FCC Radio Test Report

FCC ID: 2APBP-CS20

Original Grant

Report No.	:	TB-FCC176392
Applicant	:	Ciontek Technology Corp.
Equipment Under Test (EUT)		
EUT Name	:	Mobile Smart POS
Model No.	:	CS20
Series Model No.	:	CS20A, CS20B, CS20C, CS21, CS20PRO, CS20LITE, CS20S, CS20V, CS20MINI
Brand Name	:	Ciontek
Sample ID	:	TBBJ-20200916-08_1-01& TBBJ-20200916-08_1-02
Receipt Date	:	2020-09-29
Test Date	:	2020-09-30 to 2020-12-14
Issue Date	:	2020-12-14
Standards	:	FCC Part 2, FCC Part 22 Subpart H, FCC Part 24 Subpart E, FCC Part 27, ANSI/TIAC63.26: 2015
Conclusions	:	**PASS** In the configuration tested, the EUT complied with the standards specified above, The EUT technically complies with the FCC requirements

Test/Witness Engineer	:	Rebeca
Engineer Supervisor	:	Ivan Su
Engineer Manager	:	Ray Lai

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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Contents

Revision History

Report No.	Version	Description	Issued Date
TB-FCC176392	Rev.01	Initial issue of report	2020-12-14

1. General Information about EUT

1.1 Client Information

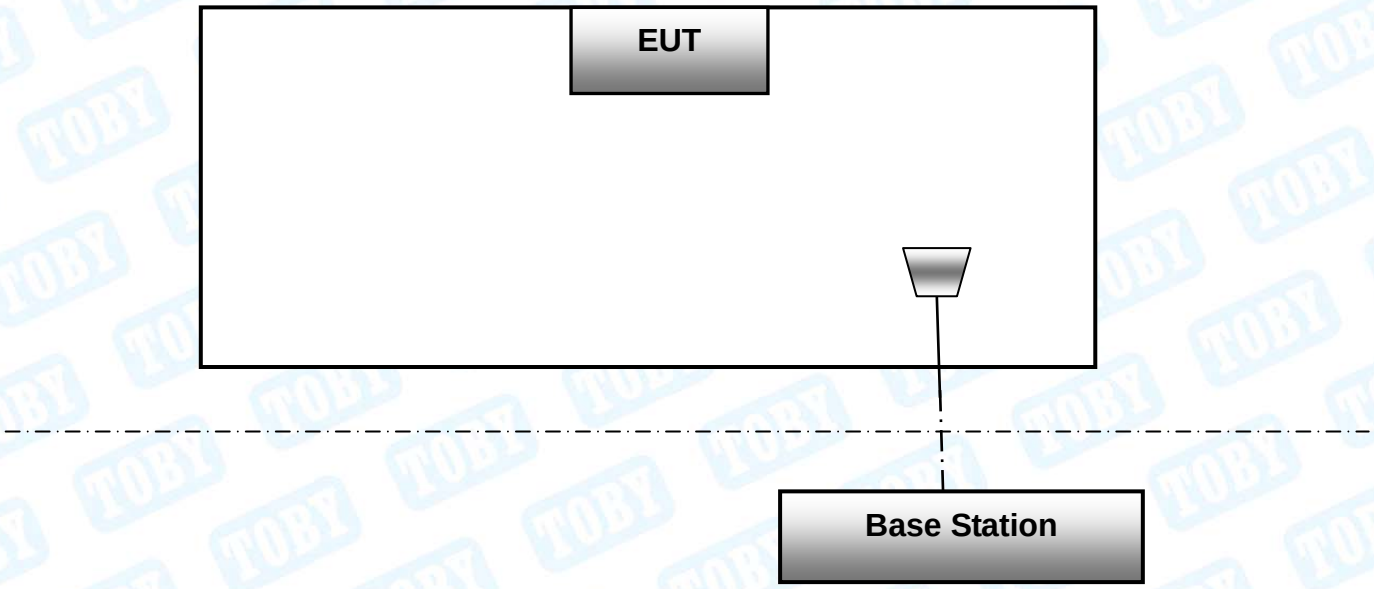
Applicant	:	Ciontek Technology Corp.
Address	:	B501, Chanxueyan Building Wuhan University, No.6 Of Yuexing 2nd Road, Yuehai Street, Nanshan District, Shenzhen, China
Manufacturer	:	Ciontek Technology Corp.
Address	:	B501, Chanxueyan Building Wuhan University, No.6 Of Yuexing 2nd Road, Yuehai Street, Nanshan District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Mobile Smart POS	
Models No.	:	CS20 , CS20A, CS20B, CS20C, CS21, CS20PRO, CS20LITE, CS20S, CS20V, CS20MINI	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is appearance color.	
Product Description	:	FCC Operating Frequency:	GSM 850: 824.20MHz-848.80MHz PCS1900: 1850.20MHz-1909.80MHz UMTS Band II: 1852.40MHz-1907.60MHz UMTS Band IV: TX:1712.4MHz-1752.6MHz UMTS Band V:826.40MHz-846.60MHz
		Antenna Gain:	0.6dBi for GSM850/1900 0.8dBi WCDMA Band II/VI/V
		Modulation Type:	GSM/GPRS:GMSK; EDGE: 8PSK UMTS:QPSK
Power Rating	:	DC 5V from Adapter(XS12-050200U): Input: AC 100-240V, 50/60Hz 0.5A Output: DC 5V, 2A DC 3.80V by 3500mAh Li-ion Polymer Battery	
Software Version	:	A50_V0.07_20200922C	
Hardware Version	:	CS20HWV2.0	
Remark	:	The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

Note:
For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3 Block Diagram Showing the Configuration of System Tested



The above block diagram of setup is the normal mode. And more detail please refer to the test setup of each test item of bellow.

1.4 Description of Support Units

The EUT has been tested as an independent unit.

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

During all testing, EUT is link mode with base station at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range. Frequency range investigated for radiated emission as below：

1. 9kHz~10GHz for GSM850 and UMTS Band V.
2. 9kHz~20GHz for PCS1900 and UMTS Band II/IV.

Test Channel		
Mode	**Channel**	**Frequency(MHz)**
GSM 850	128	824.20
	190	836.60
	251	848.80
PCS 1900	512	1850.20
	661	1880.00
	810	1909.80
UMTS Band II	9262	1852.40
	9400	1880.00
	9538	1907.60
UMTS Band IV	1312	1712.40
	1413	1732.60
	1513	1752.60
UMTS Band V	4132	826.40
	4183	836.60
	4233	846.60

Test Mode	Description
GSM 850	highest , middle, lowest channels
GPRS 850	highest , middle, lowest channels
EGPRS 850	highest , middle, lowest channels
GSM 1900	highest , middle, lowest channels
GPRS 1900	highest , middle, lowest channels
EGPRS 1900	highest , middle, lowest channels
RMC UMTS Band II	highest , middle, lowest channels
HSDPA UMTS Band II	highest , middle, lowest channels
HSUPA UMTS Band II	highest , middle, lowest channels
RMC UMTS Band IV	highest , middle, lowest channels
HSDPA UMTS Band IV	highest , middle, lowest channels
HSUPA UMTS Band IV	highest , middle, lowest channels
RMC UMTS Band V	highest , middle, lowest channels
HSDPA UMTS Band V	highest , middle, lowest channels
HSUPA UMTS Band V	highest , middle, lowest channels
For the Radiated test used the EUT-1(Sample ID: TBBJ-20200916-08_1-02). **For the RF Conduction test used the EUT-2(Sample ID: TBBJ-20200916-08_1-01).**	

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) During the testing procedure, the EUT is in link mode with base station emulator at maximum power level in each test mode.

(3) The EUT has GSM, GPRS, EDGE functions, and after pre-testing, GSM function is the worst case for all the emission tests.

(4) The EUT has RMC, HSDPA, HSUPA functions in UMTS band II, UMTS band IV and UMTS band V, and after pre-testing, RMC mode is the worst case for all the emission tests.

(5) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on Z-plane as the normal use. Therefore only the test data of this Z-plane was used for radiated emission measurement test.

1.6 Measurement Uncertainty

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025：2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01. FCC Accredited Test Site Number: 854351.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A.

2. Test Summary

Test Standards and Test Results			
Standard	**Document Title**		
FCC Part 2 (10-1-05 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations		
FCC Part 22 (10-1-05 Edition)	Public Mobile Services		
FCC Part 24 (10-1-05 Edition)	Personal Communications Services		
FCC Part 27 (10-1-05 Edition)	Miscellaneous Wireless Communications Services		
Standard Section	**Test Item**	**Judgment**	**Remark**
2.1046;	Conducted RF Output Power	PASS	N/A
24.232(d); 27.50	Peak-Average Ratio	PASS	N/A
2.1049; 22.917; 24.238; 27.53	99% & -26 dB Occupied Bandwidth	PASS	N/A
2.1055; 22.355; 24.235; 27.54	Frequency Stability	PASS	N/A
2.1051; 2.1057; 22.917; 24.238; 27.53	Conducted Out of Band Emissions	PASS	N/A
2.1051; 2.1057; 22.917; 24.238; 27.53	Band Edge	PASS	N/A
22.913; 24.238; 27.50	Transmitter Radiated Power (EIRP/ERP)	PASS	N/A
2.1051; 2.1057; 22.917; 24.238; 27.53	Radiated Out of Band Emissions	PASS	N/A
Note: N/A is an abbreviation for Not Applicable.			

3. Test Equipment

Radiation Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep. 11, 2020	Sep. 10, 2021
Universal Radio Communication Tester	Rohde&Schwarz	CMU200	103903	Jul. 06, 2020	Jul. 05, 2021
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 07, 2020	Jul. 06, 2021
Pre-amplifier	Sonoma	310N	185903	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	HP	8449B	3008A00849	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Mar.01, 2020	Feb. 28, 2021
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.01, 2020	Feb. 28, 2021
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep. 11, 2020	Sep. 10, 2021
Universal Radio Communication Tester	Rohde&Schwarz	CMU200	103903	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 11, 2020	Sep. 10, 2021
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 11, 2020	Sep. 10, 2021
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 11, 2020	Sep. 10, 2021
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 11, 2020	Sep. 10, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 11, 2020	Sep. 10, 2021

4. Frequency Stability

4.1 Test Standard and Requirement

4.1.1 Test Standard

FCC Part 2.1055
FCC Part 22.355
FCC Part 24.235
FCC Part 27.54

4.1.2 Requirement

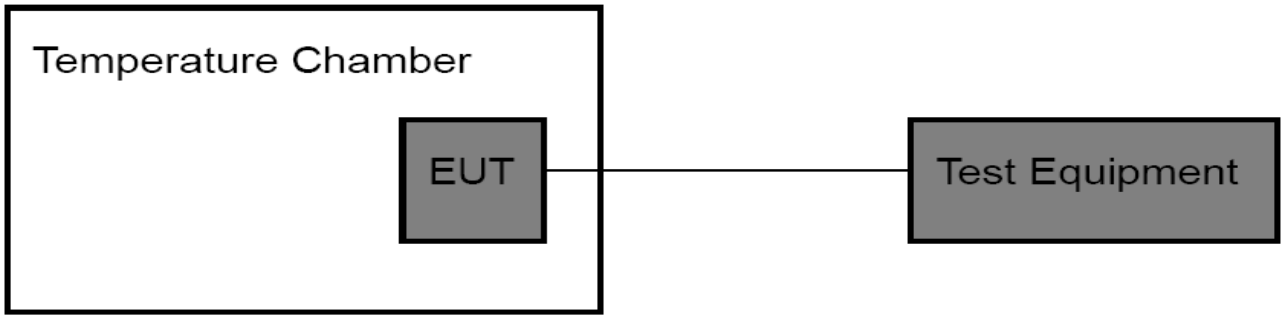
According to FCC section 22.355 and FCC section 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(1) Temperature:
The temperature is varied from -30℃ to +50℃ at intervals of not more than 10℃.

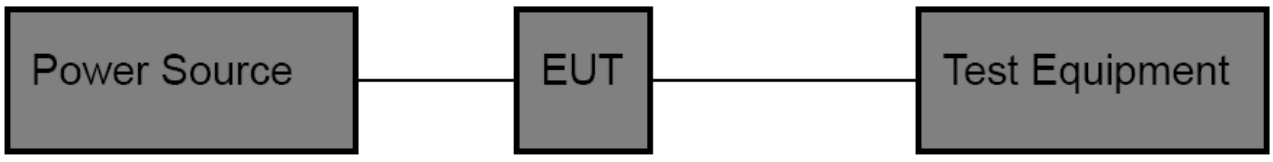
(2) Primary Supply Voltage:
For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at input to the cable normally provide with the equipment, or at the power supply terminals if cables are not normally provided.

4.2 Test Setup

For Temperature Test:



For Voltage Test:



4.3 Test Procedure

Test Procedures for Temperature Variation:

(1) The EUT was set up in the thermal chamber and connected with the base station.

(2) With power off, the temperature was decreased to -30℃ and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.

(3) With power off, the temperature was raised in 10℃ set up to 50℃ and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.

(4) If the EUT cannot be turned on at -30℃, the testing lowest temperature will be raised in 10℃ step until the EUT can be turned on.

Test Procedures for Voltage Variation:

(1) The EUT was placed in a temperature chamber at 25±5℃ and connected with the base station.

(2) Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.

(3) The variation in frequency was measured for the worst case.

4.4 EUT Operating Condition

The Equipment Under Test was set to Communication with the Base Station.

4.5 Deviation From Test Standard

No deviation

4.6 Test Data

Please refer to the Attachment A.

5. Conducted RF Output Power

5.1 Test Standard and Limit

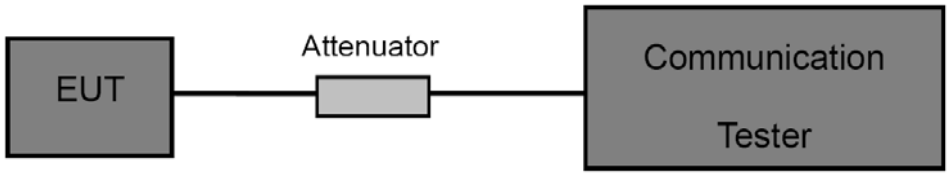
5.1.1 Test Standard

FCC Part 2: 2.1046
FCC Part 22H : 22.913 (a)
FCC Part 24E: 24.232 (c)
FCC Part 27: 50

5.1.2 Test Limit

GSM850/UMTS Band V	UMTS Band IV	PCS 1900/UMTS Band II
38.5 dBm (ERP)	30 dBm (EIRP)	33 dBm (EIRP)

5.2 Test Setup



5.3 Test Procedure

(1) The EUT is coupled to the Base Station with the suitable Attenuator, the path loss is calibrated to correct the reading.
(2) A call is set up by the Base Station to the generic call set up procedure.
(3) Set EUT at maximum power level through base station by power level command.
(4) Then read record the power value from the Base Station in dBm.

5.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

5.5 Deviation From Test Standard

No deviation

5.6 Test Data

Please refer to the Attachment B.

6. Peak-Average Ratio

6.1 Test Standard and Limit

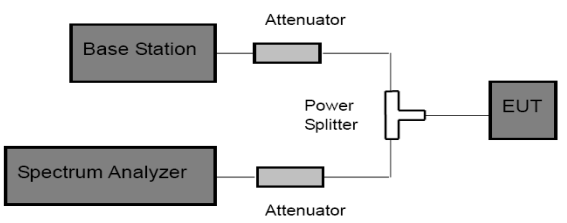
6.1.1 Test Standard

FCC Part 24E: 24.232 (d)
FCC Part 27.50

6.1.2 Test Limit

Peak-to-Average Ratio
The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

6.2 Test Setup



6.3 Test Procedure

According with KDB 971168
(1) The signal analyzer's CCDF measurement profile is enabled.
(2) Frequency = carrier center frequency.
(3) Measurement BW>Emission bandwidth of signal.
(4) The signal analyzer was set to collect one million samples to generate the CCDF curve.
(5) The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which of the transmitter is operating at maximum power.

6.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

6.5 Deviation From Test Standard

No deviation

6.6 Test Data

Please refer to the Attachment C.

7. Radiated Output Power

7.1 Test Standard and Limit

7.1.1 Test Standard

FCC Part 22H: 22.913 (a)
FCC Part 24E: 24.232 (c)
FCC Part 27.50

7.1.2 Test Limit

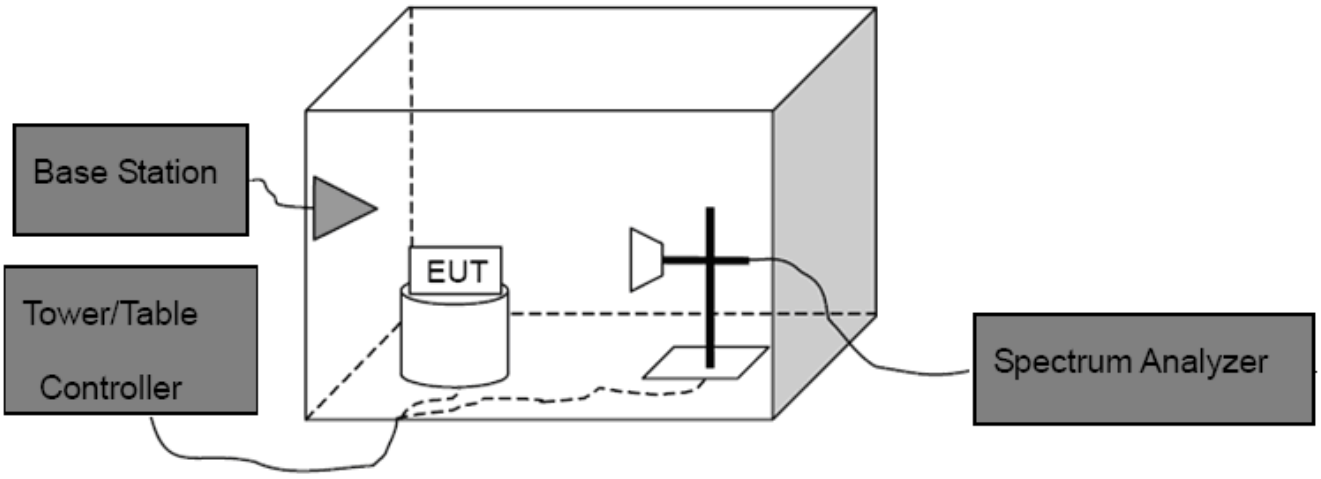
According to FCC Part 22.913 (a), the ERP of Cellular mobile transmitters must not exceed 7 Watts(38.5 dBm).

According to FCC Part 24.232 (c), the Mobile/portable stations are limited to 2 Watts(33 dBm) EIRP peak power.

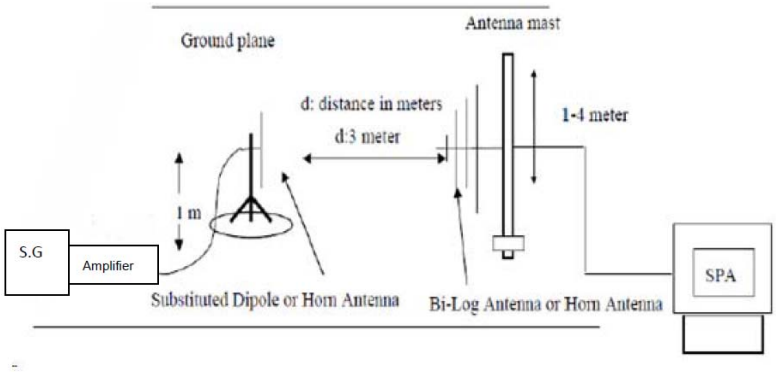
According to FCC Part 27.50 (d)(4),Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

GSM850/UMTS Band V	UMTS Band IV	PCS 1900/UMTS Band II
38.5 dBm (ERP)	30 dBm (EIRP)	33 dBm (EIRP)

7.2 Test Setup



Above 1G



Substituted Method

7.3 Test Procedure

(1) The EUT was placed on an non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW=3 MHz, VBW=3 MHz and peak detector settings.

(2) During the measurement, the EUT was enforced in maximum power and linked with the Base Station. The highest was recorded from analyzer power level (LVT) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.

(3) Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to C63.26. The EUT was replaced by dipole antenna (for frequency below 1 GHz) or Horn antenna (for frequency above 1 GHz) at same location with same polarize of receiver antenna and then a known power of each measure frequency from S.G. was applied into the dipole antenna or Horn antenna through a TX cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.

Note: In test, the S.G Connect the Pre-amplifier(Sonoma 310N Pre-amplifier for frequency below 1 GHz, HP 8449B Pre-amplifier for frequency above 1 GHz)

Then the EUT's EIRP and ERP was calculated with the correction factor:
ERP=S.G.Level +Antenna Gain Cord.(dBd)-Cable Loss(dB)
EIRP=S.G.Level+Antenna Gain Cord.(dBi)-Cable Loss(dB)

7.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

7.5 Deviation From Test Standard

No deviation

7.6 Test Data

Please refer to the Attachment D.

8. Occupied Bandwidth

8.1 Test Standard and Limit

8.1.1 Test Standard

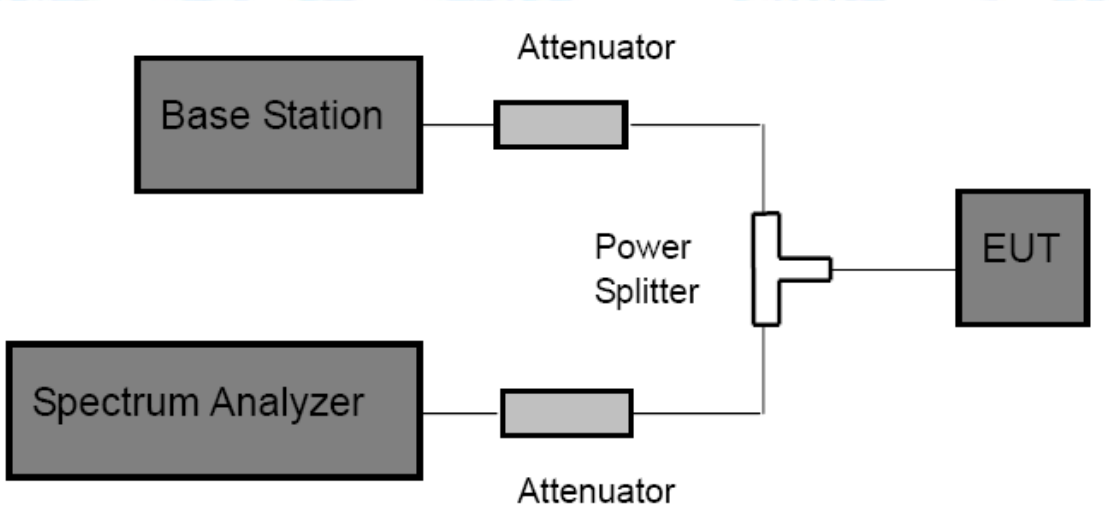
FCC Part 2: 2.1049
FCC Part 22H : 22.913 (a)
FCC Part 24E: 24.232 (c)
FCC Part 27.53

8.1.2 Test Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as 99% power and -26dBC occupied bandwidths.

8.2 Test Setup



8.3 Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
(2) The resolution bandwidth of the Spectrum Analyzer is set to at least 1% of the occupied bandwidth.
(3) The low, middle and the high channels are selected to perform tests respectively.
(4) Set the frequency range of the Spectrum Analyzer suitably to capture the waveform; search peak; make a line whose value is 26dB lower than the peak; mark two points which the line intersected the waveform at; finally record the delta of the two points as the occupied bandwidth and the plot.
(5) Set the Spectrum Analyzer Occupied bandwidth function to measure the 99% occupied bandwidth.

8.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

8.5 Deviation From Test Standard

No deviation

8.6 Test Data

Please refer to the Attachment E.

9. Conducted Out of Band Emissions

9.1 Test Standard and Limit

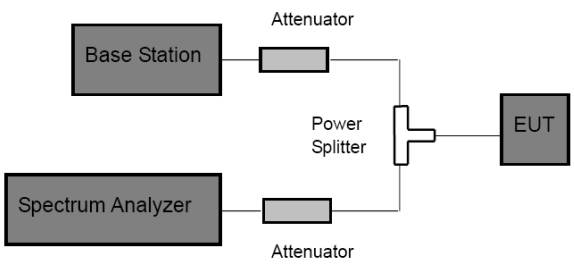
9.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057
FCC Part 22H: 22.917(a)
FCC Part 24E: 24.238(a)
FCC Part 27.53

9.1.2 Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power(P) by a factor of at least 43+10log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

9.2 Test Setup



9.3 Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
(2) Spectrum Setting:
Frequency bellow 1 GHz: RBW=100 kHz, VBW=300 kHz.
Frequency above 1 GHz: RBW=1 MHz, VBW=3 MHz.
(3) The low, middle and high channels of each band and mode's spurious emissions for 30 MHz to 10th Harmonic were measured by Spectrum analyzer.

9.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

9.5 Deviation From Test Standard

No deviation

9.6 Test Data

Please refer to the Attachment F.

10. Band Edge Test

10.1 Test Standard and Limit

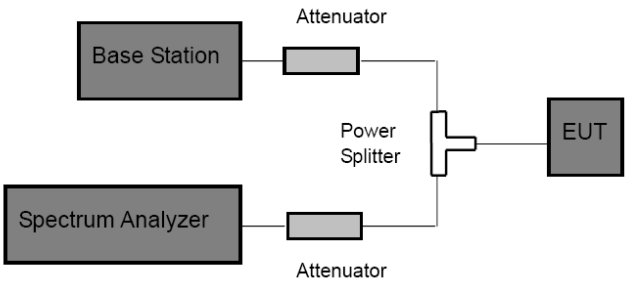
10.1.1 Test Standard

FCC Part 2: 2.1051, 2.1057
FCC Part 22H: 22.917(a)
FCC Part 24E: 24.238(a)
FCC Part 27.53

10.1.2 Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power(P) by a factor of at least 43+10log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

10.2 Test Setup



10.3 Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and Base station via power splitter as show in the block diagram above.
(2) Spectrum Setting:
GSM and PCS: RBW≥1% 26db bandwidth, VBW=3 RBW, Span 1 MHz, Detector: Peak Mode.
WCDMA: RBW≥1% 26db bandwidth, VBW=3 RBW, Span 10 MHz, Detector: Peak Mode.
(3) The band edges of low and high channels for the highest RF powers were measured.

10.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

10.5 Deviation From Test Standard

No deviation

10.6 Test Data

Please refer to the Attachment G.

11. Radiated Out Band of Emissions

11.1 Test Standard and Limit

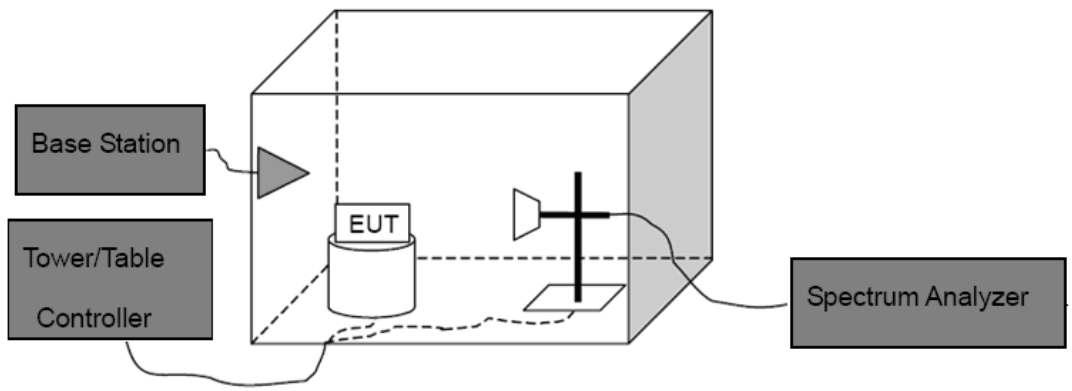
11.1.1 Test Standard

FCC Part 2: 2.1053, 2.1057
FCC Part 22H: 22.917
FCC Part 24E: 24.238
FCC Part 27.53

11.1.2 Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power(P) by a factor of at least 43+10log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.

11.2 Test Setup



11.3 Test Procedure

(1) The test system setup as show in the block diagram above.
(2) The EUT was placed on an non-conductive rotating platform in an anechoic chamber. The radiated spurious emissions from 30MHz to 10th harmonious of fundamental frequency were measured at 3 m with a test antenna and a spectrum analyzer with RBW=1 MHz, VBW=1 MHz, peak detector settings.
(3) During the measurement, the EUT was enforced in maximum power and linked with a base station. All the spurious emissions at 3m were measured by rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
(4) When found the maximum level of emissions from the EUT. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB=10 log(TX power in Watts/0.001)-the absolute level
Spurious attenuation limit in dB=43+10 log(power out in Watts)

11.4 EUT Operating Condition

The EUT was continuously connected with the Base station and transmitting in the max power during the test.

11.5 Deviation From Test Standard

No deviation

11.6 Test Data

Please refer to the Attachment H.

