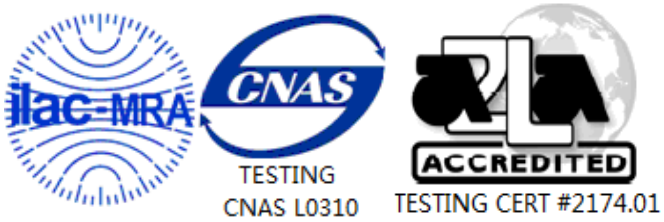


FCC
RF Test Report

Product Name: Mobile WiFi

Model Number: E5776s-501

Report No: SYBH(Z-RF)006112012-2004
FCC ID: QISE5776S-501
IC : 6369A-E5776S

Reliability Laboratory of Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Tel: +86 755 28780808 Fax: +86 755 89652518

Notice

1. The laboratory has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L0310.
2. The laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements. The site recognition number is 97456.
3. The laboratory has been listed by industry Canada to perform electromagnetic emission measurement. The site recognition number is 6369A-2.
4. The test report is invalid if not marked with "exclusive stamp for the test report".
5. The test report is invalid if not marked with the stamps or the signatures of the persons responsible for performing, revising and approving the test report.
6. The test report is invalid if there is any evidence of erasure and/or falsification.
7. If there is any dissidence for the test report, please file objection to the test centre within 15 days from the date of receiving the test report.
8. Normally, the test report is only responsible for the samples that have undergone the test.
9. Context of the test report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of the laboratory.
10. The laboratory has Passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01.

Applicant:	Huawei Technologies Co., Ltd.
Address:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Date of Receipt Test Item:	Nov.,07, 2012
Start Date of Test:	Nov.,07, 2012
End Date of Test:	Nov.,16, 2012
Test Result:	Pass

Approved by Senior Engineer:	2012-11-16	DaiLinjun	DaiLinJun
	Date	Name	Signature
Prepared by:	2012-11-16	GuoXingxing	GuoXingxing
	Date	Name	Signature

Contents

1 General Information

1.1 Applied Standard

Applied Rules:	47 CFR FCC Part 02:2011 47 CFR FCC Part 27 :2011 IC RSS-Gen (Issue 3) IC RSS-139 (Issue 2)
Test Method:	FCC KDB 971168 D01 Power Meas License Digital Systems v01 FCC KDB 662911 D01 Multiple Transmitter Output v01

1.2 Test Location

Test Location 1:	Reliability Laboratory of Huawei Technologies Co., Ltd.
Address:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.3 Test Environment Condition

Ambient Temperature:	19.5 to 25 °C
Ambient Relative Humidity:	40 to 55 %
Atmospheric Pressure:	Not applicable

2 Summary

Table 1 Summary of Band 4 results

Test Item	FCC Rule No.	IC Rule No.	Requirements	Test Result	Verdict (NOTE 2)
RF Power Output	§2.1046, §27.50(d)	RSS-Gen, §4.8; RSS-139, §6.4	EIRP ≤ 1 W; PAR ≤ 13 dB.	Appendix A	Pass
Bandwidth	§2.1049, §22.917	RSS-Gen, §4.6	OBW: No limit. EBW: No limit.	Appendix B	Pass
Band Edges Compliance	§2.1051, §27.53(h)	RSS-Gen, §4.9; RSS-139, §6.5	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Appendix C	Pass
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)	RSS-Gen, §4.9; RSS-139, §6.5	≤ -13 dBm/1 MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Appendix D	Pass
Field Strength of Spurious Radiation	§2.1053, §27.53(h)	RSS-Gen, §4.9; RSS-139, §6.5	≤ -13 dBm/1 MHz.	Appendix E	Pass
Frequency Stability	§2.1055, §27.54	RSS-Gen, §4.7; RSS-139, §6.3	Within authorized bands of operation/frequency block.	Appendix F	Pass
Receiver Spurious Emissions (NOTE 1)	---	RSS-Gen, §4.10; RSS-Gen, §6; RSS-139, §6.6	Radiated limit: RSS-Gen, §6.1 field strength limit. Conducted limit: ≤ -57 dBm/120 kHz (CISPR-QP), from 30 MHz to 1000 MHz, and ≤ -53 dBm/1 MHz (AV), from 1 GHz to 3rd harmonics.	Appendix G	Pass
Photos of Test Setups	---	---	---	Appendix H	---

NOTE 1: For Receiver Spurious Emissions, If the receiver has a detachable antenna of known impedance, antenna conducted spurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method is recommended. The antenna conducted test shall be performed with the antenna disconnected and the receiver antenna terminals connected to a measuring instrument having equal impedance to that specified for the antenna.

NOTE 2: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.

3 Product Description

3.1 Product Information

3.1.1 General Description

E5776s-501 is a LTE/UMTS/GSM triple mode and WiFi Wireless mobile Router; it can be used as a WiFi hotspot based on standard of IEEE802.11b/g/n. It supports 3G WCDMA and 4G LTE wireless internet accessing function. About 3G WCDMA wireless mode, it supports WCDMA and HSDPA/HSUPA/HSPA+/DC-HSDPA, operating in Band1、Band2、Band4、Band 5；and the 4G LTE operating in Band4、Band7；and GSM operating in GSM850MHz and GSM1900MHz.The WiFi frequency is 2.4GHz.

E5776s-501 supports 1Tx2Rx for 3G WCDMA and 4G LTE. WiFi supports 2Tx2Rx.

3.1.2 Board Information

Table 2 Board Information

Mobile WiFi		
E5776s-501		
Board and Module		
Equipment Designation / Description	Software Version	Hardware Version
MAINBOARD	21.202.11.01.00	CL2E5776SM

4 Test Description

4.1 Supported Frequency Range

Characteristics	Description
Downlink	2110 to 2155 MHz;
Uplink	1710 to 1755 MHz;

4.2 Transmitter / Receiver Characteristics

Characteristics	Description
System Type	LTE
TX Output Power (per Antenna Port)	LTE system: 23dBm
Channel Spacing(s) / Bandwidth(s)	LTE system: 5 MHz, 10 MHz, 15 MHz, 20 MHz
Designation of Emissions	LTE system: 4M48G7D (5 MHz ,QPSK modulation), 4M48W7D (5 MHz ,16QAM modulation), 8M93G7D (10 MHz QPSK modulation), 8M95W7D (10 MHz 16QAM modulation), 13M43G7D (15MHz QPSK modulation), 13M42W7D (15MHz 16QAM modulation), 17M92G7D (20 MHz QPSK modulation), 17M90W7D (20 MHz 16QAM modulation),

4.3 Antenna Gain

Antenna Gain(dBi) to LTE Band 4	0.1

5 General Test Conditions / Configurations

5.1 RF Channels under Test

Test Mode	TX / RX	RF Channel		
		Low (B)	Middle (M)	High (T)
LTE Band 4	TX (5M)	Channel 19975	Channel 20175	Channel 20375
		1712.5 MHz	1732.5 MHz	1752.5 MHz
	TX (10M)	Channel 20000	Channel 20175	Channel 20350
		1715 MHz	1732.5 MHz	1750 MHz
	TX (15M)	1717.5 MHz	1732.5 MHz	1747.5 MHz
		Channel 2025	Channel 2175	Channel 2325
	TX (20M)	Channel 20050	Channel 20175	Channel 20300
		1720 MHz	1732.5 MHz	1745 MHz
	RX (5M)	Channel 1975	Channel 2175	Channel 2375
		2112.5 MHz	2132.5MHz	2152.5 MHz
	RX (10M)	Channel 2000	Channel 2175	Channel 2350
		2115 MHz	2132.5MHz	2150 MHz
	RX (15M)	Channel 2025	Channel 2175	Channel 2325
		2117.5 MHz	2132.5MHz	2147.5 MHz
	RX (20M)	Channel 2050	Channel 2175	Channel 2300
		2120 MHz	2132.5MHz	2145 MHz

5.2 Test Modes

Test Mode	Test Modes Description
TM1	LTE QPSK modulation
TM2	LTE 16QAM modulation

5.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	Ambient	
Temperature	TN	Ambient
Voltage	VL	3.6V
	VN	3.7V
	VH	4.2V

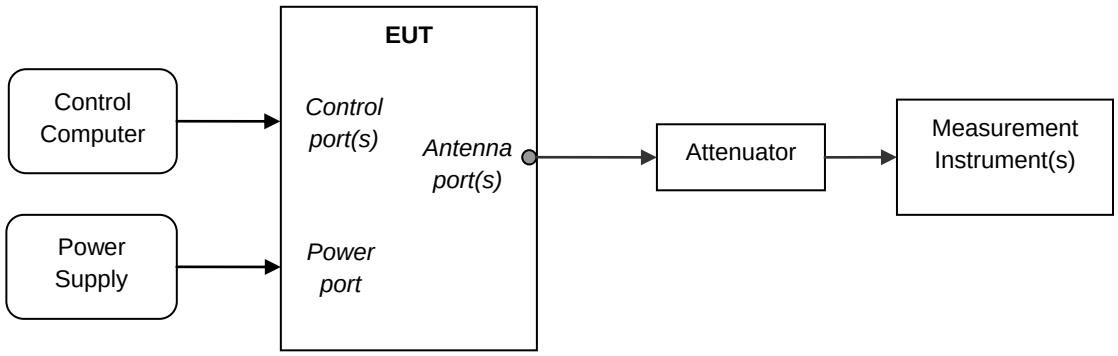
NOTE: VL= lower extreme test voltage
VN= nominal voltage
VH= upper extreme test voltage
TN= normal temperature

5.4 Test Setup

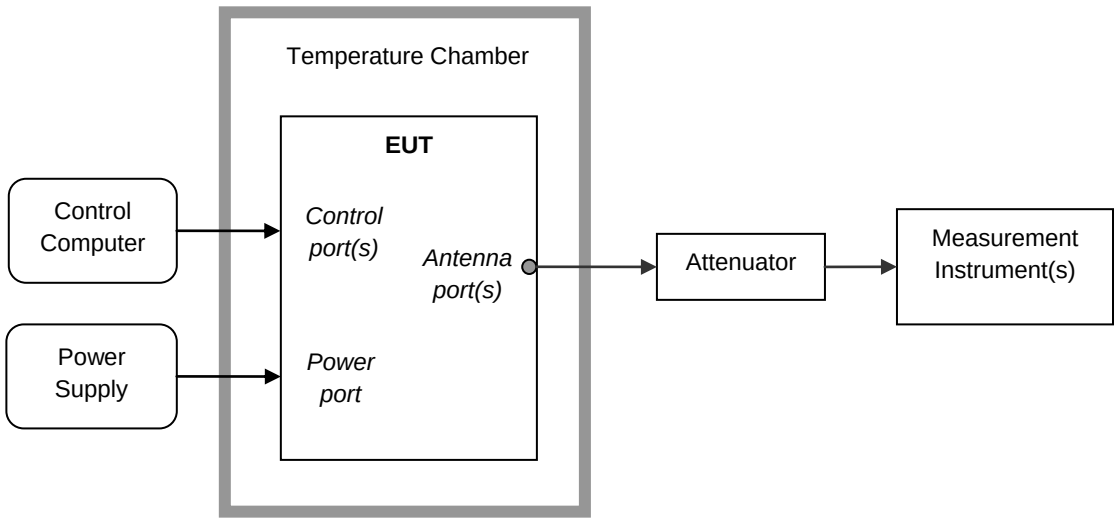
5.4.1 General Test Setup Configurations

Configuration	Description
Test Antenna Ports	Until otherwise declared, all TX tests are ONLY performed at the main Transmitter antenna port (e.g. TRXA, TXA and so on) of the EUT, and all RX tests are ONLY performed at the main Receiver antenna port (e.g. TRXA, RXA and so on) of the EUT.
Multiple RF Sources	Other than the tested RF source of the EUT, other RF source(s) are disabled or shutdown during measurements.

5.4.2 Test Setup 1



5.4.3 Test Setup 2



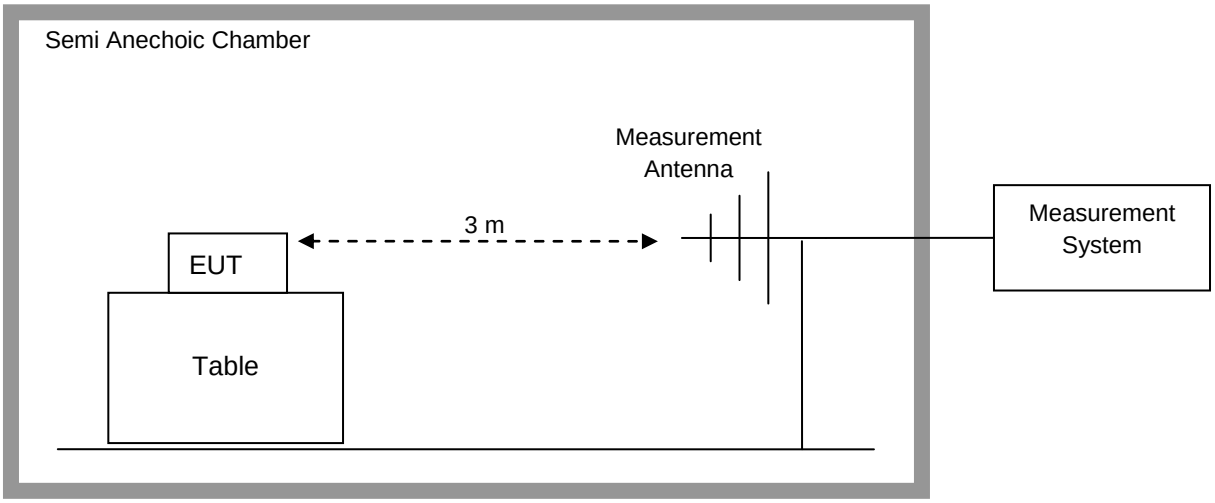
5.4.4 Test Setup 3

NOTE1: Effective radiated power (ERP) or Effective Isotropic radiated power (EIRP) refers to the EUT radiation power output, assuming all emissions are radiated from half-wave dipole antennas or horn antennas.

NOTE2: The EUT was set on insulator 80cm above the Ground Plane. The setup and test methods were according to ANSI-TIA-603C 2004.The measurements were carried through with a Rohde and Schwarz Test Receiver and control software.

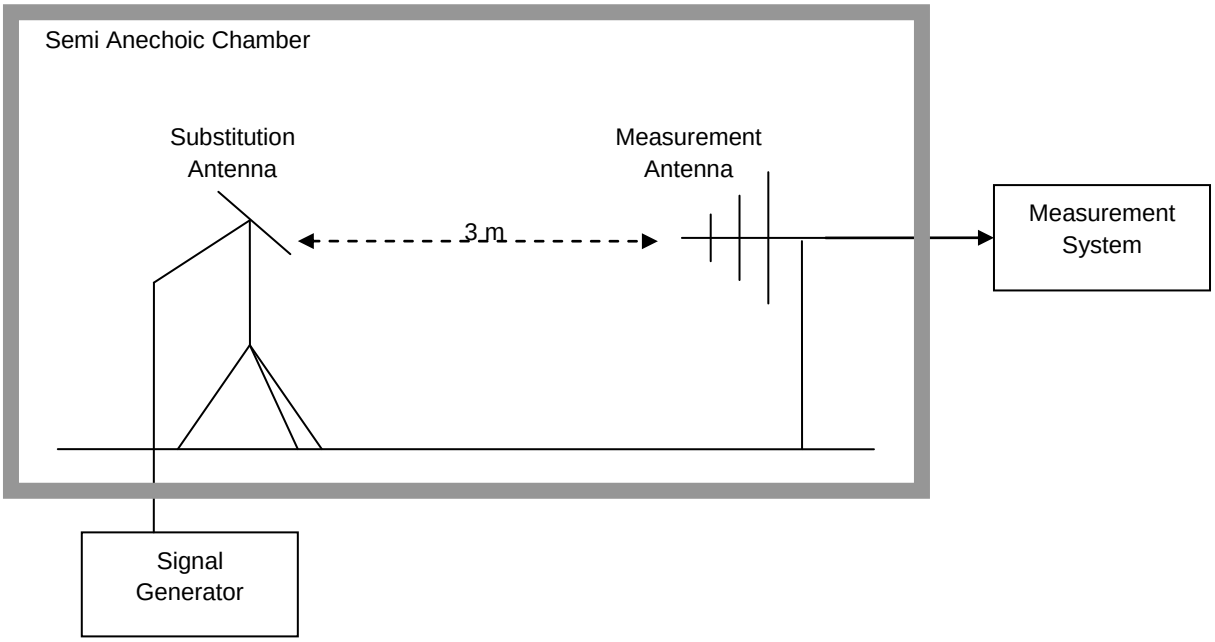
Step 1: Pre-test to find the Maximum ERP or EIRP

1. Connect the test system according to the following figure. EUT is running for 30 minutes before test, and measurement instruments are warming-up for 30 minutes.
2. Set up communication link between Universal radio communication tester and EUT, set EUT working frequency, and control EUT to transmit at maximum power.
3. Set the center frequency of the signal analyzer or receiver to the EUT's operating frequency, the RBW is equal to the emission bandwidth of the signal. Set RMS detector for the test, and the span is equal to 2 times of emission bandwidth, the other settings should remain automatic. Normally, the height range of antenna was 1m to 4m, the azimuth range of turntable was 0°to 360°. The receiver antenna has two polarizations V and H. A portable or small unlicensed wireless device shall be placed on a non-metallic test fixture or other non-metallic support during testing. The supporting fixture shall permit orientation of the EUT in each of three orthogonal (x, y, z) axis positions such that emissions from the EUT are maximized. Measure the EUT maximum RF power and record the result.
4. Changing EUT working frequency and measuring the RF power at channel L, M, H respectively. Complete the test data.


Semi Anechoic Chamber
Measurement
Antenna
3 m
EUT
Table
Measurement
System

Step 2: Substitution method to verify the maximum ERP or EIRP

1. Measurement setup is according to the following figure. EUT was substituted by antenna, and the polarization is identical with the test antenna; the signal generator was connected to the substitution antenna.
2. The radiated output power, measured by signal analyzer set, is the same as recorded in above. Then this power level is matched by a signal from a calibrated signal generator which is substituted for EUT. The power supplied by the generator is then equal to the ERP or EIRP after corrected by the antenna gain and cable loss.



5.5 Test Conditions

Test Case	Test Conditions	
Transmitter Output Power	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1 & Test Setup 3
	Detector	RMS
	RF Channels (TX)	B, M, T
	Test Mode	TM1/TM2
Modulation Characteristics	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1
	RF Channels (TX)	M
	Test Mode	TM1/TM2
Occupied Bandwidth	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1
	Detector	RMS
	RF Channels (TX)	B, M, T
	Test Mode	TM1/TM2
Band Edges Compliance	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1
	Detector	RMS
	RF Channels (TX)	B, T
	Test Mode	TM1/TM2
Spurious Emission at Antenna Terminals	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 1
	Detector	PK
	RF Channels (TX)	B, M, T
	Test Mode	TM1
Field Strength of Spurious Radiation	Test Configuration	Ambient Temperature & Rated Voltage
	Test Setup	Test Setup 3
	Detector	PK
	RF Channels (TX)	M
	Test Mode	TM1
Frequency Stability	Test Configuration	(1) -30 °C to +50 °C with step 10 °C at Rated Voltage; (2) VL VN VH Voltage at Ambient Temperature.
	Test Setup	Test Setup 2
	RF Channels (TX)	M
	Test Mode	TM1/TM2

6 Main Test Instruments

Table 3 Main Test Equipments

Equipment Name	Manufacturer	Model	Serial Number	Cal Date	Cal. Due
Power supply	KEITHLEY	2303	1288003	2012-11-09	2013-11-08
Universal Radio Communication Tester	R&S	CMU200	117341	2012-01-13	2013-01-12
Universal Radio Communication Tester	Agilent	E5515C	MY50260239	2012-11-09	2013-11-08
Spectrum Analyzer	Agilent	E4440A	MY49420179	2012-07-18	2013-07-17
Signal Analyzer	R&S	FSQ31	200021	2012-11-09	2013-11-08
Temperature Chamber	WEISS	WKL64	24600294	2012-02-14	2013-02-13
Signal generator	Agilent	E8257D	MY49281095	2012-07-10	2013-07-09
Spectrum analyzer	R&S	FSU3	200474	2012-03-06	2013-03-05
Spectrum analyzer	R&S	FSU43	100144	2012-03-06	2013-03-05
Double-Ridged Waveguide Horn Antenna (1G~18GHz)	R&S	HF907	100304	2012-04-06	2013-04-05
Double-Ridged Waveguide Horn Antenna (1G~18GHz)	R&S	HF907	100391	2012-04-06	2013-04-05
Trilog Broadband Antenna (30M~3GHz)	SCHWARZBECK	VULB 9163	9163-521	2012-07-18	2013-07-17
Pyramidal Horn Antenna(26GHz-40GHz)	ETS-Lindgren	3160-10	00123940	2012-02-28	2013-02-27
Pyramidal Horn Antenna(18GHz-26.5GHz)	ETS-Lindgren	3160-09	00125912	2012-02-28	2013-02-27
Universal Radio Communication Tester	R & S	CMW500	20347676	2012-09-08	2013-09-07
Universal Radio Communication Tester	Anritsu	MT8820C	6200971028	2012-05-05	2013-05-04

7 Measurement Uncertainty

For a 95% confidence level (k=2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item		Extended Uncertainty
Transmitter Output Power	Power (dBm)	U =0.39 dB
Occupied Bandwidth	Magnitude (%)	U=0.2%
Band Edge Compliance	Disturbance Power (dBm)	U=2.0 dB
Conducted Spurious Emissions	Disturbance Power (dBm)	U=2.0 dB
Field Strength of Spurious Radiation	ERP (dBm)	U=4.6 dB (30 MHz – 1GHz) U=3.0 dB (above 1 GHz)
Frequency Stability	Frequency Accuracy (ppm)	U=0.21 ppm

END

Appendix A

Transmitter Output Power

According to FCC Part 2.1046 & FCC Part 27C & 27M

Conducted Power of Transmitter

Table 1 Measurement Results (LTE) BAND 7

TM1 & TM2 RF Output Power(Conducted) BAND 7				
Test Mode	TN/VN			
	Modulation	RB	Measured (dBm)	Limit (dBm)
Channel (L) 5MHz(BW)	QPSK	1RB#0	22.51	33.0
		1RB#max	22.65	33.0
		12RB#6	21.91	33.0
		Full	21.68	33.0
	16QAM	1RB#0	21.43	33.0
		1RB#max	21.66	33.0
		12RB#6	20.73	33.0
		Full	20.51	33.0
Channel (L) 10MHz(BW)	QPSK	1RB#0	22.39	33.0
		1RB#max	23.21	33.0
		25RB#13	21.71	33.0
		Full	21.60	33.0
	16QAM	1RB#0	21.56	33.0
		1RB#max	22.30	33.0
		25RB#13	20.59	33.0
		Full	20.49	33.0
Channel (L) 15MHz(BW)	QPSK	1RB#0	22.71	33.0
		1RB#max	23.75	33.0
		36RB#18	21.88	33.0
		Full	21.95	33.0
	16QAM	1RB#0	21.57	33.0
		1RB#max	22.69	33.0
		36RB#18	20.67	33.0
		Full	20.76	33.0
Channel (L) 20MHz(BW)	QPSK	1RB#0	22.80	33.0
		1RB#max	24.12	33.0
		50RB#25	22.20	33.0
		Full	22.21	33.0
	16QAM	1RB#0	21.72	33.0
		1RB#max	23.12	33.0

		50RB#25	21.10	33.0
		Full	21.11	33.0
Channel (M) 5MHz(BW)	QPSK	1RB#0	23.86	33.0
		1RB#max	23.87	33.0
		12RB#6	23.05	33.0
		Full	22.94	33.0
	16QAM	1RB#0	22.93	33.0
		1RB#max	22.94	33.0
		12RB#6	21.89	33.0
		Full	21.87	33.0
Channel (M) 10MHz(BW)	QPSK	1RB#0	23.61	33.0
		1RB#max	23.85	33.0
		25RB#13	23.05	33.0
		Full	22.82	33.0
	16QAM	1RB#0	22.60	33.0
		1RB#max	23.04	33.0
		25RB#13	21.83	33.0
		Full	21.59	33.0
Channel (M) 15MHz(BW)	QPSK	1RB#0	23.71	33.0
		1RB#max	23.92	33.0
		36RB#18	23.02	33.0
		Full	22.88	33.0
	16QAM	1RB#0	22.72	33.0
		1RB#max	22.95	33.0
		36RB#18	21.81	33.0
		Full	21.71	33.0
Channel (M) 20MHz(BW)	QPSK	1RB#0	23.45	33.0
		1RB#max	23.87	33.0
		50RB#25	22.93	33.0
		Full	22.68	33.0
	16QAM	1RB#0	22.64	33.0
		1RB#max	22.99	33.0
		50RB#25	21.84	33.0
		Full	21.61	33.0
Channel (H) 5MHz(BW)	QPSK	1RB#0	23.11	33.0
		1RB#max	23.10	33.0
		12RB#6	22.35	33.0
		Full	22.24	33.0

	16QAM	1RB#0	22.08	33.0
		1RB#max	21.90	33.0
		12RB#6	21.10	33.0
		Full	21.02	33.0
Channel (H) 10MHz(BW)	QPSK	1RB#0	23.16	33.0
		1RB#max	23.25	33.0
		25RB#13	22.22	33.0
		Full	21.89	33.0
	16QAM	1RB#0	22.14	33.0
		1RB#max	22.21	33.0
		25RB#13	21.02	33.0
		Full	20.67	33.0
Channel (H) 15MHz(BW)	QPSK	1RB#0	23.58	33.0
		1RB#max	23.26	33.0
		36RB#18	22.32	33.0
		Full	22.15	33.0
	16QAM	1RB#0	22.63	33.0
		1RB#max	22.32	33.0
		36RB#18	21.13	33.0
		Full	20.97	33.0
Channel (H) 20MHz(BW)	QPSK	1RB#0	23.90	33.0
		1RB#max	23.46	33.0
		50RB#25	22.32	33.0
		Full	22.20	33.0
	16QAM	1RB#0	22.99	33.0
		1RB#max	22.55	33.0
		50RB#25	21.24	33.0
		Full	21.12	33.0

Peak-to-Average Ratio

Table 2 Measurement Results (LTE) BAND 7

Peak-to-Average Ratio				
Test Mode	TN/VN			
	Modulation	RB	Measured (dB)	Limit (dB)
Channel (L) 5MHz(BW)	QPSK	1RB#0	4.60	13
		1RB#max	4.14	13
		12RB#6	5.18	13
		Full	5.60	13
	16QAM	1RB#0	5.55	13
		1RB#max	5.08	13
		12RB#6	6.32	13
		Full	6.47	13
Channel (L) 10MHz(BW)	QPSK	1RB#0	4.49	13
		1RB#max	4.03	13
		25RB#13	5.26	13
		Full	5.30	13
	16QAM	1RB#0	5.39	13
		1RB#max	4.89	13
		25RB#13	6.12	13
		Full	6.24	13
Channel (L) 15MHz(BW)	QPSK	1RB#0	4.73	13
		1RB#max	4.06	13
		36RB#18	5.33	13
		Full	5.40	13
	16QAM	1RB#0	5.33	13
		1RB#max	4.94	13
		36RB#18	6.04	13
		Full	6.26	13
Channel (L) 20MHz(BW)	QPSK	1RB#0	4.54	13
		1RB#max	3.64	13
		50RB#25	5.12	13
		Full	5.31	13
	16QAM	1RB#0	5.41	13

		1RB#max	4.76	13
		50RB#25	6.03	13
		Full	6.14	13
Channel (M) 5MHz(BW)	QPSK	1RB#0	4.16	13
		1RB#max	3.80	13
		12RB#6	5.09	13
		Full	5.01	13
	16QAM	1RB#0	5.46	13
		1RB#max	4.93	13
		12RB#6	6.13	13
		Full	6.26	13
Channel (M) 10MHz(BW)	QPSK	1RB#0	4.70	13
		1RB#max	3.62	13
		25RB#13	5.17	13
		Full	6.26	13
	16QAM	1RB#0	5.62	13
		1RB#max	5.11	13
		25RB#13	6.13	13
		Full	6.18	13
Channel (M) 15MHz(BW)	QPSK	1RB#0	4.92	13
		1RB#max	4.30	13
		36RB#18	5.56	13
		Full	5.64	13
	16QAM	1RB#0	5.54	13
		1RB#max	5.02	13
		36RB#18	6.04	13
		Full	6.11	13
Channel (M) 20MHz(BW)	QPSK	1RB#0	4.27	13
		1RB#max	3.86	13
		50RB#25	5.26	13
		Full	5.33	13
	16QAM	1RB#0	5.63	13
		1RB#max	4.53	13
		50RB#25	6.10	13
		Full	6.21	13
Channel (H) 5MHz(BW)	QPSK	1RB#0	4.84	13
		1RB#max	4.46	13
		12RB#6	5.34	13

		Full	5.46	13
	16QAM	1RB#0	5.74	13
		1RB#max	4.91	13
		12RB#6	6.21	13
		Full	6.26	13
Channel (H) 10MHz(BW)	QPSK	1RB#0	4.71	13
		1RB#max	3.64	13
		25RB#13	5.00	13
		Full	5.16	13
	16QAM	1RB#0	5.28	13
		1RB#max	4.96	13
		25RB#13	6.08	13
		Full	6.13	13
Channel (H) 15MHz(BW)	QPSK	1RB#0	4.20	13
		1RB#max	3.87	13
		36RB#18	5.07	13
		Full	5.21	13
	16QAM	1RB#0	5.10	13
		1RB#max	4.76	13
		36RB#18	5.98	13
		Full	6.06	13
Channel (H) 20MHz(BW)	QPSK	1RB#0	4.68	13
		1RB#max	3.93	13
		50RB#25	4.99	13
		Full	5.11	13
	16QAM	1RB#0	5.47	13
		1RB#max	5.02	13
		50RB#25	6.07	13
		Full	6.18	13

Effective Isotropic Radiated Power of Transmitter (EIRP)

Table 3 Substitution Results (LTE) BAND 7

Test Mode			Meas. Level [dBm]	Substitution Antenna Type	SGP[dBm]	Substitution Gain [dBi]	Cable Loss [dB]	Substitution Level (EIRP) [dBm]	FCC limit [dBm]	Result
Channel	Modulation	RB								
Channel (L) 5MHz(BW)	QPSK	1 RB/#0	25.21	Horn Ant.	21.41	4.5	1	24.91	33	Pass
		1 RB/#max	25.35	Horn Ant.	21.55	4.5	1	25.05	33	Pass
		12 RB/#6	24.61	Horn Ant.	20.81	4.5	1	24.31	33	Pass
		Full	24.38	Horn Ant.	20.58	4.5	1	24.08	33	Pass
	16QAM	1 RB/#0	24.13	Horn Ant.	20.33	4.5	1	23.83	33	Pass
		1 RB/#max	24.36	Horn Ant.	20.56	4.5	1	24.06	33	Pass
		12 RB/#6	23.43	Horn Ant.	19.63	4.5	1	23.13	33	Pass
		Full	23.21	Horn Ant.	19.41	4.5	1	22.91	33	Pass
Channel (L) 10MHz(BW)	QPSK	1 RB/#0	25.09	Horn Ant.	21.29	4.5	1	24.79	33	Pass
		1 RB/#max	25.91	Horn Ant.	22.11	4.5	1	25.61	33	Pass
		25 RB/#13	24.41	Horn Ant.	20.61	4.5	1	24.11	33	Pass
		Full	24.30	Horn Ant.	20.50	4.5	1	24.00	33	Pass
	16QAM	1 RB/#0	24.26	Horn Ant.	20.46	4.5	1	23.96	33	Pass

		1 RB/#max	25.00	Horn Ant.	21.20	4.5	1	24.70	33	Pass
		25 RB/#13	23.29	Horn Ant.	19.49	4.5	1	22.99	33	Pass
		Full	23.19	Horn Ant.	19.39	4.5	1	22.89	33	Pass
Channel (L) 15MHz(BW)	QPSK	1 RB/#0	25.41	Horn Ant.	21.61	4.5	1	25.11	33	Pass
		1 RB/#max	26.45	Horn Ant.	22.65	4.5	1	26.15	33	Pass
		36 RB/#18	24.58	Horn Ant.	20.78	4.5	1	24.28	33	Pass
		Full	24.65	Horn Ant.	20.85	4.5	1	24.35	33	Pass
	16QAM	1 RB/#0	24.27	Horn Ant.	20.47	4.5	1	23.97	33	Pass
		1 RB/#max	25.39	Horn Ant.	21.59	4.5	1	25.09	33	Pass
		36 RB/#18	23.37	Horn Ant.	19.57	4.5	1	23.07	33	Pass
		Full	23.46	Horn Ant.	19.66	4.5	1	23.16	33	Pass
Channel (L) 20MHz(BW)	QPSK	1 RB/#0	25.50	Horn Ant.	21.70	4.5	1	25.20	33	Pass
		1 RB/#max	26.82	Horn Ant.	23.02	4.5	1	26.52	33	Pass
		50 RB/#25	24.90	Horn Ant.	21.10	4.5	1	24.60	33	Pass
		Full	24.91	Horn Ant.	21.11	4.5	1	24.61	33	Pass
	16QAM	1 RB/#0	24.42	Horn Ant.	20.62	4.5	1	24.12	33	Pass
		1 RB/#max	25.82	Horn Ant.	22.02	4.5	1	25.52	33	Pass
		50 RB/#25	23.80	Horn Ant.	20.00	4.5	1	23.50	33	Pass
		Full	23.81	Horn Ant.	20.01	4.5	1	23.51	33	Pass

Channel (M) 5MHz(BW)	QPSK	1 RB/#0	26.56	Horn Ant.	22.76	4.5	1	26.26	33	Pass
		1 RB/#max	26.57	Horn Ant.	22.77	4.5	1	26.27	33	Pass
		12 RB/#6	25.75	Horn Ant.	21.95	4.5	1	25.45	33	Pass
		Full	25.64	Horn Ant.	21.84	4.5	1	25.34	33	Pass
	16QAM	1 RB/#0	25.63	Horn Ant.	21.83	4.5	1	25.33	33	Pass
		1 RB/#max	25.64	Horn Ant.	21.84	4.5	1	25.34	33	Pass
		12 RB/#6	24.59	Horn Ant.	20.79	4.5	1	24.29	33	Pass
		Full	24.57	Horn Ant.	20.77	4.5	1	24.27	33	Pass
Channel (M) 10MHz(BW)	QPSK	1 RB/#0	26.31	Horn Ant.	22.51	4.5	1	26.01	33	Pass
		1 RB/#max	26.55	Horn Ant.	22.75	4.5	1	26.25	33	Pass
		25 RB/#13	25.75	Horn Ant.	21.95	4.5	1	25.45	33	Pass
		Full	25.52	Horn Ant.	21.72	4.5	1	25.22	33	Pass
	16QAM	1 RB/#0	25.30	Horn Ant.	21.50	4.5	1	25.00	33	Pass
		1 RB/#max	25.74	Horn Ant.	21.94	4.5	1	25.44	33	Pass
		25 RB/#13	24.53	Horn Ant.	20.73	4.5	1	24.23	33	Pass
		Full	24.29	Horn Ant.	20.49	4.5	1	23.99	33	Pass
Channel (M) 15MHz(BW)	QPSK	1 RB/#0	26.41	Horn Ant.	22.61	4.5	1	26.11	33	Pass
		1 RB/#max	26.62	Horn Ant.	22.82	4.5	1	26.32	33	Pass
		36 RB/#18	25.72	Horn Ant.	21.92	4.5	1	25.42	33	Pass

		Full	25.58	Horn Ant.	21.78	4.5	1	25.28	33	Pass
	16QAM	1 RB/#0	25.42	Horn Ant.	21.62	4.5	1	25.12	33	Pass
		1 RB/#max	25.65	Horn Ant.	21.85	4.5	1	25.35	33	Pass
		36 RB/#18	24.51	Horn Ant.	20.71	4.5	1	24.21	33	Pass
		Full	24.41	Horn Ant.	20.61	4.5	1	24.11	33	Pass
Channel (M) 20MHz(BW)	QPSK	1 RB/#0	26.15	Horn Ant.	22.35	4.5	1	25.85	33	Pass
		1 RB/#max	26.57	Horn Ant.	22.77	4.5	1	26.27	33	Pass
		50 RB/#25	25.63	Horn Ant.	21.83	4.5	1	25.33	33	Pass
		Full	25.38	Horn Ant.	21.58	4.5	1	25.08	33	Pass
	16QAM	1 RB/#0	25.34	Horn Ant.	21.54	4.5	1	25.04	33	Pass
		1 RB/#max	25.69	Horn Ant.	21.89	4.5	1	25.39	33	Pass
		50 RB/#25	24.54	Horn Ant.	20.74	4.5	1	24.24	33	Pass
		Full	24.31	Horn Ant.	20.51	4.5	1	24.01	33	Pass
Channel (H) 5MHz(BW)	QPSK	1 RB/#0	25.81	Horn Ant.	21.71	4.8	1	25.51	33	Pass
		1 RB/#max	25.80	Horn Ant.	21.70	4.8	1	25.50	33	Pass
		12 RB/#6	25.05	Horn Ant.	20.95	4.8	1	24.75	33	Pass
		Full	24.94	Horn Ant.	20.84	4.8	1	24.64	33	Pass
	16QAM	1 RB/#0	24.78	Horn Ant.	20.68	4.8	1	24.48	33	Pass
		1 RB/#max	24.60	Horn Ant.	20.50	4.8	1	24.30	33	Pass

		12 RB/#6	23.80	Horn Ant.	19.70	4.8	1	23.50	33	Pass
		Full	23.72	Horn Ant.	19.62	4.8	1	23.42	33	Pass
Channel (H) 10MHz(BW)	QPSK	1 RB/#0	25.86	Horn Ant.	21.76	4.8	1	25.56	33	Pass
		1 RB/#max	25.95	Horn Ant.	21.85	4.8	1	25.65	33	Pass
		25 RB/#13	24.92	Horn Ant.	20.82	4.8	1	24.62	33	Pass
		Full	24.59	Horn Ant.	20.49	4.8	1	24.29	33	Pass
	16QAM	1 RB/#0	24.84	Horn Ant.	20.74	4.8	1	24.54	33	Pass
		1 RB/#max	24.91	Horn Ant.	20.81	4.8	1	24.61	33	Pass
		25 RB/#13	23.72	Horn Ant.	19.62	4.8	1	23.42	33	Pass
		Full	23.37	Horn Ant.	19.27	4.8	1	23.07	33	Pass
Channel (H) 15MHz(BW)	QPSK	1 RB/#0	26.28	Horn Ant.	22.18	4.8	1	25.98	33	Pass
		1 RB/#max	25.96	Horn Ant.	21.86	4.8	1	25.66	33	Pass
		36 RB/#18	25.02	Horn Ant.	20.92	4.8	1	24.72	33	Pass
		Full	24.85	Horn Ant.	20.75	4.8	1	24.55	33	Pass
	16QAM	1 RB/#0	25.33	Horn Ant.	21.23	4.8	1	25.03	33	Pass
		1 RB/#max	25.02	Horn Ant.	20.92	4.8	1	24.72	33	Pass
		36 RB/#18	23.83	Horn Ant.	19.73	4.8	1	23.53	33	Pass
		Full	23.67	Horn Ant.	19.57	4.8	1	23.37	33	Pass
Channel (H)	QPSK	1 RB/#0	26.60	Horn Ant.	22.50	4.8	1	26.30	33	Pass

20MHz(BW)		1 RB/#max	26.16	Horn Ant.	22.06	4.8	1	25.86	33	Pass
		50 RB/#25	25.02	Horn Ant.	20.92	4.8	1	24.72	33	Pass
		Full	24.90	Horn Ant.	20.80	4.8	1	24.60	33	Pass
	16QAM	1 RB/#0	25.69	Horn Ant.	21.59	4.8	1	25.39	33	Pass
		1 RB/#max	25.25	Horn Ant.	21.15	4.8	1	24.95	33	Pass
		50 RB/#25	23.94	Horn Ant.	19.84	4.8	1	23.64	33	Pass
		Full	23.82	Horn Ant.	19.72	4.8	1	23.52	33	Pass

Note: a, For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b, SGP=Signal Generator Level

END

Appendix B

Occupied Bandwidth

According to FCC part 2.1049 & FCC Part 27C & 27M

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Result Table
NOTE: All relevant operation modes have been tested, and the full RB data is included in this report.

Table 1 Measurement Results (LTE) BAND 4

Test Mode	Carrier Conf.	RF Ch.	RB	Occupied Bandwidth [MHz]	-26dB BW [MHz]	Verdict
TM1	5 MHz	L	1RB#0	0.396	0.541	Pass
			1RB#max	0.393	0.547	Pass
			Partial RBs /RB #6	2.211	2.915	Pass
			Full RBs	4.486	4.829	Pass
		M	1RB#0	0.387	0.541	Pass
			1RB#max	0.386	0.531	Pass
			Partial RBs /RB #6	2.216	2.931	Pass
			Full RBs	4.482	4.829	Pass
		H	1RB#0	0.399	0.549	Pass
			1RB#0	0.380	0.534	Pass
			Partial RBs /RB #6	2.216	3.056	Pass
			Full RBs	4.482	4.833	Pass
	10 MHz	L	1RB#0	0.560	0.740	Pass
			1RB#max	0.564	0.747	Pass
			Partial RBs /RB #13	4.571	5.292	Pass
			Full RBs	8.936	9.549	Pass
		M	1RB#0	0.555	0.729	Pass
			1RB#max	0.562	0.754	Pass
			Partial RBs /RB #13	4.568	5.269	Pass
			Full RBs	8.935	9.525	Pass
		H	1RB#0	0.565	0.755	Pass
			1RB#max	0.564	0.744	Pass
			Partial RBs /RB #13	4.572	5.342	Pass
			Full RBs	8.934	9.525	Pass
	15 MHz	L	1RB#0	0.756	0.996	Pass
			1RB#max	0.744	0.999	Pass
			Partial RBs /RB #18	6.586	7.380	Pass
			Full RBs	13.429	14.299	Pass
		M	1RB#0	0.748	1.000	Pass
			1RB#max	0.746	0.996	Pass
			Partial RBs /RB #18	6.579	7.418	Pass
			Full RBs	13.422	14.312	Pass
		H	1RB#0	0.748	0.994	Pass
			1RB#max	0.743	0.994	Pass
			Partial RBs /RB #18	6.586	7.414	Pass
			Full RBs	13.432	14.318	Pass
	20 MHz	L	1RB#0	0.929	1.253	Pass
			1RB#max	0.936	1.254	Pass
			Partial RBs /RB #25	9.110	10.076	Pass
			Full RBs	17.893	19.015	Pass
		M	1RB#0	0.928	1.249	Pass
			1RB#max	0.931	1.251	Pass
			Partial RBs /RB #25	9.111	10.106	Pass
			Full RBs	17.894	19.033	Pass
		H	1RB#0	0.926	1.256	Pass
			1RB#max	0.934	1.254	Pass

Test Mode	Carrier Conf.	RF Ch.	RB	Occupied Bandwidth [MHz]	-26dB BW [MHz]	Verdict
			Partial RBs /RB #25	9.116	10.093	Pass
			Full RBs	17.922	19.038	Pass
TM2	5 MHz	L	1RB#0	0.397	0.538	Pass
			1RB#max	0.399	0.542	Pass
			Partial RBs /RB #6	2.217	3.071	Pass
			Full RBs	4.482	4.852	Pass
		M	1RB#0	0.395	0.542	Pass
			1RB#max	0.388	0.531	Pass
			Partial RBs /RB #6	2.217	3.136	Pass
			Full RBs	4.475	4.836	Pass
		H	1RB#0	0.403	0.538	Pass
			1RB#max	0.393	0.551	Pass
			Partial RBs /RB #6	2.219	3.011	Pass
			Full RBs	4.479	4.838	Pass
	10 MHz	L	1RB#0	0.553	0.729	Pass
			1RB#max	0.563	0.760	Pass
			Partial RBs /RB #13	4.571	5.533	Pass
			Full RBs	8.951	9.549	Pass
		M	1RB#0	0.556	0.732	Pass
			1RB#max	0.567	0.758	Pass
			Partial RBs /RB #13	4.572	5.642	Pass
			Full RBs	8.939	9.549	Pass
		H	1RB#0	0.557	0.748	Pass
			1RB#max	0.566	0.755	Pass
			Partial RBs /RB #13	4.578	5.590	Pass
			Full RBs	8.941	9.562	Pass
	15 MHz	L	1RB#0	0.758	0.997	Pass
			1RB#max	0.737	0.989	Pass
			Partial RBs /RB #18	6.594	7.614	Pass
			Full RBs	13.427	14.300	Pass
		M	1RB#0	0.757	1.006	Pass
			1RB#max	0.742	0.994	Pass
			Partial RBs /RB #18	6.594	7.578	Pass
			Full RBs	13.425	14.310	Pass
		H	1RB#0	0.747	1.007	Pass
			1RB#max	0.744	1.011	Pass
			Partial RBs /RB #18	6.593	7.638	Pass
			Full RBs	13.428	14.355	Pass
	20 MHz	L	1RB#0	0.930	1.248	Pass
			1RB#max	0.939	1.254	Pass
			Partial RBs /RB #25	9.128	10.203	Pass
			Full RBs	17.895	19.035	Pass
		M	1RB#0	0.927	1.244	Pass
			1RB#max	0.948	1.260	Pass
			Partial RBs /RB #25	9.136	10.171	Pass
			Full RBs	17.895	19.035	Pass
		H	1RB#0	0.926	1.252	Pass
			1RB#max	0.931	1.263	Pass
			Partial RBs /RB #25	9.129	10.180	Pass
			Full RBs	17.907	19.053	Pass

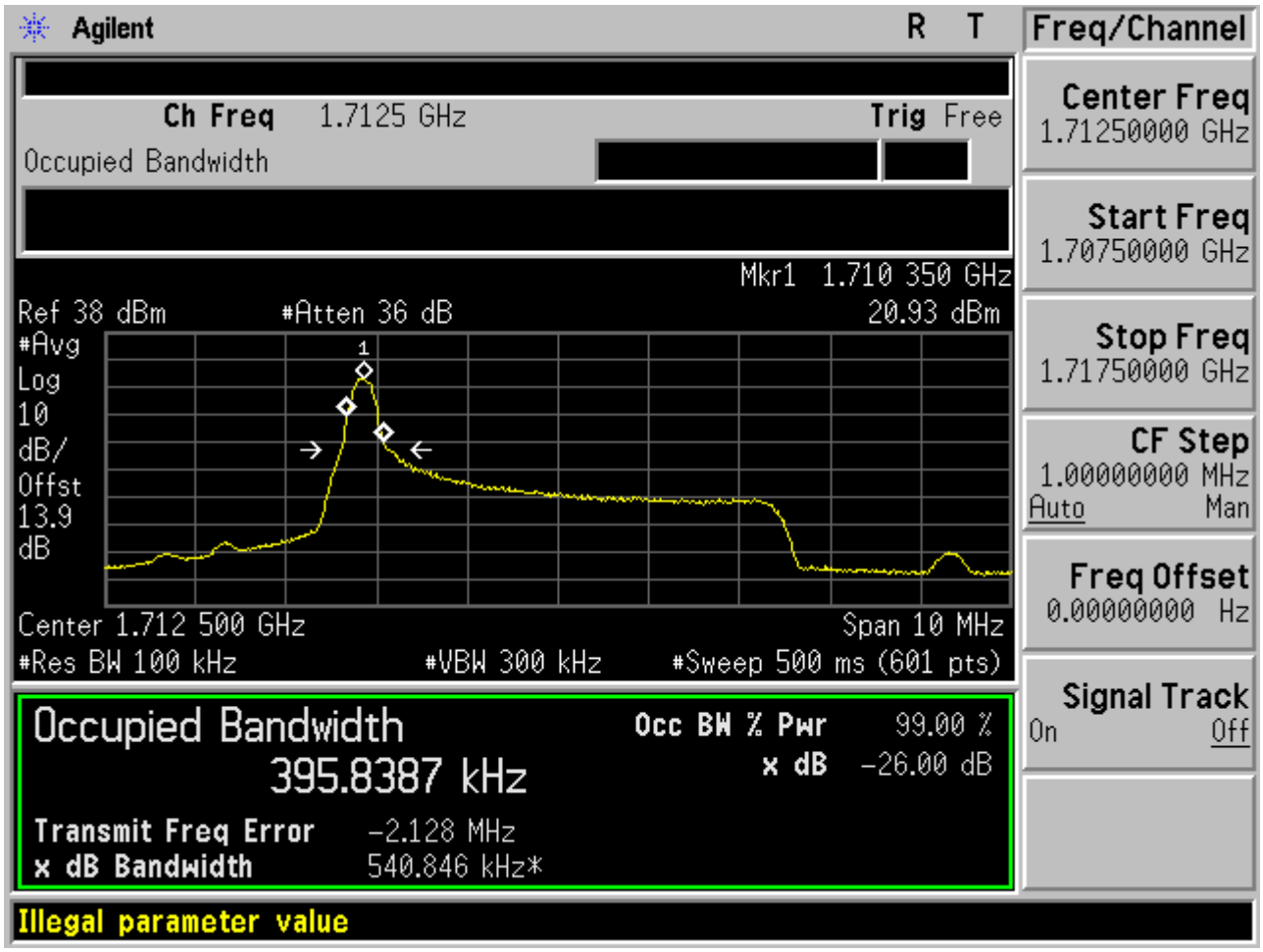
1 For BAND 4

1.1 Test Mode=TM1

1.1.1 Channel Bandwidth = Lowest (5 MHz)

1.1.1.1 Channel = B

1.1.1.1.1 QPSK/1RB#0



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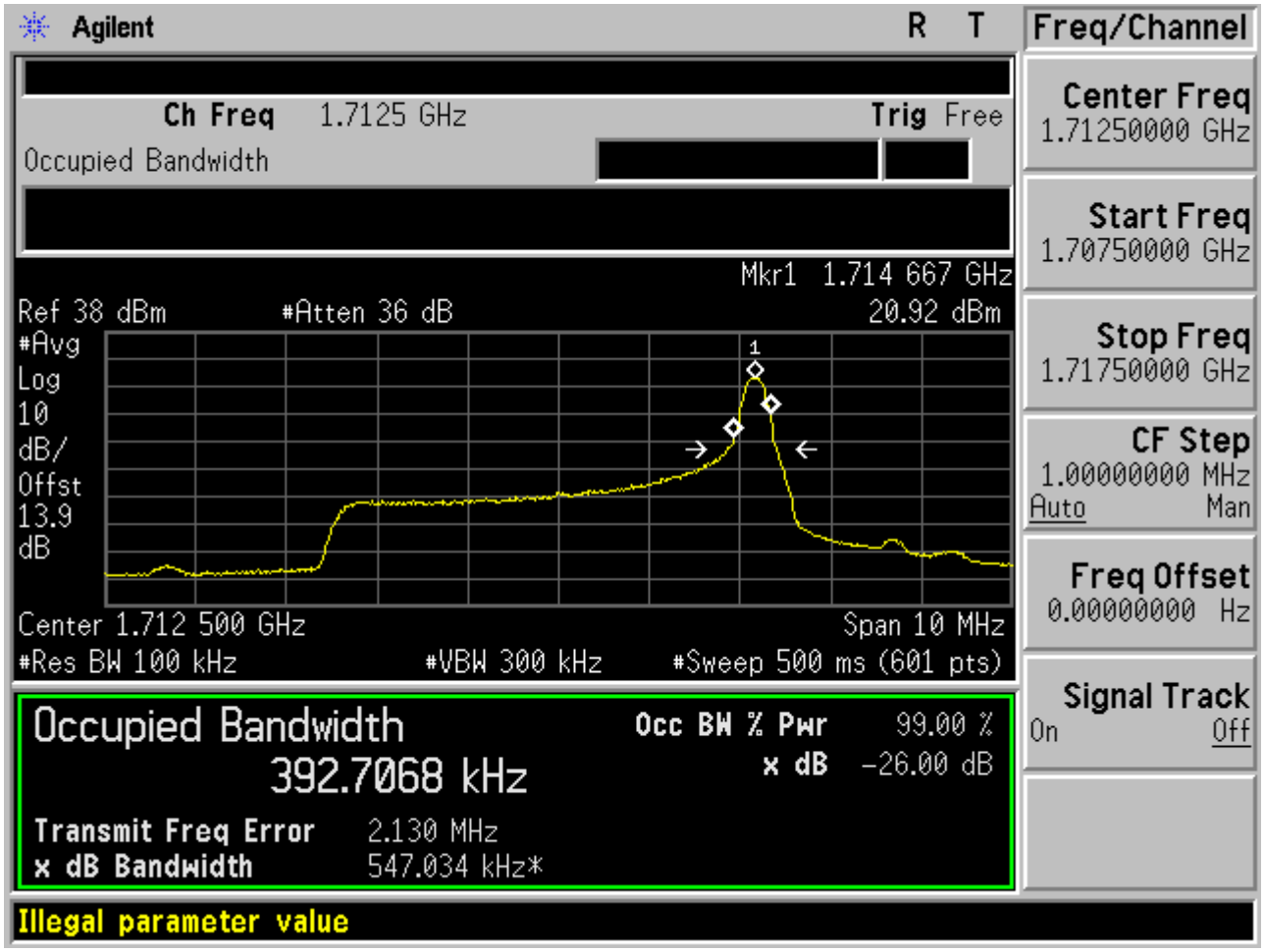

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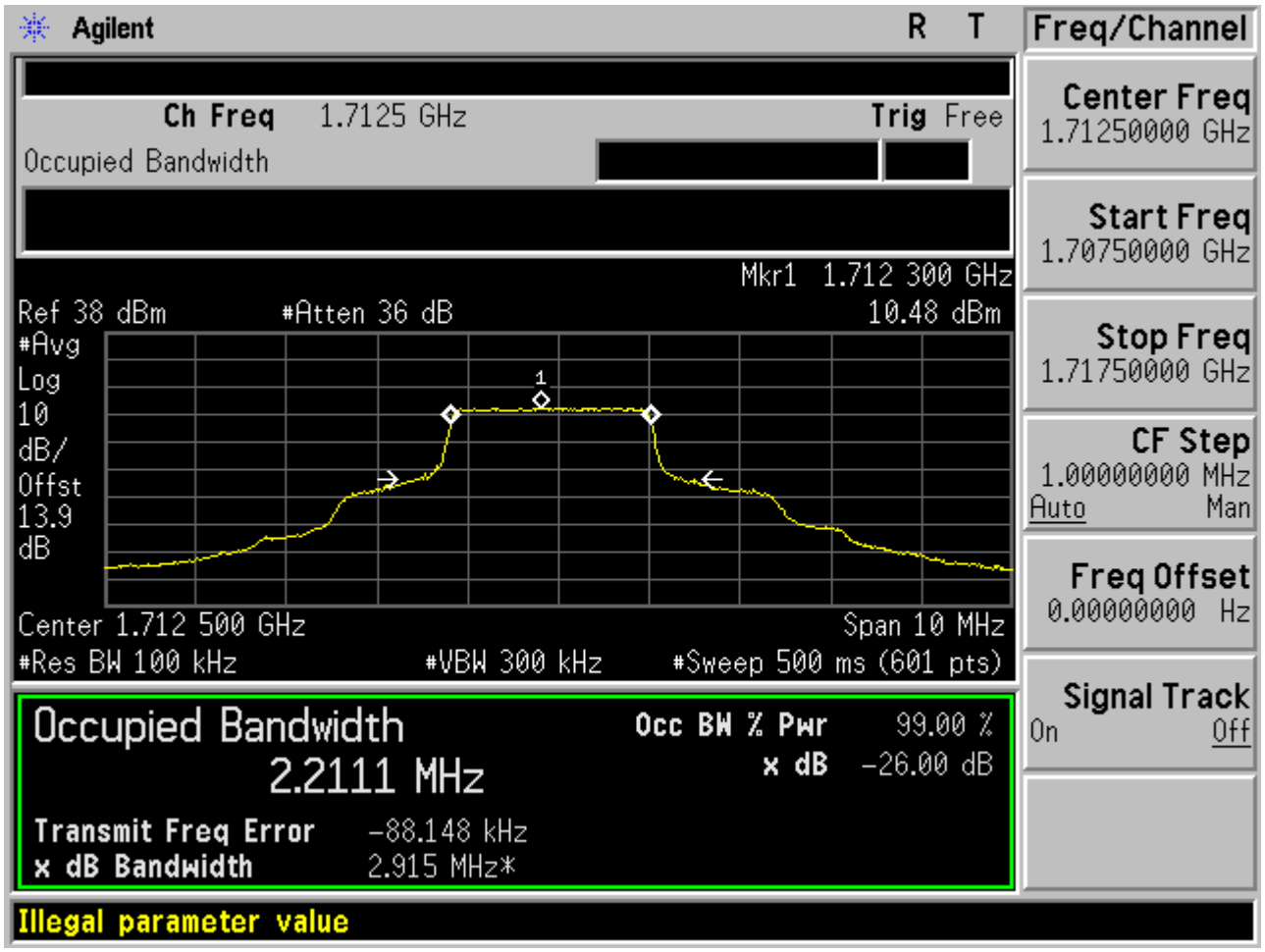
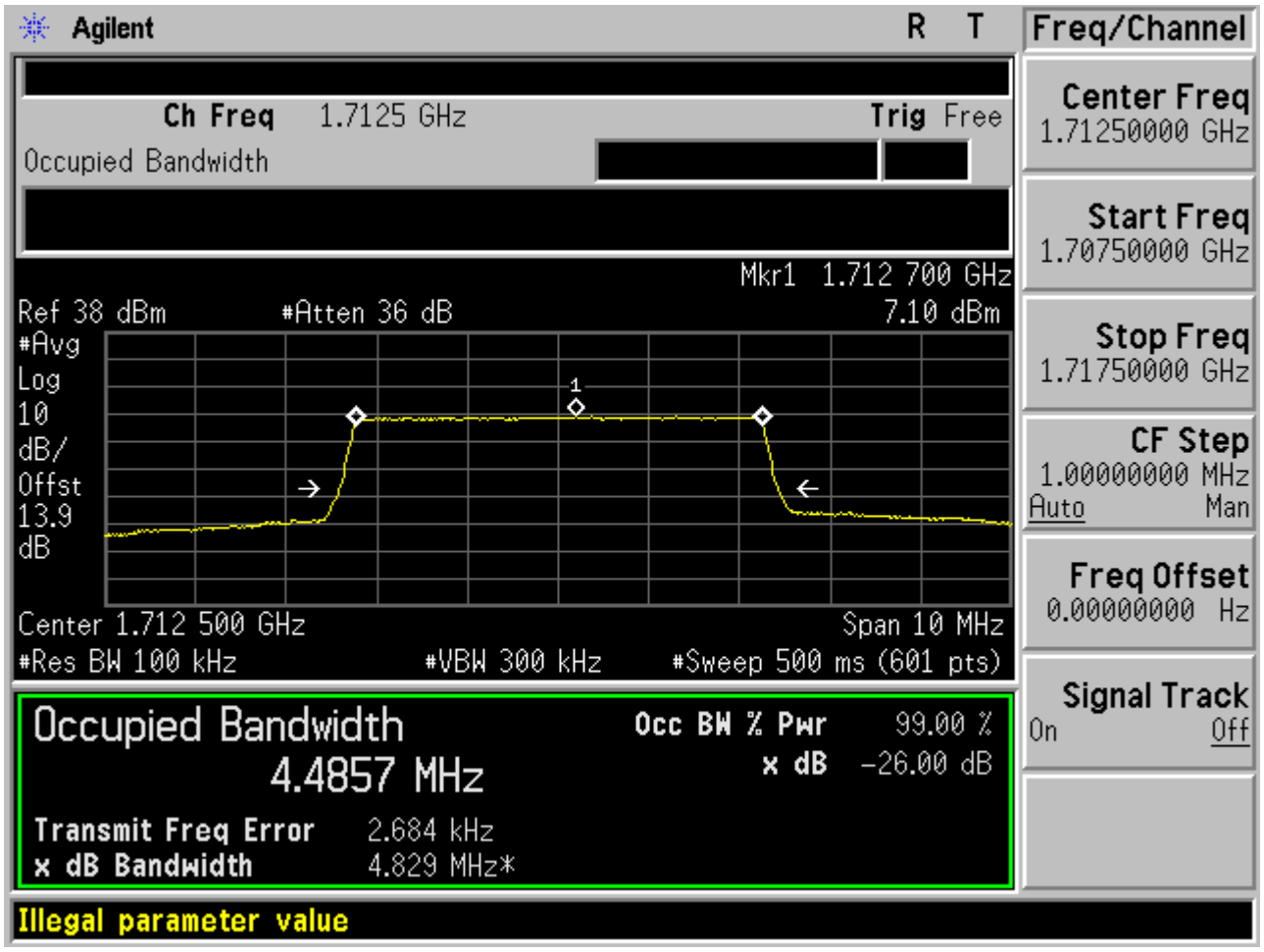


1.1.1.1.4 QPSK/full RBs



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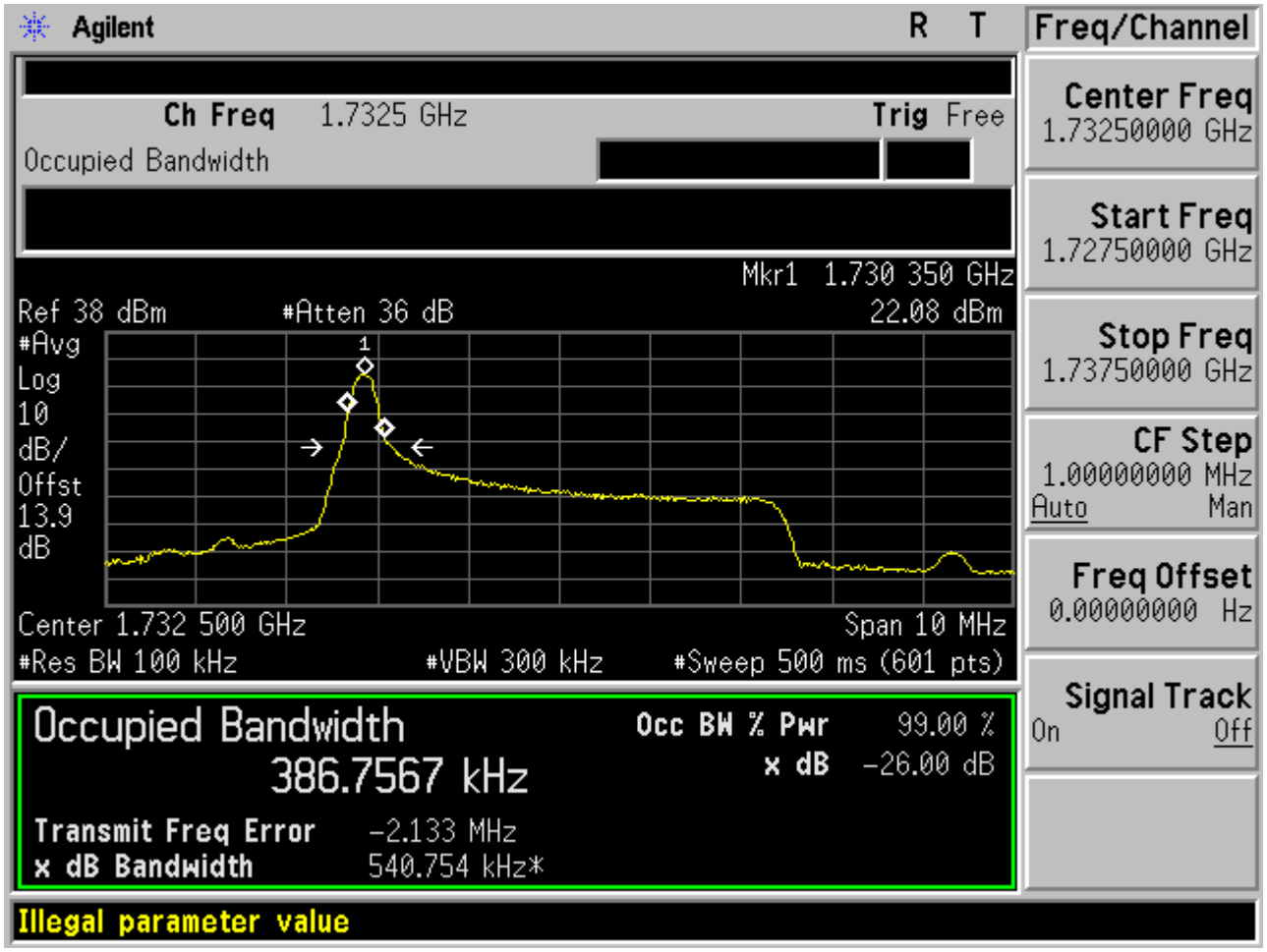

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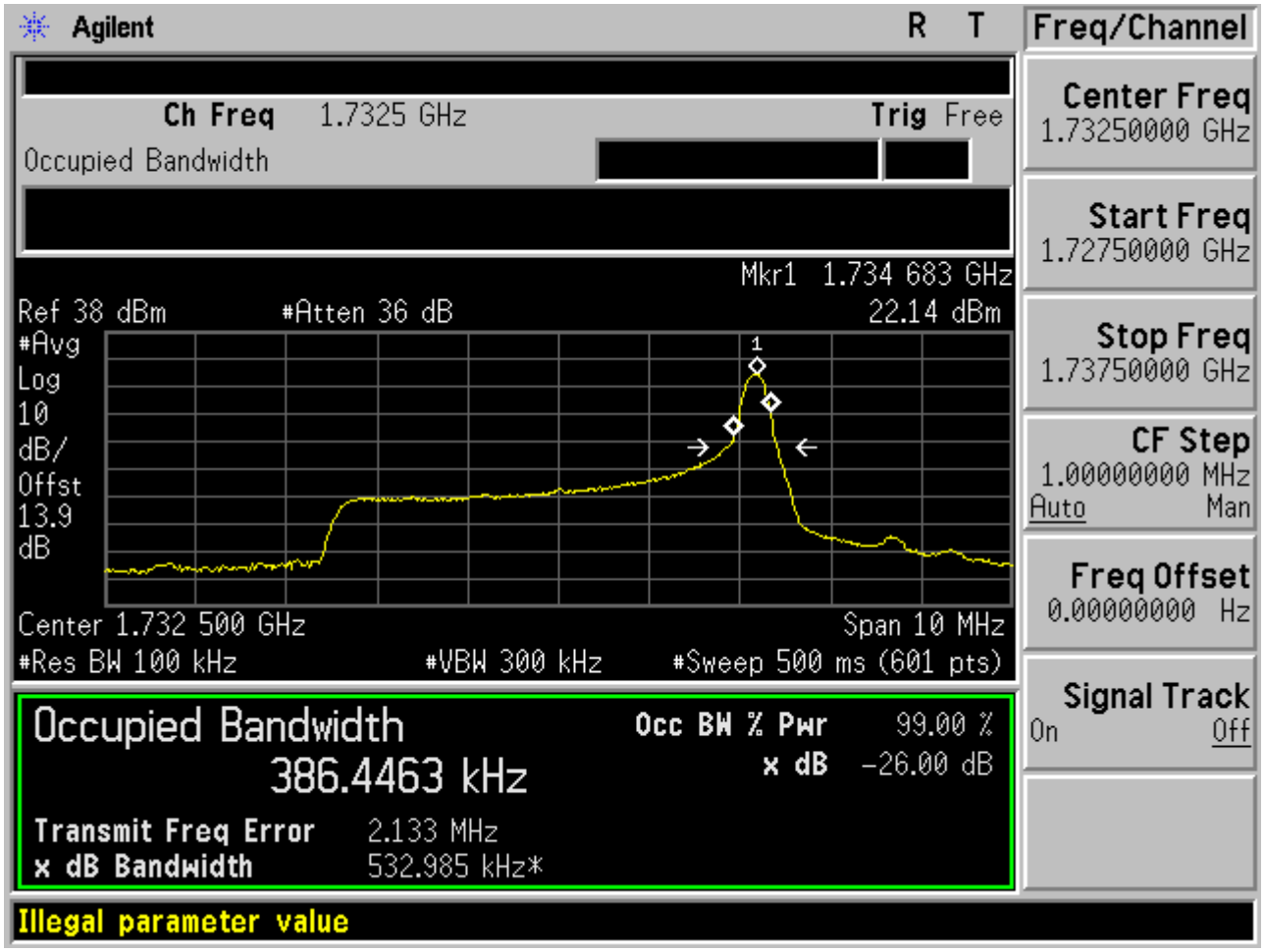
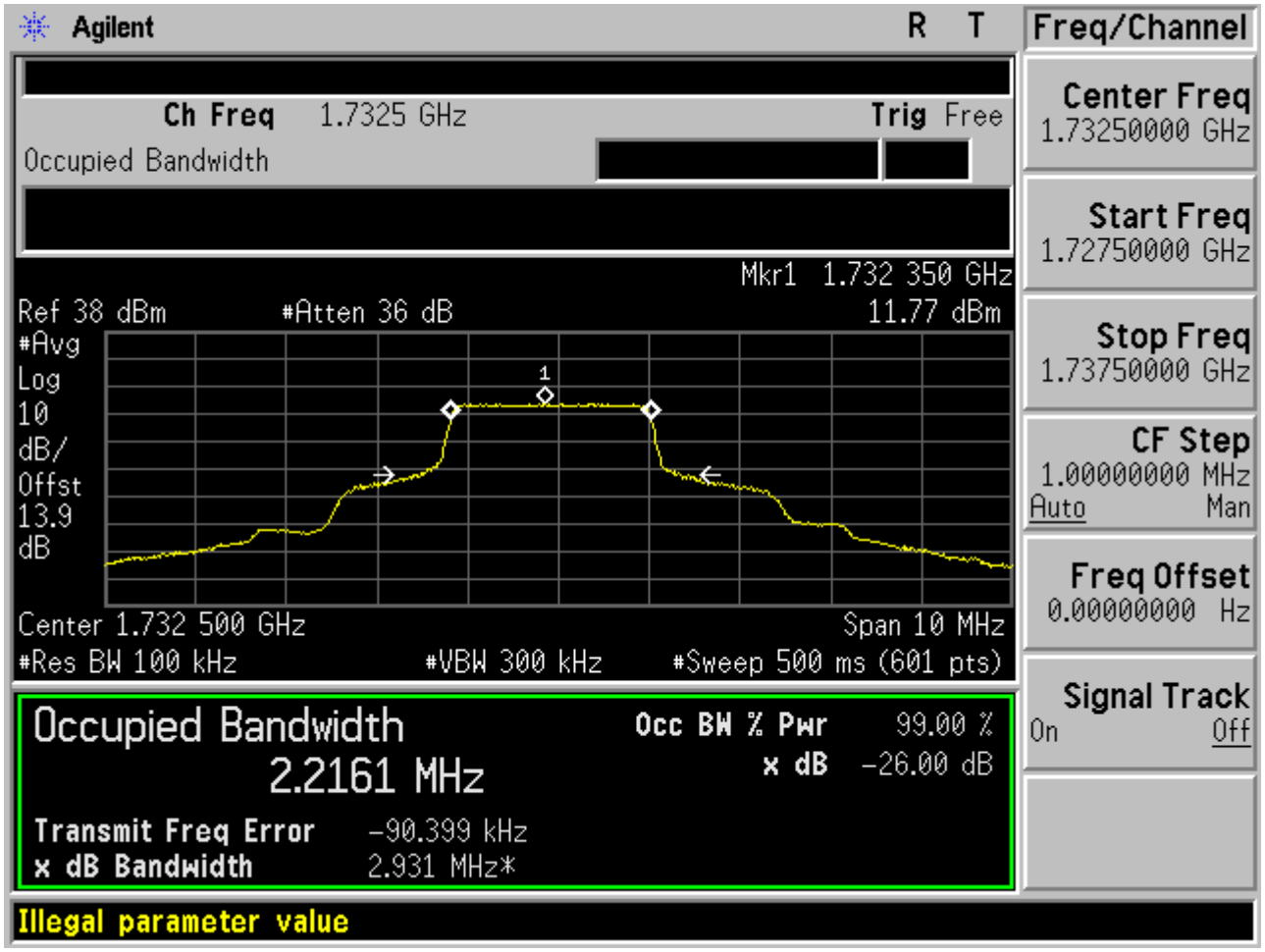


1.1.1.2.3 QPSK/ Partial RBs /RB #6



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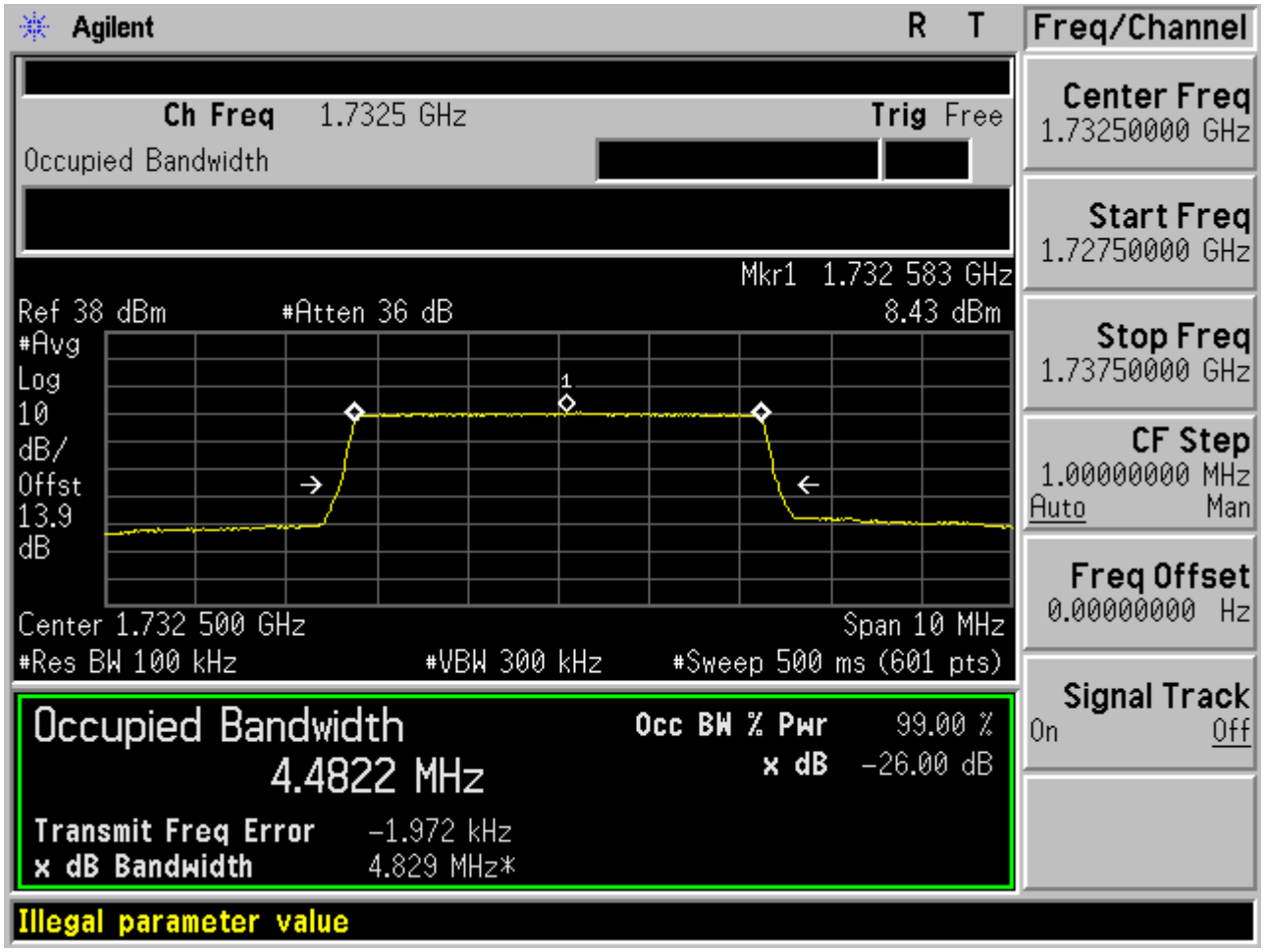
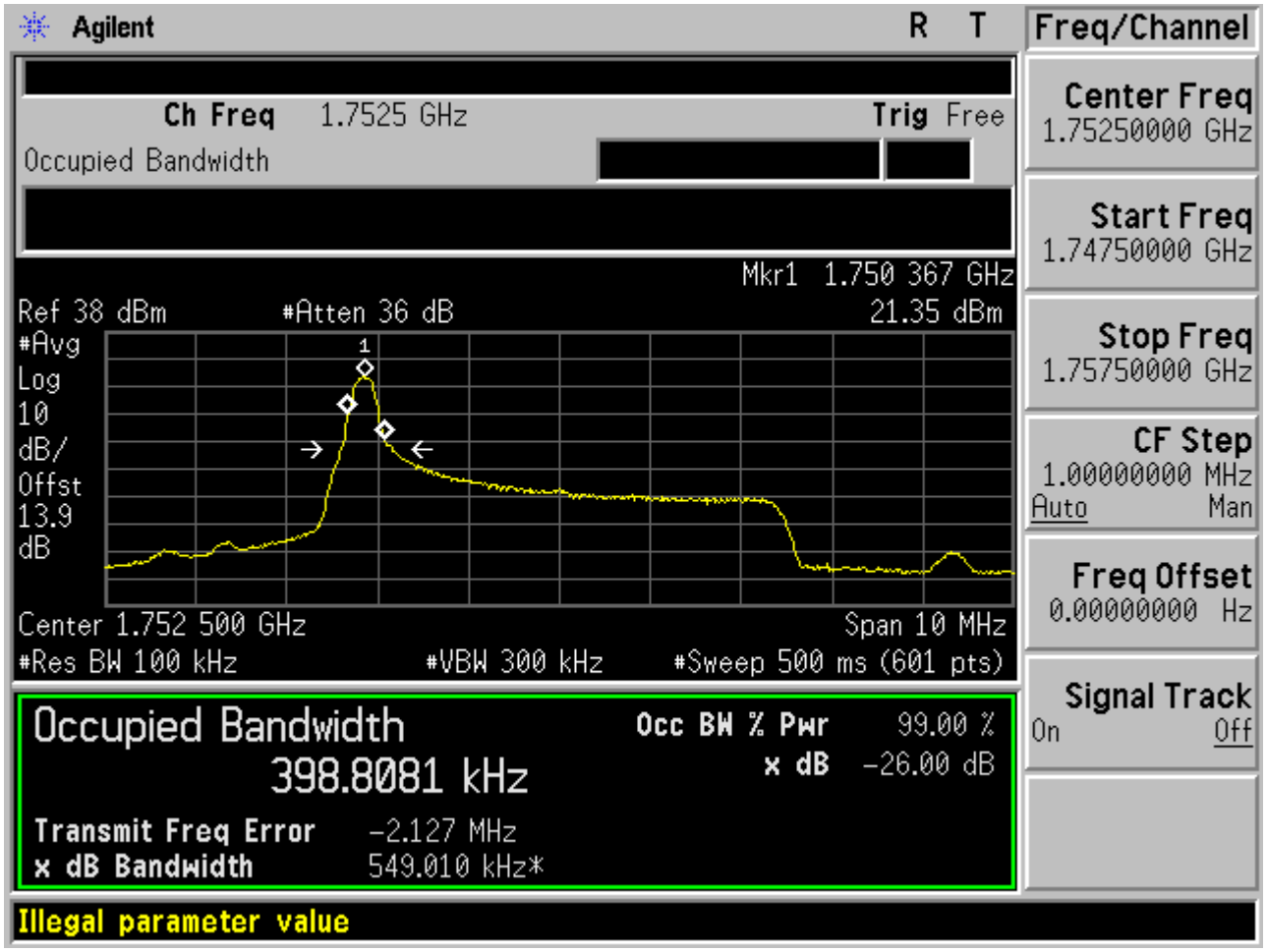


1.1.1.3 Channel =T

1.1.1.3.1 QPSK/1RB#0



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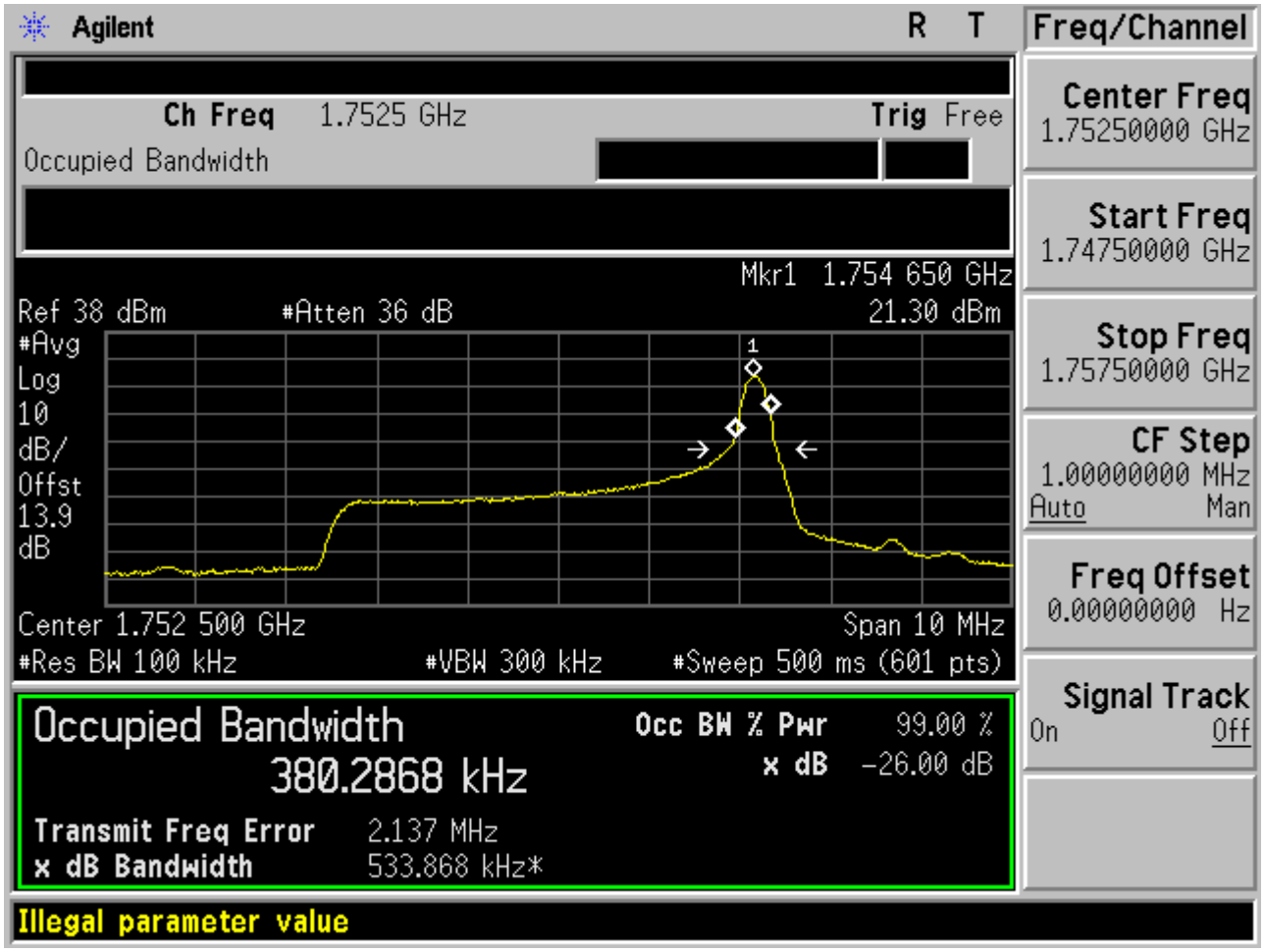

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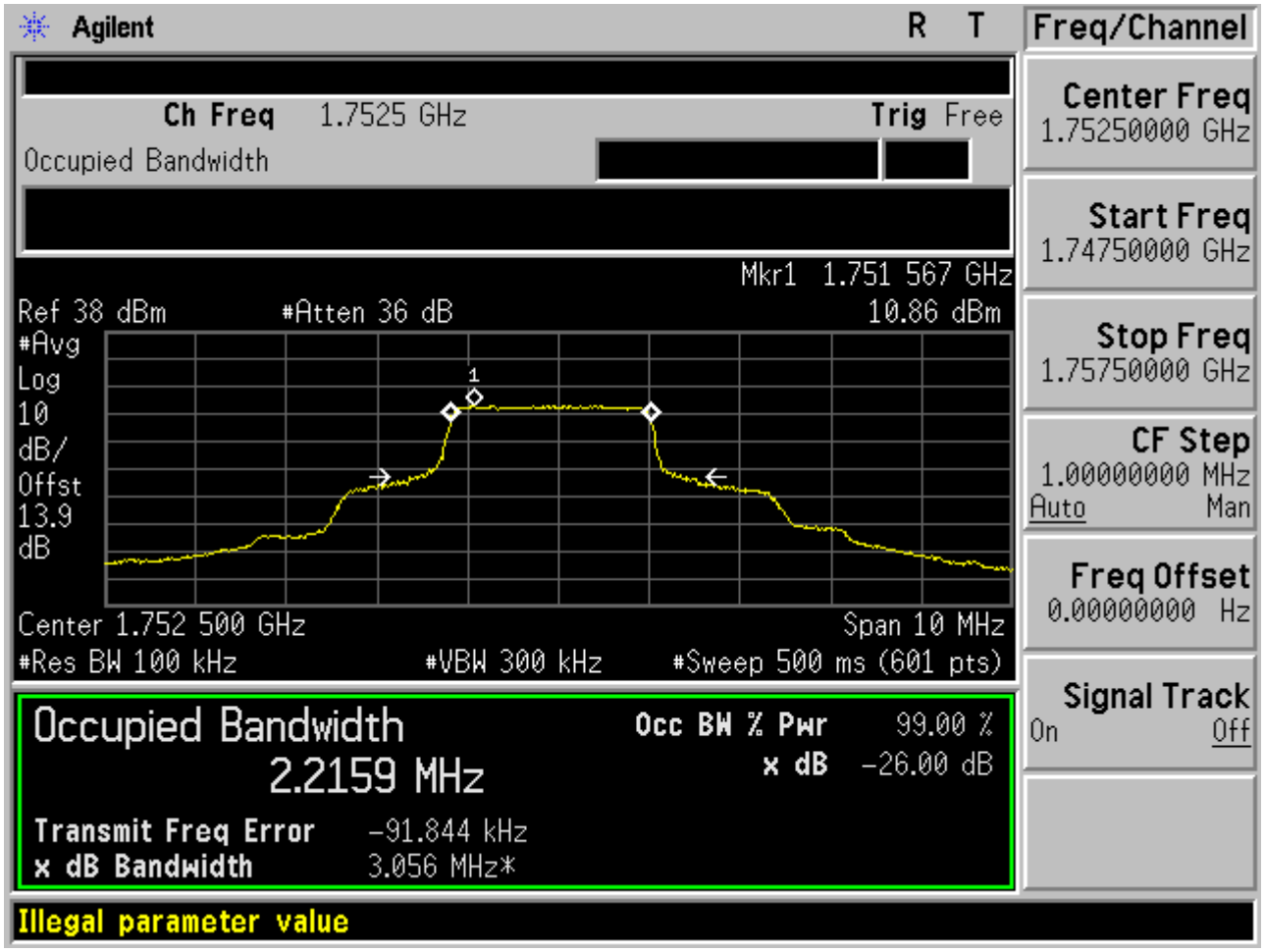

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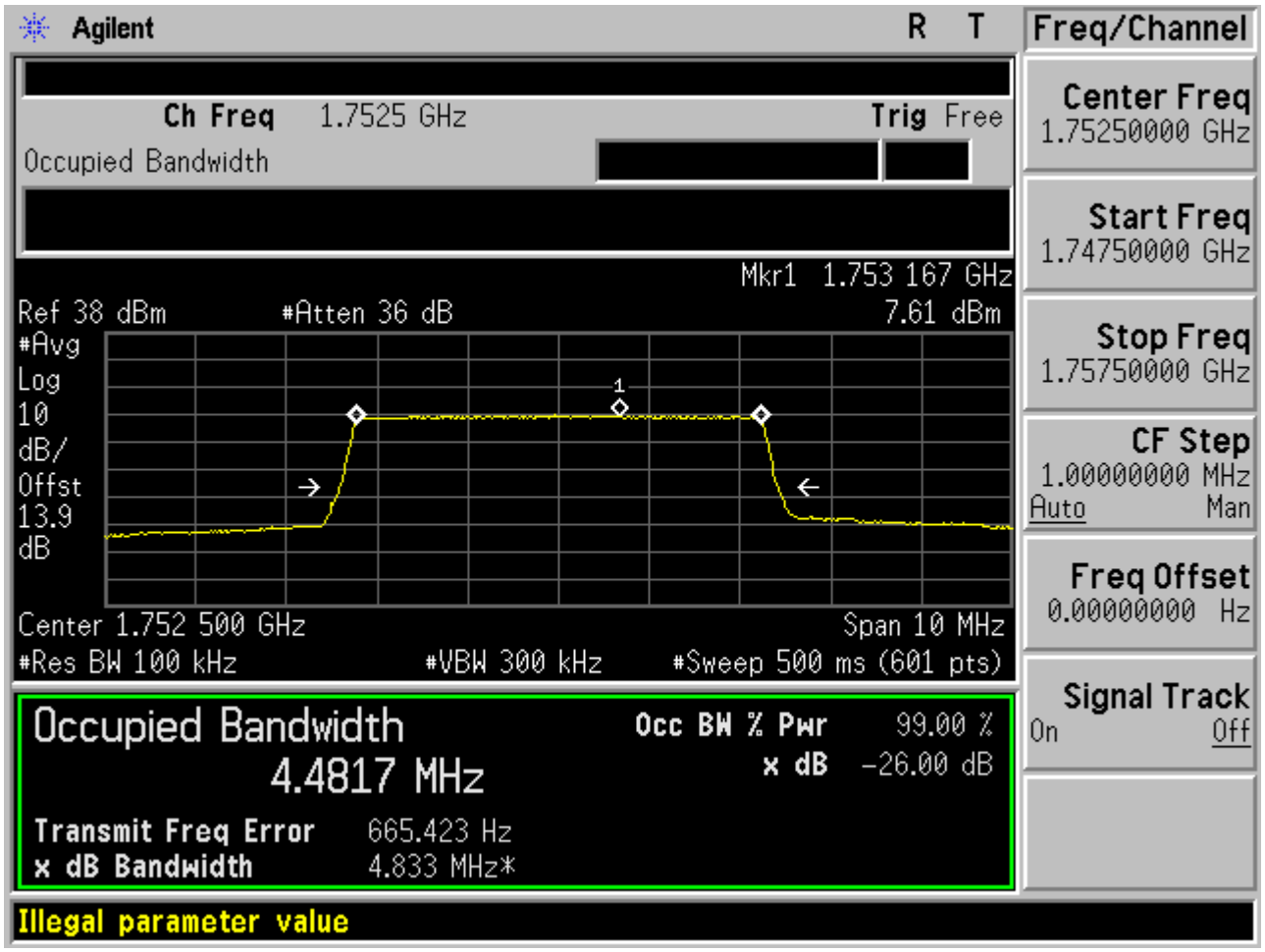

1.1.2 Channel Bandwidth = 10 MHz

1.1.2.1 Channel = B

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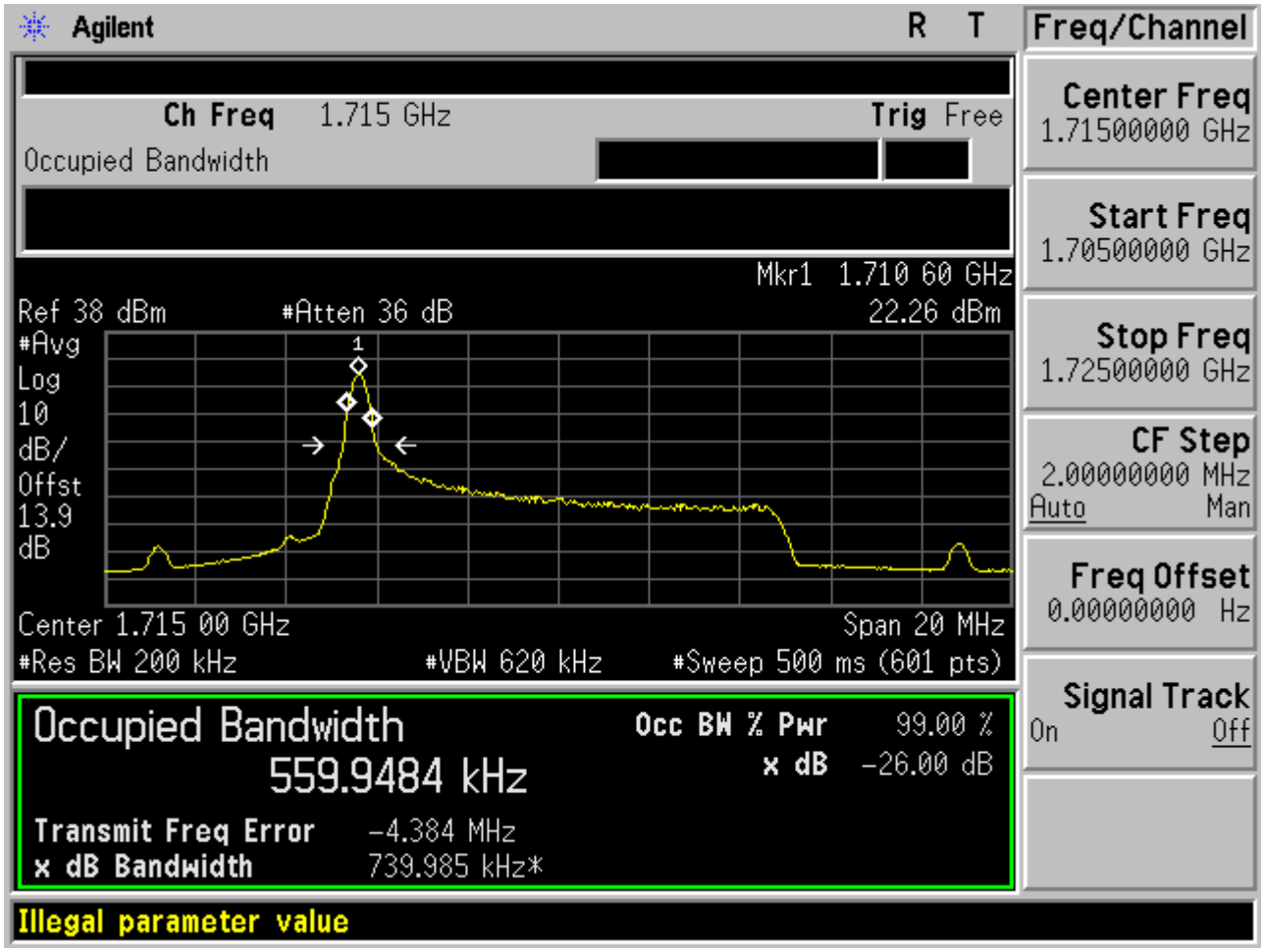

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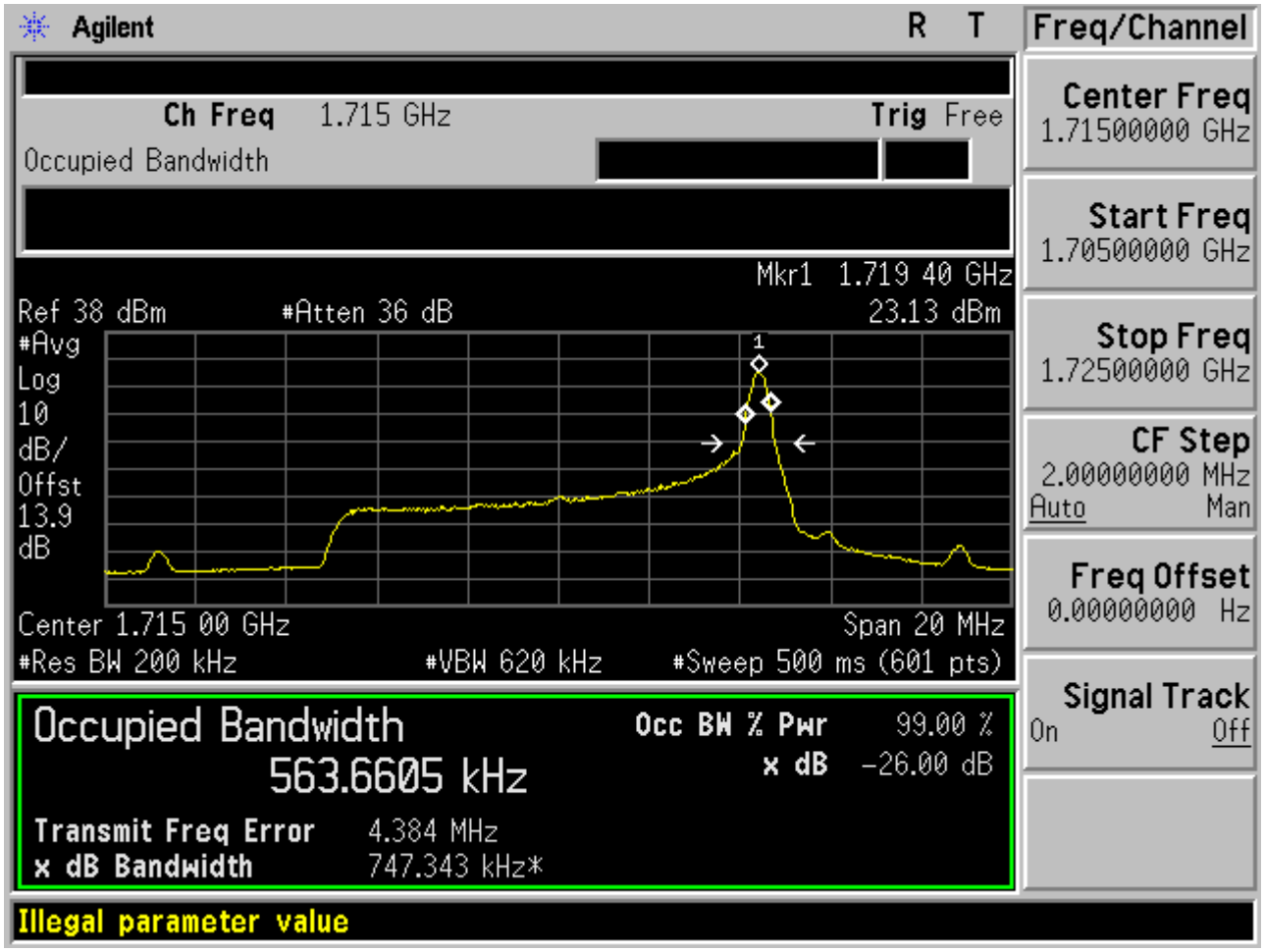

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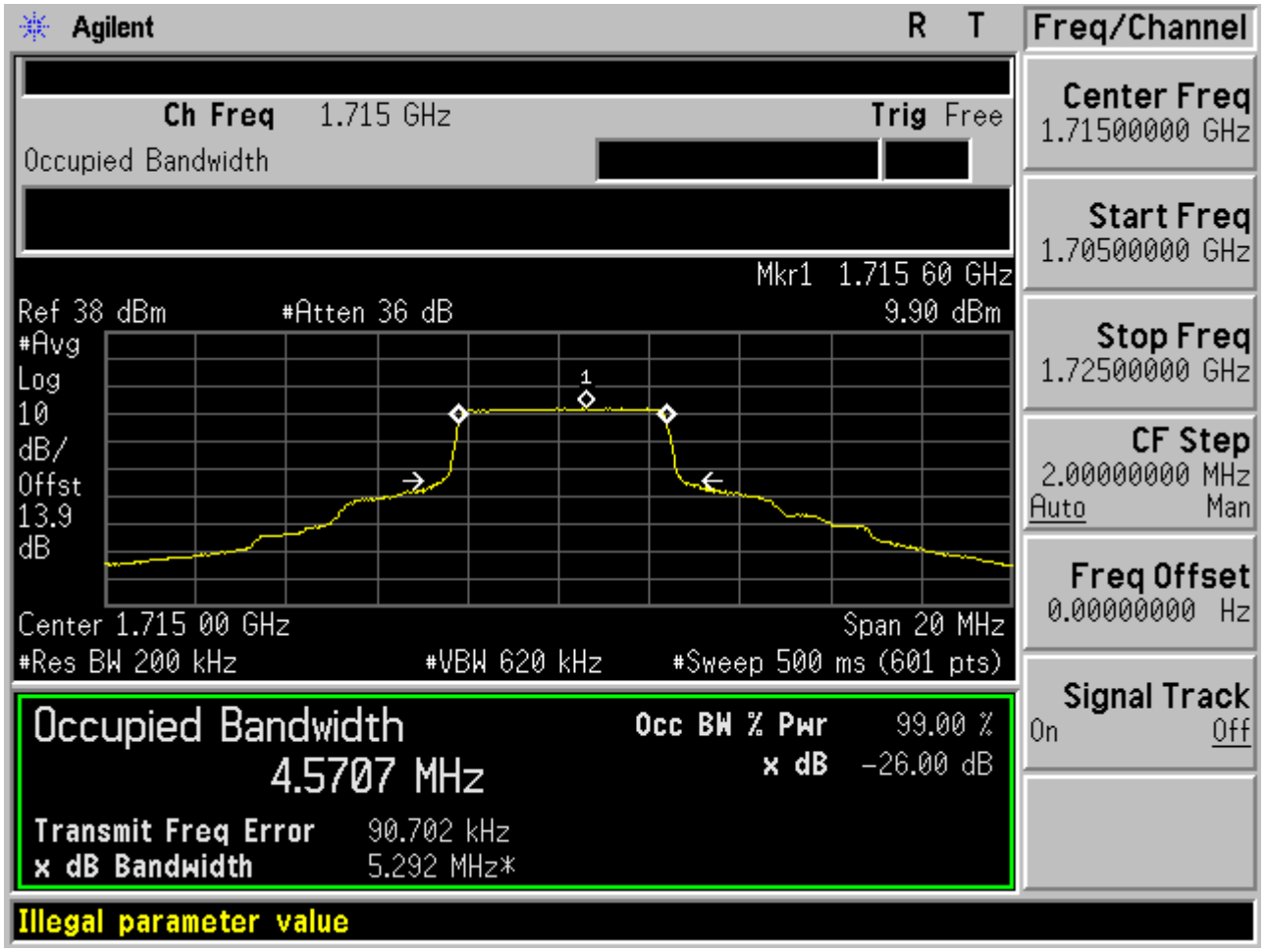
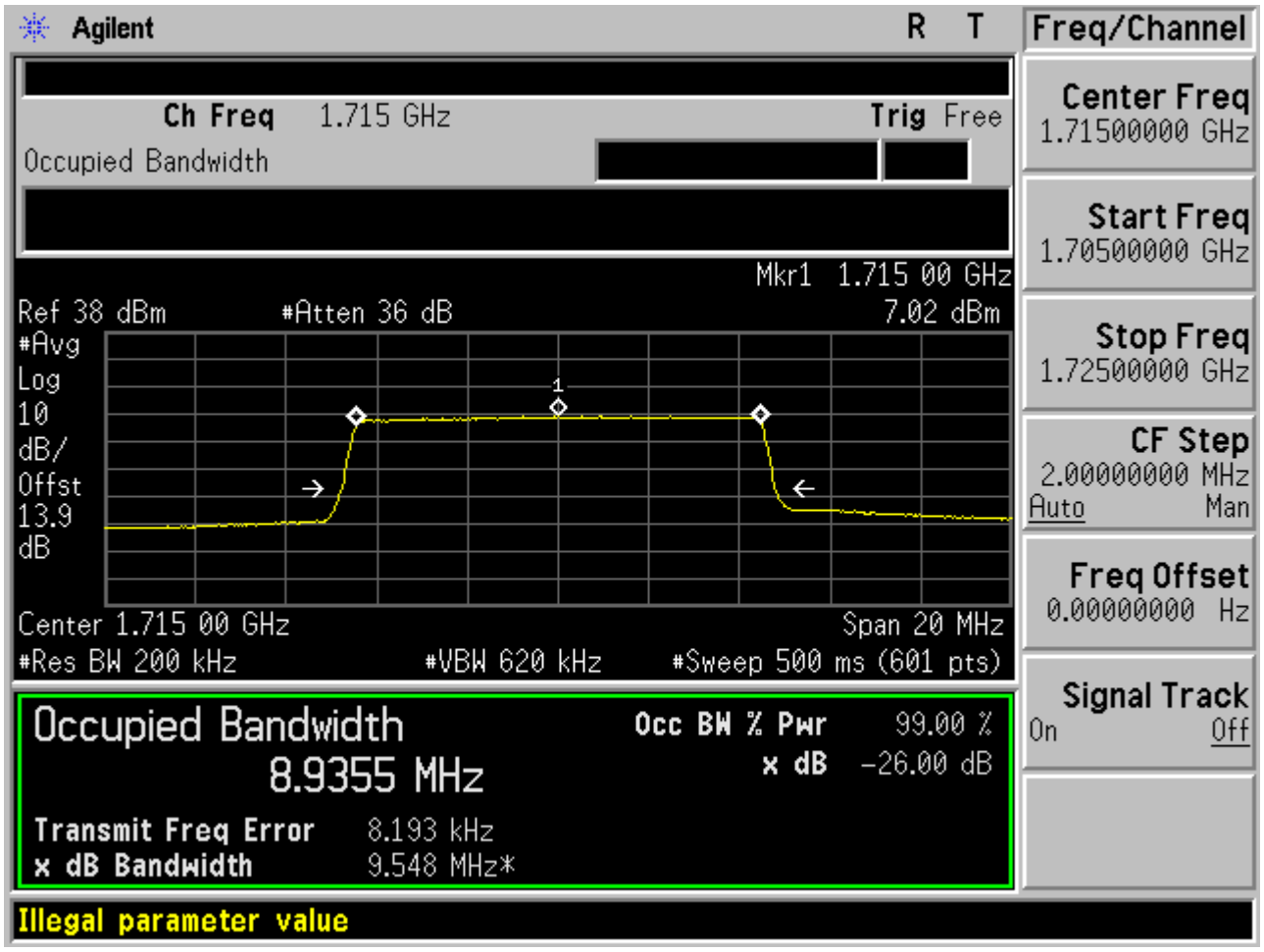
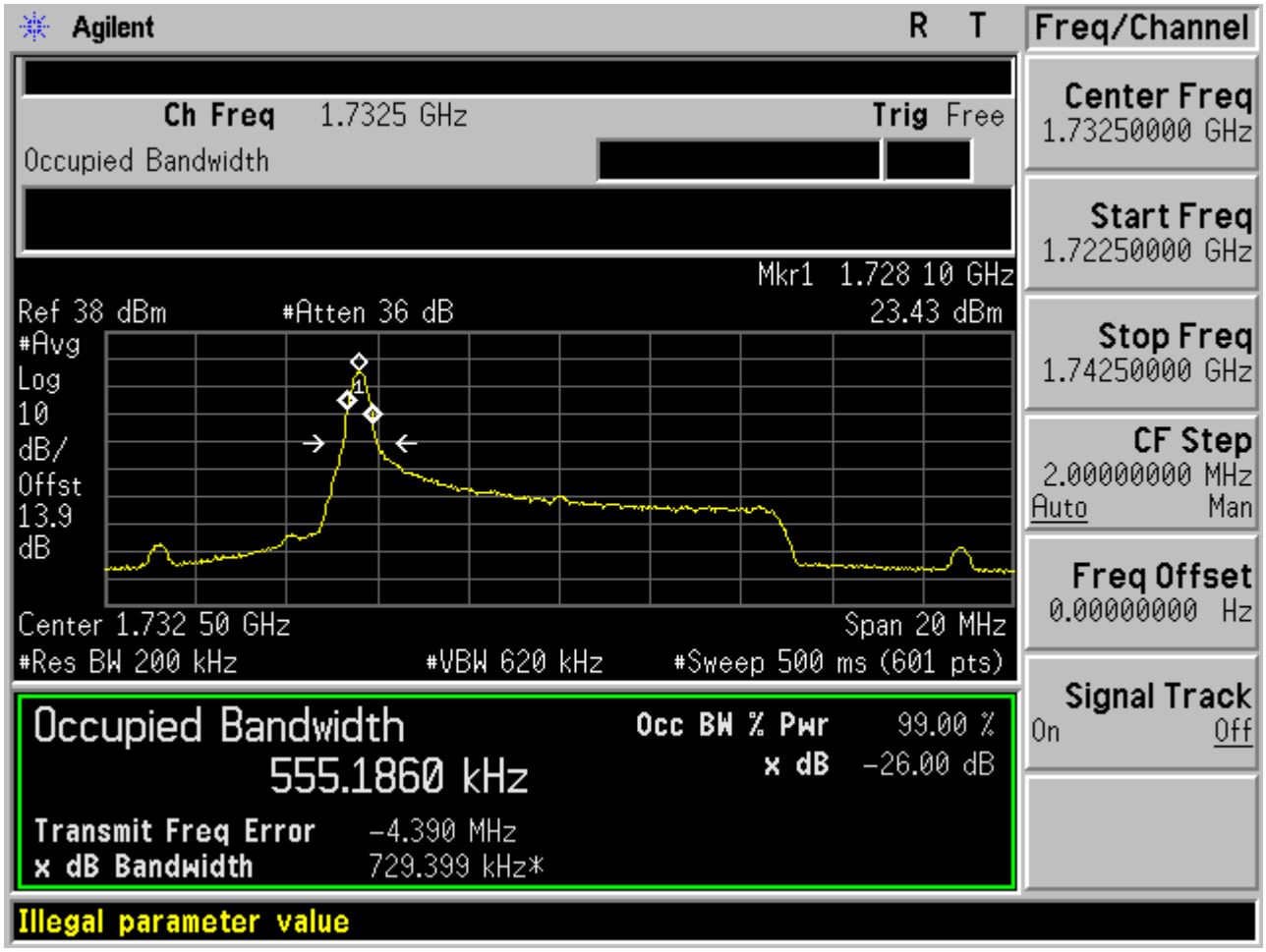


