 27 2018
23	Temp.&Humidity chamber	Chuang wei	GDS-225	GTS005-1	June 28 2017	June 27 2018
24	Highpass filter	Micro-Tronics	HPM50108	GTS549	June 28 2017	June 27 2018
25	Highpass filter	Micro-Tronics	HPM50111	GTS550	June 28 2017	June 27 2018
26	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS588	May 07 2017	May 06 2018

6 System test configuration

6.1 Test mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Test modes		
Band	Radiated	Conducted
GSM 850	■ GSM link ■ GPRS 1 link ■ EPRS 1 link	■ GSM link ■ GPRS 1 link ■ EGPRS 1 link
PCS 1900	■ GSM link ■ GPRS 1 link ■ EGPRS 1 link	■ GSM link ■ GPRS 1 link ■ EGPRS 1 link
WCDMA II	■ RMC 12.2Kbps link	■ RMC 12.2Kbps link
WCDMA Band V	■ RMC 12.2Kbps link	■ RMC 12.2Kbps link

Note: The maximum power levels are GSM mode for GMSK link, GPRS multi-slot class 8 mode for GMSK link, EGPRS multi-slot class 8 mode for 8PSK link, RMC12.2Kbps mode for WCDMA Band V/II. only these modes were used for all tests.

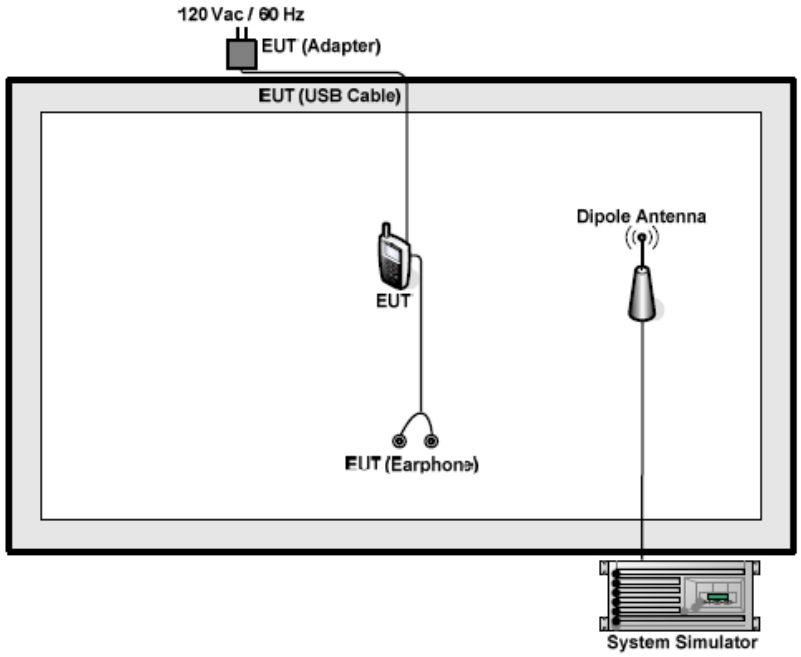
The conducted power tables are as follows:

Conducted Power (dBm)						
Band	GSM850			PCS1900		
Channel	128	190	251	512	661	810
Frequency	824.20	836.60	848.80	1850.20	1880.00	1909.80
GSM (GMSK, 1 TX slot)	32.41	32.32	32.34	28.18	28.49	29.10
GPRS (GMSK, 1 TX slot)	32.33	32.29	32.31	28.20	25.78	26.16
GPRS (GMSK, 2 TX slot)	31.44	31.46	32.49	27.69	24.22	26.68
GPRS (GMSK, 3 TX slot)	N/A	N/A	N/A	25.73	26.74	23.18
GPRS (GMSK, 4 TX slot)	N/A	N/A	N/A	25.19	20.82	21.29
EGPRS (8PSK, 1 TX slot)	31.90	32.10	32.05	28.94	28.65	28.37
EGPRS (8PSK, 2 TX slot)	31.88	31.83	31.79	28.59	28.15	27.65
EGPRS (8PSK, 3 TX slot)	N/A	N/A	N/A	N/A	N/A	N/A
EGPRS (8PSK, 4 TX slot)	N/A	N/A	N/A	N/A	N/A	N/A

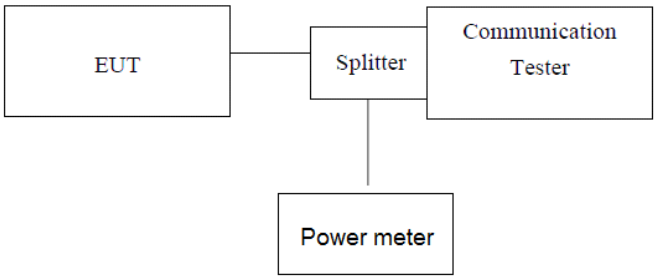
N/A: Not applicable

Conducted Power (dBm)						
Band	WCDMA Band II			WCDMA Band V		
Channel	9262	9400	9538	4132	4183	4233
Frequency	1852.4	1880.0	1907.6	826.4	836.6	846.6
RMC 12.2Kbps	25.71	25.74	25.17	25.86	25.52	26.09
HSDPA Subtest-1	25.25	25.56	25.02	25.58	25.85	26.32
HSDPA Subtest-2	23.12	23.22	23.36	23.28	22.99	22.87
HSDPA Subtest-3	22.19	22.36	22.59	22.36	22.45	22.74
HSDPA Subtest-4	22.11	22.16	22.05	22.23	22.35	22.84
HSUPA Subtest-1	26.25	26.20	25.90	25.68	25.59	26.66
HSUPA Subtest-2	23.27	23.29	23.25	22.34	23.32	23.20
HSUPA Subtest-3	23.10	23.12	23.07	22.31	23.13	23.01
HSUPA Subtest-4	23.35	23.35	23.33	22.20	23.29	23.25
HSUPA Subtest-5	23.18	23.09	23.02	22.10	23.08	23.10
AMR	24.80	24.68	24.76	23.62	24.94	24.78

6.2 Configuration of Tested System



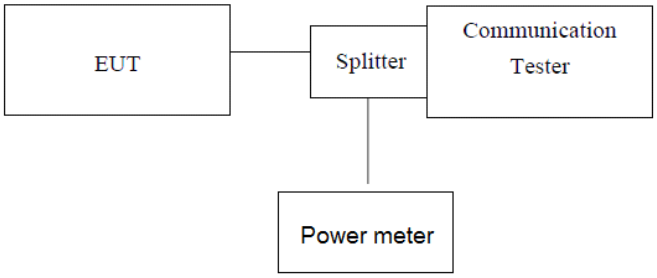
6.3 Conducted Peak Output Power

Test Requirement:	FCC part22.913(a) and FCC part24.232(b)
Test Method:	FCC part2.1046
Limit:	GSM850, WCDMA Band V: 7W PCS1900, WCDMA Band II: 2W
Test setup:	 *Note: Measurement setup for testing on Antenna connector*
Test Procedure:	1. The transmitter output port was connected to base station. 2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement. 3. Set EUT at maximum power through base station. 4. Select lowest, middle, and highest channels for each band and different modulation. 5. Measure the maximum burst average power.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

EUT Mode	Channel	Frequency (MHz)	PK power (dBm)	Limit (dBm)	Result
GSM 850 (GSM link)	128	824.20	32.41	38.45	Pass
	190	836.60	32.32		
	251	848.80	32.34		
GSM 850 (GPRS 1 link)	128	824.20	32.33	38.45	Pass
	190	836.60	32.29		
	251	848.80	32.31		
GSM 850 (EGPRS 1 link)	128	824.20	31.90	38.45	Pass
	190	836.60	32.10		
	251	848.80	32.05		
PCS 1900 (GSM link)	512	1850.20	28.18	33.01	Pass
	661	1880.00	28.49		
	810	1909.80	29.10		
PCS 1900 (GPRS 1 link)	512	1850.20	28.20	33.01	Pass
	661	1880.00	25.78		
	810	1909.80	26.16		
PCS 1900 (EGPRS 1 link)	512	1850.20	28.94	33.01	Pass
	661	1880.00	28.65		
	810	1909.80	28.37		
WCDMA Band V (RMC 12.2Kbps link)	4132	826.40	25.71	38.45	Pass
	4183	836.60	25.74		
	4233	846.60	25.17		
WCDMA Band II (RMC 12.2Kbps link)	9262	1852.4	25.86	33.01	Pass
	9400	1880.0	25.52		
	9538	1907.6	26.09		

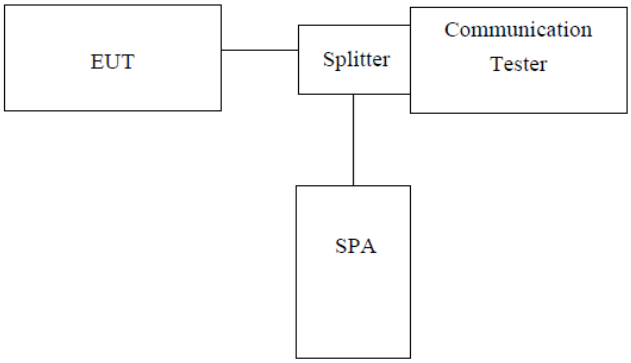
6.4 Peak-to-Average Ratio

Test Requirement:	FCC part24.232(d)
Test Method:	FCC part2.1046
Limit:	13db
Test setup:	 *Note: Measurement setup for testing on Antenna connector*
Test Procedure:	1. The transmitter output port was connected to base station. 2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement. 3. Set EUT at maximum power through base station. 4. Select lowest, middle, and highest channels for each band and different modulation. 5. Measure the maximum burst average power. 6. Record the maximum peak-to-average ratio value.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement data

Test mode	Channel	Peak power (dBm)	Average power(dBm)	PAR(dB)	Limit (dB)	Verdict
GPRS 850	824.2	32.41	31.40	0.68	13	Compliant
	836.6	32.32	31.43	0.65		
	848.8	32.49	31.27	0.62		
PCS 1900	1850.2	28.94	27.61	0.40		
	1880.0	28.65	27.39	0.43		
	1909.8	29.10	28.07	0.37		
WCDMA Band V	826.4	25.86	25.75	2.87		
	836.6	25.85	24.84	2.83		
	846.6	26.66	25.64	2.76		
WCDMA Band II	1852.4	26.25	25.27	2.82		
	1880.0	25.60	24.63	2.84		
	1907.6	25.86	24.88	2.75		

6.5 Occupy Bandwidth

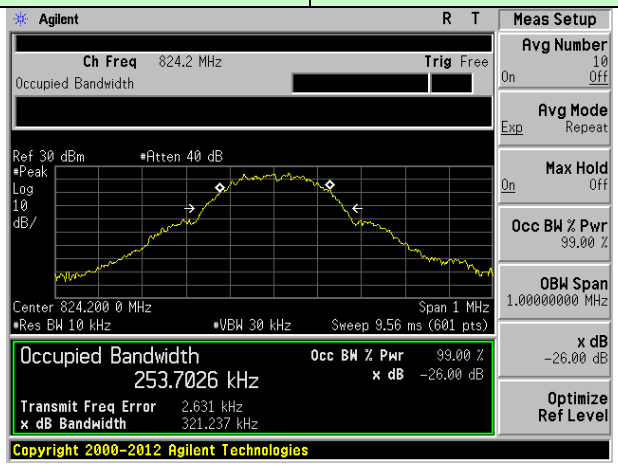
Test Requirement:	FCC part22.913(a) and FCC part24.232(b)
Test Method:	FCC part2.1049
Test setup:	 *Note: Measurement setup for testing on Antenna connector*
Test Procedure:	1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer 2. RBW was set to about 1% of emission BW, VBW= 3 times RBW. 3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

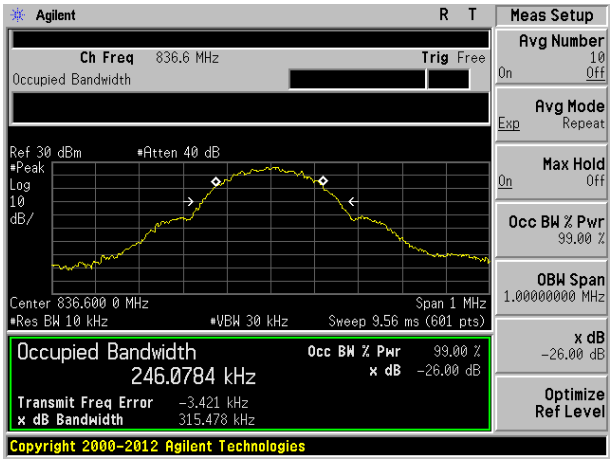
EUT Mode	Channel	Frequency (MHz)	99% Occupy bandwidth (KHz)	-26dB bandwidth (KHz)
GSM 850 (GSM link)	128	824.20	253.703	321.237
	190	836.60	246.078	315.478
	251	848.80	241.096	315.596
GSM 850 (GPRS 1 link)	128	824.20	243.104	317.601
	190	836.60	237.763	315.956
	251	848.80	247.550	317.829
GSM 850 (EGPRS 1 link)	128	824.20	270.950	367.577
	190	836.60	263.893	345.379
	251	848.80	261.868	346.630
PCS 1900 (GSM link)	512	1850.20	252.730	320.789
	661	1880.00	247.654	319.038
	810	1909.80	246.781	318.930
PCS 1900 (GPRS 1 link)	512	1850.20	250.109	321.422
	661	1880.00	244.610	321.760
	810	1909.80	246.815	315.162
PCS 1900 (EGPRS 1 link)	512	1850.20	275.100	360.262
	661	1880.00	259.665	332.593
	810	1909.80	258.265	345.100
WCDMA Band V (RMC 12.2Kbps link)	4132	826.40	4188.90	4778.00
	4183	836.60	4155.60	4678.00
	4233	846.60	4155.50	4738.00
WCDMA Band II (RMC 12.2Kbps link)	9262	1852.4	4176.50	4712.00
	9400	1880.0	4177.30	4718.00
	9538	1907.6	4163.30	4716.00

Test plot as follows:

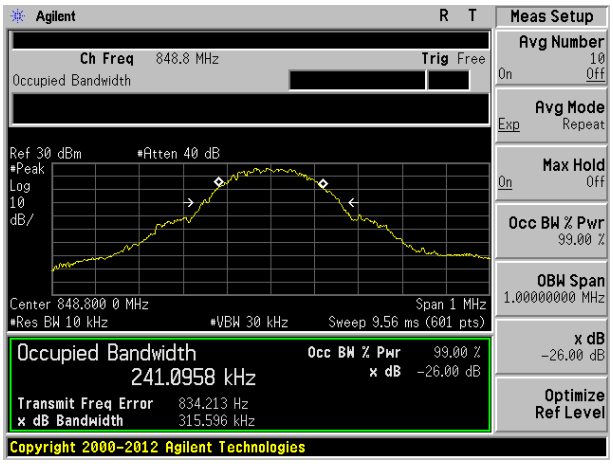
Test band:	GSM 850 (GSM link)



Lowest channel

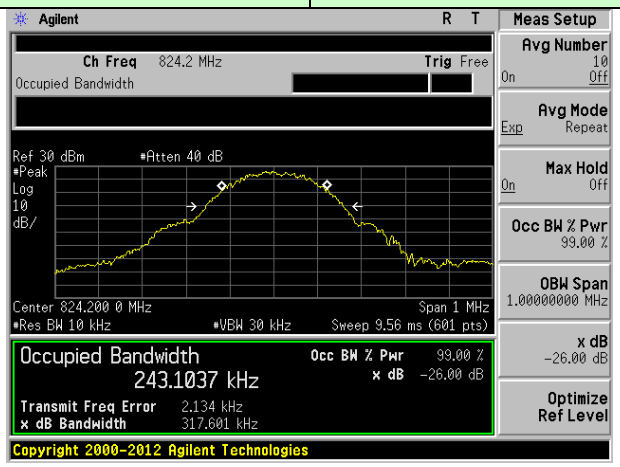


Middle channel



Highest channel

Test band:	GSM 850 (GPRS 1 link)



