Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/8/2006	13
Attenuator	Pasternack	PE7005-20	AUN	2/6/2007	13
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	12/7/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The 99% bandwidth was measured utilizing the analyzer's peak detector and measuring the carrier's 26 dB occupied bandwidth based on the peak output power level measured. A plot was taken to show the occupied bandwidth is contained within the allowable transmit band.

A direct connection was made between the EUT and a spectrum analyzer. At 3 kHz the spectrum analyzer's resolution bandwidth was sufficiently narrow to plot the actual bandwidth of the signal and not the filter response curve of the spectrum analyzer. The resolution bandwidth was approximately equal to 1% of the 20dB bandwidth and the video bandwidth was greater than or equal to the resolution bandwidth.

The occupied bandwidth was measured with the EUT configured in the modes called out in the data sheets.

NORTHWEST EMC

OCCUPIED BANDWIDTH

XMit 2006.11.13

EUT:	S-BTS GSM Base Station	Work Order:	RAFN0069
Serial Number:	Engineering Unit	Date:	03/22/07
Customer:	Radioframe Networks, Inc.	Temperature:	21°C
Attendees:	Bob Melsheimer	Humidity:	32%
Project:	None	Barometric Pres.:	30.18
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV06

TEST SPECIFICATIONS	Test Method
FCC 22H:2005	ANSI/TIA/EIA-603-B-2002

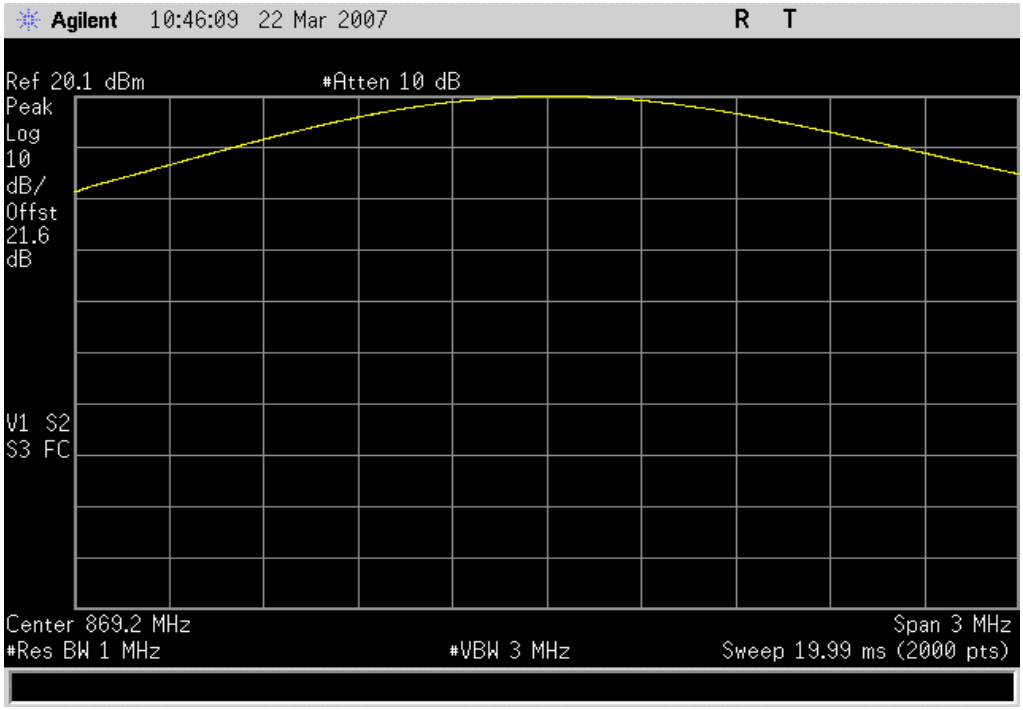
COMMENTS

DEVIATIONS FROM TEST STANDARD

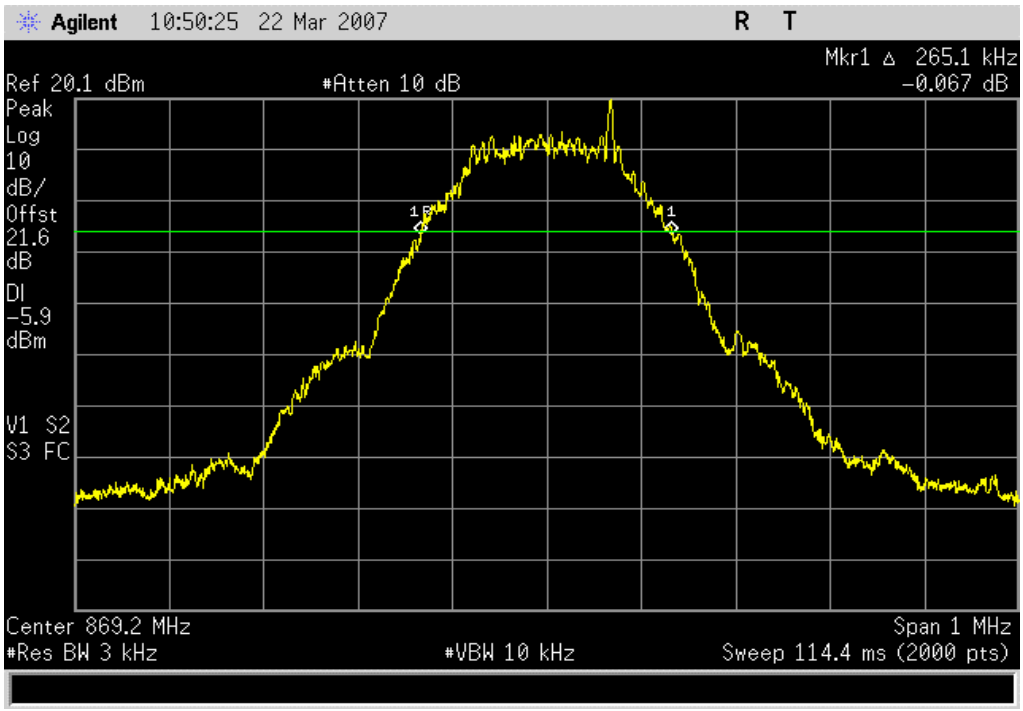
Configuration #	1	Signature

			Value	Limit	Results
GSM Modulation					
	High Power				
		Low Channel			
		Reference Level Plot	20.1 dBm	N/A	N/A
		Occupied Bandwidth	265.1 kHz	N/A	N/A
		Band Edge	-28.9 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	20.1 dBm	N/A	N/A
		Occupied Bandwidth	261.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	19.99 dBM	N/A	N/A
		Occupied Bandwidth	262.1 kHz	N/A	N/A
		Band Edge	-25.6 dBm	≤ -13 dBm	Pass
	Mid Power				
		Low Channel			
		Reference Level Plot	14.07 dBm	N/A	N/A
		Occupied Bandwidth	267.6 kHz	N/A	N/A
		Band Edge	-35.4 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	13.85 dBm	N/A	N/A
		Occupied Bandwidth	263.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	14.23 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-31.1 dBm	N/A	Pass
	Low Power				
		Low Channel			
		Reference Level Plot	8.35 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-40.86 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	8.11 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	8.67 dBM	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-36.23 dBm	≤ -13 dBm	Pass
GPRS Modulation					
	High Power				
		Low Channel			
		Reference Level Plot	20.05 dBm	N/A	N/A
		Occupied Bandwidth	261.6 kHz	N/A	N/A
		Band Edge	-26.32	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	20.02 dBm	N/A	N/A
		Occupied Bandwidth	261.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	19.85 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-25.6 dBm	≤ -13 dBm	Pass
	Mid Power				
		Low Channel			
		Reference Level Plot	14.2 dBm	N/A	N/A
		Occupied Bandwidth	261.1 kHz	N/A	N/A
		Band Edge	-31.8 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	13.98 dBm	N/A	N/A
		Occupied Bandwidth	263.1 kHz	N/a	N/A
		High Channel			
		Reference Level Plot	14.29 dBM	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-31.26 dBm	≤ -13 dBM	Pass
	Low Power				
		Low Channel			
		Reference Level Plot	8.39 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-37.45 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	8.17 dBm	N/A	N/A
		Occupied Bandwidth	263.6 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	8.73 dBm	N/A	N/A
		Occupied Bandwidth	261.6 kHz	N/A	N/A
		Band Edge	-36.12 dBm	≤ -13 dBm	Pass

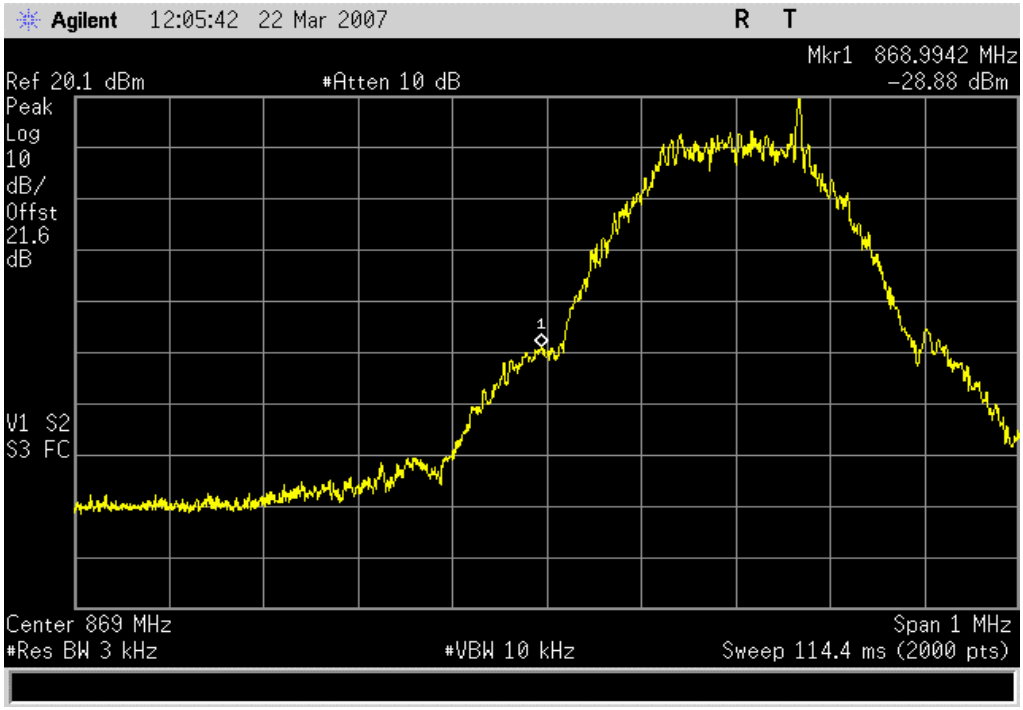
GSM Modulation, High Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	20.1 dBm	**Limit:**	N/A



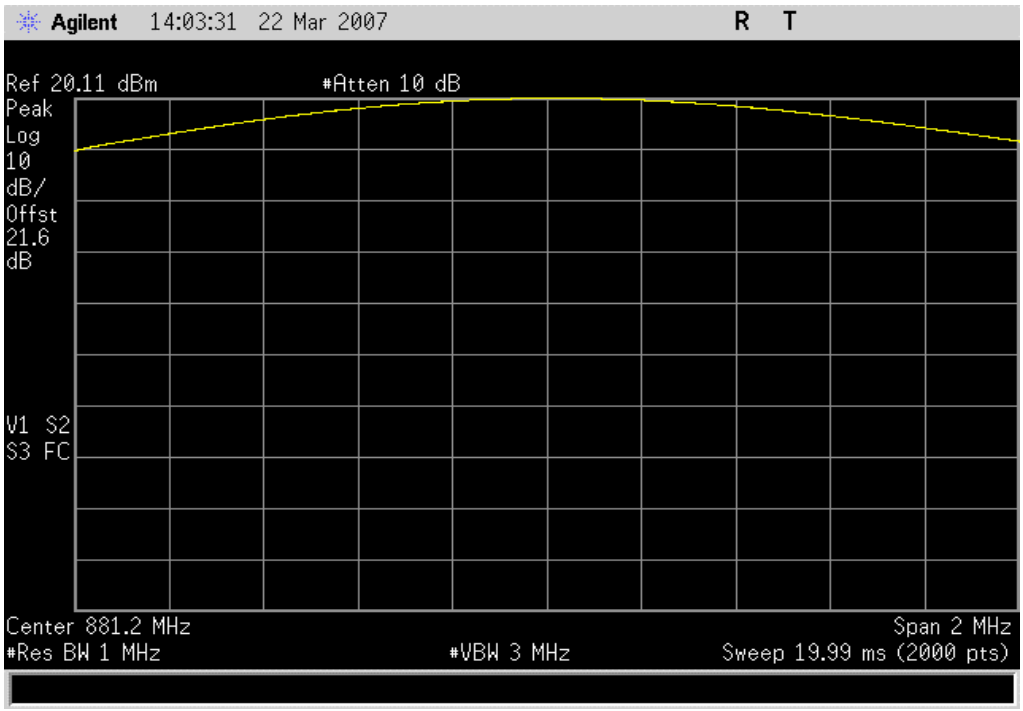
GSM Modulation, High Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	265.1 kHz	**Limit:**	N/A



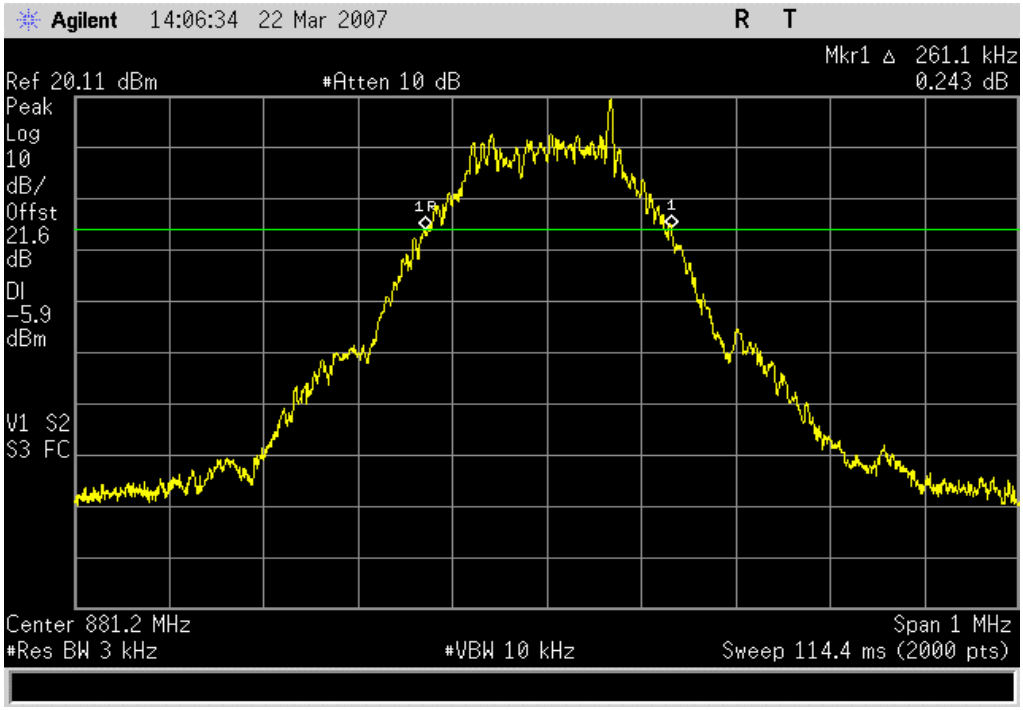
GSM Modulation, High Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-28.9 dBm	**Limit:**	≤ -13 dBm



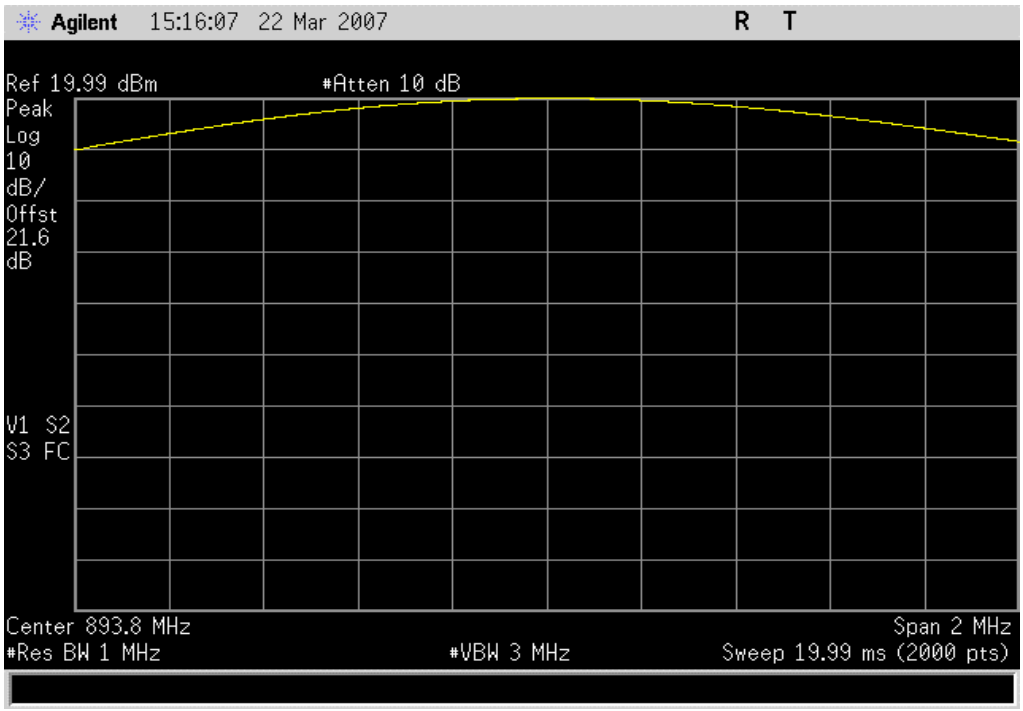
GSM Modulation, High Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	20.1 dBm	**Limit:**	N/A



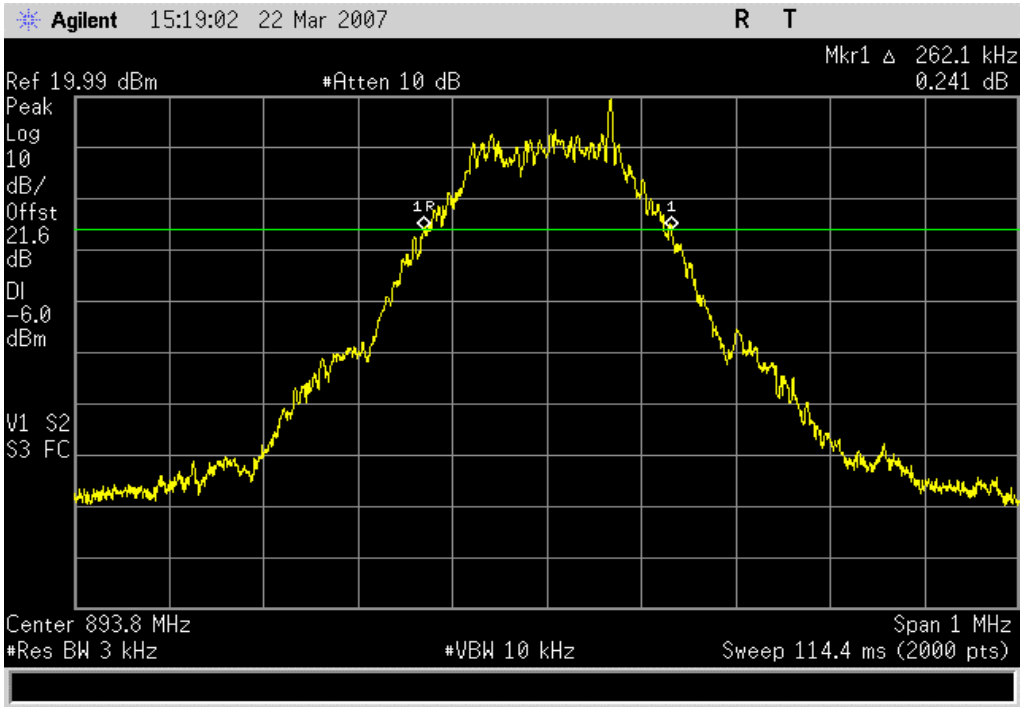
GSM Modulation, High Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	261.1 kHz	**Limit:**	N/A



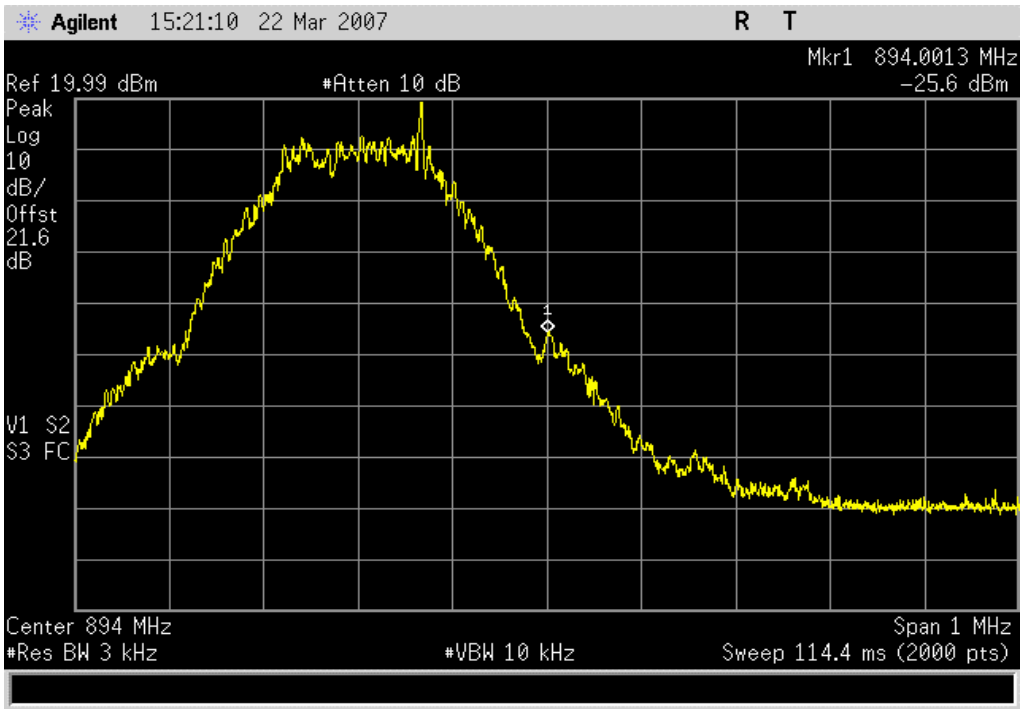
GSM Modulation, High Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	19.99 dBM	**Limit:**	N/A



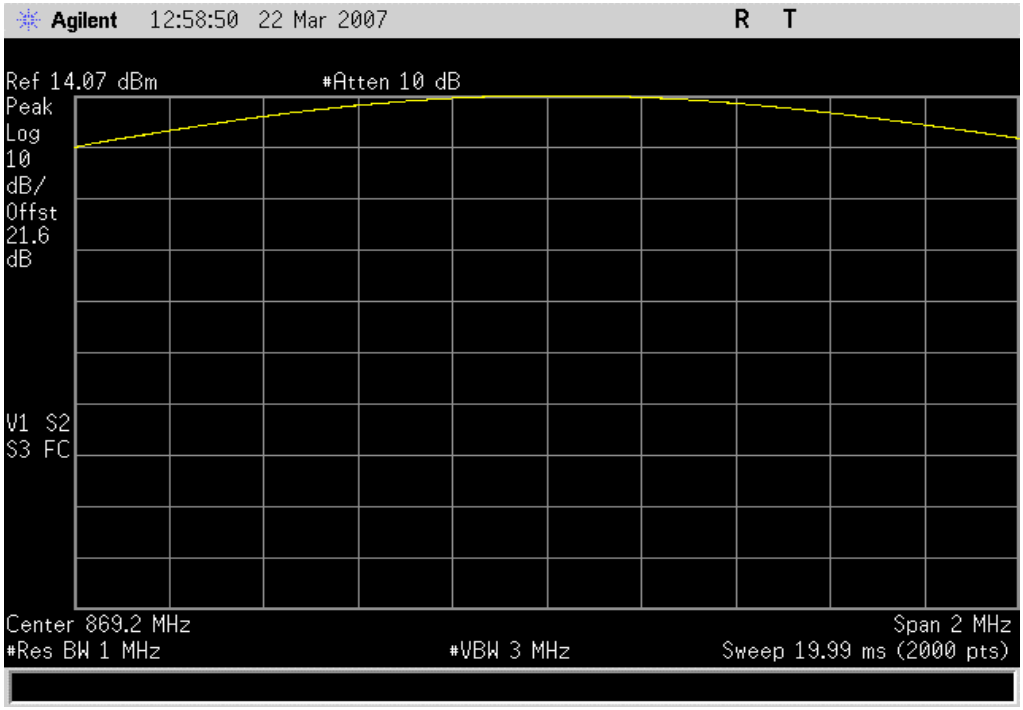
GSM Modulation, High Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.1 kHz	**Limit:**	N/A



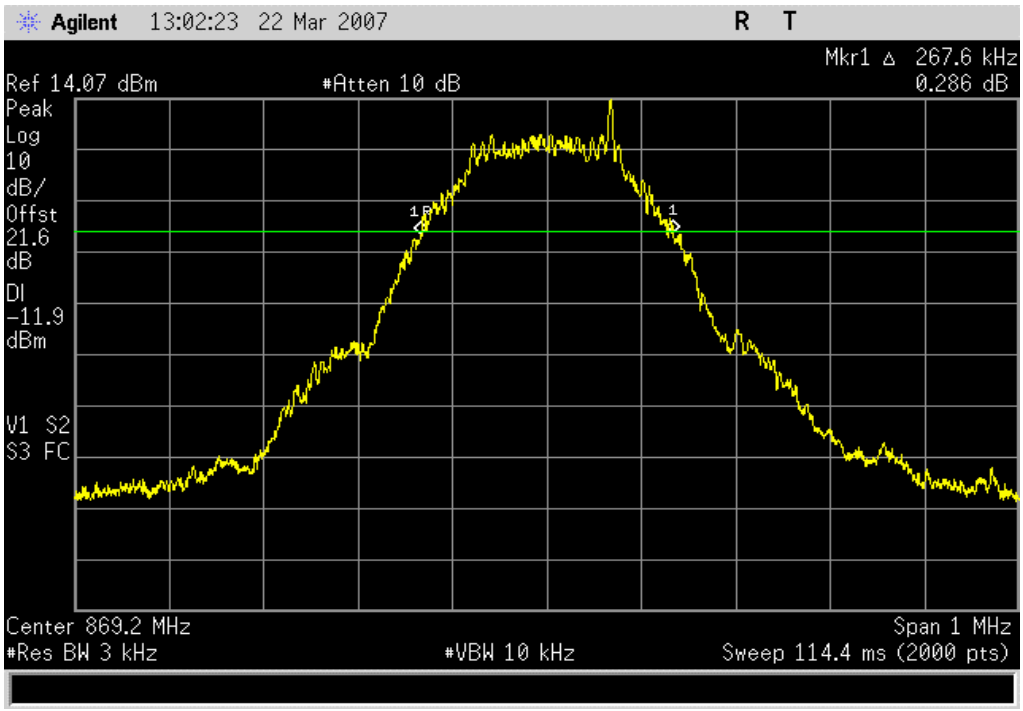
GSM Modulation, High Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-25.6 dBm	**Limit:**	≤ -13 dBm



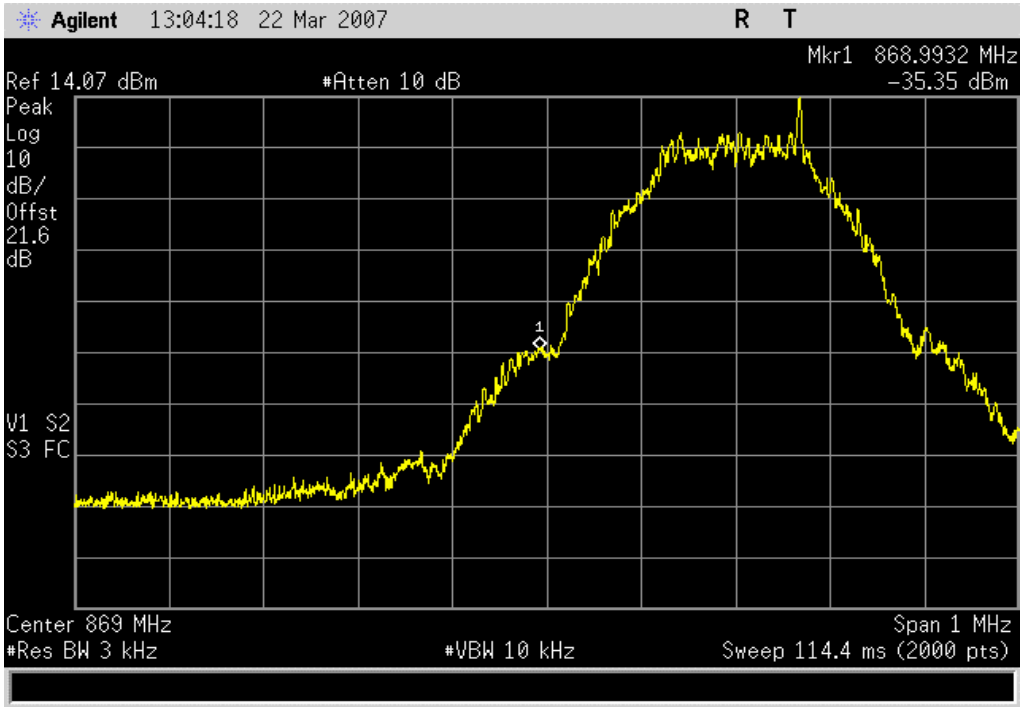
GSM Modulation, Mid Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	14.07 dBm	**Limit:**	N/A



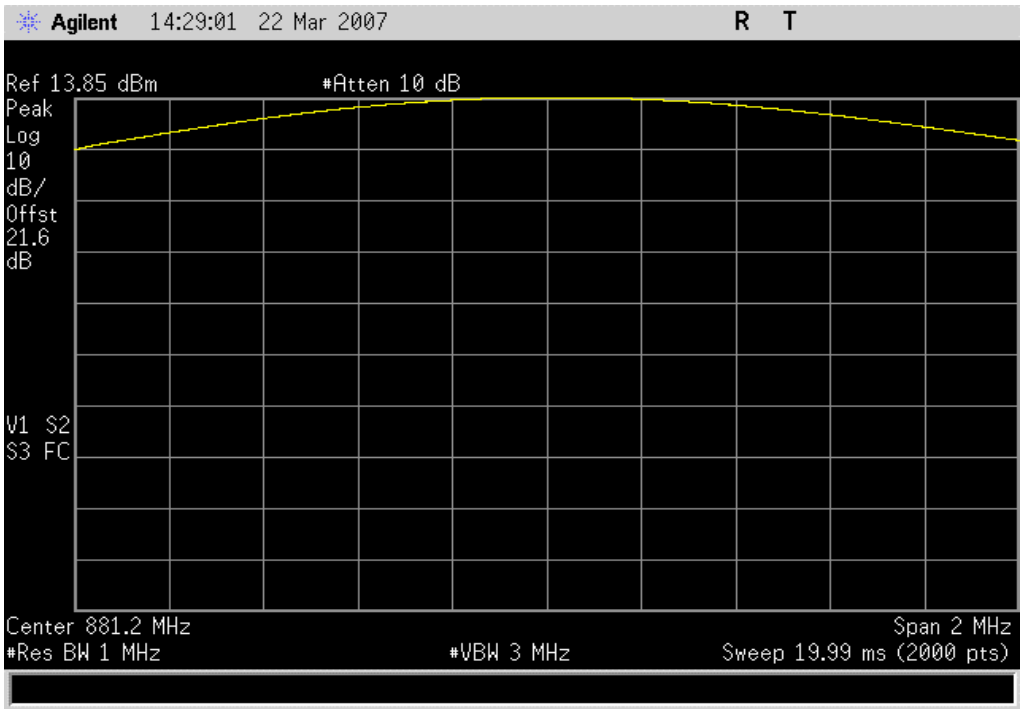
GSM Modulation, Mid Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	267.6 kHz	**Limit:**	N/A



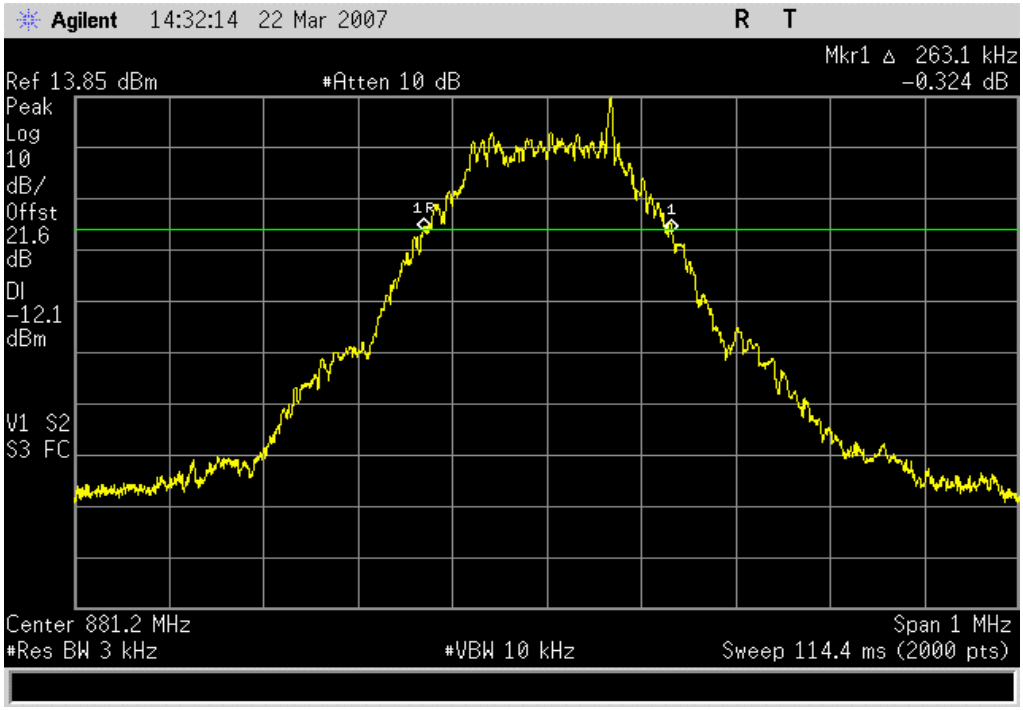
GSM Modulation, Mid Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-35.4 dBm	**Limit:**	≤ -13 dBm



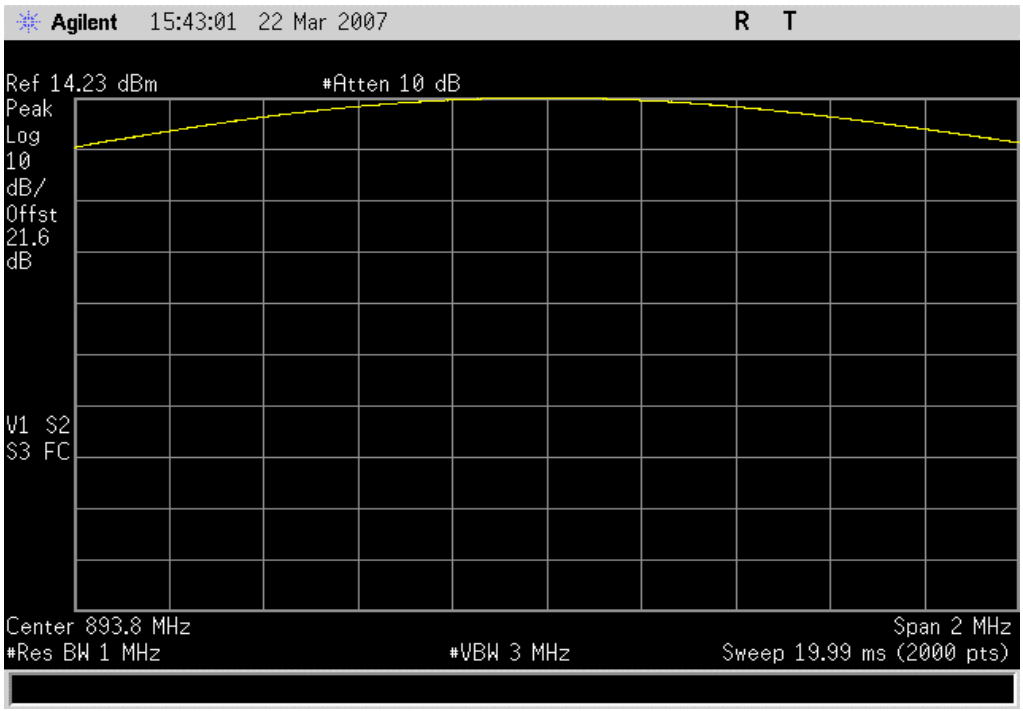
GSM Modulation, Mid Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	13.85 dBm	**Limit:**	N/A



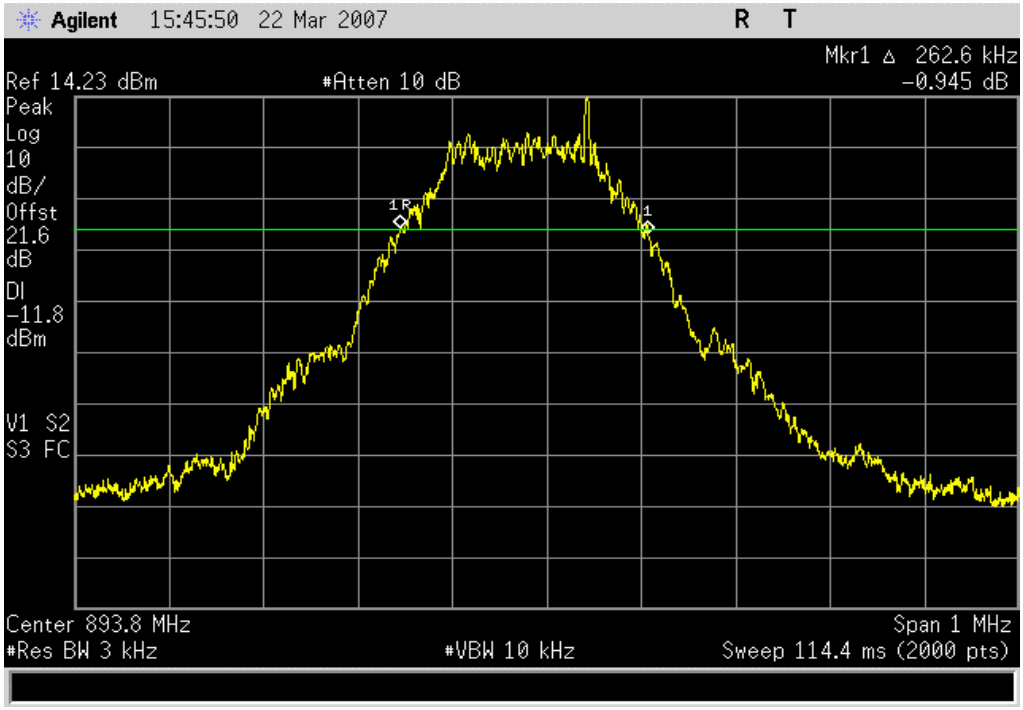
GSM Modulation, Mid Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	263.1 kHz	**Limit:**	N/A



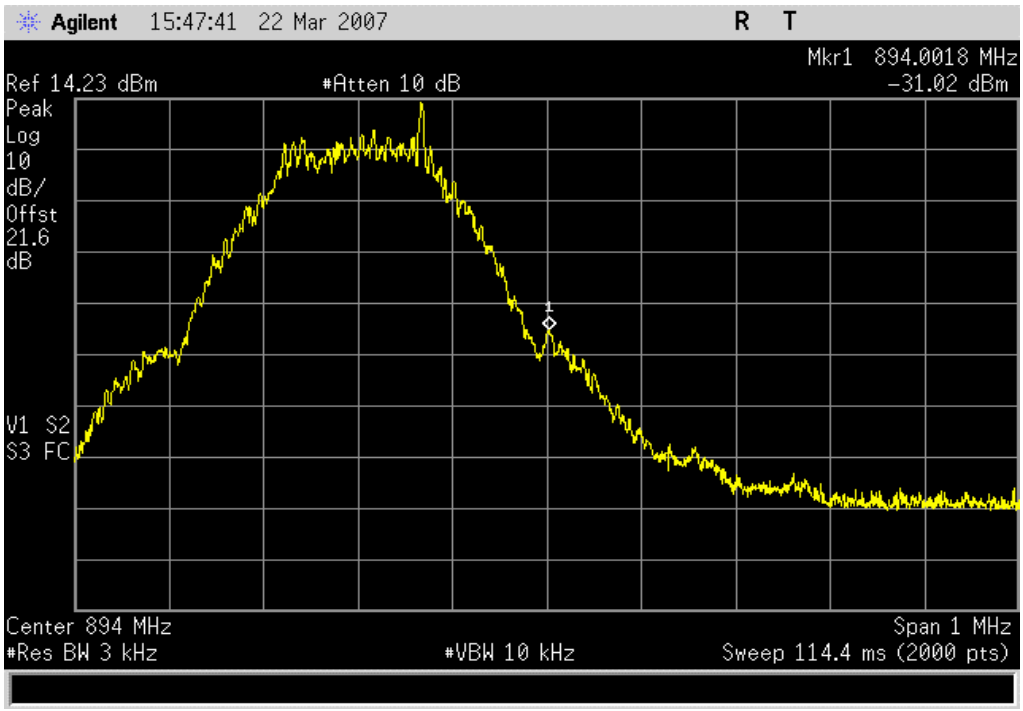
GSM Modulation, Mid Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	14.23 dBm	**Limit:**	N/A



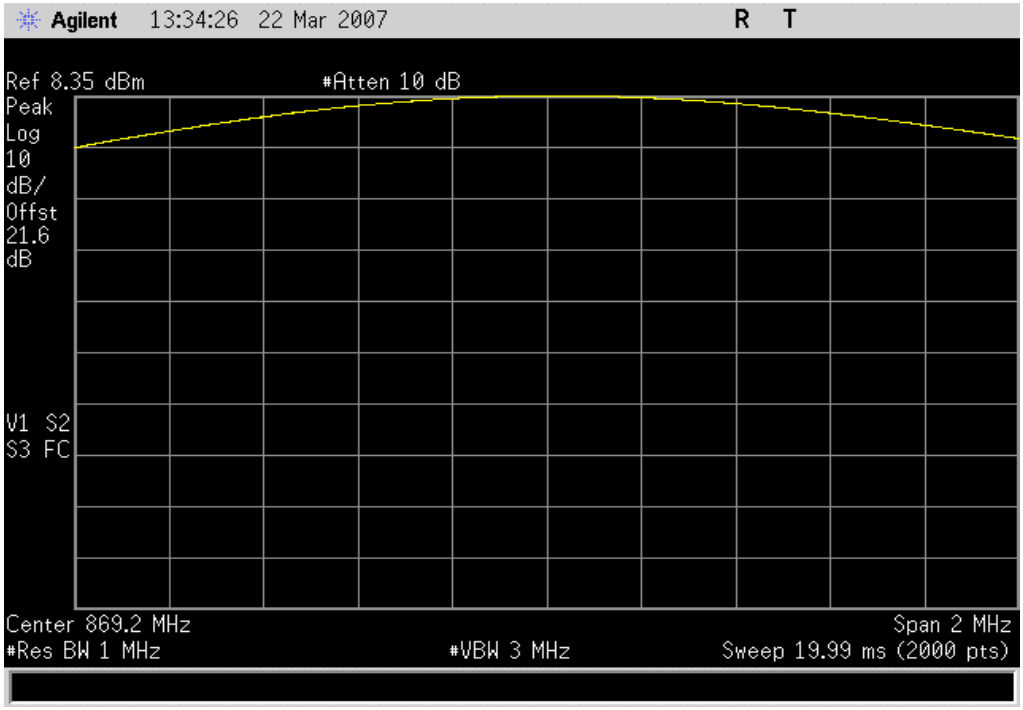
GSM Modulation, Mid Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



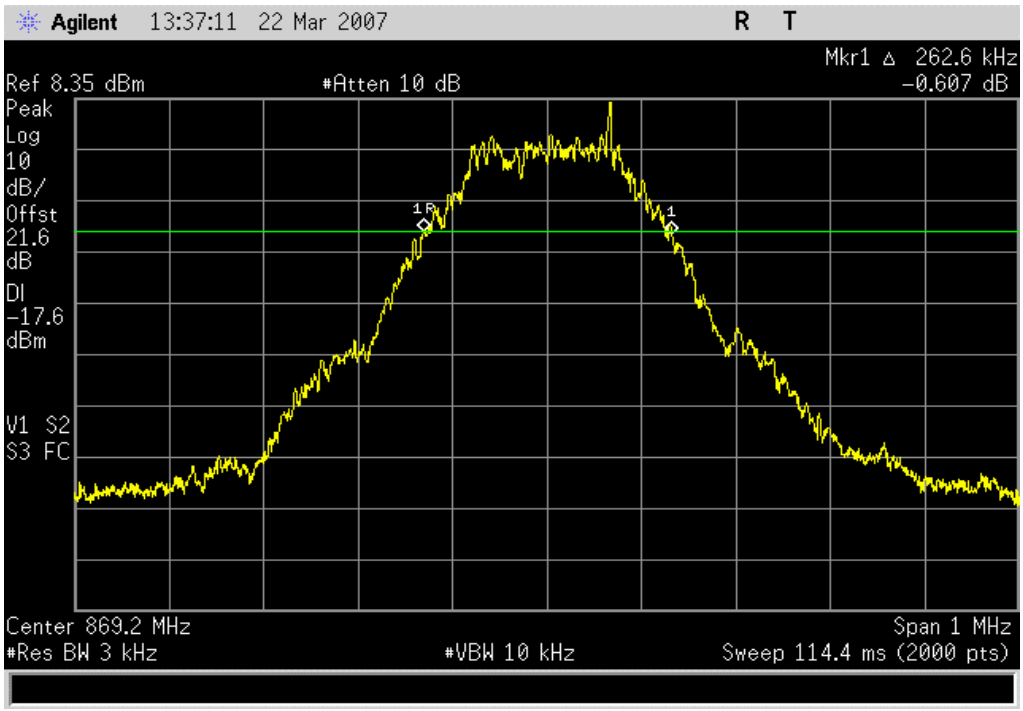
GSM Modulation, Mid Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-31.1 dBm	**Limit:**	N/A



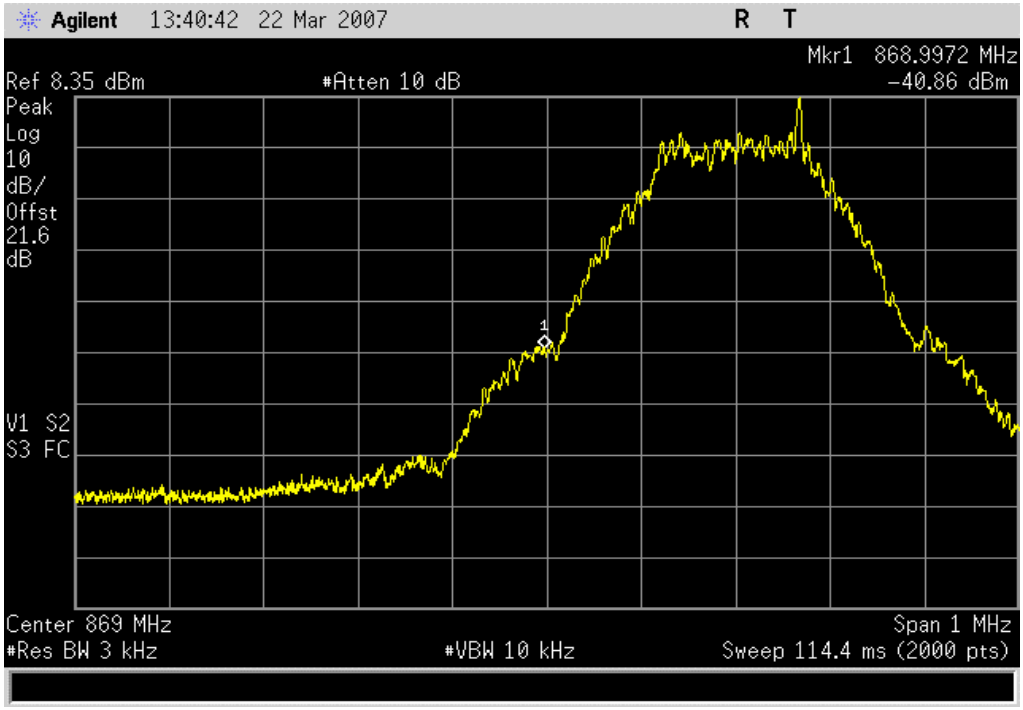
GSM Modulation, Low Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.35 dBm	**Limit:**	N/A



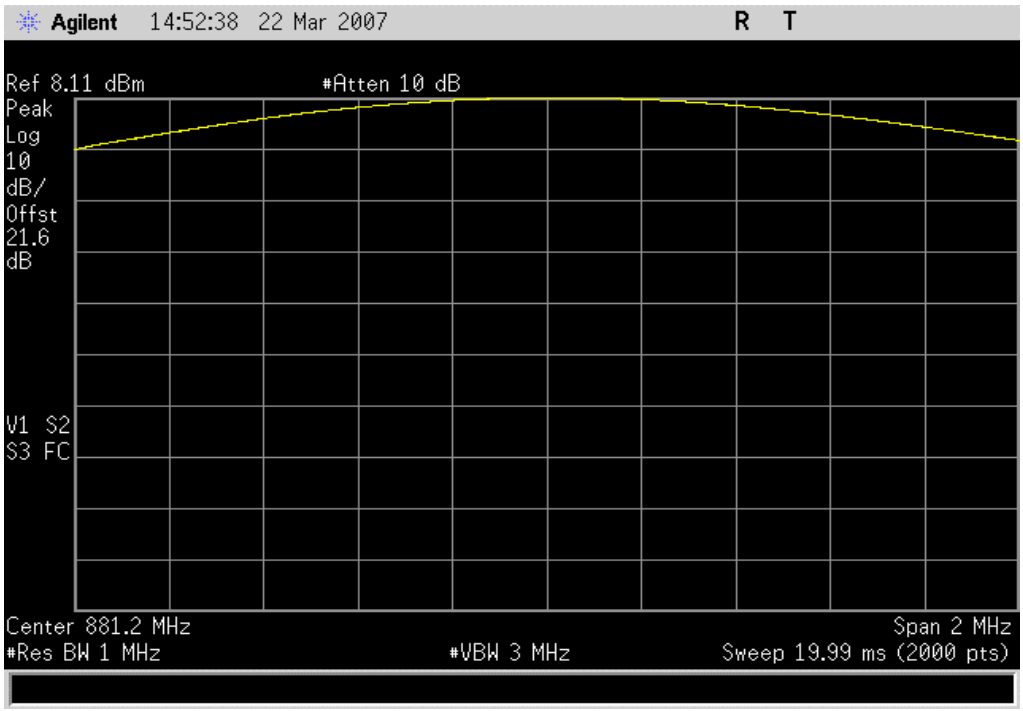
GSM Modulation, Low Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



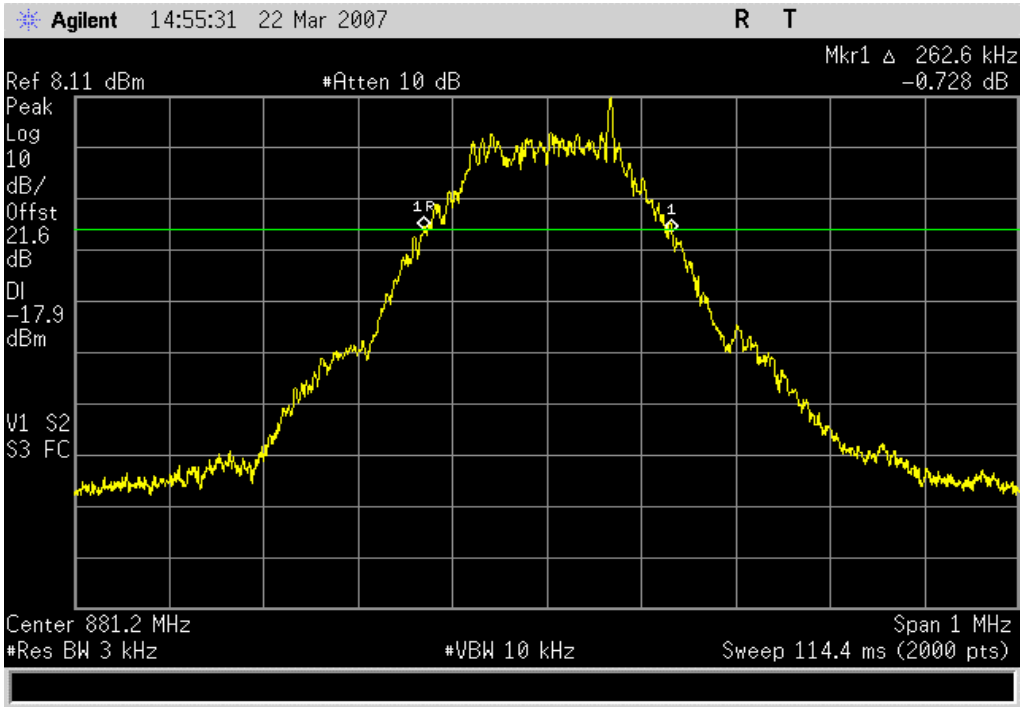
GSM Modulation, Low Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-40.86 dBm	**Limit:**	≤ -13 dBm



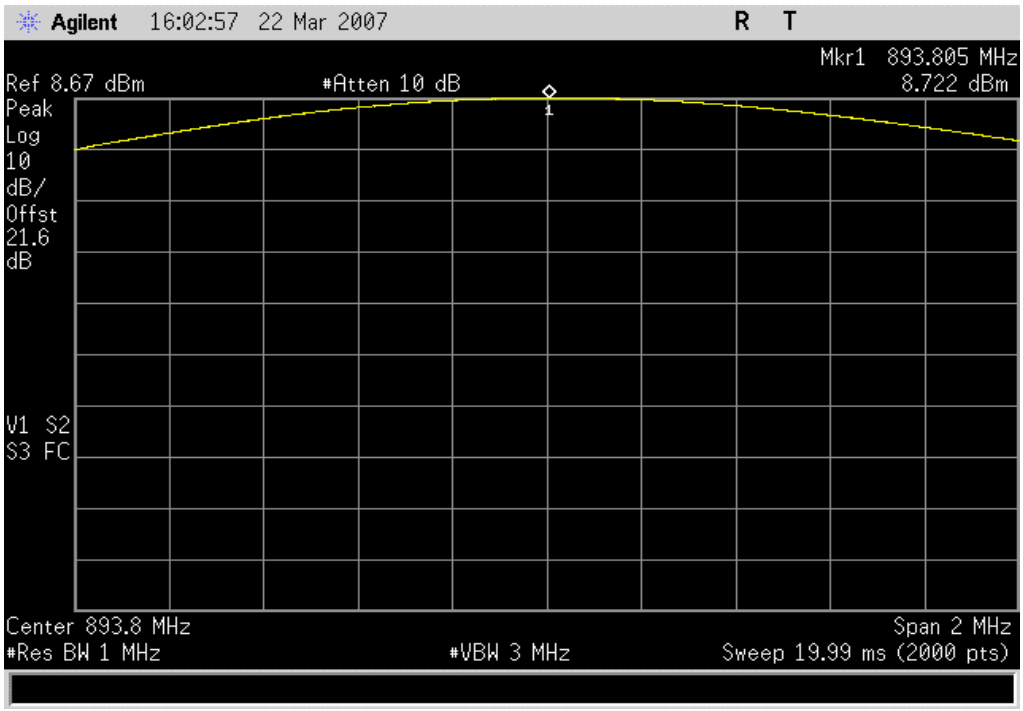
GSM Modulation, Low Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.11 dBm	**Limit:**	N/A



