FCC CFR47 PART 22H, 24E AND 27L
CERTIFICATION TEST REPORT

FOR

LTE PHONE BLUETOOTH AND WLAN

MODEL NUMBER: US780, LG-US780, LGUS780 AS780
LG-AS780 AND LGAS780

FCC ID: ZNFUS780

REPORT NUMBER: 13U14784-1

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Prepared for
LG ELECTRONICS MOBILECOMM U.S.A., INC.
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	T. Chan	Initial Issue	T. Chan

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	LG ELECTRONICS MOBILECOMM U.S.A., INC. 1000 SYLVAN AVE. ENGLEWOODS CLIFFS, NJ 07632
EUT DESCRIPTION:	LTE PHONE BLUETOOTH AND WLAN
MODEL:	US780, LGUS780, LG-LGUS780
SERIAL NUMBER:	212KPED000332
DATE TESTED:	JANUARY 18 TO 31, 2013

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 22H, 24E AND 27L	Pass

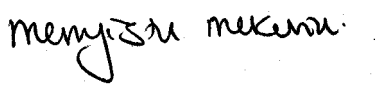
UL CCS tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL CCS By:

THU CHAN
WiSE OPERATIONS MANAGER
UL CCS

Tested By:



MENGISTU MEKURIA
WiSE ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22, FCC CFR Part 24, FCC Part 27, RSS-132 Issue 2, RSS-133 Issue 4 and RSS-139 Issue 2.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is Cell Phone with 802.11abgn+WWAN+BT Radio.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted and ERP / EIRP output powers as follows:

Part 22 Cellular Band					
Frequency range (MHz)	Modulation	Conducted		ERP	
		dBm	mW	dBm	mW
824.7 – 848.31	CDMA 2000 1xRTT	29.84	963.8	25.18	329.6
	CDMA 2000 EVDO-Rev A	30.84	1213.4	24.46	279.3

Part 24 PCS Band					
Frequency range (MHz)	Modulation	Conducted		EIRP	
		dBm	mW	dBm	mW
1851.25-1908.75	CDMA 2000 1xRTT	29.09	811.0	28.90	776.2
	CDMA 2000 EVDO REV. A	30.12	1028.0	29.10	812.8

Part 27 AWS Band					
Frequency range (MHz)	Modulation	Conducted		EIRP	
		dBm	mW	dBm	mW
1711.25-1753.75	CDMA 2000 1xRTT	28.75	749.9	26.88	487.5
	CDMA 2000 EVDO REV. A	29.54	899.5	27.10	512.9

Part 24 LTE Band 2 MODE (1.4 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1850.7-1913.5	QPSK	6/0	28.77	753.4	23.74	236.6
	16QAM		28.89	774.5	22.94	196.8

Part 24 LTE Band 2 MODE (3.0- MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1851.5-1914.3	QPSK	15/0	28.97	788.9	23.75	237.1
	16QAM		28.89	774.5	23.05	201.8

Part 24 LTE Band 2 MODE (5.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1852.5-1912.5	QPSK	25/0	28.53	712.9	23.94	247.7
	16QAM		28.63	729.5	23.32	214.8

Part 24 LTE Band 2 MODE (10.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1855.0-1905	QPSK	50/0	28.95	785.2	23.64	231.2
	16QAM		28.64	731.1	22.96	197.7

Part 27 LTE Band 4 MODE (1.4 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1710.7-1754.3	QPSK	6/0	29.18	827.9	22.85	192.8
	16QAM		29.39	869.0	21.45	139.6

Part 27 LTE Band 4 MODE (3.0- MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1711.5-1753.5	QPSK	15/0	28.94	783.4	22.89	194.5
	16QAM		28.89	774.5	21.39	137.7

Part 27 LTE Band 4 MODE (5.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1712.5-1752.5	QPSK	25/0	29.21	833.7	22.89	194.5
	16QAM		29.09	811.0	21.43	139.0

Part 27 LTE Band 4 MODE (10.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1715.0-1755.0	QPSK	50/0	29.11	814.7	21.83	152.4
	16QAM		29.10	812.8	20.60	114.8

Part 22 LTE Band 5 MODE (1.4 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
824.7-848.3	QPSK	6/0	28.77	753.4	22.30	169.8
	16QAM		28.92	779.8	20.80	120.2

Part 22 LTE Band 5 MODE (3.0- MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
825.5 - 847.5	QPSK	15/0	28.86	769.1	22.00	158.5
	16QAM		28.97	788.9	20.55	113.5

Part 22 LTE Band 5 MODE (5.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
826.5 -846.5	QPSK	25/0	29.00	794.3	21.63	145.5
	16QAM		28.86	769.1	20.43	110.4

Part 22 LTE Band 5 MODE (10.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
829.0 - 844.0	QPSK	50/0	28.91	778.0	21.20	131.8
	16QAM		28.67	736.2	21.00	125.9

Part 27 LTE Band 12 MODE (1.4 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
699.7 - 715.3	QPSK	6/0	29.76	946.2	23.00	199.5
	16QAM		29.61	914.1	21.70	147.9

Part 27 LTE Band 12 MODE (3.0- MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
700.5 - 714.5	QPSK	15/0	28.93	781.6	24.37	273.5
	16QAM		29.66	924.7	23.14	206.1

Part 27 LTE Band 12 MODE (5.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
701.5 - 713.5	QPSK	25/0	29.35	861.0	24.24	265.5
	16QAM		29.12	816.6	23.14	206.1

Part 27 LTE Band 12 MODE (10.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
704.0 - 711.0	QPSK	50/0	29.34	859.0	23.10	204.2
	16QAM		29.12	816.6	23.70	234.4

Part 24 LTE Band 25 MODE (1.4 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1850.7-1914.5	QPSK	6/0	29.37	865.0	22.23	167.1
	16QAM		29.23	837.5	20.92	123.6

Part 24 LTE Band 25 MODE (3.0- MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1851.5-1913.5	QPSK	15/0	28.96	787.0	22.36	172.2
	16QAM		28.75	749.9	20.91	123.3

Part 24 LTE Band 25 MODE (5.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1852.5-1912.5	QPSK	25/0	29.53	897.4	22.86	193.2
	16QAM		29.49	889.2	21.15	130.3

Part 24 LTE Band 25 MODE (10.0 MHz BANDWIDTH)						
Frequency range (MHz)	Modulation	Start RB and RB offset	Conducted		EIRP	
			dBm	mW	dBm	mW
1855.0-1905.0	QPSK	50/0	29.44	879.0	22.36	172.2
	16QAM		28.82	762.1	21.86	153.5

5.3. SOFTWARE AND FIRMWARE

The EUT software installed during testing was LAP8960IR120417.

The EUT is linked with Agilent 8960 and CMW500 Communication Test Sets.

5.4. WORST-CASE CONFIGURATION AND MODE

The worst-case is EUT on the highest power. Based on Peak Power measurement investigations, the following modes should be considered as worst-case scenario for all other measurements.

Worst-case modes:
- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A
- LTE Band 2, 4, 5, 12 and 25

For the fundamental investigation, since the EUT is a portable device that has three orientations; an X, Y and Z orientations and the worst among X, Y, and Z with AC/DC adapter and headset have been investigated. The worst case was found to be a Y-position with AC/DC adapter and headset for 1xRTT Cell and PCS bands and Z-Position for EVDO PCS band without AC Adapter. And on LTE bands, the worst case was at Z position.

5.5. DESCRIPTION OF TEST SETUP

RADIATED TESTS SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
AC Adapter	LG	MCS-02WR	190000054
Headset	LG	NA	NA

I/O CABLES (RF Conducted Test)

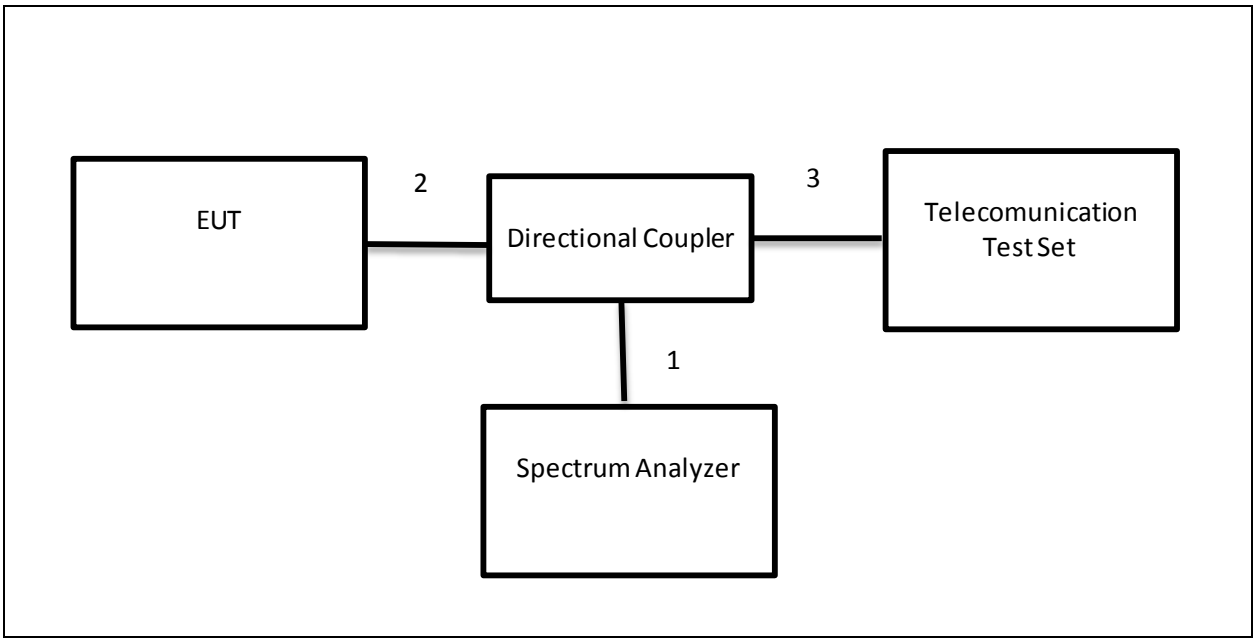
I/O CABLE LIST						
Cable No.	Port	# of Identic Ports	Connector Type	Cable Type	Cable Length	Remarks
1	RF In/Out	1	Spectrum Analyzer	UN-SHELDED	None	N/A
2	RF out	1	Directional Coupler	UN-SHELDED	0.1m	N/A
3	RF In/Out	1	Communication Call box	UN-SHELDED	0.5m	N/A

I/O CABLES (RF Radiated Test)

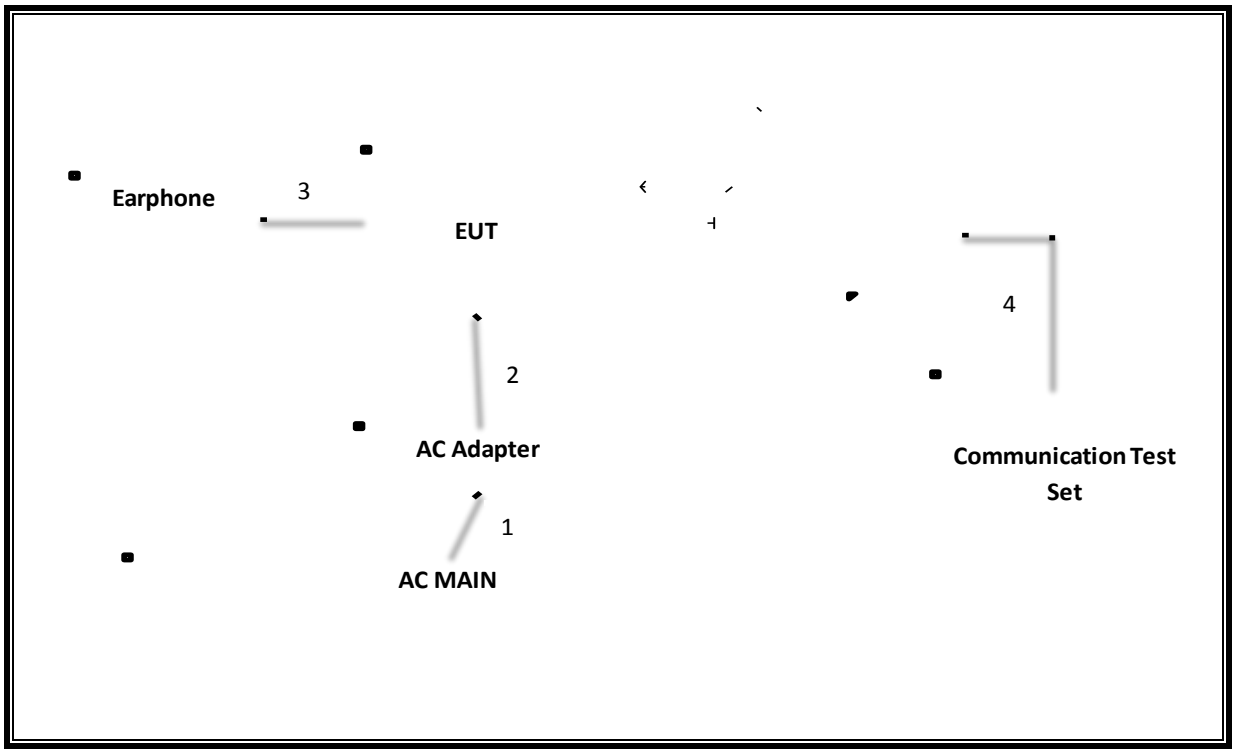
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	115VAC	UN-SHELDED	1.0m	N/A
2	DC	1	DC	UN-SHELDED	1.0m	Volume control on
3	Audio	1	Earphone	UN-SHELDED	1.0m	NA
4	RF In/Out	1	Horn	UN-SHELDED	5m	NA

TEST SETUP

CONDUCTED SETUP



RADIATED SETUP



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01179	02/16/13
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/13
Antenna, Horn, 18 GHz	EMCO	3115	C00783	10/25/13
Antenna, Horn, 18 GHz	EMCO	3115	C00945	12/11/13
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	03/23/13
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	10/22/13
Communication Test Set	Agilent / HP	E5515C	C01086	11/10/13
Communication Test Set	R & S	CMW500	None	06/28/13
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	C00930	01/09/14
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02689`	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Directional Coupler, 4.2 GHz, 40 dB	A-R	DC7144A	C00983	CNR
Vector Signal Generator	Agilent / HP	E4438C	None	07/06/13
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121C DB4	C00993	02/01/14

7. RF POWER OUTPUT VERIFICATION

Maximum output power is verified on the Low, Middle and High channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E for 1xRTT, section 3.1.2.3.4 of 3GPP2 C.S0033-0/TIA-866 for Rel. 0 and section 4.3.4 of 3GPP2 C.S0033-A for Rev. A

7.1. CDMA2000 1xRTT

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

Application	Rev, License
CDMA2000 Mobile Test	B.15.18, L

- Protocol Rev > 6 (IS-2000-0)
- System ID: 7; NID: 1, Reg. Ch. #.: 610 for Cell, 600 for PCS & 450 for AWS
- Radio Config (RC) > RC1 or RC3
- Service Option (SO) Setup > SO55 or SO32
- Traffic Data Rate > Full
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

BC0, 1xRTT CELL BAND

Radio Configuration (RC)	Service Option (SO)	Conducted Output Power (dBm)		
		Ch.1013/824.7 MHz	Ch384/836.52 MHz	Ch.777/848.31 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	**29.84**	29.71	29.79
	55 (Loopback)	29.65	29.60	29.81
RC2	9 (Loopback)	29.81	29.73	29.59
	55 (Loopback)	29.83	29.77	29.78
RC3	2 (Loopback)	29.72	29.60	29.45
	55 (Loopback)	29.76	29.64	29.69
	32 (+ F-SCH)	29.80	29.66	29.56
	32 (+ SCH)	29.83	29.69	29.79
RC4	2 (Loopback)	29.69	29.59	29.65
	55 (Loopback)	29.80	29.60	29.65
	32 (+ F-SCH)	29.76	29.58	29.54
	32 (+ SCH)	29.79	29.76	29.89
RC5	9 (Loopback)	29.64	29.61	29.44
	55 (Loopback)	29.75	29.69	29.43
RC11	2 (Loopback)	29.67	29.64	29.47
	75 (Loopback)	29.62	29.56	29.49
	32 (+ F-SCH)	29.69	29.65	29.62
	32 (+ SCH)	29.59	29.59	29.71

BC1, 1xRTT, PCS BAND

Radio Configuration (RC)	Service Option (SO)	Conducted Output Power (dBm)		
		Ch.25 /1851.25 MHz	Ch 600 /1880 MHz	Ch.1175 / 1908.75 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	28.82	**29.09**	28.82
	55 (Loopback)	28.93	29.05	28.74
RC2	9 (Loopback)	28.96	29.08	28.64
	55 (Loopback)	28.98	29.03	28.66
RC3	2 (Loopback)	28.69	28.80	28.42
	55 (Loopback)	28.58	28.79	28.40
	32 (+ F-SCH)	28.69	28.51	28.39
	32 (+ SCH)	28.77	28.54	28.33
RC4	2 (Loopback)	28.78	28.88	28.36
	55 (Loopback)	28.79	28.81	28.32
	32 (+ F-SCH)	28.62	28.77	28.41
	32 (+ SCH)	28.71	28.74	28.39
RC5	9 (Loopback)	28.82	28.81	28.49
	55 (Loopback)	28.76	28.73	28.39
RC11	2 (Loopback)	28.89	28.81	28.44
	75 (Loopback)	28.68	28.84	28.36
	32 (+ F-SCH)	28.85	28.79	28.46
	32 (+ SCH)	28.87	28.75	28.39

BC15, 1xRTT AWS BAND

Radio Configuration (RC)	Service Option (SO)	Conducted Output Power (dBm)		
		Ch.25 /1711.25 MHz	Ch 450 /1732.5 MHz	Ch.875 / 1753.75 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	28.61	**28.75**	28.44
	55 (Loopback)	28.50	28.54	28.45
RC2	9 (Loopback)	28.53	28.62	28.41
	55 (Loopback)	28.43	28.61	28.46
RC3	2 (Loopback)	28.30	28.59	28.32
	55 (Loopback)	28.28	28.52	28.31
	32 (+ F-SCH)	28.32	28.59	28.29
	32 (+ SCH)	28.30	28.63	28.28
RC4	2 (Loopback)	28.25	28.51	28.31
	55 (Loopback)	28.28	28.55	28.29
	32 (+ F-SCH)	28.31	28.62	28.27
	32 (+ SCH)	28.29	28.60	28.25
RC5	9 (Loopback)	28.30	28.61	28.30
	55 (Loopback)	28.37	28.56	28.29
RC11	2 (Loopback)	28.32	28.51	28.23
	75 (Loopback)	28.30	28.50	28.30
	32 (+ F-SCH)	28.34	28.65	28.30
	32 (+ SCH)	28.37	28.59	28.26

7.2. CDMA2000 1xEv-Do - Release 0 (Rel. 0)

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

EVDO Release 0 - RTAP

- Call Setup > Shift & Preset
- Call Control:
  - Access Network Info > Cell Parameters > Sector ID > 00000000 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parms:
  - Cell Power > -105.5 dBm/1.23 MHz
  - System ID: 7; NID: 1, Reg. Ch. #.: 610 for Cell, 600 for PCS & 450 for AWS
  - Channel > (Enter channel number)
  - Application Config > Enhanced Test Application Protocol > RTAP
  - RTAP Rate > 153.6 kbps
  - Rvs Power Ctrl > Active bits
  - Protocol Rel > 0 (1xEV-DO)
- Press “Start Data Connection” when “Session Open” appear in “Active Cell”
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

EVDO Release 0 - FTAP

- Call Setup > Shift & Preset
- Call Control:
  - Access Network Info > Cell Parameters > Sector ID > 00000000 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parms:
  - Cell Power > -105.5 dBm/1.23 MHz
  - Cell Band > (Select US Cellular or US PCS)
  - Channel > (Enter channel number)
  - Application Config > Enhanced Test Application Protocol > FTAP (default)
  - FTAP Rate > 307.2 kbps (2 Slot, QPSK)
  - Rvs Power Ctrl > Active bits
  - Protocol Rel > 0 (1xEV-DO)
- Press “Start Data Connection” when “Session Open” appear in “Active Cell”
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

RESULTS

BC0, Cell Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	Conducted power (dBm) Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	1013	824.70	30.65
		384	836.52	**30.70**
		777	848.31	30.62

BC1, PCS Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	Conducted power (dBm) Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1851.25	29.69
		600	1880.00	**30.01**
		1175	1908.75	29.15

BC15, AWS

FTAP Rate	RTAP Rate	Channel	f (MHz)	Conducted power (dBm) Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1711.25	29.17
		450	1732.5	**29.33**
		875	1753.75	29.10

7.3. CDMA2000 1xEv-Do - Revision A (Rev. A)

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

Application	Rev, License
1xEV-DO Terminal Test	A.09.13

EVDO Rev. A – RETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > RETAP
- R-Data Pkt Size > 4096
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2 > PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters > Sector ID > 00000000: 00000000: 00000000: 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots > ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

EVDO Rev. A - FETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > FETAP
- F-Traffic Format > 4 (1024, 2,128) Canonical (307.2k, QPSK)
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2 > PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters > Sector ID > 00000000: 00000000: 00000000: 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots > ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

RESULTS

BC0, Cell Band

FETAP-Traffic Format	RETAP-Data Payload Size	Channel	f (MHz)	Conducted power (dBm) Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	1013	824.70	30.68
		384	836.52	**30.84**
		777	848.31	30.71

BC1, PCS Band

FETAP-Traffic Format	RETAP-Data Payload Size	Channel	f (MHz)	Conducted power (dBm) Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1851.25	29.92
		600	1880.00	**30.12**
		1175	1908.75	29.16

BC 15, AWS Band

FETAP-Traffic Format	RETAP-Data Payload Size	Channel	f (MHz)	Conducted power (dBm) Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1711.25	29.16
		450	1732.5	**29.54**
		875	1753.75	29.14

7.4. LTE BAND 2

Output power for LTE Band 2 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1850.7	18607	QPSK	1.4	1	0	28.56
				1	2	28.23
				1	5	28.53
				3	0	28.35
				3	1	28.15
				3	2	28.14
				6	0	28.66
		16-QAM		1	0	28.24
				1	2	27.91
				1	5	28.20
				3	0	28.53
				3	1	28.44
				3	2	28.41
				6	0	28.86
1880.0	18900	QPSK		1	0	28.57
				1	2	28.61
				1	5	28.59
				3	0	28.66
				3	1	28.50
				3	2	28.51
				6	0	**28.77**
		16-QAM		1	0	28.49
				1	2	28.21
				1	5	28.41
				3	0	28.71
				3	1	28.74
				3	2	28.75
				6	0	**28.89**
1909.3	19193	QPSK		1	0	28.13
				1	2	27.91
				1	5	28.12
				3	0	28.01
				3	1	27.77
				3	2	27.81
				6	0	28.20
		16-QAM		1	0	27.86
				1	2	27.66
				1	5	27.78
				3	0	28.20
				3	1	28.01
				3	2	28.01
				6	0	28.26

Output power for LTE Band 2 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1851.5	18615	QPSK	3.0	1	0	28.44
				1	7	28.42
				1	14	28.44
				8	0	28.26
				8	4	28.09
				8	7	28.28
				15	0	28.53
		16-QAM		1	0	28.27
				1	7	28.22
				1	14	28.23
				8	0	28.03
				8	4	28.24
				8	7	28.34
				15	0	28.83
1880.0	18900	QPSK		1	0	28.94
				1	7	28.81
				1	14	28.91
				8	0	28.21
				8	4	28.42
				8	7	28.31
				15	0	**28.97**
		16-QAM		1	0	28.48
				1	7	28.31
				1	14	28.44
				8	0	28.52
				8	4	28.53
				8	7	28.55
				15	0	**28.89**
1908.5	19185	QPSK		1	0	28.08
				1	7	28.04
				1	14	28.01
				8	0	27.56
				8	4	27.83
				8	7	28.07
				15	0	28.09
		16-QAM		1	0	27.88
				1	7	27.69
				1	14	27.74
				8	0	27.90
				8	4	27.90
				8	7	27.91
				15	0	27.92

Output power for LTE Band 2 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1852.5	18625	QPSK	5.0	1	0	28.22
				1	12	28.10
				1	24	28.16
				12	0	28.15
				12	6	28.18
				12	11	28.15
				25	0	28.39
		16-QAM		1	0	28.06
				1	12	28.06
				1	24	28.11
				12	0	27.72
				12	6	27.64
				12	11	27.70
				25	0	28.15
1880.0	18900	QPSK		1	0	28.24
				1	12	28.17
				1	24	28.26
				12	0	28.23
				12	6	28.21
				12	11	28.21
				25	0	**28.53**
		16-QAM		1	0	28.23
				1	12	28.23
				1	24	28.51
				12	0	27.80
				12	6	27.77
				12	11	27.81
				25	0	**28.63**
1907.5	19175	QPSK		1	0	**27.75**
				1	12	27.59
				1	24	27.60
				12	0	27.60
				12	6	27.50
				12	11	27.43
				25	0	28.27
		16-QAM		1	0	27.96
				1	12	27.76
				1	24	27.75
				12	0	27.42
				12	6	27.38
				12	11	27.35
				25	0	27.98

Output power for LTE Band 2 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1855	18650	QPSK	10	1	0	28.02
				1	24	27.93
				1	49	28.02
				25	0	28.12
				25	12	28.22
				25	24	28.23
				50	0	28.49
		16-QAM		1	0	27.91
				1	24	27.79
				1	49	27.90
				25	0	27.78
				25	12	28.04
				25	24	27.86
				50	0	28.16
1880.0	18900	QPSK		1	0	28.63
				1	24	28.58
				1	49	28.54
				25	0	28.55
				25	12	28.77
				25	24	28.75
				50	0	**28.95**
		16-QAM		1	0	28.57
				1	24	28.39
				1	49	28.40
				25	0	28.38
				25	12	28.34
				25	24	28.32
				50	0	**28.64**
1905	19150	QPSK		1	0	28.04
				1	24	27.90
				1	49	27.81
				25	0	28.04
				25	12	28.00
				25	24	27.68
				50	0	28.05
		16-QAM		1	0	27.85
				1	24	27.65
				1	49	27.59
				25	0	27.63
				25	12	27.64
				25	24	27.57
				50	0	28.03

7.5. LTE BAND 4

Output power for LTE Band 4 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1710.7	19957	QPSK	1.4	1	0	29.10
				1	2	29.10
				1	5	29.03
				3	0	28.85
				3	1	28.84
				3	2	28.64
				6	0	29.15
		16-QAM		1	0	28.77
				1	2	28.65
				1	5	28.75
				3	0	29.07
				3	1	29.06
				3	2	29.03
				6	0	29.16
1732.5	20175	QPSK		1	0	28.36
				1	2	28.24
				1	5	28.17
				3	0	29.02
				3	1	28.89
				3	2	29.15
				6	0	**29.18**
		16-QAM		1	0	28.31
				1	2	28.22
				1	5	28.07
				3	0	28.88
				3	1	29.22
				3	2	29.25
				6	0	**29.39**
1754.3	20393	QPSK		1	0	28.86
				1	2	28.81
				1	5	28.90
				3	0	28.67
				3	1	28.63
				3	2	28.57
				6	0	28.95
		16-QAM		1	0	28.56
				1	2	28.46
				1	5	28.53
				3	0	29.03
				3	1	29.08
				3	2	29.03
				6	0	29.32

Output power for LTE Band 4 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1711.5	19965	QPSK	3.0	1	0	28.80
				1	7	28.75
				1	14	28.91
				8	0	28.64
				8	4	28.72
				8	7	28.66
				15	0	**28.94**
		16-QAM		1	0	28.77
				1	7	28.63
				1	14	28.74
				8	0	28.74
				8	4	28.72
				8	7	28.62
				15	0	**28.89**
1732.5	20175	QPSK		1	0	28.76
				1	7	28.50
				1	14	28.53
				8	0	28.41
				8	4	28.44
				8	7	28.51
				15	0	28.87
		16-QAM		1	0	28.50
				1	7	28.25
				1	14	28.31
				8	0	28.62
				8	4	28.49
				8	7	28.45
				15	0	28.88
1753.5	20385	QPSK		1	0	28.57
				1	7	28.37
				1	14	28.44
				8	0	28.45
				8	4	28.24
				8	7	28.26
				15	0	28.74
		16-QAM		1	0	28.42
				1	7	28.24
				1	14	28.31
				8	0	28.50
				8	4	28.43
				8	7	28.50
				15	0	28.52

Output power for LTE Band 4 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1712.5	19975	QPSK	5.0	1	0	28.88
				1	12	28.80
				1	24	29.11
				12	0	28.38
				12	6	28.41
				12	11	28.51
				25	0	**29.21**
		16-QAM		1	0	29.07
				1	12	29.20
				1	24	29.07
				12	0	28.51
				12	6	28.45
				12	11	28.51
				25	0	**29.09**
1732.5	20175	QPSK		1	0	28.88
				1	12	28.63
				1	24	28.69
				12	0	28.02
				12	6	28.20
				12	11	28.23
				25	0	28.91
		16-QAM		1	0	28.13
				1	12	28.87
				1	24	28.90
				12	0	28.46
				12	6	28.31
				12	11	28.17
				25	0	28.91
1752.5	20375	QPSK		1	0	28.62
				1	12	28.55
				1	24	28.57
				12	0	28.90
				12	6	28.23
				12	11	28.72
				25	0	29.03
		16-QAM		1	0	28.82
				1	12	28.81
				1	24	28.82
				12	0	28.16
				12	6	28.15
				12	11	28.22
				25	0	28.95

Output power for LTE Band 4 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1715	20000	QPSK	10.0	1	0	29.03
				1	24	29.10
				1	49	29.02
				25	0	29.02
				25	12	28.92
				25	24	29.08
				50	0	**29.11**
		16-QAM		1	0	28.81
				1	24	28.86
				1	49	29.04
				25	0	29.02
				25	12	29.00
				25	24	29.04
				50	0	**29.10**
1732.5	20175	QPSK		1	0	28.62
				1	24	28.62
				1	49	28.60
				25	0	28.56
				25	12	28.81
				25	24	28.54
				50	0	28.69
		16-QAM		1	0	28.63
				1	24	28.32
				1	49	28.45
				25	0	28.61
				25	12	28.74
				25	24	28.43
				50	0	29.01
1750	20350	QPSK		1	0	28.65
				1	24	28.56
				1	49	28.62
				25	0	28.53
				25	12	28.61
				25	24	28.31
				50	0	28.77
		16-QAM		1	0	28.38
				1	24	28.30
				1	49	28.39
				25	0	28.58
				25	12	28.71
				25	24	28.67
				50	0	28.76

7.6. LTE BAND 5

Output power for LTE Band 5 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
824.7	20407	QPSK	1.4	1	0	28.08
				1	2	28.17
				1	5	28.38
				3	0	28.06
				3	1	28.00
				3	2	28.02
				6	0	28.35
		16-QAM		1	0	27.80
				1	2	27.87
				1	5	28.06
				3	0	28.25
				3	1	28.23
				3	2	28.29
				6	0	28.38
836.5	20525	QPSK		1	0	28.74
				1	2	28.70
				1	5	28.70
				3	0	28.62
				3	1	28.51
				3	2	28.51
				6	0	**28.77**
		16-QAM		1	0	28.33
				1	2	28.32
				1	5	28.34
				3	0	28.86
				3	1	28.84
				3	2	28.81
				6	0	**28.92**
848.3	20643	QPSK		1	0	28.24
				1	2	28.15
				1	5	28.03
				3	0	28.53
				3	1	28.48
				3	2	28.43
				6	0	28.60
		16-QAM		1	0	27.77
				1	2	27.72
				1	5	27.55
				3	0	28.70
				3	1	28.59
				3	2	28.49
				6	0	28.72

Output power for LTE Band 5 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
825.5	20415	QPSK	3.0	1	0	28.11
				1	7	28.05
				1	14	28.57
				8	0	28.02
				8	4	28.09
				8	7	28.25
				15	0	28.15
		16-QAM		1	0	27.81
				1	7	28.01
				1	14	28.22
				8	0	28.24
				8	4	28.32
				8	7	28.42
				15	0	28.96
836.5	20525	QPSK		1	0	28.76
				1	7	28.67
				1	14	28.71
				8	0	28.26
				8	4	28.19
				8	7	28.25
				15	0	**28.86**
		16-QAM		1	0	28.36
				1	7	28.30
				1	14	28.31
				8	0	28.47
				8	4	28.47
				8	7	28.50
				15	0	**28.97**
847.5	20635	QPSK		1	0	28.07
				1	7	28.19
				1	14	28.01
				8	0	28.13
				8	4	28.05
				8	7	28.05
				15	0	28.08
		16-QAM		1	0	28.18
				1	7	27.89
				1	14	27.72
				8	0	28.46
				8	4	28.38
				8	7	28.26
				15	0	28.57

Output power for LTE Band 5 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
826.5	20425	QPSK	5.0	1	0	27.98
				1	12	28.31
				1	24	28.52
				12	0	27.95
				12	6	28.00
				12	11	28.02
				25	0	28.83
		16-QAM		1	0	28.23
				1	12	28.57
				1	24	28.51
				12	0	27.81
				12	6	28.03
				12	11	28.09
				25	0	28.68
836.5	20525	QPSK		1	0	28.60
				1	12	28.47
				1	24	28.52
				12	0	28.30
				12	6	28.10
				12	11	28.18
				25	0	**29.00**
		16-QAM		1	0	28.90
				1	12	28.79
				1	24	28.81
				12	0	28.19
				12	6	28.09
				12	11	28.10
				25	0	**28.86**
846.5	20625	QPSK		1	0	28.54
				1	12	28.25
				1	24	27.93
				12	0	28.08
				12	6	28.09
				12	11	27.92
				25	0	28.95
		16-QAM		1	0	28.83
				1	12	28.52
				1	24	28.51
				12	0	28.13
				12	6	27.98
				12	11	27.90
				25	0	28.95

Output power for LTE Band 5 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
829	20405	QPSK	10.0	1	0	28.25
				1	24	28.66
				1	49	28.78
				25	0	28.66
				25	12	28.50
				25	24	28.46
				50	0	28.91
		16-QAM		1	0	27.79
				1	24	28.15
				1	49	28.31
				25	0	28.41
				25	12	28.09
				25	24	28.51
				50	0	28.56
836.5	20525	QPSK		1	0	28.73
				1	24	28.78
				1	49	28.76
				25	0	28.54
				25	12	28.68
				25	24	28.40
				50	0	**28.91**
		16-QAM		1	0	28.41
				1	24	28.25
				1	49	28.35
				25	0	28.45
				25	12	28.21
				25	24	28.58
				50	0	28.58
844	20600	QPSK		1	0	28.70
				1	24	28.72
				1	49	28.08
				25	0	28.53
				25	12	28.65
				25	24	28.33
				50	0	28.75
		16-QAM		1	0	28.42
				1	24	28.29
				1	49	27.84
				25	0	28.41
				25	12	28.66
				25	24	28.50
				50	0	**28.67**

7.7. LTE BAND 12

Output power for LTE Band 12 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
699.7	23017	QPSK	1.4	1	0	28.65
				1	2	28.55
				1	5	28.51
				3	0	29.24
				3	1	29.21
				3	2	29.10
				6	0	29.76
		16-QAM		1	0	28.41
				1	2	28.37
				1	5	28.26
				3	0	28.45
				3	1	28.37
				3	2	28.40
				6	0	28.42
707.5	23095	QPSK		1	0	28.66
				1	2	28.65
				1	5	28.77
				3	0	28.60
				3	1	28.84
				3	2	28.71
				6	0	28.78
		16-QAM		1	0	28.28
				1	2	28.17
				1	5	28.13
				3	0	28.33
				3	1	28.32
				3	2	28.21
				6	0	28.37
715.3	23173	QPSK		1	0	28.34
				1	2	28.26
				1	5	28.30
				3	0	29.45
				3	1	29.34
				3	2	29.32
				6	0	**29.76**
		16-QAM		1	0	28.30
				1	2	28.34
				1	5	28.26
				3	0	29.60
				3	1	29.51
				3	2	29.47
				6	0	**29.61**

Output power for LTE Band 12 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
700.5	23035	QPSK	3.0	1	0	28.58
				1	7	28.66
				1	14	28.62
				8	0	28.55
				8	4	28.66
				8	7	28.53
				15	0	28.69
		16-QAM		1	0	28.31
				1	7	28.46
				1	14	28.55
				8	0	28.51
				8	4	28.63
				8	7	28.59
				15	0	29.07
707.5	23095	QPSK		1	0	28.87
				1	7	28.75
				1	14	28.86
				8	0	28.87
				8	4	28.84
				8	7	28.95
				15	0	**28.93**
		16-QAM		1	0	29.21
				1	7	29.23
				1	14	29.26
				8	0	28.91
				8	4	28.88
				8	7	28.91
				15	0	**29.66**
714.5	23165	QPSK		1	0	28.78
				1	7	28.75
				1	14	28.86
				8	0	28.63
				8	4	28.71
				8	7	28.64
				15	0	28.88
		16-QAM		1	0	28.72
				1	7	28.73
				1	14	28.71
				8	0	28.75
				8	4	28.72
				8	7	28.71
				15	0	28.90

Output power for LTE Band 12 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
701.5	23035	QPSK	5.0	1	0	28.81
				1	12	28.83
				1	24	28.86
				12	0	29.05
				12	6	28.91
				12	11	29.07
				25	0	29.10
		16-QAM		1	0	28.20
				1	12	28.16
				1	24	28.18
				12	0	28.26
				12	6	28.15
				12	11	28.25
				25	0	28.79
707.5	23095	QPSK		1	0	29.02
				1	12	29.00
				1	24	28.91
				12	0	28.53
				12	6	28.66
				12	11	28.47
				25	0	29.03
		16-QAM		1	0	29.02
				1	12	29.00
				1	24	29.00
				12	0	28.19
				12	6	28.33
				12	11	28.13
				25	0	29.07
713.5	23155	QPSK		1	0	28.47
				1	12	28.37
				1	24	28.46
				12	0	29.15
				12	6	29.21
				12	11	29.29
				25	0	**29.35**
		16-QAM		1	0	28.26
				1	12	28.21
				1	24	28.31
				12	0	28.27
				12	6	28.33
				12	11	28.41
				25	0	**29.12**

Output power for LTE Band 12 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
704	23060	QPSK	10.0	1	0	28.62
				1	24	28.58
				1	49	28.53
				25	0	28.93
				25	12	28.97
				25	24	28.61
				50	0	29.05
		16-QAM		1	0	29.01
				1	24	29.10
				1	49	29.10
				25	0	28.68
				25	12	28.81
				25	24	28.86
				50	0	29.12
707.5	23095	QPSK		1	0	28.29
				1	24	28.36
				1	49	28.33
				25	0	29.14
				25	12	28.66
				25	24	29.11
				50	0	**29.34**
		16-QAM		1	0	28.21
				1	24	28.20
				1	49	28.76
				25	0	28.68
				25	12	28.66
				25	24	28.72
				50	0	28.88
711.0	23130	QPSK		1	0	28.62
				1	24	28.36
				1	49	28.45
				25	0	28.90
				25	12	28.54
				25	24	28.88
				50	0	29.30
		16-QAM		1	0	29.12
				1	24	29.11
				1	49	29.13
				25	0	29.03
				25	12	28.81
				25	24	28.86
				50	0	**29.12**

7.8. LTE BAND 25

Output power for LTE Band 25 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1850.7	26047	QPSK	1.4	1	0	28.36
				1	2	28.21
				1	5	28.23
				3	0	29.18
				3	1	28.98
				3	2	29.02
				6	0	**29.37**
		16-QAM		1	0	28.20
				1	2	28.01
				1	5	28.02
				3	0	29.17
				3	1	29.07
				3	2	29.06
				6	0	**29.23**
1882.5	26365	QPSK		1	0	29.06
				1	2	28.88
				1	5	28.85
				3	0	28.80
				3	1	28.65
				3	2	28.66
				6	0	28.97
		16-QAM		1	0	28.51
				1	2	28.46
				1	5	28.54
				3	0	28.45
				3	1	28.49
				3	2	28.50
				6	0	28.63
1914.3	26683	QPSK		1	0	27.85
				1	2	27.64
				1	5	27.56
				3	0	28.67
				3	1	28.43
				3	2	28.41
				6	0	28.94
		16-QAM		1	0	27.92
				1	2	27.77
				1	5	27.62
				3	0	28.51
				3	1	28.54
				3	2	28.49
				6	0	28.60

Output power for LTE Band 25 (3.0MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1851.5	26055	QPSK	3.0	1	0	28.78
				1	7	28.63
				1	14	28.54
				8	0	28.30
				8	4	28.24
				8	7	28.18
				15	0	28.87
		16-QAM		1	0	28.24
				1	7	28.12
				1	14	28.25
				8	0	28.27
				8	4	28.37
				8	7	28.35
				15	0	28.52
1882.5	26365	QPSK		1	0	28.95
				1	7	28.92
				1	14	28.90
				8	0	28.34
				8	4	28.38
				8	7	28.20
				15	0	**28.96**
		16-QAM		1	0	28.48
				1	7	28.36
				1	14	28.39
				8	0	28.62
				8	4	28.73
				8	7	28.74
				15	0	**28.75**
1913.5	26675	QPSK		1	0	28.46
				1	7	28.32
				1	14	28.04
				8	0	28.18
				8	4	28.15
				8	7	28.11
				15	0	28.53
		16-QAM		1	0	28.05
				1	7	28.04
				1	14	28.11
				8	0	28.42
				8	4	28.39
				8	7	28.18
				15	0	28.55

Output power for LTE Band 25 (5.0MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1852.5	26065	QPSK	5.0	1	0	28.63
				1	12	28.88
				1	24	28.97
				12	0	29.31
				12	6	29.40
				12	11	29.28
				25	0	**29.53**
		16-QAM		1	0	28.66
				1	12	28.46
				1	24	28.65
				12	0	28.70
				12	6	28.72
				12	11	28.73
				25	0	**29.49**
1882.5	26365	QPSK		1	0	29.21
				1	12	29.20
				1	24	29.21
				12	0	29.12
				12	6	29.10
				12	11	29.27
				25	0	29.33
		16-QAM		1	0	28.70
				1	12	28.40
				1	24	28.58
				12	0	28.64
				12	6	28.61
				12	11	28.58
				25	0	29.26
1912.5	26665	QPSK		1	0	28.51
				1	12	28.38
				1	24	28.10
				12	0	28.83
				12	6	28.97
				12	11	28.98
				25	0	29.06
		16-QAM		1	0	29.03
				1	12	29.00
				1	24	28.92
				12	0	28.12
				12	6	28.12
				12	11	28.21
				25	0	29.10

Output power for LTE Band 25 (10.0MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)
1855	26090		10	1	0	28.48
				1	24	28.76
				1	49	28.81
				25	0	29.10
				25	12	29.07
				25	24	29.08
				50	0	29.05
		16-QAM		1	0	28.68
				1	24	28.41
				1	49	28.50
				25	0	29.32
				25	12	28.46
				25	24	28.50
				50	0	28.45
1882.5	26365	QPSK		1	0	29.41
				1	24	29.30
				1	49	29.20
				25	0	29.11
				25	12	29.42
				25	24	29.09
				50	0	**29.44**
		16-QAM		1	0	28.72
				1	24	28.71
				1	49	28.70
				25	0	28.72
				25	12	28.65
				25	24	28.61
				50	0	28.75
1910	26640	QPSK		1	0	28.84
				1	24	28.38
				1	49	28.05
				25	0	28.82
				25	12	28.60
				25	24	28.51
				50	0	28.94
		16-QAM		1	0	28.70
				1	24	28.31
				1	49	28.61
				25	0	28.24
				25	12	28.05
				25	24	28.70
				50	0	**28.82**

8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

MODES TESTED

- CDMA 2000 1xRTT, RC1 S02.
- CDMA 2000 EVDO REV. A
- LTE Band 2, 4, 5, 12 and 25

RESULTS

Mode	Band	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
CDMA 2000 1xRTT	CELL	1013	824.70	1.2220	1.374
		384	836.52	1.3039	1.423
		777	848.31	1.2390	1.344
	PCS	25	1851.25	1.2879	1.400
		600	1880.00	1.2547	1.378
		1175	1908.75	1.2776	1.413
	AWS	25	1711.25	1.2652	1.407
		450	1732.50	1.2308	1.373
		875	1753.75	1.2827	1.441

Mode	Band	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
CDMA 2000 EVDO REV.A	CELL	1013	824.70	1.2533	1.402
		384	836.52	1.2384	1.396
		777	848.31	1.2525	1.402
	PCS	25	1851.25	1.2834	1.407
		600	1880.00	1.2806	1.399
		1175	1908.75	1.3044	1.492
	AWS	25	1711.25	1.2630	1.382
		450	1732.50	1.2793	1.391
		875	1753.75	1.2723	1.399

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 2	1.4 MHz BAND QPSK	3/2	1850.7	565.016	866.839
		6/0		1086.500	1346.000
	1.4 MHz BAND 16QAM	3/2		555.075	821.720
		6/0		1084.100	1204.000
	1.4 MHz BAND QPSK	3/2	1880.0	570.641	795.554
		6/0		1094.100	1260.000
	1.4 MHz BAND 16QAM	3/2		570.471	900.756
		6/0		1101.700	1224.000
	1.4 MHz BAND QPSK	3/2	1909.3	561.168	702.256
		6/0		1091.100	1268.000
	1.4 MHz BAND 16QAM	3/2		566.397	709.698
		6/0		1082.666	1239.000
	3.0 MHz BAND QPSK	8/4	1851.5	1448.800	1811.000
		15/0		2686.700	2820.000
	3.0 MHz BAND 16QAM	8/4		1442.700	1801.000
		15/0		2707.500	2776.000
	3.0 MHz BAND QPSK	8/4	1880.0	1446.400	1665.000
		15/0		2681.300	1805.000
	3.0 MHz BAND 16QAM	8/4		1443.100	1824.000
		15/0		2683.900	2900.000
	3.0 MHz BAND QPSK	8/4	1908.5	1433.600	1729.000
		15/0		2672.300	2869.000
	3.0 MHz BAND 16QAM	8/4		1448.500	1804.000
		15/0		2667.000	2903.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE Band 2	5.0 MHz BAND QPSK	12/6	1852.5	2143.500	2861.000
		25/0		4462.300	4675.000
	5.0 MHz BAND 16QAM	12/6		2157.400	3021.000
		25/0		4501.400	4793.000
	5.0 MHz BAND QPSK	12/6	1880.0	2141.500	2896.000
		25/0		4460.500	4677.000
	5.0 MHz BAND 16QAM	12/6		2157.600	2647.000
		25/0		4449.500	4798.000
	5.0 MHz BAND QPSK	12/6	1907.5	2158.400	2313.000
		25/0		4474.000	4686.000
	5.0 MHz BAND 16QAM	12/6		2160.200	2759.000
		25/0		4511.600	4778.000
	10 MHz BAND QPSK	25/12	1855	4469.700	5053.000
		50/0		8937.200	9522.000
	10 MHz BAND 16QAM	25/12		4497.700	5513.000
		50/0		8936.100	9521.000
	10 MHz BAND QPSK	25/12	1880	4468.400	4673.000
		50/0		8911.300	9317.000
	10 MHz BAND 16QAM	25/12		4497.400	4803.000
		50/0		8932.200	9355.000
	10 MHz BAND QPSK	25/12	1905	4462.000	4986.000
		50/0		8863.200	9343.000
	10 MHz BAND 16QAM	25/12		4479.900	4776.000
		50/0		8844.200	9319.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 4	1.4 MHz BAND QPSK	3/2	1710.7	577.999	774.284
		6/0		1119.100	1260.000
	1.4 MHz BAND 16QAM	3/2		573.515	670.821
		6/0		1068.100	1164.000
	1.4 MHz BAND QPSK	3/2	1732.5	602.073	860.260
		6/0		1111.200	1174.000
	1.4 MHz BAND 16QAM	3/2		603.536	884.244
		6/0		1088.000	1236.000
	1.4 MHz BAND QPSK	3/2	1754.3	592.599	759.849
		6/0		1117.200	1228.000
	1.4 MHz BAND 16QAM	3/2		586.892	789.247
		6/0		1076.800	1258.000
	3.0 MHz BAND QPSK	8/4	1711.5	1432.400	1677.000
		15/0		2686.800	2897.000
	3.0 MHz BAND 16QAM	8/4		1442.400	1740.000
		15/0		2684.500	2864.000
	3.0 MHz BAND QPSK	8/4	1732.5	1432.900	1771.000
		15/0		2667.800	2909.000
	3.0 MHz BAND 16QAM	8/4		1449.000	1664.000
		15/0		2671.500	2820.000
	3.0 MHz BAND QPSK	8/4	1753.5	1445.700	1667.000
		15/0		2678.200	2799.000
	3.0 MHz BAND 16QAM	8/4		1450.400	1759.000
		15/0		2663.100	2899.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE Band 4	5.0 MHz BAND QPSK	12/6	1712.5	2188.500	2386.000
		25/0		4534.900	4676.000
	5.0 MHz BAND 16QAM	12/6		2251.400	3020.000
		25/0		4507.900	4684.000
	5.0 MHz BAND QPSK	12/6	1732.5	2199.900	2457.000
		25/0		4461.100	4678.000
	5.0 MHz BAND 16QAM	12/6		2189.200	2581.000
		25/0		4434.300	4652.000
	5.0 MHz BAND QPSK	12/6	1752.5	2235.600	2527.000
		25/0		4488.700	4773.000
	5.0 MHz BAND 16QAM	12/6		2179.100	2379.000
		25/0		4506.900	4732.000
	10 MHz BAND QPSK	25/12	1715.0	4434.700	5070.000
		50/0		8786.000	9418.000
	10 MHz BAND 16QAM	25/12		4468.800	5056.000
		50/0		8927.100	9391.000
	10 MHz BAND QPSK	25/12	1732.5	4453.200	6006.000
		50/0		8834.900	9380.000
	10 MHz BAND 16QAM	25/12		4515.500	5020.000
		50/0		8954.600	9298.000
	10 MHz BAND QPSK	25/12	1750.0	4452.900	4661.000
		50/0		8949.800	9352.000
	10 MHz BAND 16QAM	25/12		4452.800	5020.000
		50/0		8890.400	9265.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 5	1.4 MHz BAND QPSK	3/2	824.7	551.637	809.516
		6/0		1082.500	1162.000
	1.4 MHz BAND 16QAM	3/2		556.499	803.205
		6/0		1081.300	1204.000
	1.4 MHz BAND QPSK	3/2	836.5	545.628	704.650
		6/0		1080.600	1193.000
	1.4 MHz BAND 16QAM	3/2		579.422	858.099
		6/0		1088.200	1208.000
	1.4 MHz BAND QPSK	3/2	848.3	562.358	822.613
		6/0		1095.100	1224.000
	1.4 MHz BAND 16QAM	3/2		556.933	802.220
		6/0		1074.400	1258.000
	3.0 MHz BAND QPSK	8/4	825.5	1428.000	1805.000
		15/0		2687.400	2895.000
	3.0 MHz BAND 16QAM	8/4		1419.600	1813.000
		15/0		2687.700	2886.000
	3.0 MHz BAND QPSK	8/4	836.5	1444.500	1878.000
		15/0		2679.300	2882.000
	3.0 MHz BAND 16QAM	8/4		1425.500	1802.000
		15/0		2680.200	2897.000
	3.0 MHz BAND QPSK	8/4	847.5	1428.900	1644.000
		15/0		2704.800	2803.000
	3.0 MHz BAND 16QAM	8/4		1428.500	1642.000
		15/0		2666.000	2818.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE Band 5	5.0 MHz BAND QPSK	12/6	826.5	2166.300	2417.000
		25/0		4449.000	4670.000
	5.0 MHz BAND 16QAM	12/6		2158.100	2289.000
		25/0		4496.600	4781.000
	5.0 MHz BAND QPSK	12/6	836.5	2138.900	2492.000
		25/0		4436.200	4688.000
	5.0 MHz BAND 16QAM	12/6		2160.300	2410.000
		25/0		4369.300	4688.000
	5.0 MHz BAND QPSK	12/6	846.5	2139.500	2616.000
		25/0		4433.000	4665.000
	5.0 MHz BAND 16QAM	12/6		2149.300	2526.000
		25/0		4448.900	4668.000
	10 MHz BAND QPSK	25/12	829	4450.800	6002.000
		50/0		8767.700	9309.000
	10 MHz BAND 16QAM	25/12		4506.300	5267.000
		50/0		8926.900	9388.000
	10 MHz BAND QPSK	25/12	836.5	4464.300	5043.000
		50/0		8841.700	9296.000
	10 MHz BAND 16QAM	25/12		4450.100	5115.000
		50/0		8869.200	9318.000
	10 MHz BAND QPSK	25/12	844	4431.900	5268.000
		50/0		8808.800	9354.000
	10 MHz BAND 16QAM	25/12		4441.600	4756.000
		50/0		8796.400	9342.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 12	1.4 MHz BAND QPSK	3/2	699.7	561.341	858.205
		6/0		1079.300	1233.000
	1.4 MHz BAND 16QAM	3/2		562.911	858.074
		6/0		1075.800	1178.000
	1.4 MHz BAND QPSK	3/2	707.5	561.337	758.819
		6/0		1081.100	1244.000
	1.4 MHz BAND 16QAM	3/2		573.554	895.022
		6/0		1088.000	1207.000
	1.4 MHz BAND QPSK	3/2	715.3	561.831	837.108
		6/0		1084.000	1214.000
	1.4 MHz BAND 16QAM	3/2		561.693	714.624
		6/0		1083.400	1154.000
	3.0 MHz BAND QPSK	8/4	700.5	1436.200	1749.000
		15/0		2664.900	2919.000
	3.0 MHz BAND 16QAM	8/4		1430.400	1721.000
		15/0		2670.300	2867.000
	3.0 MHz BAND QPSK	8/4	707.5	1445.500	1673.000
		15/0		2698.500	2899.000
	3.0 MHz BAND 16QAM	8/4		1438.100	1728.000
		15/0		2707.900	2893.000
	3.0 MHz BAND QPSK	8/4	714.5	1443.000	1728.000
		15/0		2676.000	2904.000
	3.0 MHz BAND 16QAM	8/4		1456.800	1804.000
		15/0		2669.000	2899.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 12	5.0 MHz BAND QPSK	12/6	701.5	2166.600	2612.000
		25/0		4465.300	4631.000
	5.0 MHz BAND 16QAM	12/6		2152.000	2505.000
		25/0		4457.400	4871.000
	5.0 MHz BAND QPSK	12/6	707.5	2134.100	2312.000
		25/0		4501.600	4801.000
	5.0 MHz BAND 16QAM	12/6		2125.600	2302.000
		25/0		4459.700	4684.000
	5.0 MHz BAND QPSK	12/6	713.5	2158.500	2536.000
		25/0		4511.900	4675.000
	5.0 MHz BAND 16QAM	12/6		2158.500	2882.000
		25/0		4517.100	4782.000
	10 MHz BAND QPSK	25/12	704.0	4480.600	5228.000
		50/0		8925.000	9539.000
	10 MHz BAND 16QAM	25/12		4470.500	5049.000
		50/0		8982.400	9413.000
	10 MHz BAND QPSK	25/12	707.5	4467.000	5764.000
		50/0		8889.300	9523.000
	10 MHz BAND 16QAM	25/12		4501.800	5305.000
		50/0		8884.200	9525.000
	10 MHz BAND QPSK	25/12	711.0	4421.900	5022.000
		50/0		8764.000	9370.000
	10 MHz BAND 16QAM	25/12		4468.700	5509.000
		50/0		8882.100	9533.000

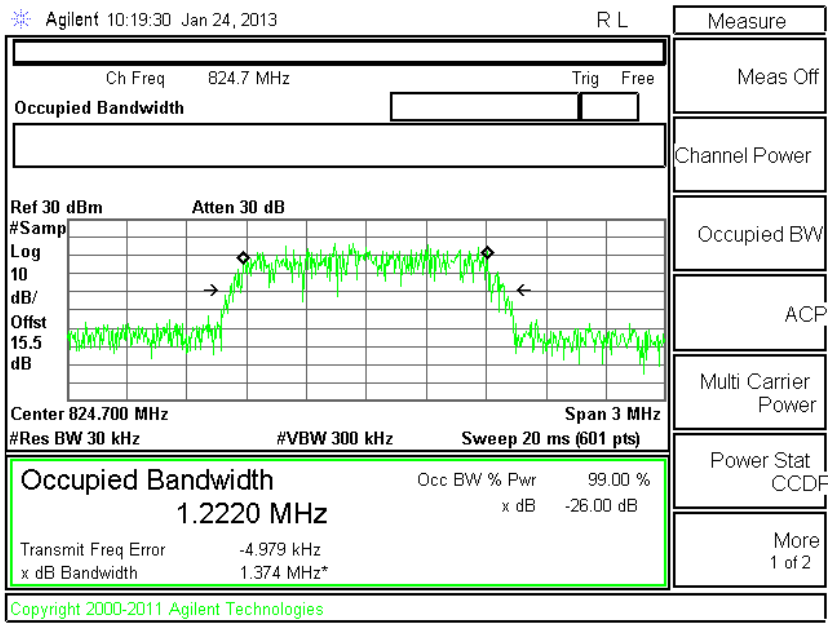
Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 25	1.4 MHz BAND QPSK	3/2	1850.7	566.377	828.973
		6/0		1101.100	1280.000
	1.4 MHz BAND 16QAM	3/2		558.890	840.680
		6/0		1085.800	1226.000
	1.4 MHz BAND QPSK	3/2	1882.5	572.283	774.649
		6/0		1105.700	1227.000
	1.4 MHz BAND 16QAM	3/2		541.452	825.687
		6/0		1094.600	1215.000
	1.4 MHz BAND QPSK	3/2	1914.3	557.006	743.268
		6/0		1086.200	1206.000
	1.4 MHz BAND 16QAM	3/2		558.740	837.864
		6/0		1089.600	1226.000
	3.0 MHz BAND QPSK	8/4	1851.5	1444.400	1693.000
		15/0		2648.400	2830.000
	3.0 MHz BAND 16QAM	8/4		1426.200	1718.000
		15/0		2708.000	2774.000
	3.0 MHz BAND QPSK	8/4	1882.5	1449.100	1738.000
		15/0		2690.200	2817.000
	3.0 MHz BAND 16QAM	8/4		1440.500	1816.000
		15/0		2682.600	2888.000
	3.0 MHz BAND QPSK	8/4	1913.5	1427.200	1795.000
		15/0		2672.500	2878.000
	3.0 MHz BAND 16QAM	8/4		1425.000	1803.000
		15/0		2647.900	2862.000

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 25	5.0 MHz BAND QPSK	12/6	1852.5	2166.100	2402.000
		25/0		4498.900	4677.000
	5.0 MHz BAND 16QAM	12/6		2153.000	3021.000
		25/0		4478.400	4862.000
	5.0 MHz BAND QPSK	12/6	1882.5	2157.500	2863.000
		25/0		4489.200	4825.000
	5.0 MHz BAND 16QAM	12/6		2169.200	2511.000
		25/0		4442.200	4669.000
	5.0 MHz BAND QPSK	12/6	1912.5	2148.200	2628.000
		25/0		4463.300	4805.000
	5.0 MHz BAND 16QAM	12/6		2163.600	2753.000
		25/0		4460.800	4663.000
	10 MHz BAND QPSK	25/12	1855	4435.900	5054.000
		50/0		8842.200	9339.000
	10 MHz BAND 16QAM	25/12		4497.600	5078.000
		50/0		8949.800	9332.000
	10 MHz BAND QPSK	25/12	1882.5	4466.200	5046.000
		50/0		8857.200	9412.000
	10 MHz BAND 16QAM	25/12		4455.700	4816.000
		50/0		8877.300	9328.000
	10 MHz BAND QPSK	25/12	1910	4482.100	5038.000
		50/0		8868.400	9326.000
	10 MHz BAND 16QAM	25/12		4462.900	4840.000
		50/0		8955.400	9350.000