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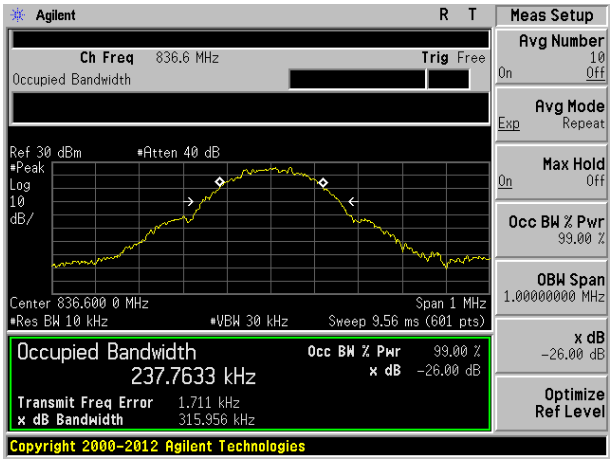
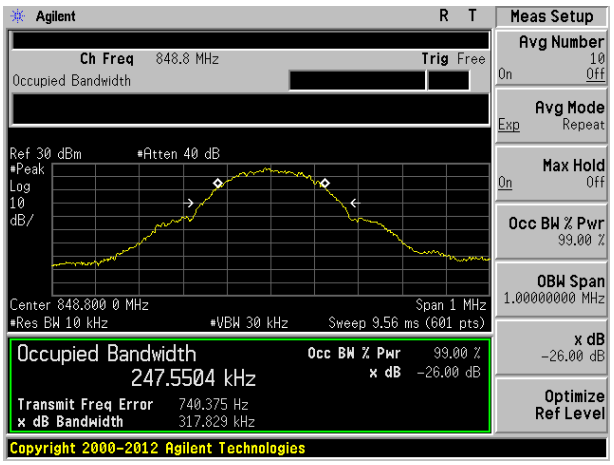
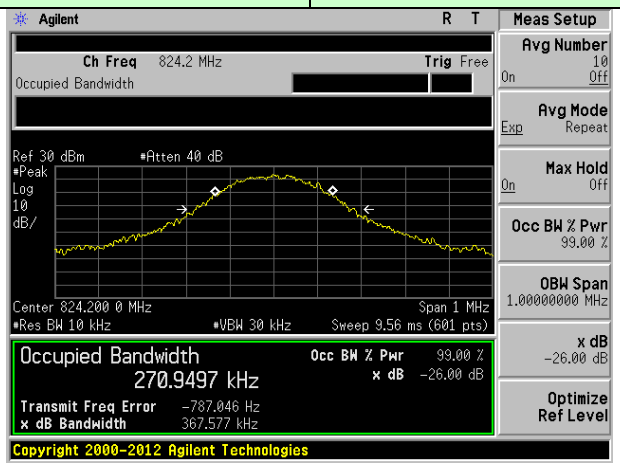


Middle channel

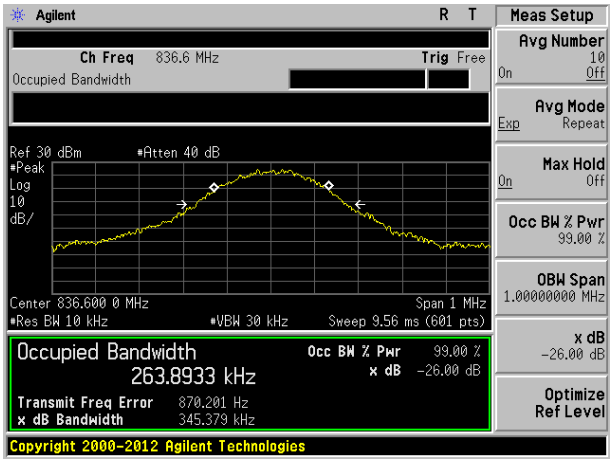


Highest channel

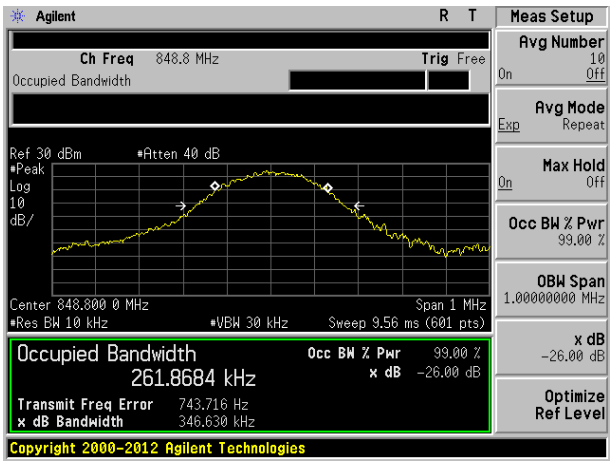
Test band:	GSM 850 (EGPRS 1 link)



Lowest channel

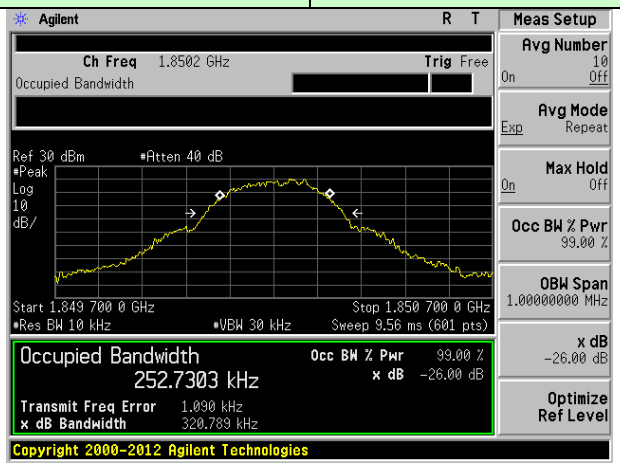


Middle channel

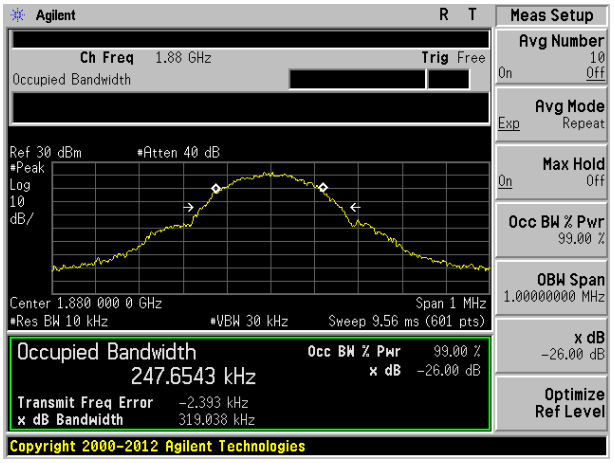


Highest channel

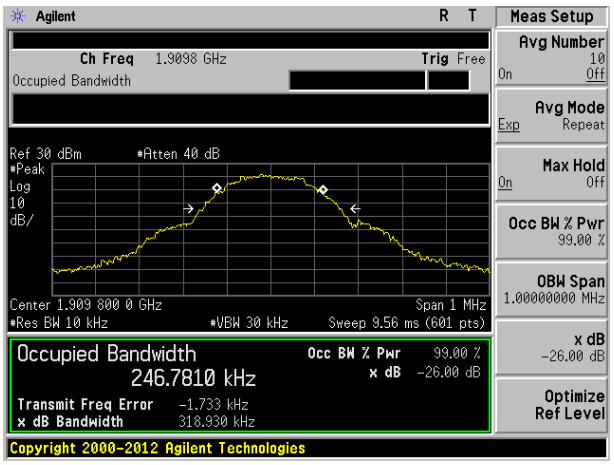
Test band:	PCS 1900 (GSM link)



Lowest channel

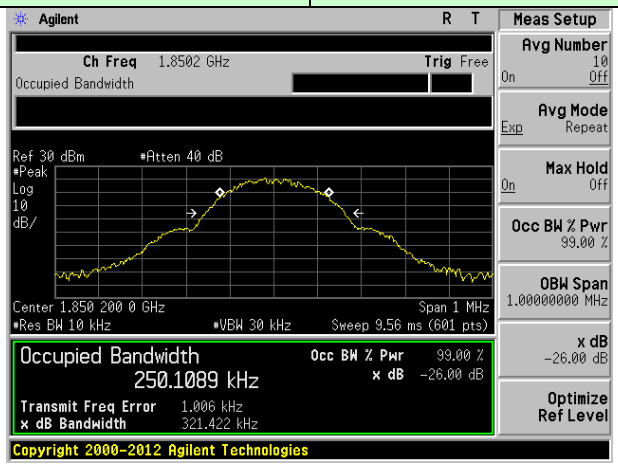


Middle channel

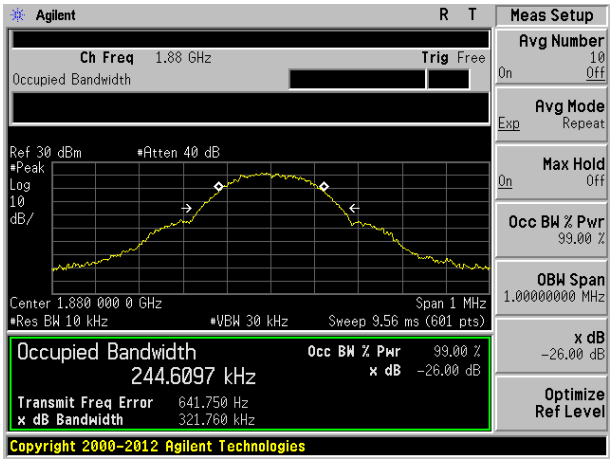


Highest channel

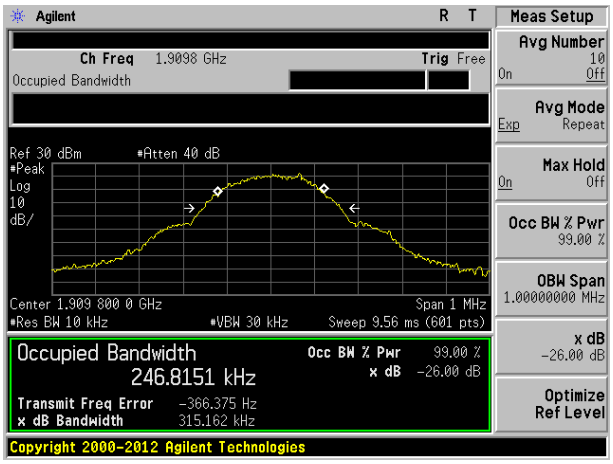
Test band:	PCS 1900 (GPRS 1 link)



Lowest channel

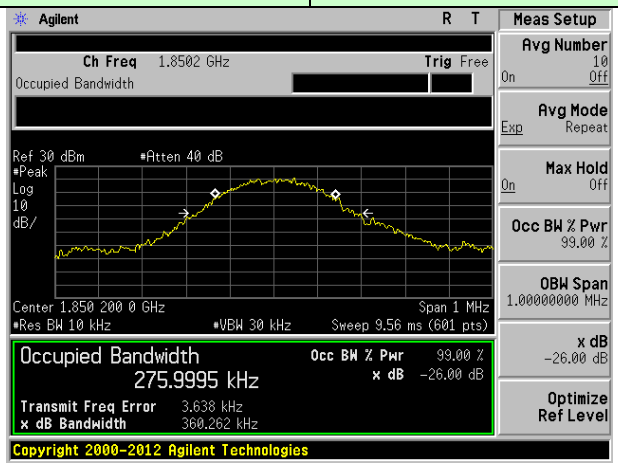


Middle channel

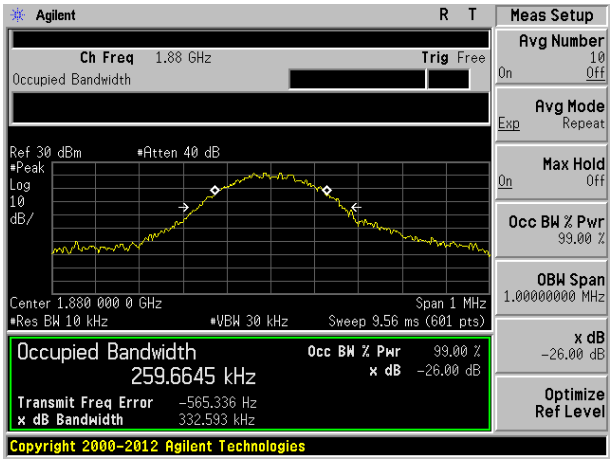


Highest channel

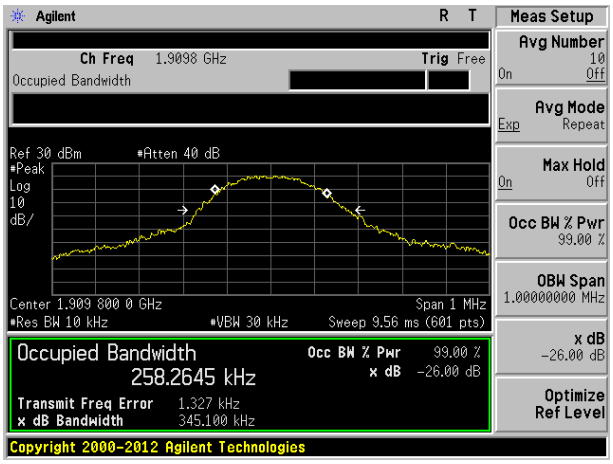
Test band:	PCS 1900 (EGPRS 1 link)



Lowest channel

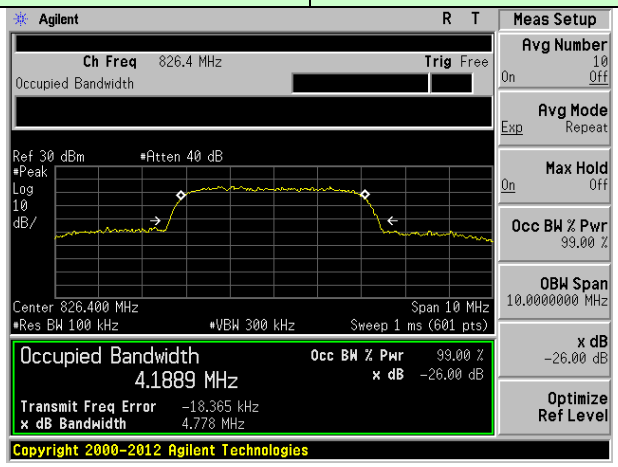


Middle channel

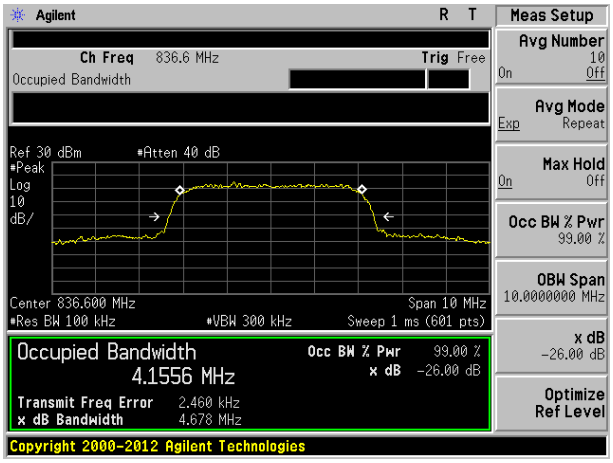


Highest channel

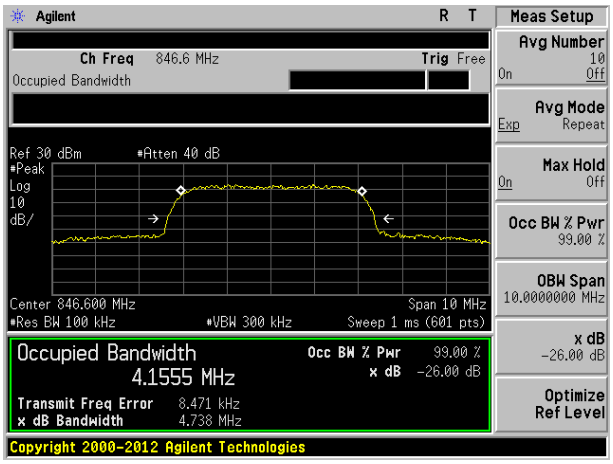
Test band:	WCDMA Band V (RMC 12.2Kbps link)