Attachment A--Frequency Stability

Temperature Variation

Temperature Variation GSM 850 (CH190)						
Temperature (℃)	GSM		GPRS		EDGE	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)
-30	6	0.007	9	0.011	10	0.012
-20	9	0.011	13	0.016	9	0.011
-10	10	0.012	14	0.017	8	0.010
0	13	0.016	11	0.013	12	0.014
10	9	0.011	10	0.012	11	0.013
20	10	0.012	9	0.011	9	0.011
30	11	0.013	8	0.010	13	0.016
40	13	0.016	5	0.006	9	0.011
50	8	0.010	7	0.008	10	0.012
60	9	0.011	9	0.011	11	0.013
Limit	2.5 (ppm)					
Result	PASS					

Temperature Variation GSM 1900 (CH661)						
Temperature (℃)	GSM		GPRS		EDGE	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)
-30	12	0.018	9	0.014	11	0.017
-20	9	0.014	8	0.012	9	0.014
-10	8	0.012	6	0.009	12	0.018
0	11	0.017	11	0.017	10	0.015
10	13	0.020	10	0.015	13	0.020
20	12	0.018	13	0.020	14	0.021
30	9	0.014	15	0.023	10	0.015
40	10	0.015	11	0.017	12	0.018
50	11	0.017	13	0.020	15	0.023
60	12	0.018	12	0.018	11	0.017
Limit	2.5 (ppm)					
Result	PASS					

Temperature Variation UMTS Band II (CH 9400)		
Temperature (℃)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
-30	10	0.005
-20	13	0.007
-10	10	0.005
0	9	0.005
10	12	0.006
20	9	0.005
30	12	0.006
40	9	0.005
50	8	0.004
60	12	0.006
Limit	2.5 (ppm)	
Result	PASS	

Temperature Variation UMTS Band IV (CH 1413)		
Temperature (℃)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
-30	9	0.005
-20	12	0.007
-10	10	0.006
0	11	0.006
10	8	0.005
20	7	0.004
30	12	0.007
40	13	0.007
50	10	0.006
60	9	0.005
Limit	2.5 (ppm)	
Result	PASS	

Temperature Variation UMTS Band V (CH 4183)		
Temperature (℃)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
-30	9	0.011
-20	4	0.005
-10	10	0.012
0	13	0.016
10	10	0.012
20	12	0.014
30	10	0.012
40	18	0.022
50	10	0.012
60	8	0.010
Limit	2.5 (ppm)	
Result	PASS	

Voltage Variation

Voltage Variation GSM 850 (CH190)						
Voltage (V)	GSM		GPRS		EDGE	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)
3.45	16	0.019	17	0.020	16	0.019
3.80	14	0.017	16	0.019	15	0.018
4.35	12	0.014	11	0.013	14	0.017
Limit	2.5 (ppm)					
Result	PASS					

Voltage Variation GSM 1900 (CH661)						
Voltage (V)	GSM		GPRS		EDGE	
	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)	Freq. Dev. (Hz)	Deviation (ppm)
3.45	16	0.024	17	0.026	13	0.020
3.80	15	0.023	16	0.024	14	0.021
4.35	18	0.027	14	0.021	17	0.026
Limit	**2.5 (ppm)**					
Result	**PASS**					

Voltage Variation UMTS Band II (CH 9400)		
Voltage (V)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
3.45	13	0.007
3.80	15	0.008
4.35	17	0.009
Limit	2.5 (ppm)	
Result	PASS	

Voltage Variation UMTS Band IV (CH 1413)		
Voltage (V)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
3.45	15	0.009
3.80	16	0.009
4.35	18	0.011
Limit	2.5 (ppm)	
Result	PASS	

Voltage Variation UMTS Band V (CH 4183)		
Voltage (V)	RMC Mode	
	Freq. Dev. (Hz)	Deviation (ppm)
3.45	12	0.014
3.80	14	0.017
4.35	18	0.022
Limit	2.5 (ppm)	
Result	PASS	

Attachment B--Conducted RF Output Power

GSM 850				
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)
GSM 850	128	824.2	33.68	2.333
	190	836.6	33.54	2.259
	251	848.8	33.62	2.301
GPRS 850 (1 Slot)	128	824.2	33.69	2.339
	190	836.6	33.54	2.259
	251	848.8	33.62	2.301
GPRS 850 (2 Slot)	128	824.2	32.54	1.795
	190	836.6	32.16	1.644
	251	848.8	32.28	1.690
GPRS 850 (3 Slot)	128	824.2	31.45	1.396
	190	836.6	31.36	1.368
	251	848.8	31.26	1.337
GPRS 850 (4 Slot)	128	824.2	30.58	1.143
	190	836.6	30.87	1.222
	251	848.8	30.54	1.132
EDGE 850 (1 Slot)	128	824.2	26.85	0.484
	190	836.6	26.52	0.449
	251	848.8	26.23	0.420
EDGE 850 (2 Slot)	128	824.2	25.36	0.344
	190	836.6	25.86	0.385
	251	848.8	25.75	0.376
EDGE 850 (3 Slot)	128	824.2	25.13	0.326
	190	836.6	25.14	0.327
	251	848.8	25.23	0.333
EDGE 850 (4 Slot)	128	824.2	24.86	0.306
	190	836.6	24.78	0.301
	251	848.8	24.46	0.279

PCS 1900				
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)
GSM 1900	512	1850.2	31.13	1.297
	661	1880.0	30.98	1.253
	810	1909.8	30.99	1.256
GPRS 1900 (1 Slot)	512	1850.2	31.11	1.291
	661	1880.0	31.00	1.259
	810	1909.8	30.91	1.233
GPRS 1900 (2 Slot)	512	1850.2	29.56	0.904
	661	1880.0	29.36	0.863
	810	1909.8	29.46	0.883
GPRS 1900 (3 Slot)	512	1850.2	28.63	0.729
	661	1880.0	28.46	0.701
	810	1909.8	28.59	0.723
GPRS 1900 (4 Slot)	512	1850.2	27.58	0.573
	661	1880.0	27.46	0.557
	810	1909.8	27.69	0.587
EDGE 1900 (1 Slot)	512	1850.2	26.47	0.444
	661	1880.0	26.21	0.418
	810	1909.8	25.94	0.393
EDGE 1900 (2 Slot)	512	1850.2	25.69	0.371
	661	1880.0	25.78	0.378
	810	1909.8	25.14	0.327
EDGE 1900 (3 Slot)	512	1850.2	24.65	0.292
	661	1880.0	24.53	0.284
	810	1909.8	24.36	0.273
EDGE 1900 (4 Slot)	512	1850.2	23.86	0.243
	661	1880.0	23.58	0.228
	810	1909.8	23.45	0.221

UMTS Band II				
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)
Band II RMC	9262	1852.4	22.83	0.192
	9400	1880.0	22.65	0.184
	9538	1907.6	22.64	0.184
HSDPA Subtest 1	9262	1852.4	21.87	0.154
	9400	1880.0	21.75	0.150
	9538	1907.6	21.60	0.145
HSDPA Subtest 2	9262	1852.4	21.25	0.133
	9400	1880.0	21.16	0.131
	9538	1907.6	21.23	0.133
HSDPA Subtest 3	9262	1852.4	20.96	0.125
	9400	1880.0	20.85	0.122
	9538	1907.6	20.78	0.120
HSDPA Subtest 4	9262	1852.4	20.41	0.110
	9400	1880.0	20.16	0.104
	9538	1907.6	20.23	0.105
HSUPA Subtest 1	9262	1852.4	21.51	0.142
	9400	1880.0	21.10	0.129
	9538	1907.6	21.05	0.127
HSUPA Subtest 2	9262	1852.4	21.12	0.129
	9400	1880.0	20.96	0.125
	9538	1907.6	20.86	0.122
HSUPA Subtest 3	9262	1852.4	20.24	0.106
	9400	1880.0	20.33	0.108
	9538	1907.6	20.25	0.106
HSUPA Subtest 4	9262	1852.4	20.05	0.101
	9400	1880.0	20.03	0.101
	9538	1907.6	20.12	0.103
HSUPA Subtest 5	9262	1852.4	20.13	0.103
	9400	1880.0	20.07	0.102
	9538	1907.6	20.11	0.103

UMTS Band IV				
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)
RCM	1312	1712.4	22.88	0.194
	1413	1732.6	21.47	0.140
	1513	1752.6	22.76	0.189
HSDPA Subtest 1	1312	1712.4	22.61	0.182
	1413	1732.6	22.20	0.166
	1513	1752.6	21.71	0.148
HSDPA Subtest 2	1312	1712.4	22.03	0.160
	1413	1732.6	22.12	0.163
	1513	1752.6	21.46	0.140
HSDPA Subtest 3	1312	1712.4	21.96	0.157
	1413	1732.6	21.56	0.143
	1513	1752.6	21.36	0.137
HSDPA Subtest 4	1312	1712.4	20.85	0.122
	1413	1732.6	20.54	0.113
	1513	1752.6	20.36	0.109
HSUPA Subtest 1	1312	1712.4	22.19	0.166
	1413	1732.6	20.61	0.115
	1513	1752.6	21.88	0.154
HSUPA Subtest 2	1312	1712.4	21.86	0.153
	1413	1732.6	20.45	0.111
	1513	1752.6	21.06	0.128
HSUPA Subtest 3	1312	1712.4	20.36	0.109
	1413	1732.6	20.68	0.117
	1513	1752.6	20.15	0.104
HSUPA Subtest 4	1312	1712.4	20.16	0.104
	1413	1732.6	20.06	0.101
	1513	1752.6	20.14	0.103
HSUPA Subtest 5	1312	1712.4	20.27	0.106
	1413	1732.6	20.60	0.115
	1513	1752.6	20.08	0.102

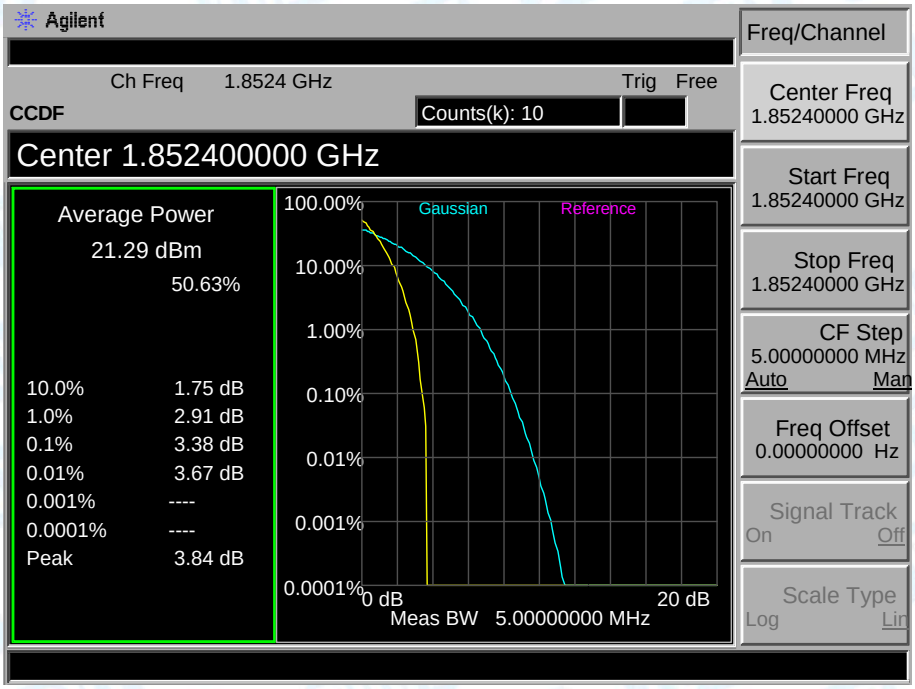
UMTS Band V				
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)
Band V RMC	4132	826.4	21.63	0.146
	4183	836.6	21.77	0.150
	4233	846.6	21.75	0.150
HSDPA Subtest 1	4132	826.4	22.58	0.181
	4183	836.6	22.78	0.190
	4233	846.6	22.78	0.190
HSDPA Subtest 2	4132	826.4	22.12	0.163
	4183	836.6	22.23	0.167
	4233	846.6	22.42	0.175
HSDPA Subtest 3	4132	826.4	21.86	0.153
	4183	836.6	21.96	0.157
	4233	846.6	21.75	0.150
HSDPA Subtest 4	4132	826.4	20.36	0.109
	4183	836.6	20.45	0.111
	4233	846.6	20.16	0.104
HSUPA Subtest 1	4132	826.4	22.02	0.159
	4183	836.6	22.20	0.166
	4233	846.6	22.05	0.160
HSUPA Subtest 2	4132	826.4	21.68	0.147
	4183	836.6	21.39	0.138
	4233	846.6	21.56	0.143
HSUPA Subtest 3	4132	826.4	21.23	0.133
	4183	836.6	21.13	0.130
	4233	846.6	21.63	0.146
HSUPA Subtest 4	4132	826.4	20.86	0.122
	4183	836.6	20.76	0.119
	4233	846.6	20.63	0.116
HSUPA Subtest 5	4132	826.4	20.35	0.108
	4183	836.6	20.42	0.110
	4233	846.6	20.19	0.104

Attachment C--Peak-Average Ratio

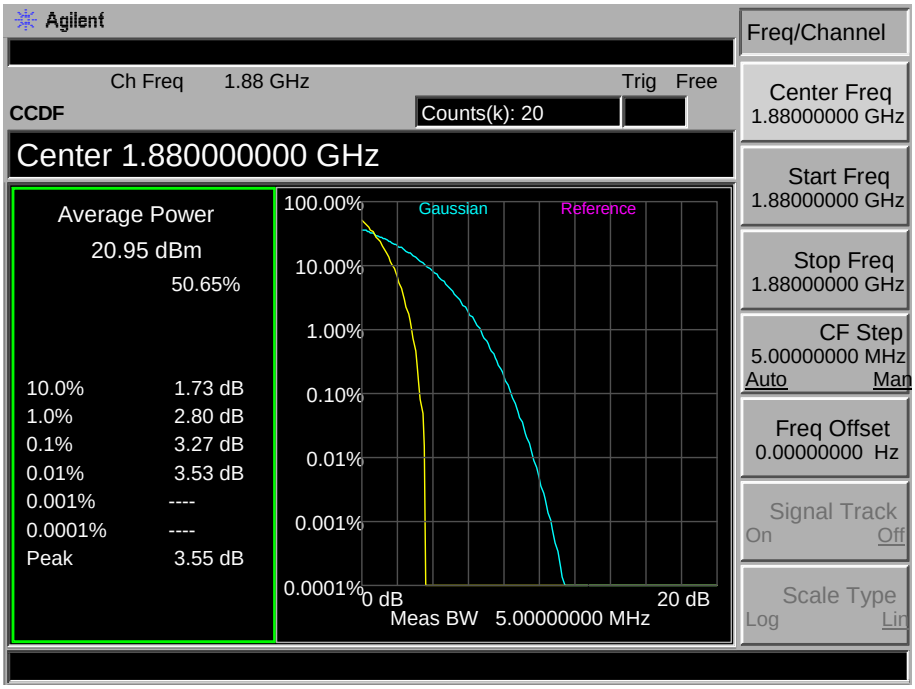
Mode	Channel	Frequency (MHz)	Peak Power (dBm)	AVG Power (dBm)	PAPR (dB)	Limit (dB)	Result
GSM 850	128	824.2	33.74	33.68	0.06	13	PASS
	190	836.6	33.59	33.54	0.05	13	PASS
	251	848.8	33.66	33.62	0.04	13	PASS
GPRS 850	128	824.2	33.72	33.69	0.03	13	PASS
	190	836.6	33.58	33.54	0.04	13	PASS
	251	848.8	33.67	33.62	0.05	13	PASS
EGPRS 850	128	824.2	30.10	26.85	3.25	13	PASS
	190	836.6	29.67	26.52	3.15	13	PASS
	251	848.8	29.49	26.23	3.26	13	PASS
PCS 1900	512	1850.2	31.20	31.13	0.07	13	PASS
	661	1880.0	31.06	30.98	0.08	13	PASS
	810	1909.8	31.05	30.99	0.06	13	PASS
GPRS 1900	512	1850.2	31.15	31.11	0.04	13	PASS
	661	1880.0	31.05	31.00	0.05	13	PASS
	810	1909.8	30.97	30.91	0.06	13	PASS
EGPRS 1900	512	1850.2	29.99	26.47	3.52	13	PASS
	661	1880.0	29.63	26.21	3.42	13	PASS
	810	1909.8	29.22	25.94	3.28	13	PASS

RMC			
Mode	**Channel**	**Frequency (MHz)**	**Peak-Average Ratio (PAR)**
UMTS Band II	9262	1852.4	3.38
	9400	1880.0	3.27
	9538	1907.6	3.25
UMTS Band IV	1312	1712.4	3.15
	1413	1732.6	3.30
	1513	1752.6	3.18
UMTS Band V	4132	826.4	3.28
	4183	836.6	3.13
	4233	846.6	3.25
			Limit≤ 13dB

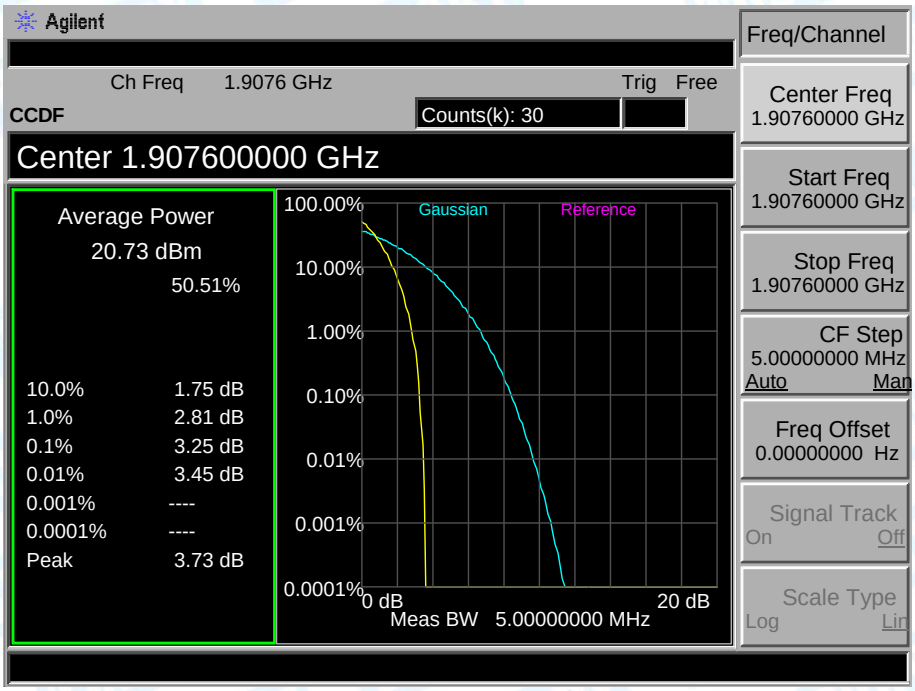
UMTS Band II
CH 9262



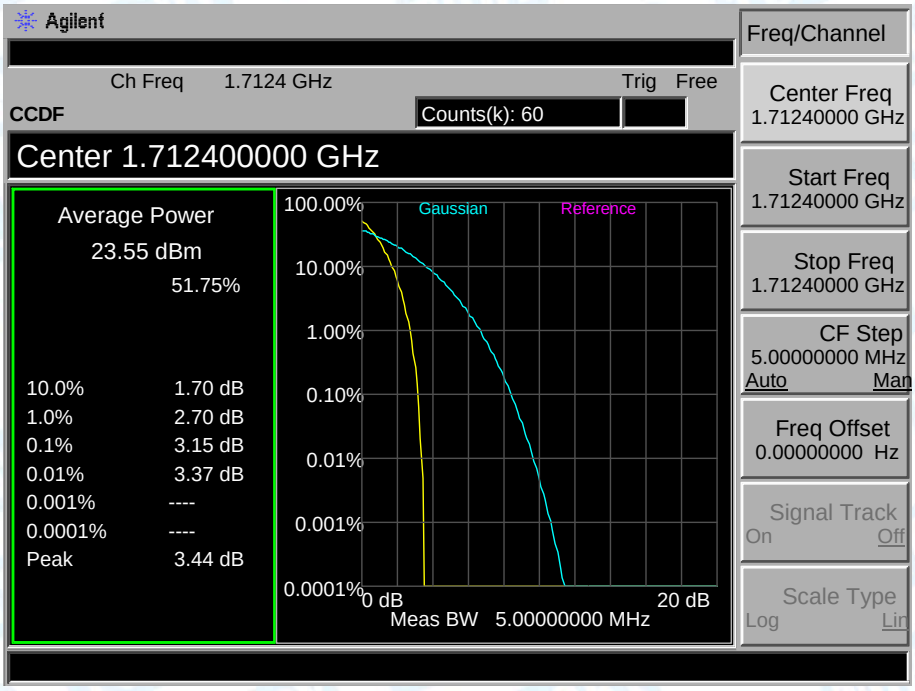
CH 9400



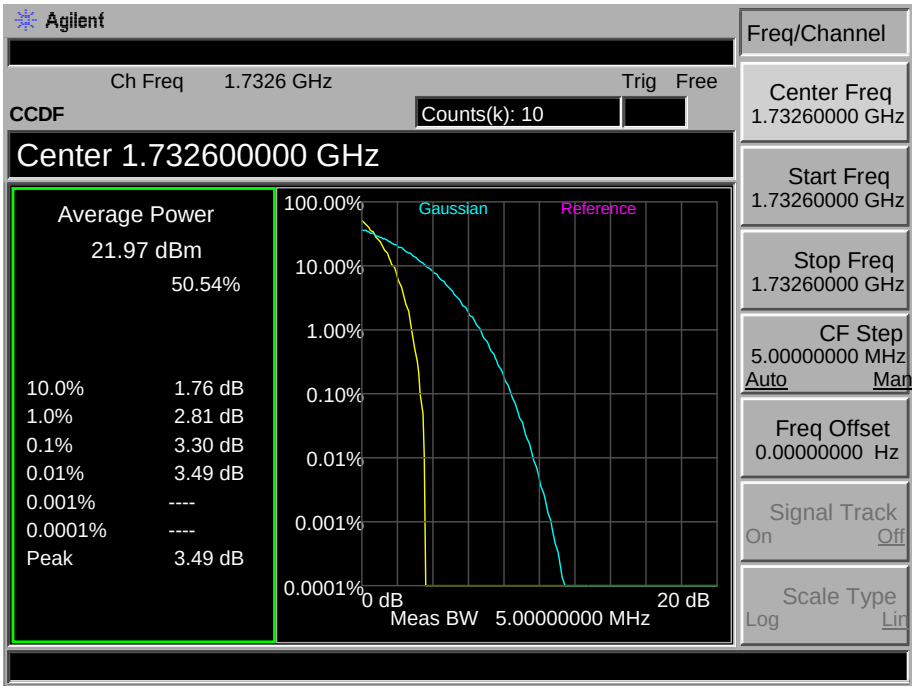
CH 9538



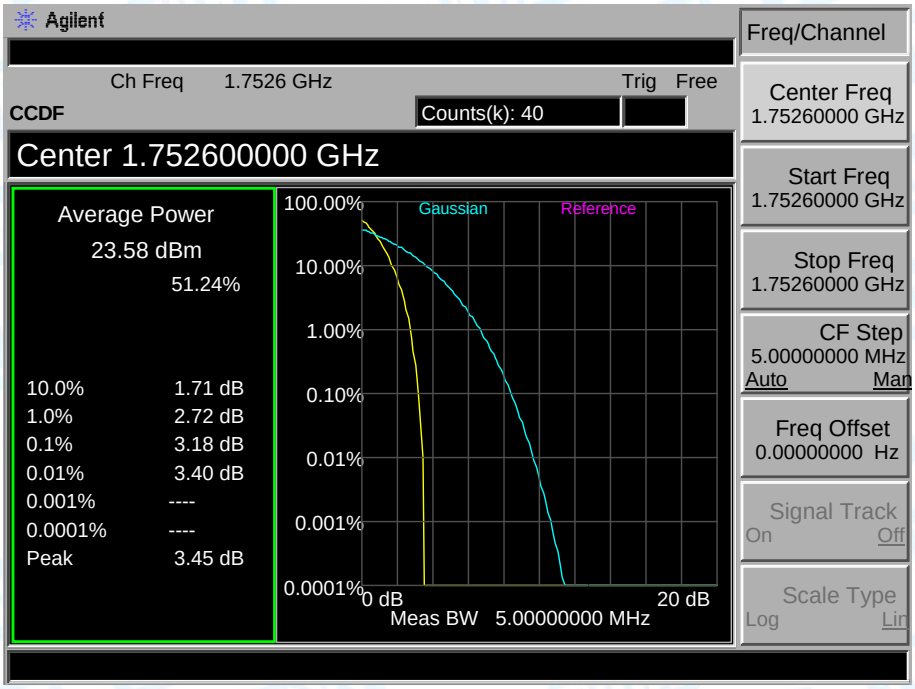
UMTS Band IV
CH 1312



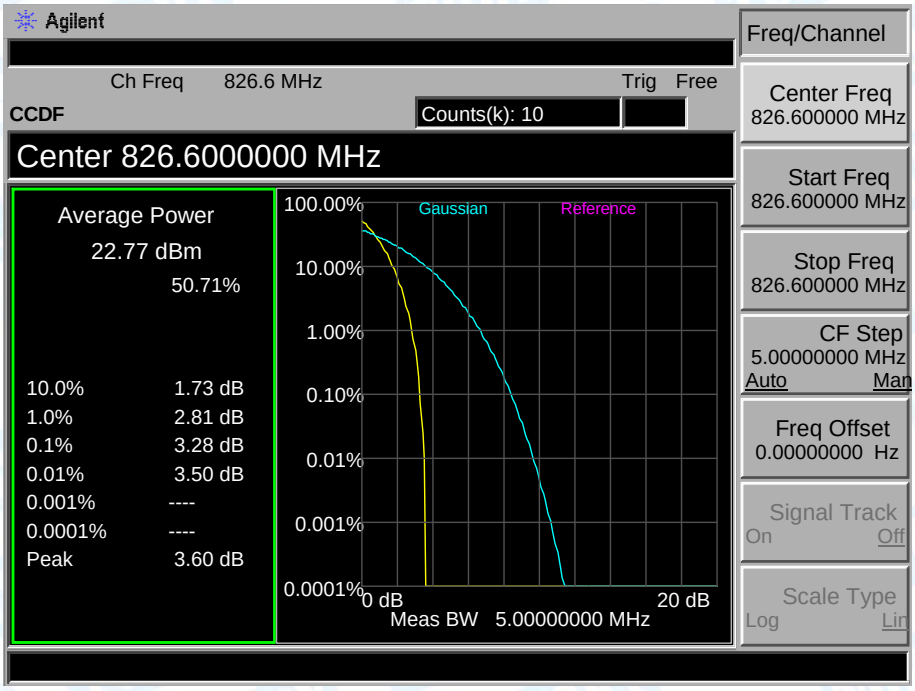
CH 1413



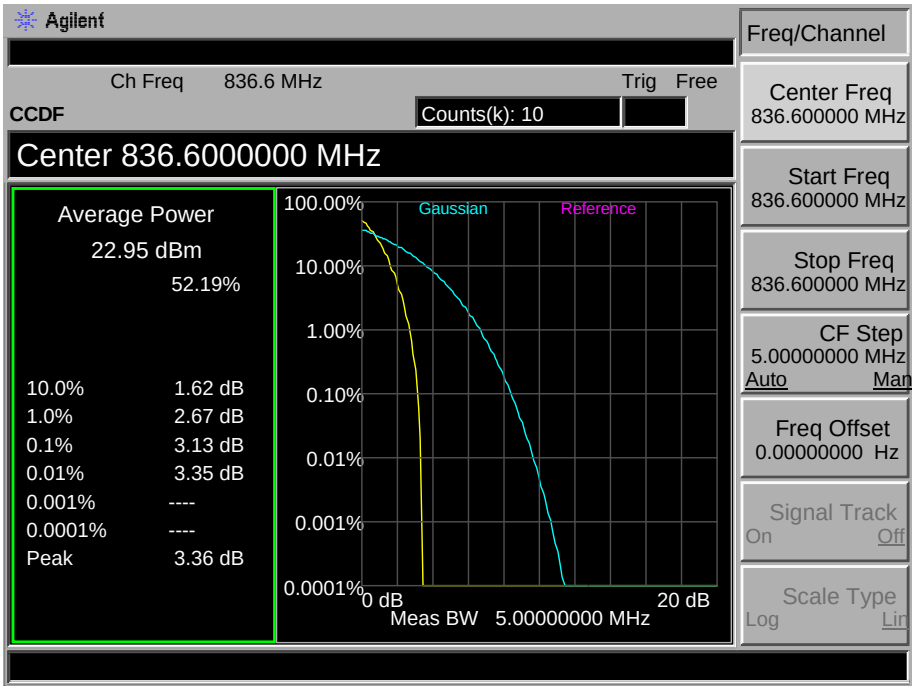
CH 1513


Agilent
Ch Freq 1.7526 GHz
Trig Free
CCDF
Counts(k): 40
Center 1.752600000 GHz
Average Power
23.58 dBm
51.24%
10.0% 1.71 dB
1.0% 2.72 dB
0.1% 3.18 dB
0.01% 3.40 dB
0.001% ----
0.0001% ----
Peak 3.45 dB
100.00%
10.00%
1.00%
0.10%
0.01%
0.001%
0.0001%
Gaussian
Reference
0 dB
20 dB
Meas BW 5.00000000 MHz
Freq/Channel
Center Freq
1.75260000 GHz
Start Freq
1.75260000 GHz
Stop Freq
1.75260000 GHz
CF Step
5.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

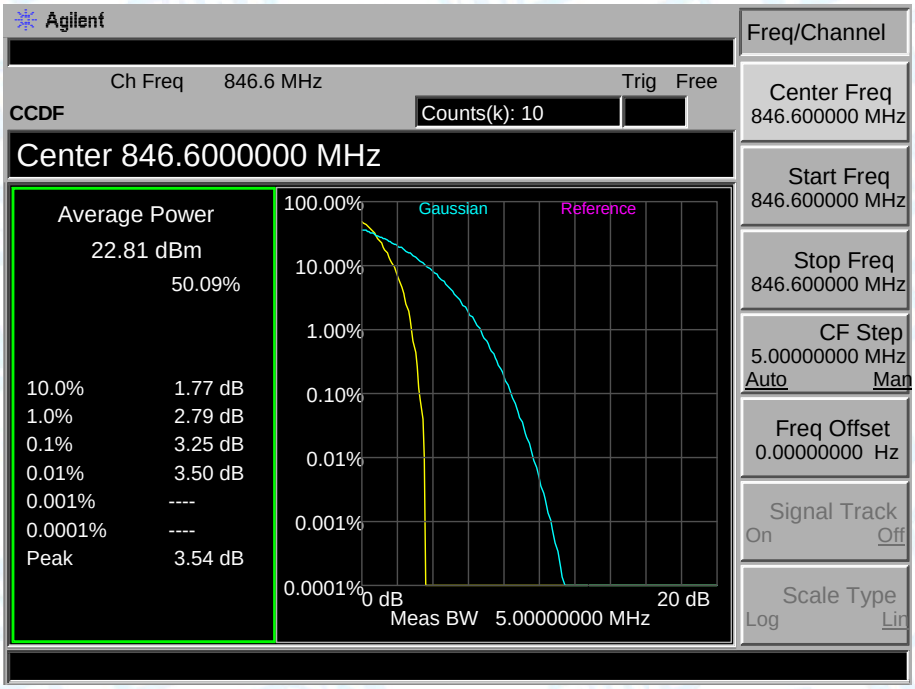
UMTS Band V
CH 4132



CH 4183



CH 4233


Agilent
Ch Freq 846.6 MHz
Trig Free
CCDF
Counts(k): 10
Center 846.6000000 MHz
Average Power
22.81 dBm
50.09%
10.0% 1.77 dB
1.0% 2.79 dB
0.1% 3.25 dB
0.01% 3.50 dB
0.001% ----
0.0001% ----
Peak 3.54 dB
100.00%
10.00%
1.00%
0.10%
0.01%
0.001%
0.0001%
Gaussian
Reference
0 dB
20 dB
Meas BW 5.00000000 MHz
Freq/Channel
Center Freq
846.600000 MHz
Start Freq
846.600000 MHz
Stop Freq
846.600000 MHz
CF Step
5.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