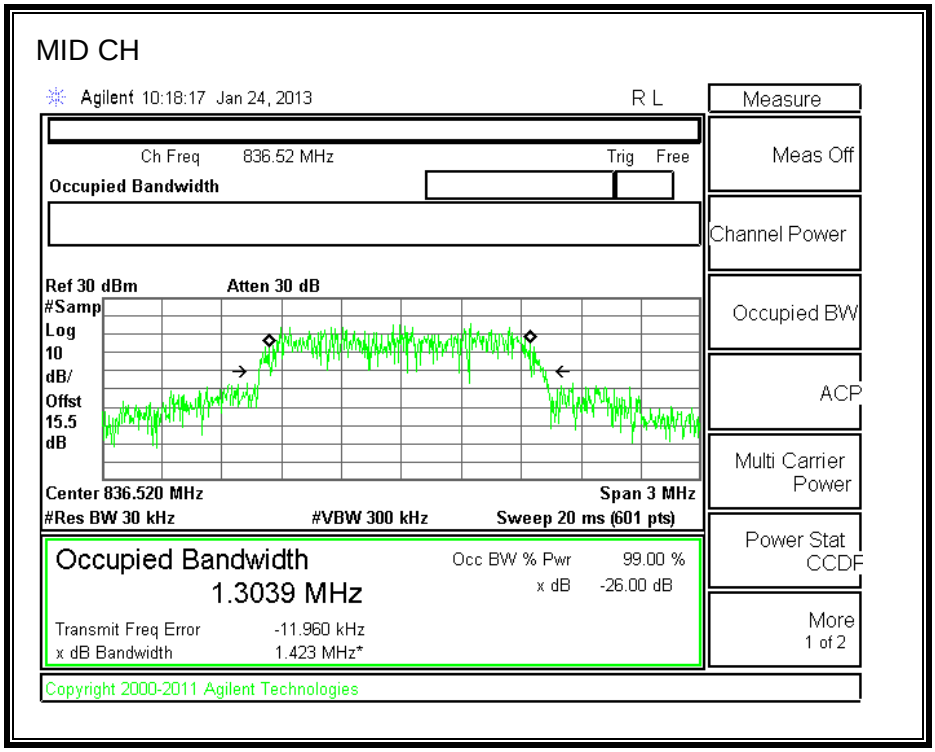
8.1.1. *CDMA200 1xRTT*

1xRTT BC 0 CELL BAND

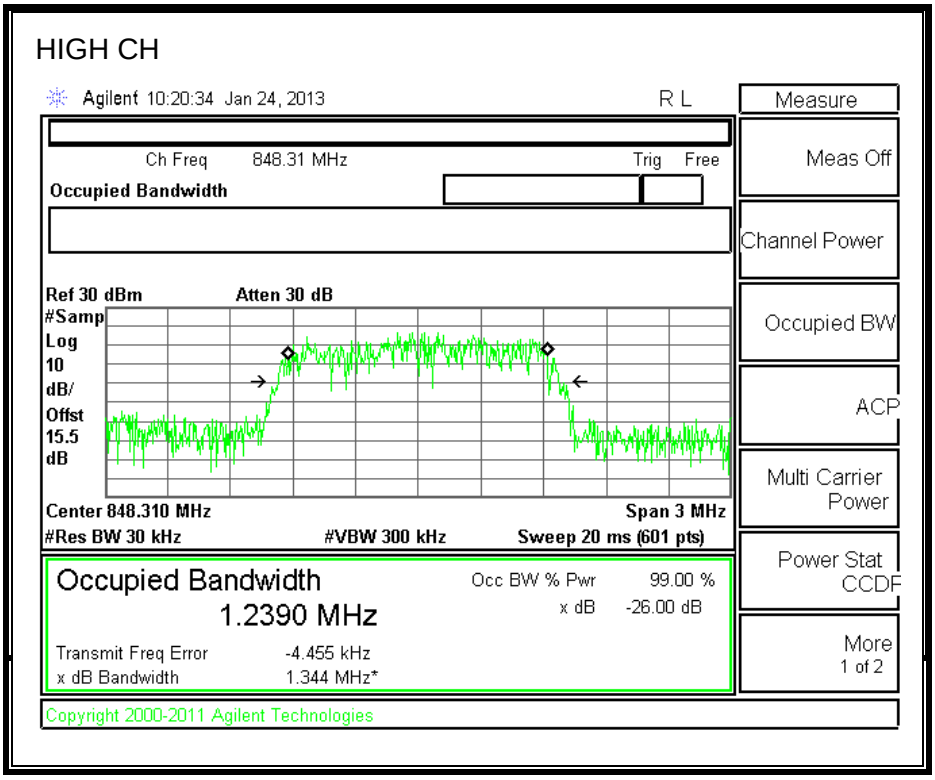
LOW CH



MID CH

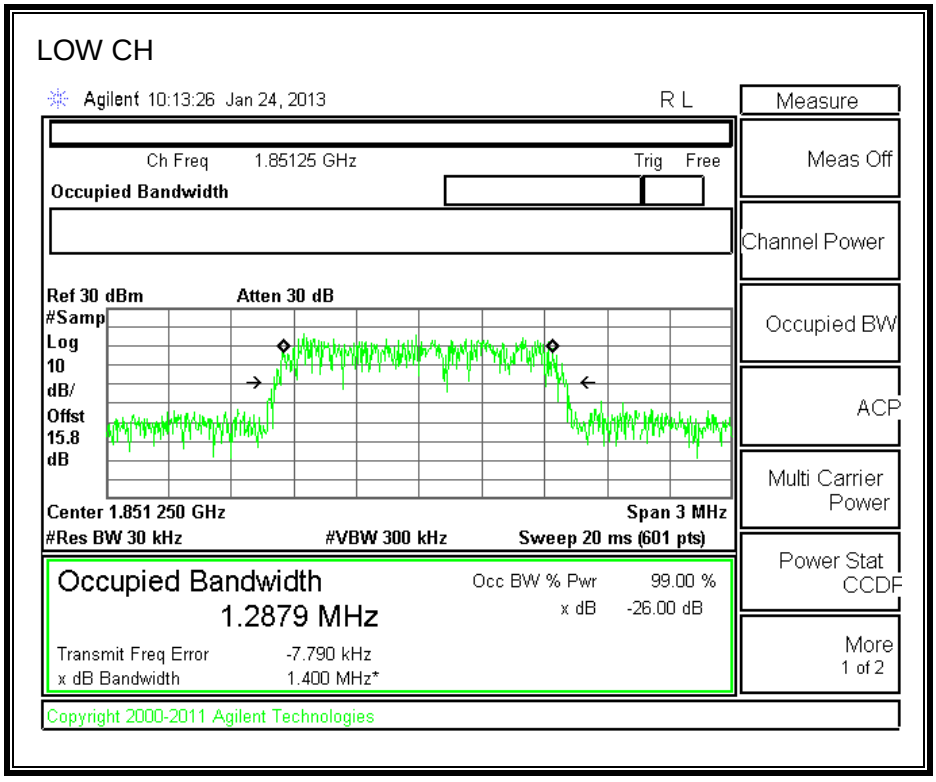


HIGH CH

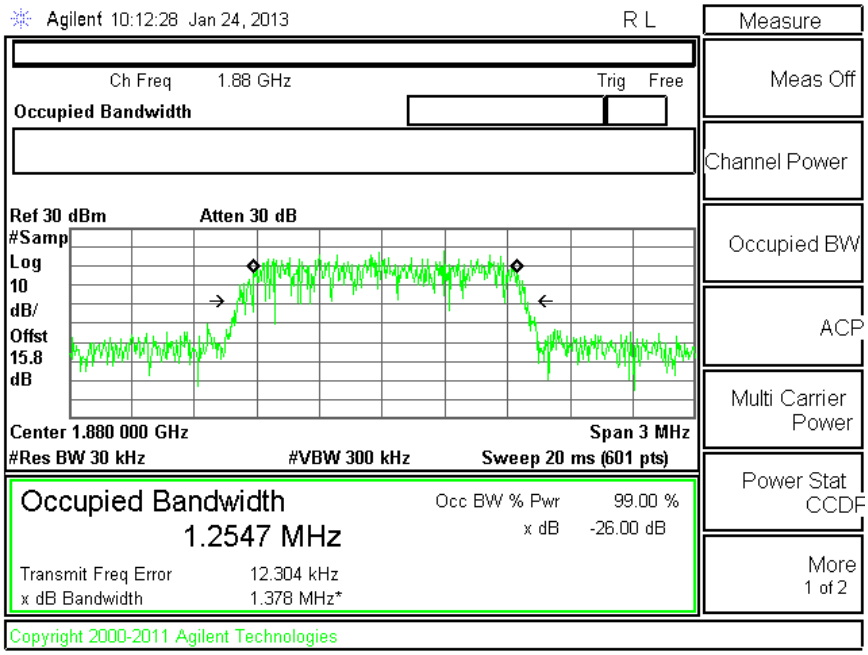


1xRTT BC 1 PCS BAND

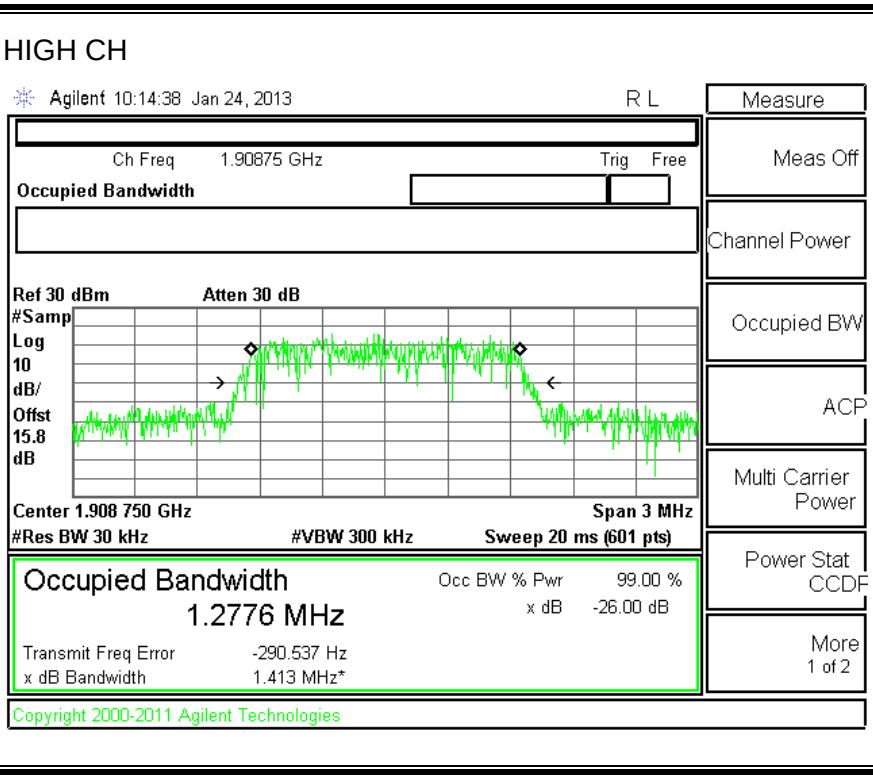
LOW CH



MID CH

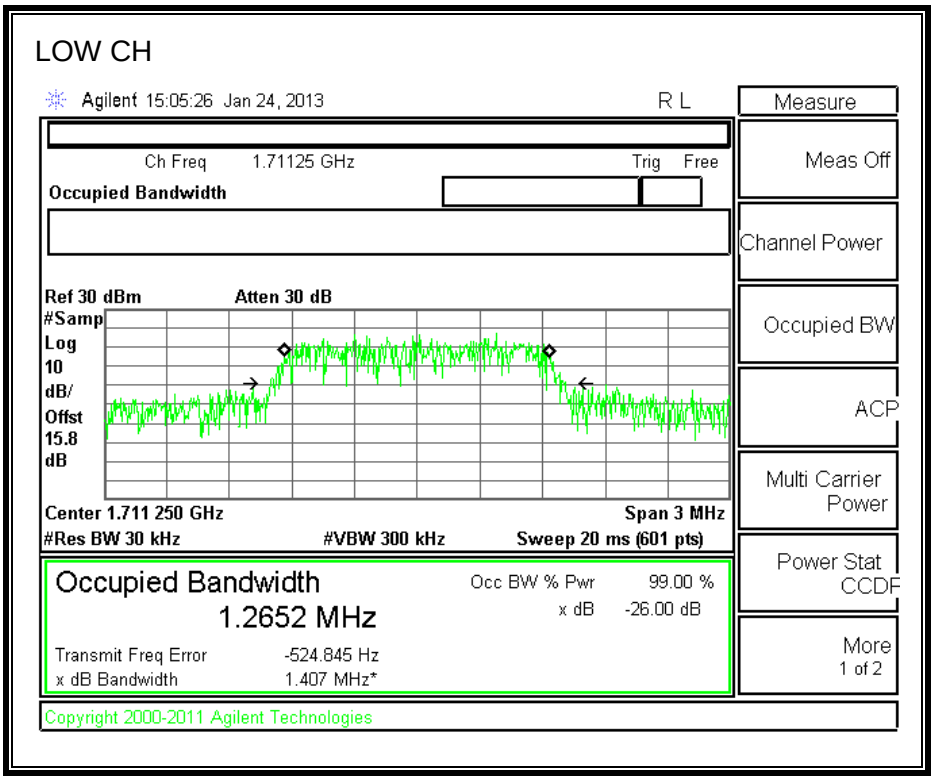


HIGH CH

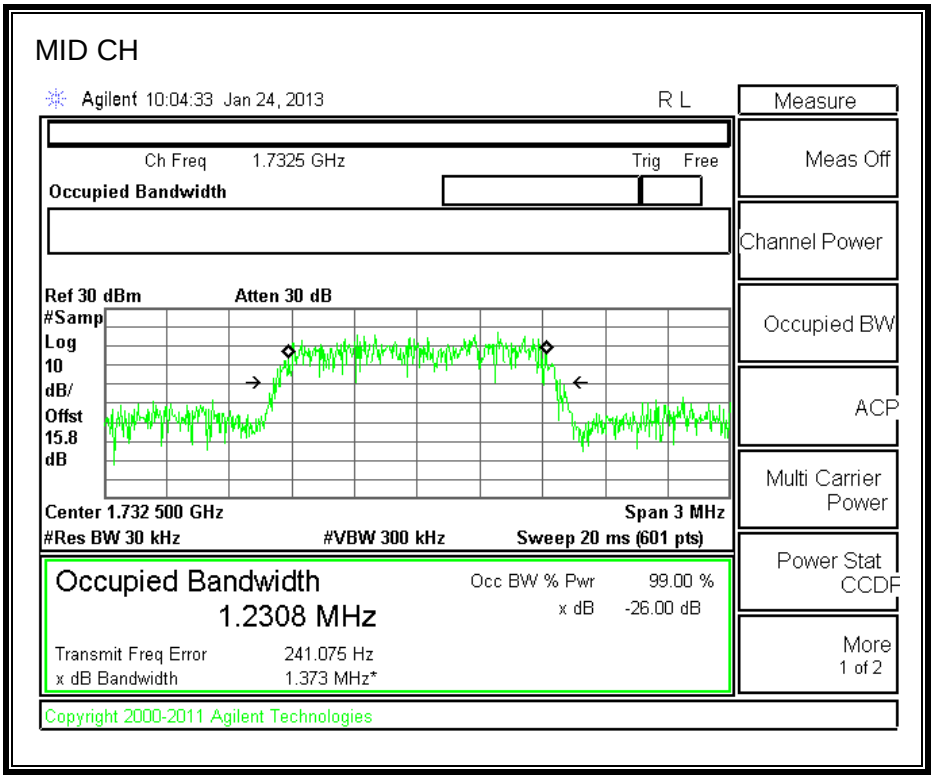


1xRTT BC 15 AWS BAND

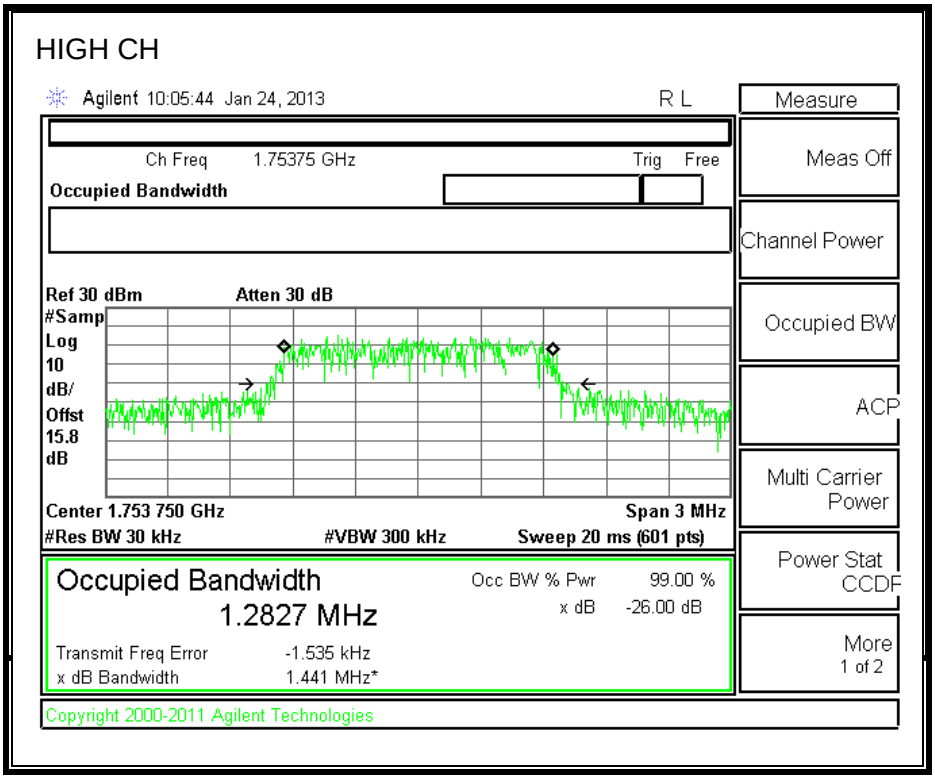
LOW CH



MID CH



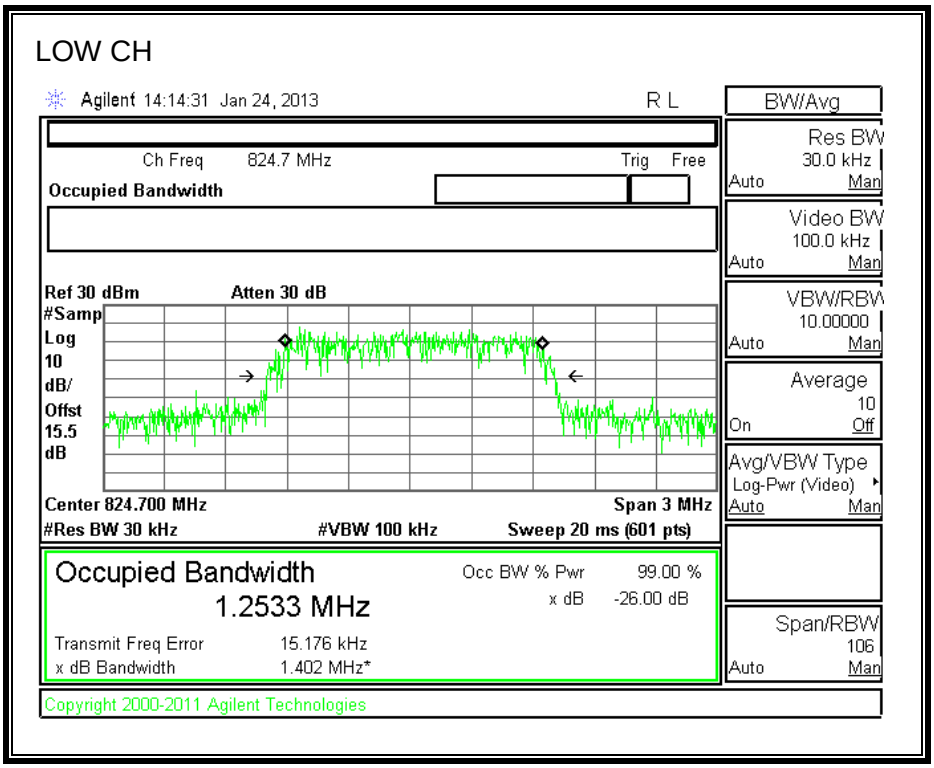
HIGH CH



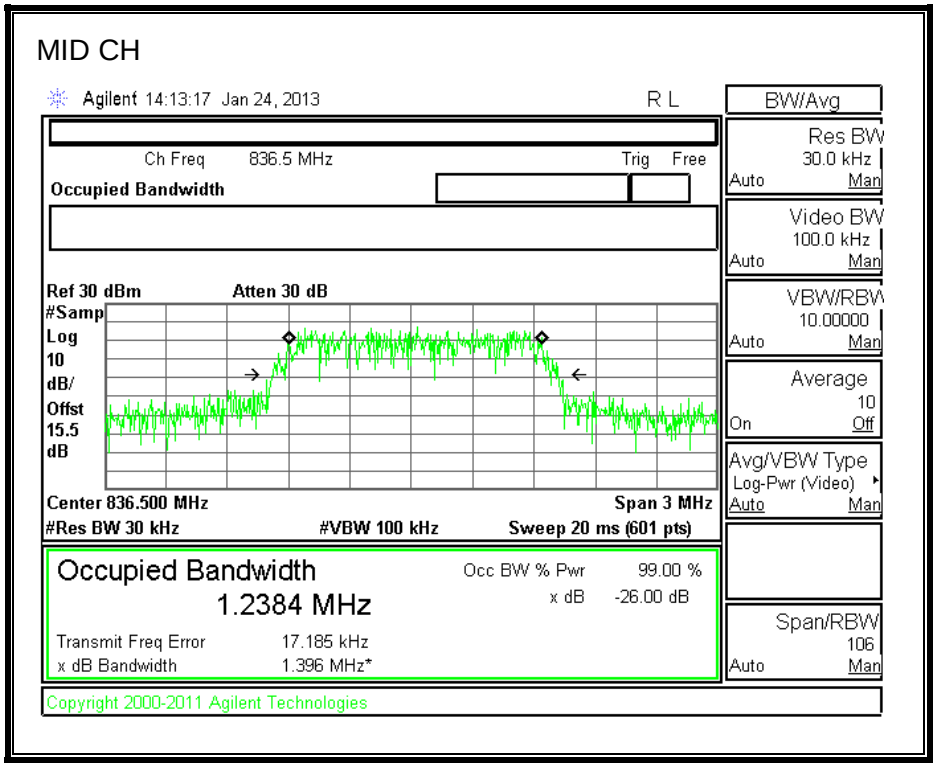
8.1.2. *1xEv-Do - Revision A (Rev. A)*

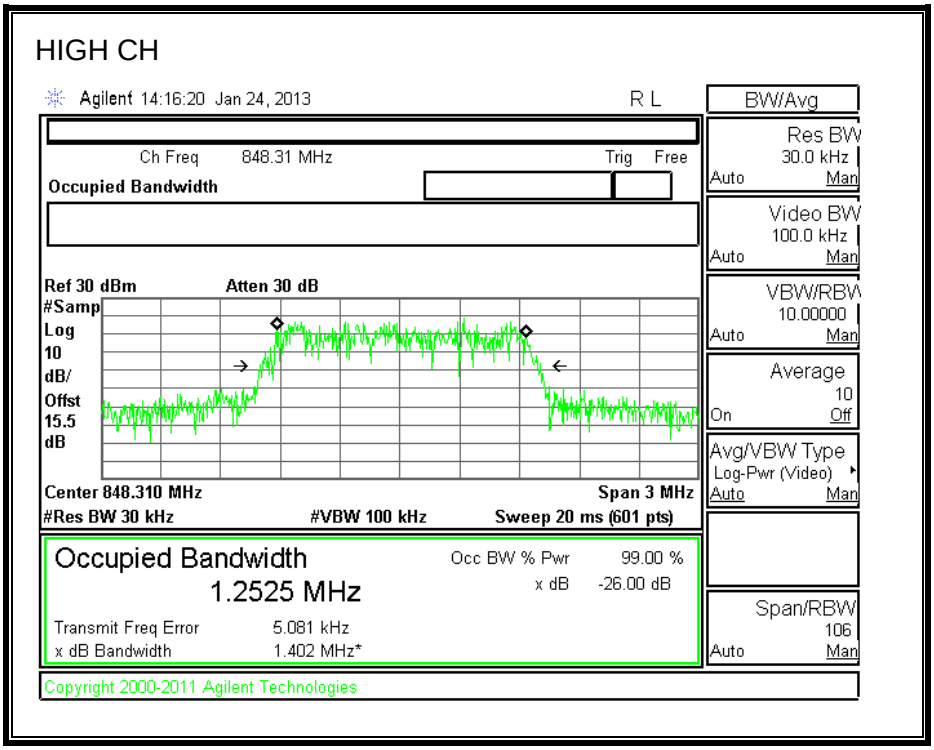
EVDO REV A. BC 0 CELL BAND

LOW CH

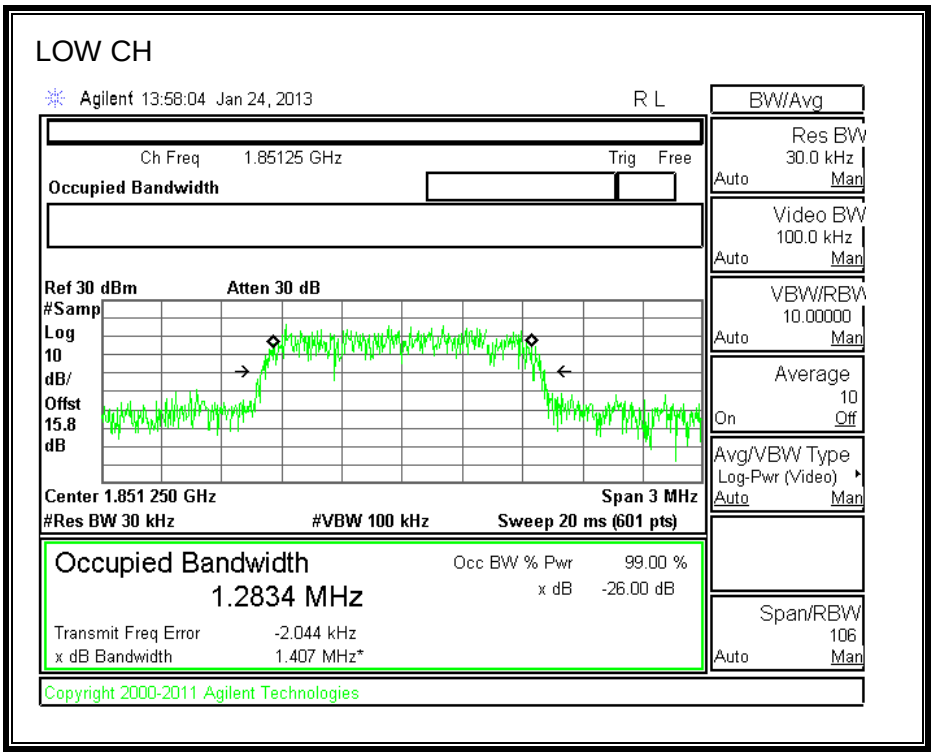


MID CH

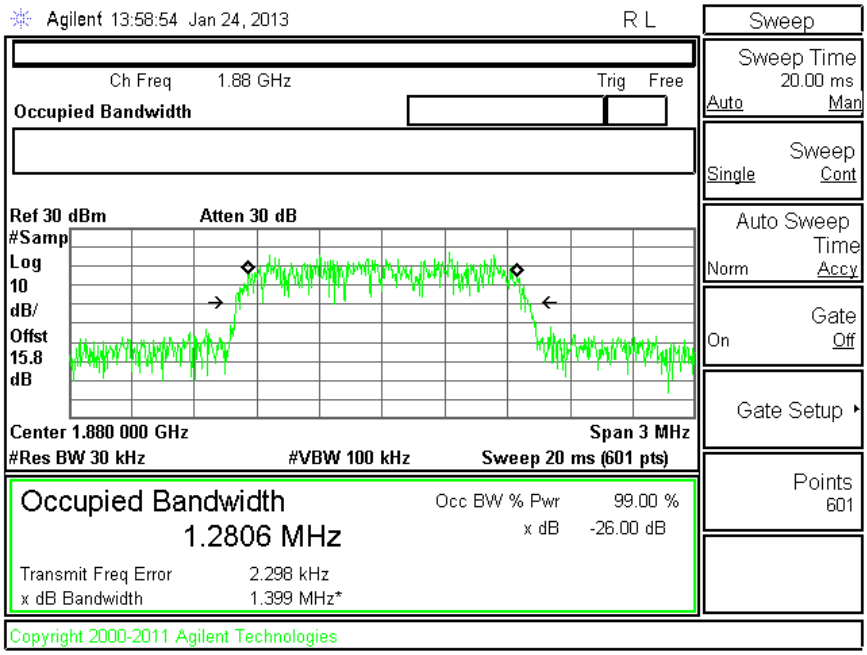




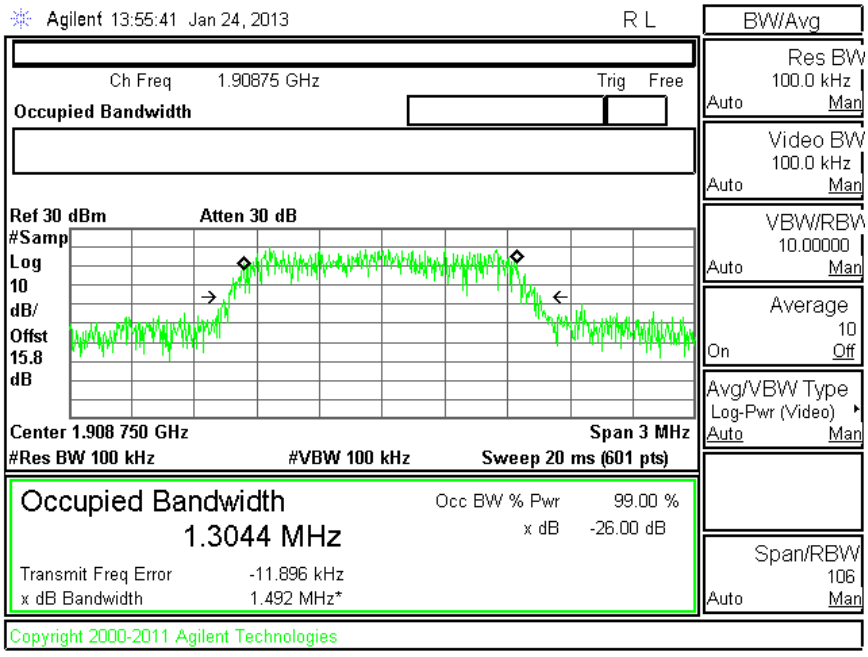
EVDO REV A. BC 1 PCS BAND



MID CH

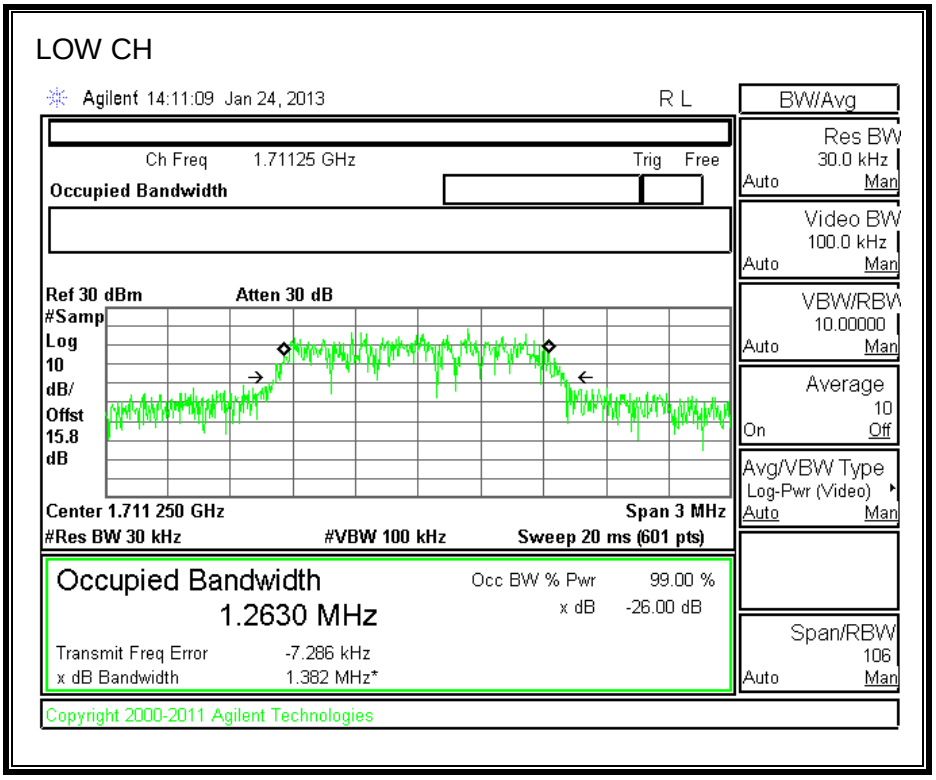


HIGH CH

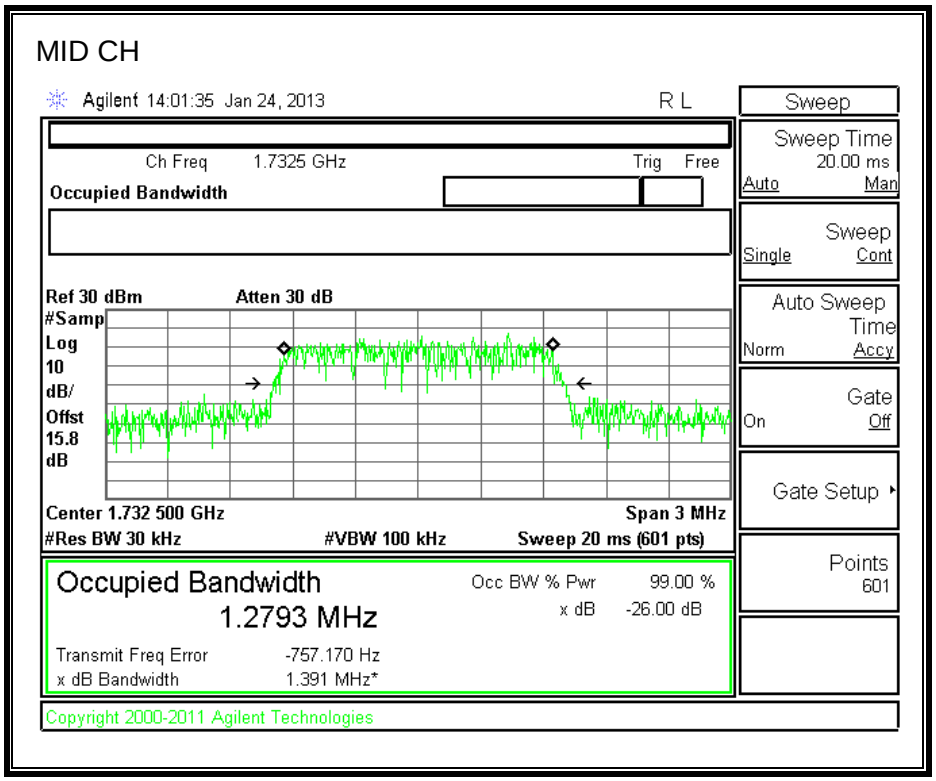


EVDO REV A. BC 15 AWS BAND

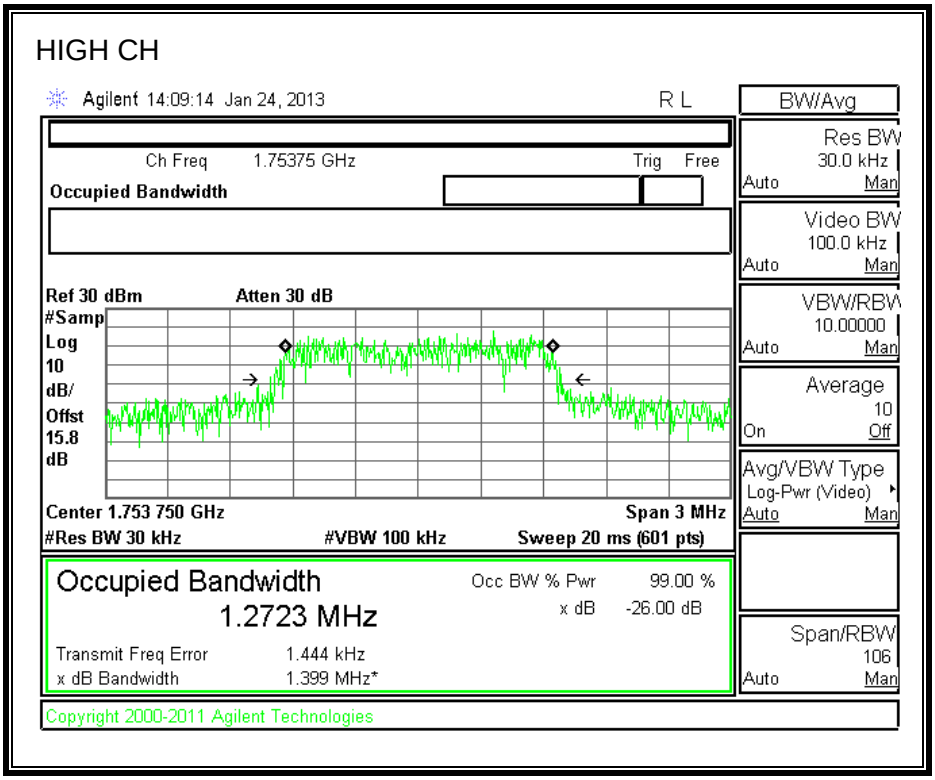
LOW CH



MID CH

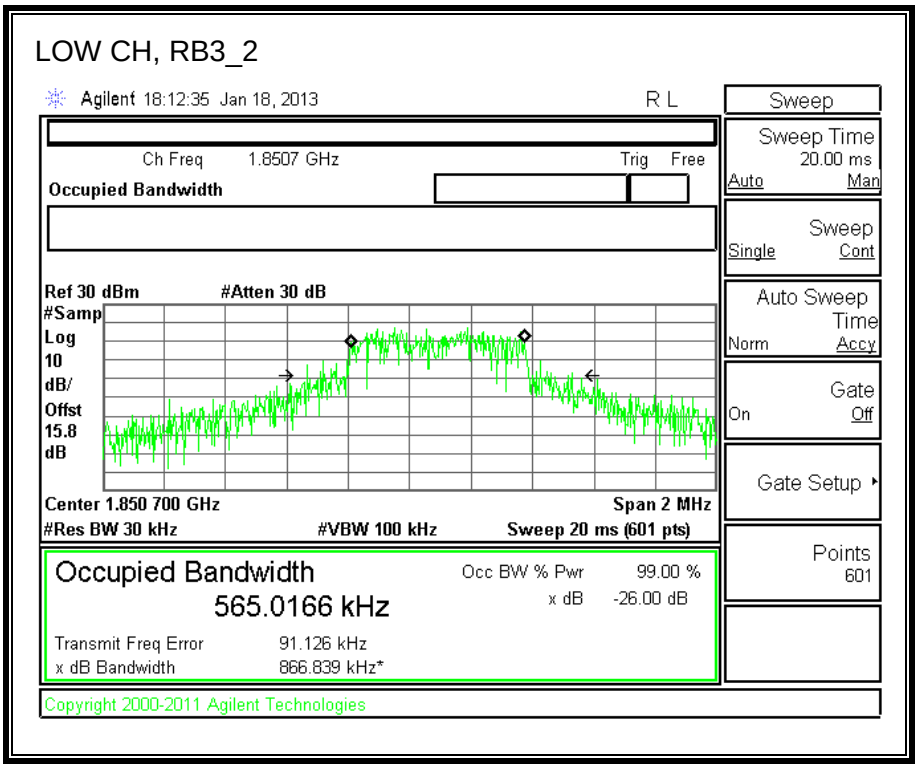


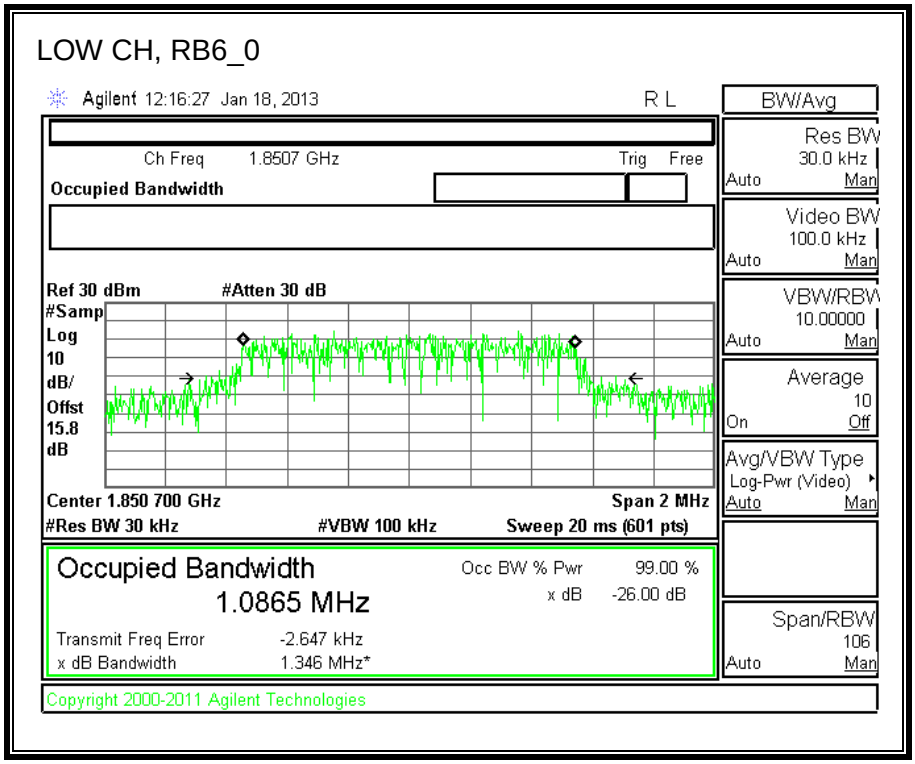
HIGH CH



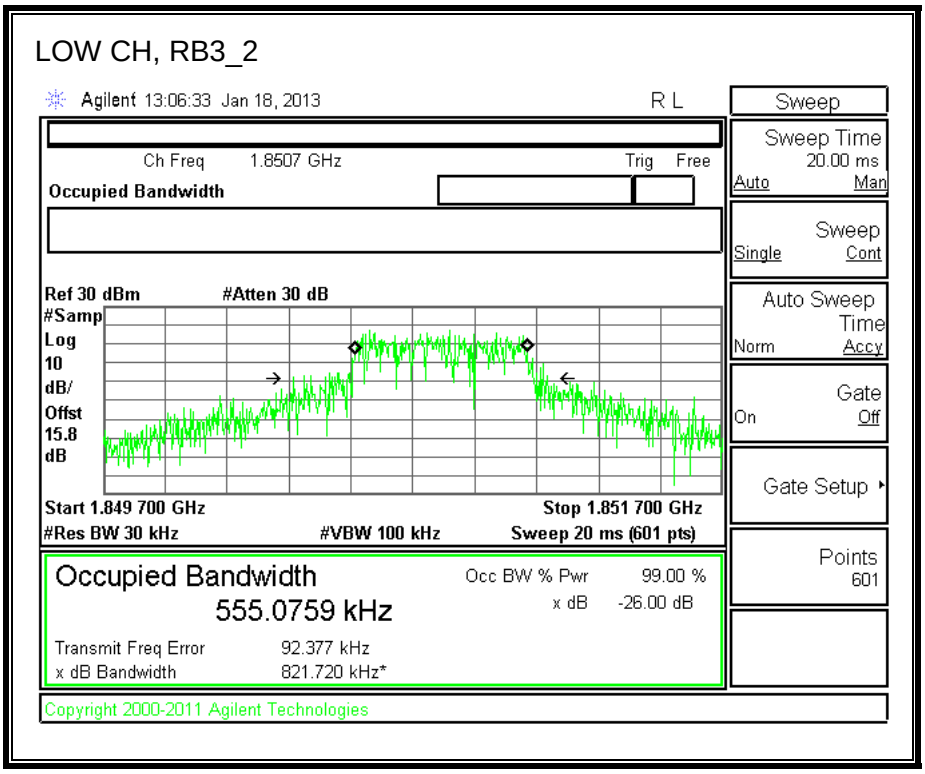
8.1.3. *LTE Band 2*

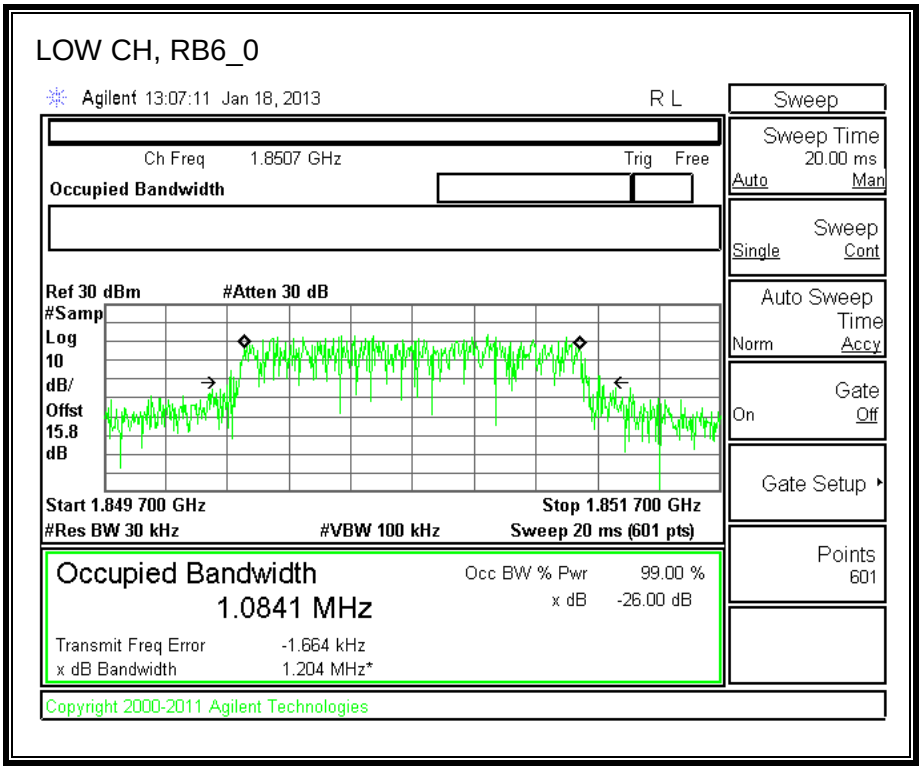
1.4MHz BAND WIDTH QPSK



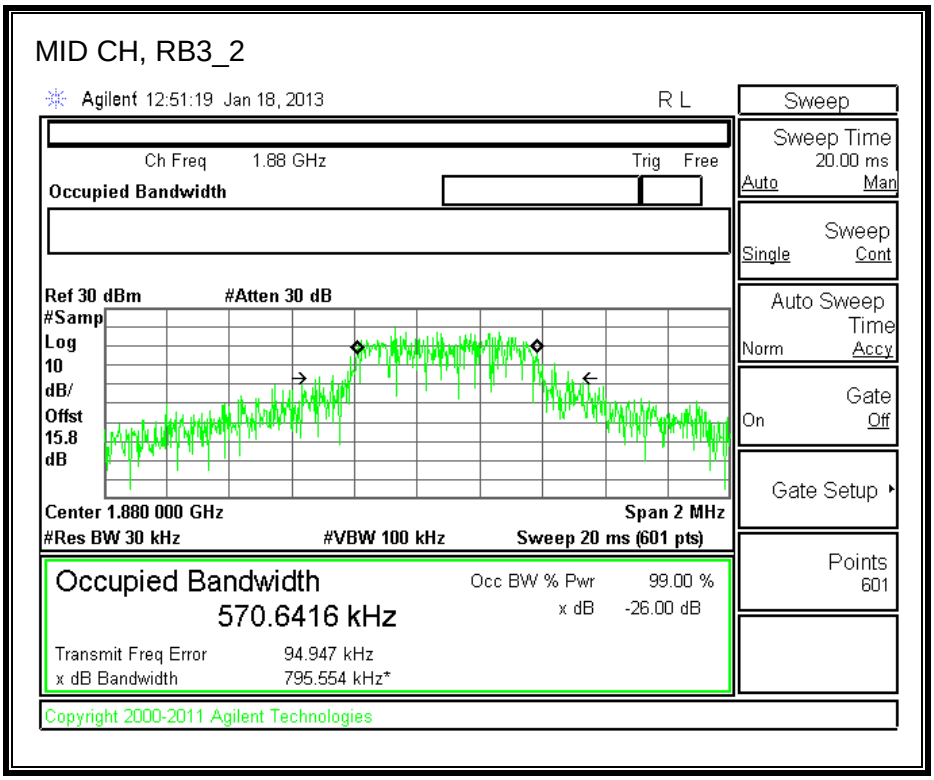


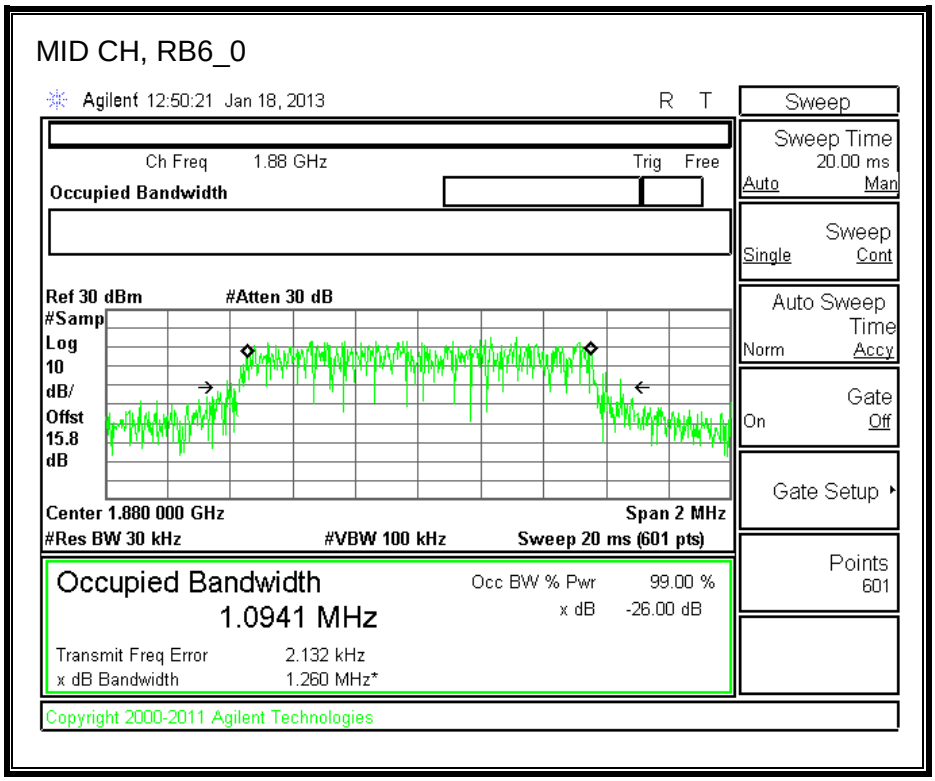
1.4MHz BAND WIDTH 16QAM



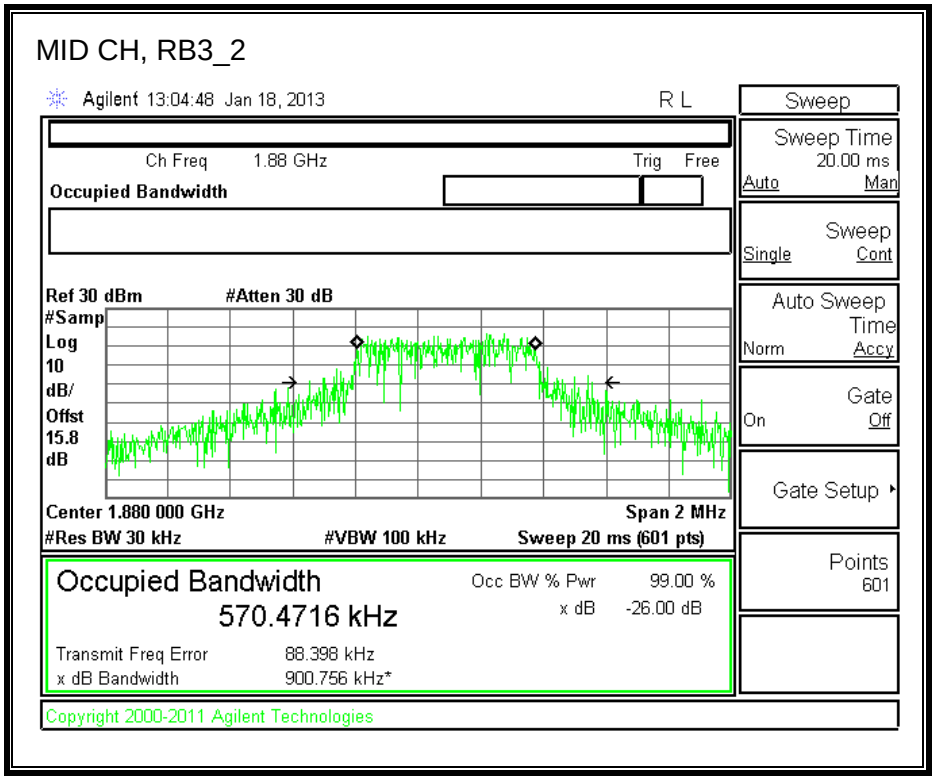


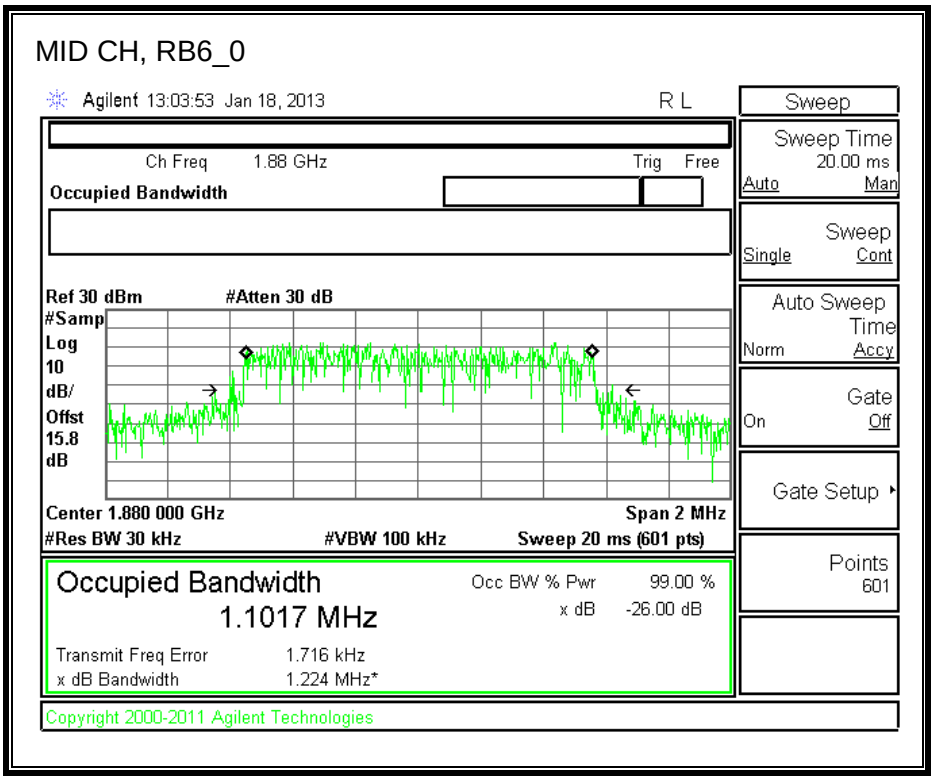
1.4MHz BAND WIDTH QPS



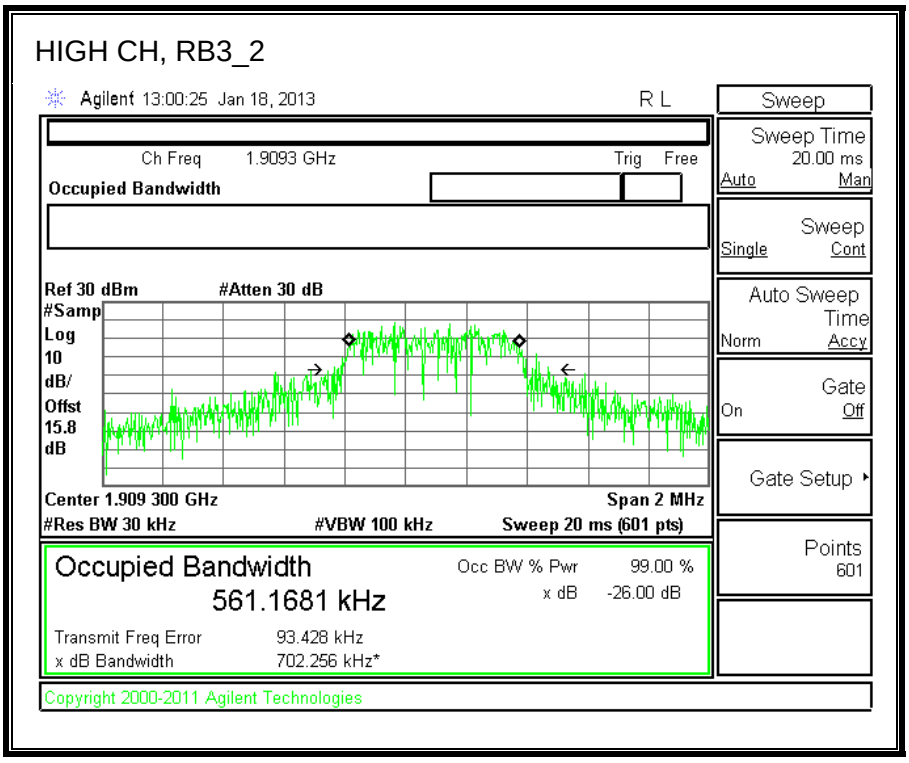


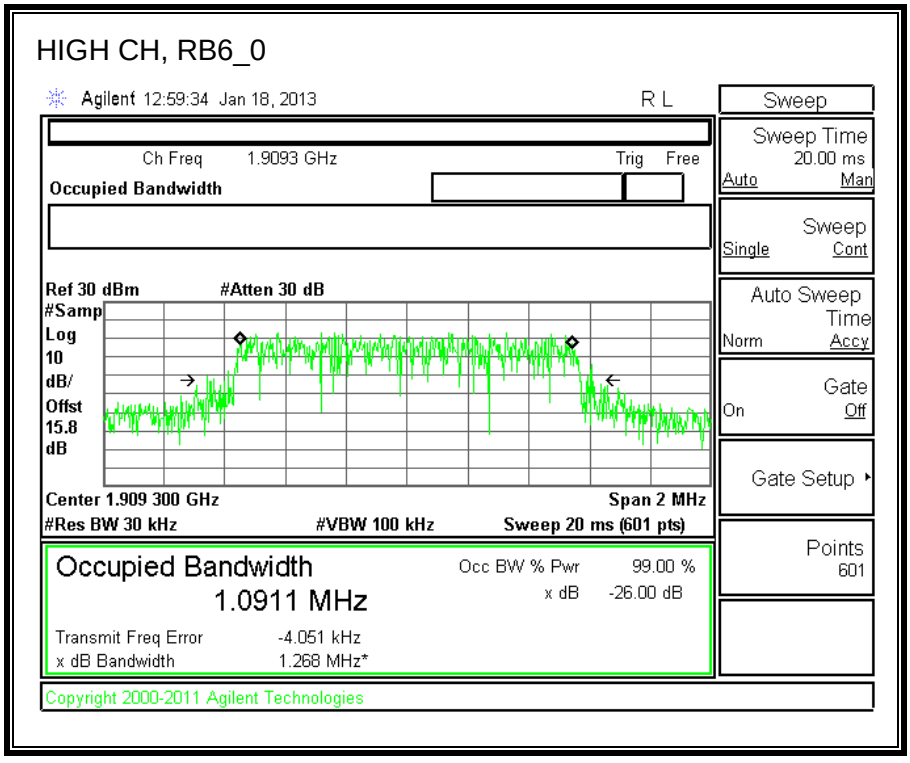
1.4MHz BAND WIDTH 16QAM





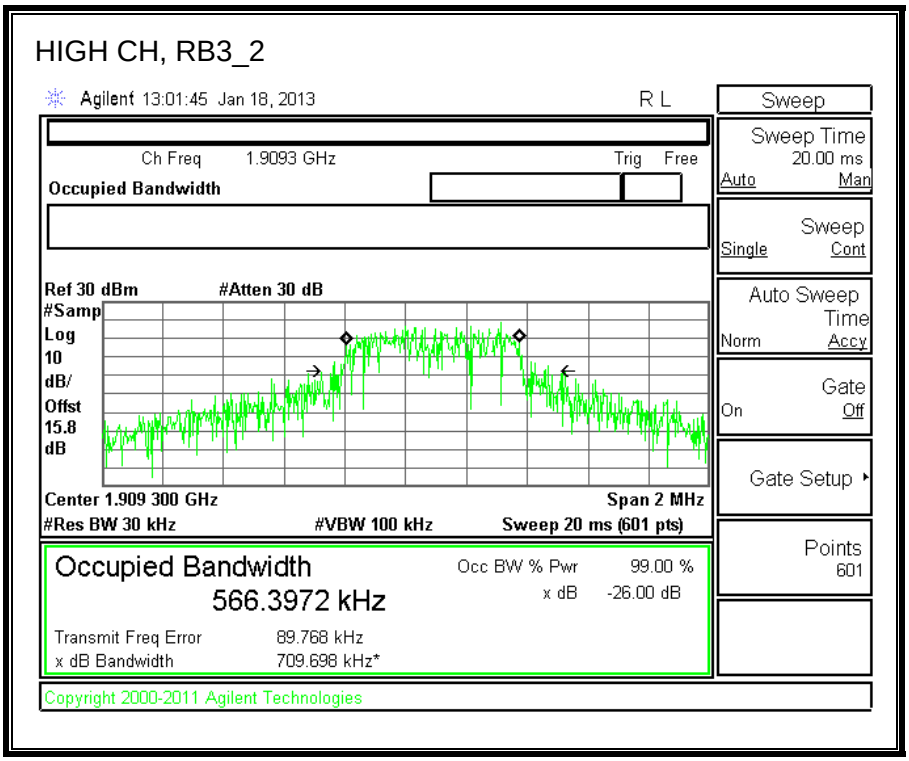
1.4MHz BAND WIDTH QPS



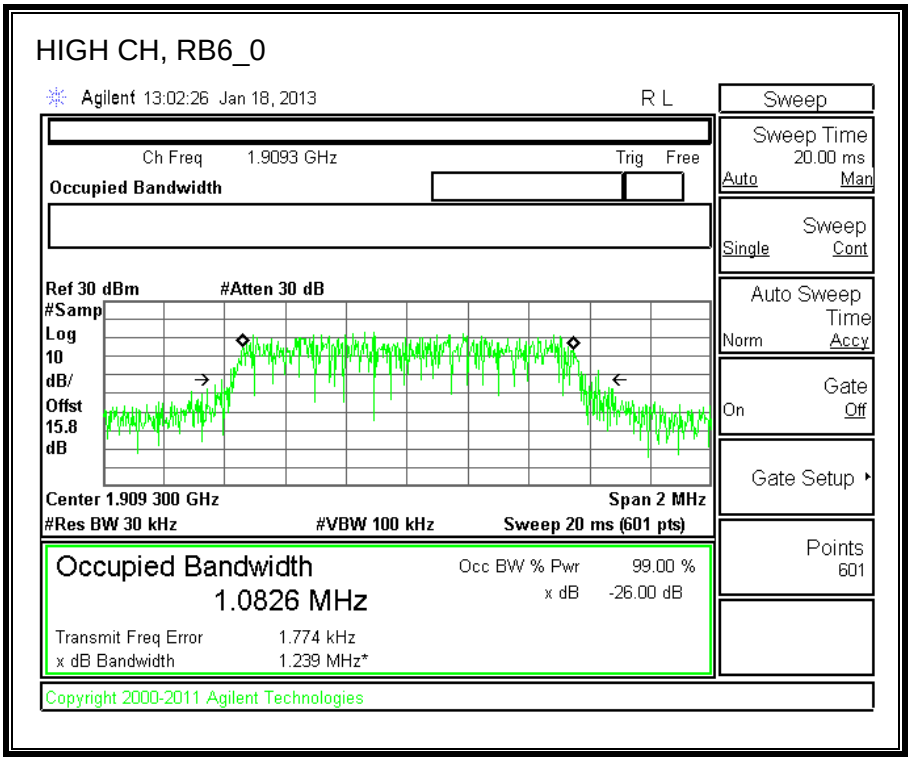


1.4MHz BAND WIDTH 16QAM

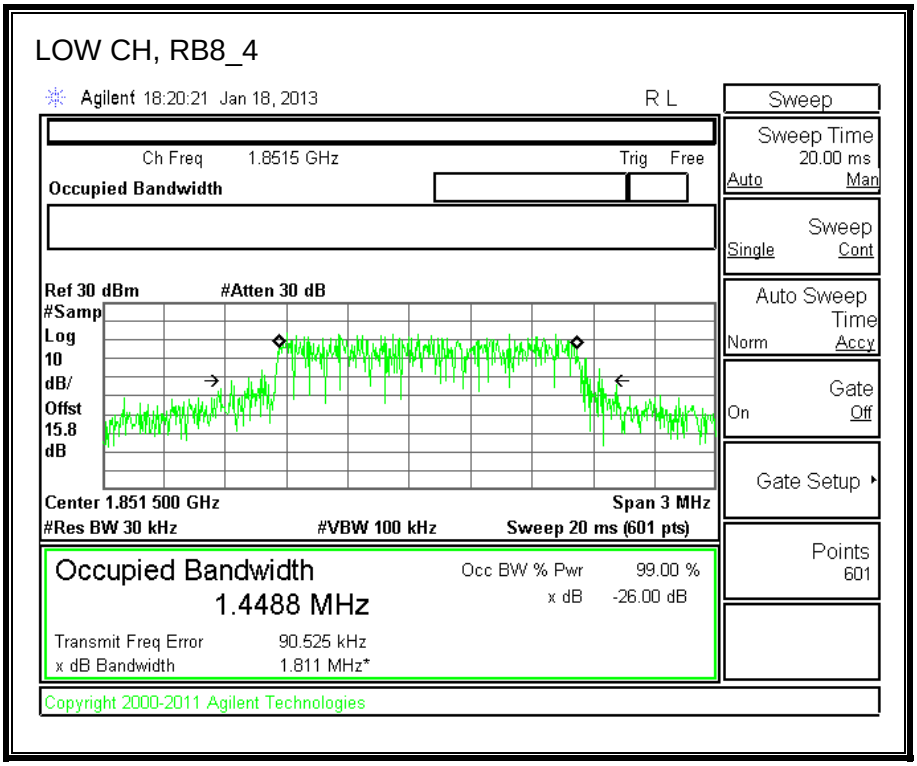
HIGH CH, RB3_2

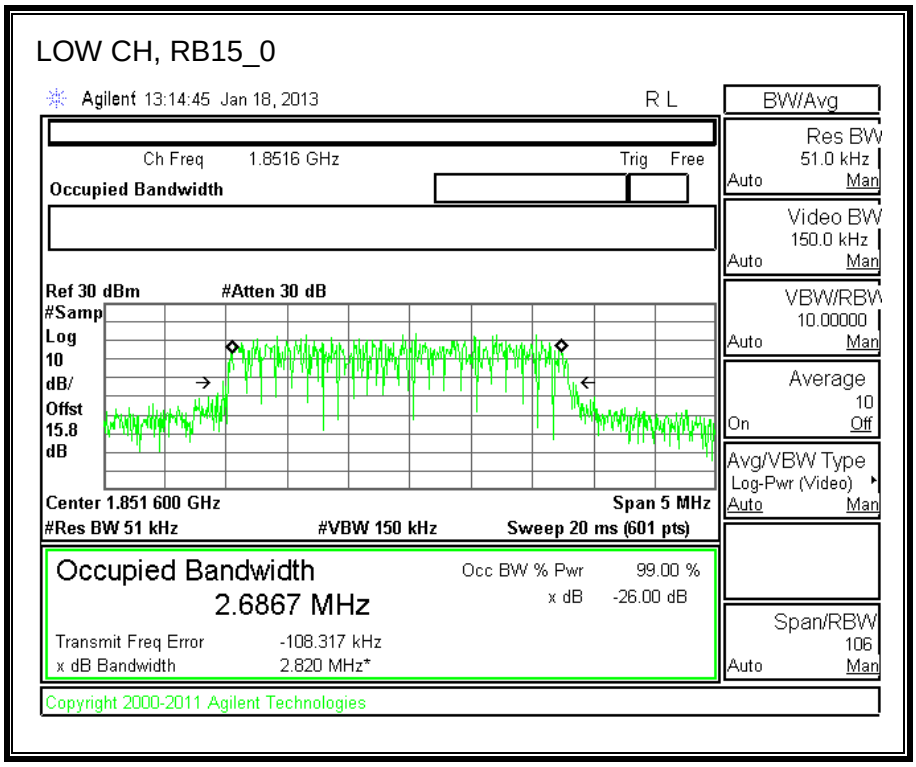


HIGH CH, RB6_0

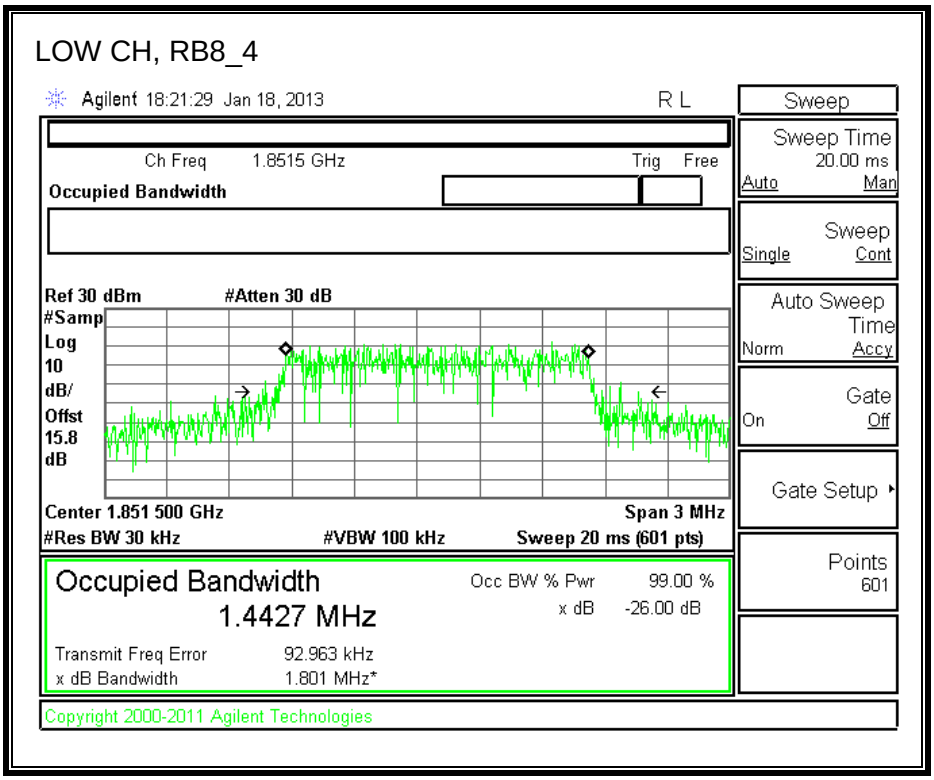


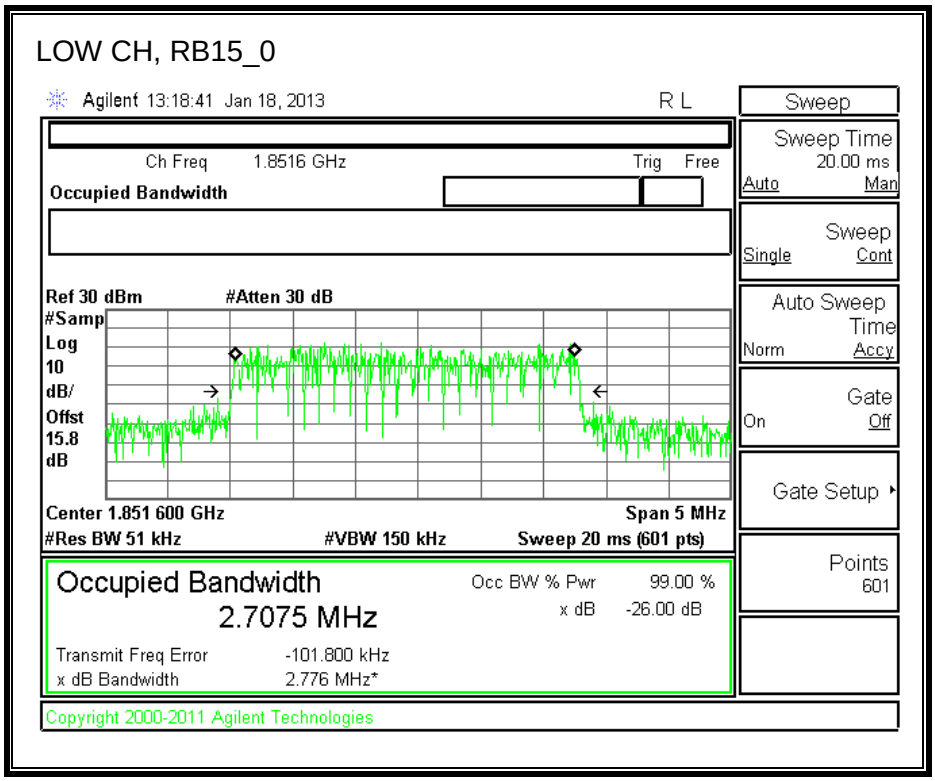
3.0MHz BAND WIDTH QPSK





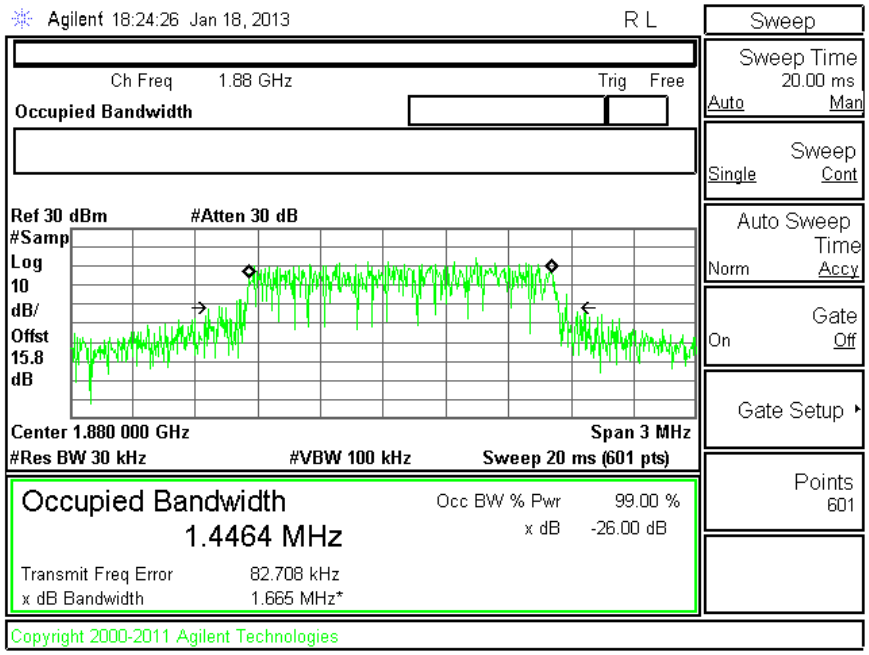
3.0MHz BAND WIDTH 16QAM



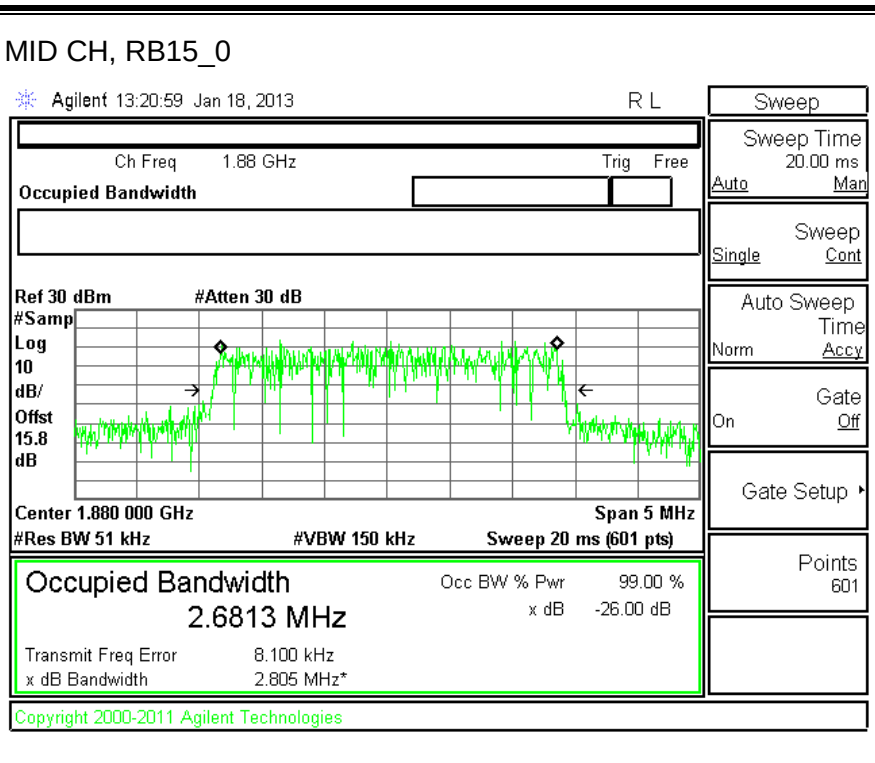


3.0MHz BAND WIDTH QPSK

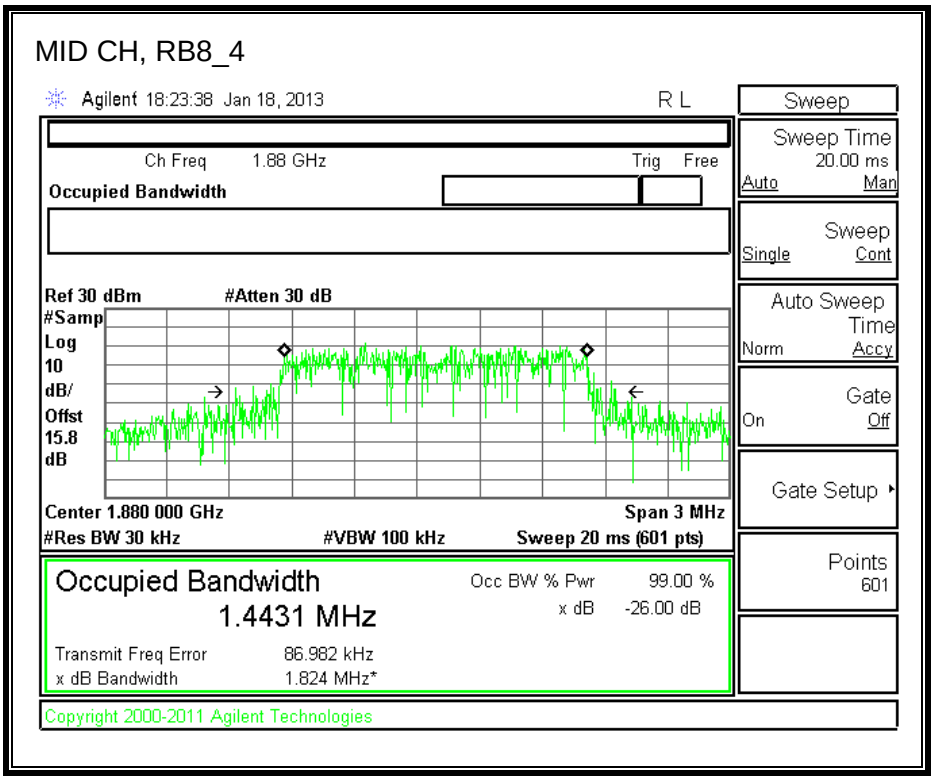
MID CH, RB8_4

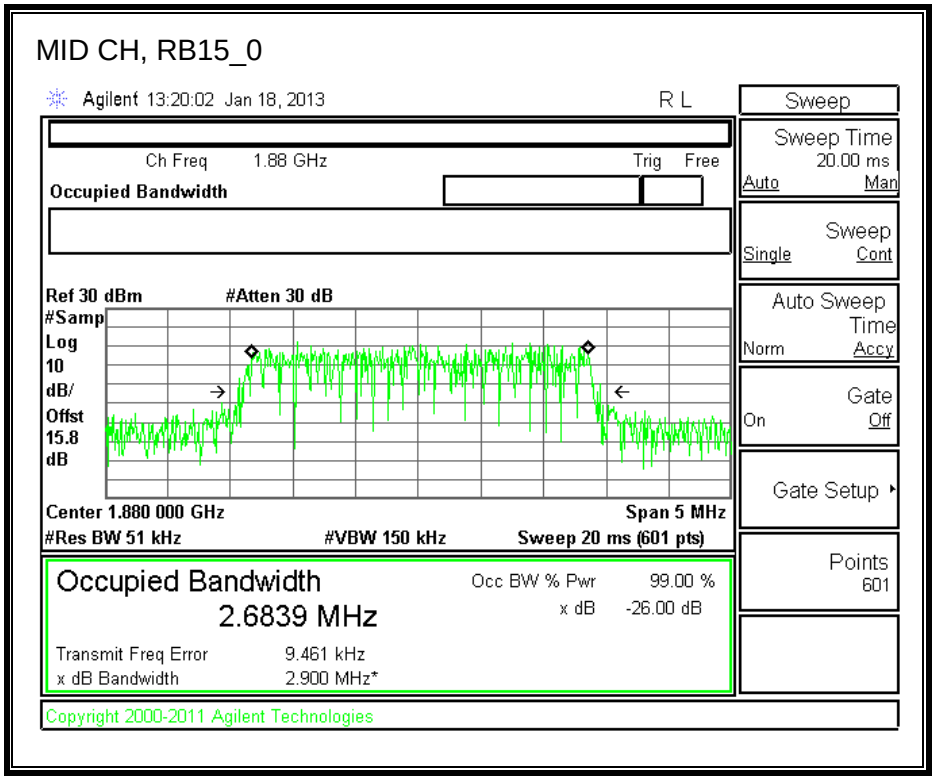


MID CH, RB15_0

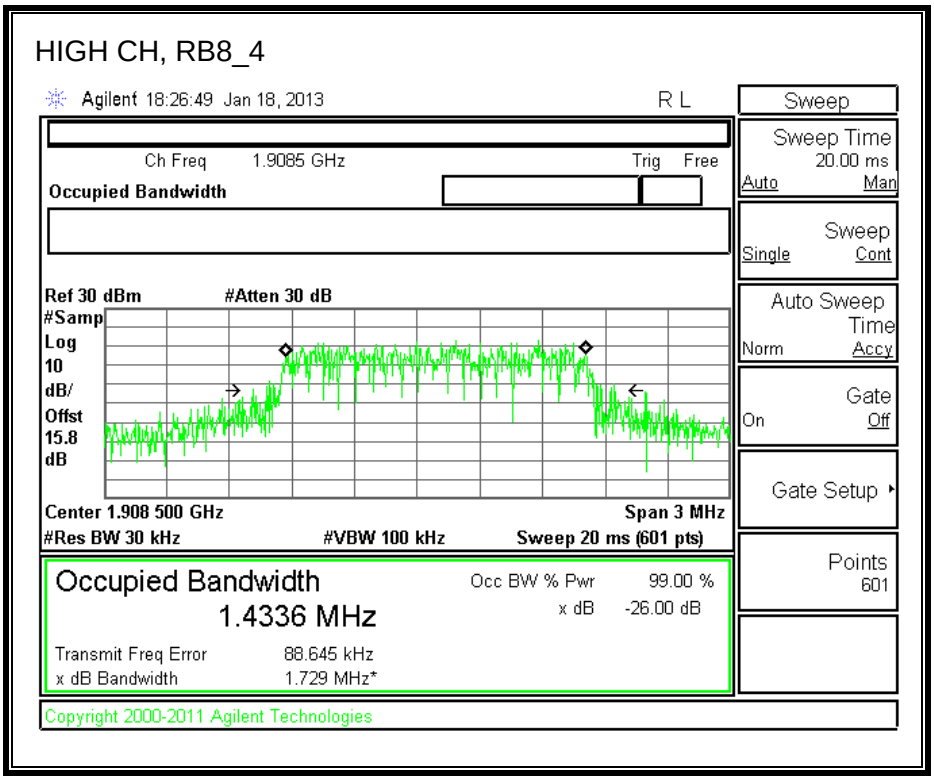


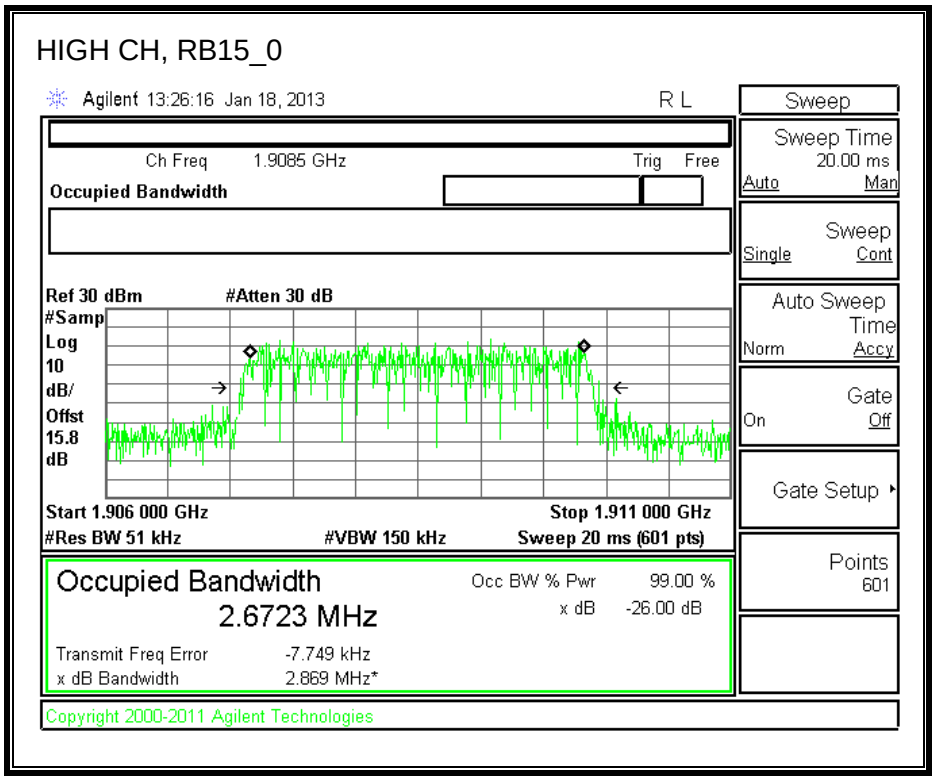
3.0MHz BAND WIDTH 16QAM



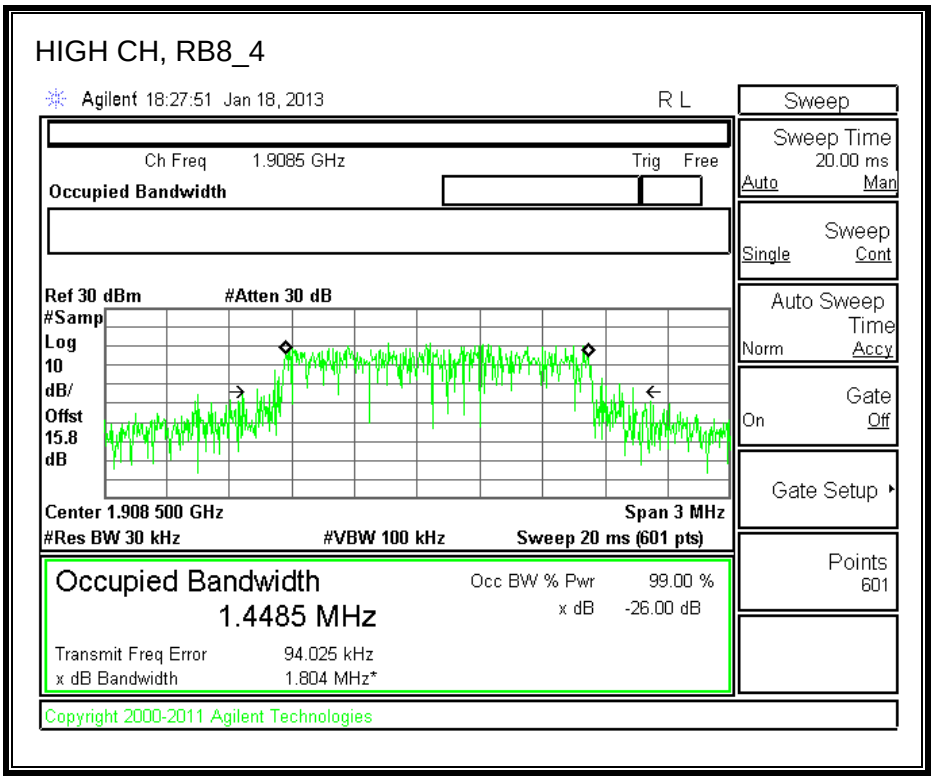


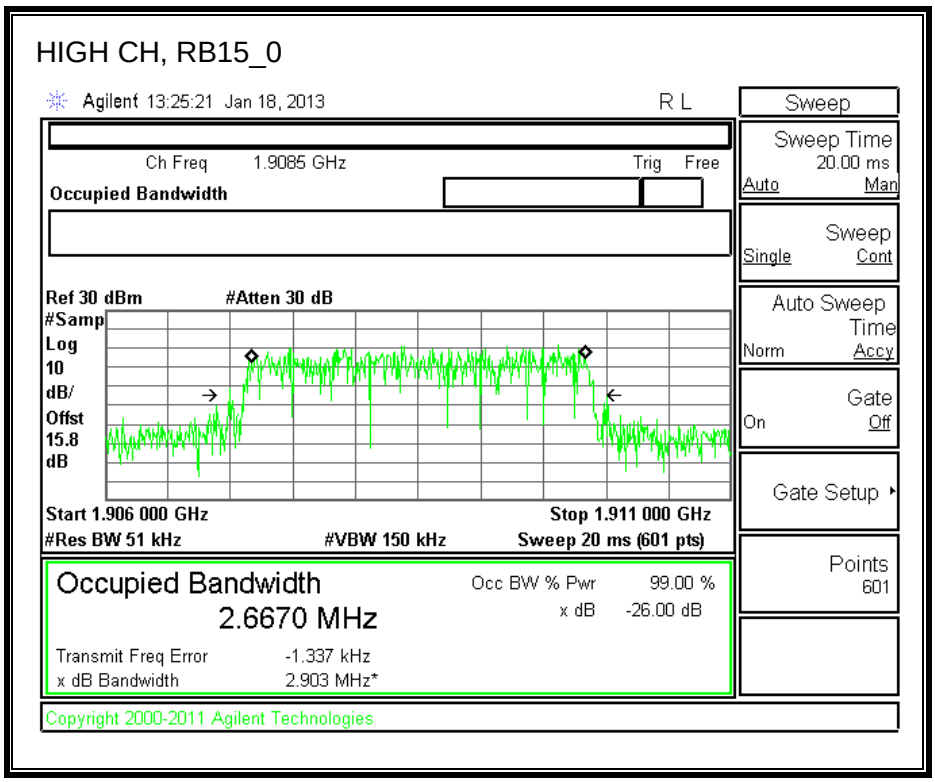
3.0MHz BAND WIDTH QPSK



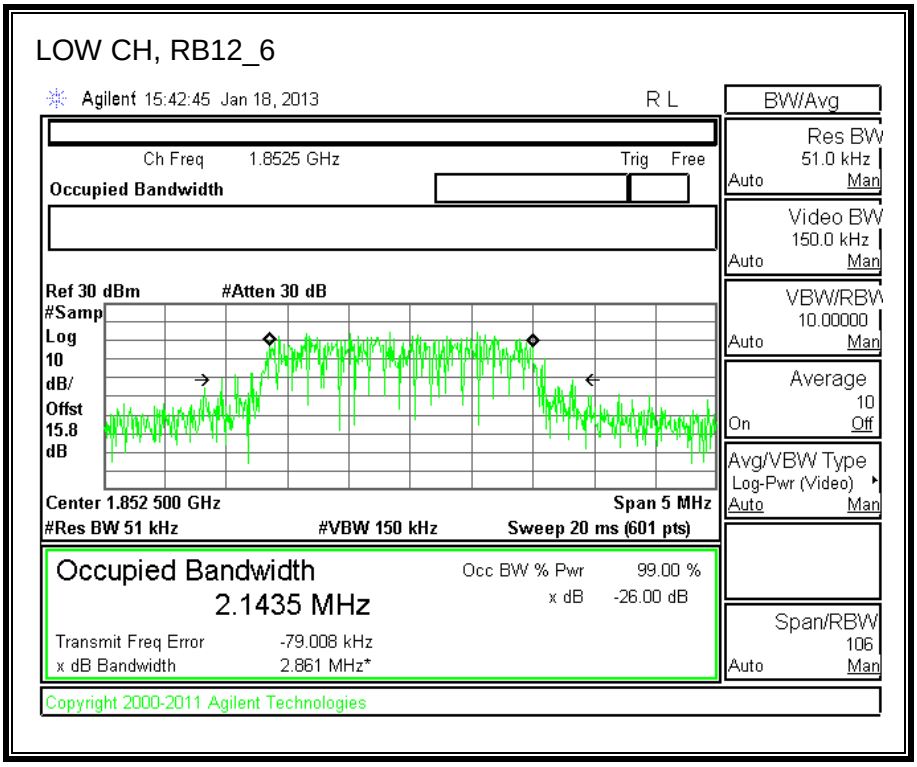


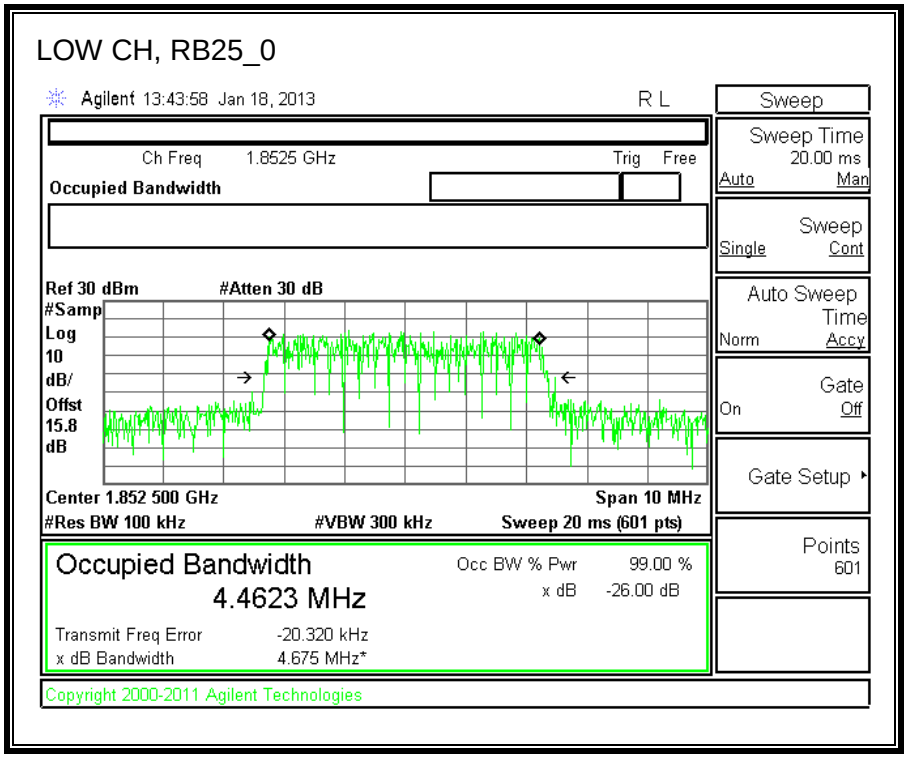
3.0MHz BAND WIDTH 16QAM





5.0MHz BAND WIDTH QPSK





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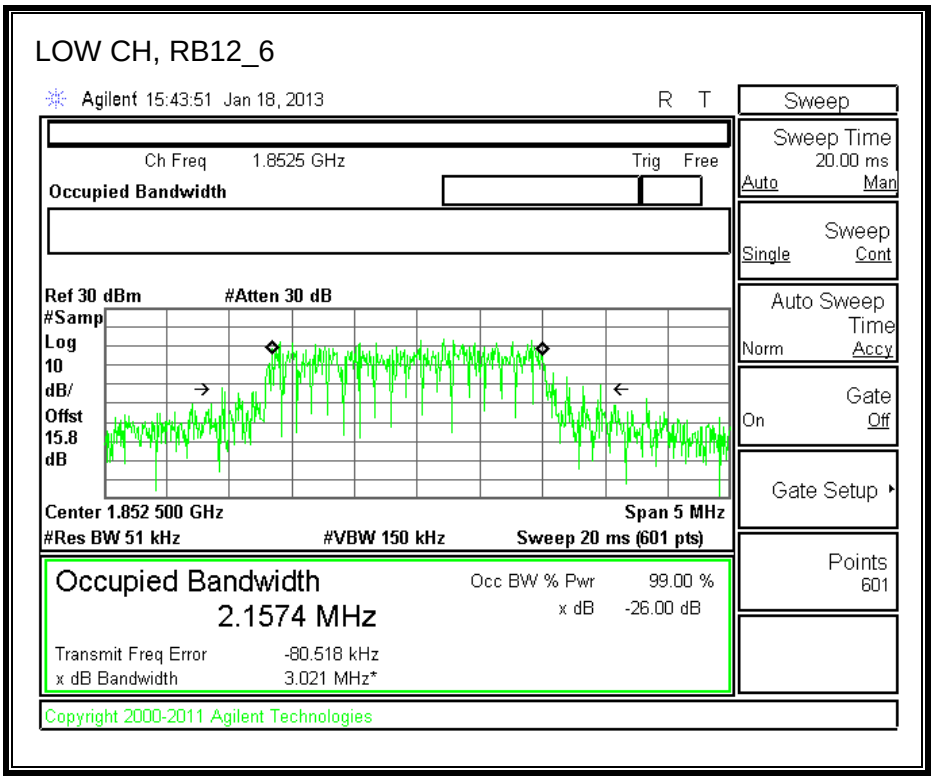

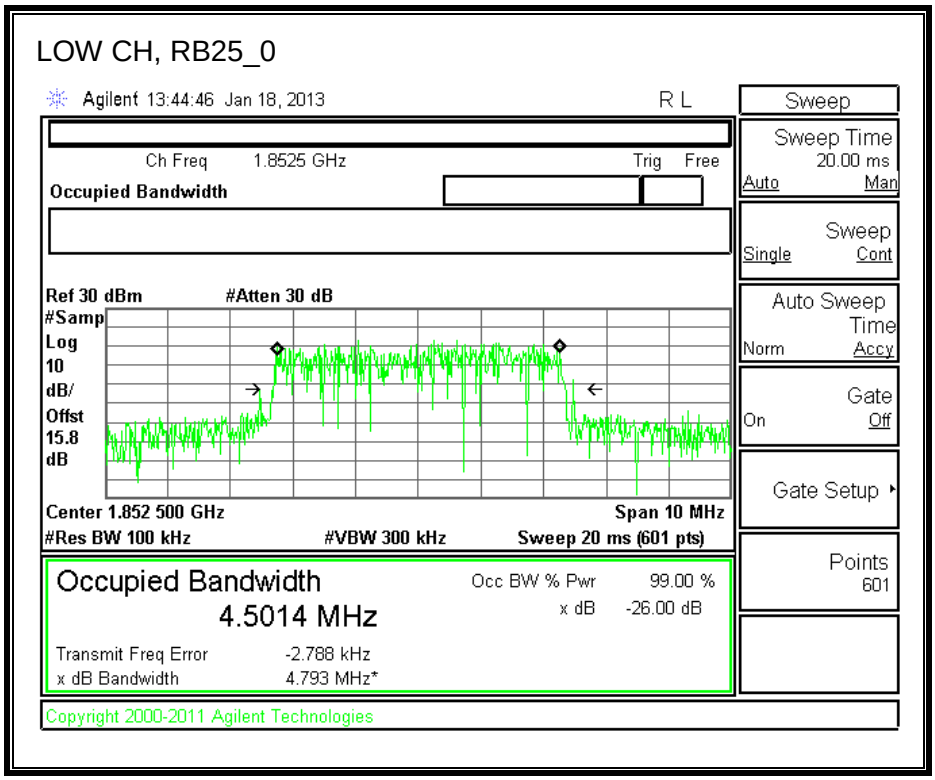

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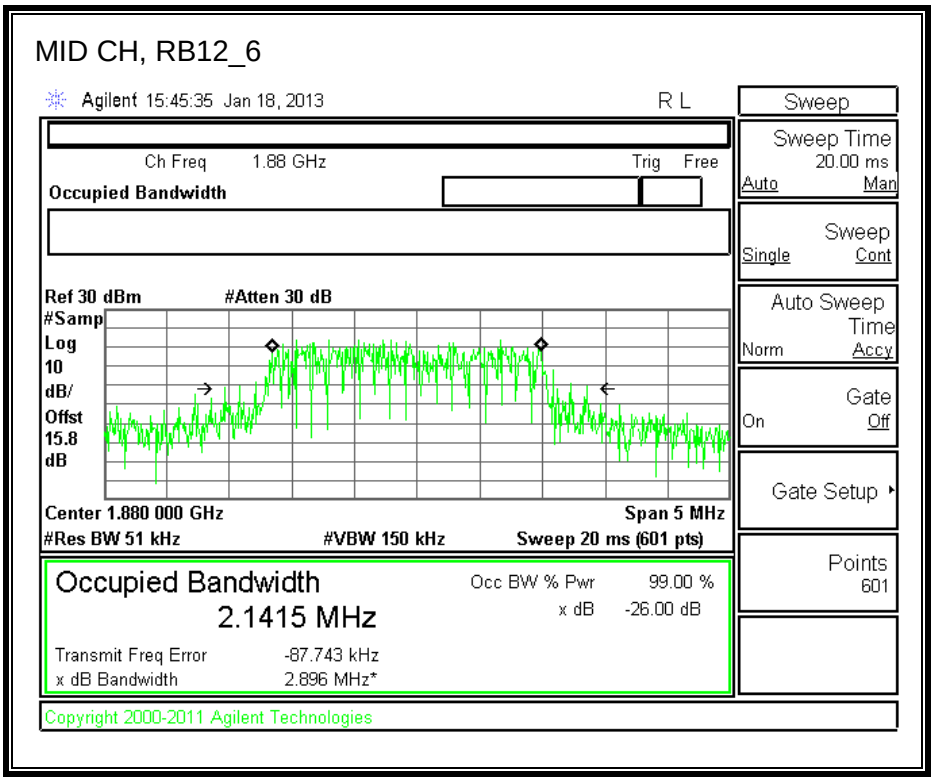

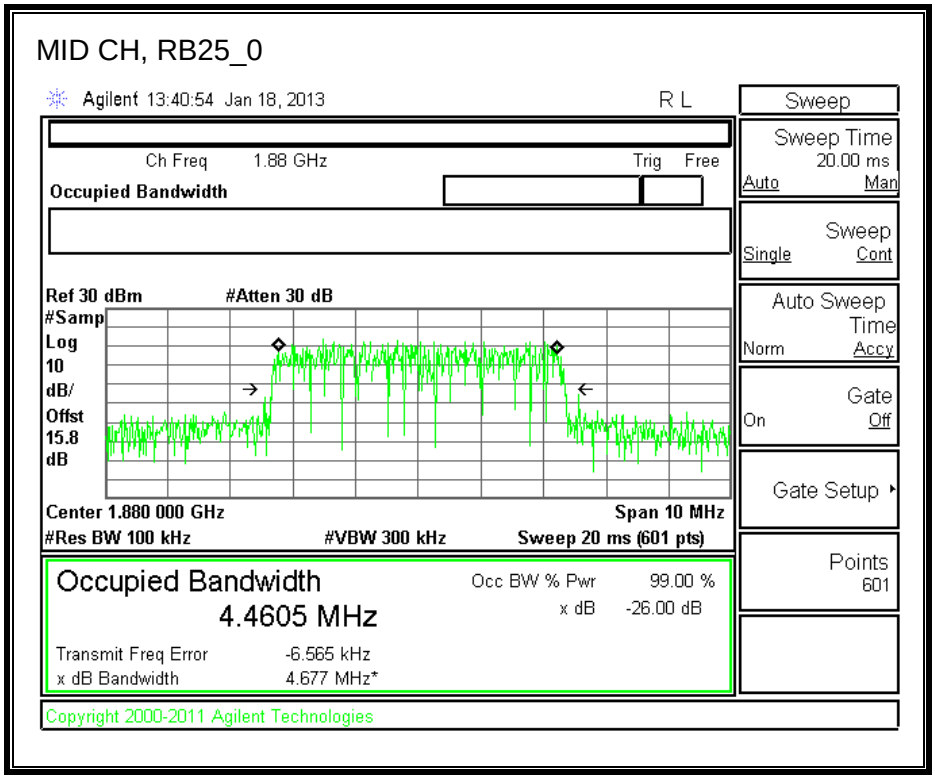

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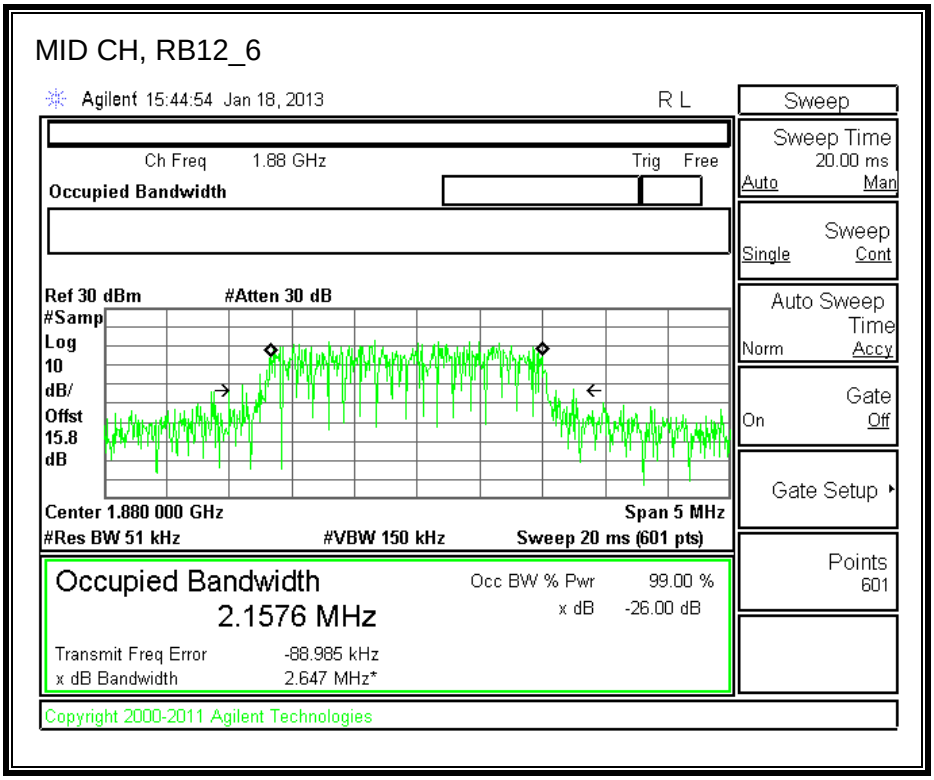

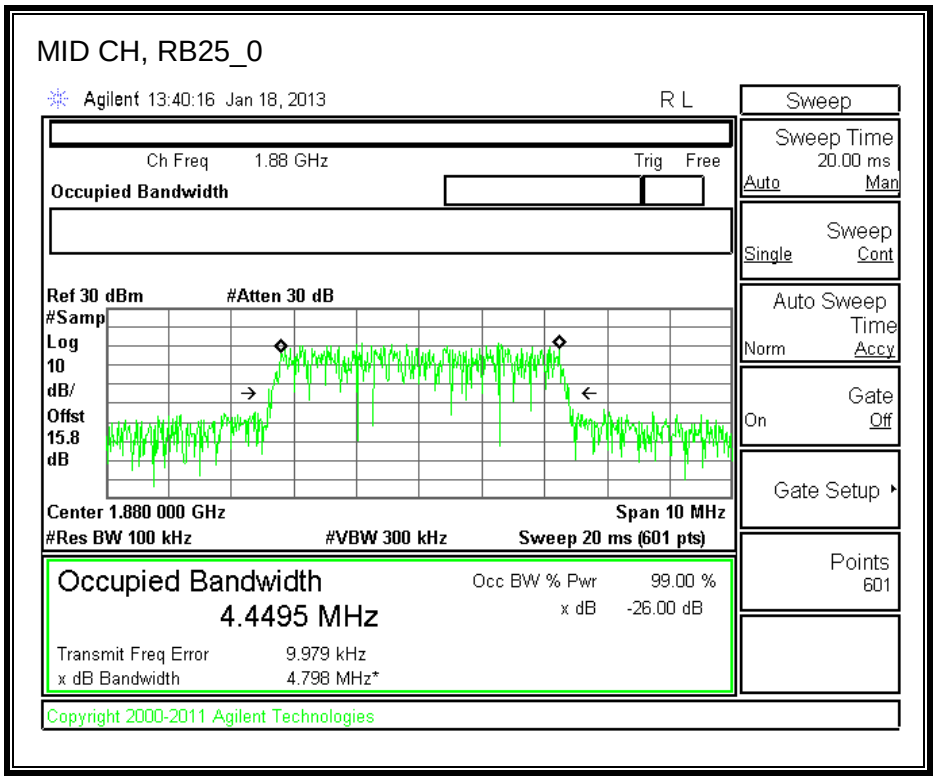

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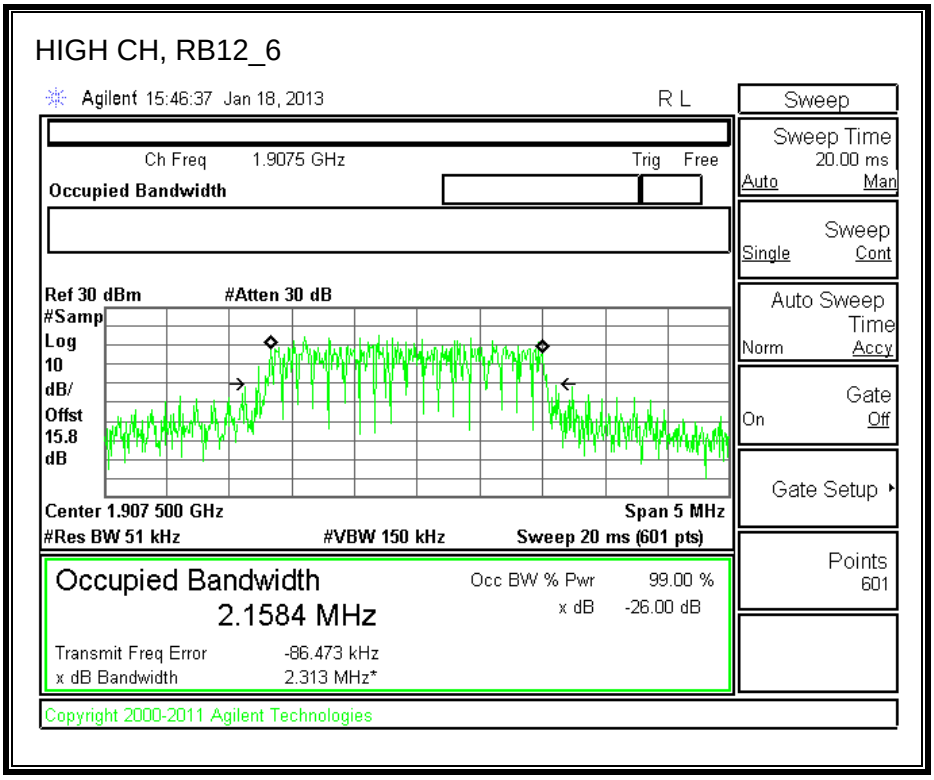
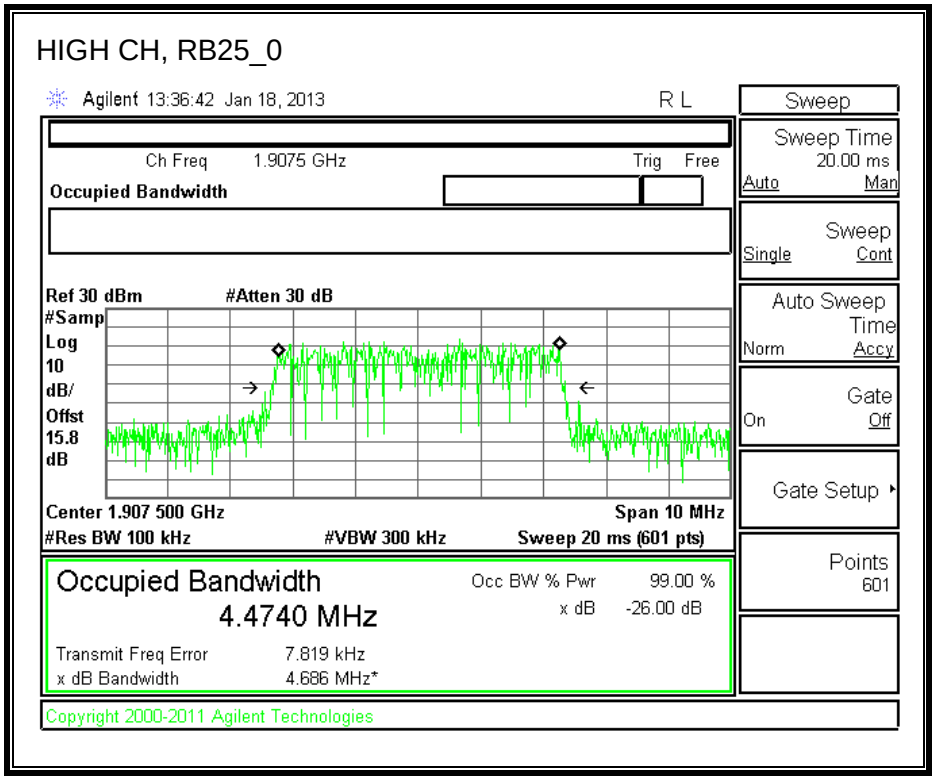
HIGH CH, RB12_6



HIGH CH, RB25_0



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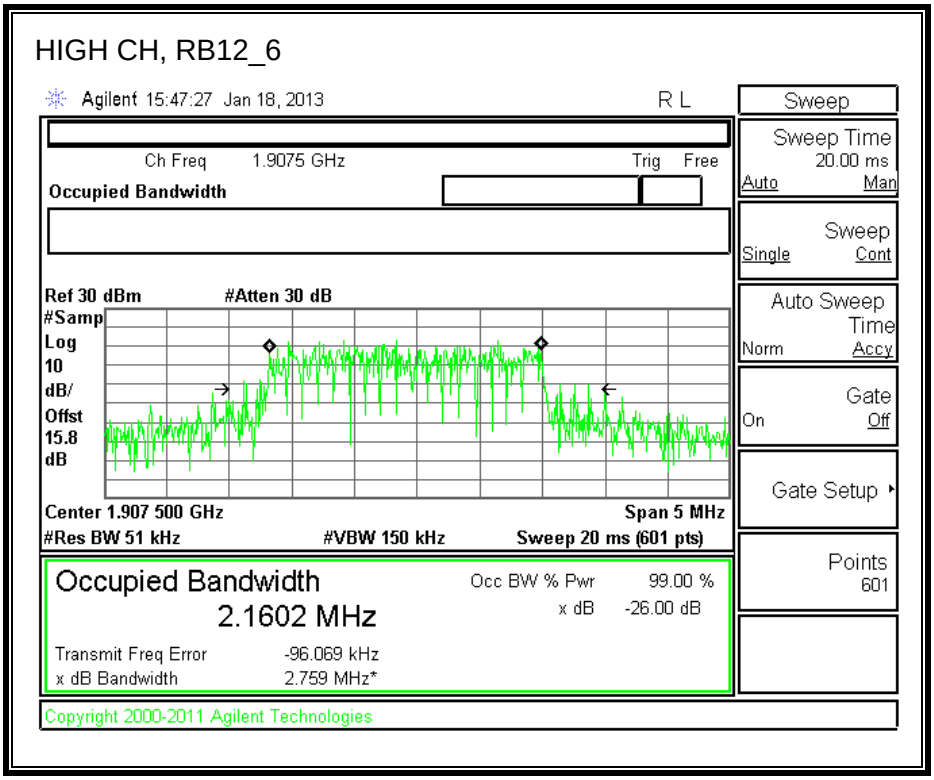

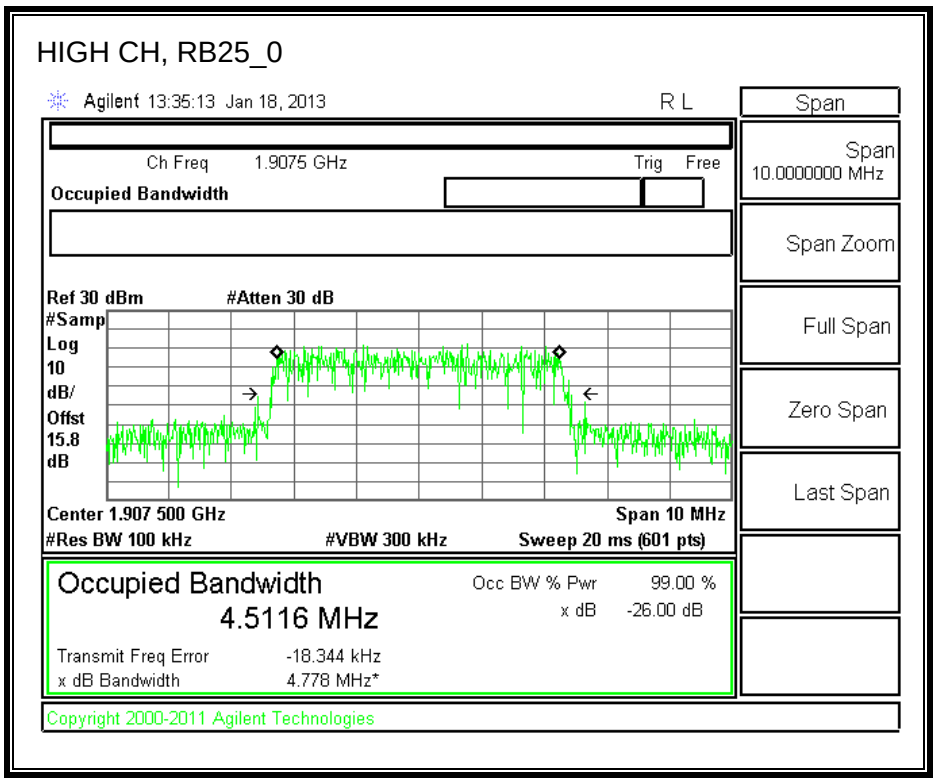

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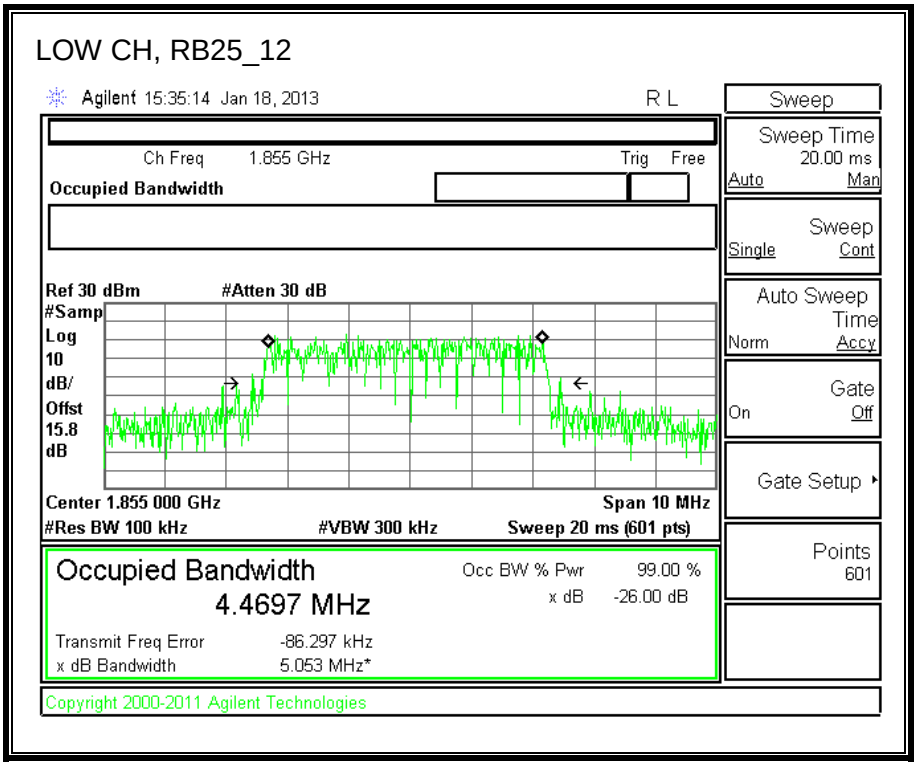

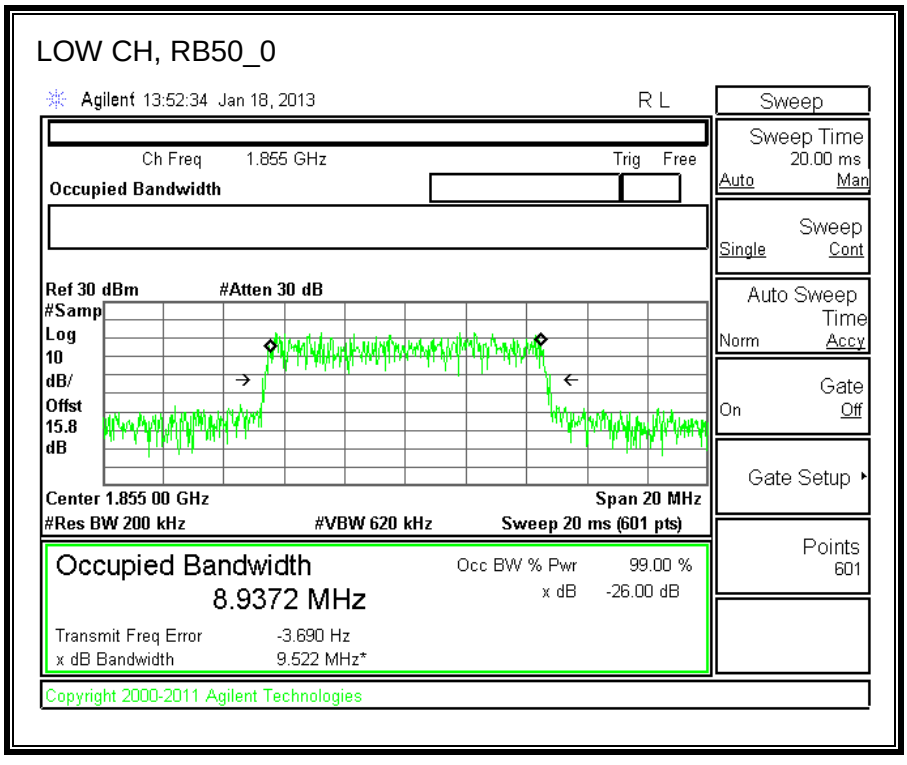

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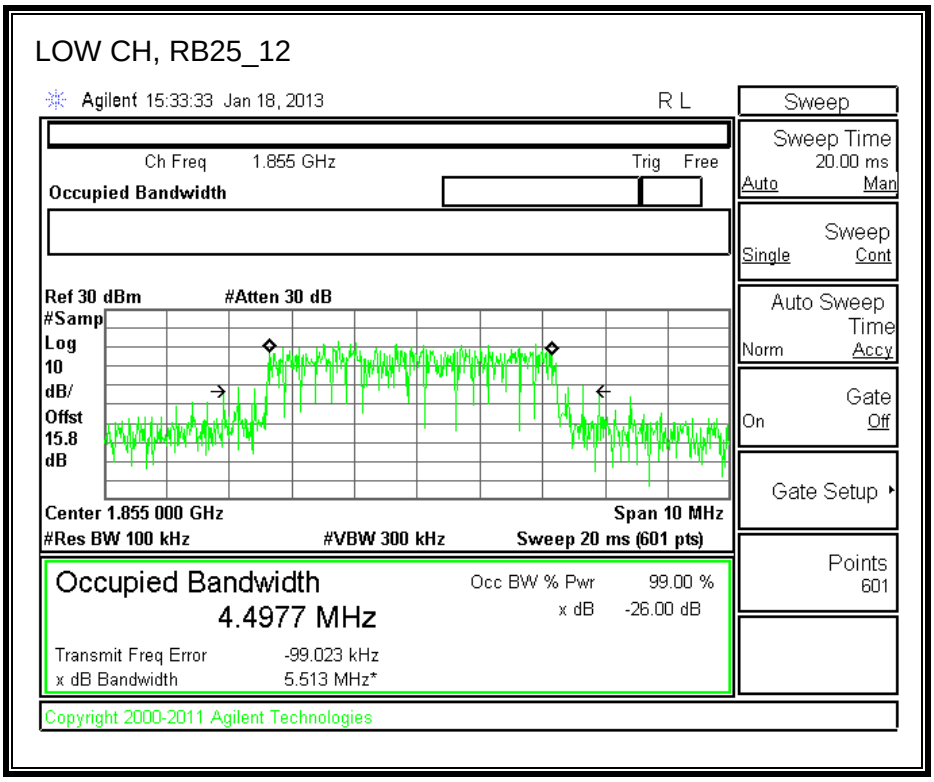

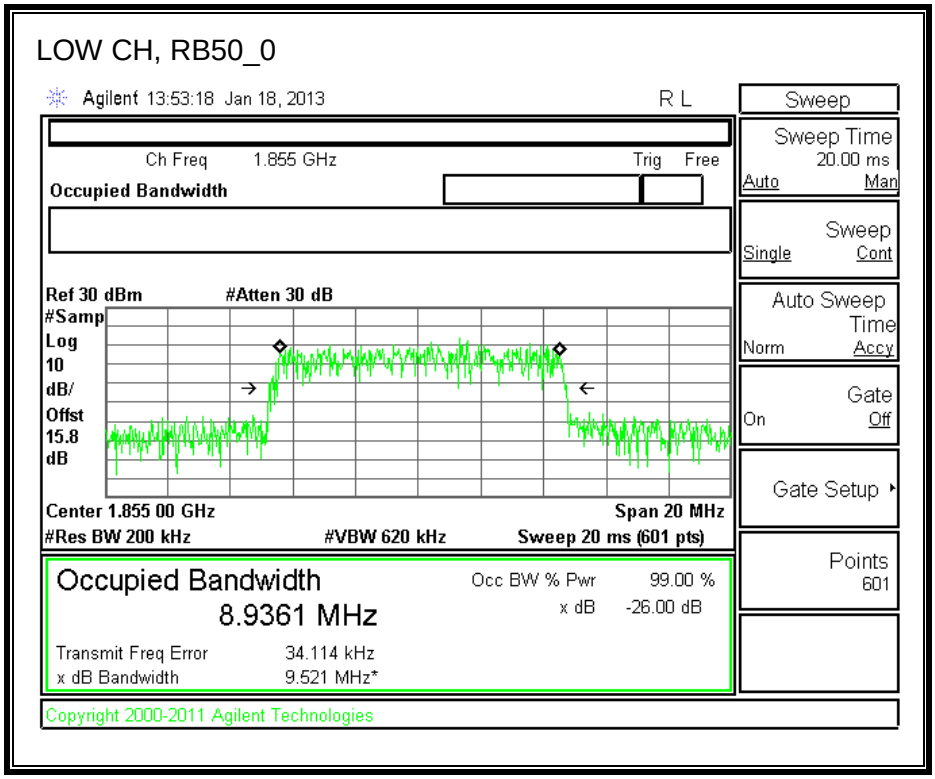

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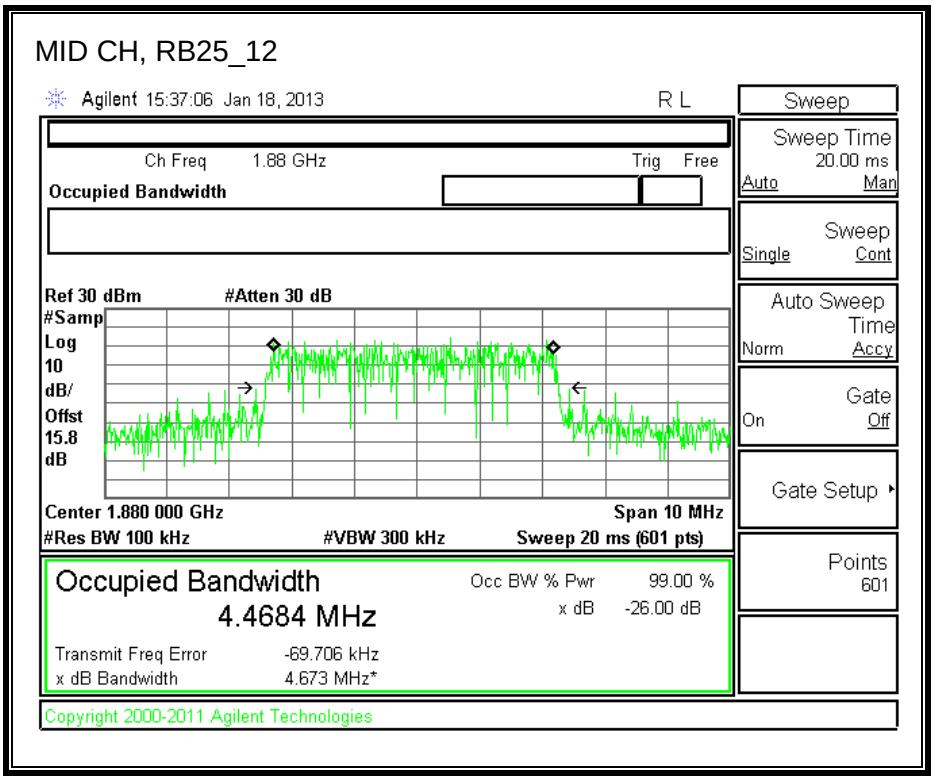

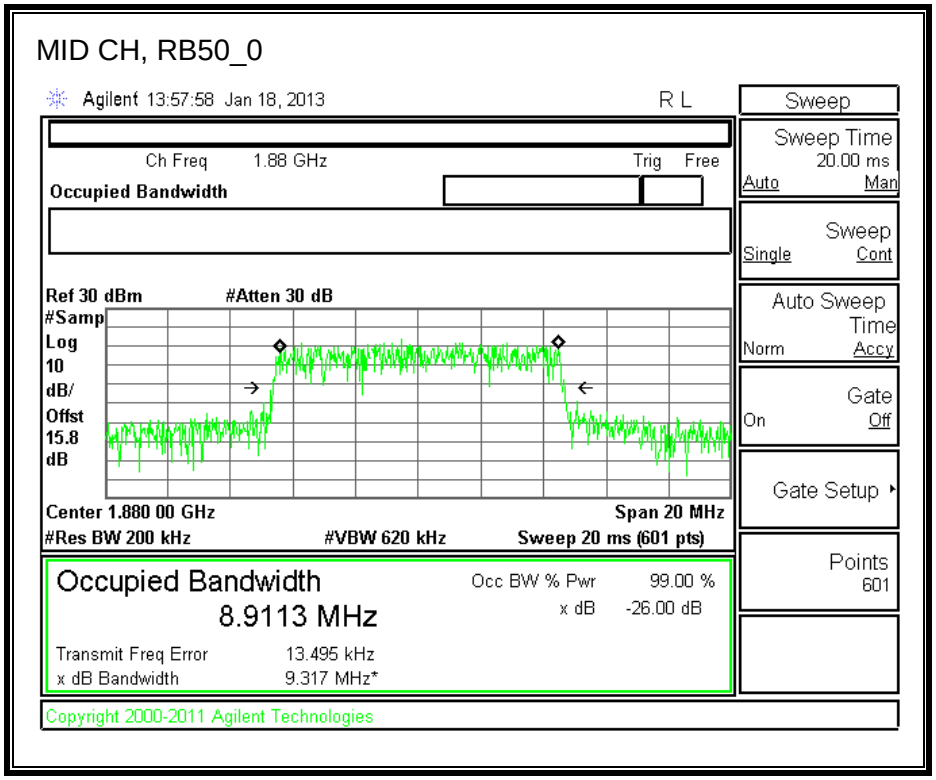

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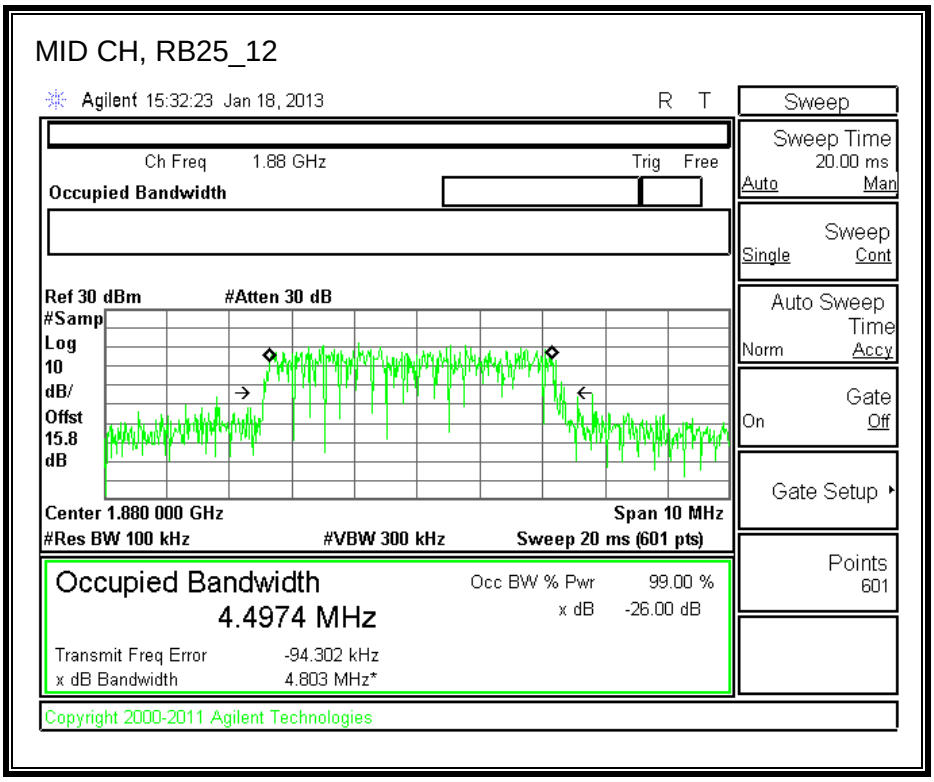

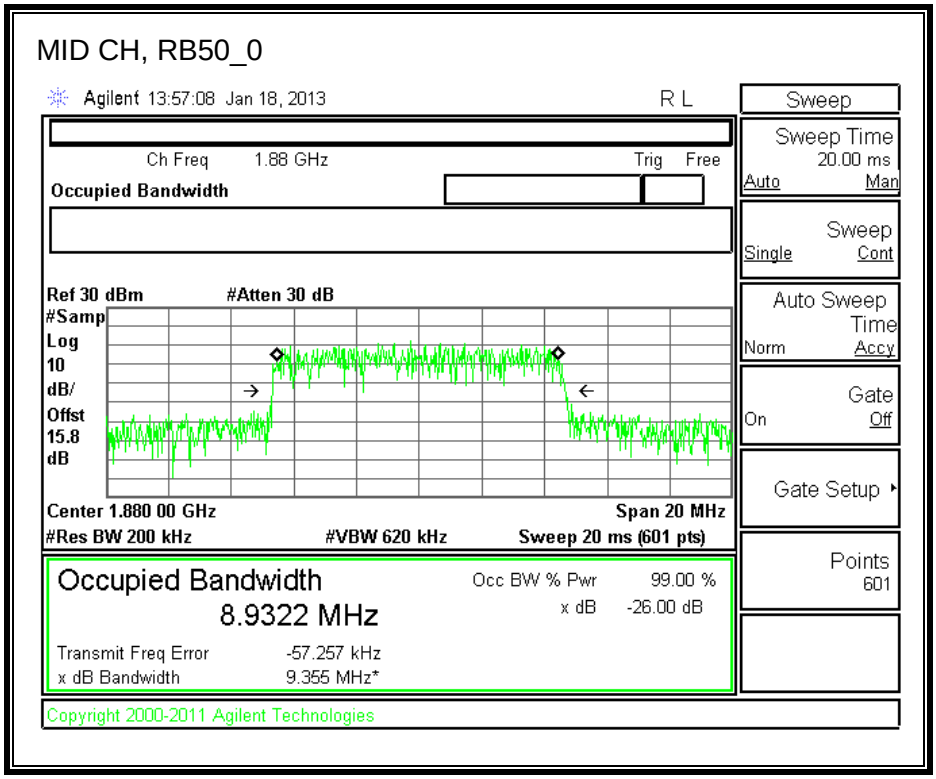

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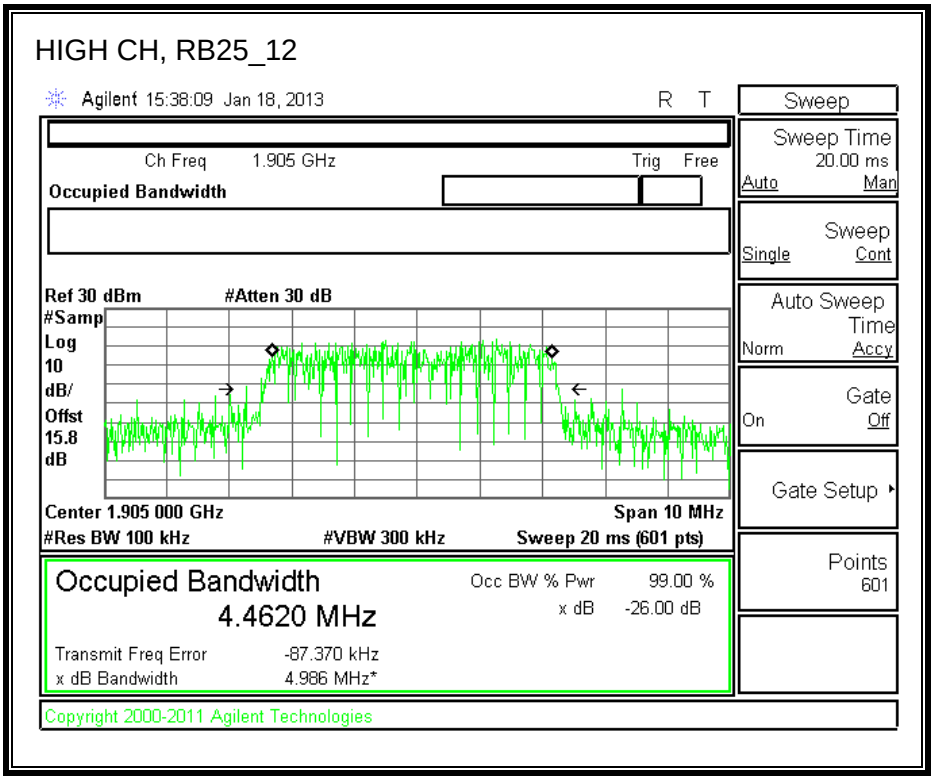

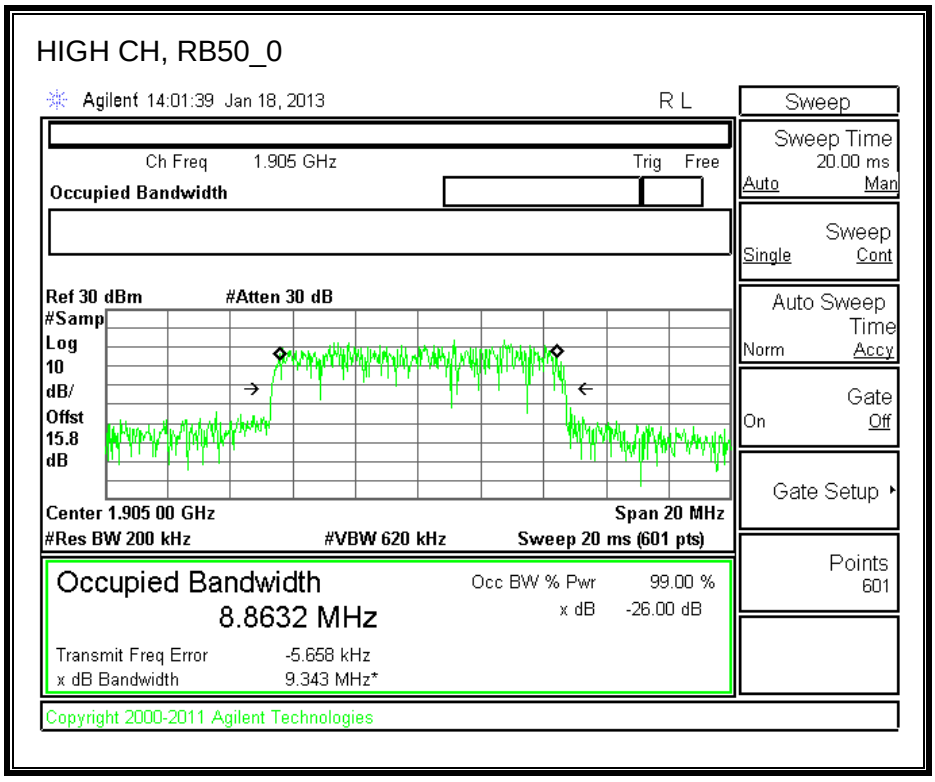

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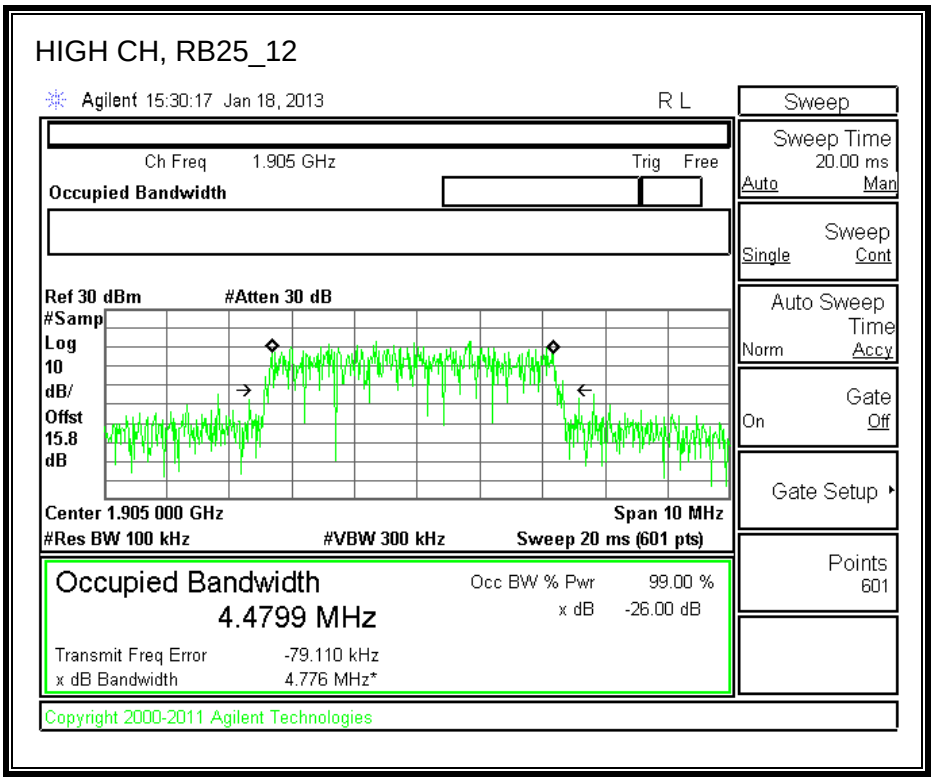
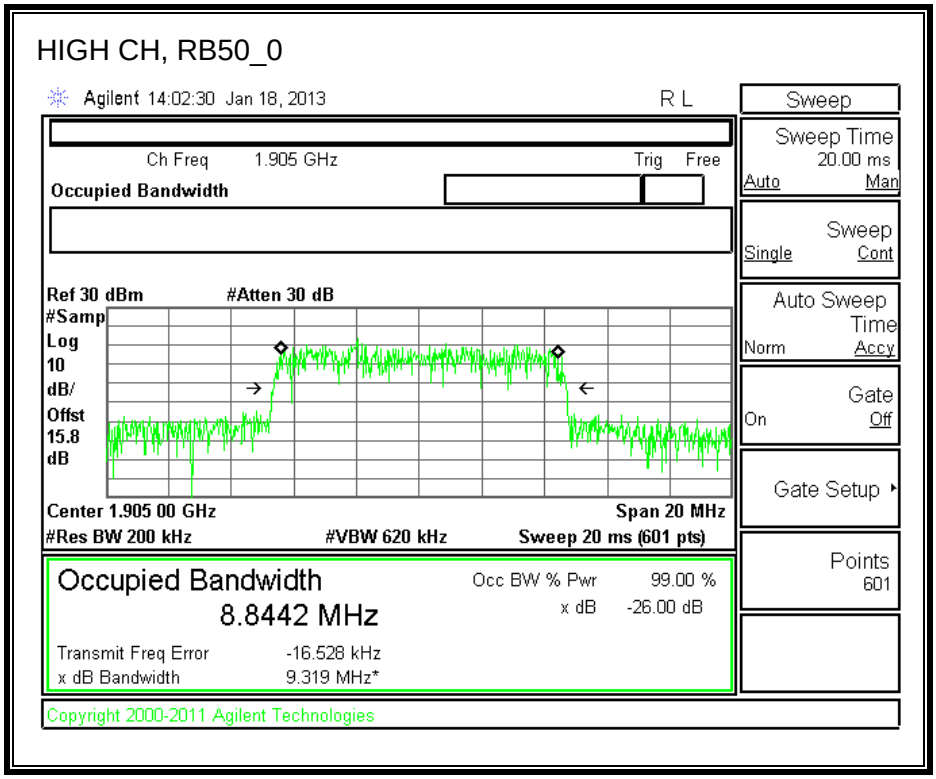
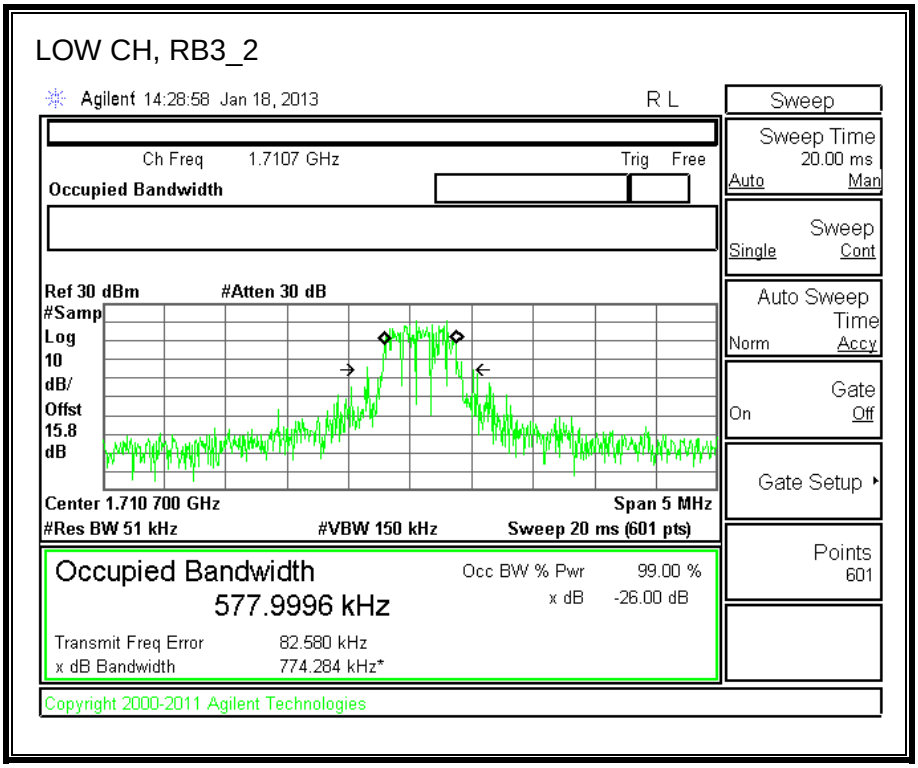
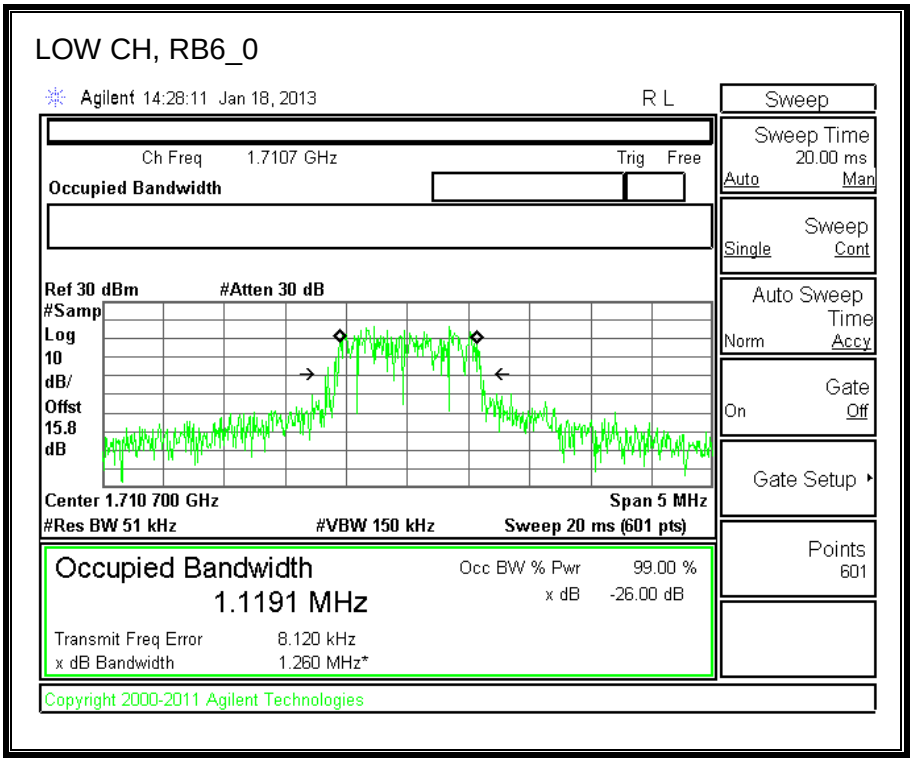




8.1.4. *LTE, Band 4*

1.4MHz BAND WIDTH QPSK





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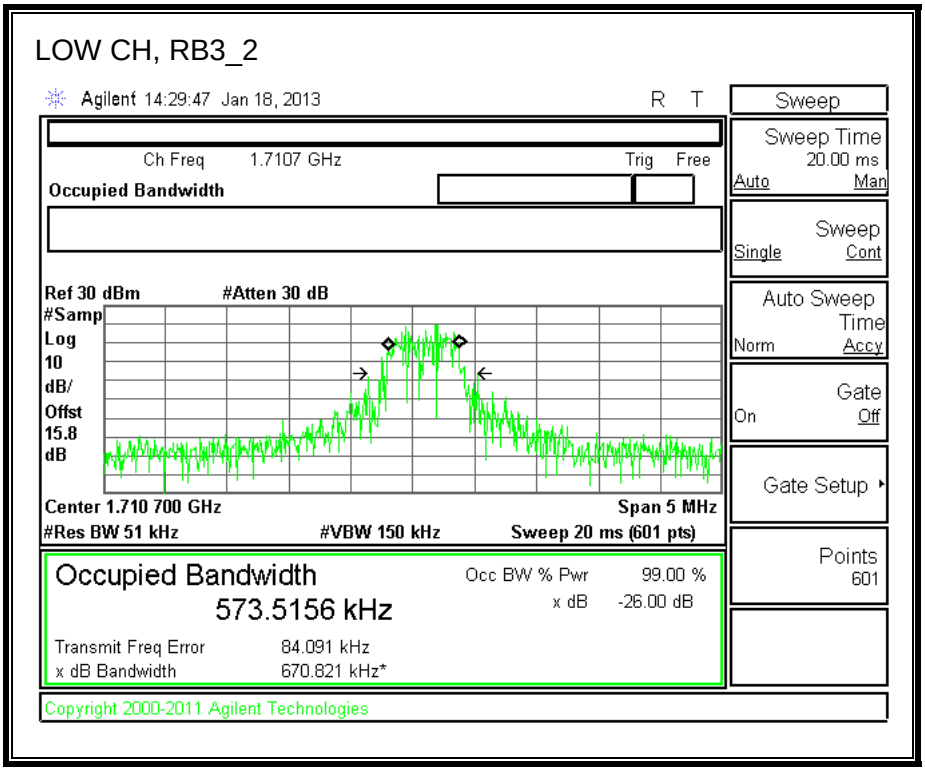

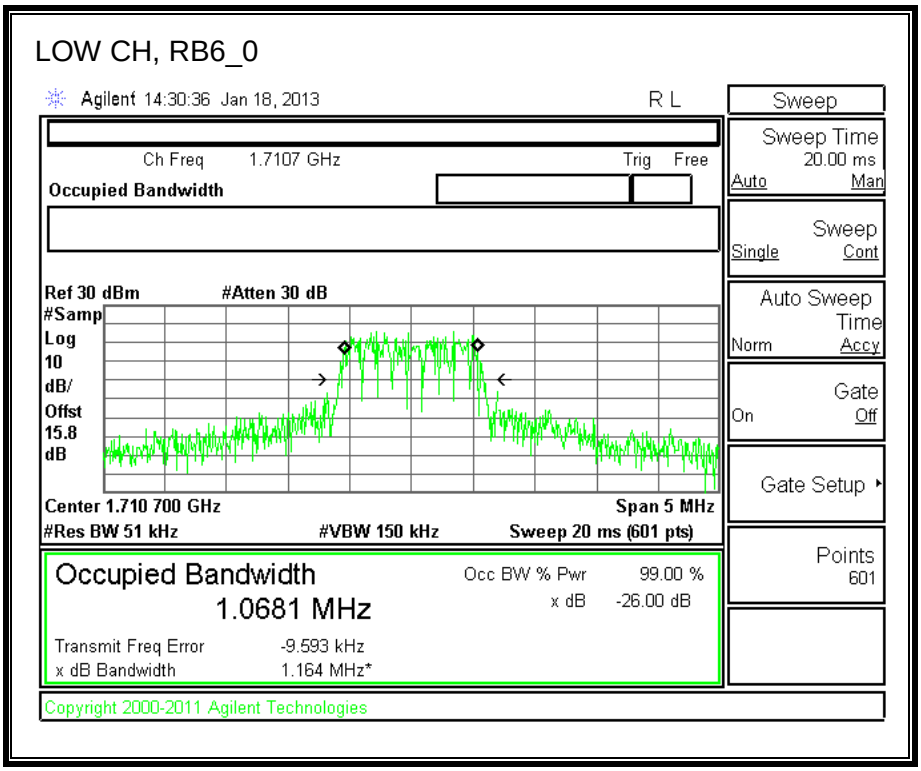

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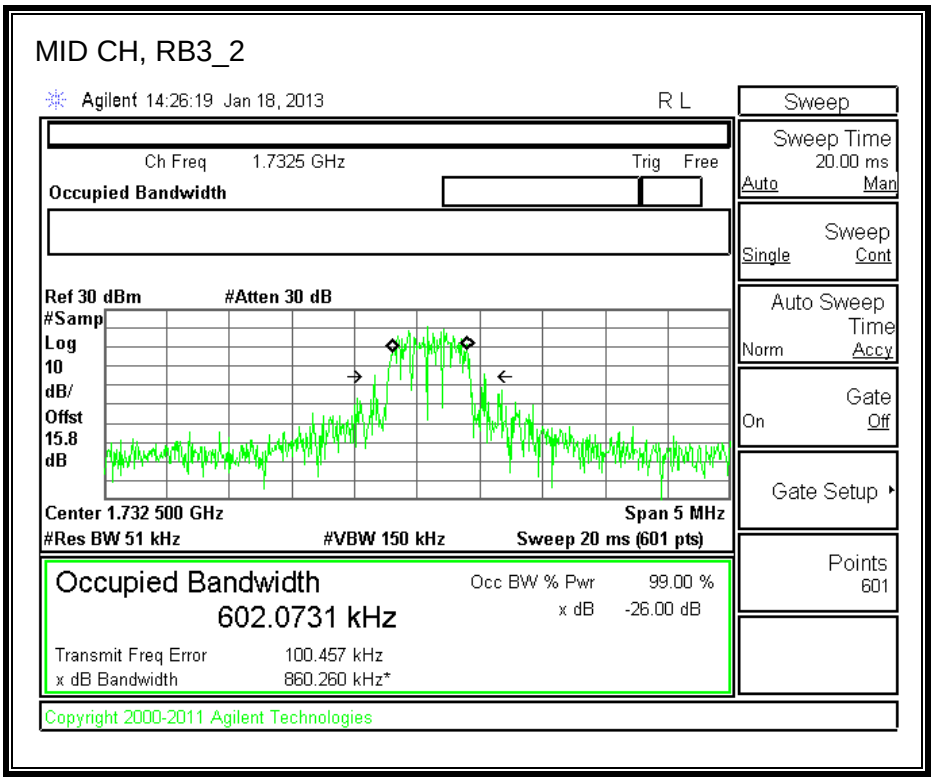

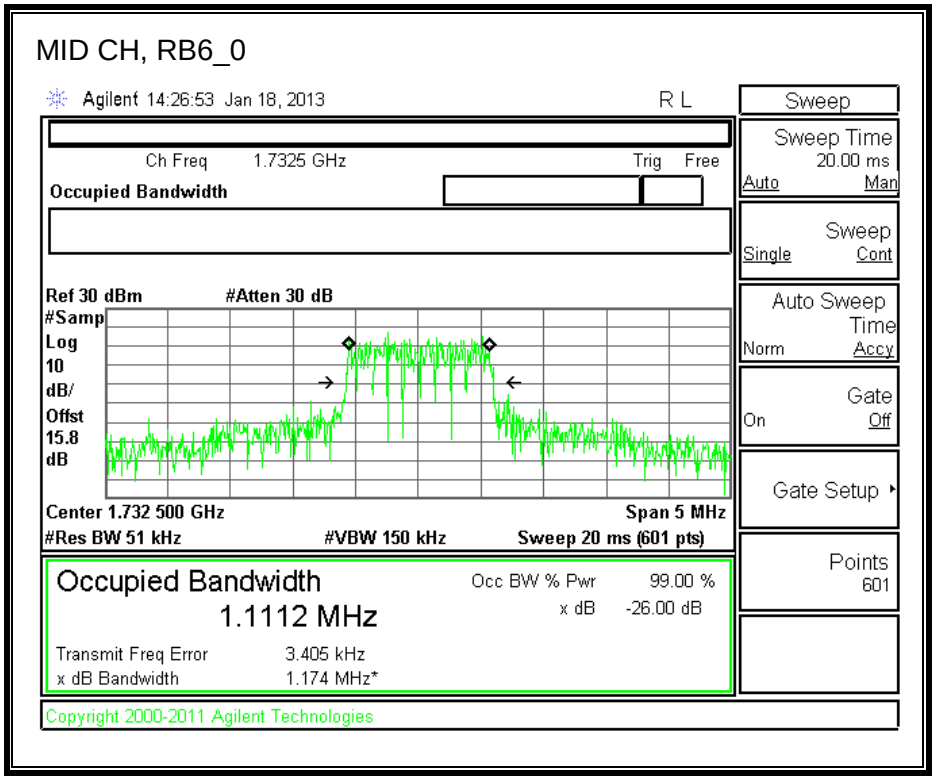

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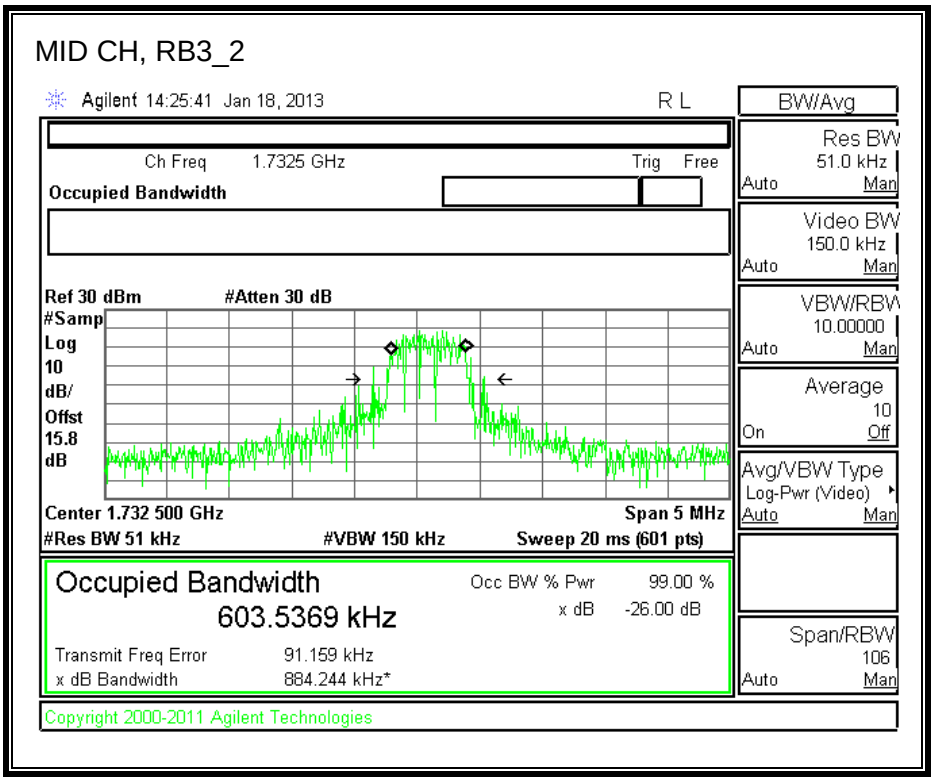

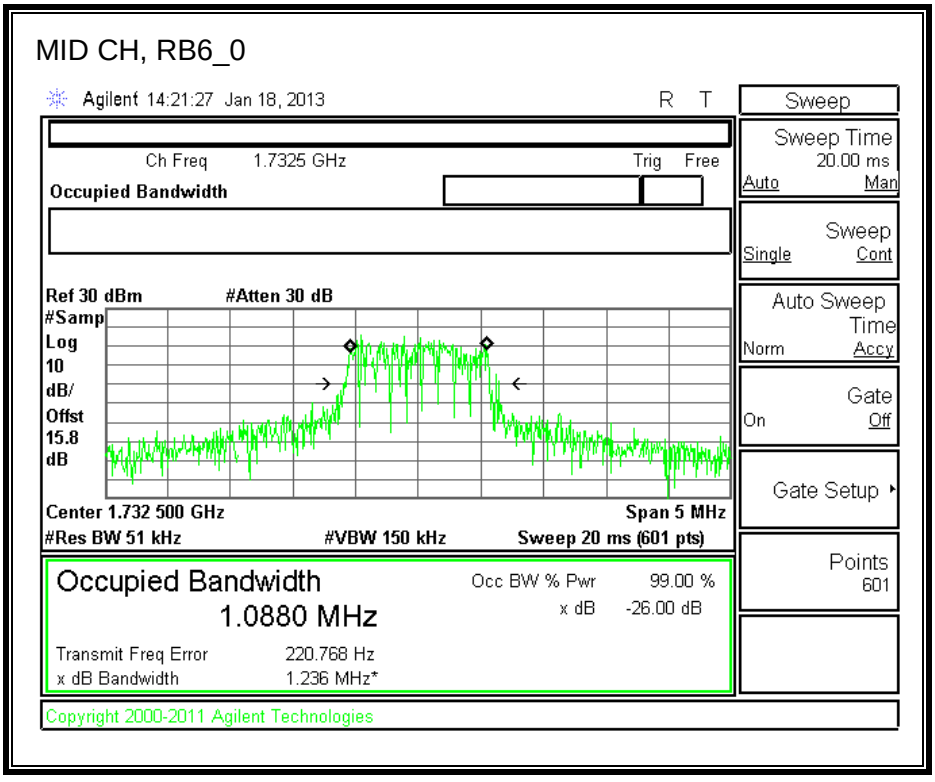

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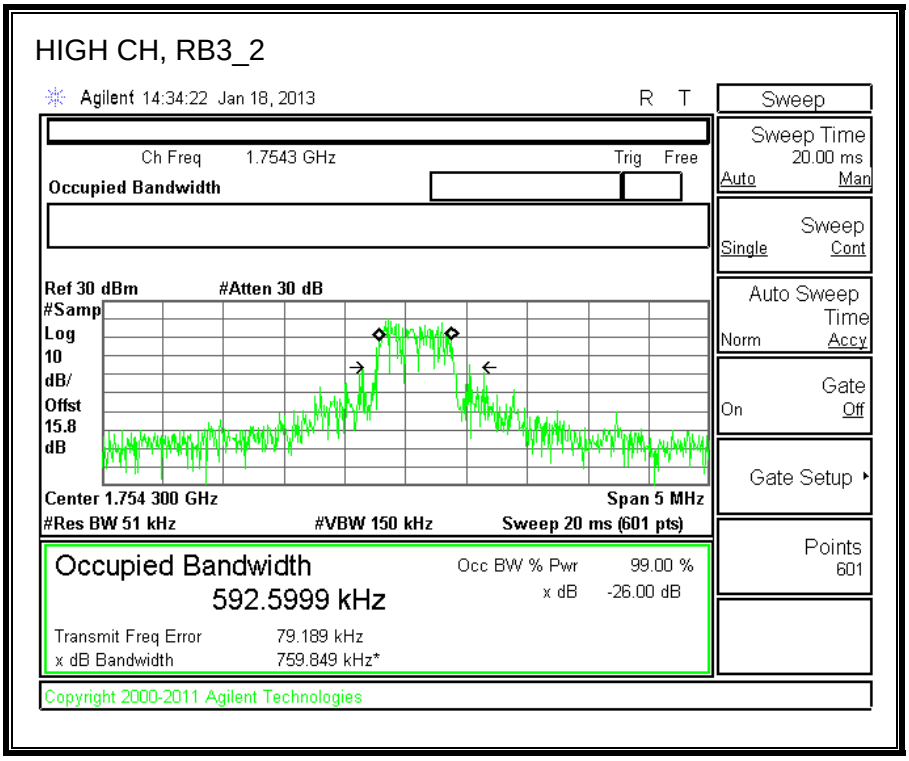

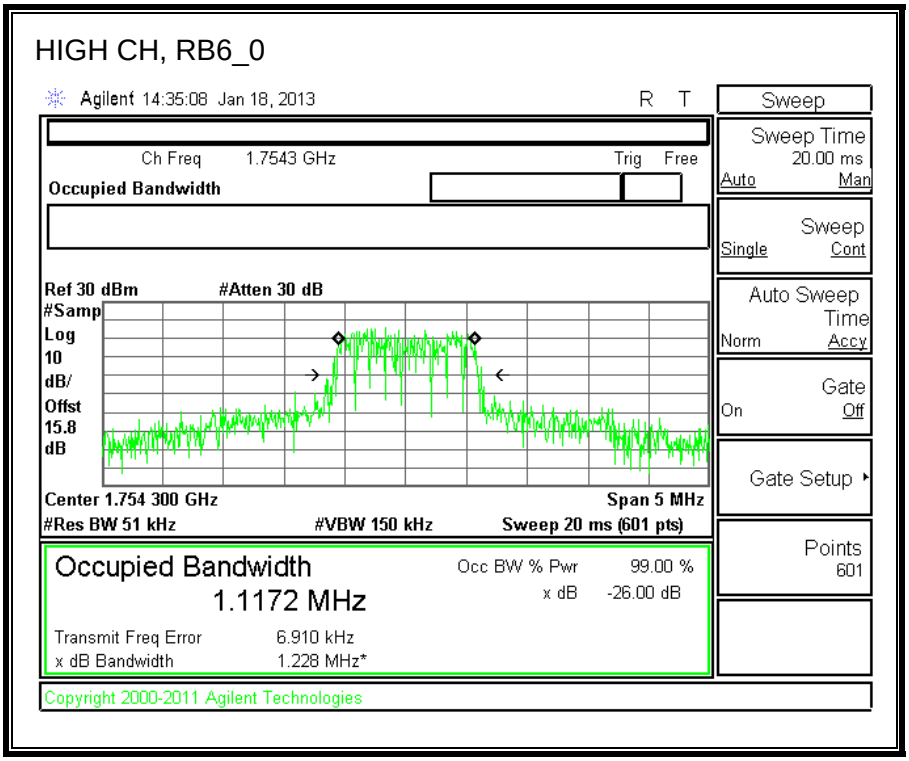

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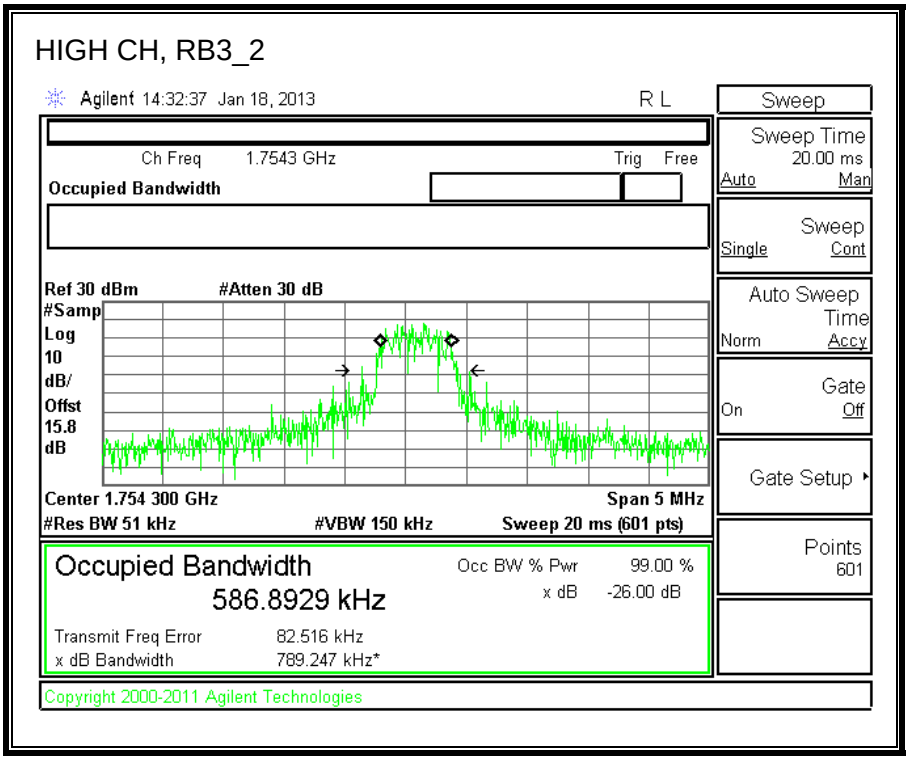
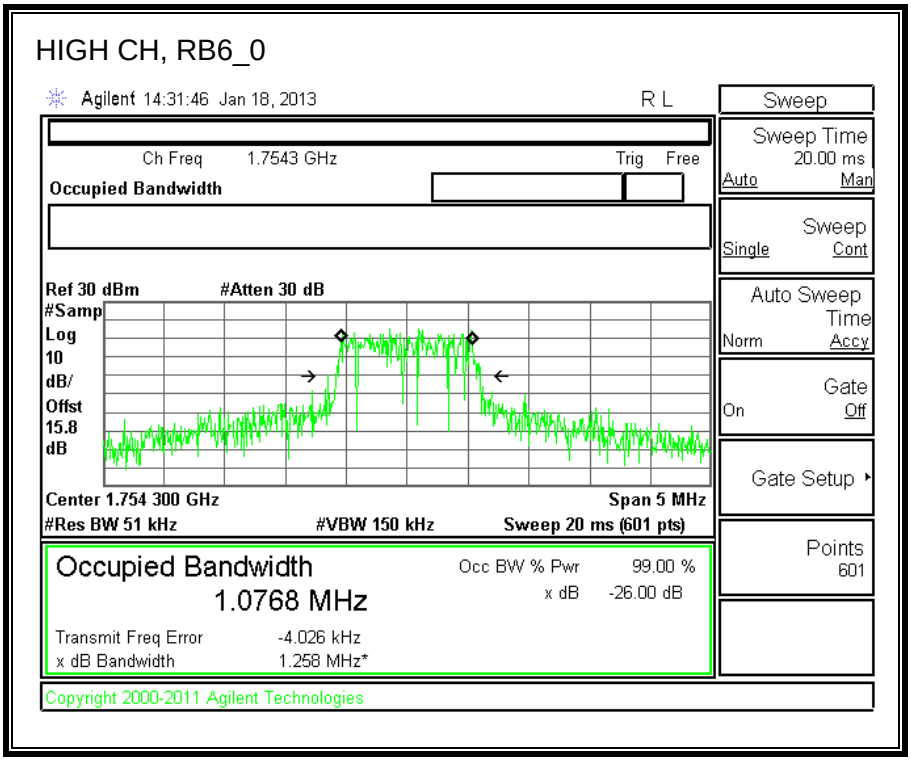
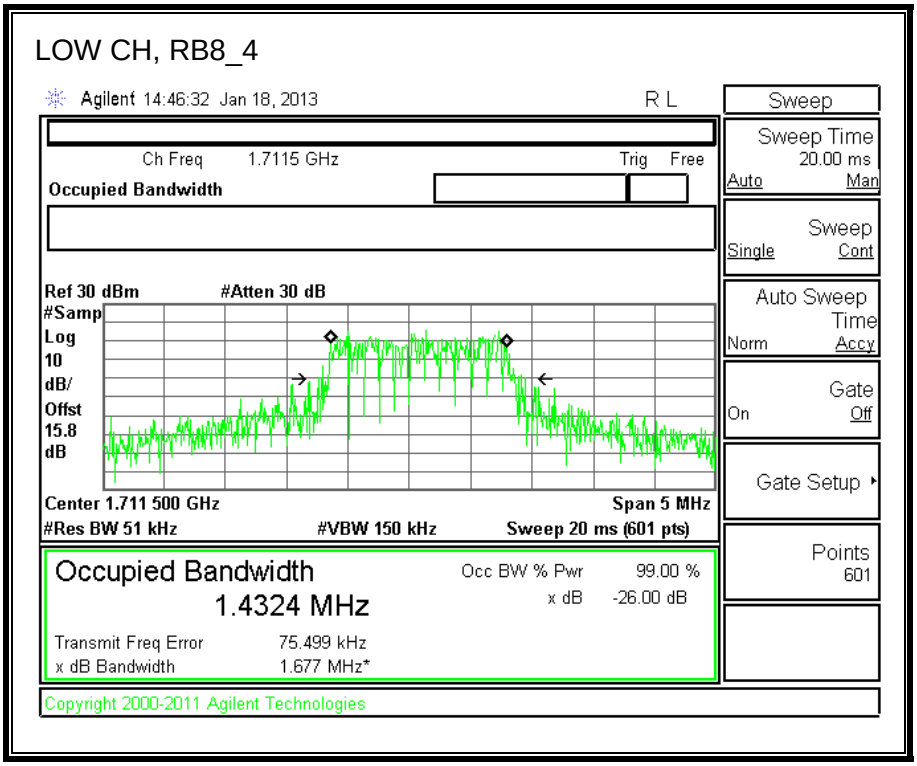
HIGH CH, RB3_2