Lowest channel

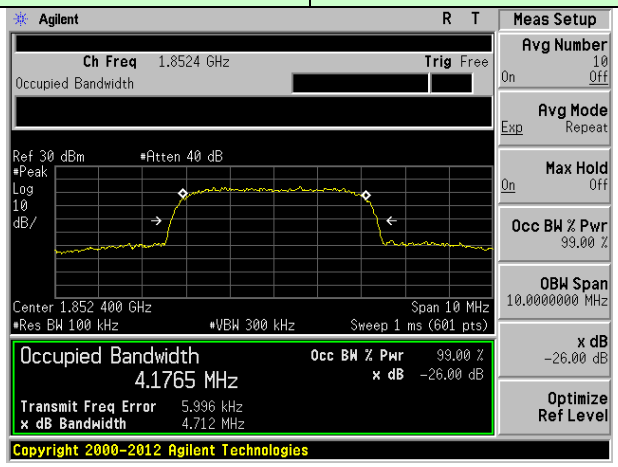


Middle channel

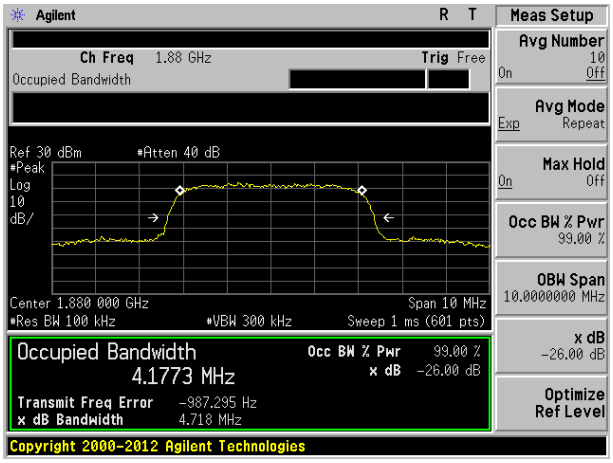


Highest channel

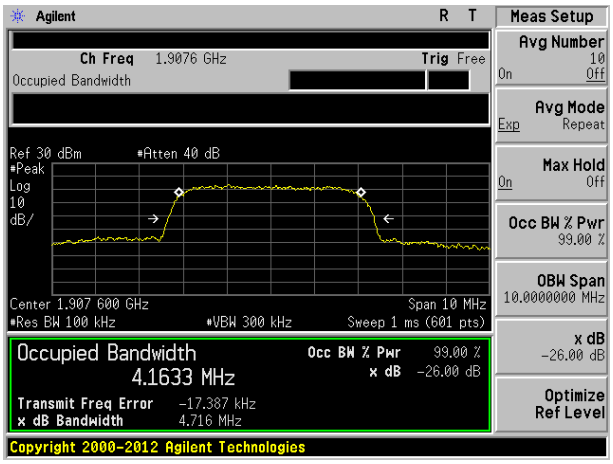
Test band:	WCDMA Band II (RMC 12.2Kbps link)



Lowest channel



Middle channel

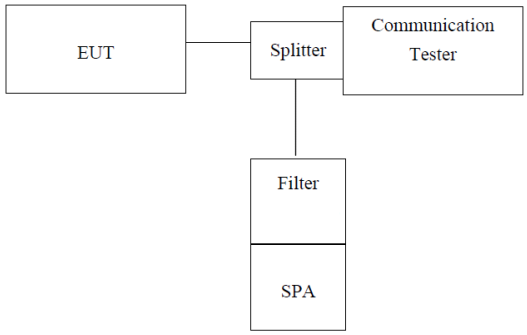


Highest channel

6.6 MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H & 24E there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

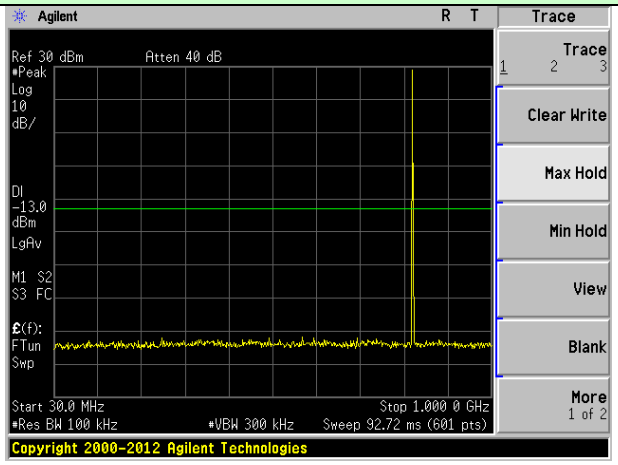
6.7 Out of band emission at antenna terminals

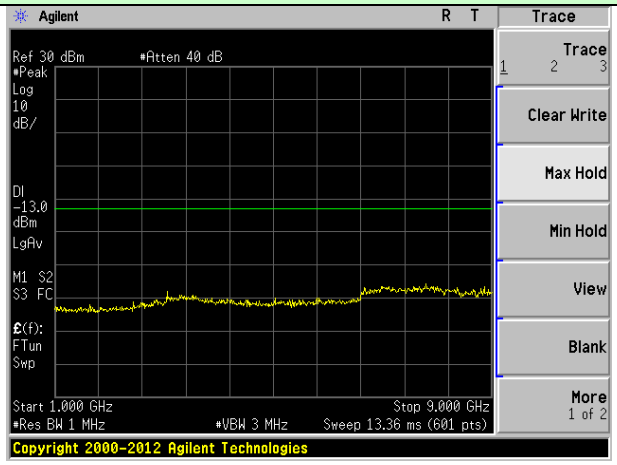
Test Requirement:	FCC part22.917(a) and FCC part24.238(a)
Test Method:	FCC part2.1051
Limit:	-13dBm
Test setup:	 *Note: Measurement setup for testing on Antenna connector*
Test Procedure:	1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic. 3 For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10th harmonic. 4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Test plot as follows:

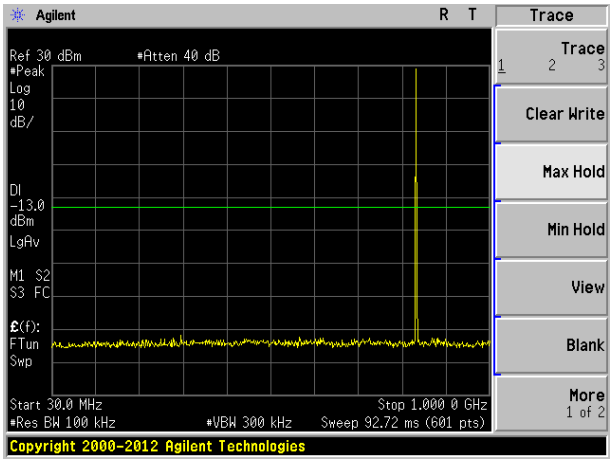
Note: During the conducted spurious emission test, a band filter was used. The information of the filter is reported at section 6.0 (refer to item 24, 25).

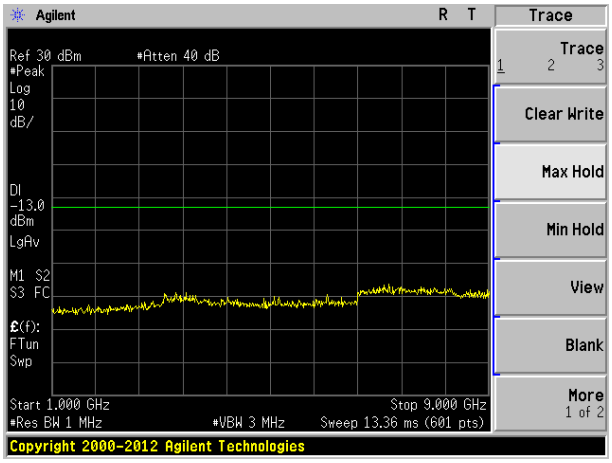
Test Mode: Traffic mode	GSM 850 (GSM link)



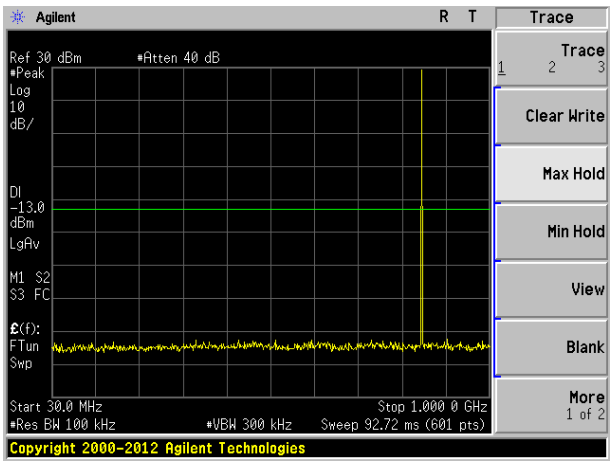


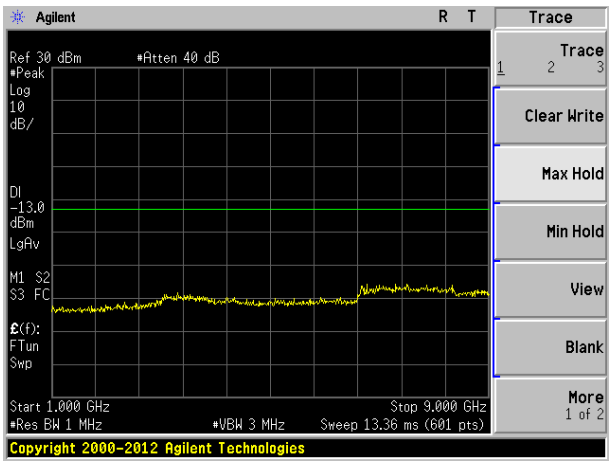
Lowest channel





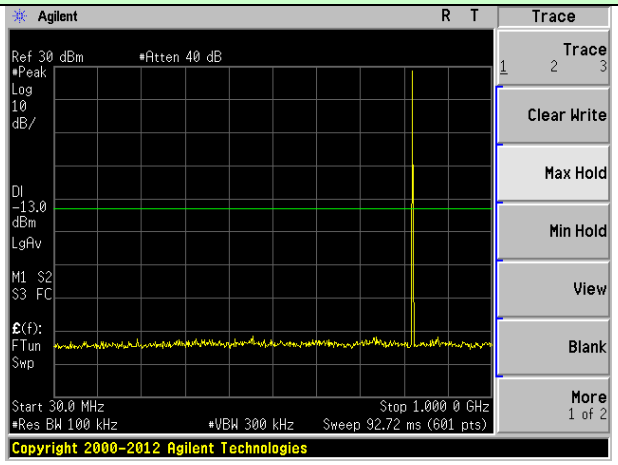
Middle channel

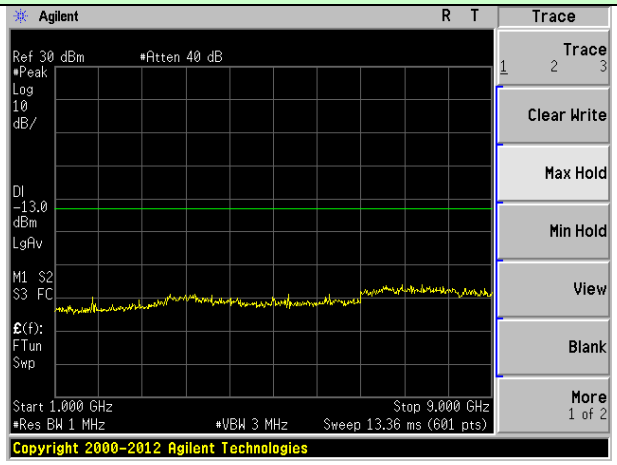




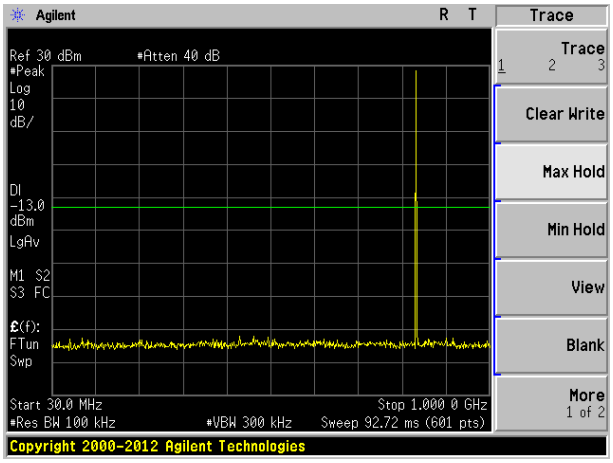
Highest channel

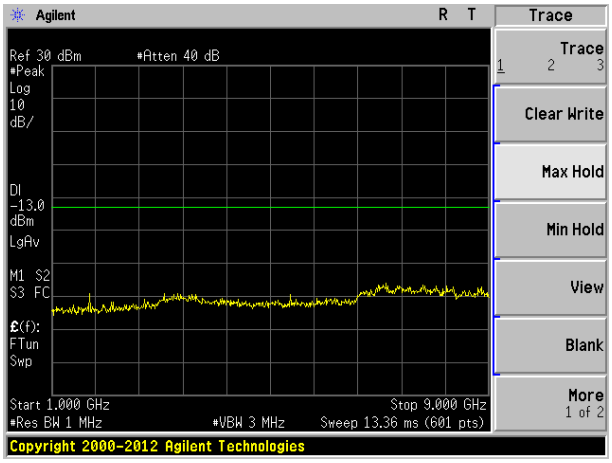
Test Mode: Traffic mode	GSM 850 (GPRS 1 link)