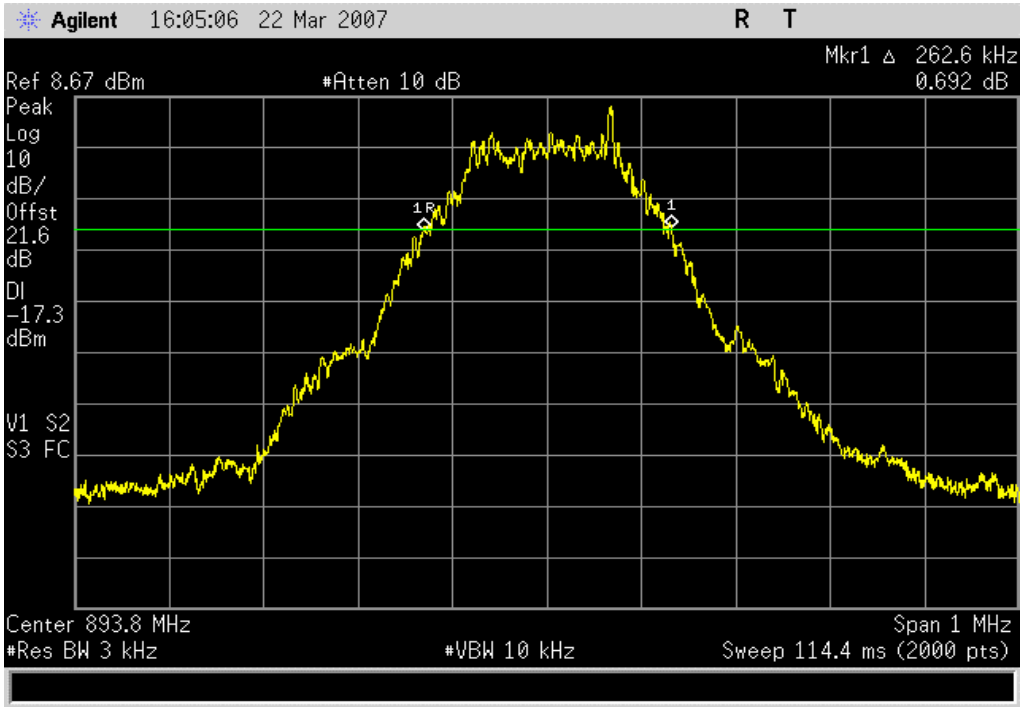
GSM Modulation, Low Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



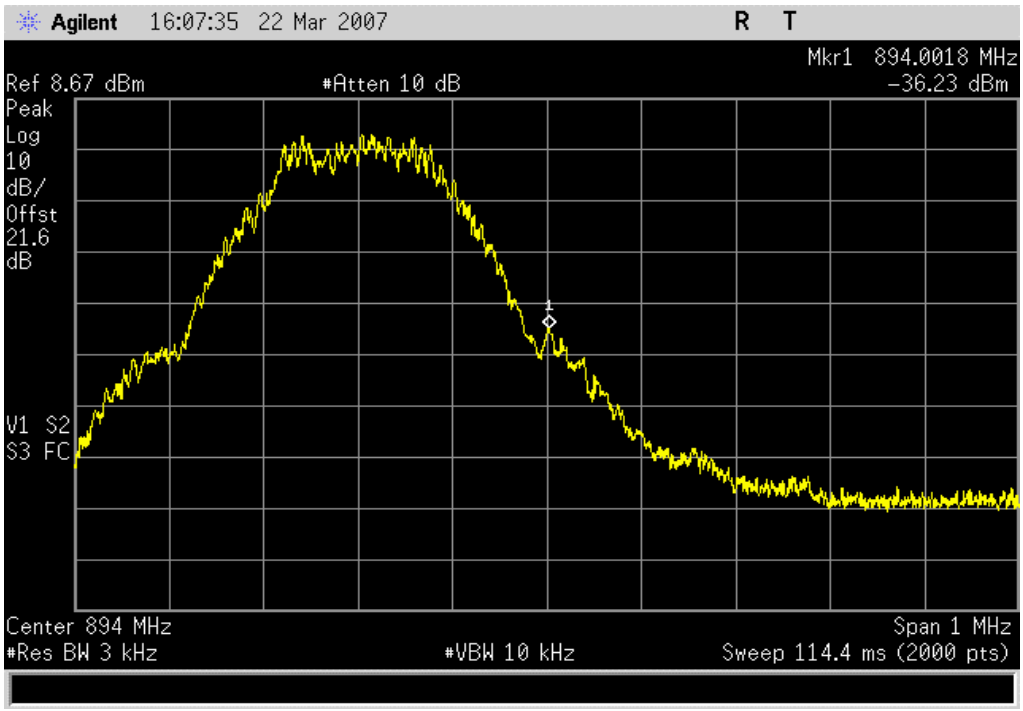
GSM Modulation, Low Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.67 dBM	**Limit:**	N/A



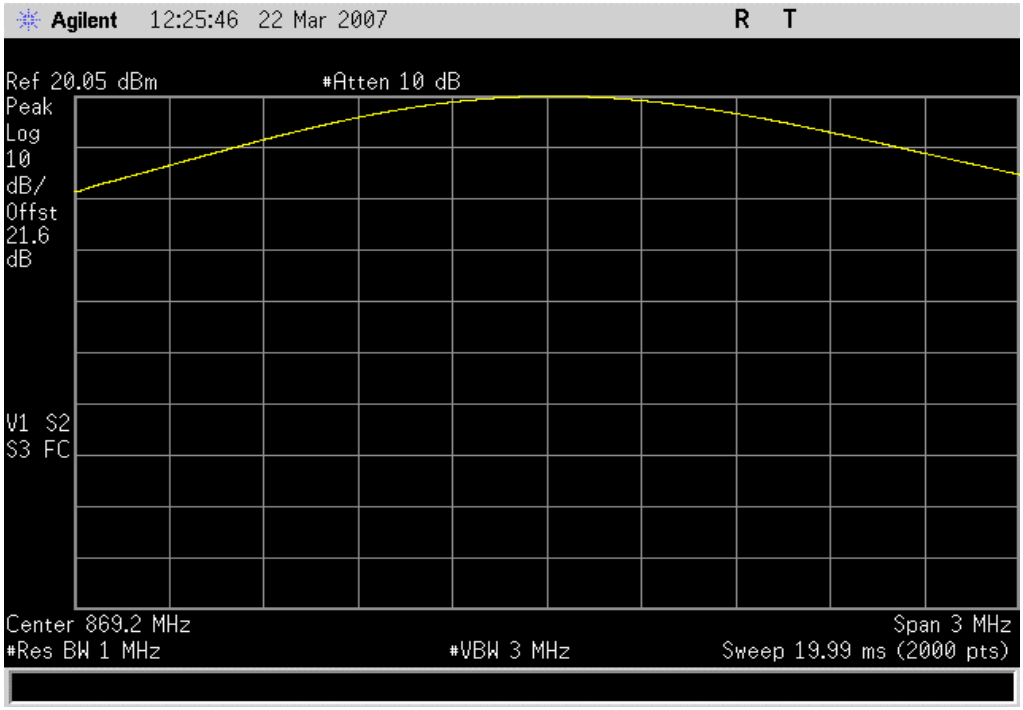
GSM Modulation, Low Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



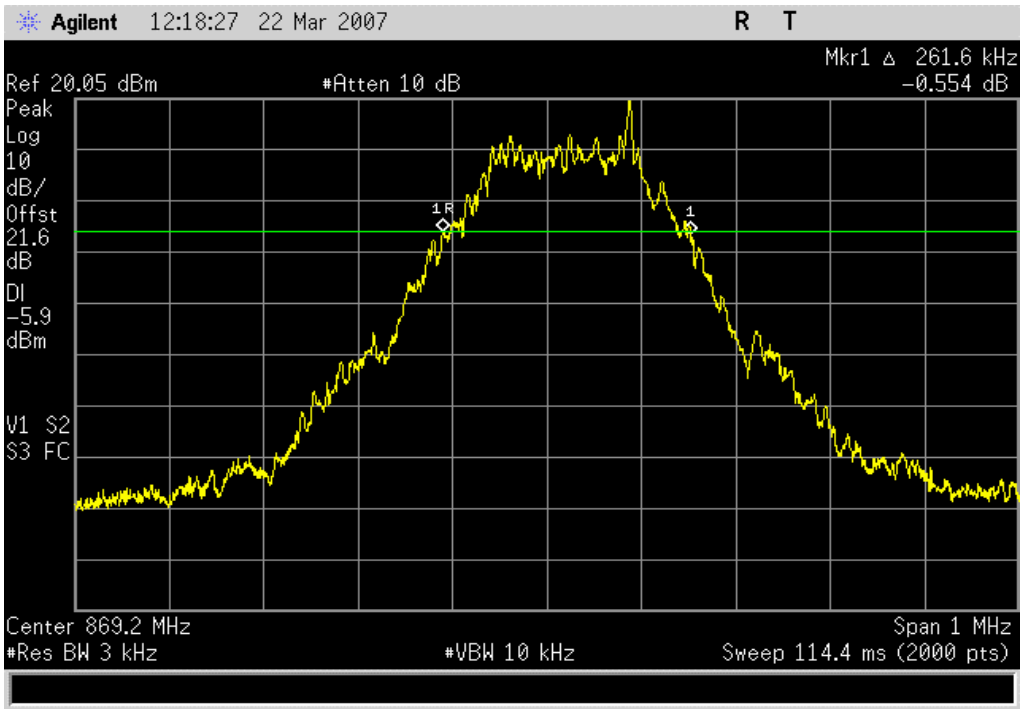
GSM Modulation, Low Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-36.23 dBm	**Limit:**	≤ -13 dBm



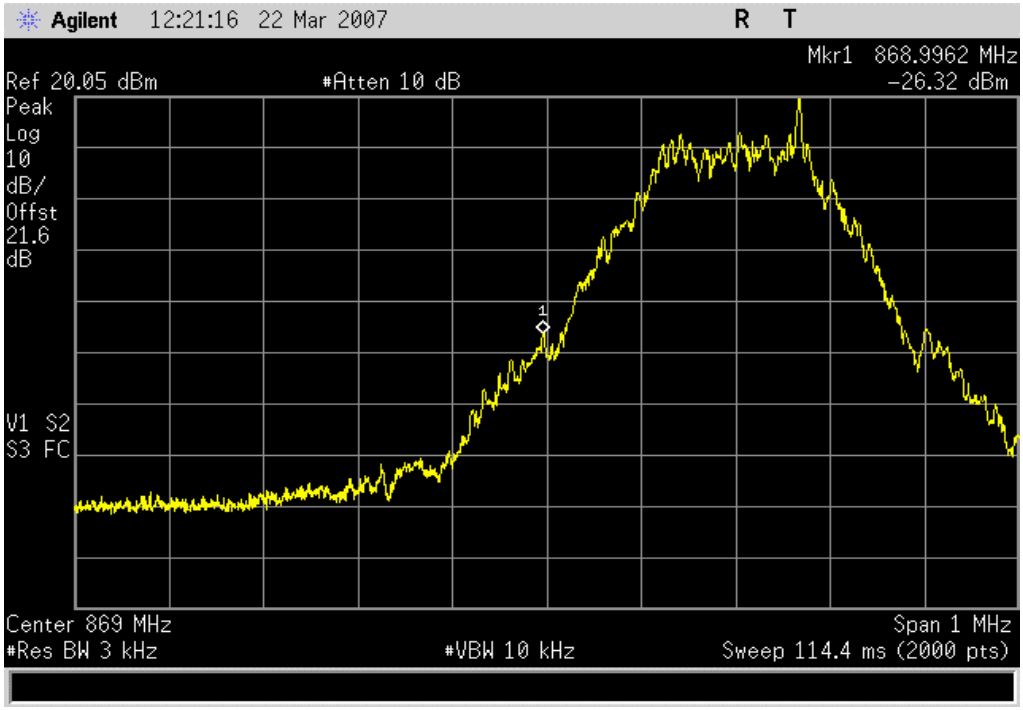
GPRS Modulation, High Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	20.05 dBm	**Limit:**	N/A



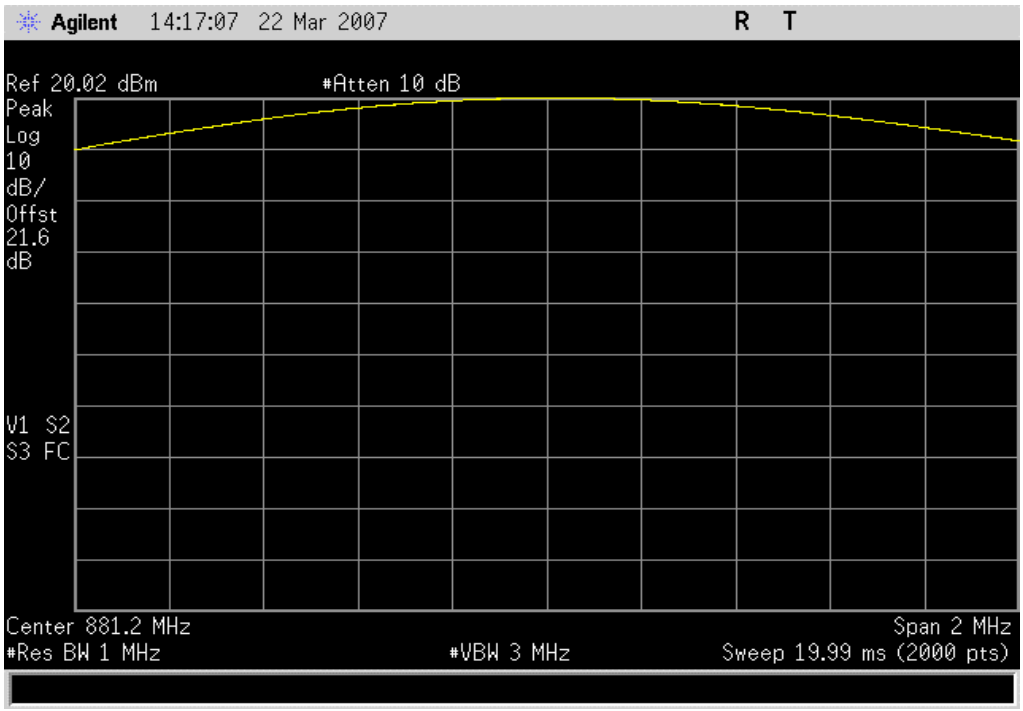
GPRS Modulation, High Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	261.6 kHz	**Limit:**	N/A



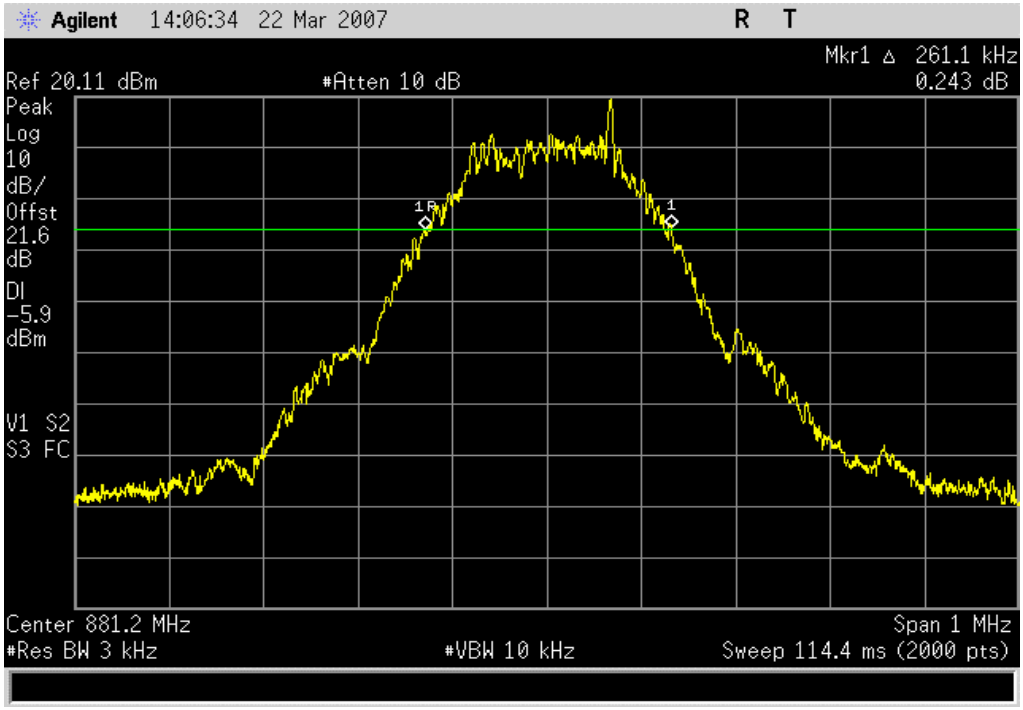
GPRS Modulation, High Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-26.32	**Limit:**	≤ -13 dBm



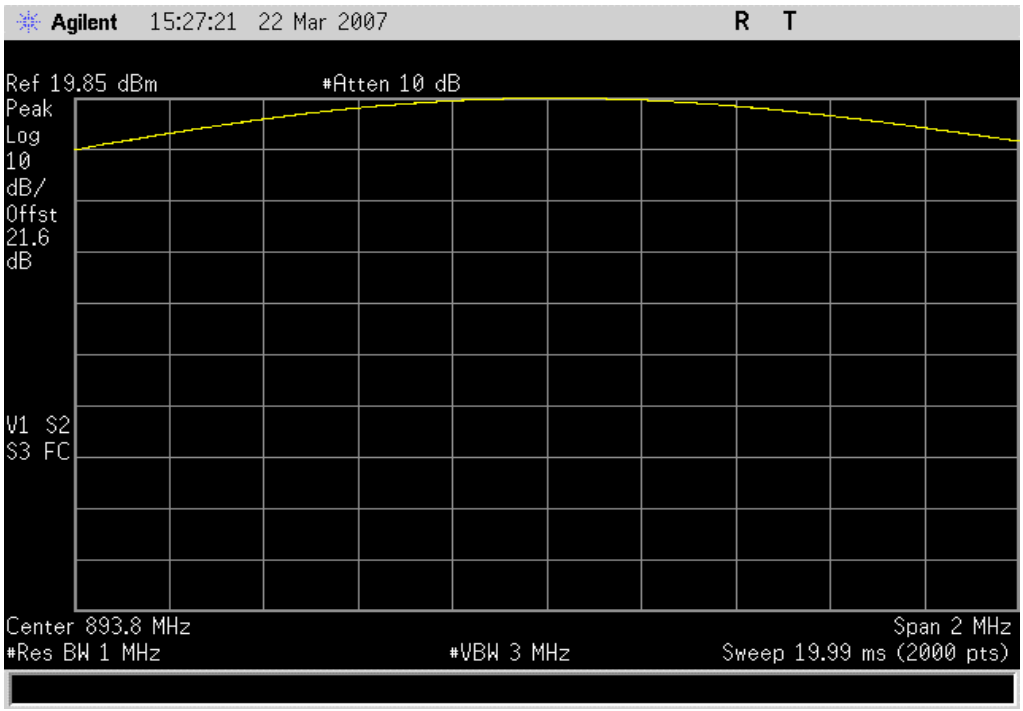
GPRS Modulation, High Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	20.02 dBm	**Limit:**	N/A



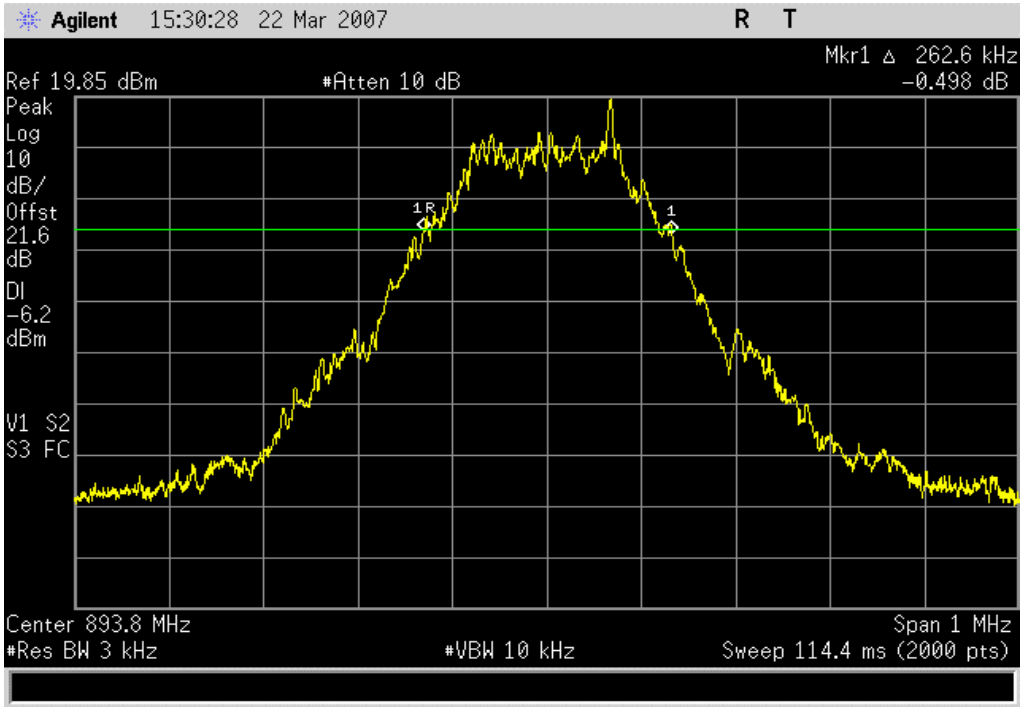
GPRS Modulation, High Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	261.1 kHz	**Limit:**	N/A



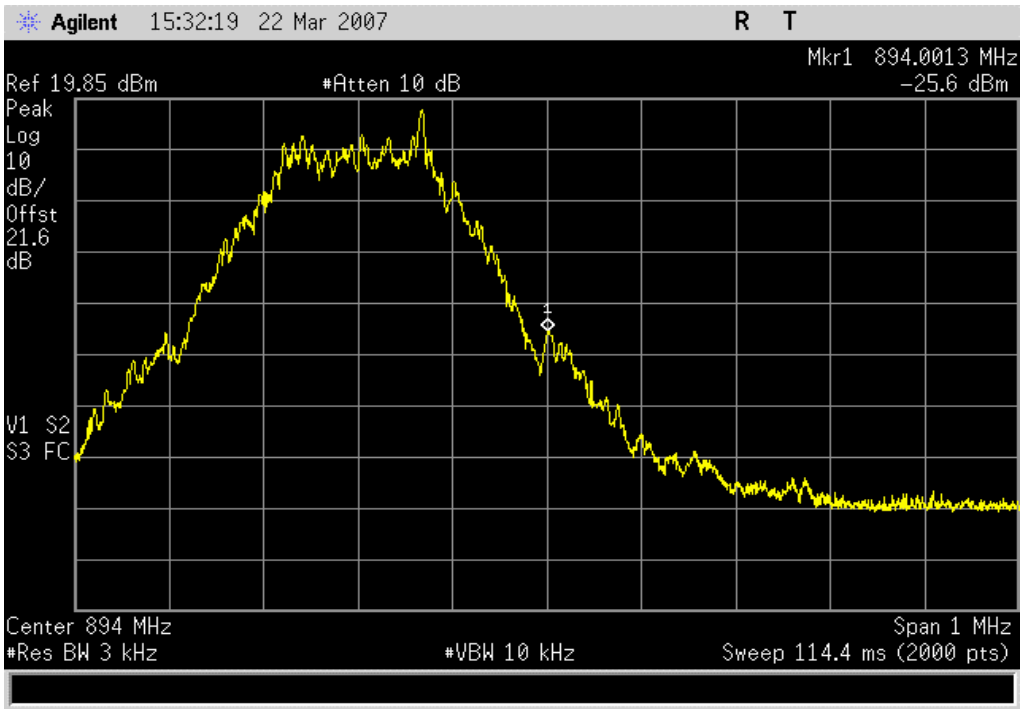
GPRS Modulation, High Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	19.85 dBm	**Limit:**	N/A



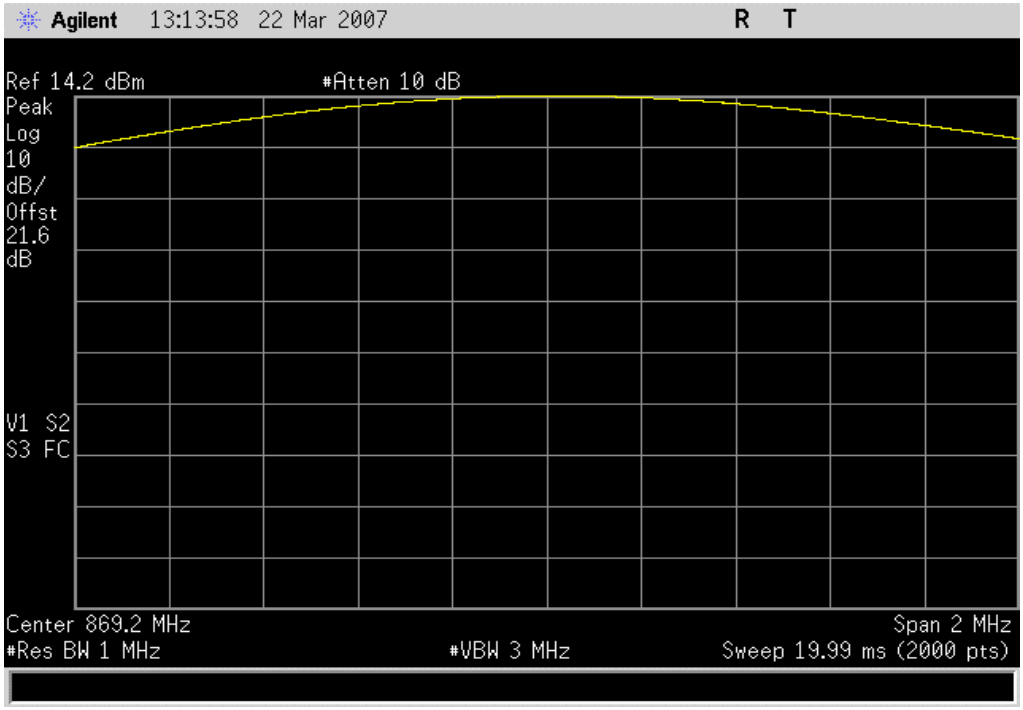
GPRS Modulation, High Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



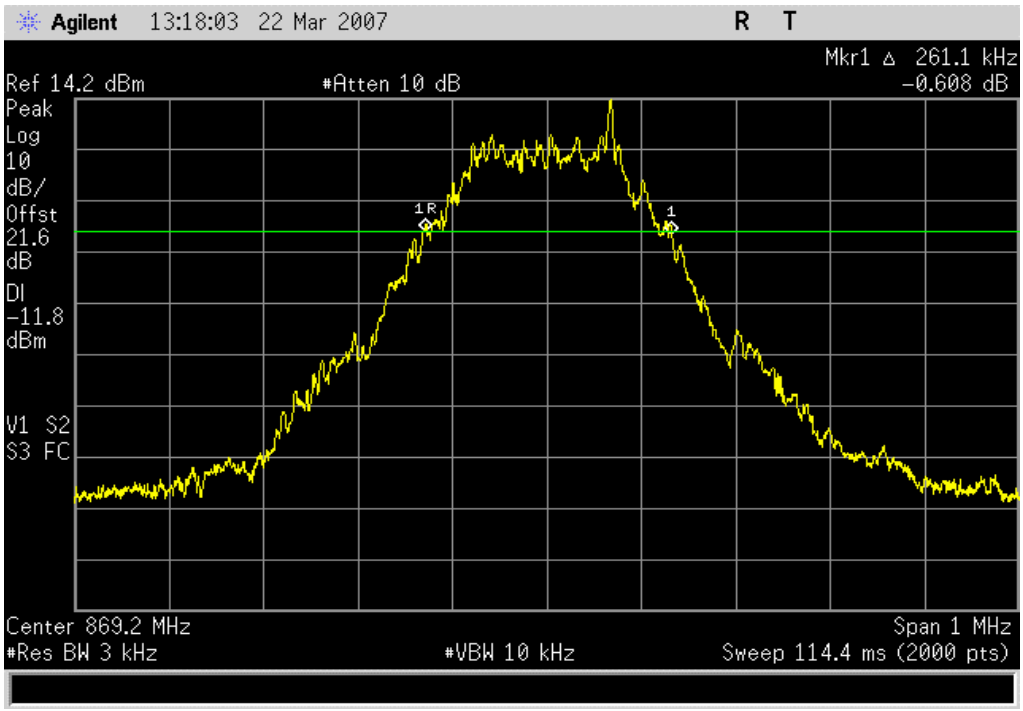
GPRS Modulation, High Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-25.6 dBm	**Limit:**	≤ -13 dBm



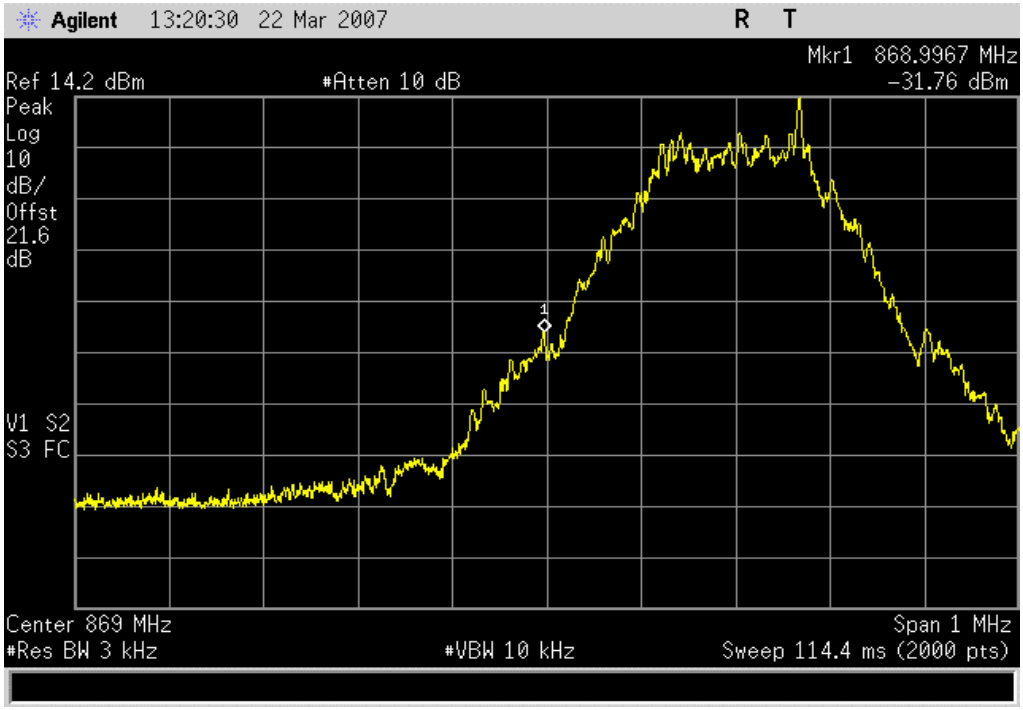
GPRS Modulation, Mid Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	14.2 dBm	**Limit:**	N/A



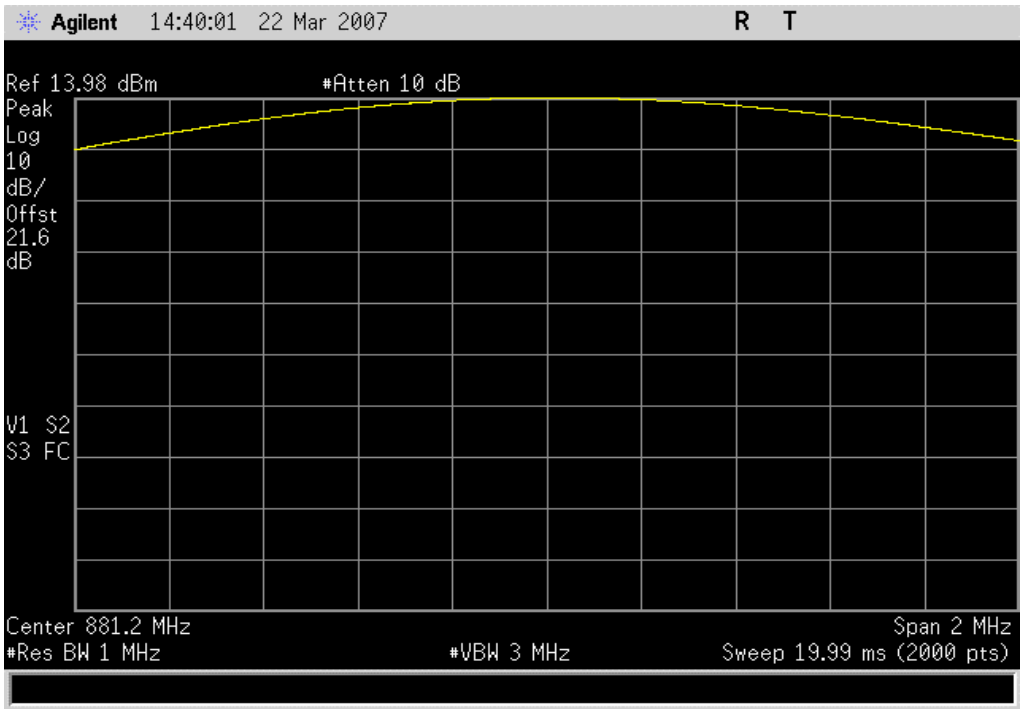
GPRS Modulation, Mid Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	261.1 kHz	**Limit:**	N/A



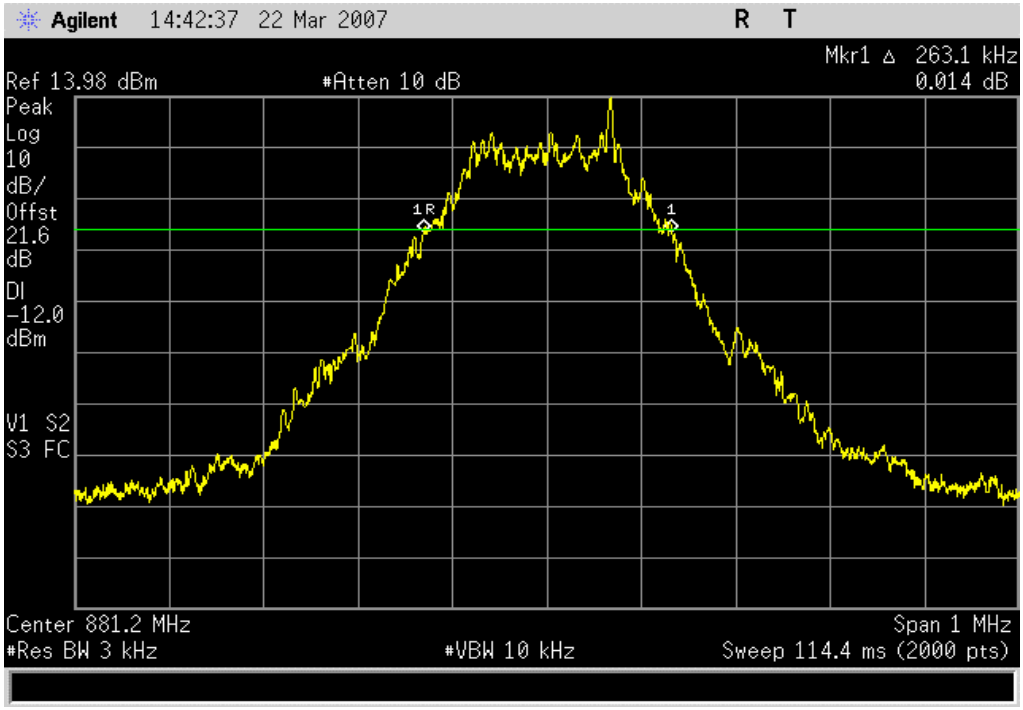
GPRS Modulation, Mid Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-31.8 dBm	**Limit:**	≤ -13 dBm



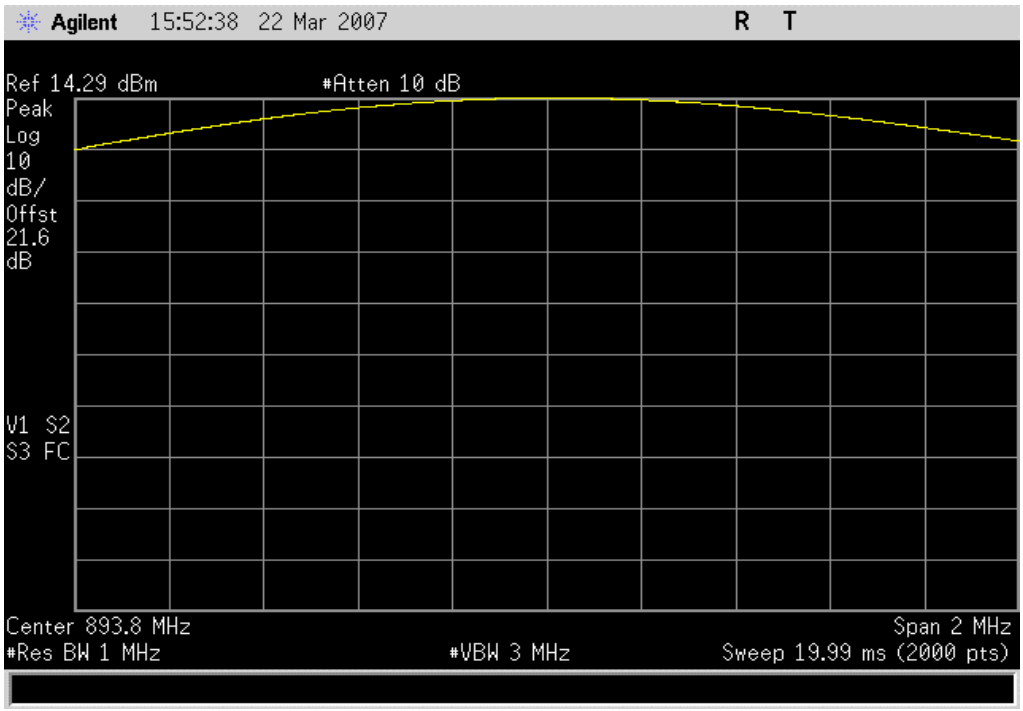
GPRS Modulation, Mid Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	13.98 dBm	**Limit:**	N/A



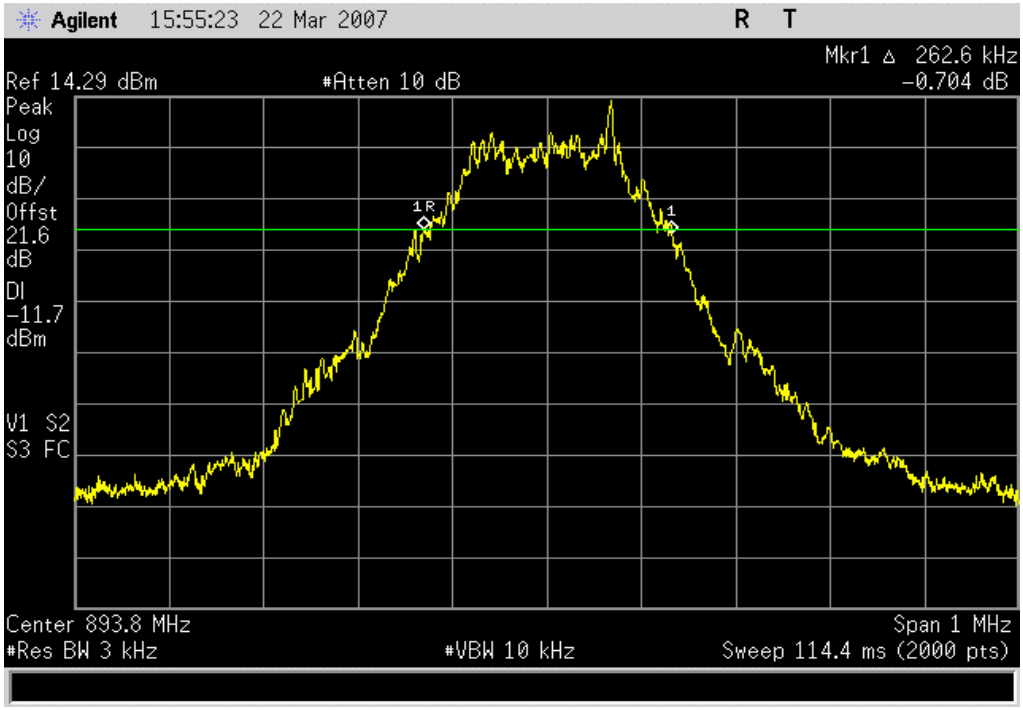
GPRS Modulation, Mid Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	263.1 kHz	**Limit:**	N/a



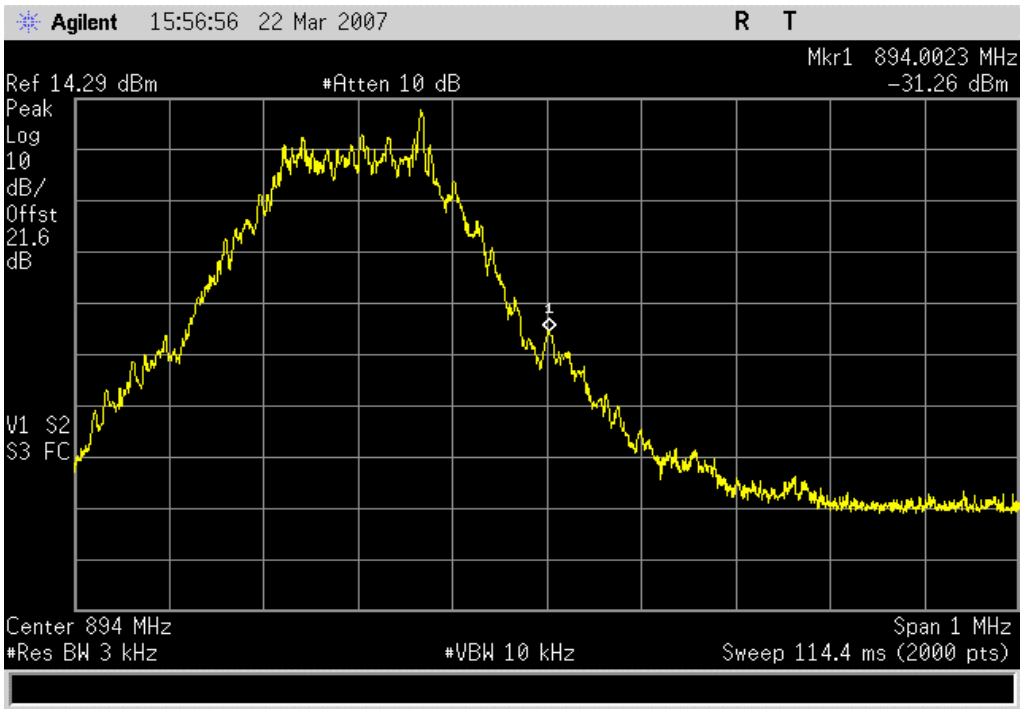
GPRS Modulation, Mid Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	14.29 dBM	**Limit:**	N/A



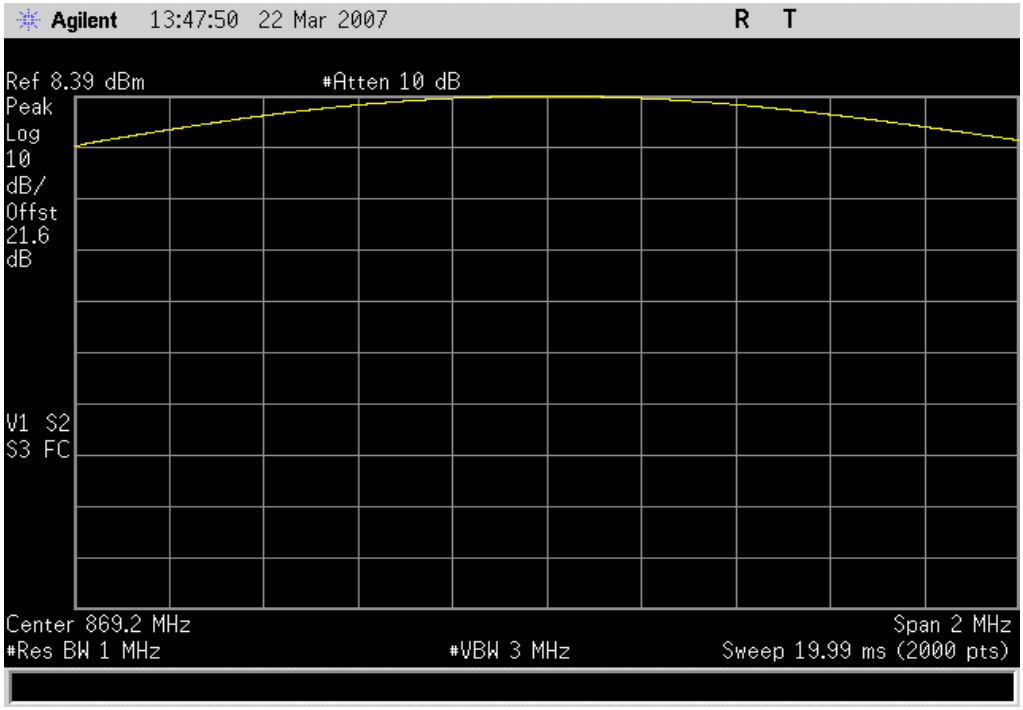
GPRS Modulation, Mid Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



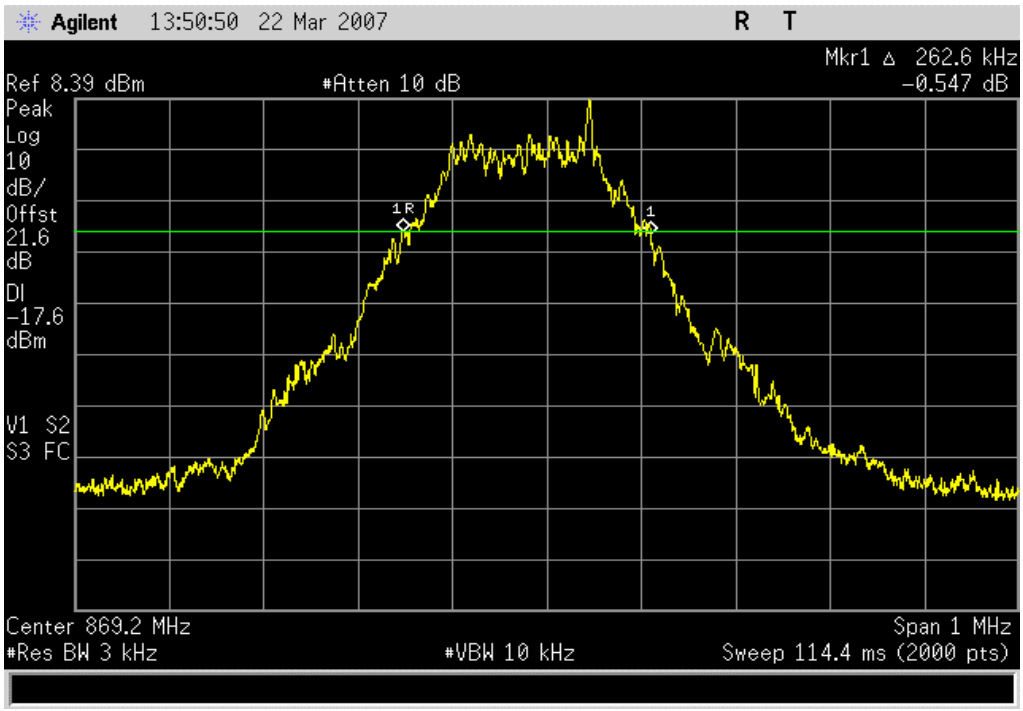
GPRS Modulation, Mid Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-31.26 dBm	**Limit:**	≤ -13 dBM



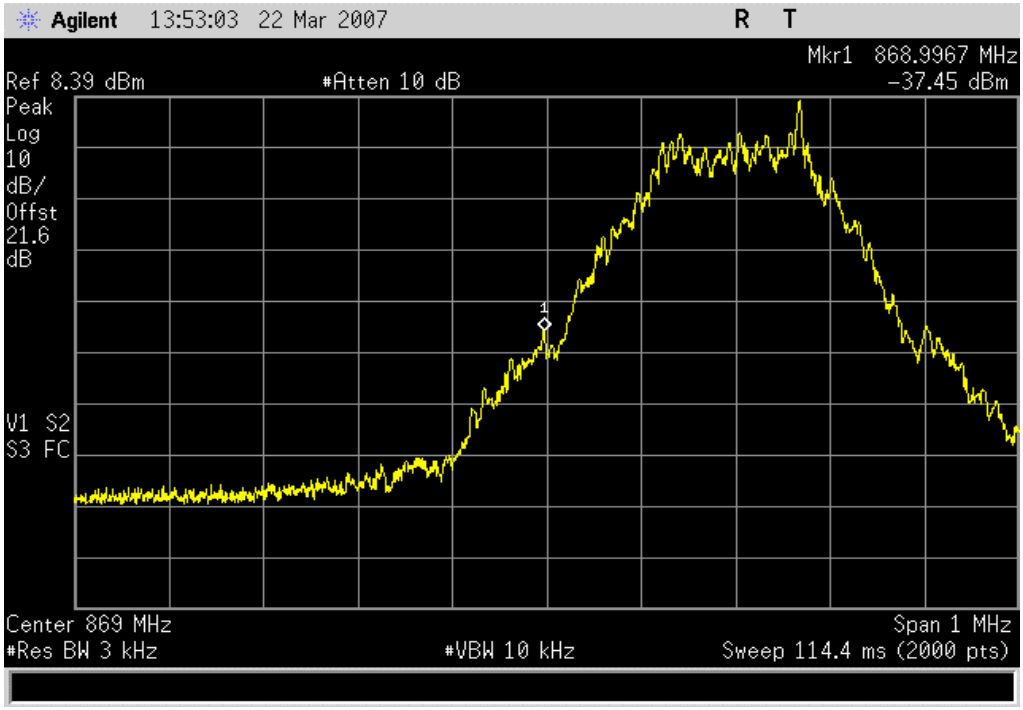
GPRS Modulation, Low Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.39 dBm	**Limit:**	N/A



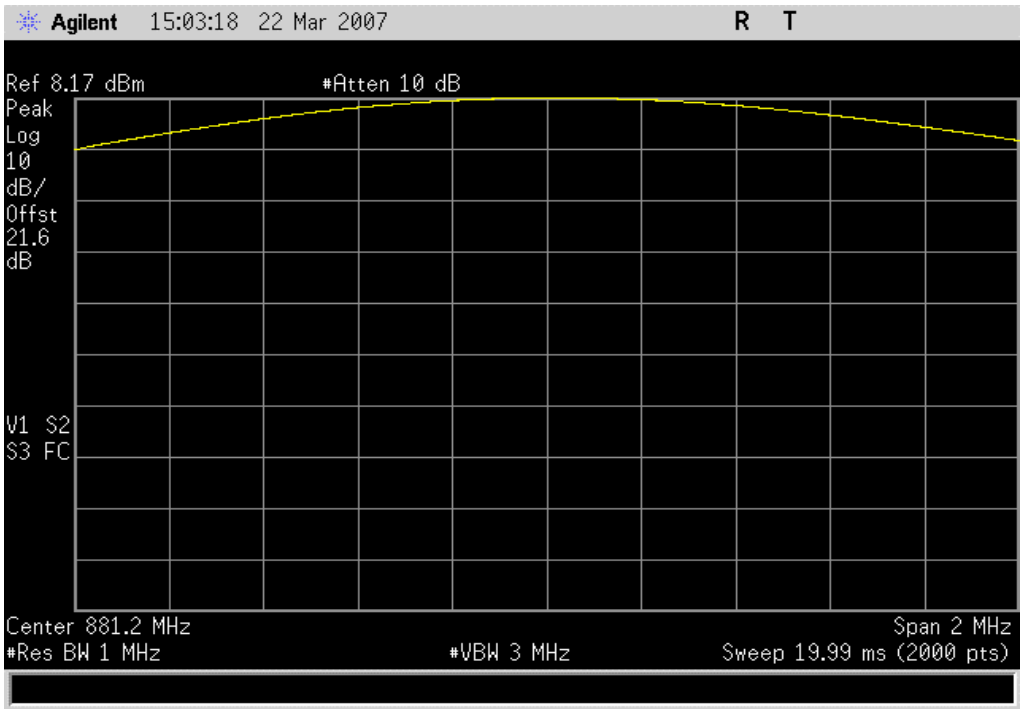
GPRS Modulation, Low Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



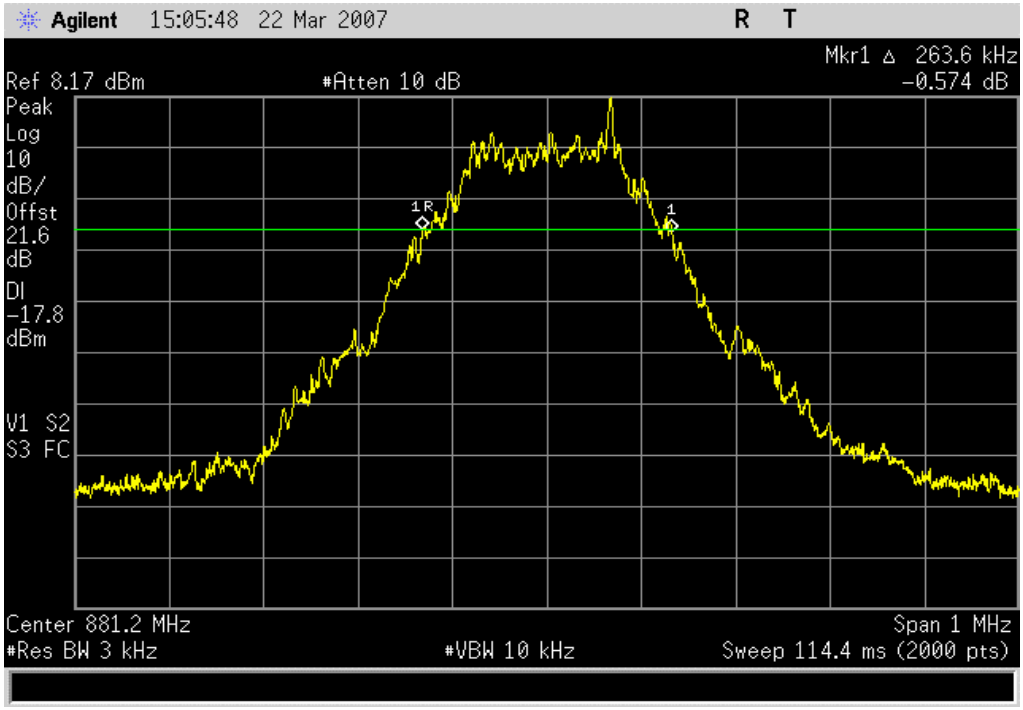
GPRS Modulation, Low Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-37.45 dBm	**Limit:**	≤ -13 dBm