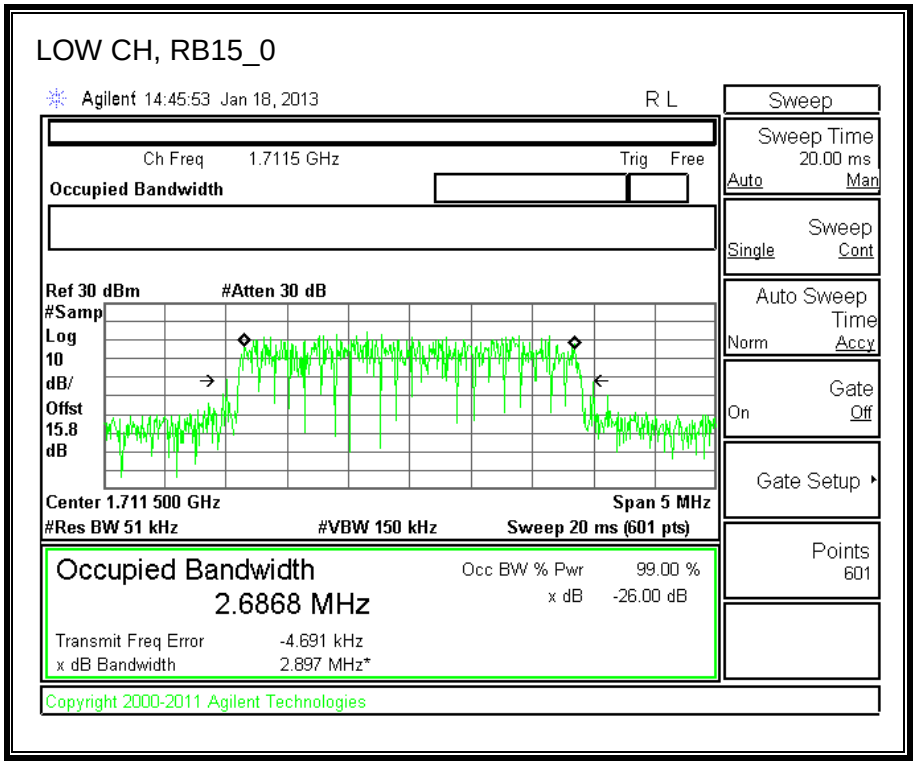


HIGH CH, RB6_0

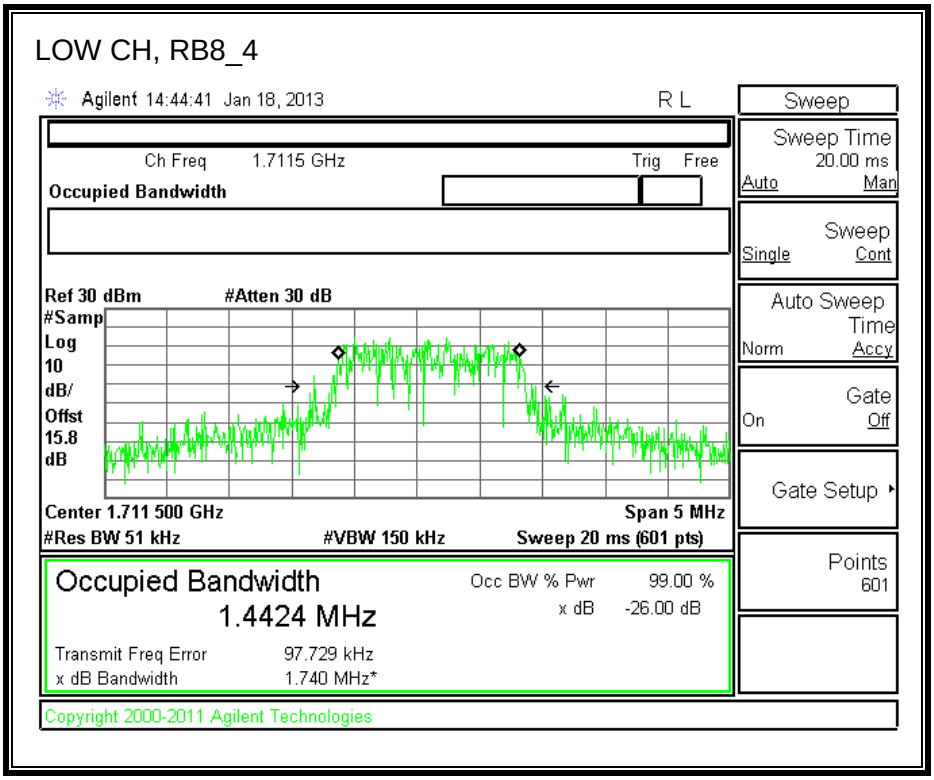


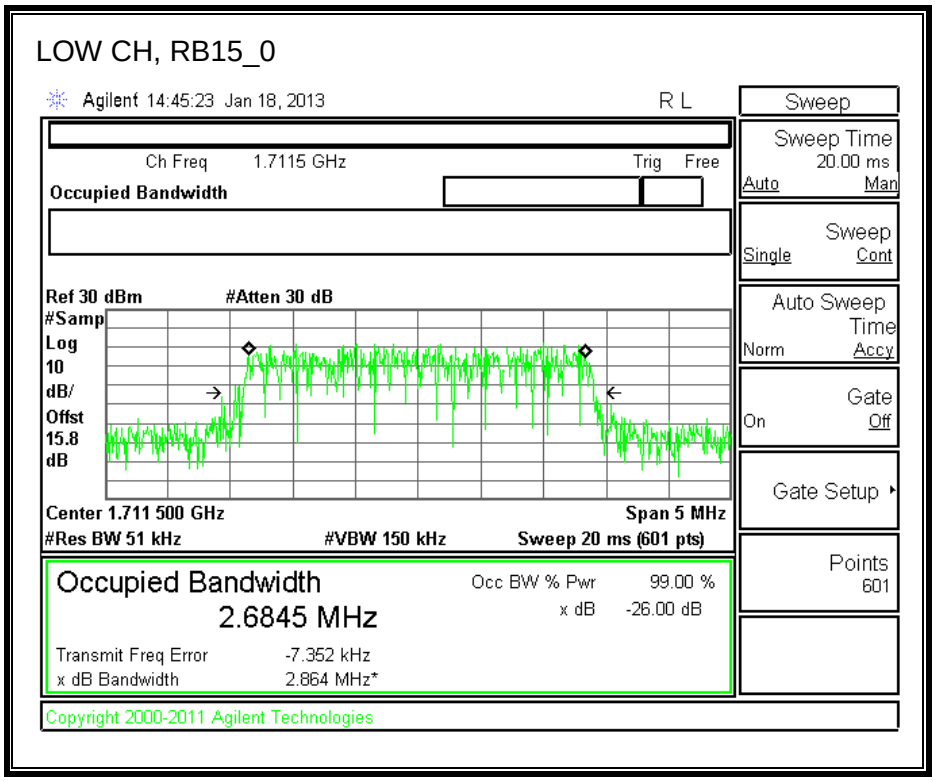
3.0MHz BAND WIDTH QPSK



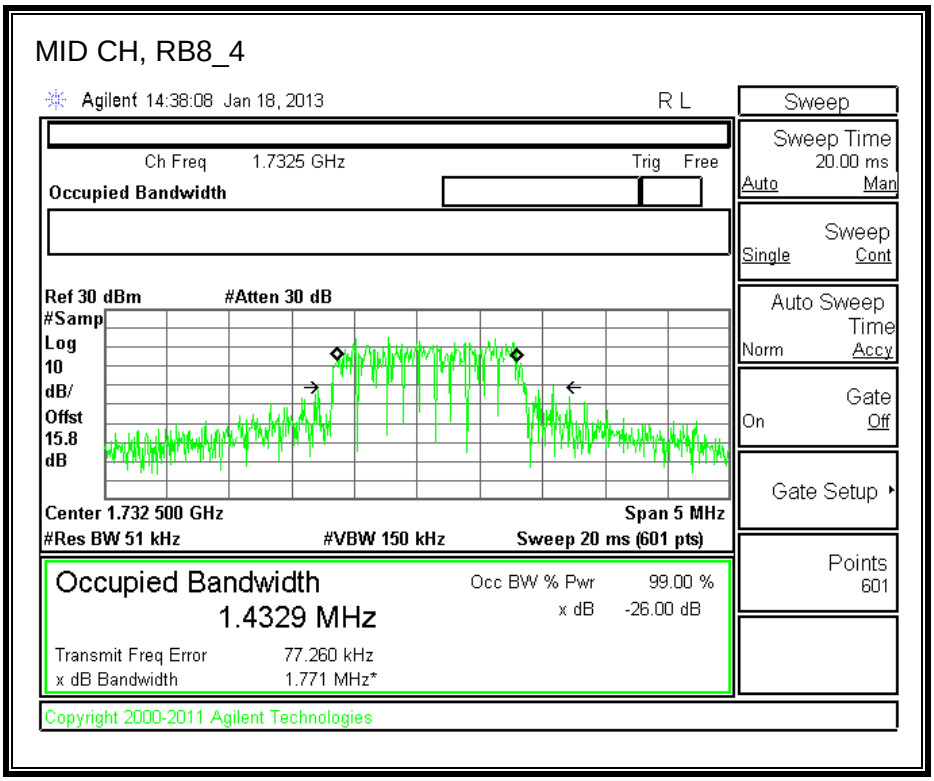


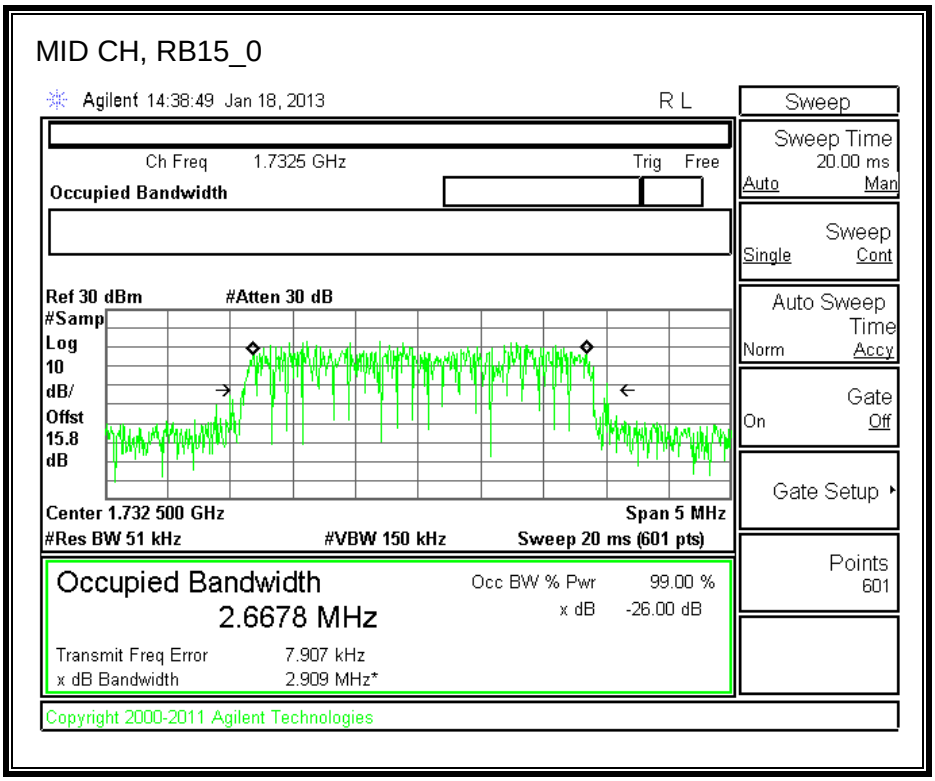
3.0MHz BAND WIDTH 16QAM





3.0MHz BAND WIDTH QPSK





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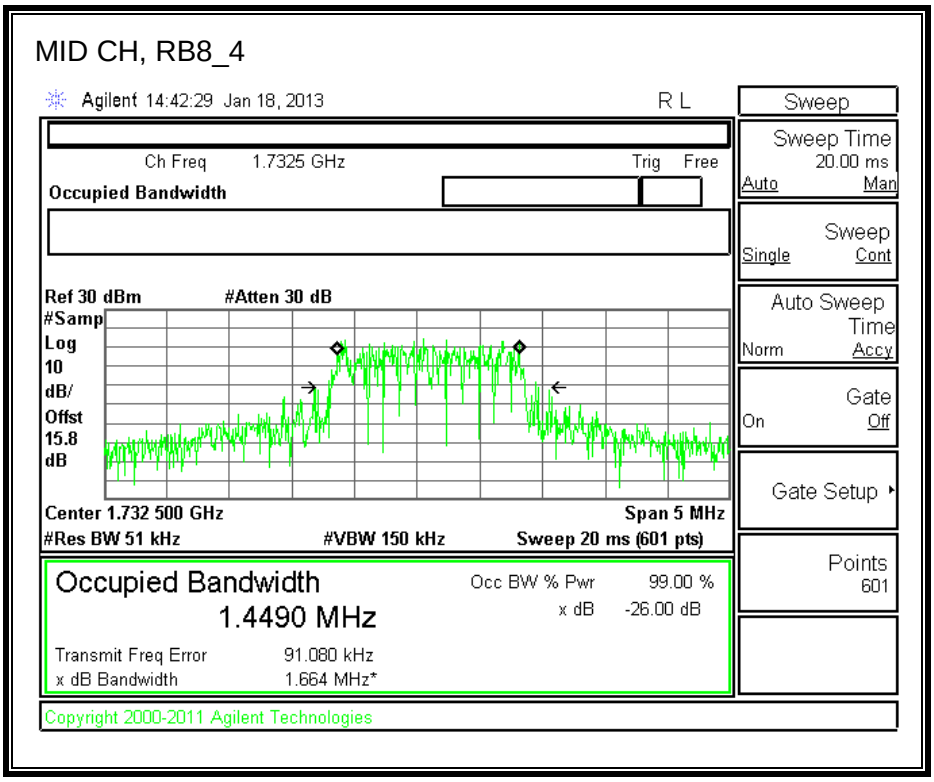

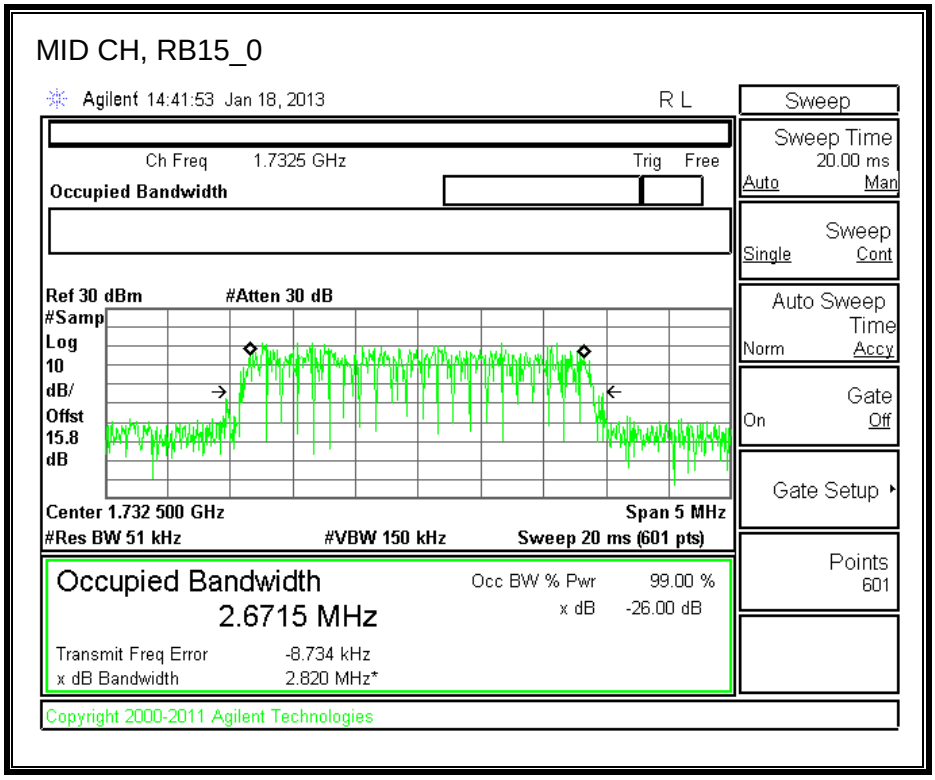

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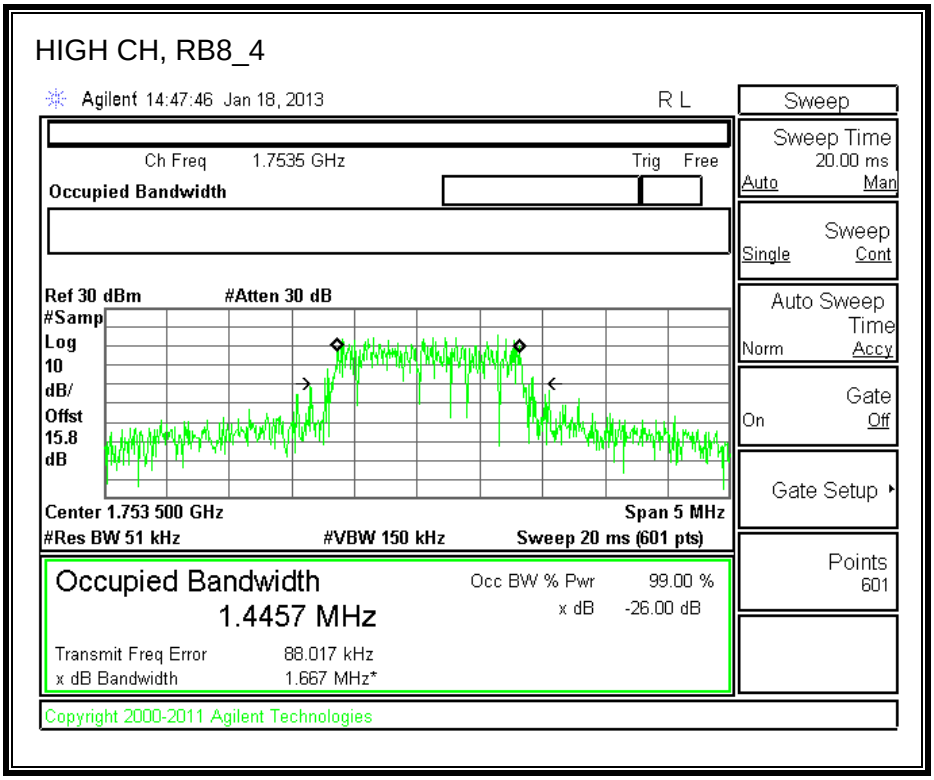
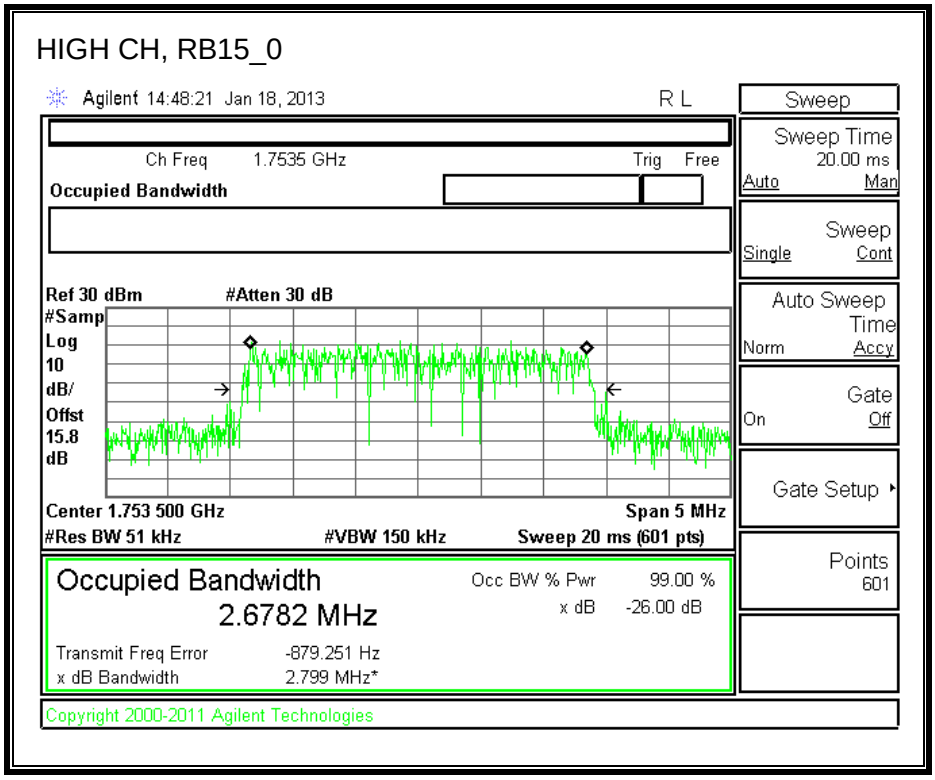
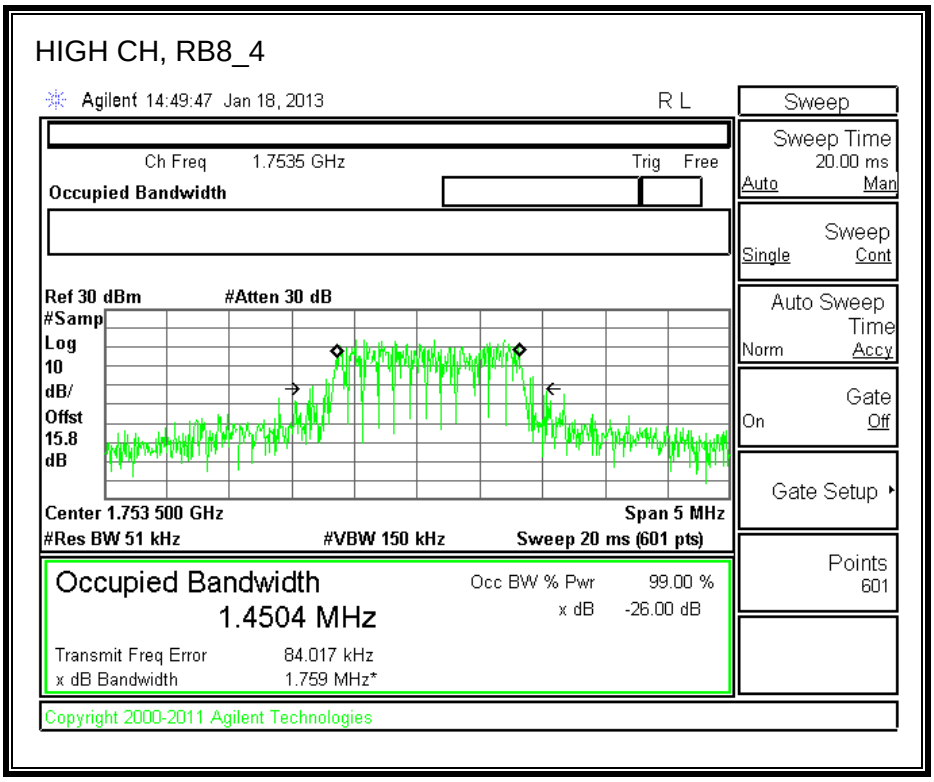


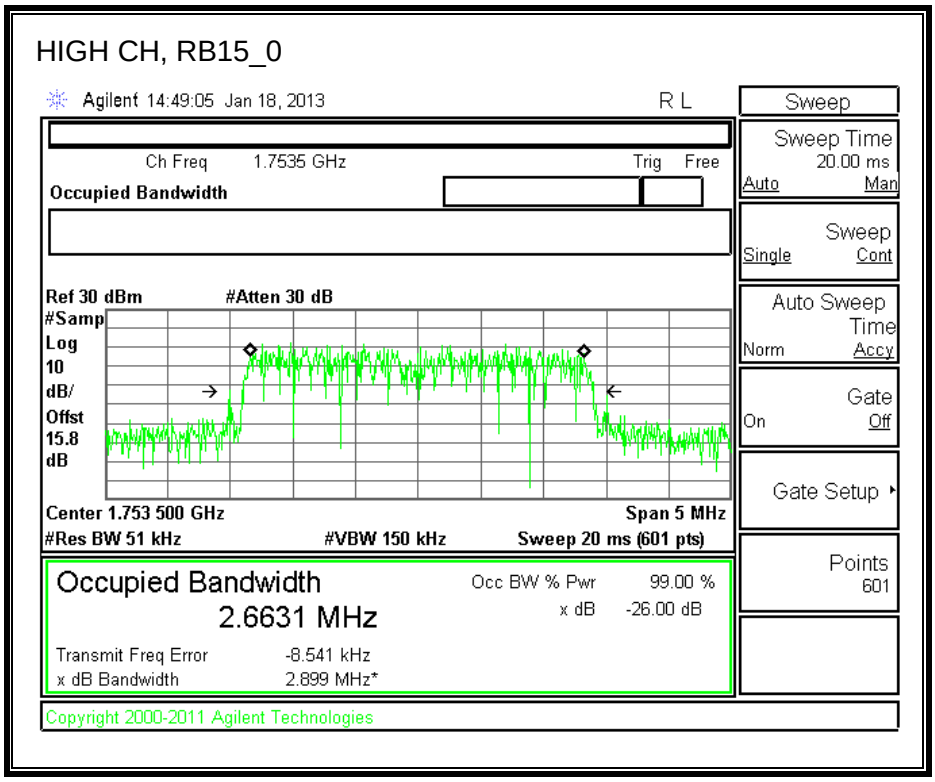


3.0MHz BAND WIDTH 16QAM

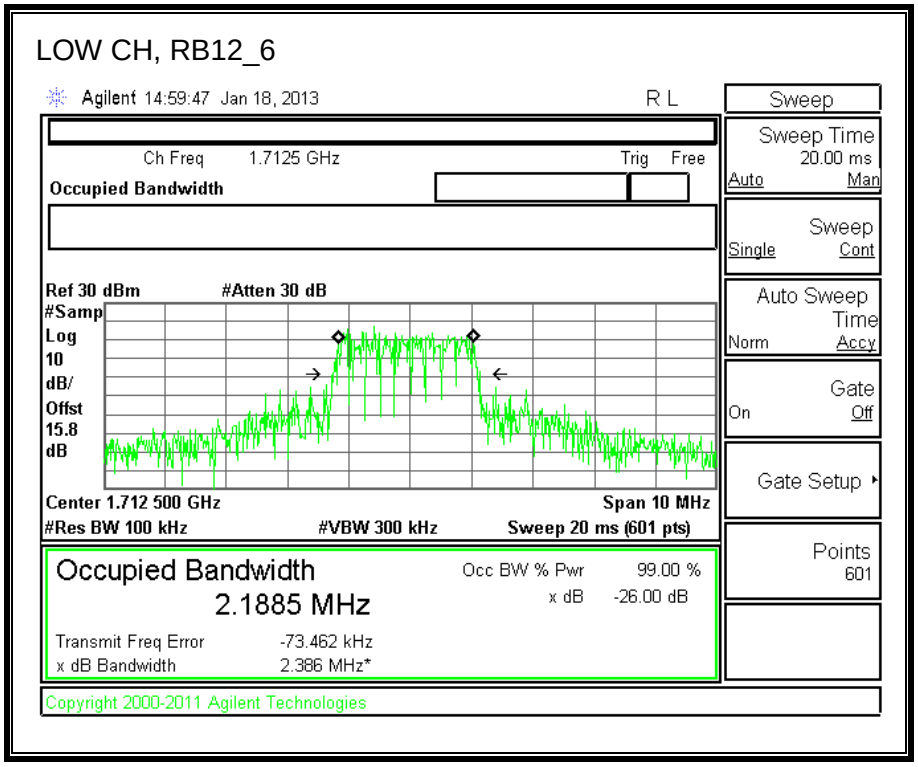
HIGH CH, RB8_4

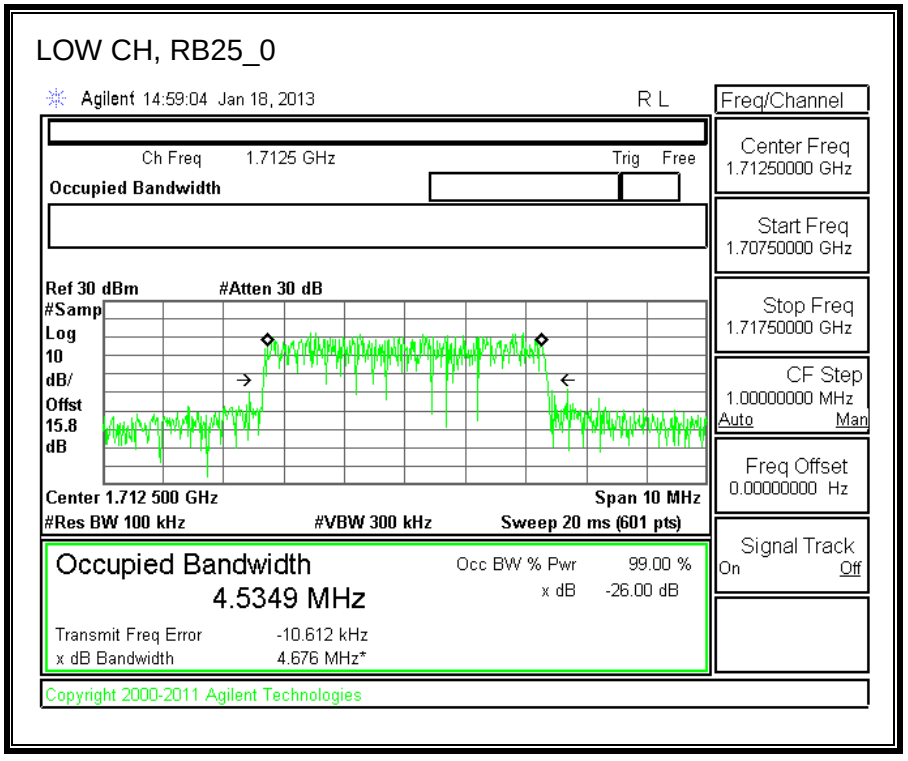


HIGH CH, RB15_0

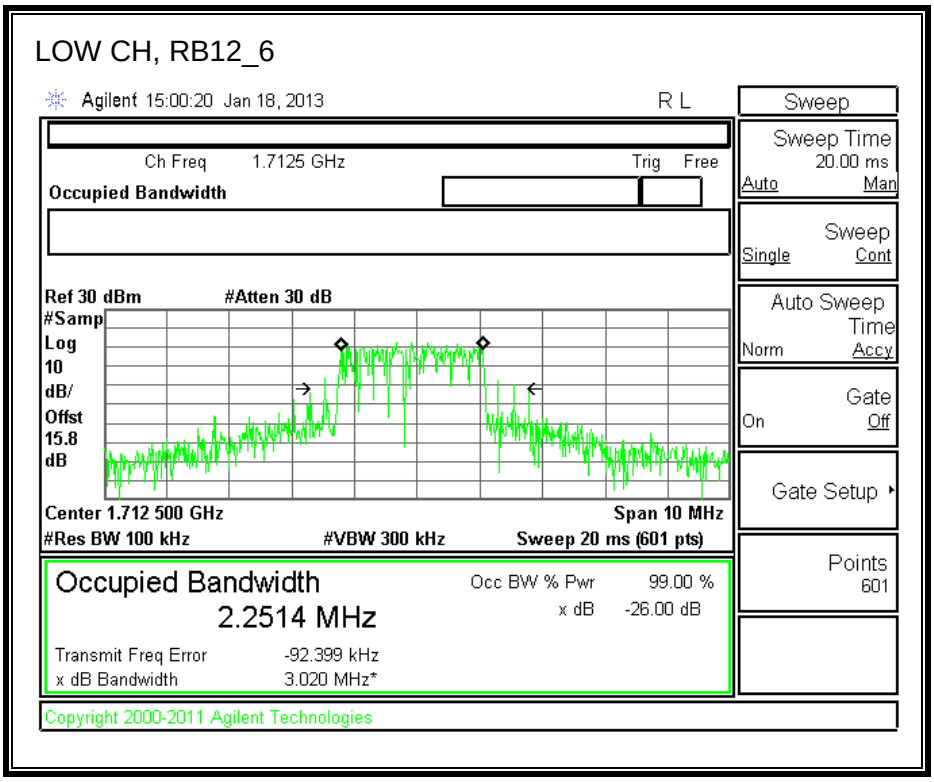


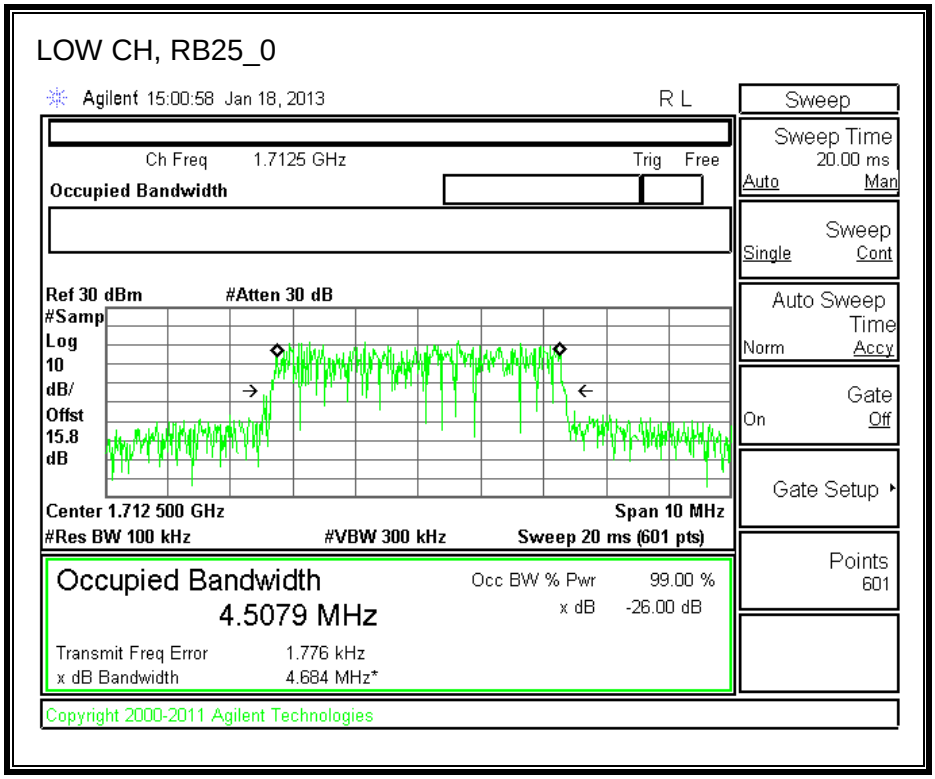
5.0MHz BAND WIDTH QPSK





5.0MHz BAND WIDTH 16QAM





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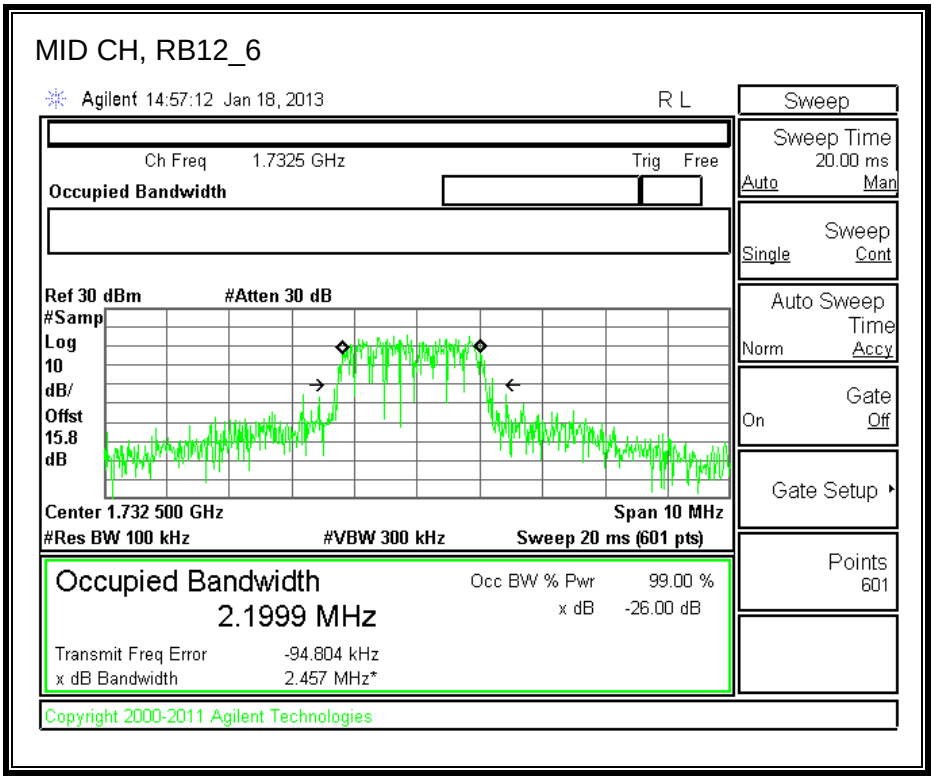

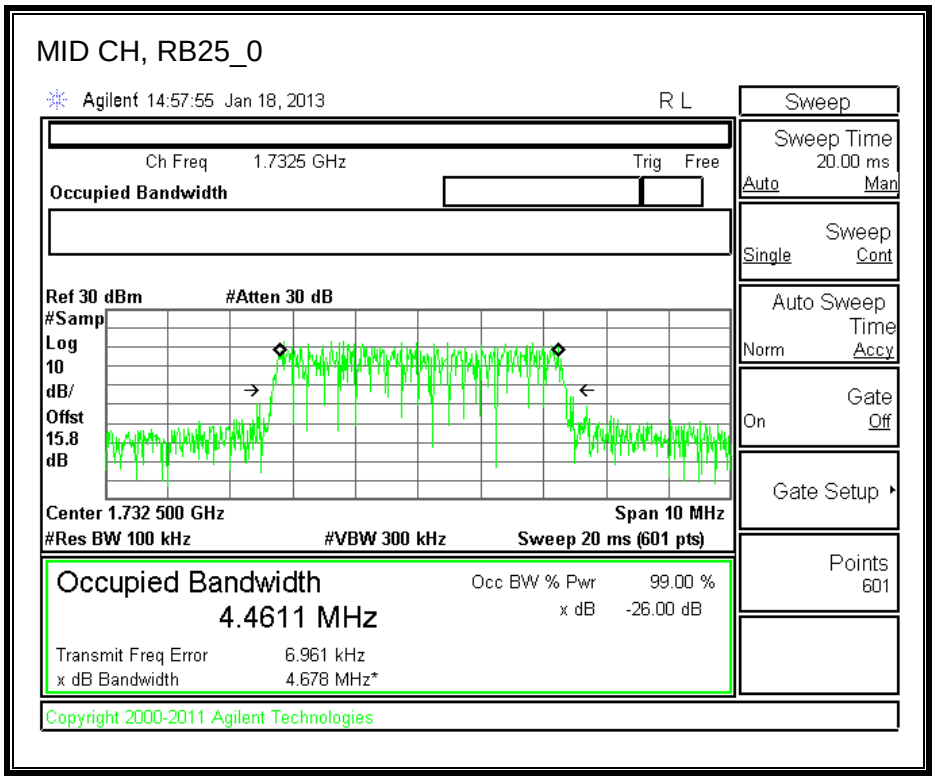

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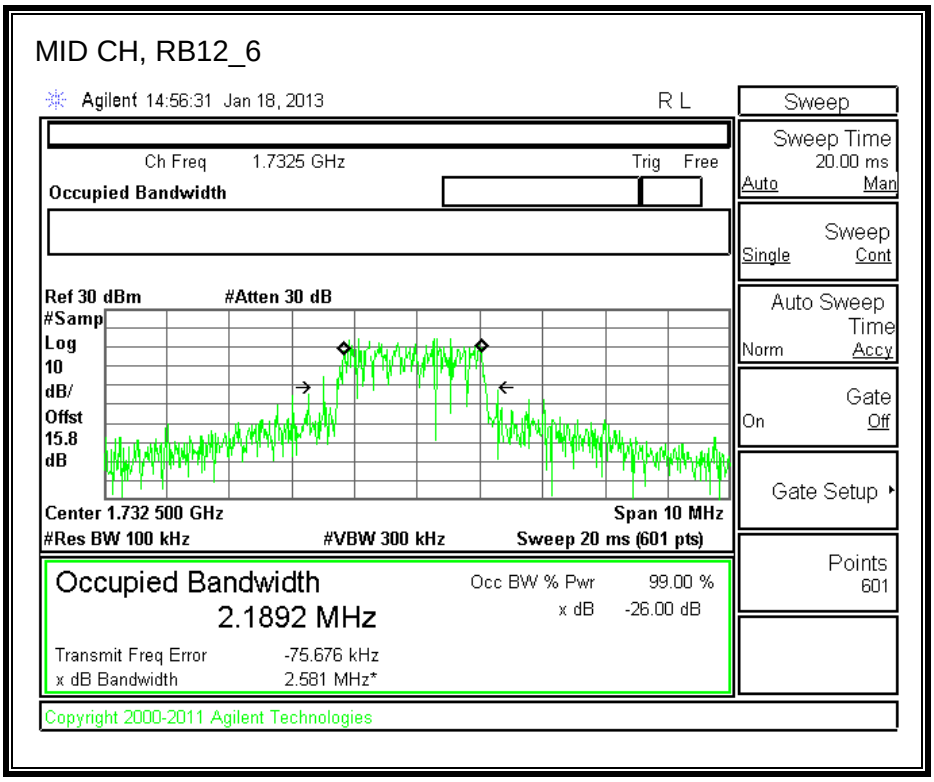

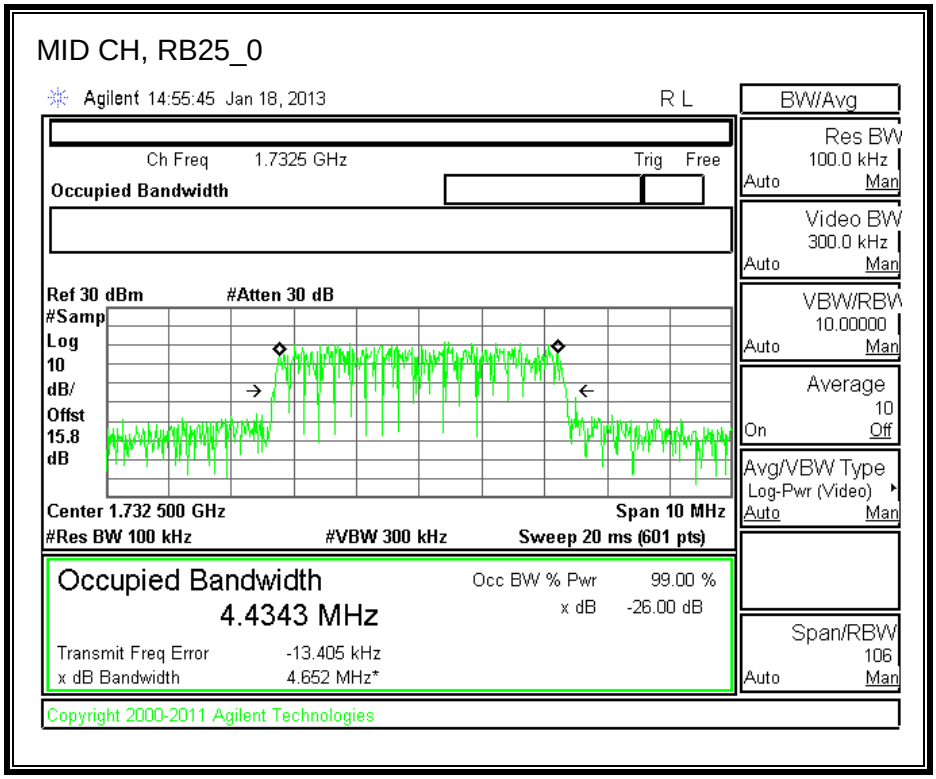

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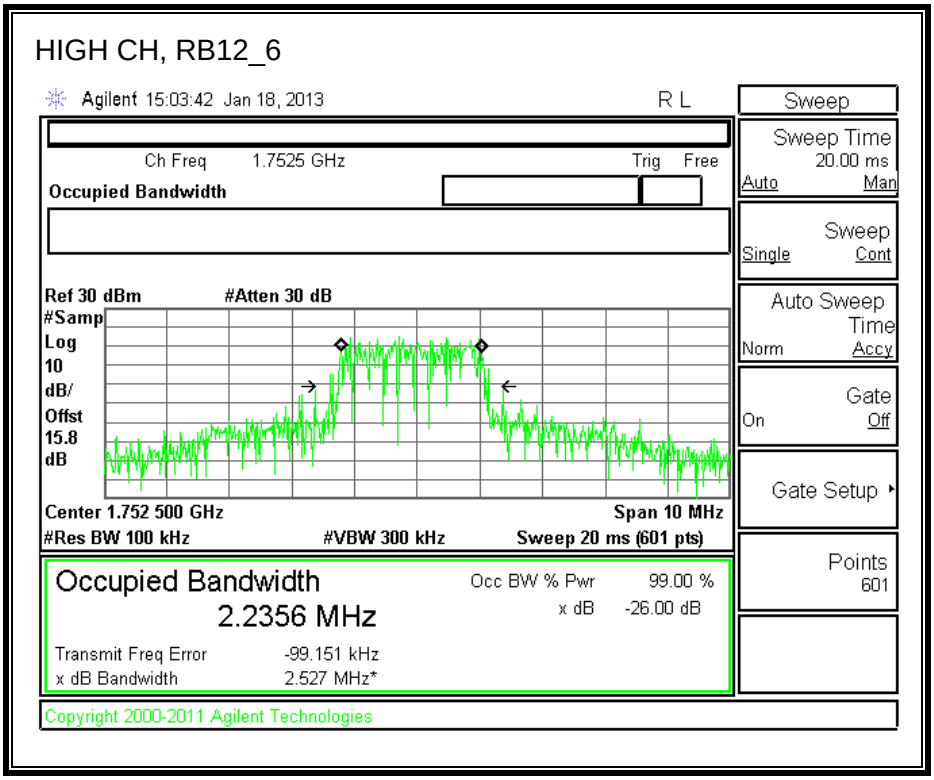

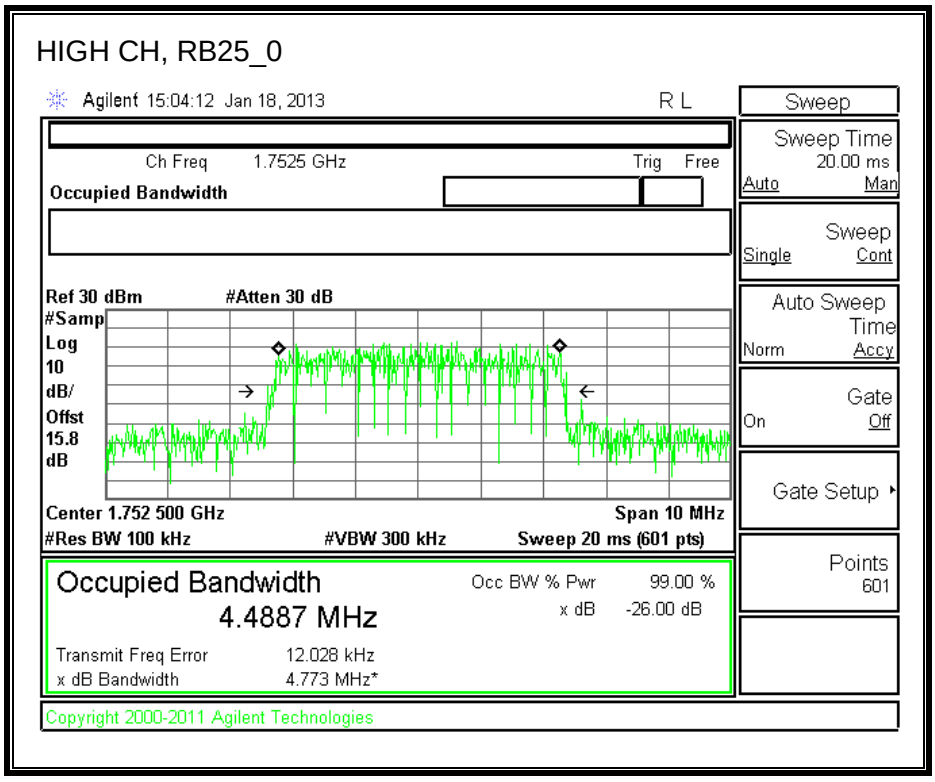

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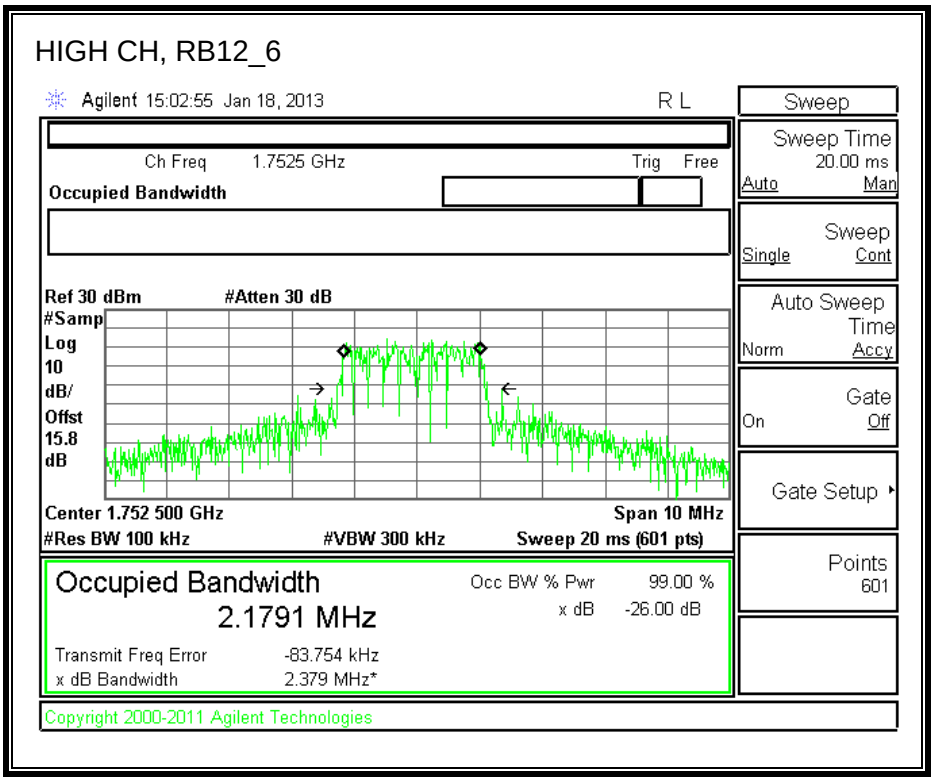

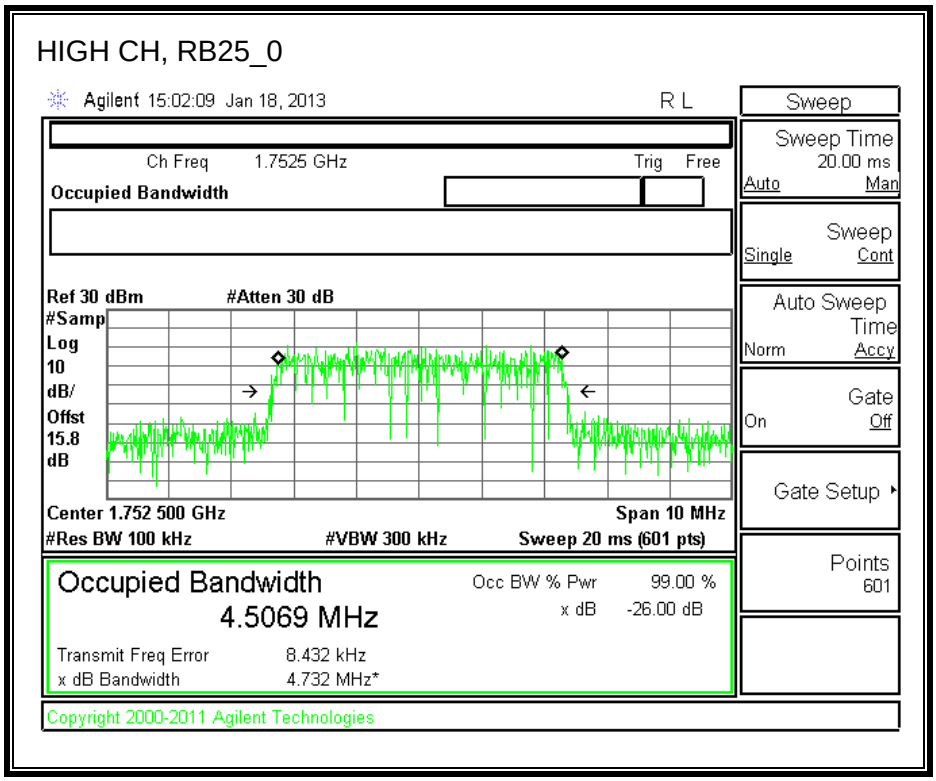

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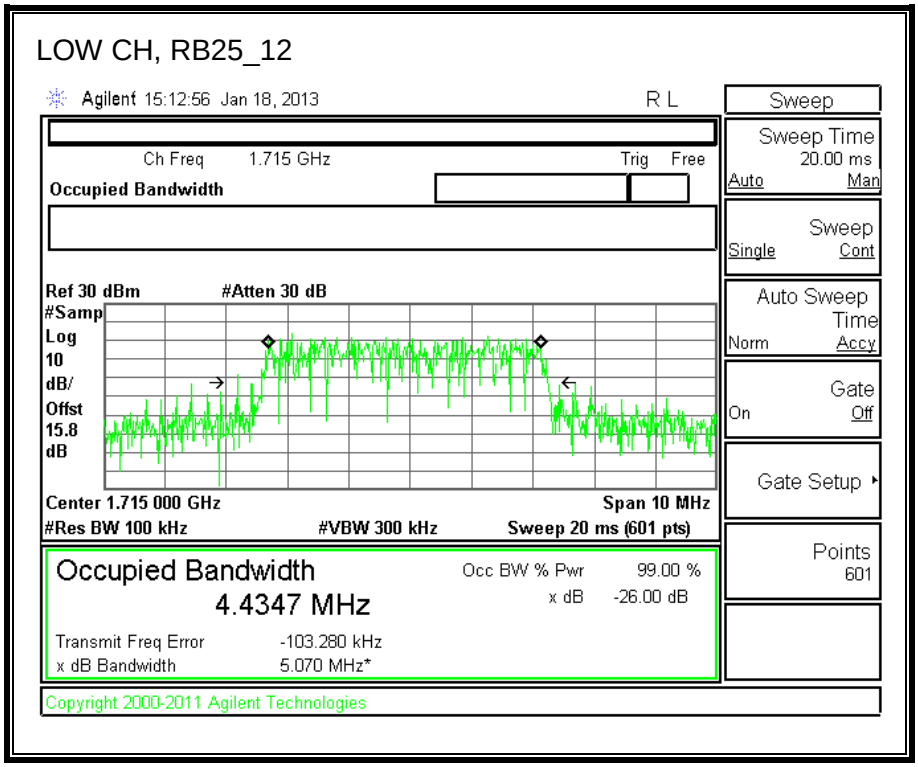

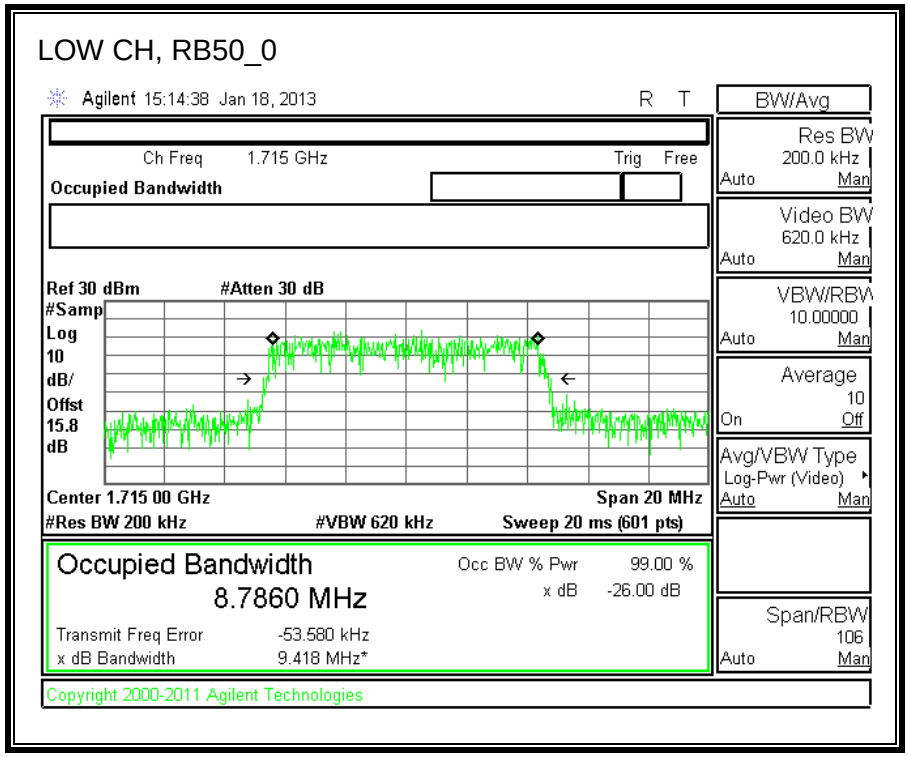

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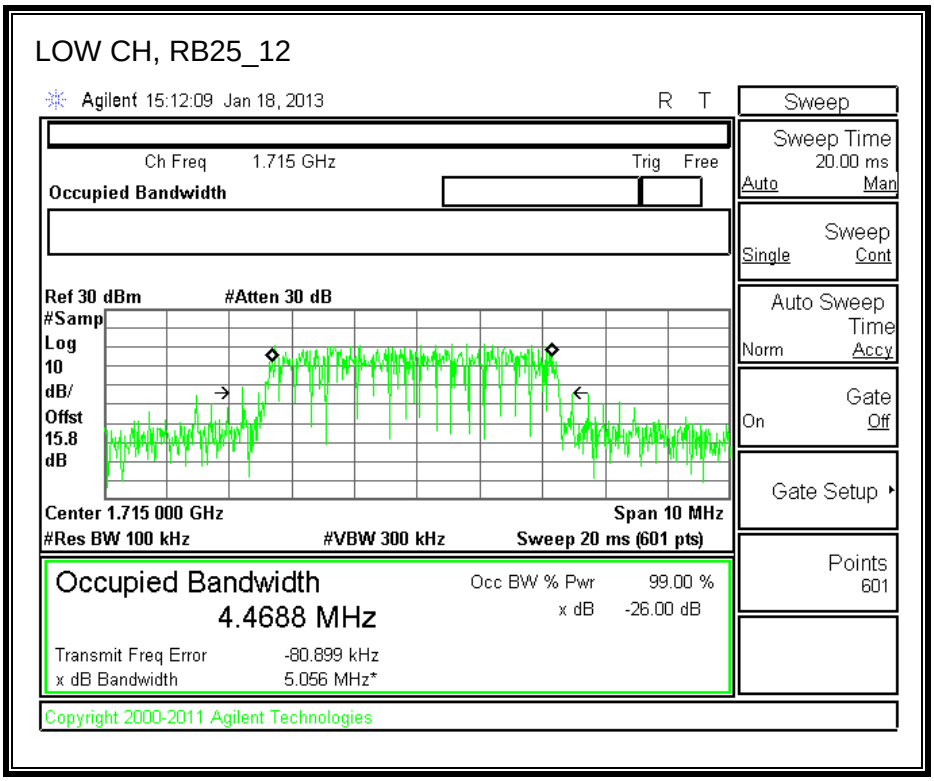

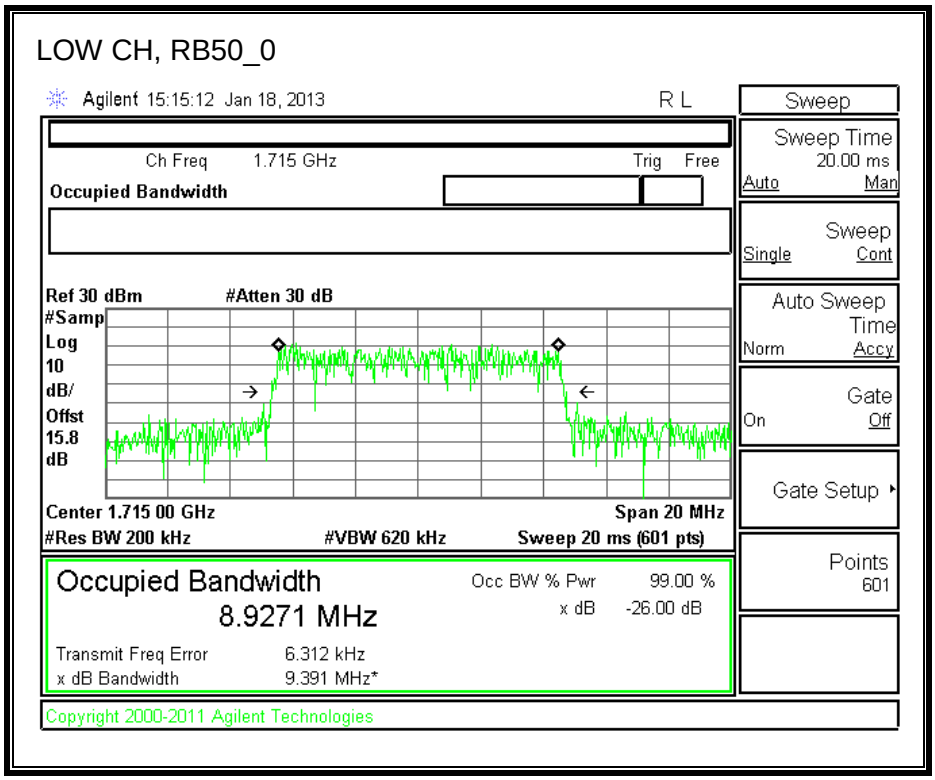

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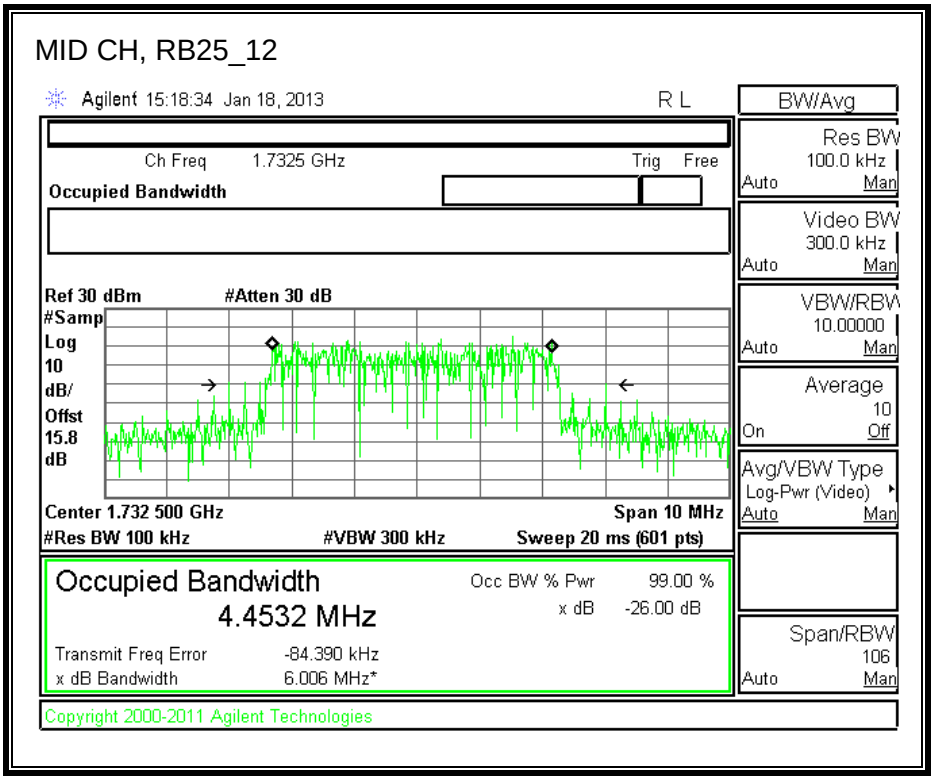

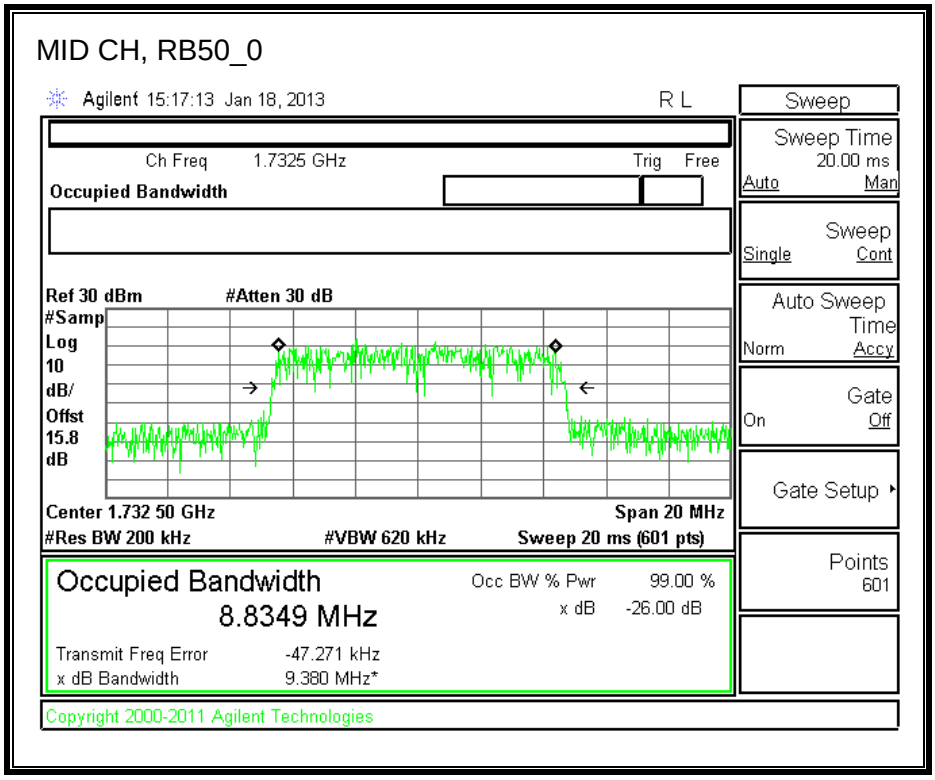

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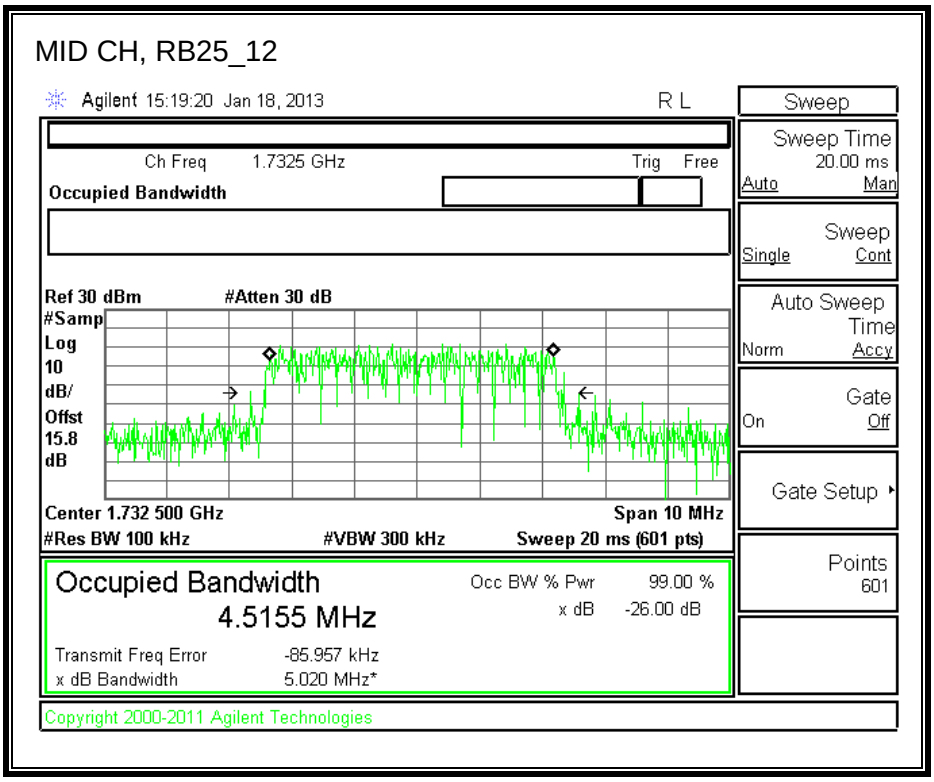

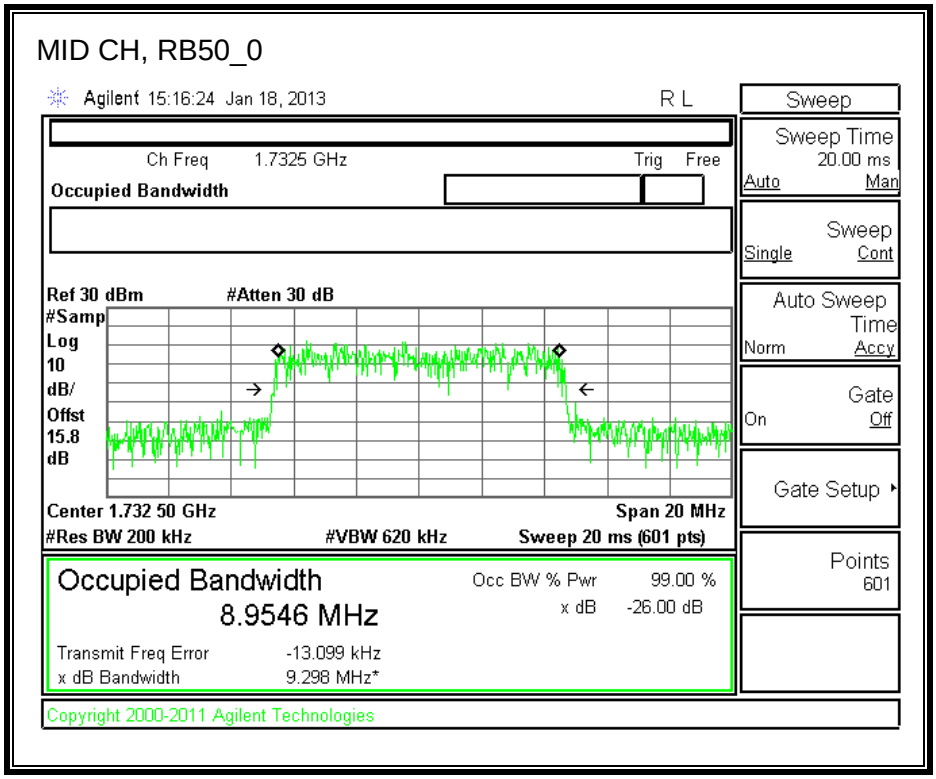

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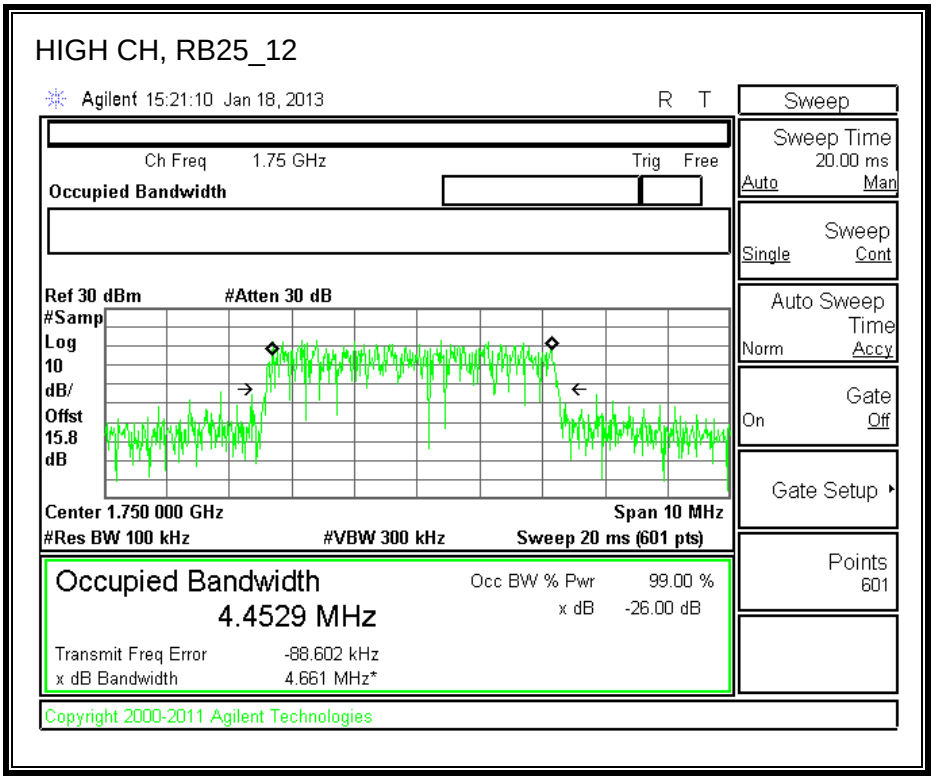

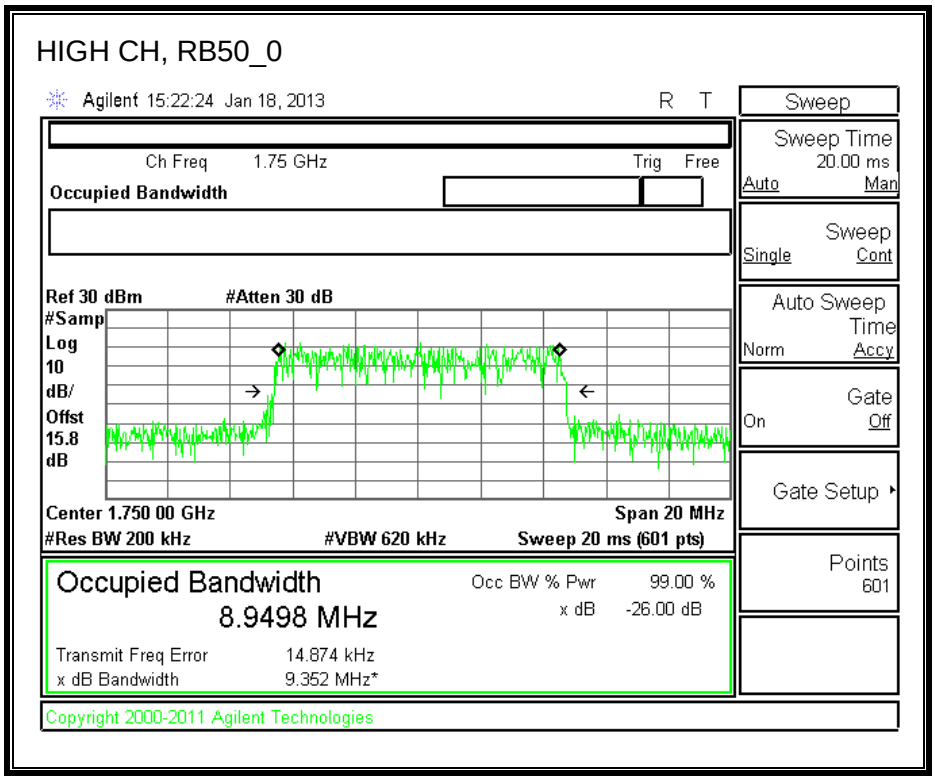

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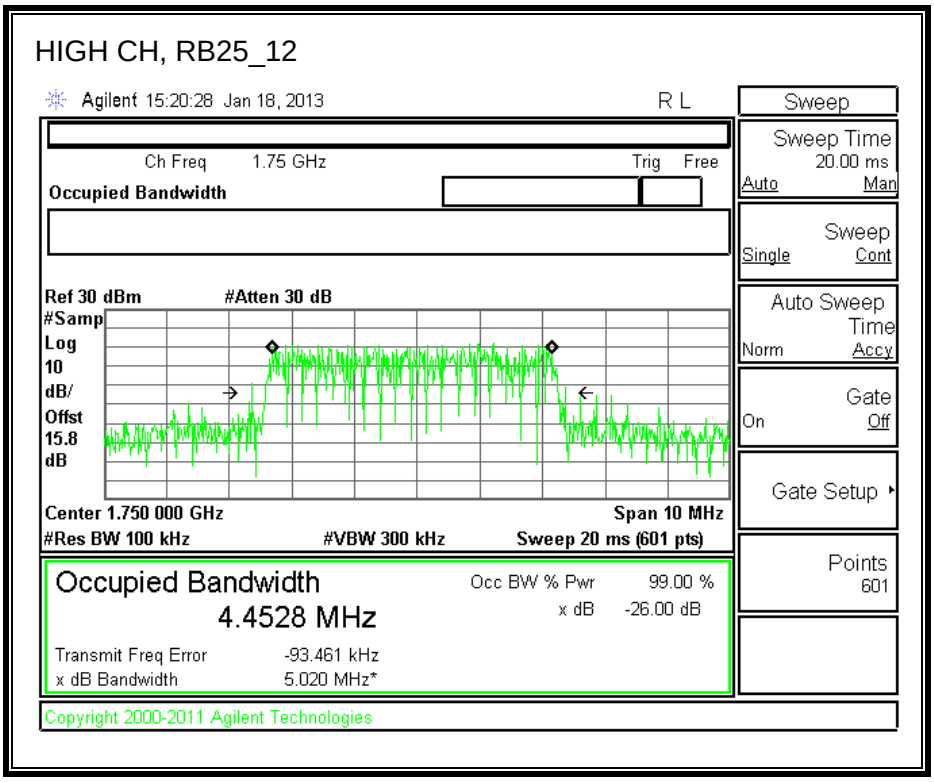

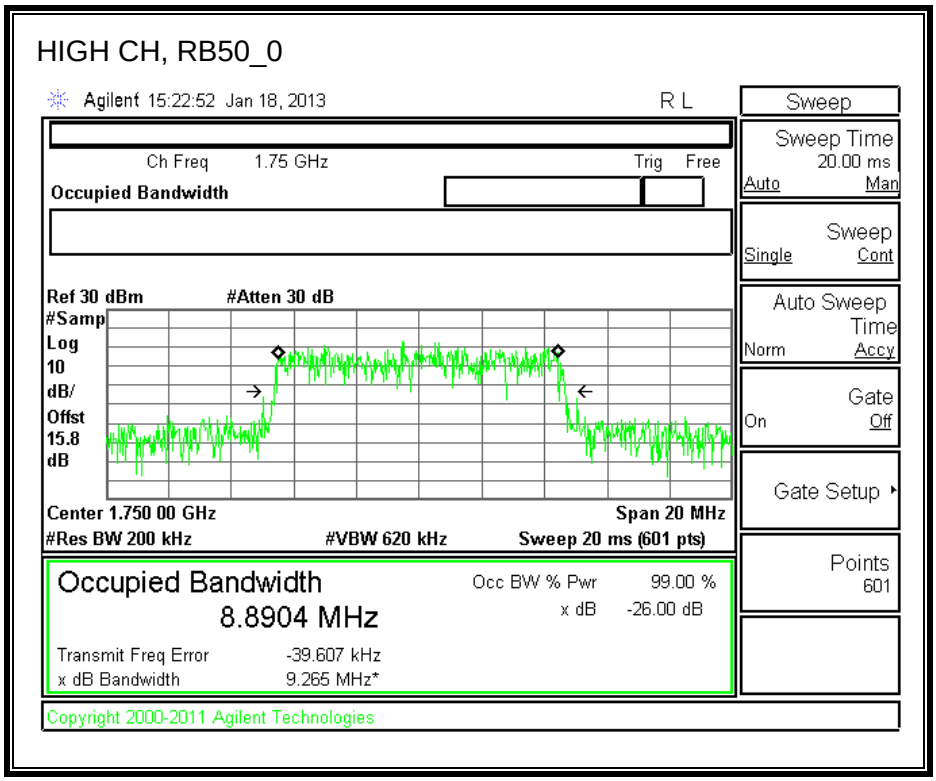

8.1.5. *LTE Band 5*

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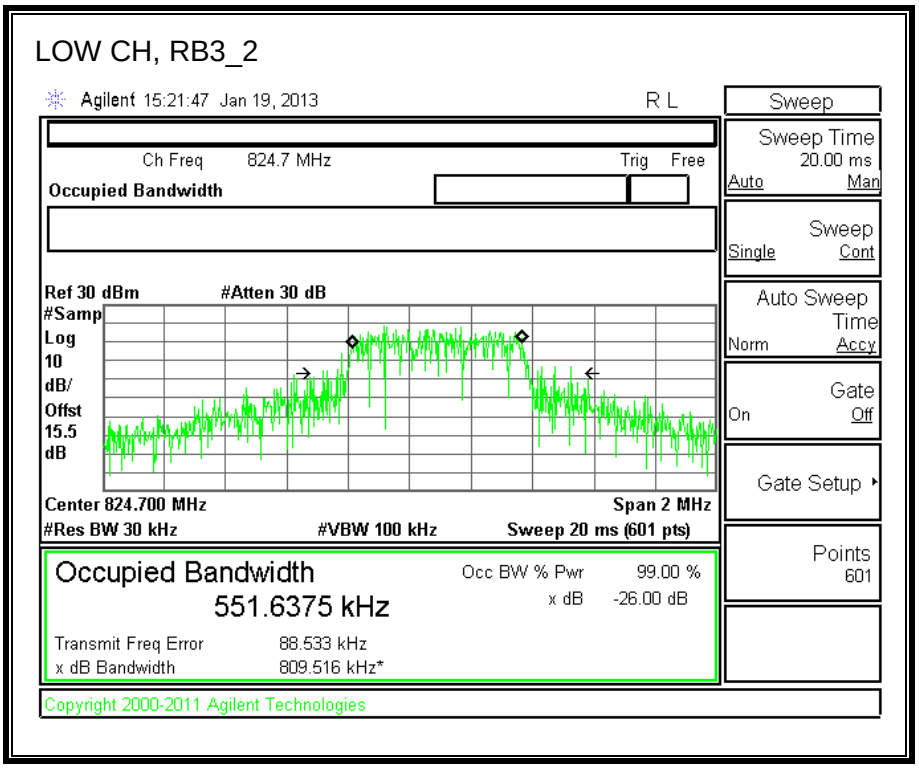

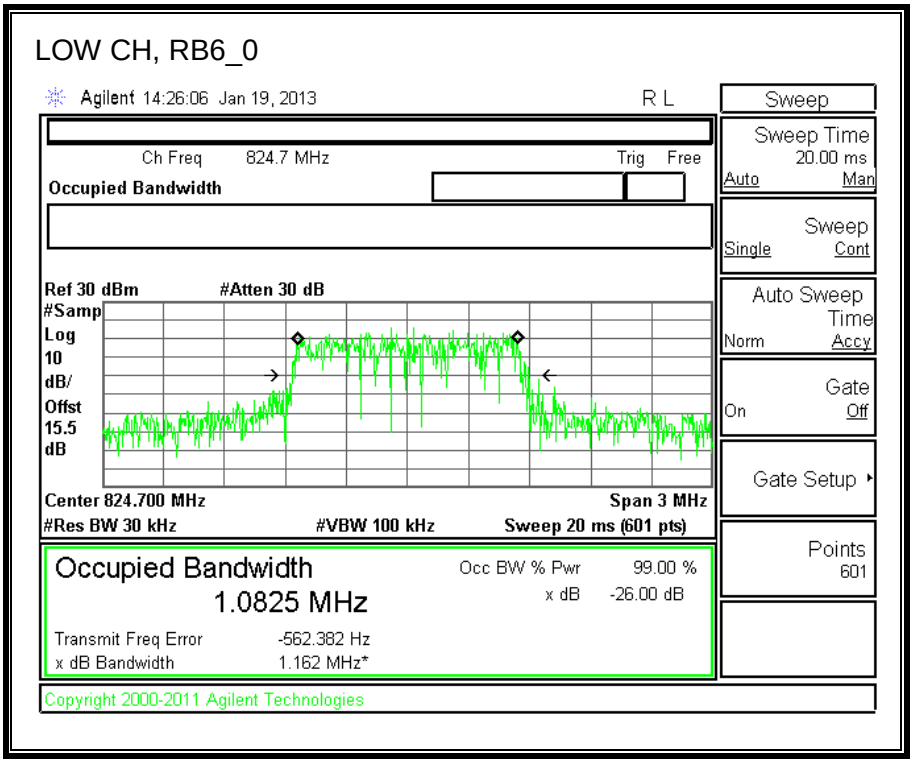

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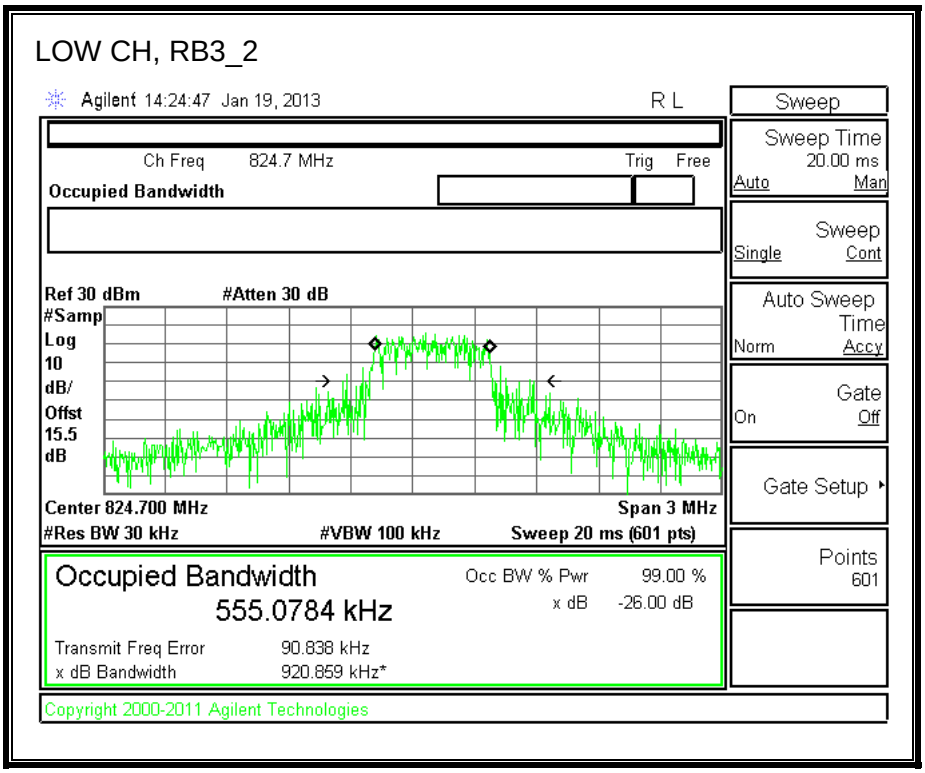

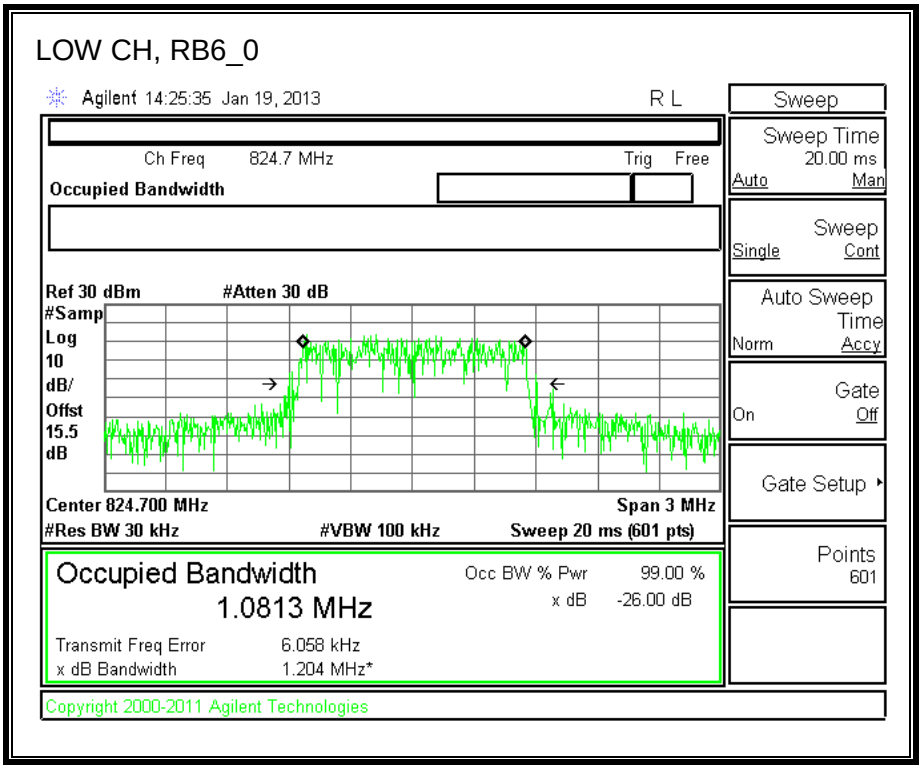

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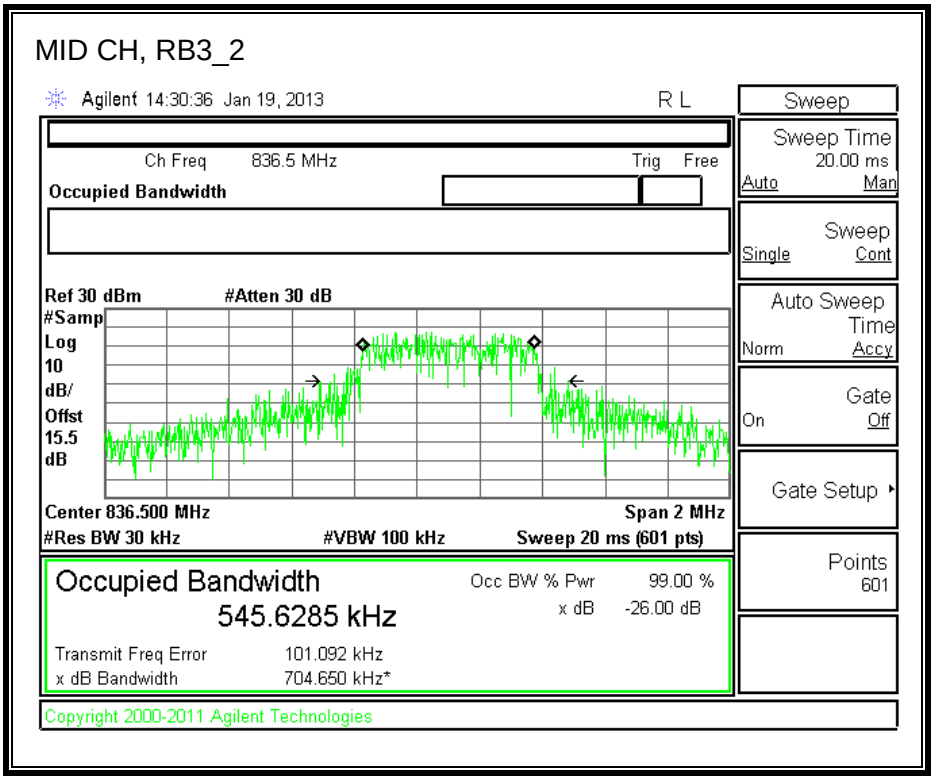

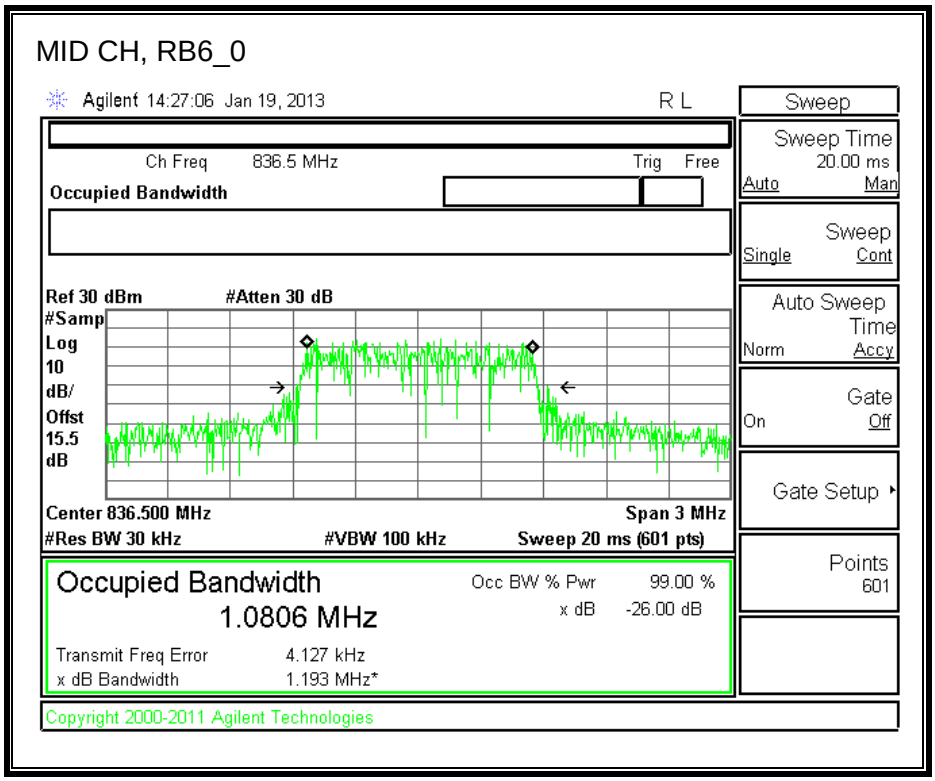

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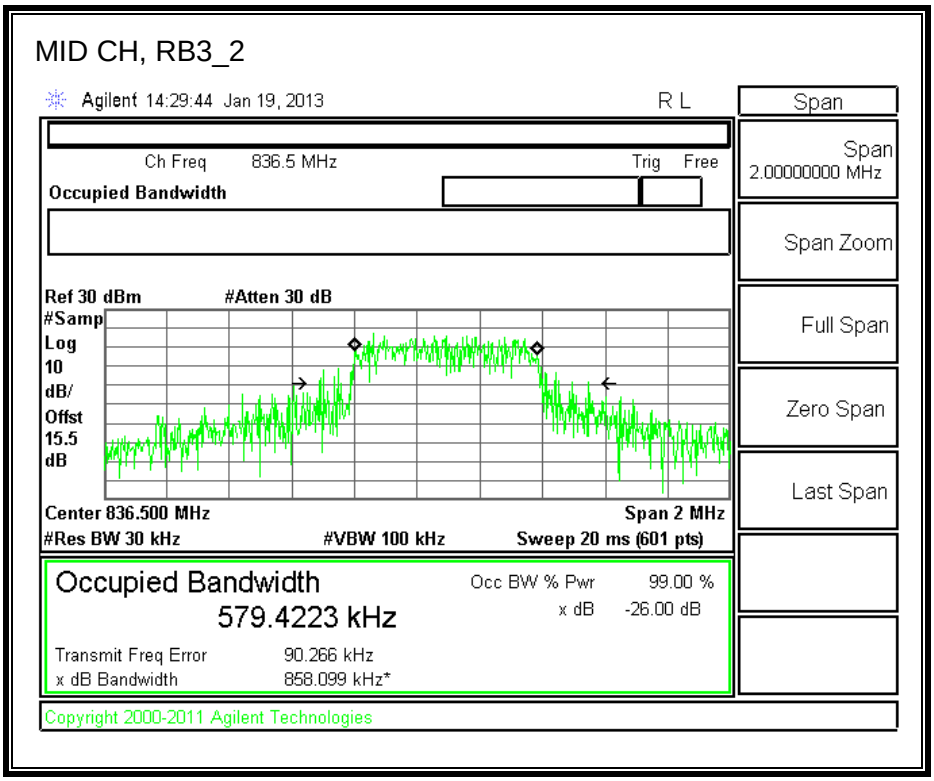

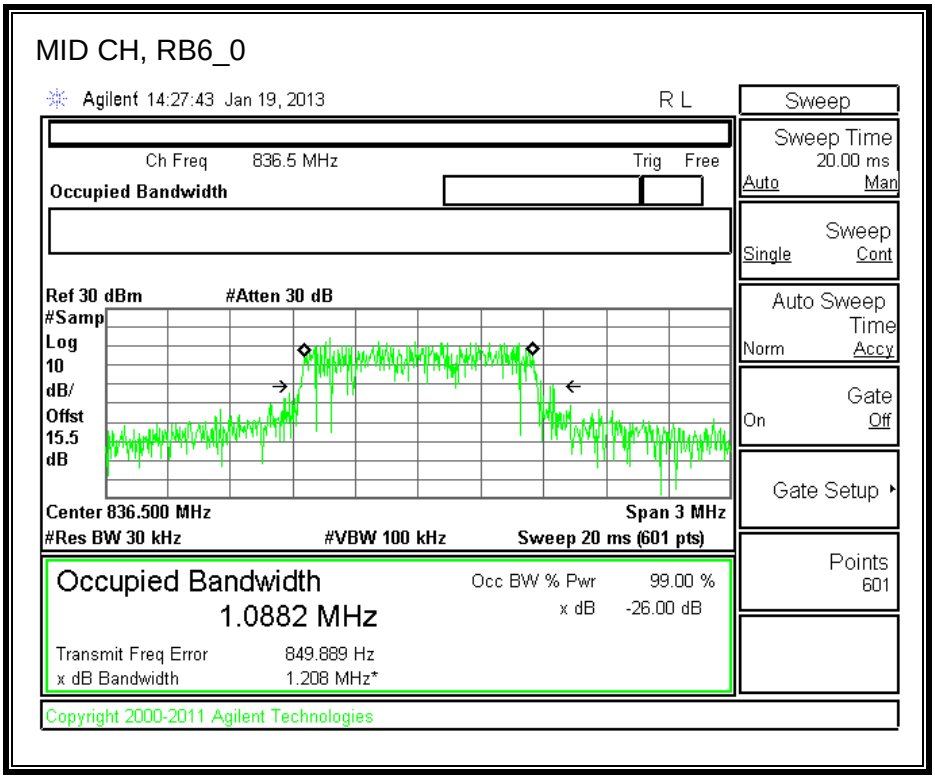

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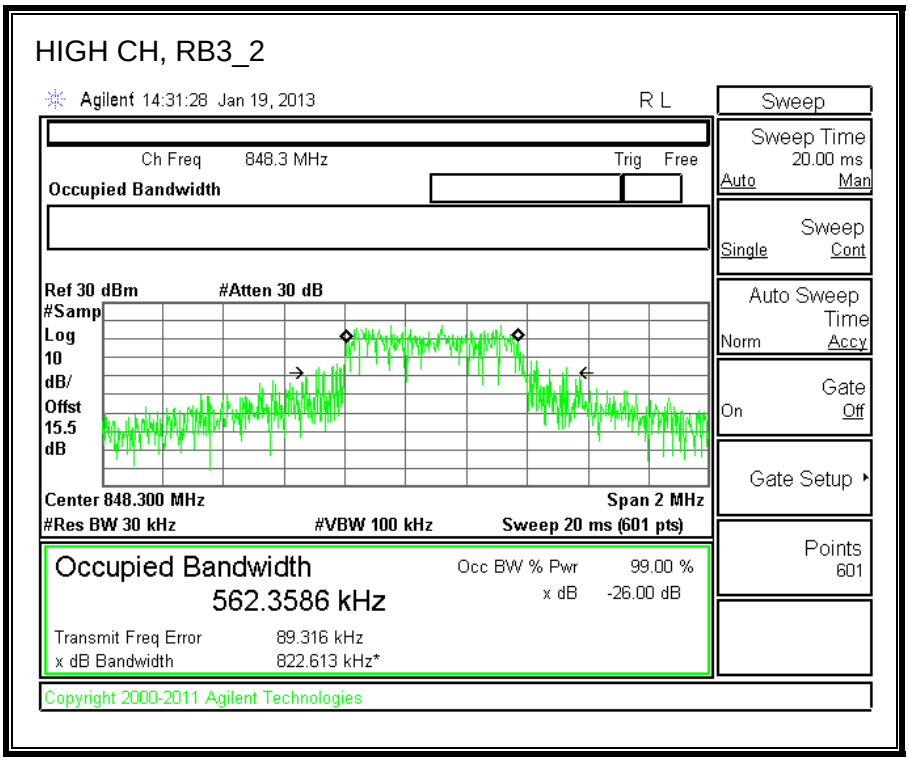

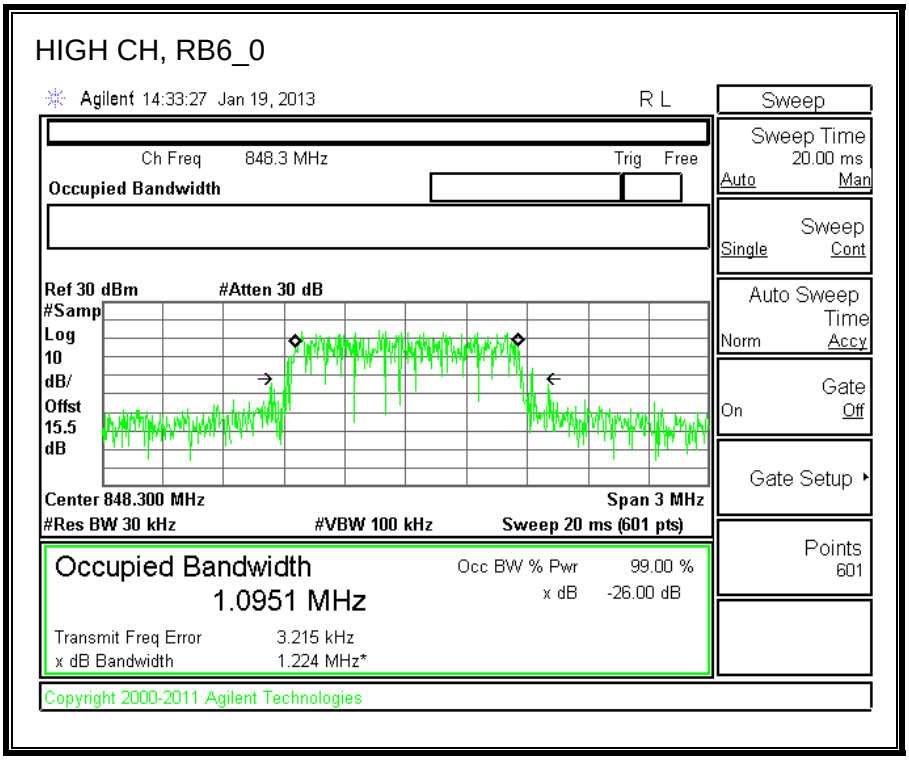

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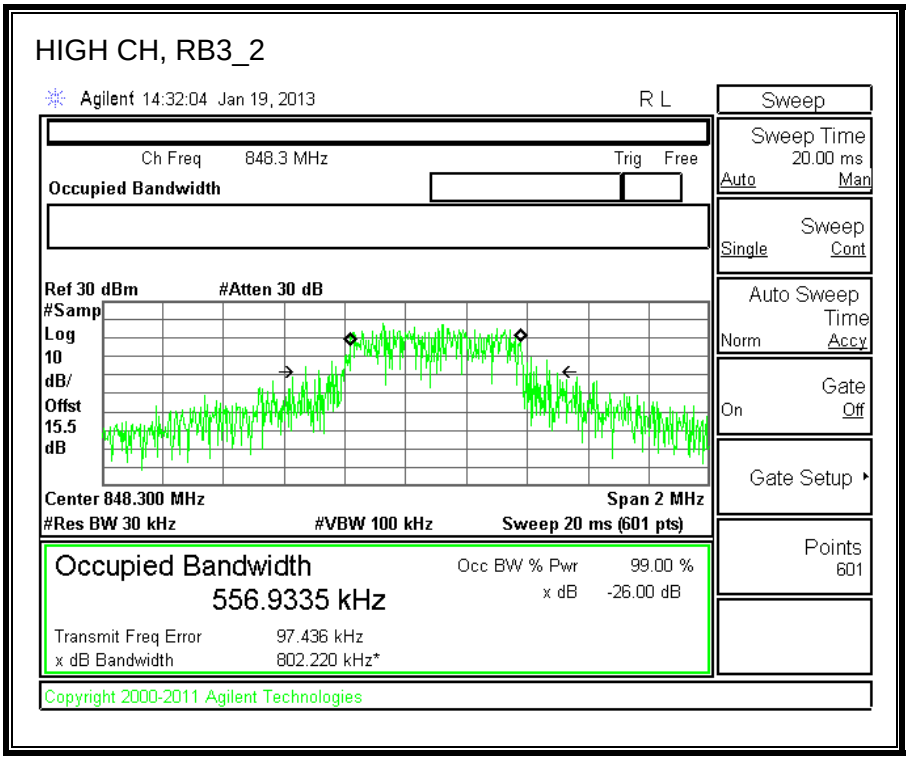

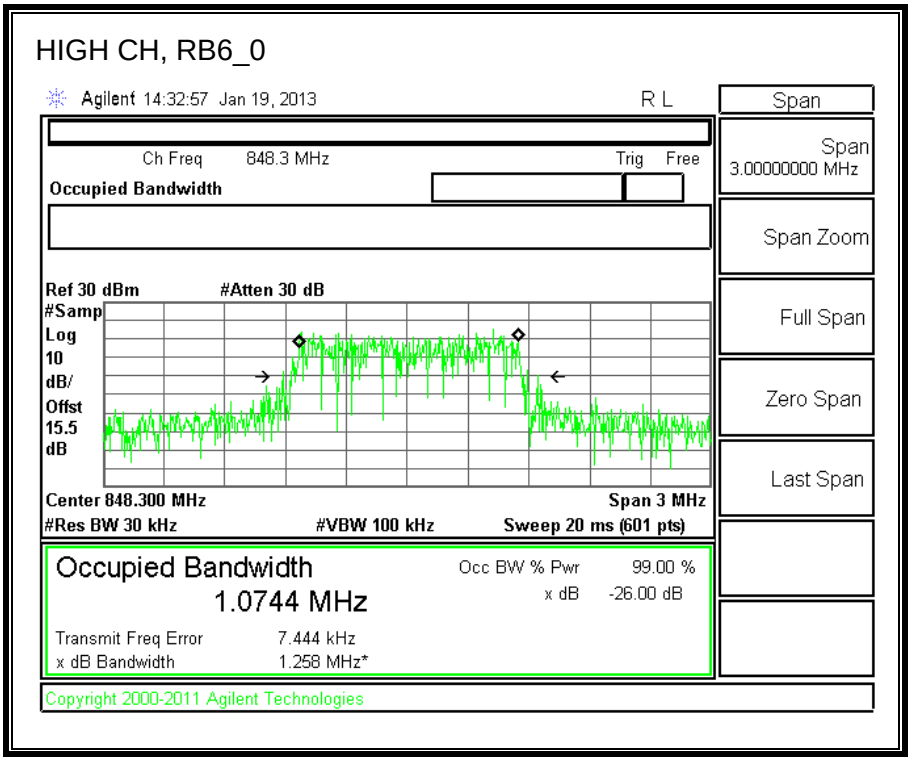

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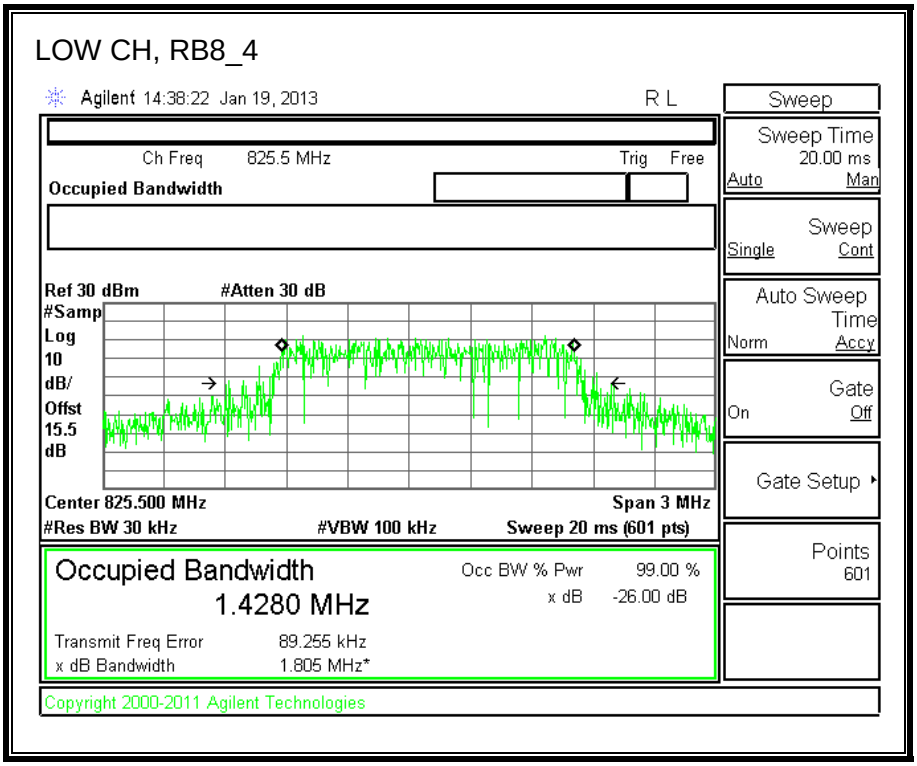

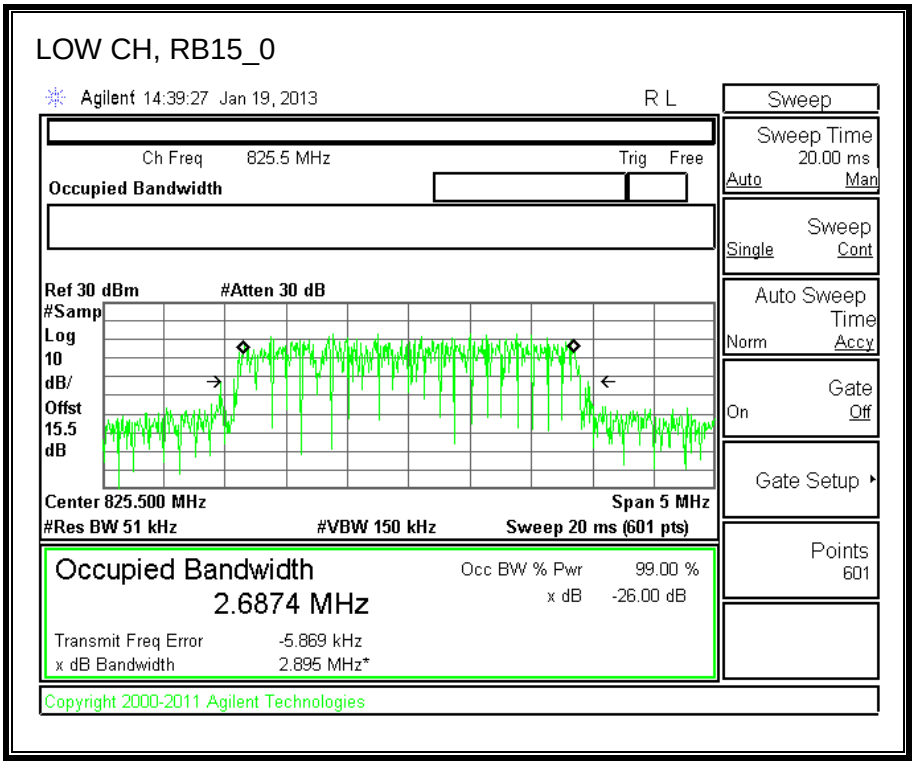

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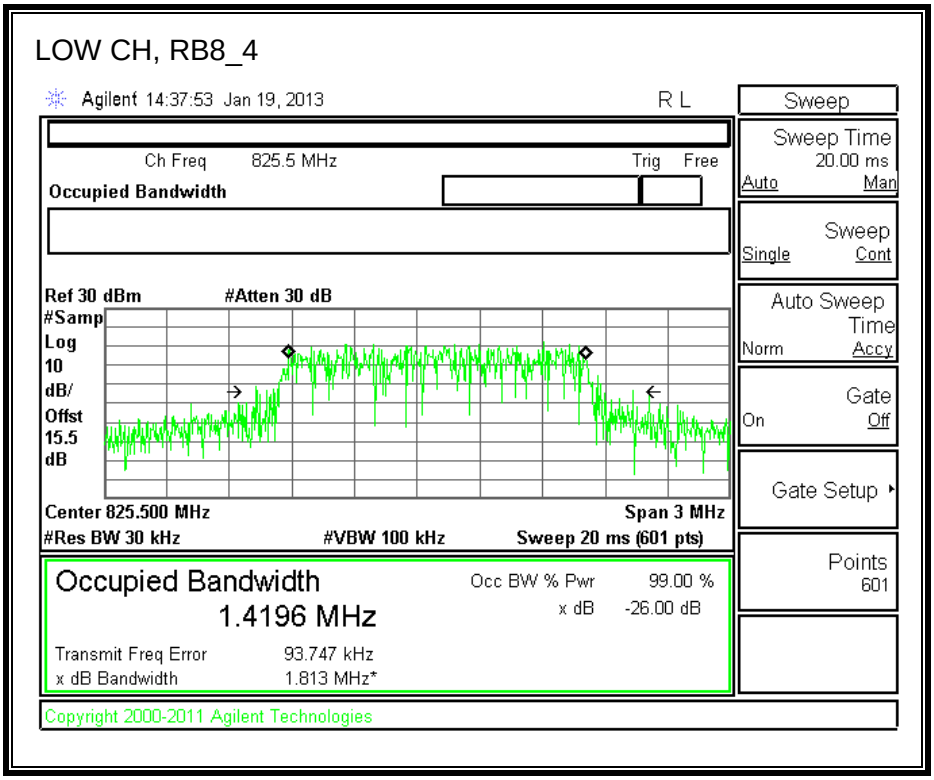

