

TEST REPORT

Product : LTE MODULE
Trade mark : GlocalMe
Model/Type reference : GLMM18A02
Serial Number : N/A
Report Number : EED32K00246407
FCC ID : 2AC88-GLMM18A02
Date of Issue : Jan. 25, 2019
Test Standards : 47 CFR Part 2
47 CFR Part 22 subpart H
Test result : PASS

Prepared for:

HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road,
Kowloon, HongKong

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Tested by:

Peter

Peter

Compiled by:

Tom - chen

Tom chen

Reviewed by:

Max Liang

Max Liang

Approved by:

Kevin Yang

Kevin yang

Date:

Jan. 25, 2019

Check No.:3096318232



2 Version

Version No.	Date	Description
00	Jan. 25, 2019	Original

3 Test Summary

LTE Band 5			
Test Item	Test Requirement	Test method	Result
Conducted output power	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(ERP)	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
99%&26dB Occupied Bandwidth	Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/Part 22.917(a)	Part 22.917(b) &KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Frequency stability	Part 2.1055/ Part 22.355	TIA-603-E-2016&KDB 971168 D01v03r01	PASS

Remark:

The tested samples and the sample information are provided by the client.

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

CH: In this whole report CH means channel.

Volt: In this whole report Volt means Voltage.

Temp: In this whole report Temp means Temperature.

Humid: In this whole report Humid means humidity.

Press: In this whole report Press means Pressure.

N/A: In this whole report not application

4 Content

1 COVER PAGE	1
2 VERSION	2
3 TEST SUMMARY	3
4 CONTENT	4
5 TEST REQUIREMENT	5
5.1 TEST SETUP	5
5.1.1 For Radiated Emissions test setup	5
5.2 TEST ENVIRONMENT	5
5.3 TEST CONDITION	5
6 GENERAL INFORMATION	6
6.1 CLIENT INFORMATION	6
6.2 GENERAL DESCRIPTION OF EUT	6
6.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	6
6.4 DESCRIPTION OF SUPPORT UNITS	7
6.5 TEST LOCATION	7
6.6 DEVIATION FROM STANDARDS	7
6.7 ABNORMALITIES FROM STANDARD CONDITIONS	7
6.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
6.9 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2)	7
7 EQUIPMENT LIST	8
8 RADIO TECHNICAL REQUIREMENTS SPECIFICATION	10
APPENDIX A): CONDUCTED OUTPUT POWER AND EFFECTIVE (ISOTROPIC) RADIATED POWER	11
APPENDIX B): 26dB BANDWIDTH AND OCCUPIED BANDWIDTH	17
APPENDIX C): BAND EDGE	27
APPENDIX D): CONDUCTED SPURIOUS EMISSION	65
APPENDIX E)): FREQUENCY STABILITY	137
APPENDIX F): FIELD STRENGTH OF SPURIOUS RADIATION	144
PHOTOGRAPHS OF TEST SETUP	169
PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	171

5.1 Test setup

Radiated Emissions setup:

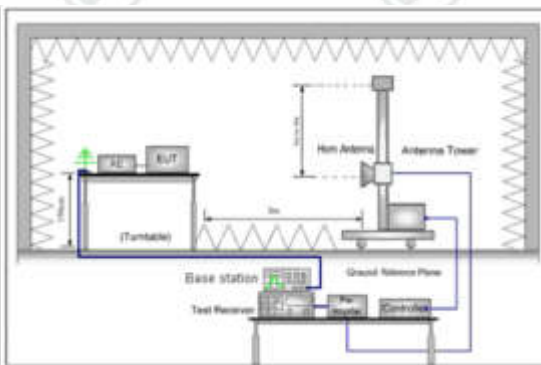


Figure 2. above 1GHz

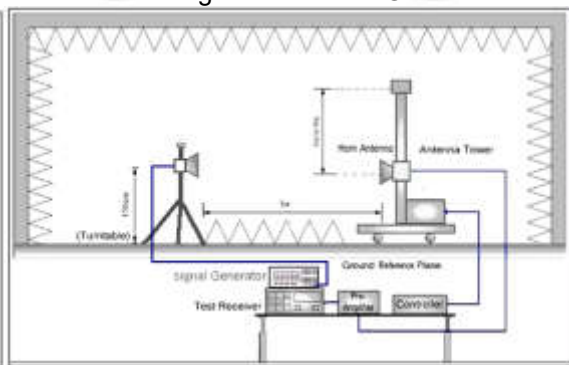


Figure 2. above 1GHz

Operating Environment:

Temperature:	23°C
Humidity:	57 % RH
Atmospheric Pressure:	1010mbar

Test channel:

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)	Number [DL]	Frequency of Downlink(MHz)
LTE band 5 TX:824–849 MHz RX: 869–894MHz	Low Range	1.4	20407	824.7	2407	869.7
		3	20415	825.5	2415	870.5
		5	20425	826.5	2425	871.5
		10	20450	829	2450	874
	Mid Range	1.4/3/5/10	20525	836.5	2525	881.5
	High Range	1.4	20643	848.3	2643	893.3
		3	20635	847.5	2635	892.5
		5	20625	846.5	2625	891.5
		10	20600	844	2600	889

6 General Information

6.1 Client Information

Applicant:	HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address of Applicant:	Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, HongKong
Manufacturer:	HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address of Manufacturer:	Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, HongKong
Factory:	SHENZHEN CHIHANG TECHNOLOGY CO., LTD
Address of Factory:	1-4/F, Building 5, Detai Industrial Park, Huarong Road, Dalang Street, Longhua, Shenzhen

6.2 General Description of EUT

Product Name:	LTE MODULE
Model No.(EUT):	GLMM18A02
Trade mark:	GlocalMe
EUT Supports Radios application:	4.0 BT Dual mode: 2402MHz to 2480MHz WiFi: IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz GPS: L1:1559MHz to 1610MHz GSM/GPRS/EGPRS 850: Tx: 824-849MHz, Rx: 869-894MHz GSM/GPRS/EGPRS 1900: Tx: 1850-1910MHz, Rx: 1930-1990MHz WCDMA Band 2: Tx: 1850-1910MHz, Rx: 1930-1990MHz WCDMA Band 4: Tx: 1850-1910MHz, Rx: 2110-2155MHz WCDMA Band 5: Tx: 824- 849MHz, Rx: 869 -894MHz LTE Band 2: Tx: 1850-1910MHz, Rx: 1930-1990MHz LTE Band 4: Tx: 1710-1755 MHz, Rx: 2110-2155 MHz LTE Band 5: Tx: 824-849 MHz, Rx: 869-894MHz LTE Band 7: TX:2500-2570 MHz, Rx: 2620-2690 MHz LTE Band 12: Tx: 699-716 MHz, Rx: 729-746 MHz LTE Band 13: Tx: 777-787 MHz, Rx: 746-756 MHz LTE Band 17: Tx: 704-716 MHz, Rx: 734-746 MHz LTE Band 26: Tx: 814-849 MHz, Rx: 859-894 MHz LTE Band 38: Tx: 2570- 2620MHz, Rx: 2570-2620MHz LTE Band 40: Tx:2305-2315 MHz, Rx:2305-2315MHz Tx:2350-2360 MHz, Rx:2350-2360MHz LTE Band 41: Tx: 2535-2655 MHz, Rx: 2535 -2655 MHz
Power Supply:	DC 3.3V
Firmware version:	GLMM18A01_TSV1.0.000.005.180821_userdebug (manufacturer declare)
Hardware version:	M2_VB (manufacturer declare)
Sample Received Date:	Sep. 10, 2018
Sample tested Date:	Sep. 11, 2018 to Dec. 12, 2018

6.3 Product Specification subjective to this standard

Frequency Band:	LTE Band 5: Tx: 824 MHz – 849 MHz, Rx: 869 MHz – 894MHz
Modulation Type:	QPSK, 16QAM
Antenna Type:	External Antenna
Antenna Gain:	-0.5dBi
Test Voltage:	DC 3.3V

6.4 Description of Support Units

The EUT has been tested independently.

6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

6.6 Deviation from Standards

None.

6.7 Abnormalities from Standard Conditions

None.

6.8 Other Information Requested by the Customer

None.

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

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

Communication RF test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Spectrum Analyzer	Agilent	E4440A	MY46185649	11-13-2017	11-14-2018
Spectrum Analyzer	Agilent	E4440A	MY46185649	11-14-2018	11-13-2019
Signal Generator	Agilent	E4438C	MY45095744	03-13-2018	03-12-2019
Communication test set	Agilent	E5515C	GB47050534	03-16-2018	03-15-2019
Signal Generator	Keysight	E8257D	MY53401106	03-13-2018	03-12-2019
Communication test set	R&S	CMW500	152394	03-16-2018	03-15-2019
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-10-2018	01-09-2019
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA09 CL12-0395-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA08 CL12-0393-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA04 CL12-0396-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA03 CL12-0394-001	---	01-10-2018	01-09-2019
DC Power	Keysight	E3642A	MY54426112	03-13-2018	03-12-2019
DC Power	Keysight	E3642A	MY54426115	03-13-2018	03-12-2019
PC-2	Lenovo	R4960d	---	01-10-2018	01-09-2019
PC-3	Lenovo	R4960d	---	01-10-2018	01-09-2019
RF control unit	JS Tonscend	JS0806-1	158060004	03-13-2018	03-12-2019
DC power Box	JS Tonscend	JS0806-4	158060007	03-13-2018	03-12-2019
LTE Automatic test software	JS Tonscend	JS1120-1	---	03-30-2018	03-29-2019
WCDMA Automatic test software	JS Tonscend	JS1120-3	---	03-30-2018	03-29-2019
GSM Automatic test software	JS Tonscend	JS1120-3	---	03-30-2018	03-29-2019
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	10-11-2017	10-12-2018
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	10-12-2018	10-11-2019

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-04-2016	06-03-2019
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-401	10-27-2017	10-28-2018
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-401	10-28-2018	10-27-2019
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	07-30-2018	07-29-2019
Microwave Preamplifier	Agilent	8449B	3008A02425	08-21-2018	08-20-2019
Microwave Preamplifier	Tonscend	EMC051845 SE	980380	01-19-2018	01-18-2019
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1869	04-25-2018	04-23-2021
Horn Antenna	ETS-LINDGREN	3117	00057410	06-05-2018	06-03-2021
Double ridge horn antenna	A.H.SYSTEMS	SAS-574	6042	06-05-2018	06-04-2021
Pre-amplifier	A.H.SYSTEMS	PAP-1840-60	6041	06-05-2018	06-04-2021
Loop Antenna	ETS	6502	00071730	06-22-2017	06-21-2019
Spectrum Analyzer	R&S	FSP40	100416	05-11-2018	05-10-2019
Receiver	R&S	ESCI	100435	05-25-2018	05-24-2019
Receiver	R&S	ESCI7	100938-003	11-22-2017	11-23-2018
Receiver	R&S	ESCI7	100938-003	11-23-2018	11-22-2019
Multi device Controller	maturo	NCD/070/107 11112	---	01-10-2018	01-09-2019
LISN	schwarzbeck	NNBM8125	81251547	05-11-2018	05-10-2019
LISN	schwarzbeck	NNBM8125	81251548	05-11-2018	05-10-2019
Signal Generator	Agilent	E4438C	MY4509574 4	03-13-2018	03-12-2019
Signal Generator	Keysight	E8257D	MY5340110 6	03-13-2018	03-12-2019
Temperature/ Humidity Indicator	Shanghai qixiang	HM10	1804298	10-11-2017	10-12-2018
Temperature/ Humidity Indicator	Shanghai qixiang	HM10	1804298	10-12-2018	10-11-2019
Communication test set	Agilent	E5515C	GB4705053 4	03-16-2018	03-15-2019
Cable line	Fulai(7M)	SF106	5219/6A	01-10-2018	01-09-2019
Cable line	Fulai(6M)	SF106	5220/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5216/6A	01-10-2018	01-09-2019
Cable line	Fulai(3M)	SF106	5217/6A	01-10-2018	01-09-2019
Communication test set	R&S	CMW500	104466	02-05-2018	02-04-2019
High-pass filter	Sinoscite	FL3CX03WG 18NM12-0398-002	---	01-10-2018	01-09-2019
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA0 9CL12-0395-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX01CA0 8CL12-0393-001	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA0 4CL12-0396-002	---	01-10-2018	01-09-2019
band rejection filter	Sinoscite	FL5CX02CA0 3CL12-0394-001	---	01-10-2018	01-09-2019

8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	PART 22	PART 22 – PUBLIC MOBILE SERVICES Subpart H – Cellular Radiotelephone Service
2	PART 24)	PART 24 – PERSONAL COMMUNICATIONS SERVICES Subpart E – Broadband PCS
3	PART 27	PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES Subpart C – Technical Standards
3	PART 2	Frequency allocations and radio treaty matters; general rules and regulations
4	TIA-603-E-2016	Land Mobile FM or PM -Communications Equipment -Measurement and Performance Standards
5	KDB971168 D01	KDB971168 D01 Power Meas License Digital Systems v03r01

Test Results List:

Test Requirement	Test method	Test item	Verdict	Note
Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016& KDB 971168 D01v03r01	Conducted output power	PASS	Appendix A)
Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016& KDB 971168 D01v03r01	Effective Radiated Power of Transmitter(ERP)	PASS	Appendix A)
Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v03r01	99% &26dBOccupied Bandwidth	PASS	Appendix B)
Part 2.1051/Part 22.917(a)/	Part 22.917(b) &KDB 971168 D01v03r01	Band Edge at antenna terminals	PASS	Appendix C)
Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)/	TIA-603-E-2016& KDB 971168 D01v03r01	Spurious emissions at antenna terminals	PASS	Appendix D)
Part 2.1055/ Part 22.355	TIA-603-E-2016& KDB 971168 D01v03r01	Frequency stability	PASS	Appendix E)
Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016& KDB 971168 D01v03r01	Field strength of spurious radiation	PASS	Appendix F)

Appendix A): Conducted Output Power and Effective (Isotropic) Radiated Power

Description of the Conducted Output Power Measurement and ERP/EIRP Measurement:	A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported. According to KDB 412172 D01 Power Approach $EIRP = P_T + G_T - L_c$, $ERP = EIRP - 2.15$, where P_T = transmitter output power in dBm G_T = gain of the transmitting antenna in dBi L_c = signal attenuation in the connecting cable between the transmitter and antenna in dB				
Measurement Procedure:	1. The transmitter output port was connected to the system simulator. 2. Set EUT at maximum power through the system simulator. 3. Select lowest, middle, and highest channels for each band and different modulation. 4. Measure and record the power level from the system simulator.				
Limit:	<table border="1"> <tr> <td>Mode</td><td>LTE band 5</td></tr> <tr> <td>Limit</td><td>38.45dBm</td></tr> </table>	Mode	LTE band 5	Limit	38.45dBm
Mode	LTE band 5				
Limit	38.45dBm				

Report No. : EED32K00246407
Test Result

Page 12 of 171

$G_T - L_C = -0.5\text{dB}$

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.72	20.07	PASS
		1	3	22.72	20.07	PASS
		1	5	22.73	20.08	PASS
		3	0	22.70	20.05	PASS
		3	2	22.70	20.05	PASS
		3	3	22.73	20.08	PASS
		6	0	21.71	19.06	PASS
	MCH	1	0	23.16	20.51	PASS
		1	3	23.13	20.48	PASS
		1	5	23.16	20.51	PASS
		3	0	23.10	20.45	PASS
		3	2	23.10	20.45	PASS
		3	3	23.03	20.38	PASS
		6	0	22.04	19.39	PASS
	HCH	1	0	23.27	20.62	PASS
		1	3	23.23	20.58	PASS
		1	5	23.23	20.58	PASS
		3	0	23.30	20.65	PASS
		3	2	23.11	20.46	PASS
		3	3	23.15	20.5	PASS
		6	0	22.27	19.62	PASS
16QAM	LCH	1	0	22.35	19.70	PASS
		1	3	22.32	19.67	PASS
		1	5	22.43	19.78	PASS
		3	0	22.79	20.14	PASS
		3	2	22.79	20.14	PASS
		3	3	22.74	20.09	PASS
		6	0	20.96	18.31	PASS
	MCH	1	0	22.29	19.64	PASS
		1	3	22.31	19.66	PASS
		1	5	22.33	19.68	PASS
		3	0	23.08	20.43	PASS
		3	2	23.08	20.43	PASS

	HCH	3	3	23.20	20.55	PASS
		6	0	21.25	18.60	PASS
		1	0	22.81	20.16	PASS
		1	3	22.89	20.24	PASS
		1	5	22.88	20.23	PASS
		3	0	23.29	20.64	PASS
		3	2	23.28	20.63	PASS
		3	3	23.20	20.55	PASS
		6	0	21.36	18.71	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.77	20.12	PASS
		1	7	22.81	20.16	PASS
		1	14	22.77	20.12	PASS
		8	0	21.76	19.11	PASS
		8	4	21.76	19.11	PASS
		8	7	21.76	19.11	PASS
		15	0	21.76	19.11	PASS
	MCH	1	0	23.05	20.4	PASS
		1	7	23.12	20.47	PASS
		1	14	23.07	20.42	PASS
		8	0	22.13	19.48	PASS
		8	4	22.09	19.44	PASS
		8	7	22.23	19.58	PASS
		15	0	22.27	19.62	PASS
	HCH	1	0	23.03	20.38	PASS
		1	7	23.07	20.42	PASS
		1	14	23.19	20.54	PASS
		8	0	22.12	19.47	PASS
		8	4	22.11	19.46	PASS
		8	7	22.12	19.47	PASS
		15	0	22.22	19.57	PASS
16QAM	LCH	1	0	21.66	19.01	PASS
		1	7	21.65	19.00	PASS
		1	14	21.60	18.95	PASS
		8	0	21.77	19.12	PASS

		8	4	21.76	19.11	PASS
		8	7	21.77	19.12	PASS
		15	0	20.80	18.15	PASS
	MCH	1	0	21.71	19.06	PASS
		1	7	21.76	19.11	PASS
		1	14	21.79	19.14	PASS
		8	0	22.10	19.45	PASS
		8	4	22.22	19.57	PASS
		8	7	22.05	19.40	PASS
		15	0	21.12	18.47	PASS
	HCH	1	0	21.88	19.23	PASS
		1	7	21.94	19.29	PASS
		1	14	21.87	19.22	PASS
		8	0	22.20	19.55	PASS
		8	4	22.20	19.55	PASS
		8	7	22.20	19.55	PASS
		15	0	21.23	18.58	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.73	20.08	PASS
		1	12	22.75	20.10	PASS
		1	24	22.80	20.15	PASS
		12	0	21.78	19.13	PASS
		12	6	21.78	19.13	PASS
		12	13	21.89	19.24	PASS
		25	0	21.78	19.13	PASS
	MCH	1	0	22.89	20.24	PASS
		1	12	23.00	20.35	PASS
		1	24	23.10	20.45	PASS
		12	0	22.03	19.38	PASS
		12	6	22.03	19.38	PASS
		12	13	22.05	19.40	PASS
		25	0	22.08	19.43	PASS
	HCH	1	0	23.12	20.47	PASS
		1	12	23.13	20.48	PASS
		1	24	23.14	20.49	PASS

16QAM		12	0	22.22	19.57	PASS
		12	6	22.23	19.58	PASS
		12	13	22.19	19.54	PASS
		25	0	22.11	19.46	PASS
	LCH	1	0	21.30	18.65	PASS
		1	12	21.29	18.64	PASS
		1	24	21.22	18.57	PASS
		12	0	21.79	19.14	PASS
		12	6	21.78	19.13	PASS
		12	13	21.86	19.21	PASS
		25	0	20.96	18.31	PASS
	MCH	1	0	21.44	18.79	PASS
		1	12	21.41	18.76	PASS
		1	24	21.47	18.82	PASS
		12	0	22.01	19.36	PASS
		12	6	22.00	19.35	PASS
		12	13	22.06	19.41	PASS
		25	0	21.25	18.60	PASS
	HCH	1	0	21.41	18.76	PASS
		1	12	21.60	18.95	PASS
		1	24	21.47	18.82	PASS
		12	0	22.14	19.49	PASS
		12	6	22.14	19.49	PASS
		12	13	22.19	19.54	PASS
		25	0	21.30	18.65	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	ERP [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.77	20.12	PASS
		1	24	22.79	20.14	PASS
		1	49	22.92	20.27	PASS
		25	0	21.84	19.19	PASS
		25	12	21.75	19.10	PASS
		25	25	21.98	19.33	PASS
		50	0	21.87	19.22	PASS
	MCH	1	0	22.99	20.34	PASS

16QAM		1	24	23.04	20.39	PASS
		1	49	23.20	20.55	PASS
		25	0	22.05	19.40	PASS
		25	12	22.04	19.39	PASS
		25	25	22.08	19.43	PASS
		50	0	22.17	19.52	PASS
	HCH	1	0	23.14	20.49	PASS
		1	24	23.18	20.53	PASS
		1	49	22.99	20.34	PASS
		25	0	22.12	19.47	PASS
		25	12	22.08	19.43	PASS
		25	25	22.08	19.43	PASS
		50	0	22.23	19.58	PASS
	LCH	1	0	21.76	19.11	PASS
		1	24	21.85	19.20	PASS
		1	49	21.96	19.31	PASS
		25	0	21.88	19.23	PASS
		25	12	21.87	19.22	PASS
		25	25	21.98	19.33	PASS
		50	0	20.87	18.22	PASS
	MCH	1	0	21.90	19.25	PASS
		1	24	22.03	19.38	PASS
		1	49	22.30	19.65	PASS
		25	0	22.02	19.37	PASS
		25	12	22.01	19.36	PASS
		25	25	22.25	19.60	PASS
		50	0	21.11	18.46	PASS
	HCH	1	0	22.06	19.41	PASS
		1	24	22.21	19.56	PASS
		1	49	22.18	19.53	PASS
		25	0	22.10	19.45	PASS
		25	12	22.10	19.45	PASS
		25	25	22.05	19.40	PASS
		50	0	21.25	18.60	PASS

Appendix B): 26dB Bandwidth and Occupied Bandwidth

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0792	1.250	PASS
	MCH	6	0	1.0783	1.247	PASS
	HCH	6	0	1.0779	1.258	PASS
16QAM	LCH	6	0	1.0819	1.245	PASS
	MCH	6	0	1.0781	1.250	PASS
	HCH	6	0	1.0803	1.249	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6870	3.065	PASS
	MCH	15	0	2.6856	3.079	PASS
	HCH	15	0	2.6942	3.087	PASS
16QAM	LCH	15	0	2.6752	2.973	PASS
	MCH	15	0	2.6857	3.001	PASS
	HCH	15	0	2.6823	2.998	PASS

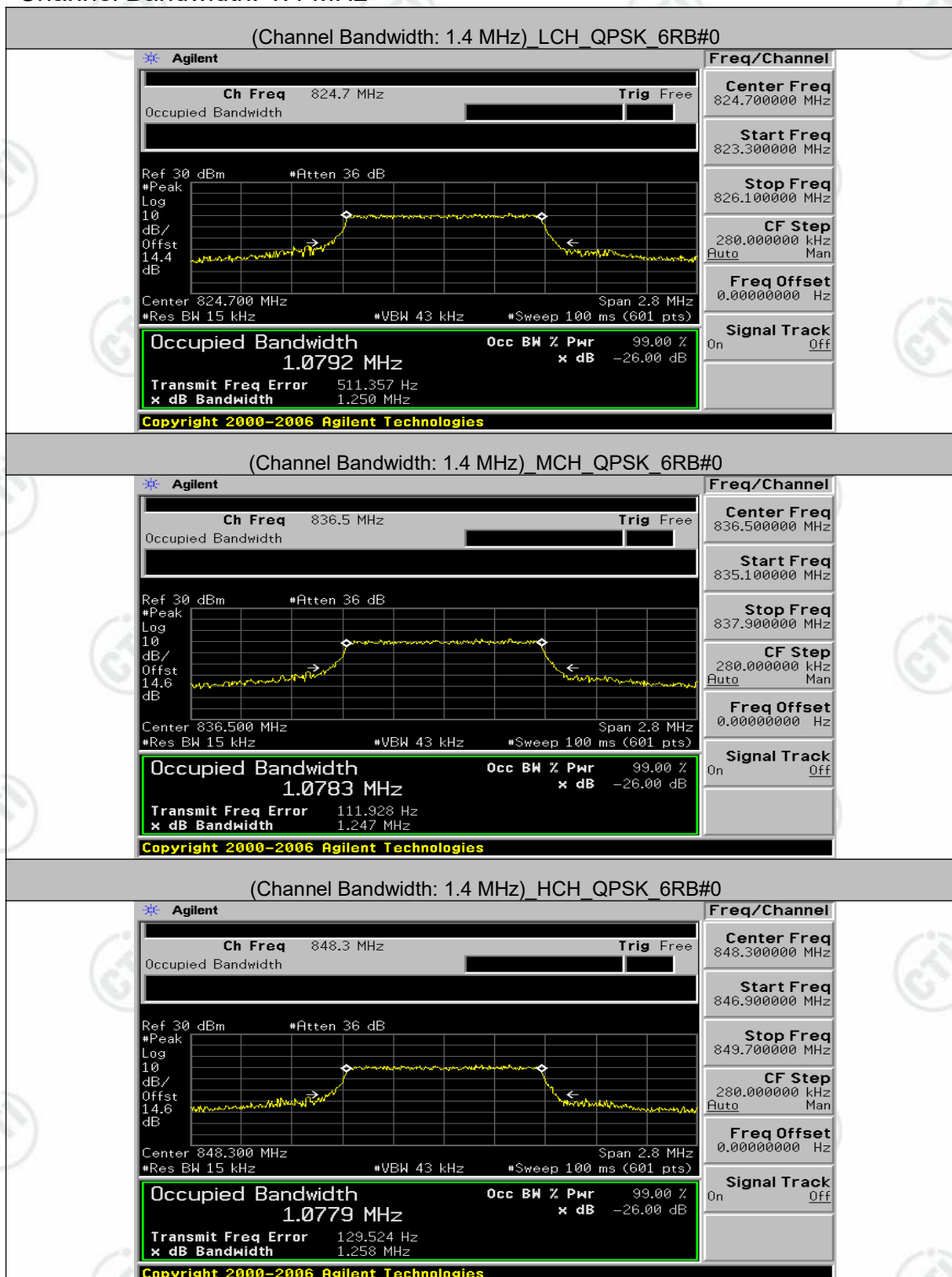
Channel Bandwidth: 5 MHz

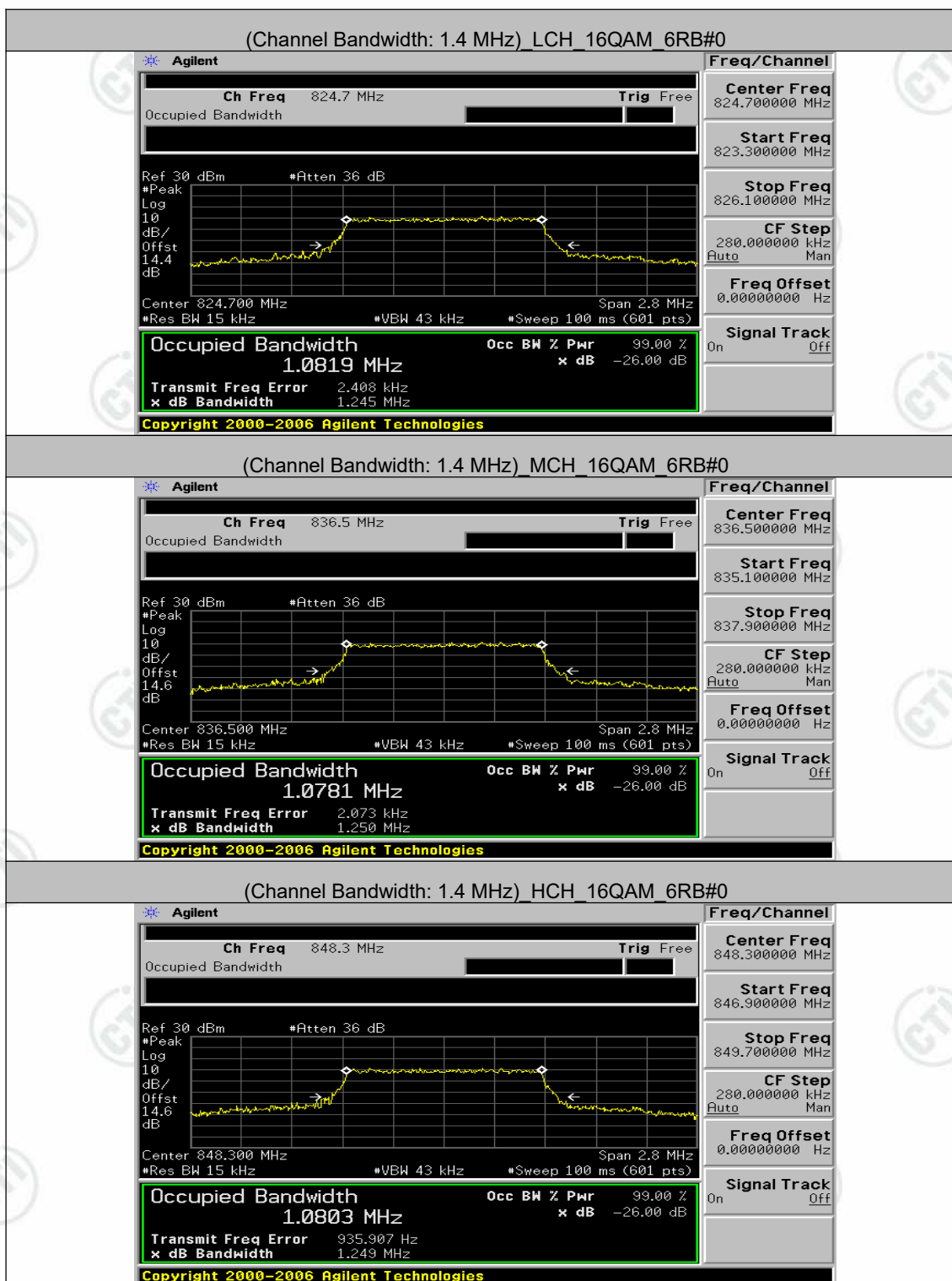
Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4657	5.041	PASS
	MCH	25	0	4.4808	5.070	PASS
	HCH	25	0	4.4805	5.084	PASS
16QAM	LCH	25	0	4.4592	4.939	PASS
	MCH	25	0	4.4756	5.055	PASS
	HCH	25	0	4.4663	5.092	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9283	9.709	PASS
	MCH	50	0	8.9645	9.766	PASS
	HCH	50	0	8.9186	9.695	PASS
16QAM	LCH	50	0	8.9118	9.886	PASS
	MCH	50	0	8.9543	9.790	PASS
	HCH	50	0	8.9194	9.851	PASS