Attachment D-- Radiated Output Power

Measurement Data (worst case)

GSM 850								
Mode	Channel	Frequency (MHz)	Antenna (H&V)	SG Level (dBm)	Antenna Factor (dBd)	Cable Loss (dB)	ERP Power (dBm)	ERP Power (W)
GSM 850	128	824.2	H	30.38	3.46	1.26	32.58	1.811
			V	25.16	3.46	1.26	27.36	0.545
	190	836.6	H	29.42	3.82	1.26	31.98	1.578
			V	24.69	3.82	1.26	27.25	0.531
	251	848.8	H	29.75	4.16	1.26	32.65	1.841
			V	25.35	4.16	1.26	28.25	0.668
GPRS 850 (1 Slot)	128	824.2	H	28.76	3.46	1.26	30.96	1.247
			V	25.65	3.46	1.26	27.85	0.610
	190	836.6	H	27.96	3.82	1.26	30.52	1.127
			V	24.33	3.82	1.26	26.89	0.489
	251	848.8	H	27.78	4.16	1.26	30.68	1.169
			V	23.69	4.16	1.26	26.59	0.456
EDGE 850 (1 Slot)	128	824.2	H	24.05	3.46	1.26	26.25	0.422
			V	20.16	3.46	1.26	22.36	0.172
	190	836.6	H	23.40	3.82	1.26	25.96	0.394
			V	19.30	3.82	1.26	21.86	0.153
	251	848.8	H	20.05	4.16	1.26	22.95	0.197
			V	18.96	4.16	1.26	21.86	0.153
Limit							**38.5**	**7**

PCS 1900								
Mode	Channel	Frequency (MHz)	Antenna (H&V)	SG Level (dBm)	Antenna Factor (dBi)	Cable Loss (dB)	EIRP Power (dBm)	EIRP Power (W)
GSM 1900	512	1850.2	H	27.27	5.01	2.59	29.69	0.931
			V	22.81	5.01	2.59	25.23	0.333
	661	1880.0	H	27.44	4.82	2.59	29.67	0.927
			V	23.00	4.82	2.59	25.23	0.333
	810	1909.8	H	28.39	4.45	2.59	30.25	1.059
			V	24.01	4.45	2.59	25.87	0.386
GPRS 1900 (1 Slot)	512	1850.2	H	26.54	5.01	2.59	28.96	0.787
			V	21.94	5.01	2.59	24.36	0.273
	661	1880.0	H	26.52	4.82	2.59	28.75	0.750
			V	22.00	4.82	2.59	24.23	0.265
	810	1909.8	H	27.00	4.45	2.59	28.86	0.769
			V	22.40	4.45	2.59	24.26	0.267
EDGE 1900 (1 Slot)	512	1850.2	H	22.71	5.01	2.59	25.13	0.326
			V	19.94	5.01	2.59	22.36	0.172
	661	1880.0	H	22.74	4.82	2.59	24.97	0.314
			V	19.83	4.82	2.59	22.06	0.161
	810	1909.8	H	23.13	4.45	2.59	24.99	0.316
			V	20.32	4.45	2.59	22.18	0.165
Limit							**33**	**2**

UMTS Band II								
Mode	Channel	Frequency (MHz)	Antenna (H&V)	SG Level (dBm)	Antenna Factor (dBi)	Cable Loss (dB)	EIRP Power (dBm)	EIRP Power (W)
RMC	9262	1852.4	H	19.15	3.46	1.26	21.35	0.136
			V	16.36	3.46	1.26	18.56	0.072
	9400	1880.0	H	18.50	3.82	1.26	21.06	0.128
			V	16.13	3.82	1.26	18.69	0.074
	9538	1907.6	H	19.36	4.16	1.26	22.26	0.168
			V	16.33	4.16	1.26	19.23	0.084
Limit							33	2

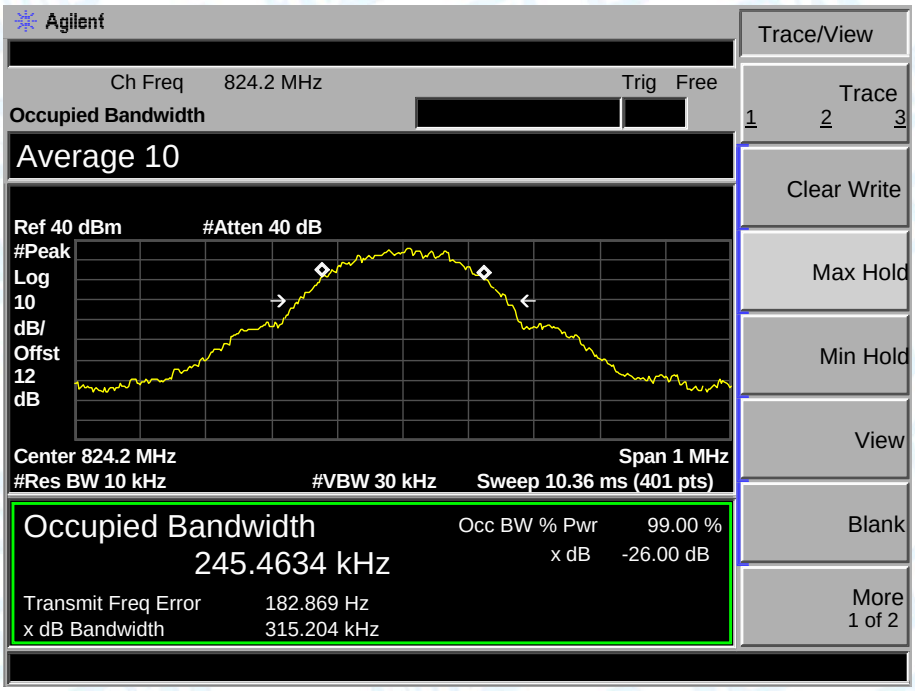
UMTS Band IV								
Mode	Channel	Frequency (MHz)	Antenna (H&V)	SG Level (dBm)	Antenna Factor (dBi)	Cable Loss (dB)	EIRP Power (dBm)	EIRP Power (W)
RMC	1312	1712.4	H	17.95	5.01	2.27	20.69	0.117
			V	15.31	5.01	2.27	18.05	0.064
	1413	1732.6	H	18.30	4.82	2.27	20.85	0.122
			V	15.71	4.82	2.27	18.26	0.067
	1513	1752.6	H	18.84	4.45	2.27	21.02	0.126
			V	16.77	4.45	2.27	18.95	0.079
Limit							30	1

UMTS Band V								
Mode	Channel	Frequency (MHz)	Antenna (H&V)	SG Level (dBm)	Antenna Factor (dBi)	Cable Loss (dB)	ERP Power (dBm)	ERP Power (W)
RMC	4132	826.4	H	18.56	5.01	2.59	20.98	0.125
			V	15.83	5.01	2.59	18.25	0.067
	4183	836.6	H	18.83	4.82	2.59	21.06	0.128
			V	17.01	4.82	2.59	19.24	0.084
	4233	846.6	H	19.00	4.45	2.59	20.86	0.122
			V	16.82	4.45	2.59	18.68	0.074
Limit							38.5	7

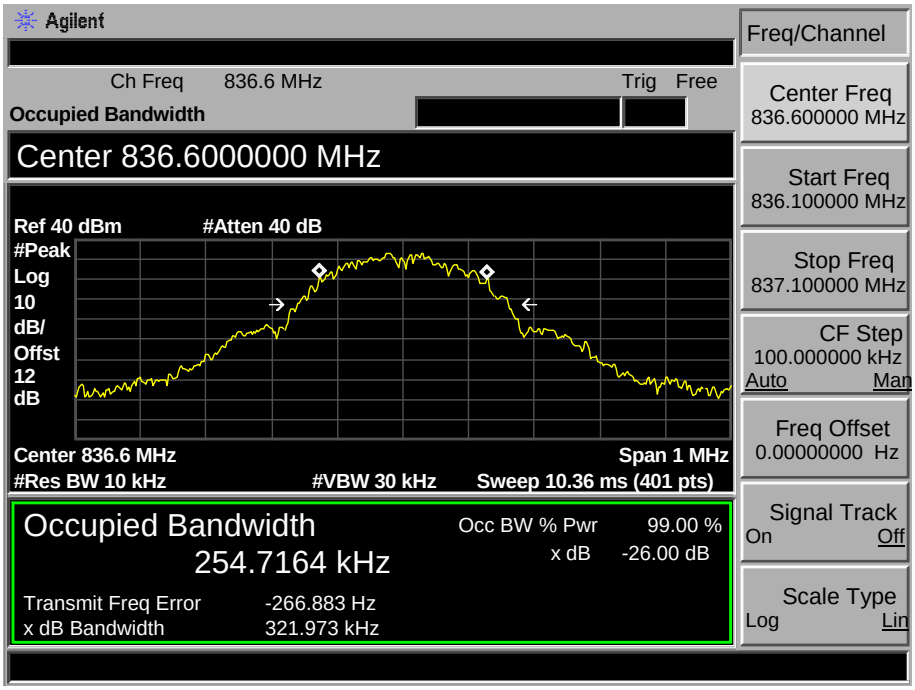
Attachment E--Occupied Bandwidth

GSM 850				
Mode	**Channel**	**Frequency (MHz)**	**99% OBW (KHz)**	**-26dB Bandwidth (kHz)**
GSM 850	128	824.2	245.4634	315.204
	190	836.6	254.4164	321.973
	251	848.8	244.1790	312.212
EGPRS 850	128	824.2	246.9633	322.240
	190	836.6	249.4206	311.884
	251	848.8	246.4065	313.595
PCS 1900				
Mode	**Channel**	**Frequency (MHz)**	**99% OBW (KHz)**	**-26dB Bandwidth (kHz)**
GSM 1900	512	1850.2	244.8469	318.744
	661	1880.0	248.0254	310.592
	810	1909.8	247.2665	318.359
EGPRS 1900	512	1850.2	248.5940	315.767
	661	1880.0	242.9302	314.683
	810	1909.8	250.5079	318.808
UMTS Band II				
Mode	**Channel**	**Frequency (MHz)**	**99% OBW (MHz)**	**-26dB Bandwidth (MHz)**
RMC	9262	1852.4	4.1105	4.728
	9400	1880.0	4.1232	4.697
	9538	1907.6	4.1208	4.704
UMTS Band IV				
Mode	**Channel**	**Frequency (MHz)**	**99% OBW (MHz)**	**-26dB Bandwidth (MHz)**
RMC	1312	1712.4	4.1030	4.728
	1413	1732.6	4.1187	4.697
	1513	1752.6	4.1110	4.704
UMTS Band V				
Mode	**Channel**	**Frequency (MHz)**	**99% OBW (MHz)**	**-26dB Bandwidth (MHz)**
RMC	4132	826.4	4.1169	4.693
	4183	836.6	4.1098	4.725
	4233	846.6	4.1330	4.709

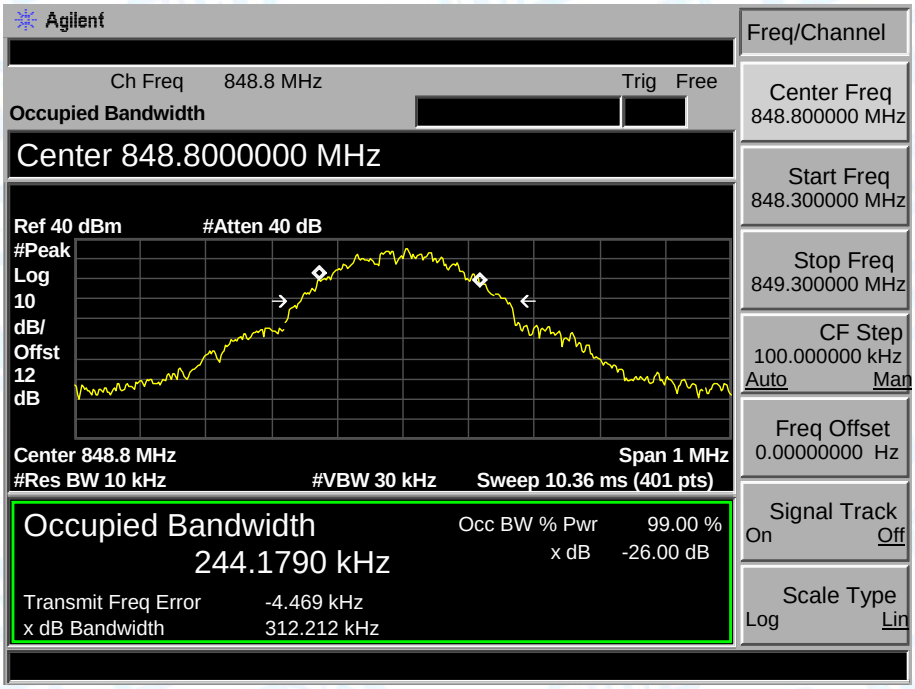
GSM 850
CH 128



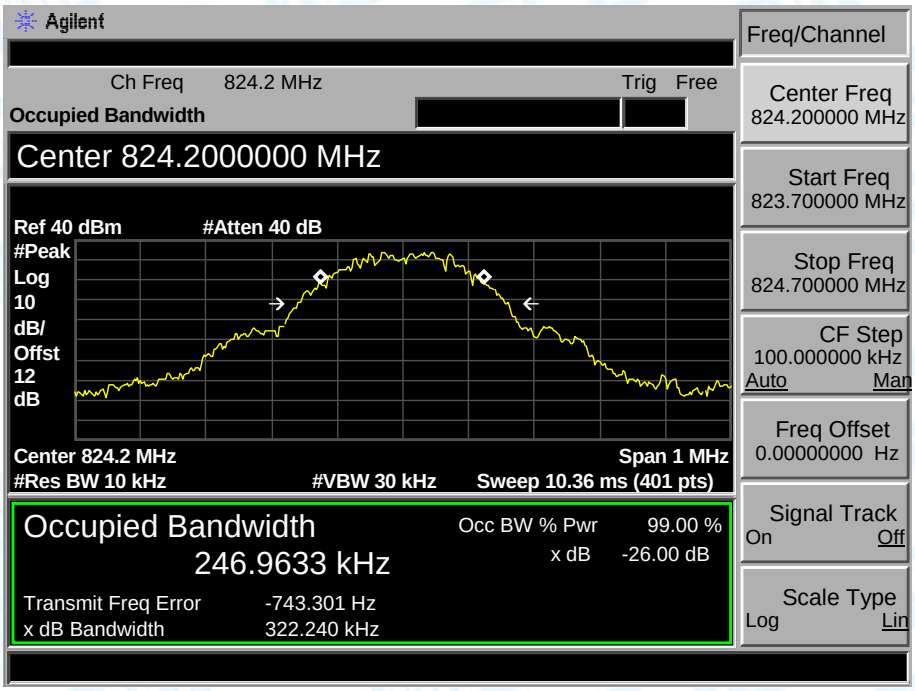
CH 190



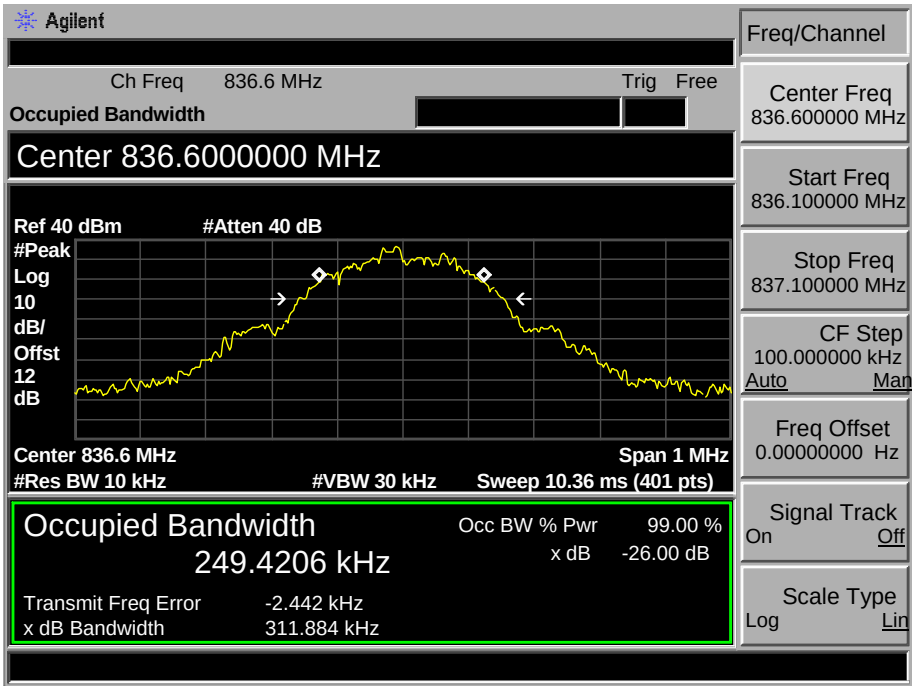
CH 251


Agilent
Ch Freq 848.8 MHz
Trig Free
Occupied Bandwidth
Center 848.8000000 MHz
Ref 40 dBm
#Atten 40 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 848.8 MHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 10.36 ms (401 pts)
Occupied Bandwidth
244.1790 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -4.469 kHz
x dB Bandwidth 312.212 kHz
Freq/Channel
Center Freq
848.800000 MHz
Start Freq
848.300000 MHz
Stop Freq
849.300000 MHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

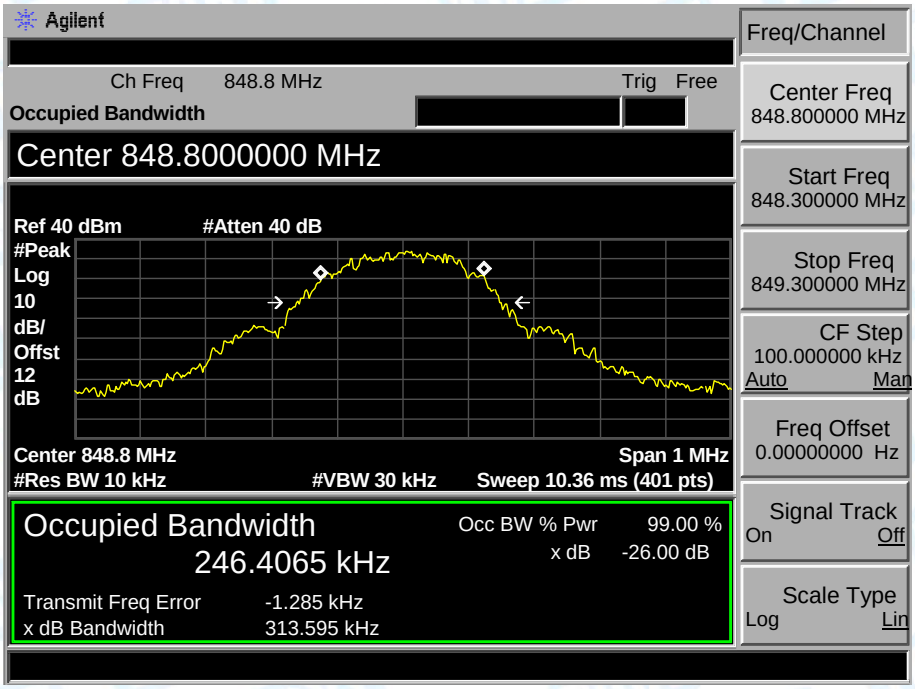
EGPRS 850
CH 128



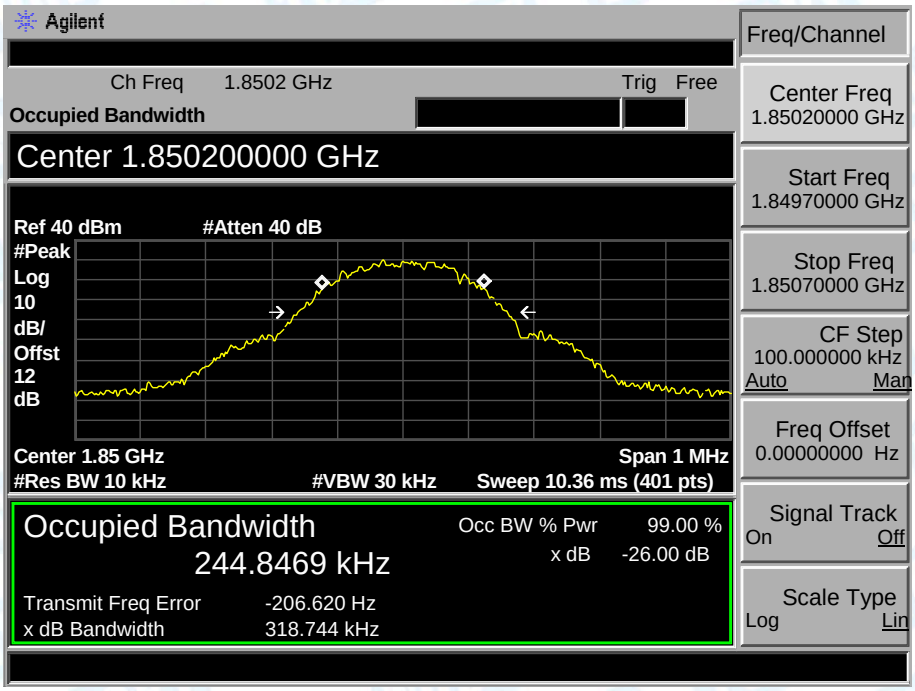
CH 190



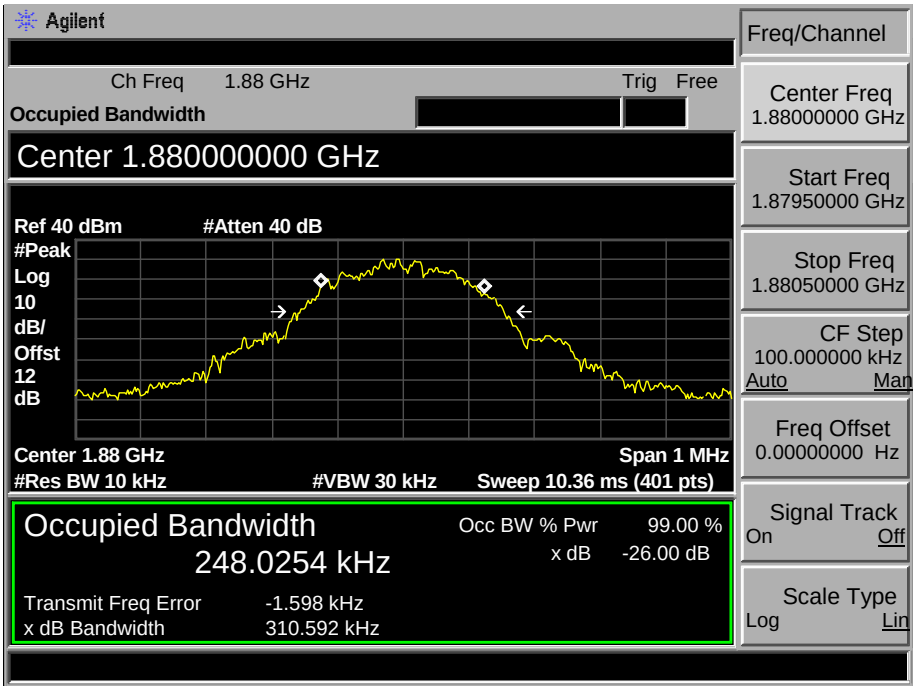
CH 251


Agilent
Ch Freq 848.8 MHz
Trig Free
Occupied Bandwidth
Center 848.8000000 MHz
Ref 40 dBm
#Atten 40 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 848.8 MHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 10.36 ms (401 pts)
Occupied Bandwidth
246.4065 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -1.285 kHz
x dB Bandwidth 313.595 kHz
Freq/Channel
Center Freq
848.800000 MHz
Start Freq
848.300000 MHz
Stop Freq
849.300000 MHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

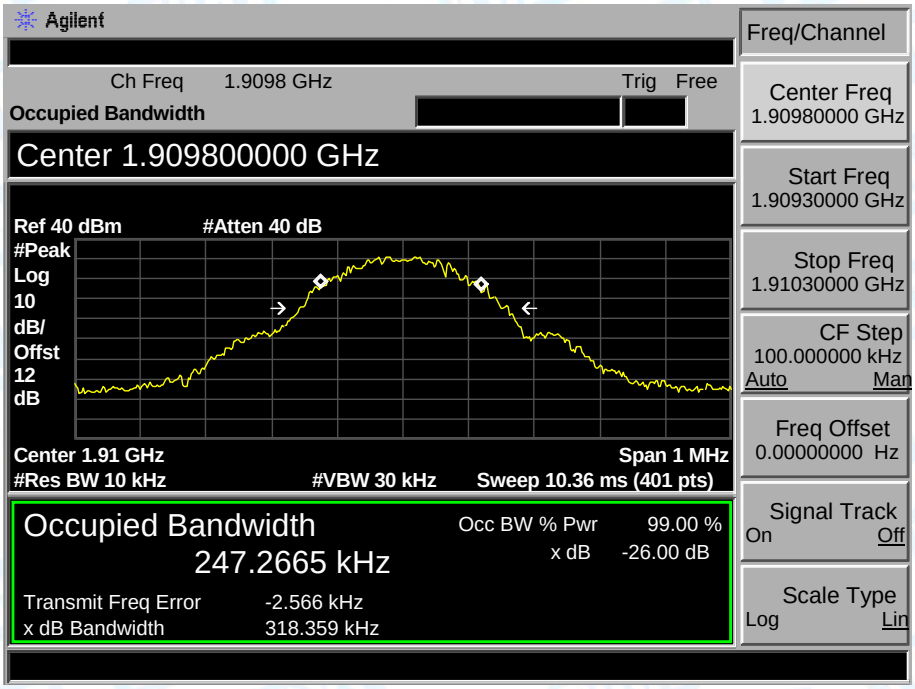
GSM 1900
CH 512



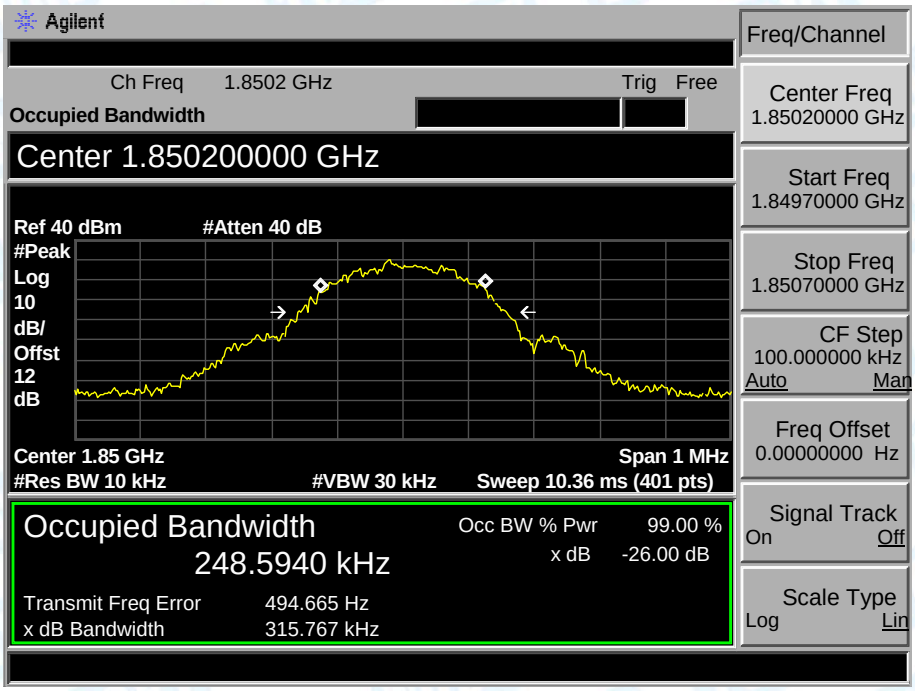
CH 661



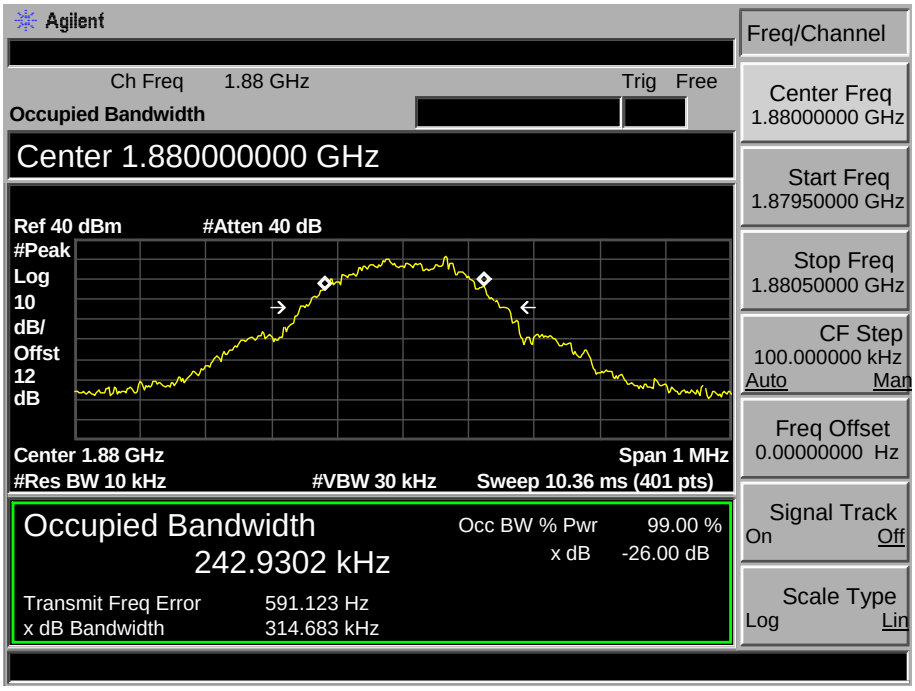
CH 810


Agilent
Ch Freq 1.9098 GHz
Trig Free
Occupied Bandwidth
Center 1.909800000 GHz
Ref 40 dBm
#Atten 40 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 1.91 GHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 10.36 ms (401 pts)
Occupied Bandwidth
247.2665 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -2.566 kHz
x dB Bandwidth 318.359 kHz
Freq/Channel
Center Freq
1.90980000 GHz
Start Freq
1.90930000 GHz
Stop Freq
1.91030000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