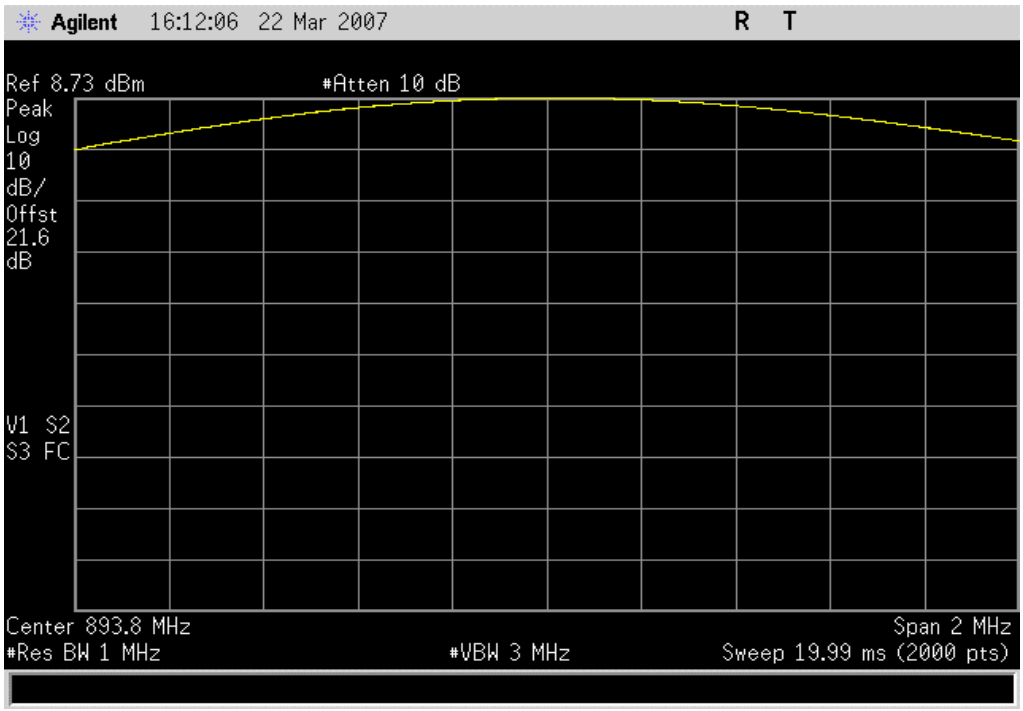
GPRS Modulation, Low Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.17 dBm	**Limit:**	N/A



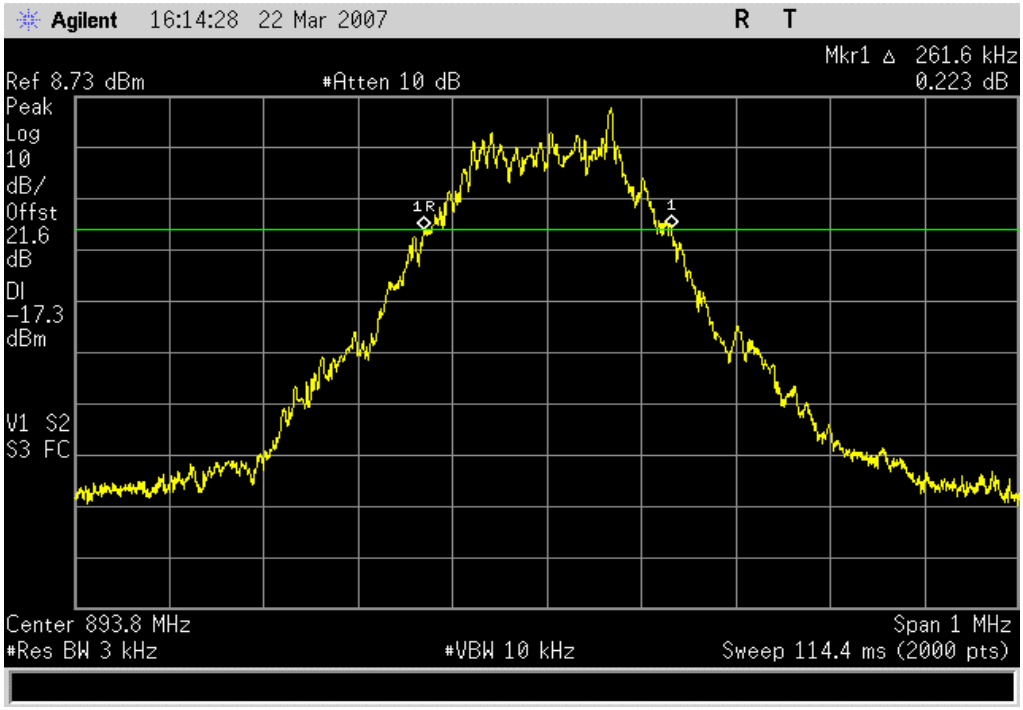
GPRS Modulation, Low Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	263.6 kHz	**Limit:**	N/A



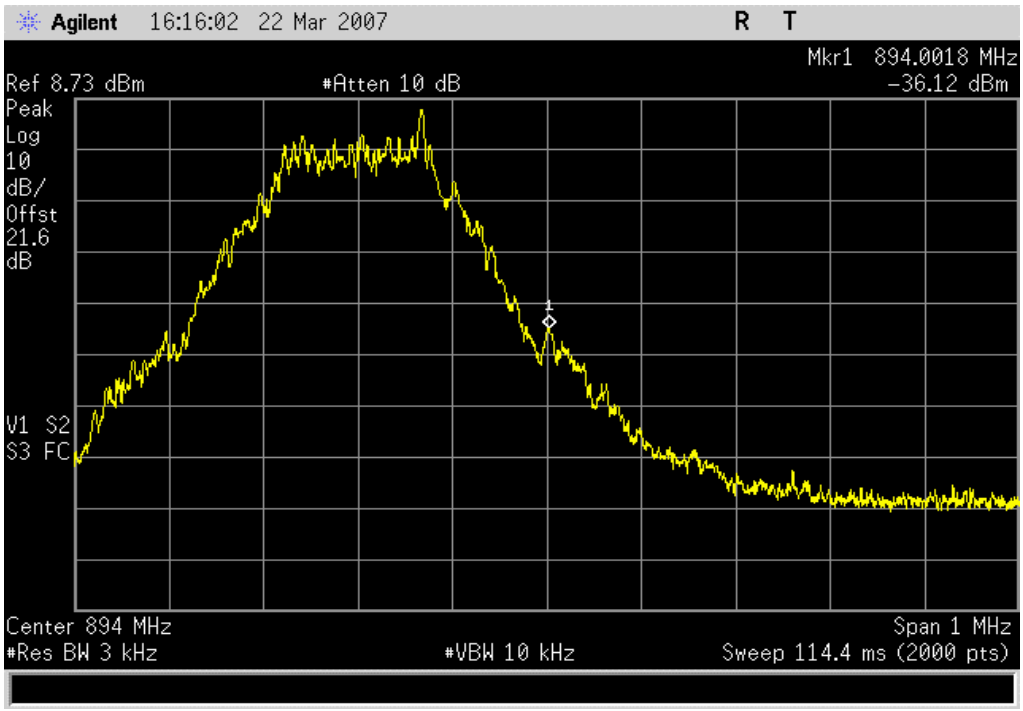
GPRS Modulation, Low Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	8.73 dBm	**Limit:**	N/A

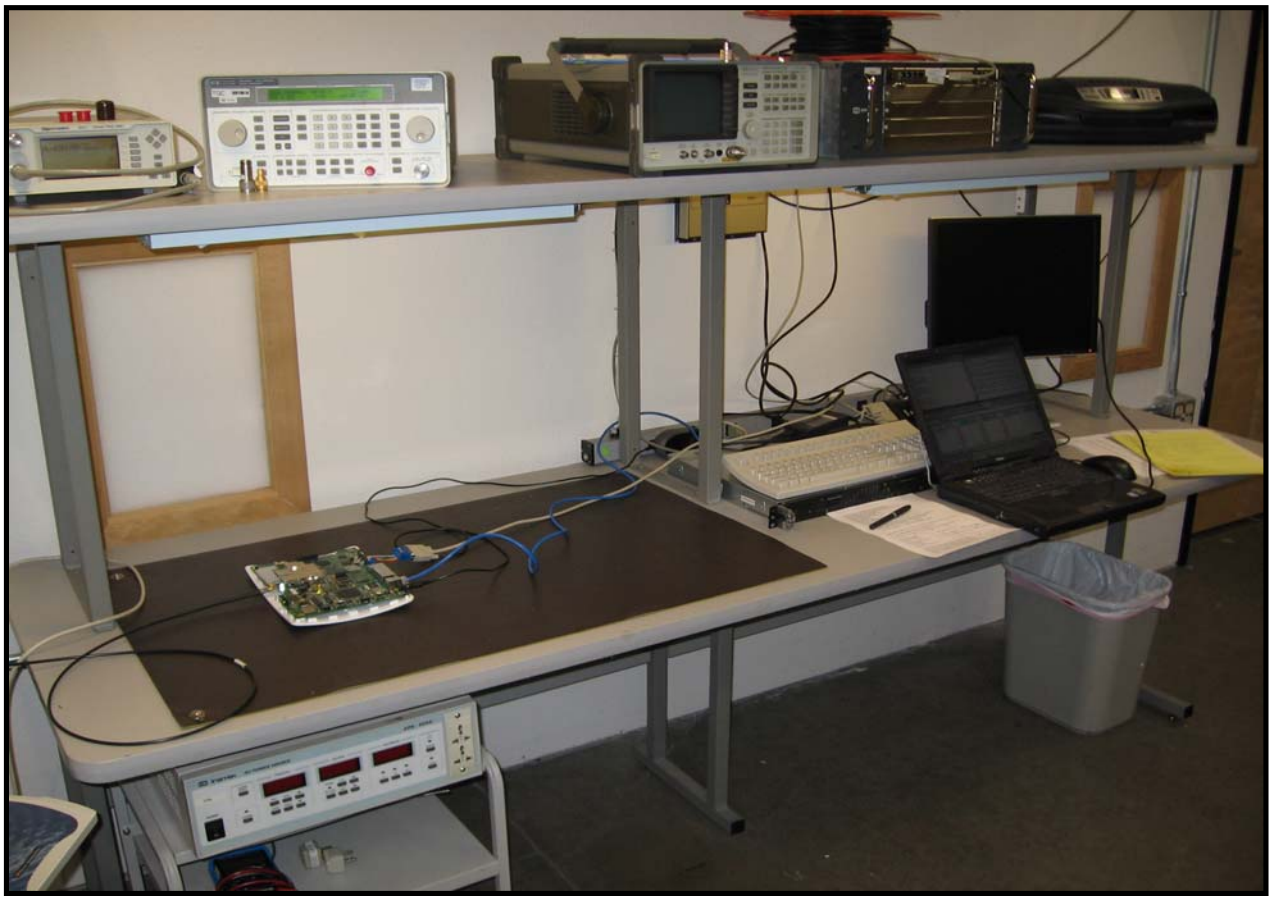


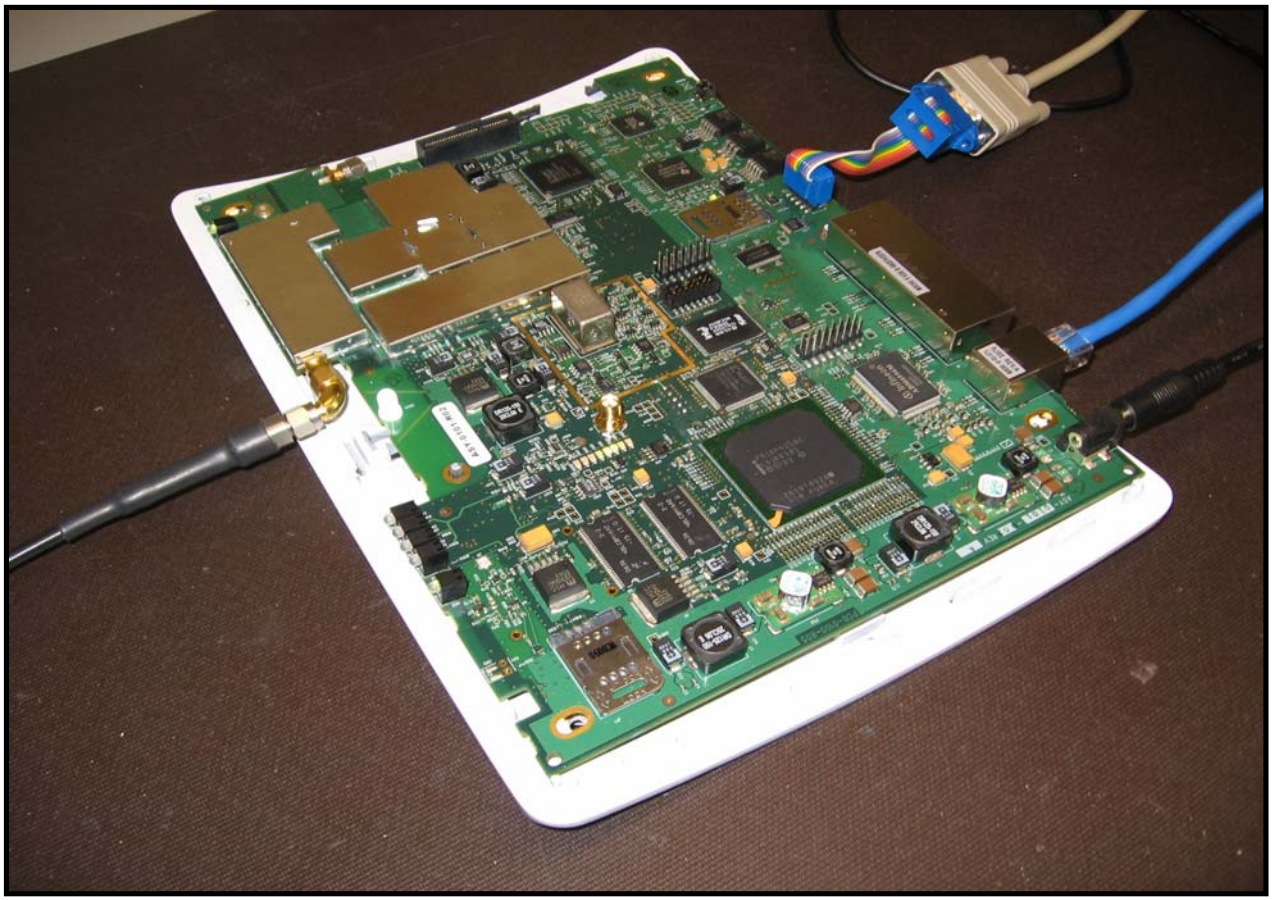
GPRS Modulation, Low Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	261.6 kHz	**Limit:**	N/A



GPRS Modulation, Low Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-36.12 dBm	**Limit:**	≤ -13 dBm







Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4407B	AAU	12/8/2006	13
Attenuator	Pasternack	PE7005-20	AUN	2/6/2007	13
Power Meter	Gigatronics	8651A	SPM	9/19/2006	12
Power Sensor	Gigatronics	80701A	SPL	9/19/2006	12
Signal Generator	Hewlett-Packard	8648D	TGC	12/7/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The 99% bandwidth was measured utilizing the analyzer's peak detector and measuring the carrier's 26 dB occupied bandwidth based on the peak output power level measured. A plot was taken to show the occupied bandwidth is contained within the allowable transmit band.

A direct connection was made between the EUT and a spectrum analyzer. At 3 kHz the spectrum analyzer's resolution bandwidth was sufficiently narrow to plot the actual bandwidth of the signal and not the filter response curve of the spectrum analyzer. The resolution bandwidth was approximately equal to 1% of the 20dB bandwidth and the video bandwidth was greater than or equal to the resolution bandwidth.

The occupied bandwidth was measured with the EUT configured in the modes called out in the data sheets.

NORTHWEST EMC

OCCUPIED BANDWIDTH

XMit 2006.11.13

EUT:	S-BTS GSM Base Station	Work Order:	RAFN0069
Serial Number:	Engineering Unit	Date:	03/22/07
Customer:	Radioframe Networks, Inc.	Temperature:	21°C
Attendees:	Bob Melsheimer	Humidity:	32%
Project:	None	Barometric Pres.:	30.18
Tested by:	Rod Peloquin	Power: 120VAC/60Hz	Job Site: EV06

TEST SPECIFICATIONS	Test Method
FCC 24E:2005	ANSI/TIA/EIA-603-B-2002

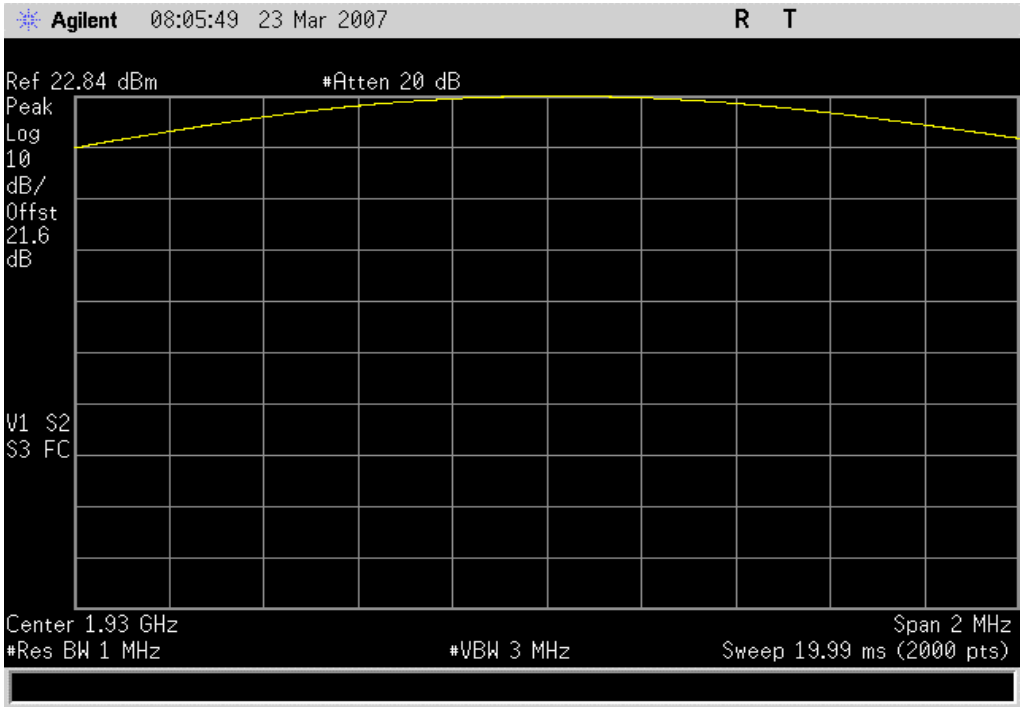
COMMENTS

DEVIATIONS FROM TEST STANDARD

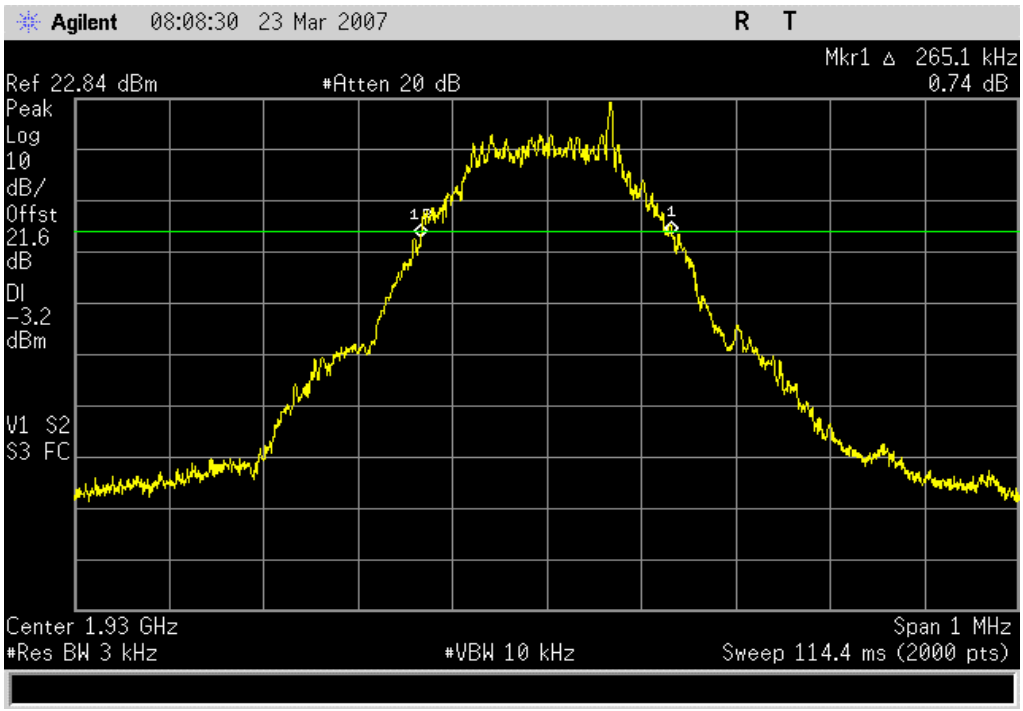
Configuration #	1	Signature

			Value	Limit	Results
GSM Modulation					
	High Power				
		Low Channel			
		Reference Level Plot	22.84 dBm	N/A	N/A
		Occupied Bandwidth	265.1 kHz	N/A	N/A
		Band Edge	-24.5 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	22.93 dBm	N/A	N/A
		Occupied Bandwidth	266.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	21.54 dBm	N/A	N/A
		Occupied Bandwidth	266.6 kHz	N/A	N/A
		Band Edge	-22.9 dBm	≤ -13 dBm	Pass
	Mid Power				
		Low Channel			
		Reference Level Plot	16.79 dBm	N/A	N/A
		Occupied Bandwidth	266.6 kHz	N/A	N/A
		Band Edge	-31.6 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	17.47 dBm	N/A	N/A
		Occupied Bandwidth	272.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	17.76 dBm	N/A	N/A
		Occupied Bandwidth	268.6 kHz	N/A	N/A
		Band Edge	-26.83	N/A	Pass
	Low Power				
		Low Channel			
		Reference Level Plot	10.89 dBm	N/A	N/A
		Occupied Bandwidth	266.1 kHz	N/A	N/A
		Band Edge	-37.1 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	11.95 dBm	N/A	N/A
		Occupied Bandwidth	265.6 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	12.76 dBm	N/A	N/A
		Occupied Bandwidth	269.6 kHz	N/A	N/A
		Band Edge	-32.0 dBm	≤ -13 dBm	Pass
GPRS Modulation					
	High Power				
		Low Channel			
		Reference Level Plot	22.81 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-23.32 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	22.94 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	21.53 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-23.12 dBm	≤ -13 dBm	Pass
	Mid Power				
		Low Channel			
		Reference Level Plot	16.79 dBm	N/A	N/A
		Occupied Bandwidth	264.6 kHz	N/A	N/A
		Band Edge	-28.39 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	17.52 dBm	N/A	N/A
		Occupied Bandwidth	262.1 kHz	N/a	N/A
		High Channel			
		Reference Level Plot	17.76 dBm	N/A	N/A
		Occupied Bandwidth	262.1 kHz	N/A	N/A
		Band Edge	-27.49 dBm	≤ -13 dBM	Pass
	Low Power				
		Low Channel			
		Reference Level Plot	10.88 dBm	N/A	N/A
		Occupied Bandwidth	262.6 kHz	N/A	N/A
		Band Edge	-34.57 dBm	≤ -13 dBm	Pass
		Mid Channel			
		Reference Level Plot	11.94 dBm	N/A	N/A
		Occupied Bandwidth	262.1 kHz	N/A	N/A
		High Channel			
		Reference Level Plot	12.75 dBm	N/A	N/A
		Occupied Bandwidth	262.1 kHz	N/A	N/A
		Band Edge	-31.88 dBm	≤ -13 dBm	Pass

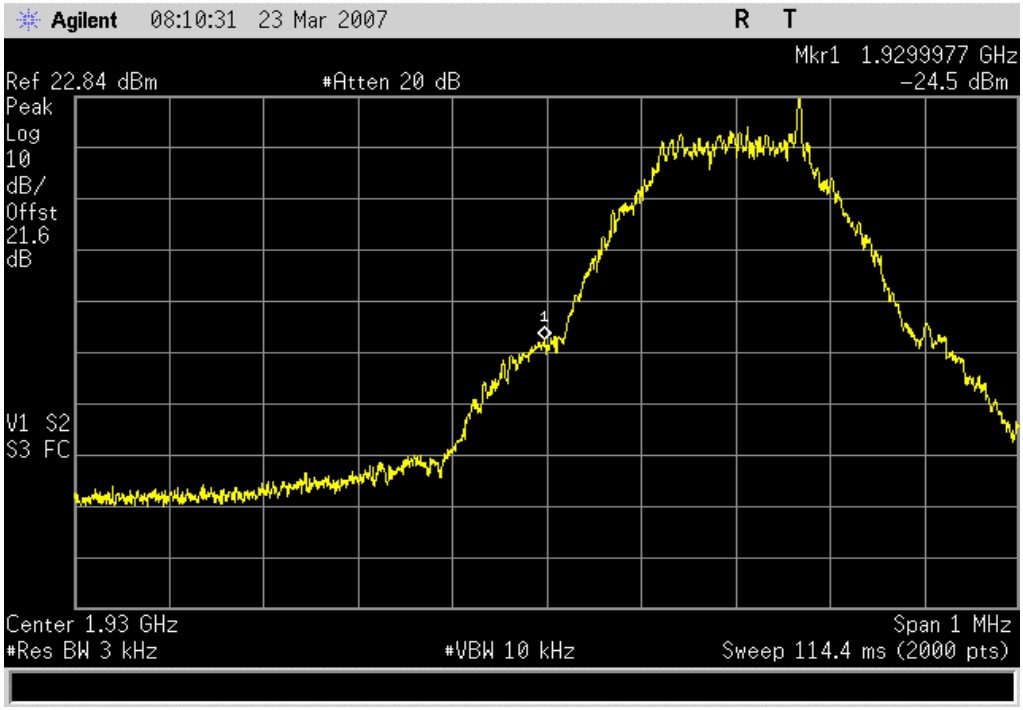
GSM Modulation, High Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	22.84 dBm	**Limit:**	N/A



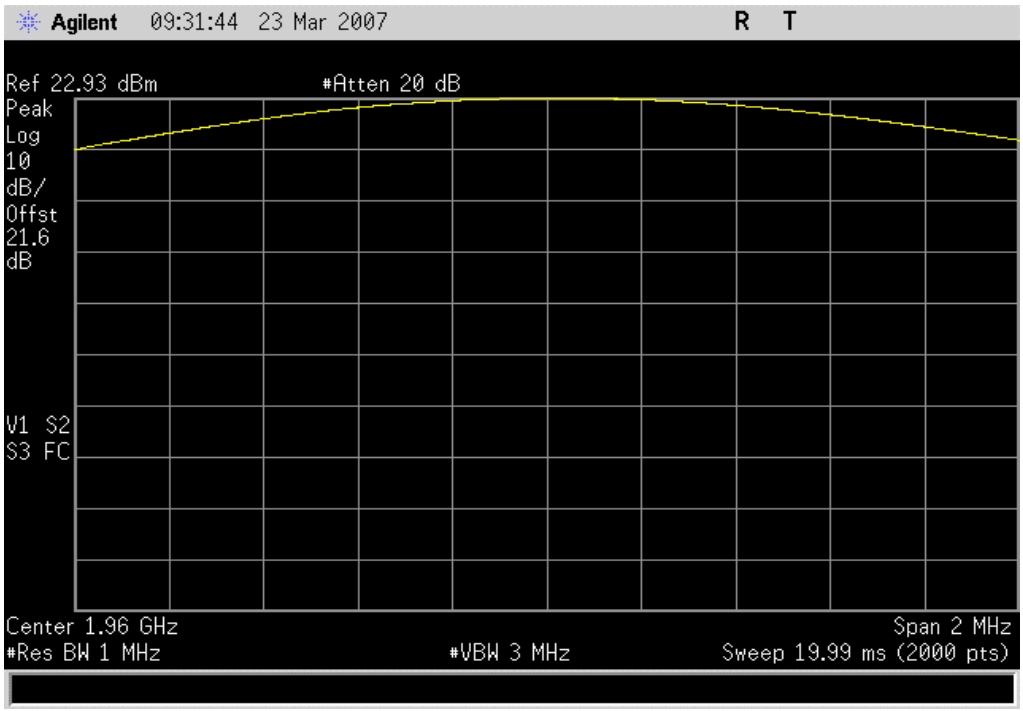
GSM Modulation, High Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	265.1 kHz	**Limit:**	N/A



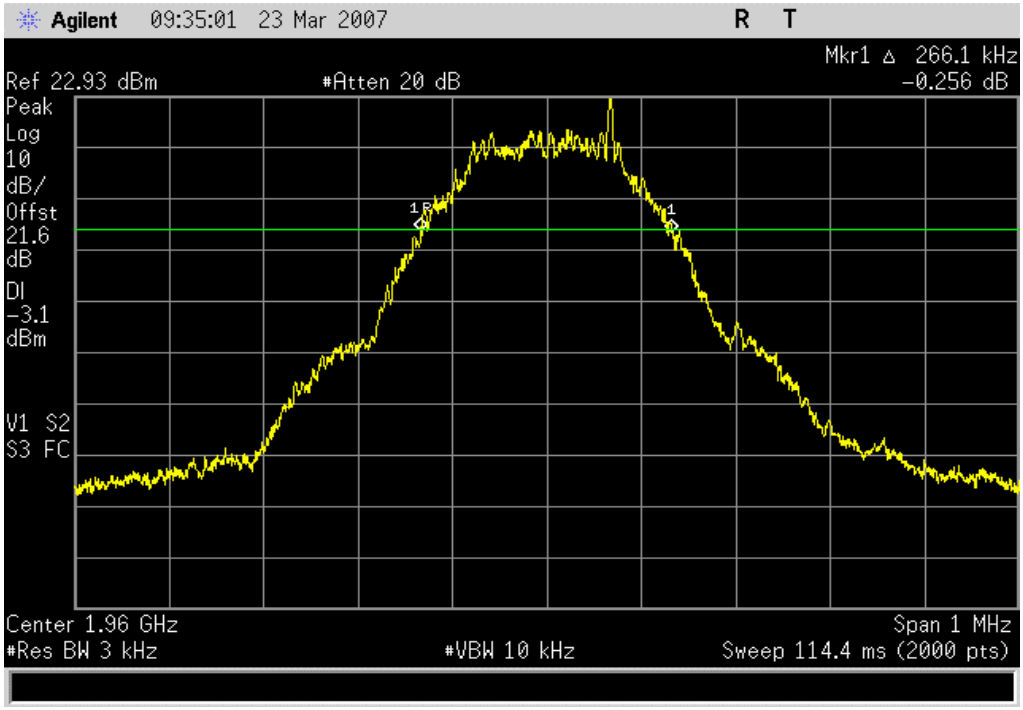
GSM Modulation, High Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-24.5 dBm	**Limit:**	≤ -13 dBm



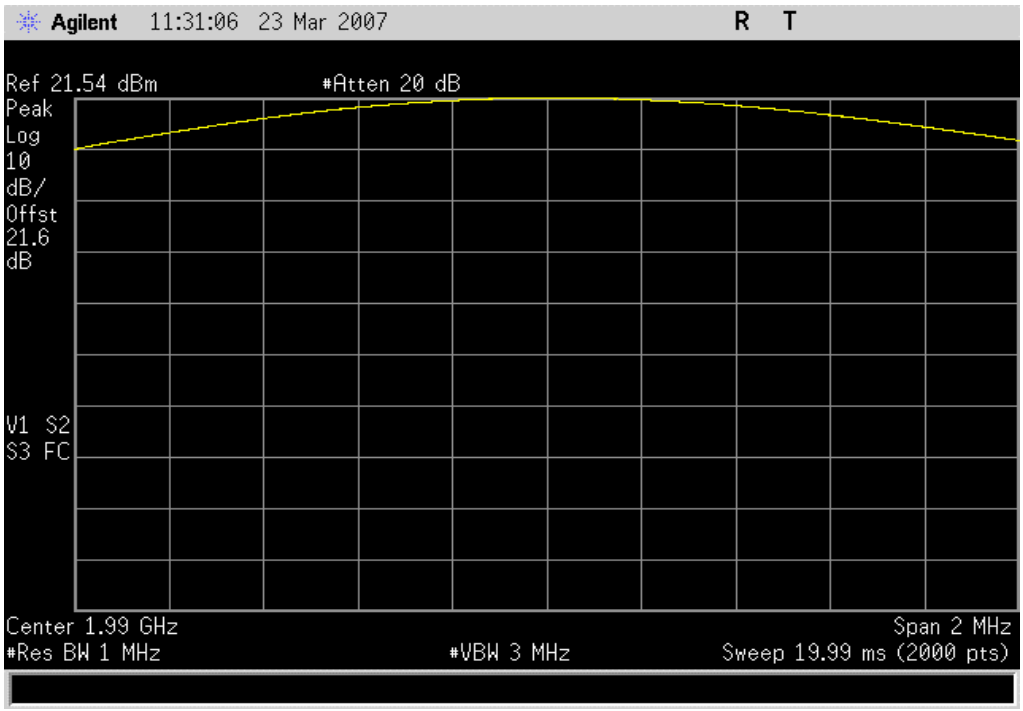
GSM Modulation, High Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	22.93 dBm	**Limit:**	N/A



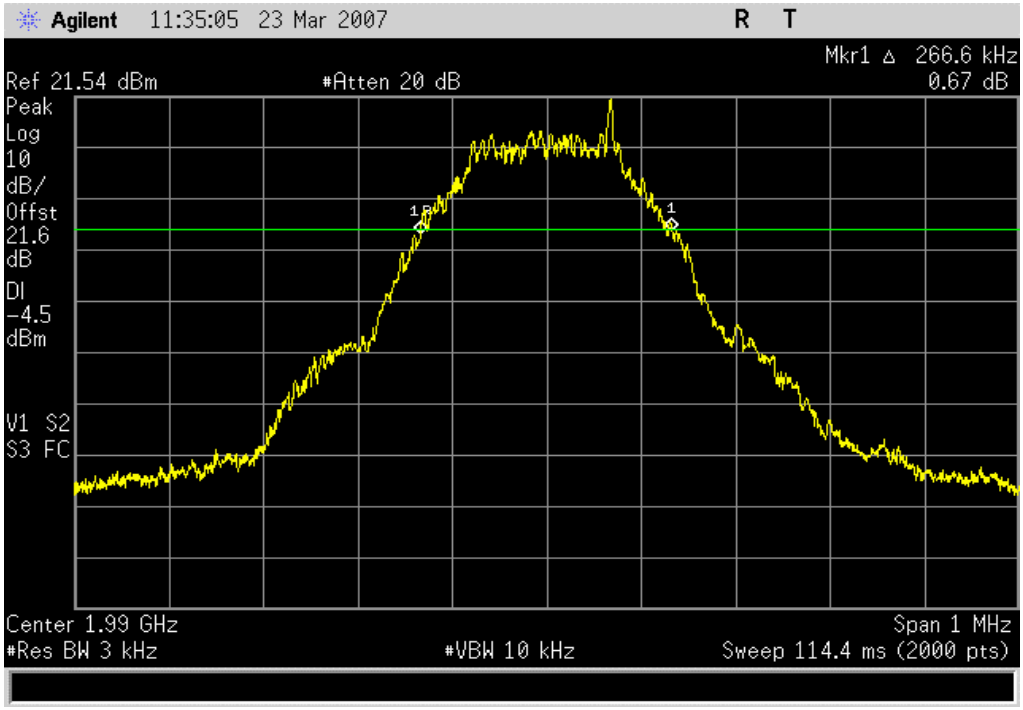
GSM Modulation, High Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	266.1 kHz	**Limit:**	N/A



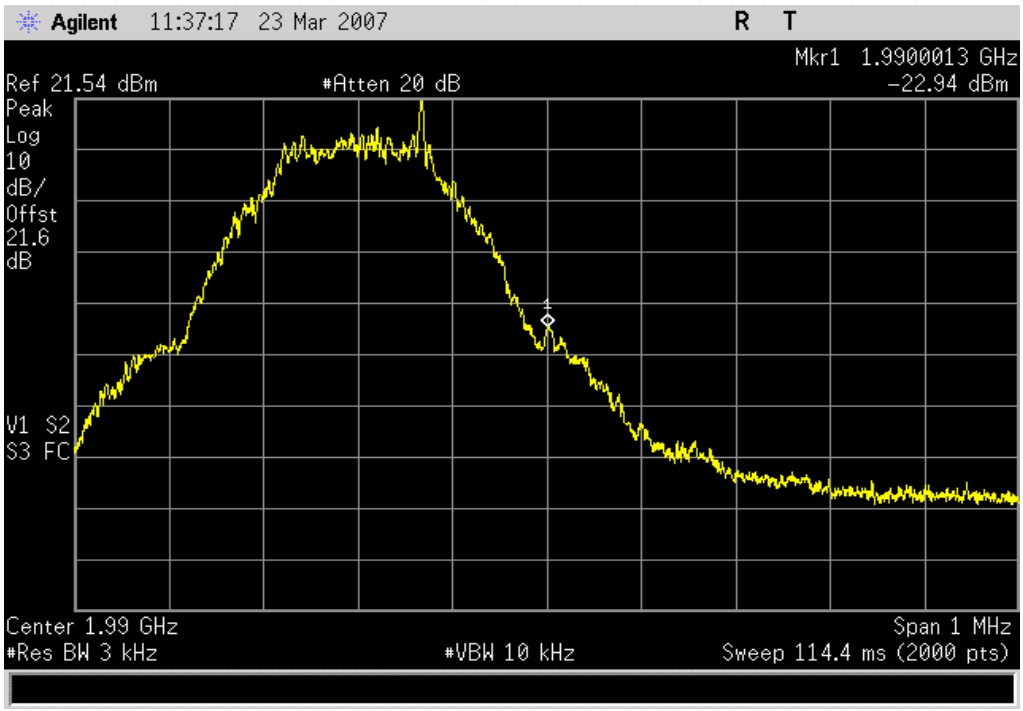
GSM Modulation, High Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	21.54 dBm	**Limit:**	N/A



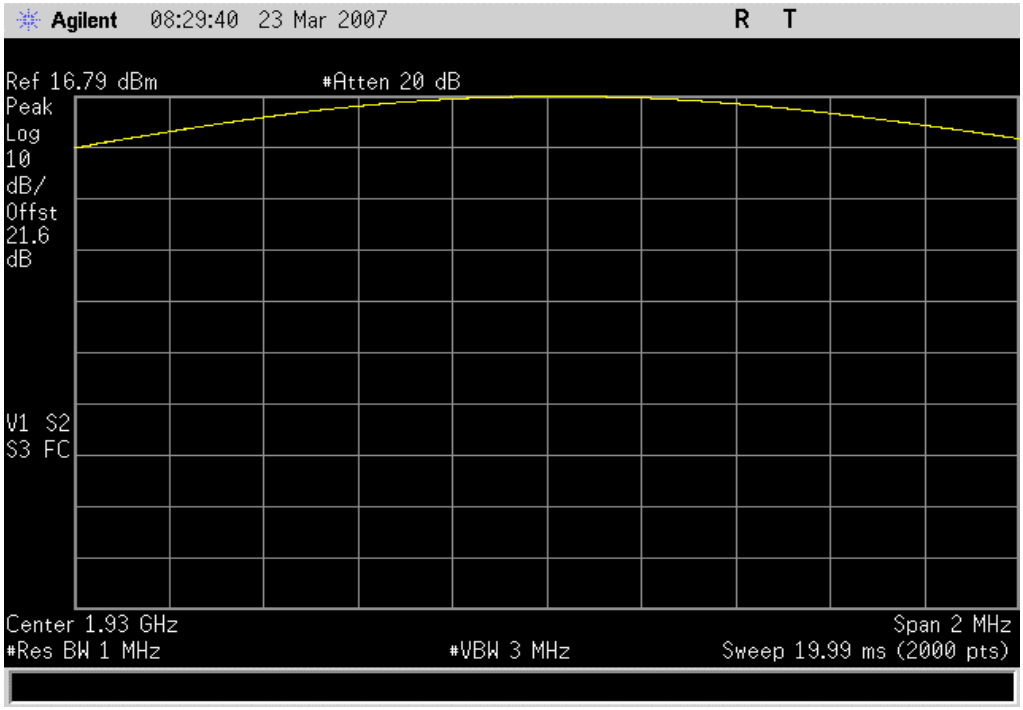
GSM Modulation, High Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	266.6 kHz	**Limit:**	N/A



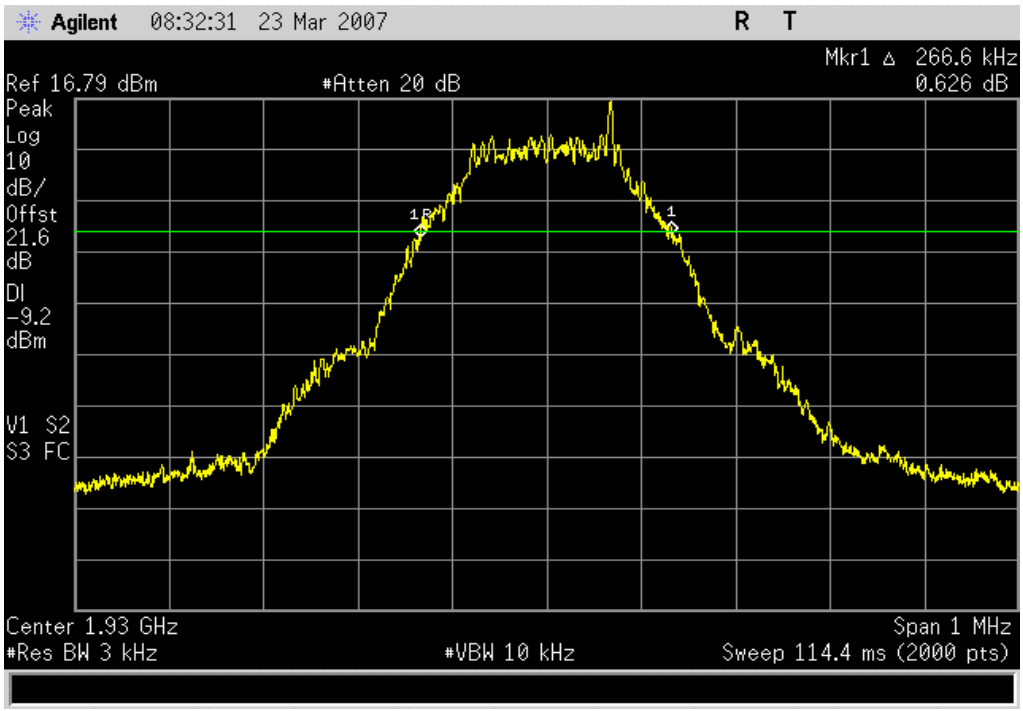
GSM Modulation, High Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-22.9 dBm	**Limit:**	≤ -13 dBm



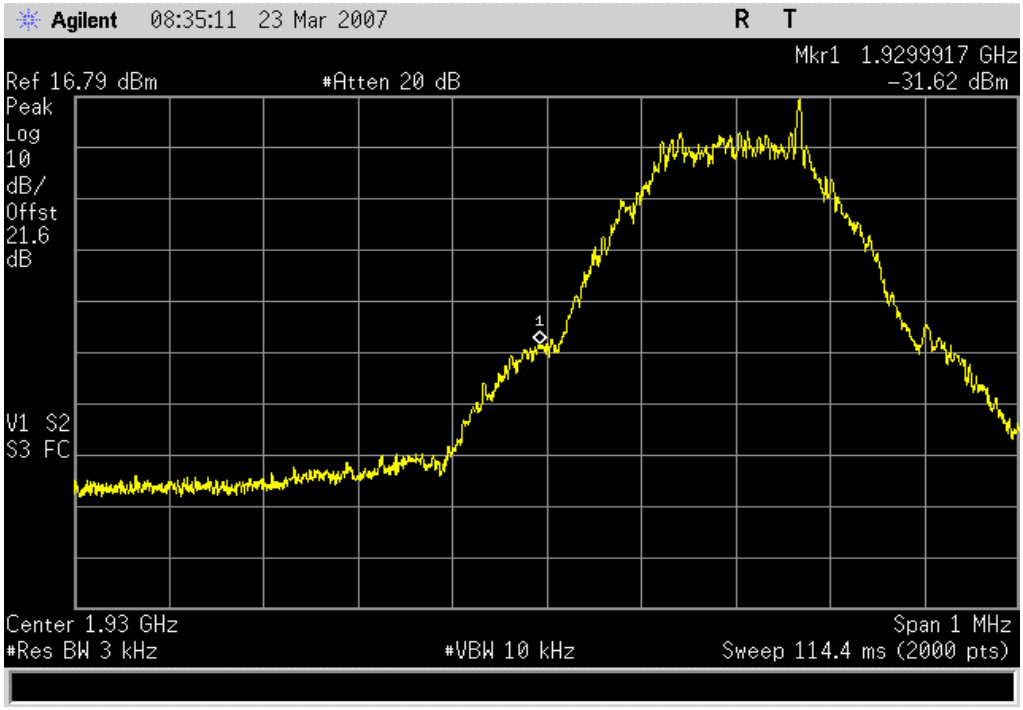
GSM Modulation, Mid Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	16.79 dBm	**Limit:**	N/A



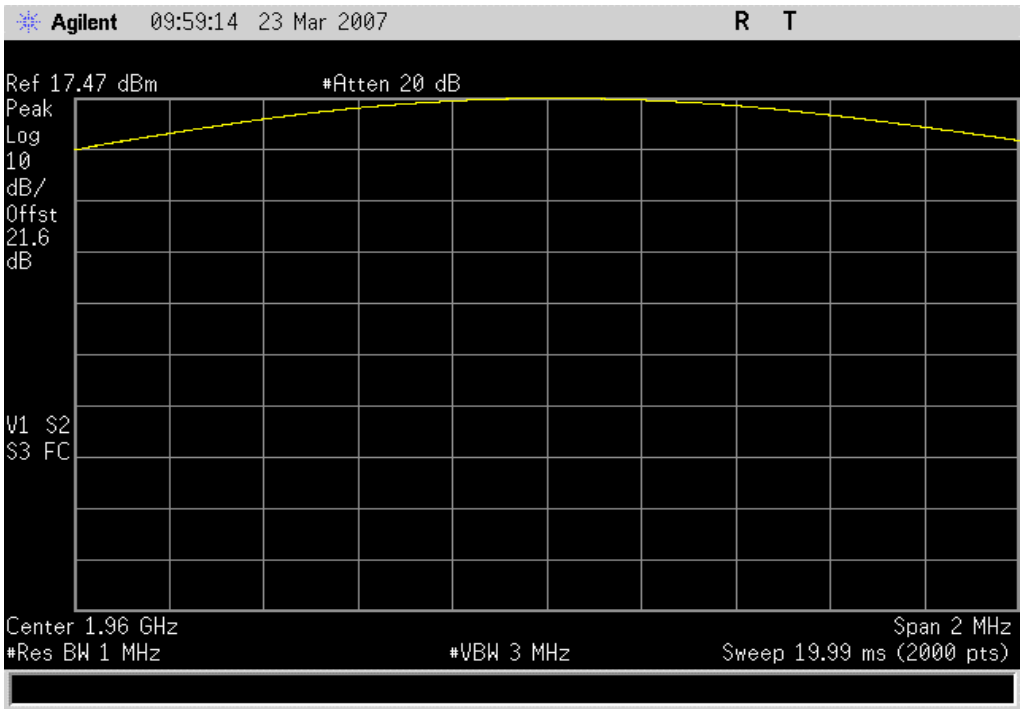
GSM Modulation, Mid Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	266.6 kHz	**Limit:**	N/A



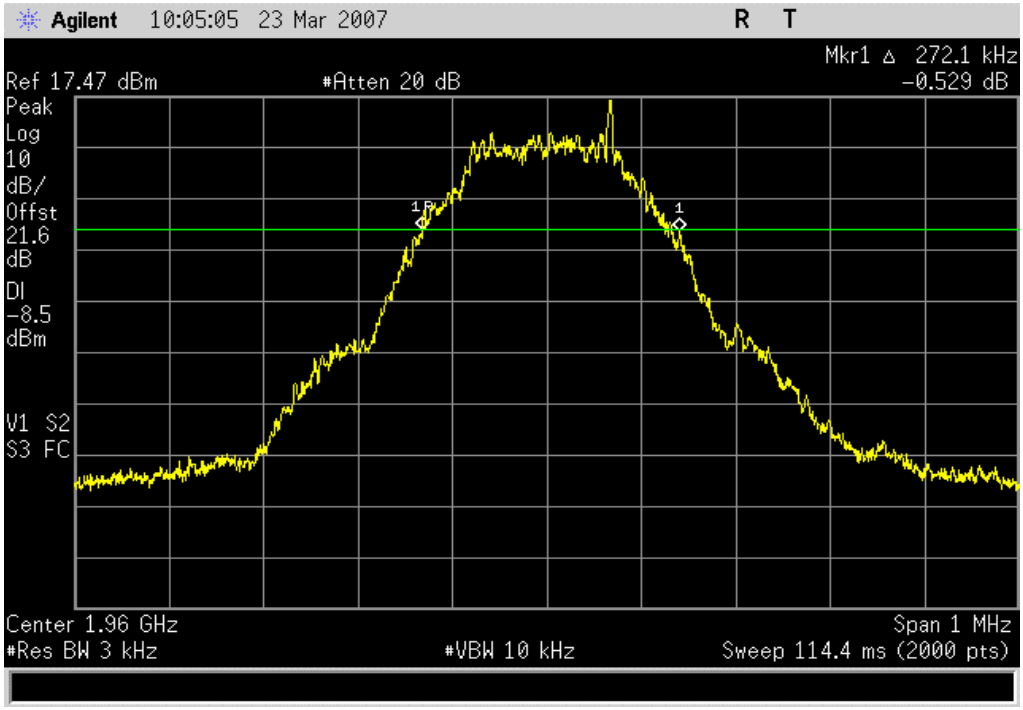
GSM Modulation, Mid Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-31.6 dBm	**Limit:**	≤ -13 dBm



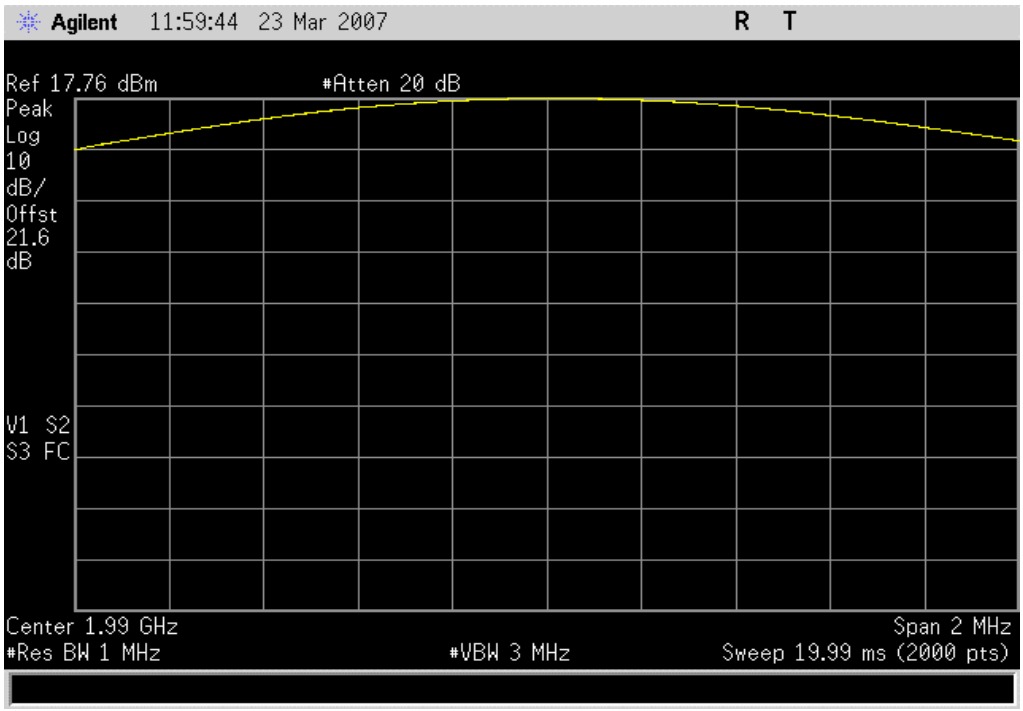
GSM Modulation, Mid Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	17.47 dBm	**Limit:**	N/A



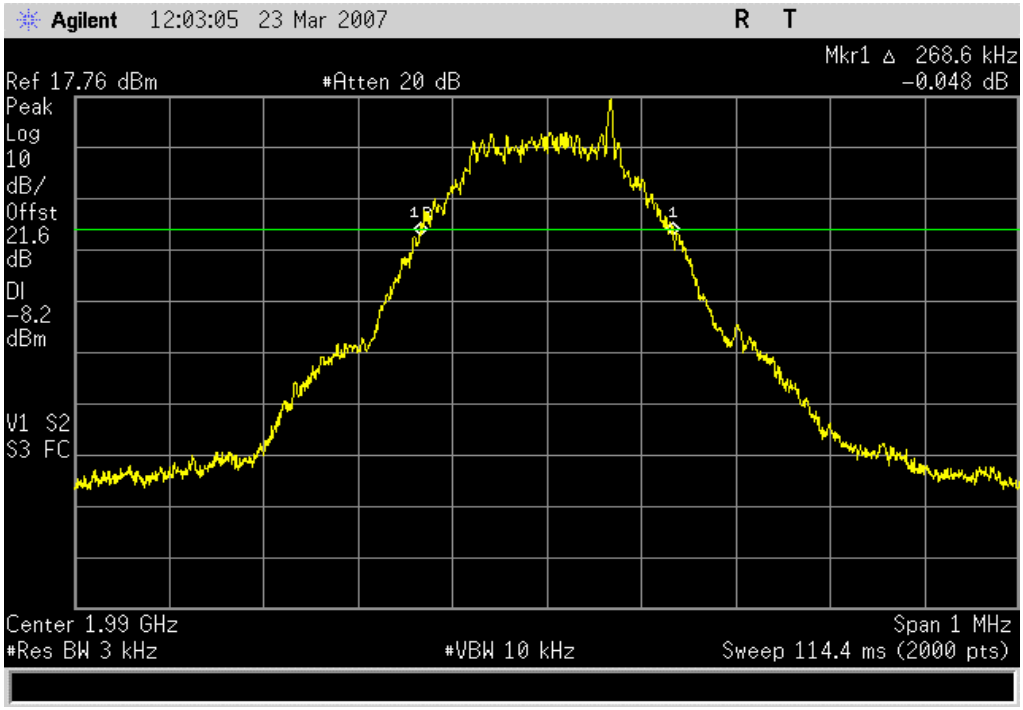
GSM Modulation, Mid Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	272.1 kHz	**Limit:**	N/A