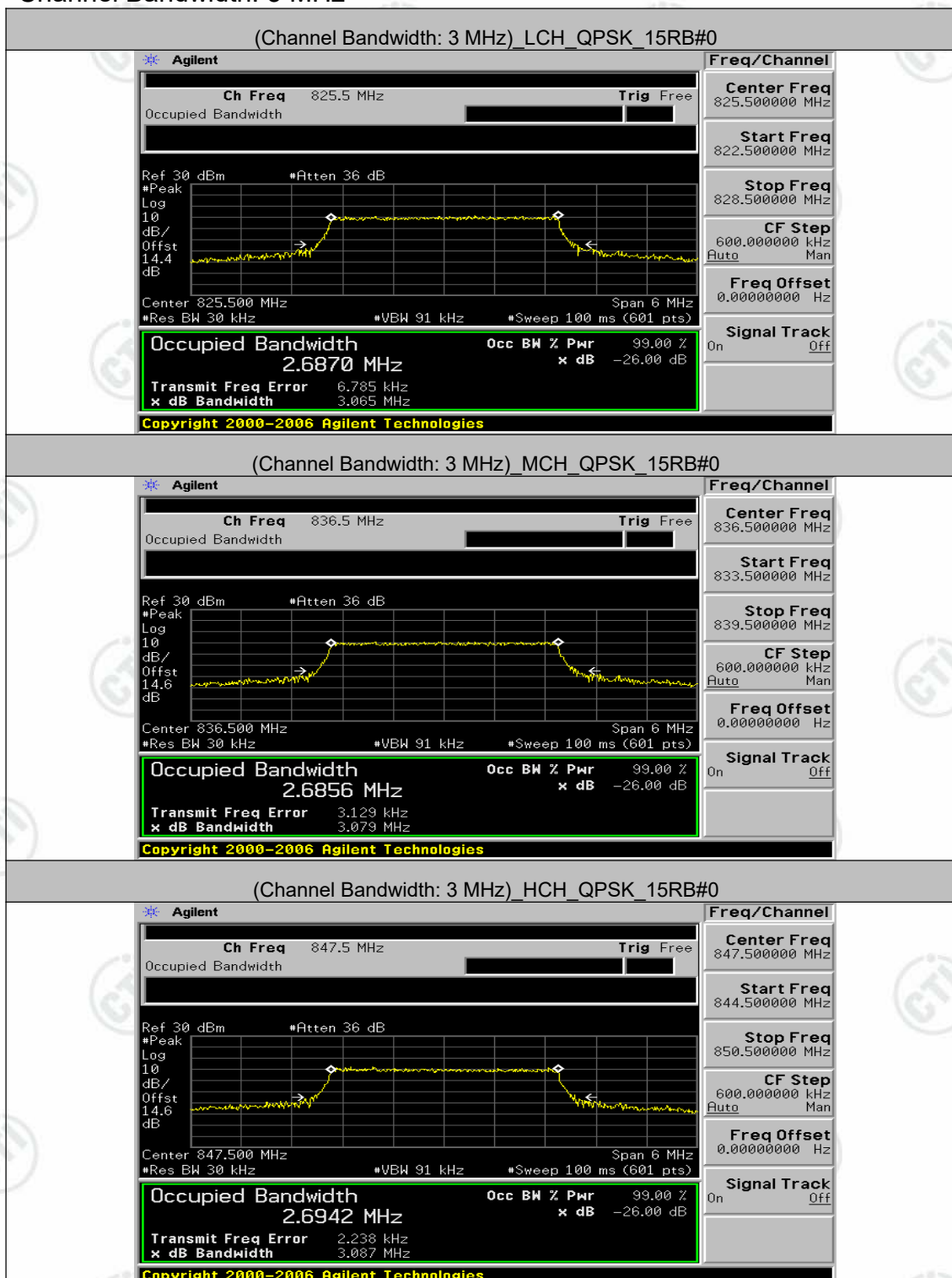
Test Graphs

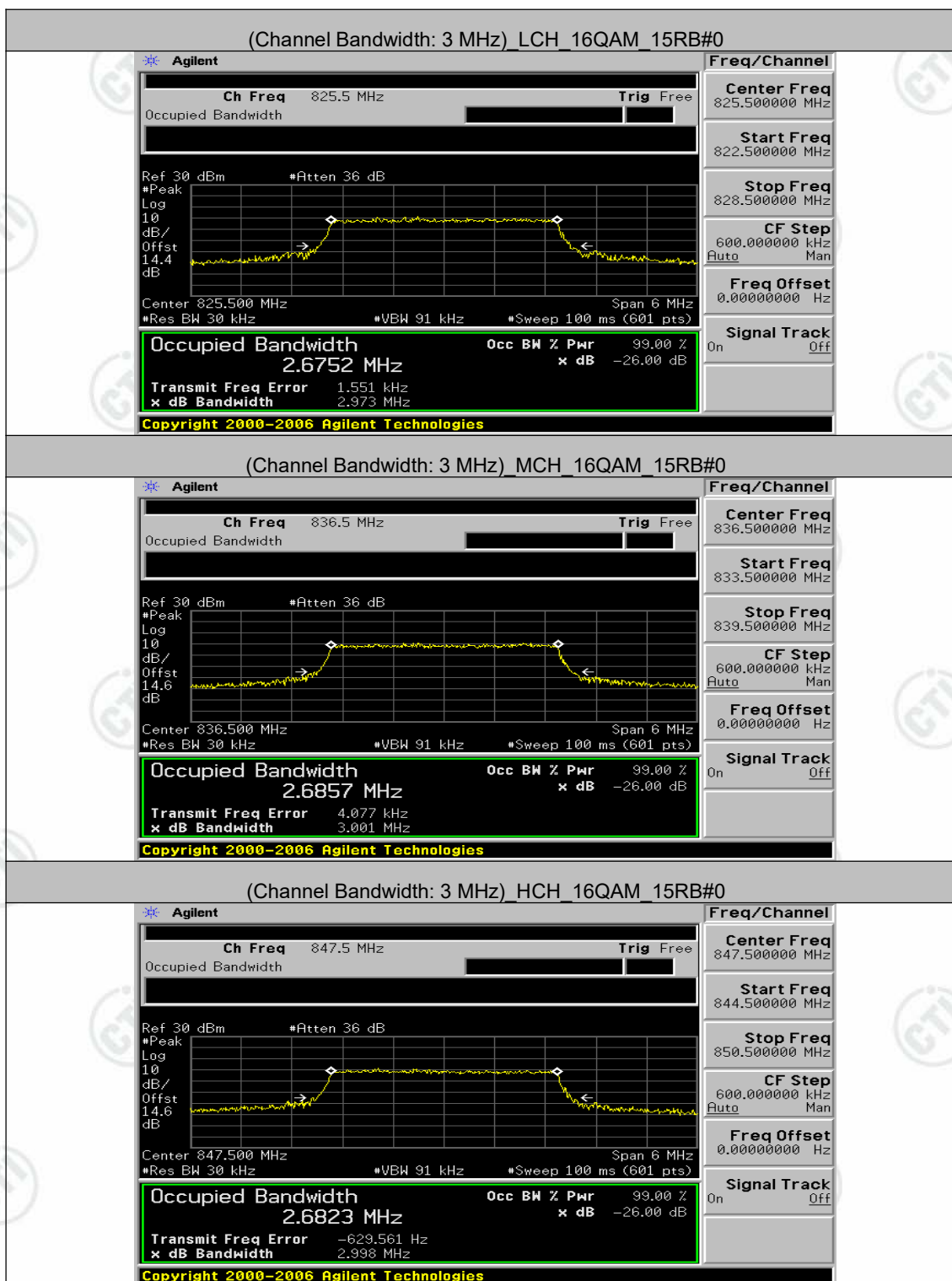
Channel Bandwidth: 1.4 MHz



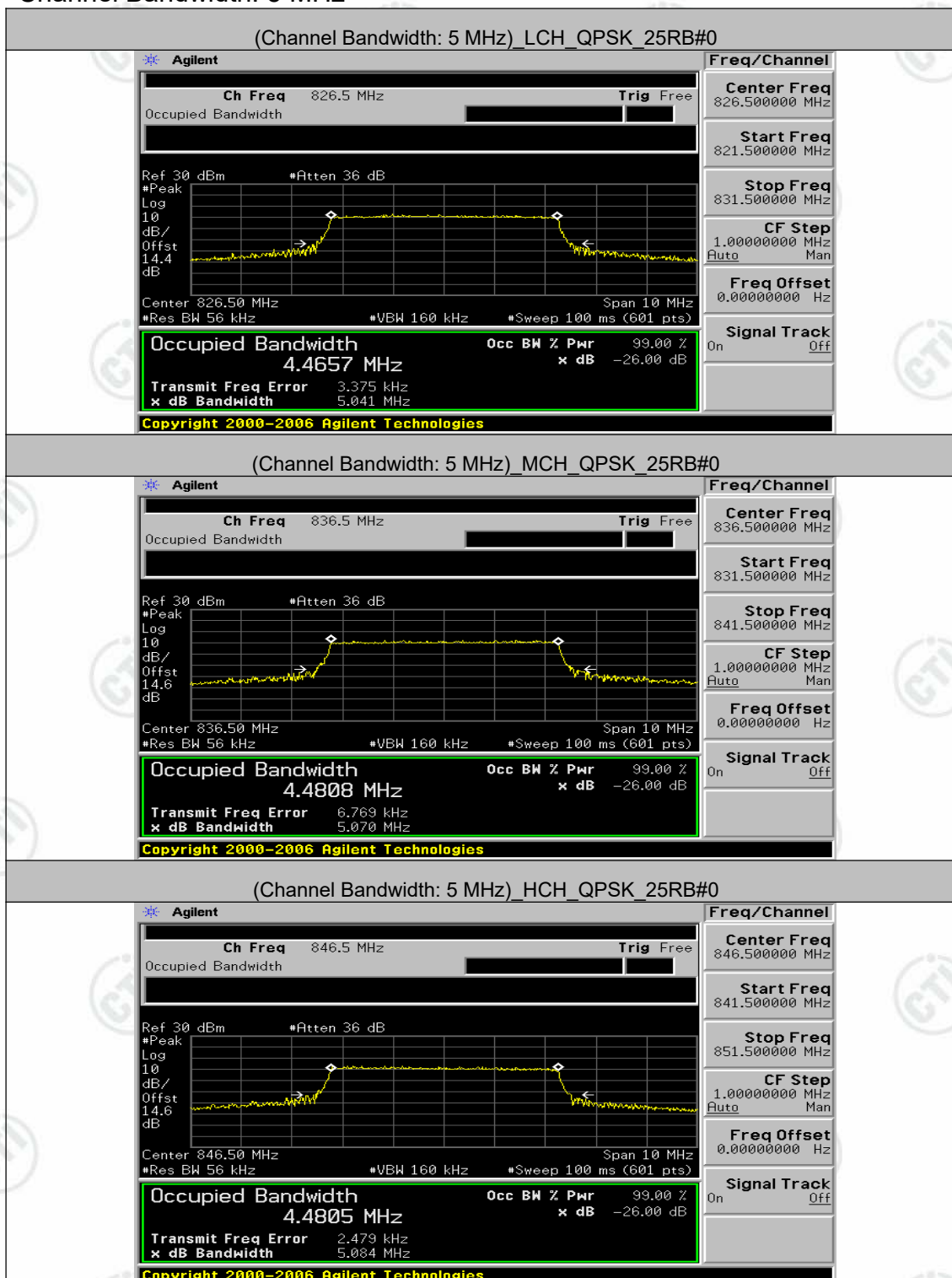


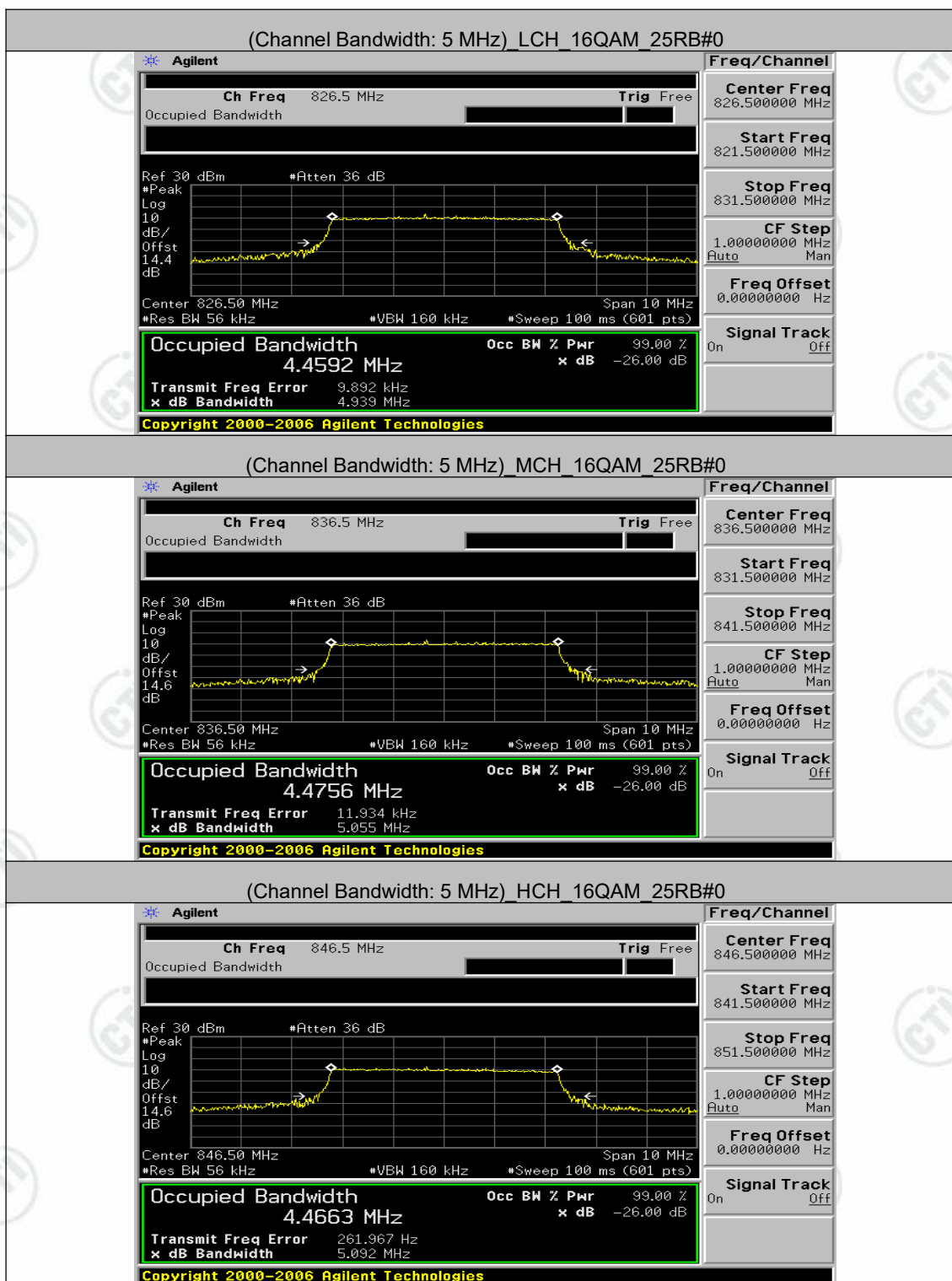
Channel Bandwidth: 3 MHz



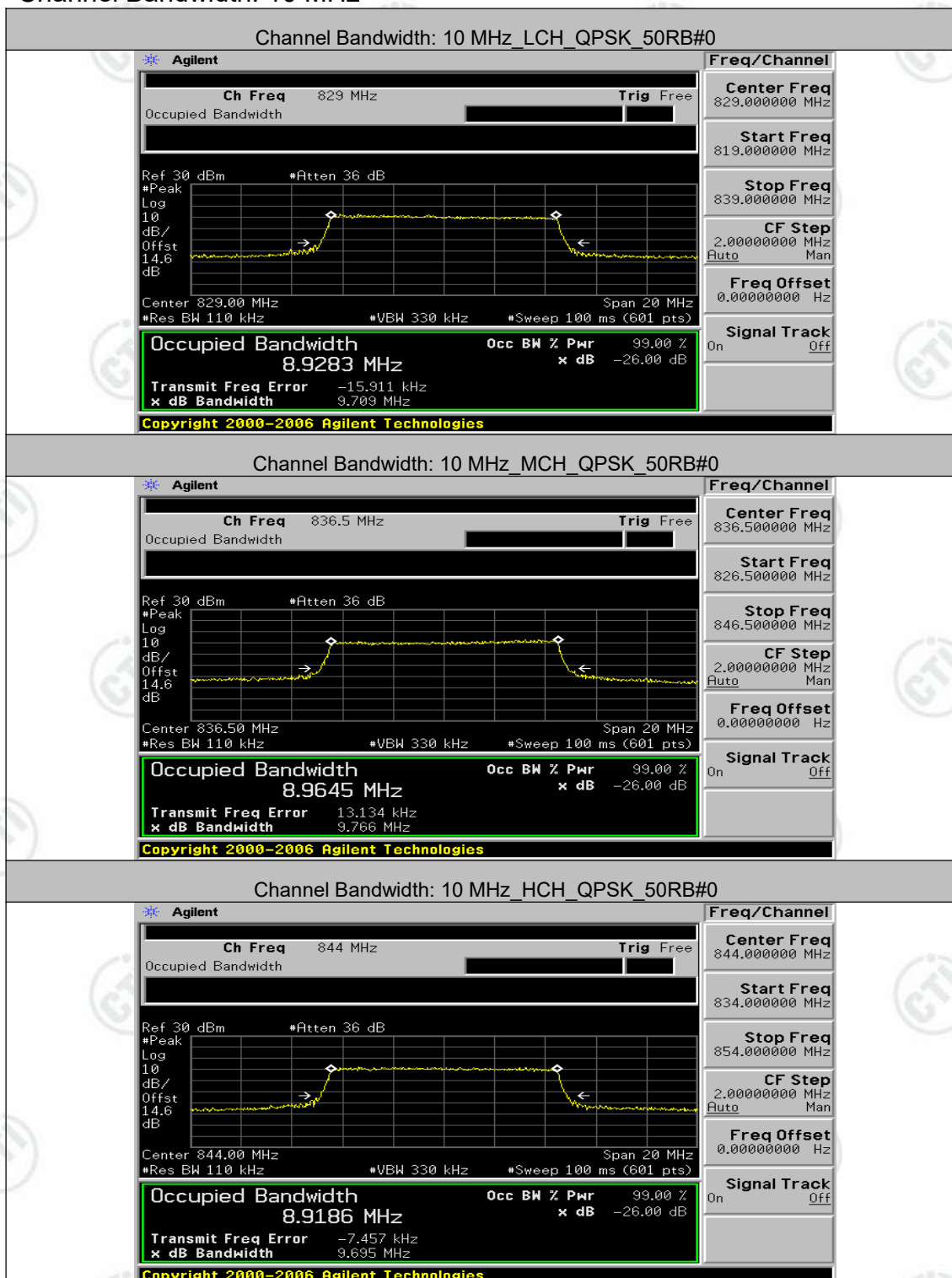


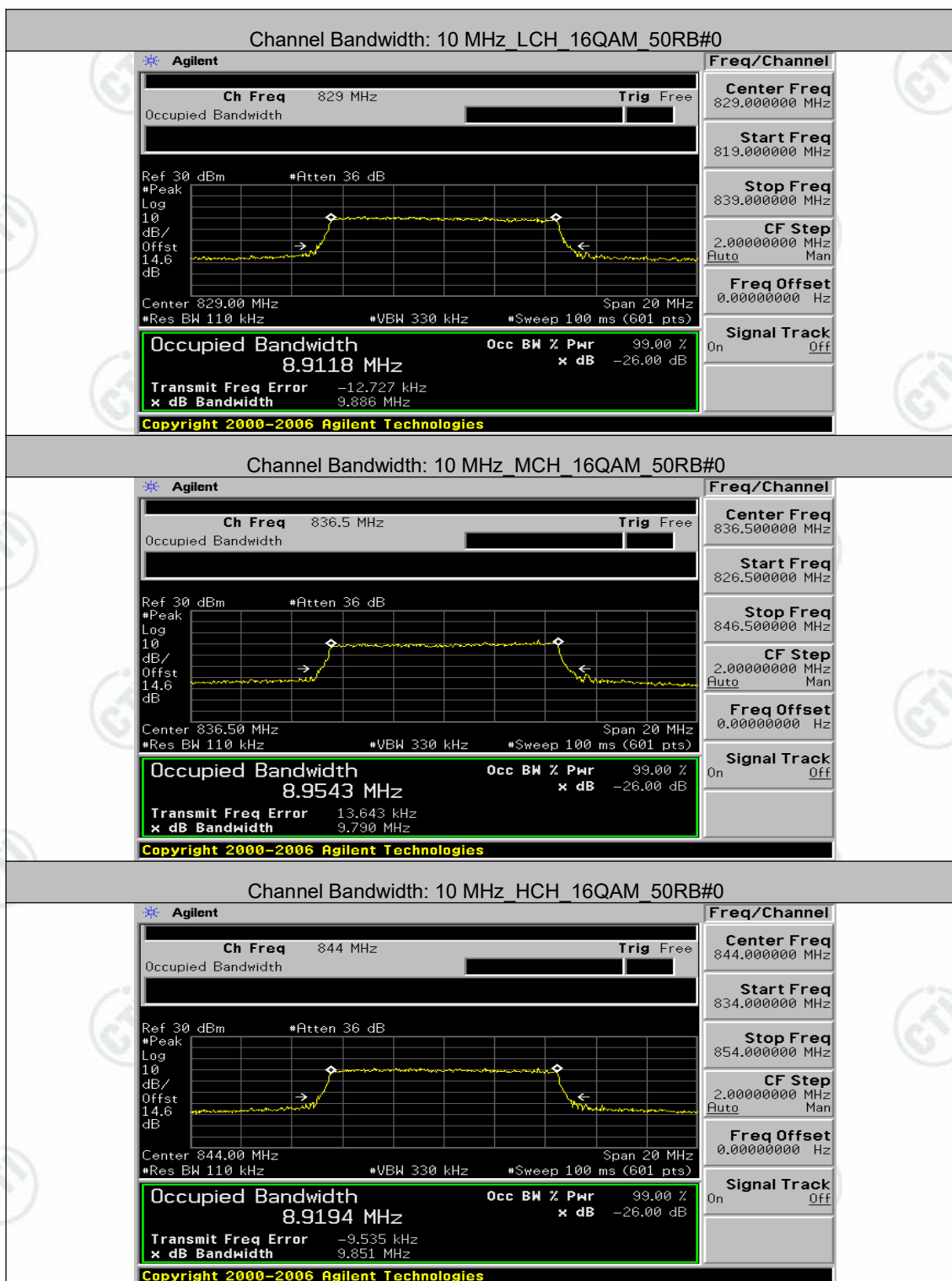
Channel Bandwidth: 5 MHz





Channel Bandwidth: 10 MHz

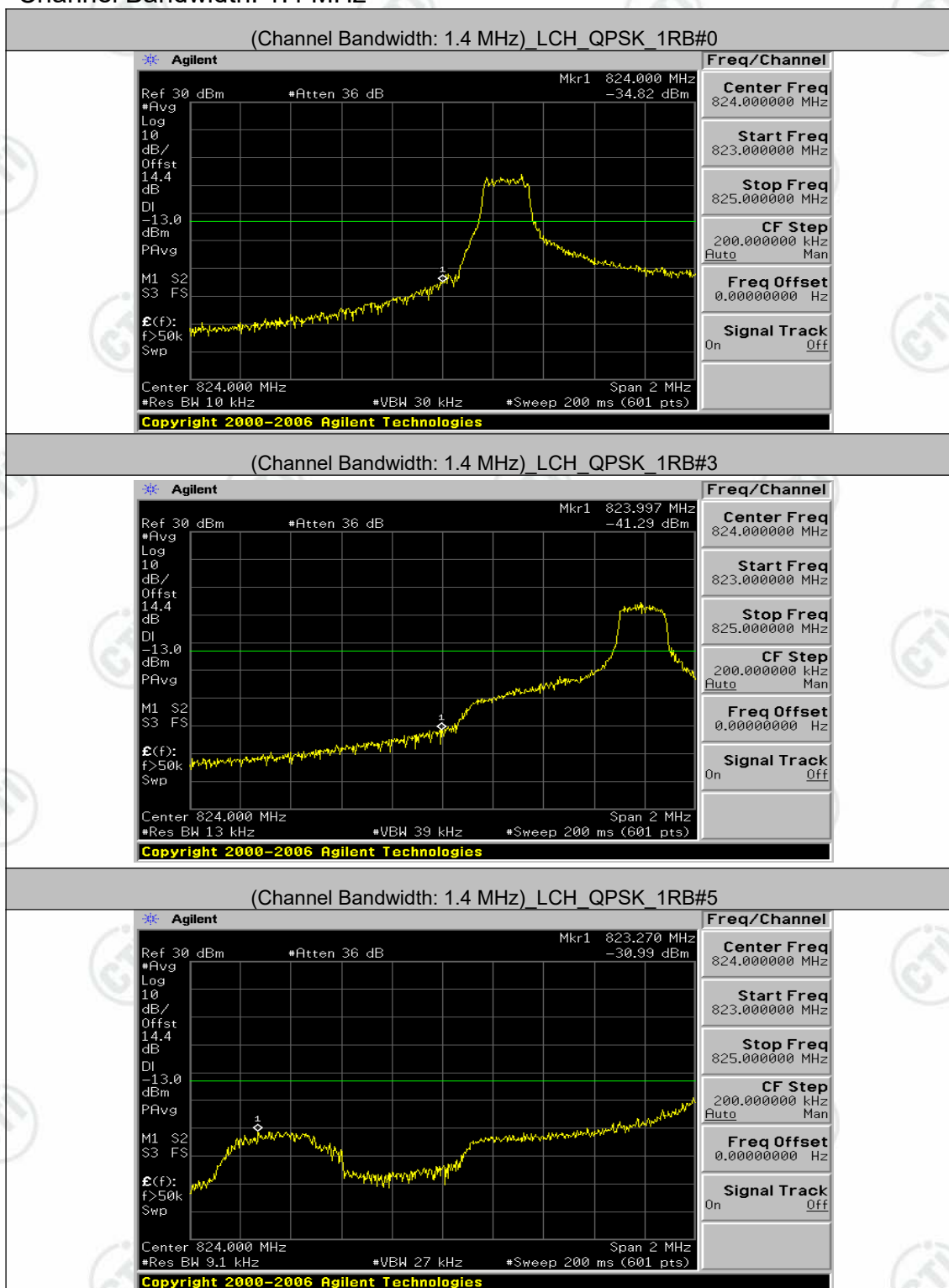


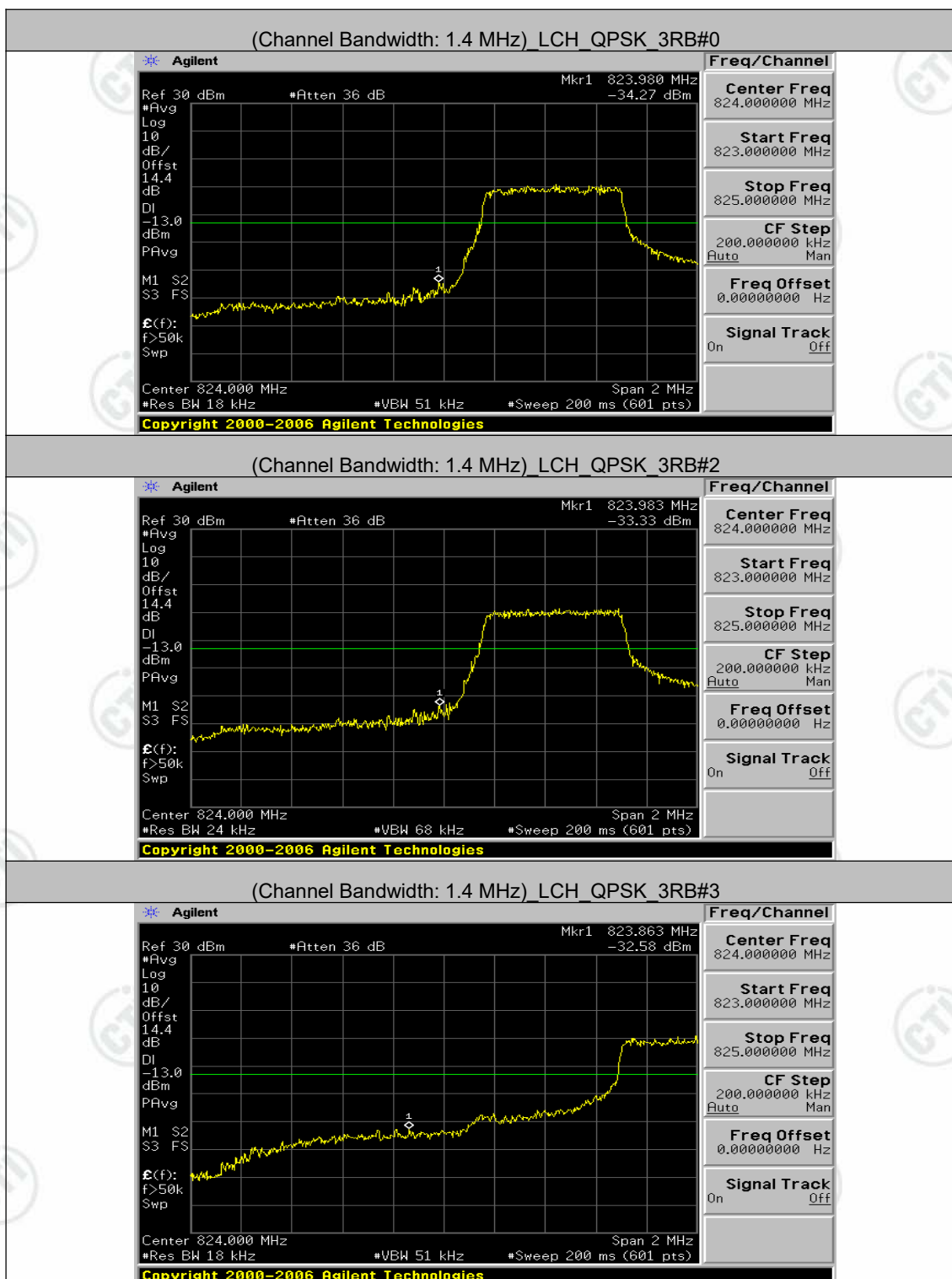


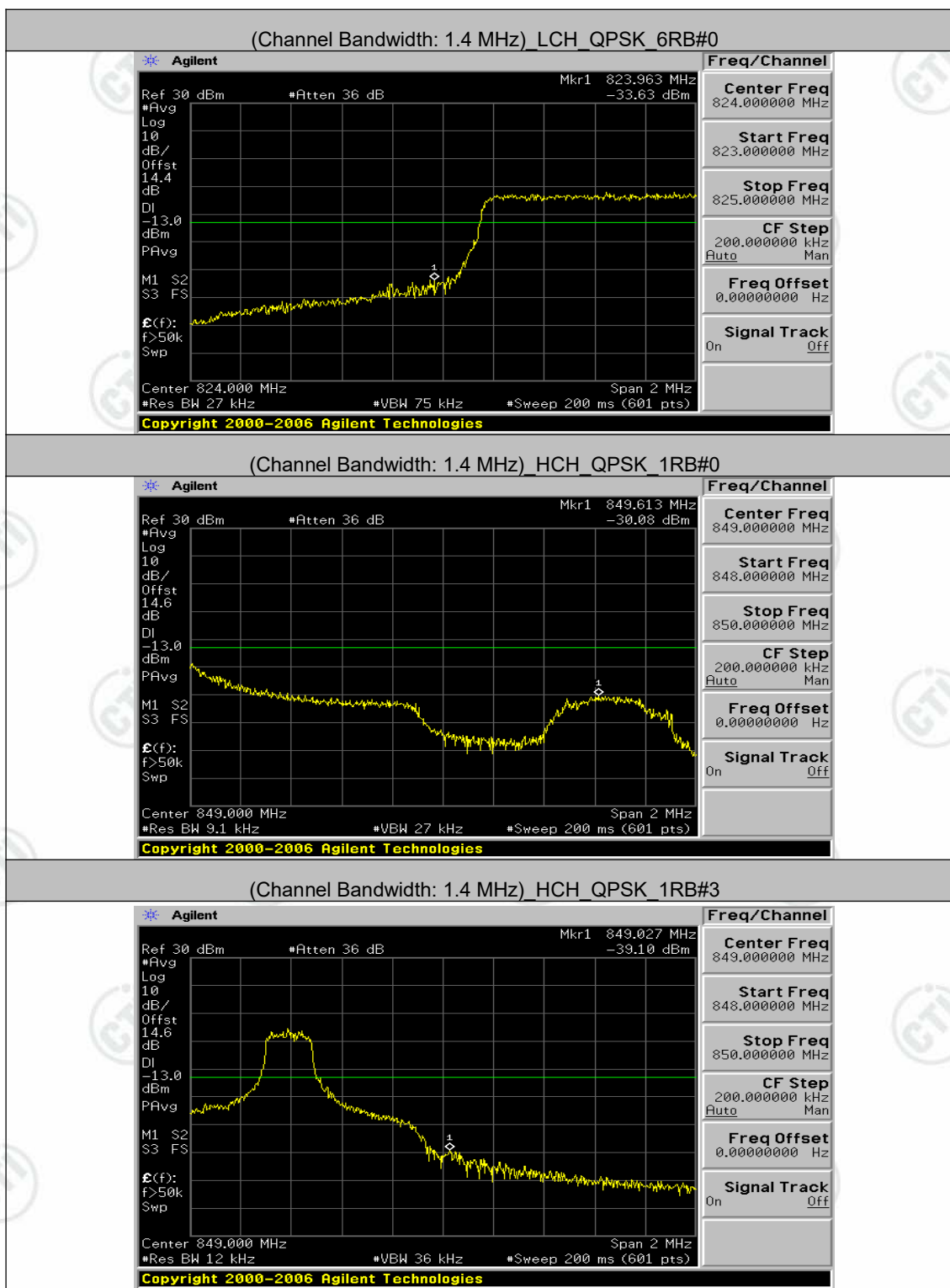
Appendix C): Band Edge

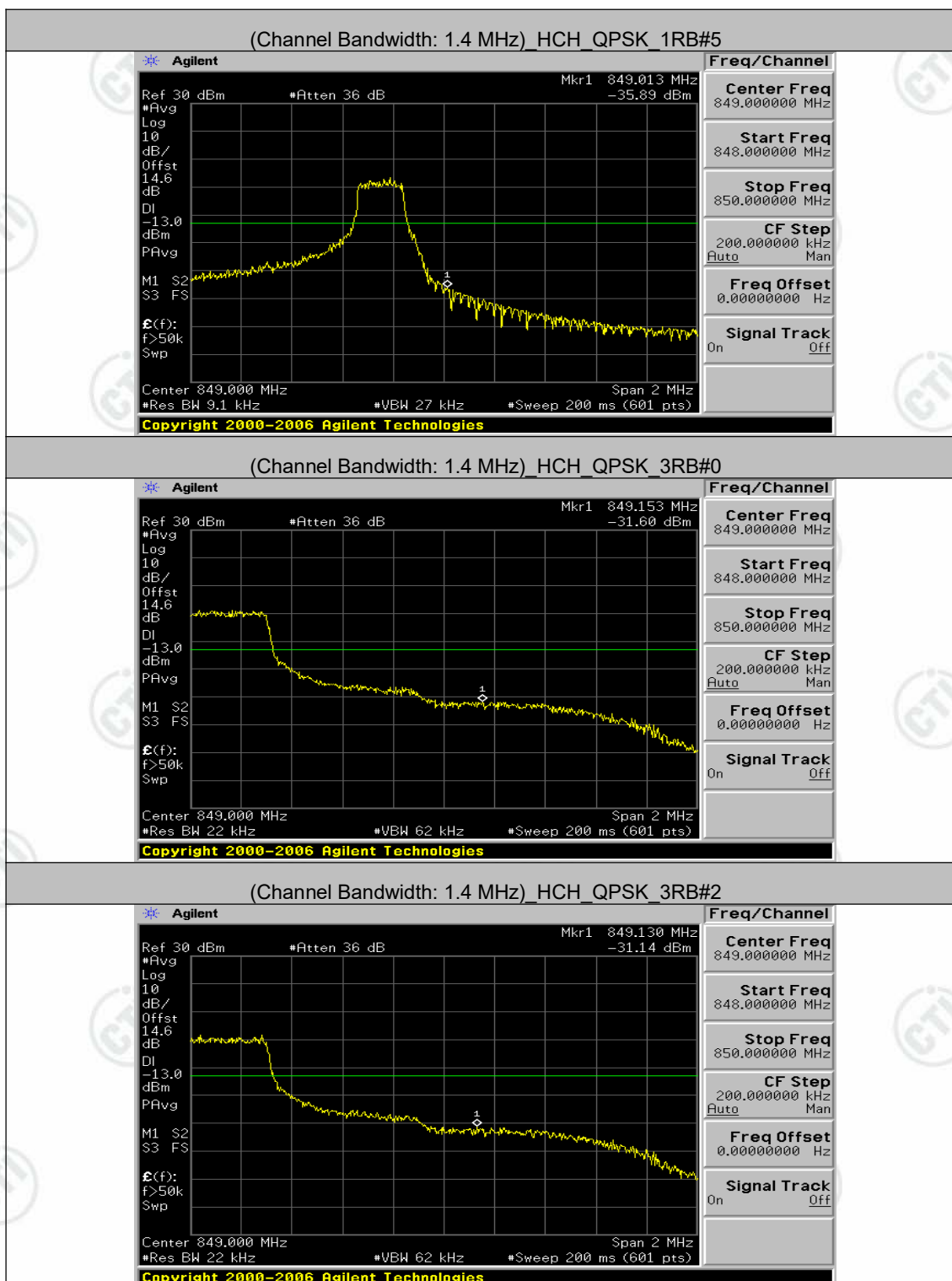
Test Graphs

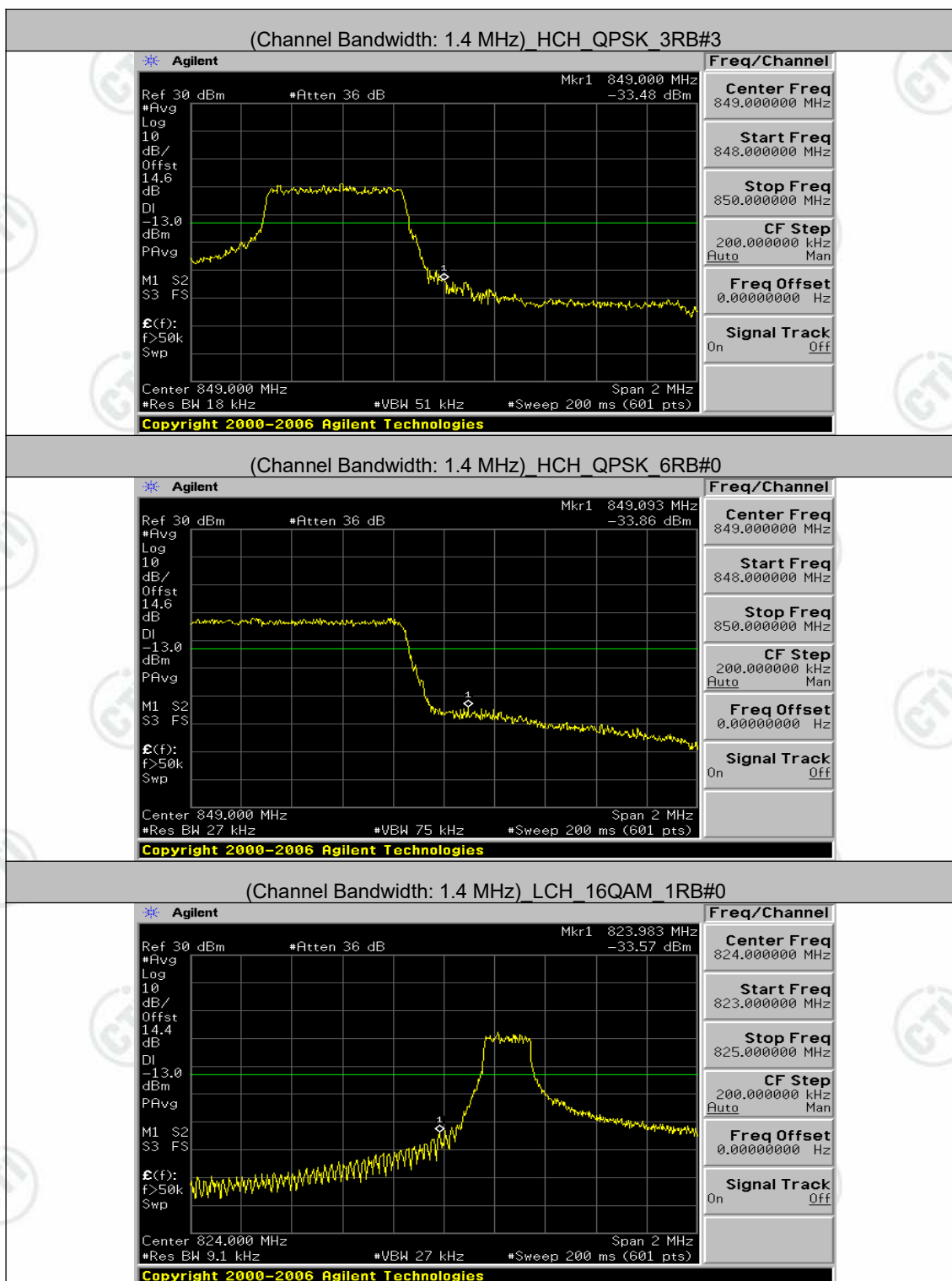
Channel Bandwidth: 1.4 MHz

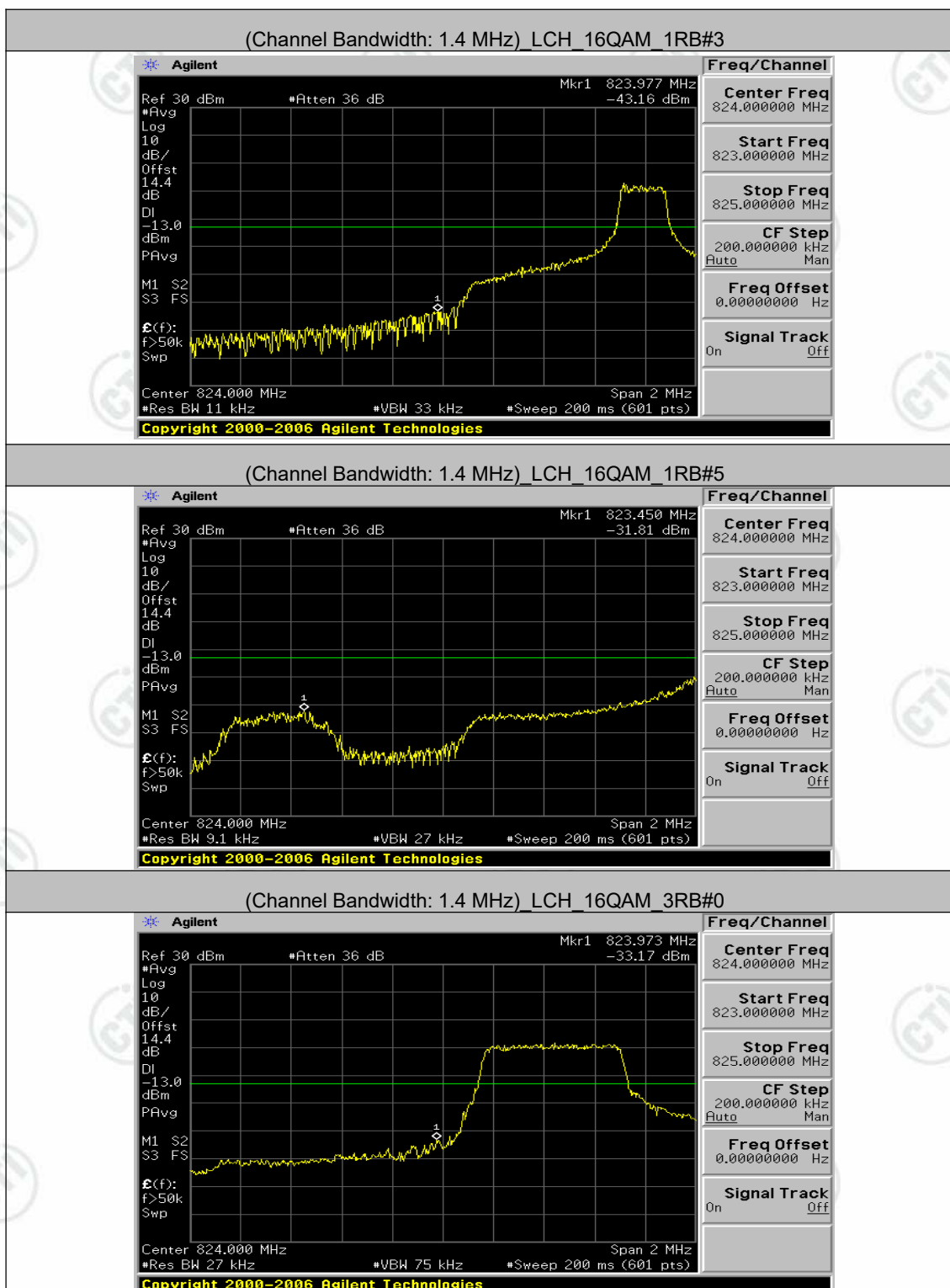


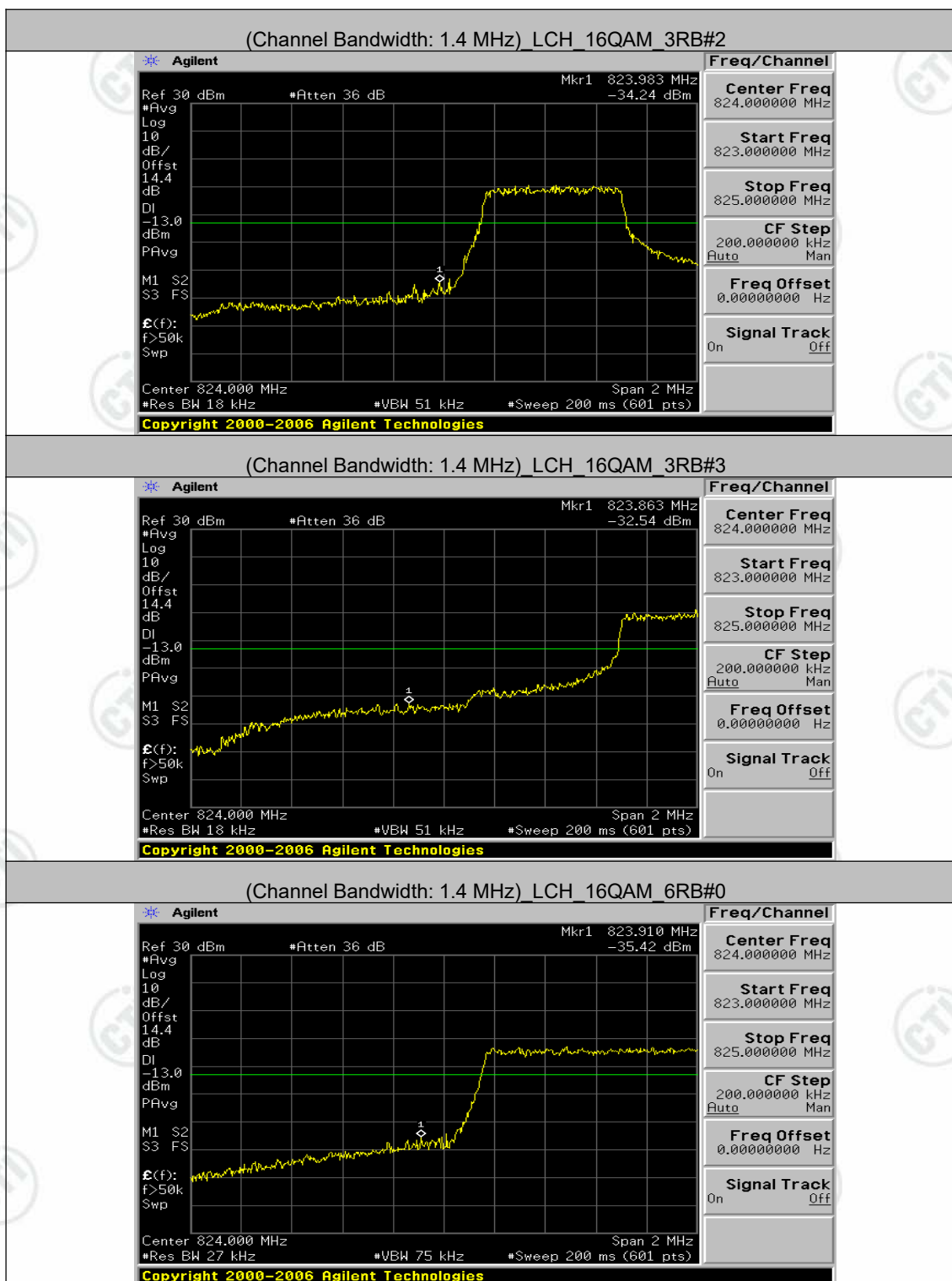


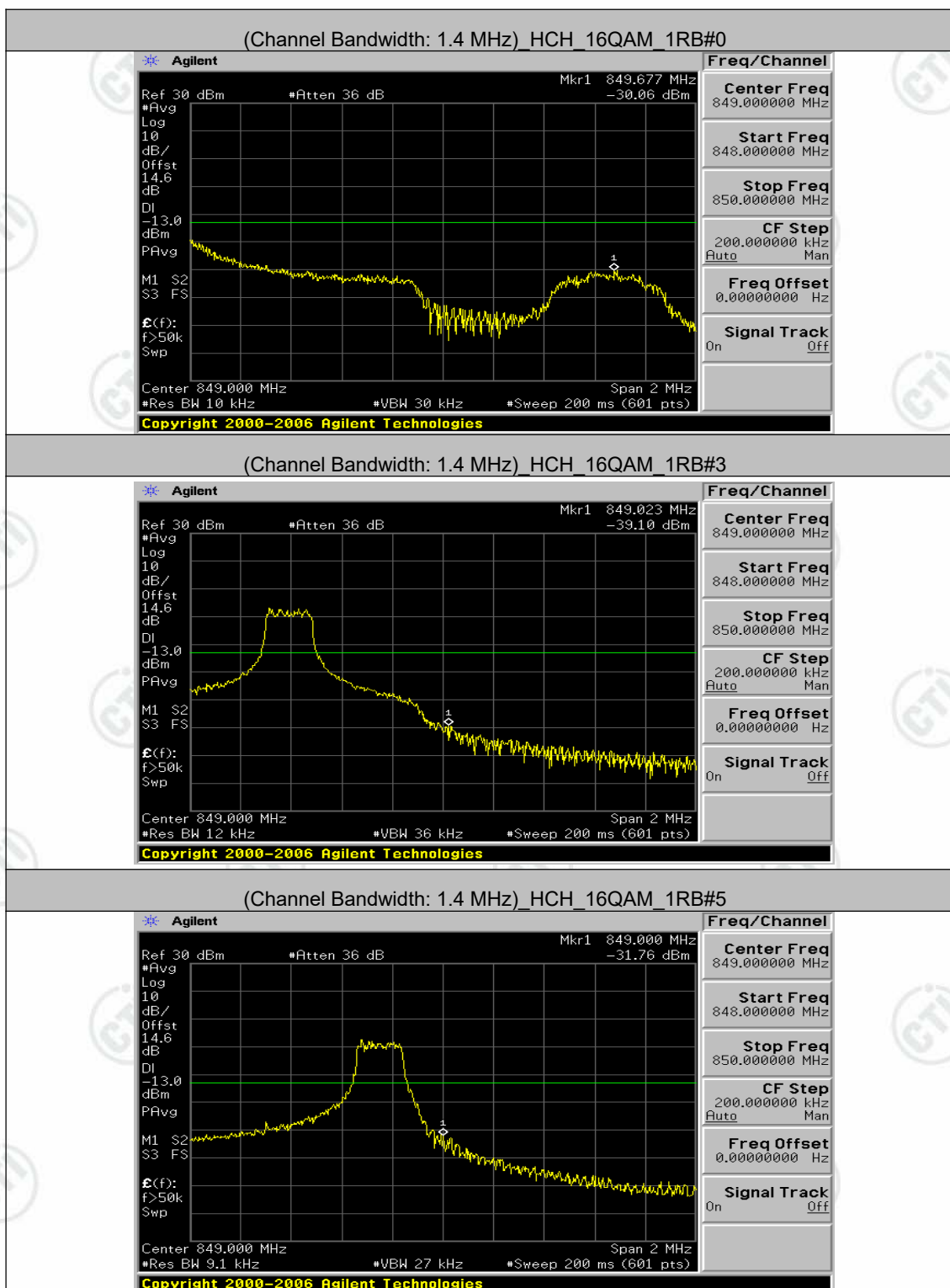


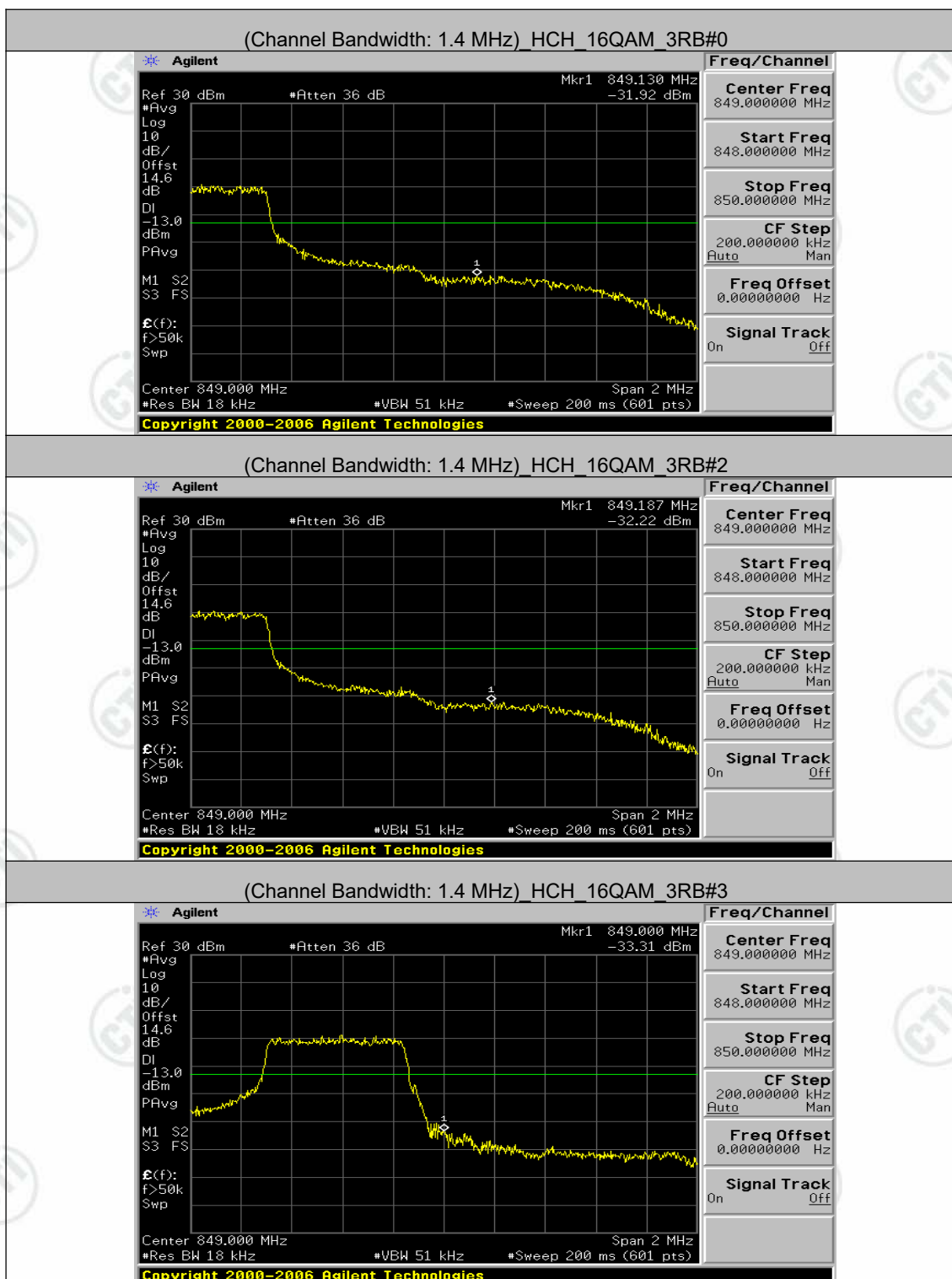


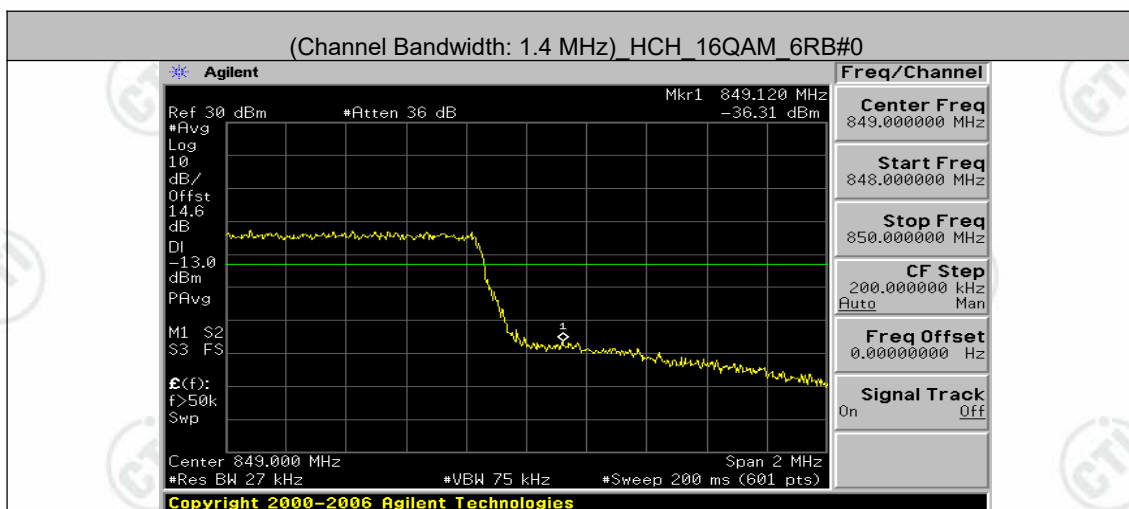




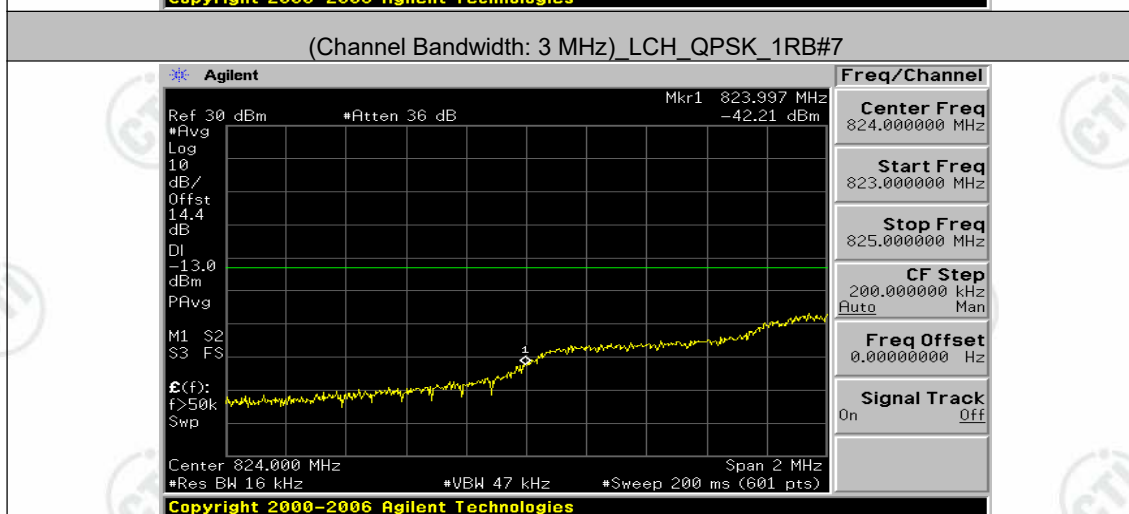
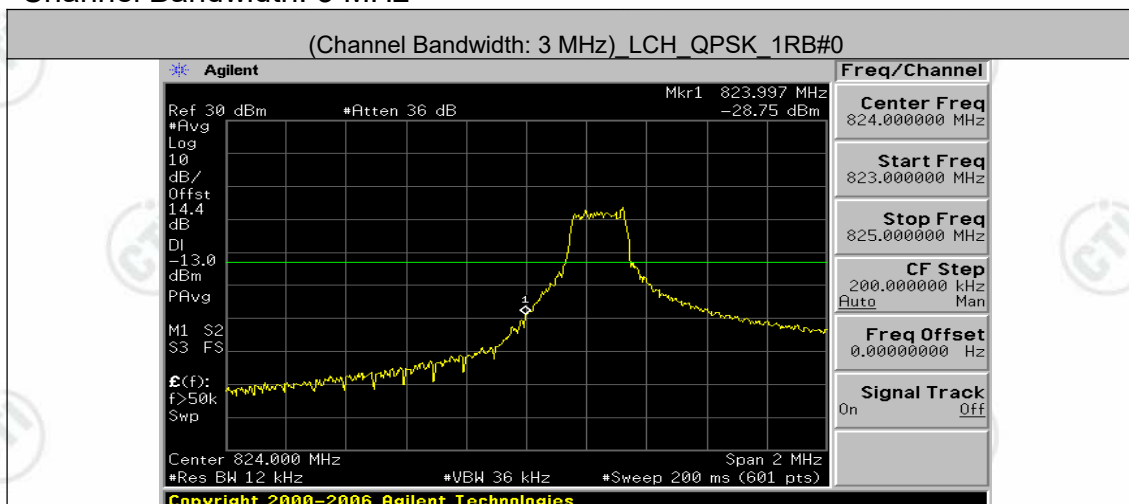


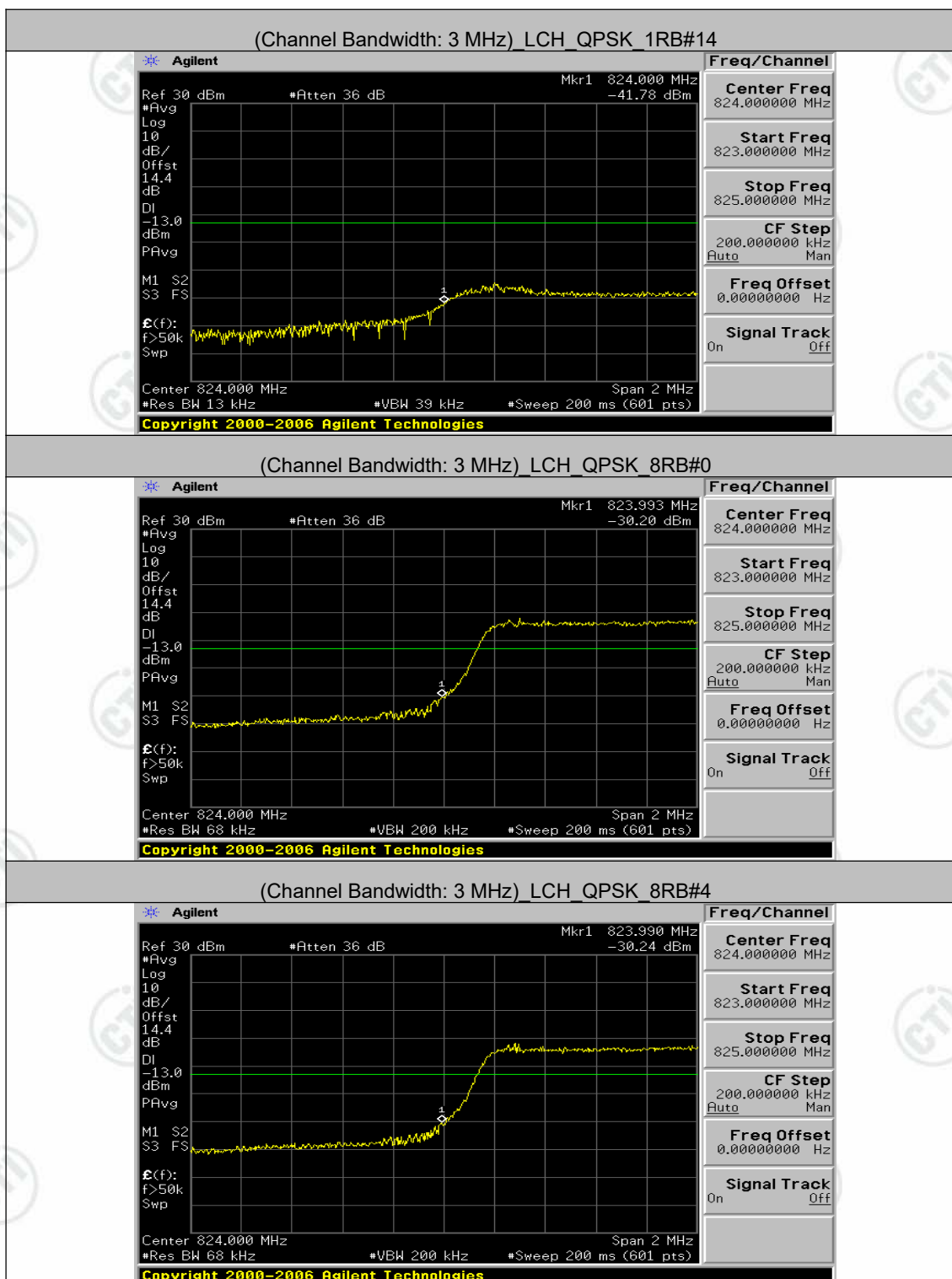


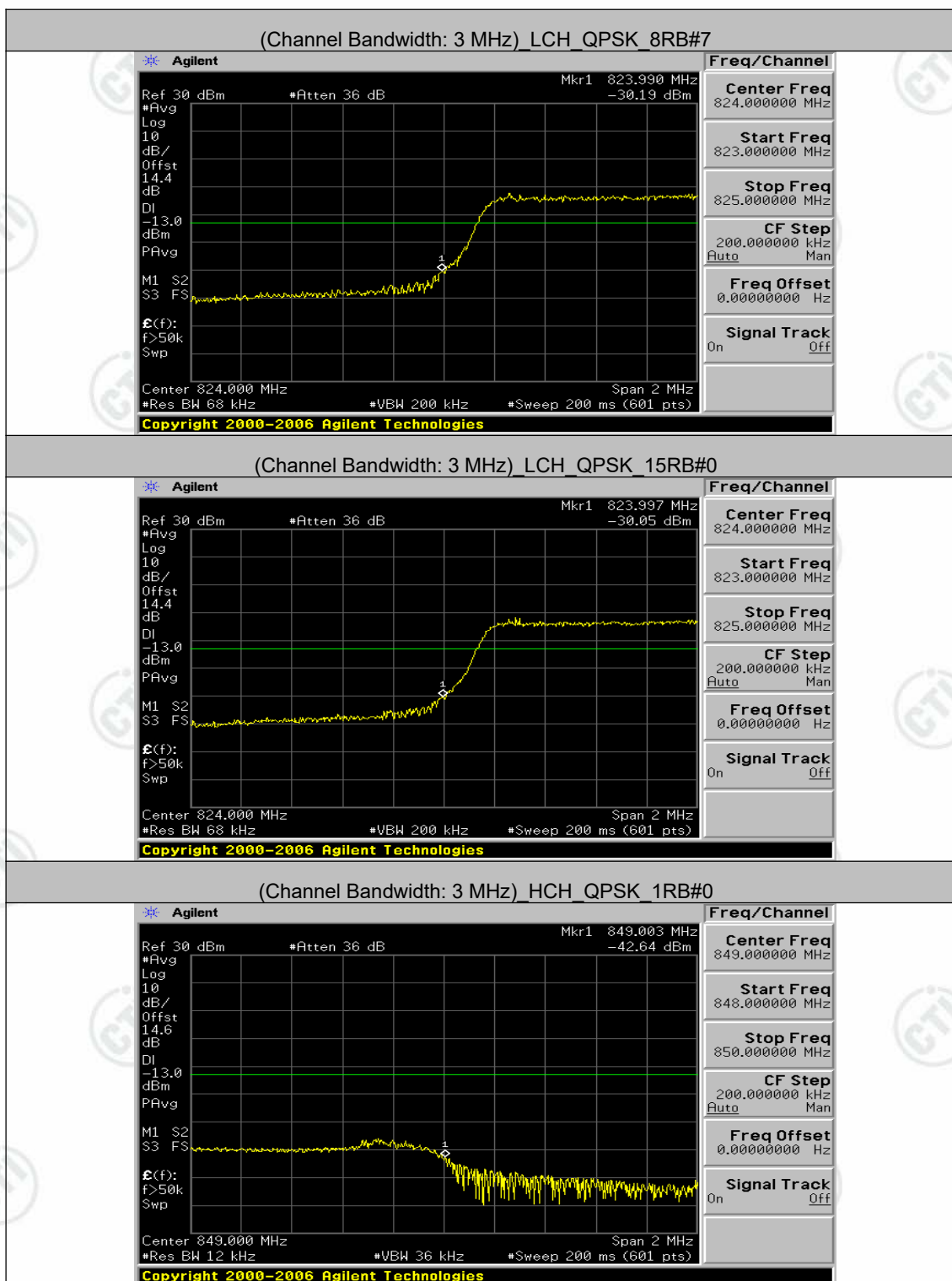


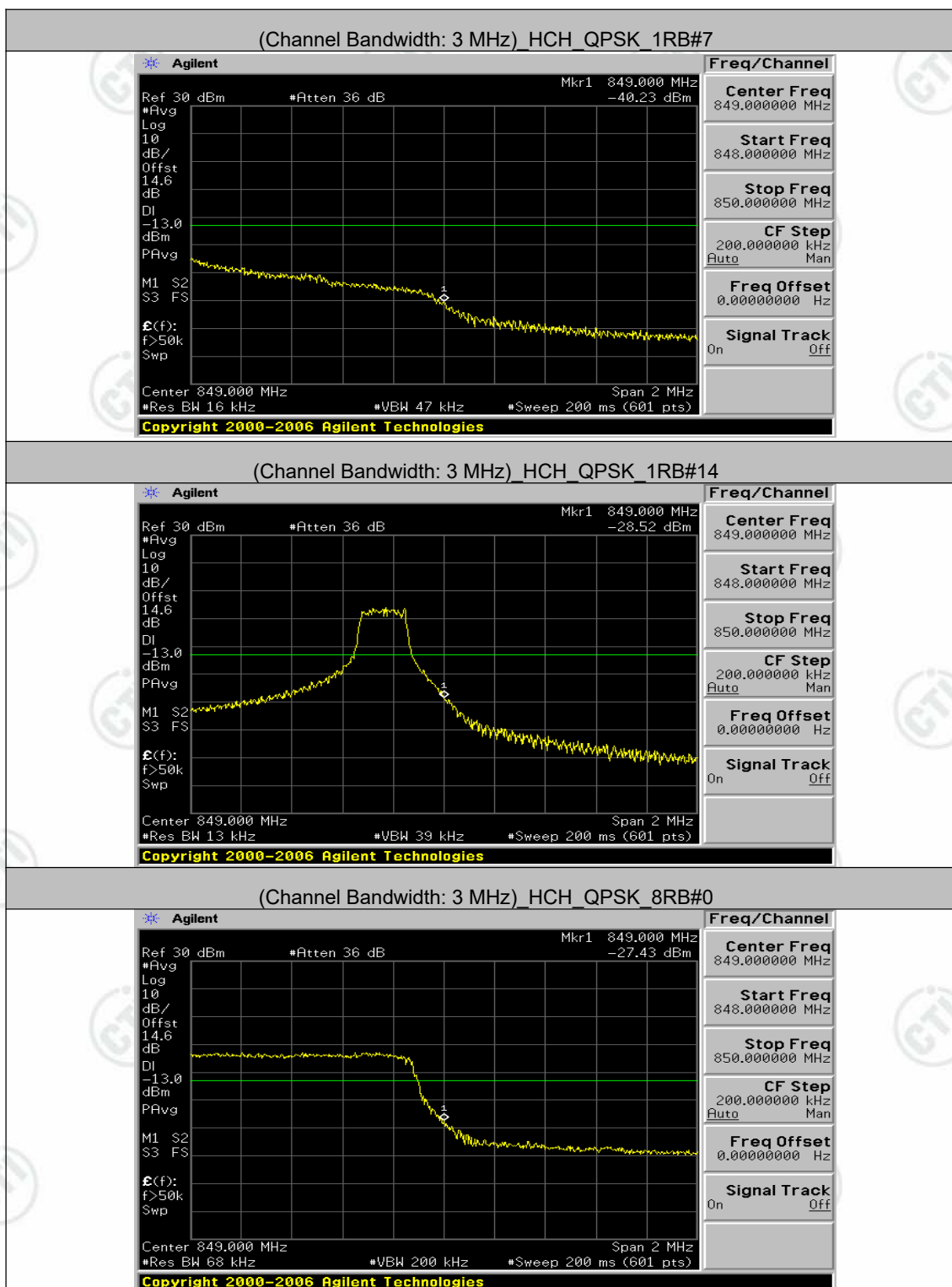


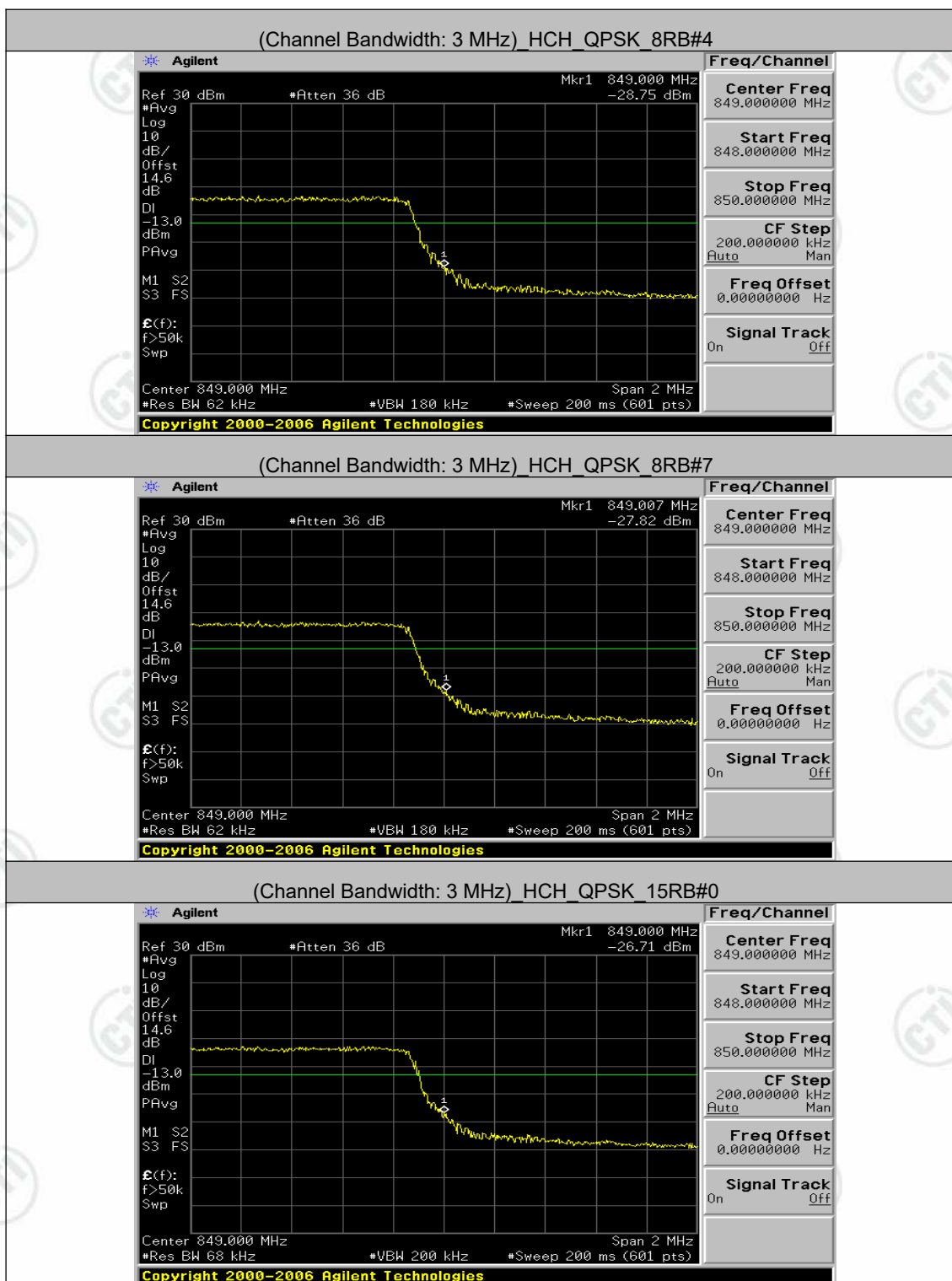
Channel Bandwidth: 3 MHz

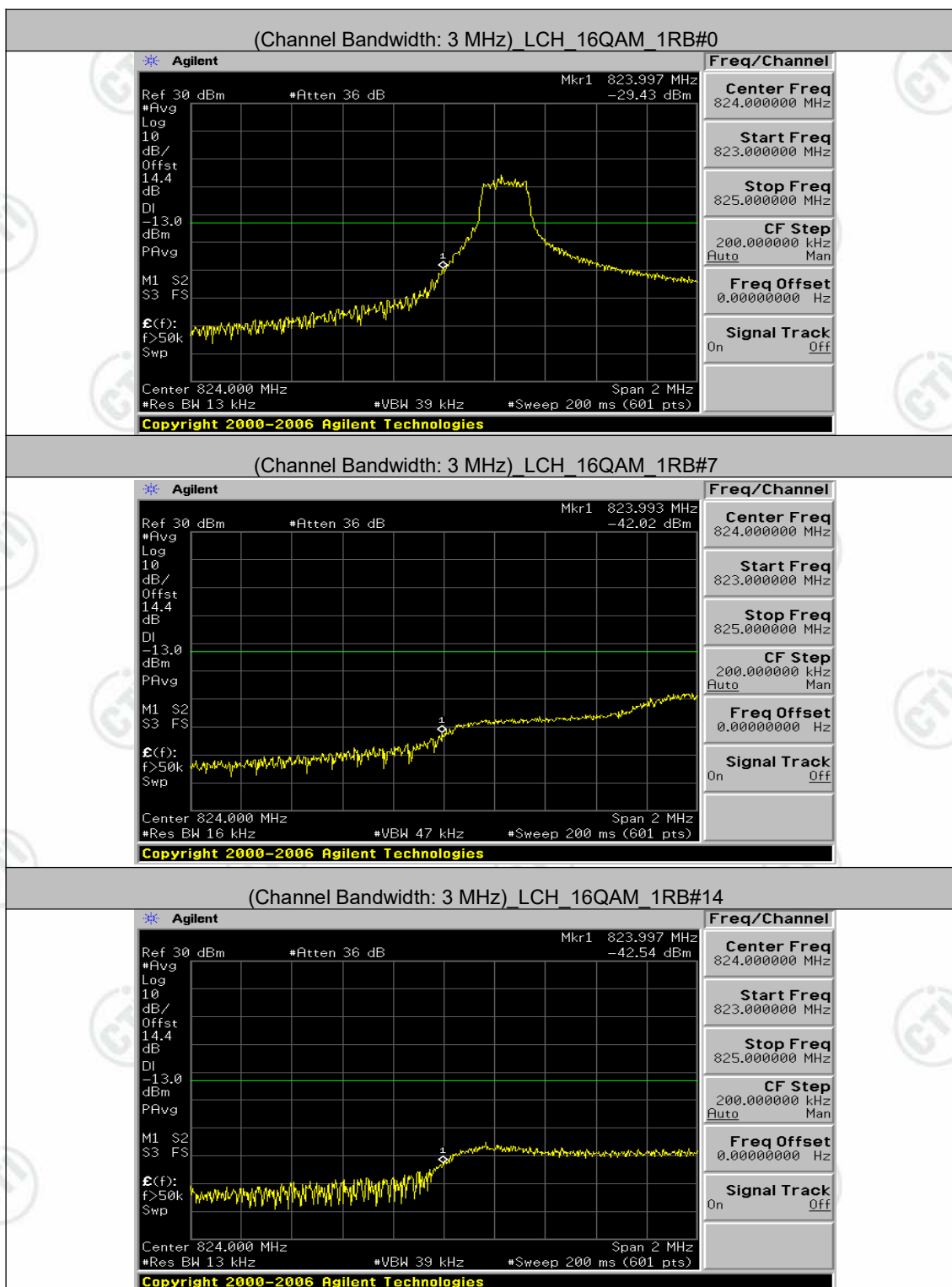


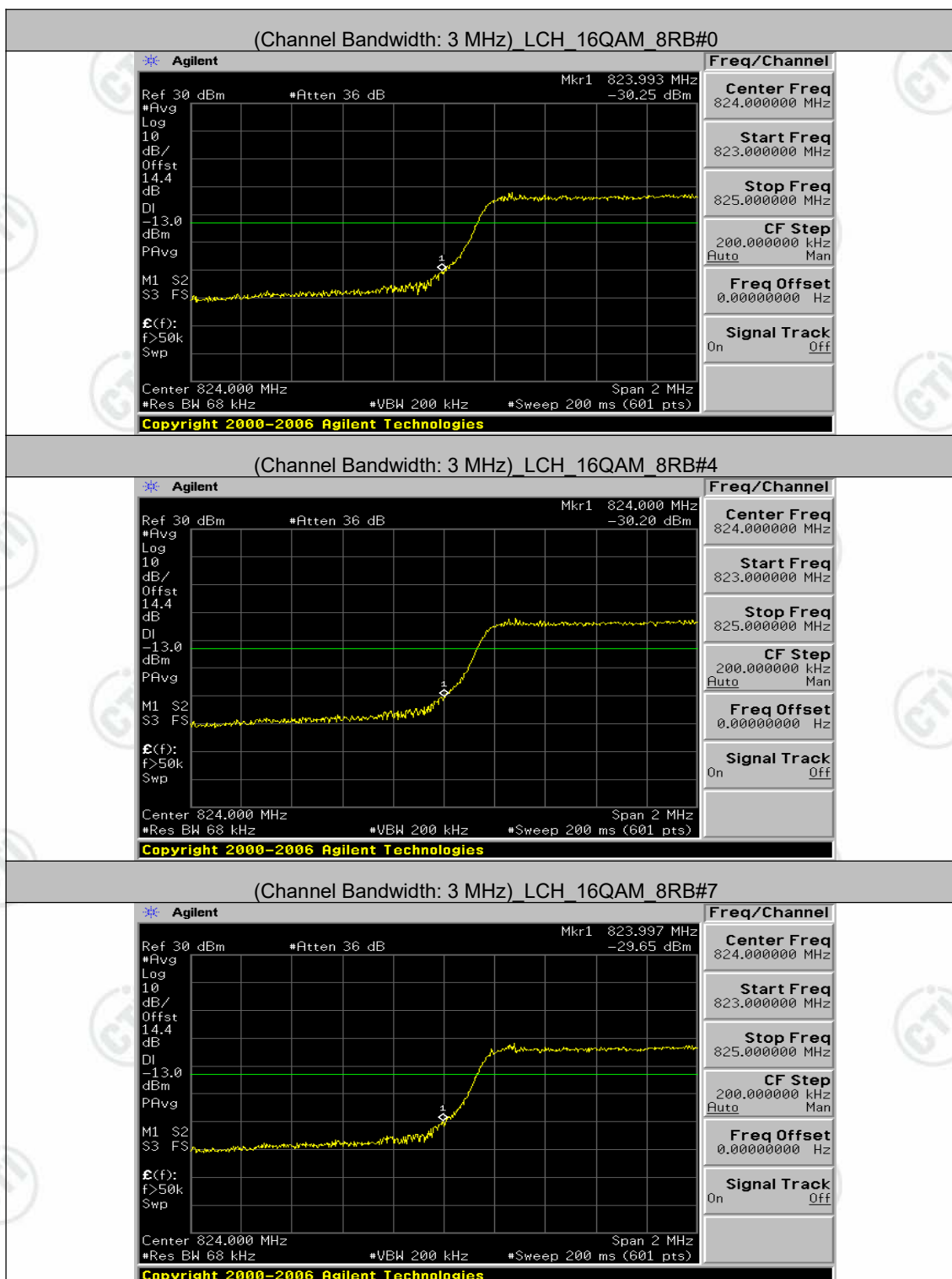


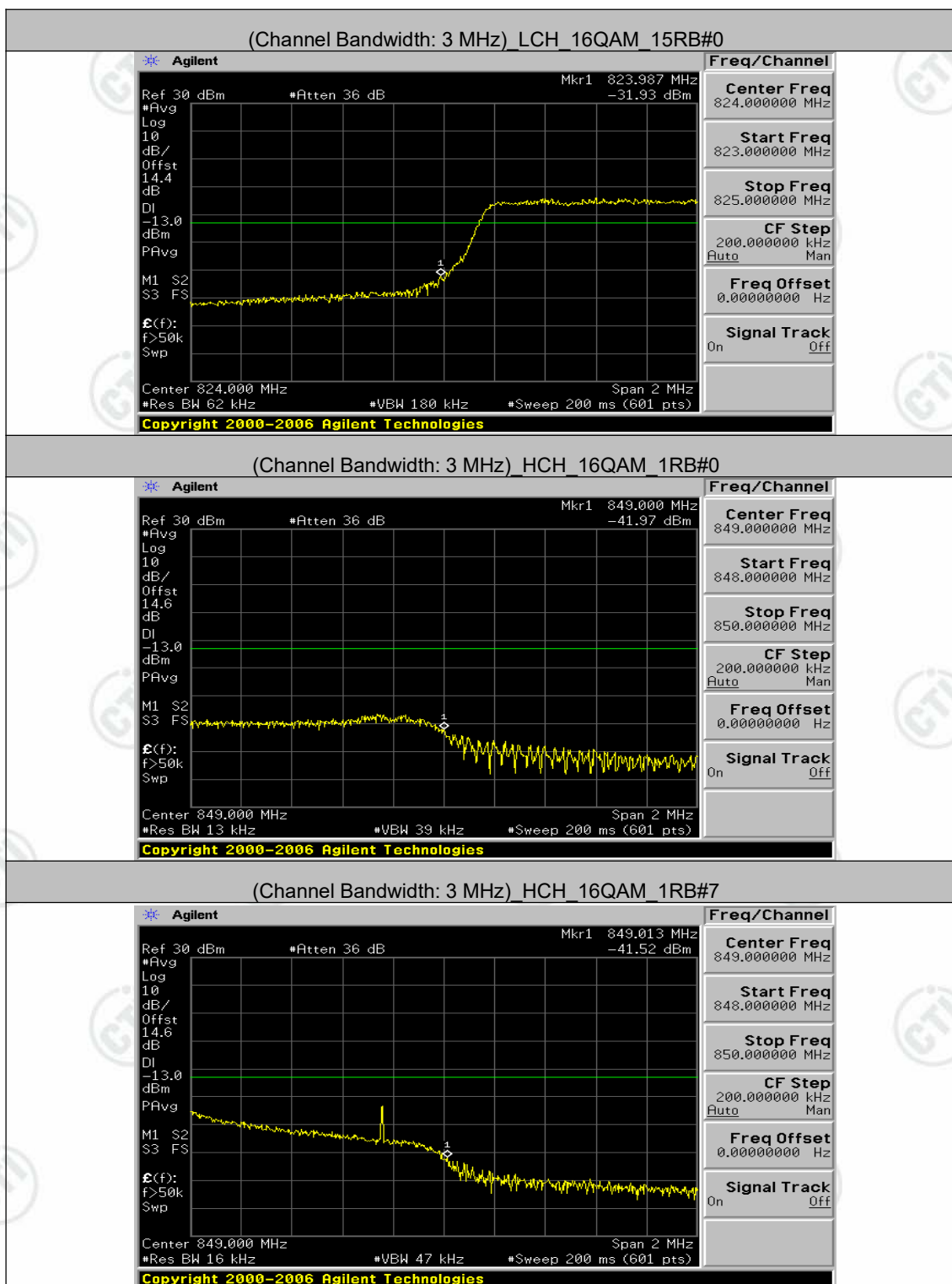


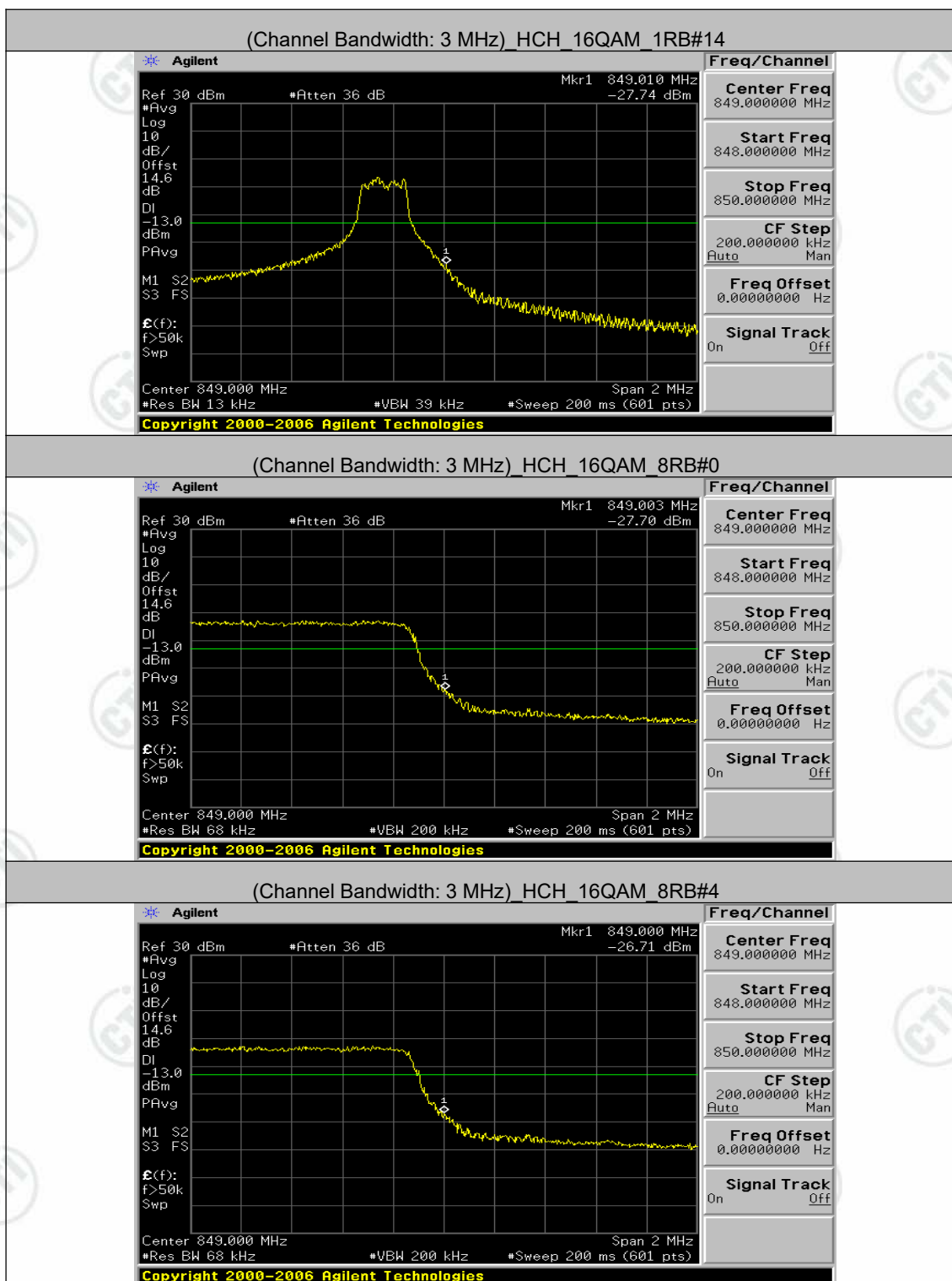


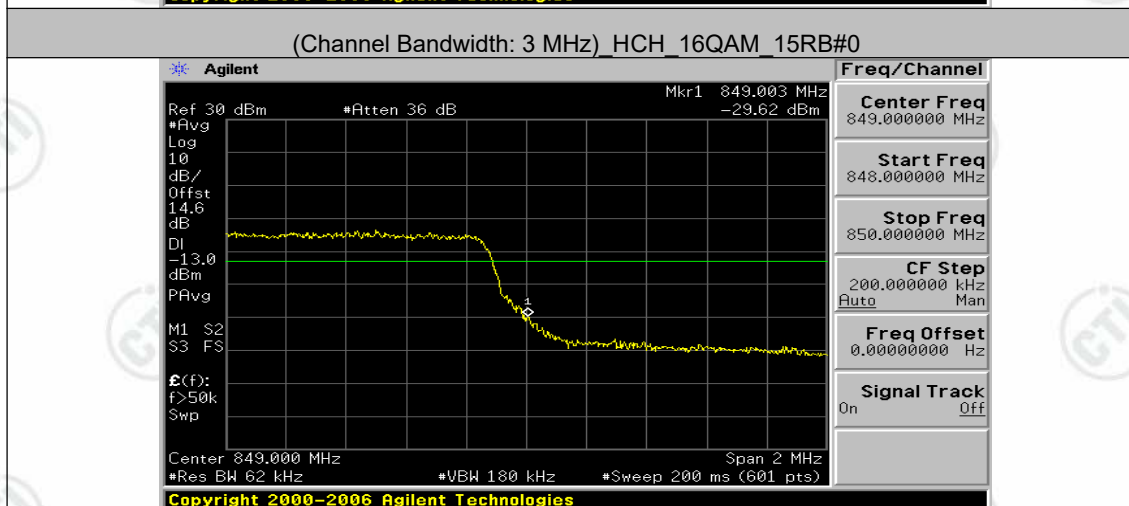
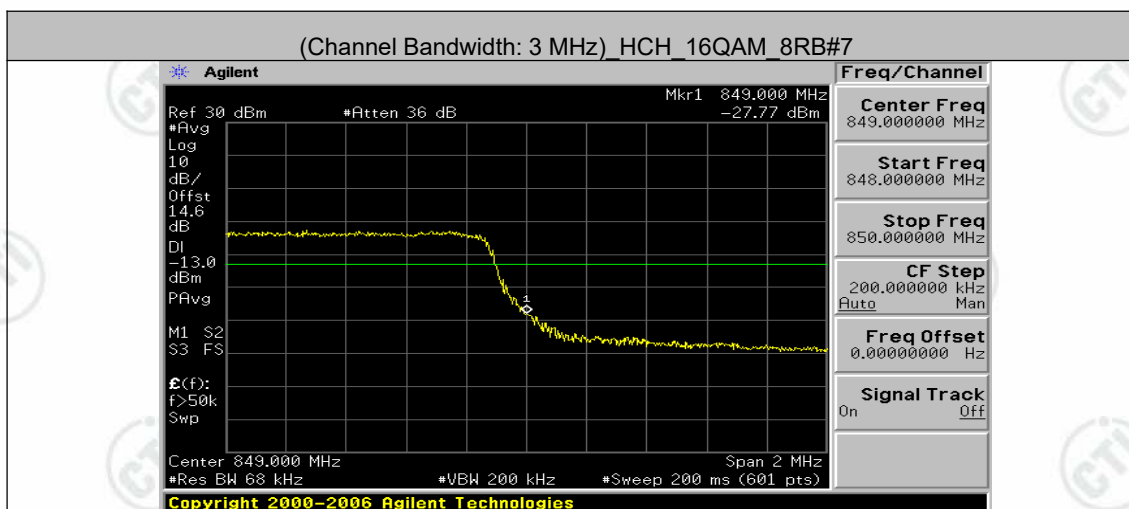