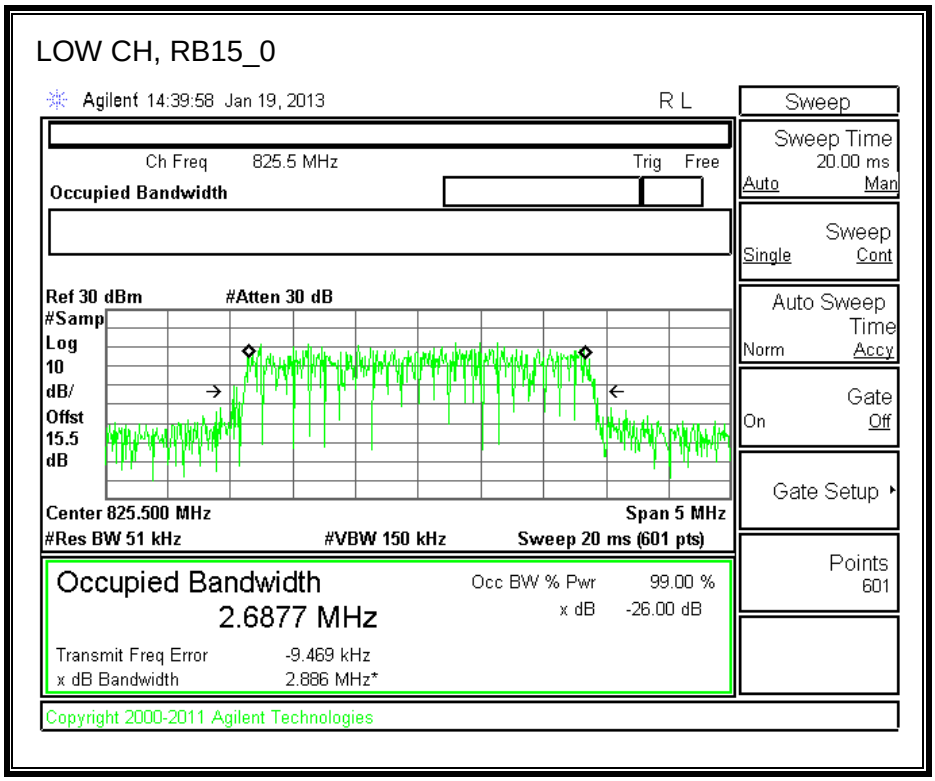

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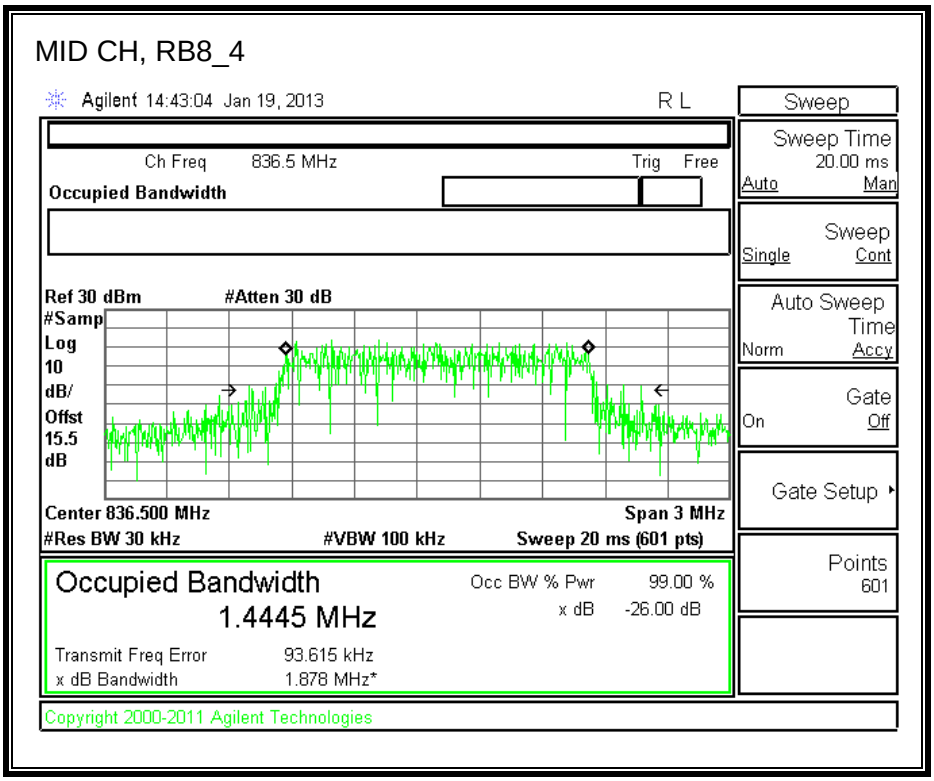

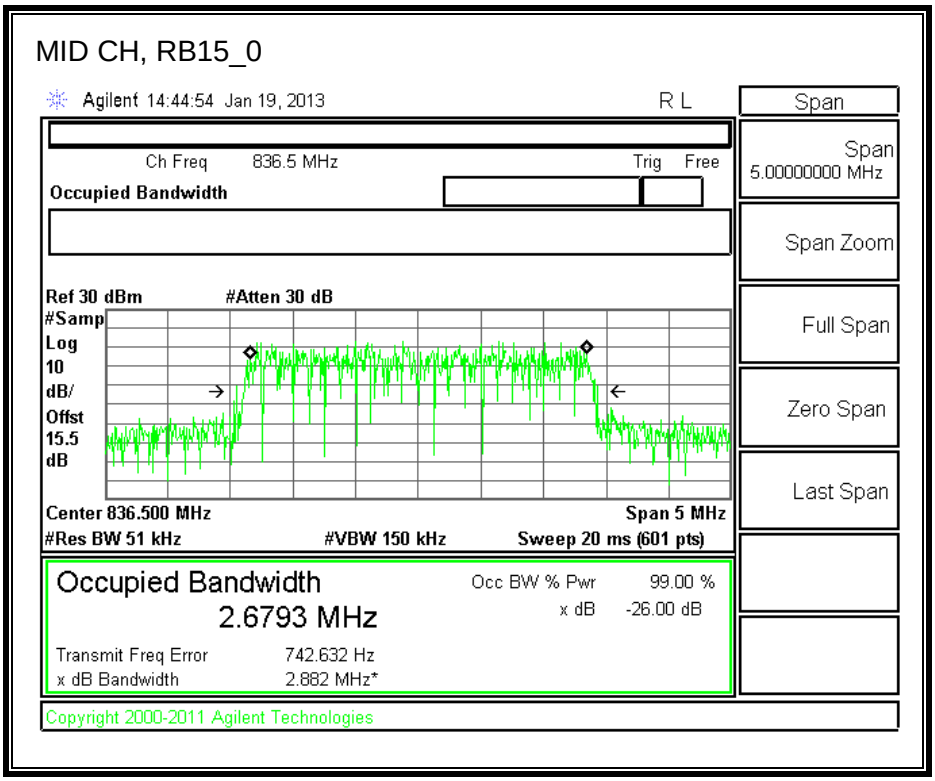

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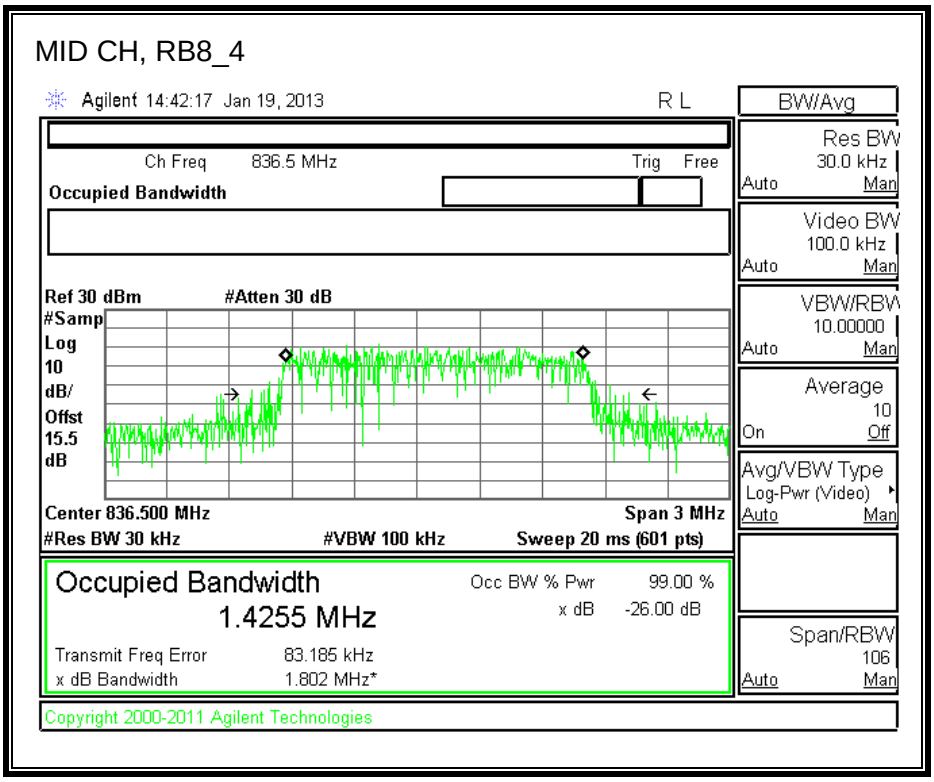
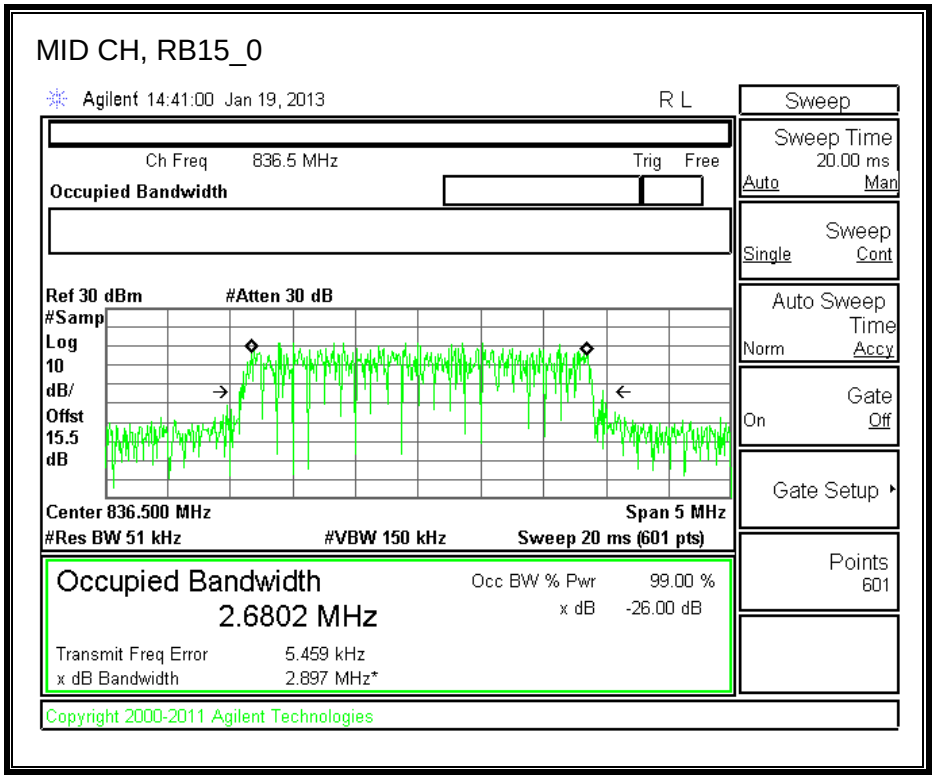
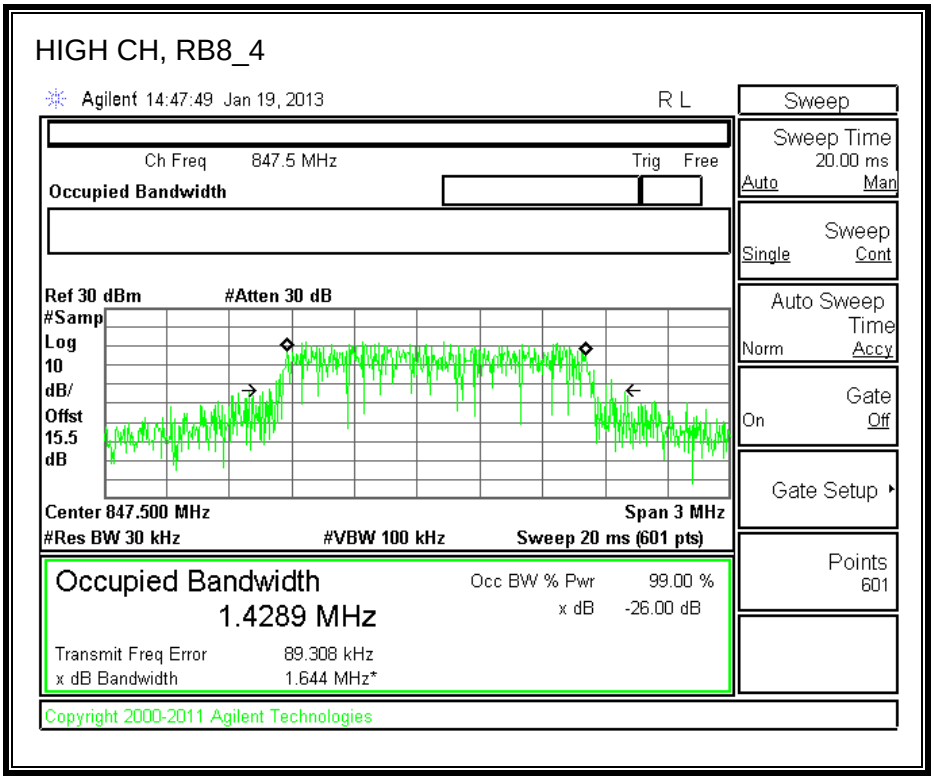


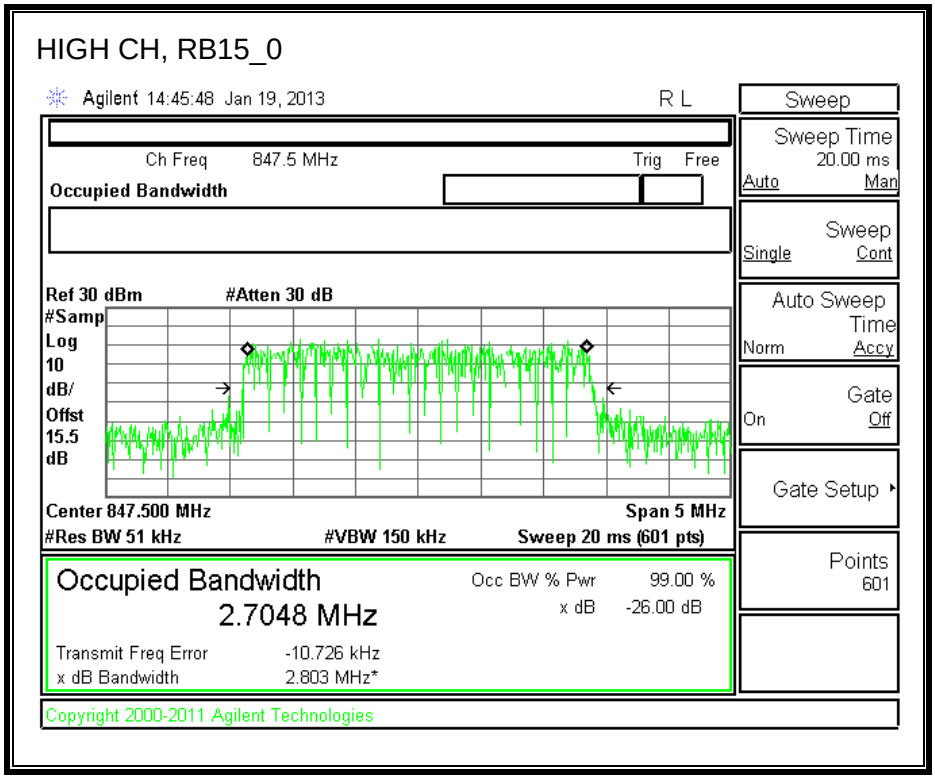


3.0MHz BAND WIDTH QPSK

HIGH CH, RB8_4

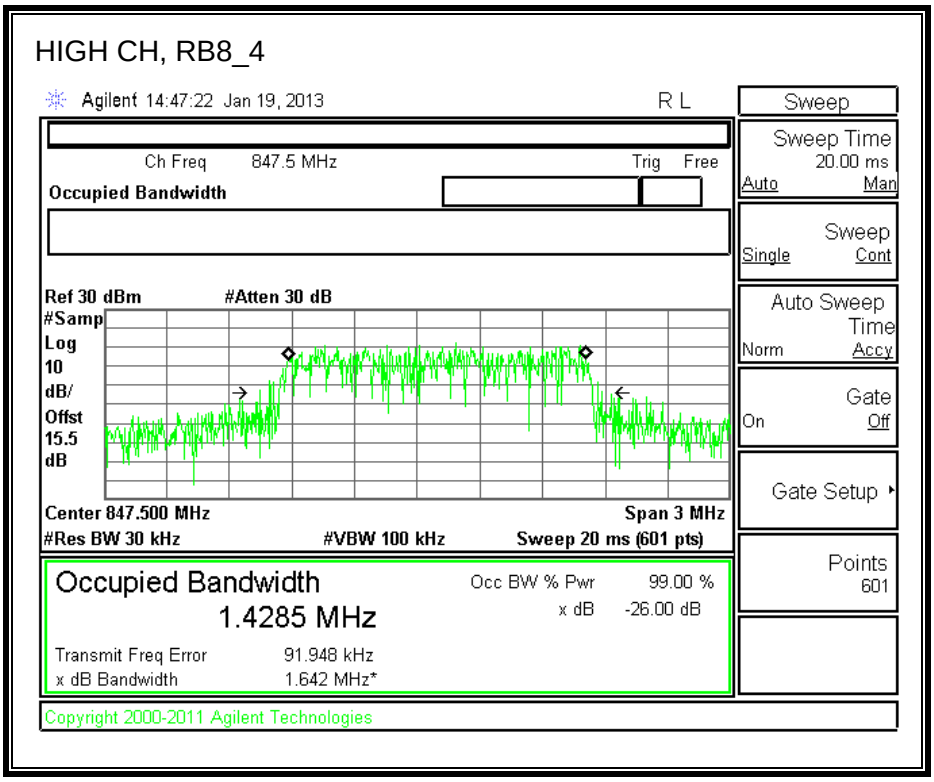


HIGH CH, RB15_0

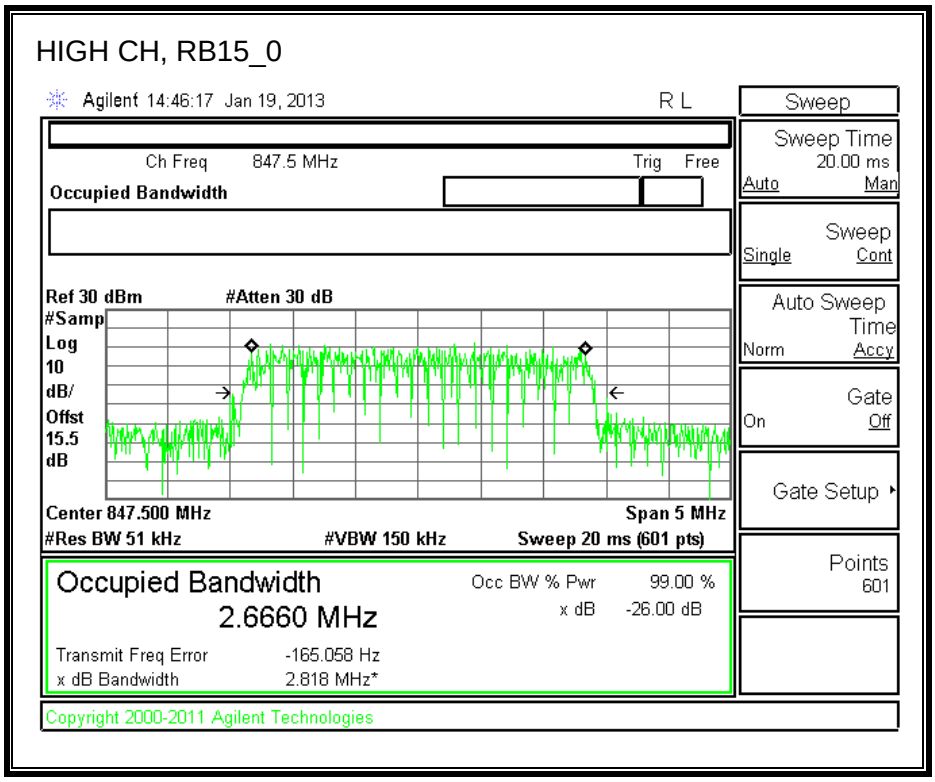


3.0MHz BAND WIDTH 16QAM

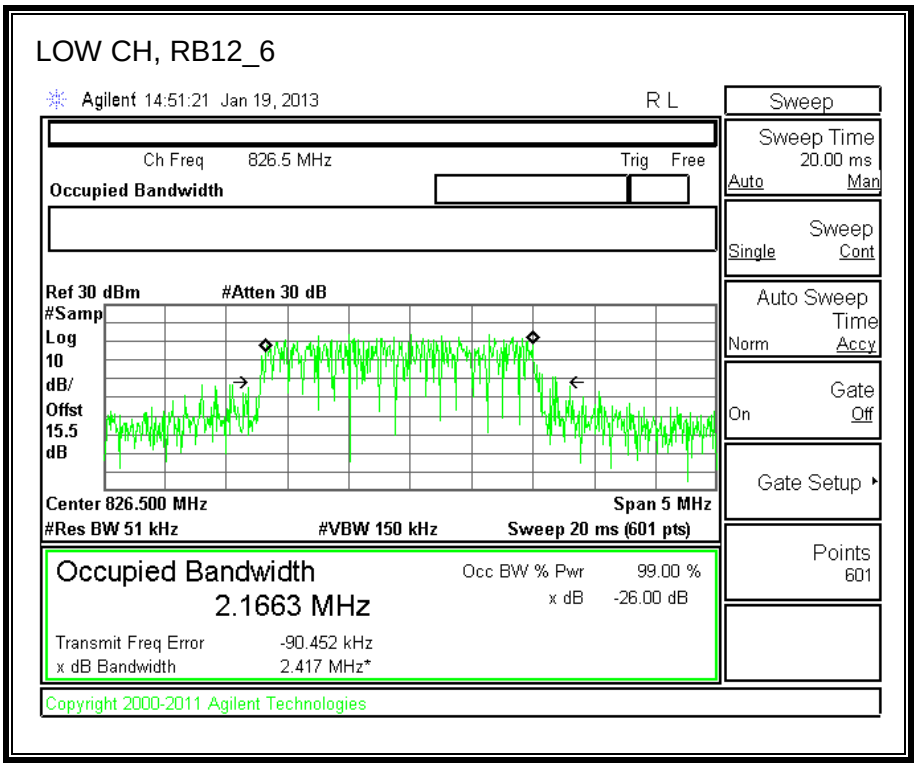
HIGH CH, RB8_4

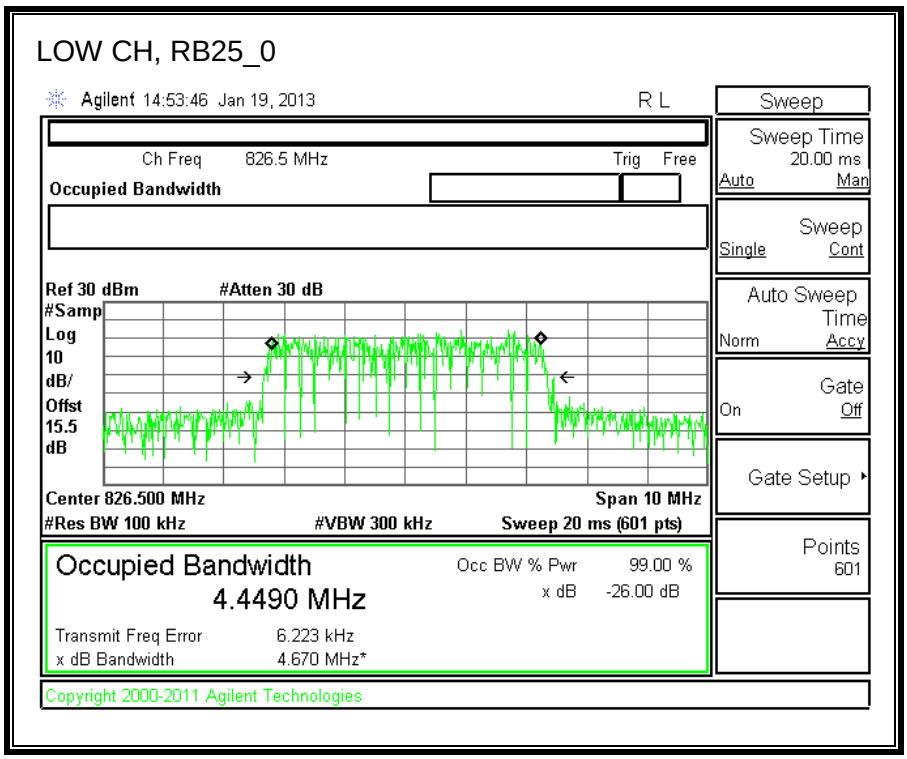


HIGH CH, RB15_0



5.0MHz BAND WIDTH QPSK





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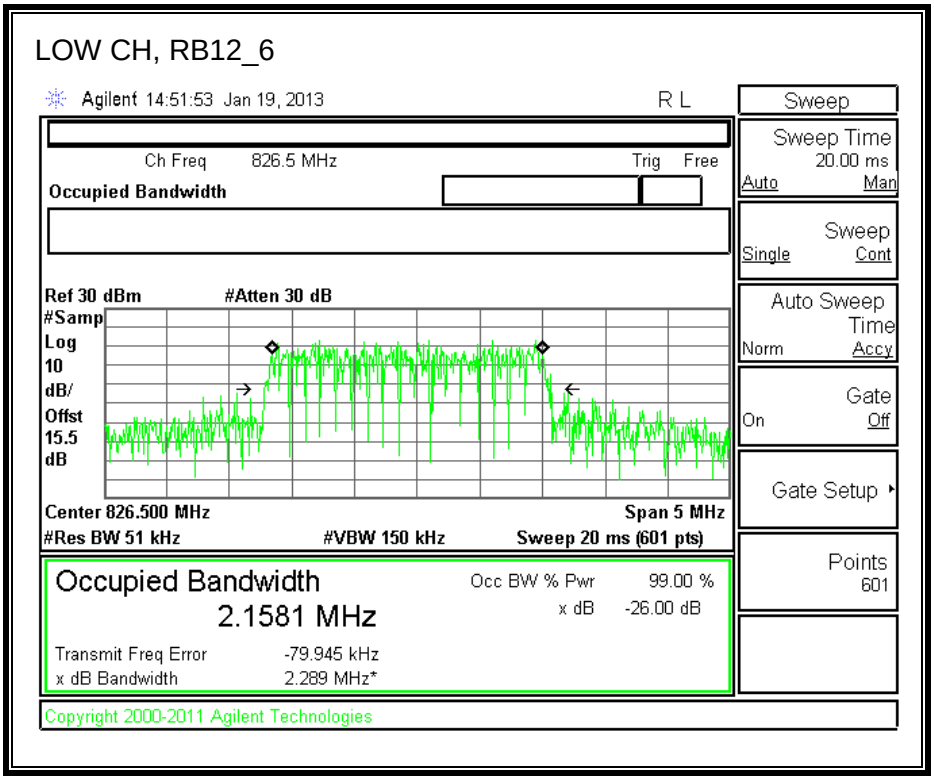

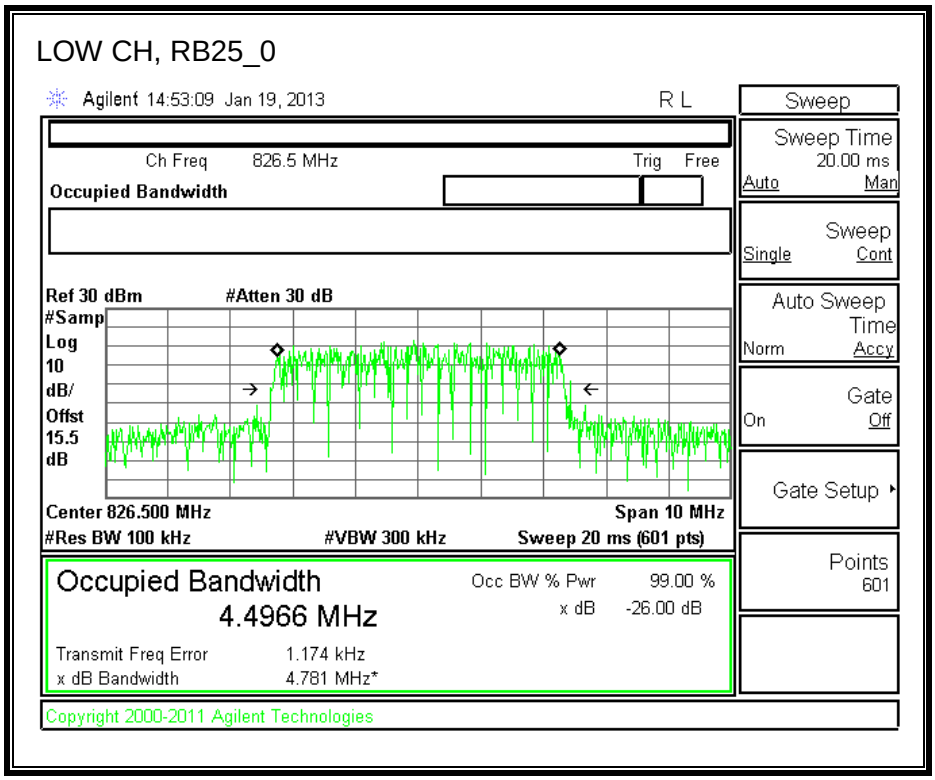

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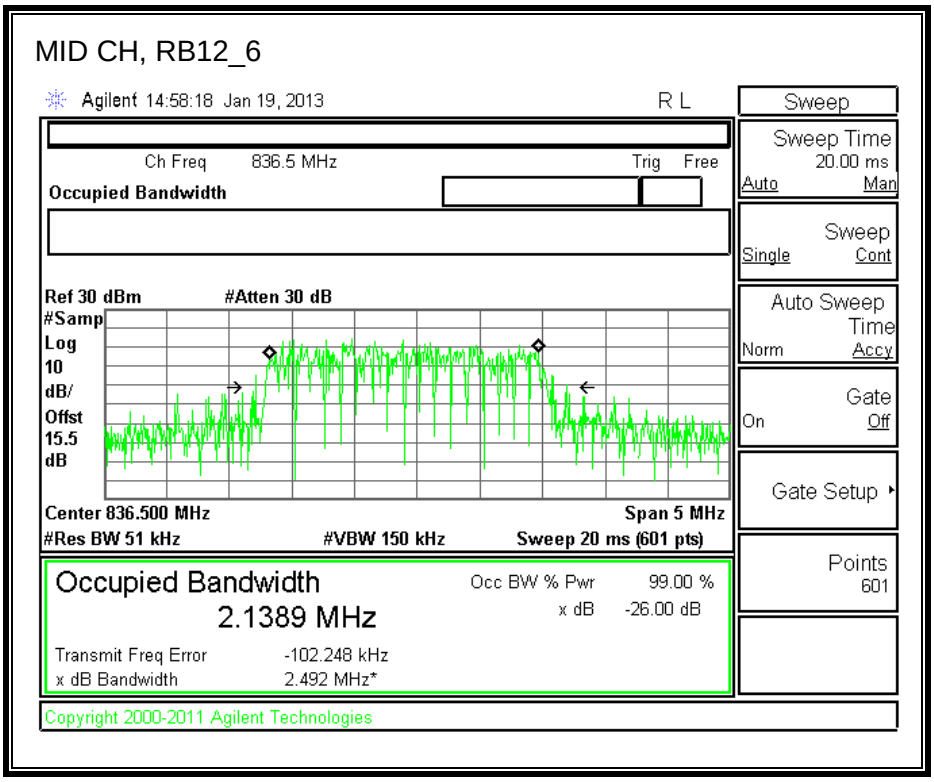

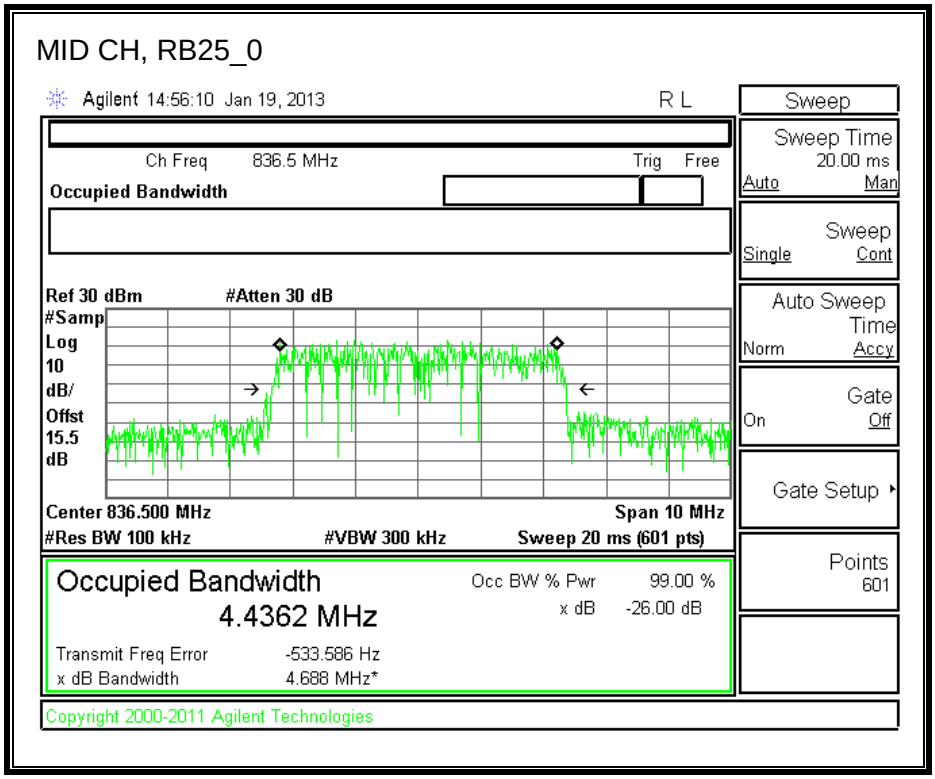

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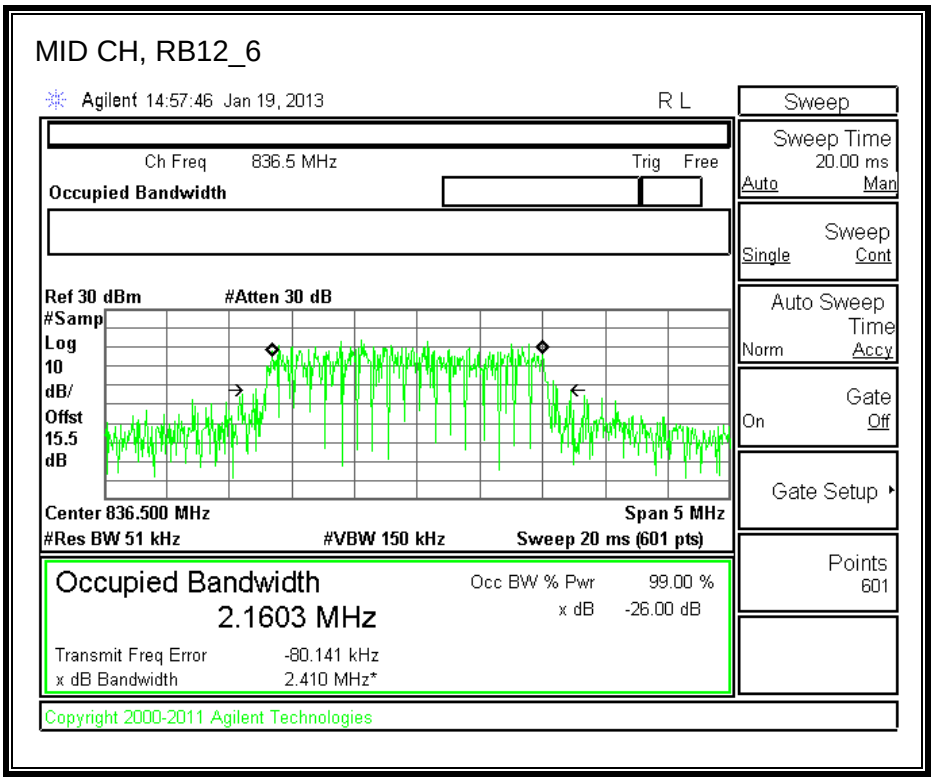

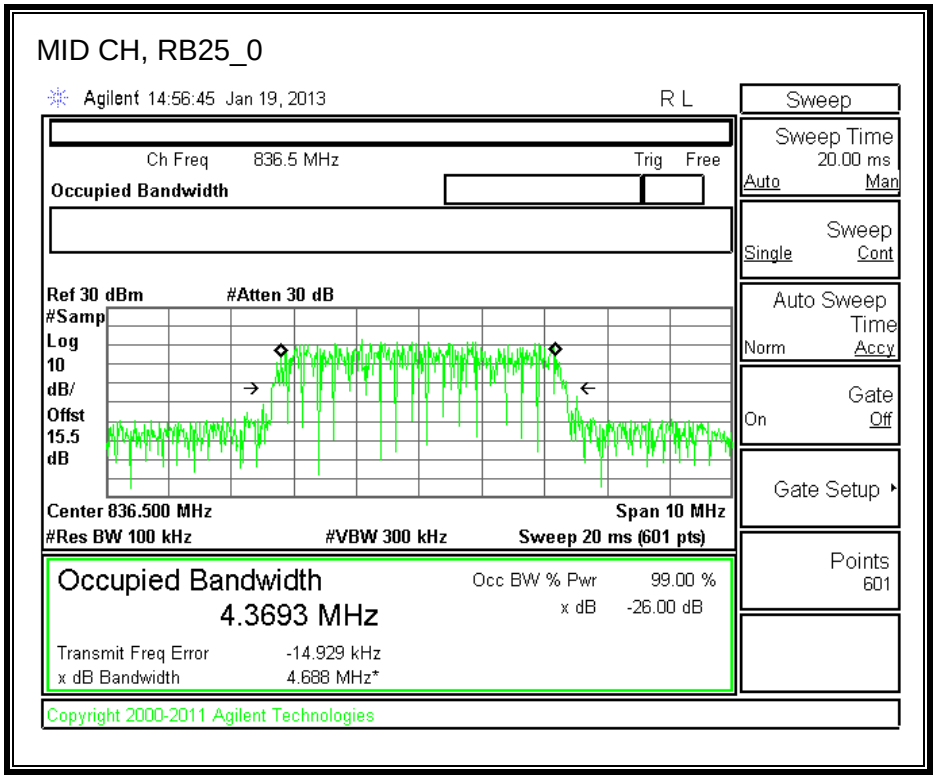

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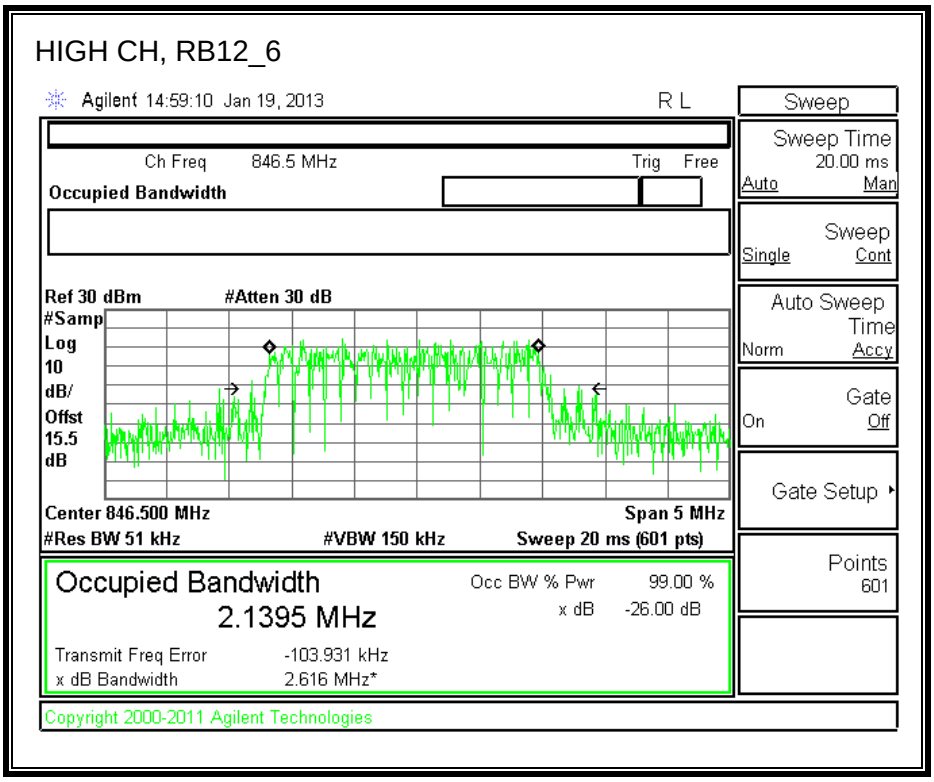
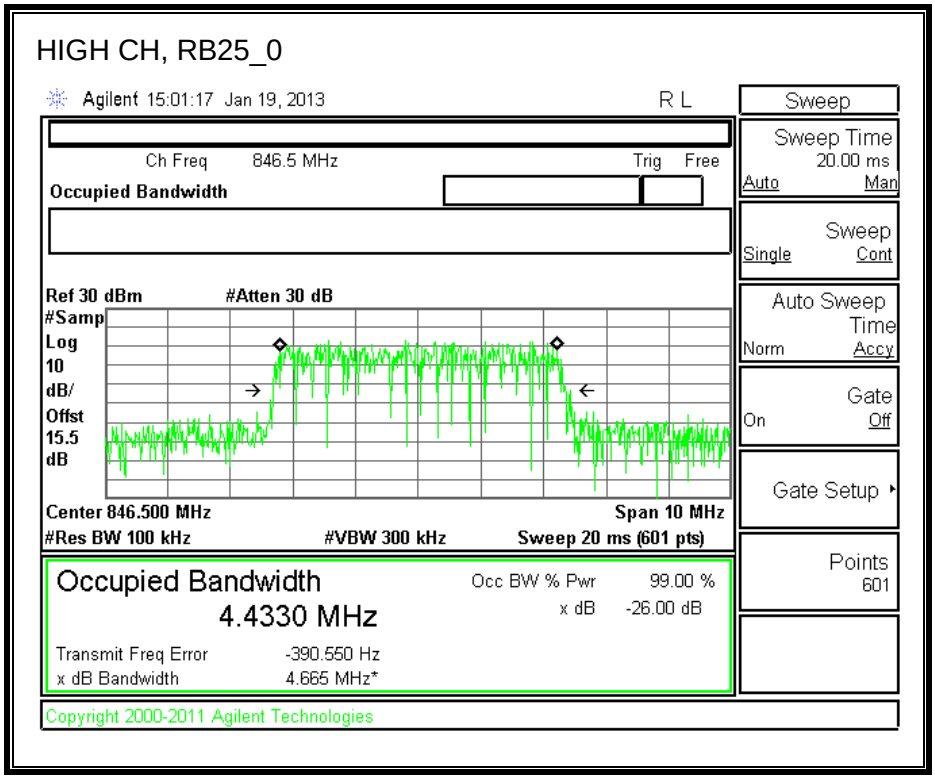
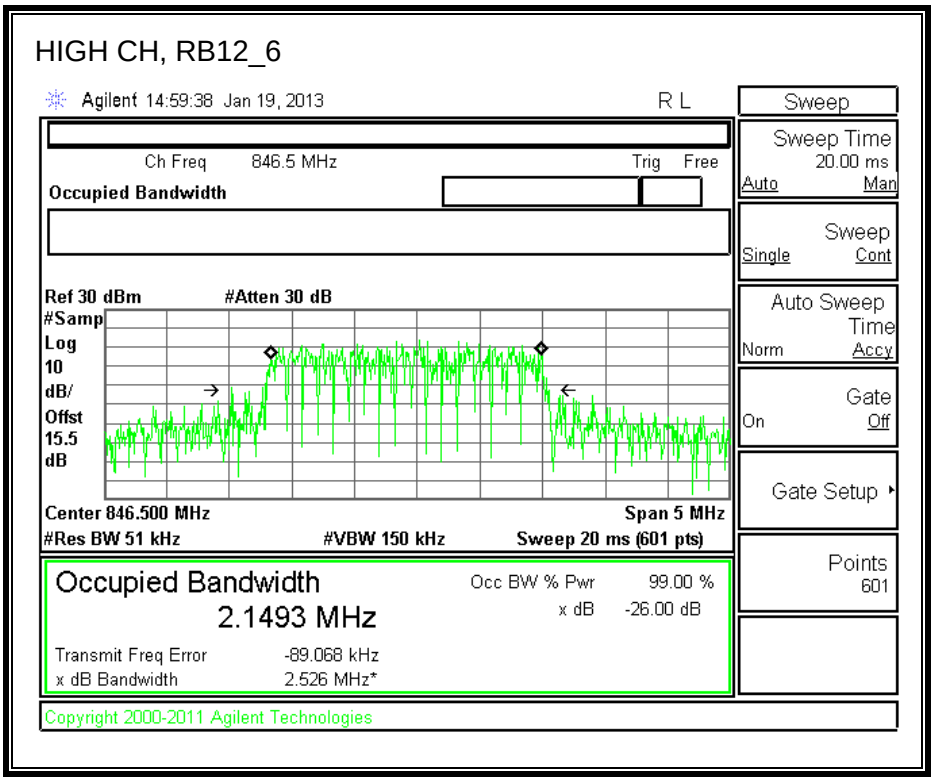
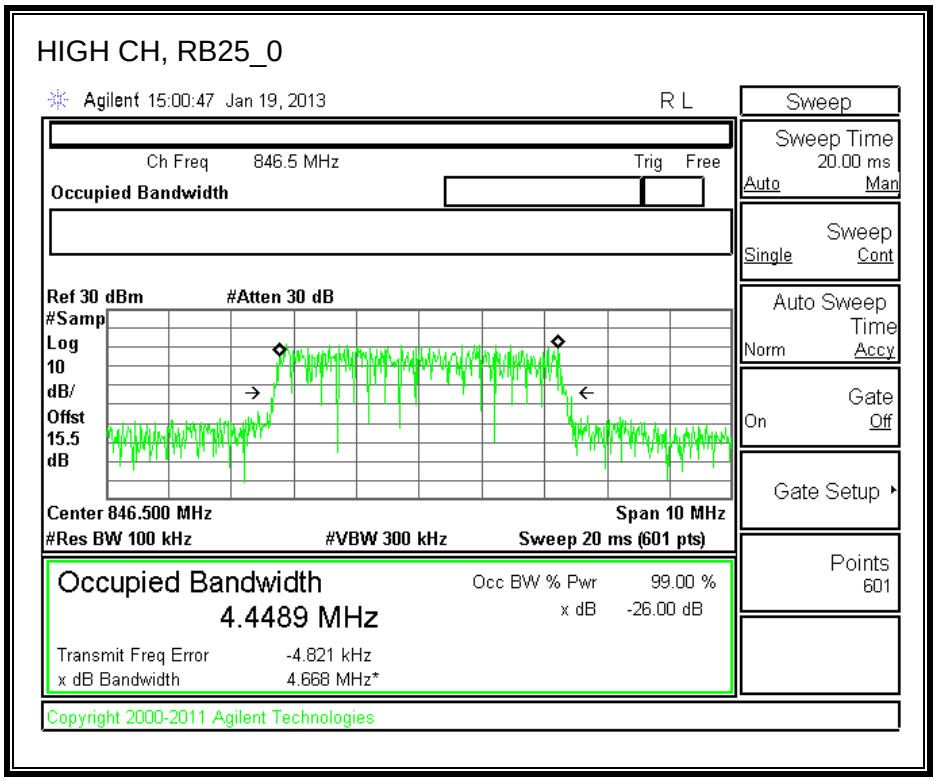




3.0MHz BAND WIDTH 16QAM





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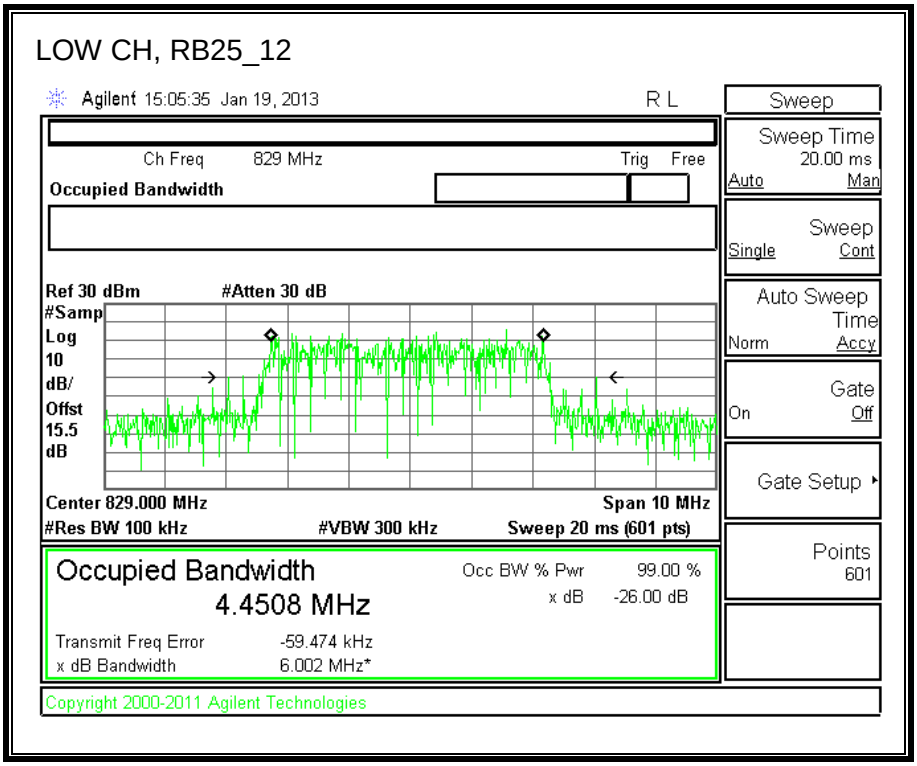

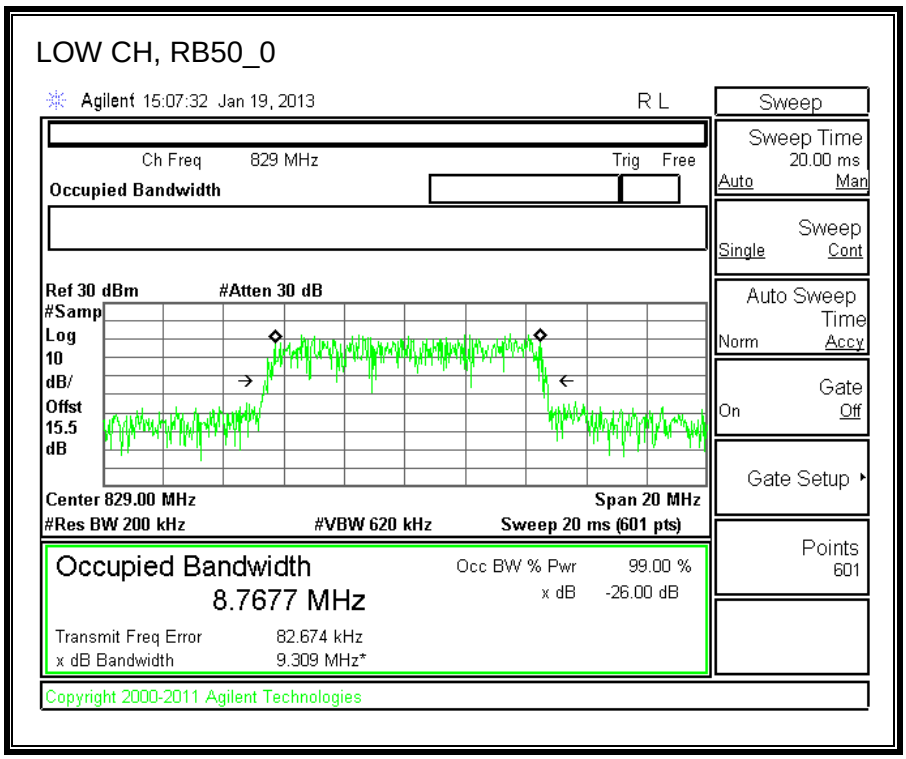

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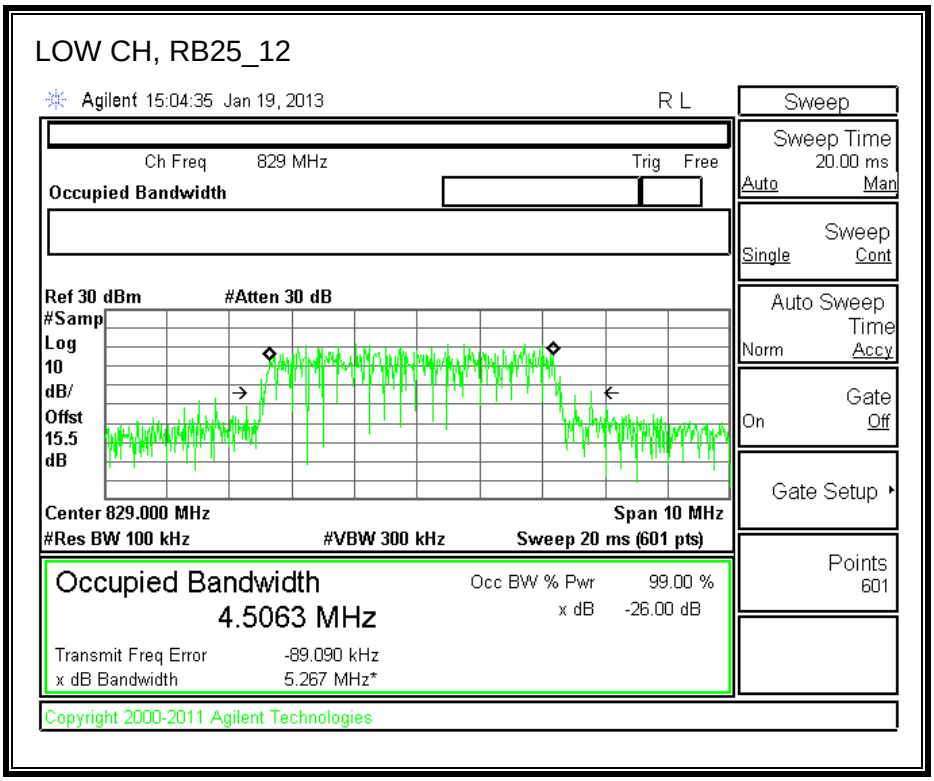

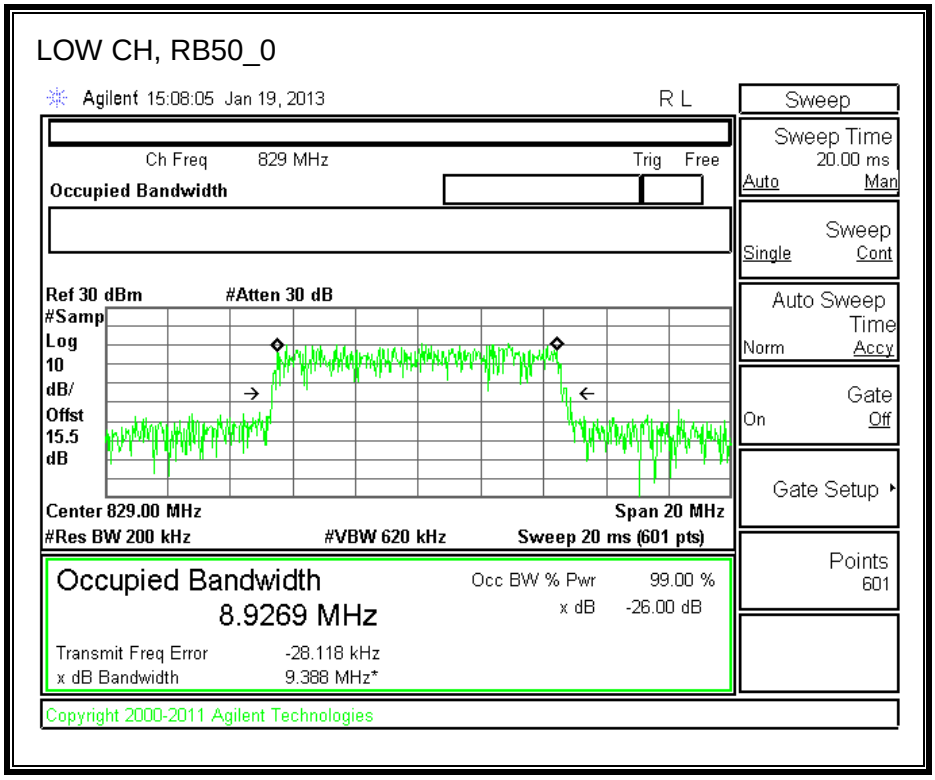

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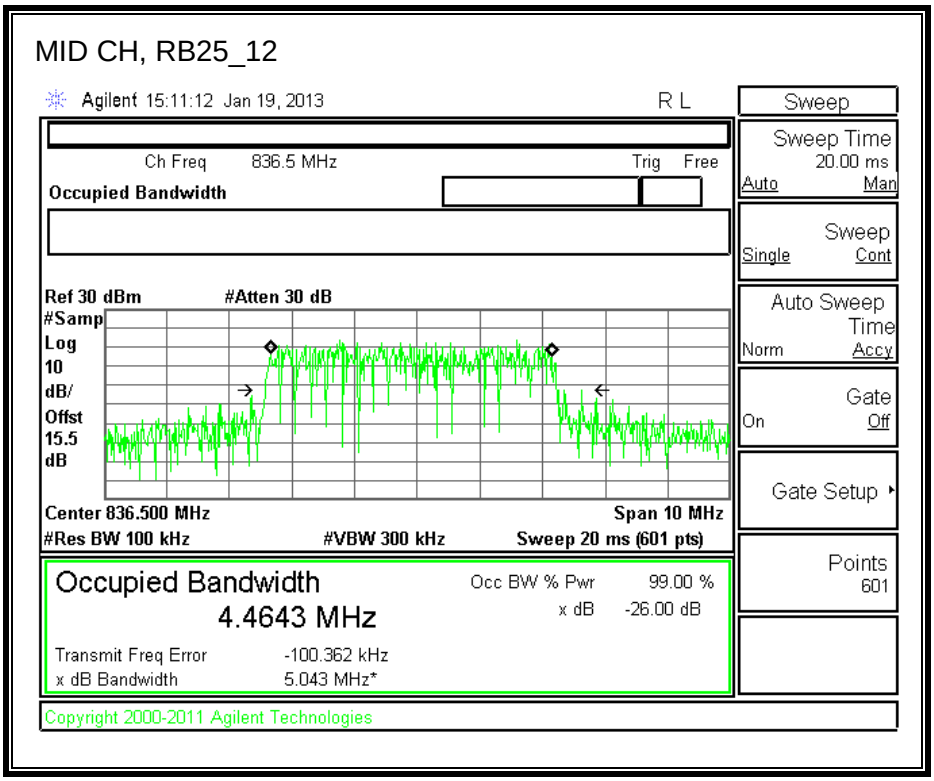

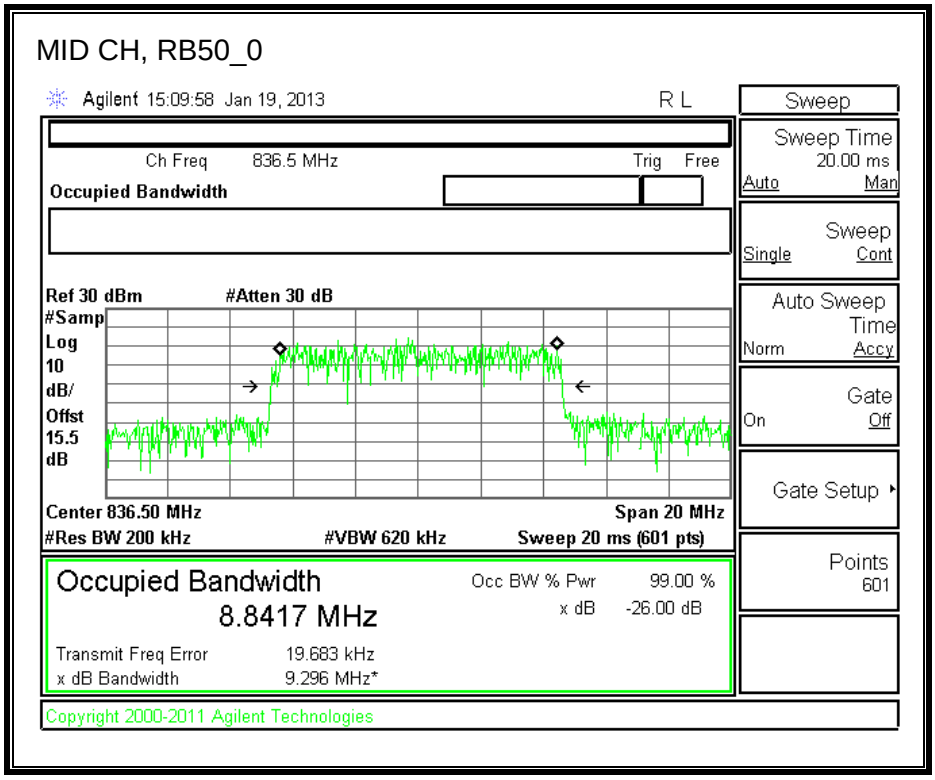

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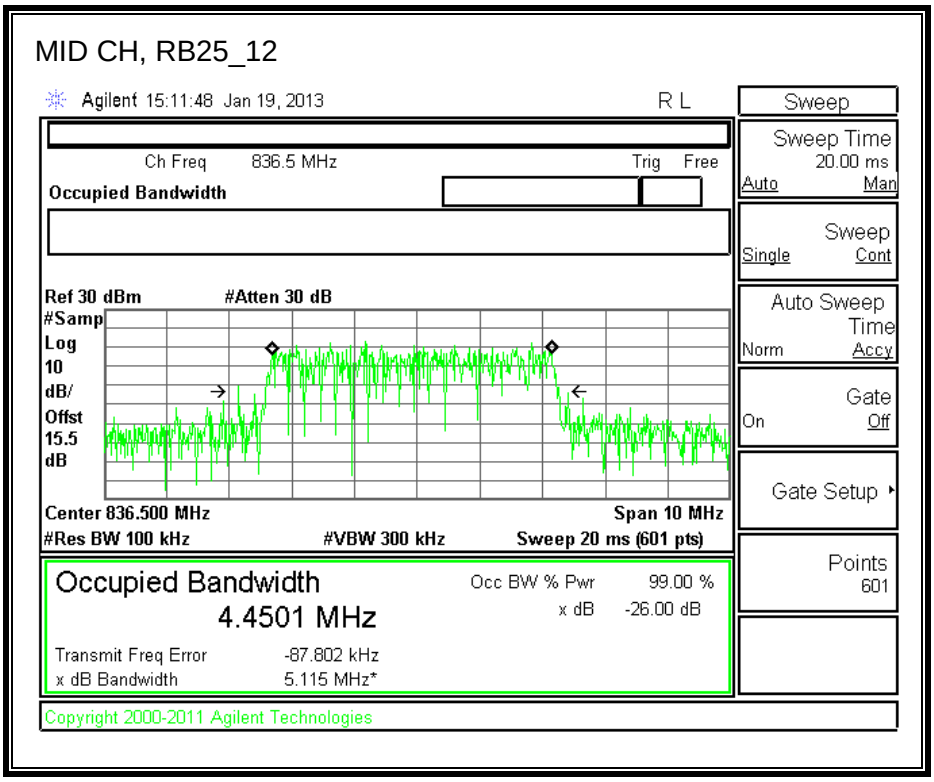
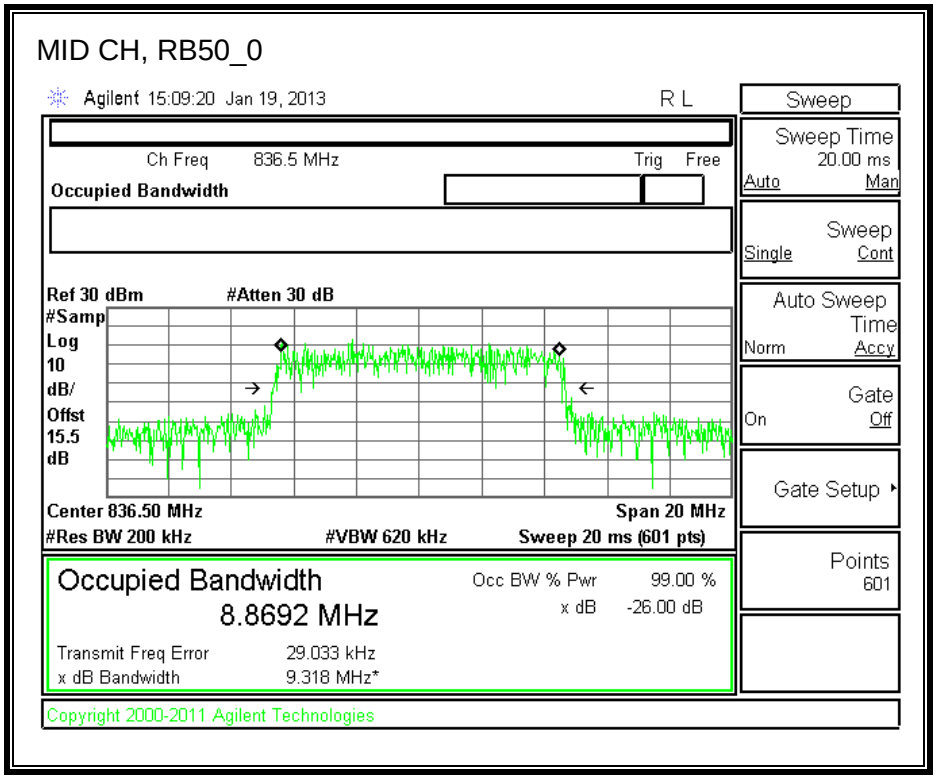
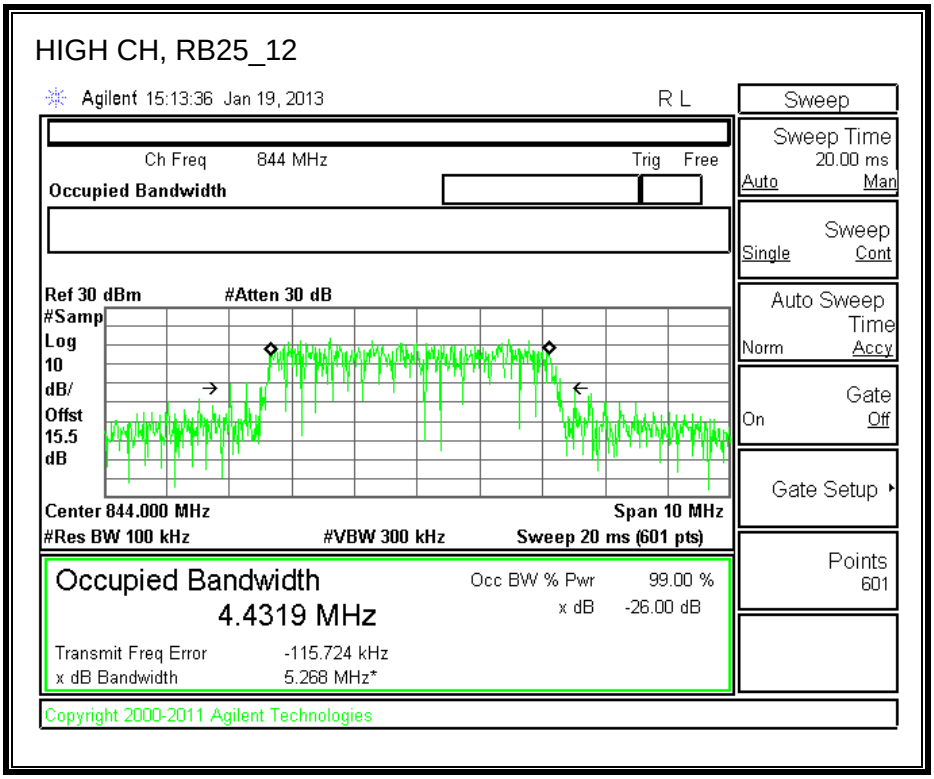
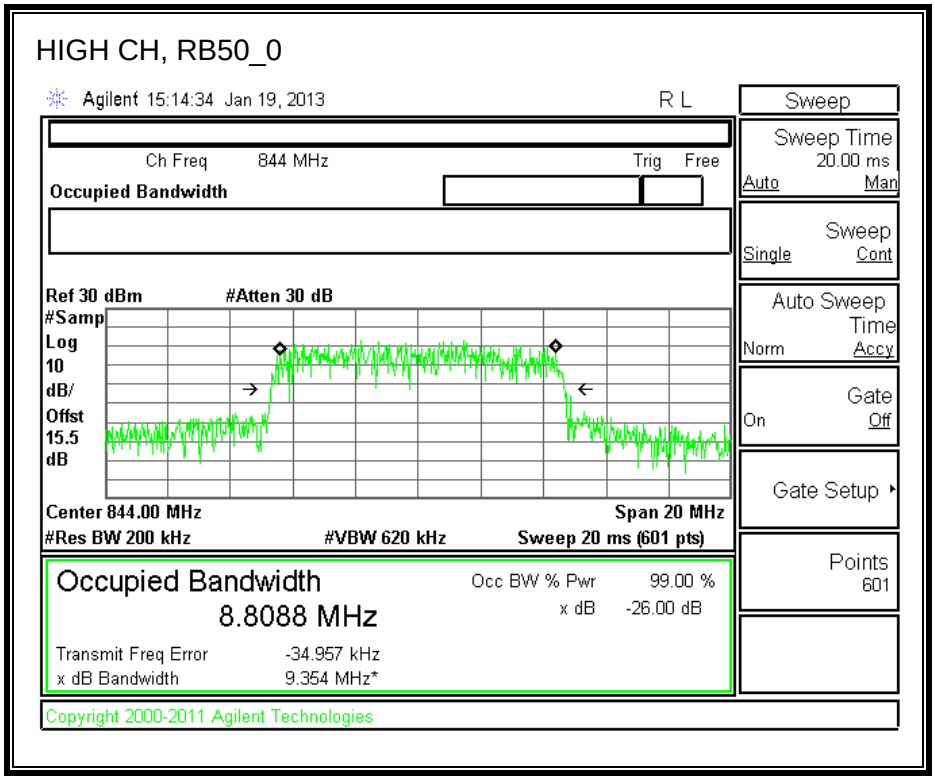




10.0MHz BAND WIDTH QPSK





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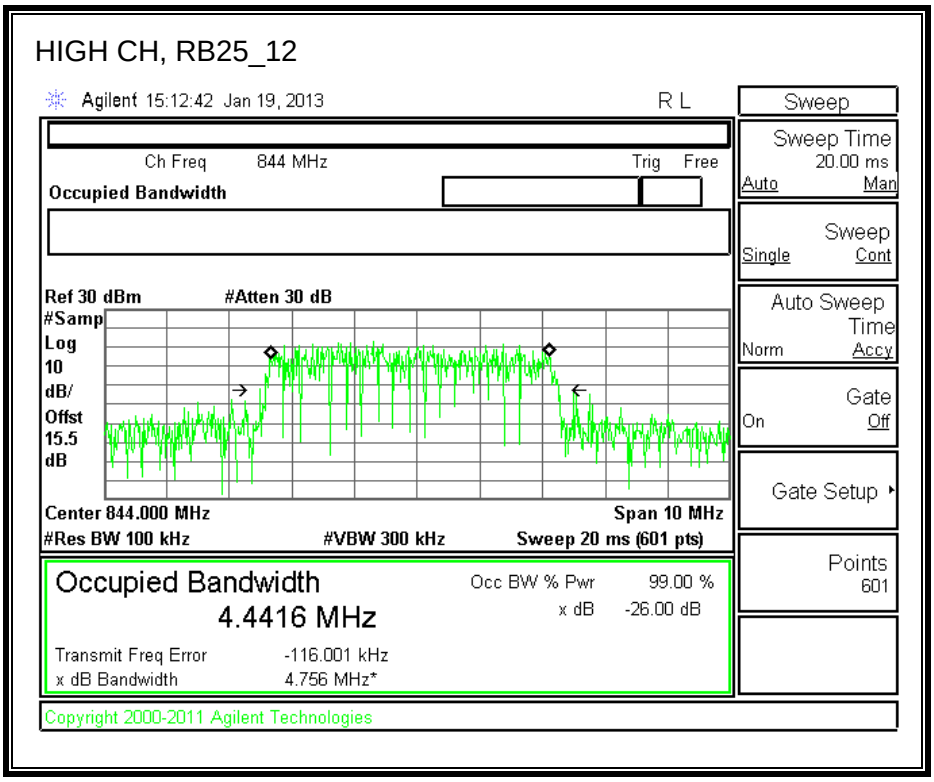
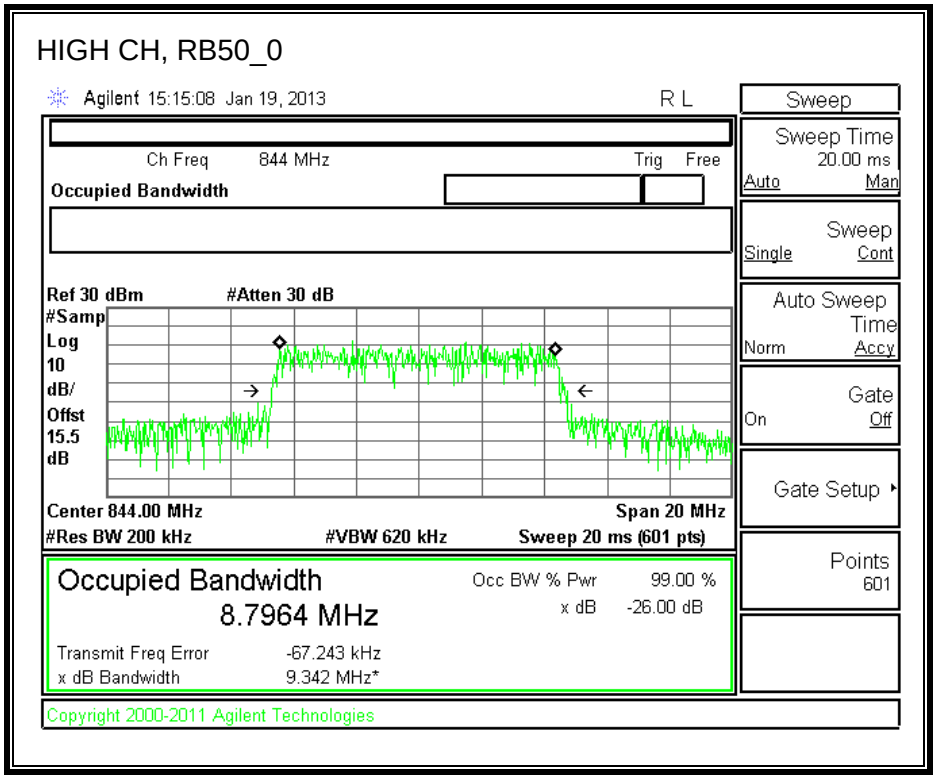
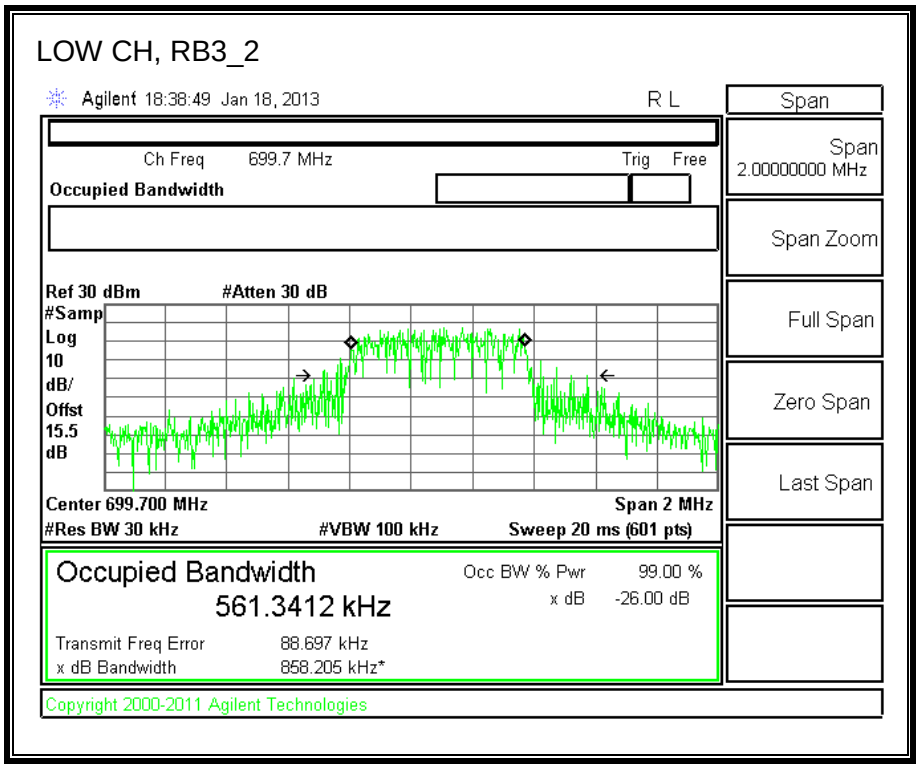
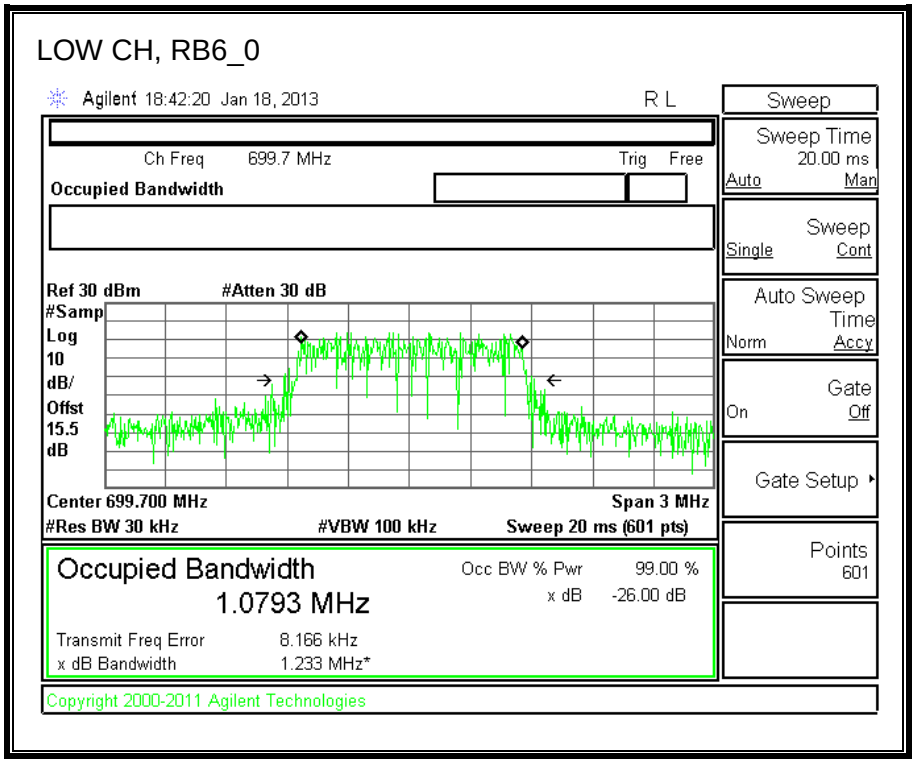