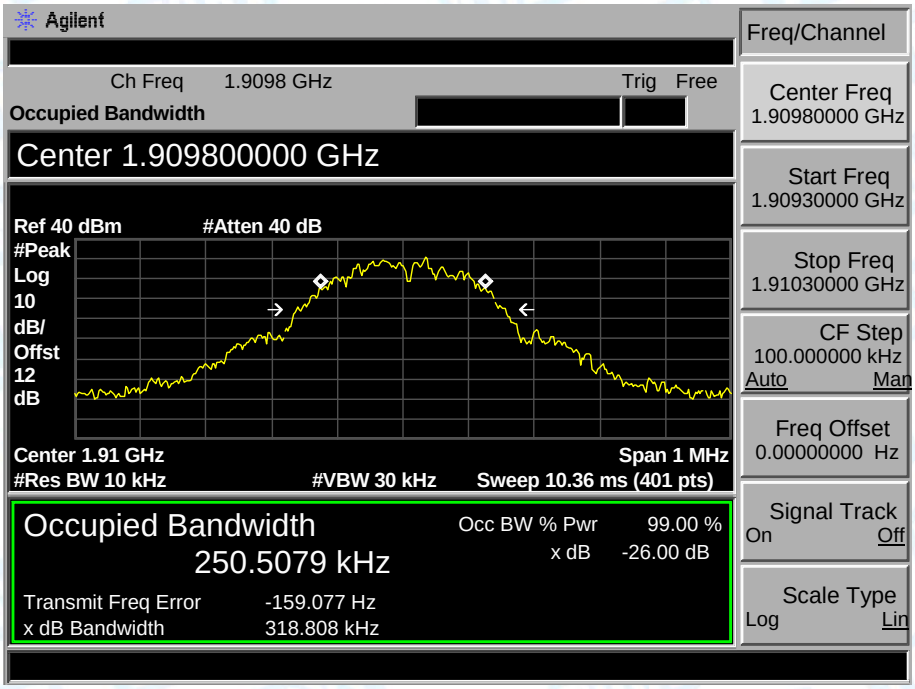
EGPRS 1900
CH 512



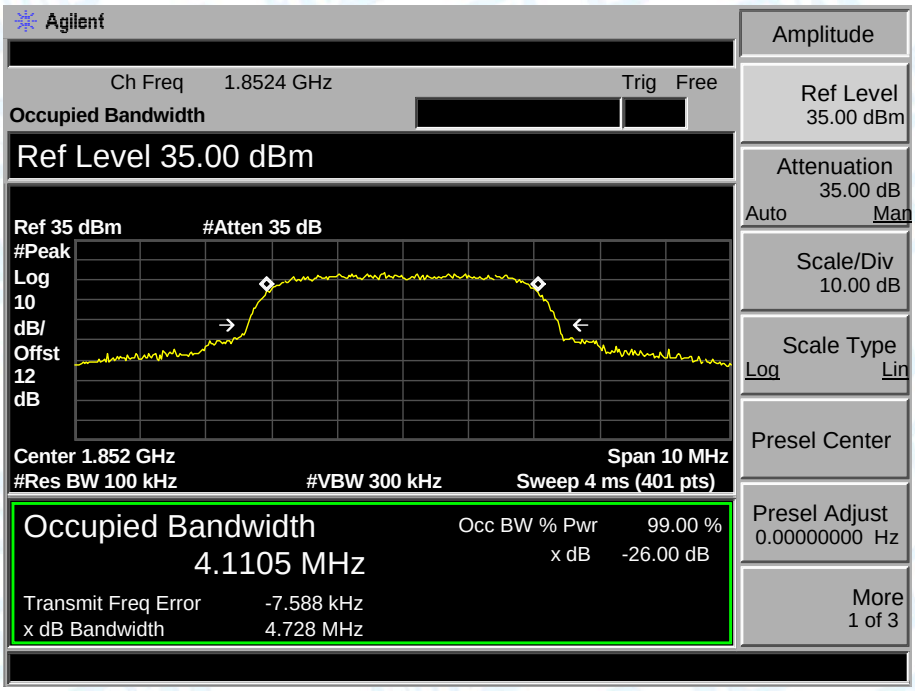
CH 661



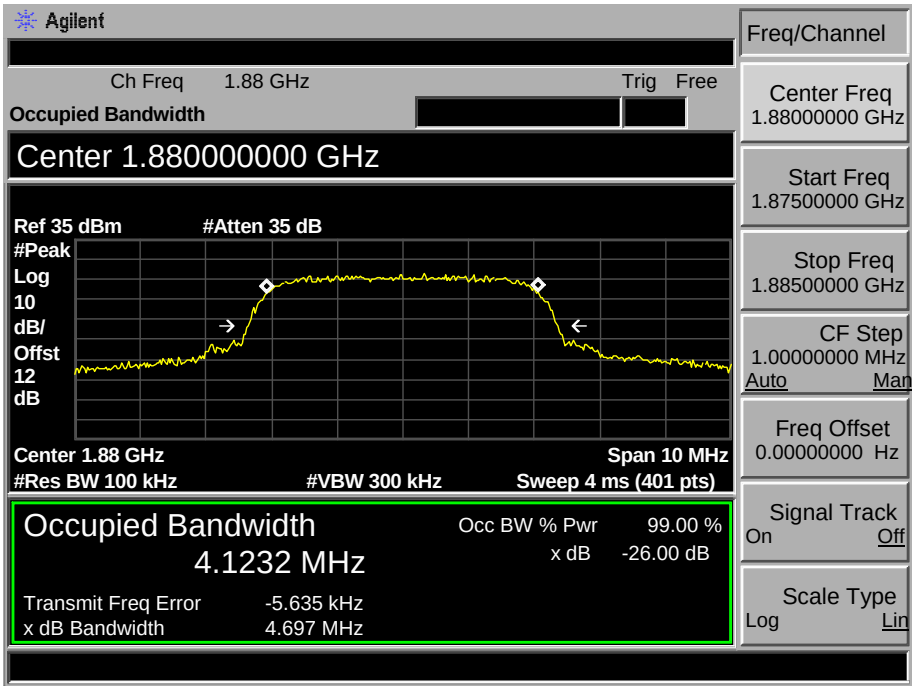
CH 810


Agilent
Freq/Channel
Ch Freq 1.9098 GHz
Trig Free
Occupied Bandwidth
Center 1.909800000 GHz
Center Freq
1.90980000 GHz
Start Freq
1.90930000 GHz
Stop Freq
1.91030000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin
Ref 40 dBm
#Atten 40 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 1.91 GHz
Span 1 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 10.36 ms (401 pts)
Occupied Bandwidth
250.5079 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -159.077 Hz
x dB Bandwidth 318.808 kHz

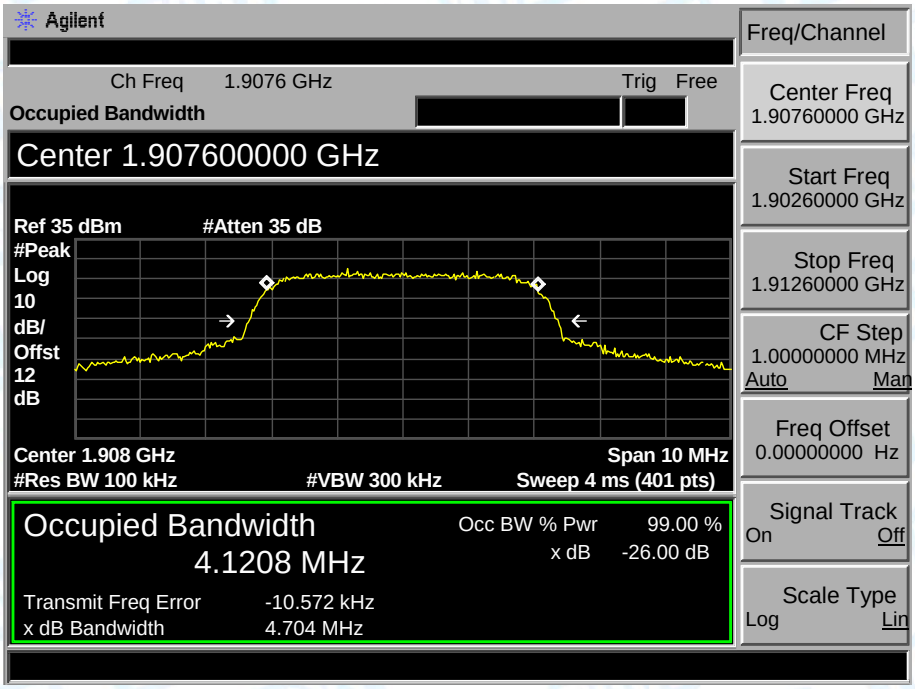
UMTS Band II
CH 9262



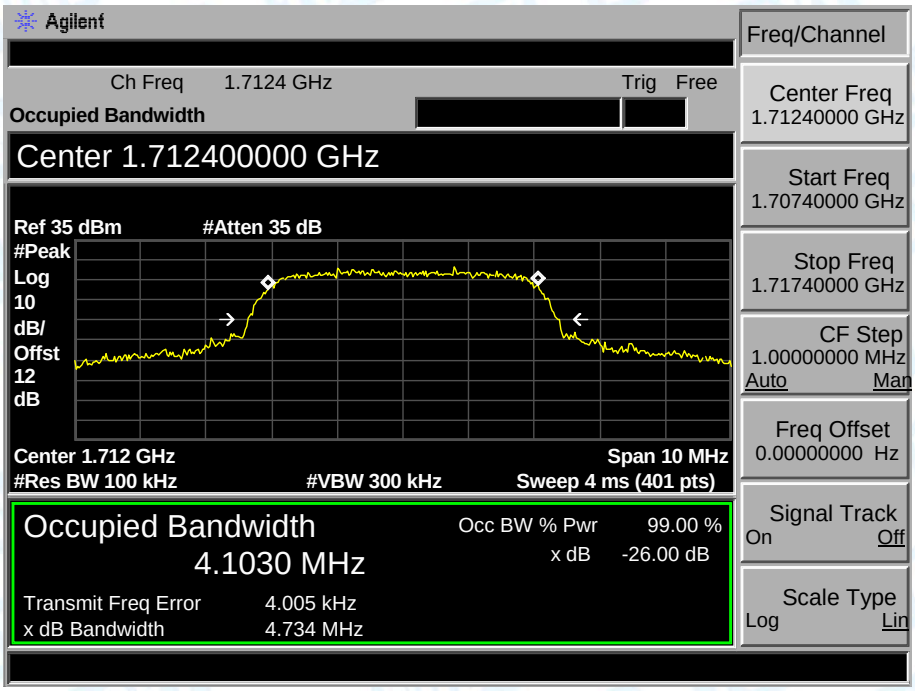
CH 9400



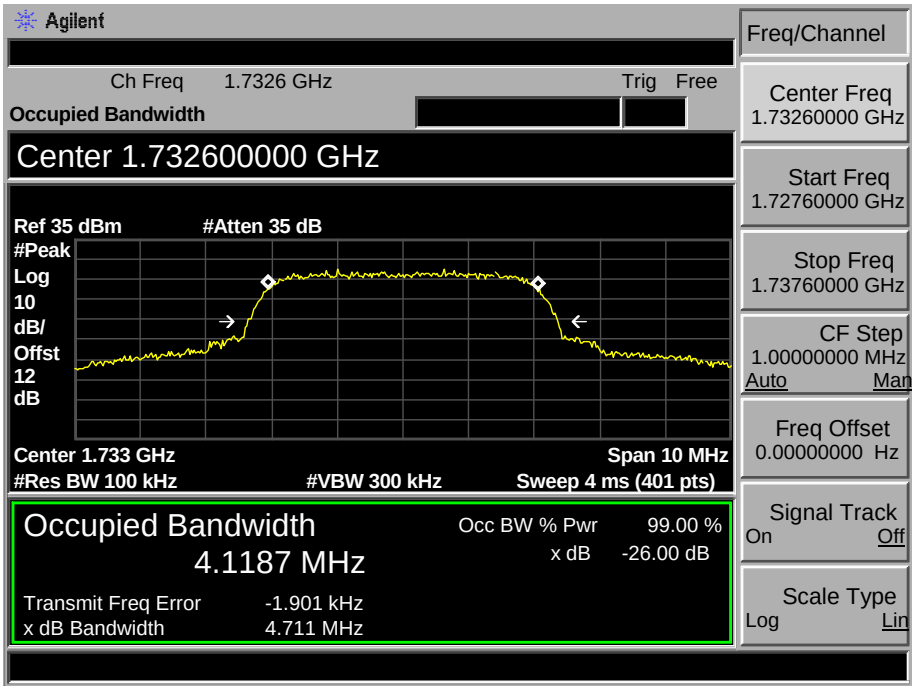
CH 9538


Agilent
Ch Freq 1.9076 GHz
Trig Free
Occupied Bandwidth
Center 1.907600000 GHz
Ref 35 dBm
#Atten 35 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 1.908 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
Sweep 4 ms (401 pts)
Occupied Bandwidth
4.1208 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -10.572 kHz
x dB Bandwidth 4.704 MHz
Freq/Channel
Center Freq
1.90760000 GHz
Start Freq
1.90260000 GHz
Stop Freq
1.91260000 GHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

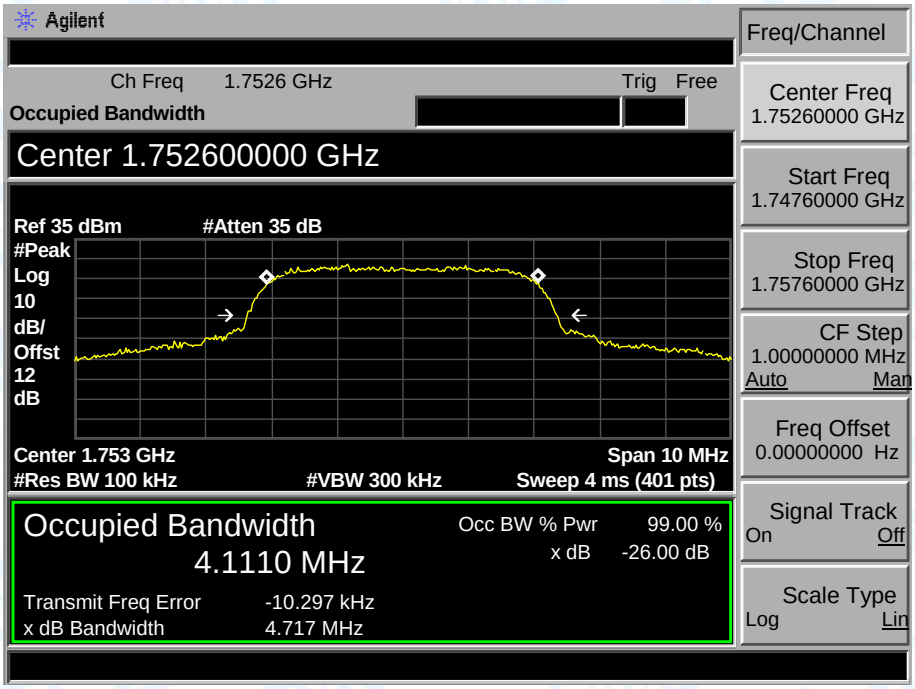
UMTS Band IV
CH 1312



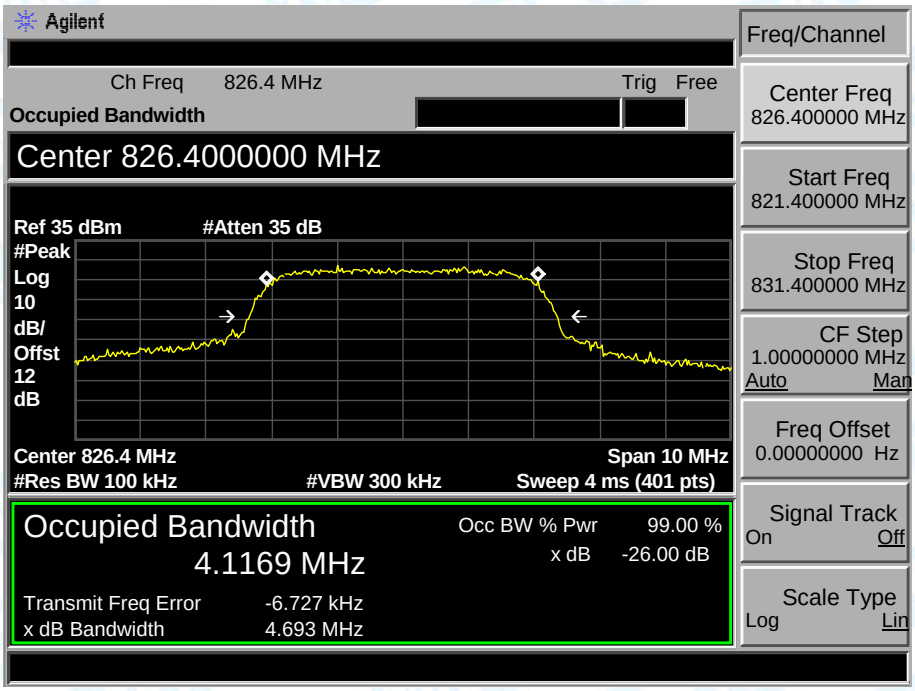
CH 1413



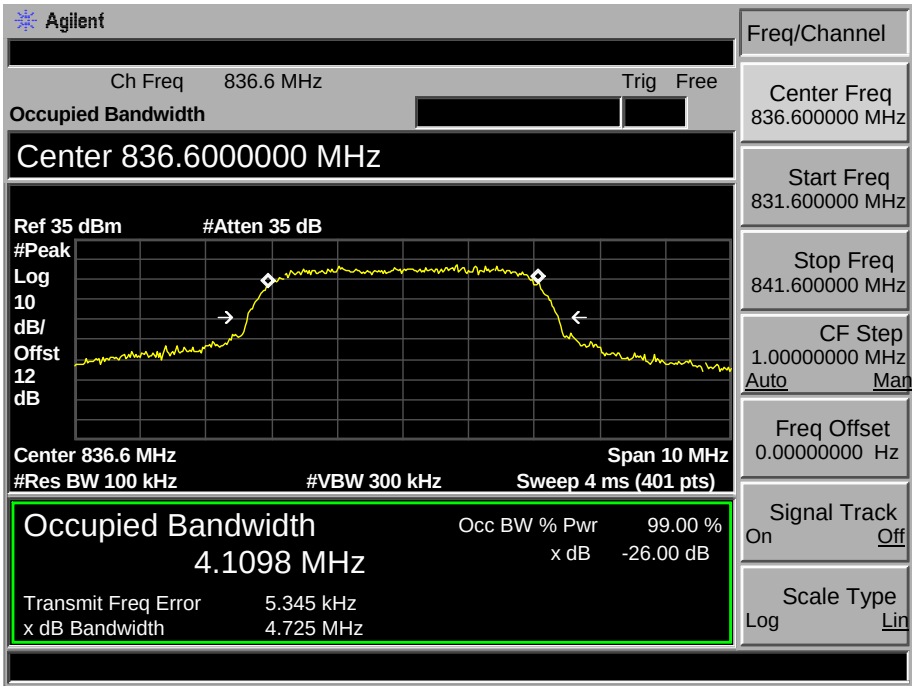
CH 1513


Agilent
Ch Freq 1.7526 GHz
Trig Free
Occupied Bandwidth
Center 1.752600000 GHz
Ref 35 dBm
#Atten 35 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 1.753 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
Sweep 4 ms (401 pts)
Occupied Bandwidth
4.1110 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -10.297 kHz
x dB Bandwidth 4.717 MHz
Freq/Channel
Center Freq
1.75260000 GHz
Start Freq
1.74760000 GHz
Stop Freq
1.75760000 GHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

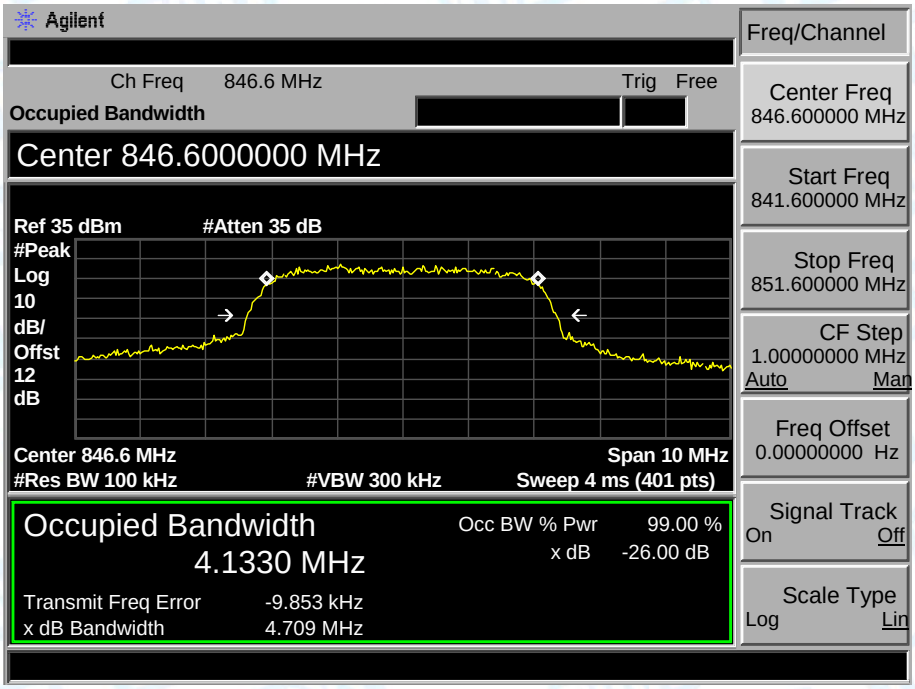
UMTS Band V
CH 4132



CH 4183



CH 4233

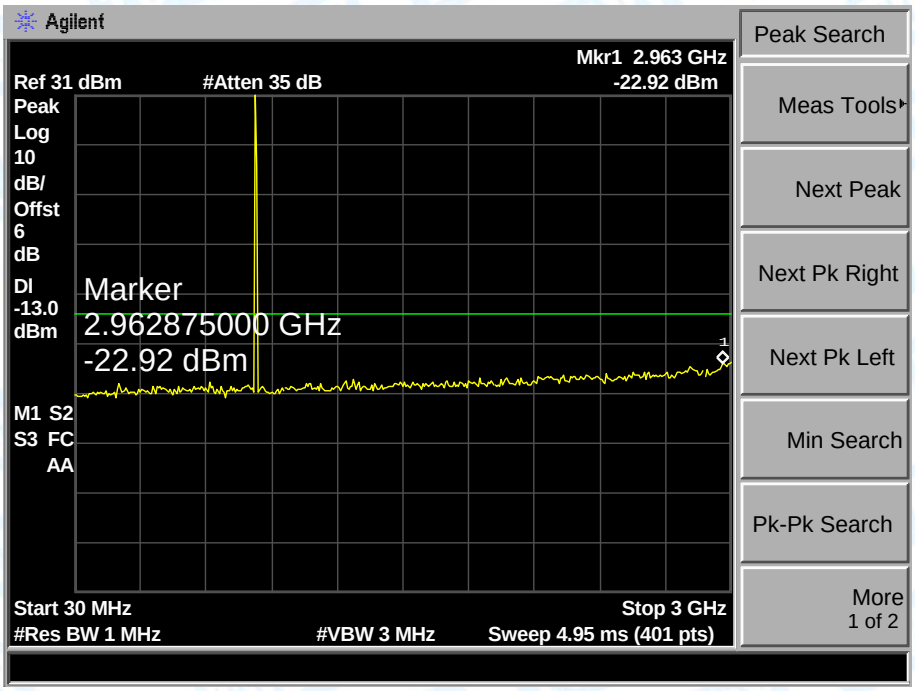

Agilent
Ch Freq 846.6 MHz
Trig Free
Occupied Bandwidth
Center 846.6000000 MHz
Ref 35 dBm
#Atten 35 dB
#Peak
Log
10
dB/
Offst
12
dB
Center 846.6 MHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
Sweep 4 ms (401 pts)
Occupied Bandwidth
4.1330 MHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -9.853 kHz
x dB Bandwidth 4.709 MHz
Freq/Channel
Center Freq
846.600000 MHz
Start Freq
841.600000 MHz
Stop Freq
851.600000 MHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

Attachment F--Conducted Out of Band Emissions

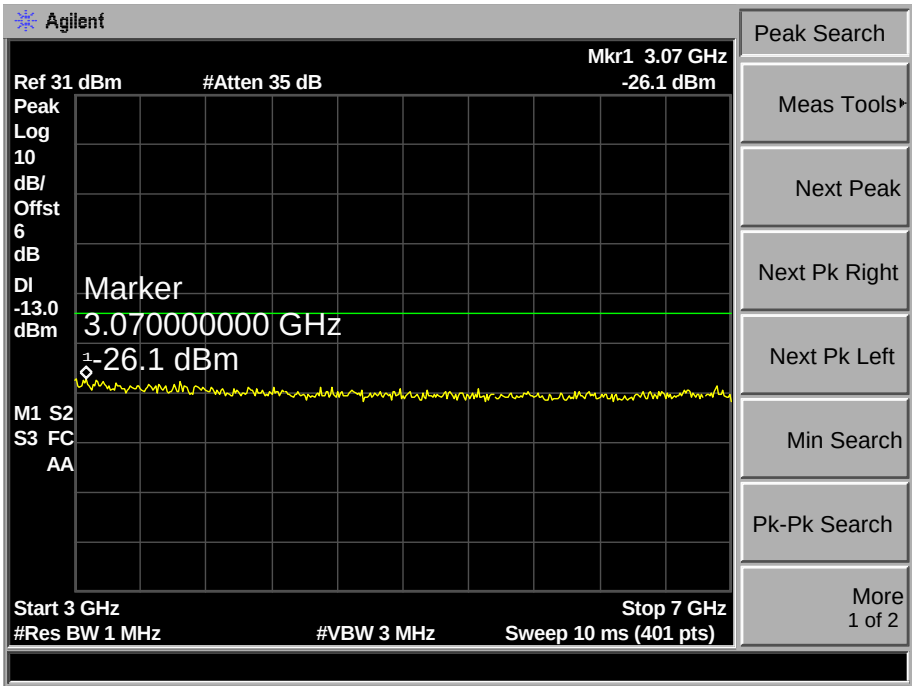
Measurement Data (worst case)

GSM850 CH 128

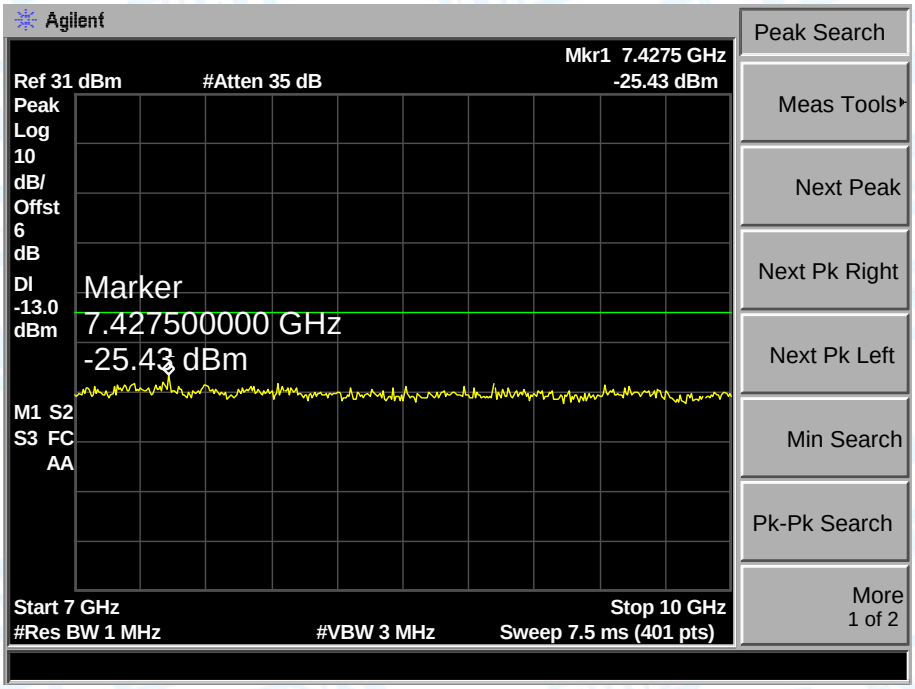
30 MHz~ 3 GHz



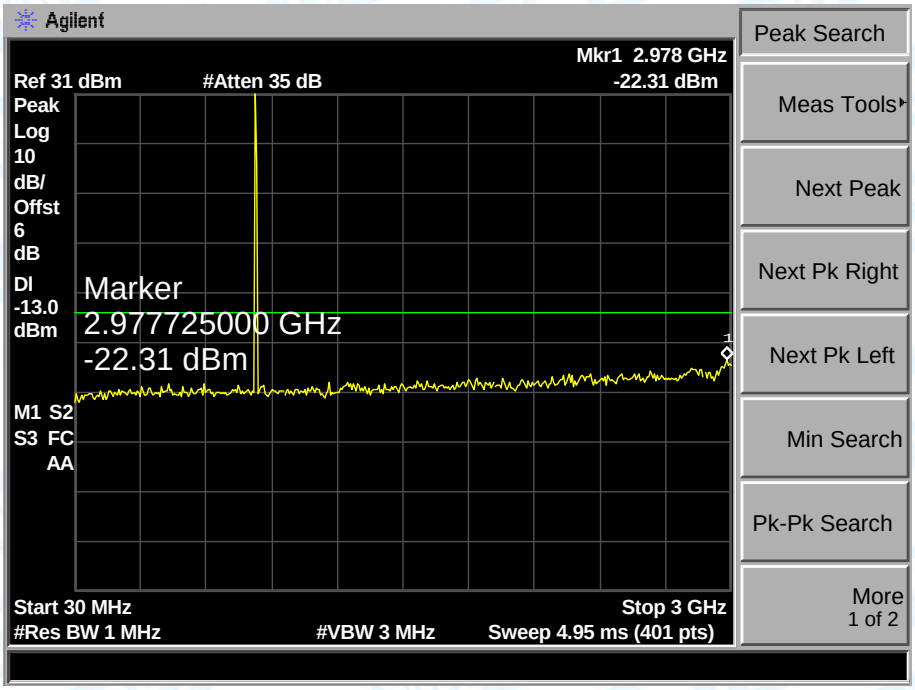
3 GHz~7 GHz



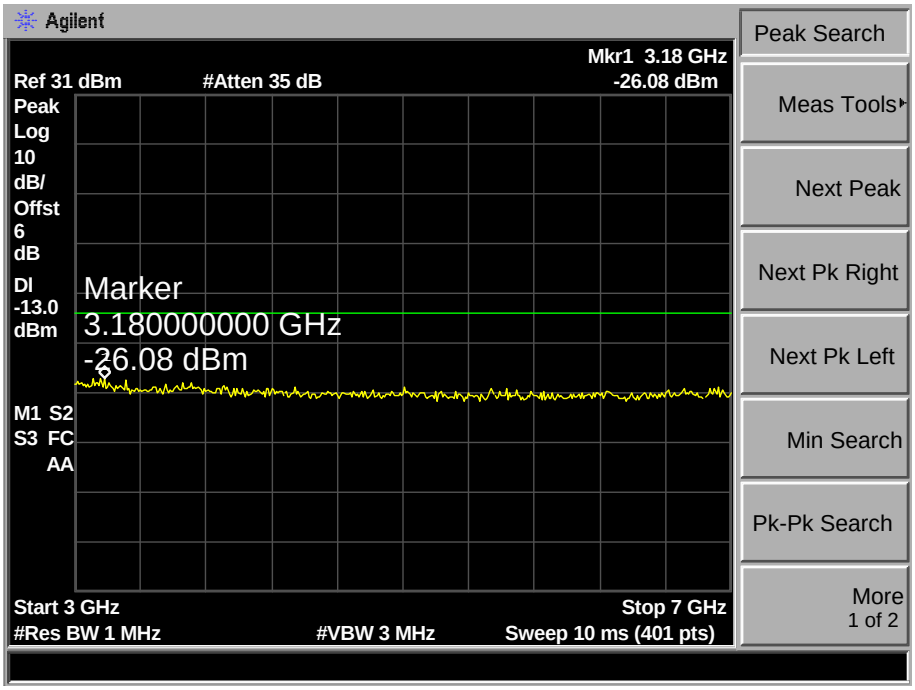
7 GHz~10 GHz


Agilent
Mkr1 7.4275 GHz
Ref 31 dBm
#Atten 35 dB
-25.43 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
7.427500000 GHz
-25.43 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