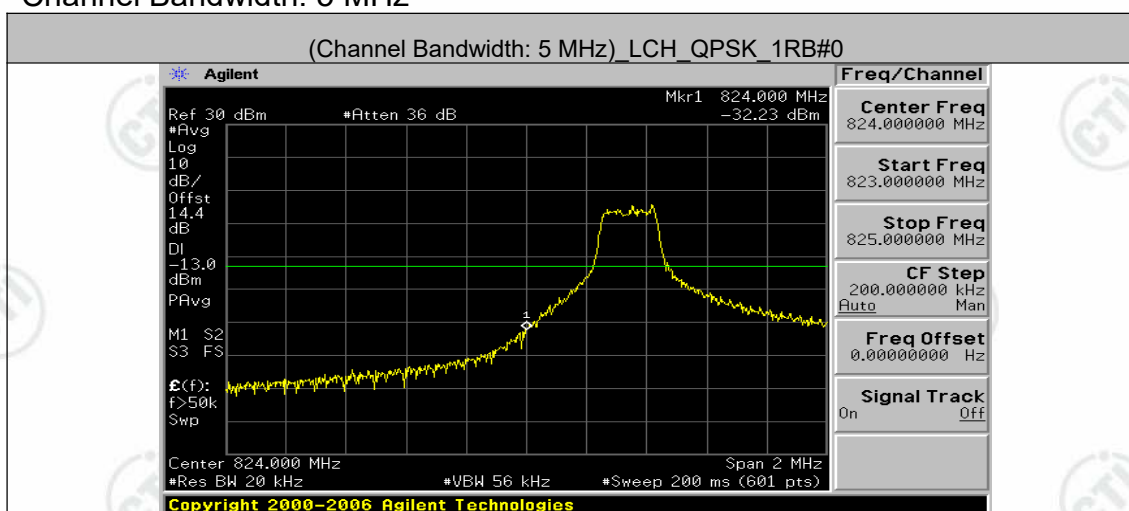


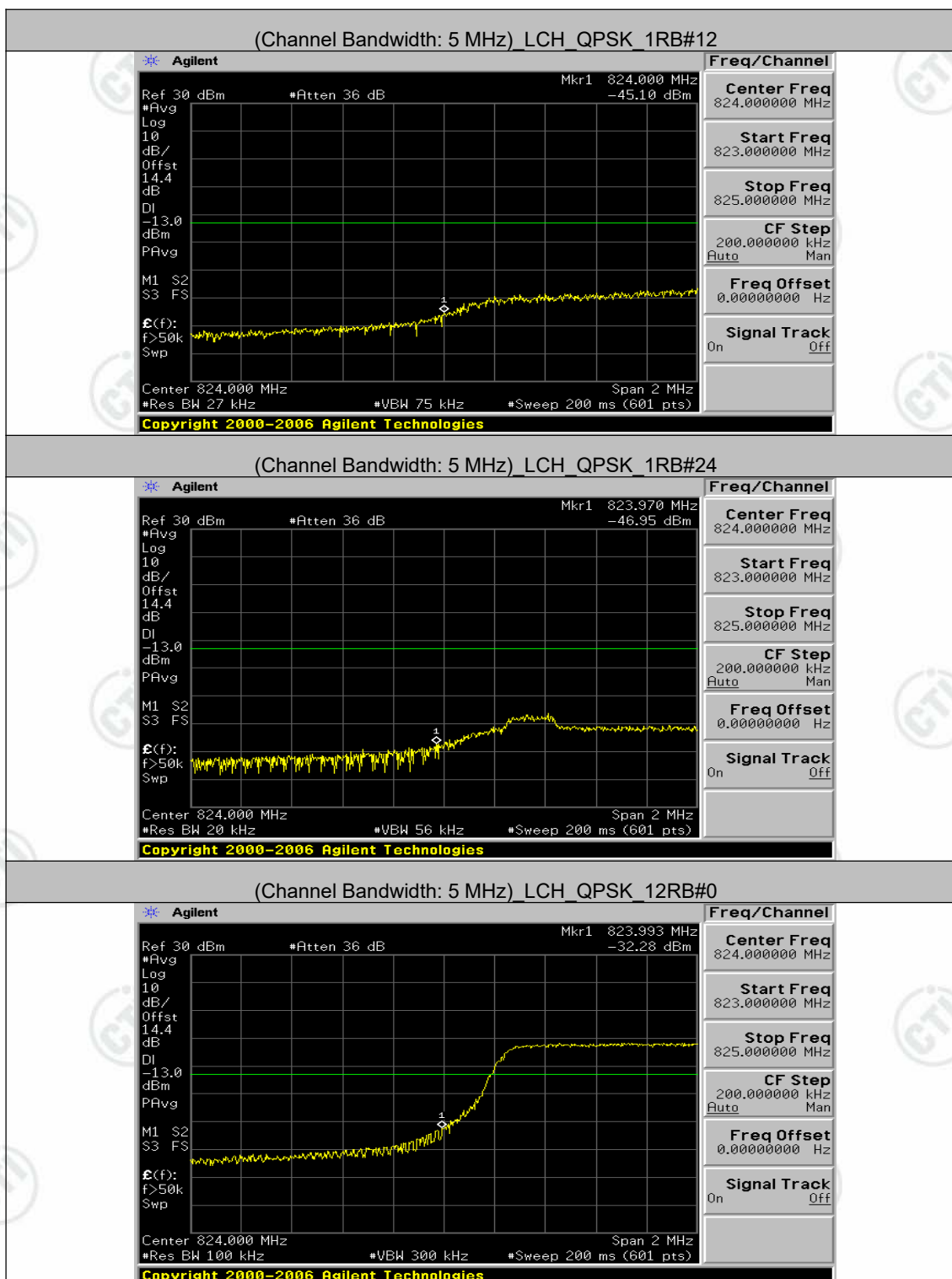


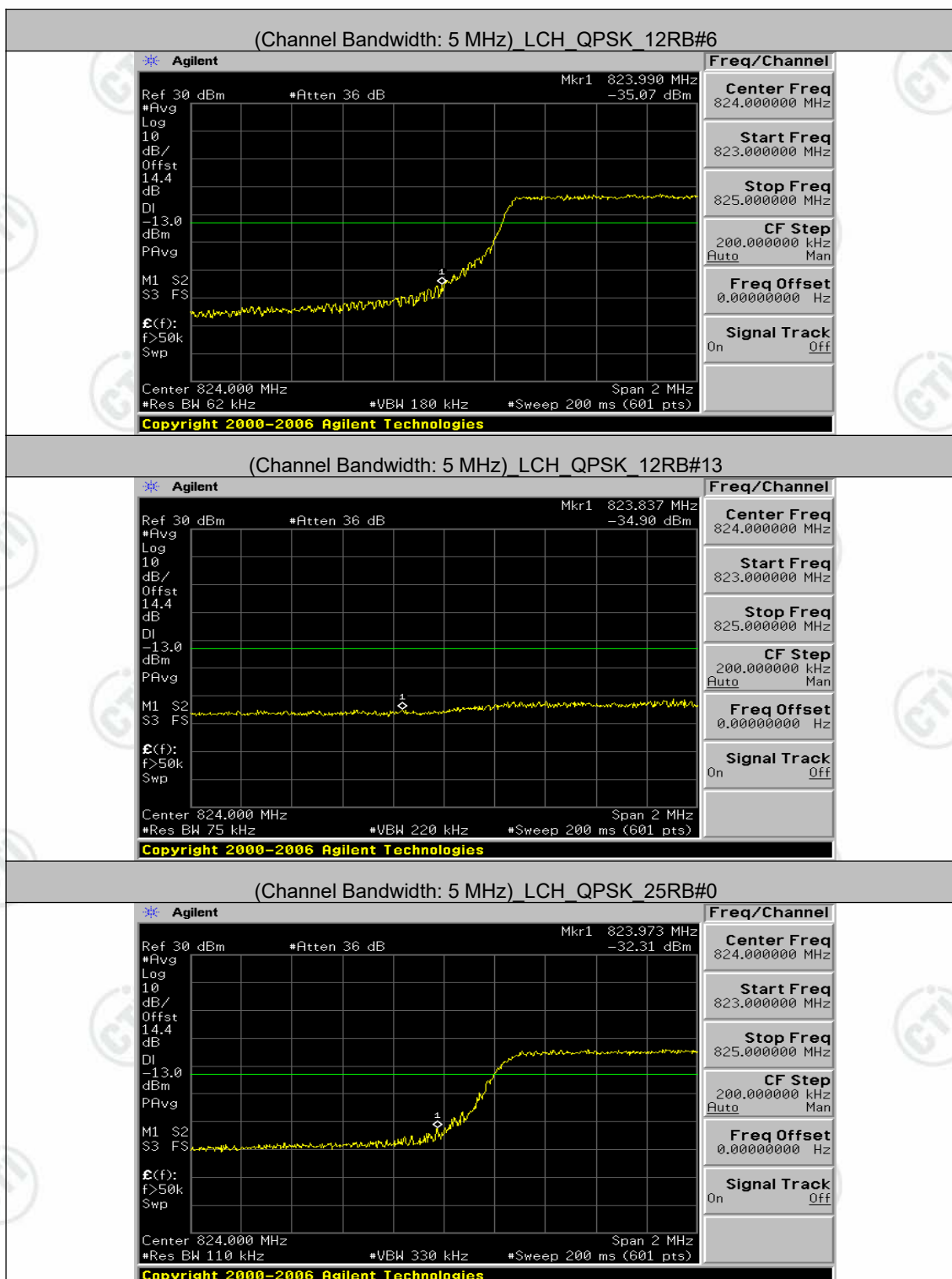


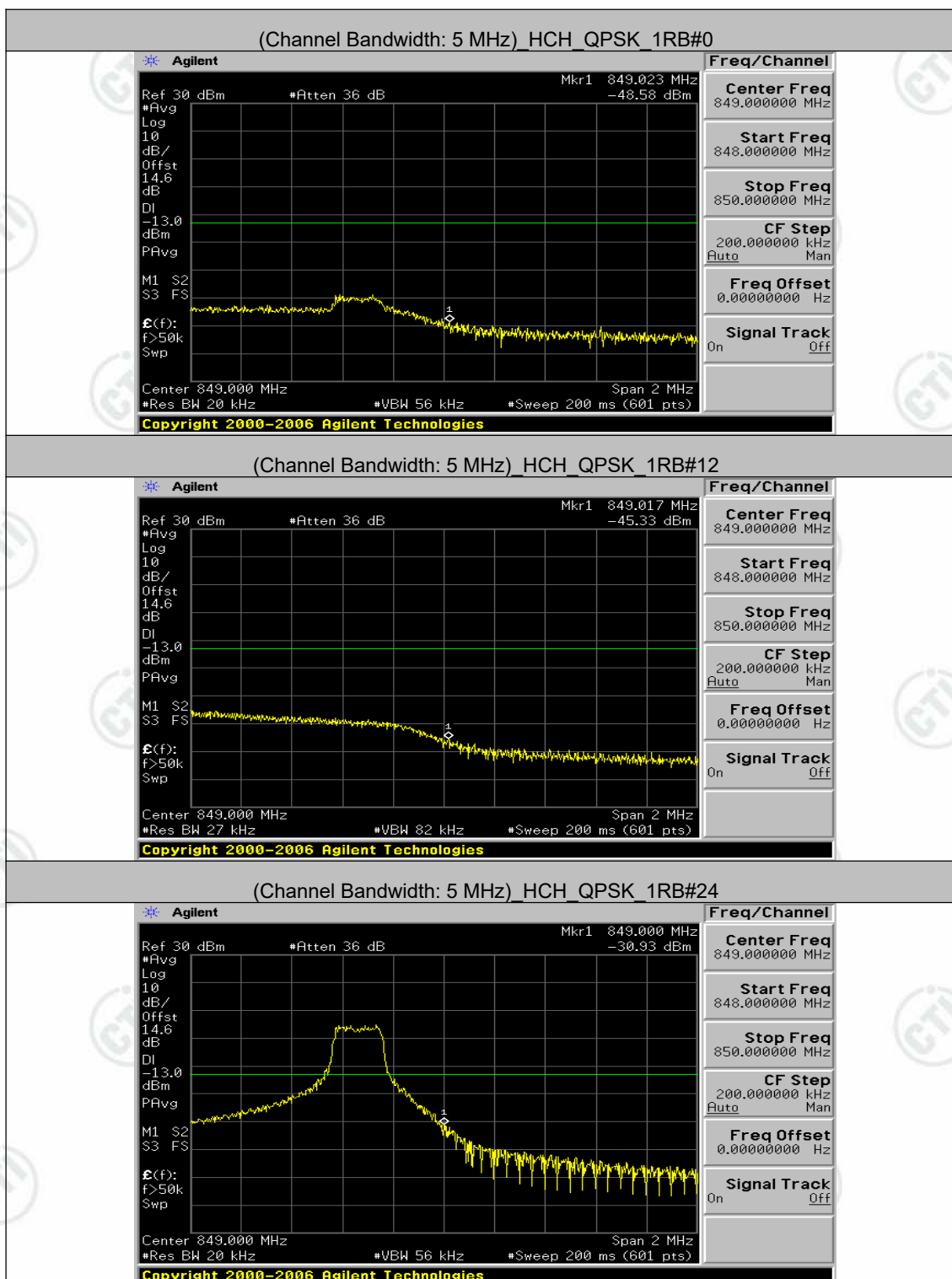


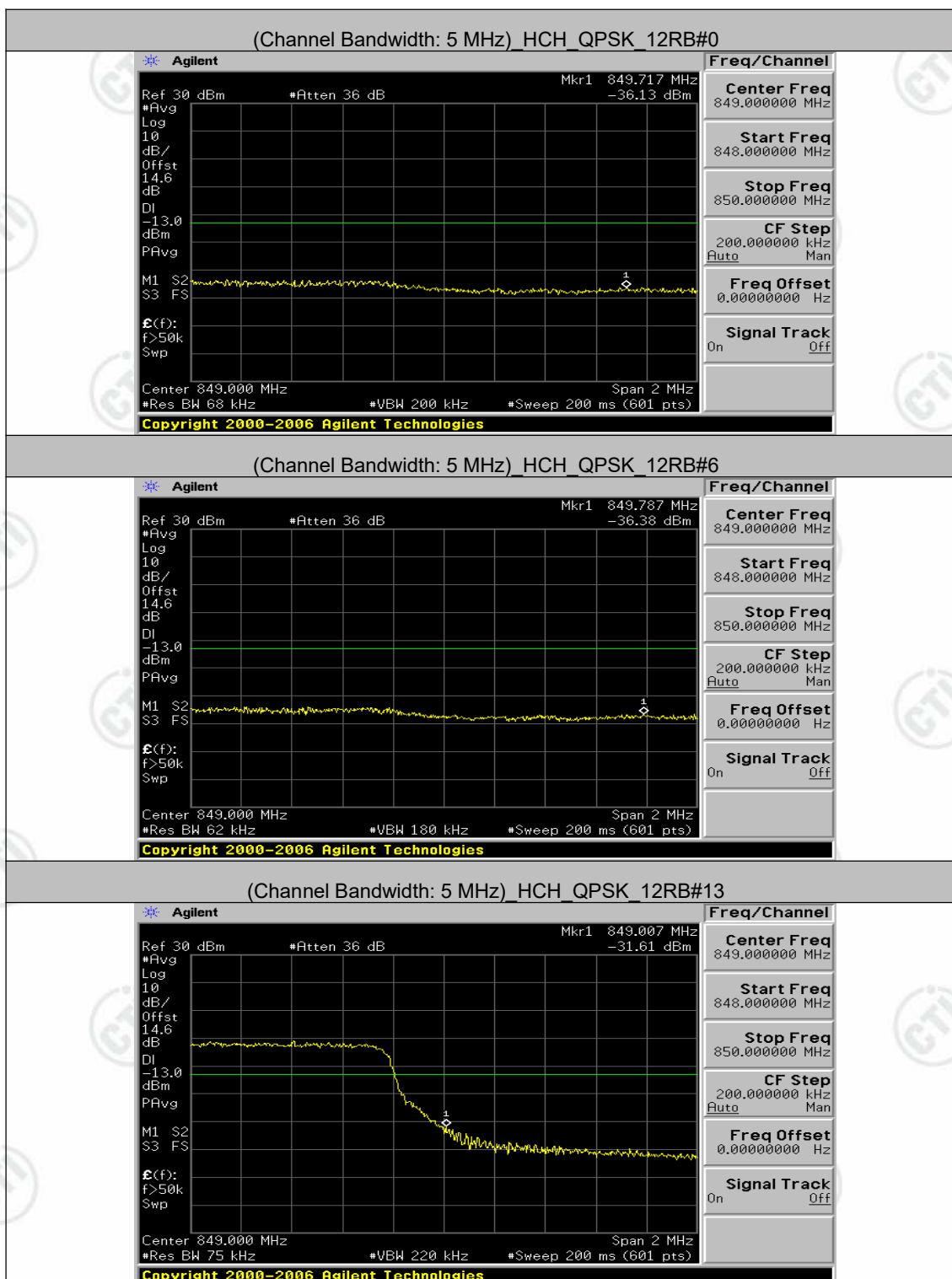
Channel Bandwidth: 5 MHz

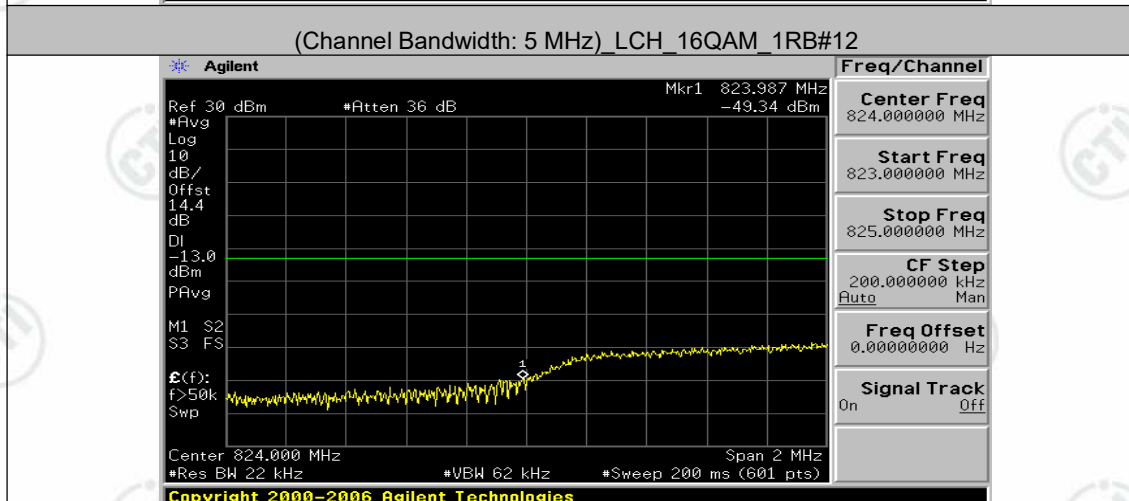
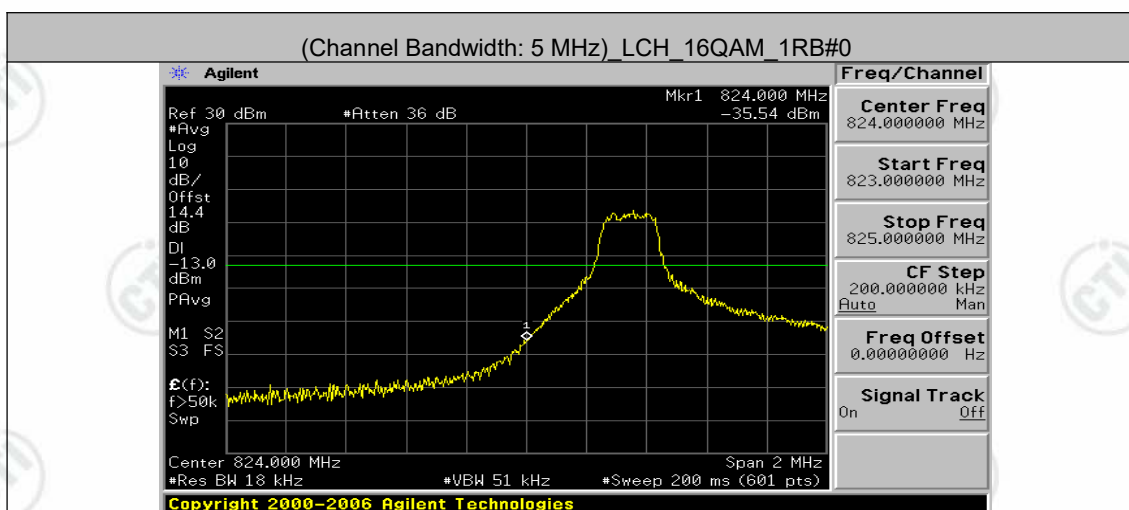
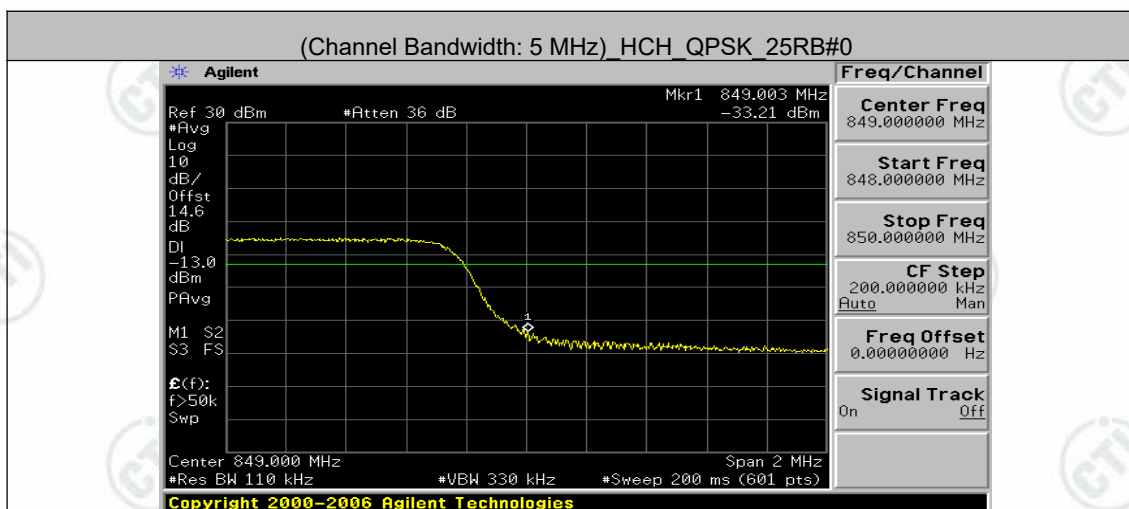


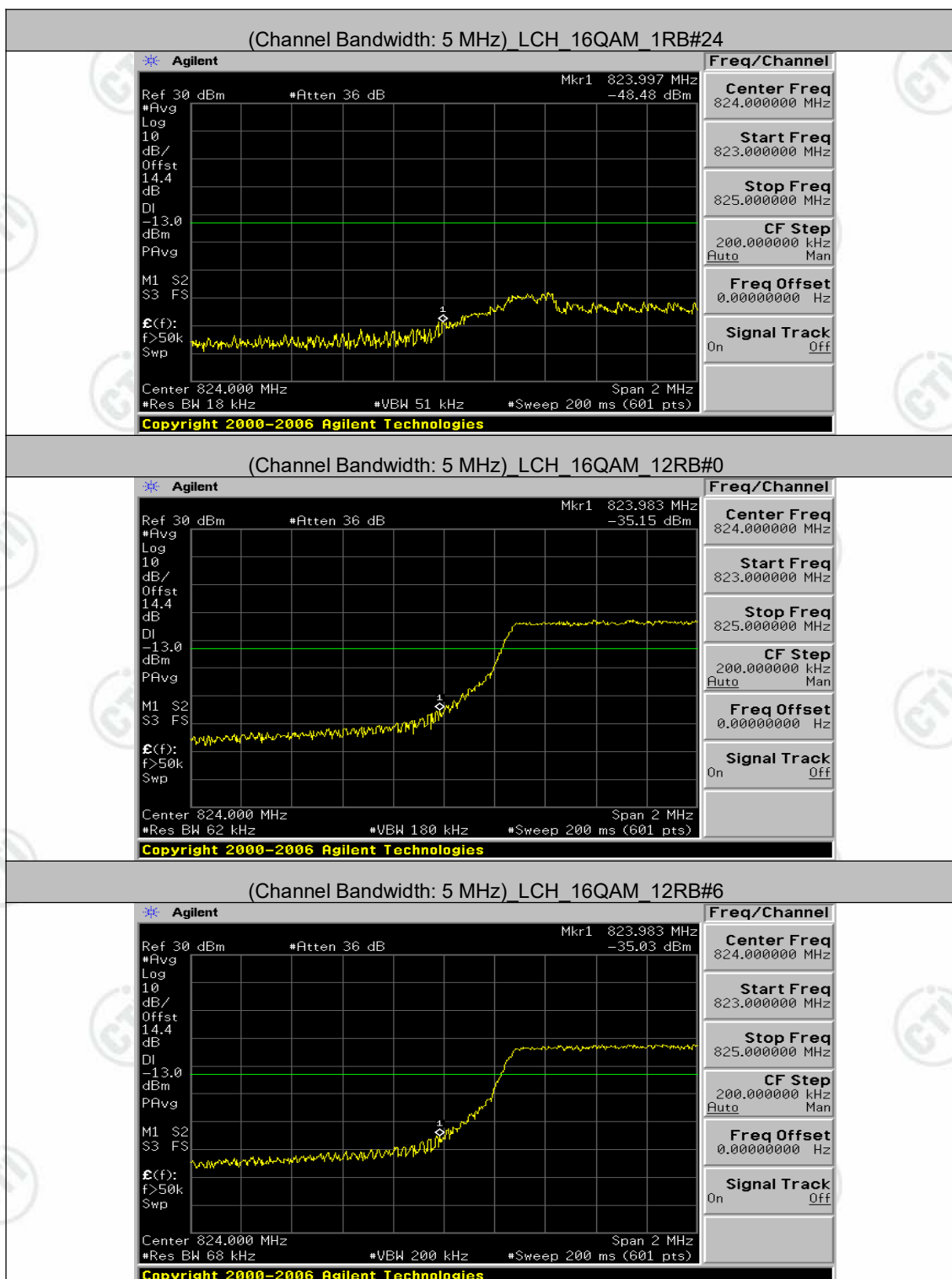


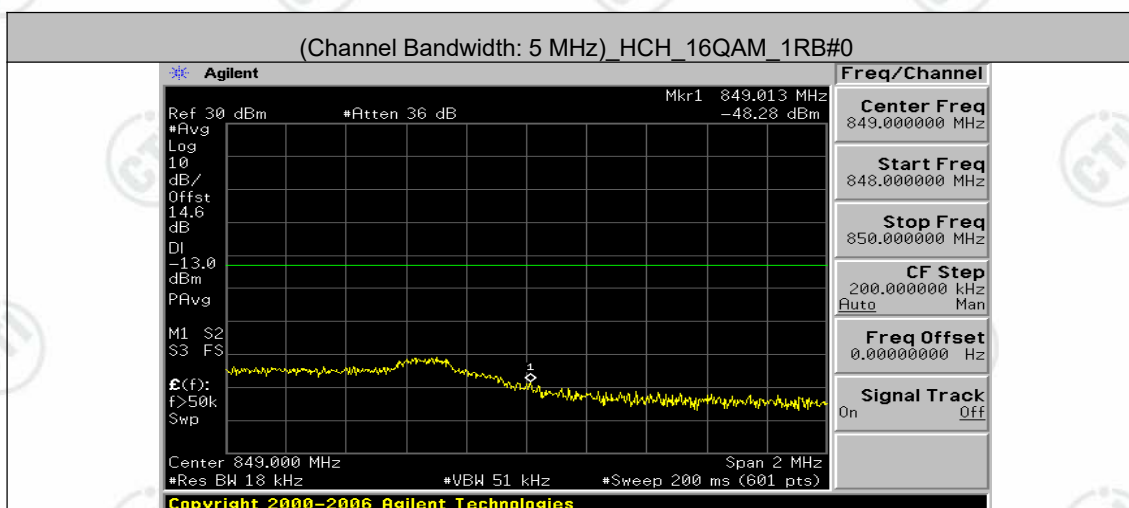
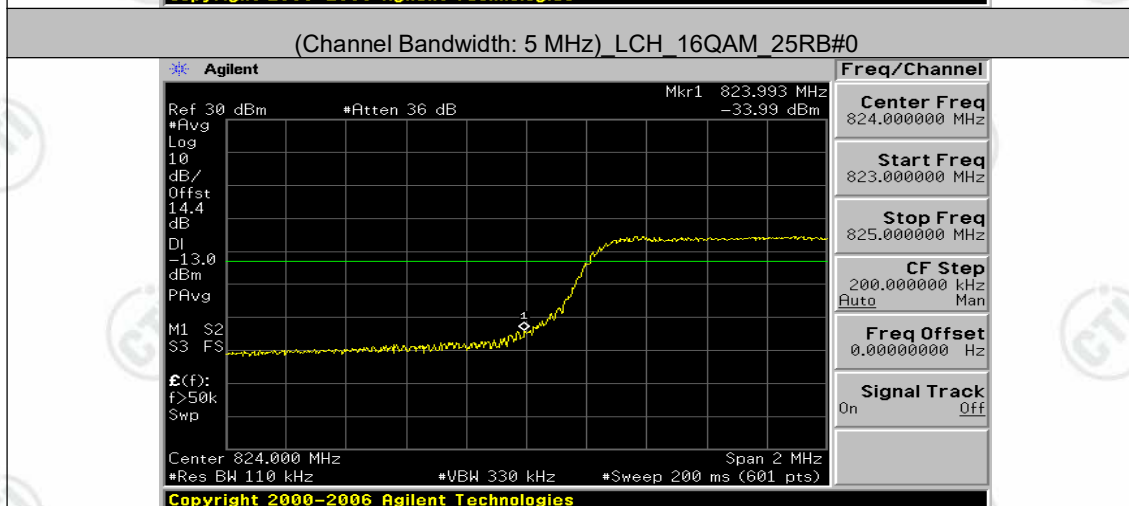
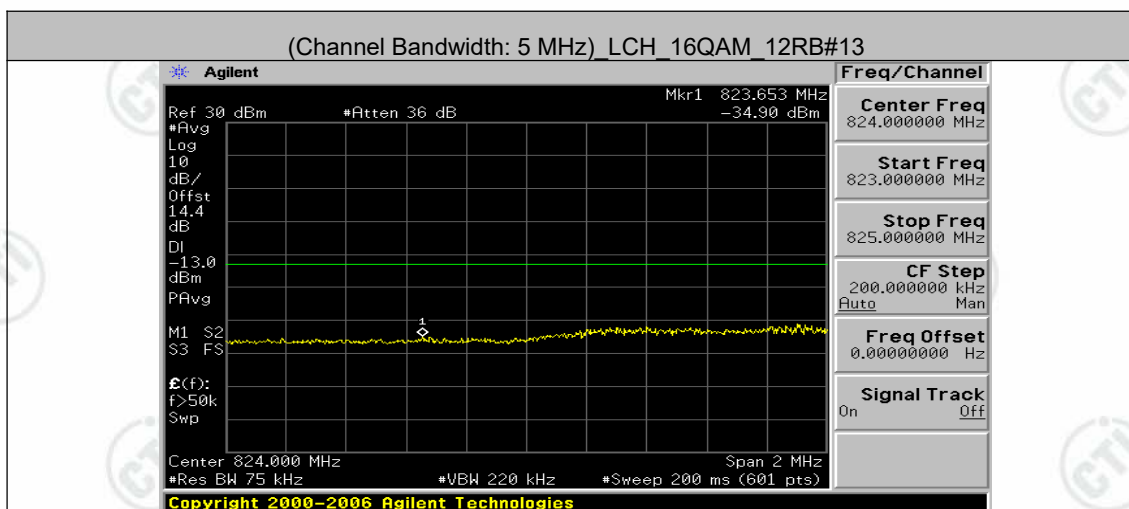


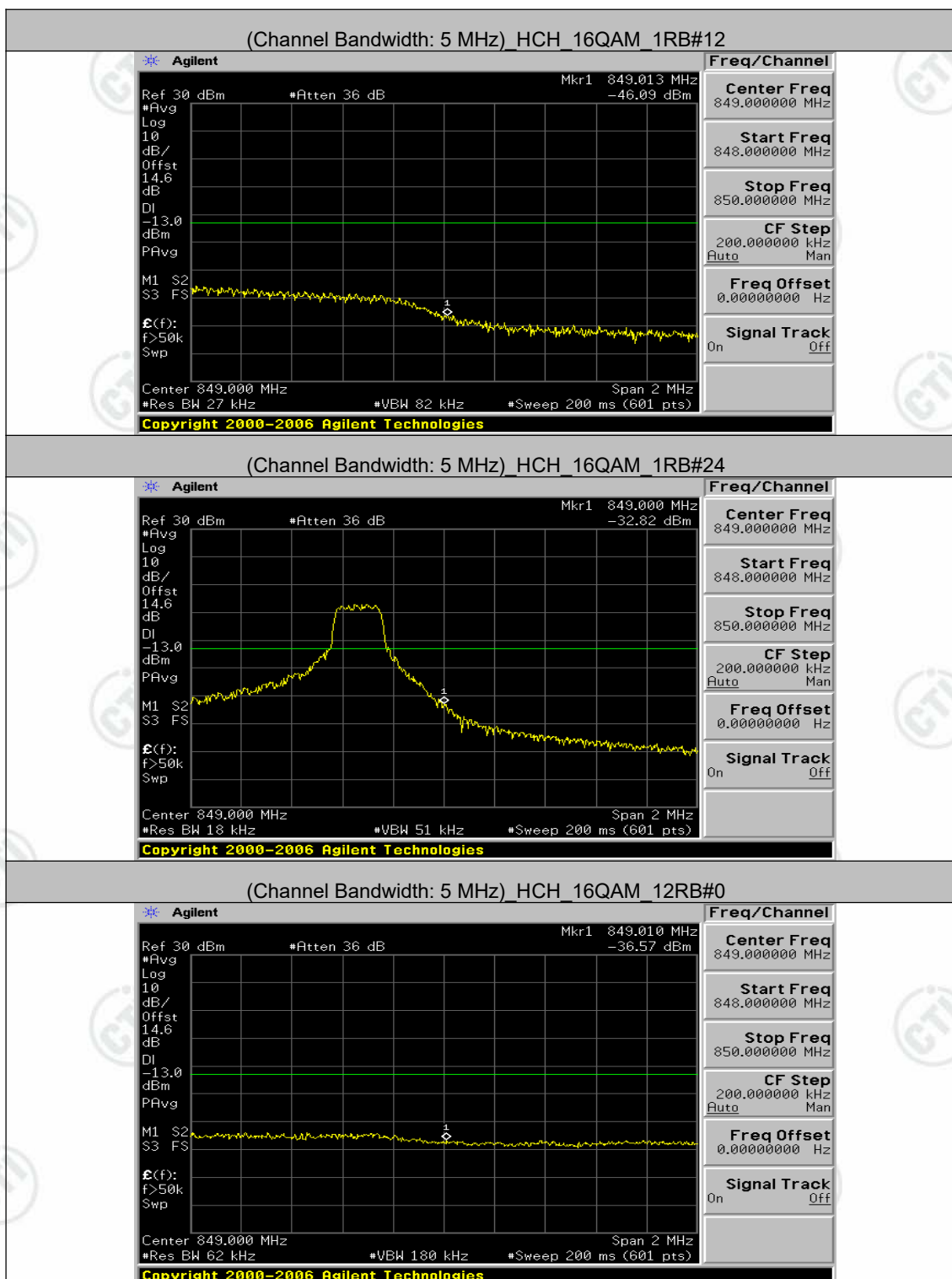


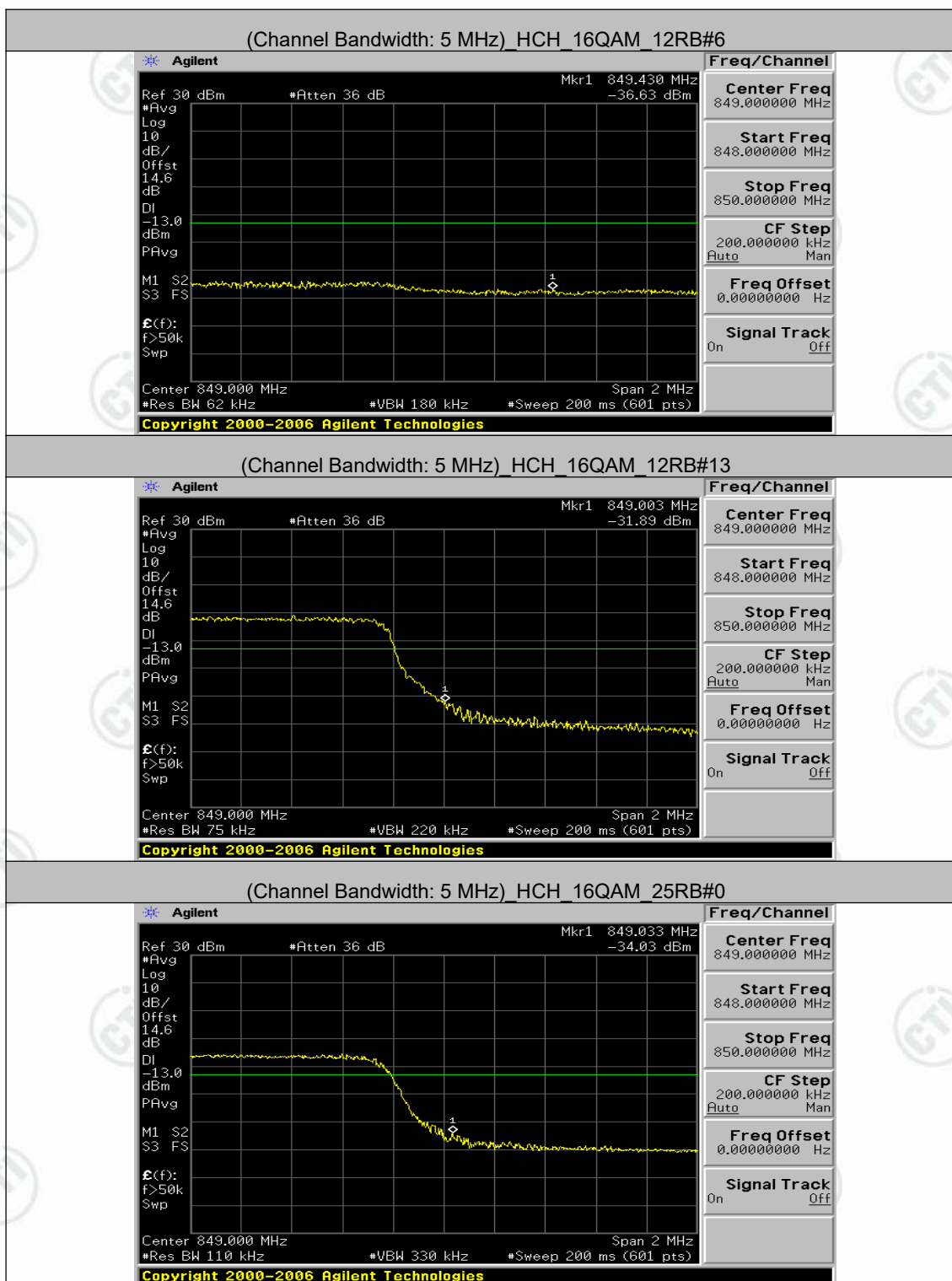


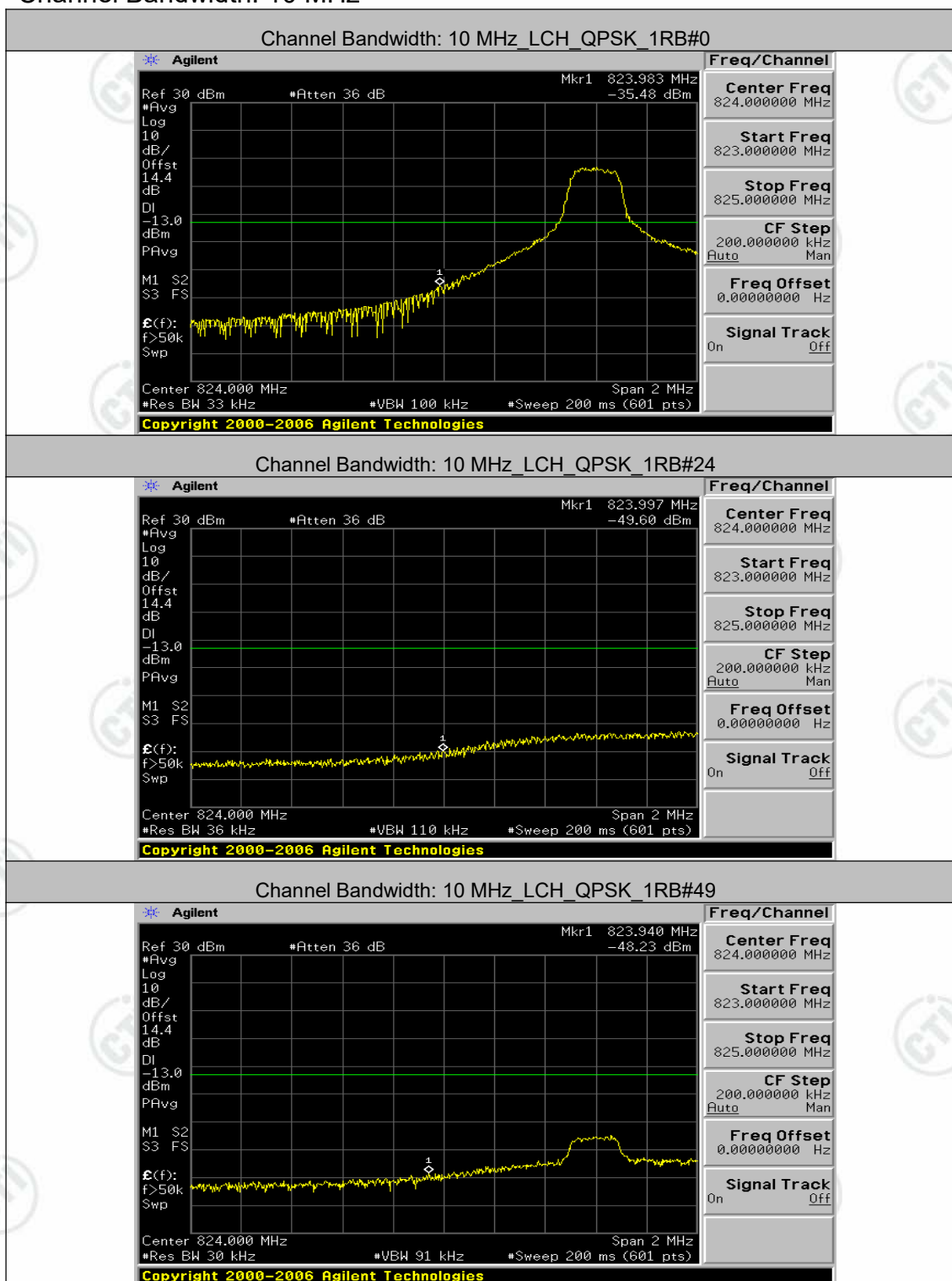


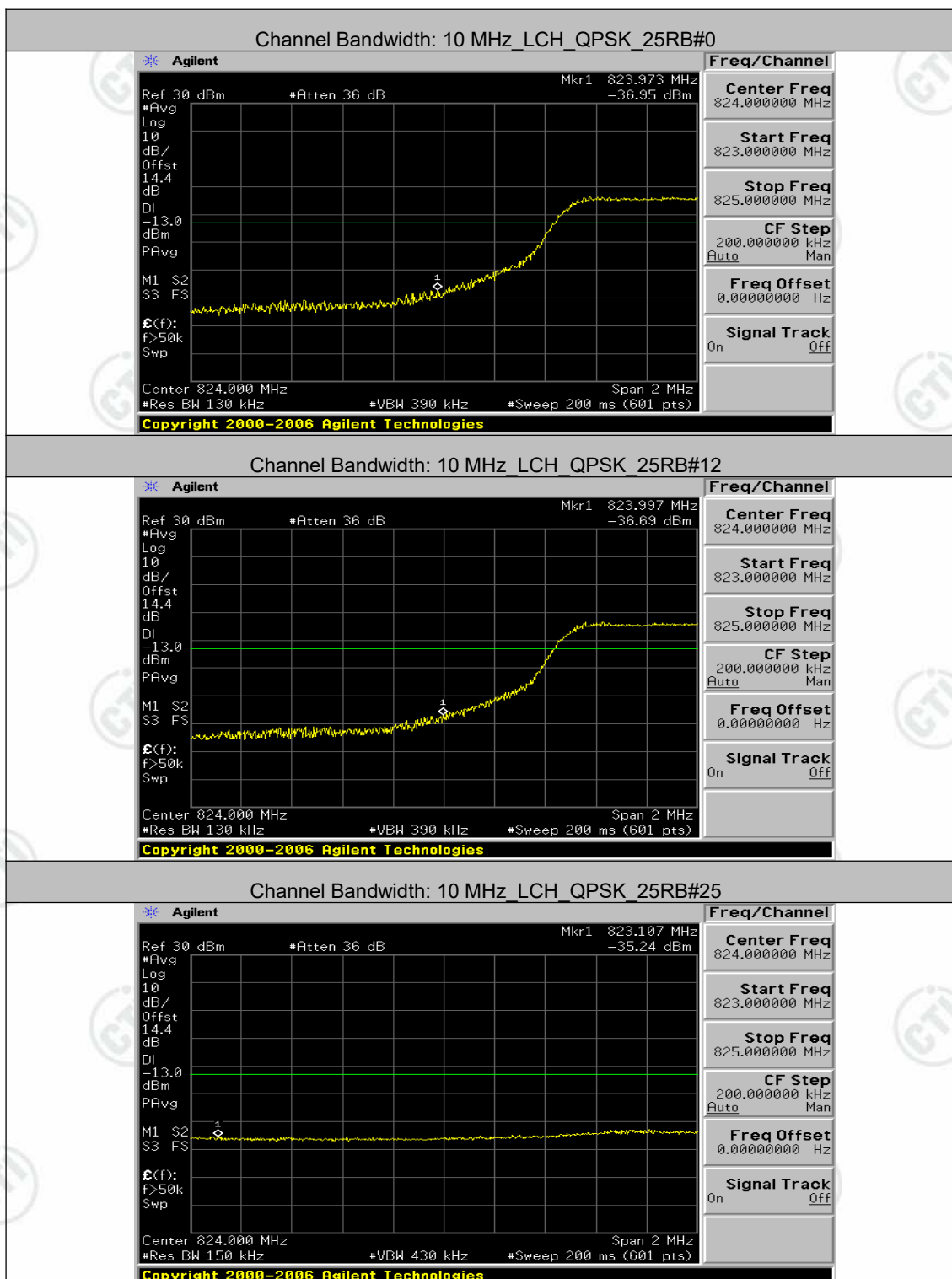


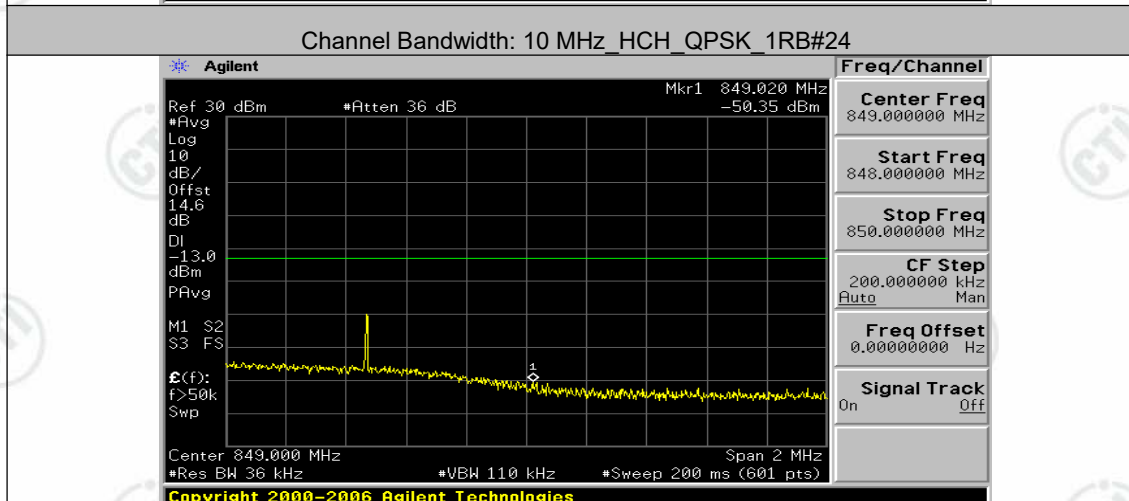
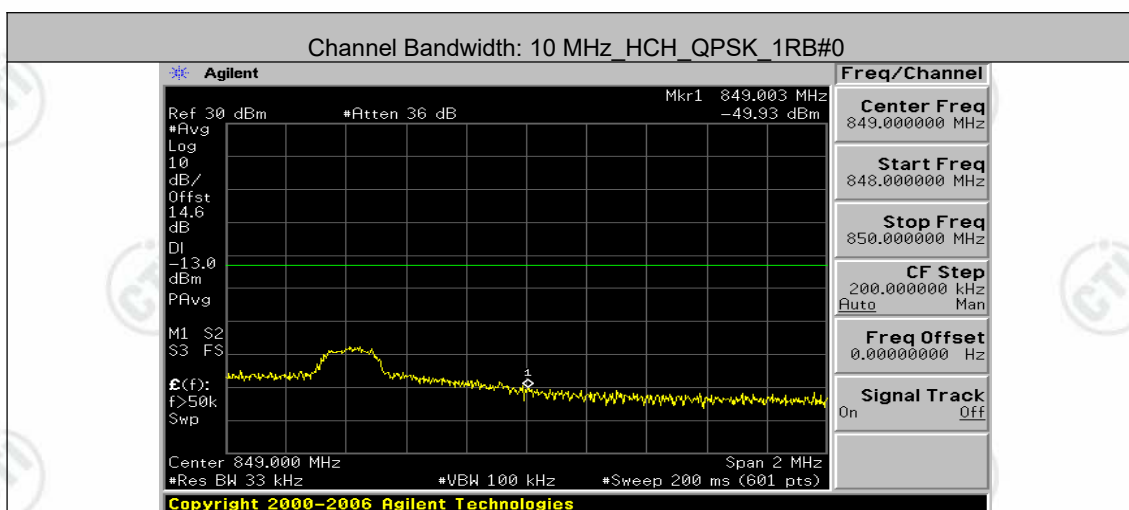
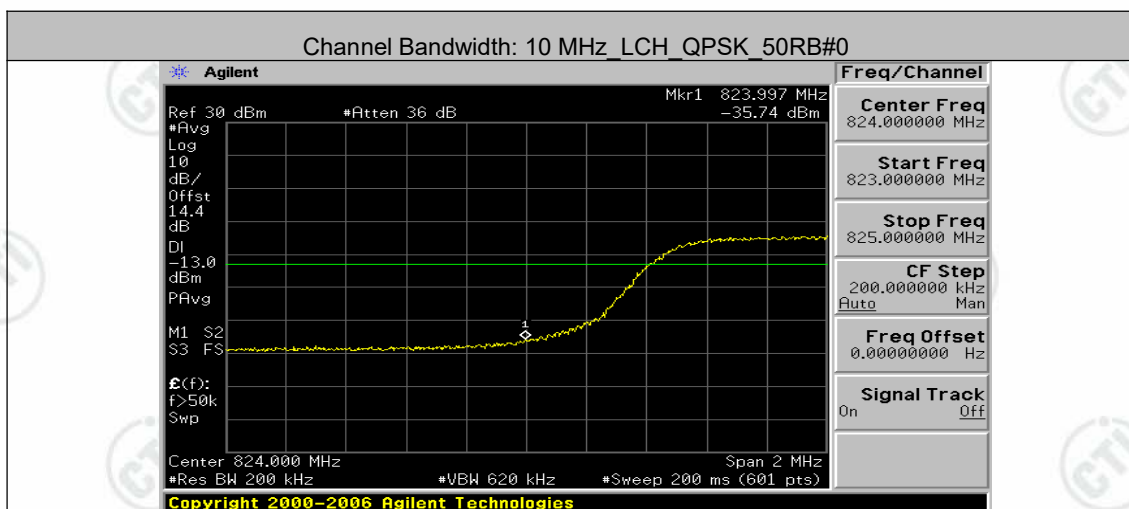


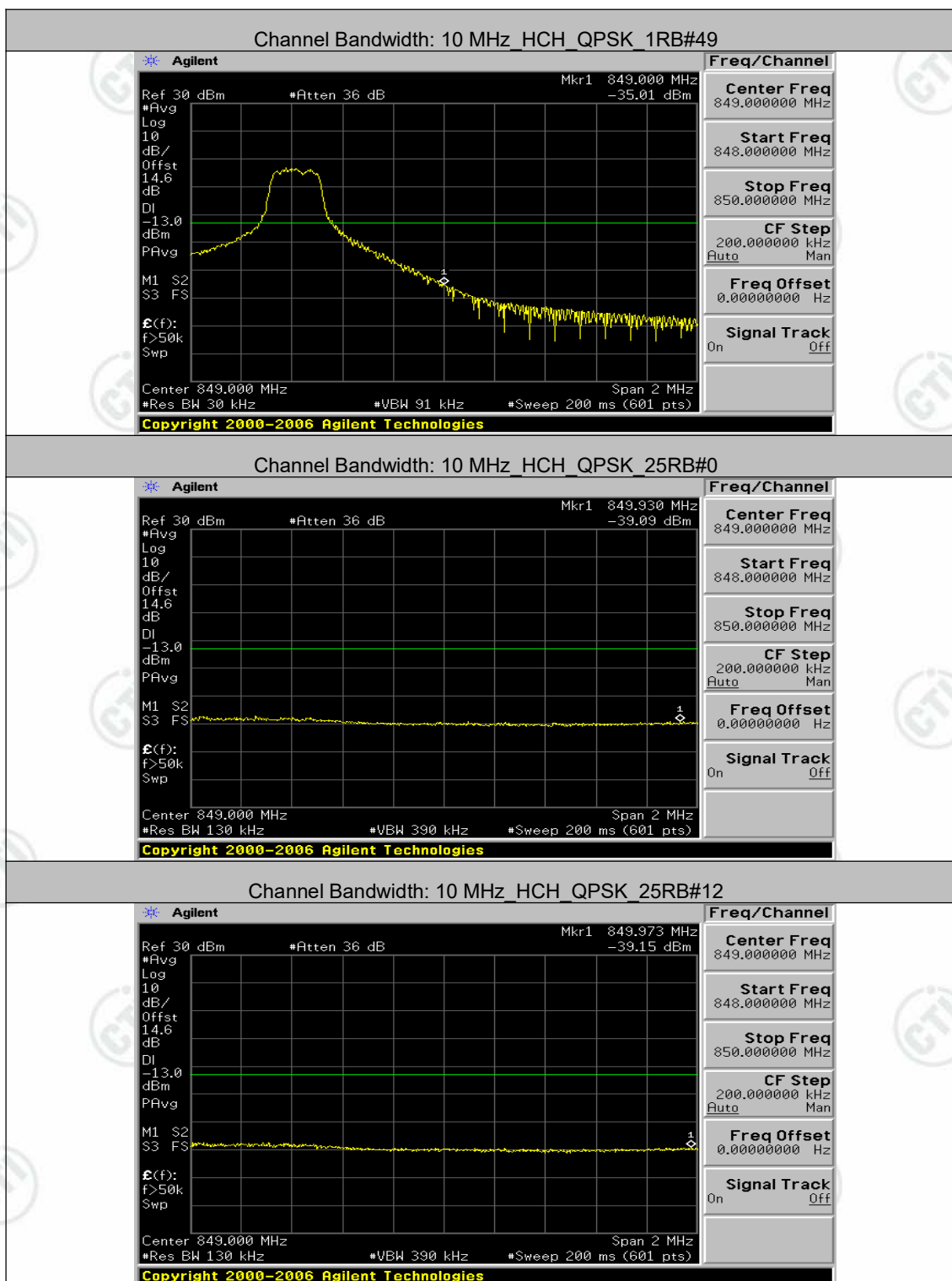


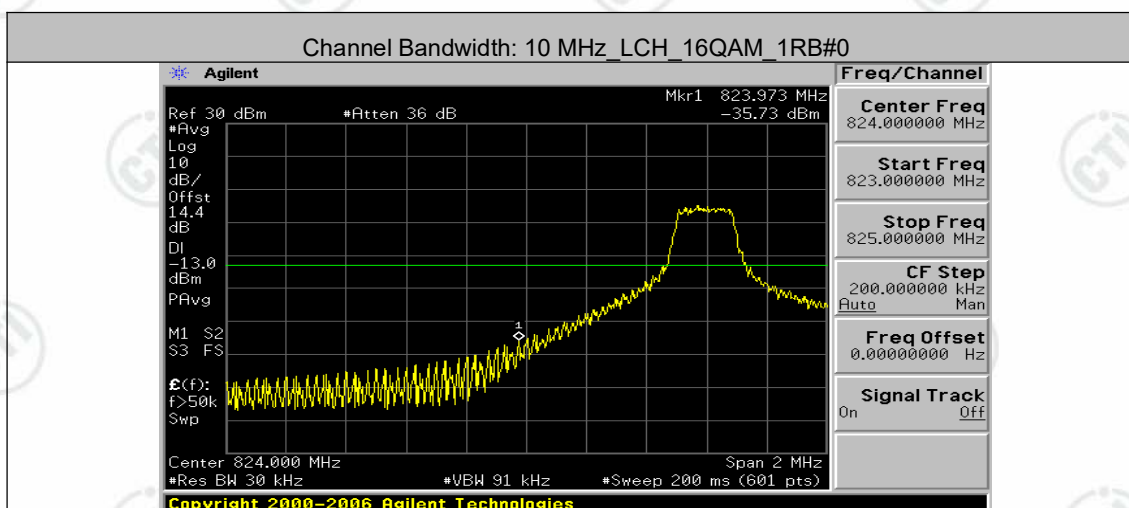
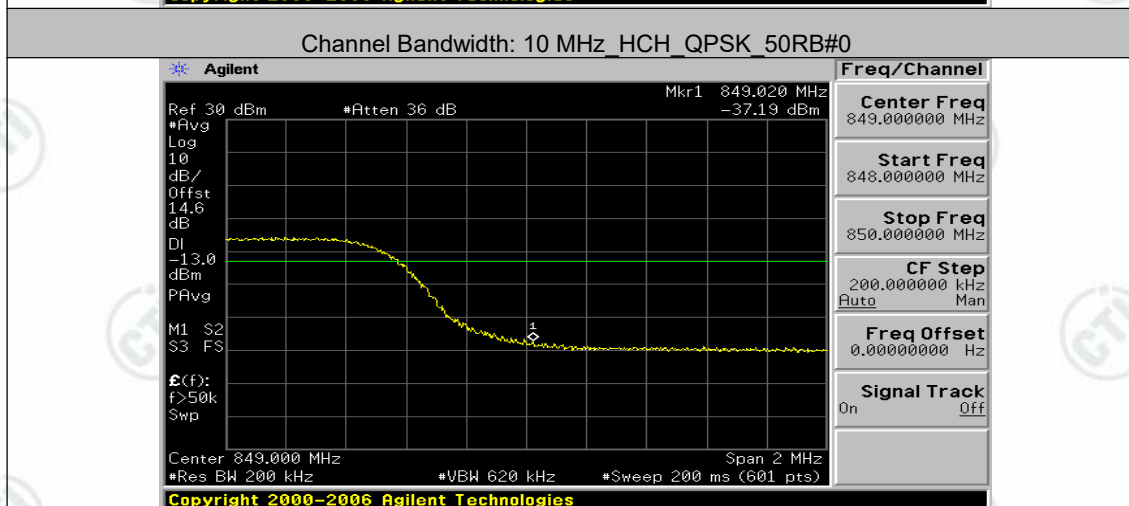
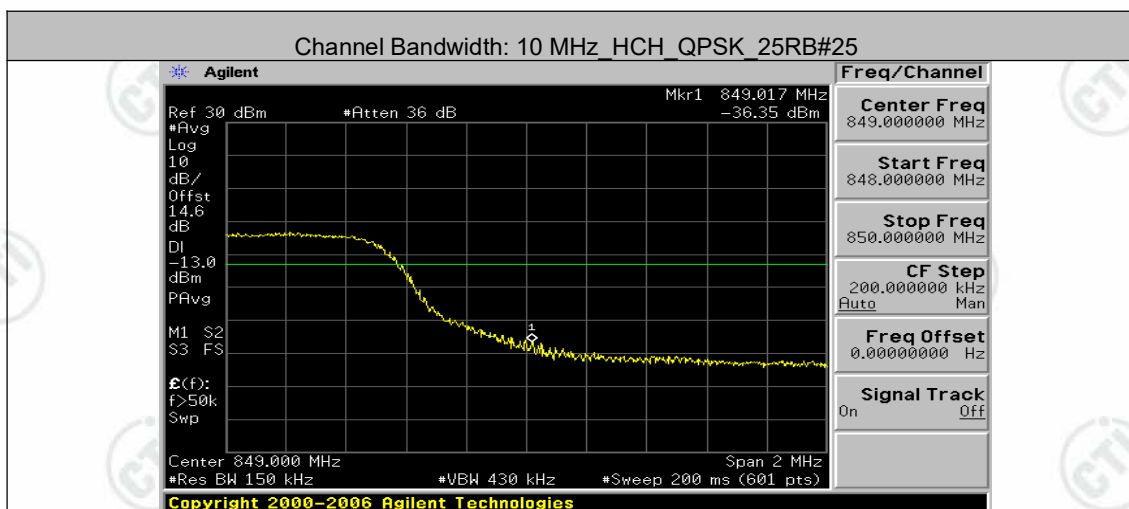