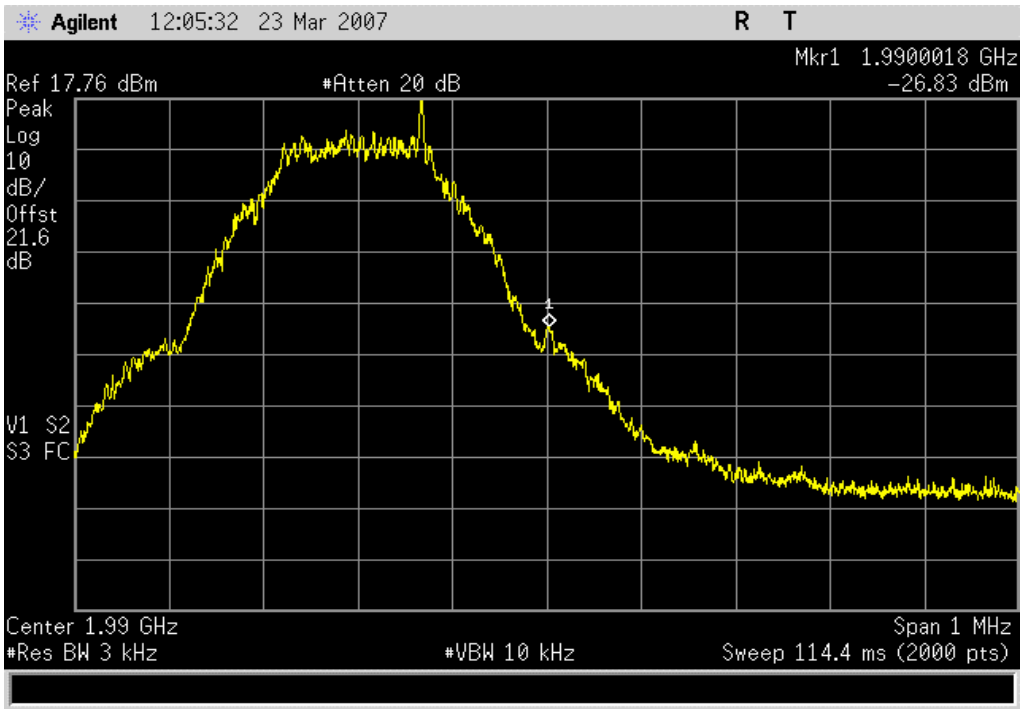
GSM Modulation, Mid Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	17.76 dBm	**Limit:**	N/A



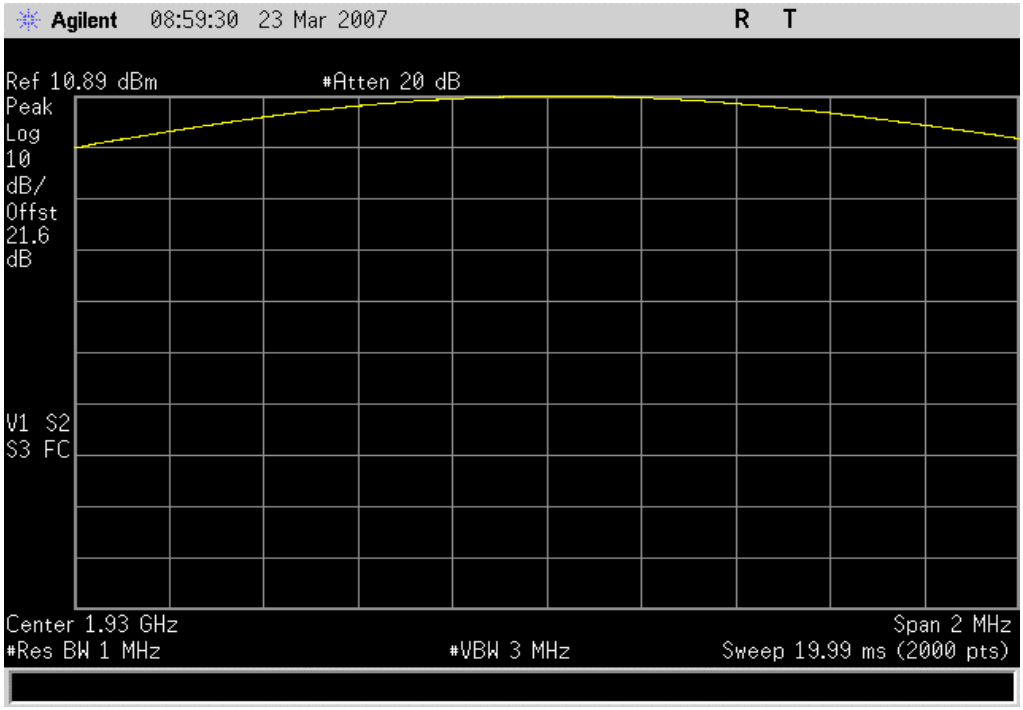
GSM Modulation, Mid Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	268.6 kHz	**Limit:**	N/A



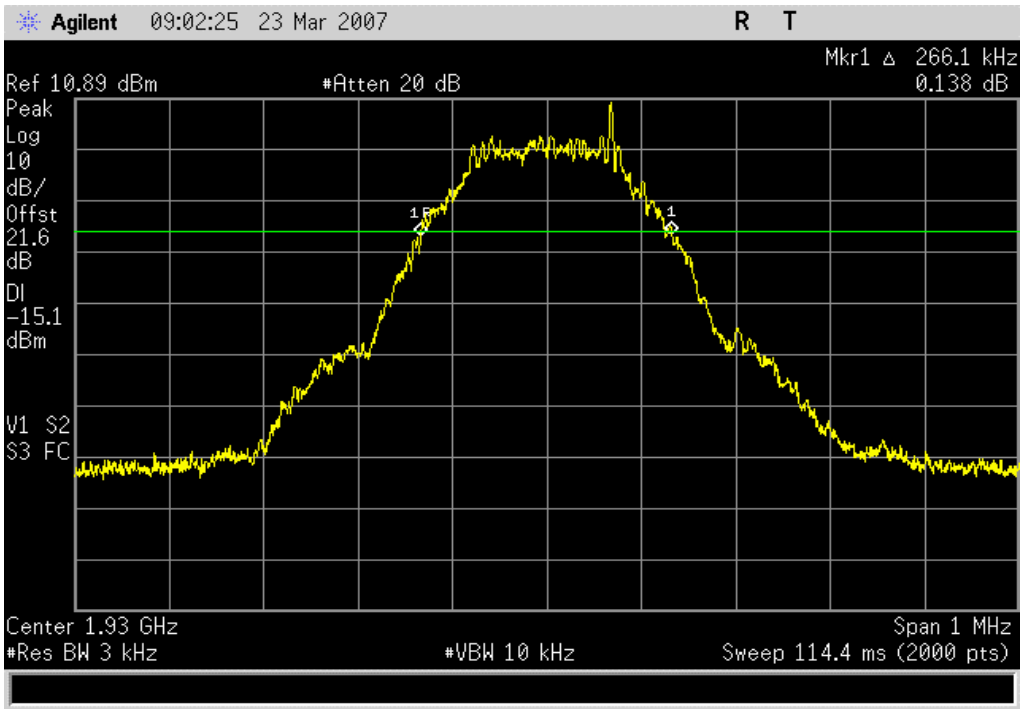
GSM Modulation, Mid Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-26.83	**Limit:**	N/A



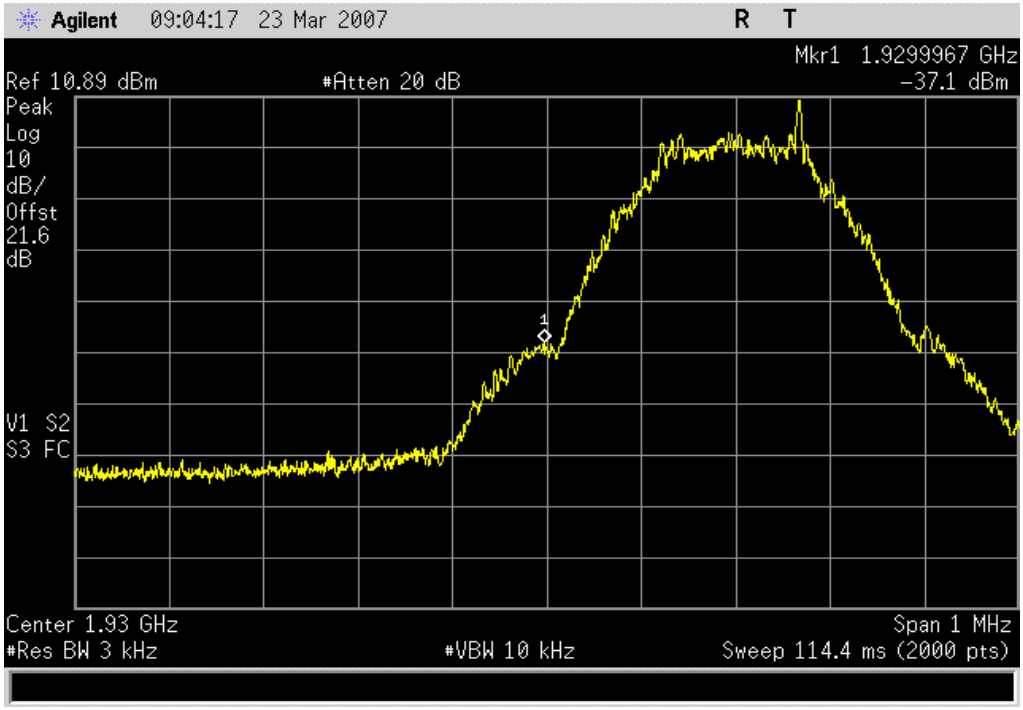
GSM Modulation, Low Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	10.89 dBm	**Limit:**	N/A



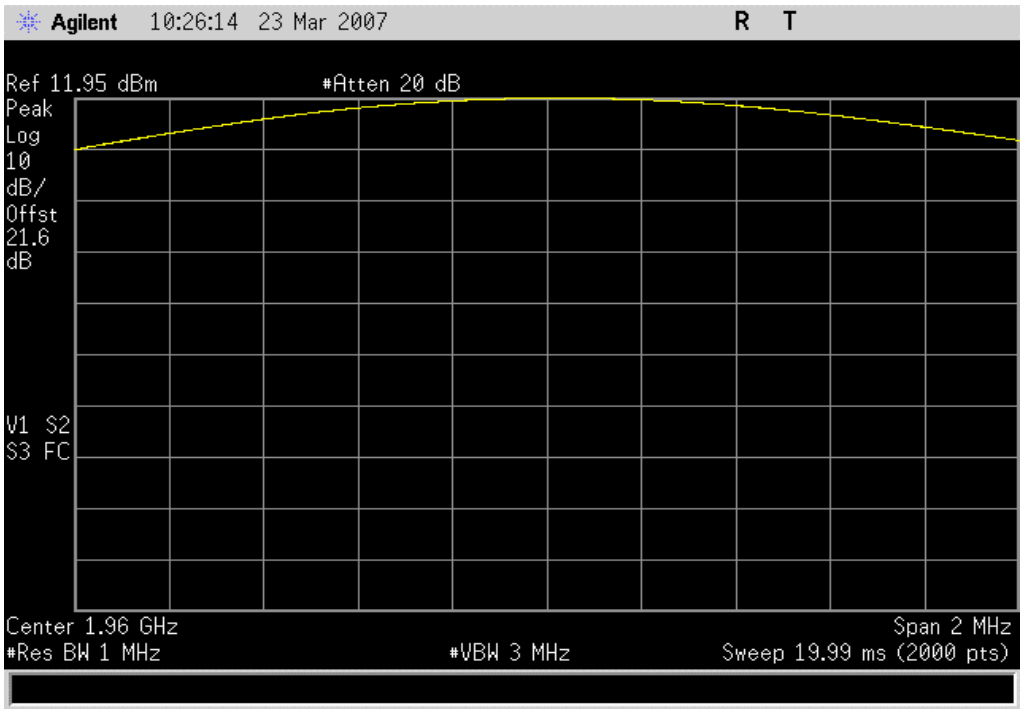
GSM Modulation, Low Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	266.1 kHz	**Limit:**	N/A



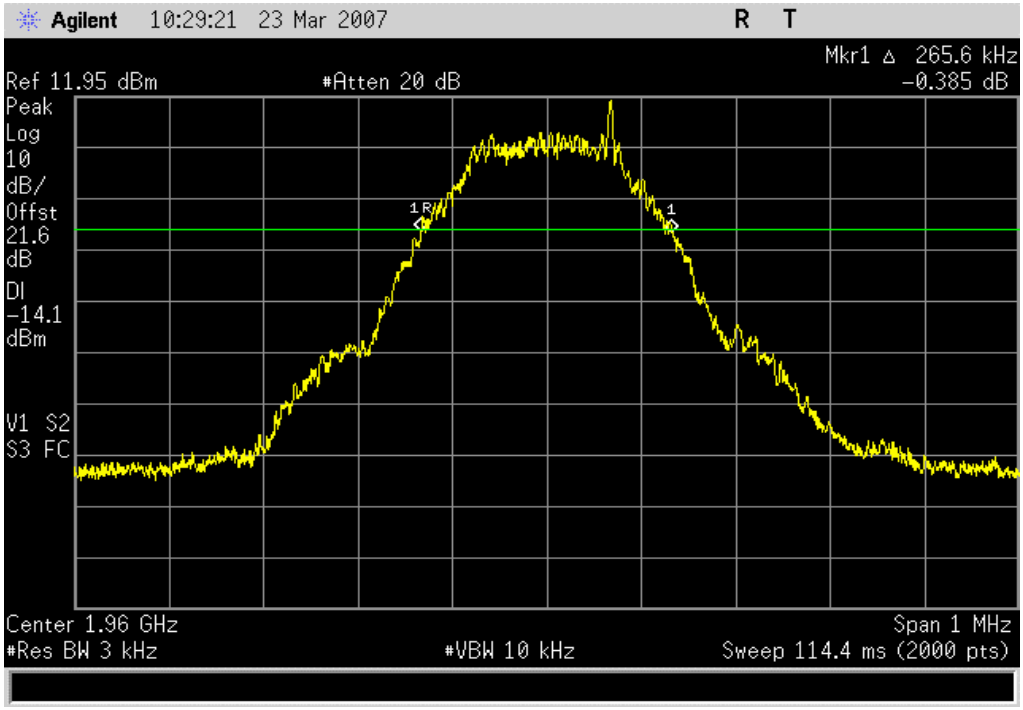
GSM Modulation, Low Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-37.1 dBm	**Limit:**	≤ -13 dBm



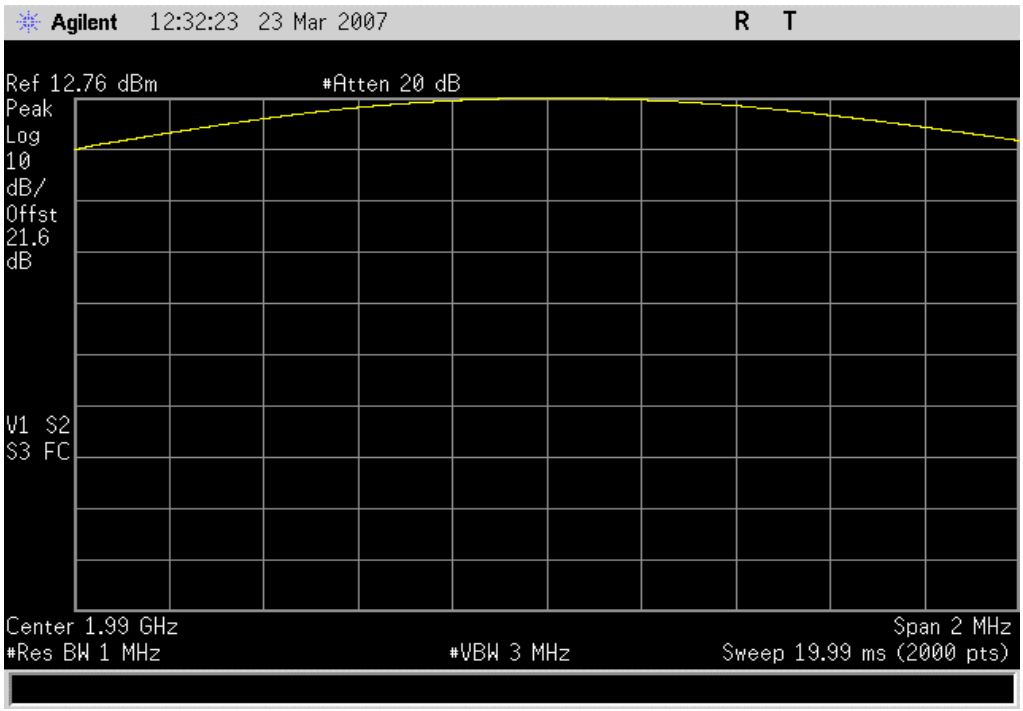
GSM Modulation, Low Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	11.95 dBm	**Limit:**	N/A



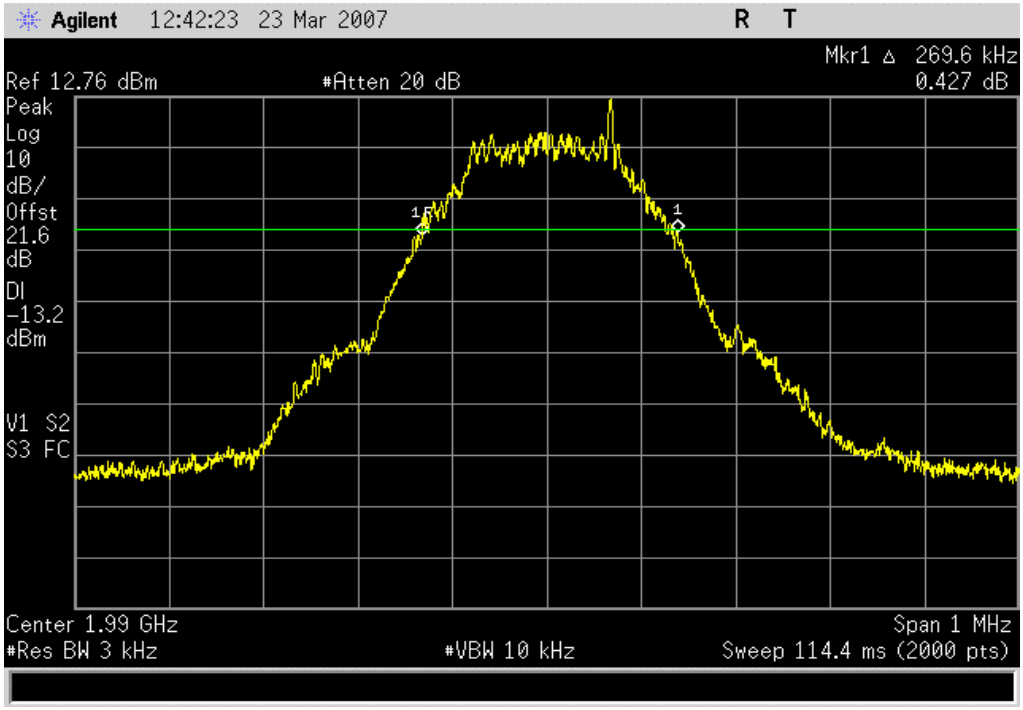
GSM Modulation, Low Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	265.6 kHz	**Limit:**	N/A



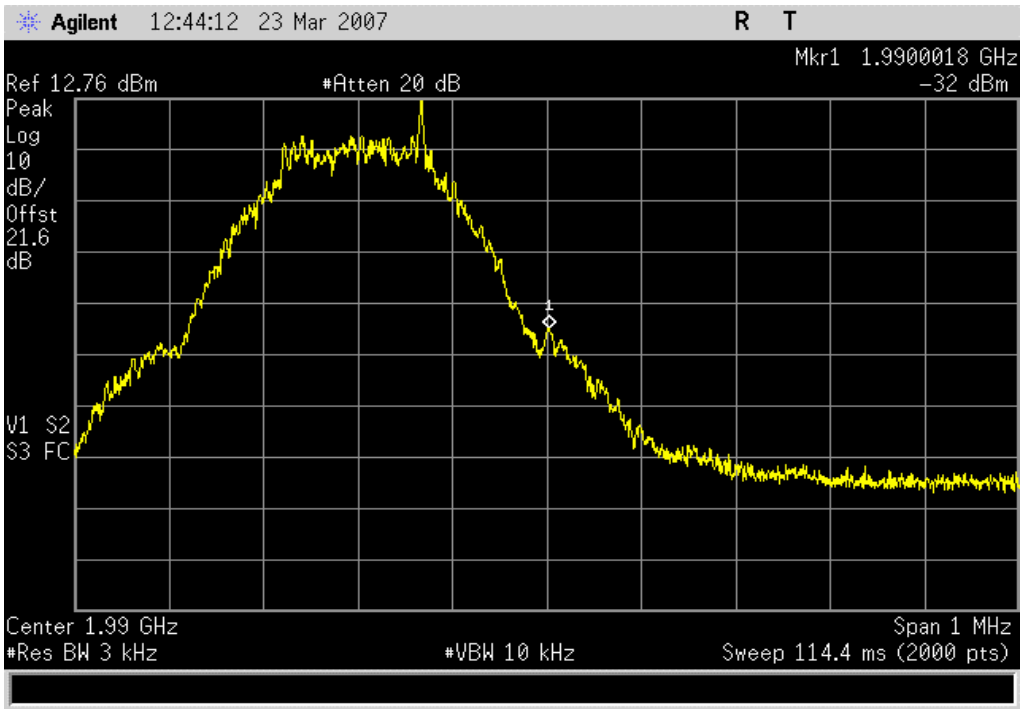
GSM Modulation, Low Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	12.76 dBm	**Limit:**	N/A



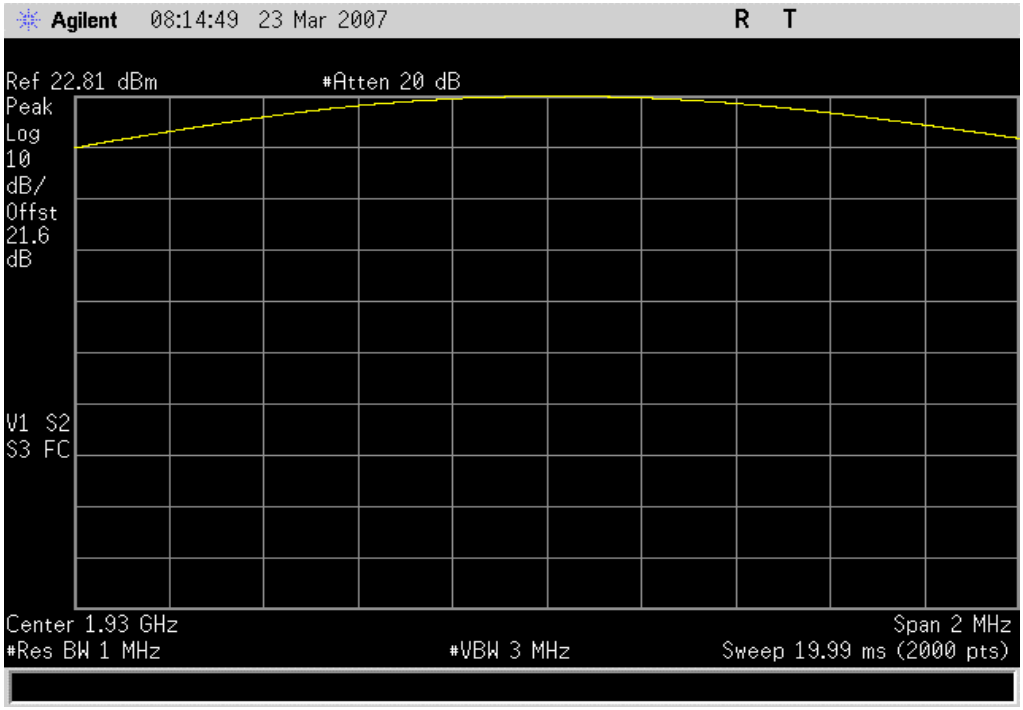
GSM Modulation, Low Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	269.6 kHz	**Limit:**	N/A



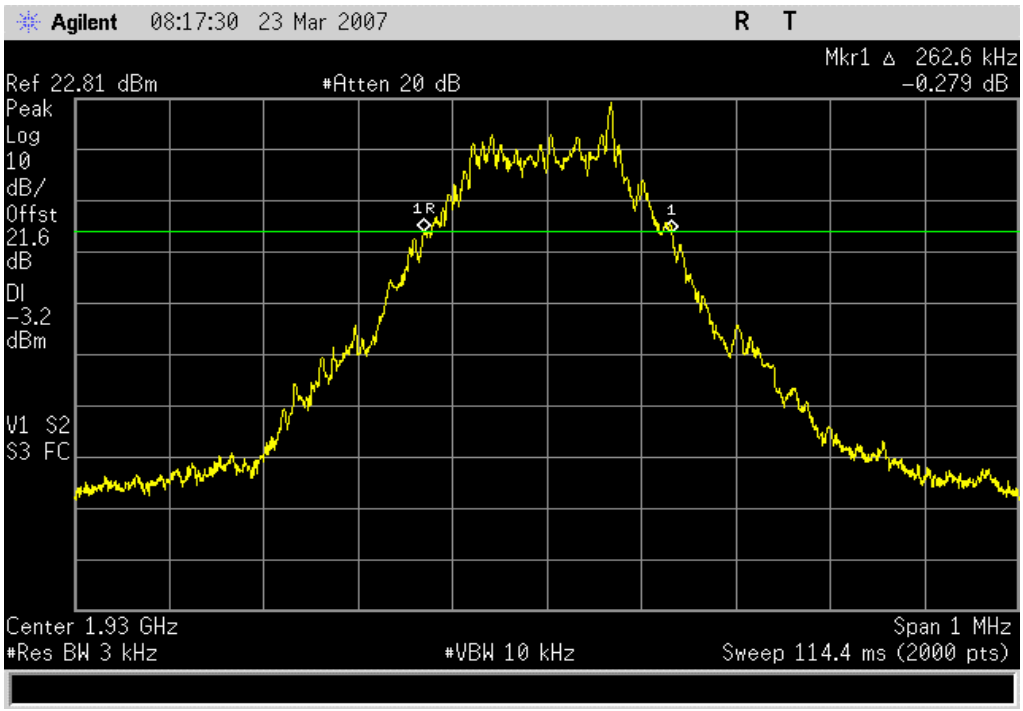
GSM Modulation, Low Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-32.0 dBm	**Limit:**	≤ -13 dBm



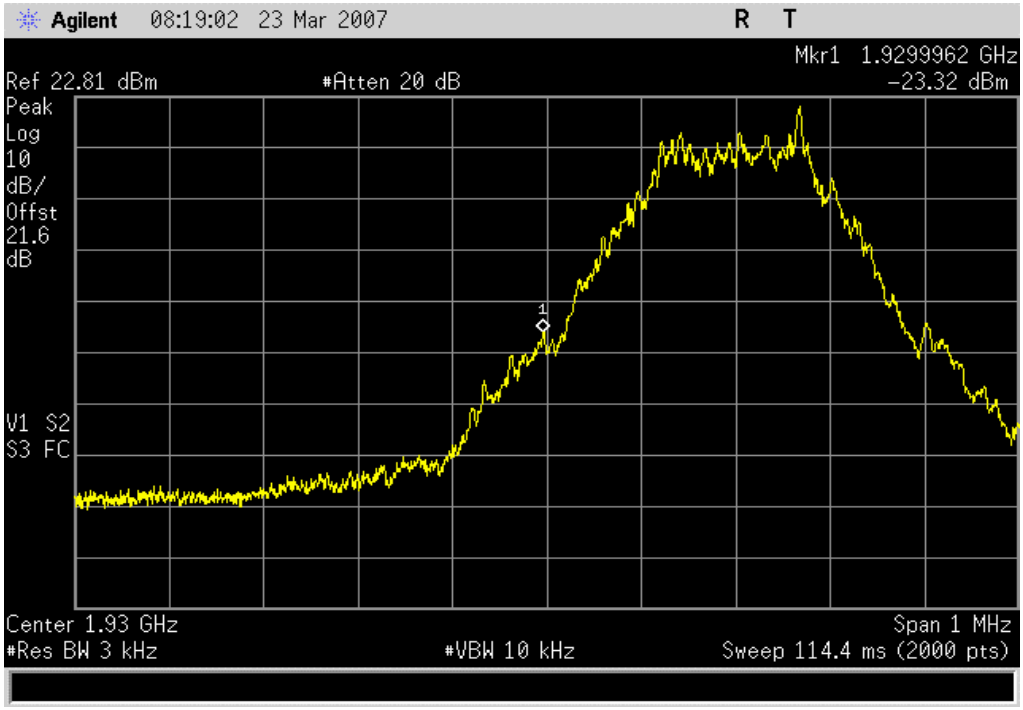
GPRS Modulation, High Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	22.81 dBm	**Limit:**	N/A



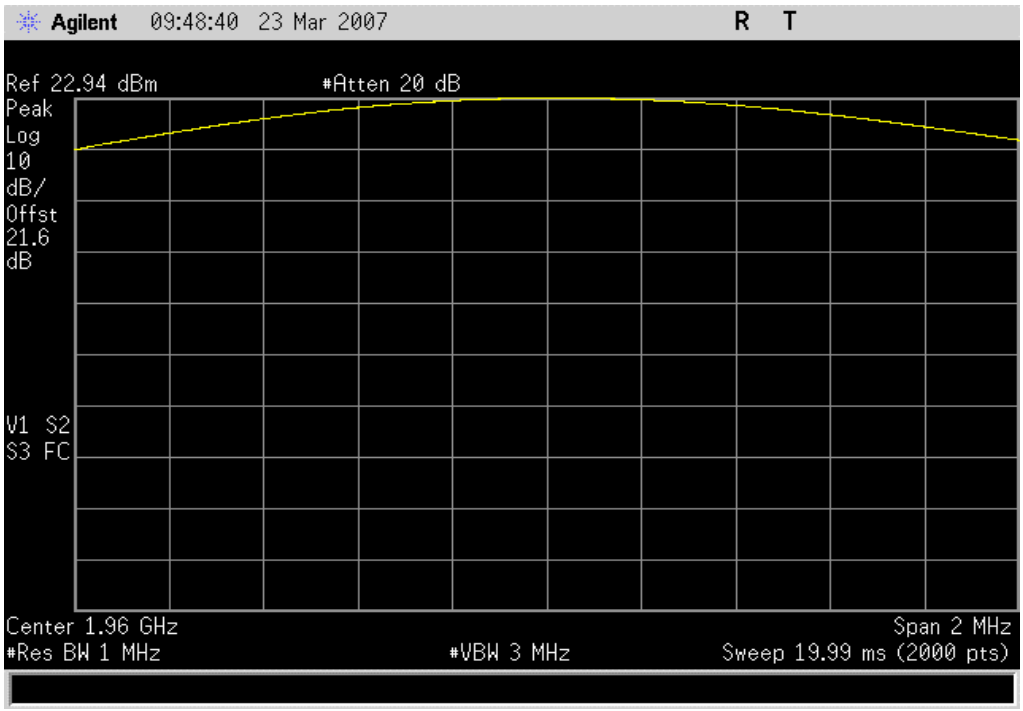
GPRS Modulation, High Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



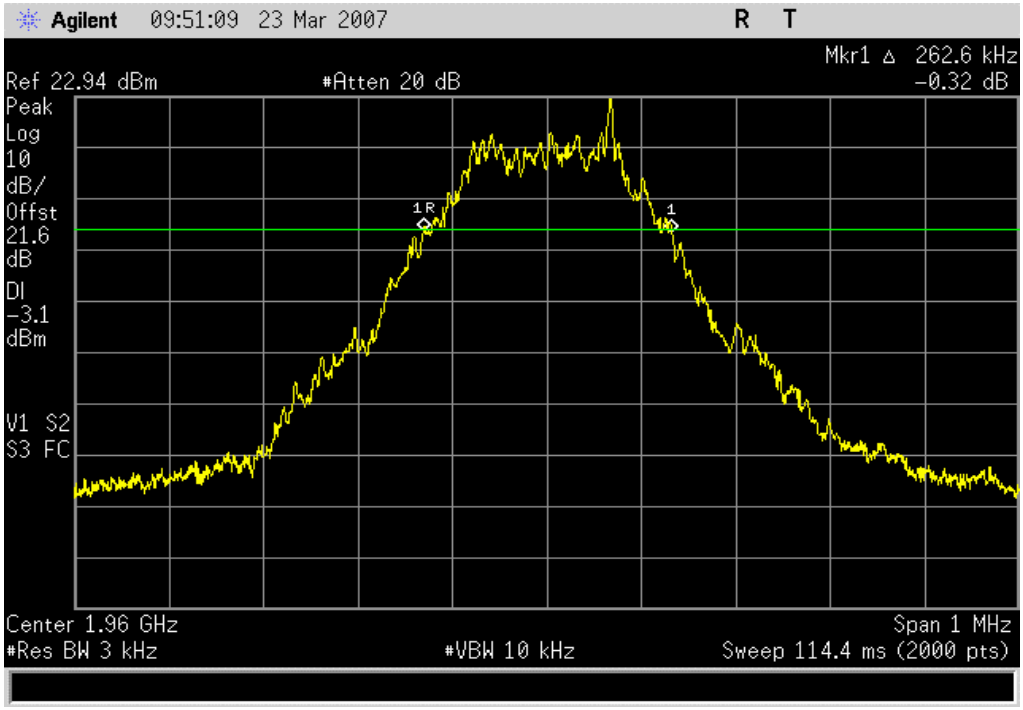
GPRS Modulation, High Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-23.32 dBm	**Limit:**	≤ -13 dBm



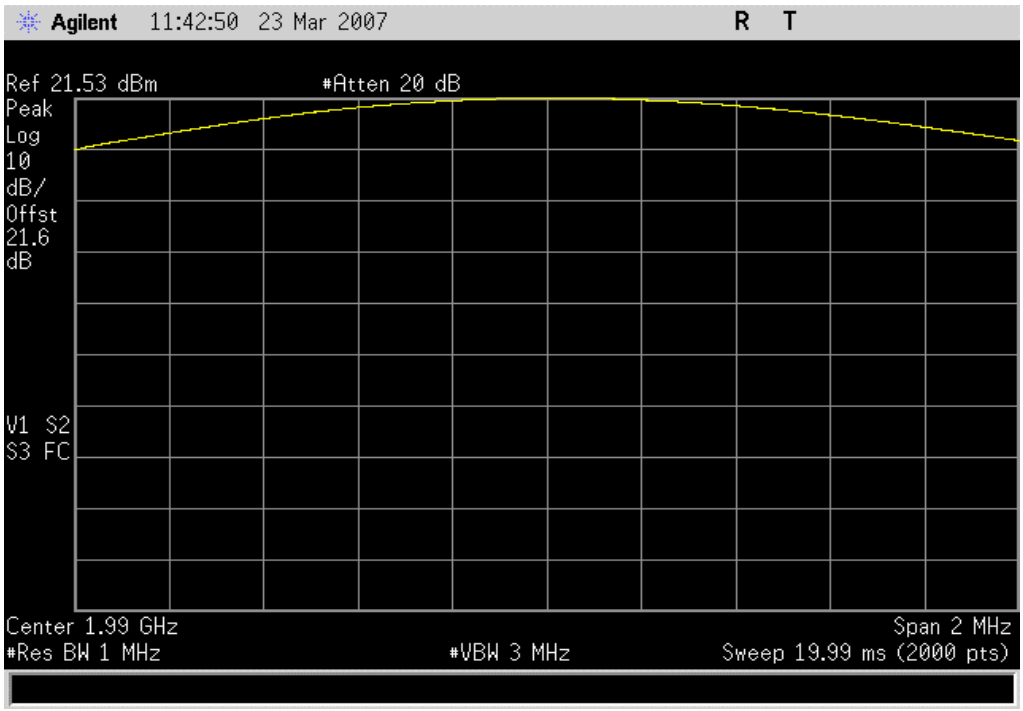
GPRS Modulation, High Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	22.94 dBm	**Limit:**	N/A



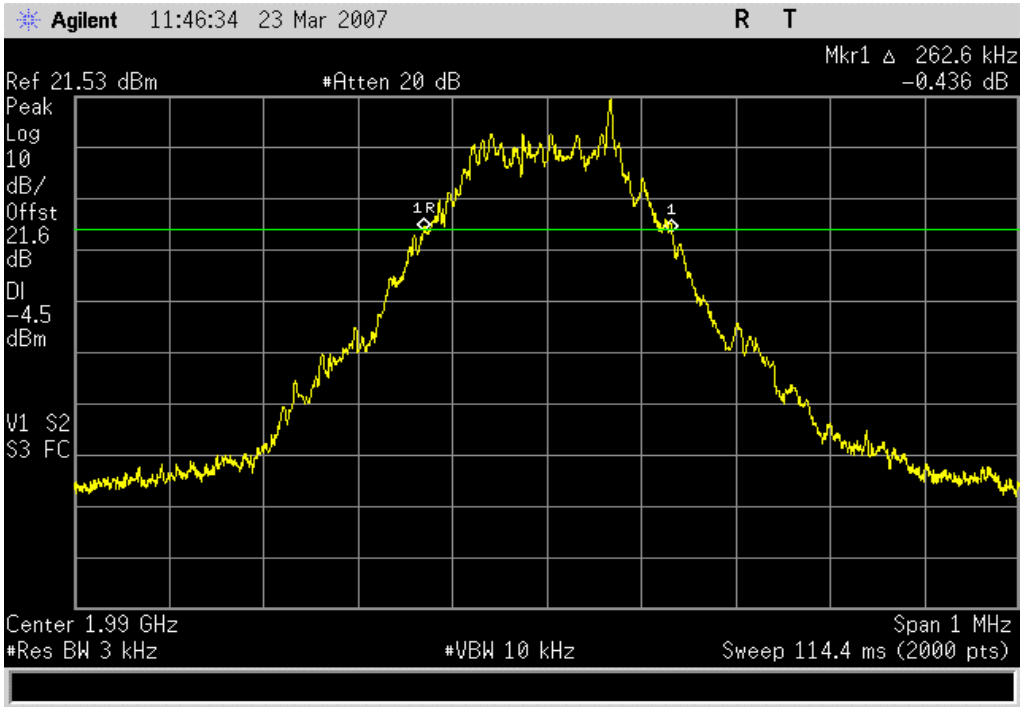
GPRS Modulation, High Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



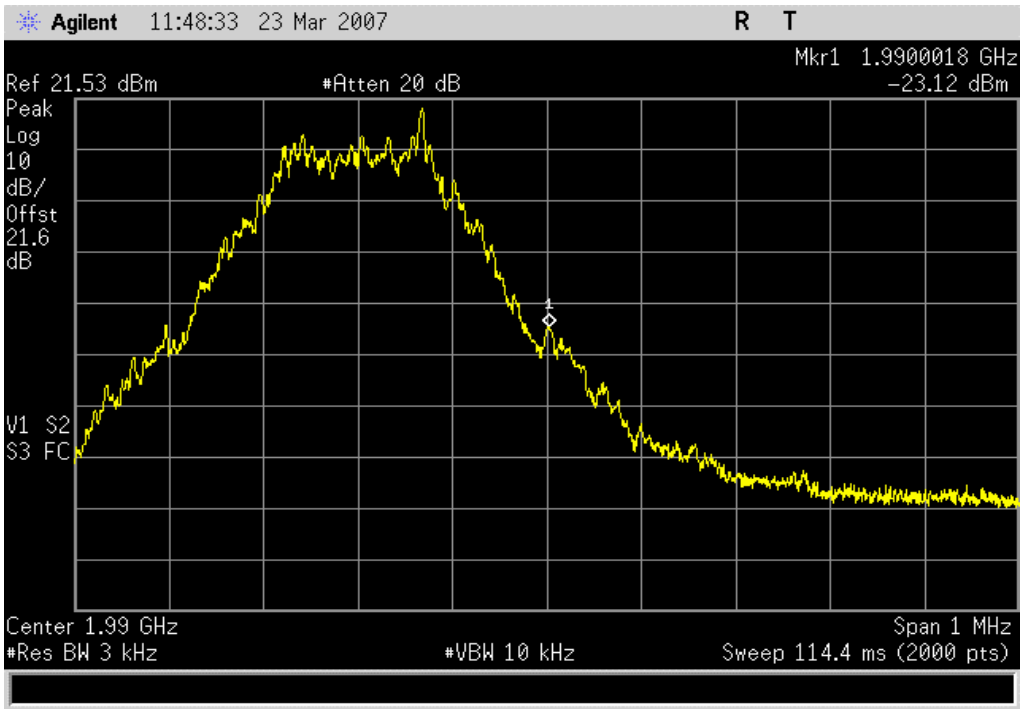
GPRS Modulation, High Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	21.53 dBm	**Limit:**	N/A



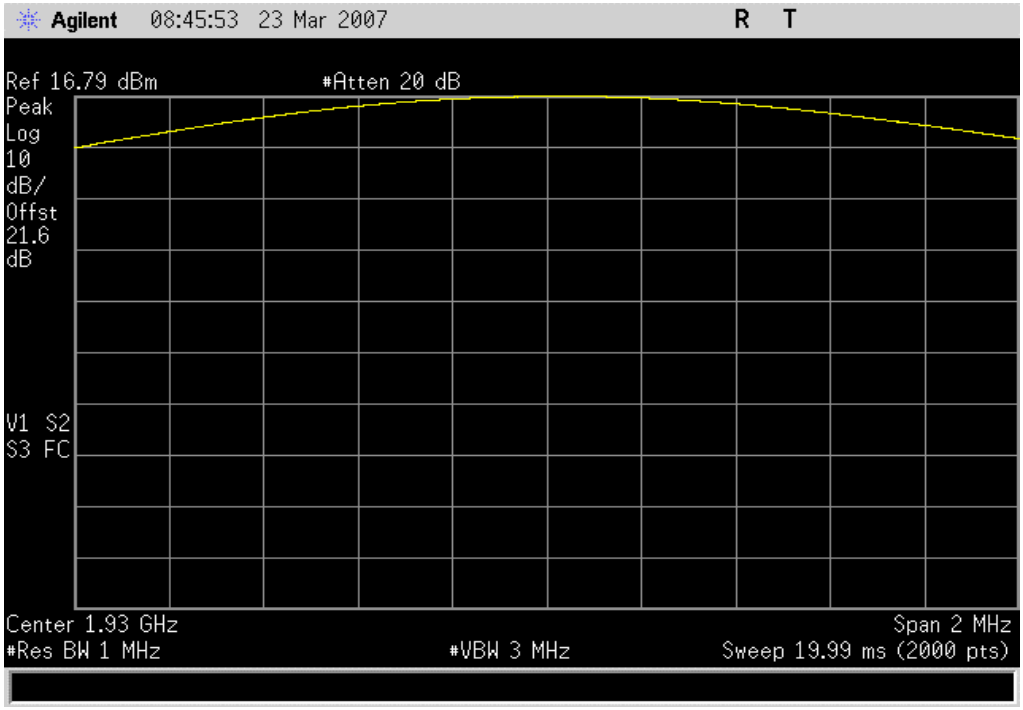
GPRS Modulation, High Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



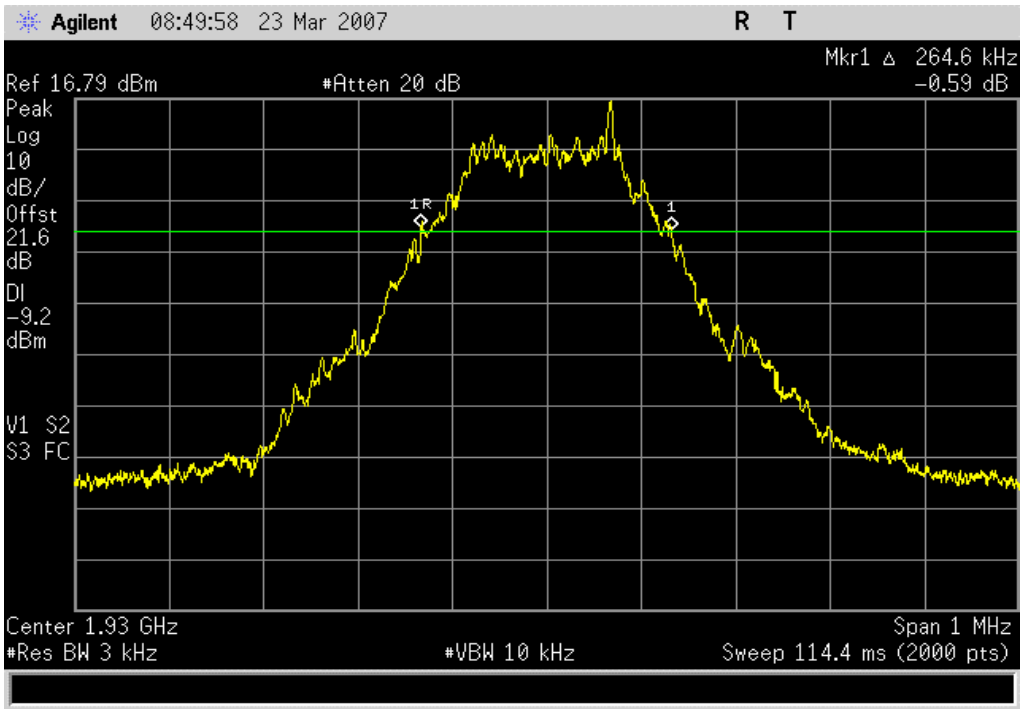
GPRS Modulation, High Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-23.12 dBm	**Limit:**	≤ -13 dBm



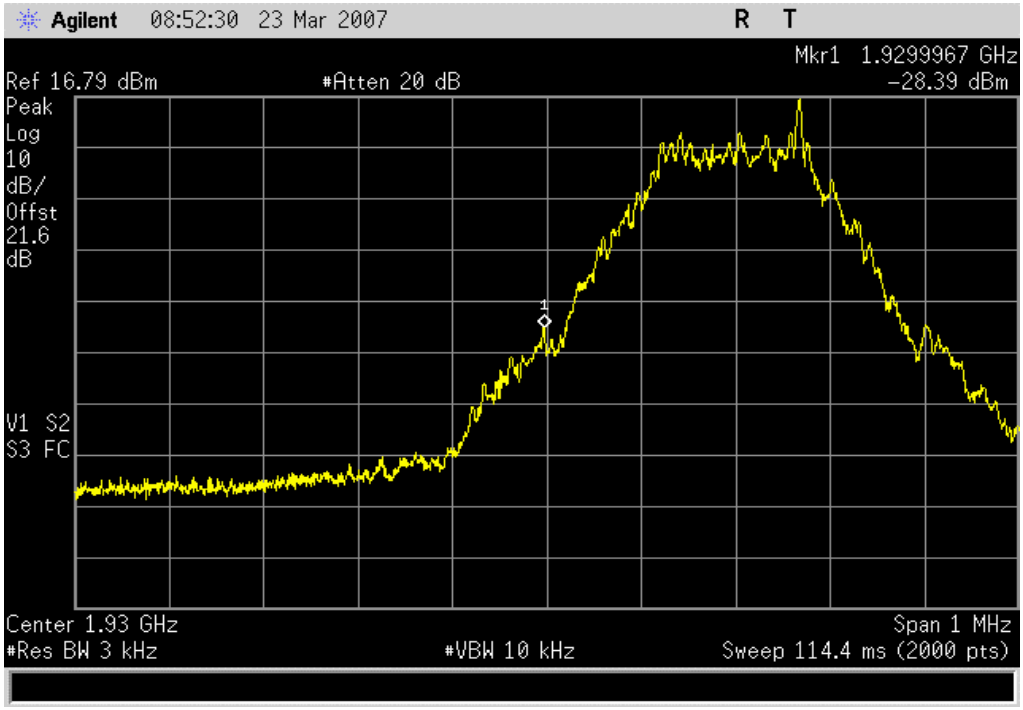
GPRS Modulation, Mid Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	16.79 dBm	**Limit:**	N/A



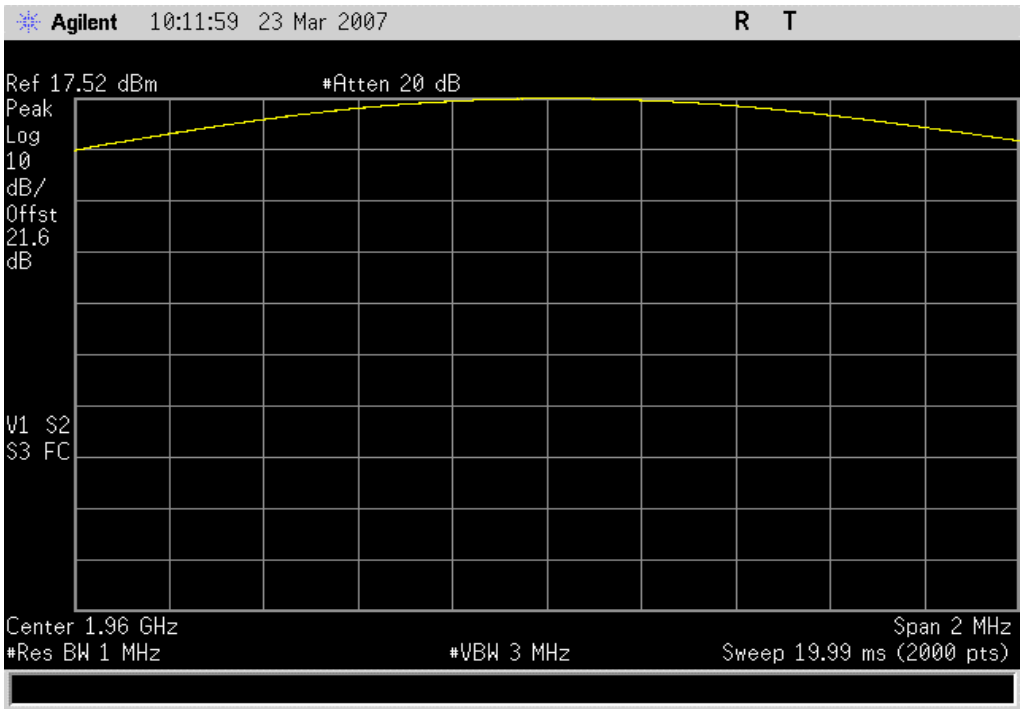
GPRS Modulation, Mid Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	264.6 kHz	**Limit:**	N/A



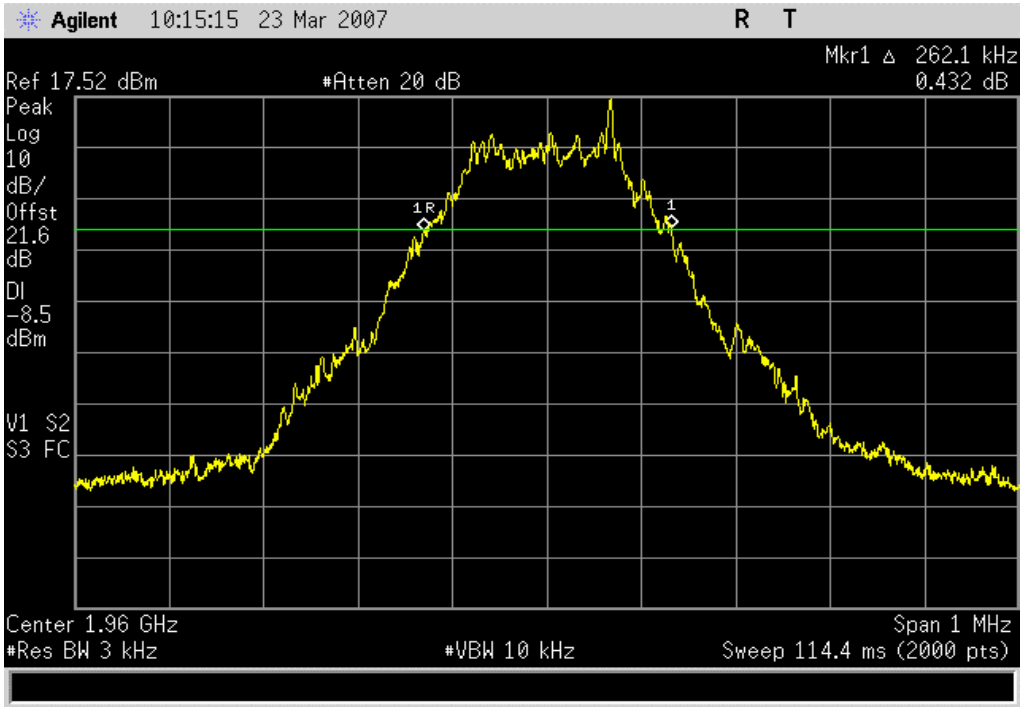
GPRS Modulation, Mid Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-28.39 dBm	**Limit:**	≤ -13 dBm



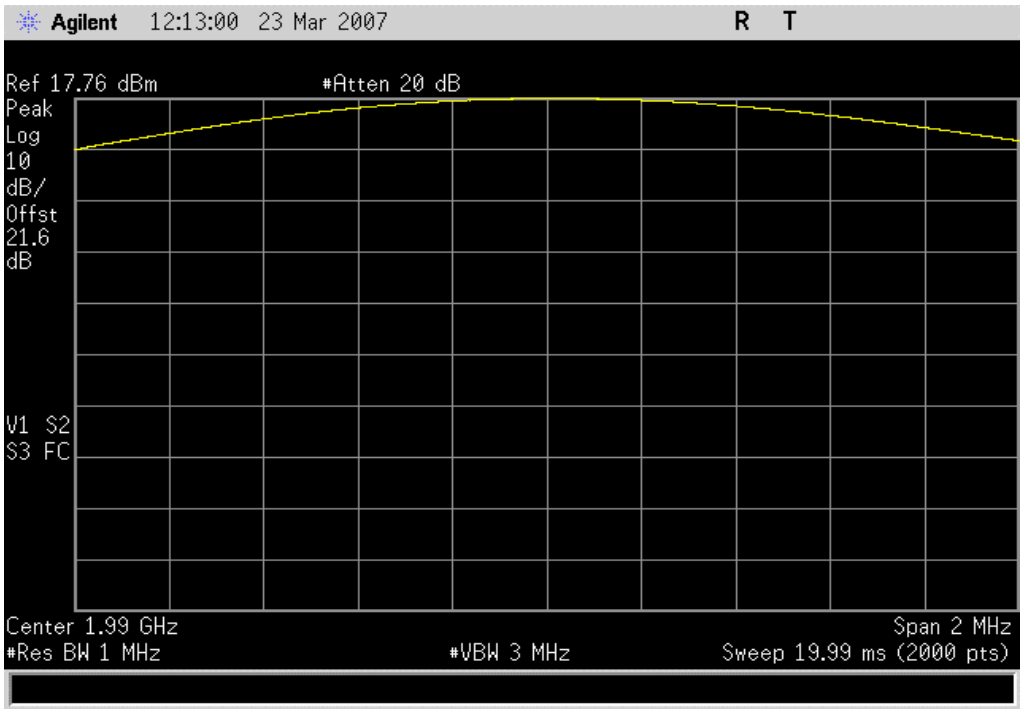
GPRS Modulation, Mid Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	17.52 dBm	**Limit:**	N/A