1.1.2.1.4 QPSK/full RBs

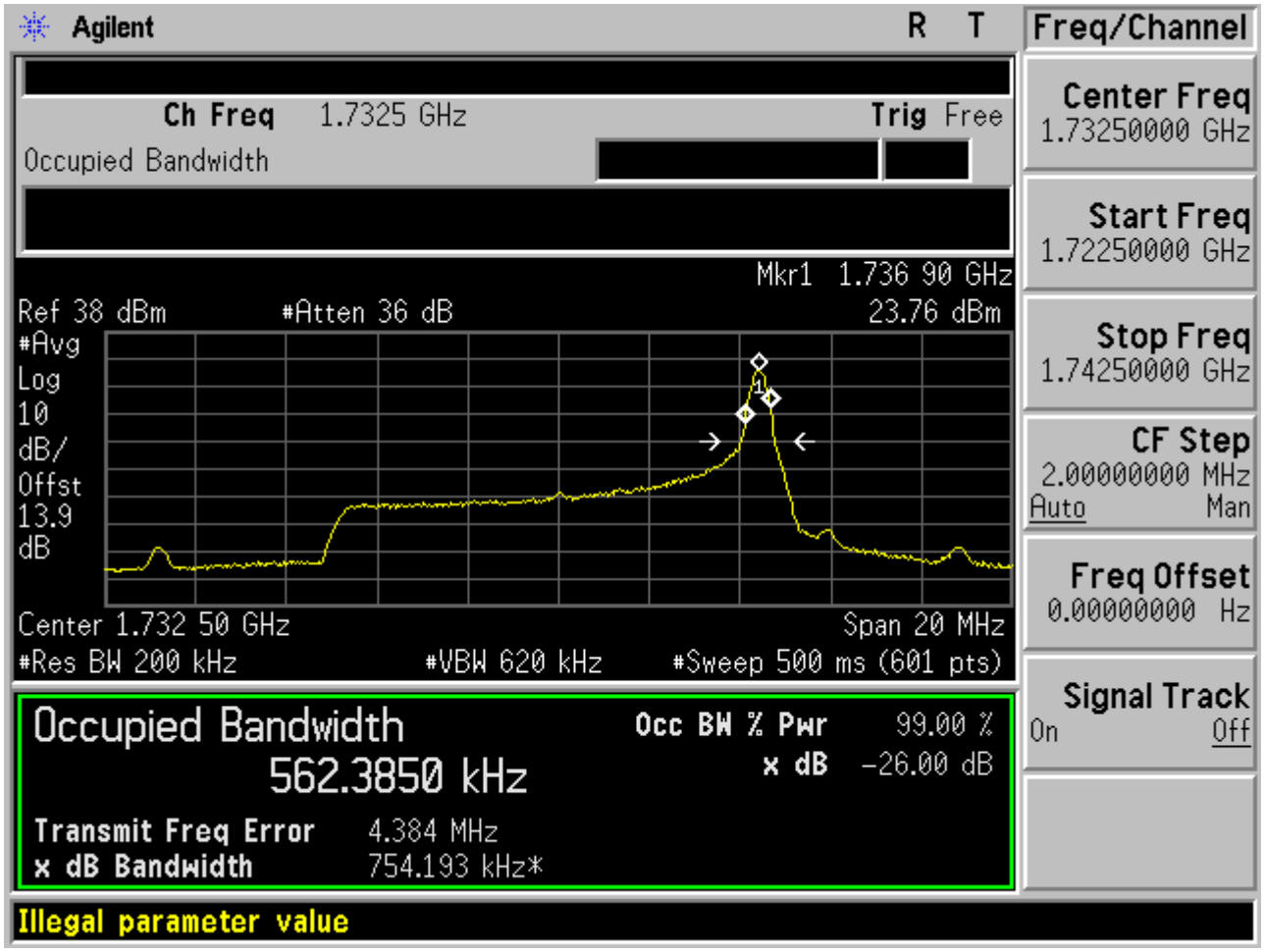


1.1.2.2 Channel =M

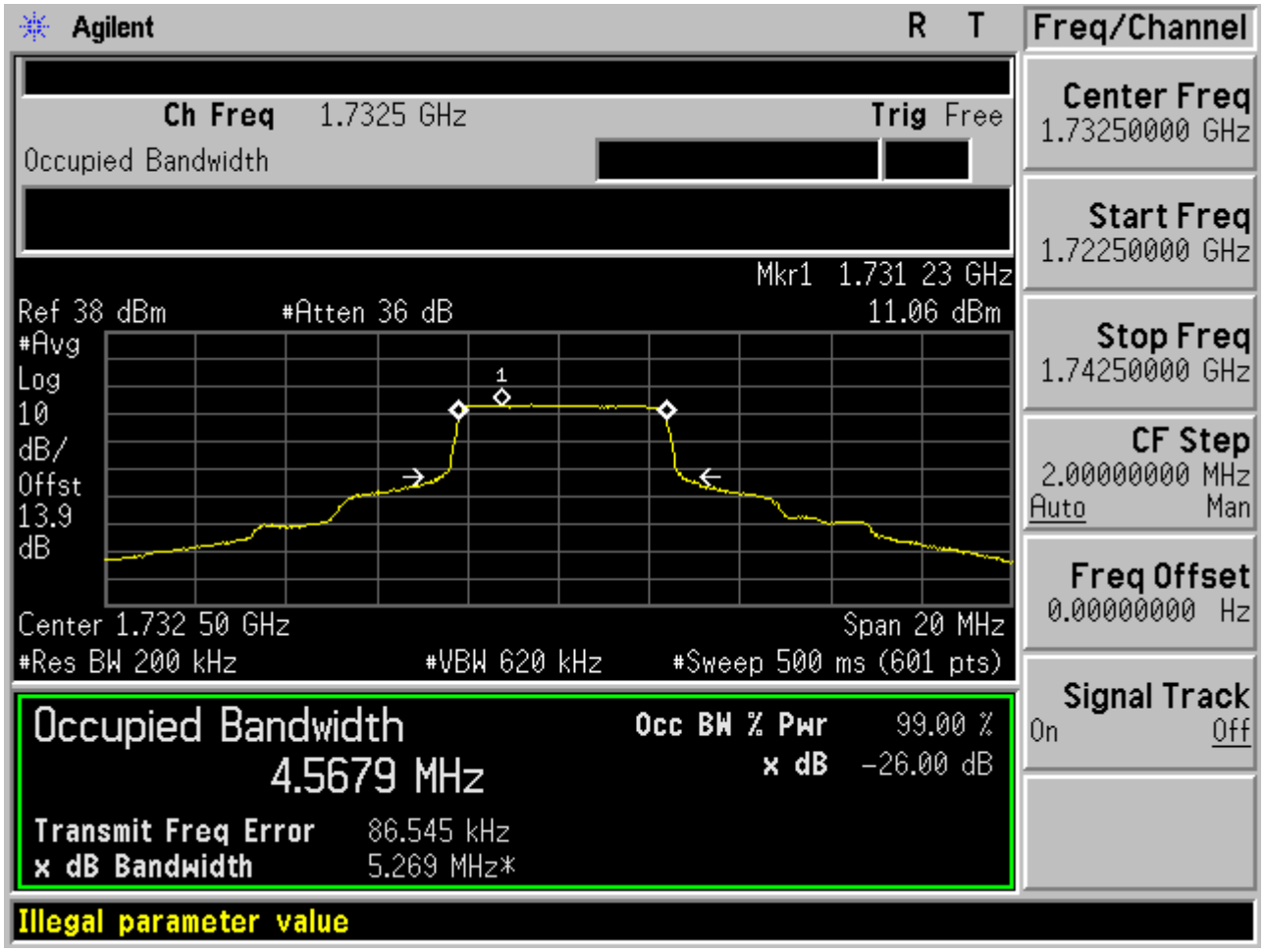
1.1.2.2.1 QPSK/1RB#0



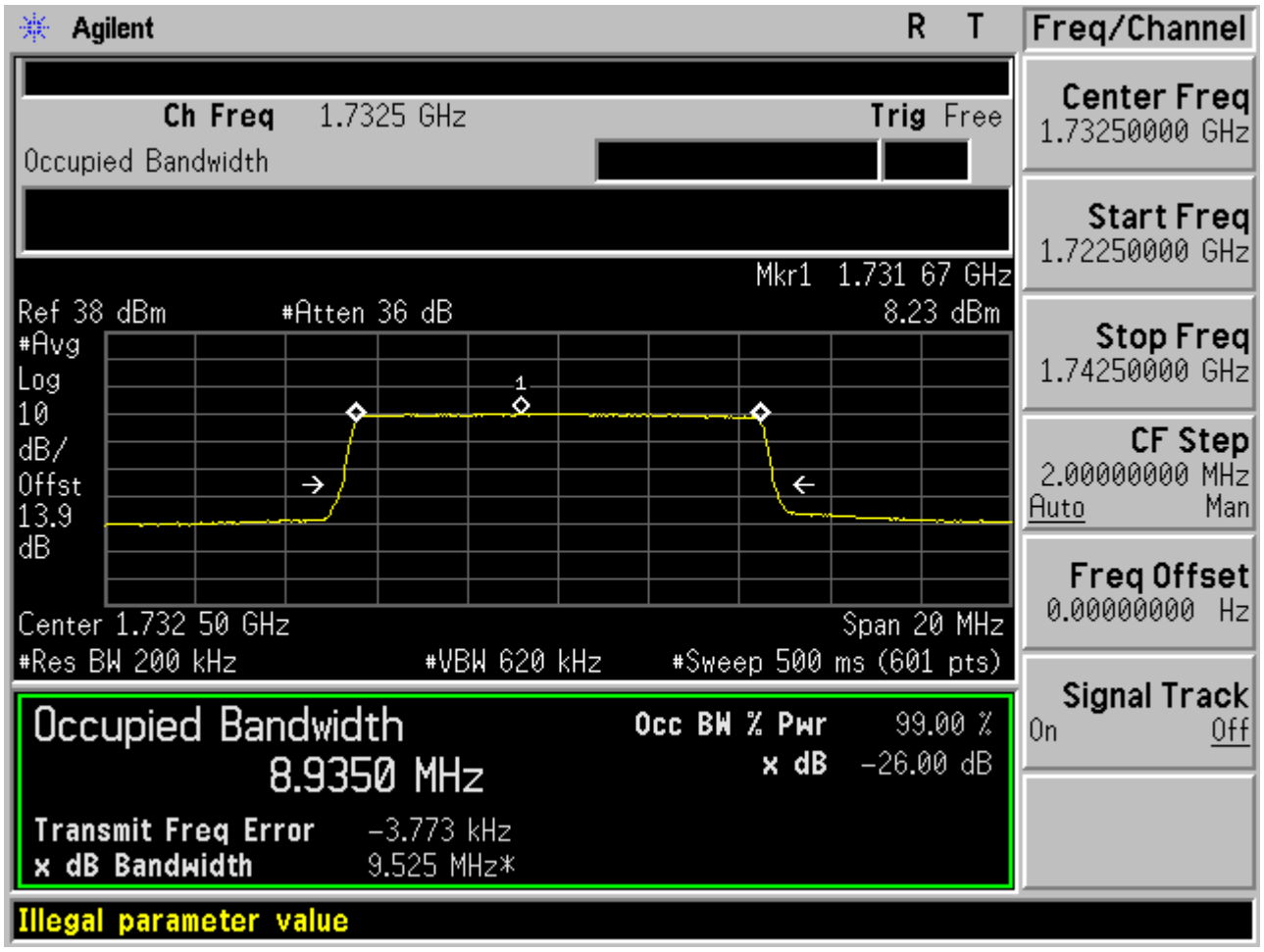
1.1.2.2.2 QPSK/1RB#max



1.1.2.2.3 QPSK/ Partial RBs /RB #13

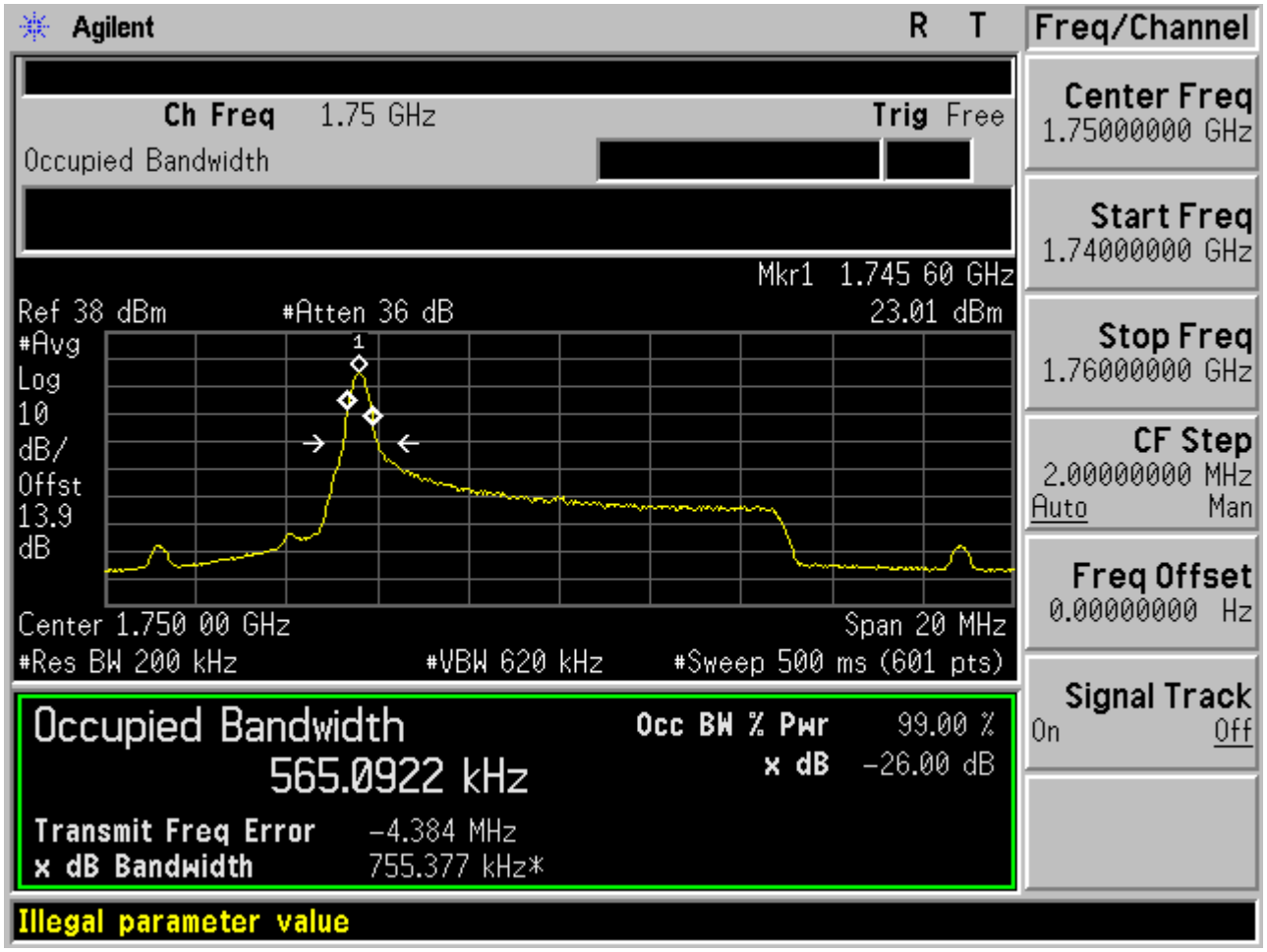


1.1.2.2.4 QPSK/full RBs

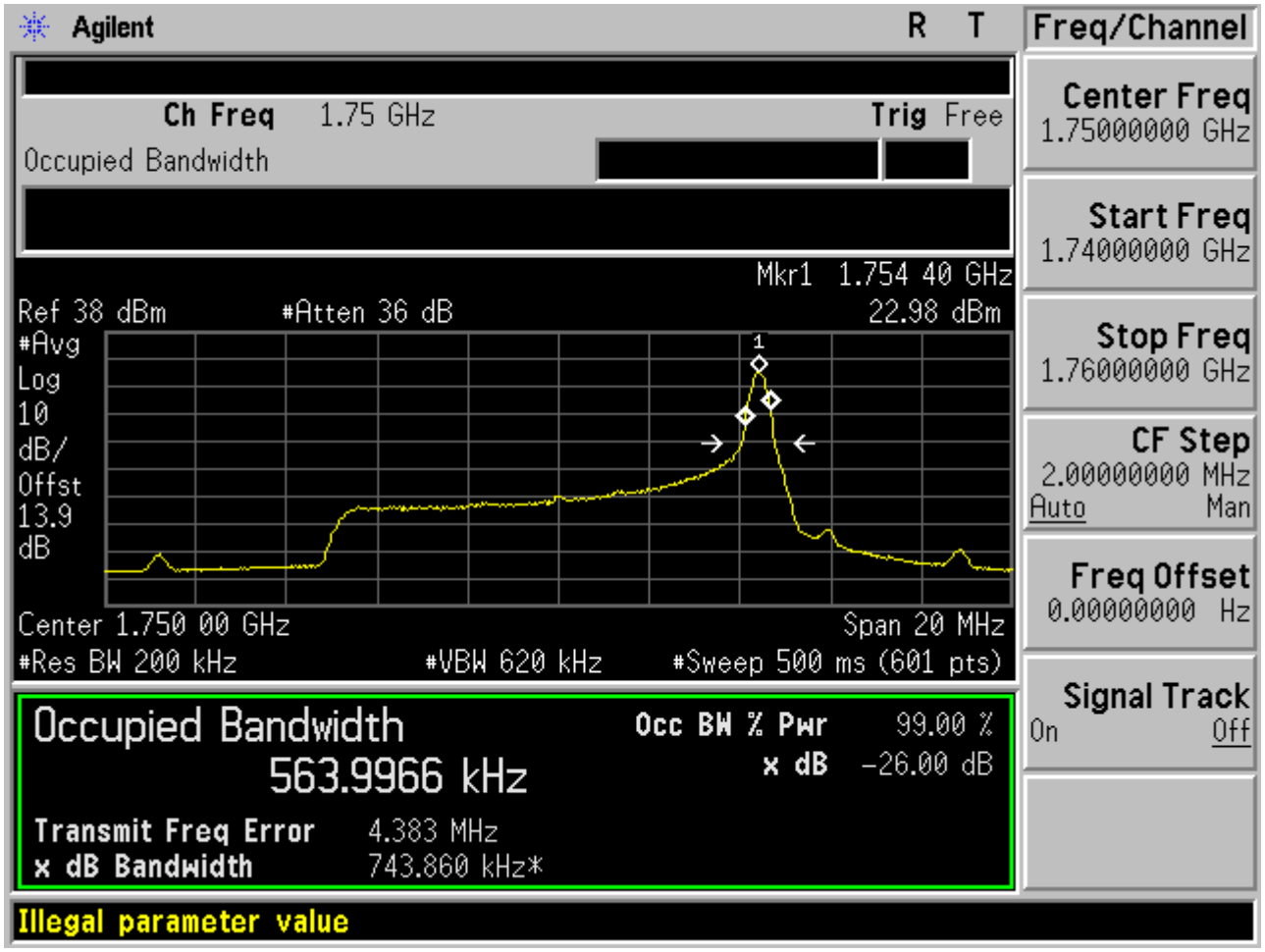


1.1.2.3 Channel =T

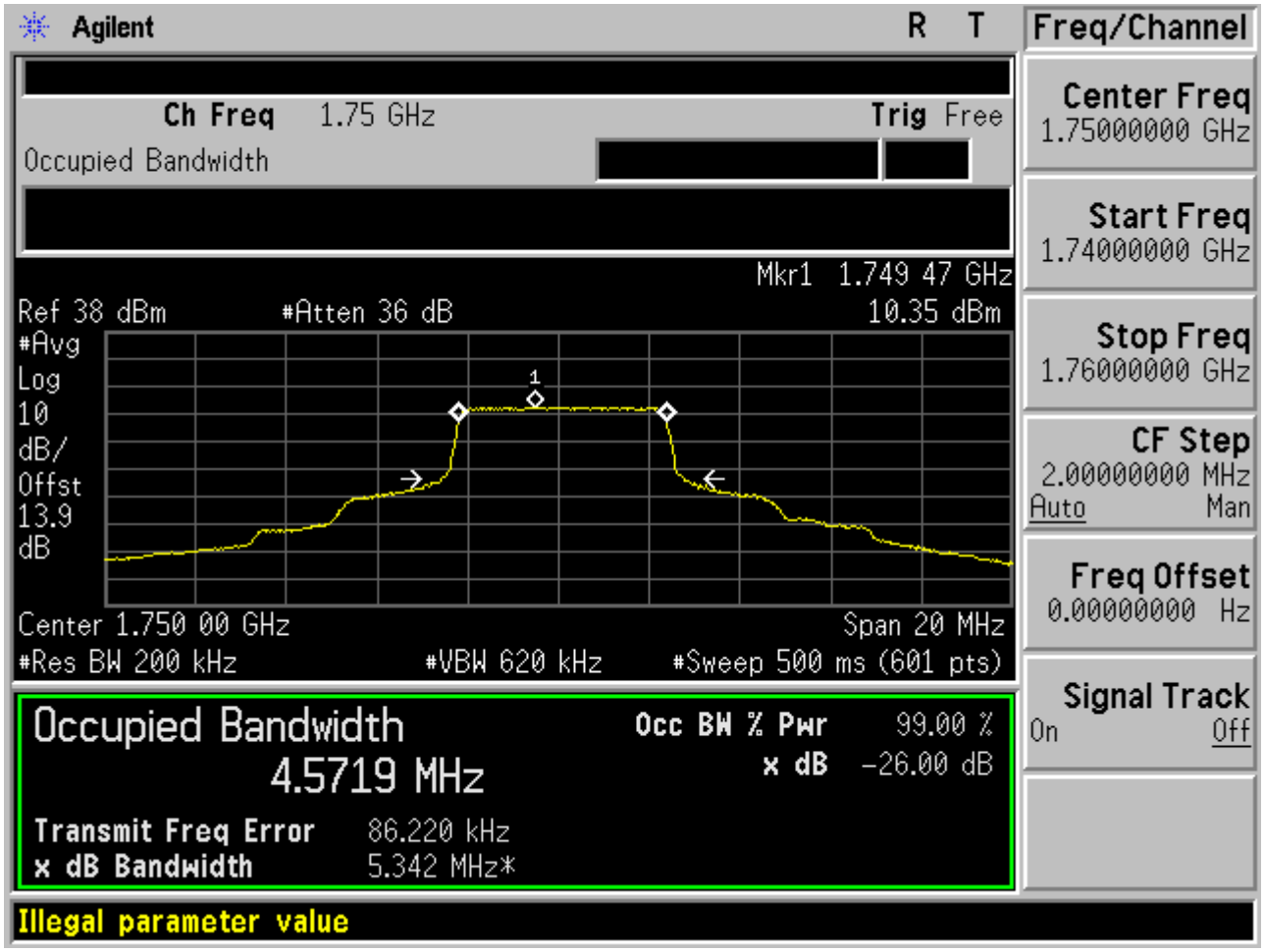
1.1.2.3.1 QPSK/1RB#0



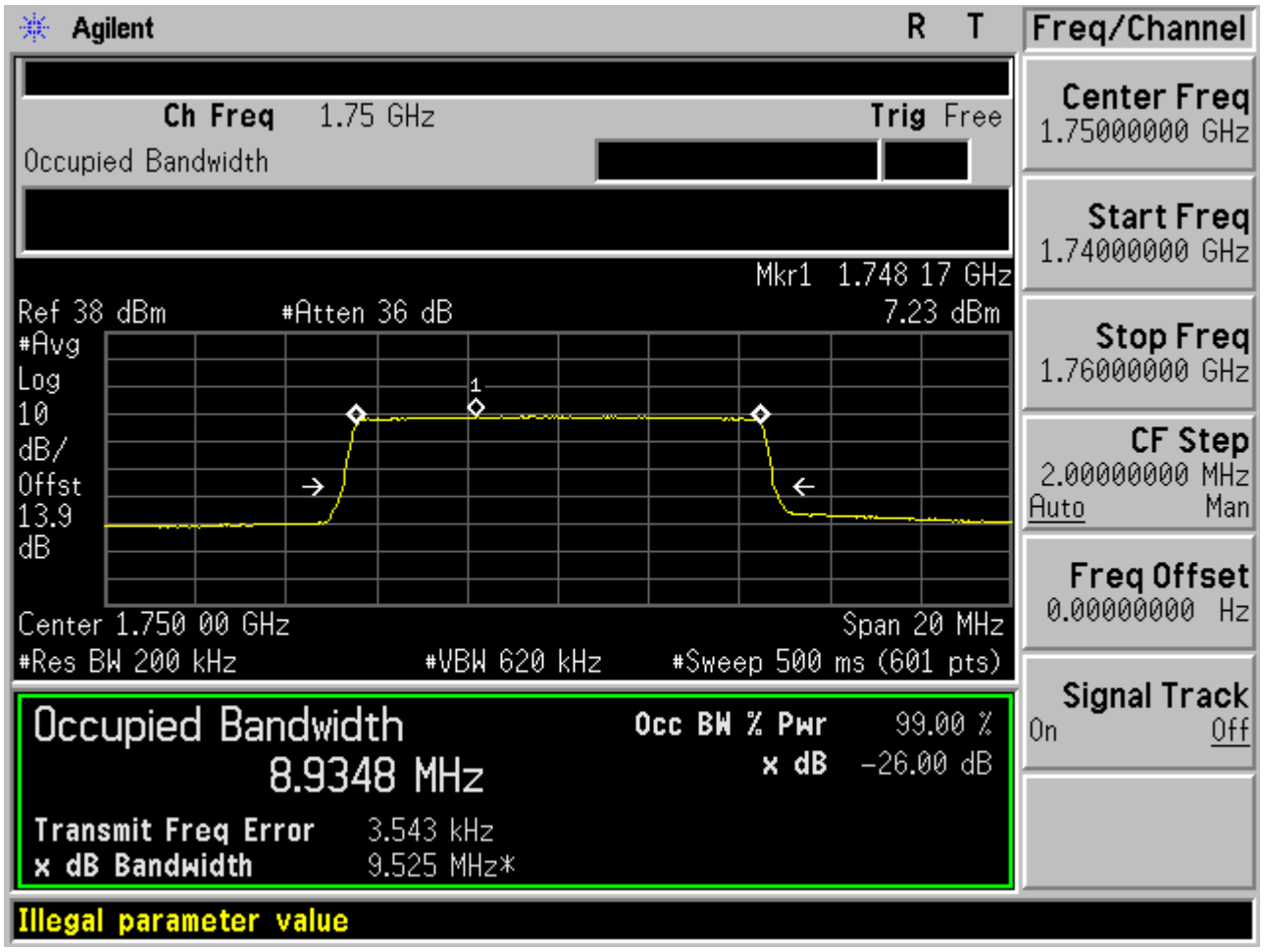
1.1.2.3.2 QPSK/1RB#max



1.1.2.3.3 QPSK/ Partial RBs /RB #13



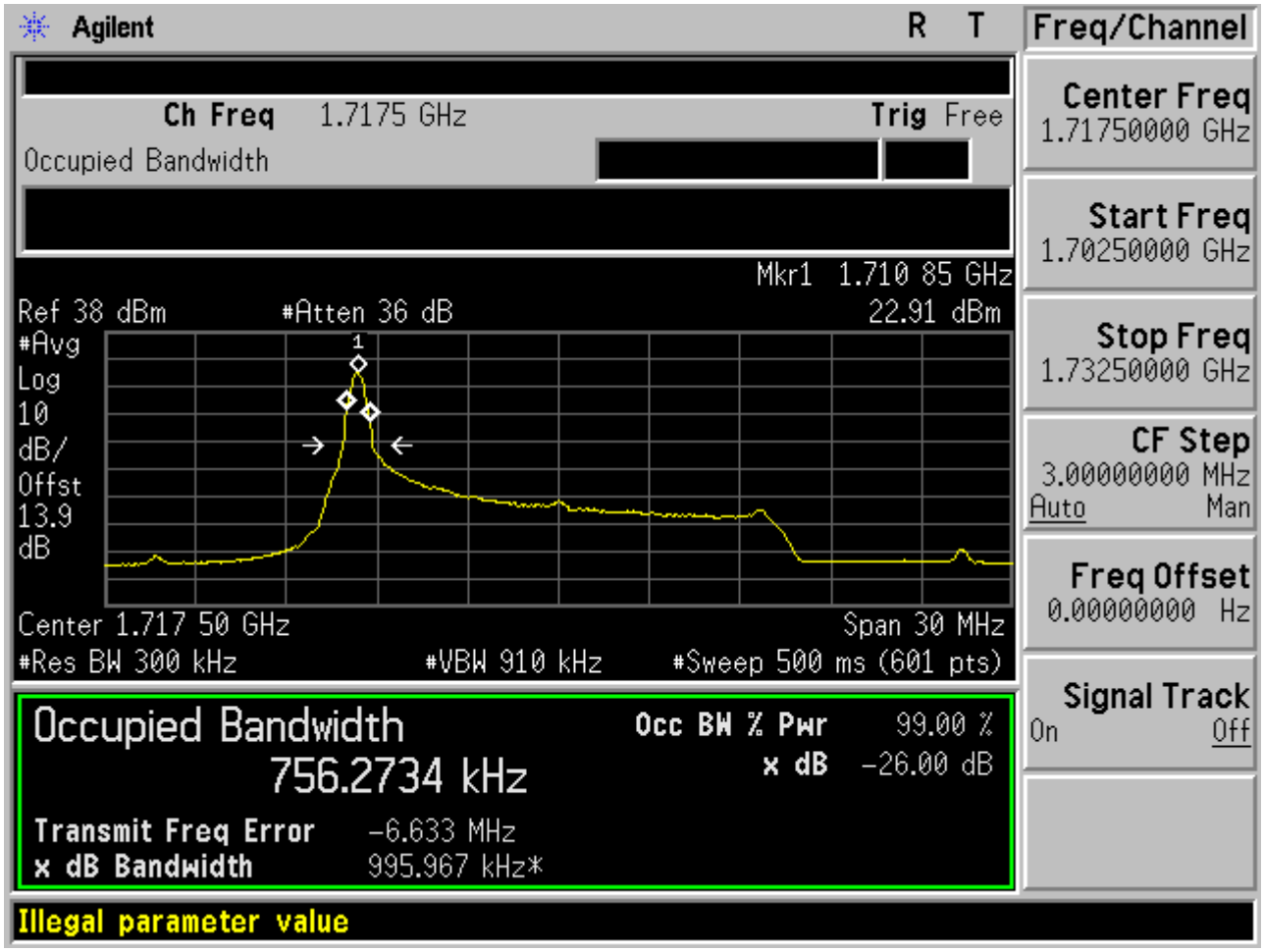
1.1.2.3.4 QPSK/full RBs



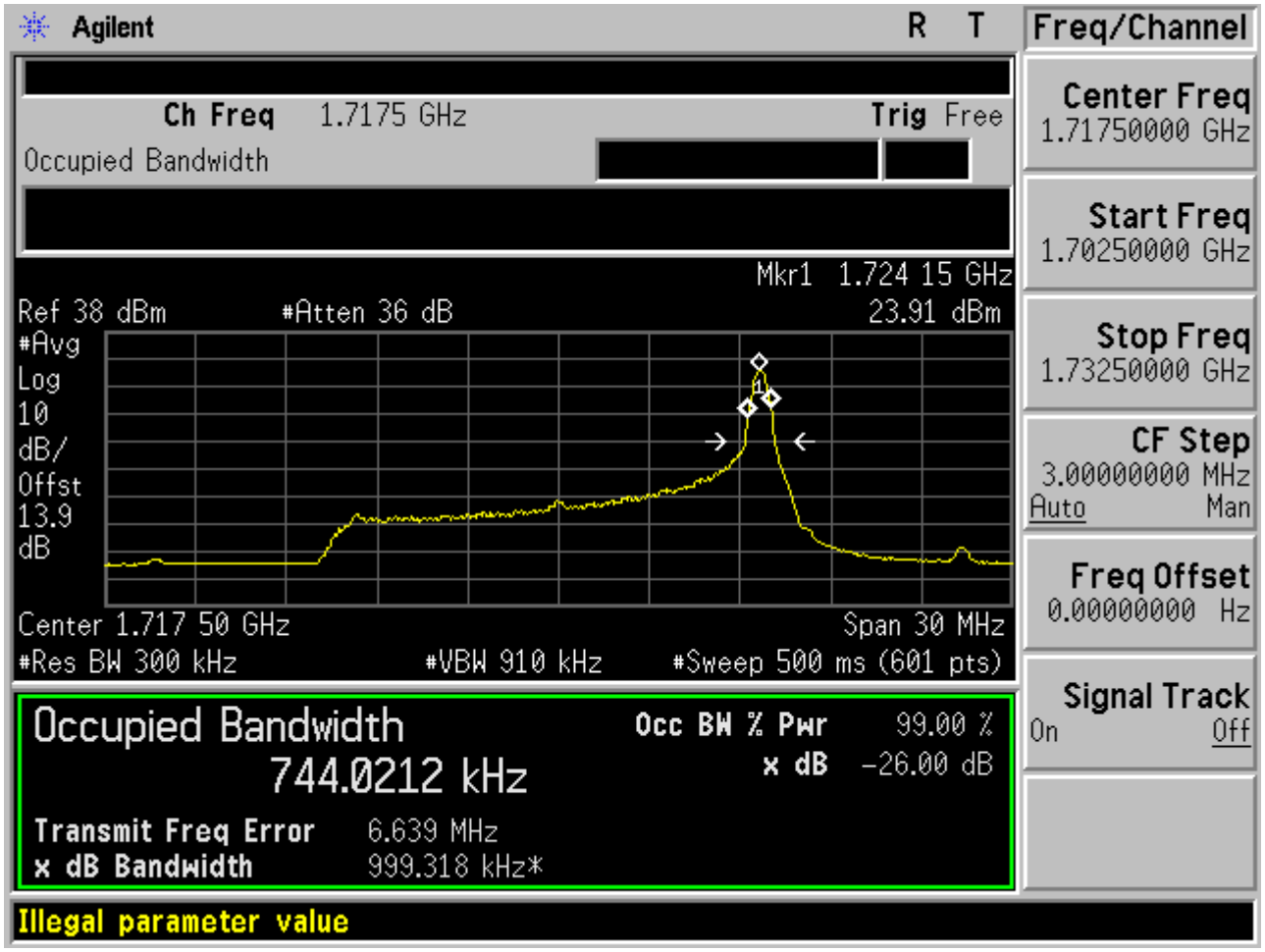
1.1.3 Channel Bandwidth = 15 MHz

1.1.3.1 Channel = B

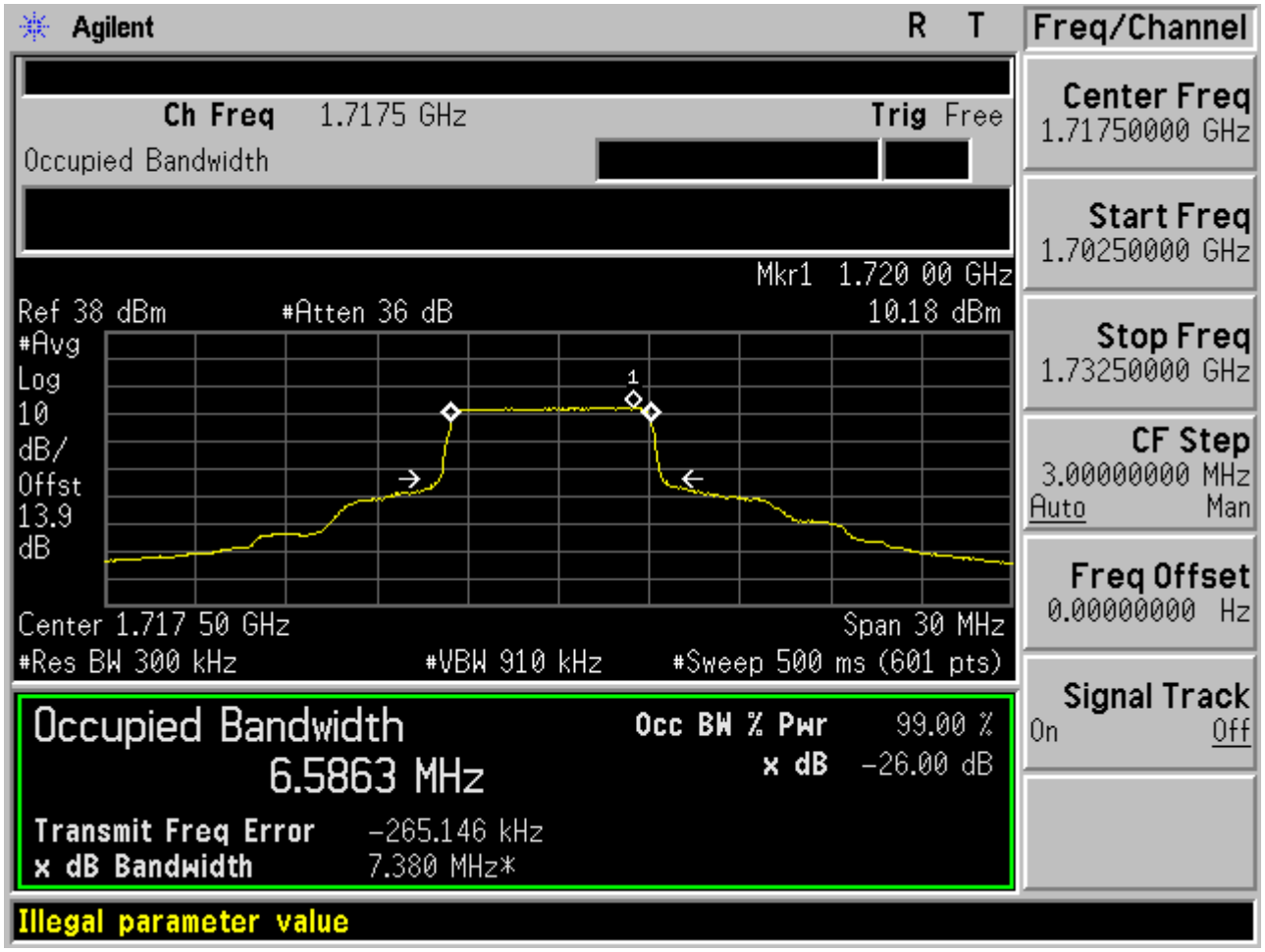
1.1.3.1.1 QPSK/1RB#0



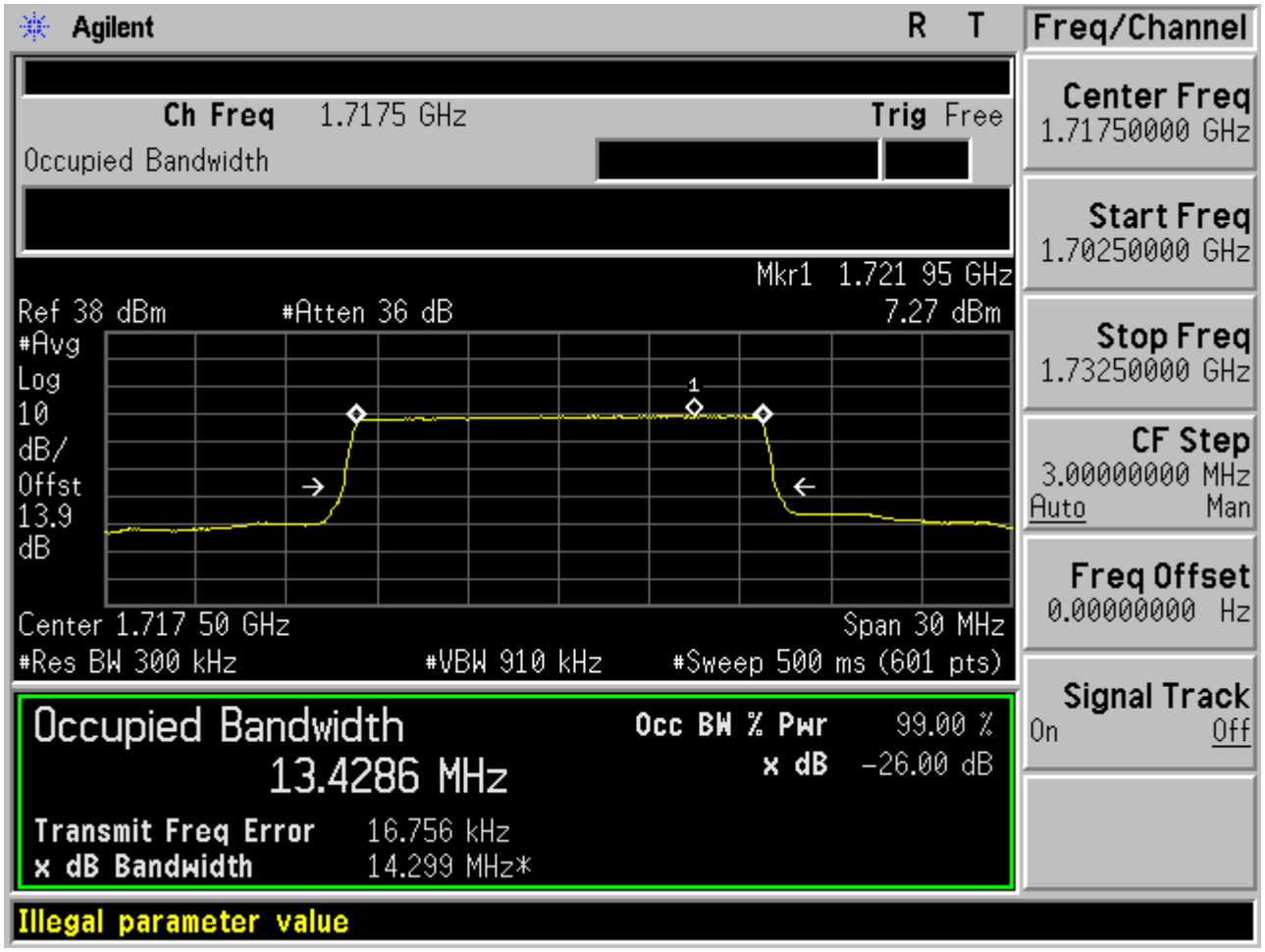
1.1.3.1.2 QPSK/1RB#max



1.1.3.1.3 QPSK/ Partial RBs /RB #18

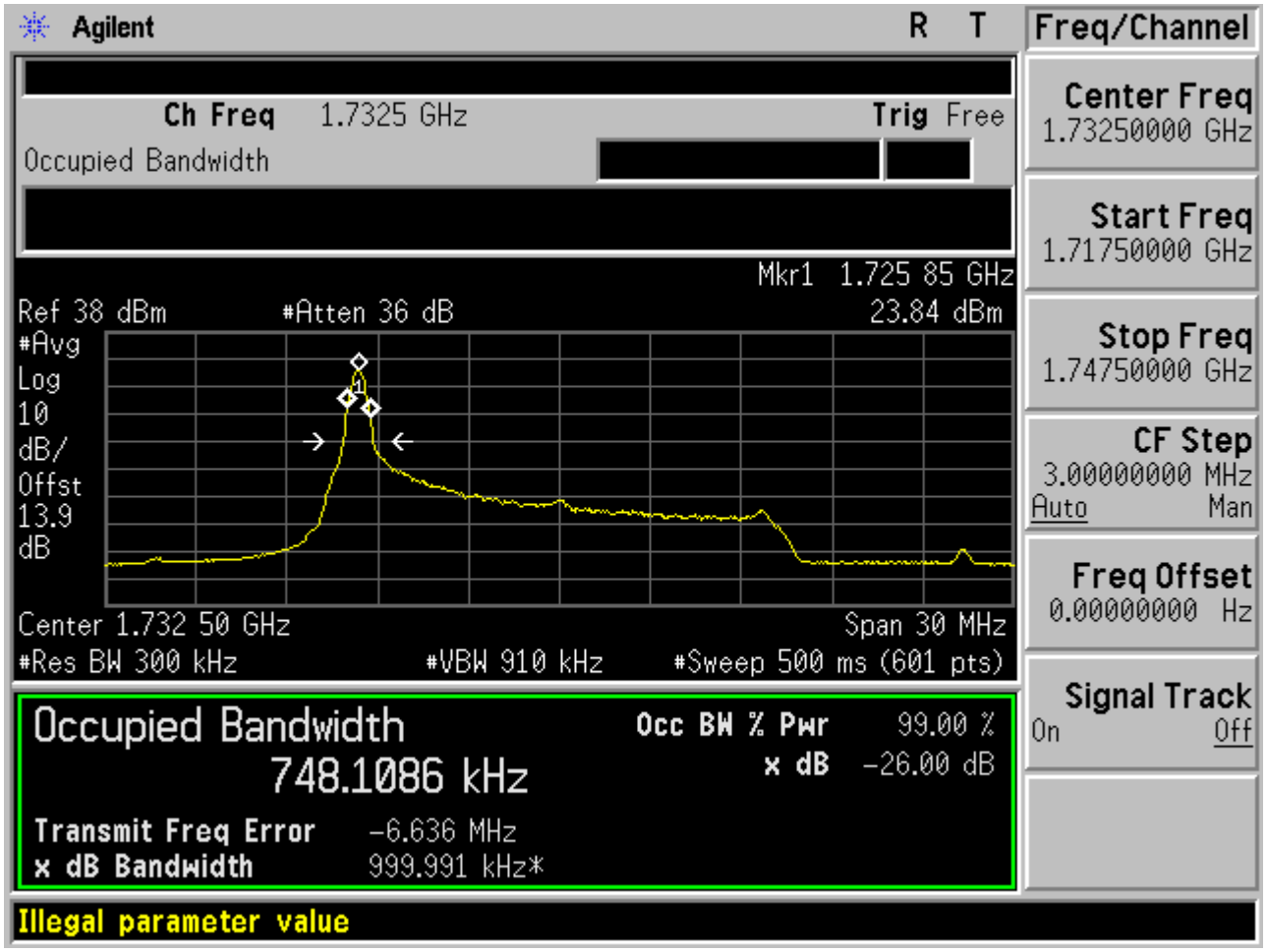


1.1.3.1.4 QPSK/full RBs

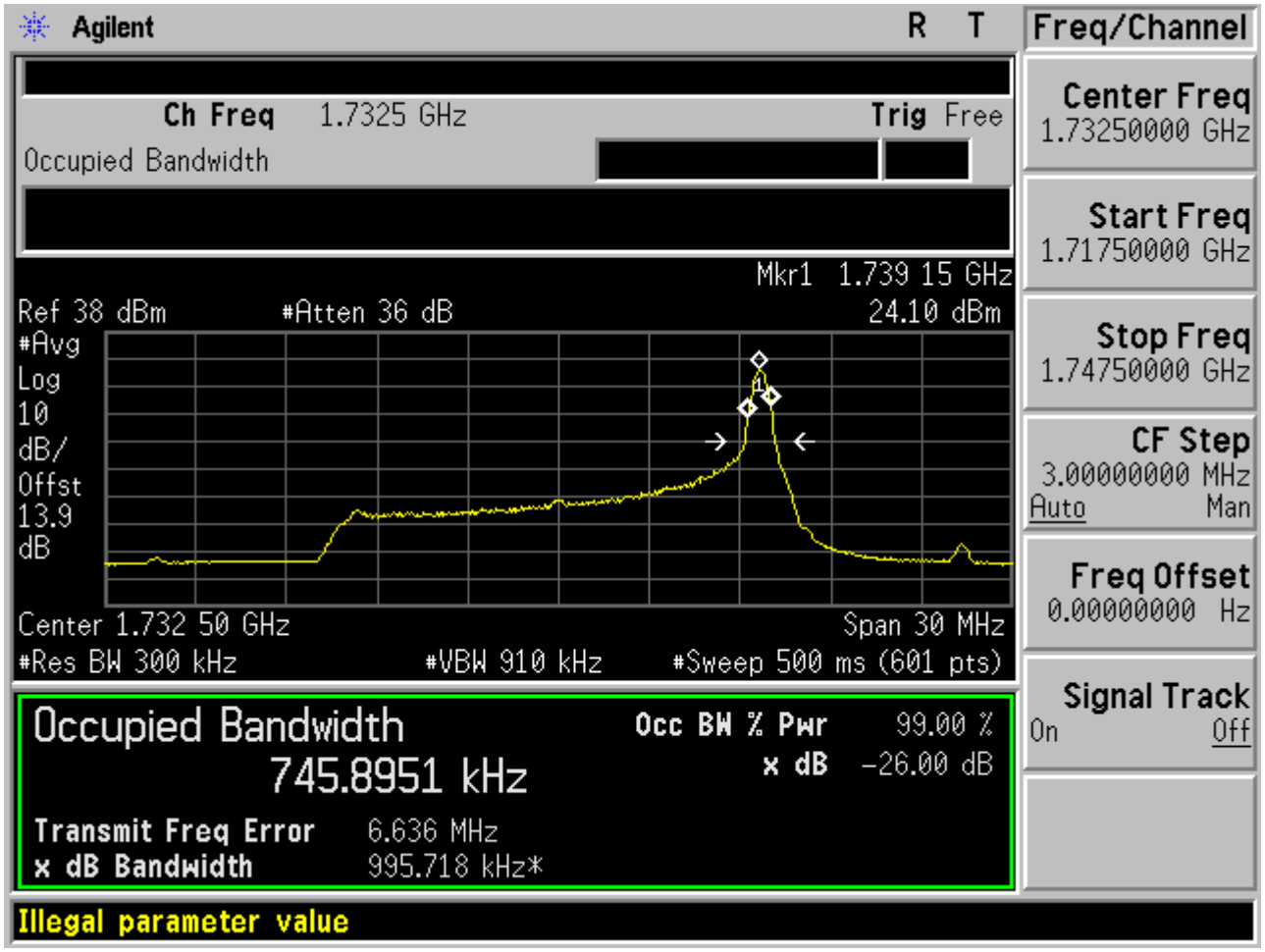


1.1.3.2 Channel =M

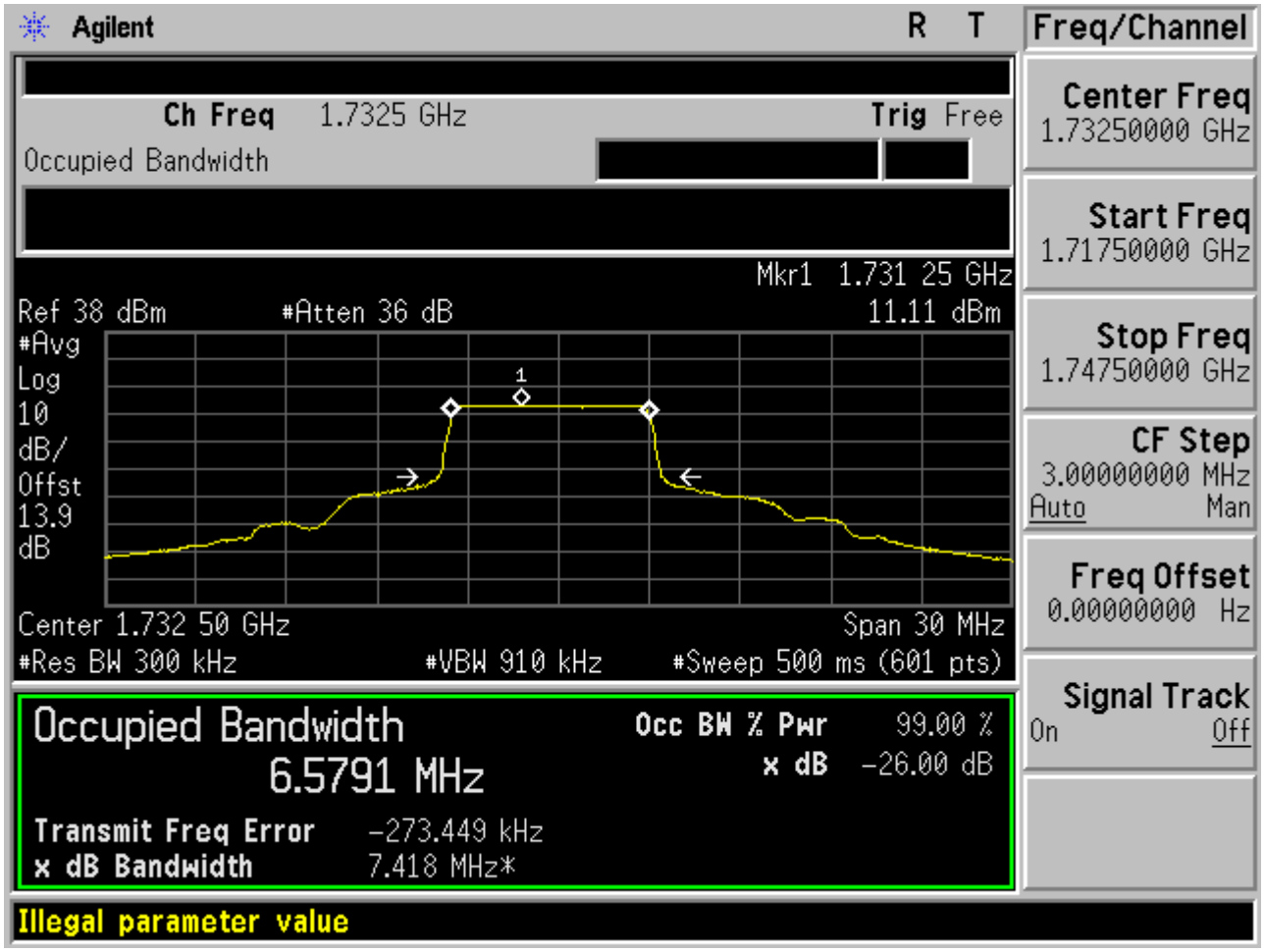
1.1.3.2.1 QPSK/1RB#0



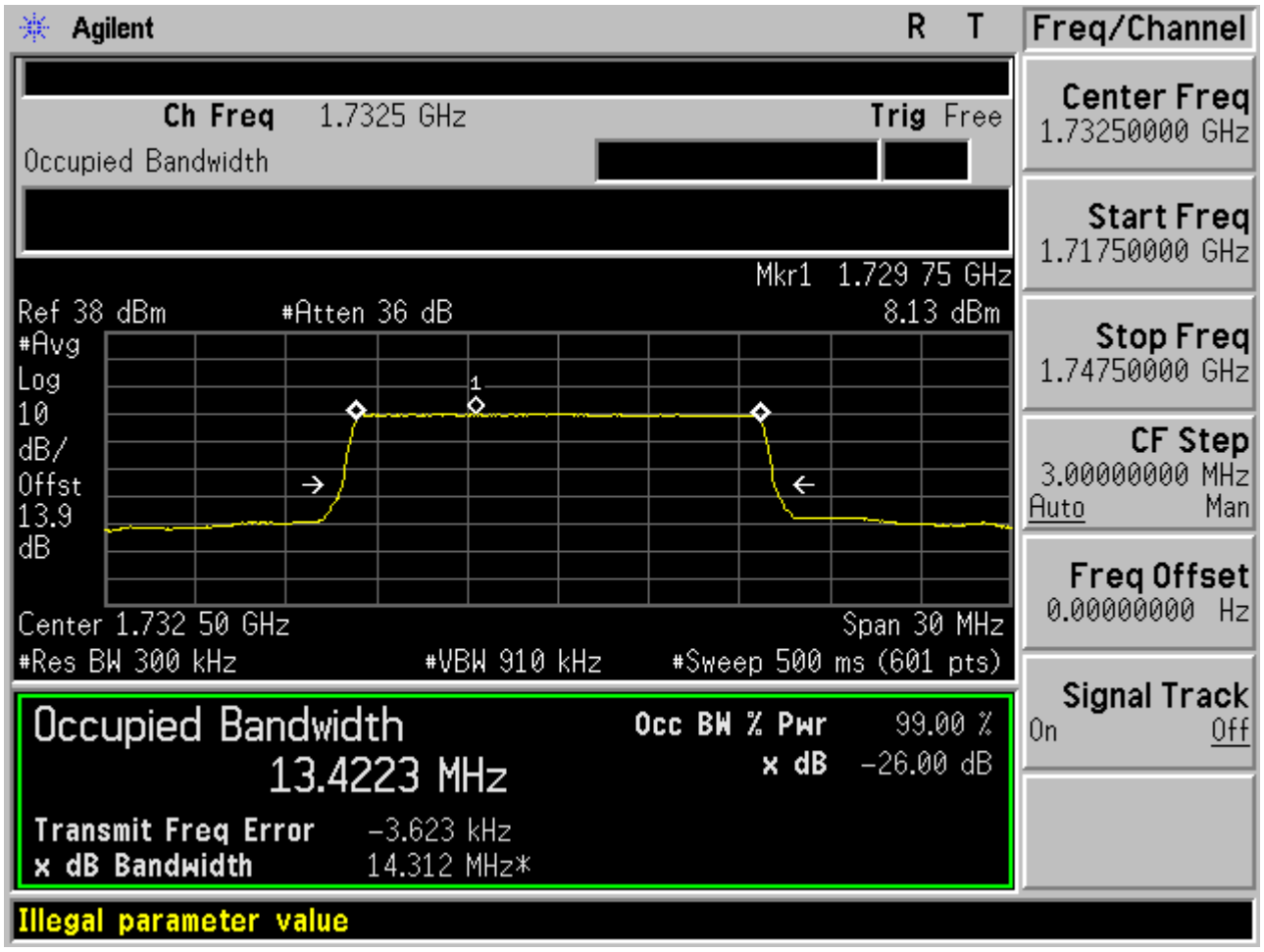
1.1.3.2.2 QPSK/1RB#max



1.1.3.2.3 QPSK/ Partial RBs /RB #18

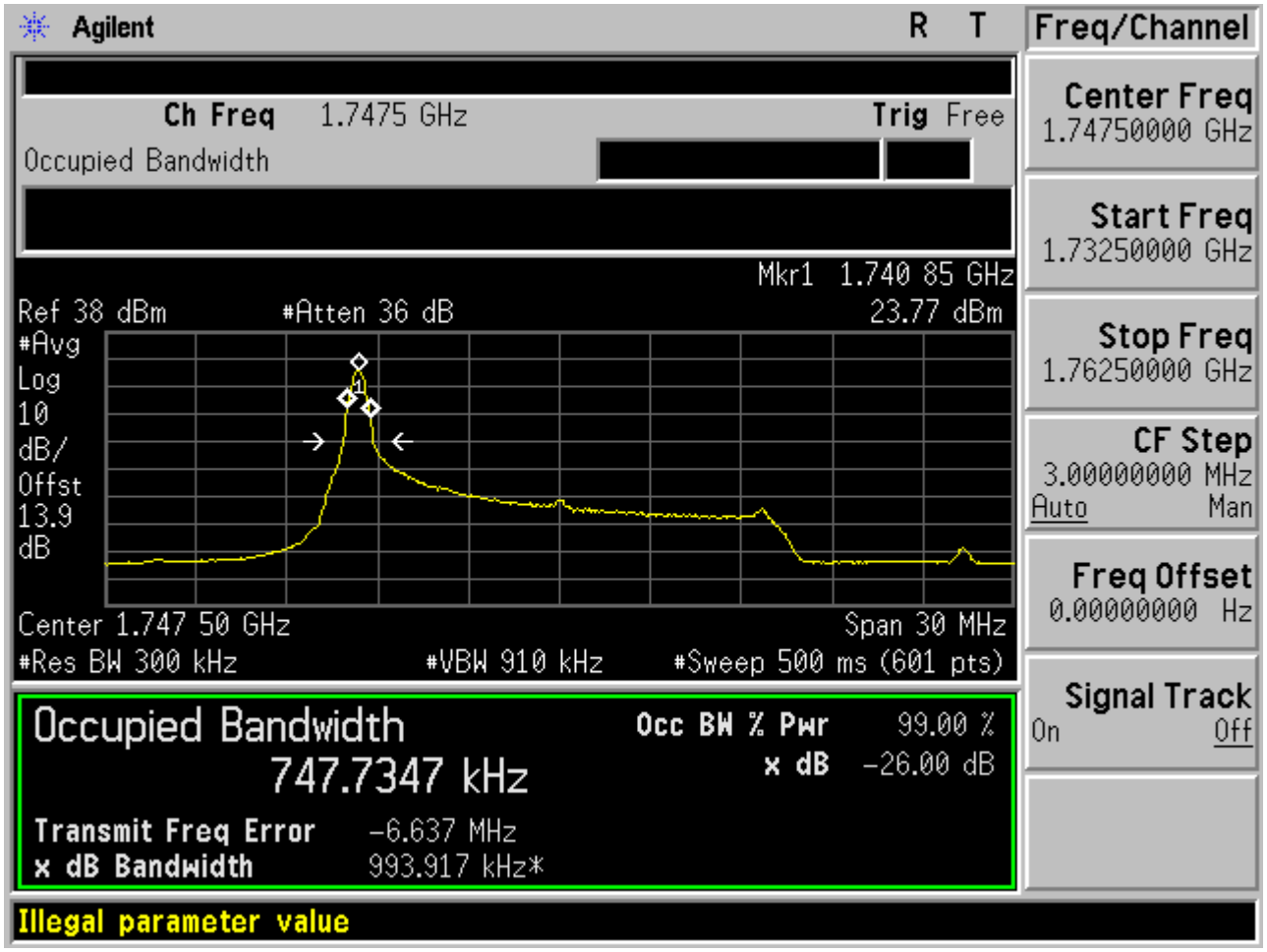


1.1.3.2.4 QPSK/full RBs

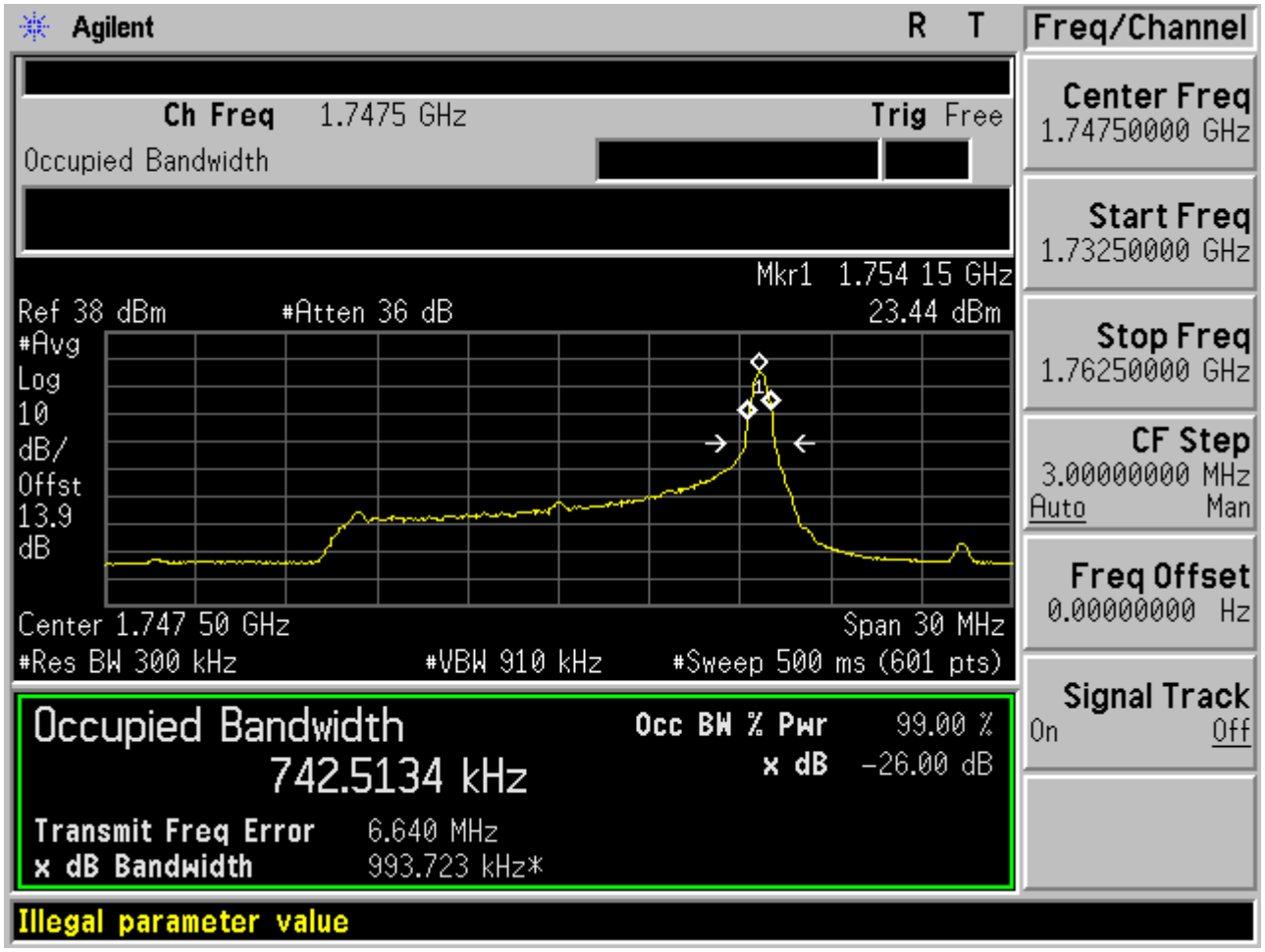


1.1.3.3 Channel =T

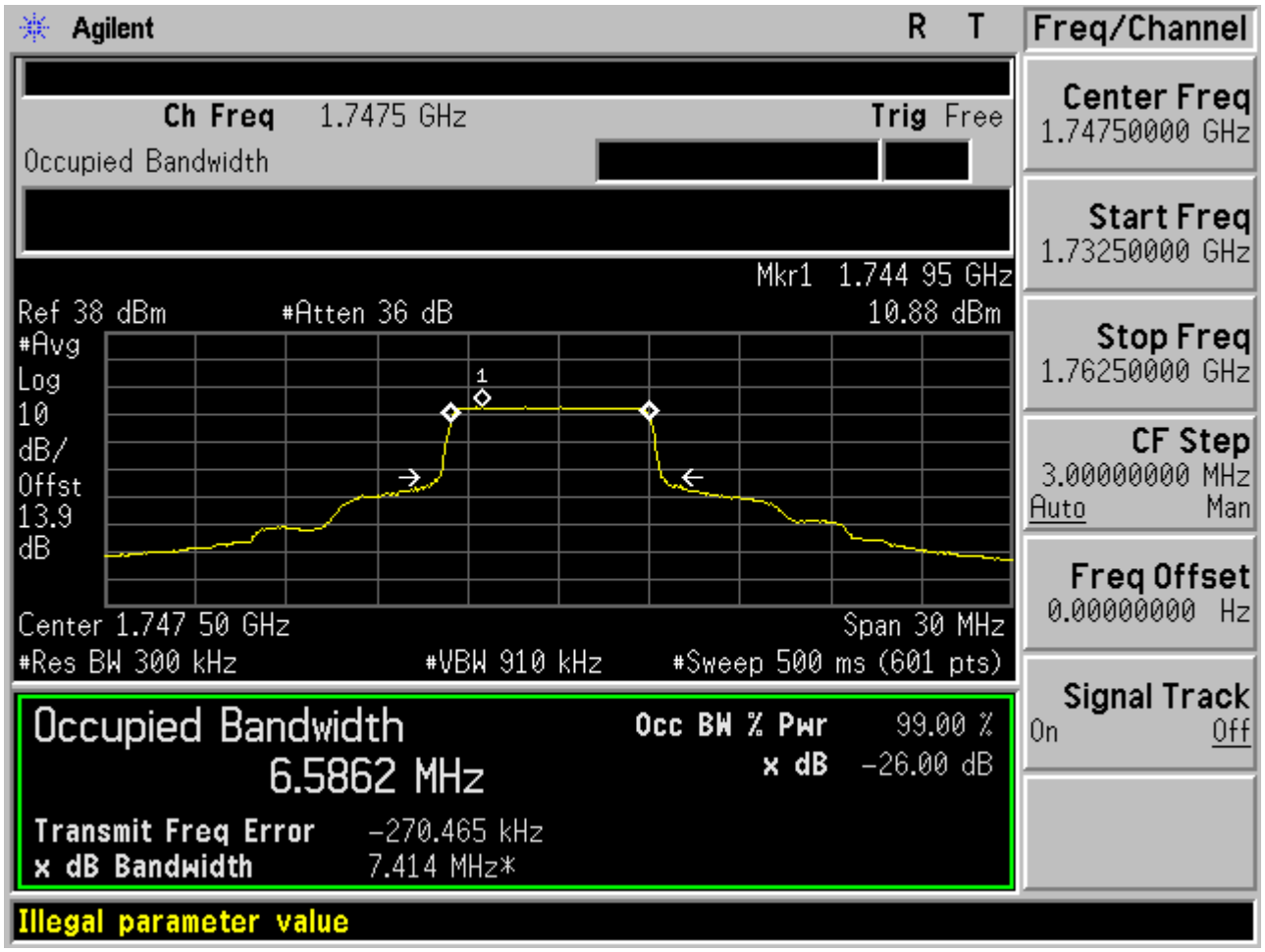
1.1.3.3.1 QPSK/1RB#0



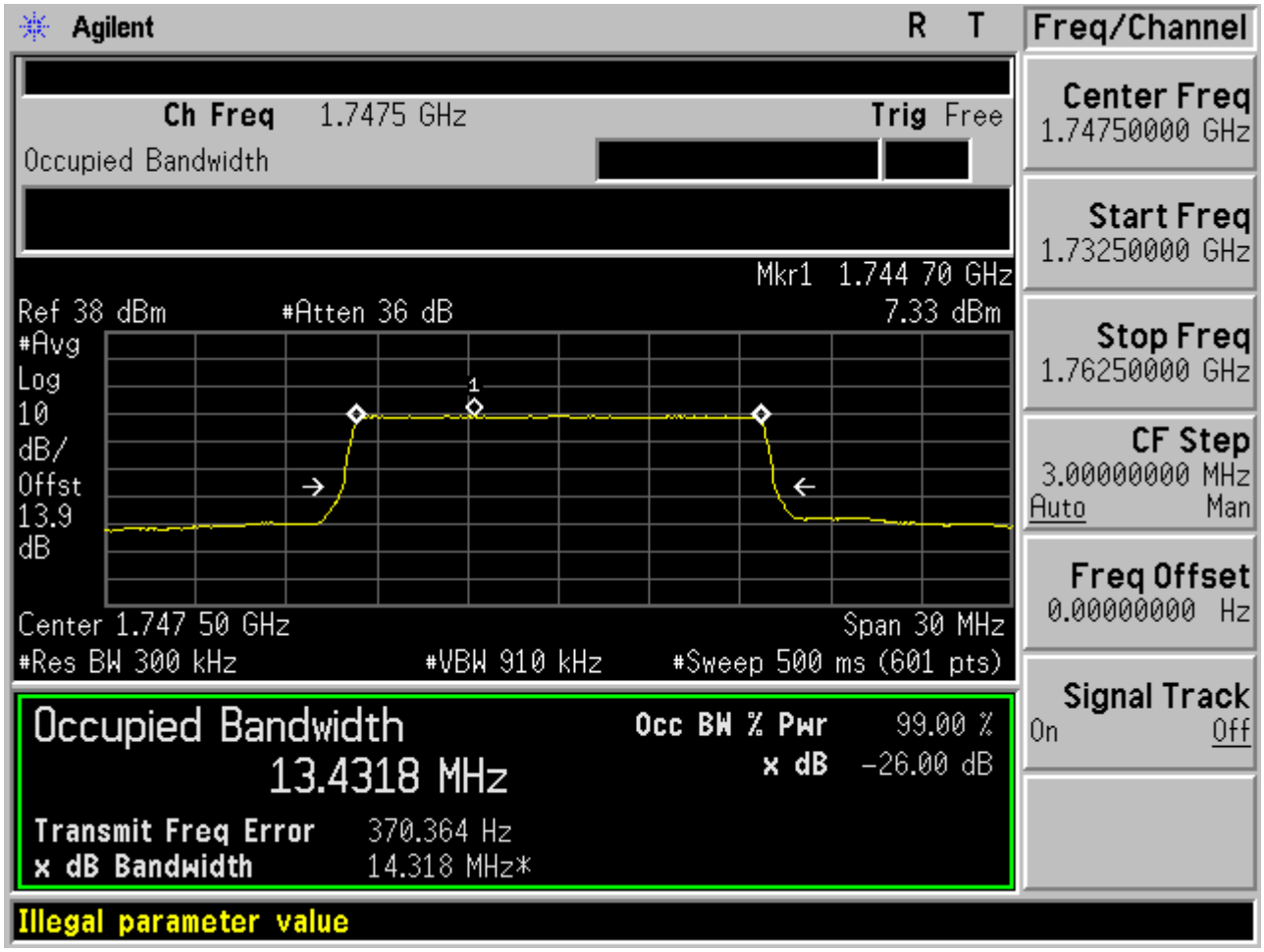
1.1.3.3.2 QPSK/1RB#max



1.1.3.3.3 QPSK/ Partial RBs /RB #18



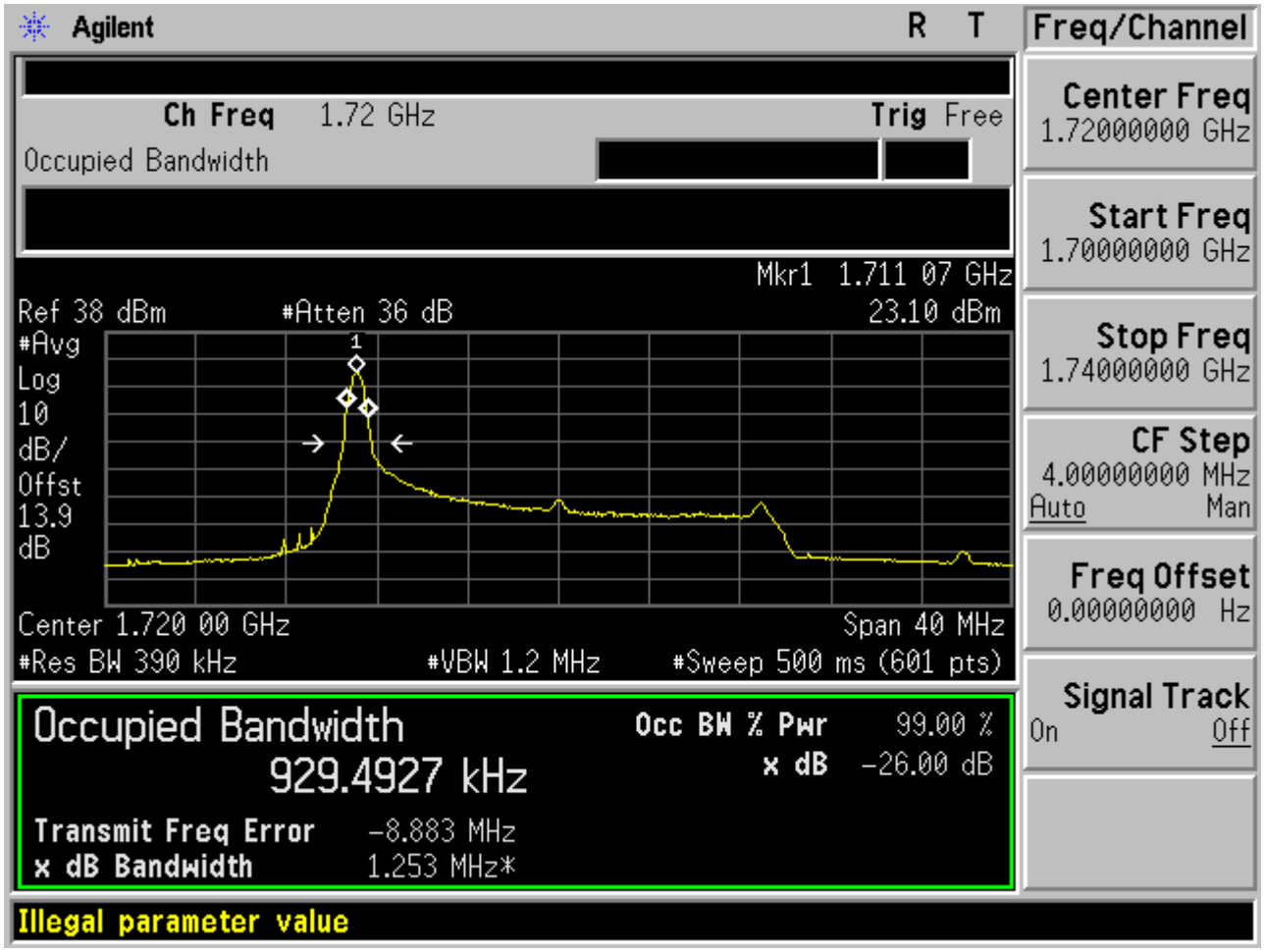
1.1.3.3.4 QPSK/full RBs



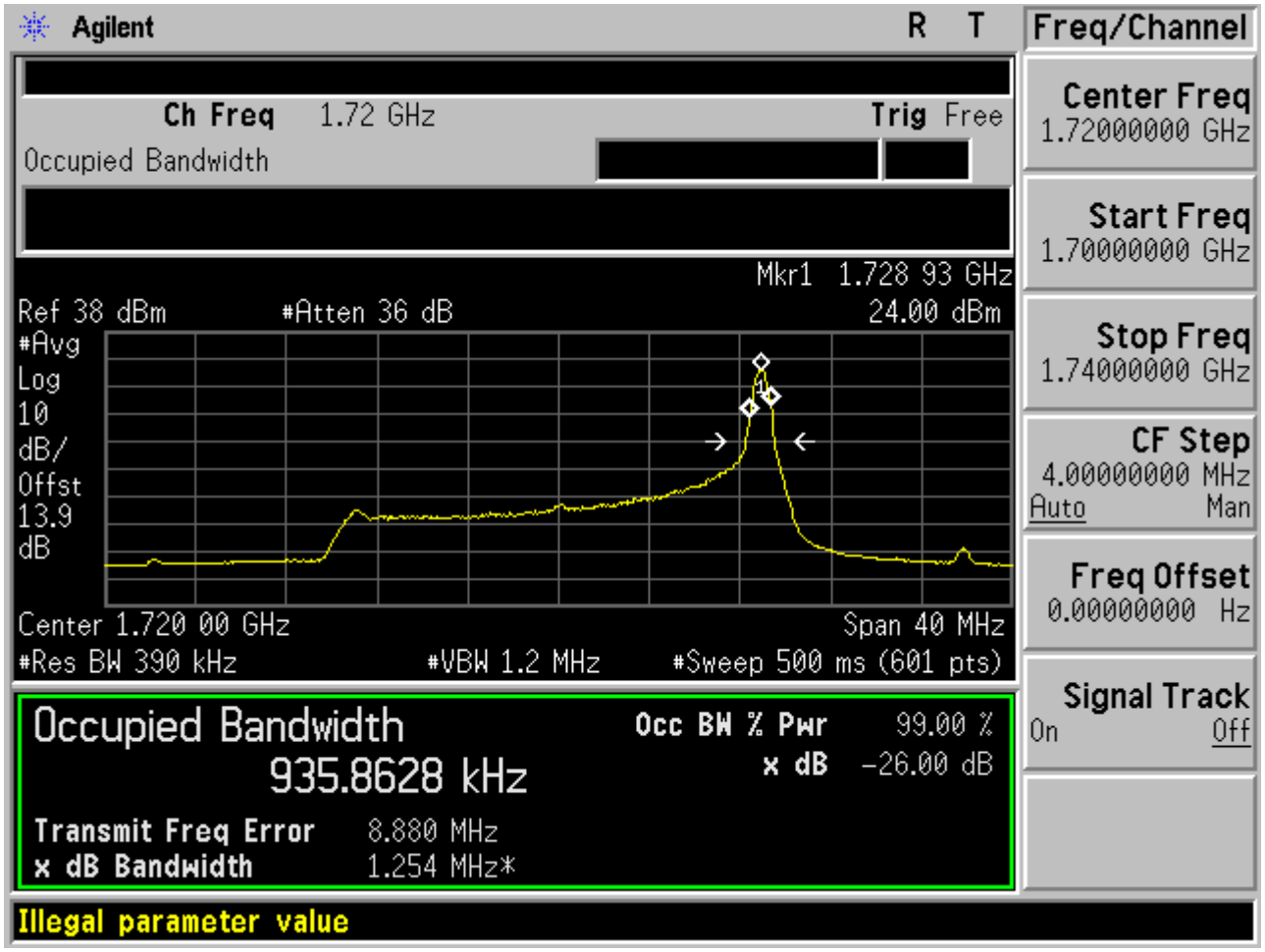
1.1.4 Channel Bandwidth = Highest (20 MHz)

1.1.4.1 Channel = B

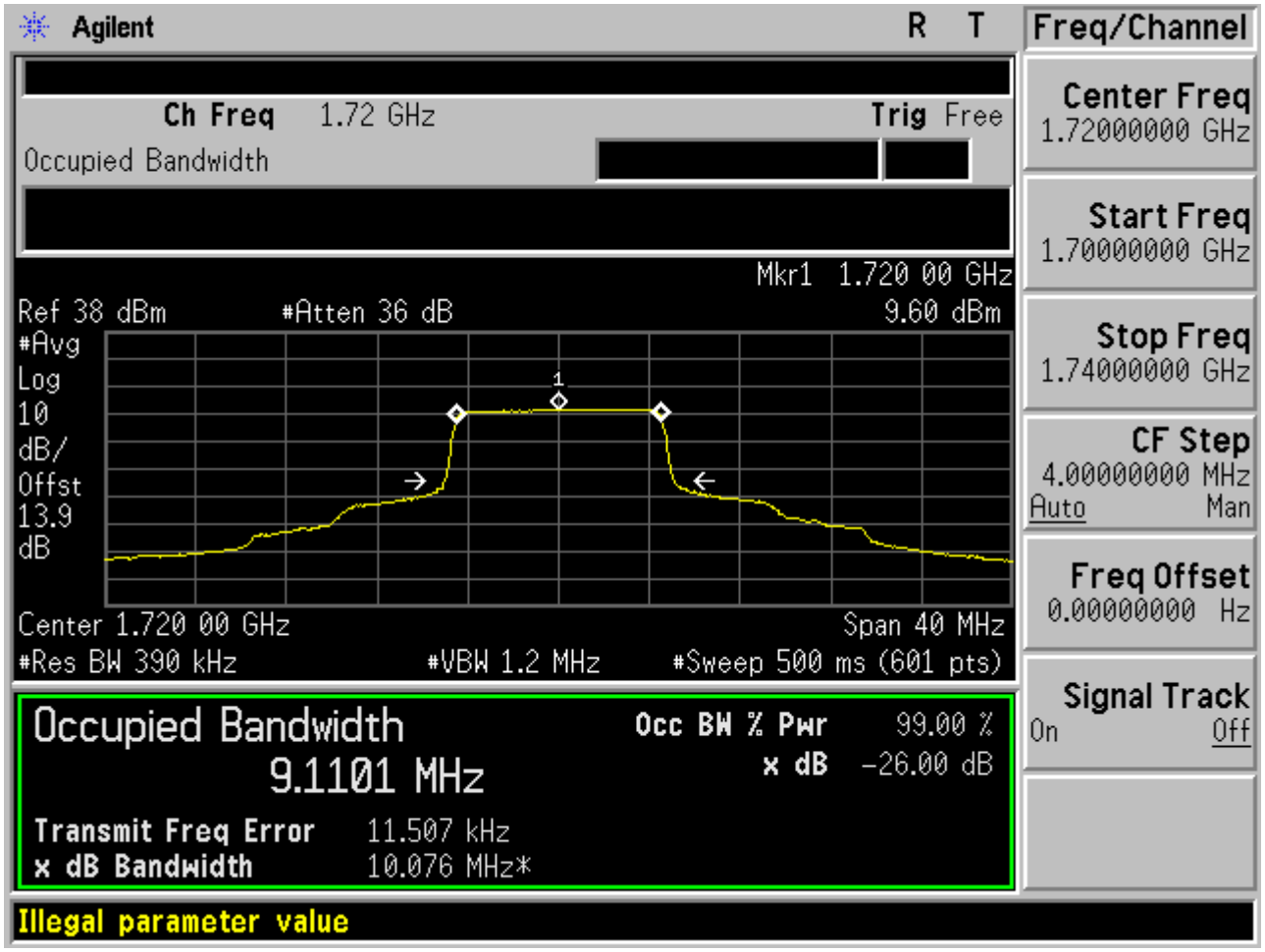
1.1.4.1.1 QPSK/1RB#0



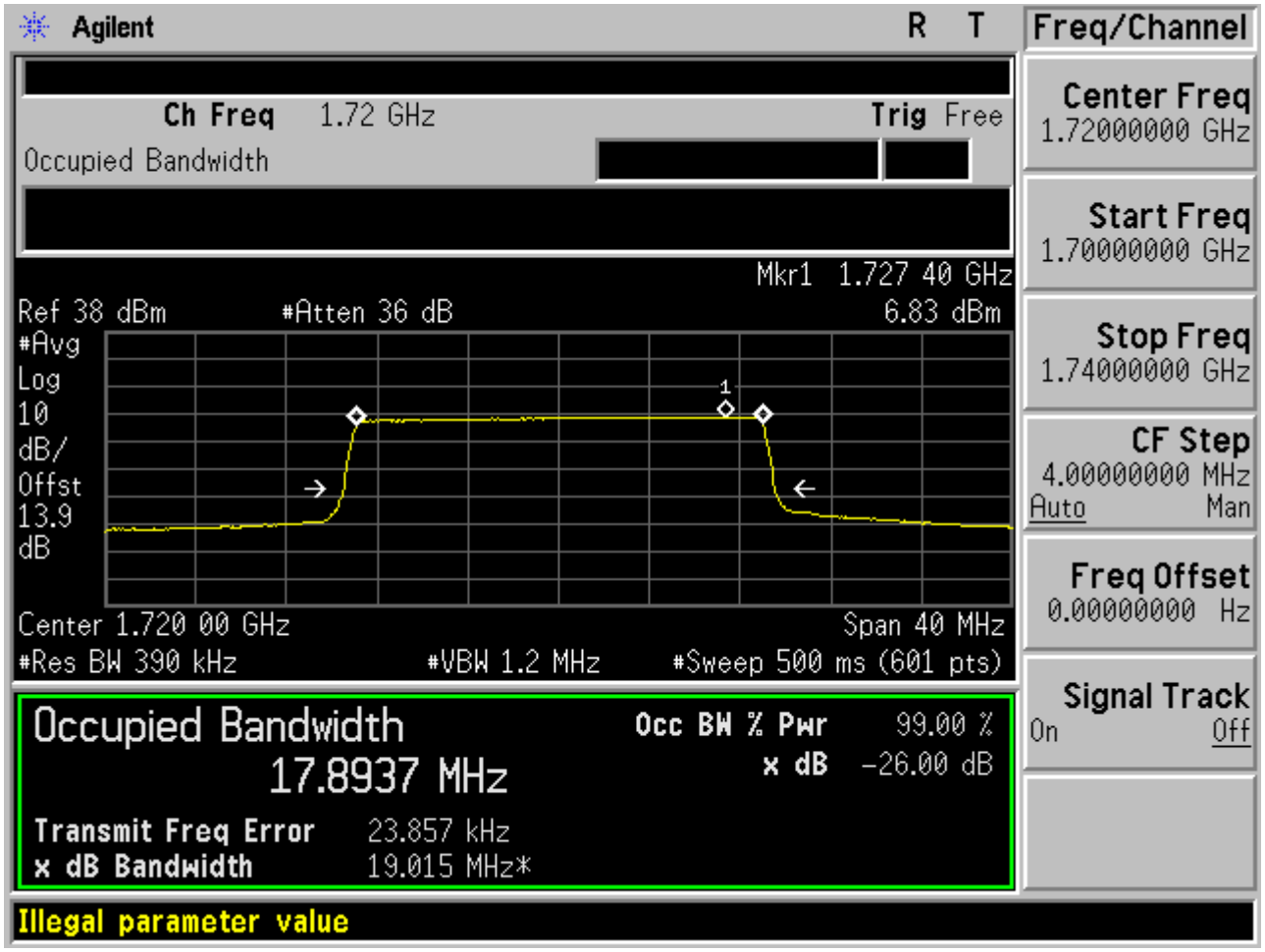
1.1.4.1.2 QPSK/1RB#max



1.1.4.1.3 QPSK/ Partial RBs /RB #25

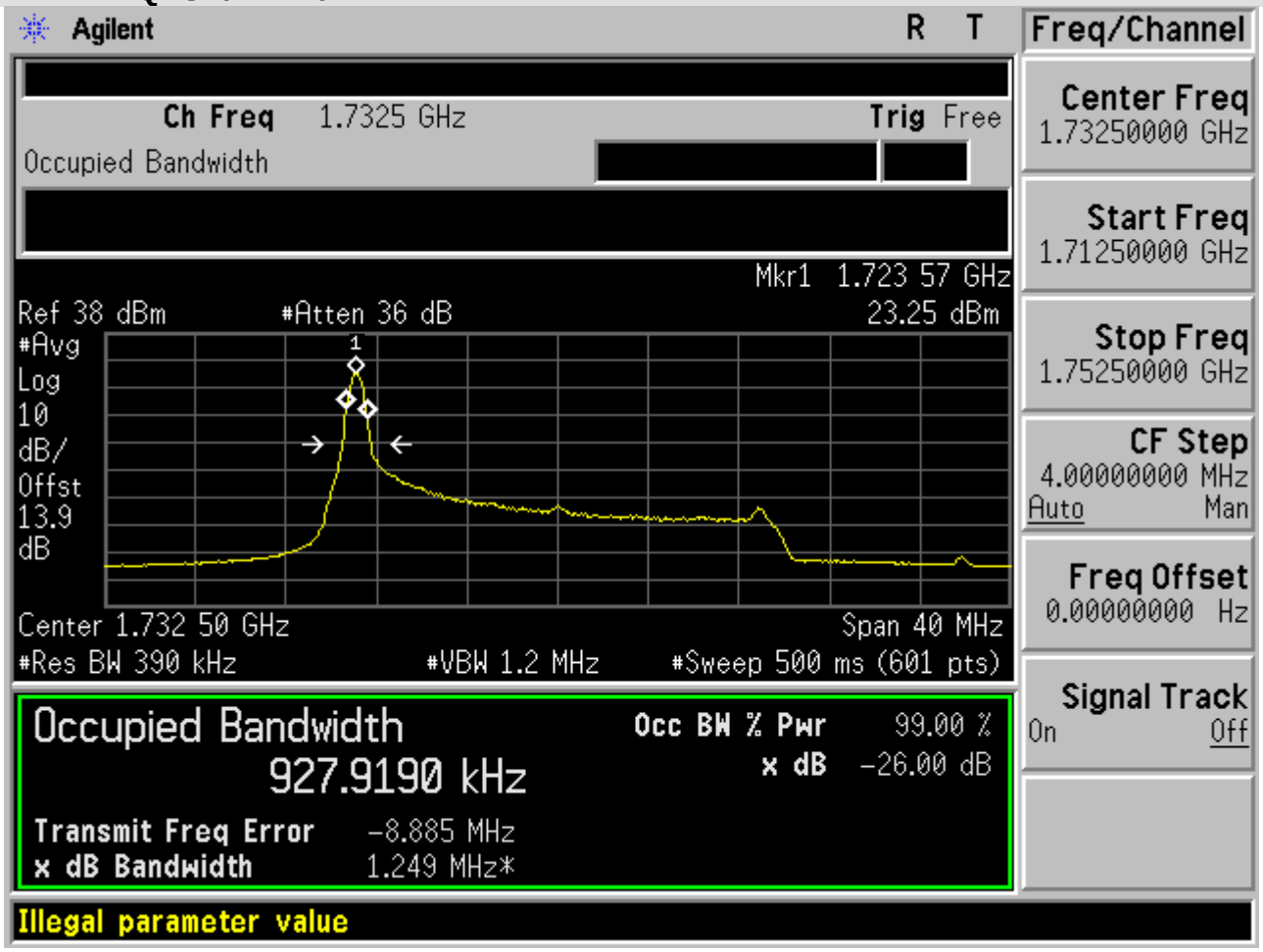


1.1.4.1.4 QPSK/full RBs

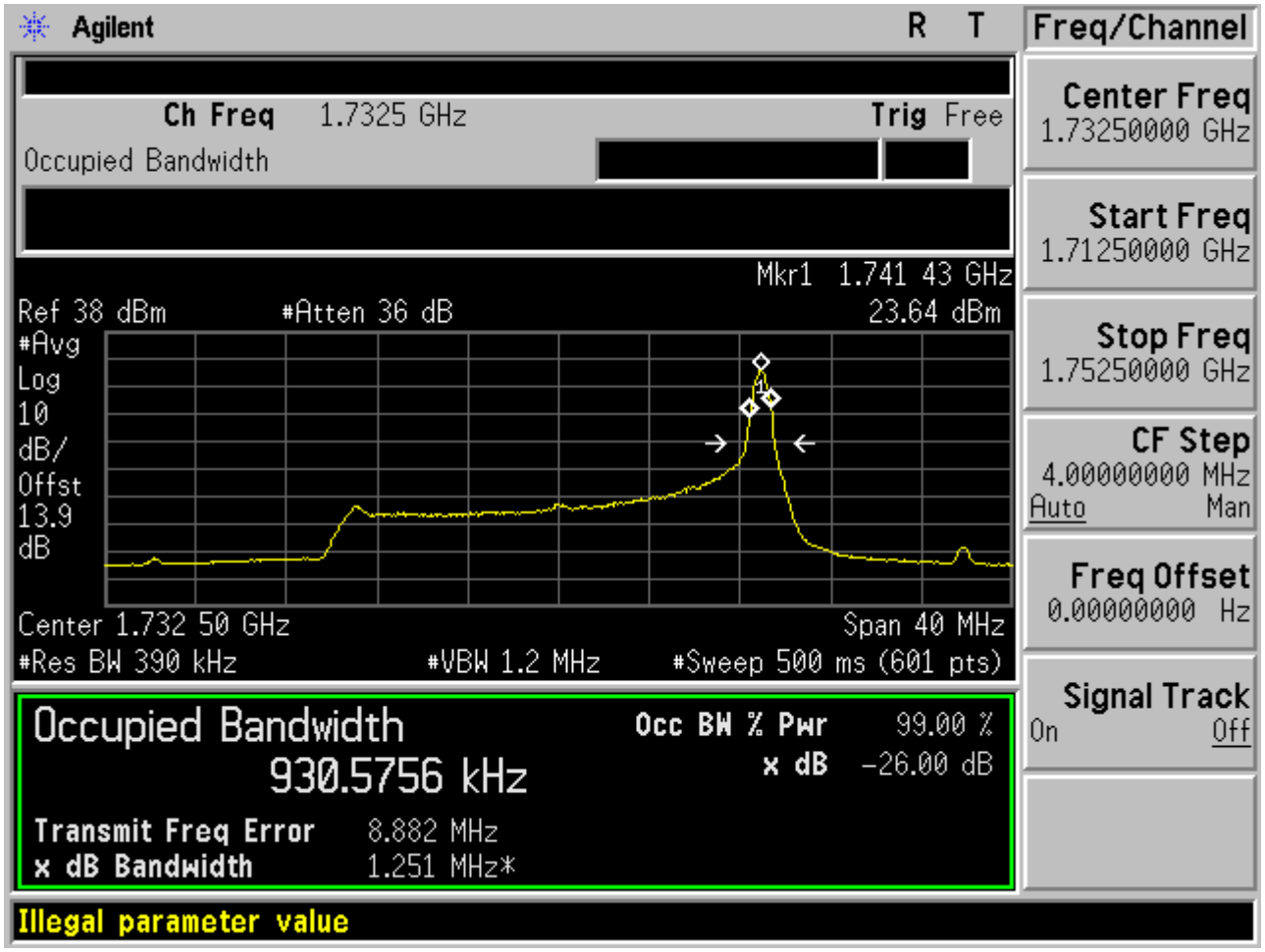


1.1.4.2 Channel =M

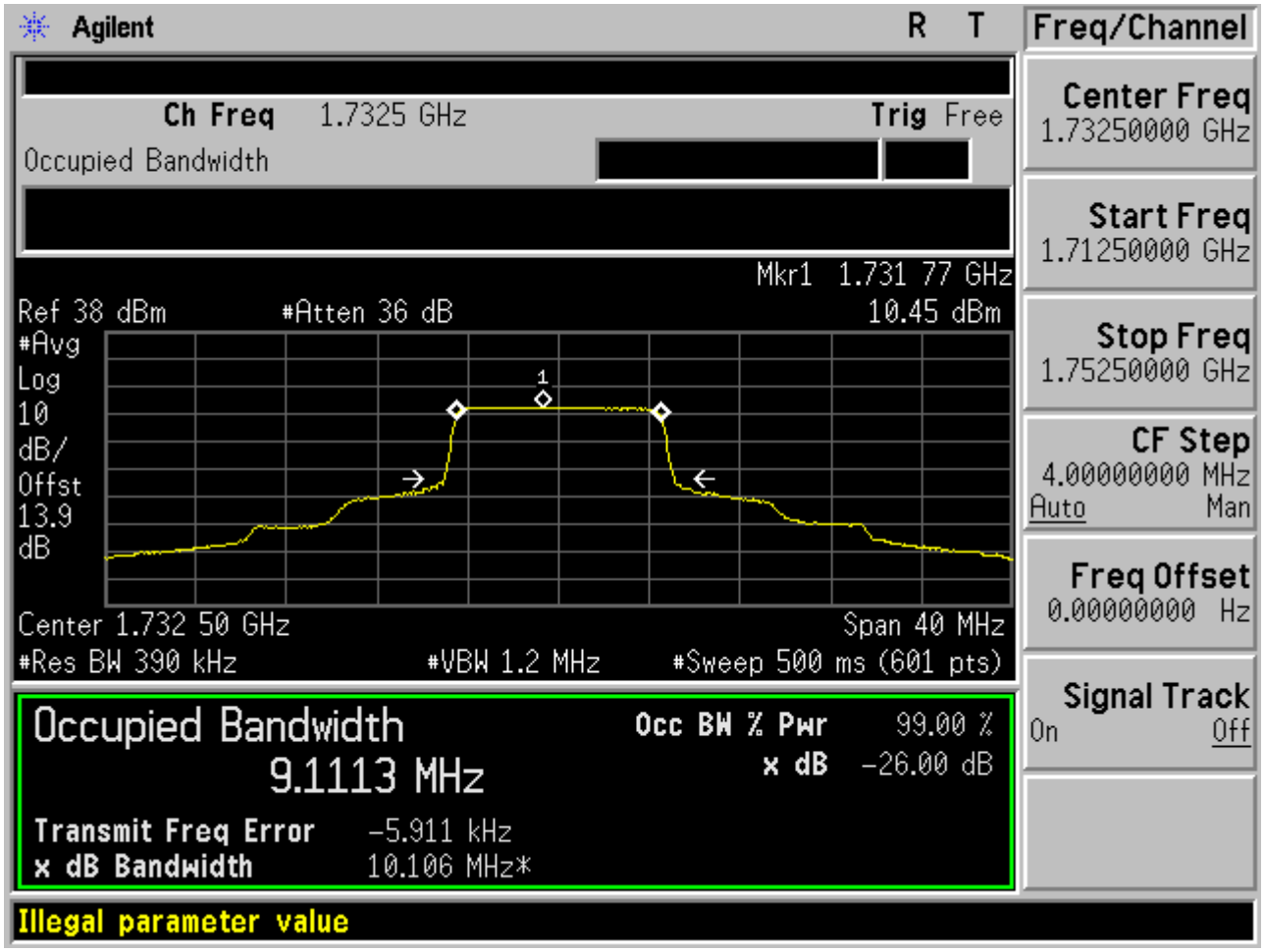
1.1.4.2.1 QPSK/1RB#0



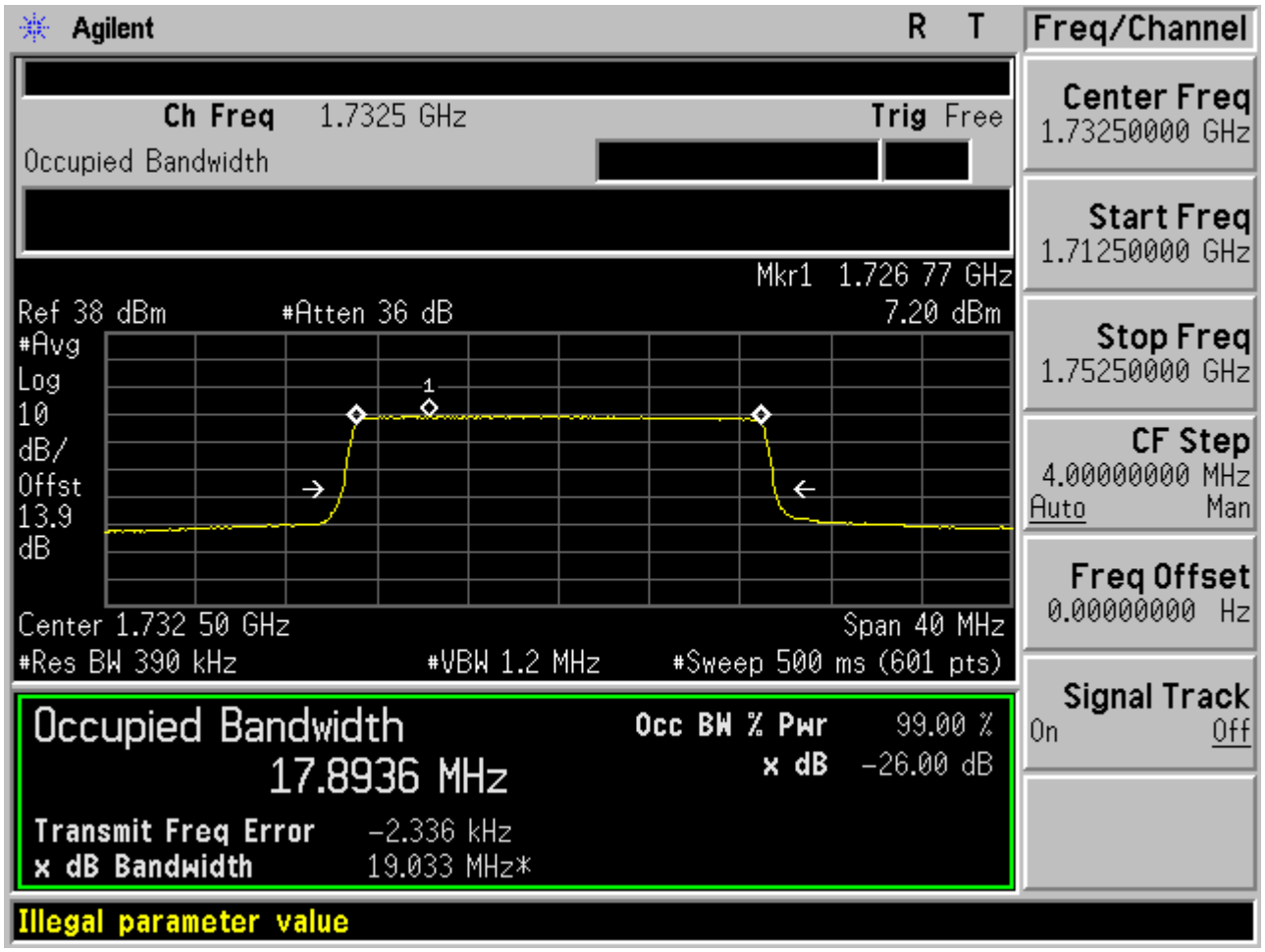
1.1.4.2.2 QPSK/1RB#max



1.1.4.2.3 QPSK/ Partial RBs /RB #25

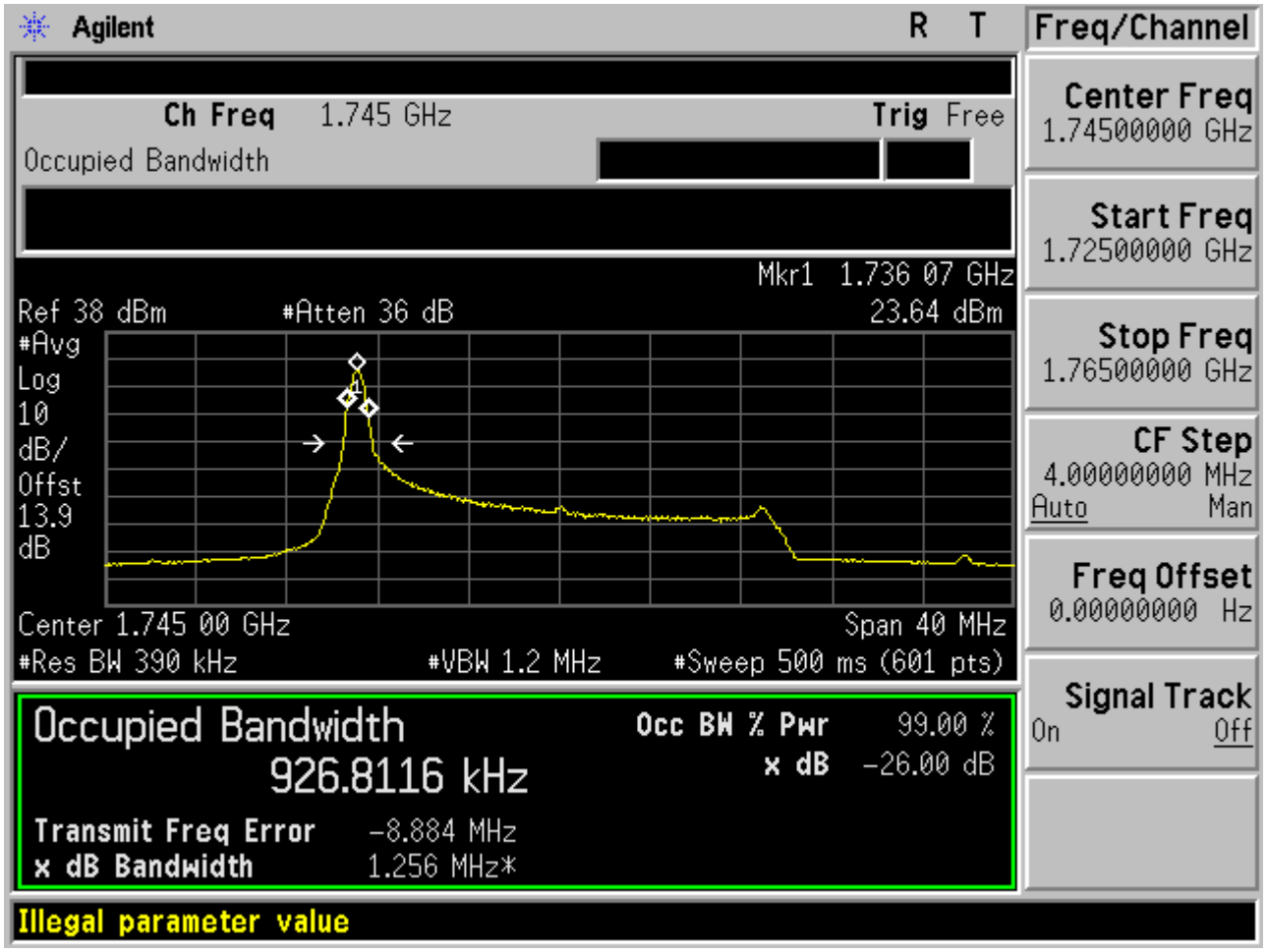


1.1.4.2.4 QPSK/full RBs

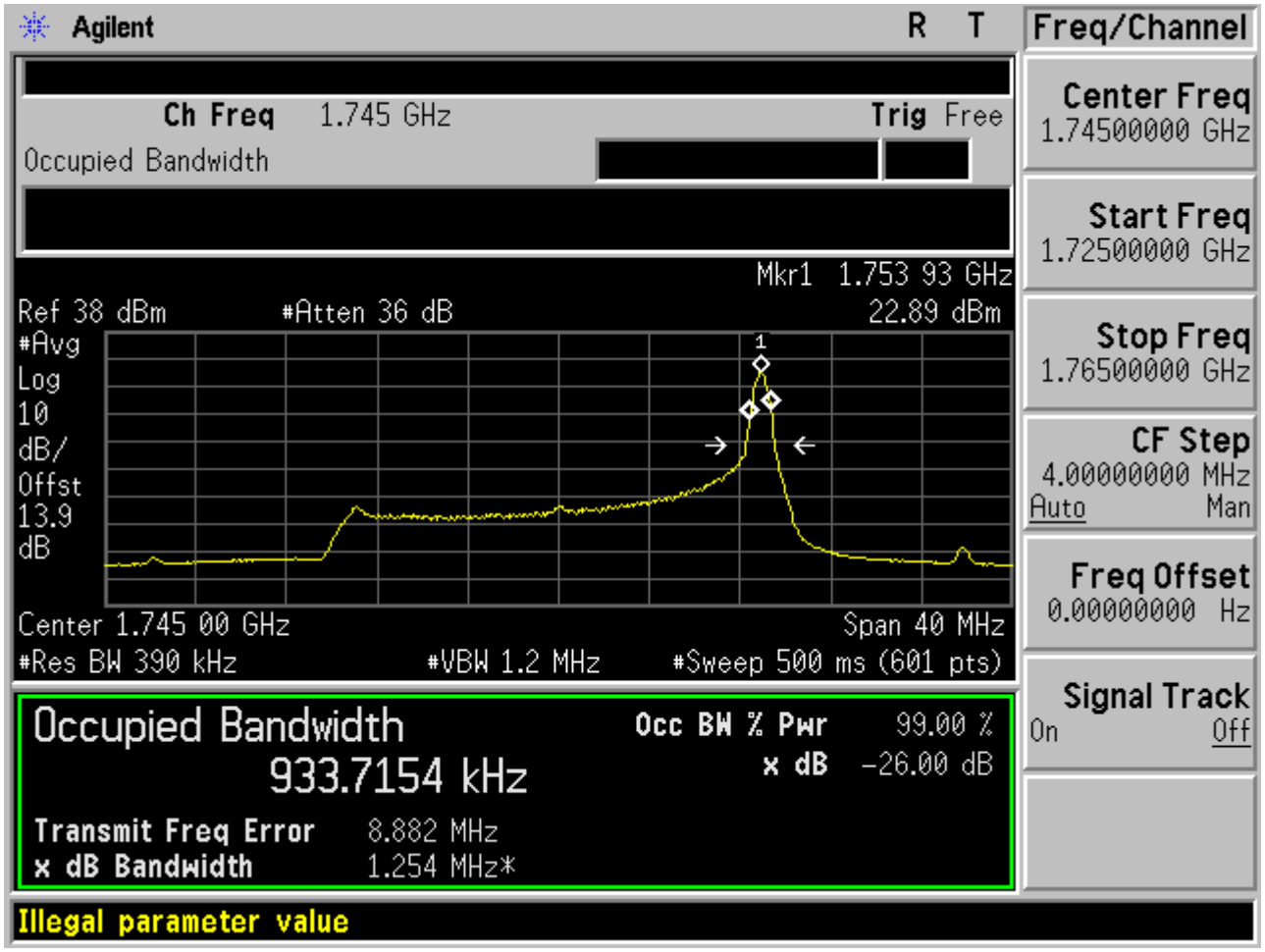


1.1.4.3 Channel =T

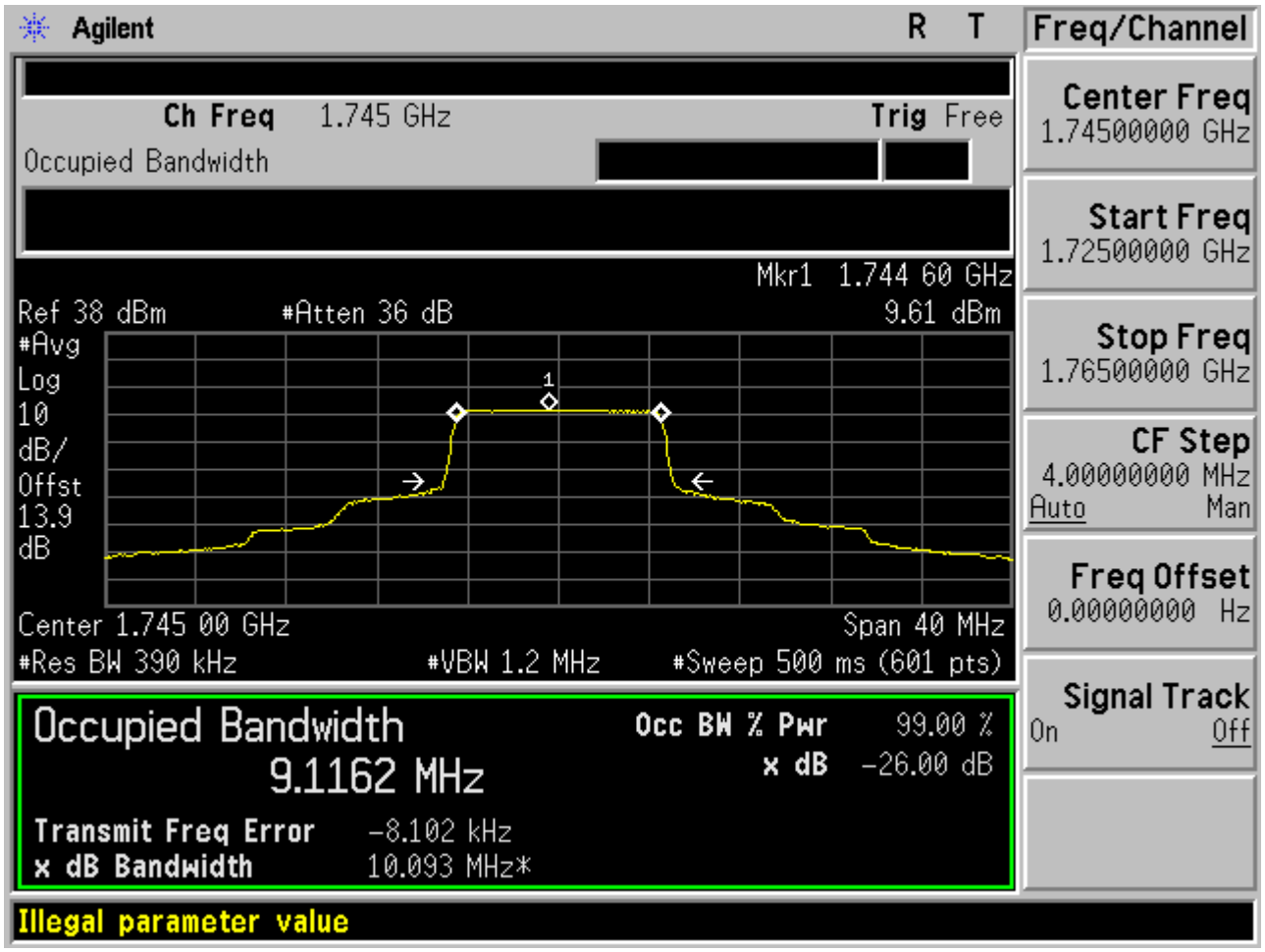
1.1.4.3.1 QPSK/1RB#0



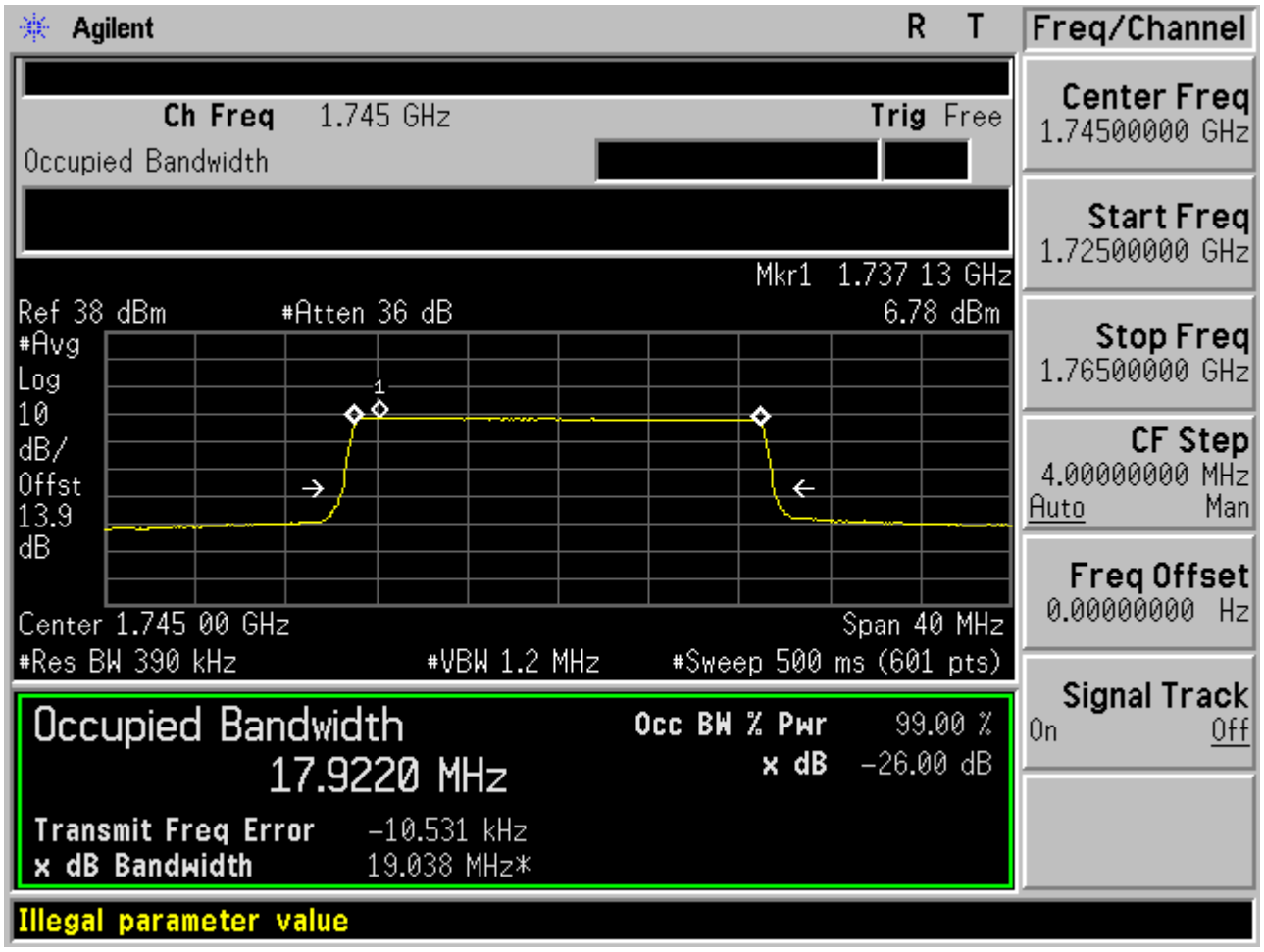
1.1.4.3.2 QPSK/1RB#max



1.1.4.3.3 QPSK/ Partial RBs /RB #25



1.1.4.3.4 QPSK/full RBs

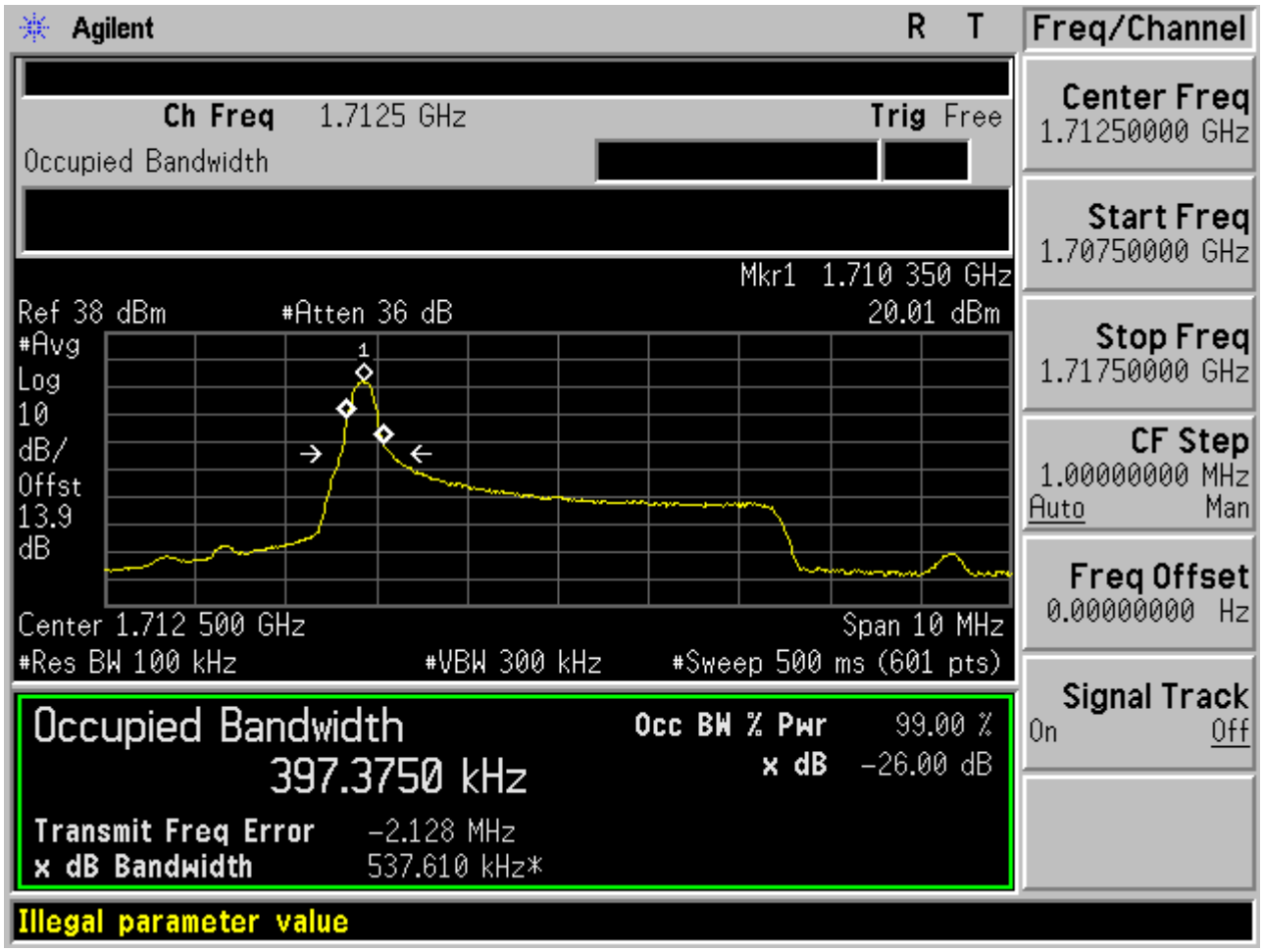


1.2 Test Mode=TM2

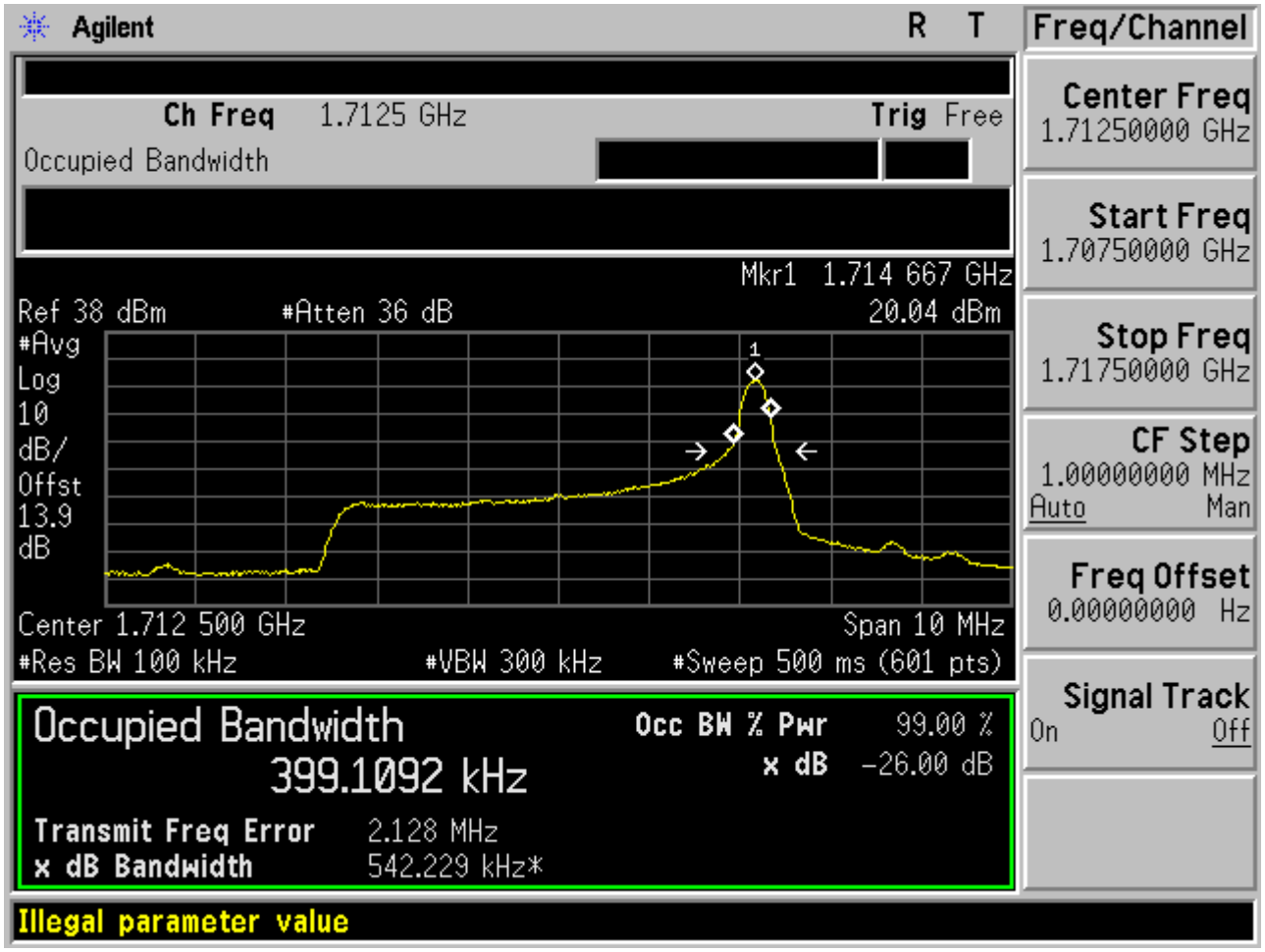
1.2.1 Channel Bandwidth = Lowest (5 MHz)