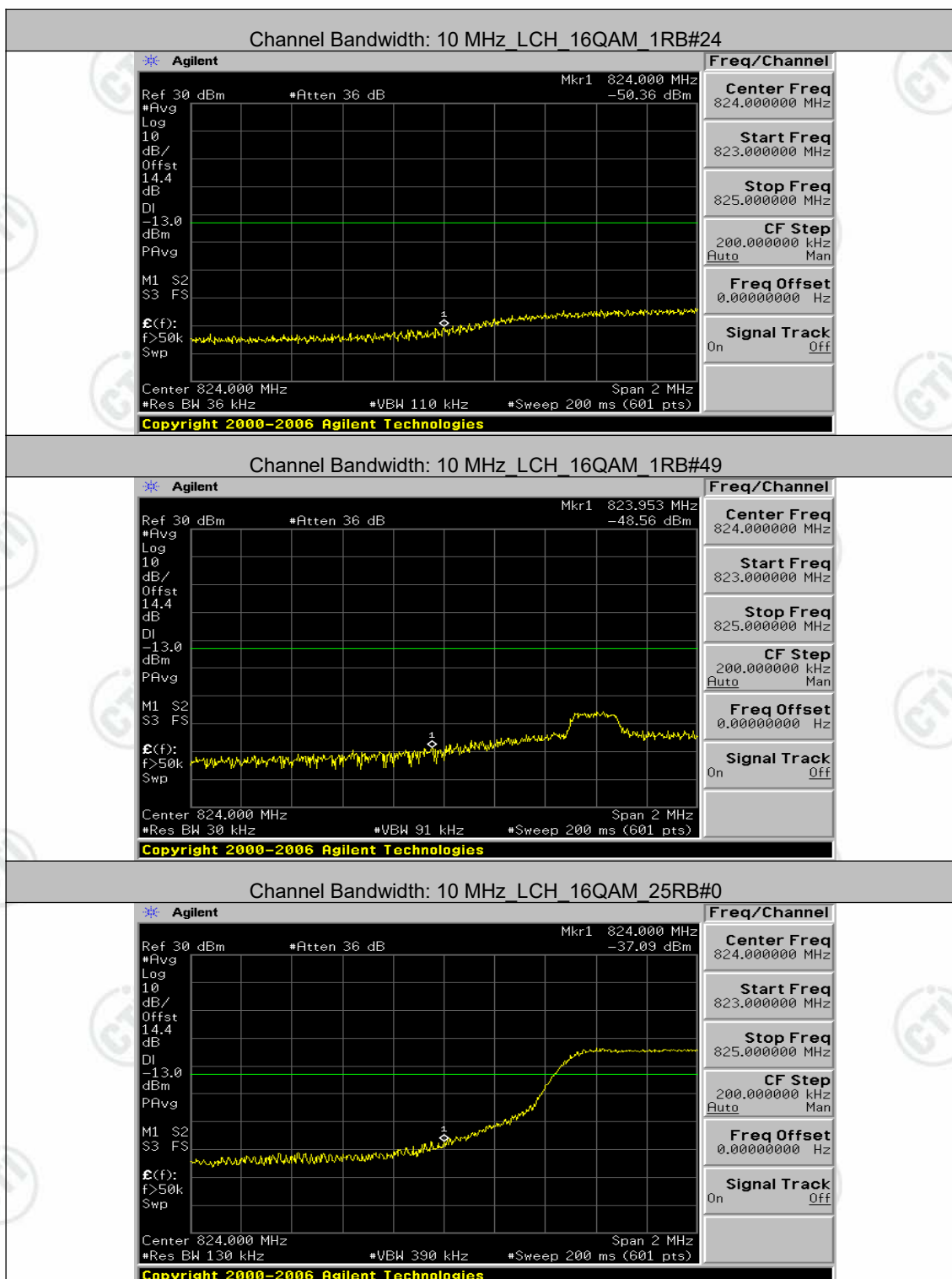


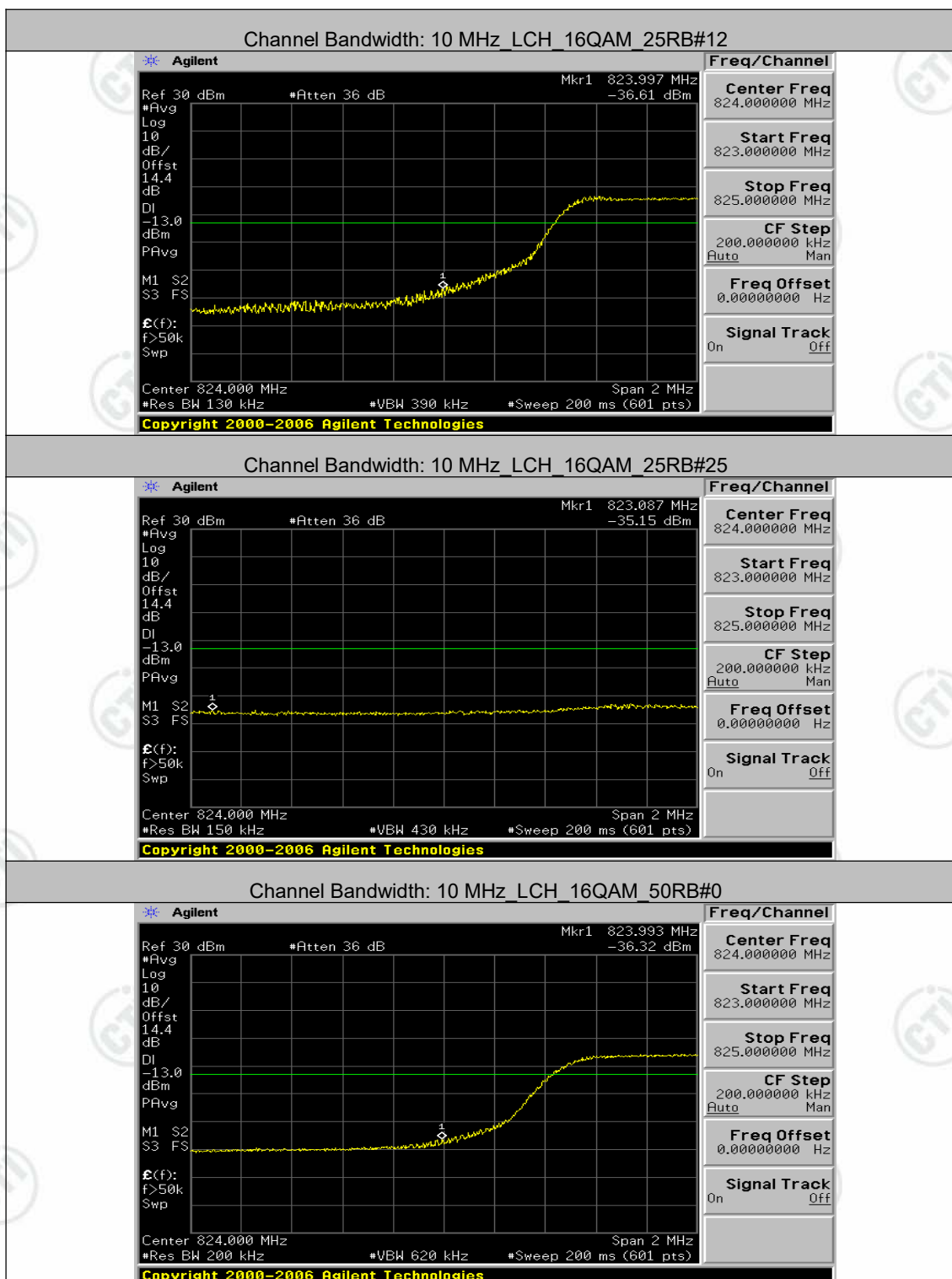


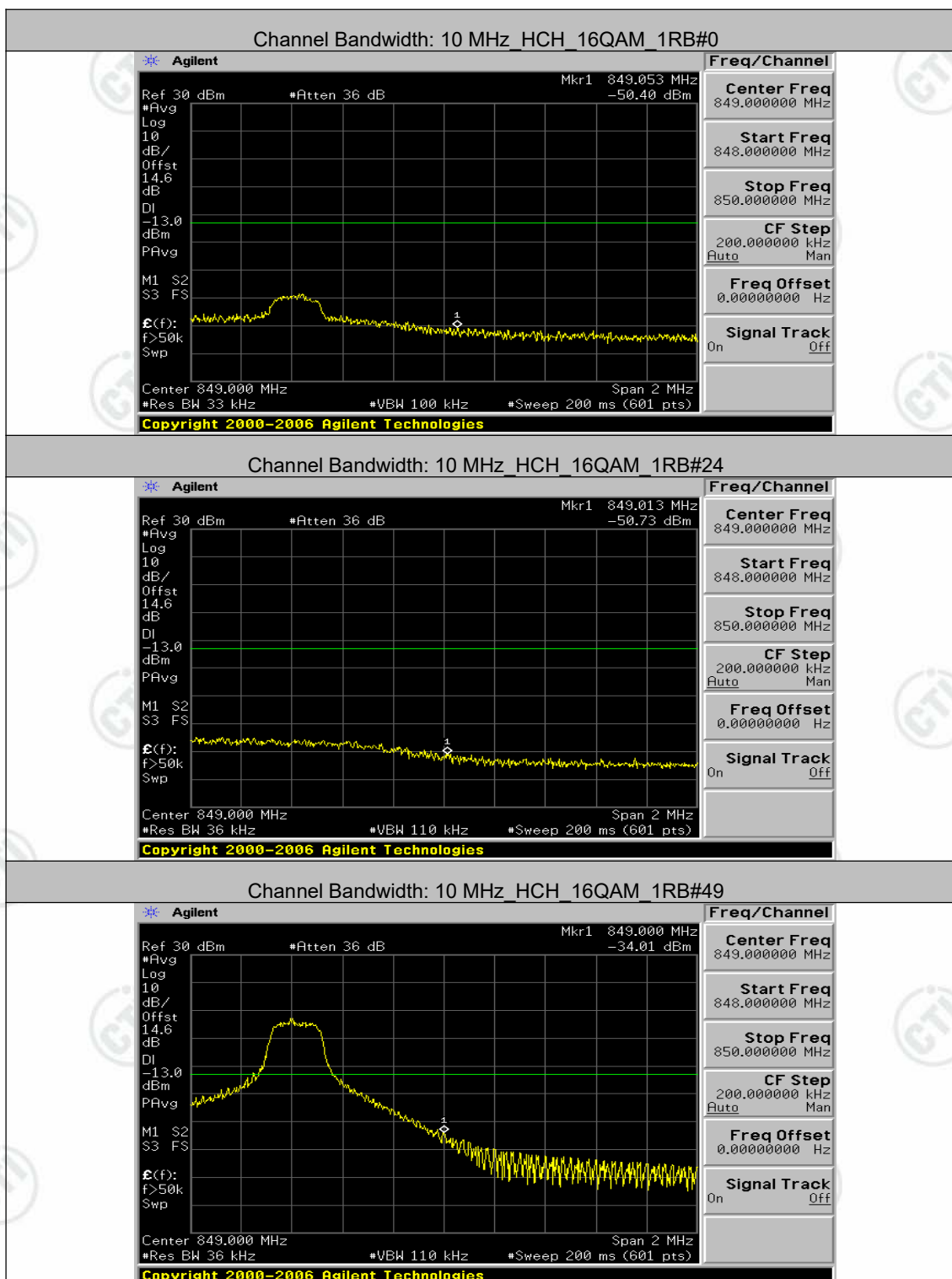


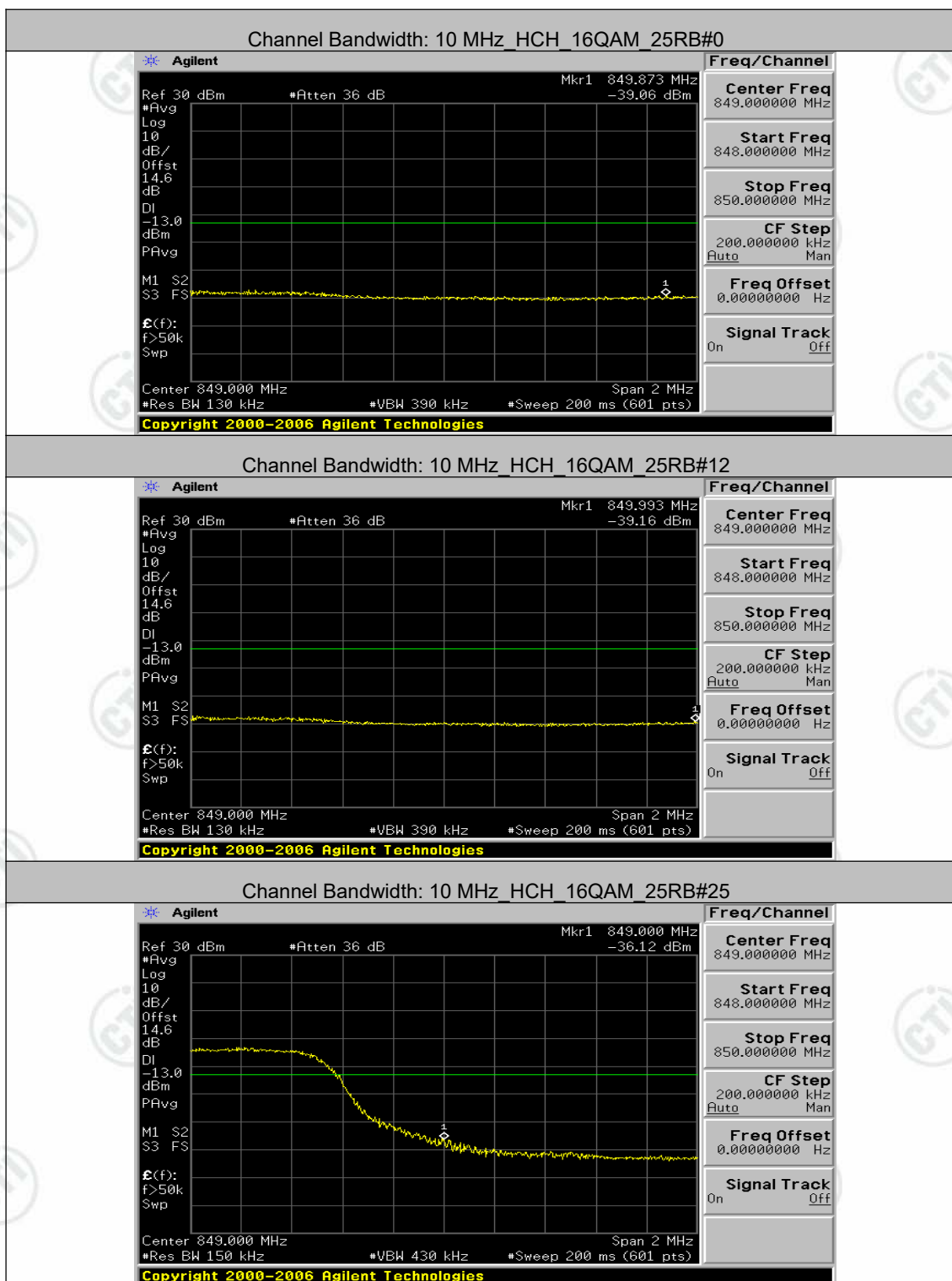


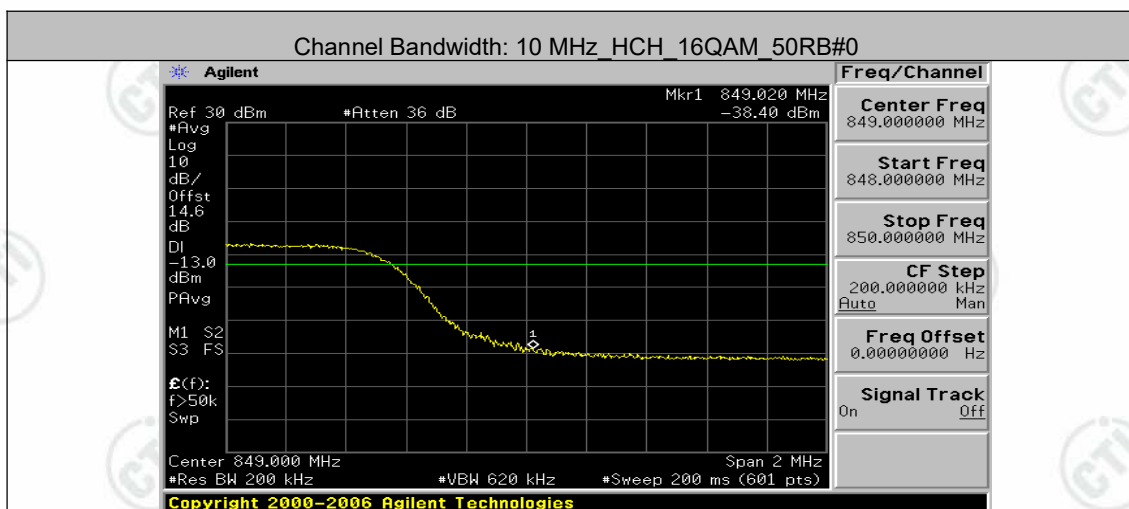








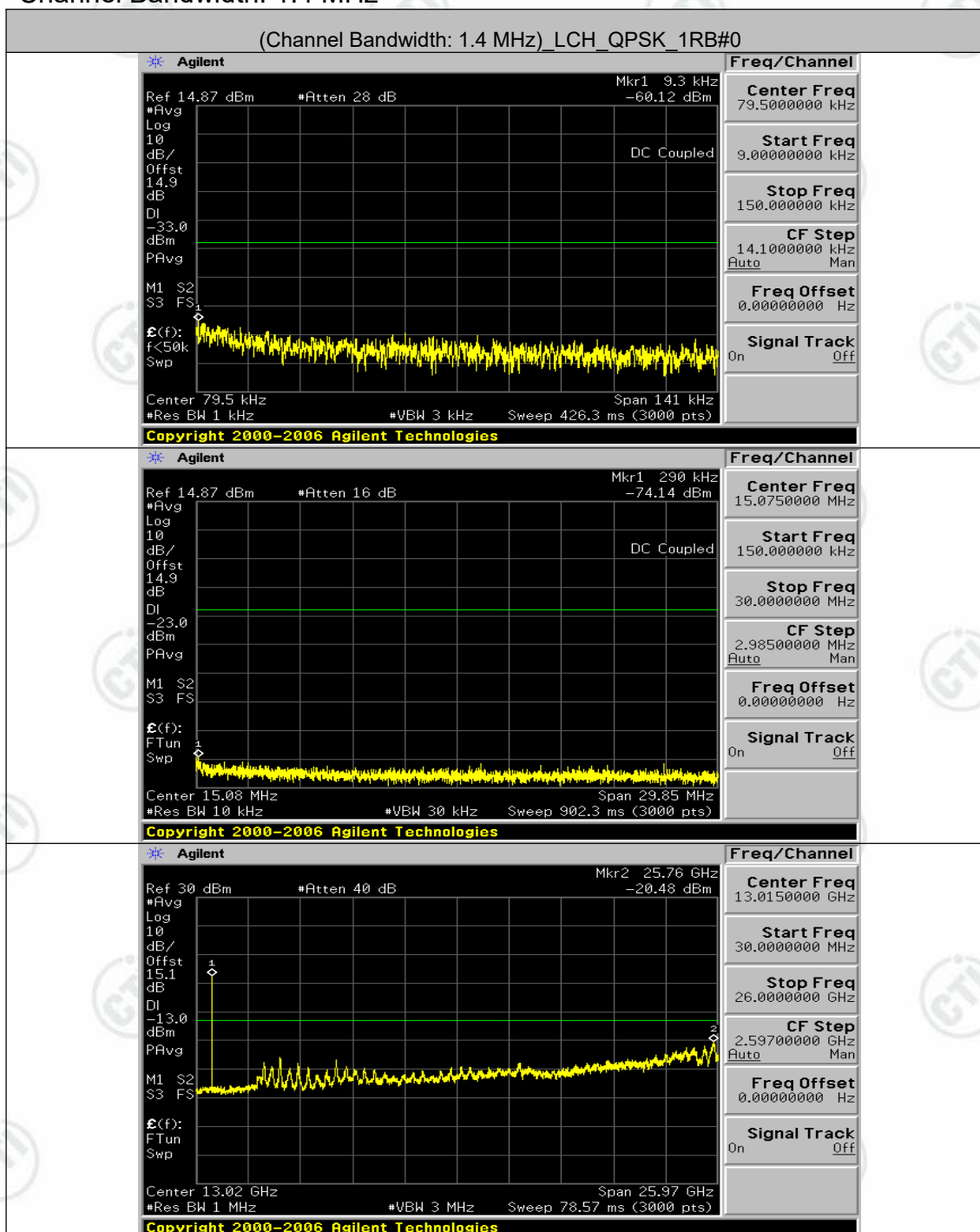


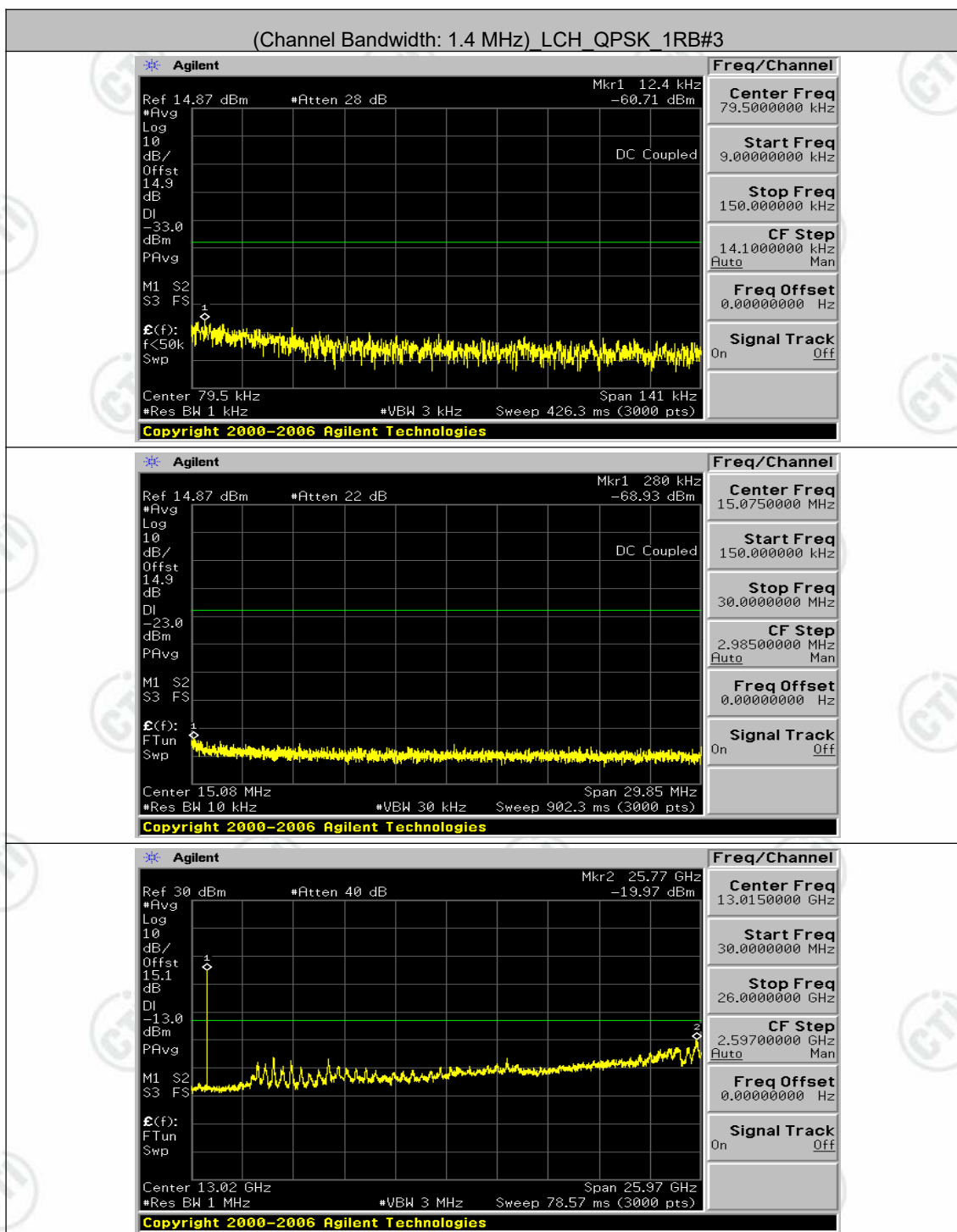


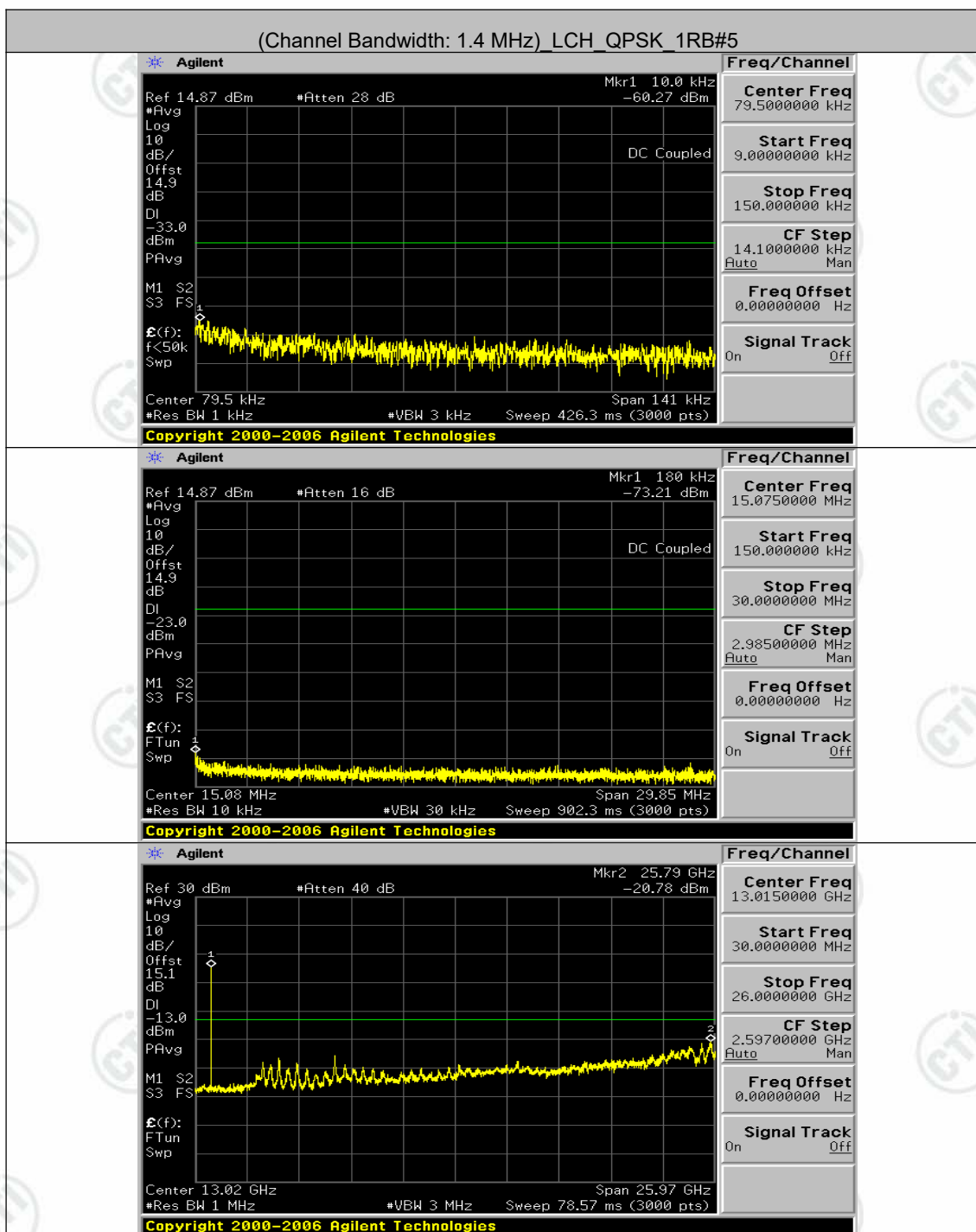
Appendix D): Conducted Spurious Emission