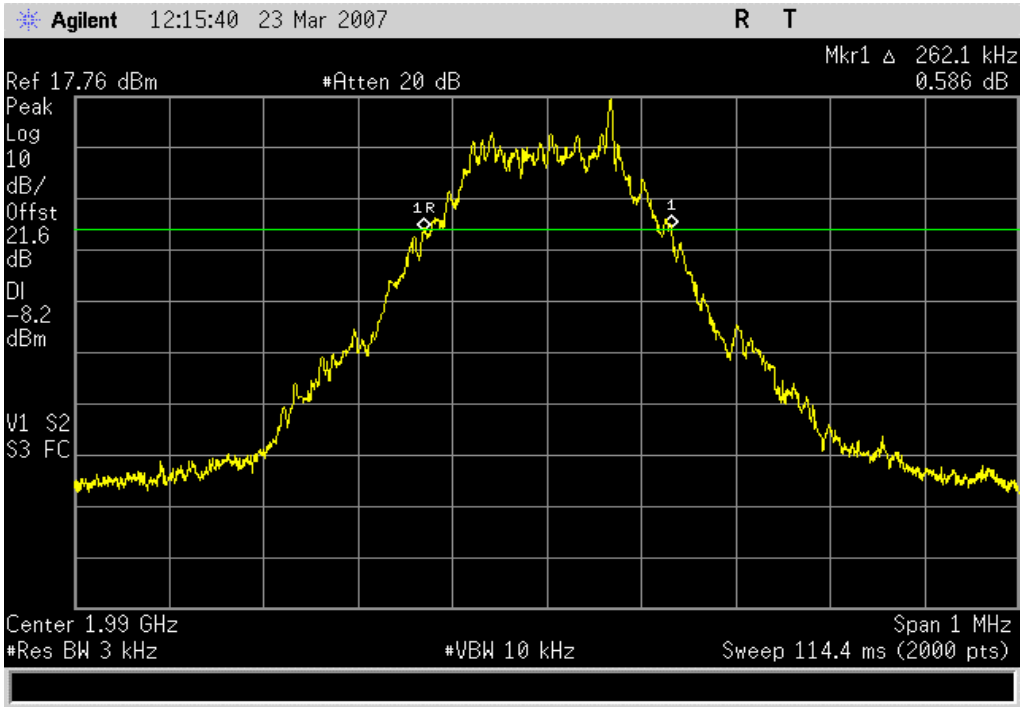
GPRS Modulation, Mid Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.1 kHz	**Limit:**	N/a



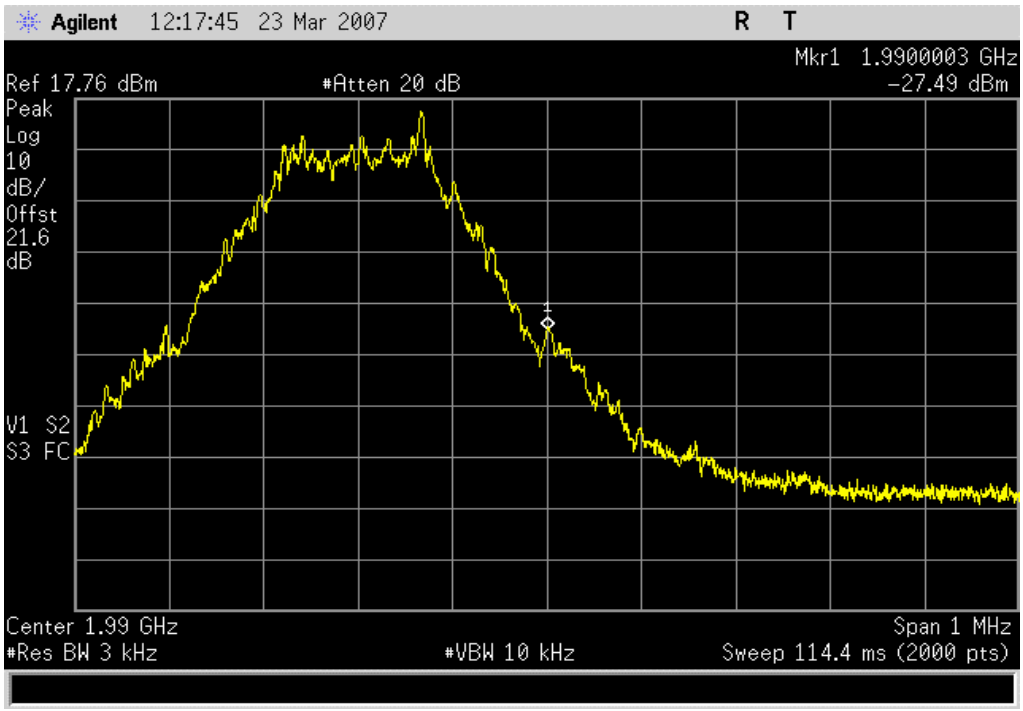
GPRS Modulation, Mid Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	17.76 dBm	**Limit:**	N/A



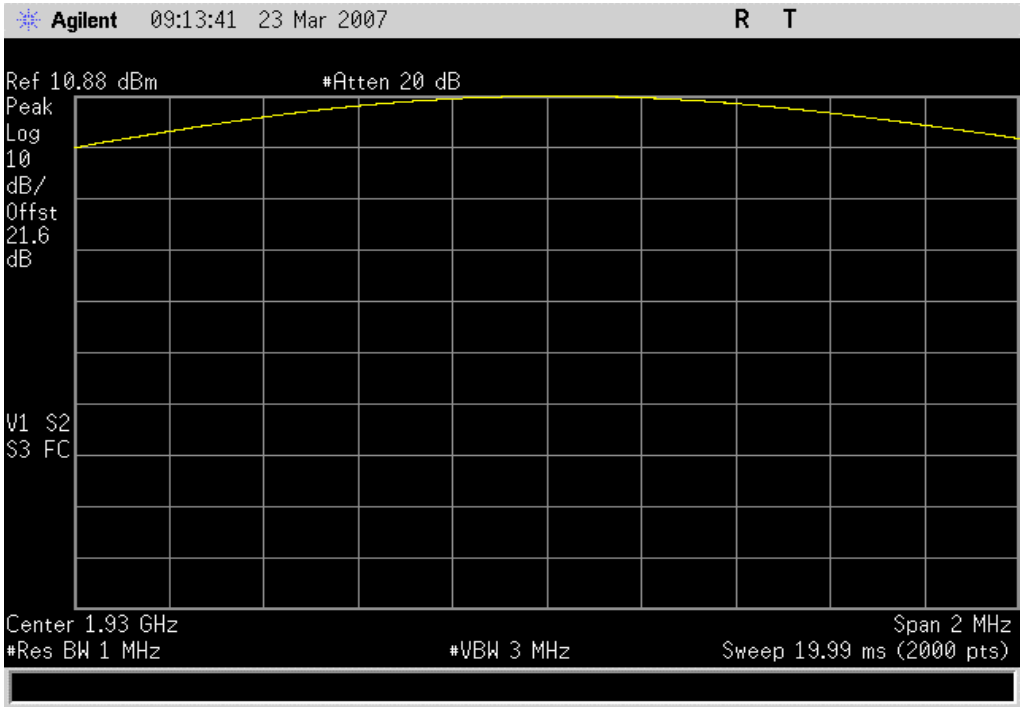
GPRS Modulation, Mid Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.1 kHz	**Limit:**	N/A



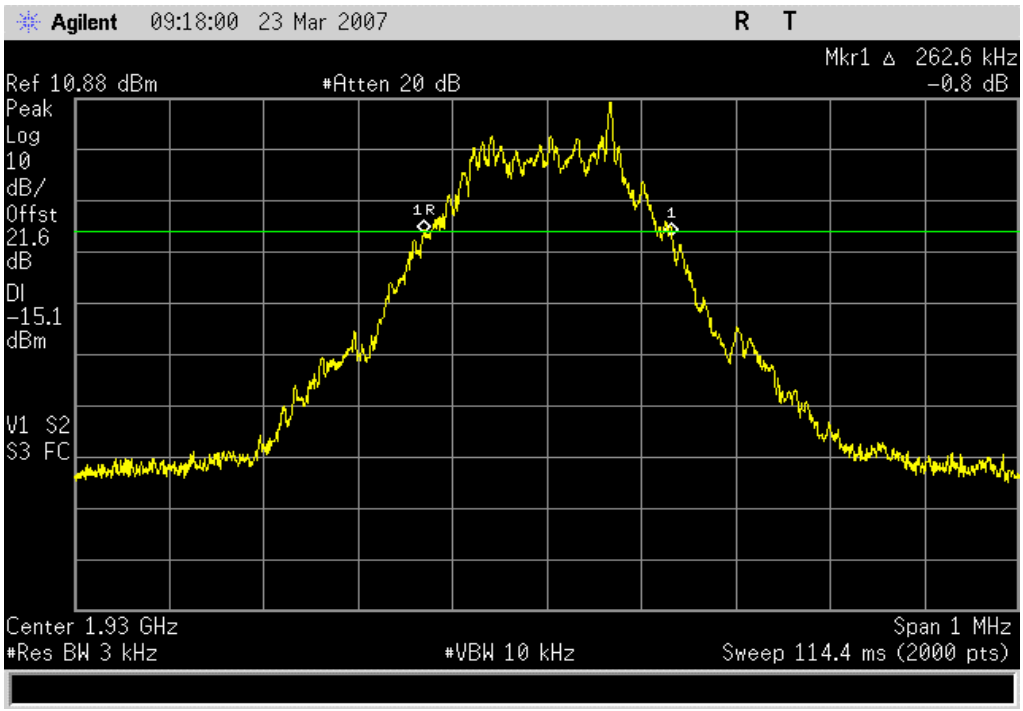
GPRS Modulation, Mid Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-27.49 dBm	**Limit:**	≤ -13 dBM



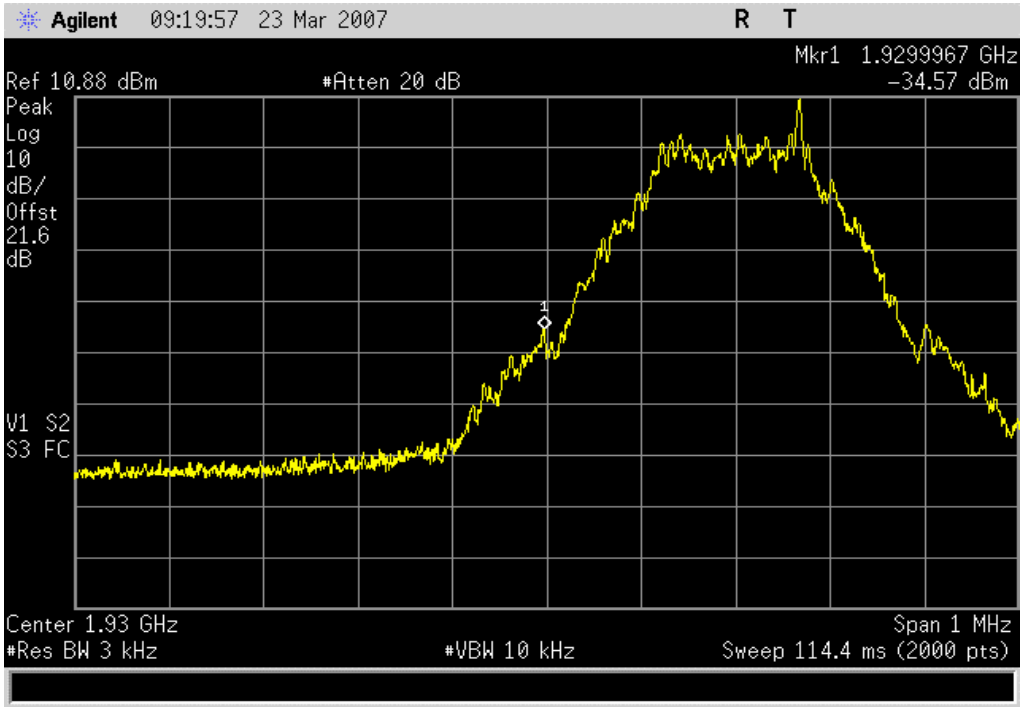
GPRS Modulation, Low Power, Low Channel, Reference Level Plot					
Result:	N/A	**Value:**	10.88 dBm	**Limit:**	N/A



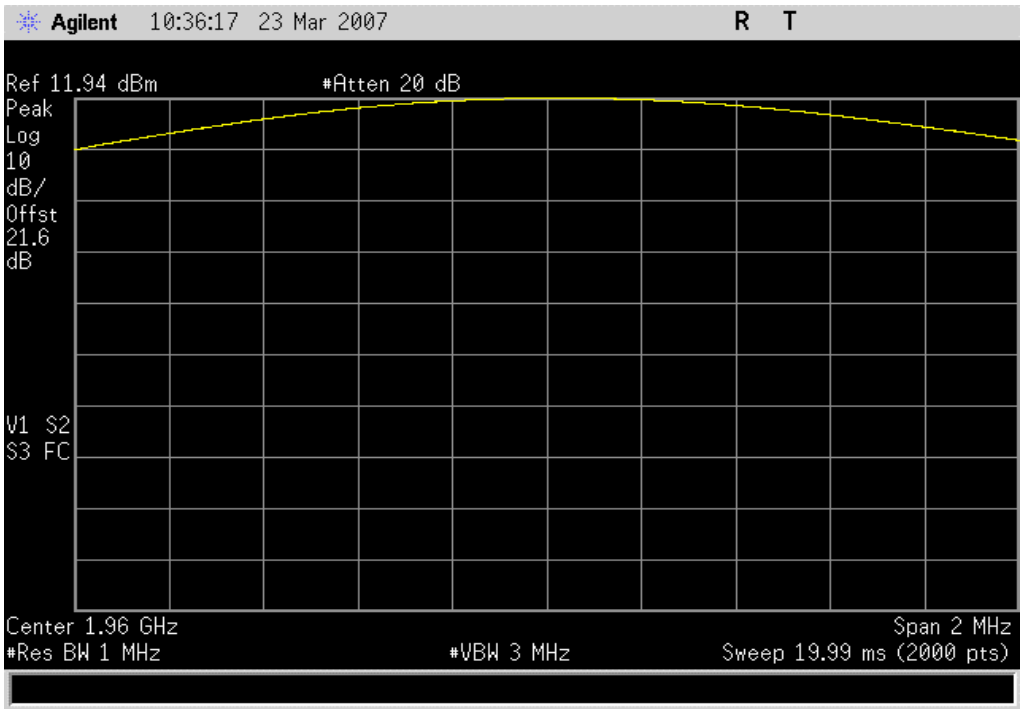
GPRS Modulation, Low Power, Low Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.6 kHz	**Limit:**	N/A



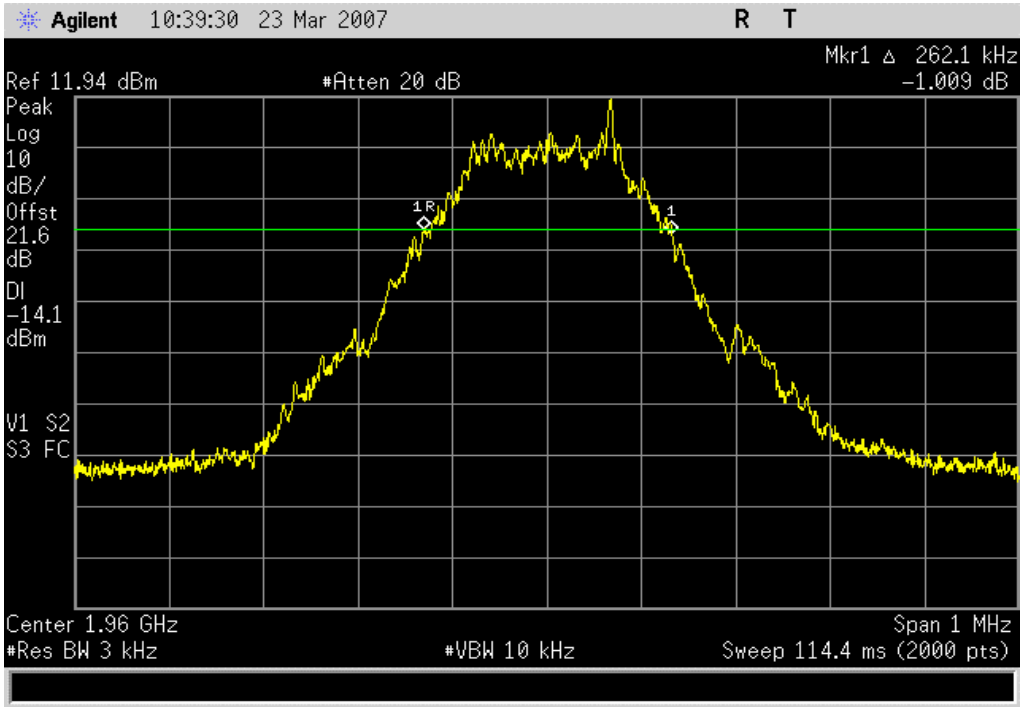
GPRS Modulation, Low Power, Low Channel, Band Edge					
Result:	Pass	**Value:**	-34.57 dBm	**Limit:**	≤ -13 dBm



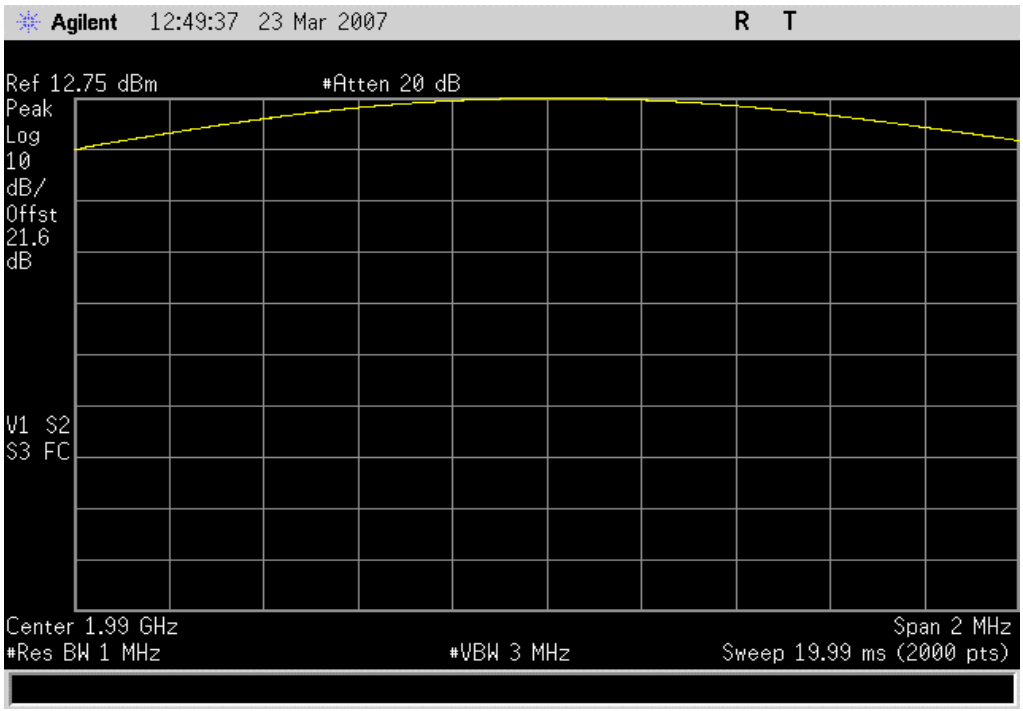
GPRS Modulation, Low Power, Mid Channel, Reference Level Plot					
Result:	N/A	**Value:**	11.94 dBm	**Limit:**	N/A



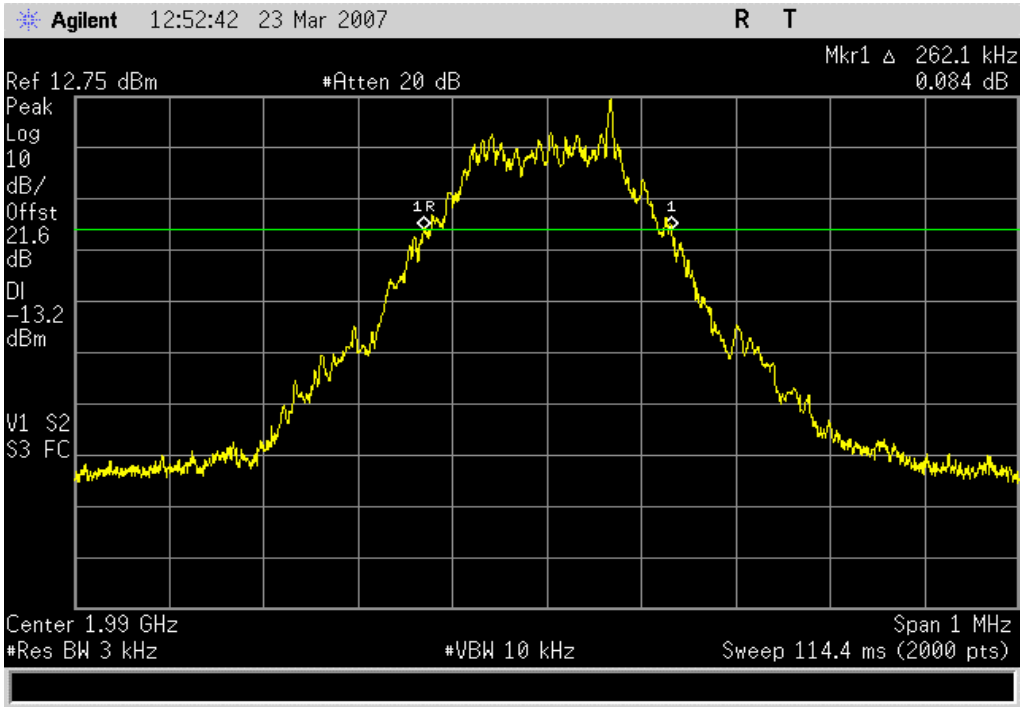
GPRS Modulation, Low Power, Mid Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.1 kHz	**Limit:**	N/A



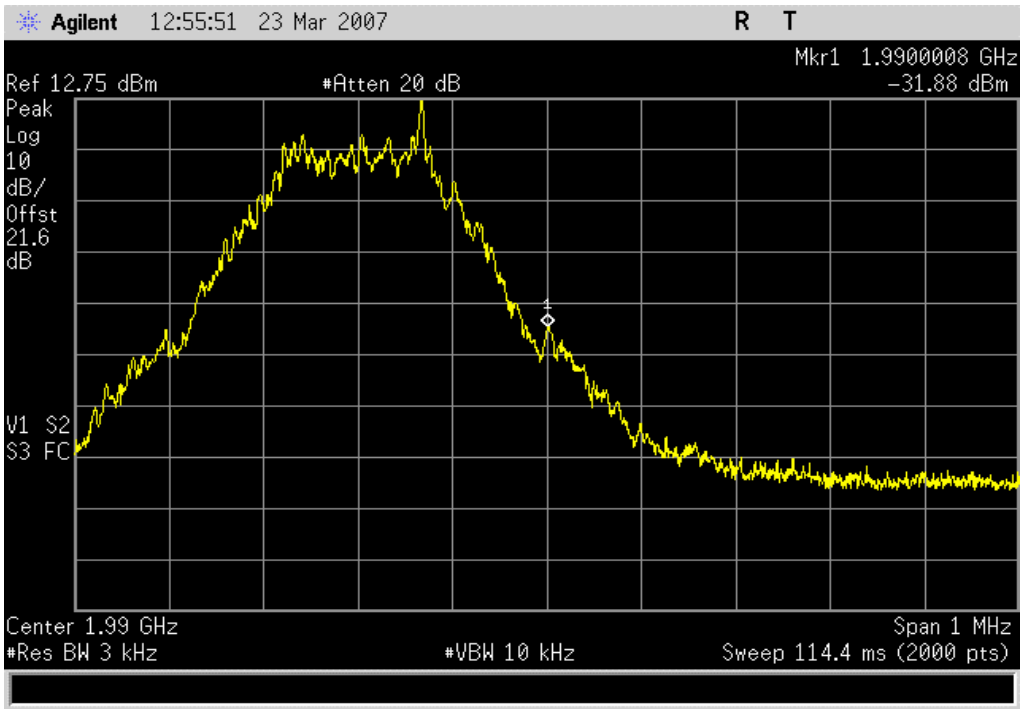
GPRS Modulation, Low Power, High Channel, Reference Level Plot					
Result:	N/A	**Value:**	12.75 dBm	**Limit:**	N/A

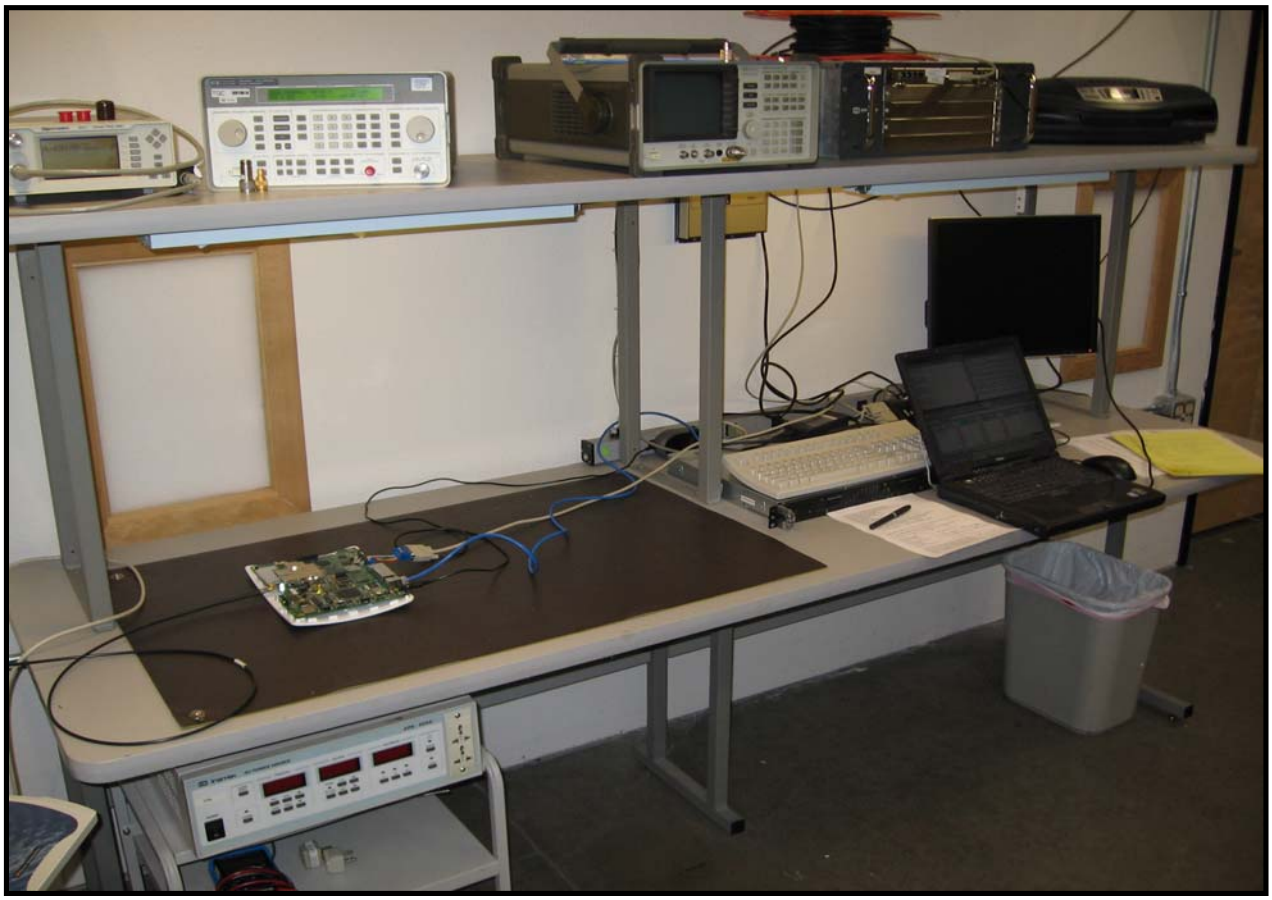


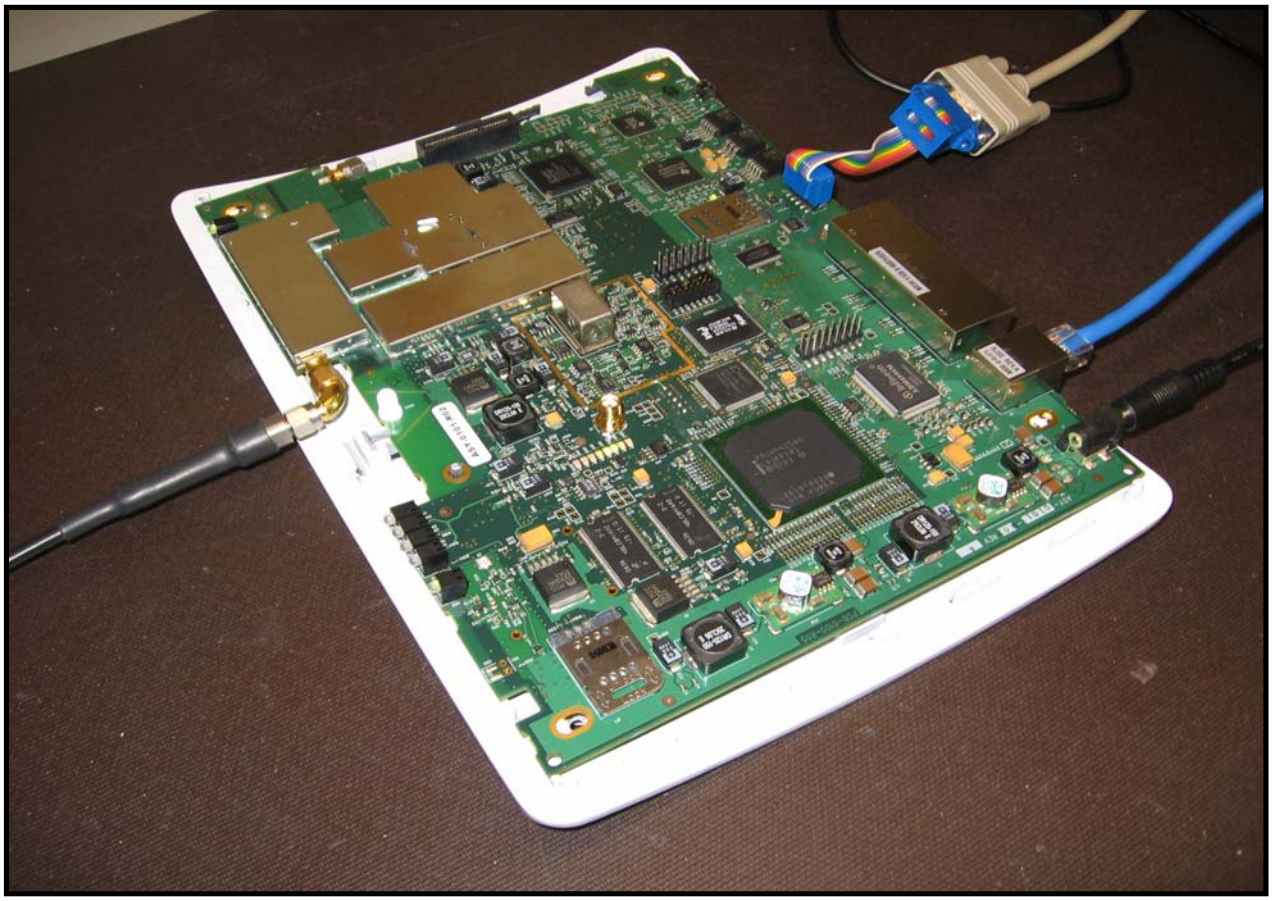
GPRS Modulation, Low Power, High Channel, Occupied Bandwidth					
Result:	N/A	**Value:**	262.1 kHz	**Limit:**	N/A



GPRS Modulation, Low Power, High Channel, Band Edge					
Result:	Pass	**Value:**	-31.88 dBm	**Limit:**	≤ -13 dBm







Spurious Conducted Emissions

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Pasternack	PE7005-20	AUN	2/6/2007	13
Spectrum Analyzer	Agilent	E4407B	AAU	12/8/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT with 20dB of external attenuation on the RF input of the spectrum analyzer. Analyzer plots utilizing a 100 kHz resolution bandwidth and no video filtering were made for each modulation type from 0 to 10 GHz. The peak conducted power of spurious emissions, up to the 10^{th} harmonic of the transmit frequency, were investigated to ensure they were less than or equal to –13 dBm.

NORTHWEST EMC

Spurious Conducted Emissions

XMit 2006.11.13

EUT:	S-BTS GSM Base Station			Work Order:	RAFN0069
Serial Number:	Engineering Unit			Date:	03/26/07
Customer:	Radioframe Networks, Inc.			Temperature:	22°C
Attendees:	Bob Melsheimer			Humidity:	33%
Project:	None			Barometric Pres.:	29.91
Tested by:	Greg Kiemel	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 22H:2005	ANSI/TIA/EIA-603-B-2002

COMMENTS

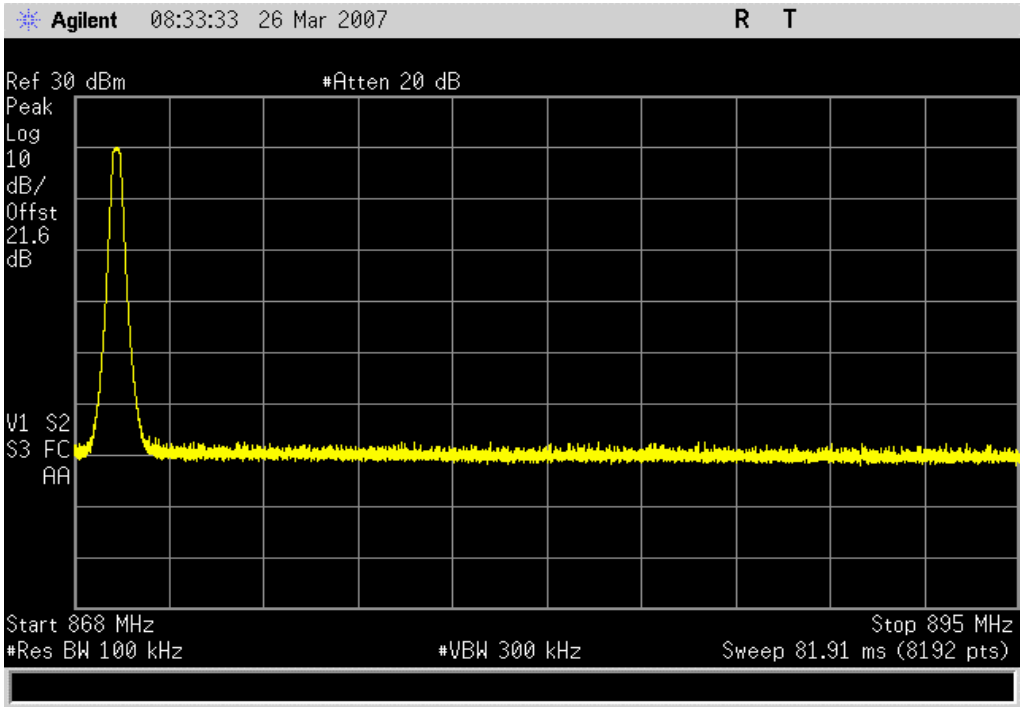
Maximum Output Power

DEVIATIONS FROM TEST STANDARD

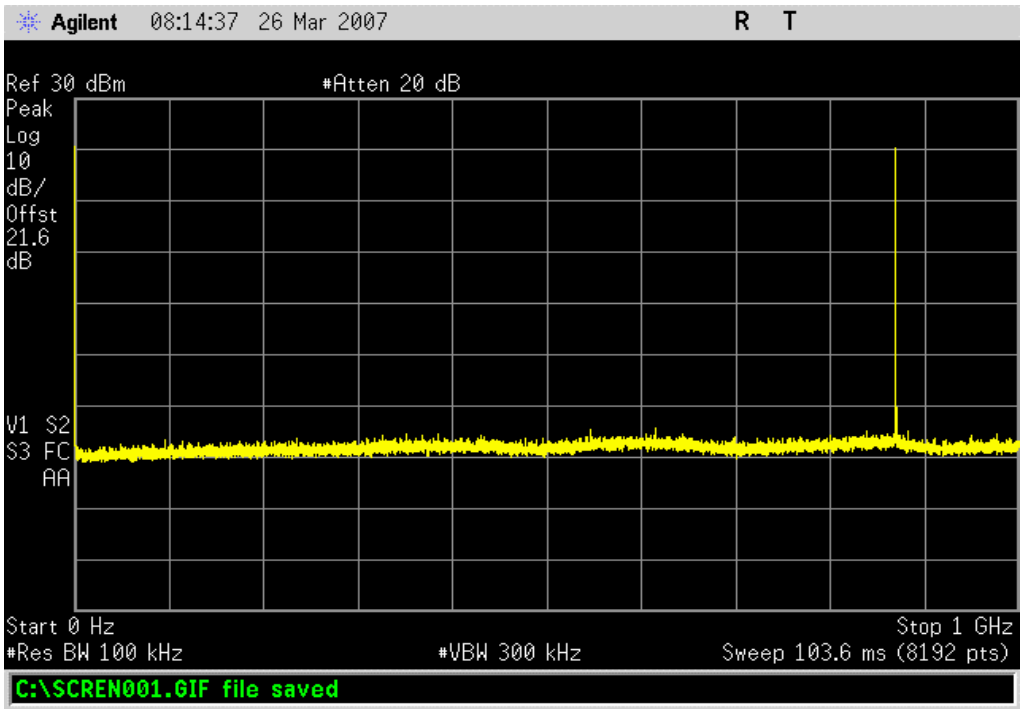
Configuration #	1	Signature

		Value	Limit	Results
GSM				
	Low Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	Mid Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	High Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass
GPRS				
	Low Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	Mid Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	High Channel			
	In Band	≤ -30 dBm	≤ -13 dBm	Pass
	0 - 1 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	995 MHz - 2.8 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	2.795 - 4.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	4.495 - 6 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	5.995 - 7.5 GHz	≤ -30 dBm	≤ -13 dBm	Pass
	7.495 - 9 GHz	≤ -30 dBm	≤ -13 dBm	Pass

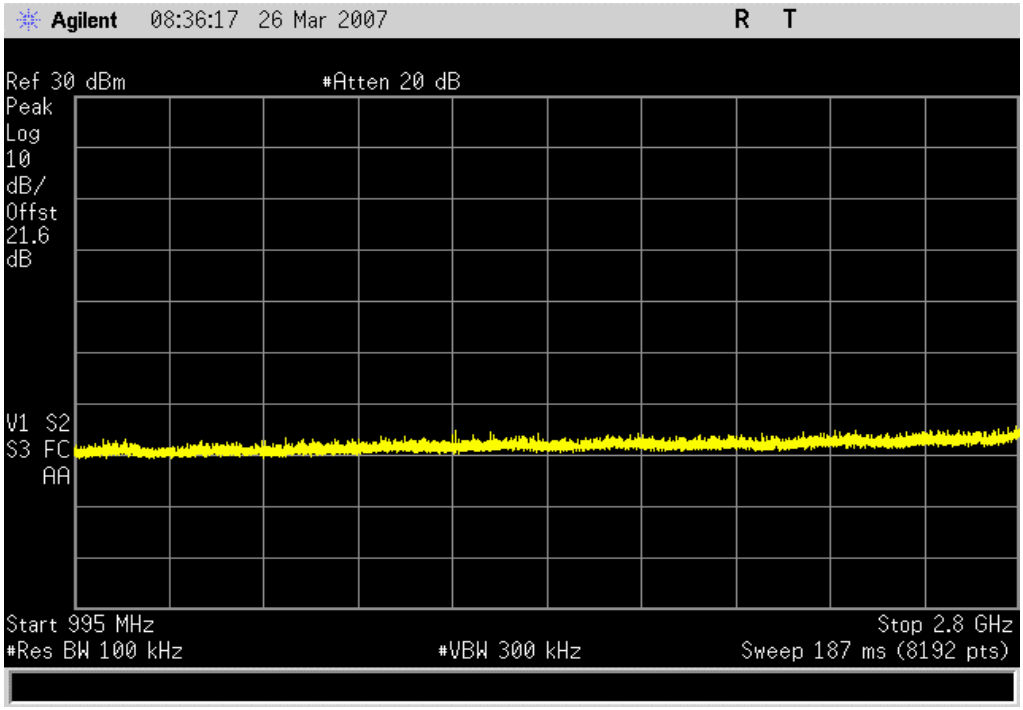
GSM, Low Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



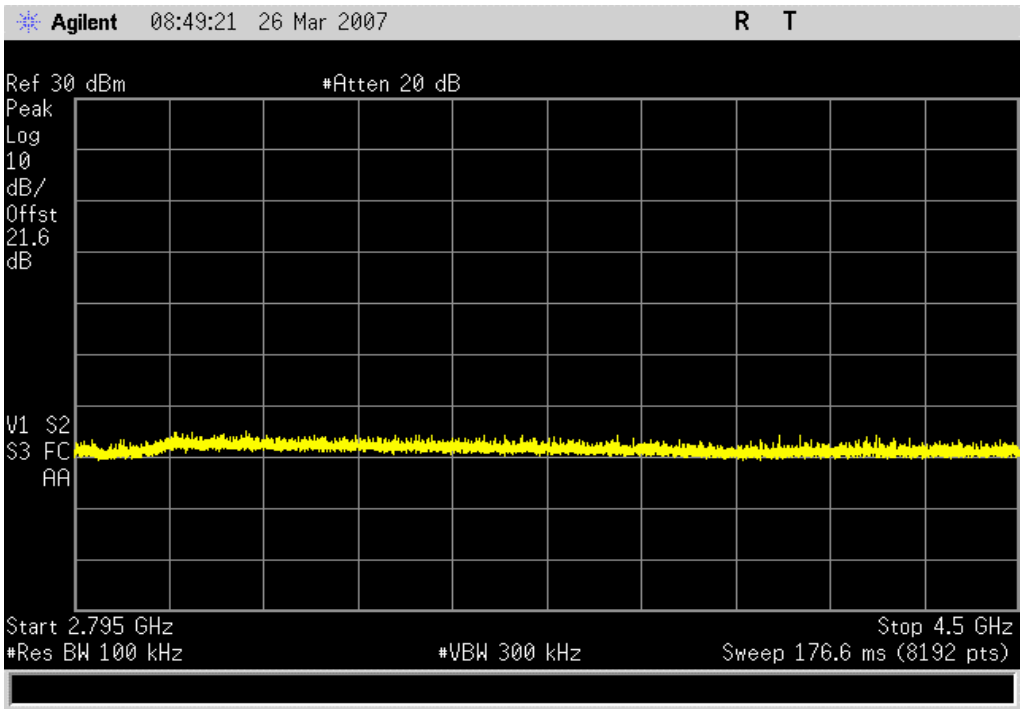
GSM, Low Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



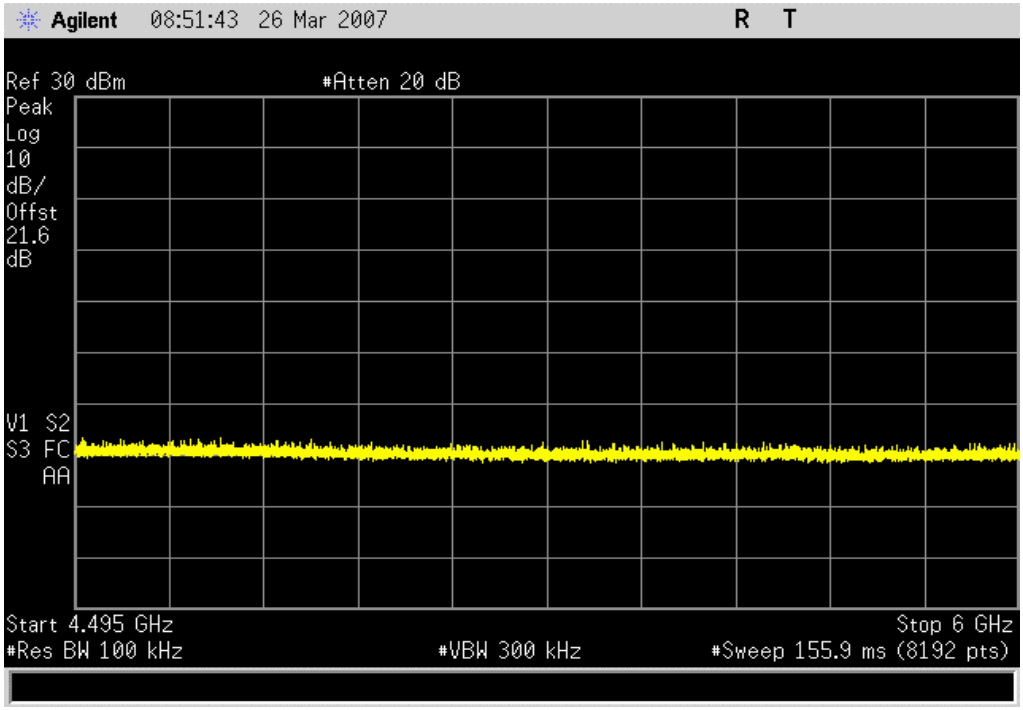
GSM, Low Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



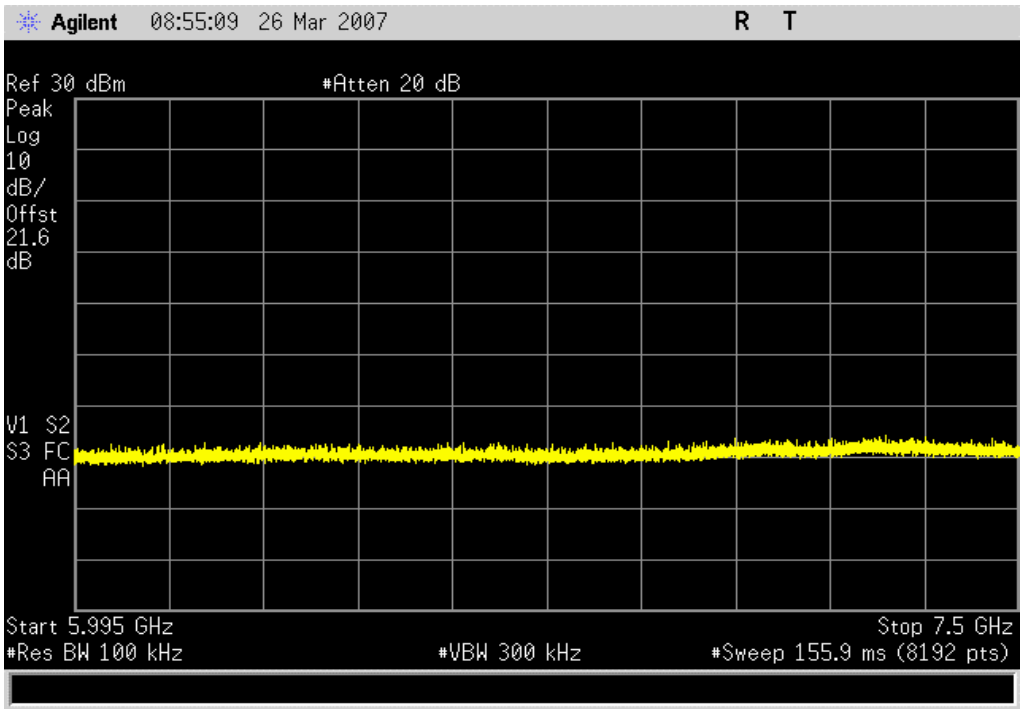
GSM, Low Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



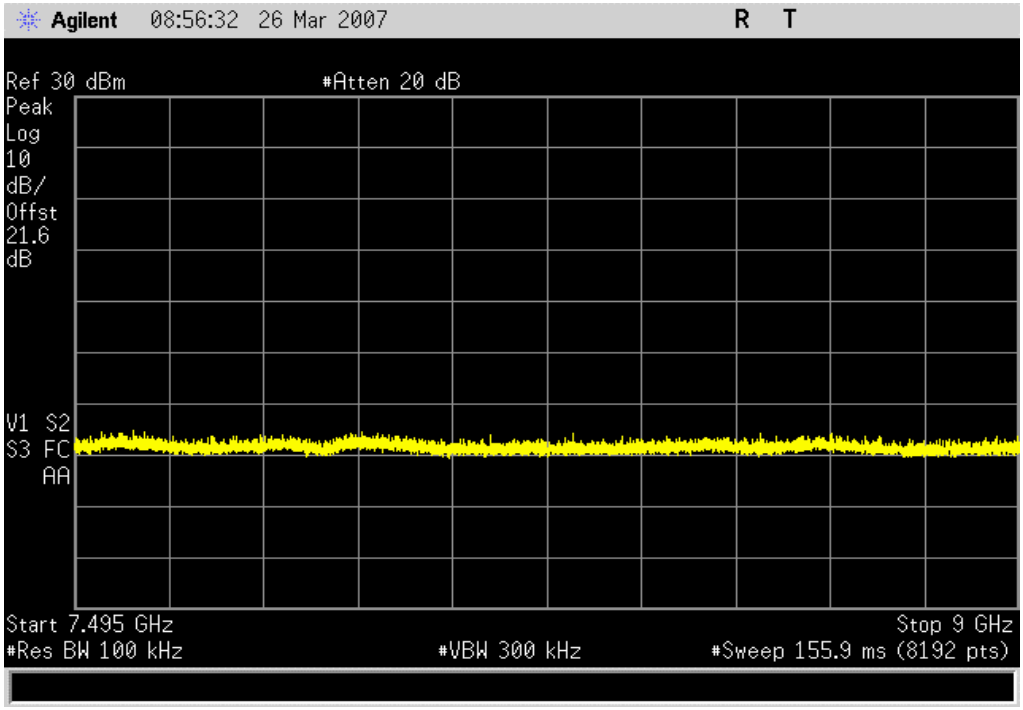
GSM, Low Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



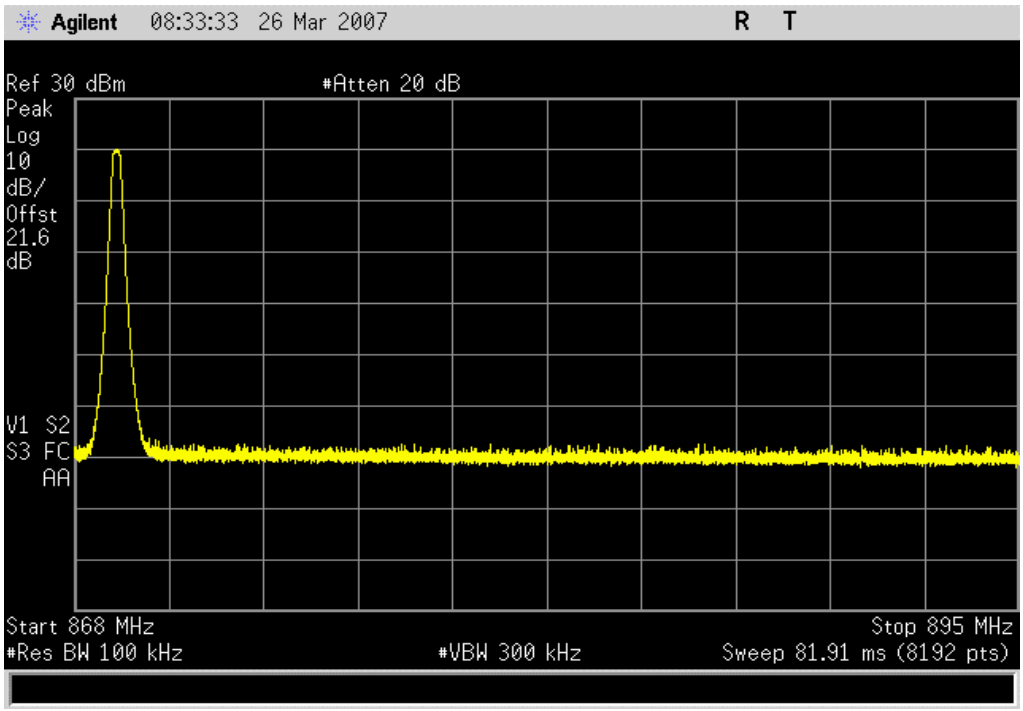
GSM, Low Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



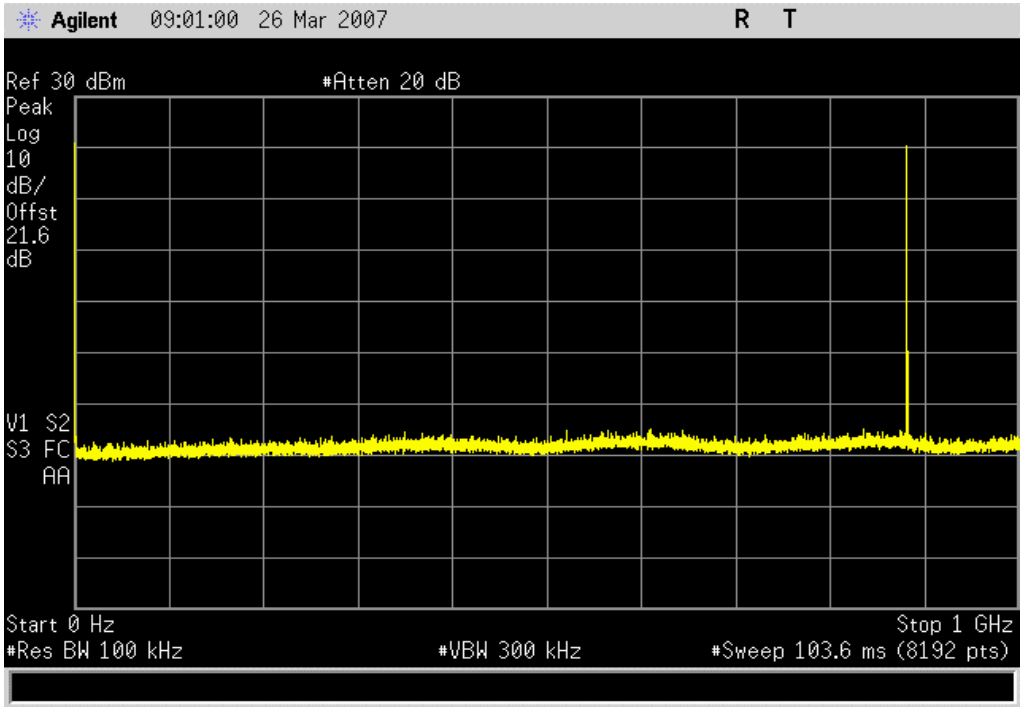
GSM, Low Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