8.1.6. *LTE Band 12*

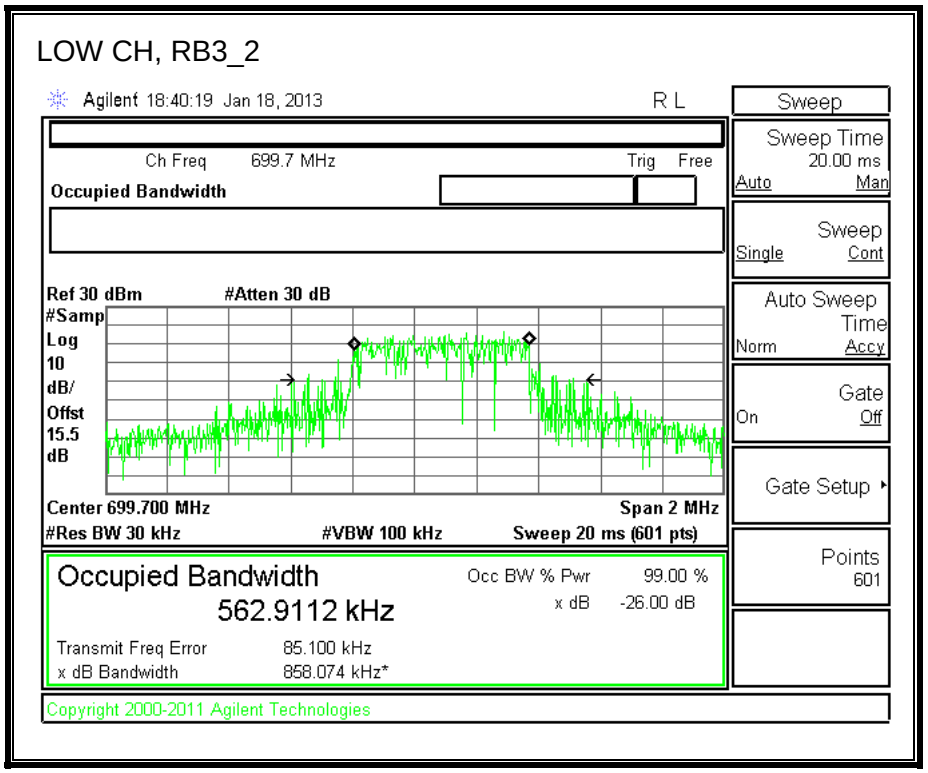
1.4MHz BAND WIDTH QPSK



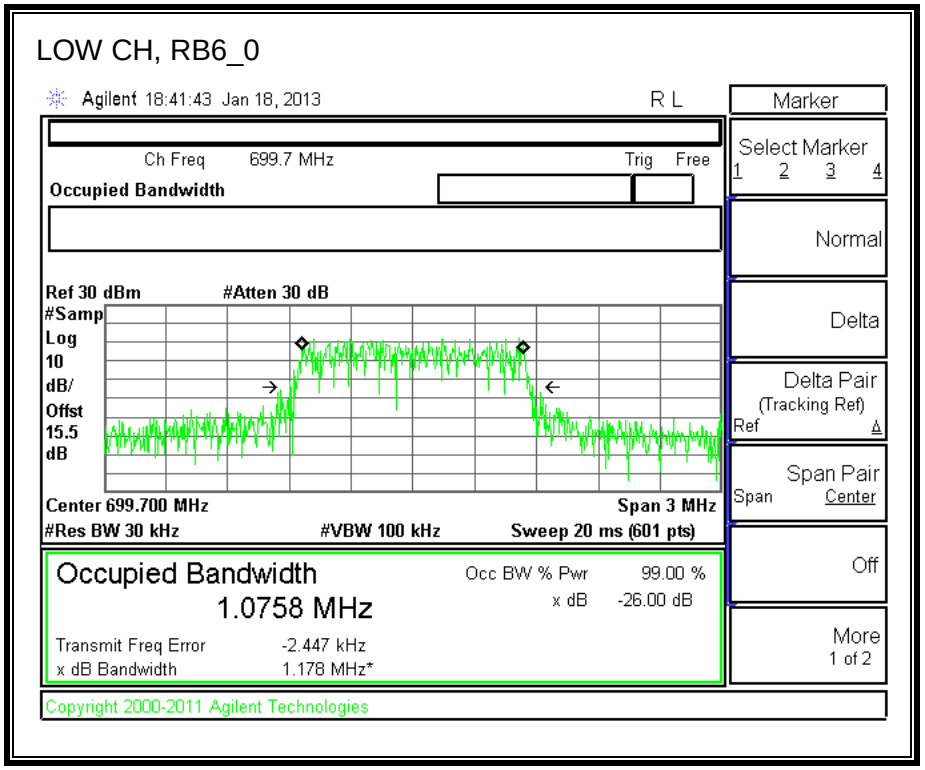


1.4MHz BAND WIDTH 16QAM

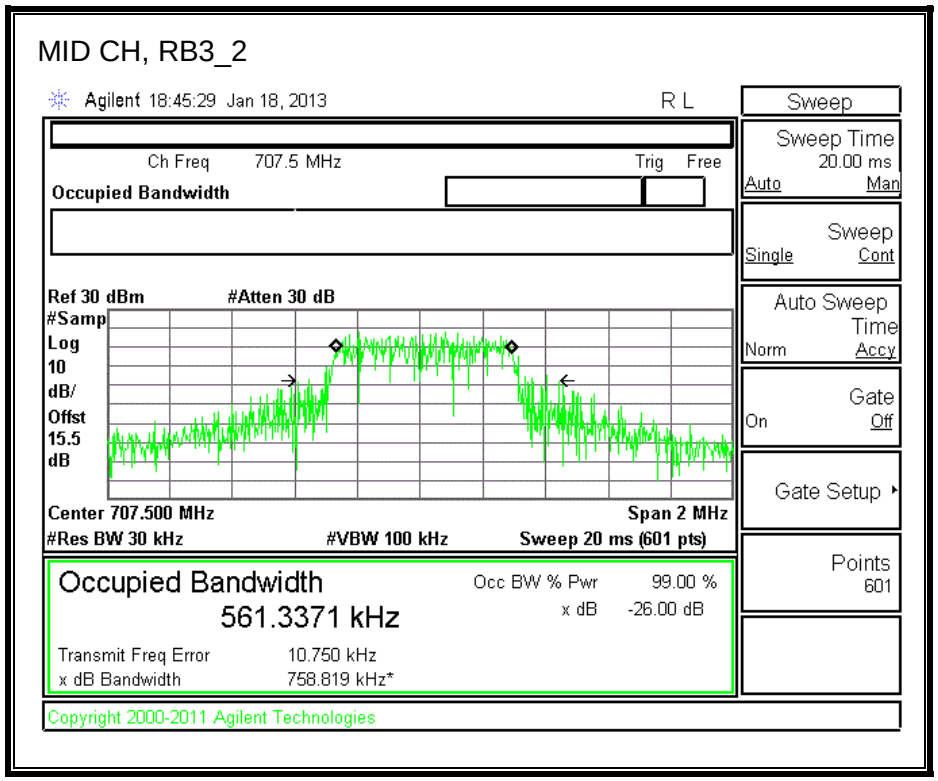
LOW CH, RB3_2

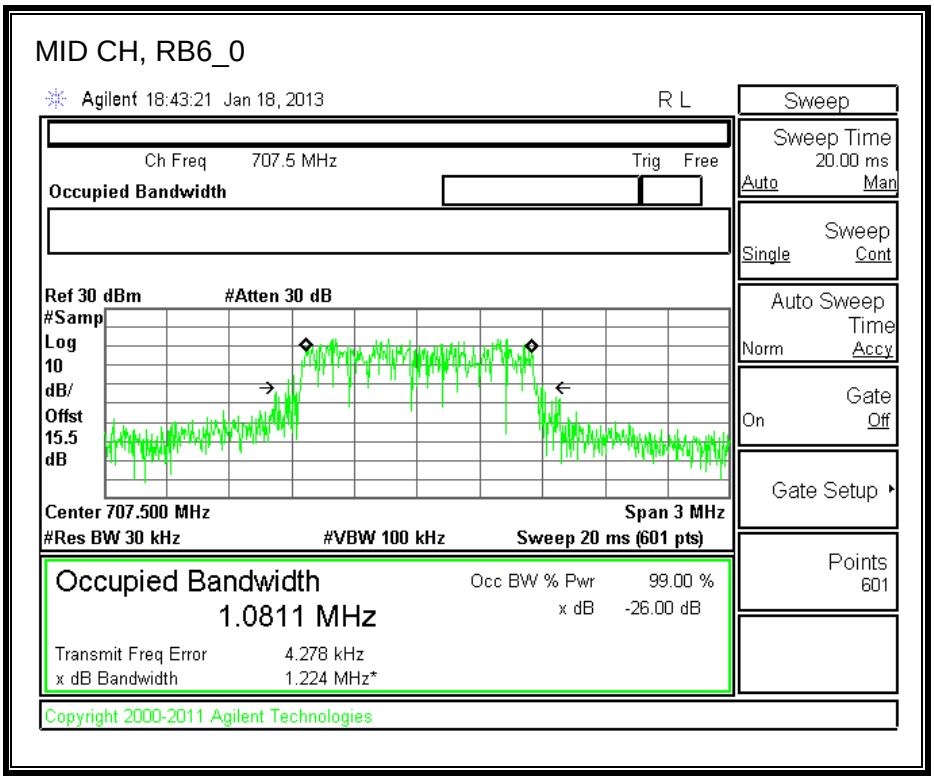


LOW CH, RB6_0

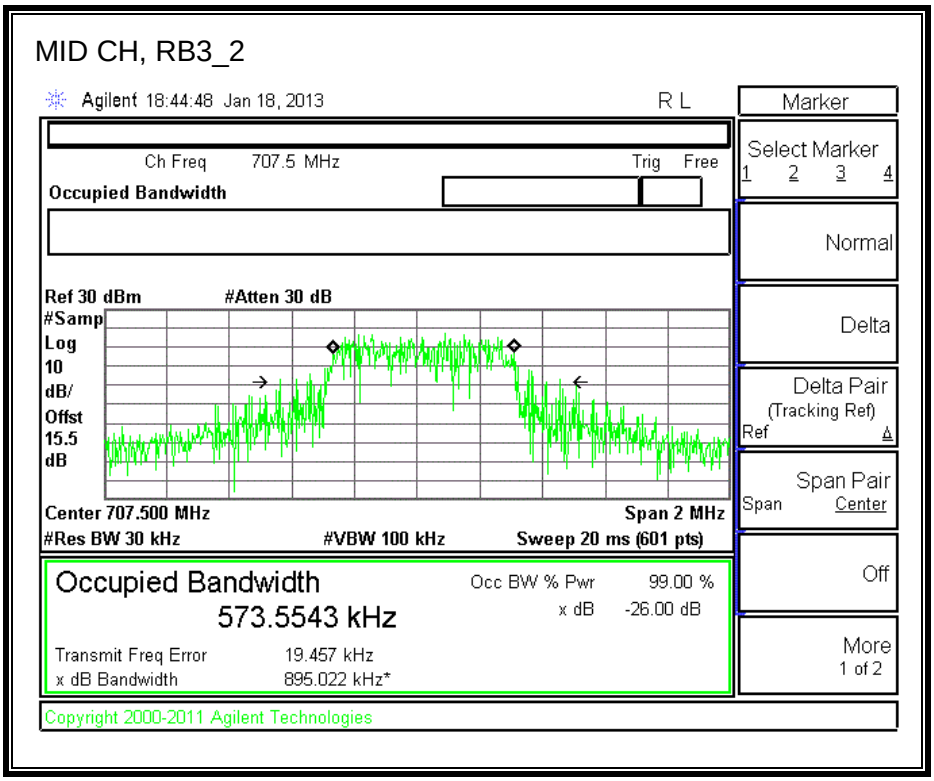


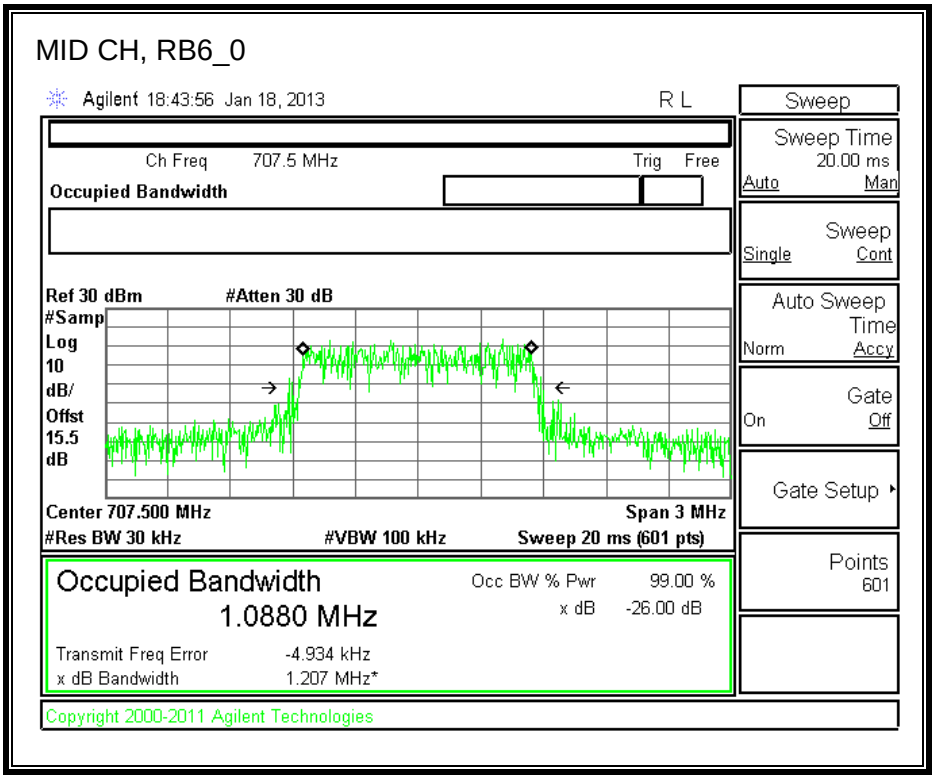
1.4MHz BAND WIDTH QPSK



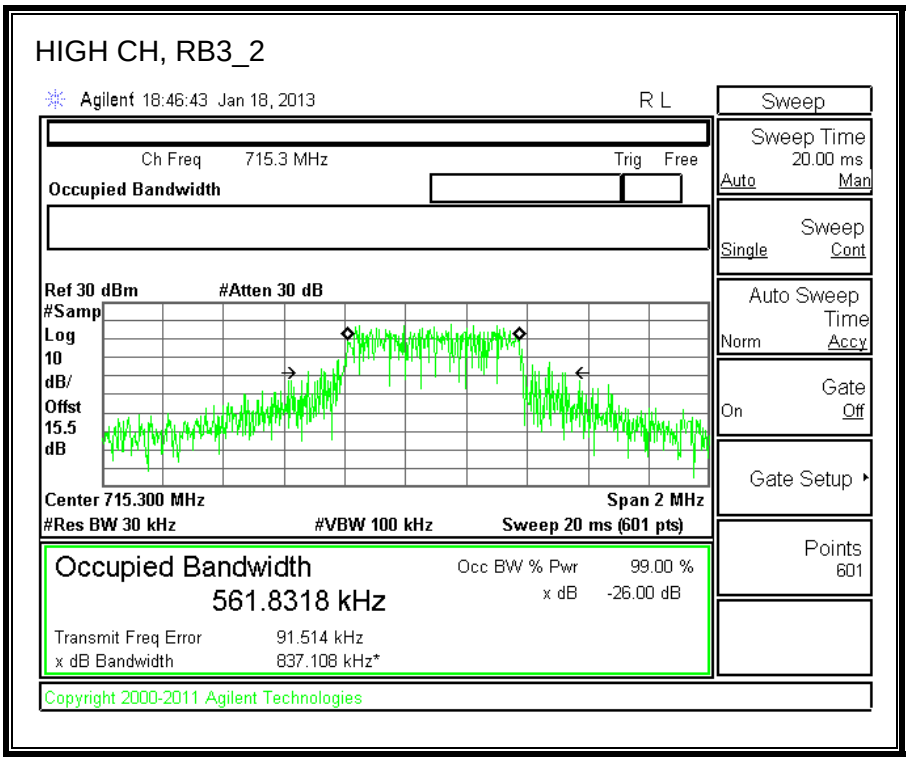


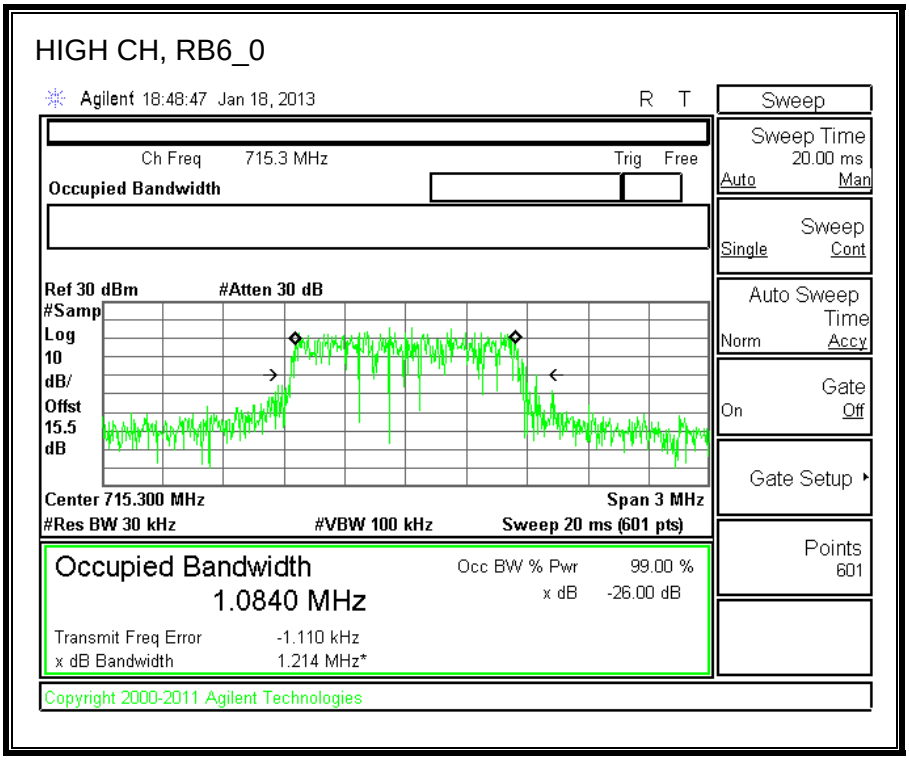
1.4MHz BAND WIDTH 16QAM





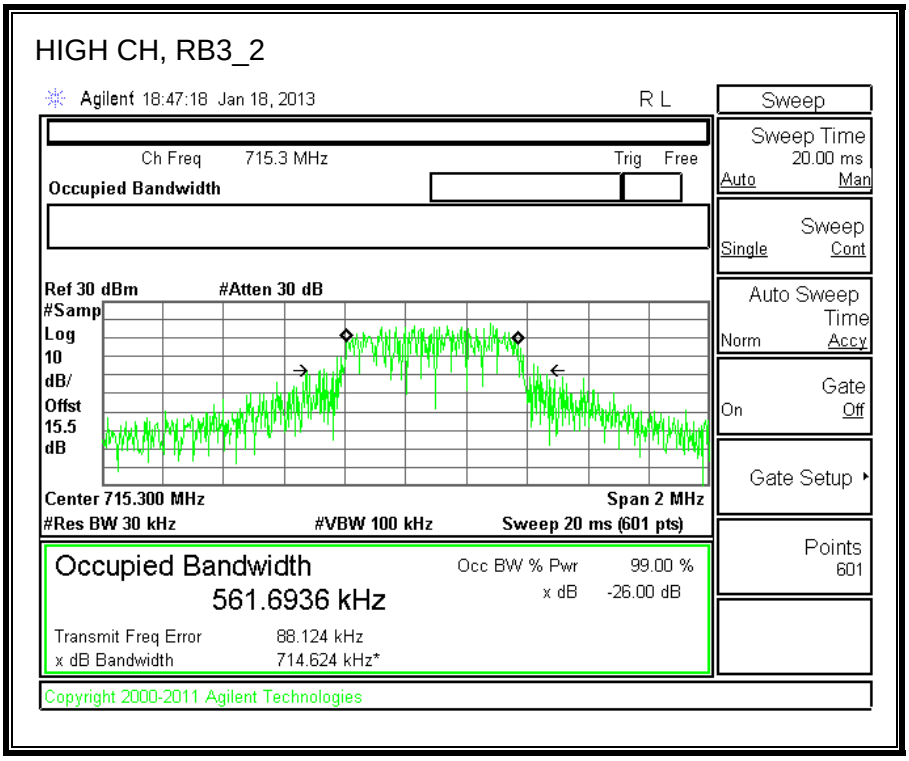
1.4MHz BAND WIDTH QPSK



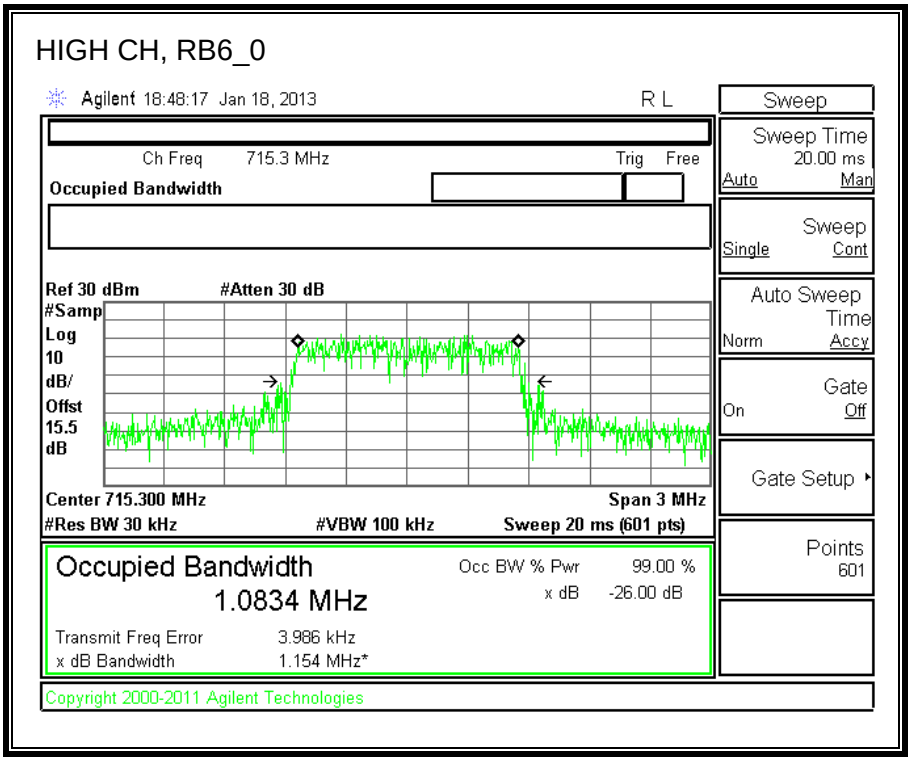


1.4MHz BAND WIDTH 16QAM

HIGH CH, RB3_2

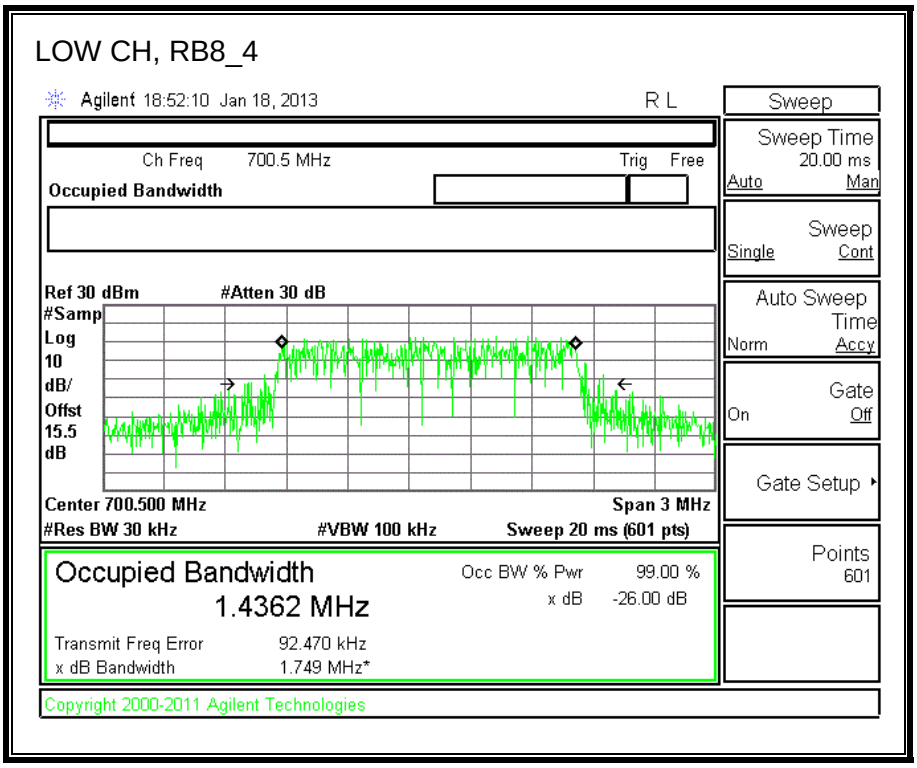


HIGH CH, RB6_0

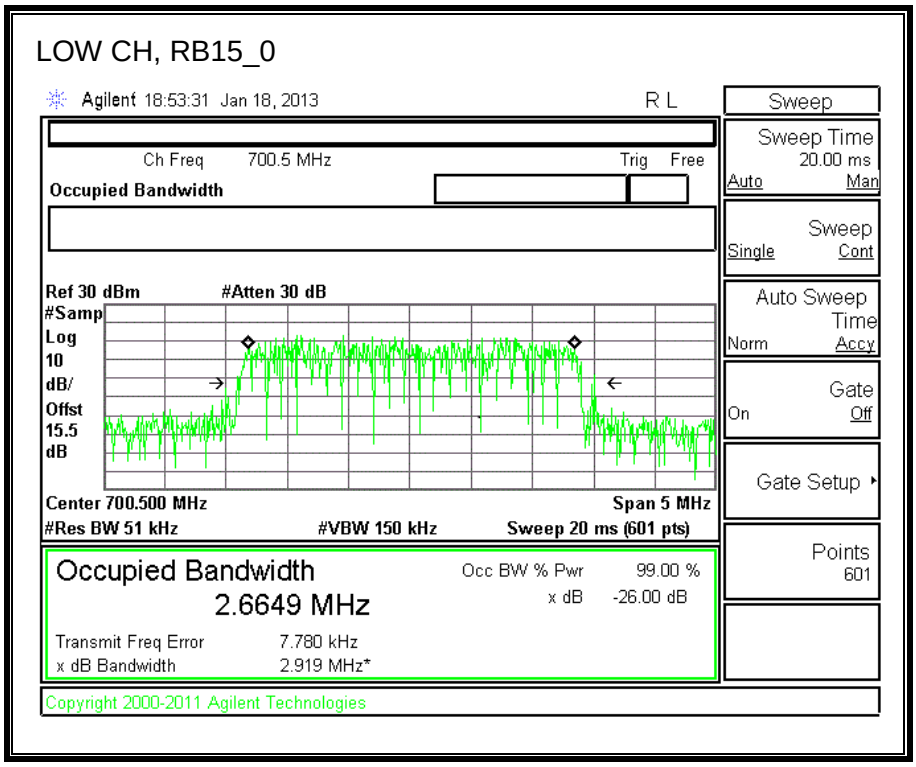


3.0MHz BAND WIDTH QPSK

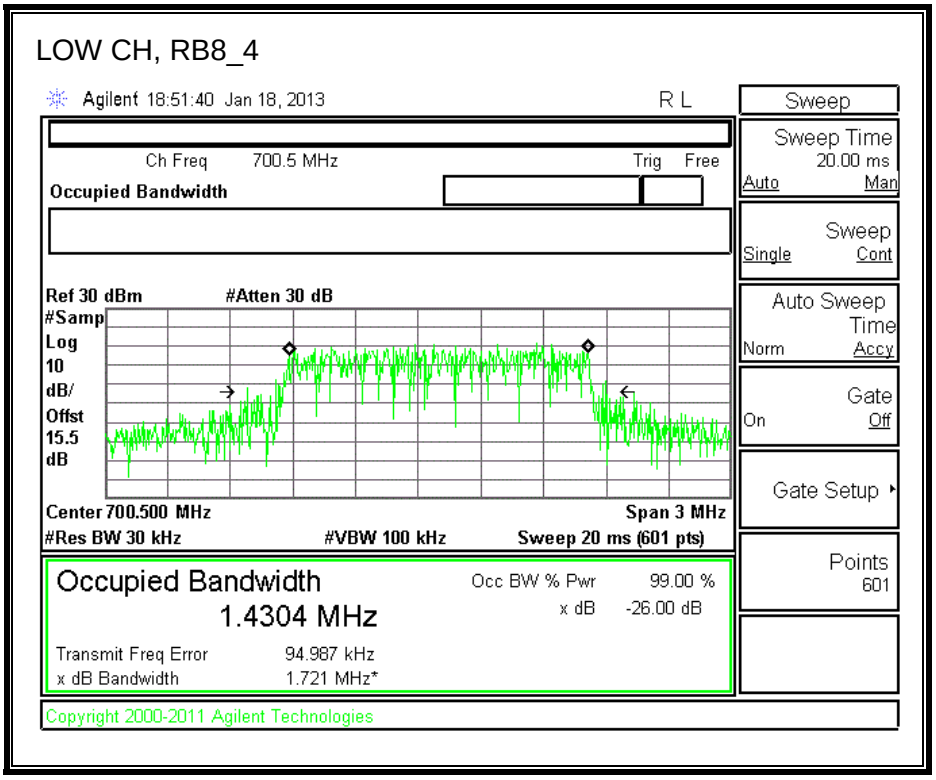
LOW CH, RB8_4

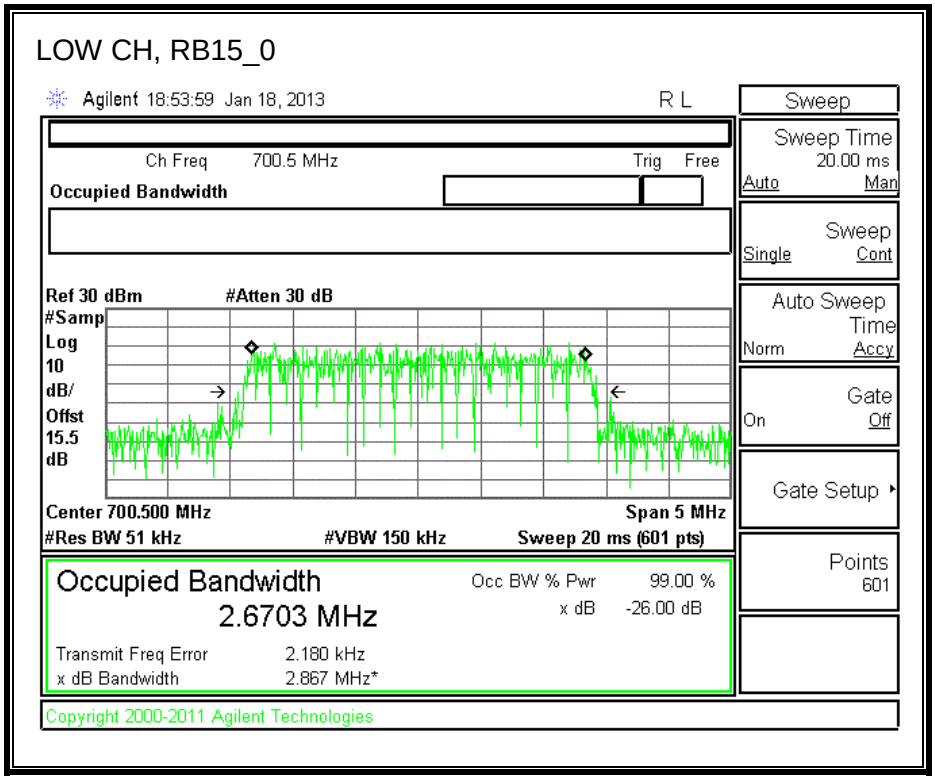


LOW CH, RB15_0

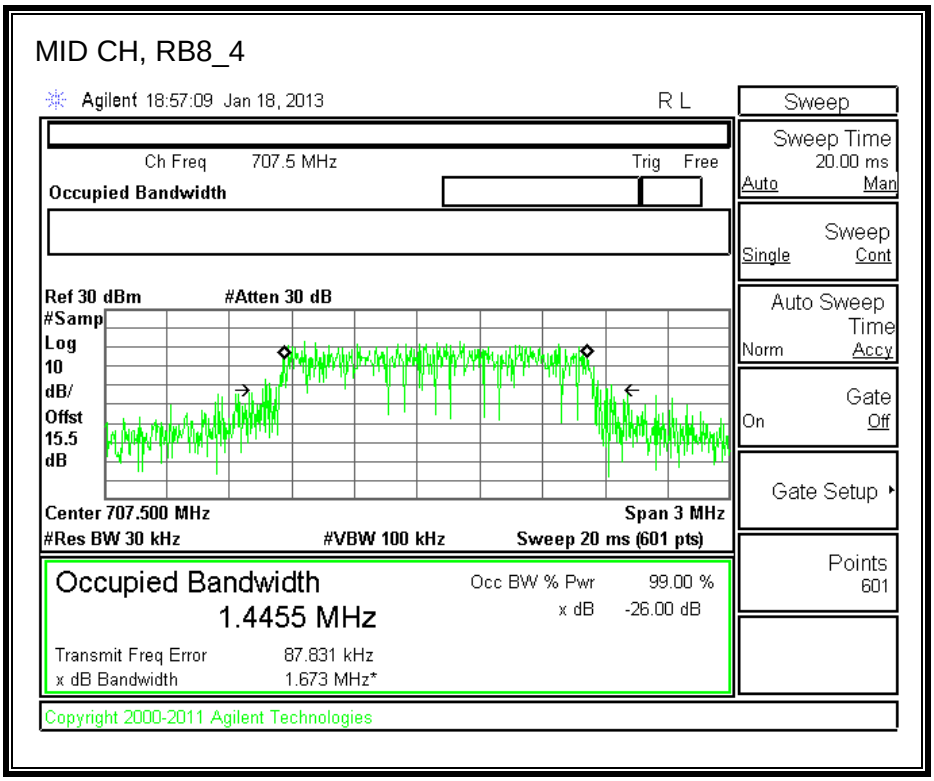


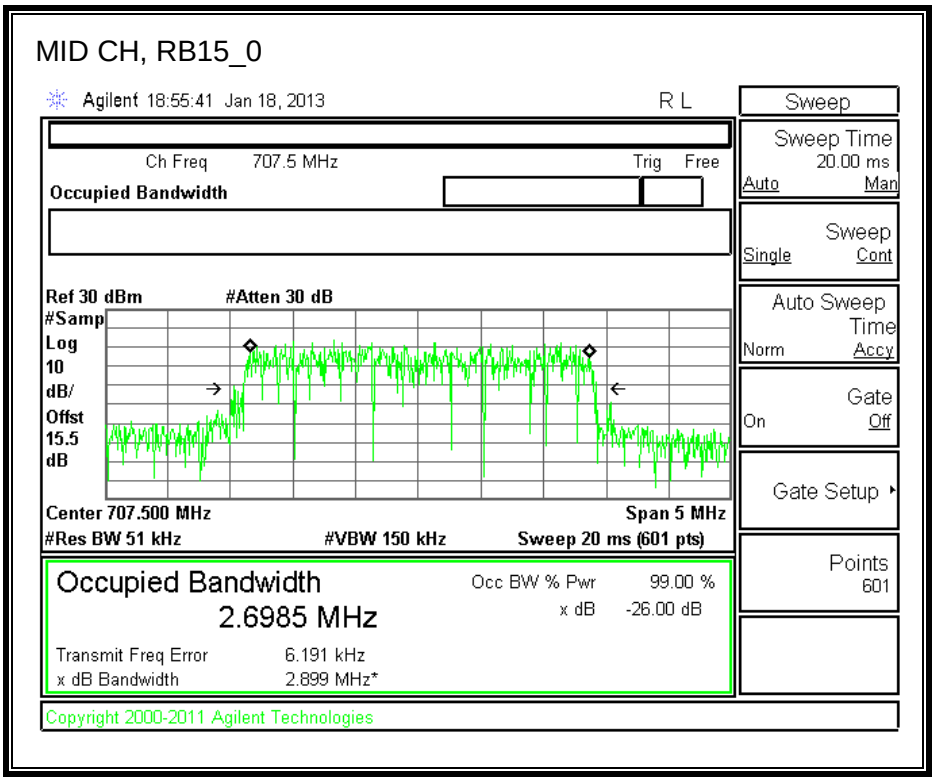
3.0MHz BAND WIDTH 16QAM



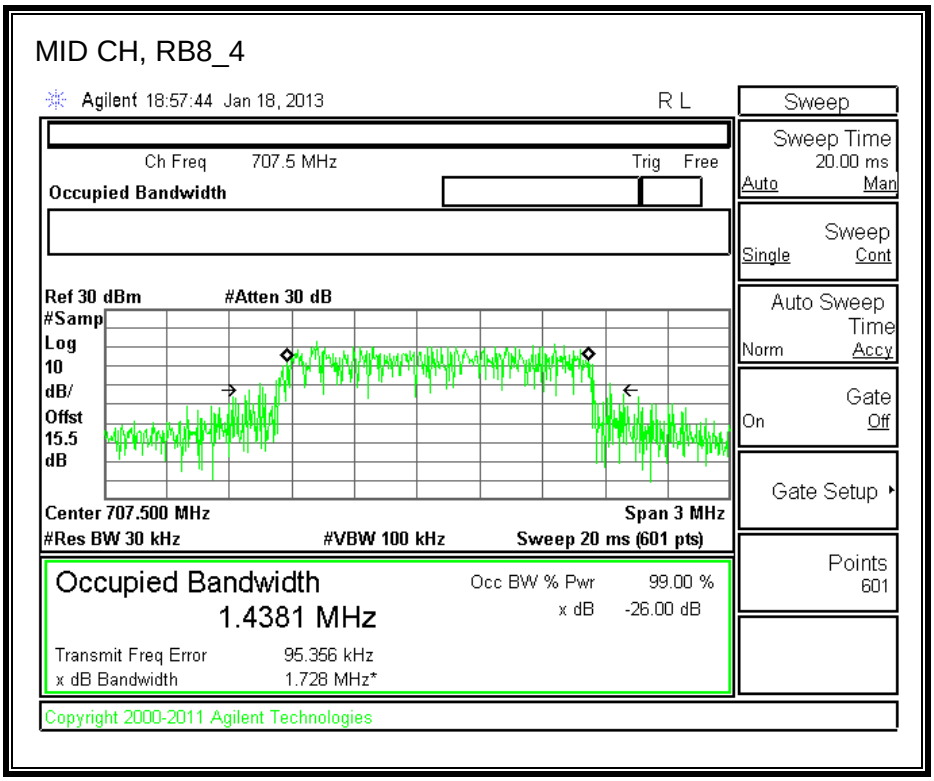


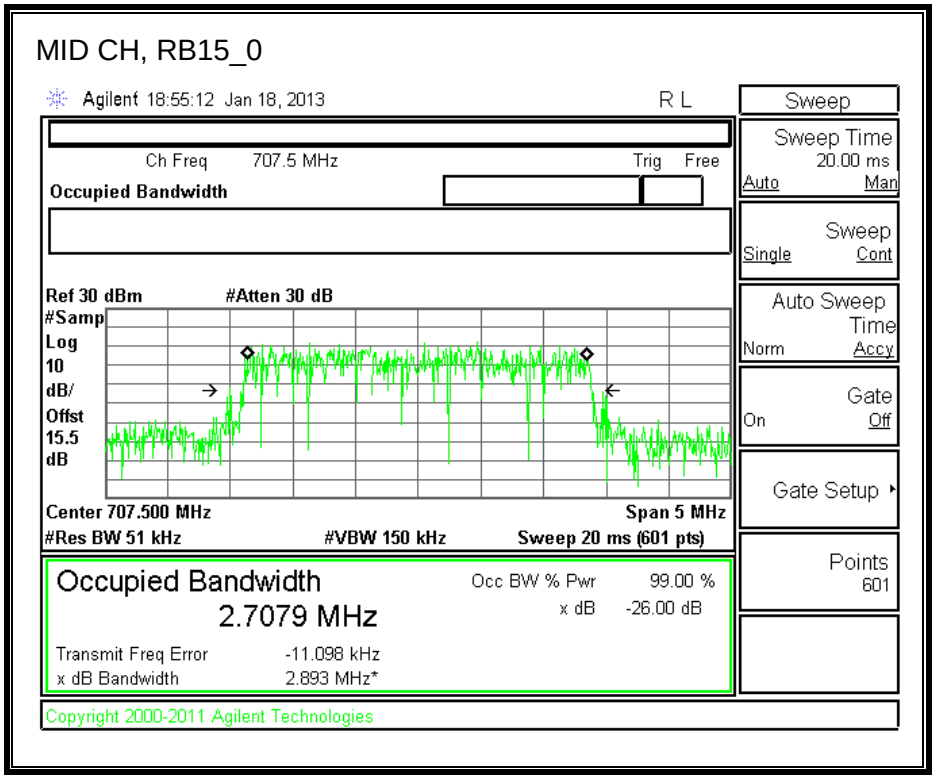
3.0MHz BAND WIDTH QPSK



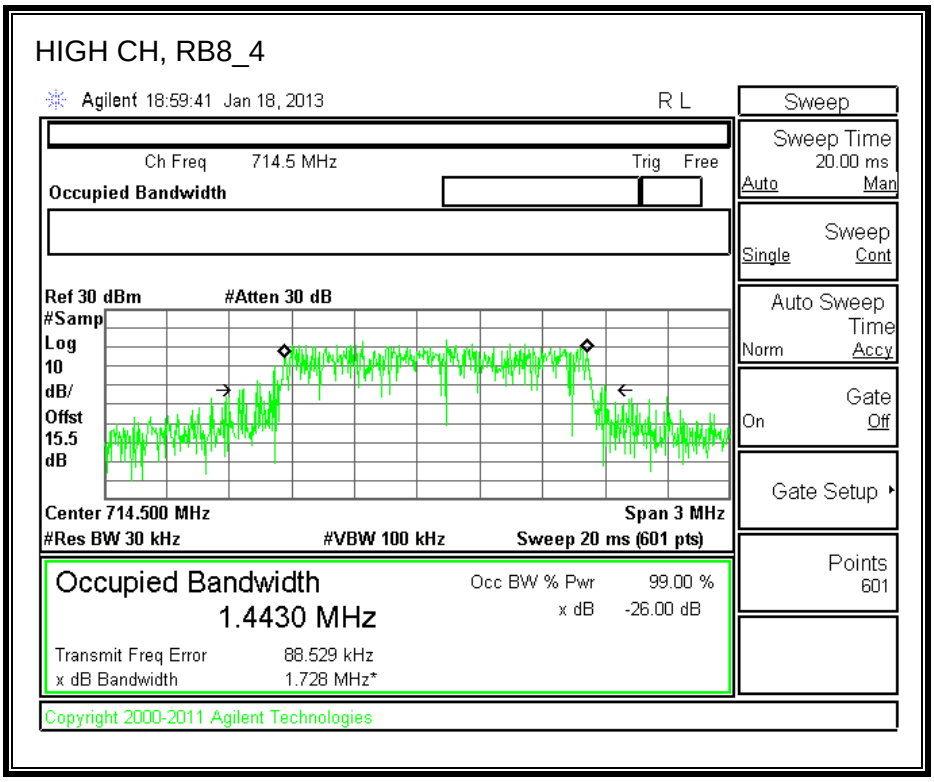


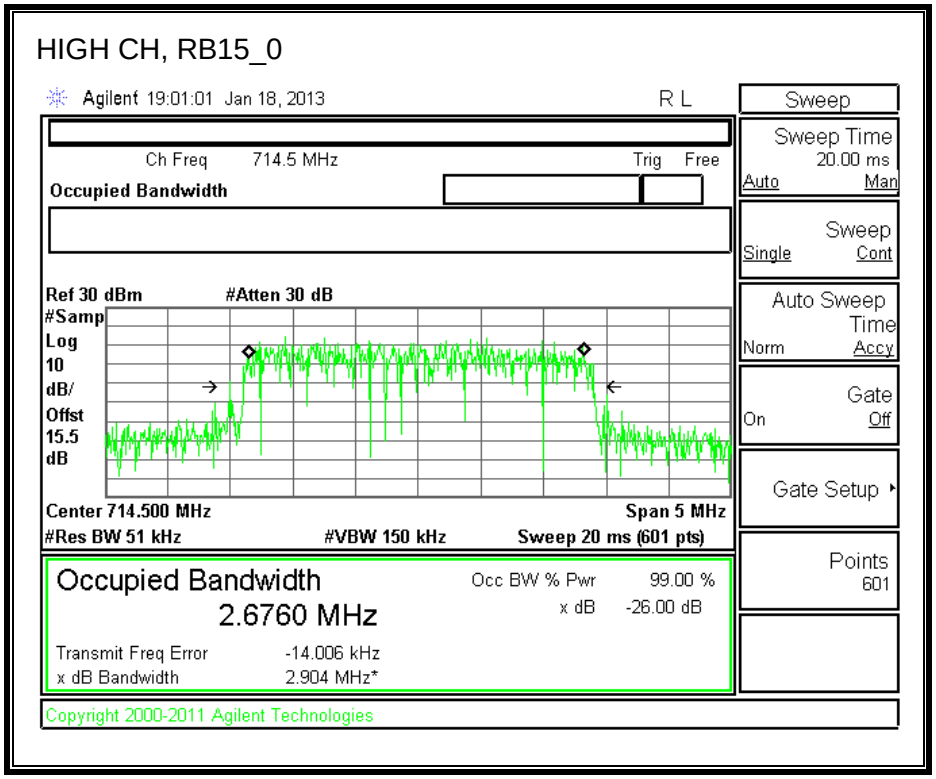
3.0MHz BAND WIDTH 16QAM



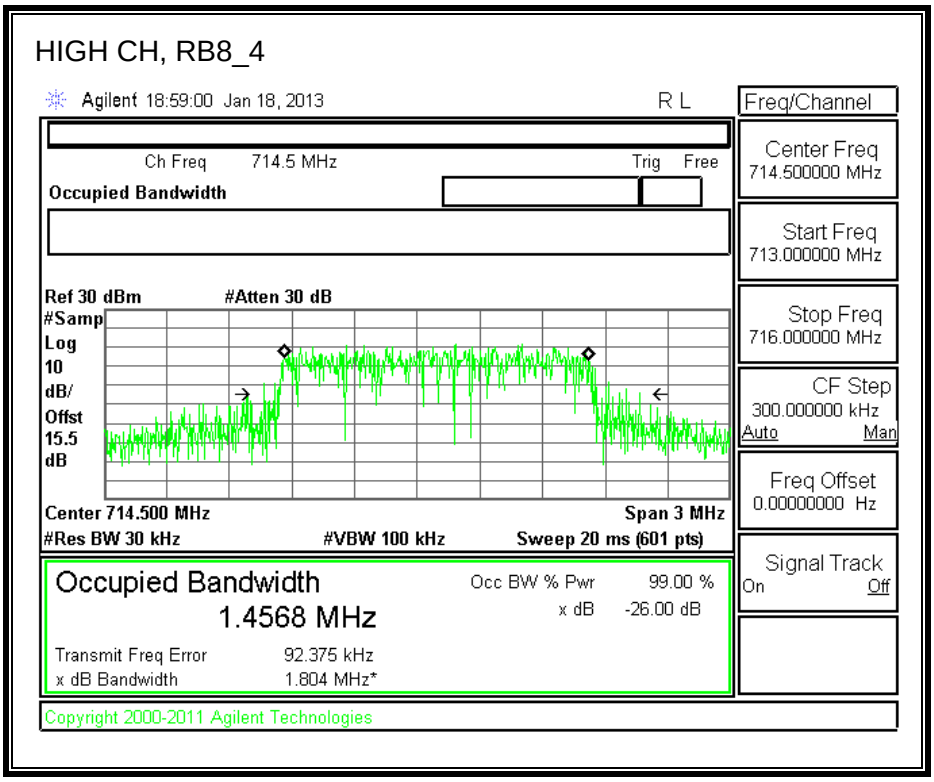


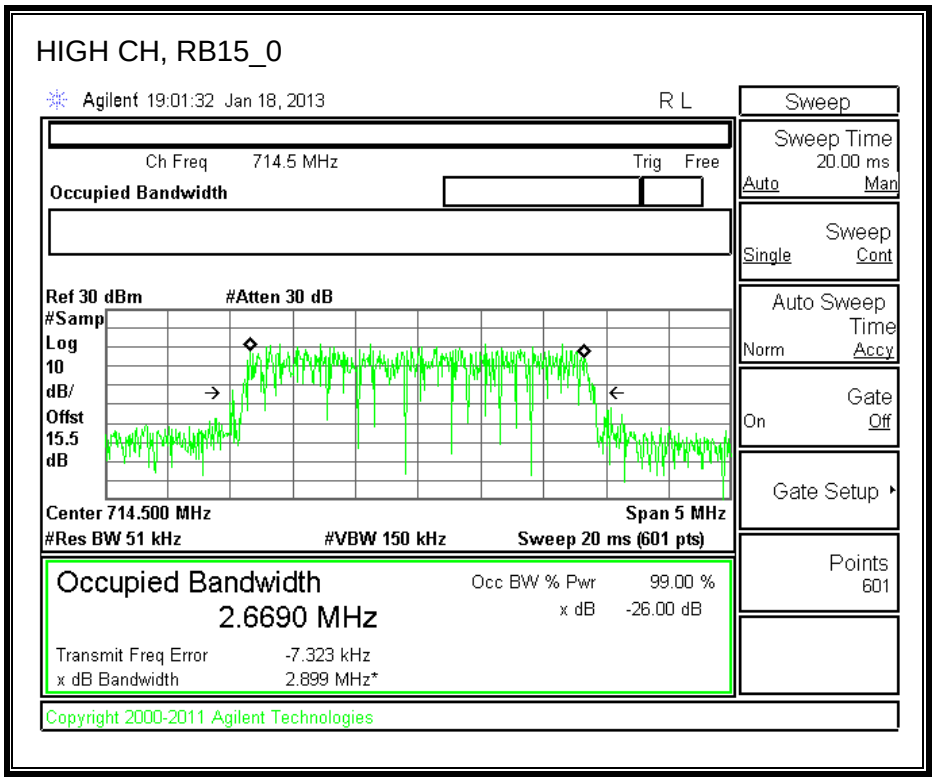
3.0MHz BAND WIDTH QPSK



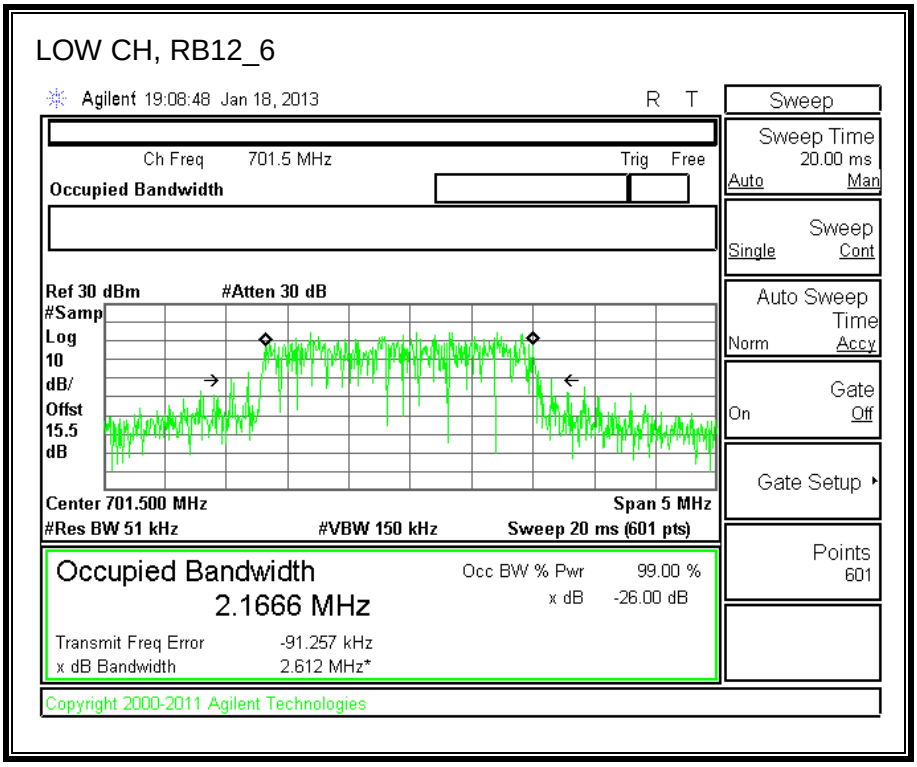


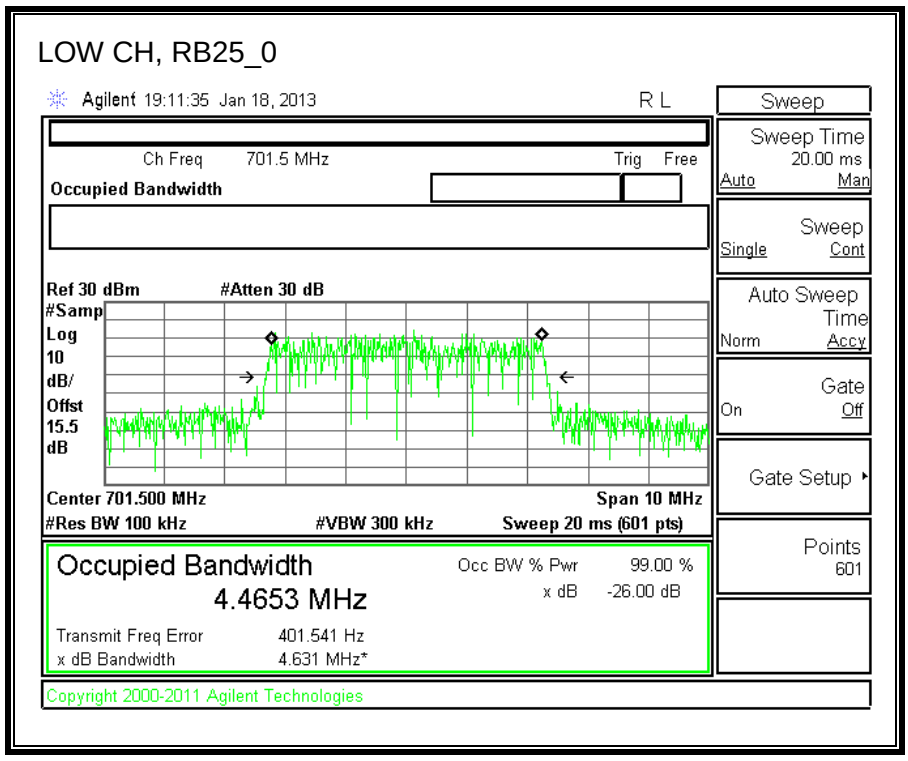
3.0MHz BAND WIDTH 16QAM



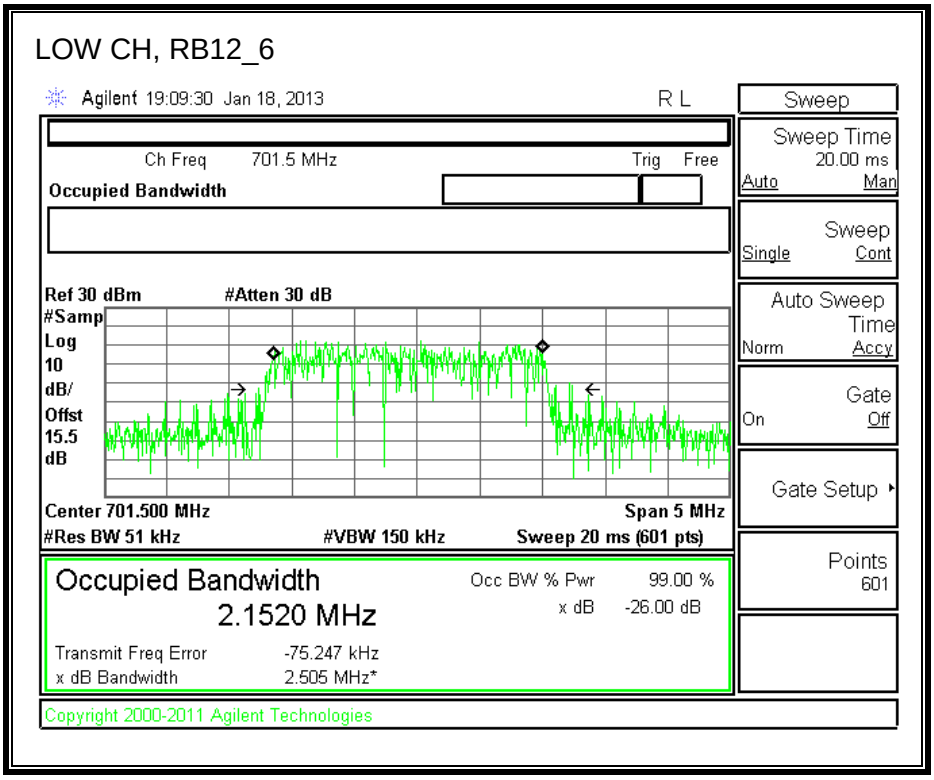


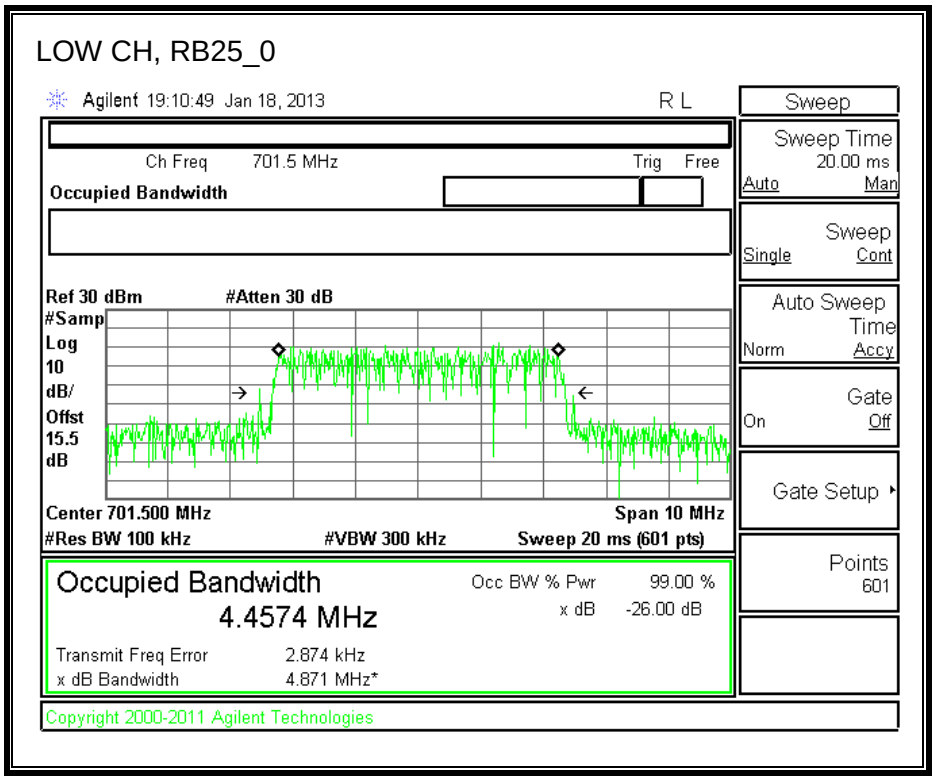
5.0MHz BAND WIDTH QPSK



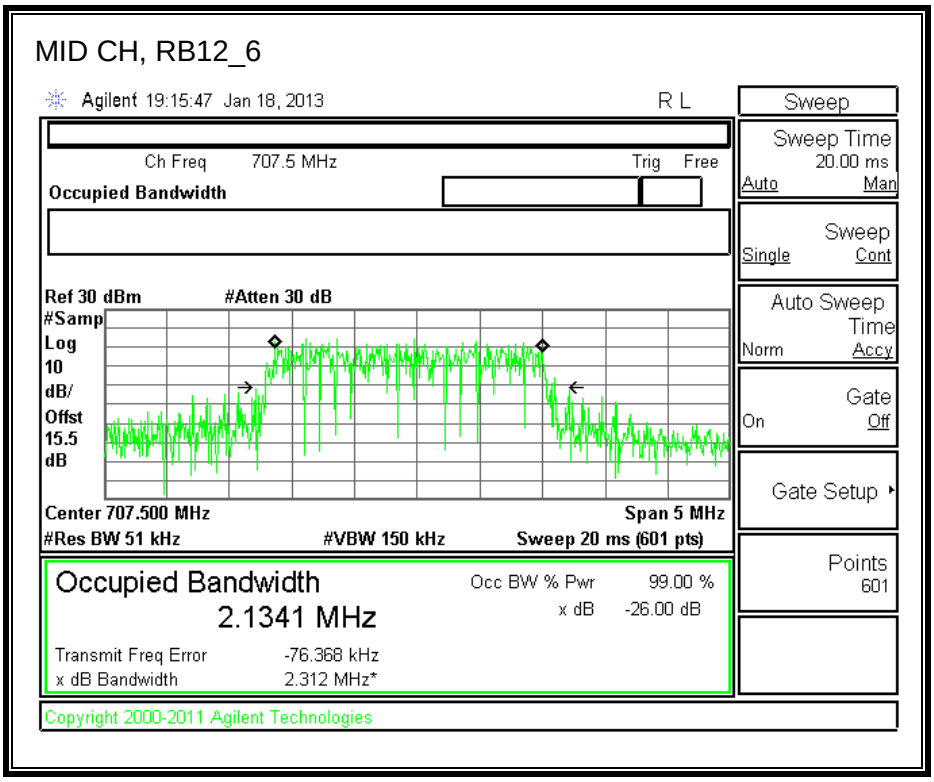


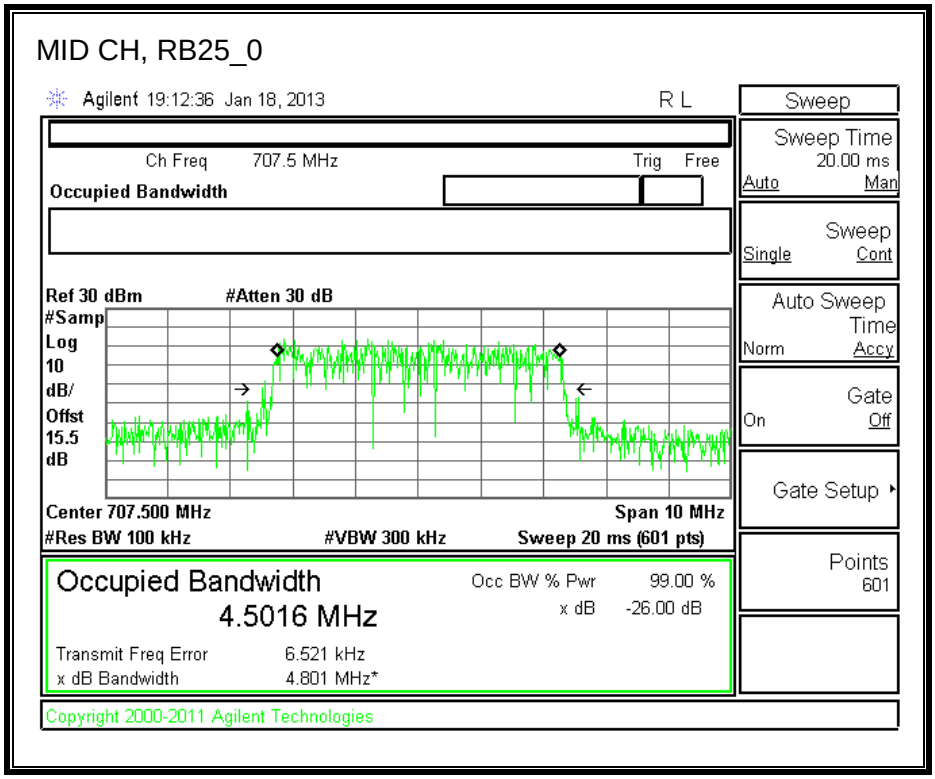
5.0MHz BAND WIDTH 16QAM



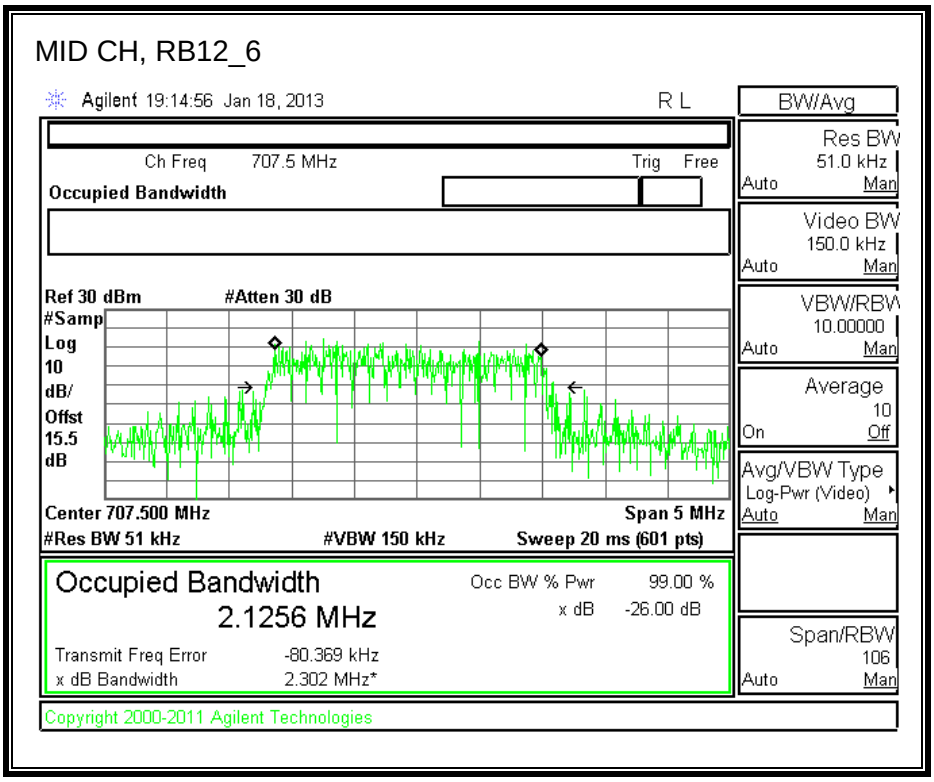


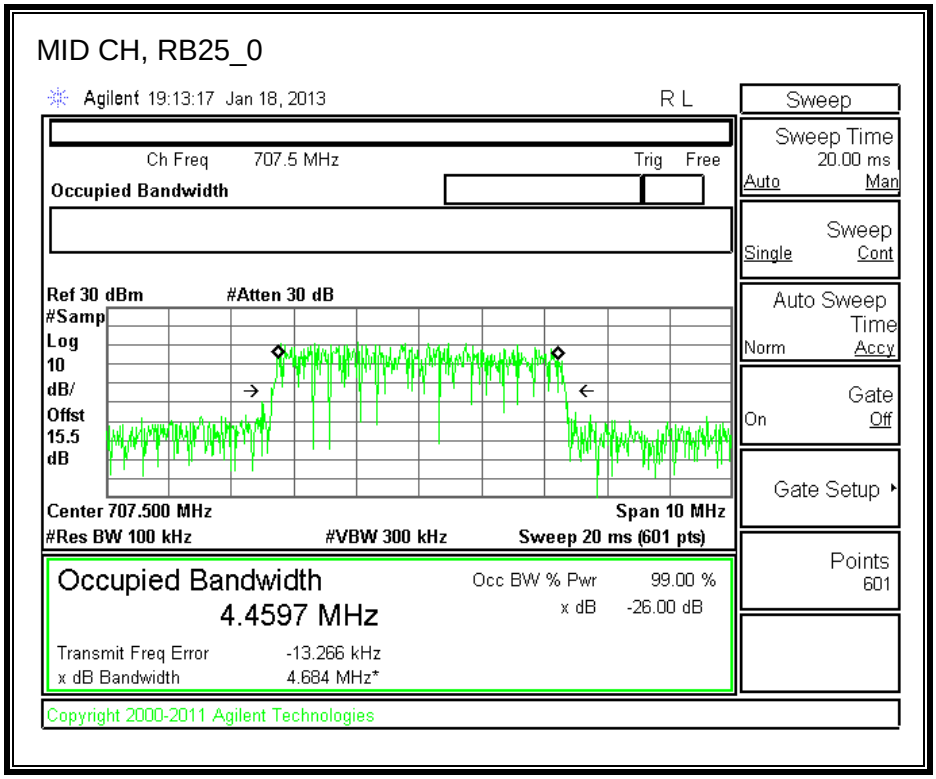
5.0MHz BAND WIDTH QPSK



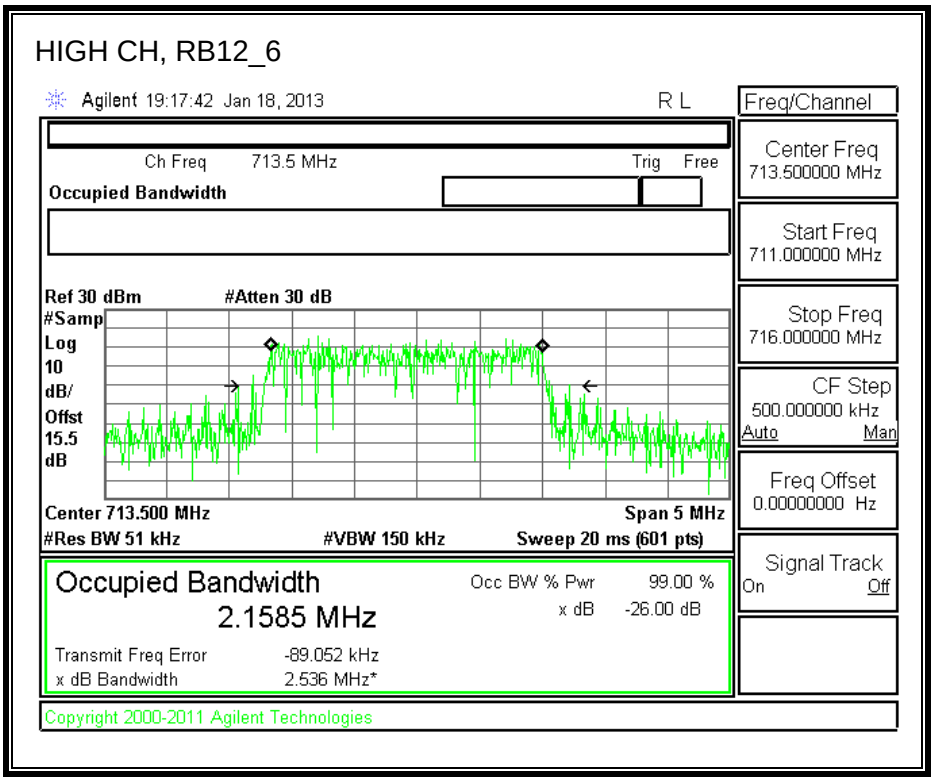


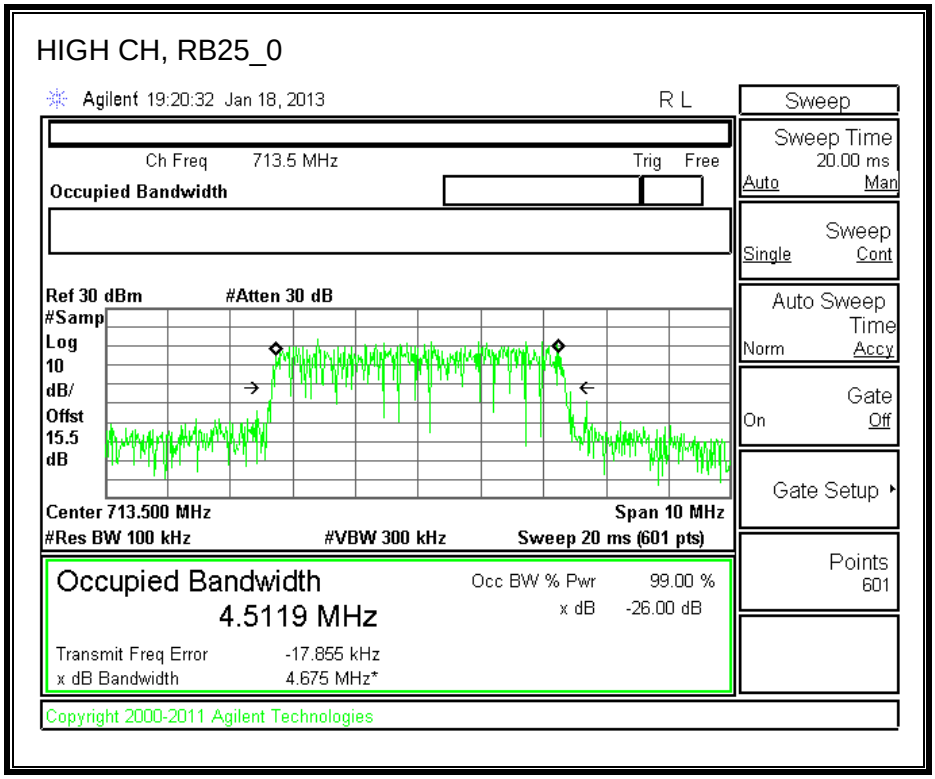
5.0MHz BAND WIDTH 16QAM



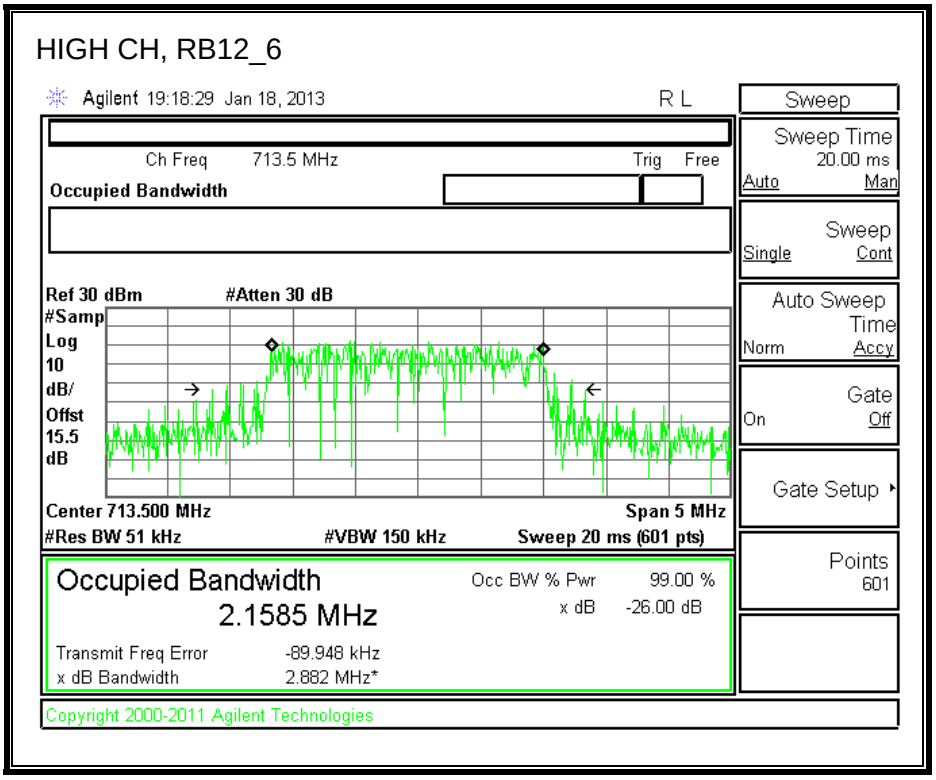


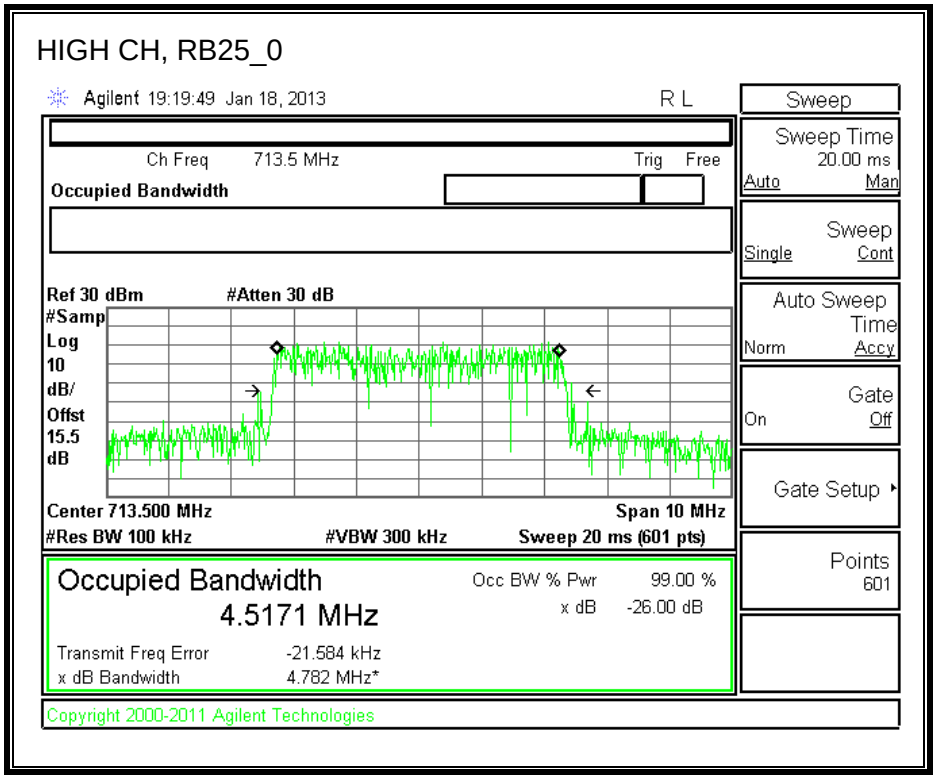
5.0MHz BAND WIDTH QPSK



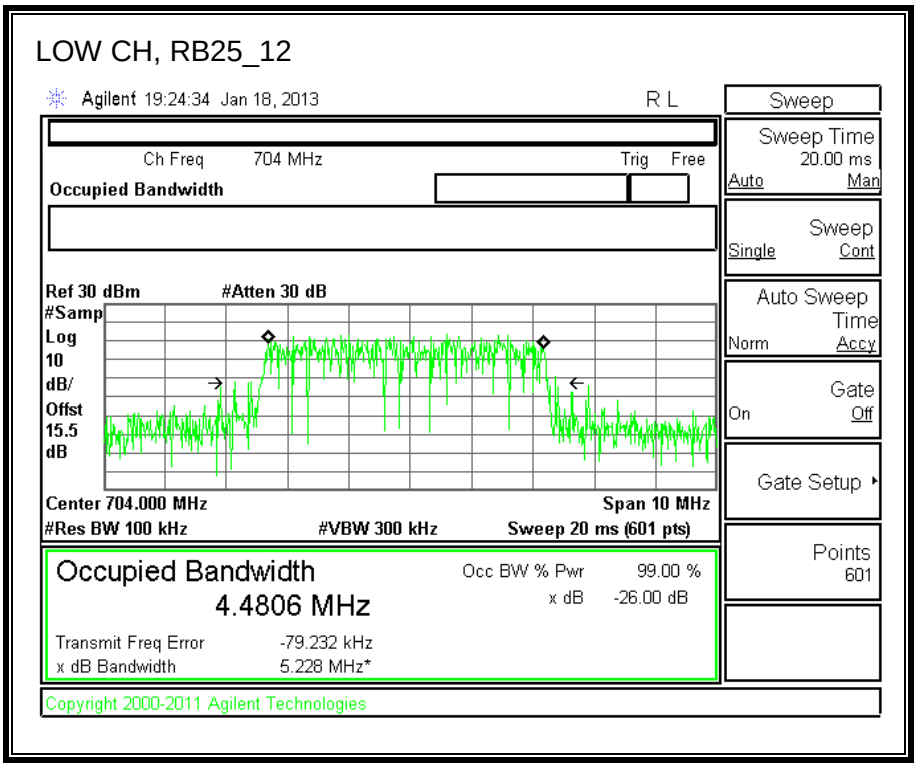


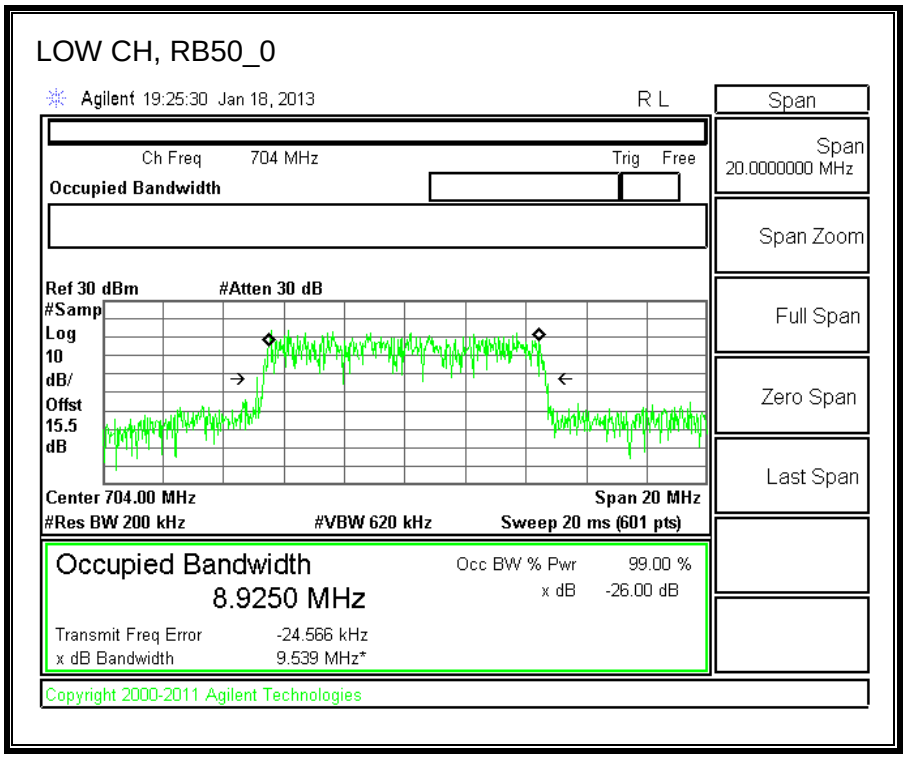
5.0MHz BAND WIDTH 16QAM



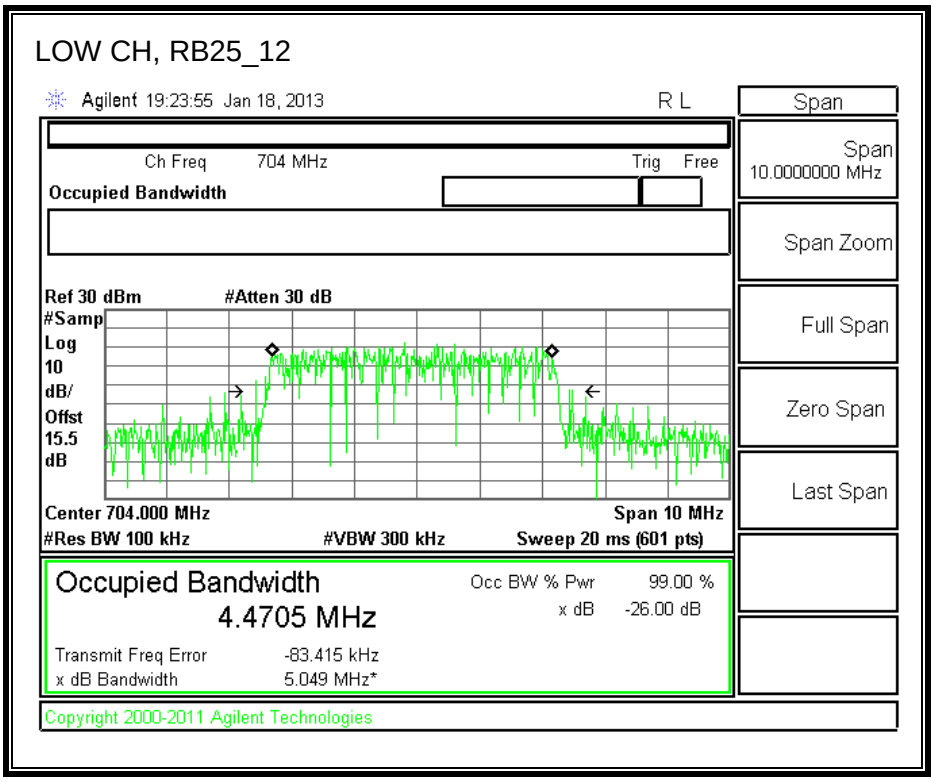


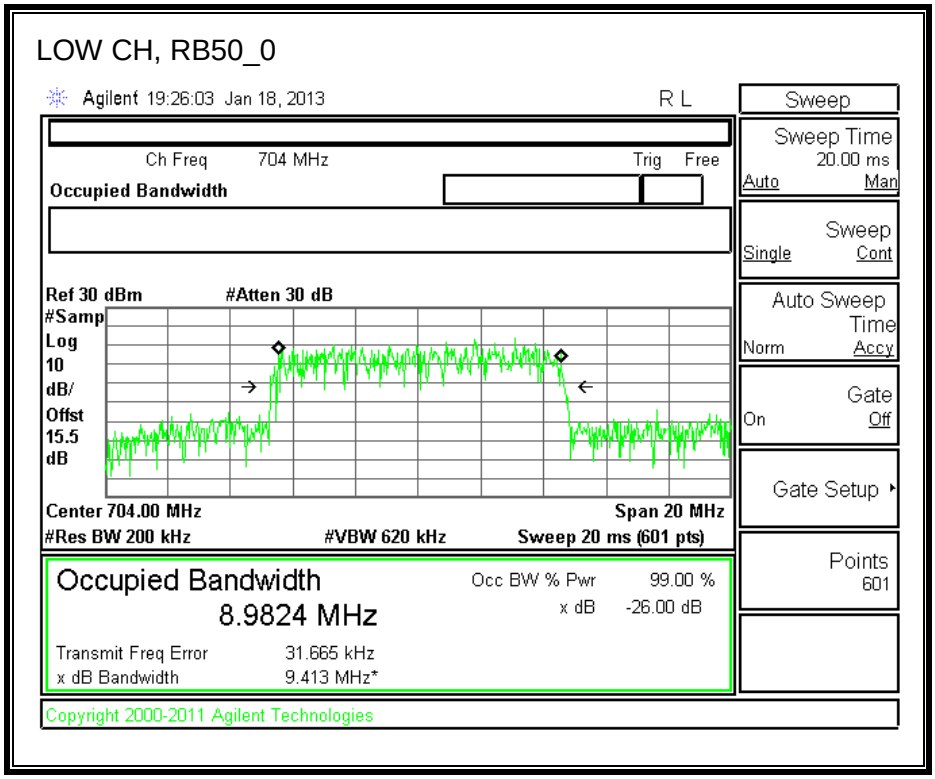
10.0MHz BAND WIDTH QPSK



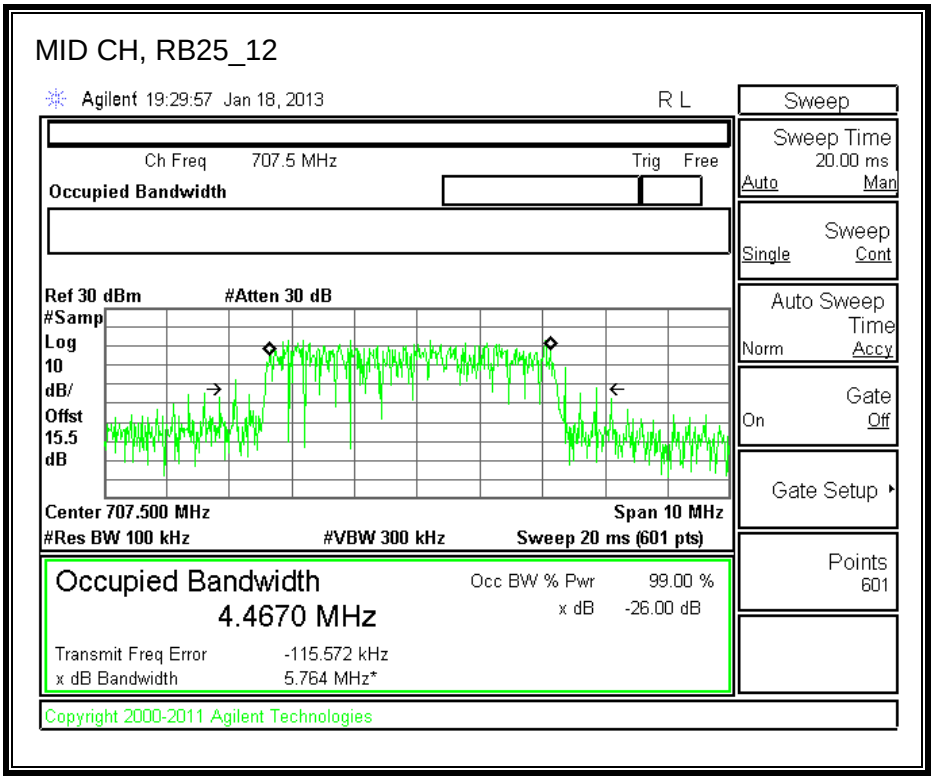


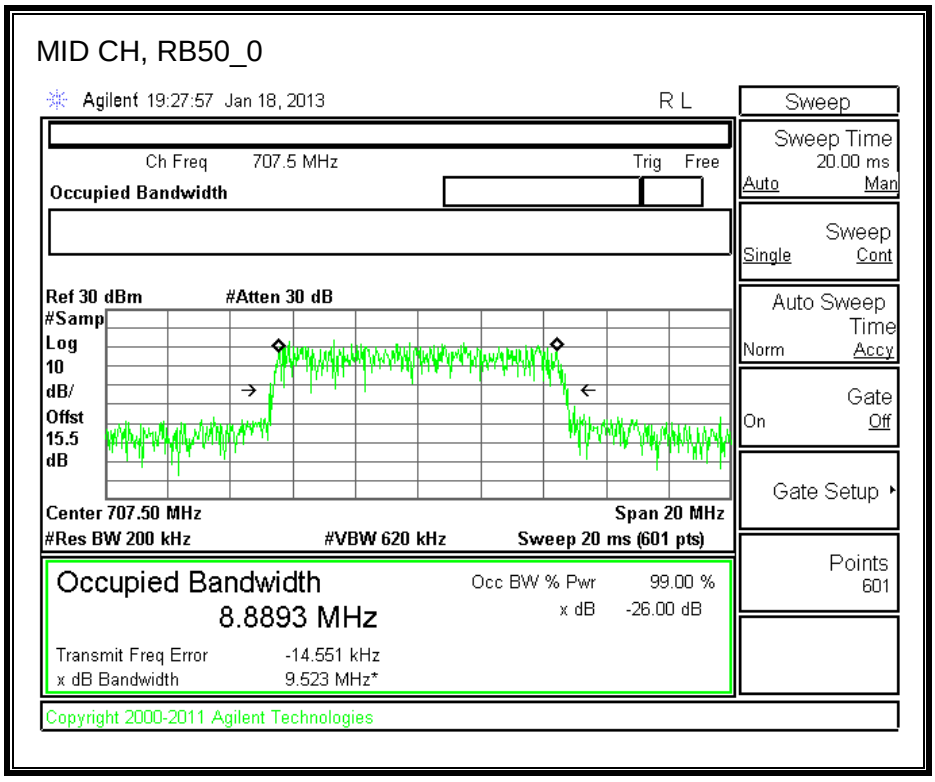
10.0MHz BAND WIDTH 16QAM



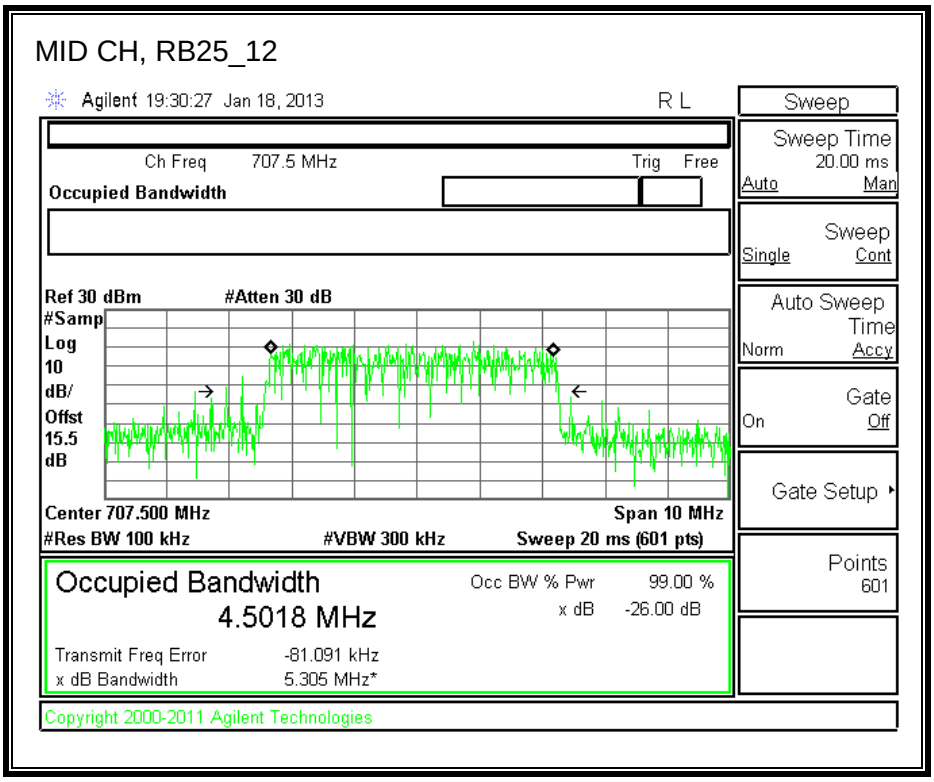


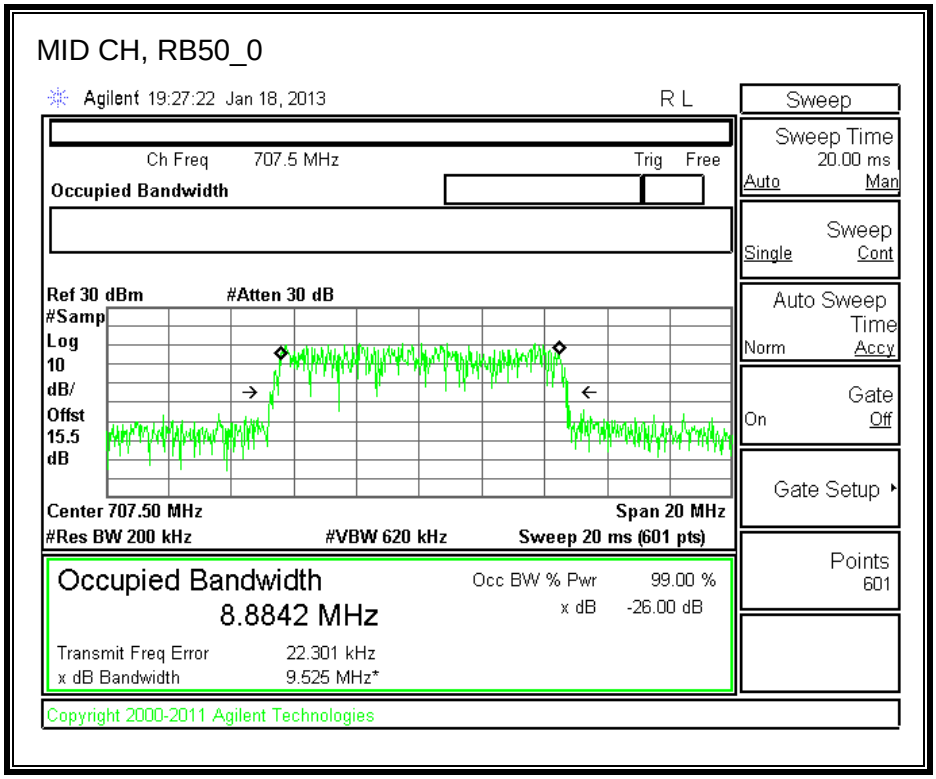
10.0MHz BAND WIDTH QPSK



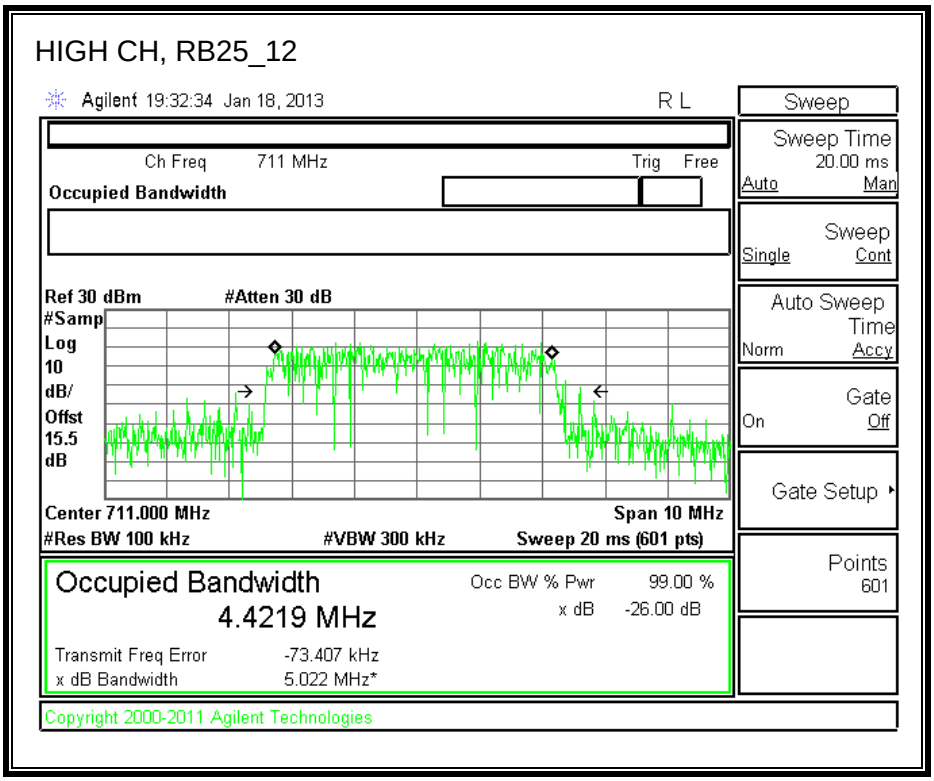


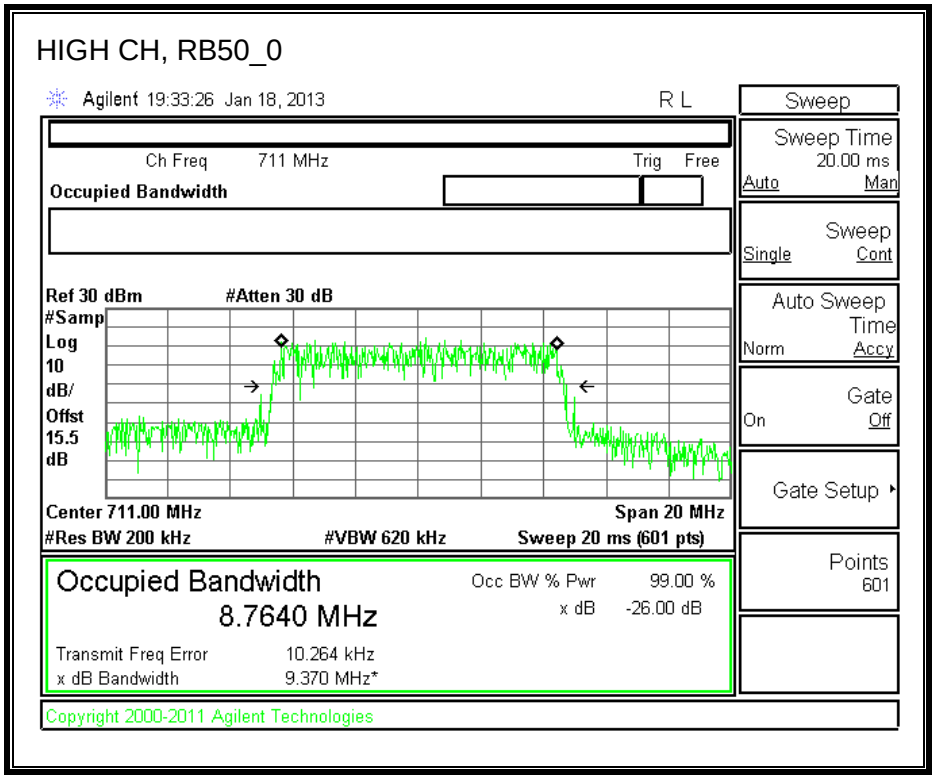
10.0MHz BAND WIDTH 16QAM



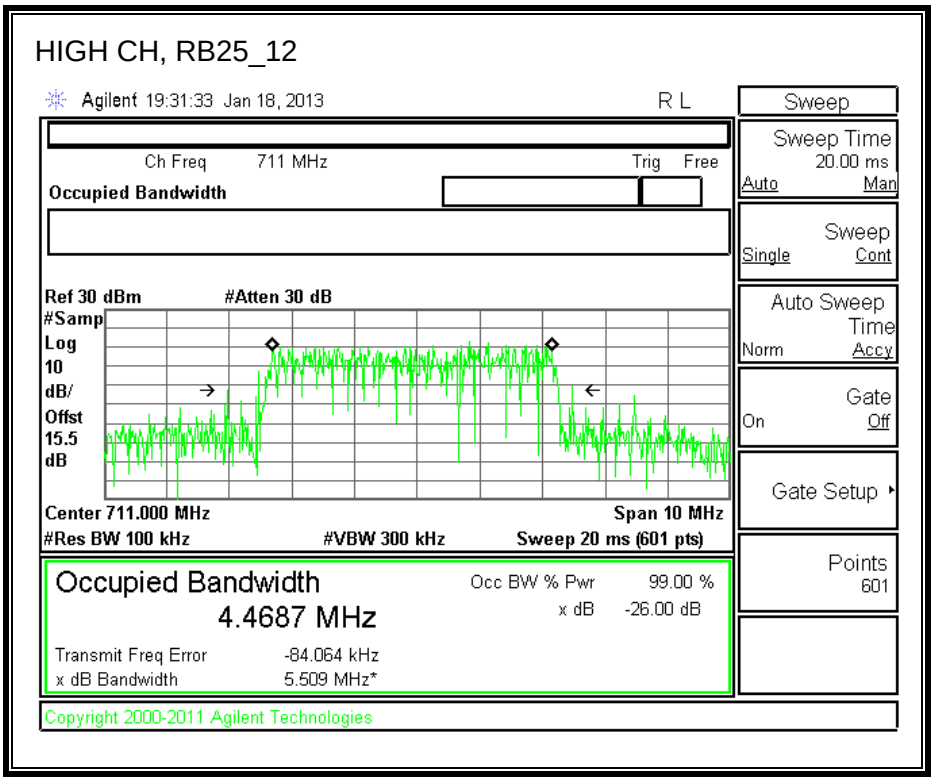


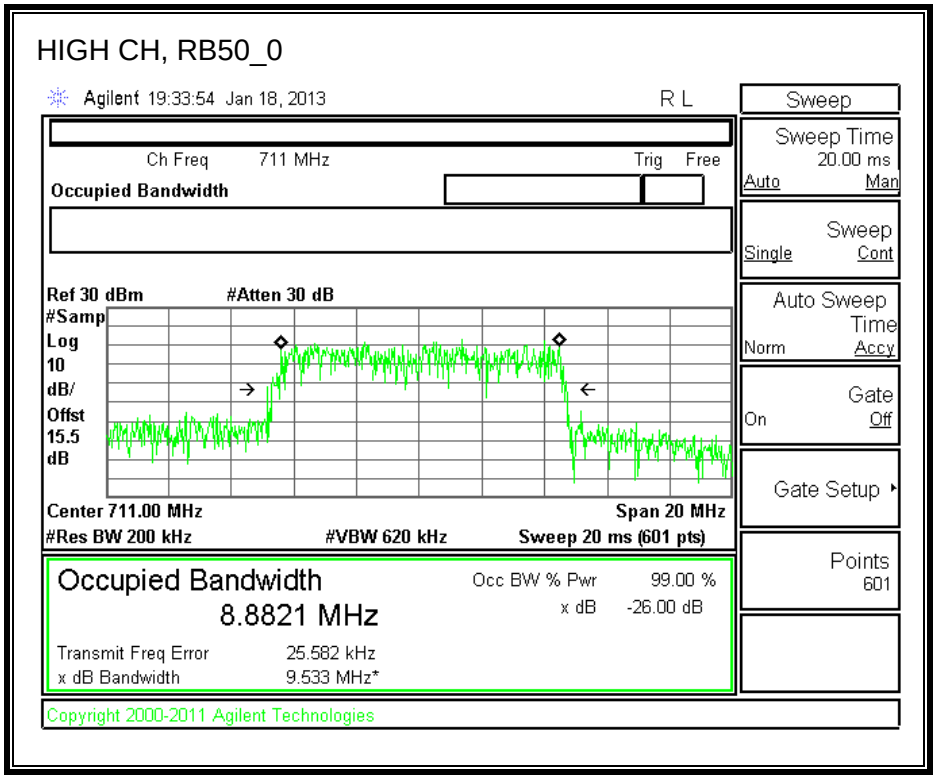
10.0MHz BAND WIDTH QPSK





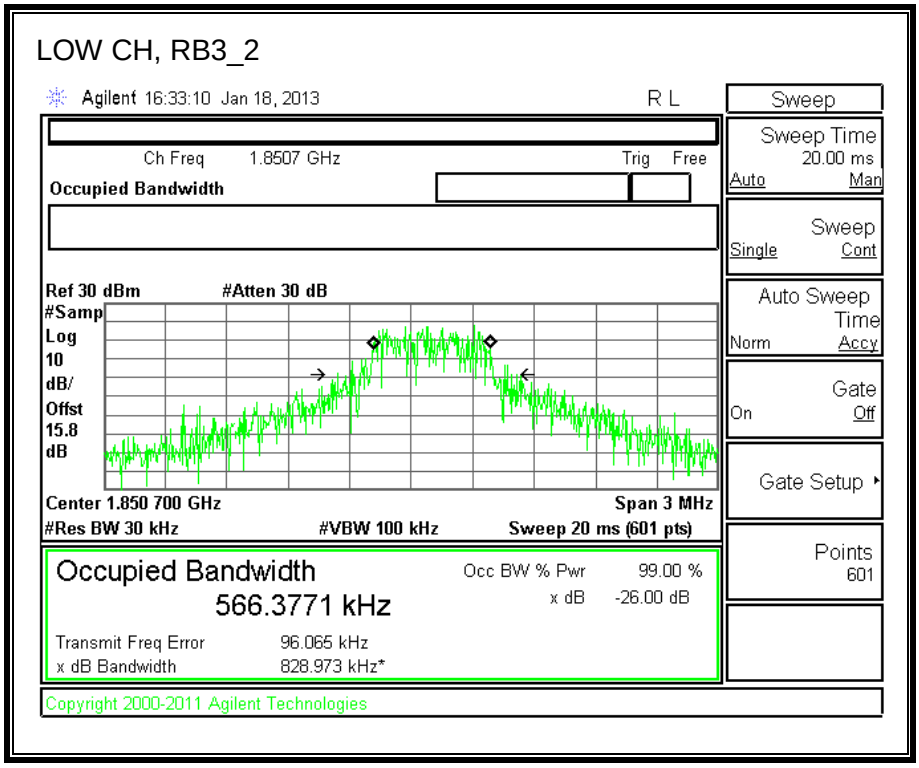
10.0MHz BAND WIDTH 16QAM

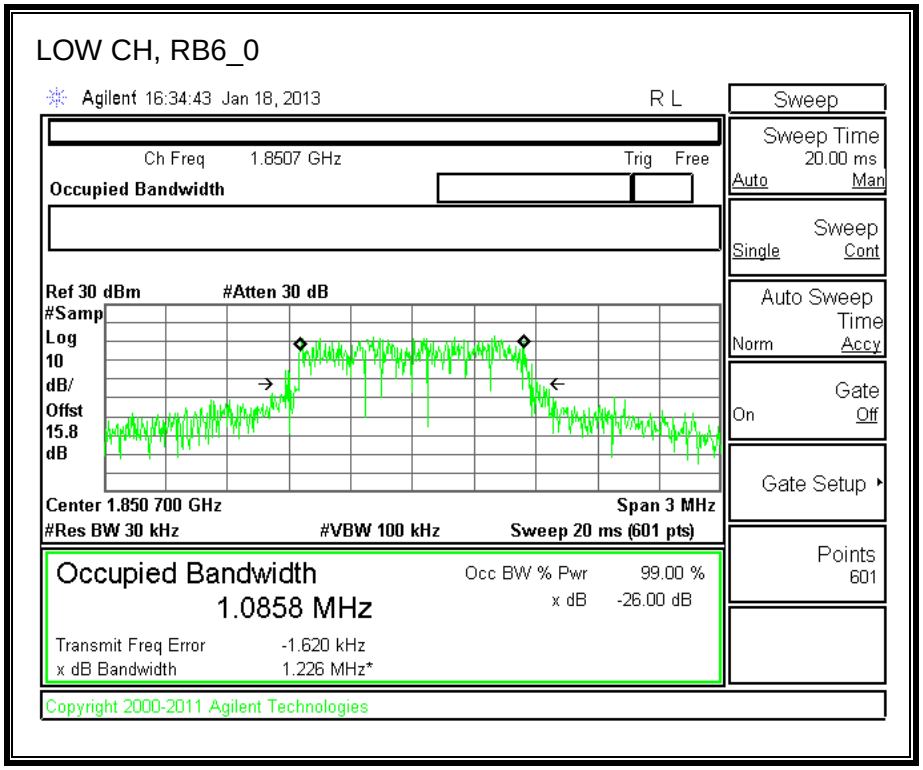




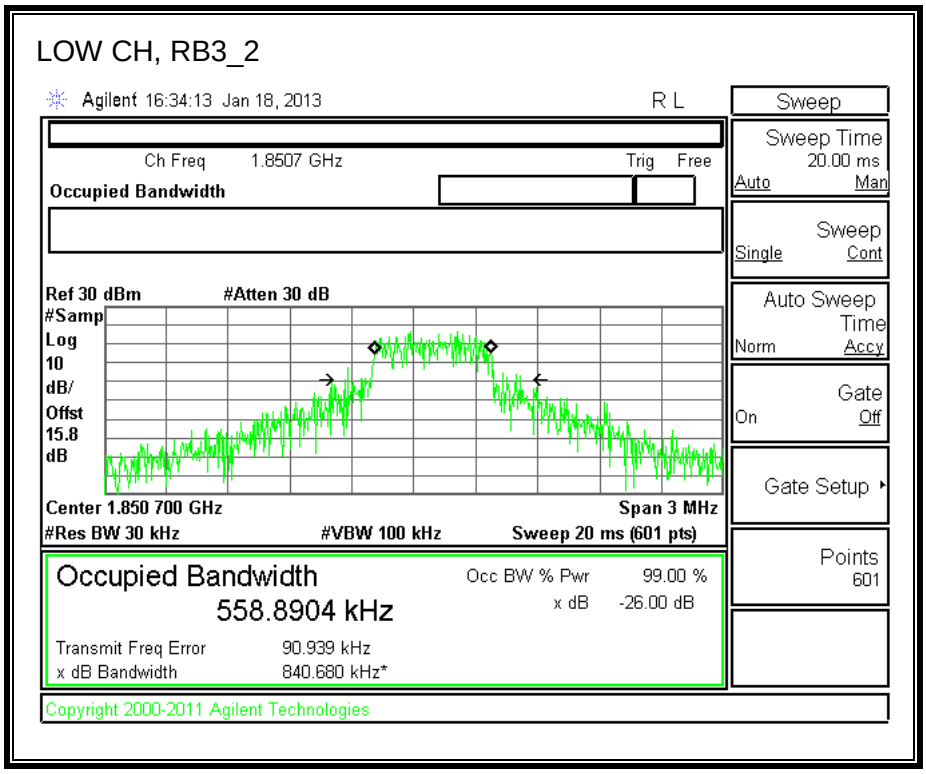
8.1.7. *LTE Band 25*

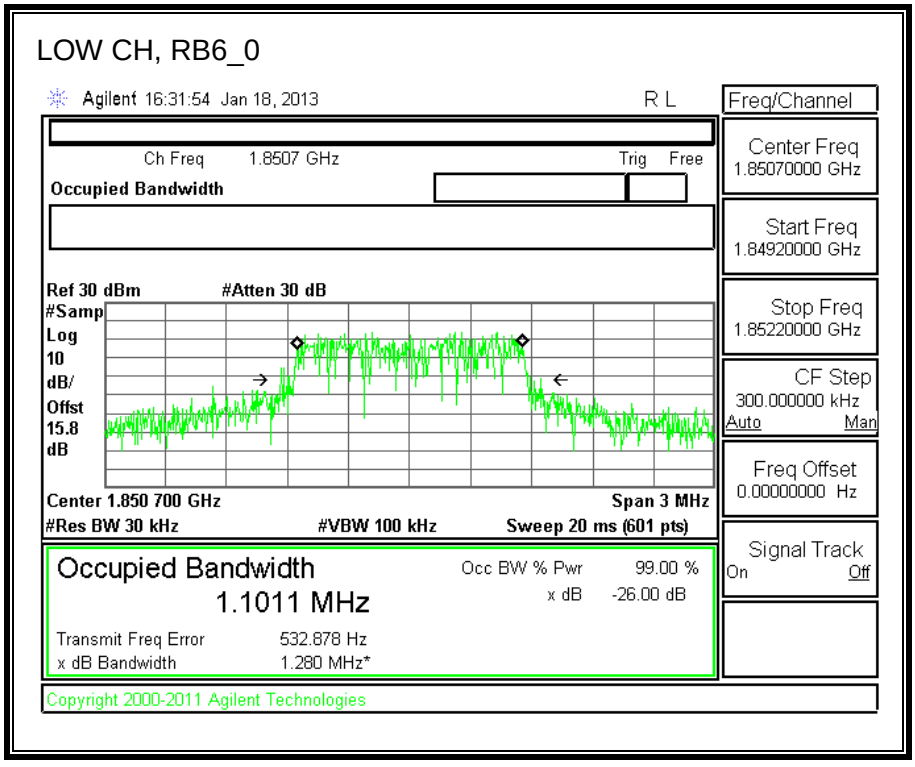
1.4MHz BAND WIDTH QPSK



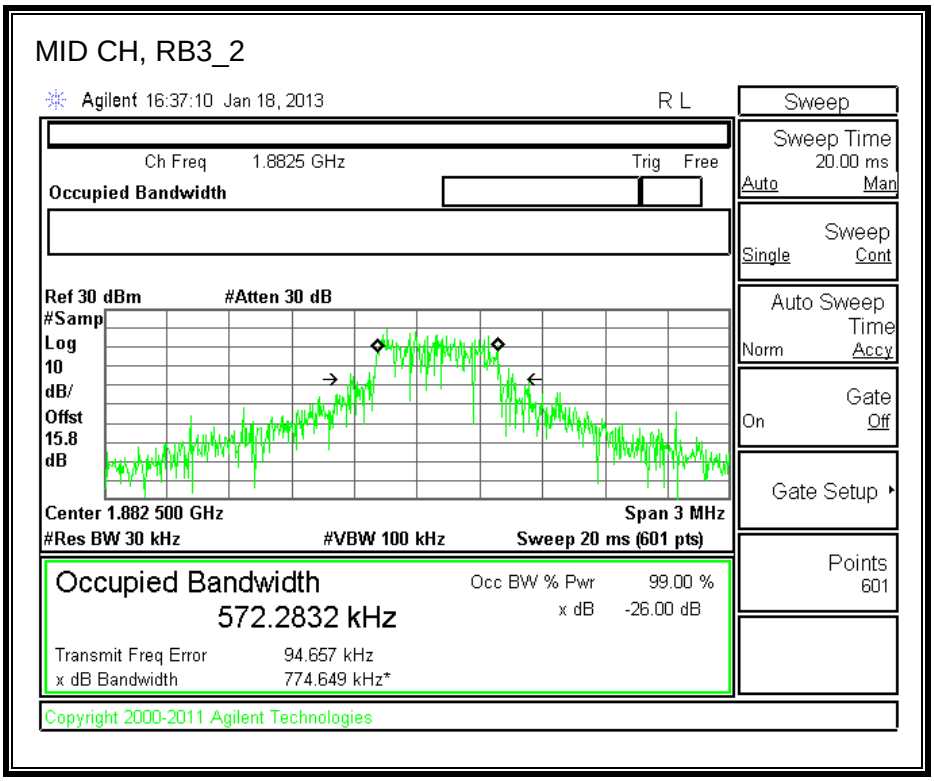


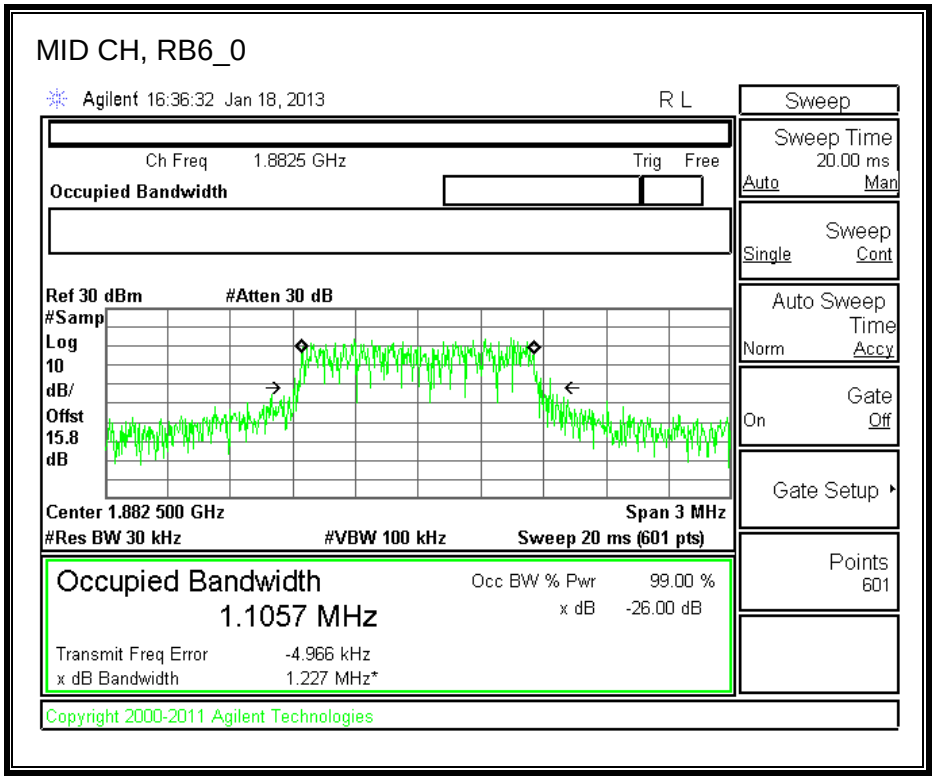
1.4MHz BAND WIDTH 16QAM



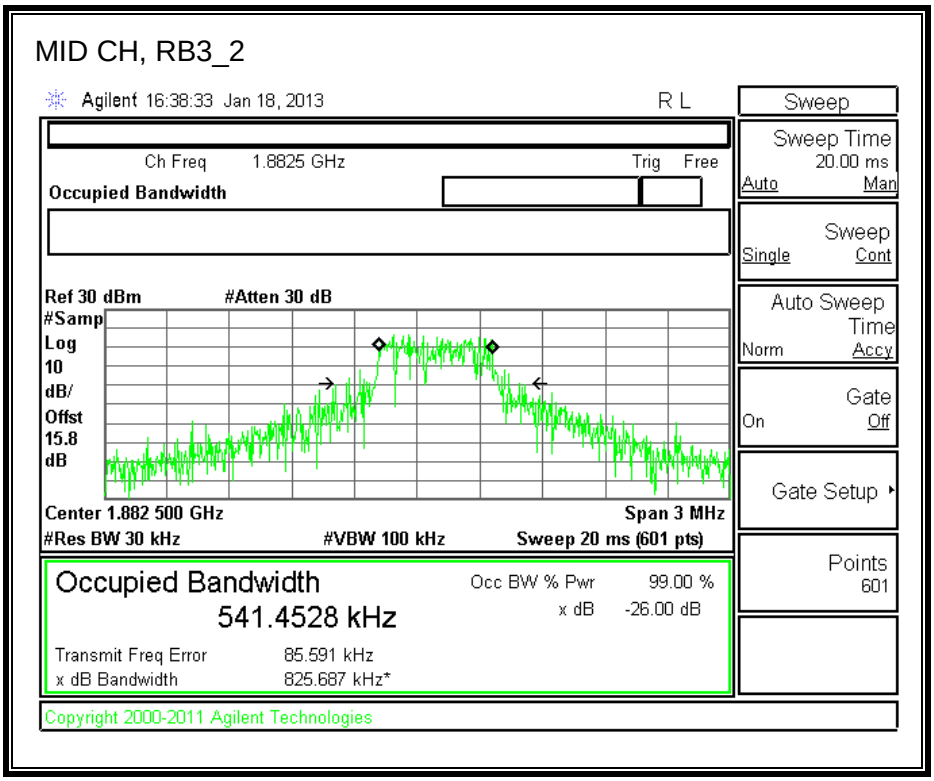


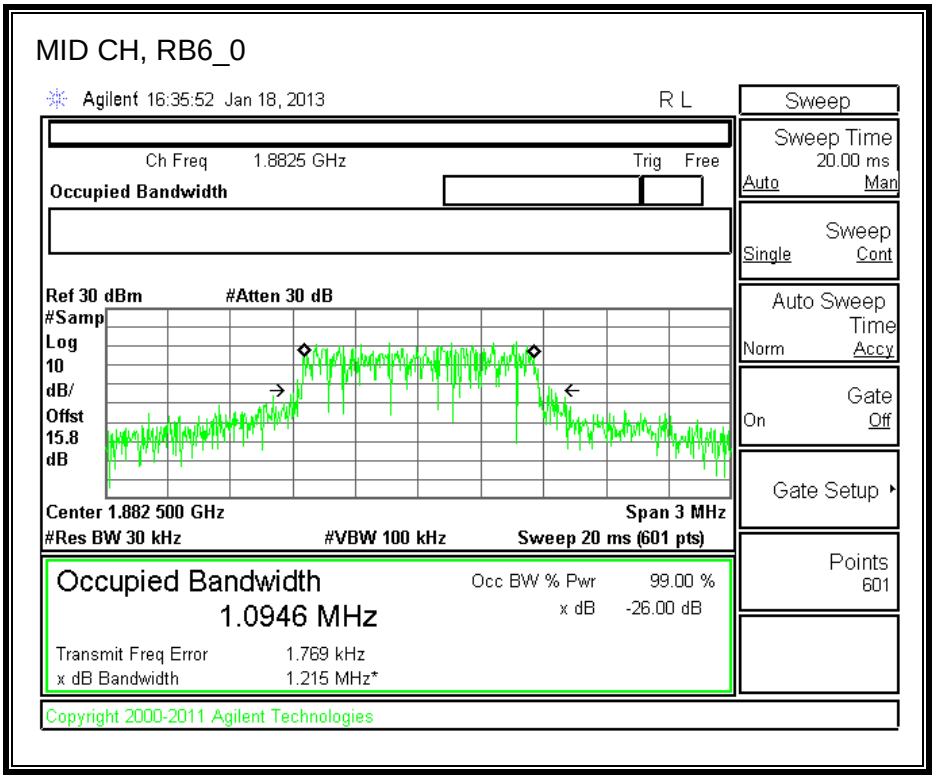
1.4MHz BAND WIDTH QPSK



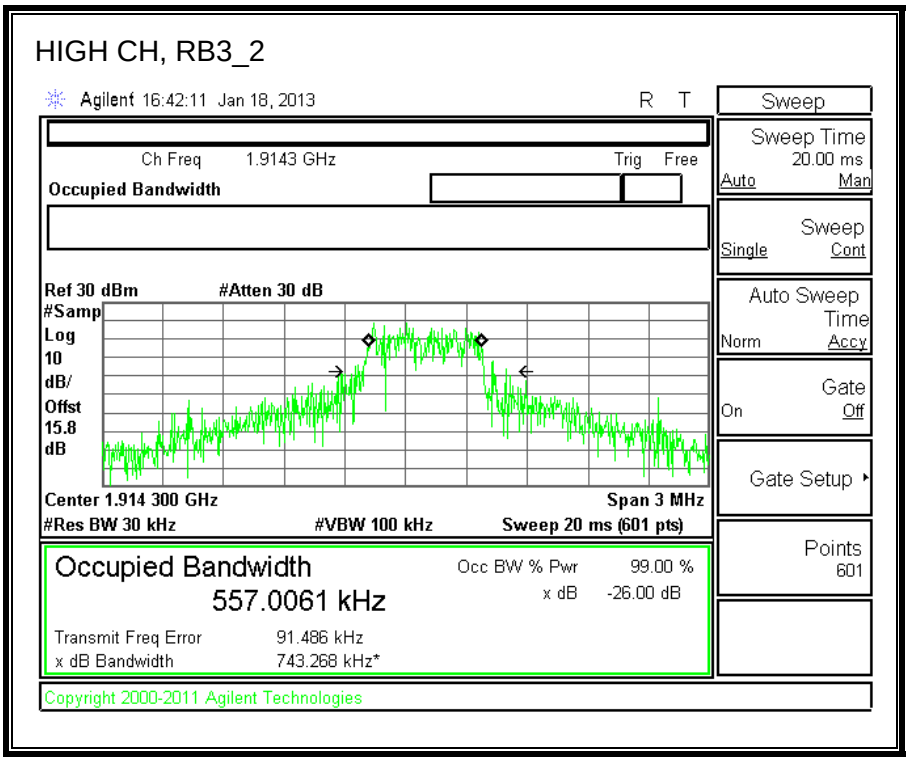


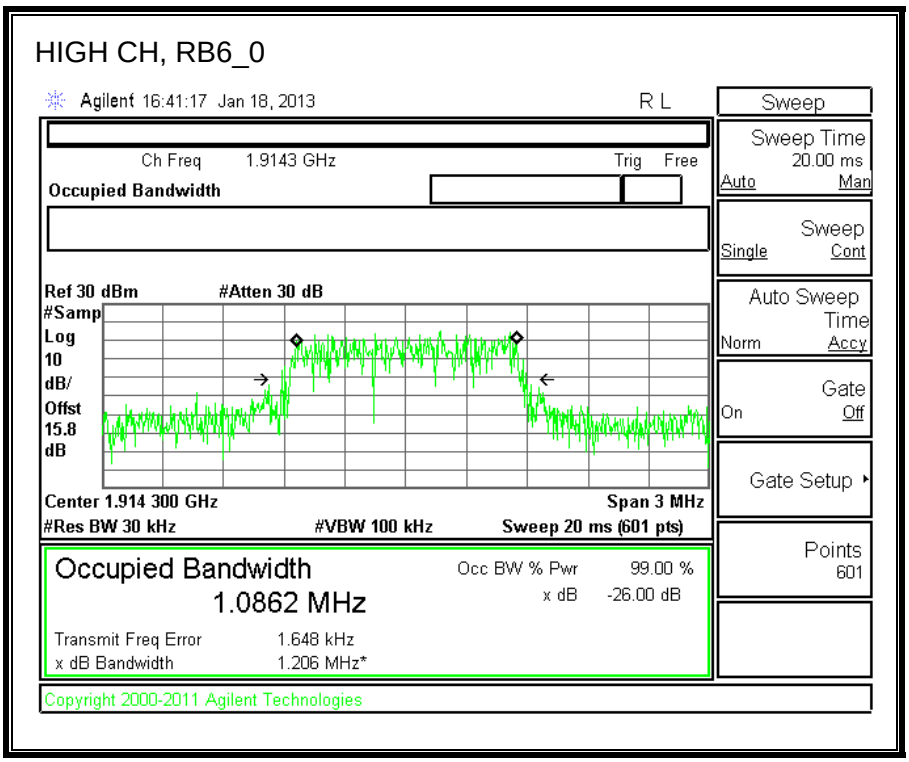
1.4MHz BAND WIDTH 16QAM



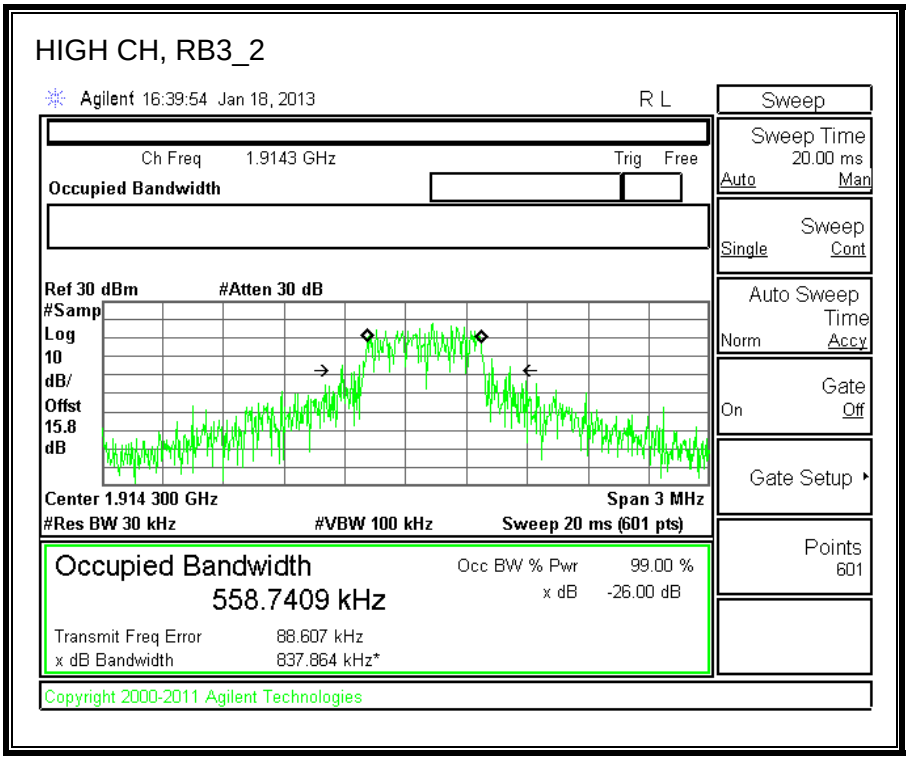


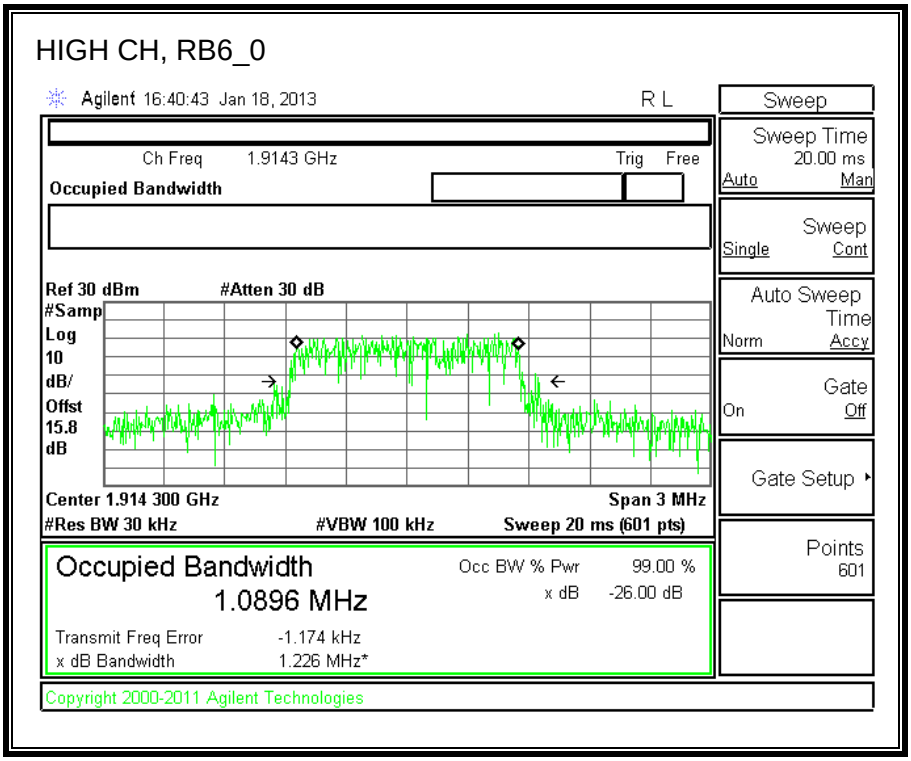
1.4MHz BAND WIDTH QPSK



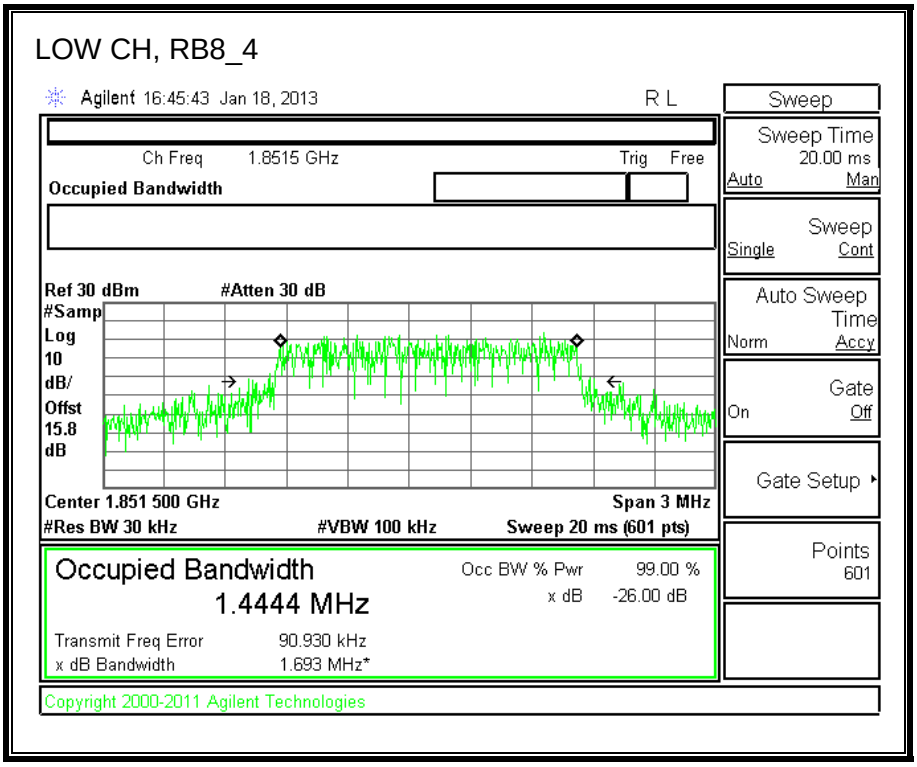


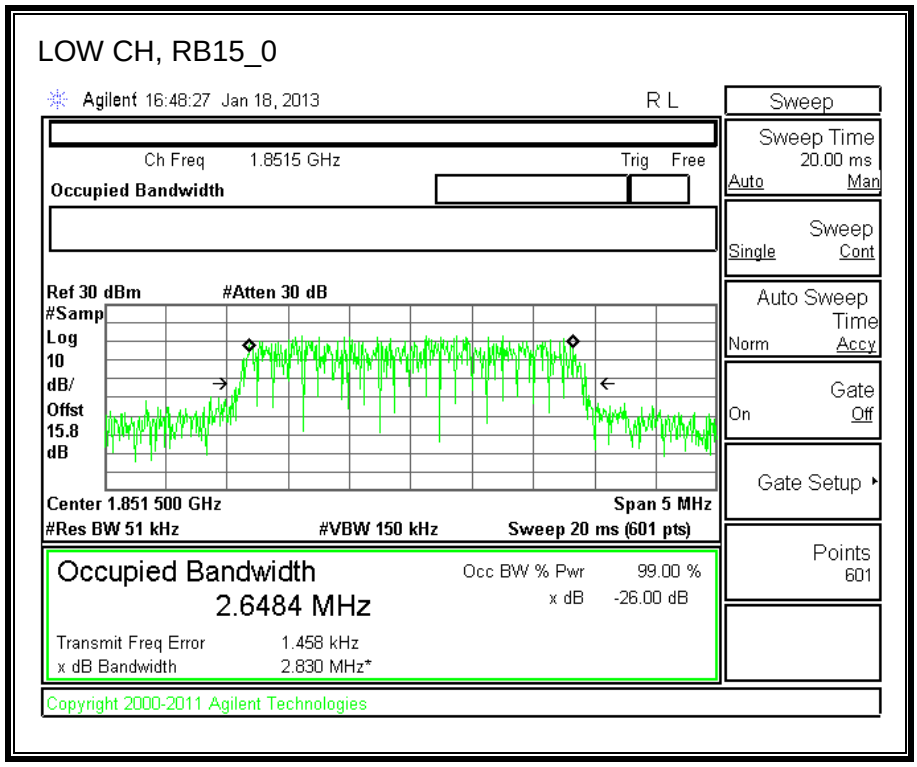
1.4MHz BAND WIDTH 16QAM



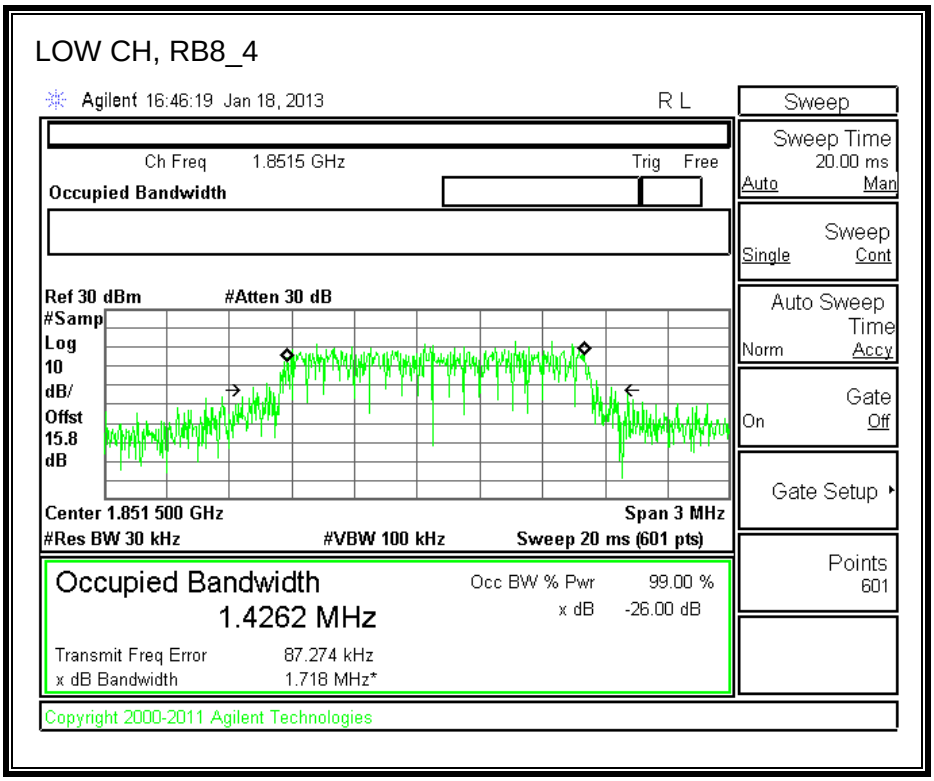


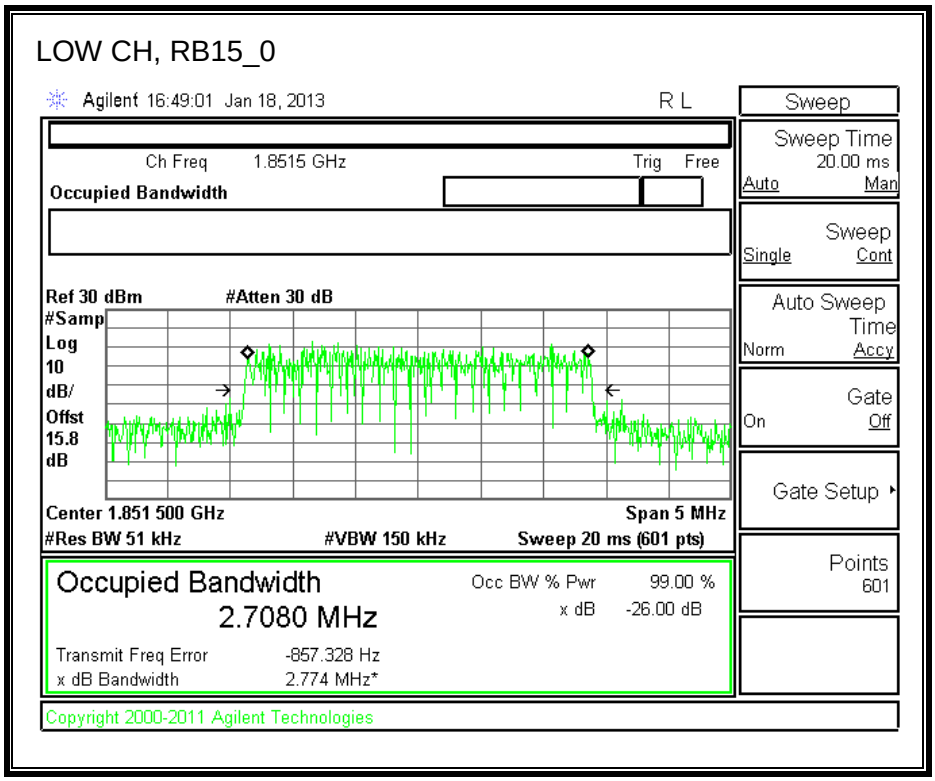
3.0MHz BAND WIDTH QPSK



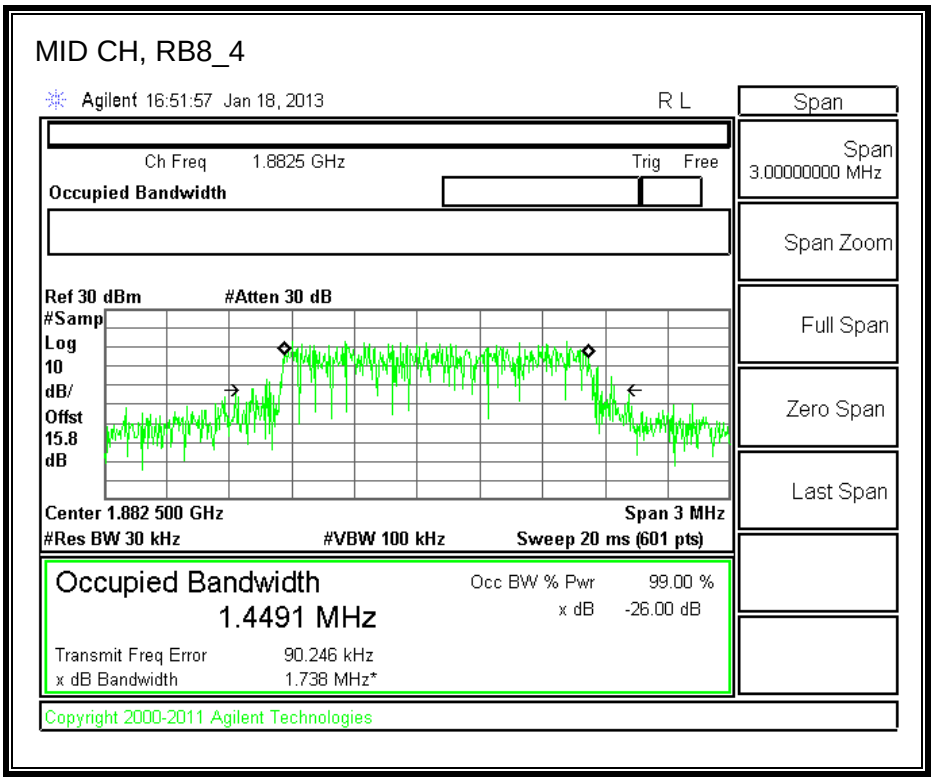


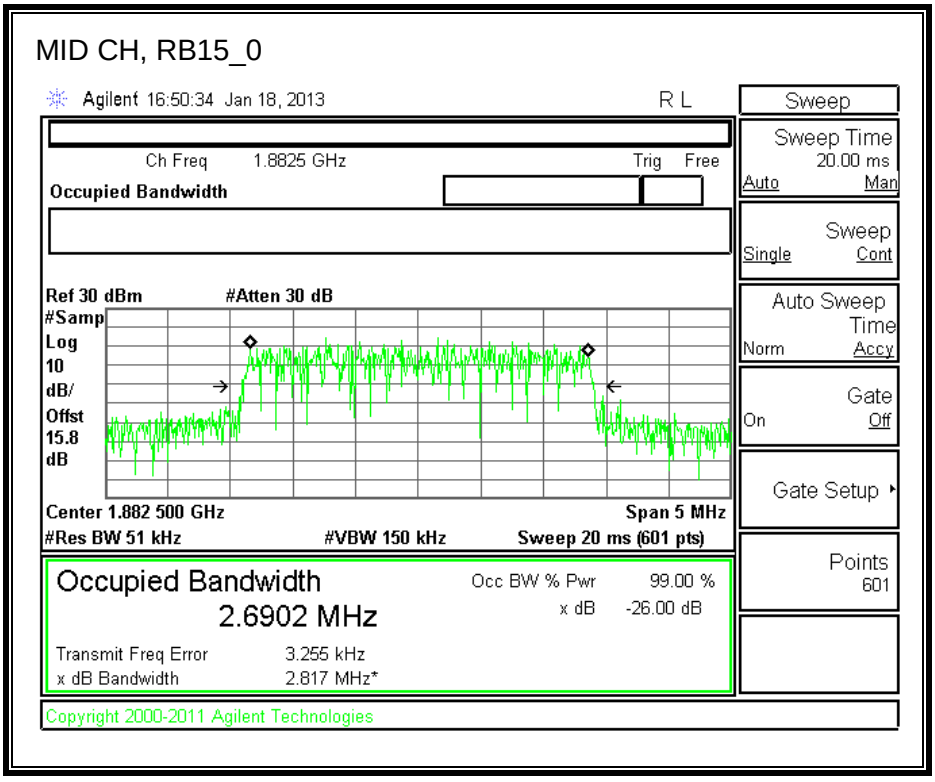
3.0MHz BAND WIDTH 16QAM



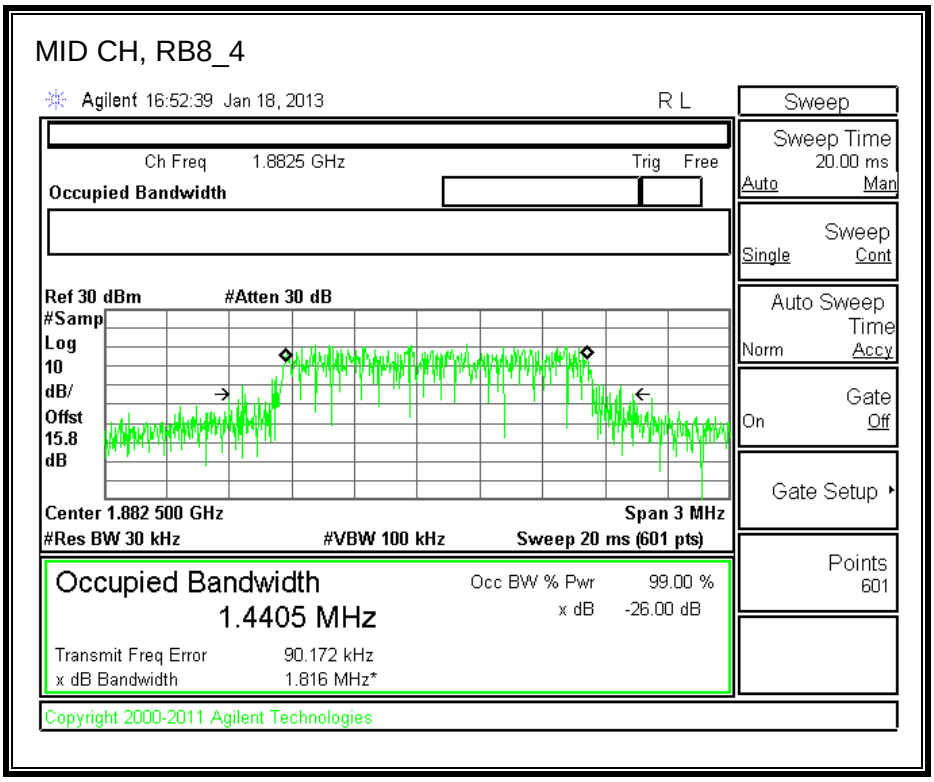