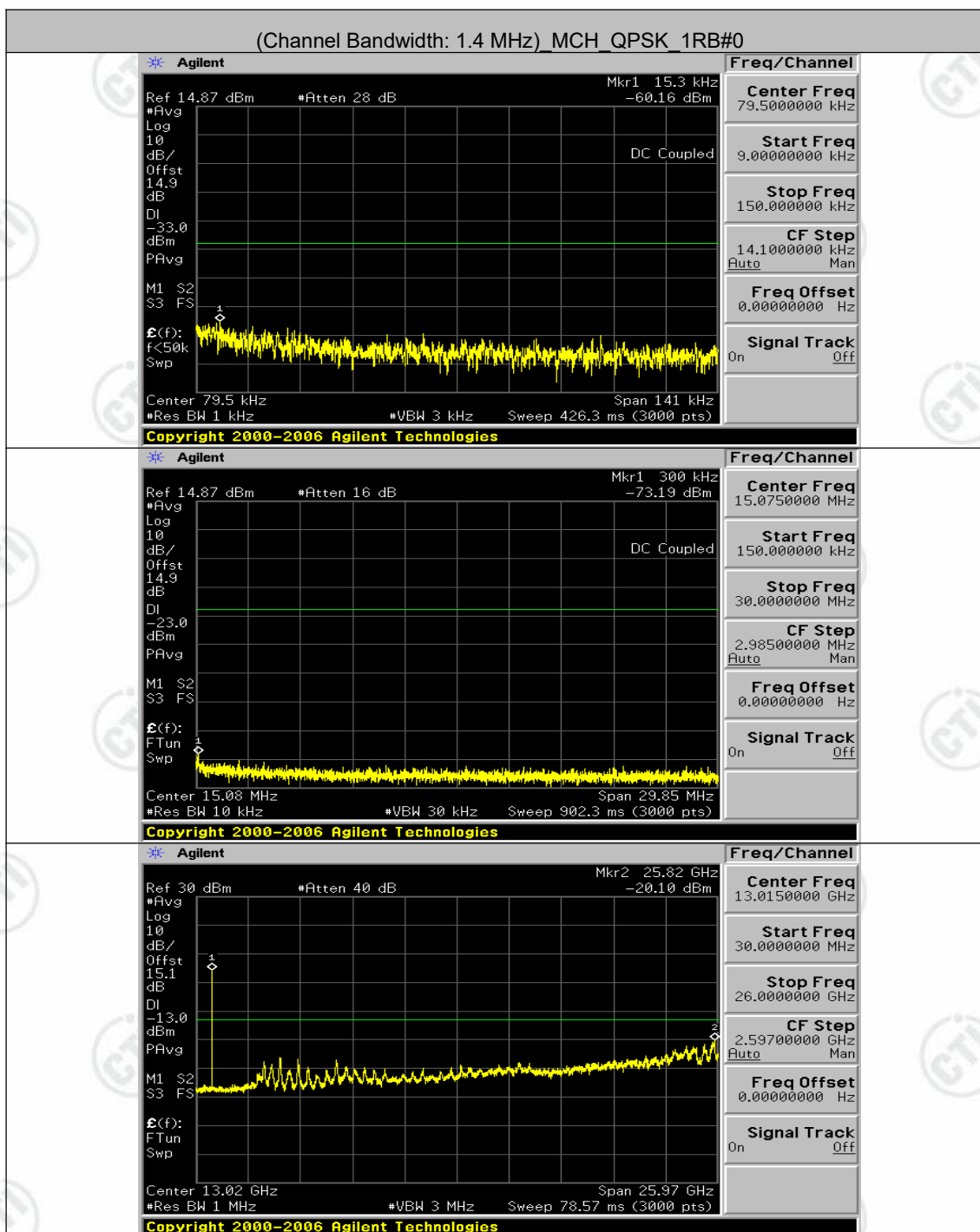
Test Graphs

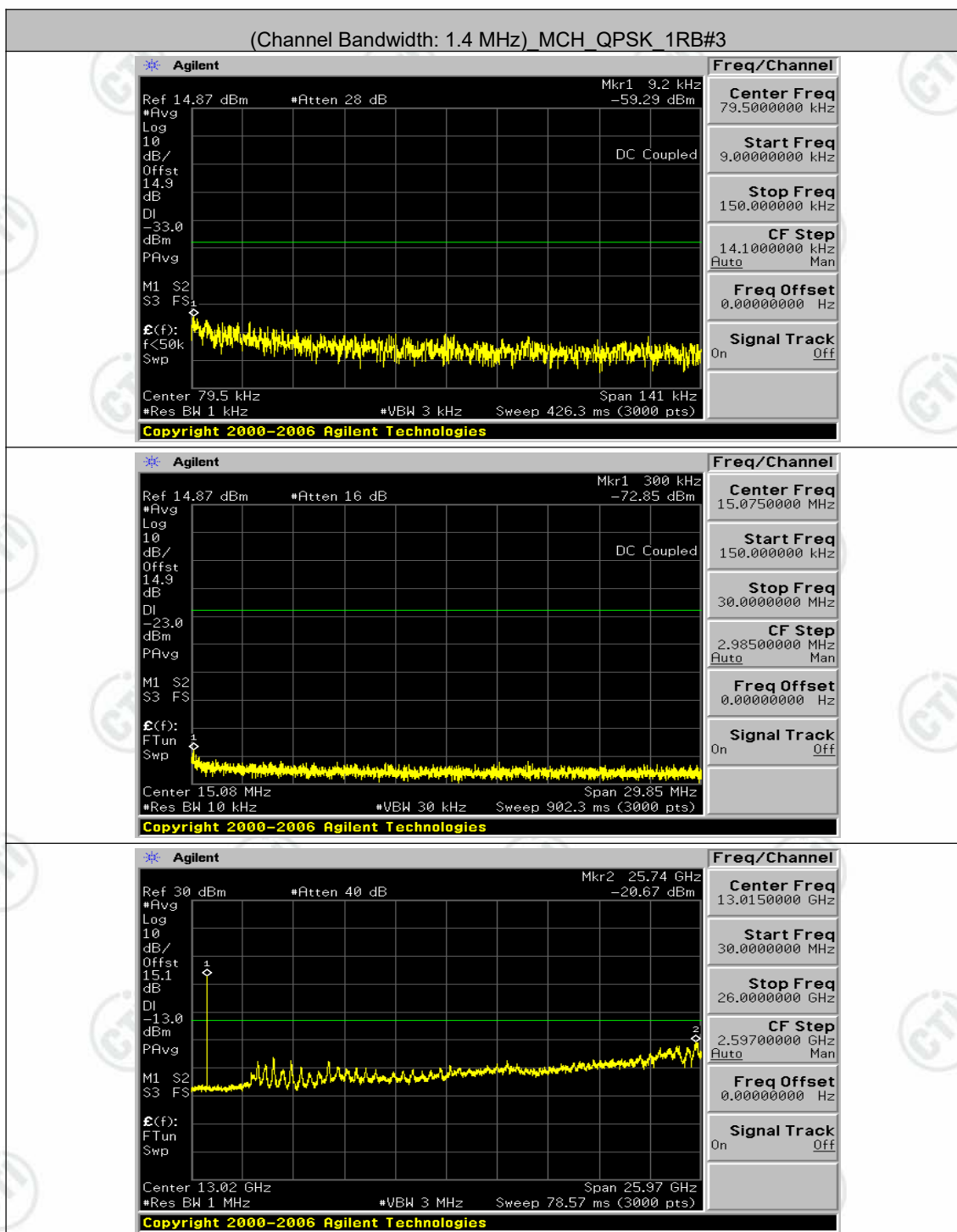
Channel Bandwidth: 1.4 MHz

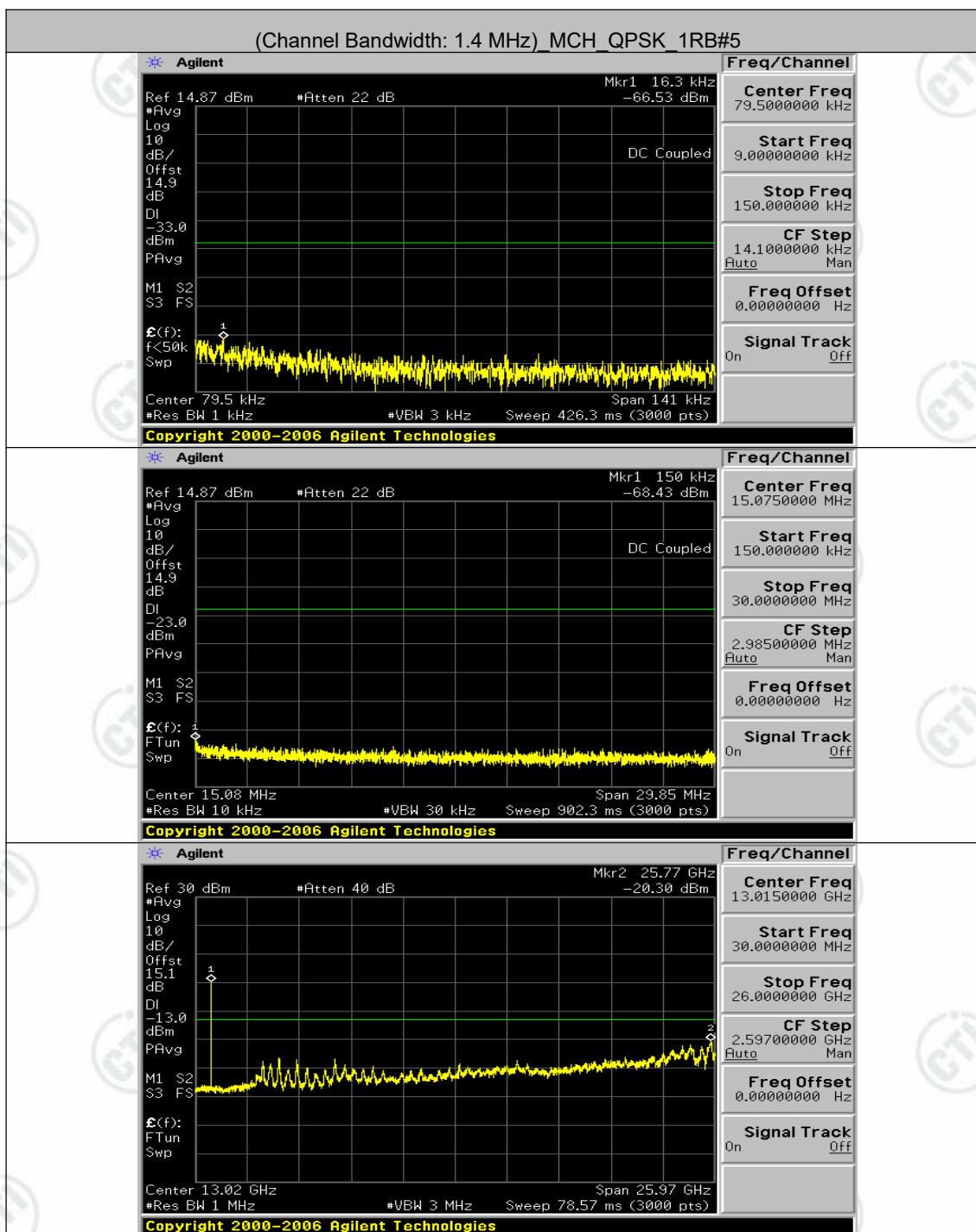


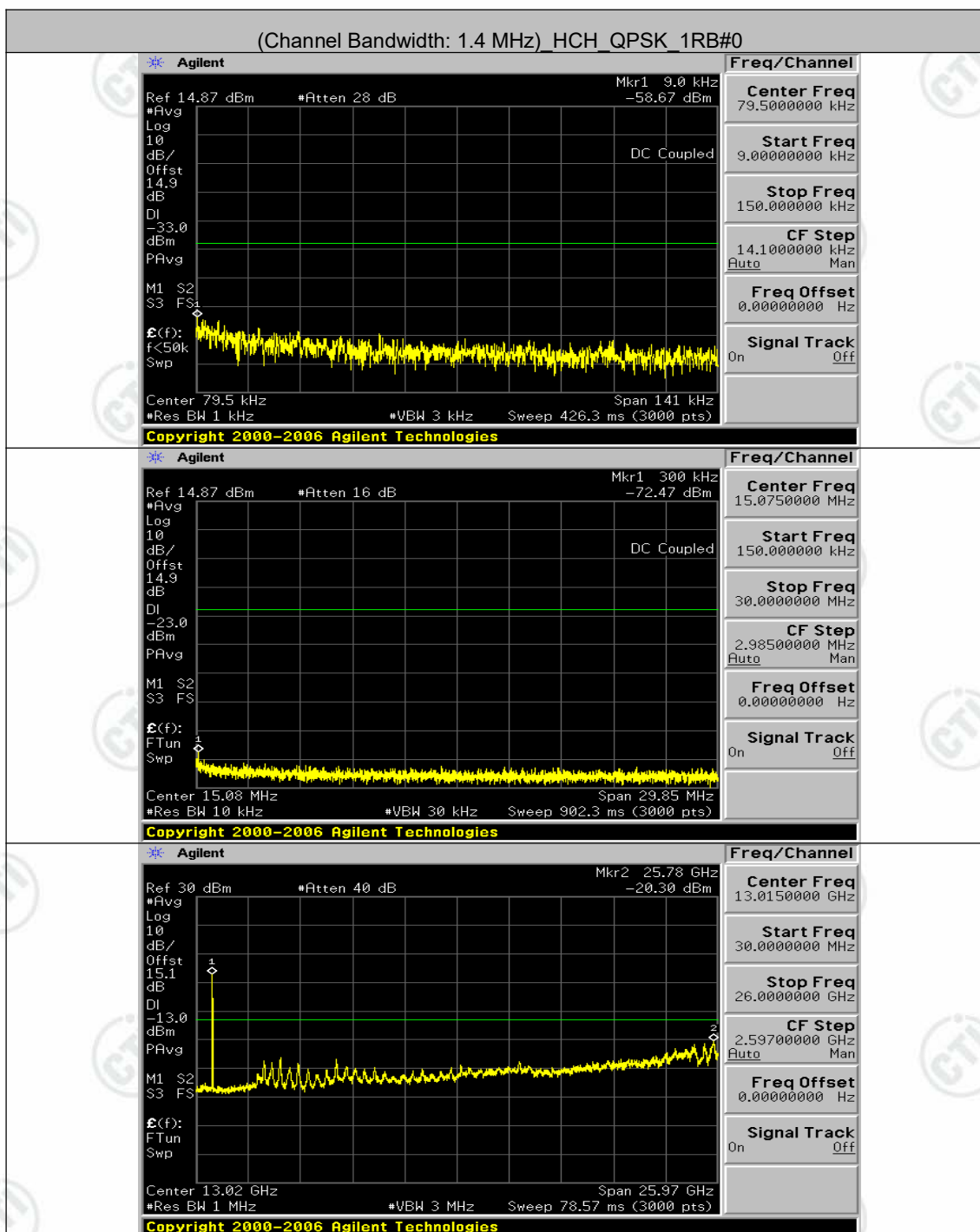


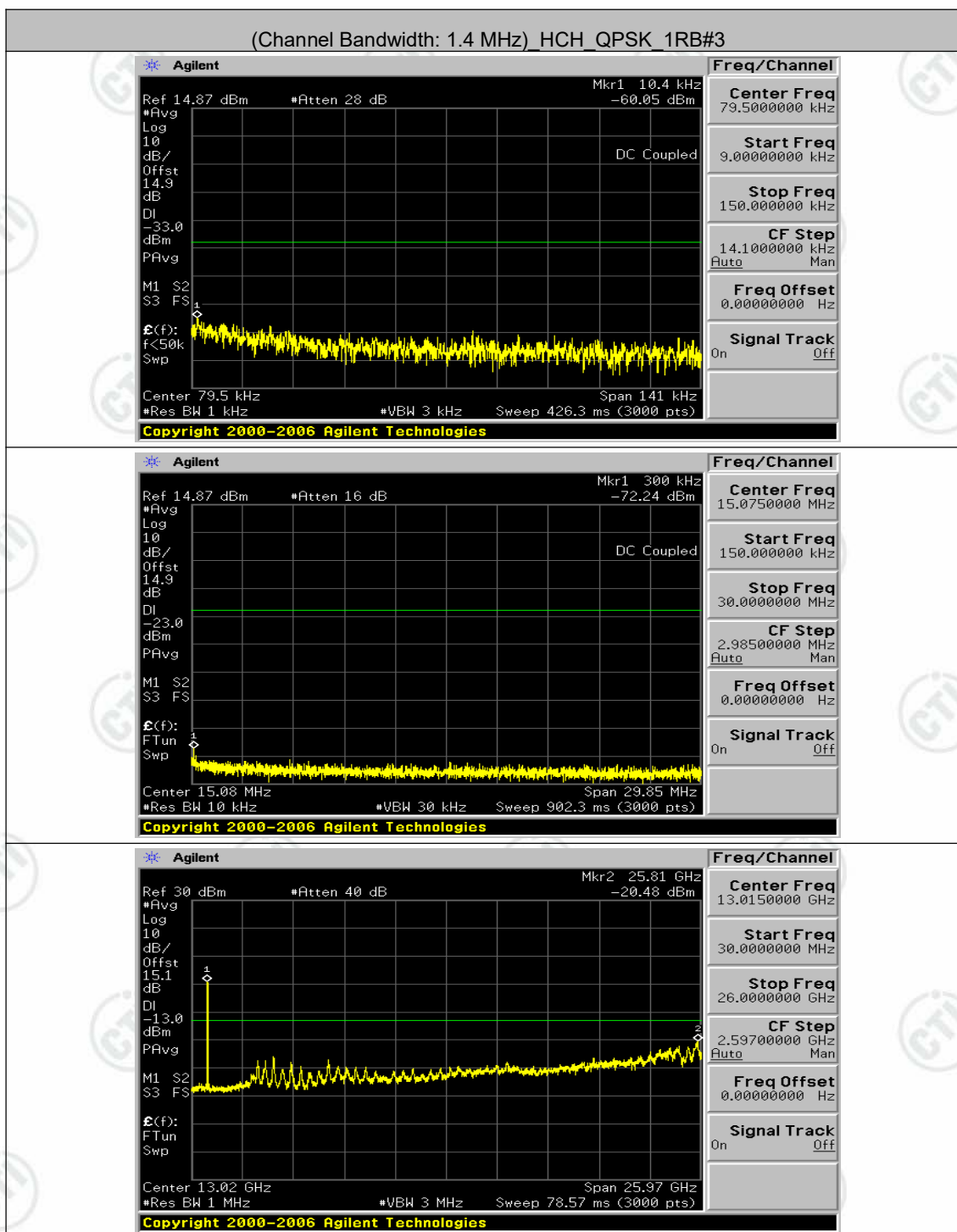


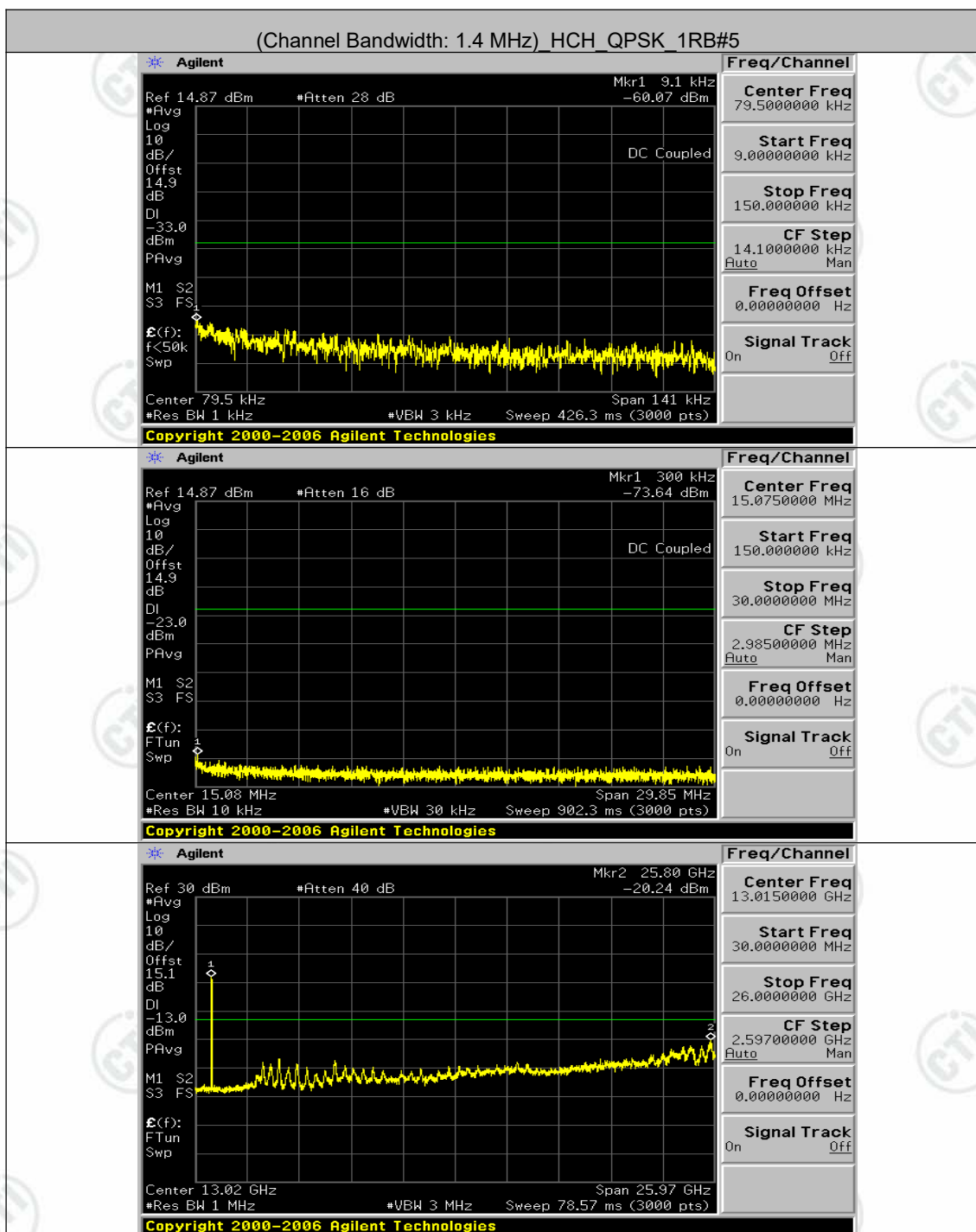


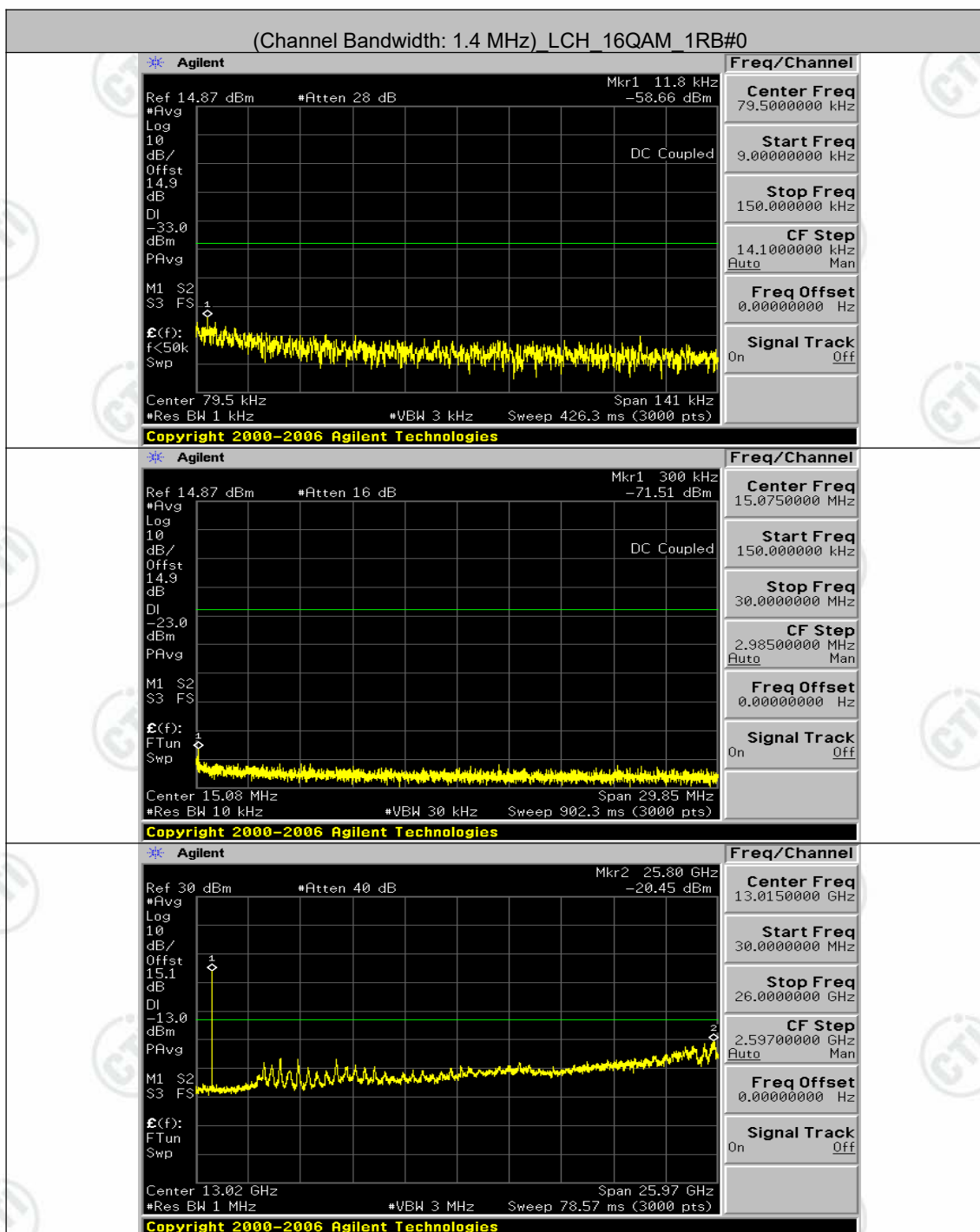


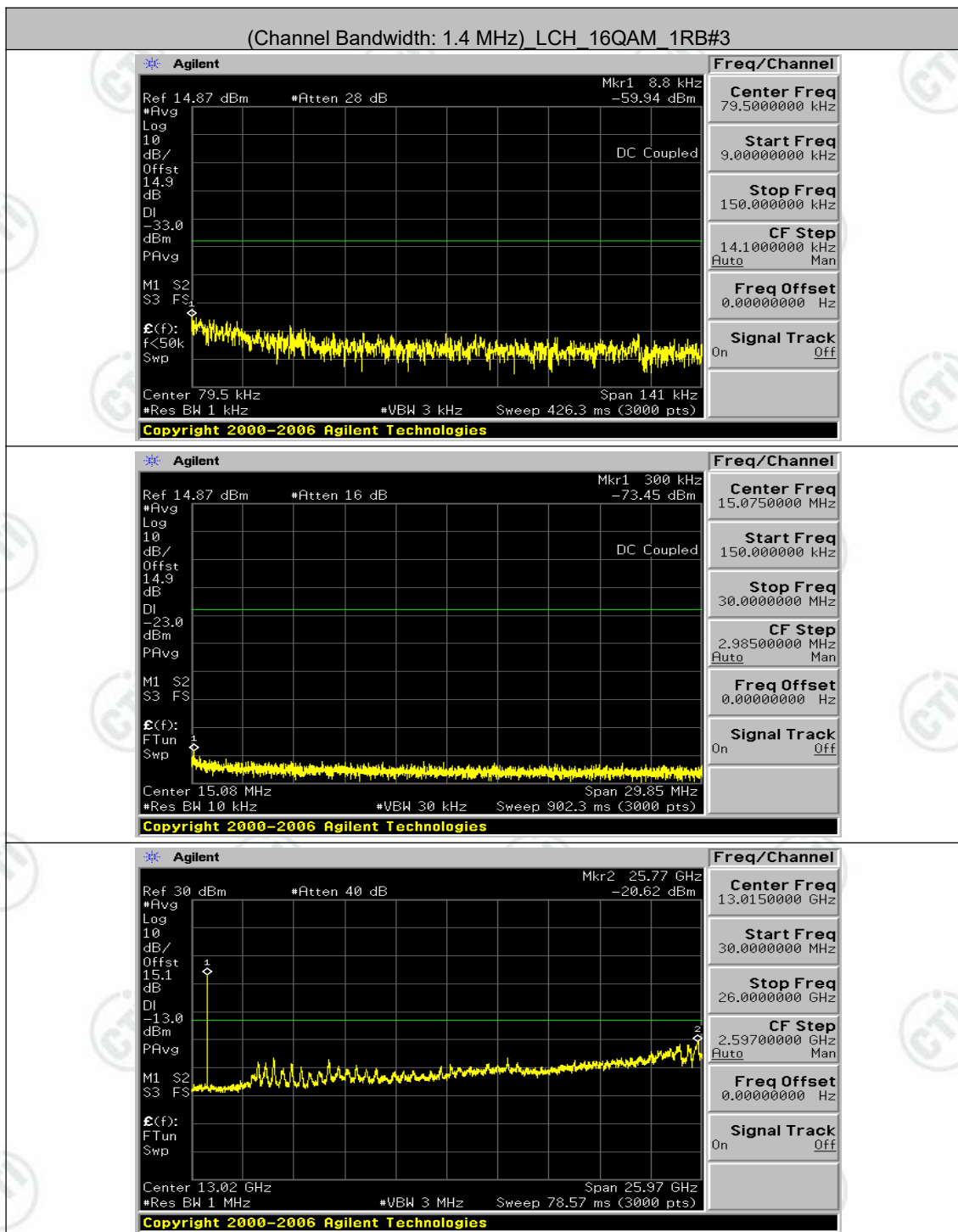


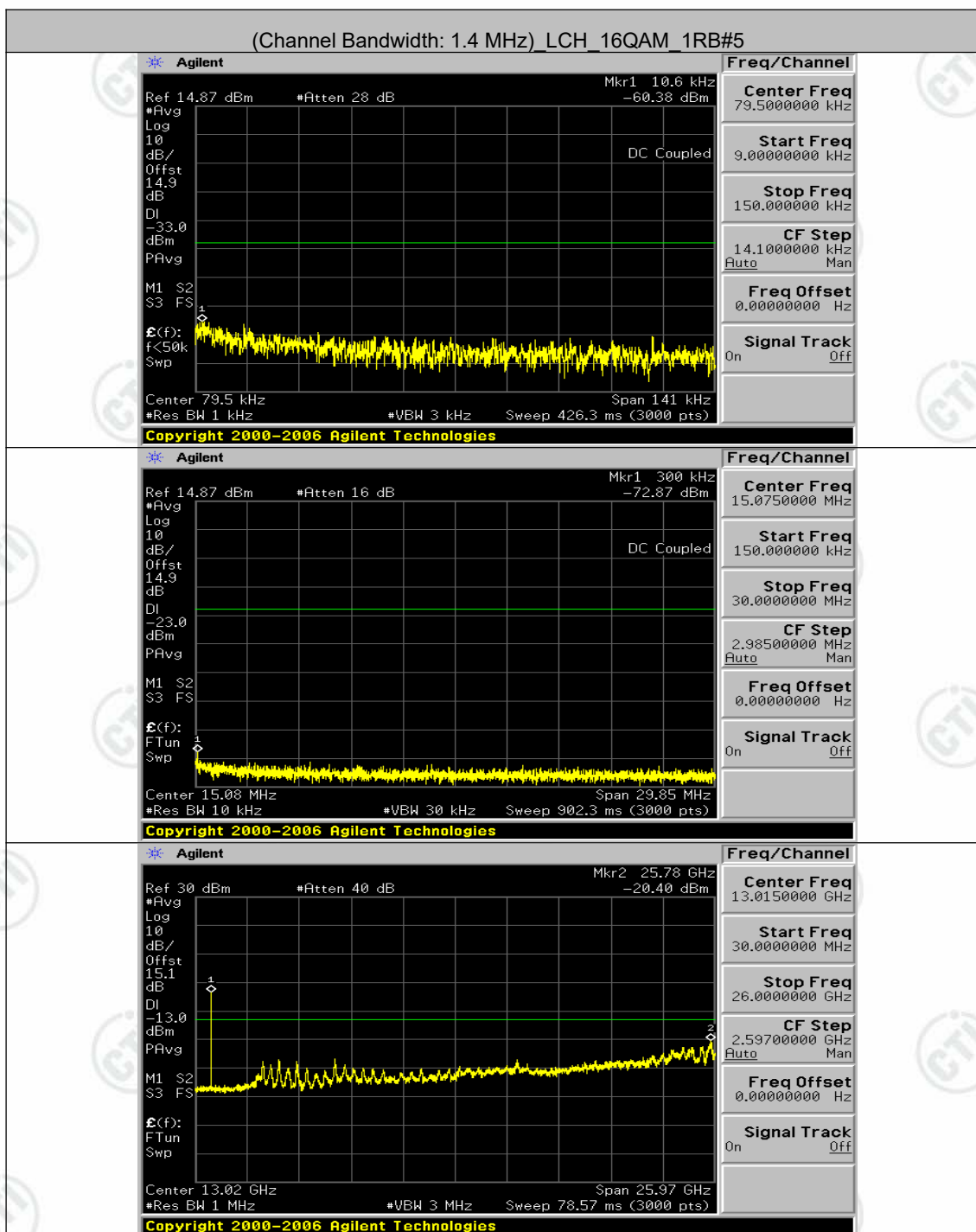


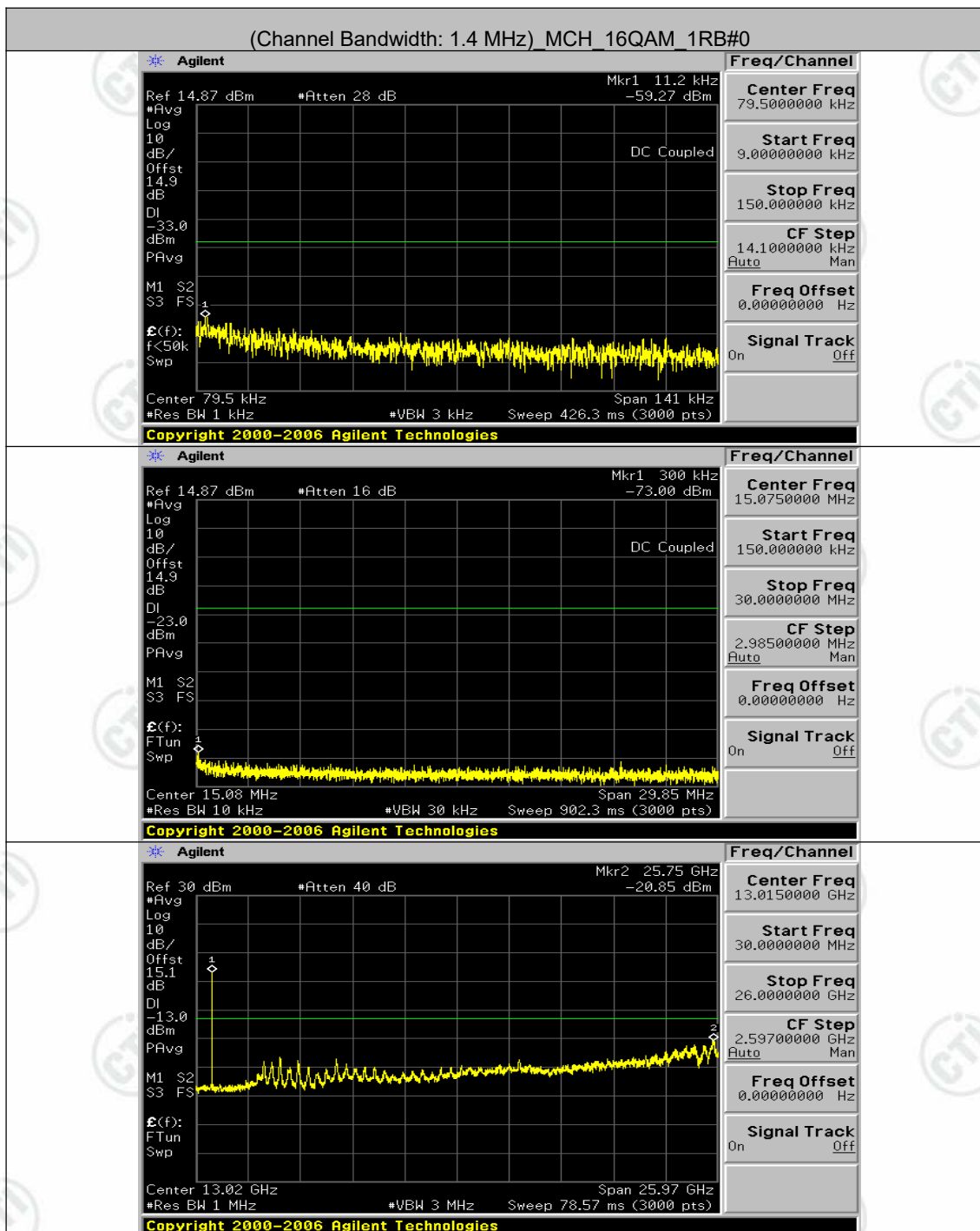


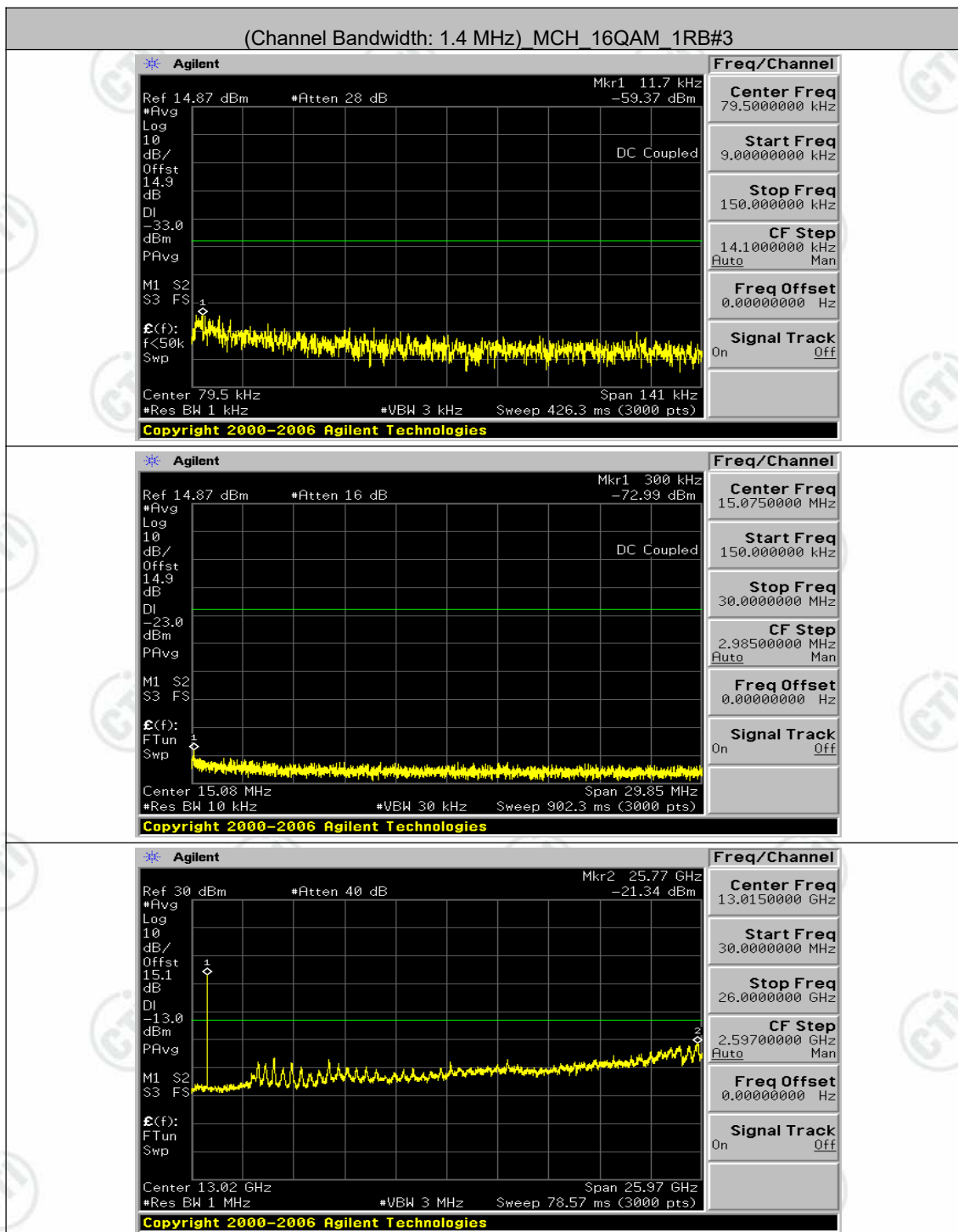


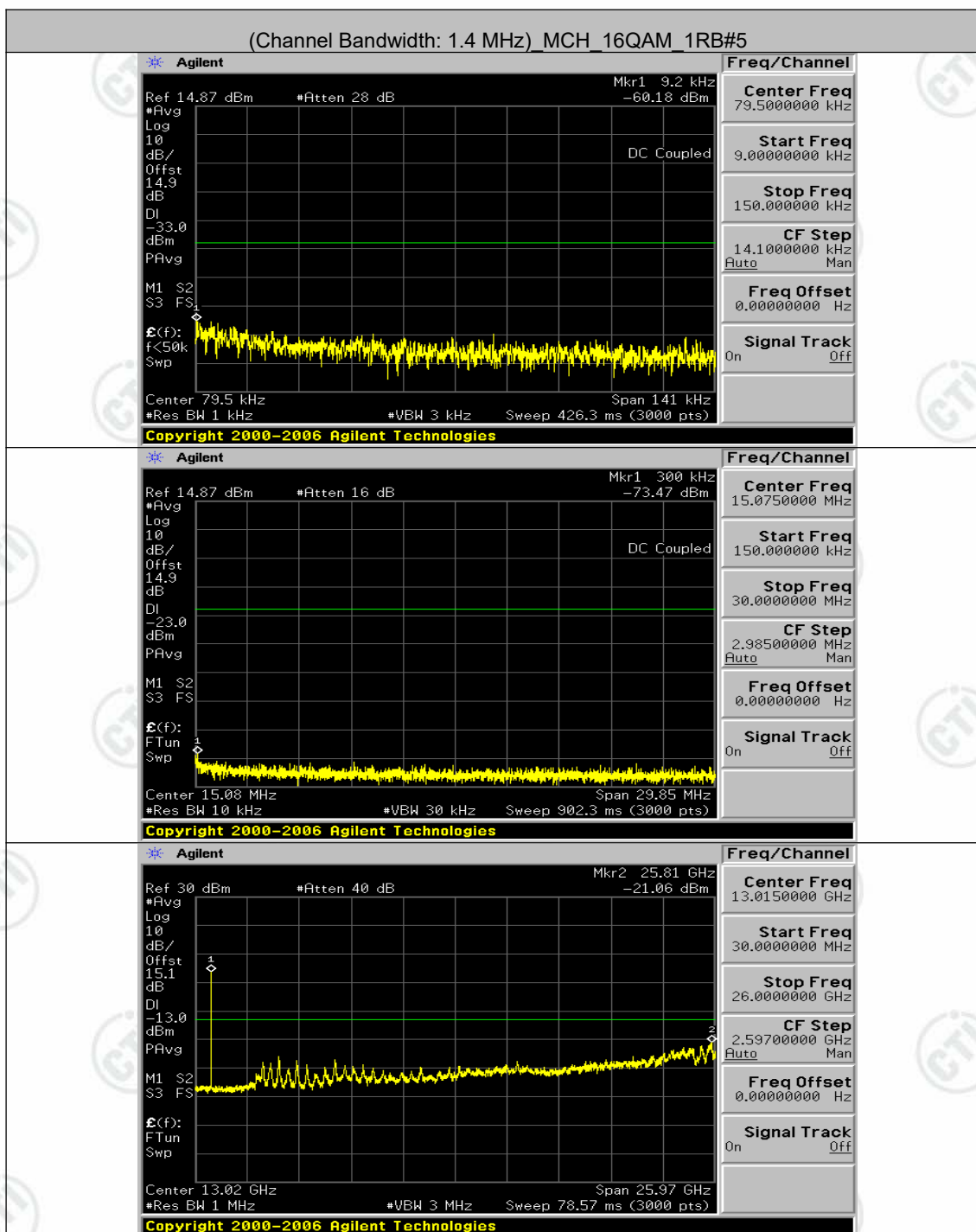


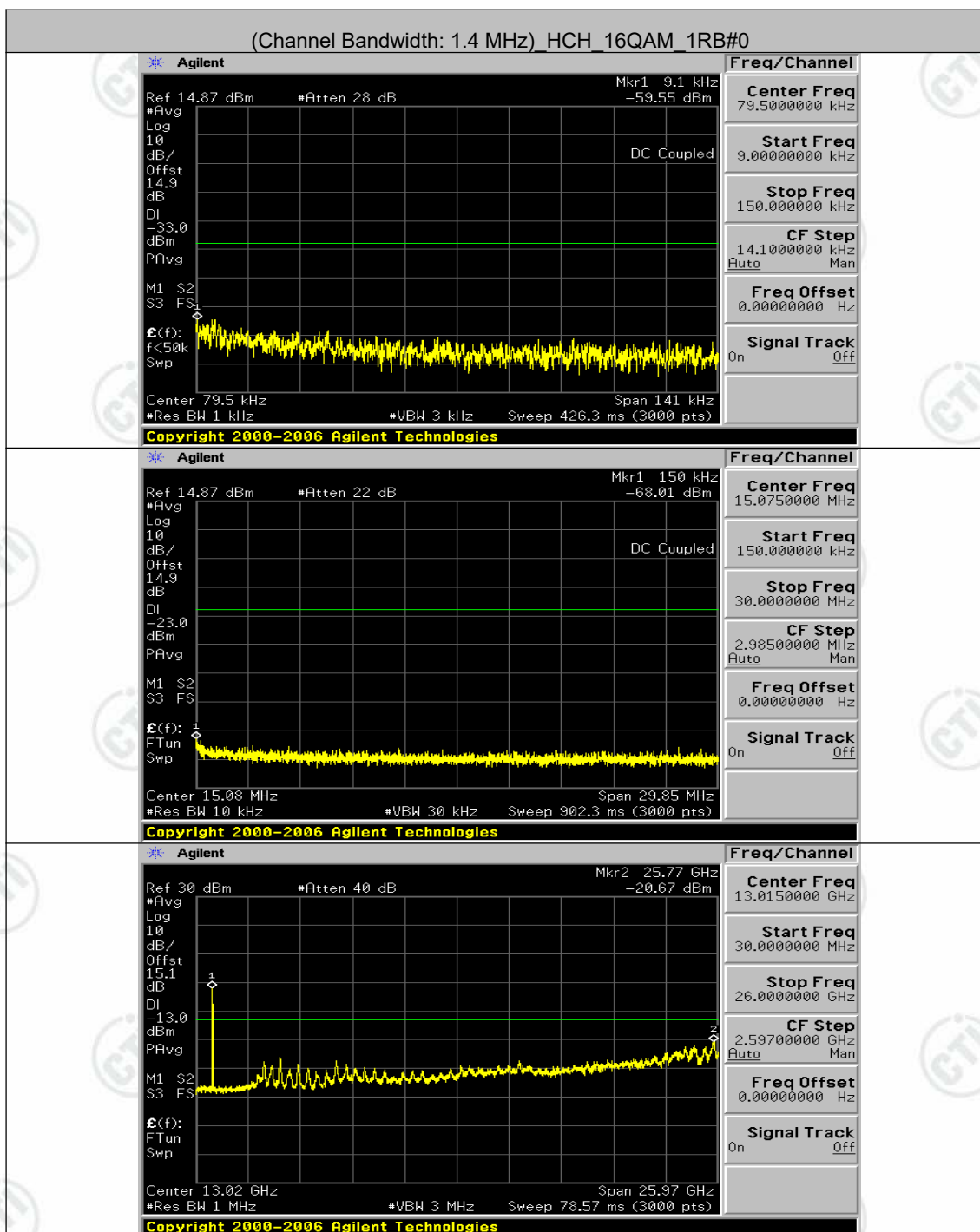


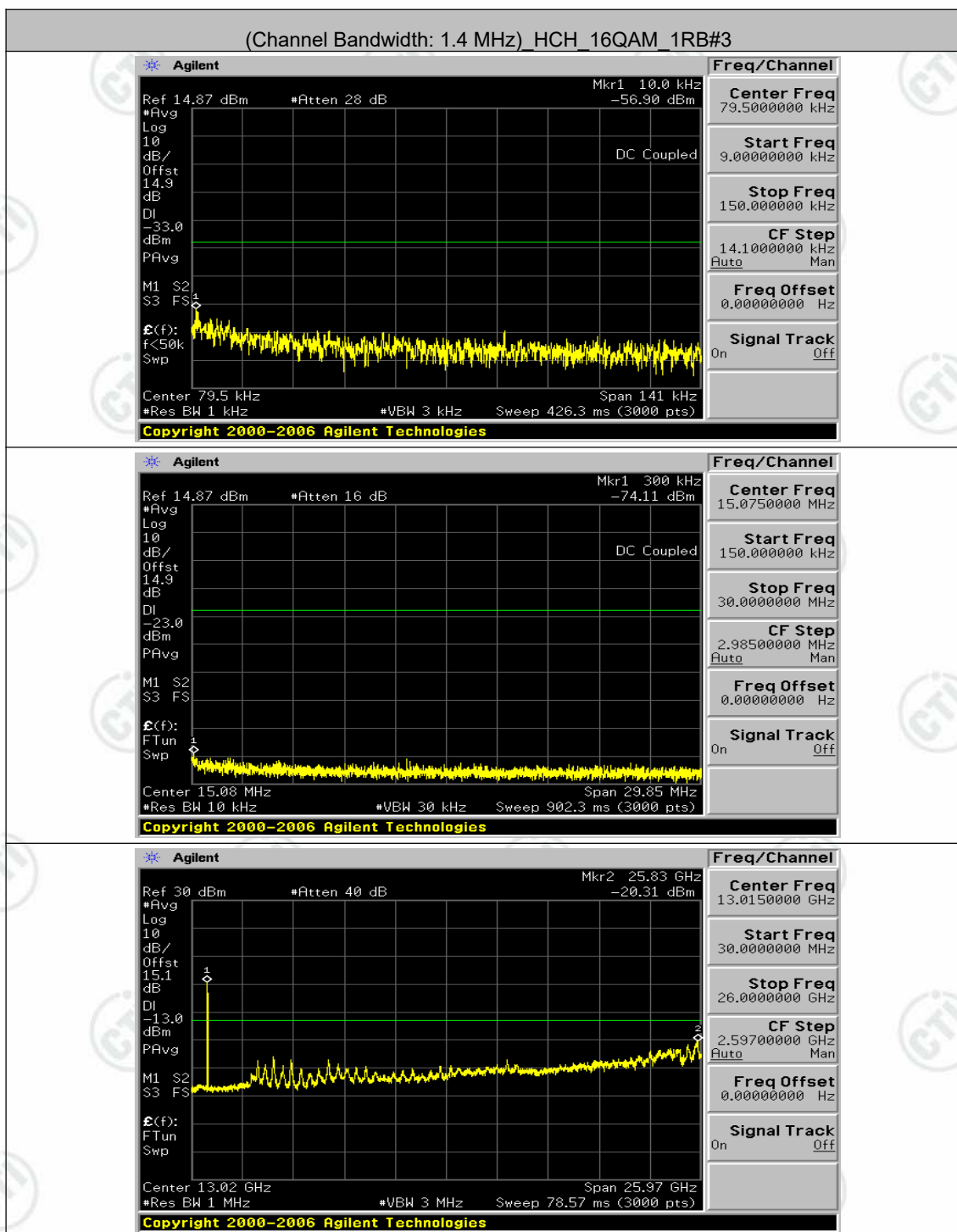


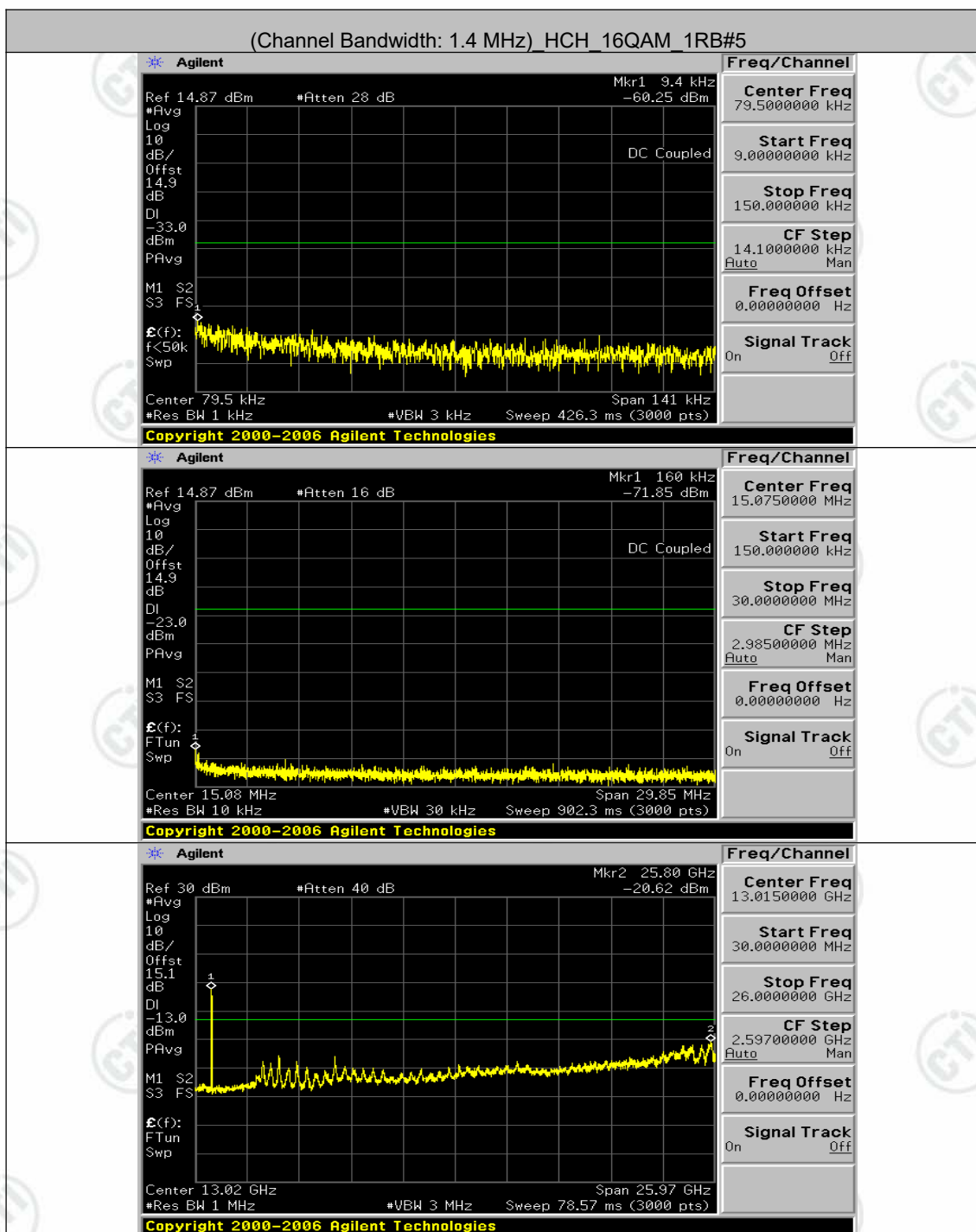


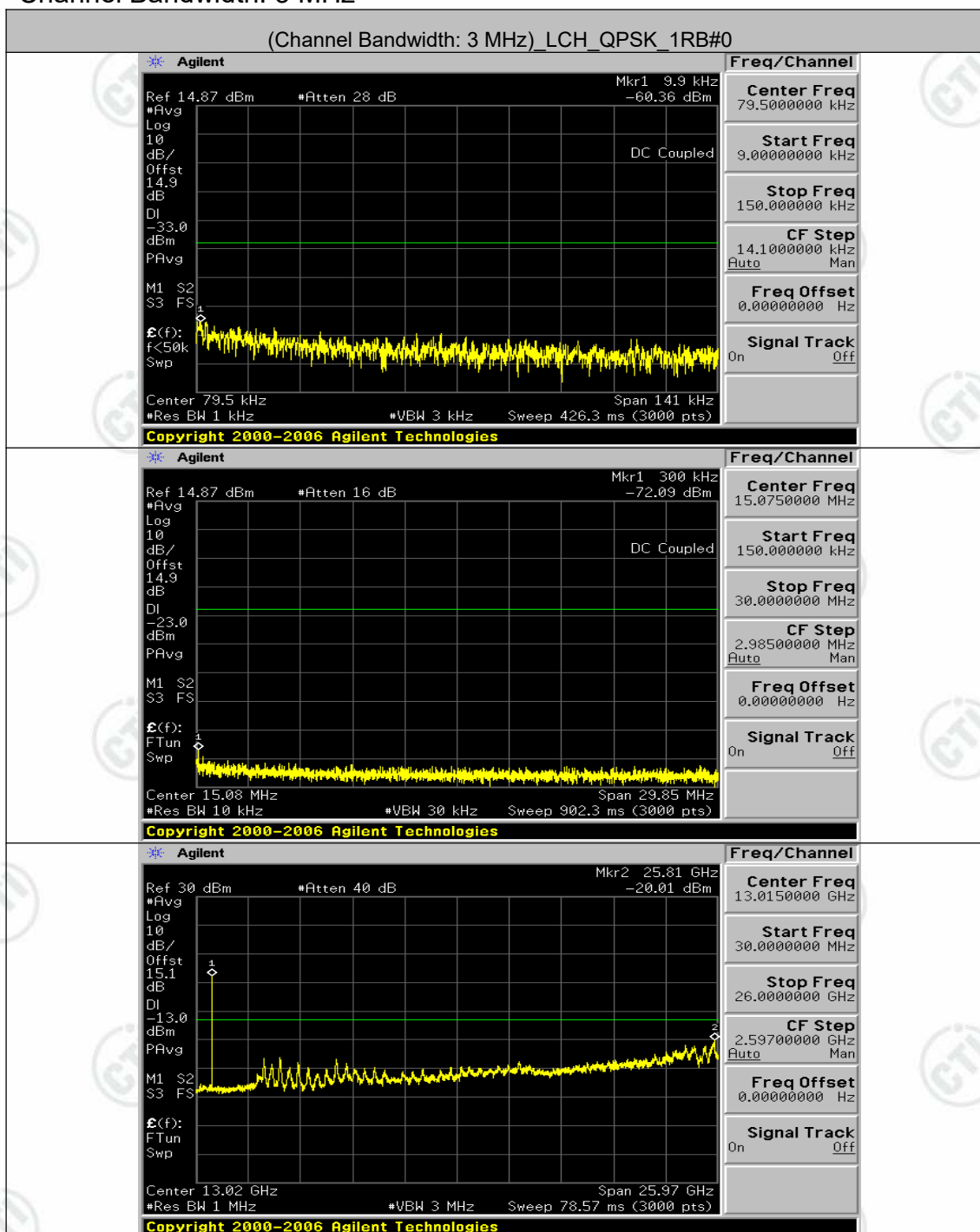


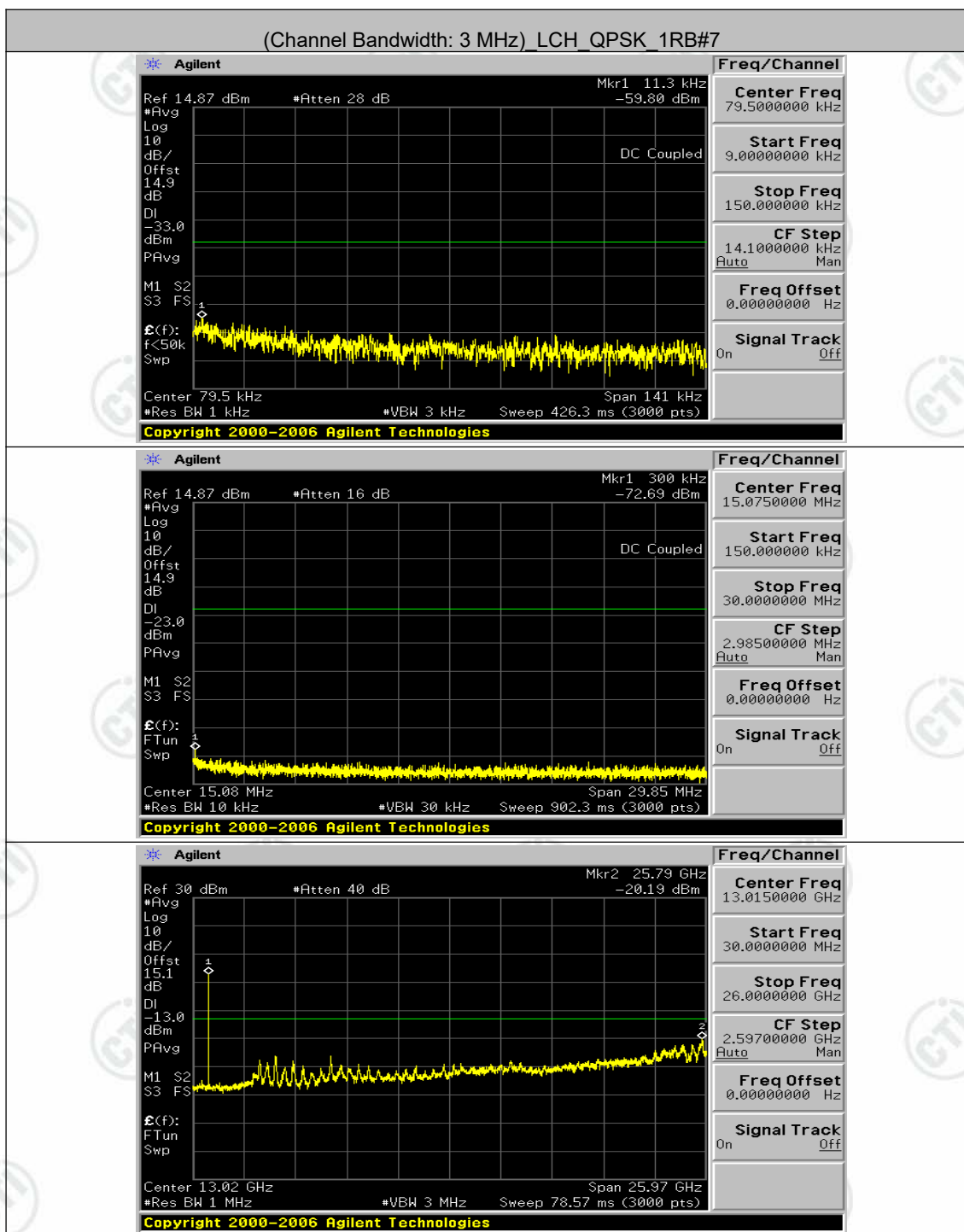


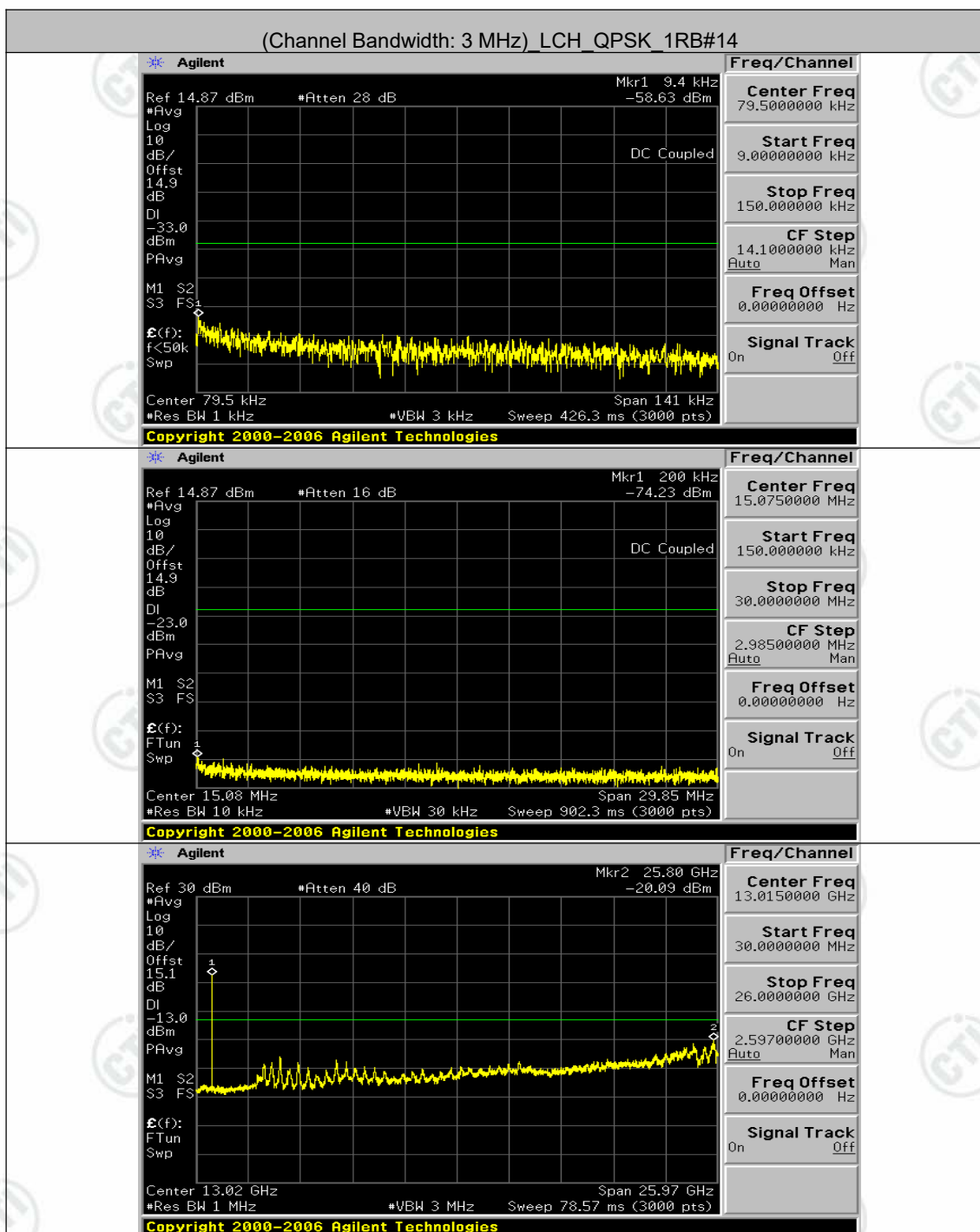


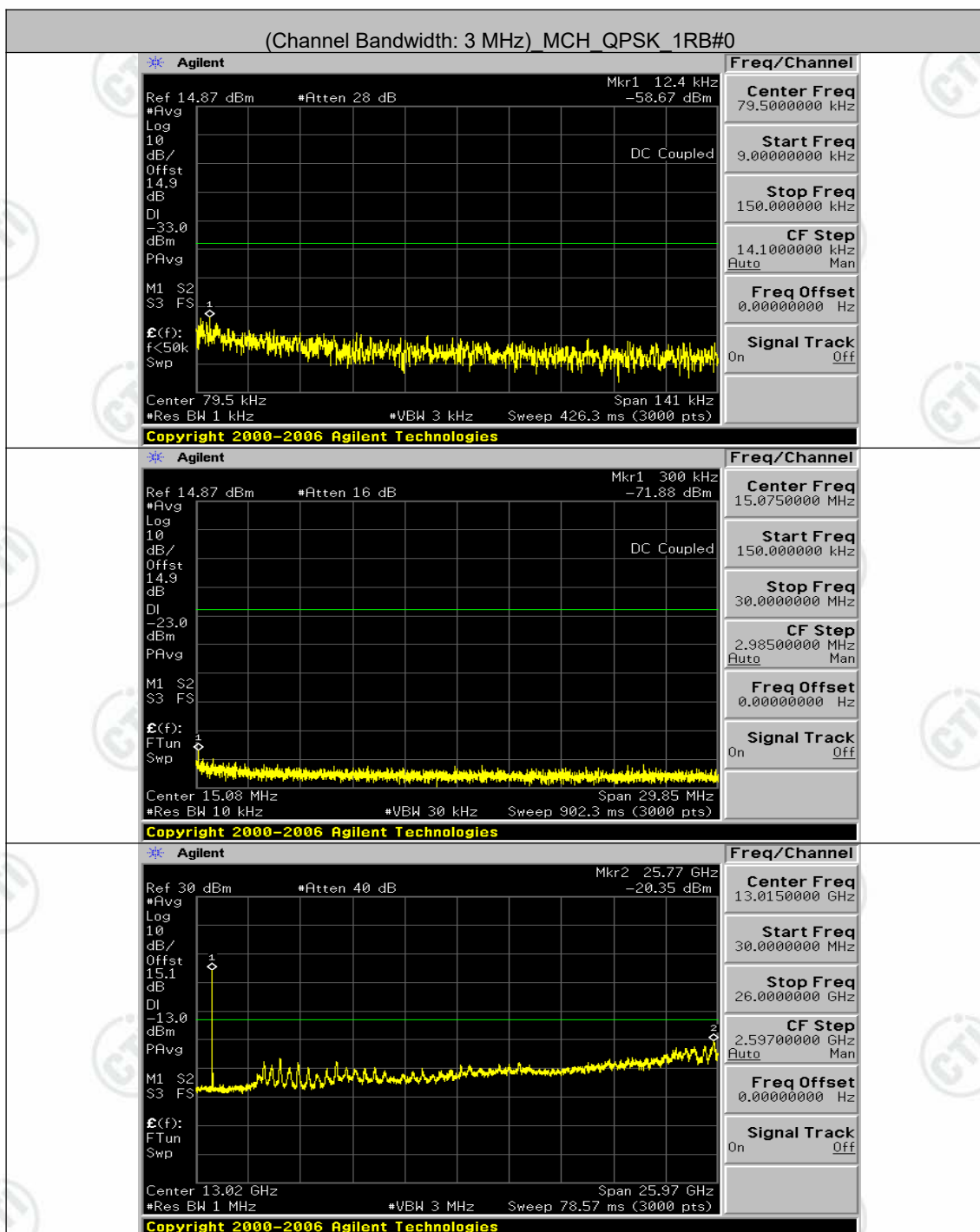


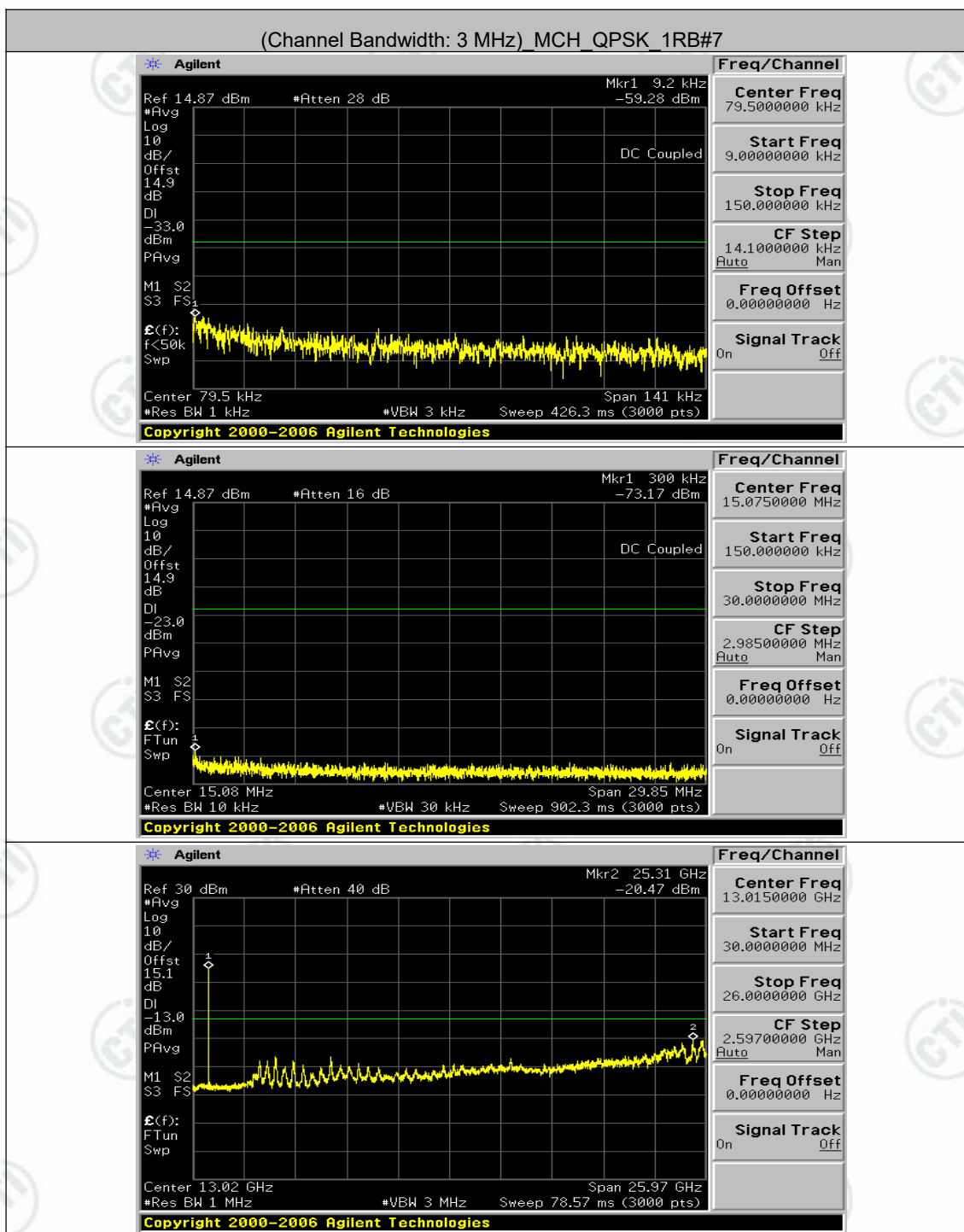


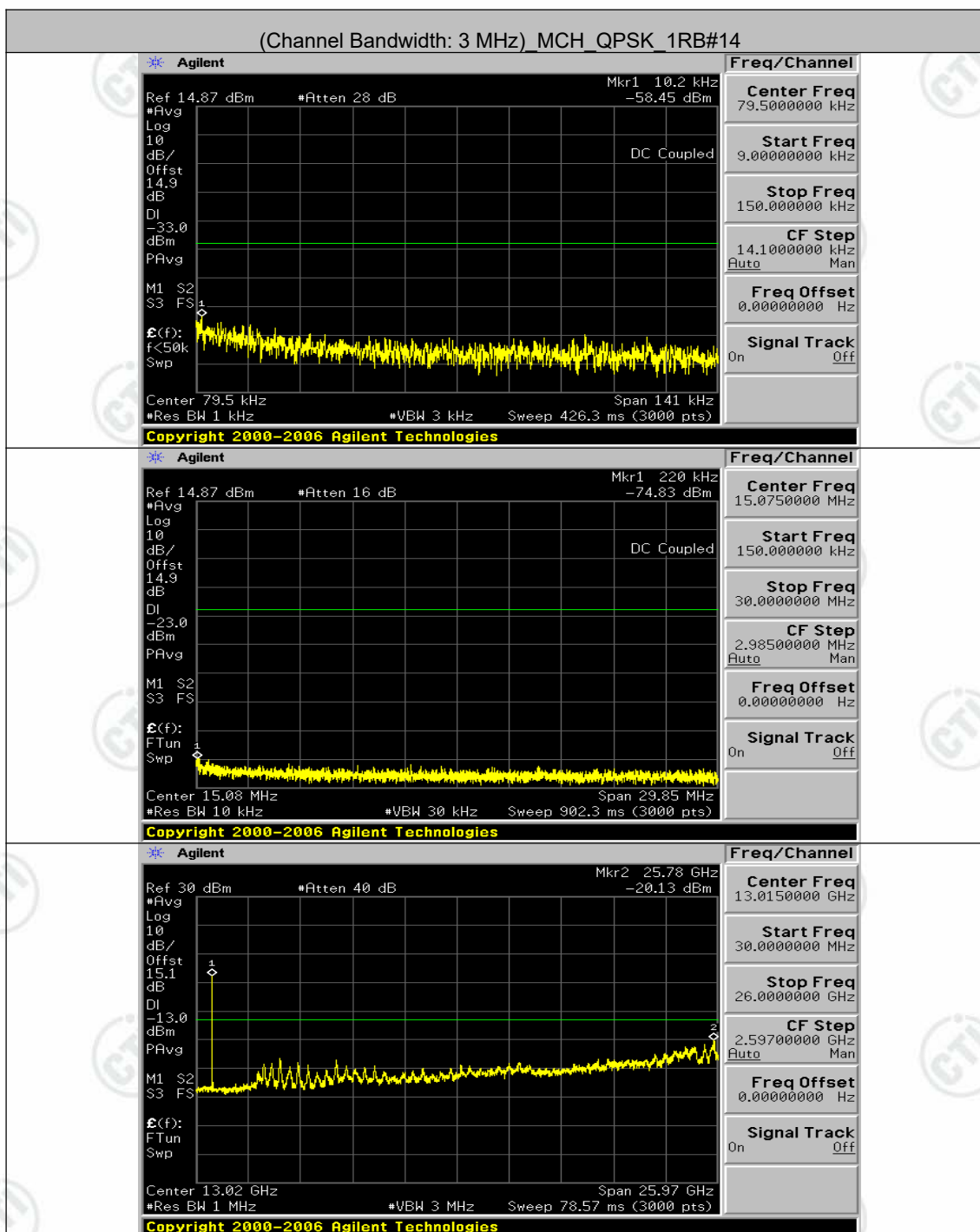


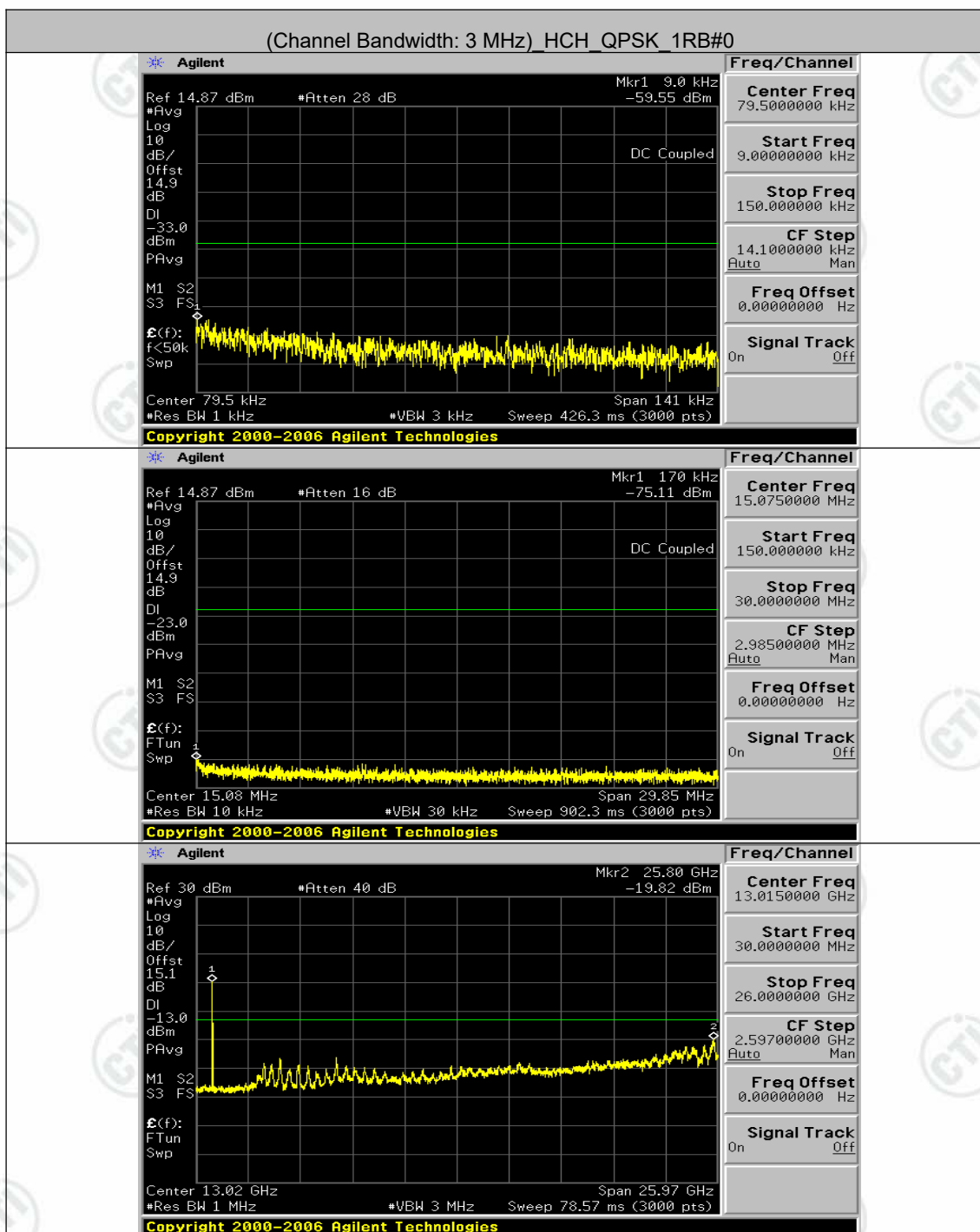


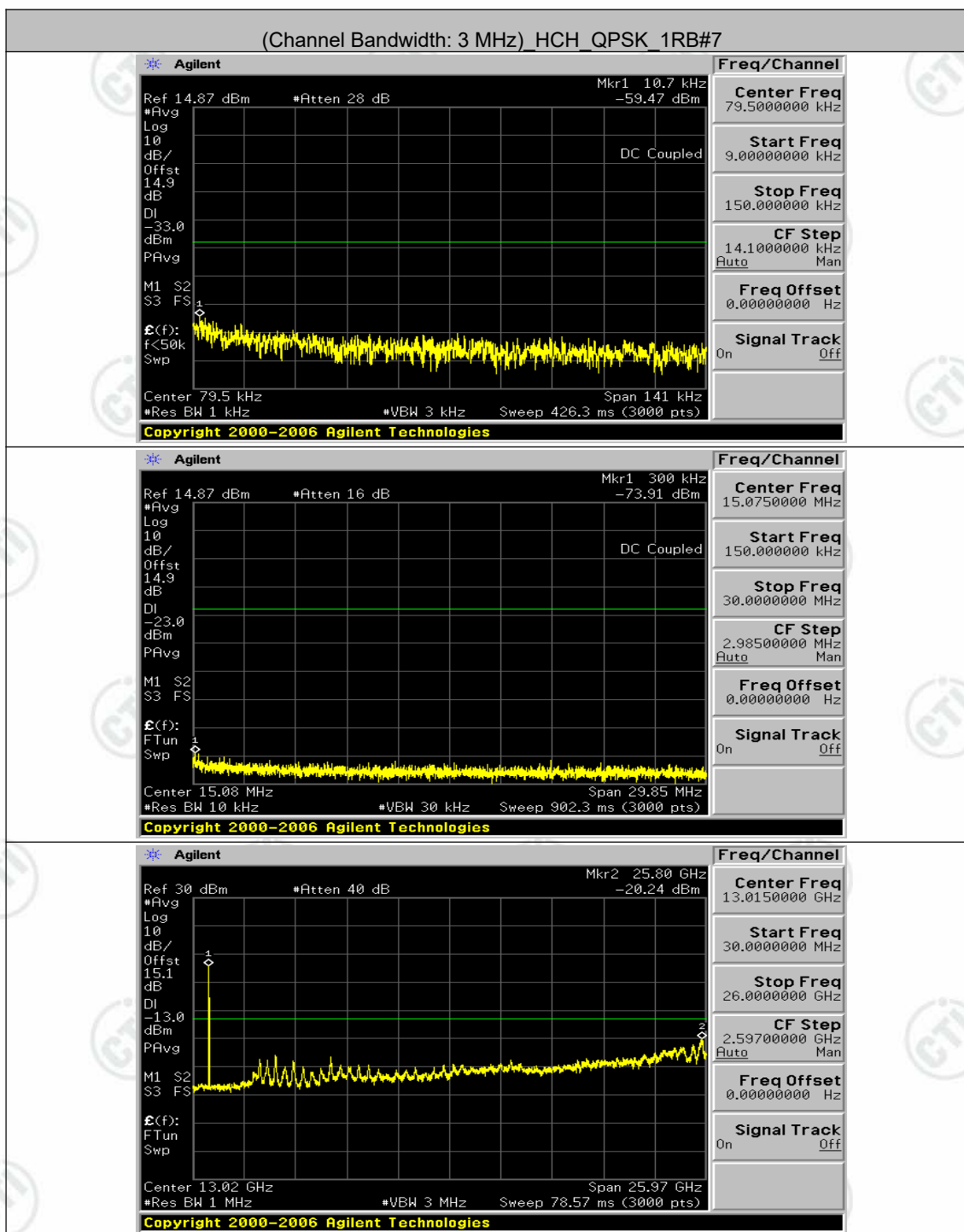