1.2.1.1 Channel = B

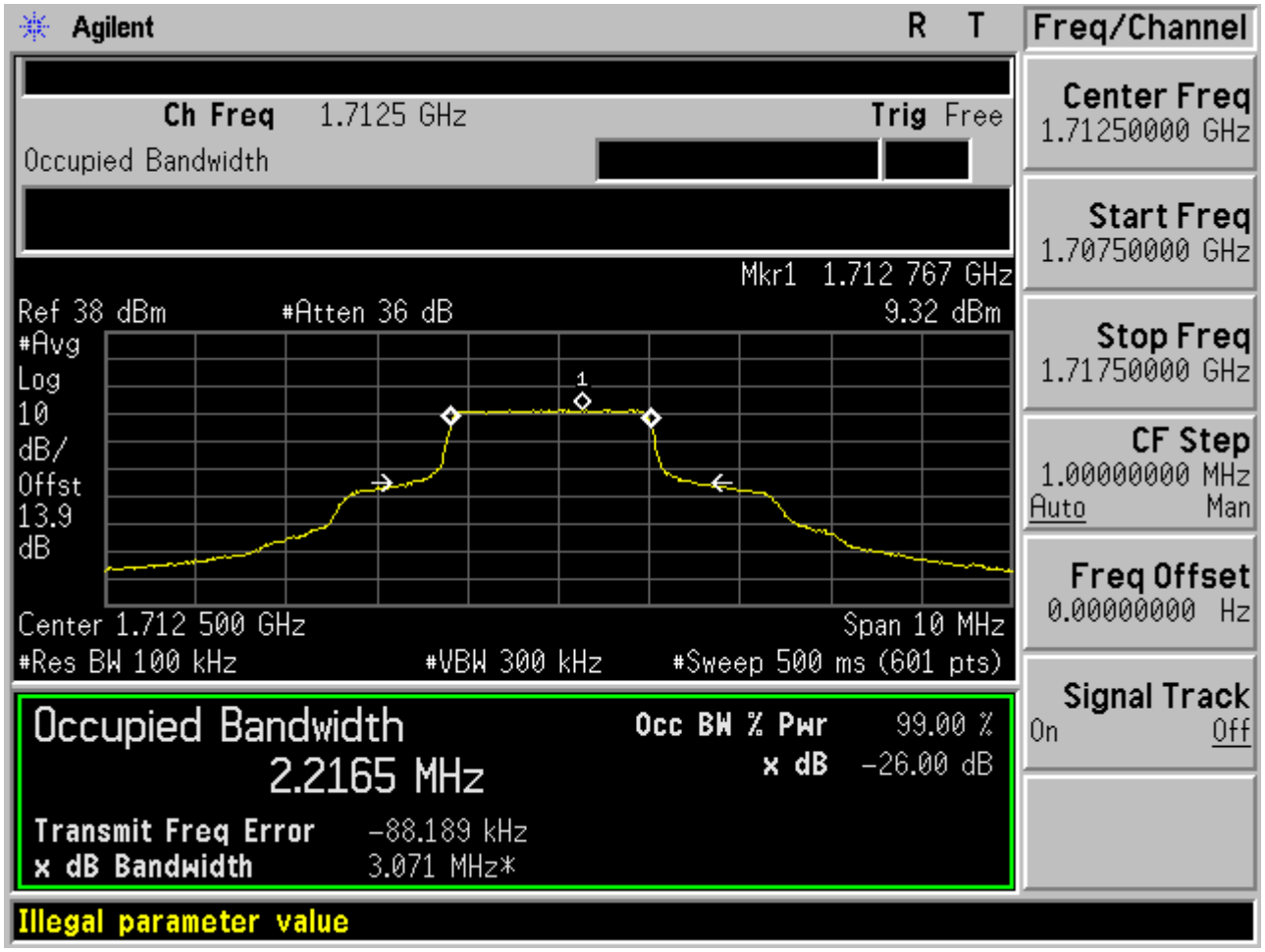
1.2.1.1.1 16QAM/1RB#0



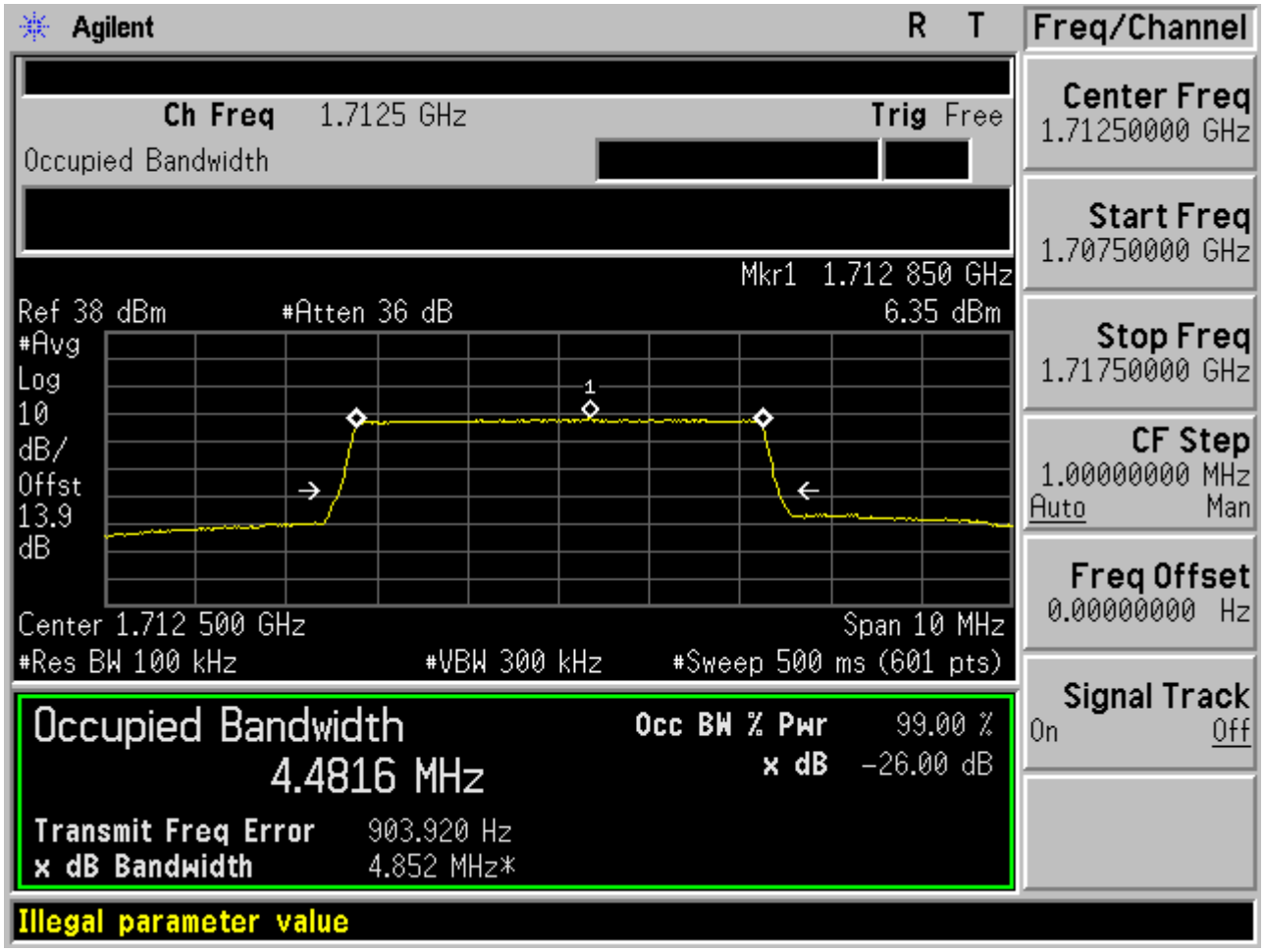
1.2.1.1.2 16QAM/1RB#max



1.2.1.1.3 16QAM/ Partial RBs /RB #6

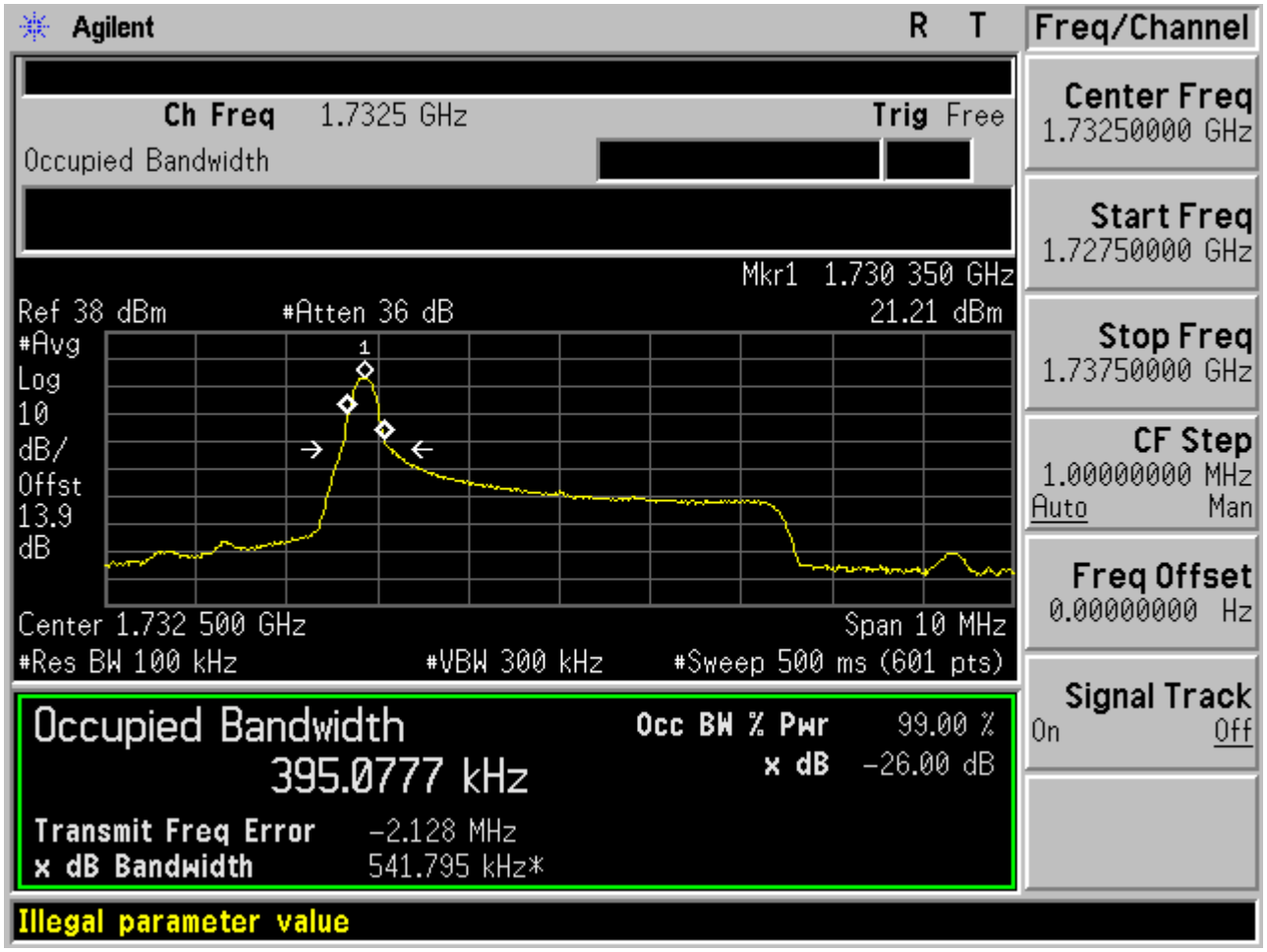


1.2.1.1.4 16QAM/full RBs

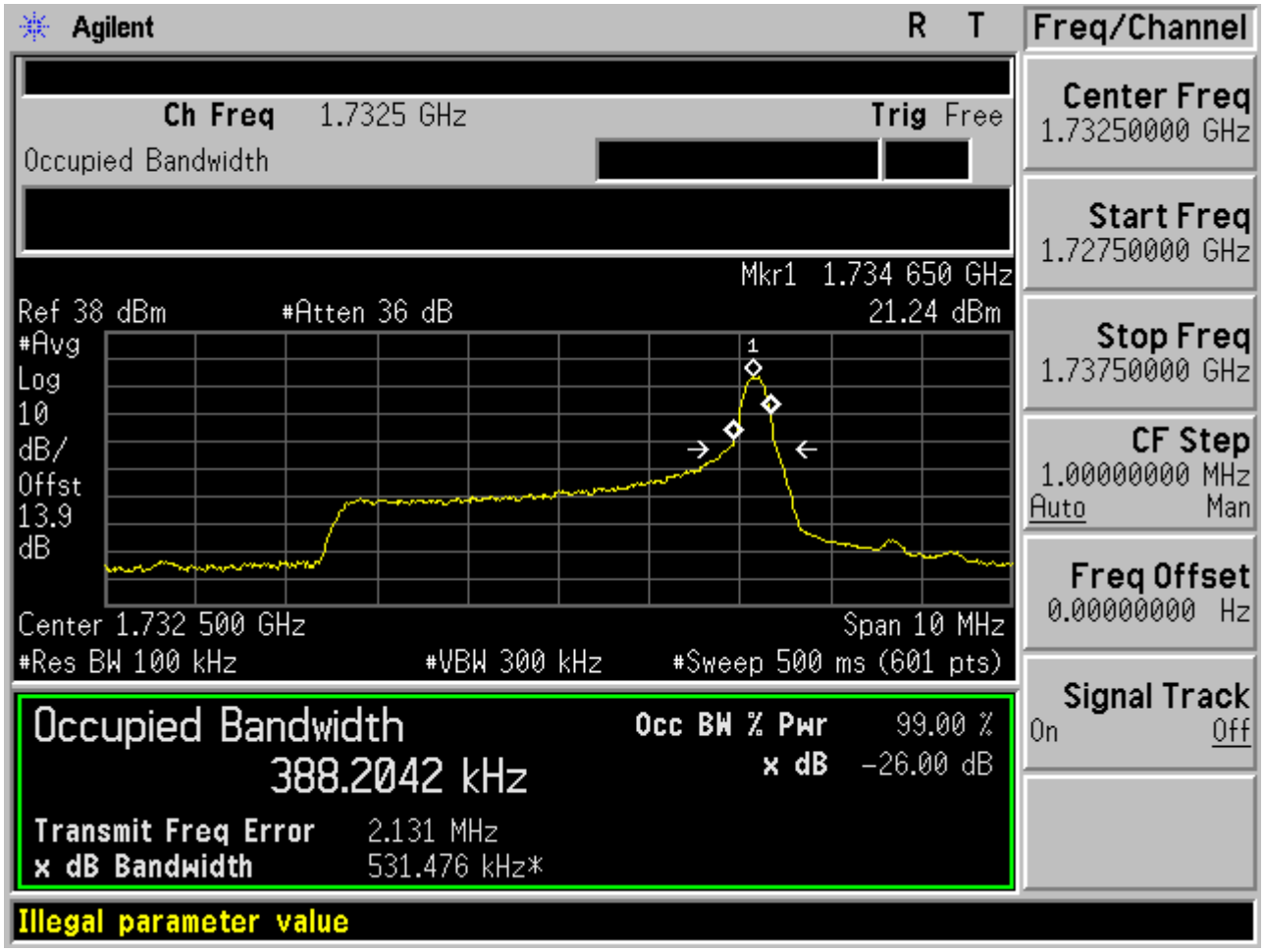


1.2.1.2 Channel =M

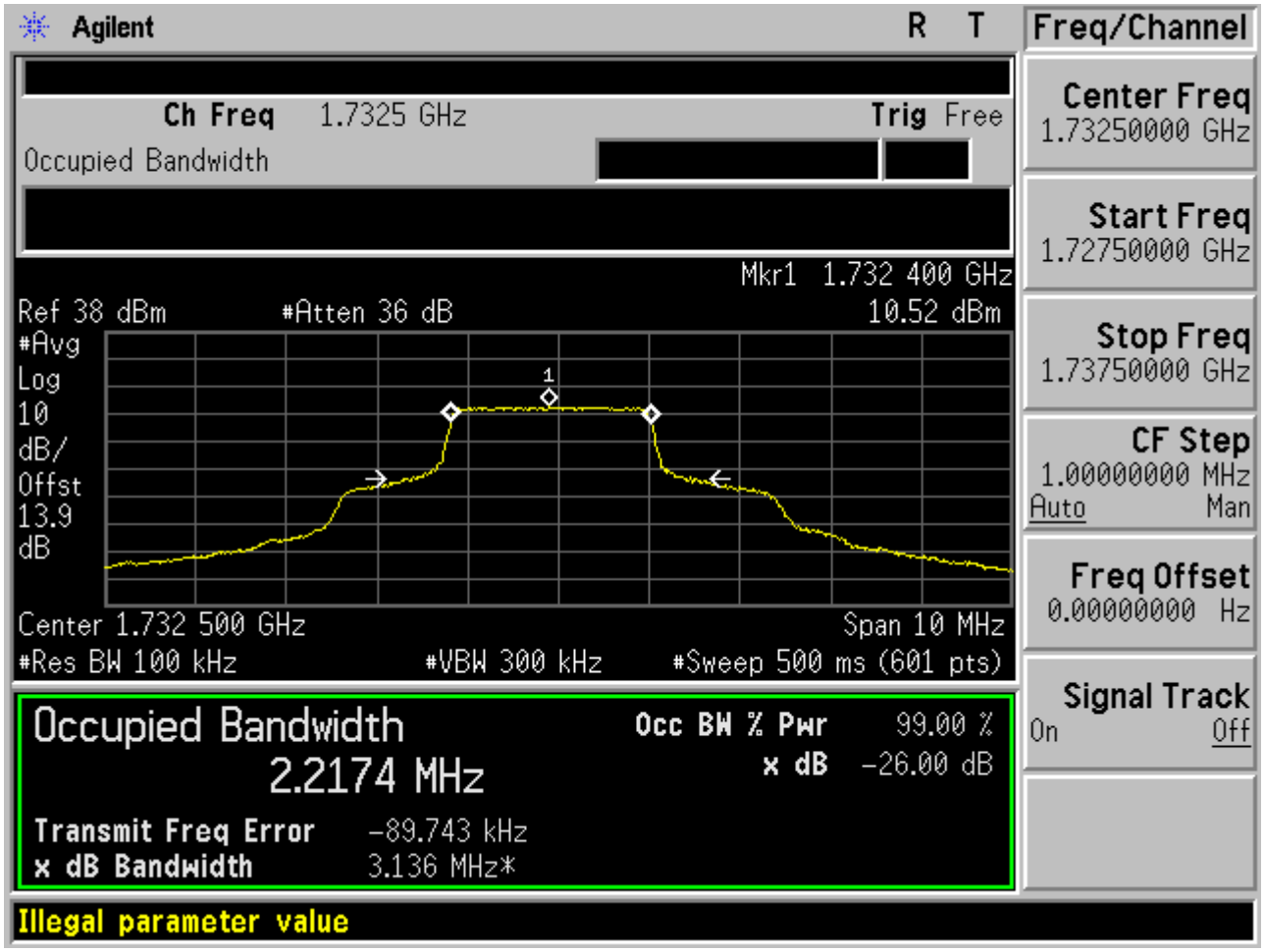
1.2.1.2.1 16QAM/1RB#0



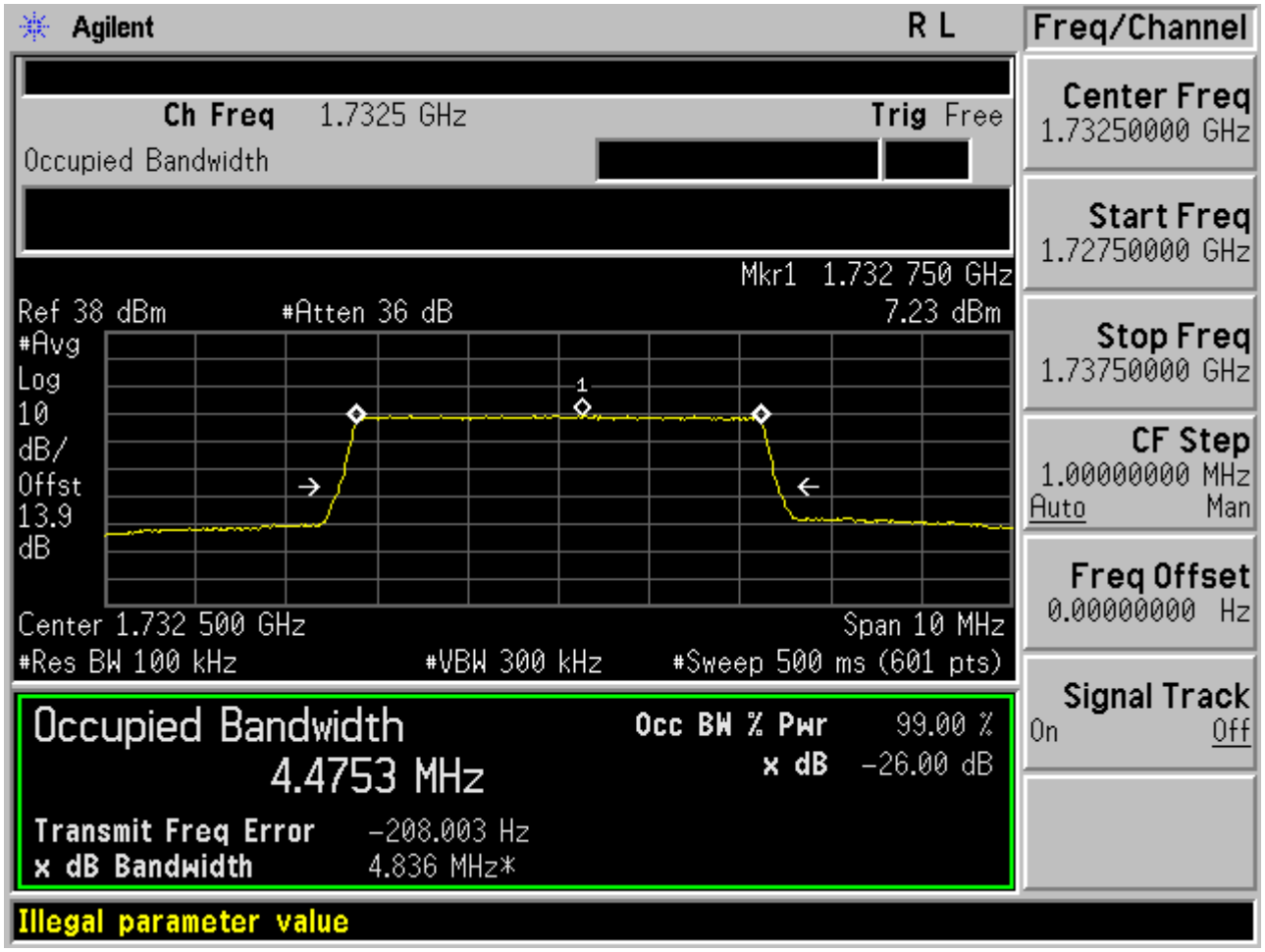
1.2.1.2.2 16QAM/1RB#max



1.2.1.2.3 16QAM/ Partial RBs /RB #6

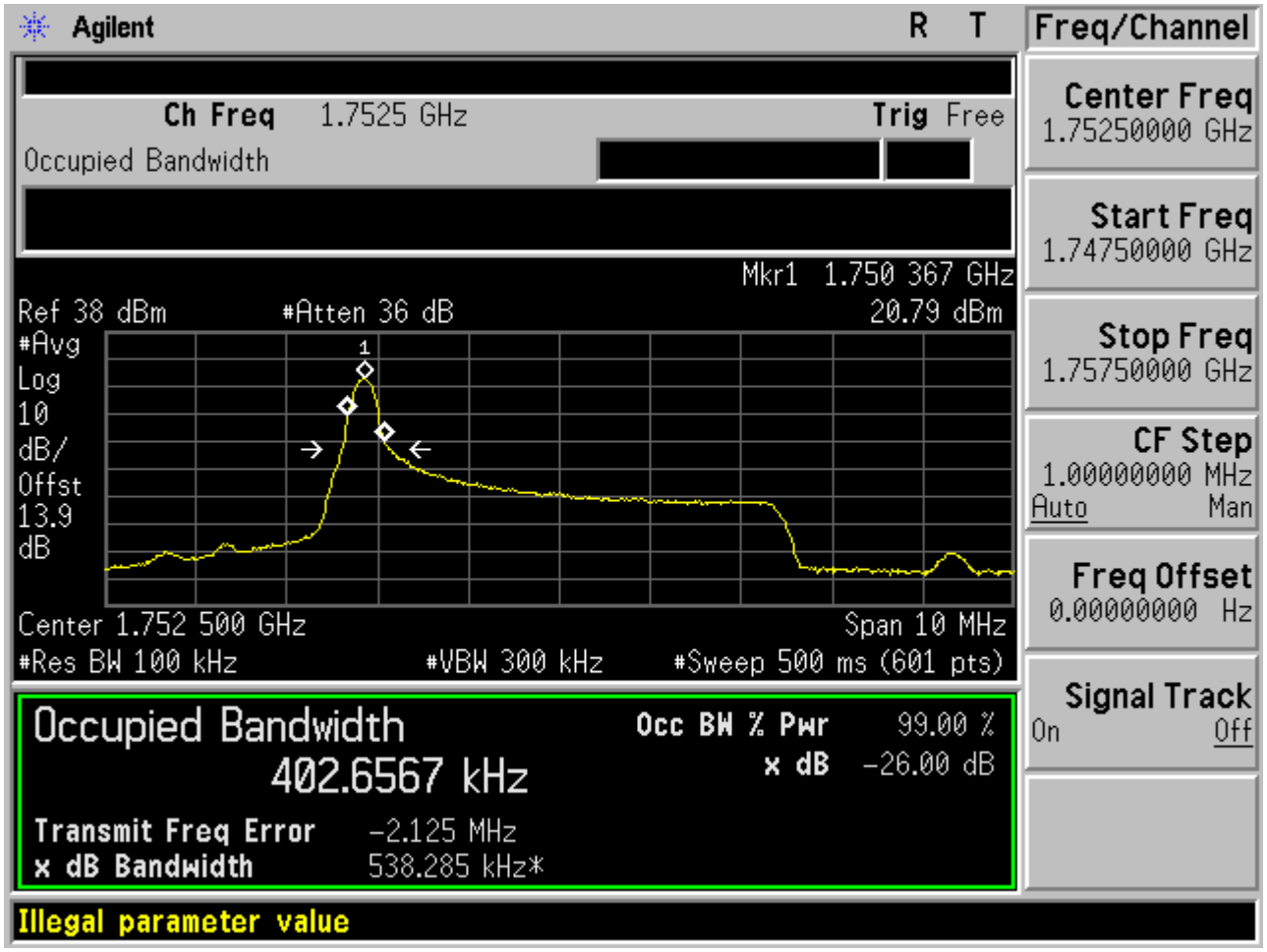


1.2.1.2.4 16QAM/full RBs

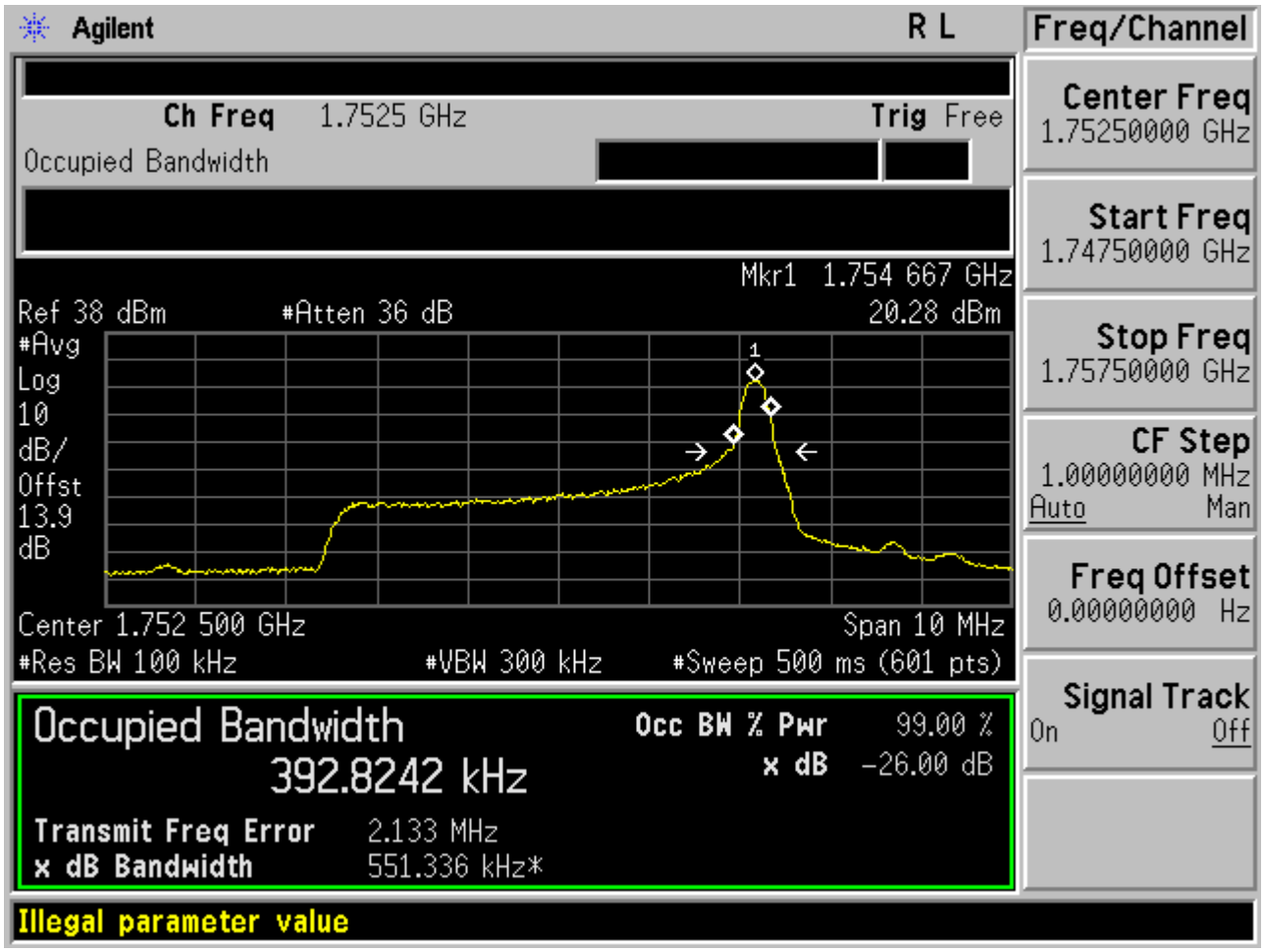


1.2.1.3 Channel =T

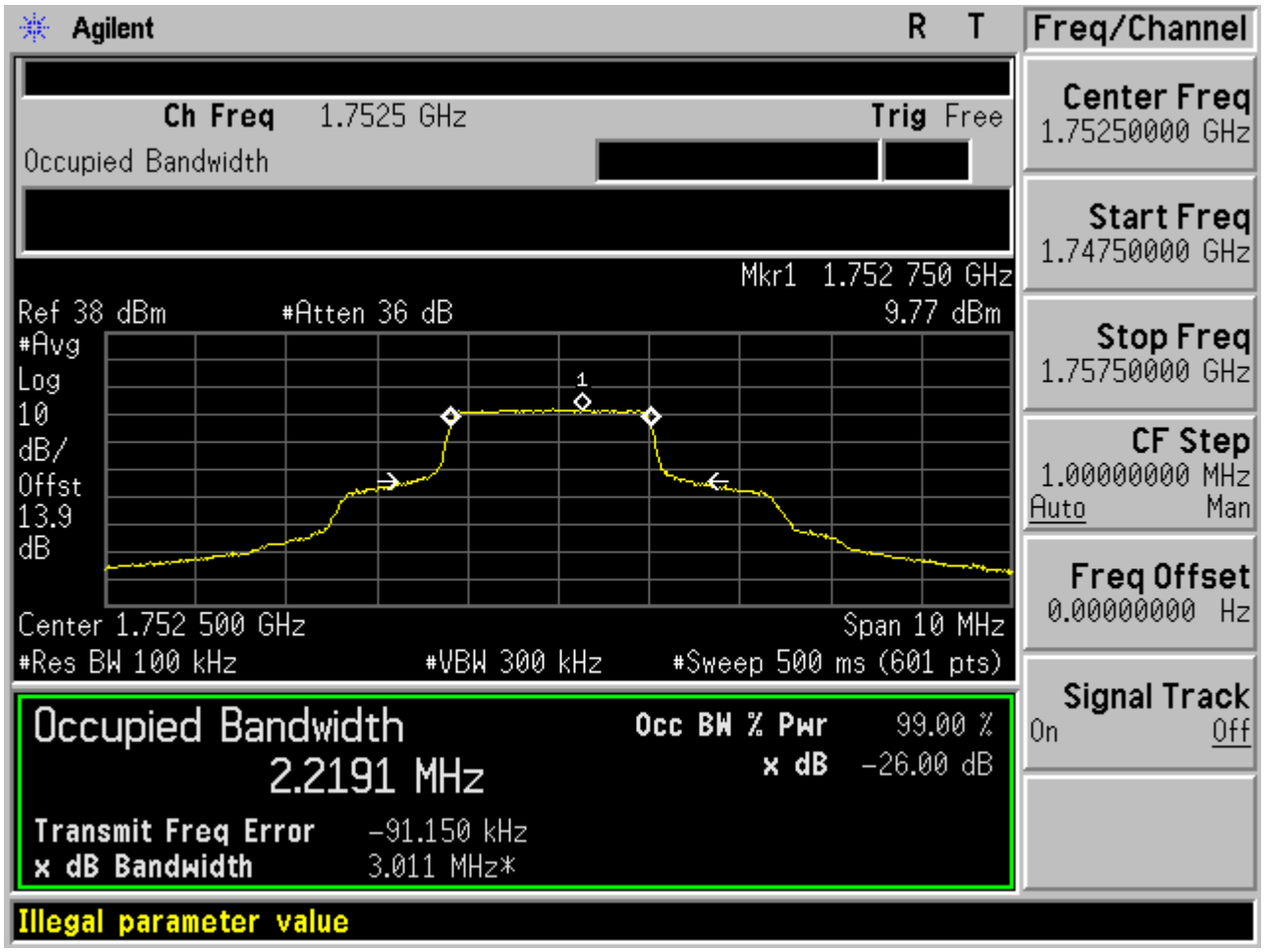
1.2.1.3.1 16QAM/1RB#0



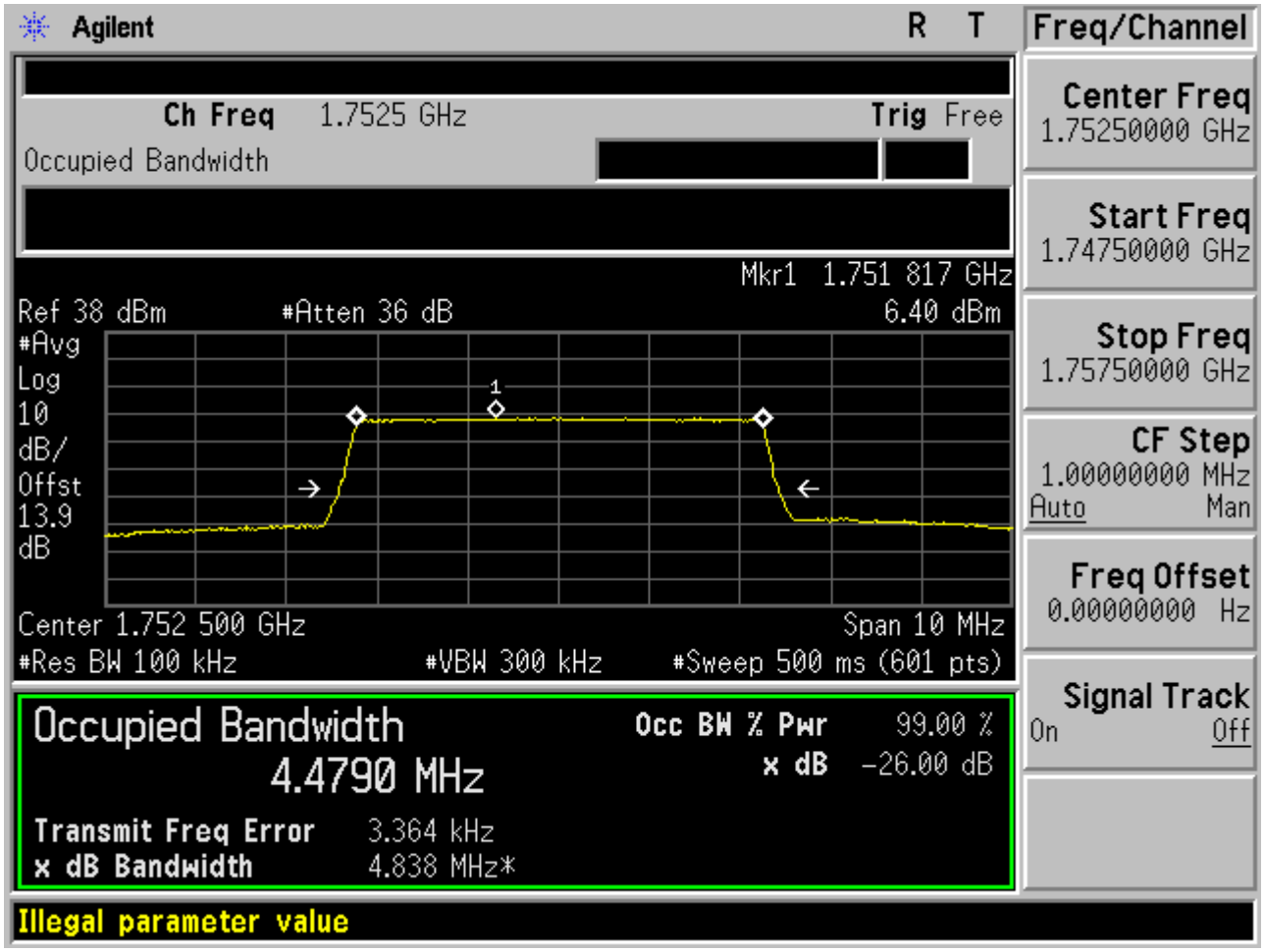
1.2.1.3.2 16QAM/1RB#max



1.2.1.3.3 16QAM/ Partial RBs /RB #6



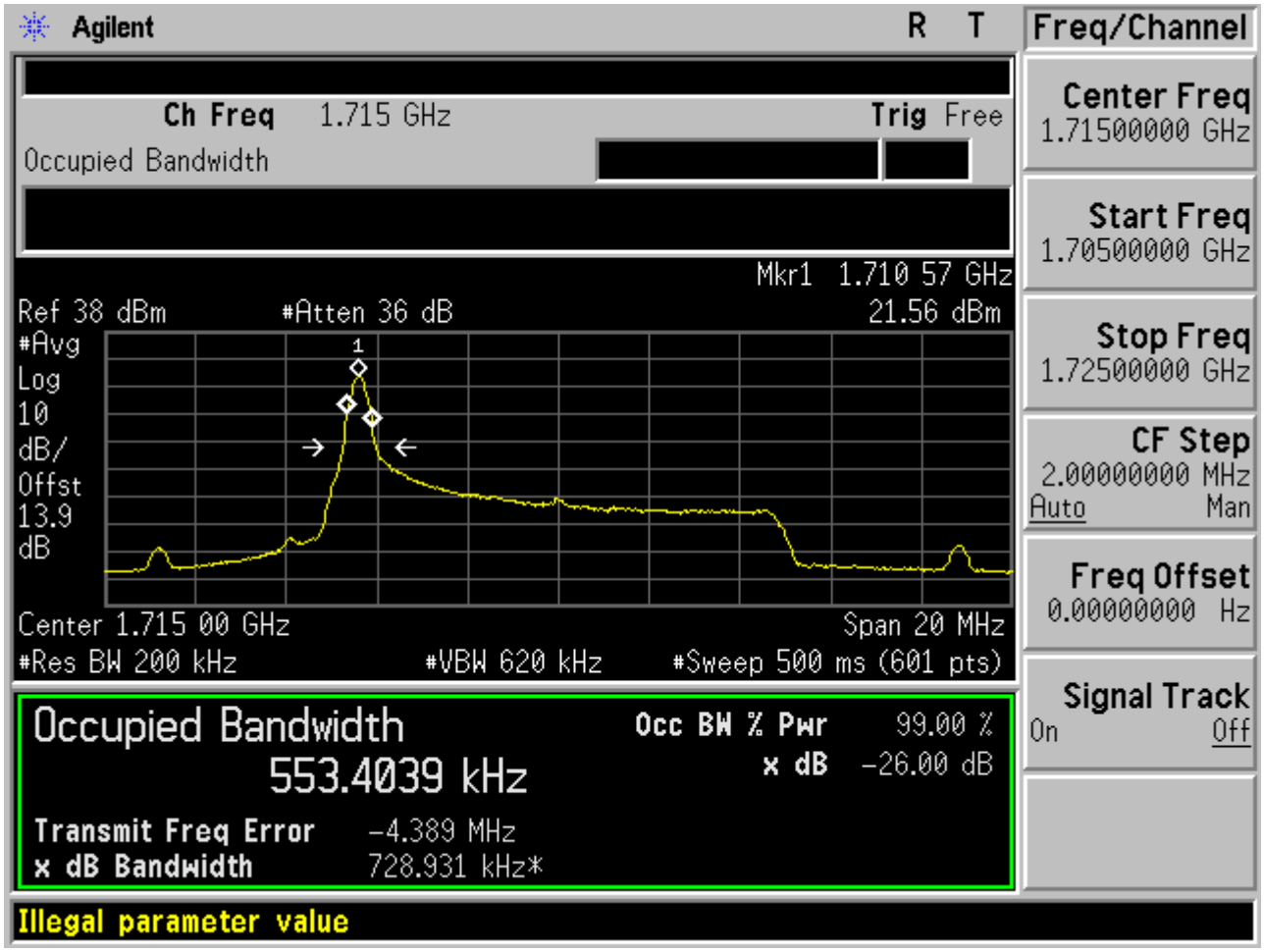
1.2.1.3.4 16QAM/full RBs



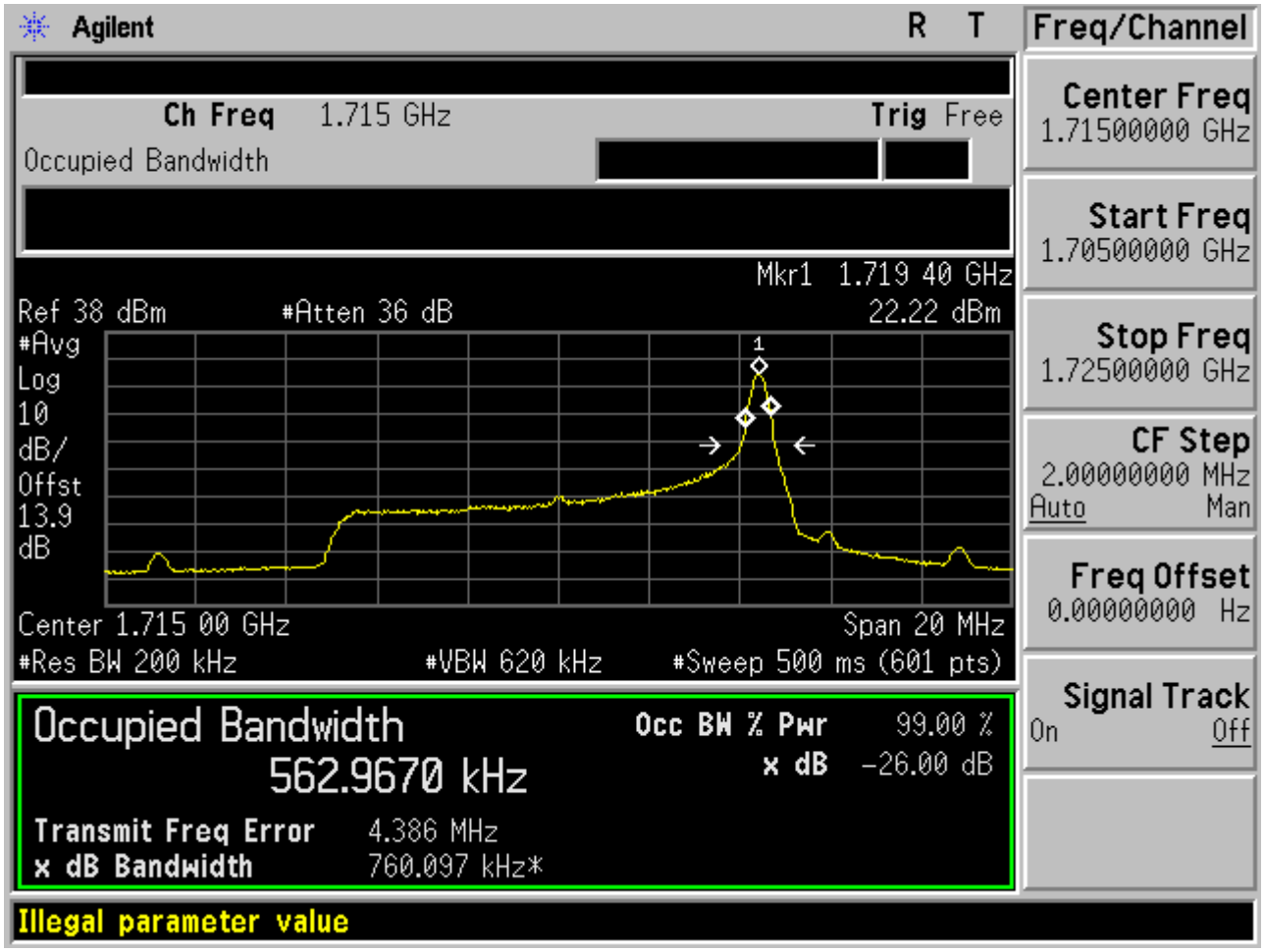
1.2.2 Channel Bandwidth = 10 MHz

1.2.2.1 Channel = B

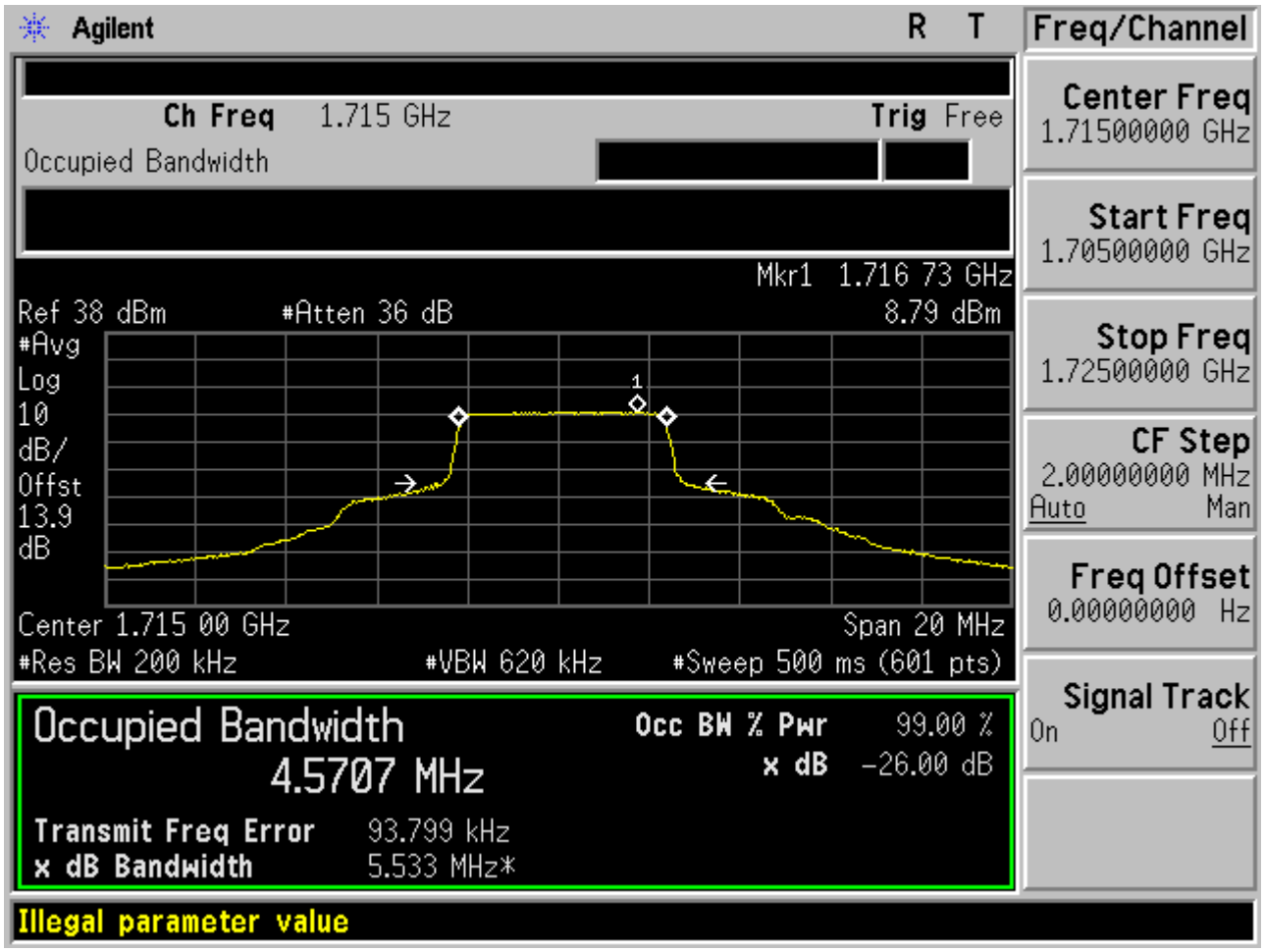
1.2.2.1.1 16QAM/1RB#0



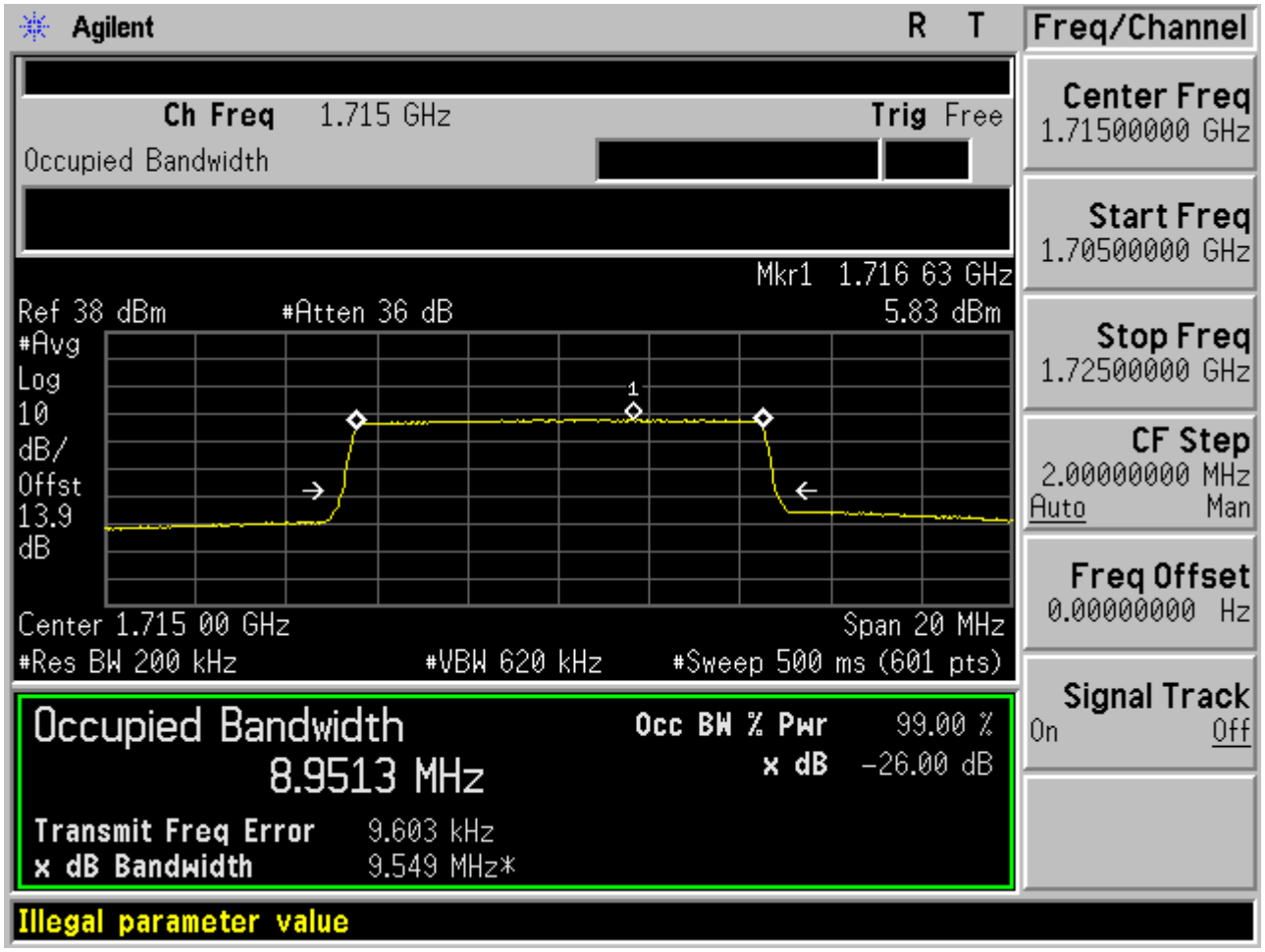
1.2.2.1.2 16QAM/1RB#max



1.2.2.1.3 16QAM/ Partial RBs /RB #13

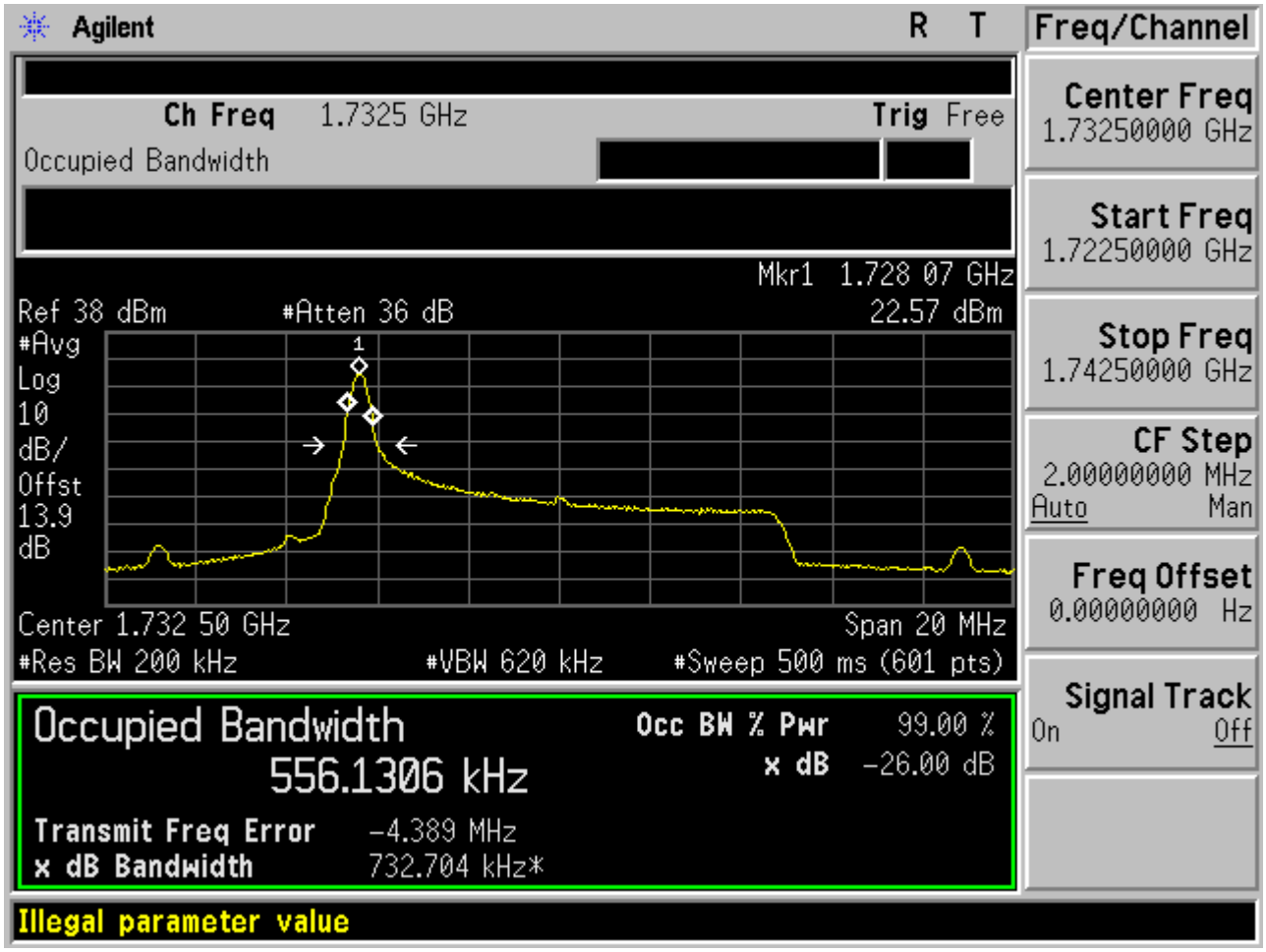


1.2.2.1.4 16QAM/full RBs

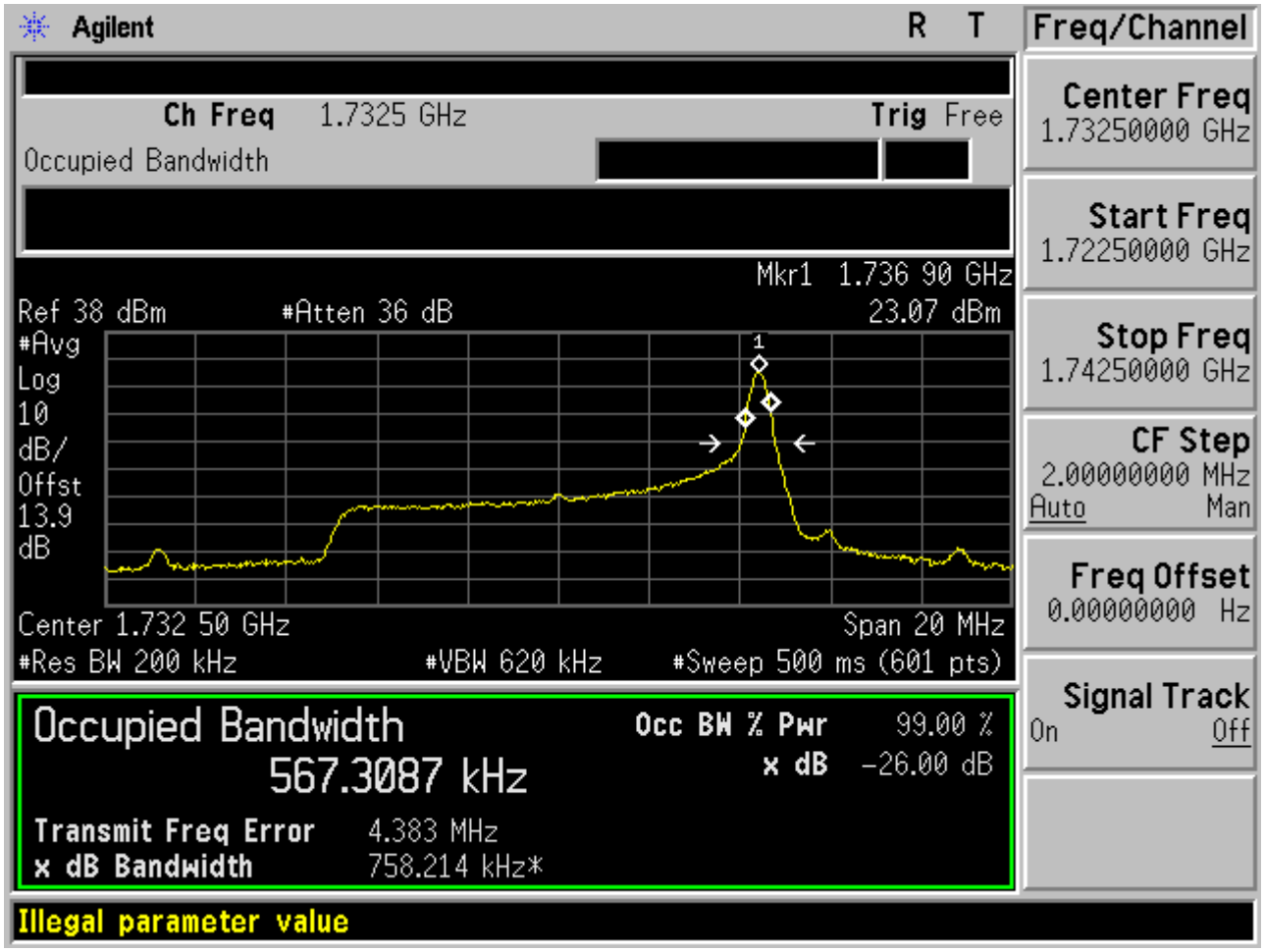


1.2.2.2 Channel =M

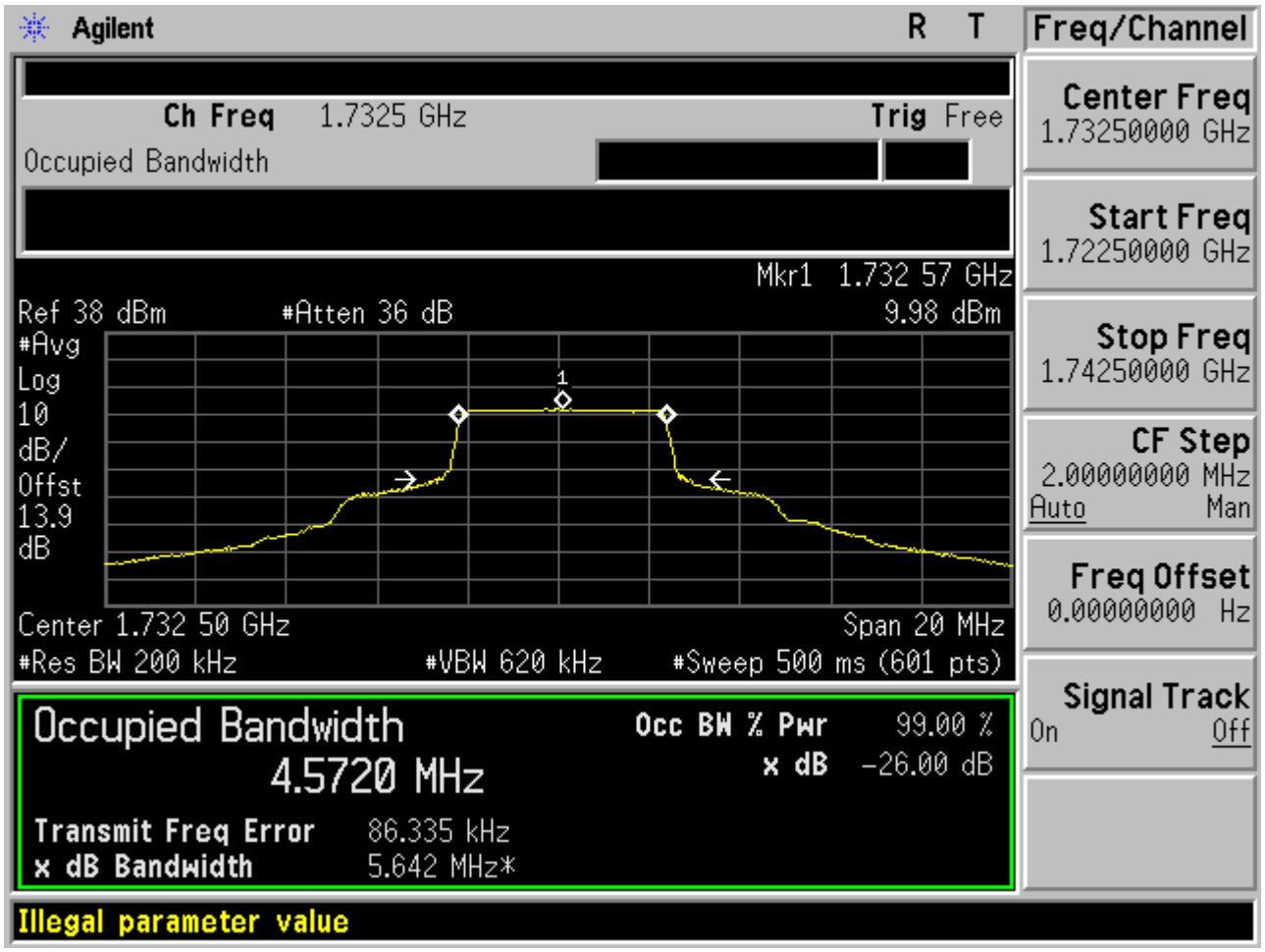
1.2.2.2.1 16QAM/1RB#0



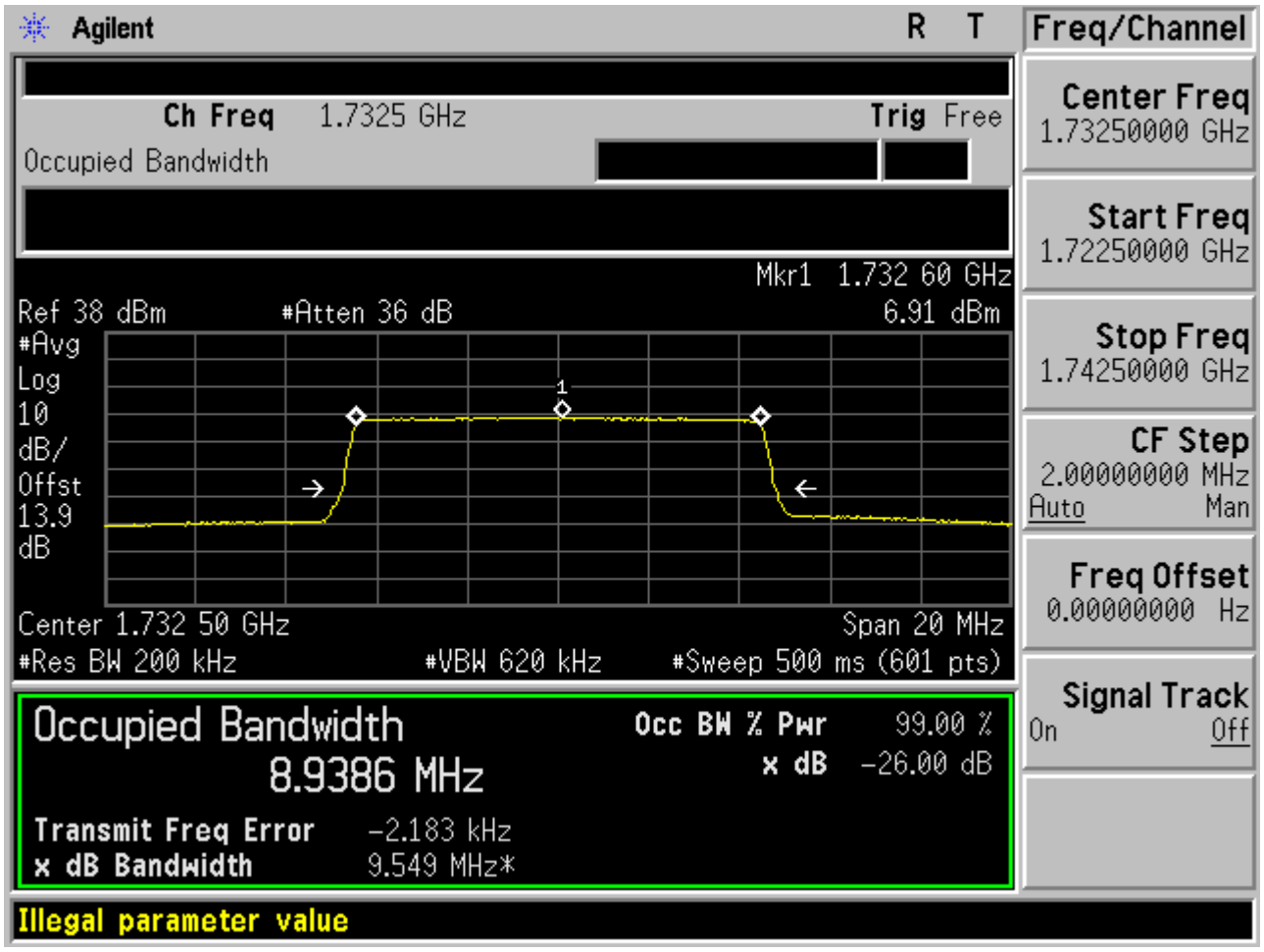
1.2.2.2.2 16QAM/1RB#max



1.2.2.2.3 16QAM/ Partial RBs /RB #13

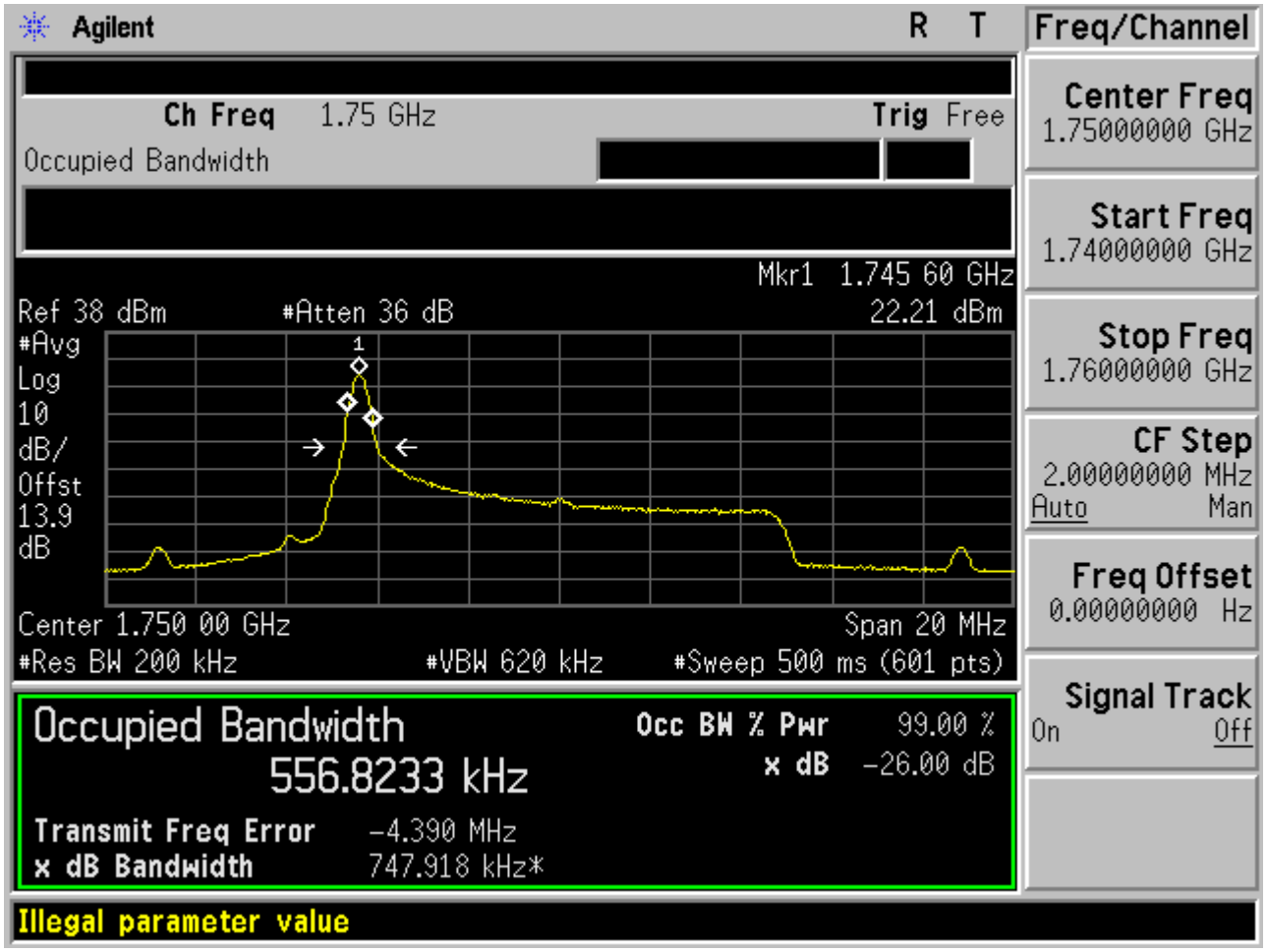


1.2.2.2.4 16QAM/full RBs

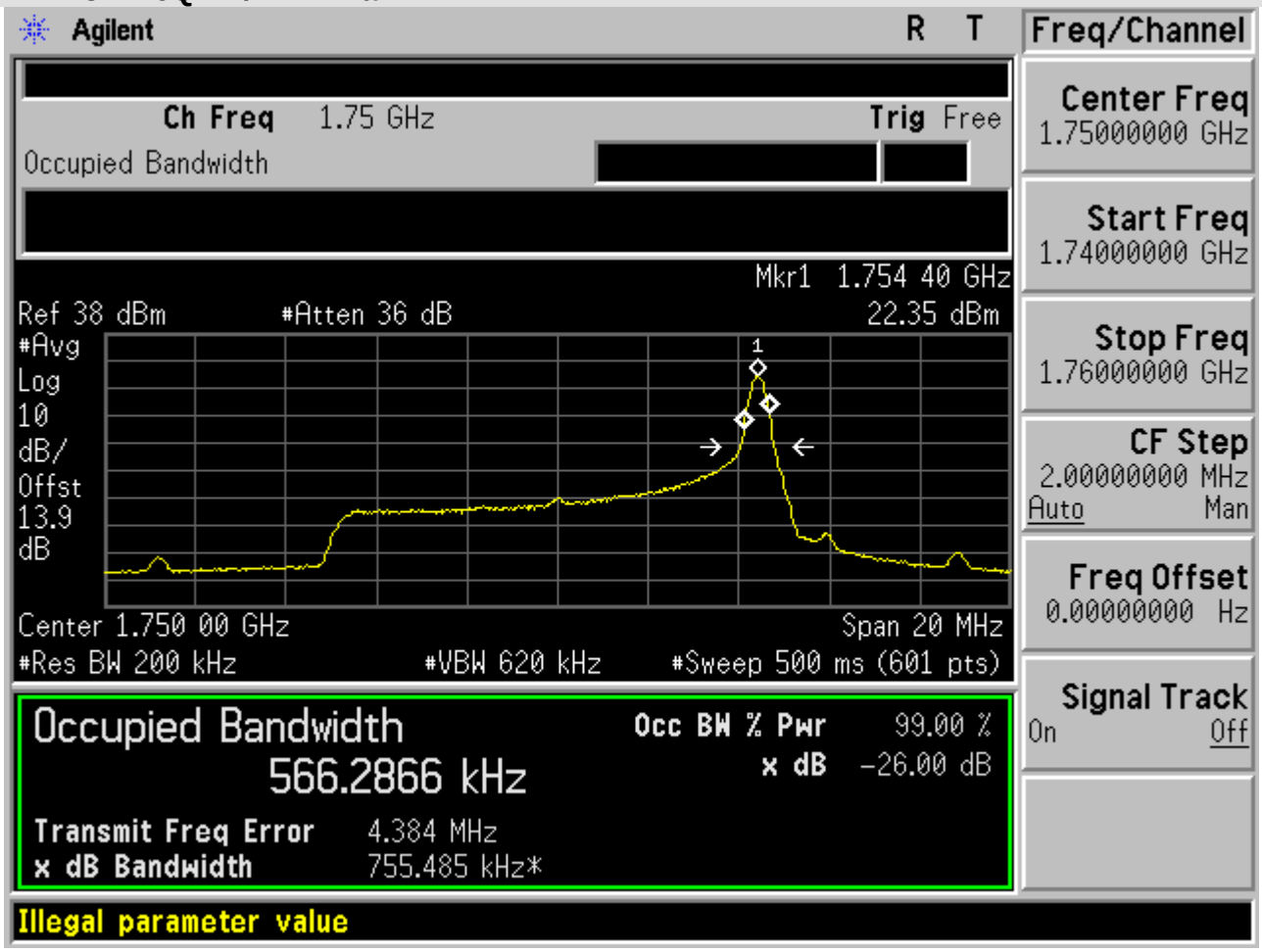


1.2.2.3 Channel =T

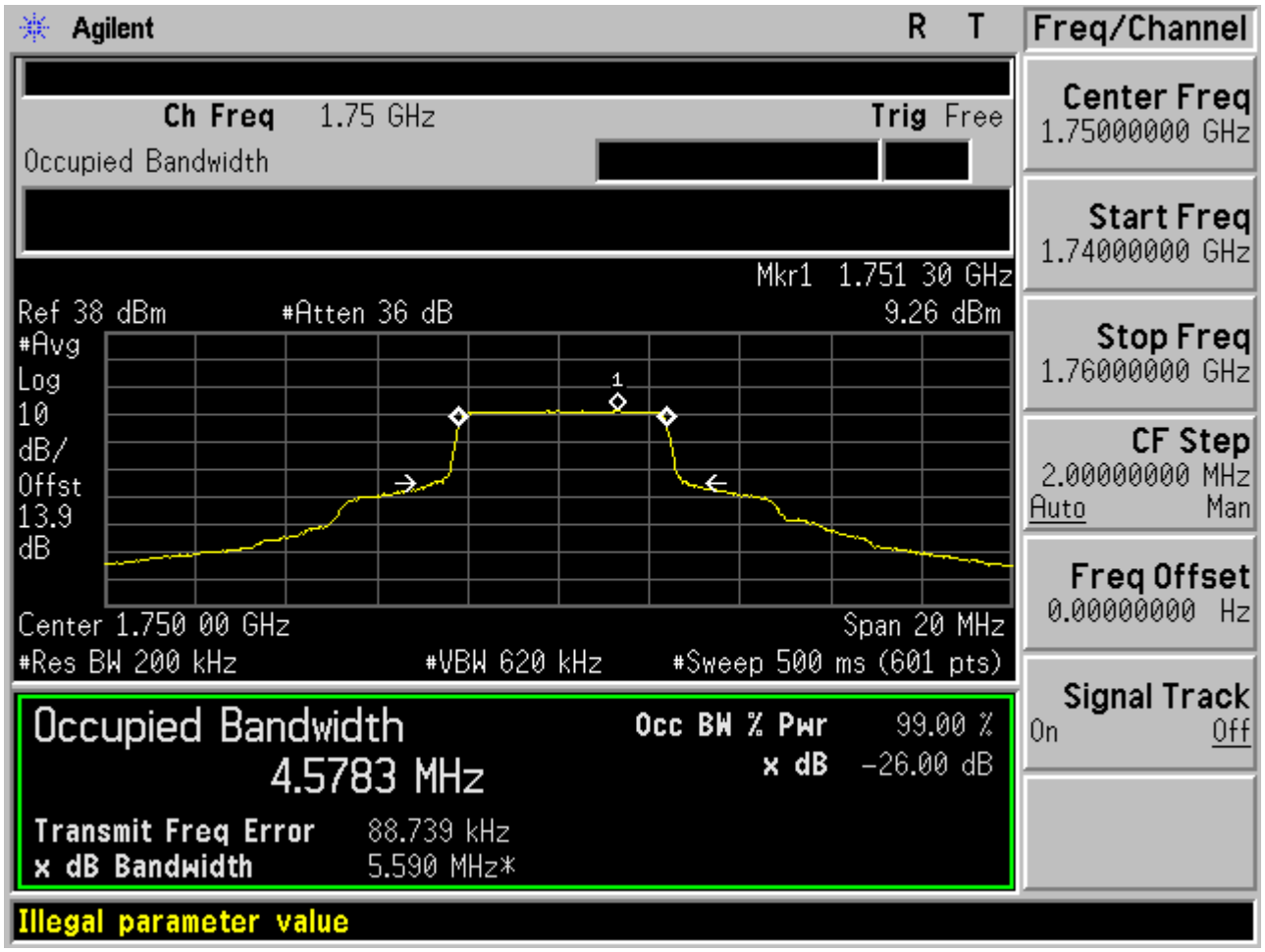
1.2.2.3.1 16QAM/1RB#0



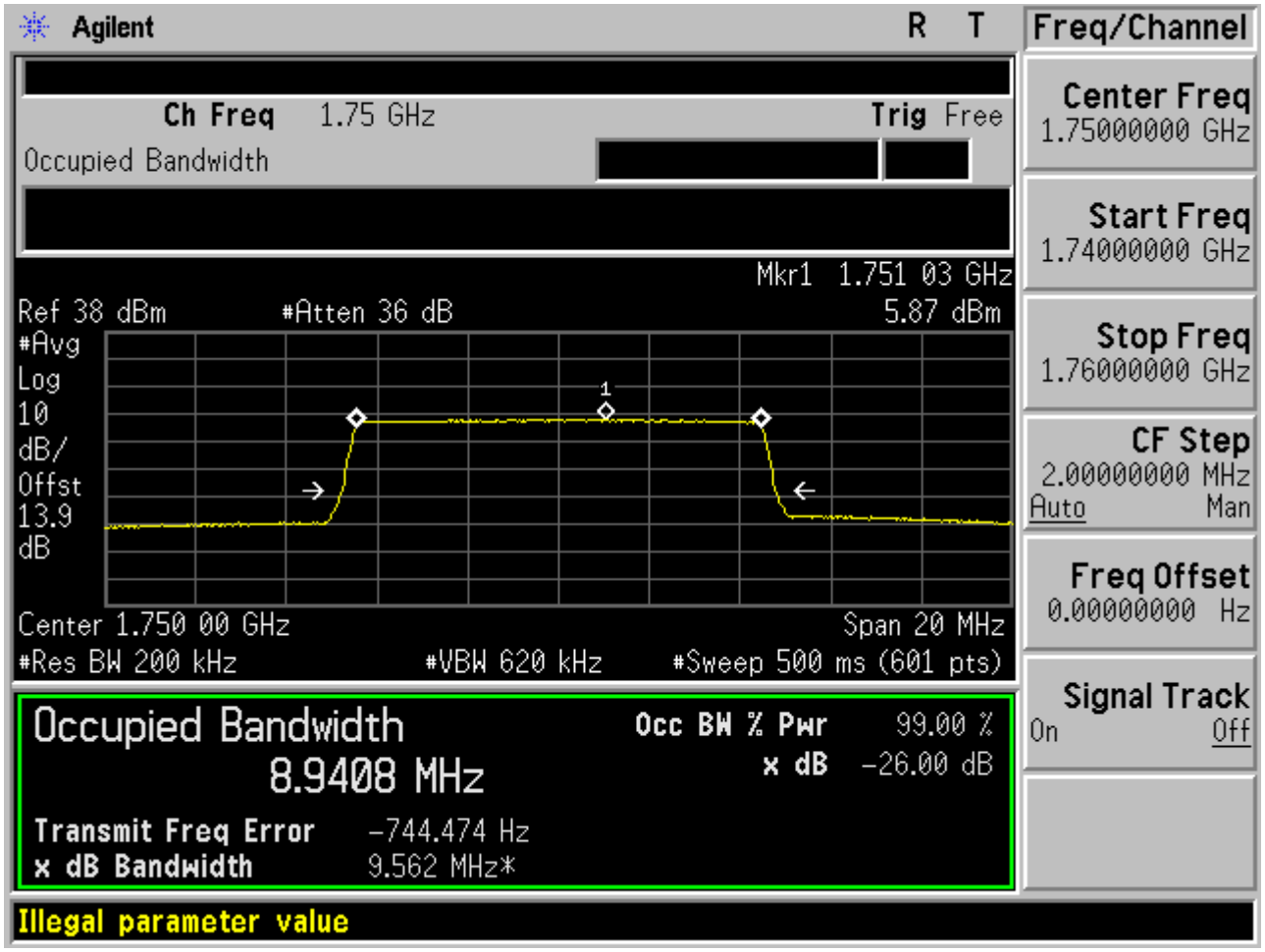
1.2.2.3.2 16QAM/1RB#max



1.2.2.3.3 16QAM/ Partial RBs /RB #13



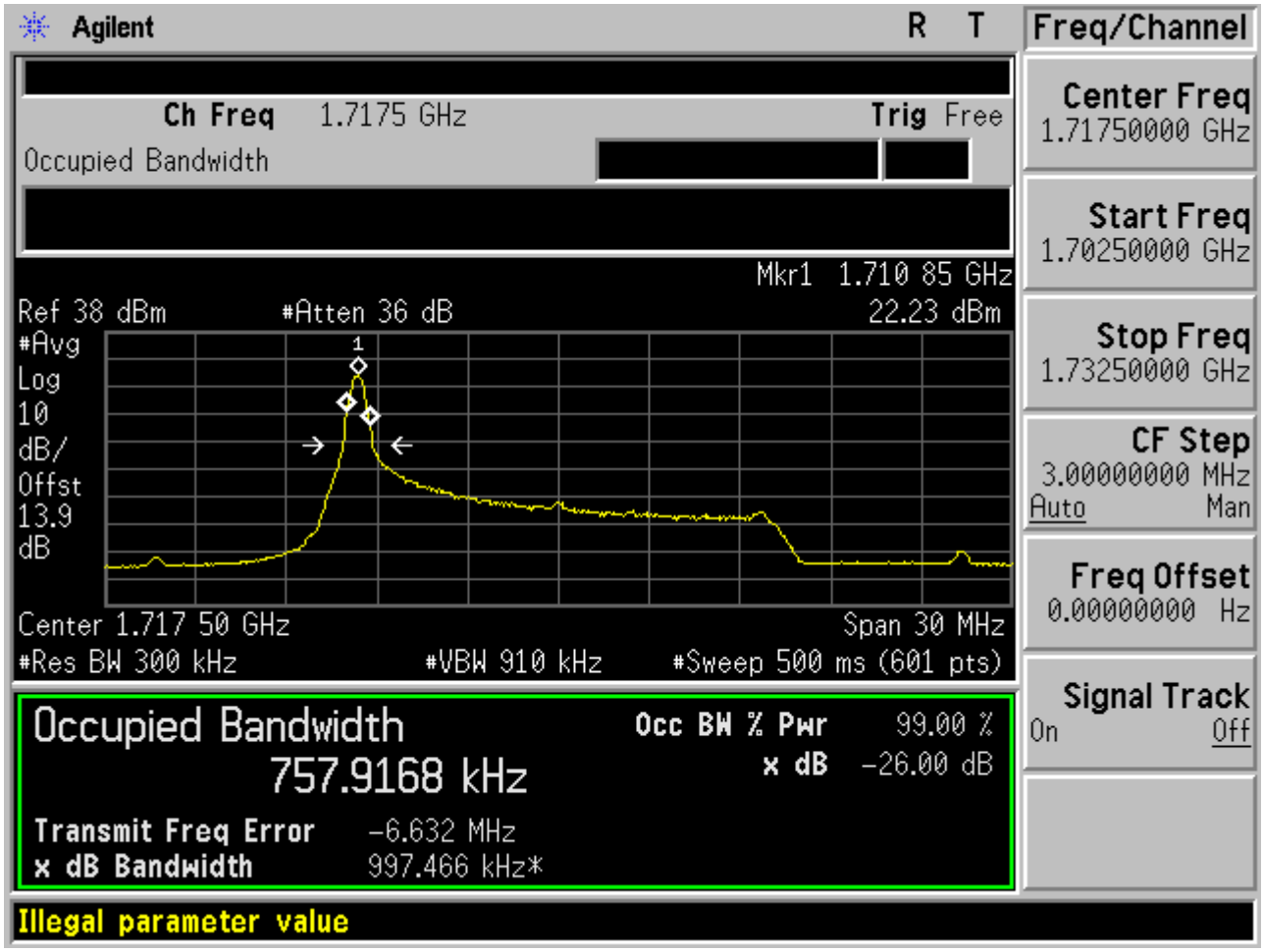
1.2.2.3.4 16QAM/full RBs



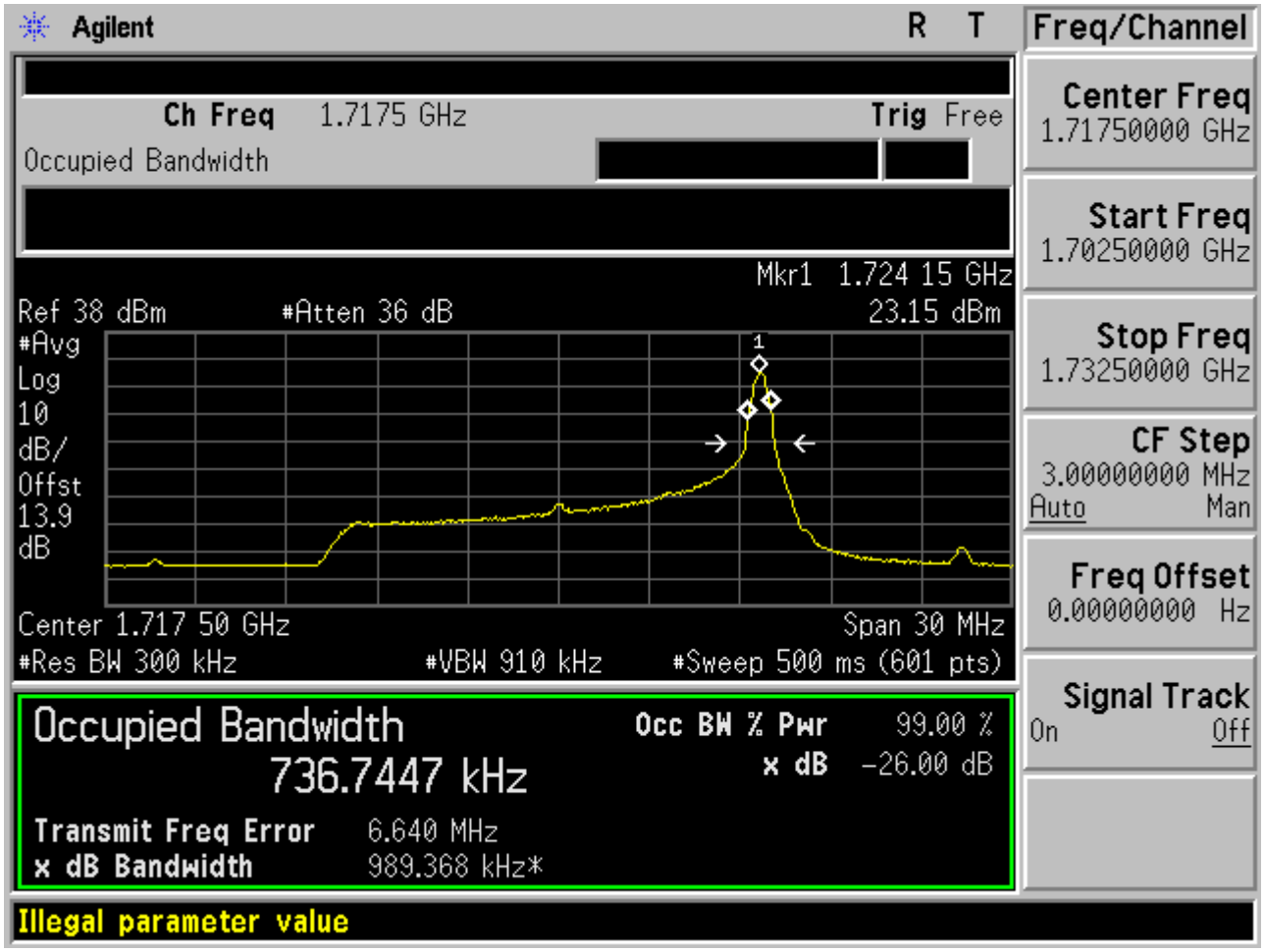
1.2.3 Channel Bandwidth = 15 MHz

1.2.3.1 Channel = B

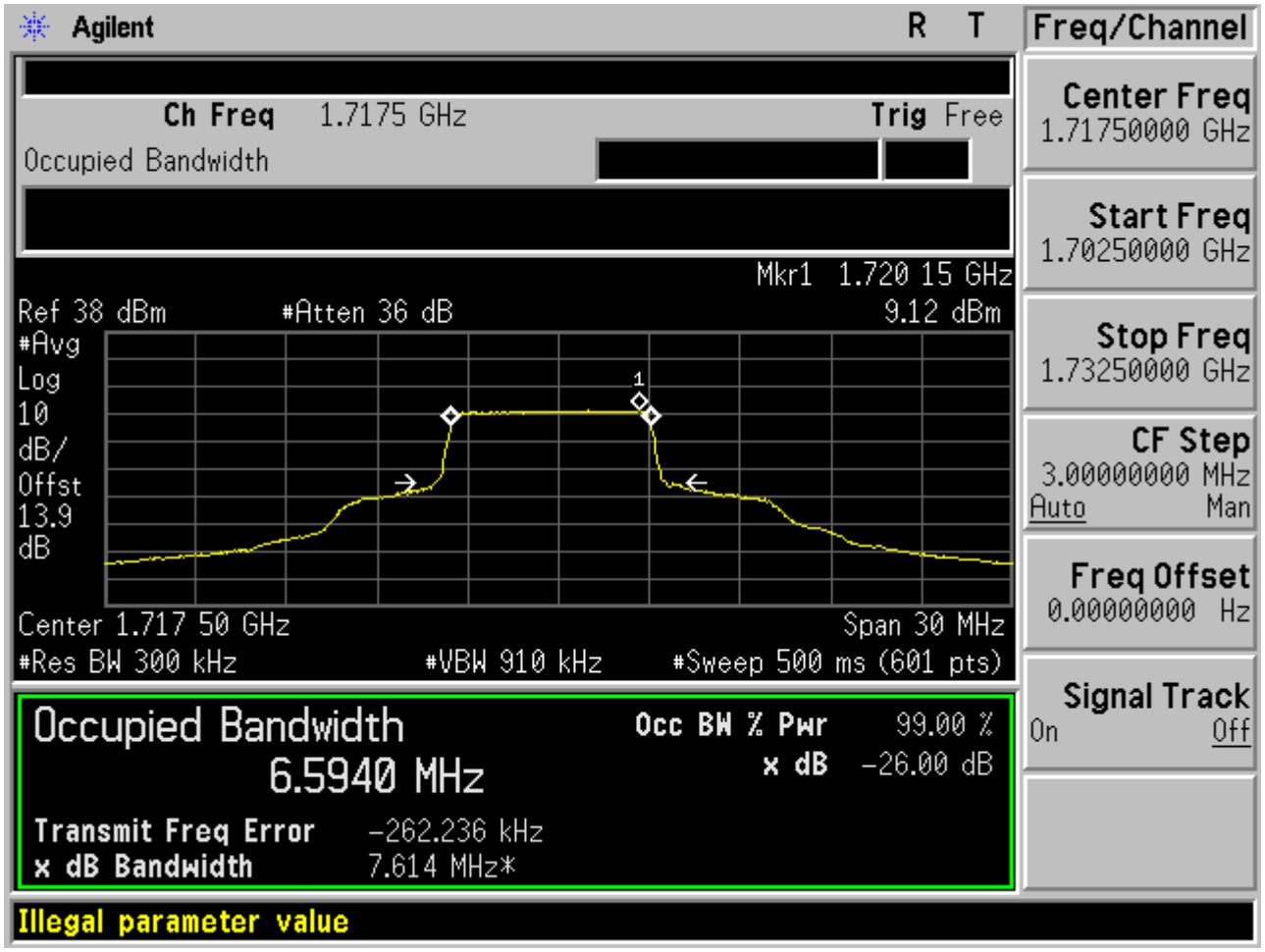
1.2.3.1.1 16QAM/1RB#0



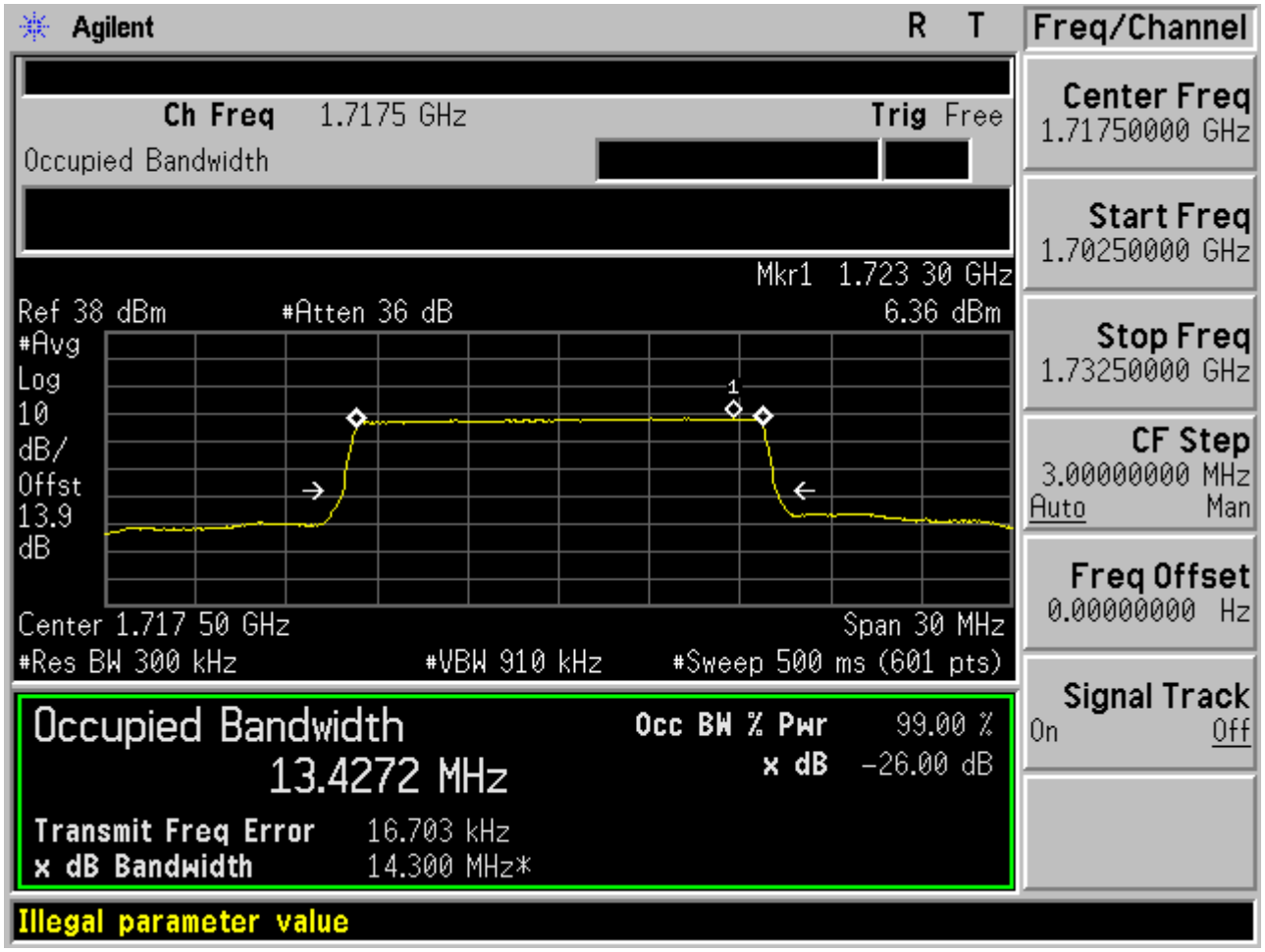
1.2.3.1.2 16QAM/1RB#max



1.2.3.1.3 16QAM/ Partial RBs /RB #18

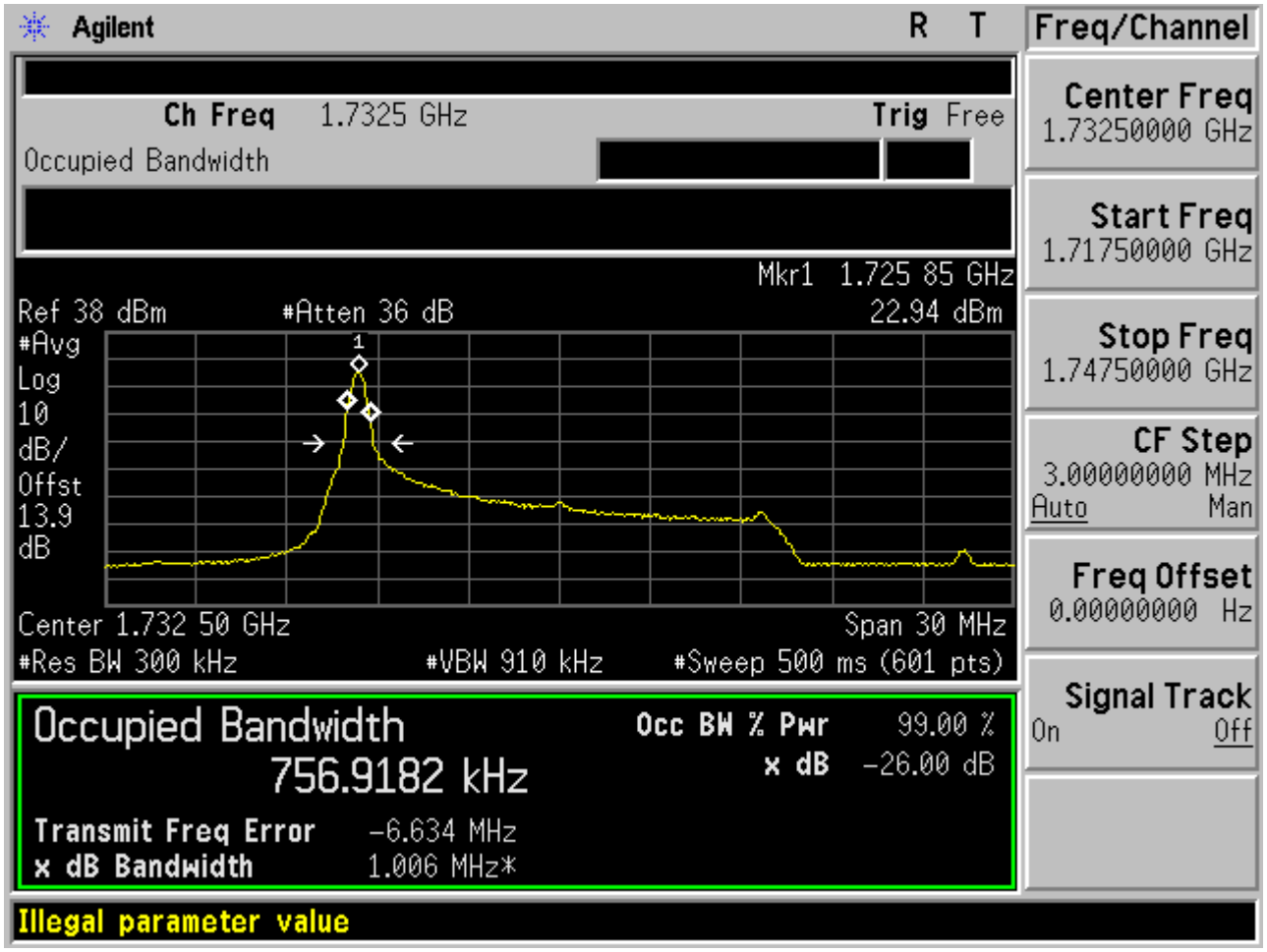


1.2.3.1.4 16QAM/full RBs

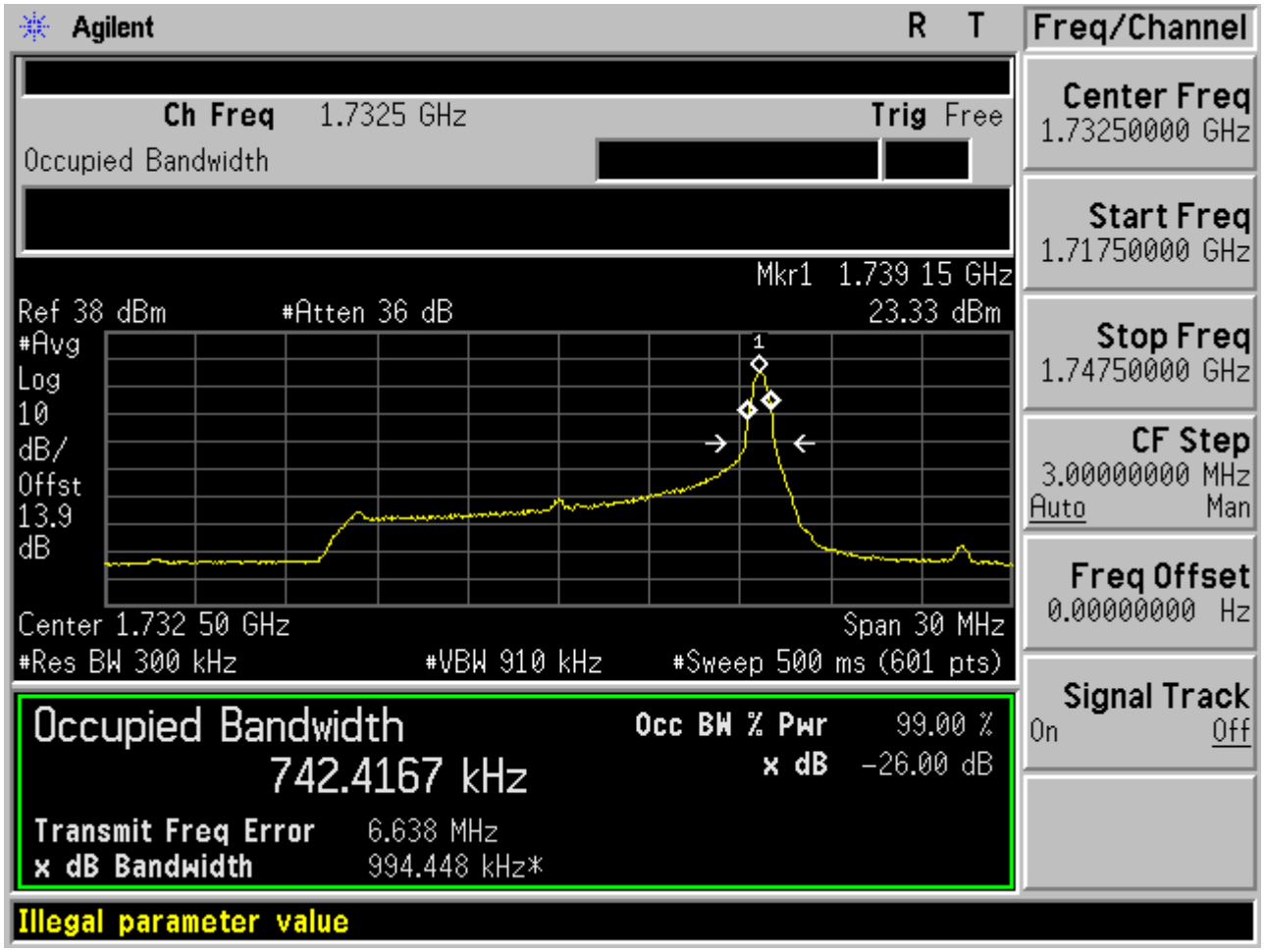


1.2.3.2 Channel =M

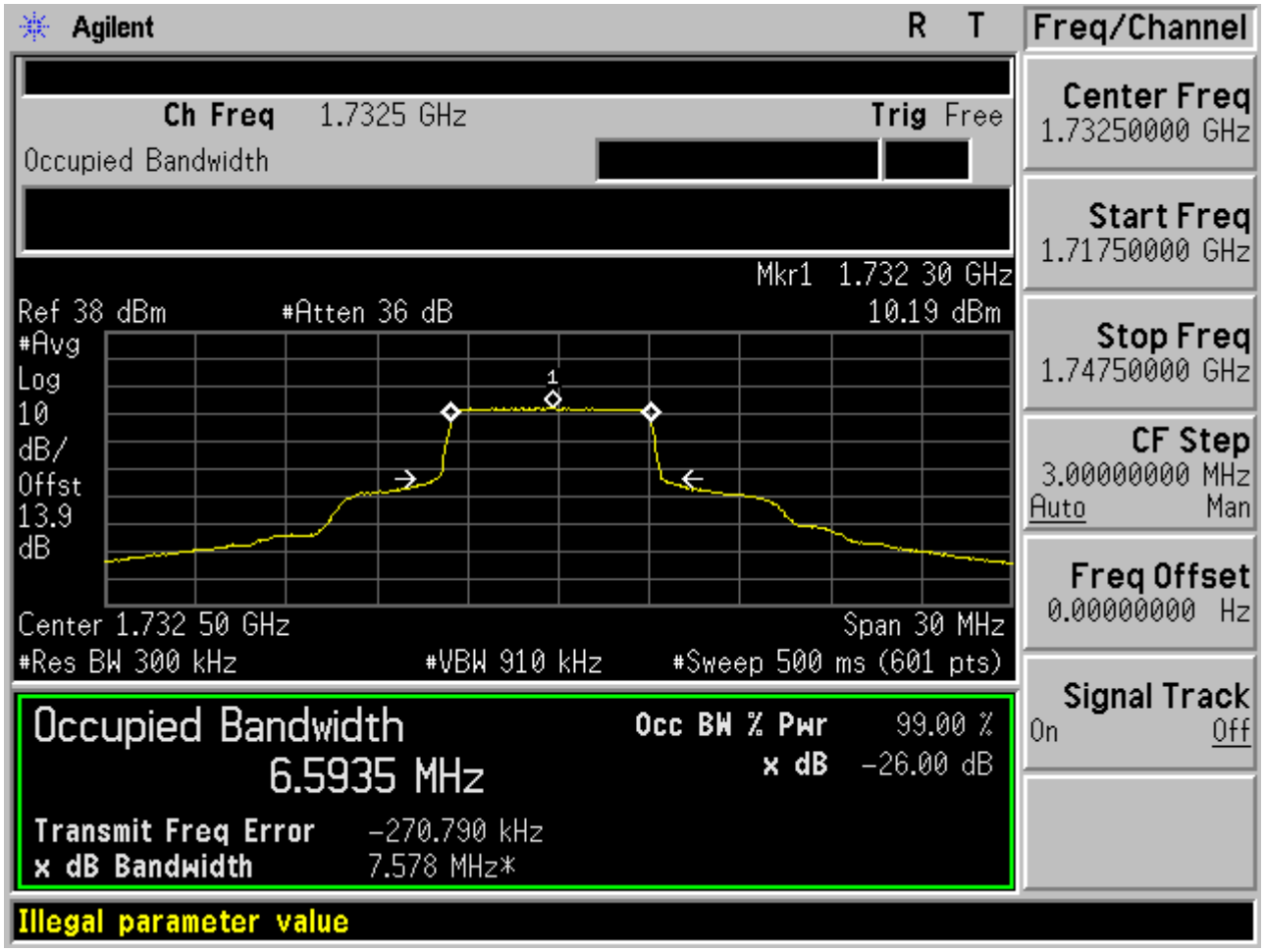
1.2.3.2.1 16QAM/1RB#0



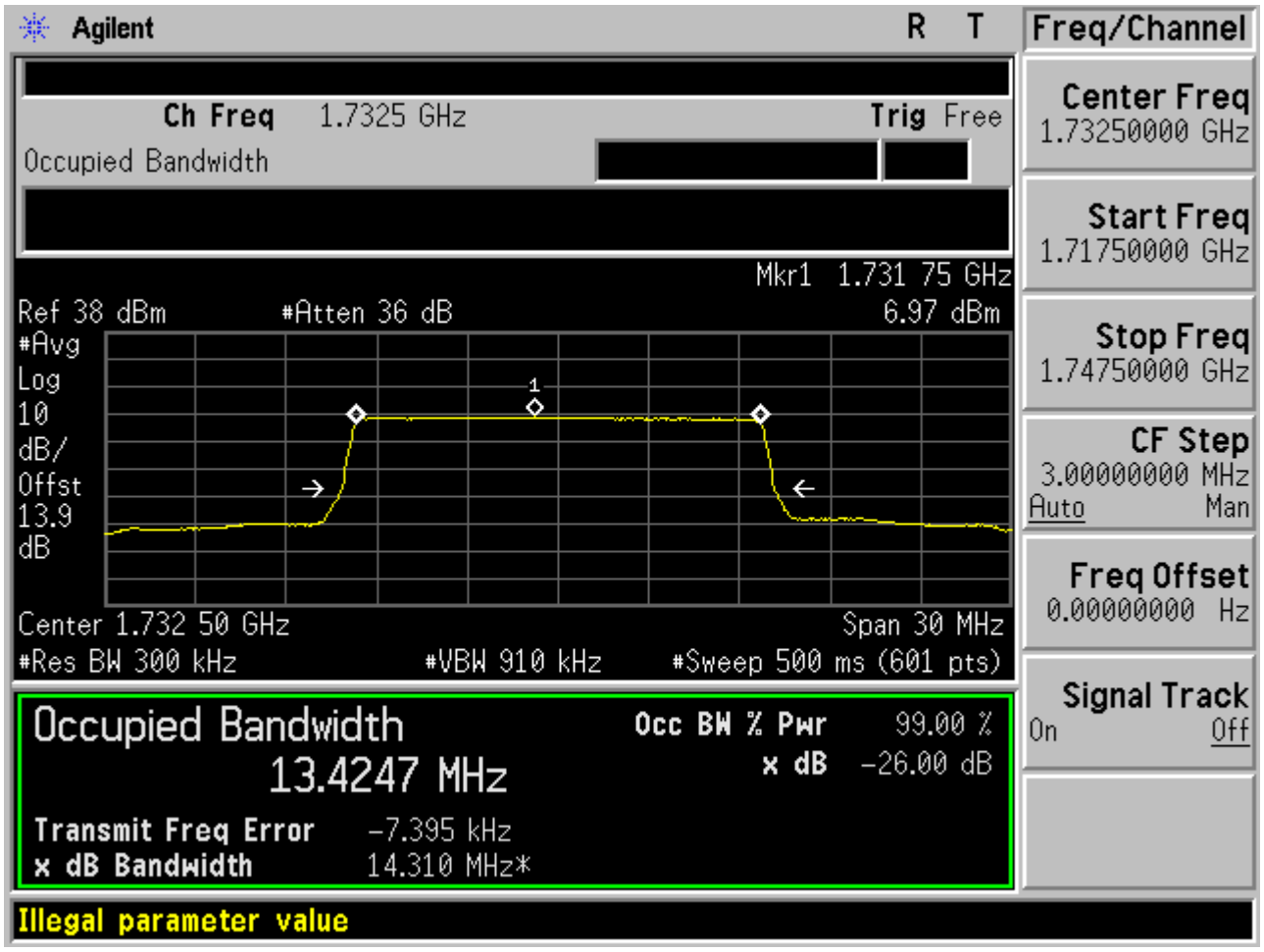
1.2.3.2.2 16QAM/1RB#max



1.2.3.2.3 16QAM/ Partial RBs /RB #18

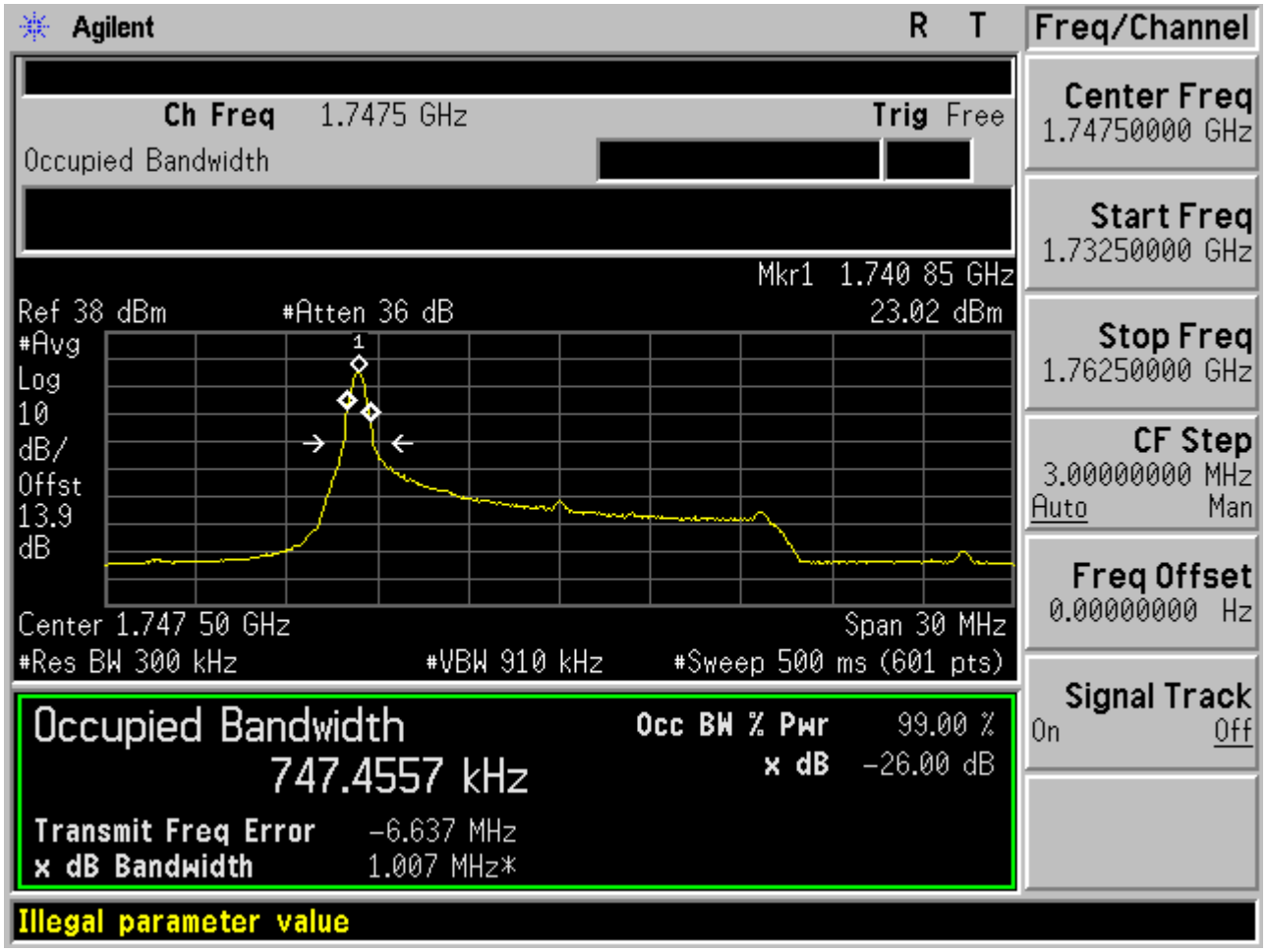


1.2.3.2.4 16QAM/full RBs

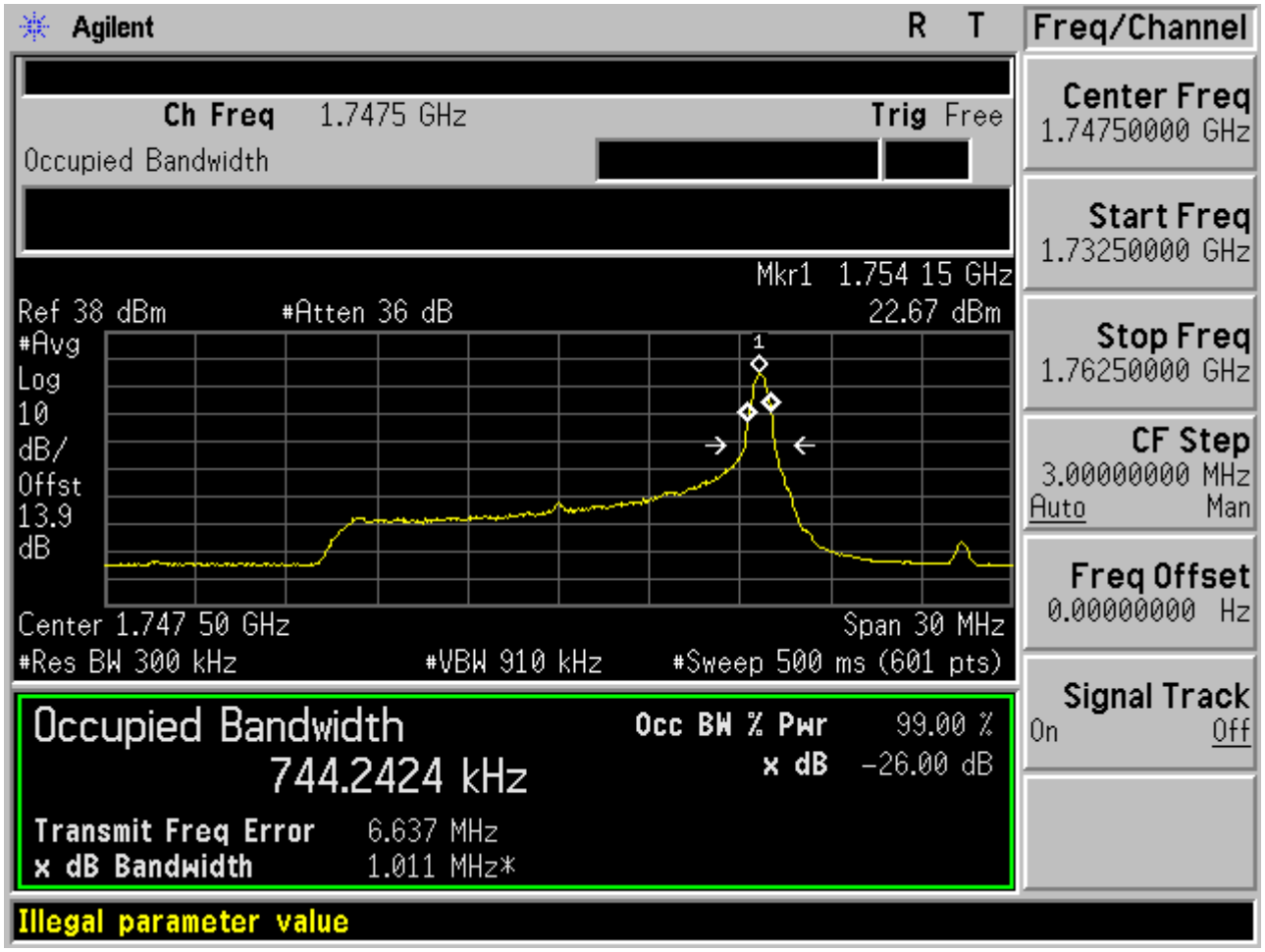


1.2.3.3 Channel =T

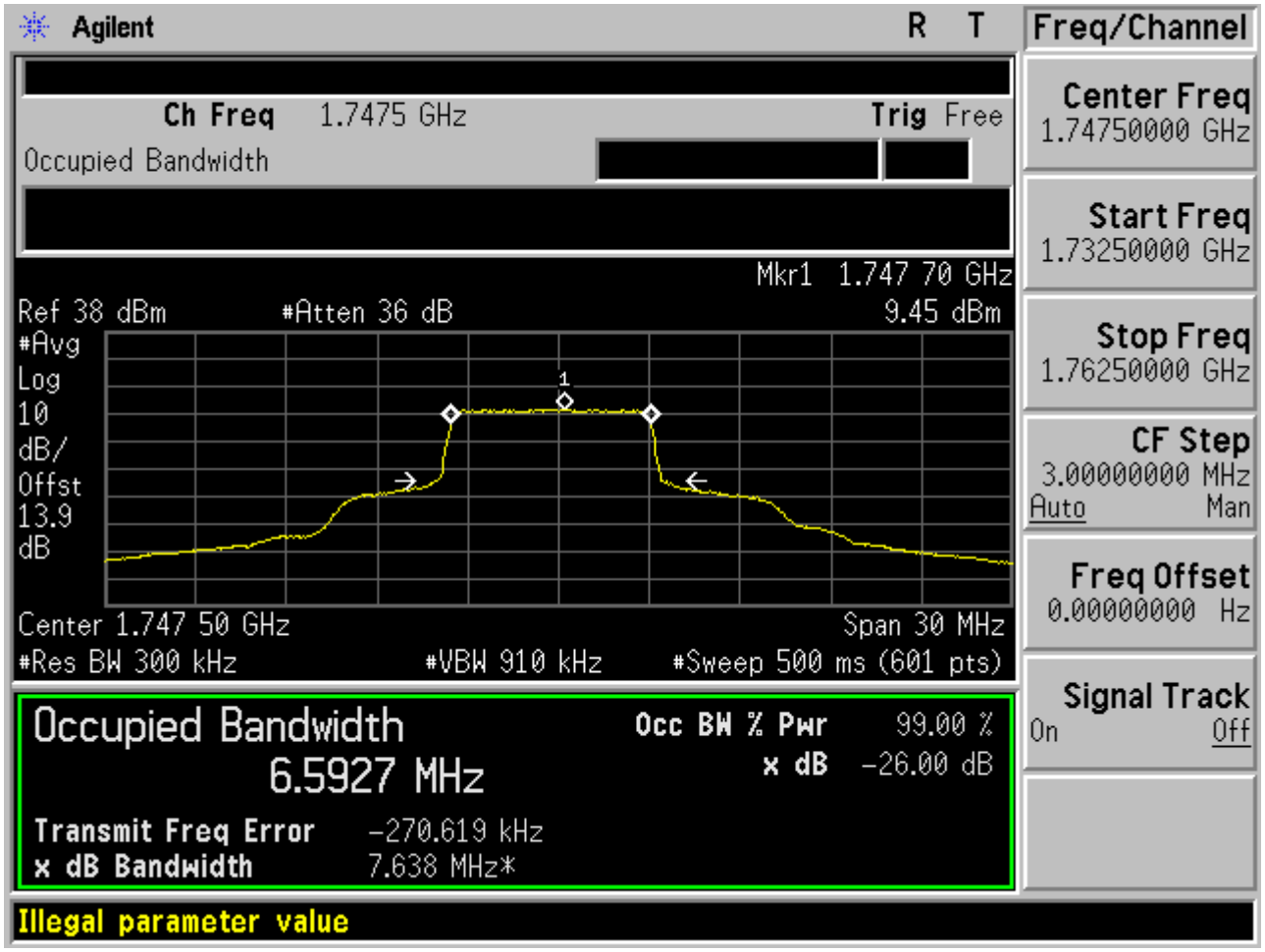
1.2.3.3.1 16QAM/1RB#0



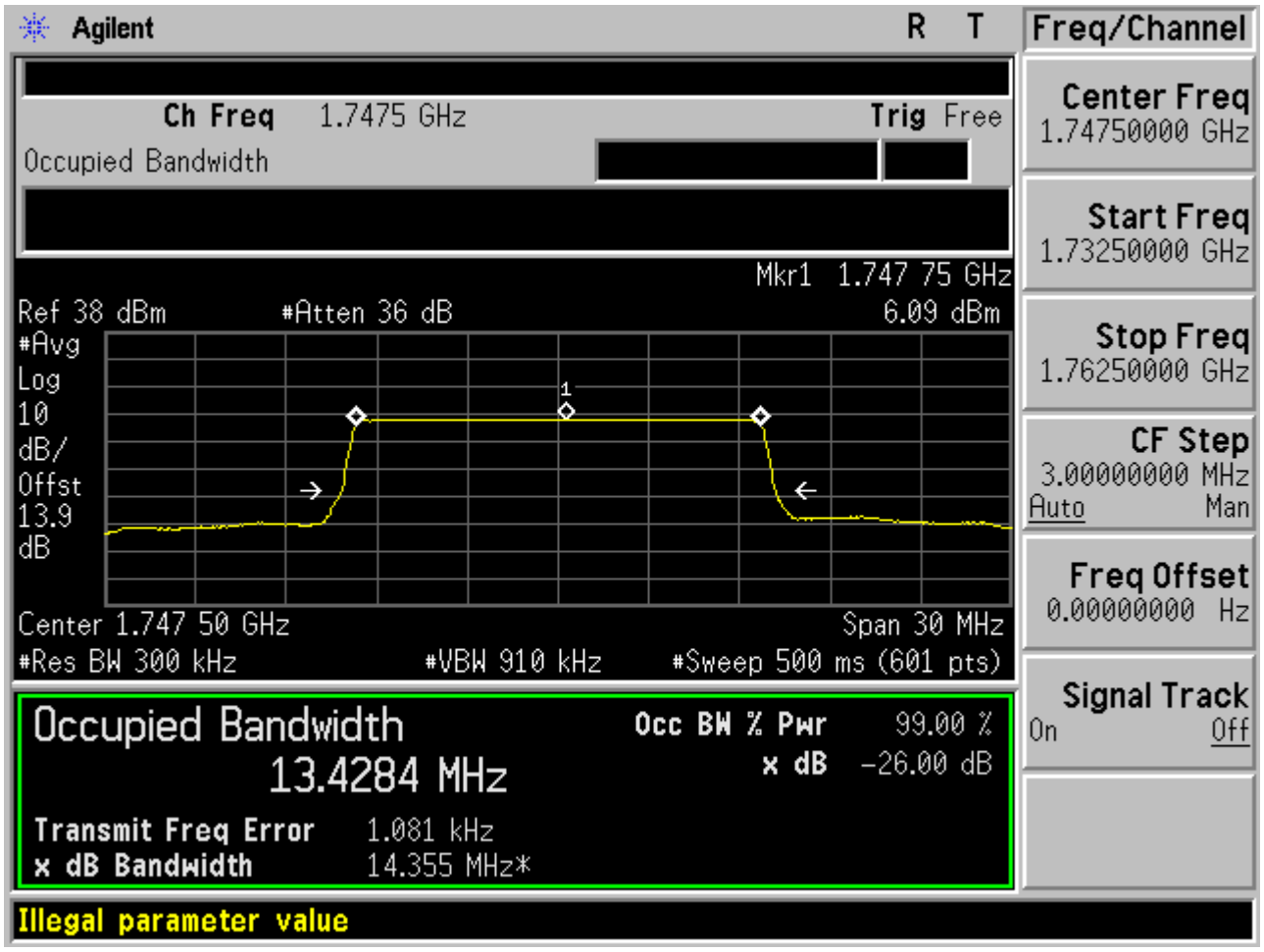
1.2.3.3.2 16QAM/1RB#max



1.2.3.3.3 16QAM/ Partial RBs /RB #18



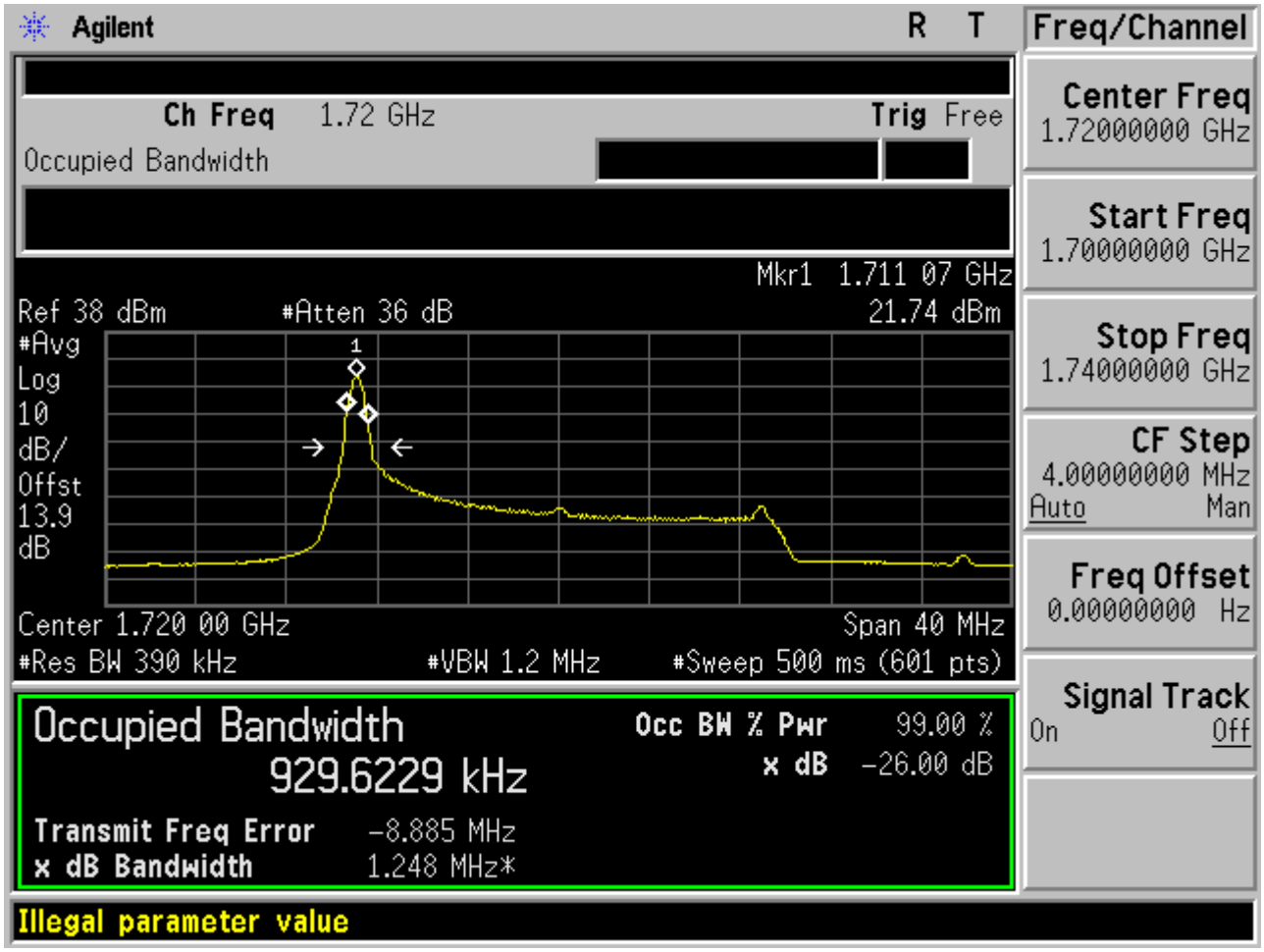
1.2.3.3.4 16QAM/full RBs



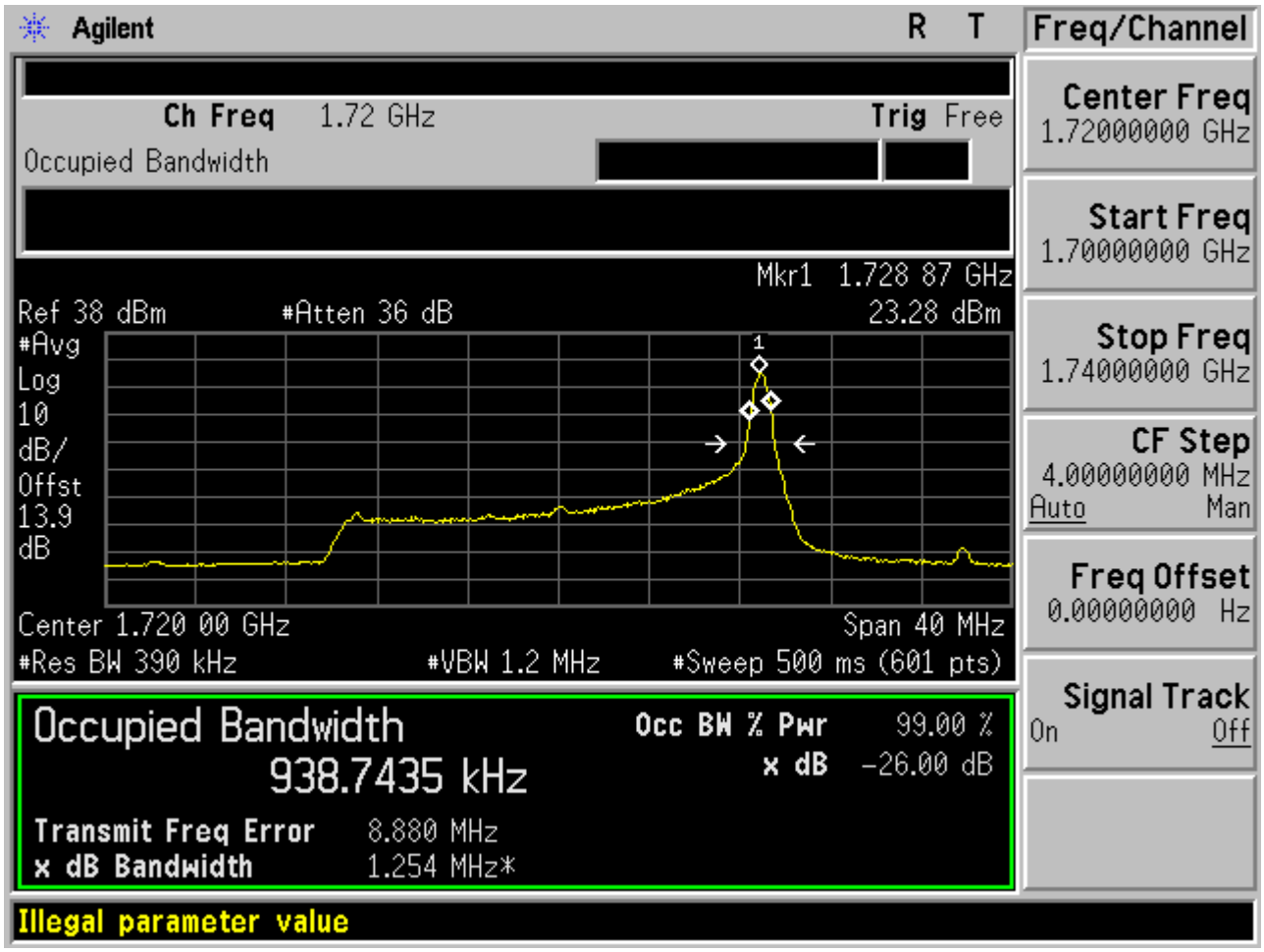
1.2.4 Channel Bandwidth = Highest (20 MHz)

