FCC CFR47 PART 22H, 24E, 27 AND 90S
CERTIFICATION TEST REPORT

FOR

CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL NUMBER: A1522

FCC ID: BCG-E2817A

REPORT NUMBER: 14U17676-E19, REVISION F

ISSUE DATE: AUGUST 27, 2014

Prepared for
APPLE, INC.
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	07/25/2014	Initial Issue	M. Mekuria
A	07/30/2014	Update EUT description	C. Pang
B	07/30/2014	Update Data	C. Pang
C	08/01/2014	Address all TCB Questions	T. Chu
D	08/05/2014	Address all TCB Questions	M. Mekuria
E	08/25/2014	Address all TCB Questions Section 5.4, 8.2.4 and 9.2	M. Hua
F	08/27/2014	Add CDMA 1x Advanced	M. Hua

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	APPLE 1 INFINITE LOOP CUPERTINO, CA 95014, U.S.A.
EUT DESCRIPTION:	CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS
MODEL:	A1522
SERIAL NUMBER:	C39MF19PG1G0(Conducted); C39MV008G30C (Radiated)
DATE TESTED:	MAY 5 - AUGUST 1, 2014

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC CFR47 PART 22H, 24E, 27 and 90S	Pass

UL Verification Services Inc. 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 Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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 Verification Services Inc. By:

Mengistu Mekuria
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UL Verification Services Inc.

Tested By:

Roy Zheng
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UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, Part 22, Part 24, Part 27 and Part 90, and IC RSS-132, RSS-133, RSS-139 and RSS-199.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☐ Chamber A	☒ Chamber D
☐ Chamber B	☒ Chamber E
☐ Chamber C	☒ Chamber F
☐ Chamber C	☐ Chamber G
☐ Chamber C	☐ Chamber H

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/2000650.htm.

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

Model A1522 is a mobile phone with multimedia functions (music, application support, and video), Cellular GSM/GPRS/EGPRS/CDMA2000 1xRTT/1x Advanced/EVDO Rev.A/ EVDO Rev.B/WCDMA/HSPA+/DC-HSDPA/LTE FDD & Carrier Aggregation radio, IEEE 802.11a/b/g/n/ac radio, Bluetooth radio and NFC. The rechargeable battery is not user accessible

5.2. MAXIMUM OUTPUT POWER

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

LAT OUTPUT POWER FOR LTE BAND 2

Part 24 LTE Band 2						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1910	QPSK	23.97	249.5	26.85	484.2
		16QAM	22.91	195.4	25.79	379.3
3		QPSK	23.81	240.4	26.80	478.6
		16QAM	22.79	190.1	25.56	359.7
5		QPSK	23.87	243.8	26.68	465.6
		16QAM	23.13	205.6	26.00	398.1
10		QPSK	23.90	245.5	26.77	475.3
		16QAM	22.78	189.7	25.64	366.4
15		QPSK	23.92	246.6	26.76	474.2
		16QAM	22.95	197.2	25.81	381.1
20		QPSK	23.91	246.0	26.78	476.4
		16QAM	22.95	197.2	25.78	378.4

UAT OUTPUT POWER FOR LTE BAND 2

Part 24 LTE Band 2						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1910	QPSK	20.77	119.4	22.41	174.2
		16QAM	19.91	97.9	22.10	162.2
3		QPSK	20.77	119.4	22.95	197.2
		16QAM	19.73	94.0	21.89	154.5
5		QPSK	20.75	118.9	22.90	195.0
		16QAM	20.07	101.6	22.24	167.5
10		QPSK	20.68	116.9	22.85	192.8
		16QAM	19.57	90.6	21.74	149.3
15		QPSK	20.69	117.2	22.84	192.3
		16QAM	20.12	102.8	22.30	169.8
20		QPSK	20.52	112.7	22.68	185.4
		16QAM	19.64	92.0	21.82	152.1

LAT OUTPUT POWER FOR LTE BAND 4

Part 27 LTE Band 4						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1710 - 1755	QPSK	23.97	249.5	26.30	426.6
		16QAM	22.97	198.2	25.49	354.0
3		QPSK	23.91	246.0	26.20	416.9
		16QAM	22.86	193.2	25.54	358.1
5		QPSK	23.87	243.8	26.27	423.6
		16QAM	23.16	207.0	25.71	372.4
10		QPSK	23.89	244.9	26.25	421.7
		16QAM	22.94	196.8	25.58	361.4
15		QPSK	23.90	245.5	26.24	420.7
		16QAM	22.85	192.8	26.50	446.7
20		QPSK	23.97	249.5	26.18	415.0
		16QAM	22.79	190.1	25.19	330.4

UAT OUTPUT POWER FOR LTE BAND 4

Part 27 LTE Band 4						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1710 - 1755	QPSK	21.12	129.4	22.65	184.1
		16QAM	20.22	105.2	21.80	151.4
3		QPSK	21.11	129.1	22.69	185.8
		16QAM	20.10	102.3	21.61	144.9
5		QPSK	21.08	128.2	22.64	183.7
		16QAM	20.32	107.6	21.89	154.5
10		QPSK	21.05	127.4	22.62	182.8
		16QAM	20.00	100.0	21.57	143.5
15		QPSK	21.09	128.5	22.65	184.1
		16QAM	20.01	100.2	21.58	143.9
20		QPSK	20.99	125.6	22.51	178.2
		16QAM	19.79	95.3	21.35	136.5

LAT OUTPUT POWER FOR LTE BAND 5

Part 22 LTE Band 5								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	824 - 849	QPSK	23.94	247.7	19.47	88.5	21.62	145.2
		16QAM	22.97	198.2	18.52	71.1	20.67	116.7
3		QPSK	23.83	241.5	19.36	86.3	21.51	141.6
		16QAM	22.76	188.8	18.30	67.6	20.45	110.9
5		QPSK	23.83	241.5	19.36	86.3	21.51	141.6
		16QAM	23.13	205.6	18.63	72.9	20.78	119.7
10		QPSK	23.61	229.6	19.10	81.3	21.25	133.4
		16QAM	22.77	189.2	18.29	67.5	20.44	110.7

UAT OUTPUT POWER FOR LTE BAND 5

Part 22 LTE Band 5								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	824 - 849	QPSK	23.66	232.3	17.61	57.7	19.76	94.6
		16QAM	22.64	183.7	16.61	45.8	18.76	75.2
3		QPSK	23.50	223.9	17.53	56.6	19.68	92.9
		16QAM	22.39	173.4	16.39	43.6	18.54	71.4
5		QPSK	23.32	214.8	17.32	54.0	19.47	88.5
		16QAM	22.37	172.6	16.24	42.1	18.39	69.0
10		QPSK	23.50	223.9	17.12	51.5	19.27	84.5
		16QAM	22.40	173.8	16.20	41.7	18.35	68.4

LAT OUTPUT POWER FOR LTE BAND 13

Part 27 LTE Band 13								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
5	777 - 787	QPSK	23.66	232.3	19.69	93.1	21.84	152.8
		16QAM	22.91	195.4	18.93	78.2	21.08	128.2
10		QPSK	23.58	228.0	19.49	88.9	21.64	145.9
		16QAM	22.91	195.4	18.81	76.0	20.96	124.7

UAT OUTPUT POWER FOR LTE BAND 13

Part 27 LTE Band 13								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted(Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
5	777 - 787	QPSK	23.59	228.6	14.93	31.1	17.08	51.1
		16QAM	22.79	190.1	14.03	25.3	16.18	41.5
10		QPSK	23.58	228.0	14.86	30.6	17.01	50.2
		16QAM	22.47	176.6	14.01	25.2	16.16	41.3

LAT OUTPUT POWER FOR LTE BAND 17

Part 27 LTE Band 17								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted(Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
5	704 - 716	QPSK	23.78	238.8	16.93	49.3	19.08	80.9
		16QAM	23.03	200.9	16.02	40.0	18.17	65.6
10		QPSK	23.68	233.3	16.73	47.1	18.88	77.3
		16QAM	22.84	192.3	15.91	39.0	18.06	64.0

UAT OUTPUT POWER FOR LTE BAND 17

Part 27 LTE Band 17								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
5	704 - 716	QPSK	23.56	227.0	16.40	43.7	18.55	71.6
		16QAM	22.74	187.9	15.69	37.1	17.84	60.8
10		QPSK	23.55	226.5	16.44	44.1	18.59	72.3
		16QAM	22.42	174.6	15.26	33.6	17.41	55.1

LAT OUTPUT POWER FOR LTE BAND 25

Part 24 LTE Band 25						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1915	QPSK	23.95	248.3	26.78	476.4
		16QAM	22.96	197.7	25.74	375.0
3		QPSK	23.82	241.0	26.73	471.0
		16QAM	22.76	188.8	25.61	363.9
5		QPSK	23.88	244.3	26.71	468.8
		16QAM	23.12	205.1	26.08	405.5
10		QPSK	23.82	241.0	26.64	461.3
		16QAM	22.75	188.4	26.00	398.1
15		QPSK	23.81	240.4	26.83	481.9
		16QAM	22.62	182.8	25.53	357.3
20		QPSK	23.94	247.7	26.81	479.7
		16QAM	22.74	187.9	25.63	365.6

UAT OUTPUT POWER FOR LTE BAND 25

Part 24 LTE Band 25						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1915	QPSK	20.99	125.6	22.94	196.8
		16QAM	20.02	100.5	22.05	160.3
3		QPSK	20.83	121.1	23.04	201.4
		16QAM	19.84	96.4	21.87	153.8
5		QPSK	20.73	118.3	23.04	201.4
		16QAM	19.93	98.4	22.36	172.2
10		QPSK	20.62	115.3	23.09	203.7
		16QAM	19.55	90.2	21.88	154.2
15		QPSK	20.65	116.1	23.03	200.9
		16QAM	19.62	91.6	21.84	152.8
20		QPSK	21.00	125.9	22.97	198.2
		16QAM	19.90	97.7	21.73	148.9

LAT OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
3	814 - 824	QPSK	23.00	199.5	18.79	75.7	20.94	124.2
		16QAM	22.20	166.0	17.89	61.5	20.04	100.9
5		QPSK	23.13	205.6	18.95	78.5	21.10	128.8
		16QAM	22.27	168.7	17.98	62.8	20.13	103.0
10		QPSK	23.50	223.9	18.52	71.1	20.67	116.7
		16QAM	22.49	177.4	17.93	62.1	20.08	101.9

UAT OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
3	814 - 824	QPSK	23.12	205.1	16.59	45.6	18.74	74.8
		16QAM	21.93	156.0	15.45	35.1	17.60	57.5
5		QPSK	23.05	201.8	16.56	45.3	18.71	74.3
		16QAM	22.24	167.5	15.77	37.8	17.92	61.9
10		QPSK	23.36	216.8	16.93	49.3	19.08	80.9
		16QAM	22.20	166.0	15.72	37.3	17.87	61.2

5.3. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 12A310 Baseband 0.26.01.

The EUT is linked with Agilent 8960, Anritsu MT8820C, and CMW500 Communication Test Sets.

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

LAT LTE BANDS	Antenna Gain (dBi)
LTE Band 2, 1850 – 1910 MHz	2.9
LTE Band 4, 1710 – 1755 MHz	2.7
LTE Band 5, 824 – 849 MHz	-2.3
LTE Band 13, 777 – 787 MHz	-1.8
LTE Band 17, 704 – 716 MHz	-4.7
LTE Band 25, 1850 – 1915 MHz	2.9
LTE Band 26, 814 – 824 MHz	-2.3

UAT LTE BANDS	Antenna Gain (dBi)
LTE Band 2, 1850 – 1910 MHz	2.2
LTE Band 4, 1710 – 1755 MHz	1.6
LTE Band 5, 824 – 849 MHz	-3.8
LTE Band 13, 777 – 787 MHz	-6.6
LTE Band 17, 704 – 716 MHz	-4.9
LTE Band 25, 1850 – 1915 MHz	2.2
LTE Band 26, 814 – 824 MHz	-4.2

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case scenario for all measurements is based on the investigation results.

The device has LTE Bands of Band 2, Band 4, Band 5, Band 13, Band 17, Band 25.

The RB Size was selected to measure for peak or average ERP and EIRP, which was based on the conducted power verification baseline data.

For the fundamental investigation of radiated emissions, the EUT is investigated for vertical and horizontal antenna orientations and X Y and Z orientation with and without AC Adapter and headset and the worst case was determined to be at X (portrait) orientation for cell bands and pcs bands without AC Adapter and headset.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
AC Adapter	Dell	Latitude 3540	NA
DC Power Supply	Dell	H65NM130	426-03P6-A00
EUT AC Adapter	Apple	A1385	D292365COYADHLHC3

I/O CABLES (RF Conducted Test)

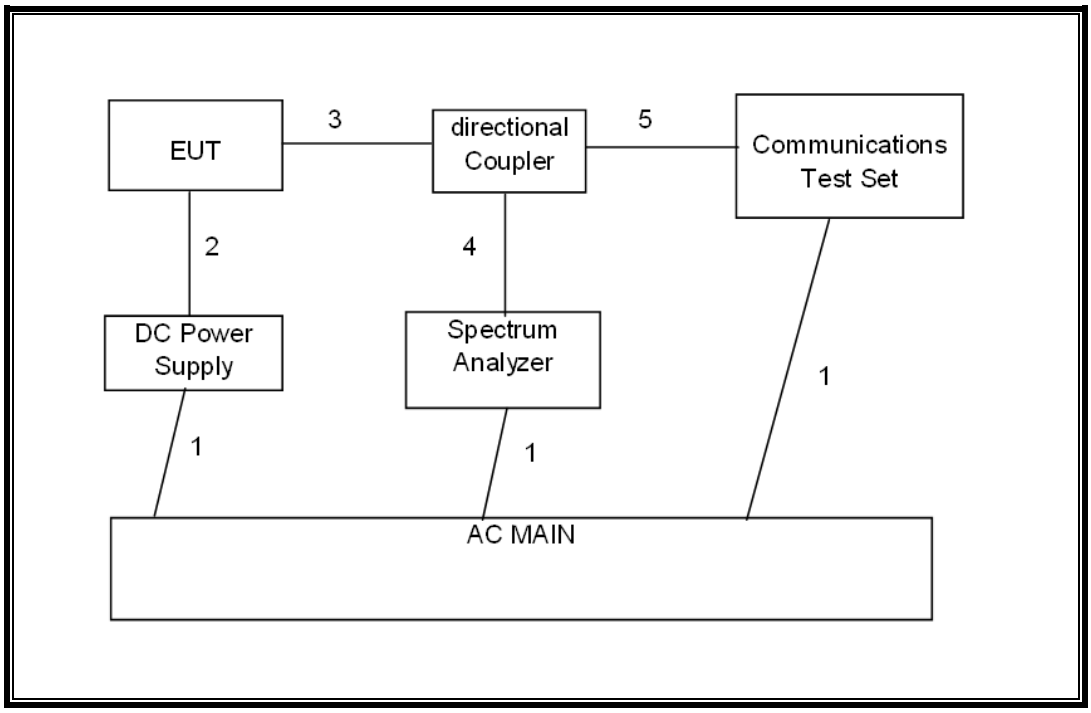
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	2m	N/A
2	DC	1	DC	Un-shielded	2m	N/A
3	RF In/Out	1	EUT	Un-shielded	1m	N/A
4	RF In/Out	1	Spectrum	Un-shielded	1m	N/A
5	RF In/Out	1	Communicatio	Un-shielded	None	N/A

I/O CABLES (RF Radiated Test)

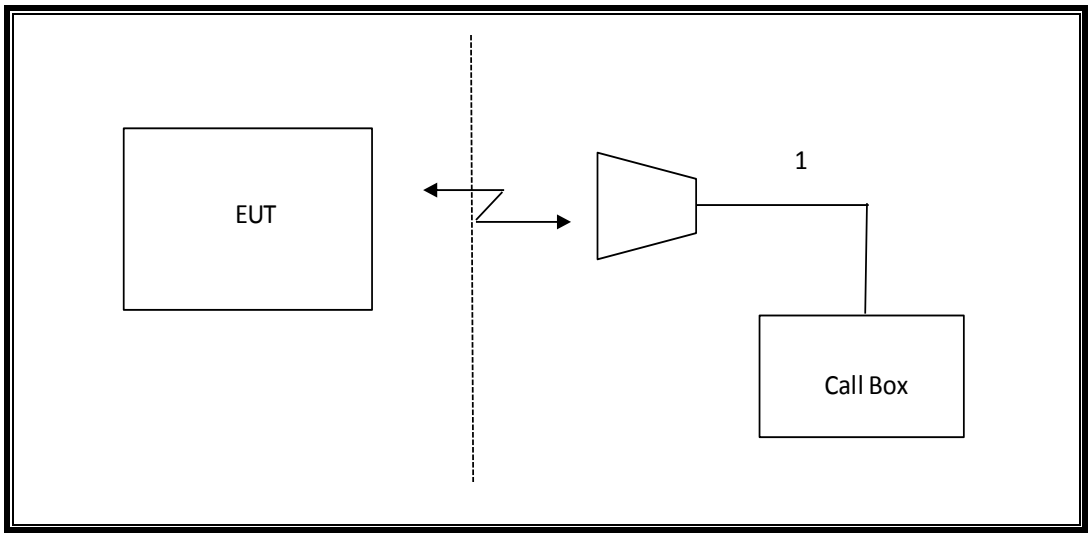
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	RF In/Out	1	Antenna	Un-shielded	5m	NA

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**
Directional Coupler	Krytar	Directional Coupler	Krytar	CNR
Wideband Radio Communication	R & S	CMW500	None	05/29/15
Temperature / Humidity Chamber	CSZ	ZPHS-8-3.5-SCT/WC	None	10/14/14
Signal Generator, 100KHz - 6GHz	Agilent	8665B	F00124	03/12/15
Antenna, Tuned Dipole 400~1000	ETS Lindgren	3121C DB4	C00993	01/23/15
8960 series 10 wireless	Agilent	E5515E	F00362	09/11/14
Spectrum Analyzer, PXA, 44GHz	Agilent	N9030A	None	05/17/15
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02686	CNR
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02688	CNR
HighPass Filter 1GHz	Micro-Tronics	HPM18129	None	CNR
Power Meter	Agilent	N1911A	F00022	4/9/2015
Power Sensor	Agilent	E9323A	F00153	03/06/15
Antenna, Horn 1-18GHz	ETS Lindgren	3117	None	04/14/15
Antenna, Horn, 18 GHz	EMCO	3115	C00872	01/06/15
Amplifier, 1 to 18GHz	Miteq	AMF-5D-01001800-40-20P	F00394	11/27/14
Amplifier	Sonoma	310	F00008	05/28/15
Antenna, Biconolog, 30MHz-1	Sunol Sciences	JB3	F00027	05/05/15

7. RF POWER OUTPUT VERIFICATION

LTE Measurement Procedure:

All LTE bands conducted power peak and average are obtained from the CMW500 telecommunication test set.

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of “NS_01”.3

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23[1]	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-
Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.					

7.1. LTE BAND 2

LAT OUTPUT POWER FOR LTE BAND 2 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	18607	1850.7	QPSK	1	0	28.08	23.64
				1	2	27.87	23.90
				1	5	27.79	23.85
				3	0	27.85	23.91
				3	1	28.14	**23.97**
				3	2	28.04	23.94
				6	0	28.03	23.20
			16QAM	1	0	28.12	22.87
				1	2	27.89	22.91
				1	5	27.82	22.87
				3	0	27.87	22.90
				3	1	27.96	22.82
				3	2	27.94	**22.91**
				6	0	27.96	22.12
1.4	18900	1880.0	QPSK	1	0	28.21	23.60
				1	2	28.56	23.87
				1	5	28.48	23.82
				3	0	28.49	23.82
				3	1	**28.60**	23.92
				3	2	28.57	23.88
				6	0	28.56	23.18
			16QAM	1	0	28.41	22.79
				1	2	28.50	22.86
				1	5	28.45	22.80
				3	0	28.49	22.86
				3	1	28.57	22.83
				3	2	28.56	22.88
				6	0	**28.57**	22.03
1.4	19193	1909.3	QPSK	1	0	28.16	23.63
				1	2	28.10	23.86
				1	5	27.99	23.79
				3	0	28.00	23.87
				3	1	28.22	23.94
				3	2	28.16	23.95
				6	0	28.17	23.23
			16QAM	1	0	28.23	22.85
				1	2	28.03	22.90
				1	5	27.97	22.90
				3	0	28.01	22.87
				3	1	28.11	22.85
				3	2	28.06	22.88
				6	0	28.08	22.05

LAT OUTPUT POWER FOR LTE BAND 2 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	18615	1851.5	QPSK	1	0	28.25	23.64
				1	7	27.82	23.80
				1	14	27.76	23.81
				8	0	27.84	23.05
				8	4	27.85	22.87
				8	7	27.83	22.86
				15	0	27.83	22.84
			16QAM	1	0	28.19	22.75
				1	7	27.81	22.76
				1	14	27.80	22.63
				8	0	27.89	22.00
				8	4	27.69	21.97
				8	7	27.60	21.91
				15	0	27.68	21.92
3.0	18900	1880.0	QPSK	1	0	28.47	23.66
				1	7	28.40	23.80
				1	14	28.38	23.77
				8	0	**28.52**	23.00
				8	4	27.99	22.91
				8	7	27.88	22.86
				15	0	27.94	22.86
			16QAM	1	0	28.33	22.71
				1	7	28.31	22.68
				1	14	28.16	22.67
				8	0	28.33	22.07
				8	4	27.65	21.95
				8	7	27.56	21.91
				15	0	27.67	21.94
3.0	19185	1908.5	QPSK	1	0	28.34	23.67
				1	7	28.10	**23.81**
				1	14	27.90	23.79
				8	0	27.93	23.01
				8	4	27.95	22.89
				8	7	27.94	22.92
				15	0	27.89	22.85
			16QAM	1	0	**28.37**	**22.79**
				1	7	28.11	22.77
				1	14	27.97	22.66
				8	0	27.93	22.02
				8	4	27.78	22.00
				8	7	27.73	21.97
				15	0	27.78	21.97

LAT OUTPUT POWER FOR LTE BAND 2 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	18625	1852.5	QPSK	1	0	28.18	23.68
				1	12	27.89	23.73
				1	24	27.93	23.71
				12	0	28.07	22.80
				12	6	27.87	22.80
				12	11	27.90	22.83
				25	0	27.96	22.87
			16QAM	1	0	28.11	22.94
				1	12	27.85	23.02
				1	24	27.90	22.93
				12	0	28.07	22.00
				12	6	27.81	21.89
				12	11	27.71	21.85
				25	0	27.84	21.91
5.0	18900	1880.0	QPSK	1	0	28.44	23.59
				1	12	28.36	**23.87**
				1	24	28.37	23.80
				12	0	**28.53**	22.95
				12	6	28.12	22.87
				12	11	27.92	22.81
				25	0	28.02	22.87
			16QAM	1	0	28.31	22.76
				1	12	28.40	**23.13**
				1	24	28.42	23.00
				12	0	**28.47**	22.00
				12	6	27.86	21.85
				12	11	27.77	21.86
				25	0	27.80	21.86
5.0	19175	1907.5	QPSK	1	0	28.40	23.63
				1	12	28.27	23.84
				1	24	27.97	23.85
				12	0	27.87	23.00
				12	6	28.08	22.89
				12	11	27.94	22.87
				25	0	27.94	22.91
			16QAM	1	0	28.33	22.82
				1	12	28.30	23.08
				1	24	28.03	23.04
				12	0	27.94	22.03
				12	6	27.91	21.95
				12	11	27.82	21.95
				25	0	27.81	21.90

LAT OUTPUT POWER FOR LTE BAND 2 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	18650	1855.0	QPSK	1	0	28.15	23.72
				1	24	27.86	23.84
				1	49	28.02	23.86
				25	0	28.35	22.90
				25	12	27.89	22.80
				25	24	28.02	22.92
				50	0	28.17	22.85
			16QAM	1	0	28.05	22.72
				1	24	27.86	22.65
				1	49	28.02	22.72
				25	0	28.24	22.00
				25	12	27.97	21.92
				25	24	27.98	21.94
				50	0	28.02	21.88
10.0	18900	1880.0	QPSK	1	0	**28.72**	23.75
				1	24	28.22	**23.90**
				1	49	28.36	23.80
				25	0	28.55	23.00
				25	12	28.20	22.90
				25	24	28.06	22.87
				50	0	28.15	22.92
			16QAM	1	0	**28.66**	22.72
				1	24	28.22	22.72
				1	49	28.15	22.62
				25	0	28.09	22.00
				25	12	28.03	21.92
				25	24	27.90	21.87
				50	0	28.02	21.94
10.0	19150	1905.0	QPSK	1	0	28.27	23.72
				1	24	28.49	23.76
				1	49	28.22	23.81
				25	0	27.91	23.00
				25	12	28.13	22.98
				25	24	28.04	22.86
				50	0	27.99	22.92
			16QAM	1	0	28.50	**22.78**
				1	24	28.20	22.61
				1	49	28.16	22.67
				25	0	27.96	22.00
				25	12	28.08	22.01
				25	24	27.87	21.96
				50	0	28.02	21.94

LAT OUTPUT POWER FOR LTE BAND 2 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	18675	1857.5	QPSK	1	0	28.42	23.85
				1	37	27.80	23.86
				1	74	28.19	23.87
				36	0	28.32	23.12
				36	16	28.07	23.10
				36	35	28.11	22.99
				75	0	28.15	22.95
			16-QAM	1	0	28.39	22.92
				1	37	27.81	22.68
				1	74	28.17	22.60
				36	0	28.21	22.06
				36	16	28.05	22.05
				36	35	28.11	22.01
				75	0	28.14	21.94
15.0	18900	1880.0	QPSK	1	0	28.52	23.78
				1	37	28.23	23.89
				1	74	28.38	23.84
				36	0	**28.59**	23.08
				36	16	28.30	23.09
				36	35	28.10	23.00
				75	0	28.17	22.98
			16-QAM	1	0	28.43	22.83
				1	37	28.24	22.69
				1	74	28.16	22.64
				36	0	28.22	22.10
				36	16	28.25	22.08
				36	35	27.99	21.97
				75	0	28.06	21.99
15.0	19125	1902.5	QPSK	1	0	28.54	23.88
				1	37	28.47	**23.92**
				1	74	28.33	23.91
				36	0	27.82	23.00
				36	16	28.23	22.90
				36	35	28.08	23.01
				75	0	28.05	22.97
			16-QAM	1	0	**28.45**	**22.95**
				1	37	28.26	22.66
				1	74	28.18	22.70
				36	0	27.88	22.00
				36	16	28.14	21.95
				36	35	27.99	22.03
				75	0	28.02	21.99

LAT OUTPUT POWER FOR LTE BAND 2 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	18700	1860.0	QPSK	1	0	28.22	23.85
				1	49	27.71	23.86
				1	99	28.26	23.87
				50	0	28.10	22.82
				50	24	28.12	22.84
				50	49	28.15	22.89
				100	0	28.16	22.74
			16-QAM	1	0	28.06	22.82
				1	49	27.72	22.68
				1	99	28.29	22.70
				50	0	28.14	21.66
				50	24	28.06	21.73
				50	49	28.10	21.77
				100	0	28.13	21.94
20.0	18900	1880.0	QPSK	1	0	28.21	23.78
				1	49	28.10	23.89
				1	99	28.33	23.84
				50	0	28.51	22.78
				50	24	28.17	22.85
				50	49	28.13	22.71
				100	0	28.26	22.98
			16-QAM	1	0	28.28	22.83
				1	49	28.10	22.79
				1	99	28.30	22.64
				50	0	28.49	21.74
				50	24	28.14	21.76
				50	49	28.10	21.87
				100	0	28.25	21.69
20.0	19100	1900.0	QPSK	1	0	**28.57**	23.78
				1	49	28.53	23.82
				1	99	28.44	**23.91**
				50	0	27.76	22.83
				50	24	28.40	22.90
				50	49	28.09	22.77
				100	0	28.11	22.81
			16-QAM	1	0	**28.53**	**22.95**
				1	49	28.49	22.66
				1	99	28.22	22.70
				50	0	27.82	21.67
				50	24	28.34	21.63
				50	49	28.11	21.75
				100	0	28.19	21.74

UAT OUTPUT POWER FOR LTE BAND 2 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	18607	1850.7	QPSK	1	0	25.36	20.51
				1	2	25.66	20.64
				1	5	25.63	20.62
				3	0	25.66	20.66
				3	1	25.79	20.68
				3	2	25.78	20.74
				6	0	25.78	19.78
			16QAM	1	0	25.52	19.73
				1	2	25.63	19.79
				1	5	25.63	19.77
				3	0	25.67	19.77
				3	1	25.73	19.80
				3	2	25.73	19.80
				6	0	25.75	18.90
1.4	18900	1880.0	QPSK	1	0	25.41	20.54
				1	2	25.95	20.63
				1	5	25.69	20.66
				3	0	25.93	20.71
				3	1	**26.19**	20.74
				3	2	26.11	20.75
				6	0	26.11	19.81
			16QAM	1	0	25.56	19.84
				1	2	26.02	19.84
				1	5	25.80	19.87
				3	0	25.97	19.89
				3	1	**26.15**	19.87
				3	2	26.00	19.90
				6	0	25.99	19.01
1.4	19193	1909.3	QPSK	1	0	25.31	20.62
				1	2	25.46	20.66
				1	5	25.36	20.69
				3	0	25.36	20.76
				3	1	25.56	20.74
				3	2	25.52	**20.77**
				6	0	25.52	19.89
			16QAM	1	0	25.40	19.89
				1	2	25.46	19.85
				1	5	25.36	19.88
				3	0	25.39	19.83
				3	1	25.51	19.86
				3	2	25.48	**19.91**
				6	0	25.49	19.11

UAT OUTPUT POWER FOR LTE BAND 2 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	18615	1851.5	QPSK	1	0	25.37	20.57
				1	7	25.65	20.56
				1	14	25.53	20.59
				8	0	25.75	19.75
				8	4	25.18	19.78
				8	7	25.04	19.76
				15	0	25.08	19.77
			16QAM	1	0	25.31	19.67
				1	7	25.46	19.49
				1	14	25.19	19.52
				8	0	25.32	18.74
				8	4	24.83	18.78
				8	7	24.80	18.81
				15	0	24.86	18.82
3.0	18900	1880.0	QPSK	1	0	25.31	20.74
				1	7	**25.94**	20.66
				1	14	25.67	20.76
				8	0	25.93	19.86
				8	4	25.24	19.89
				8	7	25.13	19.85
				15	0	25.18	19.88
			16QAM	1	0	25.17	**19.73**
				1	7	**25.51**	19.62
				1	14	25.27	19.65
				8	0	25.49	18.93
				8	4	24.91	18.91
				8	7	24.85	18.94
				15	0	25.00	18.90
3.0	19185	1908.5	QPSK	1	0	25.18	20.70
				1	7	25.68	20.67
				1	14	25.39	**20.77**
				8	0	25.33	19.89
				8	4	25.16	19.87
				8	7	24.94	19.90
				15	0	25.11	19.89
			16QAM	1	0	25.31	19.66
				1	7	25.31	19.62
				1	14	25.15	19.65
				8	0	25.31	18.87
				8	4	24.85	18.90
				8	7	24.74	18.93
				15	0	24.87	18.94

UAT OUTPUT POWER FOR LTE BAND 2 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	18625	1852.5	QPSK	1	0	25.38	20.18
				1	12	25.58	20.69
				1	24	25.45	20.69
				12	0	25.51	19.85
				12	6	25.13	19.77
				12	11	24.96	19.73
				25	0	25.04	19.75
			16QAM	1	0	25.49	18.87
				1	12	25.62	19.96
				1	24	25.54	19.84
				12	0	25.56	19.00
				12	6	24.90	18.73
				12	11	24.76	18.70
				25	0	24.78	18.63
5.0	18900	1880.0	QPSK	1	0	25.73	19.89
				1	12	**25.80**	20.74
				1	24	25.59	**20.75**
				12	0	25.70	20.00
				12	6	25.28	19.84
				12	11	25.13	19.52
				25	0	25.16	19.63
			16QAM	1	0	**25.79**	18.91
				1	12	25.75	**20.07**
				1	24	25.62	19.68
				12	0	25.70	19.00
				12	6	25.03	18.88
				12	11	24.90	18.31
				25	0	24.97	18.78
5.0	19175	1907.5	QPSK	1	0	25.58	19.81
				1	12	25.55	20.60
				1	24	25.48	20.72
				12	0	25.32	19.80
				12	6	25.14	19.71
				12	11	25.01	19.44
				25	0	25.04	19.60
			16QAM	1	0	25.52	18.86
				1	12	25.61	19.95
				1	24	25.56	19.73
				12	0	25.37	18.90
				12	6	24.92	18.81
				12	11	24.95	18.73
				25	0	24.91	18.81

UAT OUTPUT POWER FOR LTE BAND 2 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	18650	1855.0	QPSK	1	0	25.36	20.56
				1	24	25.67	20.52
				1	49	25.57	20.53
				25	0	25.58	19.60
				25	12	25.15	19.42
				25	24	25.05	19.34
				50	0	25.09	19.37
			16QAM	1	0	25.09	19.23
				1	24	25.26	19.31
				1	49	25.18	19.30
				25	0	25.11	18.50
				25	12	25.08	18.33
				25	24	24.96	18.24
				50	0	24.99	18.30
10.0	18900	1880.0	QPSK	1	0	**25.89**	**20.68**
				1	24	25.77	20.64
				1	49	25.76	20.56
				25	0	25.59	19.60
				25	12	25.27	19.51
				25	24	25.33	19.48
				50	0	25.25	19.57
			16QAM	1	0	25.35	19.41
				1	24	25.38	19.23
				1	49	25.30	**19.57**
				25	0	25.18	18.50
				25	12	25.21	18.44
				25	24	25.12	18.51
				50	0	25.18	18.52
10.0	19150	1905.0	QPSK	1	0	25.65	20.41
				1	24	25.58	20.45
				1	49	25.60	20.31
				25	0	25.32	19.70
				25	12	25.03	19.63
				25	24	25.11	19.65
				50	0	25.13	19.64
			16QAM	1	0	**25.74**	19.29
				1	24	25.26	19.15
				1	49	25.18	19.49
				25	0	25.18	18.80
				25	12	24.97	18.75
				25	24	24.80	18.71
				50	0	25.07	18.87

UAT OUTPUT POWER FOR LTE BAND 2 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	18675	1857.5	QPSK	1	0	25.59	20.53
				1	37	25.68	20.50
				1	74	25.56	20.58
				36	0	25.69	20.00
				36	16	25.29	19.88
				36	35	25.06	19.85
				75	0	25.14	19.91
			16-QAM	1	0	25.59	19.45
				1	37	25.35	20.09
				1	74	25.16	20.02
				36	0	25.23	18.90
				36	16	25.21	18.89
				36	35	25.03	18.83
				75	0	25.18	18.91
15.0	18900	1880.0	QPSK	1	0	25.79	20.45
				1	37	**25.82**	20.63
				1	74	25.69	20.62
				36	0	25.68	20.00
				36	16	25.46	19.97
				36	35	25.26	20.00
				75	0	25.24	20.00
			16-QAM	1	0	25.72	19.60
				1	37	25.36	**20.12**
				1	74	25.28	20.09
				36	0	25.22	19.00
				36	16	25.37	18.99
				36	35	25.22	18.73
				75	0	25.21	18.96
15.0	19125	1902.5	QPSK	1	0	25.76	20.48
				1	37	25.66	20.67
				1	74	25.51	**20.69**
				36	0	25.28	20.00
				36	16	25.33	19.88
				36	35	25.08	19.59
				75	0	25.14	19.80
			16-QAM	1	0	**25.74**	19.35
				1	37	25.26	20.08
				1	74	25.19	19.73
				36	0	25.20	18.60
				36	16	25.24	18.54
				36	35	24.98	18.62
				75	0	25.08	18.67

UAT OUTPUT POWER FOR LTE BAND 2 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	18700	1860.0	QPSK	1	0	25.41	20.35
				1	49	25.59	20.30
				1	99	25.63	20.31
				50	0	25.61	19.75
				50	24	25.33	19.62
				50	49	25.18	19.68
				100	0	25.29	19.69
			16-QAM	1	0	25.27	19.49
				1	49	25.52	19.60
				1	99	25.22	19.51
				50	0	25.52	18.75
				50	24	25.14	18.65
				50	49	25.04	18.69
				100	0	25.24	18.61
20.0	18900	1880.0	QPSK	1	0	25.26	20.29
				1	49	25.70	**20.52**
				1	99	**25.88**	20.31
				50	0	25.82	19.75
				50	24	25.59	19.71
				50	49	25.30	19.70
				100	0	25.36	19.62
			16-QAM	1	0	25.49	19.39
				1	49	**25.61**	**19.64**
				1	99	25.45	19.62
				50	0	25.51	18.75
				50	24	25.39	18.68
				50	49	25.23	18.69
				100	0	25.31	18.60
20.0	19100	1900.0	QPSK	1	0	25.68	20.35
				1	49	25.87	20.36
				1	99	25.70	20.31
				50	0	25.20	19.75
				50	24	25.35	19.69
				50	49	25.20	19.69
				100	0	25.32	19.40
			16-QAM	1	0	25.57	19.52
				1	49	25.58	19.49
				1	99	25.26	19.51
				50	0	25.24	18.75
				50	24	25.16	18.72
				50	49	25.13	18.74
				100	0	25.21	18.74

7.2. LTE BAND 4

LAT OUTPUT POWER FOR LTE BAND 4 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	19957	1710.7	QPSK	1	0	28.23	23.75
				1	2	28.36	23.89
				1	5	28.25	23.90
				3	0	28.24	23.93
				3	1	28.40	23.94
				3	2	28.35	**23.97**
				6	0	28.33	23.01
			16QAM	1	0	28.13	22.90
				1	2	28.29	22.95
				1	5	28.22	22.95
				3	0	28.21	**22.97**
				3	1	28.35	22.96
				3	2	28.31	22.90
				6	0	28.30	22.04
1.4	20175	1732.5	QPSK	1	0	28.23	23.73
				1	2	28.49	23.88
				1	5	28.40	23.80
				3	0	28.45	23.91
				3	1	28.59	23.85
				3	2	28.53	23.91
				6	0	28.53	23.05
			16QAM	1	0	28.36	22.86
				1	2	28.50	22.89
				1	5	28.43	22.85
				3	0	28.47	22.88
				3	1	28.56	22.89
				3	2	28.54	22.88
				6	0	28.52	22.10
1.4	20393	1754.3	QPSK	1	0	28.34	23.72
				1	2	28.65	23.84
				1	5	28.43	23.82
				3	0	28.58	23.85
				3	1	**28.75**	23.88
				3	2	28.68	23.90
				6	0	28.70	23.10
			16QAM	1	0	28.27	22.84
				1	2	28.65	22.87
				1	5	28.48	22.84
				3	0	28.63	22.89
				3	1	**28.70**	22.91
				3	2	28.64	22.86
				6	0	28.65	22.06

LAT OUTPUT POWER FOR LTE BAND 4 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	19965	1711.5	QPSK	1	0	28.39	23.70
				1	7	28.23	**23.91**
				1	14	28.07	23.77
				8	0	28.12	23.00
				8	4	27.87	22.96
				8	7	27.66	22.84
				15	0	27.80	22.91
			16QAM	1	0	28.21	22.76
				1	7	28.20	22.82
				1	14	27.88	22.67
				8	0	27.98	22.14
				8	4	27.54	22.06
				8	7	27.31	21.93
				15	0	27.42	21.93
3.0	20175	1732.5	QPSK	1	0	28.36	23.66
				1	7	28.44	23.84
				1	14	28.34	23.77
				8	0	28.49	23.00
				8	4	27.89	22.94
				8	7	27.73	22.85
				15	0	27.77	22.83
			16QAM	1	0	**28.30**	22.75
				1	7	28.23	22.77
				1	14	28.01	**22.86**
				8	0	28.17	22.10
				8	4	27.66	21.98
				8	7	27.62	21.97
				15	0	27.65	21.98
3.0	20385	1753.5	QPSK	1	0	28.33	23.66
				1	7	**28.61**	23.85
				1	14	28.35	23.76
				8	0	28.52	22.90
				8	4	27.97	22.86
				8	7	27.80	22.86
				15	0	27.86	22.85
			16QAM	1	0	28.24	22.75
				1	7	28.17	22.70
				1	14	27.97	22.61
				8	0	28.13	22.00
				8	4	27.69	21.97
				8	7	27.57	21.93
				15	0	27.62	21.94

LAT OUTPUT POWER FOR LTE BAND 4 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	19975	1712.5	QPSK	1	0	28.30	23.63
				1	12	28.25	**23.87**
				1	24	28.07	23.77
				12	0	28.04	23.00
				12	6	27.87	22.88
				12	11	27.64	22.84
				25	0	27.70	22.85
			16QAM	1	0	28.29	22.90
				1	12	28.26	**23.16**
				1	24	28.11	23.00
				12	0	28.07	21.90
				12	6	27.60	21.87
				12	11	27.38	21.87
				25	0	27.41	21.84
5.0	20175	1732.5	QPSK	1	0	**28.53**	23.67
				1	12	28.37	23.80
				1	24	28.30	23.80
				12	0	28.42	22.90
				12	6	27.96	22.88
				12	11	27.78	22.86
				25	0	27.93	22.88
			16QAM	1	0	28.21	22.82
				1	12	28.40	23.08
				1	24	28.38	23.03
				12	0	28.47	22.00
				12	6	27.71	21.91
				12	11	27.60	21.91
				25	0	27.69	21.93
5.0	20375	1752.5	QPSK	1	0	28.47	23.68
				1	12	28.46	23.77
				1	24	28.31	23.77
				12	0	28.40	22.90
				12	6	28.04	22.90
				12	11	27.85	22.87
				25	0	27.93	22.87
			16QAM	1	0	28.49	22.86
				1	12	**28.51**	23.04
				1	24	28.46	23.04
				12	0	28.41	21.90
				12	6	27.79	21.88
				12	11	27.59	21.85
				25	0	27.65	21.86

LAT OUTPUT POWER FOR LTE BAND 4 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	20000	1715.0	QPSK	1	0	28.30	23.70
				1	24	28.23	23.86
				1	49	28.02	**23.89**
				25	0	27.99	23.00
				25	12	27.77	22.85
				25	24	27.59	22.84
				50	0	27.82	22.88
			16QAM	1	0	27.81	22.79
				1	24	28.07	22.86
				1	49	27.96	**22.94**
				25	0	27.83	22.00
				25	12	27.70	21.93
				25	24	27.51	21.92
				50	0	27.58	21.89
10.0	20175	1732.5	QPSK	1	0	28.39	23.66
				1	24	28.31	23.79
				1	49	28.41	23.79
				25	0	28.46	23.00
				25	12	27.95	22.95
				25	24	27.88	22.86
				50	0	28.02	22.88
			16QAM	1	0	27.97	22.76
				1	24	28.04	22.78
				1	49	28.04	22.86
				25	0	28.04	22.00
				25	12	27.84	21.95
				25	24	27.68	21.89
				50	0	27.85	21.92
10.0	20350	1750.0	QPSK	1	0	28.08	23.72
				1	24	**28.49**	23.77
				1	49	28.47	23.77
				25	0	28.34	23.00
				25	12	27.97	22.84
				25	24	28.00	22.85
				50	0	27.90	22.84
			16QAM	1	0	**28.26**	22.67
				1	24	28.17	22.65
				1	49	28.07	22.62
				25	0	28.08	21.90
				25	12	27.93	21.88
				25	24	27.84	21.90
				50	0	27.85	21.91

LAT OUTPUT POWER FOR LTE BAND 4 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	20025	1717.5	QPSK	1	0	28.29	23.74
				1	37	28.20	**23.90**
				1	74	27.95	23.83
				36	0	28.08	23.00
				36	16	27.96	22.99
				36	35	27.75	22.96
				75	0	27.78	22.91
			16-QAM	1	0	28.08	22.85
				1	37	28.07	22.78
				1	74	27.88	22.69
				36	0	27.86	22.00
				36	16	27.80	21.98
				36	35	27.52	21.96
				75	0	27.67	21.95
15.0	20175	1732.5	QPSK	1	0	28.36	23.79
				1	37	28.19	23.81
				1	74	28.39	23.82
				36	0	28.55	23.10
				36	16	28.09	23.03
				36	35	27.95	23.01
				75	0	27.94	22.93
			16-QAM	1	0	**28.40**	22.78
				1	37	27.99	22.69
				1	74	28.03	22.67
				36	0	28.08	22.00
				36	16	27.88	21.99
				36	35	27.72	21.94
				75	0	27.92	21.95
15.0	20325	1747.5	QPSK	1	0	28.51	23.83
				1	37	**28.58**	23.80
				1	74	28.48	23.82
				36	0	28.45	23.09
				36	16	28.23	23.04
				36	35	27.99	22.98
				75	0	27.97	22.94
			16-QAM	1	0	28.32	**22.85**
				1	37	28.16	22.62
				1	74	28.09	22.63
				36	0	28.06	22.16
				36	16	28.09	22.00
				36	35	27.96	21.97
				75	0	27.95	21.93

LAT OUTPUT POWER FOR LTE BAND 4 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	20050	1720.0	QPSK	1	0	28.21	23.67
				1	49	28.52	23.95
				1	99	28.38	23.94
				50	0	28.62	22.68
				50	24	28.40	22.56
				50	49	28.12	22.65
				100	0	28.28	22.71
			16-QAM	1	0	28.37	22.85
				1	49	28.54	22.66
				1	99	28.38	22.73
				50	0	28.59	21.68
				50	24	28.15	21.83
				50	49	27.96	21.77
				100	0	28.18	21.78
20.0	20175	1732.5	QPSK	1	0	28.48	23.68
				1	49	28.48	23.91
				1	99	28.83	**23.97**
				50	0	28.94	22.73
				50	24	28.46	22.87
				50	49	28.36	22.64
				100	0	28.49	22.96
			16-QAM	1	0	28.54	**22.79**
				1	49	28.47	22.71
				1	99	28.57	22.72
				50	0	28.74	21.62
				50	24	28.24	21.56
				50	49	28.22	21.61
				100	0	28.46	21.73
20.0	20300	1745.0	QPSK	1	0	28.25	23.70
				1	49	28.95	23.66
				1	99	**29.05**	23.74
				50	0	28.91	22.77
				50	24	28.57	22.73
				50	49	28.34	22.60
				100	0	28.56	22.66
			16-QAM	1	0	28.34	22.53
				1	49	**28.77**	22.71
				1	99	28.64	22.57
				50	0	28.61	21.68
				50	24	28.50	21.54
				50	49	28.33	21.78
				100	0	28.38	21.57

UAT OUTPUT POWER FOR LTE BAND 4 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	19957	1710.7	QPSK	1	0	25.33	20.98
				1	2	25.75	21.00
				1	5	25.53	21.03
				3	0	25.75	21.07
				3	1	**25.99**	21.05
				3	2	25.82	21.08
				6	0	25.92	20.15
			16QAM	1	0	25.30	20.12
				1	2	25.74	20.10
				1	5	25.42	20.13
				3	0	25.73	20.17
				3	1	**25.95**	20.13
				3	2	25.71	20.16
				6	0	25.48	19.29
1.4	20175	1732.5	QPSK	1	0	25.31	20.98
				1	2	24.91	21.01
				1	5	24.88	21.04
				3	0	24.94	**21.12**
				3	1	25.23	21.08
				3	2	25.12	21.11
				6	0	25.11	20.15
			16QAM	1	0	25.25	20.11
				1	2	24.88	20.12
				1	5	24.85	20.15
				3	0	24.91	20.19
				3	1	24.97	20.12
				3	2	24.95	20.15
				6	0	25.00	19.28
1.4	20393	1754.3	QPSK	1	0	25.15	20.99
				1	2	24.66	21.08
				1	5	24.57	21.10
				3	0	25.62	21.10
				3	1	25.78	21.06
				3	2	24.98	21.09
				6	0	25.42	20.16
			16QAM	1	0	25.02	20.13
				1	2	25.54	20.19
				1	5	24.88	**20.22**
				3	0	25.48	20.20
				3	1	25.25	20.16
				3	2	25.00	20.19
				6	0	24.69	19.30

UAT OUTPUT POWER FOR LTE BAND 4 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	19965	1711.5	QPSK	1	0	25.02	20.85
				1	7	25.66	21.02
				1	14	25.46	21.00
				8	0	**25.66**	20.16
				8	4	24.92	20.19
				8	7	24.88	20.19
				15	0	24.98	20.12
			16QAM	1	0	25.08	19.96
				1	7	24.15	19.97
				1	14	23.95	20.00
				8	0	24.46	19.20
				8	4	24.26	19.16
				8	7	24.13	19.19
				15	0	24.39	19.13
3.0	20175	1732.5	QPSK	1	0	25.48	20.92
				1	7	24.83	21.06
				1	14	24.77	21.01
				8	0	24.92	20.17
				8	4	24.97	20.20
				8	7	24.99	20.20
				15	0	25.02	20.19
			16QAM	1	0	25.15	20.00
				1	7	24.82	19.96
				1	14	24.82	19.99
				8	0	24.92	19.24
				8	4	24.85	19.27
				8	7	24.85	19.26
				15	0	24.94	19.26
3.0	20385	1753.5	QPSK	1	0	25.25	20.95
				1	7	24.71	**21.11**
				1	14	24.50	21.10
				8	0	25.20	20.19
				8	4	24.77	20.22
				8	7	24.72	20.22
				15	0	24.74	20.22
			16QAM	1	0	**25.24**	**20.10**
				1	7	24.68	20.00
				1	14	24.53	20.03
				8	0	24.54	19.27
				8	4	24.71	19.30
				8	7	24.65	19.28
				15	0	24.71	19.27