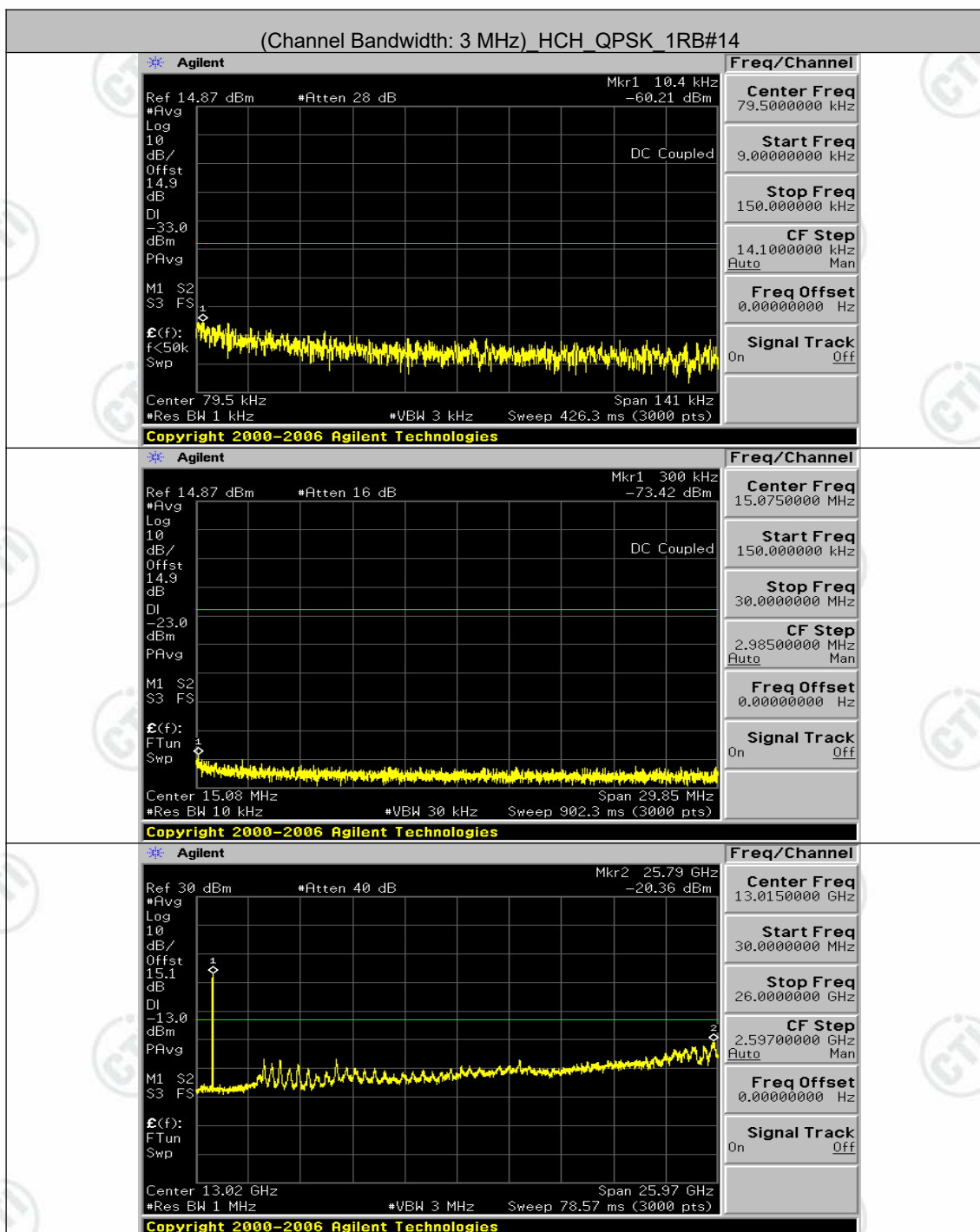


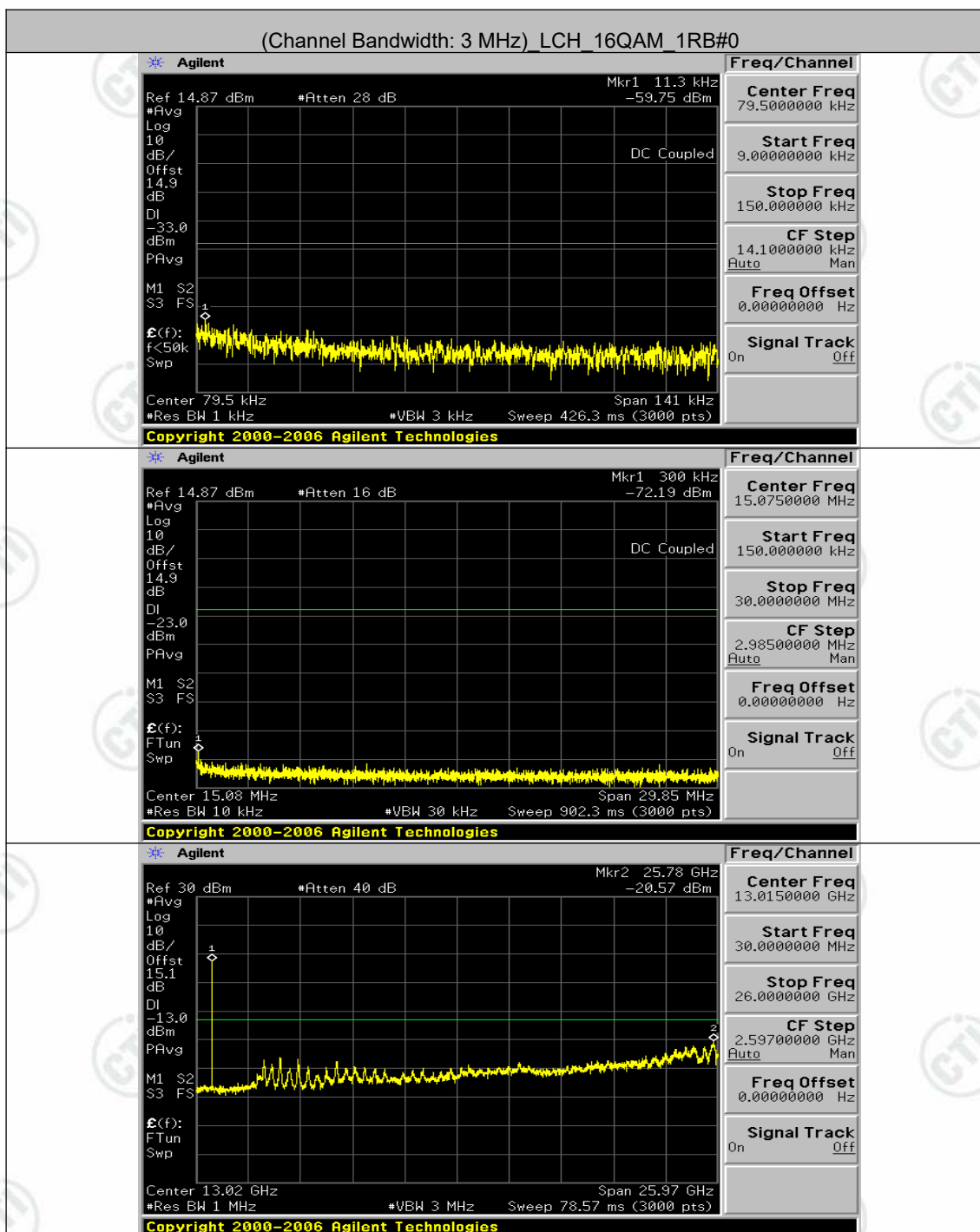


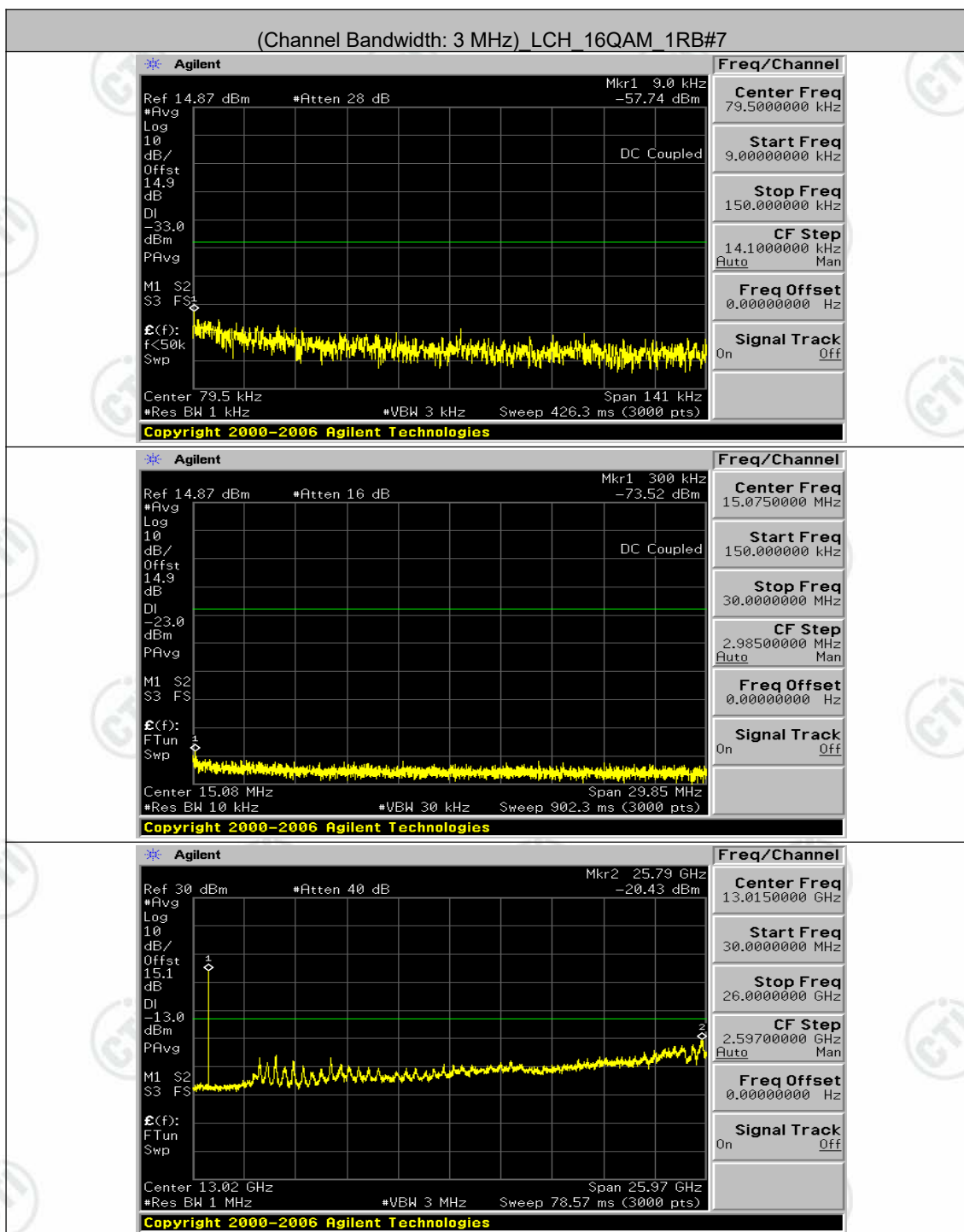


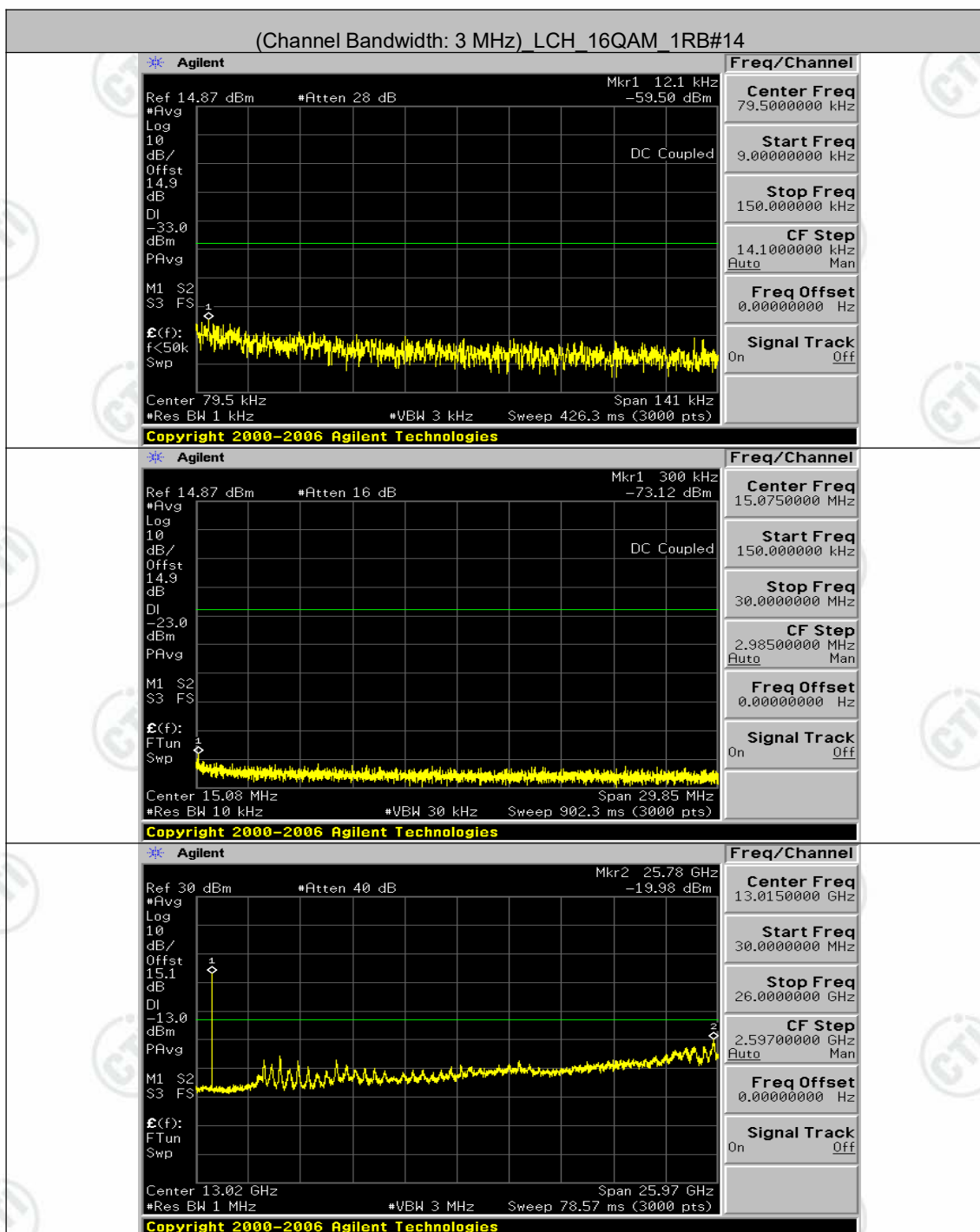


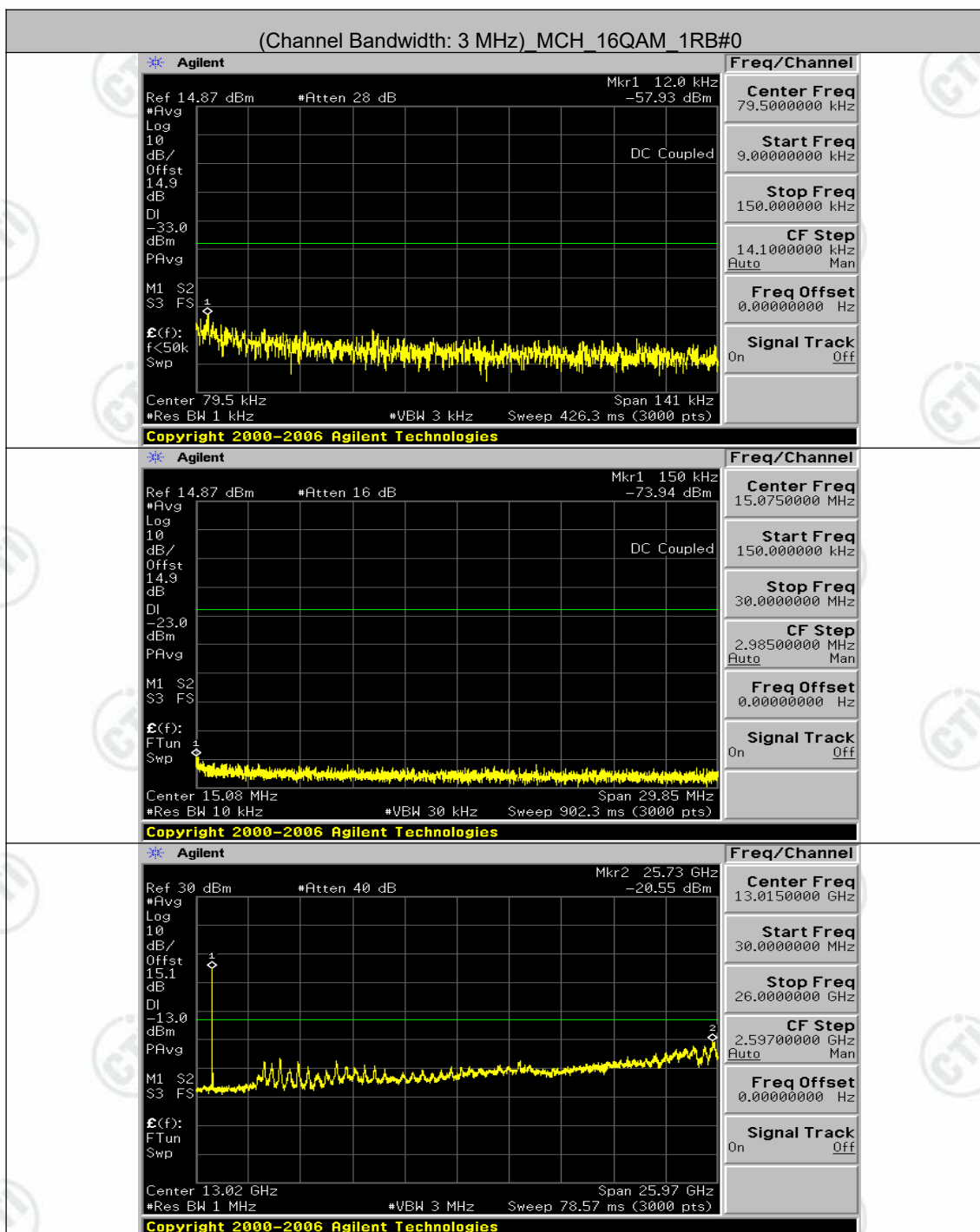


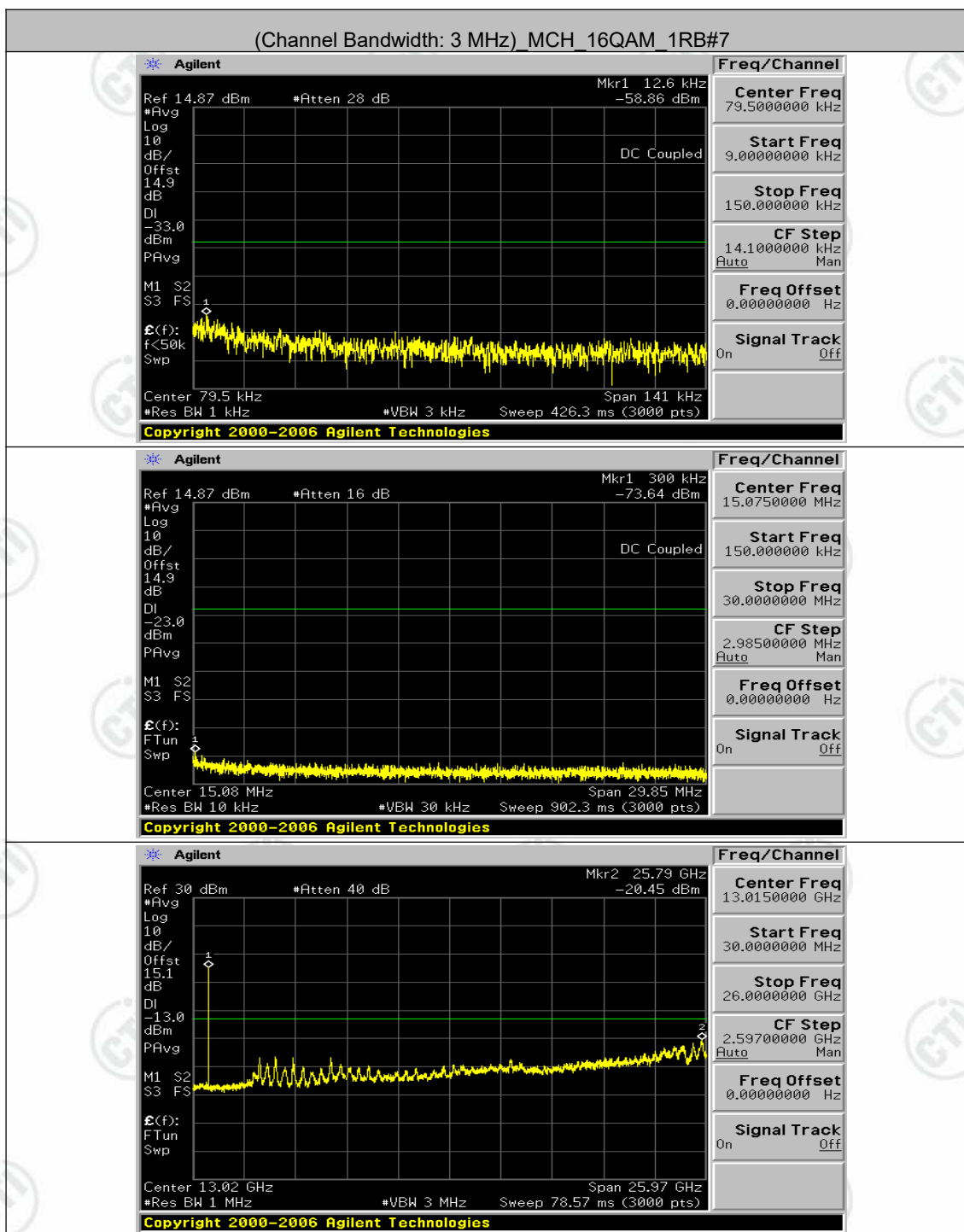


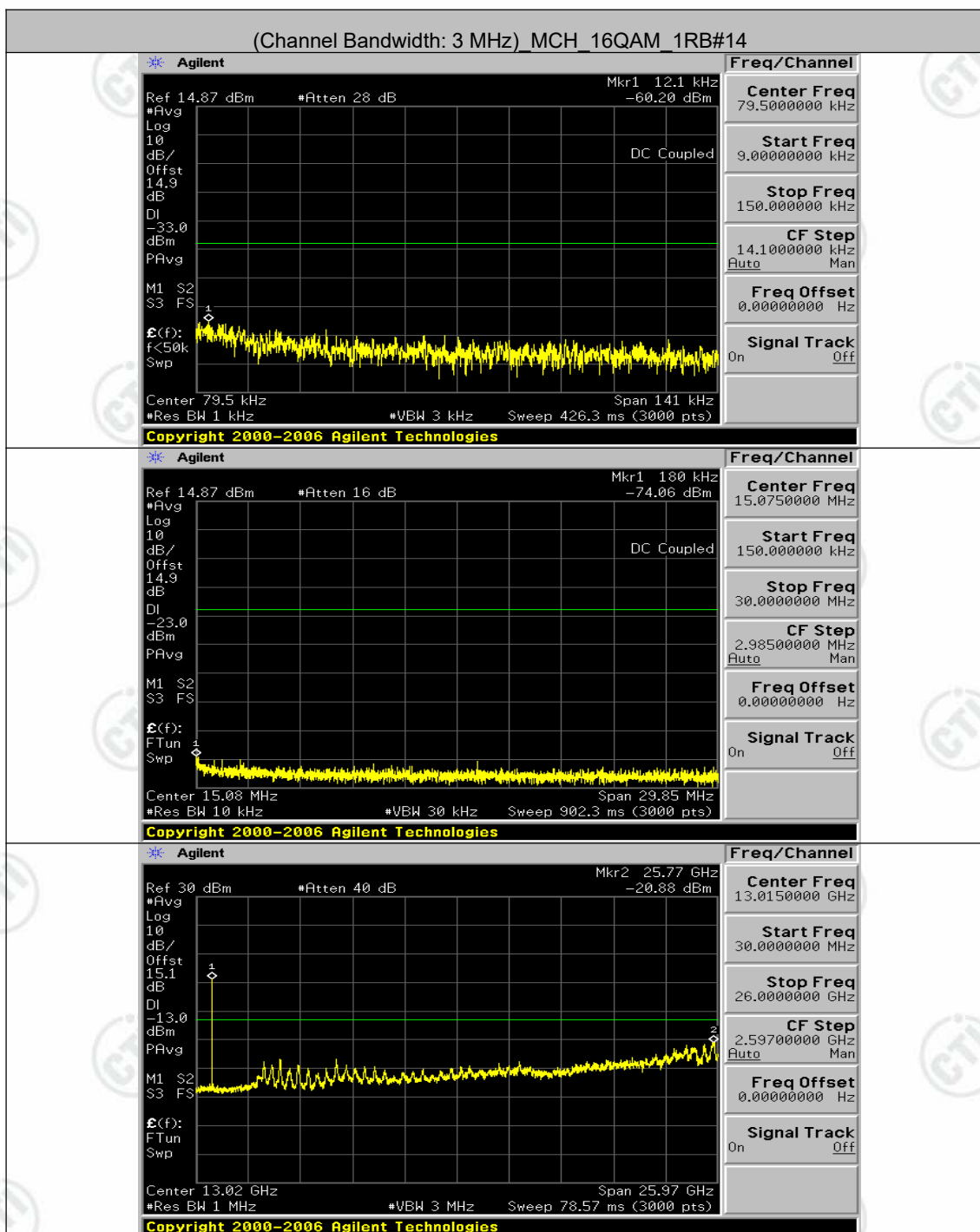


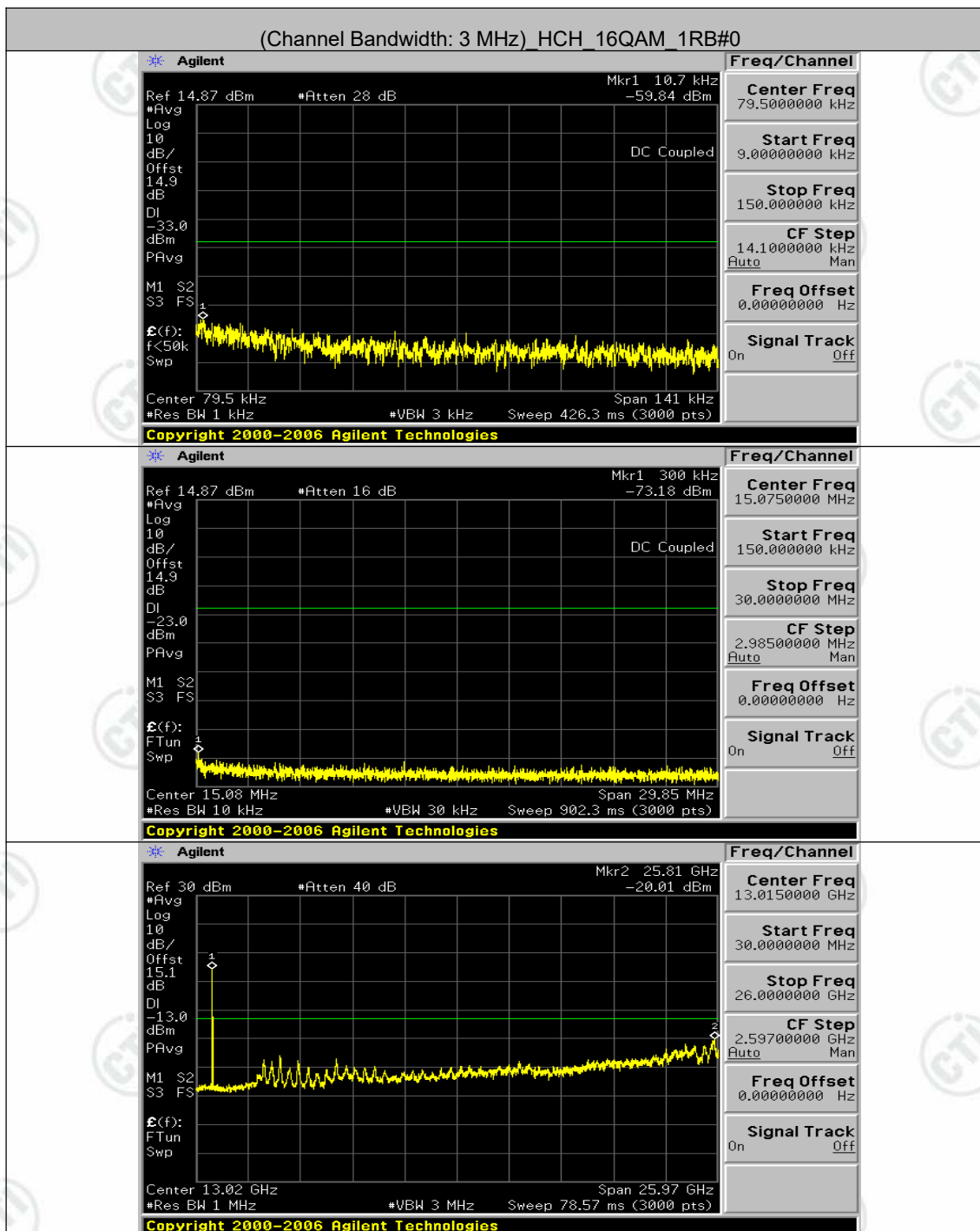


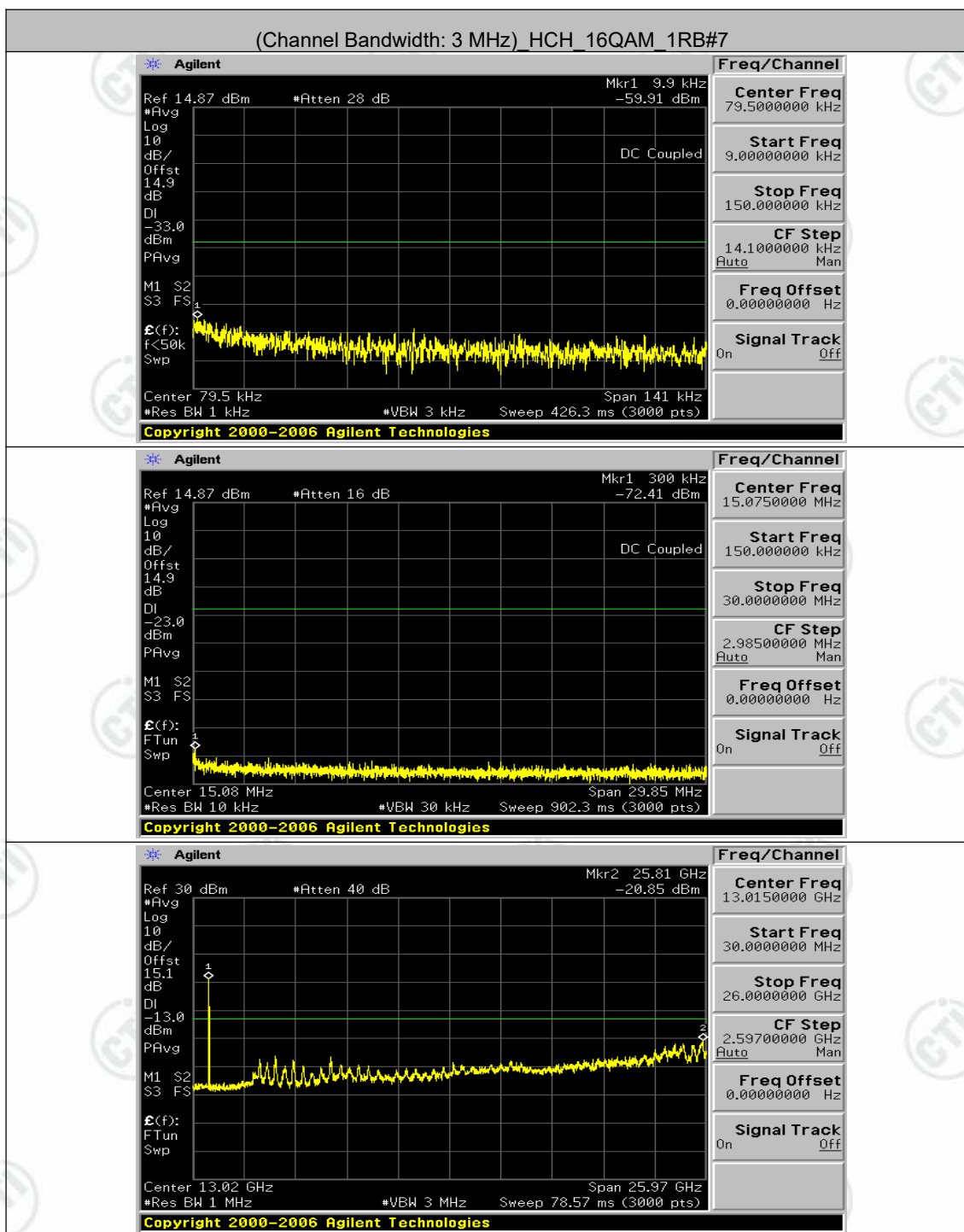


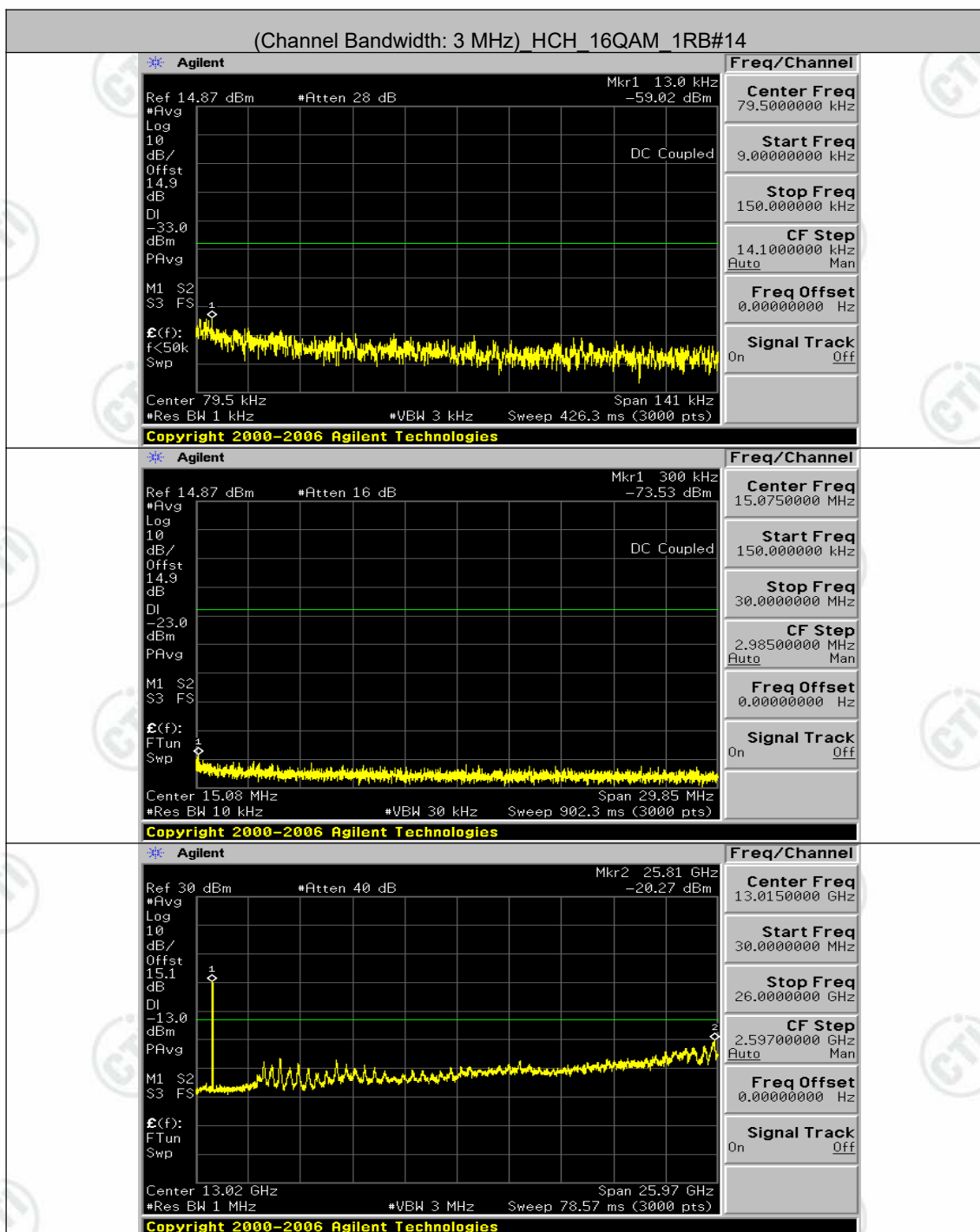


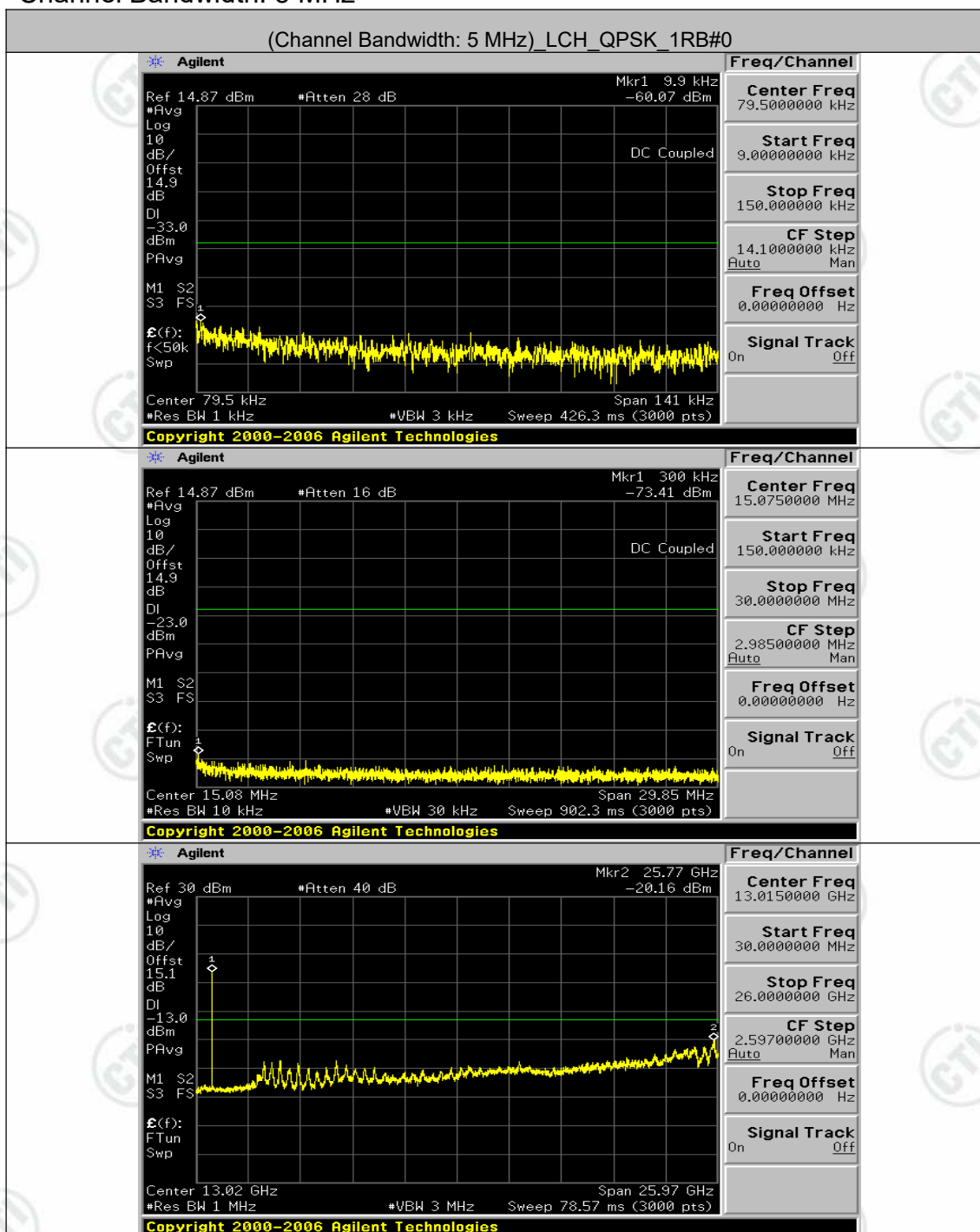


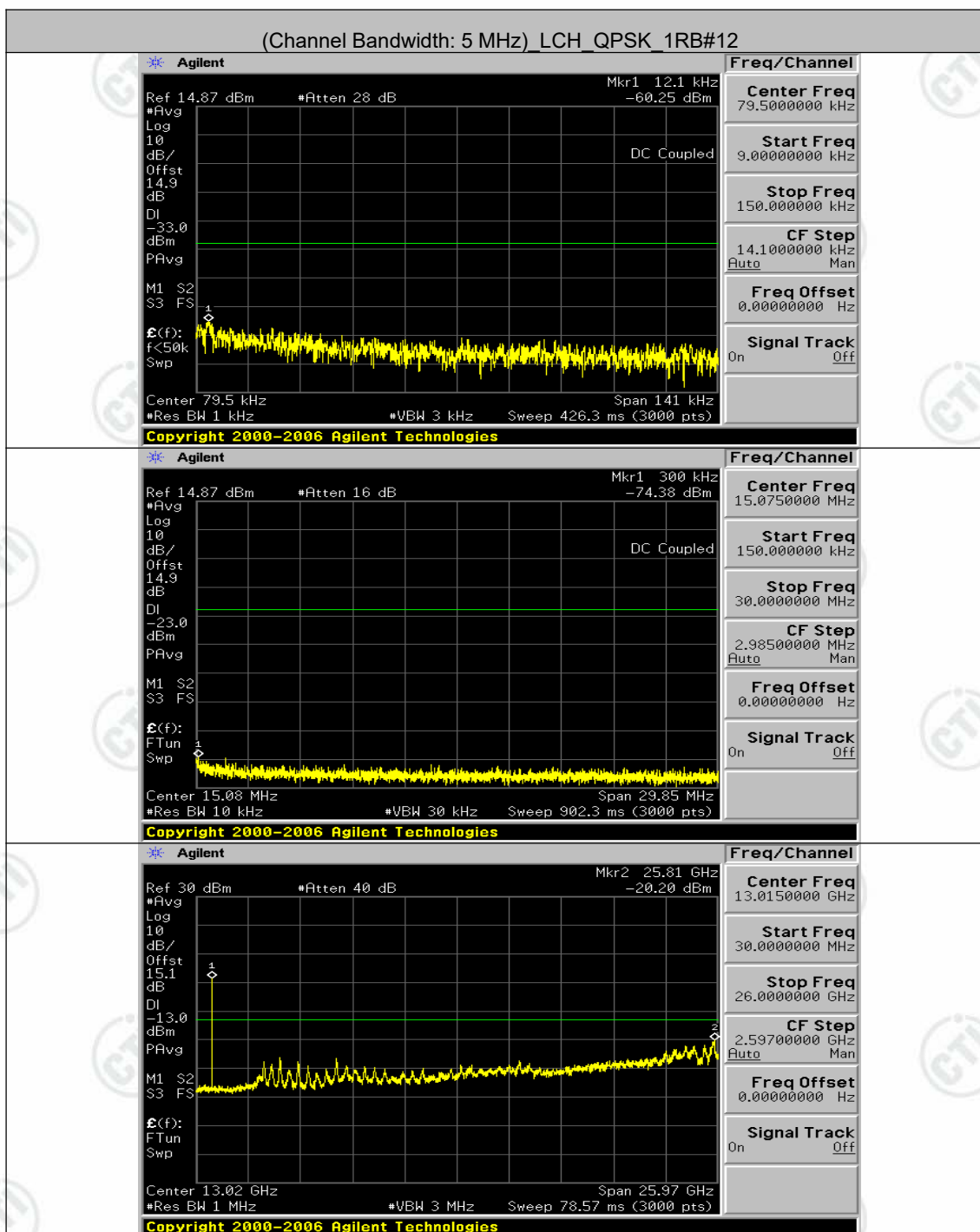


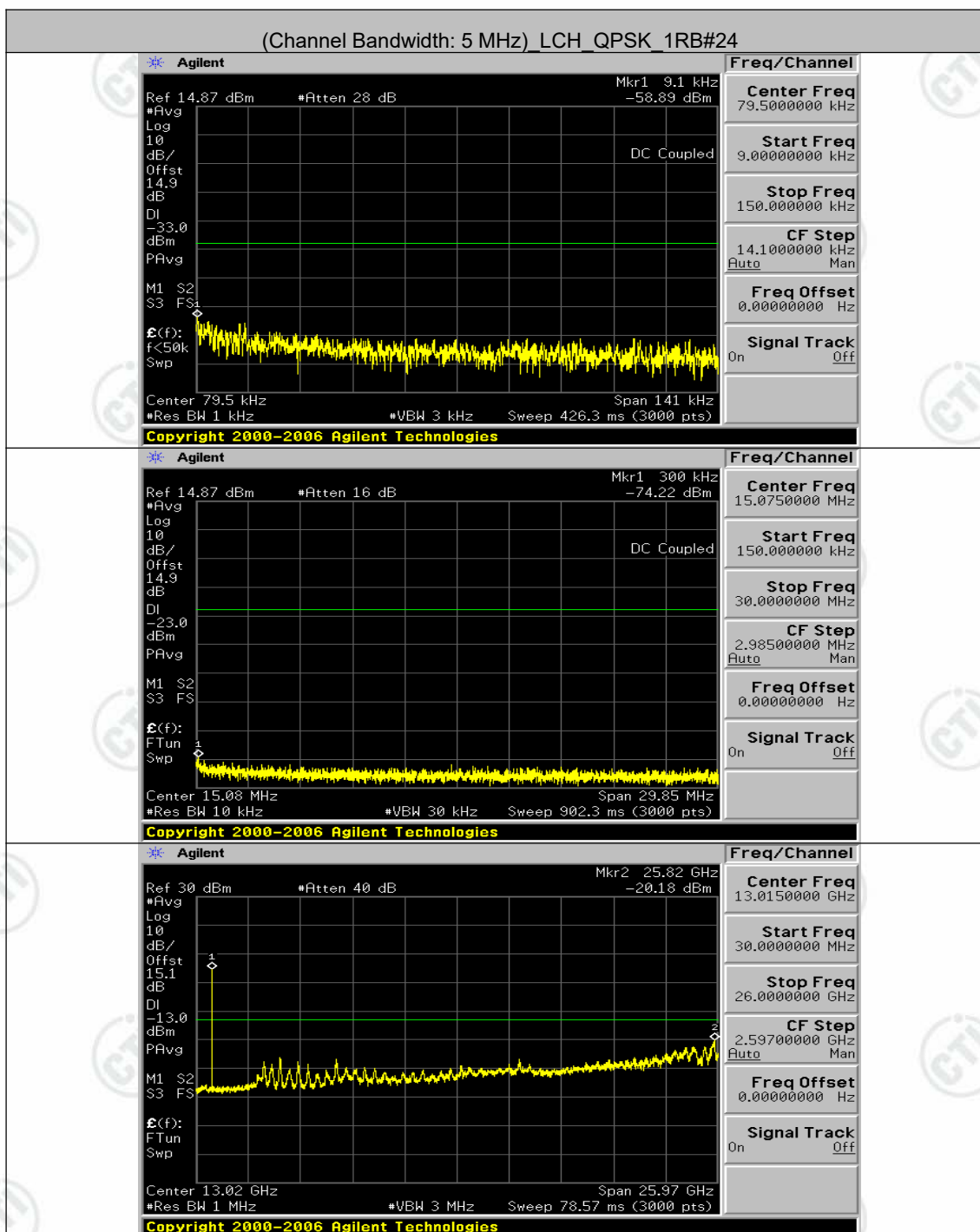


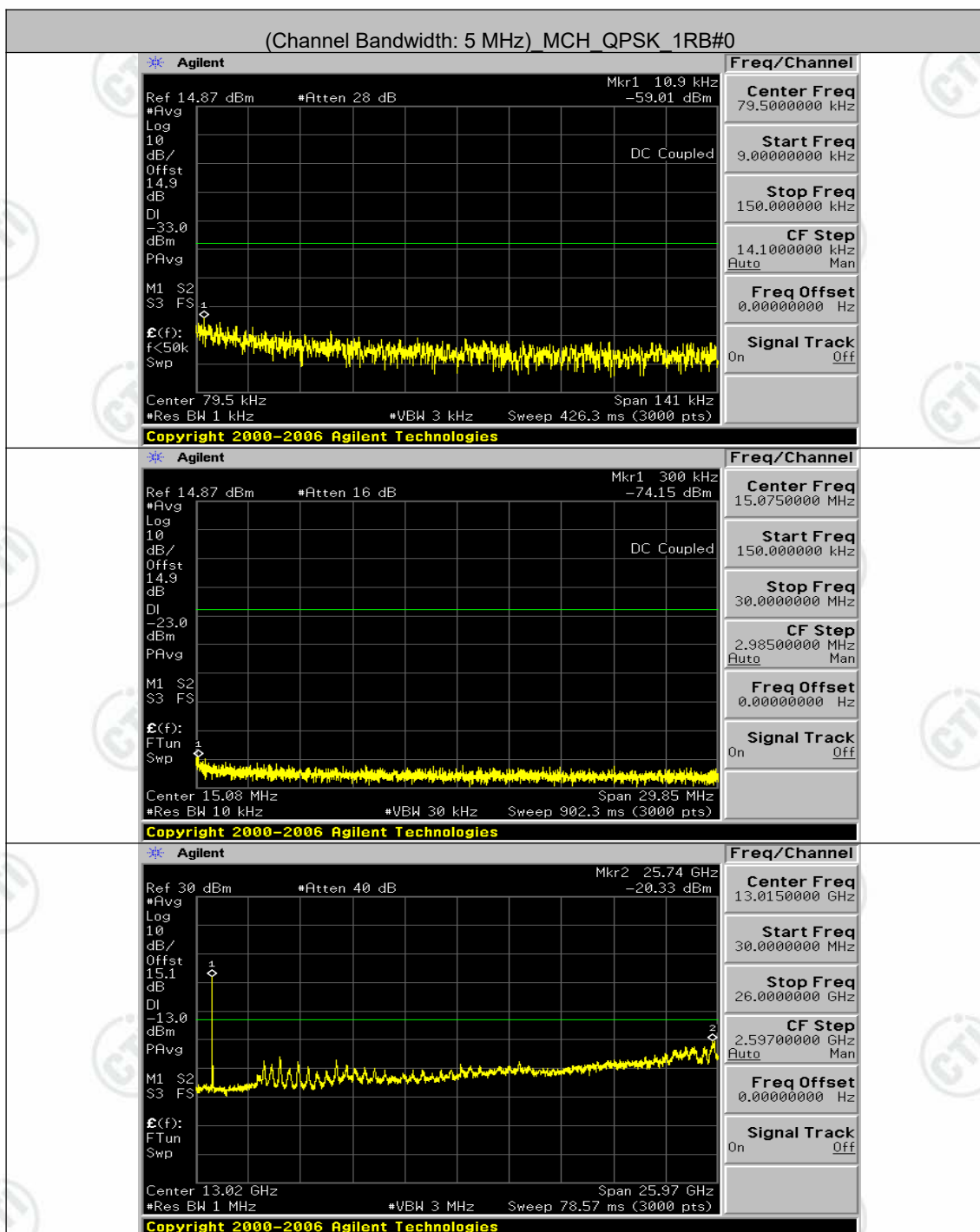


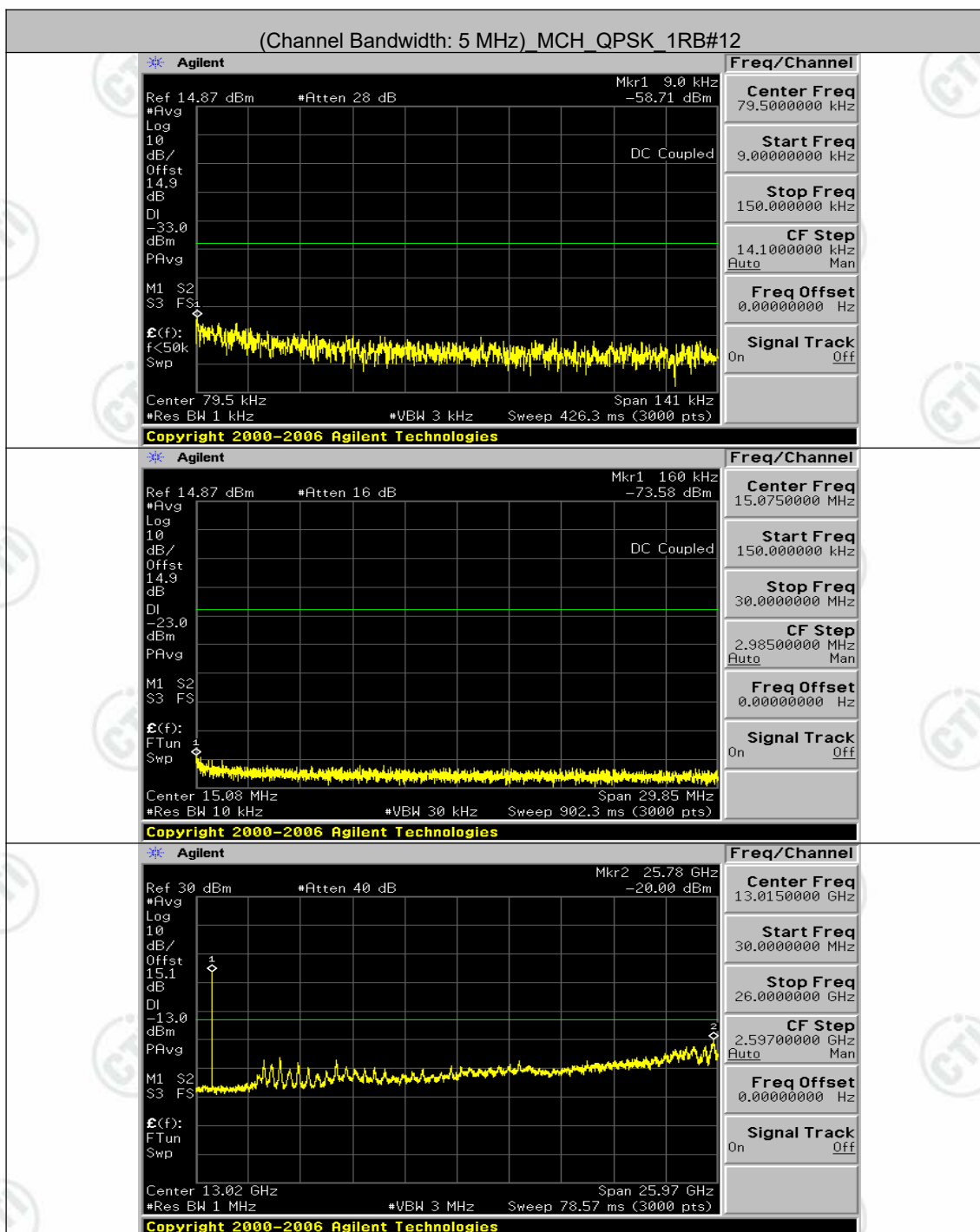


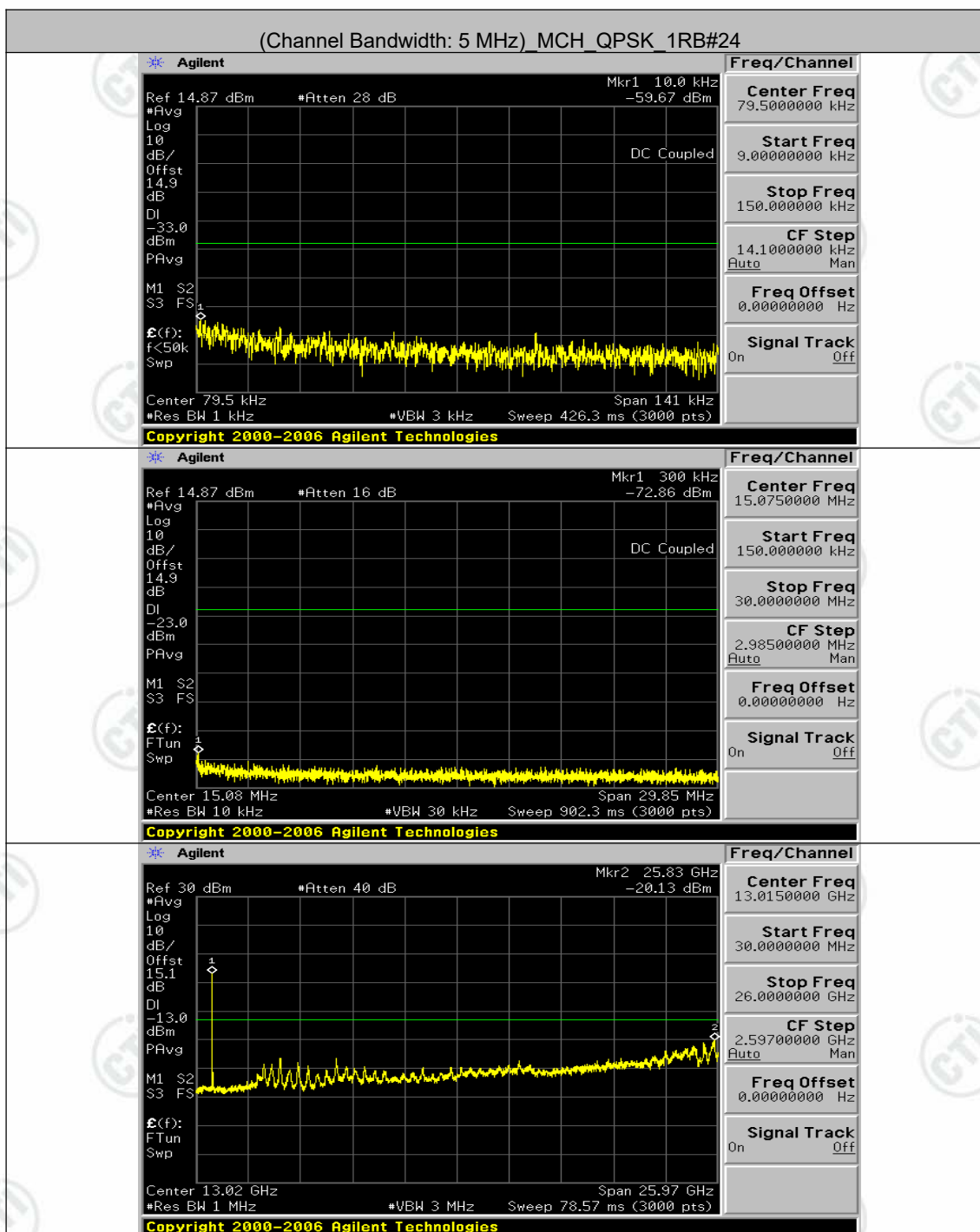


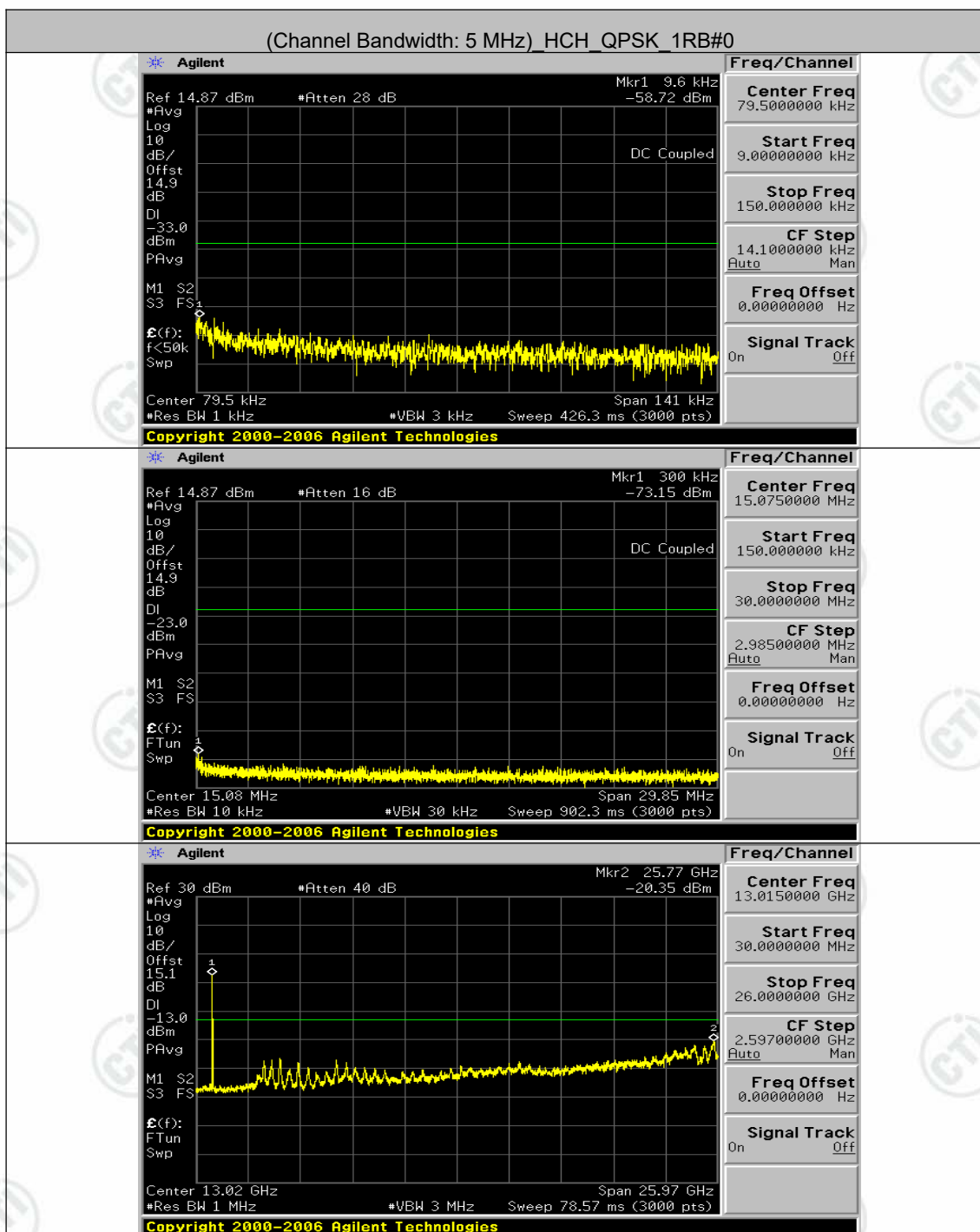


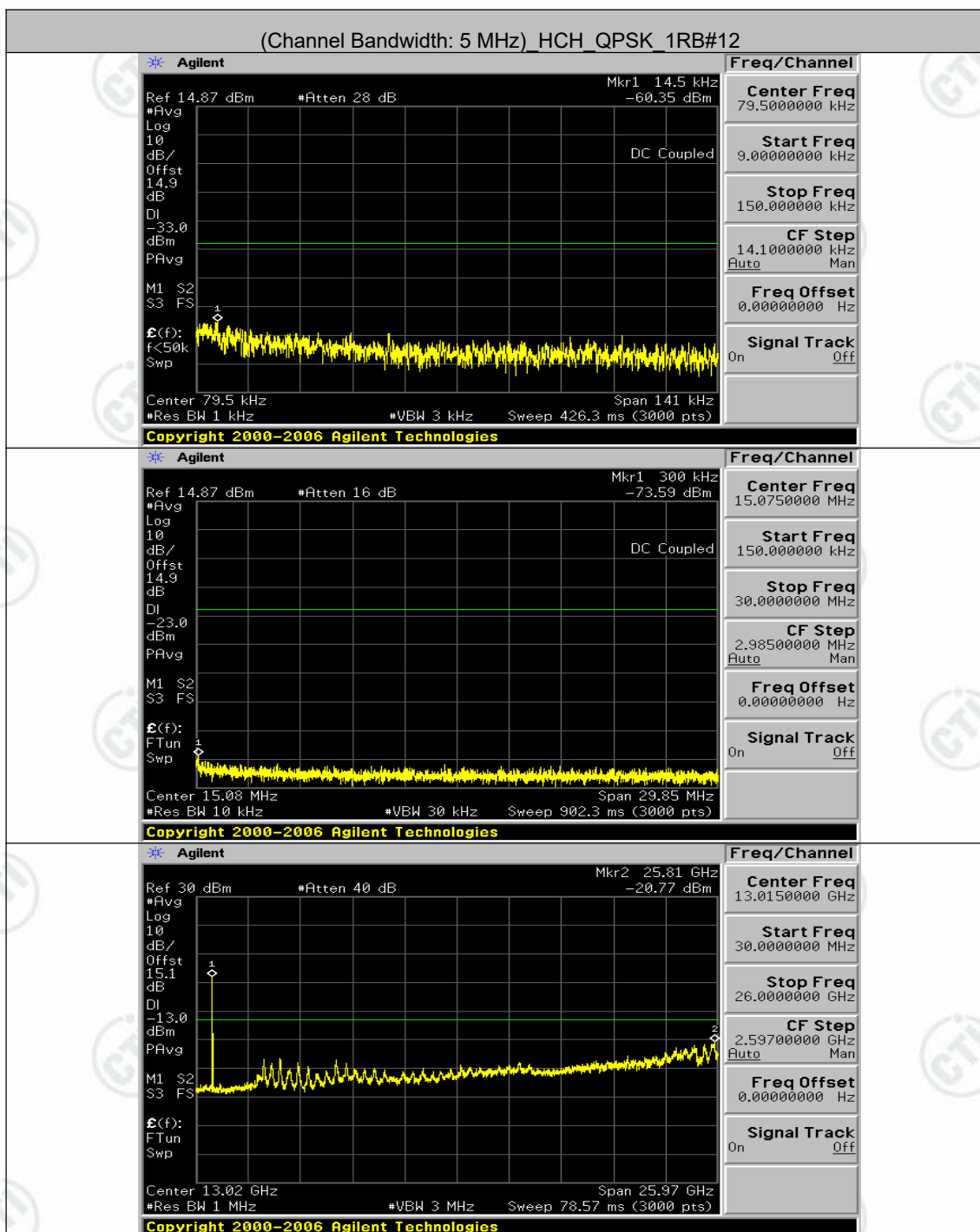


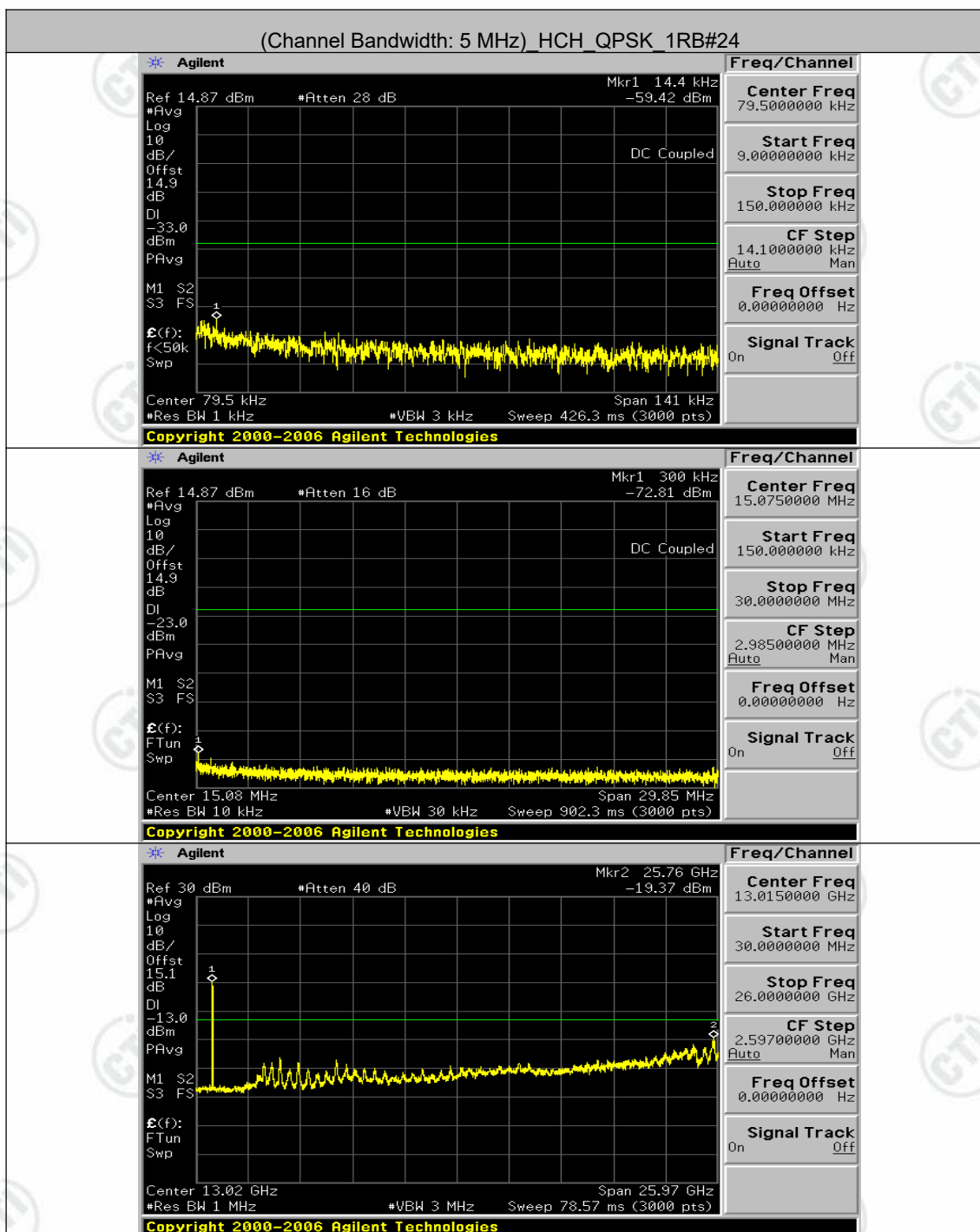


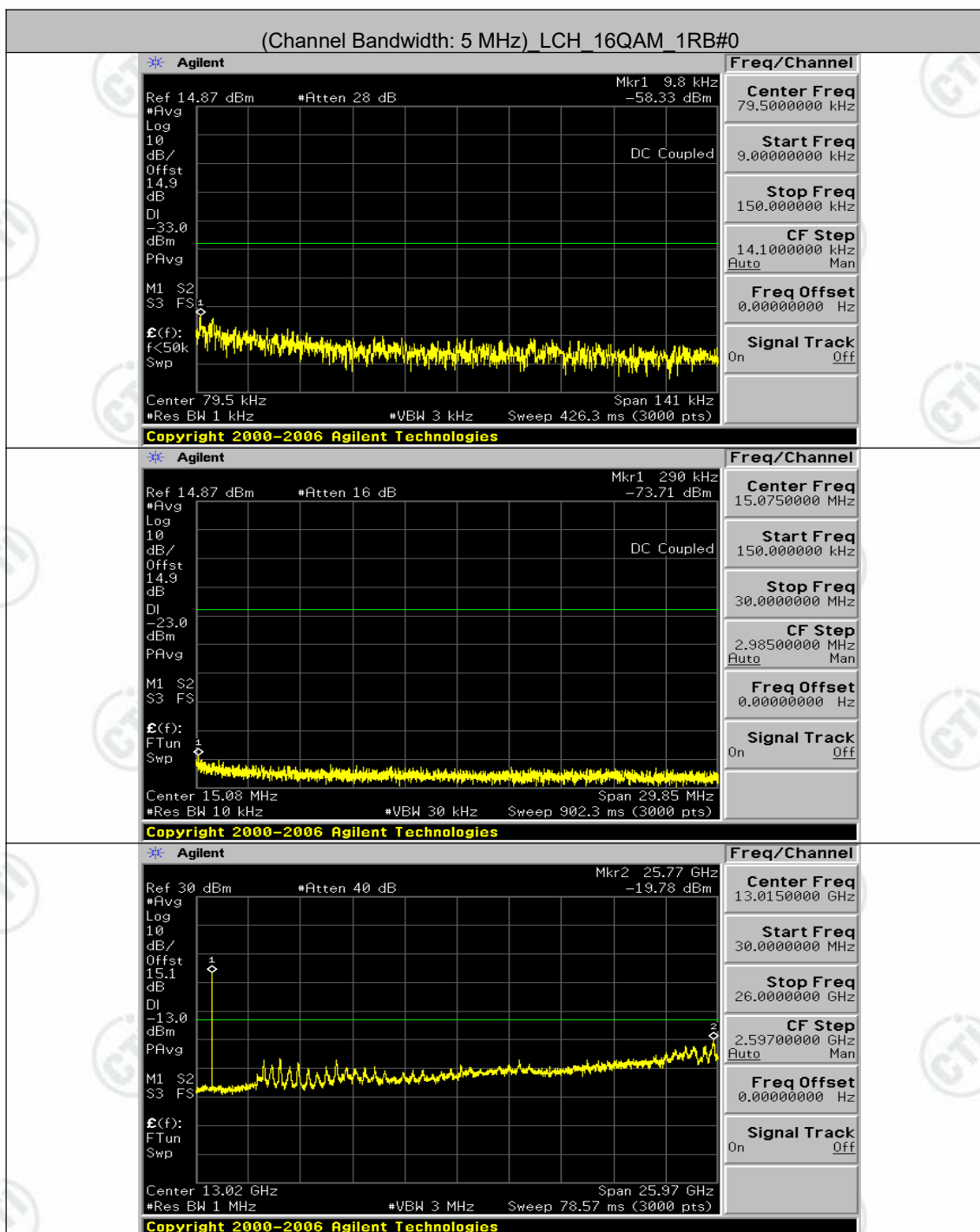


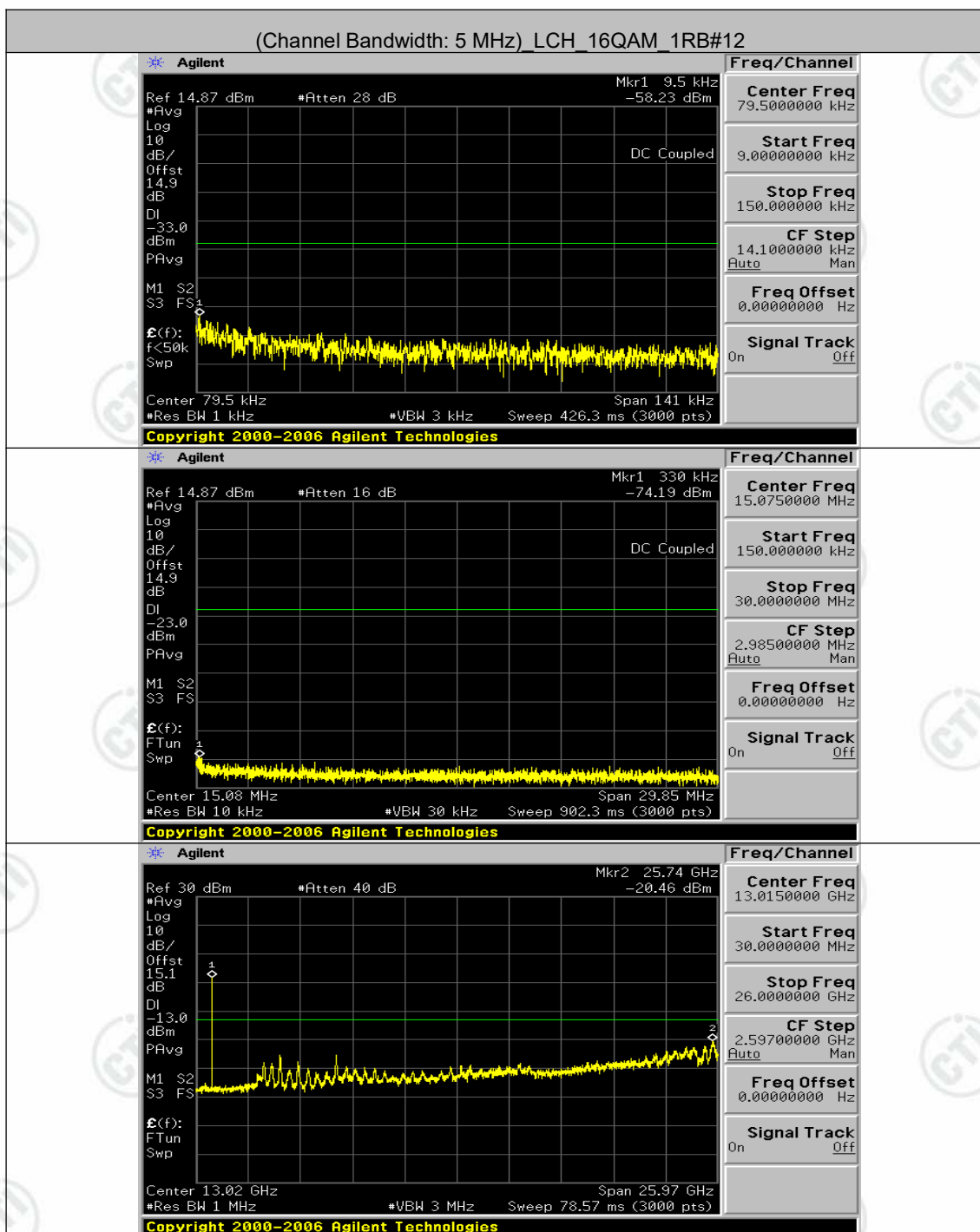


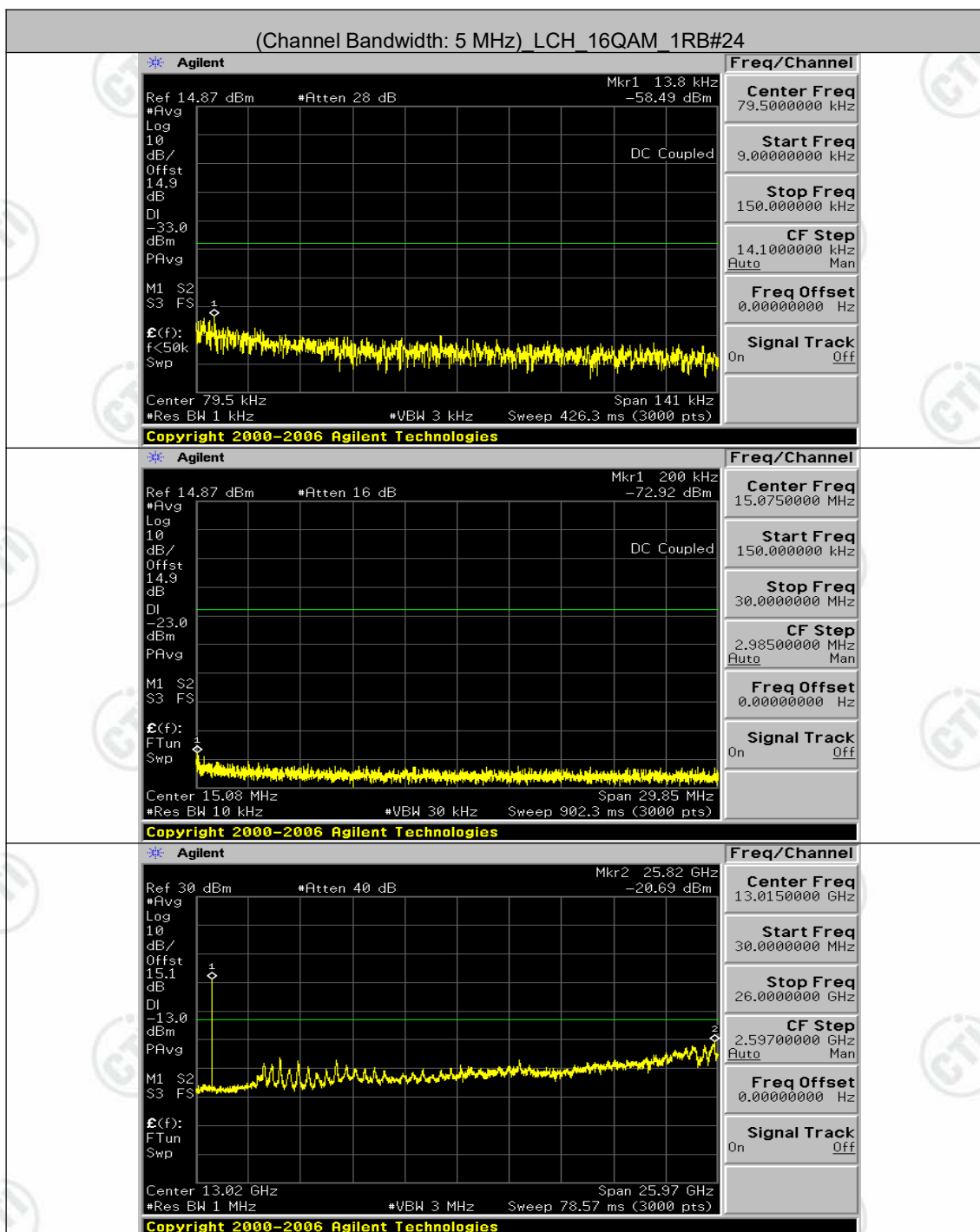


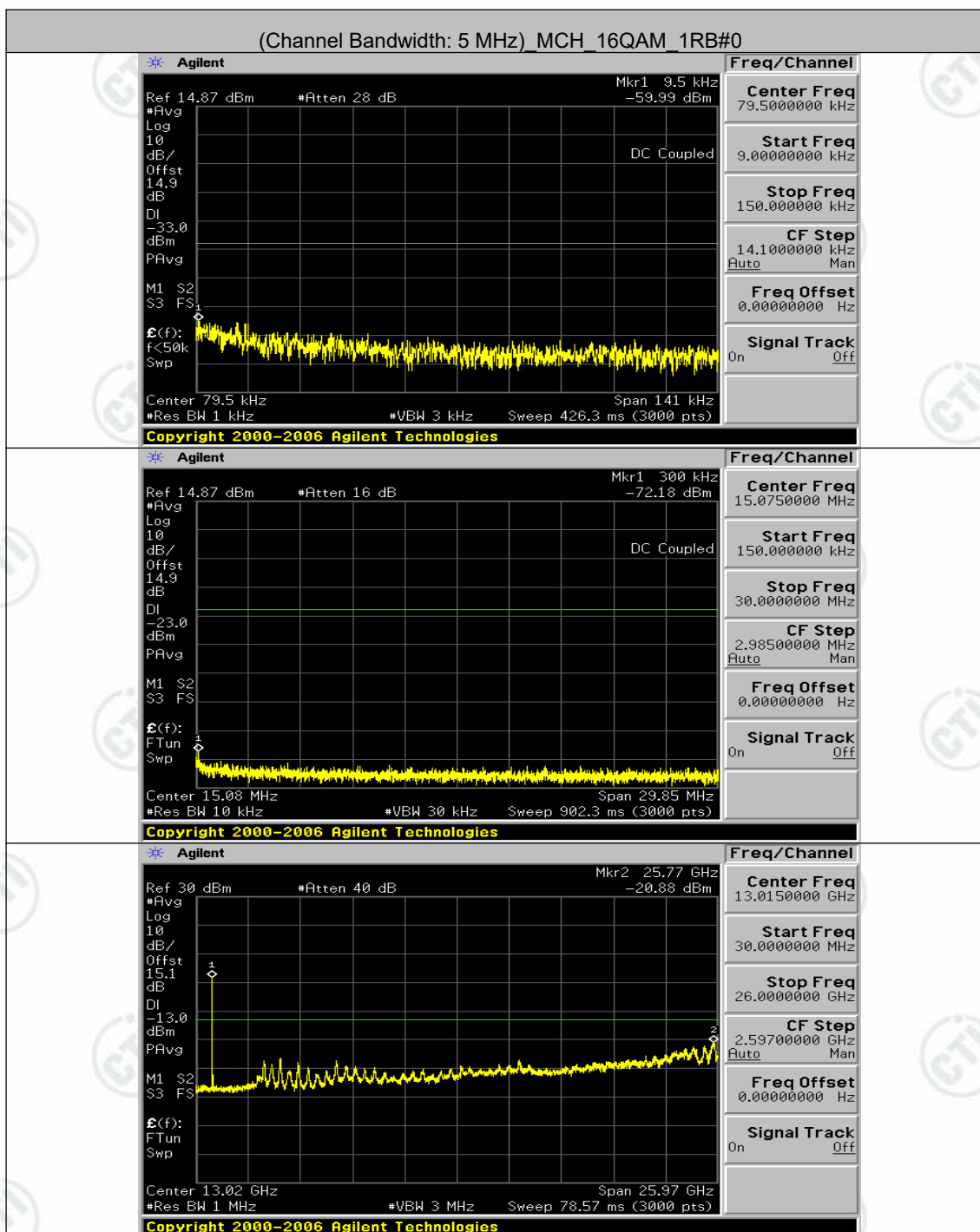


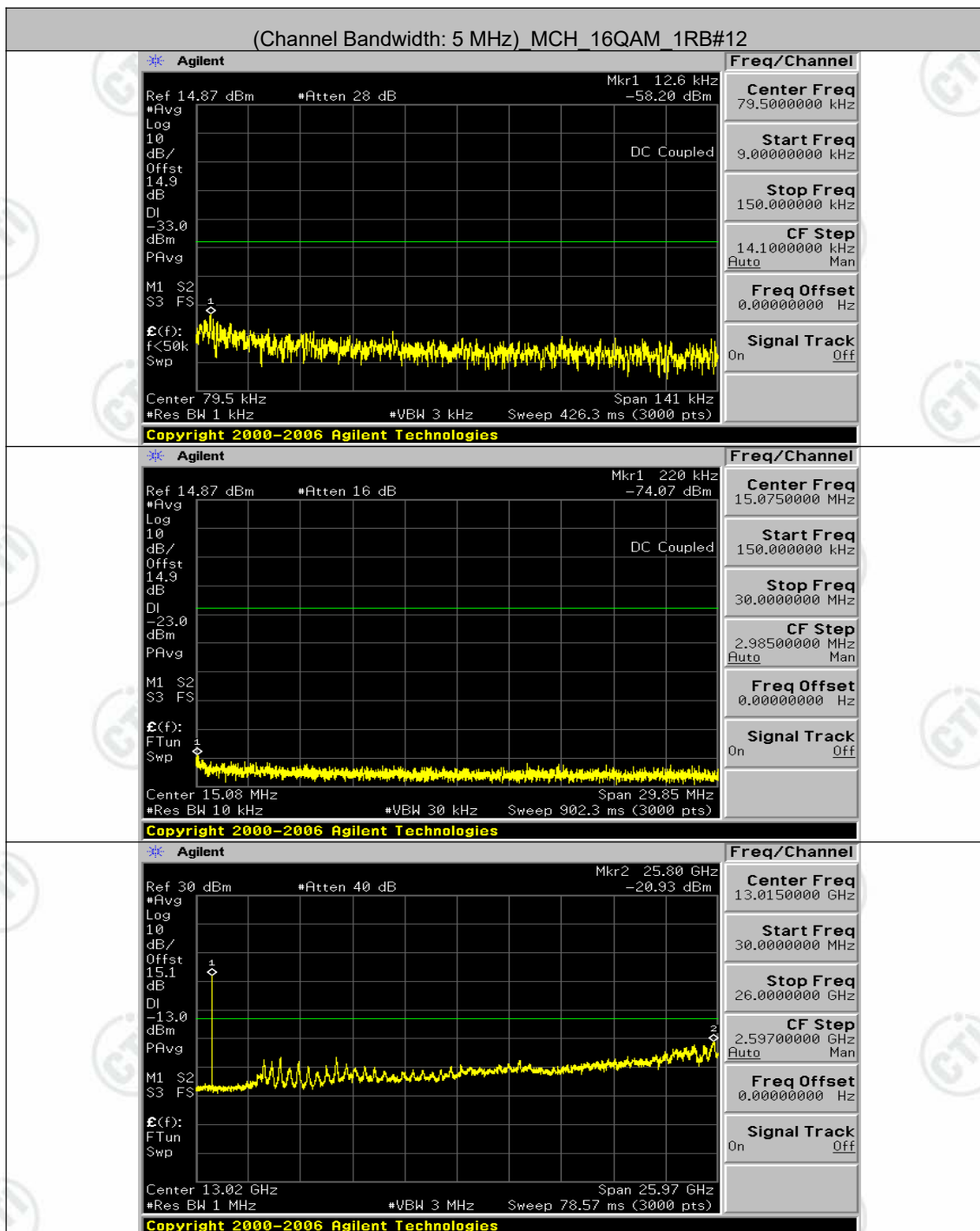