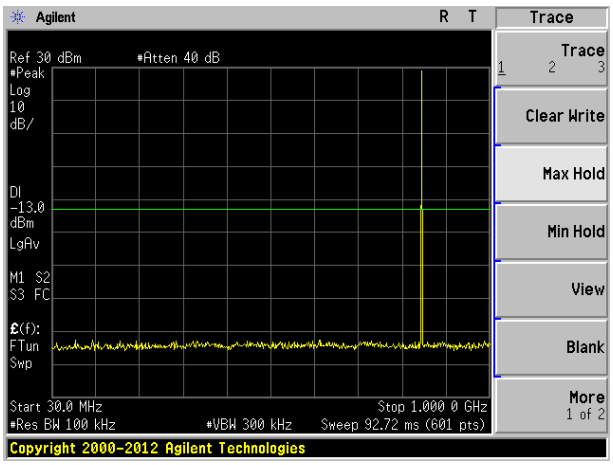


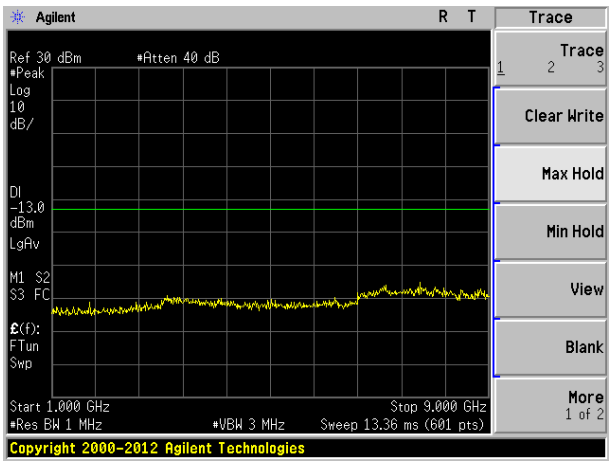
Lowest channel





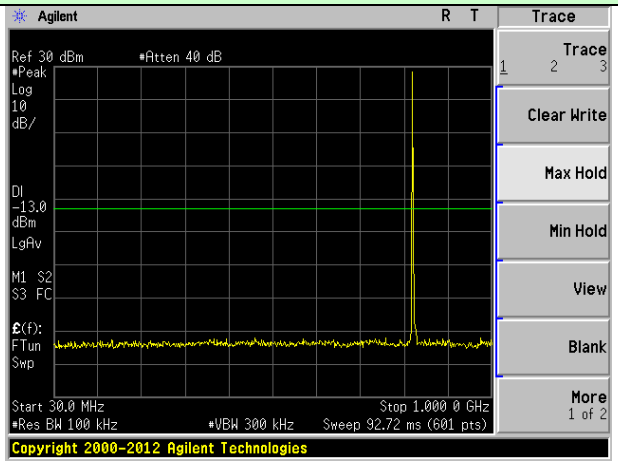
Middle channel

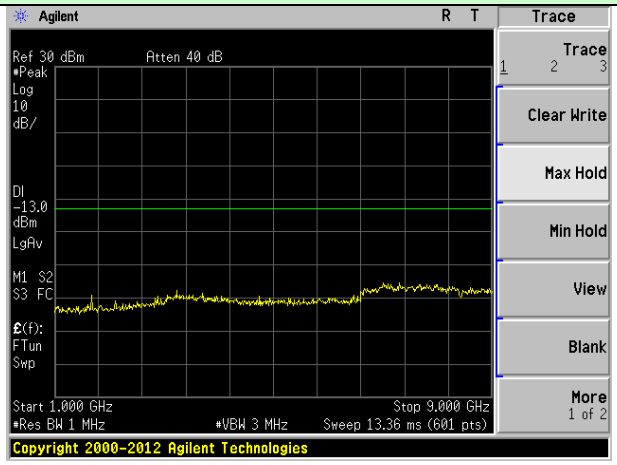




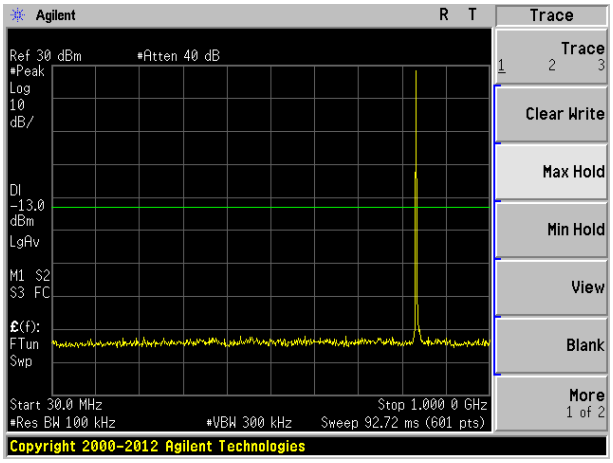
Highest channel

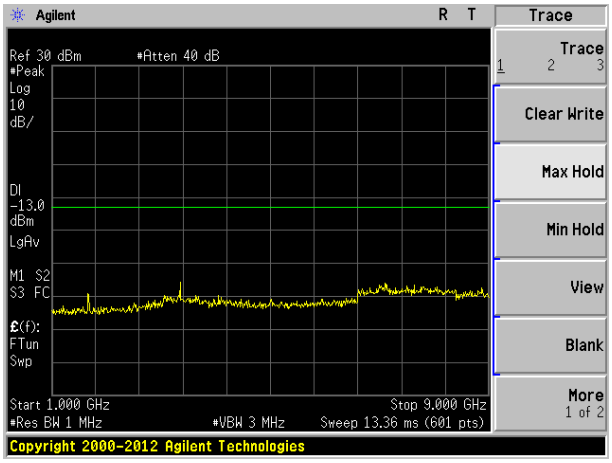
Test Mode: Traffic mode	GSM 850 (EGPRS 1 link)



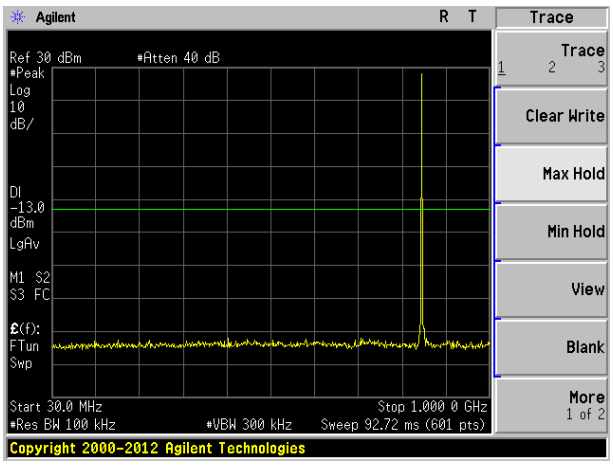


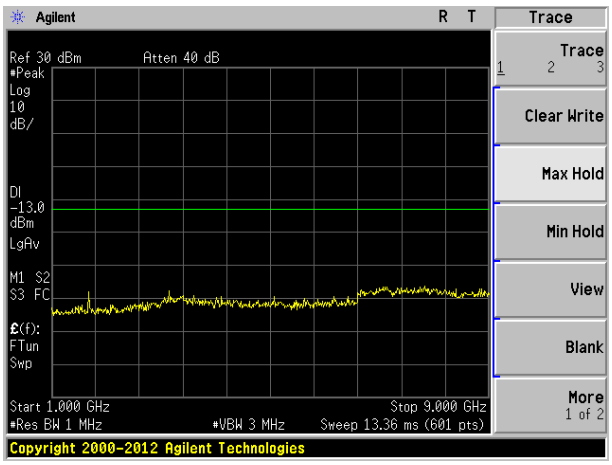
Lowest channel





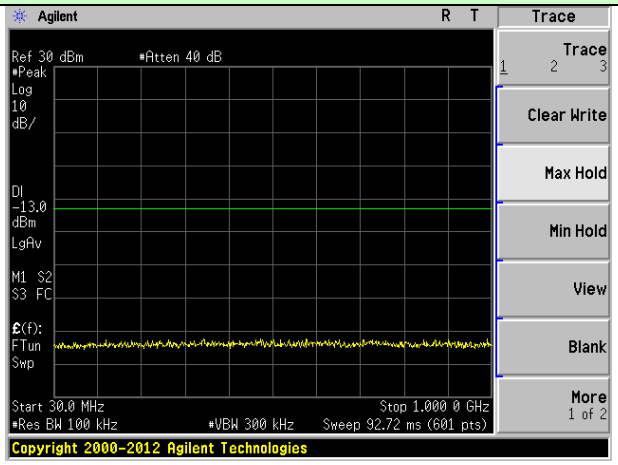
Middle channel

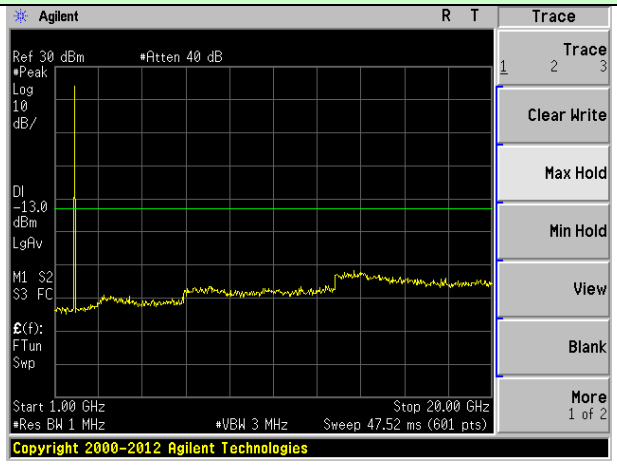




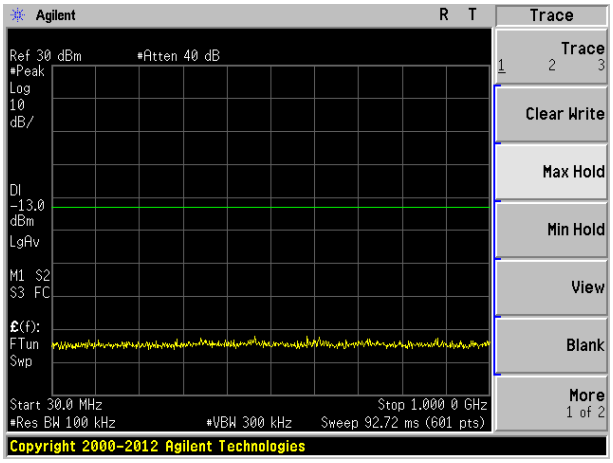
Highest channel

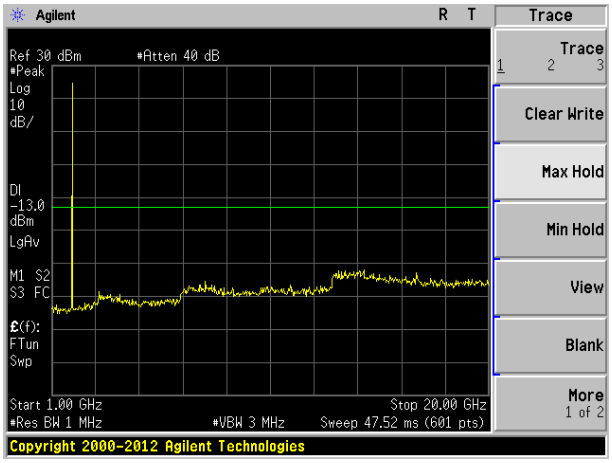
Test Mode: Traffic mode	PCS1900 (GSM link)



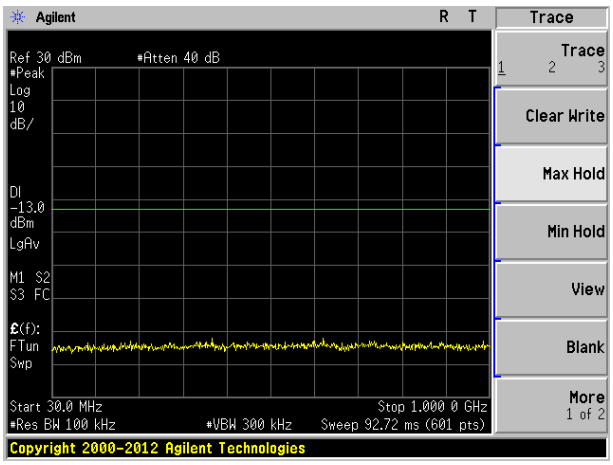


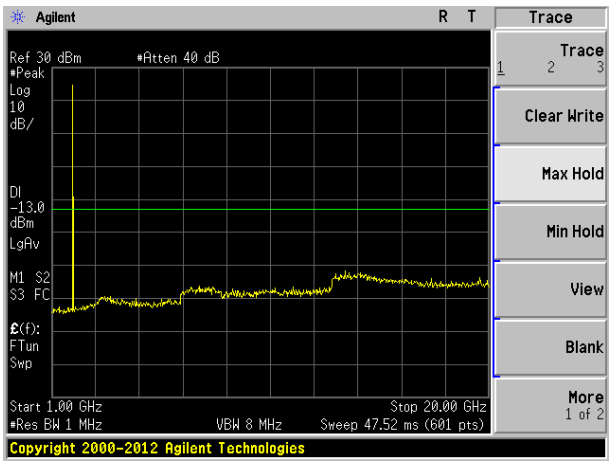
Lowest channel





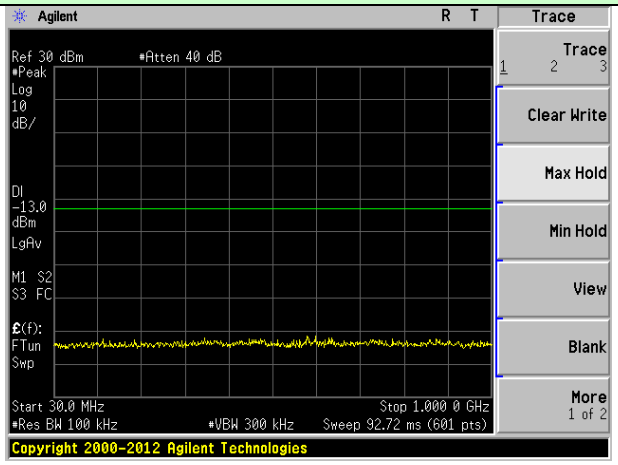
Middle channel

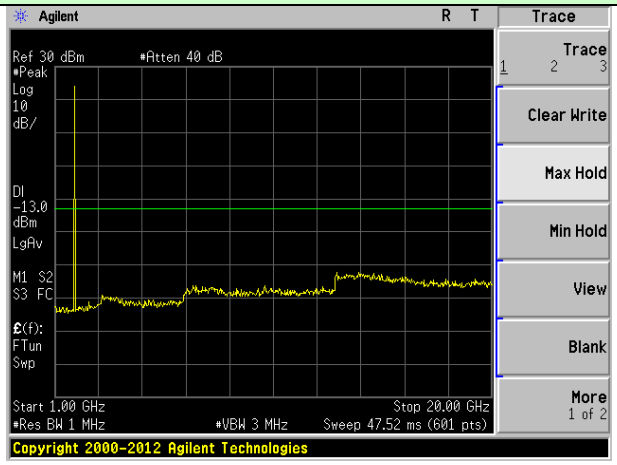




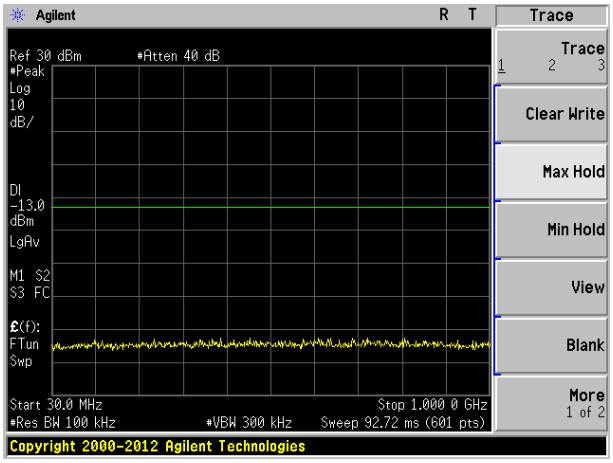
Highest channel

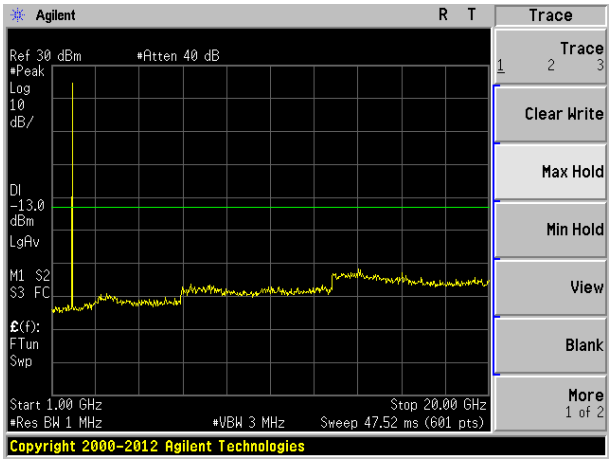
Test Mode: Traffic mode	PCS1900 (GPRS 1 link)