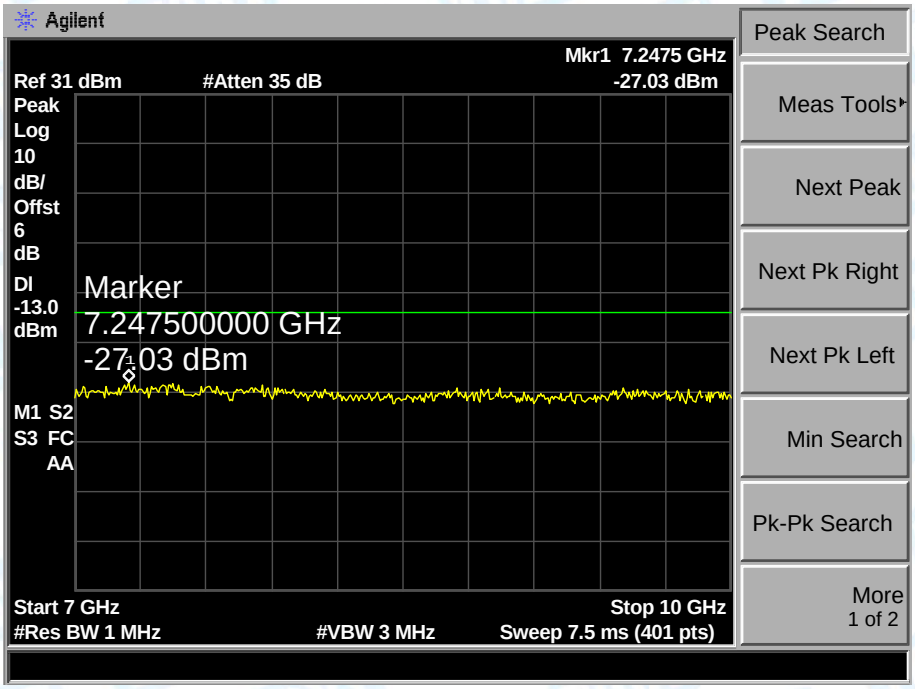
GSM850 CH 190
30 MHz~ 3 GHz



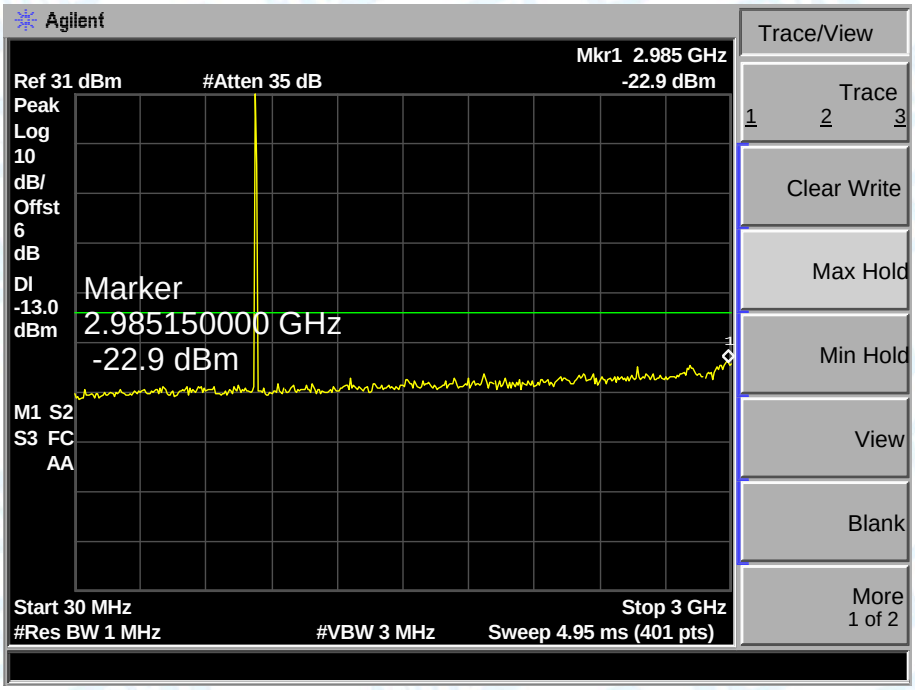
3 GHz~7 GHz



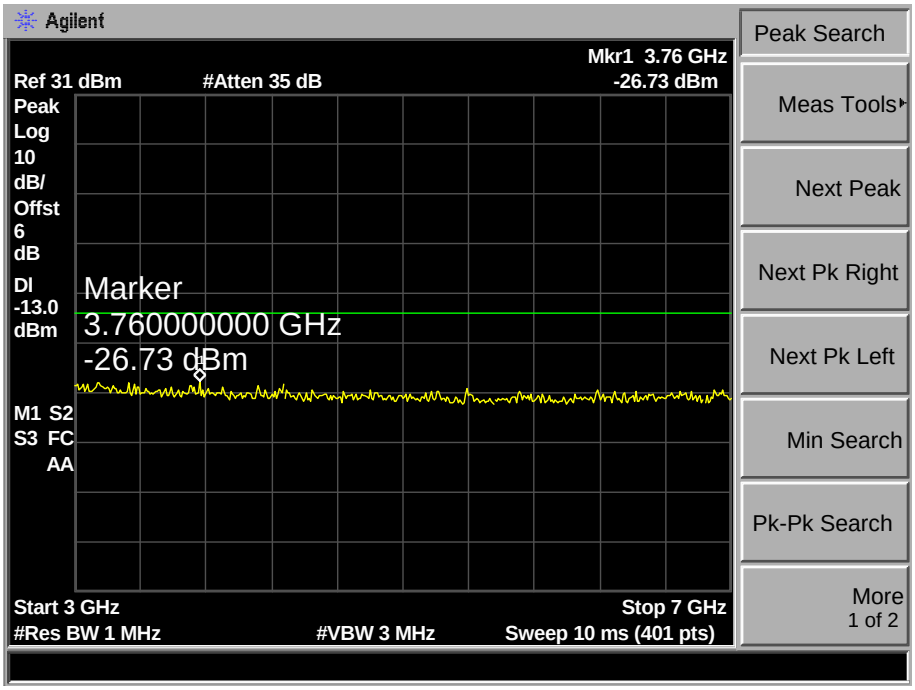
7 GHz~10 GHz


Agilent
Mkr1 7.2475 GHz
Ref 31 dBm
#Atten 35 dB
-27.03 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
7.247500000 GHz
-27.03 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

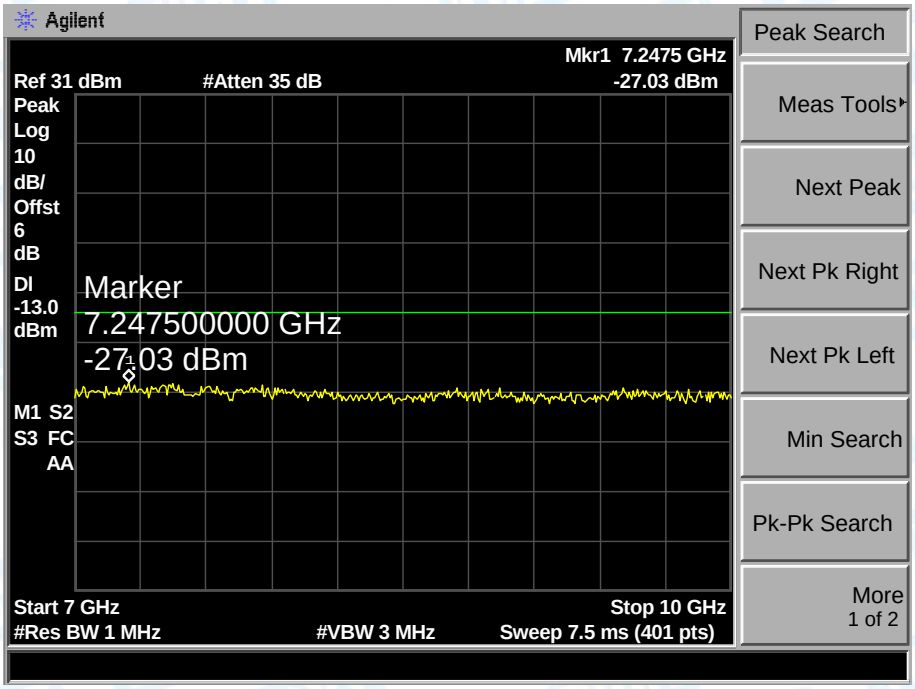
GSM850 CH 251
30 MHz~ 3 GHz



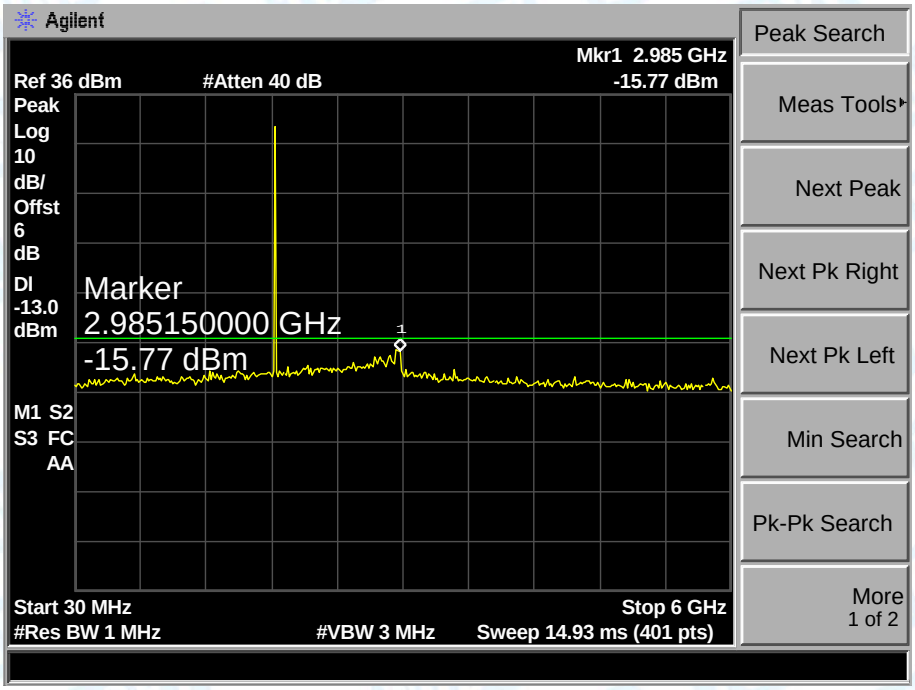
3 GHz~7 GHz



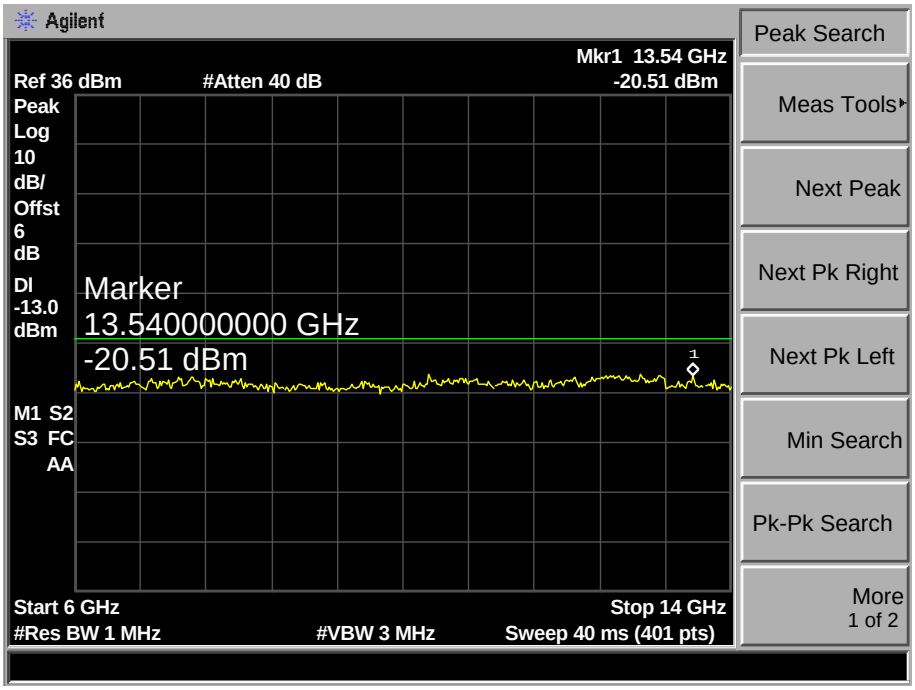
7 GHz~10 GHz


Agilent
Mkr1 7.2475 GHz
Ref 31 dBm
#Atten 35 dB
-27.03 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
7.247500000 GHz
-27.03 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

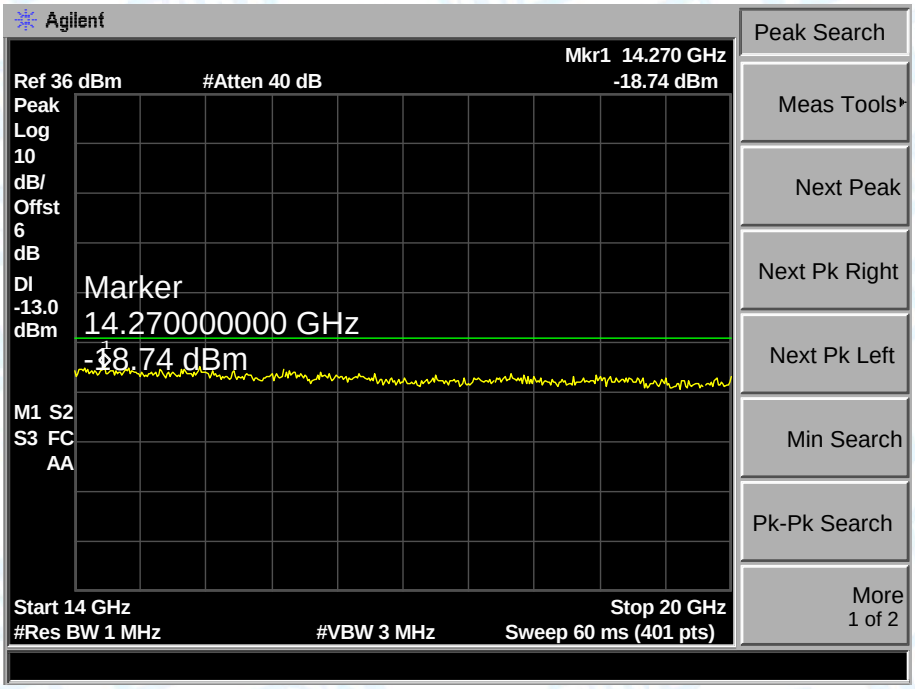
PCS 1900 CH 512
30 MHz~ 6 GHz



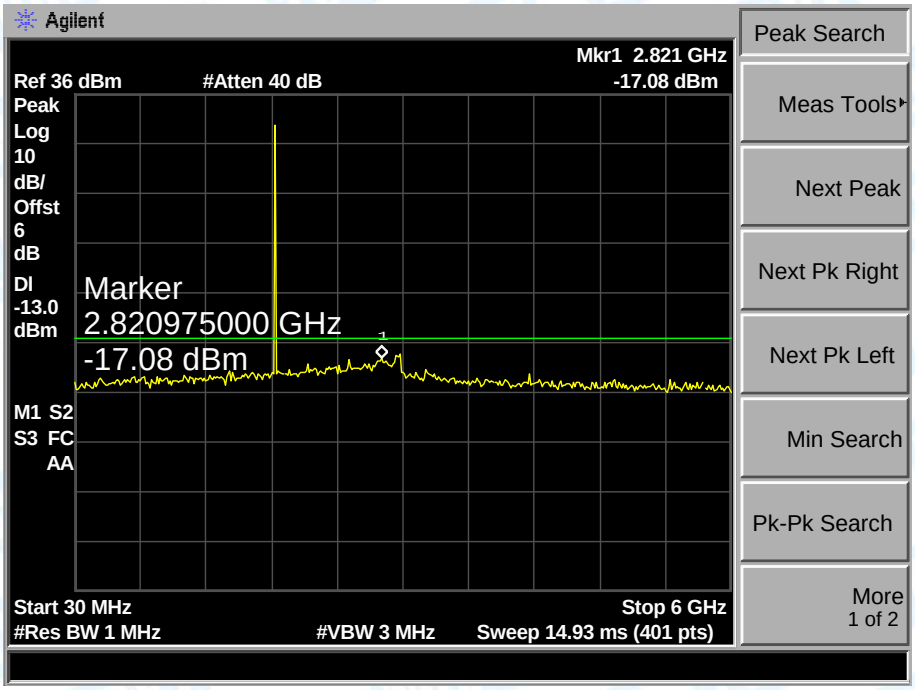
6 GHz~14 GHz



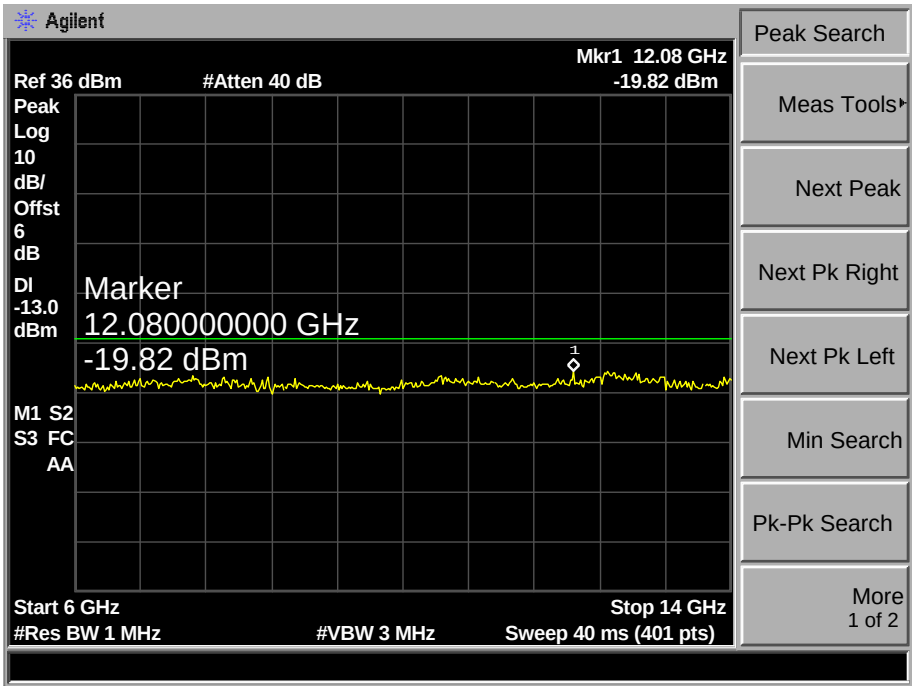
14 GHz~20 GHz


Agilent
Mkr1 14.270 GHz
Ref 36 dBm
#Atten 40 dB
-18.74 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
14.270000000 GHz
-18.74 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

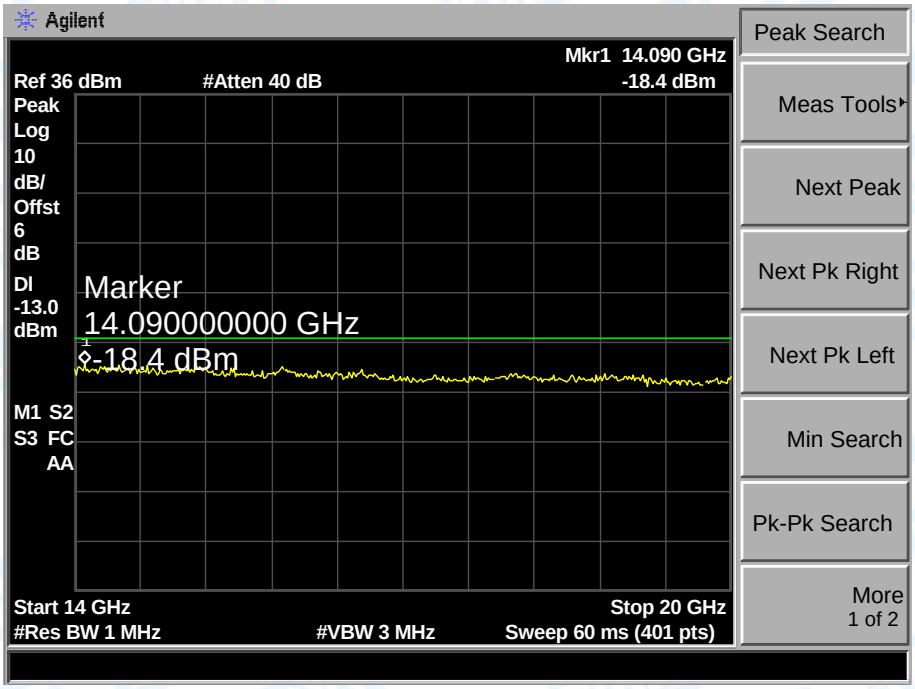
PCS 1900 CH 661
30 MHz~ 6 GHz



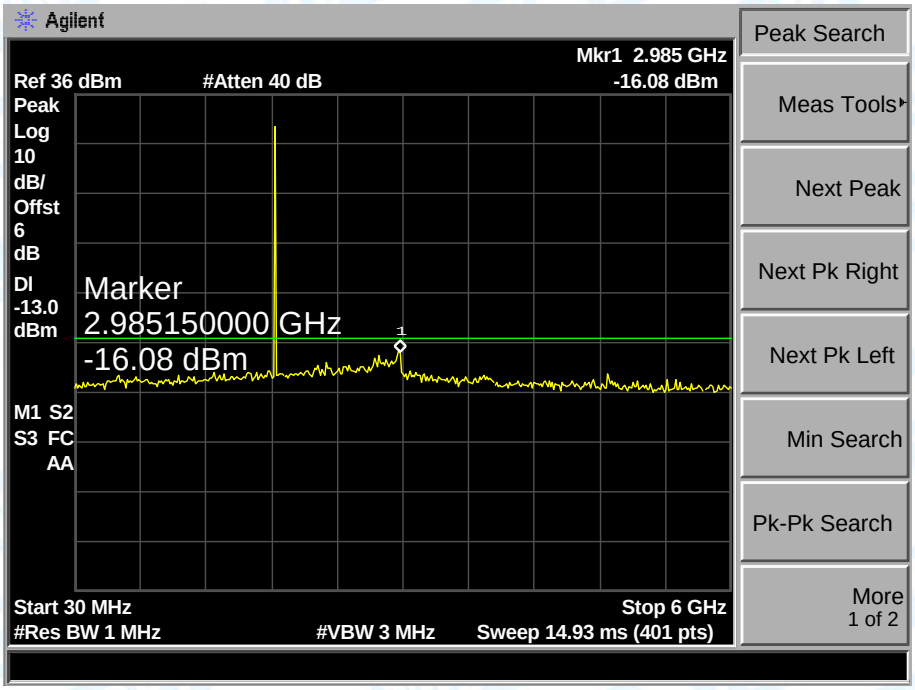
6 GHz~14 GHz



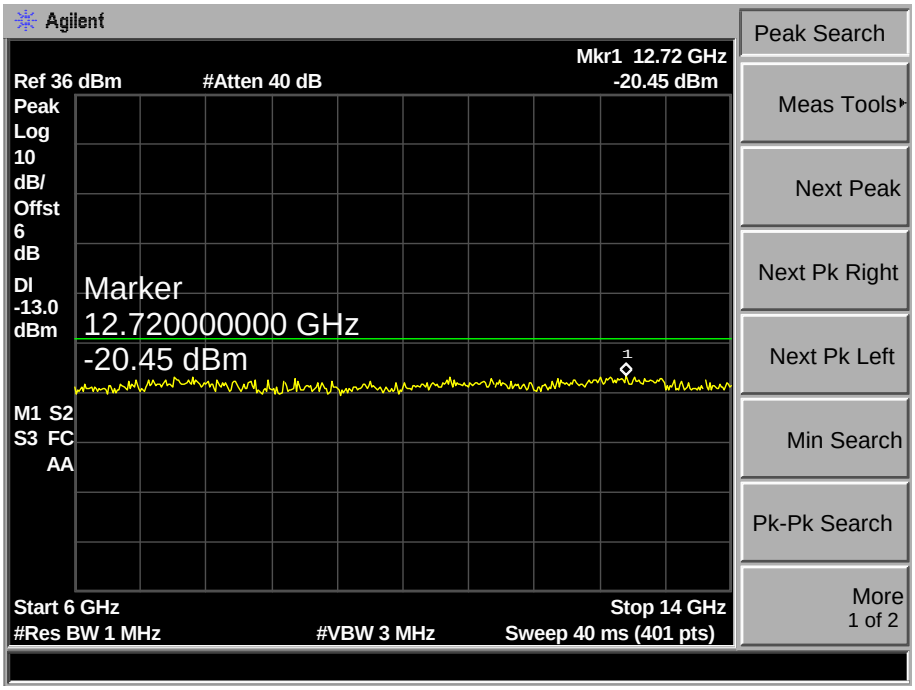
14 GHz~20 GHz


Agilent
Mkr1 14.090 GHz
Ref 36 dBm
#Atten 40 dB
-18.4 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
14.090000000 GHz
-18.4 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