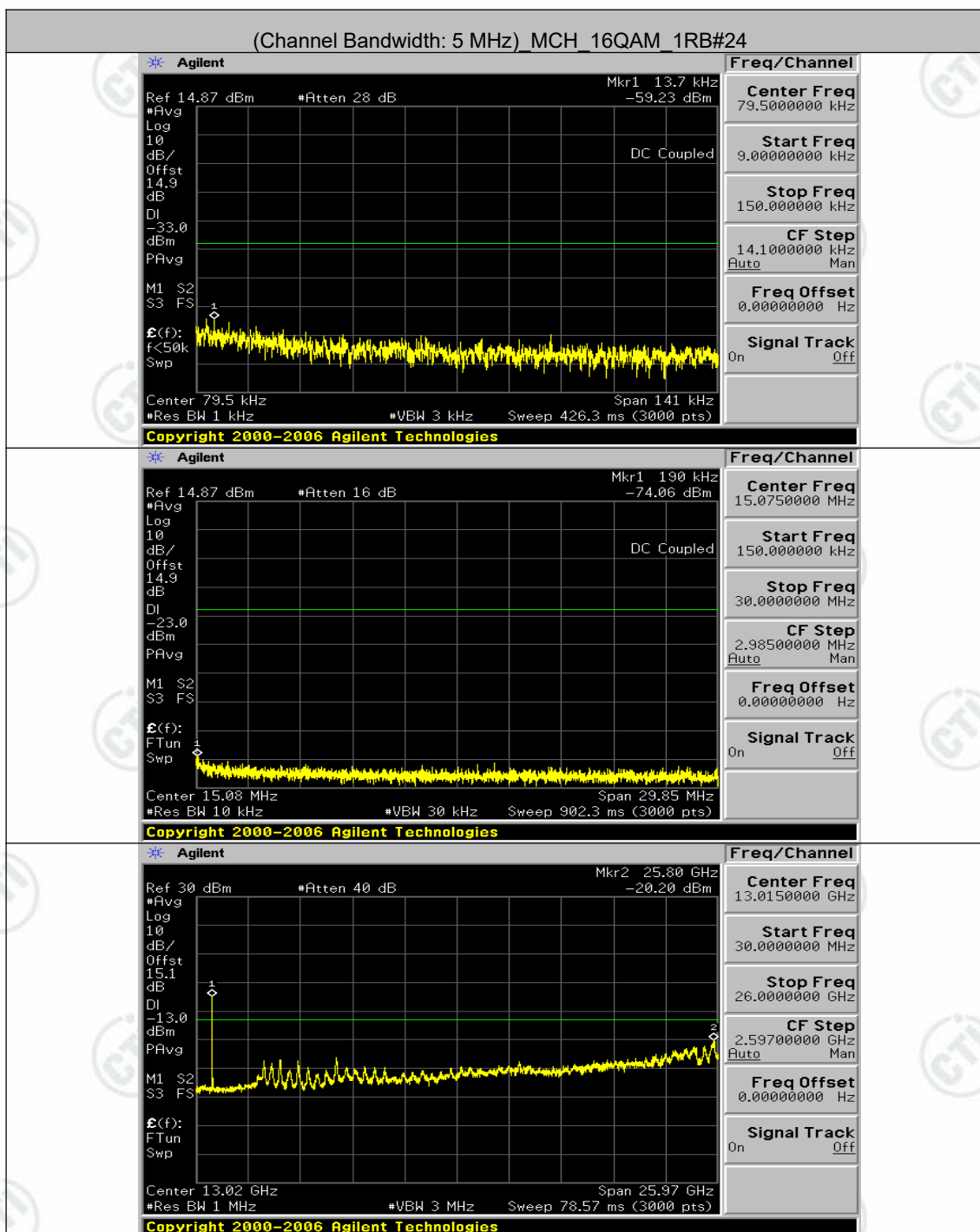


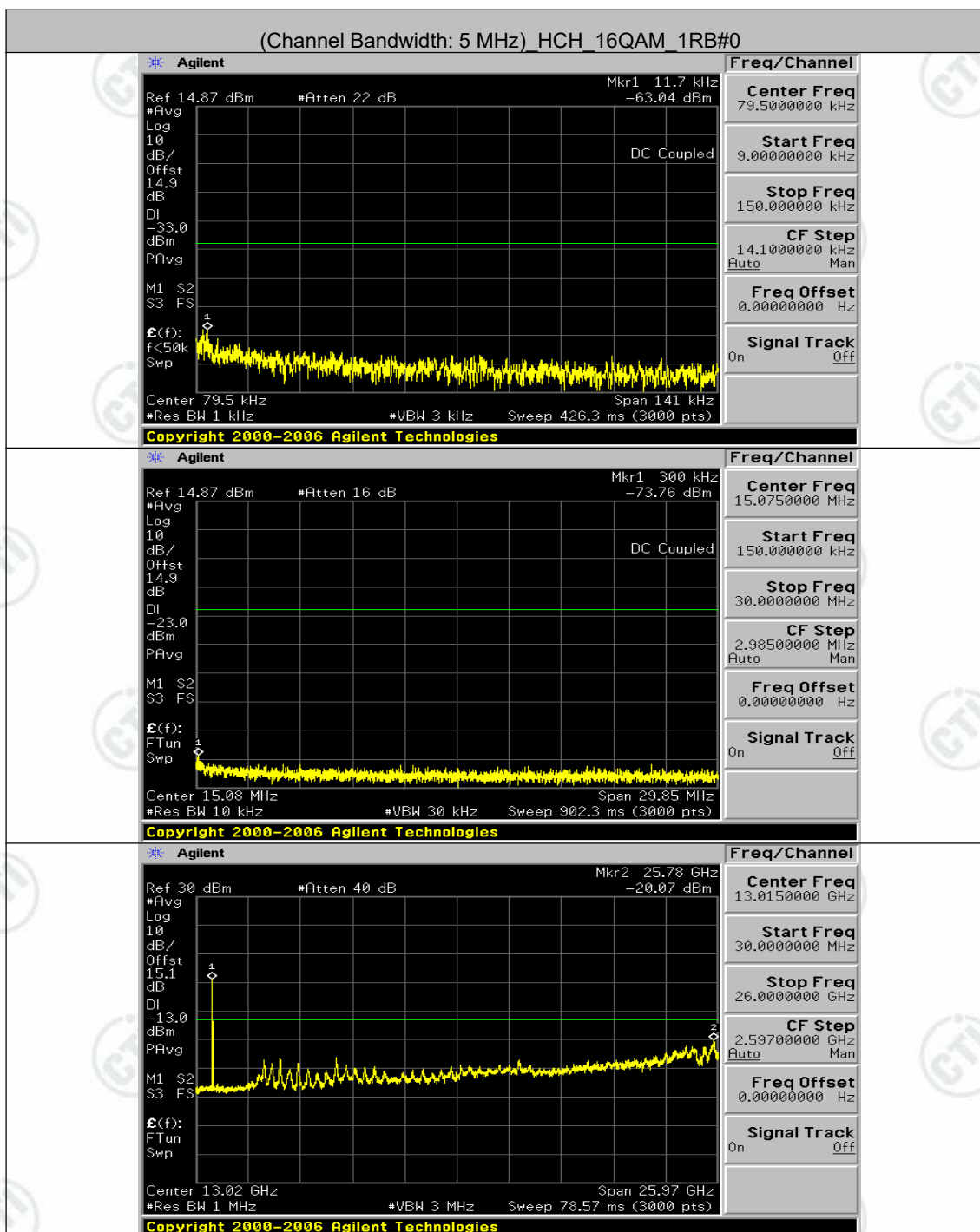


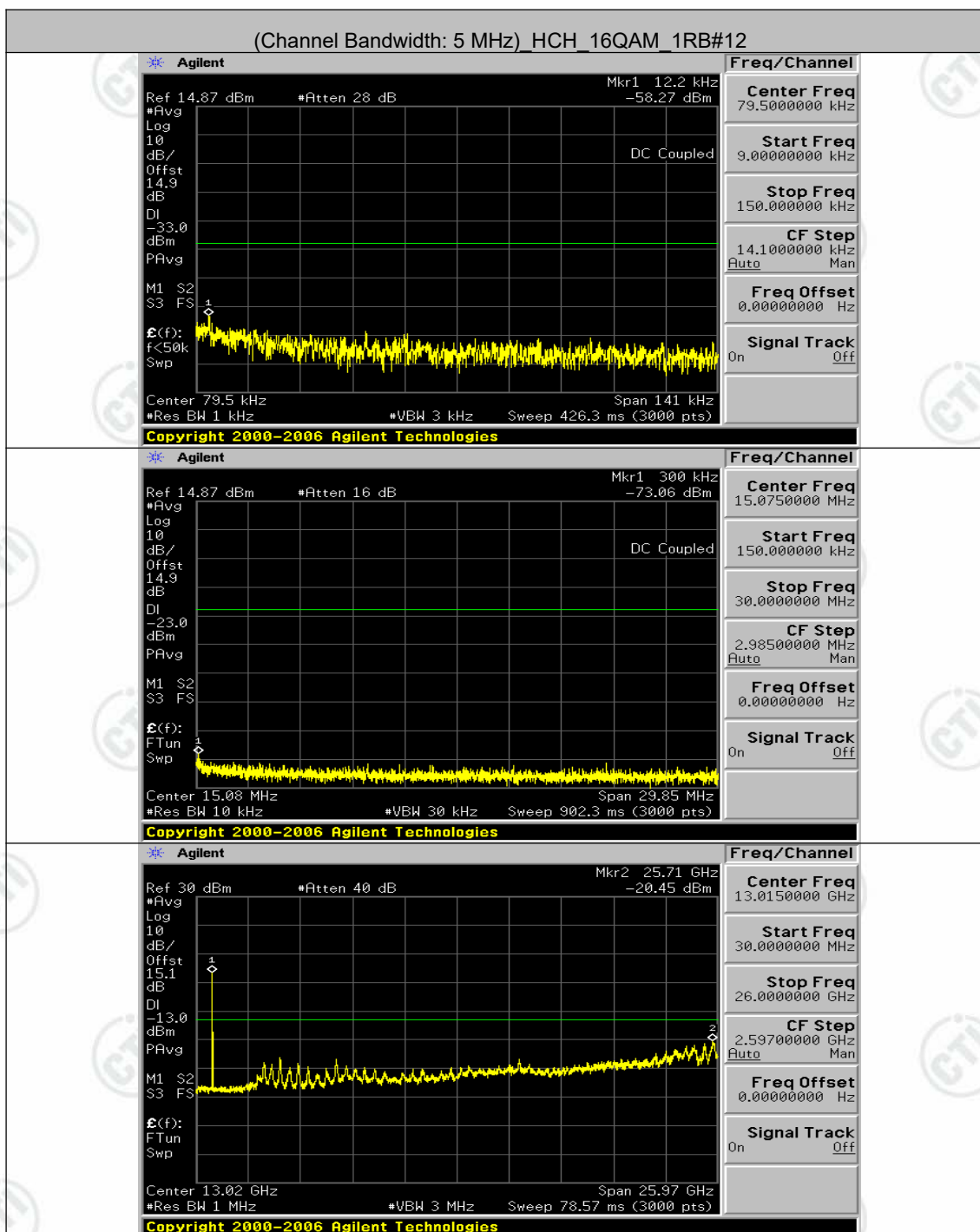


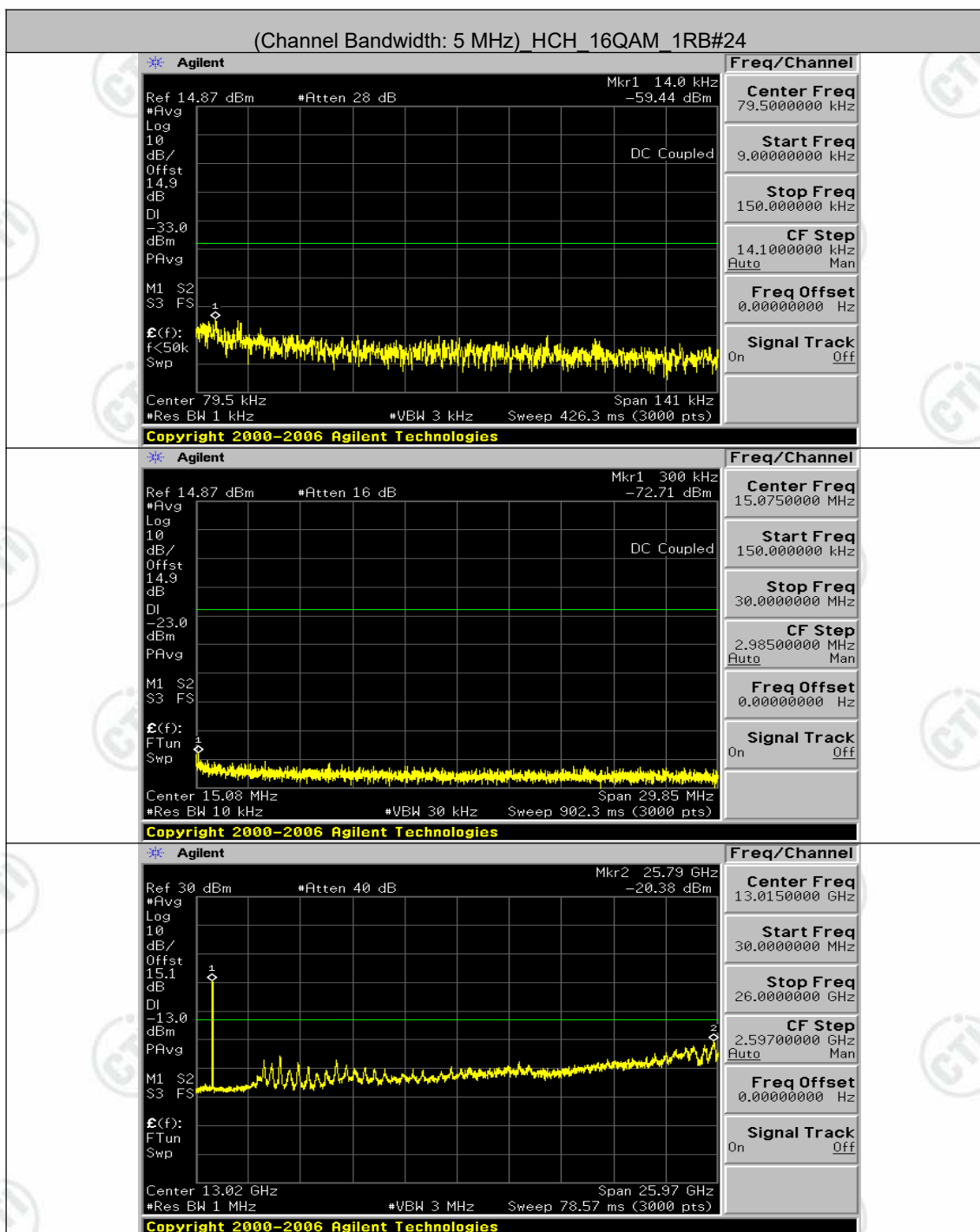


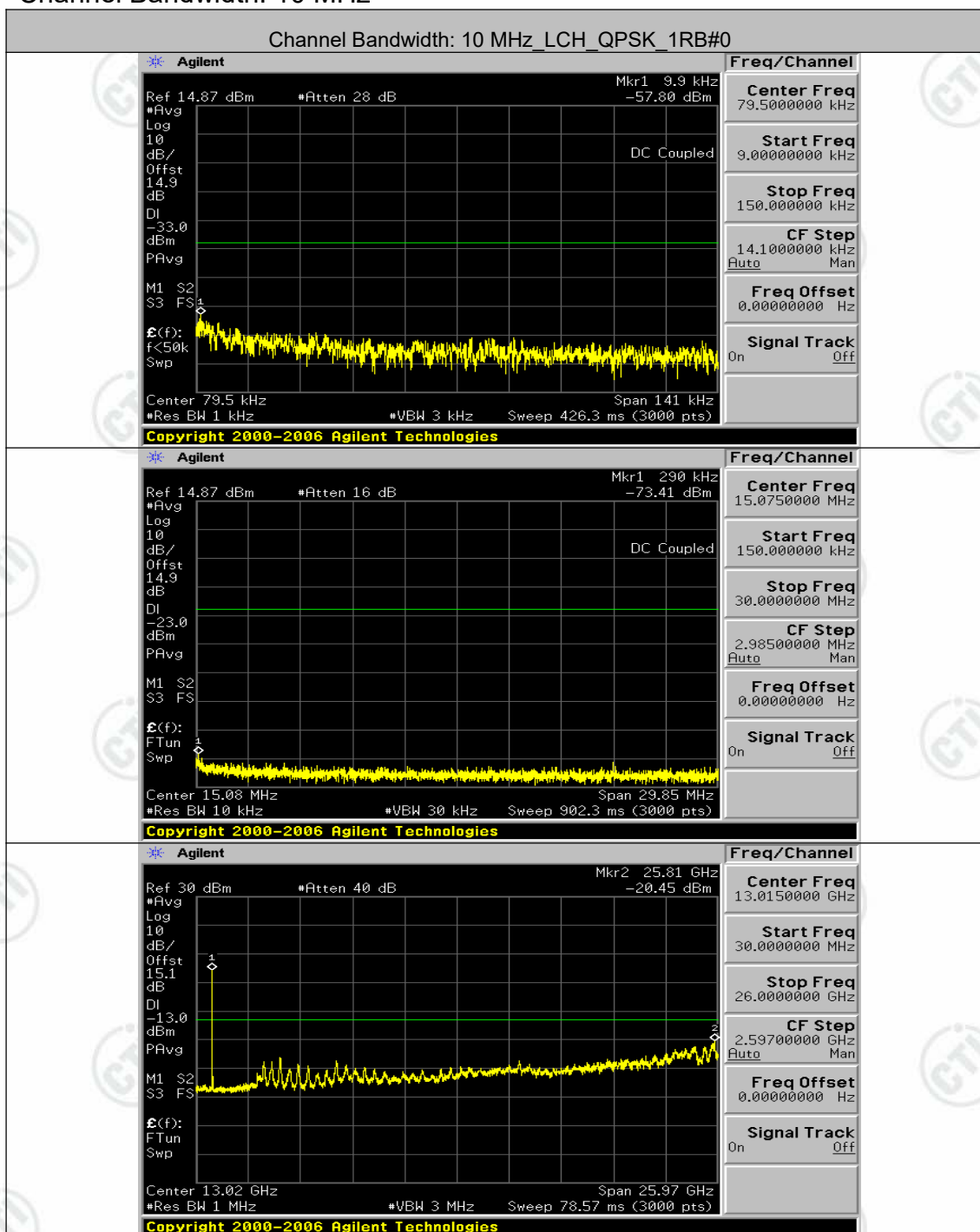


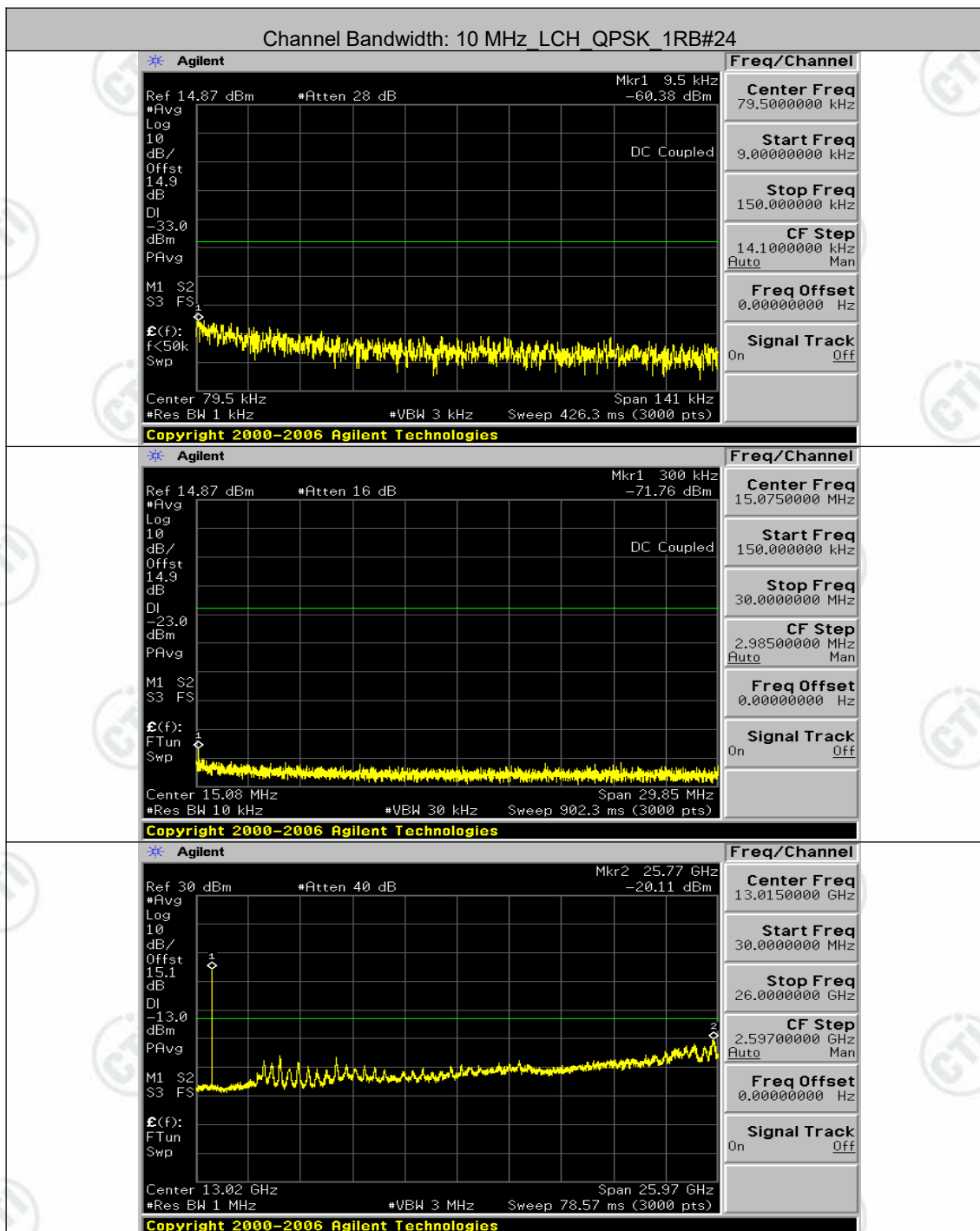


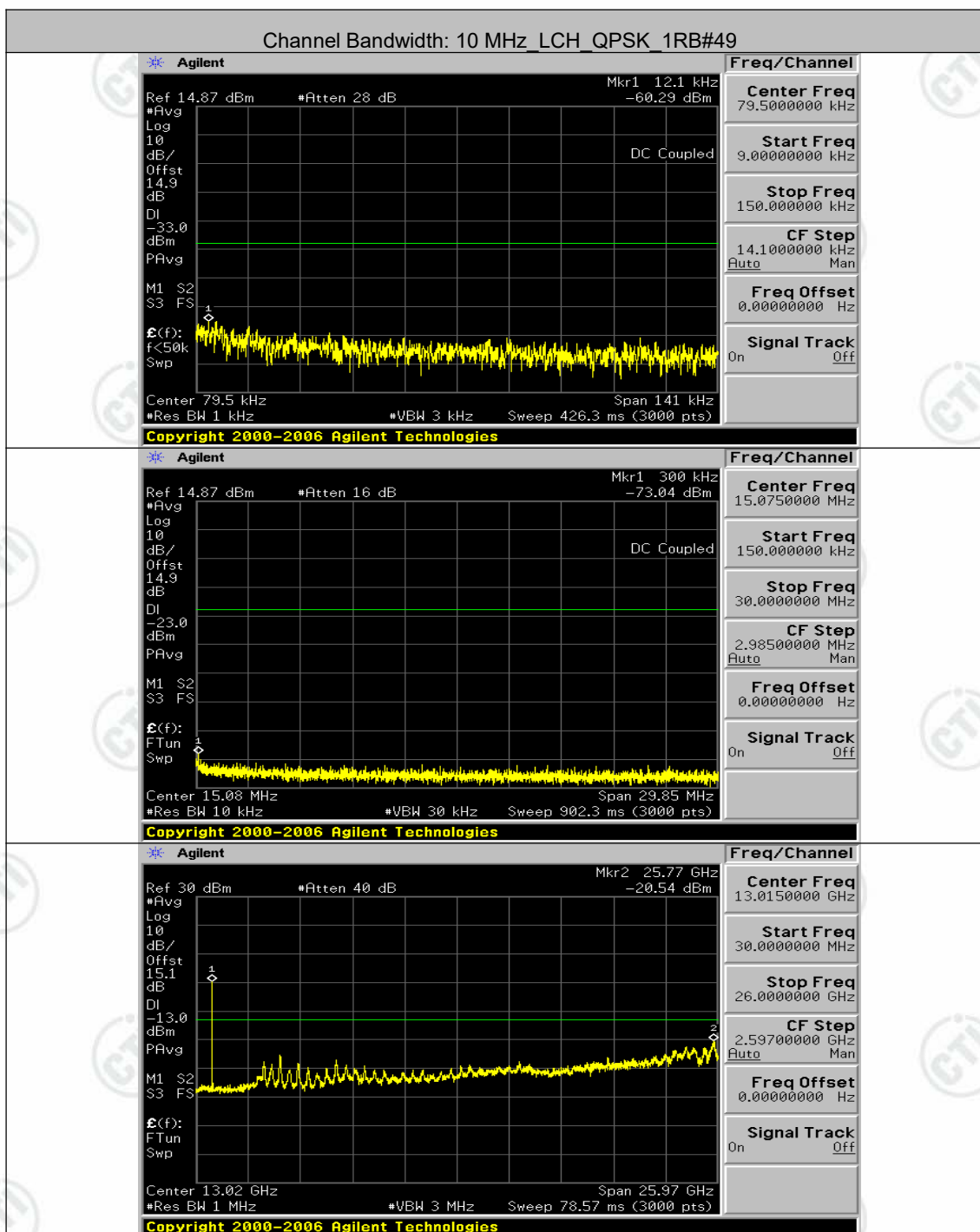


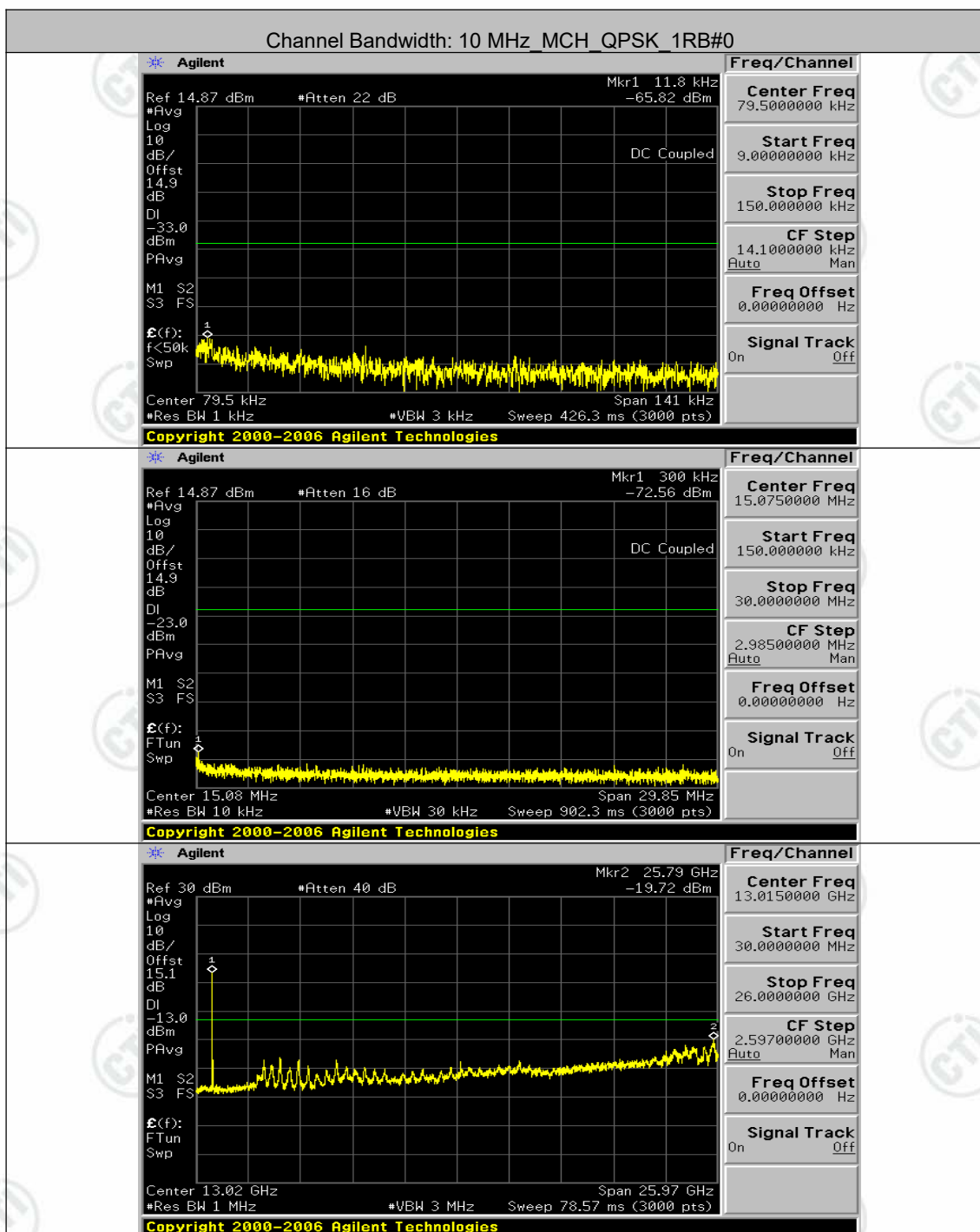


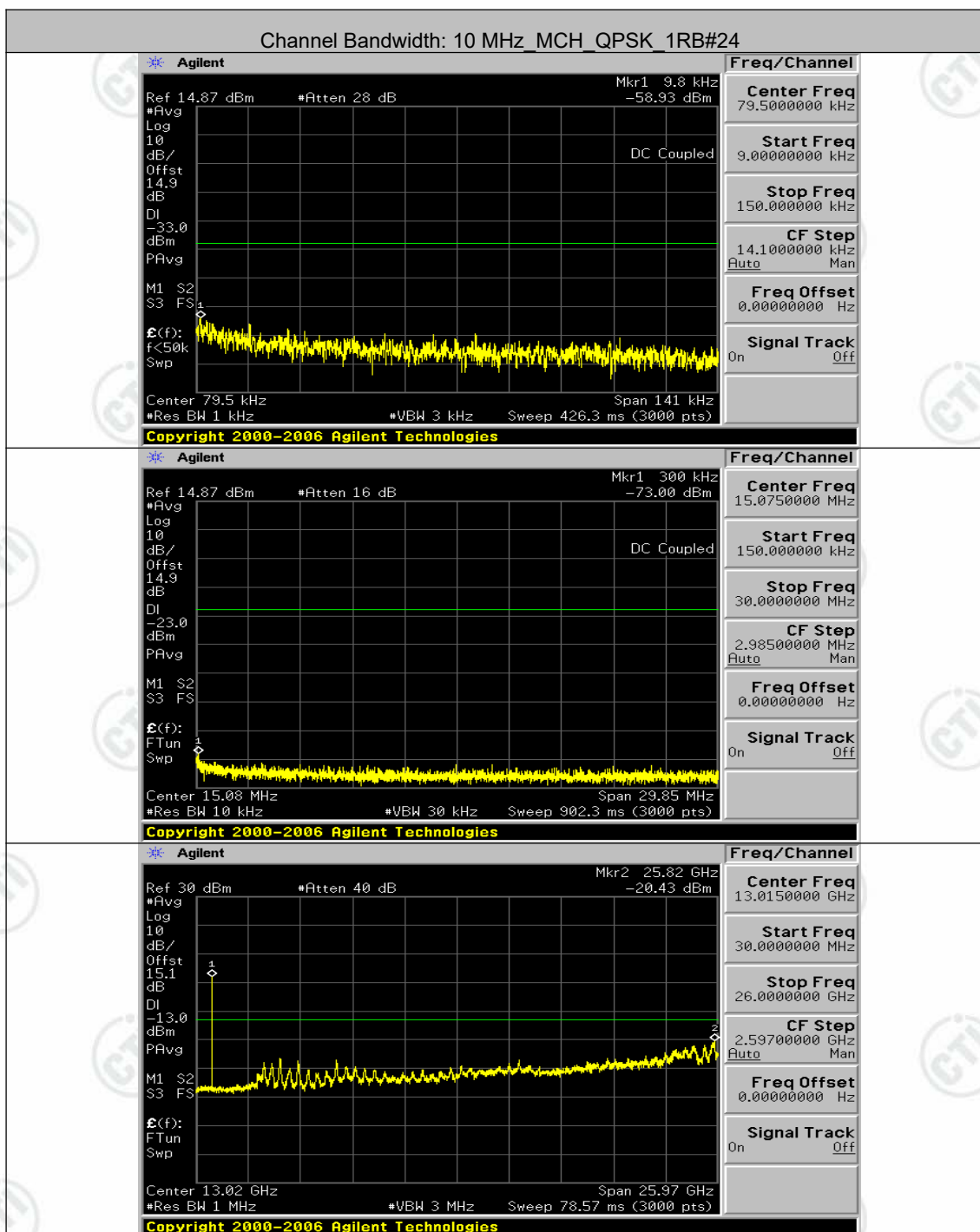


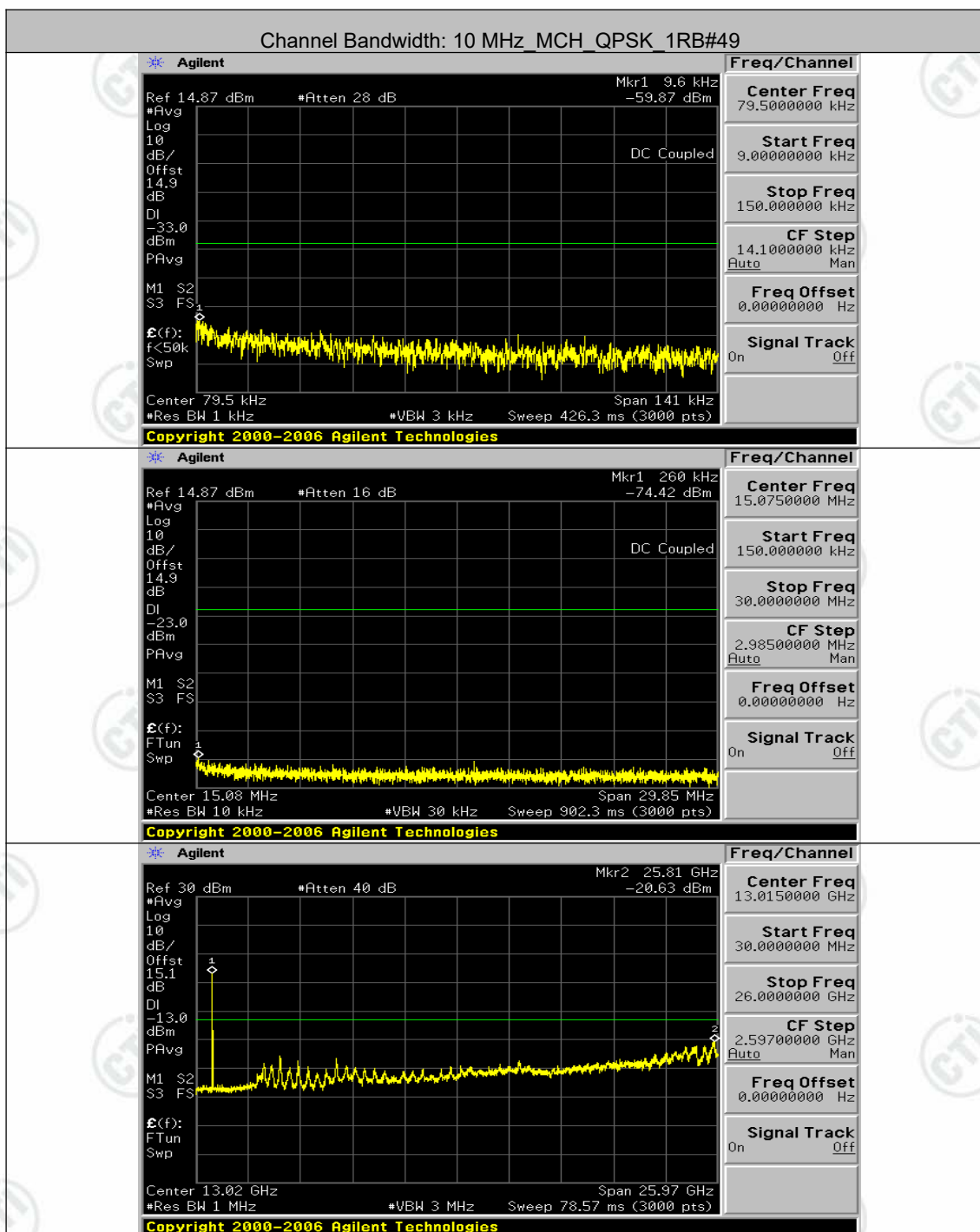


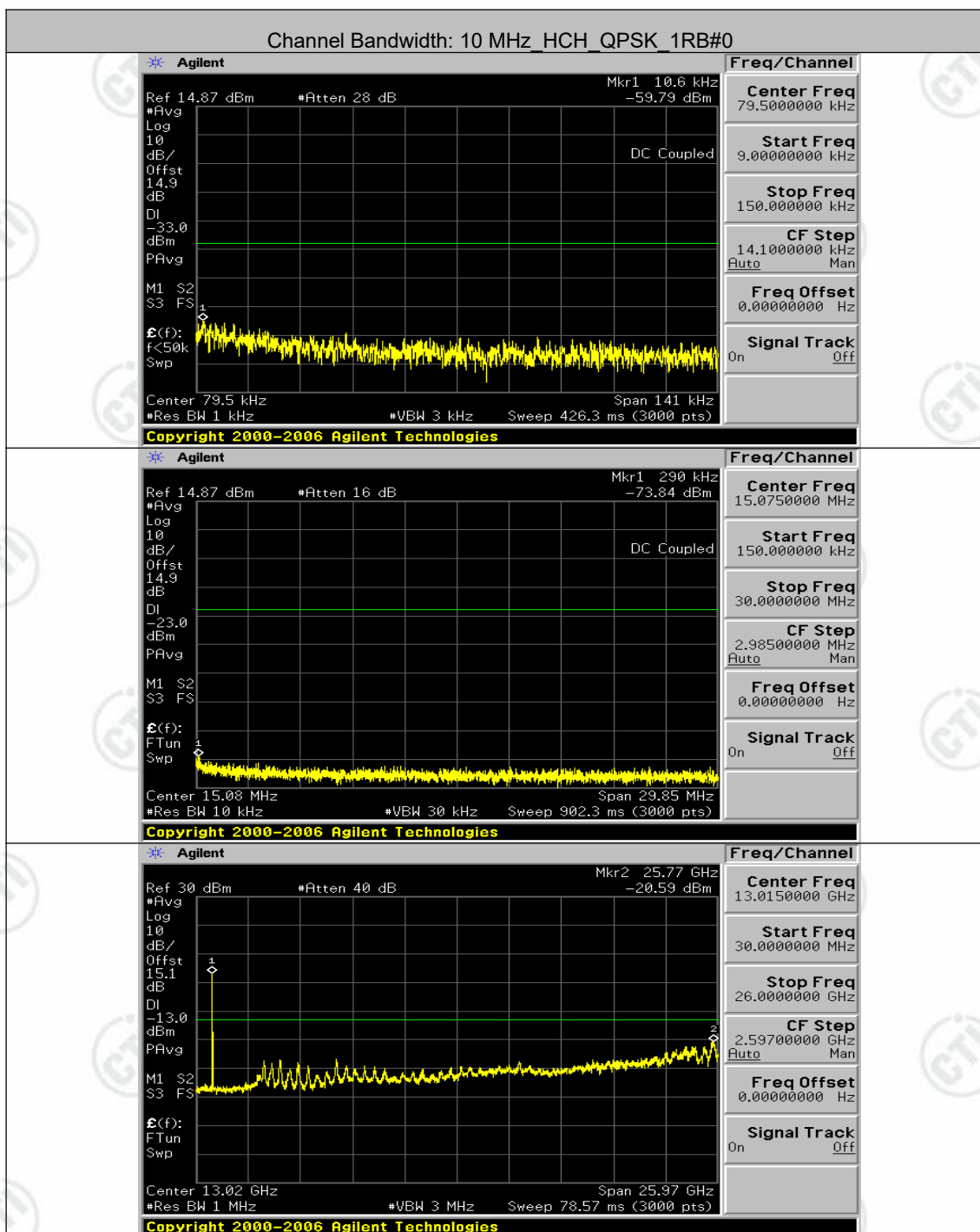


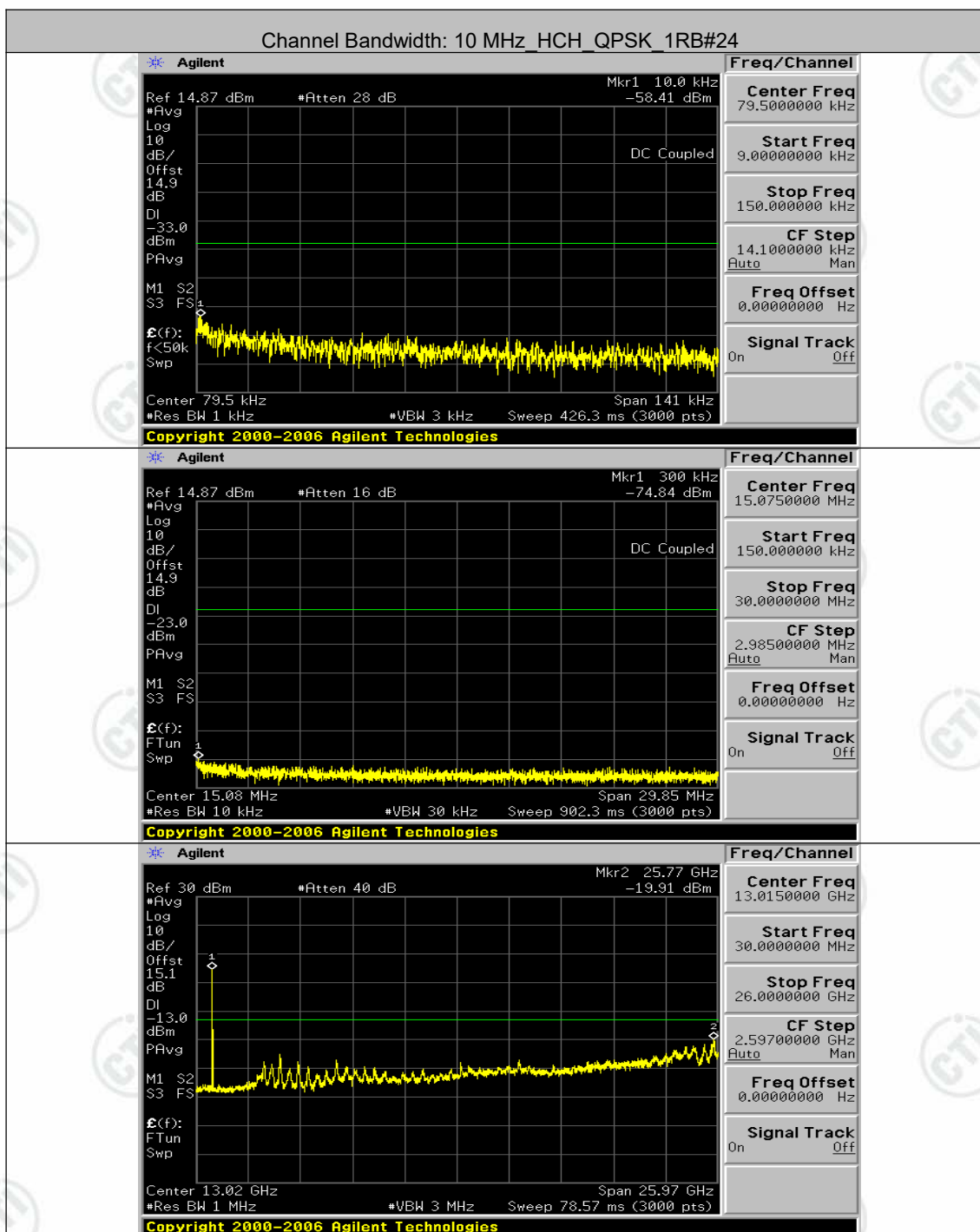


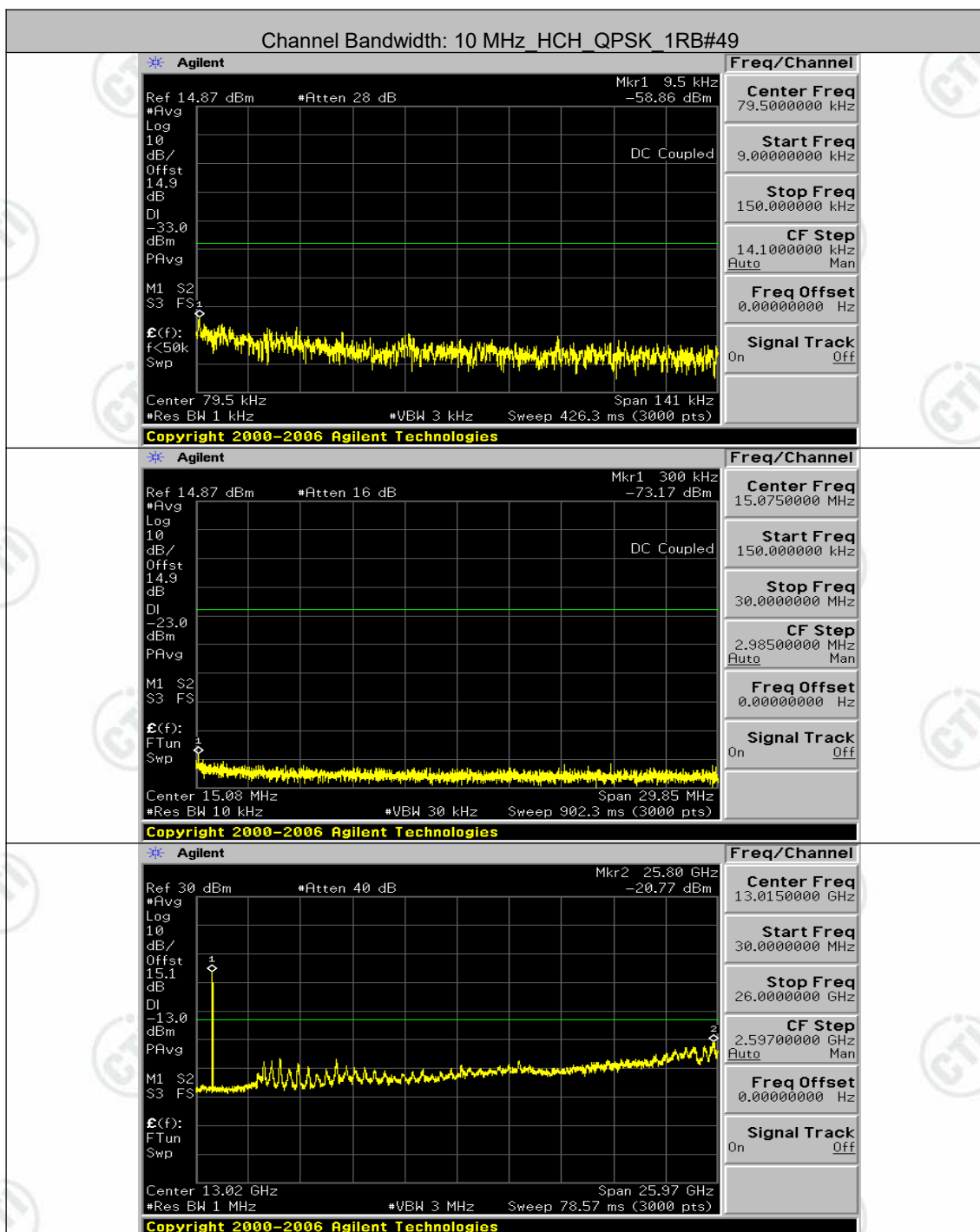


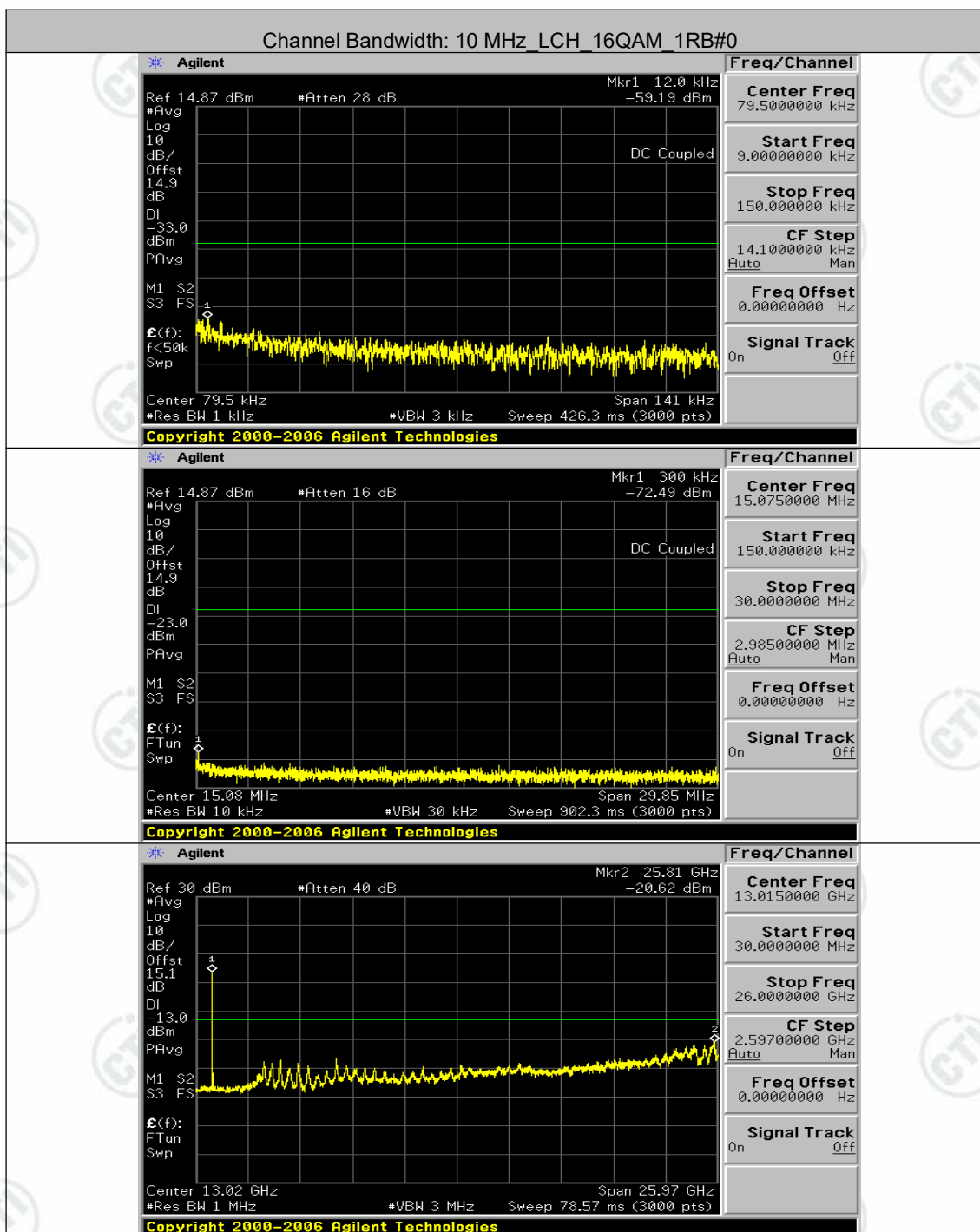


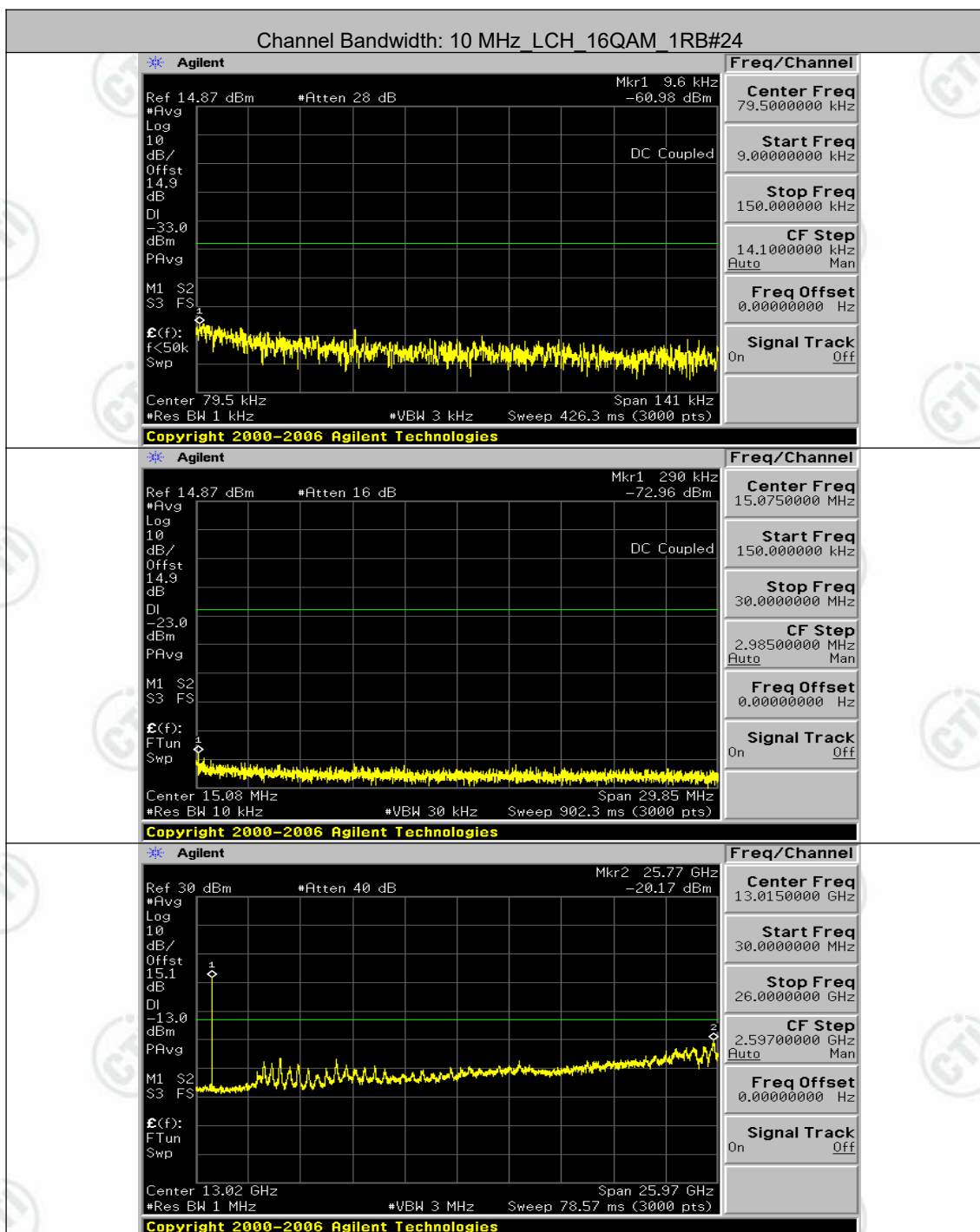


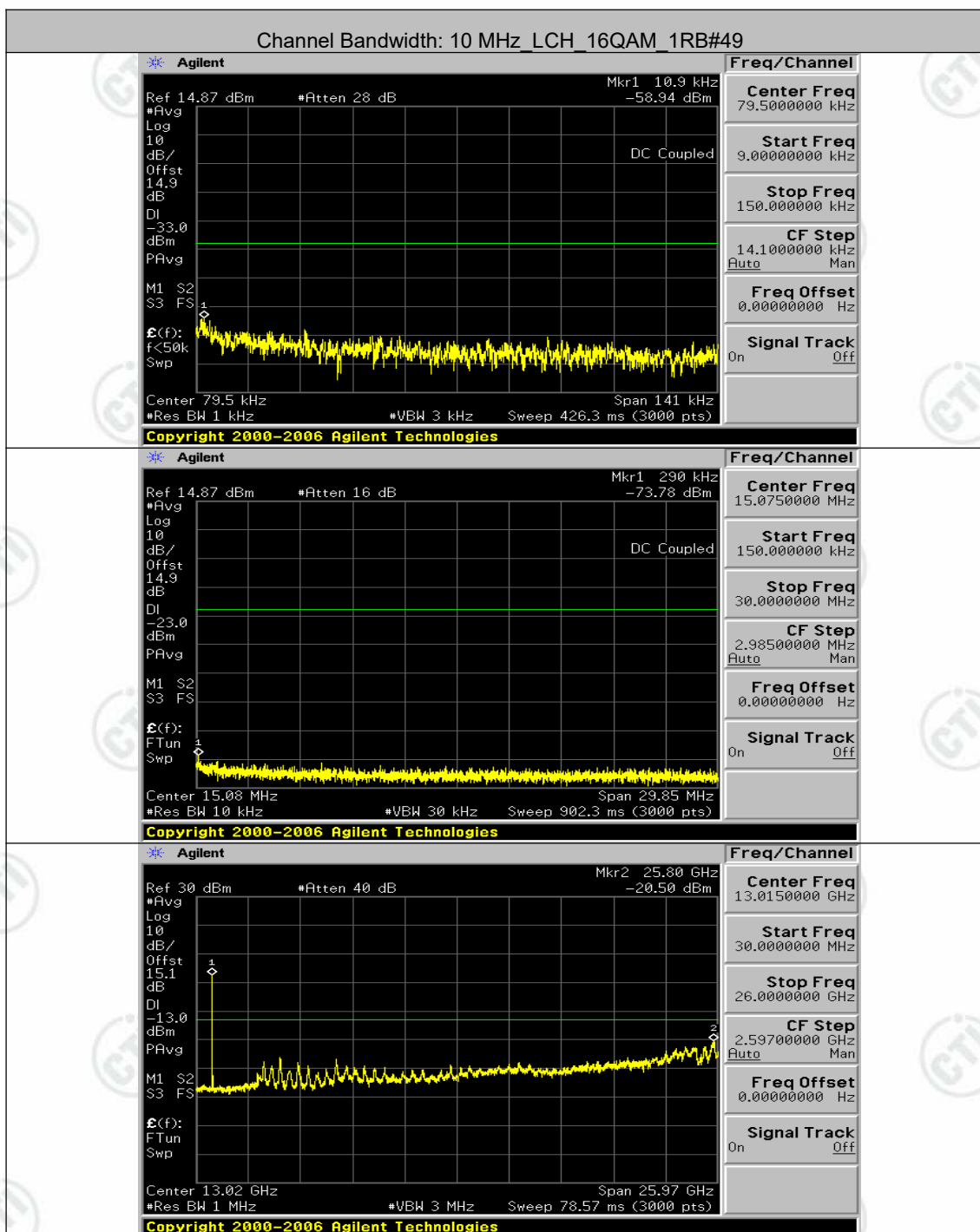


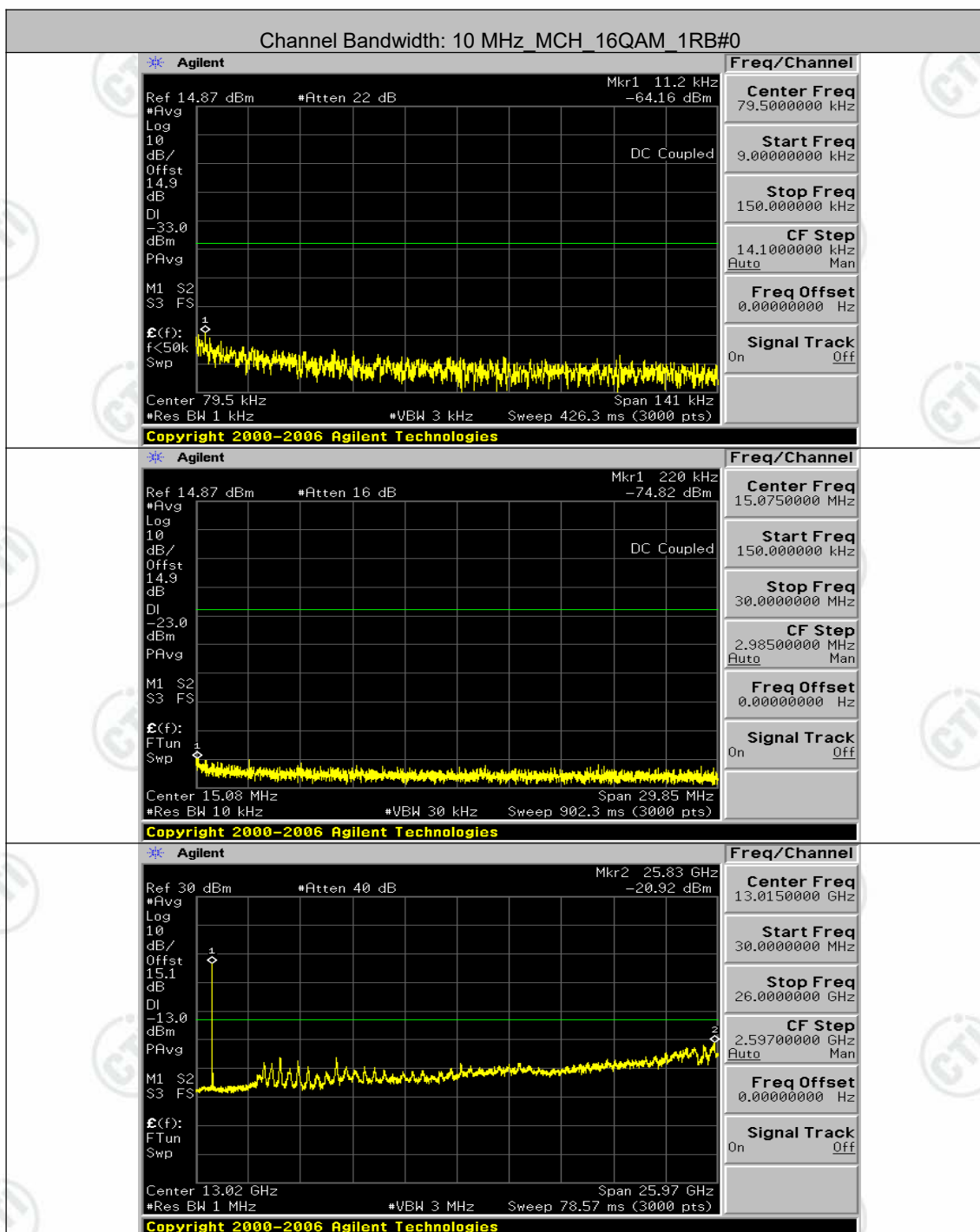


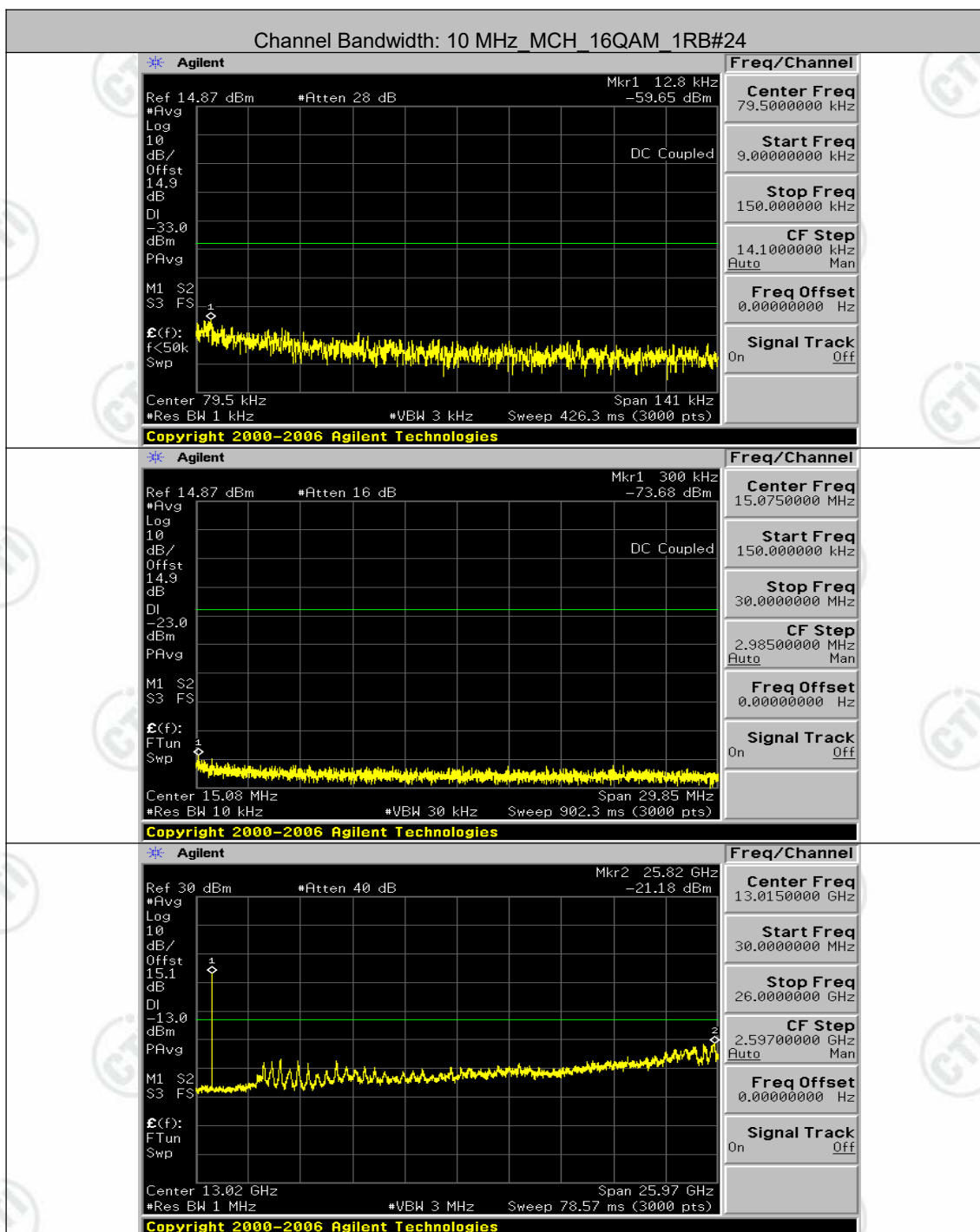


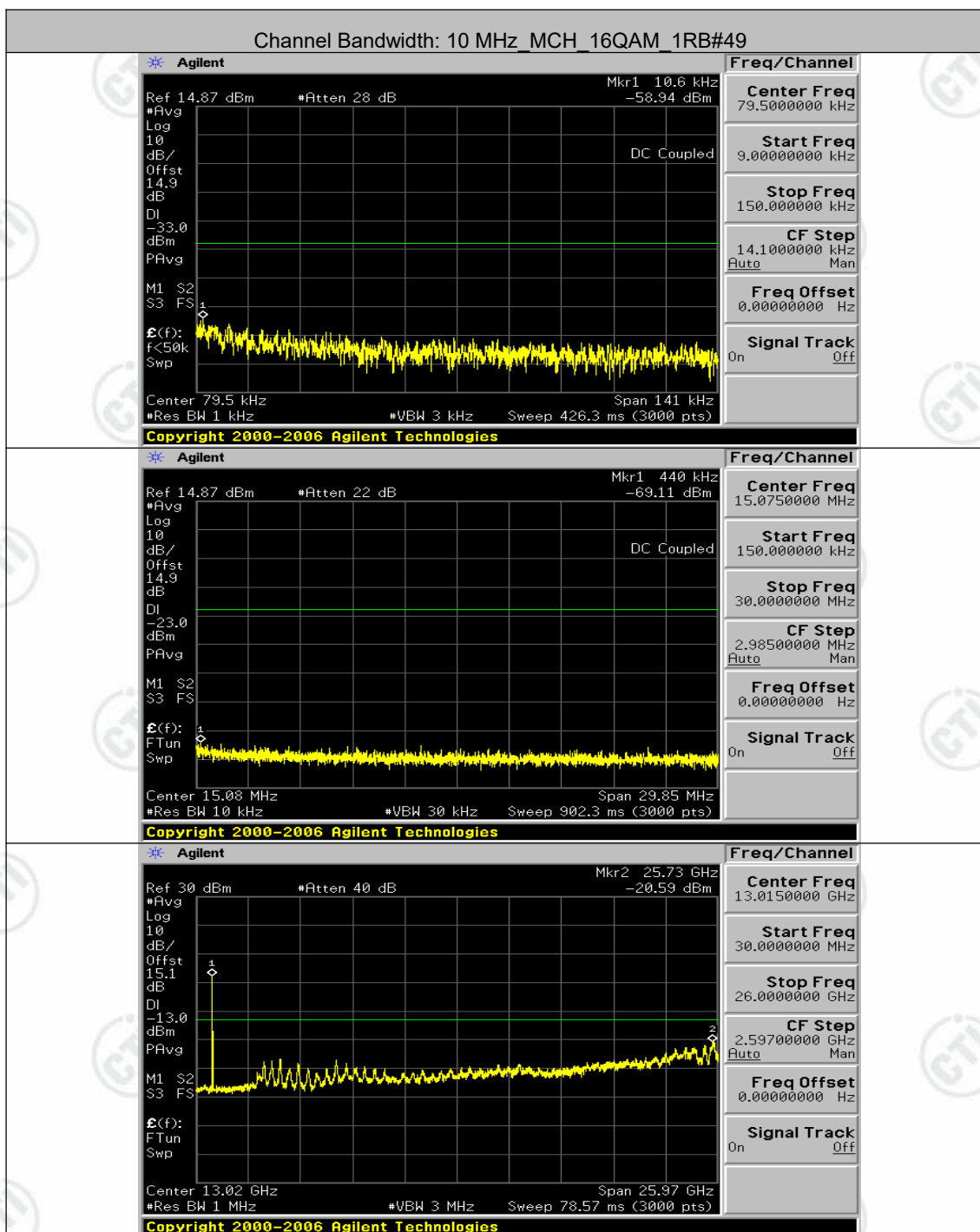


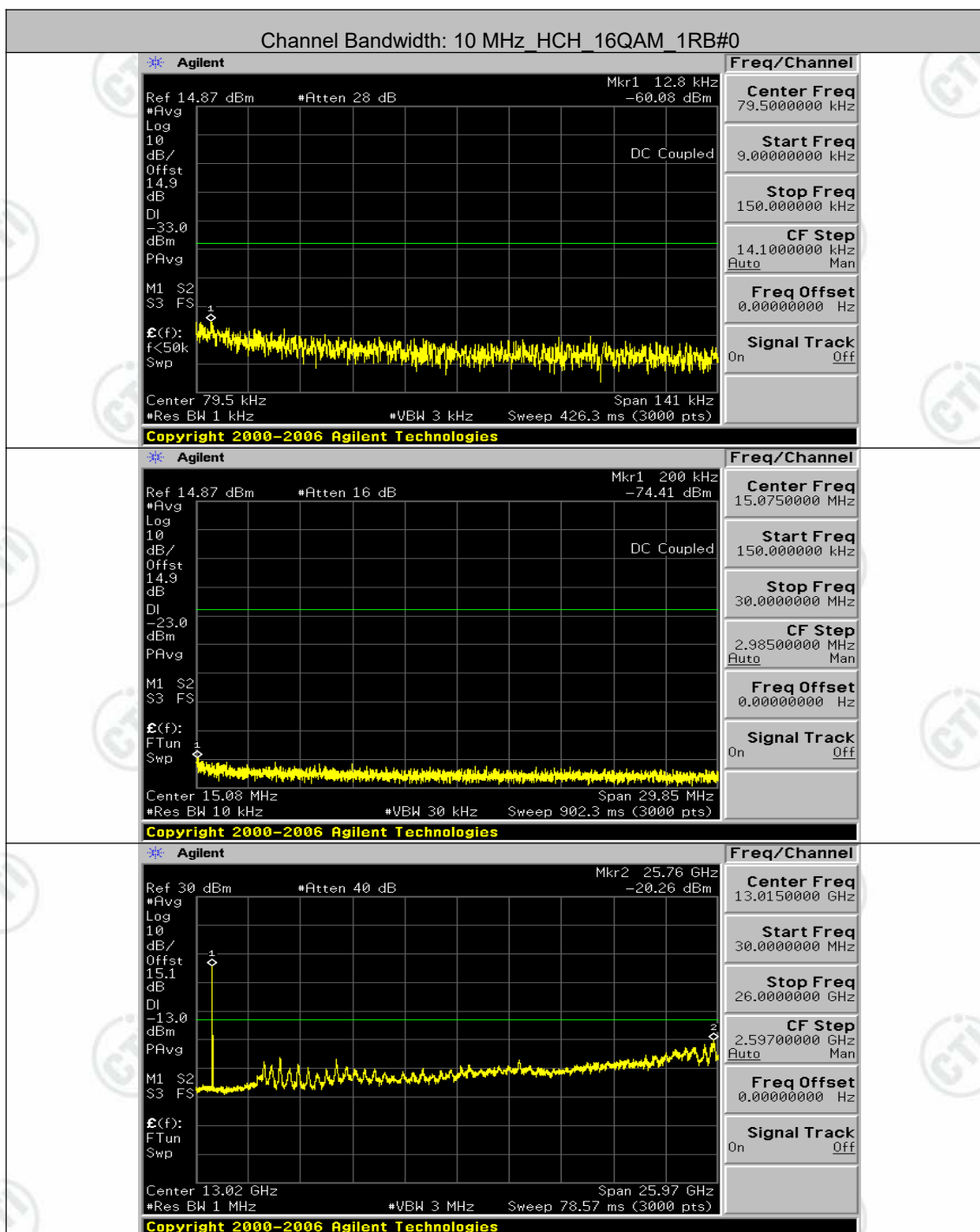


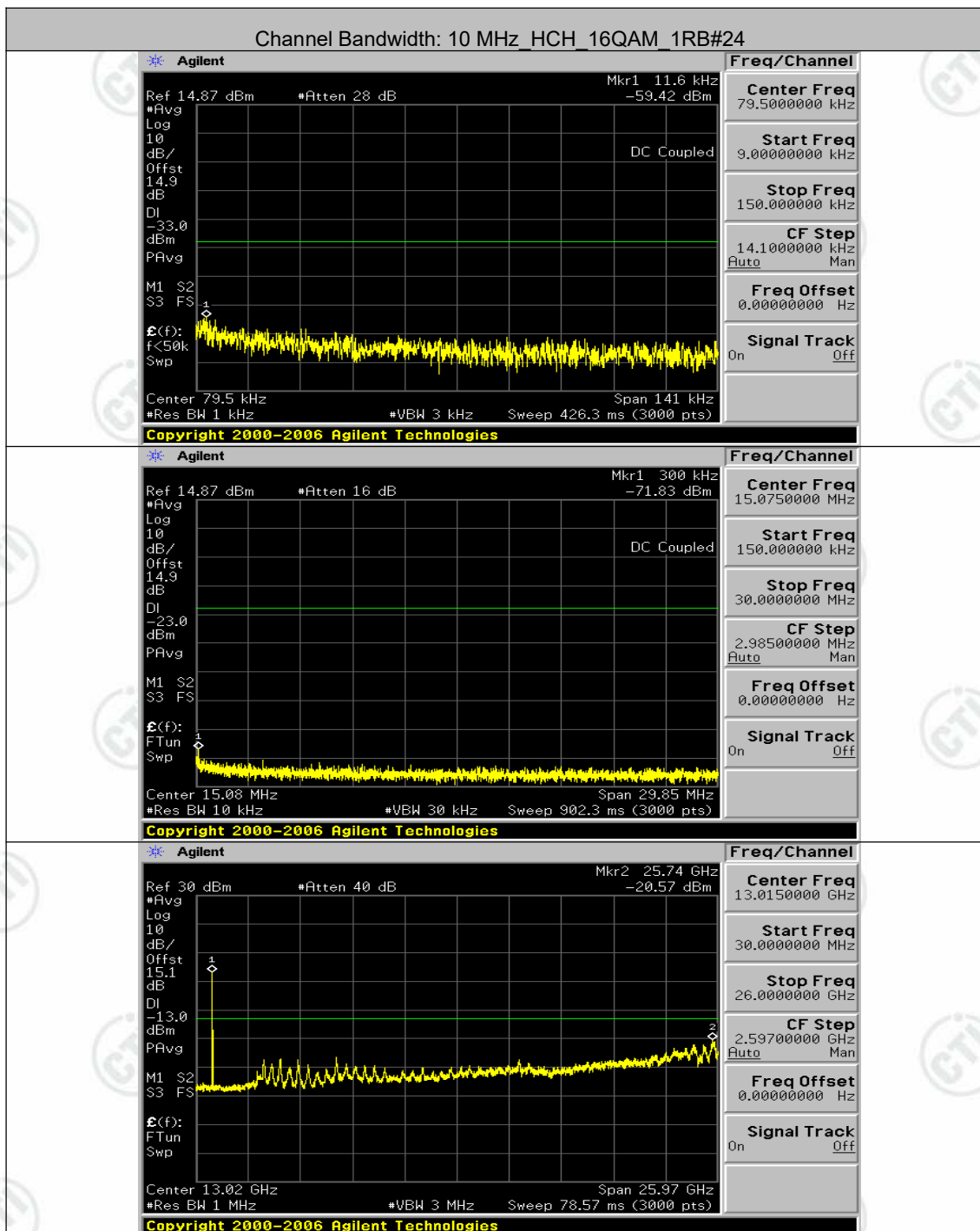


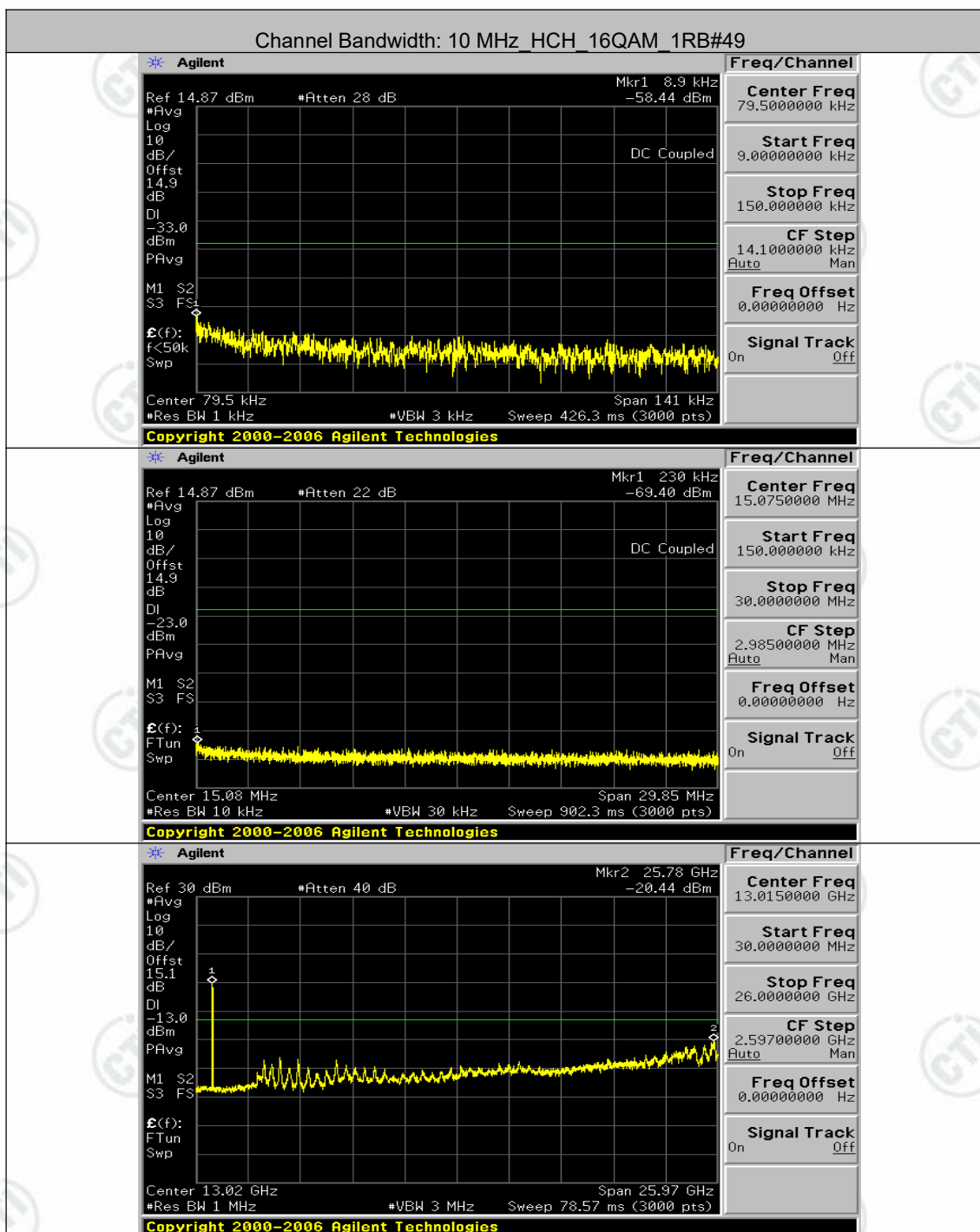












Appendix E)): Frequency Stability

Test Result

(VL is 2.805V, VN is 3.3V, VH is 3.795V)