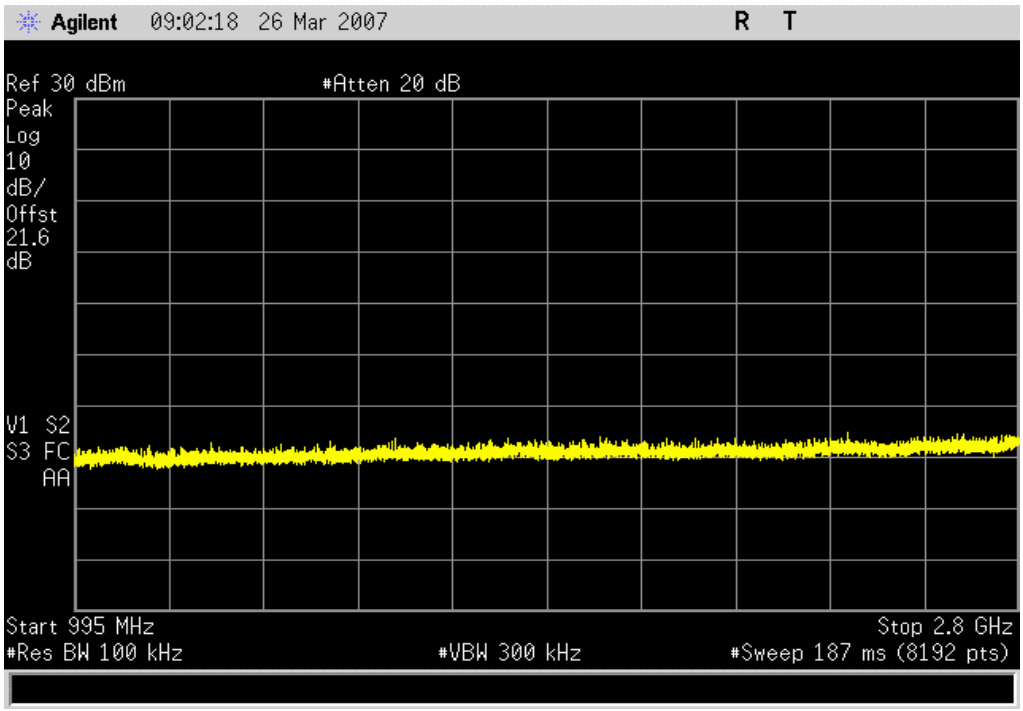
GSM, Mid Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



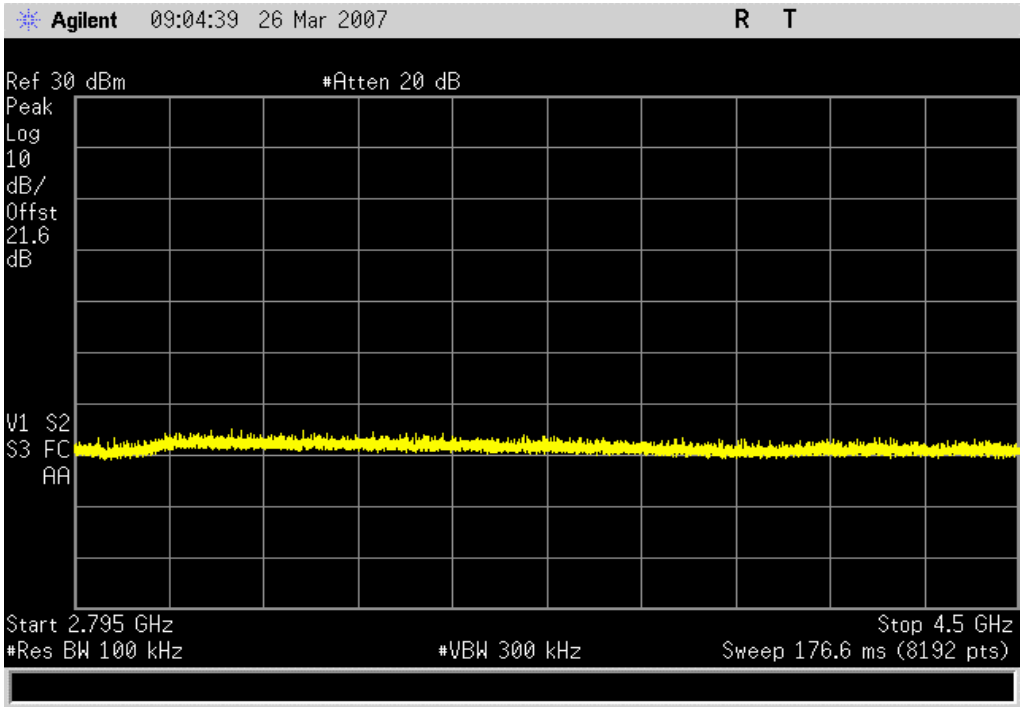
GSM, Mid Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



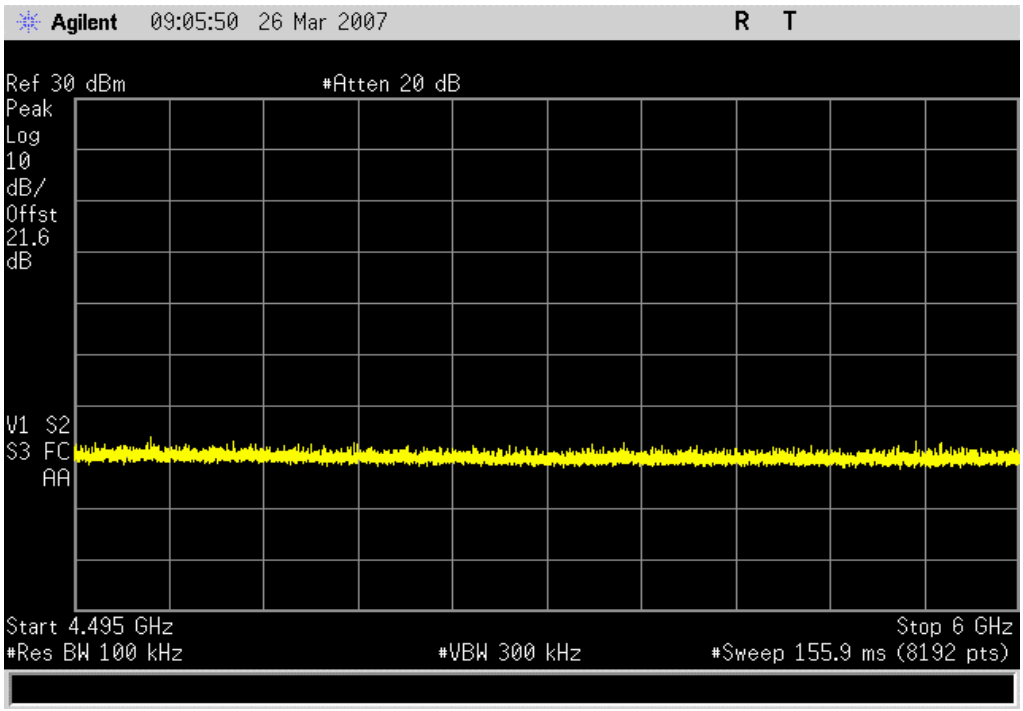
GSM, Mid Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



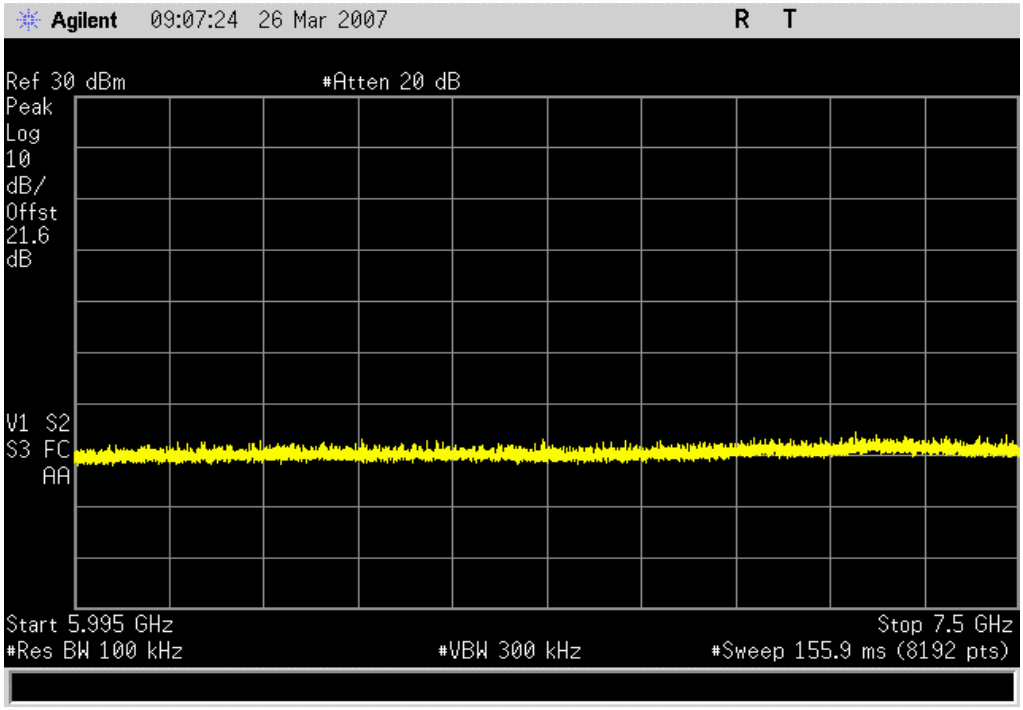
GSM, Mid Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



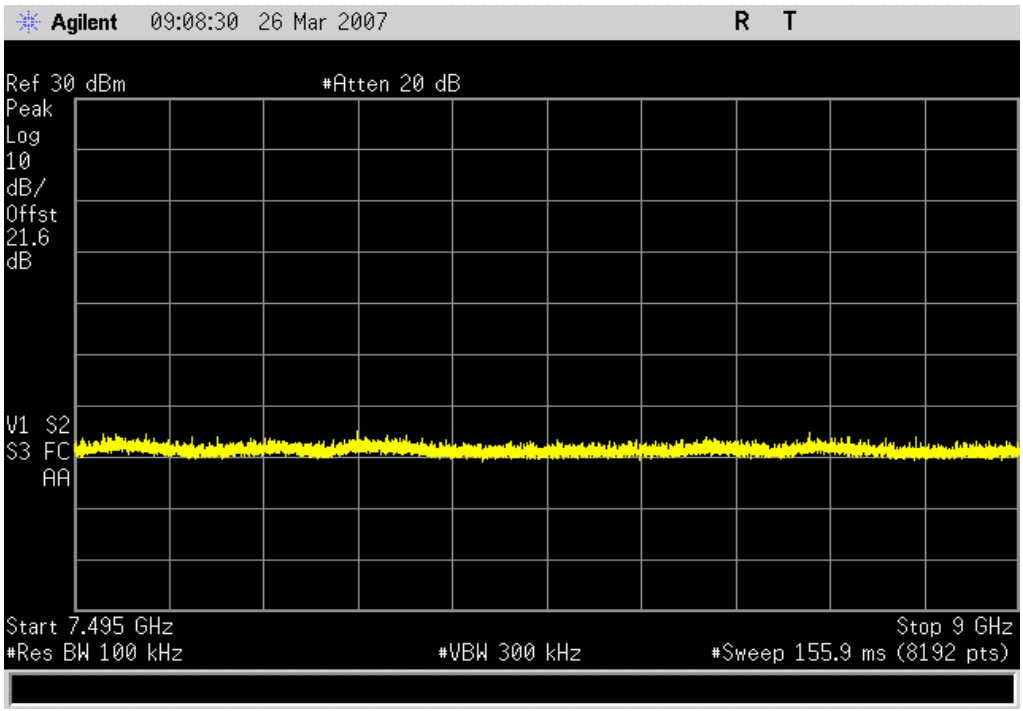
GSM, Mid Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



GSM, Mid Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm

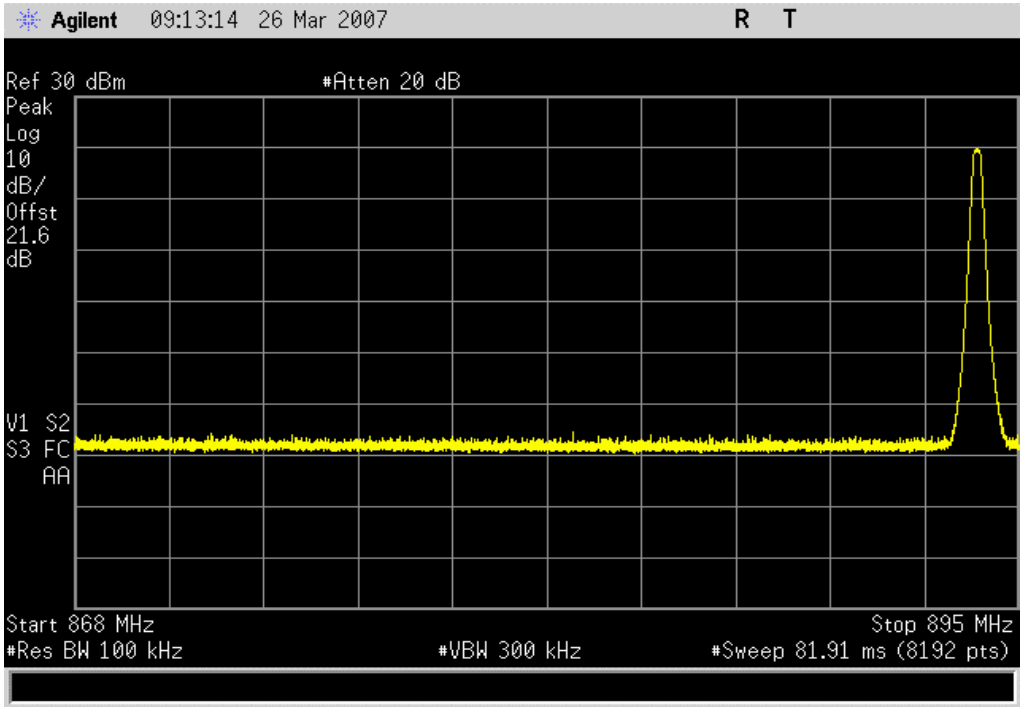


GSM, Mid Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm

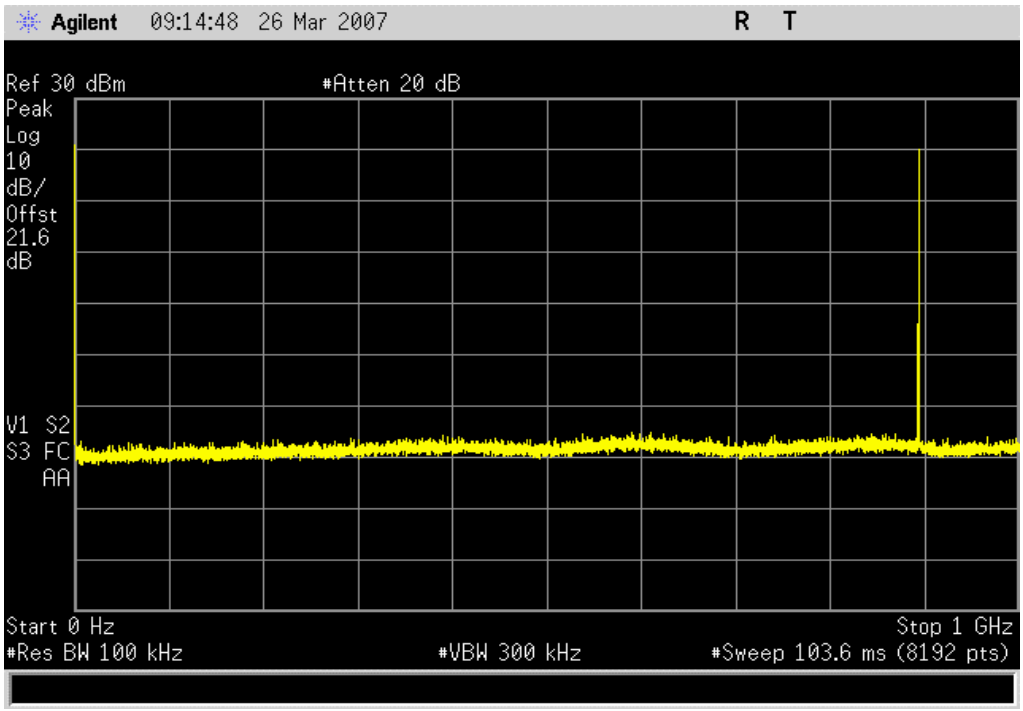


Spurious Conducted Emissions

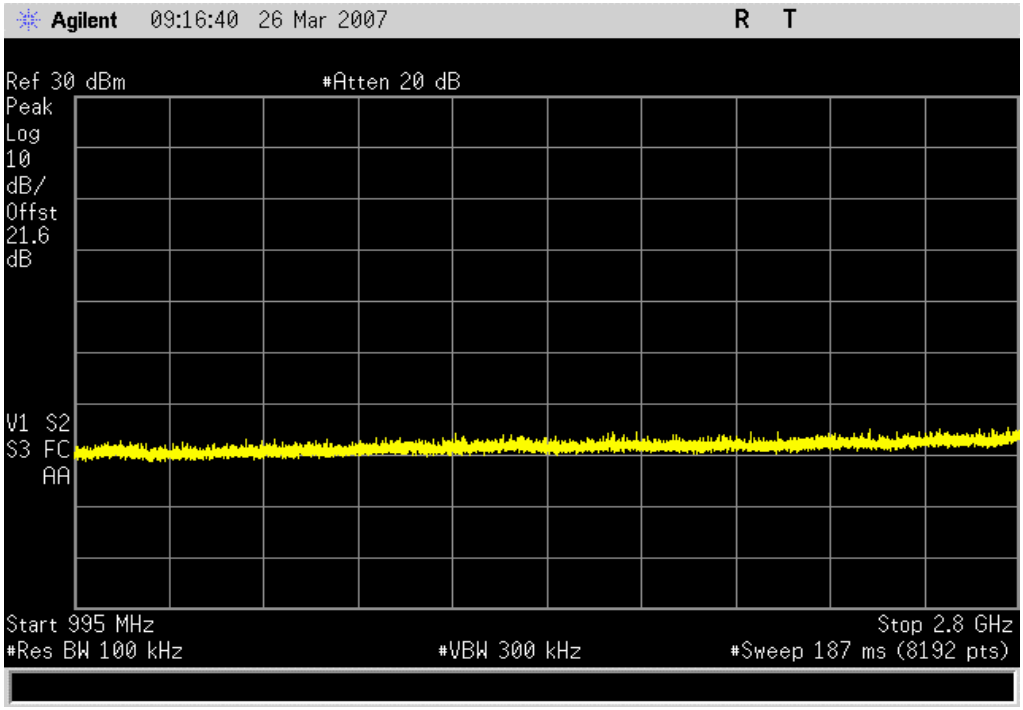
GSM, High Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



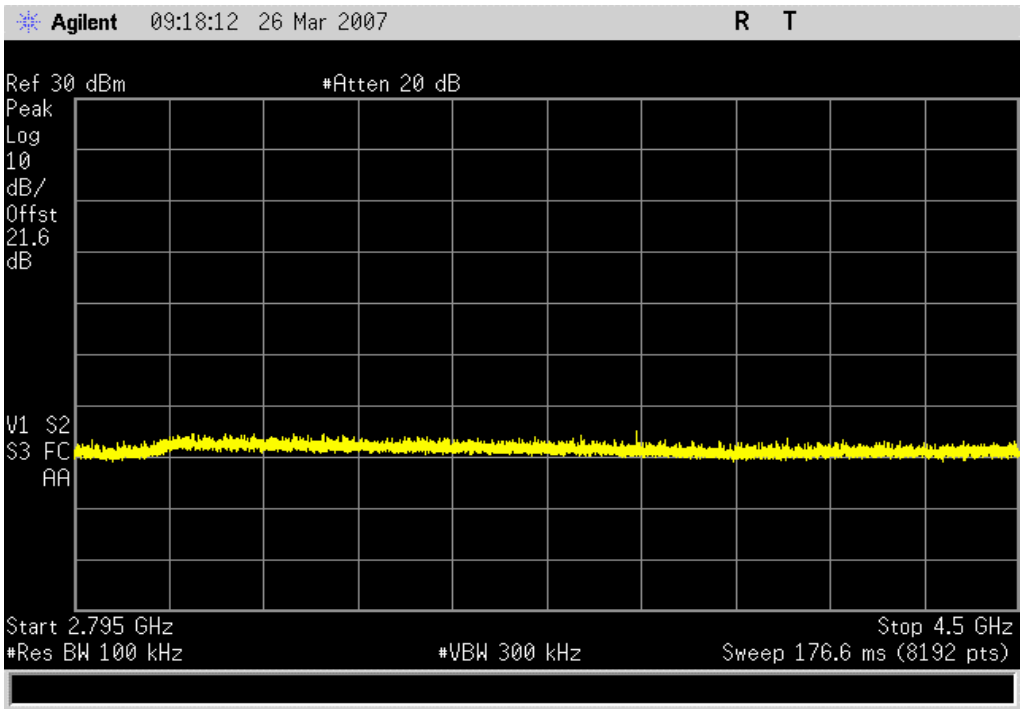
GSM, High Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



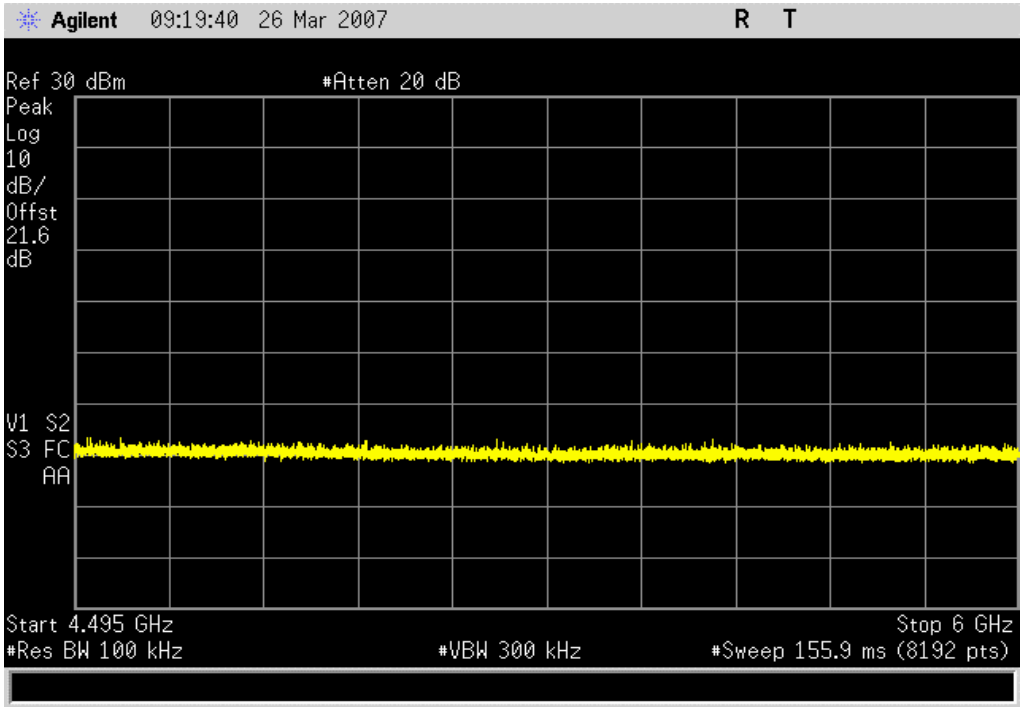
GSM, High Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



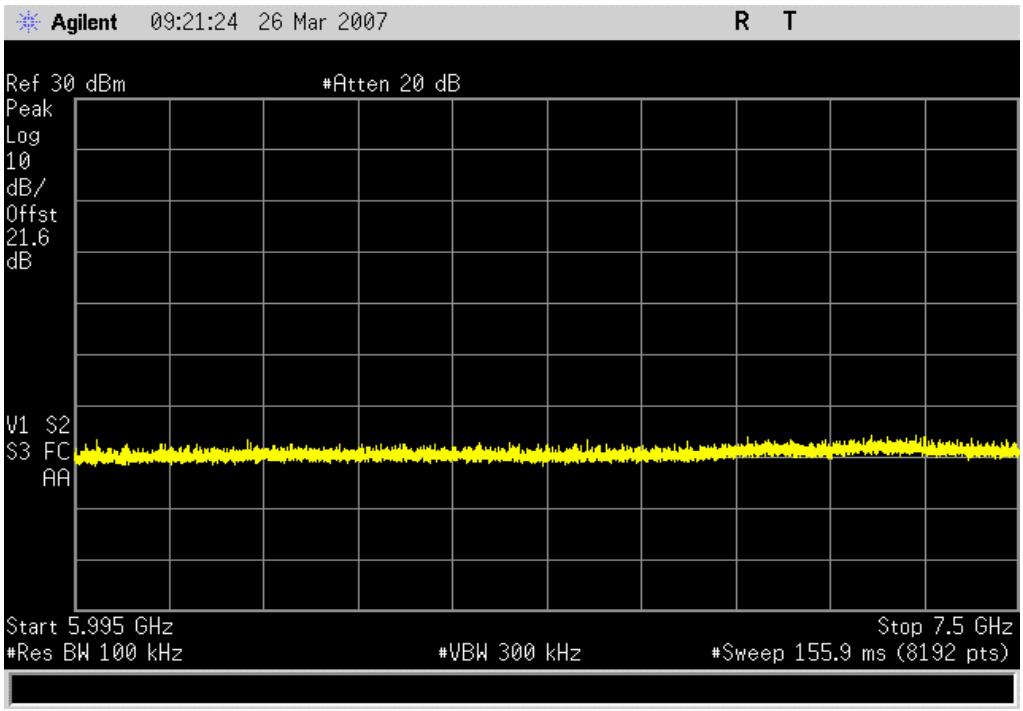
GSM, High Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



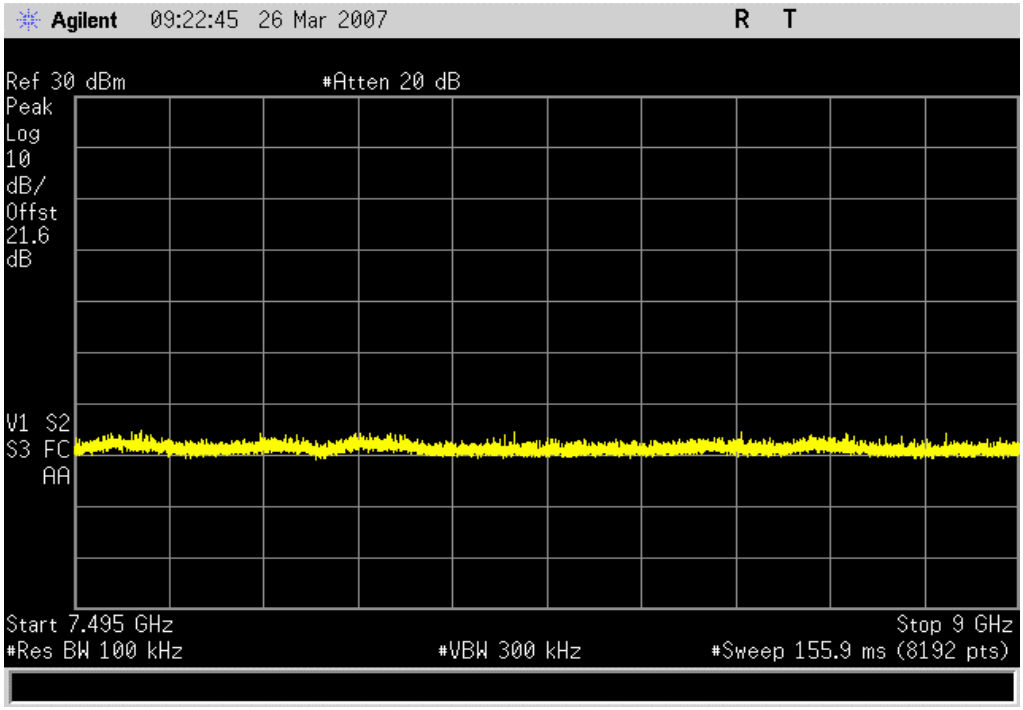
GSM, High Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



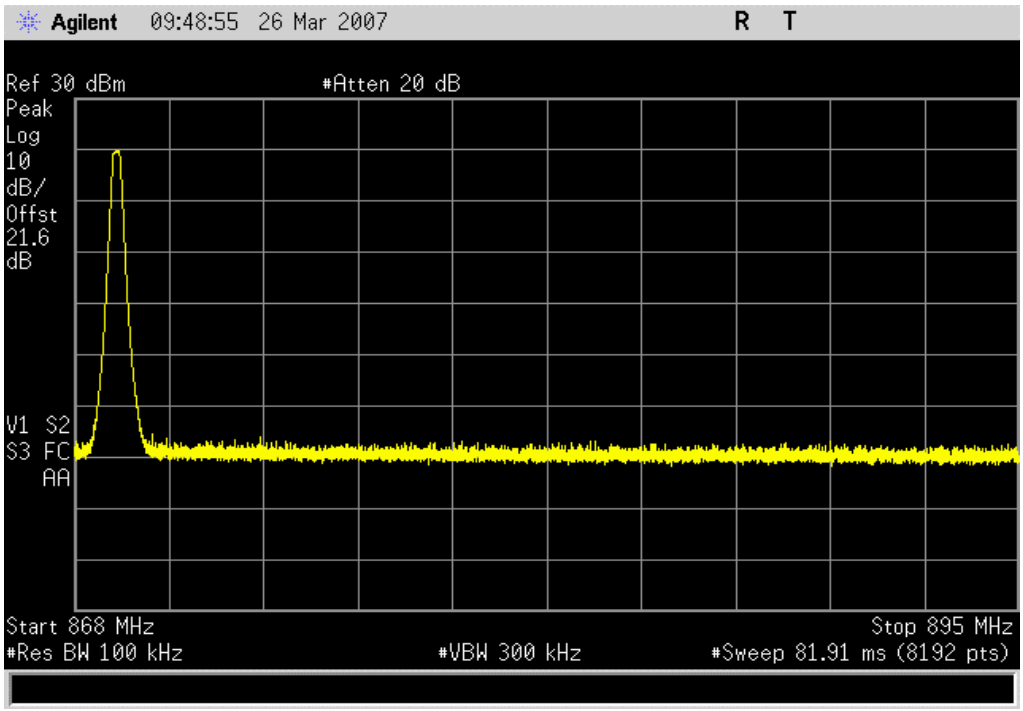
GSM, High Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



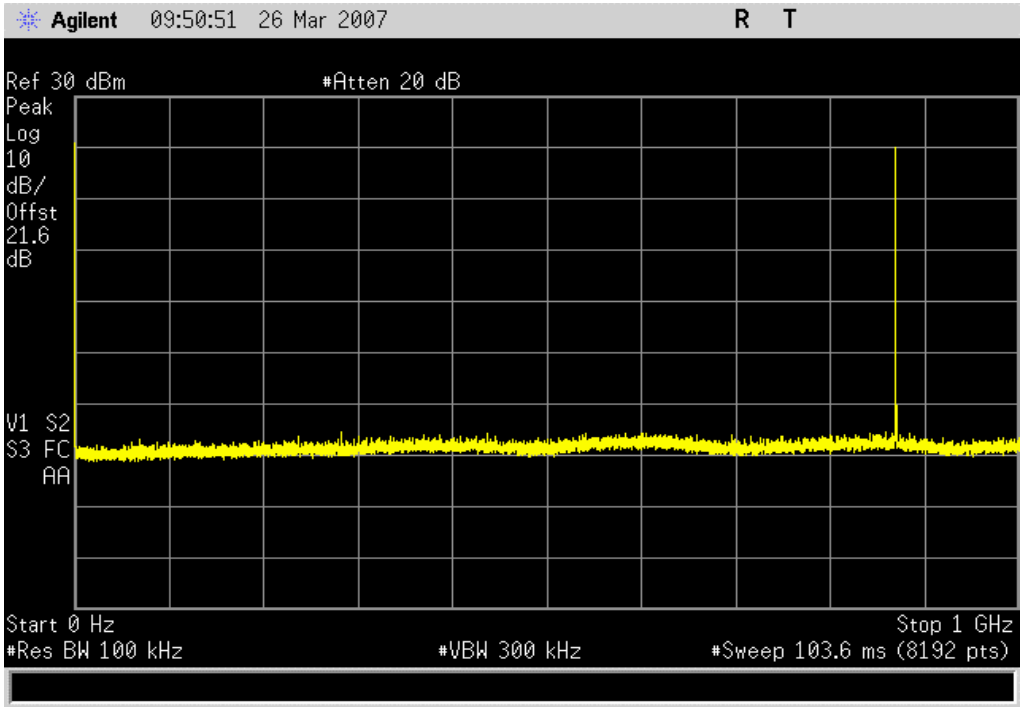
GSM, High Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



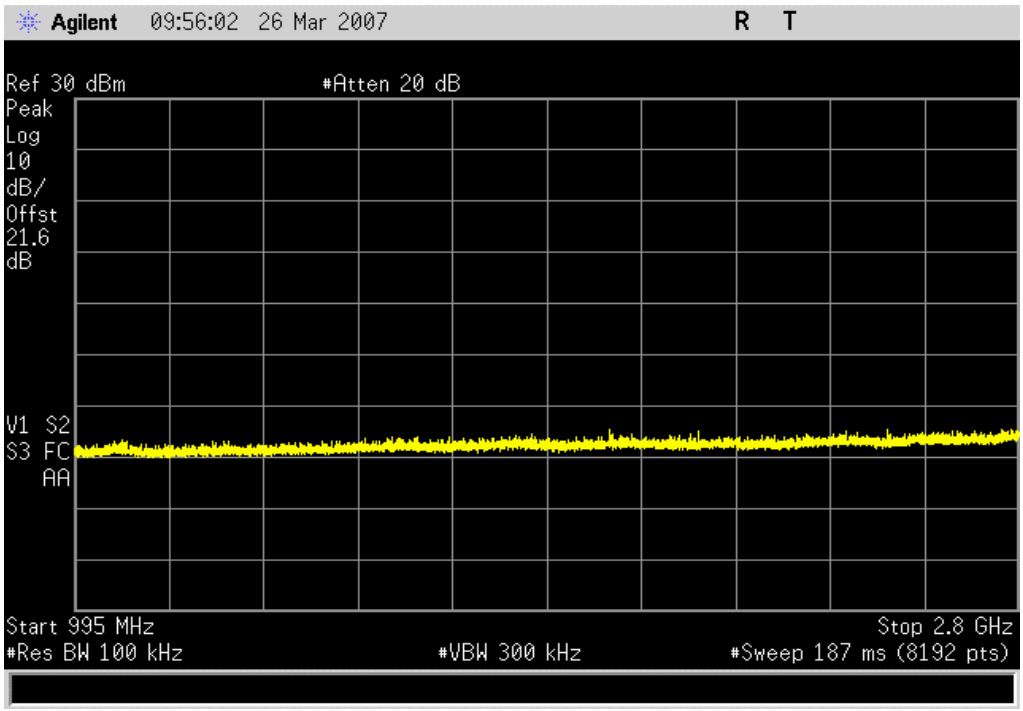
GPRS, Low Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



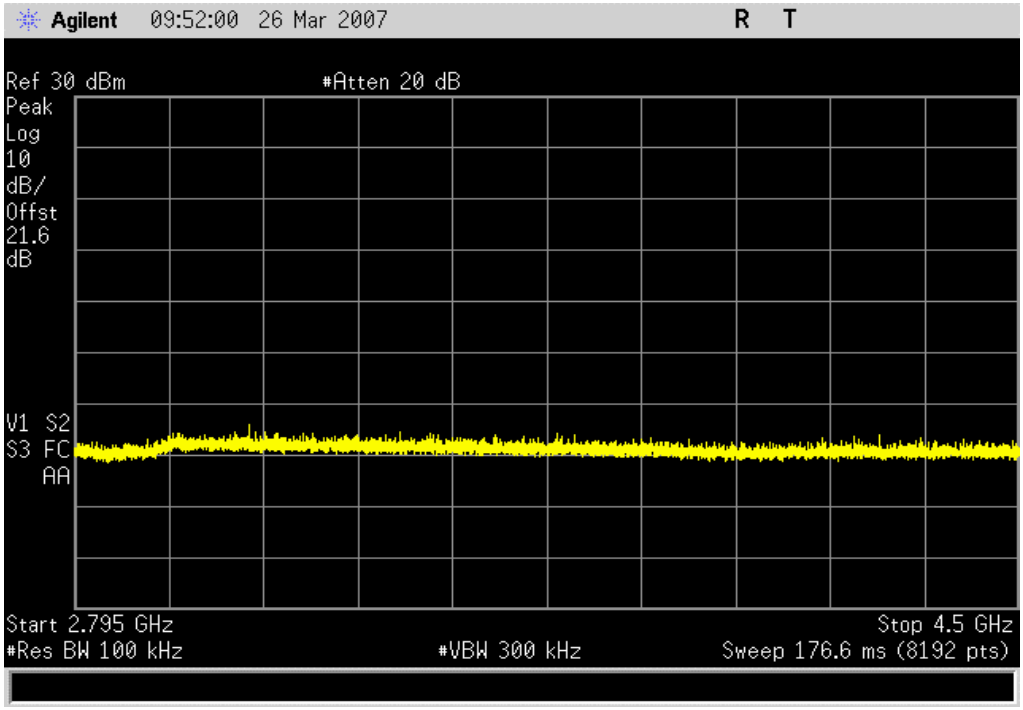
GPRS, Low Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



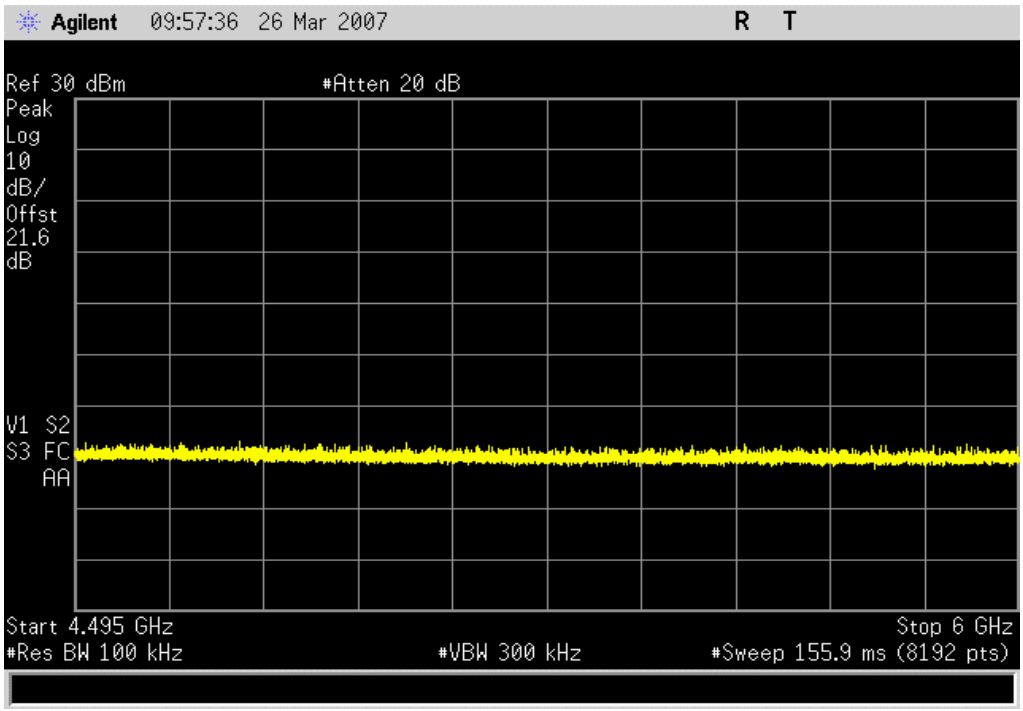
GPRS, Low Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



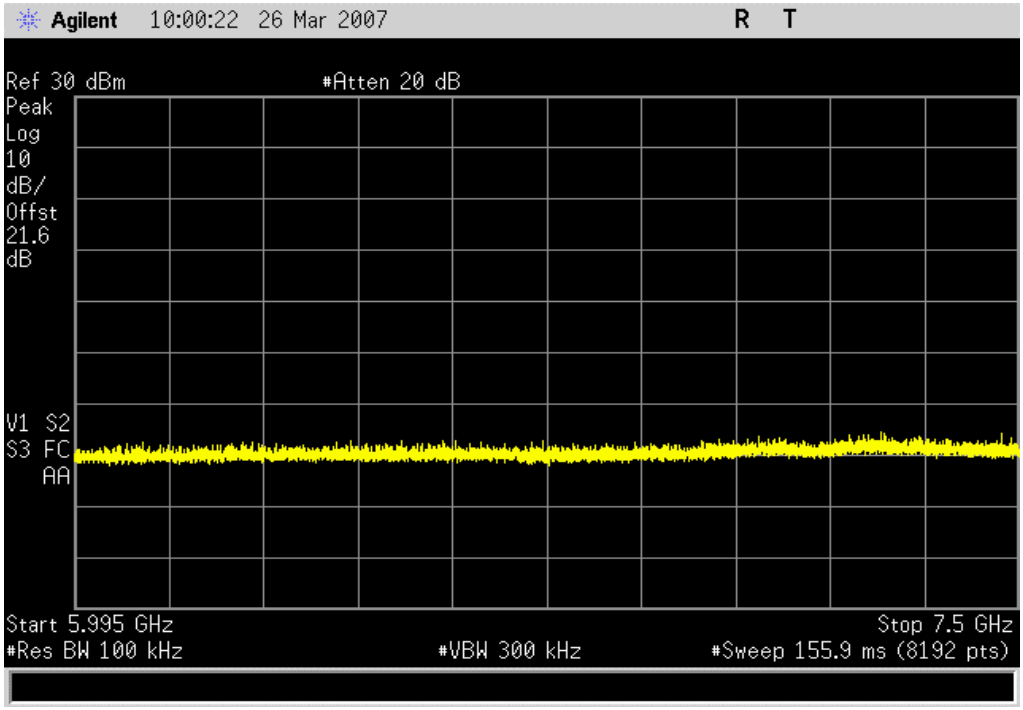
GPRS, Low Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



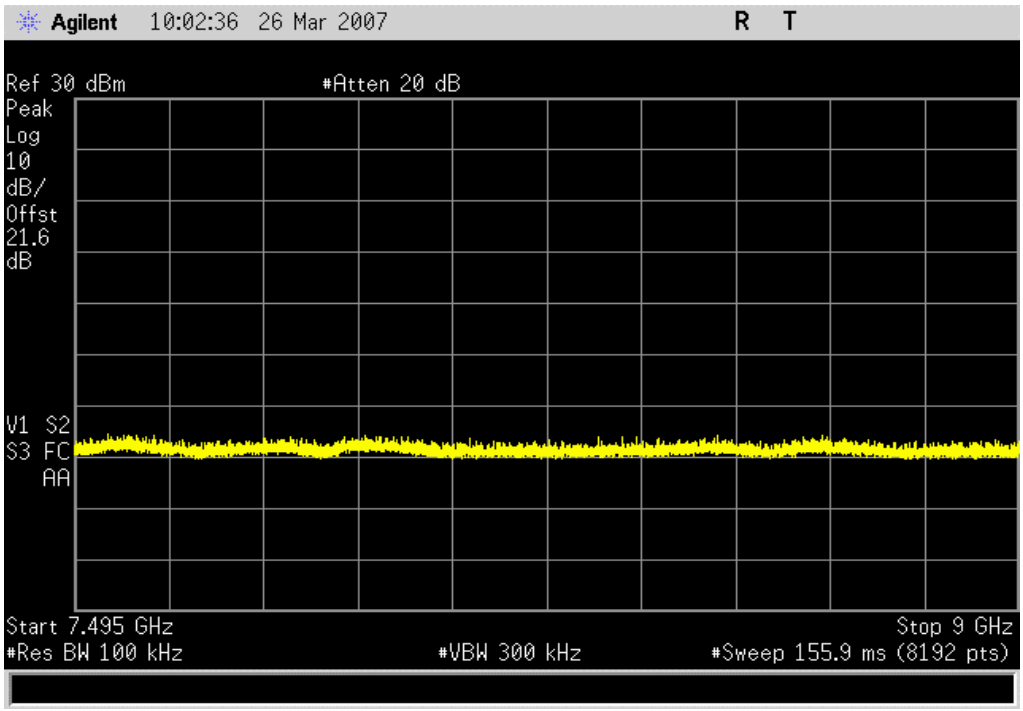
GPRS, Low Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



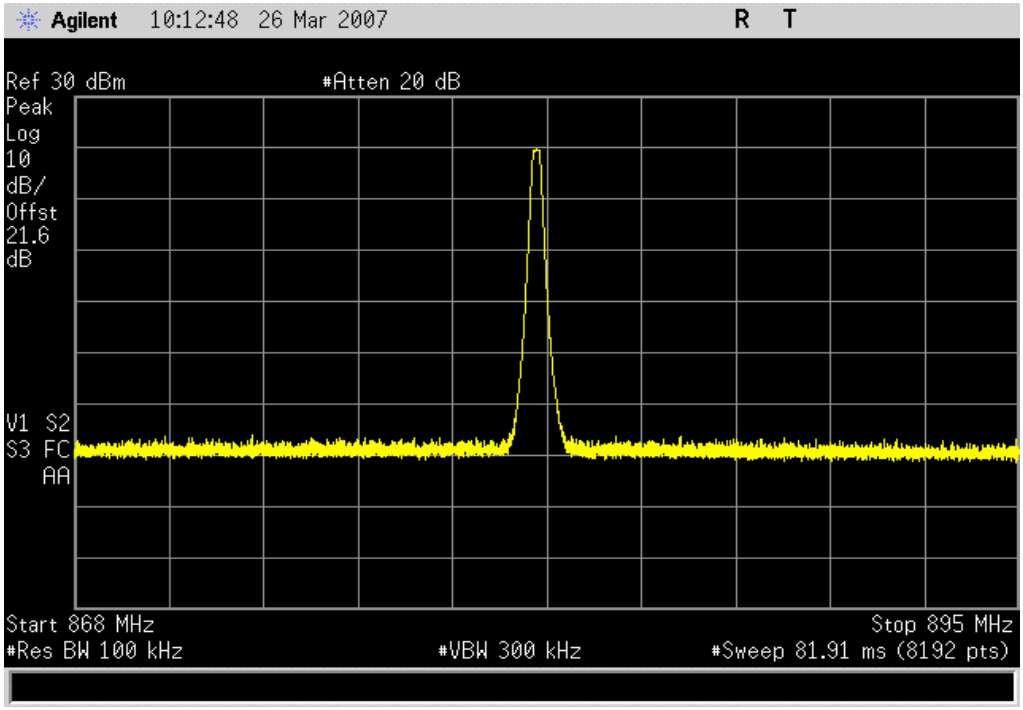
GPRS, Low Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



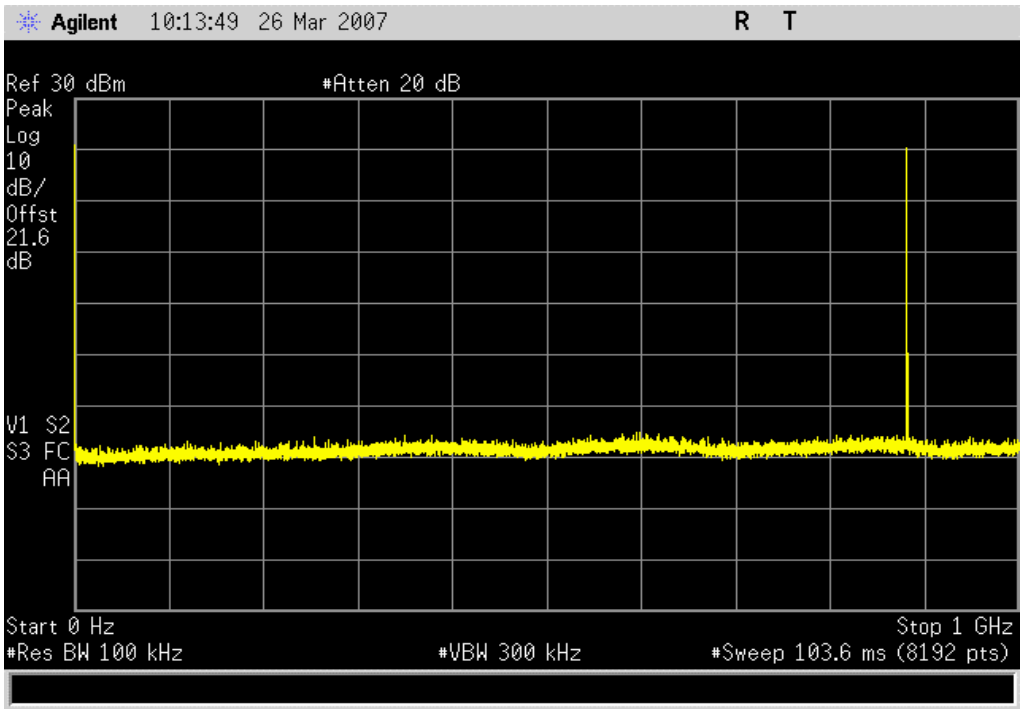
GPRS, Low Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



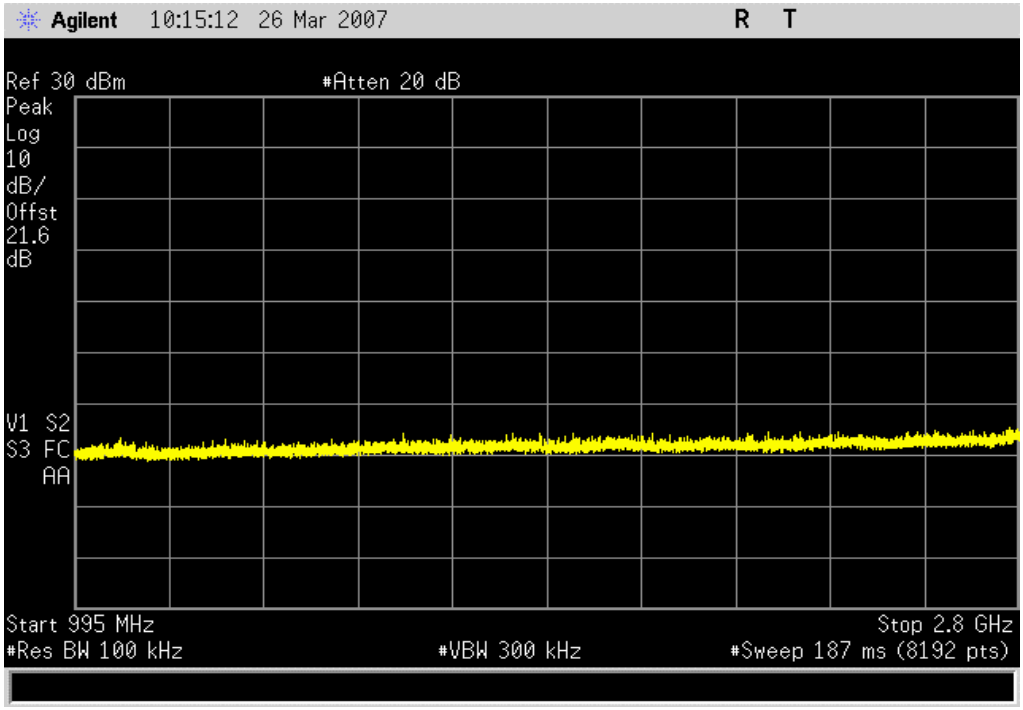
GPRS, Mid Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



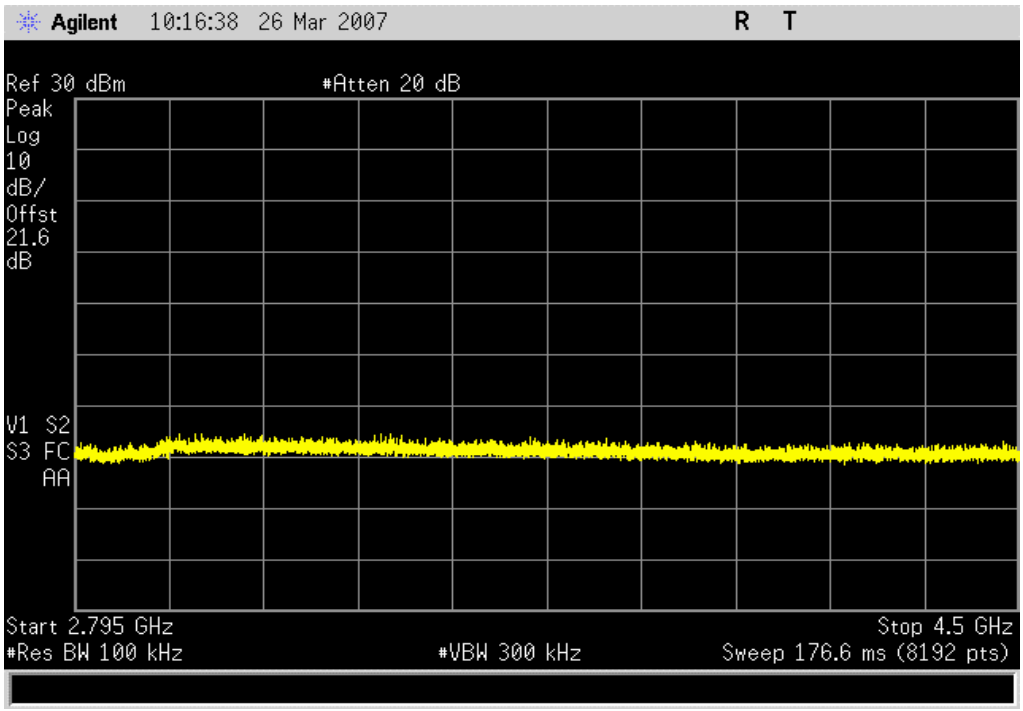
GPRS, Mid Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