UAT OUTPUT POWER FOR LTE BAND 4 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	19975	1712.5	QPSK	1	0	**25.61**	20.97
				1	12	25.53	20.98
				1	24	25.40	20.99
				12	0	25.49	20.15
				12	6	25.13	20.18
				12	11	24.82	20.11
				25	0	24.91	20.14
			16QAM	1	0	**25.55**	20.05
				1	12	25.11	**20.32**
				1	24	25.47	20.24
				12	0	25.47	19.10
				12	6	24.19	19.13
				12	11	24.23	19.12
				25	0	24.39	19.13
5.0	20175	1732.5	QPSK	1	0	25.34	20.99
				1	12	24.70	21.03
				1	24	24.78	21.02
				12	0	24.92	20.16
				12	6	24.86	20.19
				12	11	24.90	20.18
				25	0	24.98	20.16
			16QAM	1	0	25.34	20.08
				1	12	24.72	20.31
				1	24	24.81	20.29
				12	0	24.95	19.16
				12	6	24.85	19.12
				12	11	24.87	19.15
				25	0	24.92	19.16
5.0	20375	1752.5	QPSK	1	0	25.20	20.99
				1	12	24.72	21.04
				1	24	24.55	**21.08**
				12	0	24.66	20.20
				12	6	24.80	20.16
				12	11	24.69	20.19
				25	0	24.68	20.16
			16QAM	1	0	25.16	20.14
				1	12	24.75	20.32
				1	24	24.57	20.31
				12	0	24.84	19.18
				12	6	24.75	19.21
				12	11	24.69	19.21
				25	0	24.66	19.20

UAT OUTPUT POWER FOR LTE BAND 4 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	20000	1715.0	QPSK	1	0	25.21	20.95
				1	24	25.55	21.00
				1	49	25.57	20.95
				25	0	**25.60**	20.16
				25	12	25.13	20.19
				25	24	24.92	20.14
				50	0	25.00	20.12
			16QAM	1	0	**25.32**	19.91
				1	24	24.12	19.98
				1	49	24.45	19.92
				25	0	24.49	19.15
				25	12	24.81	19.24
				25	24	24.74	19.14
				50	0	24.77	19.08
10.0	20175	1732.5	QPSK	1	0	25.48	20.98
				1	24	24.57	20.99
				1	49	24.81	20.96
				25	0	25.04	20.16
				25	12	24.83	20.19
				25	24	24.94	20.18
				50	0	25.05	20.16
			16QAM	1	0	25.25	**20.00**
				1	24	24.57	19.94
				1	49	24.80	19.90
				25	0	25.06	19.13
				25	12	24.79	19.14
				25	24	24.87	19.17
				50	0	25.01	19.16
10.0	20350	1750.0	QPSK	1	0	25.26	20.98
				1	24	24.97	21.05
				1	49	24.66	**21.05**
				25	0	24.64	20.15
				25	12	24.89	20.18
				25	24	24.78	20.17
				50	0	24.73	20.18
			16QAM	1	0	24.98	19.98
				1	24	25.00	20.00
				1	49	24.69	19.93
				25	0	24.52	19.16
				25	12	24.93	19.13
				25	24	24.76	19.16
				50	0	24.76	19.15

UAT OUTPUT POWER FOR LTE BAND 4 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	20025	1717.5	QPSK	1	0	**25.85**	20.97
				1	37	25.63	20.99
				1	74	25.53	21.02
				36	0	25.52	20.18
				36	16	25.22	20.21
				36	35	24.99	20.14
				75	0	25.09	20.17
			16-QAM	1	0	**25.65**	19.96
				1	37	24.05	19.99
				1	74	24.72	19.83
				36	0	23.98	19.06
				36	16	25.10	19.19
				36	35	24.75	19.22
				75	0	24.96	19.20
15.0	20175	1732.5	QPSK	1	0	25.33	20.98
				1	37	25.05	20.99
				1	74	24.79	**21.09**
				36	0	24.96	20.21
				36	16	24.78	20.24
				36	35	24.90	20.16
				75	0	25.00	20.19
			16-QAM	1	0	25.29	19.97
				1	37	24.38	19.94
				1	74	24.80	19.91
				36	0	25.00	19.14
				36	16	24.76	19.22
				36	35	24.89	19.19
				75	0	25.02	19.22
15.0	20325	1747.5	QPSK	1	0	25.32	21.00
				1	37	25.03	21.07
				1	74	24.79	21.03
				36	0	25.08	20.24
				36	16	25.04	20.20
				36	35	24.94	20.16
				75	0	24.78	20.19
			16-QAM	1	0	25.29	19.98
				1	37	25.04	**20.01**
				1	74	24.84	20.00
				36	0	24.49	19.22
				36	16	25.06	19.28
				36	35	24.89	19.18
				75	0	24.77	19.21

UAT OUTPUT POWER FOR LTE BAND 4 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	20050	1720.0	QPSK	1	0	25.56	20.78
				1	49	25.79	20.77
				1	99	25.74	20.75
				50	0	25.73	19.76
				50	24	25.37	19.78
				50	49	25.19	19.75
				100	0	25.30	19.73
			16-QAM	1	0	**25.56**	19.68
				1	49	24.78	19.69
				1	99	25.35	19.67
				50	0	24.48	18.69
				50	24	24.97	18.64
				50	49	24.85	18.66
				100	0	25.16	18.69
20.0	20175	1732.5	QPSK	1	0	25.09	20.95
				1	49	25.87	**20.99**
				1	99	24.80	20.96
				50	0	24.84	20.00
				50	24	25.25	19.91
				50	49	24.87	19.94
				100	0	24.99	19.93
			16-QAM	1	0	25.00	**19.79**
				1	49	24.83	19.76
				1	99	24.82	19.77
				50	0	24.88	18.78
				50	24	24.68	18.76
				50	49	24.87	18.73
				100	0	25.01	18.72
20.0	20300	1745.0	QPSK	1	0	24.92	20.86
				1	49	24.91	20.88
				1	99	24.89	20.87
				50	0	**25.91**	19.88
				50	24	25.03	19.84
				50	49	24.93	19.86
				100	0	24.82	19.87
			16-QAM	1	0	25.03	19.69
				1	49	24.93	19.68
				1	99	24.91	19.65
				50	0	24.39	18.69
				50	24	25.03	18.67
				50	49	24.92	18.64
				100	0	24.84	18.70

7.3. LTE BAND 5

LAT OUTPUT POWER FOR LTE BAND 5 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	20407	824.7	QPSK	1	0	28.56	23.48
				1	2	28.72	23.77
				1	5	28.60	23.77
				3	0	28.81	23.87
				3	1	28.97	23.84
				3	2	28.88	23.81
				6	0	29.04	23.10
			16QAM	1	0	28.50	22.64
				1	2	28.66	22.82
				1	5	28.68	22.81
				3	0	28.89	22.82
				3	1	28.94	22.80
				3	2	28.90	22.86
				6	0	28.99	22.06
1.4	20525	836.5	QPSK	1	0	28.62	23.65
				1	2	29.00	23.85
				1	5	28.84	23.83
				3	0	29.05	23.91
				3	1	29.21	23.92
				3	2	29.21	**23.94**
				6	0	**29.24**	23.07
			16QAM	1	0	28.73	22.71
				1	2	29.12	**22.97**
				1	5	29.04	22.96
				3	0	29.11	22.96
				3	1	**29.26**	22.91
				3	2	29.19	22.94
				6	0	29.16	22.03
1.4	20643	848.3	QPSK	1	0	28.42	23.43
				1	2	28.51	23.72
				1	5	28.54	23.69
				3	0	28.50	23.67
				3	1	28.66	23.71
				3	2	28.71	23.80
				6	0	28.74	23.05
			16QAM	1	0	28.32	22.32
				1	2	28.45	22.63
				1	5	28.52	22.61
				3	0	28.44	22.59
				3	1	28.66	22.65
				3	2	28.69	22.78
				6	0	28.65	22.34

LAT OUTPUT POWER FOR LTE BAND 5 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	20415	825.5	QPSK	1	0	28.55	23.55
				1	7	28.68	23.76
				1	14	28.56	23.79
				8	0	28.80	23.00
				8	4	28.09	22.92
				8	7	28.04	22.90
				15	0	28.10	22.94
			16QAM	1	0	28.38	22.38
				1	7	28.38	22.69
				1	14	28.26	22.74
				8	0	28.39	22.00
				8	4	27.82	22.03
				8	7	27.73	22.03
				15	0	27.79	22.01
3.0	20525	836.5	QPSK	1	0	28.43	23.51
				1	7	28.89	**23.83**
				1	14	28.77	23.80
				8	0	**28.98**	23.00
				8	4	28.36	22.91
				8	7	28.38	22.92
				15	0	28.42	22.94
			16QAM	1	0	**28.76**	22.39
				1	7	28.56	22.74
				1	14	28.48	22.71
				8	0	28.67	22.06
				8	4	28.08	22.04
				8	7	28.07	22.05
				15	0	28.11	22.02
3.0	20635	847.5	QPSK	1	0	28.52	23.33
				1	7	28.43	23.70
				1	14	28.50	23.70
				8	0	28.49	22.80
				8	4	28.04	22.71
				8	7	28.00	22.76
				15	0	28.03	22.76
			16QAM	1	0	28.41	22.57
				1	7	28.30	**22.76**
				1	14	28.34	22.74
				8	0	28.39	22.00
				8	4	27.90	21.89
				8	7	27.96	21.99
				15	0	27.96	21.79

LAT OUTPUT POWER FOR LTE BAND 5 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	20425	826.5	QPSK	1	0	28.61	23.56
				1	12	28.55	23.72
				1	24	28.47	23.78
				12	0	28.61	22.80
				12	6	28.10	22.77
				12	11	28.01	22.74
				25	0	28.03	22.65
			16QAM	1	0	28.71	22.85
				1	12	28.73	23.01
				1	24	28.59	23.05
				12	0	28.69	21.69
				12	6	27.91	21.66
				12	11	27.80	21.67
				25	0	27.83	21.77
5.0	20525	836.5	QPSK	1	0	**28.91**	23.38
				1	12	28.73	23.68
				1	24	28.69	23.78
				12	0	28.83	22.90
				12	6	28.34	22.86
				12	11	28.23	22.88
				25	0	28.31	22.81
			16QAM	1	0	**28.97**	22.86
				1	12	28.81	23.05
				1	24	28.82	23.02
				12	0	28.95	21.90
				12	6	28.17	21.84
				12	11	28.08	21.85
				25	0	28.17	21.92
5.0	20625	846.5	QPSK	1	0	28.63	23.60
				1	12	28.68	**23.83**
				1	24	28.41	23.70
				12	0	28.42	22.80
				12	6	28.24	22.79
				12	11	27.99	22.71
				25	0	28.05	22.75
			16QAM	1	0	28.48	22.73
				1	12	28.72	**23.13**
				1	24	28.42	22.90
				12	0	28.46	21.76
				12	6	28.14	21.77
				12	11	27.87	21.84
				25	0	27.93	21.83

LAT OUTPUT POWER FOR LTE BAND 5 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	20450	829.0	QPSK	1	0	28.40	23.53
				1	24	28.50	**23.61**
				1	49	28.61	23.53
				25	0	28.12	22.54
				25	12	28.13	22.50
				25	24	28.02	22.51
				50	0	28.18	22.50
			16QAM	1	0	28.40	22.60
				1	24	28.18	22.68
				1	49	28.30	22.60
				25	0	28.10	21.65
				25	12	27.99	21.57
				25	24	27.94	21.64
				50	0	28.15	21.72
10.0	20525	836.5	QPSK	1	0	28.45	23.50
				1	24	28.59	23.52
				1	49	28.63	23.50
				25	0	28.46	22.62
				25	12	28.16	22.78
				25	24	28.28	22.74
				50	0	28.26	22.60
			16QAM	1	0	**28.70**	22.60
				1	24	28.32	22.66
				1	49	28.57	**22.77**
				25	0	28.27	21.53
				25	12	28.18	21.67
				25	24	28.20	21.61
				50	0	28.14	21.69
10.0	20600	844.0	QPSK	1	0	28.66	23.55
				1	24	**28.70**	23.50
				1	49	28.55	23.51
				25	0	28.60	22.57
				25	12	28.13	22.68
				25	24	28.16	22.60
				50	0	28.46	22.56
			16QAM	1	0	28.42	22.61
				1	24	28.39	22.53
				1	49	28.26	22.52
				25	0	28.15	21.54
				25	12	28.03	21.66
				25	24	27.92	21.60
				50	0	28.34	21.64

UAT OUTPUT POWER FOR LTE BAND 5 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	20407	824.7	QPSK	1	0	27.85	23.32
				1	2	28.22	23.46
				1	5	28.05	23.42
				3	0	28.17	23.45
				3	1	28.43	23.52
				3	2	28.32	23.46
				6	0	28.34	22.59
			16QAM	1	0	27.79	22.16
				1	2	28.26	22.47
				1	5	28.11	22.45
				3	0	28.25	22.50
				3	1	28.40	22.47
				3	2	28.28	22.49
				6	0	28.29	21.63
1.4	20525	836.5	QPSK	1	0	28.00	23.21
				1	2	28.34	23.53
				1	5	28.15	23.44
				3	0	28.37	23.52
				3	1	**28.59**	23.54
				3	2	28.48	23.49
				6	0	28.50	22.58
			16QAM	1	0	28.05	22.27
				1	2	28.41	22.53
				1	5	28.27	22.50
				3	0	28.40	22.52
				3	1	**28.58**	22.53
				3	2	28.35	22.43
				6	0	28.41	21.74
1.4	20643	848.3	QPSK	1	0	28.01	23.29
				1	2	28.19	23.59
				1	5	28.18	23.58
				3	0	28.18	23.59
				3	1	28.33	**23.66**
				3	2	28.30	23.58
				6	0	28.34	22.66
			16QAM	1	0	28.01	22.35
				1	2	28.11	22.56
				1	5	28.12	22.59
				3	0	28.09	22.49
				3	1	28.27	22.60
				3	2	28.25	**22.64**
				6	0	28.27	21.82

UAT OUTPUT POWER FOR LTE BAND 5 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	20415	825.5	QPSK	1	0	28.02	23.21
				1	7	28.18	23.40
				1	14	27.90	23.33
				8	0	28.16	22.52
				8	4	27.45	22.45
				8	7	27.27	22.42
				15	0	27.40	22.47
			16QAM	1	0	27.87	22.09
				1	7	27.79	22.32
				1	14	27.53	22.27
				8	0	27.68	21.60
				8	4	27.24	21.53
				8	7	27.04	21.49
				15	0	27.13	21.48
3.0	20525	836.5	QPSK	1	0	27.95	23.19
				1	7	28.25	23.47
				1	14	28.05	23.38
				8	0	**28.32**	22.55
				8	4	27.66	22.48
				8	7	27.59	22.49
				15	0	27.64	22.47
			16QAM	1	0	27.71	22.09
				1	7	27.85	22.31
				1	14	27.73	22.29
				8	0	27.91	21.63
				8	4	27.38	21.56
				8	7	27.24	21.50
				15	0	27.45	21.58
3.0	20635	847.5	QPSK	1	0	28.15	23.26
				1	7	28.25	23.45
				1	14	28.16	**23.50**
				8	0	28.18	22.65
				8	4	27.62	22.58
				8	7	27.53	22.56
				15	0	27.61	22.55
			16QAM	1	0	**28.12**	22.25
				1	7	27.94	**22.39**
				1	14	27.80	22.38
				8	0	27.96	21.75
				8	4	27.59	21.68
				8	7	27.44	21.65
				15	0	27.54	21.66

UAT OUTPUT POWER FOR LTE BAND 5 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	20425	826.5	QPSK	1	0	27.96	22.81
				1	12	27.98	23.07
				1	24	27.84	23.19
				12	0	28.09	22.17
				12	6	27.48	22.18
				12	11	27.35	22.12
				25	0	27.42	22.13
			16QAM	1	0	27.62	21.90
				1	12	28.07	22.03
				1	24	27.96	22.16
				12	0	28.15	21.15
				12	6	27.23	21.06
				12	11	27.08	21.10
				25	0	27.18	21.24
5.0	20525	836.5	QPSK	1	0	28.14	22.88
				1	12	28.07	23.26
				1	24	28.03	23.29
				12	0	28.16	22.14
				12	6	27.65	22.17
				12	11	27.51	22.16
				25	0	27.57	22.15
			16QAM	1	0	28.19	21.99
				1	12	28.15	22.23
				1	24	28.08	22.25
				12	0	**28.25**	21.14
				12	6	27.44	21.17
				12	11	27.34	21.15
				25	0	27.41	21.22
5.0	20625	846.5	QPSK	1	0	**28.29**	22.81
				1	12	28.14	23.27
				1	24	28.10	**23.32**
				12	0	28.11	22.19
				12	6	27.63	22.21
				12	11	27.57	22.26
				25	0	27.59	22.27
			16QAM	1	0	28.13	21.94
				1	12	28.18	22.25
				1	24	28.15	**22.37**
				12	0	28.13	21.23
				12	6	27.49	21.19
				12	11	27.34	21.28
				25	0	27.48	21.45

UAT OUTPUT POWER FOR LTE BAND 5 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	20450	829.0	QPSK	1	0	27.49	23.43
				1	24	28.00	23.40
				1	49	28.07	23.39
				25	0	28.02	22.38
				25	12	27.45	22.37
				25	24	27.35	22.38
				50	0	27.49	22.30
			16QAM	1	0	**28.16**	22.40
				1	24	27.54	22.37
				1	49	27.67	22.36
				25	0	27.35	21.21
				25	12	27.24	21.40
				25	24	27.27	21.31
				50	0	27.41	21.34
10.0	20525	836.5	QPSK	1	0	28.58	23.40
				1	24	28.03	23.39
				1	49	28.13	23.37
				25	0	28.02	22.50
				25	12	27.63	22.44
				25	24	27.58	22.43
				50	0	27.65	22.34
			16QAM	1	0	27.63	22.23
				1	24	27.49	22.20
				1	49	27.77	22.21
				25	0	27.49	21.30
				25	12	27.48	21.26
				25	24	27.45	21.24
				50	0	27.50	21.23
10.0	20600	844.0	QPSK	1	0	**28.67**	**23.50**
				1	24	28.04	23.46
				1	49	28.04	23.39
				25	0	28.20	22.36
				25	12	27.54	22.25
				25	24	27.50	22.23
				50	0	27.69	22.21
			16QAM	1	0	27.65	**22.40**
				1	24	27.47	22.36
				1	49	27.64	22.33
				25	0	27.84	21.24
				25	12	27.43	21.21
				25	24	27.24	21.32
				50	0	27.47	21.32

7.4. LTE BAND 13

LAT OUTPUT POWER FOR LTE BAND 13 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	23207	779.5	QPSK	1	0	28.34	23.55
				1	12	27.24	23.60
				1	24	28.16	23.65
				12	0	28.48	22.64
				12	6	27.96	22.65
				12	11	28.20	22.68
				25	0	28.23	22.61
			16QAM	1	0	28.48	21.97
				1	12	27.32	22.83
				1	24	28.23	**22.91**
				12	0	28.53	21.67
				12	6	27.95	21.60
				12	11	28.06	21.56
				25	0	28.03	21.68
5.0	23230	782.0	QPSK	1	0	28.43	**23.66**
				1	12	28.29	23.65
				1	24	28.55	23.65
				12	0	**28.59**	22.69
				12	6	28.33	22.65
				12	11	28.19	22.61
				25	0	28.08	22.59
			16QAM	1	0	28.68	22.89
				1	12	28.26	22.85
				1	24	28.59	22.82
				12	0	28.63	21.50
				12	6	28.11	21.57
				12	11	28.09	21.54
				25	0	27.96	21.61
5.0	23255	784.5	QPSK	1	0	28.59	23.49
				1	12	28.53	23.47
				1	24	28.51	23.57
				12	0	28.47	22.60
				12	6	28.27	22.54
				12	11	28.15	22.58
				25	0	28.06	22.53
			16QAM	1	0	**28.71**	22.76
				1	12	28.59	22.72
				1	24	28.62	22.80
				12	0	28.53	21.61
				12	6	28.10	21.62
				12	11	27.97	21.61
				25	0	27.90	21.75

LAT OUTPUT POWER FOR LTE BAND 13 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	23230	782.0	QPSK	1	0	28.26	**23.58**
				1	24	27.50	23.51
				1	49	28.51	23.56
				25	0	**28.54**	22.55
				25	12	28.24	22.62
				25	24	28.08	22.61
				50	0	28.12	22.62
			16QAM	1	0	**28.48**	**22.91**
				1	24	27.53	22.77
				1	49	28.29	22.79
				25	0	28.19	21.75
				25	12	28.26	21.81
				25	24	28.15	21.75
				50	0	28.05	21.64

UAT OUTPUT POWER FOR LTE BAND 13 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	23207	779.5	QPSK	1	0	27.82	23.44
				1	12	**28.61**	23.58
				1	24	27.36	23.49
				12	0	27.60	22.55
				12	6	28.11	22.68
				12	11	28.06	22.52
				25	0	27.60	22.51
			16QAM	1	0	28.29	22.65
				1	12	**28.71**	22.72
				1	24	27.52	22.70
				12	0	27.60	21.57
				12	6	27.93	21.70
				12	11	27.83	21.57
				25	0	27.58	21.70
5.0	23230	782.0	QPSK	1	0	28.05	23.42
				1	12	27.35	23.42
				1	24	27.66	23.44
				12	0	27.49	22.55
				12	6	27.65	22.49
				12	11	27.57	22.48
				25	0	27.57	22.49
			16QAM	1	0	27.88	22.63
				1	12	27.55	22.63
				1	24	27.68	22.67
				12	0	27.54	21.56
				12	6	27.56	21.54
				12	11	27.44	21.53
				25	0	27.45	21.66
5.0	23255	784.5	QPSK	1	0	28.04	23.40
				1	12	27.65	**23.59**
				1	24	27.54	23.53
				12	0	27.45	22.53
				12	6	27.65	22.60
				12	11	27.61	22.59
				25	0	27.58	22.47
			16QAM	1	0	27.93	22.62
				1	12	27.60	**22.79**
				1	24	27.55	22.74
				12	0	27.48	21.55
				12	6	27.62	21.68
				12	11	27.59	21.68
				25	0	27.59	21.69

UAT OUTPUT POWER FOR LTE BAND 13 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	23230	782.0	QPSK	1	0	27.70	23.52
				1	24	**28.66**	23.45
				1	49	27.65	**23.58**
				25	0	27.53	22.54
				25	12	27.51	22.53
				25	24	27.66	22.49
				50	0	27.59	22.58
			16QAM	1	0	27.89	22.41
				1	24	**28.34**	22.34
				1	49	27.66	**22.47**
				25	0	27.52	21.57
				25	12	28.08	21.46
				25	24	27.61	21.58
				50	0	27.56	21.58

7.5. LTE BAND 17

LAT OUTPUT POWER FOR LTE BAND 17 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	23755	706.5	QPSK	1	0	**28.47**	23.74
				1	12	27.44	23.72
				1	24	28.07	**23.78**
				12	0	27.97	22.69
				12	6	28.01	22.69
				12	11	27.99	22.80
				25	0	28.00	22.69
			16QAM	1	0	28.29	22.93
				1	12	27.58	22.90
				1	24	28.09	**23.03**
				12	0	28.04	21.58
				12	6	27.78	21.59
				12	11	27.78	21.64
				25	0	27.93	21.78
5.0	23790	710.0	QPSK	1	0	28.42	23.66
				1	12	27.99	23.61
				1	24	27.98	23.64
				12	0	27.98	22.70
				12	6	28.01	22.68
				12	11	28.03	22.67
				25	0	28.00	22.63
			16QAM	1	0	28.42	22.86
				1	12	27.97	22.82
				1	24	28.01	22.88
				12	0	28.00	21.72
				12	6	27.99	21.74
				12	11	27.95	21.72
				25	0	27.99	21.88
5.0	23825	713.5	QPSK	1	0	28.44	23.62
				1	12	27.88	23.59
				1	24	28.02	23.67
				12	0	27.87	22.71
				12	6	28.04	22.70
				12	11	28.00	22.66
				25	0	27.95	22.60
			16QAM	1	0	**28.43**	22.88
				1	12	27.96	22.83
				1	24	28.07	22.84
				12	0	27.91	21.68
				12	6	28.01	21.72
				12	11	27.97	21.71
				25	0	27.95	21.78

LAT OUTPUT POWER FOR LTE BAND 17 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	23780	709.0	QPSK	1	0	28.27	23.62
				1	24	28.21	23.67
				1	49	27.97	23.67
				25	0	27.92	22.77
				25	12	28.00	22.69
				25	24	27.97	22.74
				50	0	27.95	22.71
			16QAM	1	0	28.28	22.46
				1	24	27.00	22.56
				1	49	28.00	22.52
				25	0	27.99	21.73
				25	12	27.95	21.74
				25	24	28.01	21.78
				50	0	28.05	21.74
10.0	23790	710.0	QPSK	1	0	**28.29**	23.56
				1	24	28.04	23.62
				1	49	27.95	**23.68**
				25	0	27.87	22.76
				25	12	28.04	22.66
				25	24	28.03	22.72
				50	0	27.96	22.69
			16QAM	1	0	**28.46**	22.51
				1	24	28.01	22.50
				1	49	27.99	22.51
				25	0	27.89	21.73
				25	12	28.00	21.69
				25	24	28.06	21.76
				50	0	27.99	21.70
10.0	23800	711.0	QPSK	1	0	28.16	23.58
				1	24	28.06	23.61
				1	49	27.90	23.62
				25	0	27.89	22.72
				25	12	27.99	22.70
				25	24	27.98	22.66
				50	0	27.94	22.70
			16QAM	1	0	28.18	22.74
				1	24	27.89	22.79
				1	49	27.93	**22.84**
				25	0	27.91	21.86
				25	12	27.99	21.86
				25	24	28.02	21.81
				50	0	28.01	21.69

UAT OUTPUT POWER FOR LTE BAND 17 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	23755	706.5	QPSK	1	0	28.00	23.54
				1	12	27.37	**23.56**
				1	24	27.17	23.53
				12	0	**28.32**	22.61
				12	6	27.42	22.64
				12	11	27.37	22.62
				25	0	27.89	22.61
			16QAM	1	0	27.79	22.68
				1	12	27.38	**22.74**
				1	24	27.45	22.72
				12	0	27.72	21.68
				12	6	27.38	21.65
				12	11	27.38	21.65
				25	0	27.38	21.78
5.0	23790	710.0	QPSK	1	0	27.88	23.50
				1	12	28.20	23.49
				1	24	27.73	23.51
				12	0	27.41	22.61
				12	6	28.04	22.56
				12	11	27.99	22.61
				25	0	28.04	22.57
			16QAM	1	0	**28.46**	22.67
				1	12	27.65	22.74
				1	24	27.82	22.72
				12	0	27.54	21.68
				12	6	27.95	21.62
				12	11	27.81	21.63
				25	0	27.87	21.76
5.0	23825	713.5	QPSK	1	0	27.90	23.44
				1	12	27.65	23.48
				1	24	27.47	23.51
				12	0	27.24	22.61
				12	6	27.54	22.56
				12	11	27.57	22.57
				25	0	27.52	22.51
			16QAM	1	0	27.88	22.65
				1	12	27.68	22.63
				1	24	27.48	22.64
				12	0	27.26	21.63
				12	6	27.55	21.63
				12	11	27.56	21.59
				25	0	27.48	21.72

UAT OUTPUT POWER FOR LTE BAND 17 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	23780	709.0	QPSK	1	0	27.80	23.54
				1	24	27.33	23.50
				1	49	28.25	23.49
				25	0	27.45	22.58
				25	12	27.40	22.57
				25	24	27.98	22.60
				50	0	28.01	22.61
			16QAM	1	0	**28.57**	22.47
				1	24	27.32	22.37
				1	49	27.21	22.34
				25	0	27.46	21.67
				25	12	27.39	21.61
				25	24	27.90	21.65
				50	0	28.04	21.70
10.0	23790	710.0	QPSK	1	0	27.94	23.52
				1	24	27.20	23.53
				1	49	27.32	23.49
				25	0	27.31	22.40
				25	12	28.03	22.37
				25	24	28.00	22.35
				50	0	27.51	22.36
			16QAM	1	0	27.81	22.38
				1	24	27.23	22.40
				1	49	27.39	22.29
				25	0	27.35	21.47
				25	12	27.97	21.40
				25	24	28.01	21.37
				50	0	27.54	21.36
10.0	23800	711.0	QPSK	1	0	27.92	**23.55**
				1	24	27.25	23.50
				1	49	**28.36**	23.45
				25	0	27.40	22.62
				25	12	28.02	22.57
				25	24	27.96	22.53
				50	0	27.50	22.66
			16QAM	1	0	28.41	**22.42**
				1	24	27.27	22.35
				1	49	27.24	22.33
				25	0	27.42	21.66
				25	12	27.87	21.60
				25	24	27.91	21.59
				50	0	27.50	21.65

7.6. LTE BAND 25

LAT OUTPUT POWER FOR LTE BAND 25 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	26047	1850.7	QPSK	1	0	28.62	23.52
				1	2	28.98	23.72
				1	5	28.79	23.68
				3	0	28.96	23.71
				3	1	29.20	23.78
				3	2	29.20	23.82
				6	0	29.20	22.77
			16QAM	1	0	28.67	22.70
				1	2	28.99	22.75
				1	5	28.86	22.71
				3	0	28.96	22.76
				3	1	**29.20**	22.74
				3	2	29.07	22.70
				6	0	29.09	21.96
1.4	26365	1882.5	QPSK	1	0	28.55	23.63
				1	2	29.18	23.88
				1	5	28.93	23.79
				3	0	29.16	23.82
				3	1	**29.38**	23.85
				3	2	29.23	23.84
				6	0	29.25	22.93
			16QAM	1	0	28.61	22.74
				1	2	28.86	22.84
				1	5	28.70	22.80
				3	0	28.75	22.72
				3	1	29.08	22.60
				3	2	28.99	22.60
				6	0	29.01	21.82
1.4	26683	1914.3	QPSK	1	0	28.52	23.53
				1	2	29.01	23.83
				1	5	28.84	23.79
				3	0	28.82	**23.95**
				3	1	28.99	23.94
				3	2	28.90	23.94
				6	0	28.81	22.88
			16QAM	1	0	28.70	22.87
				1	2	28.76	22.89
				1	5	28.65	22.91
				3	0	28.64	**22.96**
				3	1	28.97	22.94
				3	2	28.96	22.92
				6	0	28.93	22.16

LAT OUTPUT POWER FOR LTE BAND 25 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	26055	1851.5	QPSK	1	0	28.58	23.65
				1	7	29.06	23.81
				1	14	28.77	23.67
				8	0	29.06	22.80
				8	4	28.24	22.76
				8	7	28.21	22.75
				15	0	28.35	22.85
			16QAM	1	0	28.63	22.70
				1	7	28.64	22.62
				1	14	28.44	22.73
				8	0	**28.68**	21.86
				8	4	28.05	21.83
				8	7	28.02	21.80
				15	0	28.12	21.91
3.0	26365	1882.5	QPSK	1	0	28.84	23.63
				1	7	29.03	23.74
				1	14	28.77	23.67
				8	0	**29.13**	23.01
				8	4	28.49	22.79
				8	7	28.35	22.83
				15	0	28.47	22.81
			16QAM	1	0	28.51	**22.76**
				1	7	28.61	22.60
				1	14	28.49	22.65
				8	0	28.67	21.82
				8	4	28.04	21.88
				8	7	28.14	21.85
				15	0	28.20	21.87
3.0	26675	1913.5	QPSK	1	0	28.68	23.56
				1	7	29.10	**23.82**
				1	14	28.79	23.77
				8	0	28.57	22.91
				8	4	28.56	22.96
				8	7	28.34	22.92
				15	0	28.35	22.92
			16QAM	1	0	28.50	22.73
				1	7	28.64	22.70
				1	14	28.43	22.65
				8	0	28.65	22.00
				8	4	28.29	22.08
				8	7	28.08	21.96
				15	0	28.08	21.97

LAT OUTPUT POWER FOR LTE BAND 25 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	26065	1852.5	QPSK	1	0	28.80	23.59
				1	12	28.83	23.66
				1	24	28.80	23.75
				12	0	28.88	22.76
				12	6	28.34	22.74
				12	11	28.27	22.79
				25	0	28.39	22.81
			16QAM	1	0	29.05	22.79
				1	12	28.93	22.95
				1	24	28.95	23.02
				12	0	28.94	21.89
				12	6	28.14	21.76
				12	11	28.07	21.82
				25	0	28.15	21.85
5.0	26365	1882.5	QPSK	1	0	28.77	23.51
				1	12	28.79	23.64
				1	24	28.71	23.67
				12	0	28.86	22.90
				12	6	28.29	22.64
				12	11	28.23	22.74
				25	0	28.36	22.78
			16QAM	1	0	28.81	22.83
				1	12	28.87	22.90
				1	24	28.86	22.91
				12	0	28.97	21.80
				12	6	28.19	21.79
				12	11	28.10	21.77
				25	0	28.19	21.78
5.0	26665	1912.5	QPSK	1	0	28.83	23.73
				1	12	**29.02**	23.84
				1	24	28.88	**23.88**
				12	0	28.52	22.92
				12	6	28.57	22.87
				12	11	28.42	22.88
				25	0	28.45	22.85
			16QAM	1	0	28.82	22.87
				1	12	**29.08**	**23.12**
				1	24	28.99	23.10
				12	0	28.75	21.96
				12	6	28.47	21.89
				12	11	28.29	21.94
				25	0	28.23	21.97

LAT OUTPUT POWER FOR LTE BAND 25 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	26090	1855.0	QPSK	1	0	29.23	23.63
				1	24	28.86	23.67
				1	49	28.92	23.75
				25	0	28.94	22.90
				25	12	28.53	22.87
				25	24	28.50	22.79
				50	0	28.50	22.81
			16QAM	1	0	**29.32**	22.68
				1	24	28.58	22.68
				1	49	28.53	22.66
				25	0	28.50	21.67
				25	12	28.42	21.87
				25	24	28.31	21.82
				50	0	28.40	21.84
10.0	26365	1882.5	QPSK	1	0	28.68	23.58
				1	24	28.94	23.77
				1	49	28.87	23.70
				25	0	28.84	22.82
				25	12	28.39	22.80
				25	24	28.43	22.82
				50	0	28.47	22.79
			16QAM	1	0	29.29	22.67
				1	24	28.62	22.73
				1	49	28.50	22.63
				25	0	28.47	21.66
				25	12	28.37	21.82
				25	24	28.22	21.79
				50	0	28.30	21.83
10.0	26640	1910.0	QPSK	1	0	**29.61**	23.73
				1	24	28.83	23.74
				1	49	28.97	**23.82**
				25	0	28.70	22.94
				25	12	28.59	22.93
				25	24	28.61	22.92
				50	0	28.54	22.88
			16QAM	1	0	29.07	22.66
				1	24	28.48	22.62
				1	49	28.60	**22.75**
				25	0	28.30	21.84
				25	12	28.42	21.92
				25	24	28.41	21.92
				50	0	28.50	21.98

LAT OUTPUT POWER FOR LTE BAND 25 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	26115	1857.5	QPSK	1	0	29.11	23.72
				1	37	28.95	23.74
				1	74	28.94	23.76
				36	0	28.94	22.92
				36	16	28.67	22.92
				36	35	28.41	22.88
				75	0	28.43	22.83
			16-QAM	1	0	29.10	22.81
				1	37	28.54	22.54
				1	74	28.53	22.54
				36	0	28.49	21.68
				36	16	28.63	21.98
				36	35	28.41	21.88
				75	0	28.42	21.85
15.0	26365	1882.5	QPSK	1	0	29.18	23.78
				1	37	29.03	**23.81**
				1	74	28.85	23.74
				36	0	28.92	22.92
				36	16	28.56	22.86
				36	35	28.47	22.91
				75	0	28.49	22.92
			16-QAM	1	0	28.94	22.62
				1	37	28.56	22.59
				1	74	28.50	22.55
				36	0	28.47	21.65
				36	16	28.47	21.87
				36	35	28.33	21.87
				75	0	28.42	21.90
15.0	26615	1907.5	QPSK	1	0	**29.26**	23.76
				1	37	28.97	23.79
				1	74	28.82	23.78
				36	0	28.59	23.06
				36	16	28.60	22.90
				36	35	28.55	23.04
				75	0	28.63	22.95
			16-QAM	1	0	**29.20**	22.61
				1	37	28.58	**22.62**
				1	74	28.43	22.55
				36	0	28.39	21.84
				36	16	28.56	21.95
				36	35	28.42	22.02
				75	0	28.54	21.97

LAT OUTPUT POWER FOR LTE BAND 25 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	26140	1860.0	QPSK	1	0	28.93	23.55
				1	49	29.08	23.85
				1	99	29.01	23.81
				50	0	29.16	22.92
				50	24	28.71	22.88
				50	49	28.46	22.82
				100	0	28.48	22.78
			16-QAM	1	0	28.58	22.73
				1	49	28.66	22.58
				1	99	28.65	22.65
				50	0	28.83	21.77
				50	24	28.47	21.88
				50	49	28.38	21.64
				100	0	28.43	21.81
20.0	26365	1882.5	QPSK	1	0	28.84	23.67
				1	49	29.21	**23.94**
				1	99	29.06	23.88
				50	0	29.02	22.70
				50	24	28.60	22.78
				50	49	28.49	22.64
				100	0	28.57	22.91
			16-QAM	1	0	28.81	**22.74**
				1	49	28.92	22.67
				1	99	28.65	22.61
				50	0	28.67	21.66
				50	24	28.52	21.89
				50	49	28.40	21.87
				100	0	28.56	21.65
20.0	26590	1905.0	QPSK	1	0	**29.55**	23.62
				1	49	29.05	23.80
				1	99	28.94	23.88
				50	0	28.65	22.88
				50	24	28.65	22.70
				50	49	28.47	22.83
				100	0	28.84	22.89
			16-QAM	1	0	**29.04**	22.61
				1	49	28.72	22.51
				1	99	28.58	22.62
				50	0	28.64	21.75
				50	24	28.64	21.73
				50	49	28.38	21.79
				100	0	28.85	21.82

UAT OUTPUT POWER FOR LTE BAND 25 (1.4MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1.4	26047	1850.7	QPSK	1	0	25.23	20.39
				1	2	25.63	20.63
				1	5	25.37	20.53
				3	0	25.62	20.64
				3	1	25.81	20.67
				3	2	25.76	20.64
				6	0	25.82	19.76
			16QAM	1	0	25.24	19.54
				1	2	25.74	19.61
				1	5	25.52	19.56
				3	0	25.67	19.58
				3	1	25.83	19.57
				3	2	25.71	19.59
				6	0	25.72	18.79
1.4	26365	1882.5	QPSK	1	0	25.05	20.22
				1	2	25.42	20.42
				1	5	25.20	20.36
				3	0	25.53	20.52
				3	1	25.66	20.51
				3	2	25.57	20.47
				6	0	25.65	19.59
			16QAM	1	0	25.05	19.36
				1	2	25.59	19.46
				1	5	25.36	19.41
				3	0	25.66	19.57
				3	1	25.71	19.43
				3	2	25.58	19.46
				6	0	25.60	18.67
1.4	26683	1914.3	QPSK	1	0	25.35	20.63
				1	2	25.91	20.93
				1	5	25.69	20.88
				3	0	25.85	20.97
				3	1	**26.04**	20.98
				3	2	25.98	**20.99**
				6	0	25.95	20.00
			16QAM	1	0	25.49	19.96
				1	2	25.86	19.97
				1	5	25.71	19.97
				3	0	25.66	**20.02**
				3	1	**26.08**	19.99
				3	2	25.97	19.97
				6	0	25.97	19.22

UAT OUTPUT POWER FOR LTE BAND 25 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	26055	1851.5	QPSK	1	0	25.18	20.38
				1	7	25.60	20.63
				1	14	25.32	20.52
				8	0	25.52	19.76
				8	4	24.86	19.64
				8	7	24.86	19.64
				15	0	24.77	19.60
			16QAM	1	0	25.22	19.45
				1	7	25.20	19.41
				1	14	25.00	19.33
				8	0	25.15	18.58
				8	4	24.53	18.69
				8	7	24.47	18.62
				15	0	24.66	18.67
3.0	26365	1882.5	QPSK	1	0	25.32	20.30
				1	7	25.43	20.43
				1	14	25.22	20.42
				8	0	25.55	19.68
				8	4	24.82	19.51
				8	7	24.66	19.47
				15	0	24.77	19.56
			16QAM	1	0	25.05	19.30
				1	7	25.06	19.29
				1	14	24.92	19.28
				8	0	25.05	18.53
				8	4	24.47	18.51
				8	7	24.37	18.49
				15	0	24.54	18.58
3.0	26675	1913.5	QPSK	1	0	25.54	20.65
				1	7	25.73	20.78
				1	14	25.62	**20.83**
				8	0	**25.82**	19.98
				8	4	25.14	19.81
				8	7	25.16	19.94
				15	0	25.16	19.96
			16QAM	1	0	**25.75**	**19.84**
				1	7	25.41	19.64
				1	14	25.32	19.65
				8	0	25.38	18.98
				8	4	24.91	18.88
				8	7	25.04	19.01
				15	0	24.97	19.03

UAT OUTPUT POWER FOR LTE BAND 25 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	26065	1852.5	QPSK	1	0	25.23	20.36
				1	12	25.34	20.53
				1	24	25.16	20.49
				12	0	25.26	19.69
				12	6	24.89	19.58
				12	11	24.67	19.54
				25	0	24.72	19.53
			16QAM	1	0	25.26	19.48
				1	12	25.34	19.70
				1	24	25.29	19.71
				12	0	25.31	18.79
				12	6	24.67	18.62
				12	11	24.56	18.61
				25	0	24.56	18.58
5.0	26365	1882.5	QPSK	1	0	25.24	20.29
				1	12	25.18	20.38
				1	24	25.16	20.51
				12	0	25.23	19.67
				12	6	24.78	19.50
				12	11	24.54	19.45
				25	0	24.75	19.57
			16QAM	1	0	24.99	19.40
				1	12	25.22	19.61
				1	24	25.30	19.71
				12	0	25.29	18.64
				12	6	24.52	18.47
				12	11	24.41	18.44
				25	0	24.47	18.53
5.0	26665	1912.5	QPSK	1	0	25.44	20.54
				1	12	25.40	20.66
				1	24	25.42	**20.73**
				12	0	**25.61**	19.94
				12	6	25.06	19.77
				12	11	24.93	19.81
				25	0	25.08	19.92
			16QAM	1	0	25.54	19.72
				1	12	25.45	19.89
				1	24	25.52	**19.93**
				12	0	**25.70**	18.99
				12	6	24.89	18.82
				12	11	24.74	18.80
				25	0	24.93	18.96

UAT OUTPUT POWER FOR LTE BAND 25 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	26090	1855.0	QPSK	1	0	25.06	20.50
				1	24	25.44	20.60
				1	49	25.34	20.56
				25	0	25.37	19.78
				25	12	24.94	19.65
				25	24	24.82	19.62
				50	0	24.88	19.66
			16QAM	1	0	25.19	19.52
				1	24	25.05	19.35
				1	49	24.89	19.34
				25	0	24.95	18.59
				25	12	24.74	18.59
				25	24	24.66	18.62
				50	0	24.75	18.65
10.0	26365	1882.5	QPSK	1	0	25.61	20.31
				1	24	25.30	20.47
				1	49	25.21	20.40
				25	0	25.22	19.66
				25	12	24.71	19.47
				25	24	24.71	19.44
				50	0	24.73	19.54
			16QAM	1	0	25.07	19.28
				1	24	24.92	19.29
				1	49	24.72	19.16
				25	0	24.86	18.50
				25	12	24.58	18.44
				25	24	24.43	18.42
				50	0	24.71	18.57
10.0	26640	1910.0	QPSK	1	0	**25.83**	20.42
				1	24	25.39	**20.62**
				1	49	25.29	20.59
				25	0	25.58	19.87
				25	12	24.96	19.70
				25	24	24.96	19.71
				50	0	24.98	19.70
			16QAM	1	0	**25.80**	**19.55**
				1	24	25.04	19.48
				1	49	24.87	19.38
				25	0	25.21	18.81
				25	12	24.88	18.77
				25	24	24.74	18.69
				50	0	24.88	18.69

UAT OUTPUT POWER FOR LTE BAND 25 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
15.0	26115	1857.5	QPSK	1	0	25.56	20.54
				1	37	25.45	20.58
				1	74	25.34	20.63
				36	0	25.30	19.72
				36	16	24.97	19.69
				36	35	24.84	19.72
				75	0	24.85	19.71
			16-QAM	1	0	25.60	19.57
				1	37	25.08	19.40
				1	74	24.94	19.38
				36	0	24.88	18.51
				36	16	24.96	18.69
				36	35	24.84	18.74
				75	0	24.87	18.71
15.0	26365	1882.5	QPSK	1	0	25.35	20.45
				1	37	25.40	20.53
				1	74	25.23	20.50
				36	0	25.27	19.74
				36	16	24.97	19.59
				36	35	24.67	19.55
				75	0	24.75	19.58
			16-QAM	1	0	25.47	19.45
				1	37	25.02	19.36
				1	74	24.83	19.28
				36	0	24.84	18.53
				36	16	24.89	18.63
				36	35	24.57	18.53
				75	0	24.74	18.60
15.0	26615	1907.5	QPSK	1	0	**25.70**	20.58
				1	37	25.46	20.62
				1	74	25.26	**20.65**
				36	0	25.69	19.99
				36	16	25.12	19.82
				36	35	24.93	19.76
				75	0	25.08	19.79
			16-QAM	1	0	**25.86**	**19.62**
				1	37	25.08	19.45
				1	74	24.91	19.44
				36	0	25.26	18.86
				36	16	25.14	18.88
				36	35	24.84	18.82
				75	0	25.00	18.79

UAT OUTPUT POWER FOR LTE BAND 25 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
20.0	26140	1860.0	QPSK	1	0	25.20	**21.00**
				1	49	25.60	20.72
				1	99	25.47	20.75
				50	0	25.60	19.93
				50	24	25.09	19.72
				50	49	24.90	19.73
				100	0	25.02	19.72
			16-QAM	1	0	24.97	19.94
				1	49	25.28	19.87
				1	99	25.03	19.83
				50	0	25.23	18.76
				50	24	24.95	18.77
				50	49	24.75	18.72
				100	0	24.86	18.71
20.0	26365	1882.5	QPSK	1	0	24.85	20.98
				1	49	25.57	20.65
				1	99	25.34	20.55
				50	0	25.34	19.75
				50	24	25.12	19.66
				50	49	24.67	19.64
				100	0	24.98	19.66
			16-QAM	1	0	24.92	**19.90**
				1	49	25.29	19.76
				1	99	24.91	19.66
				50	0	25.03	18.65
				50	24	24.87	18.61
				50	49	24.58	18.57
				100	0	24.75	18.56
20.0	26590	1905.0	QPSK	1	0	25.53	20.88
				1	49	25.60	20.69
				1	99	25.62	20.86
				50	0	**25.82**	20.00
				50	24	25.38	19.83
				50	49	25.08	19.83
				100	0	25.36	19.83
			16-QAM	1	0	**26.12**	19.59
				1	49	25.35	19.56
				1	99	25.22	19.57
				50	0	25.49	18.85
				50	24	25.21	18.70
				50	49	25.03	18.69
				100	0	25.32	18.78

7.7. LTE BAND 26

LAT OUTPUT POWER FOR LTE BAND 26 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	26705	820.3	QPSK	1	0	27.82	22.86
				1	7	**28.36**	**23.00**
				1	14	28.13	22.93
				8	0	28.26	22.18
				8	4	27.87	22.08
				8	7	27.78	22.03
				15	0	27.78	22.02
			16QAM	1	0	27.95	21.92
				1	7	**28.03**	21.92
				1	14	27.66	21.80
				8	0	27.96	21.09
				8	4	27.56	21.14
				8	7	27.39	21.14
				15	0	27.42	21.15
3.0	26865	821.3	QPSK	1	0	28.19	22.88
				1	7	28.35	22.99
				1	14	27.93	22.94
				8	0	28.02	22.19
				8	4	27.85	22.08
				8	7	27.66	22.05
				15	0	27.66	22.03
			16QAM	1	0	28.00	**22.20**
				1	7	27.84	22.05
				1	14	27.77	21.99
				8	0	27.96	21.08
				8	4	27.51	21.19
				8	7	27.26	21.13
				15	0	27.45	21.15
3.0	27025	822.3	QPSK	1	0	27.93	22.81
				1	7	28.34	22.99
				1	14	28.03	22.92
				8	0	28.29	22.16
				8	4	27.62	22.09
				8	7	27.48	22.01
				15	0	27.56	22.03
			16QAM	1	0	28.02	21.92
				1	7	27.90	21.90
				1	14	27.73	21.81
				8	0	27.92	21.06
				8	4	27.34	21.12
				8	7	27.26	21.13
				15	0	27.35	21.12

LAT OUTPUT POWER FOR LTE BAND 26 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	26865	821.3	QPSK	1	0	28.20	23.03
				1	12	**28.25**	22.97
				1	24	27.94	**23.13**
				12	0	28.00	22.14
				12	6	27.79	22.09
				12	11	27.64	22.04
				25	0	27.61	22.00
			16QAM	1	0	28.24	22.24
				1	12	**28.36**	**22.27**
				1	24	28.09	22.27
				12	0	28.08	21.15
				12	6	27.55	21.07
				12	11	27.42	21.09
				25	0	27.48	21.07

LAT OUTPUT POWER FOR LTE BAND 26 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	26740	819.0	QPSK	1	0	27.69	23.29
				1	24	27.48	23.04
				1	49	27.00	**23.50**
				25	0	**28.34**	22.45
				25	12	27.39	22.46
				25	24	28.10	22.38
				50	0	27.41	22.22
			16QAM	1	0	27.20	22.48
				1	24	27.10	**22.49**
				1	49	27.26	22.42
				25	0	27.31	21.43
				25	12	27.36	21.41
				25	24	27.39	21.38
				50	0	**27.43**	21.40

UAT OUTPUT POWER FOR LTE BAND 26 (3.0 MHZ)