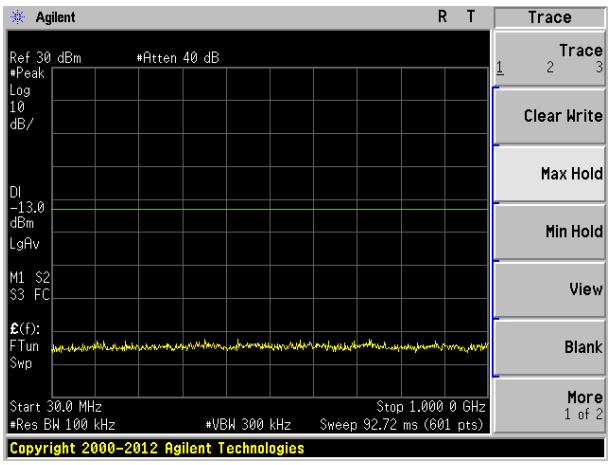


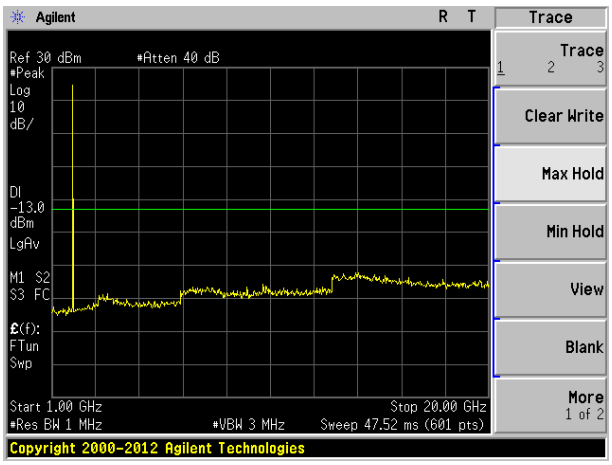
Lowest channel





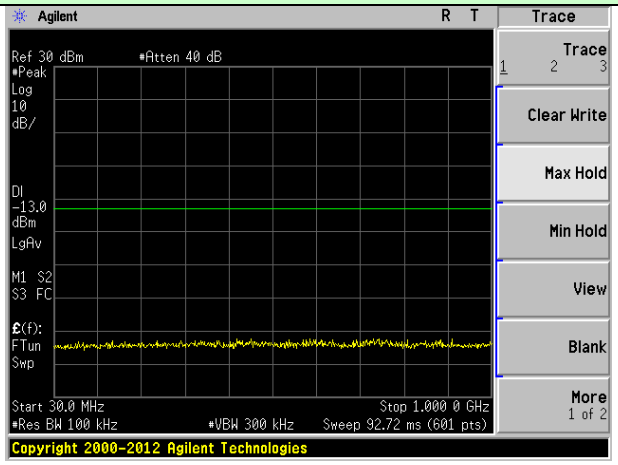
Middle channel

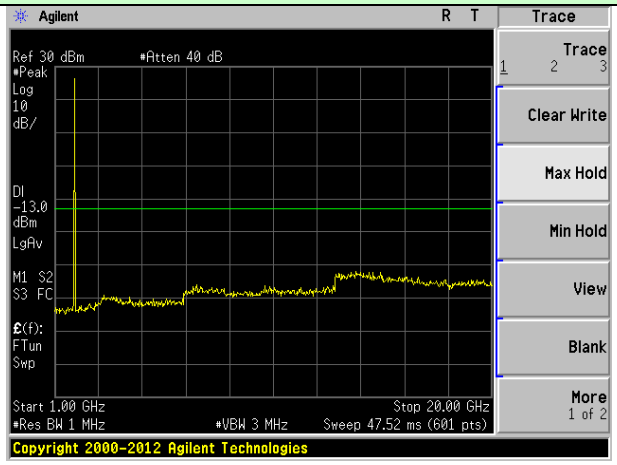




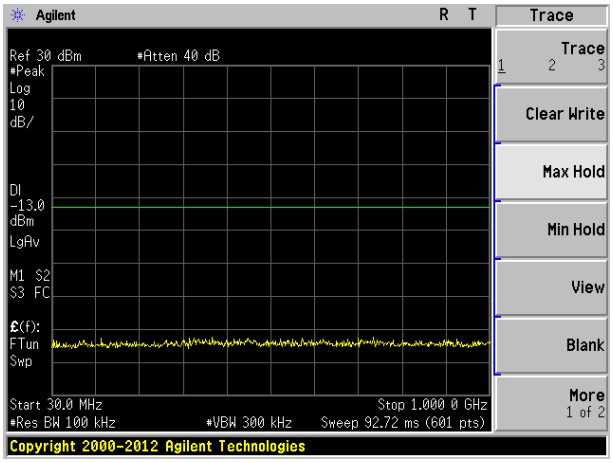
Highest channel

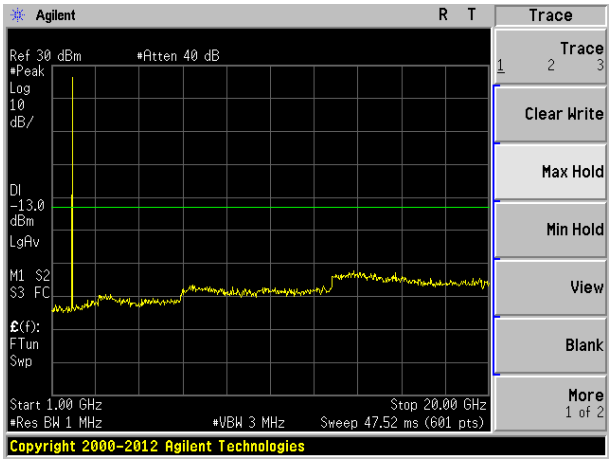
Test Mode: Traffic mode	PCS1900 (EGPRS 1 link)



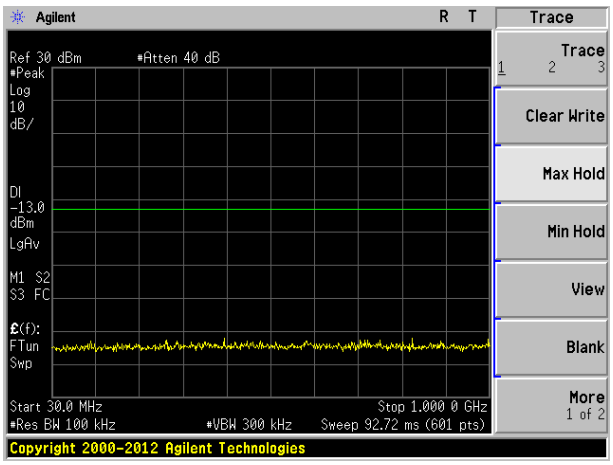


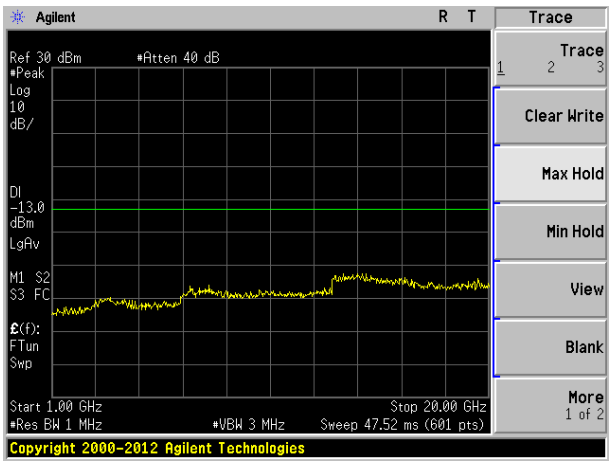
Lowest channel





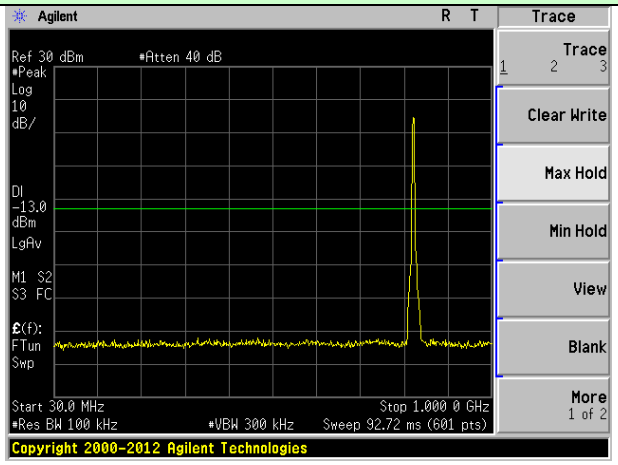
Middle channel

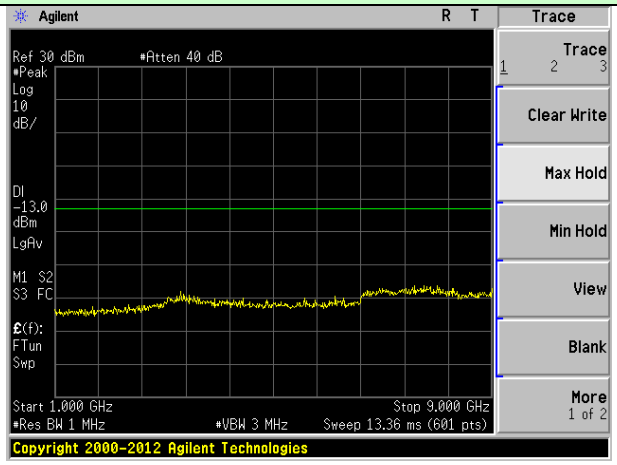




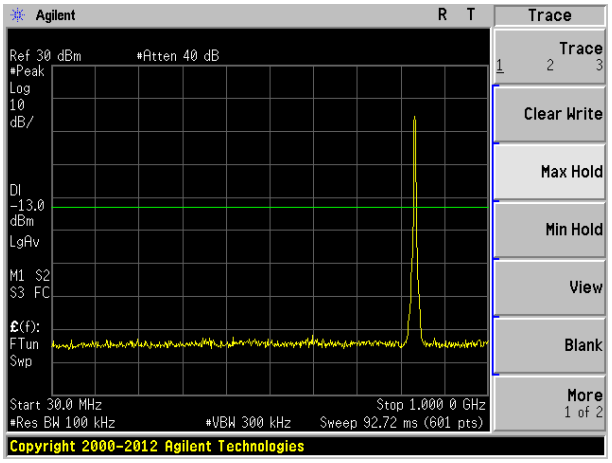
Highest channel

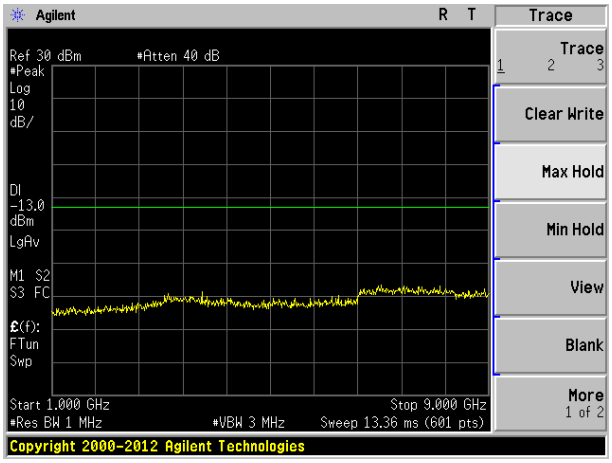
Test Mode: Traffic mode	WCDMA Band V (RMC 12.2Kbps link)



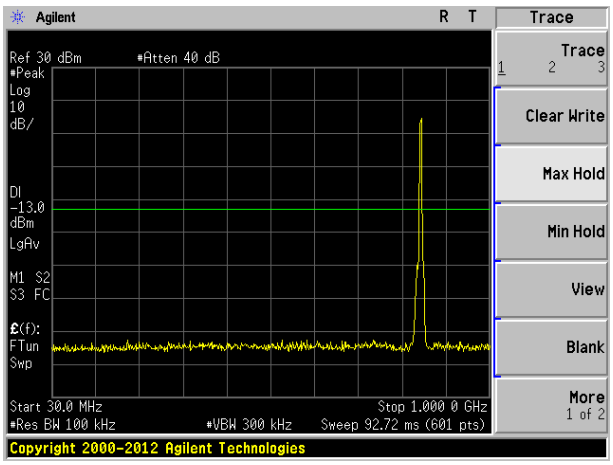


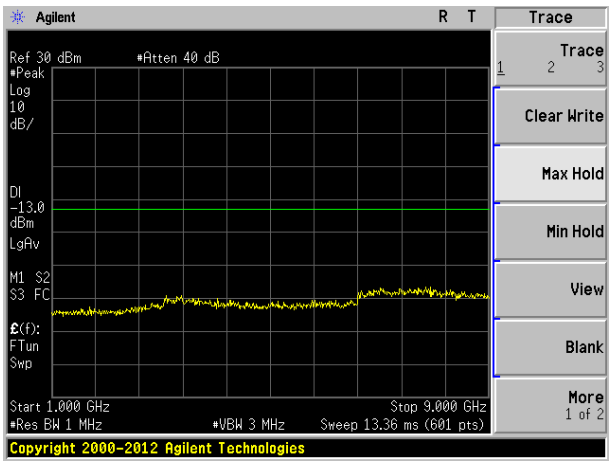
Lowest channel





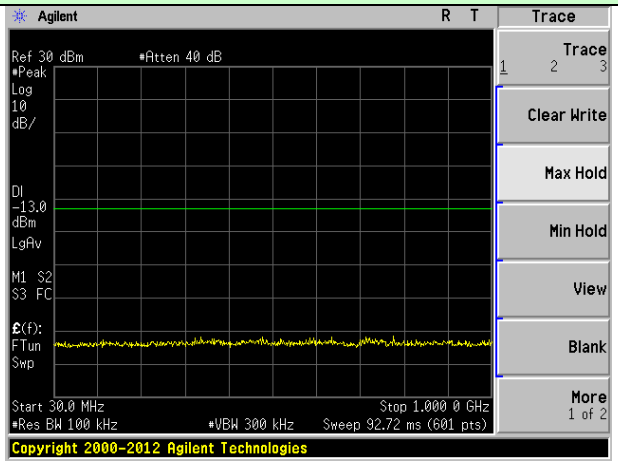
Middle channel

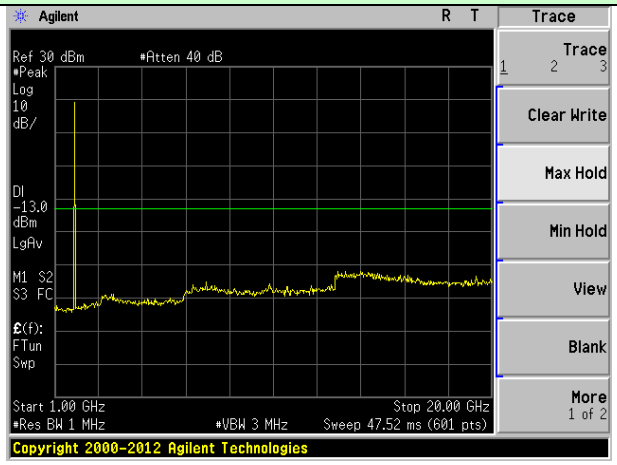




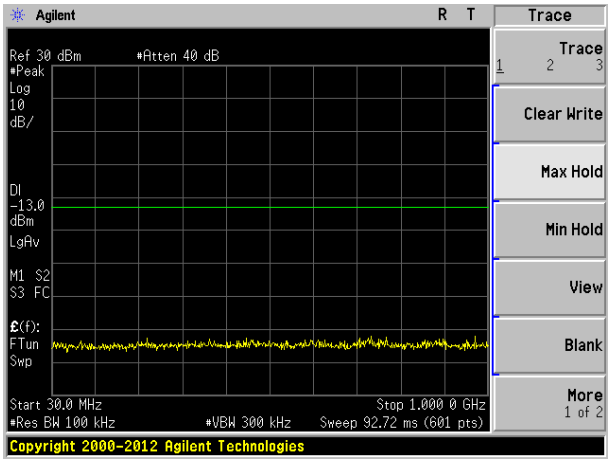
Highest channel

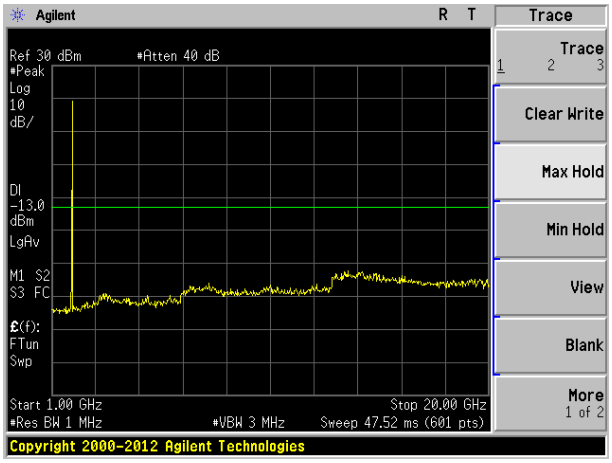
Test Mode: Traffic mode	WCDMA Band II (RMC 12.2Kbps link)