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	18.60	0.022550	± 2.5	PASS
		VN	TN	14.13	0.017138	± 2.5	PASS
		VH	TN	15.22	0.018456	± 2.5	PASS
	MCH	VL	TN	-33.46	-0.040000	± 2.5	PASS
		VN	TN	-9.66	-0.011543	± 2.5	PASS
		VH	TN	-33.17	-0.039658	± 2.5	PASS
	HCH	VL	TN	22.13	0.026087	± 2.5	PASS
		VN	TN	21.16	0.024941	± 2.5	PASS
		VH	TN	25.42	0.029966	± 2.5	PASS
16QAM	LCH	VL	TN	14.05	0.017034	± 2.5	PASS
		VN	TN	10.00	0.012125	± 2.5	PASS
		VH	TN	24.83	0.030112	± 2.5	PASS
	MCH	VL	TN	24.78	0.029619	± 2.5	PASS
		VN	TN	-0.74	-0.000889	± 2.5	PASS
		VH	TN	0.10	0.000120	± 2.5	PASS
	HCH	VL	TN	20.46	0.024114	± 2.5	PASS
		VN	TN	5.38	0.006341	± 2.5	PASS
		VH	TN	37.95	0.044738	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	11.47	0.013911	± 2.5	PASS
		VN	-20	10.07	0.012211	± 2.5	PASS
		VN	-10	9.51	0.011535	± 2.5	PASS
		VN	0	13.03	0.015802	± 2.5	PASS
		VN	10	13.03	0.015802	± 2.5	PASS
		VN	20	13.79	0.016721	± 2.5	PASS
		VN	30	13.98	0.016947	± 2.5	PASS
		VN	40	14.91	0.018074	± 2.5	PASS
		VN	50	14.02	0.016999	± 2.5	PASS
	MCH	VN	-30	-11.56	-0.013818	± 2.5	PASS
		VN	-20	-23.40	-0.027977	± 2.5	PASS
		VN	-10	-34.10	-0.040769	± 2.5	PASS
		VN	0	2.23	0.002668	± 2.5	PASS
		VN	10	-10.80	-0.012911	± 2.5	PASS
		VN	20	-18.55	-0.022180	± 2.5	PASS
		VN	30	-27.18	-0.032492	± 2.5	PASS
		VN	40	-34.17	-0.040855	± 2.5	PASS
		VN	50	-41.83	-0.050004	± 2.5	PASS
	HCH	VN	-30	23.80	0.028060	± 2.5	PASS
		VN	-20	18.40	0.021686	± 2.5	PASS
		VN	-10	18.61	0.021939	± 2.5	PASS
		VN	0	20.20	0.023811	± 2.5	PASS

16QAM		VN	10	15.96	0.018819	± 2.5	PASS
		VN	20	10.76	0.012681	± 2.5	PASS
		VN	30	3.49	0.004115	± 2.5	PASS
		VN	40	-0.37	-0.000438	± 2.5	PASS
		VN	50	-6.69	-0.007892	± 2.5	PASS
	LCH	VN	-30	31.23	0.037866	± 2.5	PASS
		VN	-20	35.98	0.043625	± 2.5	PASS
		VN	-10	41.67	0.050528	± 2.5	PASS
		VN	0	44.05	0.053408	± 2.5	PASS
		VN	10	34.52	0.041856	± 2.5	PASS
		VN	20	44.02	0.053373	± 2.5	PASS
		VN	30	0.62	0.000746	± 2.5	PASS
		VN	40	7.34	0.008898	± 2.5	PASS
		VN	50	14.62	0.017727	± 2.5	PASS
	MCH	VN	-30	2.39	0.002856	± 2.5	PASS
		VN	-20	6.54	0.007815	± 2.5	PASS
		VN	-10	9.13	0.010911	± 2.5	PASS
		VN	0	13.02	0.015562	± 2.5	PASS
		VN	10	13.99	0.016725	± 2.5	PASS
		VN	20	0.63	0.000752	± 2.5	PASS
		VN	30	8.27	0.009884	± 2.5	PASS
		VN	40	13.78	0.016468	± 2.5	PASS
		VN	50	18.12	0.021667	± 2.5	PASS
	HCH	VN	-30	44.60	0.052580	± 2.5	PASS
		VN	-20	2.49	0.002934	± 2.5	PASS
		VN	-10	5.85	0.006897	± 2.5	PASS
		VN	0	13.80	0.016273	± 2.5	PASS
		VN	10	18.01	0.021231	± 2.5	PASS
		VN	20	26.38	0.031096	± 2.5	PASS
		VN	30	38.81	0.045750	± 2.5	PASS
		VN	40	29.63	0.034924	± 2.5	PASS
		VN	50	49.15	0.057942	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	25.16	0.030482	± 2.5	PASS
		VN	TN	1.99	0.002409	± 2.5	PASS
		VH	TN	11.86	0.014366	± 2.5	PASS
	MCH	VL	TN	-20.57	-0.024591	± 2.5	PASS
		VN	TN	-41.18	-0.049234	± 2.5	PASS
		VH	TN	-26.65	-0.031859	± 2.5	PASS
	HCH	VL	TN	34.33	0.040510	± 2.5	PASS
		VN	TN	14.08	0.016609	± 2.5	PASS
		VH	TN	5.75	0.006785	± 2.5	PASS
16QAM	LCH	VL	TN	3.20	0.003882	± 2.5	PASS
		VN	TN	28.47	0.034485	± 2.5	PASS
		VH	TN	22.90	0.027744	± 2.5	PASS
	MCH	VL	TN	40.86	0.048841	± 2.5	PASS

		VN	TN	18.14	0.021684	± 2.5	PASS
		VH	TN	8.04	0.009611	± 2.5	PASS
	HCH	VL	TN	1.40	0.001654	± 2.5	PASS
		VN	TN	18.78	0.022162	± 2.5	PASS
		VH	TN	15.22	0.017959	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	21.21	0.025699	± 2.5	PASS
		VN	-20	29.33	0.035525	± 2.5	PASS
		VN	-10	34.17	0.041399	± 2.5	PASS
		VN	0	36.31	0.043981	± 2.5	PASS
		VN	10	43.16	0.052282	± 2.5	PASS
		VN	20	46.35	0.056146	± 2.5	PASS
		VN	30	3.00	0.003639	± 2.5	PASS
		VN	40	9.14	0.011073	± 2.5	PASS
		VN	50	13.07	0.015839	± 2.5	PASS
	MCH	VN	-30	-47.89	-0.057255	± 2.5	PASS
		VN	-20	-15.16	-0.018127	± 2.5	PASS
		VN	-10	-31.41	-0.037554	± 2.5	PASS
		VN	0	-44.30	-0.052962	± 2.5	PASS
		VN	10	-10.90	-0.013031	± 2.5	PASS
		VN	20	-18.48	-0.022095	± 2.5	PASS
		VN	30	-24.08	-0.028781	± 2.5	PASS
		VN	40	-29.15	-0.034852	± 2.5	PASS
		VN	50	-38.05	-0.045489	± 2.5	PASS
	HCH	VN	-30	14.88	0.017554	± 2.5	PASS
		VN	-20	22.12	0.026095	± 2.5	PASS
		VN	-10	22.90	0.027024	± 2.5	PASS
		VN	0	21.53	0.025403	± 2.5	PASS
		VN	10	22.83	0.026939	± 2.5	PASS
		VN	20	20.53	0.024222	± 2.5	PASS
		VN	30	20.10	0.023715	± 2.5	PASS
		VN	40	24.40	0.028796	± 2.5	PASS
		VN	50	27.61	0.032577	± 2.5	PASS
16QAM	LCH	VN	-30	26.39	0.031972	± 2.5	PASS
		VN	-20	27.88	0.033774	± 2.5	PASS
		VN	-10	32.13	0.038921	± 2.5	PASS
		VN	0	38.11	0.046165	± 2.5	PASS
		VN	10	44.19	0.053529	± 2.5	PASS
		VN	20	9.90	0.011992	± 2.5	PASS
		VN	30	16.18	0.019599	± 2.5	PASS
		VN	40	22.79	0.027605	± 2.5	PASS
		VN	50	12.55	0.015198	± 2.5	PASS
	MCH	VN	-30	12.55	0.014998	± 2.5	PASS
		VN	-20	18.42	0.022026	± 2.5	PASS
		VN	-10	20.97	0.025070	± 2.5	PASS
		VN	0	23.16	0.027687	± 2.5	PASS
		VN	10	21.29	0.025447	± 2.5	PASS
		VN	20	16.05	0.019187	± 2.5	PASS
		VN	30	17.82	0.021308	± 2.5	PASS

	HCH	VN	40	19.01	0.022727	± 2.5	PASS
		VN	50	22.50	0.026900	± 2.5	PASS
		VN	-30	15.49	0.018280	± 2.5	PASS
		VN	-20	21.54	0.025420	± 2.5	PASS
		VN	-10	28.04	0.033083	± 2.5	PASS
		VN	0	34.22	0.040375	± 2.5	PASS
		VN	10	41.90	0.049439	± 2.5	PASS
		VN	20	-0.64	-0.000760	± 2.5	PASS
		VN	30	1.29	0.001519	± 2.5	PASS
		VN	40	8.60	0.010144	± 2.5	PASS
		VN	50	14.65	0.017284	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.13	0.001367	± 2.5	PASS
		VN	TN	-13.58	-0.016425	± 2.5	PASS
		VH	TN	13.06	0.015802	± 2.5	PASS
	MCH	VL	TN	-29.43	-0.035177	± 2.5	PASS
		VN	TN	-7.84	-0.009371	± 2.5	PASS
		VH	TN	-44.26	-0.052911	± 2.5	PASS
	HCH	VL	TN	8.38	0.009903	± 2.5	PASS
		VN	TN	8.08	0.009548	± 2.5	PASS
		VH	TN	33.42	0.039476	± 2.5	PASS
16QAM	LCH	VL	TN	21.97	0.026585	± 2.5	PASS
		VN	TN	41.83	0.050609	± 2.5	PASS
		VH	TN	48.17	0.058276	± 2.5	PASS
	MCH	VL	TN	6.58	0.007867	± 2.5	PASS
		VN	TN	-1.24	-0.001488	± 2.5	PASS
		VH	TN	13.88	0.016588	± 2.5	PASS
	HCH	VL	TN	37.78	0.044631	± 2.5	PASS
		VN	TN	42.39	0.050072	± 2.5	PASS
		VH	TN	14.08	0.016629	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	16.14	0.019523	± 2.5	PASS
		VN	-20	16.91	0.020458	± 2.5	PASS
		VN	-10	17.60	0.021289	± 2.5	PASS
		VN	0	17.34	0.020977	± 2.5	PASS
		VN	10	19.34	0.023401	± 2.5	PASS
		VN	20	21.34	0.025824	± 2.5	PASS
		VN	30	22.39	0.027087	± 2.5	PASS
		VN	40	16.06	0.019437	± 2.5	PASS
		VN	50	19.73	0.023868	± 2.5	PASS
	MCH	VN	-30	-26.56	-0.031757	± 2.5	PASS
		VN	-20	-2.39	-0.002856	± 2.5	PASS
		VN	-10	-20.17	-0.024113	± 2.5	PASS
		VN	0	-35.83	-0.042838	± 2.5	PASS

16QAM		VN	10	-0.40	-0.000479	± 2.5	PASS
		VN	20	-13.80	-0.016503	± 2.5	PASS
		VN	30	-26.32	-0.031466	± 2.5	PASS
		VN	40	-35.15	-0.042018	± 2.5	PASS
		VN	50	-46.85	-0.056006	± 2.5	PASS
	HCH	VN	-30	41.46	0.048974	± 2.5	PASS
		VN	-20	47.54	0.056156	± 2.5	PASS
		VN	-10	1.14	0.001352	± 2.5	PASS
		VN	0	8.28	0.009785	± 2.5	PASS
		VN	10	15.81	0.018674	± 2.5	PASS
		VN	20	25.25	0.029827	± 2.5	PASS
		VN	30	30.80	0.036384	± 2.5	PASS
		VN	40	36.06	0.042603	± 2.5	PASS
		VN	50	39.21	0.046321	± 2.5	PASS
	LCH	VN	-30	6.65	0.008048	± 2.5	PASS
		VN	-20	8.67	0.010489	± 2.5	PASS
		VN	-10	10.47	0.012669	± 2.5	PASS
		VN	0	10.03	0.012133	± 2.5	PASS
		VN	10	12.40	0.015006	± 2.5	PASS
		VN	20	12.49	0.015110	± 2.5	PASS
		VN	30	15.59	0.018866	± 2.5	PASS
		VN	40	19.56	0.023660	± 2.5	PASS
		VN	50	14.26	0.017256	± 2.5	PASS
	MCH	VN	-30	16.69	0.019957	± 2.5	PASS
		VN	-20	21.37	0.025549	± 2.5	PASS
		VN	-10	27.41	0.032766	± 2.5	PASS
		VN	0	33.75	0.040342	± 2.5	PASS
		VN	10	42.26	0.050517	± 2.5	PASS
		VN	20	48.48	0.057956	± 2.5	PASS
		VN	30	9.24	0.011047	± 2.5	PASS
		VN	40	11.20	0.013390	± 2.5	PASS
	HCH	VN	50	13.10	0.015665	± 2.5	PASS
		VN	-30	22.07	0.026075	± 2.5	PASS
		VN	-20	34.13	0.040321	± 2.5	PASS
		VN	-10	-2.76	-0.003262	± 2.5	PASS
		VN	0	7.72	0.009126	± 2.5	PASS
		VN	10	16.59	0.019603	± 2.5	PASS
		VN	20	20.26	0.023929	± 2.5	PASS
		VN	30	23.66	0.027951	± 2.5	PASS
		VN	40	27.55	0.032548	± 2.5	PASS
		VN	50	33.52	0.039595	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-26.61	-0.032096	± 2.5	PASS
		VN	TN	-34.19	-0.041242	± 2.5	PASS
		VH	TN	-23.89	-0.028817	± 2.5	PASS
	MCH	VL	TN	-22.27	-0.026626	± 2.5	PASS

	HCH	VN	TN	-34.86	-0.041676	± 2.5	PASS
		VH	TN	-27.02	-0.032304	± 2.5	PASS
		VL	TN	3.42	0.004051	± 2.5	PASS
		VN	TN	34.79	0.041220	± 2.5	PASS
		VH	TN	20.04	0.023746	± 2.5	PASS
16QAM	LCH	VL	TN	45.05	0.054339	± 2.5	PASS
		VN	TN	19.11	0.023054	± 2.5	PASS
		VH	TN	15.48	0.018671	± 2.5	PASS
	MCH	VL	TN	21.76	0.026011	± 2.5	PASS
		VN	TN	5.58	0.006669	± 2.5	PASS
		VH	TN	30.41	0.036357	± 2.5	PASS
	HCH	VL	TN	39.30	0.046559	± 2.5	PASS
		VN	TN	1.96	0.002322	± 2.5	PASS
		VH	TN	20.04	0.023746	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	-26.05	-0.031423	± 2.5	PASS
		VN	-20	-28.60	-0.034494	± 2.5	PASS
		VN	-10	-30.57	-0.036876	± 2.5	PASS
		VN	0	-32.14	-0.038774	± 2.5	PASS
		VN	10	-32.63	-0.039361	± 2.5	PASS
		VN	20	-38.35	-0.046263	± 2.5	PASS
		VN	30	-41.91	-0.050560	± 2.5	PASS
		VN	40	-41.71	-0.050318	± 2.5	PASS
	MCH	VN	50	-0.19	-0.000224	± 2.5	PASS
		VN	-30	-1.70	-0.002035	± 2.5	PASS
		VN	-20	-21.01	-0.025122	± 2.5	PASS
		VN	-10	-39.48	-0.047199	± 2.5	PASS
		VN	0	-18.11	-0.021650	± 2.5	PASS
		VN	10	-32.36	-0.038683	± 2.5	PASS
		VN	20	-43.06	-0.051474	± 2.5	PASS
		VN	30	-5.22	-0.006242	± 2.5	PASS
	HCH	VN	40	-10.70	-0.012792	± 2.5	PASS
		VN	50	-16.51	-0.019735	± 2.5	PASS
		VN	-30	28.20	0.033407	± 2.5	PASS
		VN	-20	33.00	0.039102	± 2.5	PASS
		VN	-10	38.37	0.045458	± 2.5	PASS
		VN	0	43.87	0.051983	± 2.5	PASS
		VN	10	46.71	0.055339	± 2.5	PASS
		VN	20	4.46	0.005288	± 2.5	PASS
QPSK	LCH	VN	30	10.14	0.012017	± 2.5	PASS
		VN	40	11.46	0.013576	± 2.5	PASS
		VN	50	13.46	0.015949	± 2.5	PASS
		VN	-30	22.63	0.027299	± 2.5	PASS
		VN	-20	28.74	0.034667	± 2.5	PASS
		VN	-10	31.97	0.038567	± 2.5	PASS
		VN	0	34.89	0.042087	± 2.5	PASS
		VN	10	39.40	0.047523	± 2.5	PASS

		VN	40	48.14	0.058066	± 2.5	PASS
		VN	50	7.54	0.009094	± 2.5	PASS
	MCH	VN	-30	33.86	0.040478	± 2.5	PASS
		VN	-20	36.81	0.044001	± 2.5	PASS
		VN	-10	45.60	0.054518	± 2.5	PASS
		VN	0	4.21	0.005028	± 2.5	PASS
		VN	10	7.84	0.009371	± 2.5	PASS
		VN	20	-10.51	-0.012569	± 2.5	PASS
		VN	30	-4.18	-0.004994	± 2.5	PASS
		VN	40	3.68	0.004395	± 2.5	PASS
		VN	50	10.94	0.013082	± 2.5	PASS
	HCH	VN	-30	14.09	0.016695	± 2.5	PASS
		VN	-20	32.09	0.038017	± 2.5	PASS
		VN	-10	-0.49	-0.000576	± 2.5	PASS
		VN	0	12.55	0.014864	± 2.5	PASS
		VN	10	20.20	0.023932	± 2.5	PASS
		VN	20	27.08	0.032085	± 2.5	PASS
		VN	30	31.40	0.037203	± 2.5	PASS
		VN	40	38.78	0.045949	± 2.5	PASS
		VN	50	41.67	0.049373	± 2.5	PASS

Appendix F): Field strength of spurious radiation

Receiver Setup:	<table><tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr><tr><td>0.009MHz-30MHz</td><td>Peak</td><td>10kHz</td><td>30kHz</td><td>Peak</td></tr><tr><td>30MHz-1GHz</td><td>Peak</td><td>120kHz</td><td>300kHz</td><td>Peak</td></tr><tr><td>Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr></table>	Frequency	Detector	RBW	VBW	Remark	0.009MHz-30MHz	Peak	10kHz	30kHz	Peak	30MHz-1GHz	Peak	120kHz	300kHz	Peak	Above 1GHz	Peak	1MHz	3MHz	Peak
Frequency	Detector	RBW	VBW	Remark																	
0.009MHz-30MHz	Peak	10kHz	30kHz	Peak																	
30MHz-1GHz	Peak	120kHz	300kHz	Peak																	
Above 1GHz	Peak	1MHz	3MHz	Peak																	
Measurement Procedure:	1. Scan up to 10th harmonic, find the maximum radiation frequency to measure. 2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT. Test procedure as below: 1) The EUT was powered ON and placed on a 1.5m high table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test. 2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. 4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization. 5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter. 6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions. 7) The output power into the substitution antenna was then measured. 8) Steps 6) and 7)were repeated with both antennas polarized. 9) Calculate power in dBm by the following formula: $\text{ERP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBd)}$ $\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ $\text{EIRP}=\text{ERP}+2.15\text{dB}$ where: Pg is the generator output power into the substitution antenna. 10) Test the EUT in the lowest channel, the middle channel the Highest channel 11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode,And found the X axis positioning which it is worse case. 12) Repeat above procedures until all frequencies measured was complete.																				
Limit:	Attenuated at least 43+10log(P)																				

Test Data:

QPSK

Mode:		LTE Traffic						
Band:		5		Channel:			20407	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.0340	150	359	-70.14	-13.00	57.14	Pass	Horizontal
2	166.6033	150	359	-61.46	-13.00	48.46	Pass	Horizontal
3	290.5941	150	124	-66.63	-13.00	53.63	Pass	Horizontal
4	354.8210	150	272	-66.45	-13.00	53.45	Pass	Horizontal
5	598.5337	150	297	-64.97	-13.00	51.97	Pass	Horizontal
6	718.0616	150	349	-66.38	-13.00	53.38	Pass	Horizontal
7	1649.4000	150	209	-54.01	-13.00	41.01	Pass	Horizontal
8	2474.1000	150	248	-49.70	-13.00	36.70	Pass	Horizontal
9	3298.8000	150	102	-50.22	-13.00	37.22	Pass	Horizontal
10	4546.5773	150	182	-45.76	-13.00	32.76	Pass	Horizontal
11	8695.7848	150	359	-40.79	-13.00	27.79	Pass	Horizontal
12	14828.0914	150	182	-30.68	-13.00	17.68	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20407	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.5085	150	254	-68.29	-13.00	55.29	Pass	Vertical
2	184.2609	150	351	-69.49	-13.00	56.49	Pass	Vertical
3	208.9038	150	181	-68.66	-13.00	55.66	Pass	Vertical
4	290.5941	150	194	-70.58	-13.00	57.58	Pass	Vertical
5	355.0150	150	351	-73.16	-13.00	60.16	Pass	Vertical
6	597.5635	150	327	-63.95	-13.00	50.95	Pass	Vertical
7	1649.4000	150	304	-52.72	-13.00	39.72	Pass	Vertical
8	2474.1000	150	315	-50.07	-13.00	37.07	Pass	Vertical
9	3298.8000	150	225	-49.69	-13.00	36.69	Pass	Vertical
10	5297.3649	150	148	-47.60	-13.00	34.60	Pass	Vertical
11	10638.3819	150	186	-38.47	-13.00	25.47	Pass	Vertical
12	15296.8648	150	207	-30.43	-13.00	17.43	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20415	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.0340	150	13	-70.37	-13.00	57.37	Pass	Horizontal
2	167.9616	150	150	-63.99	-13.00	50.99	Pass	Horizontal
3	290.2060	150	126	-66.87	-13.00	53.87	Pass	Horizontal
4	354.6269	150	138	-65.00	-13.00	52.00	Pass	Horizontal
5	478.8118	150	138	-68.79	-13.00	55.79	Pass	Horizontal
6	600.0860	150	286	-66.12	-13.00	53.12	Pass	Horizontal
7	1651.0000	150	213	-54.33	-13.00	41.33	Pass	Horizontal
8	2476.5000	150	250	-50.91	-13.00	37.91	Pass	Horizontal
9	3302.0000	150	61	-49.33	-13.00	36.33	Pass	Horizontal
10	6038.4019	150	22	-46.07	-13.00	33.07	Pass	Horizontal
11	9595.8298	150	283	-39.43	-13.00	26.43	Pass	Horizontal
12	14833.3417	150	181	-30.61	-13.00	17.61	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20415	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.5085	150	330	-68.64	-13.00	55.64	Pass	Vertical
2	199.9780	150	146	-67.21	-13.00	54.21	Pass	Vertical
3	290.4001	150	171	-72.20	-13.00	59.20	Pass	Vertical
4	398.8678	150	219	-71.00	-13.00	58.00	Pass	Vertical
5	600.0860	150	330	-63.70	-13.00	50.70	Pass	Vertical
6	725.4351	150	159	-67.45	-13.00	54.45	Pass	Vertical
7	1651.0000	150	280	-54.17	-13.00	41.17	Pass	Vertical
8	2476.5000	150	123	-48.52	-13.00	35.52	Pass	Vertical
9	3302.0000	150	264	-50.14	-13.00	37.14	Pass	Vertical
10	4782.0891	150	323	-46.27	-13.00	33.27	Pass	Vertical
11	8128.7564	150	303	-42.27	-13.00	29.27	Pass	Vertical
12	15019.3510	150	69	-29.55	-13.00	16.55	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20425	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.0340	150	1	-69.34	-13.00	56.34	Pass	Horizontal
2	167.9616	150	1	-62.68	-13.00	49.68	Pass	Horizontal
3	290.5941	150	110	-67.27	-13.00	54.27	Pass	Horizontal
4	354.8210	150	304	-66.04	-13.00	53.04	Pass	Horizontal
5	480.1700	150	25	-66.41	-13.00	53.41	Pass	Horizontal
6	598.1456	150	341	-65.97	-13.00	52.97	Pass	Horizontal
7	1653.0000	150	110	-53.71	-13.00	40.71	Pass	Horizontal
8	2479.5000	150	110	-50.06	-13.00	37.06	Pass	Horizontal
9	3306.0000	150	130	-50.09	-13.00	37.09	Pass	Horizontal
10	5118.1059	150	285	-46.73	-13.00	33.73	Pass	Horizontal
11	9709.8355	150	108	-38.92	-13.00	25.92	Pass	Horizontal
12	14821.3411	150	70	-30.26	-13.00	17.26	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20425	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	53.2847	150	360	-68.70	-13.00	55.70	Pass	Vertical
2	199.7840	150	162	-63.36	-13.00	50.36	Pass	Vertical
3	208.9038	150	360	-68.86	-13.00	55.86	Pass	Vertical
4	290.4001	150	1	-71.81	-13.00	58.81	Pass	Vertical
5	354.6269	150	50	-74.34	-13.00	61.34	Pass	Vertical
6	598.3397	150	309	-64.24	-13.00	51.24	Pass	Vertical
7	1653.0000	150	1	-53.52	-13.00	40.52	Pass	Vertical
8	2479.5000	150	73	-48.43	-13.00	35.43	Pass	Vertical
9	3306.0000	150	341	-49.55	-13.00	36.55	Pass	Vertical
10	7191.2096	150	224	-42.89	-13.00	29.89	Pass	Vertical
11	11504.6752	150	206	-37.28	-13.00	24.28	Pass	Vertical
12	15005.8503	150	108	-29.99	-13.00	16.99	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20450	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	120.0340	150	1	-69.87	-13.00	56.87	Pass	Horizontal
2	167.9616	150	172	-63.38	-13.00	50.38	Pass	Horizontal
3	322.6105	150	147	-65.57	-13.00	52.57	Pass	Horizontal
4	399.0618	150	293	-63.98	-13.00	50.98	Pass	Horizontal
5	478.4237	150	147	-68.99	-13.00	55.99	Pass	Horizontal
6	598.3397	150	282	-64.47	-13.00	51.47	Pass	Horizontal
7	1658.0000	150	293	-54.31	-13.00	41.31	Pass	Horizontal
8	2487.0000	150	160	-50.87	-13.00	37.87	Pass	Horizontal
9	3316.0000	150	183	-49.40	-13.00	36.40	Pass	Horizontal
10	5553.1277	150	359	-46.30	-13.00	33.30	Pass	Horizontal
11	10405.1203	150	183	-38.31	-13.00	25.31	Pass	Horizontal
12	14822.8411	150	23	-30.63	-13.00	17.63	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20450	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	48.6277	150	88	-69.22	-13.00	56.22	Pass	Vertical
2	199.3959	150	196	-67.12	-13.00	54.12	Pass	Vertical
3	290.4001	150	196	-71.99	-13.00	58.99	Pass	Vertical
4	399.0618	150	341	-72.45	-13.00	59.45	Pass	Vertical
5	598.9218	150	305	-65.37	-13.00	52.37	Pass	Vertical
6	730.2861	150	100	-66.50	-13.00	53.50	Pass	Vertical
7	1658.0000	150	147	-52.40	-13.00	39.40	Pass	Vertical
8	2487.0000	150	74	-49.56	-13.00	36.56	Pass	Vertical
9	3316.0000	150	145	-50.05	-13.00	37.05	Pass	Vertical
10	6693.9347	150	324	-44.76	-13.00	31.76	Pass	Vertical
11	11174.6587	150	342	-38.46	-13.00	25.46	Pass	Vertical
12	15097.3549	150	206	-29.62	-13.00	16.62	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	161.3643	150	6	-63.99	-13.00	50.99	Pass	Horizontal
2	290.5941	150	104	-67.93	-13.00	54.93	Pass	Horizontal
3	355.0150	150	116	-65.47	-13.00	52.47	Pass	Horizontal
4	480.7522	150	116	-68.93	-13.00	55.93	Pass	Horizontal
5	599.6979	150	325	-62.93	-13.00	49.93	Pass	Horizontal
6	720.0020	150	104	-69.36	-13.00	56.36	Pass	Horizontal
7	1673.0000	150	190	-53.19	-13.00	40.19	Pass	Horizontal
8	2509.5000	150	252	-49.80	-13.00	36.80	Pass	Horizontal
9	3346.0000	150	57	-50.35	-13.00	37.35	Pass	Horizontal
10	6342.9171	150	257	-45.76	-13.00	32.76	Pass	Horizontal
11	11539.1770	150	155	-37.26	-13.00	24.26	Pass	Horizontal
12	15020.1010	150	234	-30.72	-13.00	17.72	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	55.0310	150	177	-68.66	-13.00	55.66	Pass	Vertical
2	71.9124	150	273	-76.81	-13.00	63.81	Pass	Vertical
3	199.5899	150	140	-68.23	-13.00	55.23	Pass	Vertical
4	290.2060	150	20	-72.06	-13.00	59.06	Pass	Vertical
5	399.6439	150	0	-70.82	-13.00	57.82	Pass	Vertical
6	599.1158	150	44	-63.64	-13.00	50.64	Pass	Vertical
7	1673.0000	150	323	-53.06	-13.00	40.06	Pass	Vertical
8	2509.5000	150	0	-49.45	-13.00	36.45	Pass	Vertical
9	3346.0000	150	297	-50.24	-13.00	37.24	Pass	Vertical
10	4570.5785	150	58	-45.37	-13.00	32.37	Pass	Vertical
11	9661.8331	150	115	-39.68	-13.00	26.68	Pass	Vertical
12	15293.1147	150	137	-29.86	-13.00	16.86	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.9434	150	158	-69.88	-13.00	56.88	Pass	Horizontal
2	161.3643	150	358	-60.22	-13.00	47.22	Pass	Horizontal
3	290.0120	150	108	-66.54	-13.00	53.54	Pass	Horizontal
4	354.6269	150	108	-62.85	-13.00	49.85	Pass	Horizontal
5	480.1700	150	172	-48.40	-13.00	35.40	Pass	Horizontal
6	598.9218	150	335	-64.15	-13.00	51.15	Pass	Horizontal
7	1673.0000	150	358	-54.29	-13.00	41.29	Pass	Horizontal
8	2509.5000	150	297	-49.77	-13.00	36.77	Pass	Horizontal
9	3346.0000	150	337	-51.23	-13.00	38.23	Pass	Horizontal
10	5145.8573	150	136	-45.88	-13.00	32.88	Pass	Horizontal
11	8796.2898	150	154	-41.06	-13.00	28.06	Pass	Horizontal
12	15050.8525	150	197	-30.34	-13.00	17.34	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.7025	150	20	-67.68	-13.00	54.68	Pass	Vertical
2	167.9616	150	309	-67.64	-13.00	54.64	Pass	Vertical
3	199.7840	150	181	-63.58	-13.00	50.58	Pass	Vertical
4	479.7820	150	32	-61.28	-13.00	48.28	Pass	Vertical
5	599.8920	150	323	-64.64	-13.00	51.64	Pass	Vertical
6	716.8974	150	131	-65.49	-13.00	52.49	Pass	Vertical
7	1673.0000	150	131	-53.42	-13.00	40.42	Pass	Vertical
8	2509.5000	150	297	-49.02	-13.00	36.02	Pass	Vertical
9	3346.0000	150	360	-49.05	-13.00	36.05	Pass	Vertical
10	6456.1728	150	174	-45.77	-13.00	32.77	Pass	Vertical
11	11559.4280	150	360	-37.39	-13.00	24.39	Pass	Vertical
12	15238.3619	150	174	-30.80	-13.00	17.80	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.7494	150	137	-68.90	-13.00	55.90	Pass	Horizontal
2	161.1702	150	2	-60.84	-13.00	47.84	Pass	Horizontal
3	290.4001	150	101	-67.15	-13.00	54.15	Pass	Horizontal
4	398.8678	150	124	-61.15	-13.00	48.15	Pass	Horizontal
5	477.6475	150	124	-53.65	-13.00	40.65	Pass	Horizontal
6	738.6297	150	335	-66.60	-13.00	53.60	Pass	Horizontal
7	1673.0000	150	149	-53.46	-13.00	40.46	Pass	Horizontal
8	2509.5000	150	112	-50.41	-13.00	37.41	Pass	Horizontal
9	3346.0000	150	177	-50.09	-13.00	37.09	Pass	Horizontal
10	4666.5833	150	36	-45.70	-13.00	32.70	Pass	Horizontal
11	8824.7912	150	355	-40.75	-13.00	27.75	Pass	Horizontal
12	15053.1027	150	116	-30.02	-13.00	17.02	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	54.2549	150	107	-68.53	-13.00	55.53	Pass	Vertical
2	96.7494	150	202	-76.36	-13.00	63.36	Pass	Vertical
3	161.1702	150	299	-68.11	-13.00	55.11	Pass	Vertical
4	199.9780	150	166	-66.65	-13.00	53.65	Pass	Vertical
5	479.9760	150	71	-56.42	-13.00	43.42	Pass	Vertical
6	598.9218	150	311	-62.72	-13.00	49.72	Pass	Vertical
7	1673.0000	150	335	-53.38	-13.00	40.38	Pass	Vertical
8	2509.5000	150	323	-48.35	-13.00	35.35	Pass	Vertical
9	3346.0000	150	309	-49.05	-13.00	36.05	Pass	Vertical
10	6488.4244	150	18	-45.29	-13.00	32.29	Pass	Vertical
11	8131.0066	150	291	-41.43	-13.00	28.43	Pass	Vertical
12	15306.6153	150	136	-30.65	-13.00	17.65	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.7494	150	154	-69.01	-13.00	56.01	Pass	Horizontal
2	161.3643	150	0	-60.35	-13.00	47.35	Pass	Horizontal
3	368.9858	150	69	-62.79	-13.00	49.79	Pass	Horizontal
4	477.6475	150	117	-53.37	-13.00	40.37	Pass	Horizontal
5	597.5635	150	214	-65.42	-13.00	52.42	Pass	Horizontal
6	721.1662	150	117	-65.85	-13.00	52.85	Pass	Horizontal
7	1673.0000	150	20	-53.89	-13.00	40.89	Pass	Horizontal
8	2509.5000	150	335	-49.72	-13.00	36.72	Pass	Horizontal
9	3346.0000	150	96	-50.35	-13.00	37.35	Pass	Horizontal
10	4657.5829	150	18	-46.18	-13.00	33.18	Pass	Horizontal
11	8935.7968	150	114	-39.51	-13.00	26.51	Pass	Horizontal
12	15039.6020	150	192	-30.68	-13.00	17.68	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.5085	150	347	-68.10	-13.00	55.10	Pass	Vertical
2	161.1702	150	324	-67.71	-13.00	54.71	Pass	Vertical
3	208.9038	150	347	-68.63	-13.00	55.63	Pass	Vertical
4	290.4001	150	359	-70.29	-13.00	57.29	Pass	Vertical
5	476.4833	150	65	-63.16	-13.00	50.16	Pass	Vertical
6	734.9430	150	128	-65.03	-13.00	52.03	Pass	Vertical
7	1673.0000	150	299	-53.94	-13.00	40.94	Pass	Vertical
8	2509.5000	150	128	-49.74	-13.00	36.74	Pass	Vertical
9	3346.0000	150	187	-50.25	-13.00	37.25	Pass	Vertical
10	4646.3323	150	227	-45.54	-13.00	32.54	Pass	Vertical
11	9052.8026	150	20	-40.06	-13.00	27.06	Pass	Vertical
12	15101.8551	150	146	-30.79	-13.00	17.79	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20643	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	55.8072	150	188	-76.50	-13.00	63.50	Pass	Horizontal
2	96.7494	150	152	-68.66	-13.00	55.66	Pass	Horizontal
3	161.1702	150	0	-62.15	-13.00	49.15	Pass	Horizontal
4	354.6269	150	272	-64.30	-13.00	51.30	Pass	Horizontal
5	478.0356	150	116	-53.58	-13.00	40.58	Pass	Horizontal
6	597.9516	150	322	-63.97	-13.00	50.97	Pass	Horizontal
7	1696.6000	150	212	-53.72	-13.00	40.72	Pass	Horizontal
8	2544.9000	150	297	-49.97	-13.00	36.97	Pass	Horizontal
9	3393.2000	150	58	-50.35	-13.00	37.35	Pass	Horizontal
10	6597.1799	150	19	-44.35	-13.00	31.35	Pass	Horizontal
11	10576.8788	150	175	-38.83	-13.00	25.83	Pass	Horizontal
12	14999.8500	150	154	-30.47	-13.00	17.47	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20643	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.5085	150	117	-68.49	-13.00	55.49	Pass	Vertical
2	160.9762	150	310	-67.38	-13.00	54.38	Pass	Vertical
3	399.4499	150	164	-68.21	-13.00	55.21	Pass	Vertical
4	477.6475	150	128	-63.55	-13.00	50.55	Pass	Vertical
5	598.7277	150	335	-64.81	-13.00	51.81	Pass	Vertical
6	728.9278	150	106	-66.12	-13.00	53.12	Pass	Vertical
7	1696.6000	150	117	-53.27	-13.00	40.27	Pass	Vertical
8	2544.9000	150	33	-49.08	-13.00	36.08	Pass	Vertical
9	3393.2000	150	117	-49.41	-13.00	36.41	Pass	Vertical
10	6067.6534	150	316	-46.96	-13.00	33.96	Pass	Vertical
11	9367.8184	150	356	-39.18	-13.00	26.18	Pass	Vertical
12	15302.1151	150	37	-30.60	-13.00	17.60	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20635	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	57.7476	150	177	-76.52	-13.00	63.52	Pass	Horizontal
2	96.7494	150	152	-69.83	-13.00	56.83	Pass	Horizontal
3	161.3643	150	0	-61.31	-13.00	48.31	Pass	Horizontal
4	478.0356	150	126	-53.65	-13.00	40.65	Pass	Horizontal
5	599.8920	150	299	-63.04	-13.00	50.04	Pass	Horizontal
6	728.7337	150	30	-65.15	-13.00	52.15	Pass	Horizontal
7	1695.0000	150	152	-52.19	-13.00	39.19	Pass	Horizontal
8	2542.5000	150	348	-50.44	-13.00	37.44	Pass	Horizontal
9	3390.0000	150	350	-49.96	-13.00	36.96	Pass	Horizontal
10	5439.1220	150	311	-46.41	-13.00	33.41	Pass	Horizontal
11	9066.3033	150	58	-40.11	-13.00	27.11	Pass	Horizontal
12	14816.8408	150	77	-30.37	-13.00	17.37	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20635	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	54.0608	150	106	-68.86	-13.00	55.86	Pass	Vertical
2	161.3643	150	335	-68.17	-13.00	55.17	Pass	Vertical
3	199.7840	150	129	-66.66	-13.00	53.66	Pass	Vertical
4	476.8714	150	70	-63.44	-13.00	50.44	Pass	Vertical
5	598.3397	150	310	-64.39	-13.00	51.39	Pass	Vertical
6	727.1814	150	153	-64.53	-13.00	51.53	Pass	Vertical
7	1695.0000	150	225	-52.86	-13.00	39.86	Pass	Vertical
8	2542.5000	150	310	-48.80	-13.00	35.80	Pass	Vertical
9	3390.0000	150	337	-49.46	-13.00	36.46	Pass	Vertical
10	6041.4021	150	156	-46.45	-13.00	33.45	Pass	Vertical
11	8002.0001	150	18	-41.85	-13.00	28.85	Pass	Vertical
12	15261.6131	150	297	-30.47	-13.00	17.47	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20625	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.7494	150	164	-69.93	-13.00	56.93	Pass	Horizontal
2	161.3643	150	5	-60.55	-13.00	47.55	Pass	Horizontal
3	354.6269	150	116	-64.48	-13.00	51.48	Pass	Horizontal
4	477.6475	150	116	-53.75	-13.00	40.75	Pass	Horizontal
5	598.3397	150	323	-61.28	-13.00	48.28	Pass	Horizontal
6	752.2124	150	164	-66.56	-13.00	53.56	Pass	Horizontal
7	1693.0000	150	348	-54.12	-13.00	41.12	Pass	Horizontal
8	2539.5000	150	336	-50.05	-13.00	37.05	Pass	Horizontal
9	3386.0000	150	330	-49.26	-13.00	36.26	Pass	Horizontal
10	5845.6423	150	75	-46.41	-13.00	33.41	Pass	Horizontal
11	10231.8616	150	212	-39.10	-13.00	26.10	Pass	Horizontal
12	14836.3418	150	309	-30.22	-13.00	17.22	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20625	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	54.8370	150	129	-68.19	-13.00	55.19	Pass	Vertical
2	161.1702	150	323	-66.95	-13.00	53.95	Pass	Vertical
3	290.0120	150	359	-70.84	-13.00	57.84	Pass	Vertical
4	477.2595	150	117	-63.80	-13.00	50.80	Pass	Vertical
5	598.1456	150	44	-63.64	-13.00	50.64	Pass	Vertical
6	746.1972	150	153	-66.53	-13.00	53.53	Pass	Vertical
7	1693.0000	150	93	-52.83	-13.00	39.83	Pass	Vertical
8	2539.5000	150	19	-48.16	-13.00	35.16	Pass	Vertical
9	3386.0000	150	19	-48.76	-13.00	35.76	Pass	Vertical
10	6411.9206	150	19	-45.72	-13.00	32.72	Pass	Vertical
11	11490.4245	150	234	-36.67	-13.00	23.67	Pass	Vertical
12	15259.3630	150	295	-30.56	-13.00	17.56	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20600	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	96.7494	150	150	-69.25	-13.00	56.25	Pass	Horizontal
2	161.3643	150	336	-60.59	-13.00	47.59	Pass	Horizontal
3	398.2857	150	359	-62.87	-13.00	49.87	Pass	Horizontal
4	478.0356	150	124	-53.82	-13.00	40.82	Pass	Horizontal
5	599.1158	150	311	-63.41	-13.00	50.41	Pass	Horizontal
6	727.1814	150	40	-64.50	-13.00	51.50	Pass	Horizontal
7	1688.0000	150	162	-53.82	-13.00	40.82	Pass	Horizontal
8	2532.0000	150	4	-50.30	-13.00	37.30	Pass	Horizontal
9	3376.0000	150	18	-50.59	-13.00	37.59	Pass	Horizontal
10	7397.4699	150	18	-43.29	-13.00	30.29	Pass	Horizontal
11	11535.4268	150	253	-37.60	-13.00	24.60	Pass	Horizontal
12	14895.5948	150	350	-30.40	-13.00	17.40	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20600	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	53.0906	150	152	-68.14	-13.00	55.14	Pass	Vertical
2	199.3959	150	189	-64.27	-13.00	51.27	Pass	Vertical
3	398.2857	150	152	-69.81	-13.00	56.81	Pass	Vertical
4	479.7820	150	298	-59.21	-13.00	46.21	Pass	Vertical
5	599.3099	150	323	-62.98	-13.00	49.98	Pass	Vertical
6	713.0166	150	215	-65.83	-13.00	52.83	Pass	Vertical
7	1688.0000	150	201	-52.11	-13.00	39.11	Pass	Vertical
8	2532.0000	150	115	-49.94	-13.00	36.94	Pass	Vertical
9	3376.0000	150	348	-49.70	-13.00	36.70	Pass	Vertical
10	6553.6777	150	115	-46.03	-13.00	33.03	Pass	Vertical
11	10247.6124	150	18	-38.58	-13.00	25.58	Pass	Vertical
12	15056.8528	150	291	-30.18	-13.00	17.18	Pass	Vertical

16QAM

Mode:		LTE Traffic						
Band:		5		Channel:			20407	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	57.9416	150	100	-77.17	-13.00	64.17	Pass	Horizontal
2	151.8564	150	58	-64.65	-13.00	51.65	Pass	Horizontal
3	208.9038	150	127	-75.23	-13.00	62.23	Pass	Horizontal
4	375.0010	150	227	-75.98	-13.00	62.98	Pass	Horizontal
5	560.5021	150	354	-73.21	-13.00	60.21	Pass	Horizontal
6	687.5975	150	198	-70.69	-13.00	57.69	Pass	Horizontal
7	1649.4000	150	71	-56.10	-13.00	43.10	Pass	Horizontal
8	2474.1000	150	212	-52.58	-13.00	39.58	Pass	Horizontal
9	3298.8000	150	40	-51.78	-13.00	38.78	Pass	Horizontal
10	4557.0779	150	318	-48.40	-13.00	35.40	Pass	Horizontal
11	8479.0240	150	0	-44.73	-13.00	31.73	Pass	Horizontal
12	15070.3535	150	272	-39.07	-13.00	26.07	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20407	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	83	-66.17	-13.00	53.17	Pass	Vertical
2	144.0948	150	183	-70.98	-13.00	57.98	Pass	Vertical
3	208.9038	150	295	-68.01	-13.00	55.01	Pass	Vertical
4	375.0010	150	140	-75.85	-13.00	62.85	Pass	Vertical
5	599.5039	150	360	-72.43	-13.00	59.43	Pass	Vertical
6	687.5975	150	41	-68.15	-13.00	55.15	Pass	Vertical
7	1649.4000	150	98	-56.08	-13.00	43.08	Pass	Vertical
8	2474.1000	150	324	-51.24	-13.00	38.24	Pass	Vertical
9	3298.8000	150	319	-52.13	-13.00	39.13	Pass	Vertical
10	6258.1629	150	201	-48.36	-13.00	35.36	Pass	Vertical
11	10266.3633	150	358	-42.10	-13.00	29.10	Pass	Vertical
12	14915.8458	150	179	-38.68	-13.00	25.68	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20415	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	52.1204	150	155	-77.01	-13.00	64.01	Pass	Horizontal
2	111.8844	150	2	-76.71	-13.00	63.71	Pass	Horizontal
3	152.6325	150	41	-66.11	-13.00	53.11	Pass	Horizontal
4	399.4499	150	126	-74.99	-13.00	61.99	Pass	Horizontal
5	609.9820	150	126	-74.90	-13.00	61.90	Pass	Horizontal
6	687.5975	150	155	-70.16	-13.00	57.16	Pass	Horizontal
7	1651.0000	150	184	-56.50	-13.00	43.50	Pass	Horizontal
8	2476.5000	150	168	-52.02	-13.00	39.02	Pass	Horizontal
9	3302.0000	150	15	-52.17	-13.00	39.17	Pass	Horizontal
10	6347.4174	150	0	-48.01	-13.00	35.01	Pass	Horizontal
11	10218.3609	150	86	-41.94	-13.00	28.94	Pass	Horizontal
12	14497.3249	150	40	-39.13	-13.00	26.13	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20415	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	59.6879	150	253	-66.58	-13.00	53.58	Pass	Vertical
2	109.9440	150	13	-76.16	-13.00	63.16	Pass	Vertical
3	152.0504	150	197	-71.03	-13.00	58.03	Pass	Vertical
4	208.9038	150	56	-68.22	-13.00	55.22	Pass	Vertical
5	398.8678	150	226	-75.67	-13.00	62.67	Pass	Vertical
6	687.5975	150	253	-66.76	-13.00	53.76	Pass	Vertical
7	1651.0000	150	197	-56.17	-13.00	43.17	Pass	Vertical
8	2476.5000	150	281	-53.64	-13.00	40.64	Pass	Vertical
9	3302.0000	150	178	-51.99	-13.00	38.99	Pass	Vertical
10	4939.5970	150	340	-48.97	-13.00	35.97	Pass	Vertical
11	10252.1126	150	340	-41.76	-13.00	28.76	Pass	Vertical
12	14275.3138	150	294	-39.34	-13.00	26.34	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20425	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.2402	150	177	-77.36	-13.00	64.36	Pass	Horizontal
2	153.7968	150	43	-64.63	-13.00	51.63	Pass	Horizontal
3	208.9038	150	88	-76.26	-13.00	63.26	Pass	Horizontal
4	375.0010	150	356	-73.16	-13.00	60.16	Pass	Horizontal
5	560.3081	150	161	-76.31	-13.00	63.31	Pass	Horizontal
6	687.5975	150	191	-69.50	-13.00	56.50	Pass	Horizontal
7	1653.0000	150	326	-55.27	-13.00	42.27	Pass	Horizontal
8	2479.5000	150	58	-52.07	-13.00	39.07	Pass	Horizontal
9	3306.0000	150	26	-52.58	-13.00	39.58	Pass	Horizontal
10	4936.5968	150	74	-47.87	-13.00	34.87	Pass	Horizontal
11	8528.5264	150	143	-44.02	-13.00	31.02	Pass	Horizontal
12	14380.3190	150	2	-38.88	-13.00	25.88	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20425	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	144	-66.65	-13.00	53.65	Pass	Vertical
2	92.2865	150	29	-75.76	-13.00	62.76	Pass	Vertical
3	152.0504	150	216	-71.64	-13.00	58.64	Pass	Vertical
4	208.9038	150	100	-68.82	-13.00	55.82	Pass	Vertical
5	400.0320	150	127	-75.90	-13.00	62.90	Pass	Vertical
6	687.5975	150	43	-67.65	-13.00	54.65	Pass	Vertical
7	1653.0000	150	359	-55.17	-13.00	42.17	Pass	Vertical
8	2479.5000	150	100	-53.85	-13.00	40.85	Pass	Vertical
9	3306.0000	150	112	-52.97	-13.00	39.97	Pass	Vertical
10	6471.1736	150	209	-48.19	-13.00	35.19	Pass	Vertical
11	9223.0612	150	325	-42.95	-13.00	29.95	Pass	Vertical
12	14078.8039	150	41	-39.15	-13.00	26.15	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:		20450		
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	57.9416	150	262	-77.34	-13.00	64.34	Pass	Horizontal
2	111.8844	150	156	-77.43	-13.00	64.43	Pass	Horizontal
3	152.2444	150	27	-64.74	-13.00	51.74	Pass	Horizontal
4	208.9038	150	100	-74.91	-13.00	61.91	Pass	Horizontal
5	375.0010	150	41	-75.50	-13.00	62.50	Pass	Horizontal
6	687.5975	150	188	-70.38	-13.00	57.38	Pass	Horizontal
7	1658.0000	150	304	-57.41	-13.00	44.41	Pass	Horizontal
8	2487.0000	150	319	-52.86	-13.00	39.86	Pass	Horizontal
9	3316.0000	150	106	-52.78	-13.00	39.78	Pass	Horizontal
10	4749.0875	150	132	-48.67	-13.00	35.67	Pass	Horizontal
11	7684.7342	150	199	-44.56	-13.00	31.56	Pass	Horizontal
12	14323.3162	150	178	-38.43	-13.00	25.43	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20450	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	99	-66.96	-13.00	53.96	Pass	Vertical
2	153.4087	150	197	-71.07	-13.00	58.07	Pass	Vertical
3	208.9038	150	113	-68.87	-13.00	55.87	Pass	Vertical
4	399.4499	150	184	-75.48	-13.00	62.48	Pass	Vertical
5	538.3817	150	142	-76.72	-13.00	63.72	Pass	Vertical
6	687.5975	150	311	-67.54	-13.00	54.54	Pass	Vertical
7	1658.0000	150	311	-56.47	-13.00	43.47	Pass	Vertical
8	2487.0000	150	282	-53.78	-13.00	40.78	Pass	Vertical
9	3316.0000	150	11	-52.78	-13.00	39.78	Pass	Vertical
10	5759.3880	150	105	-48.60	-13.00	35.60	Pass	Vertical
11	9179.5590	150	152	-42.80	-13.00	29.80	Pass	Vertical
12	14097.5549	150	36	-39.47	-13.00	26.47	Pass	Vertical

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	46.4933	150	41	-77.21	-13.00	64.21	Pass	Horizontal
2	120.0340	150	145	-75.31	-13.00	62.31	Pass	Horizontal
3	149.1398	150	357	-65.07	-13.00	52.07	Pass	Horizontal
4	268.4737	150	13	-79.05	-13.00	66.05	Pass	Horizontal
5	383.9268	150	13	-76.07	-13.00	63.07	Pass	Horizontal
6	687.5975	150	188	-70.20	-13.00	57.20	Pass	Horizontal
7	1673.0000	150	131	-56.69	-13.00	43.69	Pass	Horizontal
8	2509.5000	150	357	-52.38	-13.00	39.38	Pass	Horizontal
9	3346.0000	150	180	-52.84	-13.00	39.84	Pass	Horizontal
10	4806.8403	150	34	-48.80	-13.00	35.80	Pass	Horizontal
11	7455.2228	150	0	-45.05	-13.00	32.05	Pass	Horizontal
12	14515.3258	150	130	-39.37	-13.00	26.37	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	56	-66.04	-13.00	53.04	Pass	Vertical
2	152.2444	150	196	-71.10	-13.00	58.10	Pass	Vertical
3	208.9038	150	322	-68.07	-13.00	55.07	Pass	Vertical
4	300.1020	150	140	-77.13	-13.00	64.13	Pass	Vertical
5	399.8380	150	359	-75.80	-13.00	62.80	Pass	Vertical
6	687.5975	150	293	-67.20	-13.00	54.20	Pass	Vertical
7	1673.0000	150	98	-57.11	-13.00	44.11	Pass	Vertical
8	2509.5000	150	322	-52.34	-13.00	39.34	Pass	Vertical
9	3346.0000	150	248	-53.03	-13.00	40.03	Pass	Vertical
10	5032.6016	150	294	-48.55	-13.00	35.55	Pass	Vertical
11	9928.8464	150	202	-41.78	-13.00	28.78	Pass	Vertical
12	13709.7855	150	43	-39.23	-13.00	26.23	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.6581	150	205	-77.93	-13.00	64.93	Pass	Horizontal
2	107.4215	150	146	-76.87	-13.00	63.87	Pass	Horizontal
3	153.6027	150	58	-64.55	-13.00	51.55	Pass	Horizontal
4	208.9038	150	102	-75.67	-13.00	62.67	Pass	Horizontal
5	375.0010	150	358	-75.36	-13.00	62.36	Pass	Horizontal
6	687.5975	150	162	-69.51	-13.00	56.51	Pass	Horizontal
7	1673.0000	150	102	-56.29	-13.00	43.29	Pass	Horizontal
8	2509.5000	150	234	-53.44	-13.00	40.44	Pass	Horizontal
9	3346.0000	150	202	-51.84	-13.00	38.84	Pass	Horizontal
10	5141.3571	150	294	-48.45	-13.00	35.45	Pass	Horizontal
11	10252.1126	150	248	-41.95	-13.00	28.95	Pass	Horizontal
12	14918.0959	150	1	-39.12	-13.00	26.12	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	350	-66.66	-13.00	53.66	Pass	Vertical
2	92.4805	150	14	-76.68	-13.00	63.68	Pass	Vertical
3	150.6921	150	209	-72.48	-13.00	59.48	Pass	Vertical
4	208.9038	150	70	-68.70	-13.00	55.70	Pass	Vertical
5	299.9080	150	224	-76.56	-13.00	63.56	Pass	Vertical
6	599.5039	150	14	-72.22	-13.00	59.22	Pass	Vertical
7	1673.0000	150	209	-55.55	-13.00	42.55	Pass	Vertical
8	2509.5000	150	154	-52.36	-13.00	39.36	Pass	Vertical
9	3346.0000	150	89	-51.41	-13.00	38.41	Pass	Vertical
10	5152.6076	150	340	-48.74	-13.00	35.74	Pass	Vertical
11	10130.6065	150	340	-42.36	-13.00	29.36	Pass	Vertical
12	14001.5501	150	156	-39.13	-13.00	26.13	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.4343	150	217	-76.74	-13.00	63.74	Pass	Horizontal
2	150.6921	150	27	-64.74	-13.00	51.74	Pass	Horizontal
3	208.9038	150	104	-74.76	-13.00	61.76	Pass	Horizontal
4	375.0010	150	344	-72.79	-13.00	59.79	Pass	Horizontal
5	479.9760	150	104	-76.15	-13.00	63.15	Pass	Horizontal
6	687.5975	150	160	-70.02	-13.00	57.02	Pass	Horizontal
7	1673.0000	150	217	-56.88	-13.00	43.88	Pass	Horizontal
8	2509.5000	150	259	-52.30	-13.00	39.30	Pass	Horizontal
9	3346.0000	150	340	-52.68	-13.00	39.68	Pass	Horizontal
10	5130.8565	150	133	-48.55	-13.00	35.55	Pass	Horizontal
11	9214.8107	150	86	-42.73	-13.00	29.73	Pass	Horizontal
12	14545.3273	150	226	-39.12	-13.00	26.12	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20525	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	84	-66.85	-13.00	53.85	Pass	Vertical
2	152.0504	150	184	-71.20	-13.00	58.20	Pass	Vertical
3	208.9038	150	56	-68.10	-13.00	55.10	Pass	Vertical
4	309.9980	150	14	-77.63	-13.00	64.63	Pass	Vertical
5	399.6439	150	226	-76.36	-13.00	63.36	Pass	Vertical
6	687.5975	150	311	-66.93	-13.00	53.93	Pass	Vertical
7	1673.0000	150	70	-56.70	-13.00	43.70	Pass	Vertical
8	2509.5000	150	56	-52.16	-13.00	39.16	Pass	Vertical
9	3346.0000	150	359	-51.90	-13.00	38.90	Pass	Vertical
10	7357.7179	150	247	-45.72	-13.00	32.72	Pass	Vertical
11	10309.1155	150	39	-41.82	-13.00	28.82	Pass	Vertical
12	17551.4776	150	226	-38.10	-13.00	25.10	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.2402	150	350	-76.80	-13.00	63.80	Pass	Horizontal
2	89.9580	150	182	-76.30	-13.00	63.30	Pass	Horizontal
3	152.2444	150	1	-64.62	-13.00	51.62	Pass	Horizontal
4	208.9038	150	196	-75.58	-13.00	62.58	Pass	Horizontal
5	375.0010	150	1	-75.28	-13.00	62.28	Pass	Horizontal
6	687.5975	150	125	-70.49	-13.00	57.49	Pass	Horizontal
7	1673.0000	150	209	-57.17	-13.00	44.17	Pass	Horizontal
8	2509.5000	150	359	-52.68	-13.00	39.68	Pass	Horizontal
9	3346.0000	150	1	-53.20	-13.00	40.20	Pass	Horizontal
10	6472.6736	150	89	-47.57	-13.00	34.57	Pass	Horizontal
11	10261.1131	150	1	-41.68	-13.00	28.68	Pass	Horizontal
12	15044.1022	150	202	-38.94	-13.00	25.94	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20525	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.4641	150	359	-66.67	-13.00	53.67	Pass	Vertical
2	150.6921	150	224	-71.89	-13.00	58.89	Pass	Vertical
3	208.9038	150	56	-68.16	-13.00	55.16	Pass	Vertical
4	375.0010	150	140	-74.81	-13.00	61.81	Pass	Vertical
5	598.7277	150	2	-74.44	-13.00	61.44	Pass	Vertical
6	687.5975	150	350	-67.64	-13.00	54.64	Pass	Vertical
7	1673.0000	150	56	-56.51	-13.00	43.51	Pass	Vertical
8	2509.5000	150	335	-51.68	-13.00	38.68	Pass	Vertical
9	3346.0000	150	156	-52.28	-13.00	39.28	Pass	Vertical
10	5965.6483	150	156	-49.02	-13.00	36.02	Pass	Vertical
11	9188.5594	150	110	-42.14	-13.00	29.14	Pass	Vertical
12	16494.6747	150	134	-39.54	-13.00	26.54	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20643	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.2402	150	167	-77.05	-13.00	64.05	Pass	Horizontal
2	120.0340	150	167	-74.89	-13.00	61.89	Pass	Horizontal
3	150.4981	150	27	-65.50	-13.00	52.50	Pass	Horizontal
4	208.9038	150	111	-76.05	-13.00	63.05	Pass	Horizontal
5	375.0010	150	359	-74.31	-13.00	61.31	Pass	Horizontal
6	687.5975	150	153	-71.07	-13.00	58.07	Pass	Horizontal
7	1696.6000	150	209	-56.57	-13.00	43.57	Pass	Horizontal
8	2544.9000	150	251	-53.19	-13.00	40.19	Pass	Horizontal
9	3393.2000	150	340	-52.46	-13.00	39.46	Pass	Horizontal
10	5057.3529	150	273	-49.01	-13.00	36.01	Pass	Horizontal
11	9718.0859	150	340	-42.56	-13.00	29.56	Pass	Horizontal
12	15065.8533	150	64	-39.33	-13.00	26.33	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20643	
Remark:		1.4M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	322	-66.61	-13.00	53.61	Pass	Vertical
2	151.8564	150	196	-71.71	-13.00	58.71	Pass	Vertical
3	208.9038	150	70	-68.63	-13.00	55.63	Pass	Vertical
4	309.9980	150	56	-77.05	-13.00	64.05	Pass	Vertical
5	398.4797	150	56	-76.42	-13.00	63.42	Pass	Vertical
6	687.5975	150	225	-68.29	-13.00	55.29	Pass	Vertical
7	1696.6000	150	183	-54.57	-13.00	41.57	Pass	Vertical
8	2544.9000	150	140	-52.09	-13.00	39.09	Pass	Vertical
9	3393.2000	150	179	-50.73	-13.00	37.73	Pass	Vertical
10	6473.4237	150	294	-47.57	-13.00	34.57	Pass	Vertical
11	9563.5782	150	154	-42.34	-13.00	29.34	Pass	Vertical
12	13751.7876	150	201	-39.77	-13.00	26.77	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20635	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.2402	150	360	-77.66	-13.00	64.66	Pass	Horizontal
2	152.8266	150	40	-63.65	-13.00	50.65	Pass	Horizontal
3	208.9038	150	112	-75.76	-13.00	62.76	Pass	Horizontal
4	375.0010	150	338	-73.87	-13.00	60.87	Pass	Horizontal
5	481.5283	150	112	-75.48	-13.00	62.48	Pass	Horizontal
6	687.5975	150	183	-70.15	-13.00	57.15	Pass	Horizontal
7	1695.0000	150	126	-56.74	-13.00	43.74	Pass	Horizontal
8	2542.5000	150	338	-51.92	-13.00	38.92	Pass	Horizontal
9	3390.0000	150	86	-52.21	-13.00	39.21	Pass	Horizontal
10	5113.6057	150	340	-48.66	-13.00	35.66	Pass	Horizontal
11	9693.3347	150	86	-41.95	-13.00	28.95	Pass	Horizontal
12	14918.8459	150	318	-38.90	-13.00	25.90	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20635	
Remark:		3M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	350	-66.57	-13.00	53.57	Pass	Vertical
2	152.2444	150	183	-72.30	-13.00	59.30	Pass	Vertical
3	208.9038	150	56	-68.13	-13.00	55.13	Pass	Vertical
4	300.1020	150	41	-76.64	-13.00	63.64	Pass	Vertical
5	398.6737	150	126	-76.54	-13.00	63.54	Pass	Vertical
6	687.5975	150	336	-67.59	-13.00	54.59	Pass	Vertical
7	1695.0000	150	261	-55.44	-13.00	42.44	Pass	Vertical
8	2542.5000	150	126	-53.45	-13.00	40.45	Pass	Vertical
9	3390.0000	150	82	-51.91	-13.00	38.91	Pass	Vertical
10	6302.4151	150	35	-47.42	-13.00	34.42	Pass	Vertical
11	9205.8103	150	104	-43.37	-13.00	30.37	Pass	Vertical
12	13992.5496	150	246	-38.91	-13.00	25.91	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20625	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	61.0462	150	175	-77.03	-13.00	64.03	Pass	Horizontal
2	120.0340	150	146	-75.60	-13.00	62.60	Pass	Horizontal
3	152.2444	150	29	-64.75	-13.00	51.75	Pass	Horizontal
4	329.9840	150	133	-74.80	-13.00	61.80	Pass	Horizontal
5	476.8714	150	117	-76.75	-13.00	63.75	Pass	Horizontal
6	687.5975	150	160	-71.12	-13.00	58.12	Pass	Horizontal
7	1693.0000	150	218	-57.75	-13.00	44.75	Pass	Horizontal
8	2539.5000	150	277	-54.07	-13.00	41.07	Pass	Horizontal
9	3386.0000	150	208	-52.87	-13.00	39.87	Pass	Horizontal
10	5984.3992	150	163	-48.66	-13.00	35.66	Pass	Horizontal
11	10255.8628	150	282	-41.96	-13.00	28.96	Pass	Horizontal
12	13643.7822	150	96	-38.94	-13.00	25.94	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5			Channel:		20625	
Remark:		5M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	59.8820	150	281	-66.34	-13.00	53.34	Pass	Vertical
2	152.0504	150	210	-71.51	-13.00	58.51	Pass	Vertical
3	208.9038	150	225	-68.35	-13.00	55.35	Pass	Vertical
4	399.8380	150	168	-73.72	-13.00	60.72	Pass	Vertical
5	598.5337	150	57	-72.67	-13.00	59.67	Pass	Vertical
6	687.5975	150	309	-67.22	-13.00	54.22	Pass	Vertical
7	1693.0000	150	336	-56.57	-13.00	43.57	Pass	Vertical
8	2539.5000	150	154	-54.50	-13.00	41.50	Pass	Vertical
9	3386.0000	150	248	-52.40	-13.00	39.40	Pass	Vertical
10	5057.3529	150	227	-48.78	-13.00	35.78	Pass	Vertical
11	10432.1216	150	110	-41.76	-13.00	28.76	Pass	Vertical
12	14017.3009	150	227	-39.40	-13.00	26.40	Pass	Vertical

Mode:		LTE Traffic						
Band:		5		Channel:			20600	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.6581	150	279	-76.76	-13.00	63.76	Pass	Horizontal
2	120.0340	150	138	-75.07	-13.00	62.07	Pass	Horizontal
3	152.2444	150	54	-63.89	-13.00	50.89	Pass	Horizontal
4	208.9038	150	194	-75.22	-13.00	62.22	Pass	Horizontal
5	375.0010	150	223	-75.51	-13.00	62.51	Pass	Horizontal
6	687.5975	150	138	-70.90	-13.00	57.90	Pass	Horizontal
7	1688.0000	150	265	-56.84	-13.00	43.84	Pass	Horizontal
8	2532.0000	150	223	-52.39	-13.00	39.39	Pass	Horizontal
9	3376.0000	150	15	-52.04	-13.00	39.04	Pass	Horizontal
10	5463.1232	150	62	-48.95	-13.00	35.95	Pass	Horizontal
11	9700.0850	150	318	-42.18	-13.00	29.18	Pass	Horizontal
12	15051.6026	150	40	-39.57	-13.00	26.57	Pass	Horizontal

Mode:		LTE Traffic						
Band:		5		Channel:			20600	
Remark:		10M						
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	60.0760	150	99	-66.68	-13.00	53.68	Pass	Vertical
2	152.0504	150	211	-71.67	-13.00	58.67	Pass	Vertical
3	208.9038	150	155	-68.91	-13.00	55.91	Pass	Vertical
4	309.9980	150	56	-77.62	-13.00	64.62	Pass	Vertical
5	399.4499	150	211	-75.04	-13.00	62.04	Pass	Vertical
6	687.5975	150	41	-67.77	-13.00	54.77	Pass	Vertical
7	1693.0000	150	126	-55.71	-13.00	42.71	Pass	Vertical
8	2539.5000	150	324	-52.92	-13.00	39.92	Pass	Vertical
9	3386.0000	150	245	-52.40	-13.00	39.40	Pass	Vertical
10	6303.9152	150	8	-49.00	-13.00	36.00	Pass	Vertical
11	9164.5582	150	316	-42.64	-13.00	29.64	Pass	Vertical
12	15563.8782	150	198	-39.46	-13.00	26.46	Pass	Vertical

Note:

Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

PHOTOGRAPHS OF TEST SETUP

Test model No.: GLMM18A02



Radiated spurious emission Test Setup-1(Below 1GHz)



Radiated spurious emission Test Setup-2(Above 1GHz)



Radiated spurious emission Test Setup-3(Close-up)

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32K00246401 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.