Bandwidth	UL Channel	Frequency	Modulation	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
3.0	26705	820.3	QPSK	1	0	27.72	**23.12**
				1	7	**28.25**	22.98
				1	14	27.98	23.05
				8	0	28.14	22.07
				8	4	27.49	22.09
				8	7	27.48	22.08
				15	0	27.60	22.03
			16QAM	1	0	27.69	21.91
				1	7	27.83	21.81
				1	14	27.48	21.87
				8	0	27.77	21.14
				8	4	27.37	21.12
				8	7	27.24	21.12
				15	0	27.28	21.11
3.0	26865	821.3	QPSK	1	0	27.94	23.05
				1	7	28.23	23.01
				1	14	27.99	23.06
				8	0	27.87	22.08
				8	4	27.54	22.07
				8	7	27.52	22.05
				15	0	27.56	22.07
			16QAM	1	0	27.69	**21.93**
				1	7	27.82	21.82
				1	14	27.60	21.87
				8	0	27.80	21.13
				8	4	27.40	21.12
				8	7	27.15	21.16
				15	0	27.21	21.10
3.0	27025	822.3	QPSK	1	0	27.77	23.10
				1	7	28.16	22.93
				1	14	27.86	23.02
				8	0	27.90	22.08
				8	4	27.53	22.02
				8	7	27.39	22.07
				15	0	27.46	22.04
			16QAM	1	0	**27.88**	21.91
				1	7	27.67	21.82
				1	14	27.58	21.88
				8	0	27.74	21.17
				8	4	27.15	21.13
				8	7	27.05	21.12
				15	0	27.12	21.11

UAT OUTPUT POWER FOR LTE BAND 26 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
5.0	26865	821.3	QPSK	1	0	28.03	**23.05**
				1	12	**28.17**	22.99
				1	24	27.94	23.00
				12	0	27.84	22.03
				12	6	27.63	22.07
				12	11	27.48	22.04
				25	0	27.54	22.02
			16QAM	1	0	28.07	**22.24**
				1	12	**28.20**	22.22
				1	24	27.95	22.21
				12	0	27.98	21.07
				12	6	27.38	21.04
				12	11	27.21	21.07
				25	0	27.26	21.21

UAT OUTPUT POWER FOR LTE BAND 26 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
10.0	26740	819.0	QPSK	1	0	**27.78**	**23.36**
				1	24	27.44	23.04
				1	49	27.49	23.10
				25	0	27.42	22.50
				25	12	27.43	22.42
				25	24	27.54	22.41
				50	0	27.75	22.04
			16QAM	1	0	27.06	**22.20**
				1	24	27.00	22.18
				1	49	27.24	22.15
				25	0	27.20	21.50
				25	12	**27.39**	21.43
				25	24	27.21	21.37
				50	0	27.30	21.21

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

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26

RESULTS

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 2	1.4 MHz BAND QPSK	6/0	1880	1.0869	1.195
	1.4 MHz BAND 16QAM	6/0	1880	1.0871	1.177
	3.0 MHz BAND QPSK	15/0	1880	2.7011	2.817
	3.0 MHz BAND 16QAM	15/0	1880	2.6868	2.869
	5.0 MHz BAND QPSK	25/0	1880	4.4182	4.690
	5.0 MHz BAND 16QAM	25/0	1880	4.471	4.628
	10.0 MHz BAND QPSK	50/0	1880	8.8308	9.426
	10.0 MHz BAND 16QAM	50/0	1880	8.8943	9.205
	15.0 MHz BAND QPSK	75/0	1880	13.441	13.763
	15.0 MHz BAND 16QAM	75/0	1880	13.2901	13.765
	20.0 MHz BAND QPSK	100/0	1880	17.7604	18.544
	20.0 MHz BAND 16QAM	100/0	1880	17.7141	18.327

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 4	1.4 MHz BAND QPSK	6/0	1732.5	1.0757	1.205
	1.4 MHz BAND 16QAM	6/0	1732.5	1.0802	1.225
	3.0 MHz BAND QPSK	15/0	1732.5	2.6729	2.879
	3.0 MHz BAND 16QAM	15/0	1732.5	2.6859	2.757
	5.0 MHz BAND QPSK	25/0	1732.5	4.4812	4.77
	5.0 MHz BAND 16QAM	25/0	1732.5	4.4668	4.612
	10.0 MHz BAND QPSK	50/0	1732.5	8.9491	9.383
	10.0 MHz BAND 16QAM	50/0	1732.5	8.8000	9.22
	15.0 MHz BAND QPSK	75/0	1732.5	13.1414	14.026
	15.0 MHz BAND 16QAM	75/0	1732.5	13.4243	13.707
	20.0 MHz BAND QPSK	100/0	1732.5	17.7666	18.247
	20.0 MHz BAND 16QAM	100/0	1732.5	17.878	18.357

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 5	1.4 MHz BAND QPSK	6/0	836.5	1.0843	1.216
	1.4 MHz BAND 16QAM	6/0	836.5	1.0933	1.144
	3.0 MHz BAND QPSK	15/0	836.5	2.6737	2.787
	3.0 MHz BAND 16QAM	15/0	836.5	2.6815	2.798
	5.0 MHz BAND QPSK	25/0	836.5	4.4814	4.584
	5.0 MHz BAND 16QAM	25/0	836.5	4.4379	4.593
	10.0 MHz BAND QPSK	50/0	836.5	8.8566	9.184
	10.0 MHz BAND 16QAM	50/0	836.5	8.9035	9.37

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 13	5.0 MHz BAND QPSK	25/0	782	4.4023	4.589
	5.0 MHz BAND 16QAM	25/0	782	4.4400	4.696
	10.0 MHz BAND QPSK	50/0	782	8.8063	9.186
	10.0 MHz BAND 16QAM	50/0	782	8.919	9.175

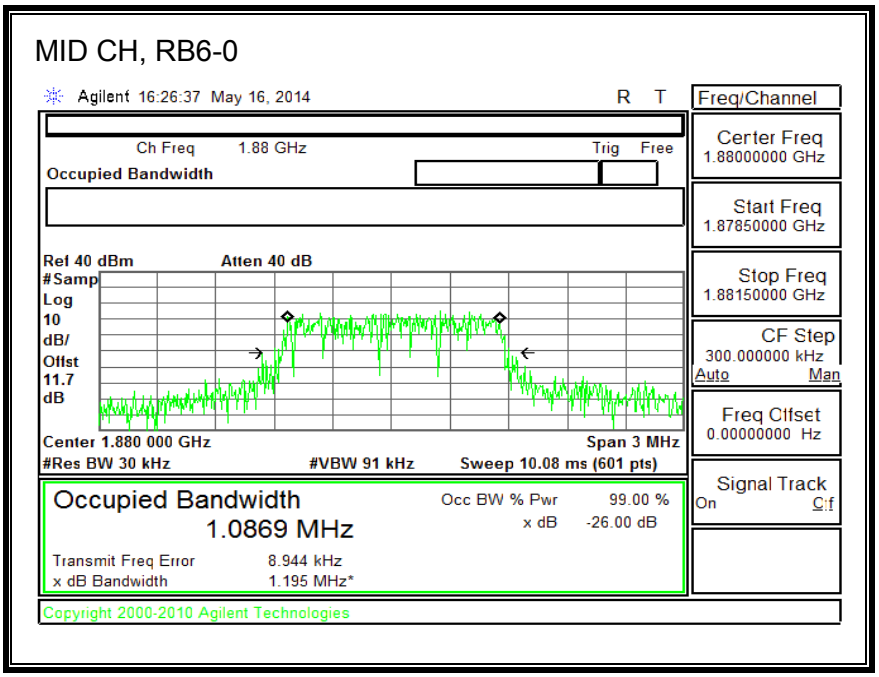
BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 17	5.0 MHz BAND QPSK	25/0	710	4.4295	4.607
	5.0 MHz BAND 16QAM	25/0	710	4.4549	4.636
	10.0 MHz BAND QPSK	50/0	710	8.894	9.191
	10.0 MHz BAND 16QAM	50/0	710	8.7374	9.092

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 25	1.4 MHz BAND QPSK	6/0	1882.5	1.0975	1.224
	1.4 MHz BAND 16QAM	6/0	1882.5	1.0834	1.168
	3.0 MHz BAND QPSK	15/0	1882.5	2.6826	2.802
	3.0 MHz BAND 16QAM	15/0	1882.5	2.6447	2.794
	5.0 MHz BAND QPSK	25/0	1882.5	4.4285	4.758
	5.0 MHz BAND 16QAM	25/0	1882.5	4.4400	4.616
	10.0 MHz BAND QPSK	50/0	1882.5	8.9562	9.196
	10.0 MHz BAND 16QAM	50/0	1882.5	8.9007	9.184
	15.0 MHz BAND QPSK	75/0	1882.5	13.2492	13.755
	15.0 MHz BAND 16QAM	75/0	1882.5	13.4092	13.766
	20.0 MHz BAND QPSK	100/0	1882.5	17.8531	18.41
	20.0 MHz BAND 16QAM	100/0	1882.5	17.8033	18.313

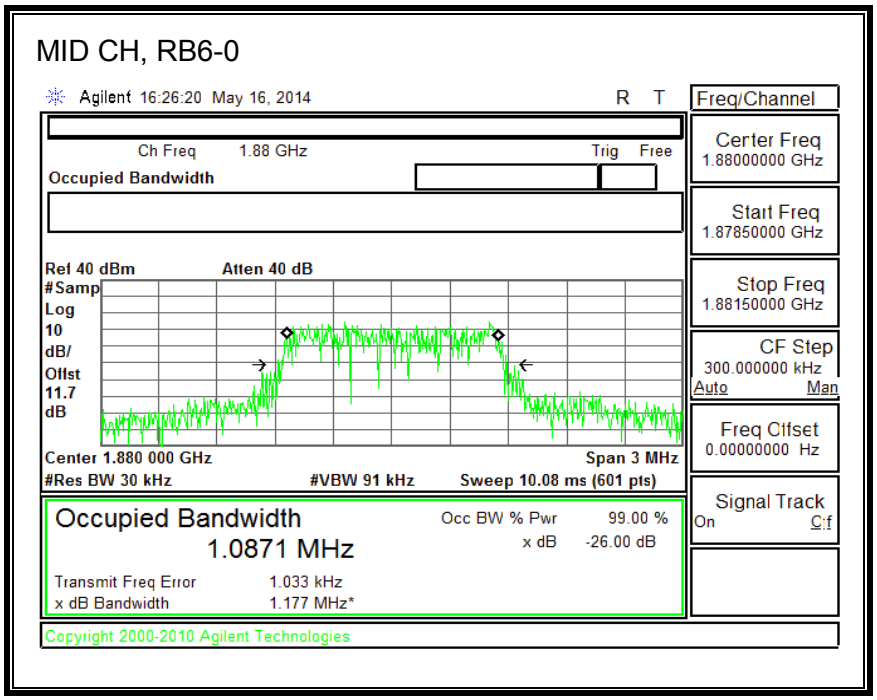
BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
BAND 26	3.0 MHz BAND QPSK	15/0	821.3	2.6822	2.793
	3.0 MHz BAND 16QAM	15/0	821.3	2.6700	2.873
	5.0 MHz BAND QPSK	25/0	821.3	4.4567	4.719
	5.0 MHz BAND 16QAM	25/0	821.3	4.4204	4.597
	10.0 MHz BAND QPSK	50/0	819	8.9182	9.336
	10.0 MHz BAND 16QAM	50/0	819	8.8739	9.331

8.1.1. LTE BAND 2

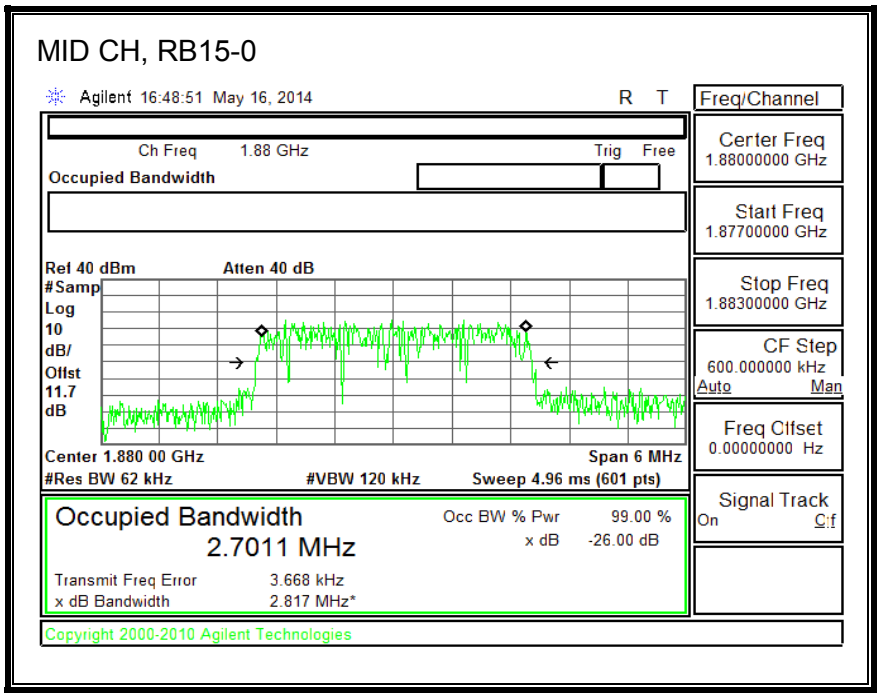
QPSK, (1.4 MHz BAND WIDTH)



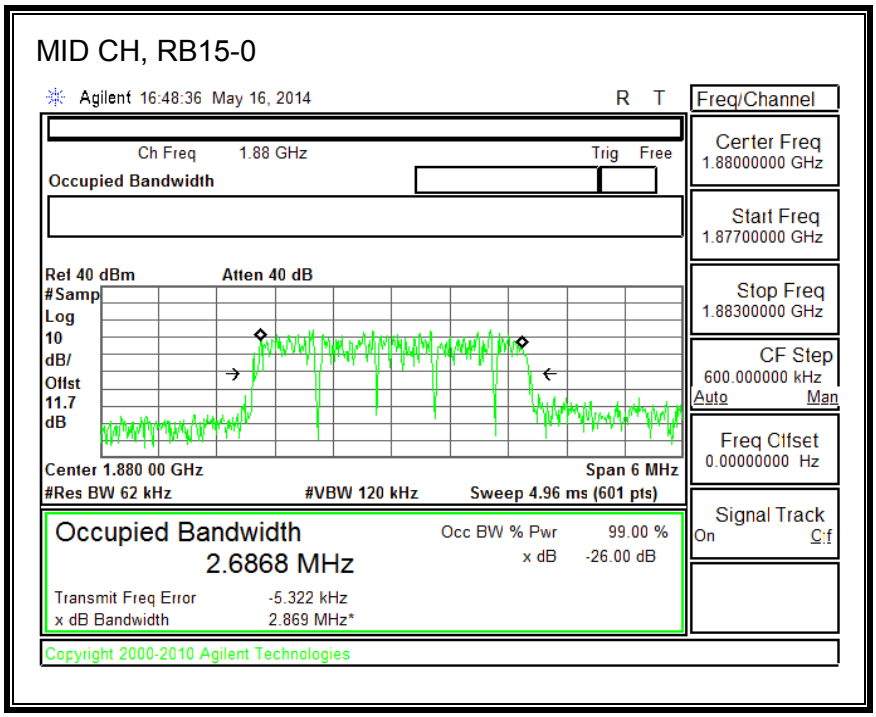
16QAM, (1.4 MHz BAND WIDTH)



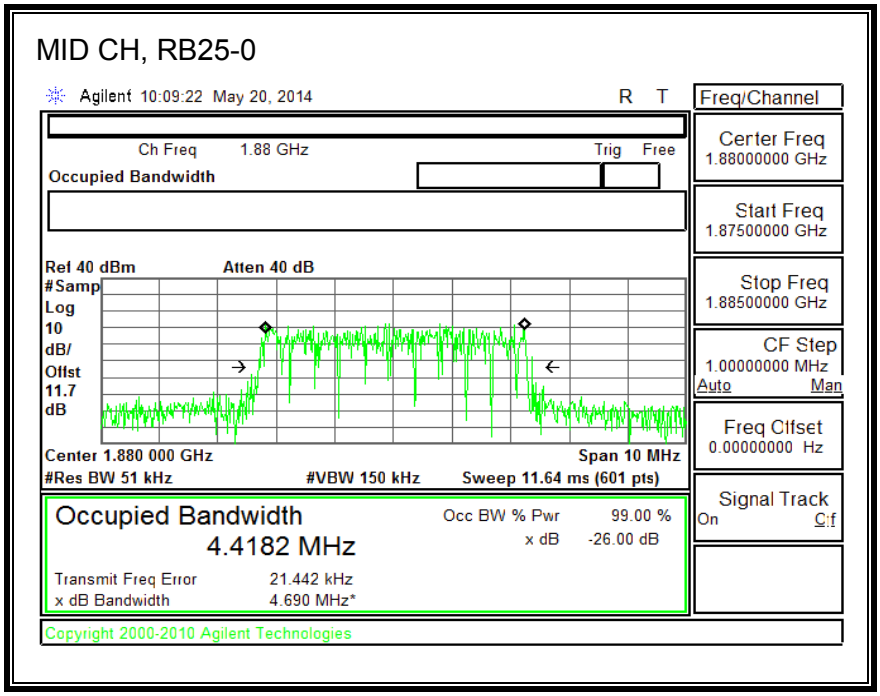
QPSK, (3.0 MHz BAND WIDTH)



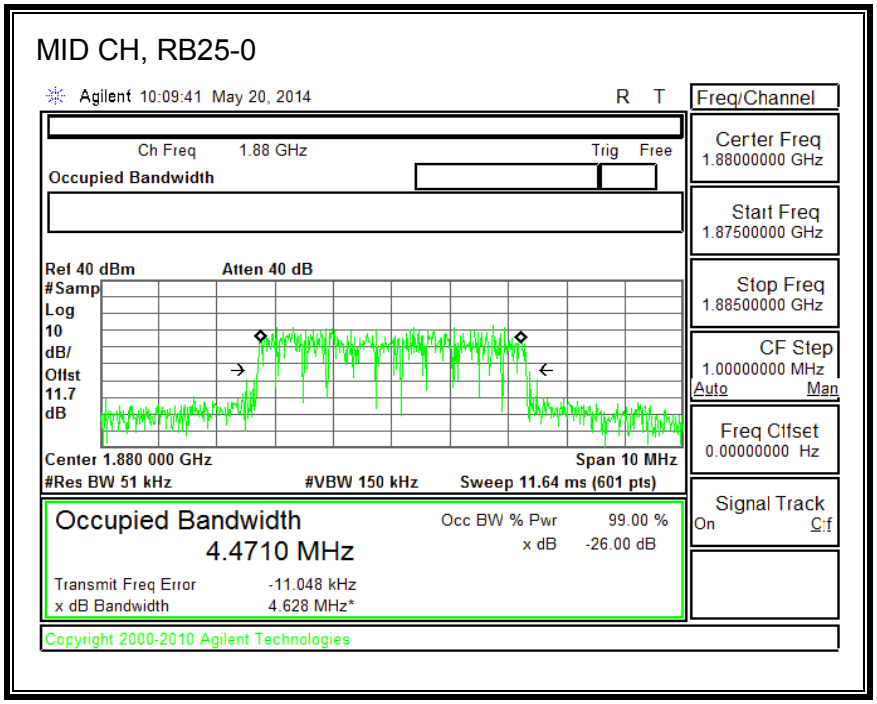
16QAM, (3.0 MHz BAND WIDTH)



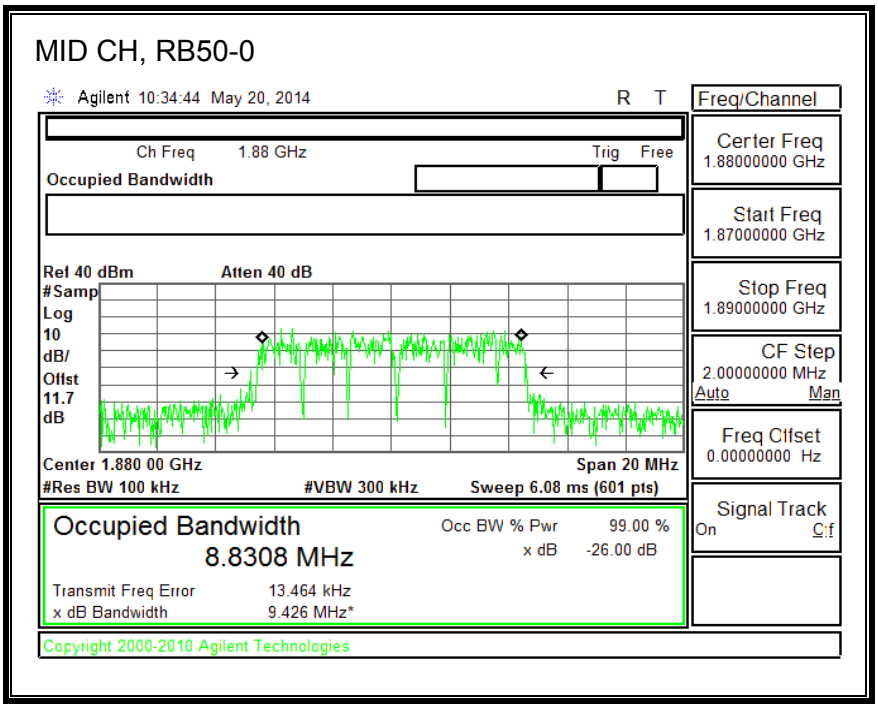
QPSK, (5.0 MHz BAND WIDTH)



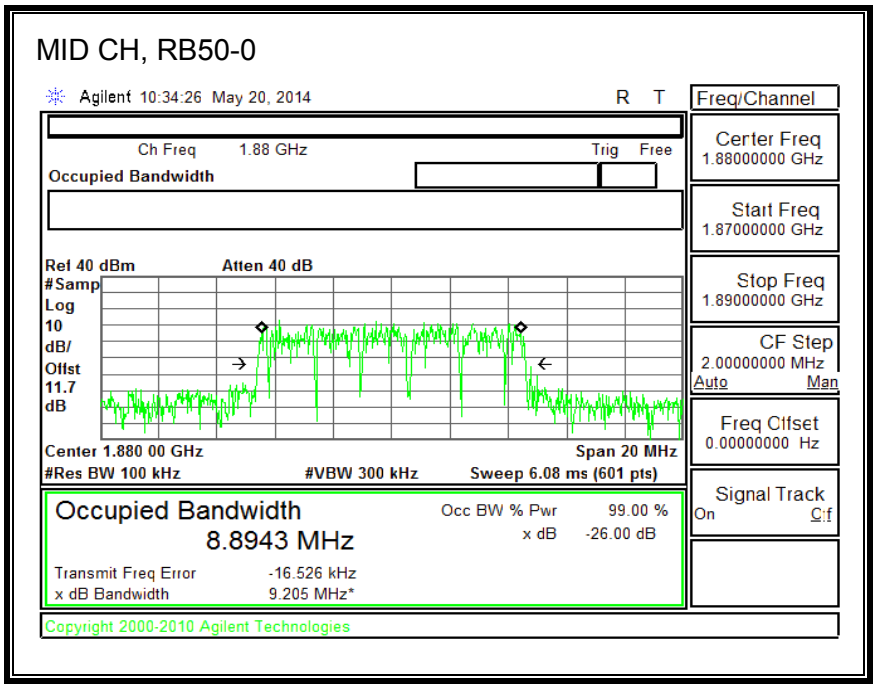
16QAM, (5.0 MHz BAND WIDTH)



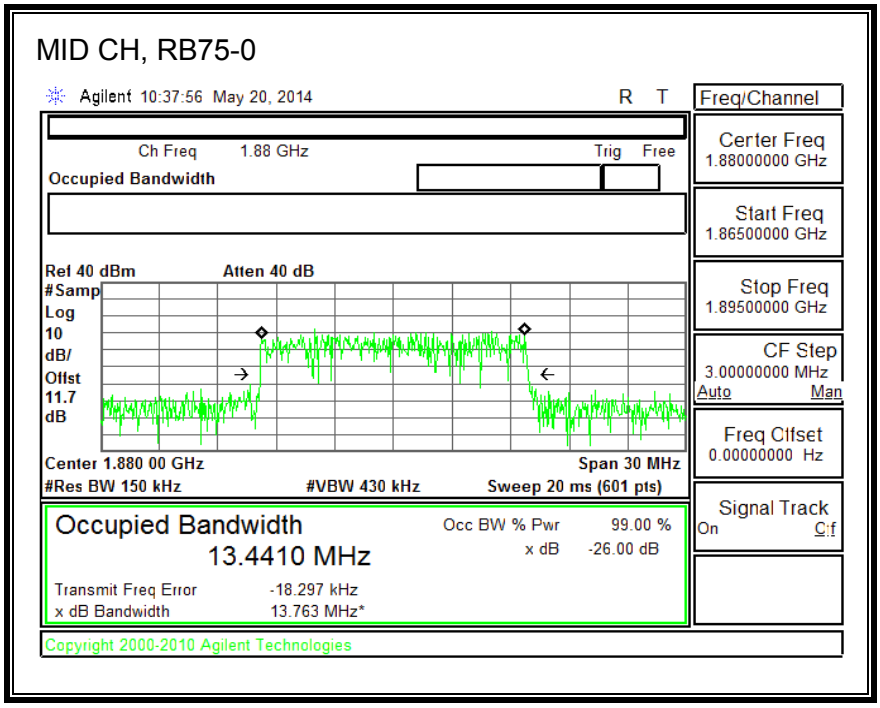
QPSK, (10.0 MHz BAND WIDTH)



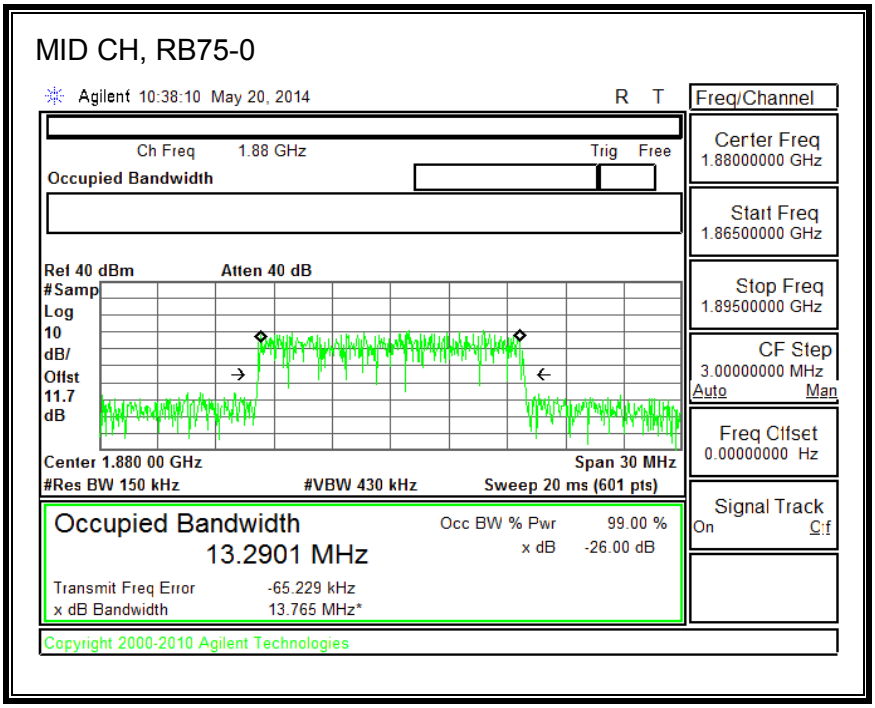
16QAM, (10.0 MHz BAND WIDTH)



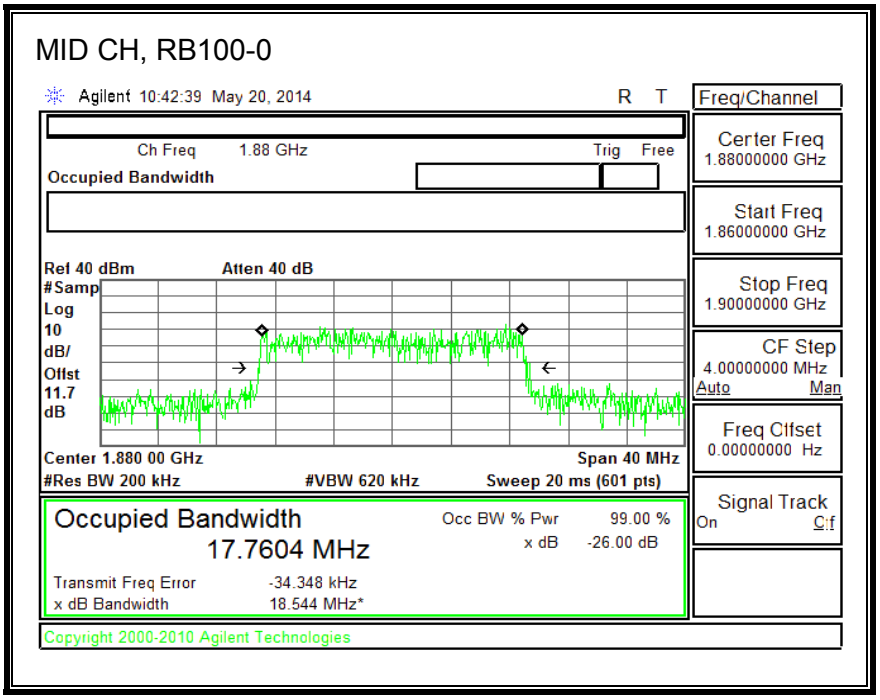
QPSK, (15.0 MHz BAND WIDTH)



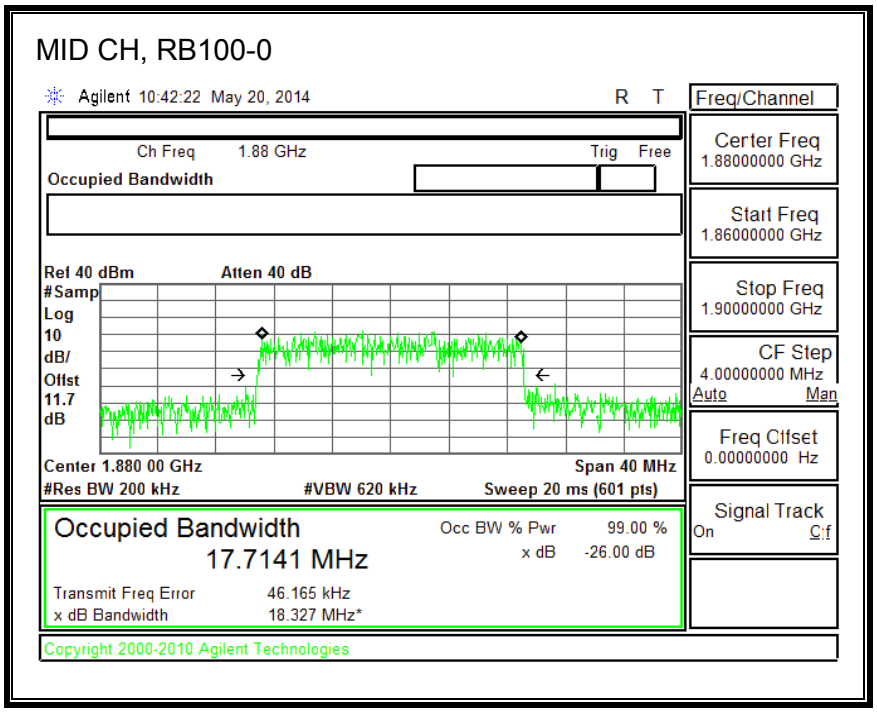
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

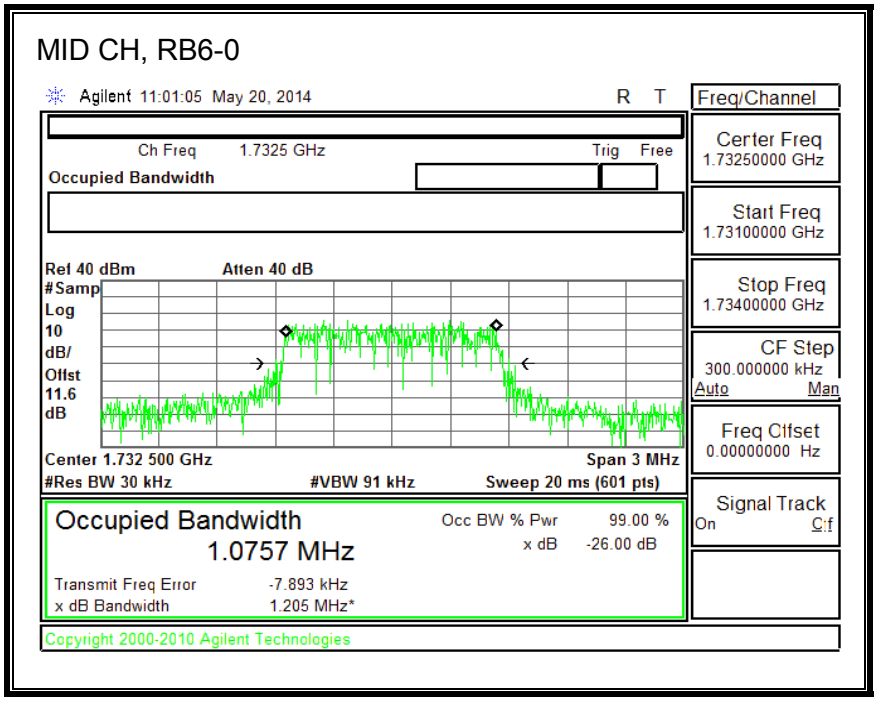


16QAM, (20.0 MHz BAND WIDTH)

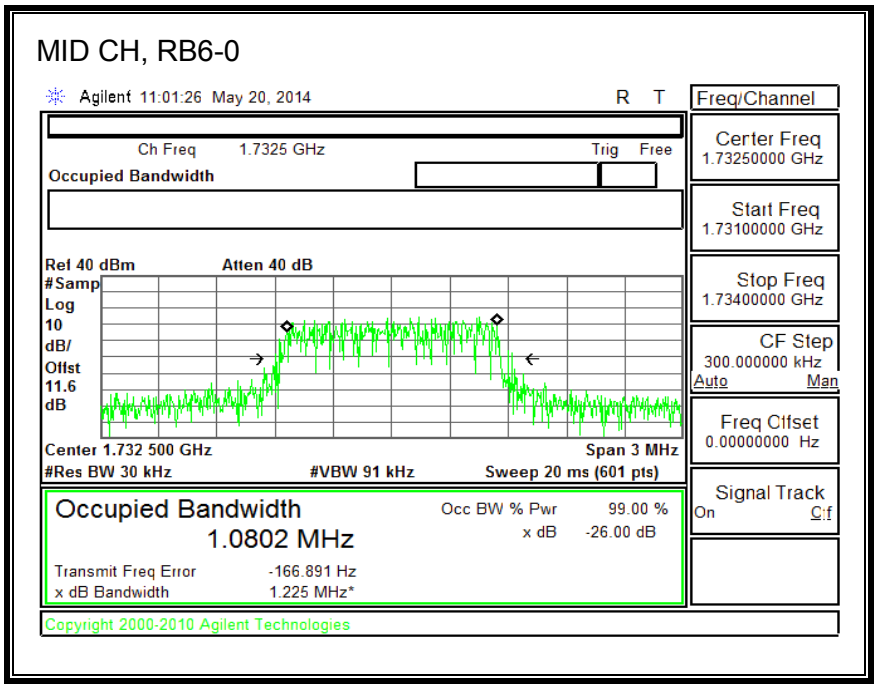


8.1.2. LTE BAND 4

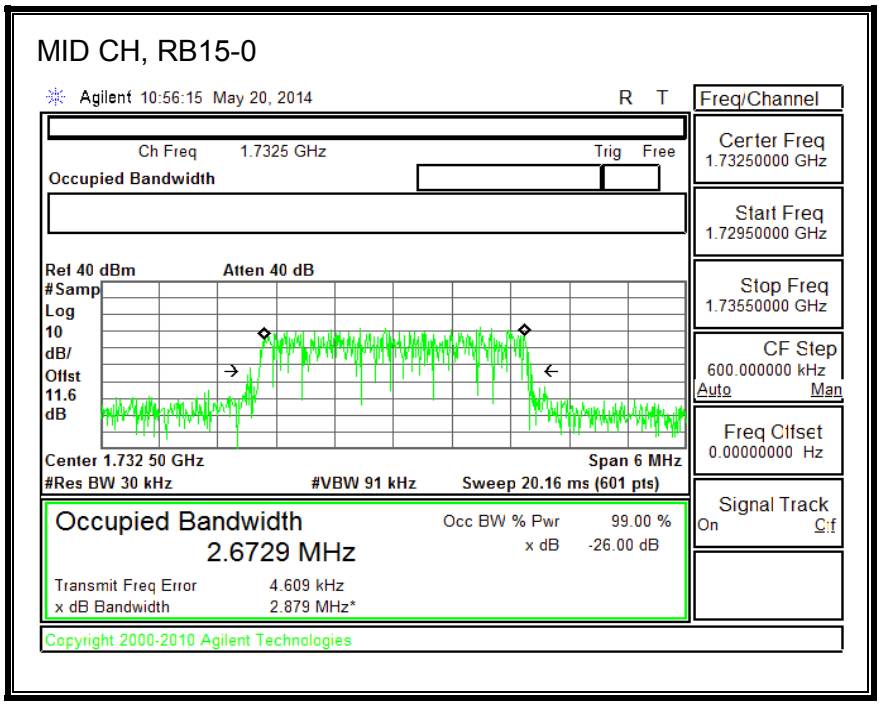
QPSK, (1.4 MHz BAND WIDTH)



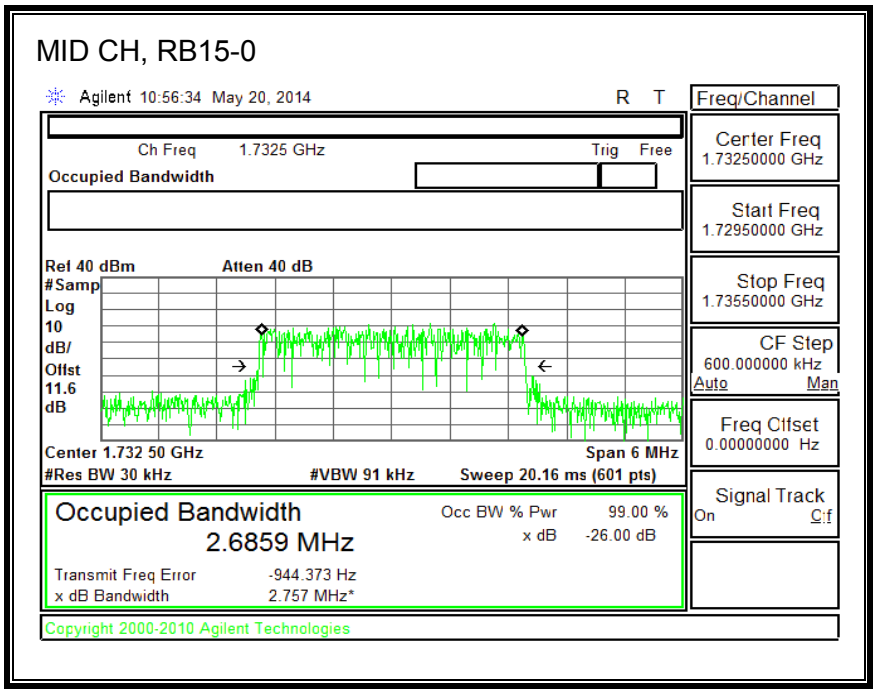
16QAM, (1.4 MHz BAND WIDTH)



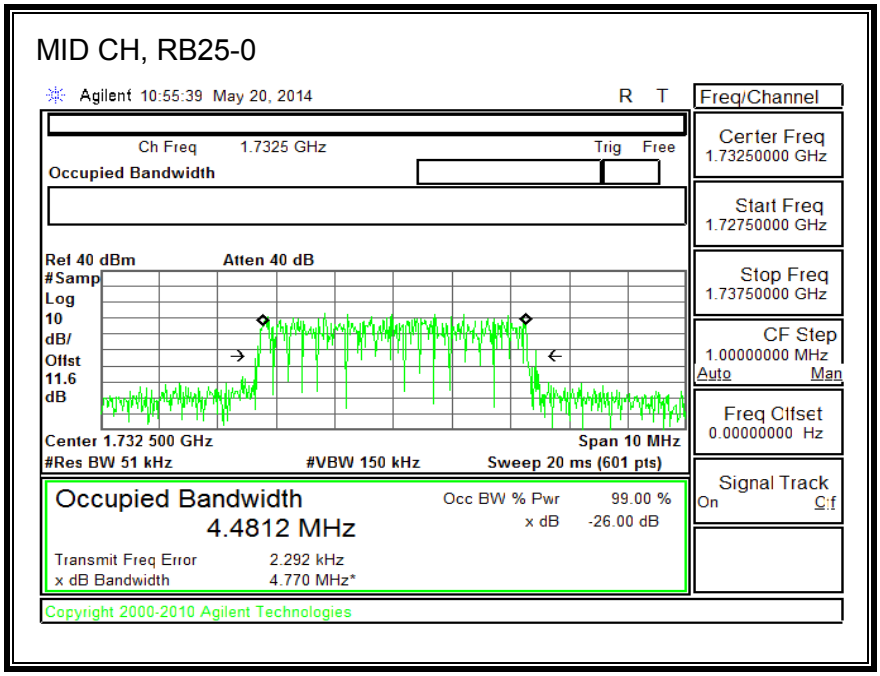
QPSK, (3.0 MHz BAND WIDTH)



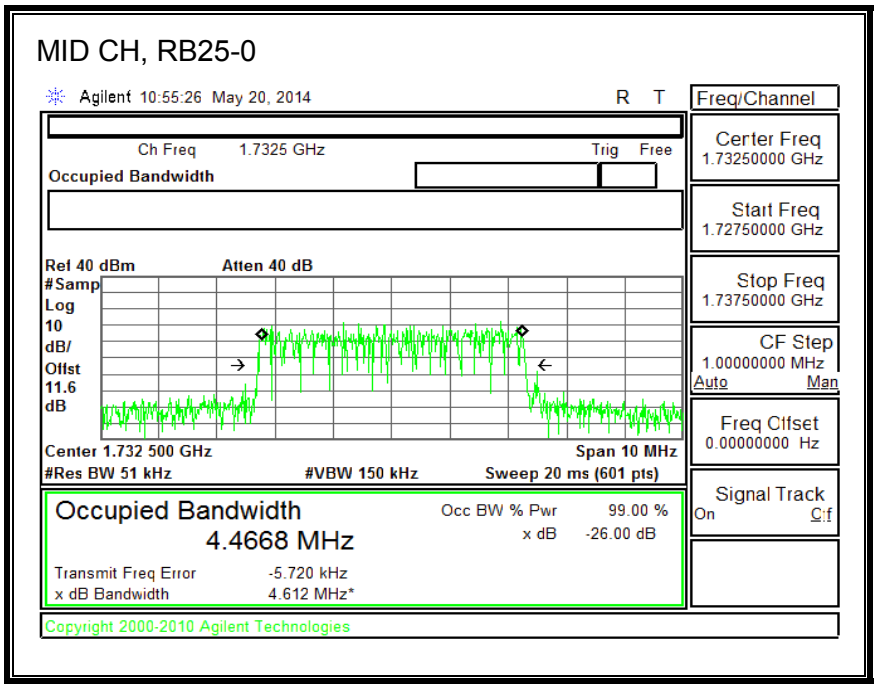
16QAM, (3.0 MHz BAND WIDTH)



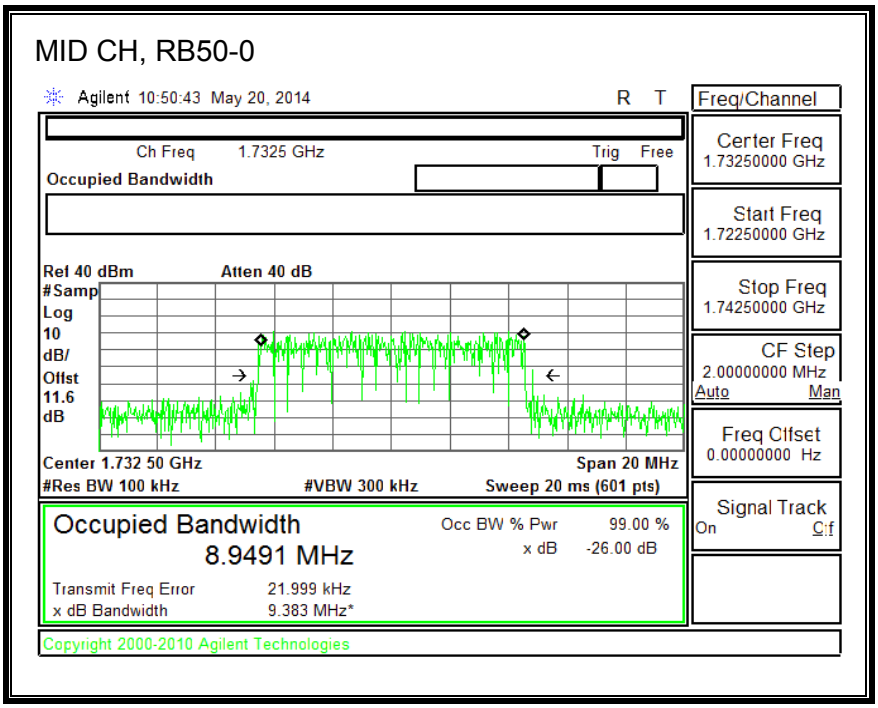
QPSK, (5.0 MHz BAND WIDTH)



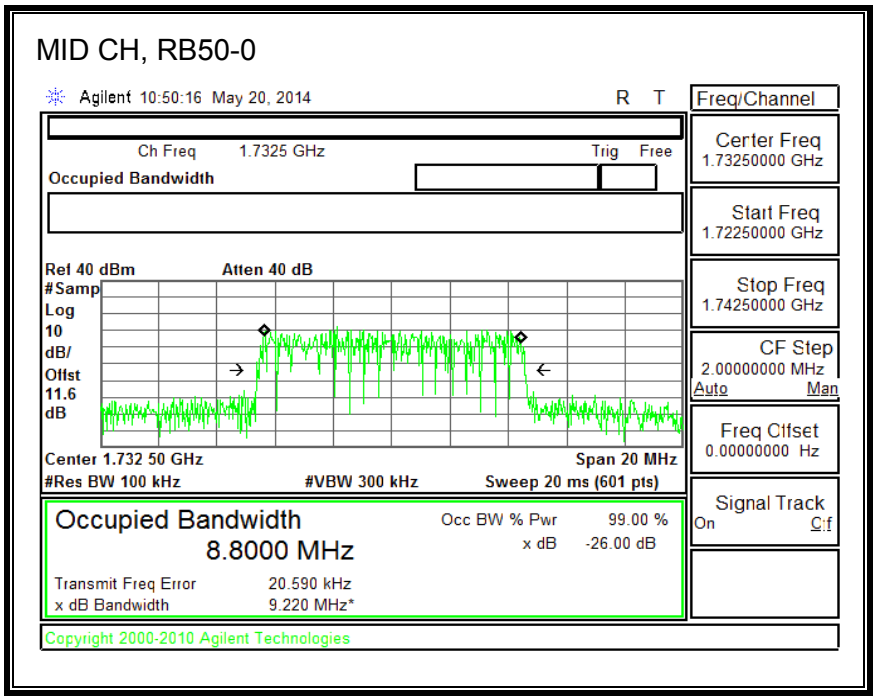
16QAM, (5.0 MHz BAND WIDTH)



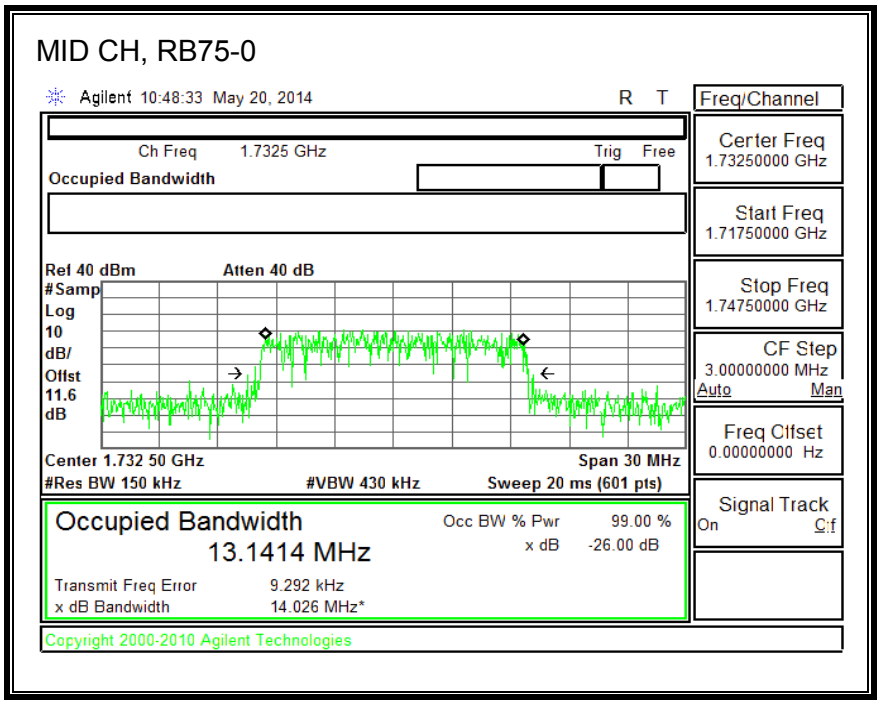
QPSK, (10.0 MHz BAND WIDTH)