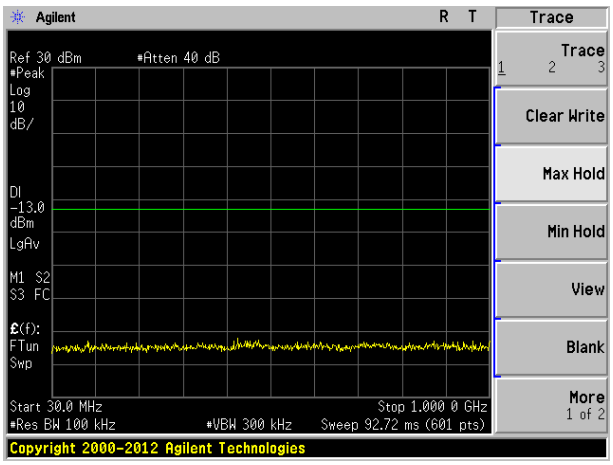


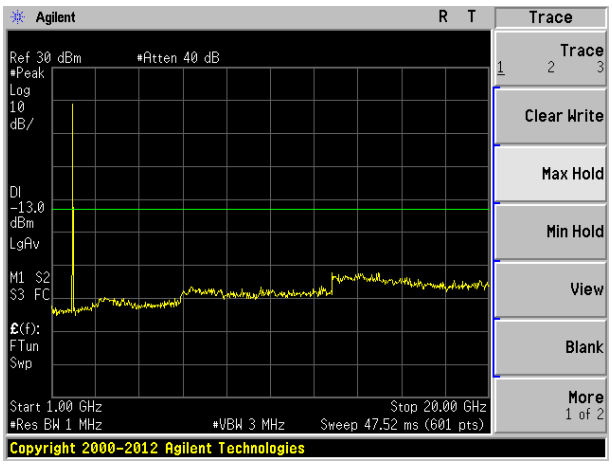
Lowest channel





Middle channel

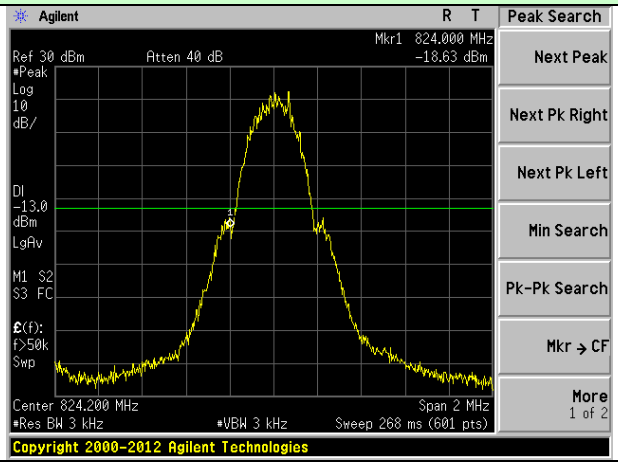




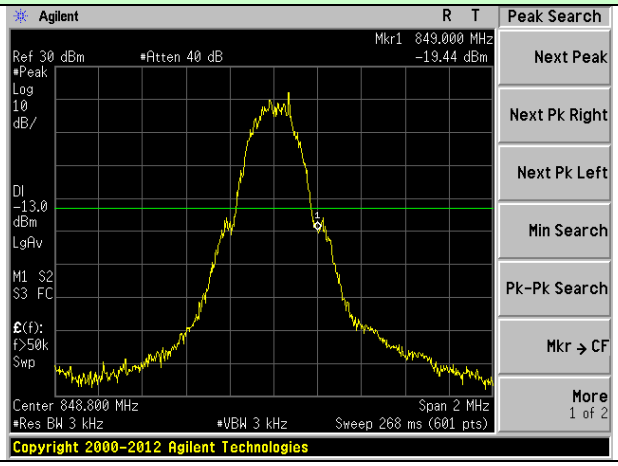
Highest channel

Band Edge:

Test Mode: Traffic mode	GSM850 (GSM link)

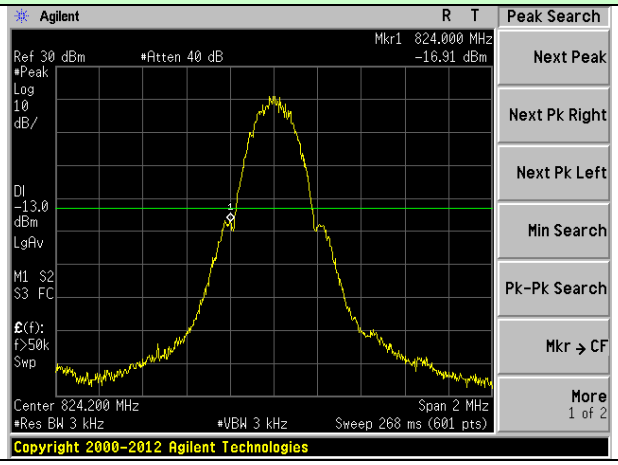


Lowest channel

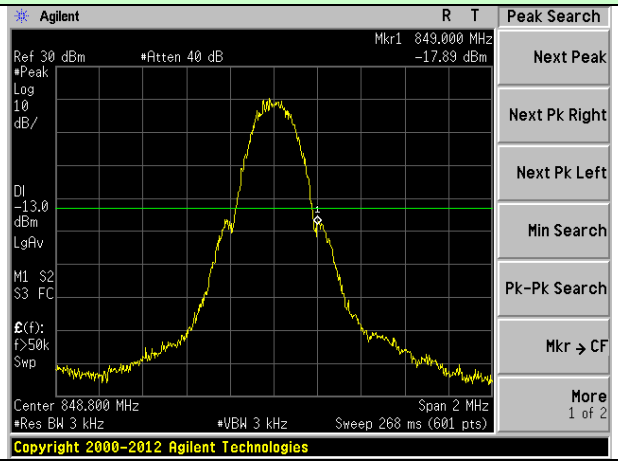


Highest channel

Test Mode: Traffic mode	GSM850 (GPRS 1 link)

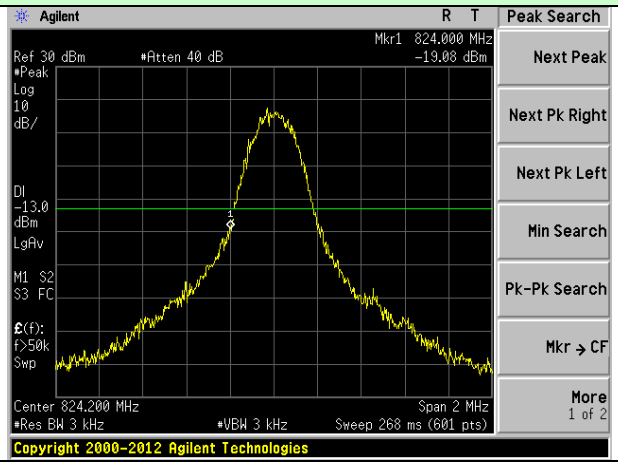


Lowest channel

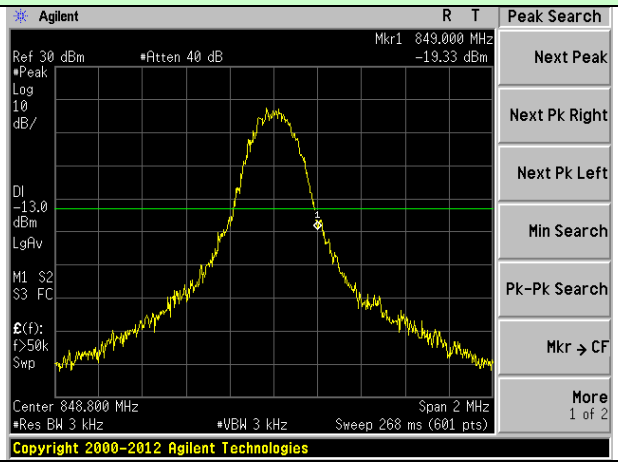


Highest channel

Test Mode: Traffic mode	GSM850 (EGPRS 1 link)

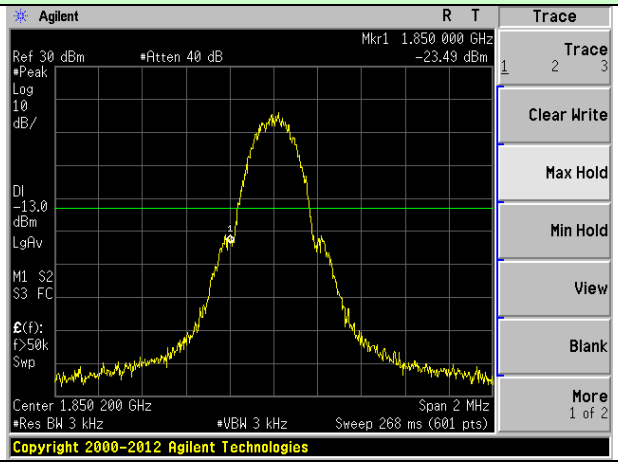


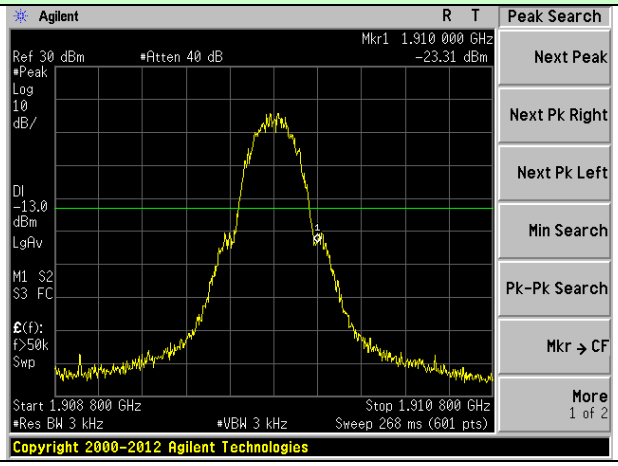
Lowest channel



Highest channel

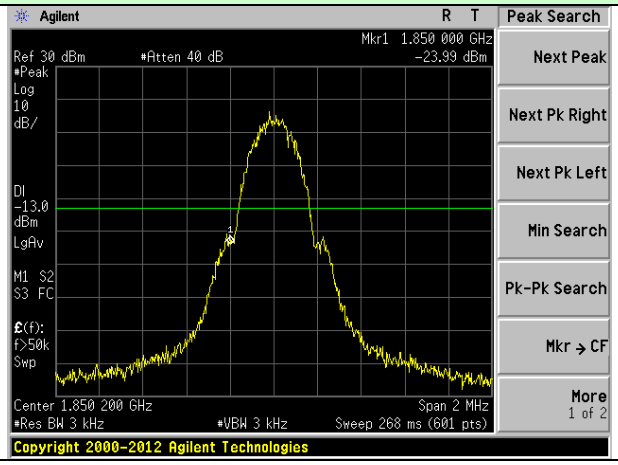
Test Mode: Traffic mode	PCS1900 (GSM link)

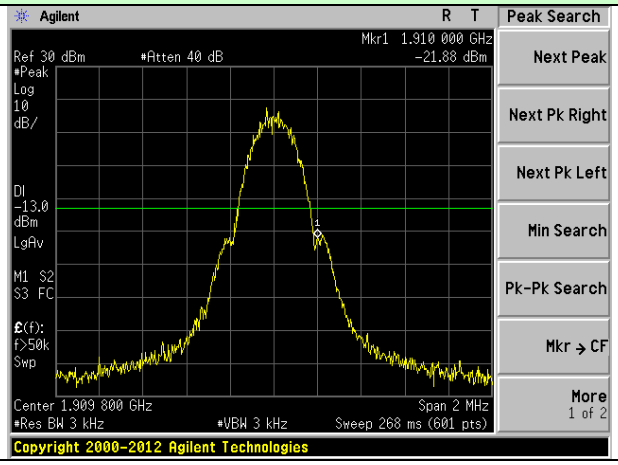




Lowest channel | Highest channel

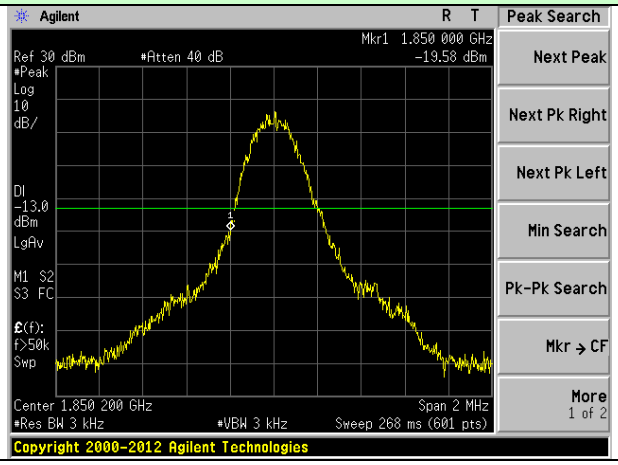
Test Mode: Traffic mode	PCS1900 (GPRS 1 link)

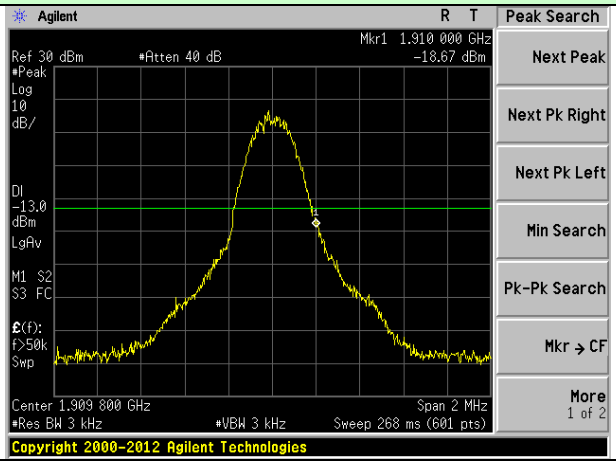




Lowest channel | Highest channel

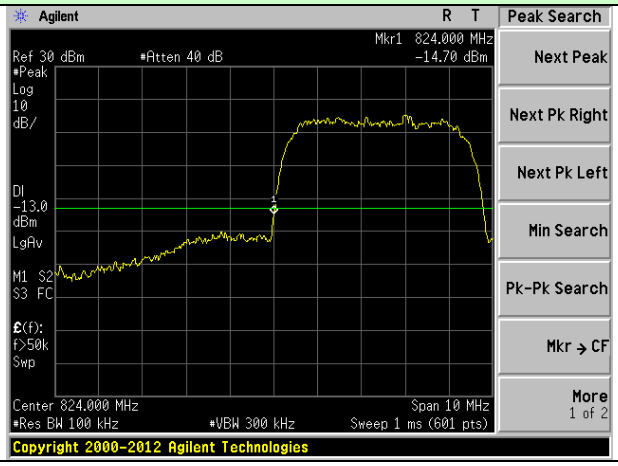
Test Mode: Traffic mode	PCS1900 (EGPRS 1 link)