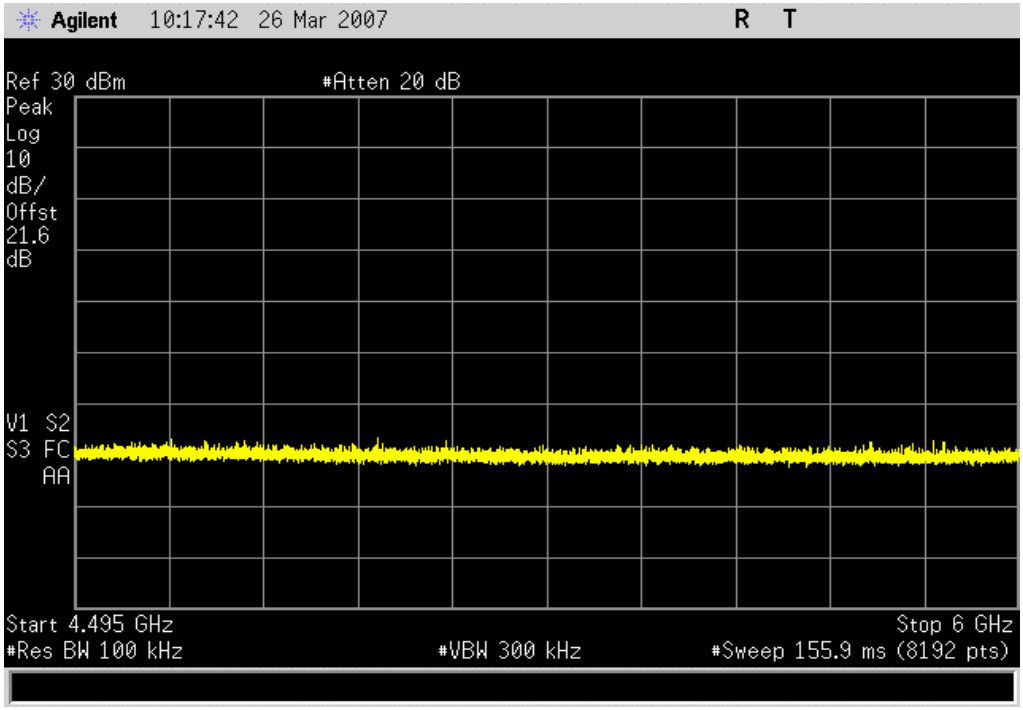
GPRS, Mid Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



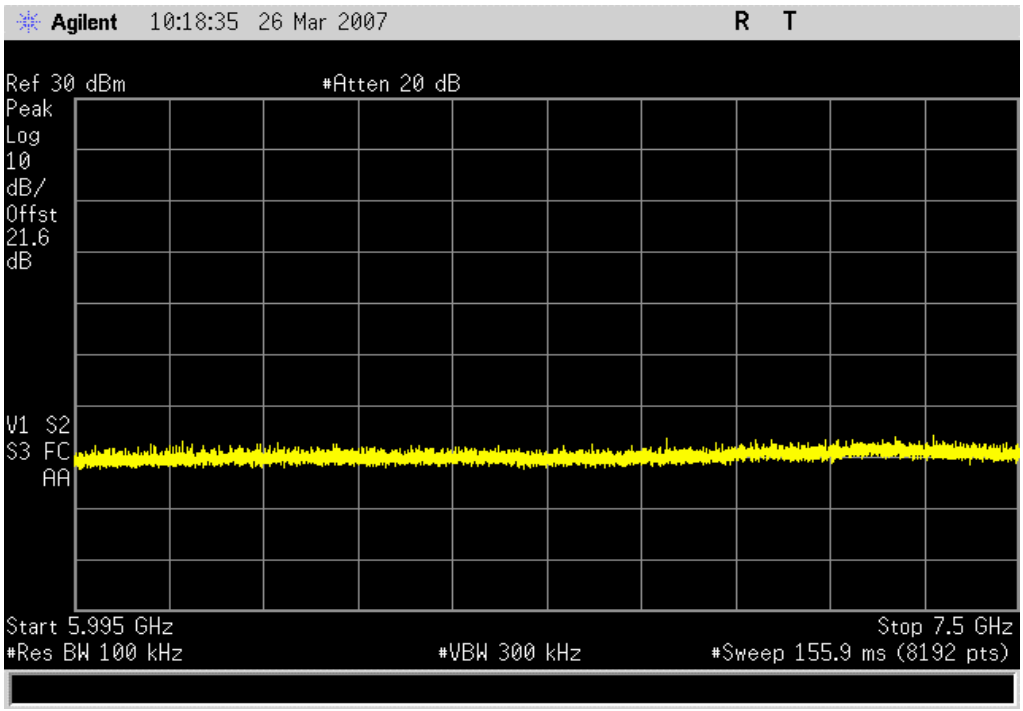
GPRS, Mid Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



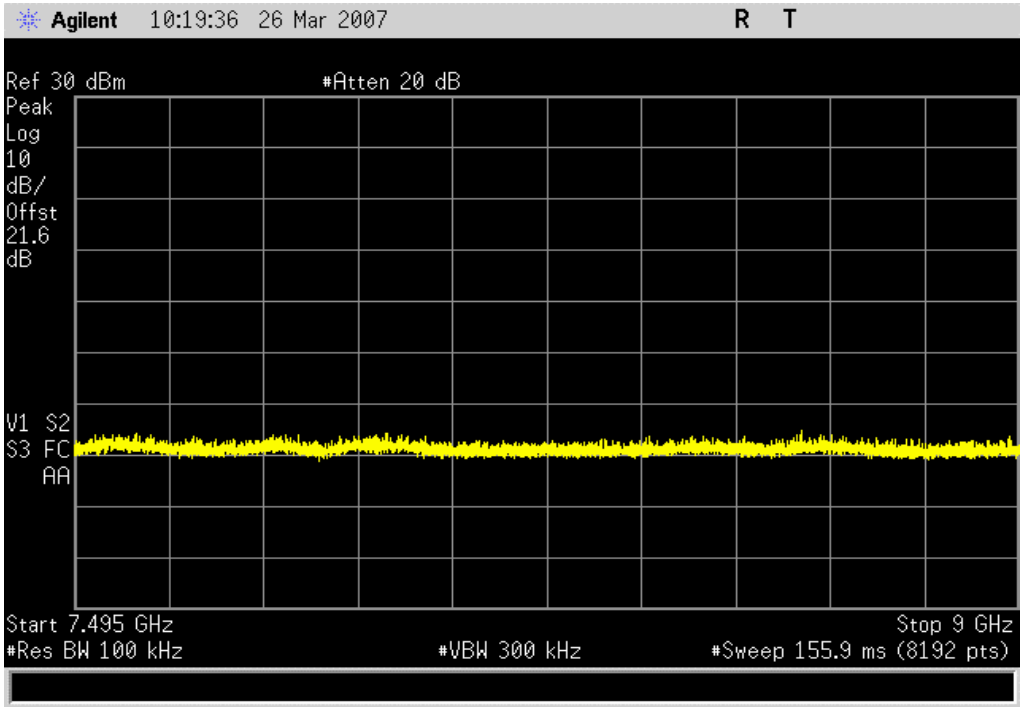
GPRS, Mid Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



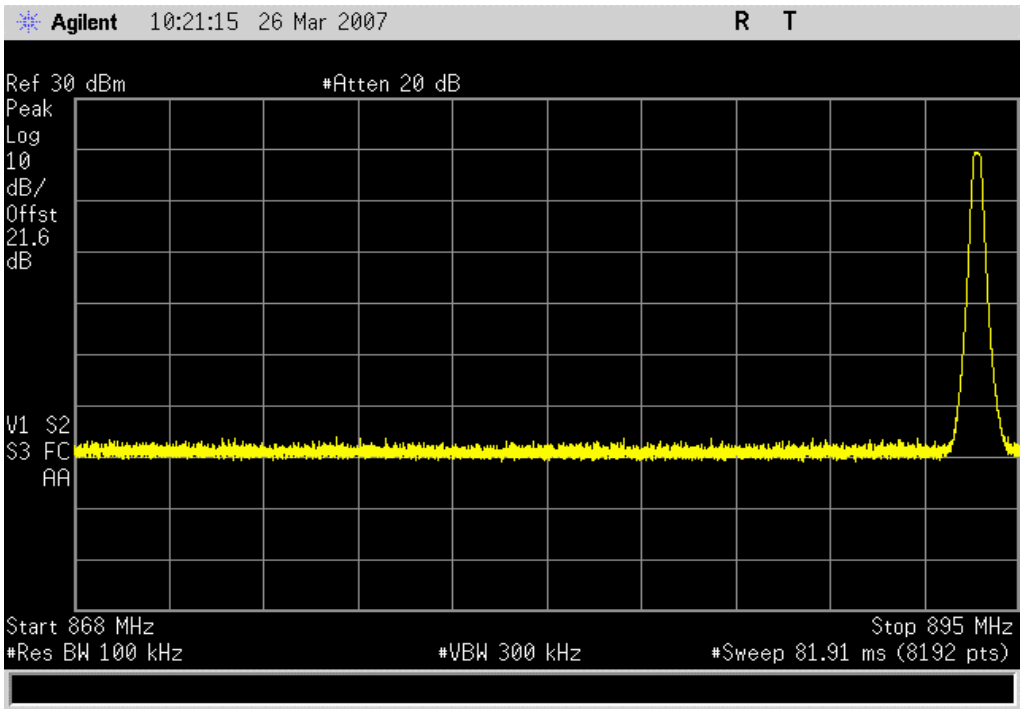
GPRS, Mid Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



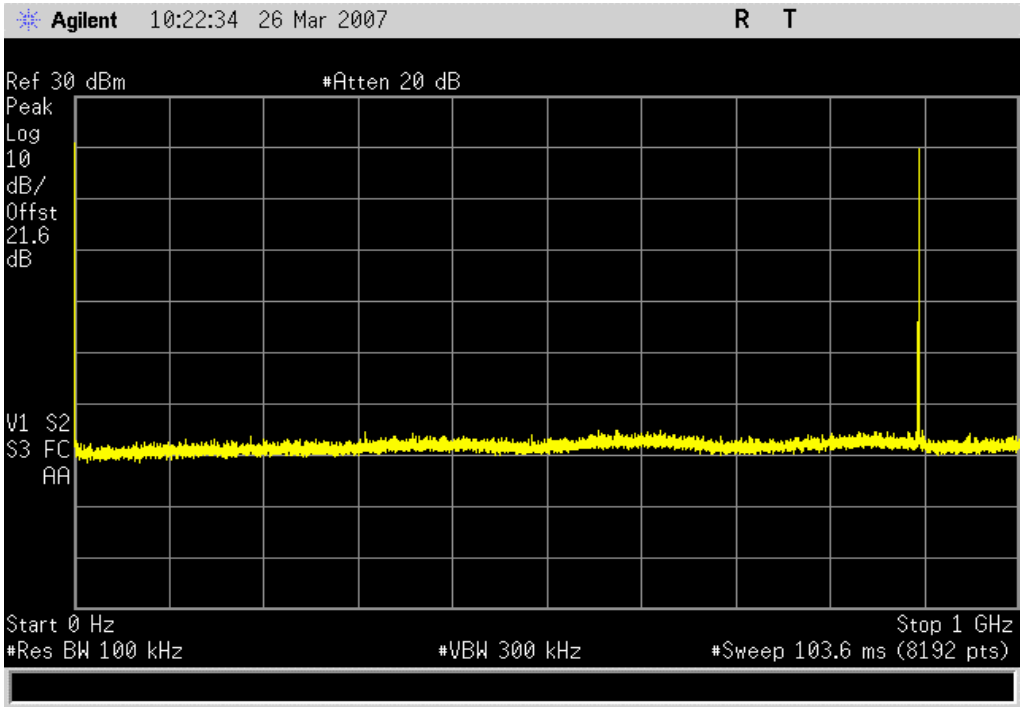
GPRS, Mid Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



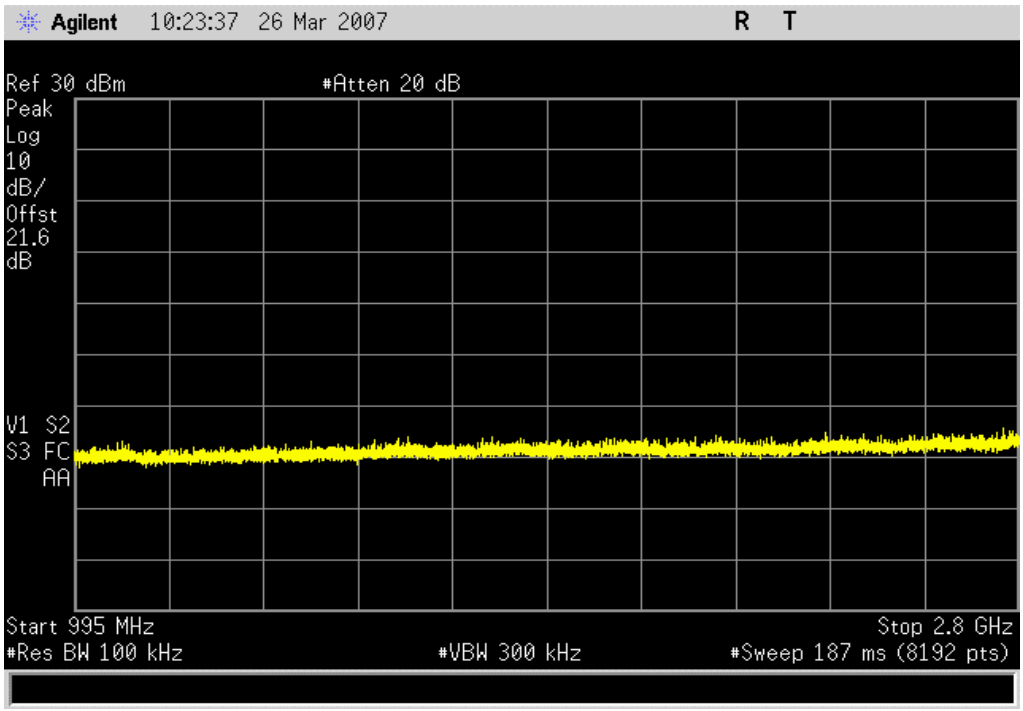
GPRS, High Channel, In Band					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



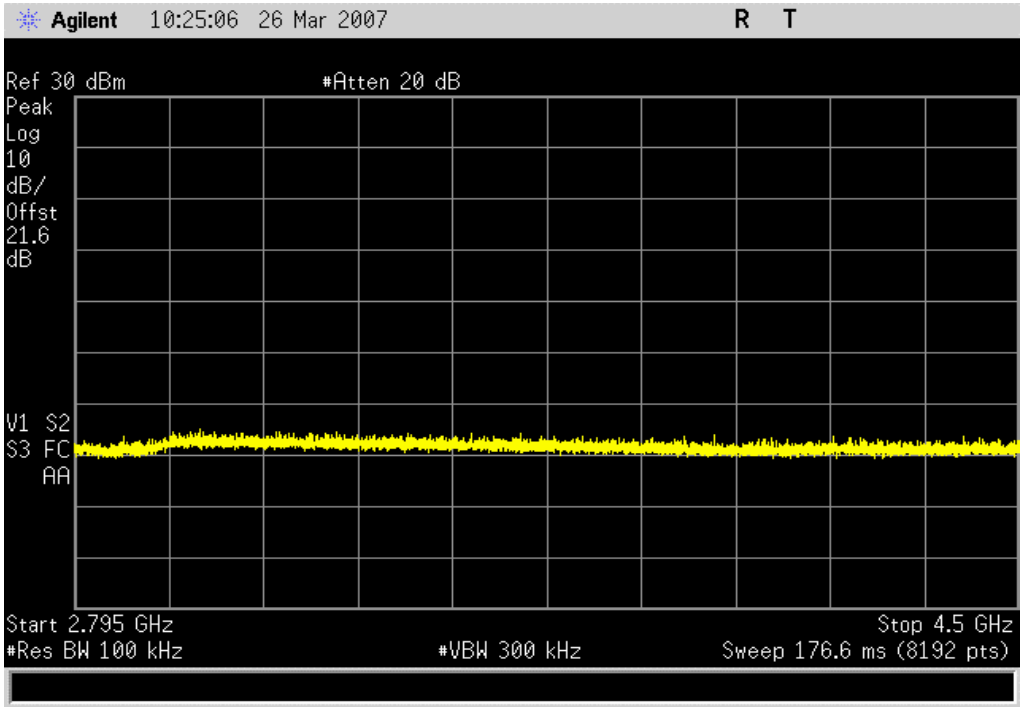
GPRS, High Channel, 0 - 1 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



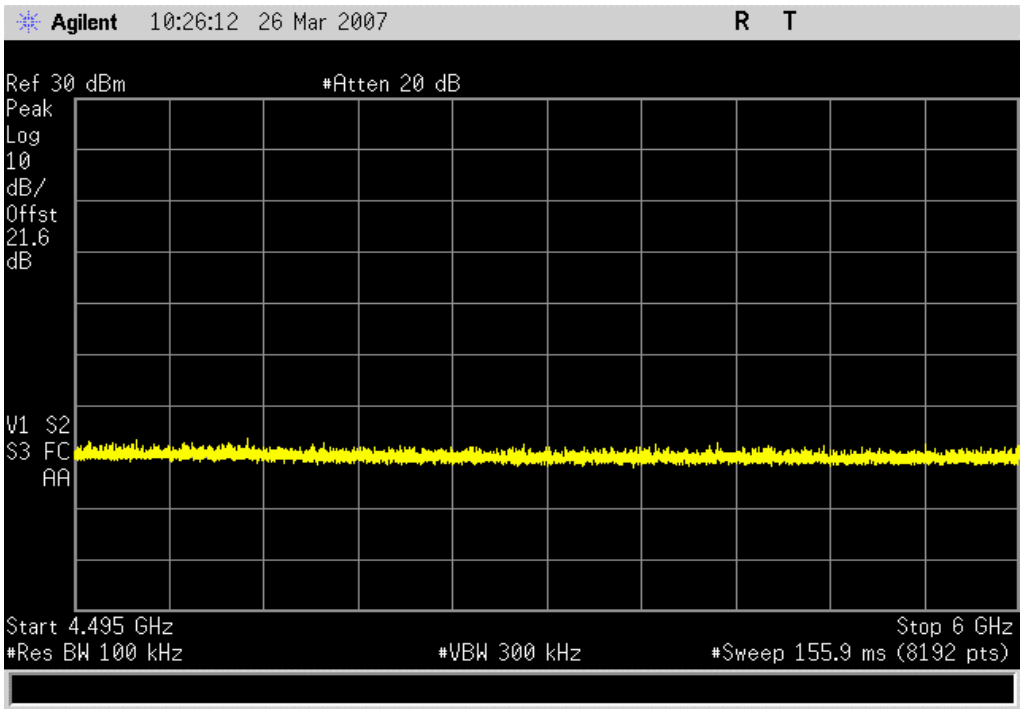
GPRS, High Channel, 995 MHz - 2.8 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



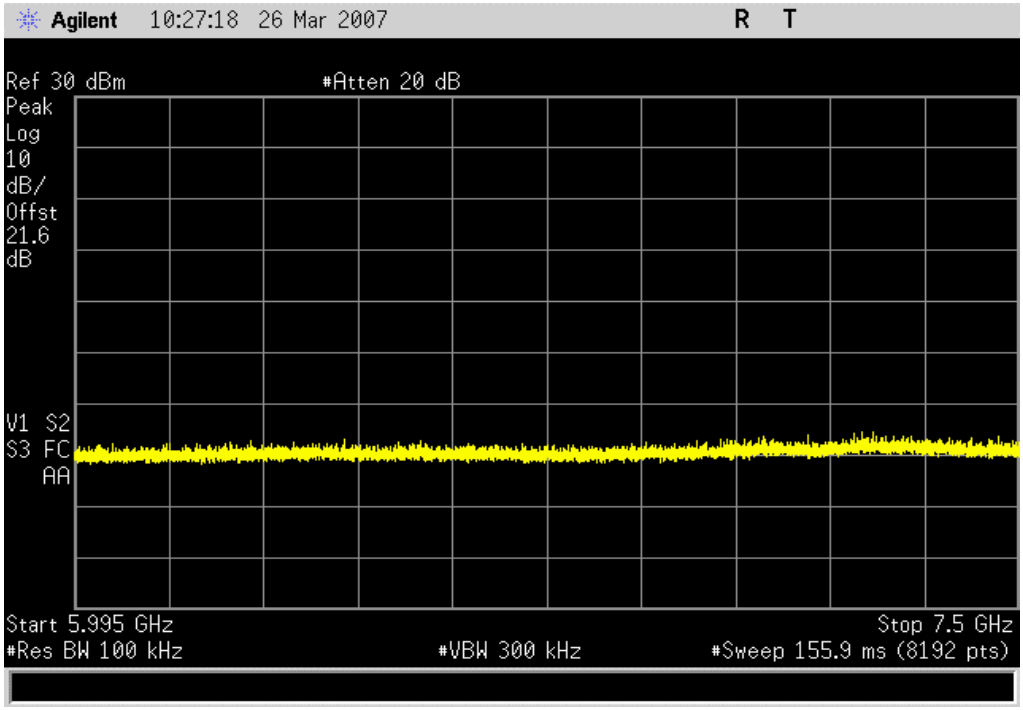
GPRS, High Channel, 2.795 - 4.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



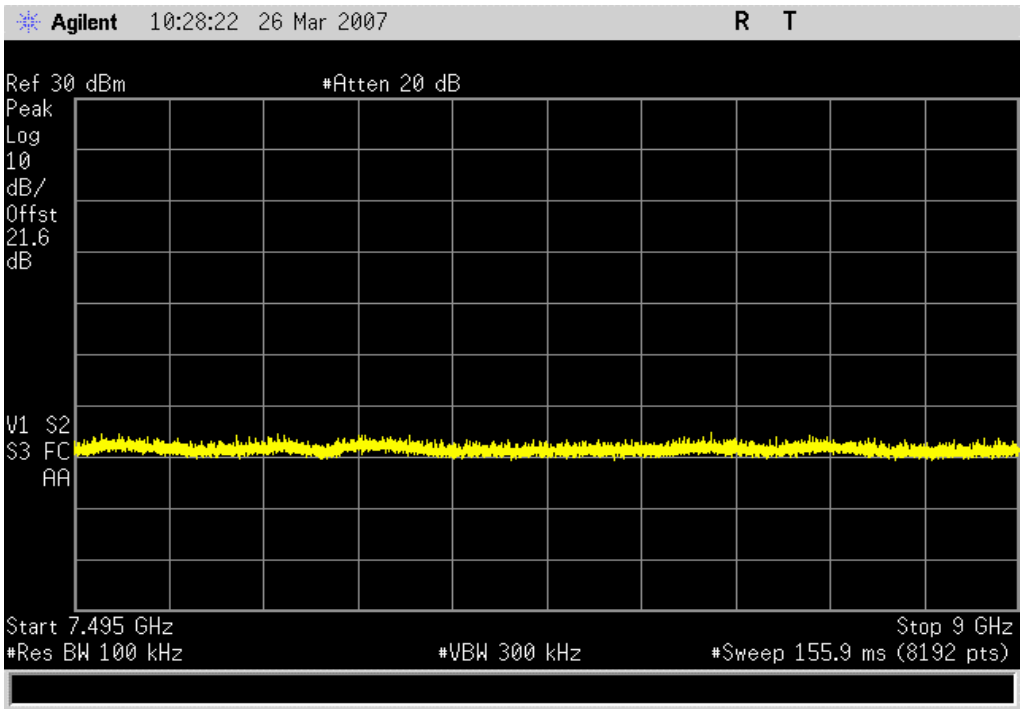
GPRS, High Channel, 4.495 - 6 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm

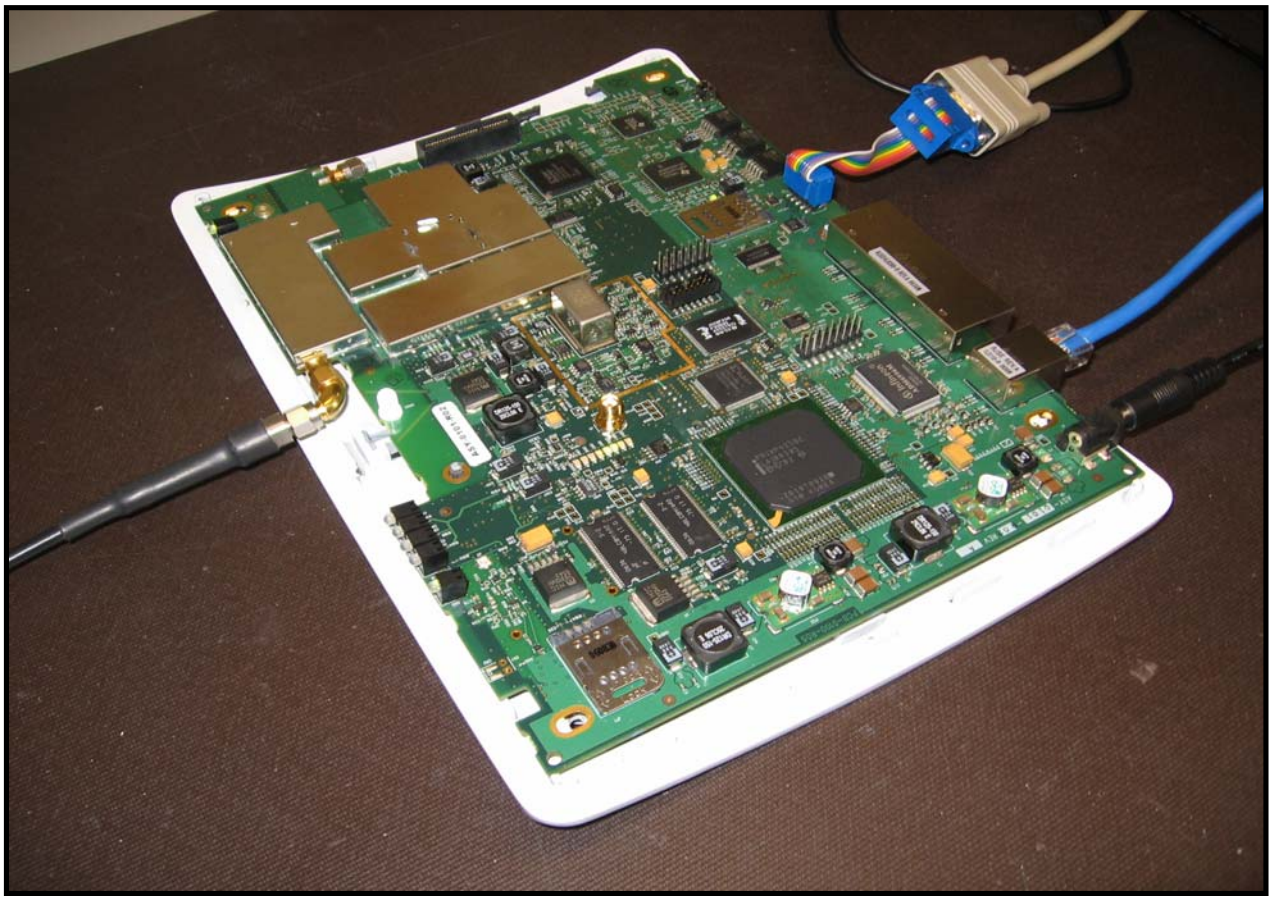


GPRS, High Channel, 5.995 - 7.5 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm



GPRS, High Channel, 7.495 - 9 GHz					
Result:	Pass	**Value:**	≤ -30 dBm	**Limit:**	≤ -13 dBm





Spurious Conducted Emissions

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Pasternack	PE7005-20	AUN	2/6/2007	13
Spectrum Analyzer	Agilent	E4407B	AAU	12/8/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT with 20dB of external attenuation on the RF input of the spectrum analyzer. Analyzer plots utilizing a 1MHz resolution bandwidth and no video filtering were made for each modulation type from 0 to 20 GHz. The peak conducted power of spurious emissions, up to the 10^{th} harmonic of the transmit frequency, were investigated to ensure they were less than or equal to –13 dBm.

NORTHWEST EMC

Spurious Conducted Emissions

XMit 2006.11.13

EUT:	S-BTS GSM Base Station			Work Order:	RAFN0069
Serial Number:	Engineering Unit			Date:	03/26/07
Customer:	Radioframe Networks, Inc.			Temperature:	22°C
Attendees:	Bob Melsheimer			Humidity:	33%
Project:	None			Barometric Pres.:	29.91
Tested by:	Greg Kiemel	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 24E:2005	ANSI/TIA/EIA-603-B-2002

COMMENTS

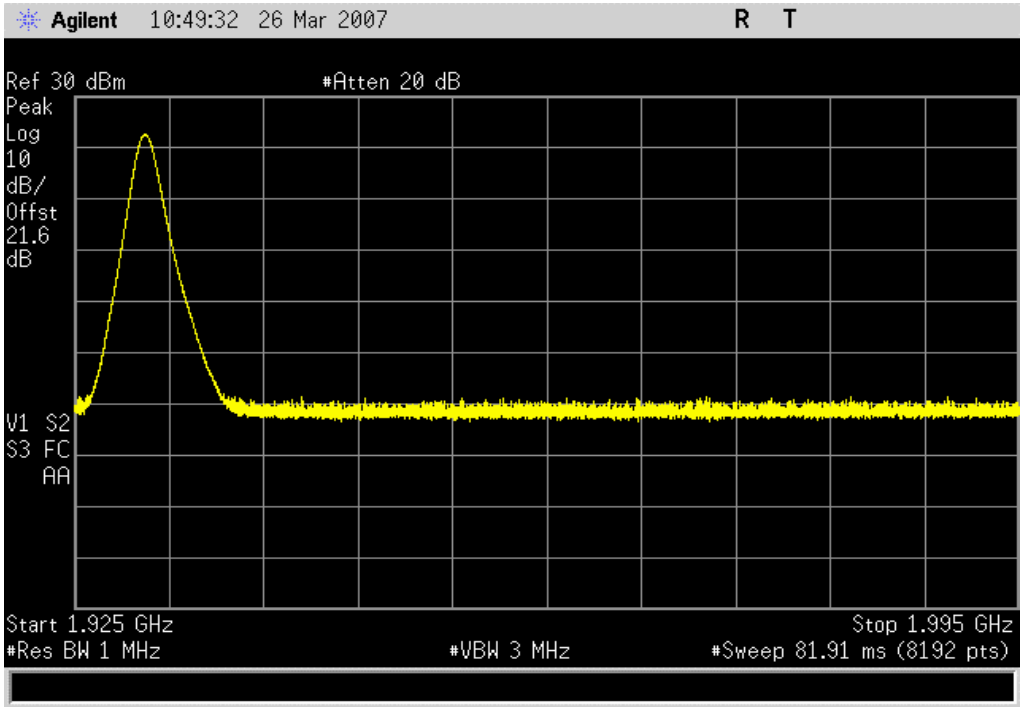
Maximum Output Power

DEVIATIONS FROM TEST STANDARD

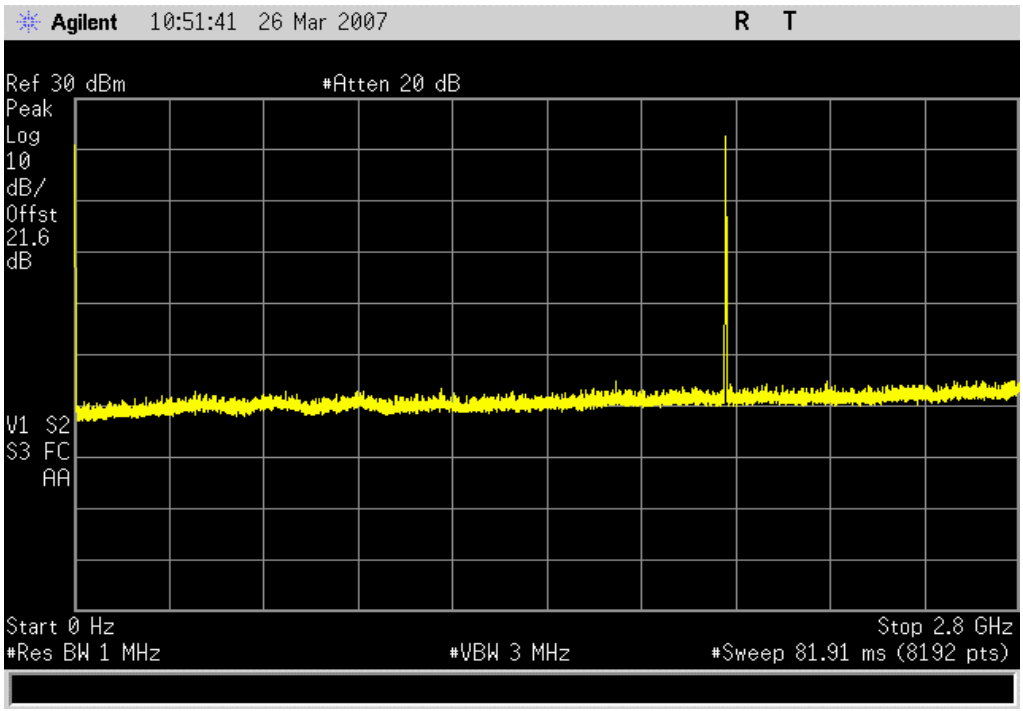
Configuration #	1	Signature

		Value	Limit	Results
GSM				
	Low Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	Mid Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	High Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass
GPRS				
	Low Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	Mid Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	High Channel			
	In Band	≤ -25 dBm	≤ -13 dBm	Pass
	0 - 2.8 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	2.795 - 9 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	8.995 - 14 GHz	≤ -25 dBm	≤ -13 dBm	Pass
	13.995 - 20 GHz	≤ -25 dBm	≤ -13 dBm	Pass

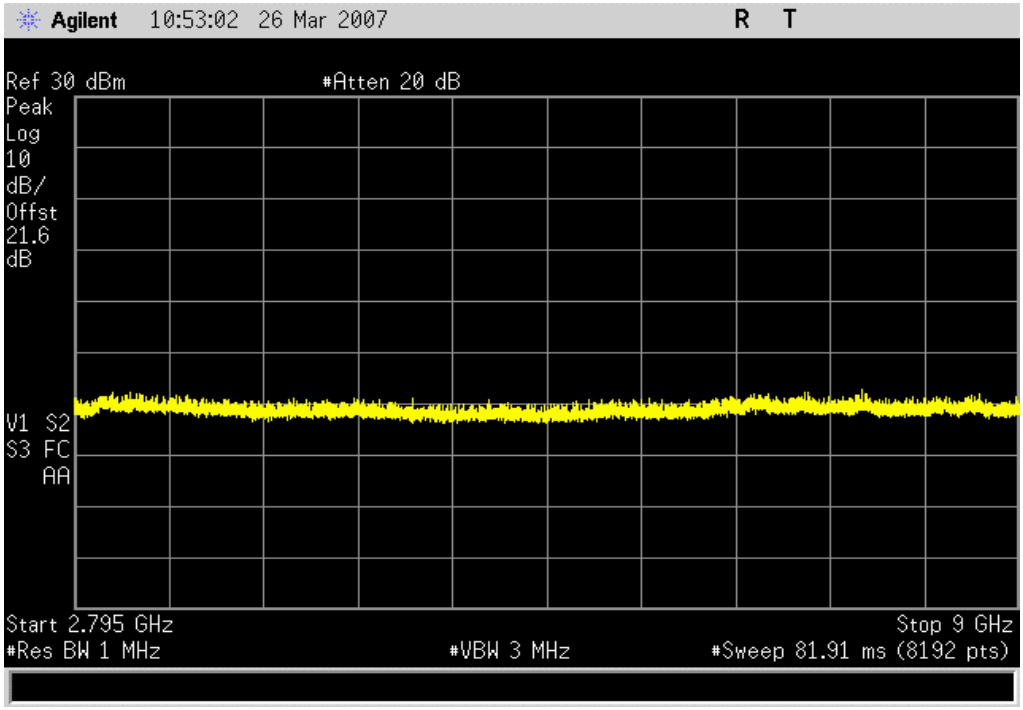
GSM, Low Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



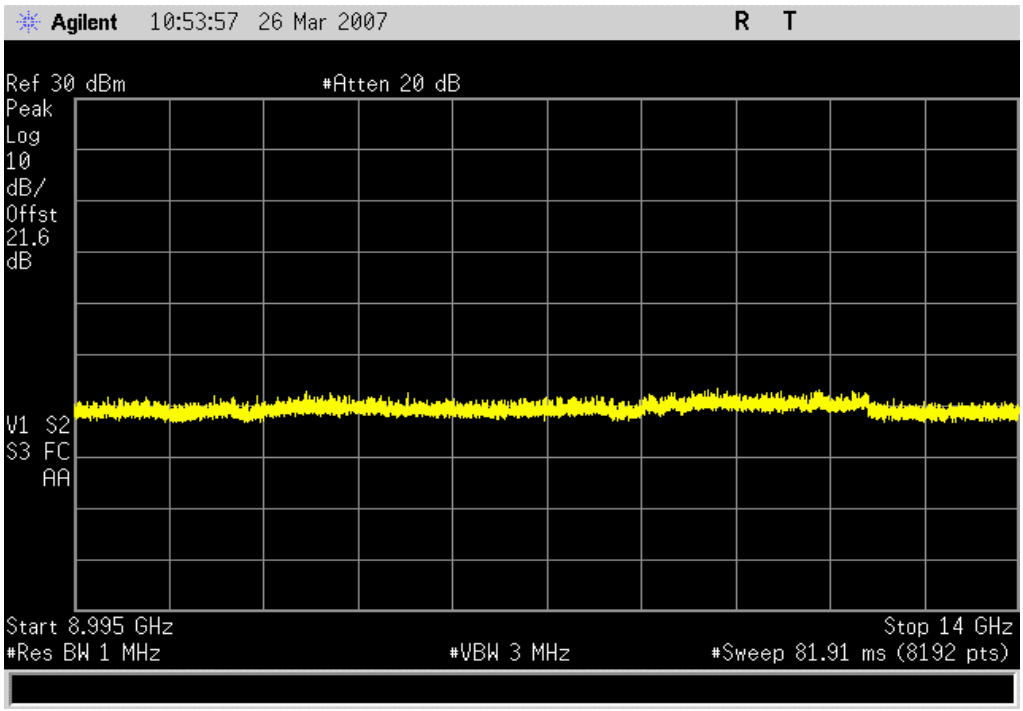
GSM, Low Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



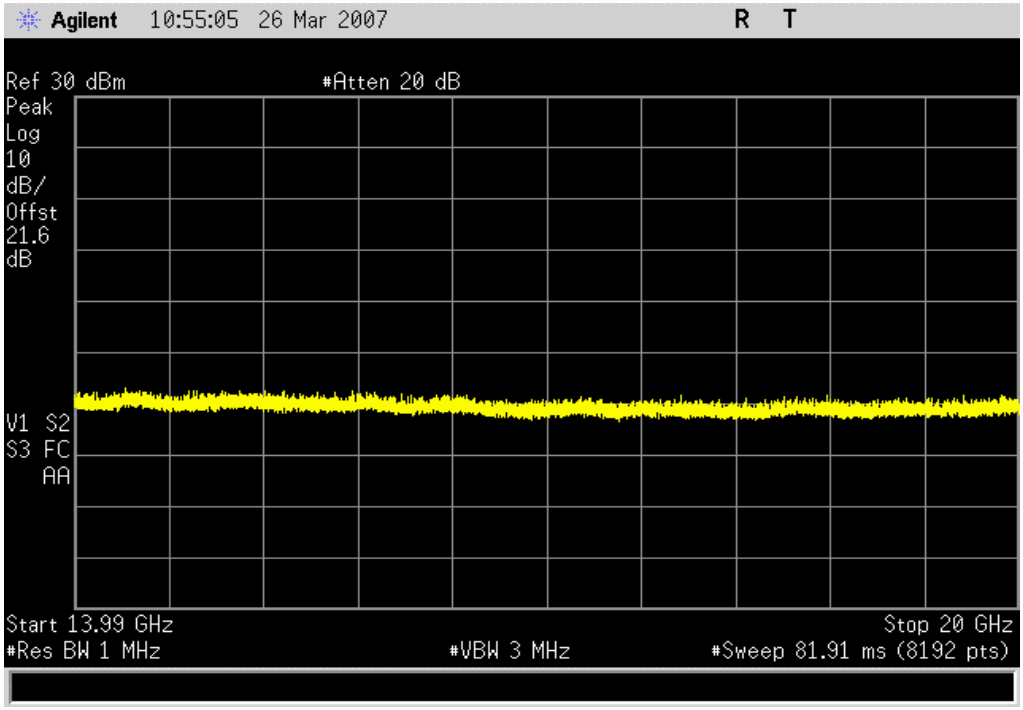
GSM, Low Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



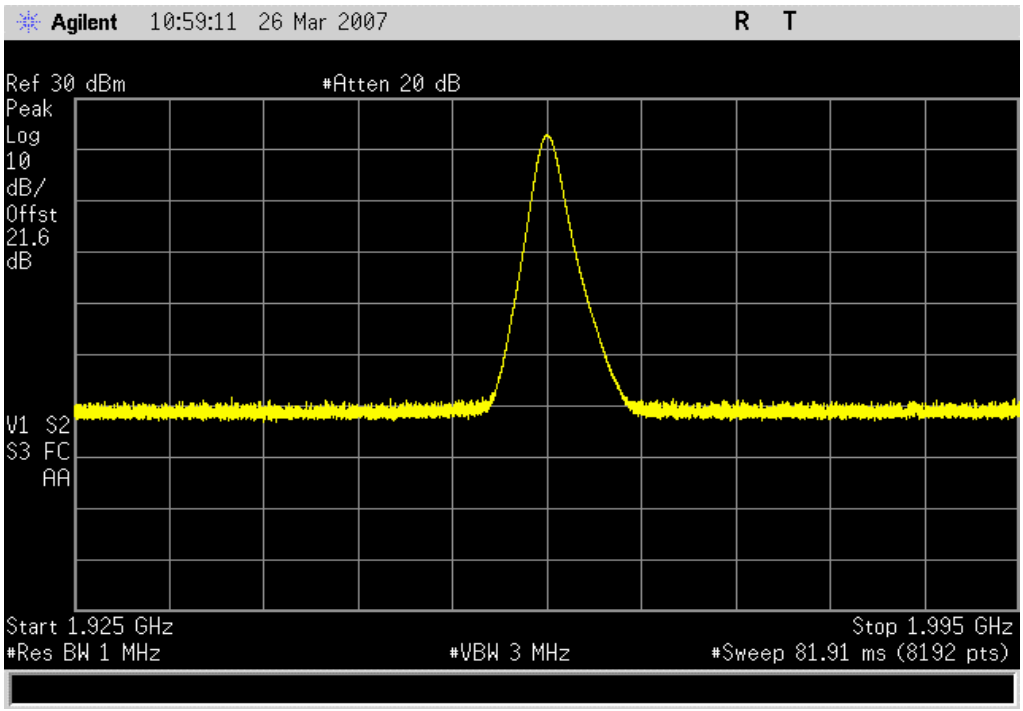
GSM, Low Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



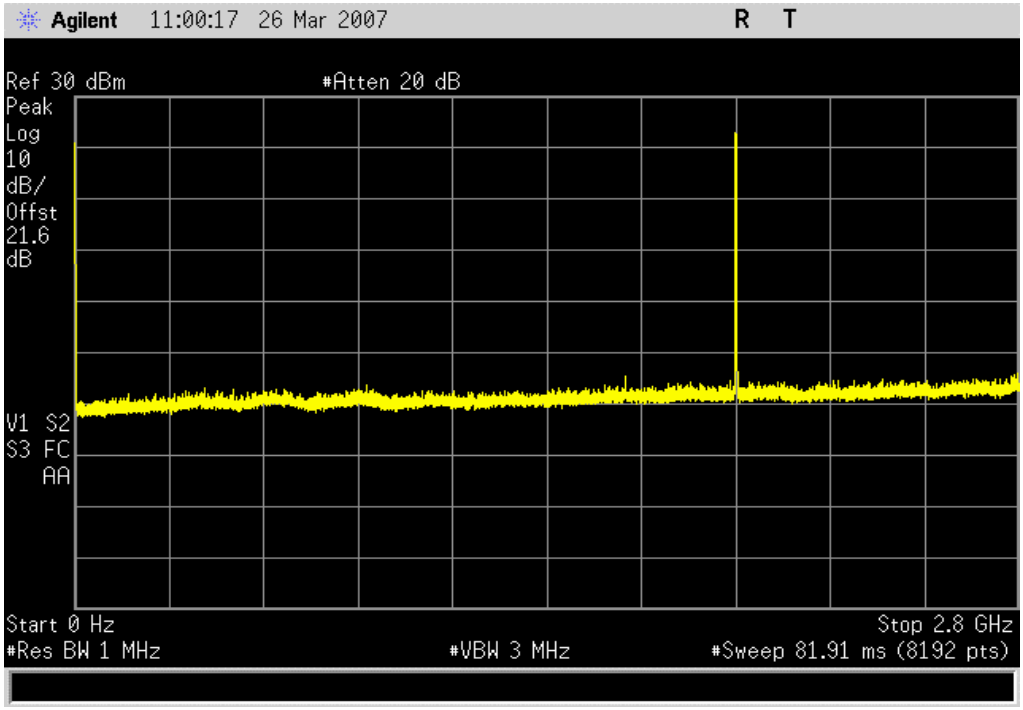
GSM, Low Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



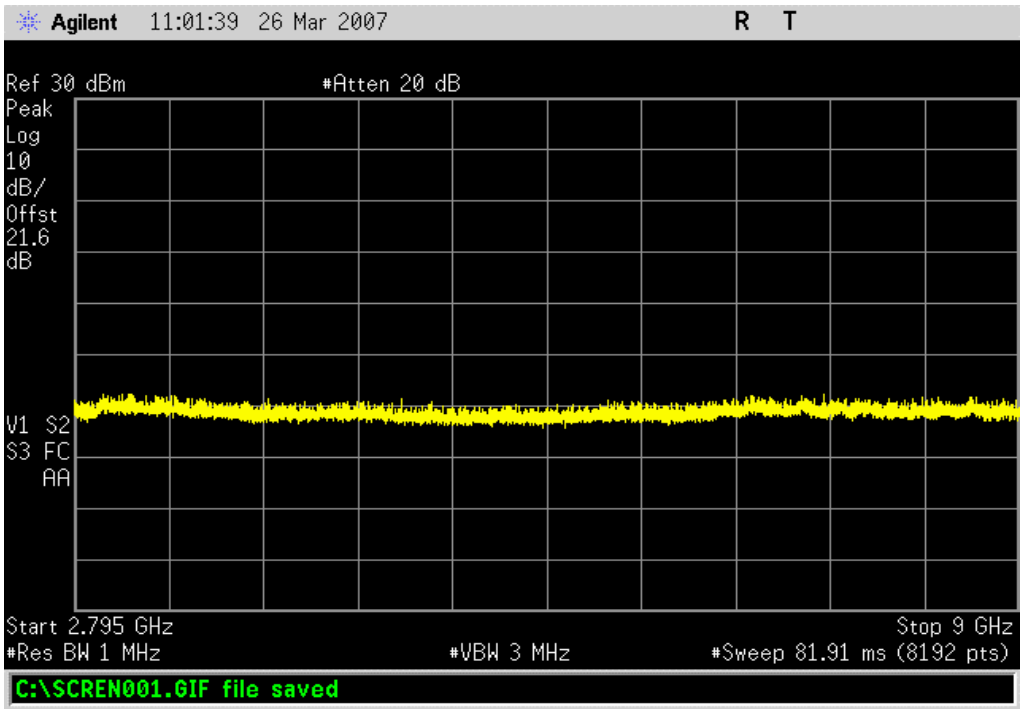
GSM, Mid Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



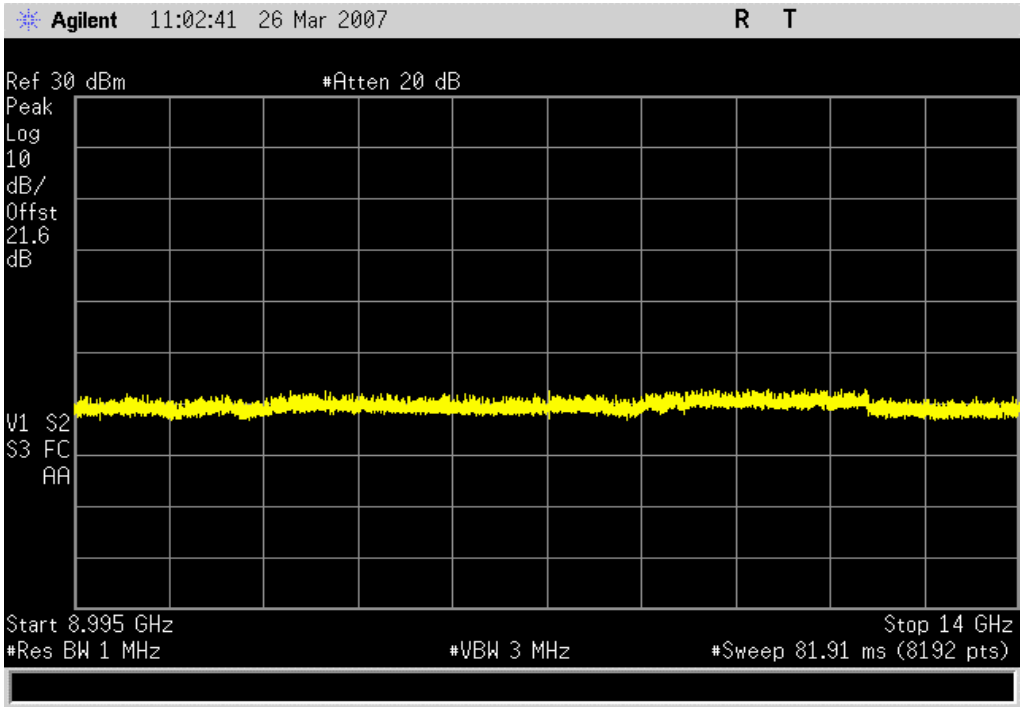
GSM, Mid Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



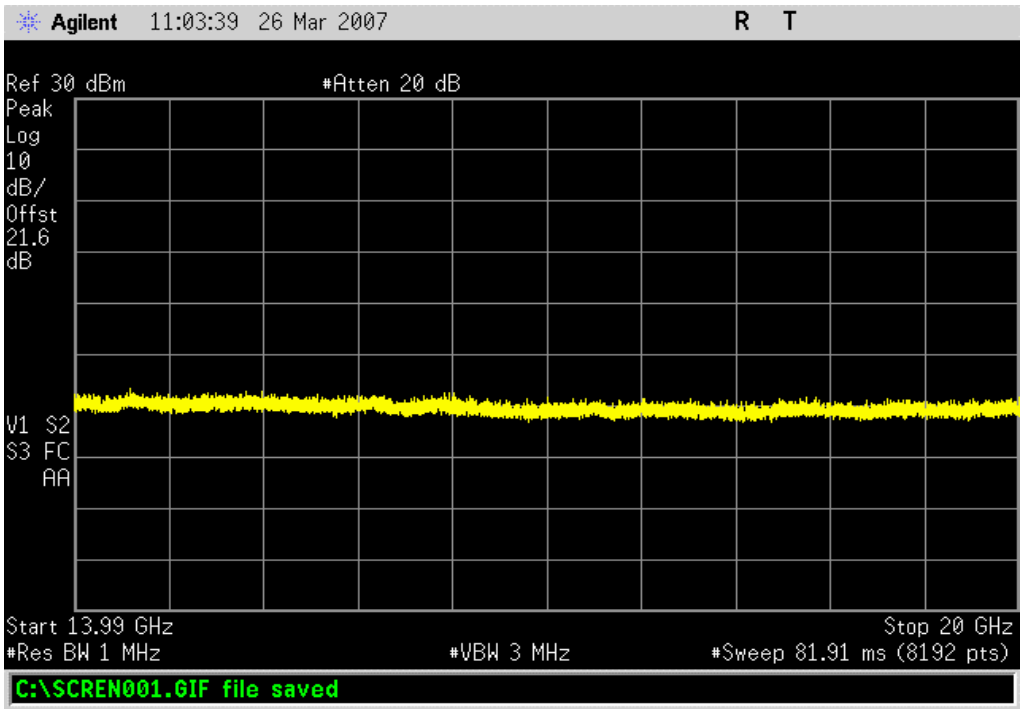
GSM, Mid Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



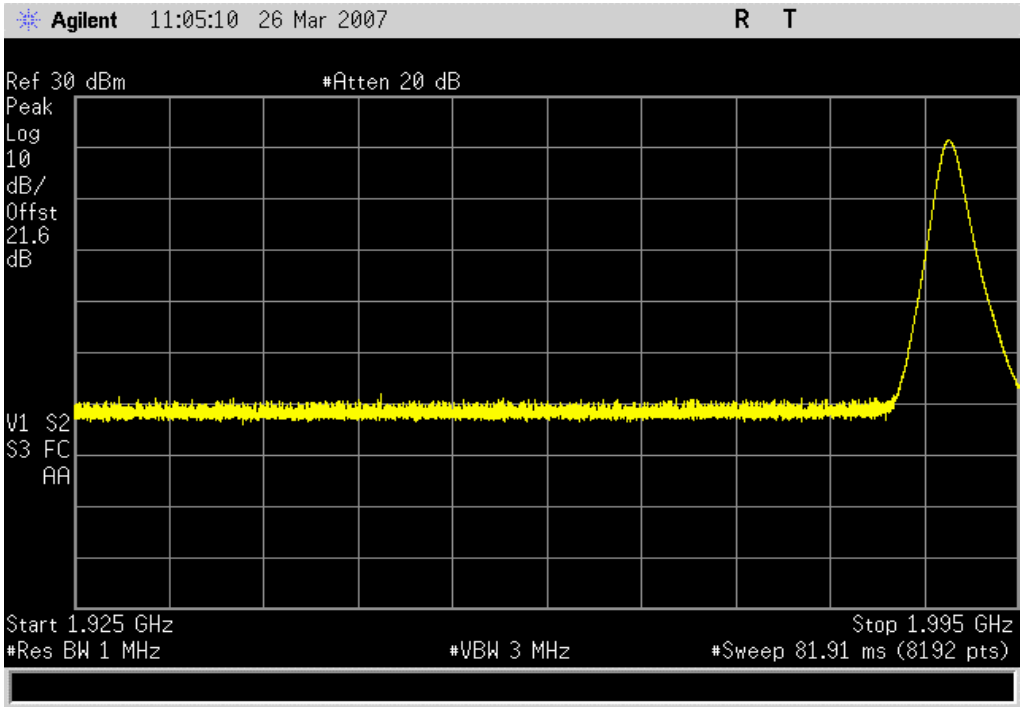
GSM, Mid Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



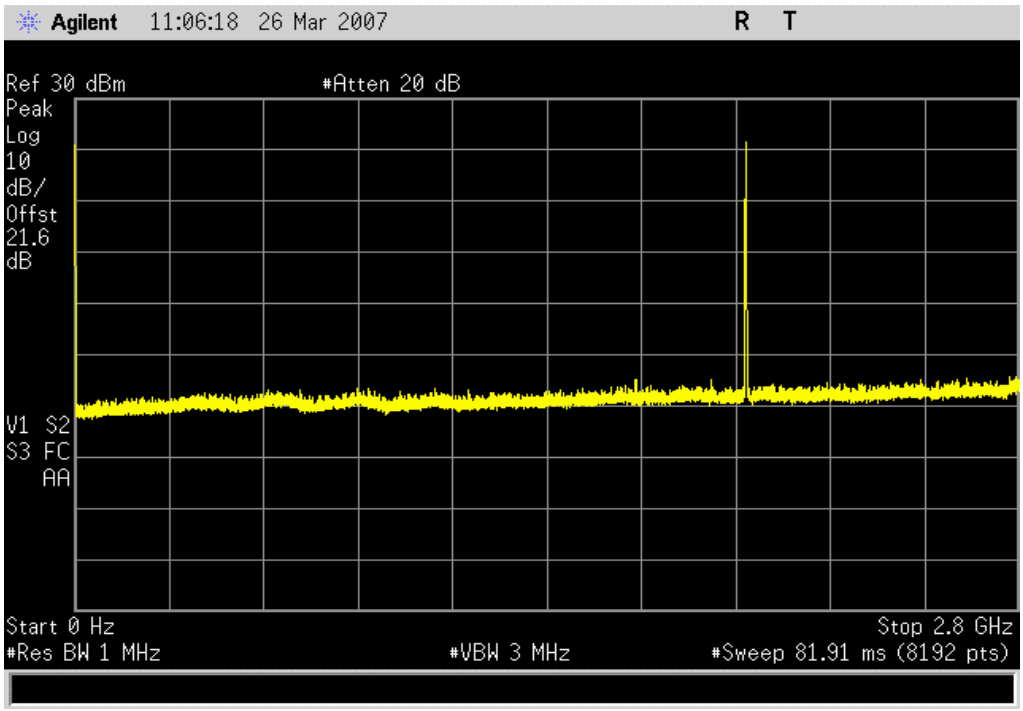
GSM, Mid Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