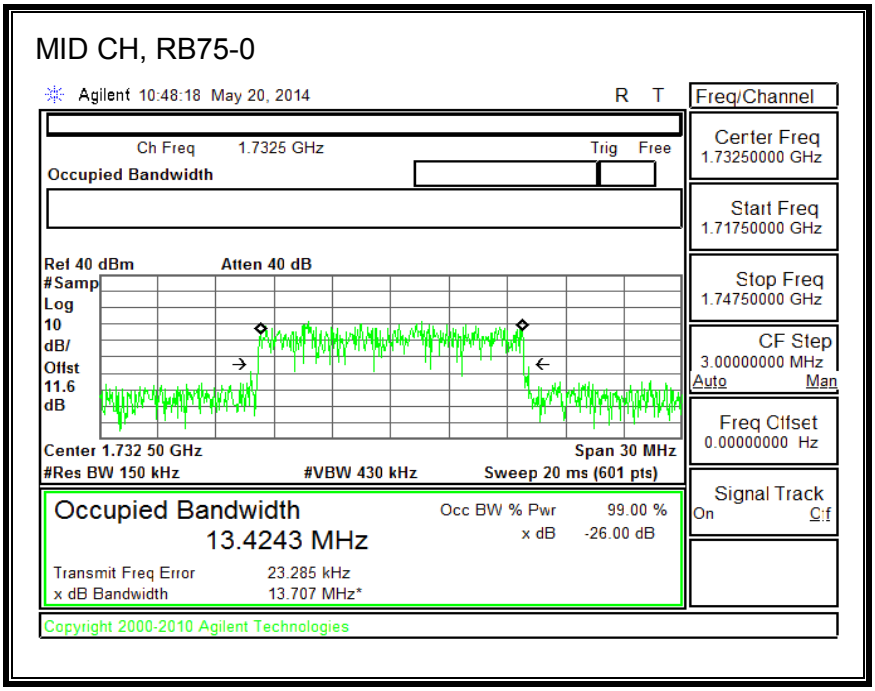
16QAM, (10.0 MHz BAND WIDTH)



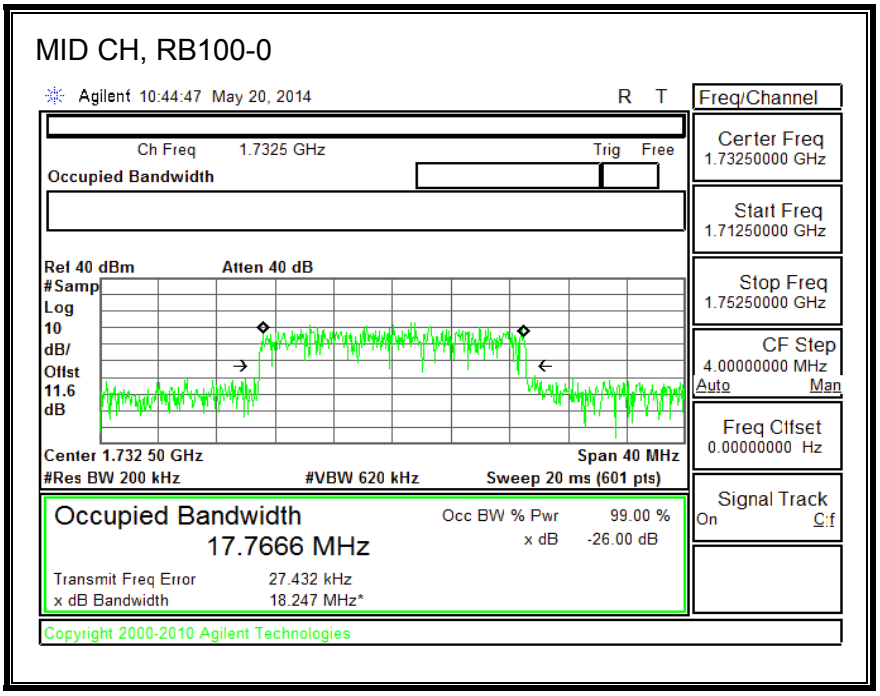
QPSK, (15.0 MHz BAND WIDTH)



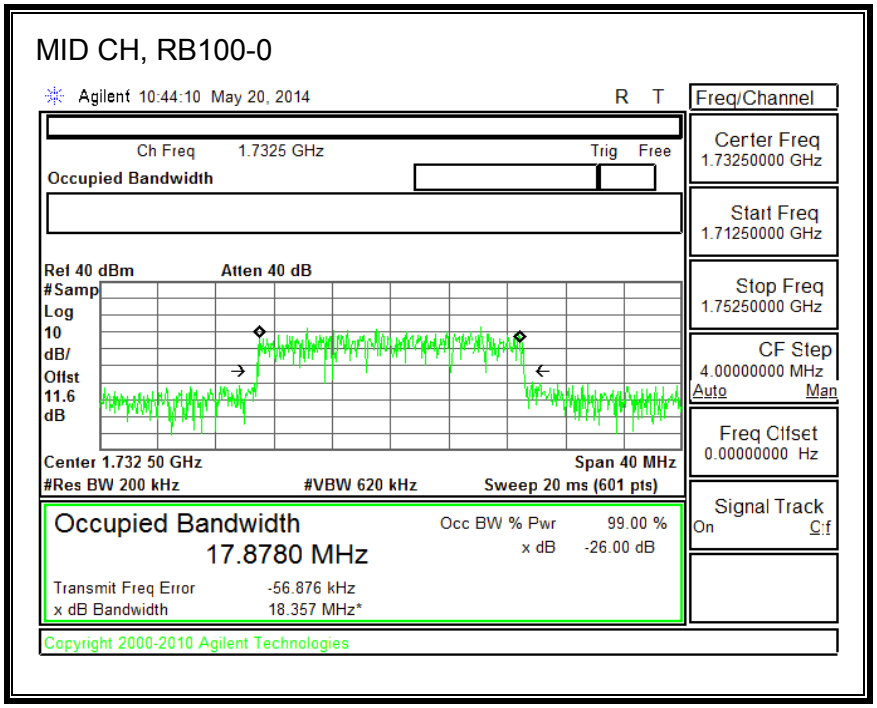
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

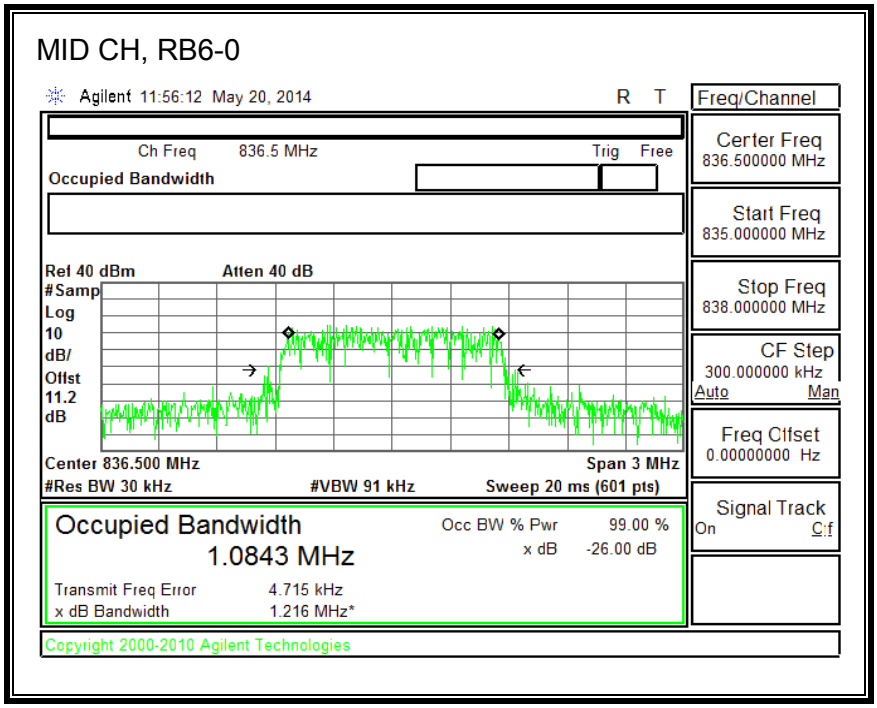


16QAM, (20.0 MHz BAND WIDTH)

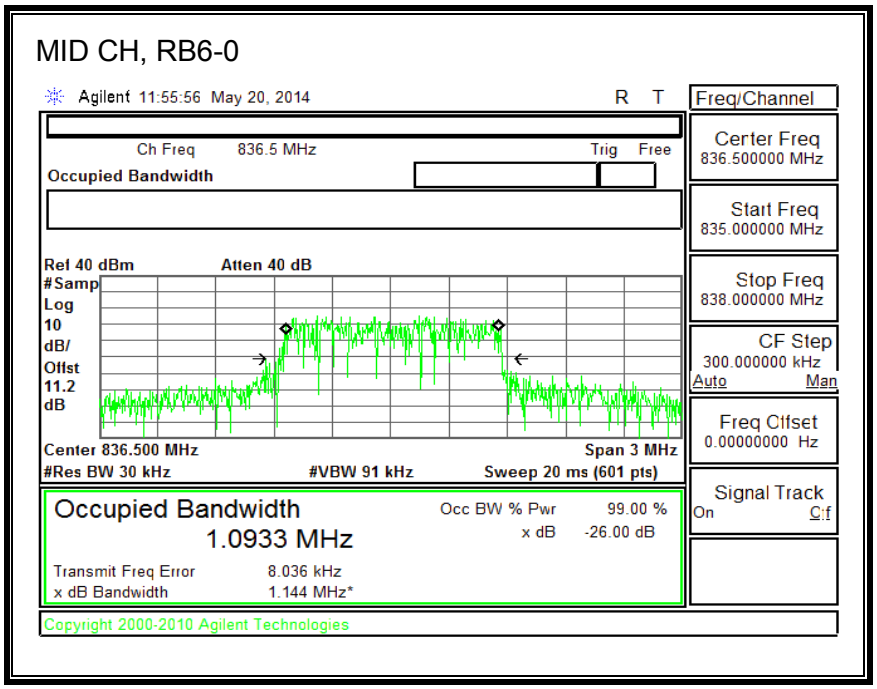


8.1.3. LTE BAND 5

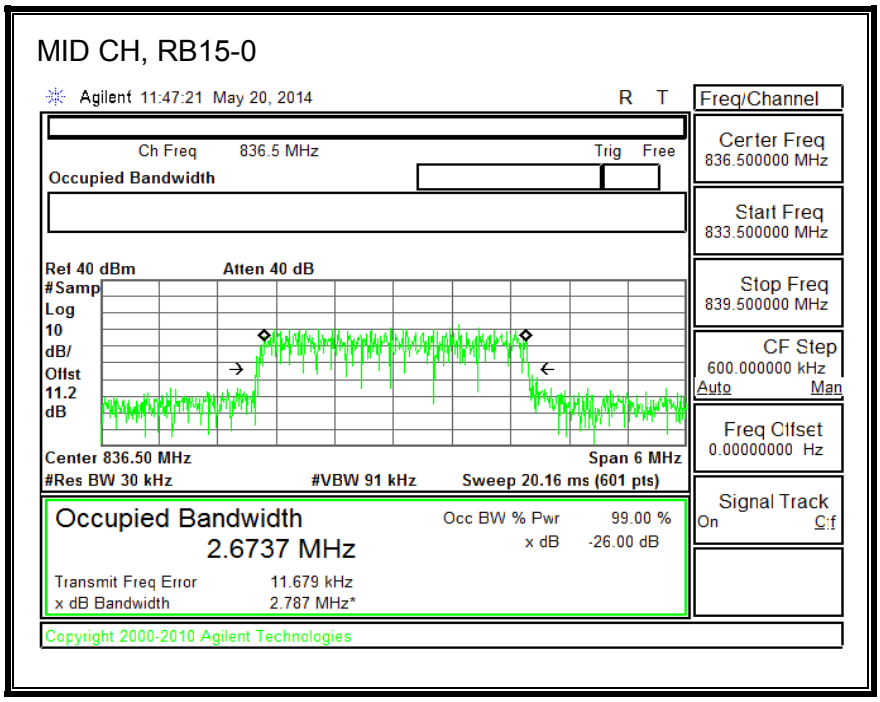
QPSK, (1.4 MHz BAND WIDTH)



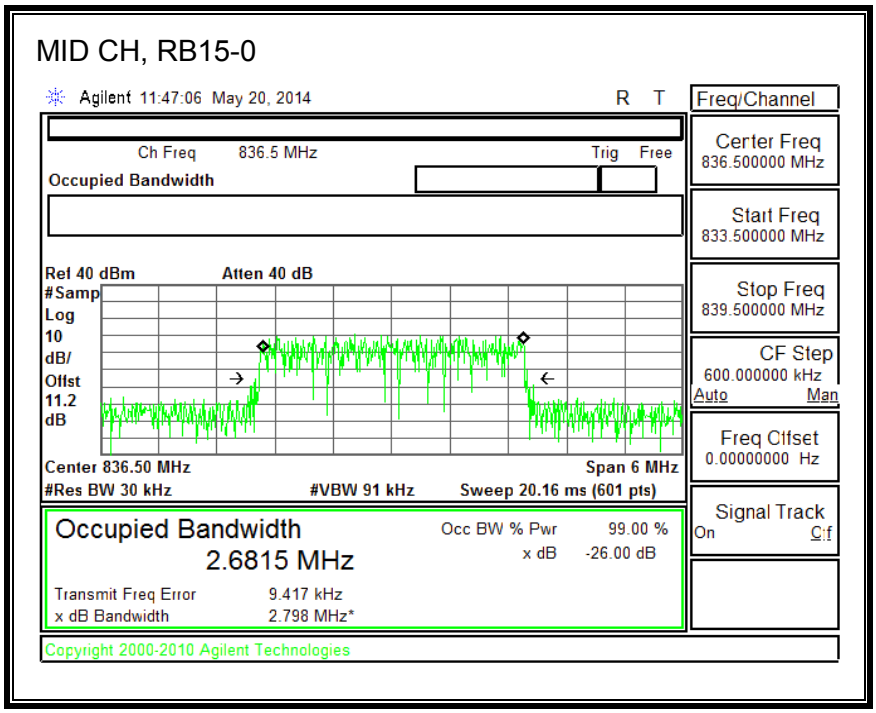
16QAM, (1.4 MHz BAND WIDTH)



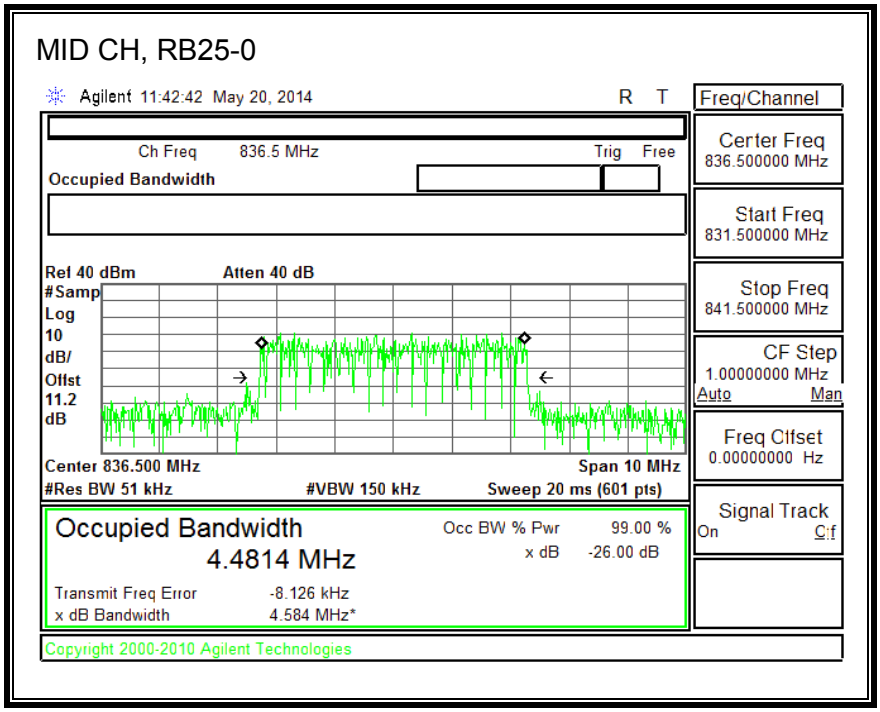
QPSK, (3.0 MHz BAND WIDTH)



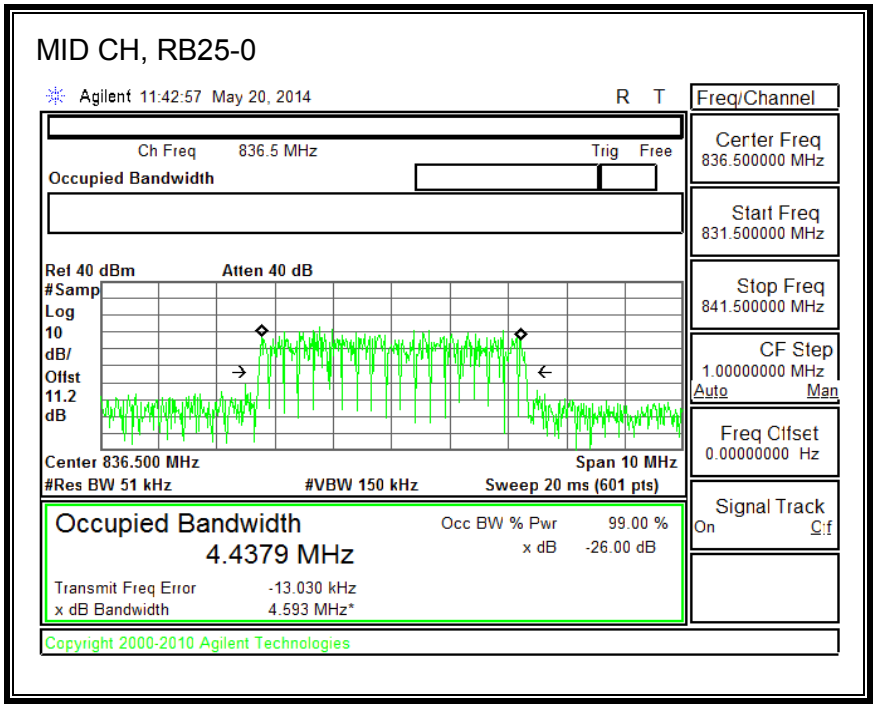
16QAM, (3.0 MHz BAND WIDTH)



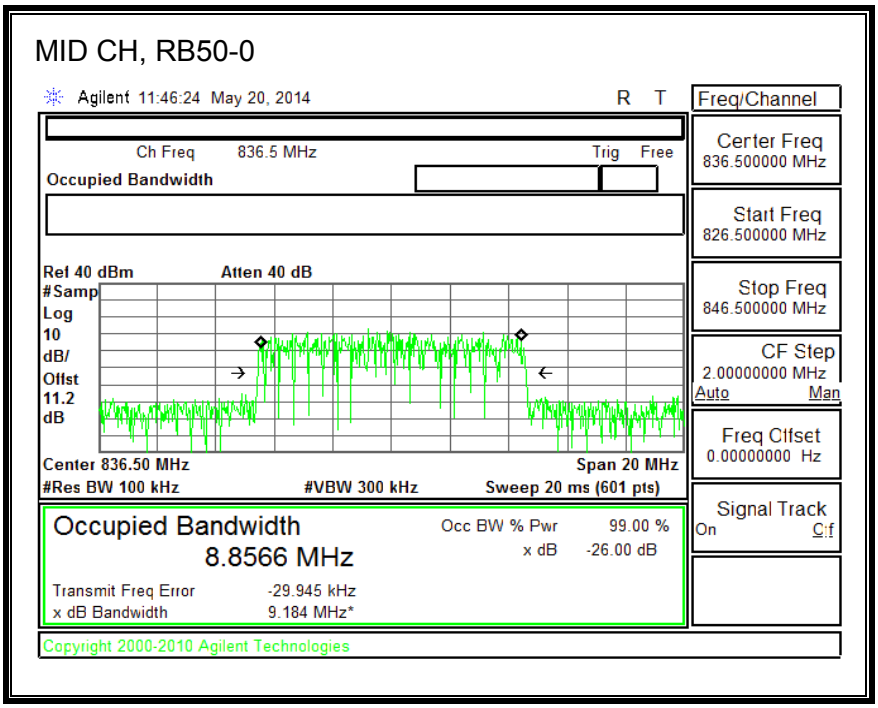
QPSK, (5.0 MHz BAND WIDTH)



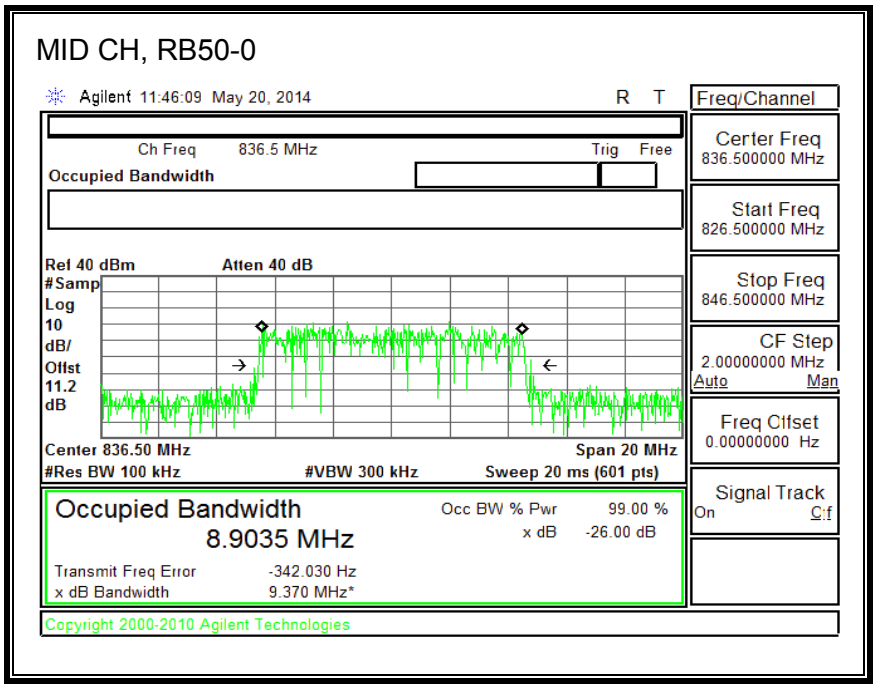
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

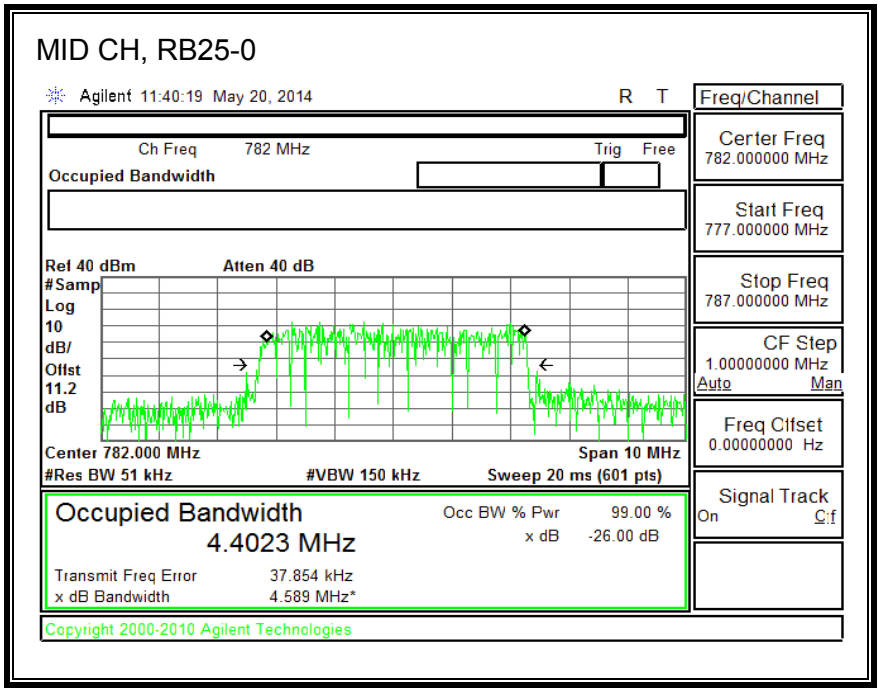


16QAM, (10.0 MHz BAND WIDTH)

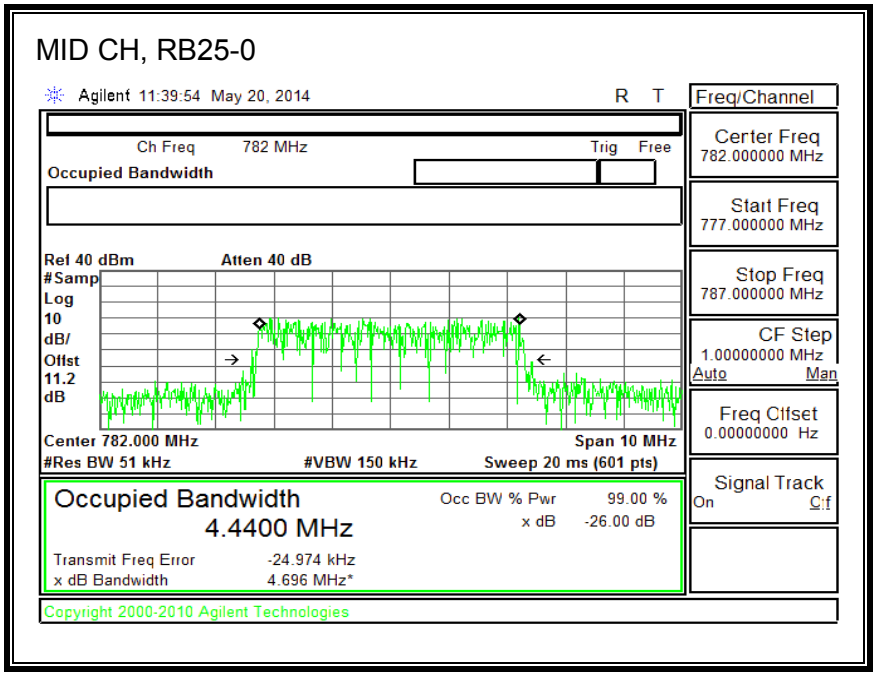


8.1.4. LTE BAND 13

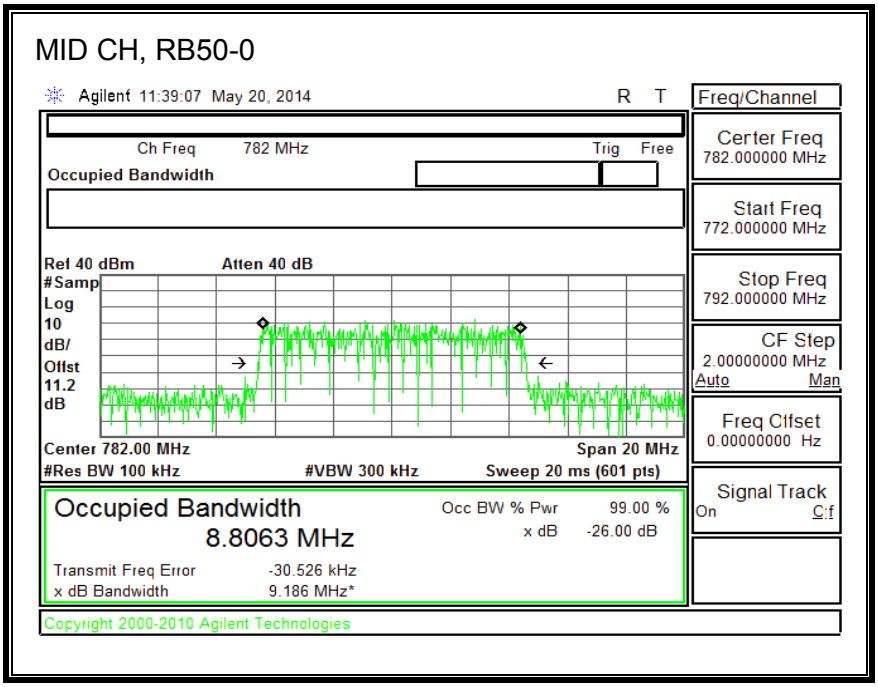
QPSK, (5.0 MHz BAND WIDTH)



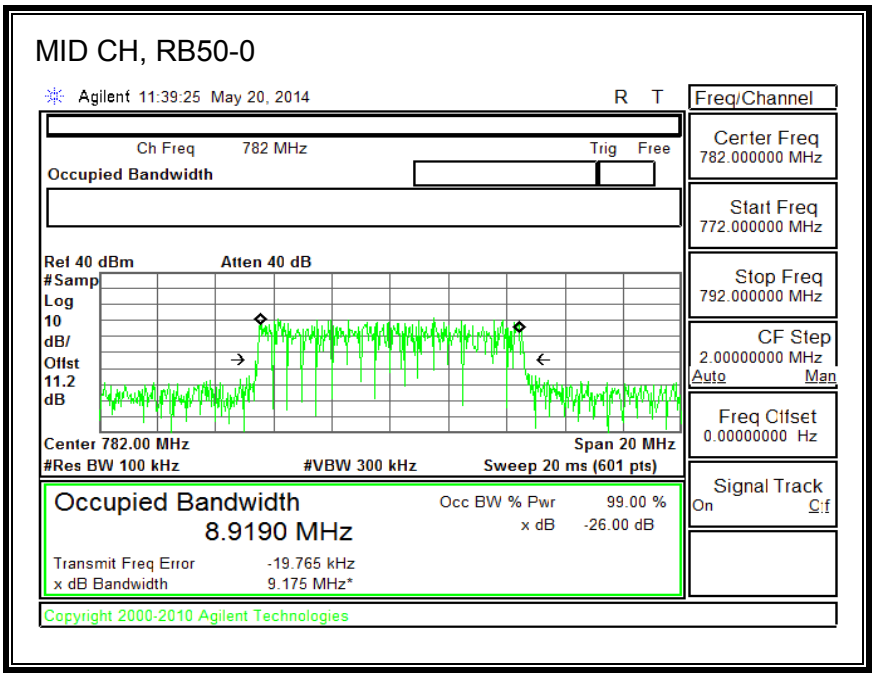
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

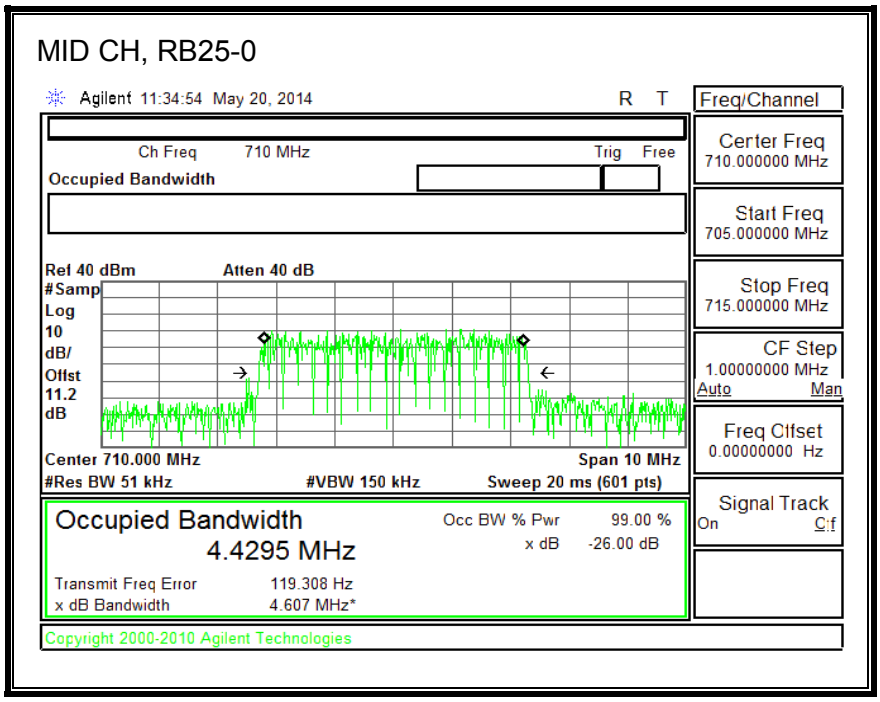


16QAM, (10.0 MHz BAND WIDTH)

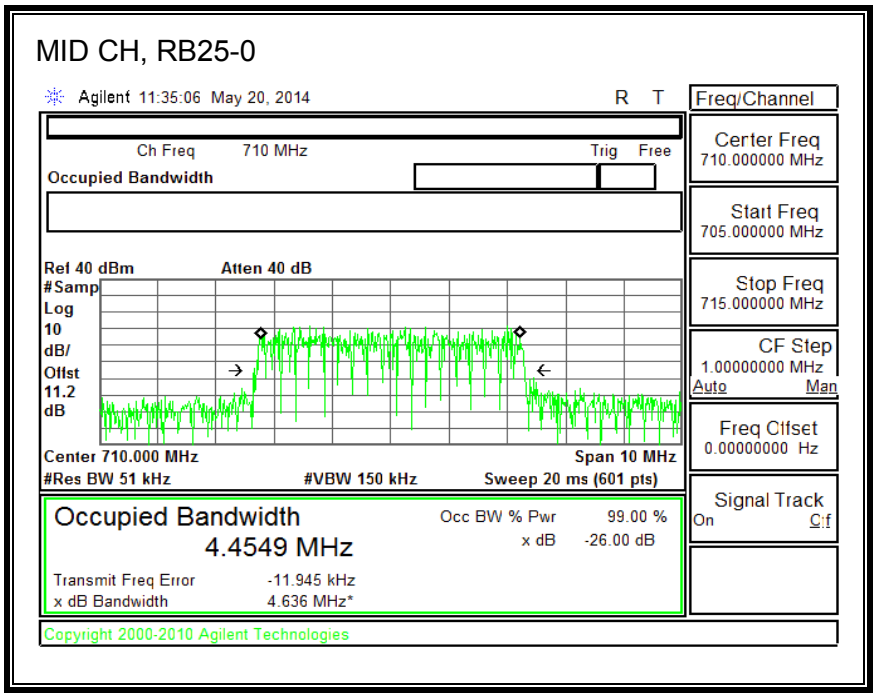


8.1.5. LTE BAND 17

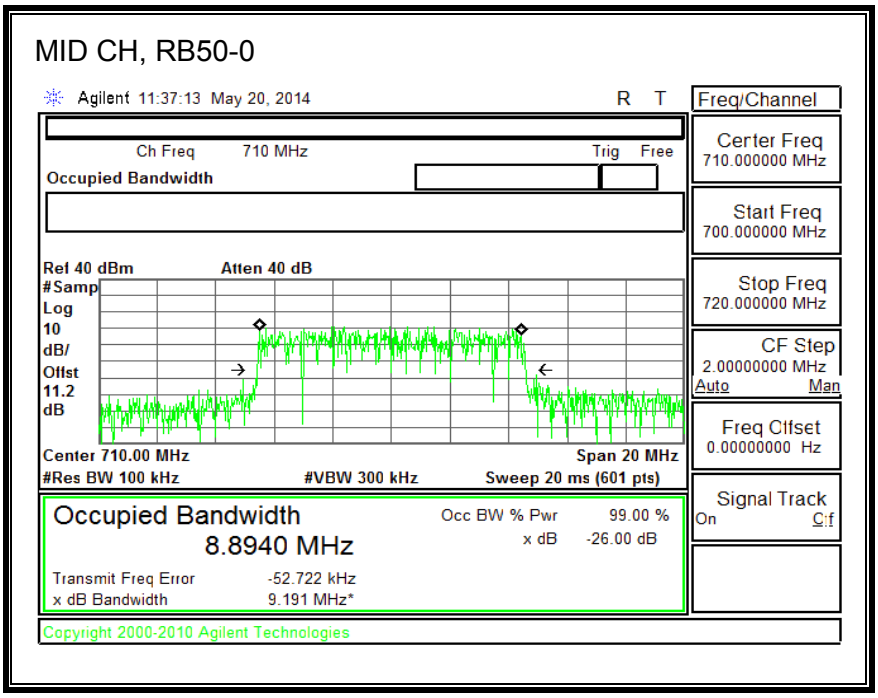
QPSK, (5.0 MHz BAND WIDTH)



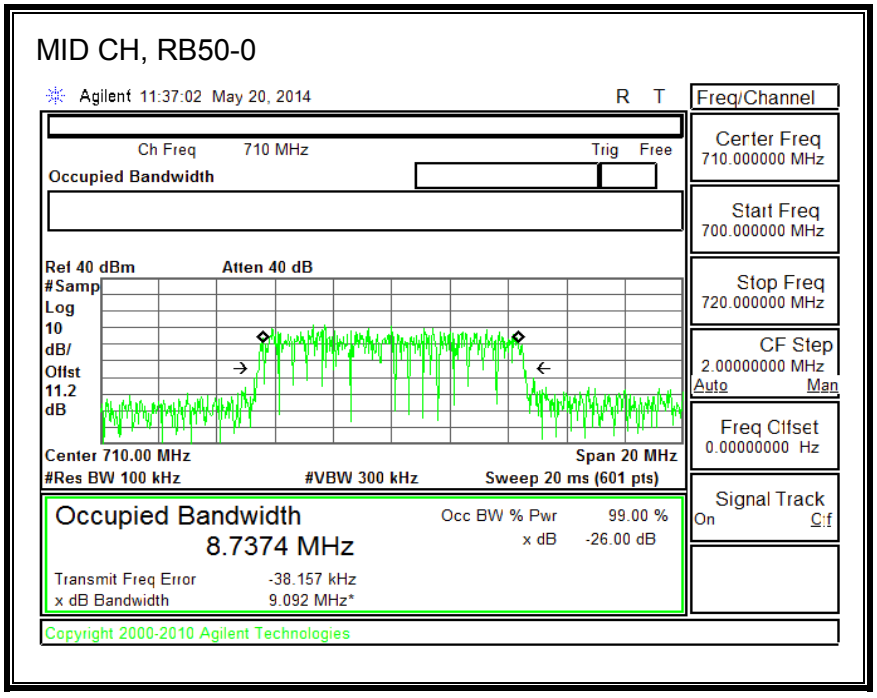
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

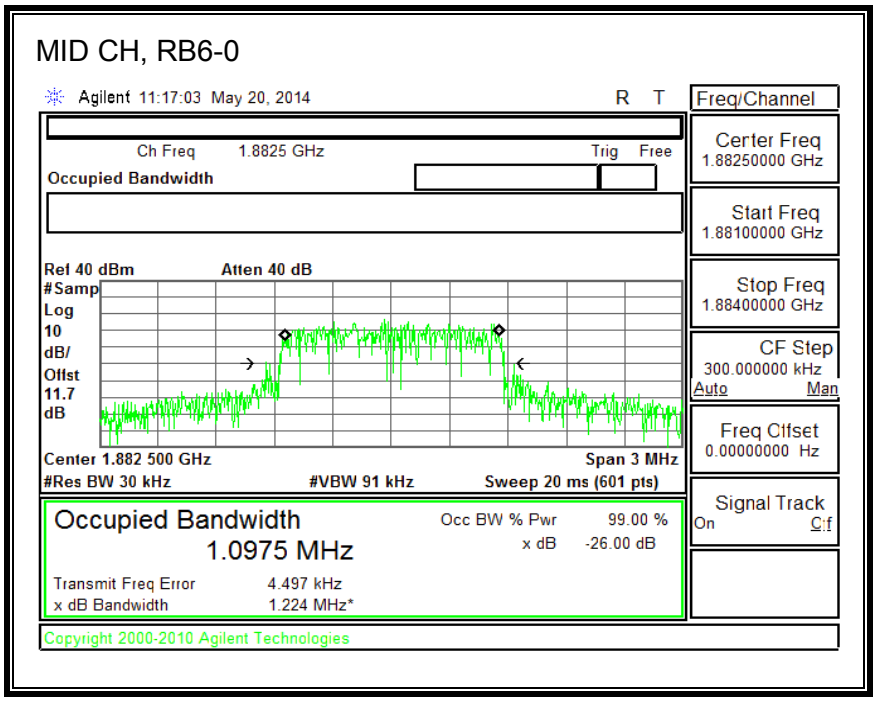


16QAM, (10.0 MHz BAND WIDTH)

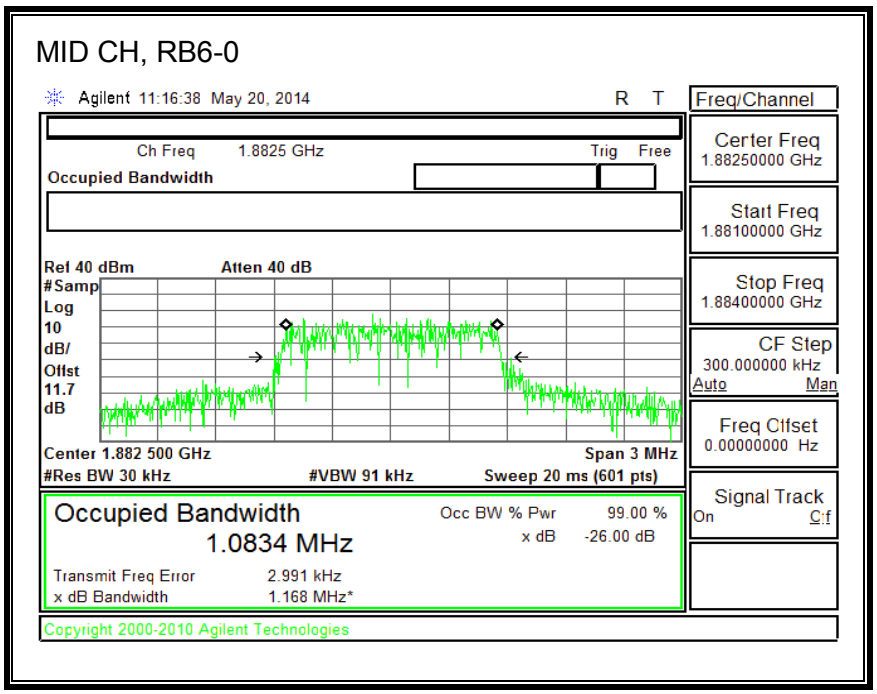


8.1.6. LTE BAND 25

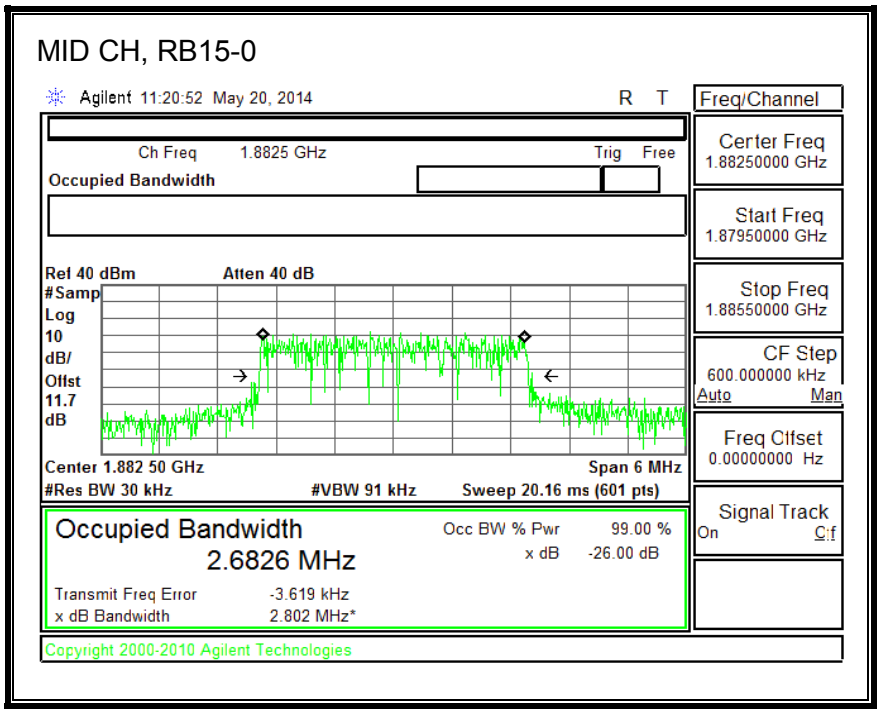
QPSK, (1.4 MHz BAND WIDTH)



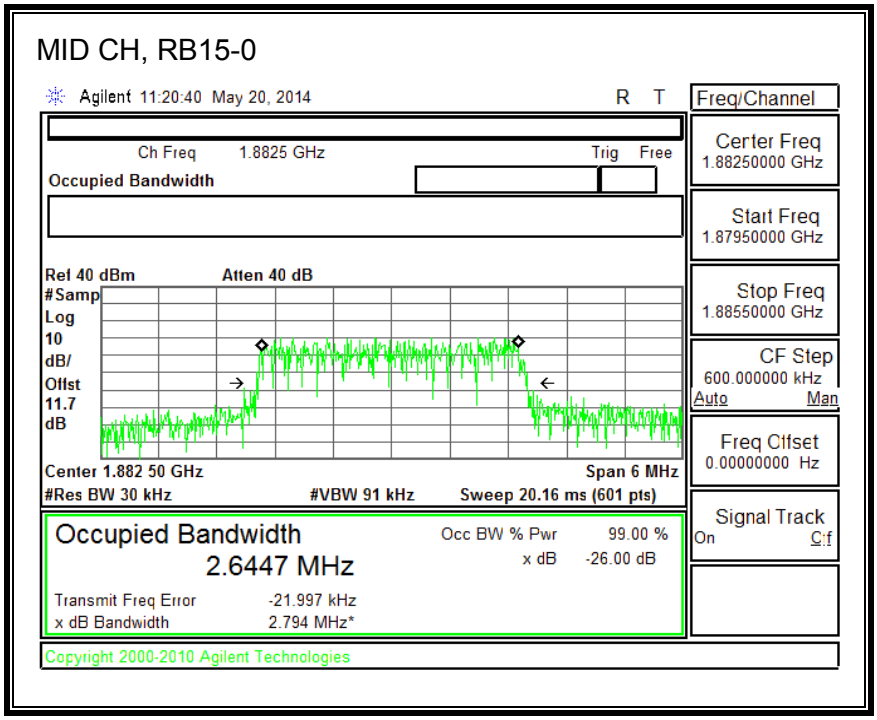
16QAM, (1.4 MHz BAND WIDTH)



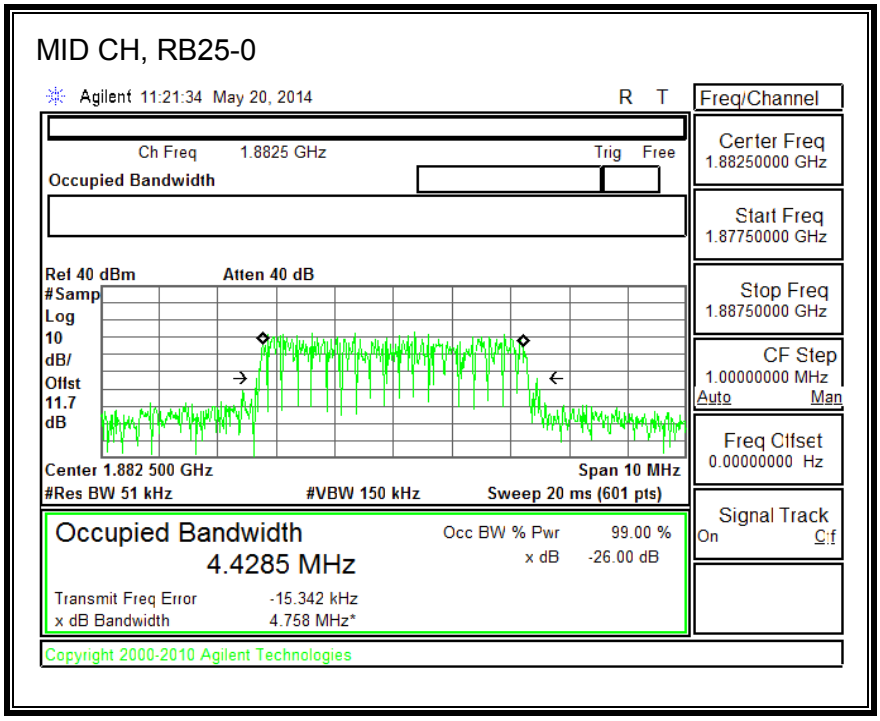
QPSK, (3.0 MHz BAND WIDTH)



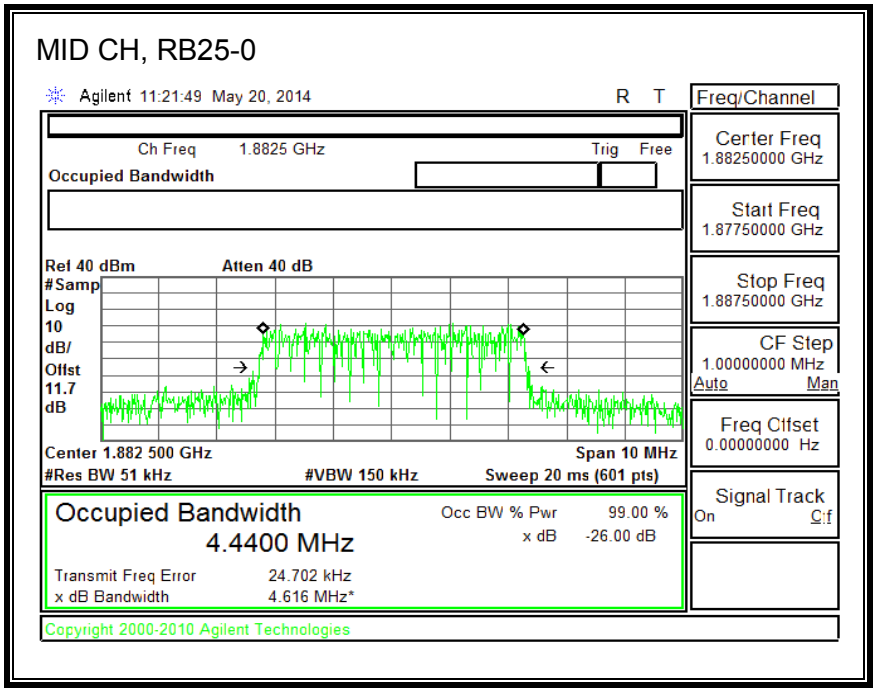
16QAM, (3.0 MHz BAND WIDTH)