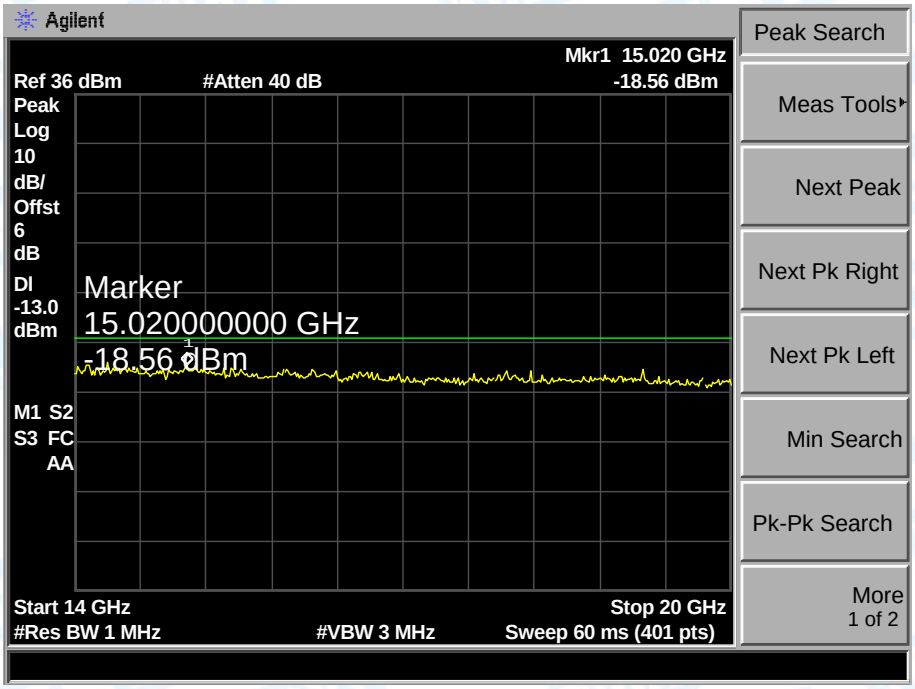
PCS 1900 CH 810
30 MHz~ 6 GHz



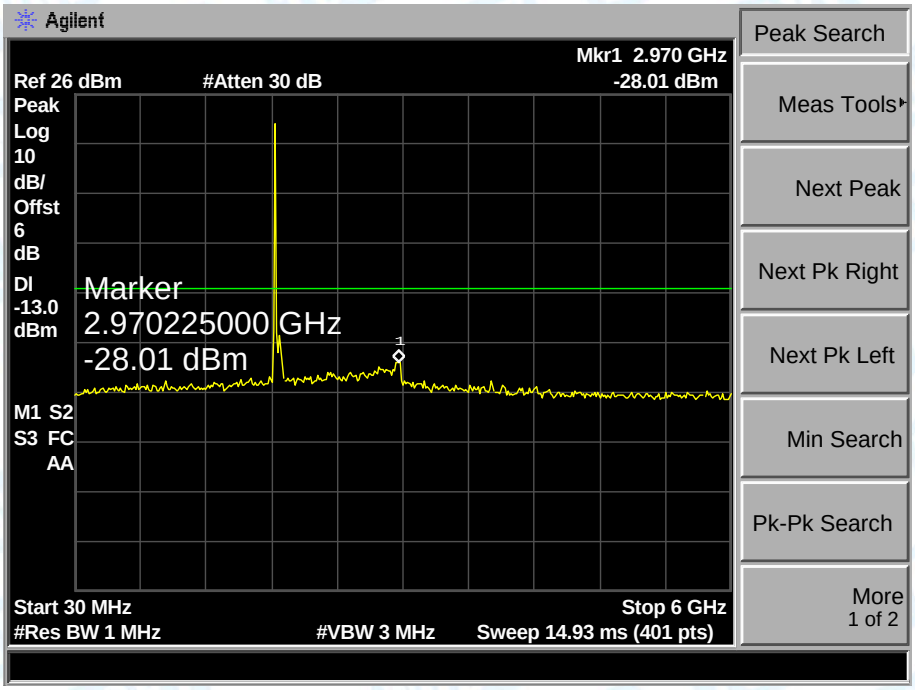
6 GHz~14 GHz



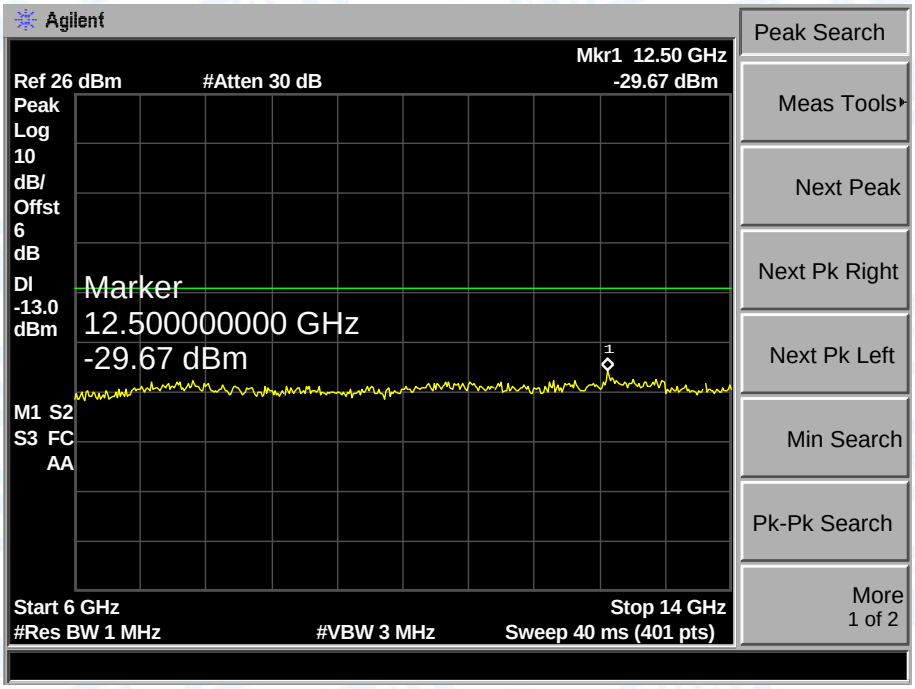
14 GHz~20 GHz


Agilent
Mkr1 15.020 GHz
Ref 36 dBm
#Atten 40 dB
-18.56 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
15.020000000 GHz
-18.56 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

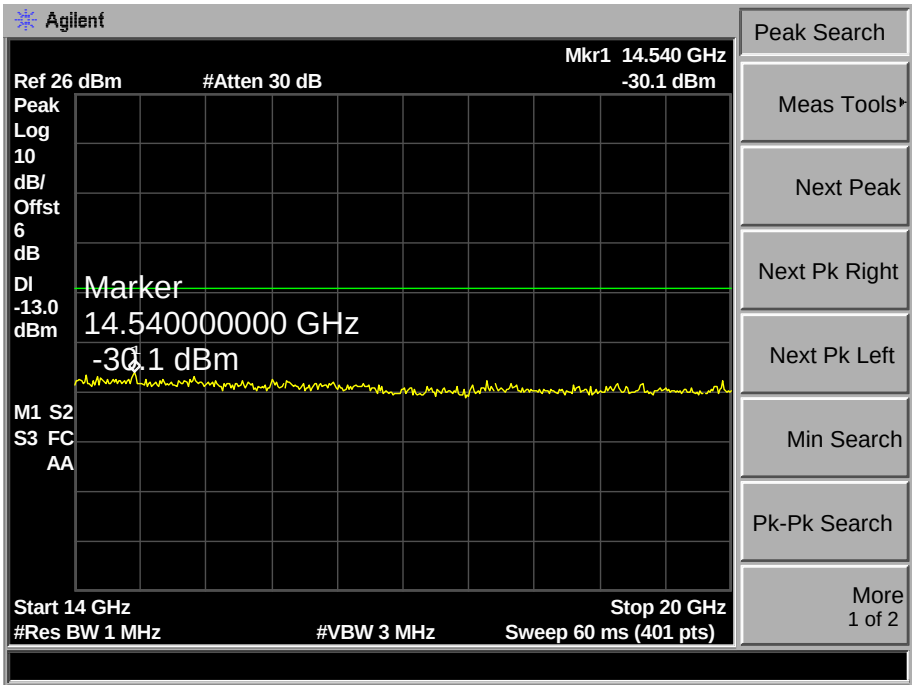
UMTS Band II CH 9262
30 MHz~ 6000MHz



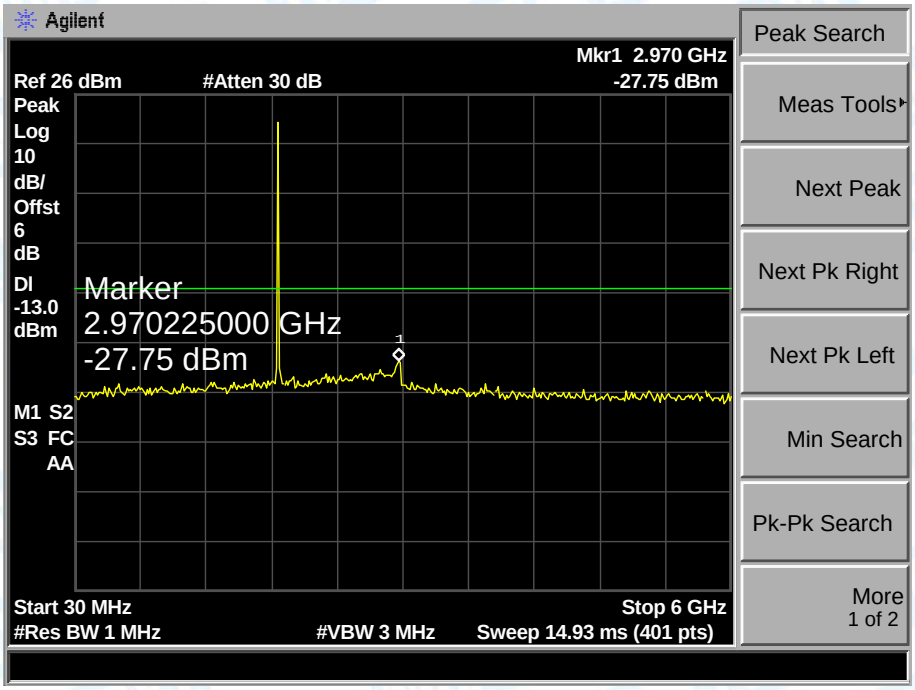
6GHz~14GHz



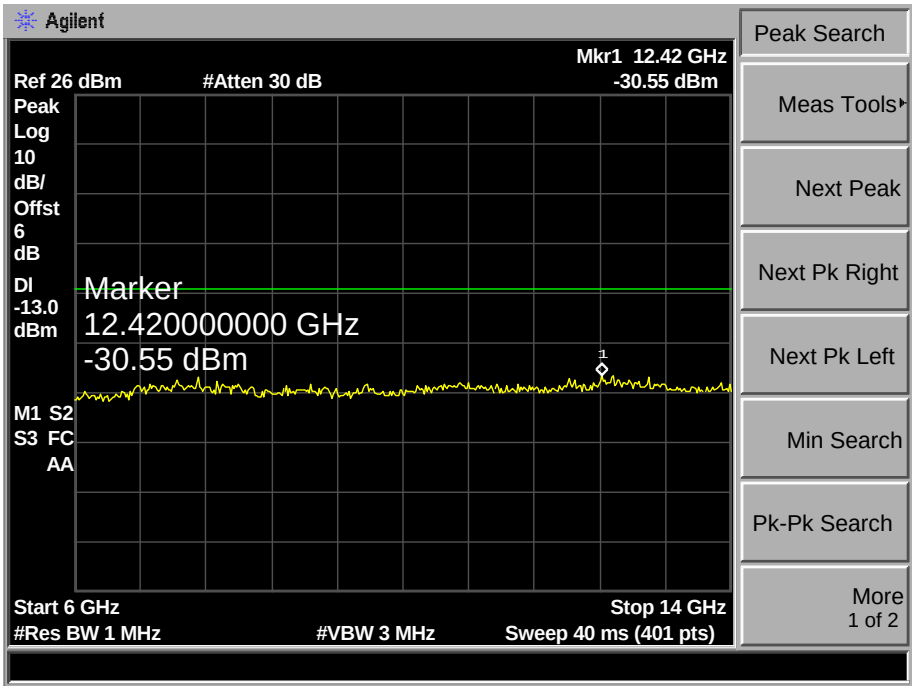
14GHz~20GHz


Agilent
Mkr1 14.540 GHz
Ref 26 dBm
#Atten 30 dB
-30.1 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
14.540000000 GHz
-30.1 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

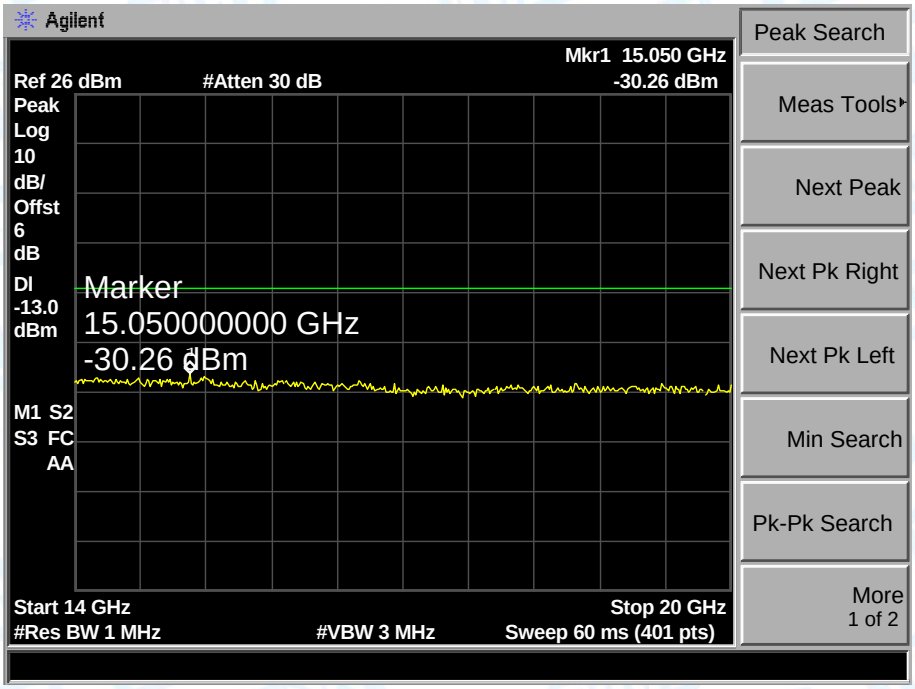
UMTS Band II CH 9400
30 MHz~ 6000MHz



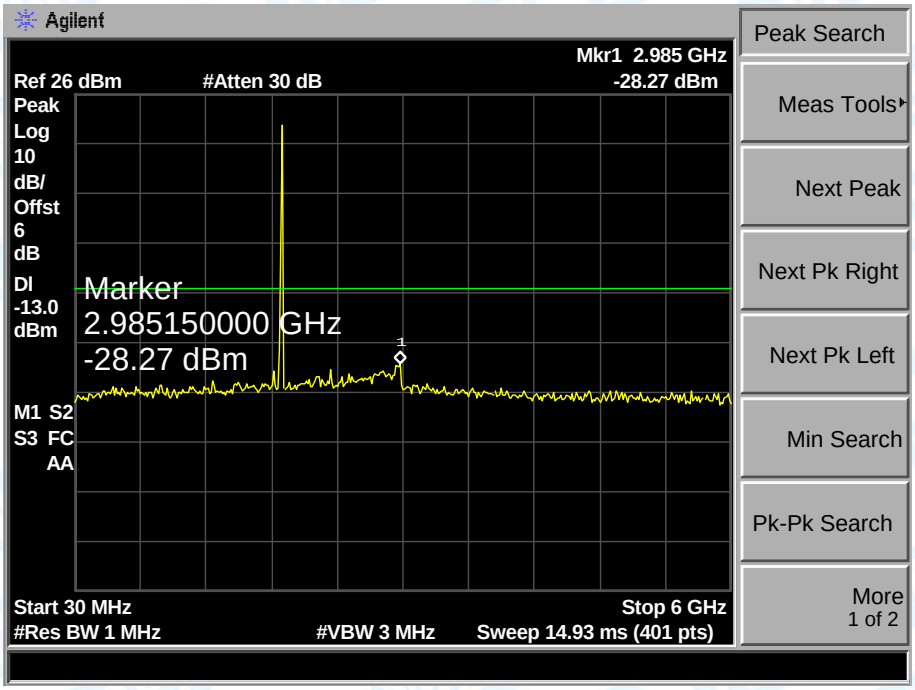
6GHz~14GHz



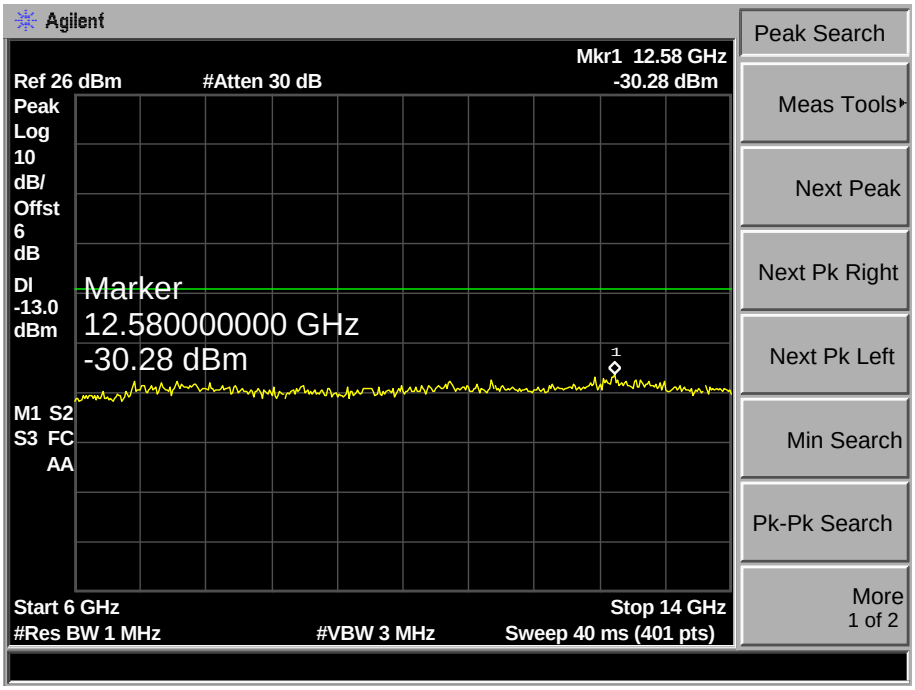
14GHz~20 GHz


Agilent
Mkr1 15.050 GHz
Ref 26 dBm
#Atten 30 dB
-30.26 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
15.050000000 GHz
-30.26 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

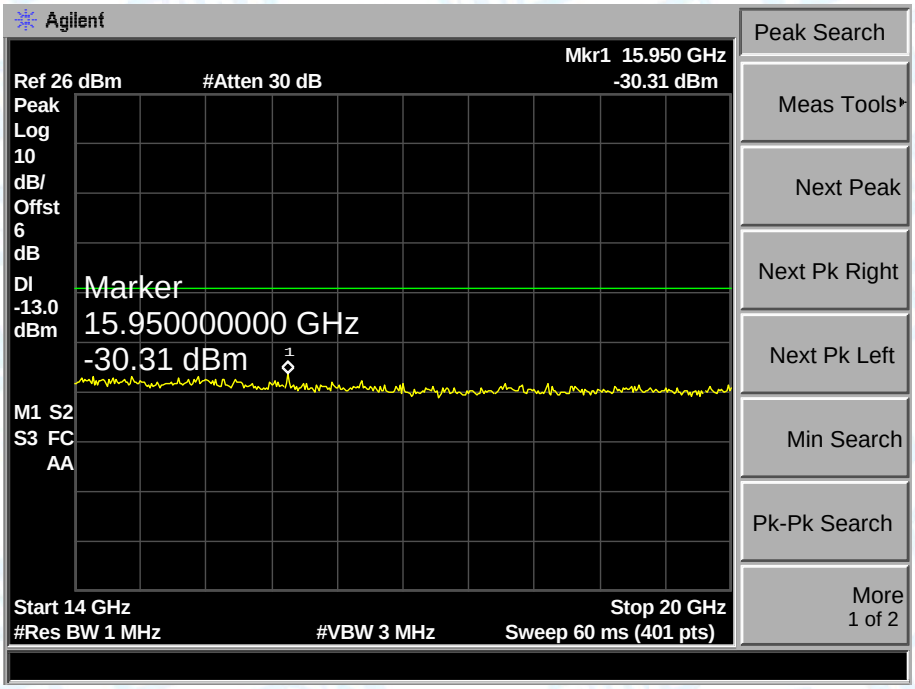
UMTS Band II CH 9538
30 MHz~ 6000MHz



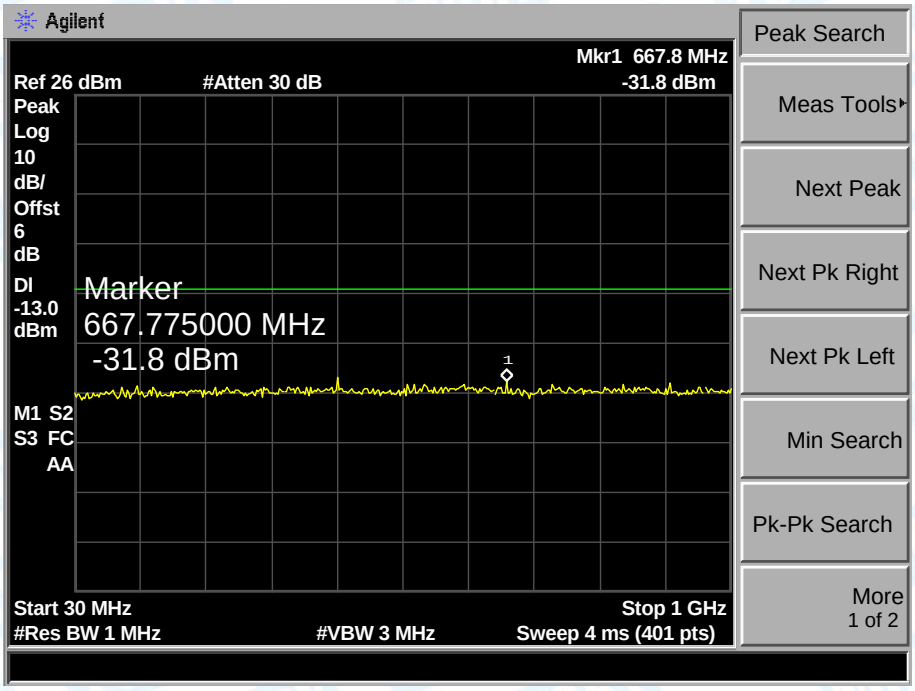
6GHz~14GHz



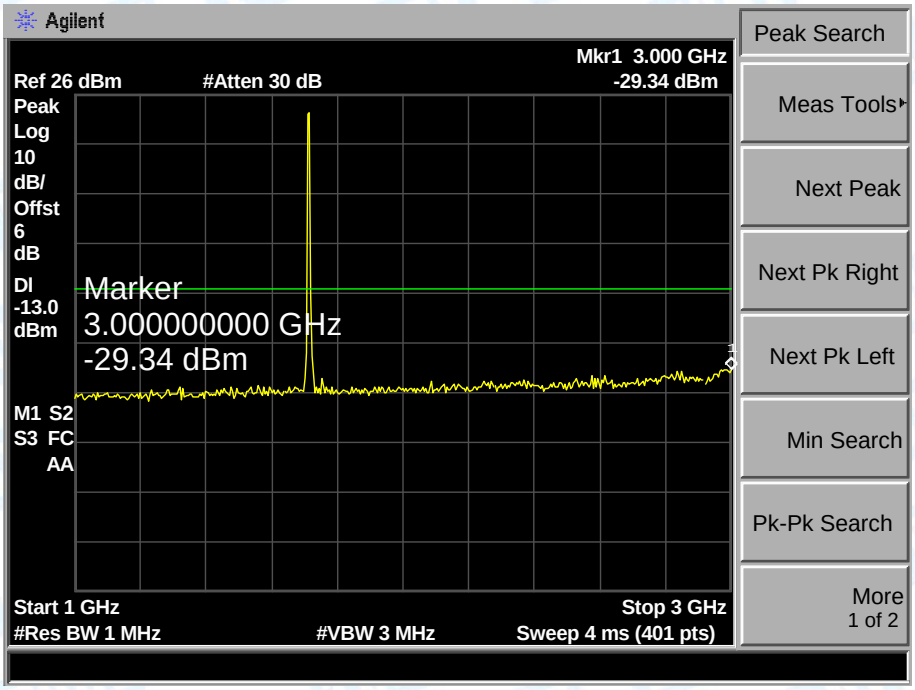
14GHz~20 GHz

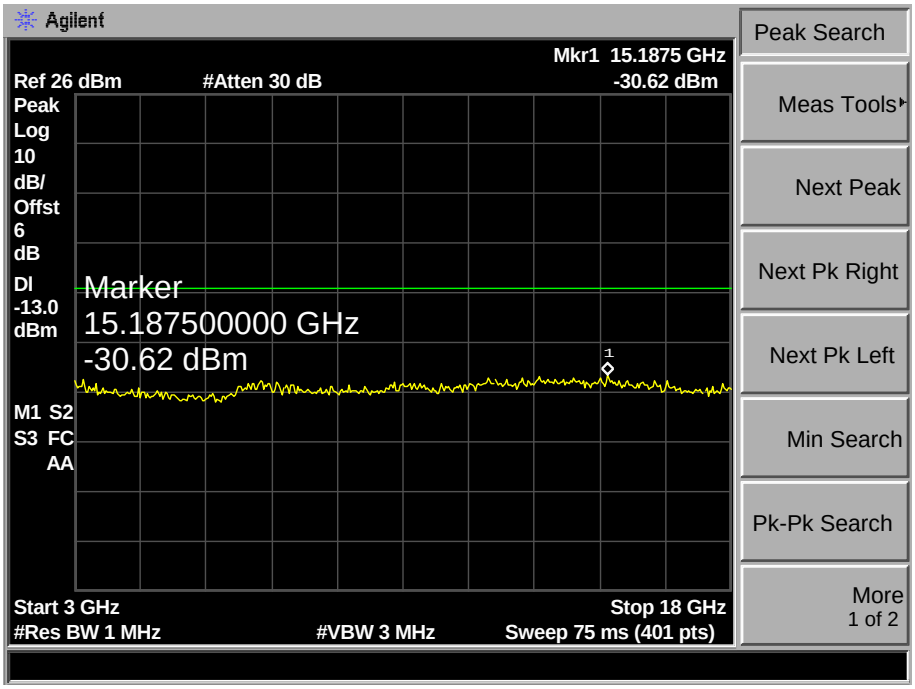

Agilent
Mkr1 15.950 GHz
Ref 26 dBm
#Atten 30 dB
-30.31 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
15.950000000 GHz
-30.31 dBm
M1 S2
S3 FC
AA
Start 14 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 60 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

UMTS Band IV CH 1312
30 MHz~ 1000MHz



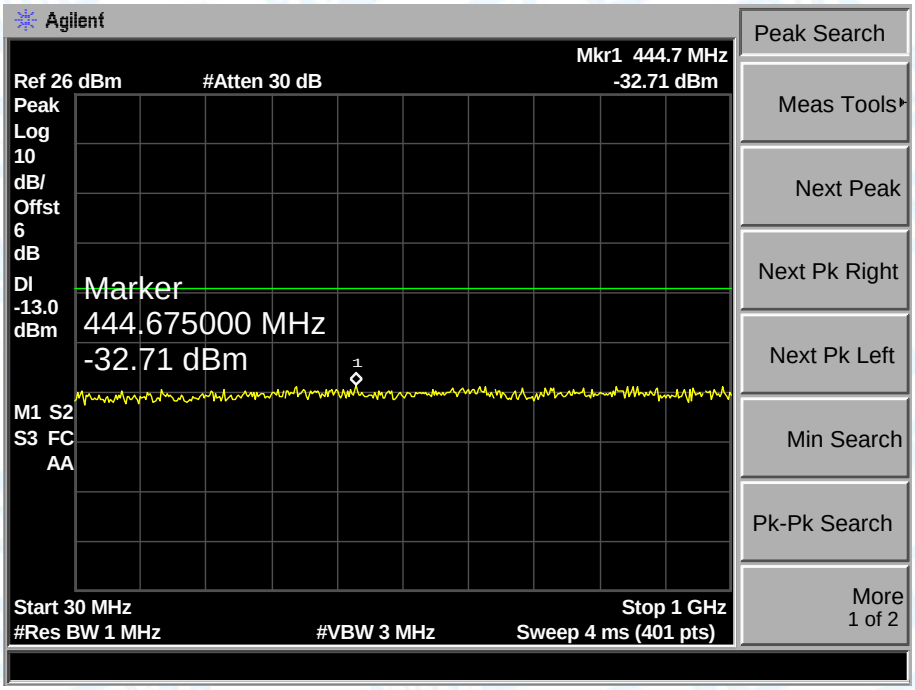
1GHz~3GHz



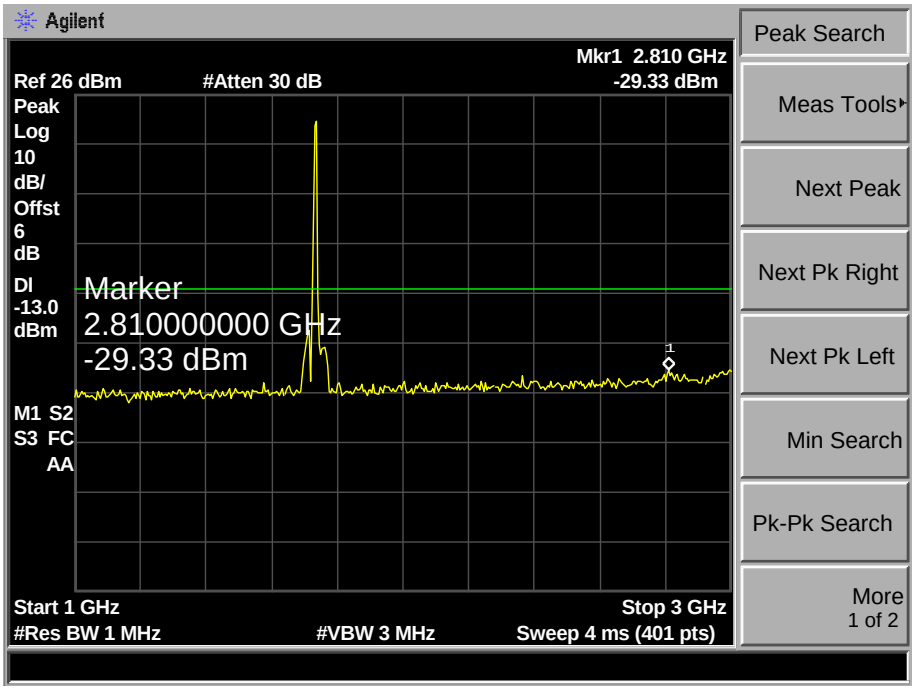
3GHz~18GHz


Agilent
Mkr1 15.1875 GHz
Ref 26 dBm
#Atten 30 dB
-30.62 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
15.187500000 GHz
-30.62 dBm
M1 S2
S3 FC
AA
Start 3 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 18 GHz
Sweep 75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