1.2.4.1 Channel = B

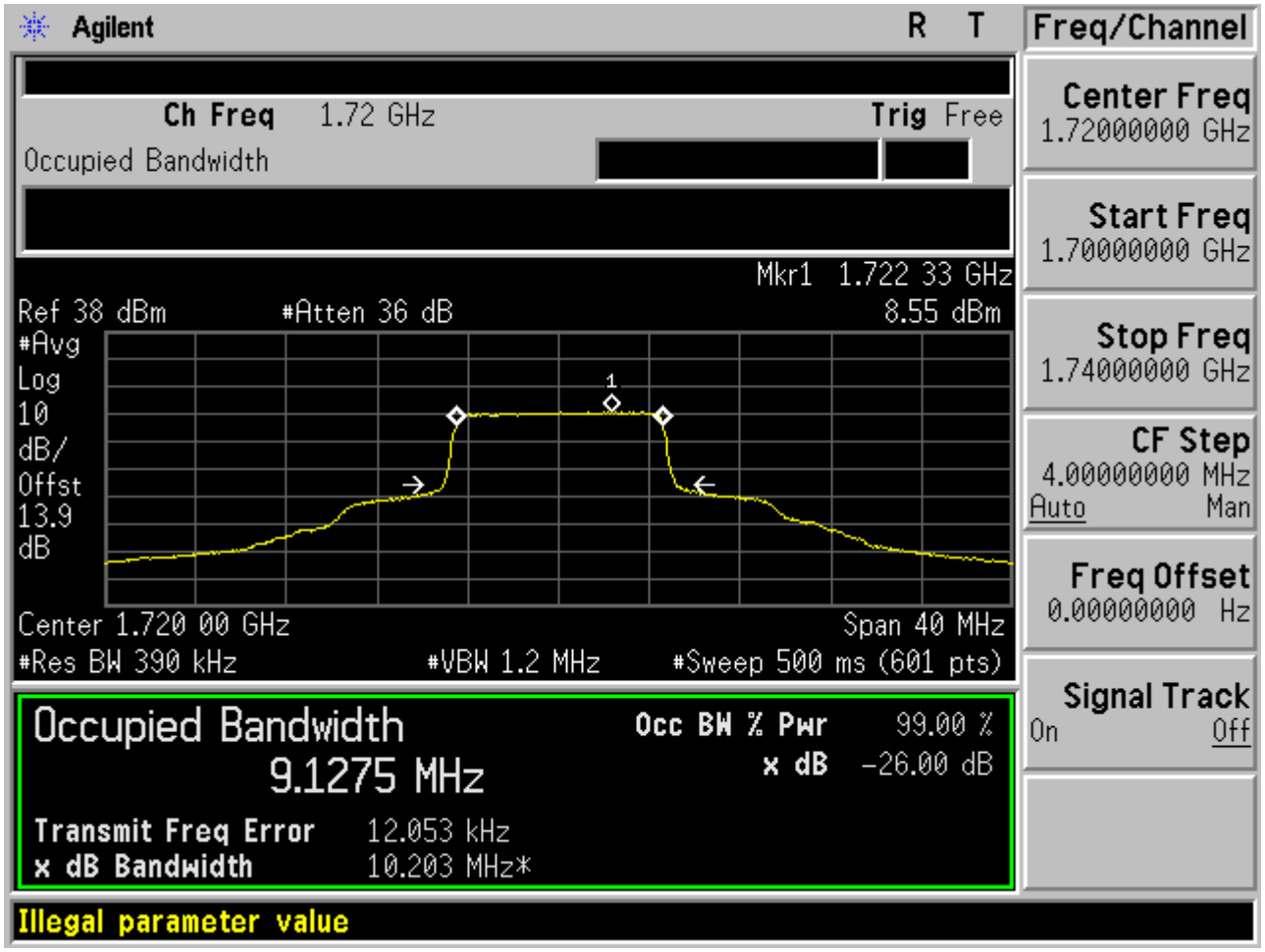
1.2.4.1.1 16QAM/1RB#0



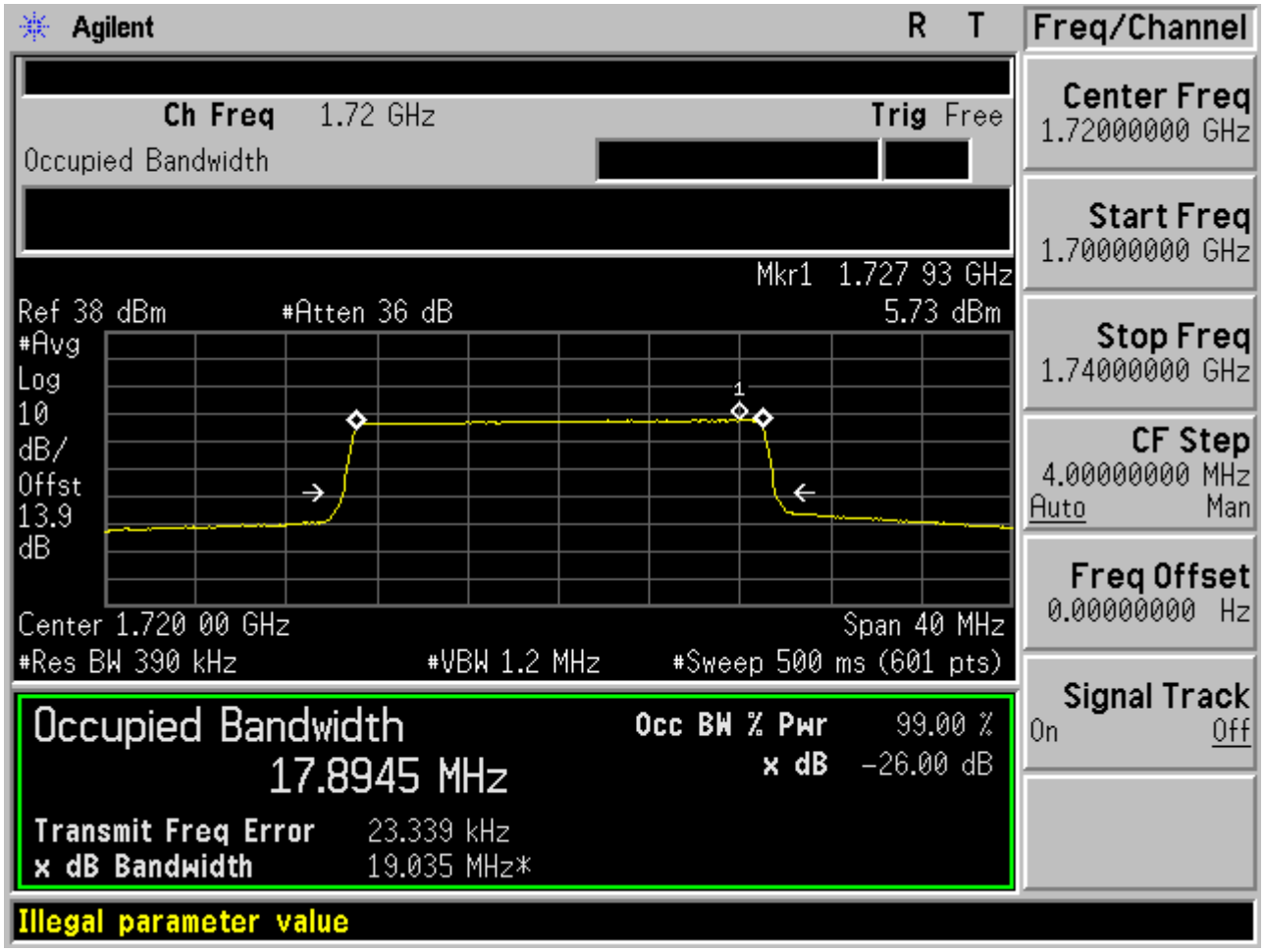
1.2.4.1.2 16QAM/1RB#max



1.2.4.1.3 16QAM/ Partial RBs /RB #25

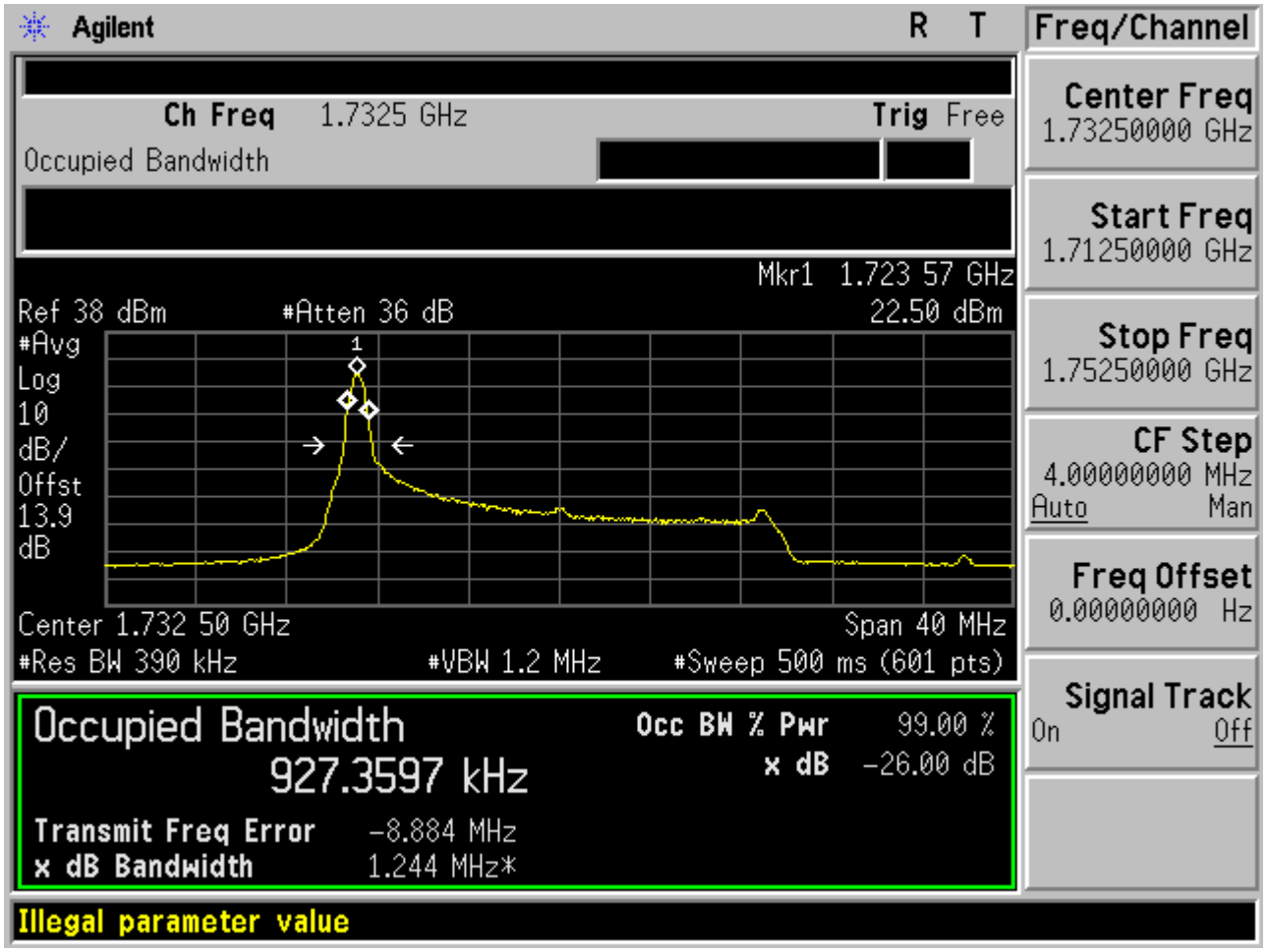


1.2.4.1.4 16QAM/full RBs

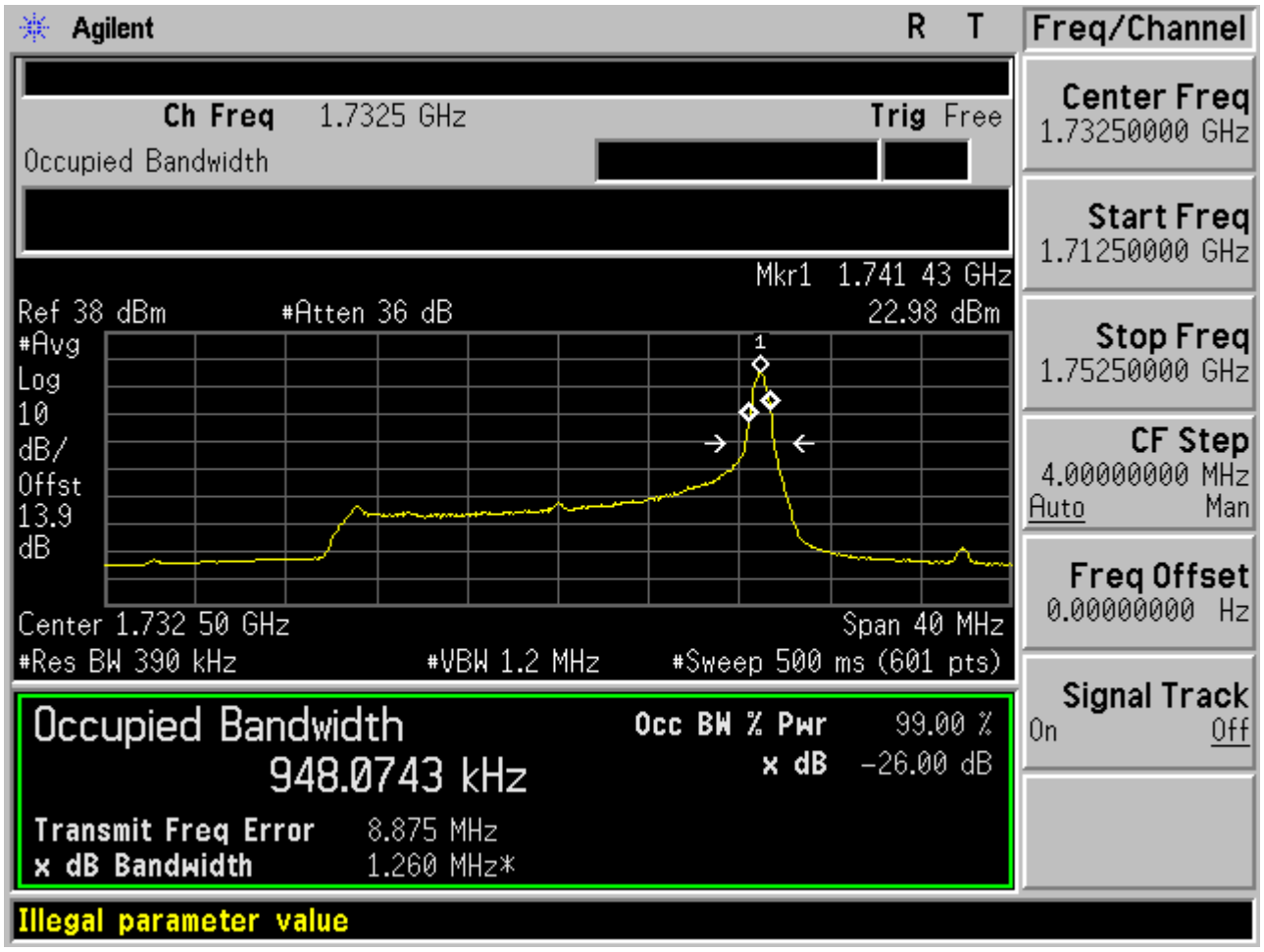


1.2.4.2 Channel =M

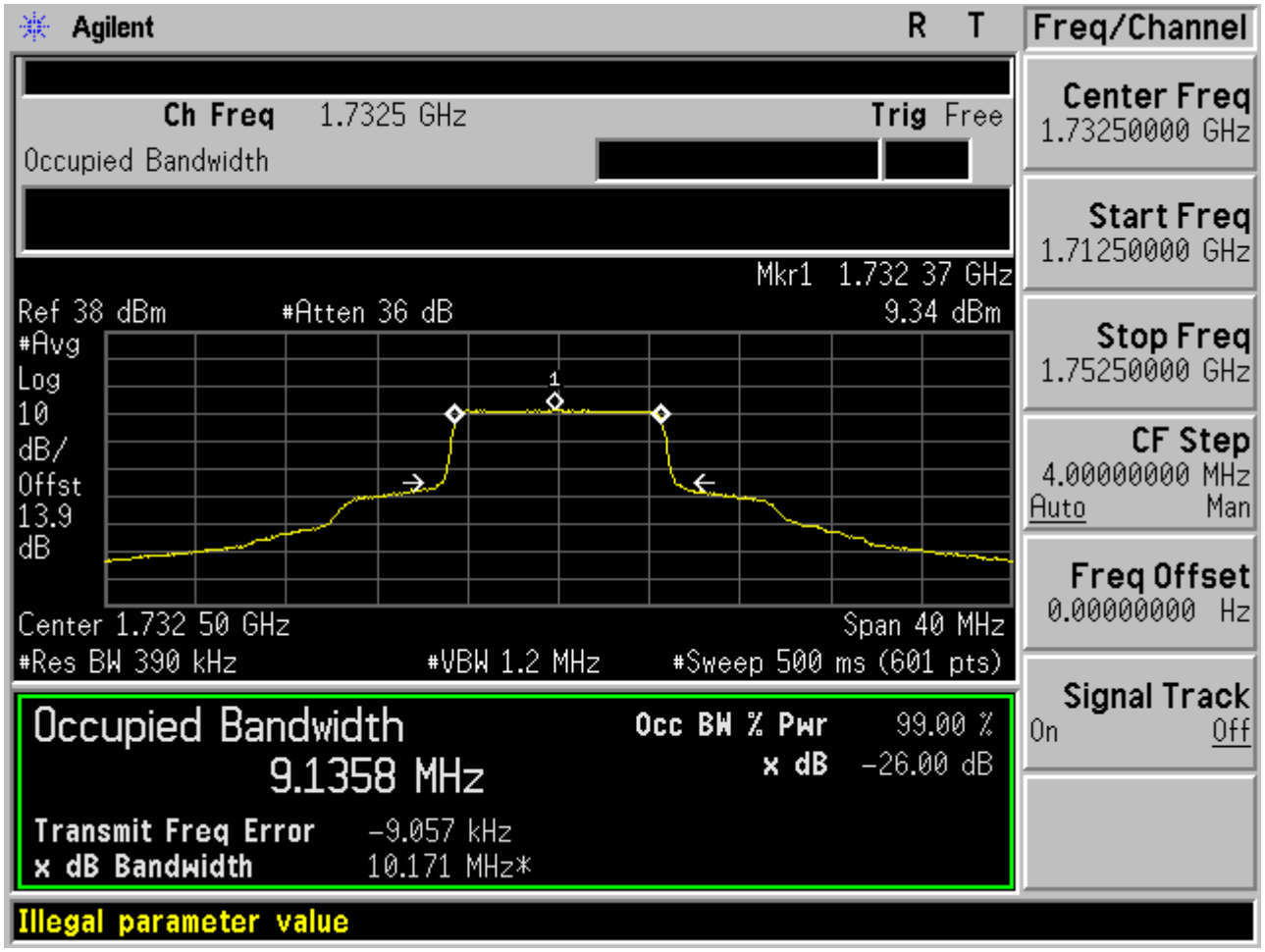
1.2.4.2.1 16QAM/1RB#0



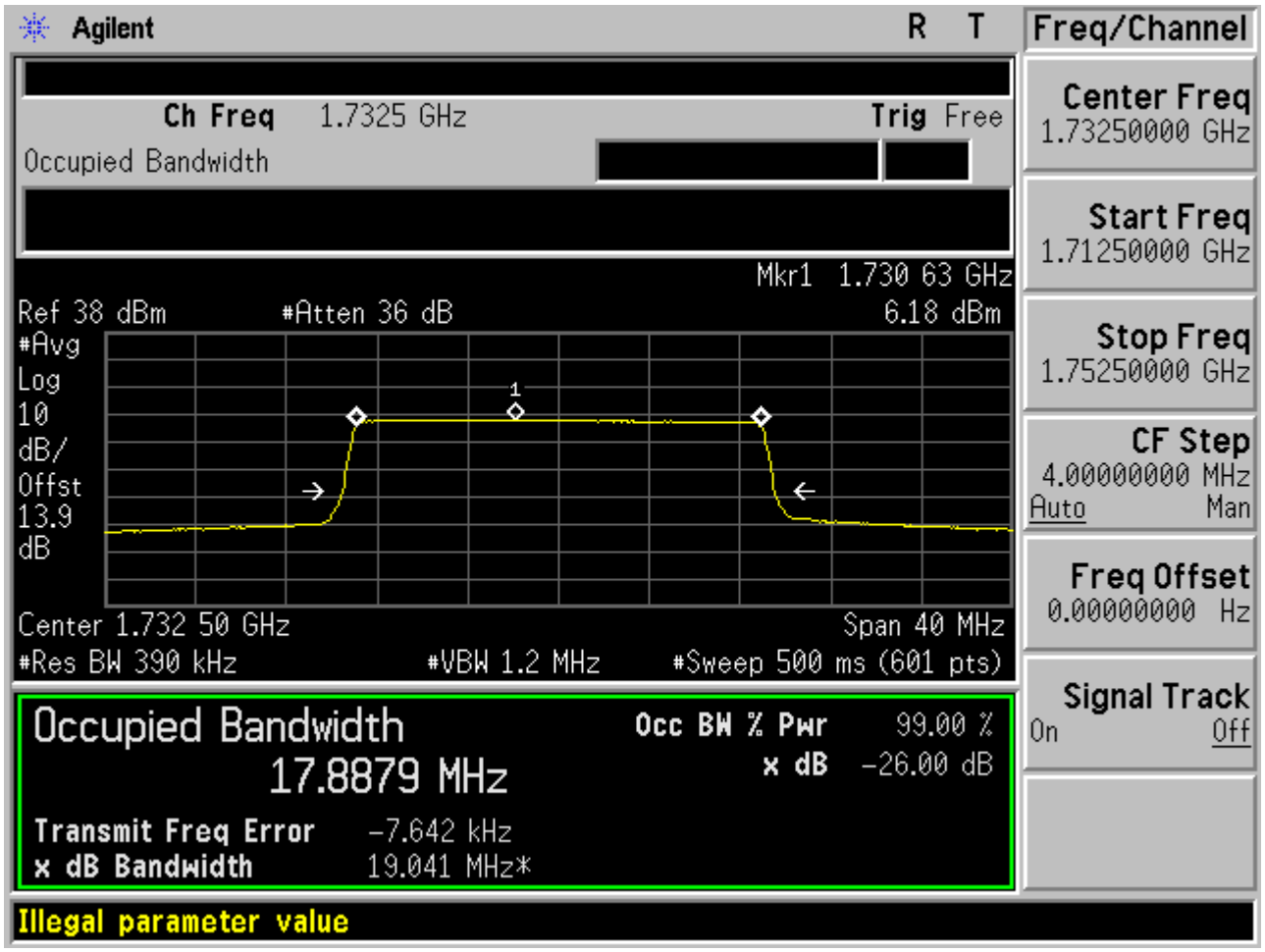
1.2.4.2.2 16QAM/1RB#max



1.2.4.2.3 16QAM/ Partial RBs /RB #25

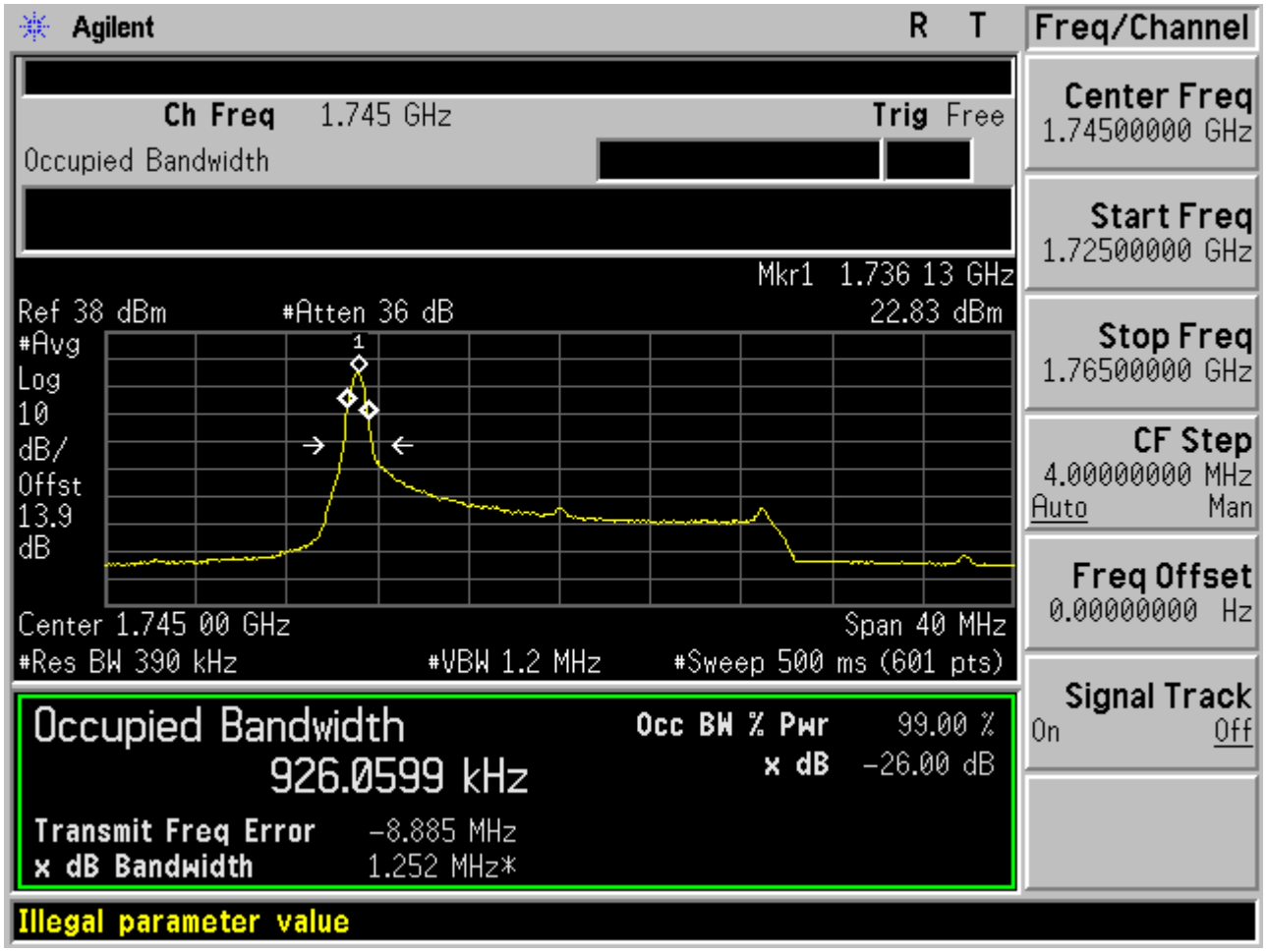


1.2.4.2.4 16QAM/full RBs

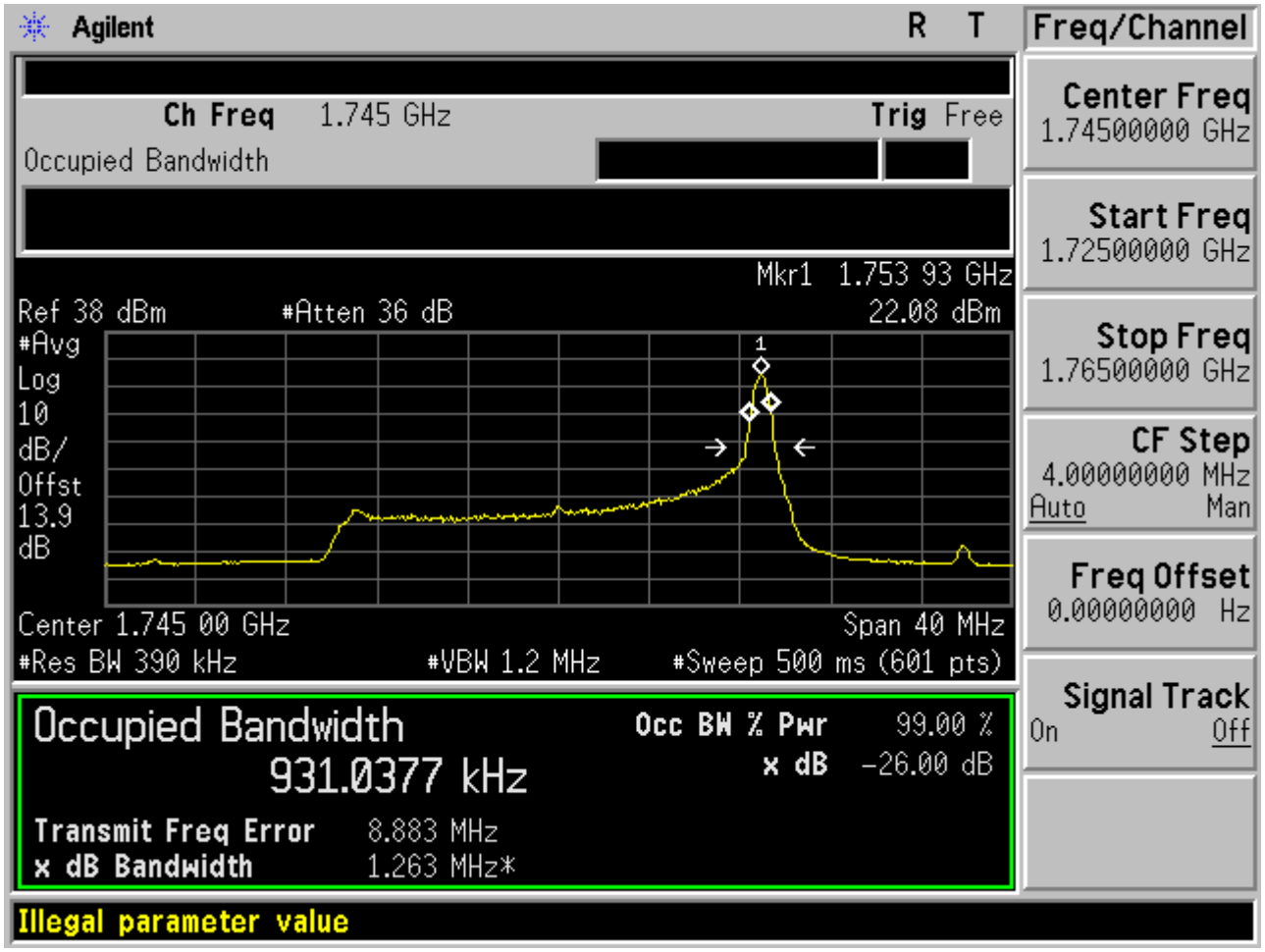


1.2.4.3 Channel =T

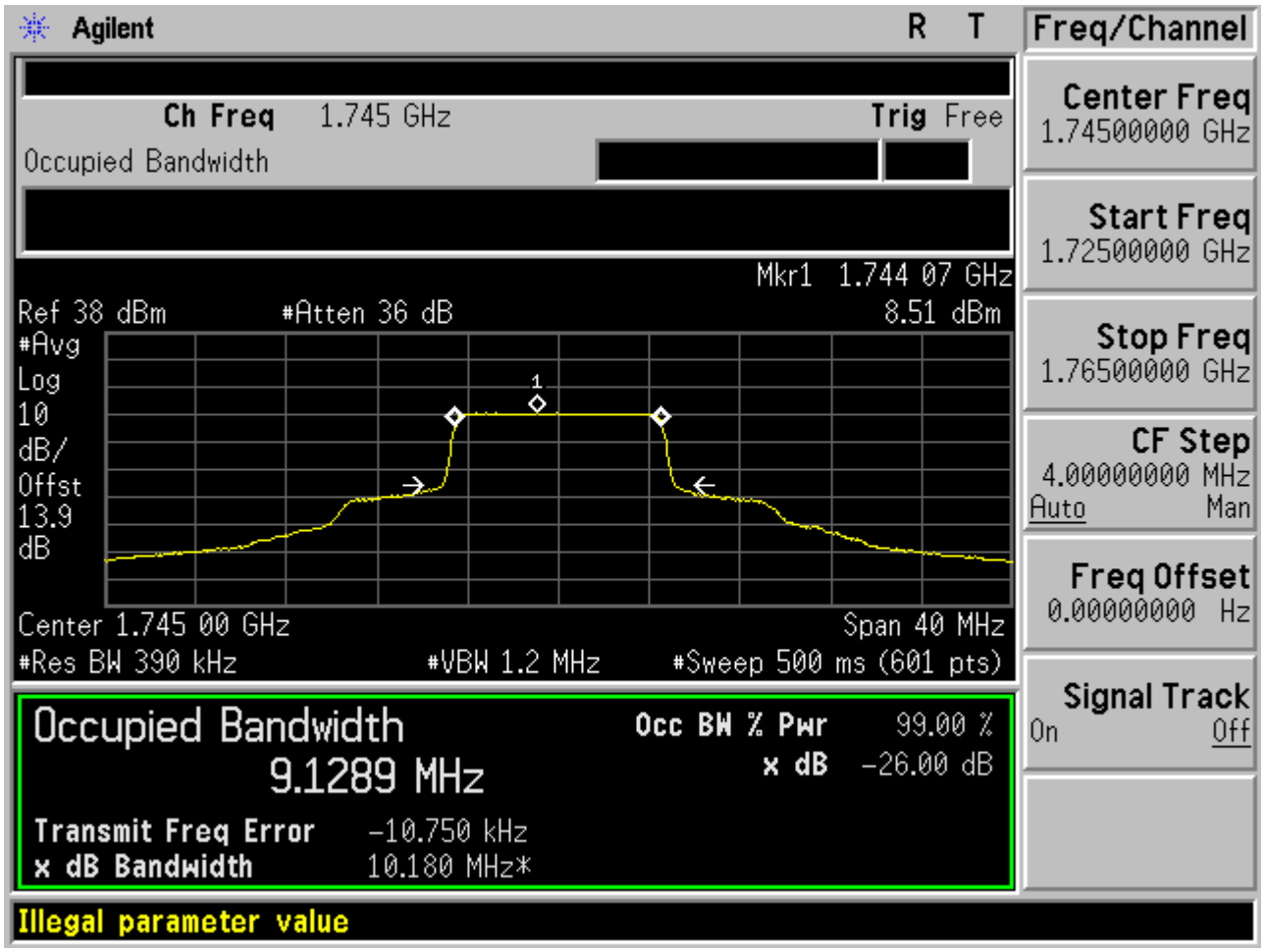
1.2.4.3.1 16QAM/1RB#0



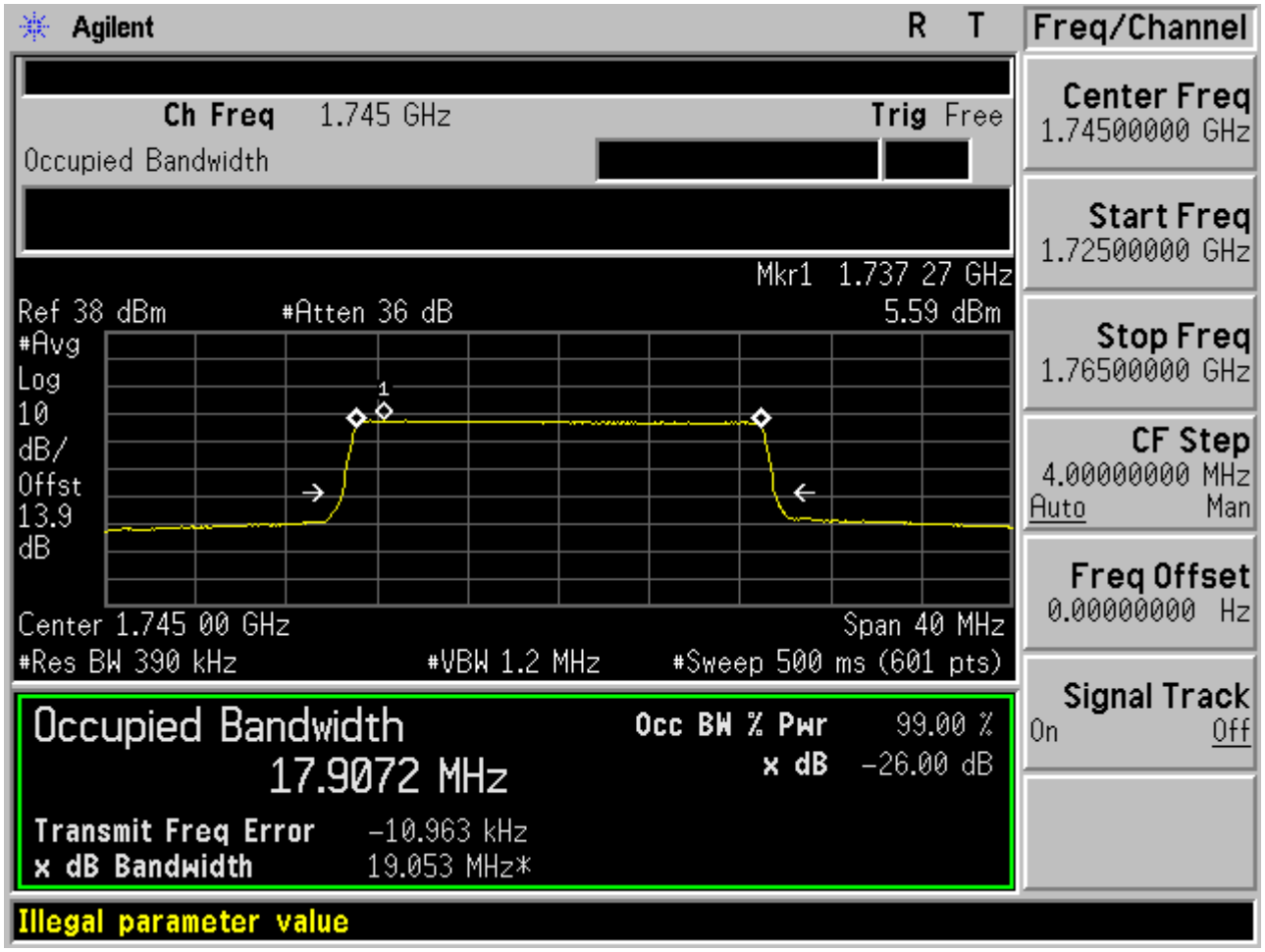
1.2.4.3.2 16QAM/1RB#max



1.2.4.3.3 16QAM/ Partial RBs /RB #25



1.2.4.3.4 16QAM/full RBs



END

Appendix C

Band Edges Compliance

According to FCC Part 2.1051 & FCC Part 27C & 27M

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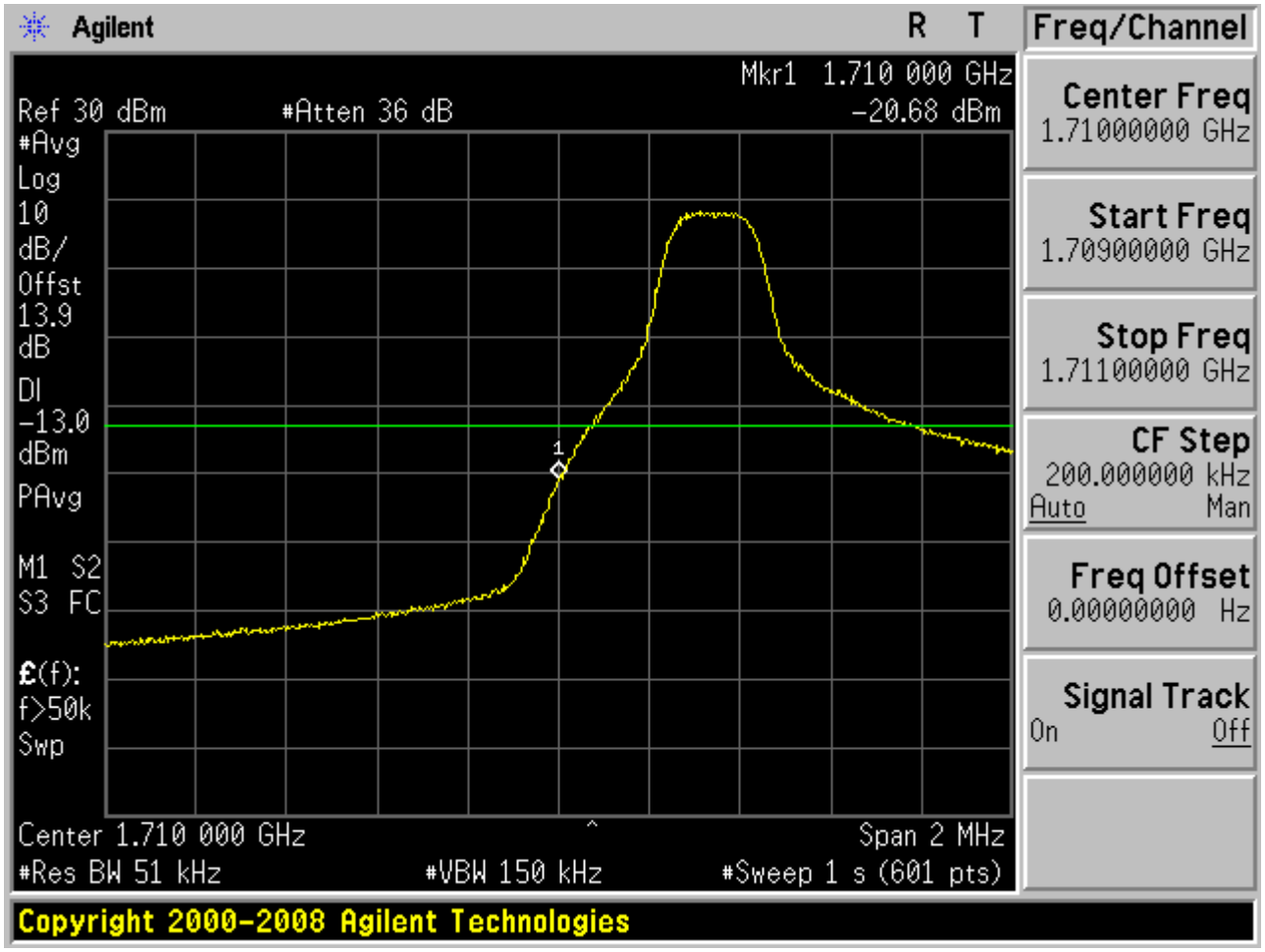
1 For Band 4

1.1 Test Mode=TM1

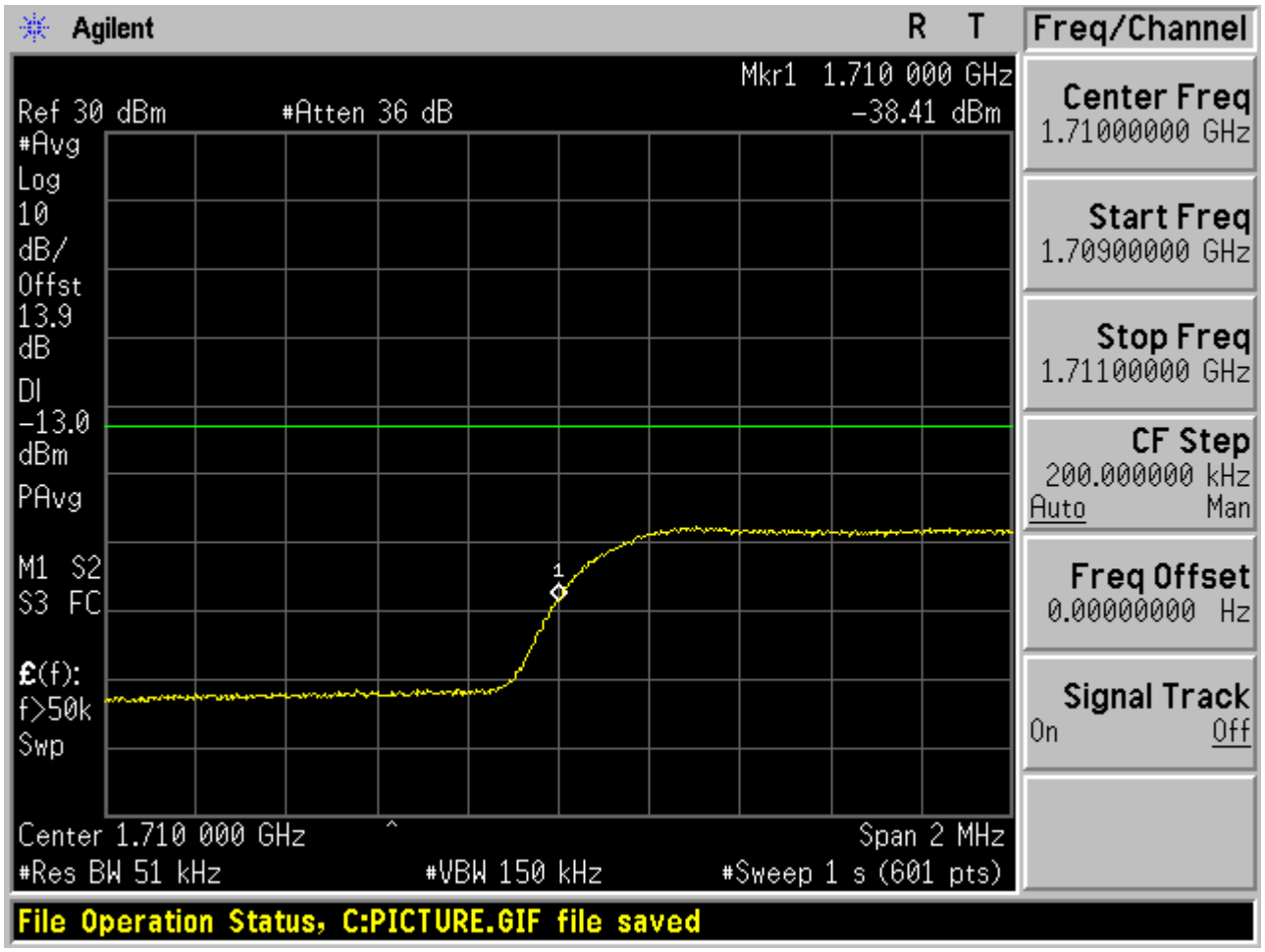
1.1.1 Channel Bandwidth = Lowest (5 MHz)