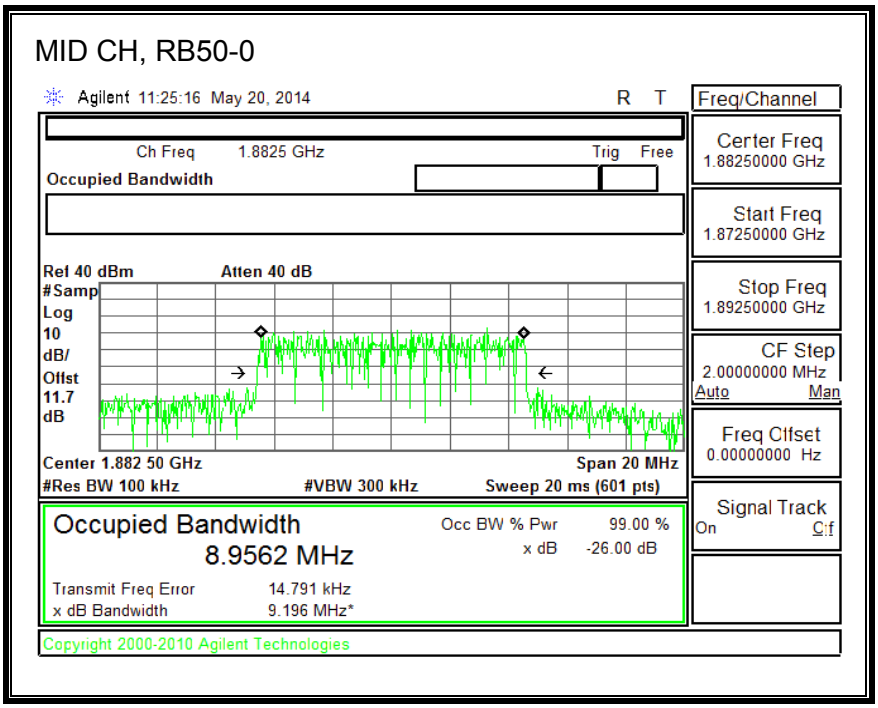
QPSK, (5.0 MHz BAND WIDTH)



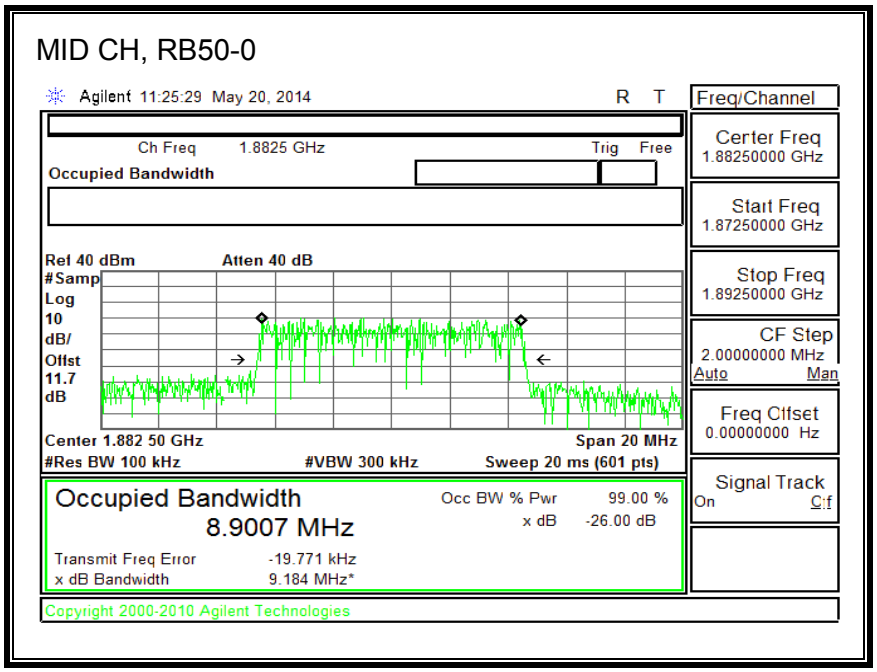
16QAM, (5.0 MHz BAND WIDTH)



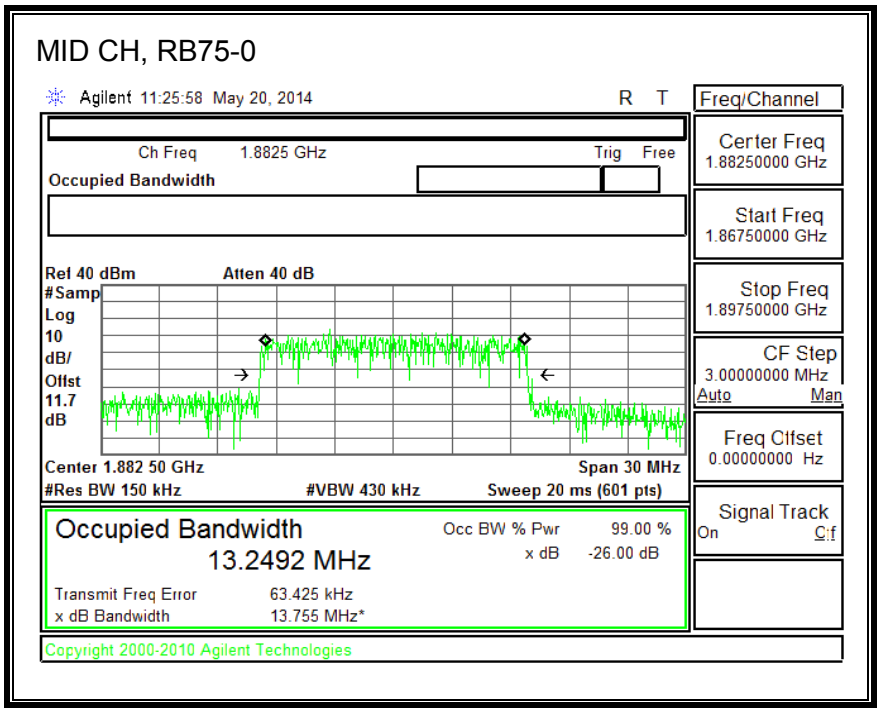
QPSK, (10.0 MHz BAND WIDTH)



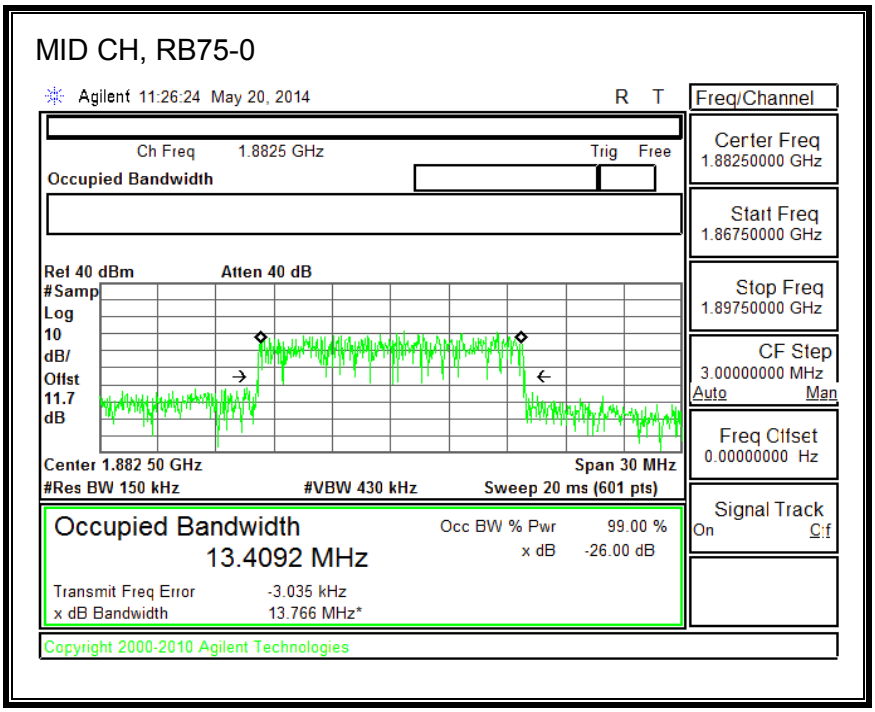
16QAM, (10.0 MHz BAND WIDTH)



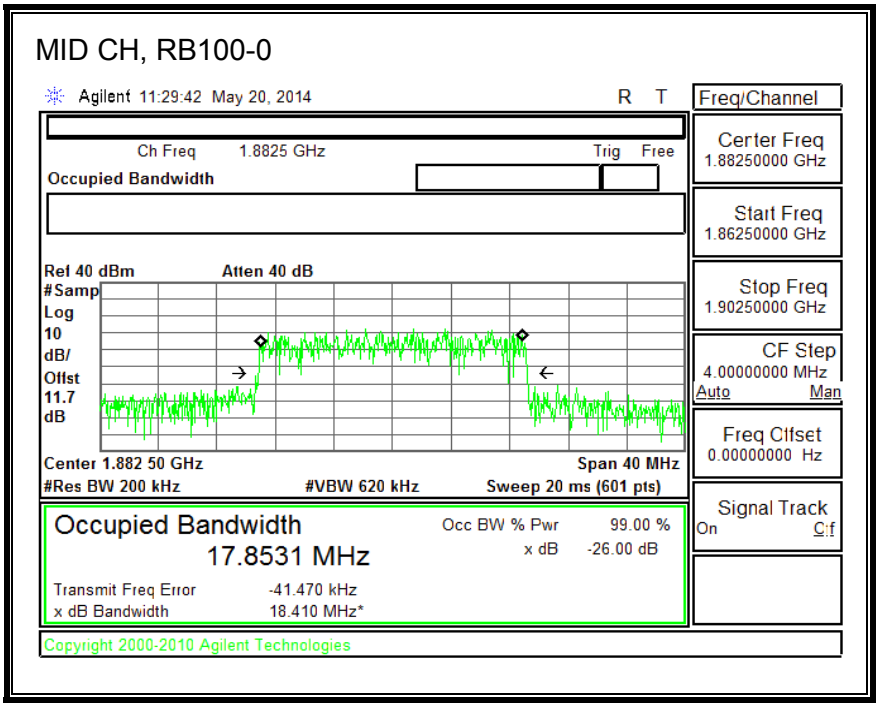
QPSK, (15.0 MHz BAND WIDTH)



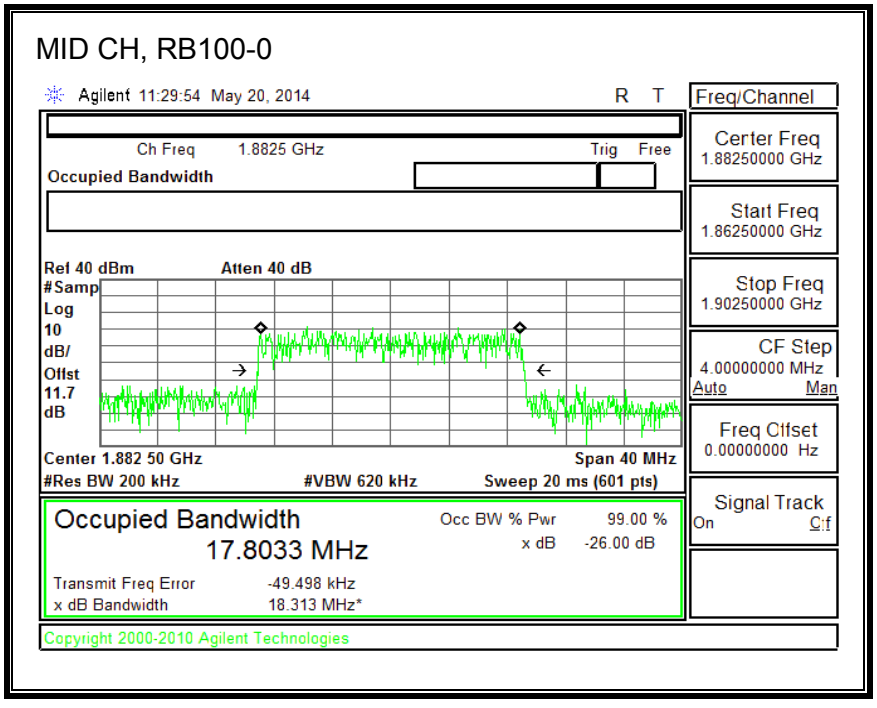
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

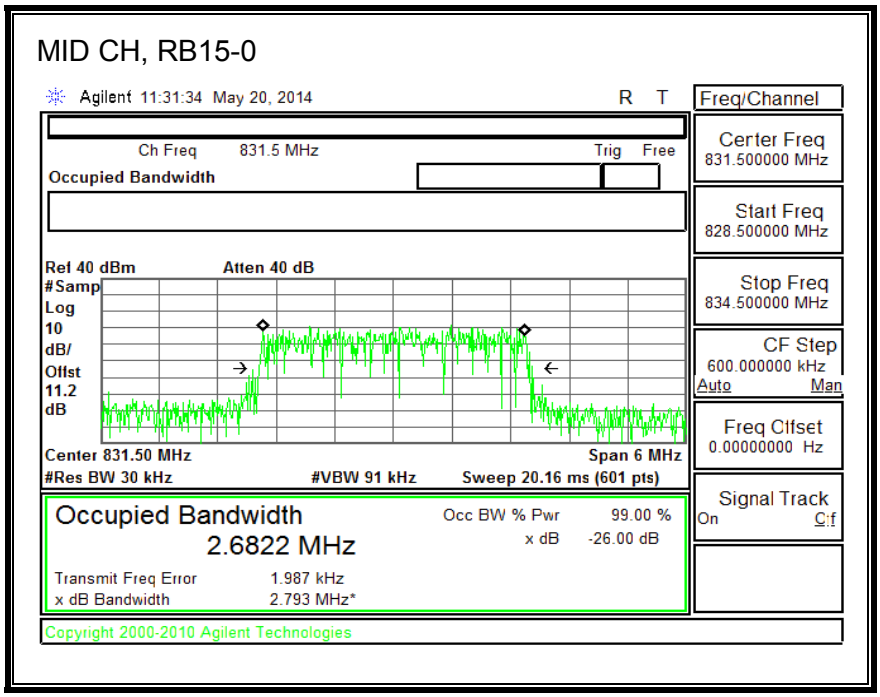


16QAM, (20.0 MHz BAND WIDTH)

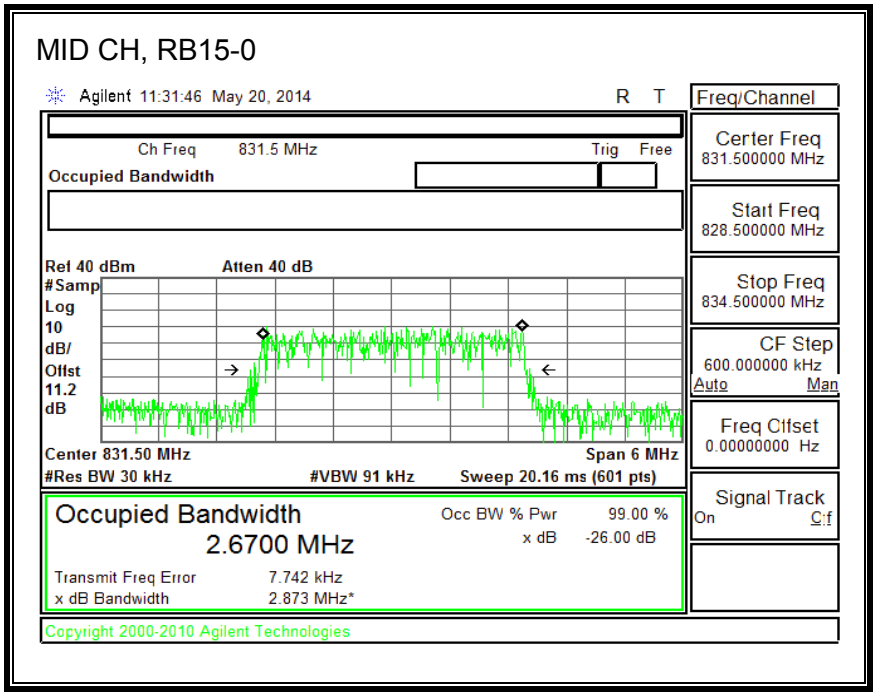


8.1.7. LTE BAND 26

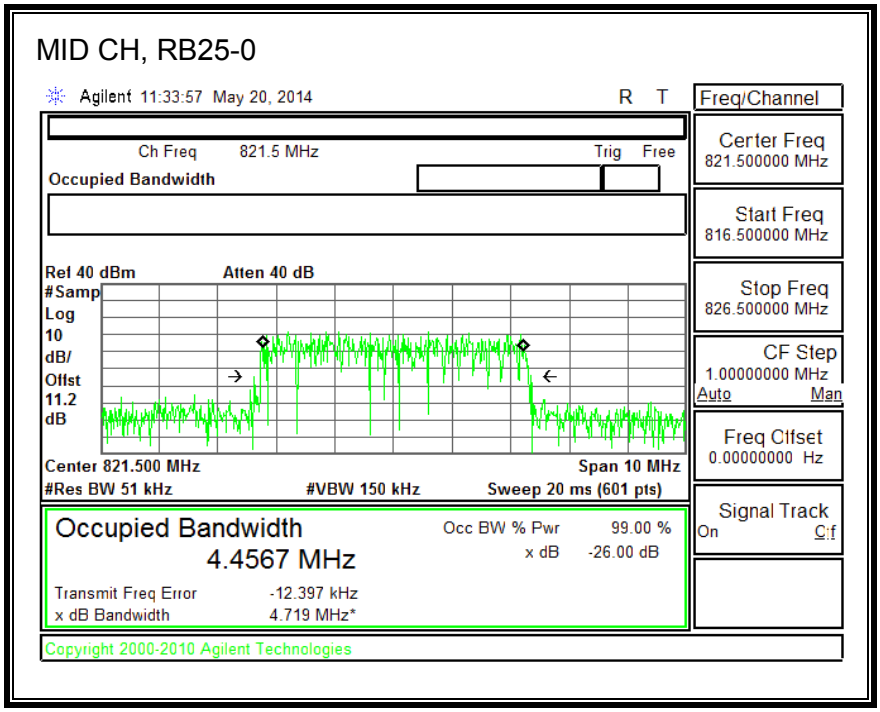
QPSK, (3.0 MHz BAND WIDTH)



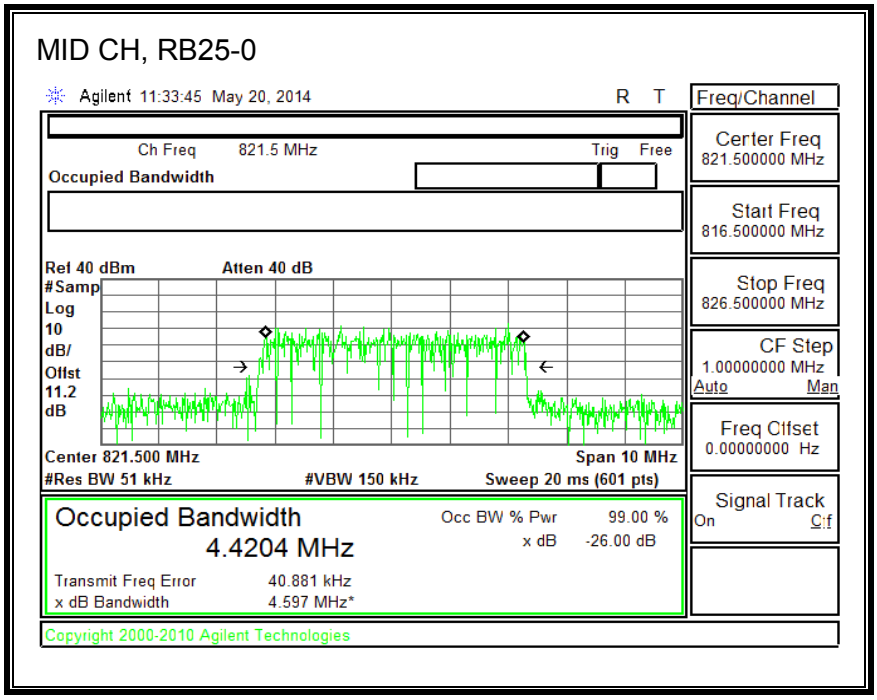
16QAM, (3.0 MHz BAND WIDTH)



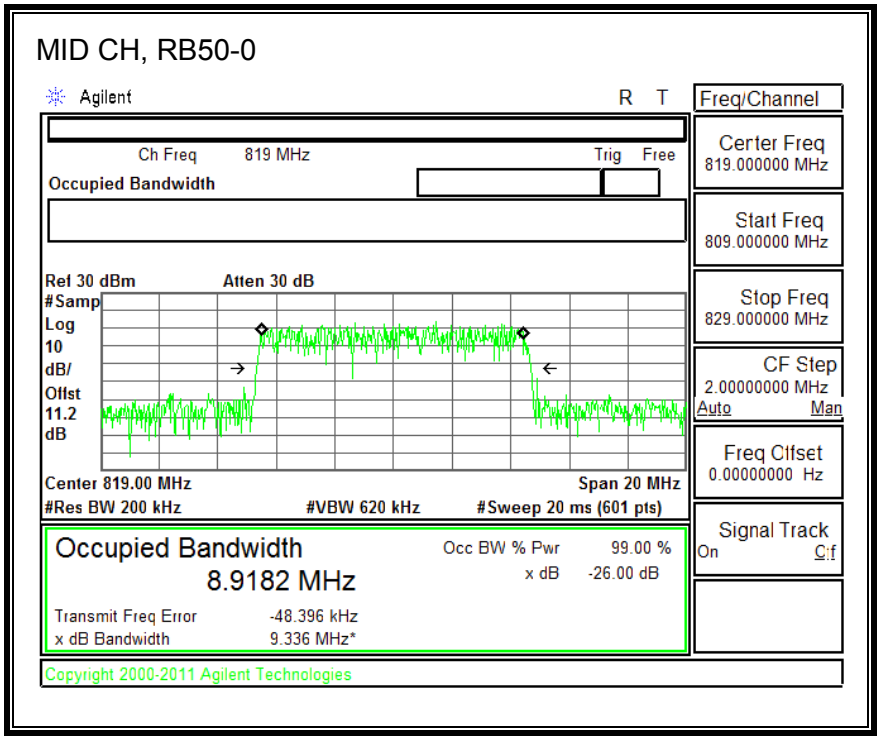
QPSK, (5.0 MHz BAND WIDTH)



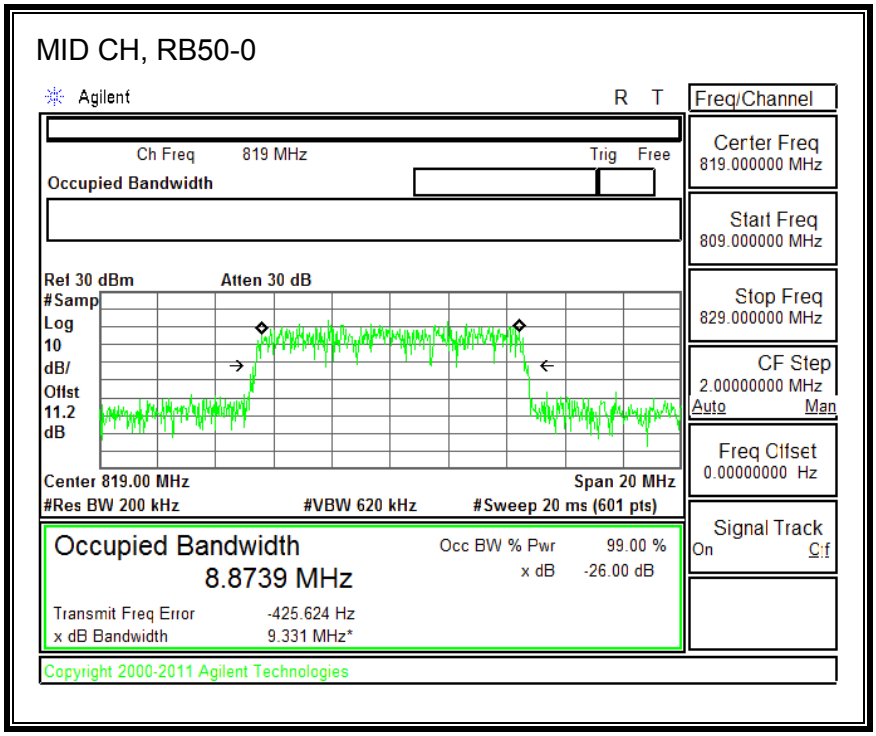
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)



16QAM, (10.0 MHz BAND WIDTH)



8.2. BANDEDGE AND EMISSION MASK

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, and §27.53.
FCC: §22.359

LIMITS

FCC: §22.359, §24.238, §27.53
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.

FCC: §90.210, and §90.691 (LTE BAND 26)
(a)(1)For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
(a)(2)For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz. (NOTE: Use 100 kHz reference bandwidth.)

FCC: §27.53
(c) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than 43 + 10 log (P) dB at the channel edge and 55 + 10 log (P) dB at 5.5 megahertz from the channel edges. (Channel edges are defined under §27.5 (i) Frequency assignment for the BRS/EBS band)
(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

TEST PROCEDURE

The transmitter output was connected to a CMW500Test 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 (704, 716, 824, 849, 1710 and 1755, 1850 and 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.

TEST PROCEDURE FOR RSS-199

The transmitter output was connected to a CMW500 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.
- Set a marker to point the corresponding band edge frequency in each test case. Set display line at -13dBm and -25dBm

MODES TESTED

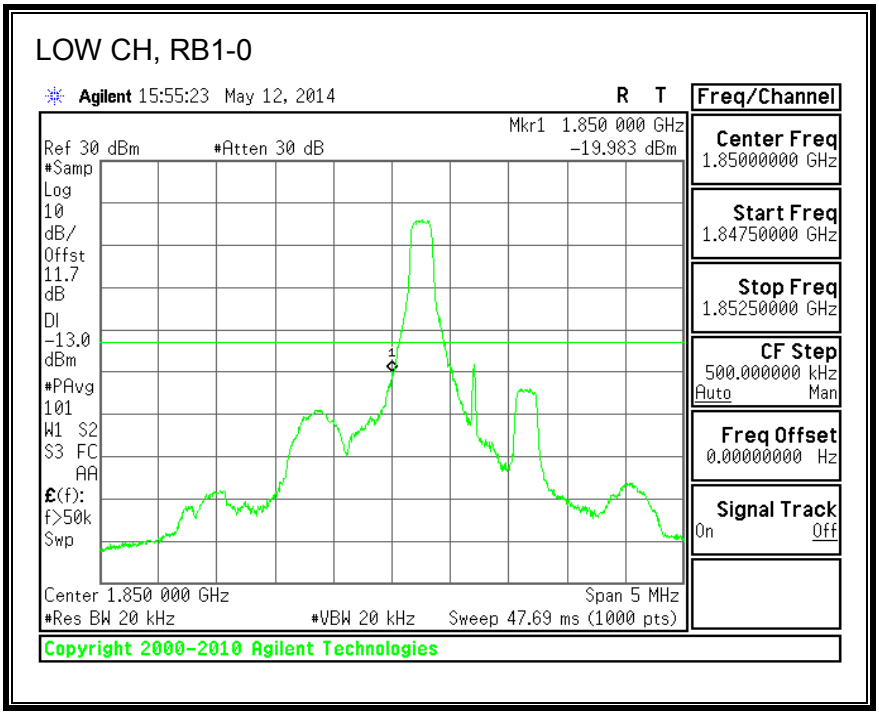
- Band 2
- Band 4
- Band 5
- Band 12
- Band 13
- Band 17
- Band 25
- Band 26

RESULTS

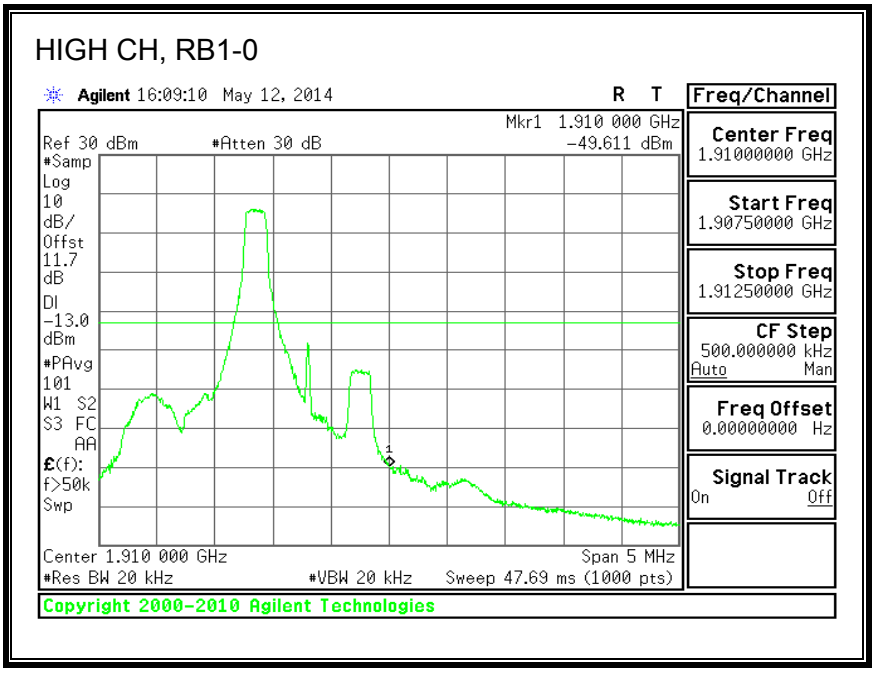
8.2.1. LTE BAND 2 BANDEDGE

QPSK, (1.4 MHz BAND WIDTH)

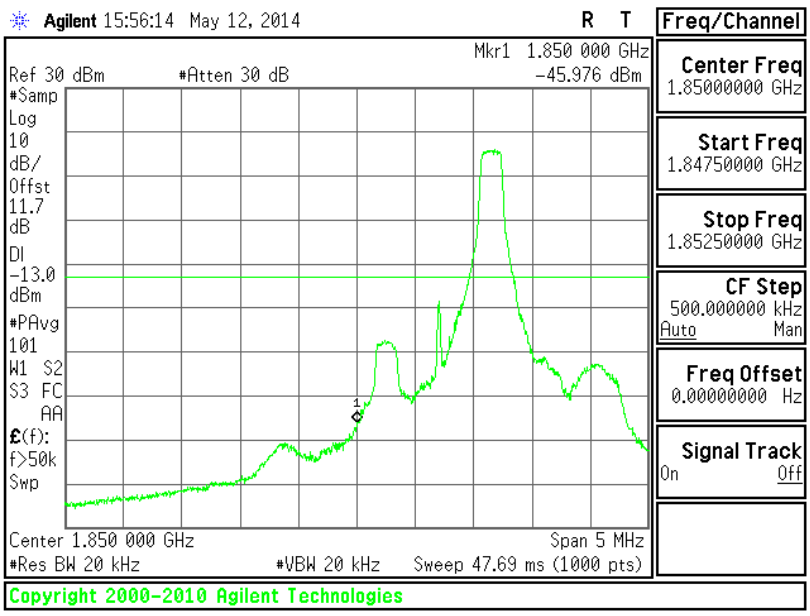
LOW CH, RB1-0



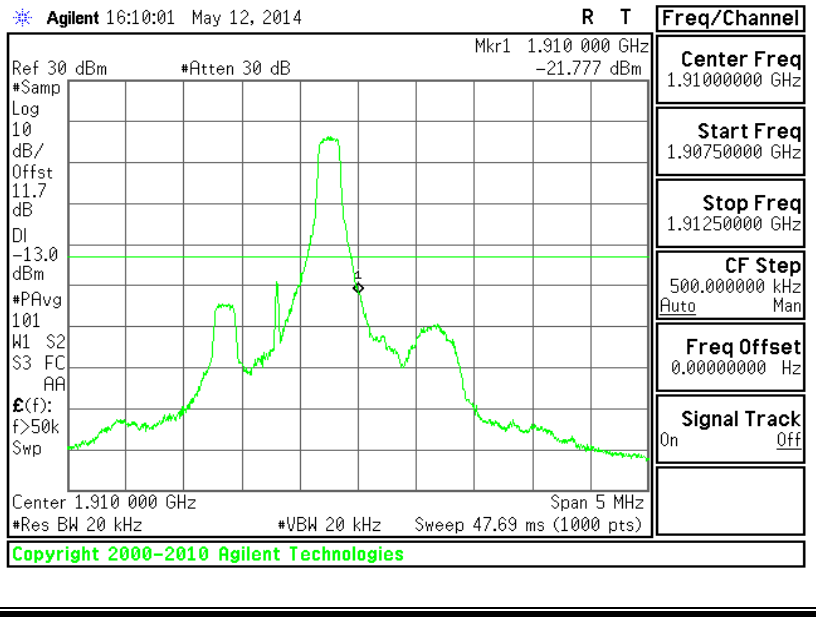
HIGH CH, RB1-0



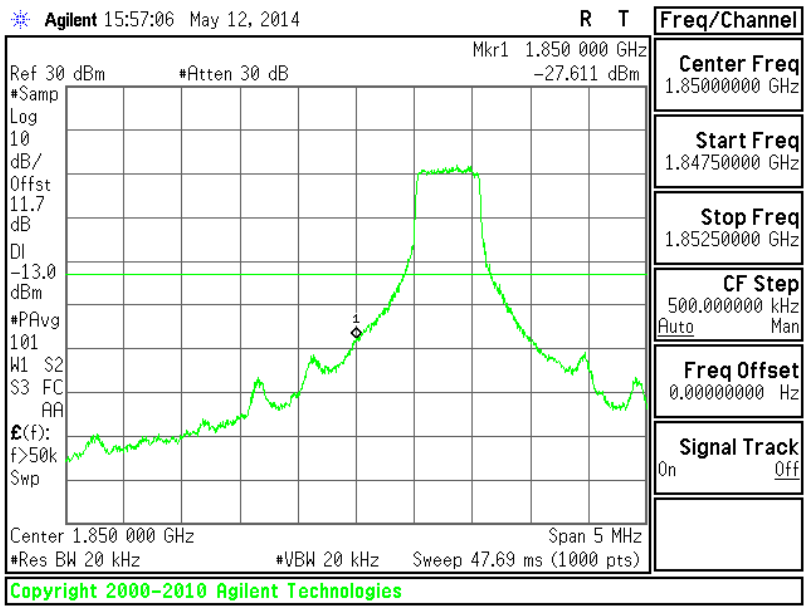
LOW CH, RB1-5



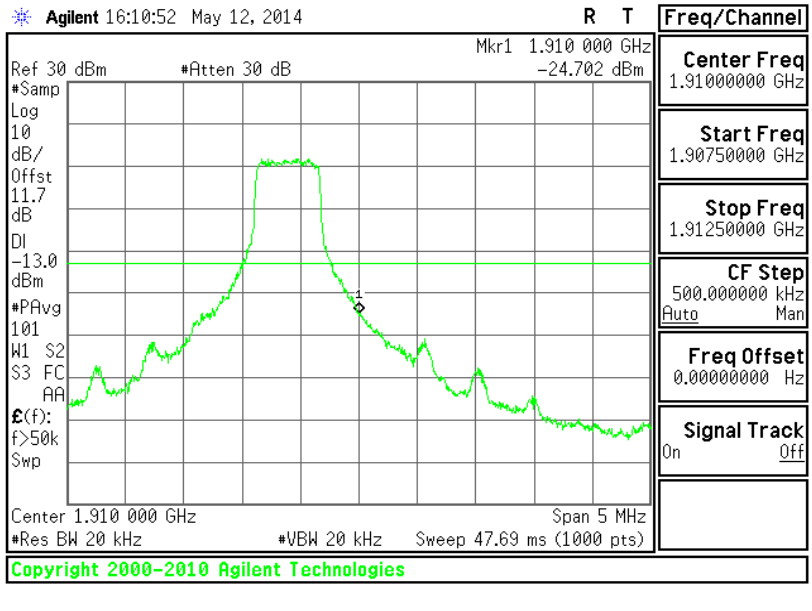
HIGH CH, RB1-5



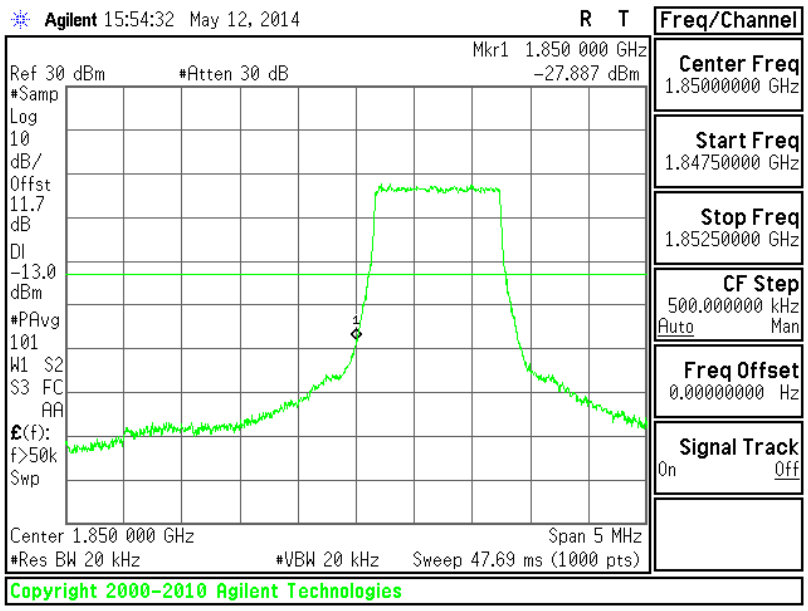
LOW CH, RB3-2



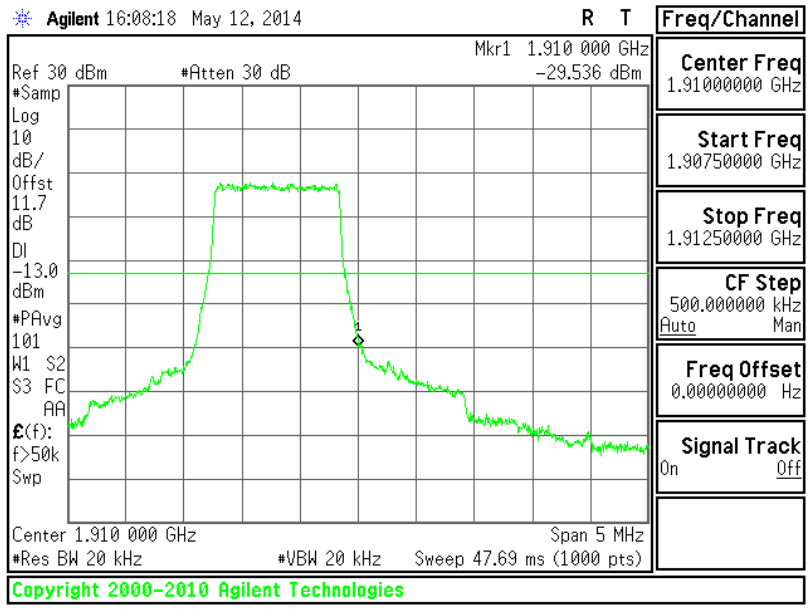
HIGH CH, RB3-2



LOW CH, RB6-0

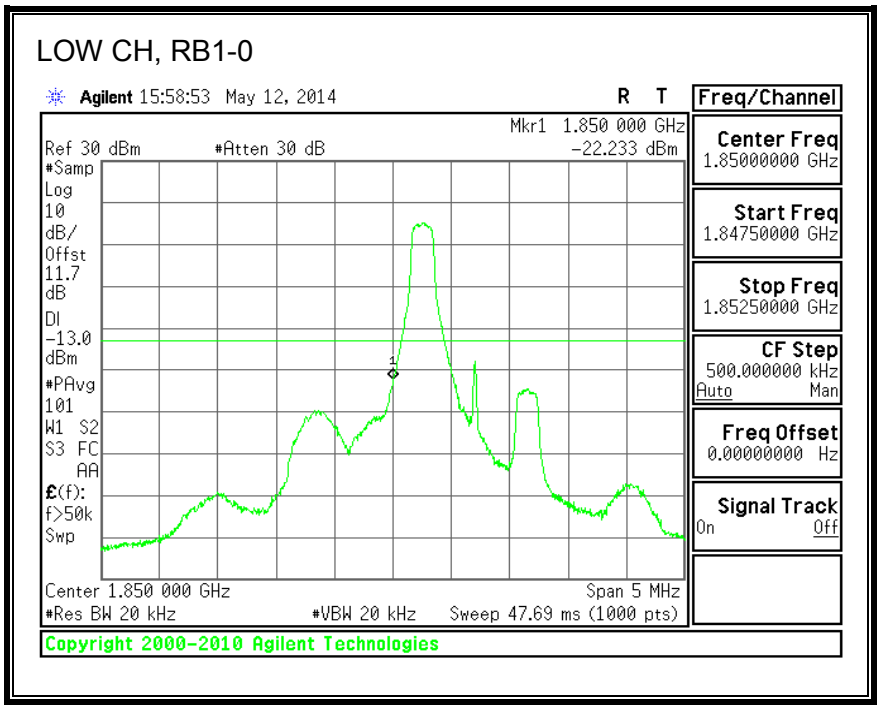


HIGH CH, RB6-0

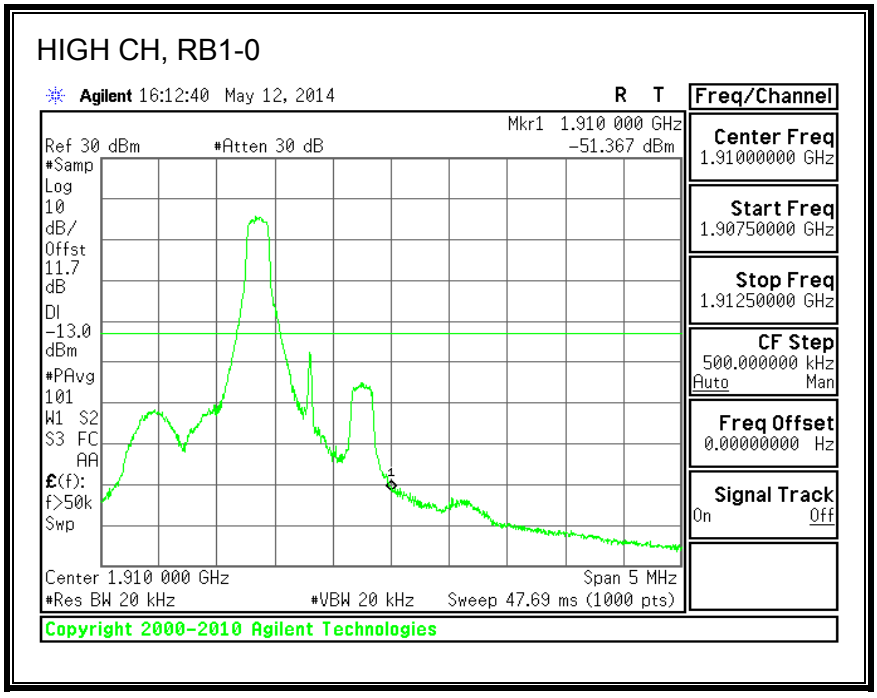


16QAM, (1.4 MHz BAND WIDTH)