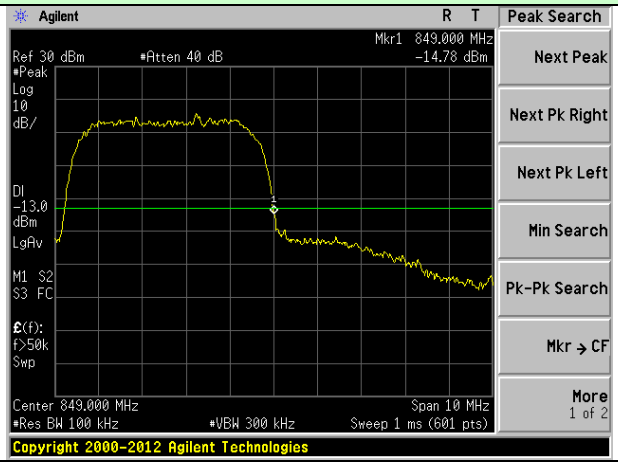


Lowest channel | Highest channel

Test Mode: Traffic mode	WCDMA Band V (RMC 12.2Kbps link)

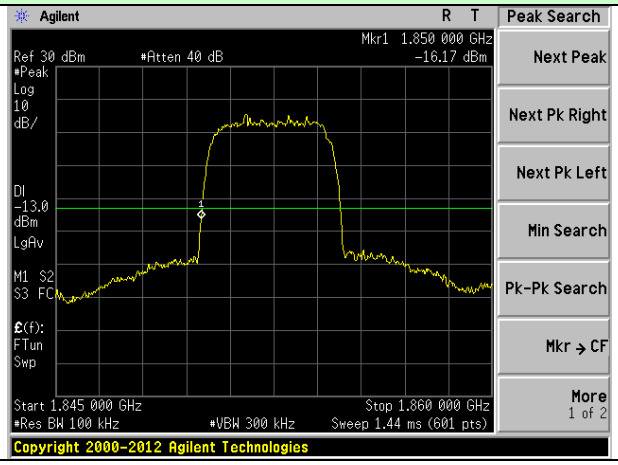


Lowest channel

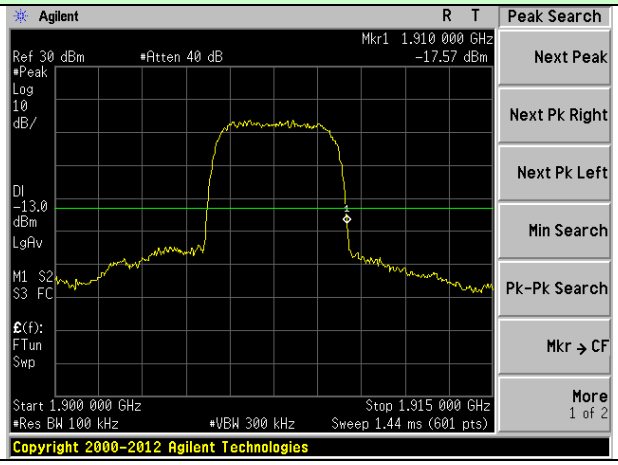


Highest channel

Test Mode: Traffic mode	WCDMA Band II (RMC 12.2Kbps link)

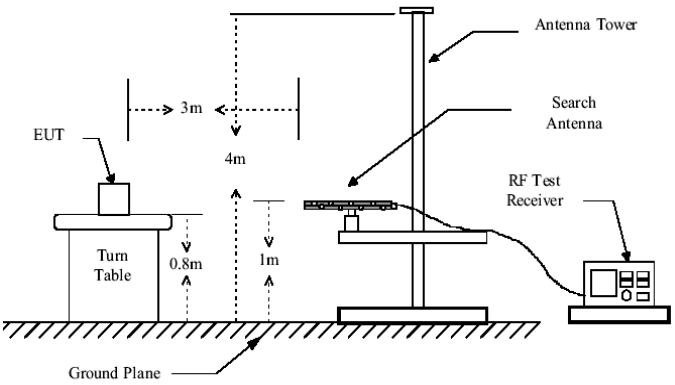
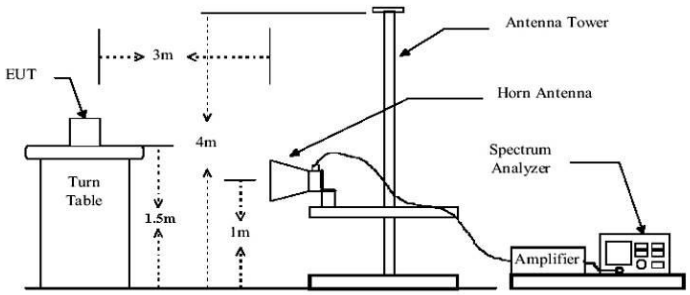
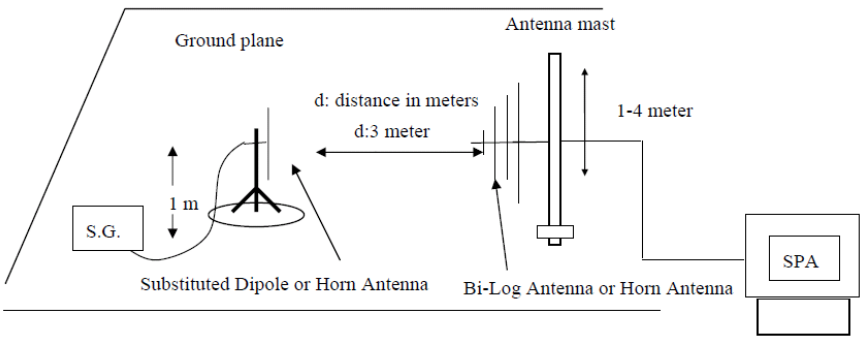


Lowest channel



Highest channel

6.8 ERP, EIRP Measurement

Test Requirement:	FCC part22.913(a) and FCC part24.232(b)
Test Method:	FCC part2.1046
Limit:	GSM850, WCDMA Band V: 7W PCS1900, WCDMA Band II: 2W WCDMA Band IV: 1W
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an 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. 2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated. 3. ERP in frequency band 824.2 –848.80.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated asfollows: ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB) 4. EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GSM link)	Lowest	H	V	31.89	38.45	Pass
			H	28.76		
		E1	V	23.39		
			H	28.91		
		E2	V	22.43		
			H	26.52		
	Middle	H	V	31.73	38.45	Pass
			H	28.56		
		E1	V	23.27		
			H	28.83		
		E2	V	24.04		
			H	27.04		
	Highest	H	V	32.16	38.45	Pass
			H	28.39		
		E1	V	23.32		
			H	27.83		
		E2	V	22.36		
			H	27.73		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GPRS 1 link)	Lowest	H	V	31.44	38.45	Pass
			H	28.27		
		E1	V	22.87		
			H	28.35		
		E2	V	21.84		
			H	25.88		
	Middle	H	V	31.15	38.45	Pass
			H	27.90		
		E1	V	22.56		
			H	28.09		
		E2	V	23.38		
			H	26.35		
	Highest	H	V	31.59	38.45	Pass
			H	27.78		
		E1	V	22.68		
			H	27.15		
		E2	V	21.84		
			H	27.18		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (EGPRS 1 link)	Lowest	H	V	27.61	38.45	Pass
			H	24.59		
		E1	V	19.23		
			H	25.13		
		E2	V	18.63		
			H	23.04		
	Middle	H	V	27.93	38.45	Pass
			H	25.09		
		E1	V	19.87		
			H	25.81		
		E2	V	20.38		
			H	23.67		
	Highest	H	V	28.14	38.45	Pass
			H	24.44		
		E1	V	19.40		
			H	24.25		
		E2	V	17.73		
			H	23.48		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GSM link)	Lowest	H	V	26.33	33.01	Pass
			H	24.61		
		E1	V	19.72		
			H	24.59		
		E2	V	18.69		
			H	22.27		
	Middle	H	V	23.21	33.01	Pass
			H	24.09		
		E1	V	19.25		
			H	24.16		
		E2	V	20.06		
			H	22.67		
	Highest	H	V	24.69	33.01	Pass
			H	24.16		
		E1	V	19.55		
			H	23.50		
		E2	V	18.97		
			H	23.70		

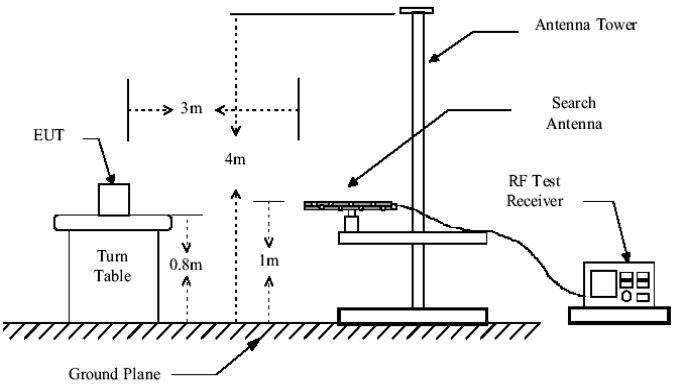
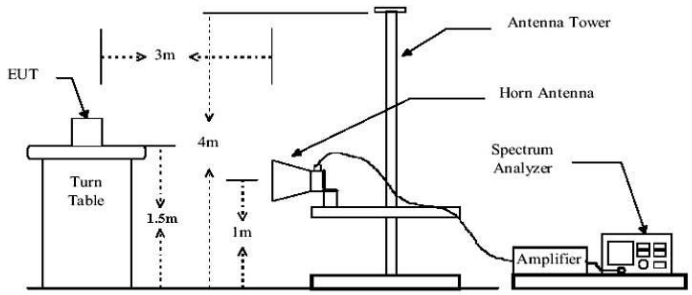
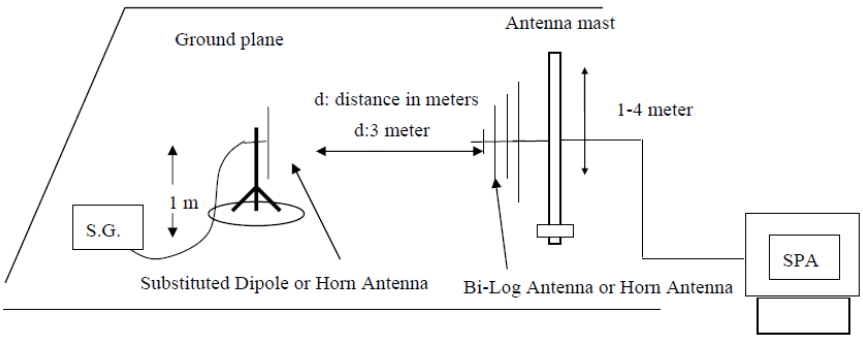
EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GPRS 1 link)	Lowest	H	V	26.65	33.01	Pass
			H	23.67		
		E1	V	18.69		
			H	23.47		
		E2	V	17.49		
			H	20.98		
	Middle	H	V	23.36	33.01	Pass
			H	22.73		
		E1	V	17.79		
			H	22.60		
		E2	V	18.73		
			H	21.24		
	Highest	H	V	24.89	33.01	Pass
			H	22.94		
		E1	V	18.23		
			H	22.10		
		E2	V	17.96		
			H	22.61		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (EGPRS 1 link)	Lowest	H	V	23.38	33.01	Pass
			H	18.86		
		E1	V	12.92		
			H	18.70		
		E2	V	11.57		
			H	15.80		
	Middle	H	V	21.62	33.01	Pass
			H	17.84		
		E1	V	11.96		
			H	17.77		
		E2	V	13.02		
			H	16.09		
	Highest	H	V	22.06	33.01	Pass
			H	17.84		
		E1	V	12.24		
			H	16.93		
		E2	V	11.77		
			H	17.39		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
WCDMA Band V	Lowest	H	V	21.28	38.45	Pass
			H	18.86		
		E1	V	15.00		
			H	18.11		
		E2	V	13.56		
			H	15.75		
	Middle	H	V	19.85	38.45	Pass
			H	16.88		
		E1	V	12.97		
			H	16.11		
		E2	V	14.08		
			H	15.59		
	Highest	H	V	18.84	38.45	Pass
			H	16.01		
		E1	V	12.34		
			H	14.81		
		E2	V	13.20		
			H	16.21		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band II	Lowest	H	V	23.27	33.01	Pass
			H	21.11		
		E1	V	17.51		
			H	20.88		
		E2	V	16.58		
			H	19.03		
	Middle	H	V	22.74	33.01	Pass
			H	20.35		
		E1	V	16.77		
			H	20.16		
		E2	V	17.49		
			H	19.25		
	Highest	H	V	21.67	33.01	Pass
			H	19.10		
		E1	V	15.69		
			H	18.42		
		E2	V	15.64		
			H	18.91		

6.9 Field strength of spurious radiation measurement

Test Requirement:	FCC part22.917(a) and FCC part24.238(a)
Test Method:	FCC part2.1053
Limit:	-13dBm
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an 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. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

Test mode:	GSM850		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1648.40	Vertical	-36.16	-13.00	Pass
2472.60	V	-38.89		
3296.80	V	-41.14		
4121.00	V	-43.30		
4945.20	V	---		
1648.40	Horizontal	-41.39	-13.00	Pass
2472.60	H	-45.24		
3296.80	H	-46.80		
4121.00	H	-49.52		
4945.20	H	---		
Test mode:	**GSM850**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.20	Vertical	-37.49	-13.00	Pass
2509.80	V	-39.76		
3346.40	V	-41.64		
4183.00	V	-43.44		
5019.60	V	---		
1673.20	Horizontal	-41.85	-13.00	Pass
2509.80	H	-45.06		
3346.40	H	-46.36		
4183.00	H	-48.63		
5019.60	H	---		
Test mode:	**GSM850**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1697.60	Vertical	-37.69	-13.00	Pass
2546.40	V	-39.72		
3395.20	V	-41.38		
4244.00	V	-42.99		
5092.80	V	---		
1697.60	Horizontal	-41.57	-13.00	Pass
2546.40	H	-44.43		
3395.20	H	-45.59		
4244.00	H	-47.60		
5092.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	PCS1900		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3700.40	Vertical	-36.81	-13.00	Pass
5550.60	V	-39.20		
7400.80	V	-41.18		
9251.00	V	-43.08		
11101.20	V	---		
3700.40	Horizontal	-41.40	-13.00	Pass
5550.60	H	-44.79		
7400.80	H	-46.15		
9251.00	H	-48.53		
11101.20	H	---		
Test mode:	**PCS1900**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-34.40	-13.00	Pass
5640.00	V	-36.88		
7520.00	V	-38.93		
9400.00	V	-40.90		
11280.00	V	---		
3760.00	Horizontal	-39.16	-13.00	Pass
5640.00	H	-42.66		
7520.00	H	-44.09		
9400.00	H	-46.57		
11280.00	H	---		
Test mode:	**PCS1900**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3819.60	Vertical	-35.64	-13.00	Pass
5729.40	V	-38.04		
7639.20	V	-40.03		
9549.00	V	-41.93		
11458.80	V	---		
3819.60	Horizontal	-40.25	-13.00	Pass
5729.40	H	-43.65		
7639.20	H	-45.02		
9549.00	H	-47.41		
11458.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band V		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1652.80	Vertical	-37.41	-13.00	Pass
2479.20	V	-41.15		
3305.60	V	-43.88		
4132.00	V	-41.41		
4958.40	V	---		
1652.80	Horizontal	-40.21	-13.00	Pass
2479.20	H	-42.90		
3305.60	H	-48.31		
4132.00	H	-51.93		
4958.40	H	---		
Test mode:	**WCDMA Band V**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.80	Vertical	-39.43	-13.00	Pass
2509.20	V	-40.74		
3345.60	V	-44.36		
4182.00	V	-46.83		
5018.40	V	---		
1672.80	Horizontal	-41.89	-13.00	Pass
2509.20	H	-43.79		
3345.60	H	-48.48		
4182.00	H	-50.87		
5018.40	H	---		
Test mode:	**WCDMA Band V**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1693.20	Vertical	-37.93	-13.00	Pass
2539.80	V	-40.37		
3386.40	V	-42.99		
4233.00	V	-45.89		
5079.60	V	---		
1693.20	Horizontal	-41.28	-13.00	Pass
2539.80	H	-43.70		
3386.40	H	-45.07		
4233.00	H	-51.26		
5079.60	H	---		