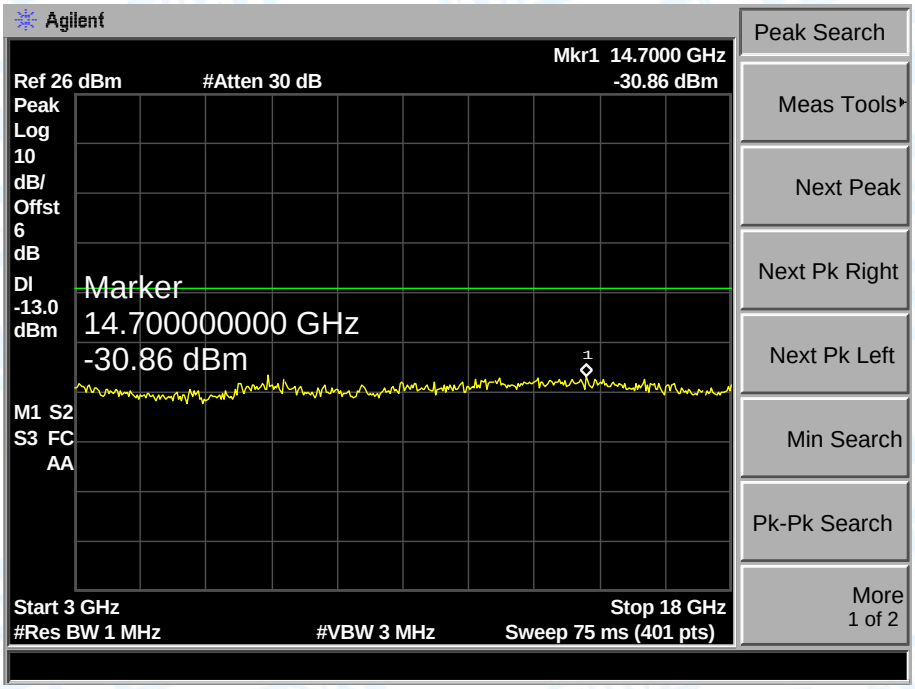
UMTS Band IV CH 1413
30 MHz~ 1000MHz



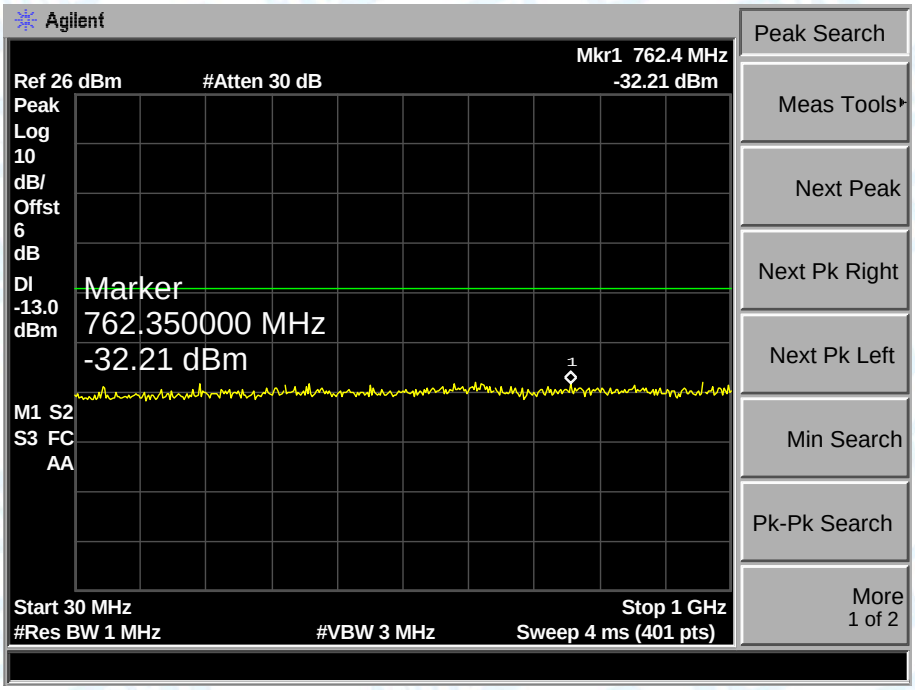
1 GHz~3 GHz



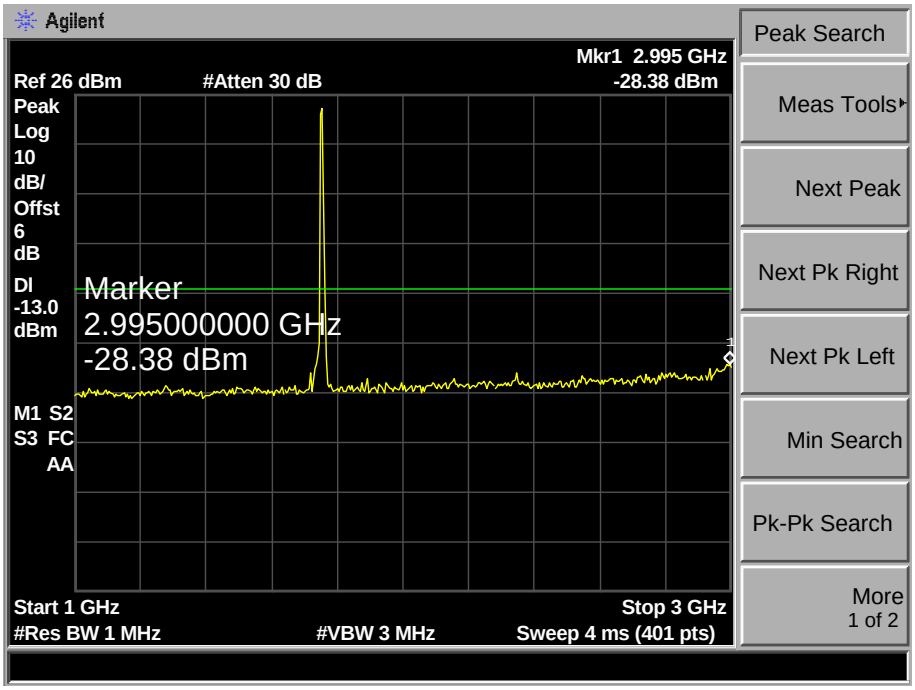
3 GHz~18 GHz


Agilent
Mkr1 14.7000 GHz
Ref 26 dBm
#Atten 30 dB
-30.86 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
14.700000000 GHz
-30.86 dBm
M1 S2
S3 FC
AA
Start 3 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 18 GHz
Sweep 75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

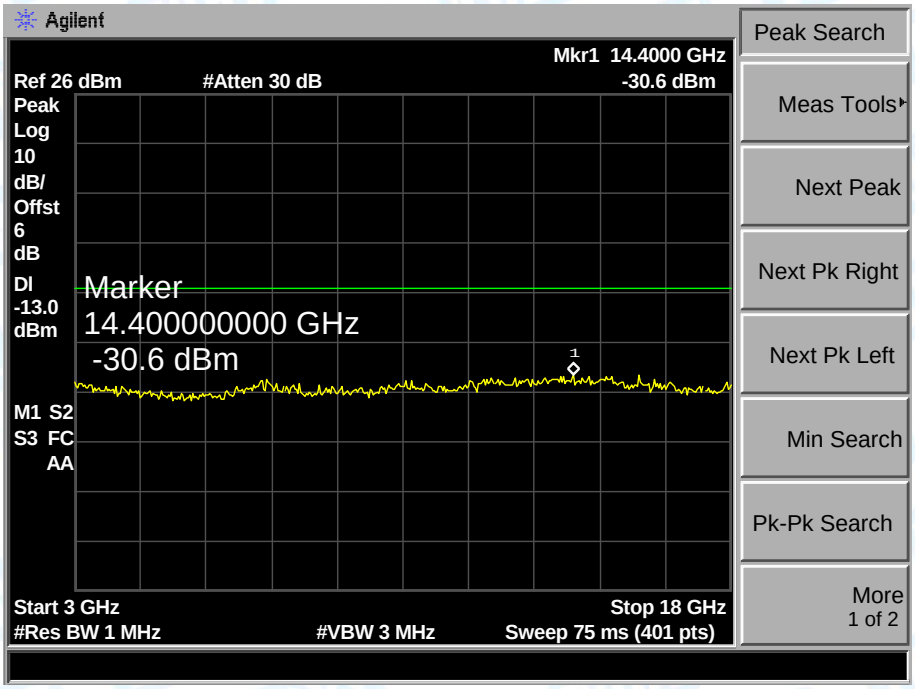
UMTS Band IV CH 1513
30 MHz~ 1000MHz



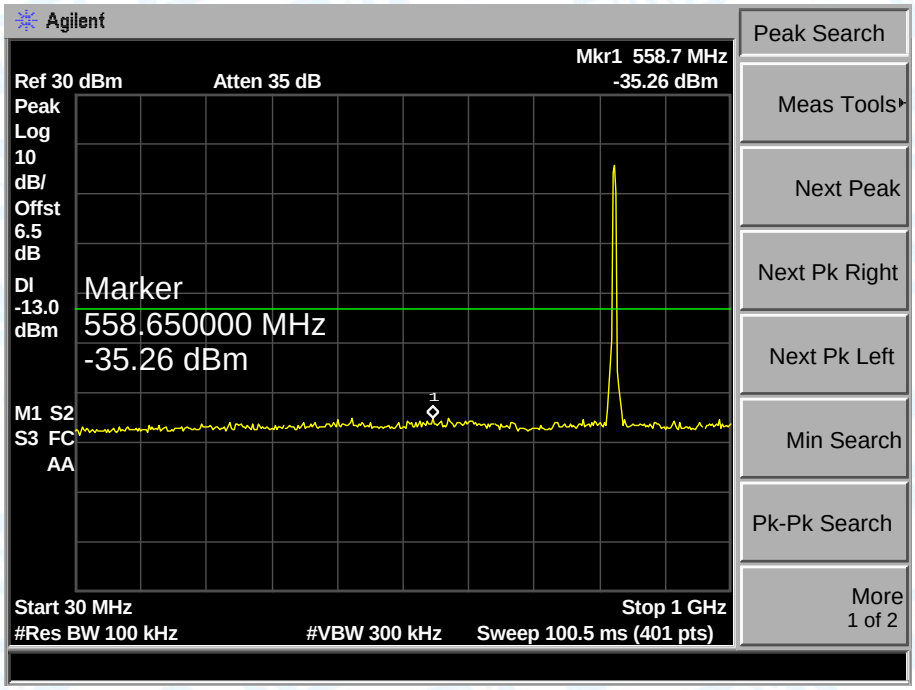
1 GHz~3 GHz



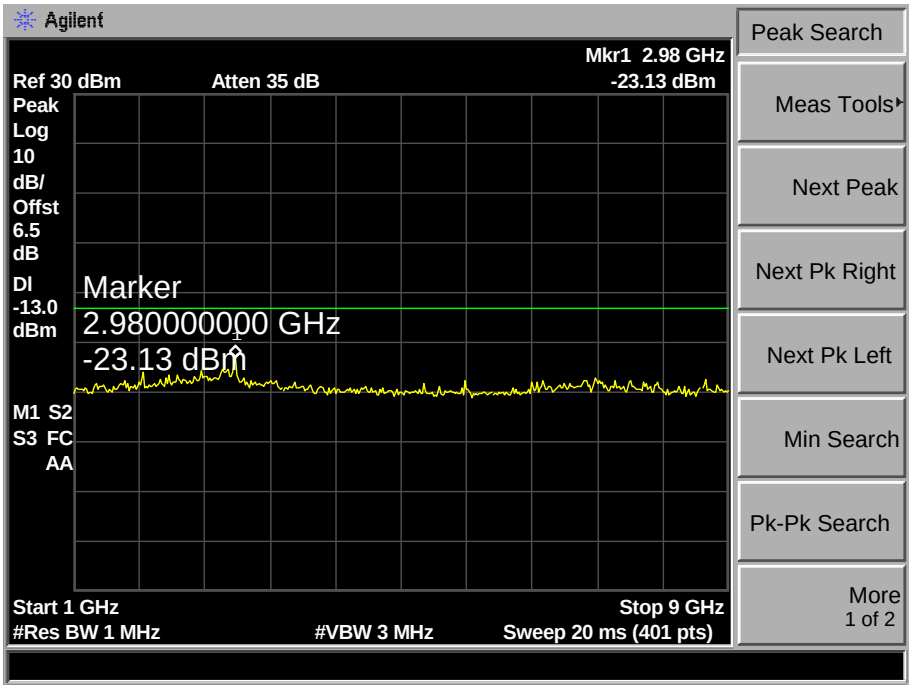
3 GHz~18 GHz


Agilent
Mkr1 14.4000 GHz
Ref 26 dBm
#Atten 30 dB
-30.6 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
14.400000000 GHz
-30.6 dBm
M1 S2
S3 FC
AA
Start 3 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 18 GHz
Sweep 75 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

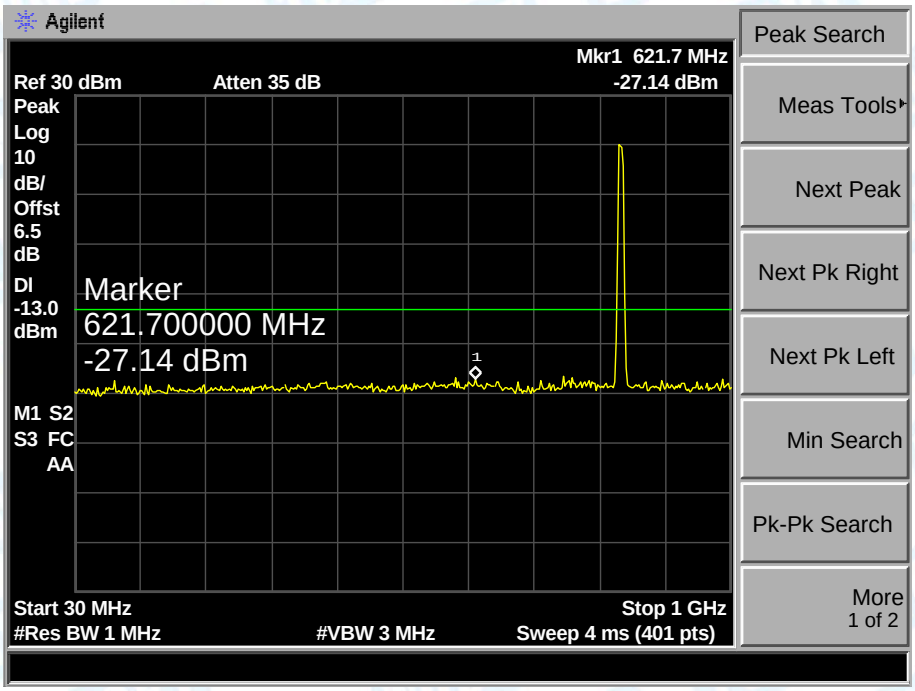
UMTS Band V CH 4132
30 MHz~ 1000MHz



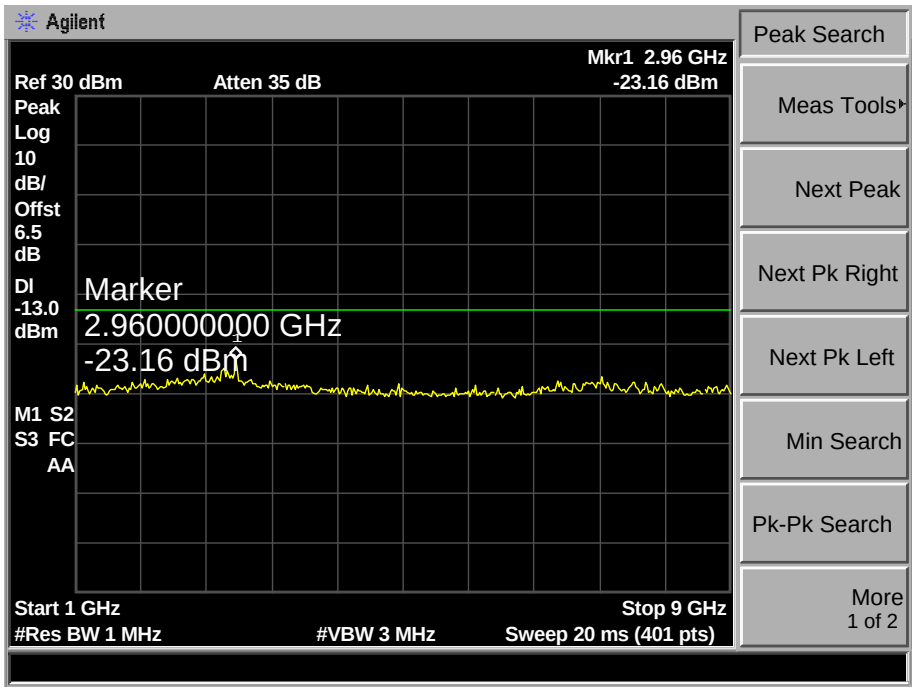
1 GHz~9 GHz



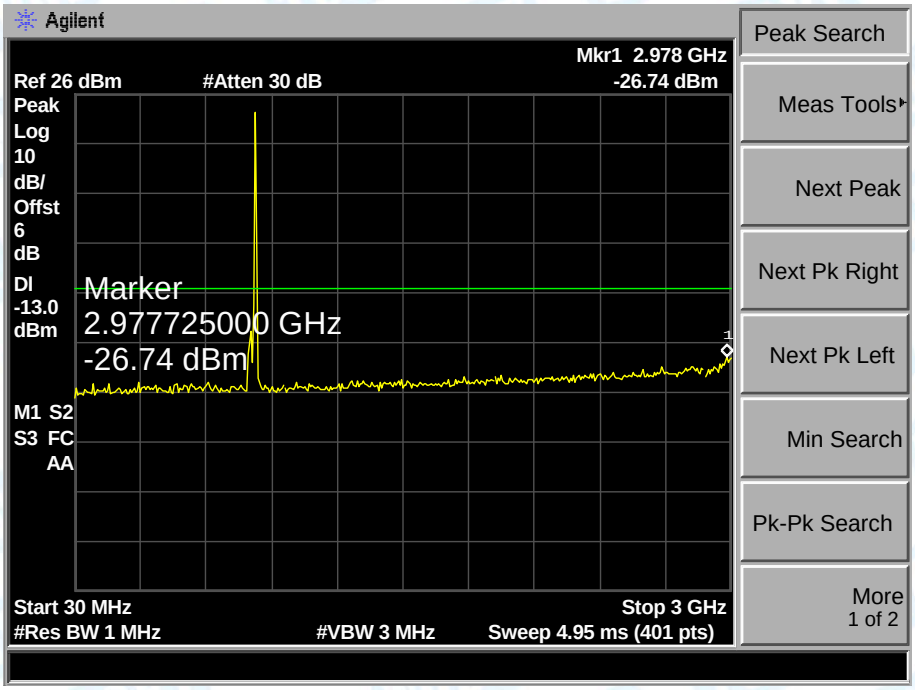
UMTS Band V CH 4183
30 MHz~ 1000MHz



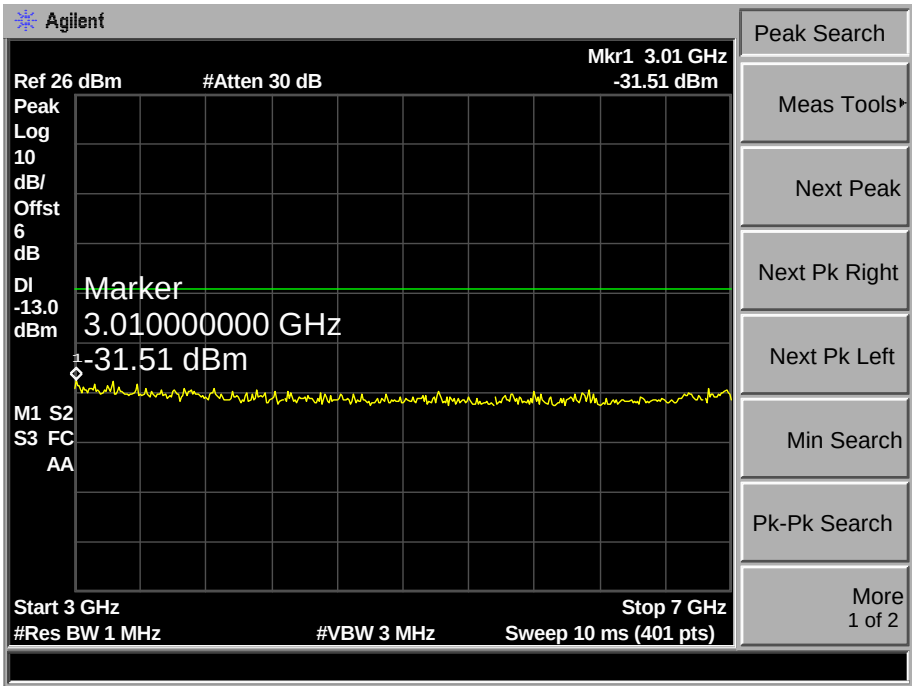
1 GHz~9 GHz

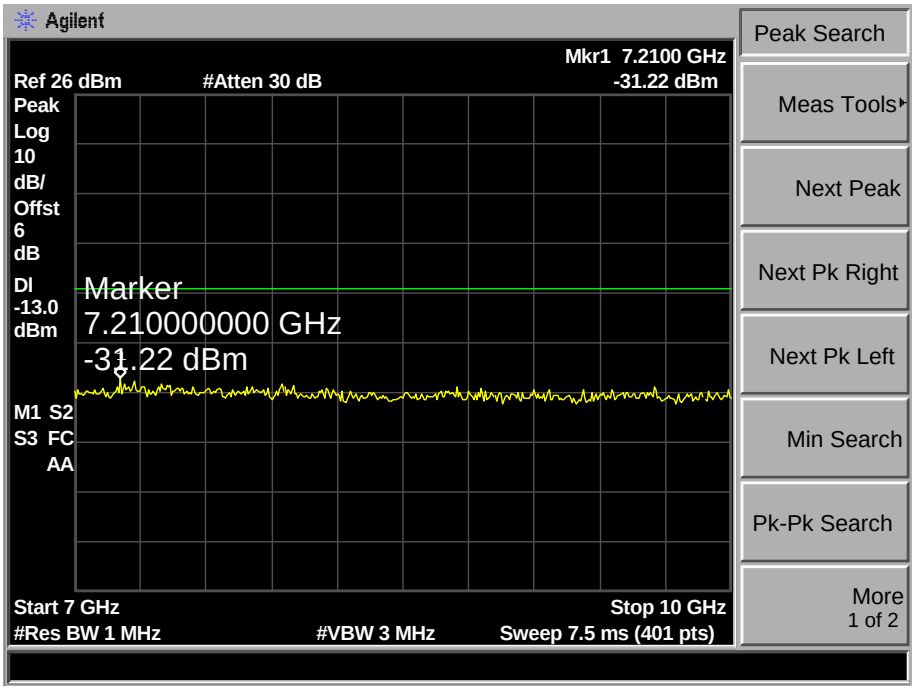


UMTS Band V CH 4233
30 MHz~ 3000MHz



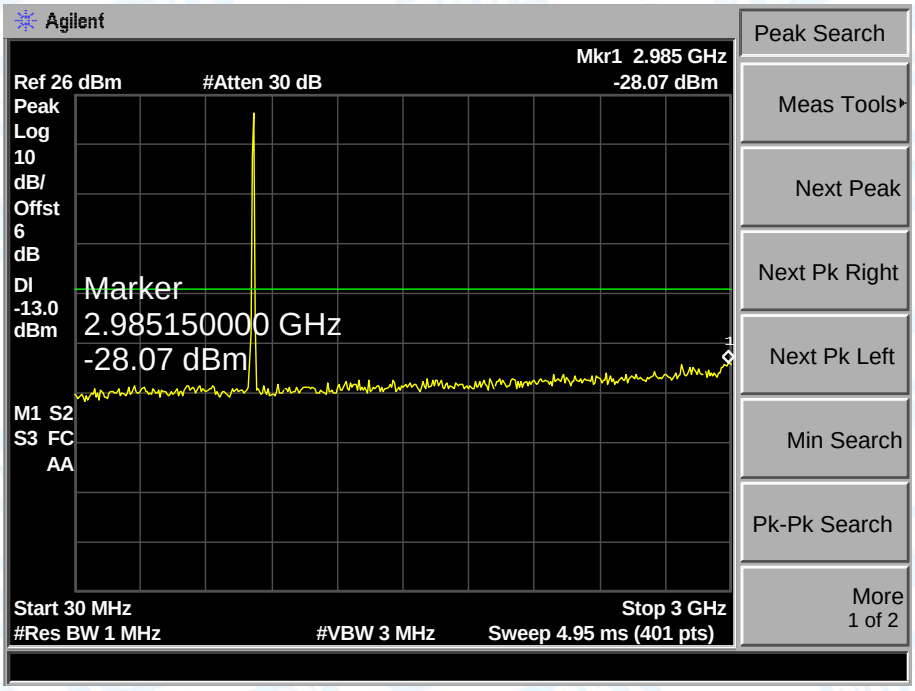
3GHz~7GHz



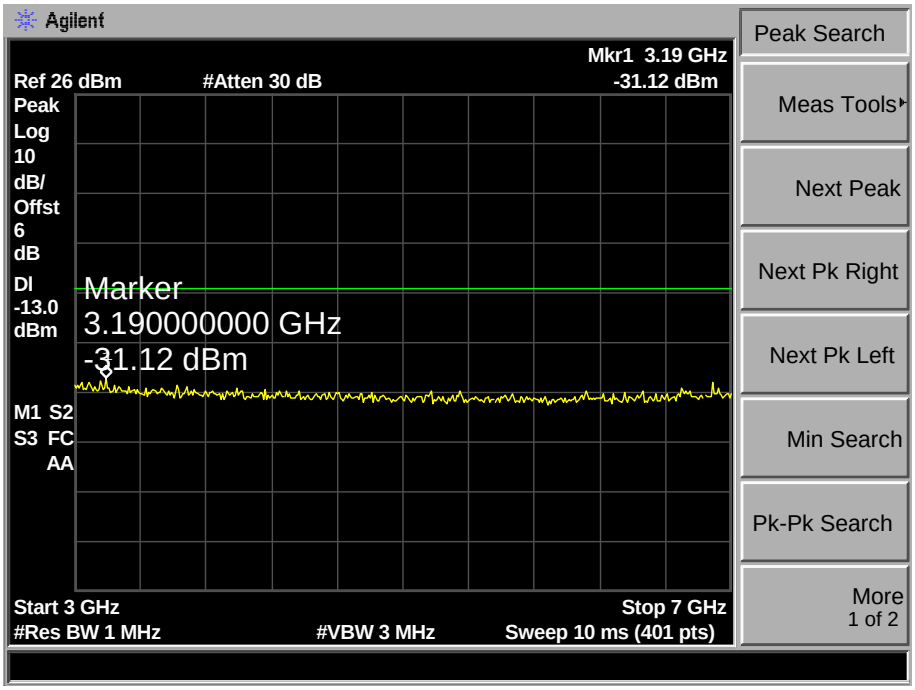
7GHz~10GHz


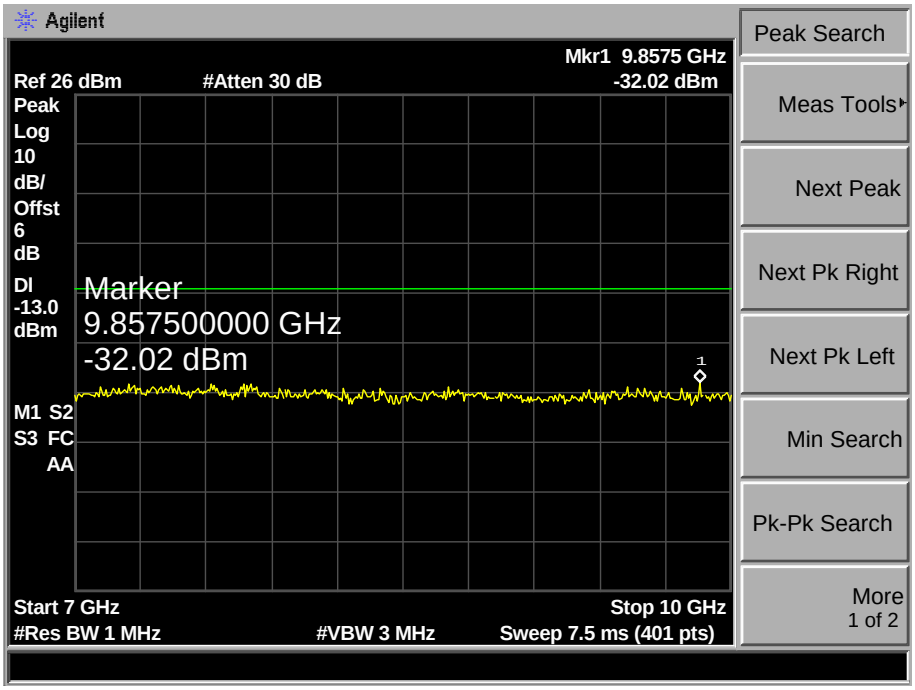
Agilent
Mkr1 7.2100 GHz
Ref 26 dBm
#Atten 30 dB
-31.22 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
7.210000000 GHz
-31.22 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

UMTS Band V CH 4183
30 MHz~ 3000MHz

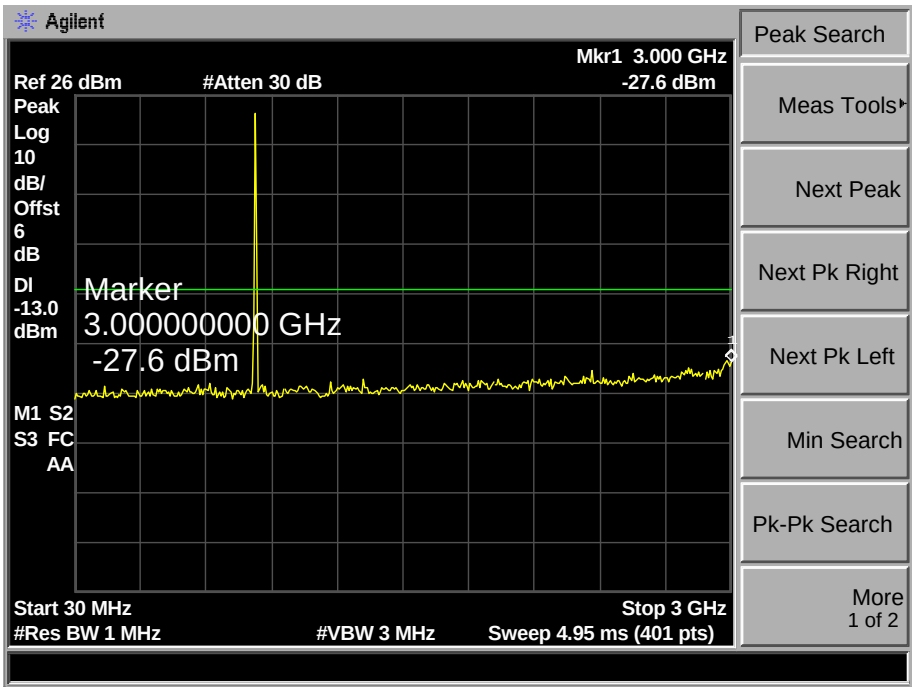
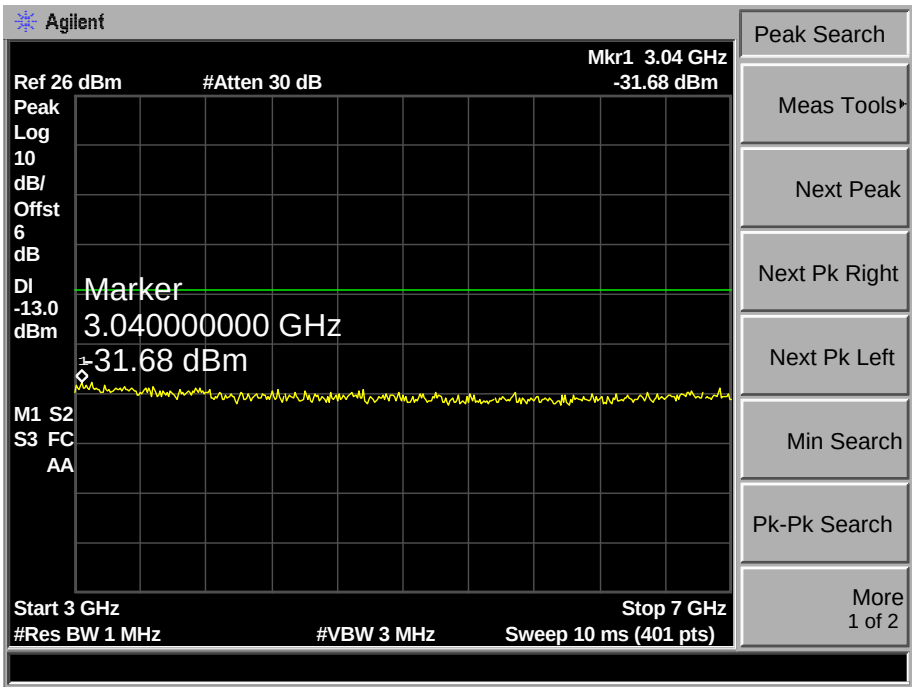