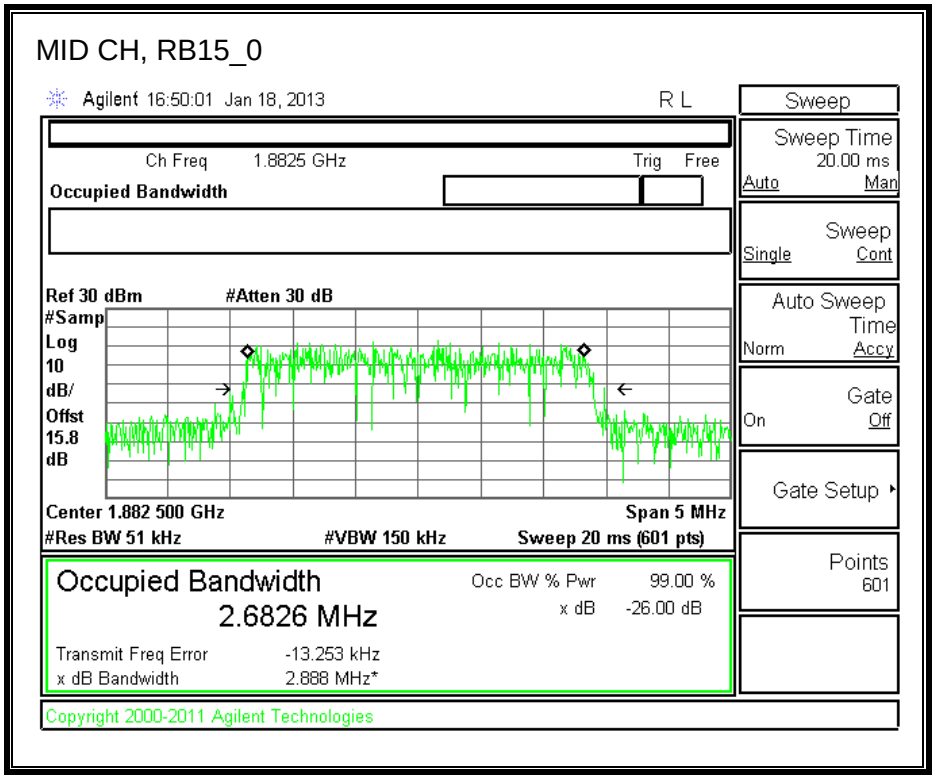
3.0MHz BAND WIDTH QPSK





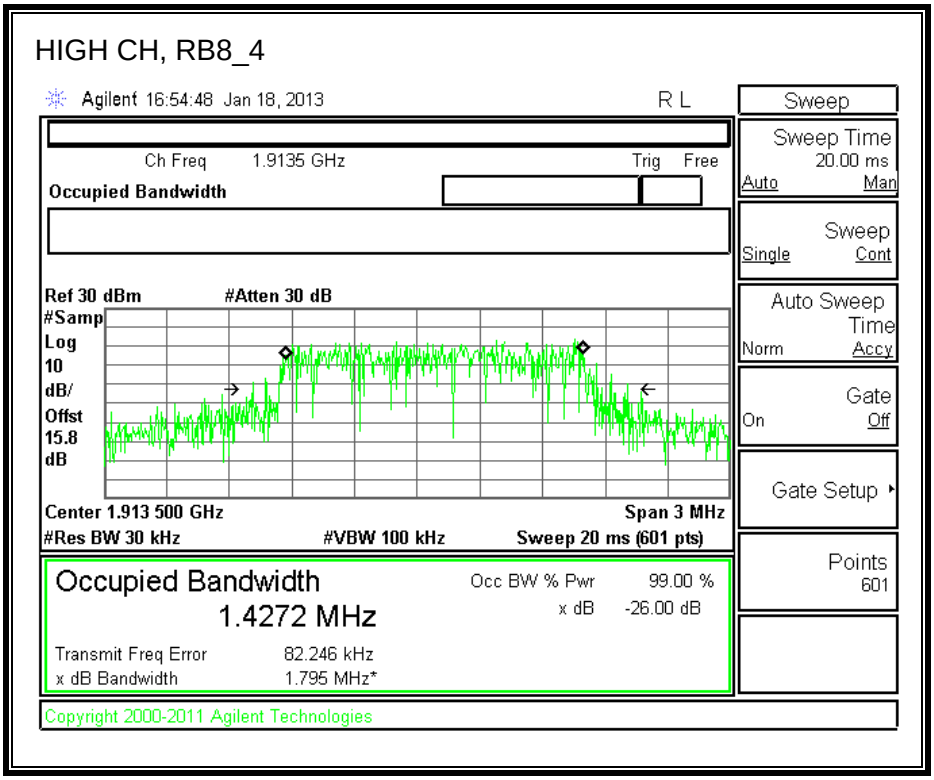
3.0MHz BAND WIDTH 16QAM



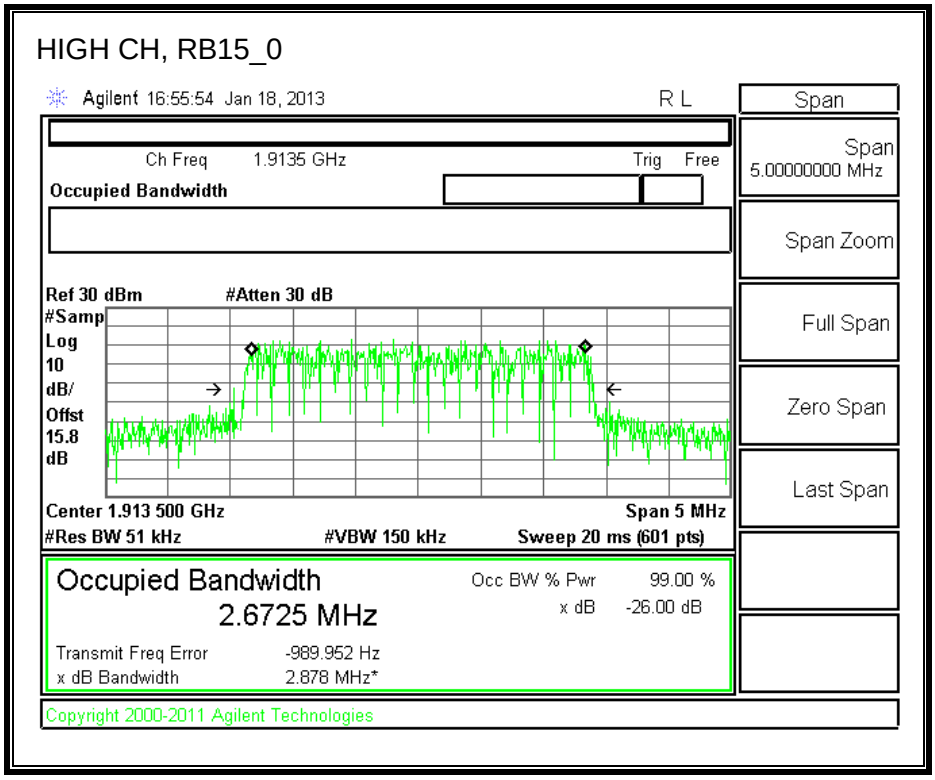


3.0MHz BAND WIDTH QPSK

HIGH CH, RB8_4

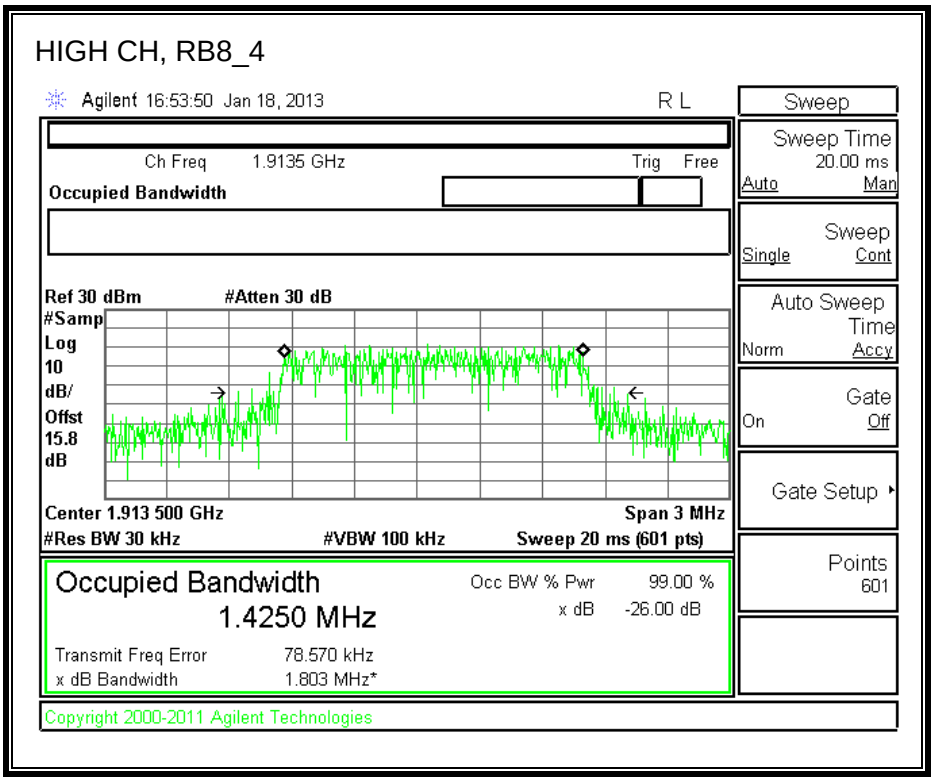


HIGH CH, RB15_0

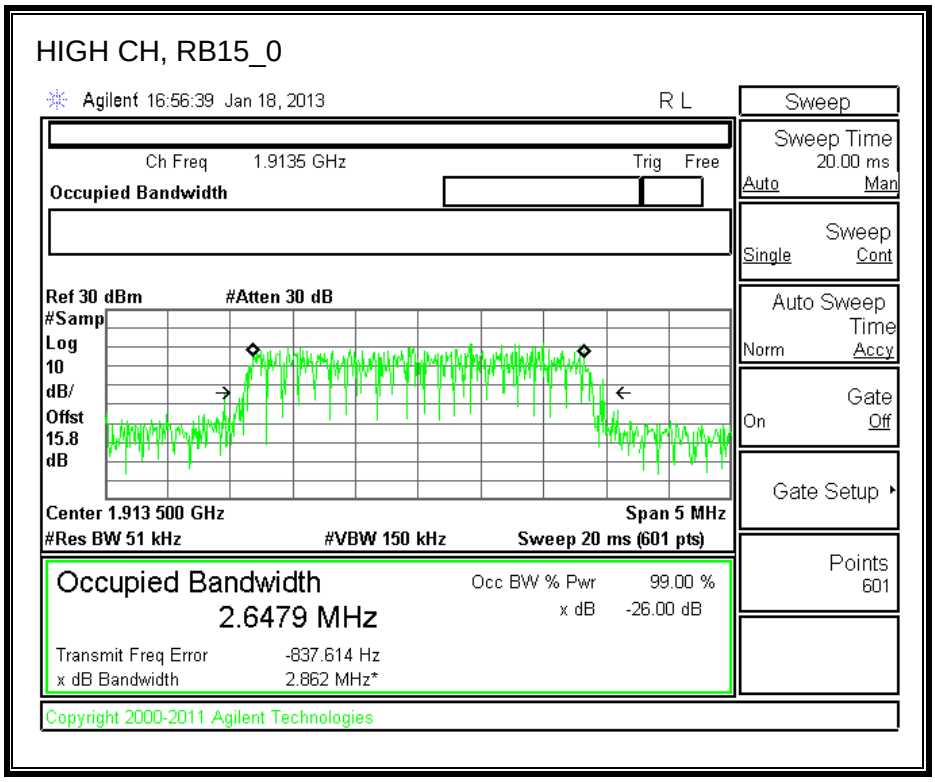


3.0MHz BAND WIDTH 16QAM

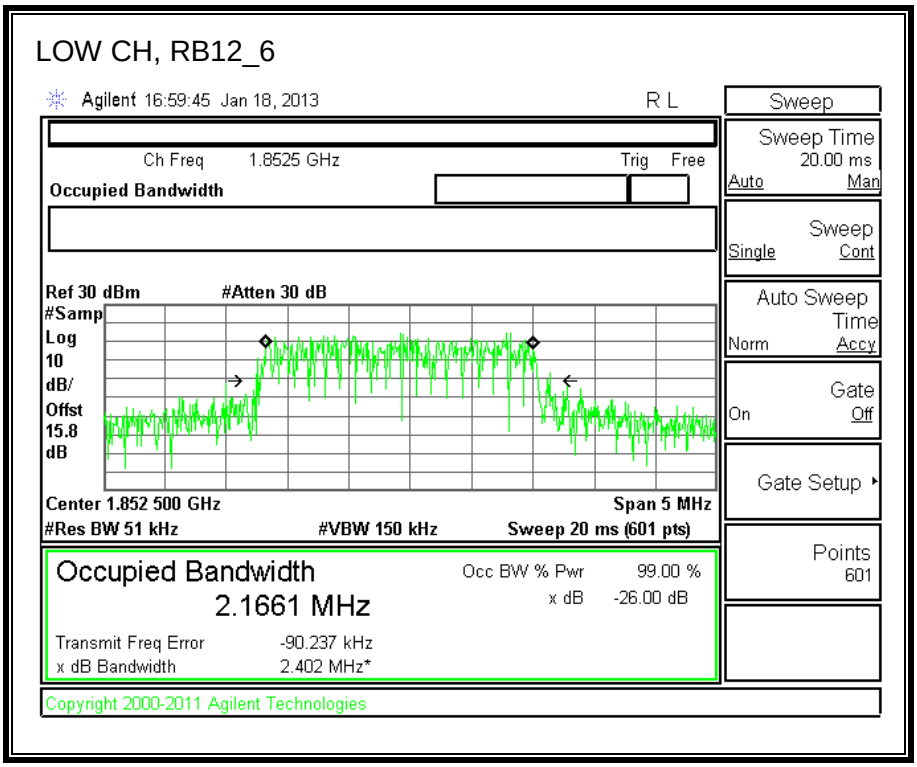
HIGH CH, RB8_4

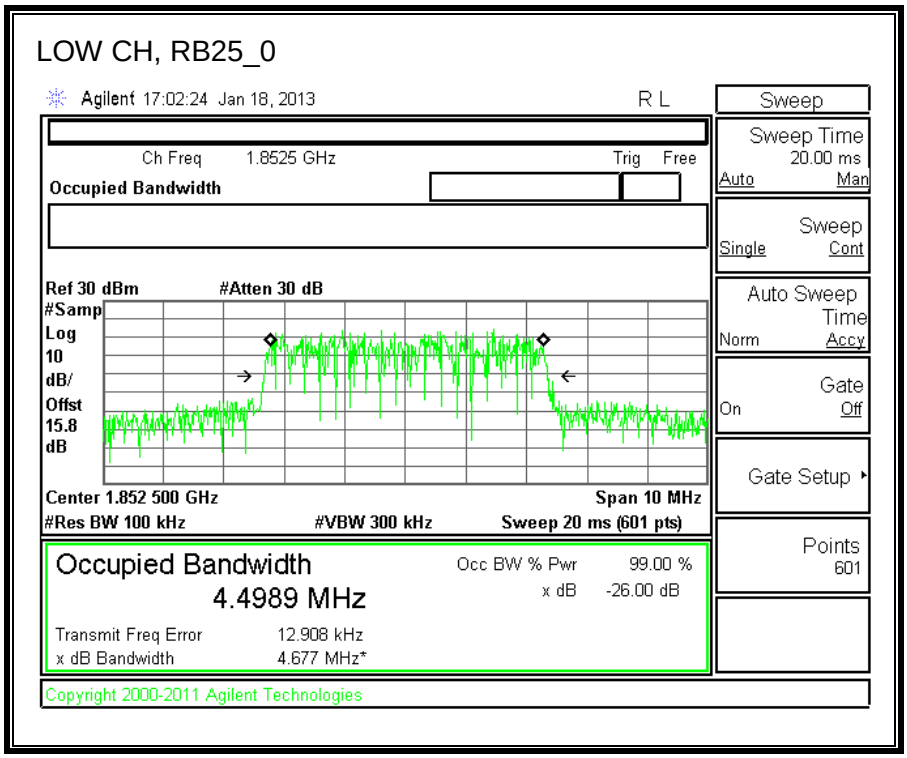


HIGH CH, RB15_0

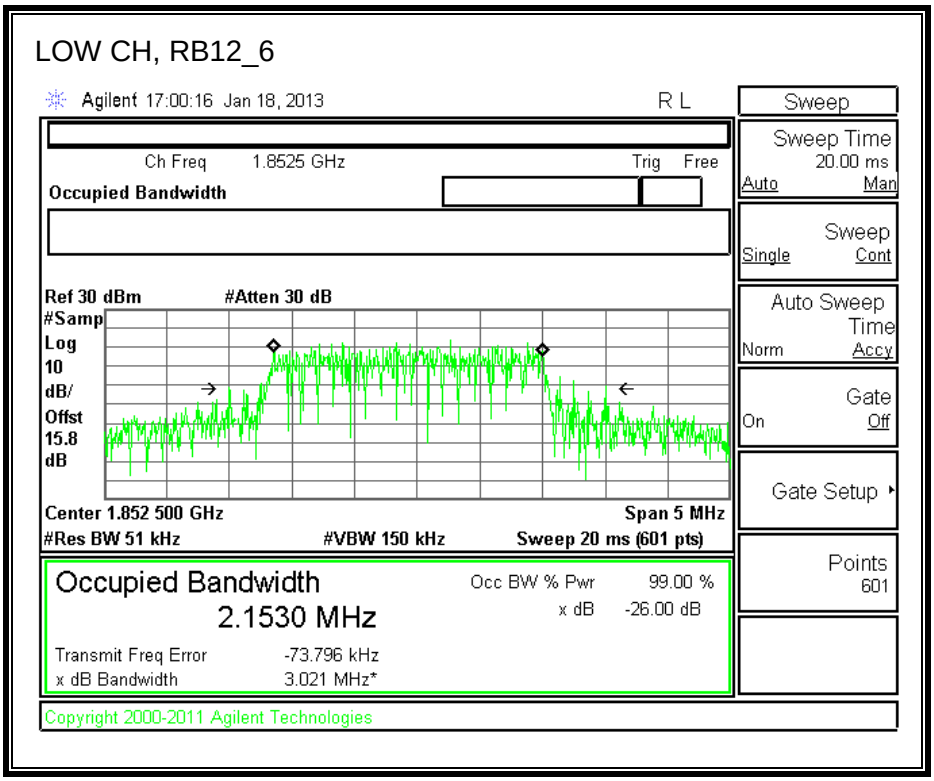


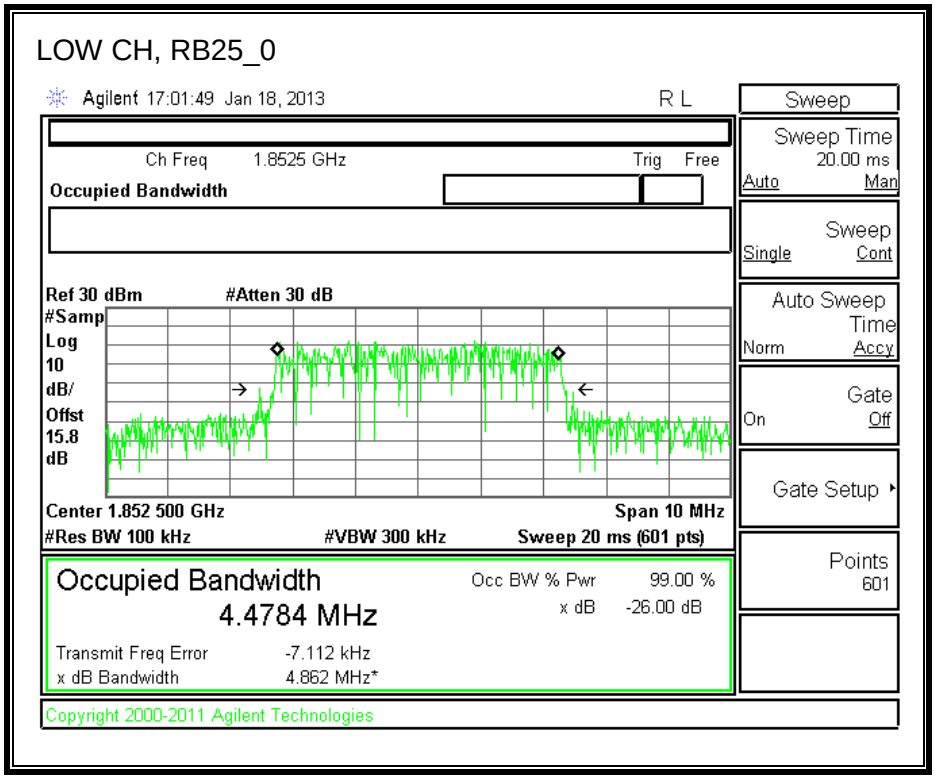
5.0MHz BAND WIDTH QPSK



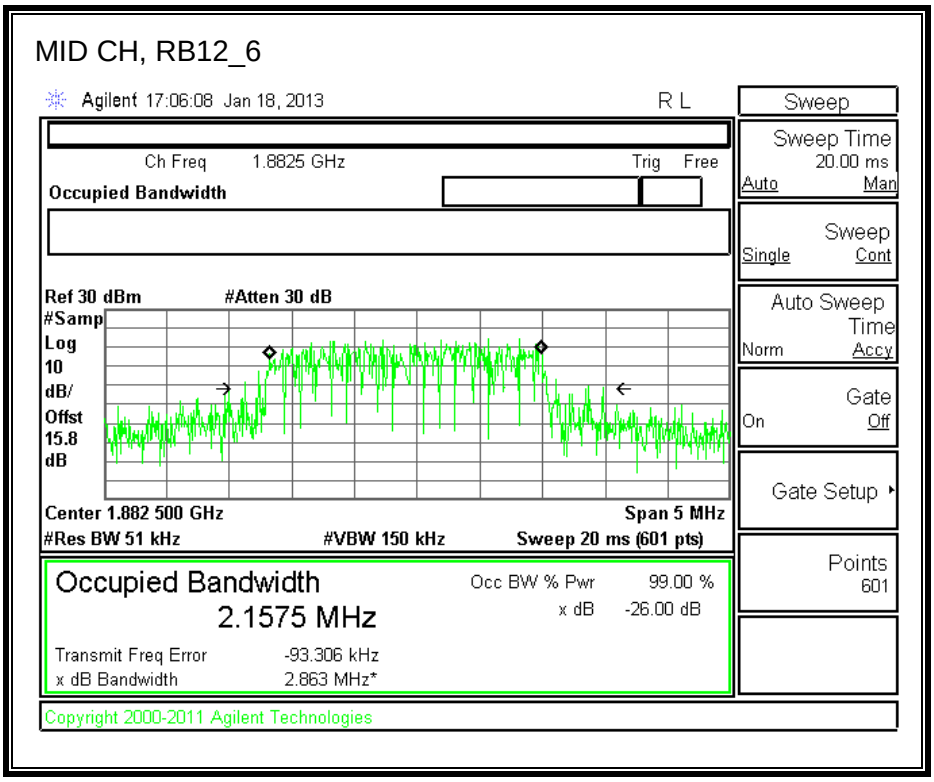


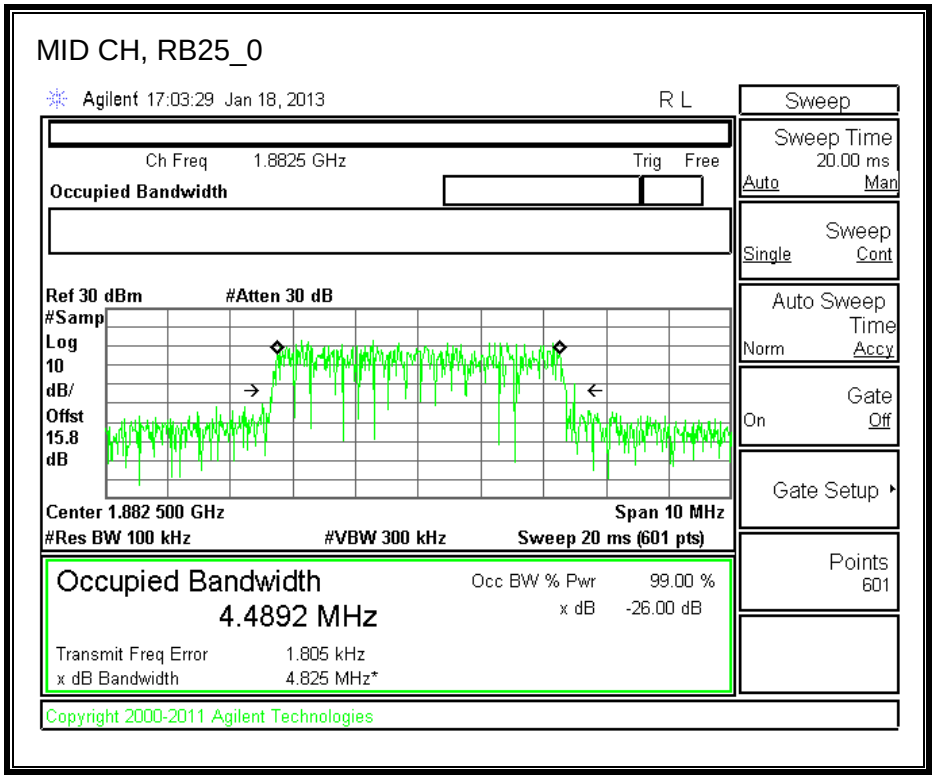
5.0MHz BAND WIDTH 16QAM



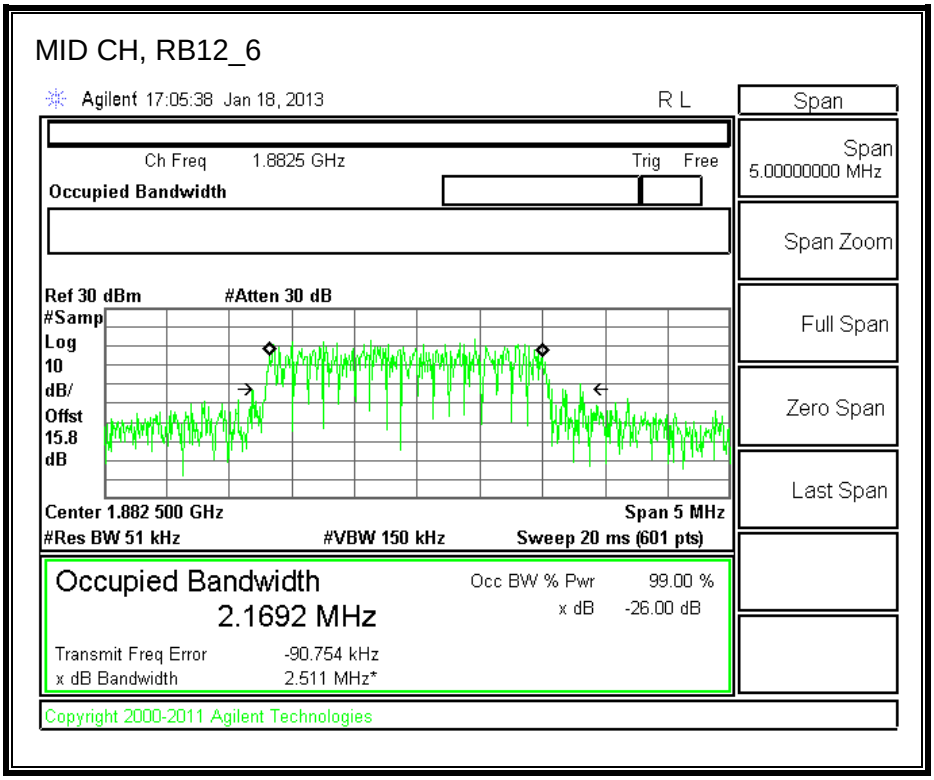


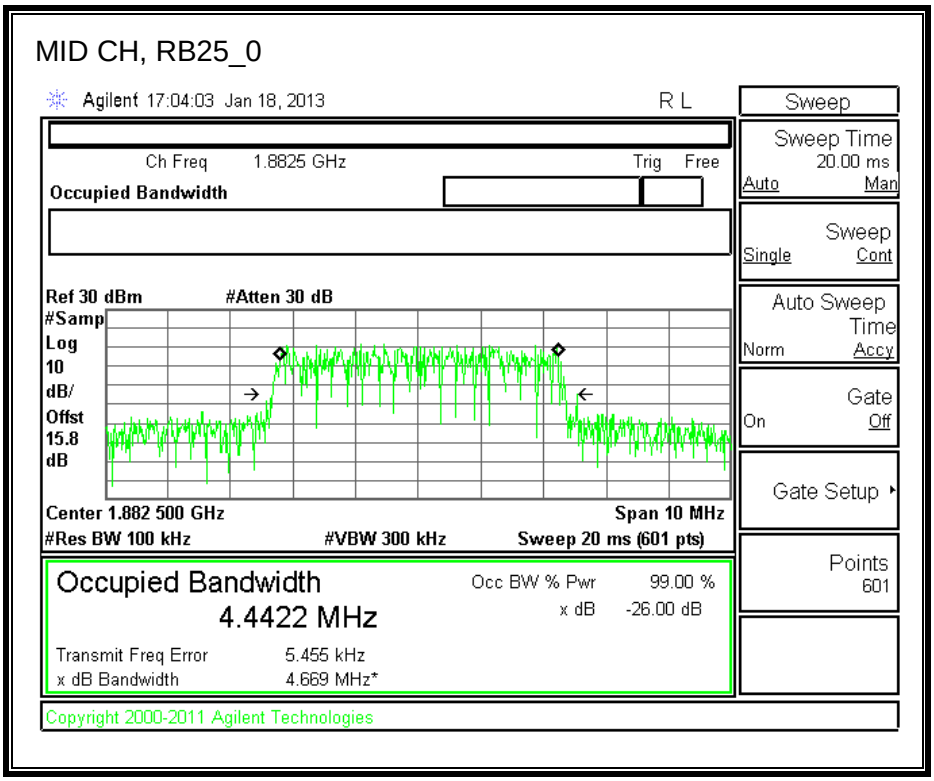
5.0MHz BAND WIDTH QPSK



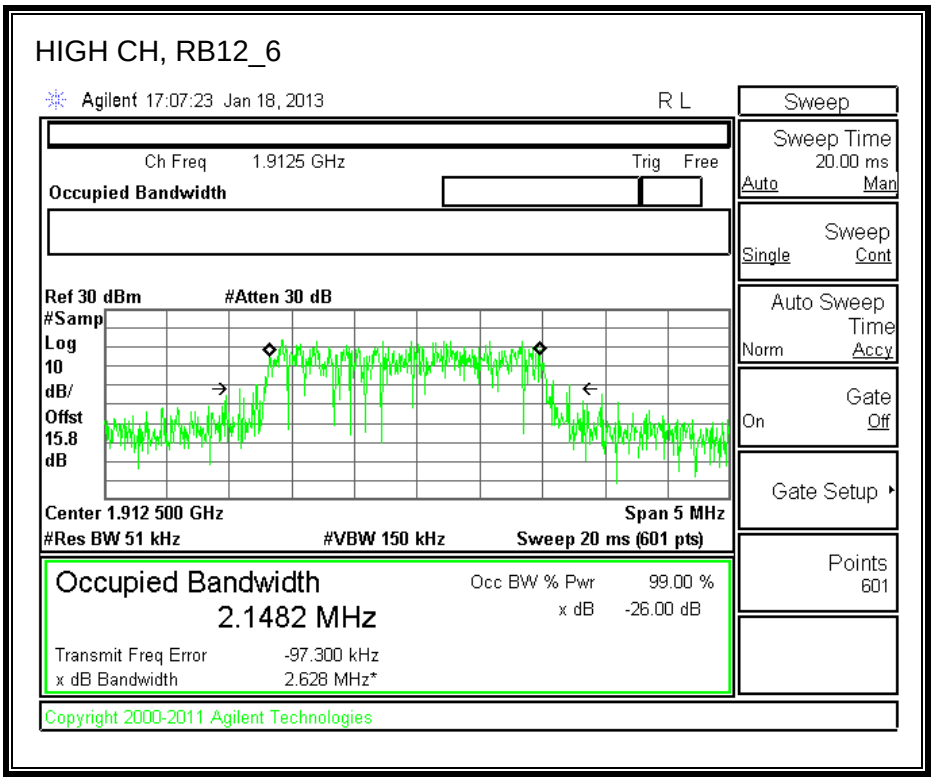


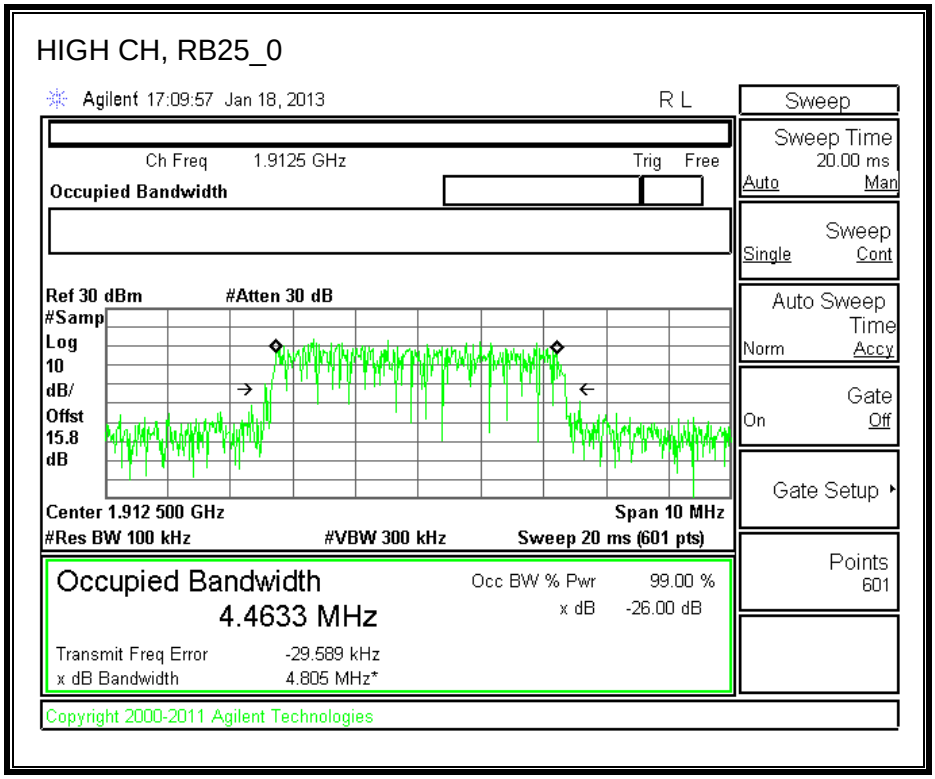
5.0MHz BAND WIDTH 16QAM



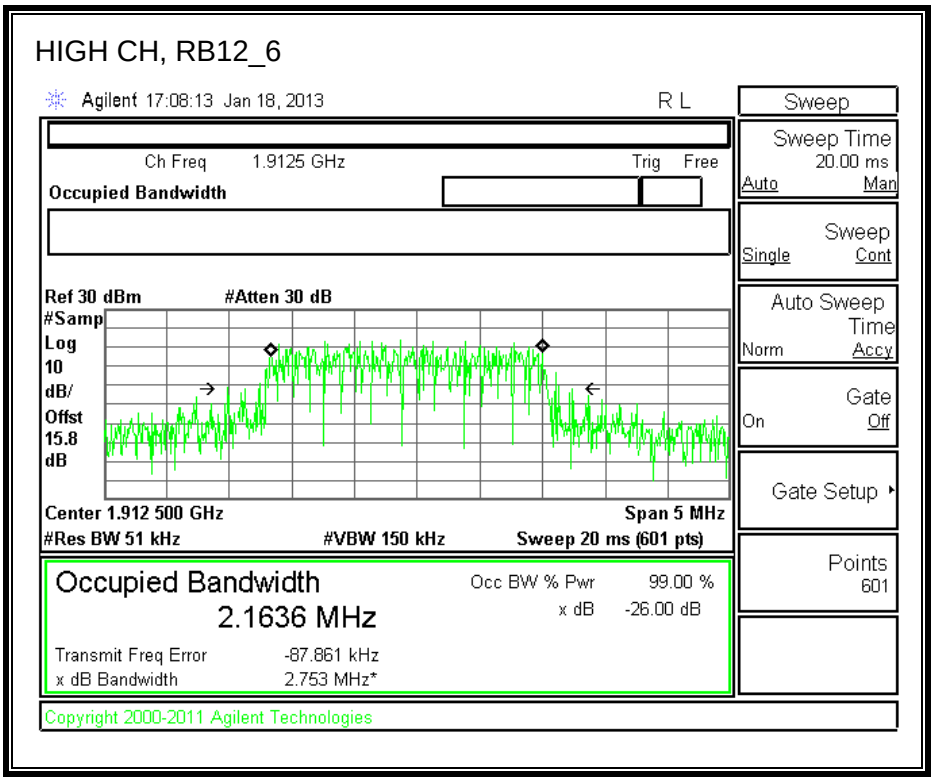


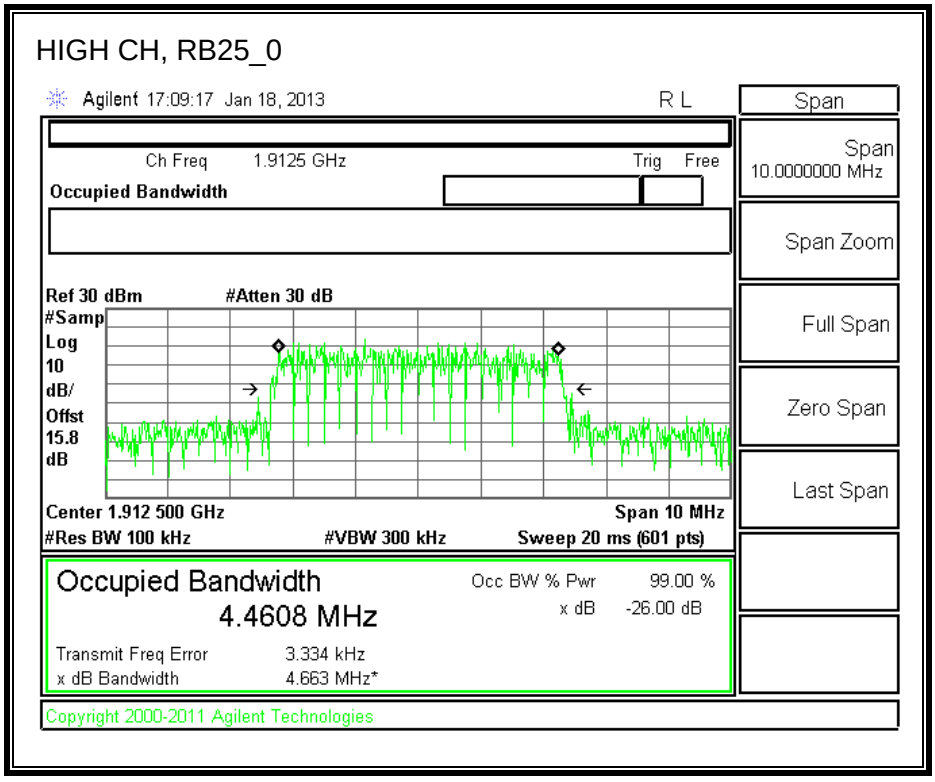
5.0MHz BAND WIDTH QPSK



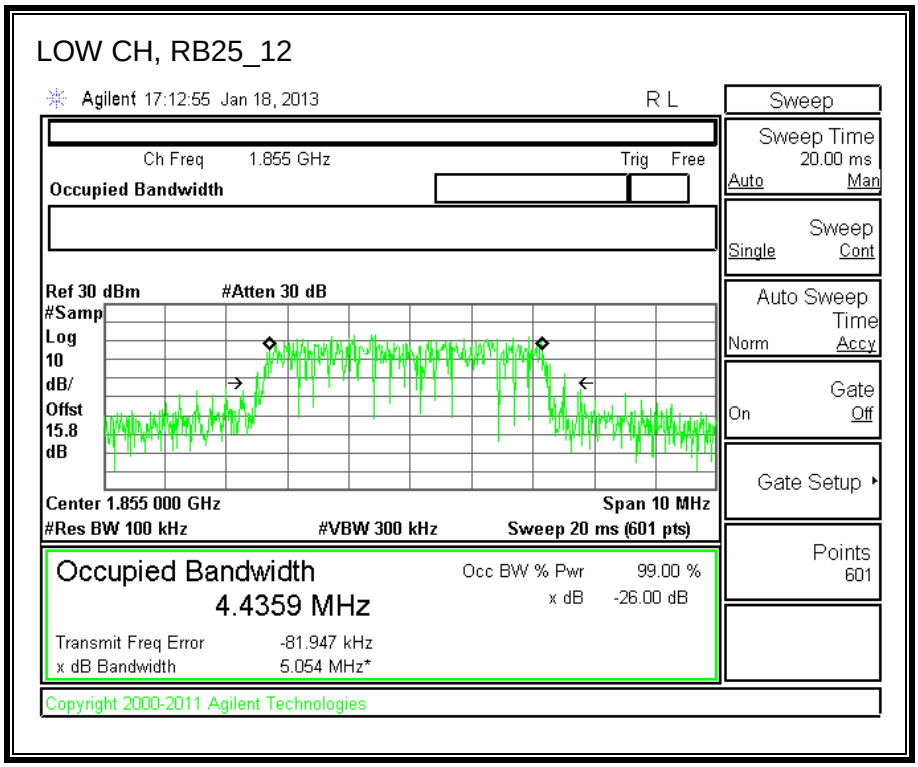


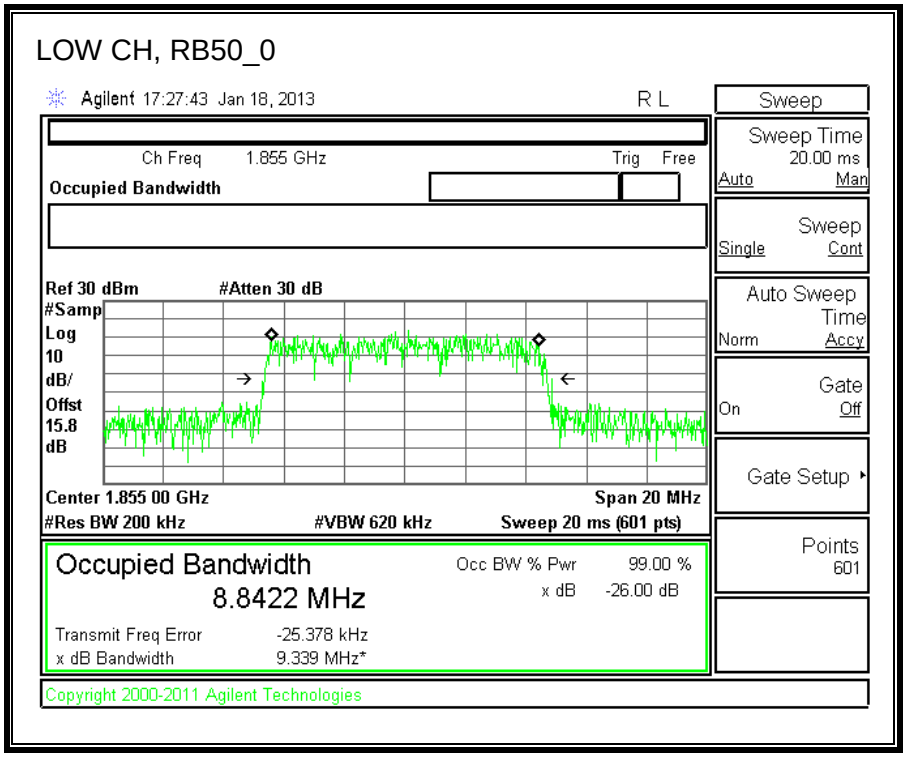
5.0MHz BAND WIDTH 16QAM



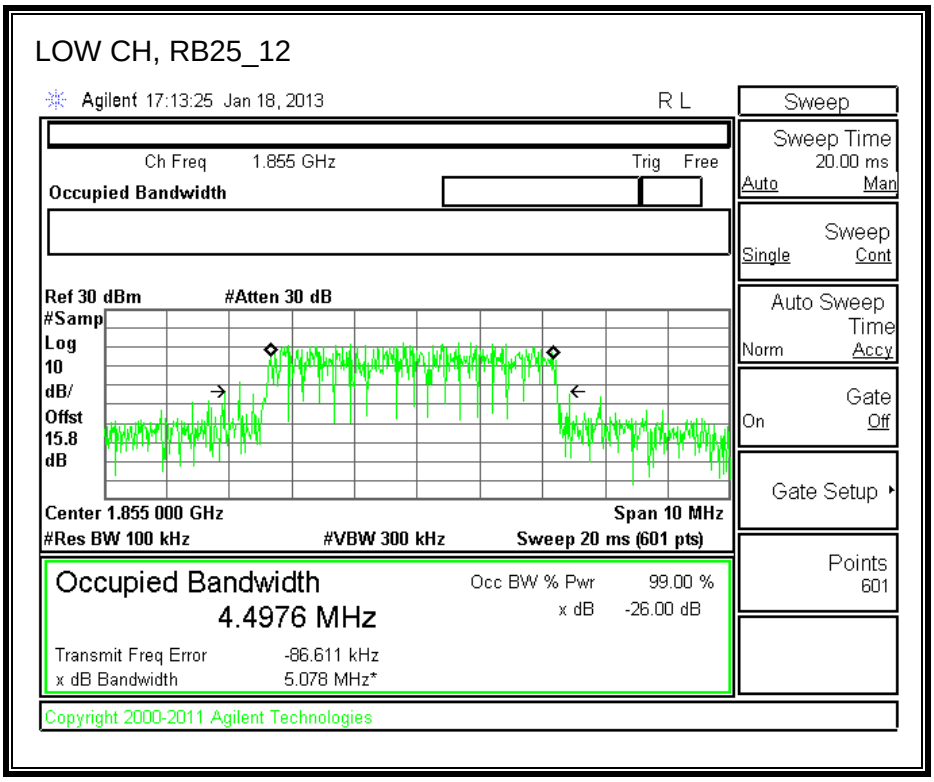


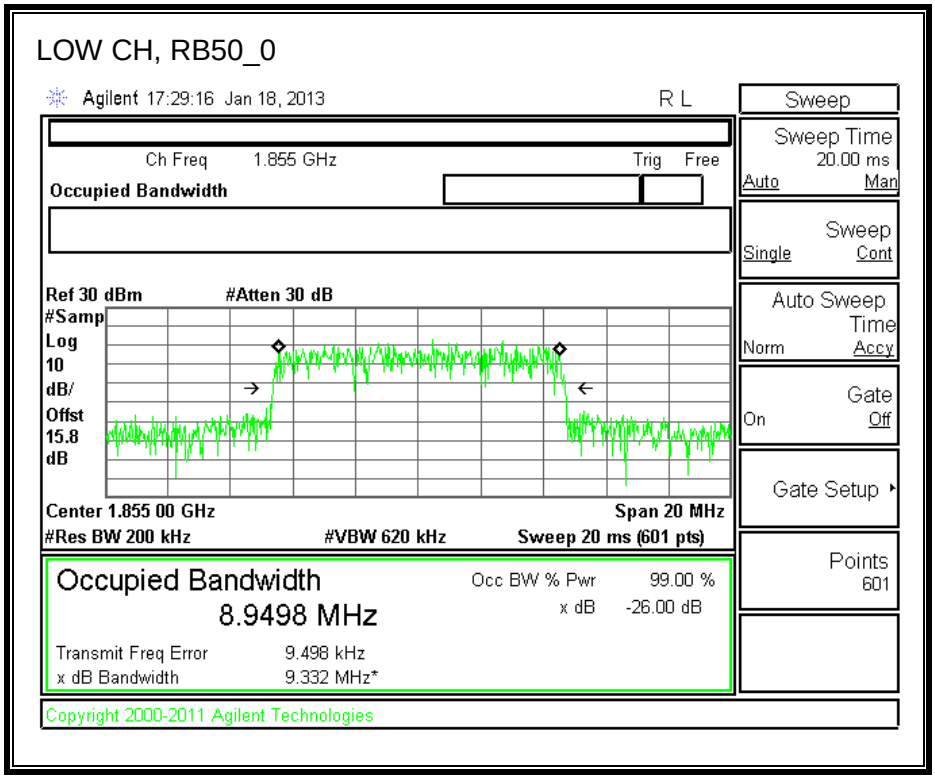
10.0MHz BAND WIDTH QPSK



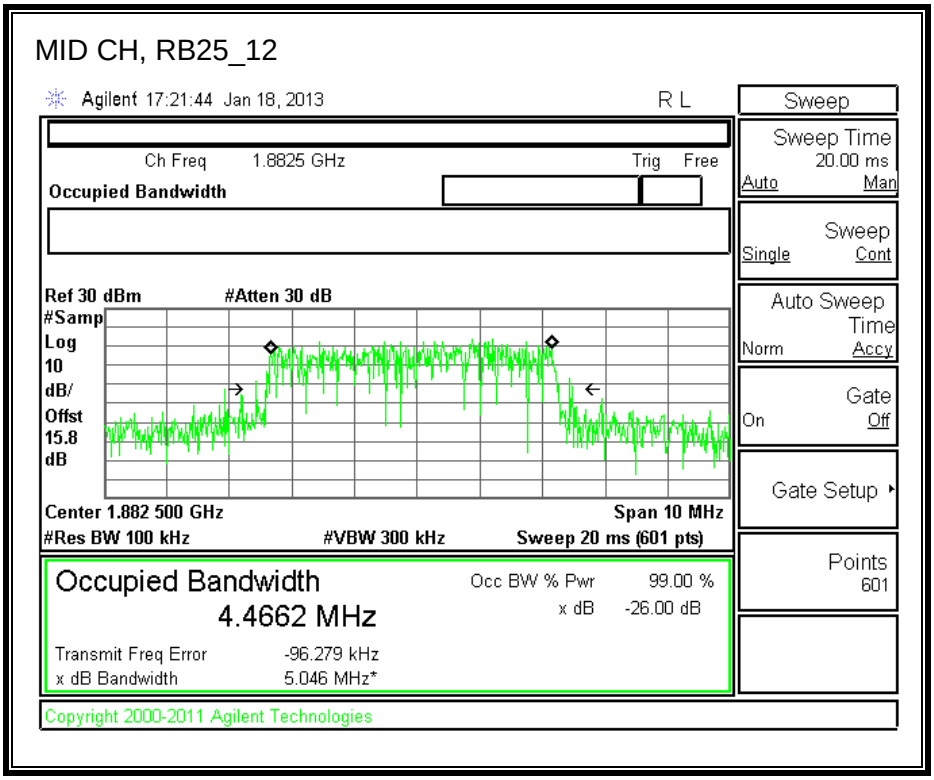


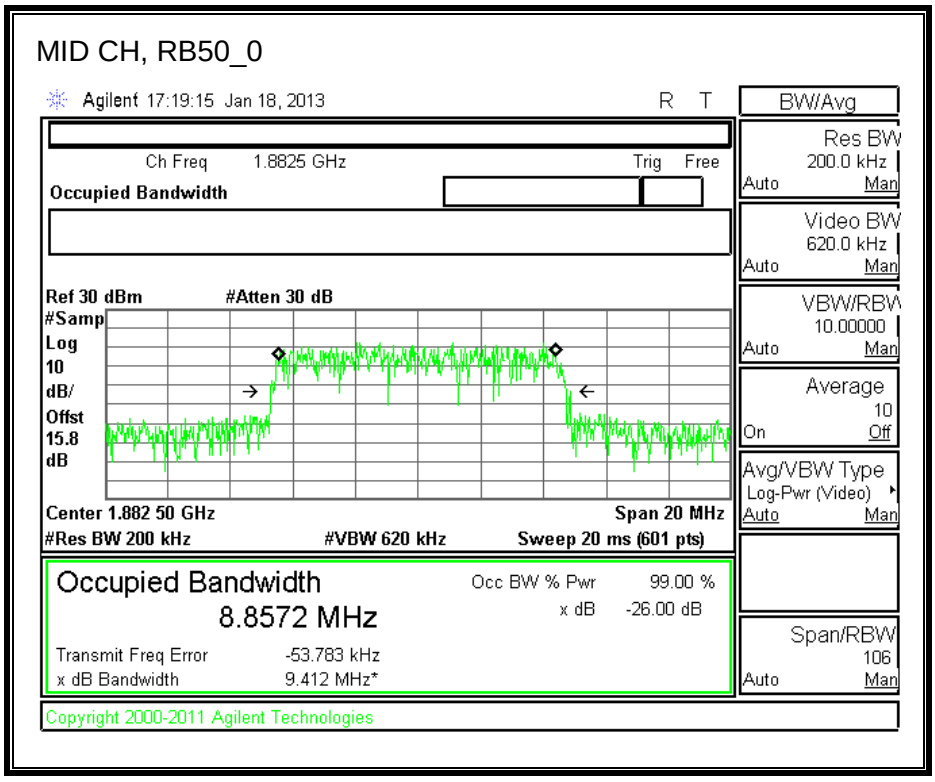
10.0MHz BAND WIDTH 16QAM





10.0MHz BAND WIDTH QPSK





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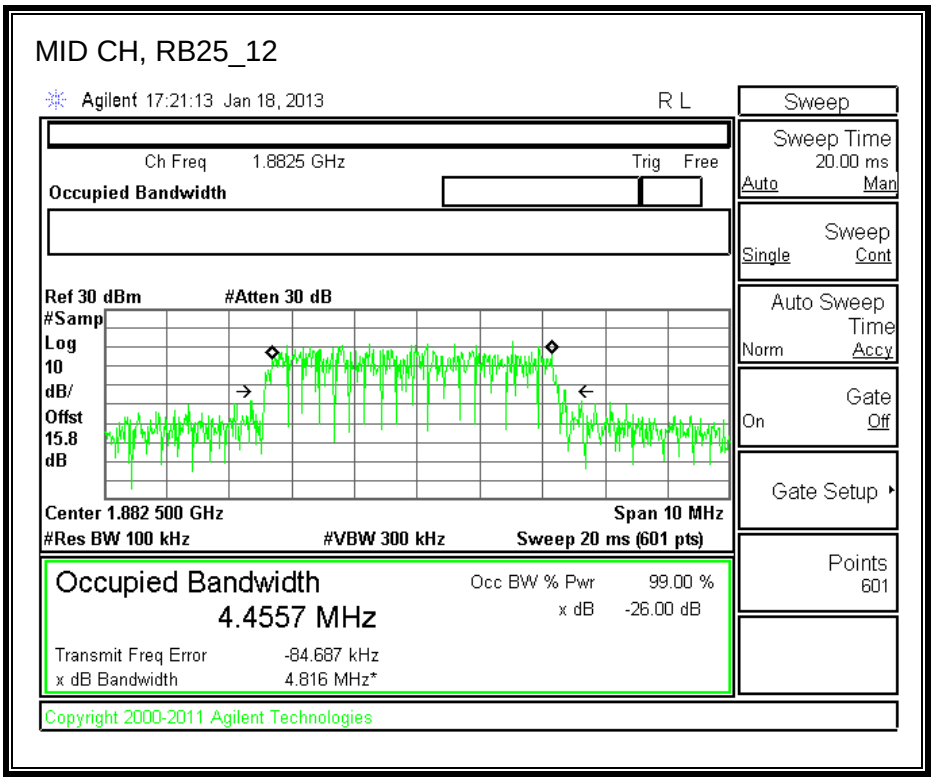
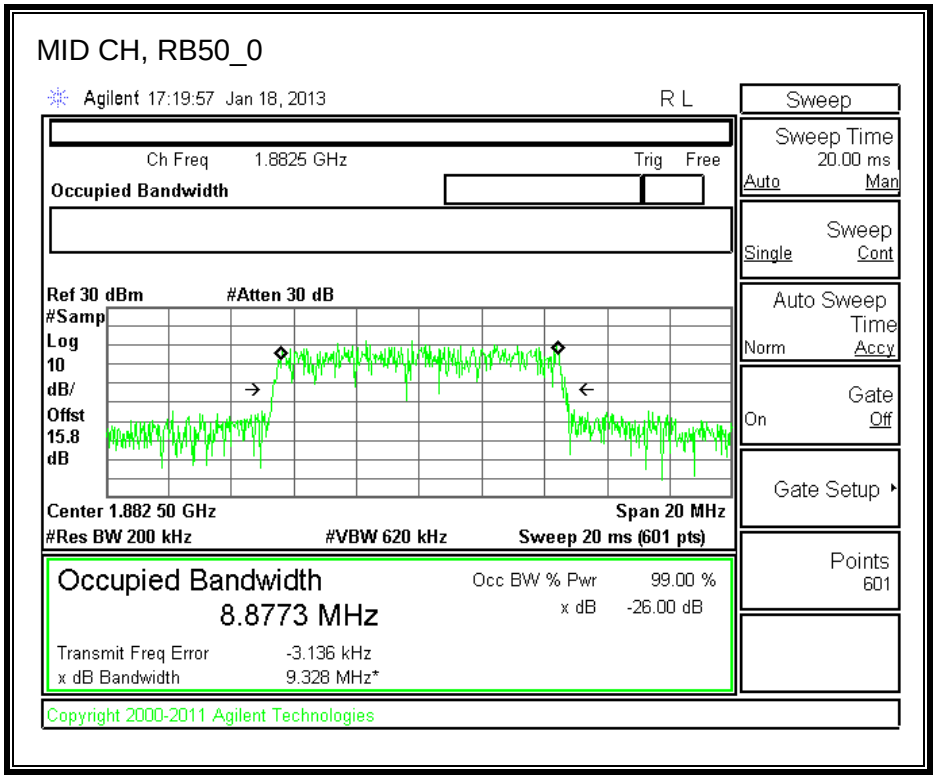
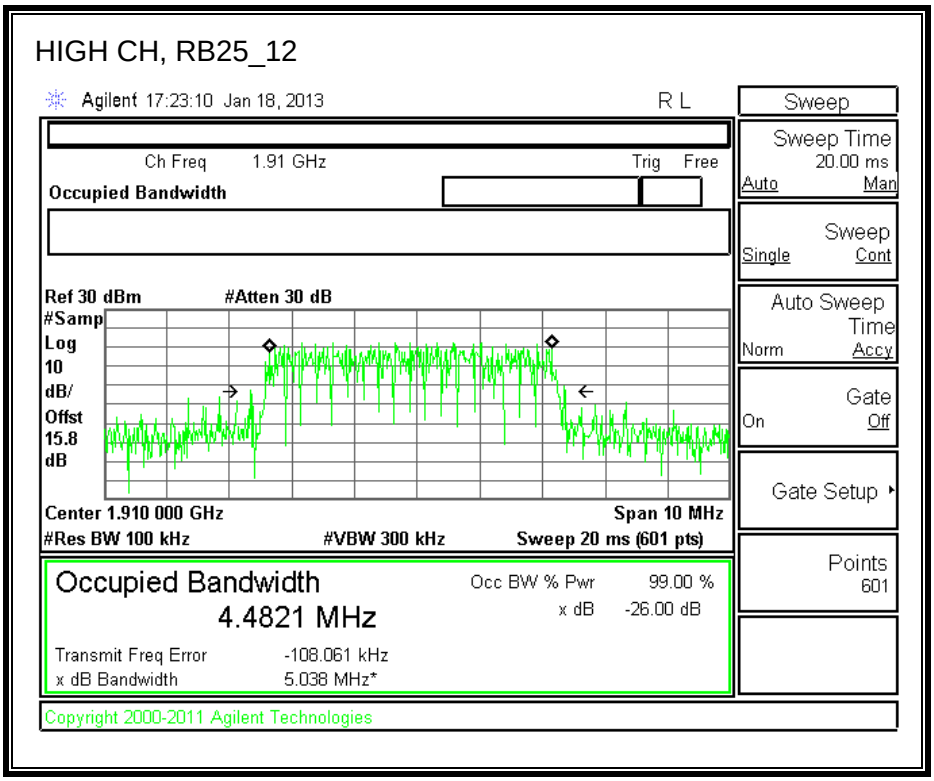
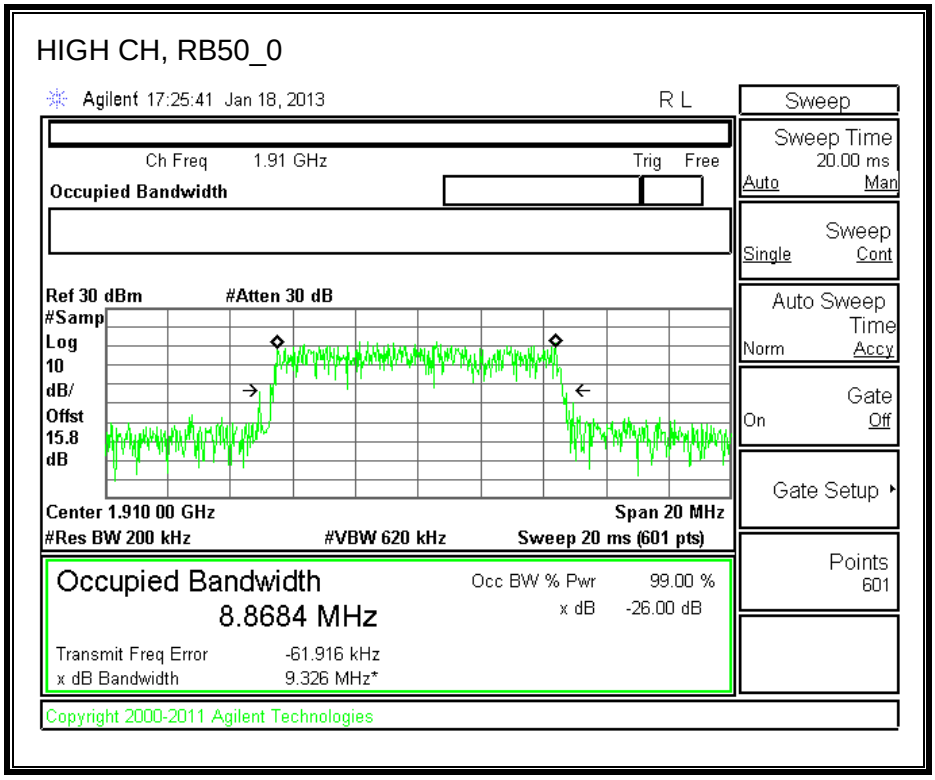


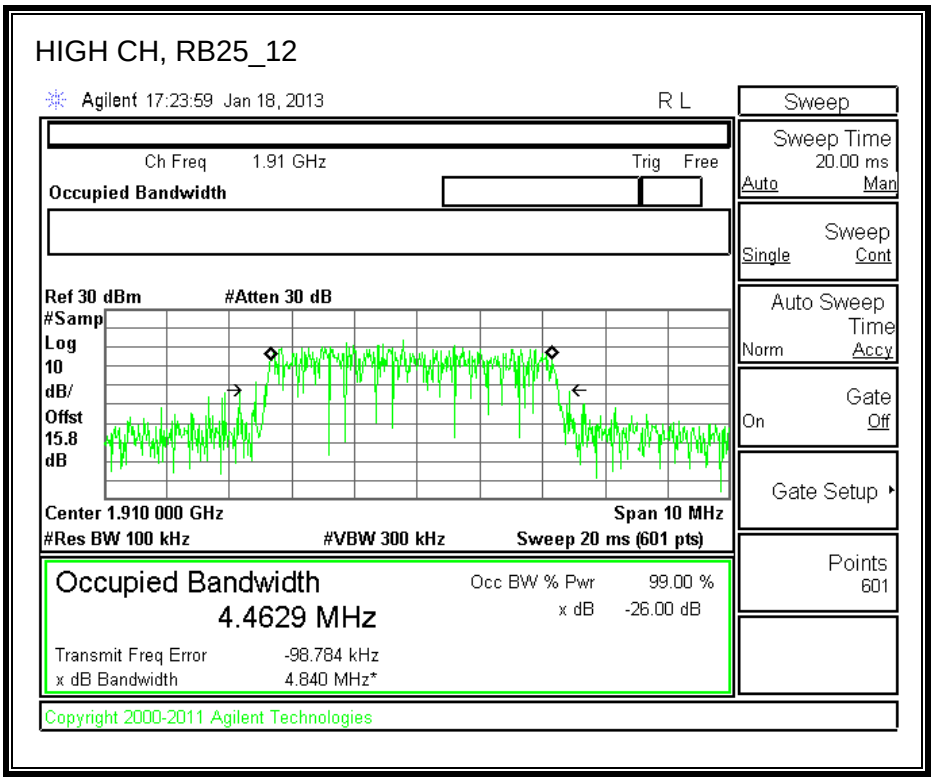


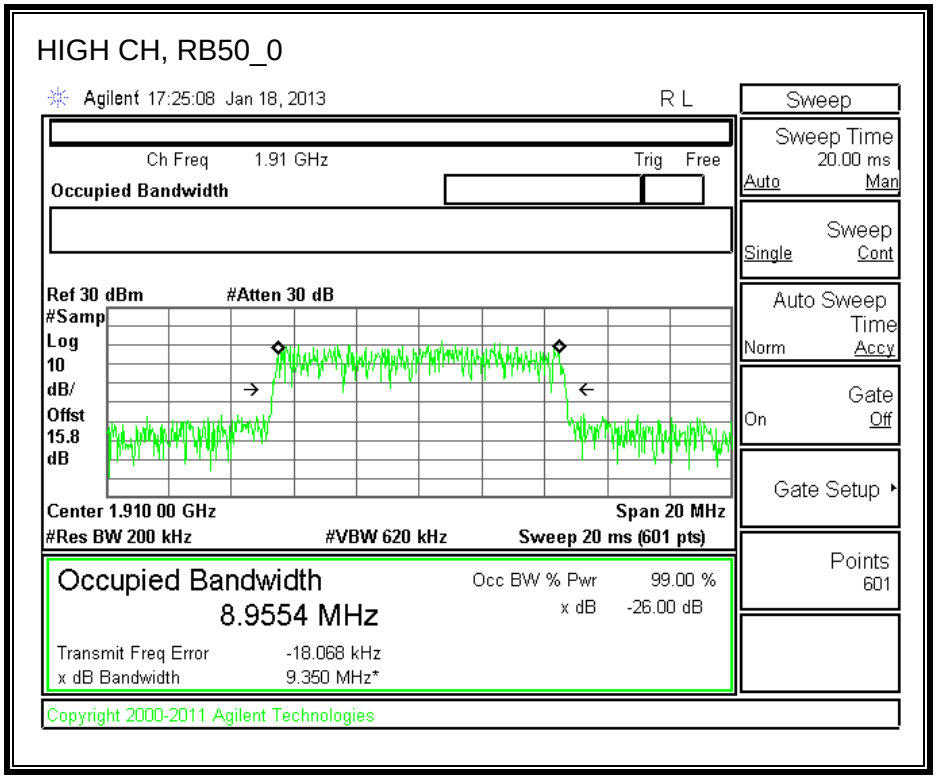
10.0MHz BAND WIDTH QPSK





10.0MHz BAND WIDTH 16QAM





8.2. BAND EDGE

RULE PART(S)

FCC: §22.359, 24.238, and 27.

LIMITS

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

The transmitter output was connected to a Agilent 8960 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.
For each band edge measurement:

- Set the spectrum analyzer span to include the block edge frequency (824, 849, 1850, 1910MHz)
- Set a marker to point the corresponding band edge frequency in each test case.
- Set display line at -13 dBm
- Set resolution bandwidth to at least 1% of emission bandwidth.

MODES TESTED

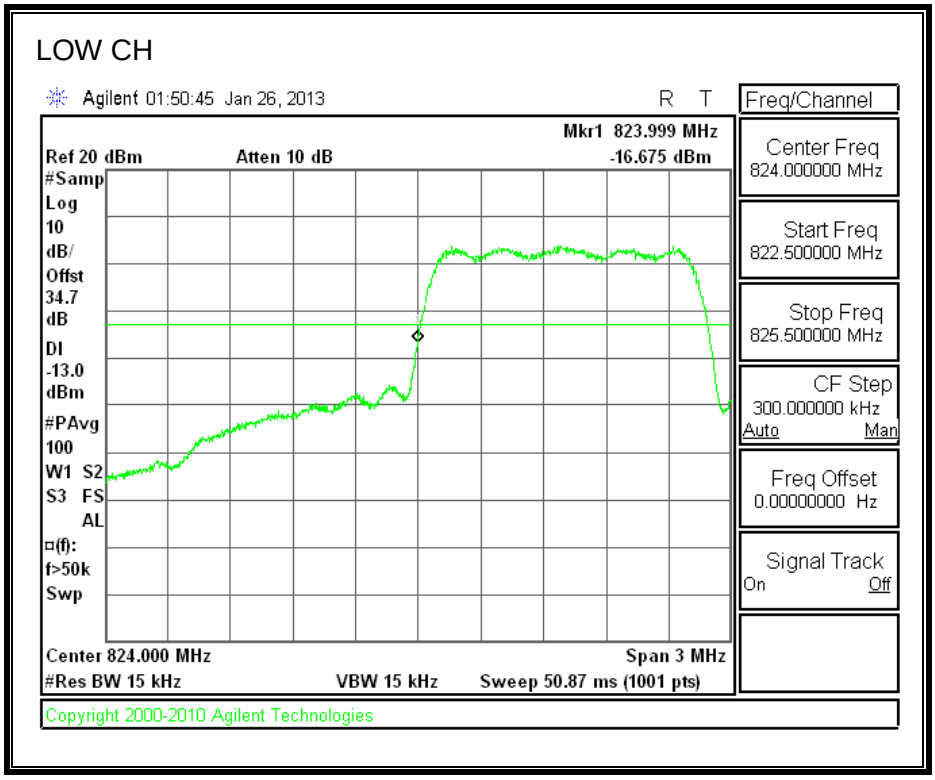
- CDMA 2000 1xRTT, RC1 SO2.
- CDMA 2000 EVDO REV. A
- LTE Band 2, 4, 5, 12 and 25

RESULTS

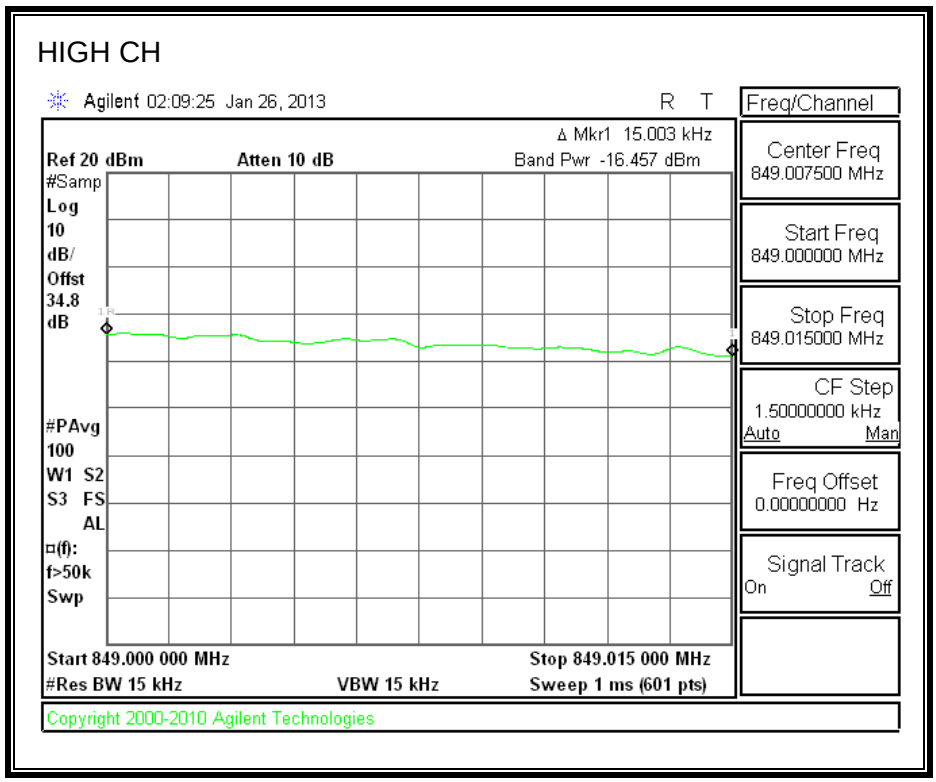
8.2.1. *CDMA200 1xRTT*

1xRTT BC 0 CELL BAND

LOW CH

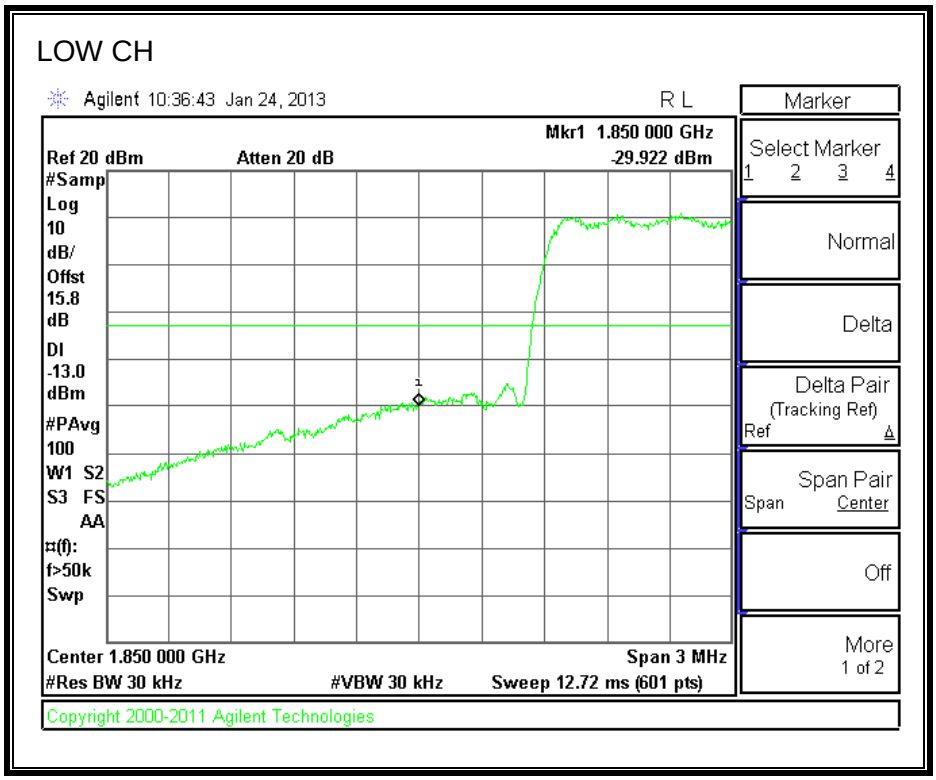


HIGH CH

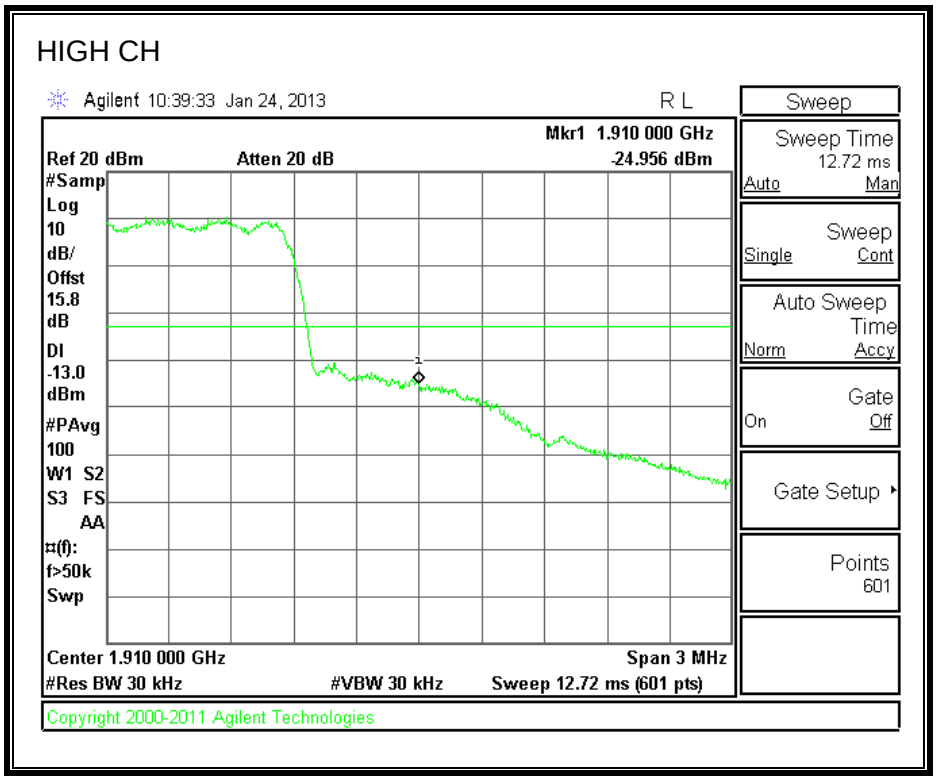


1xRTT BC 1 PCS BAND

LOW CH

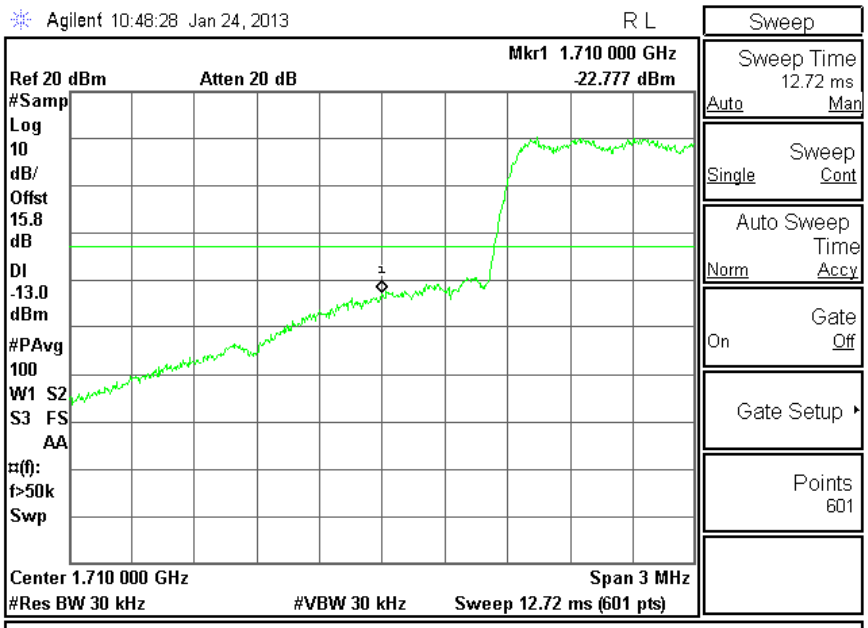


HIGH CH

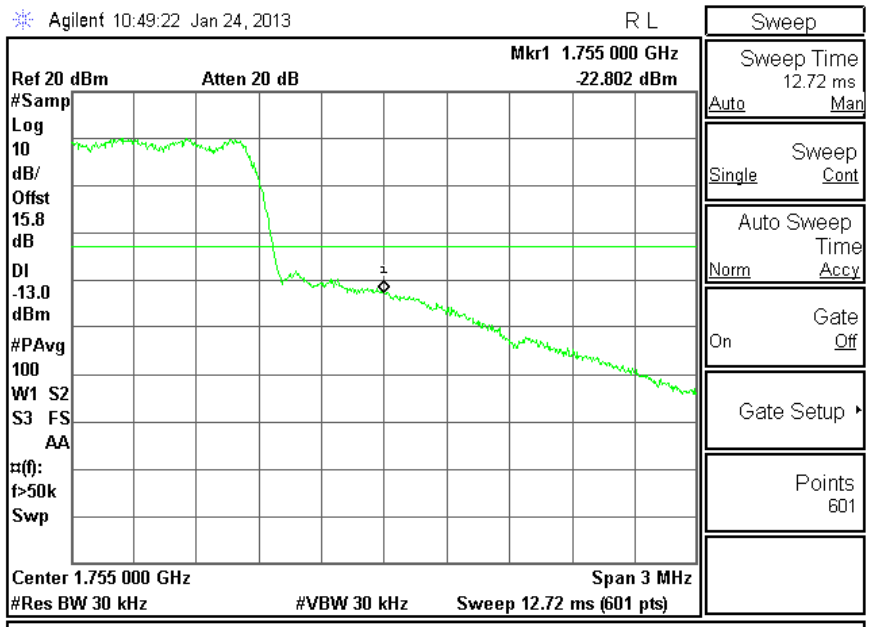


1xRTT BC 15 AWS BAND

LOW CH



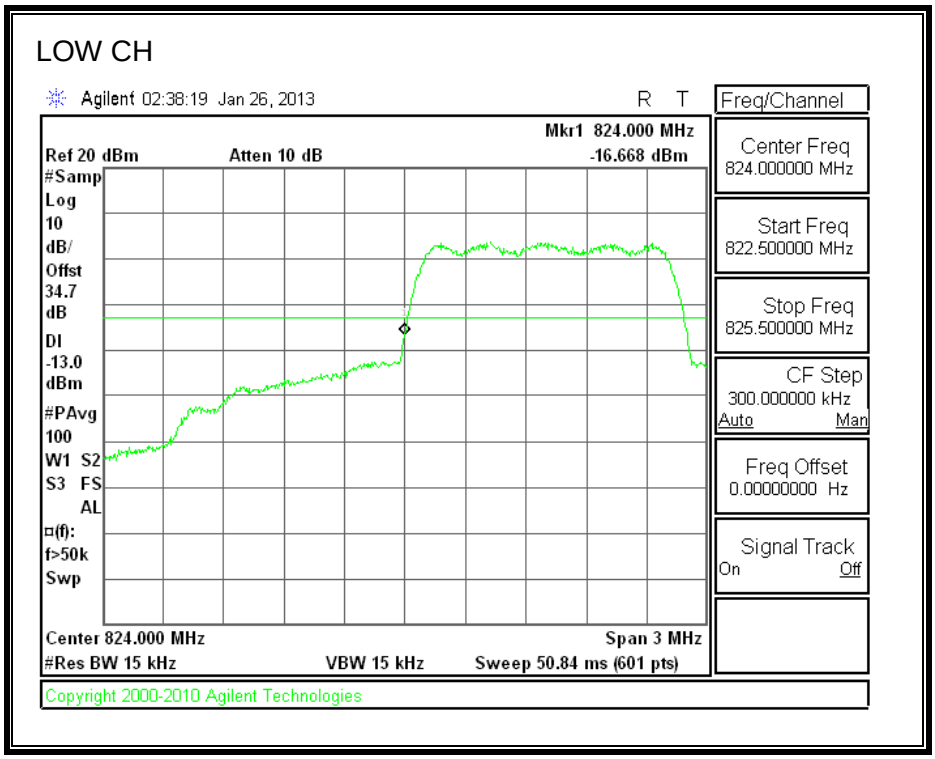
HIGH CH



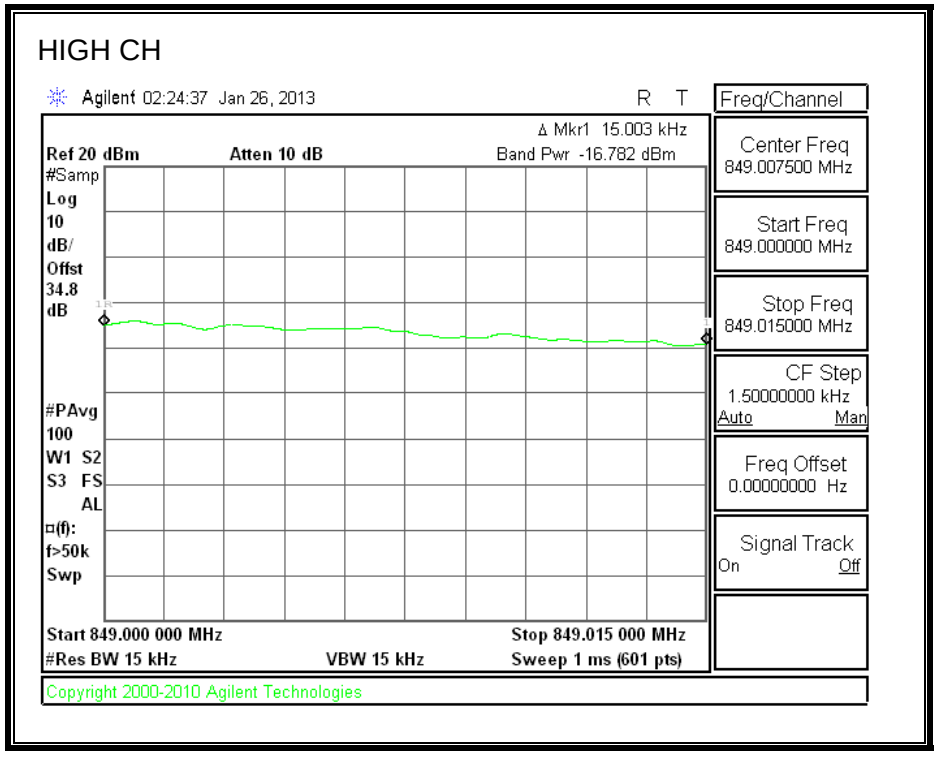
8.2.2. *1xEv-Do - Revision A (Rev. A)*

EVDO REV A. BC 0 CELL BAND

LOW CH

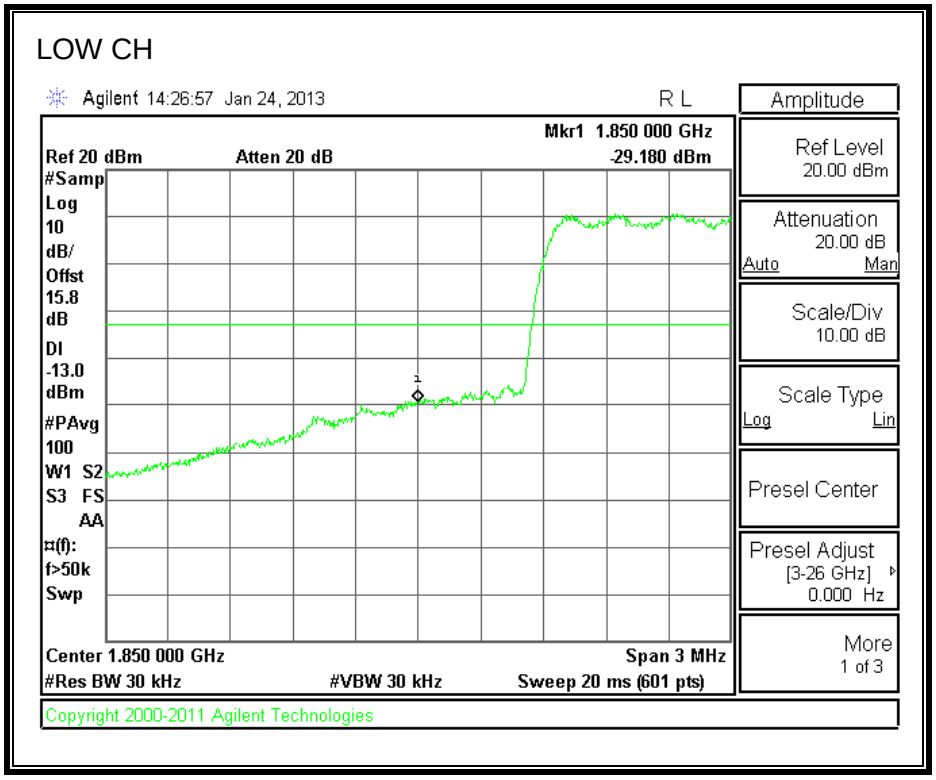


HIGH CH

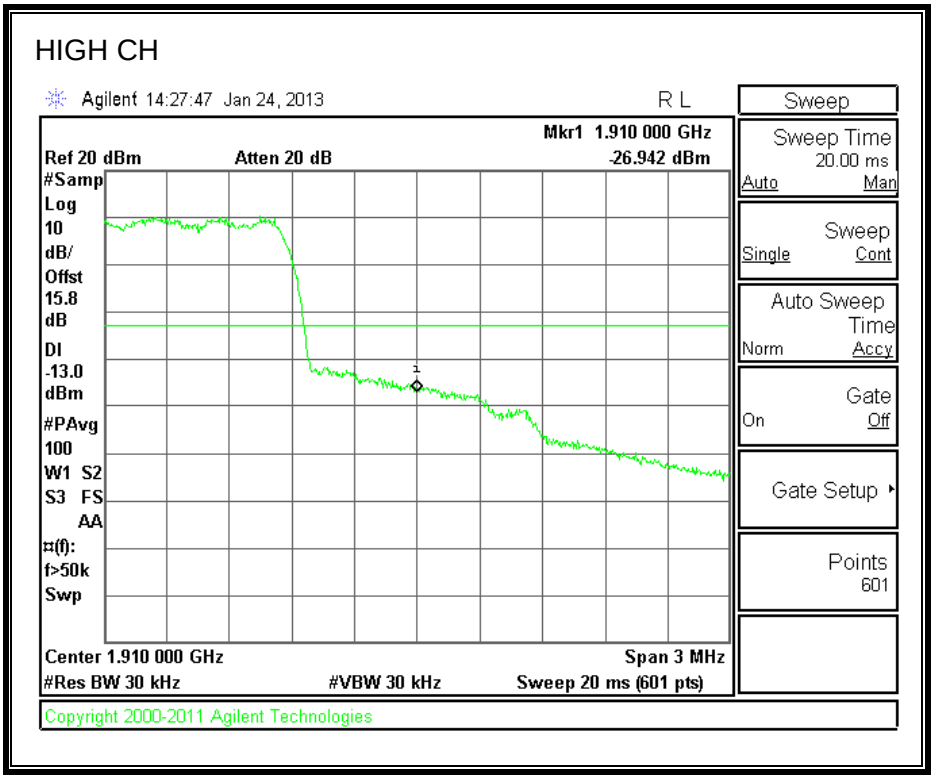


EVDO REV A. BC 1 PCS BAND

LOW CH

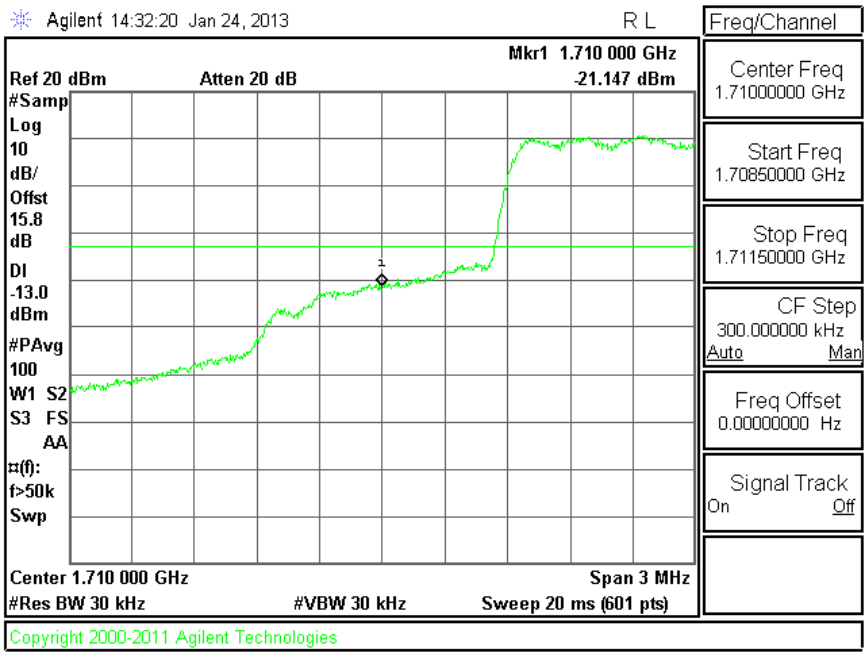


HIGH CH

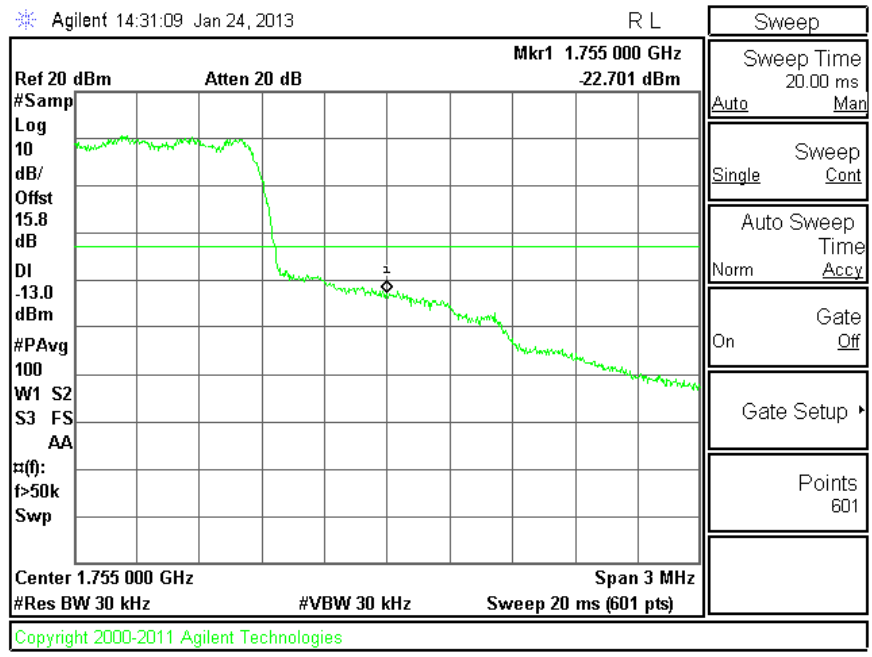


EVDO REV A. BC 15 AWS BAND

LOW CH



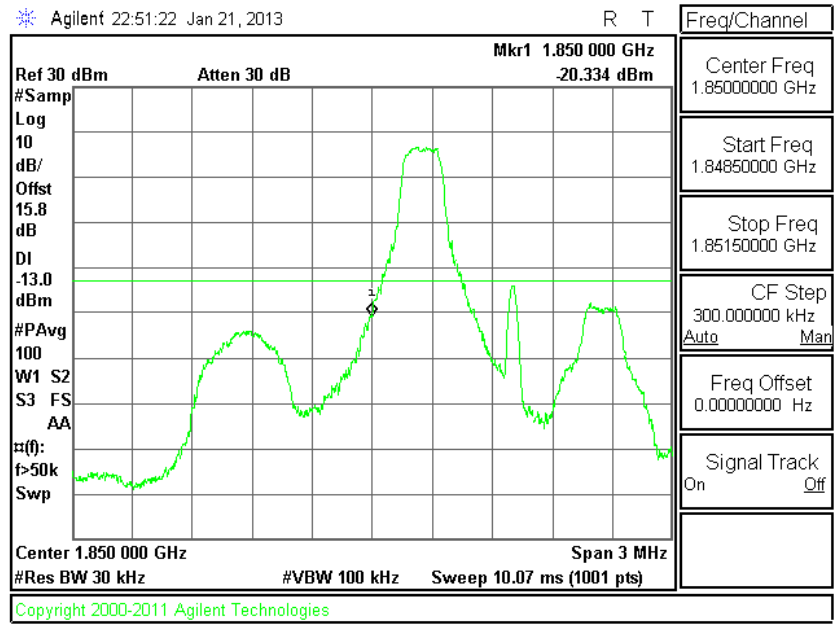
HIGH CH



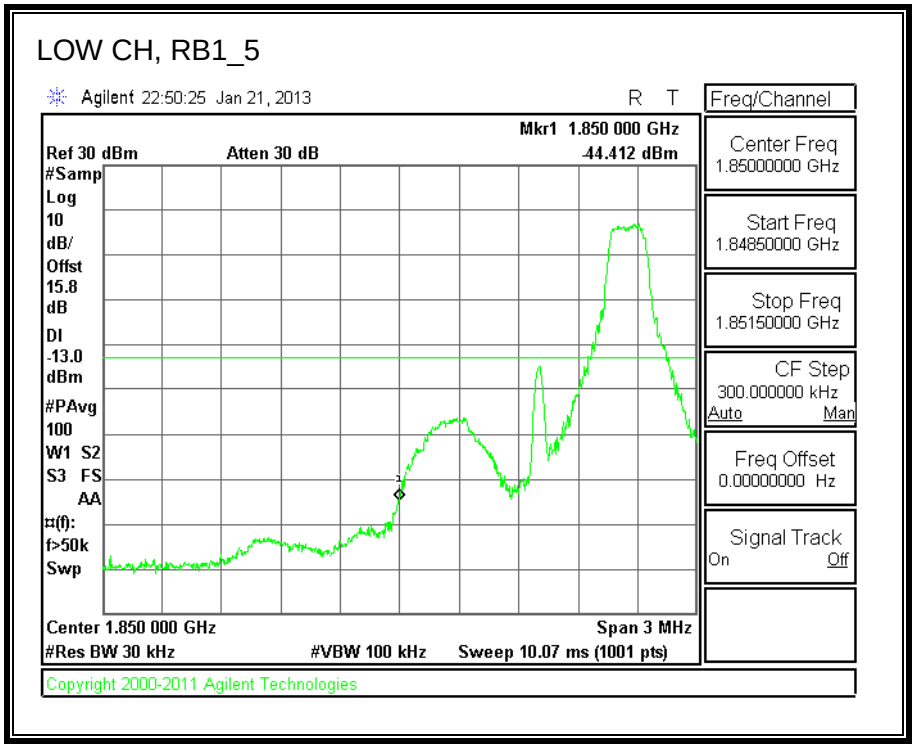
8.2.3. *LTE BAND 2*

1.4MHz BAND WIDTH QPSK

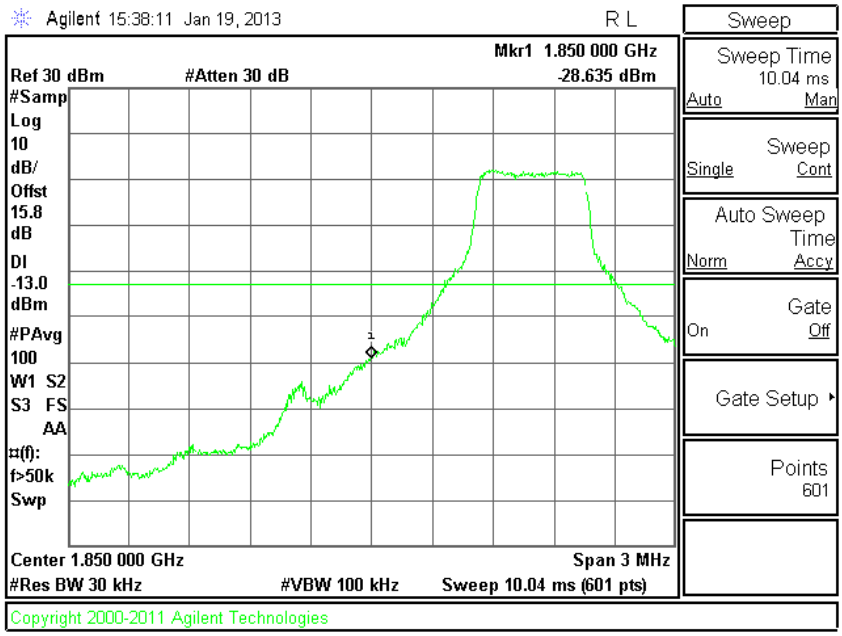
LOW CH, RB1_0



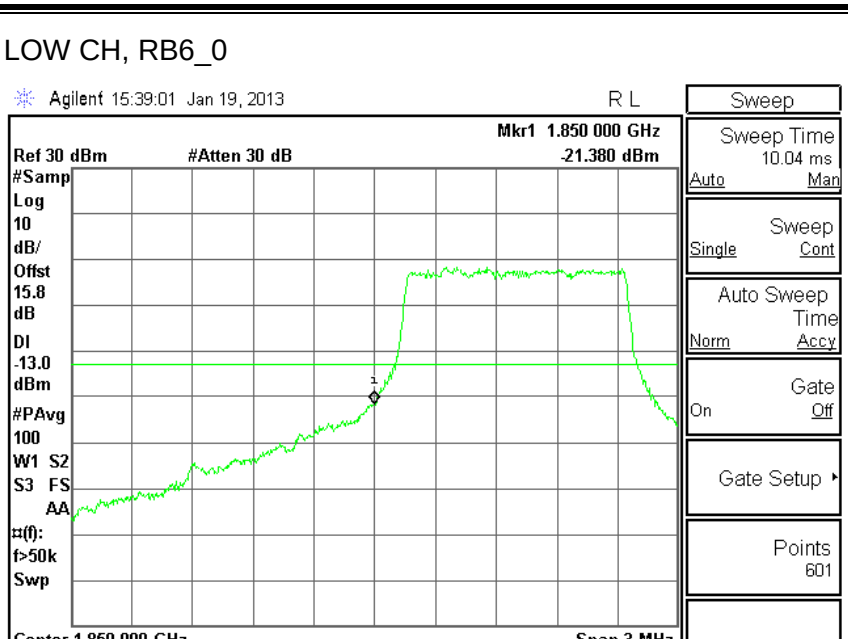
LOW CH, RB1_5



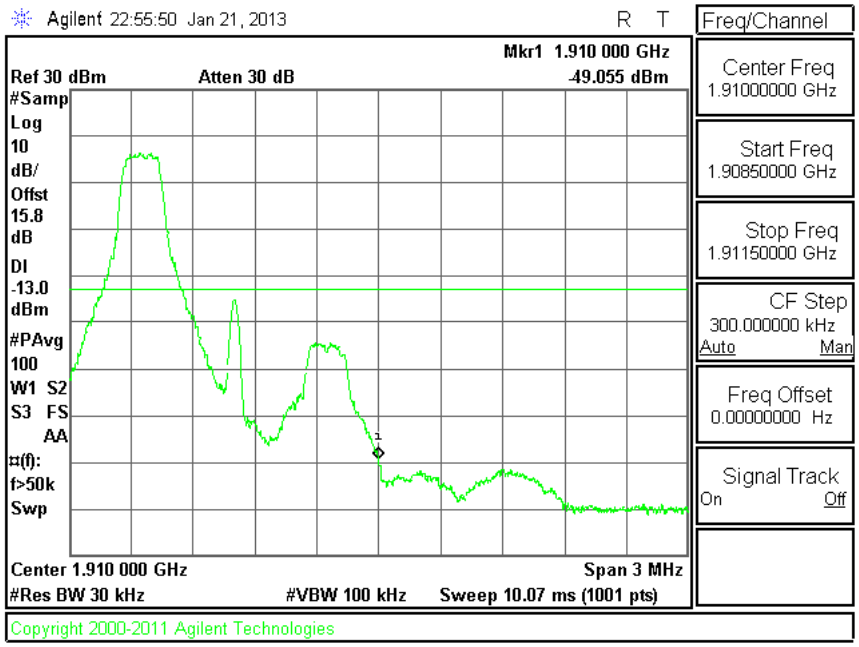
LOW CH, RB3_2



LOW CH, RB6_0



HIGH CH, RB1_0



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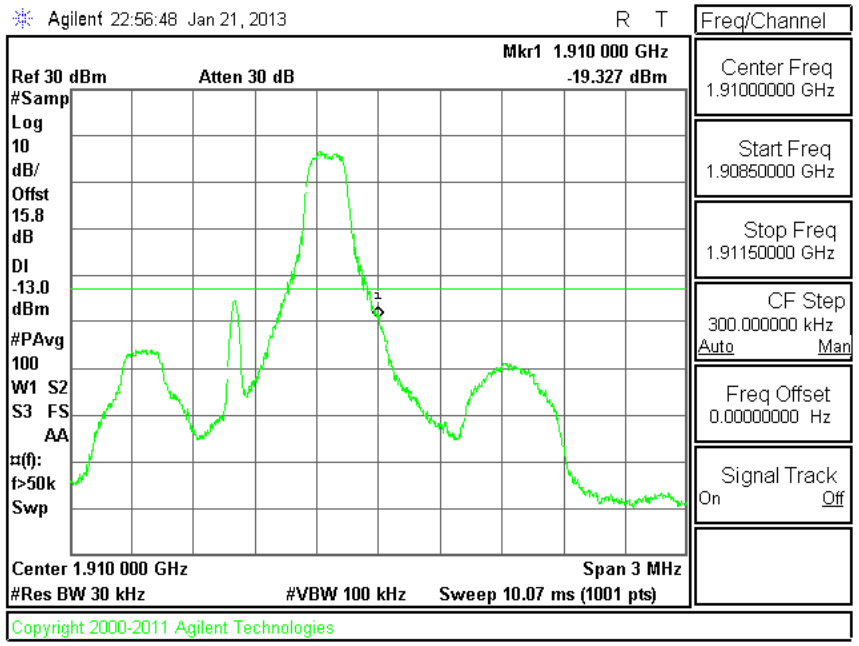
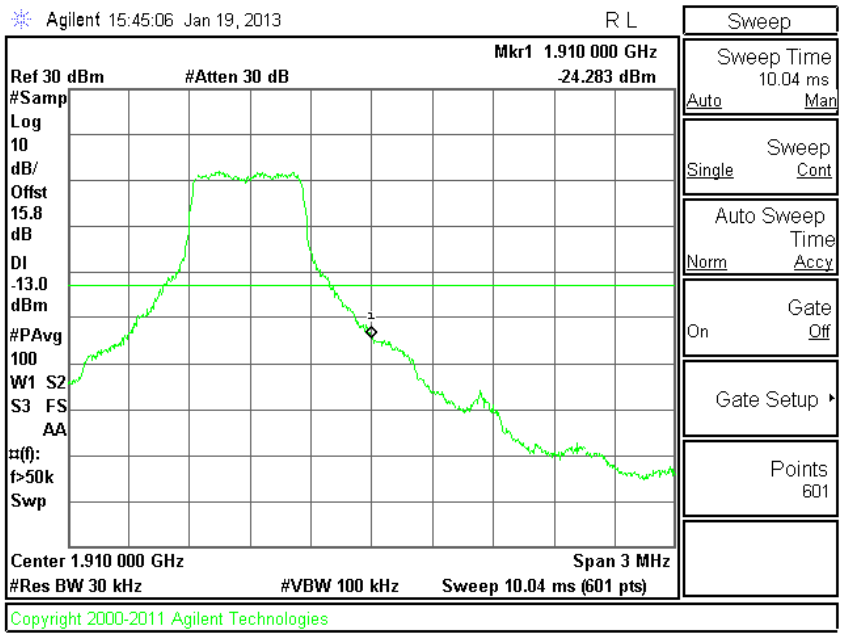
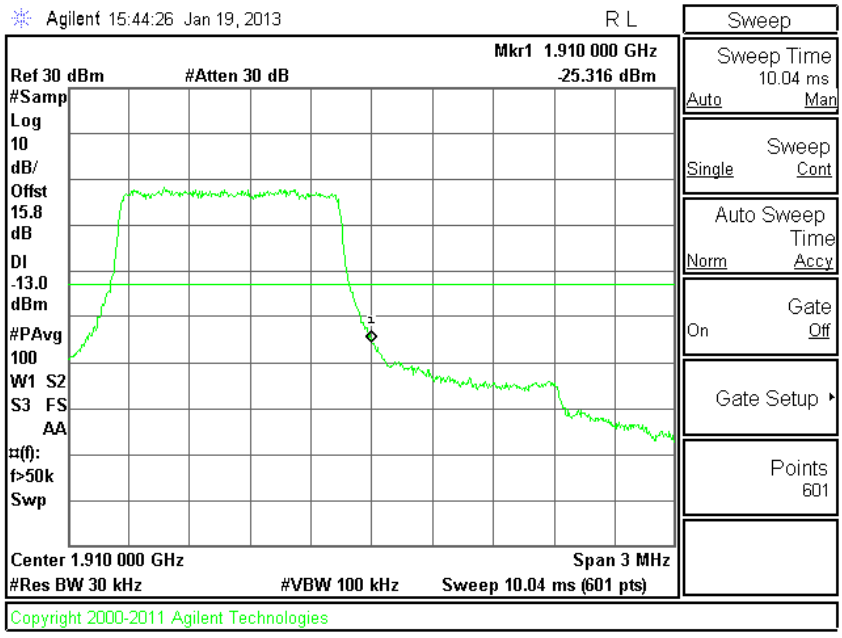