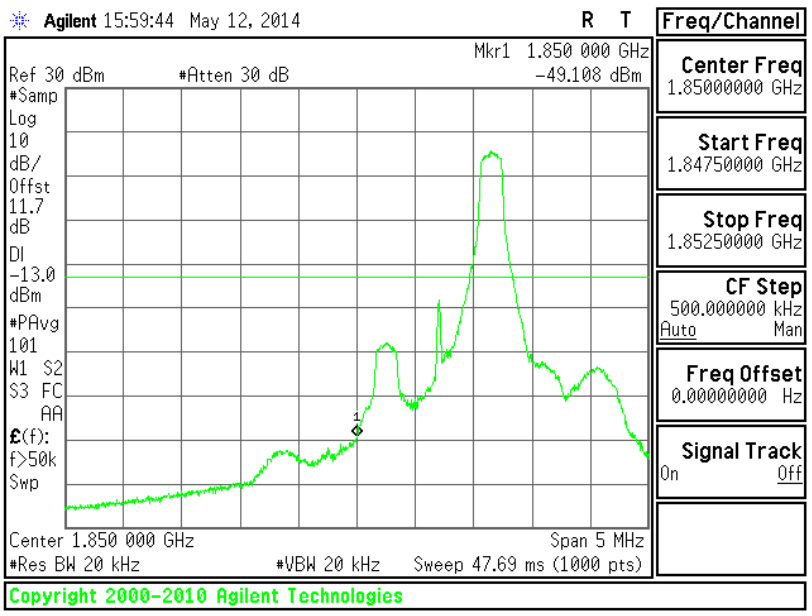
LOW CH, RB1-0



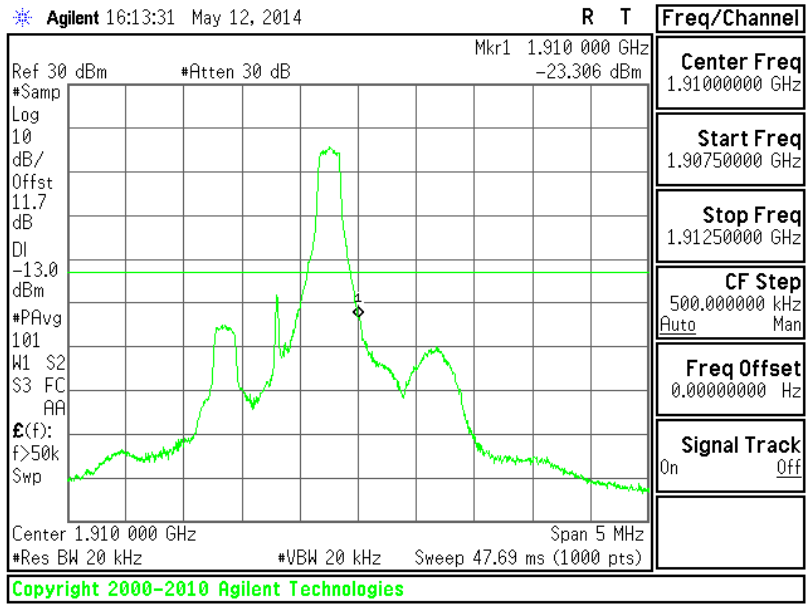
HIGH CH, RB1-0



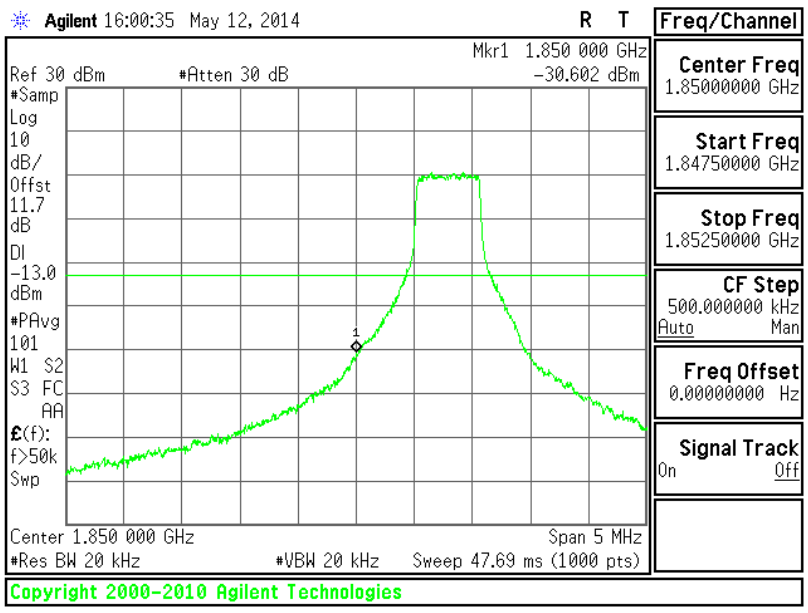
LOW CH, RB1-5



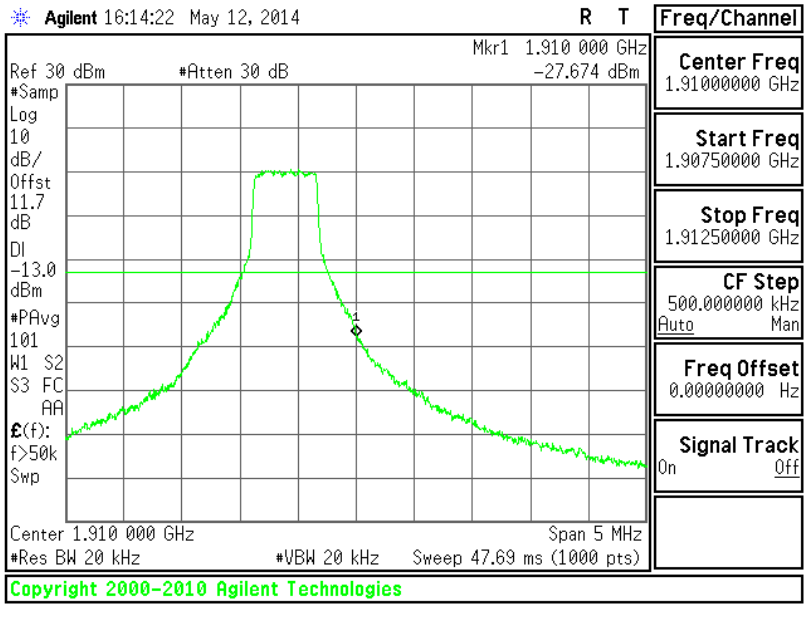
HIGH CH, RB1-5



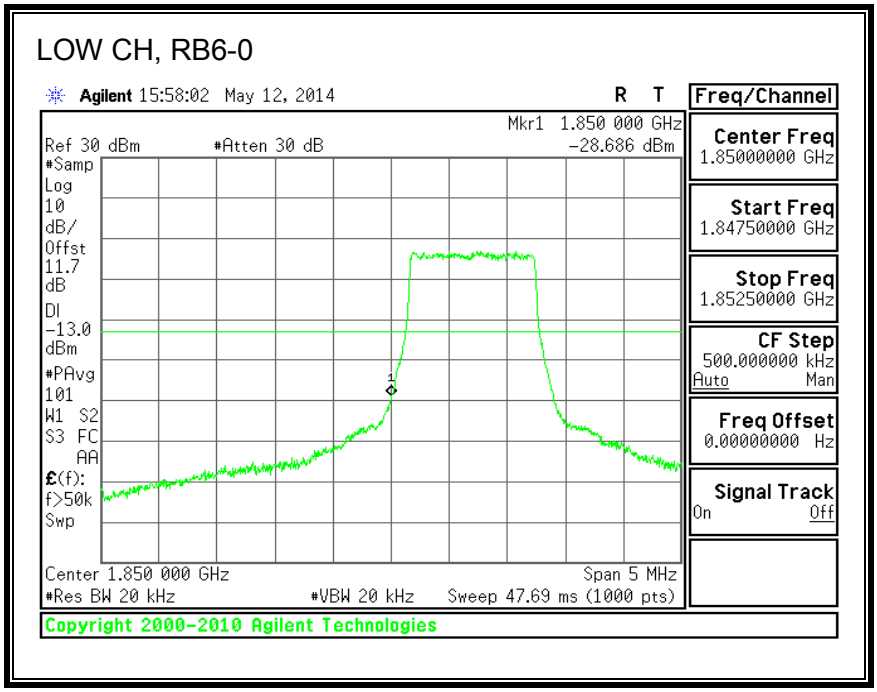
LOW CH, RB3-2



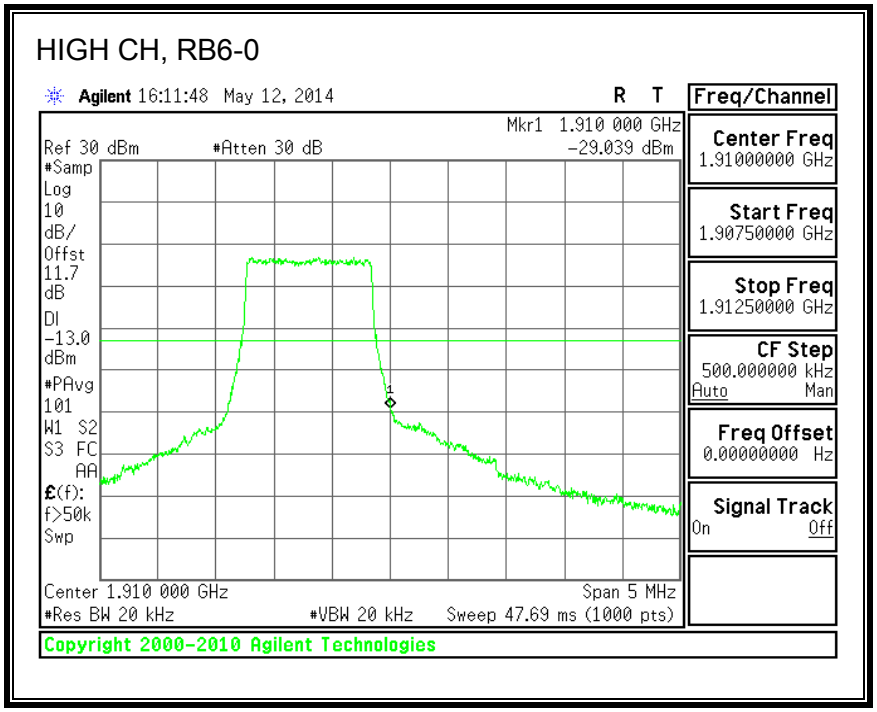
HIGH CH, RB3-2



LOW CH, RB6-0

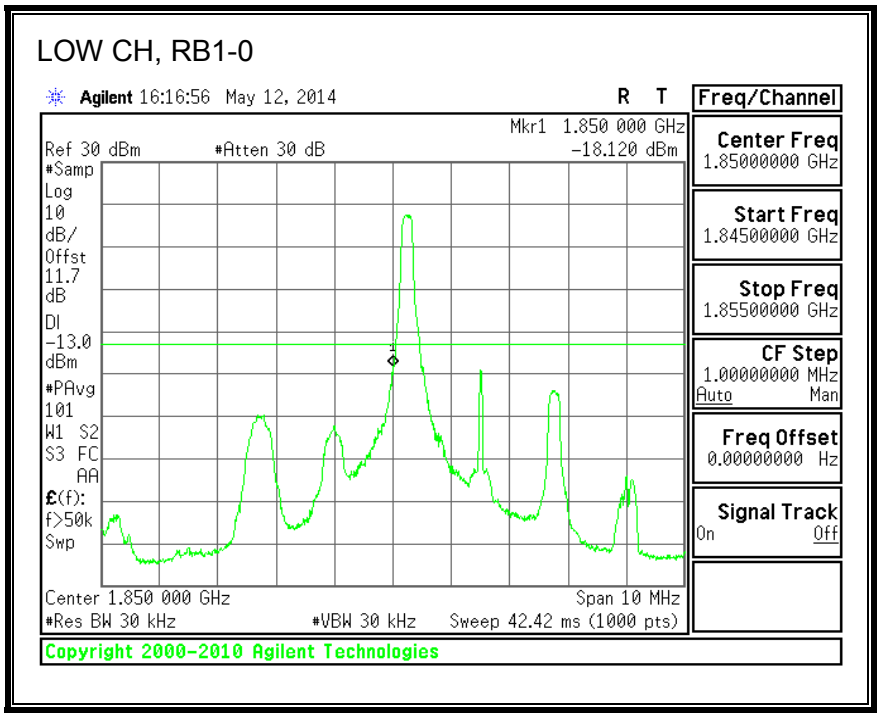


HIGH CH, RB6-0

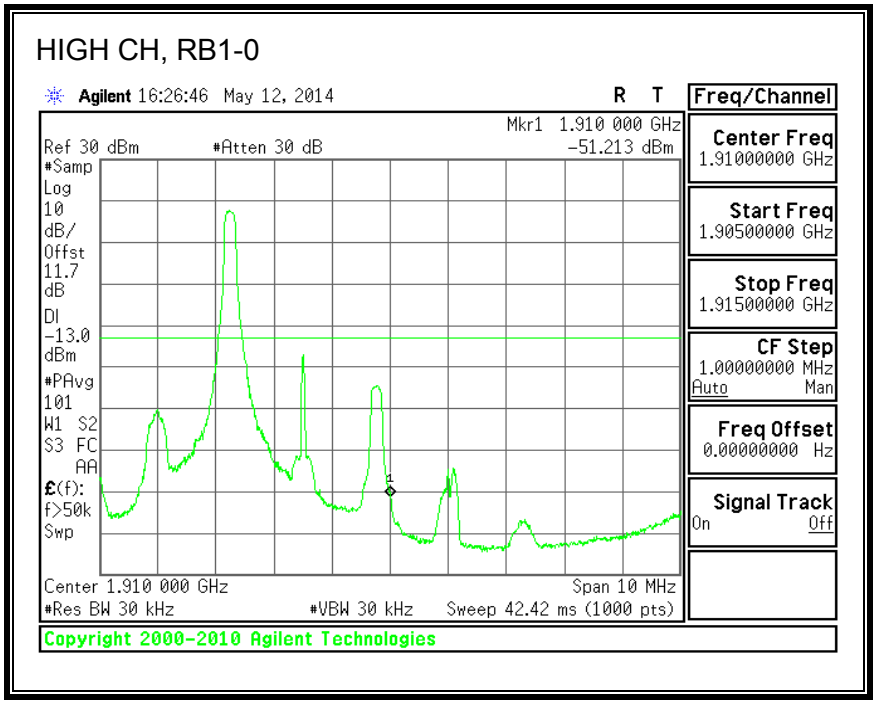


QPSK, (3.0 MHz BAND WIDTH)

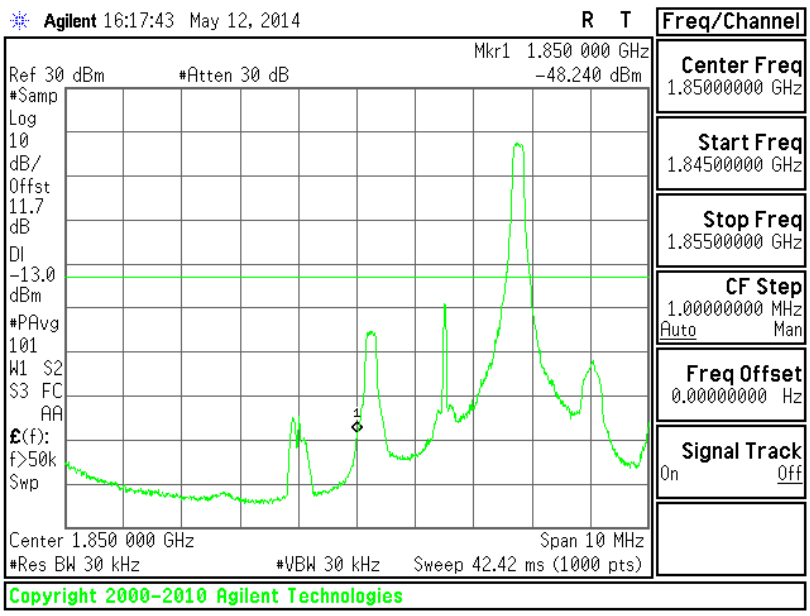
LOW CH, RB1-0



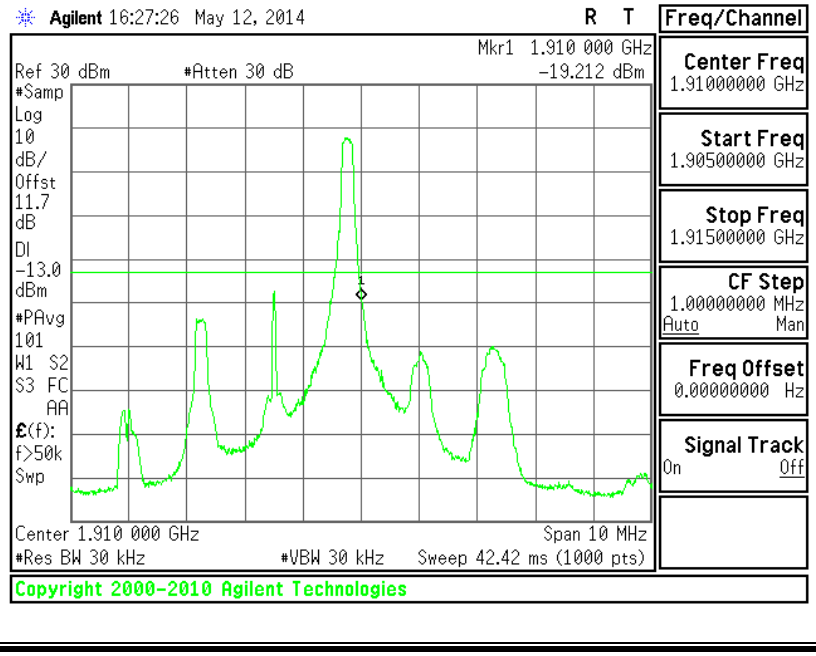
HIGH CH, RB1-0



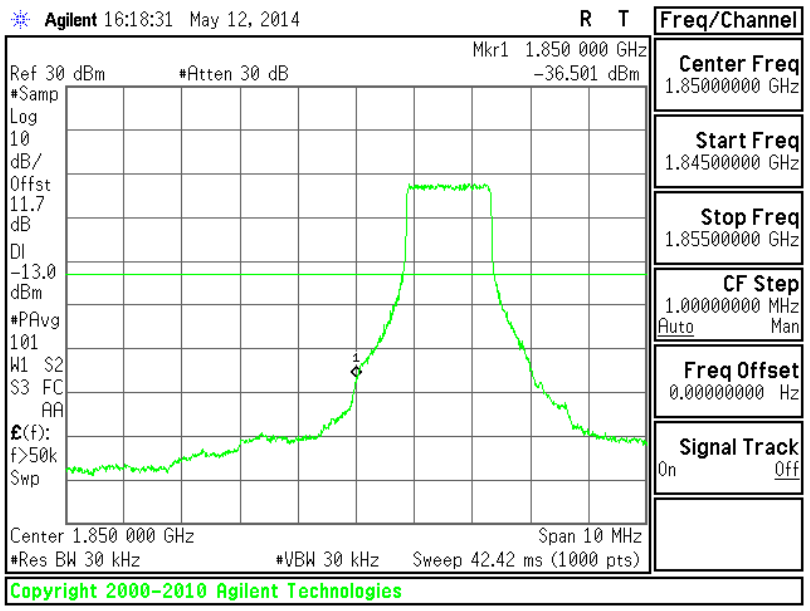
LOW CH, RB1-14



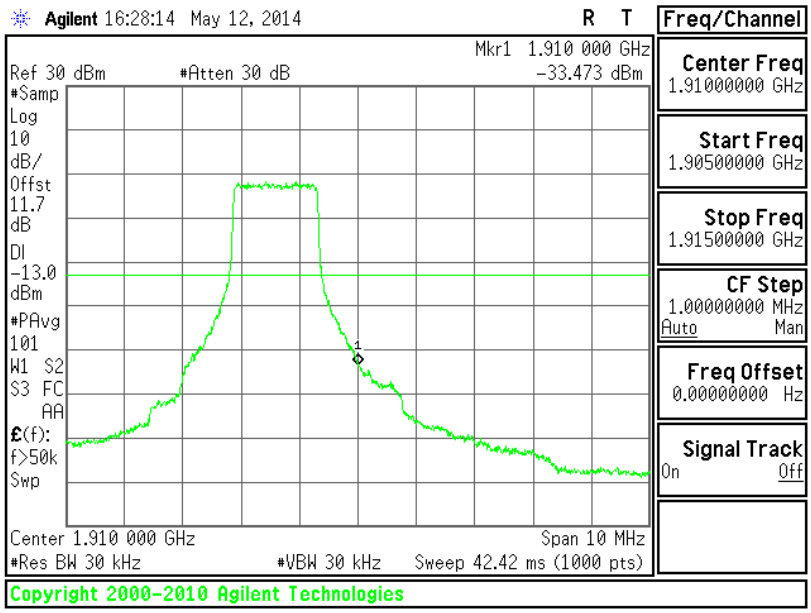
HIGH CH, RB1-14



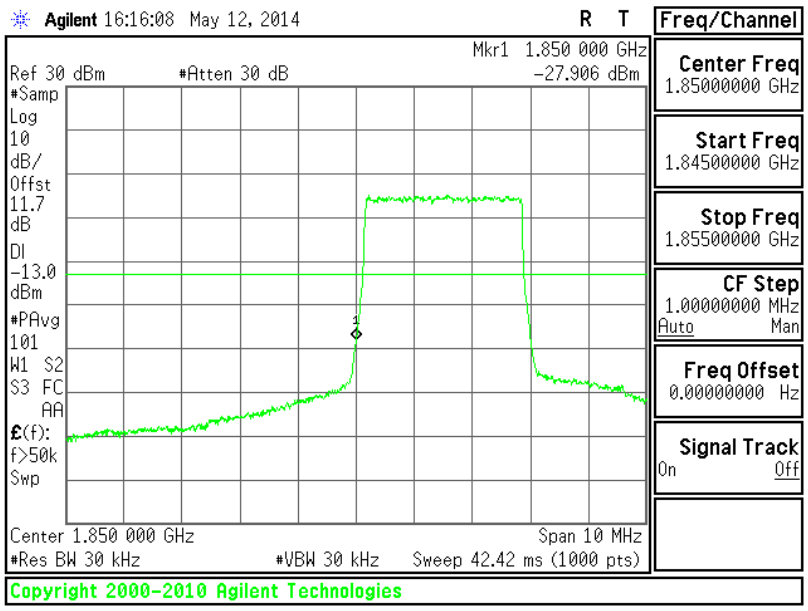
LOW CH, RB8-4



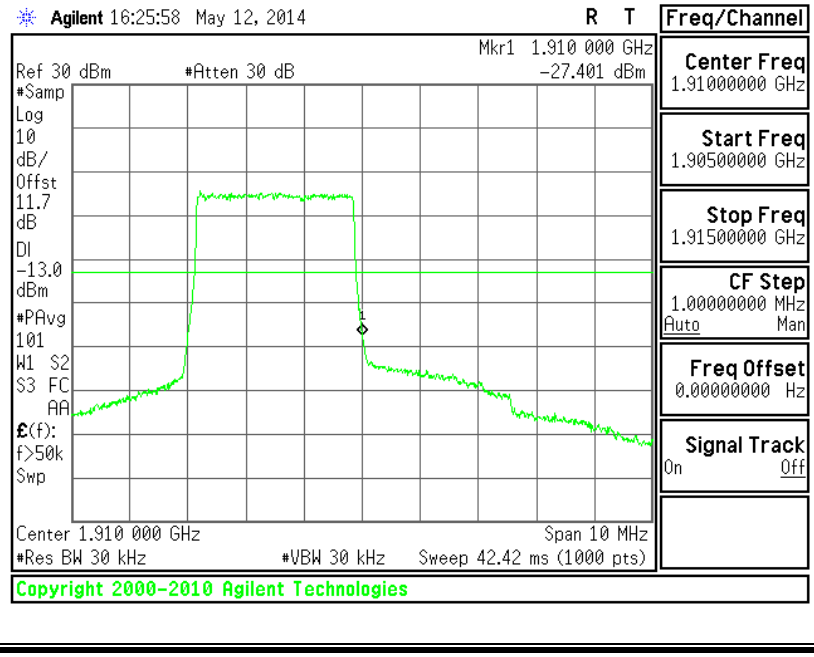
HIGH CH, RB8-4



LOW CH, RB15-0

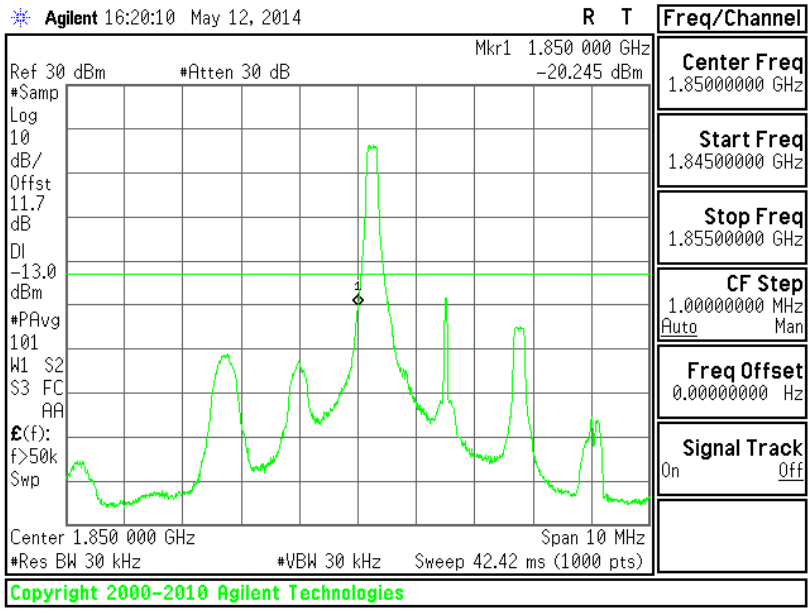


HIGH CH, RB15-0

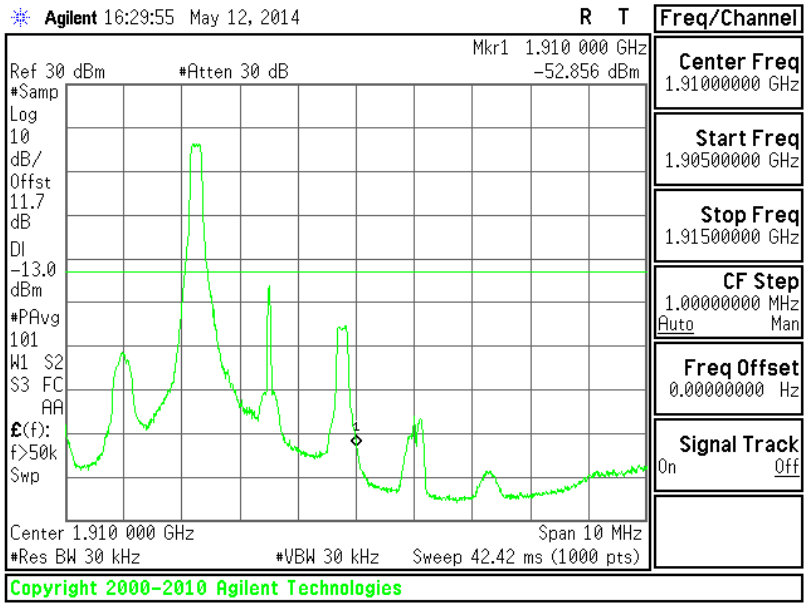


16QAM, (3.0 MHz BAND WIDTH)

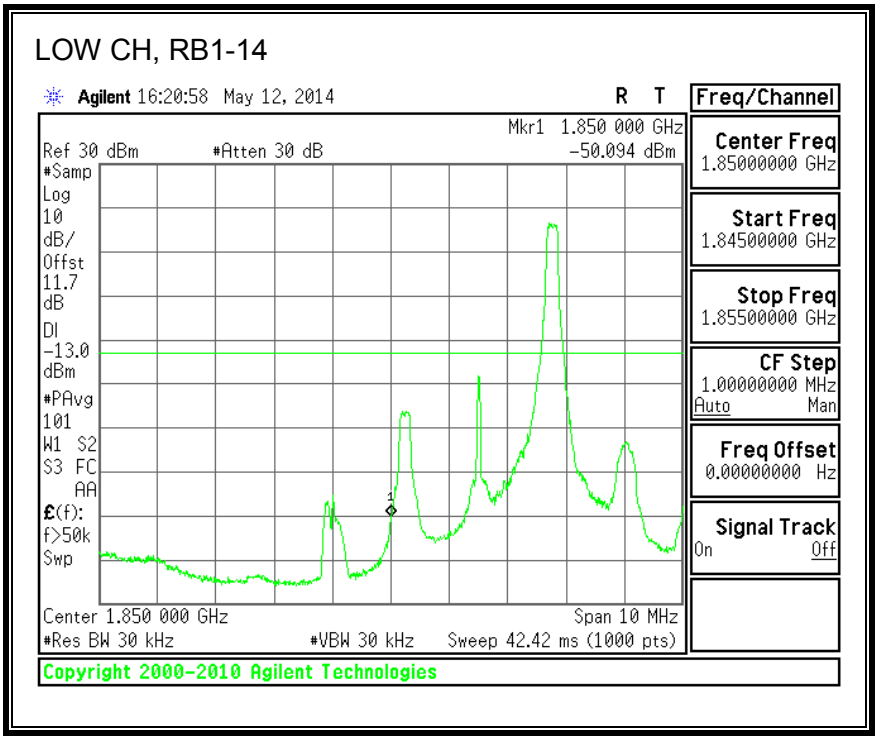
LOW CH, RB1-0



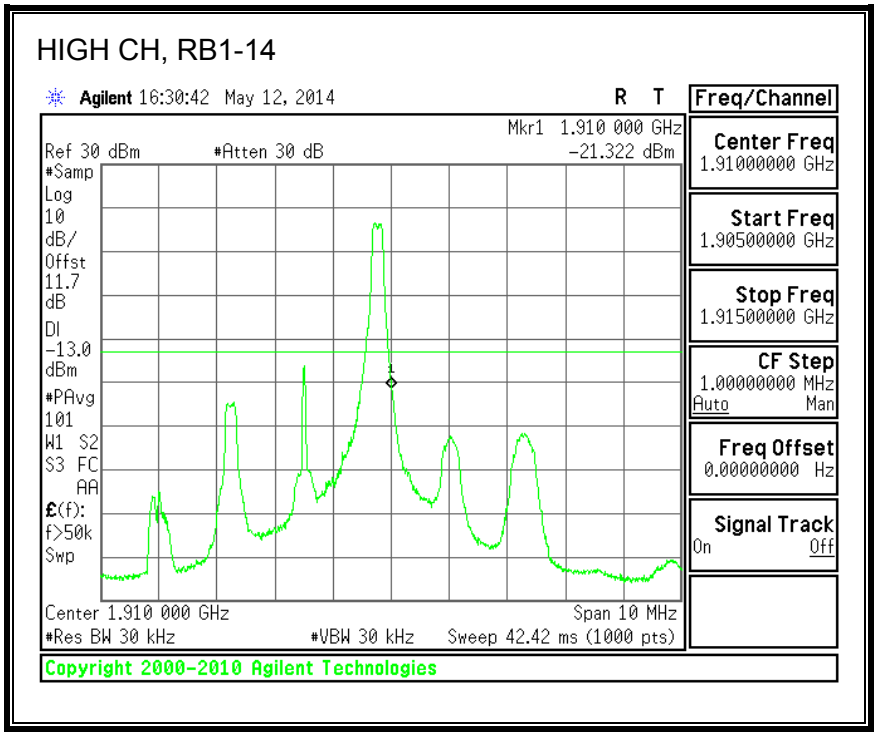
HIGH CH, RB1-0



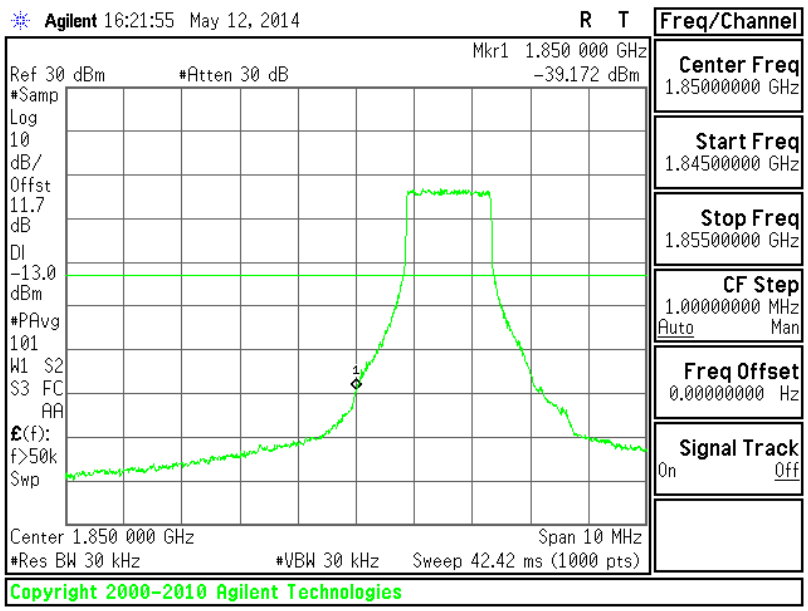
LOW CH, RB1-14



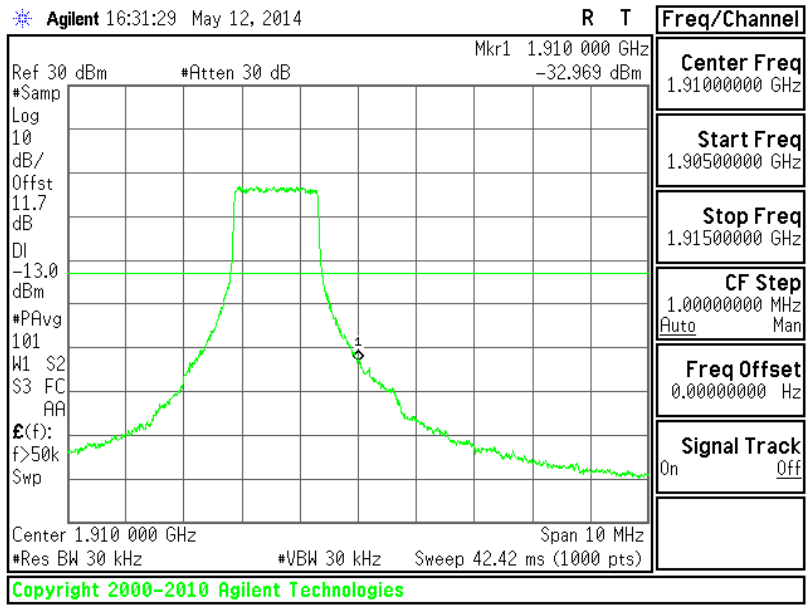
HIGH CH, RB1-14



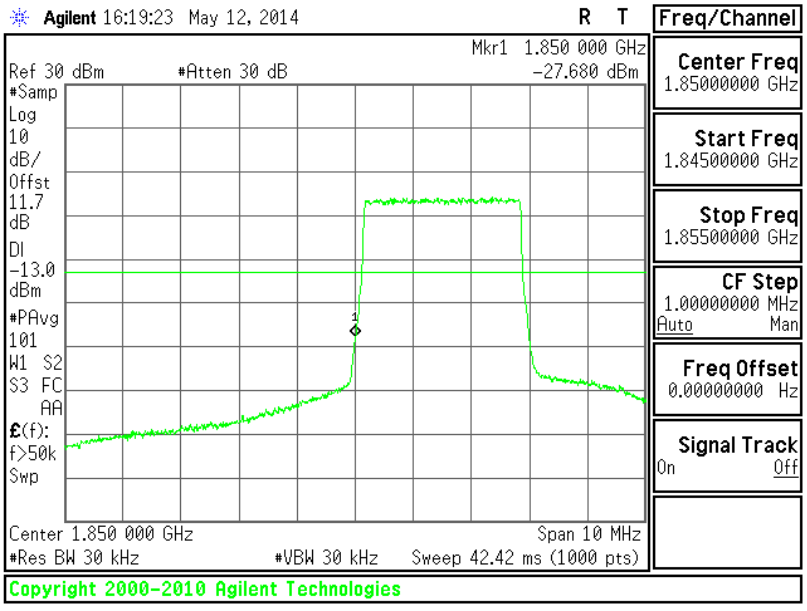
LOW CH, RB8-4



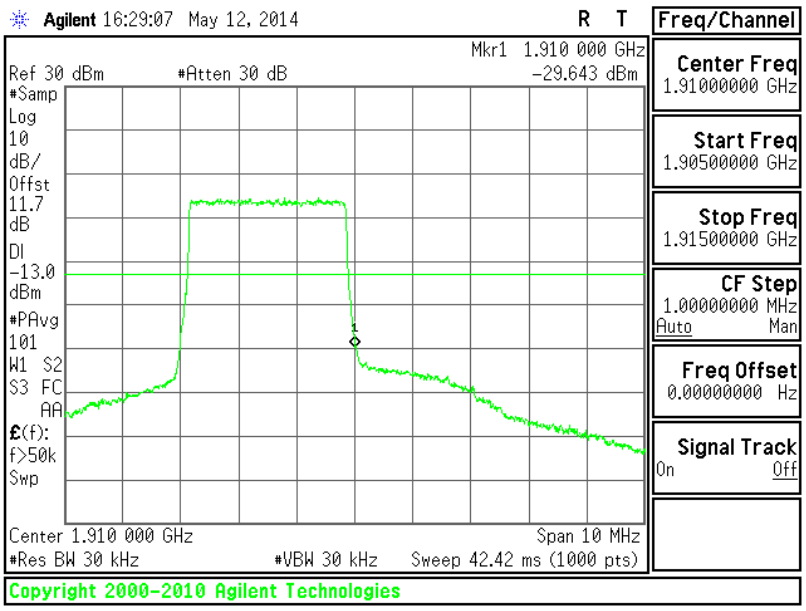
HIGH CH, RB8-4



LOW CH, RB15-0

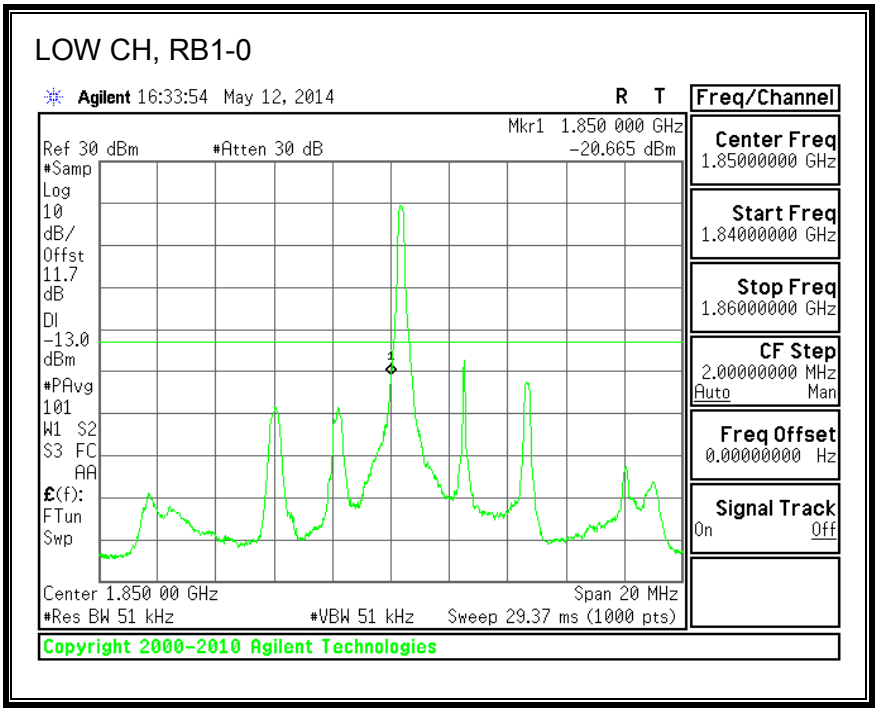


HIGH CH, RB15-0

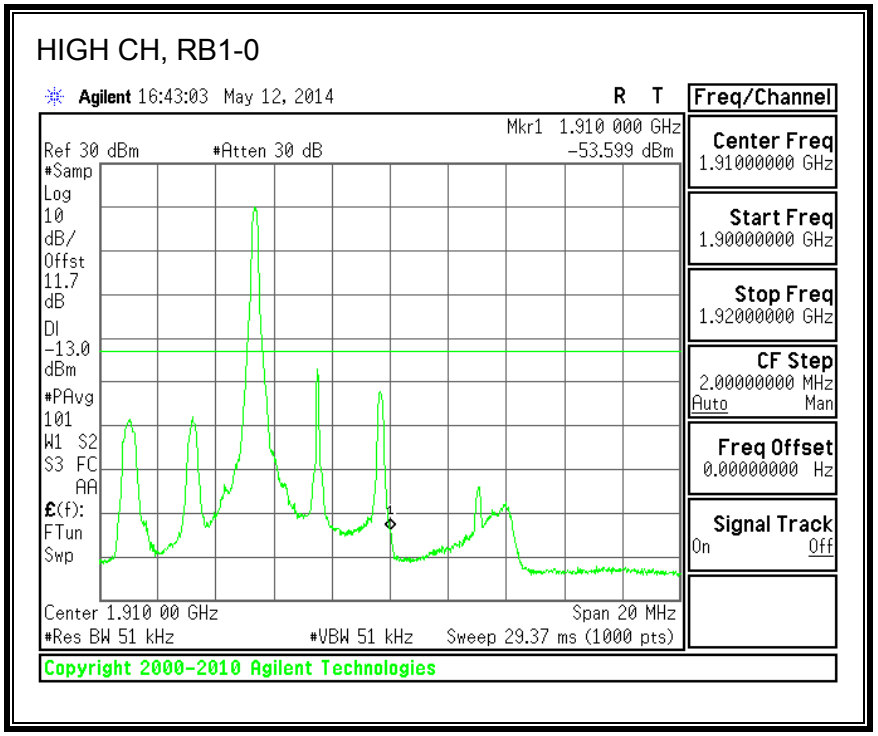


QPSK, (5.0 MHz BAND WIDTH)

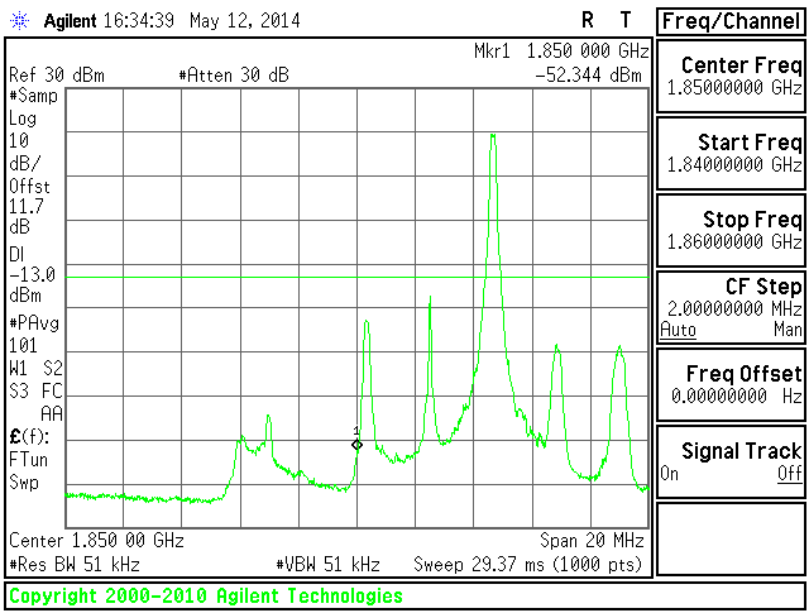
LOW CH, RB1-0



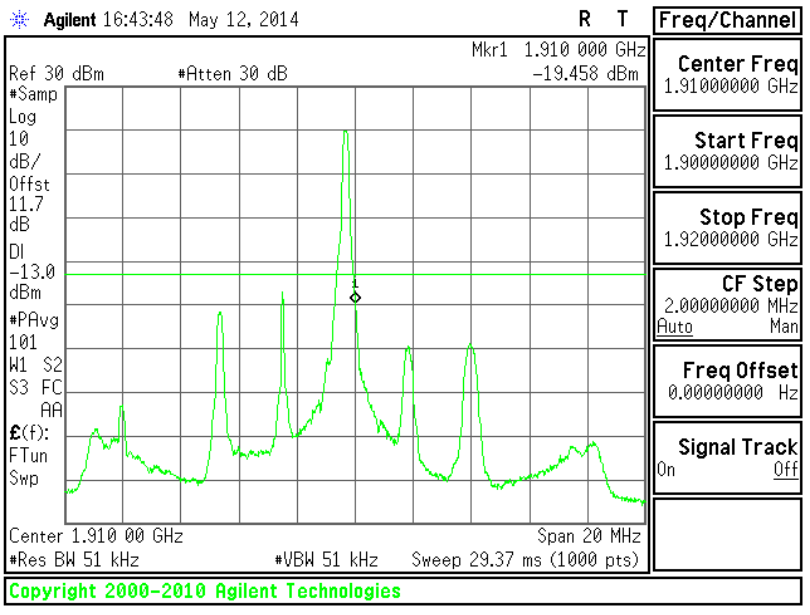
HIGH CH, RB1-0



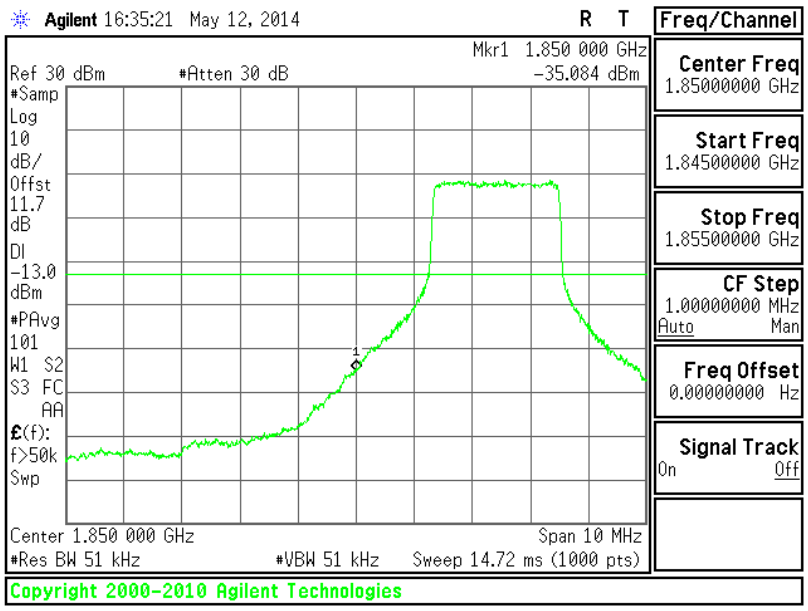
LOW CH, RB1-24



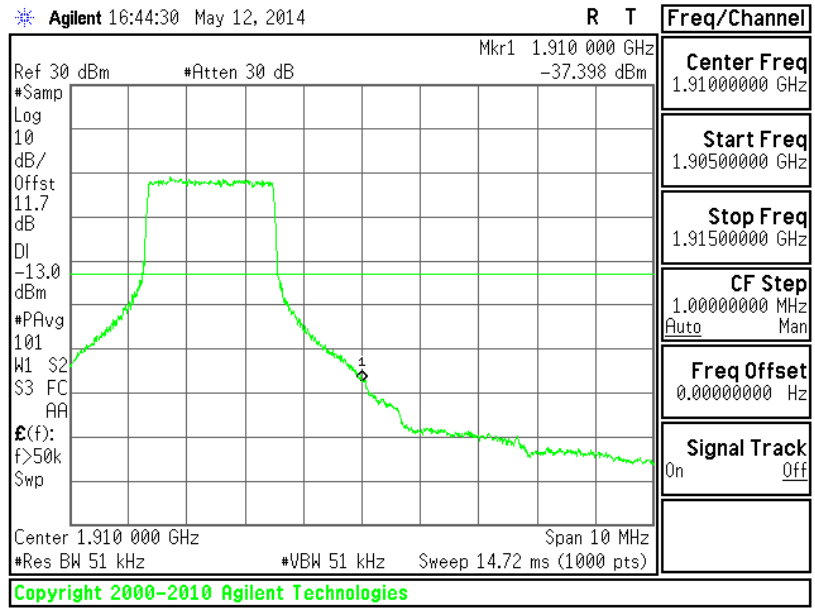
HIGH CH, RB1-24



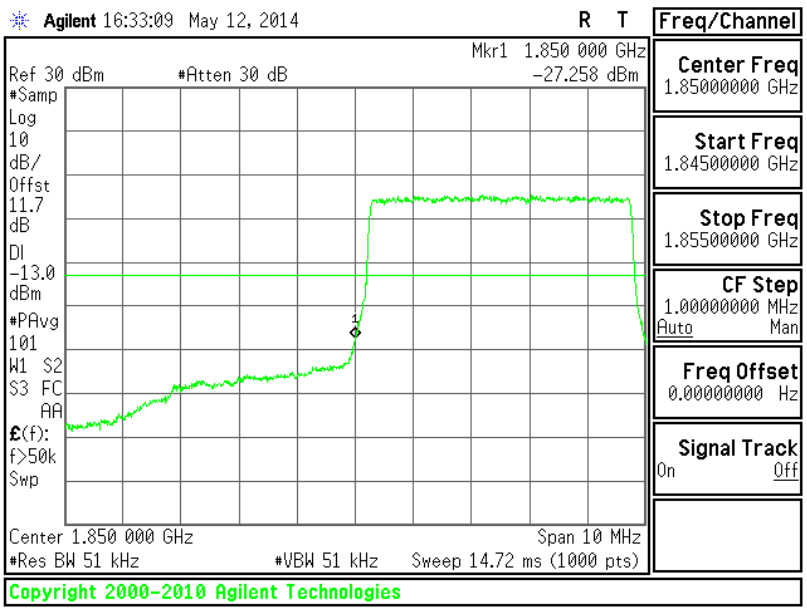
LOW CH, RB12-6



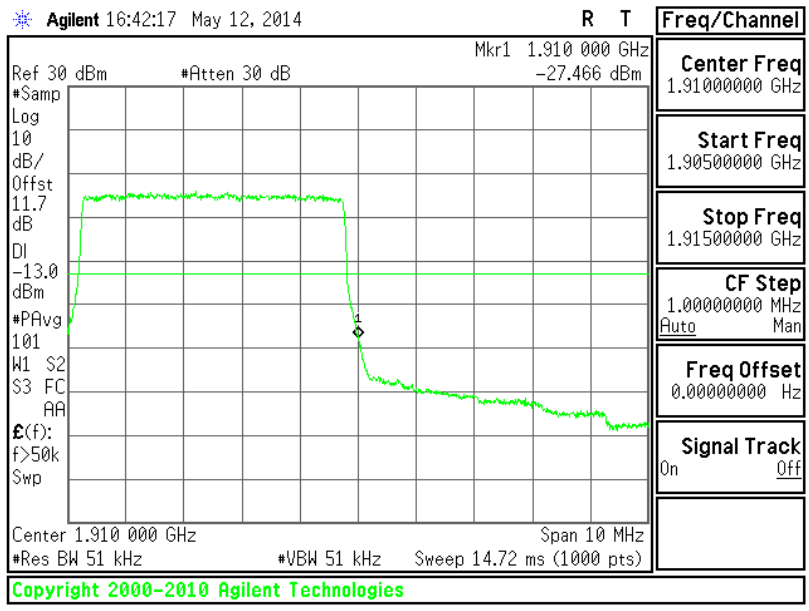
HIGH CH, RB12-6



LOW CH, RB25-0

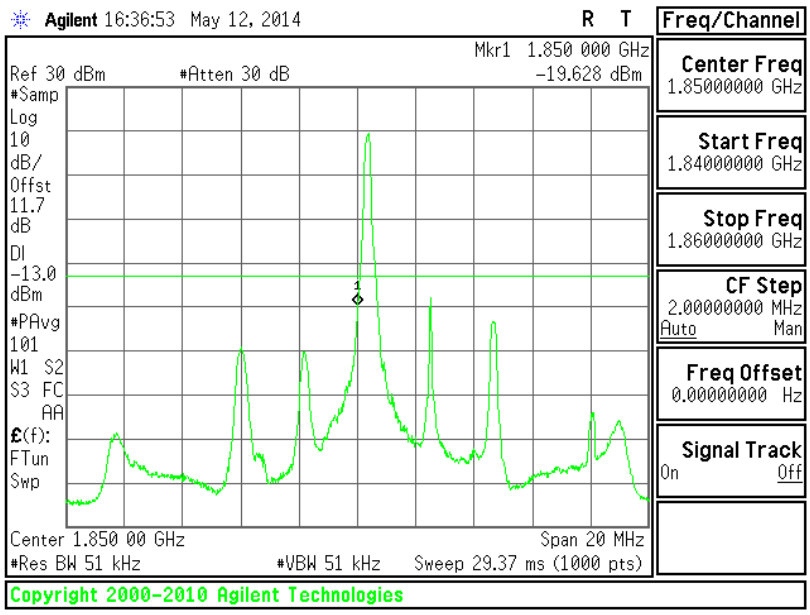


HIGH CH, RB25-0

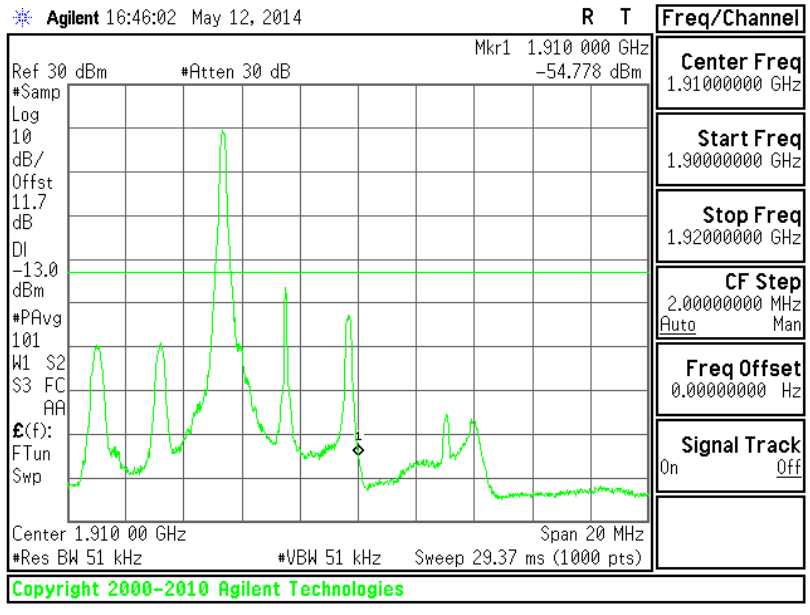


16QAM, (5.0 MHz BAND WIDTH)