1.1.1.1 Channel= B

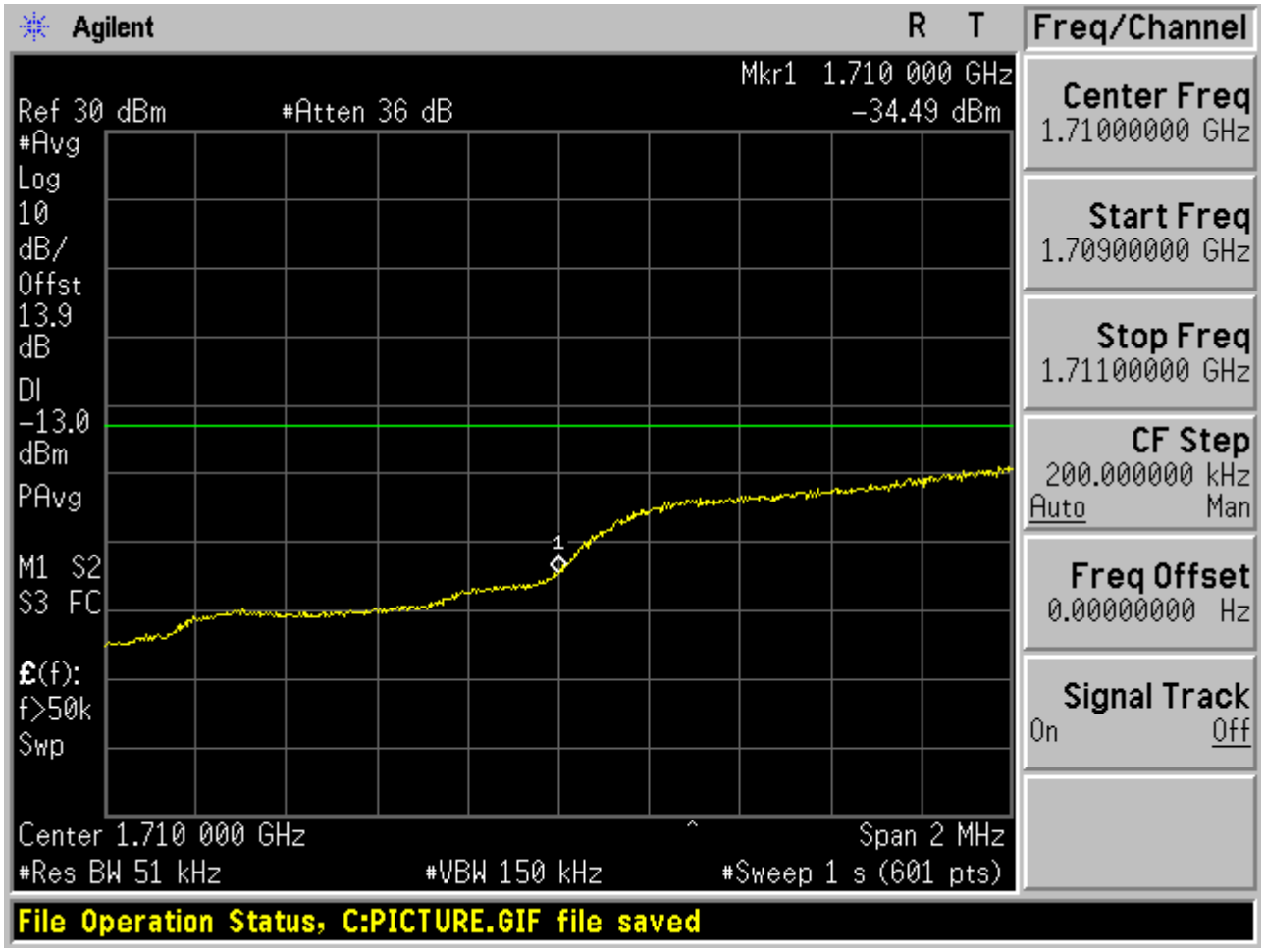
1.1.1.1.1 QPSK/1RB #0



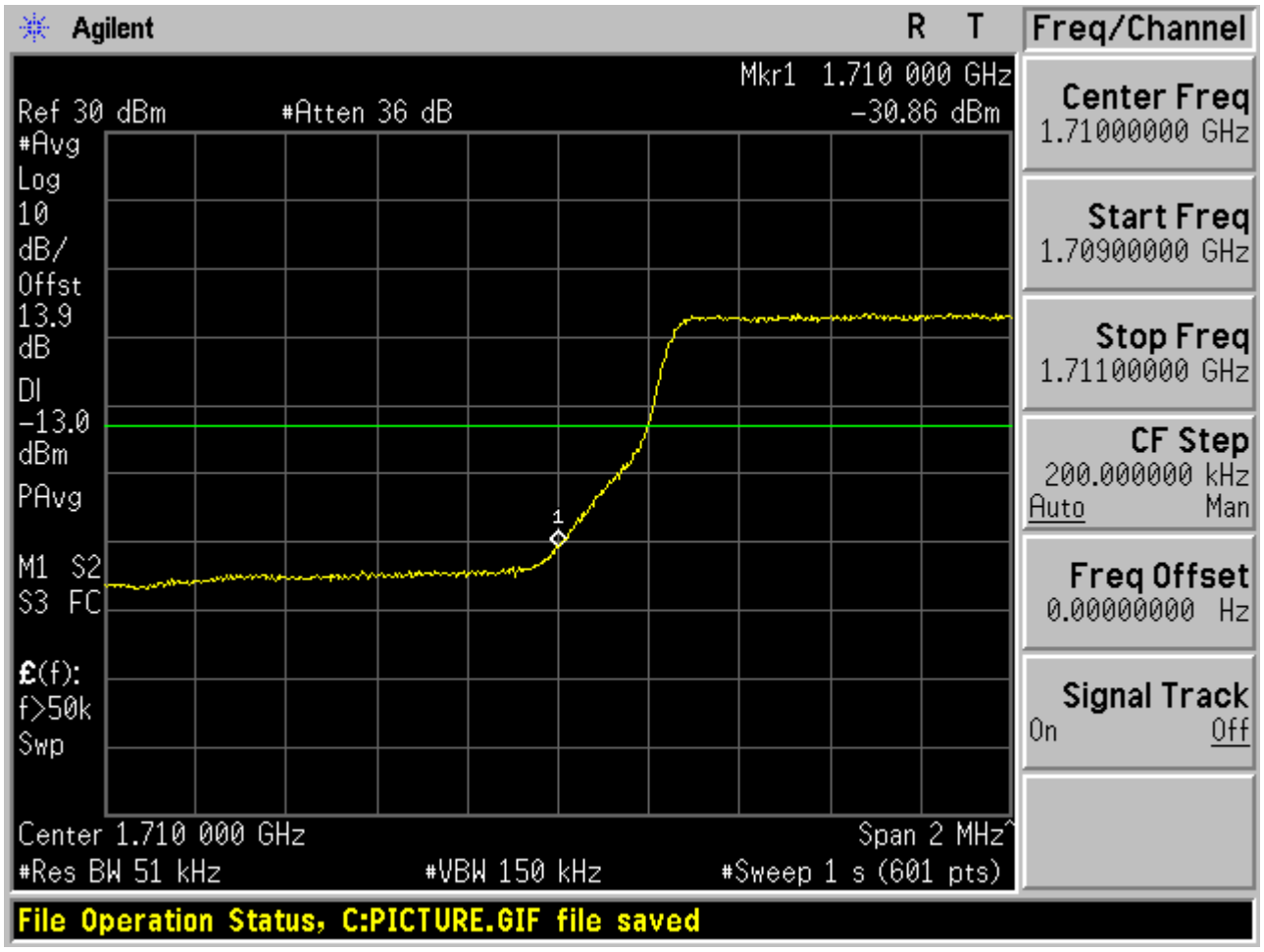
1.1.1.1.2 QPSK/1RB #max



1.1.1.1.3 QPSK/Partial RBs /RB #6

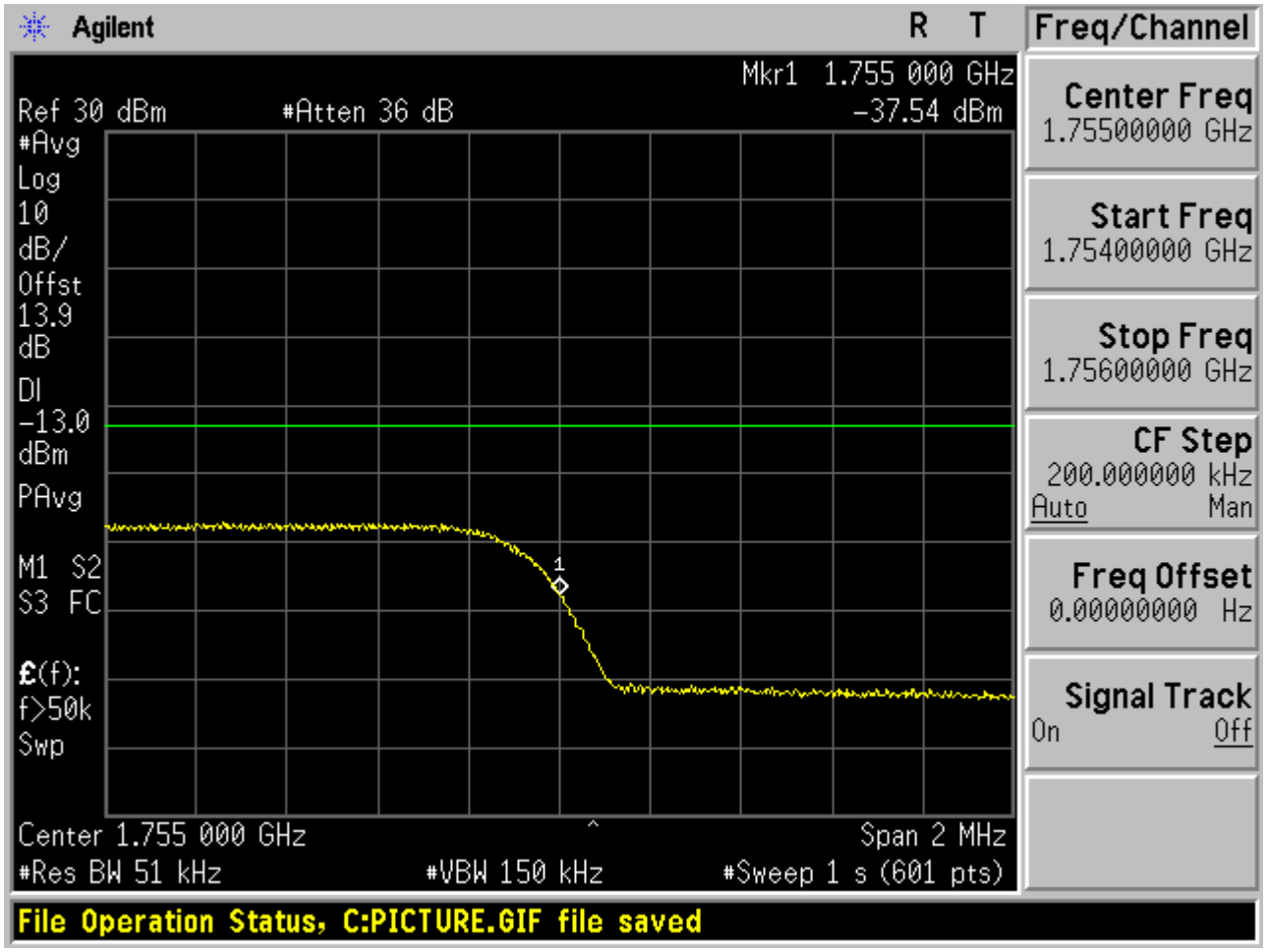


1.1.1.1.4 QPSK/full RBs

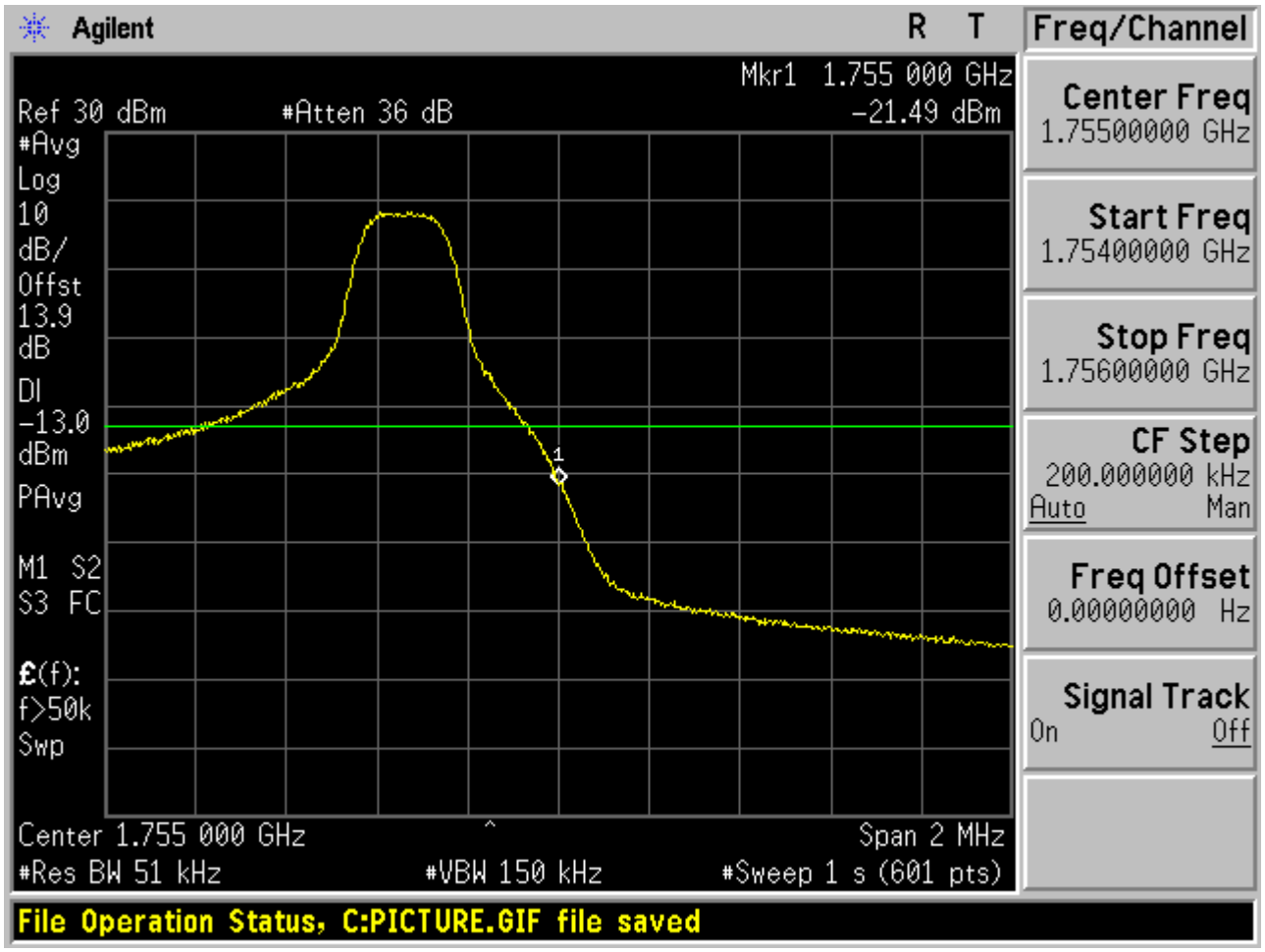


1.1.1.2 Channel= T

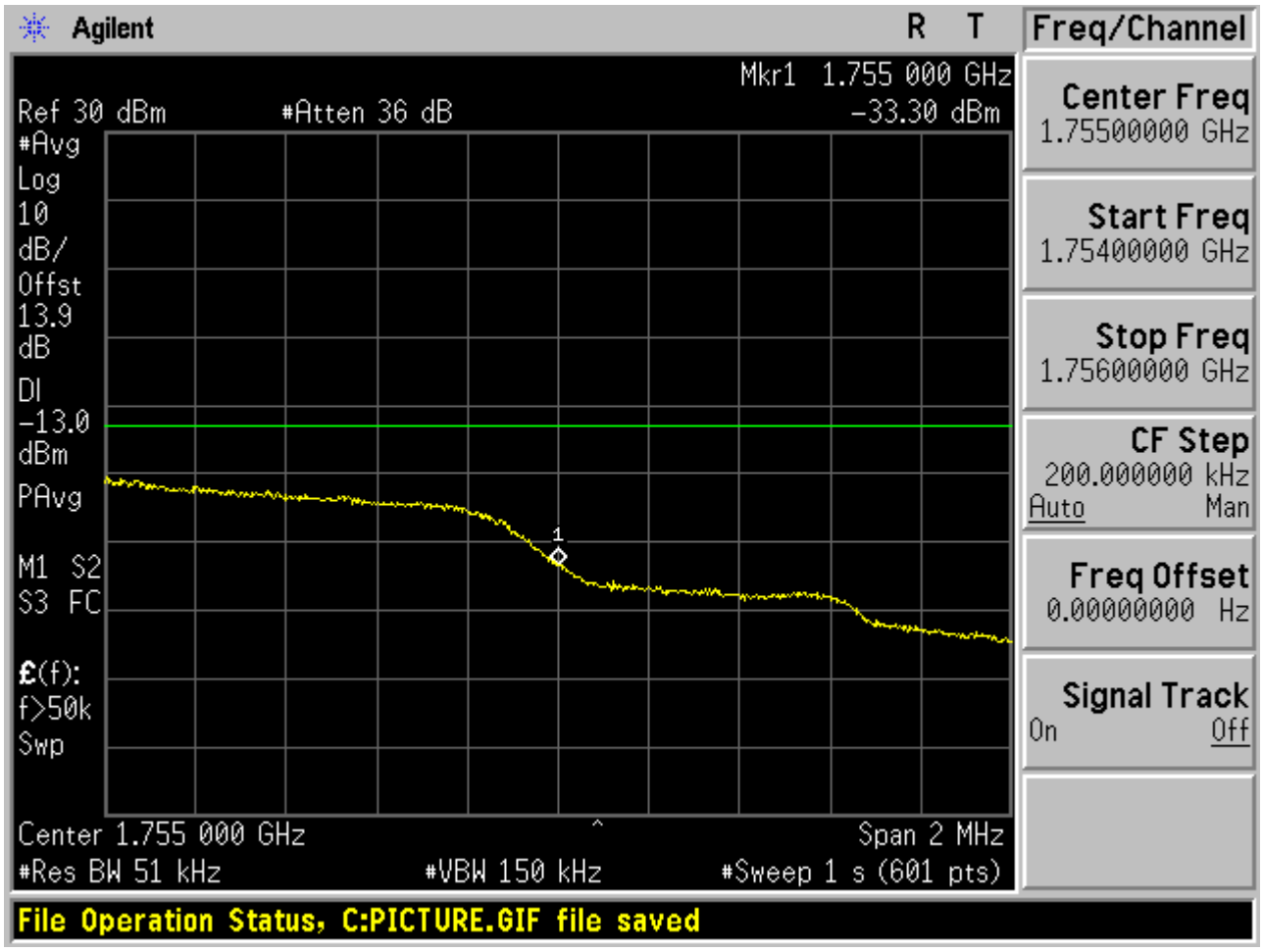
1.1.1.2.1 QPSK/1RB #0



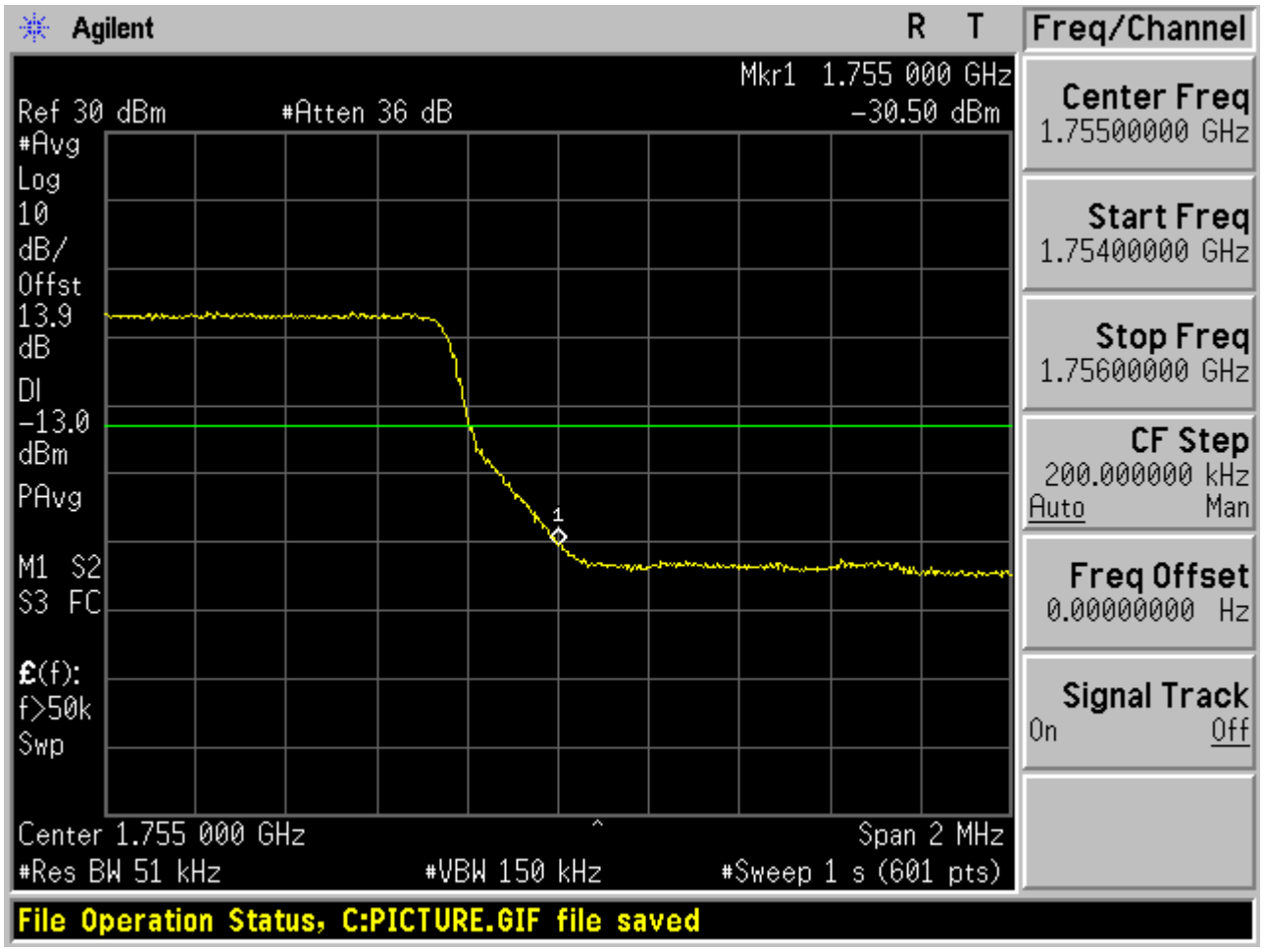
1.1.1.2.2 QPSK/1RB #max



1.1.1.2.3 QPSK/Partial RBs /RB #6



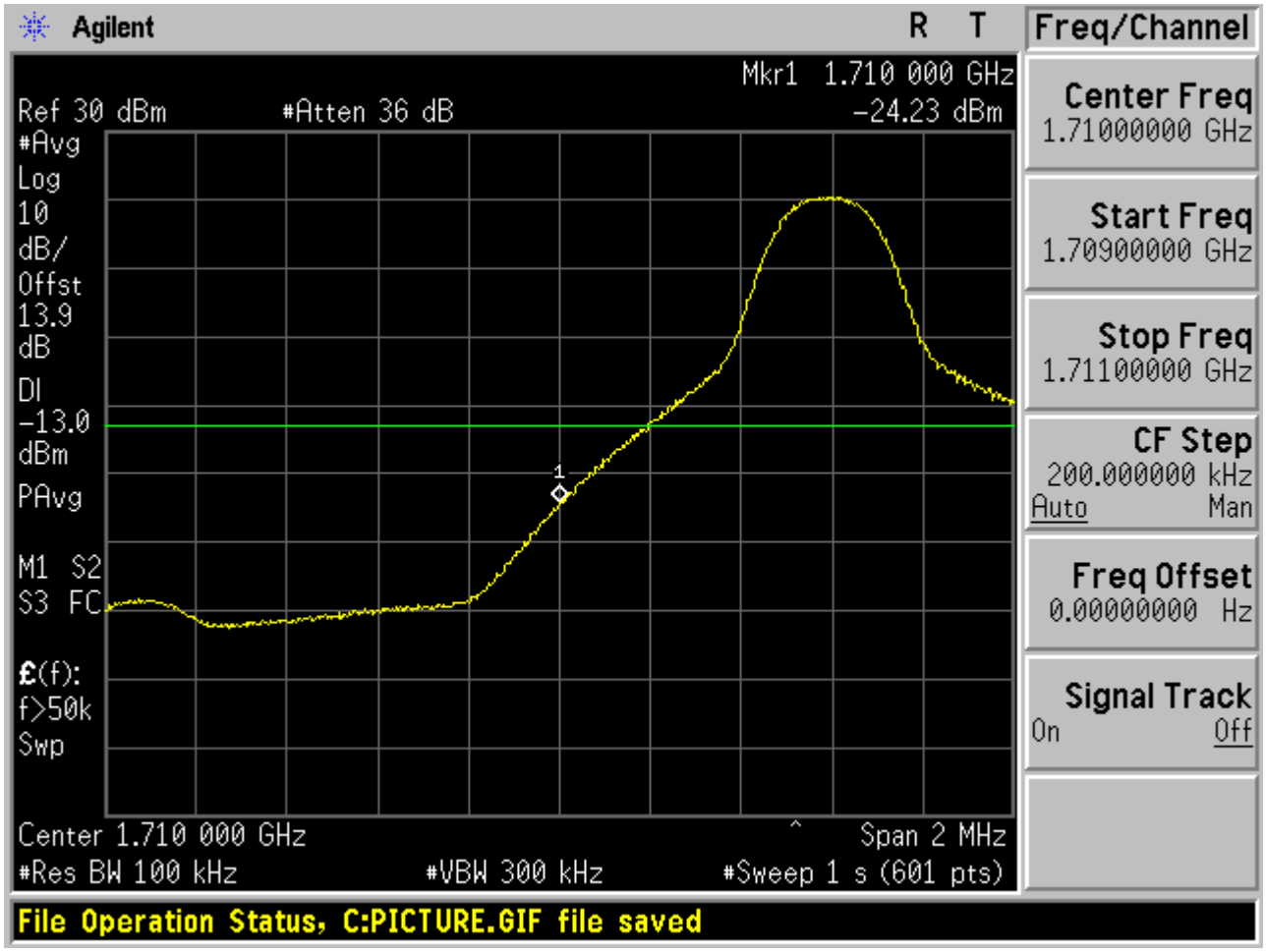
1.1.1.2.4 QPSK/full RBs



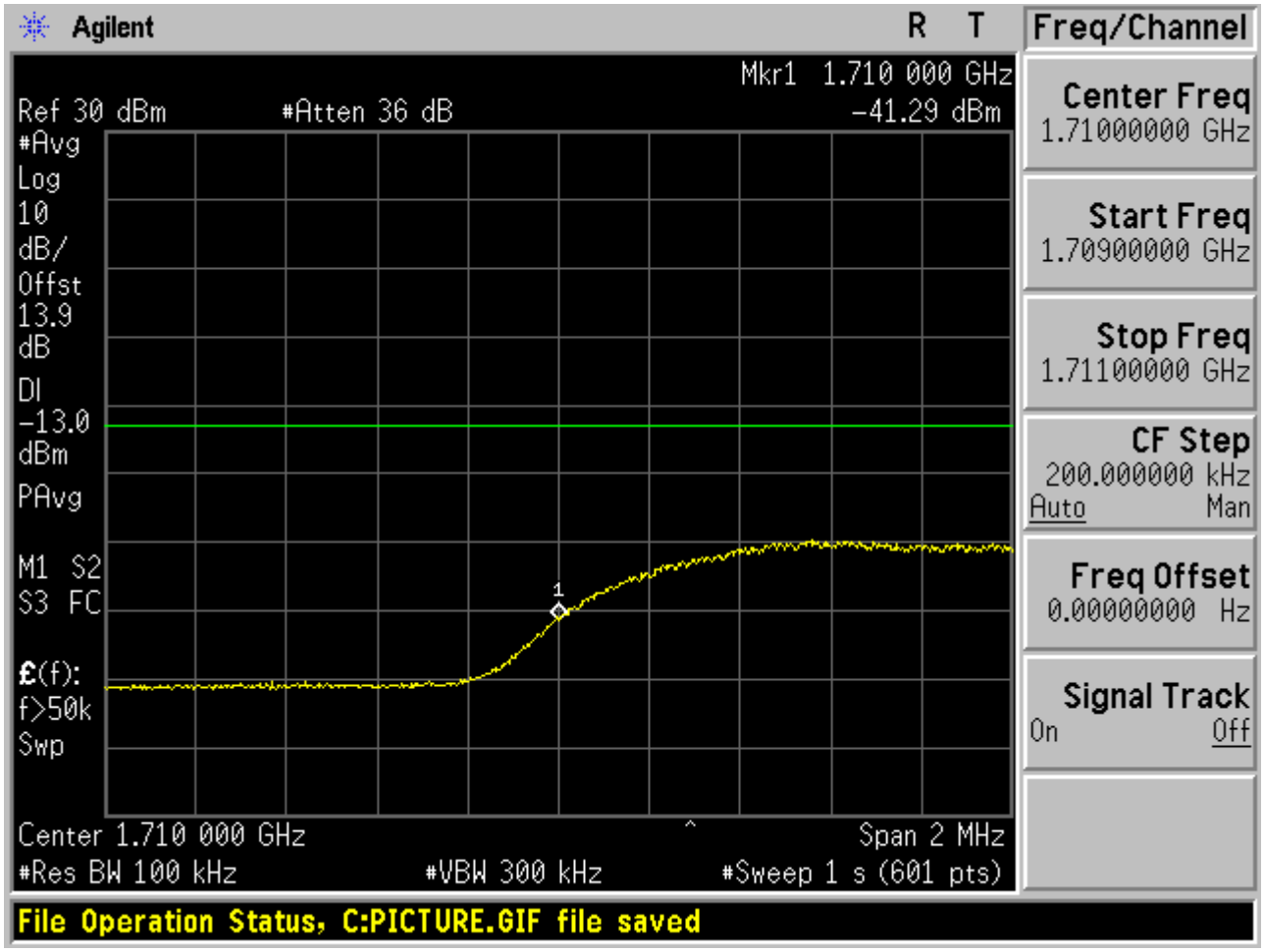
1.1.2 Channel Bandwidth = 10 MHz

1.1.2.1 Channel= B

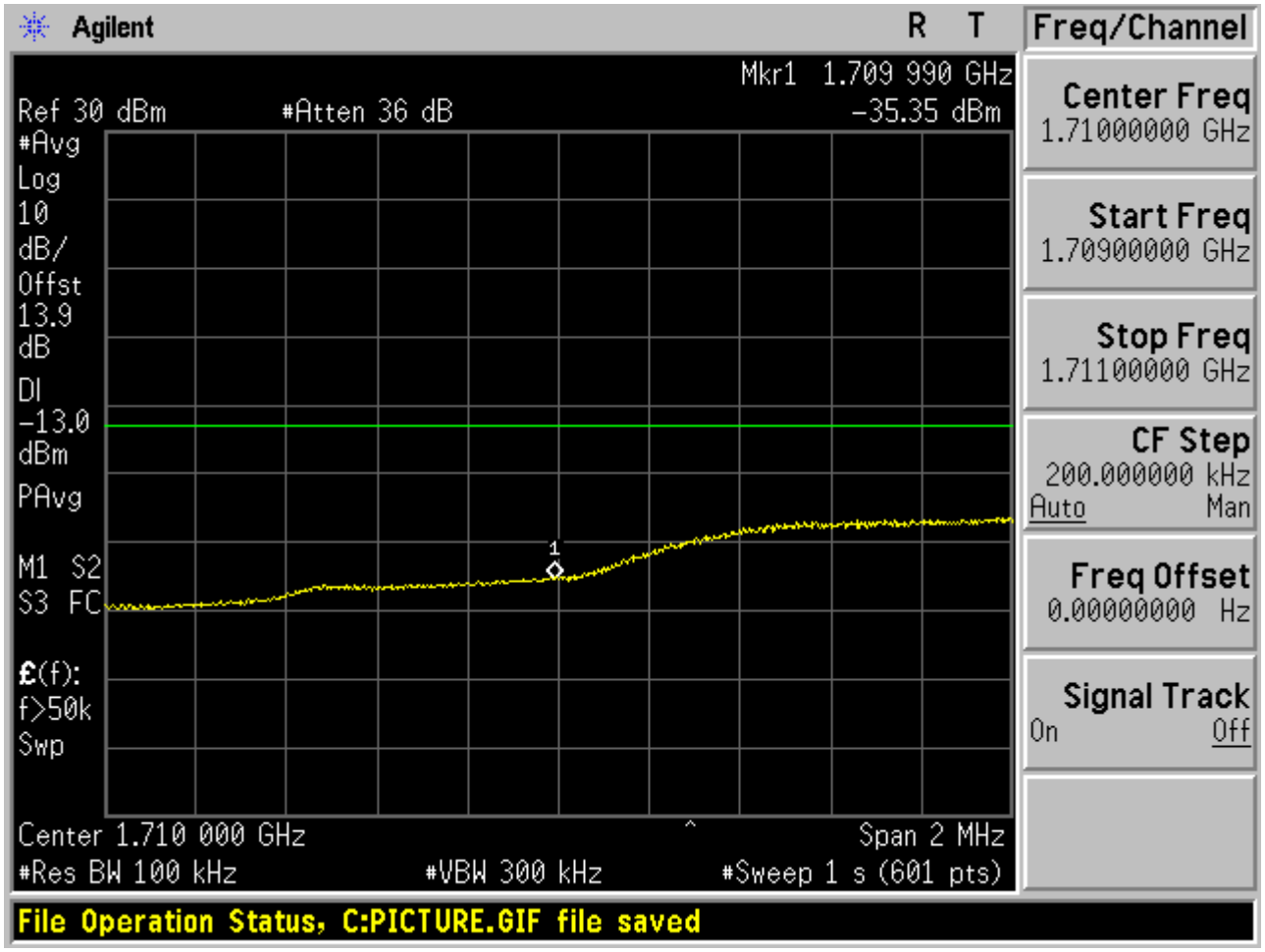
1.1.2.1.1 QPSK/1RB #0



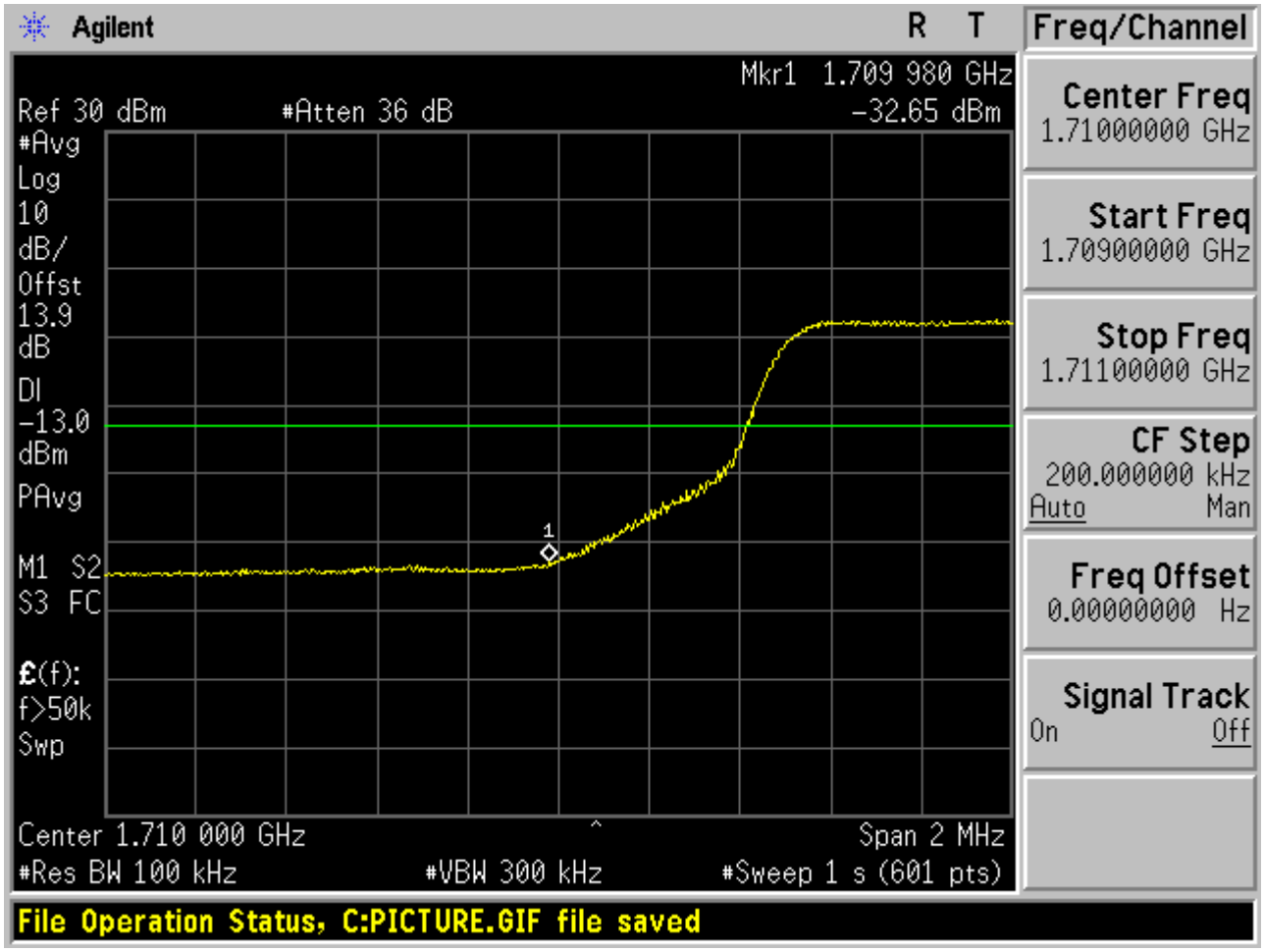
1.1.2.1.2 QPSK/1RB #max



1.1.2.1.3 QPSK/Partial RBs /RB #13

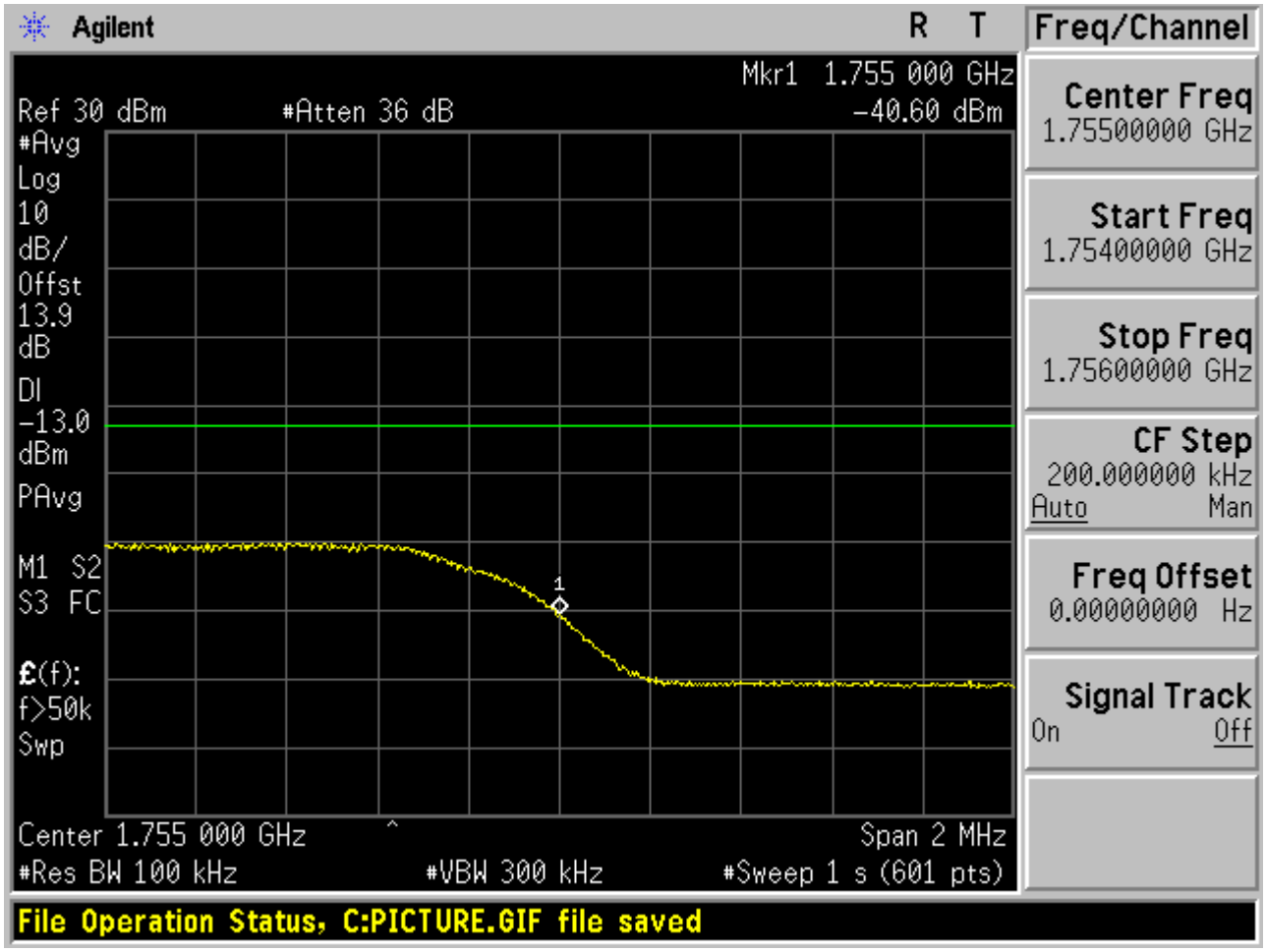


1.1.2.1.4 QPSK/full RBs

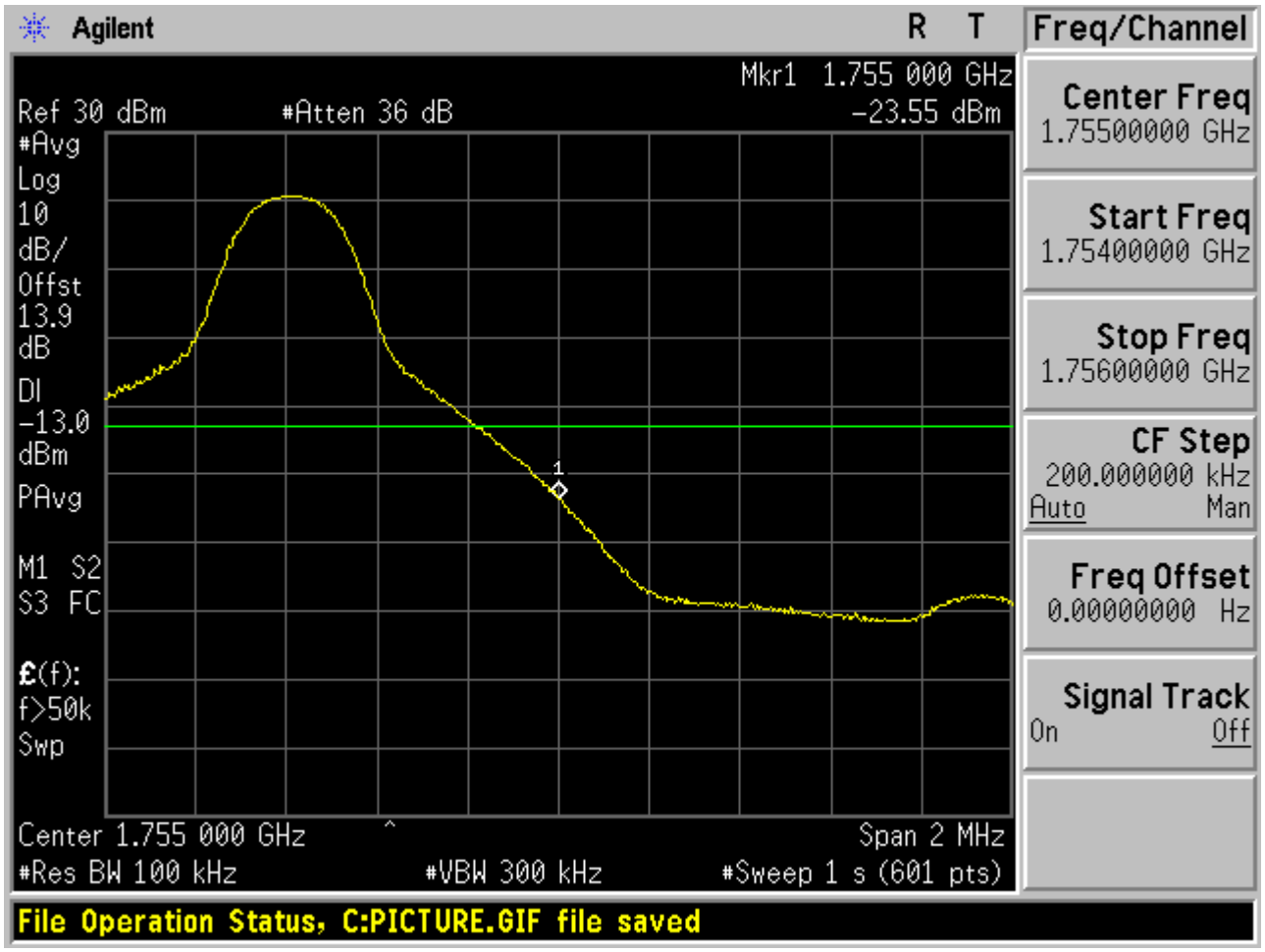


1.1.2.2 Channel= T

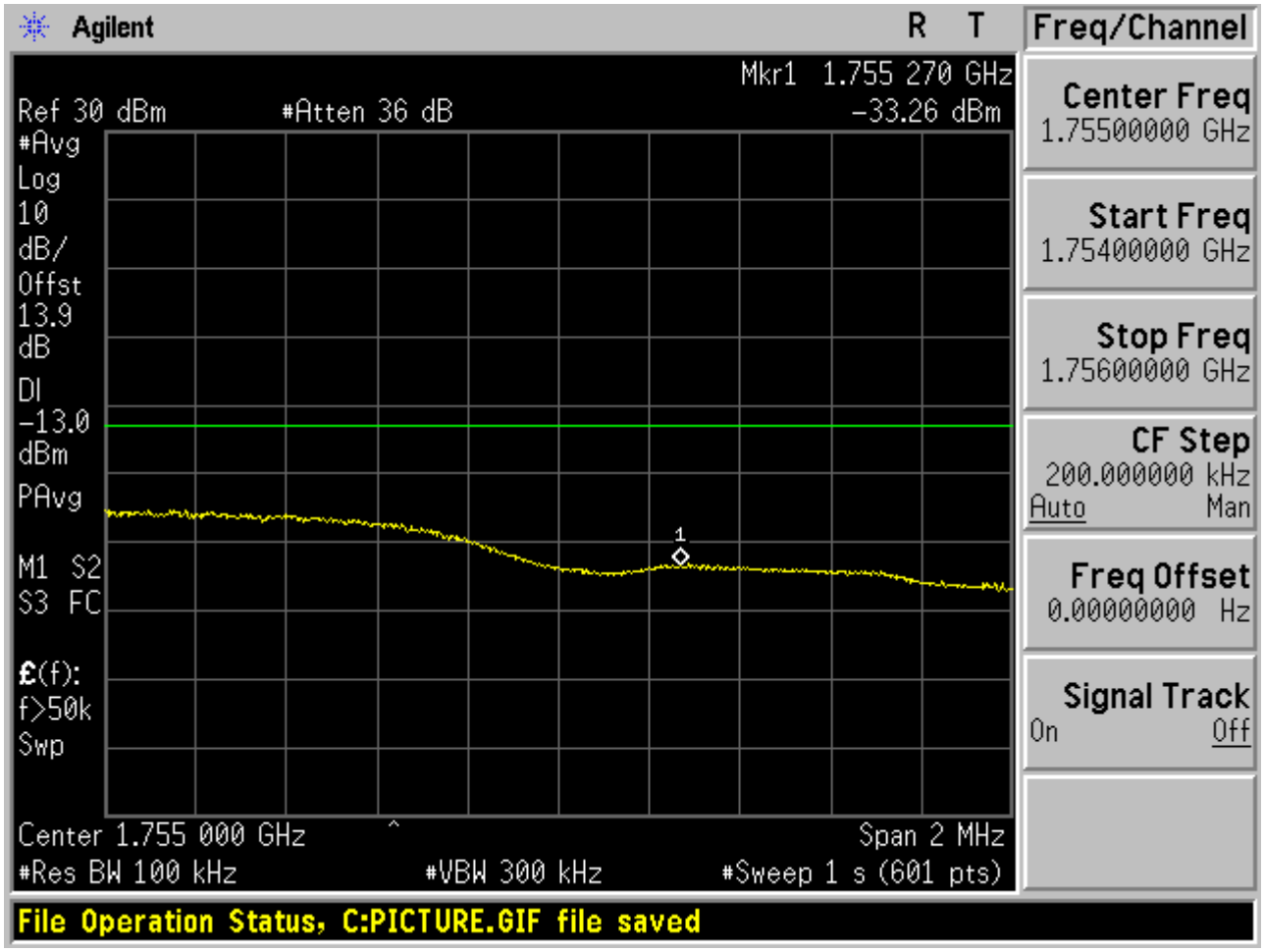
1.1.2.2.1 QPSK/1RB #0



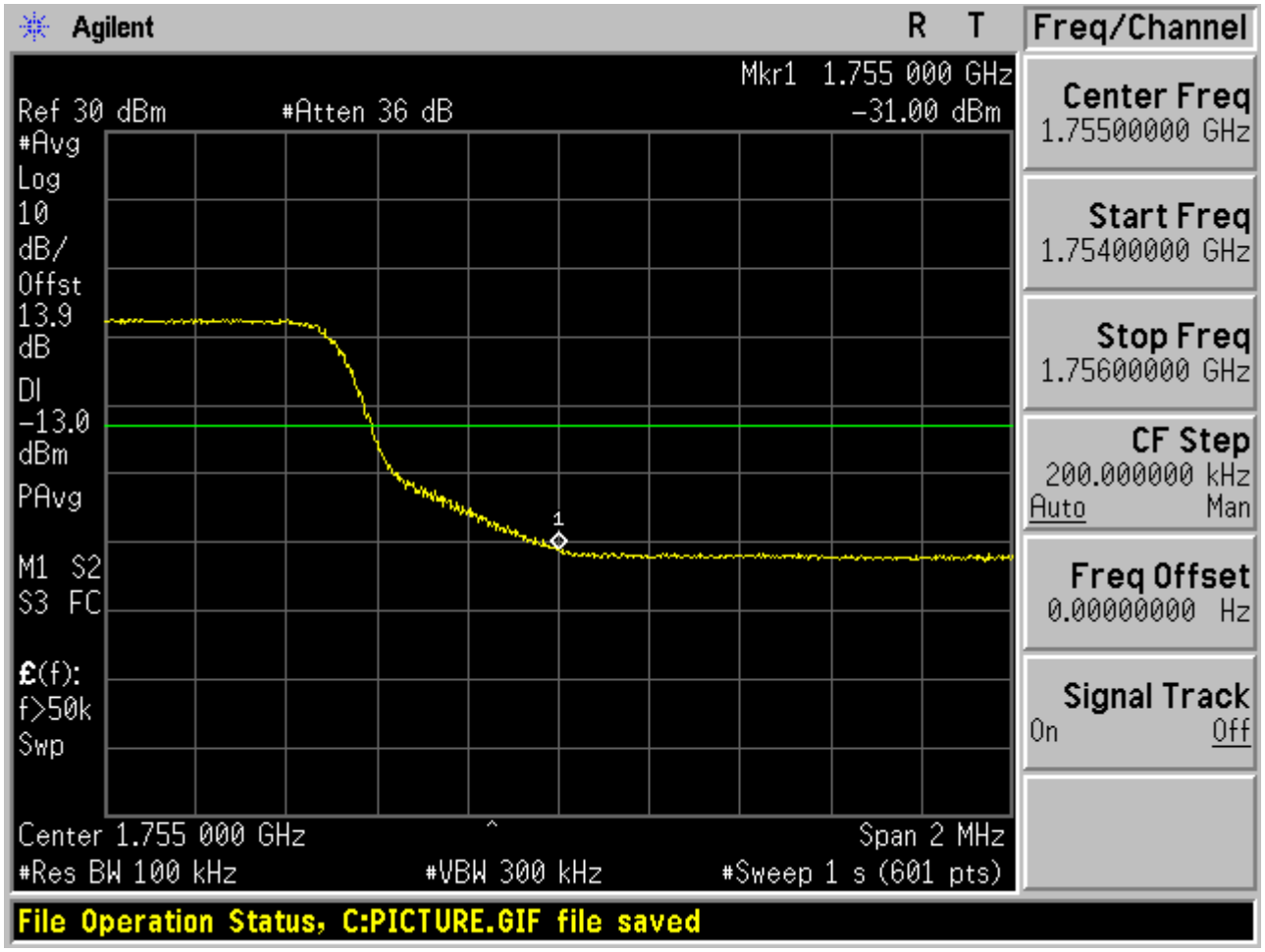
1.1.2.2.2 QPSK/1RB #max



1.1.2.2.3 QPSK/Partial RBs /RB #13



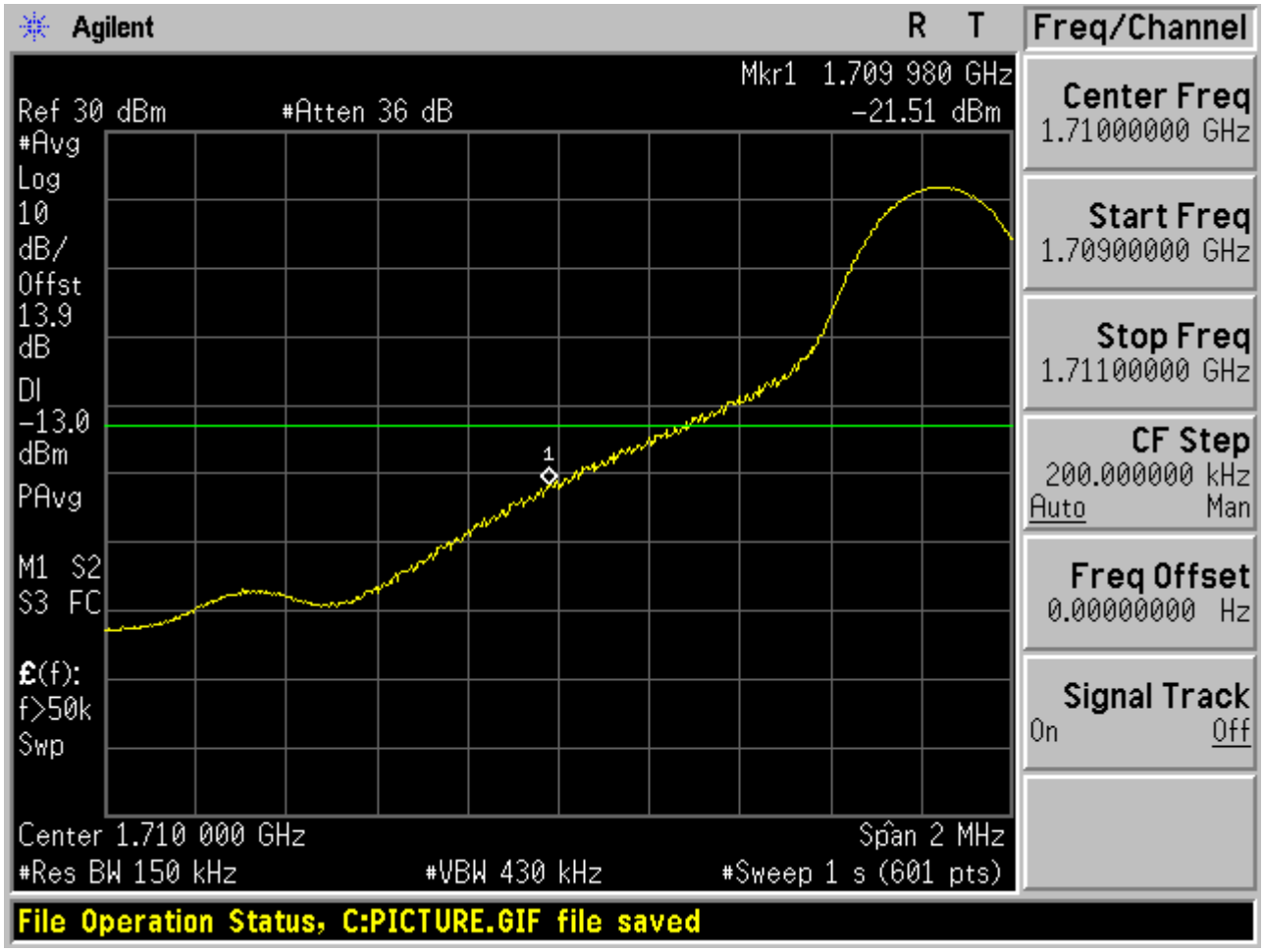
1.1.2.2.4 QPSK/full RBs



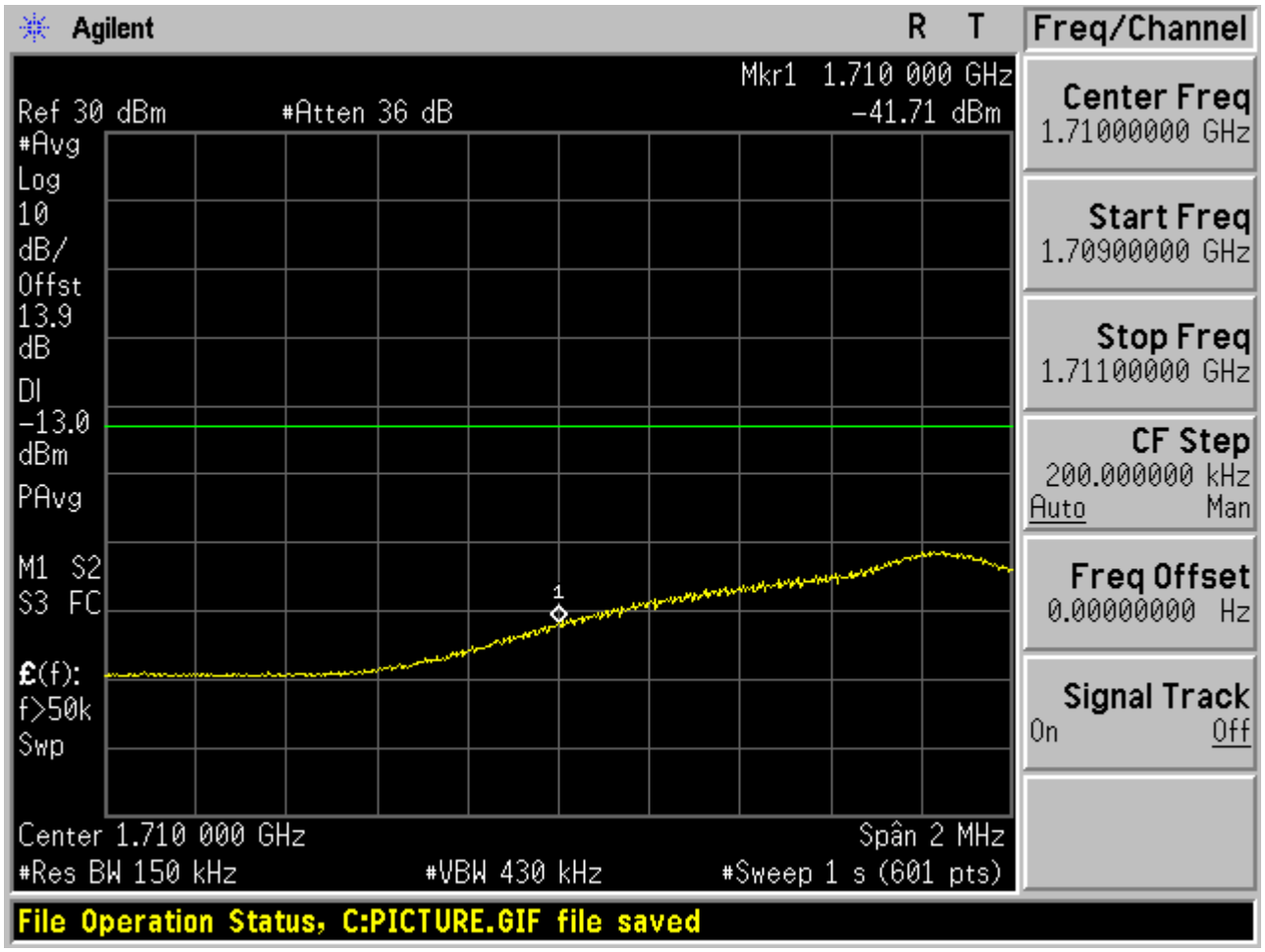
1.1.3 Channel Bandwidth = 15 MHz

1.1.3.1 Channel= B

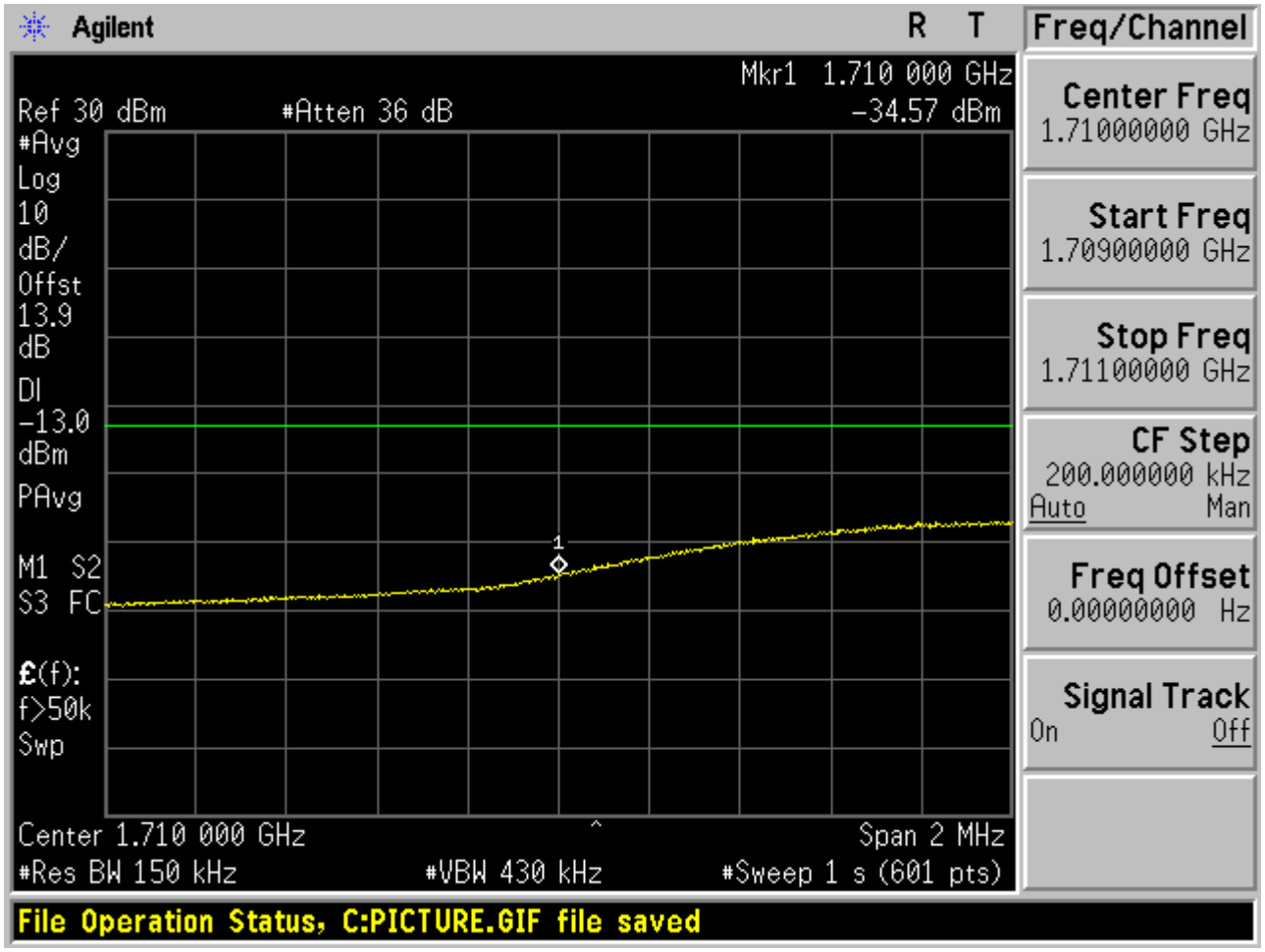
1.1.3.1.1 QPSK/1RB #0



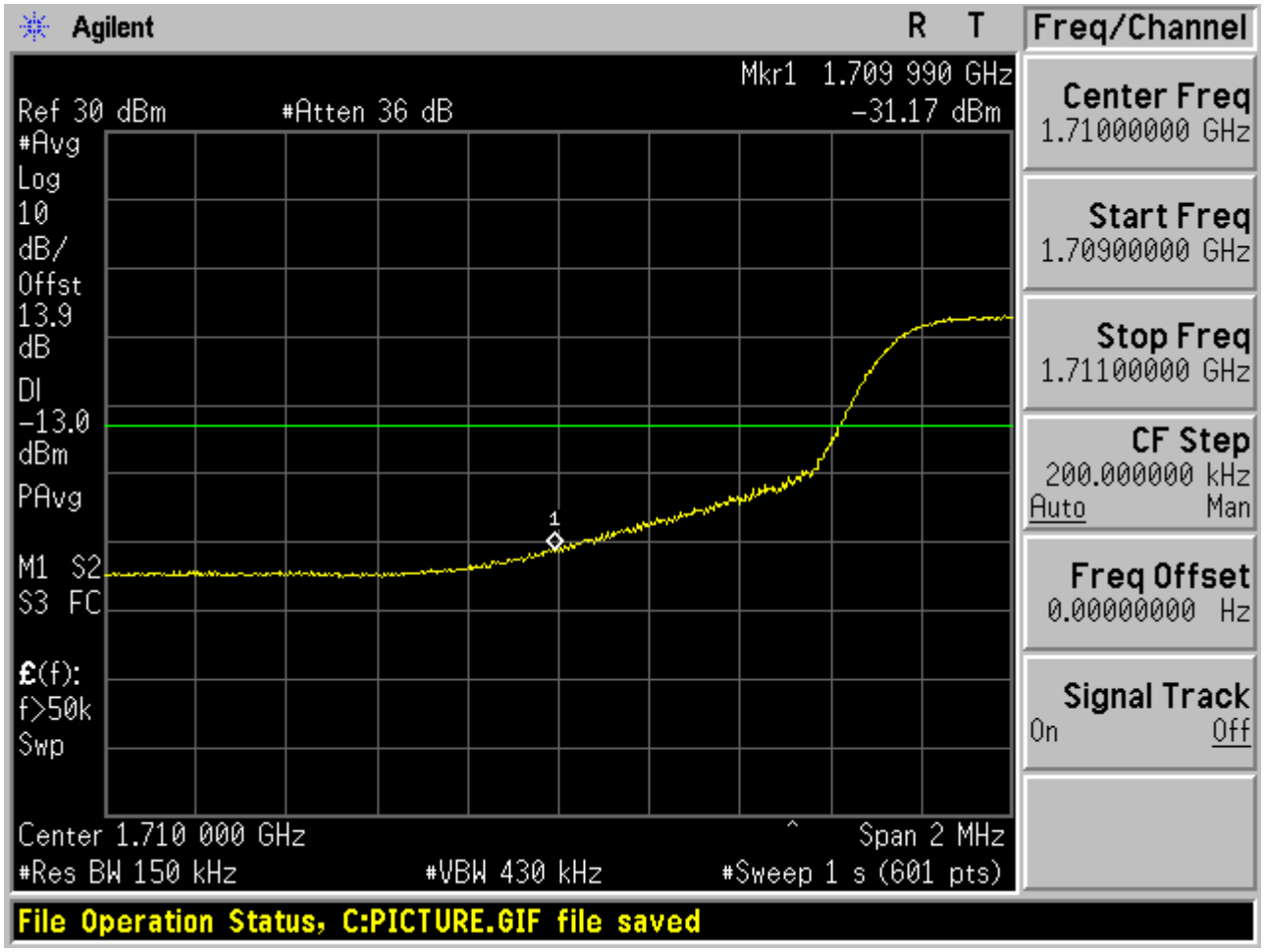
1.1.3.1.2 QPSK/1RB #max



1.1.3.1.3 QPSK/Partial RBs /RB #18

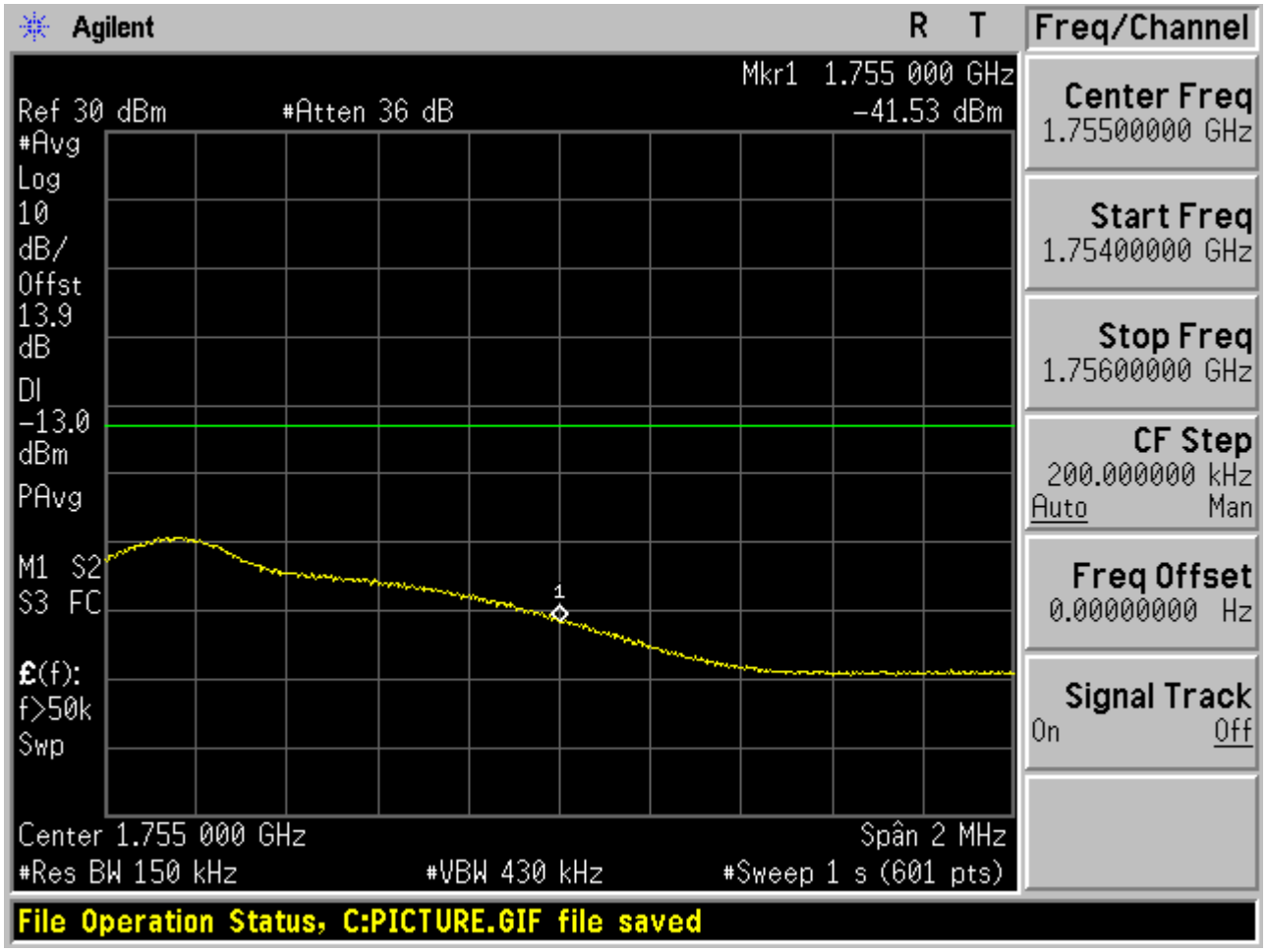


1.1.3.1.4 QPSK/full RBs

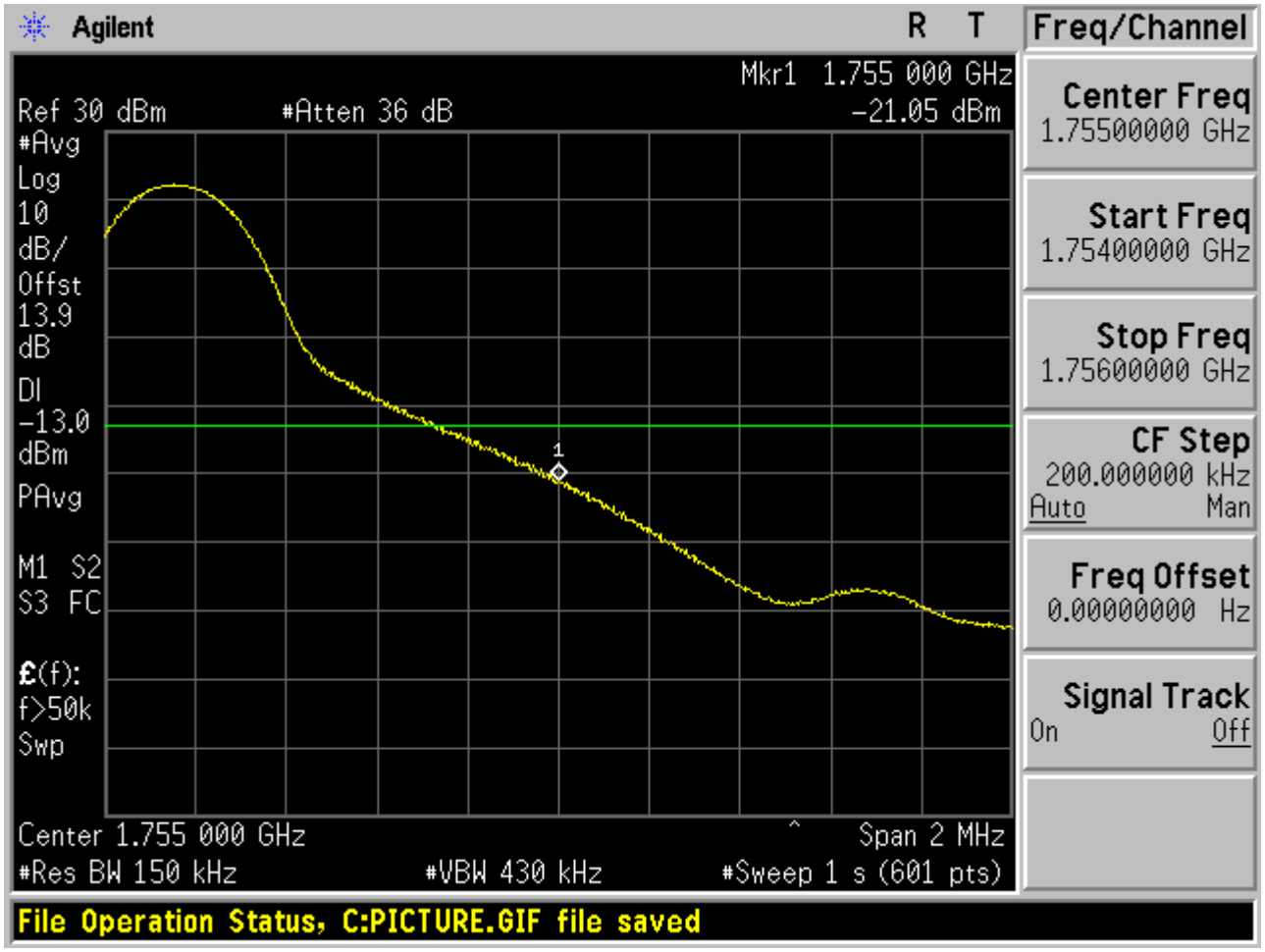


1.1.3.2 Channel= T

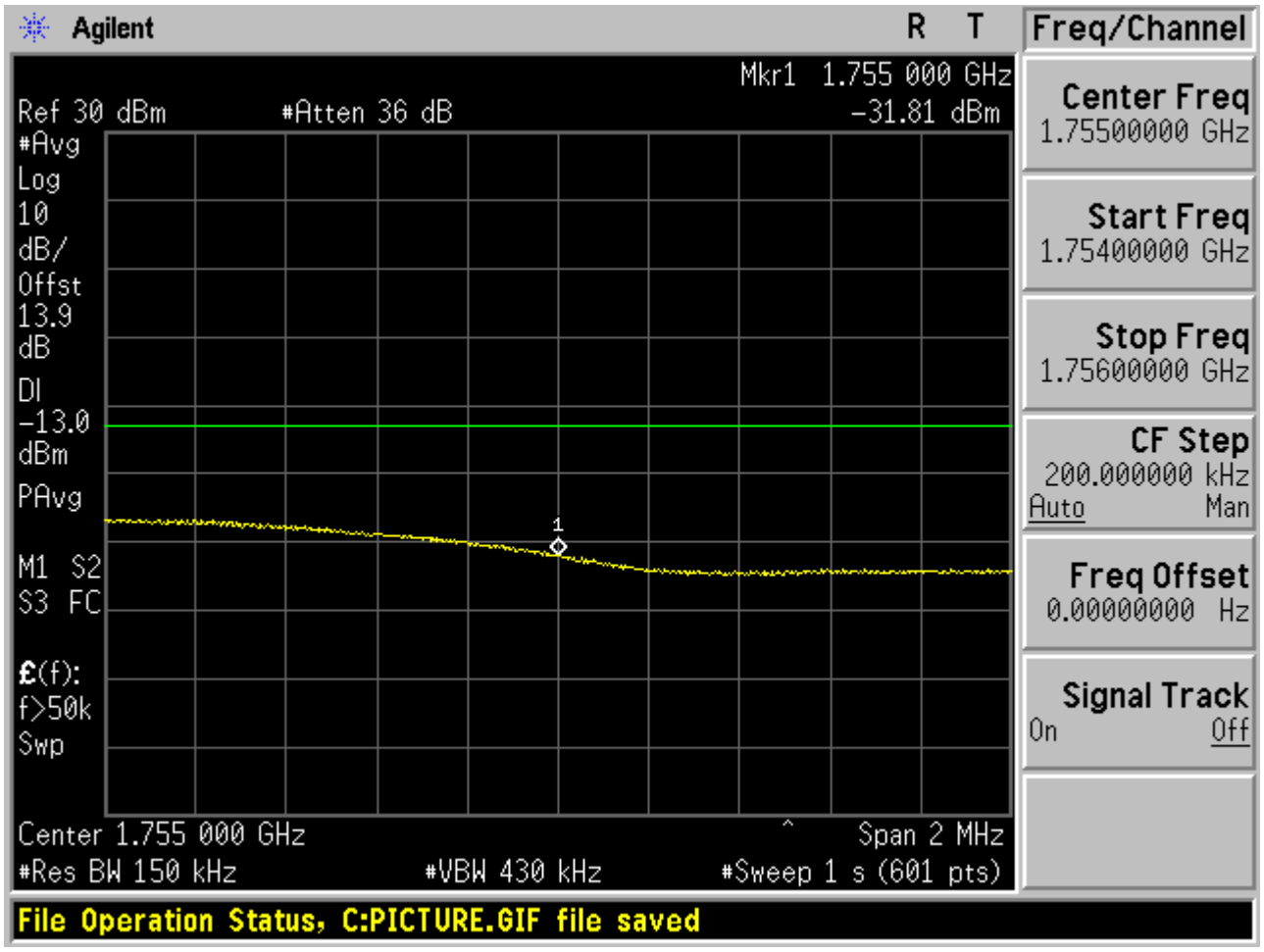
1.1.3.2.1 QPSK/1RB #0



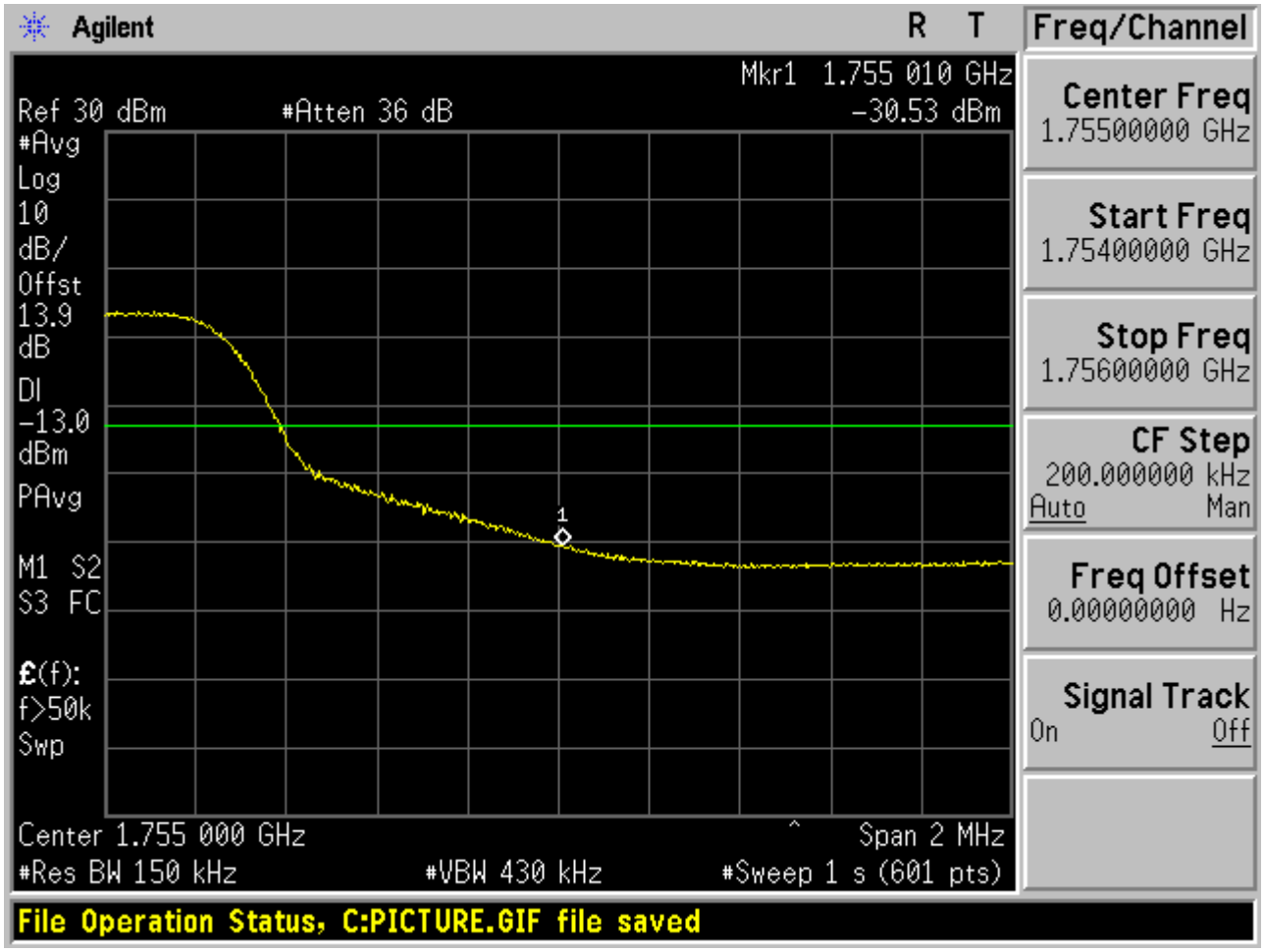
1.1.3.2.2 QPSK/1RB #max



1.1.3.2.3 QPSK/Partial RBs /RB #18



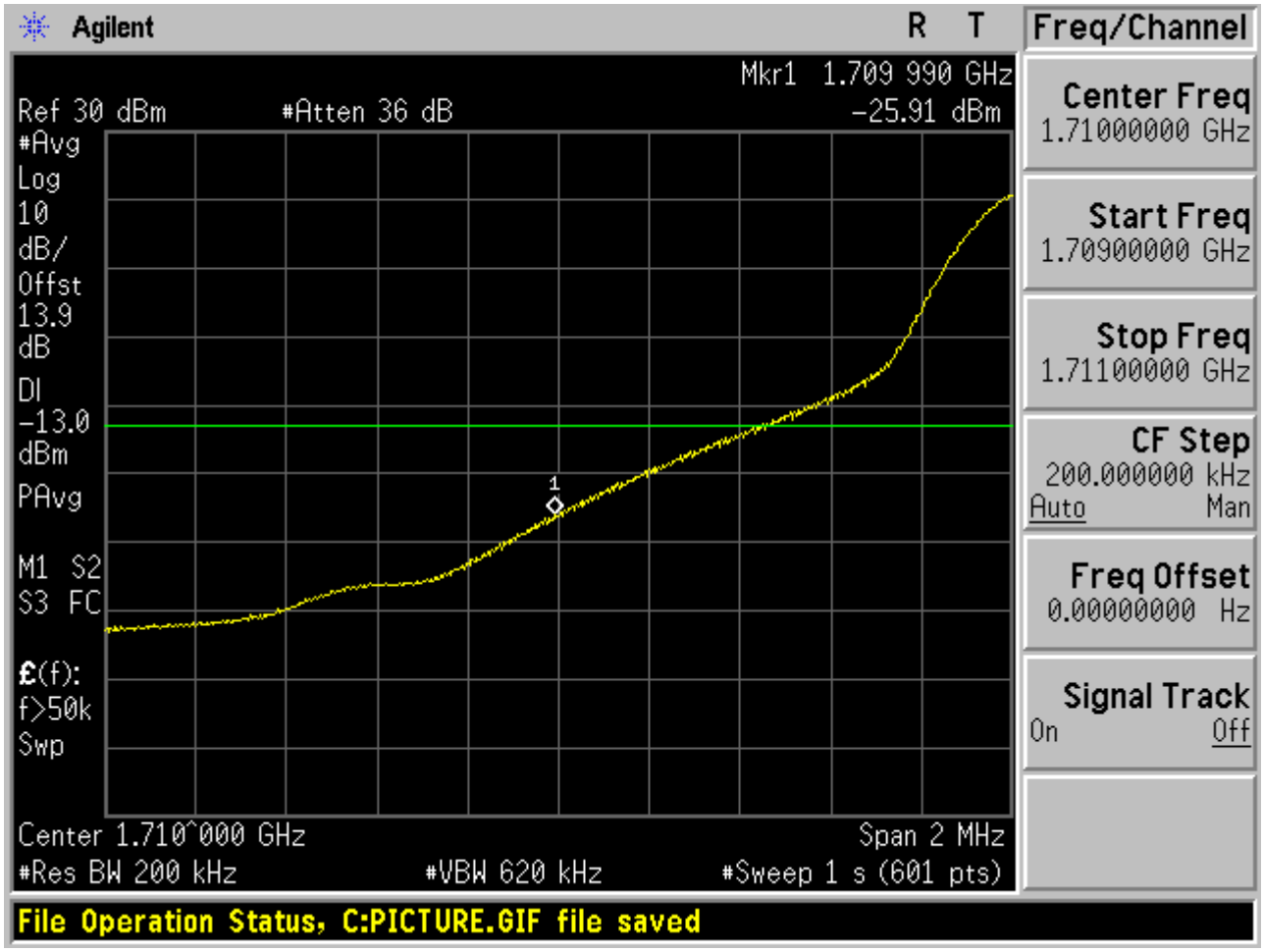
1.1.3.2.4 QPSK/full RBs



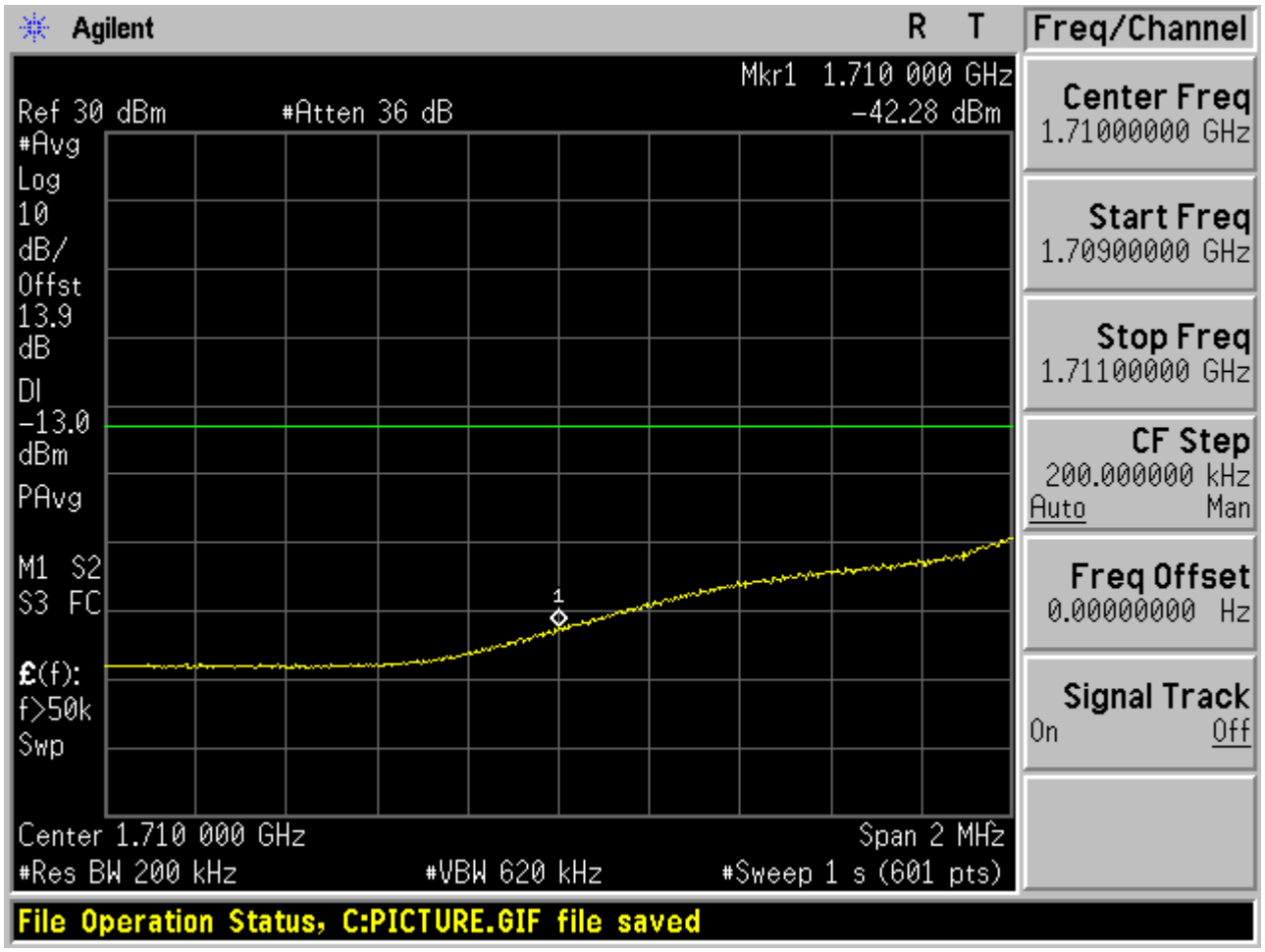
1.1.4 Channel Bandwidth = Highest (20 MHz)

1.1.4.1 Channel= B

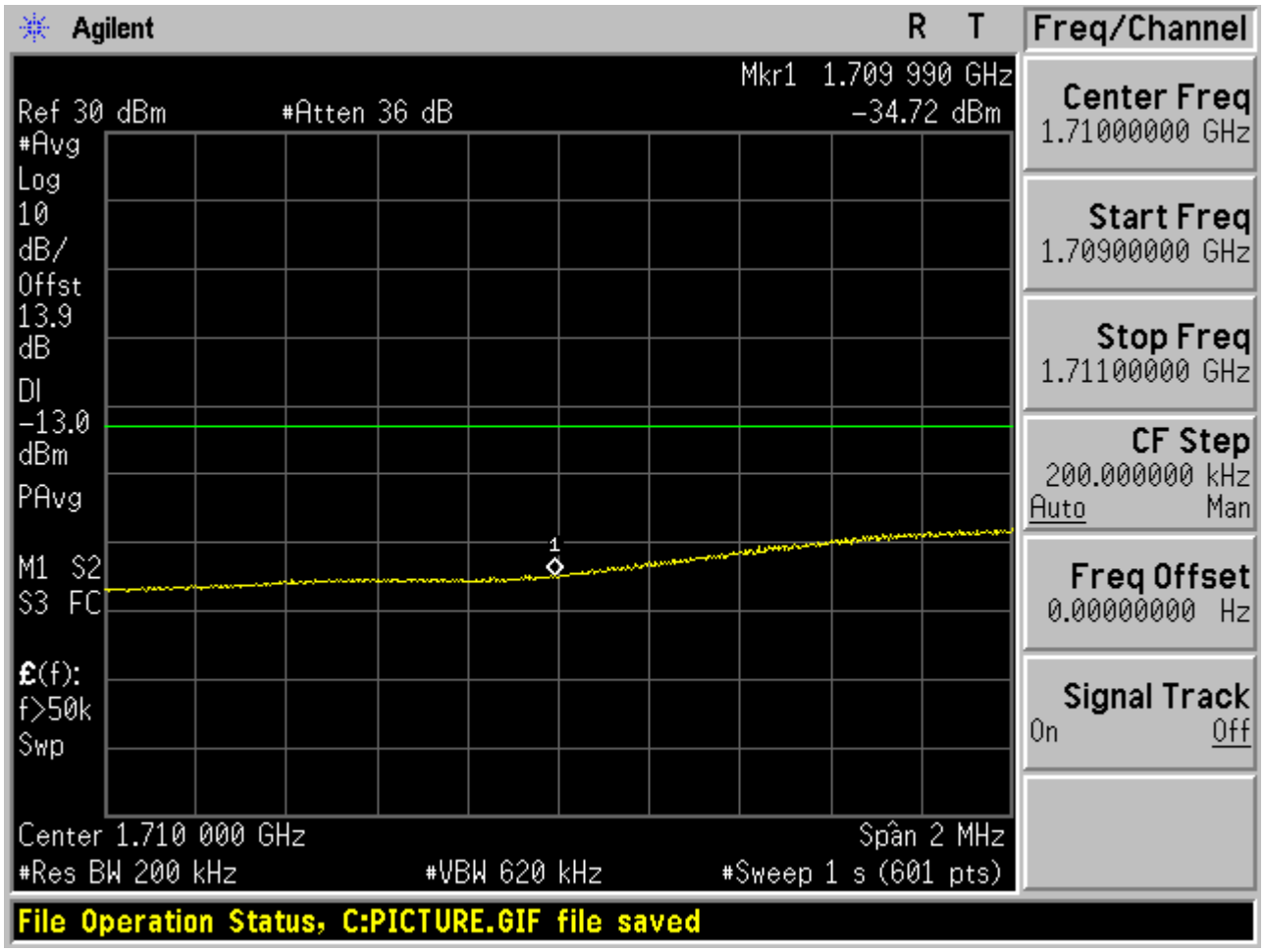
1.1.4.1.1 QPSK/1RB #0



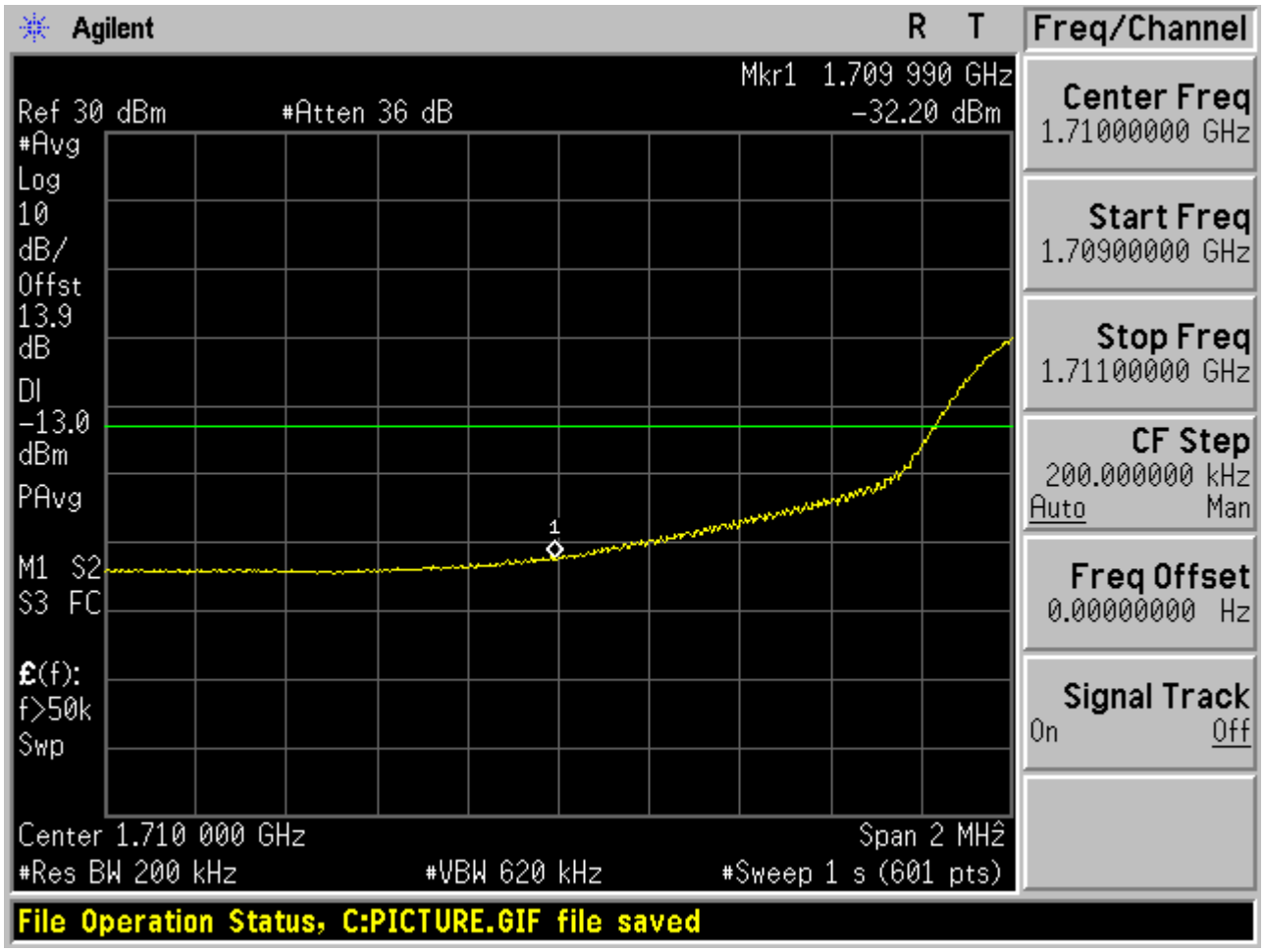
1.1.4.1.2 QPSK/1RB #max



1.1.4.1.3 QPSK/Partial RBs /RB #25

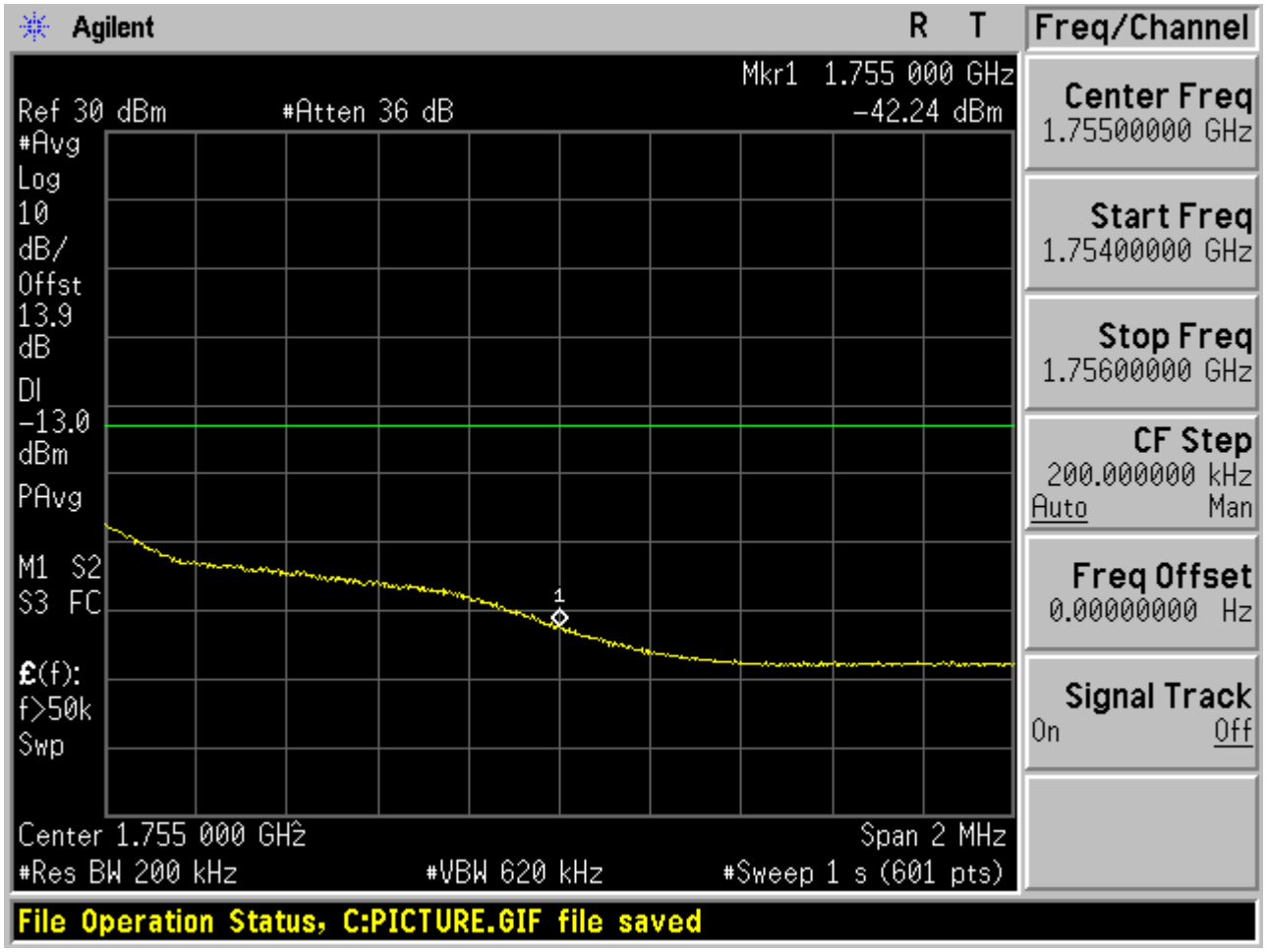


1.1.4.1.4 QPSK/full RBs

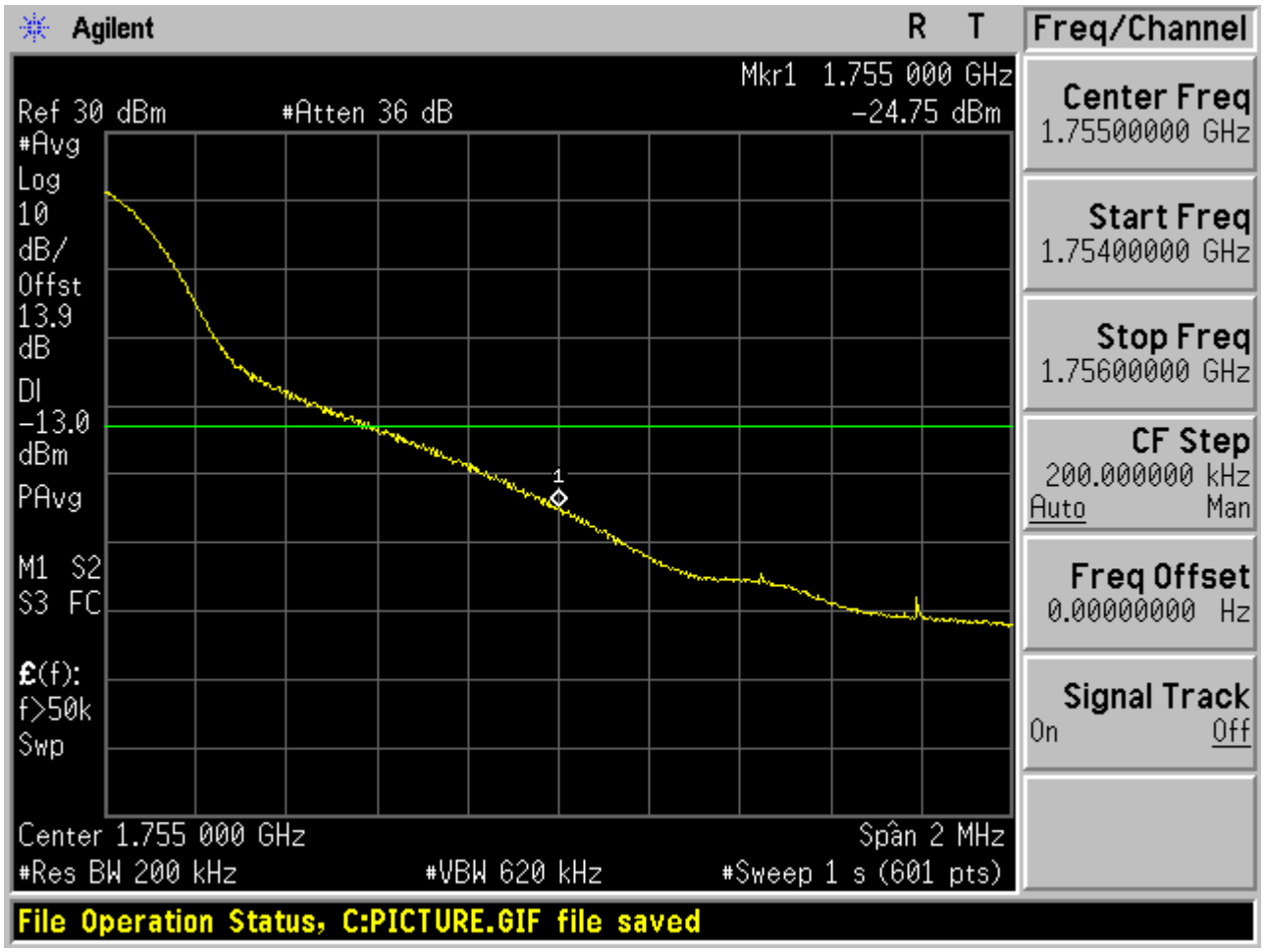


1.1.4.2 Channel= T

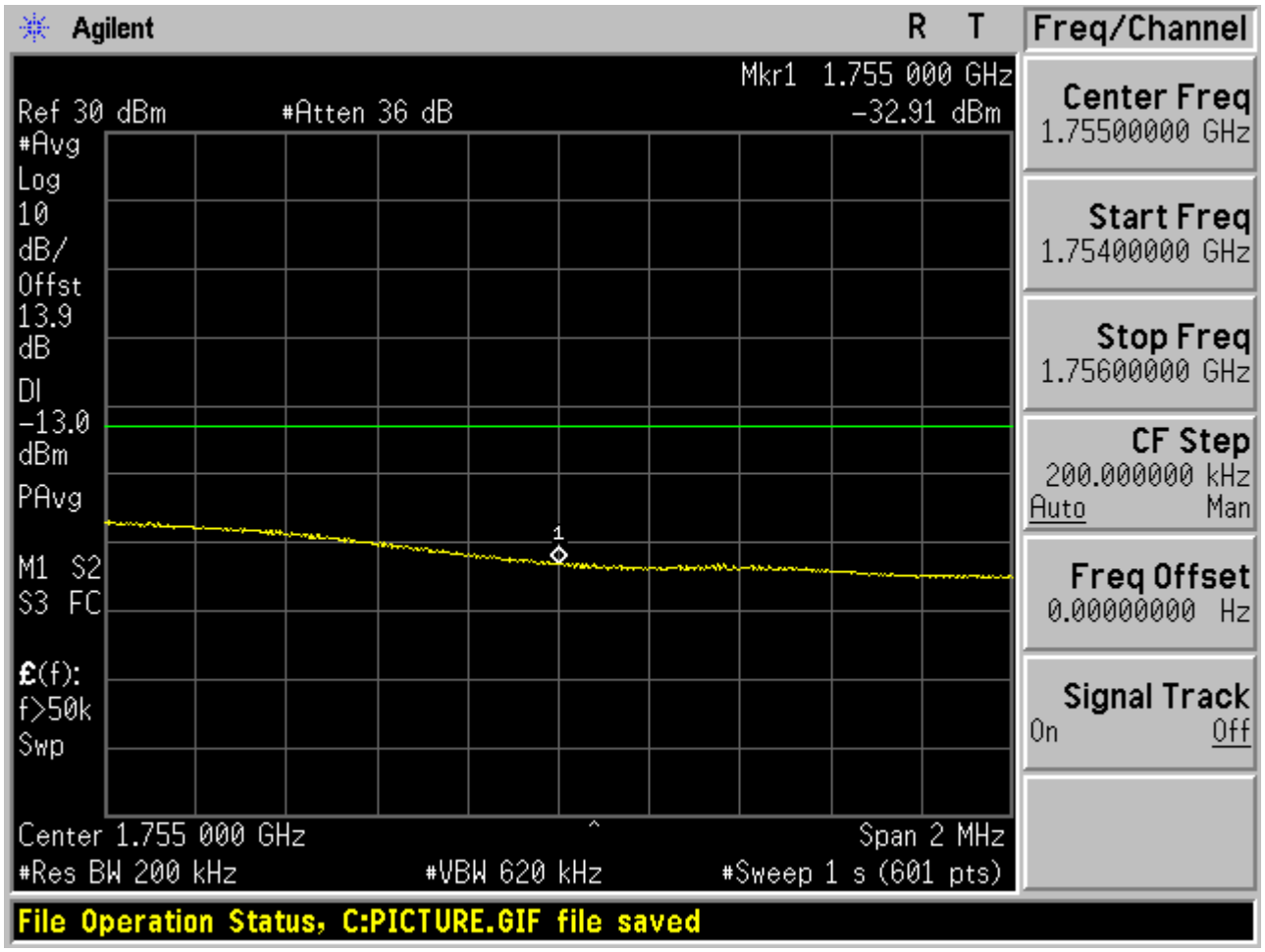
1.1.4.2.1 QPSK/1RB #0



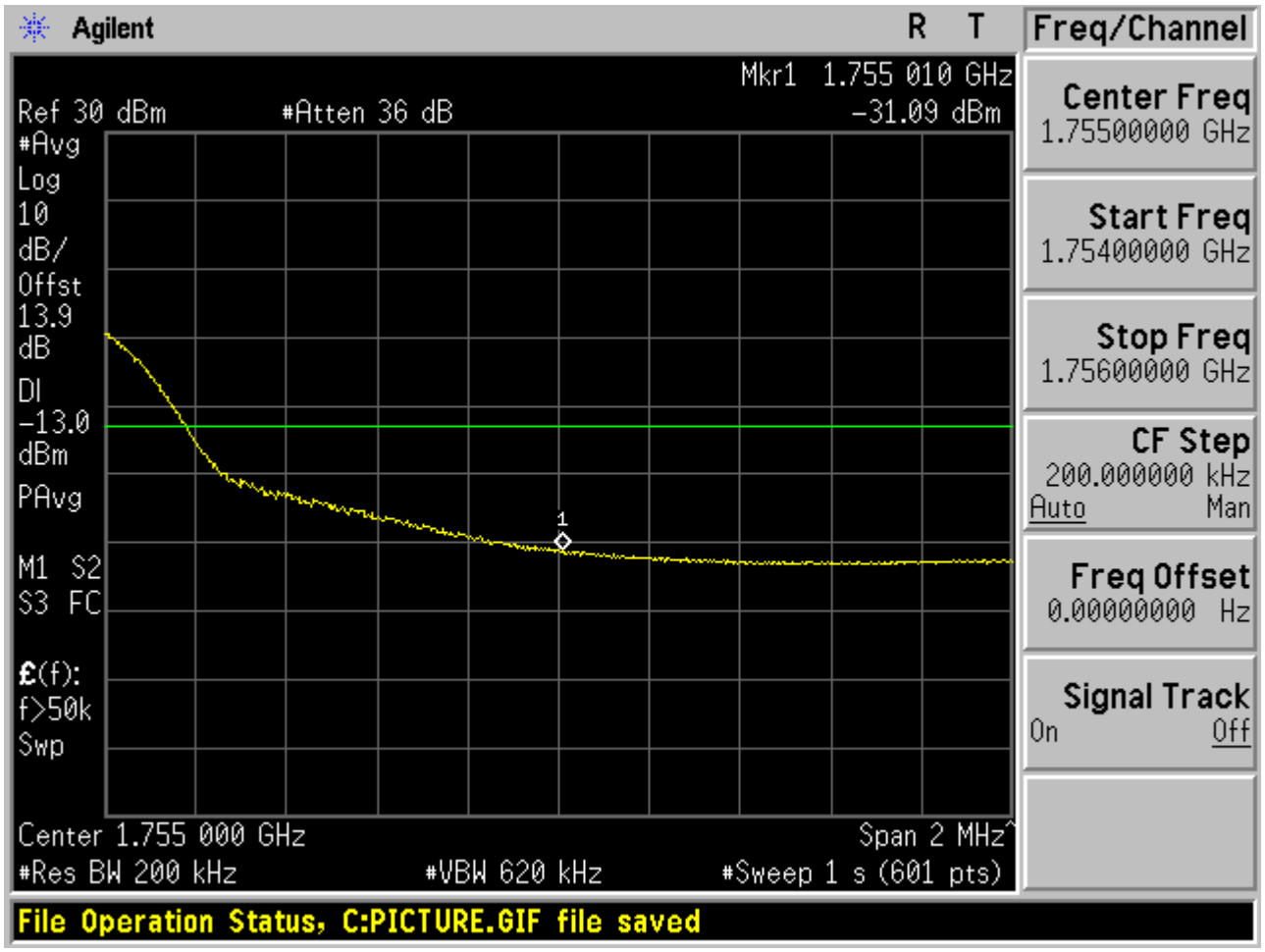
1.1.4.2.2 QPSK/1RB #max



1.1.4.2.3 QPSK/Partial RBs /RB #25



1.1.4.2.4 QPSK/full RBs

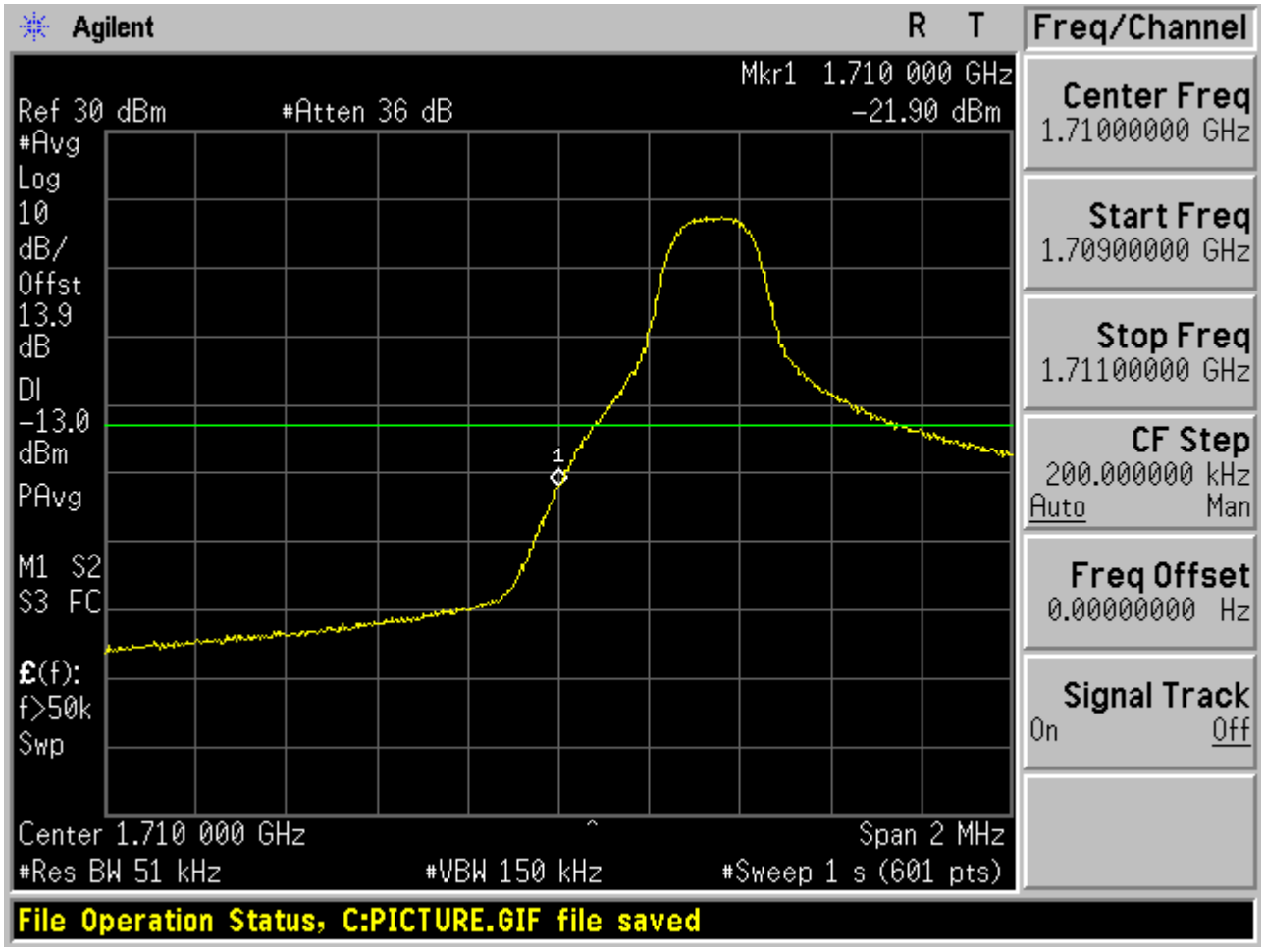


1.2 Test Mode=TM2

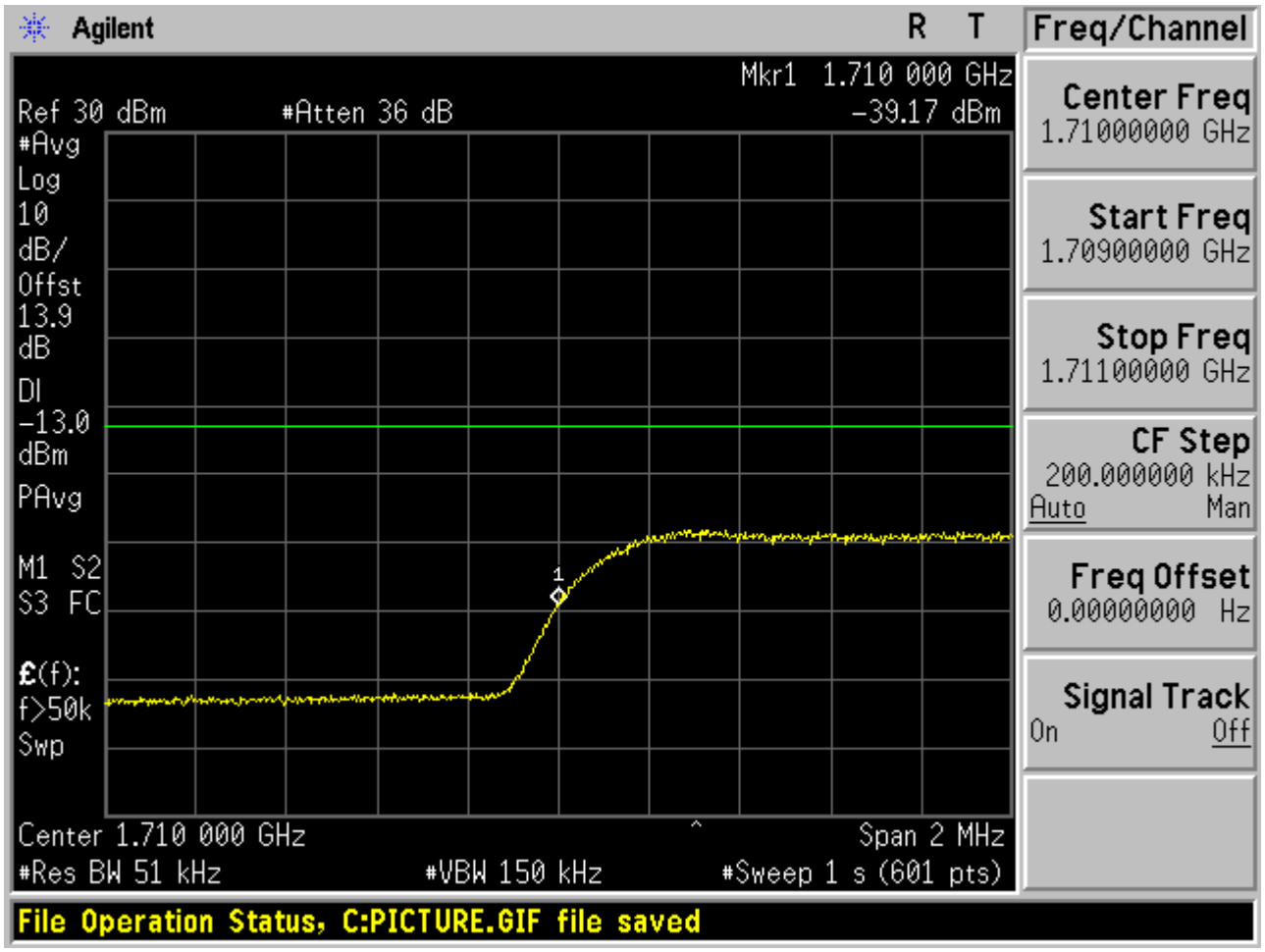
1.2.1 Channel Bandwidth = Lowest (5 MHz)