HIGH CH, RB3_2

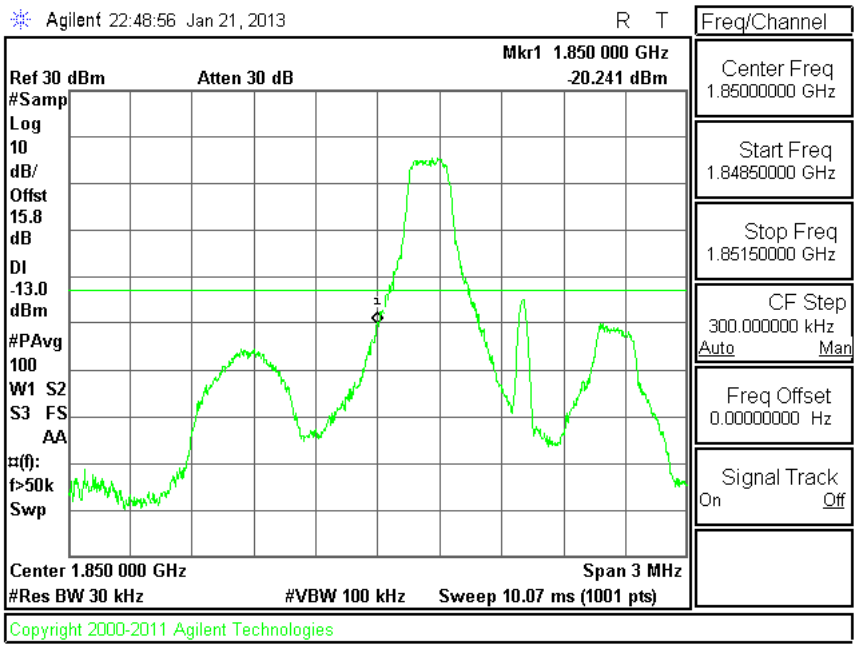


HIGH CH, RB6_0

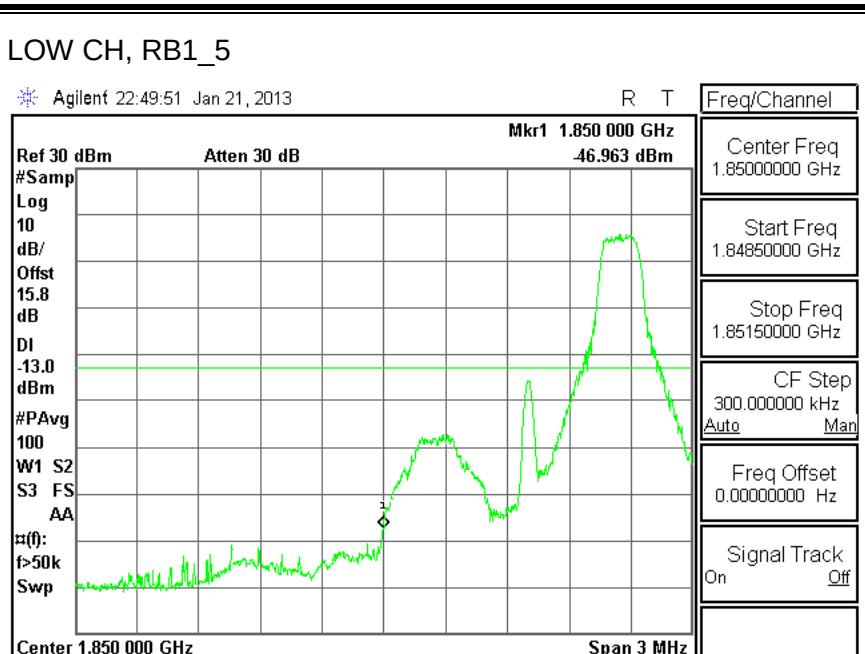


1.4MHz BAND WIDTH 16QAM

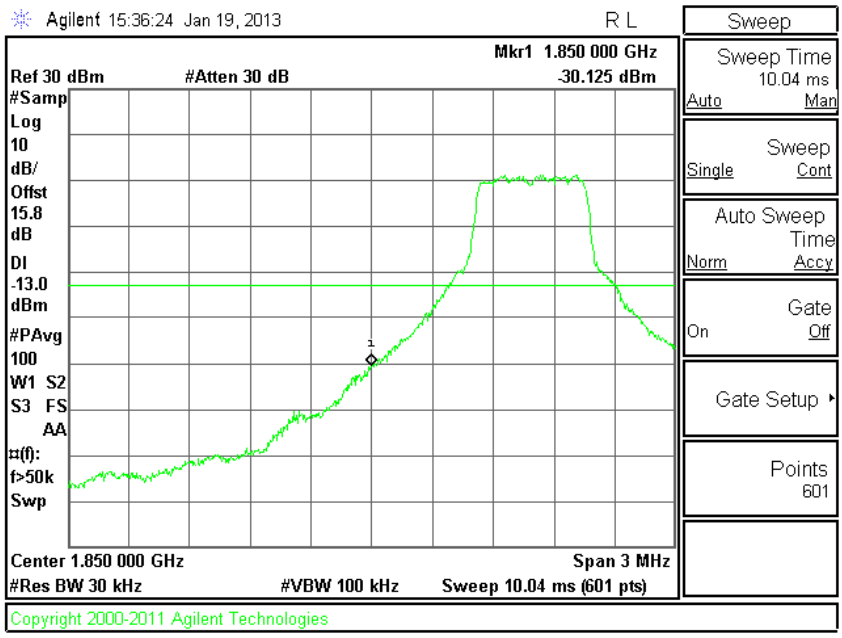
LOW CH, RB1_0



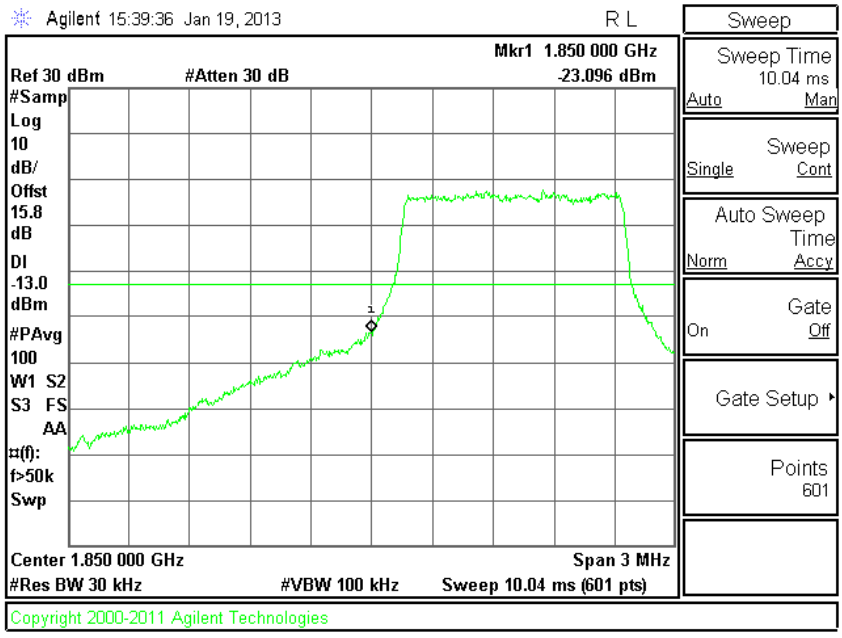
LOW CH, RB1_5



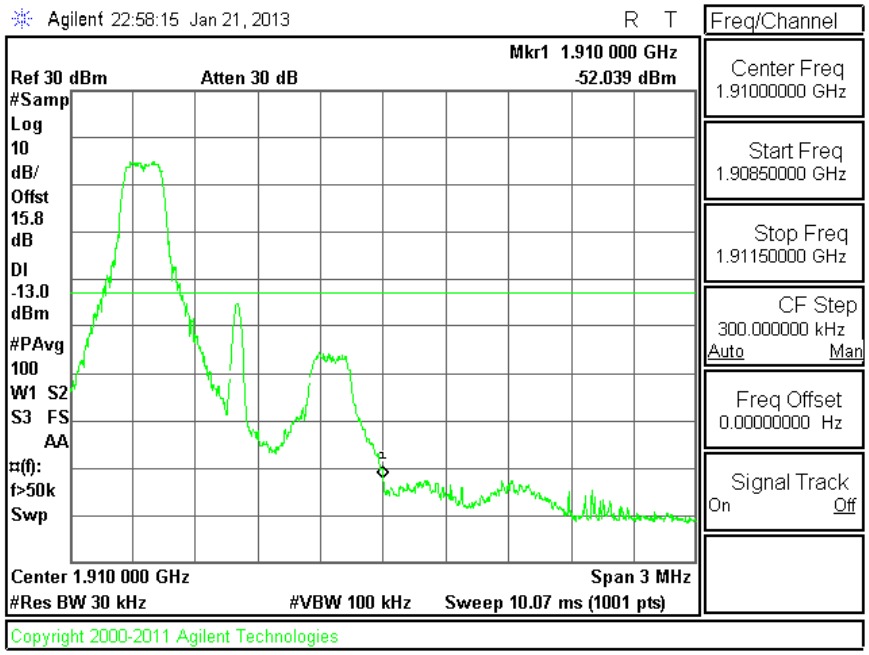
LOW CH, RB3_2



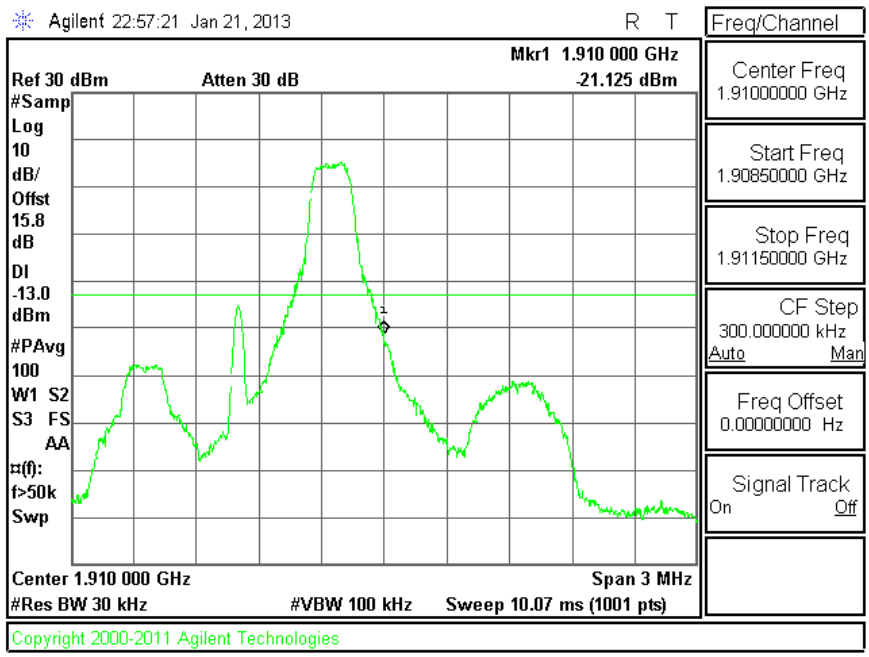
LOW CH, RB6_0



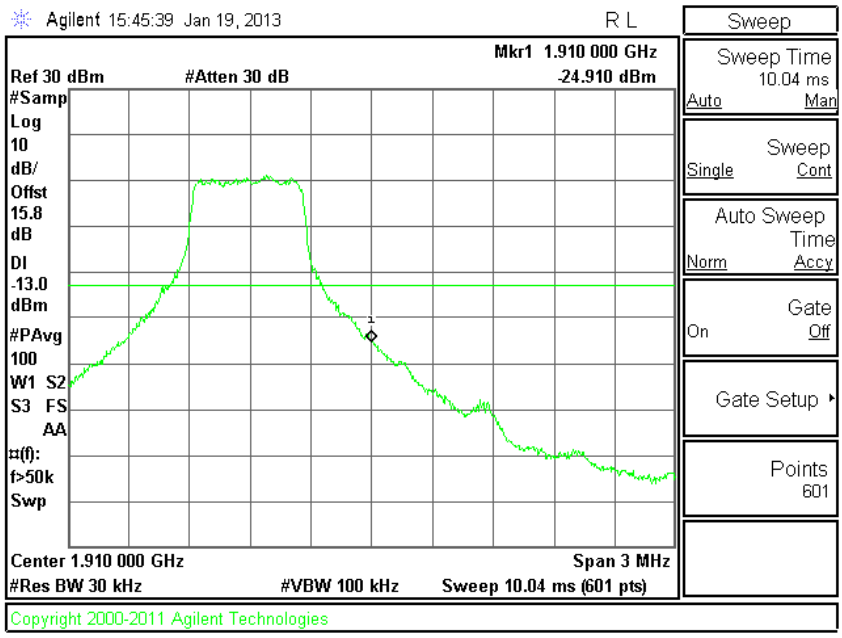
HIGH CH, RB1_0



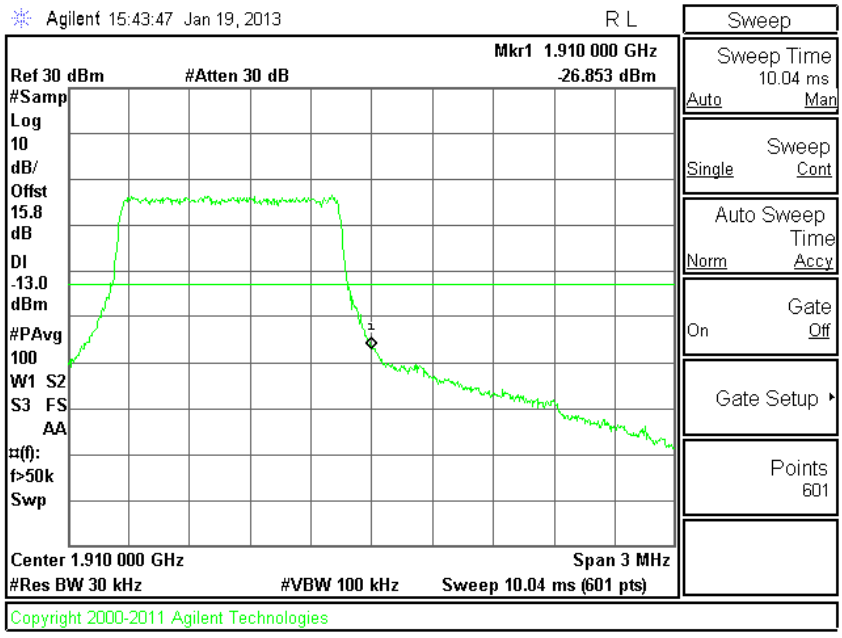
HIGH CH, RB1_5



HIGH CH, RB3_2

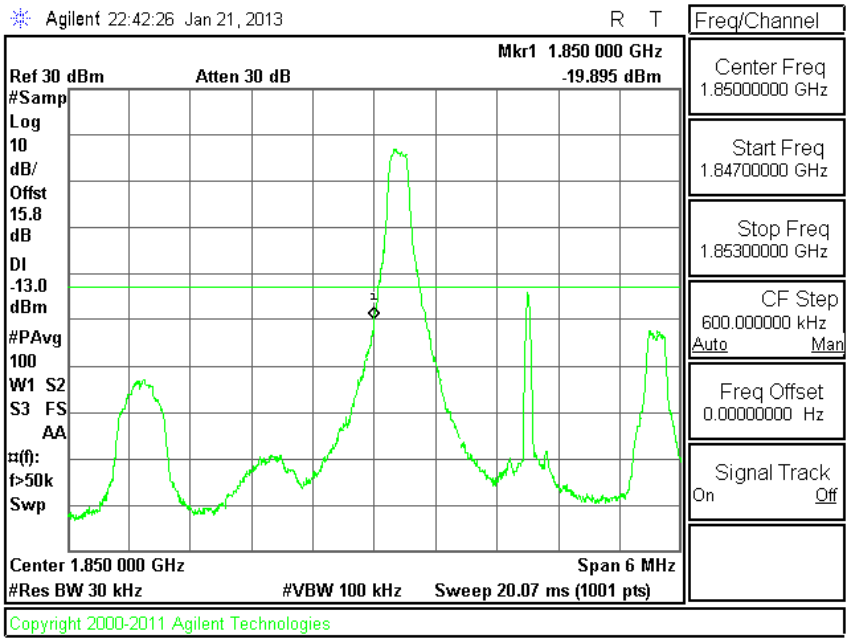


HIGH CH, RB6_0

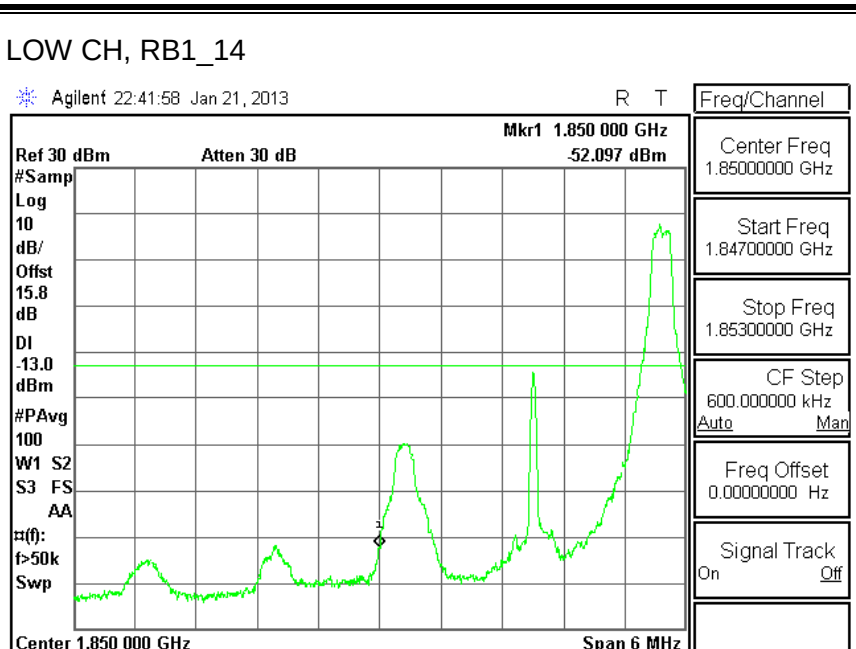


3.0MHz BAND WIDTH QPSK

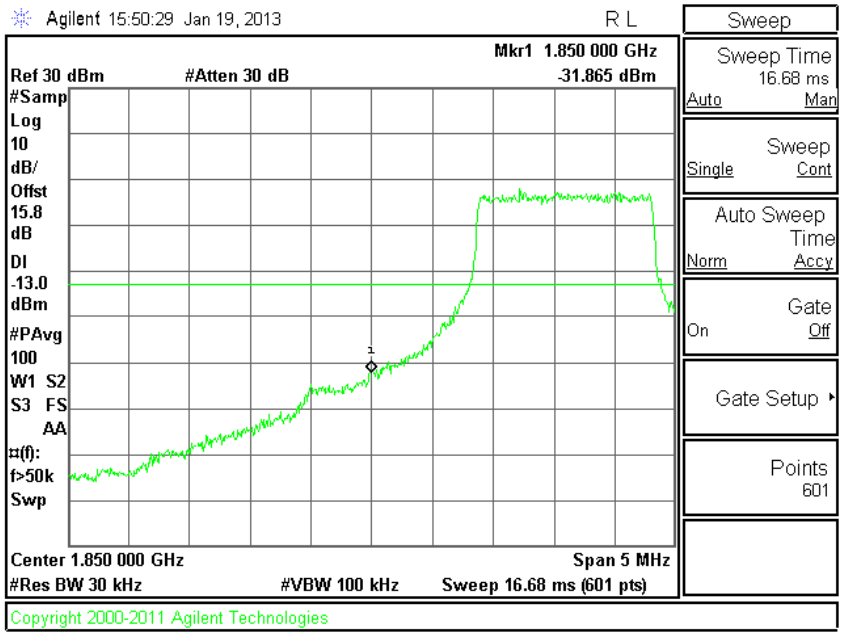
LOW CH, RB1_0



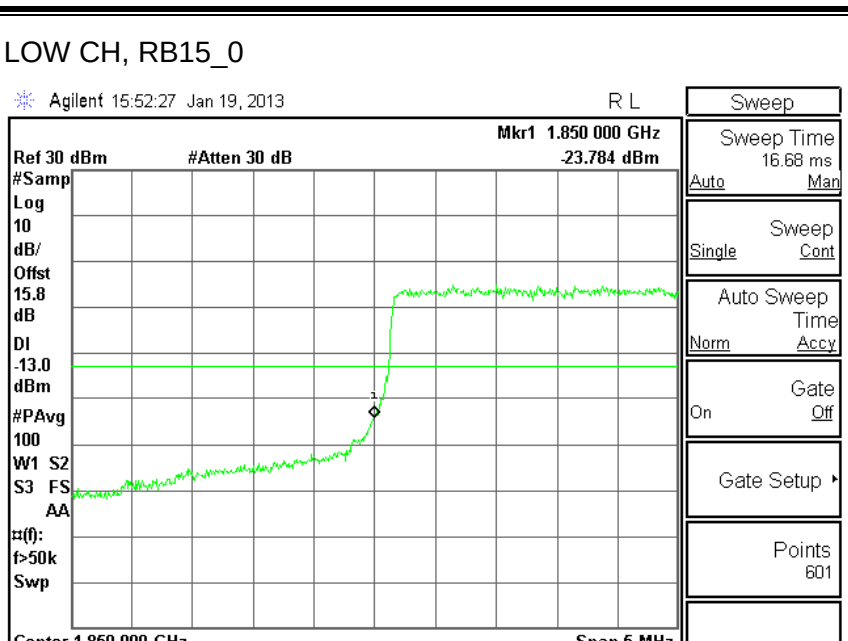
LOW CH, RB1_14



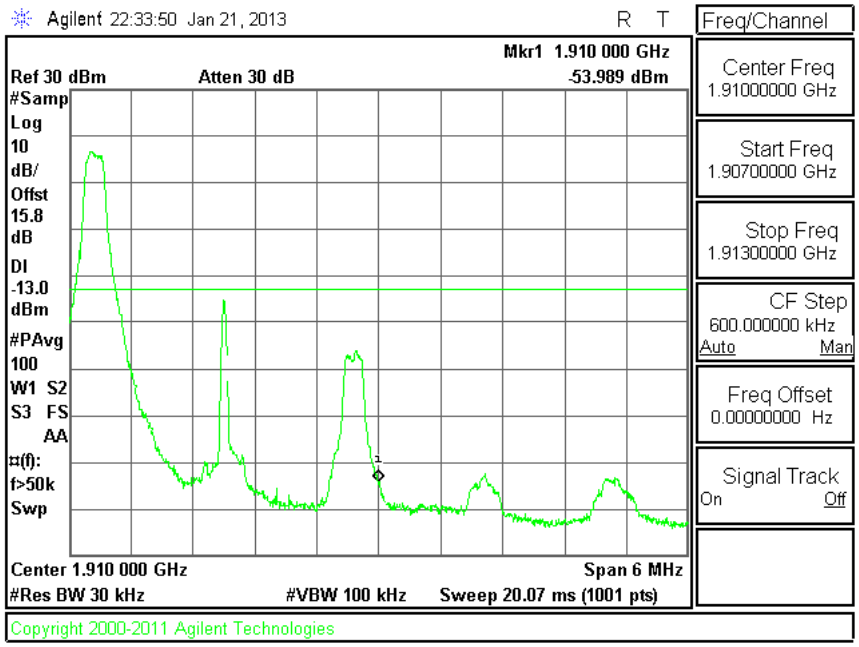
LOW CH, RB8_4



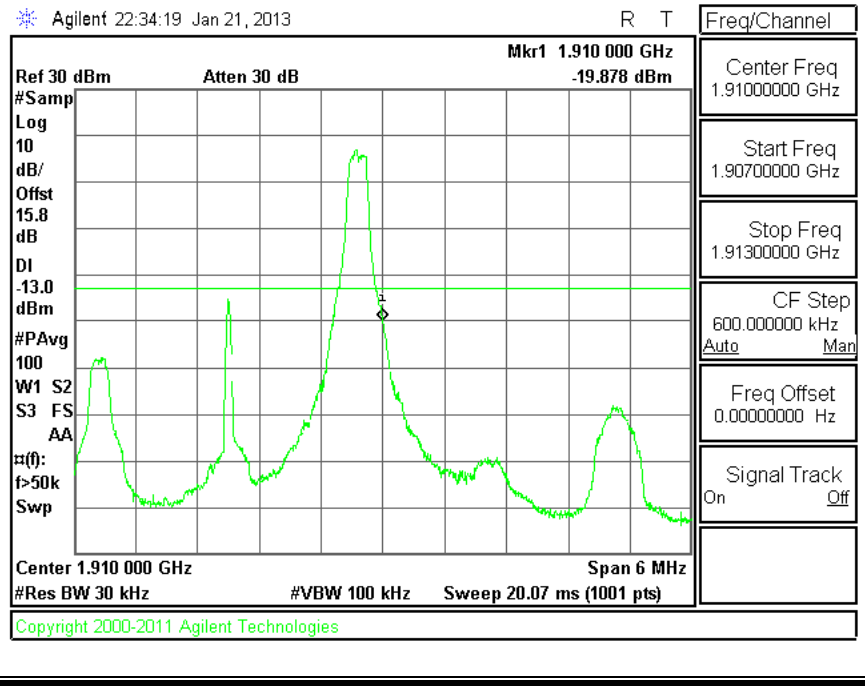
LOW CH, RB15_0



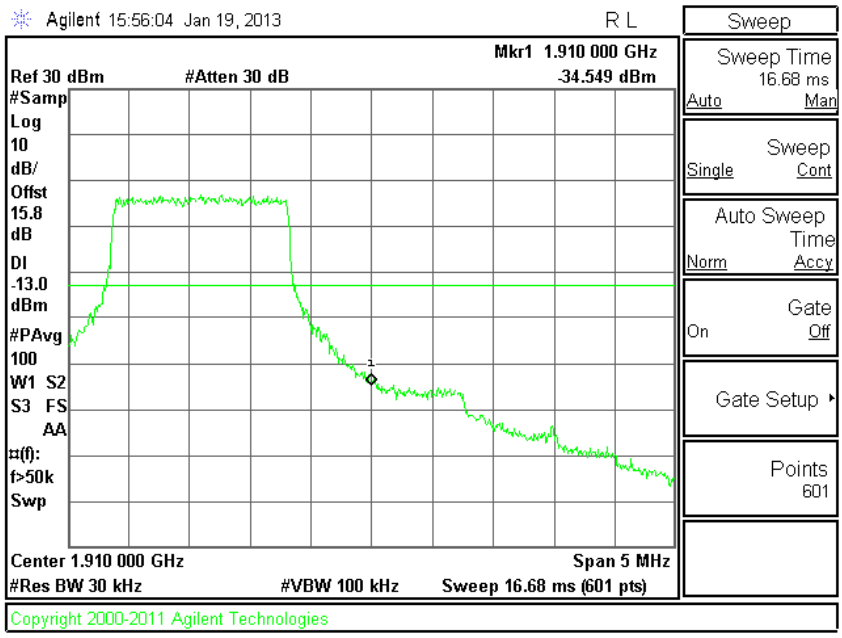
HIGH CH, RB1_0



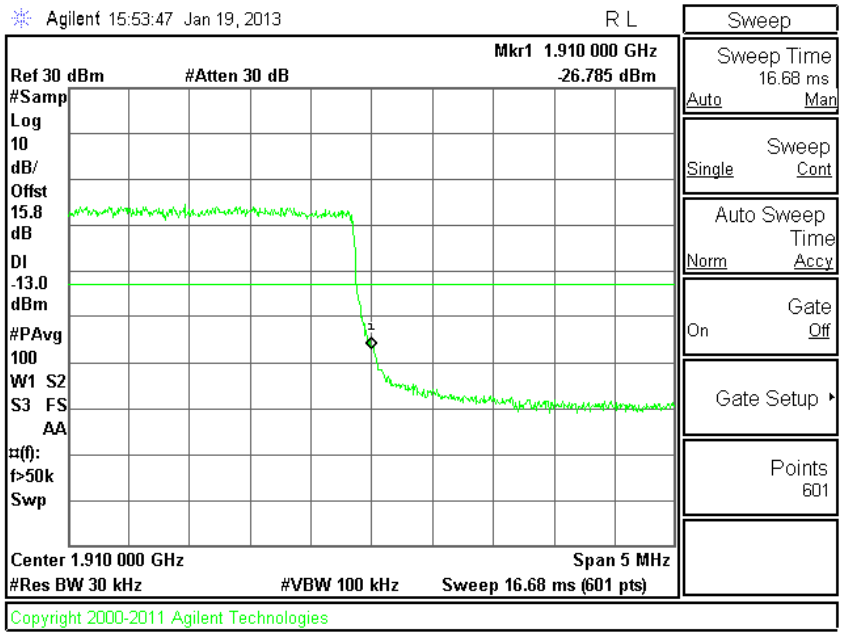
HIGH CH, RB1_14



HIGH CH, RB8_4

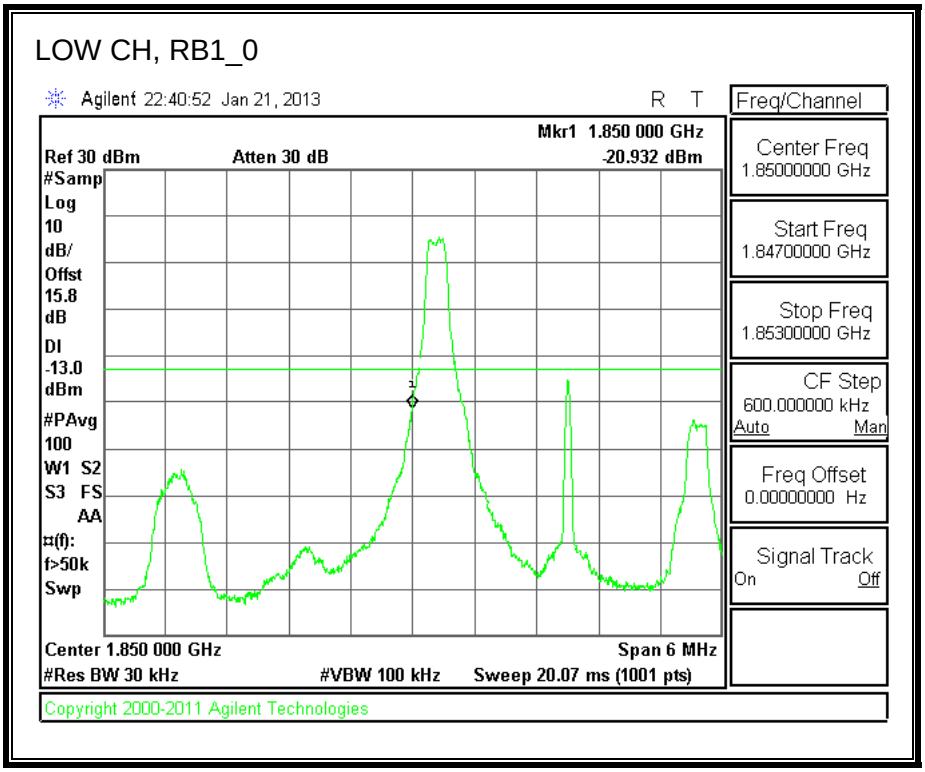


HIGH CH, RB15_0

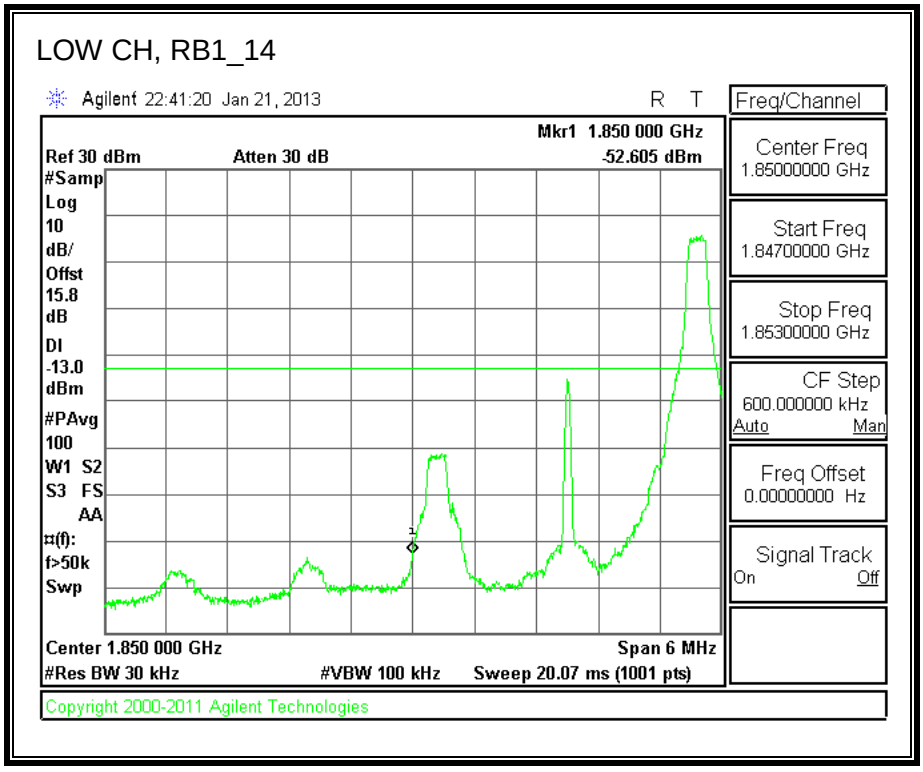


3.0MHz BAND WIDTH 16QAM

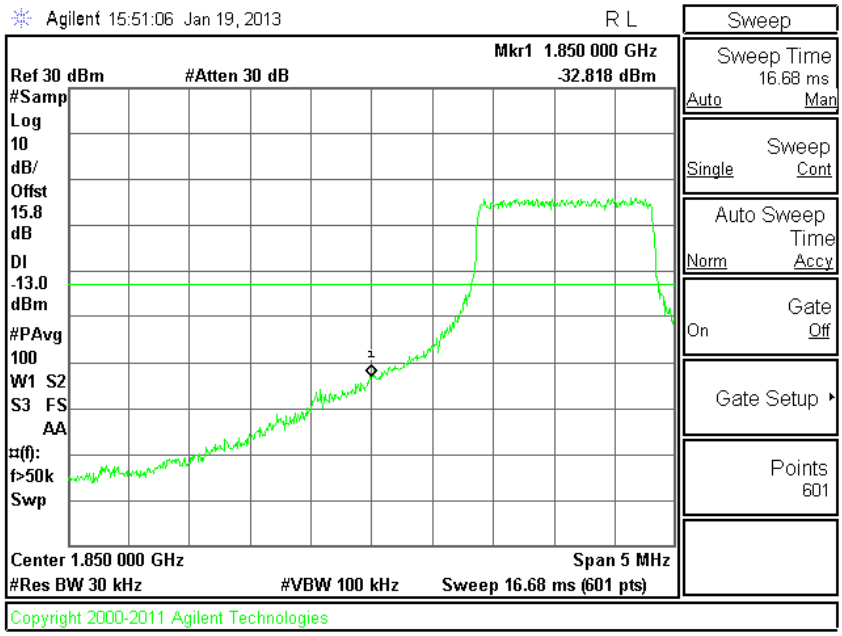
LOW CH, RB1_0



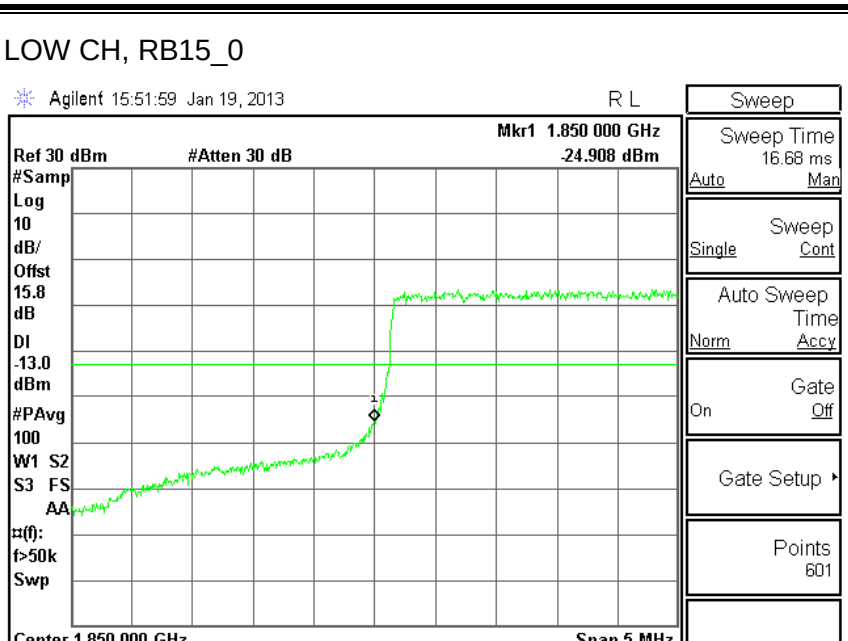
LOW CH, RB1_14



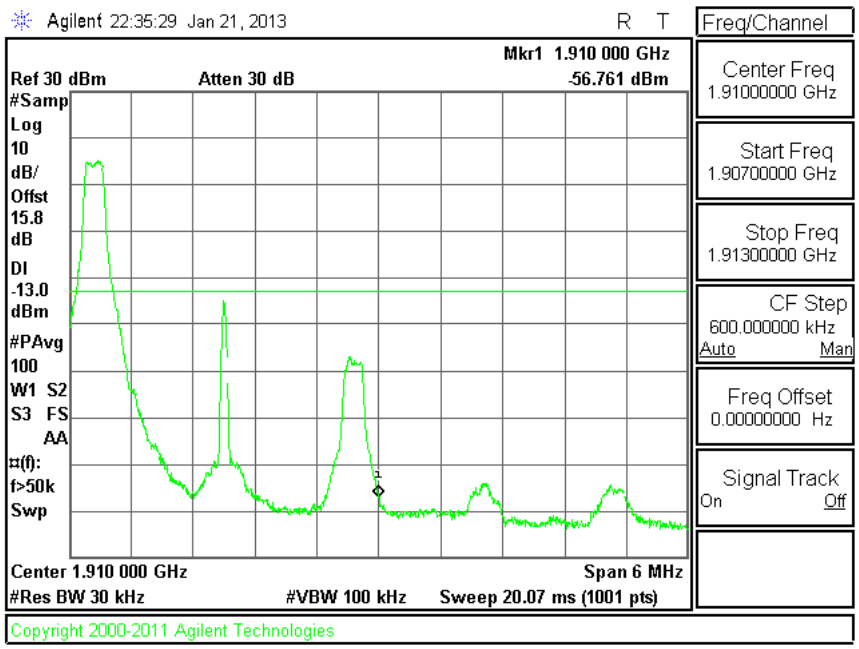
LOW CH, RB8_4



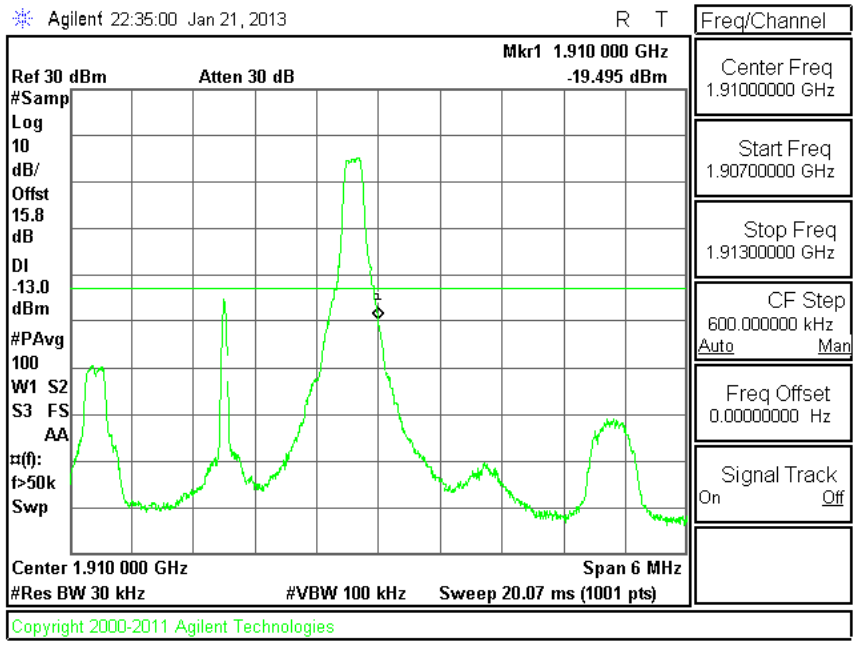
LOW CH, RB15_0



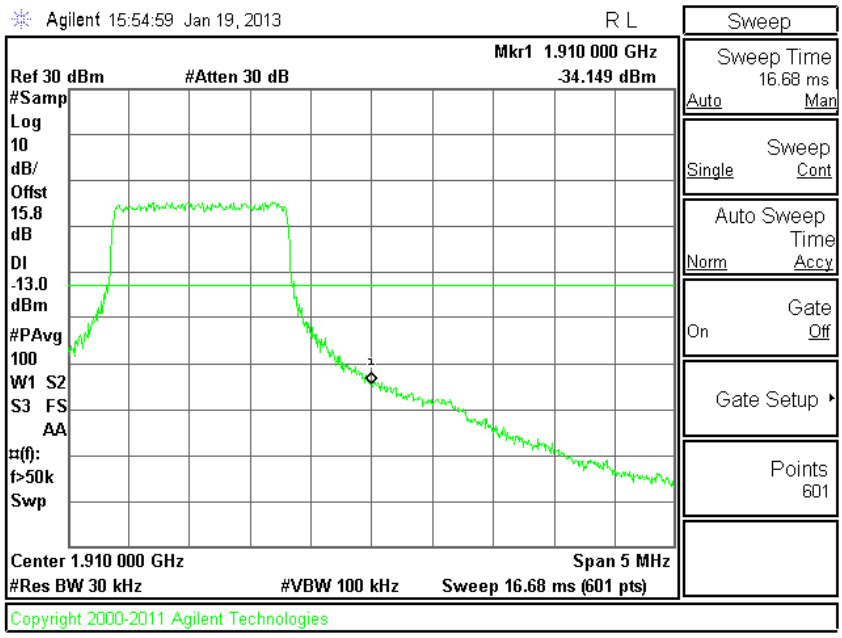
HIGH CH, RB1_0



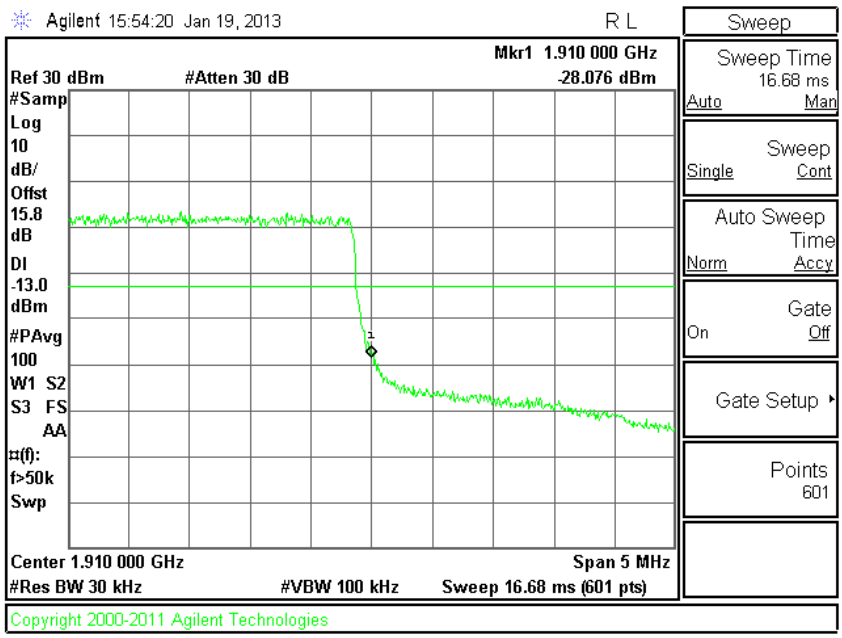
HIGH CH, RB1_14



HIGH CH, RB8_4

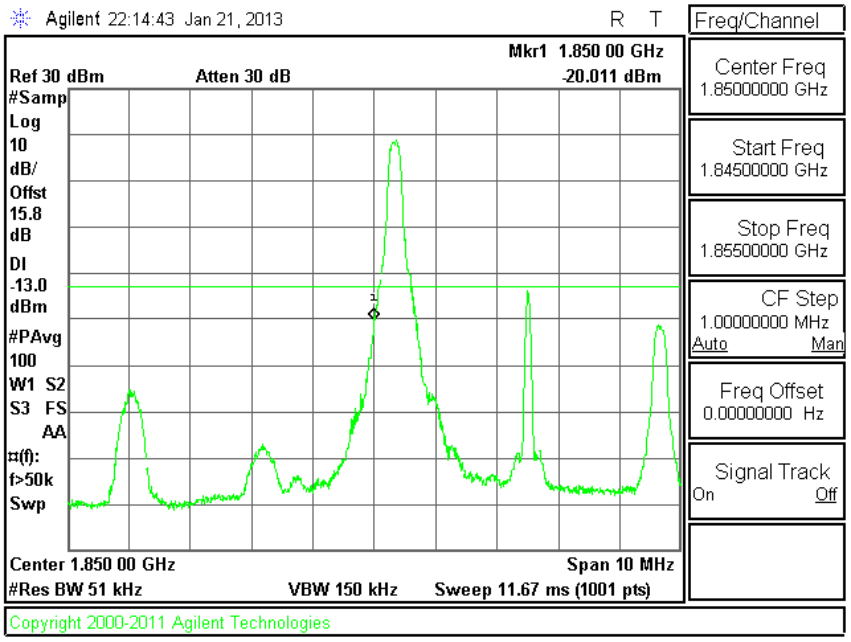


HIGH CH, RB15_0

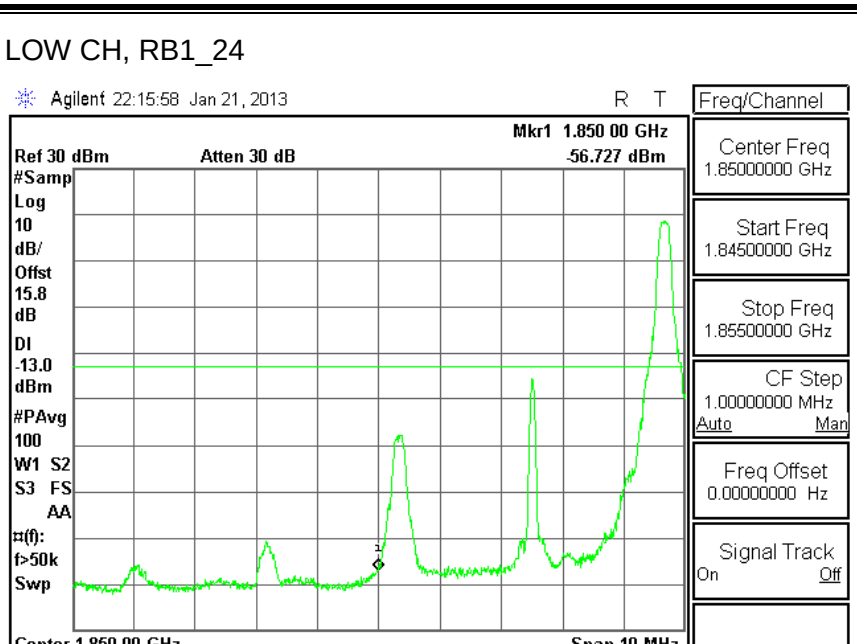


5.0MHz BAND WIDTH QPSK

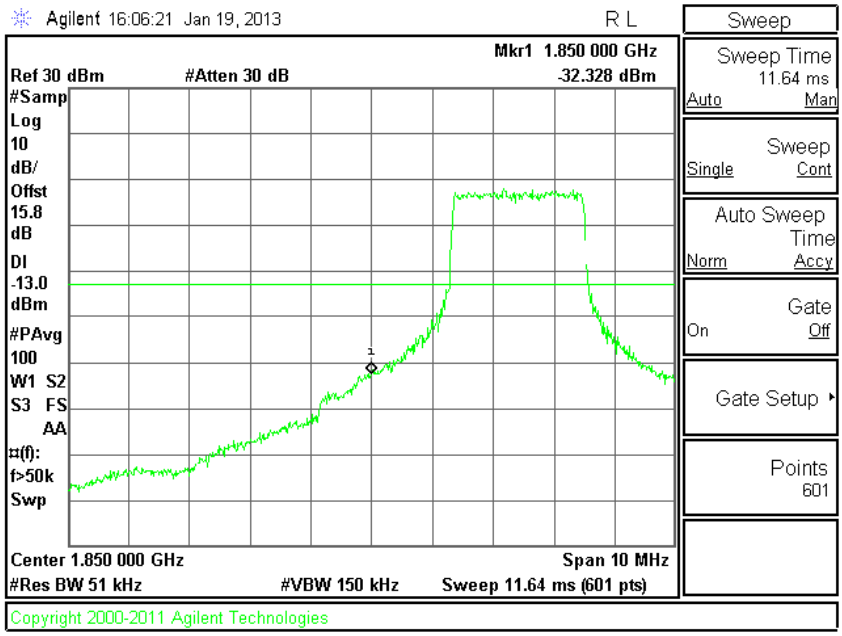
LOW CH, RB1_0



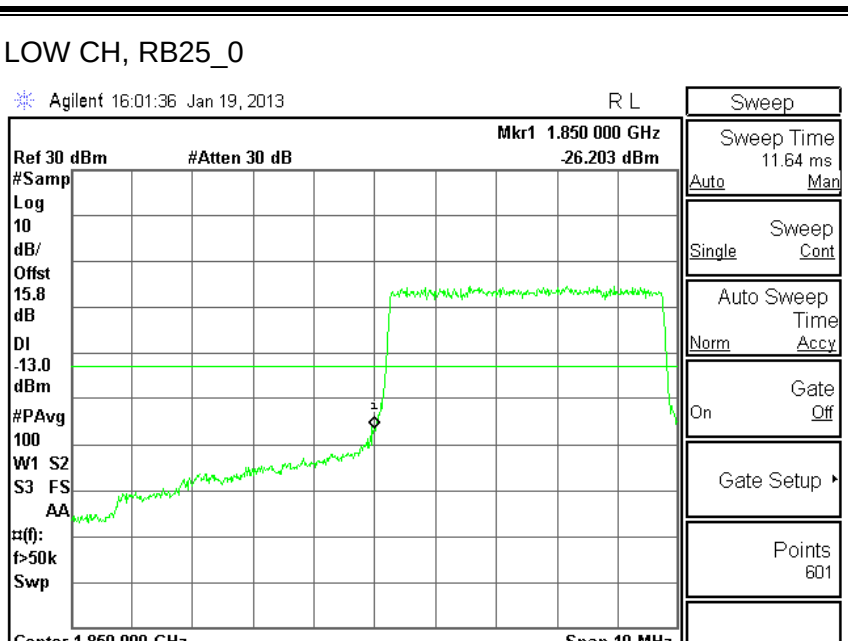
LOW CH, RB1_24



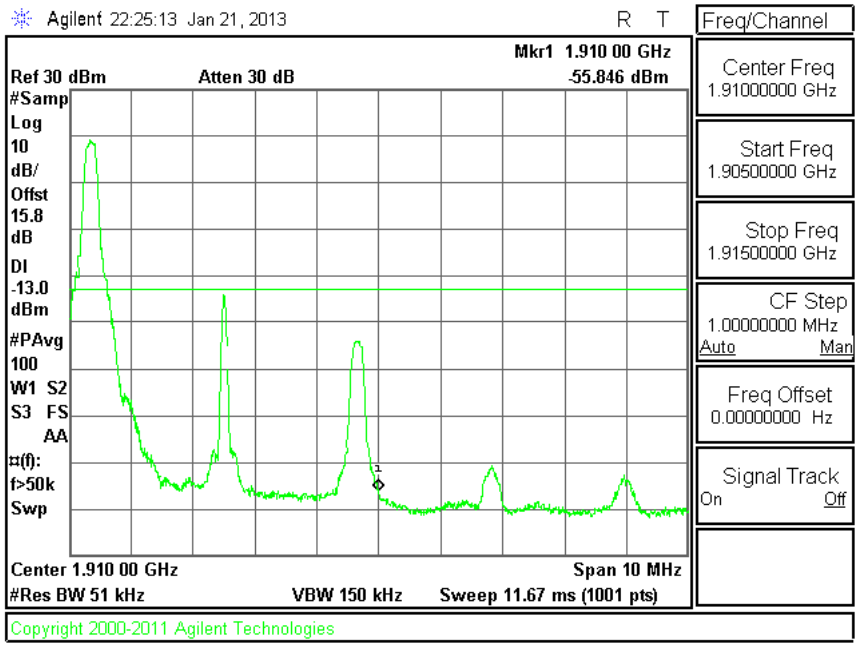
LOW CH, RB12_6



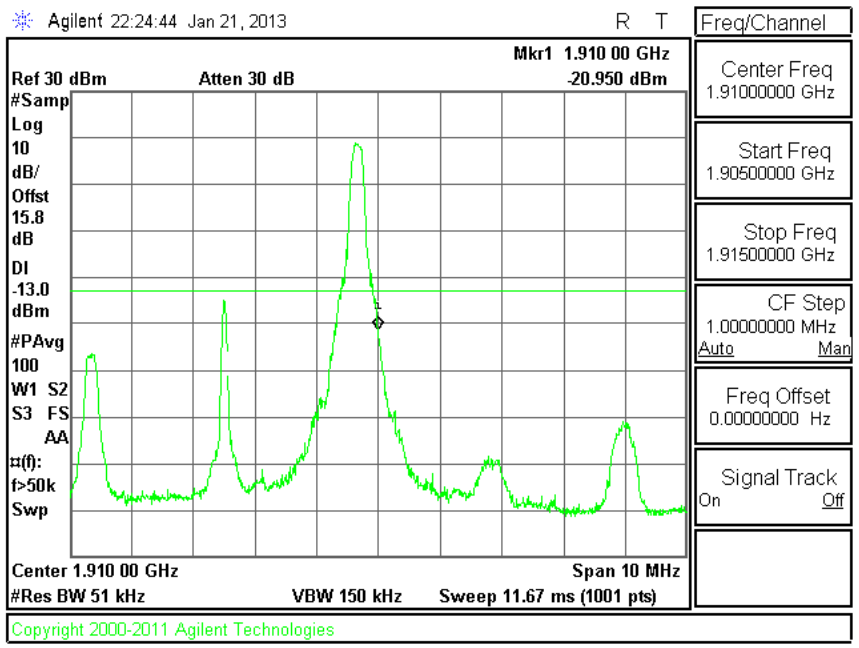
LOW CH, RB25_0



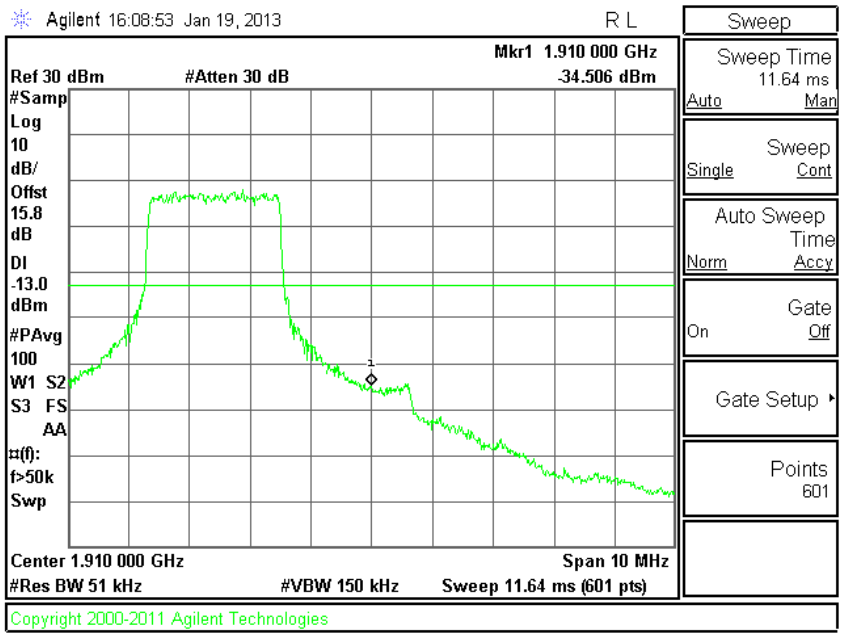
HIGH CH, RB1_0



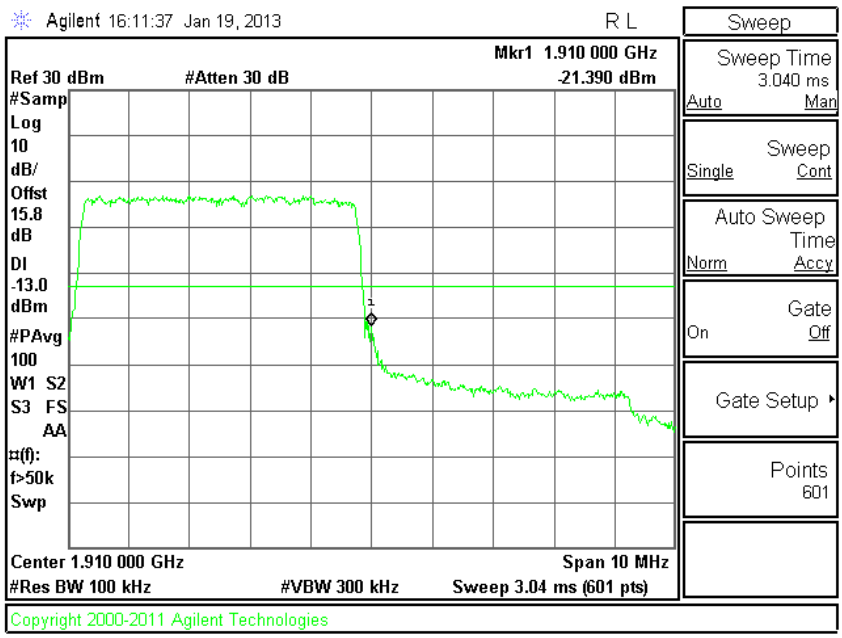
HIGH CH, RB1_24



HIGH CH, RB12_6

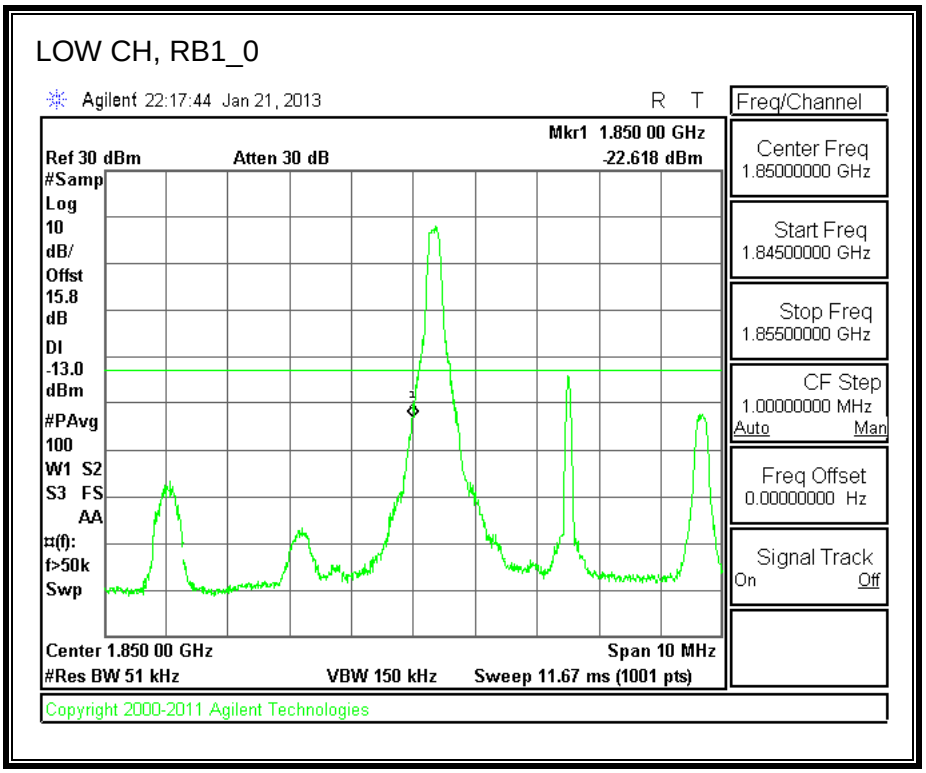


HIGH CH, RB25_0

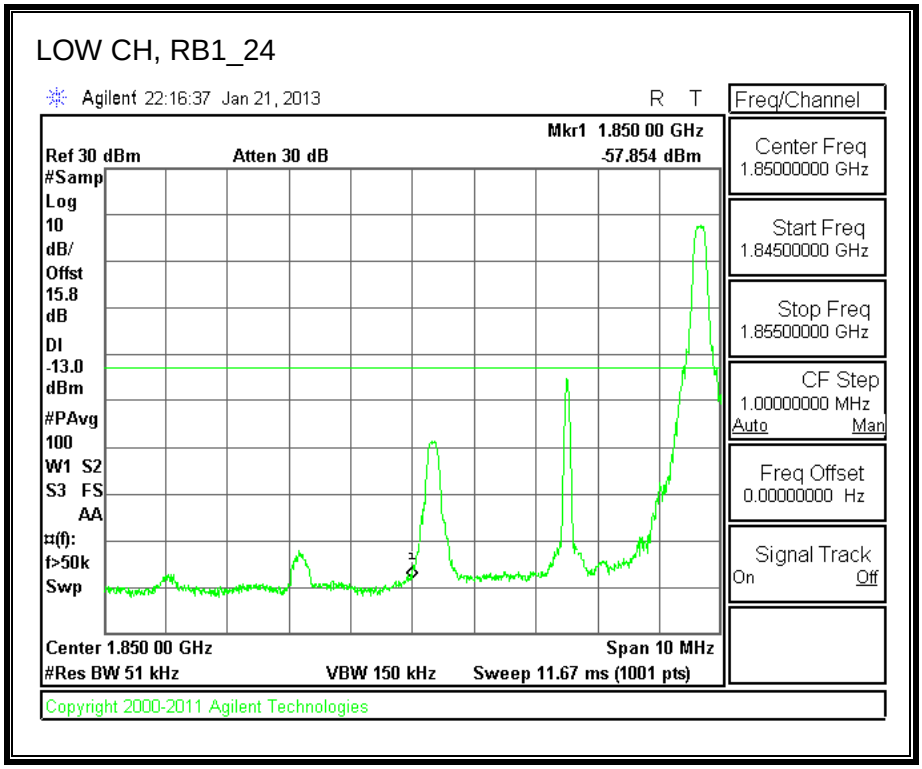


5.0MHz BAND WIDTH 16QAM

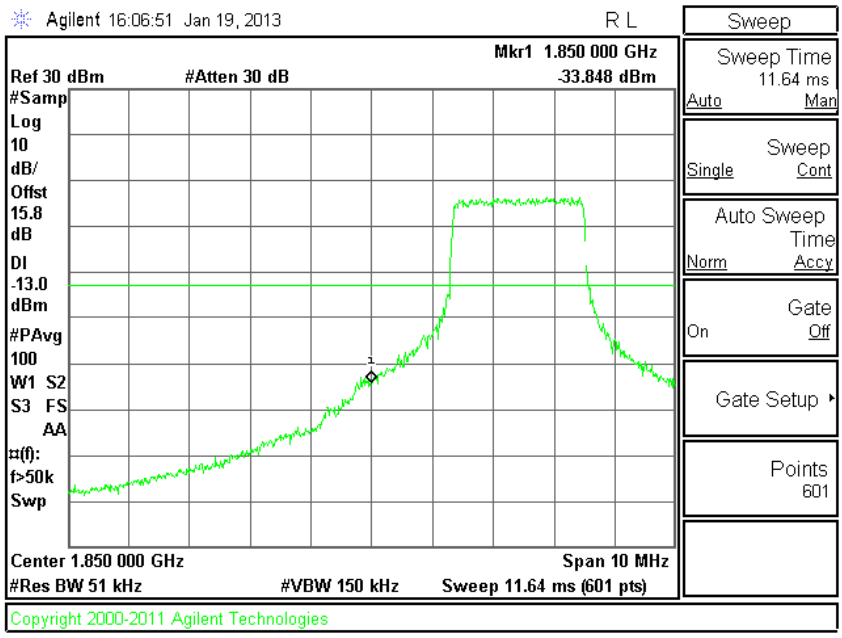
LOW CH, RB1_0



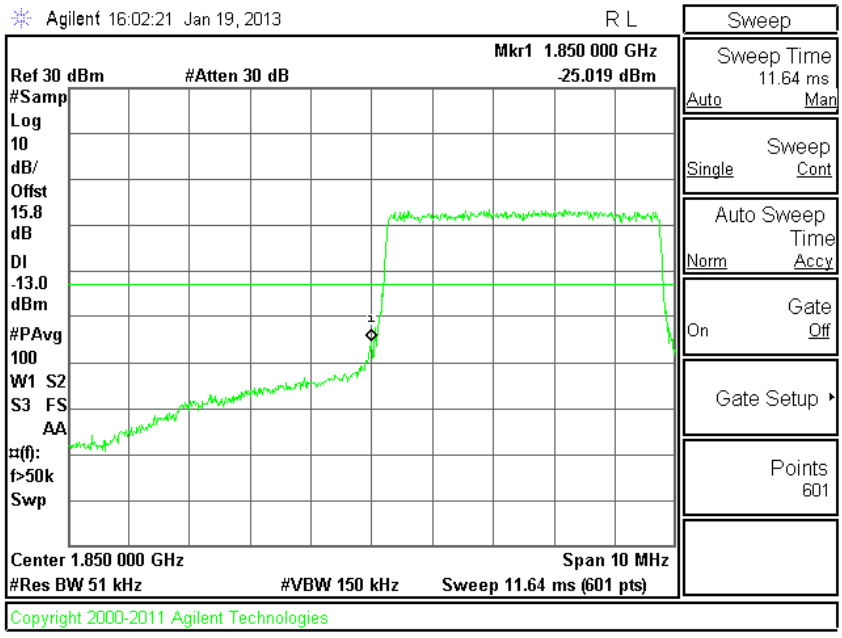
LOW CH, RB1_24



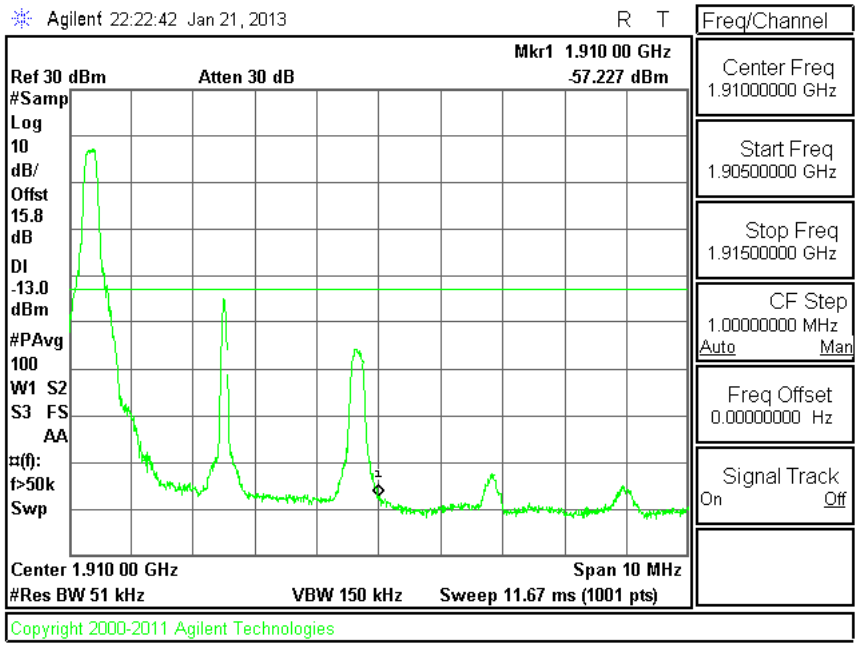
LOW CH, RB12_6



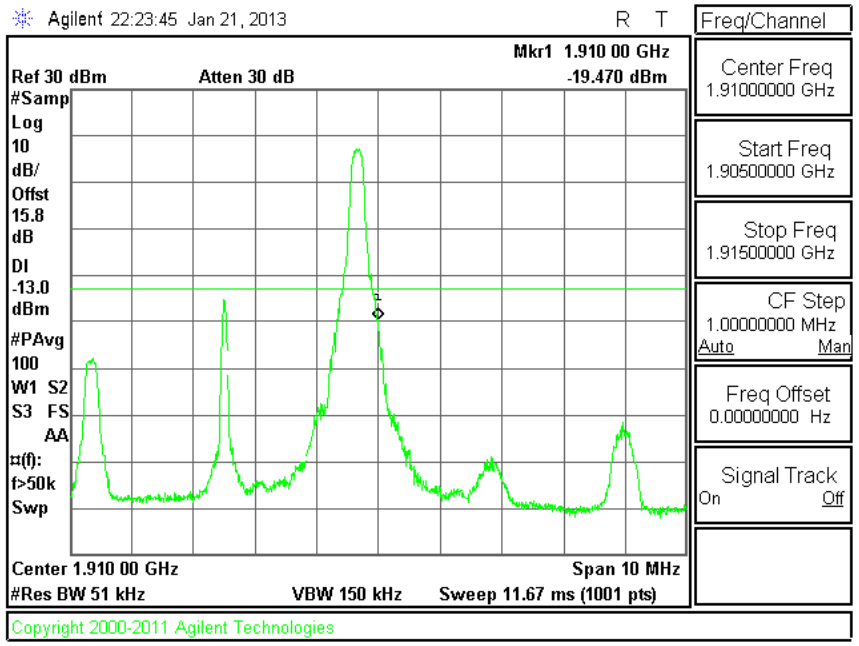
LOW CH, RB25_0



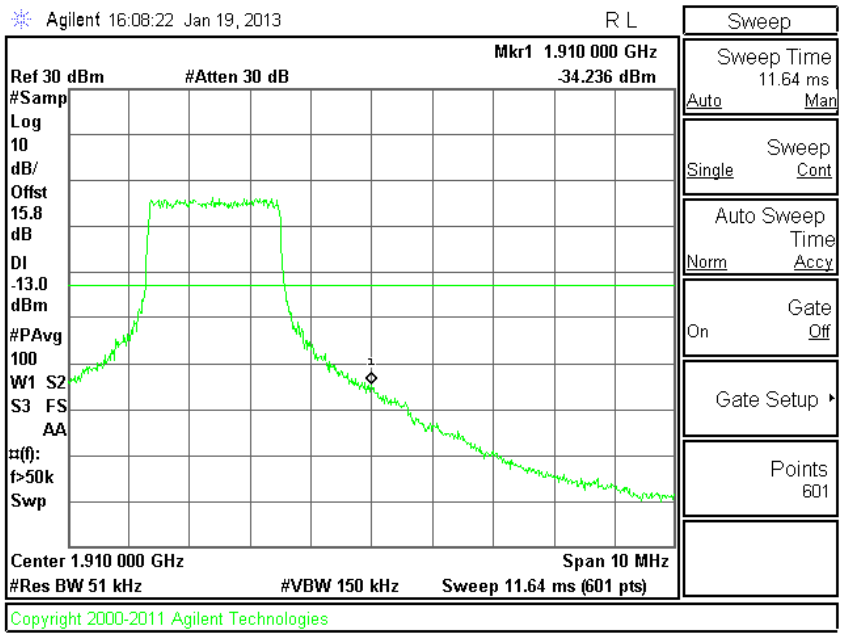
HIGH CH, RB1_0



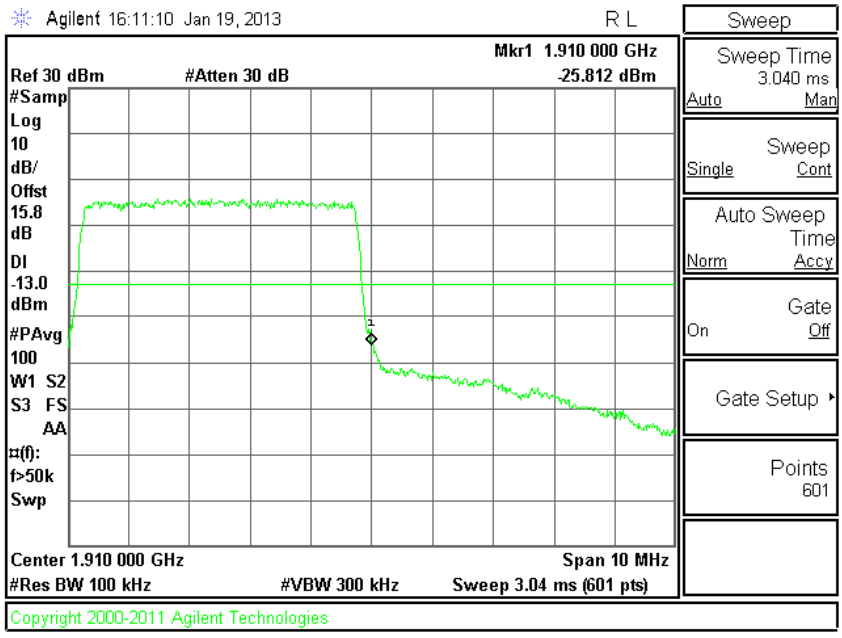
HIGH CH, RB1_24



HIGH CH, RB12_6

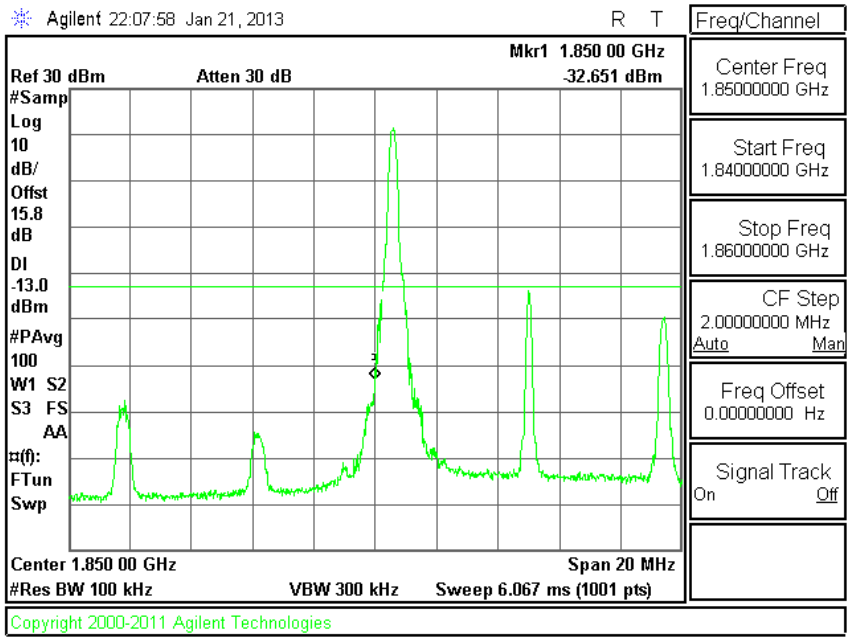


HIGH CH, RB25_0

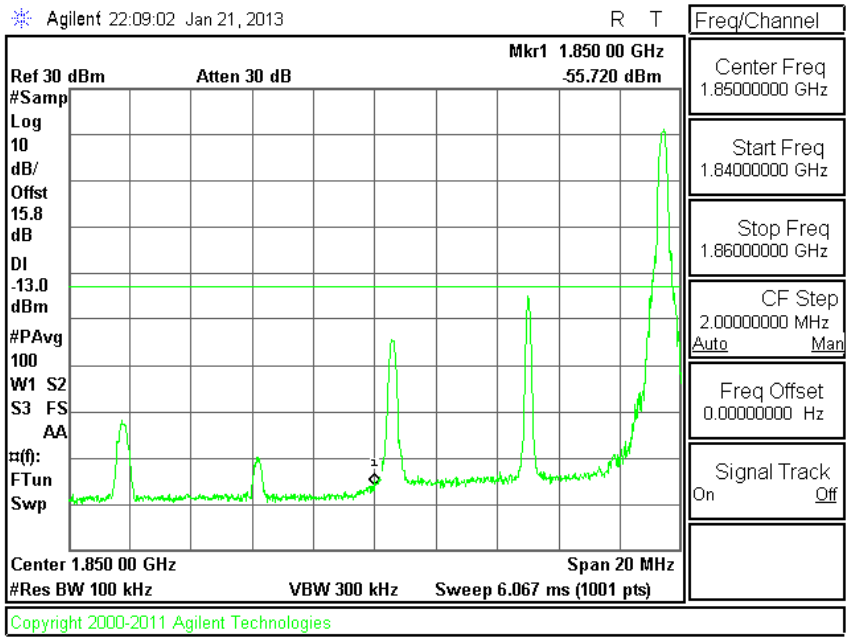


10.0MHz BAND WIDTH QPSK

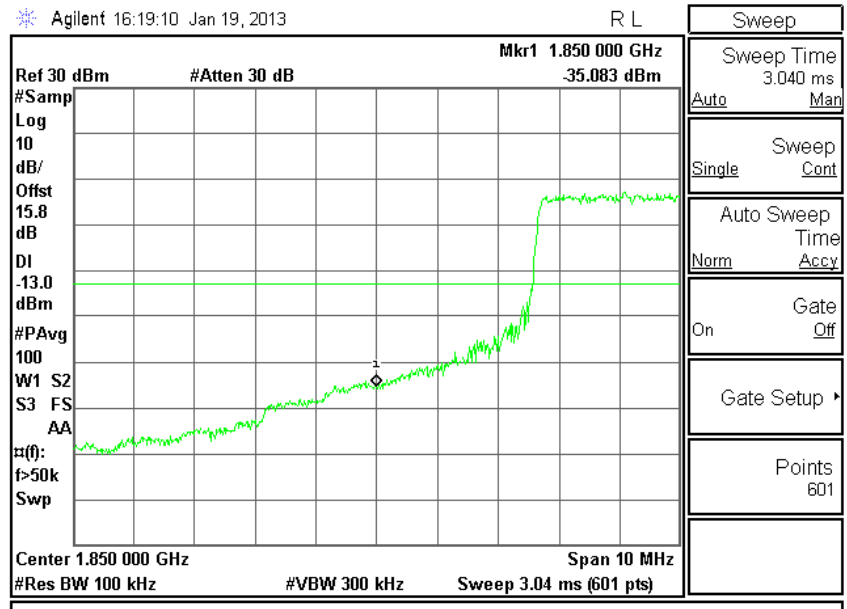
LOW CH, RB1_0



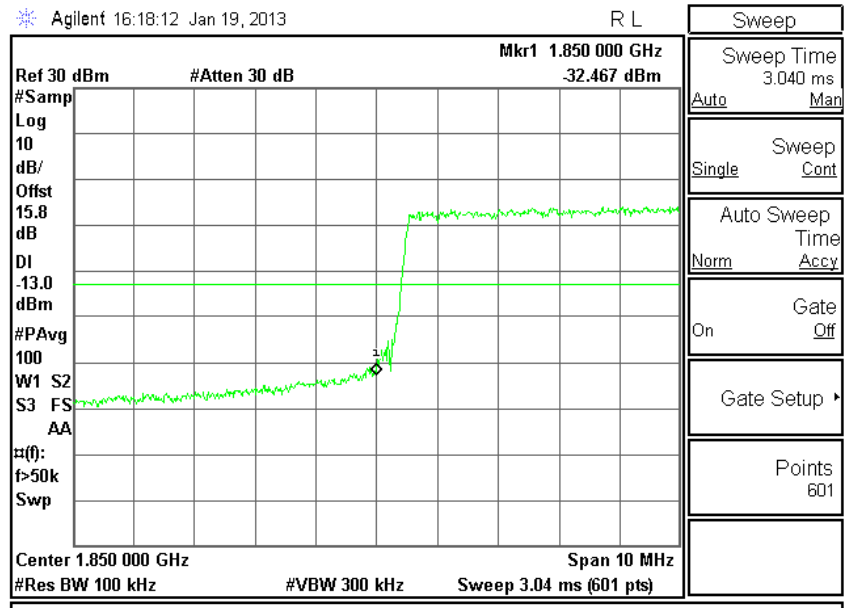
LOW CH, RB1_49



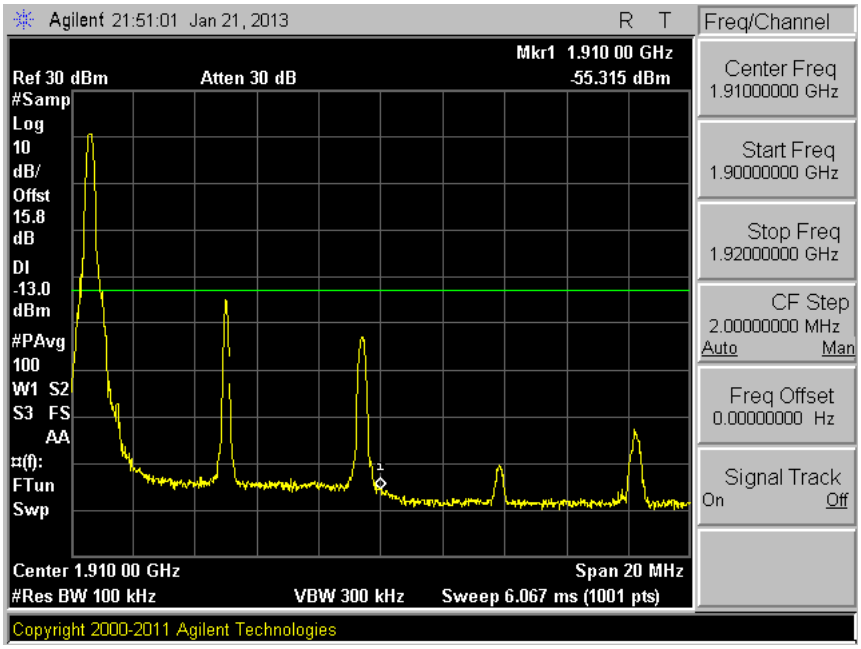
LOW CH, RB25_12



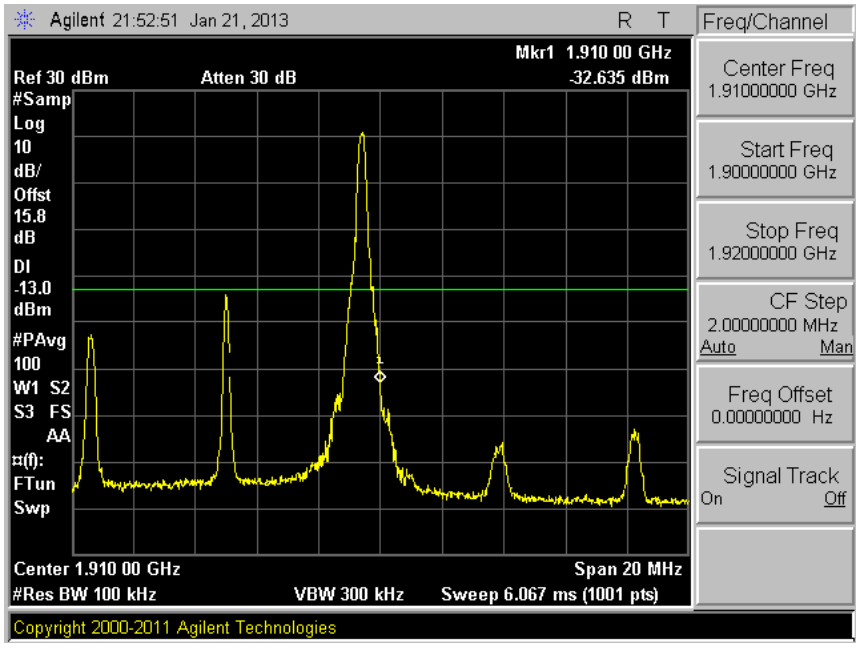
LOW CH, RB50_0



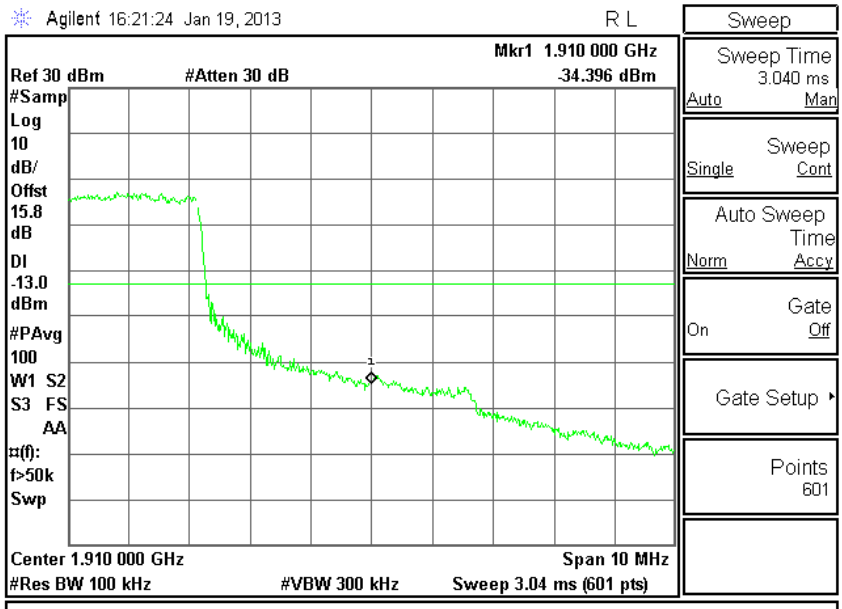
HIGH CH, RB1_0



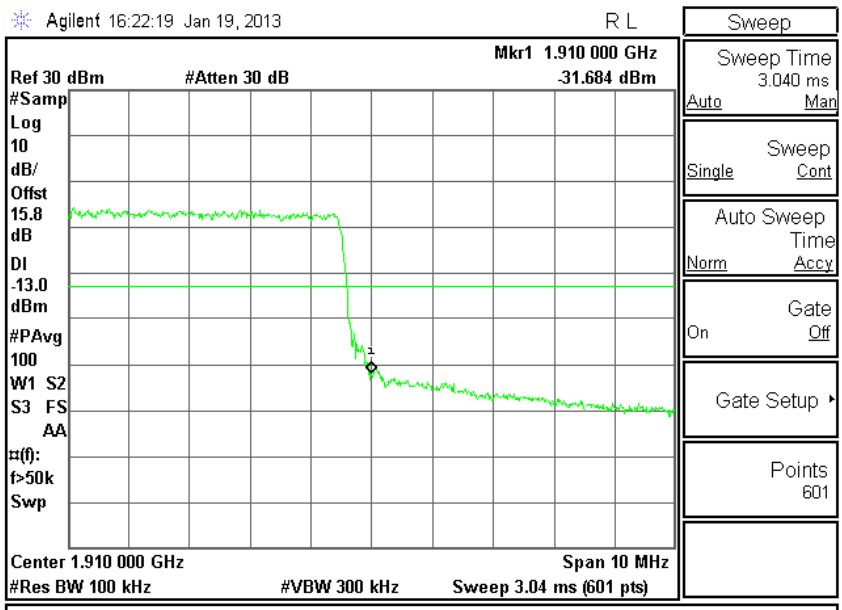
HIGH CH, RB1_49



HIGH CH, RB25_12

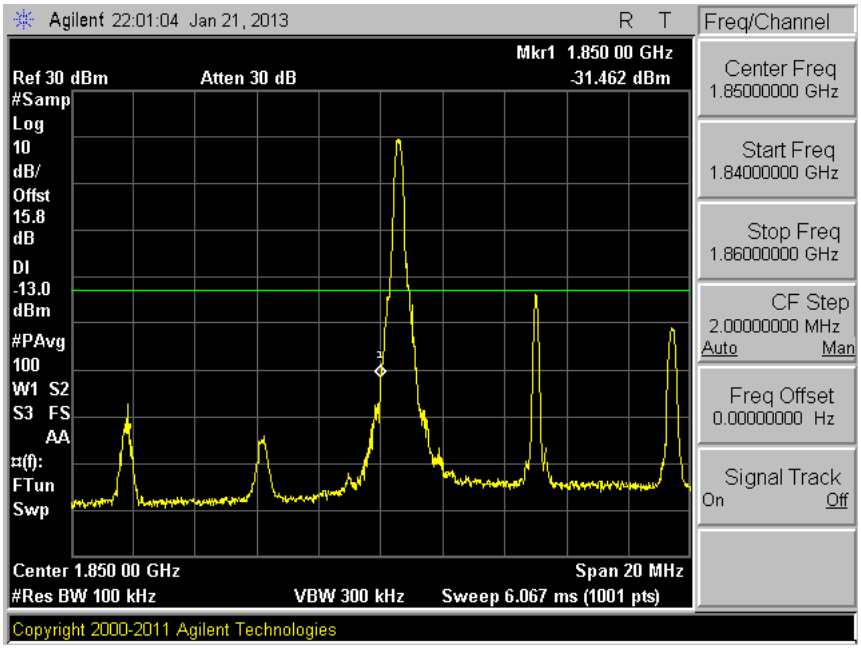


HIGH CH, RB50_0

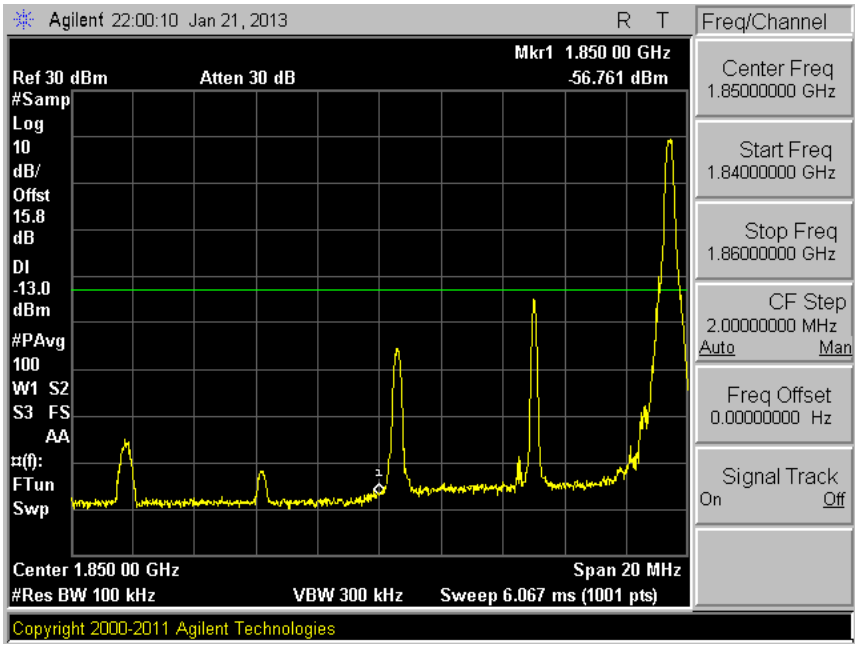


10.0MHz BAND WIDTH 16QAM

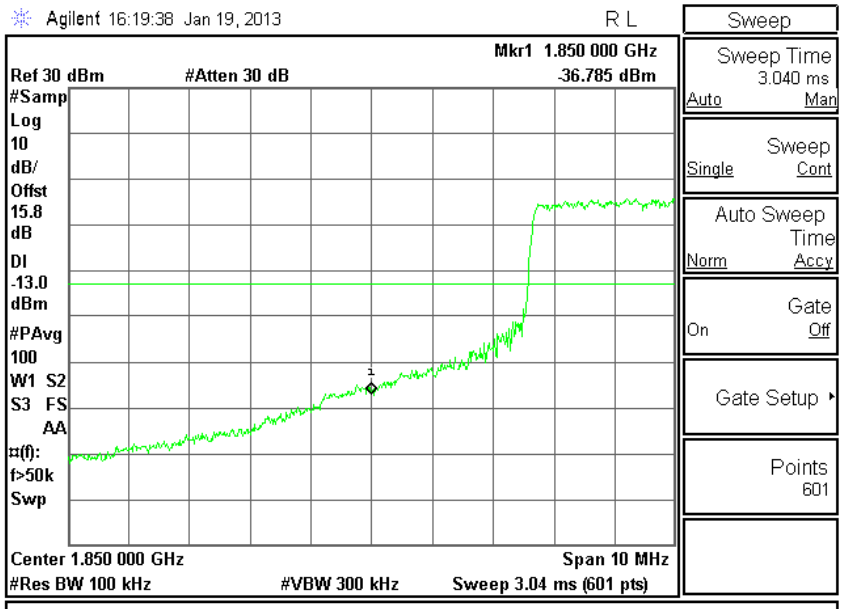
LOW CH, RB1_0



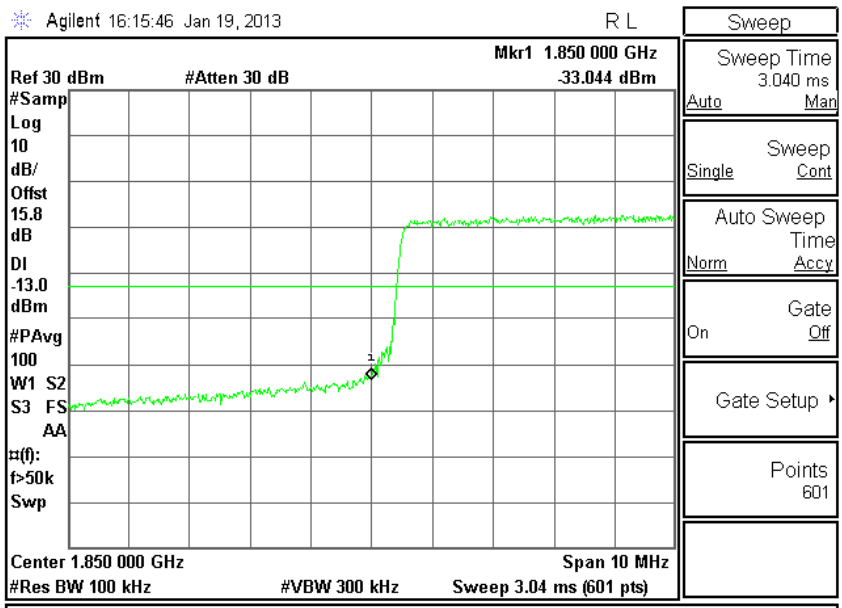
LOW CH, RB1_49



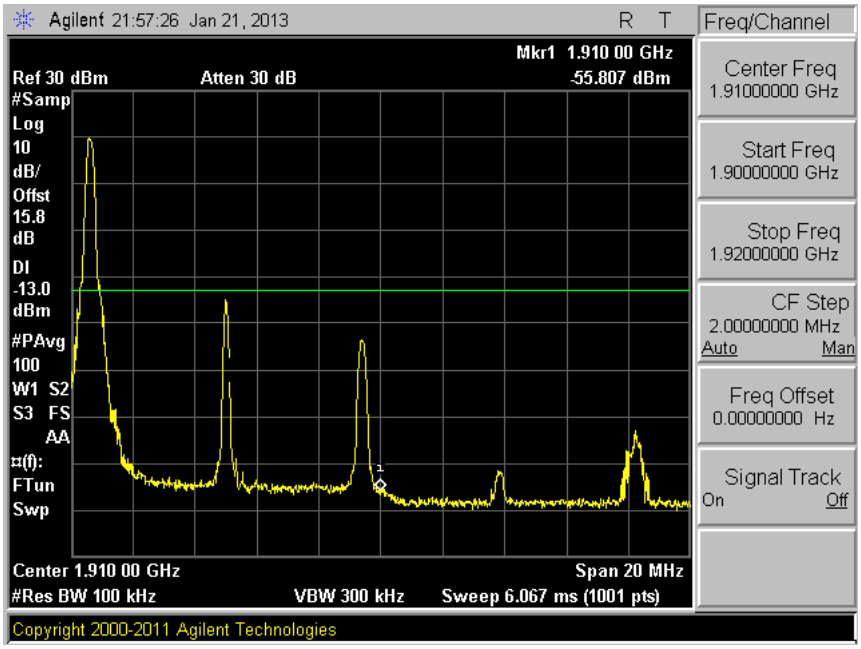
LOW CH, RB25_12



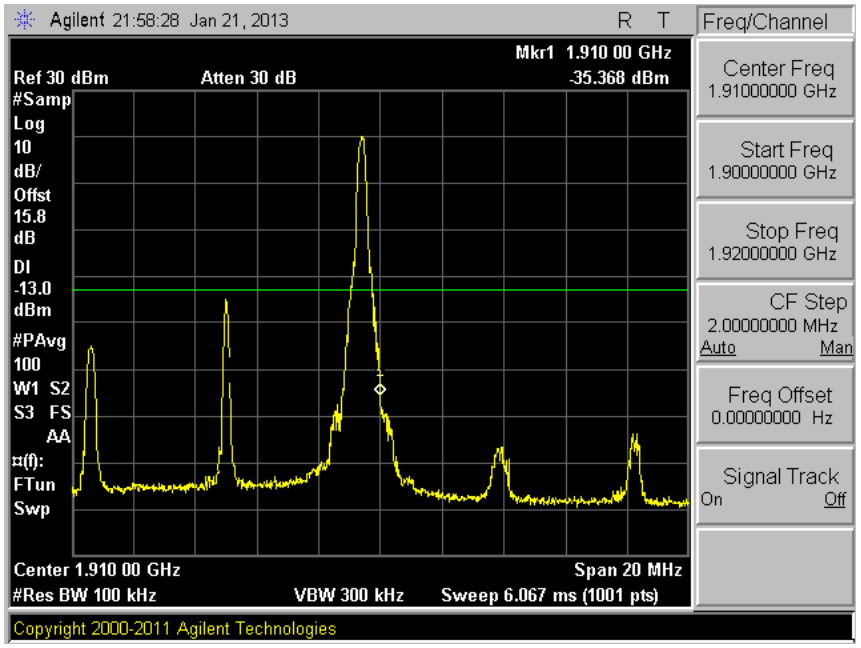
LOW CH, RB50_0



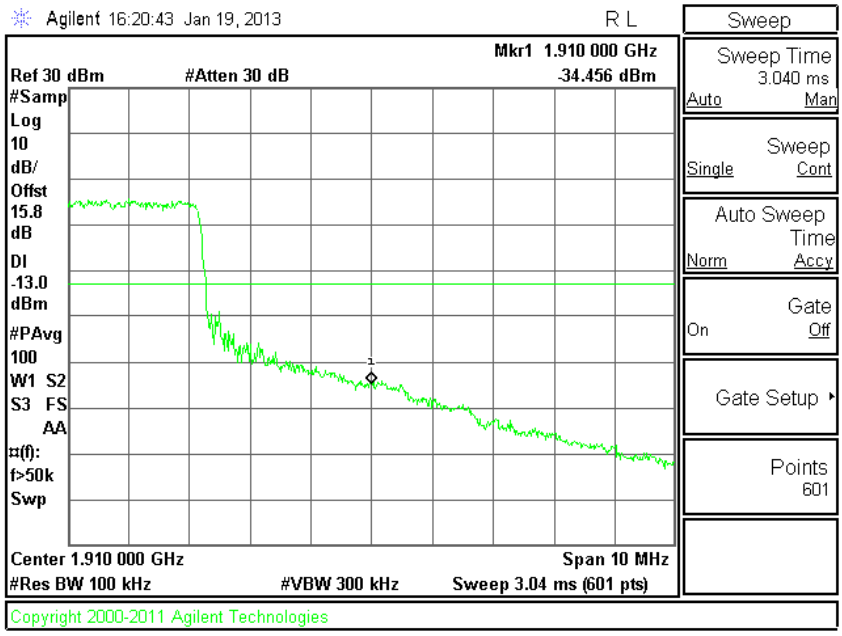
HIGH CH, RB1_0



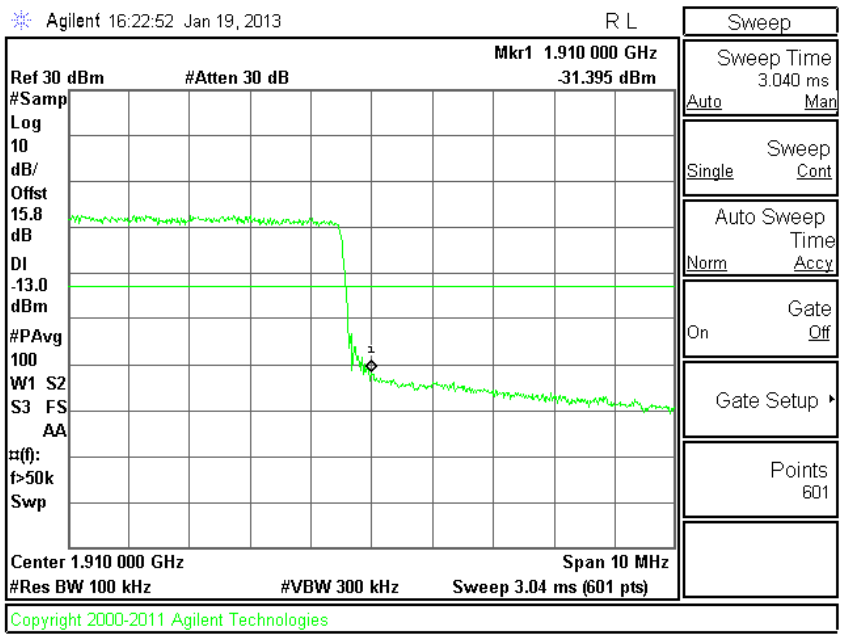
HIGH CH, RB1_49



HIGH CH, RB25_12

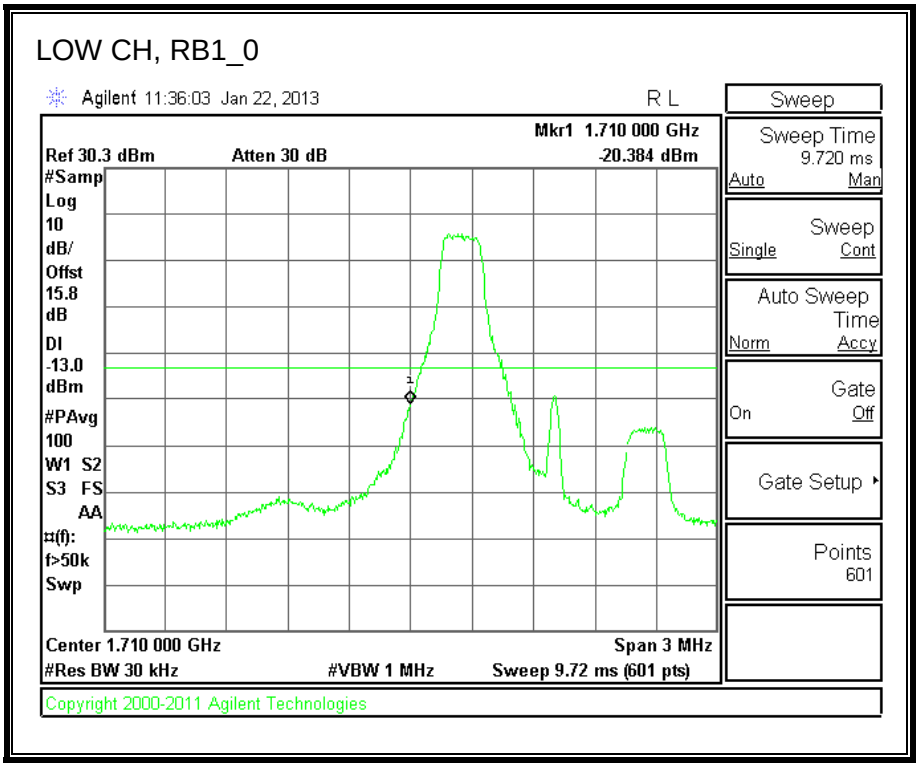


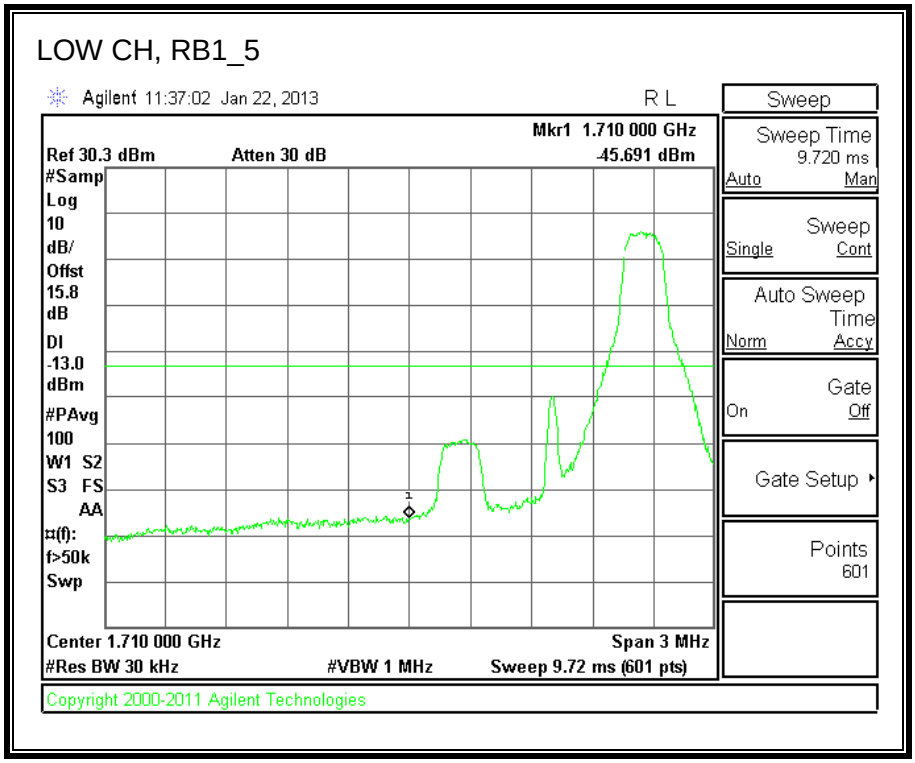
HIGH CH, RB50_0



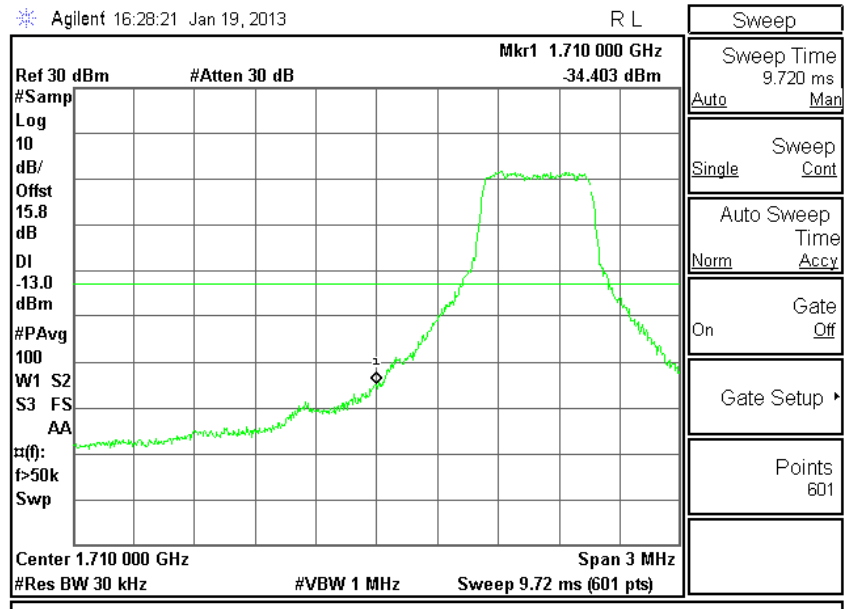
8.2.4. *LTE BAND 4*

1.4MHz BAND WIDTH QPSK)