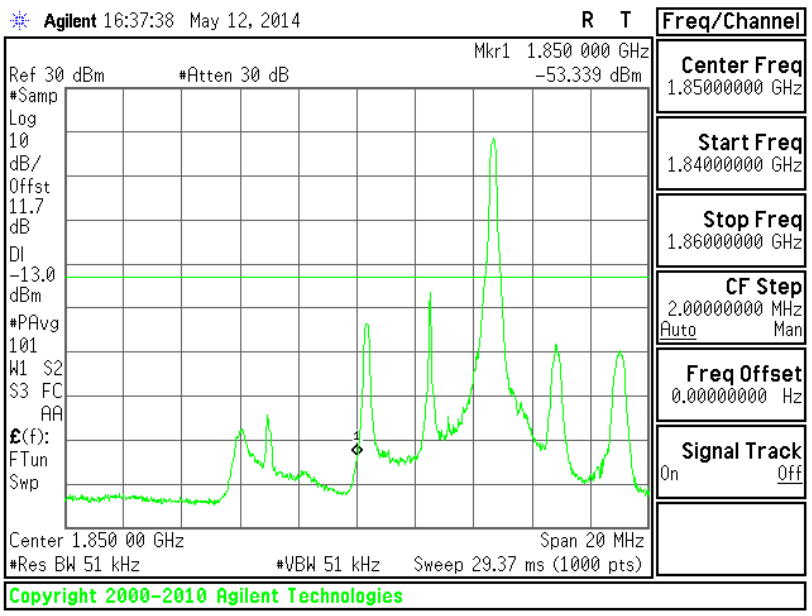
LOW CH, RB1-0



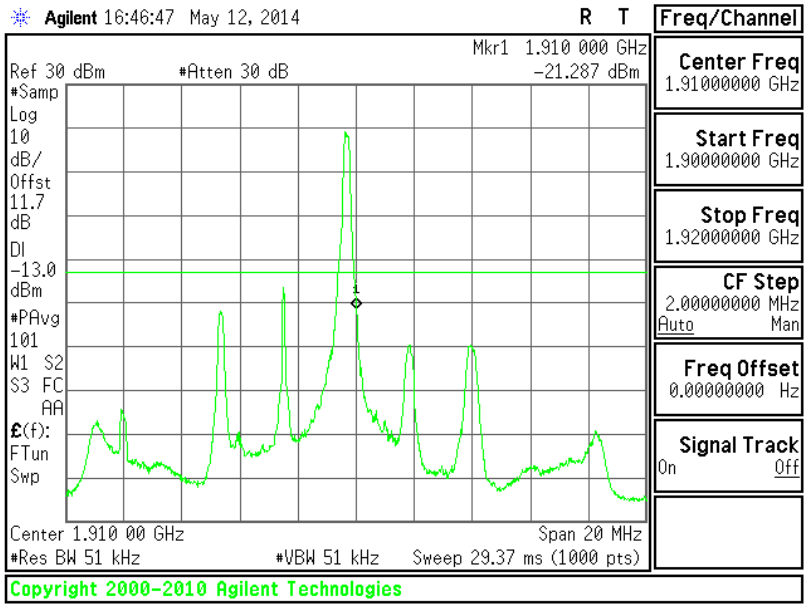
HIGH CH, RB1-0



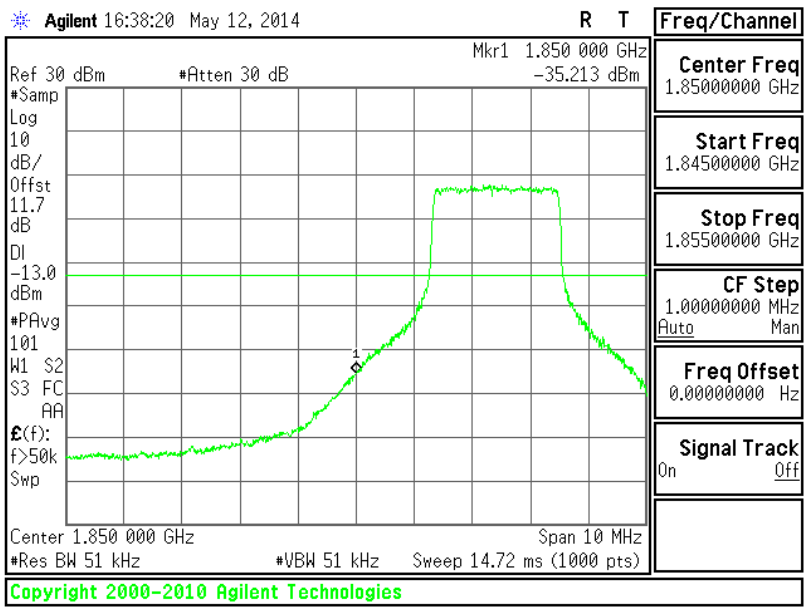
LOW CH, RB1-24



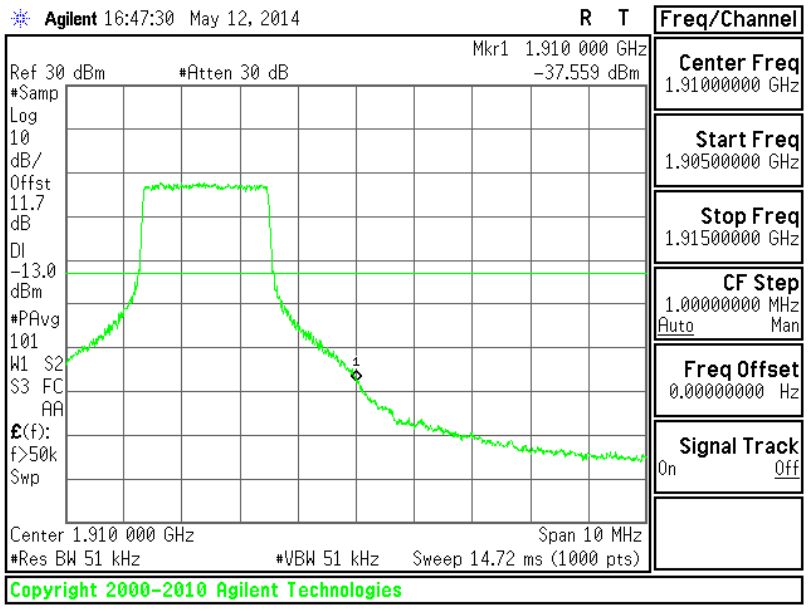
HIGH CH, RB1-24



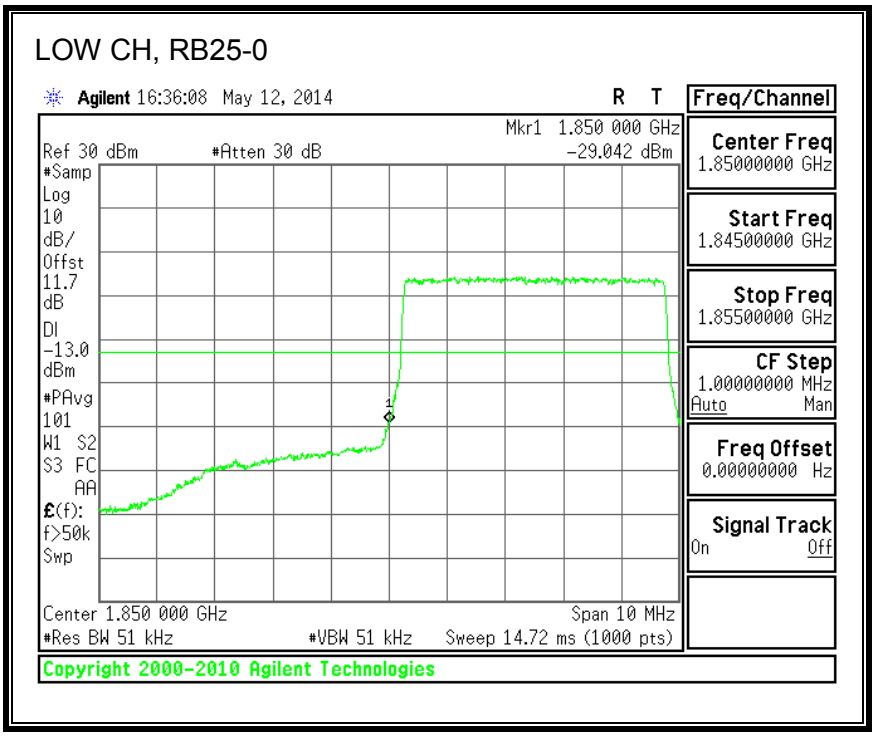
LOW CH, RB12-6



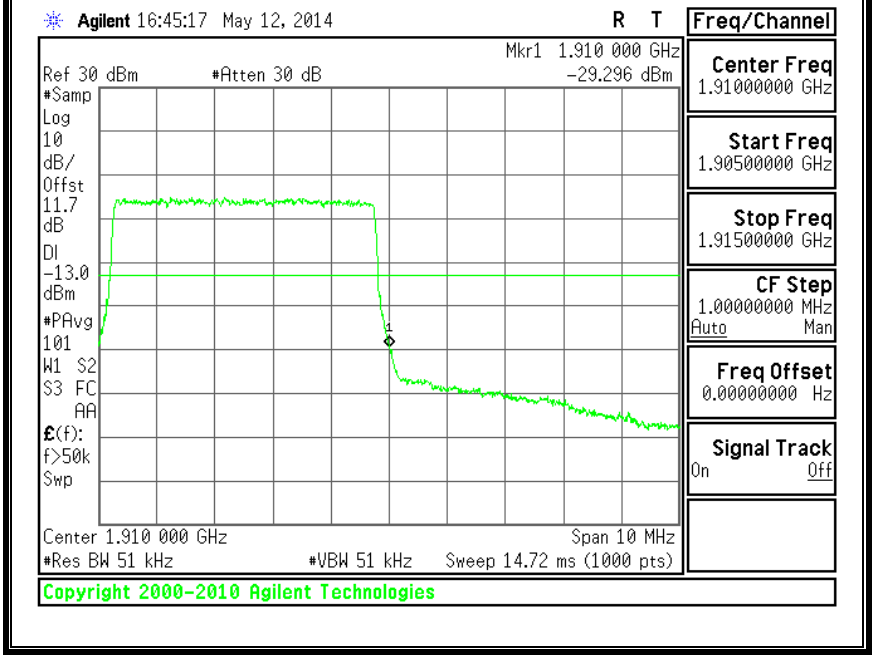
HIGH CH, RB12-6



LOW CH, RB25-0

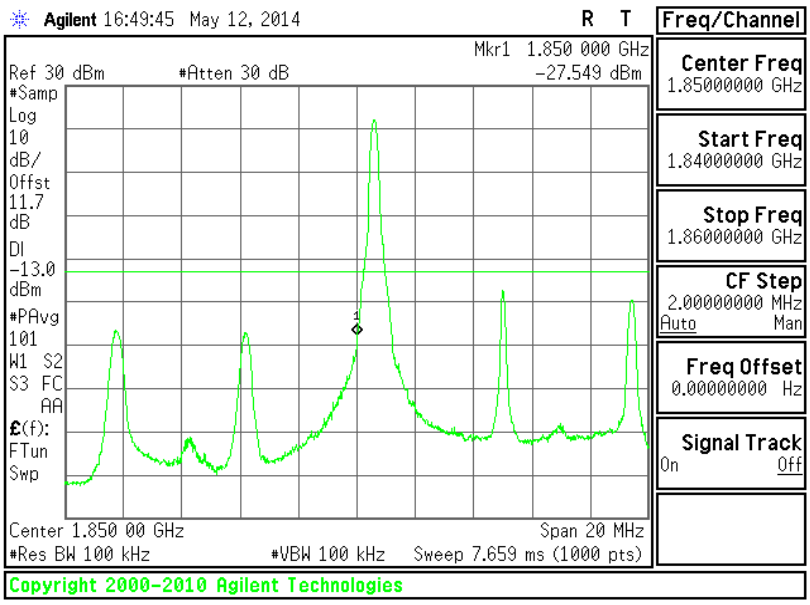


HIGH CH, RB25-0

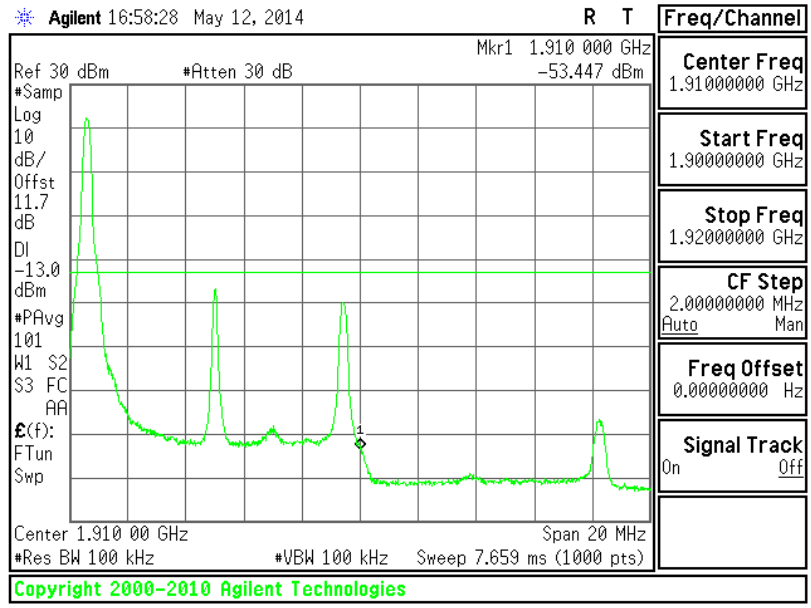


QPSK, (10.0 MHz BAND WIDTH)

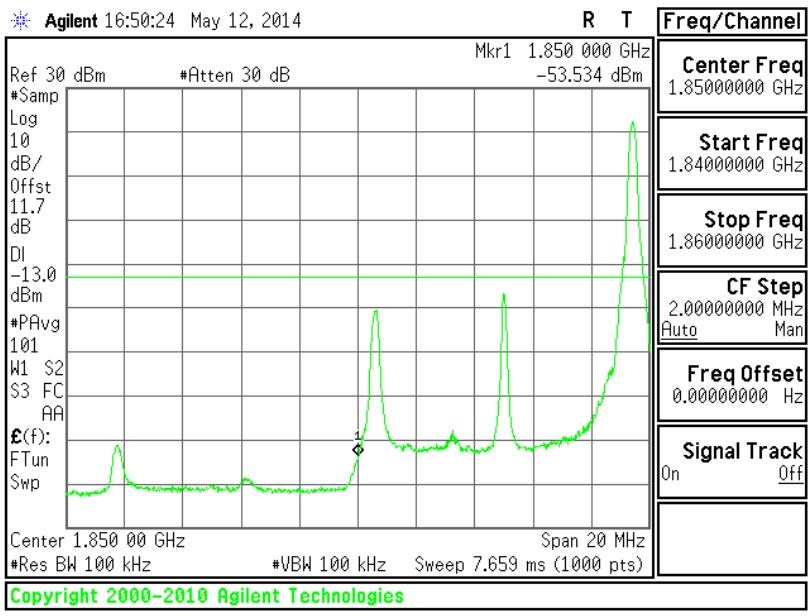
LOW CH, RB1-0



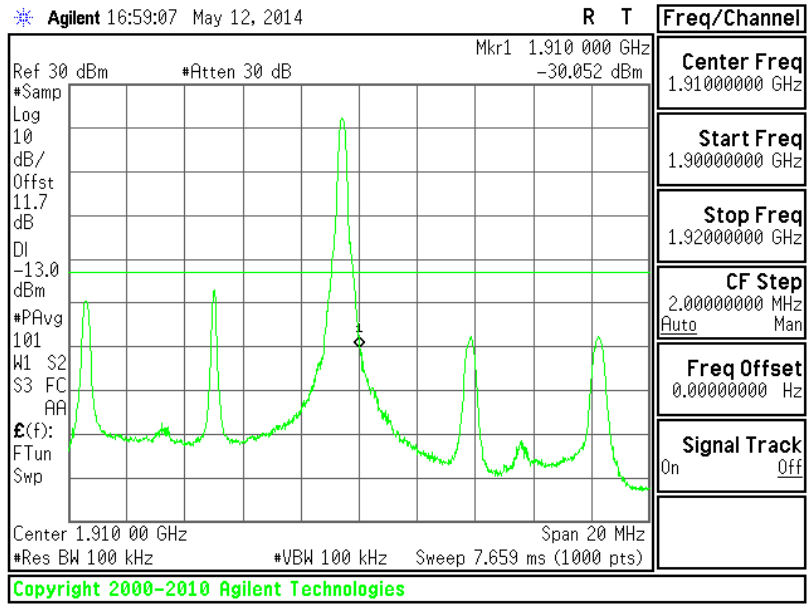
HIGH CH, RB1-0



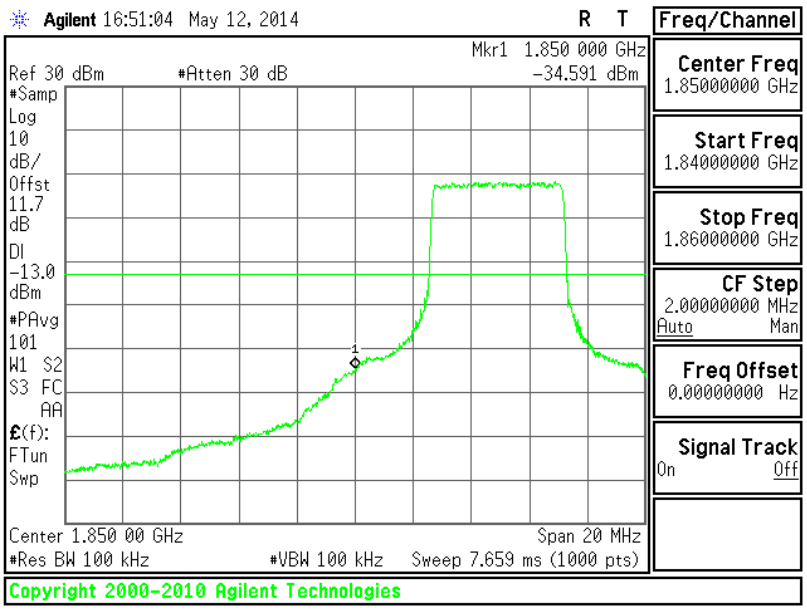
LOW CH, RB1-49



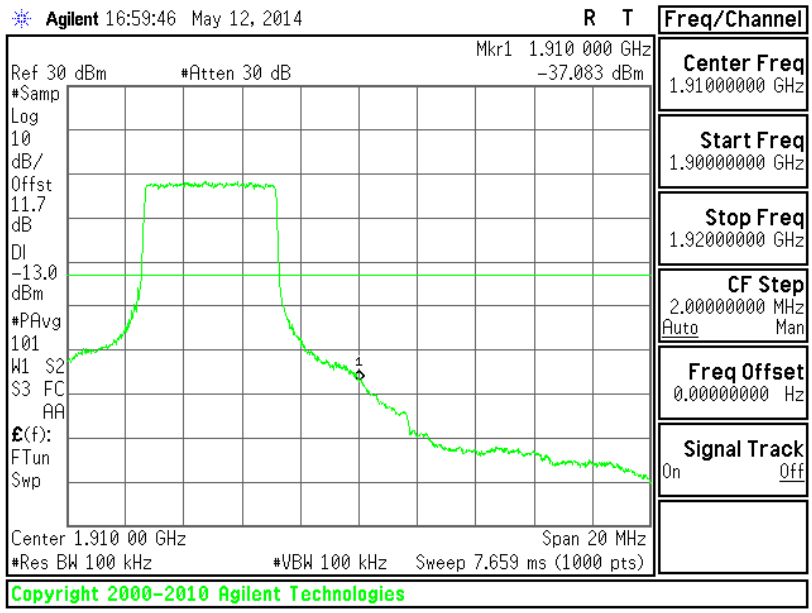
HIGH CH, RB1-49



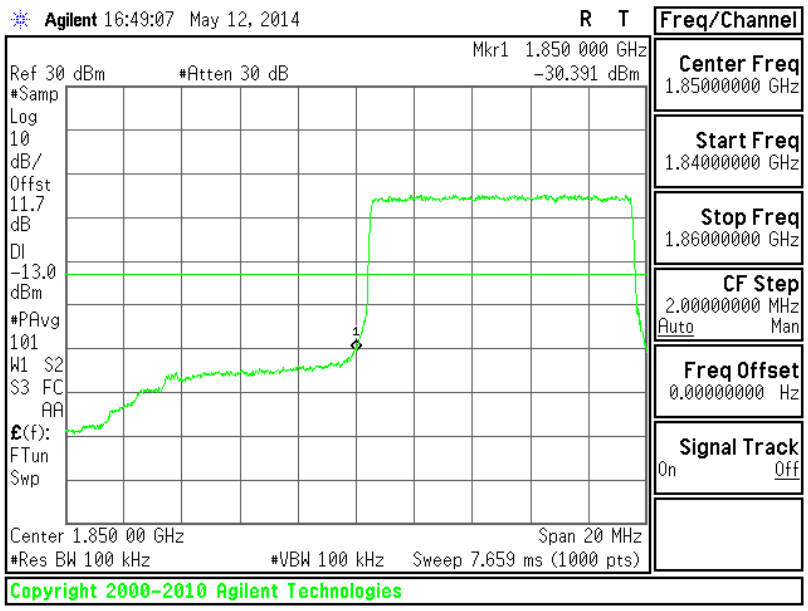
LOW CH, RB25-12



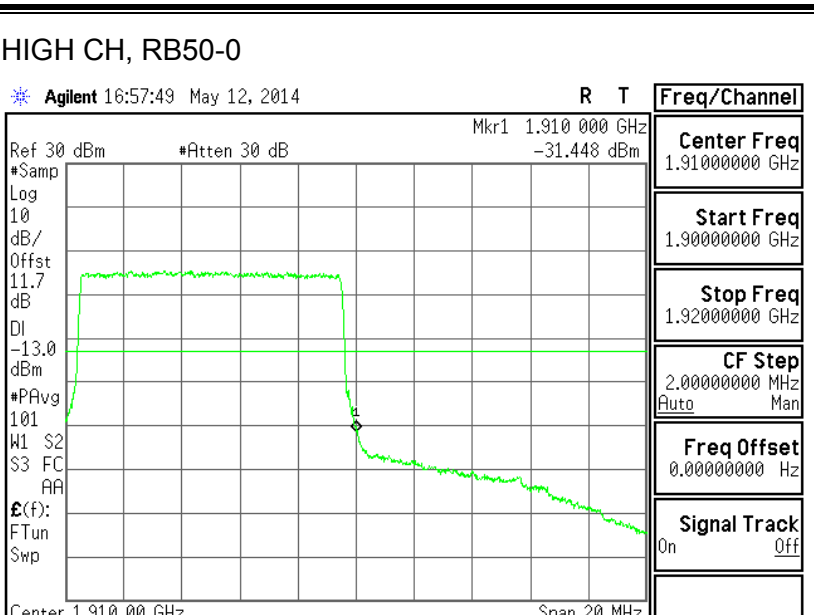
HIGH CH, RB25-12



LOW CH, RB50-0

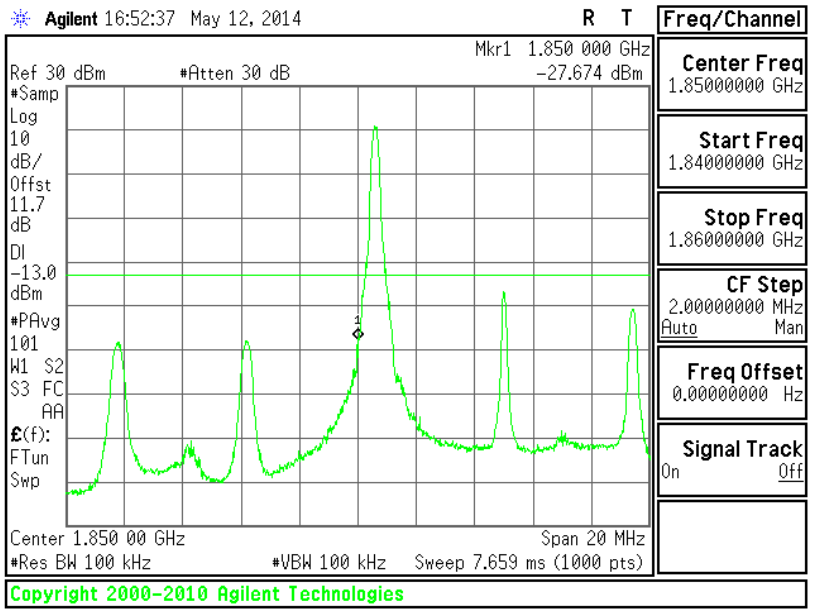


HIGH CH, RB50-0

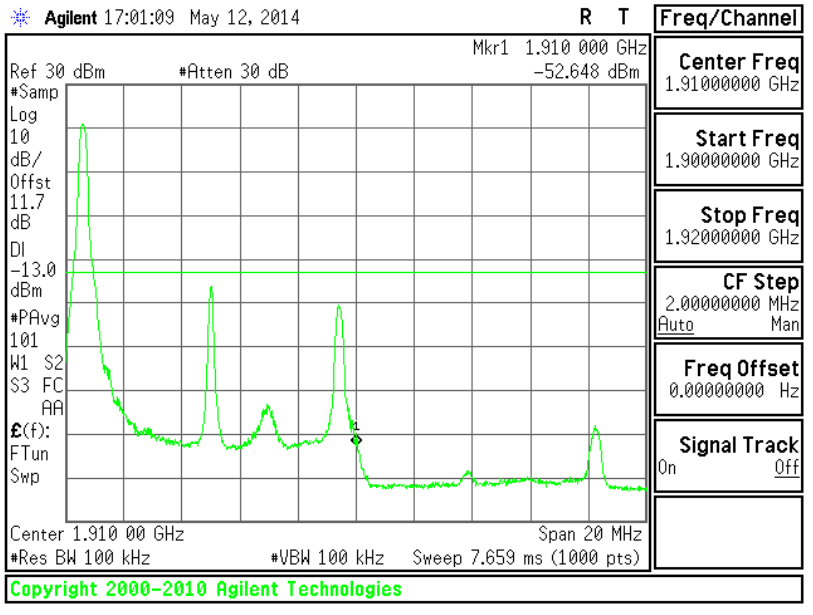


16QAM, (10.0 MHz BAND WIDTH)

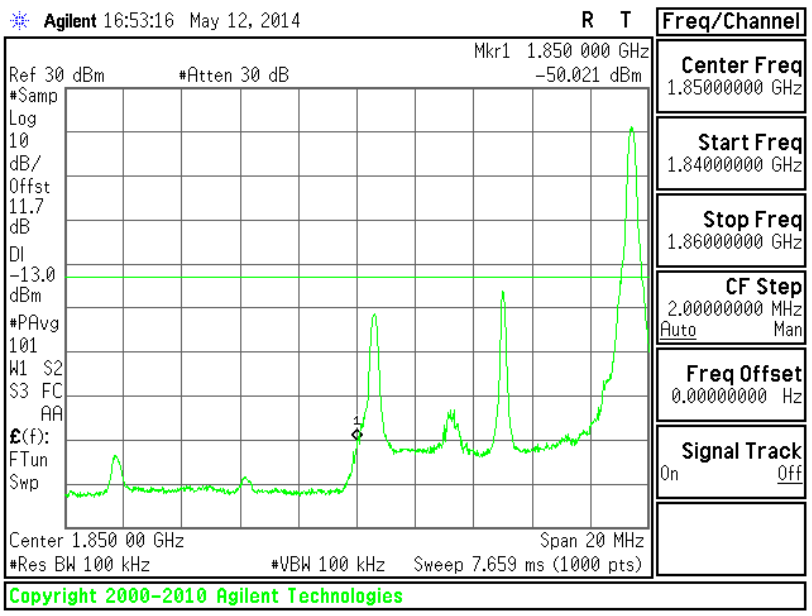
LOW CH, RB1-0



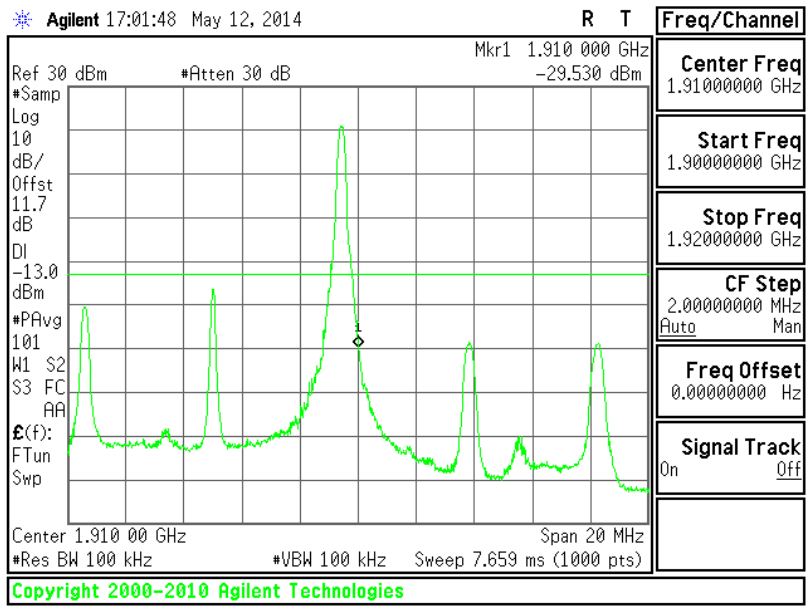
HIGH CH, RB1-0



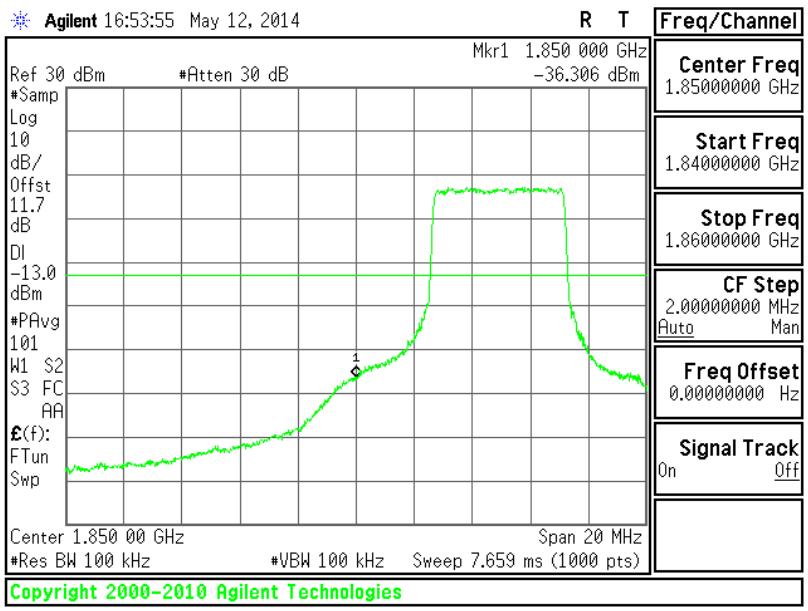
LOW CH, RB1-49



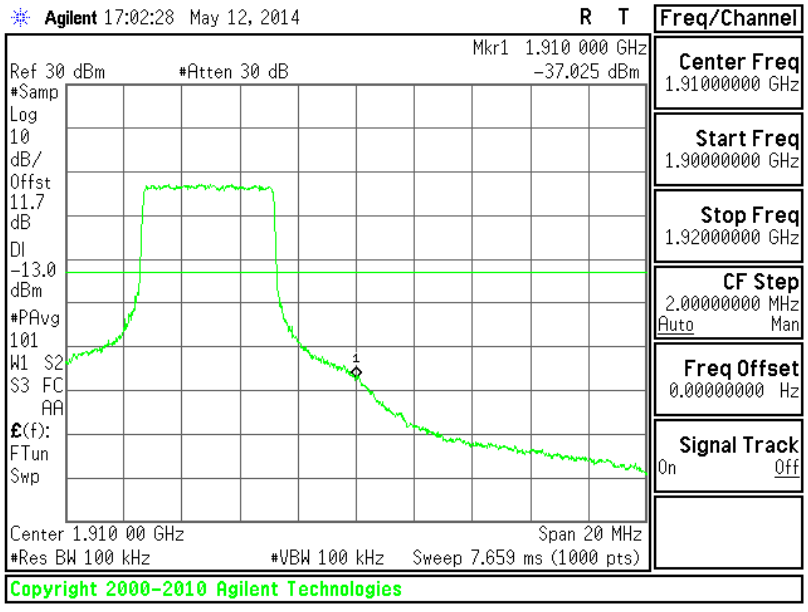
HIGH CH, RB1-49



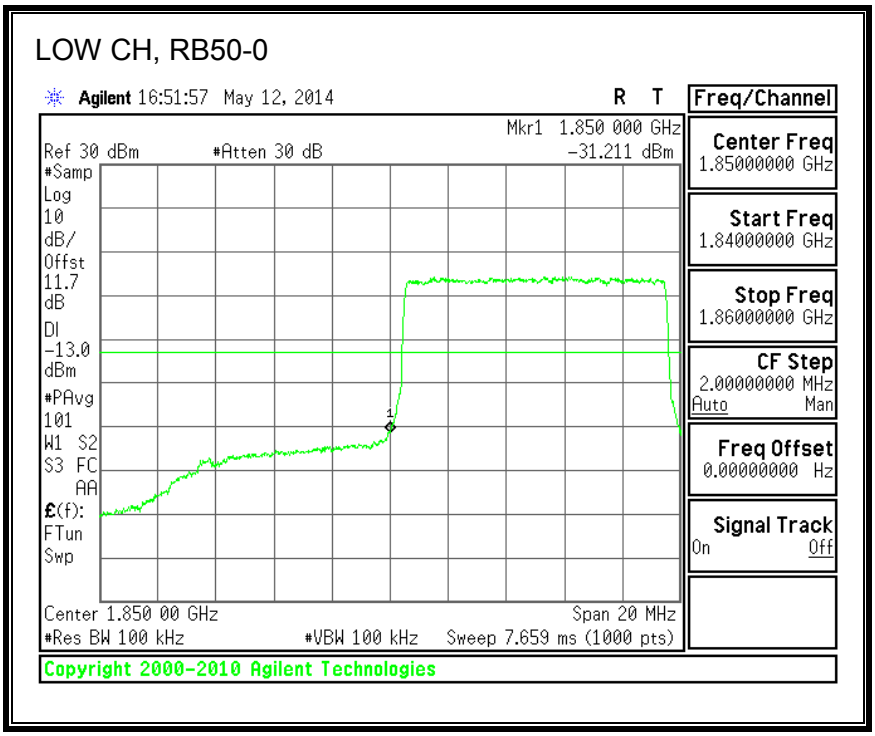
LOW CH, RB25-12



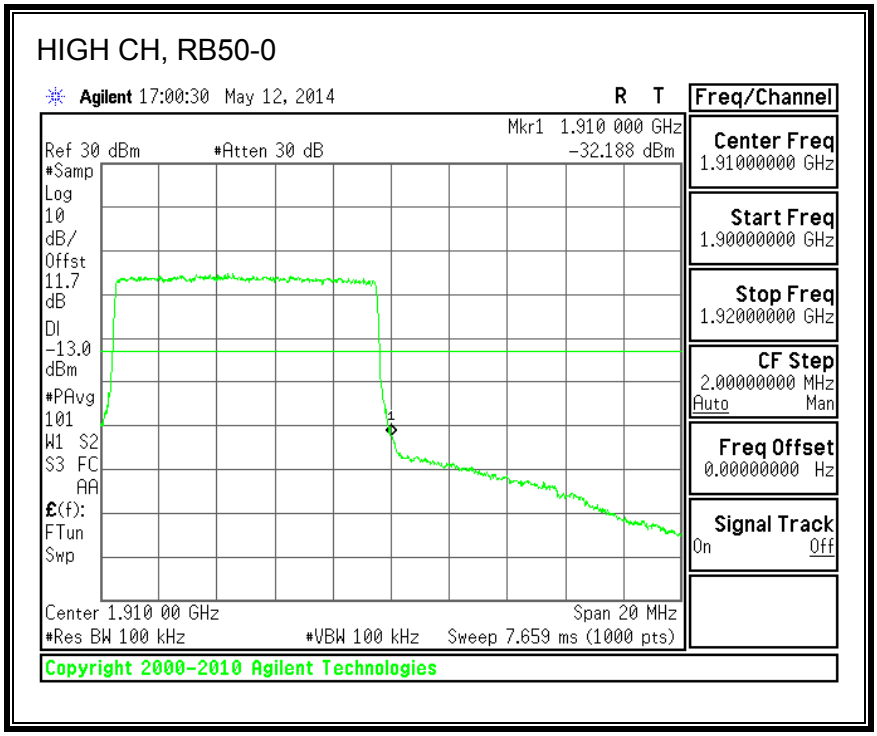
HIGH CH, RB25-12



LOW CH, RB50-0

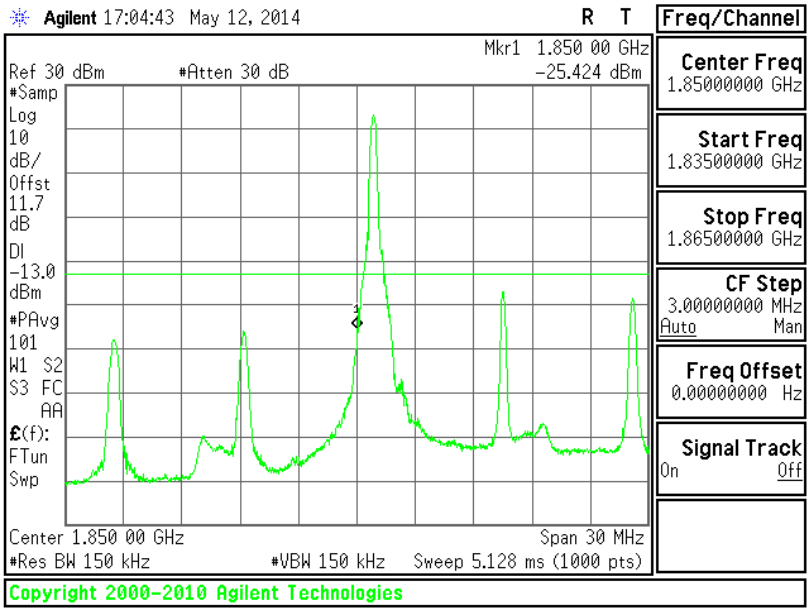


HIGH CH, RB50-0

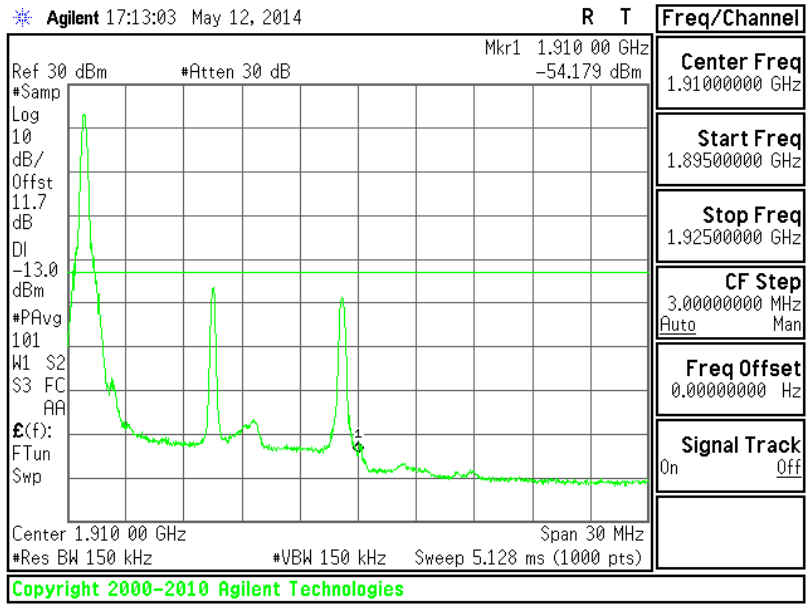


QPSK, (15.0 MHz BAND WIDTH)

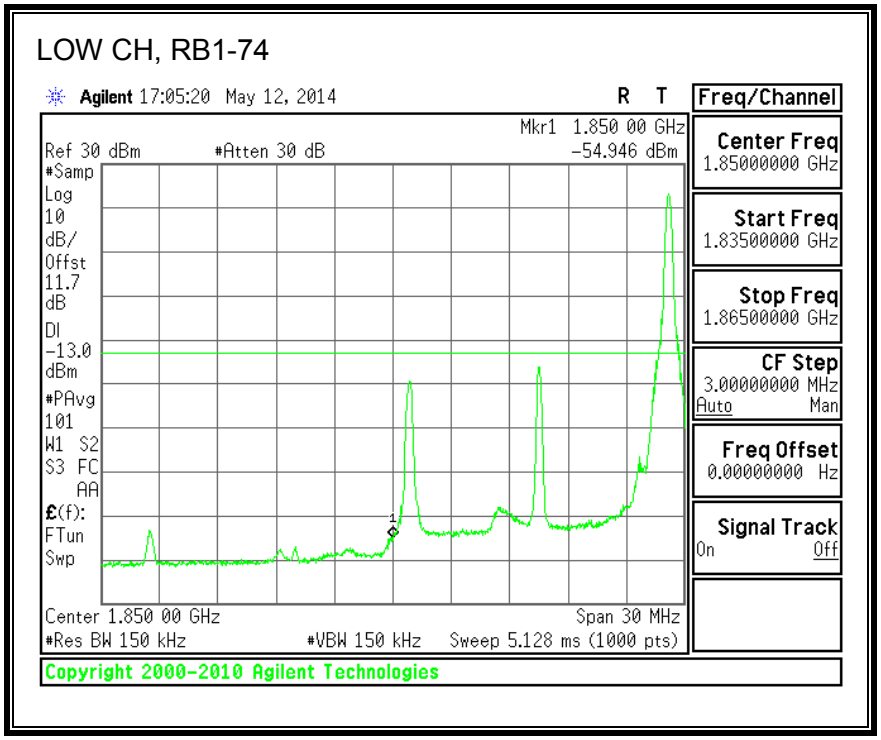
LOW CH, RB1-0



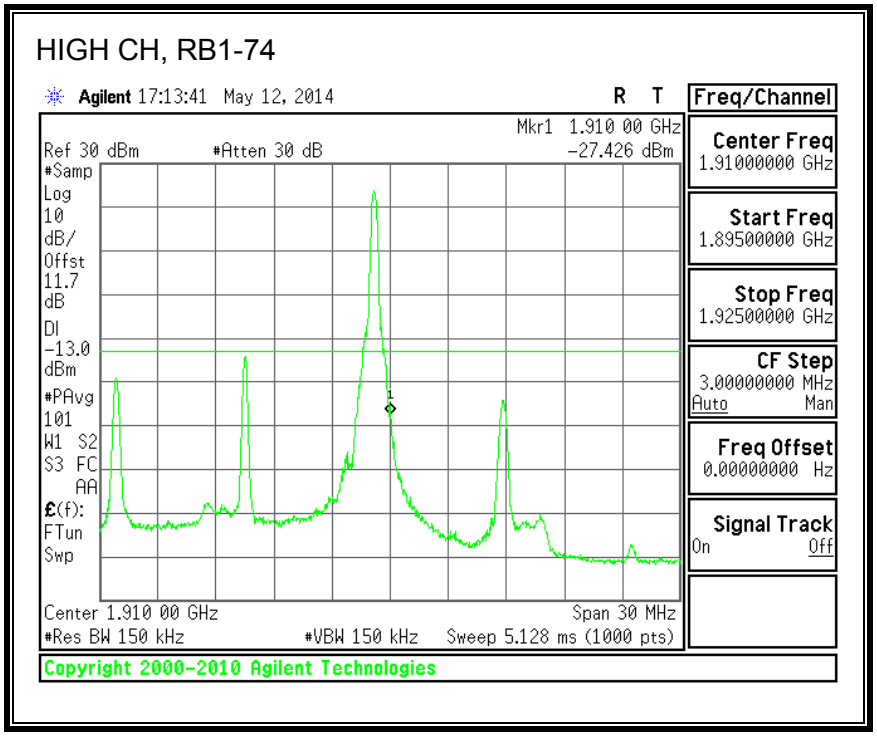
HIGH CH, RB1-0



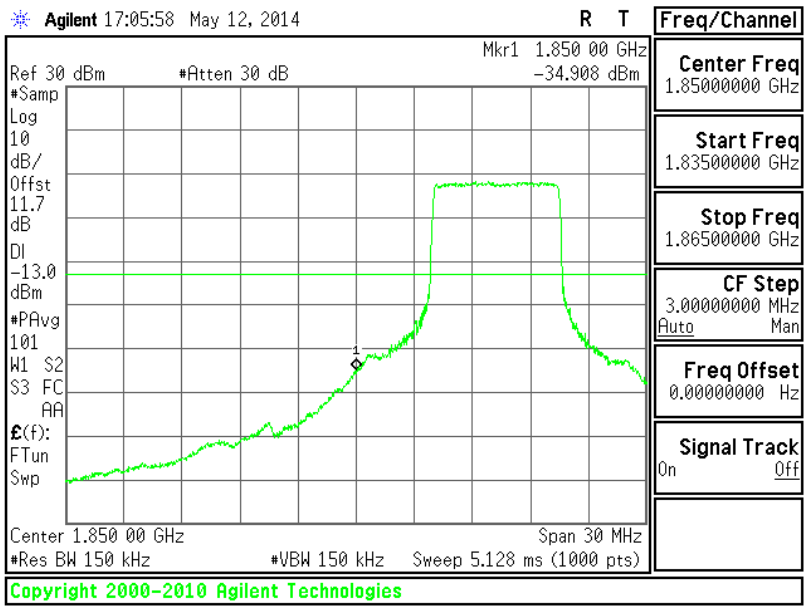
LOW CH, RB1-74



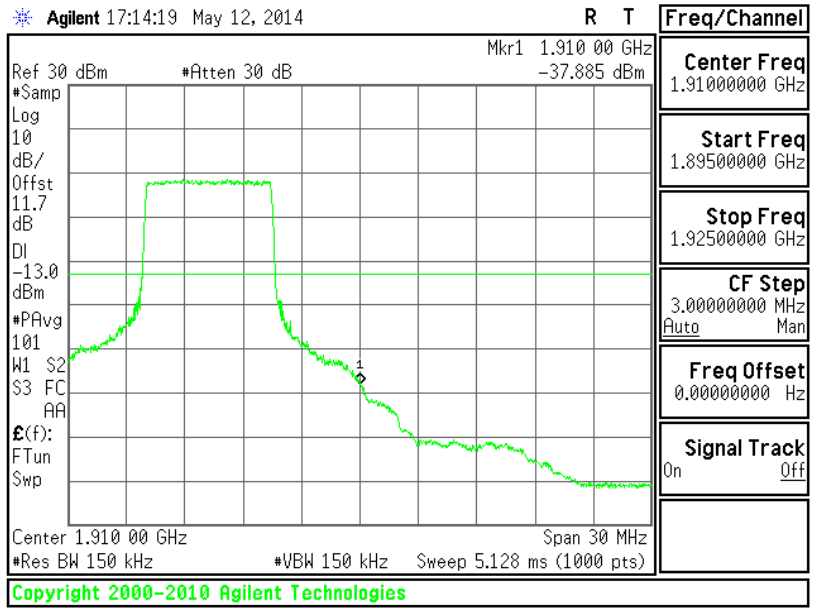
HIGH CH, RB1-74



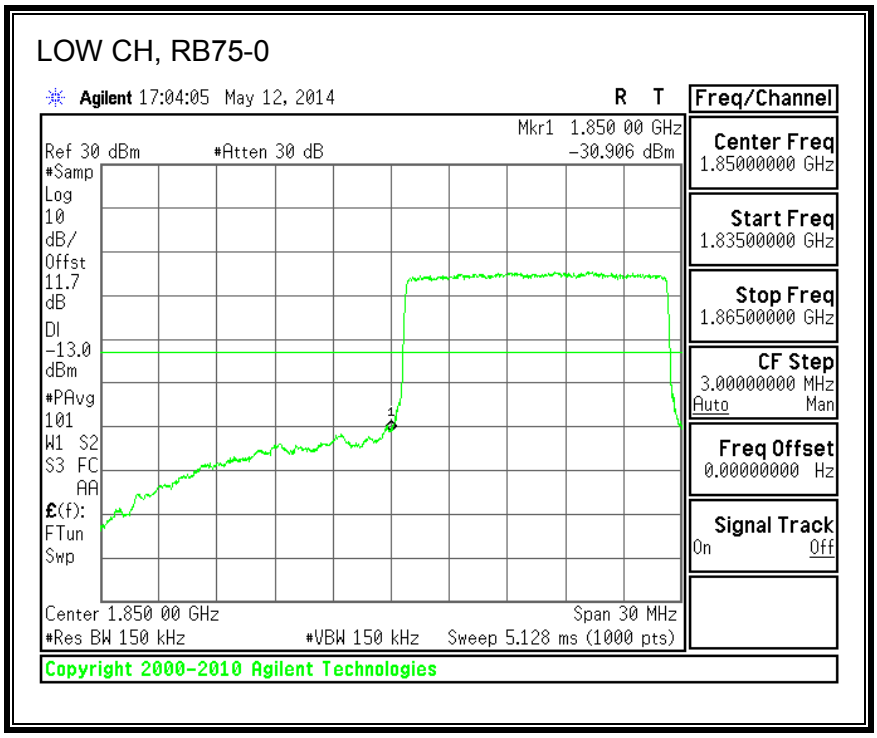
LOW CH, RB36-18



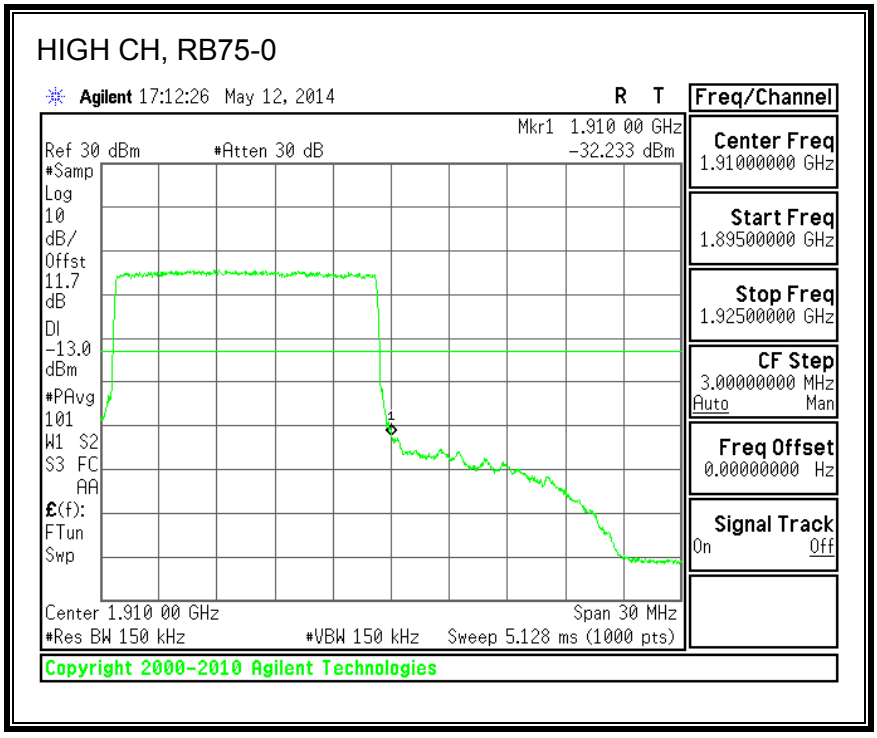
HIGH CH, RB36-18



LOW CH, RB75-0

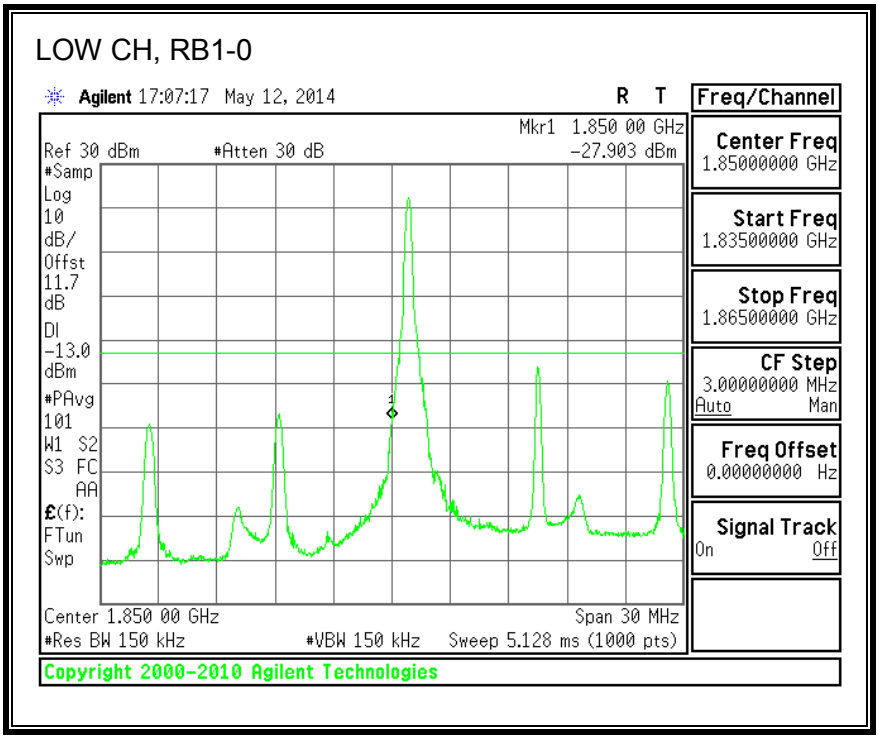


HIGH CH, RB75-0

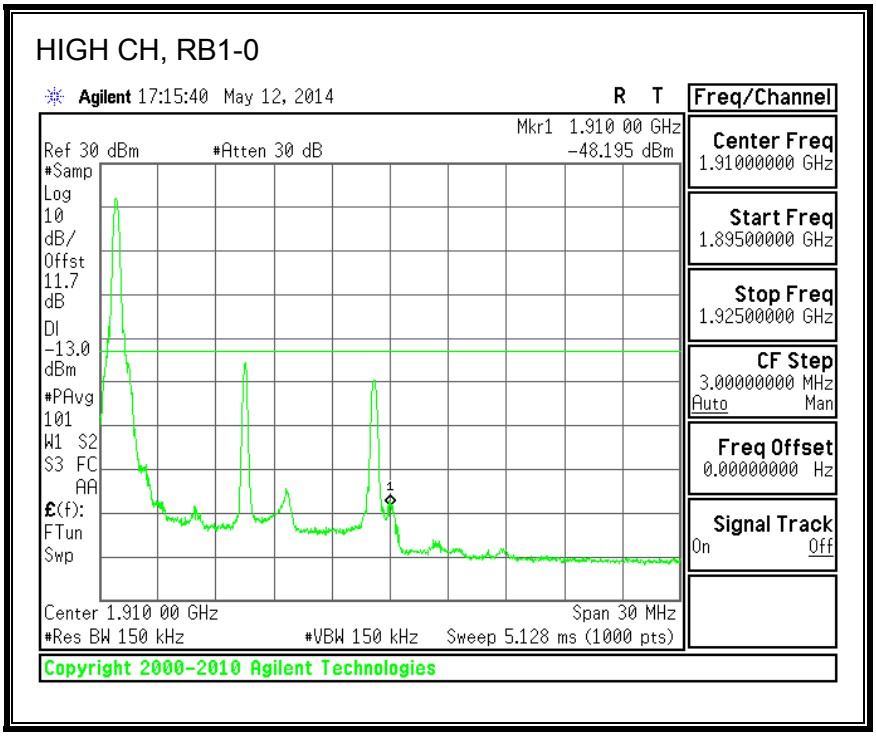


16QAM, (15.0 MHz BAND WIDTH)