1.2.1.1 Channel= B

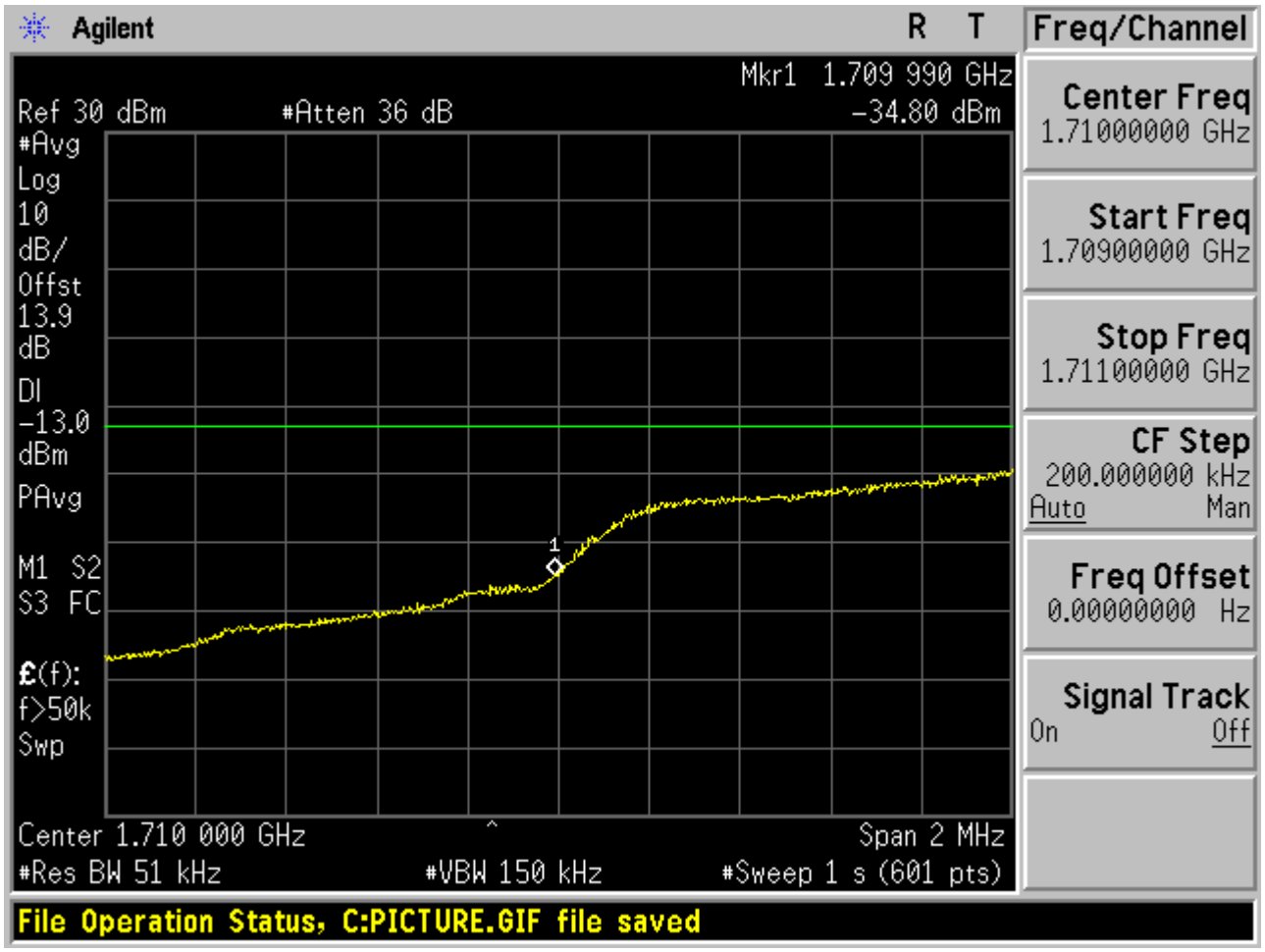
1.2.1.1.1 16QAM/1RB #0



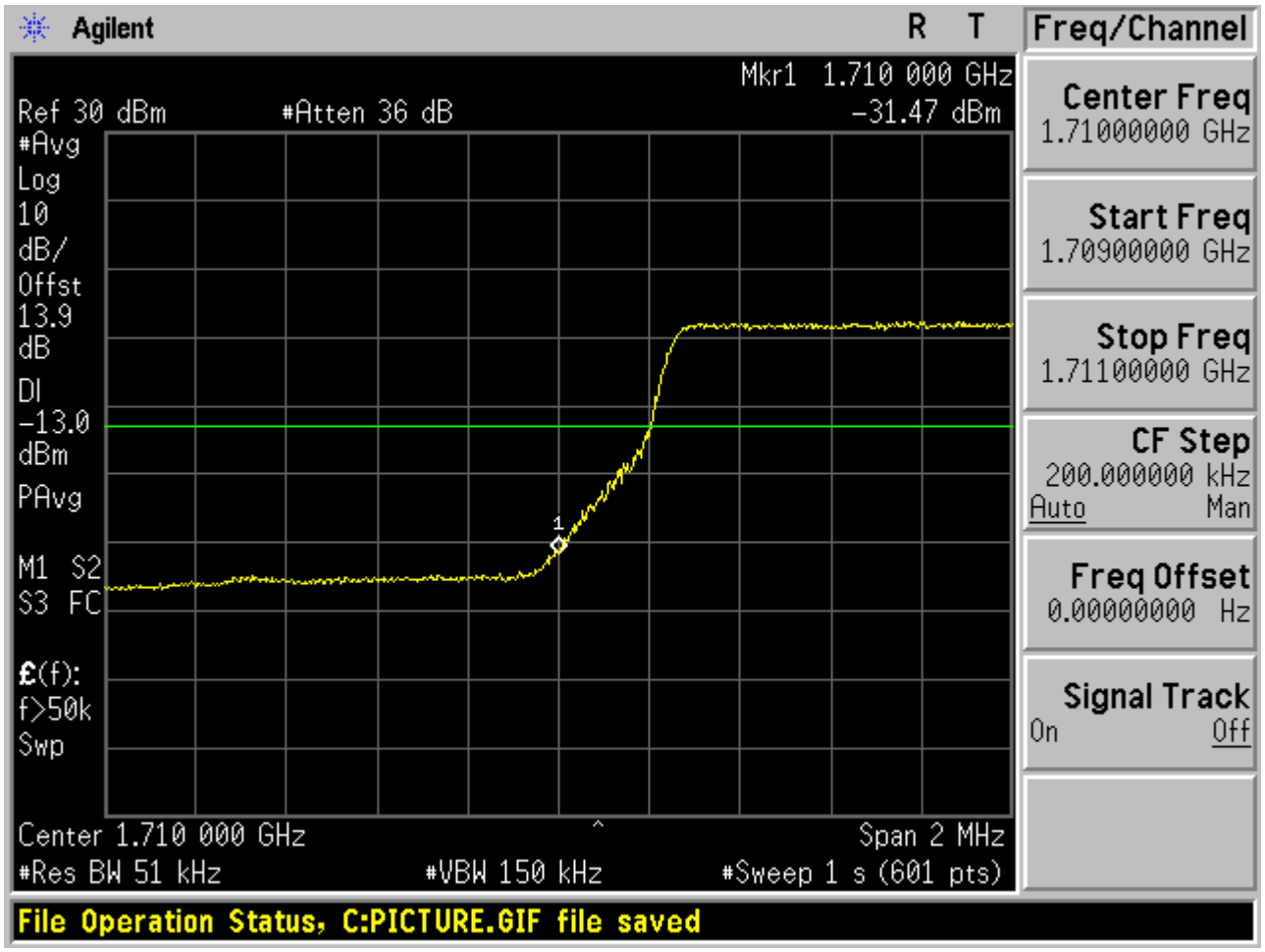
1.2.1.1.2 16QAM/1RB #max



1.2.1.1.3 16QAM /Partial RBs /RB #6

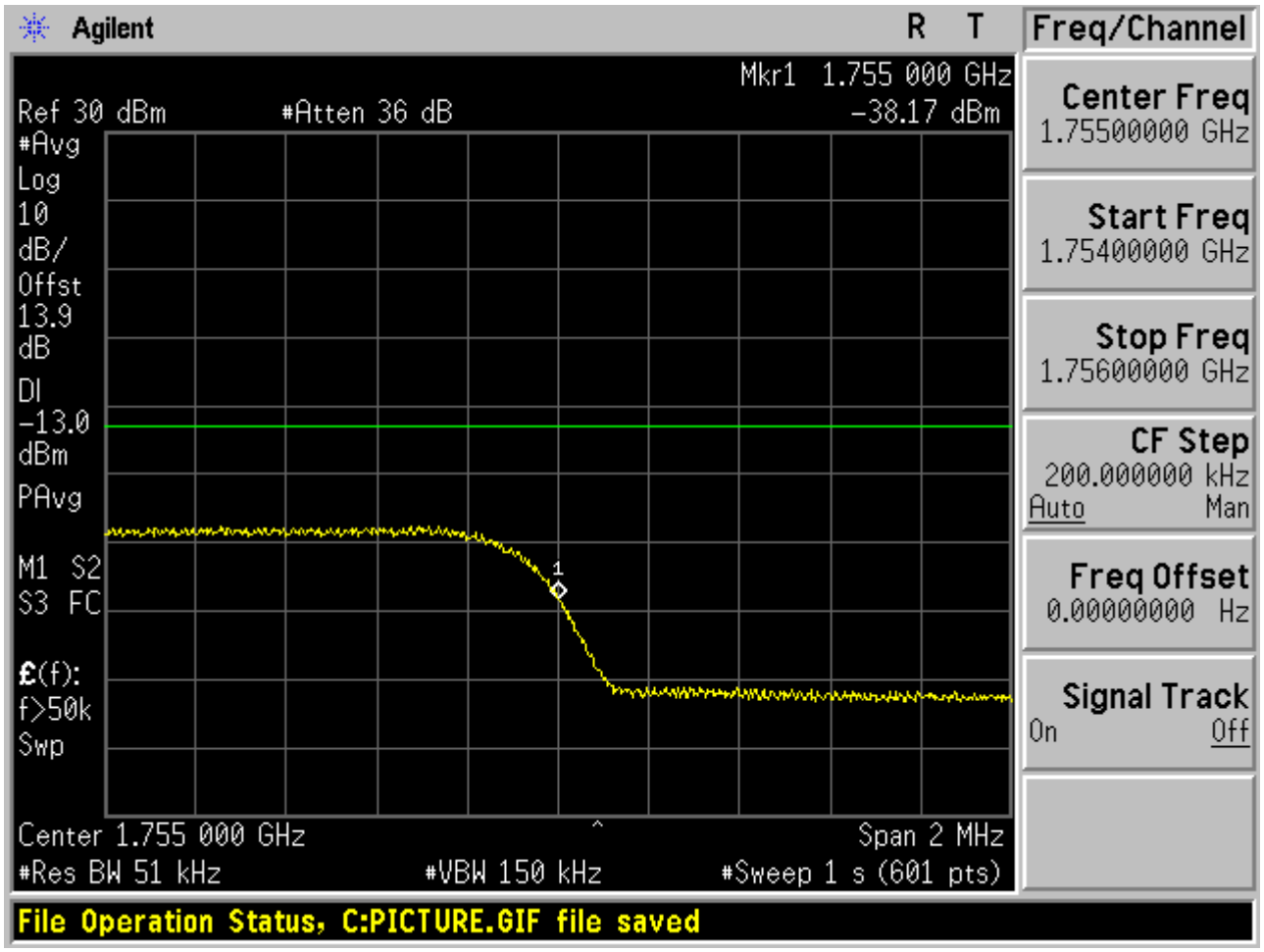


1.2.1.1.4 16QAM /full RBs

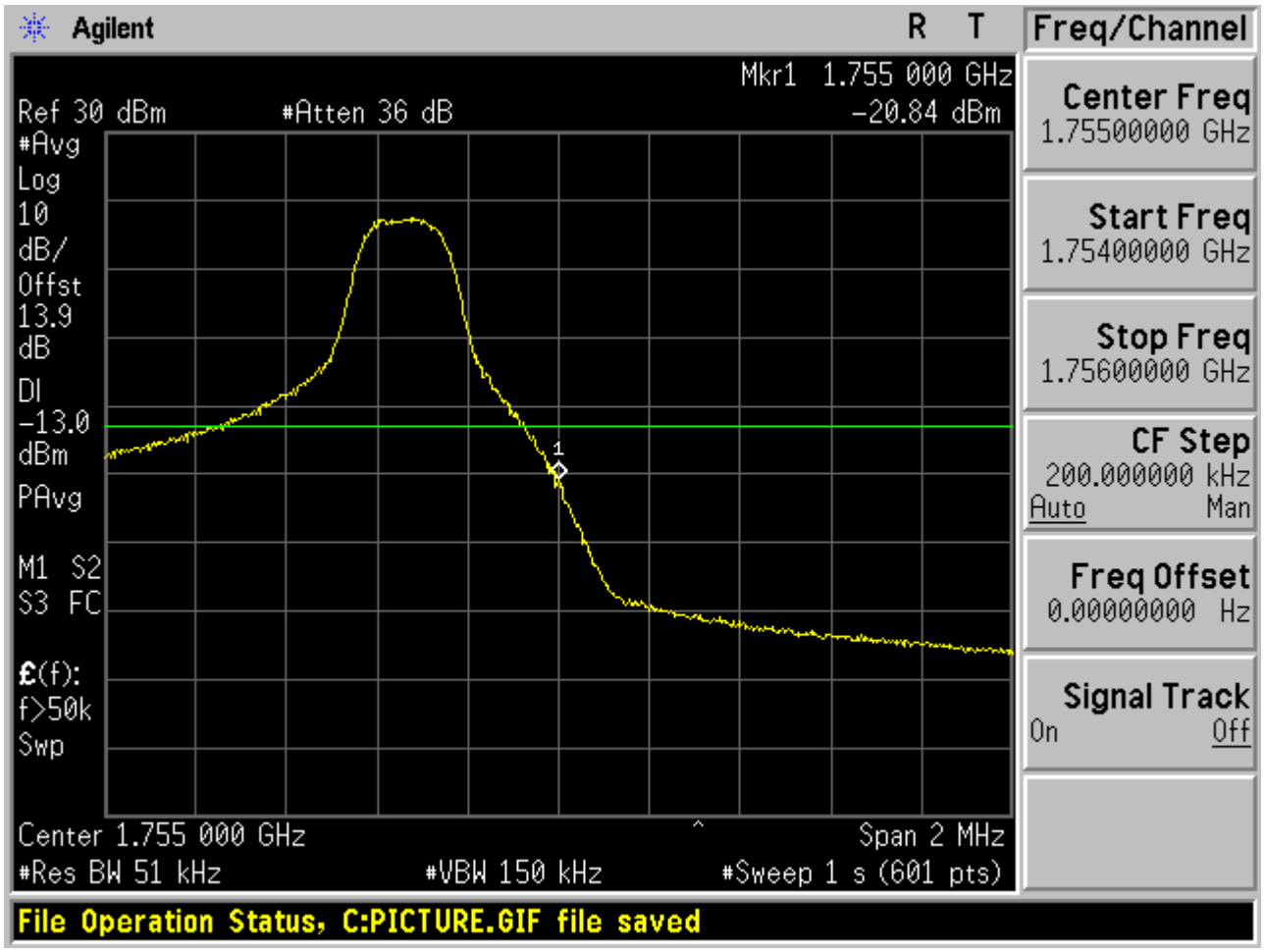


1.2.1.2 Channel= T

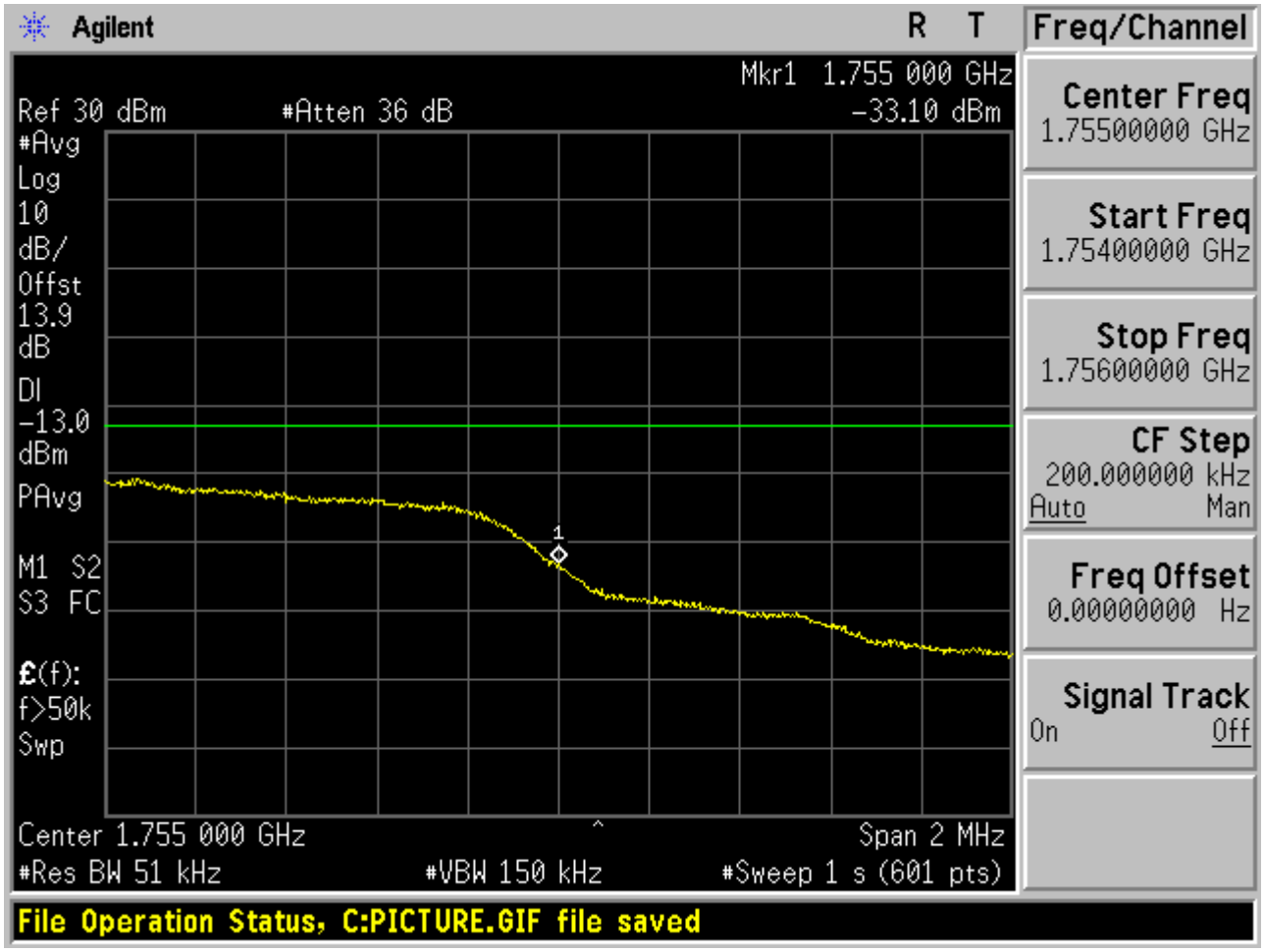
1.2.1.2.1 16QAM/1RB #0



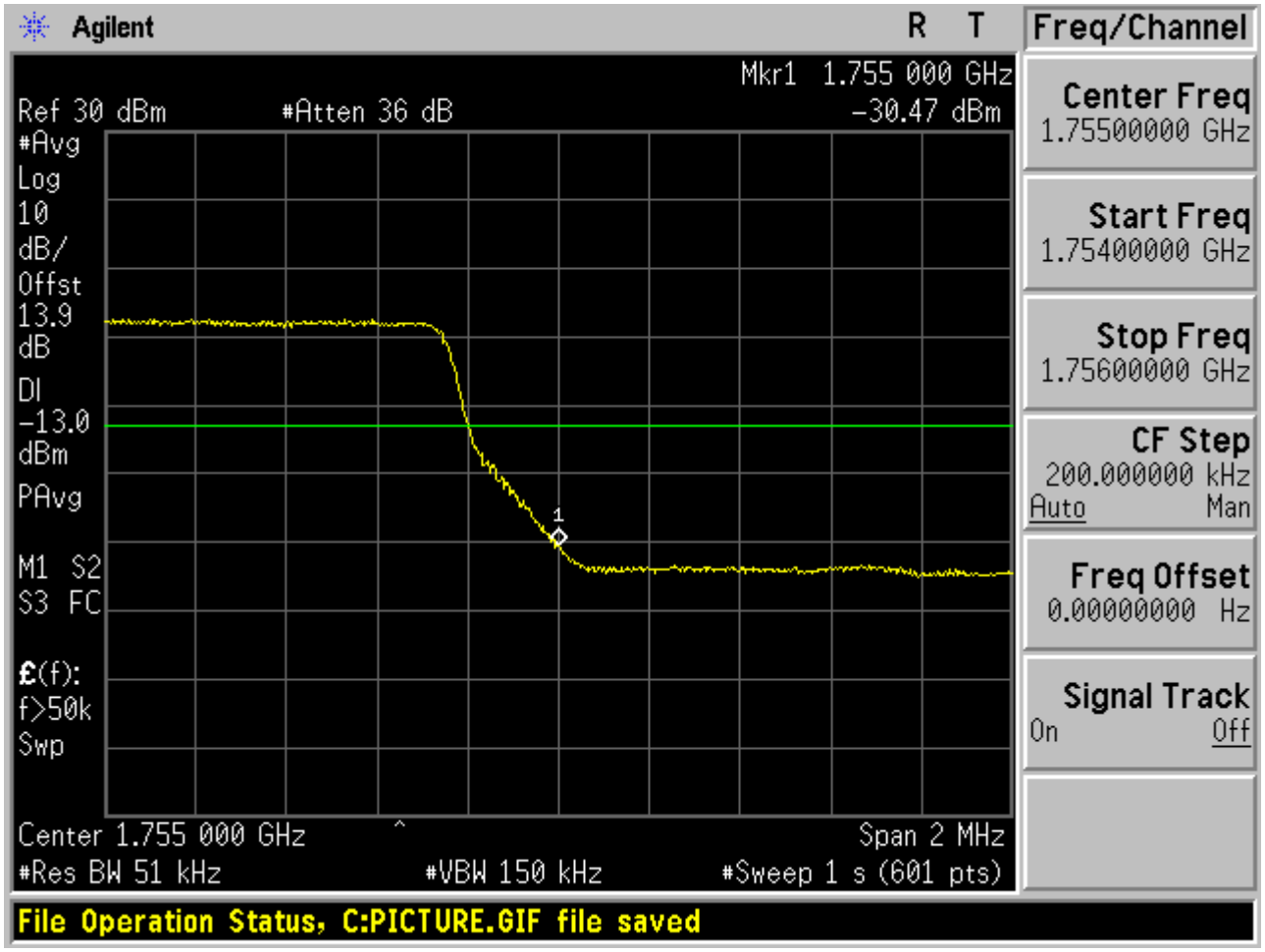
1.2.1.2.2 16QAM/1RB #max



1.2.1.2.3 16QAM /Partial RBs /RB #6



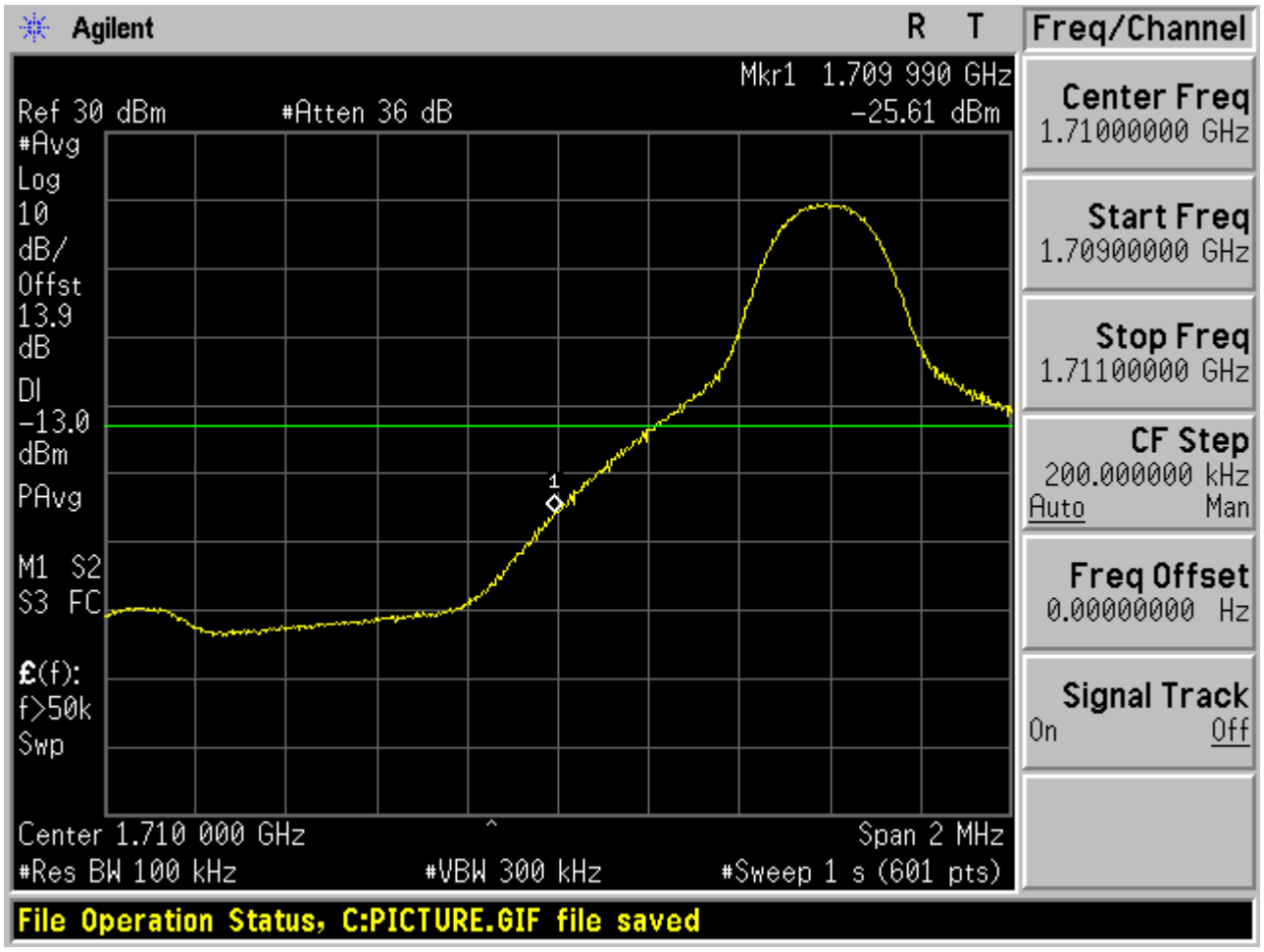
1.2.1.2.4 16QAM /full RBs



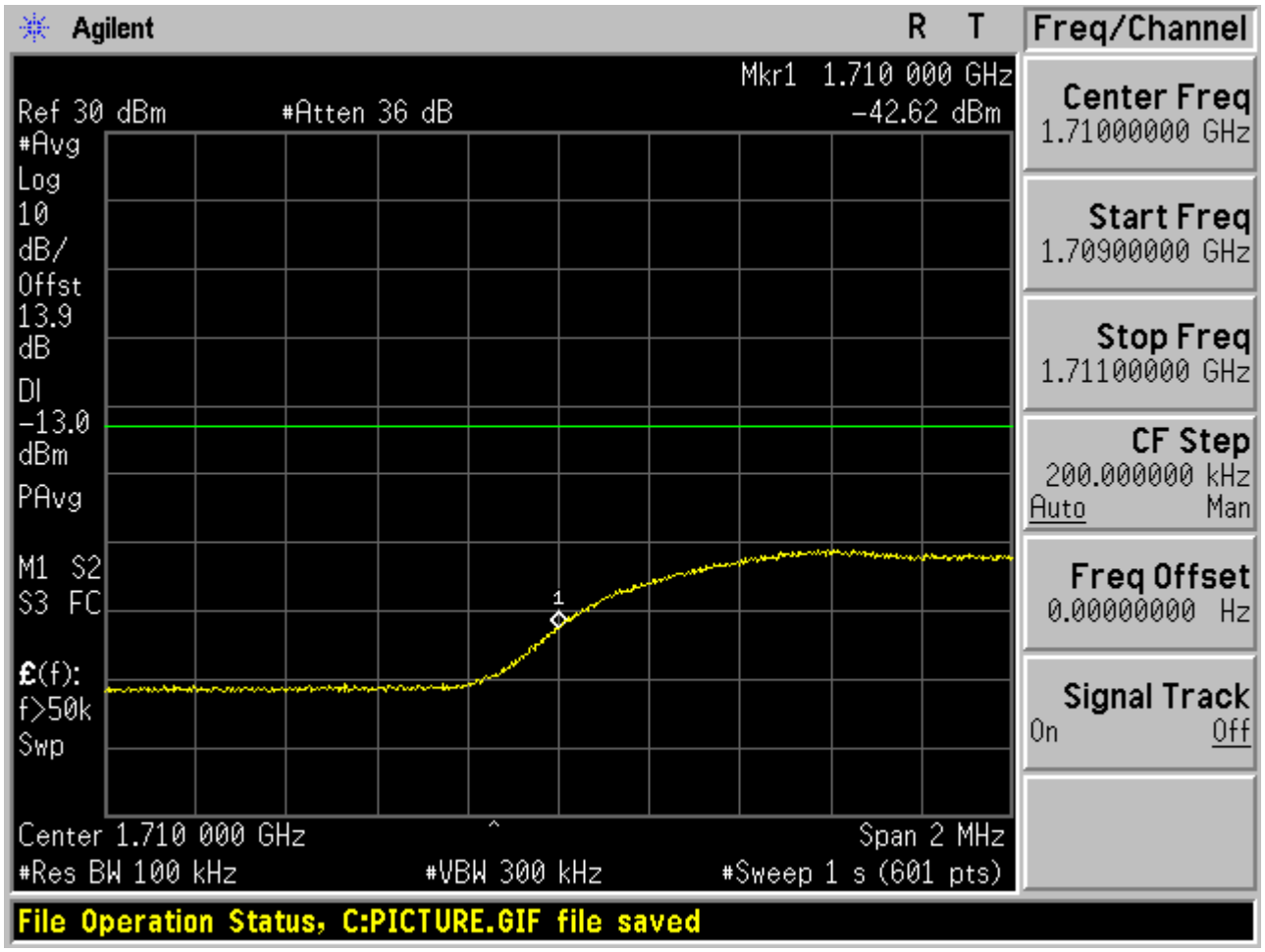
1.2.2 Channel Bandwidth = 10 MHz

1.2.2.1 Channel= B

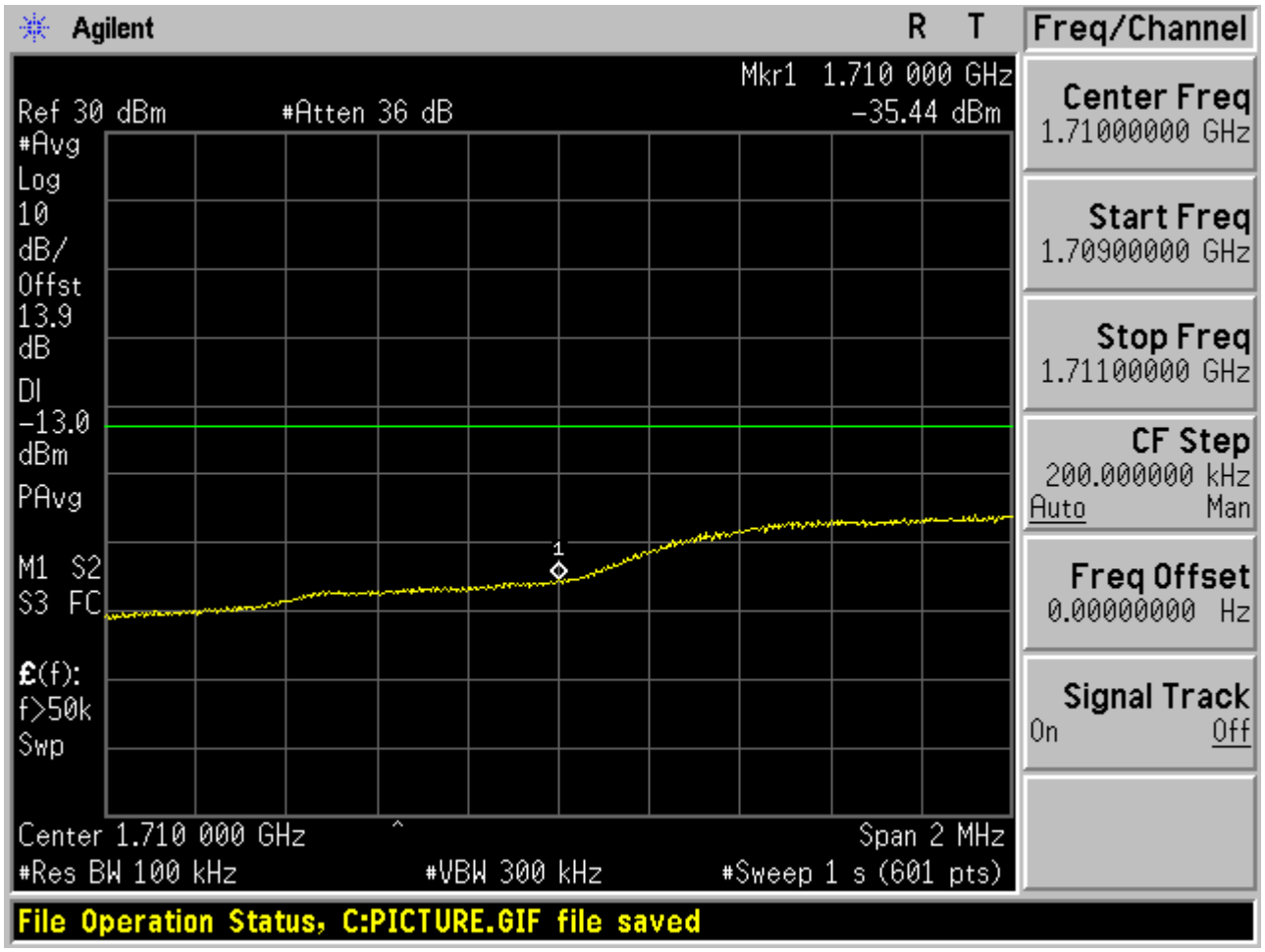
1.2.2.1.1 16QAM/1RB #0



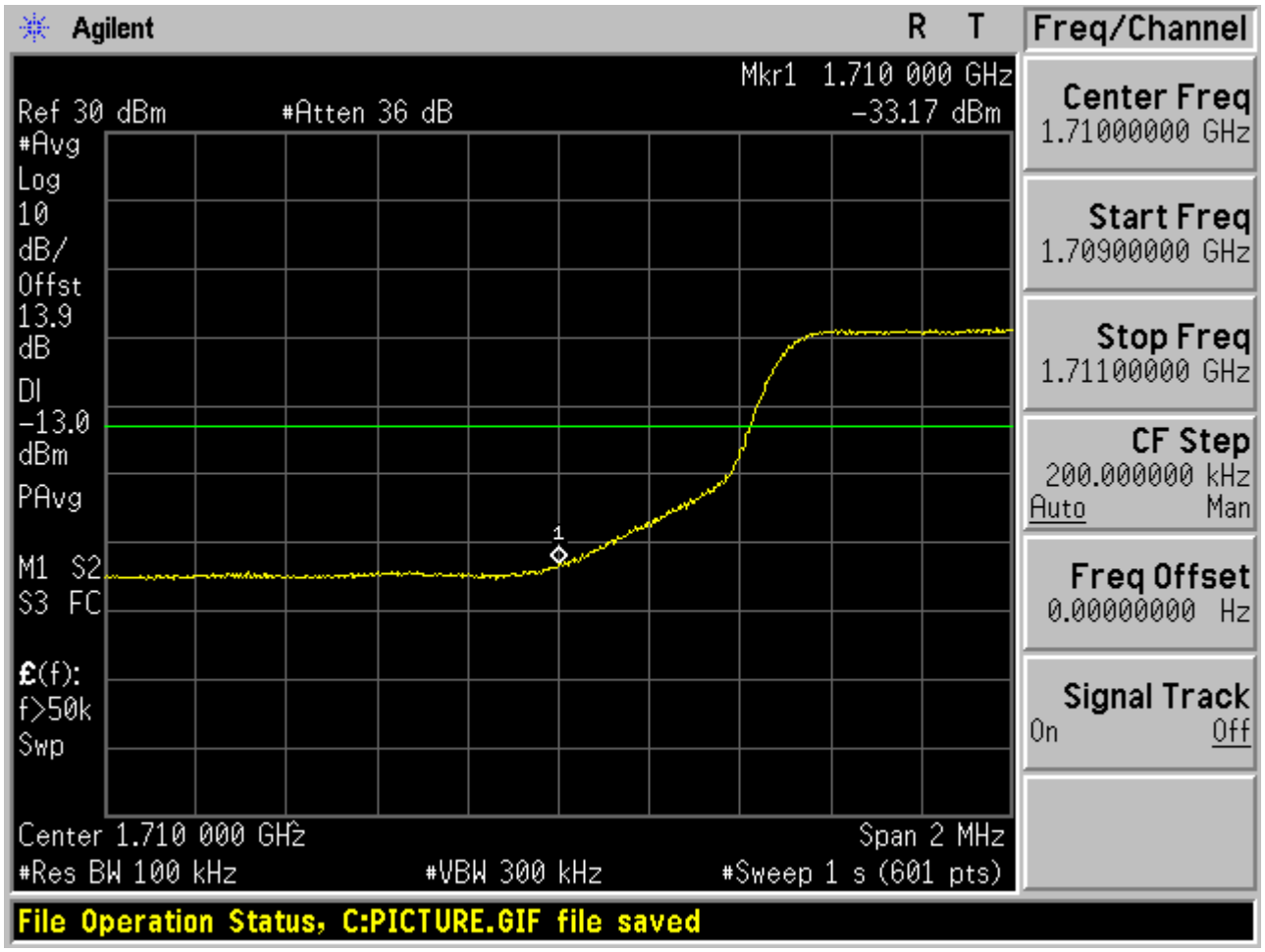
1.2.2.1.2 16QAM/1RB #max



1.2.2.1.3 16QAM /Partial RBs /RB #13

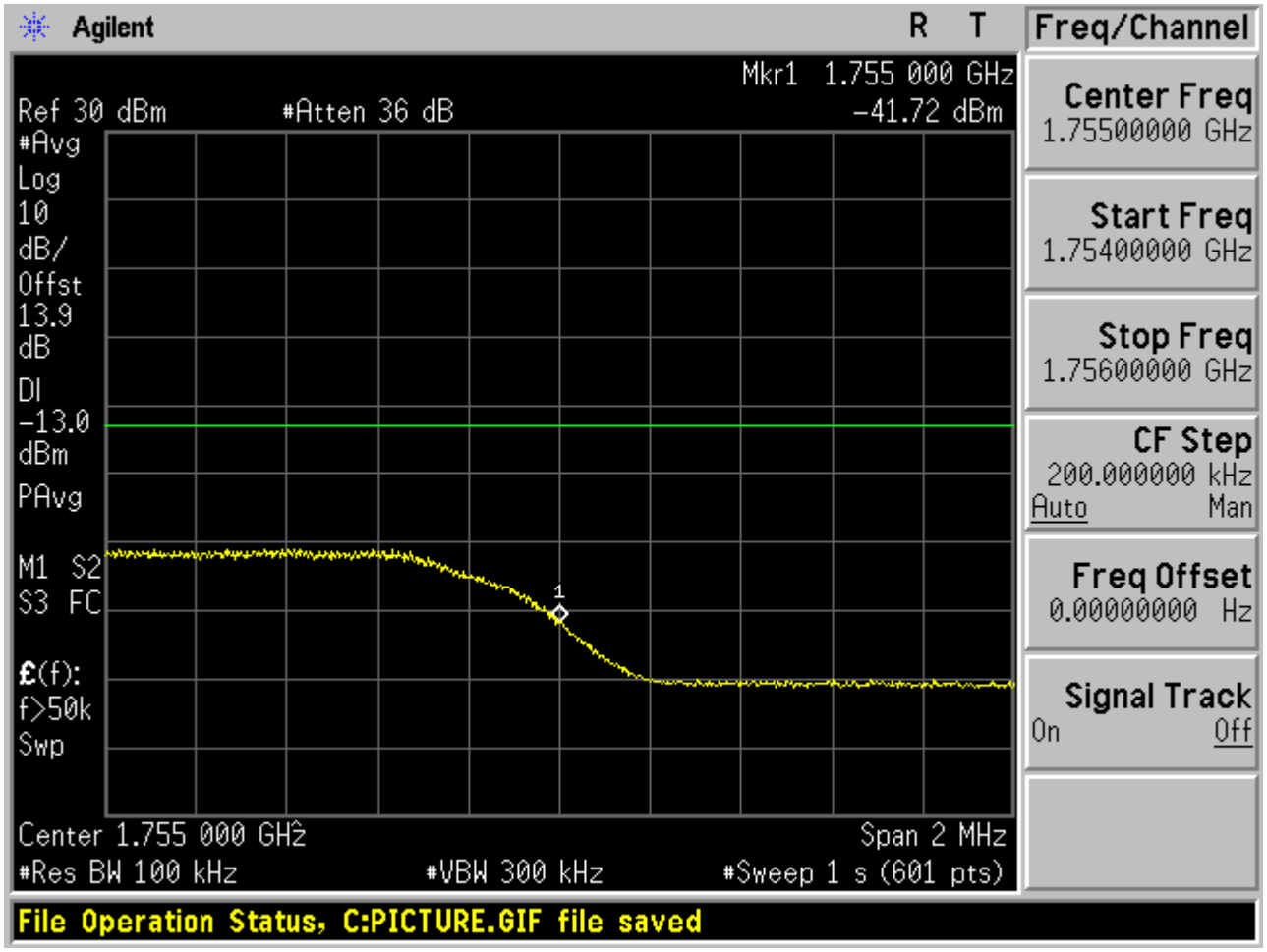


1.2.2.1.4 16QAM /full RBs

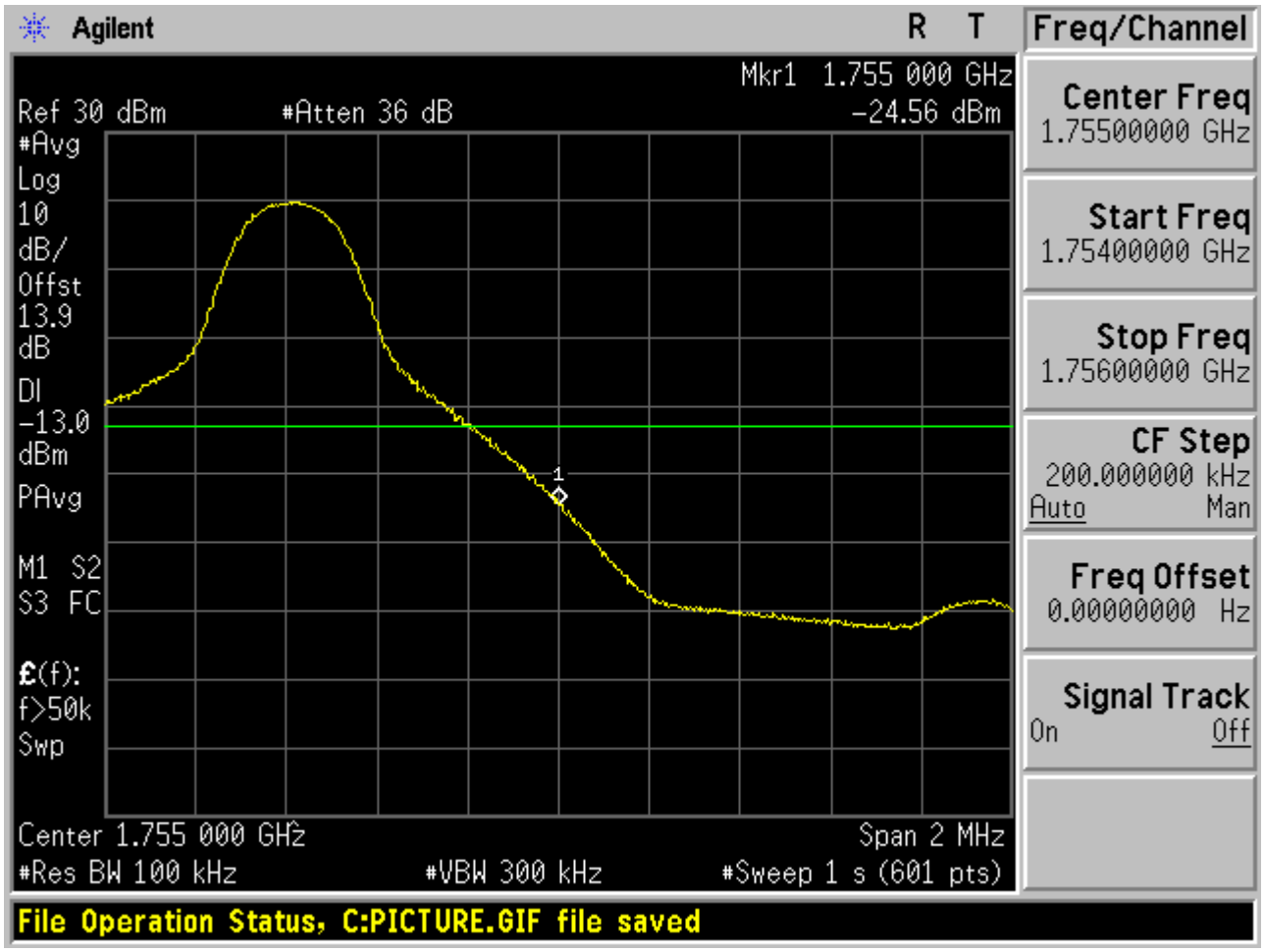


1.2.2.2 Channel= T

1.2.2.2.1 16QAM/1RB #0

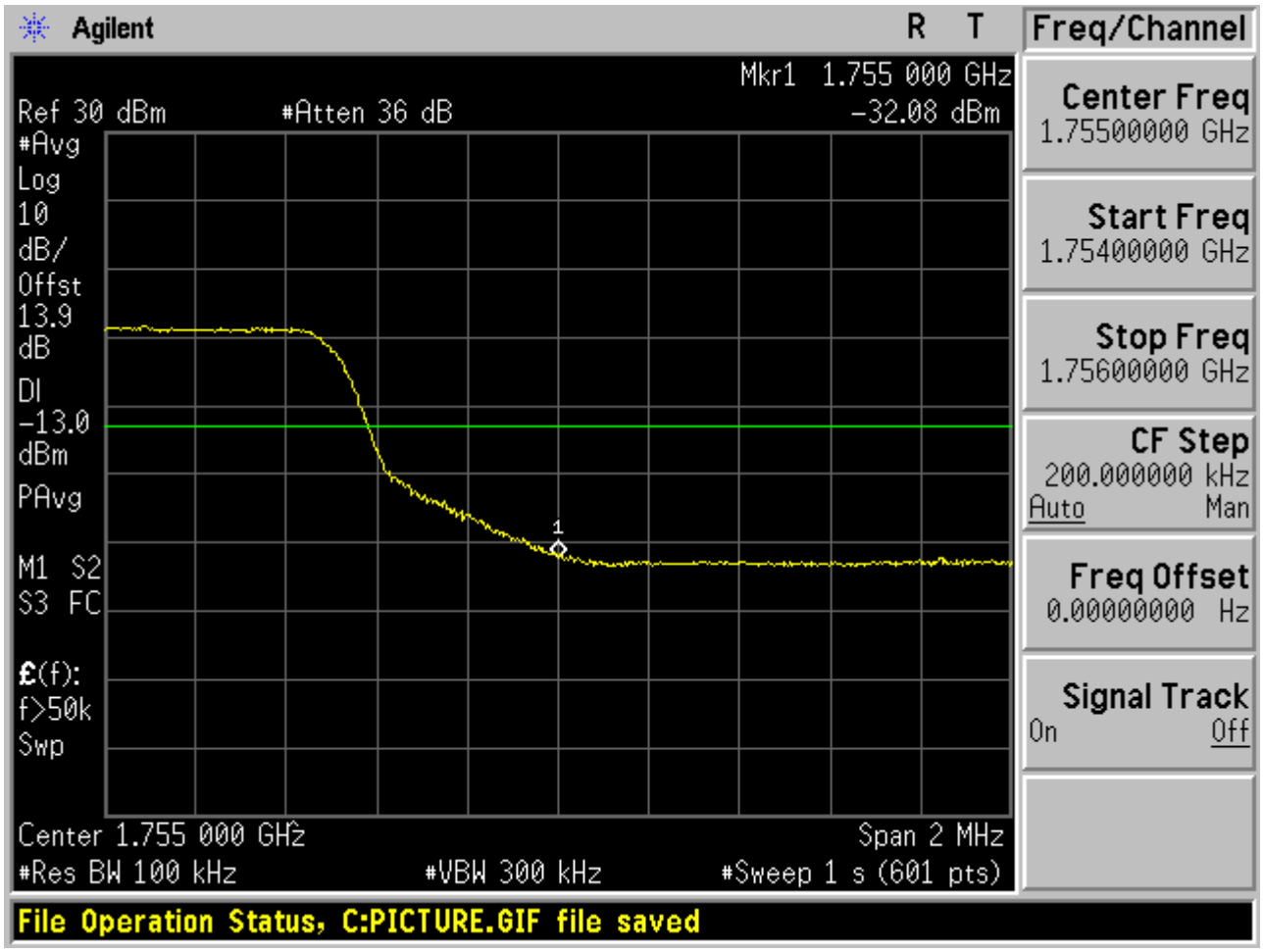


1.2.2.2.2 16QAM/1RB #max



1.2.2.2.3 16QAM /Partial RBs /RB #13

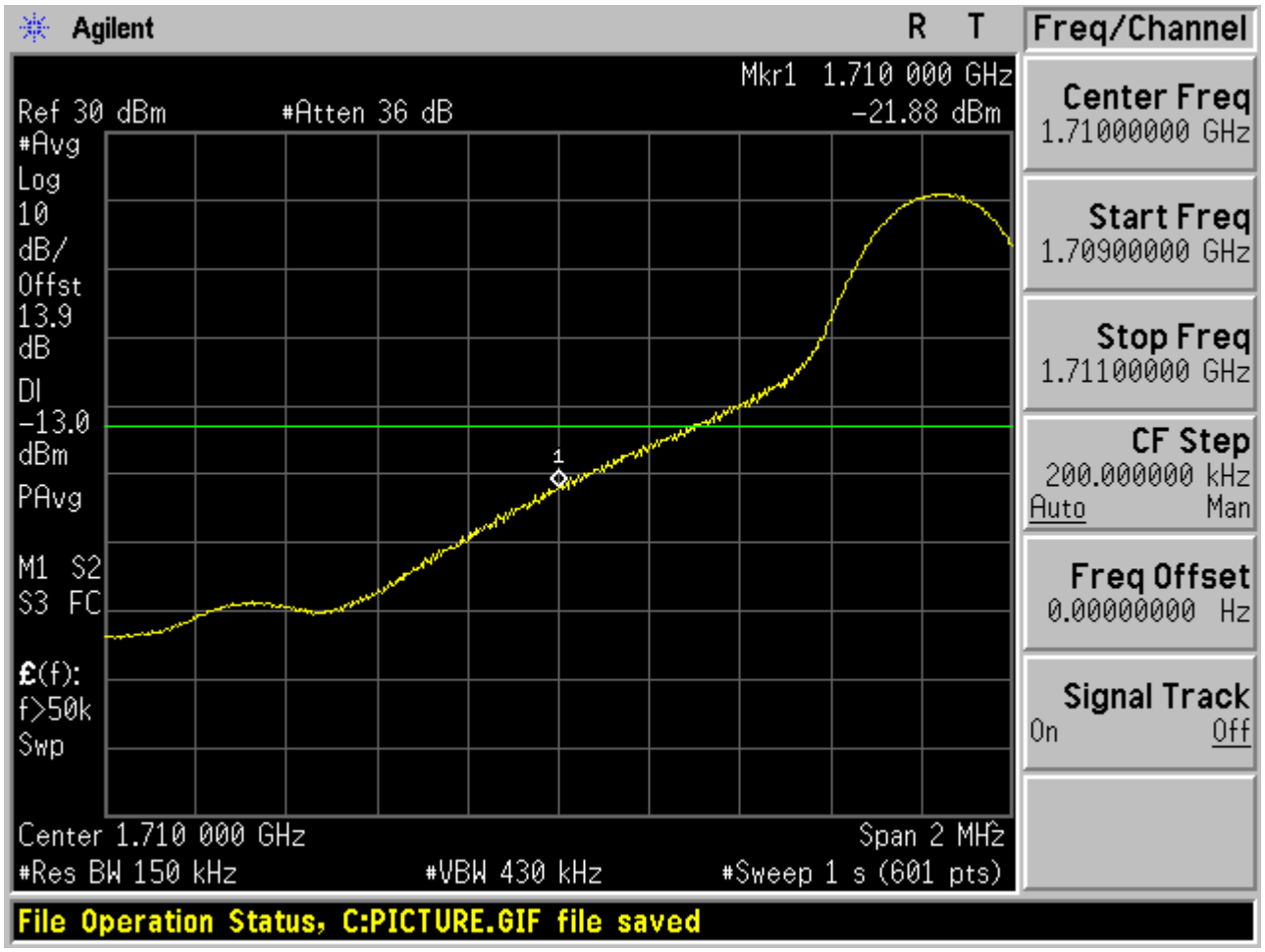
1.2.2.2.4 16QAM /full RBs



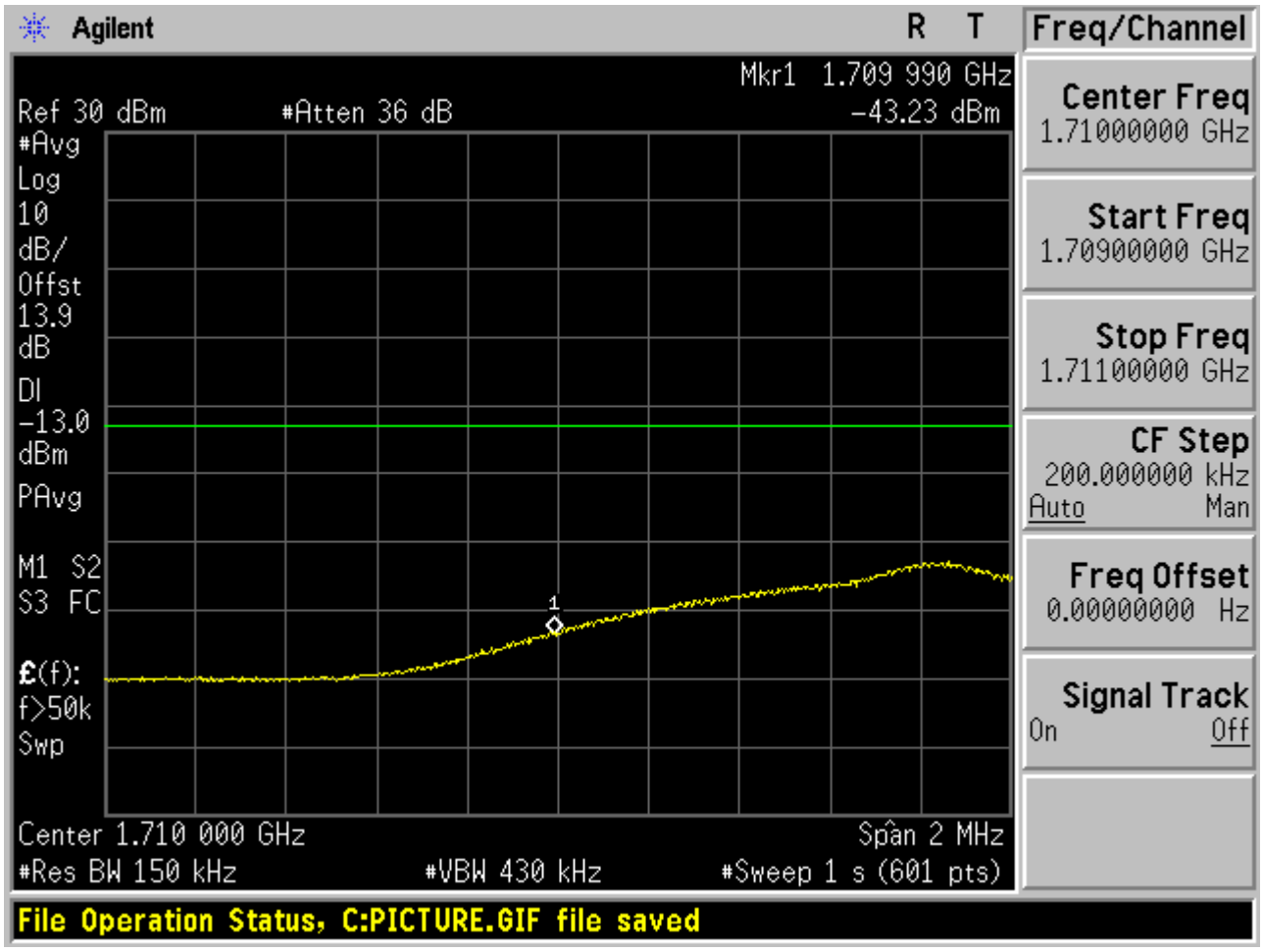
1.2.3 Channel Bandwidth = 15 MHz

1.2.3.1 Channel= B

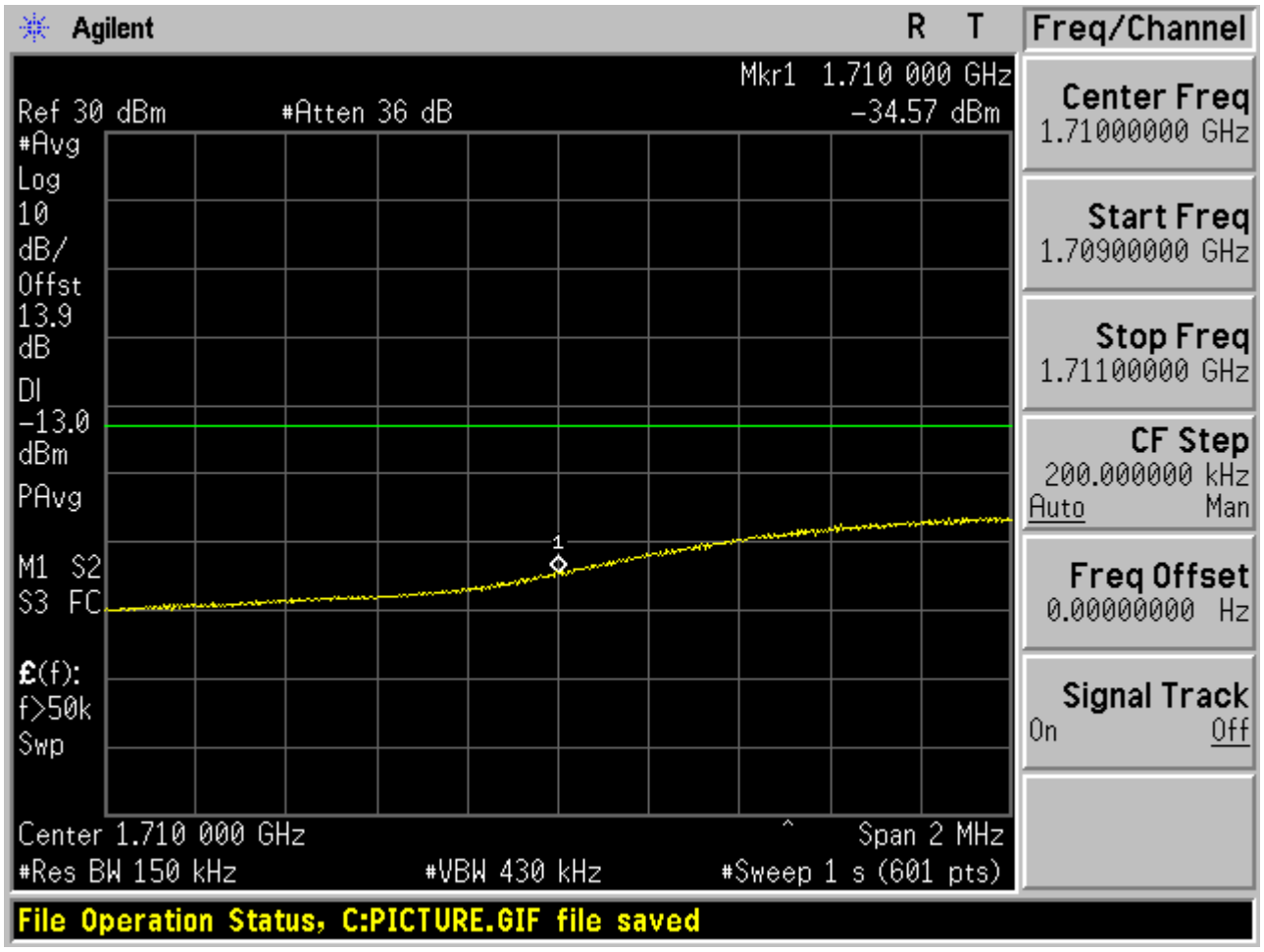
1.2.3.1.1 16QAM/1RB #0



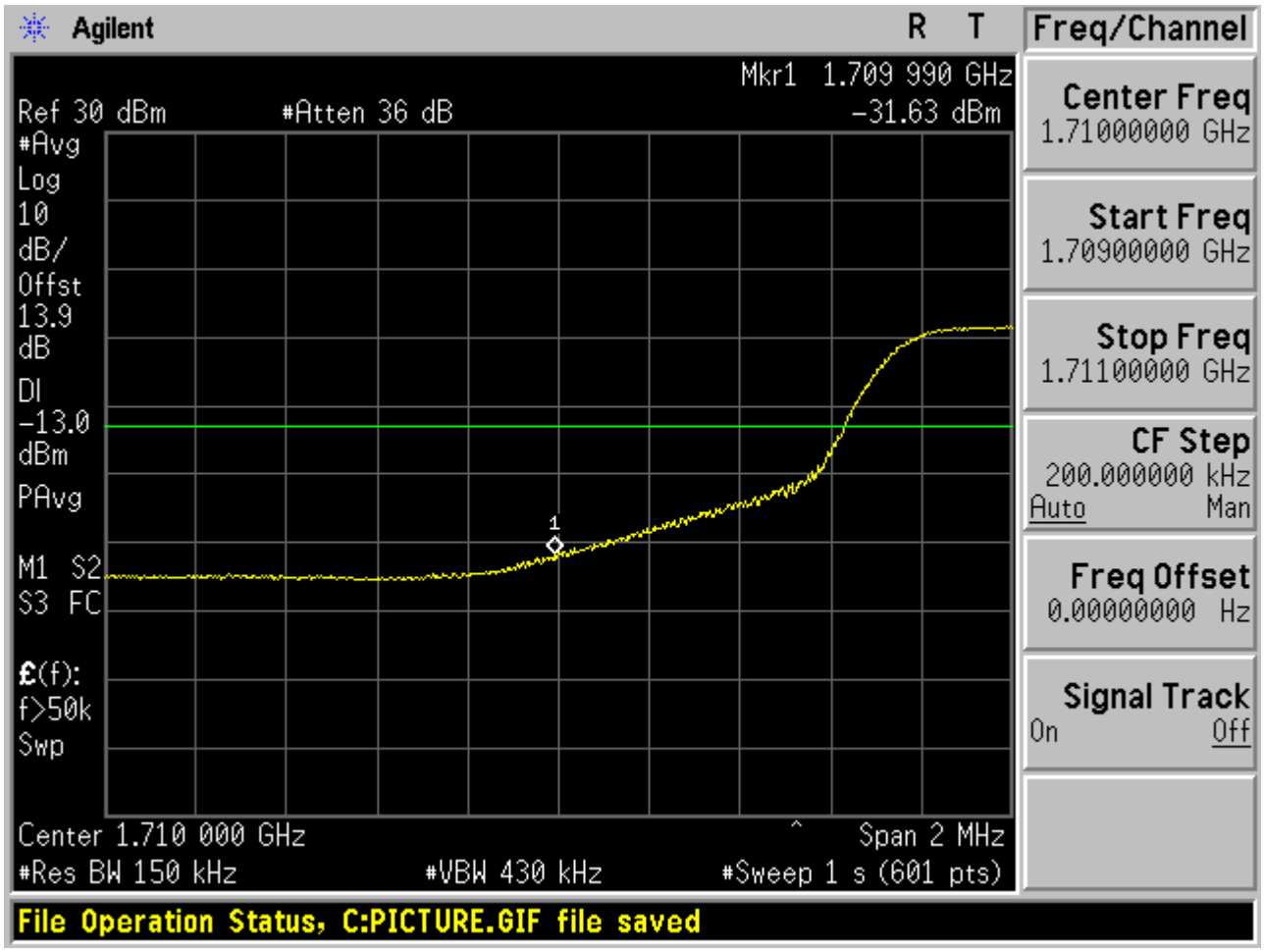
1.2.3.1.2 16QAM/1RB #max



1.2.3.1.3 16QAM /Partial RBs /RB #18

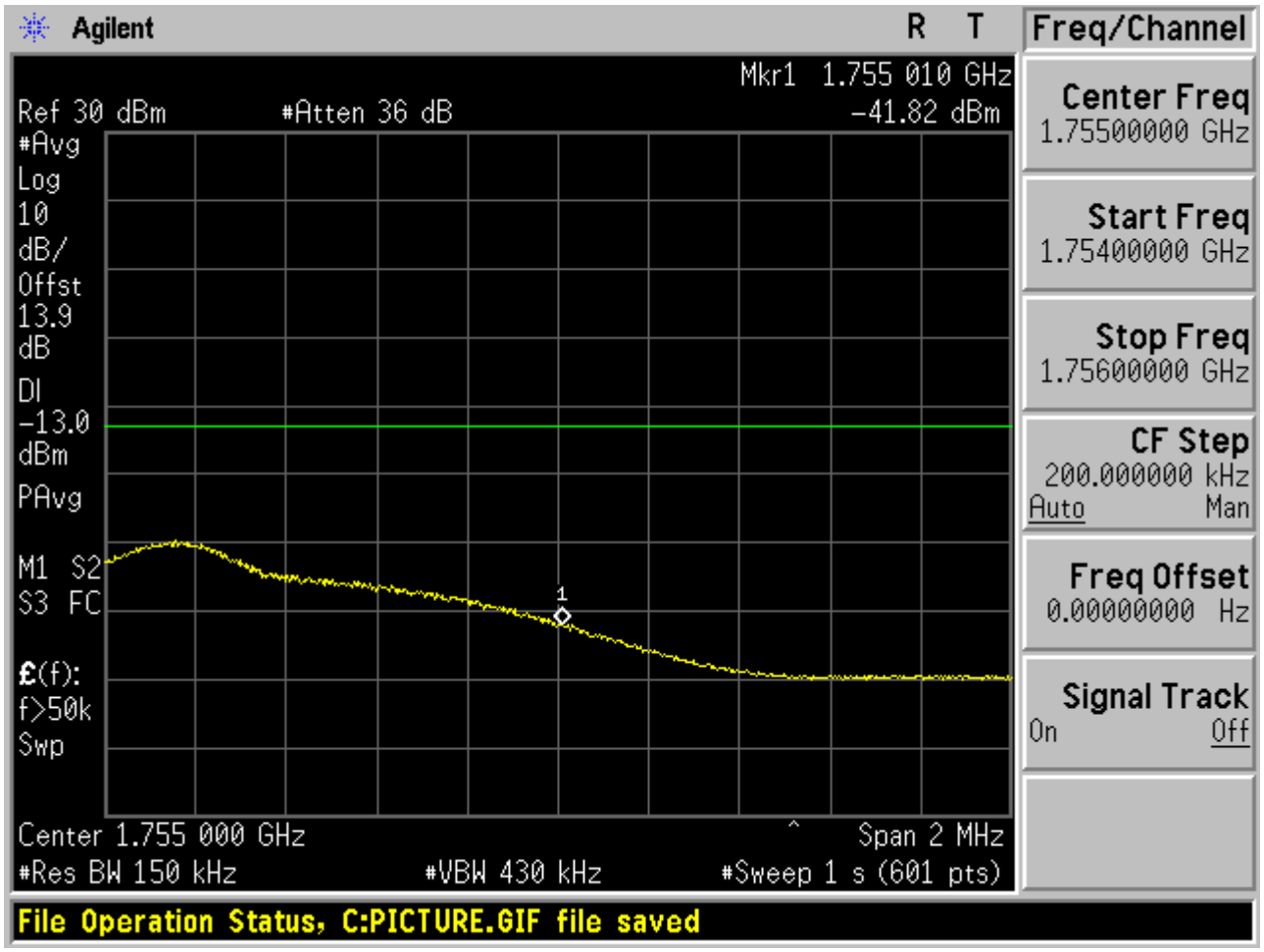


1.2.3.1.4 16QAM /full RBs

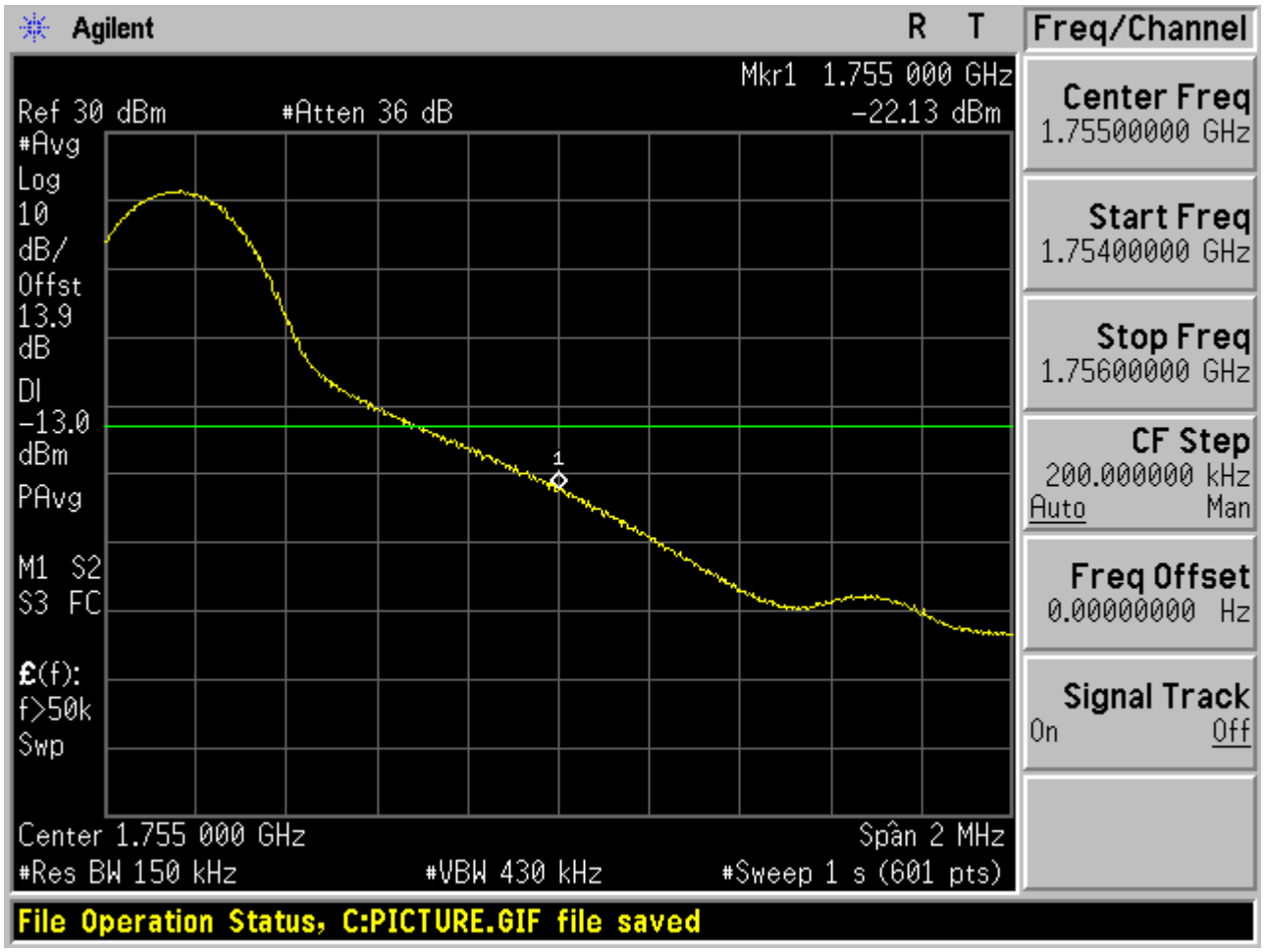


1.2.3.2 Channel= T

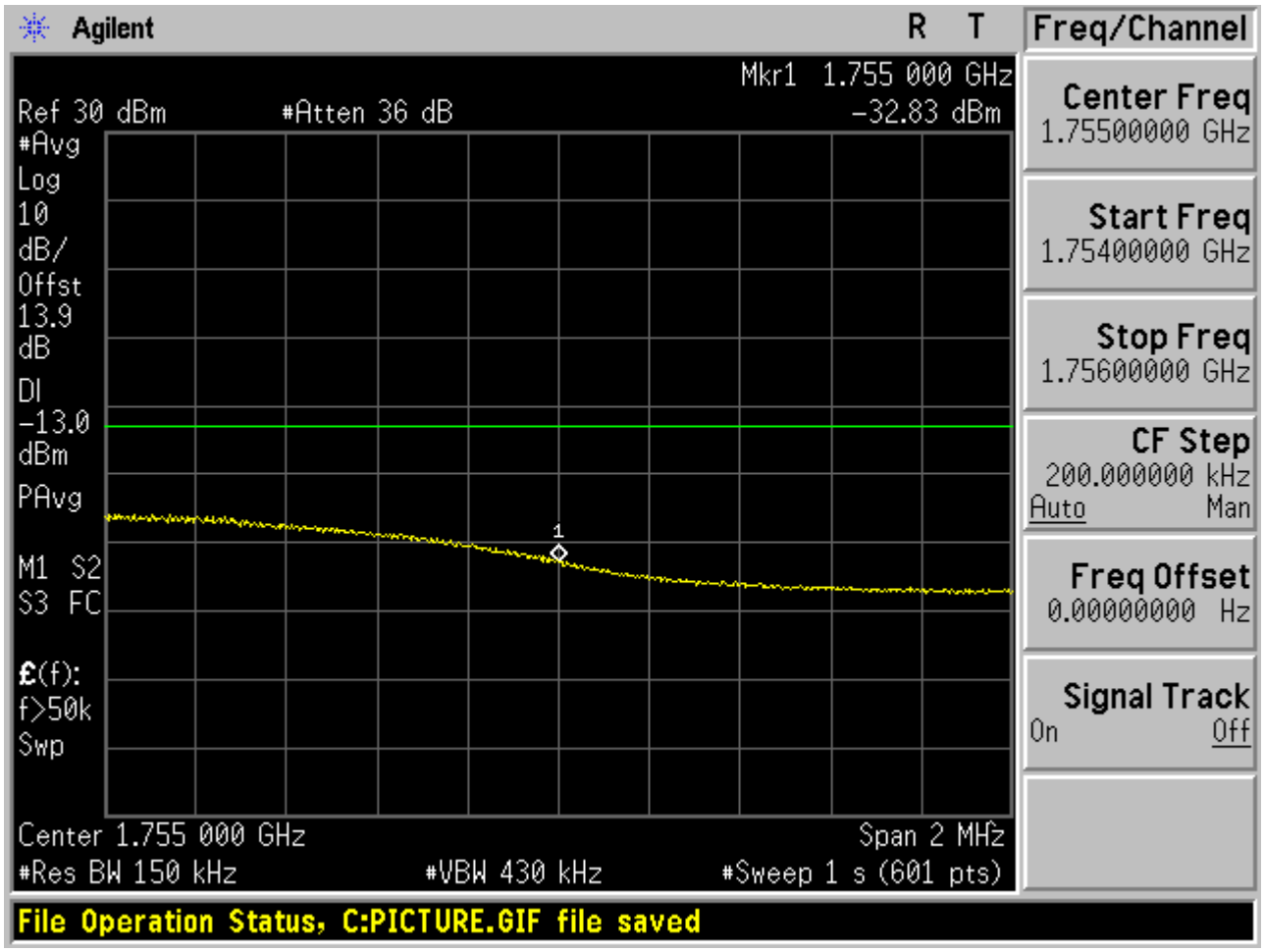
1.2.3.2.1 16QAM/1RB #0



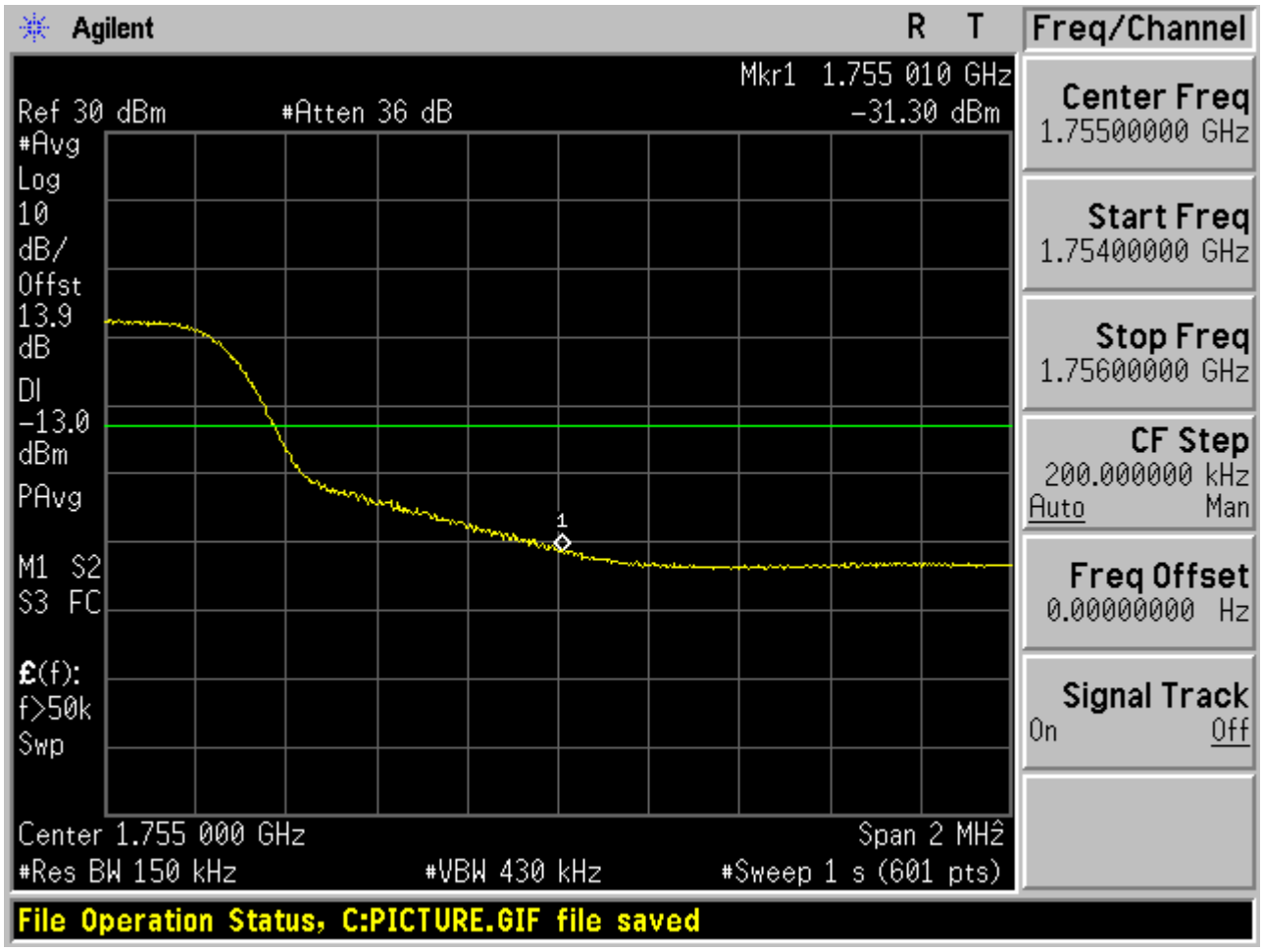
1.2.3.2.2 16QAM/1RB #max



1.2.3.2.3 16QAM /Partial RBs /RB #18



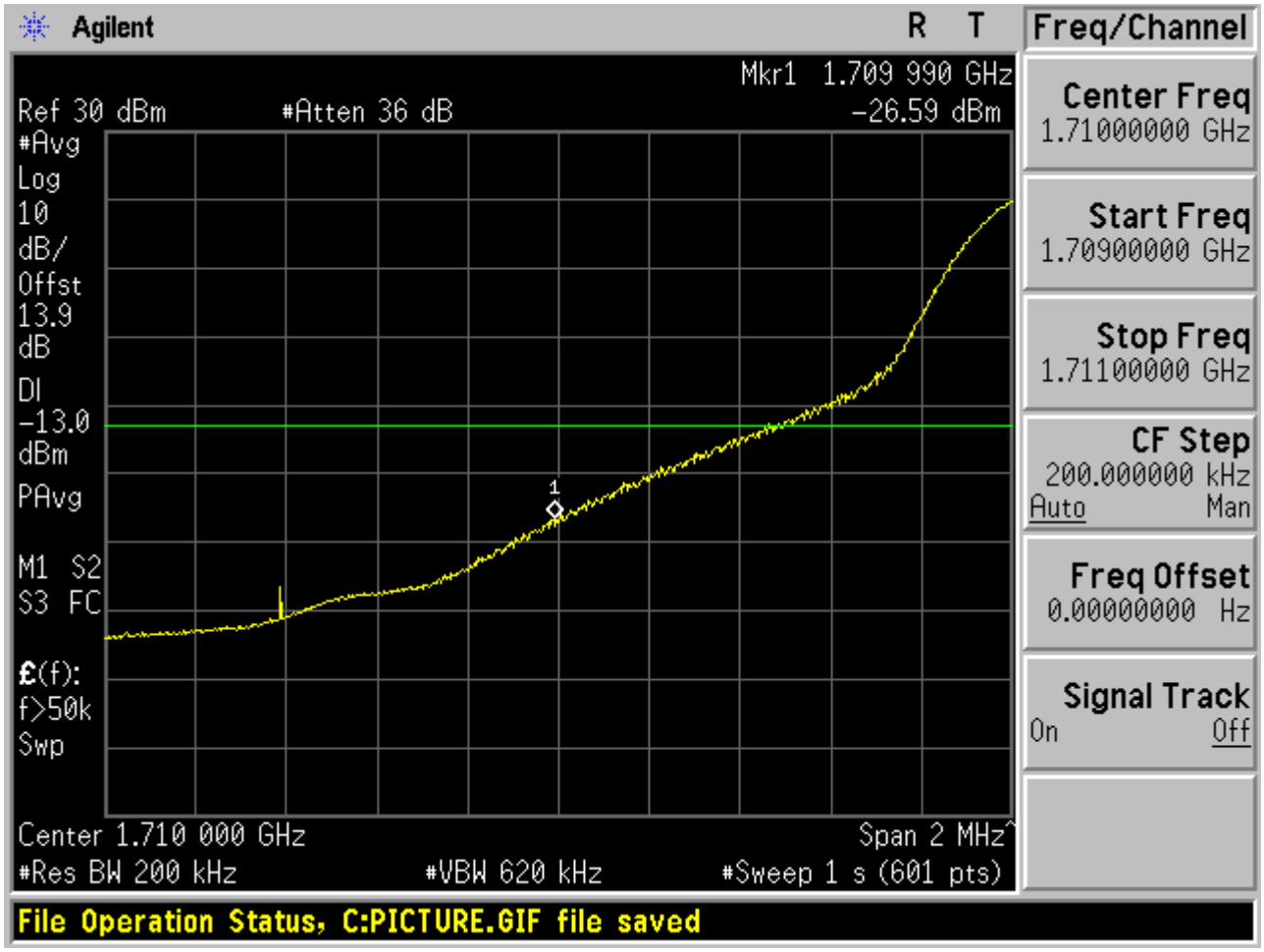
1.2.3.2.4 16QAM /full RBs



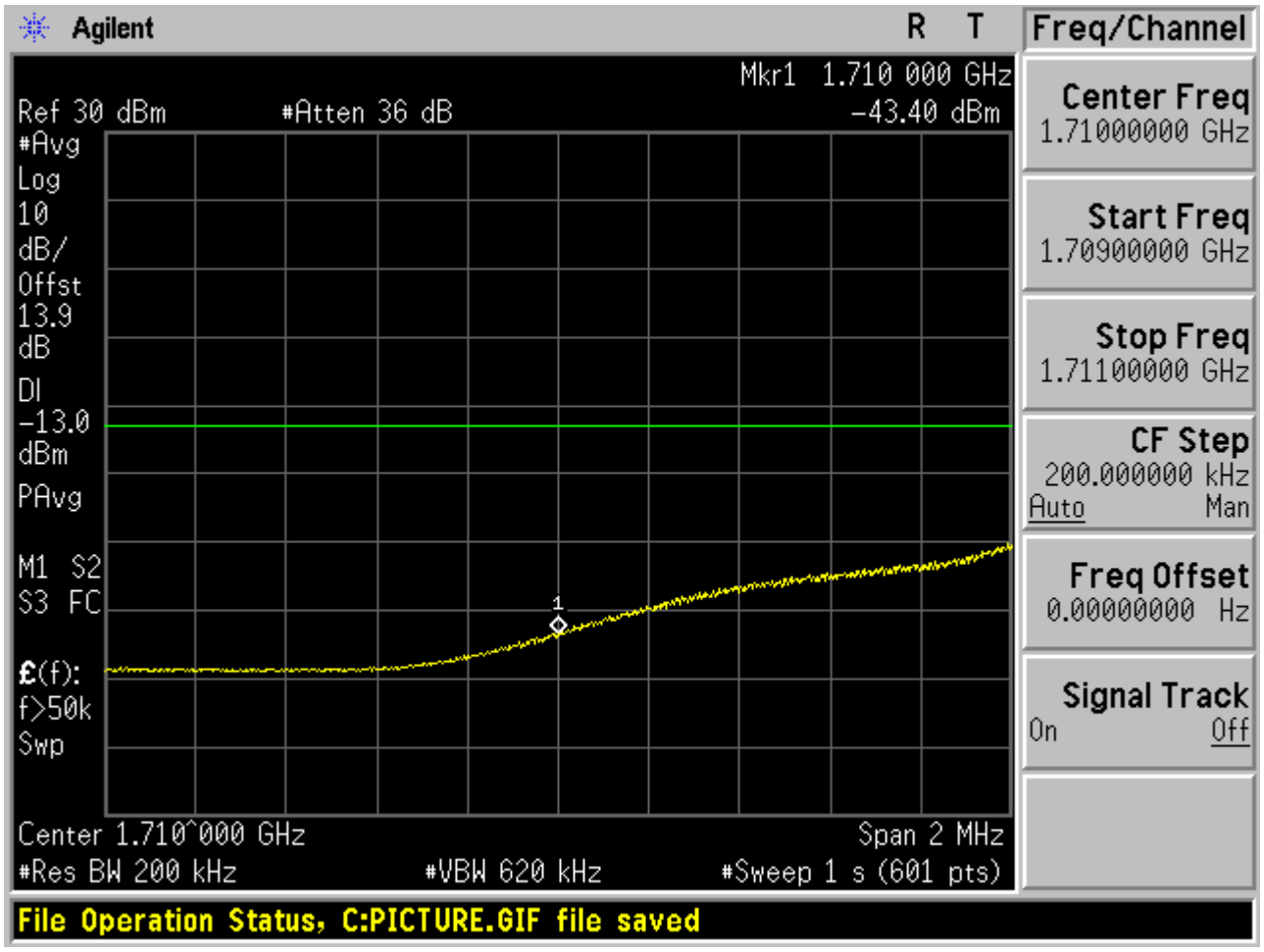
1.2.4 Channel Bandwidth = Highest (20 MHz)

1.2.4.1 Channel= B

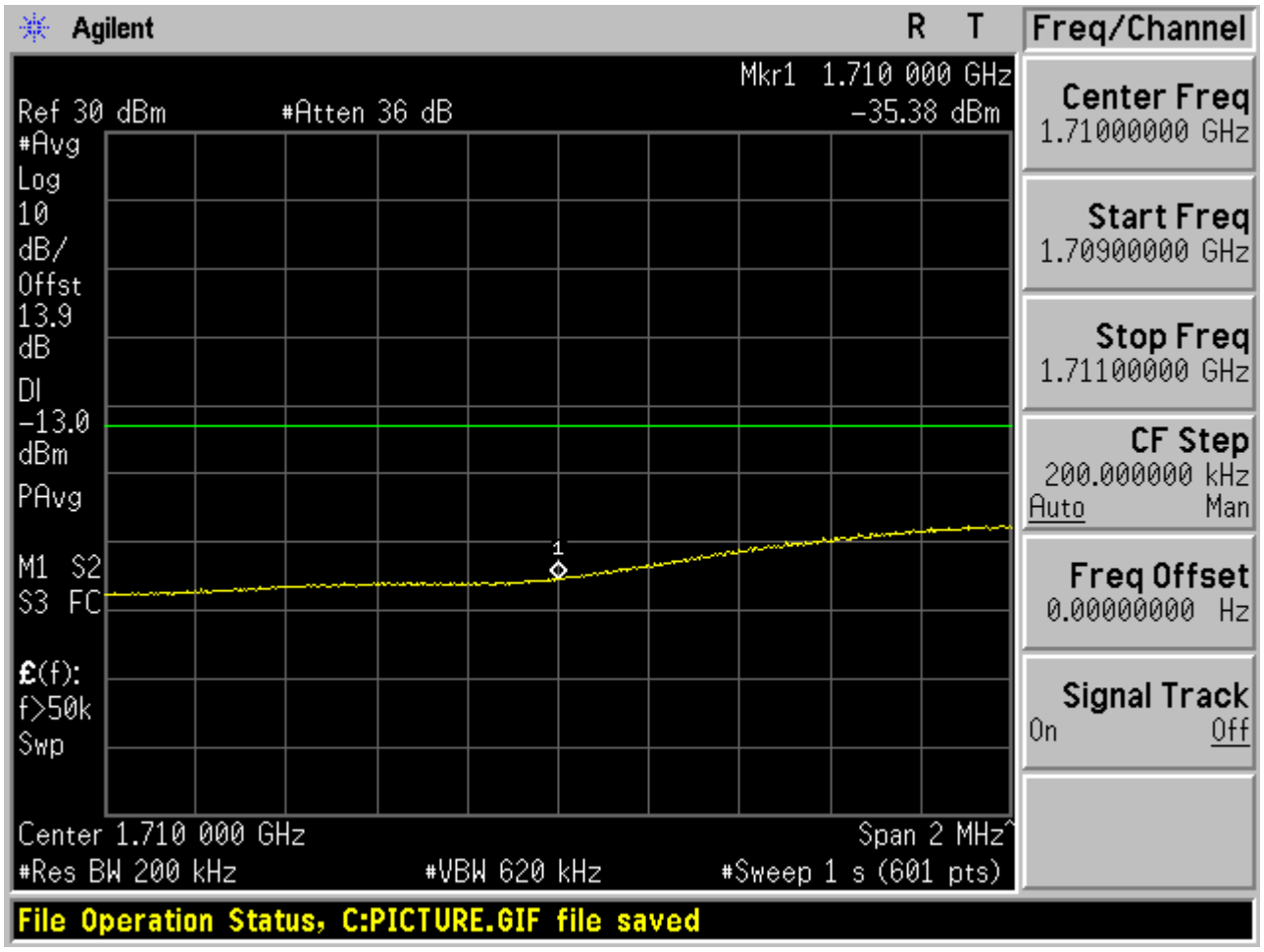
1.2.4.1.1 16QAM/1RB #0



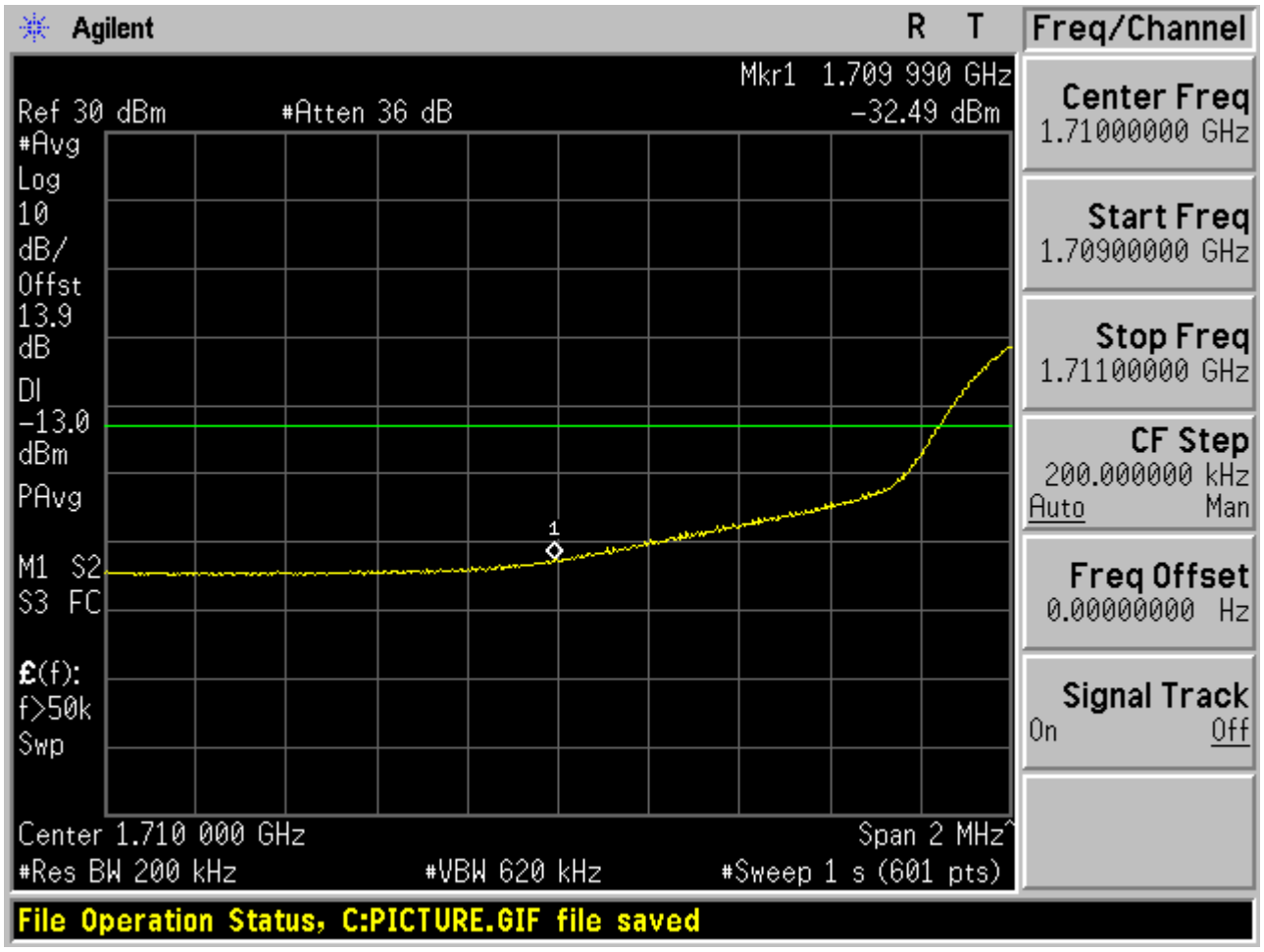
1.2.4.1.2 16QAM/1RB #max



1.2.4.1.3 16QAM /Partial RBs /RB #25

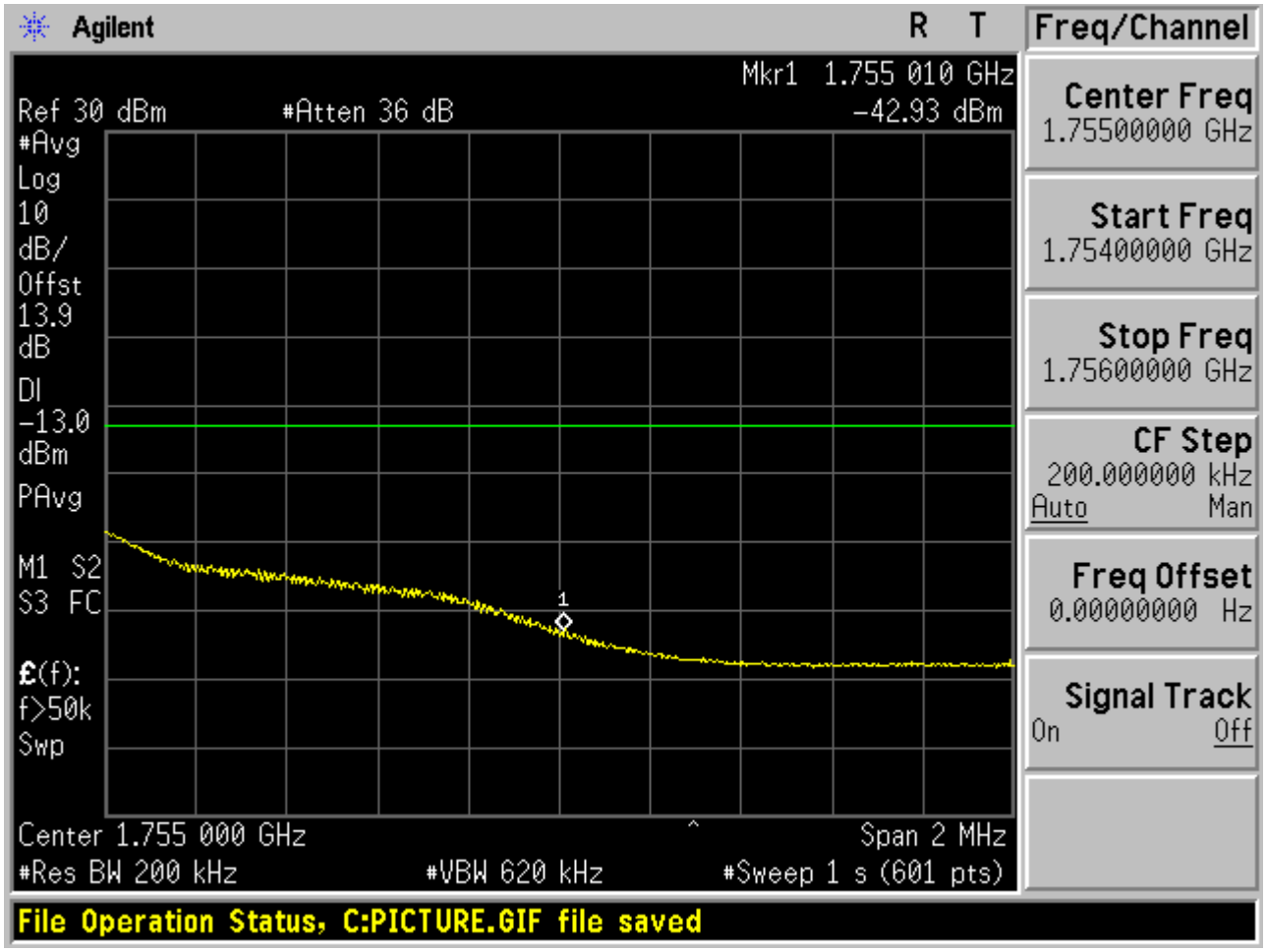


1.2.4.1.4 16QAM /full RBs

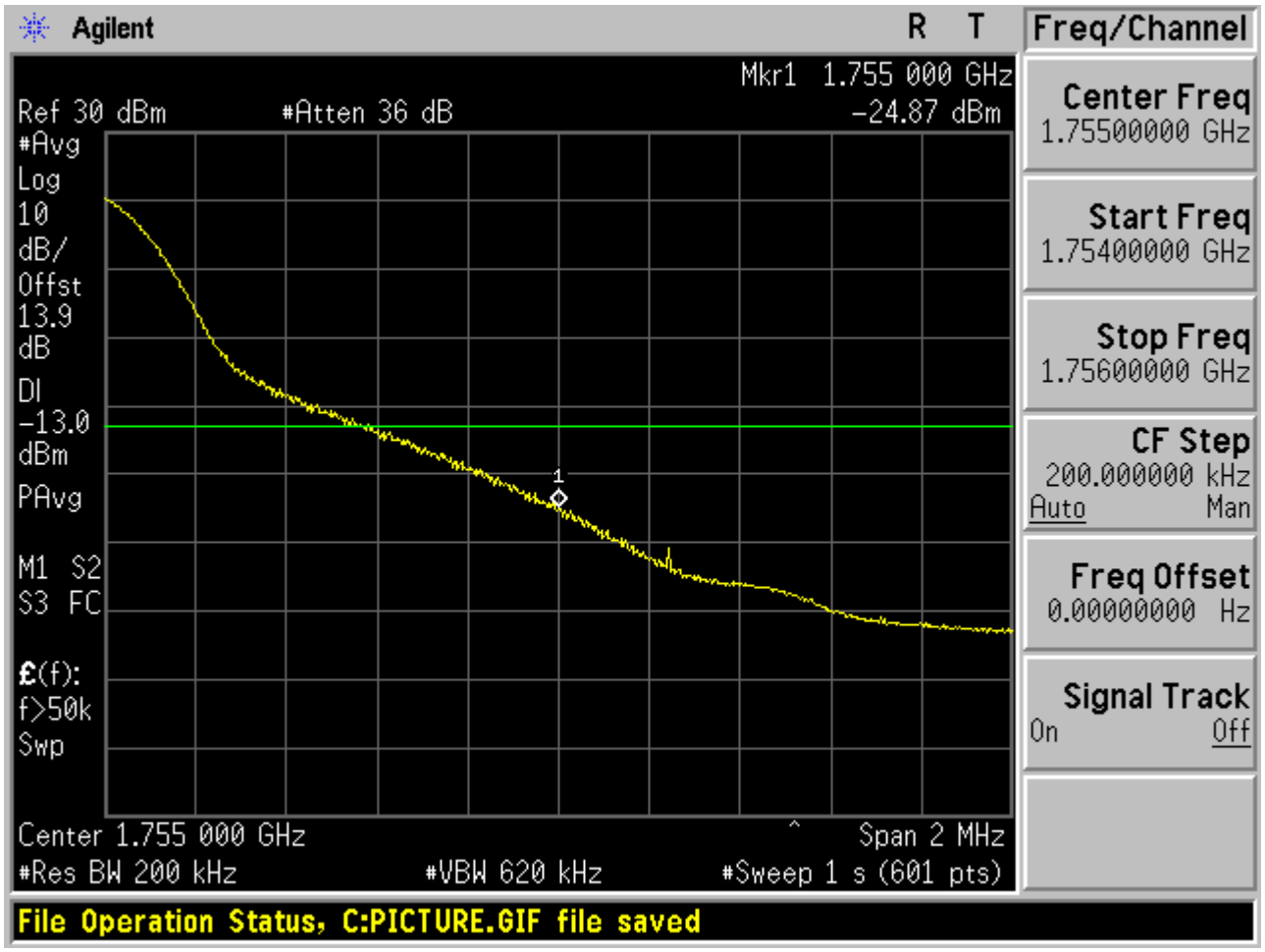


1.2.4.2 Channel= T

1.2.4.2.1 16QAM/1RB #0

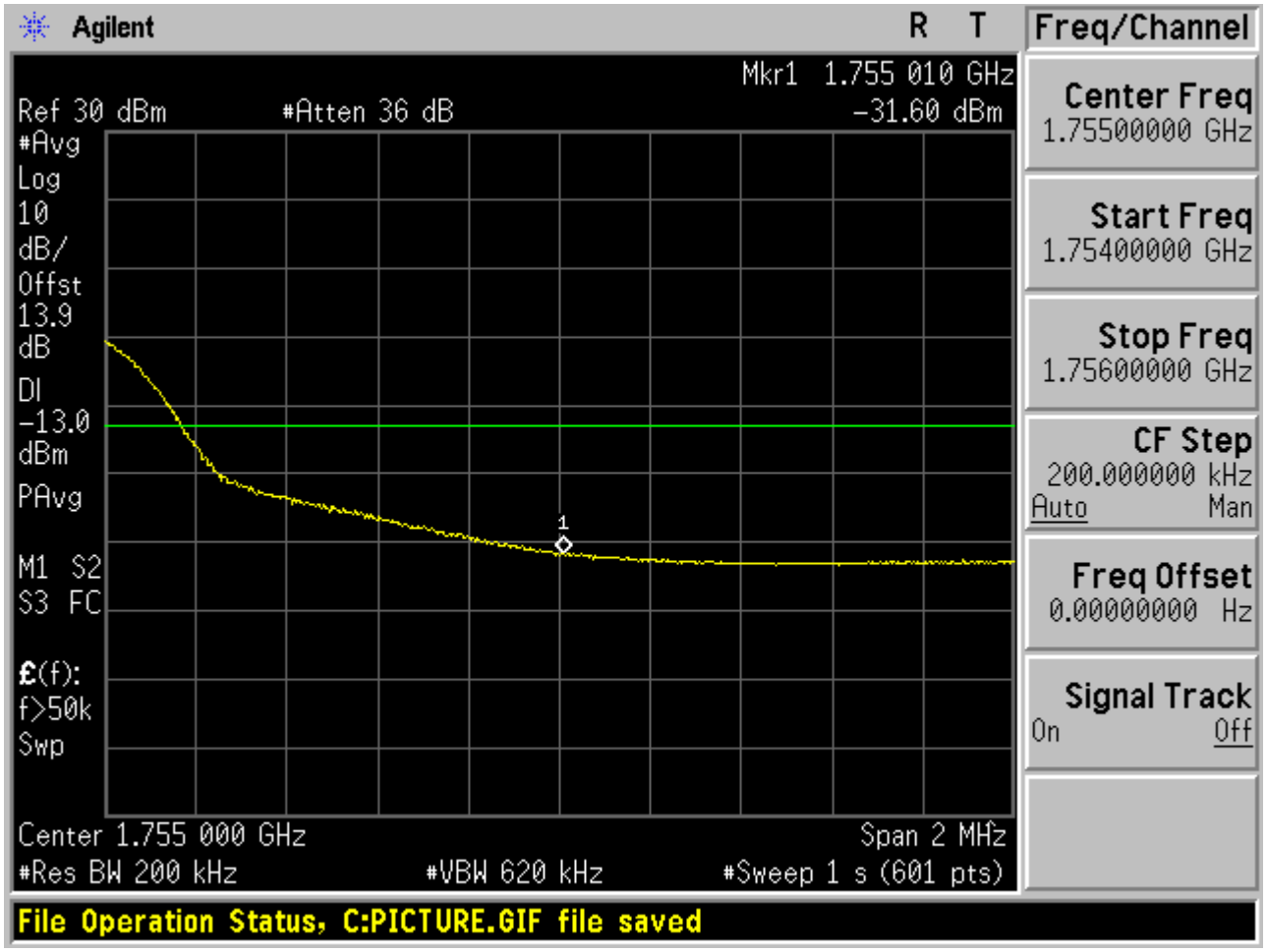


1.2.4.2.2 16QAM/1RB #max



1.2.4.2.3 16QAM /Partial RBs /RB #25

1.2.4.2.4 16QAM /full RBs



END

Appendix D

Spurious Emission at Antenna Terminal

According to FCC Part 2.1051 & FCC Part 27C & 27M

TABLE OF CONTENTS

1 For BAND 4

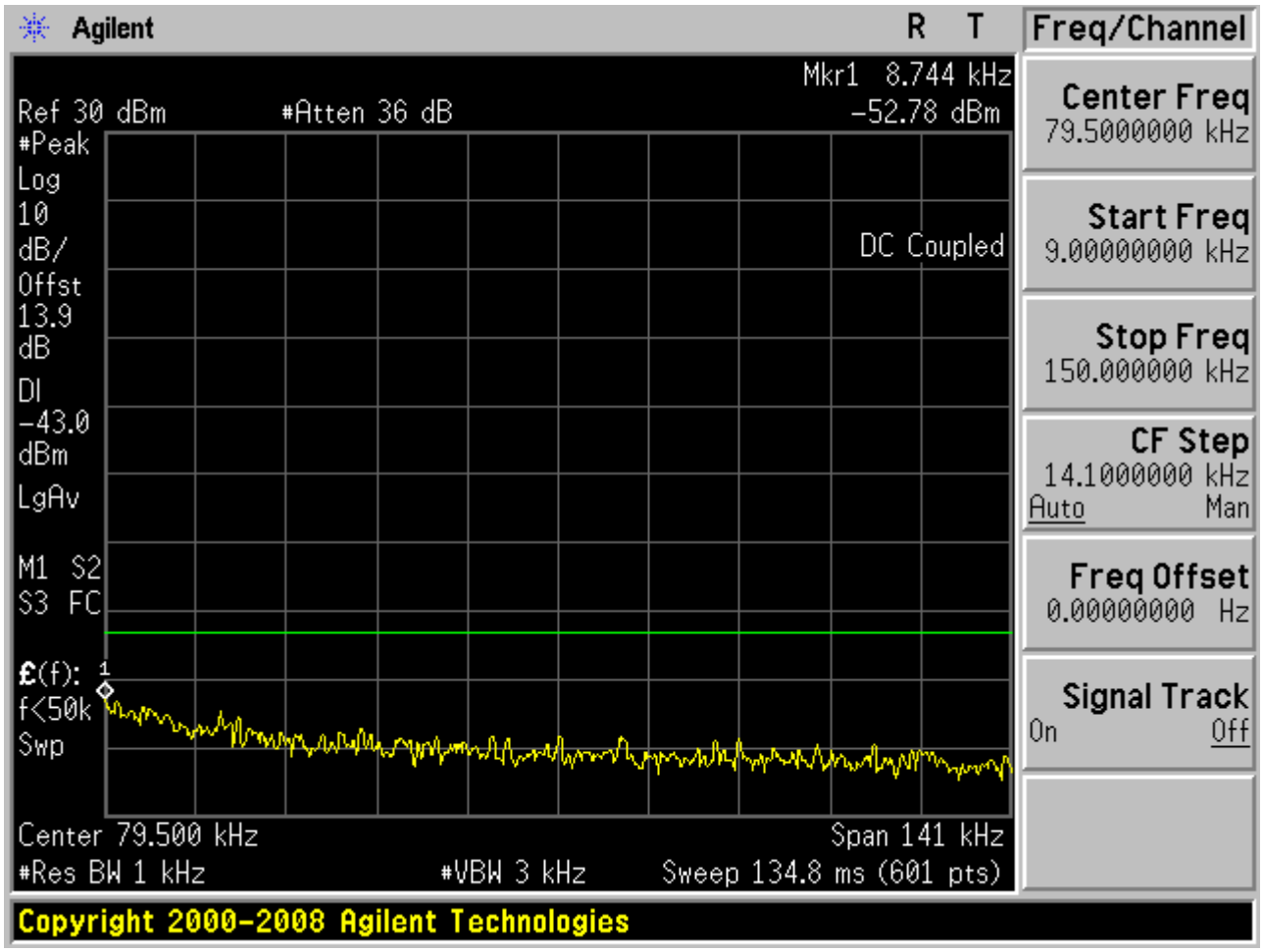
NOTE1: All relevant operation modes have been tested, and the 1RB case data is included in this report.

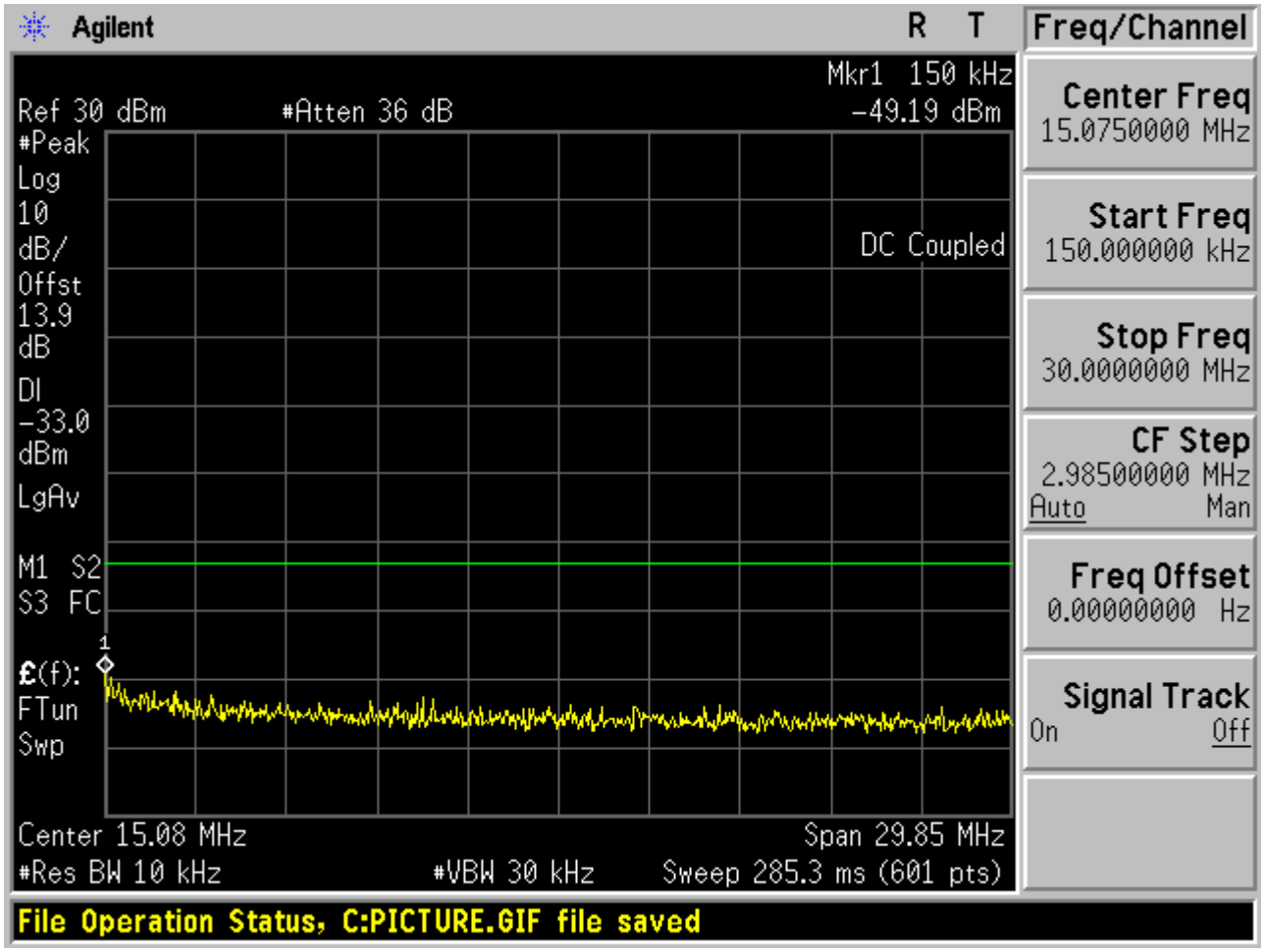
1.1 Test Mode=TM1

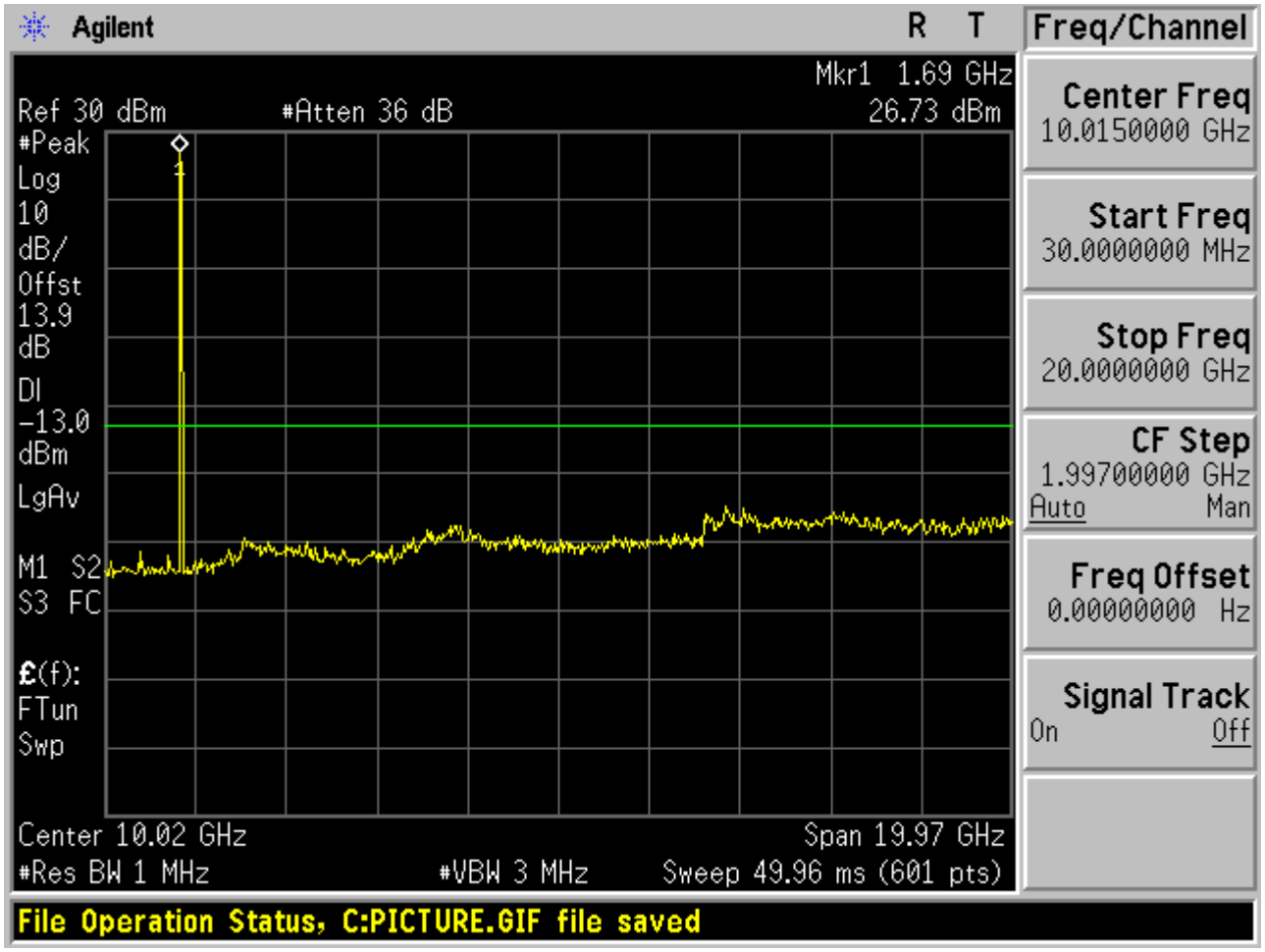
1.1.1 Channel Bandwidth = Lowest (5 MHz)

1.1.1.1 Channel = L

1.1.1.1.1 QPSK/1RBs /RB #0

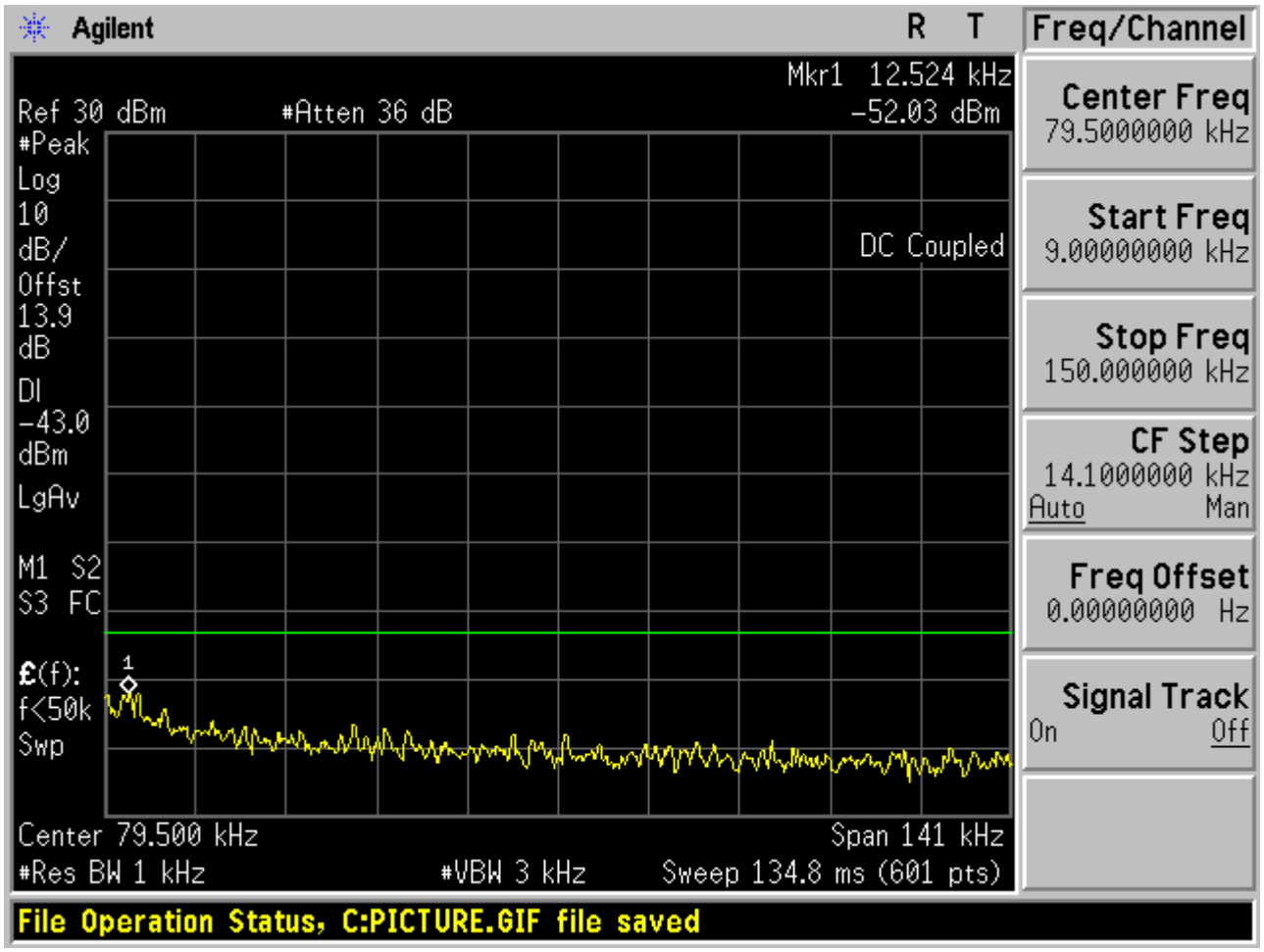


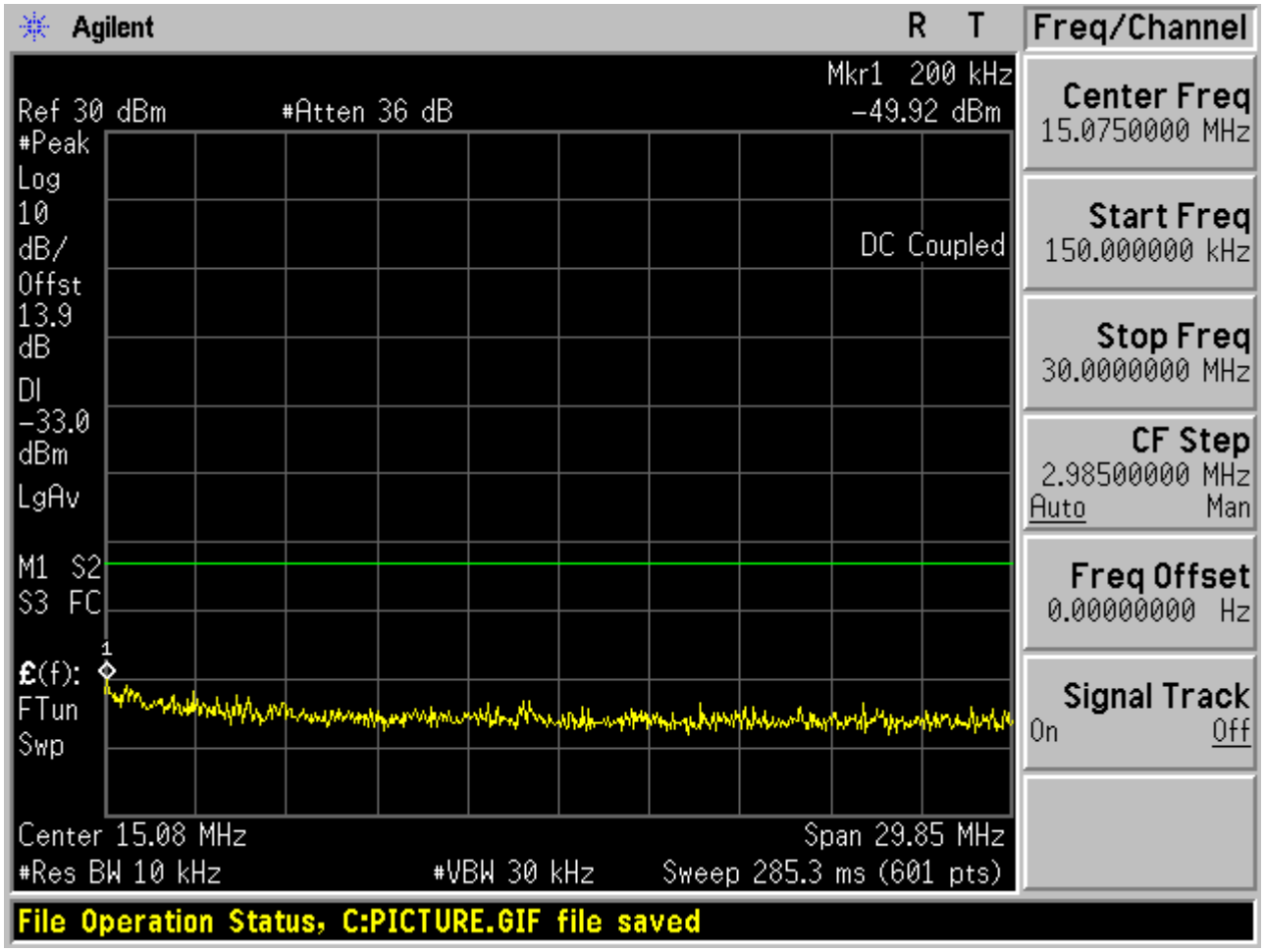

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-49.19 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

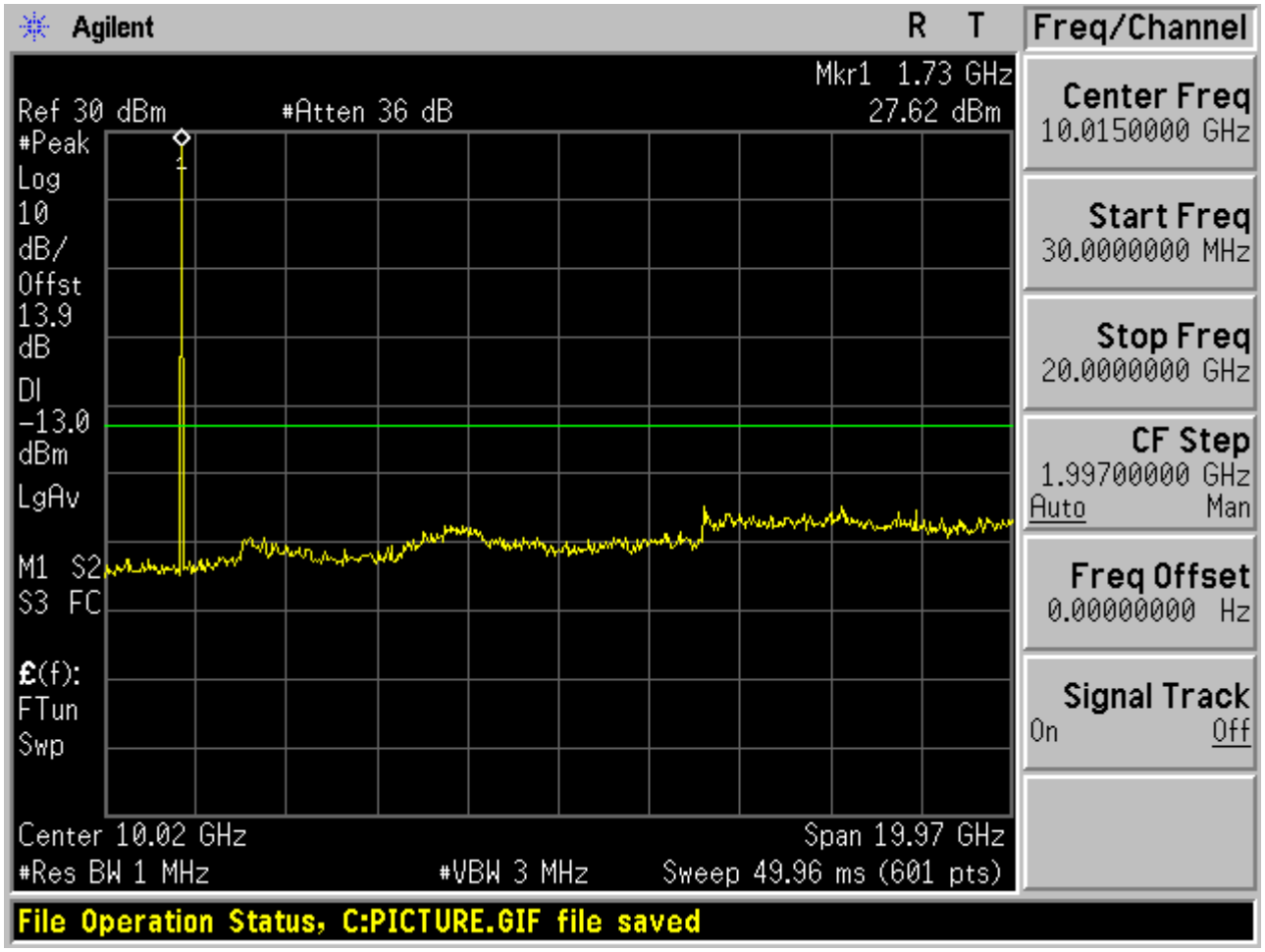

Agilent
R T
Freq/Channel
Mkr1 1.69 GHz
26.73 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.1.2 Channel = M

1.1.1.2.1 QPSK/1RBs /RB #0

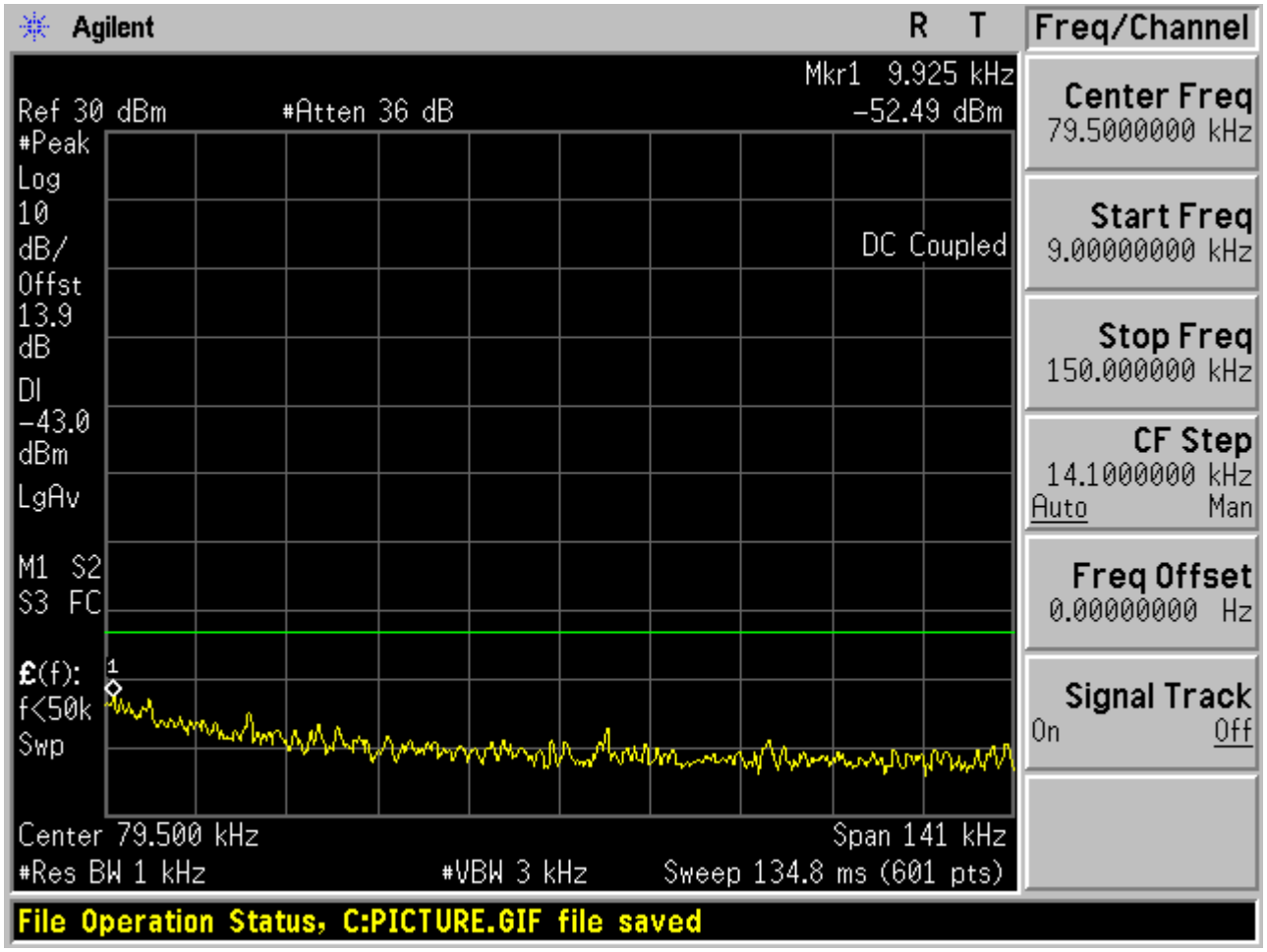


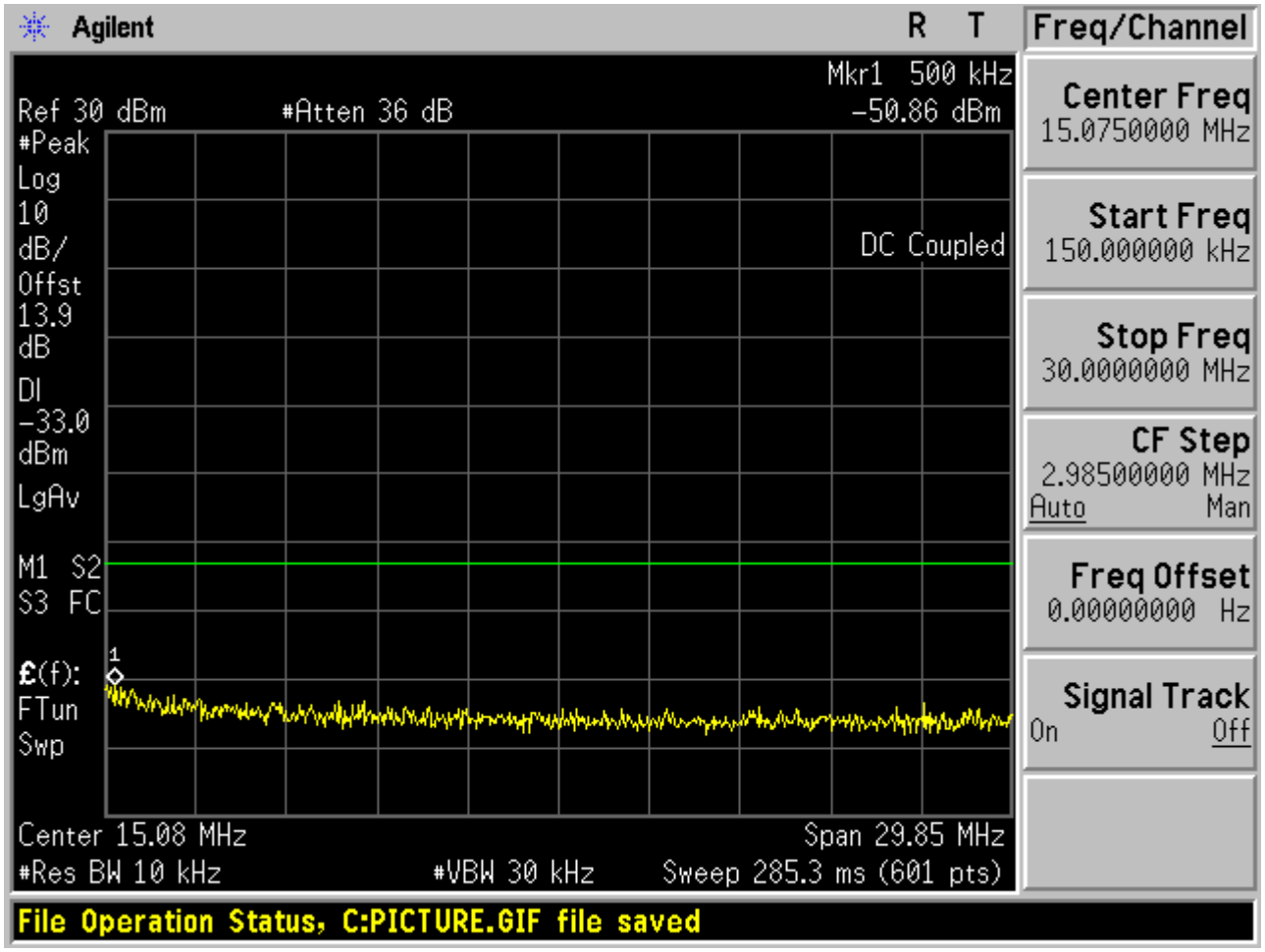

Agilent
R T
Freq/Channel
Mkr1 200 kHz
Ref 30 dBm
#Atten 36 dB
-49.92 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

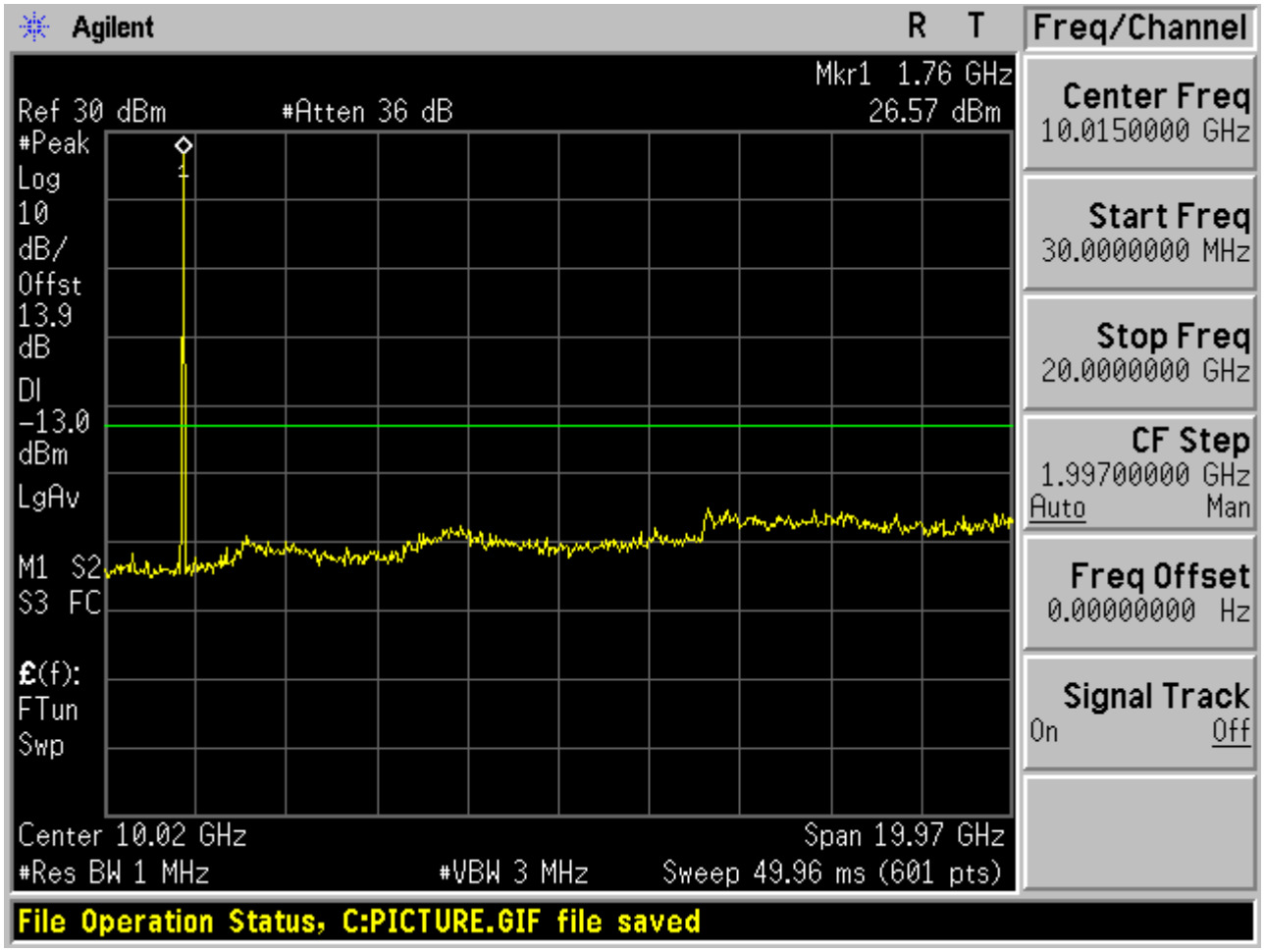

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.62 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.1.3 Channel = H

1.1.1.3.1 QPSK/1RBs /RB #0



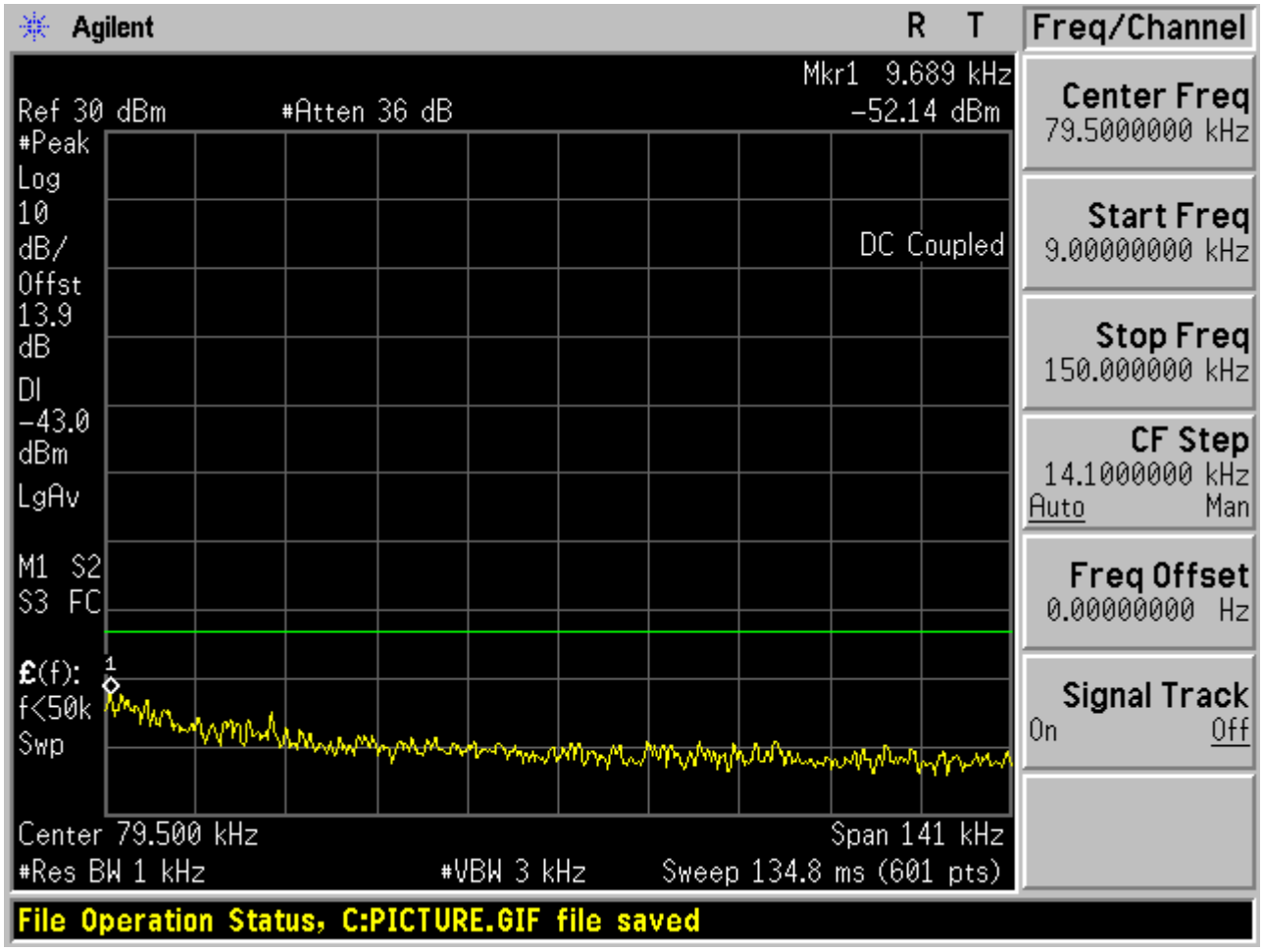

Agilent
R T
Freq/Channel
Mkr1 500 kHz
Ref 30 dBm
#Atten 36 dB
-50.86 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

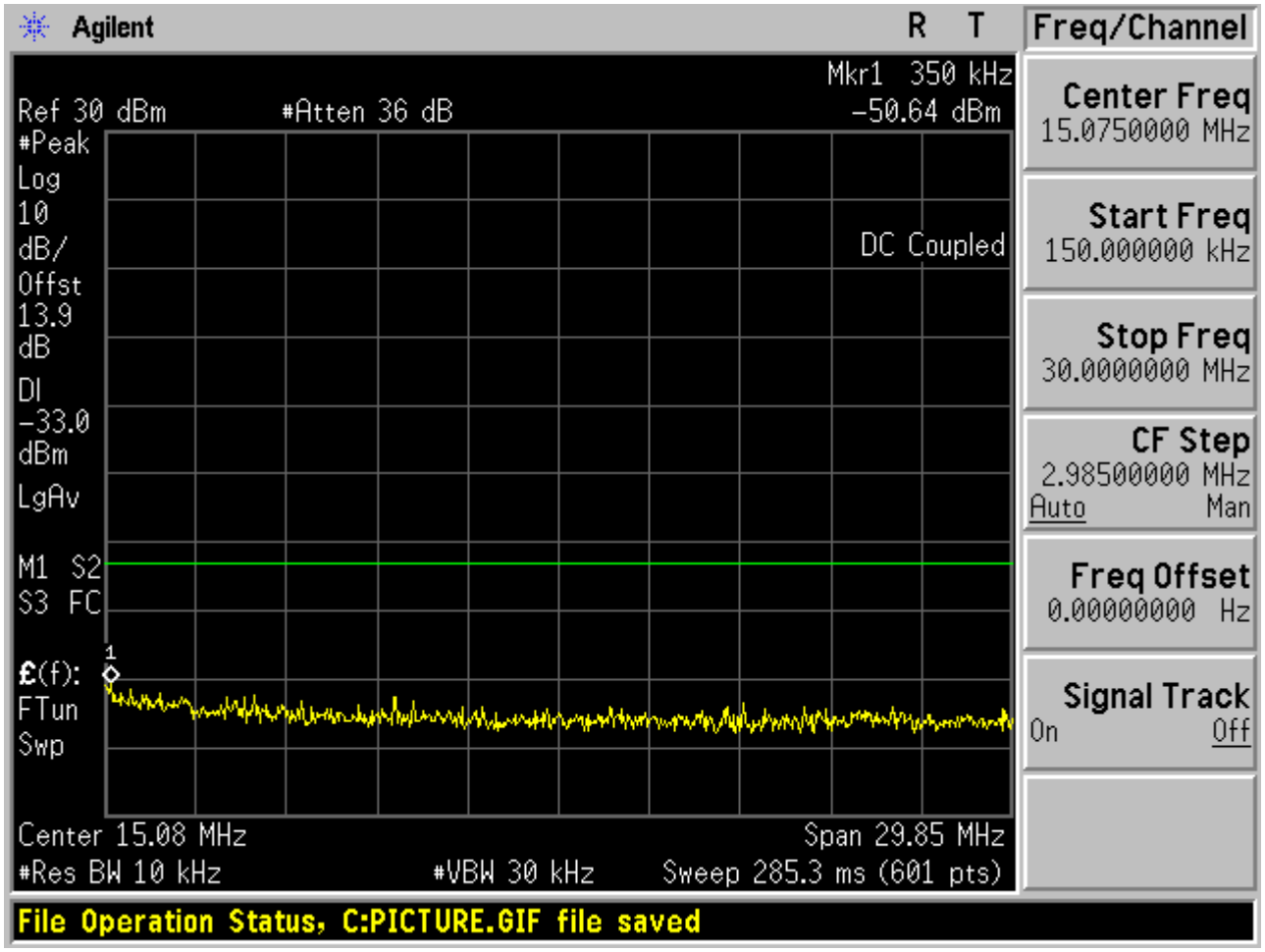

Agilent
R T
Freq/Channel
Mkr1 1.76 GHz
Ref 30 dBm
#Atten 36 dB
26.57 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

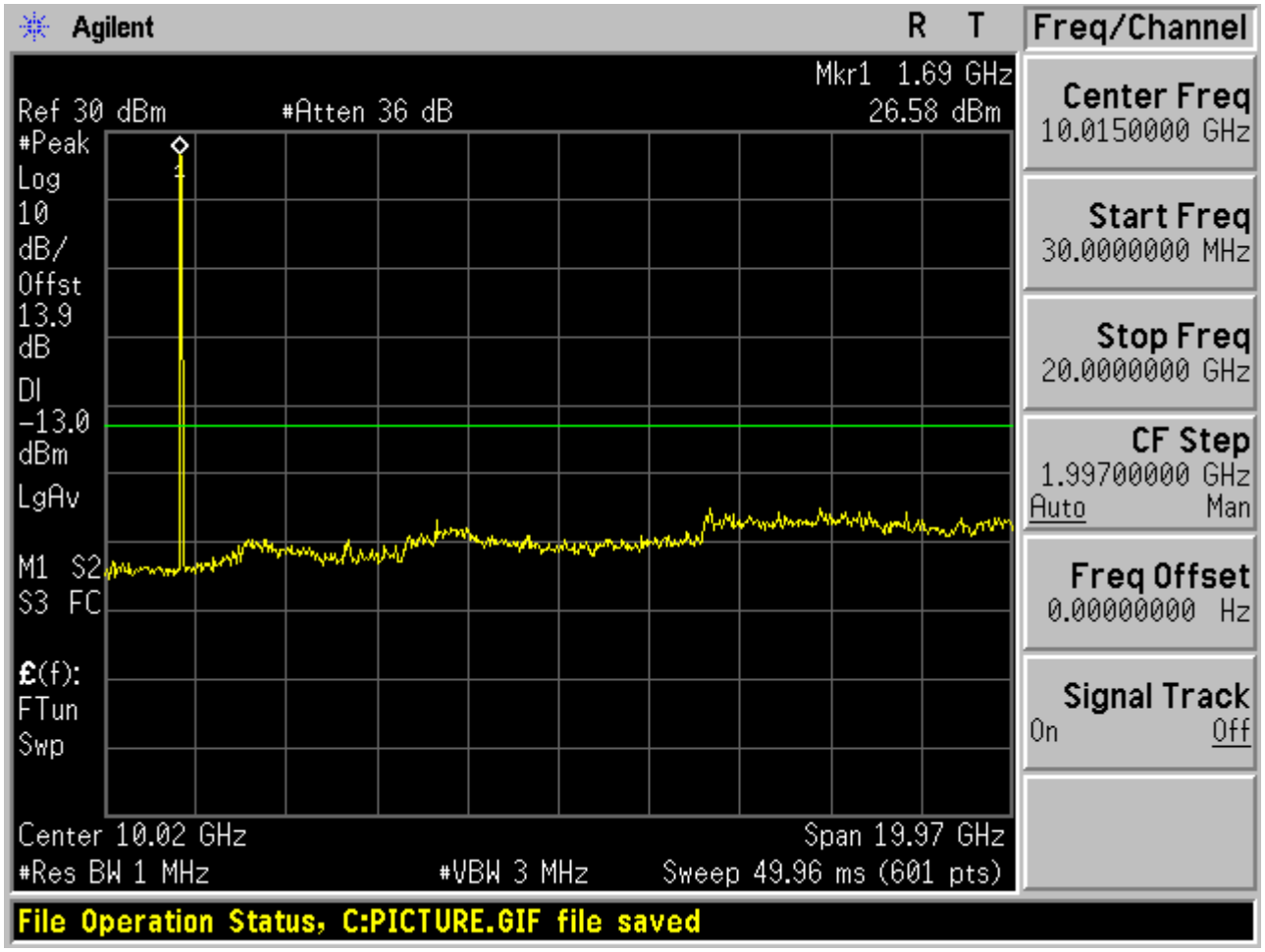
1.1.2 Channel Bandwidth = 10 MHz

1.1.2.1 Channel = L

1.1.2.1.1 QPSK/1RBs /RB #0

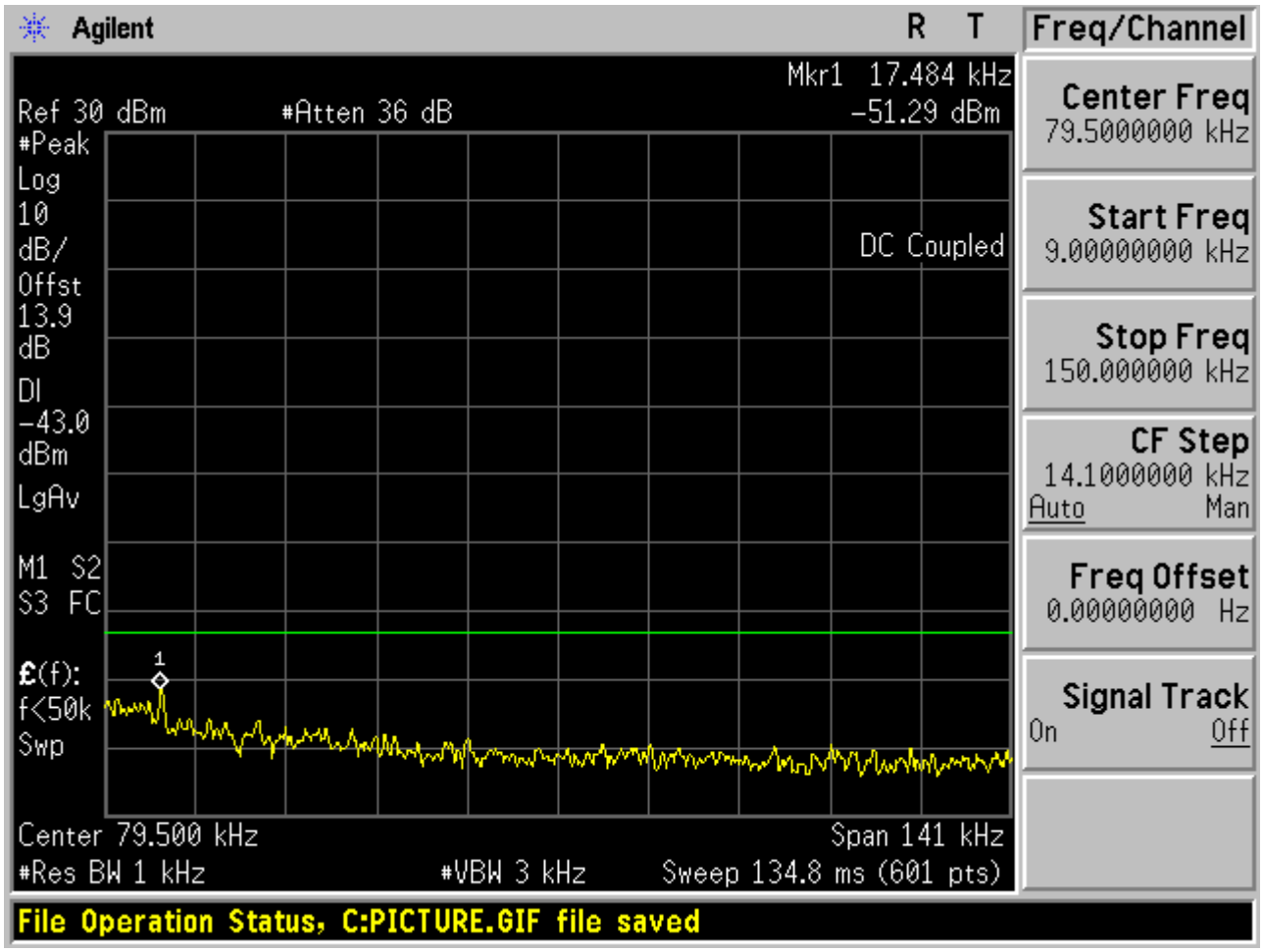


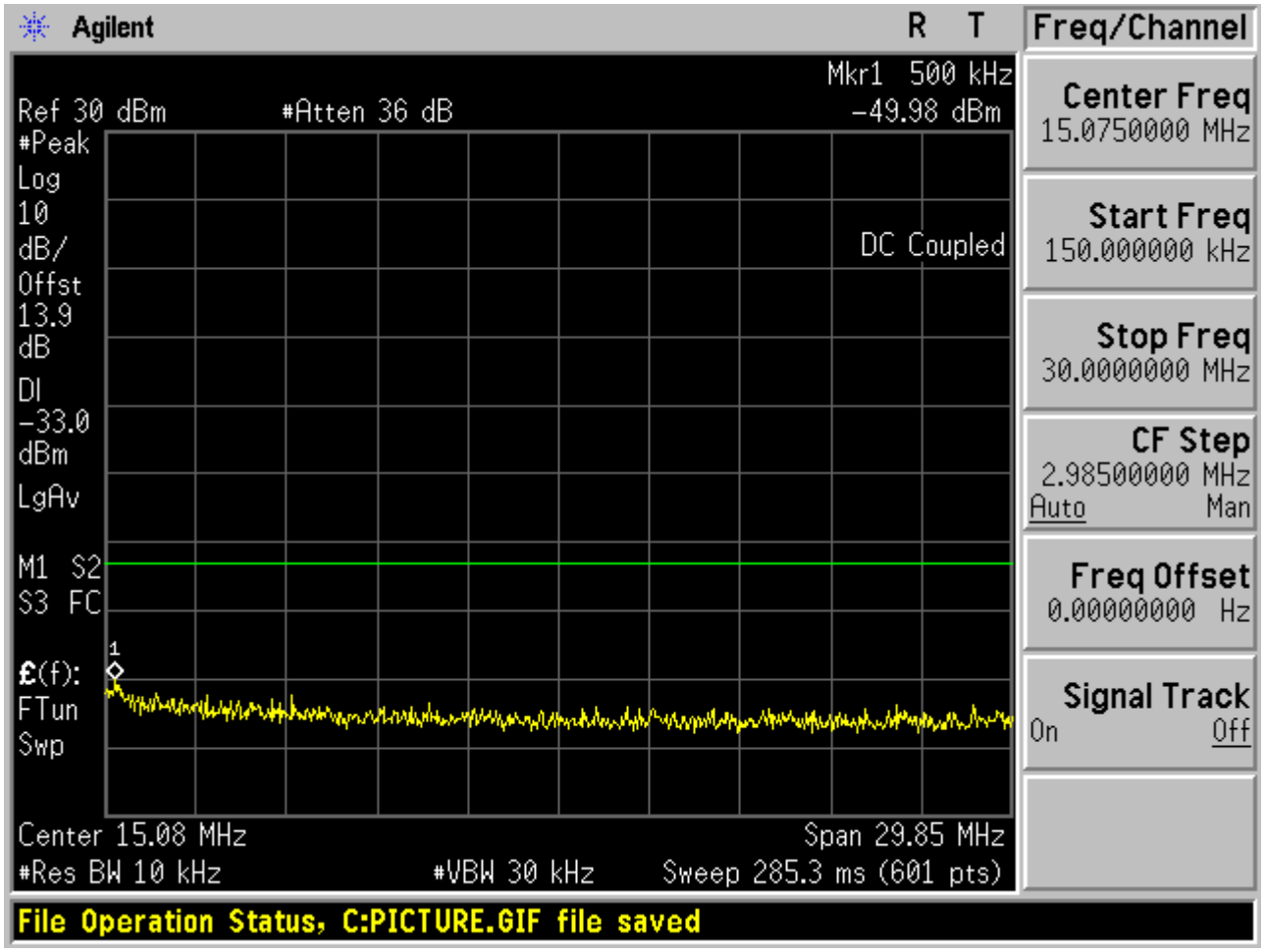

Agilent
R T
Freq/Channel
Mkr1 350 kHz
Ref 30 dBm
#Atten 36 dB
-50.64 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

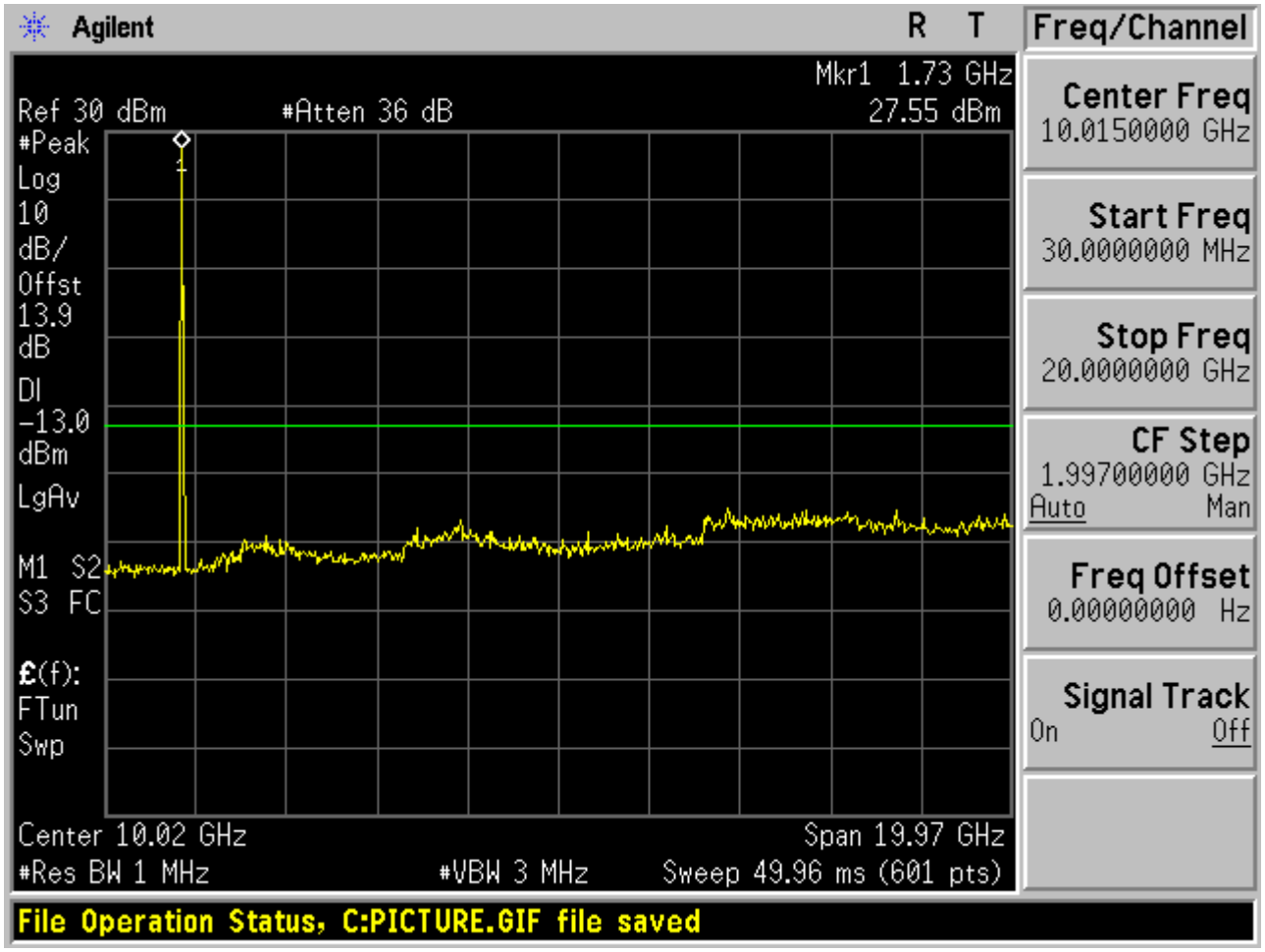

Agilent
R T
Freq/Channel
Mkr1 1.69 GHz
26.58 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

1.1.2.2 Channel = M

1.1.2.2.1 QPSK/1RBs /RB #0

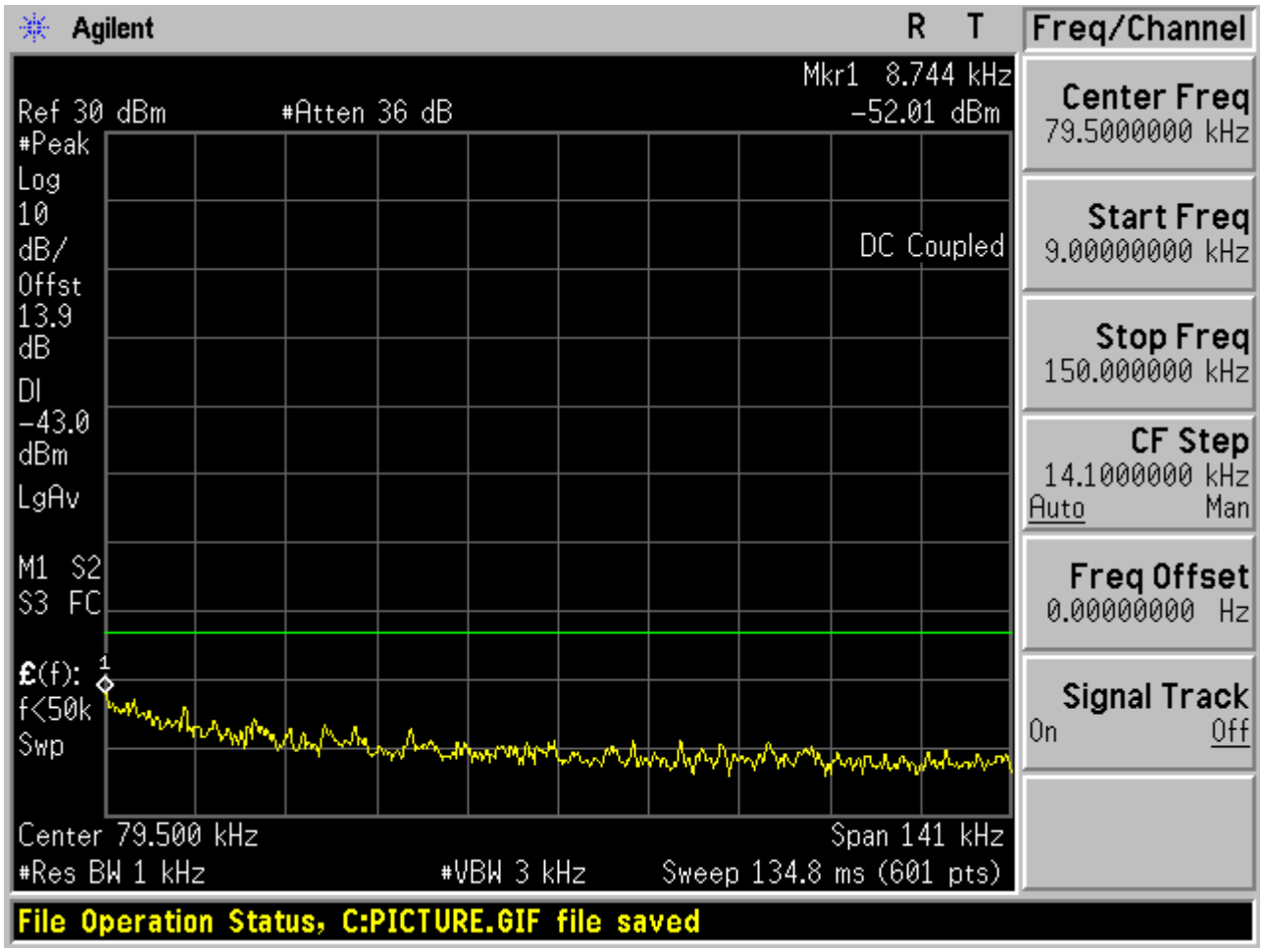


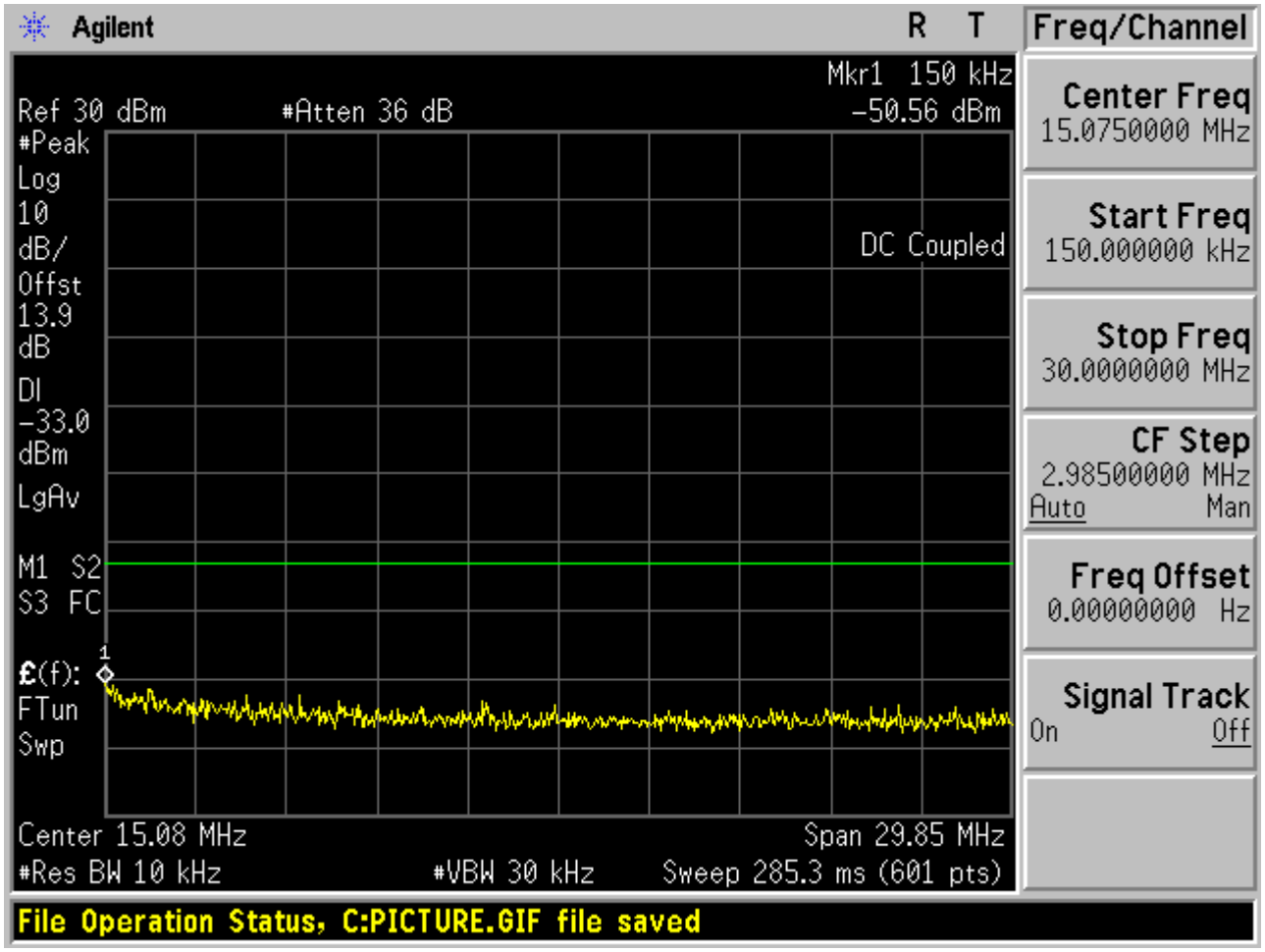

Agilent
R T
Freq/Channel
Mkr1 500 kHz
Ref 30 dBm
#Atten 36 dB
-49.98 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