3GHz~7GHz

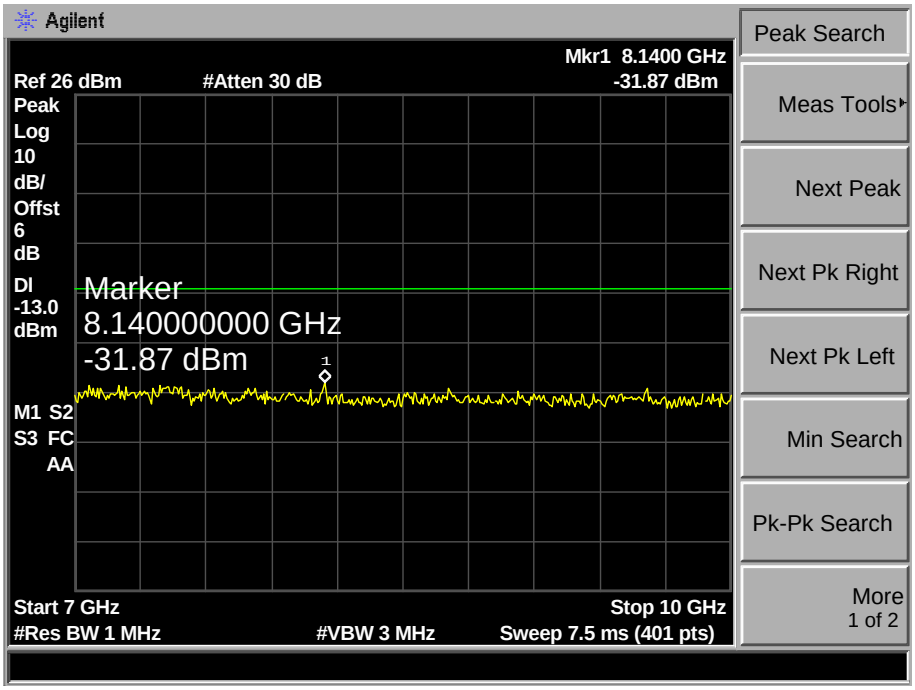


7GHz~10GHz


Agilent
Mkr1 9.8575 GHz
Ref 26 dBm
#Atten 30 dB
-32.02 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
9.857500000 GHz
-32.02 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

UMTS Band V CH 4233
30 MHz~ 3000MHz

3GHz~7GHz


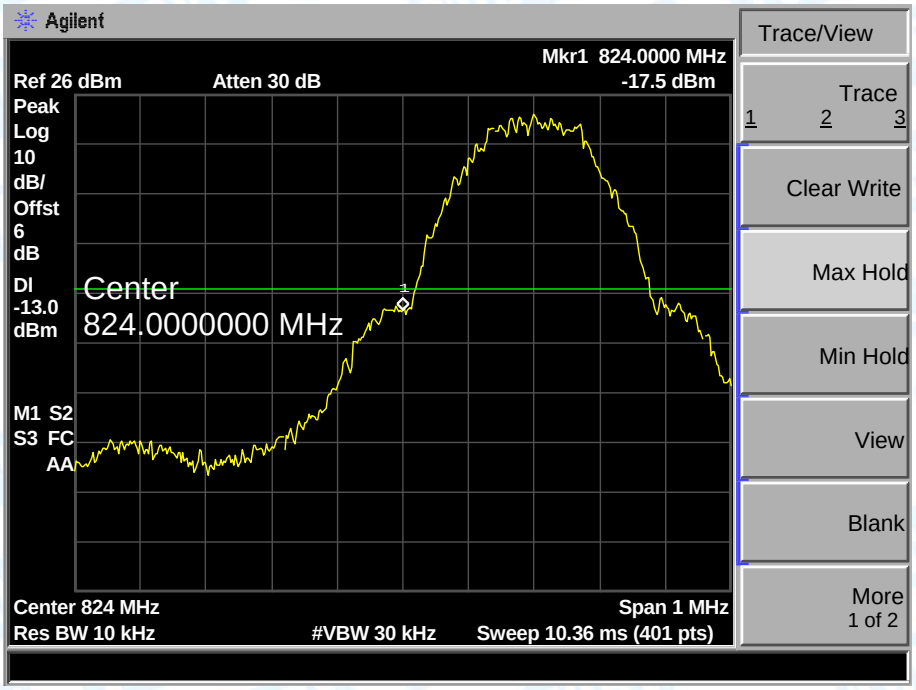
7GHz~10GHz


Agilent
Mkr1 8.1400 GHz
Ref 26 dBm
#Atten 30 dB
-31.87 dBm
Peak
Log
10
dB/
Offst
6
dB
Dl
-13.0
dBm
Marker
8.140000000 GHz
-31.87 dBm
M1 S2
S3 FC
AA
Start 7 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 10 GHz
Sweep 7.5 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

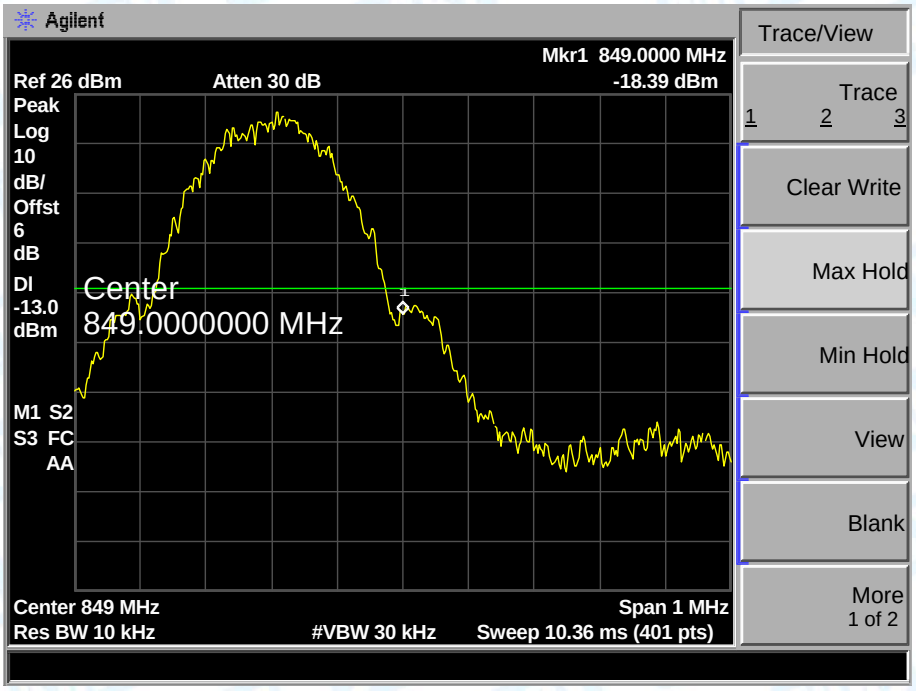
Attachment G-- Band Edge Test

Measurement Data (worst case)

Test Mode:	GSM 850

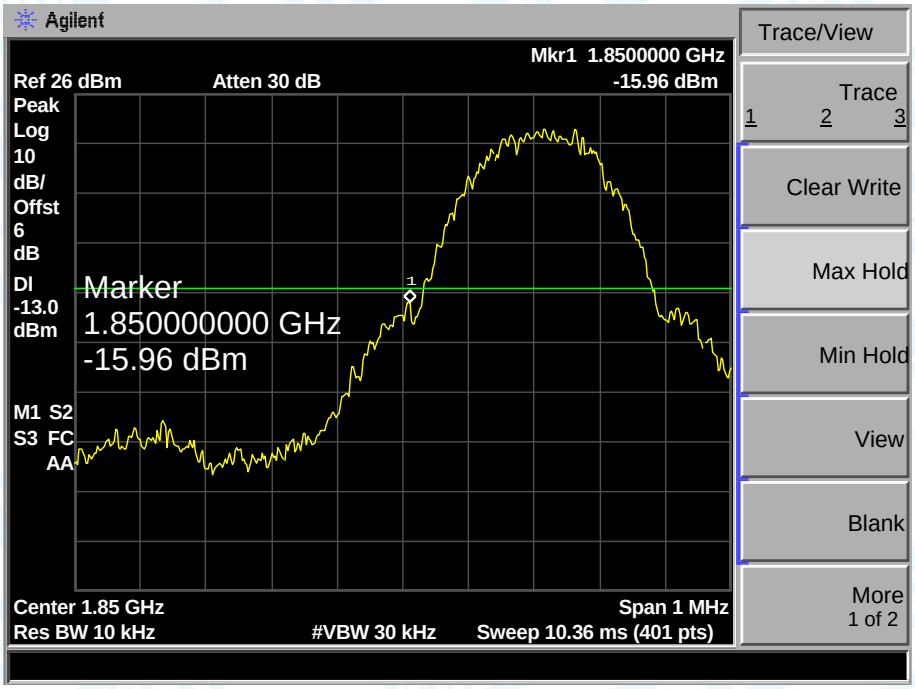


Lowest channel

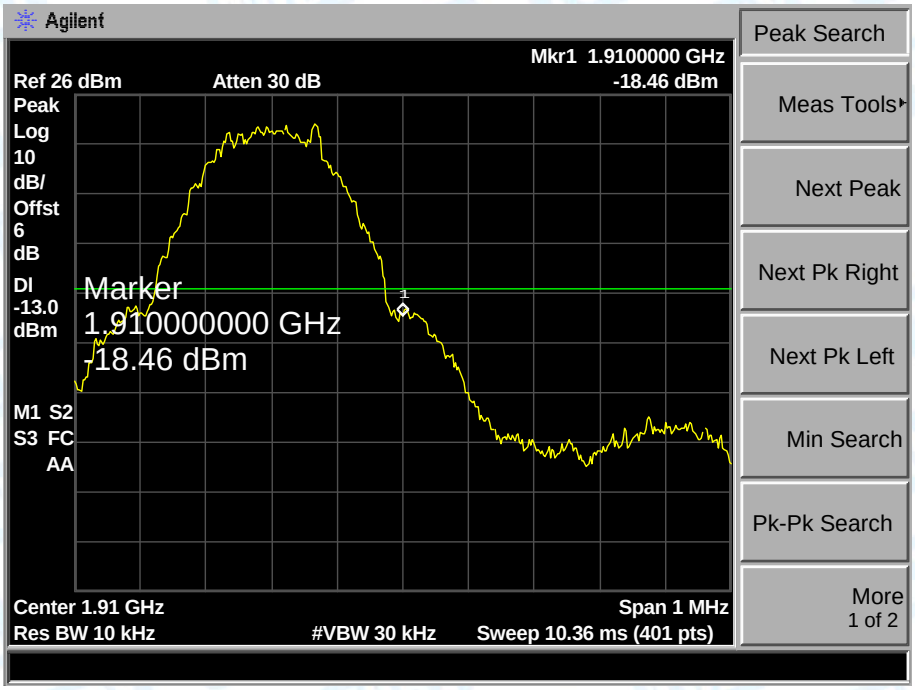


Highest channel

Test Mode:	GSM1900

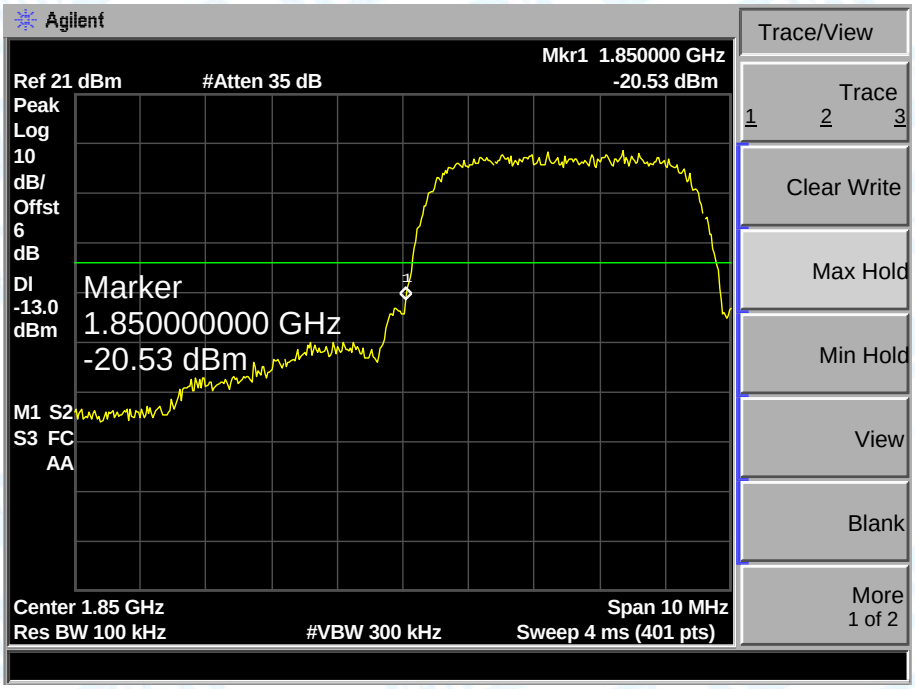


Lowest channel

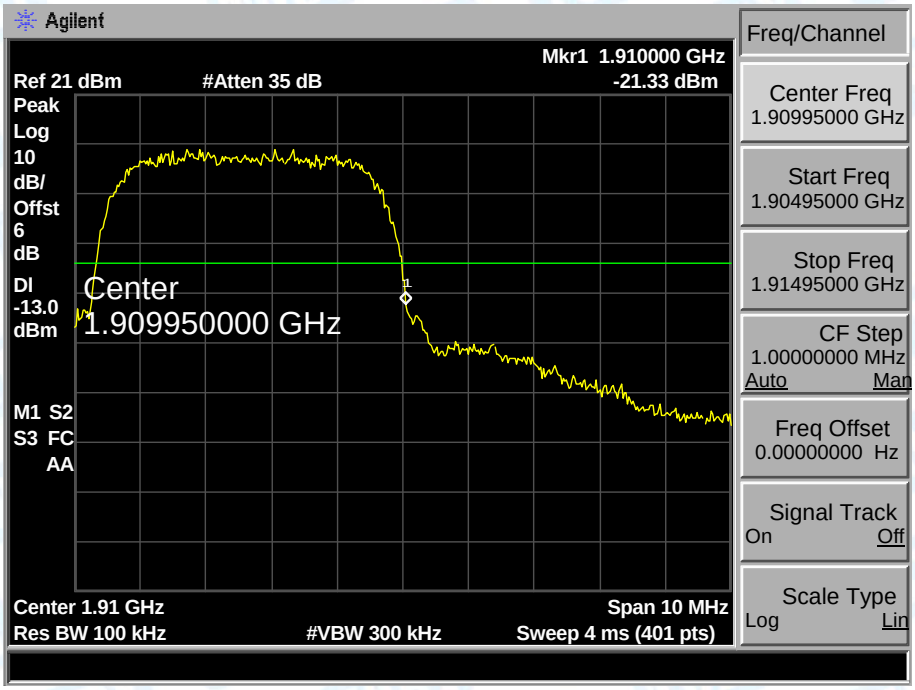


Highest channel

Test Mode:	UMTS Band II RMC

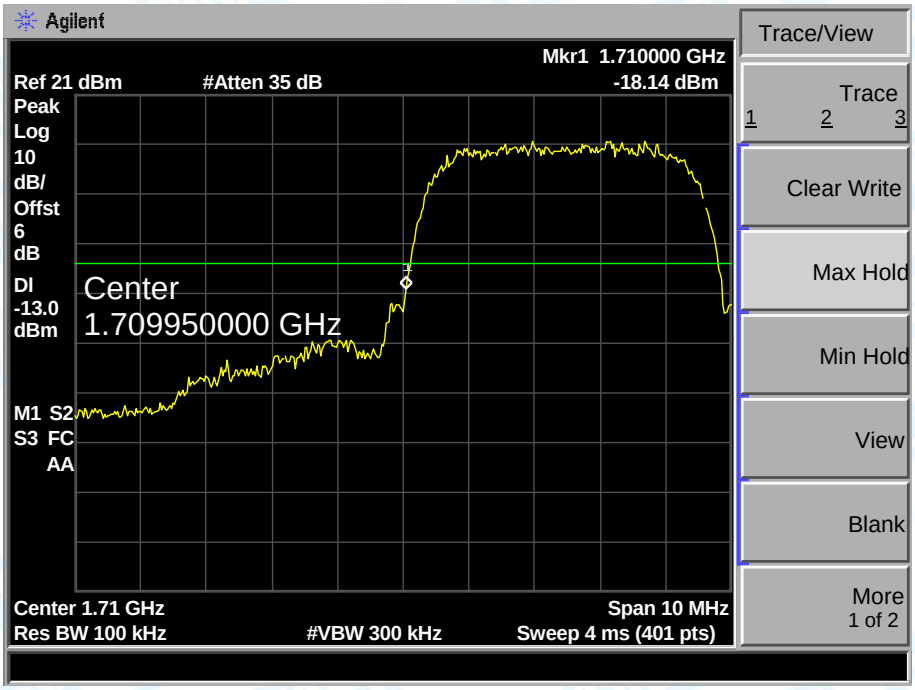


Lowest channel

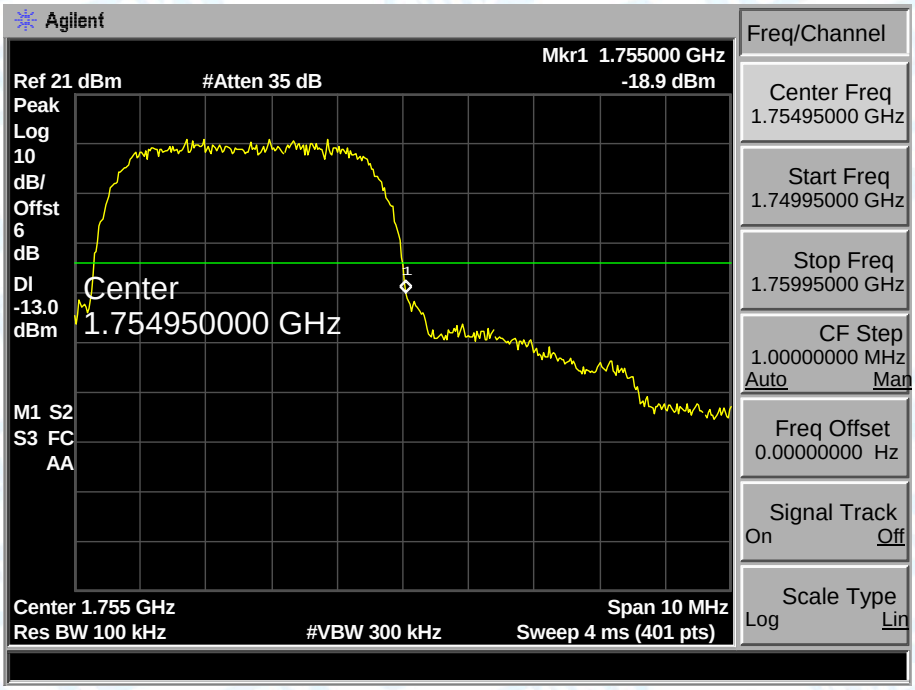


Highest channel

Test Mode:	UMTS Band IV RMC

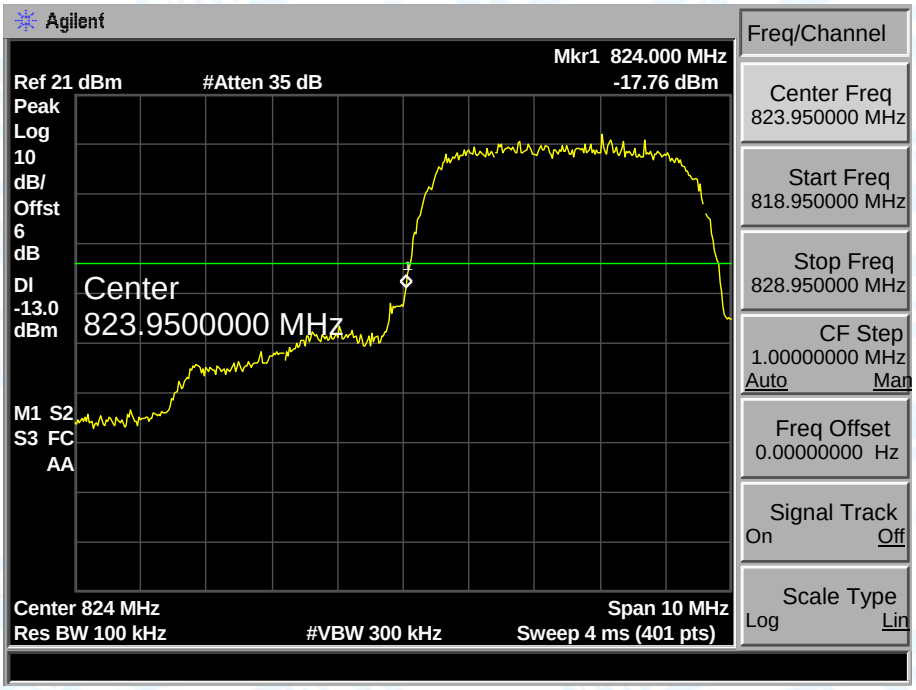


Lowest channel

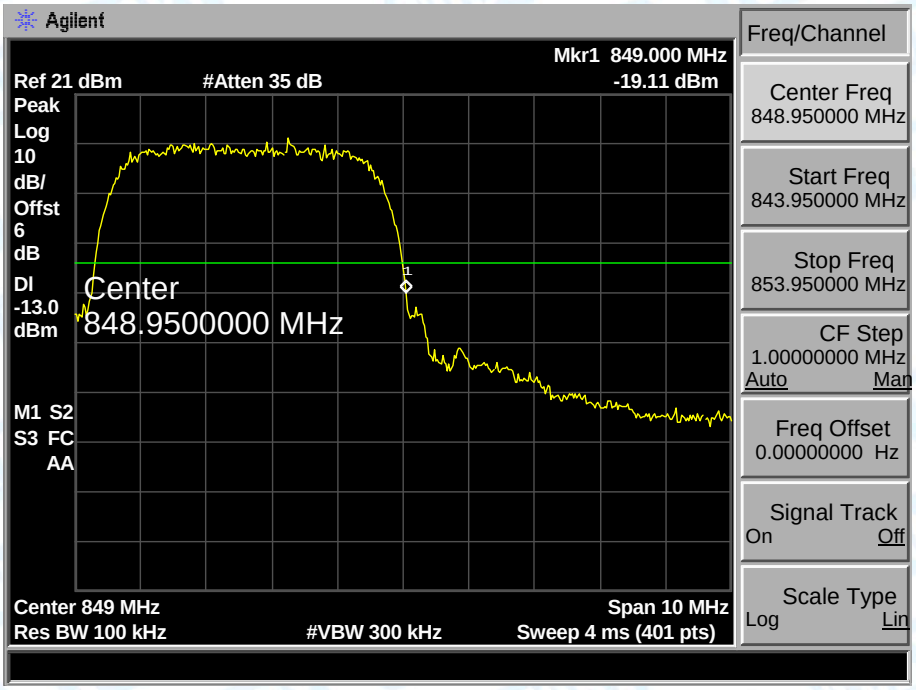


Highest channel

Test Mode:	UMTS Band V RMC



Lowest channel



Highest channel

Attachment H--Radiated Out Band of Emissions

Measurement Data (worst case)

Test mode:	GSM 850						
Channel:	Middle			Date of Test:	2020-10-26		
Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
	Polarization (H&V)	Read Level (dBm)	Antenna Correct Factor (dBi)	Cable Loss (dB)	Emission Level (dBm)		
1673.20	Horizontal	-50.71	7.49	3.97	-39.25	-13.00	Pass
2509.80	H	-58.93	7.03	5.05	-46.85		
3346.40	H	-67.31	12.48	5.98	-48.85		
4183.00	H		---	---	---		
5019.60	H	---	---	---	---		
5856.20	H	---	---	---	---		
1673.20	Vertical	-50.24	8.02	3.97	-38.25	-13.00	Pass
2509.80	V	-59.90	10.47	5.05	-44.38		
3346.40	V	-70.79	16.92	5.98	-47.89		
4183.00	V	---	---	---	---		
5019.60	V	---	---	---	---		
5856.20	V	---	---	---	---		

Remark: 1, The testing has been conformed to 10*836.6MHz=8,366MHz.
2, All other emissions more than 30 dB below the limit.
3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

Test mode:	GSM 1900						
Channel:	Middle			Date of Test:	2020-10-26		
Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
	Polarization (H&V)	Read Level (dBm)	Antenna Correct Factor (dBi)	Cable Loss (dB)	Emission Level (dBm)		
3760.00	Horizontal	-59.46	14.94	6.24	-38.28	-13.00	Pass
5640.00	H	-66.10	13.87	7.98	-44.25		
7520.00	H	-73.42	14.49	9.68	-49.25		
9400.00	H	---	---	---	---		
11280.00	H	---	---	---	---		
13160.00	H	---	---	---	---		
3760.00	Vertical	-59.49	15.97	6.24	-37.28	-13.00	Pass
5640.00	V	-67.17	13.94	7.98	-45.25		
7520.00	V	-71.90	13.87	9.68	-48.35		
9400.00	V	---	---	---	---		
11280.00	V	---	---	---	---		
13160.00	V	---	---	---	---		

Remark: 1, The testing has been conformed to 10*1880.0MHz=18,800MHz.
2, All other emissions more than 30 dB below the limit.
3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

Test mode:	UMTS Band II RMC						
Channel:	Middle			Date of Test:	2020-10-26		
Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
	Polarization (H&V)	Read Level (dBm)	Antenna Correct Factor (dBi)	Cable Loss (dB)	Emission Level (dBm)		
3760.40	Horizontal	-58.91	14.94	6.12	-37.85	-13.00	Pass
5640.30	H	-66.98	13.87	7.86	-45.25		
7520.40	H	-72.31	14.49	9.54	-48.28		
9400.00	H	---	---	---	---		
11280.00	H	---	---	---	---		
13160.00	H	---	---	---	---		
3760.40	Vertical	-58.34	15.97	6.12	-36.25	-13.00	Pass
5640.30	V	-66.08	13.94	7.86	-44.28		
7520.40	V	-70.69	13.87	9.54	-47.28		
9400.00	V	---	---	---	---		
11280.00	V	---	---	---	---		
13160.00	V	---	---	---	---		

Remark: 1, The testing has been conformed to 10*1880.0MHz=18,800MHz.
2, All other emissions more than 30 dB below the limit.
3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

Test mode:	UMTS Band IV RMC						
Channel:	Middle			Date of Test:	2020-10-26		
Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
	Polarization (H&V)	Read Level (dBm)	Antenna Correct Factor (dBi)	Cable Loss (dB)	Emission Level (dBm)		
3465.25	Horizontal	-56.74	14.70	5.76	-36.28	-13.00	Pass
5197.82	H	-63.15	13.67	7.23	-42.25		
6930.44	H	-72.51	14.27	8.95	-49.29		
8663.00	H	---	---	---	---		
10395.60	H	---	---	---	---		
3465.25	H	---	---	---	---		
5197.82	Vertical	-58.82	15.81	5.76	-37.25	-13.00	Pass
6930.44	V	-64.31	13.80	7.23	-43.28		
8663.00	V	-69.63	13.40	8.95	-47.28		
10395.60	V	---	---	---	---		
3465.25	V	---	---	---	---		
5197.82	V	---	---	---	---		

Remark: 1, The testing has been conformed to 10*1732.6MHz=17326MHz.
2, All other emissions more than 30 dB below the limit.
3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

Test mode:	UMTS Band V RMC						
Channel:	Middle			Date of Test:	2020-10-26		
Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
	Polarization (H&V)	Read Level (dBm)	Antenna Correct Factor (dBi)	Cable Loss (dB)	Emission Level (dBm)		
1673.20	Horizontal	-46.72	7.49	3.97	-35.26	-13.00	Pass
2509.80	H	-55.33	7.03	5.05	-43.25		
3346.40	H	-66.32	12.48	5.98	-47.86		
4183.00	H		---	---	---		
5019.60	H	---	---	---	---		
5856.20	H	---	---	---	---		
1673.20	Vertical	-48.24	8.02	3.97	-36.25	-13.00	Pass
2509.80	V	-59.77	10.47	5.05	-44.25		
3346.40	V	-71.22	16.92	5.98	-48.32		
4183.00	V	---	---	---	---		
5019.60	V	---	---	---	---		
5856.20	V	---	---	---	---		

Remark: 1, The testing has been conformed to 10*836.6MHz=8,366MHz.
2, All other emissions more than 30 dB below the limit.
3, Emission Level= Read Level+ Antenna Correct Factor +Cable Loss

------End of the Report------