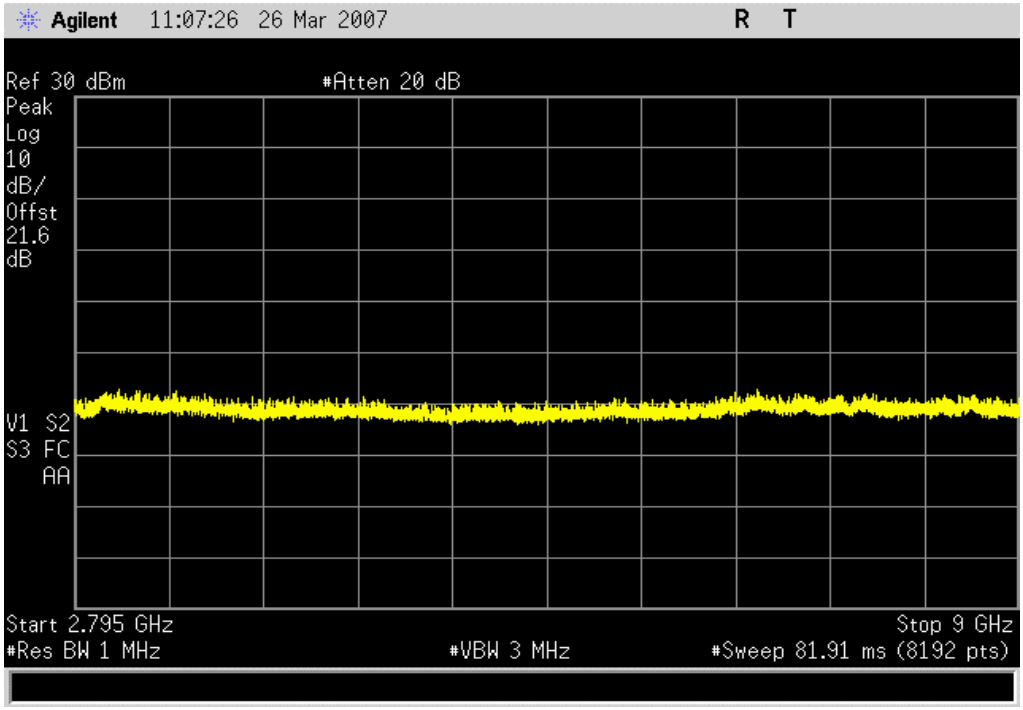
GSM, High Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



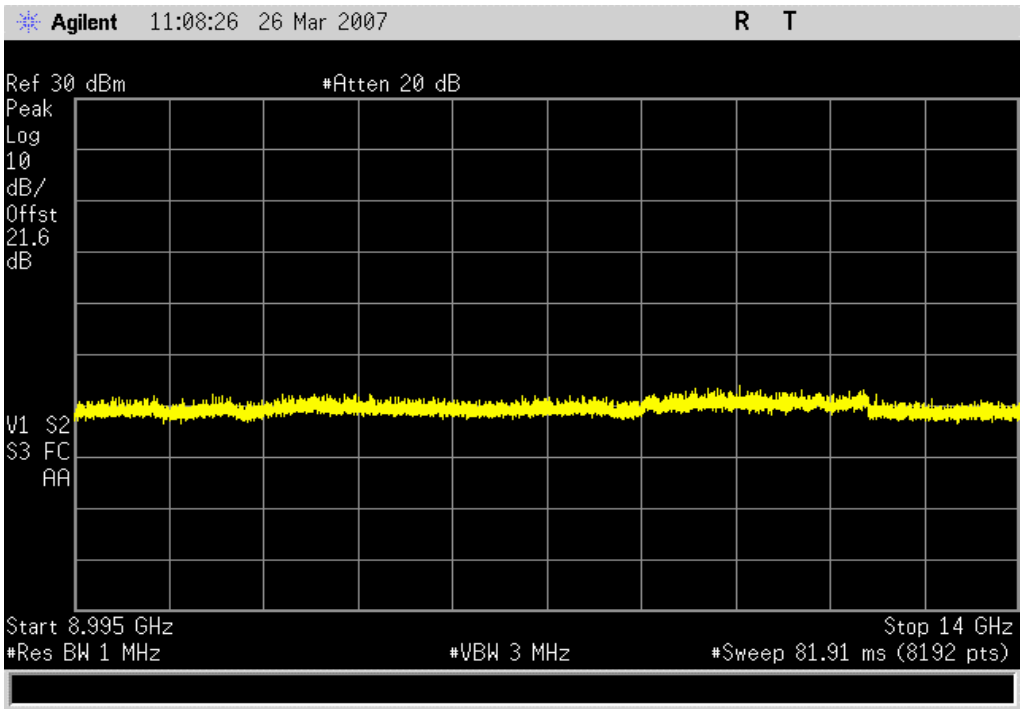
GSM, High Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



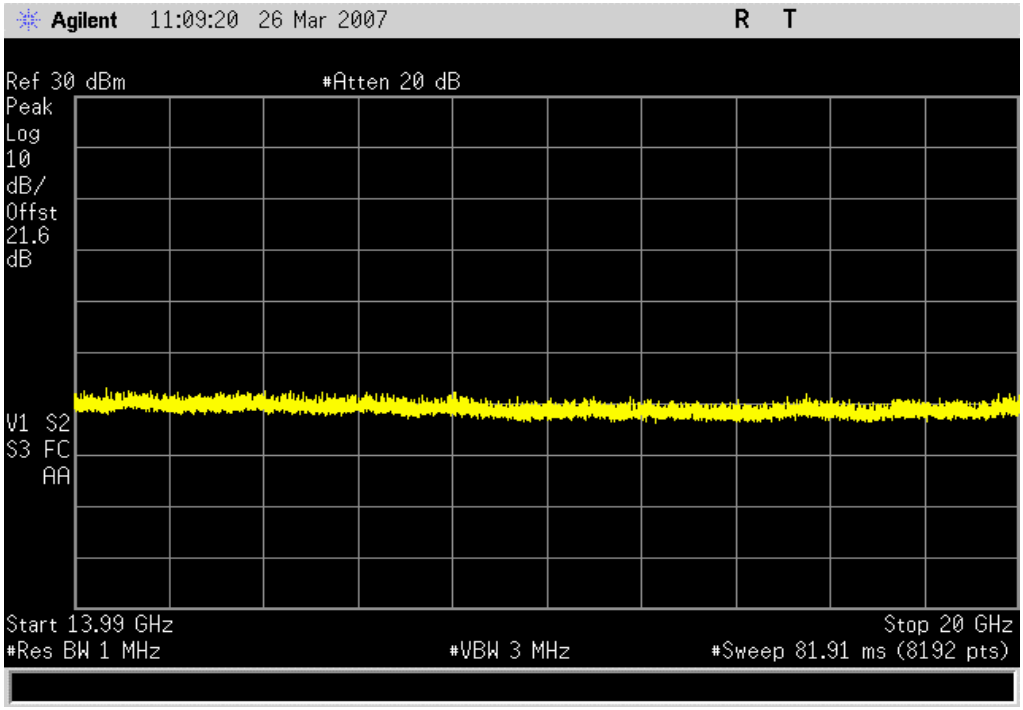
GSM, High Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



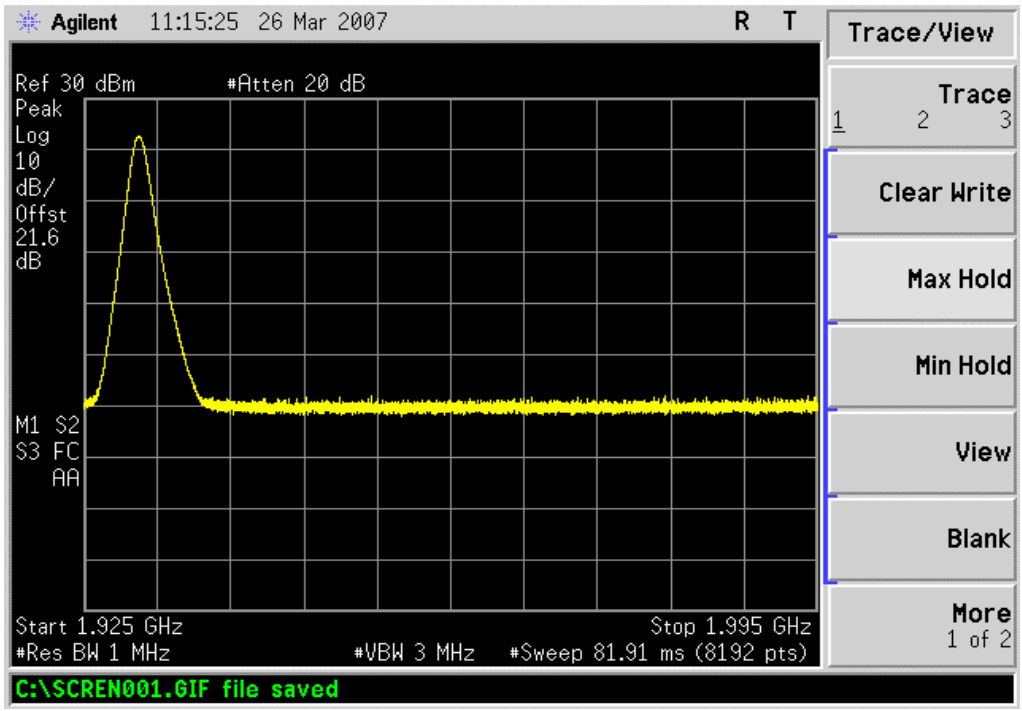
GSM, High Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



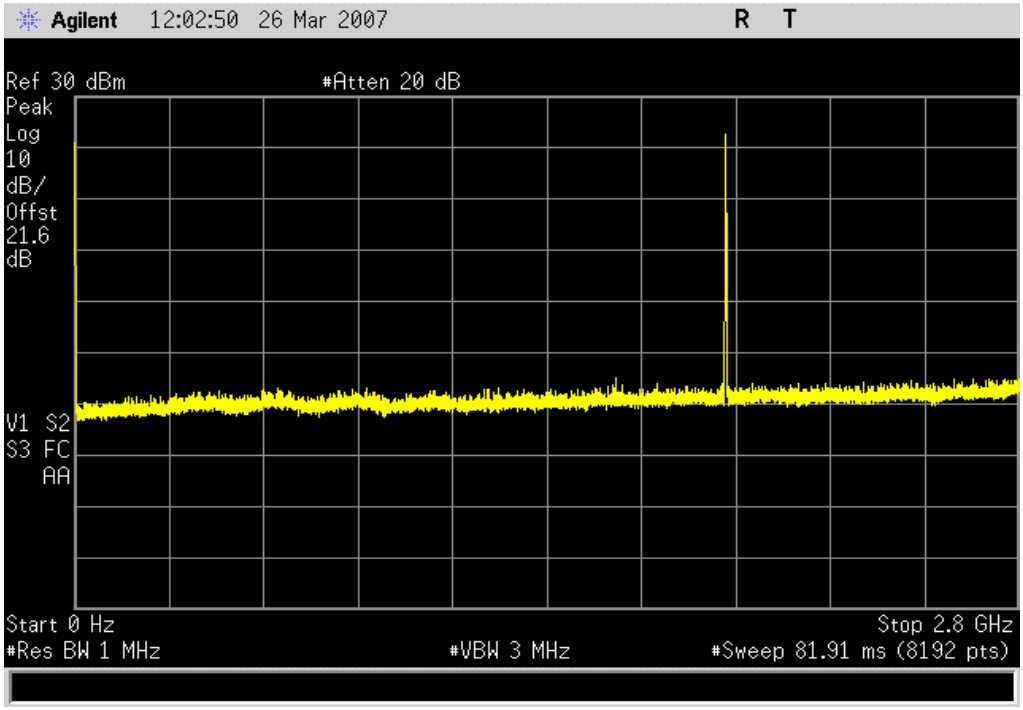
GSM, High Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



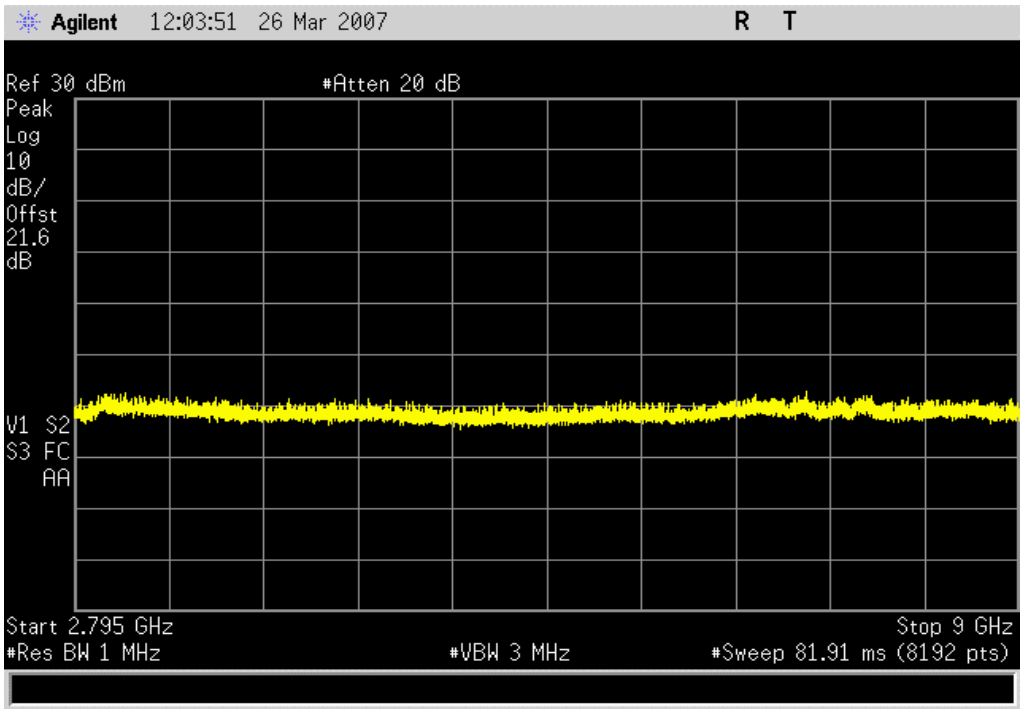
GPRS, Low Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



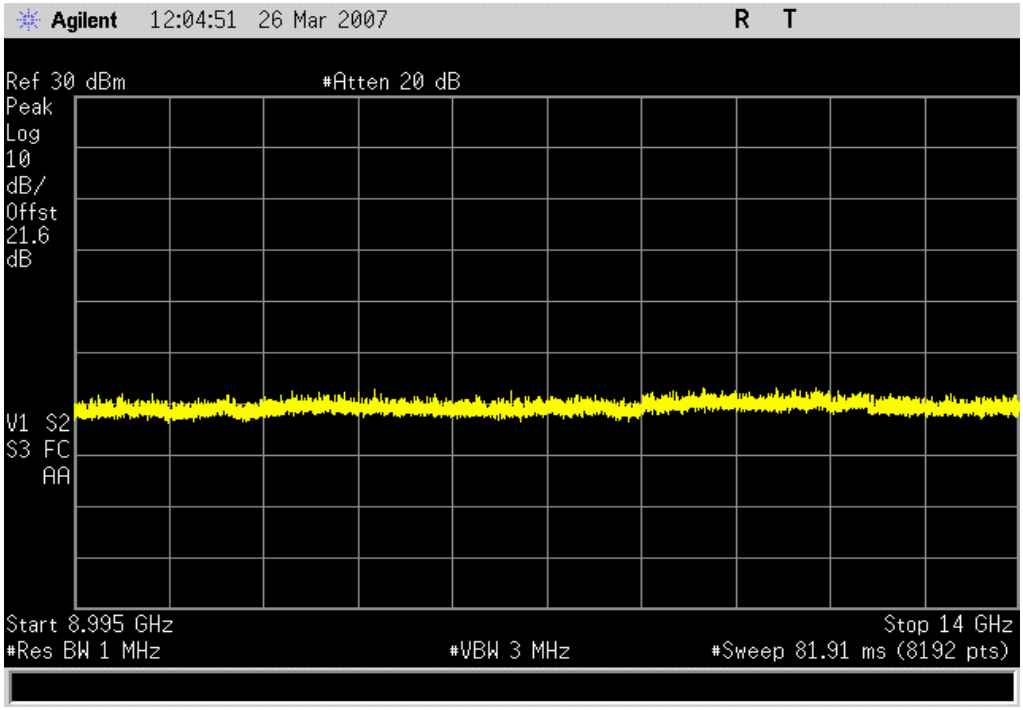
GPRS, Low Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



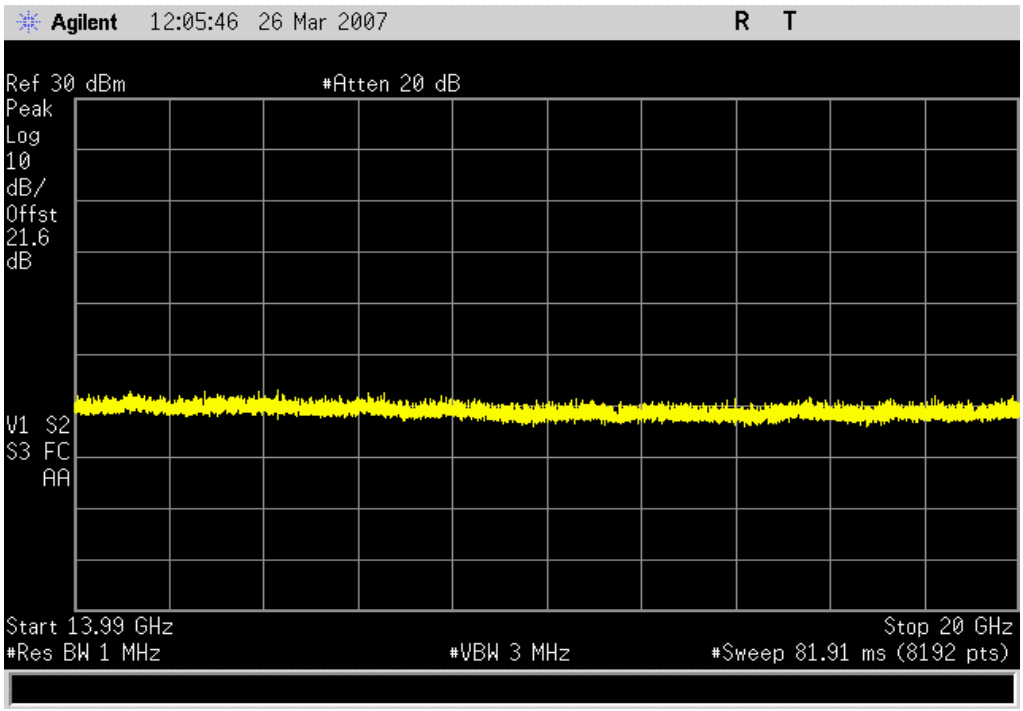
GPRS, Low Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



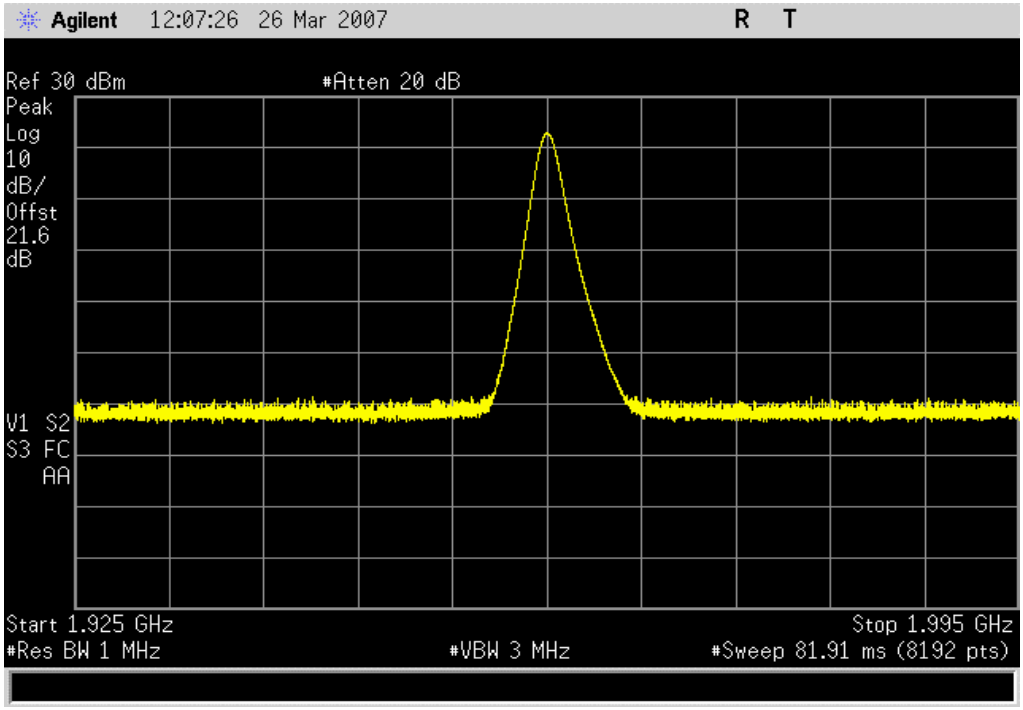
GPRS, Low Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



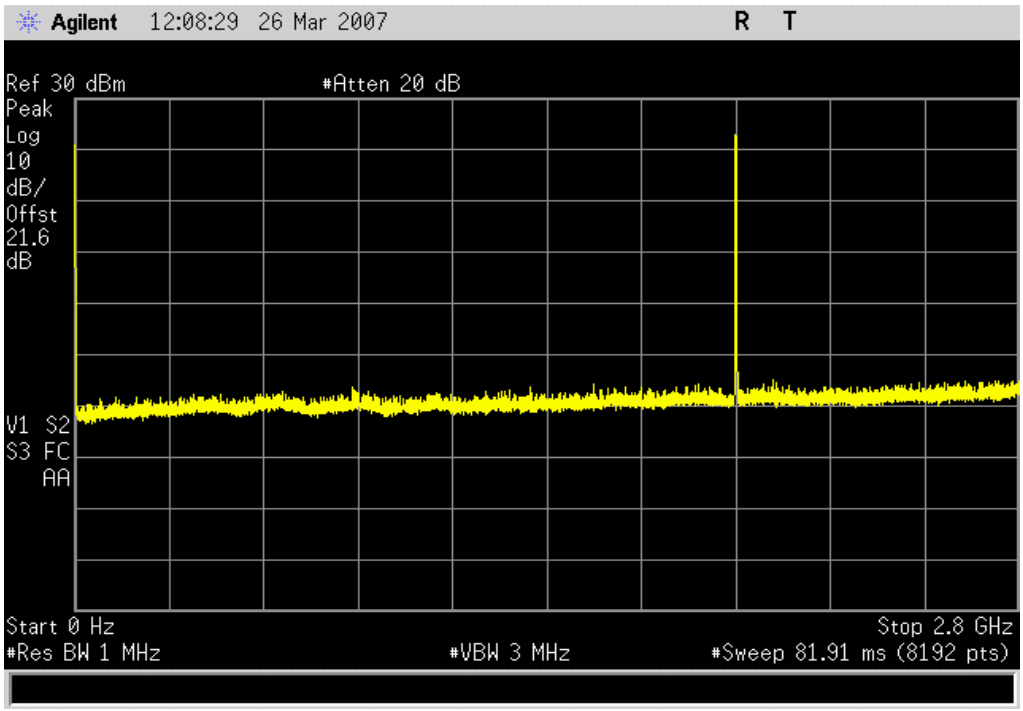
GPRS, Low Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



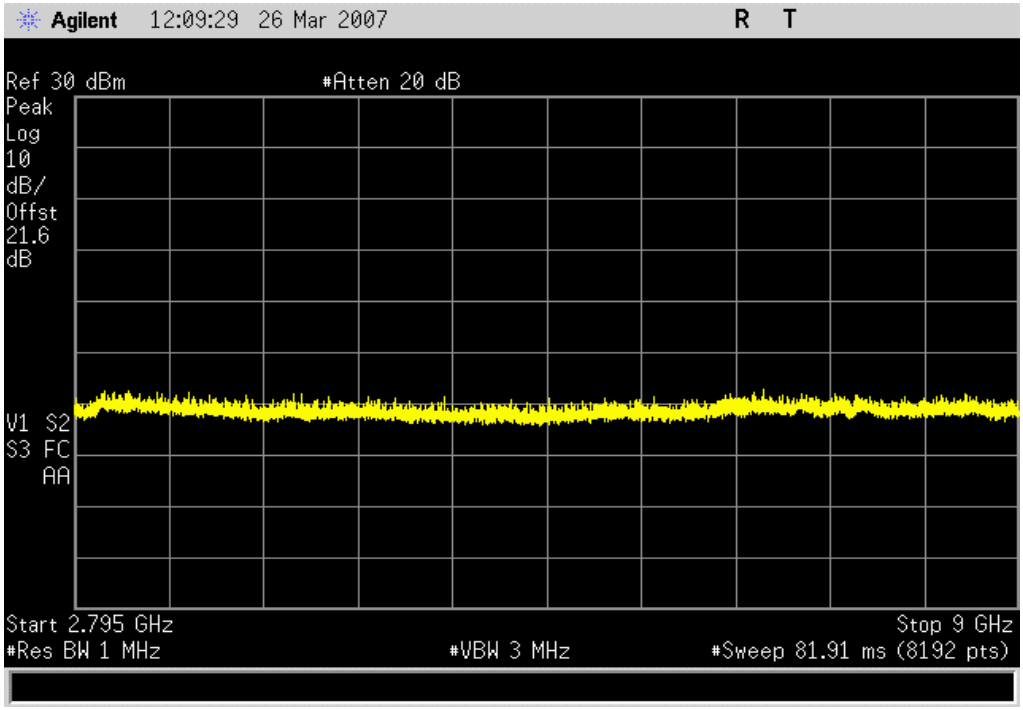
GPRS, Mid Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



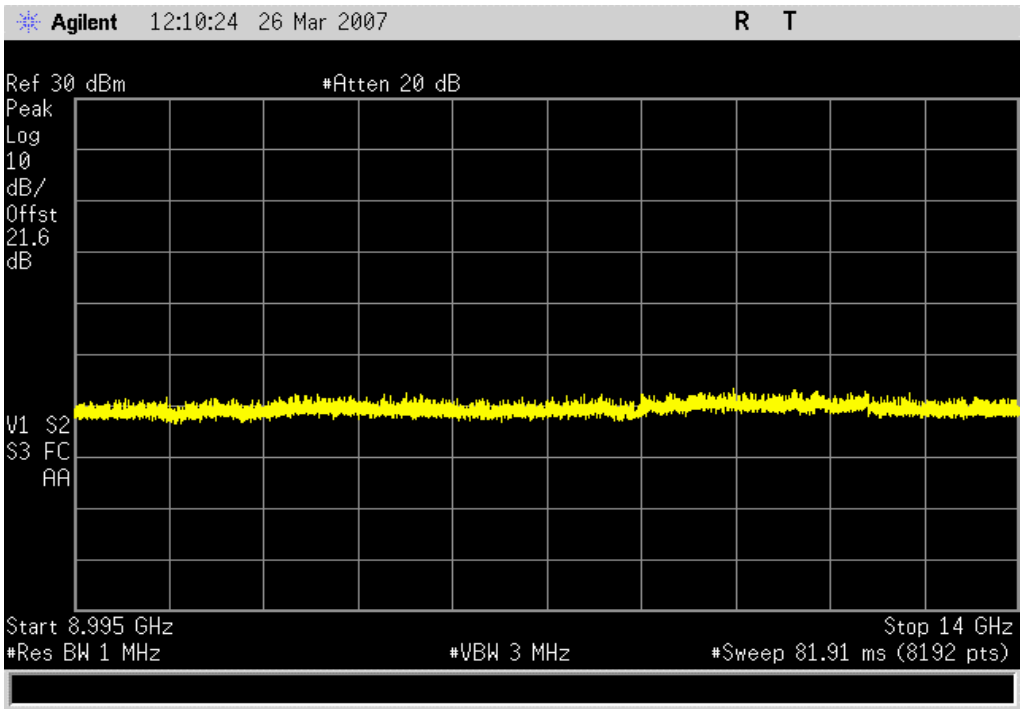
GPRS, Mid Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



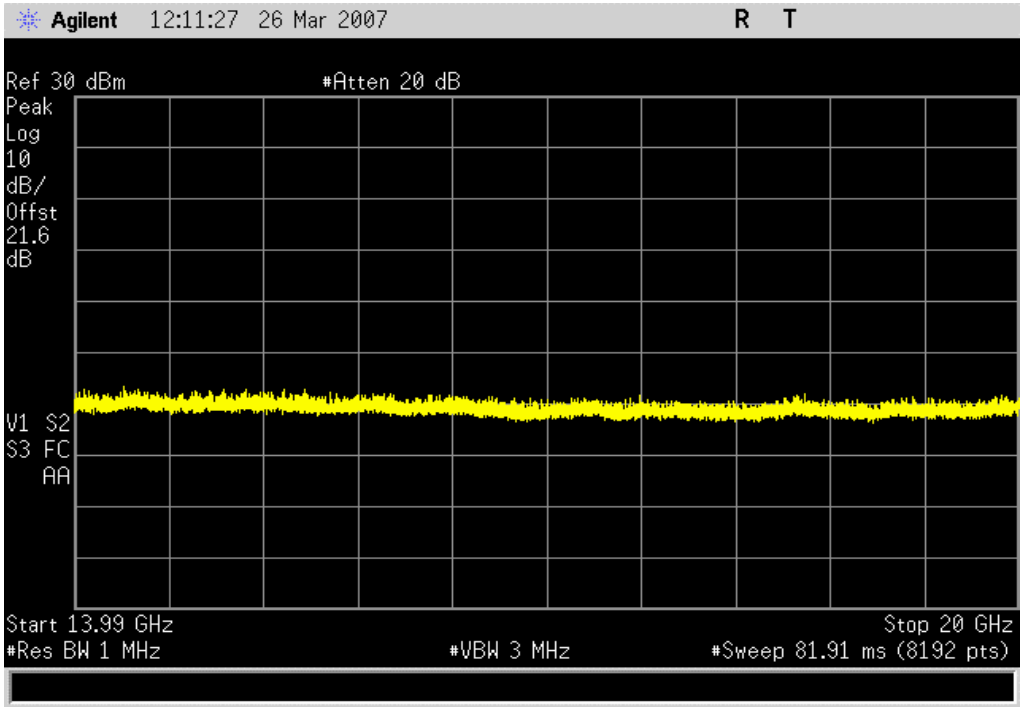
GPRS, Mid Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



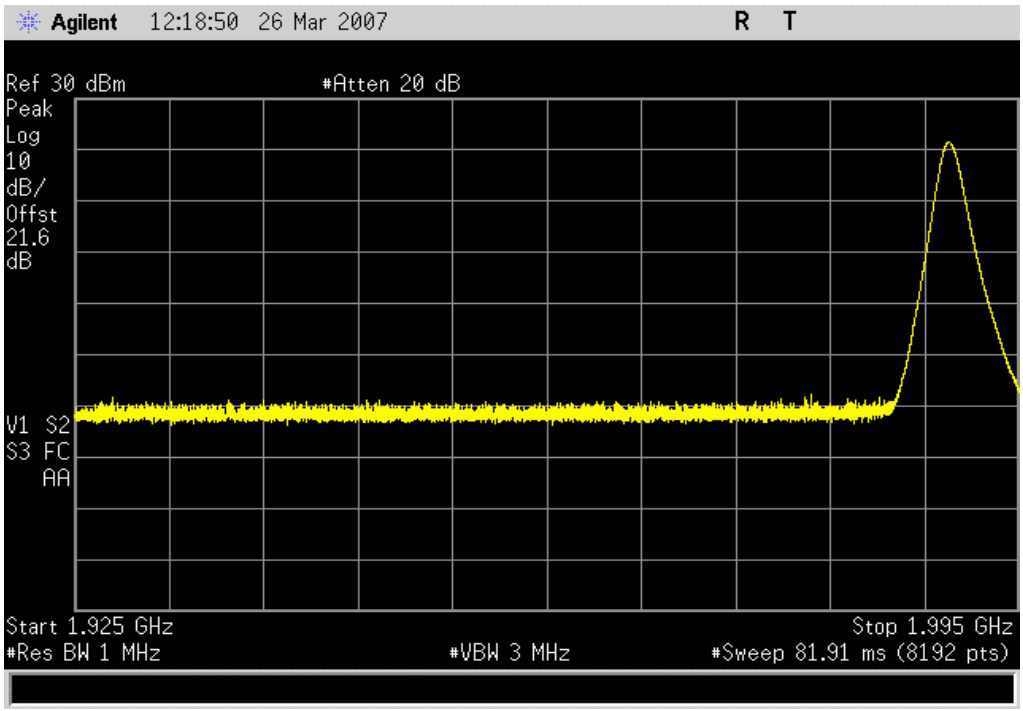
GPRS, Mid Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



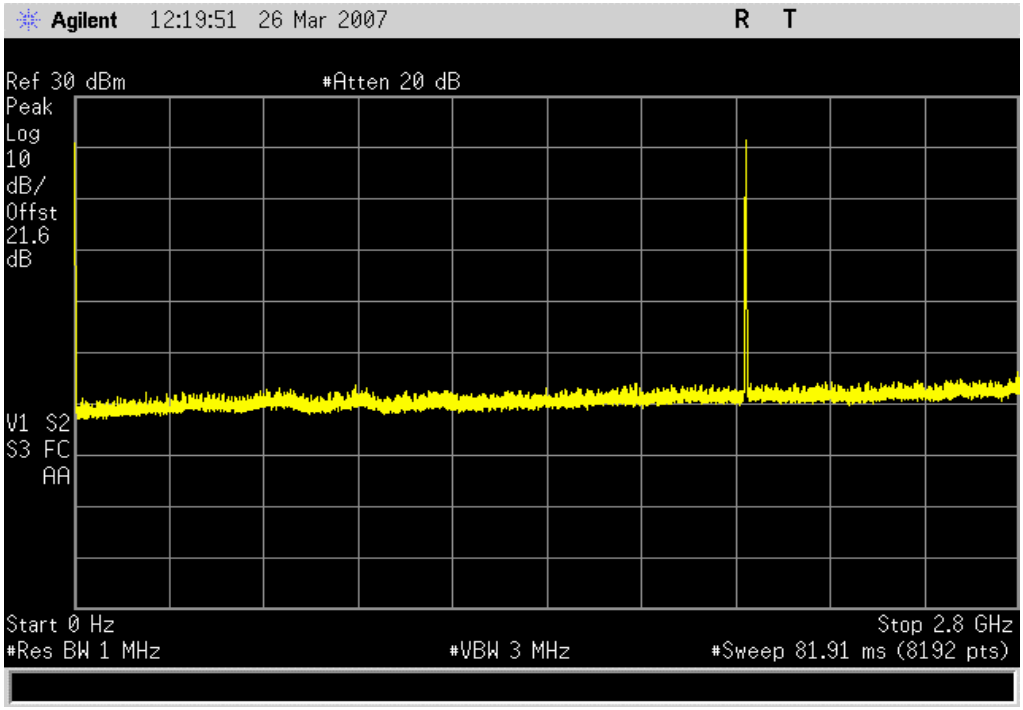
GPRS, Mid Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



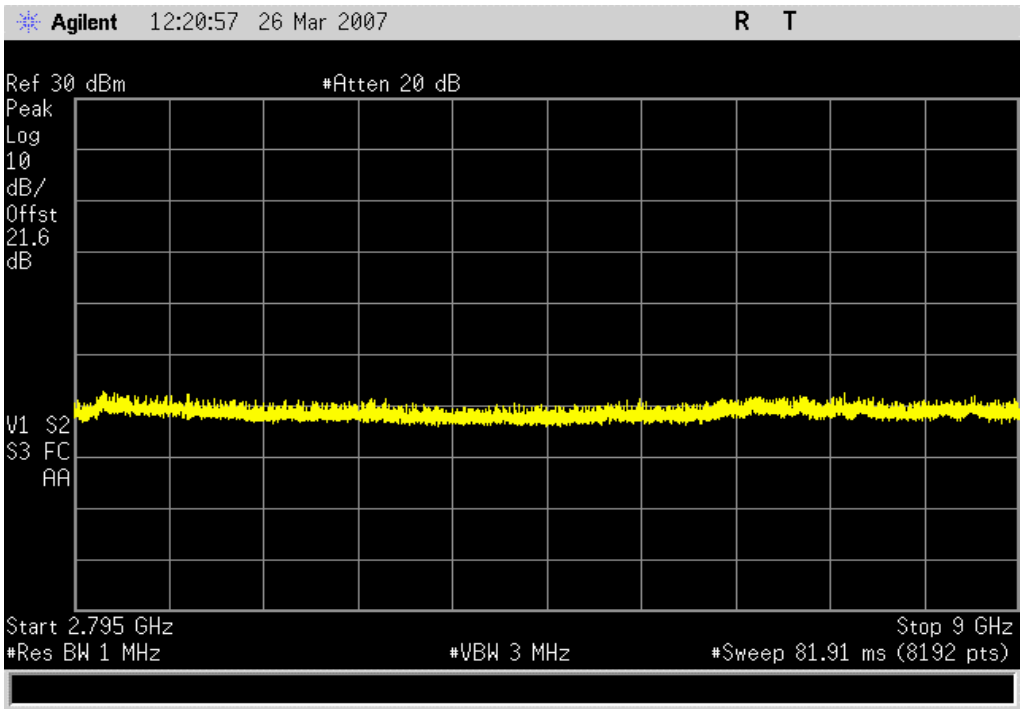
GPRS, High Channel, In Band					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



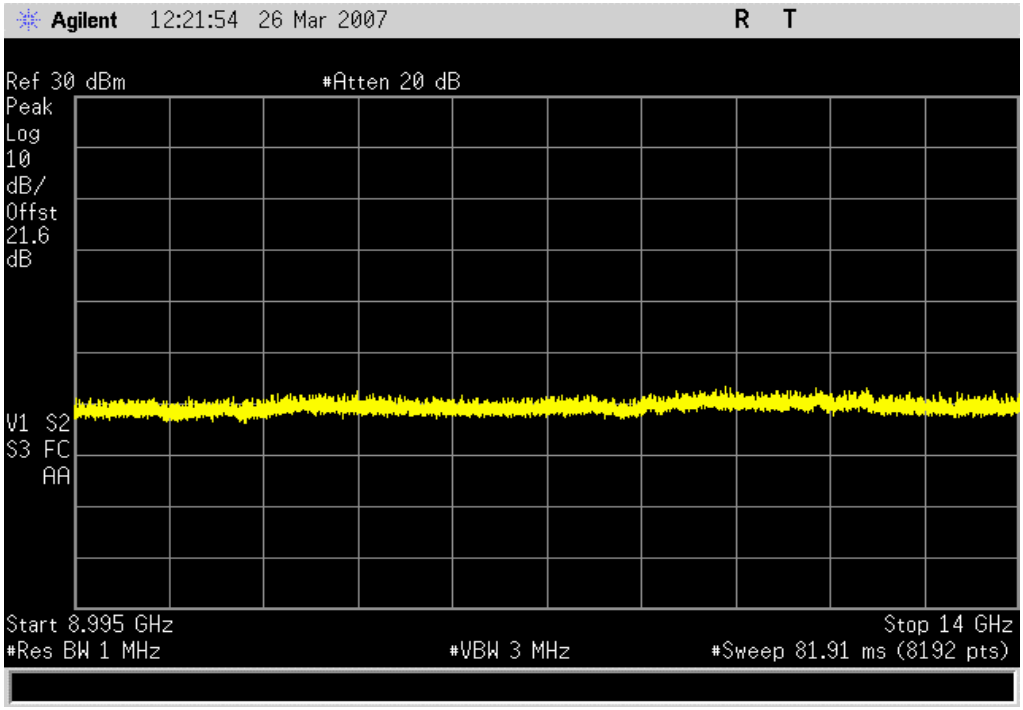
GPRS, High Channel, 0 - 2.8 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



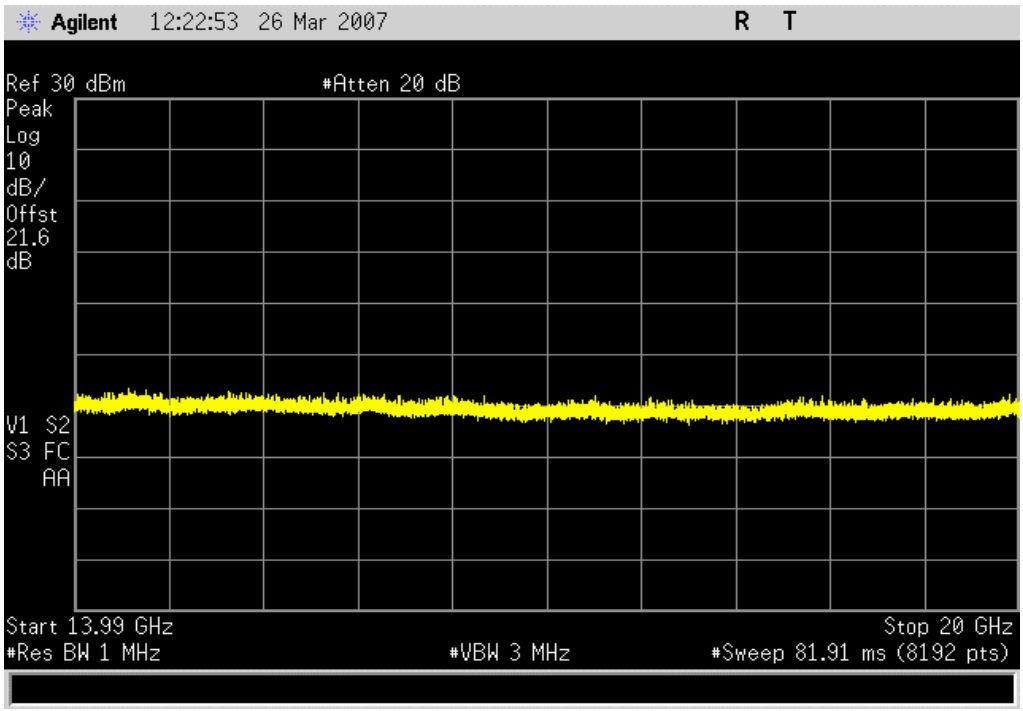
GPRS, High Channel, 2.795 - 9 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm

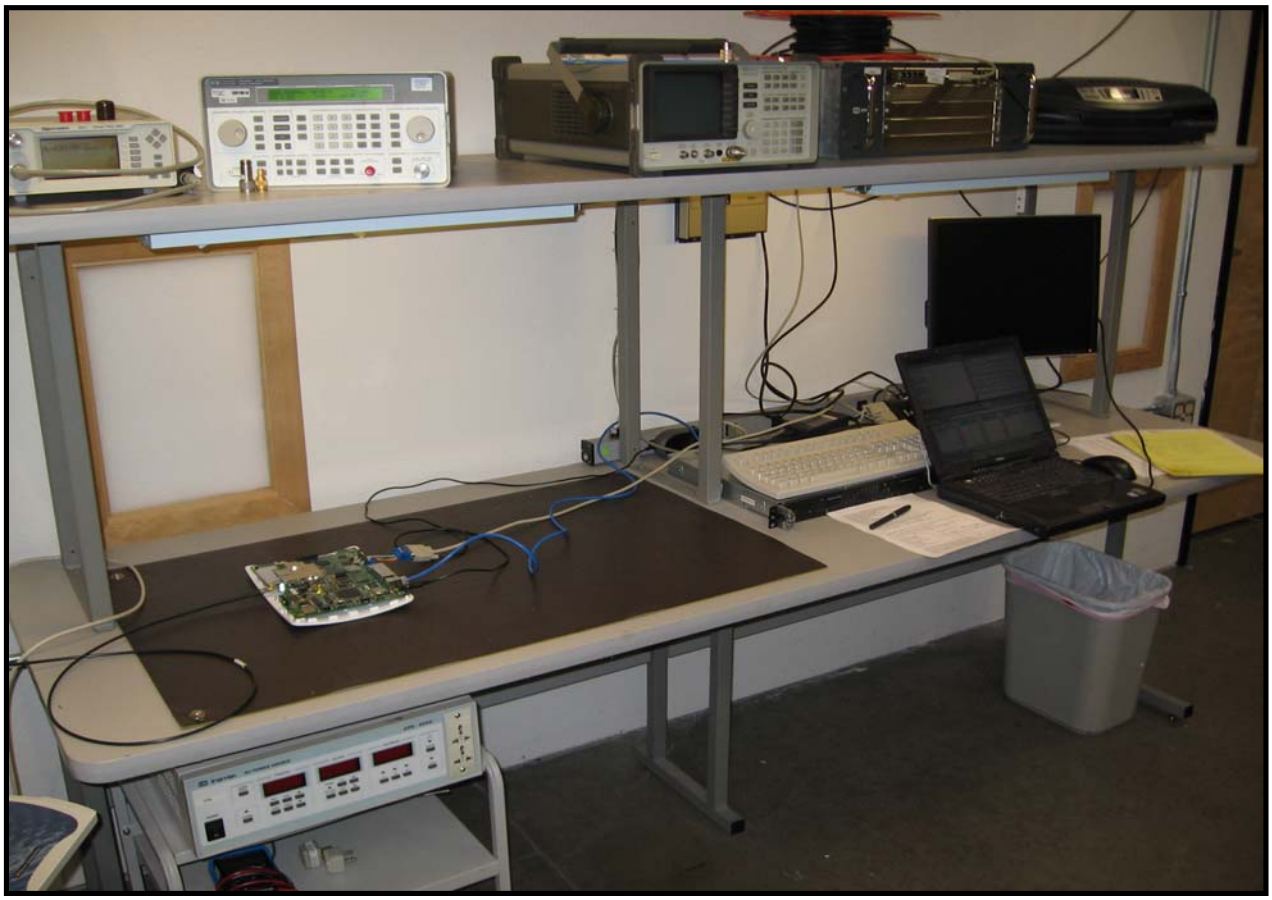


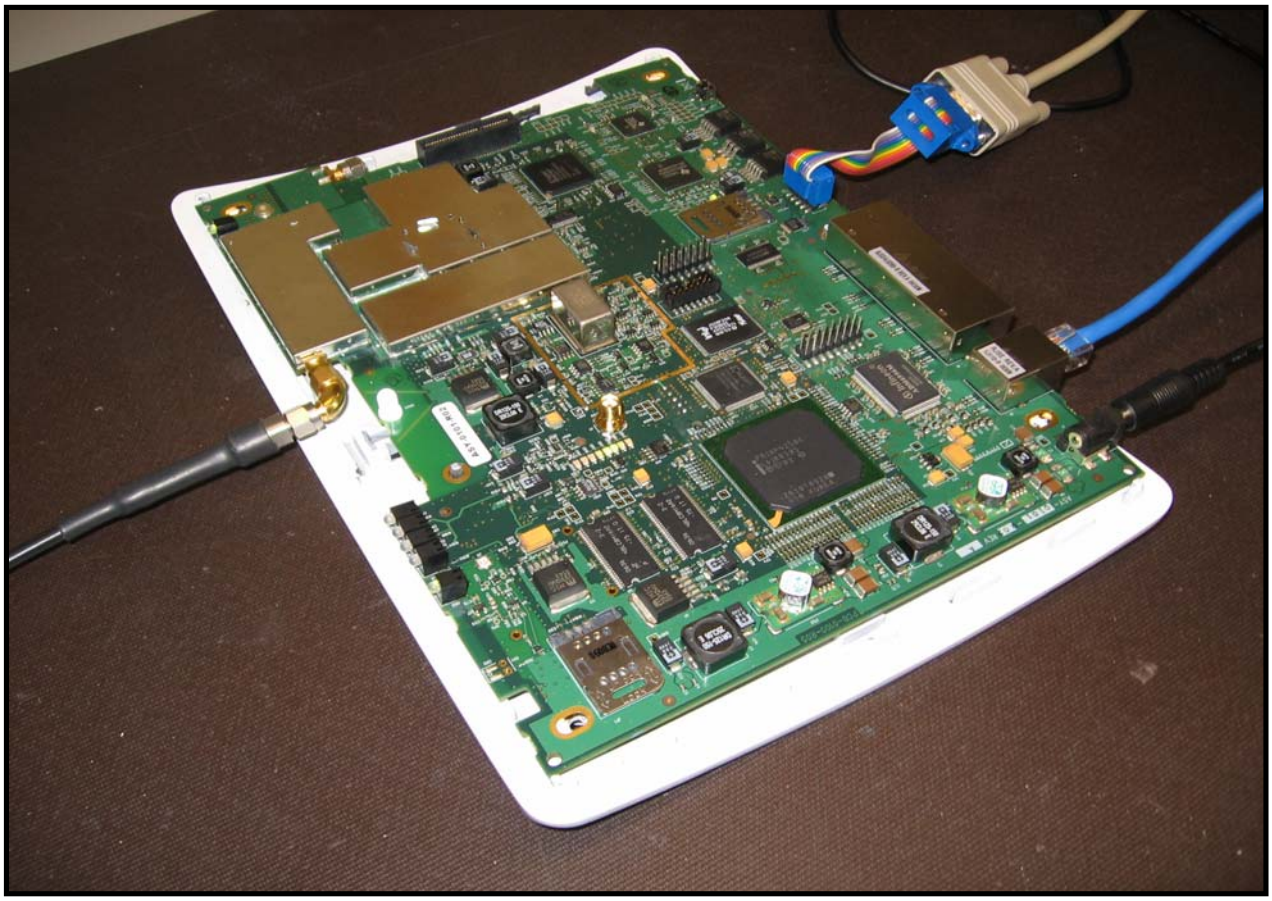
GPRS, High Channel, 8.995 - 14 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm



GPRS, High Channel, 13.995 - 20 GHz					
Result:	Pass	**Value:**	≤ -25 dBm	**Limit:**	≤ -13 dBm







FREQUENCY STABILITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Chamber, Temp./Humidity Chamber	Cincinnati Sub Zero (CSZ)	ZH-32-2-2-H/AC	TBA	7/31/2006	12
Spectrum Analyzer	Agilent	E4407B	AAU	12/8/2006	13
Multimeter	Tektronix	DMM912	MMH	12/7/2006	13
AC Power Source	Instek	APS-9050	TPK	NCR	0

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

Variation of Supply Voltage

The primary supply voltage was varied from 85% to 115% of nominal. The EUT can only be operated from the public AC mains, so an AC lab supply was used to vary the supply voltage from 115% to 85% of 120 V, 60 Hz.

Variation of Ambient Temperature

Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (-30° to +50° C) and at 10°C intervals.

Measurements were made mid channel in the operational band via a direct connection between the RF output and a spectrum analyzer. The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

NORTHWEST EMC

FREQUENCY STABILITY

XMit 2006.11.13

EUT:	S-BTS GSM Base Station			Work Order:	RAFN0069
Serial Number:	Engineering Unit			Date:	03/29/07
Customer:	Radioframe Networks, Inc.			Temperature:	20°C
Attendees:	Bob Melsheimer			Humidity:	32%
Project:	None			Barometric Pres.:	30.08
Tested by:	Greg Kiemel	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 22H:2005	ANSI/TIA/EIA-603-B-2002

COMMENTS

Maximum Output Power.

DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

Frequency Stability with Variation of Ambient Temperature (Primary Supply = 120VAC, 60 Hz)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	881.20000	881.200129	0.15	1
40	881.20000	881.200103	0.12	1
30	881.20000	881.200098	0.11	1
20	881.20000	881.200093	0.11	1
10	881.20000	881.200093	0.11	1
0	881.20000	881.200102	0.12	1
-10	881.20000	881.200109	0.12	1
-20	881.20000	881.200137	0.16	1
-30	881.20000	881.200170	0.19	1

Frequency Stability with Variation of Primary Supply Voltage (Ambient Temperature = 20°C)

Voltage (VAC, 60 Hz)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
138 (115%)	881.20000	881.200093	0.11	1
132 (110%)	881.20000	881.200093	0.11	1
126 (105%)	881.20000	881.200093	0.11	1
120 (100%)	881.20000	881.200093	0.11	1
114 (95%)	881.20000	881.200093	0.11	1
108 (90%)	881.20000	881.200093	0.11	1
102 (85%)	881.20000	881.200093	0.11	1

FREQUENCY STABILITY

FREQUENCY STABILITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

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Multimeter	Tektronix	DMM912	MMH	12/7/2006	13
AC Power Source	Instek	APS-9050	TPK	NCR	0

MEASUREMENT UNCERTAINTY

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NORTHWEST EMC

FREQUENCY STABILITY

XMit 2006.11.13

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Serial Number:	Engineering Unit			Date:	03/29/07
Customer:	Radioframe Networks, Inc.			Temperature:	20°C
Attendees:	Bob Melsheimer			Humidity:	32%
Project:	None			Barometric Pres.:	30.08
Tested by:	Greg Kiemel	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 24E:2005	ANSI/TIA/EIA-603-B-2002

COMMENTS

Maximum Output Power.

DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

Frequency Stability with Variation of Ambient Temperature (Primary Supply = 120VAC, 60 Hz)

Temp (°C)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
50	1960.00000	1960.000147	0.07	1
40	1960.00000	1960.000147	0.07	1
30	1960.00000	1960.000147	0.07	1
20	1960.00000	1960.000147	0.07	1
10	1960.00000	1960.000139	0.07	1
0	1960.00000	1960.000209	0.11	1
-10	1960.00000	1960.000292	0.15	1
-20	1960.00000	1960.000286	0.15	1
-30	1960.00000	1960.000338	0.17	1

Frequency Stability with Variation of Primary Supply Voltage (Ambient Temperature = 20°C)

Voltage (VAC, 60 Hz)	Assigned Frequency (MHz)	Measured Frequency (MHz)	Tolerance (ppm)	Specification (ppm)
138 (115%)	1960.00000	1960.000147	0.07	1
132 (110%)	1960.00000	1960.000147	0.07	1
126 (105%)	1960.00000	1960.000147	0.07	1
120 (100%)	1960.00000	1960.000147	0.07	1
114 (95%)	1960.00000	1960.000147	0.07	1
108 (90%)	1960.00000	1960.000147	0.07	1
102 (85%)	1960.00000	1960.000147	0.07	1

FREQUENCY STABILITY