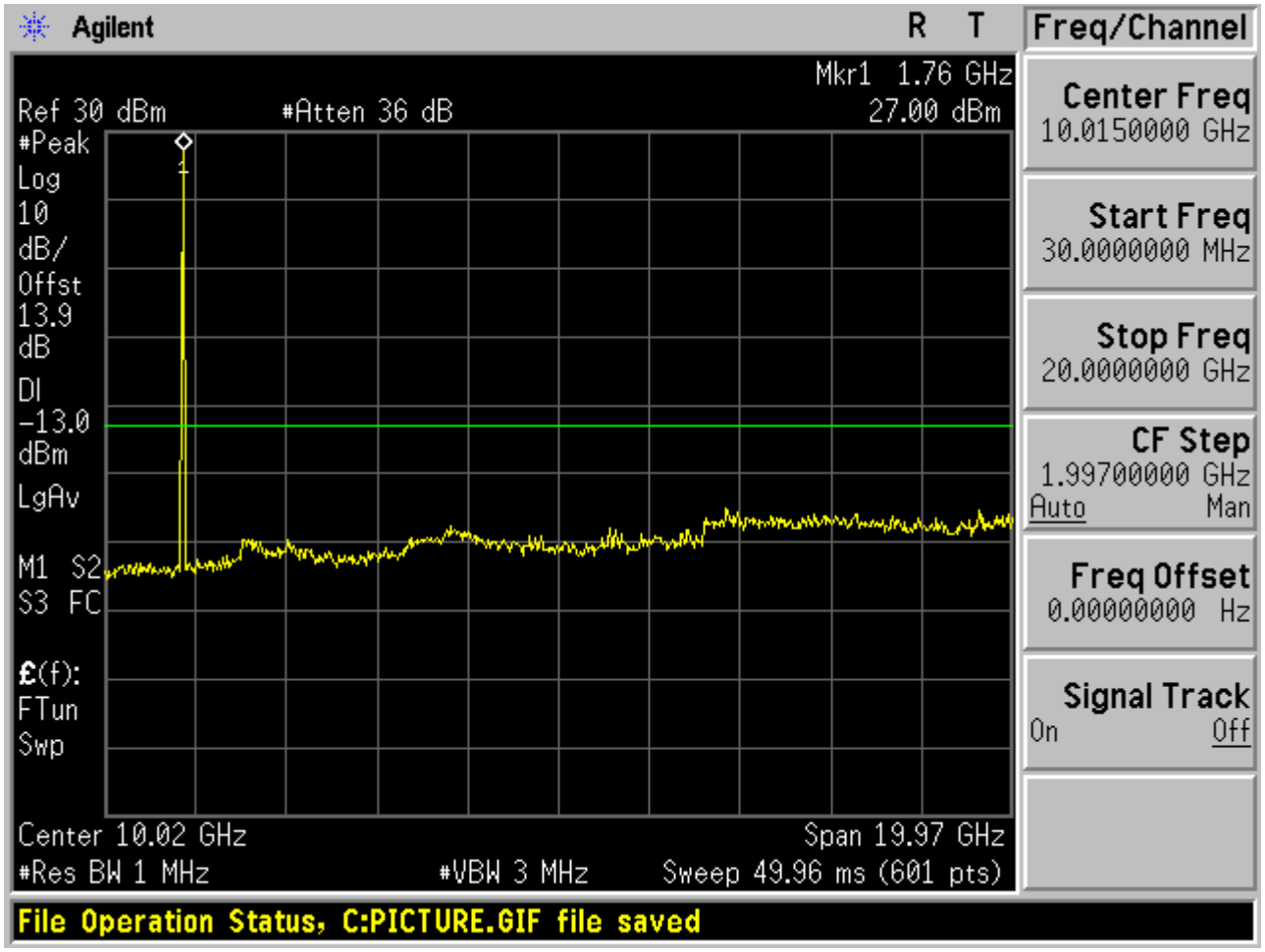

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.55 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.2.3 Channel = H

1.1.2.3.1 QPSK/1RBs /RB #0

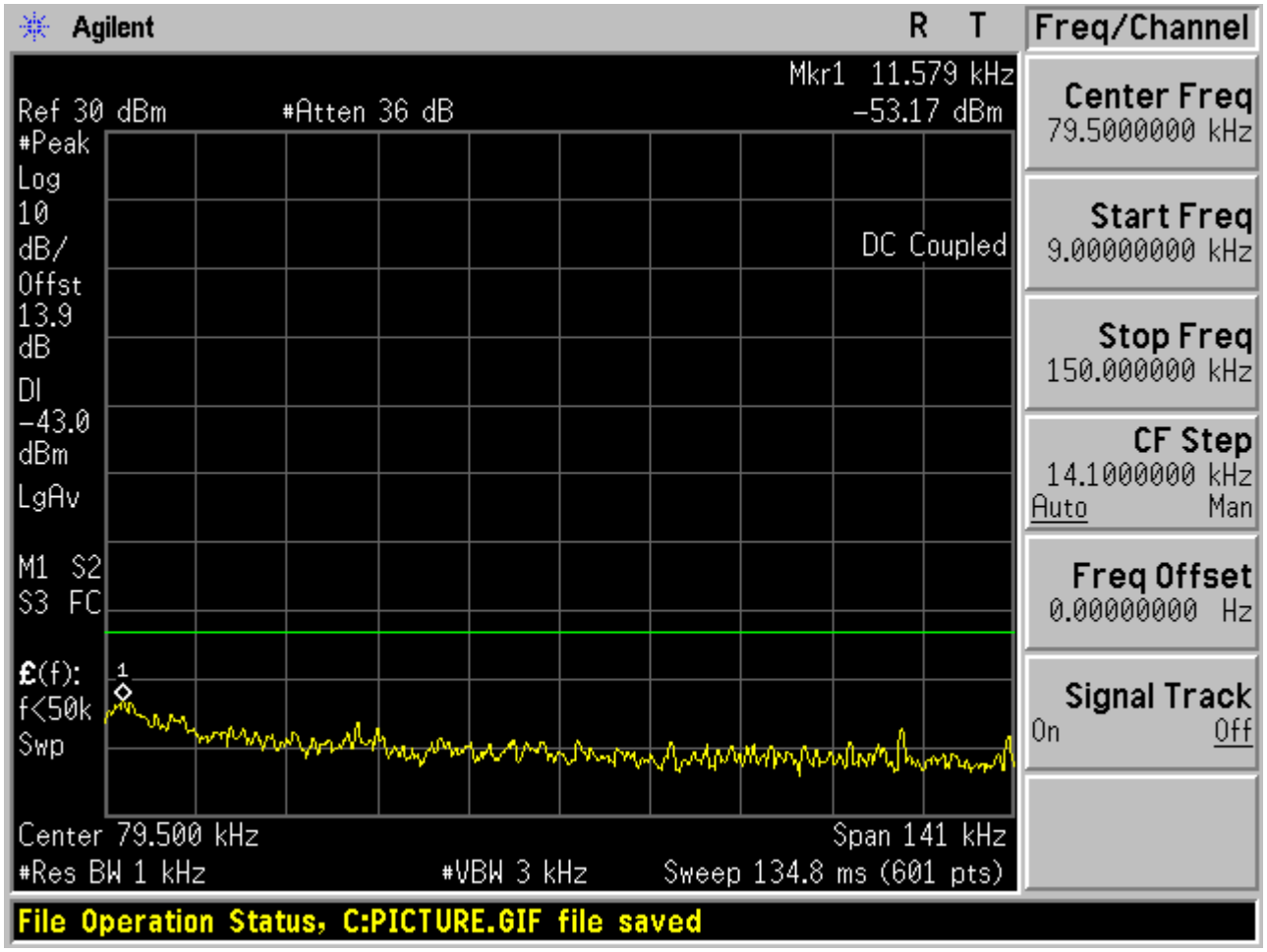


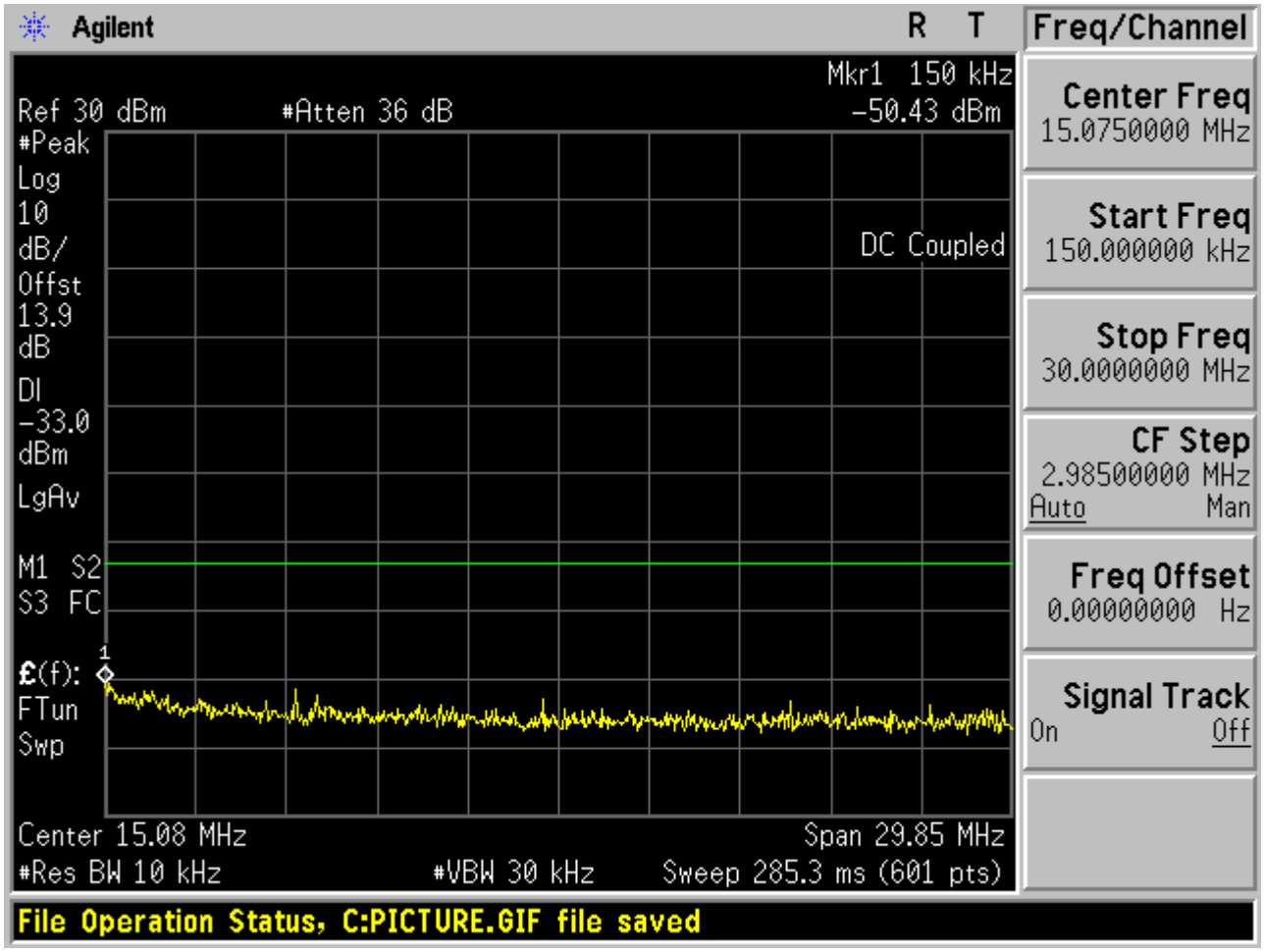

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.56 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

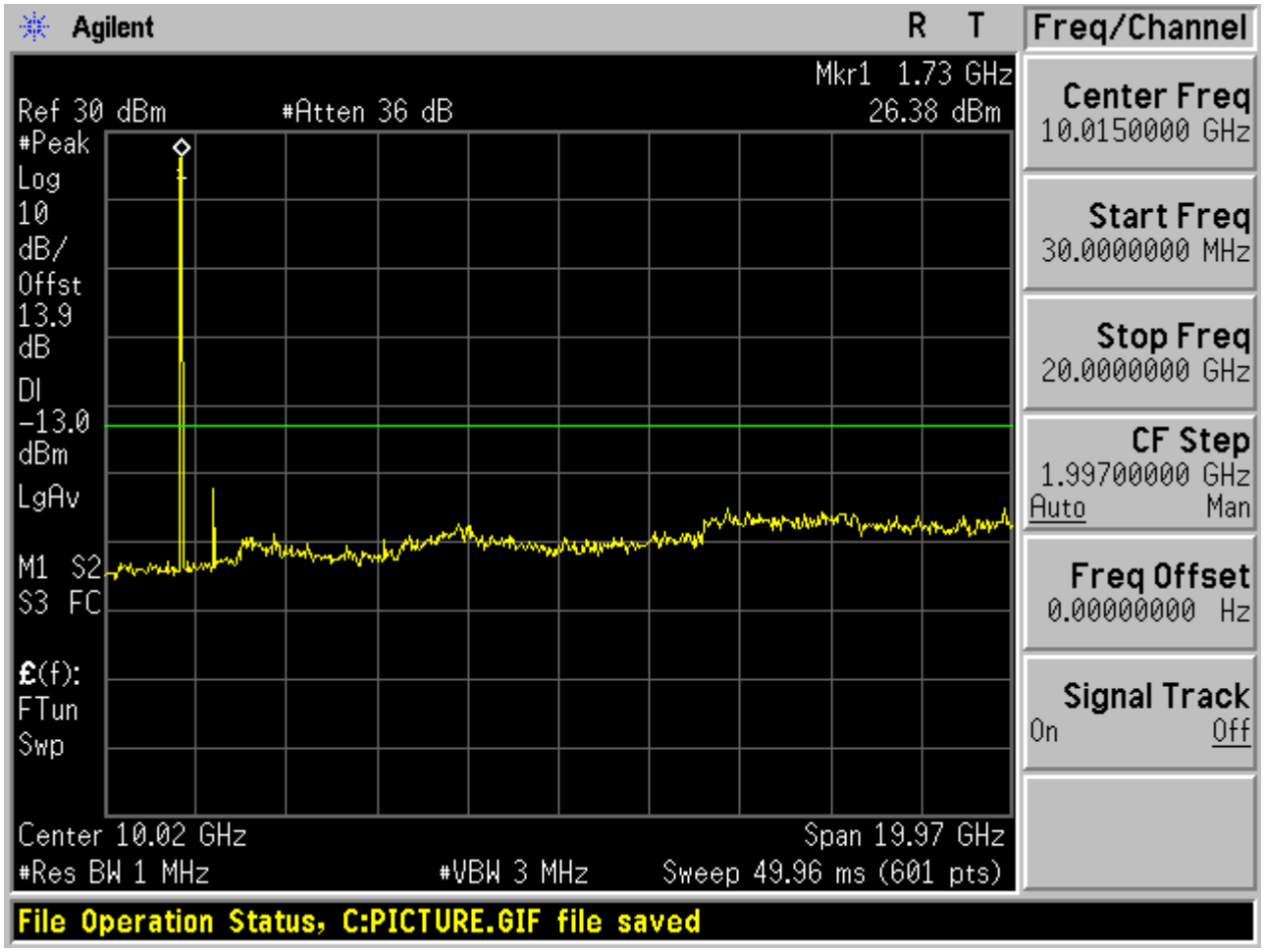

Agilent
R T
Freq/Channel
Mkr1 1.76 GHz
27.00 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.3 Channel Bandwidth = 15 MHz

1.1.3.1.1 QPSK/1RBs /RB #0

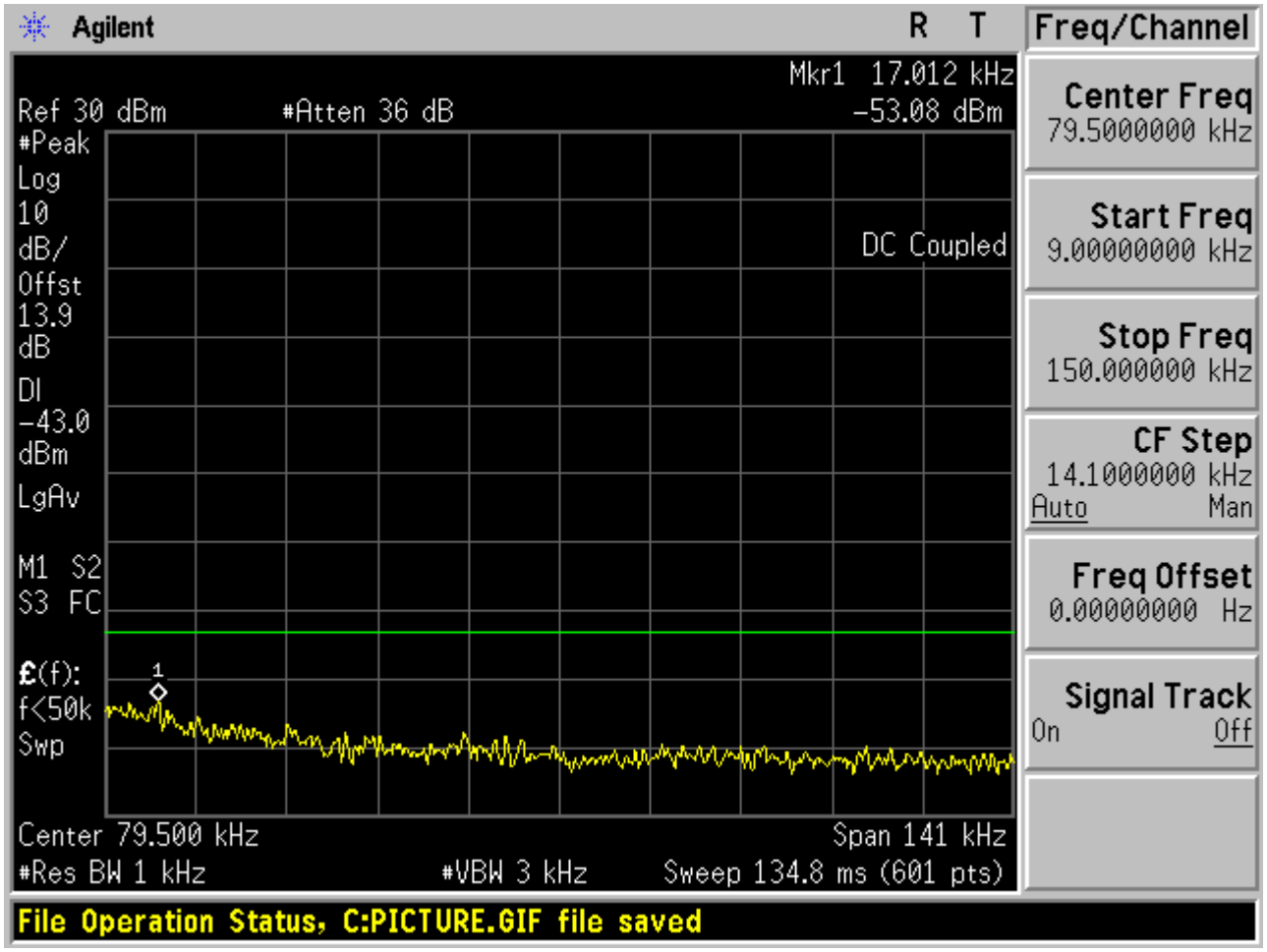


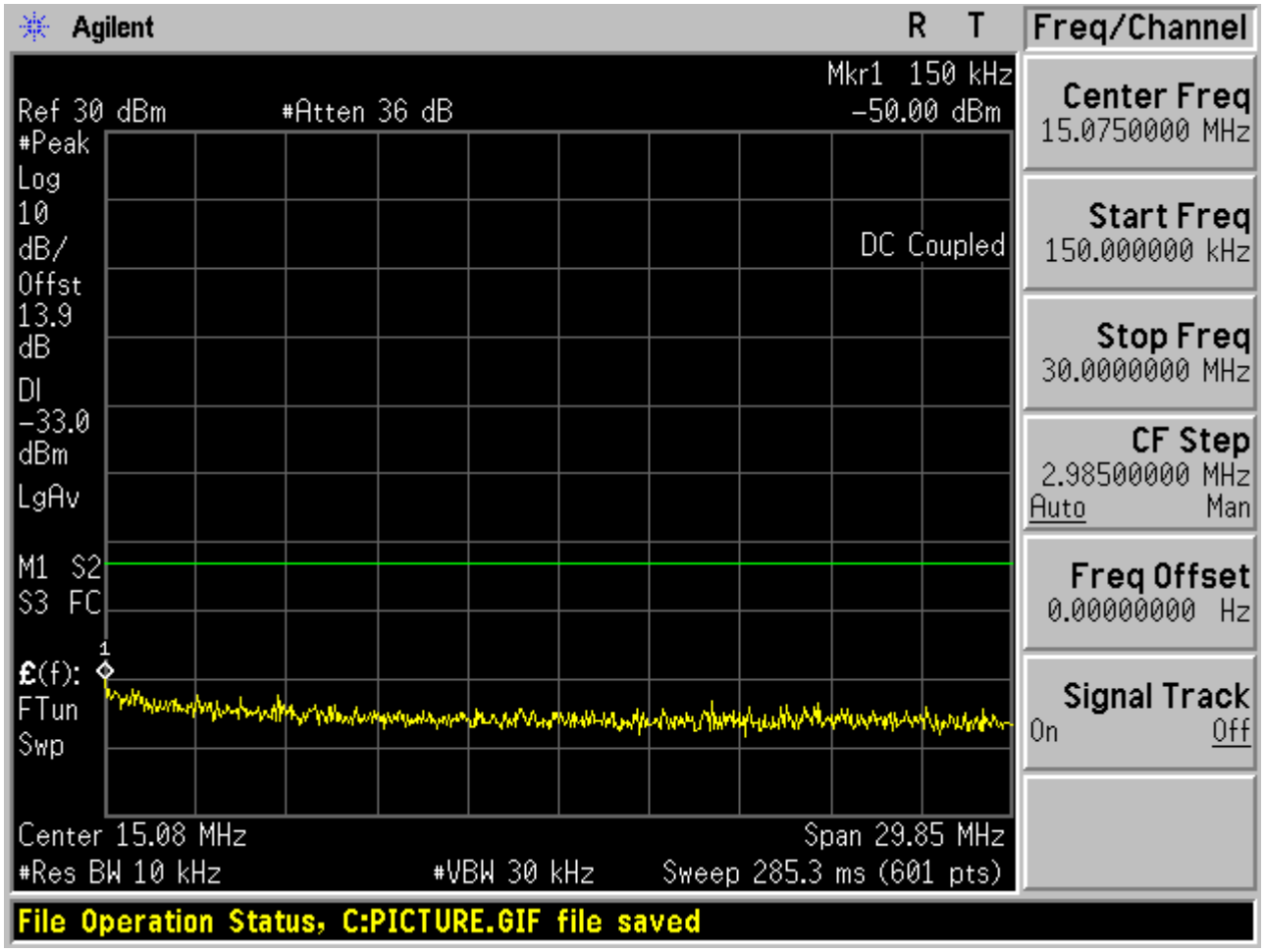

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.43 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

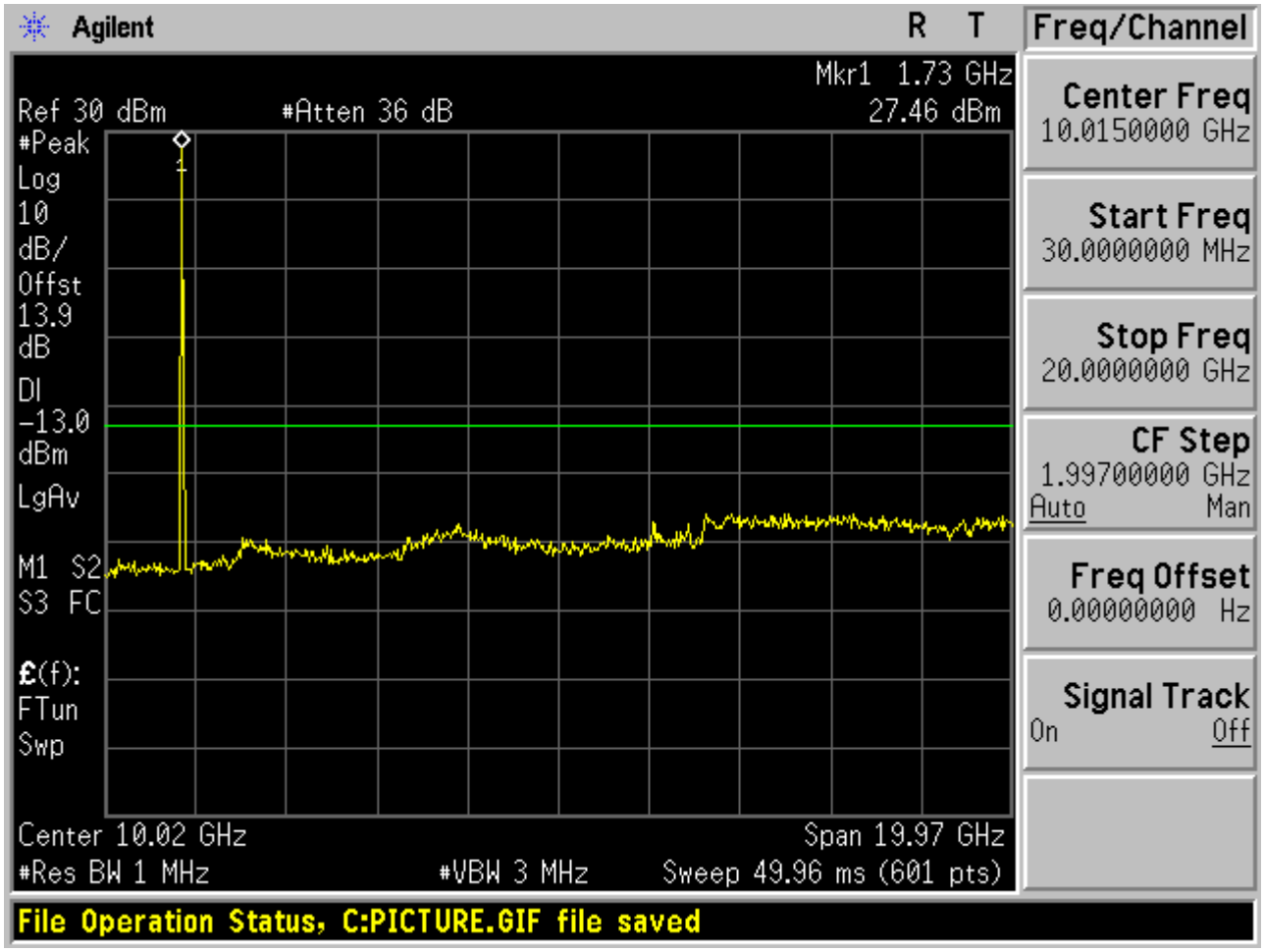

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.38 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

1.1.3.2 Channel = M

1.1.3.2.1 QPSK/1RBs /RB #0

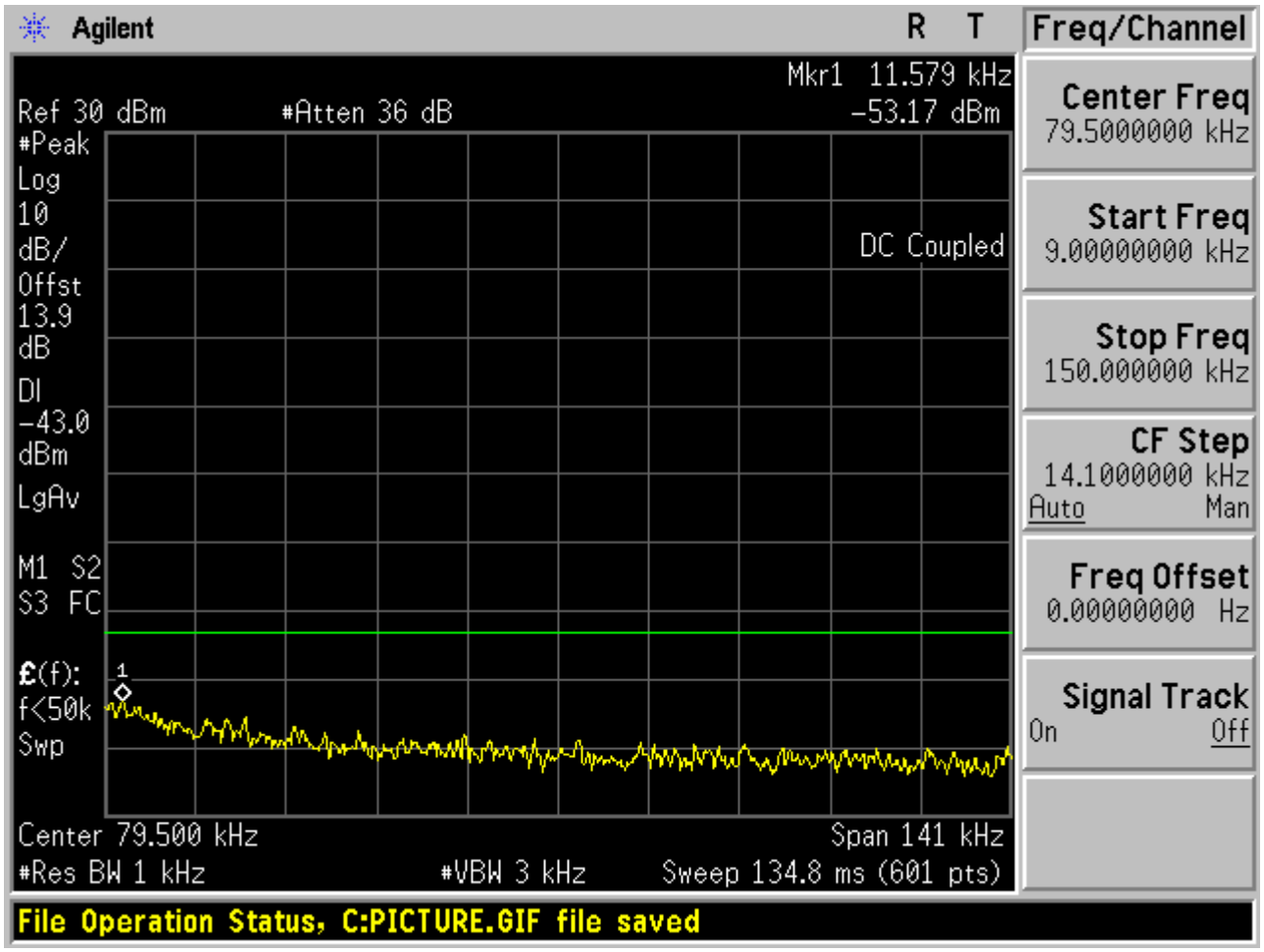


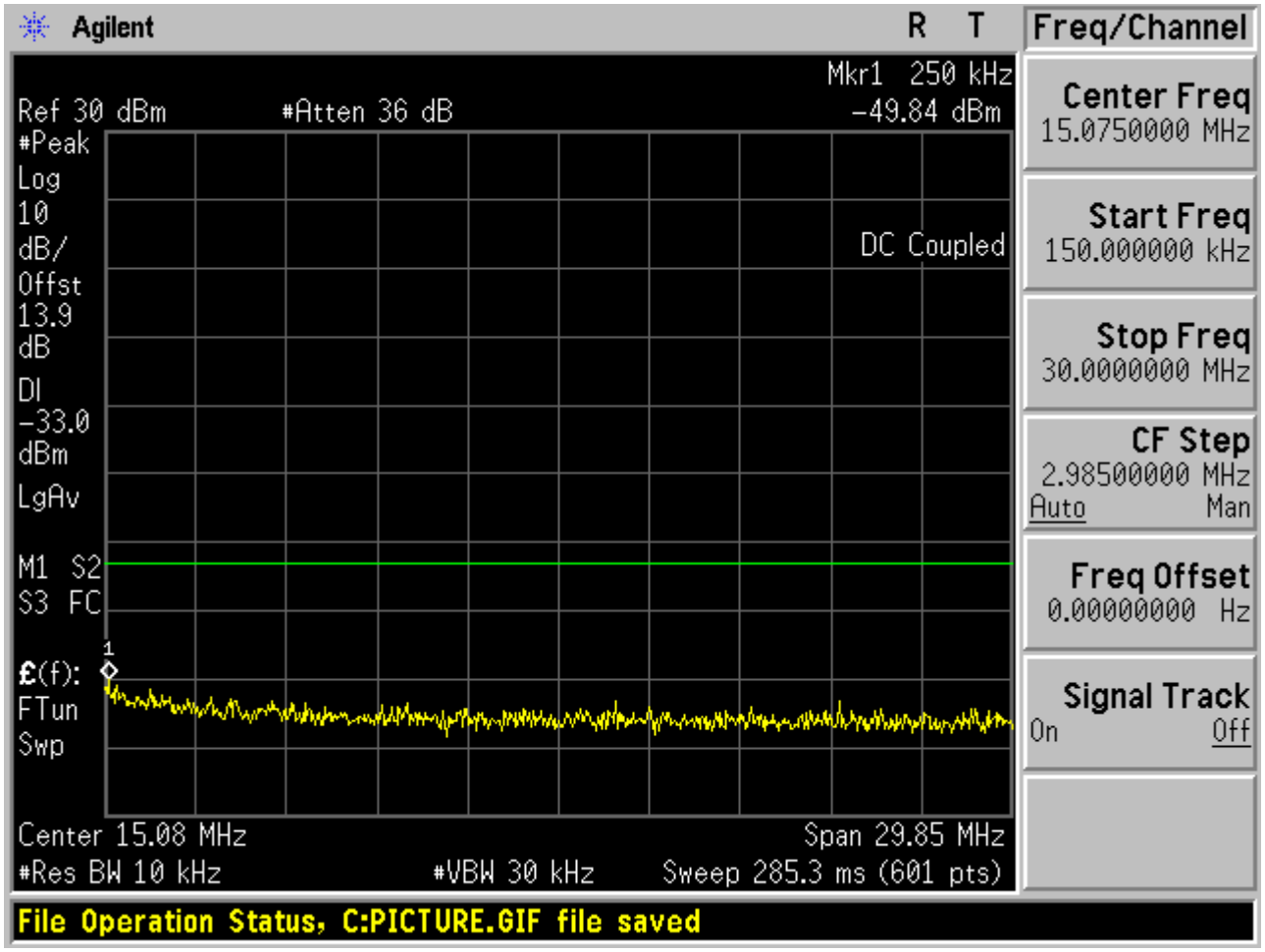

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.00 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

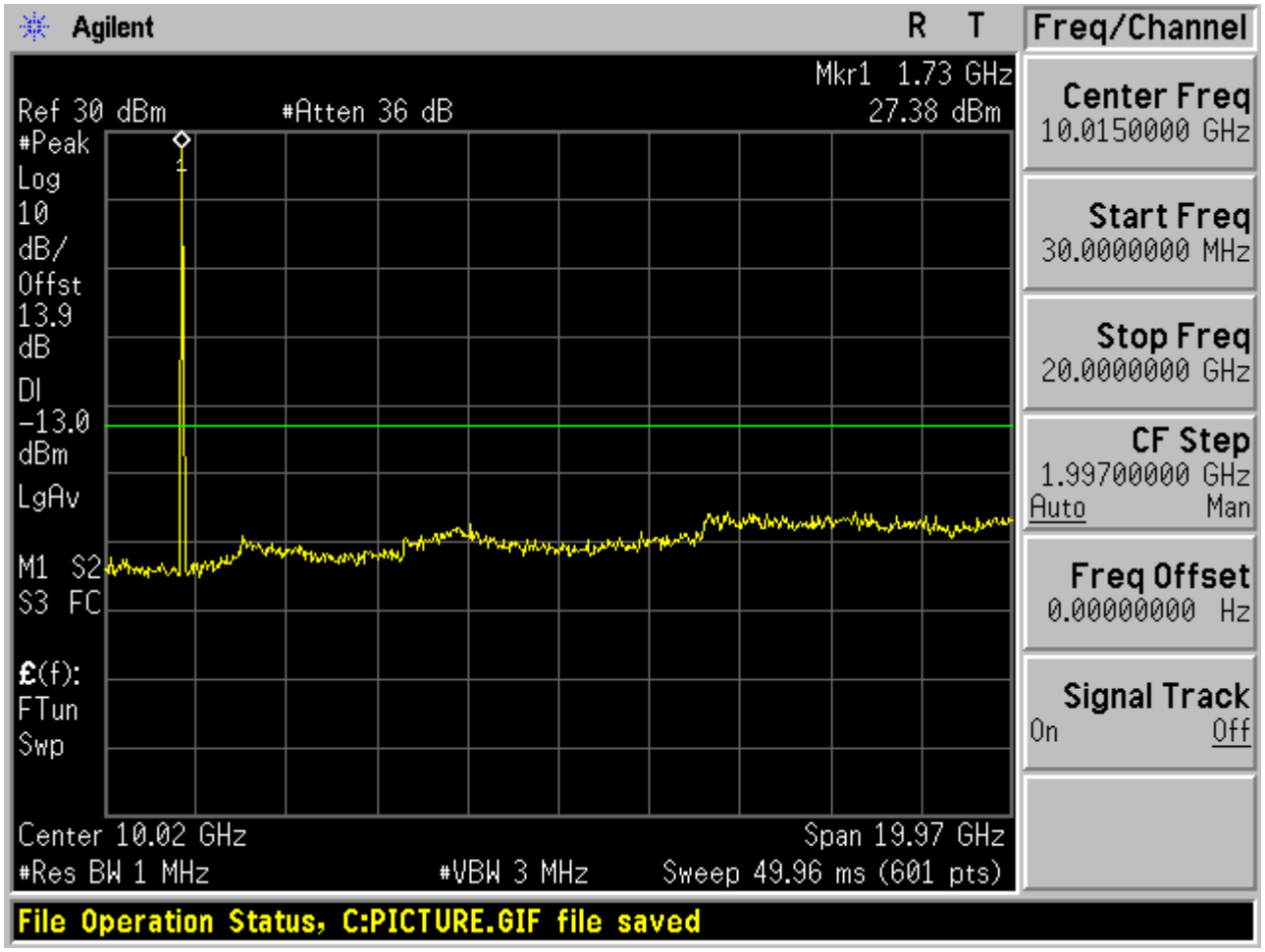

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.46 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.3.3 Channel = H

1.1.3.3.1 QPSK/1RBs /RB #0



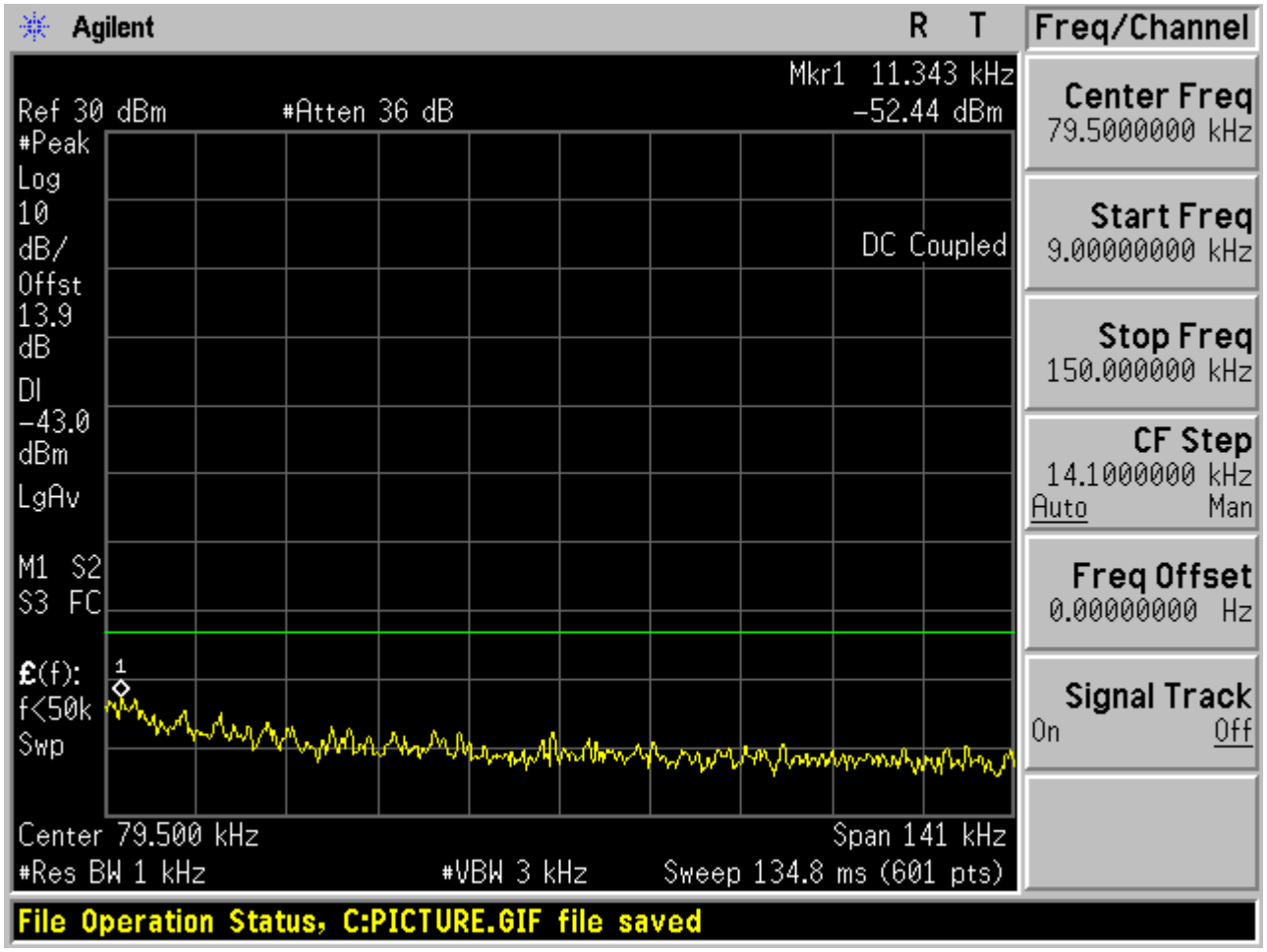

Agilent
R T
Freq/Channel
Mkr1 250 kHz
Ref 30 dBm
#Atten 36 dB
-49.84 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

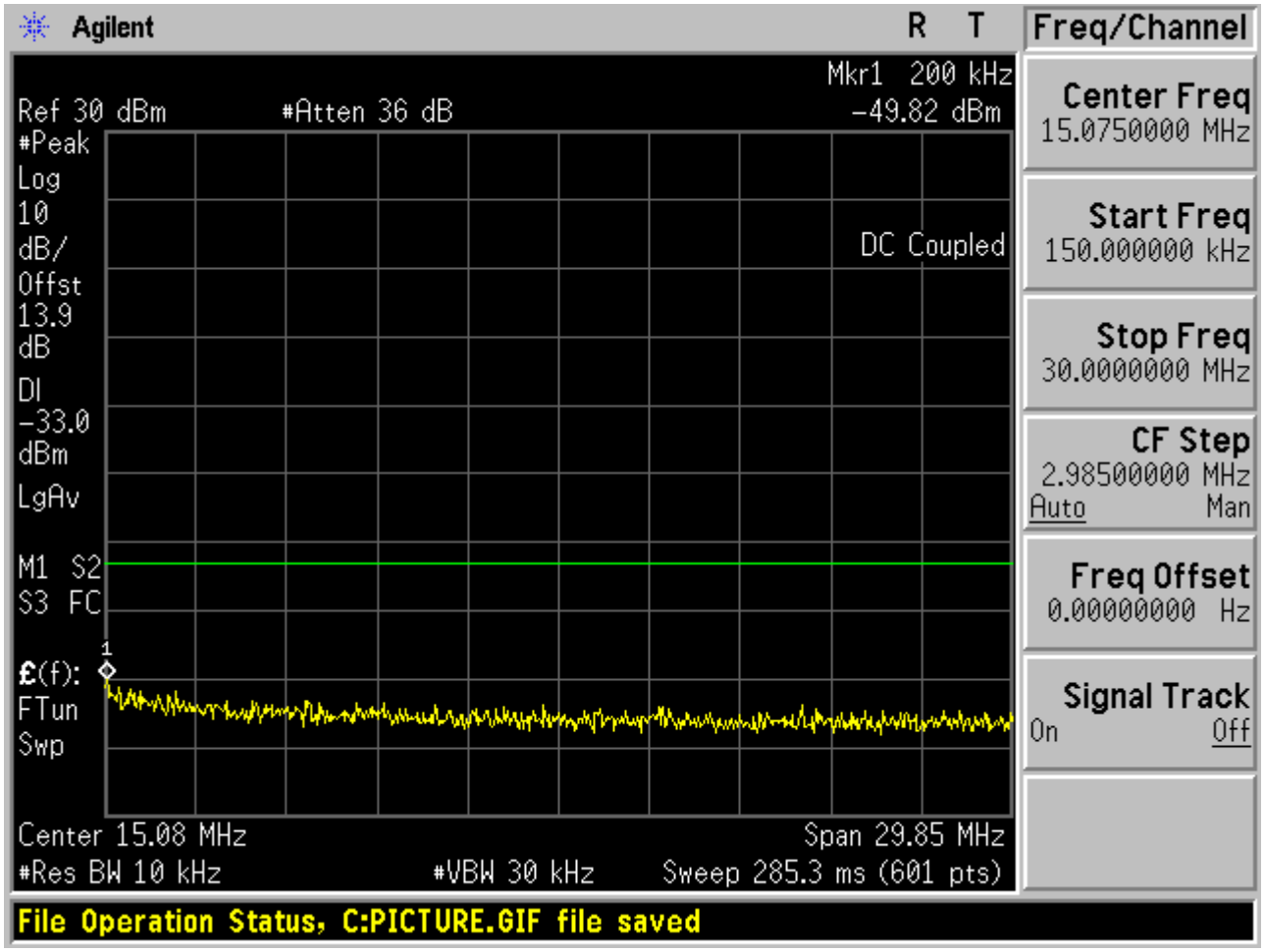

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.38 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

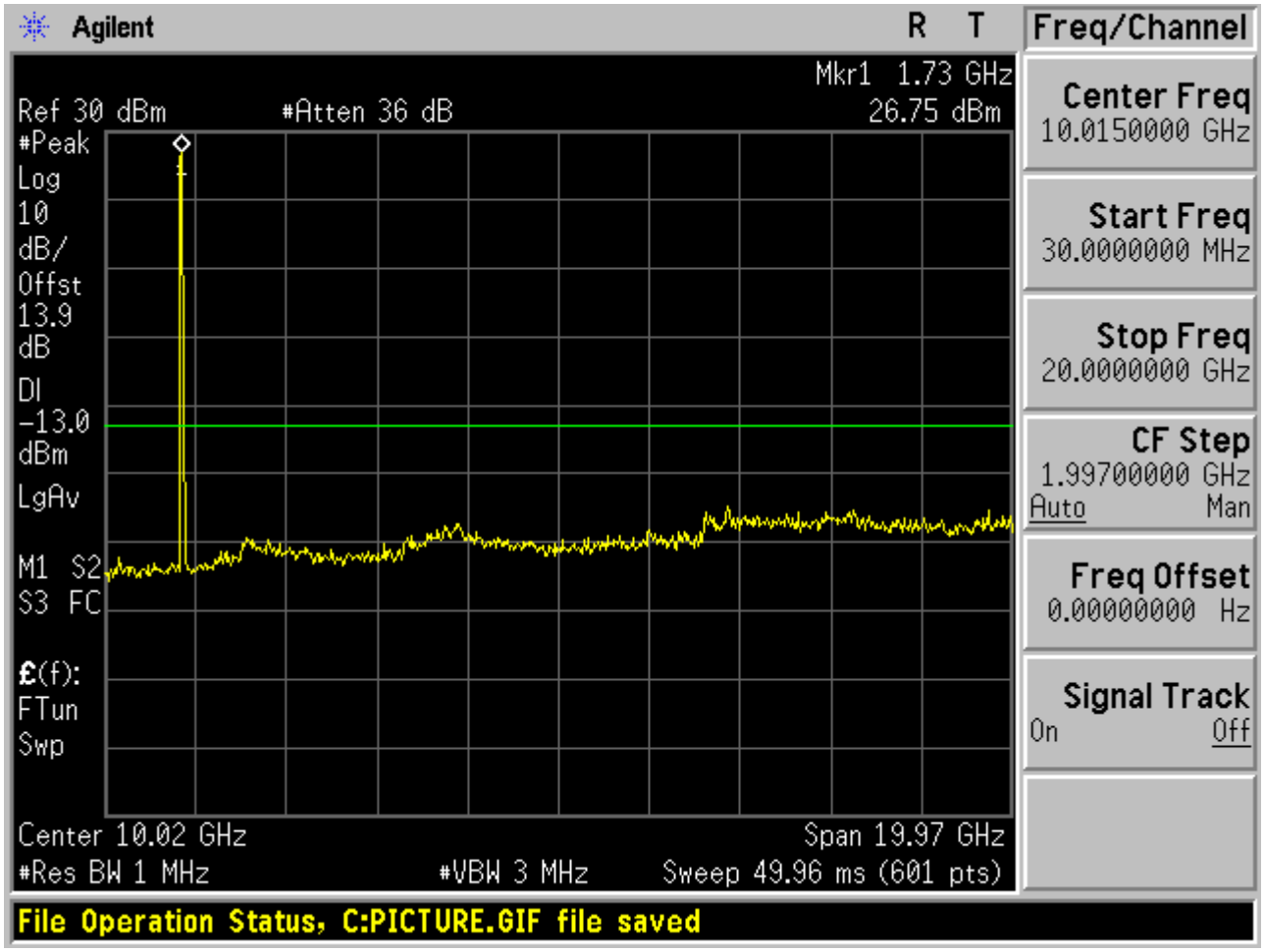
1.1.4 Channel Bandwidth = Highest (20 MHz)

1.1.4.1 Channel = L

1.1.4.1.1 QPSK/1RBs /RB #0

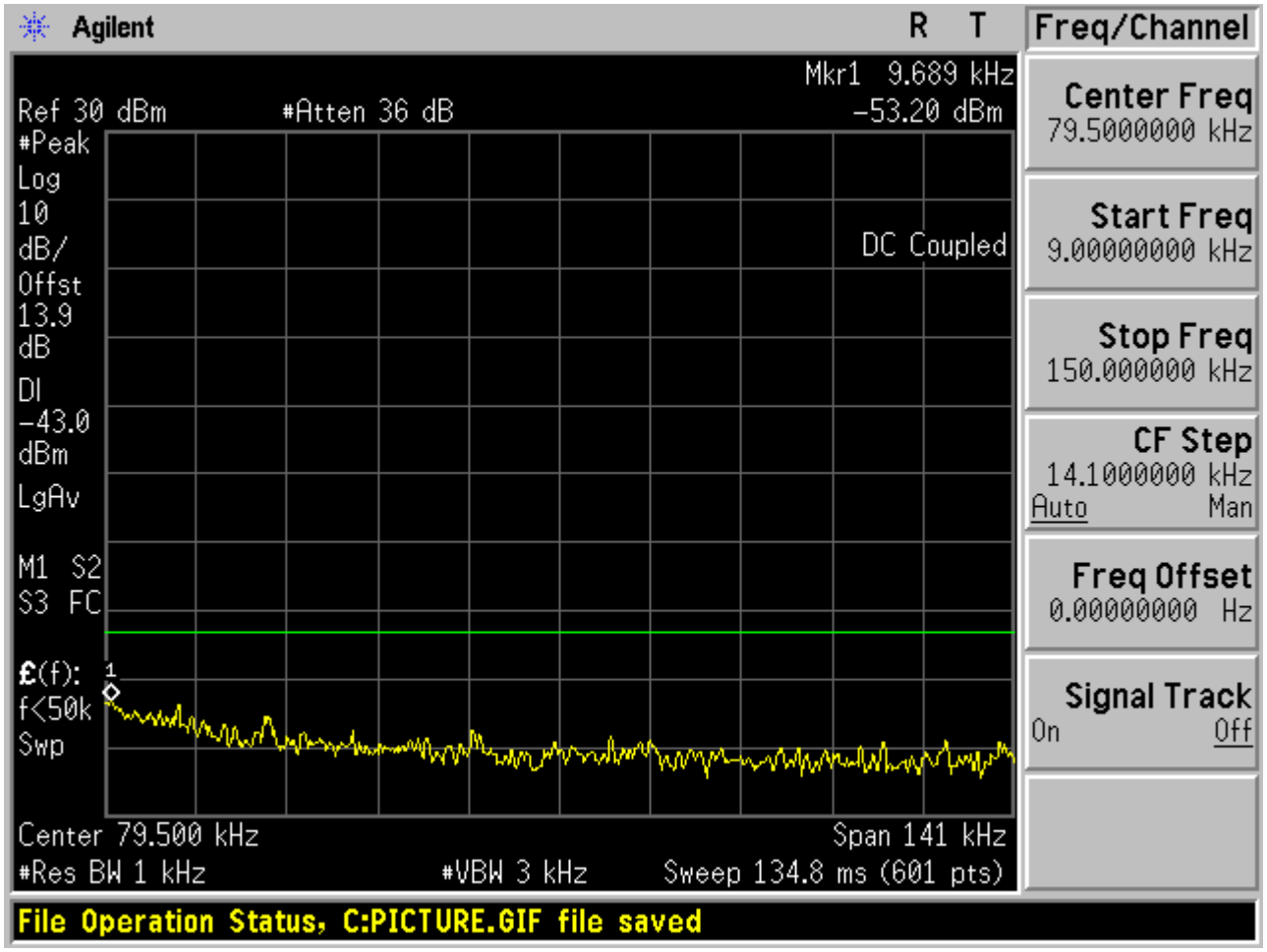


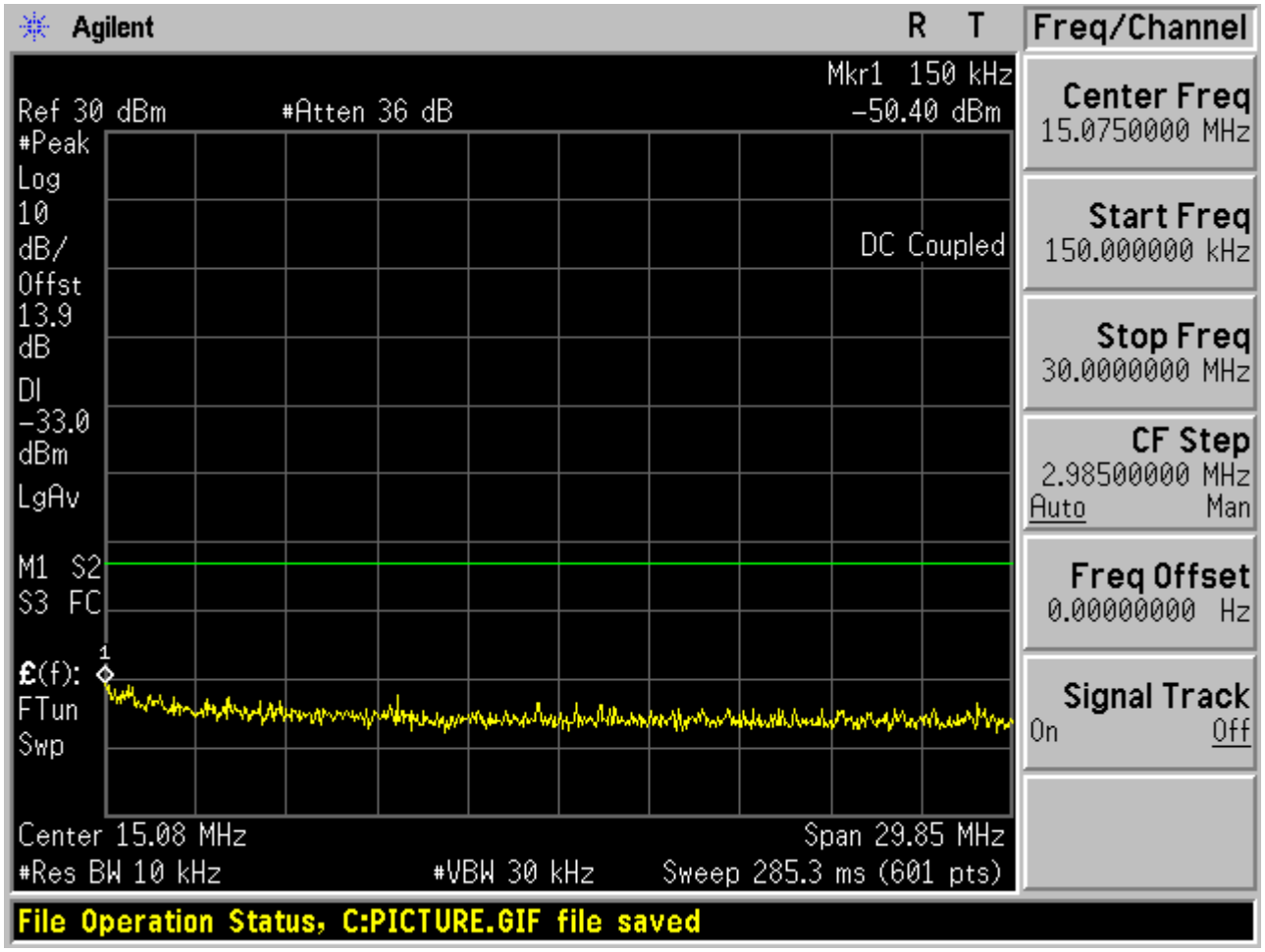

Agilent
R T
Freq/Channel
Mkr1 200 kHz
Ref 30 dBm
#Atten 36 dB
-49.82 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

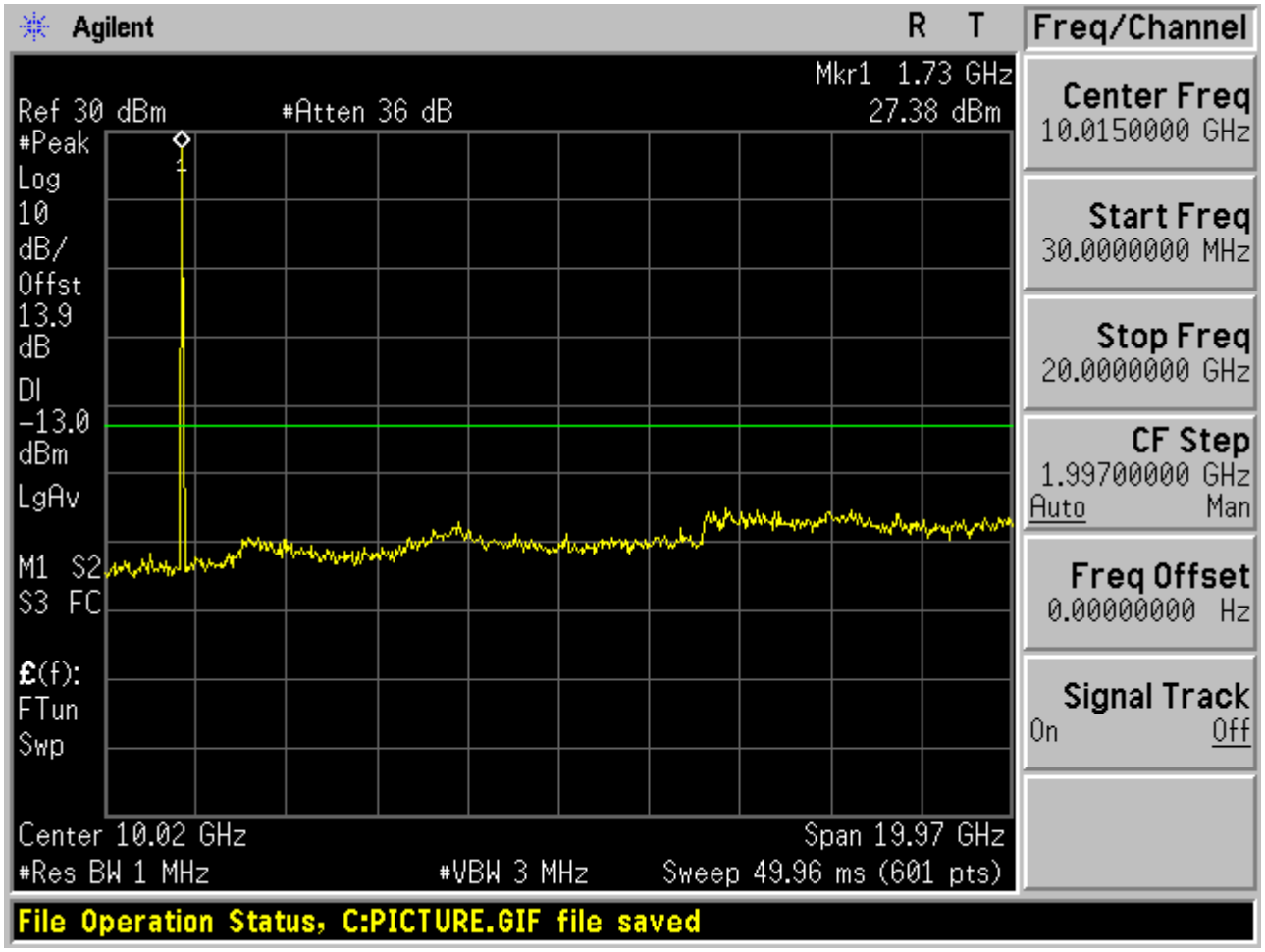

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
26.75 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.4.2 Channel = M

1.1.4.2.1 QPSK/1RBs /RB #0

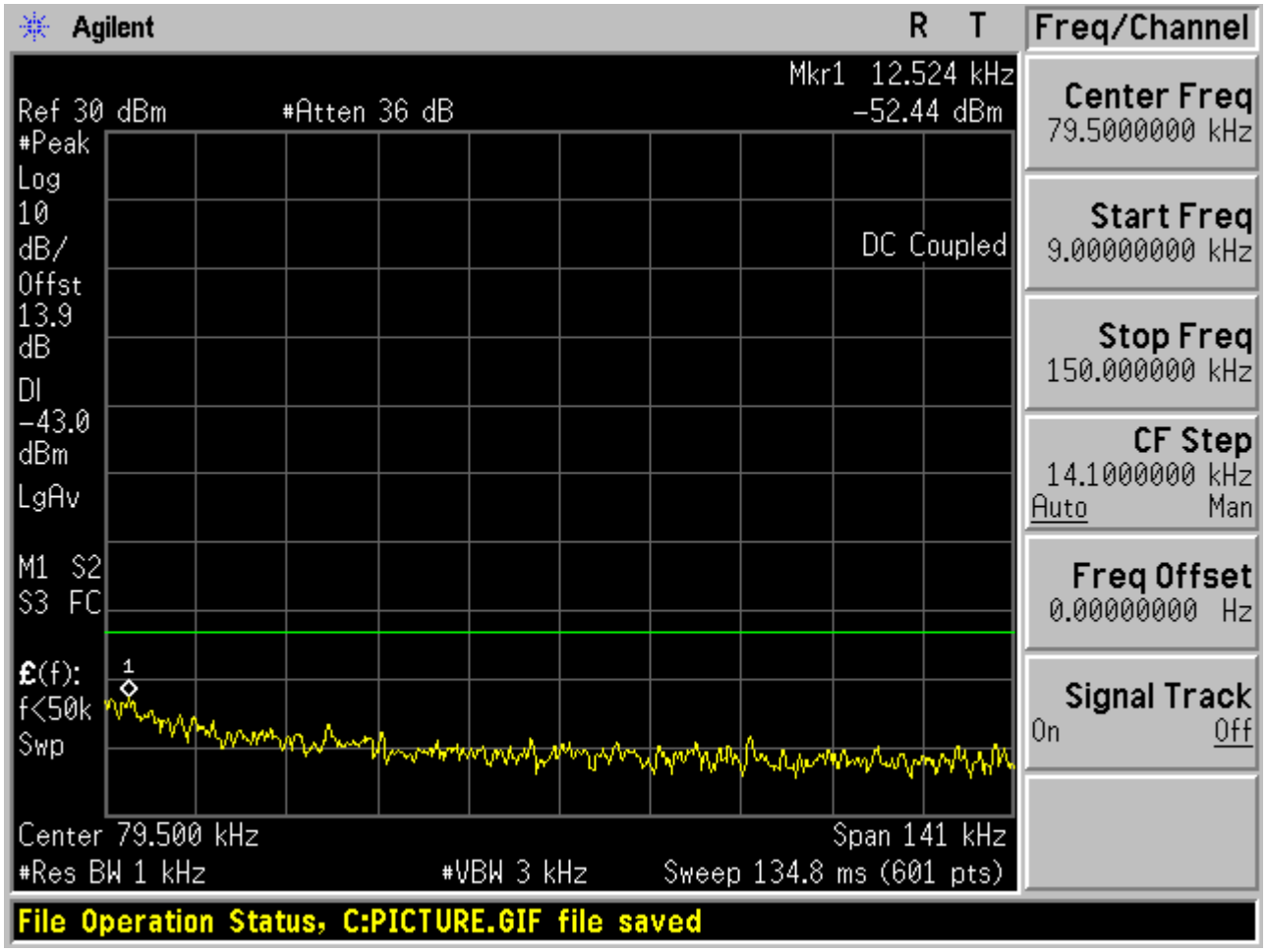


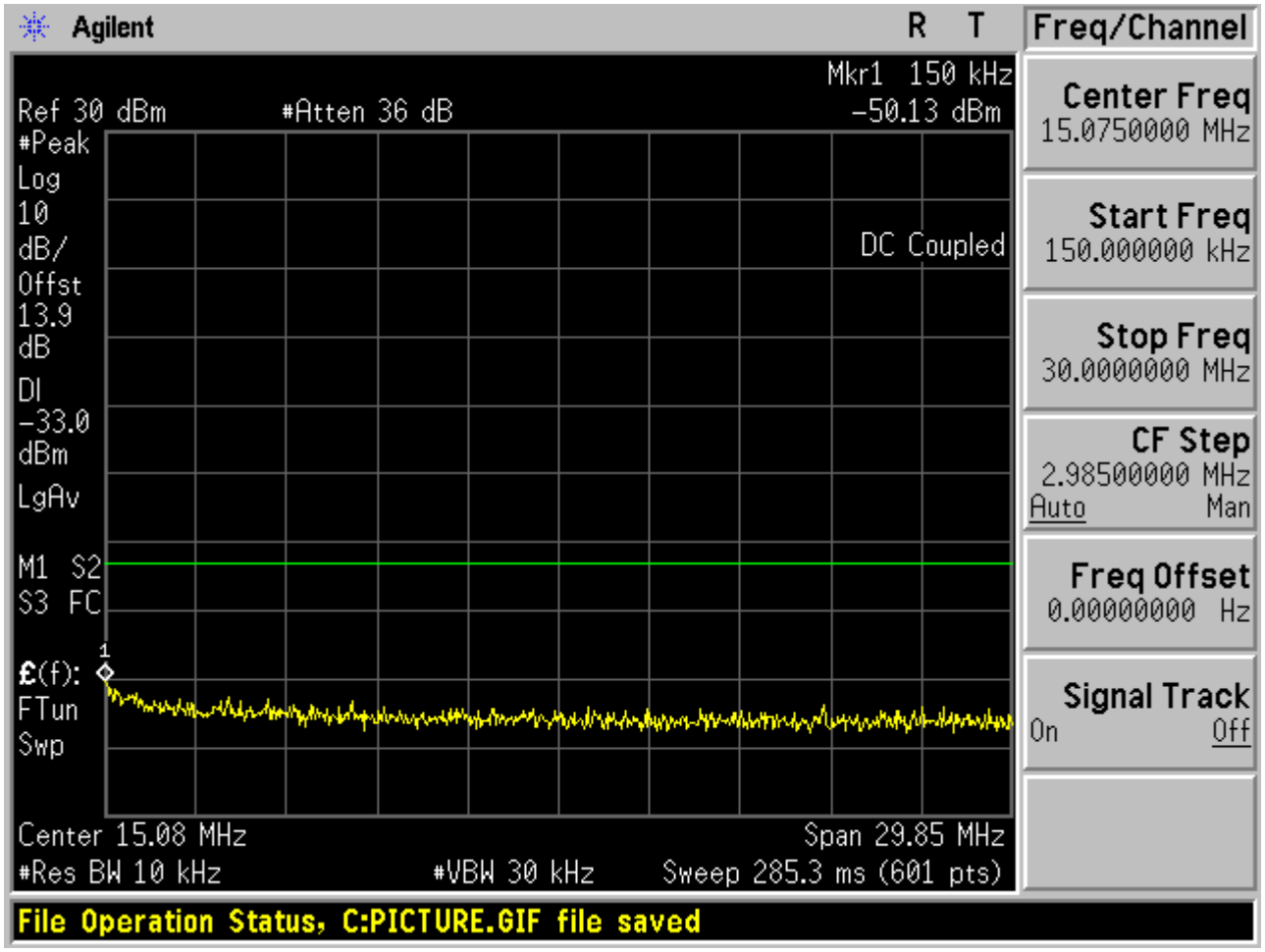

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.40 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

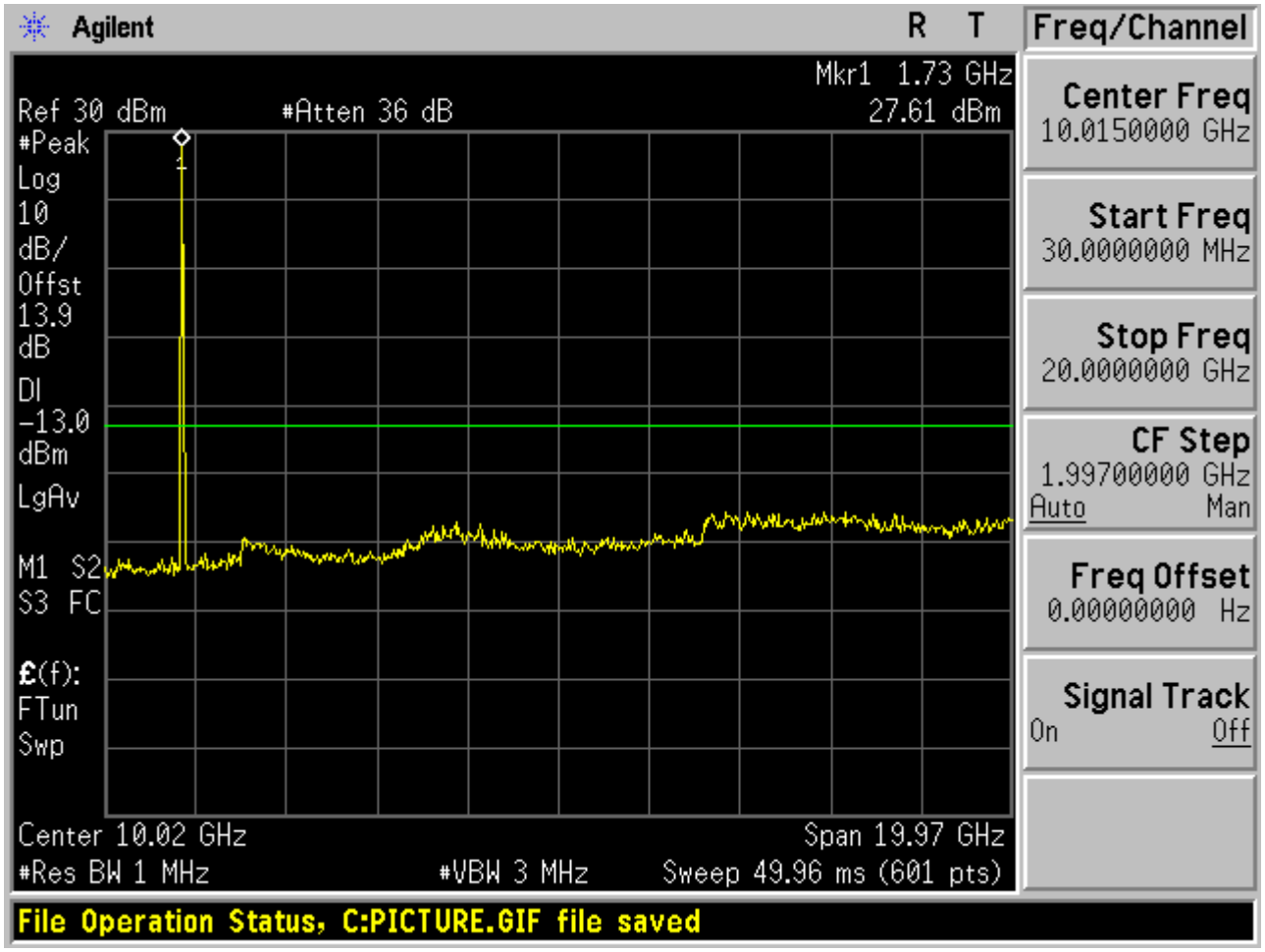

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.38 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.1.4.3 Channel = H

1.1.4.3.1 QPSK/1RBs /RB #0




Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.13 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

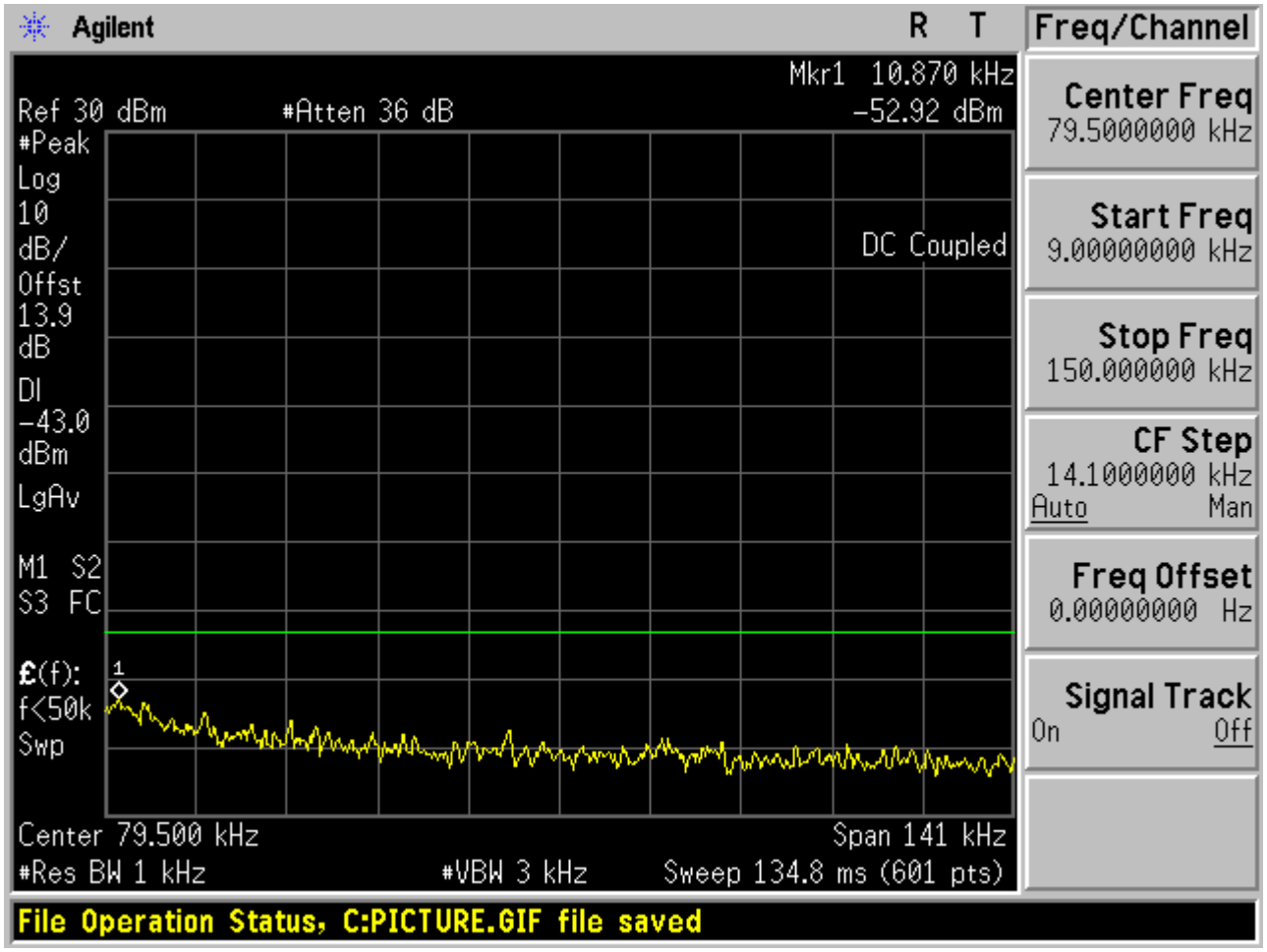

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
27.61 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

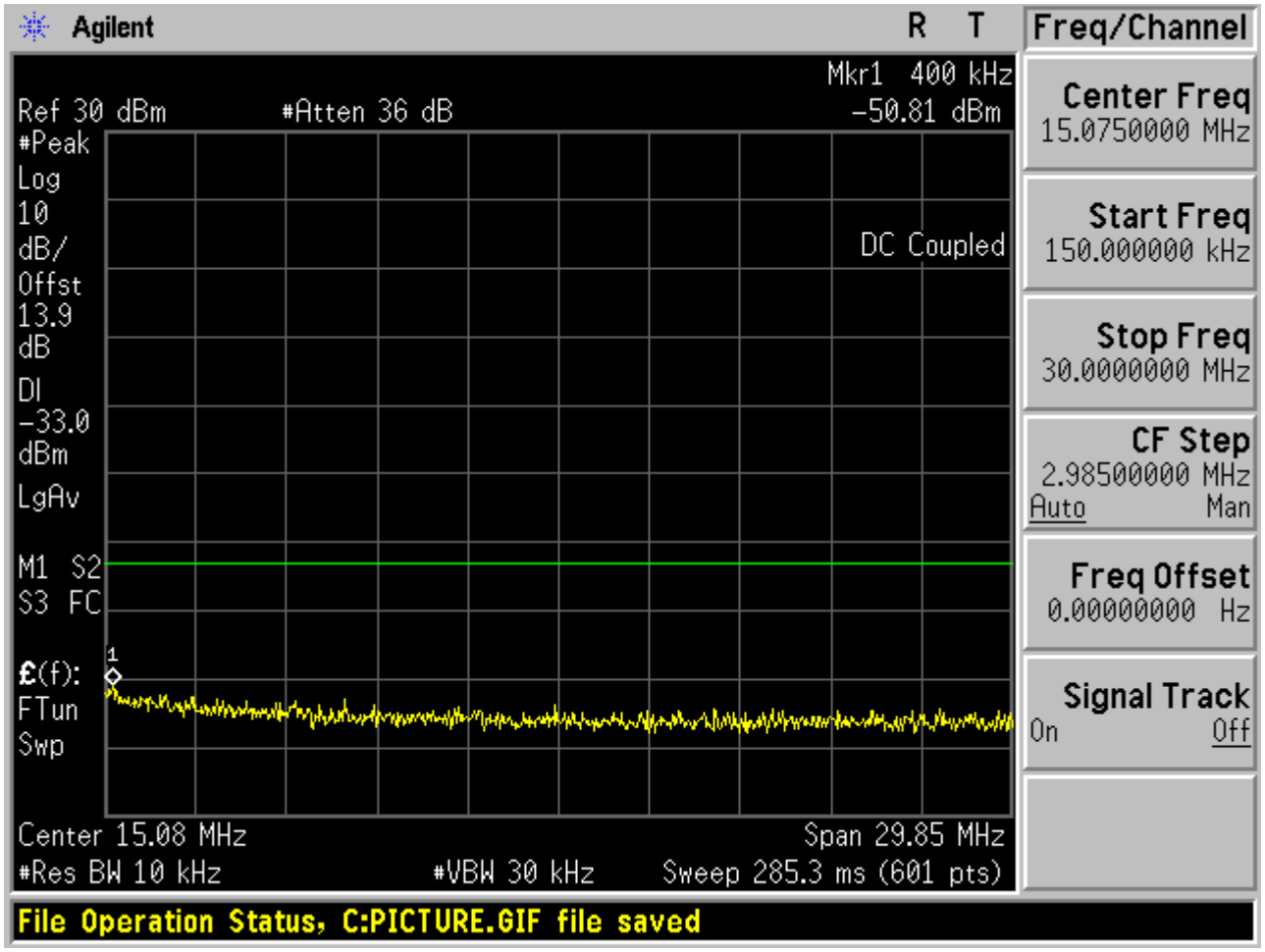
1.2 Test Mode=TM2

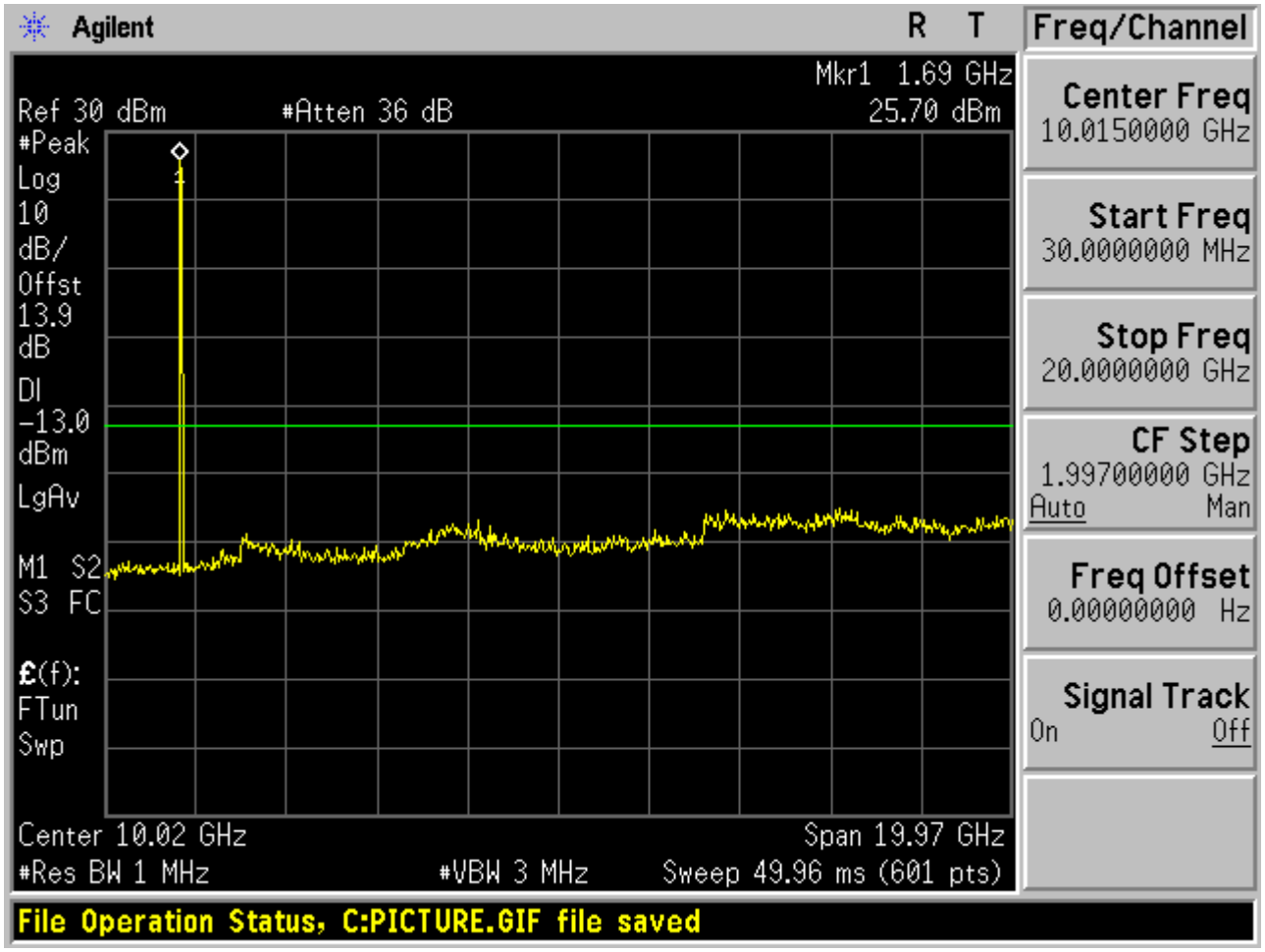
1.2.1 Channel Bandwidth = Lowest (5 MHz)

1.2.1.1 Channel = L

1.2.1.1.1 16QAM/1RBs /RB #0

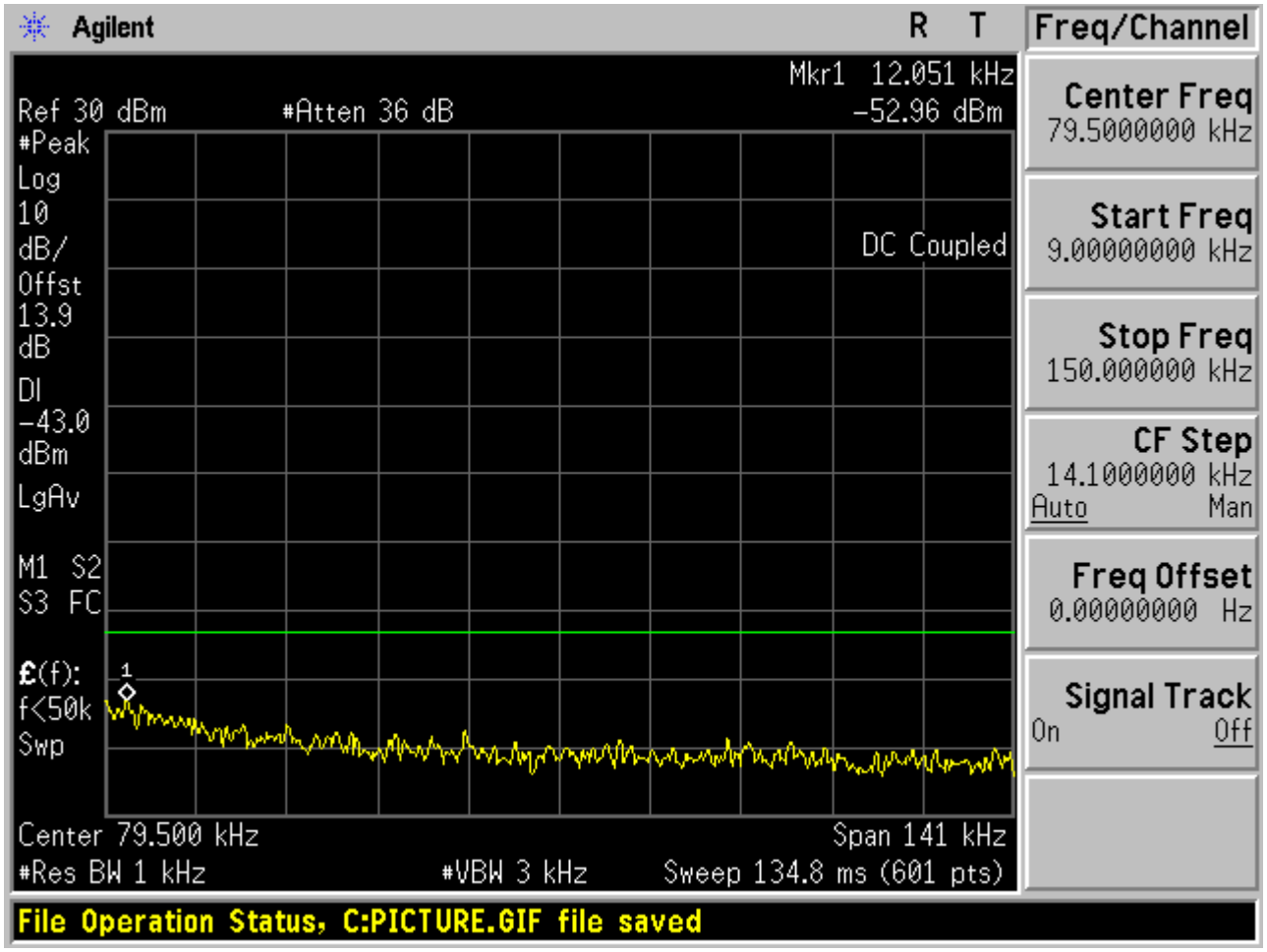


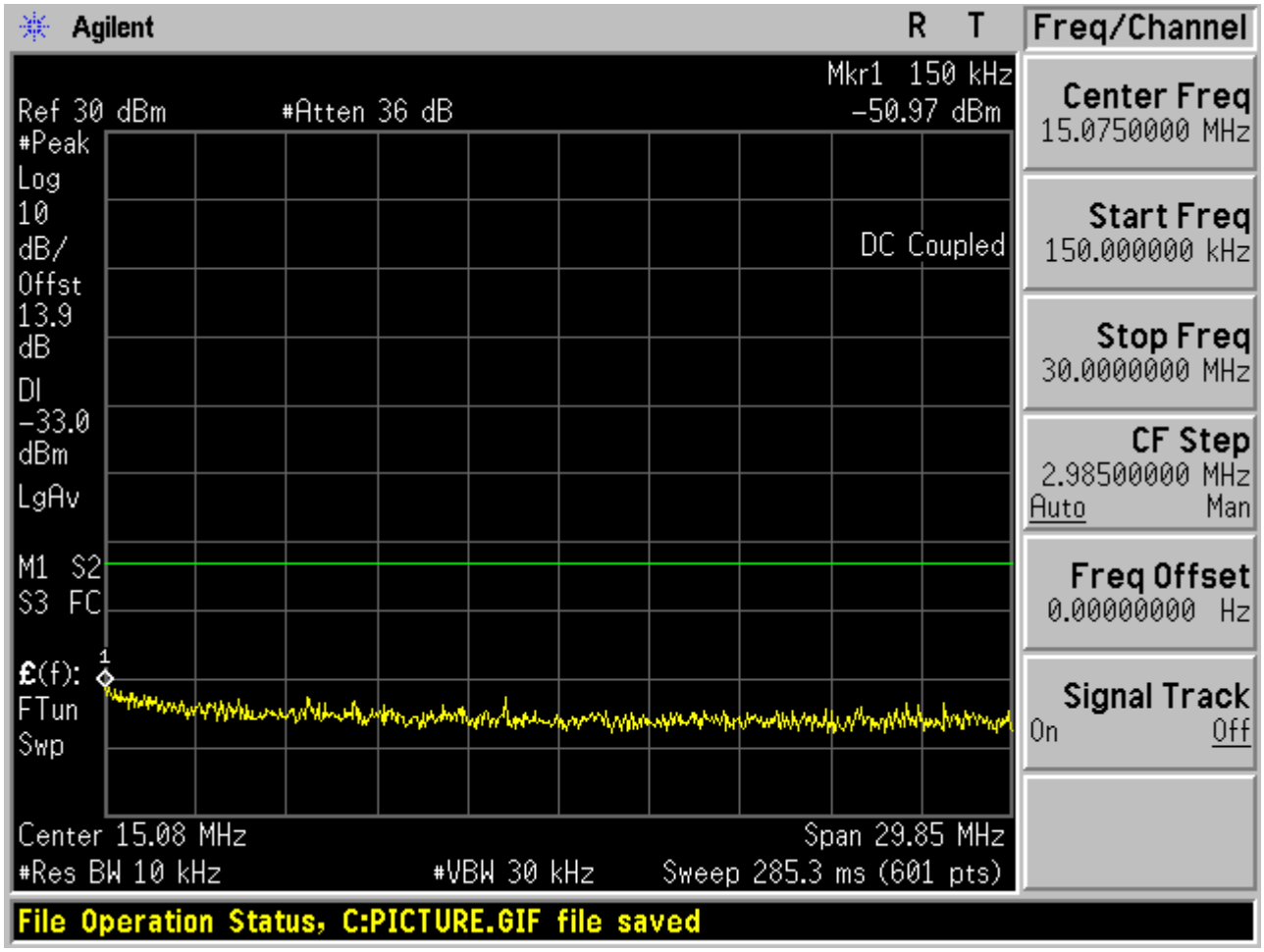

Agilent
R T
Freq/Channel
Mkr1 400 kHz
Ref 30 dBm
#Atten 36 dB
-50.81 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

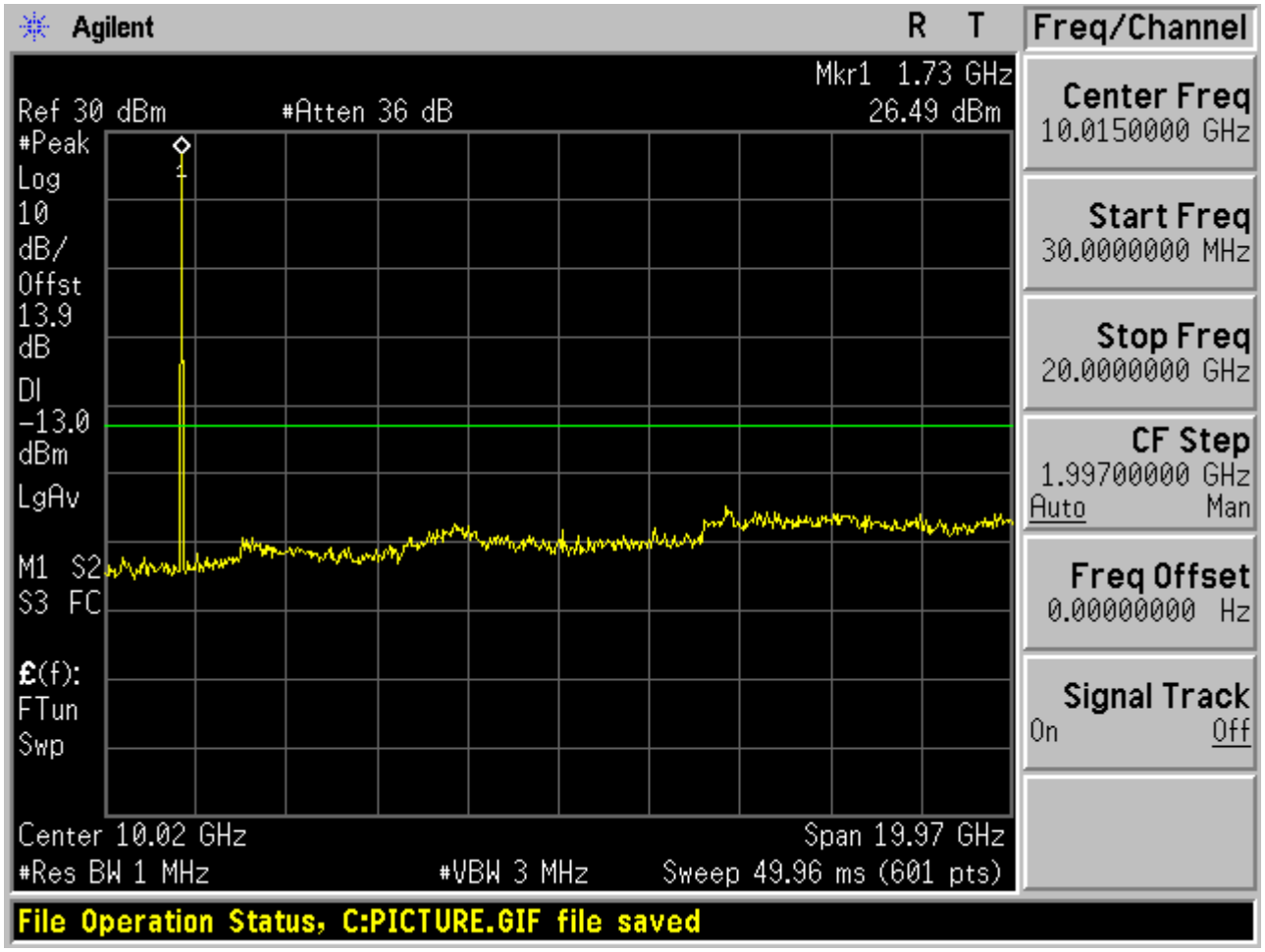

Agilent
R T
Freq/Channel
Mkr1 1.69 GHz
25.70 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.2.1.2 Channel = M

1.2.1.2.1 16QAM /1RBs /RB #0

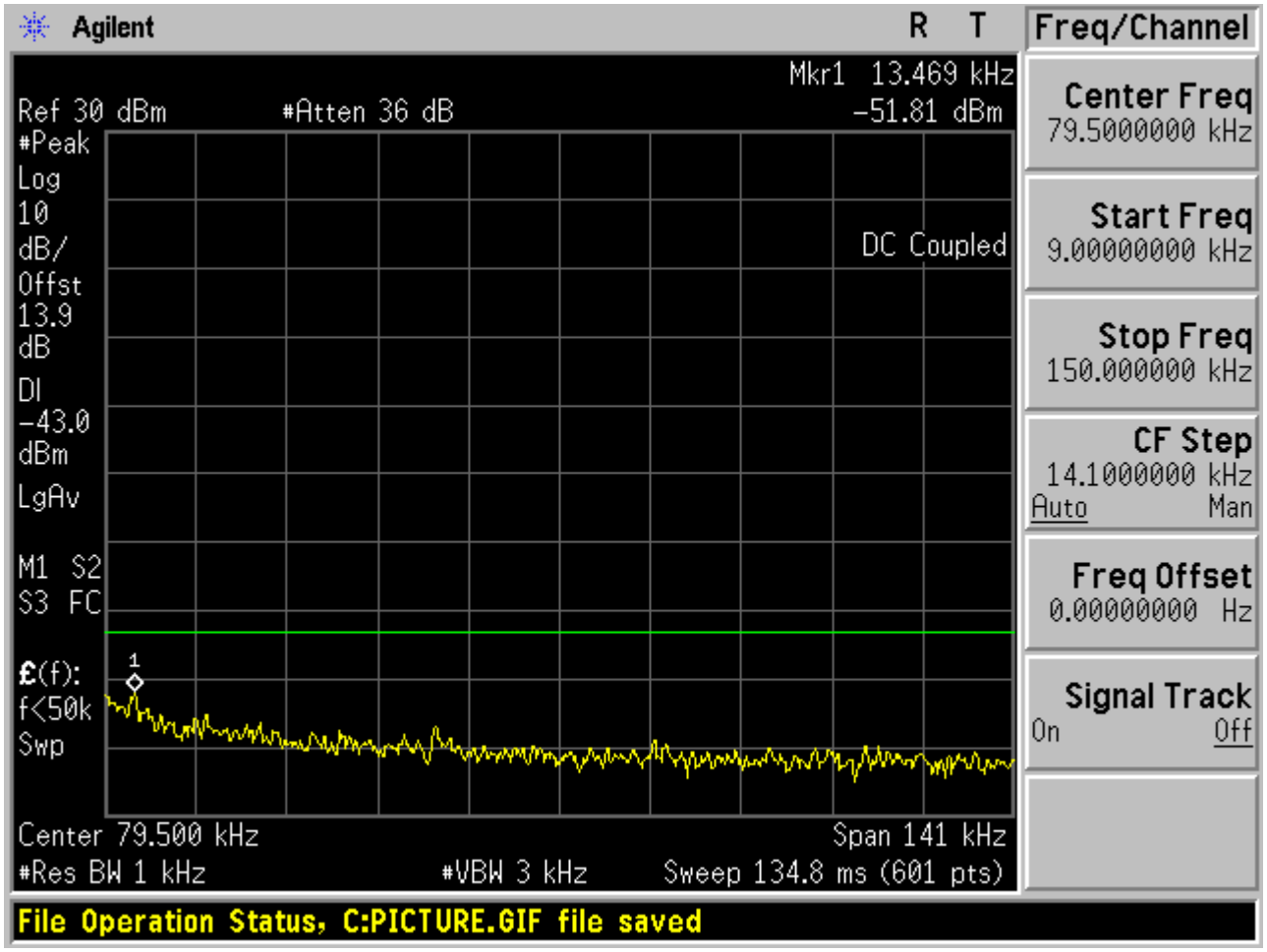


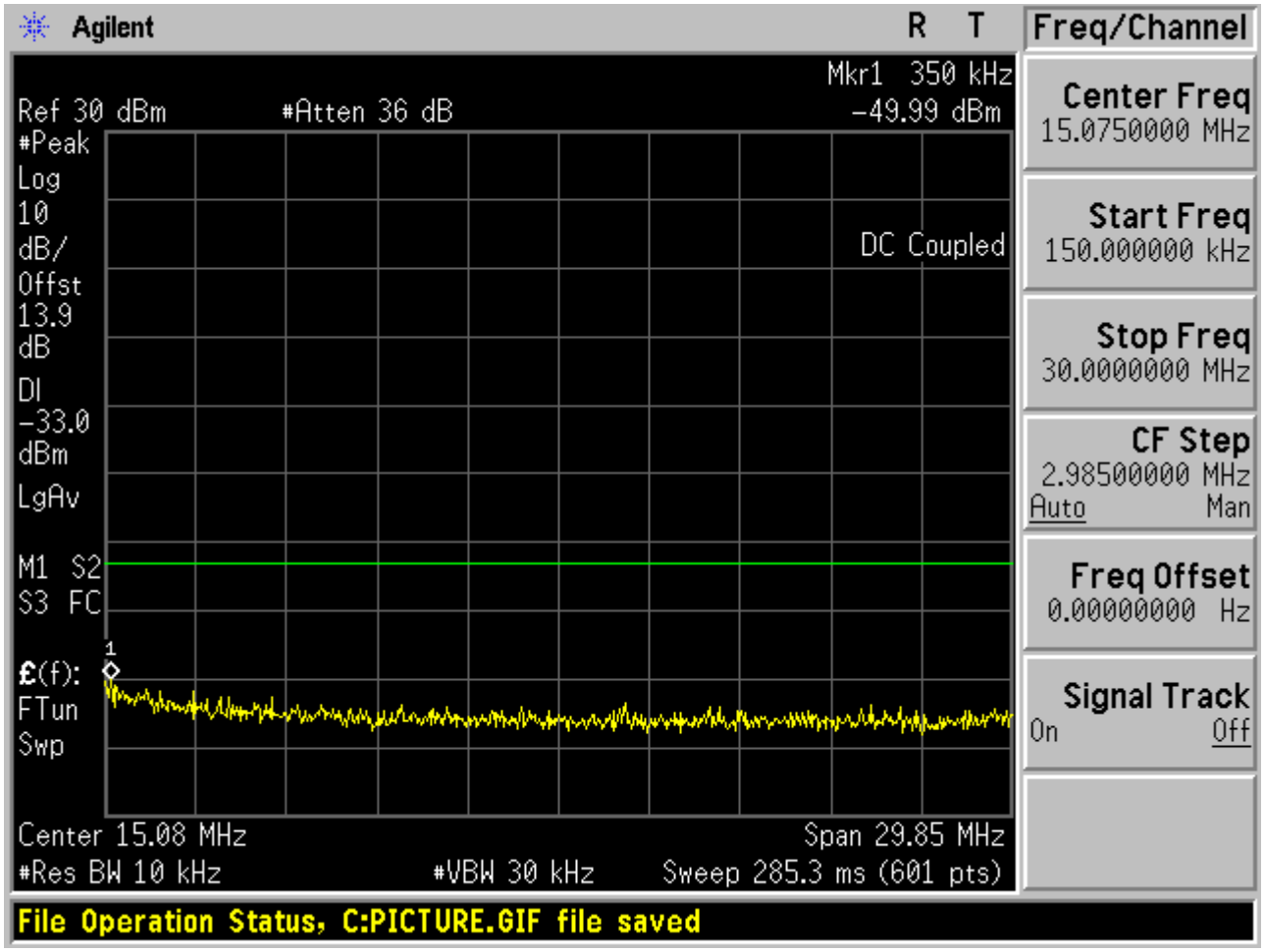

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.97 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

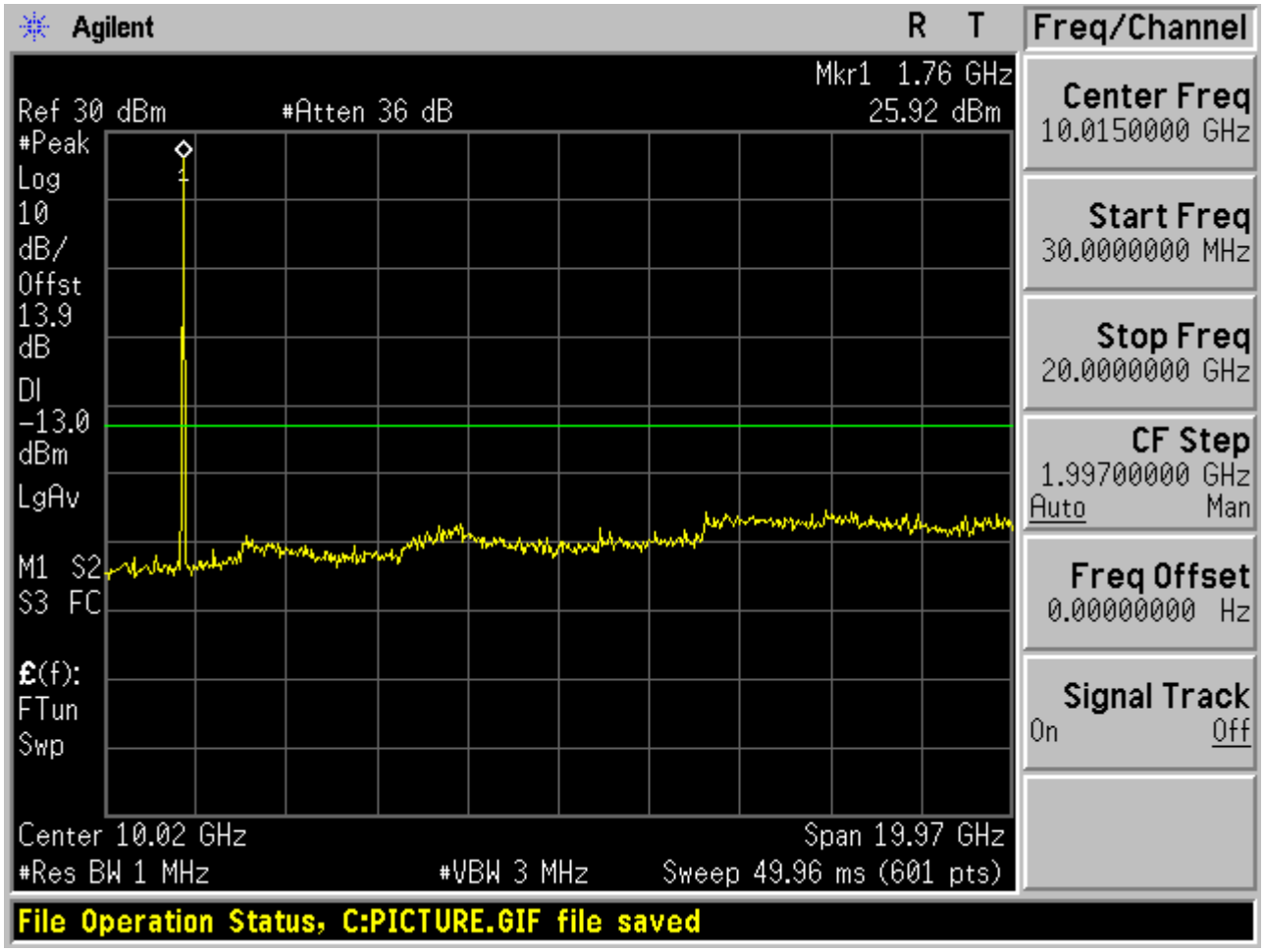

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.49 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.2.1.3 Channel = H

1.2.1.3.1 16QAM /1RBs /RB #0



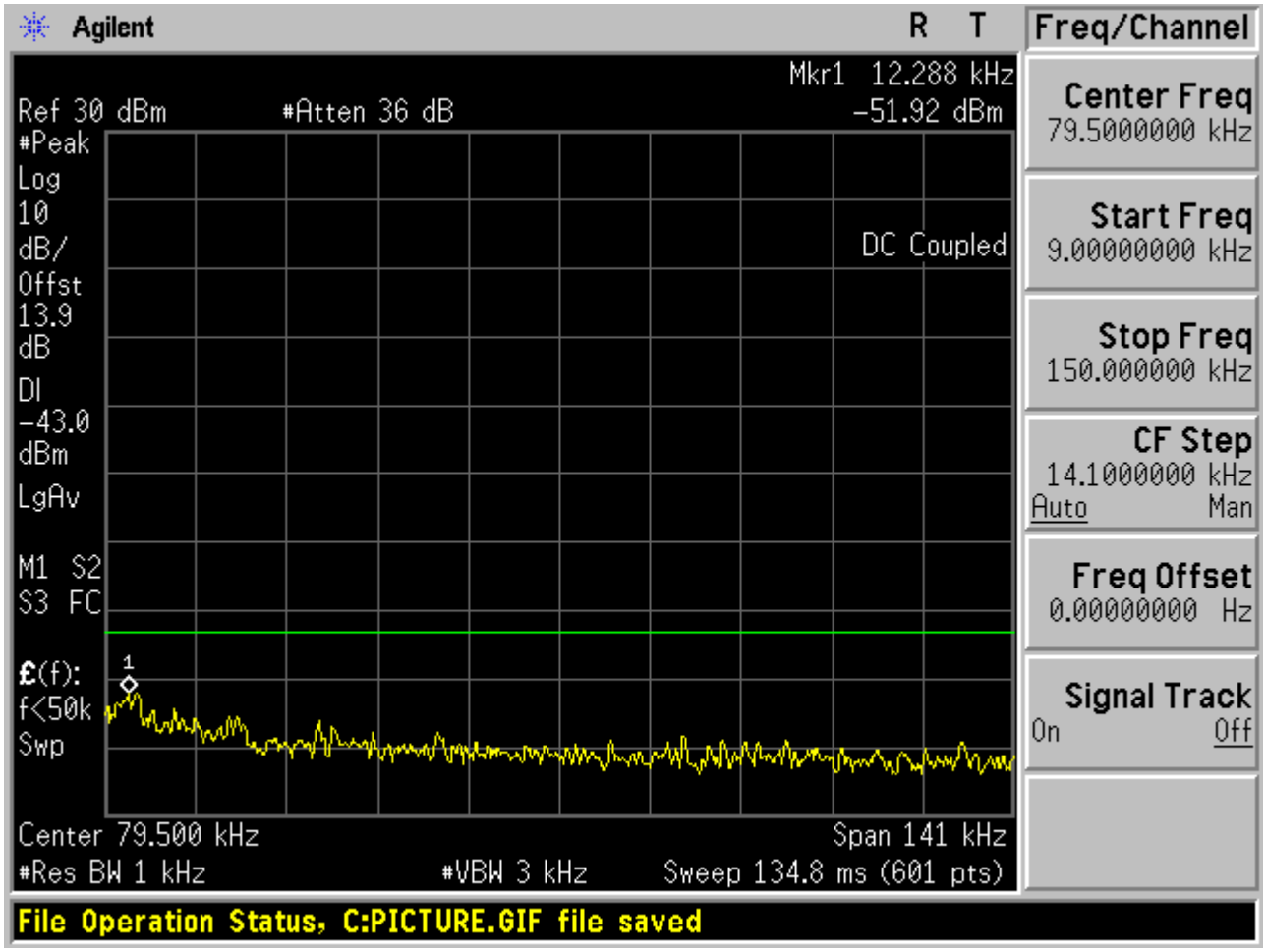

Agilent
R T
Freq/Channel
Mkr1 350 kHz
Ref 30 dBm
#Atten 36 dB
-49.99 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

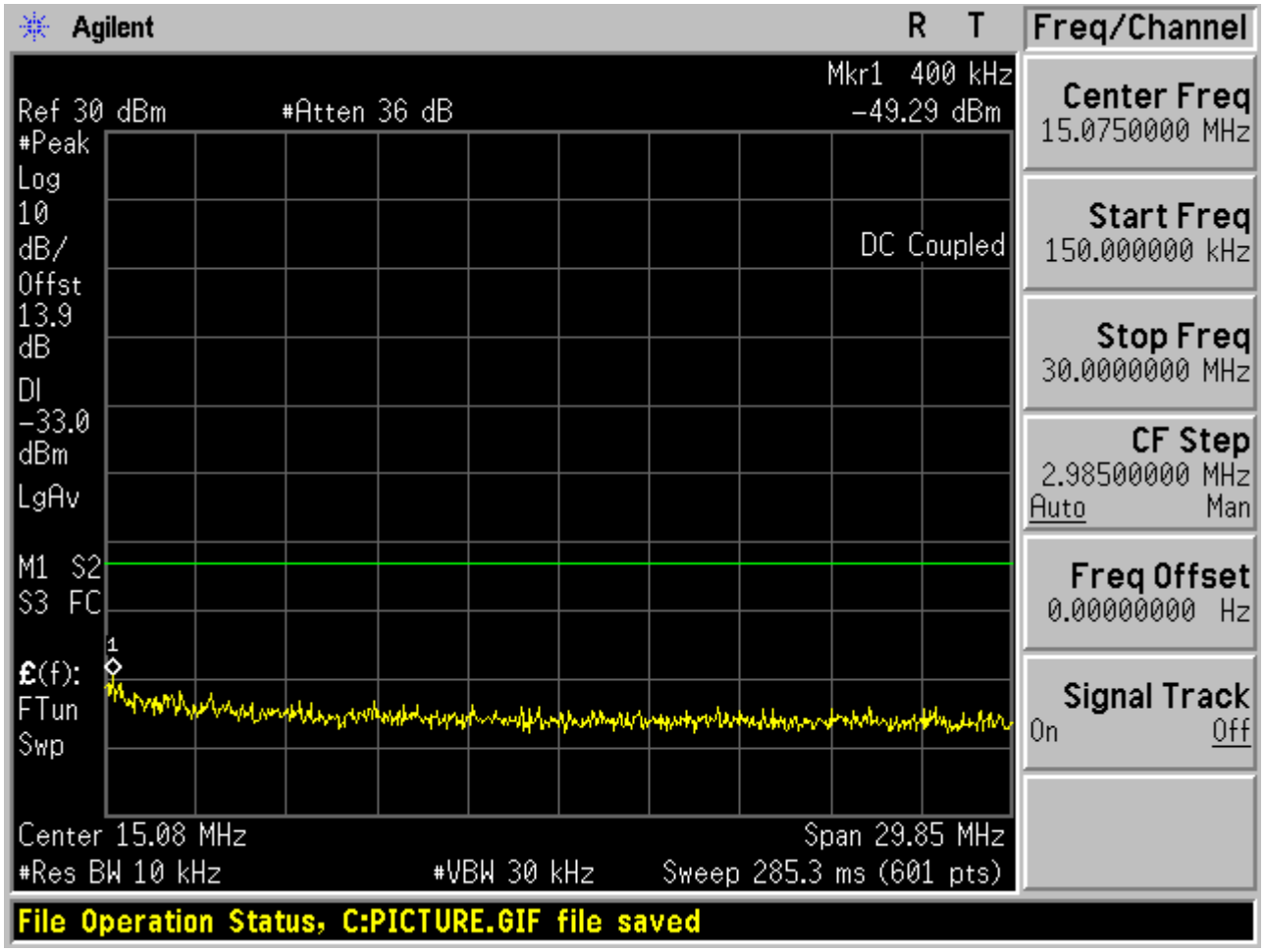

Agilent
R T
Freq/Channel
Mkr1 1.76 GHz
25.92 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