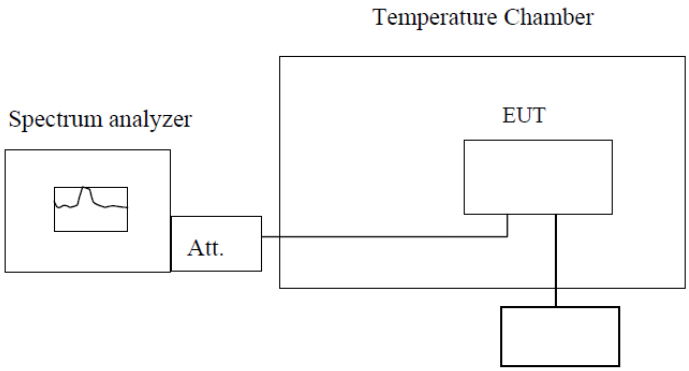
Remark :

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band II		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3704.80	Vertical	-38.56	-13.00	Pass
5557.20	V	-41.65		
7409.60	V	-44.20		
9262.00	V	-46.66		
11114.40	V	---		
3704.80	Horizontal	-44.49	-13.00	Pass
5557.20	H	-48.86		
7409.60	H	-50.63		
9262.00	H	-53.71		
11114.40	H	---		
Test mode:	**WCDMA Band II**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-39.36	-13.00	Pass
5640.00	V	-42.29		
7520.00	V	-44.70		
9400.00	V	-47.04		
11280.00	V	---		
3760.00	Horizontal	-44.98	-13.00	Pass
5640.00	H	-49.13		
7520.00	H	-50.80		
9400.00	H	-53.72		
11280.00	H	---		
Test mode:	**WCDMA Band II**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3815.20	Vertical	-38.64	-13.00	Pass
5722.80	V	-41.37		
7630.40	V	-43.62		
9538.00	V	-45.80		
11445.60	V	---		
3815.20	Horizontal	-43.88	-13.00	Pass
5722.80	H	-47.75		
7630.40	H	-49.30		
9538.00	H	-52.02		
11445.60	H	---		

Remark：
1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

6.10 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part2.1055(a)(1)(b)
Test Method:	FCC Part2.1055(a)(1)(b)
Limit:	2.5ppm
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

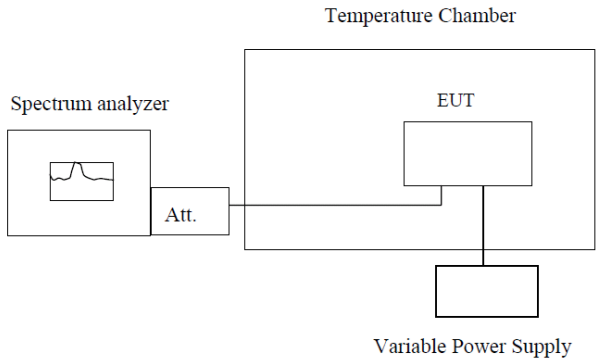
Measurement Data

Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	31	0.0368	2.5	Pass
	-20	34	0.0409		
	-10	32	0.0382		
	0	25	0.0301		
	10	30	0.0355		
	20	27	0.0328		
	30	39	0.0462		
	40	35	0.0422		
	50	34	0.0409		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	30	0.0355	2.5	Pass
	-20	31	0.0368		
	-10	26	0.0314		
	0	25	0.0301		
	10	25	0.0301		
	20	24	0.0287		
	30	35	0.0422		
	40	33	0.0395		
	50	32	0.0382		
Reference Frequency: GSM850 (EGPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	52	0.0617	2.5	Pass
	-20	57	0.0677		
	-10	47	0.0557		
	0	43	0.0512		
	10	47	0.0557		
	20	42	0.0497		
	30	65	0.0781		
	40	60	0.0721		
	50	57	0.0677		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.70	-30	28	0.0149	2.5	Pass
	-20	27	0.0143		
	-10	26	0.0137		
	0	20	0.0105		
	10	26	0.0137		
	20	21	0.0111		
	30	41	0.0219		
	40	34	0.0181		
	50	30	0.0162		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.70	-30	29	0.0152	2.5	Pass
	-20	34	0.0182		
	-10	26	0.0139		
	0	21	0.0109		
	10	27	0.0146		
	20	22	0.0115		
	30	40	0.0212		
	40	32	0.0170		
	50	34	0.0182		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.70	-30	89	0.0473	2.5	Pass
	-20	105	0.0559		
	-10	83	0.0441		
	0	68	0.0363		
	10	85	0.0453		
	20	69	0.0366		
	30	103	0.0545		
	40	96	0.0512		
	50	98	0.0519		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	32	0.0381	2.5	Pass
	-20	42	0.0507		
	-10	49	0.0591		
	0	26	0.0311		
	10	35	0.0423		
	20	39	0.0465		
	30	56	0.0675		
	40	54	0.0647		
	50	62	0.0745		
Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880.0MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	100	0.0533	2.5	Pass
	-20	89	0.0472		
	-10	76	0.0405		
	0	71	0.0378		
	10	65	0.0345		
	20	56	0.0298		
	30	71	0.0378		
	40	80	0.0425		
	50	76	0.0405		

6.11 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	FCC Part2.1055(d)(1)(2)
Limit:	2.5ppm
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

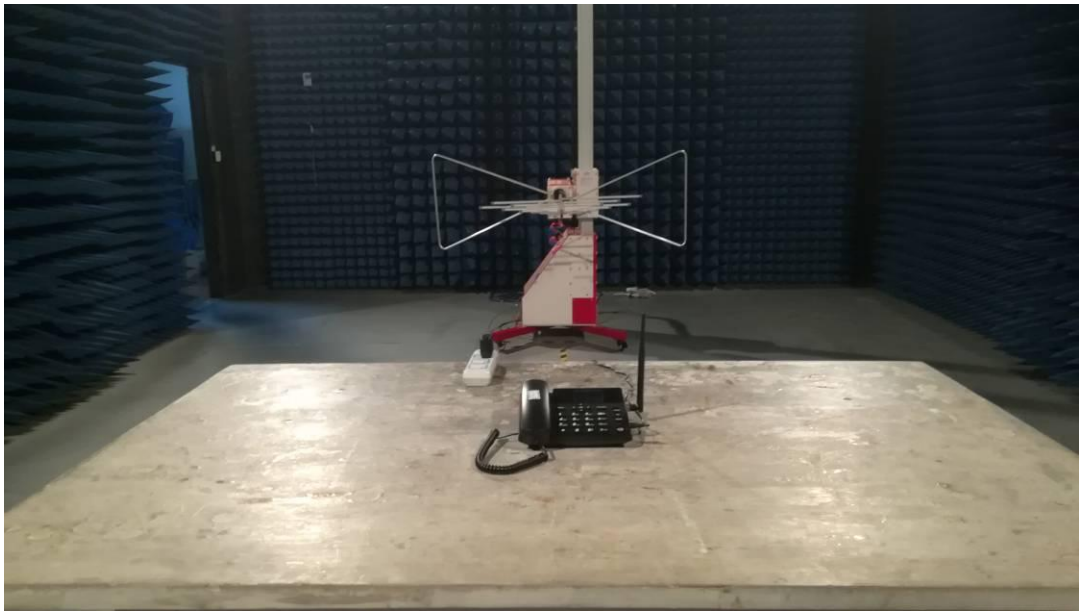
Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	20	0.0242	2.5	Pass
	3.7	22	0.0257		
	3.4	24	0.0287		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	19	0.0223	2.5	Pass
	3.7	15	0.0177		
	3.4	14	0.0161		
Reference Frequency: GSM850 (EGPRS 1 link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	29	0.0345	2.5	Pass
	3.7	34	0.0405		
	3.4	36	0.0433		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	14	0.0075	2.5	Pass
	3.7	20	0.0104		
	3.4	21	0.0111		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	29	0.0155	2.5	Pass
	3.7	25	0.0130		
	3.4	26	0.0137		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	62	0.0331	2.5	Pass
	3.7	70	0.0373		
	3.4	64	0.0338		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	26	0.0316	2.5	Pass
	3.7	33	0.0389		
	3.4	20	0.0244		
Reference Frequency: WCDMA Band II Middle channel=940 channel=1880.0MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.25	48	0.0254	2.5	Pass
	3.7	40	0.0212		
	3.4	44	0.0233		

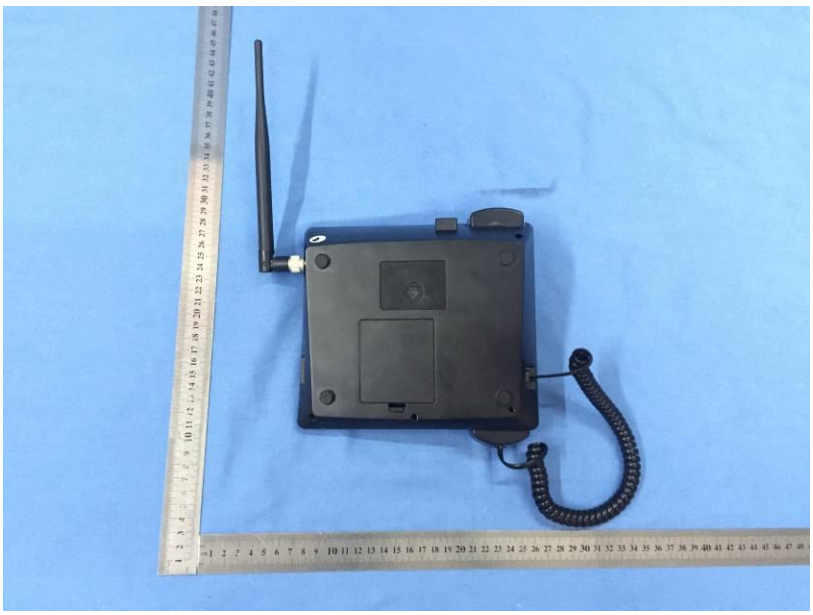
7 Test Setup Photo

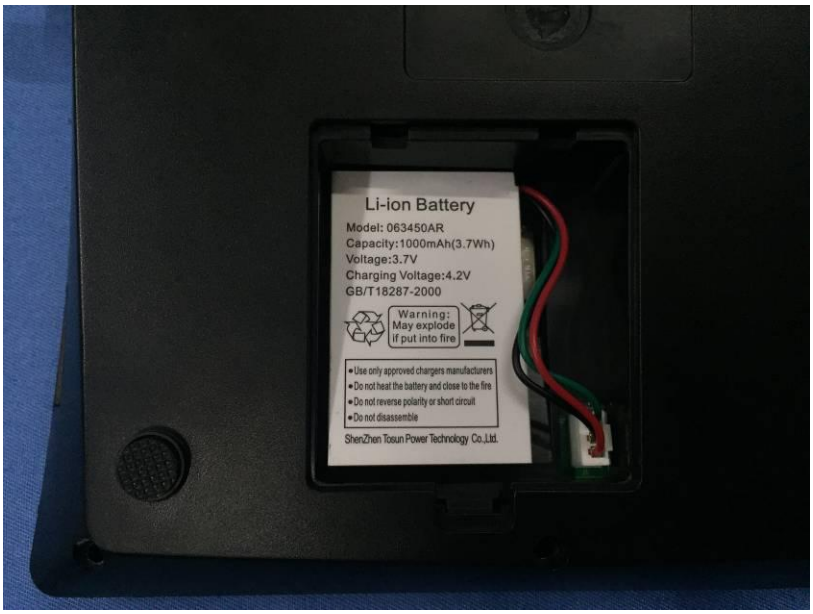
Radiated Emission

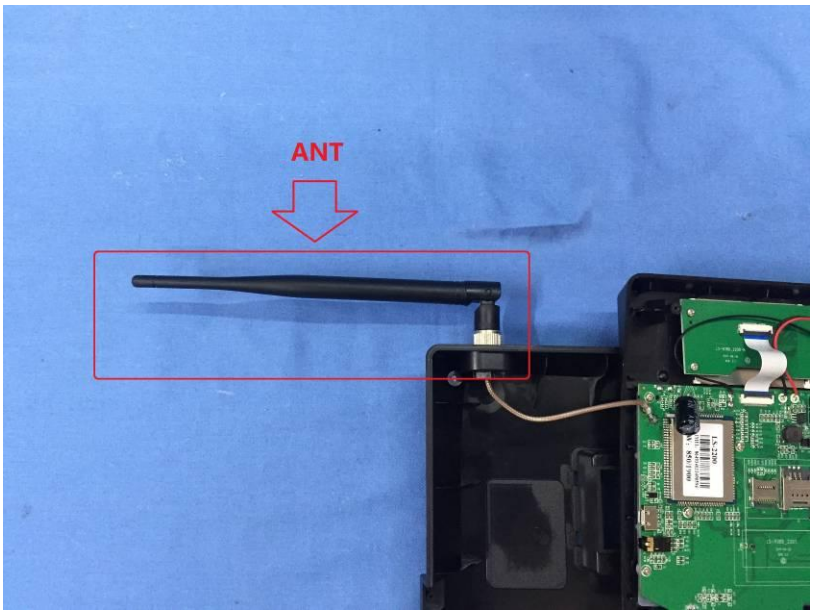


8 EUT Constructional Details

C




Li-ion Battery
Model: 063450AR
Capacity:1000mAh(3.7Wh)
Voltage:3.7V
Charging Voltage:4.2V
GB/T18287-2000
Warning:
May explode
If put into fire
•Use only approved chargers manufacturers
•Do not heat the battery and close to the fire
•Do not reverse polarity or short circuit
•Do not disassemble
ShenZhen Tosun Power Technology Co.,Ltd.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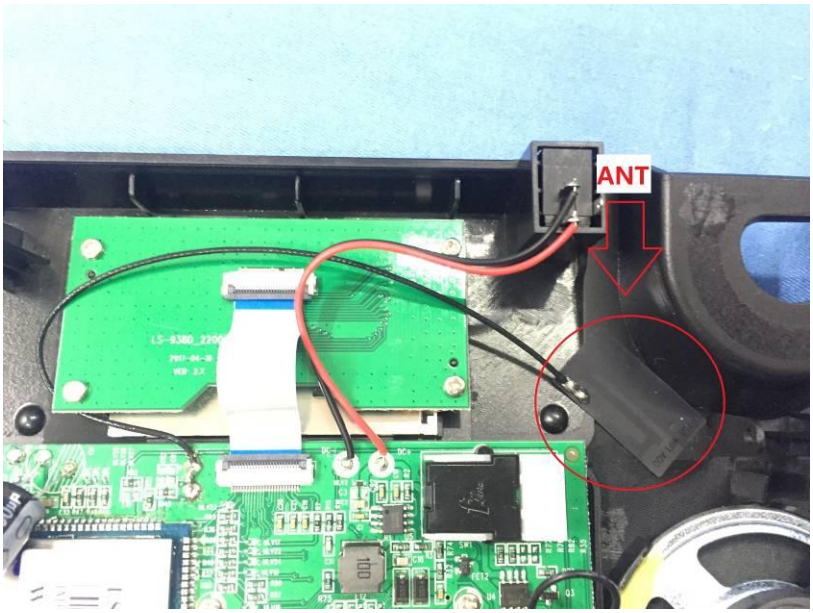
BT & Wi-Fi ANT



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