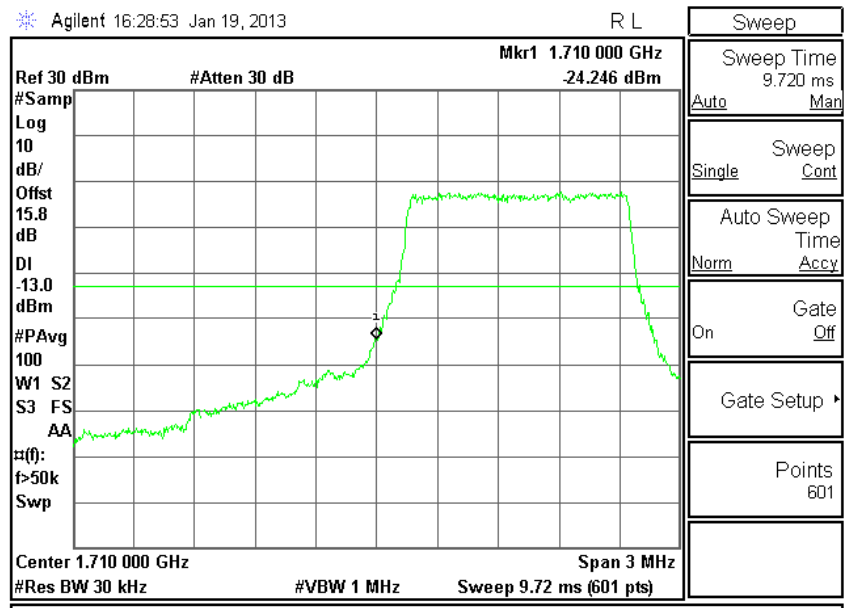




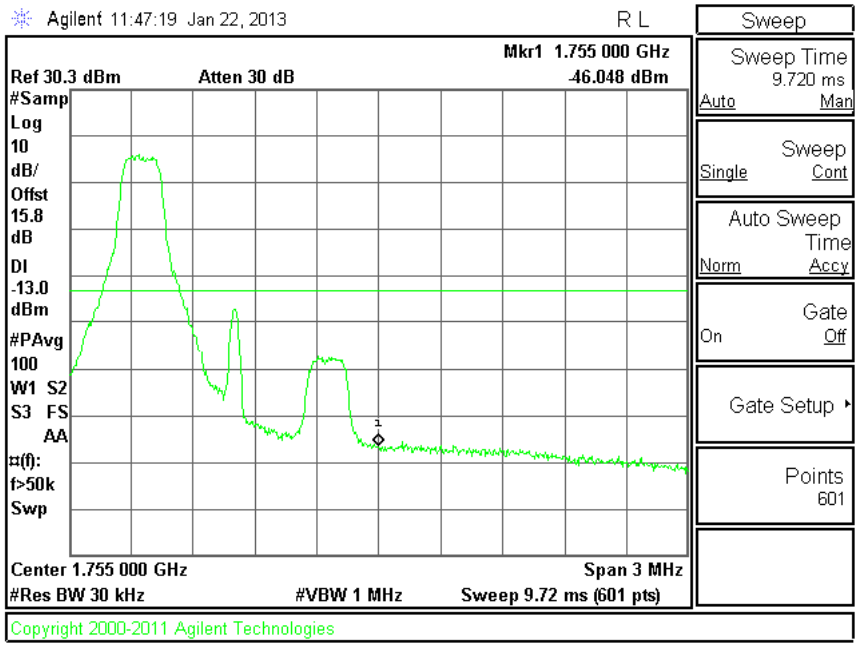
LOW CH, RB3_2



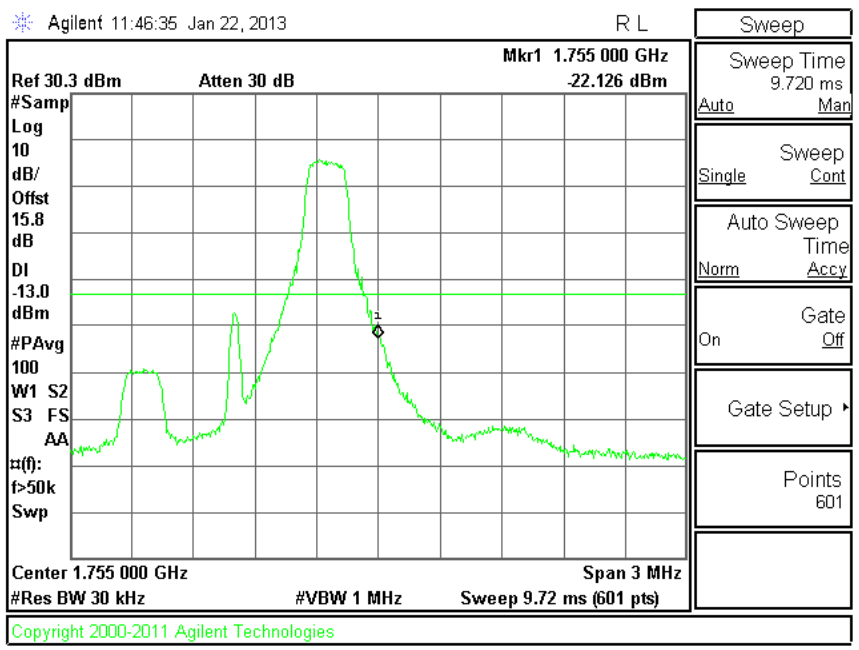
LOW CH, RB6_0



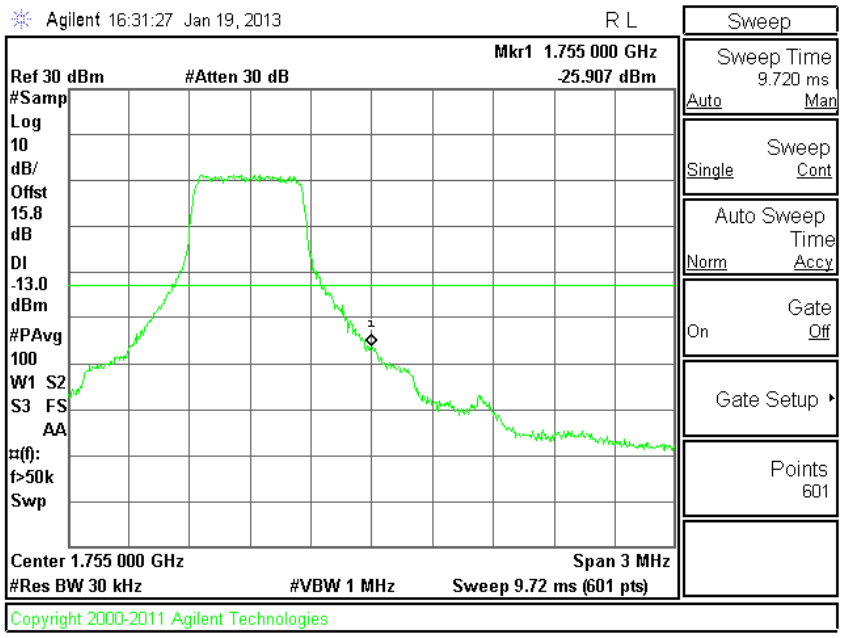
HIGH CH, RB1_0



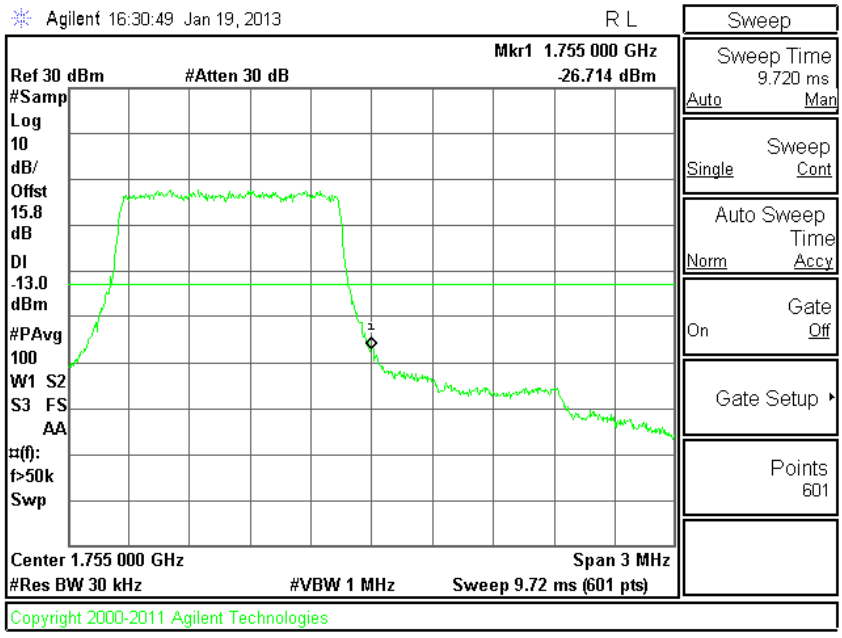
HIGH CH, RB1_5



HIGH CH, RB3_2

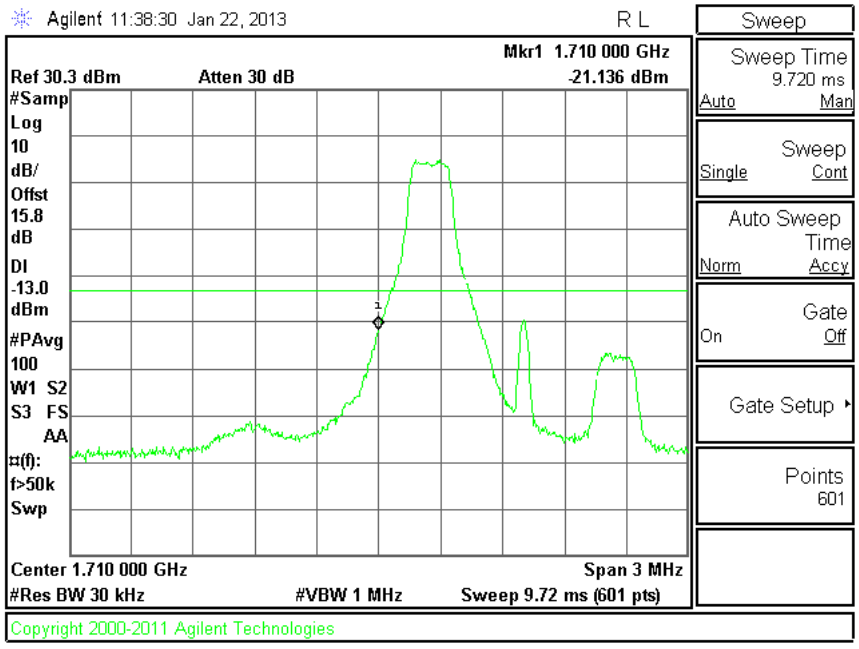


HIGH CH, RB6_0

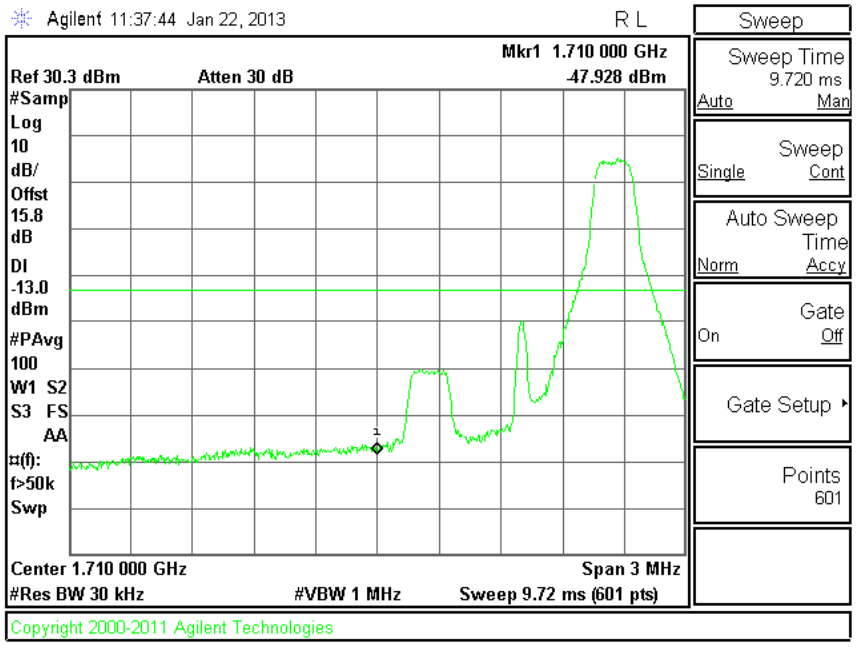


1.4MHz BAND WIDTH 16QAM

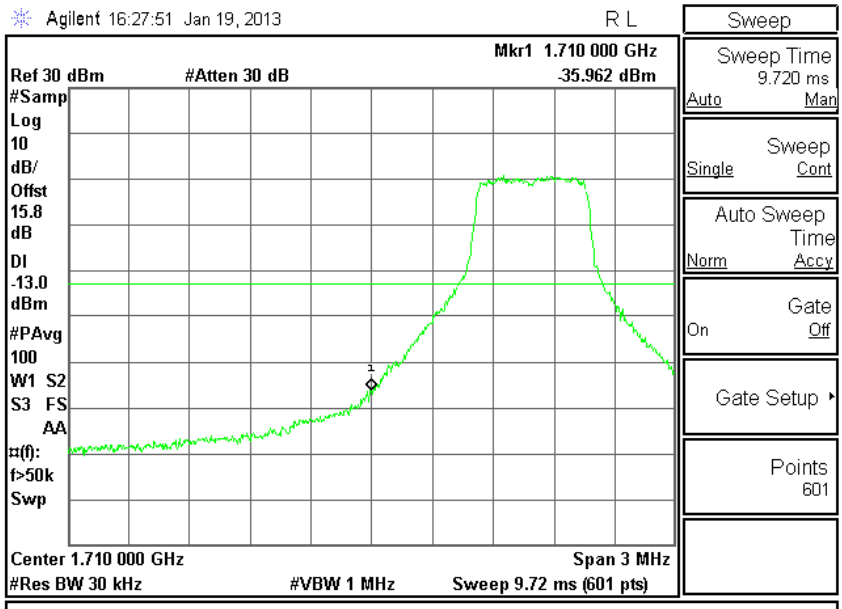
LOW CH, RB1_0



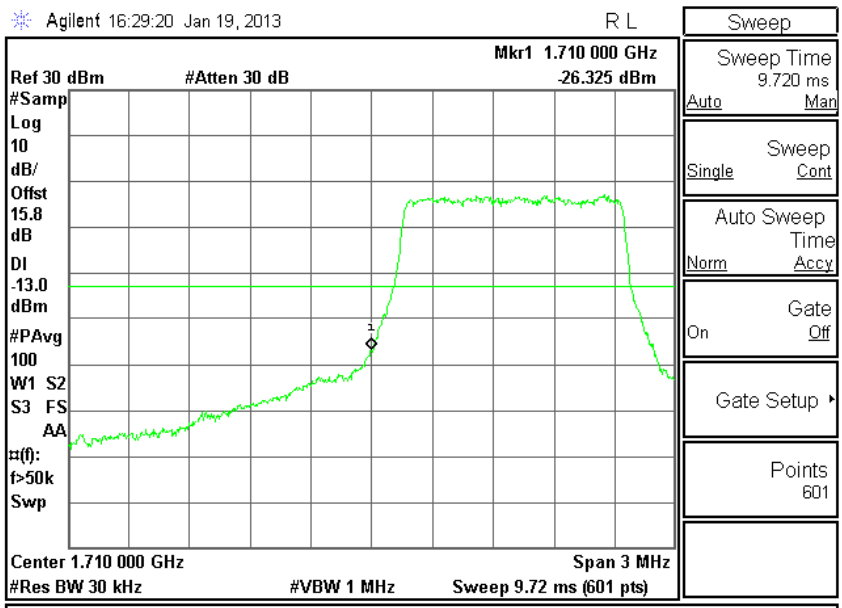
LOW CH, RB1_5



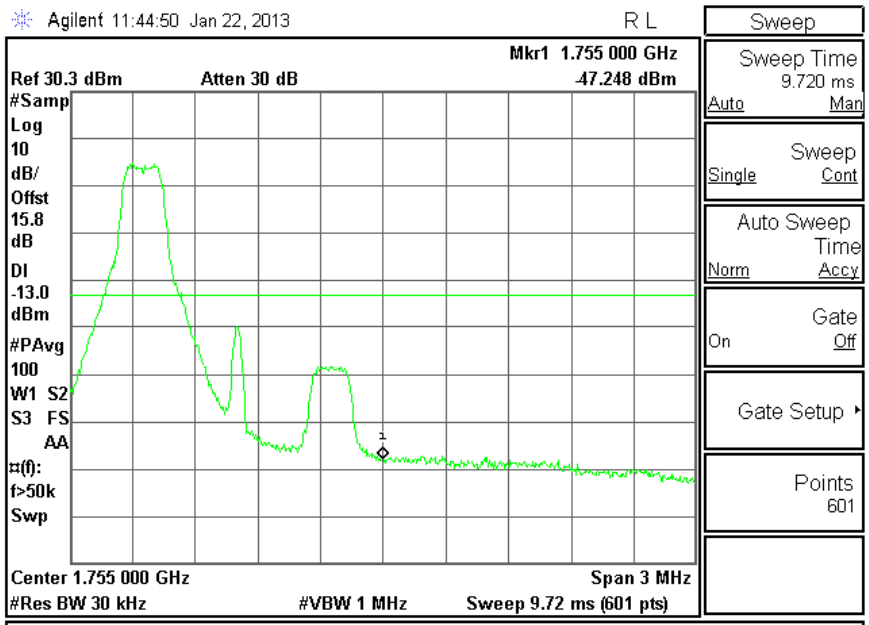
LOW CH, RB3_2



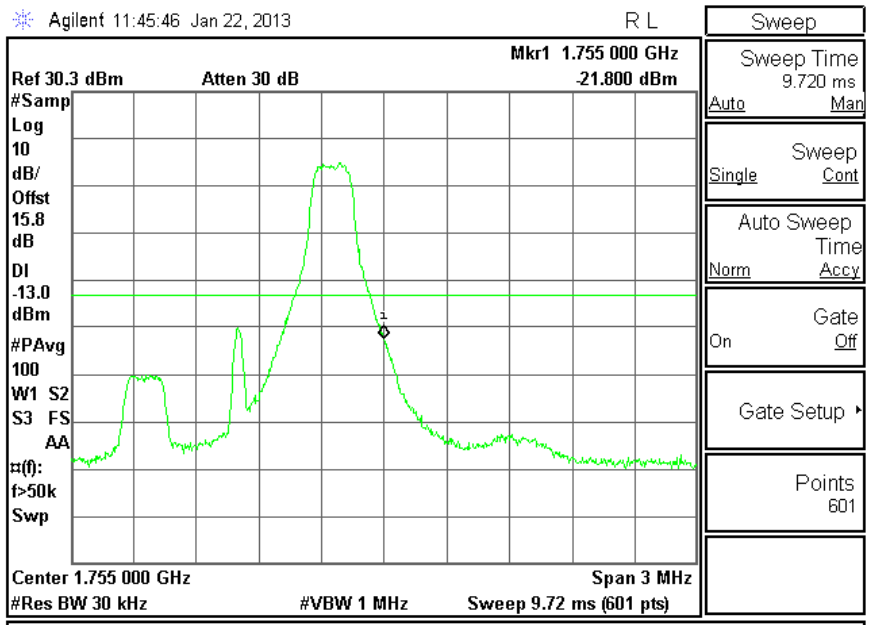
LOW CH, RB6_0



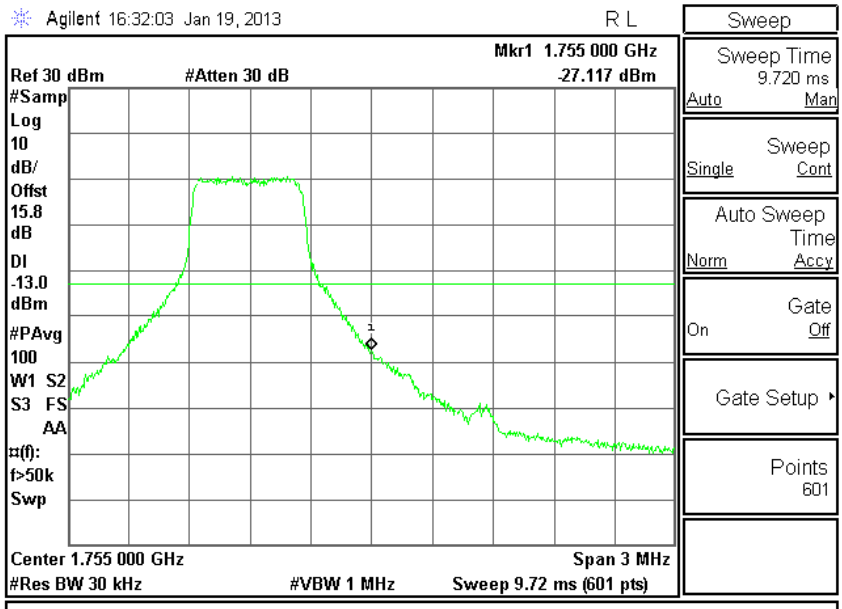
HIGH CH, RB1_0



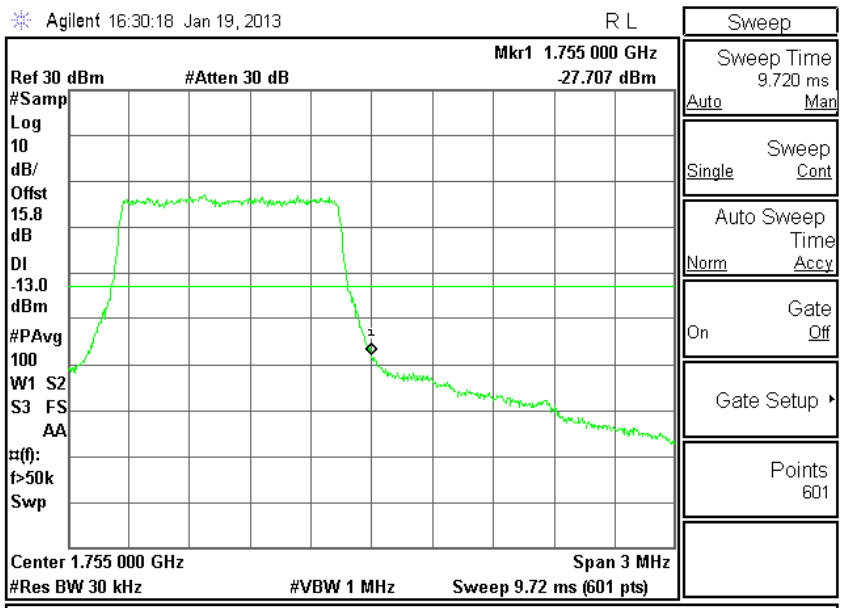
HIGH CH, RB1_5



HIGH CH, RB3_2

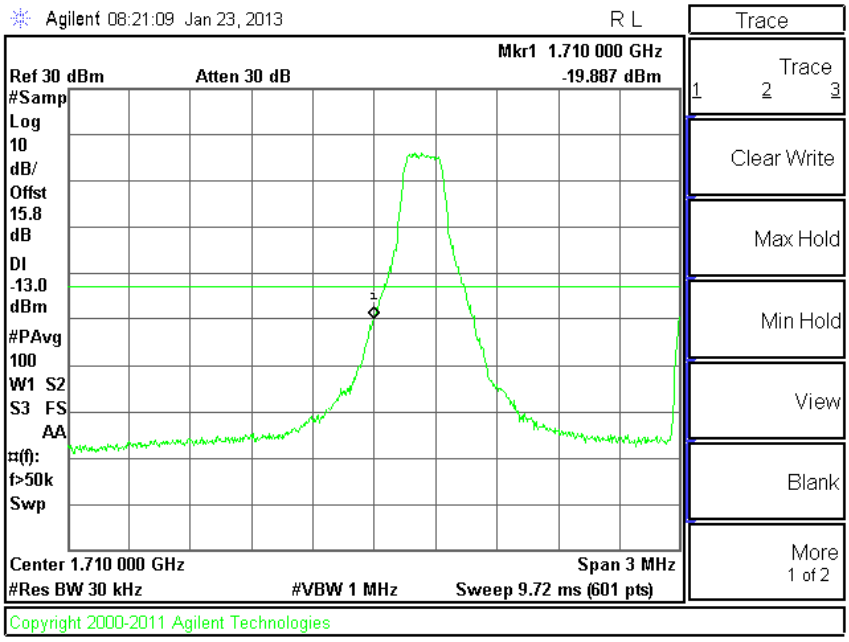


HIGH CH, RB6_0

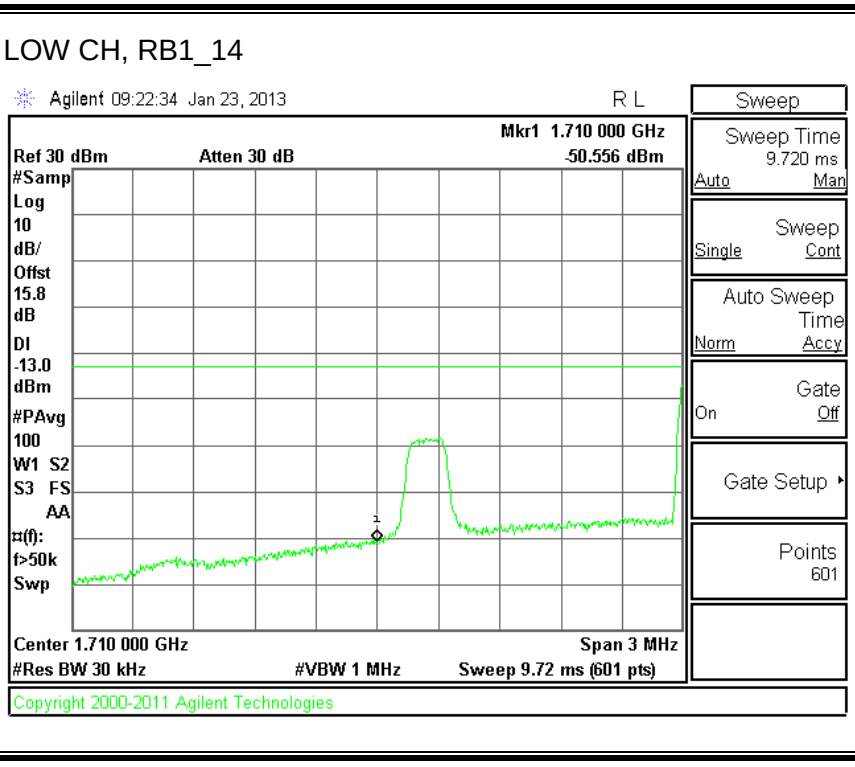


3.0MHz BAND WIDTH QPSK

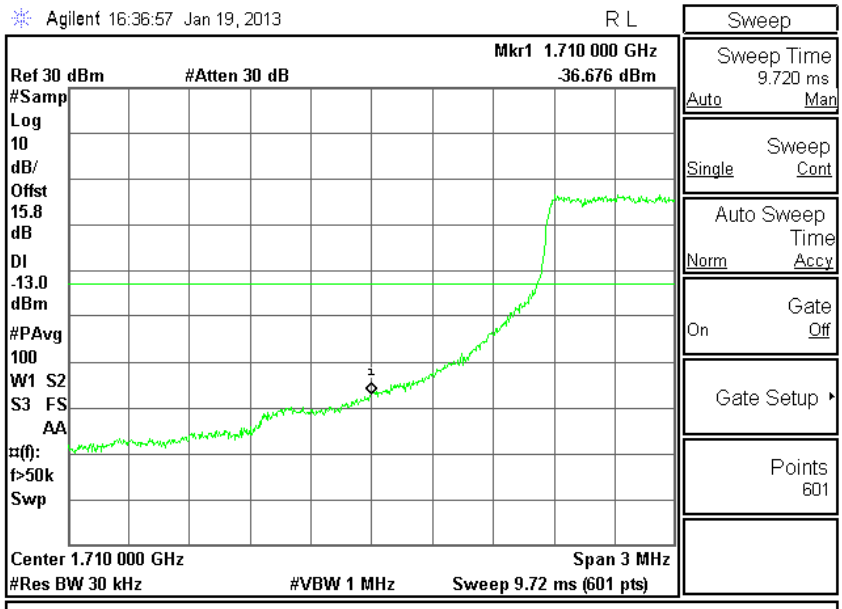
LOW CH, RB1_0



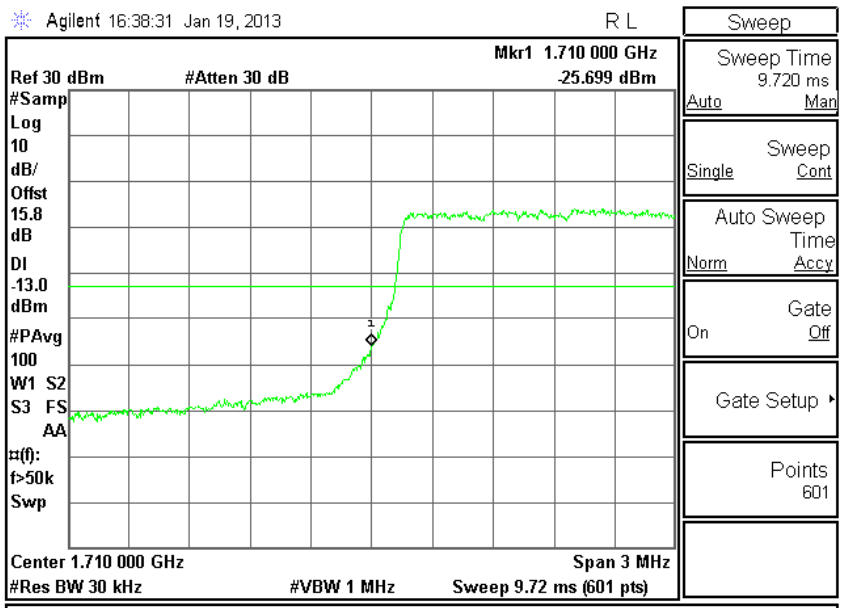
LOW CH, RB1_14



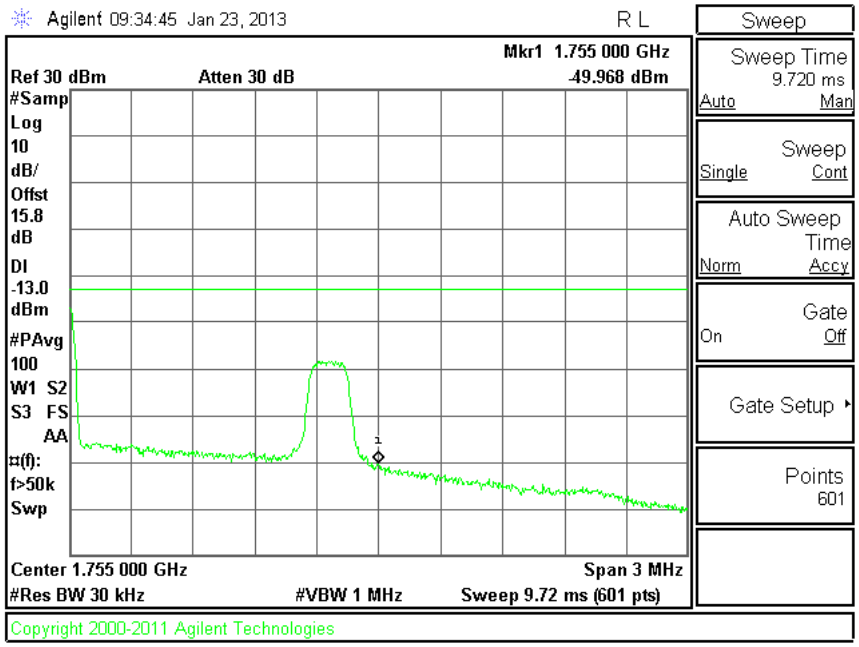
LOW CH, RB8_4



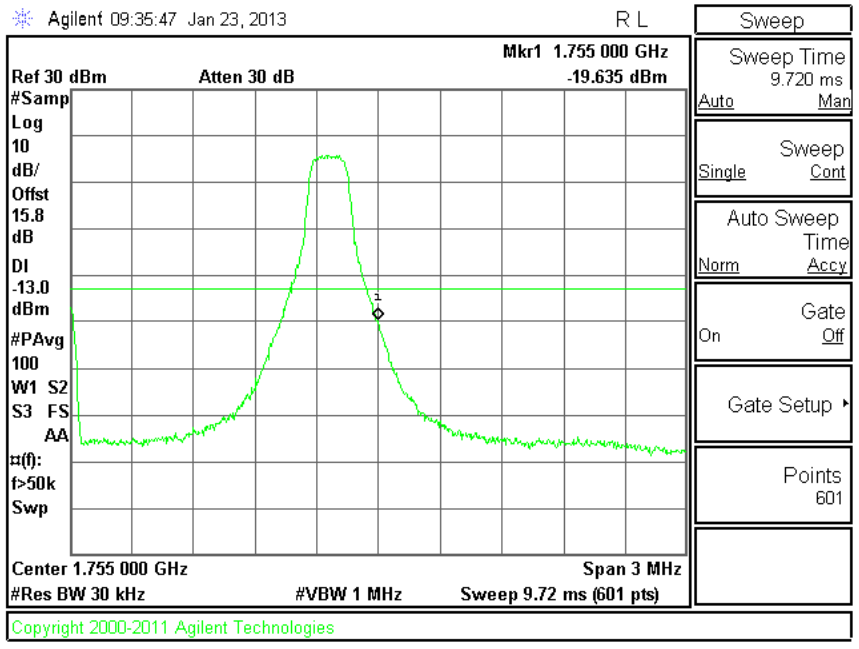
LOW CH, RB15_0



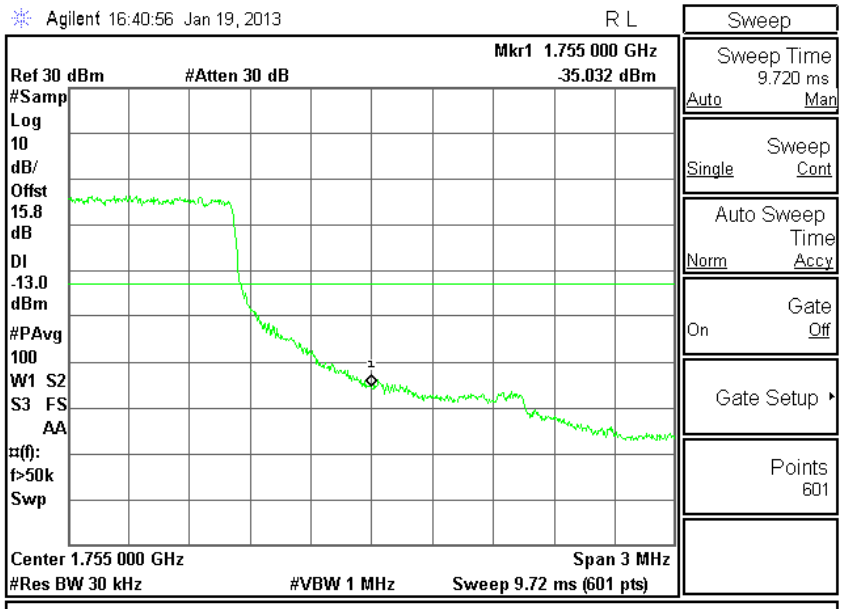
HIGH CH, RB1_0



HIGH CH, RB1_14



HIGH CH, RB8_4



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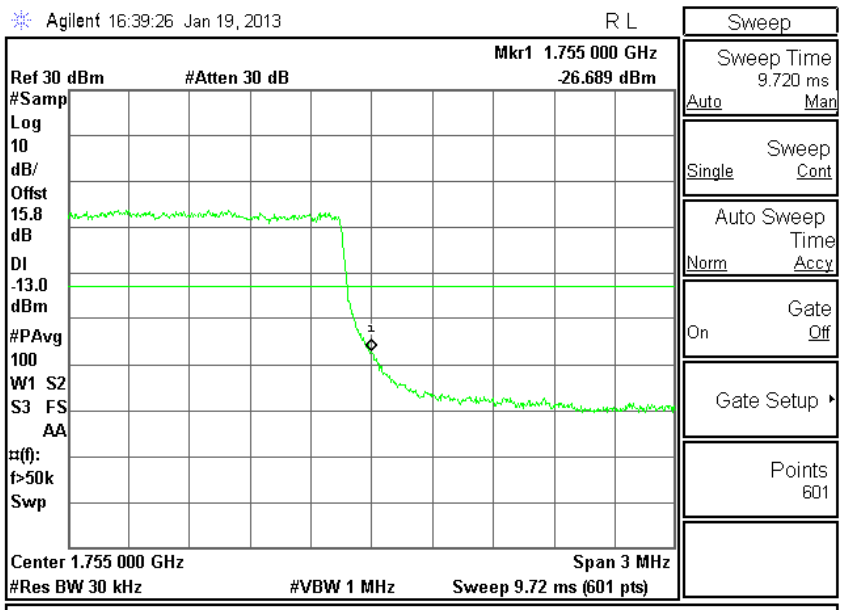
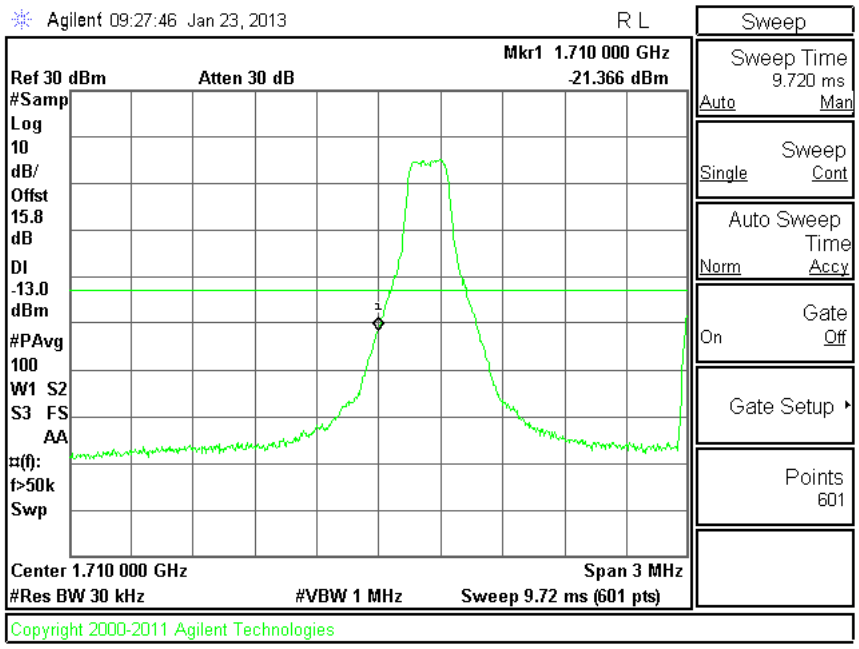
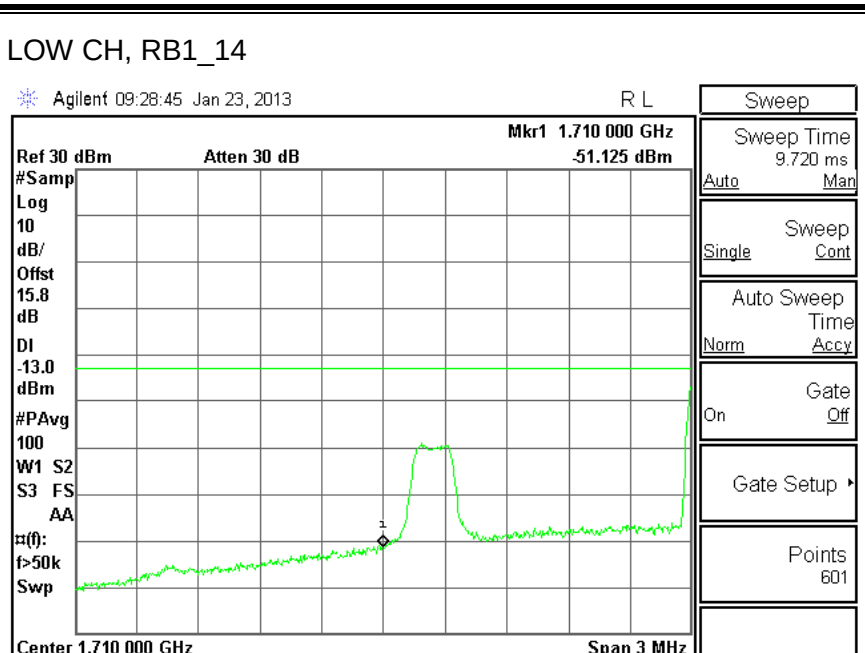


3.0MHz BAND WIDTH 16QAM

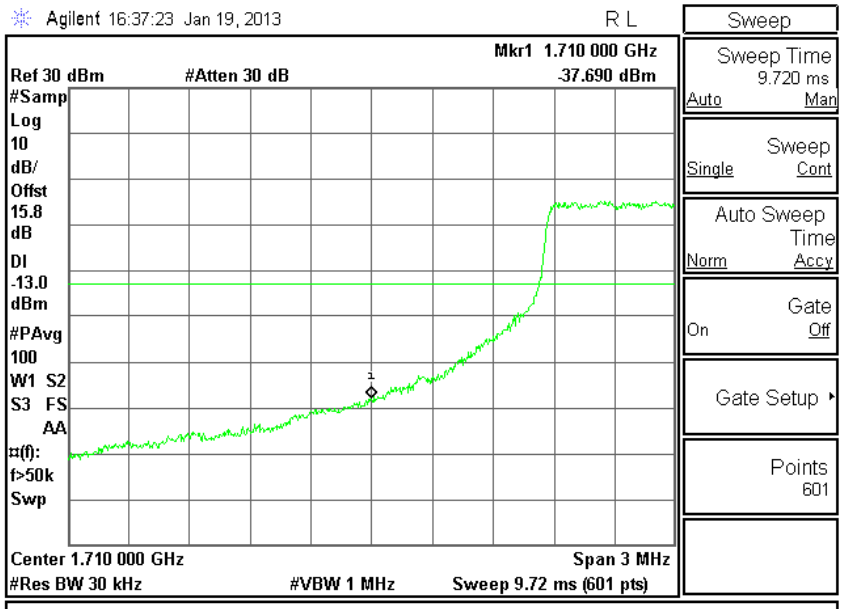
LOW CH, RB1_0



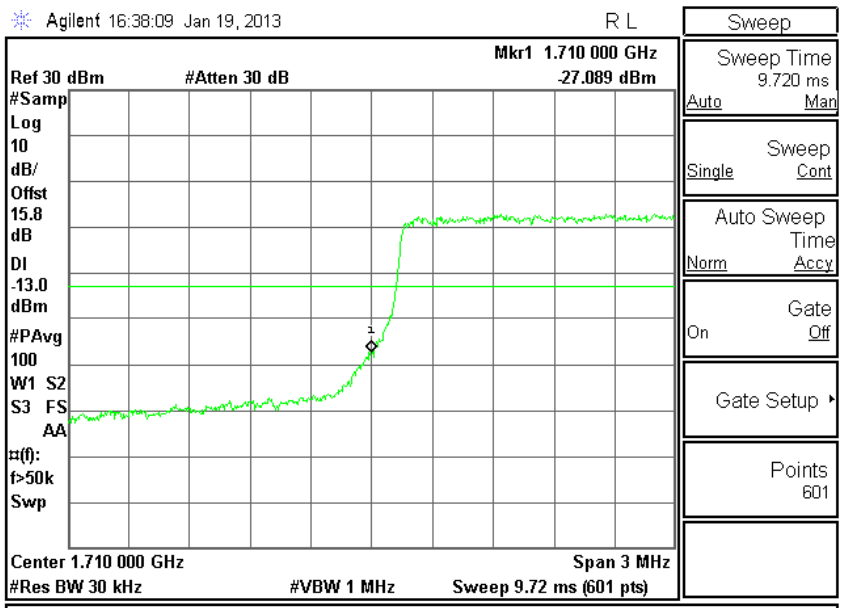
LOW CH, RB1_14



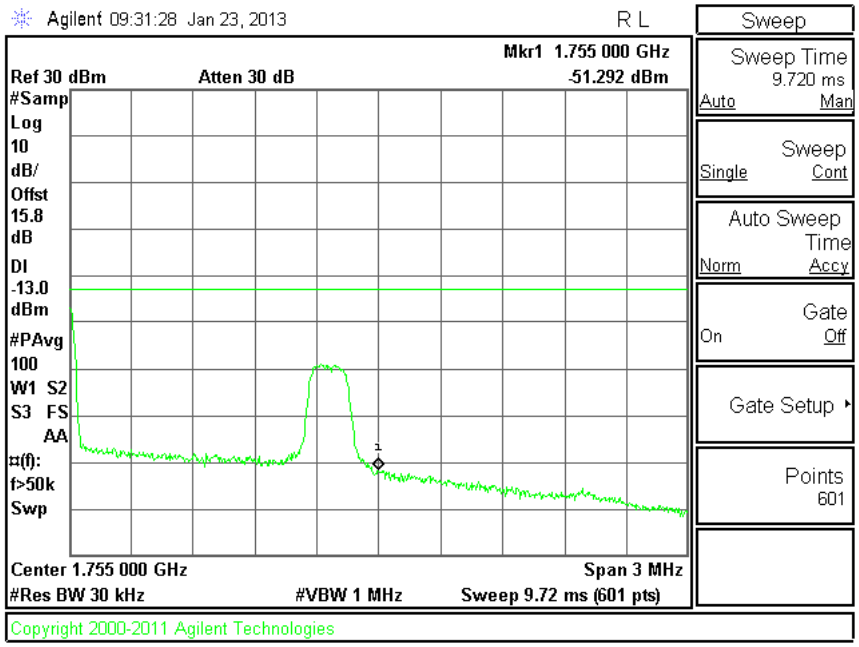
LOW CH, RB8_4



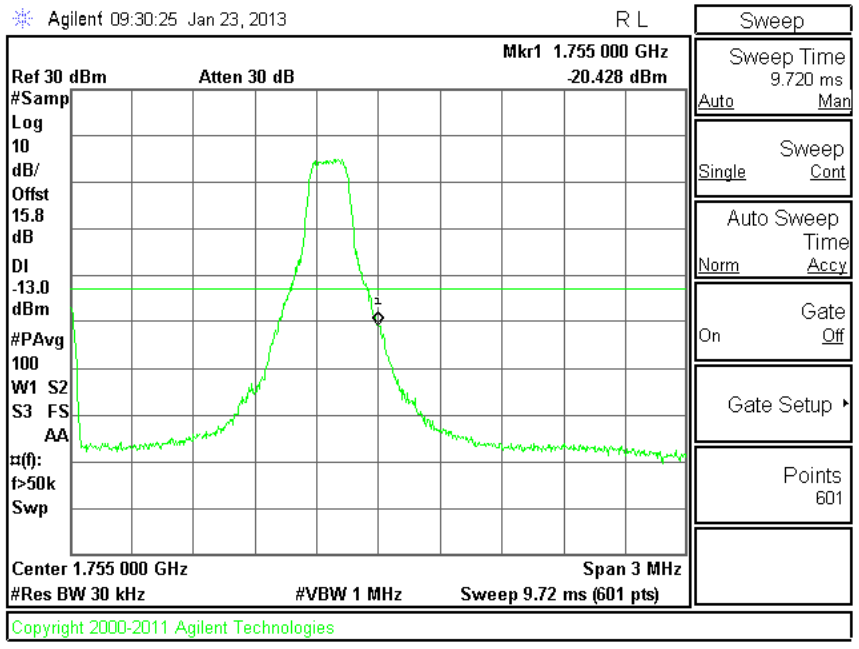
LOW CH, RB15_0



HIGH CH, RB1_0



HIGH CH, RB1_14



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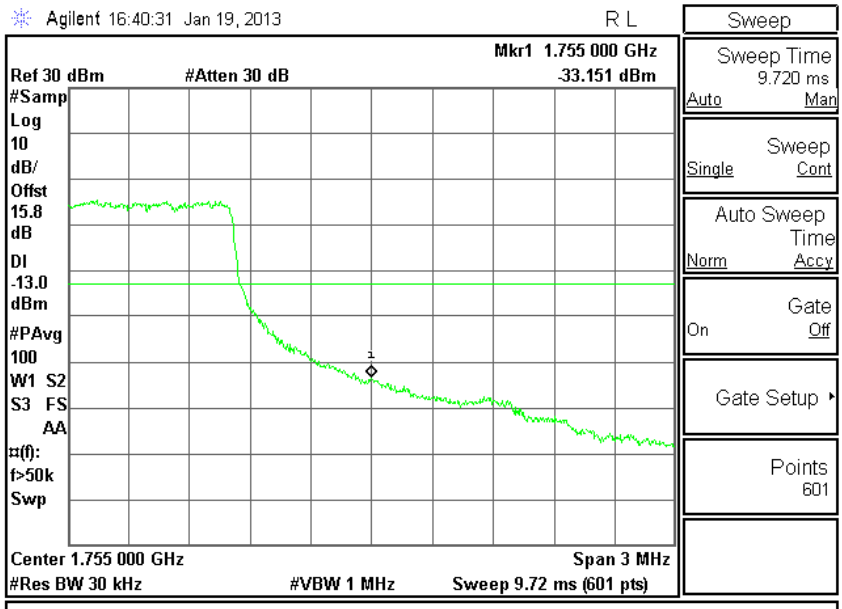
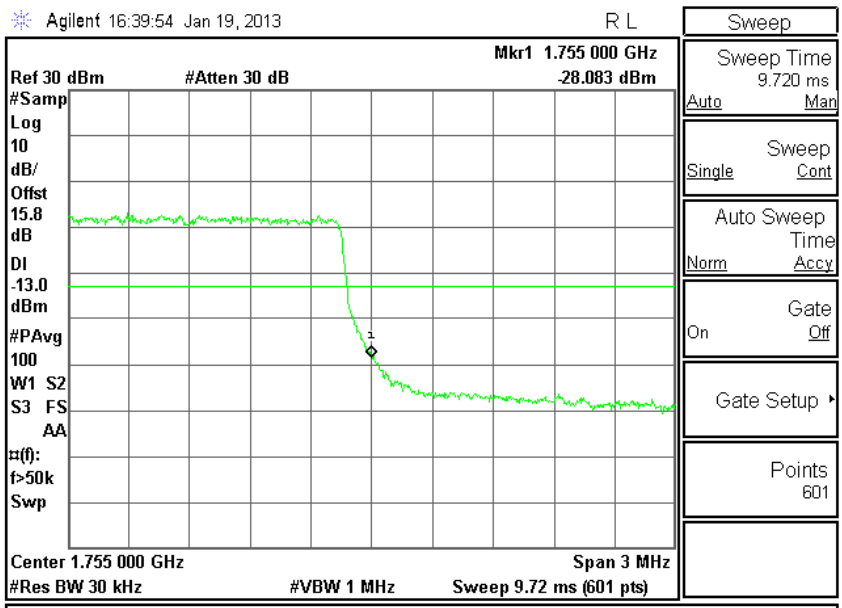
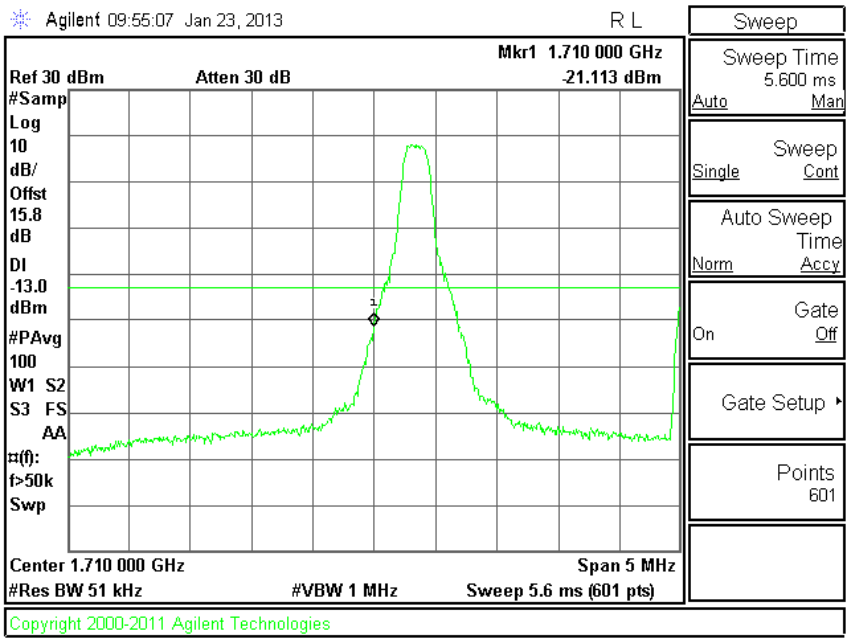


HIGH CH, RB15_0

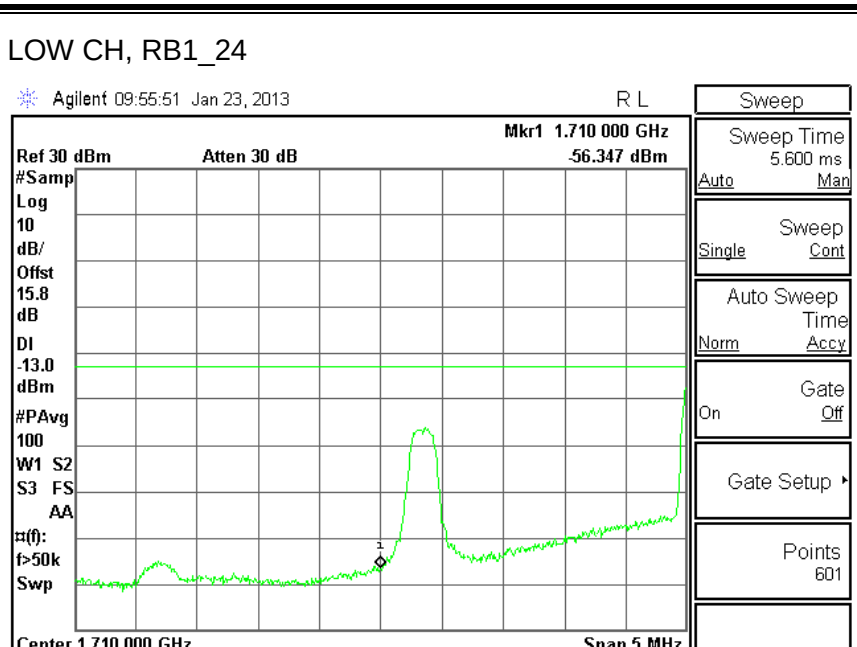


5.0MHz BAND WIDTH QPSK

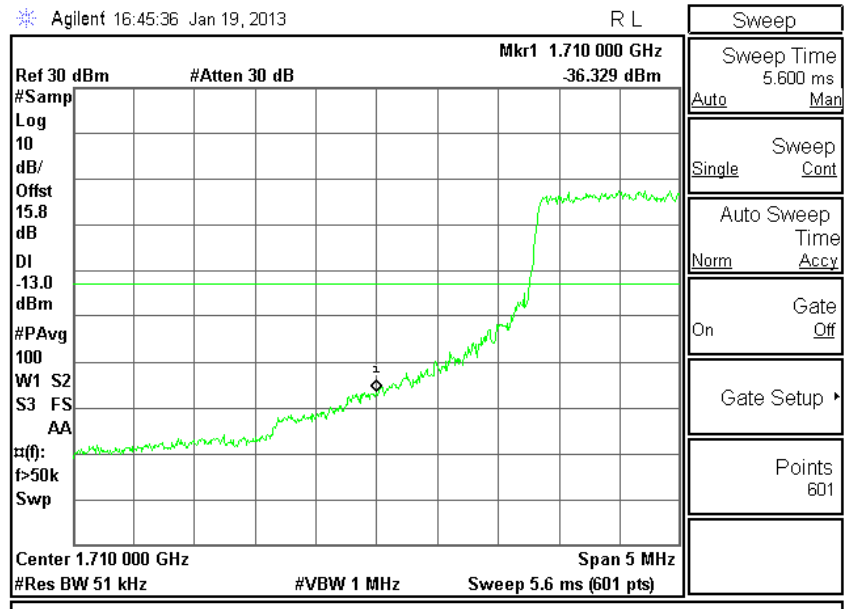
LOW CH, RB1_0



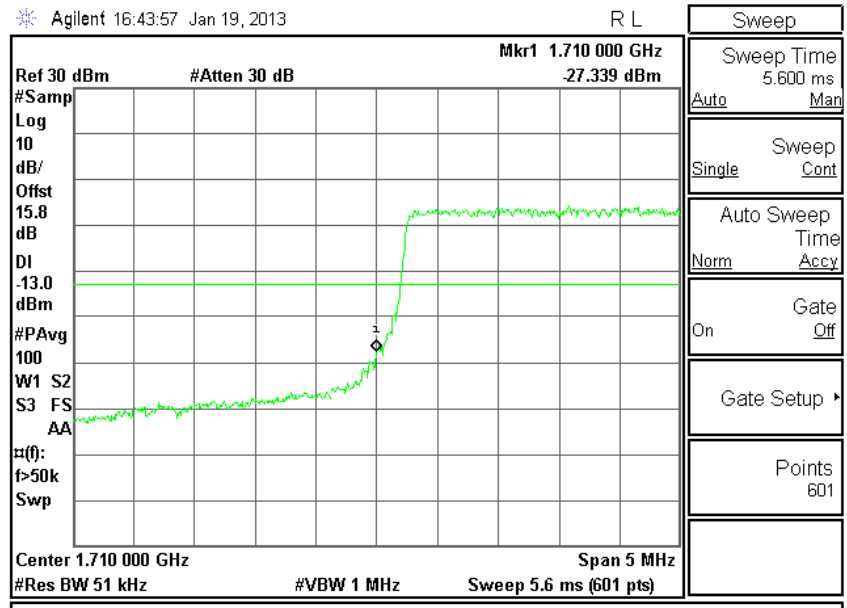
LOW CH, RB1_24



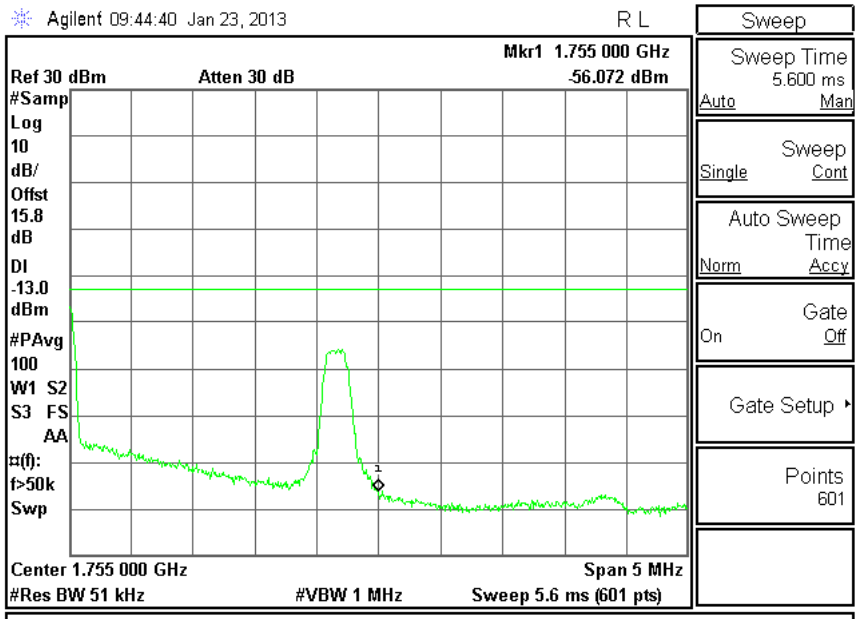
LOW CH, RB12_6



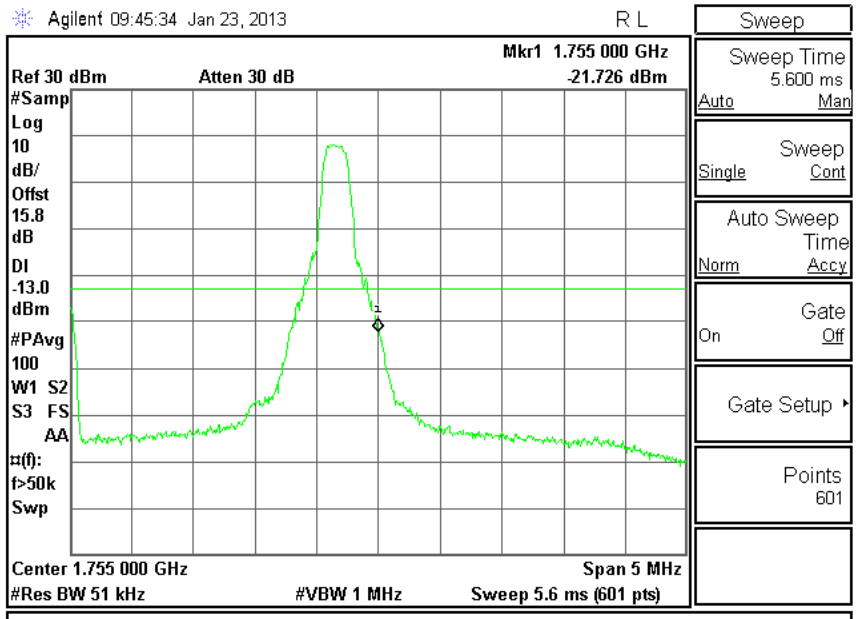
LOW CH, RB25_0



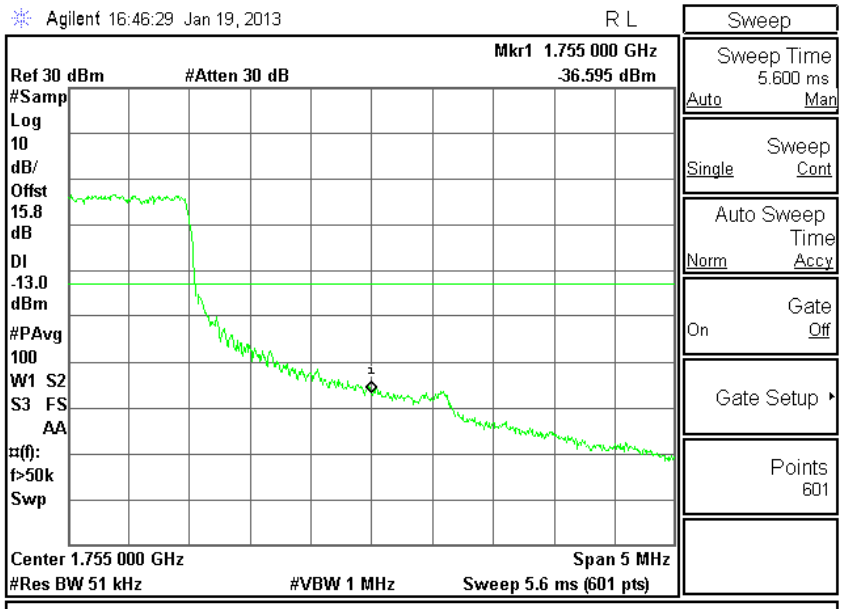
HIGH CH, RB1_0



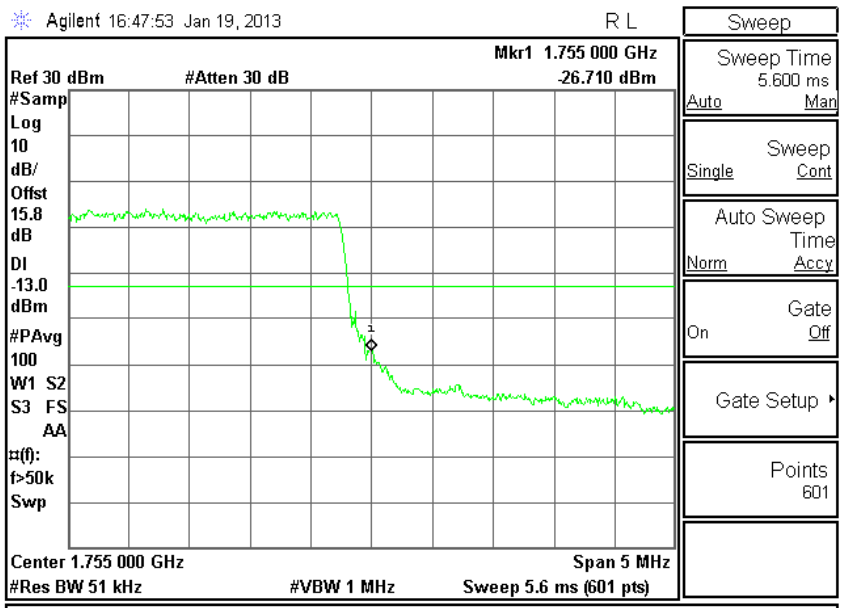
HIGH CH, RB1_24



HIGH CH, RB12_6

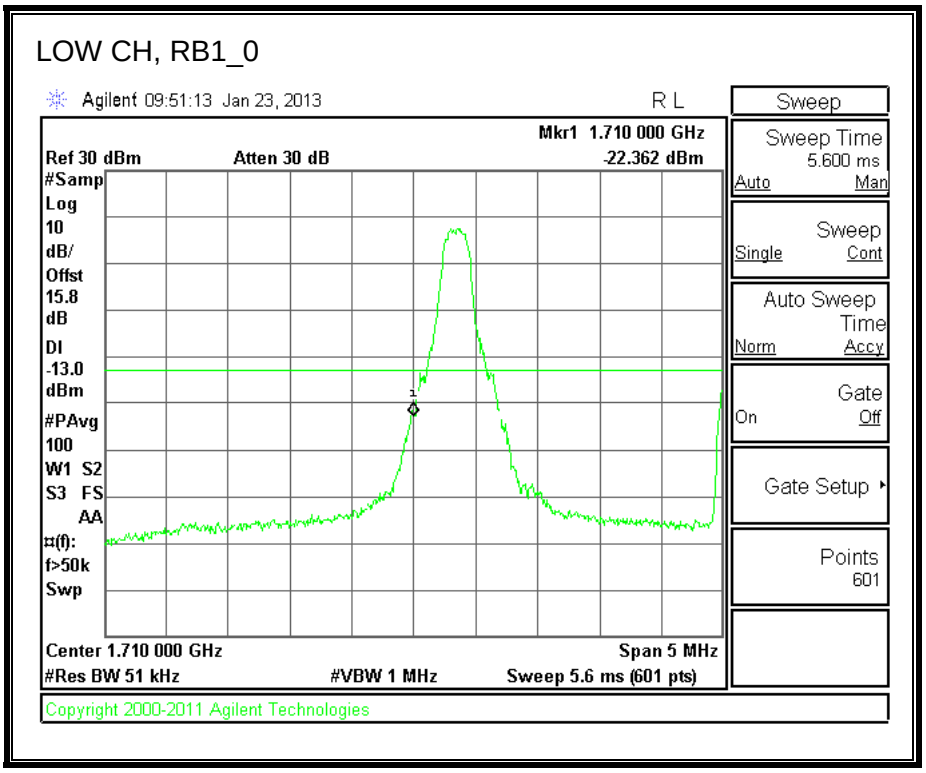


HIGH CH, RB25_0

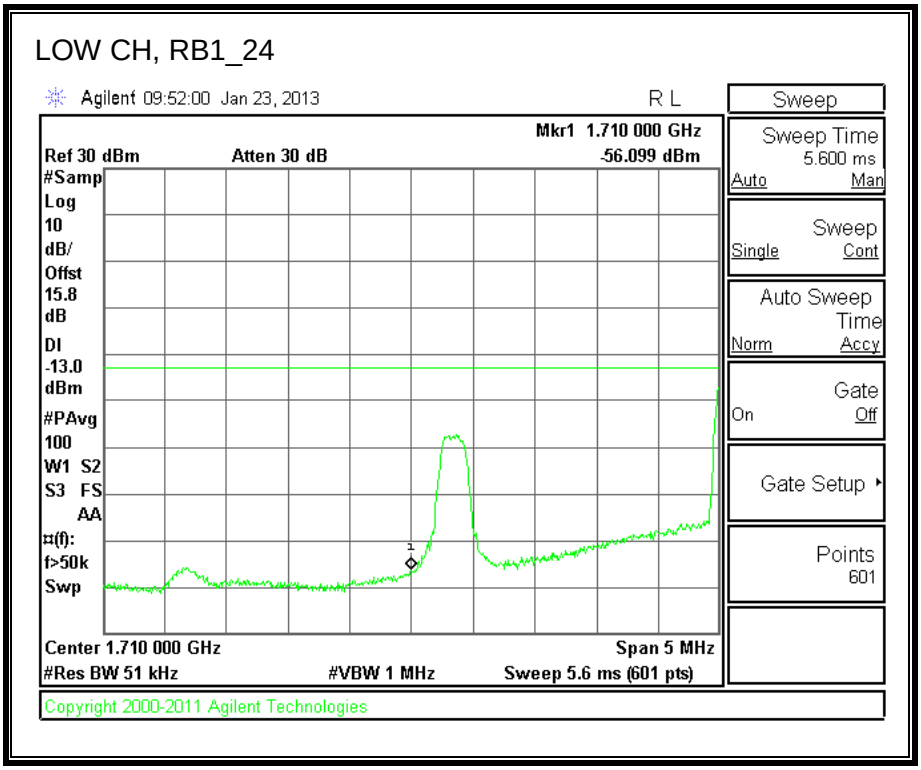


5.0MHz BAND WIDTH 16QAM

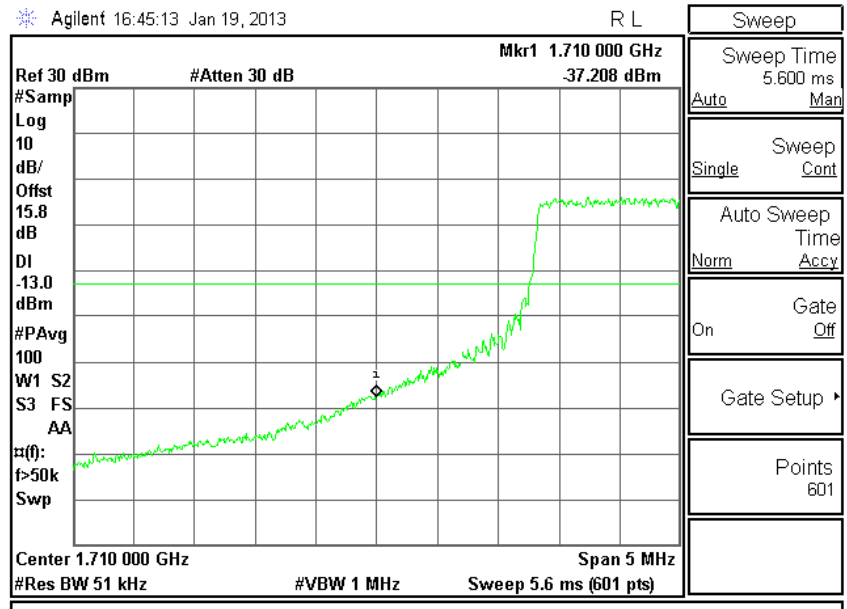
LOW CH, RB1_0



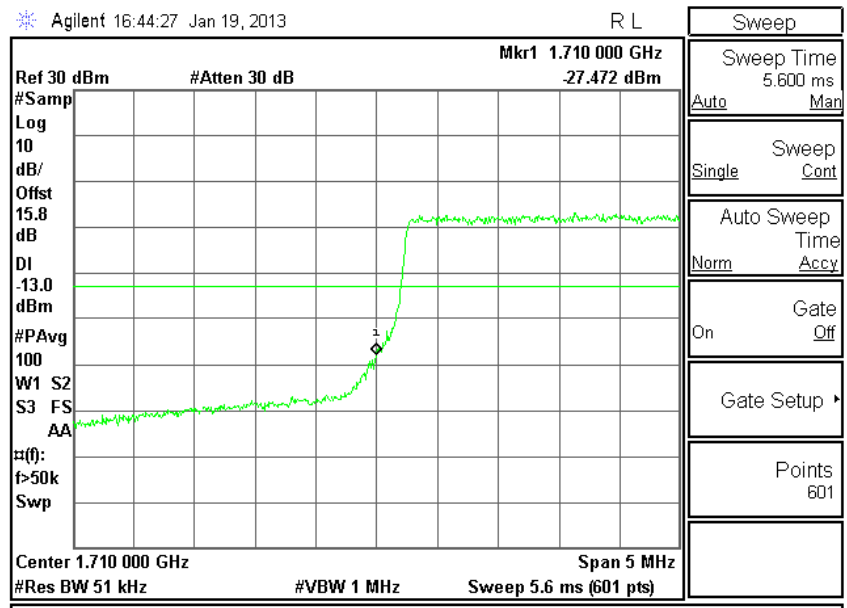
LOW CH, RB1_24



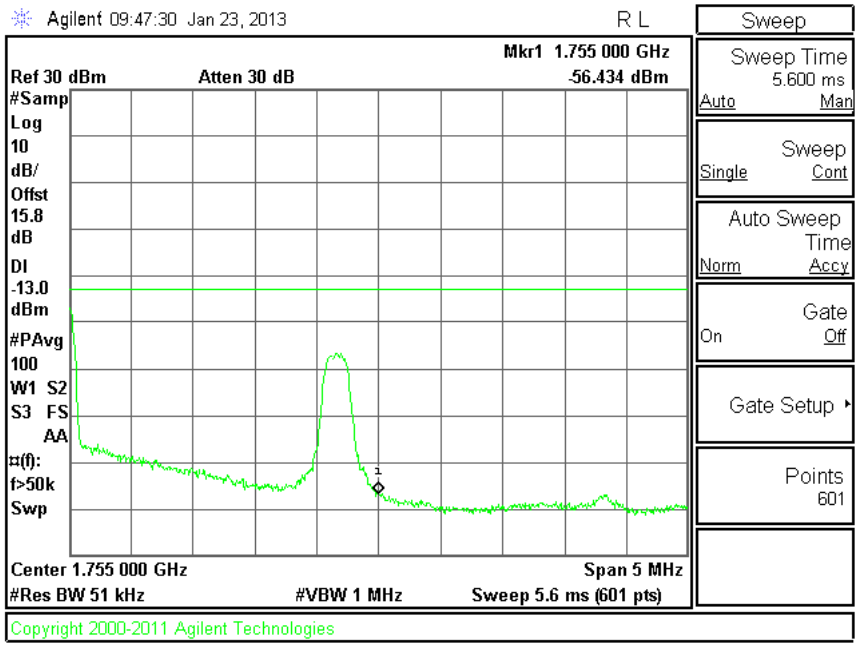
LOW CH, RB12_6



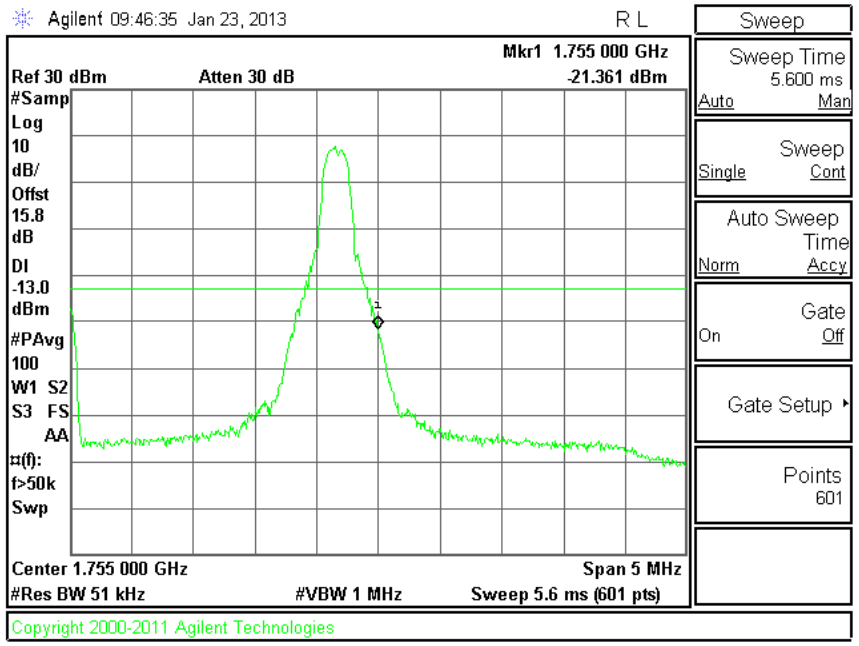
LOW CH, RB25_0



HIGH CH, RB1_0



HIGH CH, RB1_24



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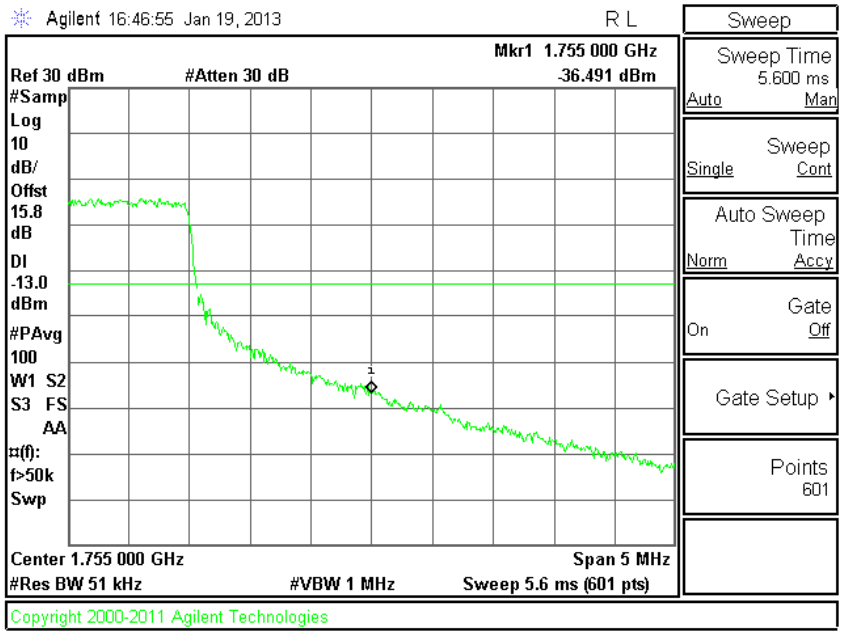
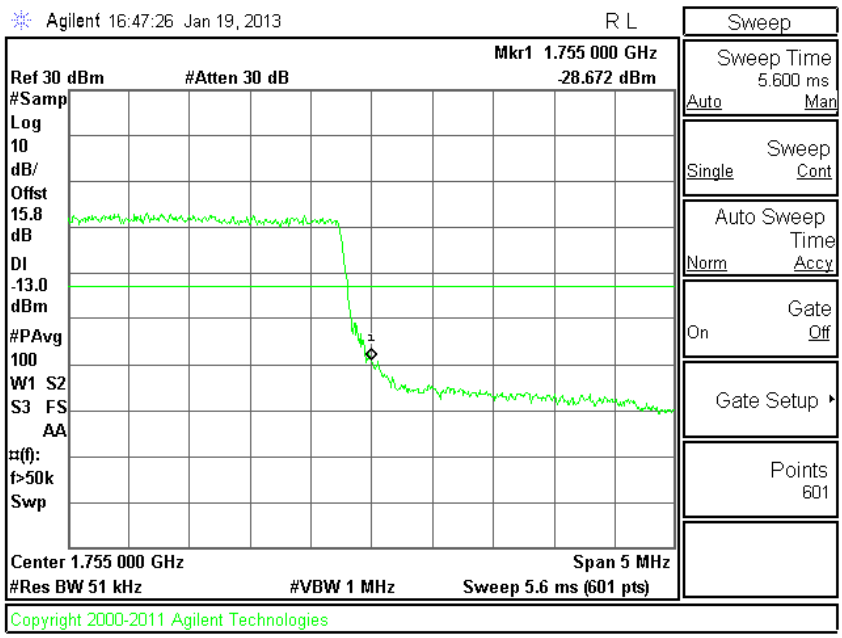
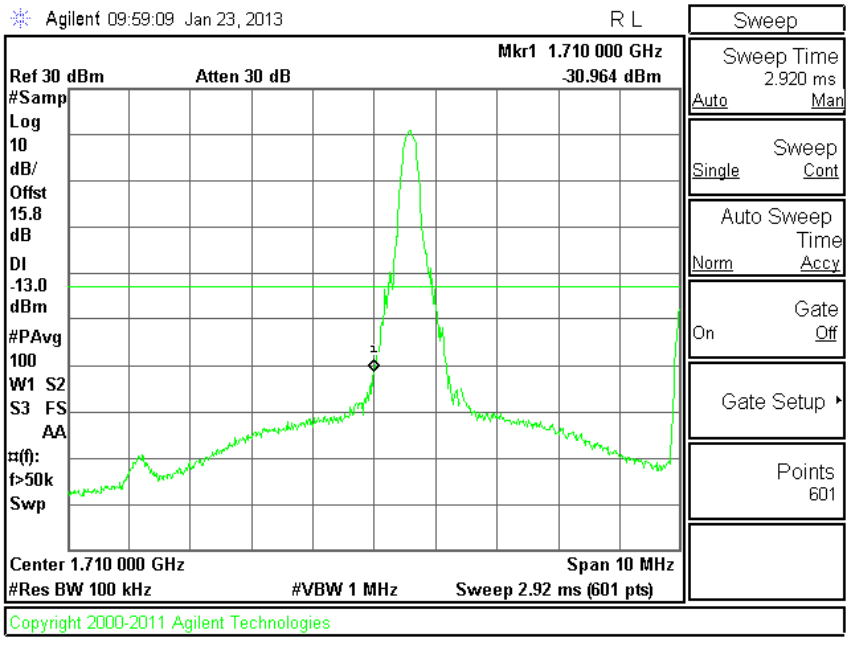


HIGH CH, RB25_0

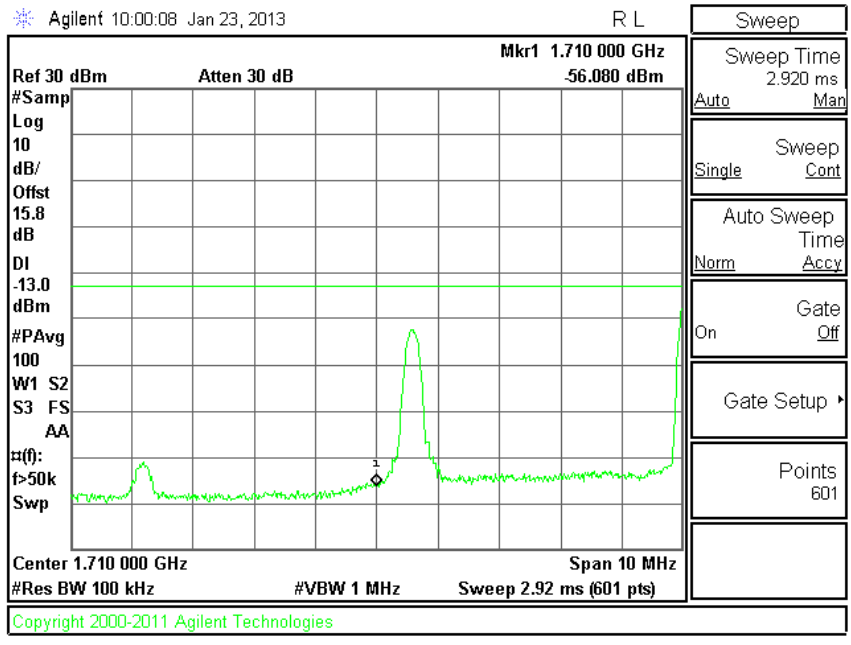


10.0MHz BAND WIDTH QPSK

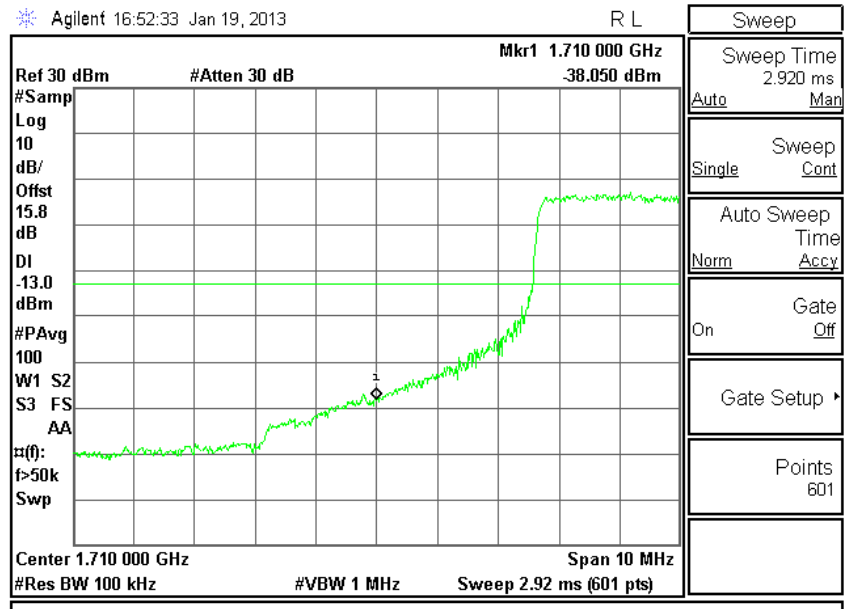
LOW CH, RB1_0



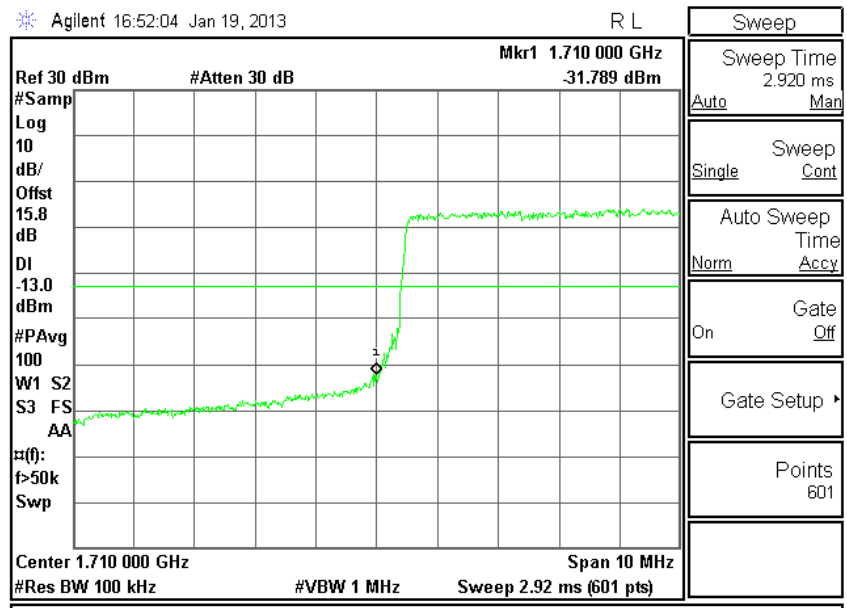
LOW CH, RB1_49



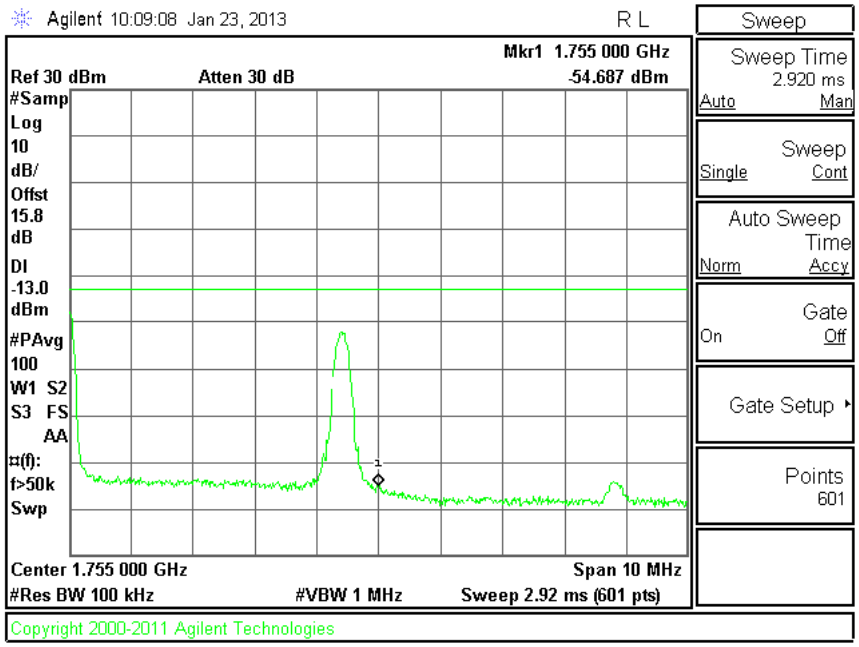
LOW CH, RB25_12



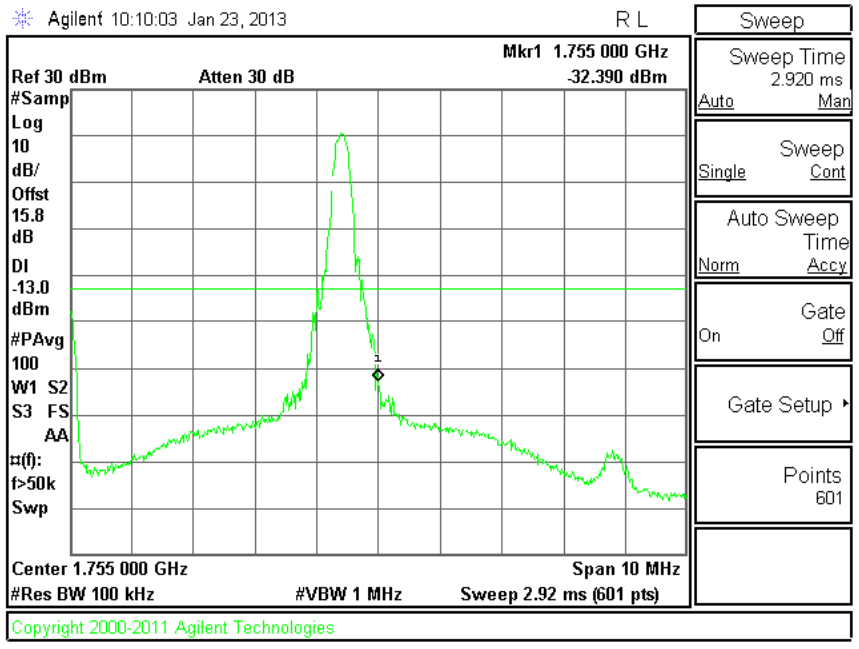
LOW CH, RB50_0



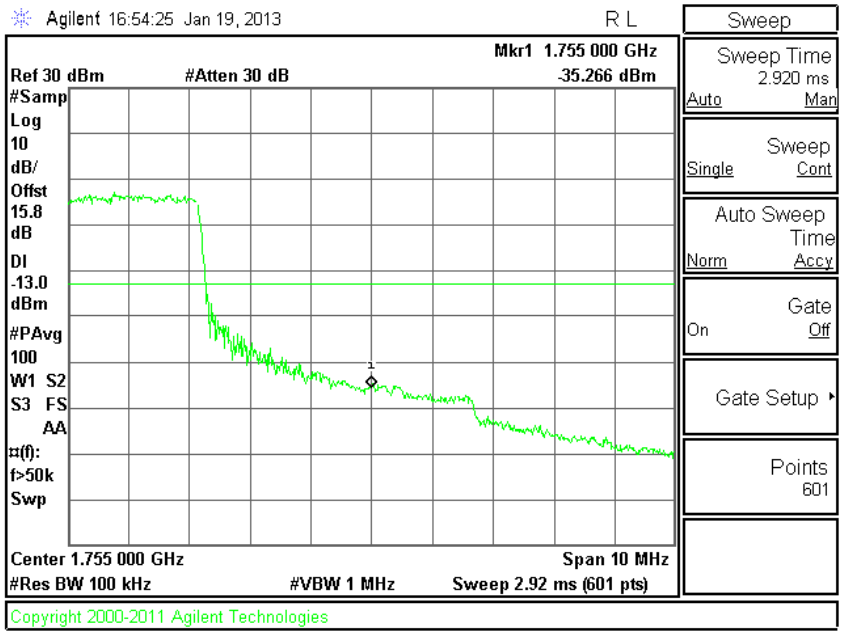
HIGH CH, RB1_0



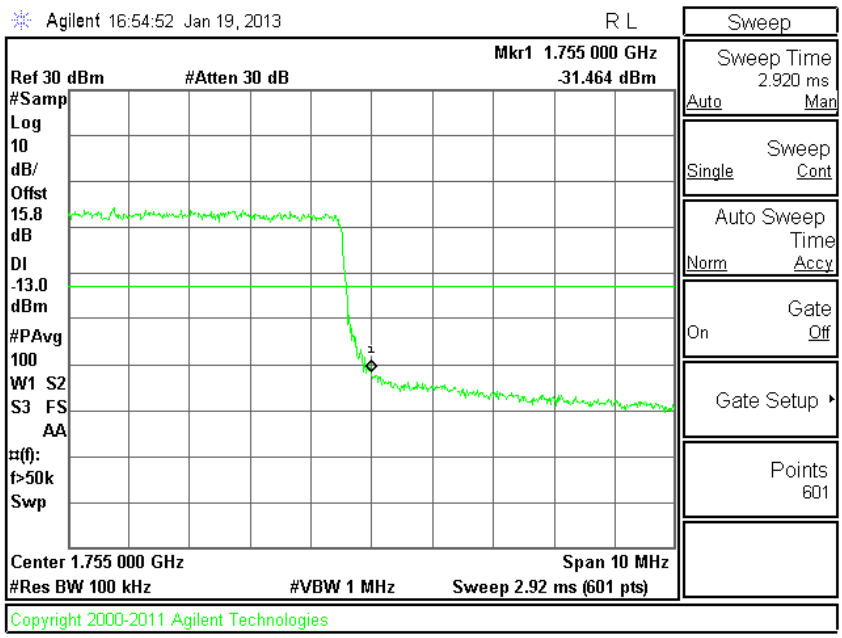
HIGH CH, RB1_49



HIGH CH, RB25_12

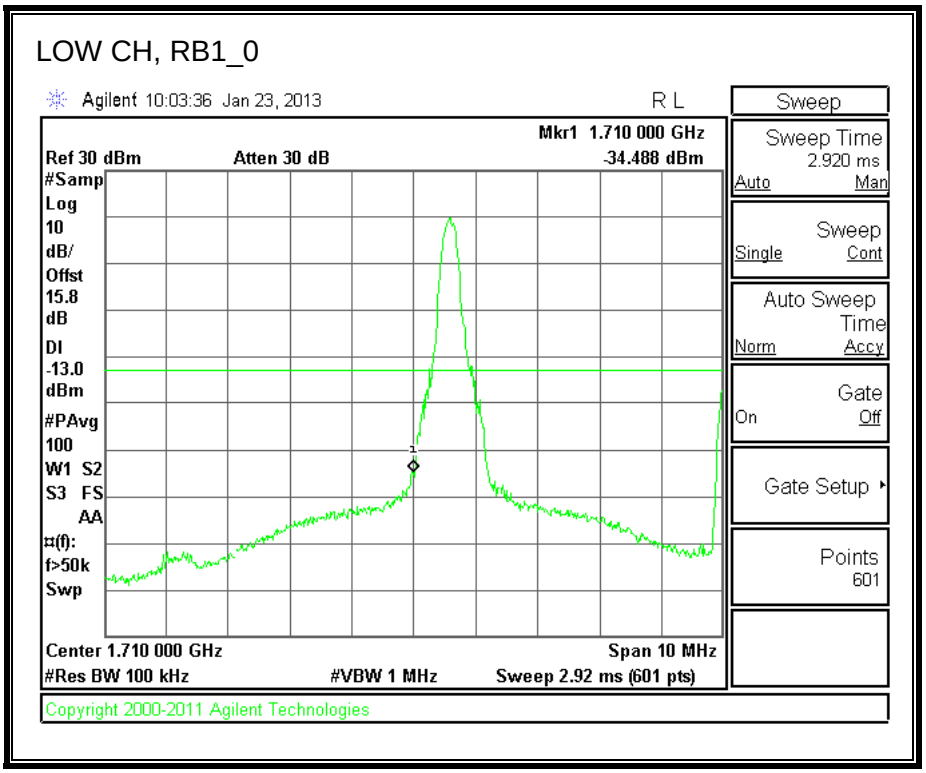


HIGH CH, RB50_0

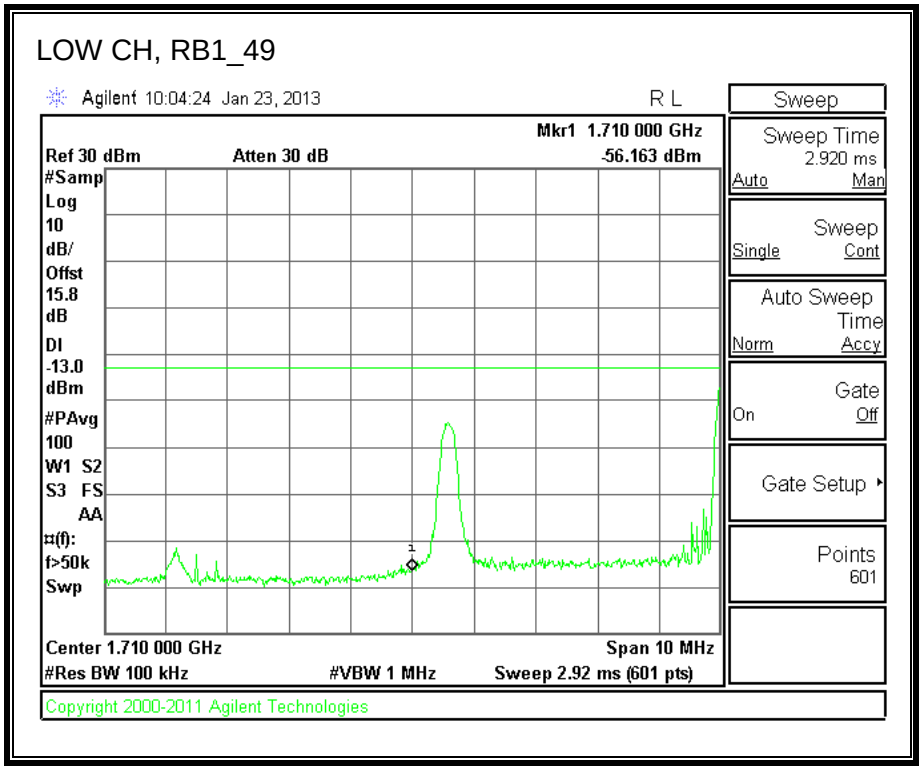


10.0MHz BAND WIDTH 16QAM

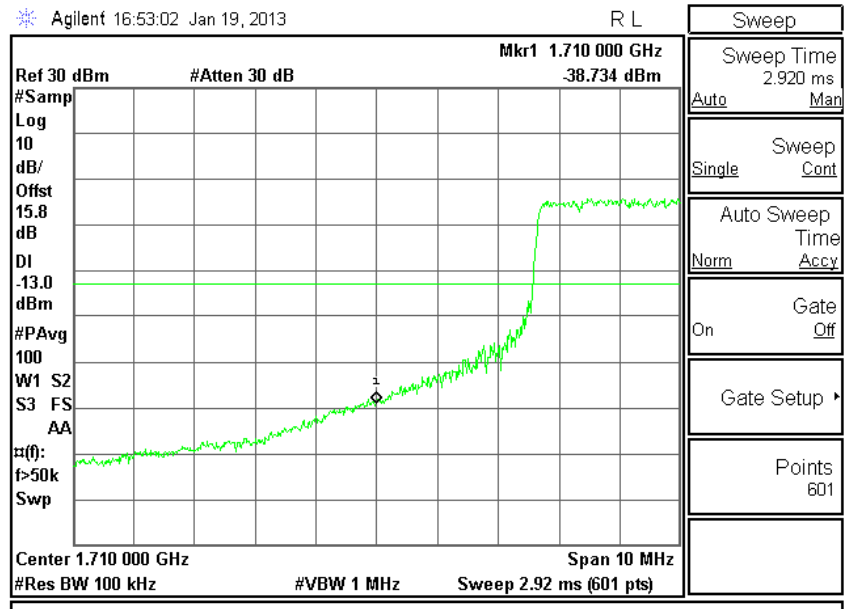
LOW CH, RB1_0



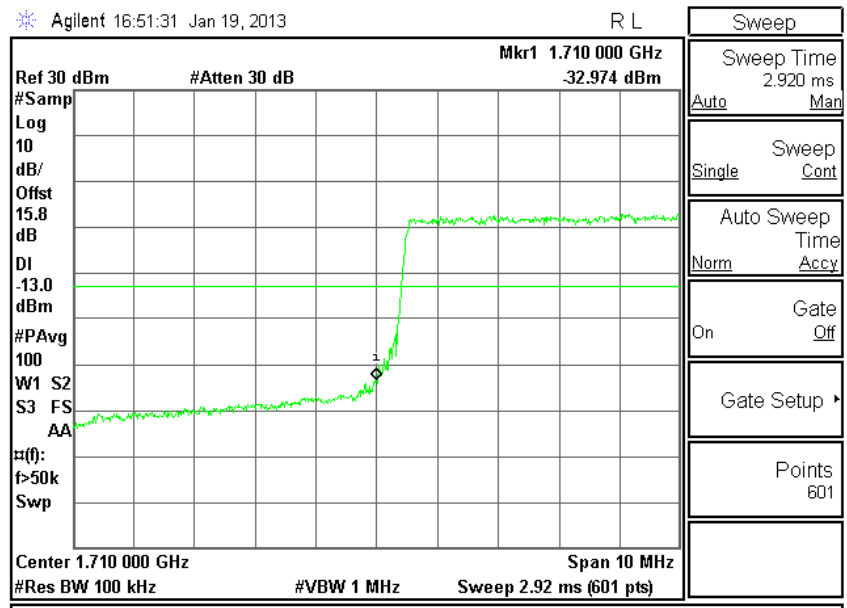
LOW CH, RB1_49



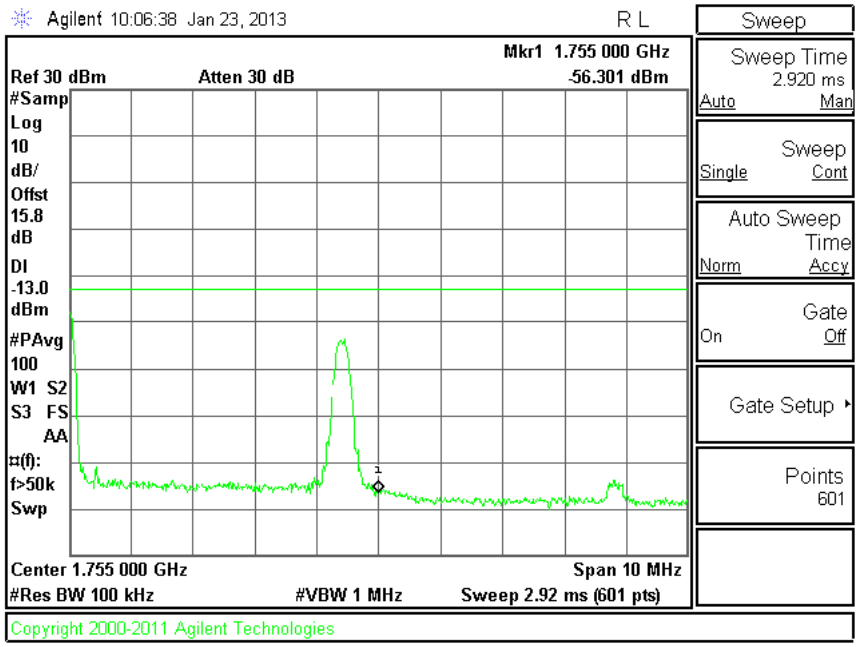
LOW CH, RB25_12



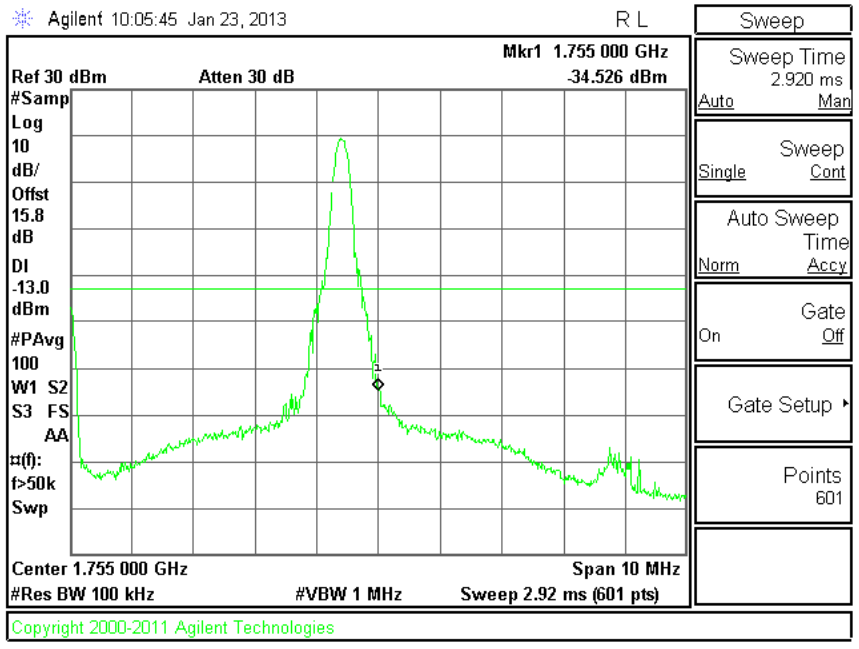
LOW CH, RB50_0



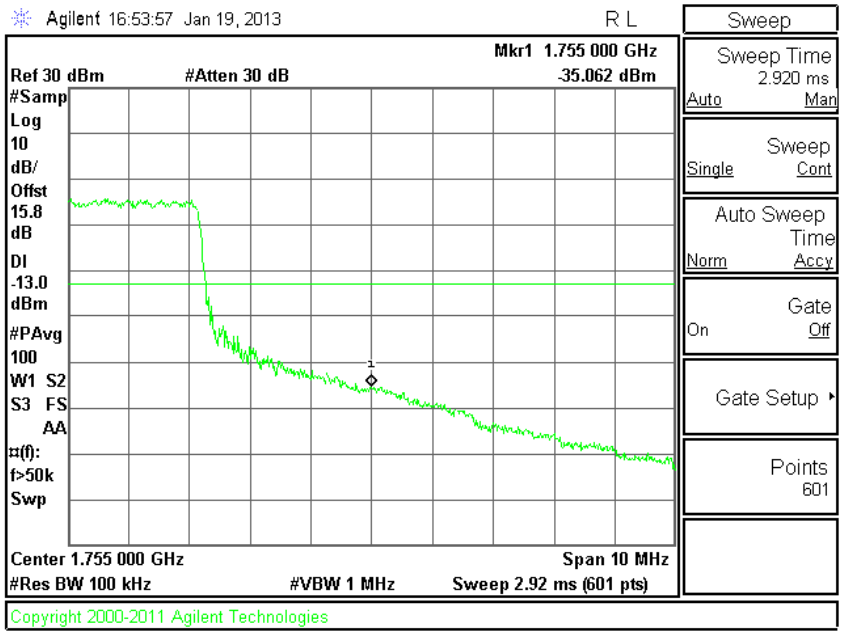
HIGH CH, RB1_0



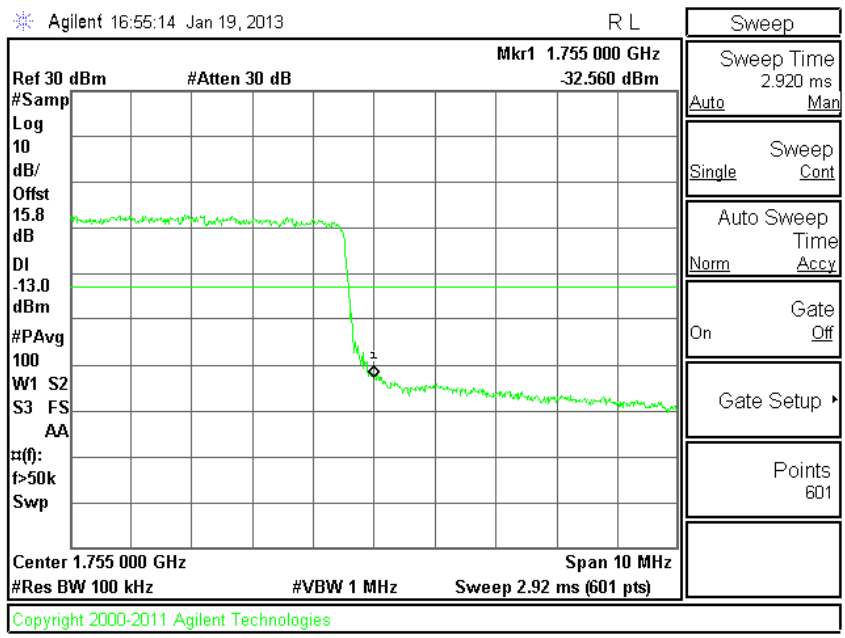
HIGH CH, RB1_49



HIGH CH, RB25_12

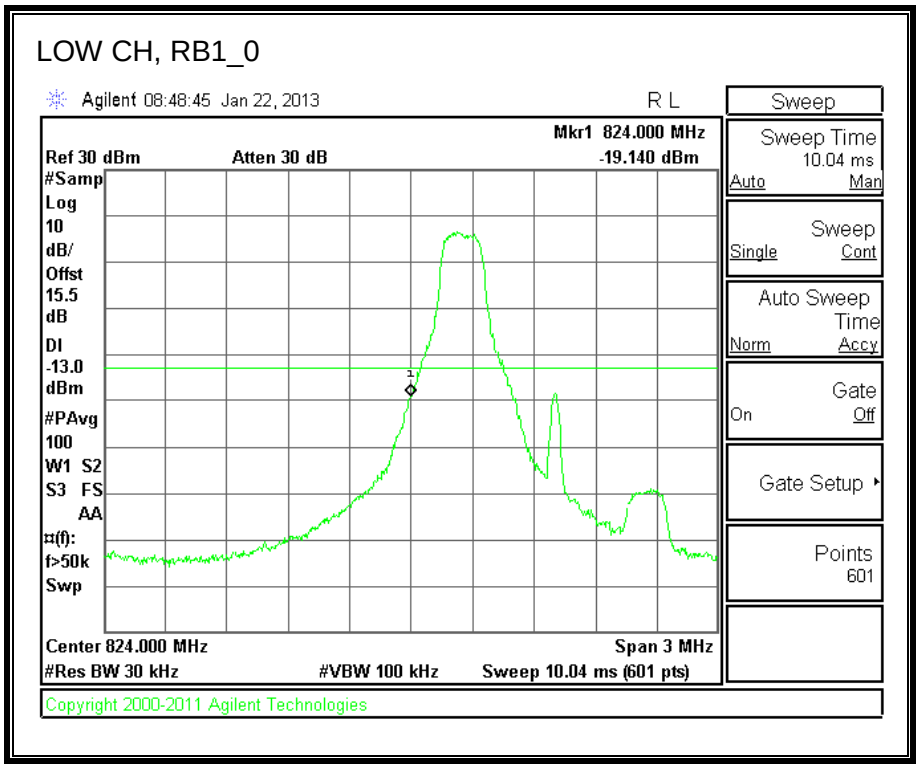


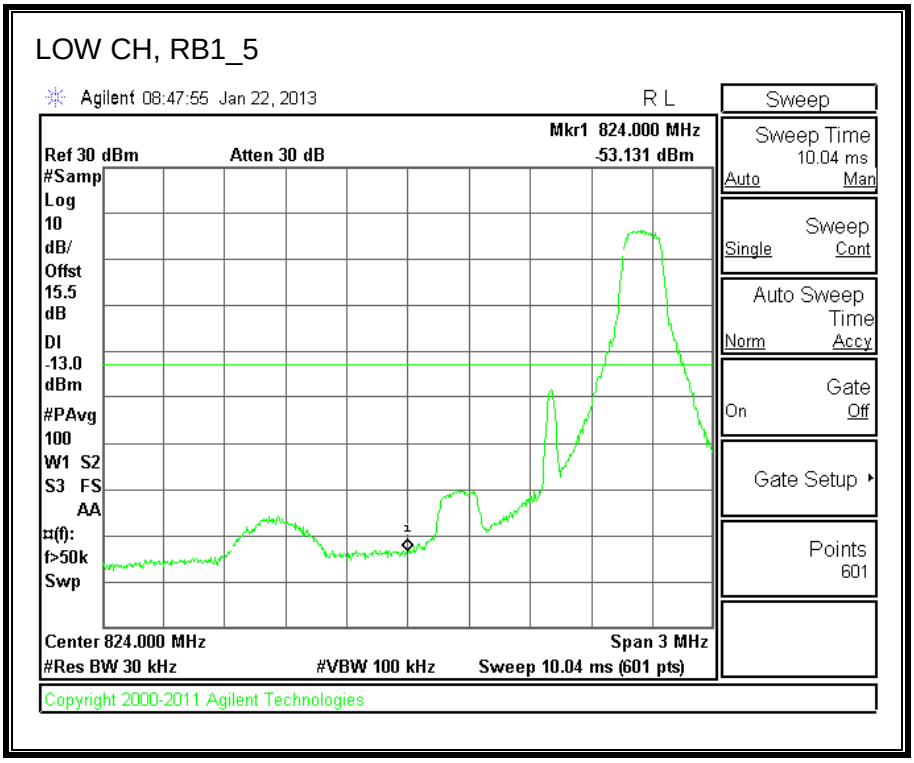
HIGH CH, RB50_0



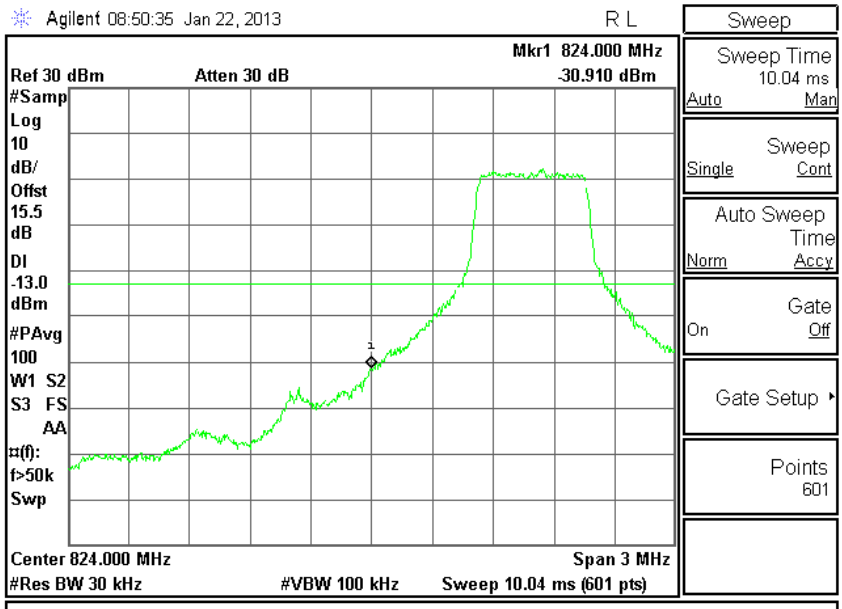
8.2.5. *LTE BAND 5*

1.4MHz BAND WIDTH QPSK

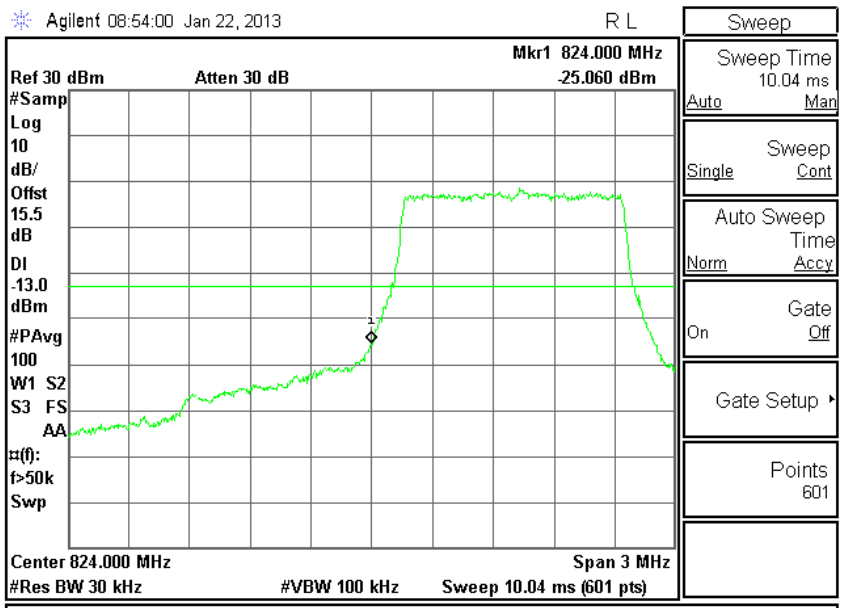




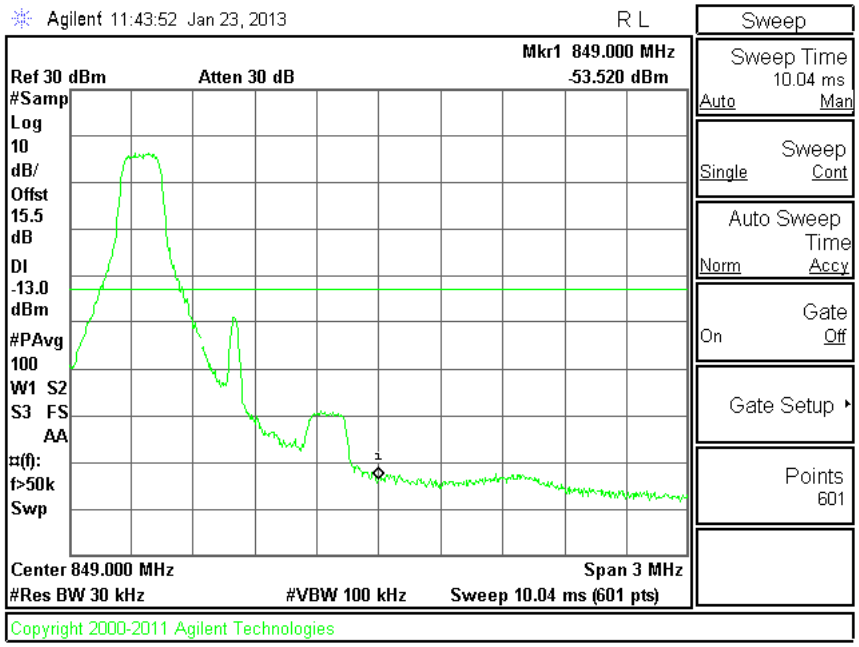
LOW CH, RB3_2



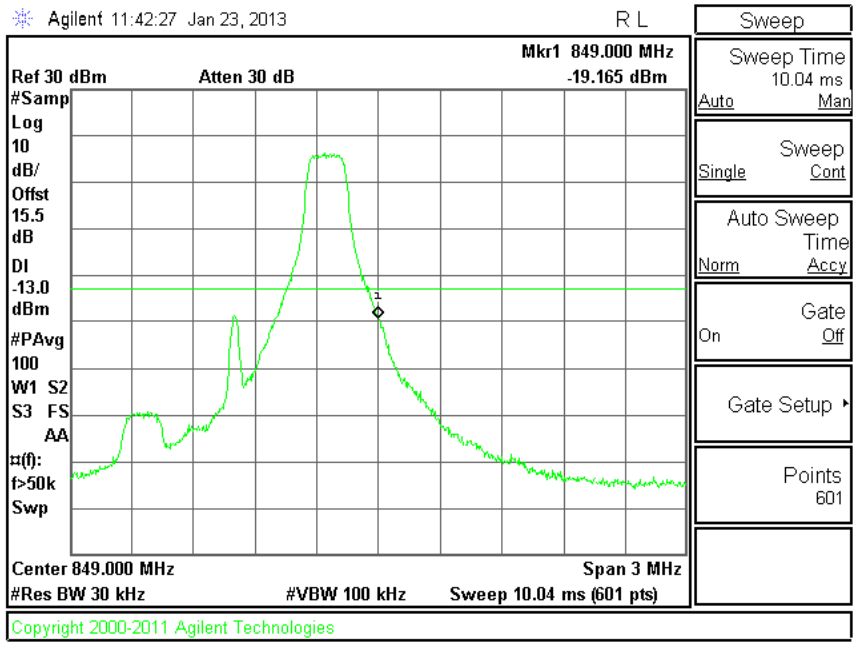
LOW CH, RB6_0



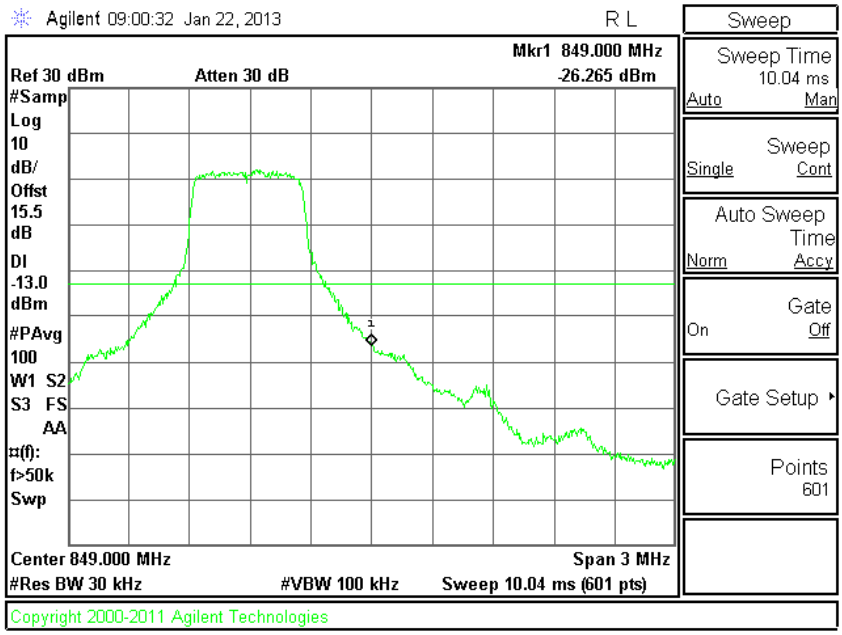
HIGH CH, RB1_0



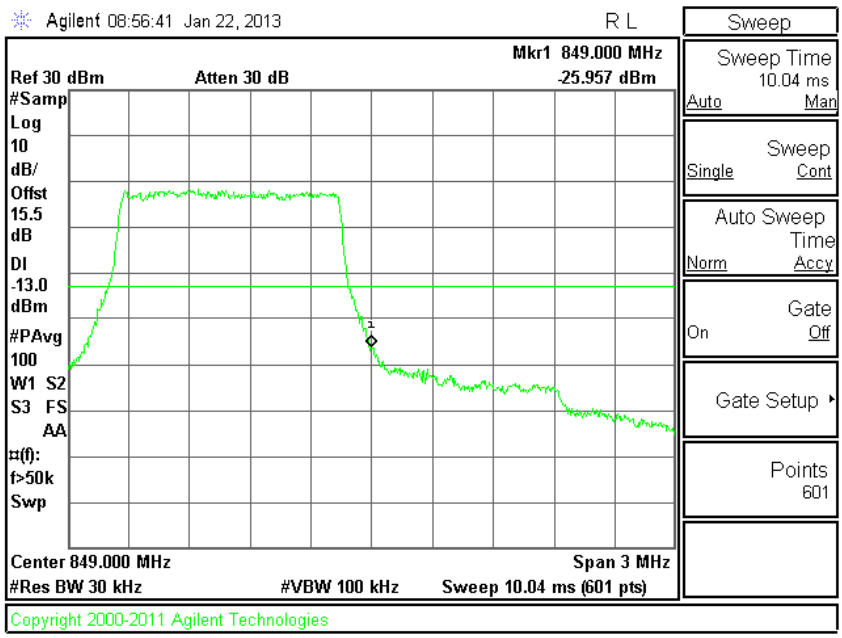
HIGH CH, RB1_5



HIGH CH, RB3_2

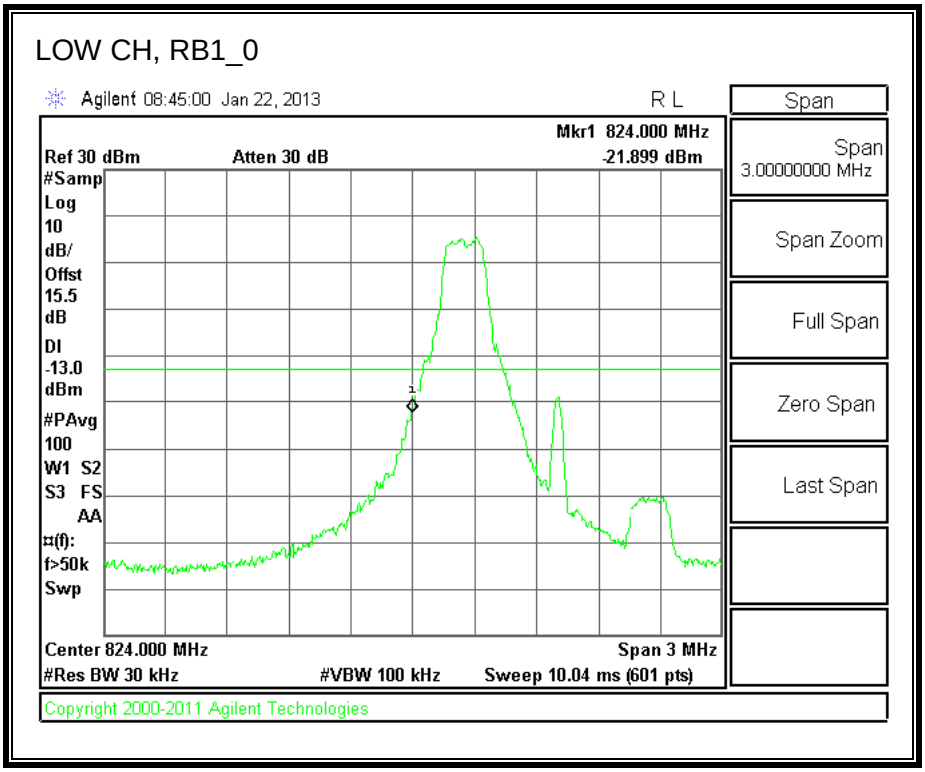


HIGH CH, RB6_0

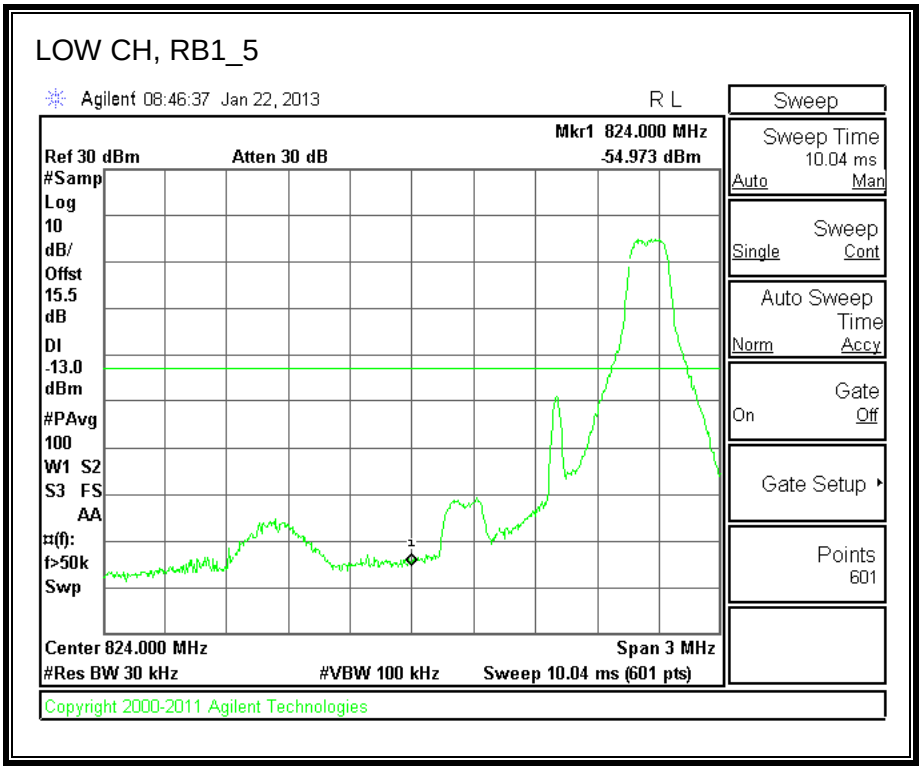


1.4MHz BAND WIDTH 16QAM

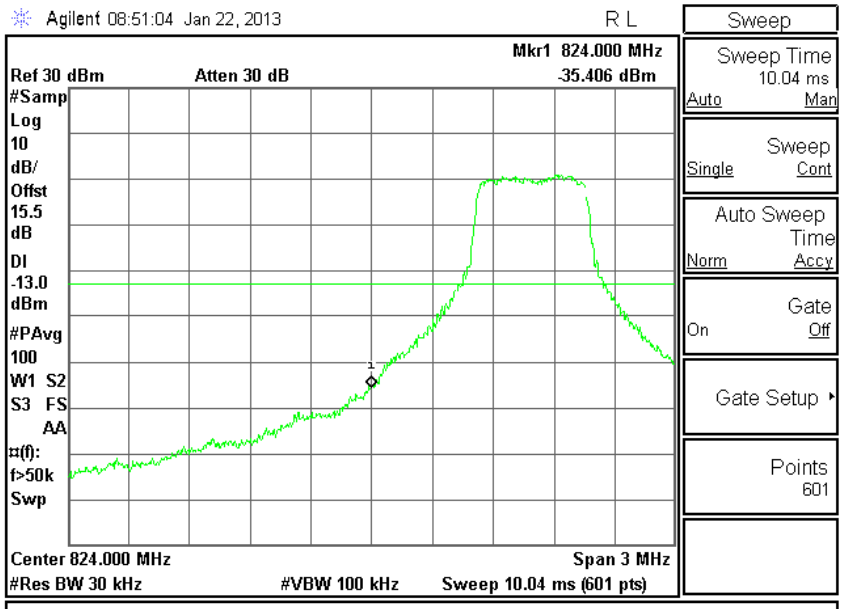
LOW CH, RB1_0



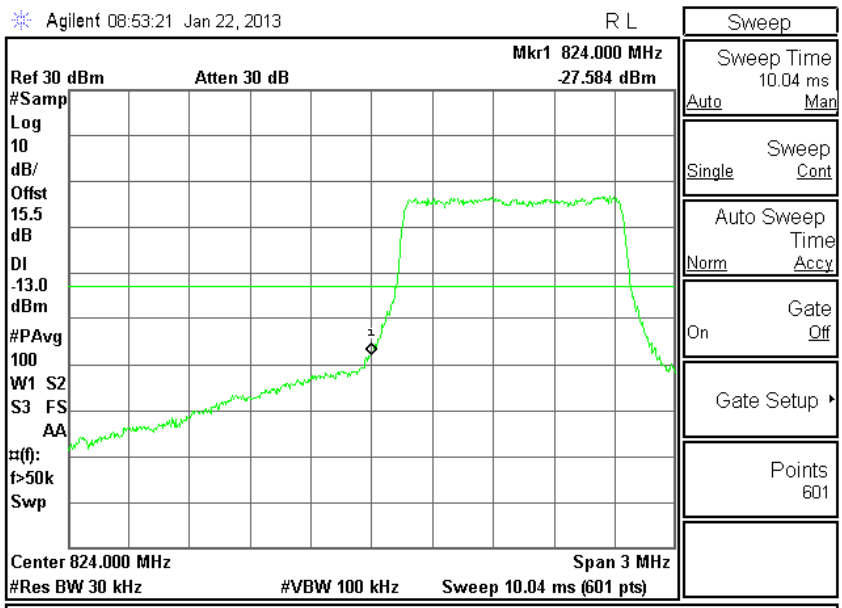
LOW CH, RB1_5



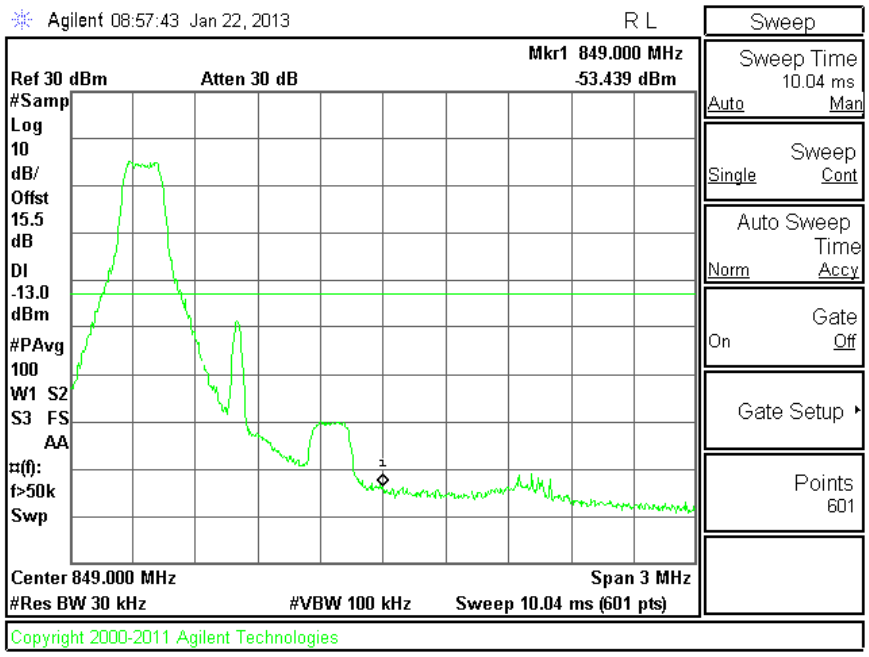
LOW CH, RB3_2



LOW CH, RB6_0



HIGH CH, RB1_0



HIGH CH, RB1_5