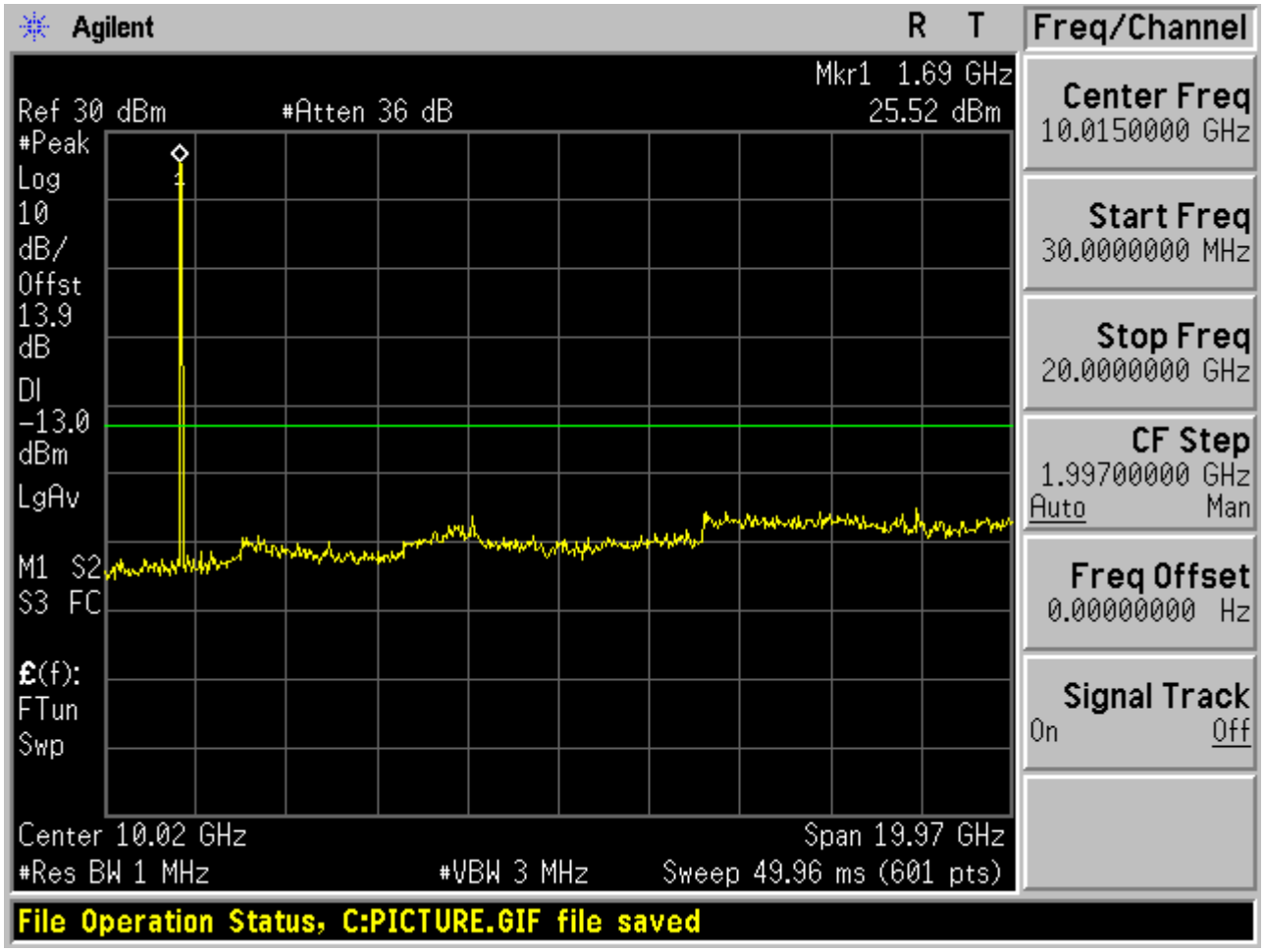
1.2.2 Channel Bandwidth = 10 MHz

1.2.2.1 Channel = L

1.2.2.1.1 16QAM /1RBs /RB #0

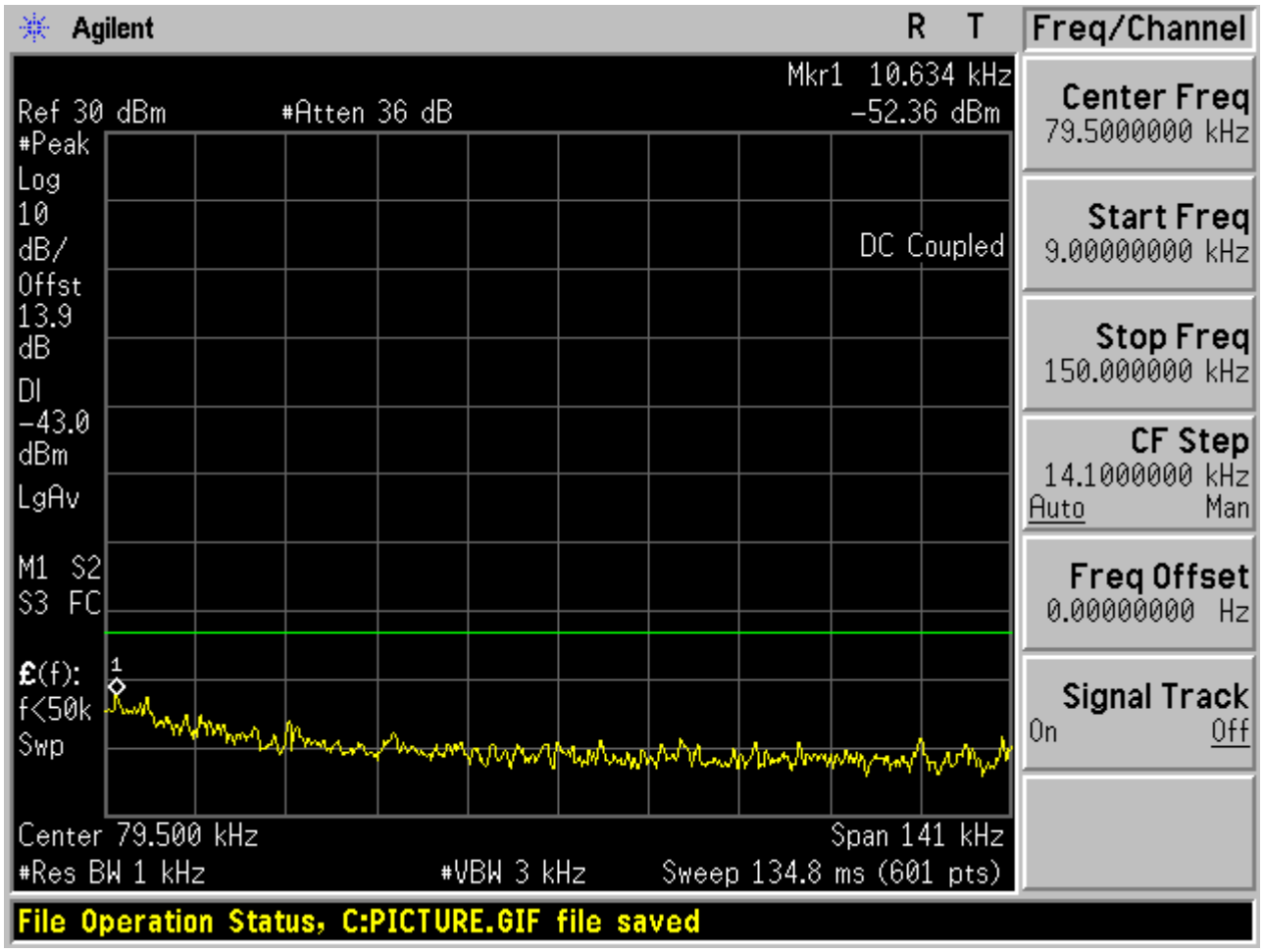


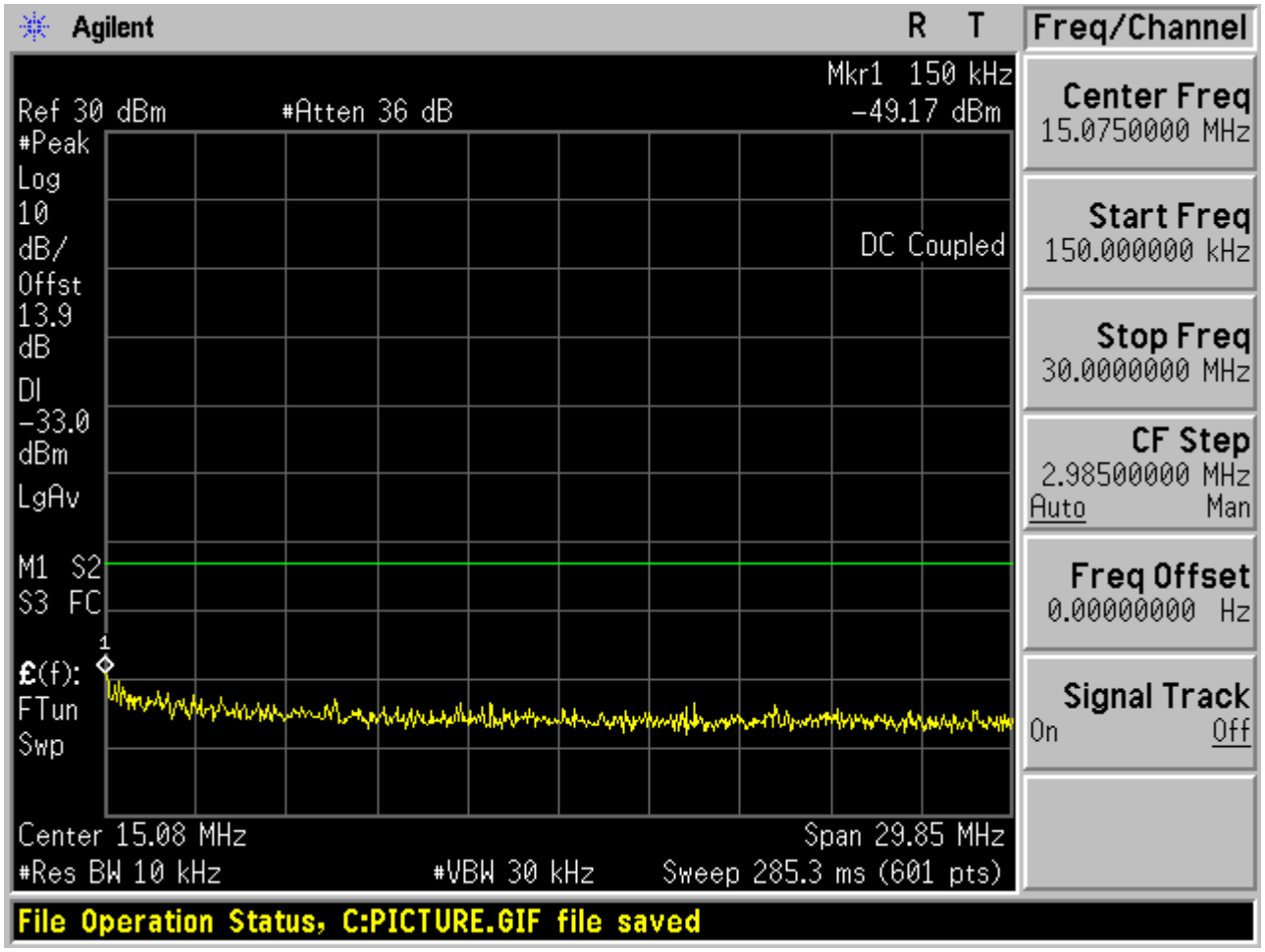

Agilent
R T
Freq/Channel
Mkr1 400 kHz
Ref 30 dBm
#Atten 36 dB
-49.29 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

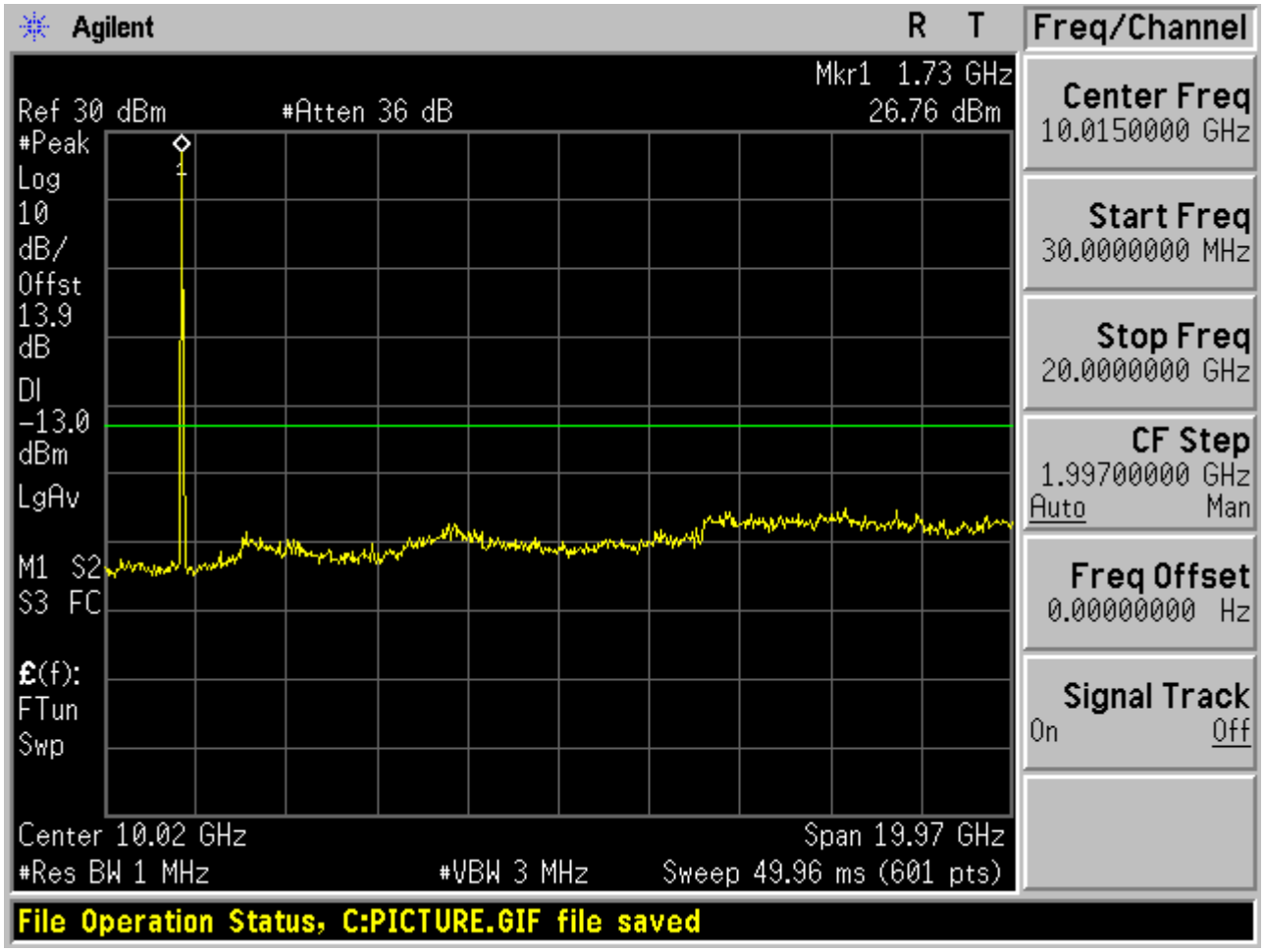

Agilent
R T
Freq/Channel
Mkr1 1.69 GHz
25.52 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

1.2.2.2 Channel = M

1.2.2.2.1 16QAM /1RBs /RB #0

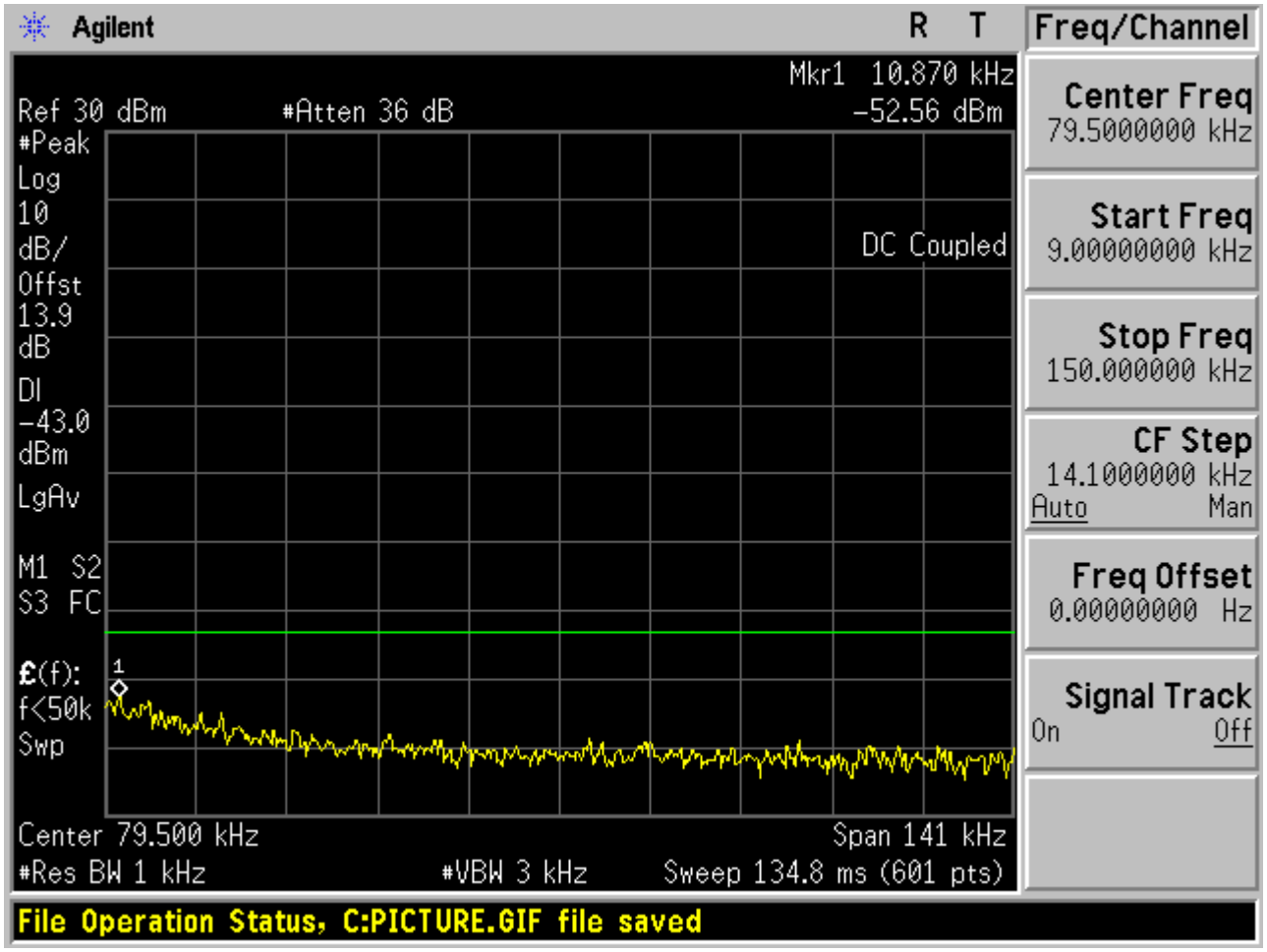


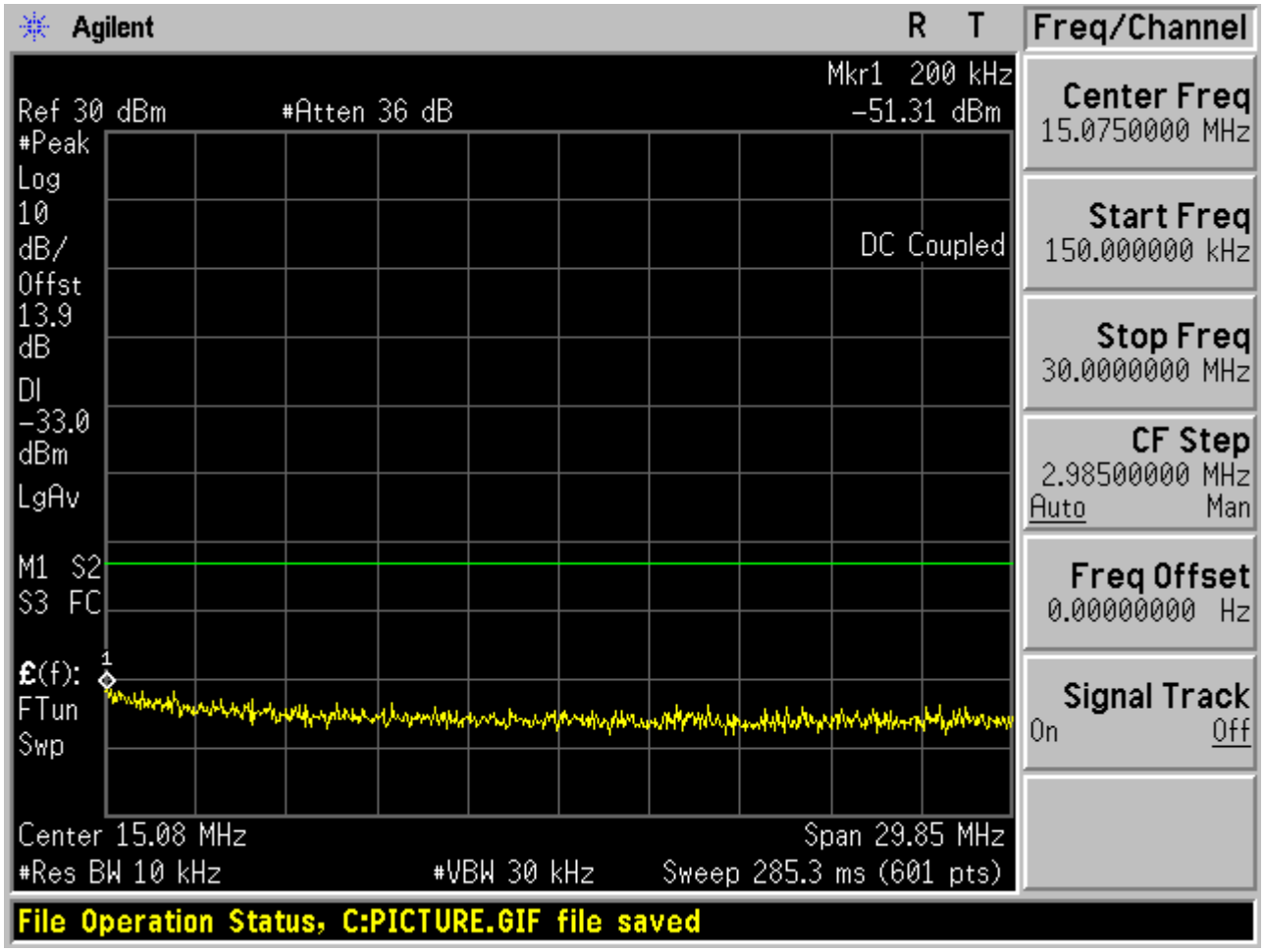

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-49.17 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

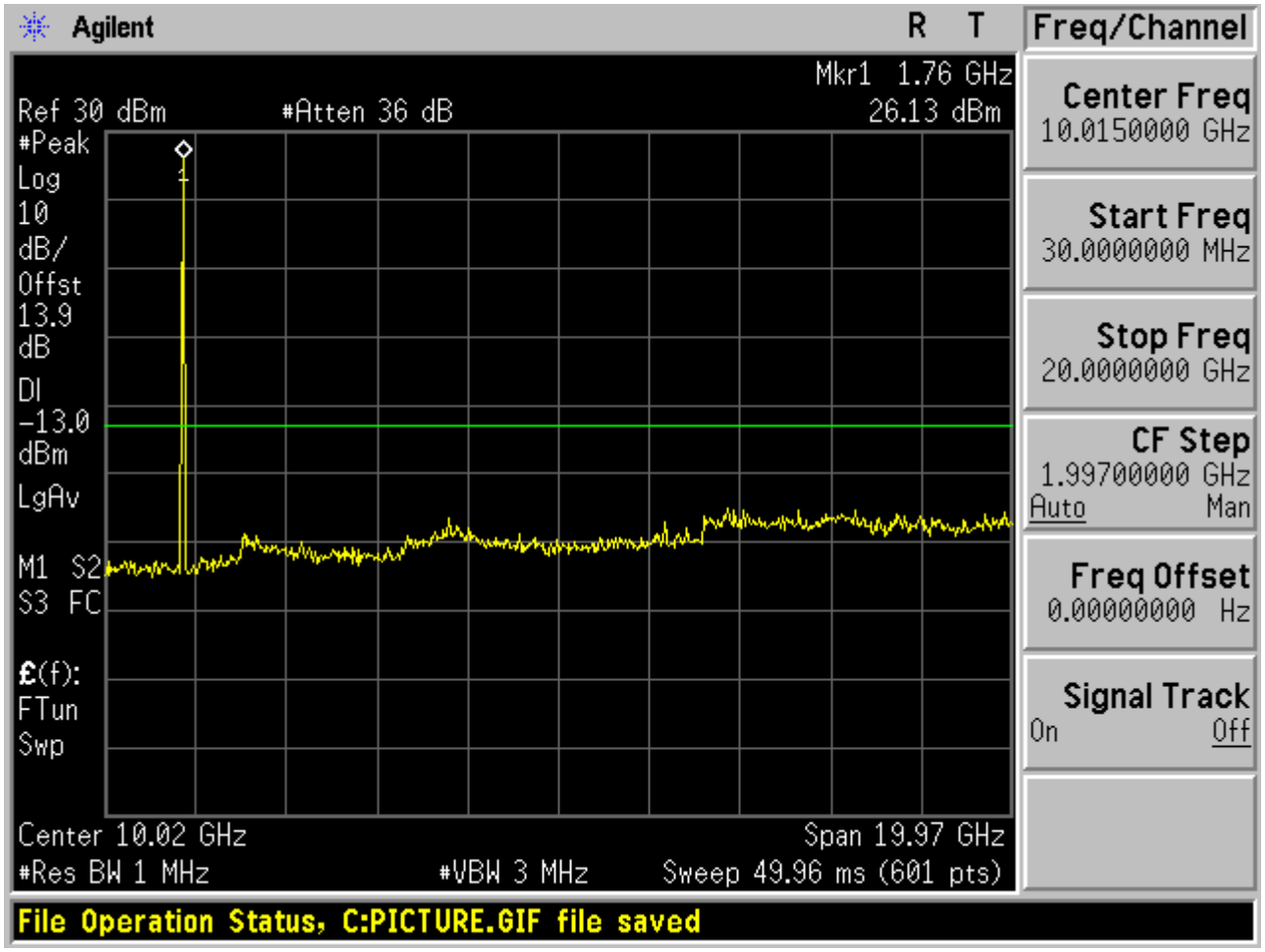

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.76 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

1.2.2.3 Channel = H

1.2.2.3.1 16QAM /1RBs /RB #0



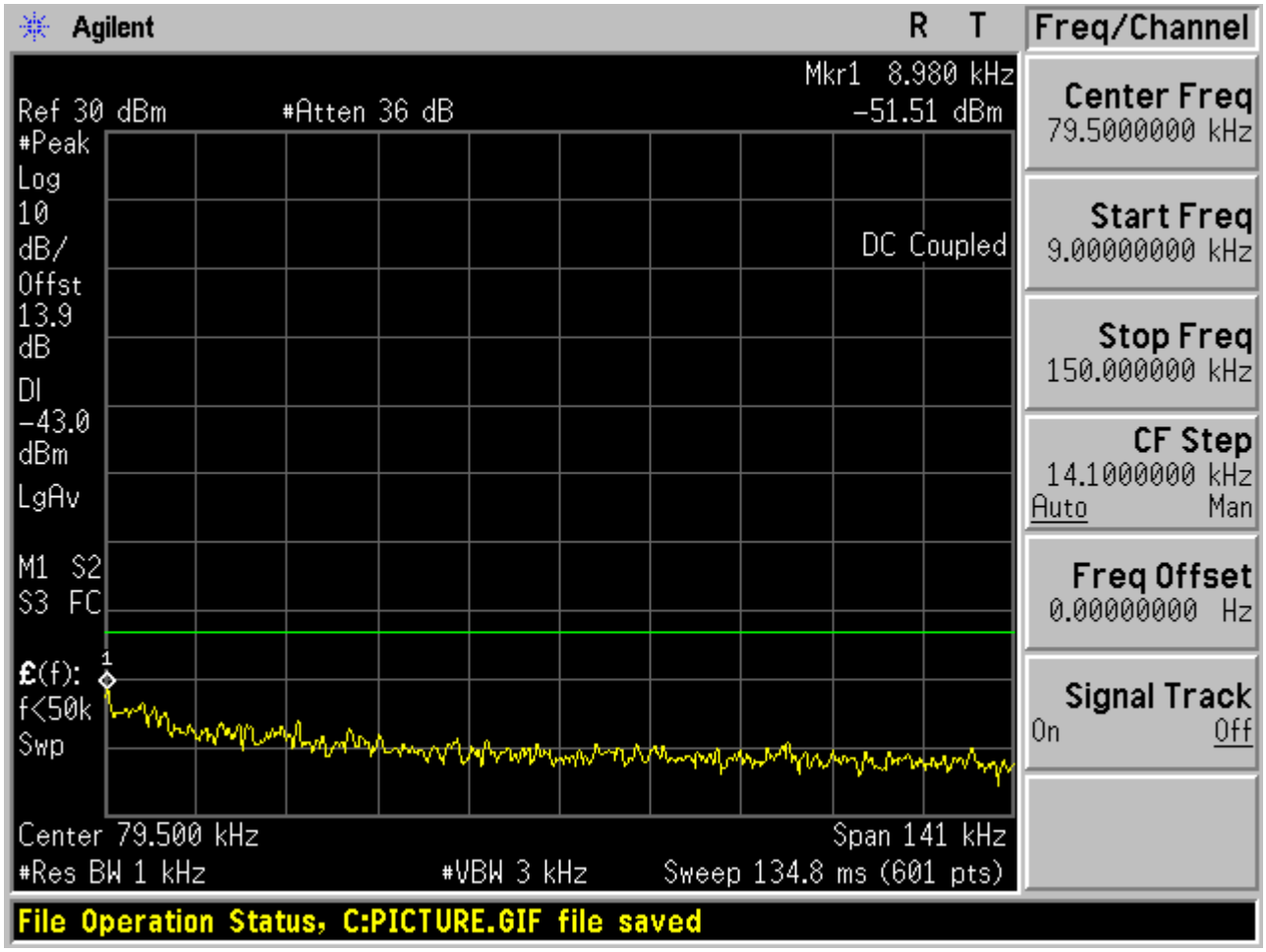

Agilent
R T
Freq/Channel
Mkr1 200 kHz
Ref 30 dBm
#Atten 36 dB
-51.31 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

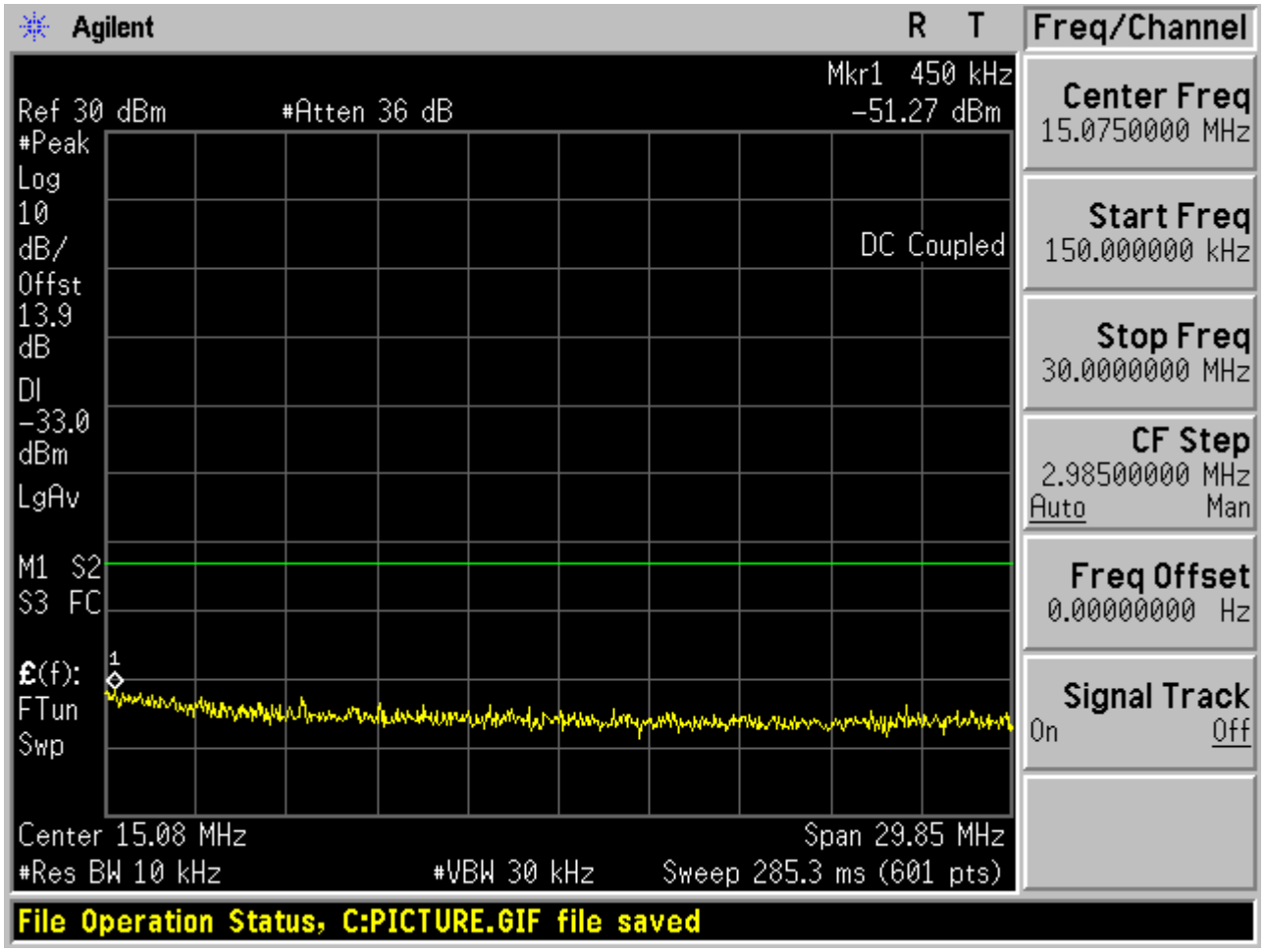

Agilent
R T
Freq/Channel
Mkr1 1.76 GHz
Ref 30 dBm
#Atten 36 dB
26.13 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

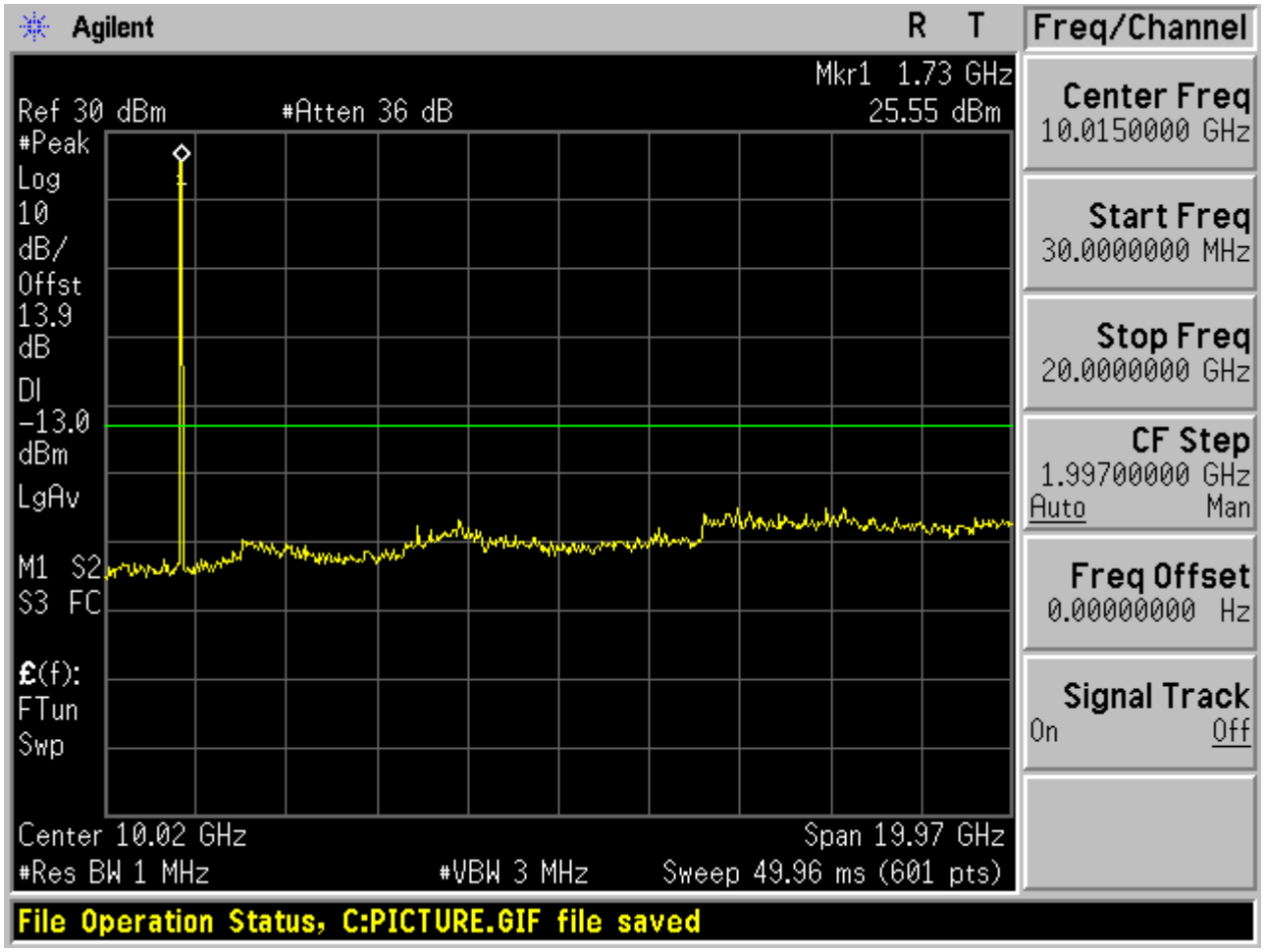
1.2.3 Channel Bandwidth = 15 MHz

1.2.3.1 Channel = L

1.2.3.1.1 16QAM /1RBs /RB #0

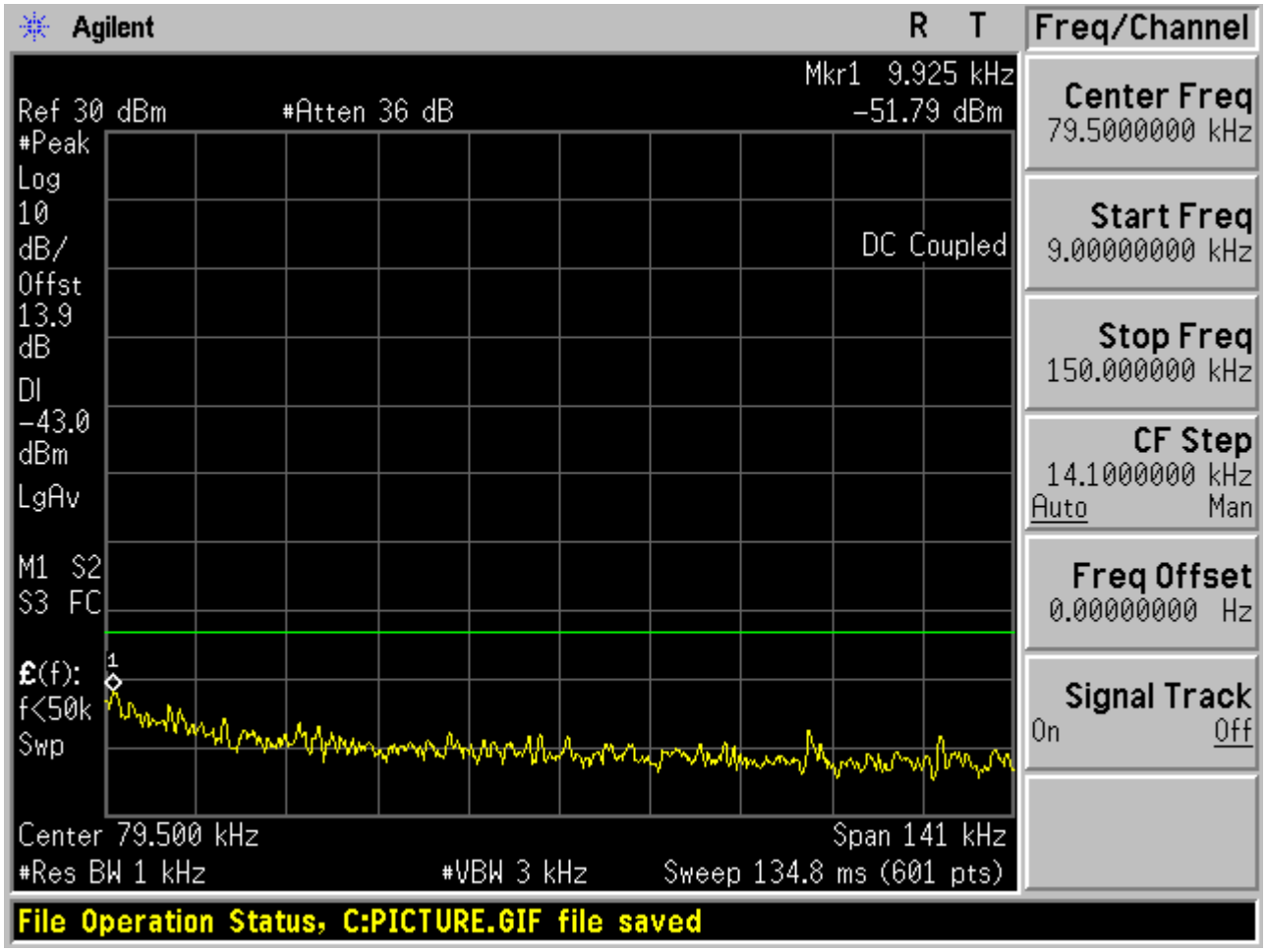


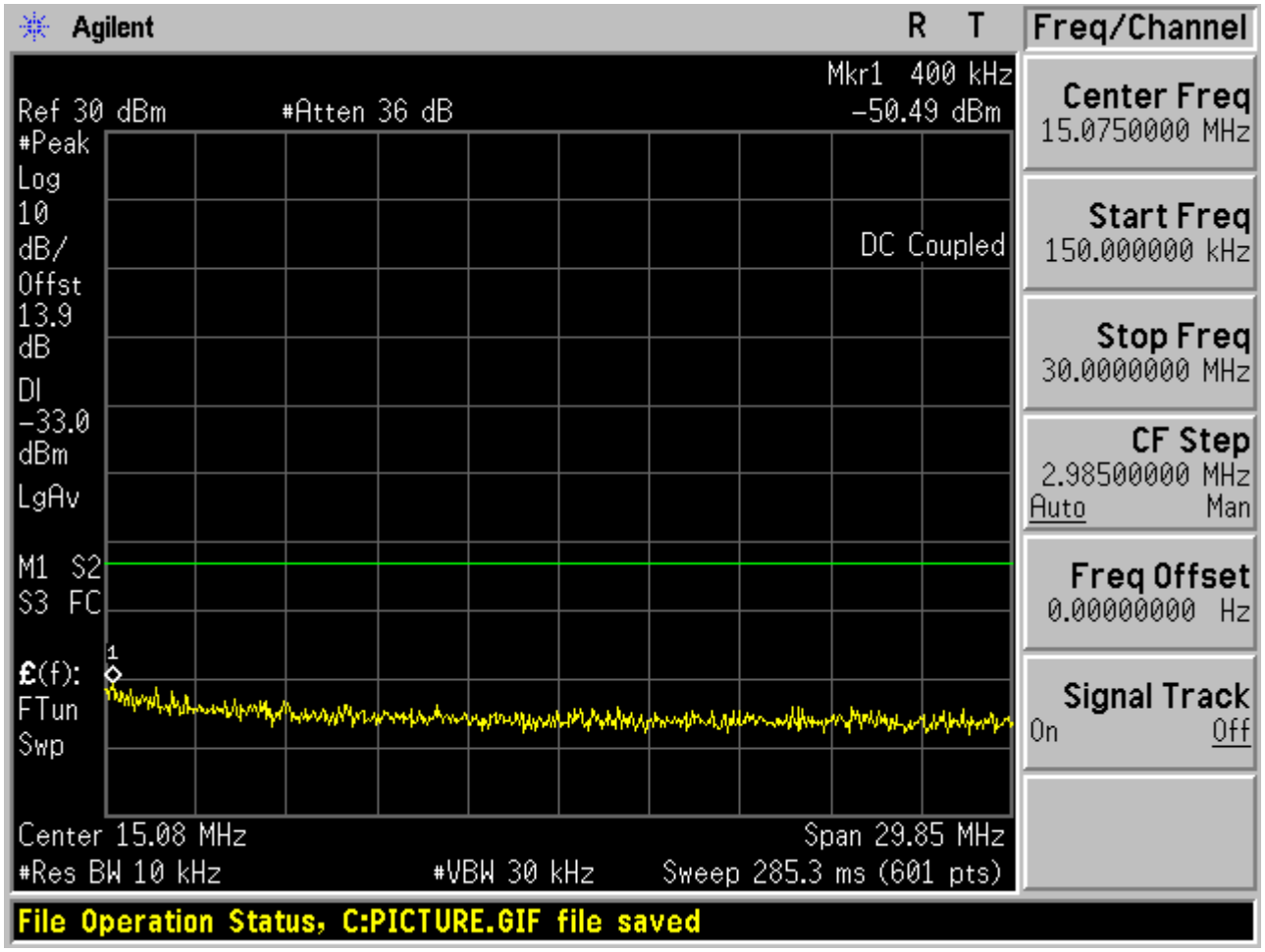

Agilent
R T
Freq/Channel
Mkr1 450 kHz
Ref 30 dBm
#Atten 36 dB
-51.27 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

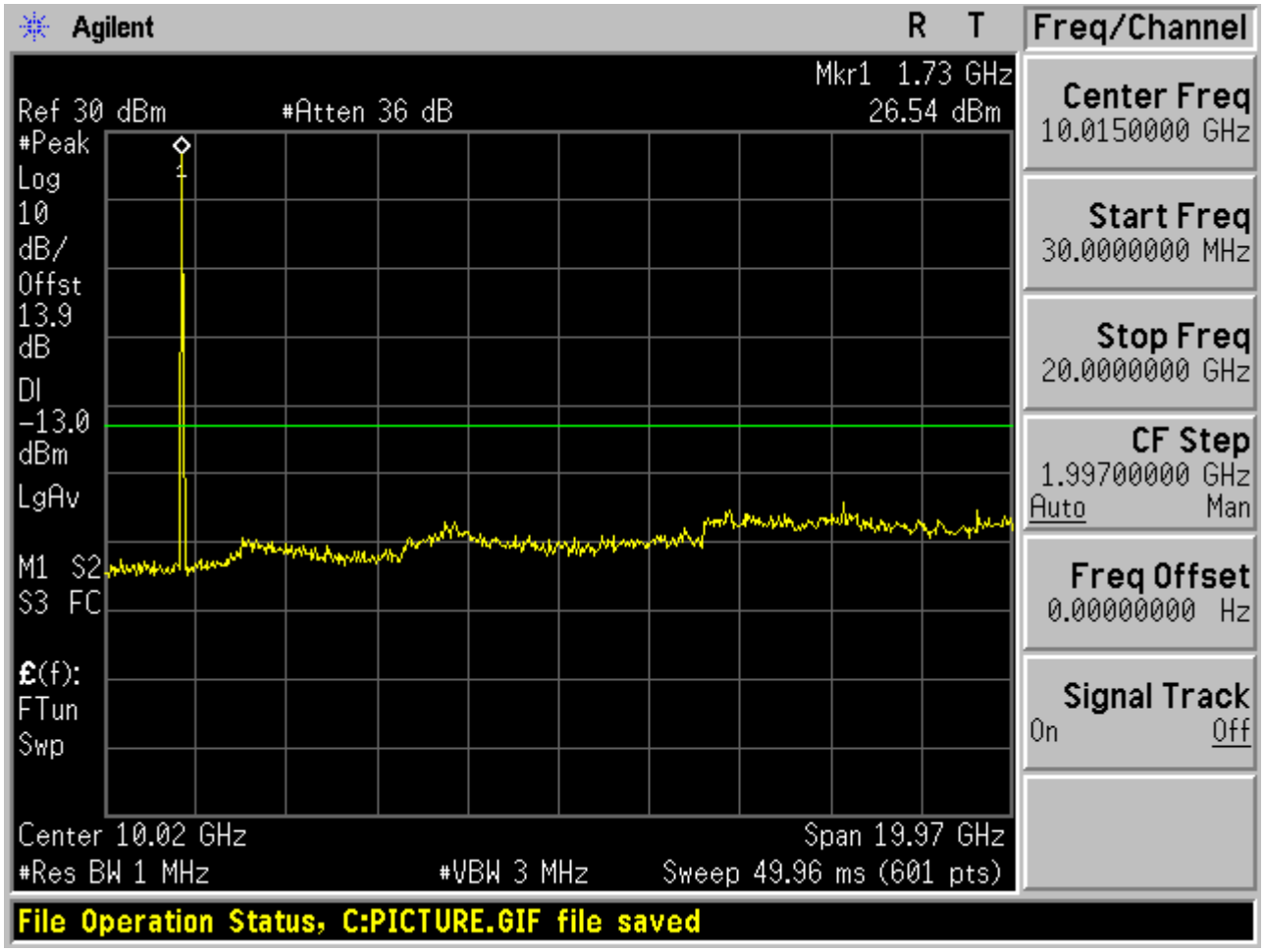

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
25.55 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.2.3.2 Channel = M

1.2.3.2.1 16QAM /1RBs /RB #0

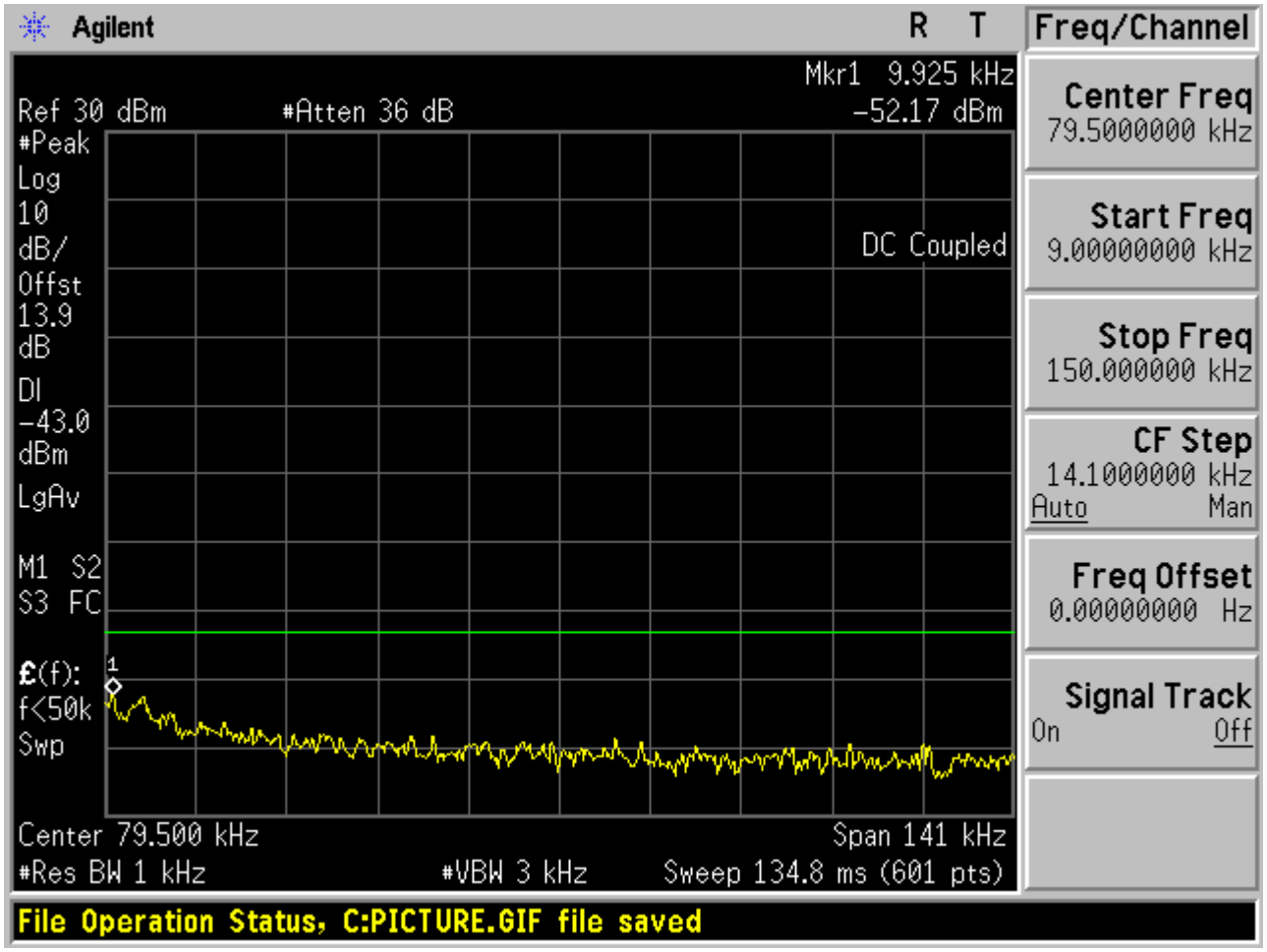


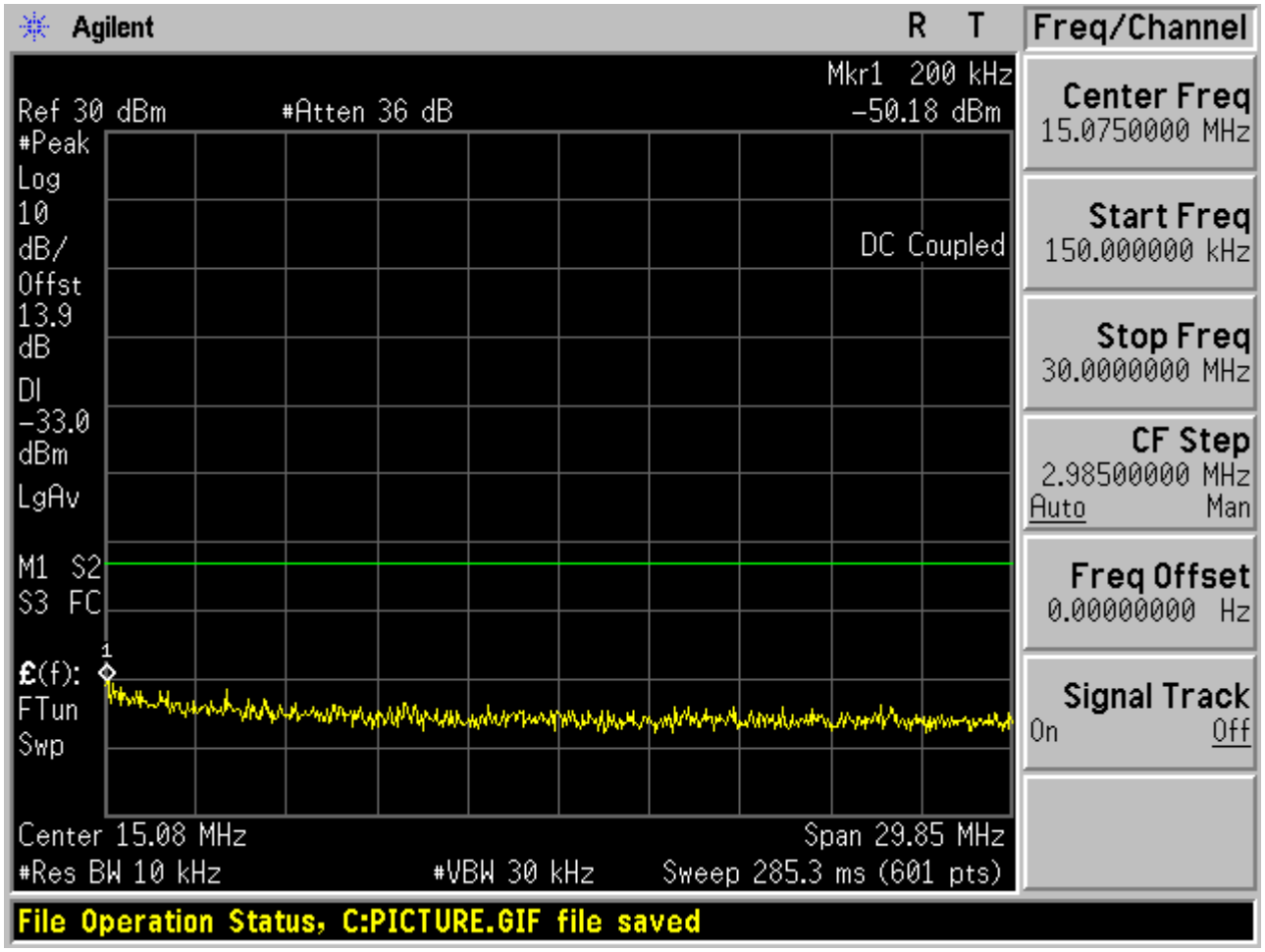

Agilent
R T
Freq/Channel
Mkr1 400 kHz
Ref 30 dBm
#Atten 36 dB
-50.49 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

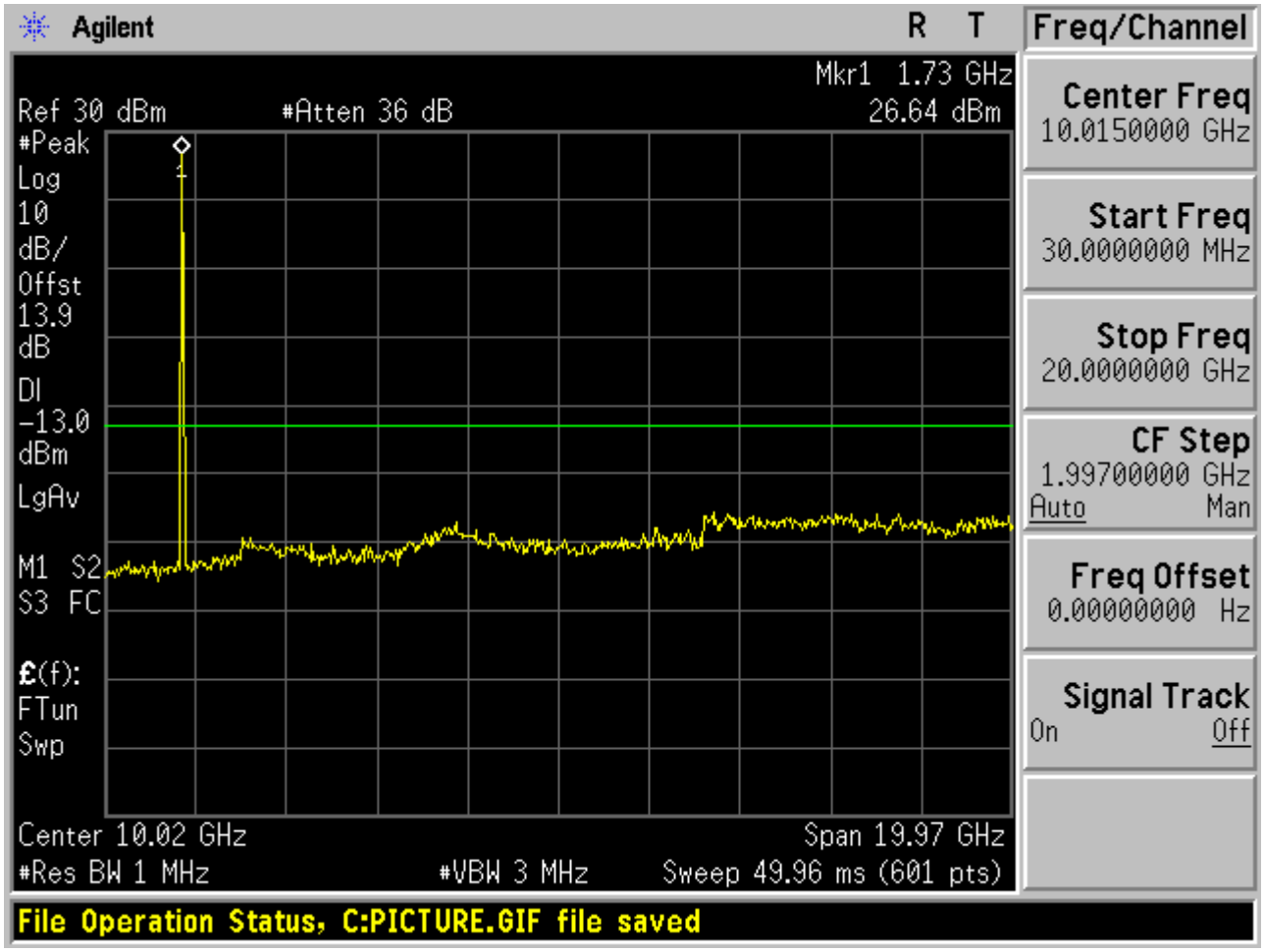

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
26.54 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

1.2.3.3 Channel = H

1.2.3.3.1 16QAM /1RBs /RB #0



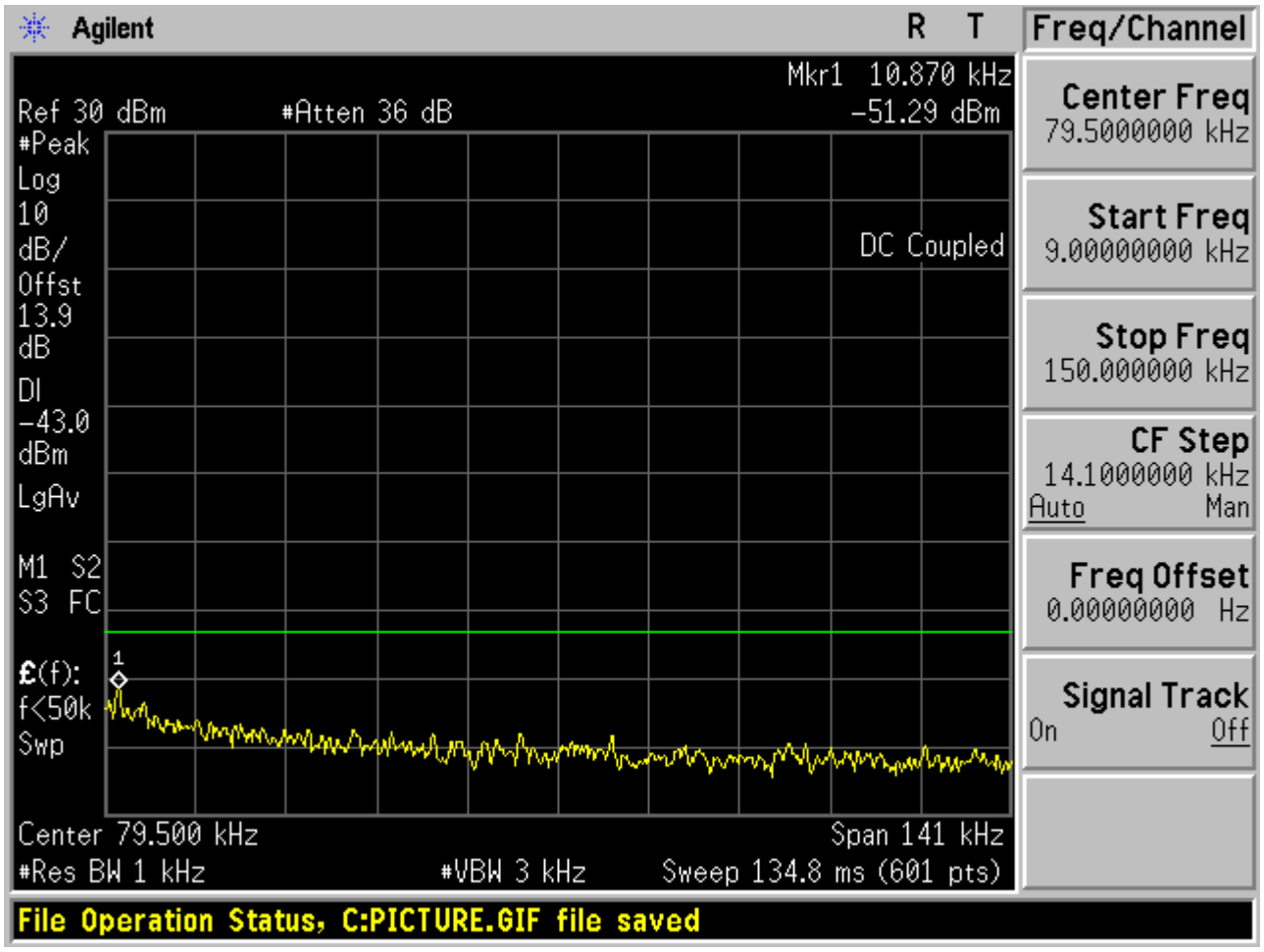

Agilent
R T
Freq/Channel
Mkr1 200 kHz
Ref 30 dBm
#Atten 36 dB
-50.18 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

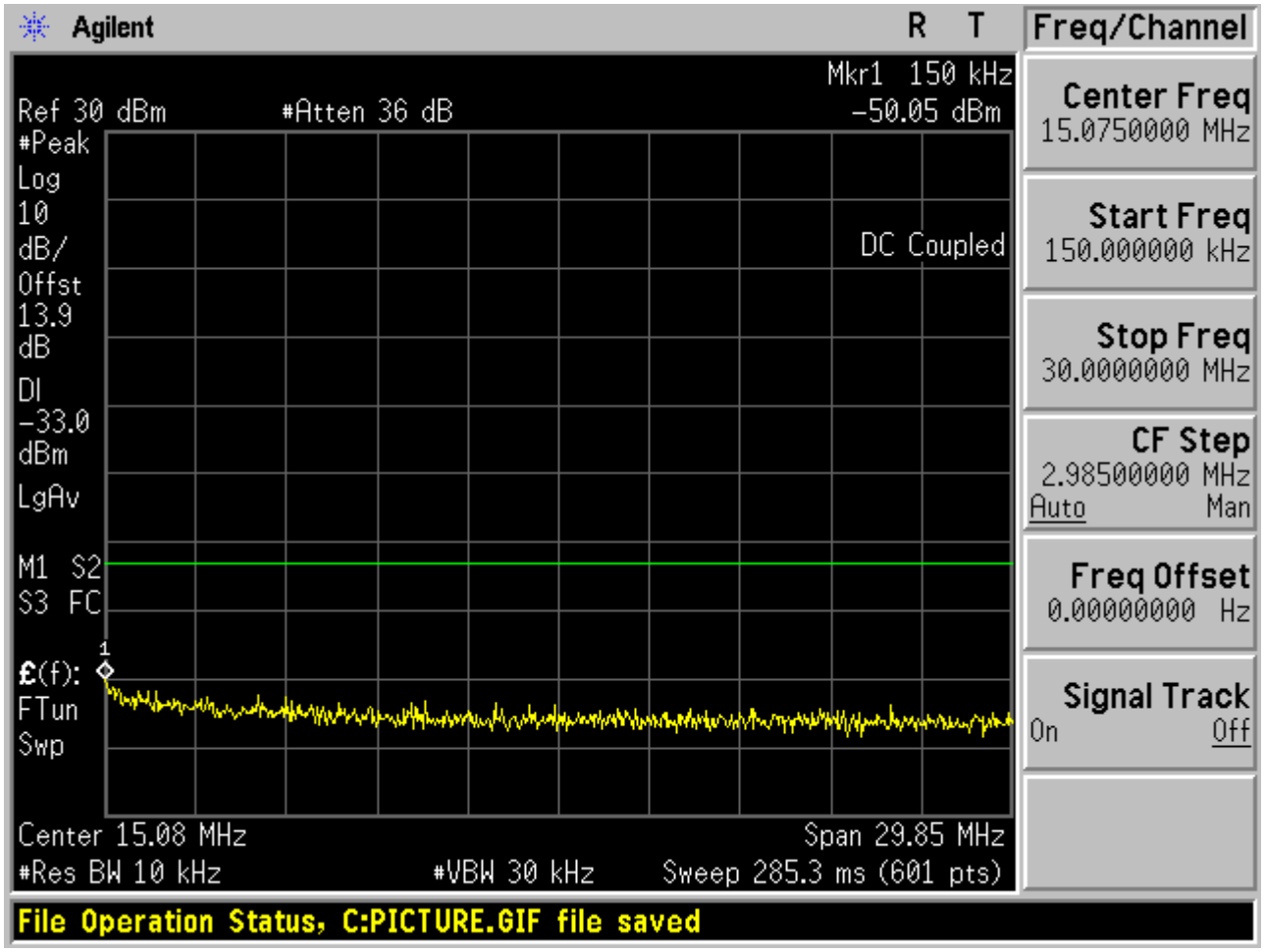

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.64 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

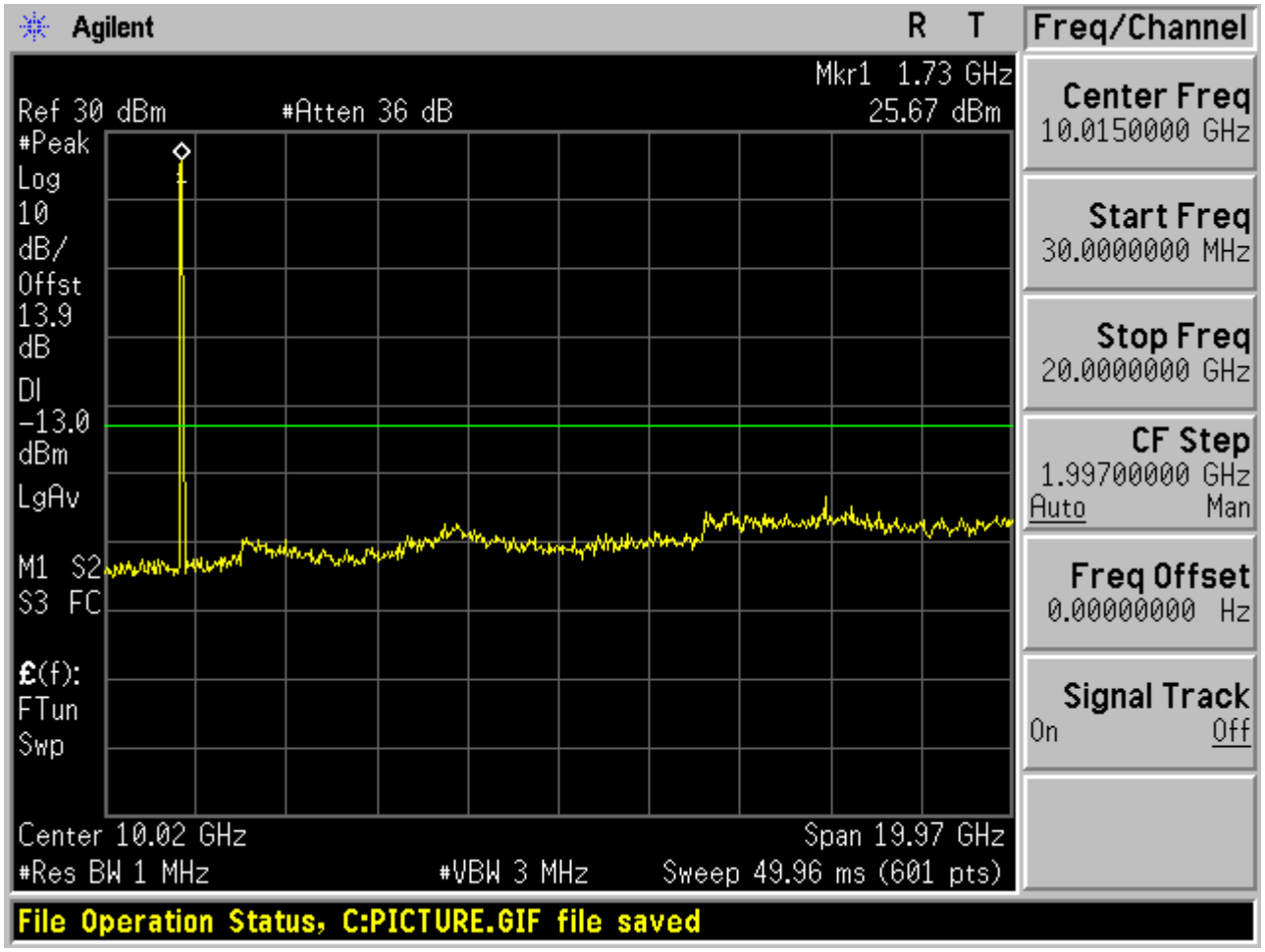
1.2.4 Channel Bandwidth = Highest (20 MHz)

1.2.4.1 Channel = L

1.2.4.1.1 16QAM /1RBs /RB #0

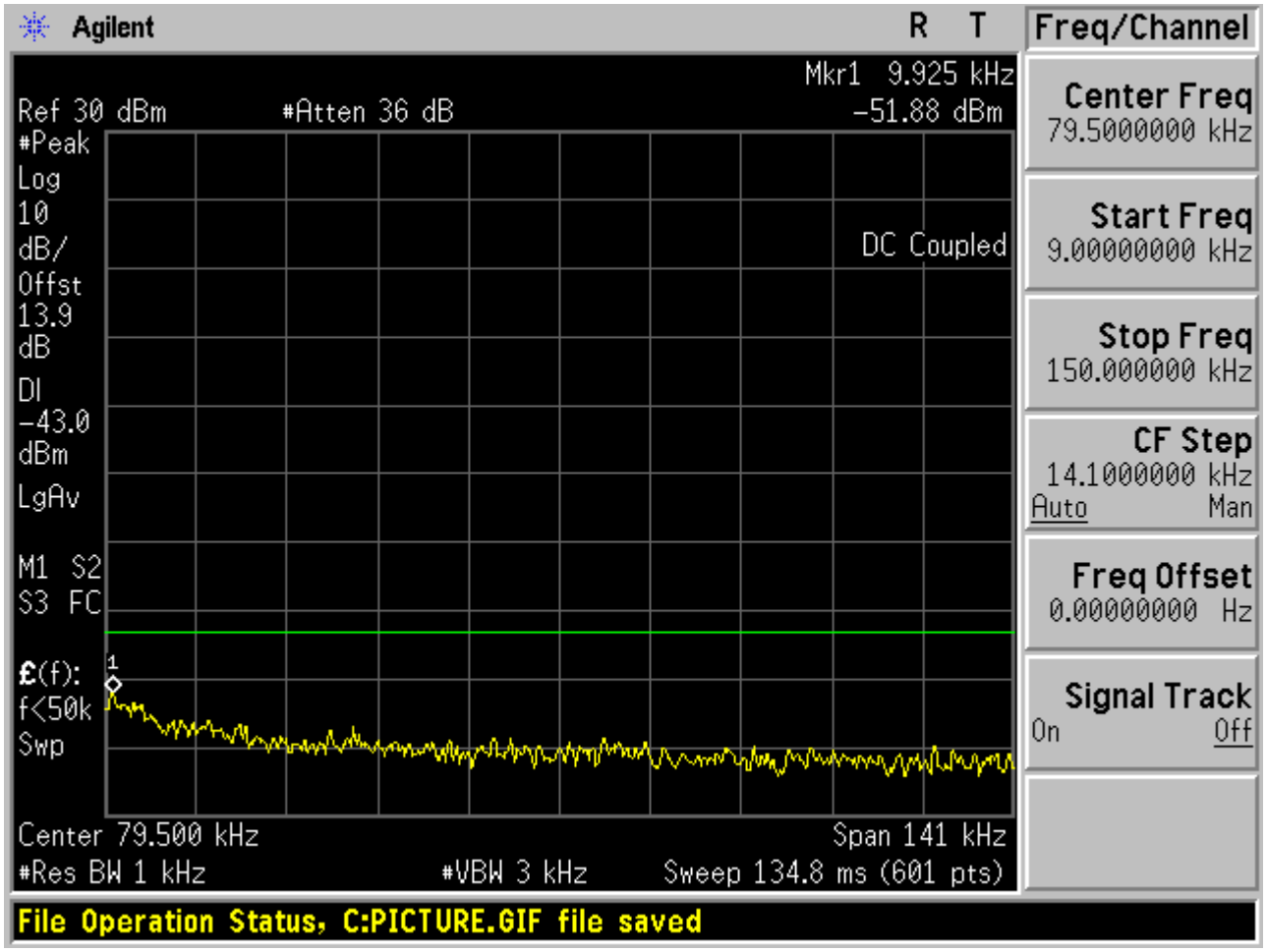


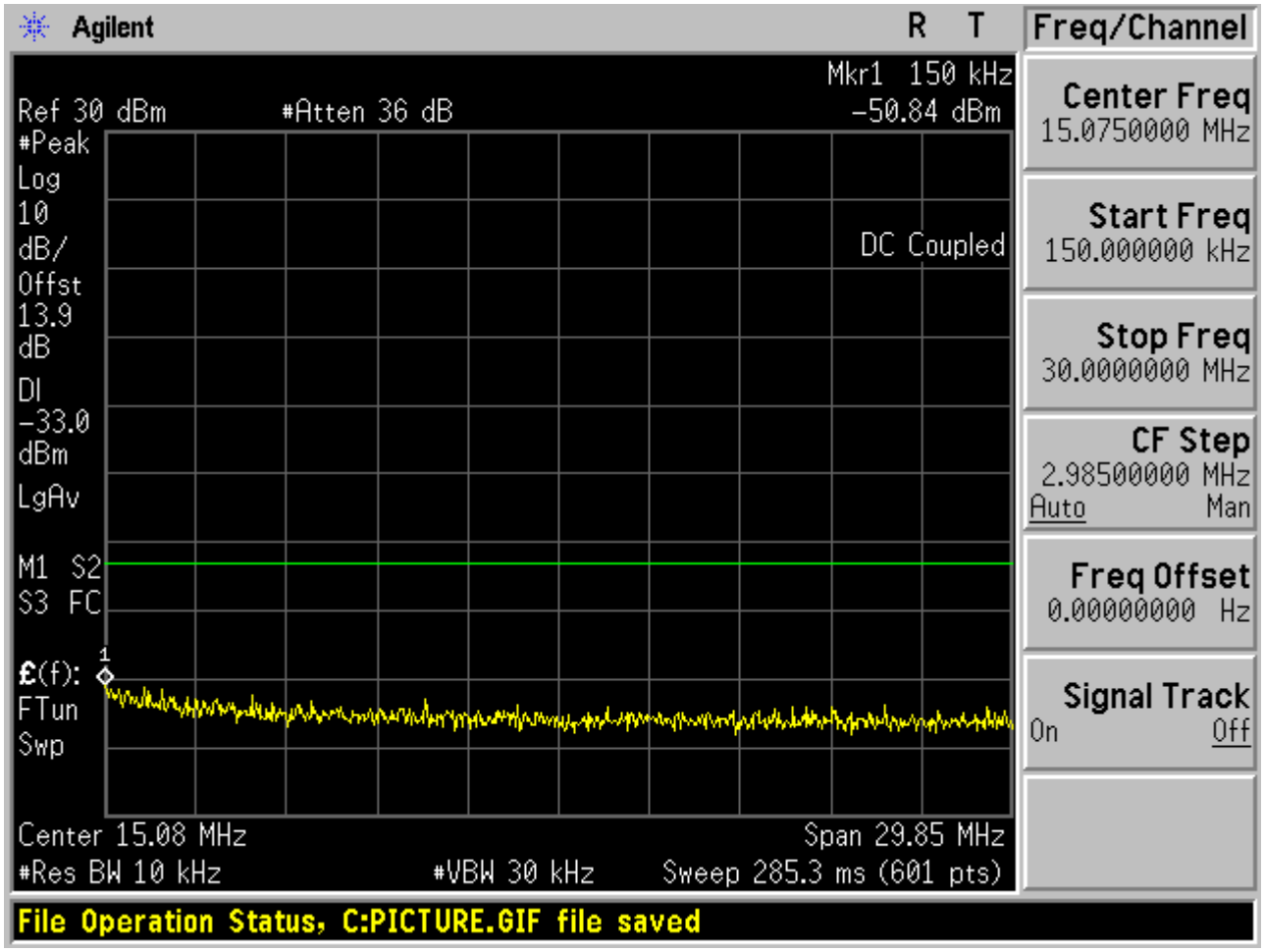

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.05 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

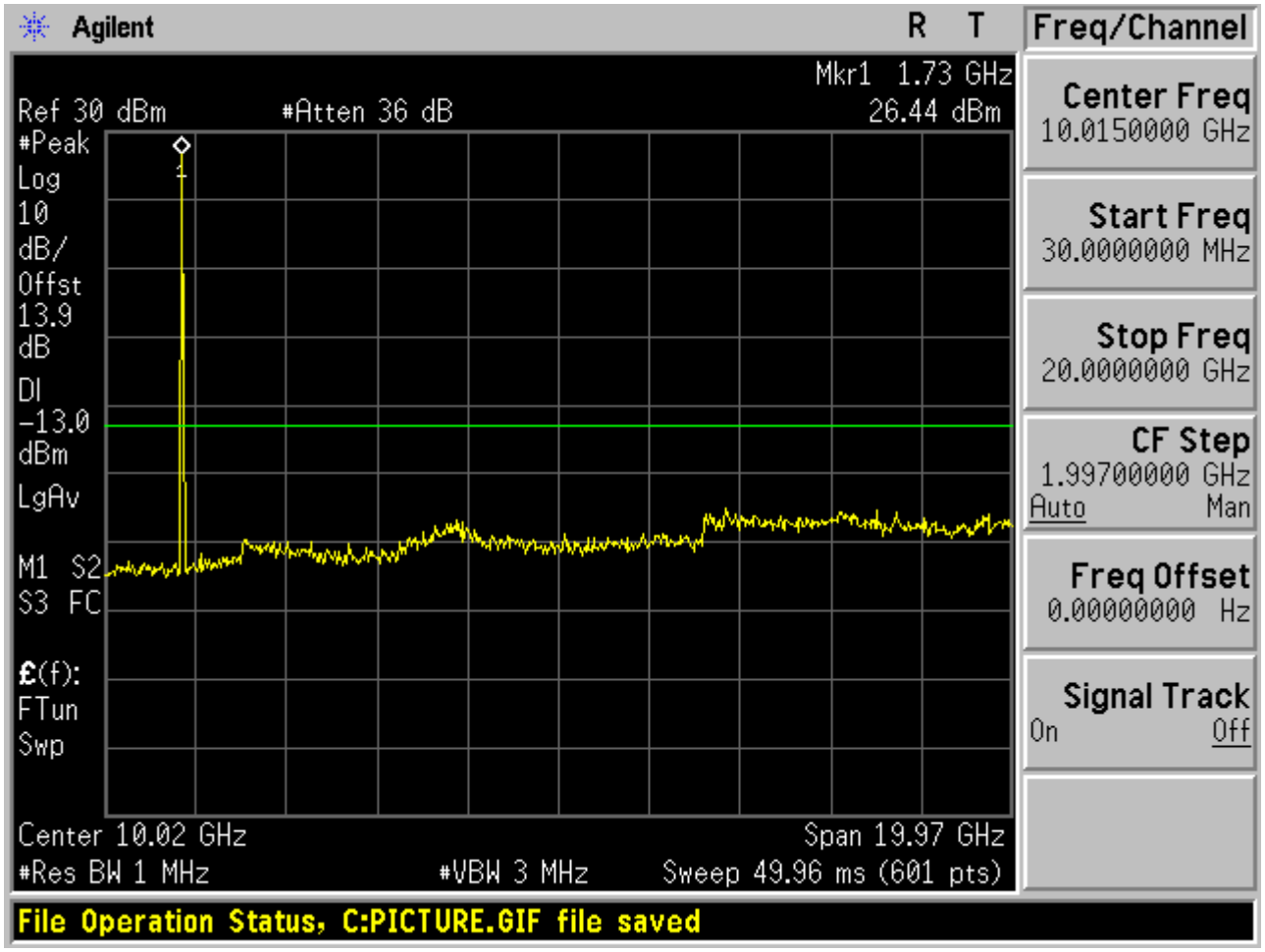

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
25.67 dBm
Ref 30 dBm
#Atten 36 dB
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:PICTURE.GIF file saved

1.2.4.2 Channel = M

1.2.4.2.1 16QAM /1RBs /RB #0

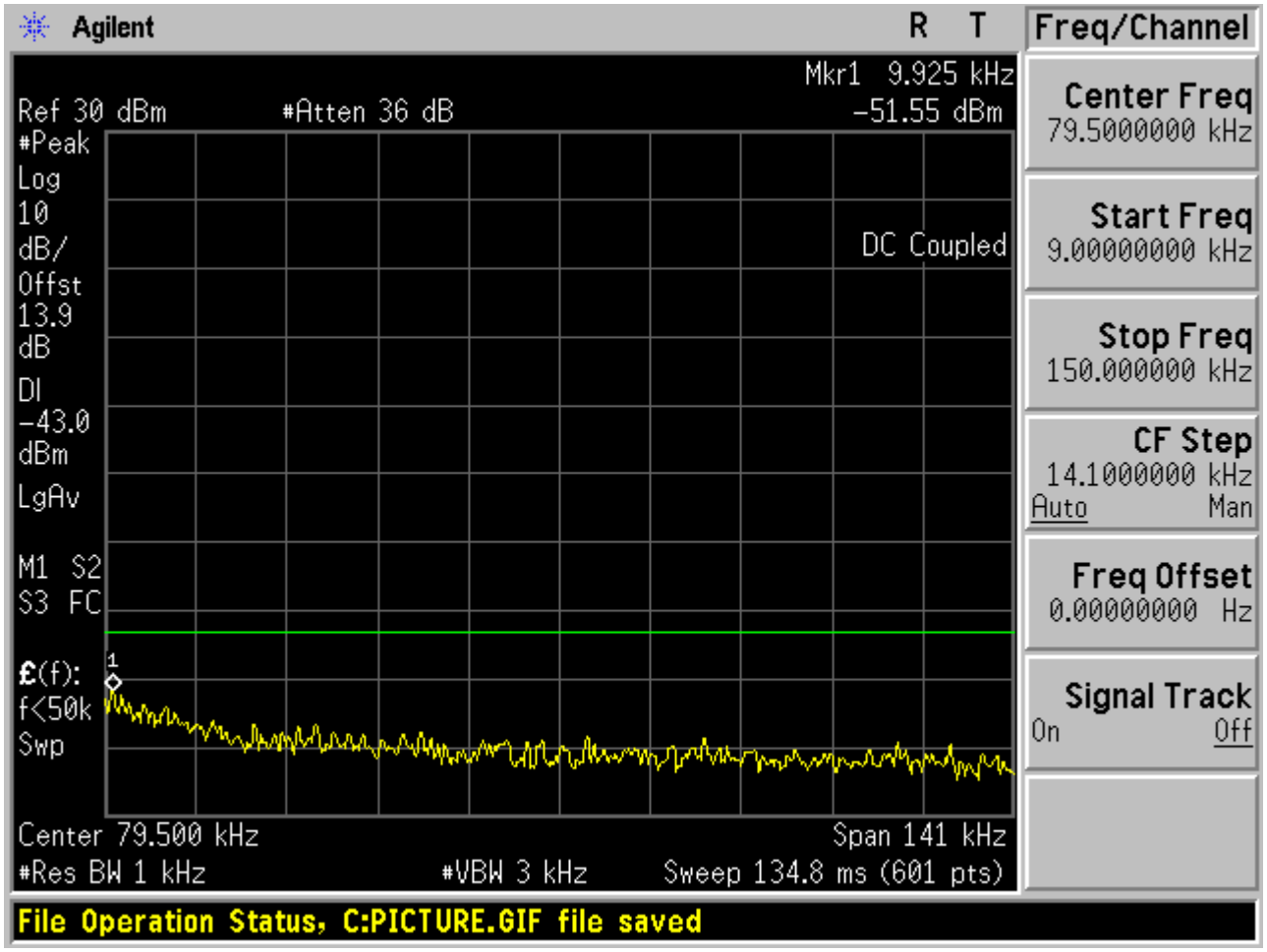


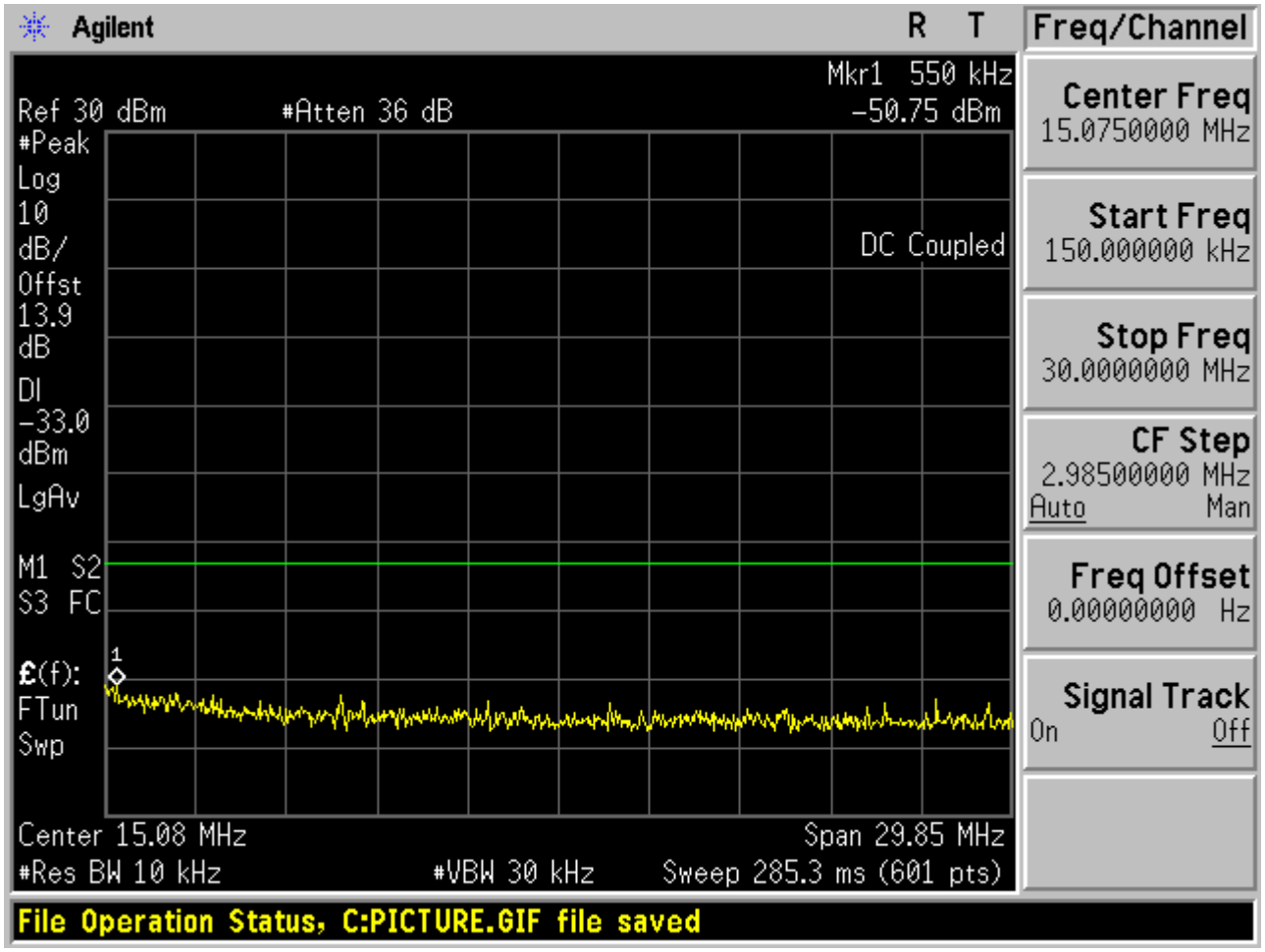

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 30 dBm
#Atten 36 dB
-50.84 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

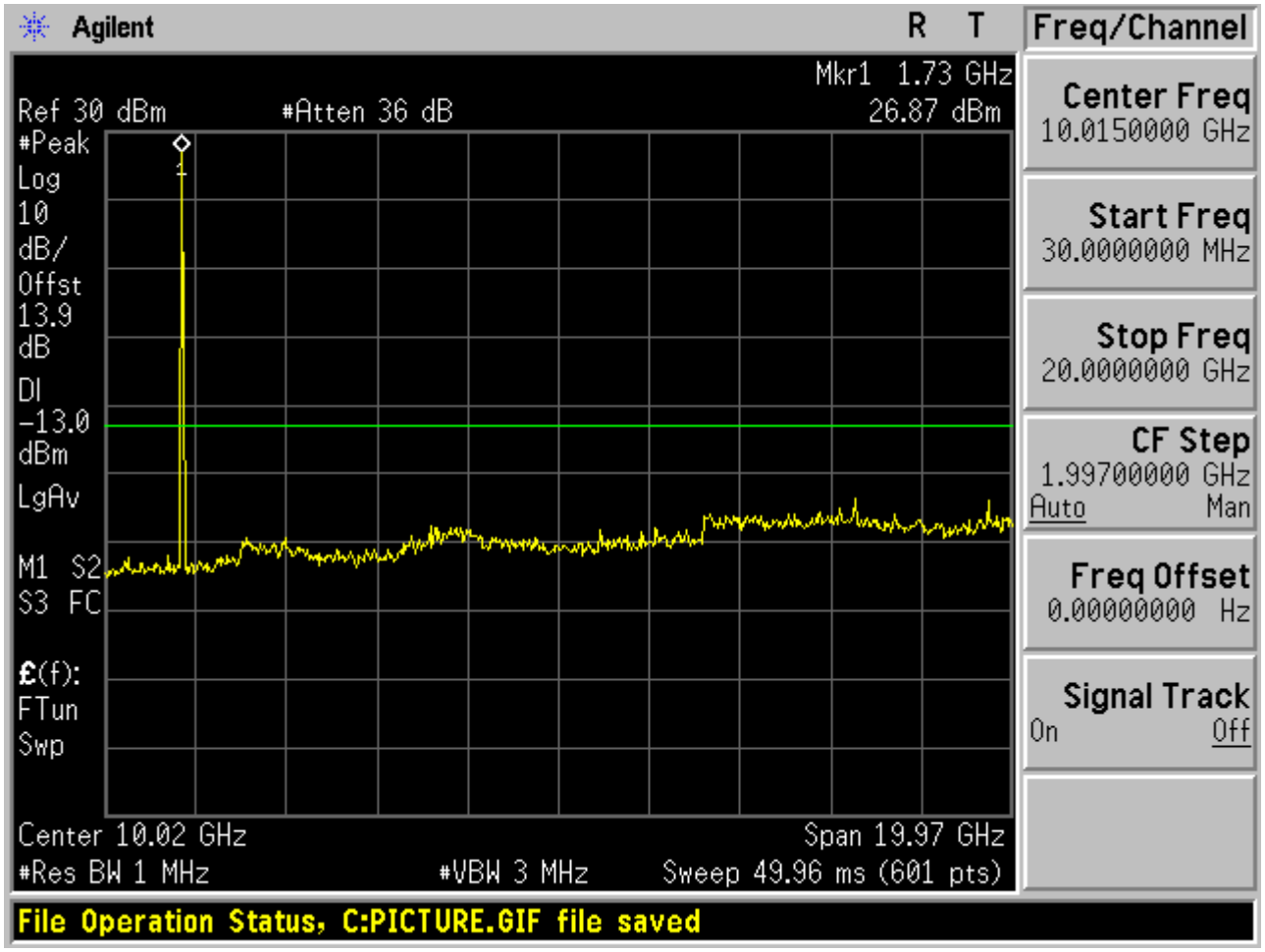

Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.44 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

1.2.4.3 Channel = H

1.2.4.3.1 16QAM /1RBs /RB #0




Agilent
R T
Freq/Channel
Mkr1 550 kHz
Ref 30 dBm
#Atten 36 dB
-50.75 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-33.0
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr1 1.73 GHz
Ref 30 dBm
#Atten 36 dB
26.87 dBm
#Peak
Log
10
dB/
Offst
13.9
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
10.0150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
20.0000000 GHz
CF Step
1.99700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 10.02 GHz
Span 19.97 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 49.96 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

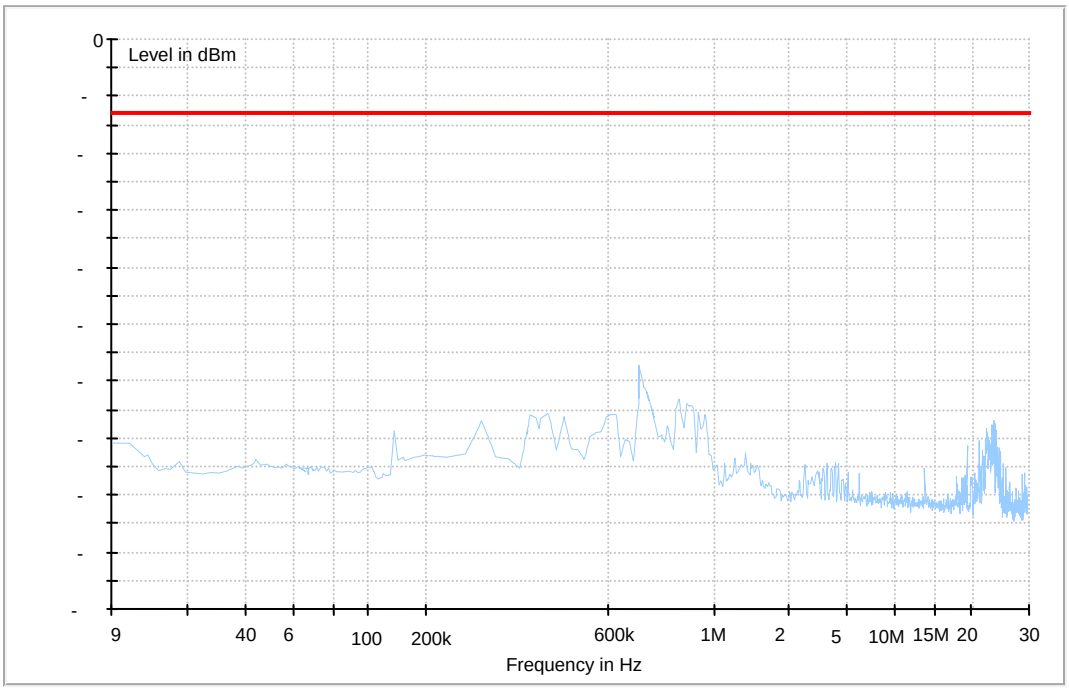
END

Appendix E

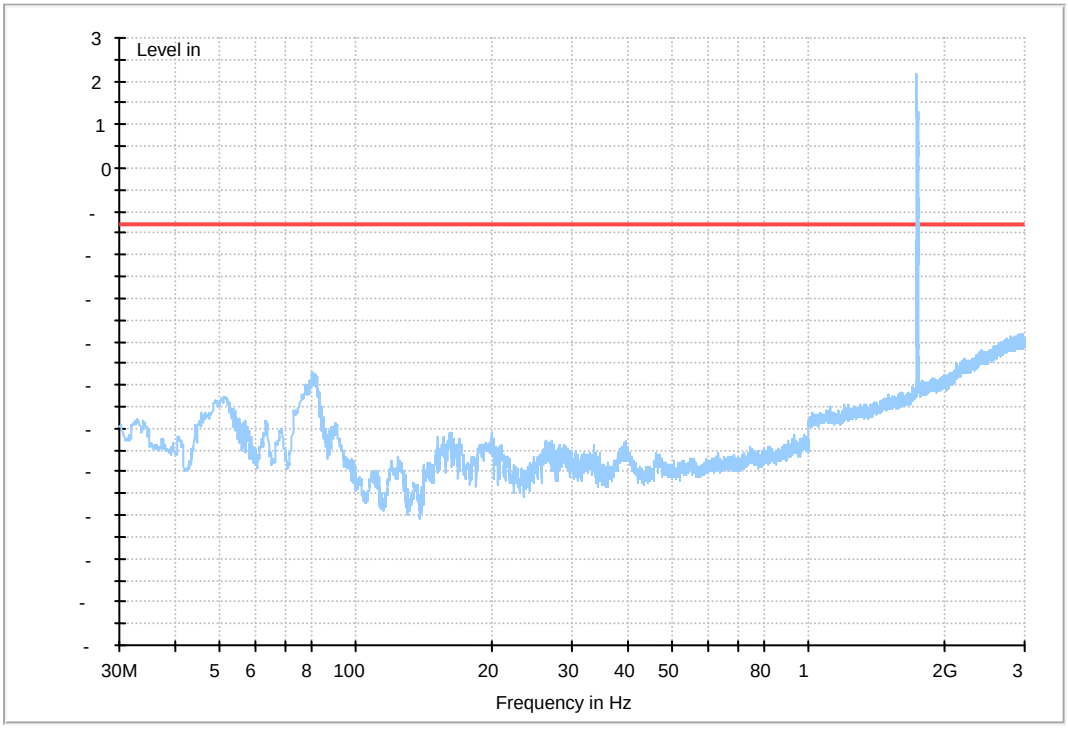
Radiated spurious emission

LTE Band 4（BW=5MHz）

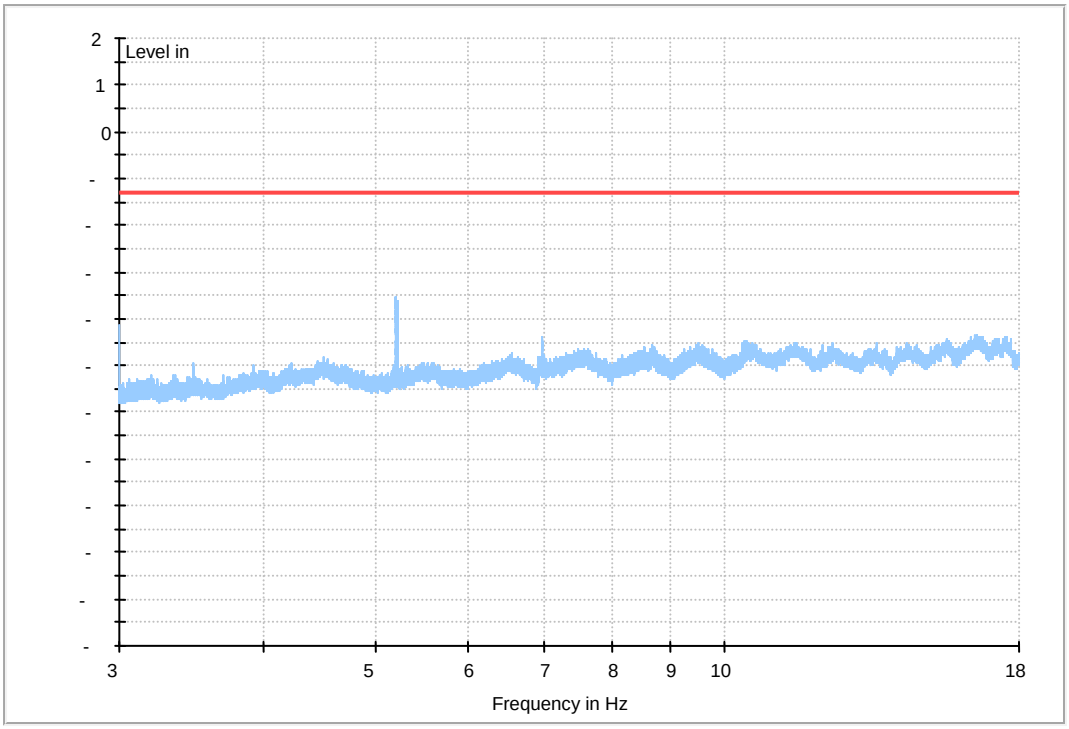
Traffic Mode (9kHz-30MHz)



Traffic Mode (30MHz-3GHz)

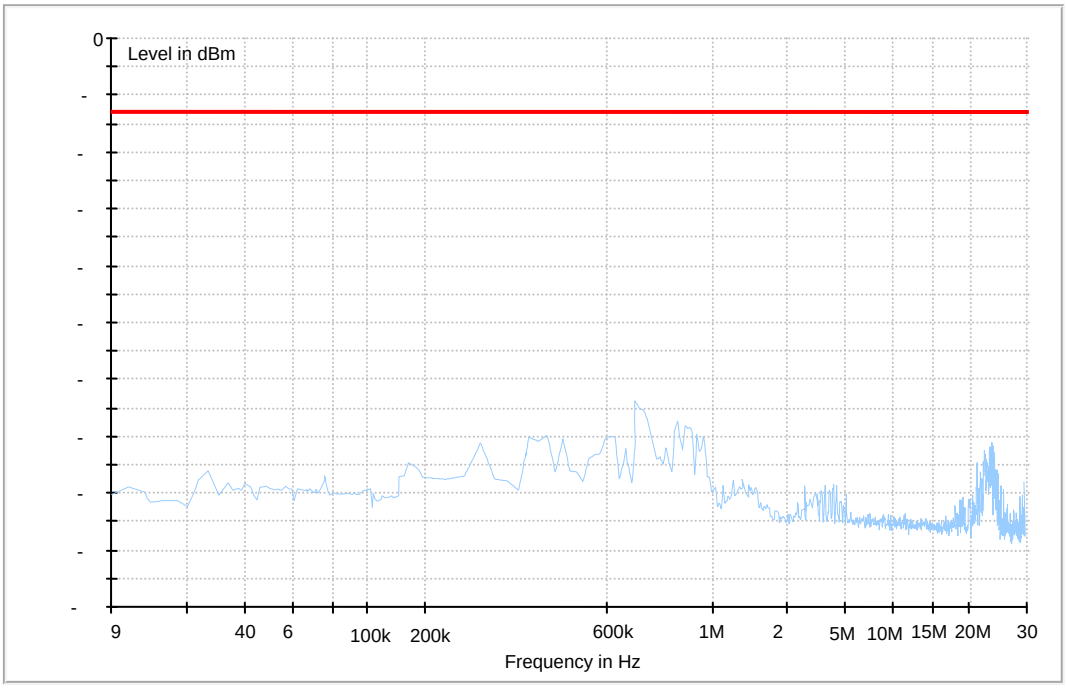


Traffic Mode (3GHz-18GHz)

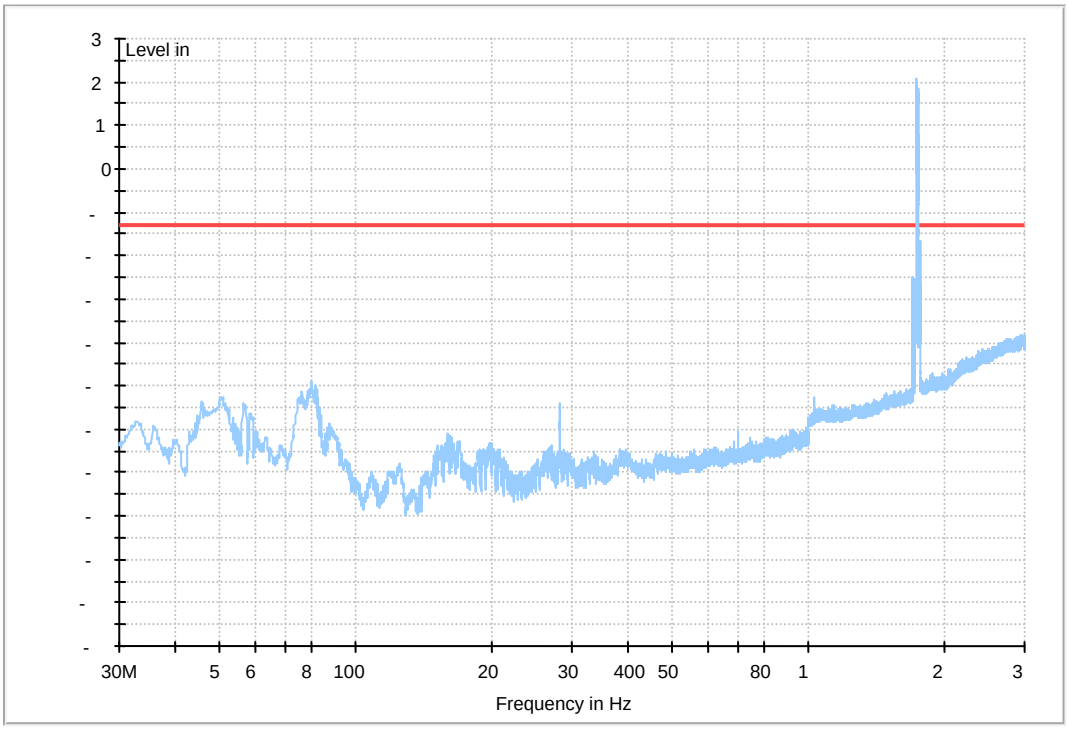


LTE Band 4（BW=20MHz）

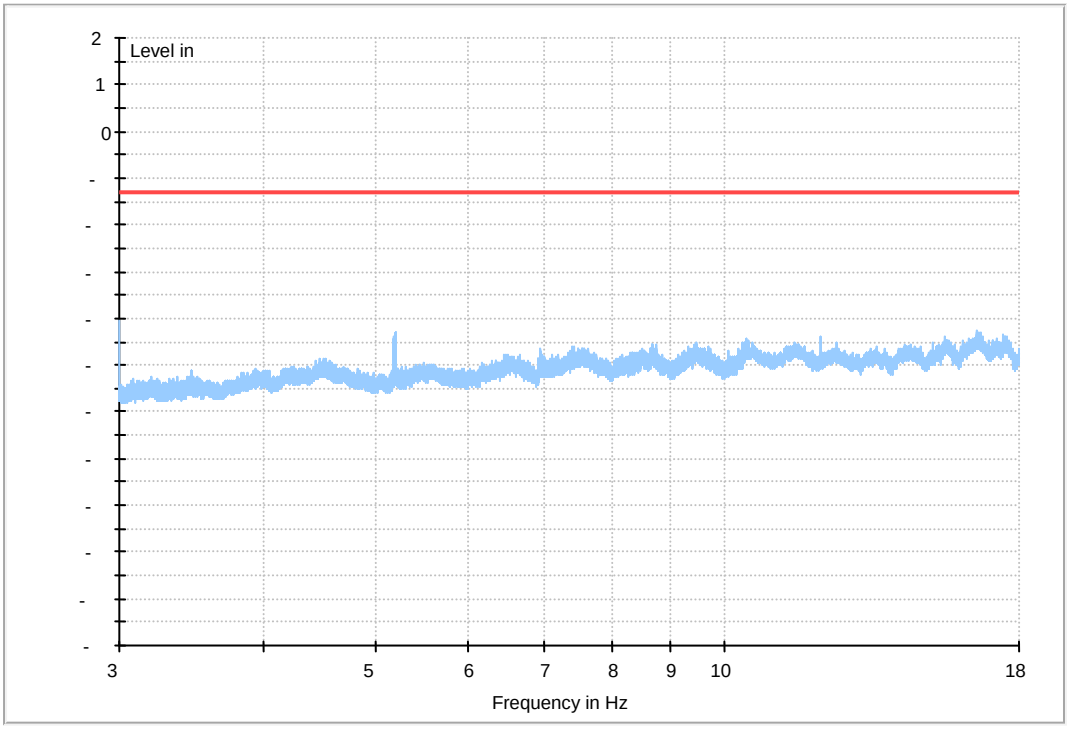
Traffic Mode (9kHz-30MHz)



Traffic Mode (30MHz-3GHz)



Traffic Mode (3GHz-18GHz)



END

Appendix F

Frequency Stability

According to FCC Part 2.1051 & FCC Part 27C & 27M

Frequency Error vs. Temperature:

NOTE: All relevant operation modes have been tested, and the worst case data is included in this report.

Table 1 Measurement Results (LTE) BAND 7

Test Mode	RF Ch.	Volt.	Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Limit [ppm]	Verdict
TM1(5M)	M	VN	-30 °C	-15	-0.00315	---	±2.5	Pass
			-20 °C	11	0.007111	---	±2.5	Pass
			-10 °C	6	0.005138	---	±2.5	Pass
			0 °C	-14	-0.00275	---	±2.5	Pass
			10 °C	13	0.0079	---	±2.5	Pass
			20 °C	-13	-0.00236	---	±2.5	Pass
			30 °C	19	0.010266	---	±2.5	Pass
			40 °C	7	0.005533	---	±2.5	Pass
			50 °C	-29	-0.00867	---	±2.5	Pass
TM1(10M)	M	VN	-30 °C	-27	-0.00788	---	±2.5	Pass
			-20 °C	-21	-0.00551	---	±2.5	Pass
			-10 °C	3	0.003955	---	±2.5	Pass
			0 °C	-14	-0.00275	---	±2.5	Pass
			10 °C	-22	-0.00591	---	±2.5	Pass
			20 °C	19	0.010266	---	±2.5	Pass
			30 °C	15	0.008689	---	±2.5	Pass
			40 °C	3	0.003955	---	±2.5	Pass
			50 °C	10	0.006716	---	±2.5	Pass
TM1(15M)	M	VN	-30 °C	-23	-0.0063	---	±2.5	Pass
			-20 °C	-16	-0.00354	---	±2.5	Pass
			-10 °C	-20	-0.00512	---	±2.5	Pass
			0 °C	-24	-0.0067	---	±2.5	Pass
			10 °C	8	0.005927	---	±2.5	Pass
			20 °C	12	0.007505	---	±2.5	Pass
			30 °C	-15	-0.00315	---	±2.5	Pass
			40 °C	4	0.004349	---	±2.5	Pass
			50 °C	-19	-0.00472	---	±2.5	Pass
TM1(20M)	M	VN	-30 °C	8	0.005927	---	±2.5	Pass
			-20 °C	14	0.008294	---	±2.5	Pass
			-10 °C	2	0.00356	---	±2.5	Pass
			0 °C	17	0.009477	---	±2.5	Pass
			10 °C	-23	-0.0063	---	±2.5	Pass
			20 °C	5	0.004744	---	±2.5	Pass
			30 °C	-27	-0.00788	---	±2.5	Pass
			40 °C	-19	-0.00472	---	±2.5	Pass
			50 °C	5	0.004744	---	±2.5	Pass

Frequency Error vs. Voltage:

Table 2 Measurement Results (LTE) BAND 7

Test Mode	RF Ch.	Temp.	Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Limit [ppm]	Verdict
TM1(5M)	M	20 °C	VL	26	0.009658	---	±2.5	Pass
			VN	20	0.007292	---	±2.5	Pass
			VH	11	0.003741	---	±2.5	Pass
TM1(10M)	M	20 °C	VL	-17	-0.00731	---	±2.5	Pass
			VN	-20	-0.00849	---	±2.5	Pass
			VH	-4	-0.00218	---	±2.5	Pass
TM1(15M)	M	20 °C	VL	25	0.009264	---	±2.5	Pass
			VN	16	0.005714	---	±2.5	Pass
			VH	18	0.006503	---	±2.5	Pass
TM1(20M)	M	20 °C	VL	-19	-0.00809	---	±2.5	Pass
			VN	28	0.010447	---	±2.5	Pass
			VH	14	0.004925	---	±2.5	Pass

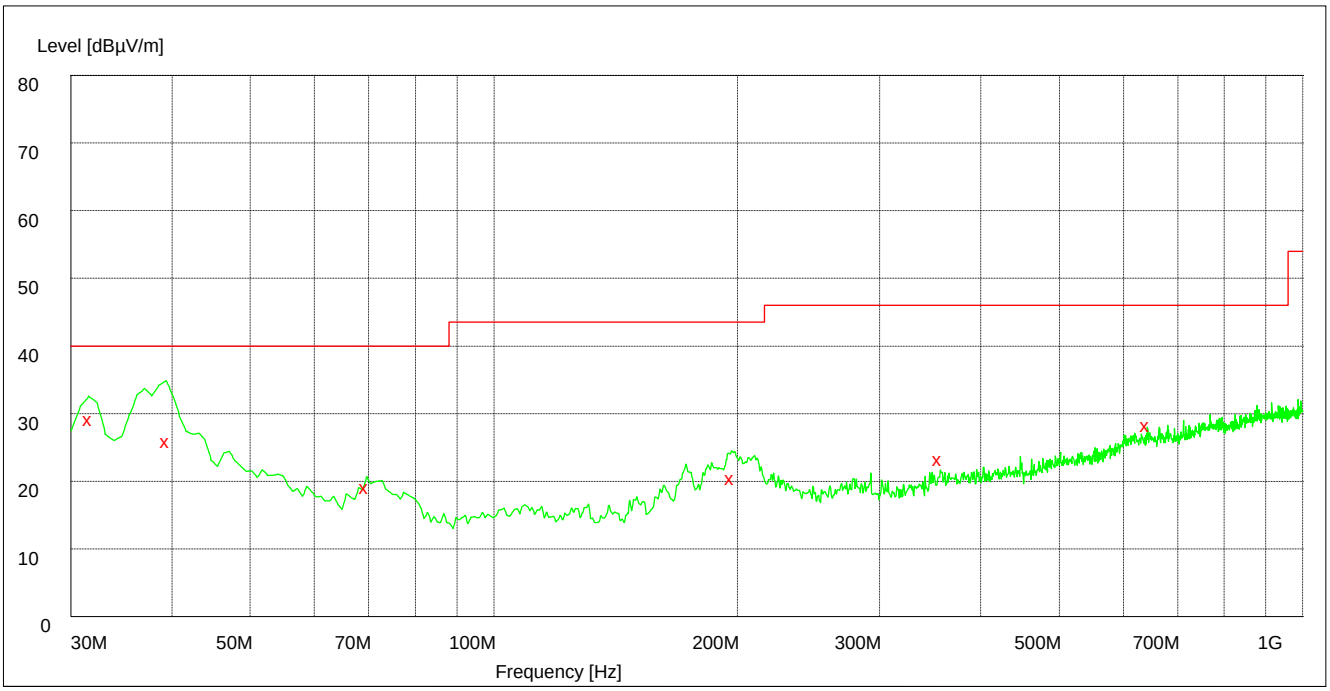
END

Appendix G

Receiver Spurious Emission

This test was carried out in all the test modes. Here only the worst test result was shown.

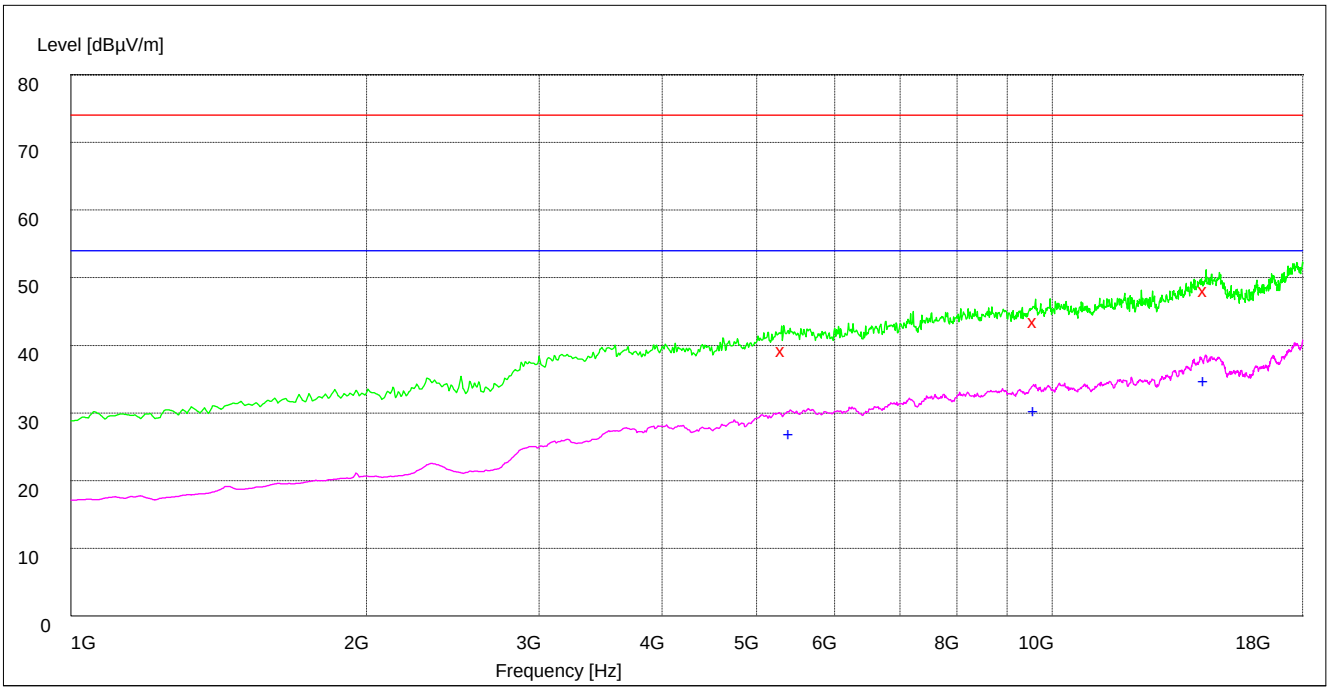
30MHz-1GHz



MEASUREMENT RESULT: QP Detector

Frequency	Level	Transducer	Limit	Margin	Height	Azimuth	Polarisation
MHz	dBµV/m	dB	dBµV/m	dB	cm	deg	
31.740000	30.50	14.7	40.0	9.5	100.0	272.00	VERTICAL
39.540000	27.30	15.3	40.0	12.7	100.0	289.00	VERTICAL
69.780000	20.50	11.0	40.0	19.5	126.0	46.00	VERTICAL
197.580000	21.80	12.3	43.5	21.7	100.0	340.00	VERTICAL
356.760000	24.70	16.8	46.0	21.3	100.0	231.00	HORIZONTAL
643.740000	29.60	21.8	46.0	16.4	200.0	212.00	VERTICAL

1GHz to 18 GHz”



MEASUREMENT RESULT: PK Detector

Frequency	Level	Transducer	Limit	Margin	Height	Azimuth	Polarisation
MHz	dBµV/m	dB	dBµV/m	dB	cm	deg	
5321.800000	40.60	-1.1	74.0	33.4	148.0	0.00	VERTICAL
9615.400000	44.90	6.0	74.0	29.1	100.0	26.00	VERTICAL
14349.100000	49.40	16.6	74.0	24.6	117.0	60.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency	Level	Transducer	Limit	Margin	Height	Azimuth	Polarisation
MHz	dBµV/m	dB	dBµV/m	dB	cm	deg	
5413.400000	28.20	-0.8	54.0	25.8	135.0	136.00	VERTICAL
9614.900000	31.60	6.0	54.0	22.4	100.0	99.00	VERTICAL
14323.500000	36.10	16.5	54.0	17.9	148.0	176.00	VERTICAL

END