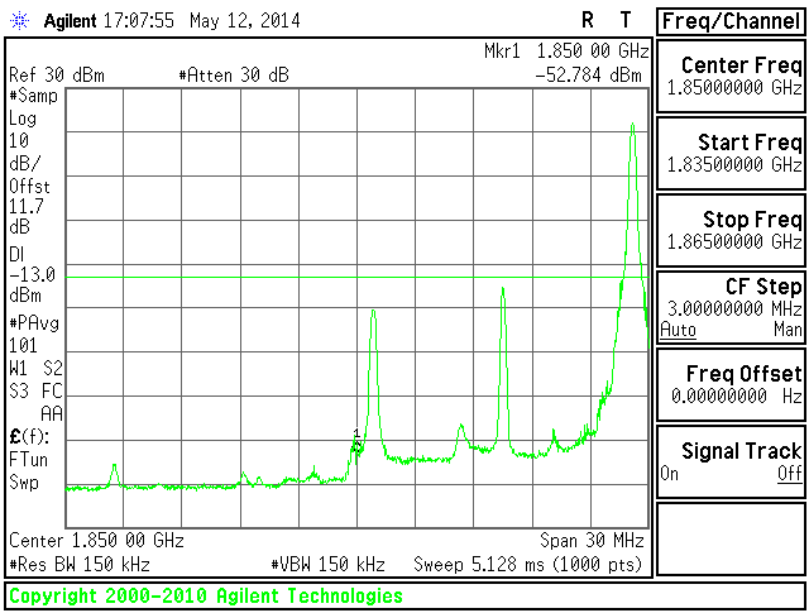
LOW CH, RB1-0



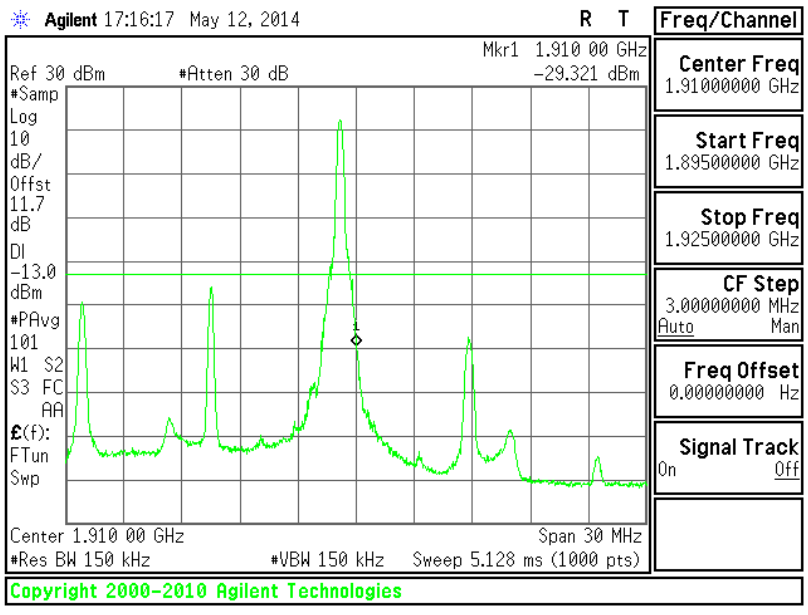
HIGH CH, RB1-0



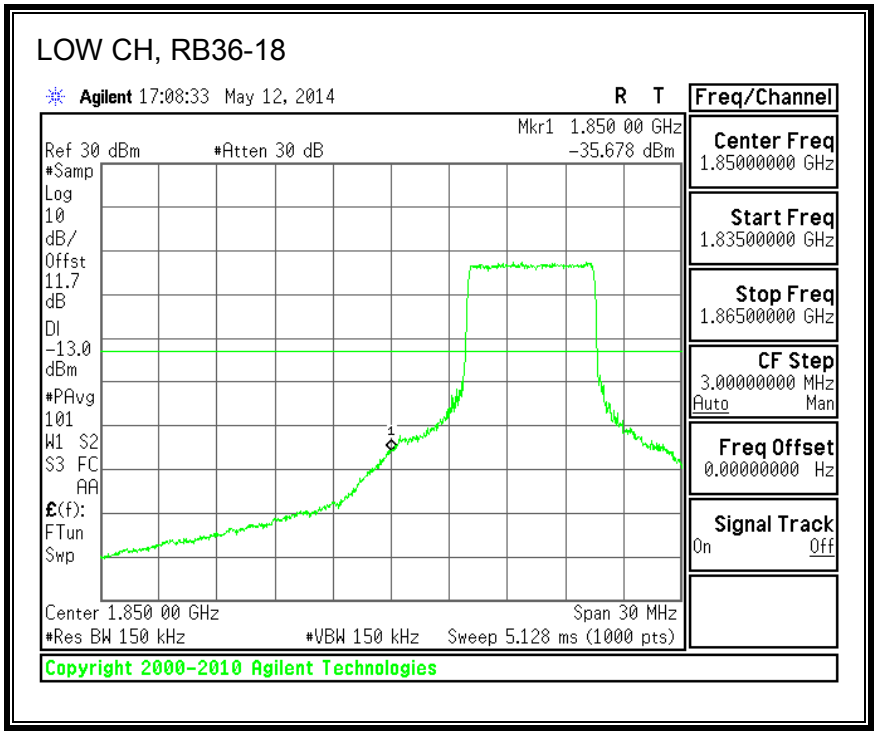
LOW CH, RB1-74



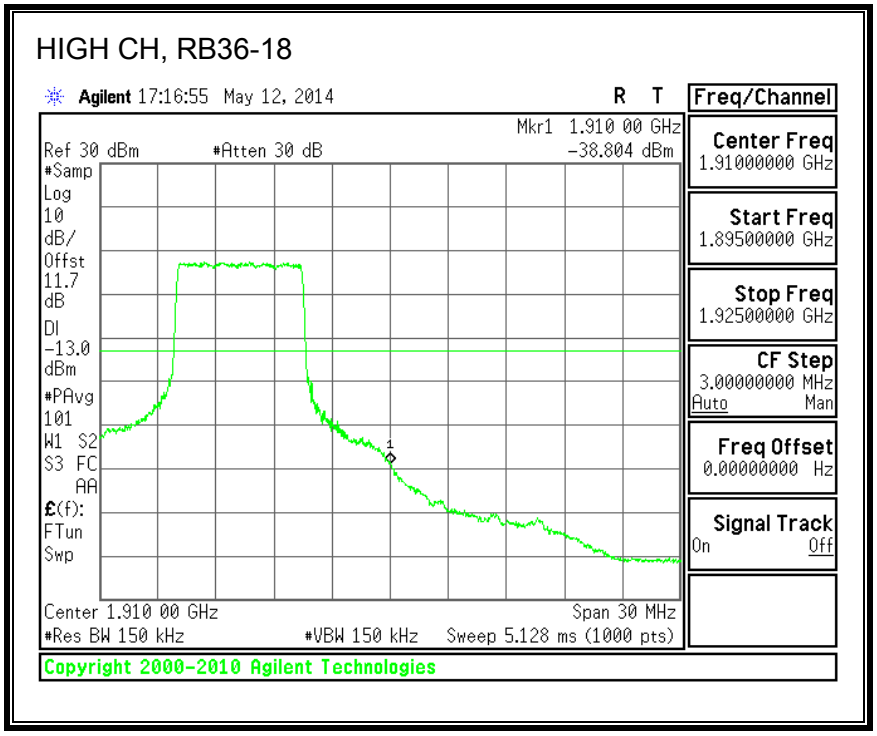
HIGH CH, RB1-74



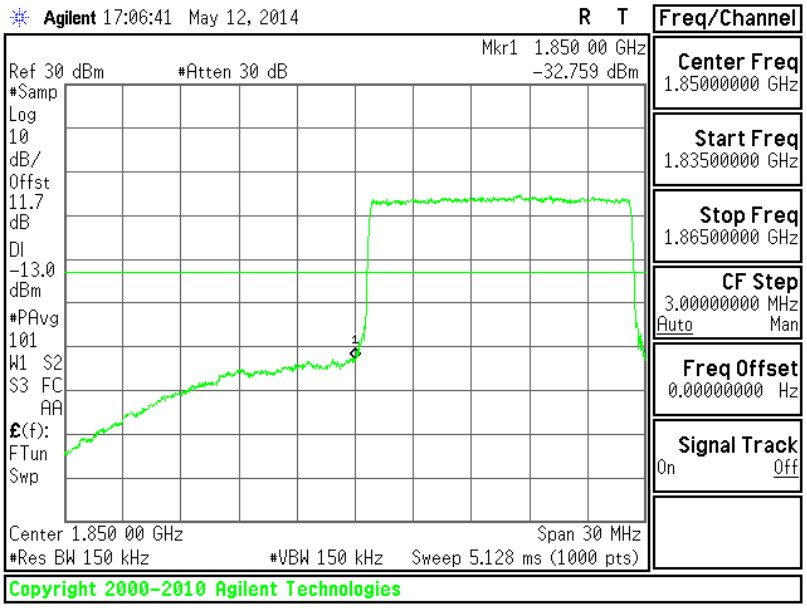
LOW CH, RB36-18



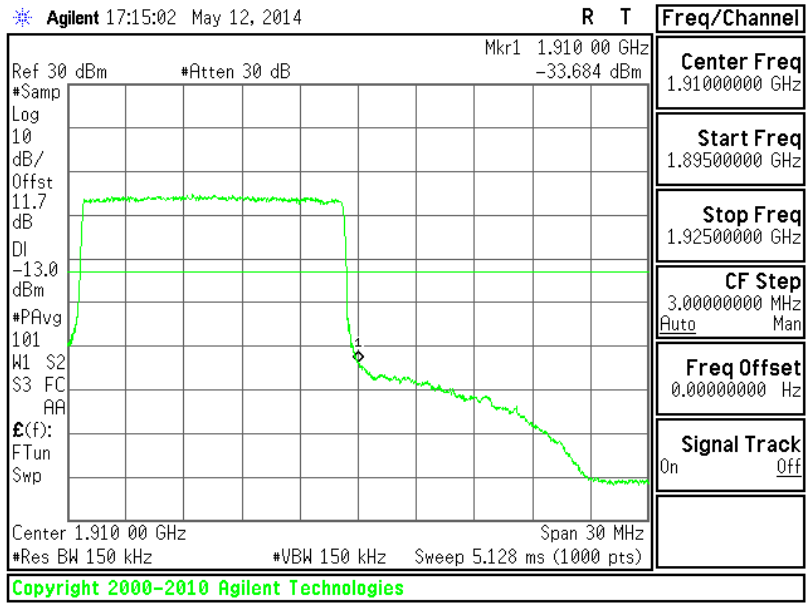
HIGH CH, RB36-18



LOW CH, RB75-0

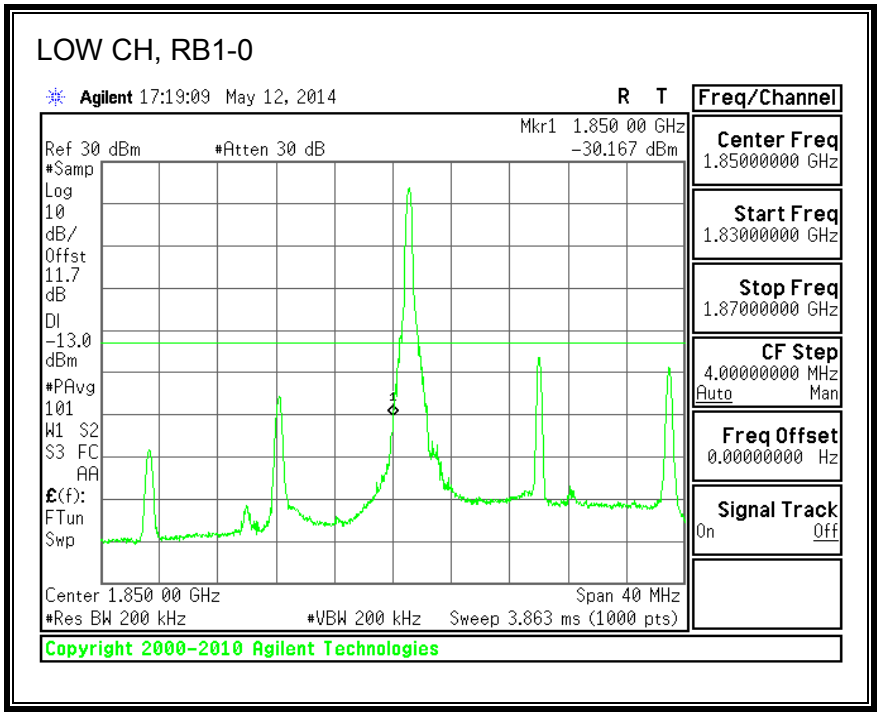


HIGH CH, RB75-0

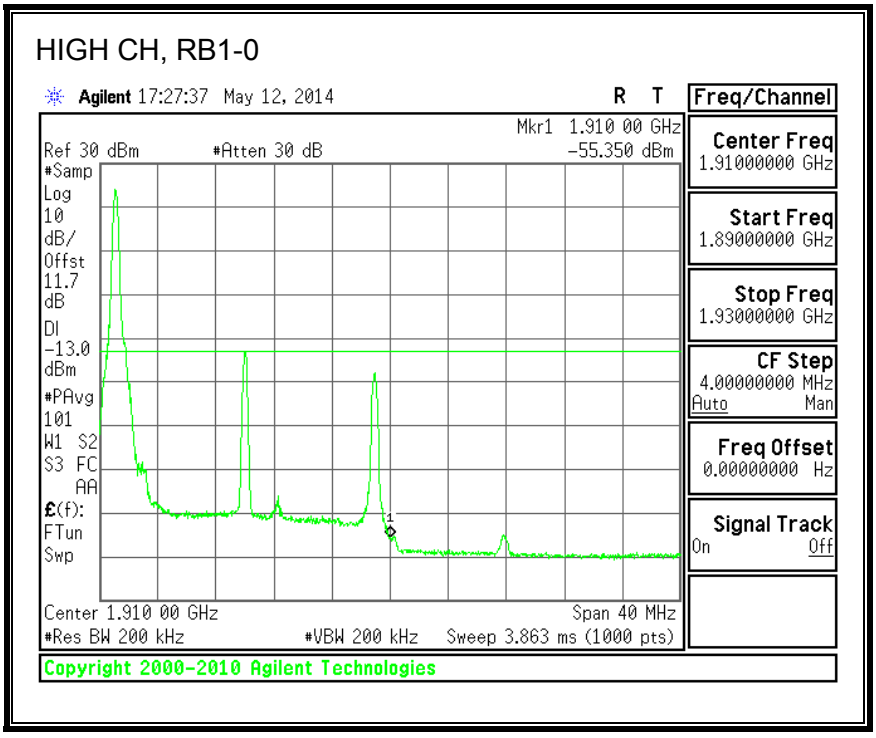


QPSK, (20.0 MHz BAND WIDTH)

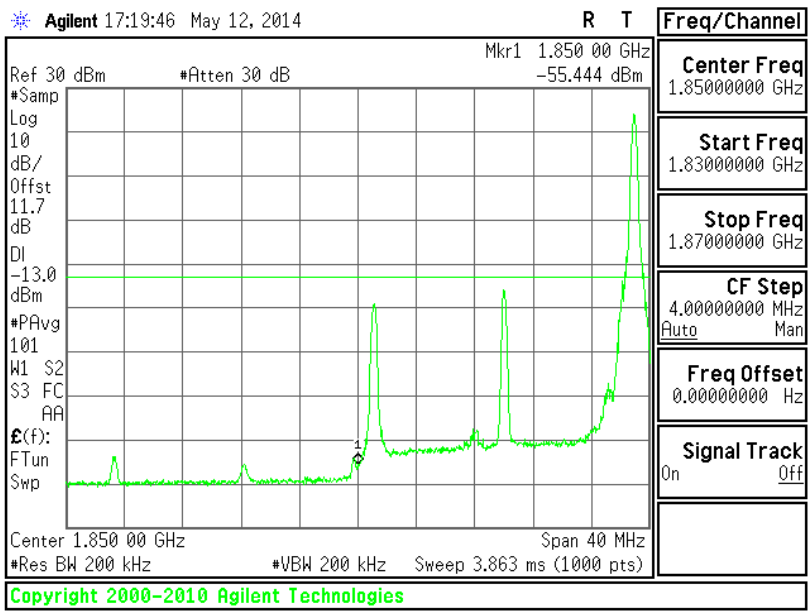
LOW CH, RB1-0



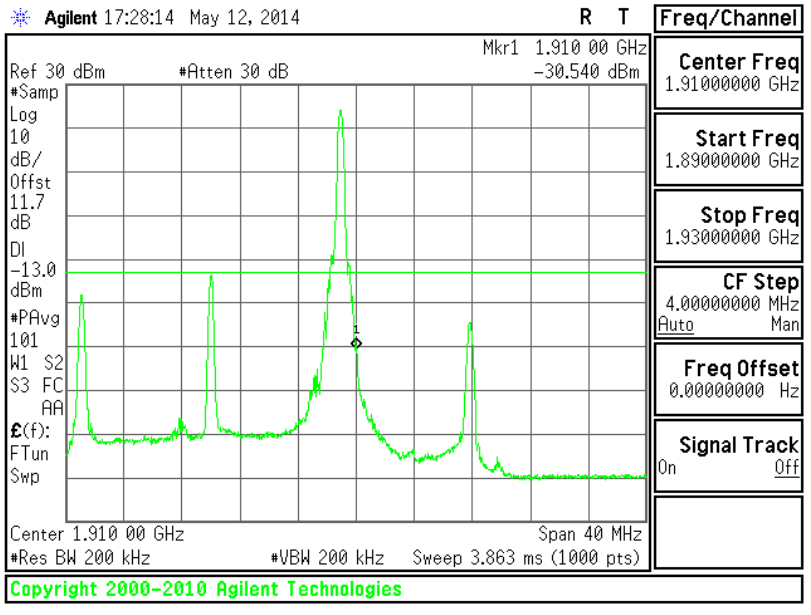
HIGH CH, RB1-0



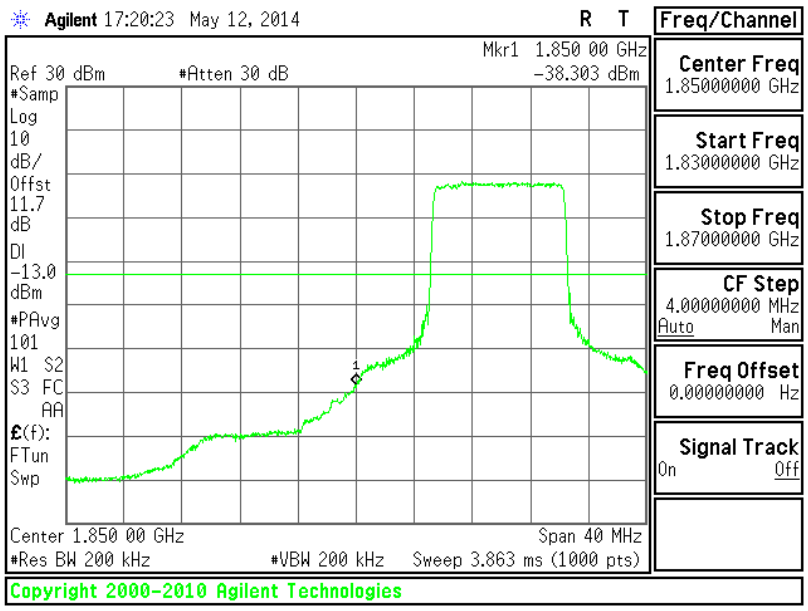
LOW CH, RB1-99



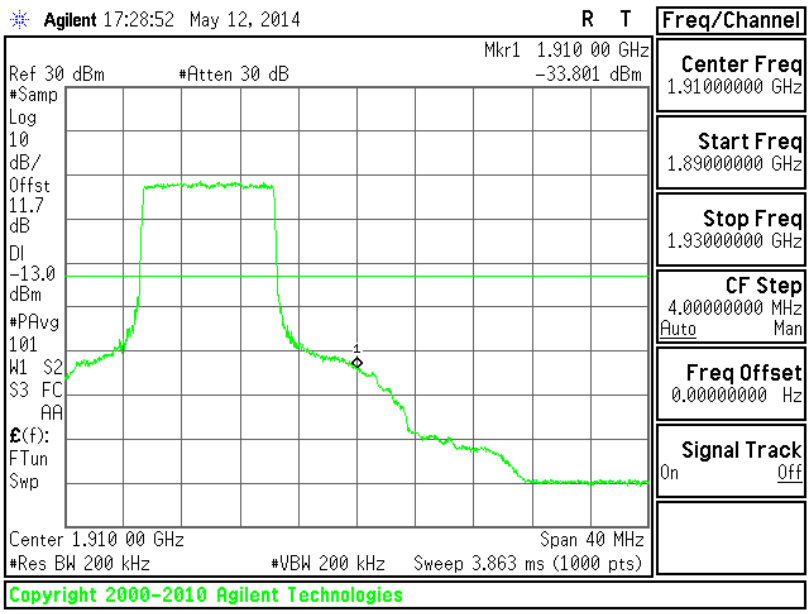
HIGH CH, RB1-99



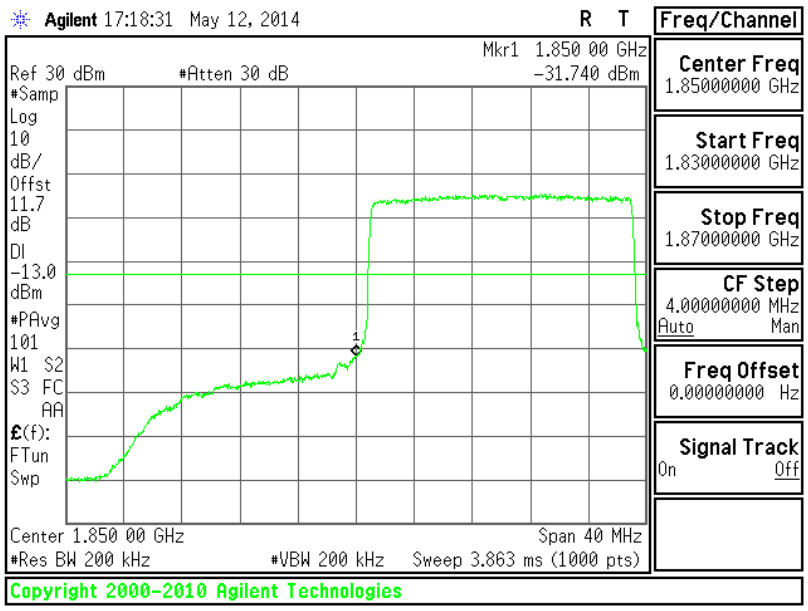
LOW CH, RB50-24



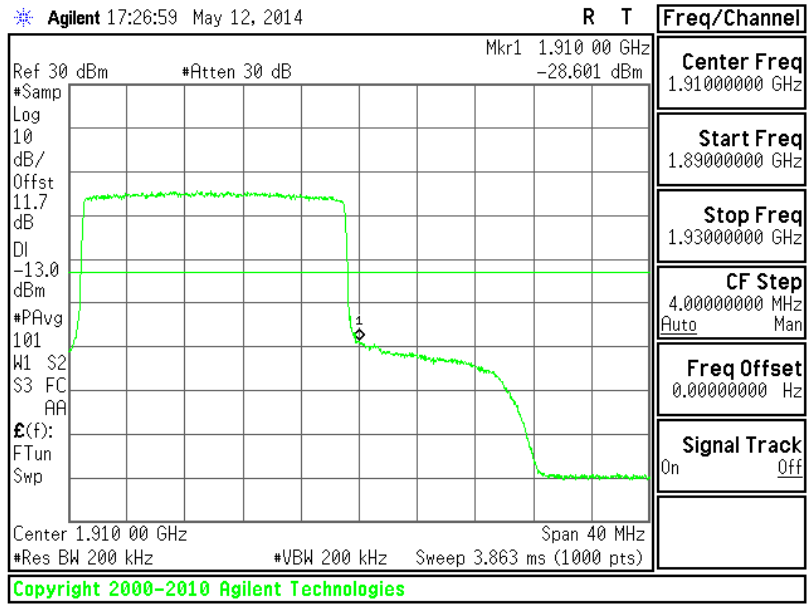
HIGH CH, RB50-24



LOW CH, RB100-0

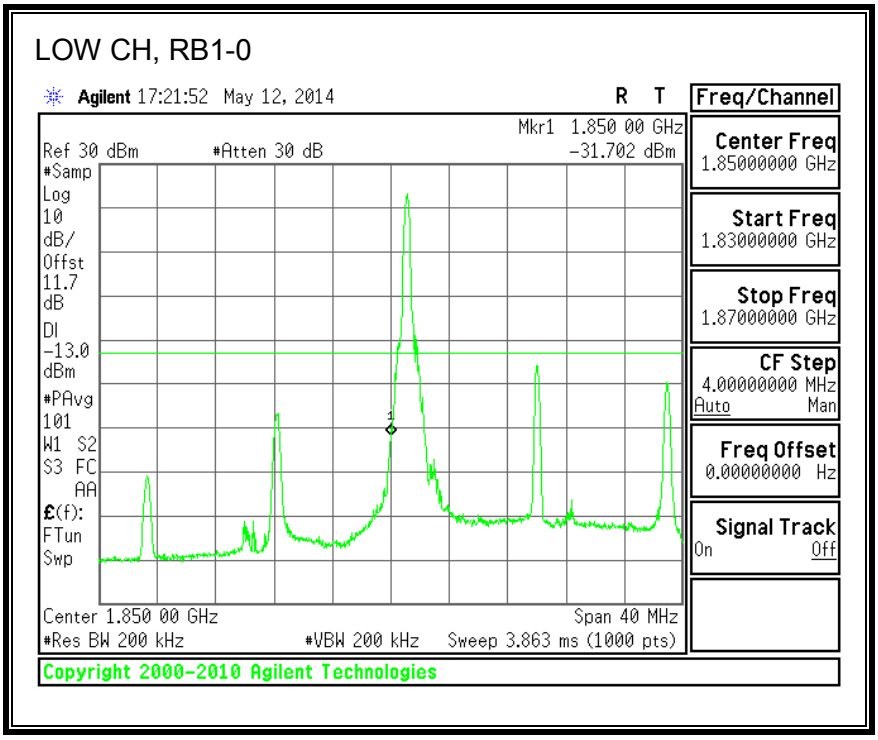


HIGH CH, RB100-0

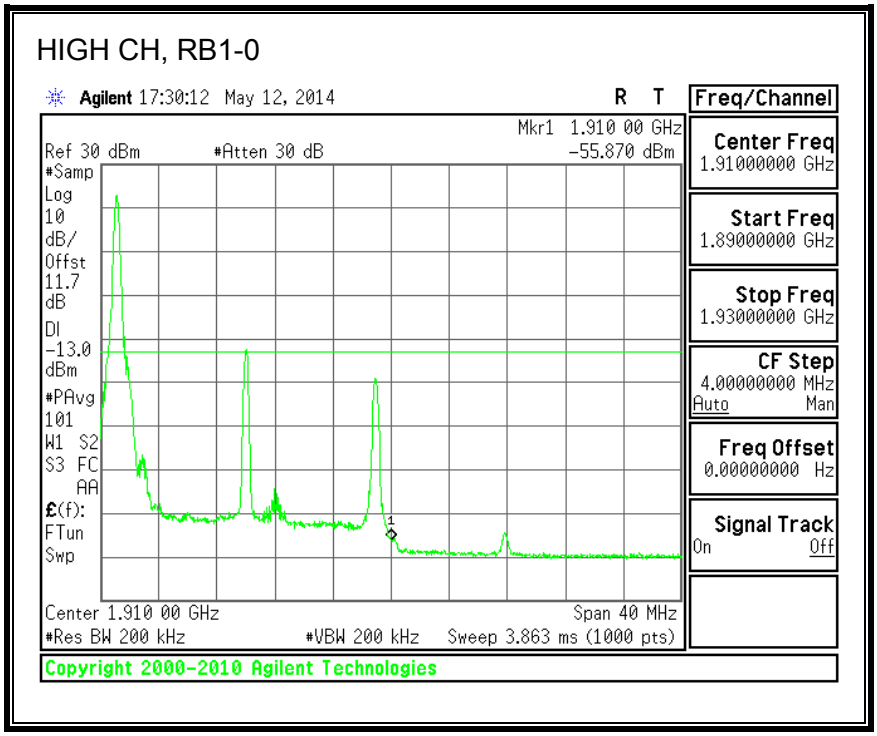


16QAM, (20.0 MHz BAND WIDTH)

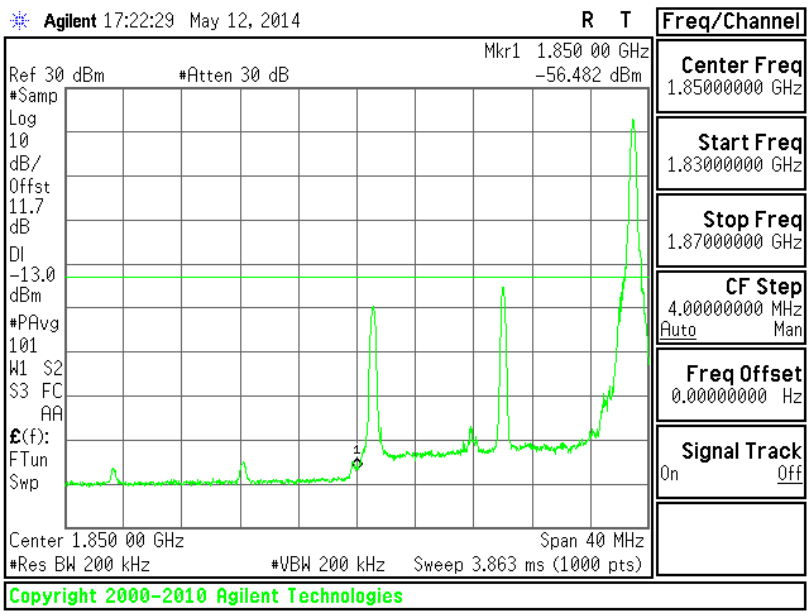
LOW CH, RB1-0



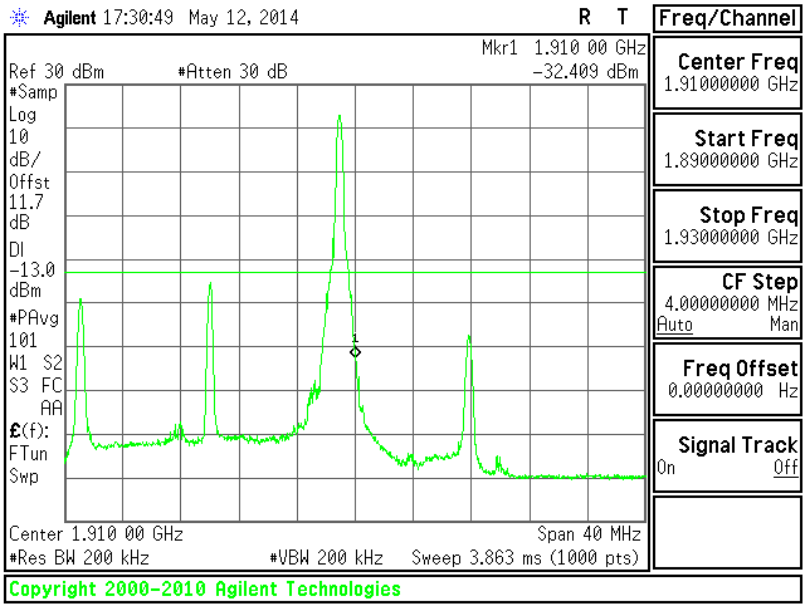
HIGH CH, RB1-0



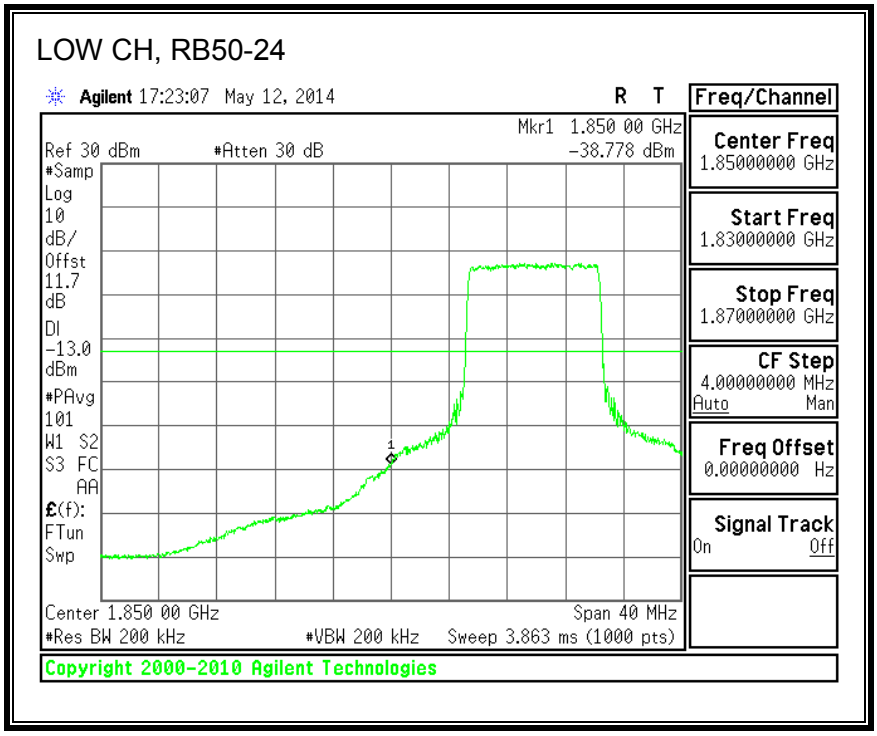
LOW CH, RB1-99



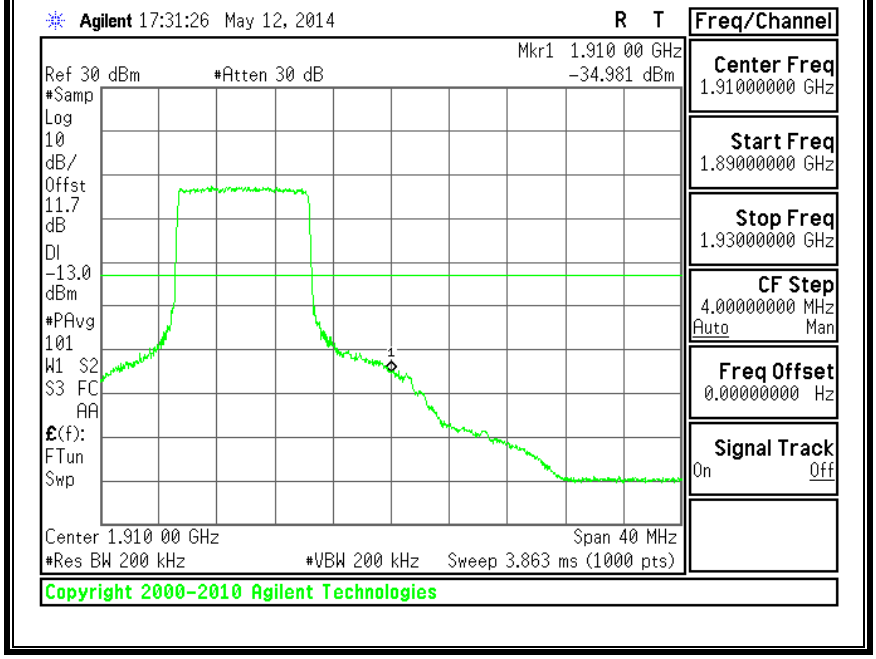
HIGH CH, RB1-99



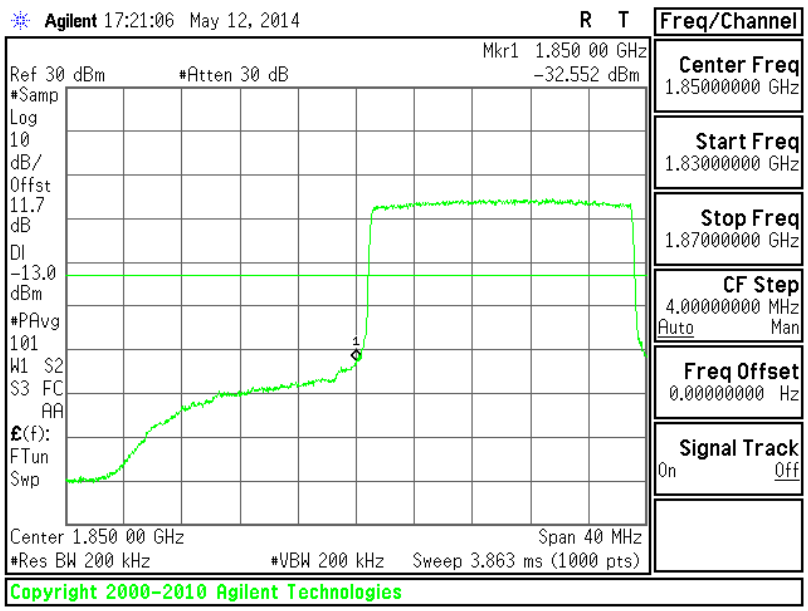
LOW CH, RB50-24



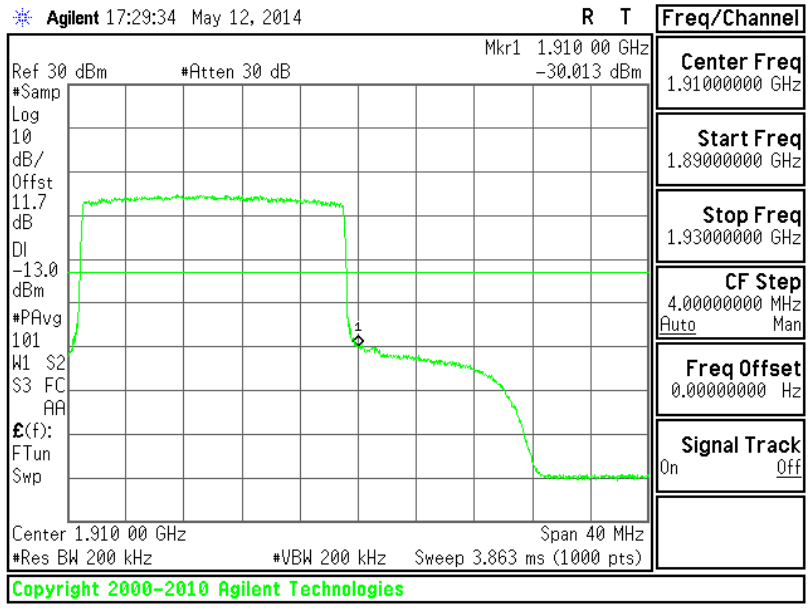
HIGH CH, RB50-24



LOW CH, RB100-0



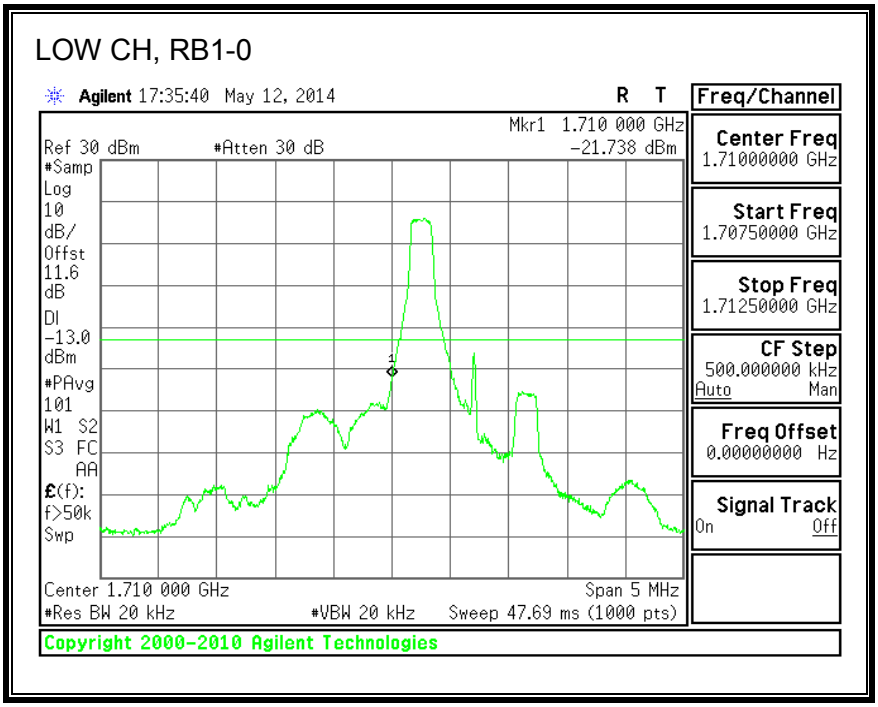
HIGH CH, RB100-0



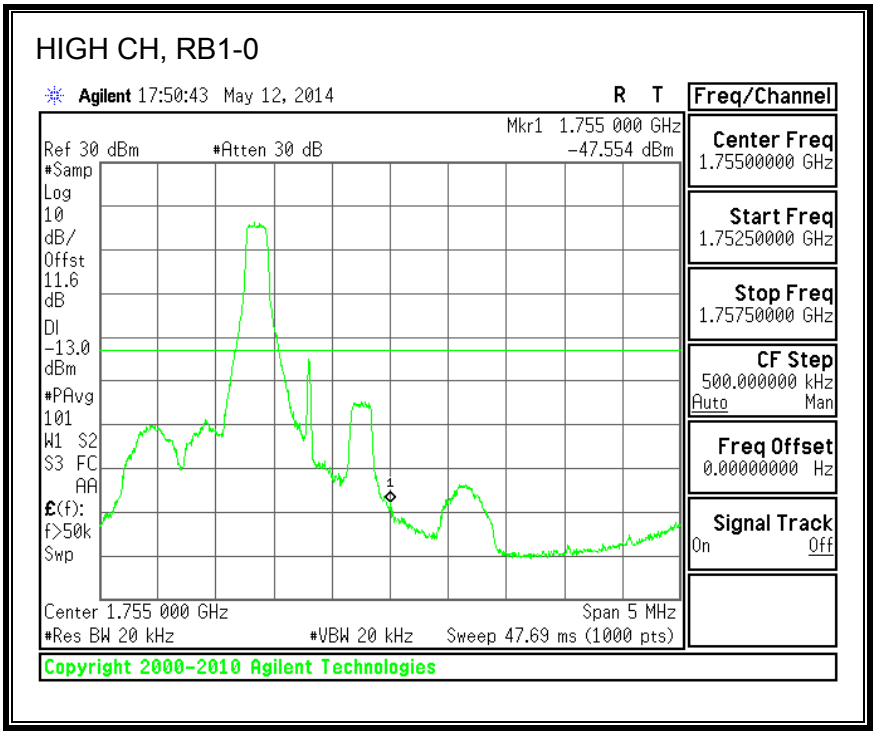
8.2.2. LTE BAND 4 BANDEDGE

QPSK, (1.4 MHz BAND WIDTH)

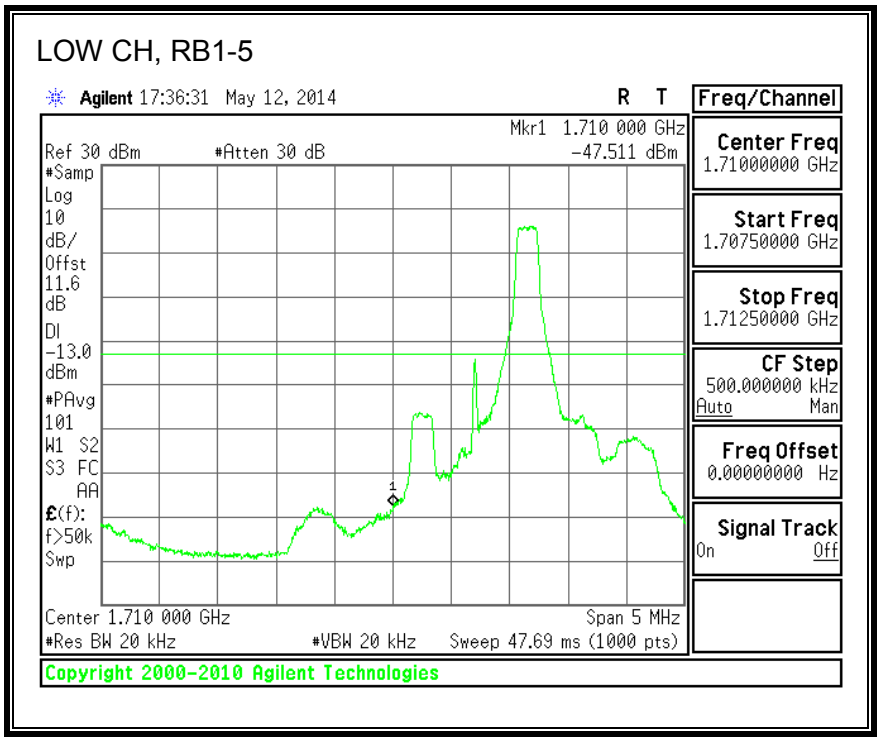
LOW CH, RB1-0



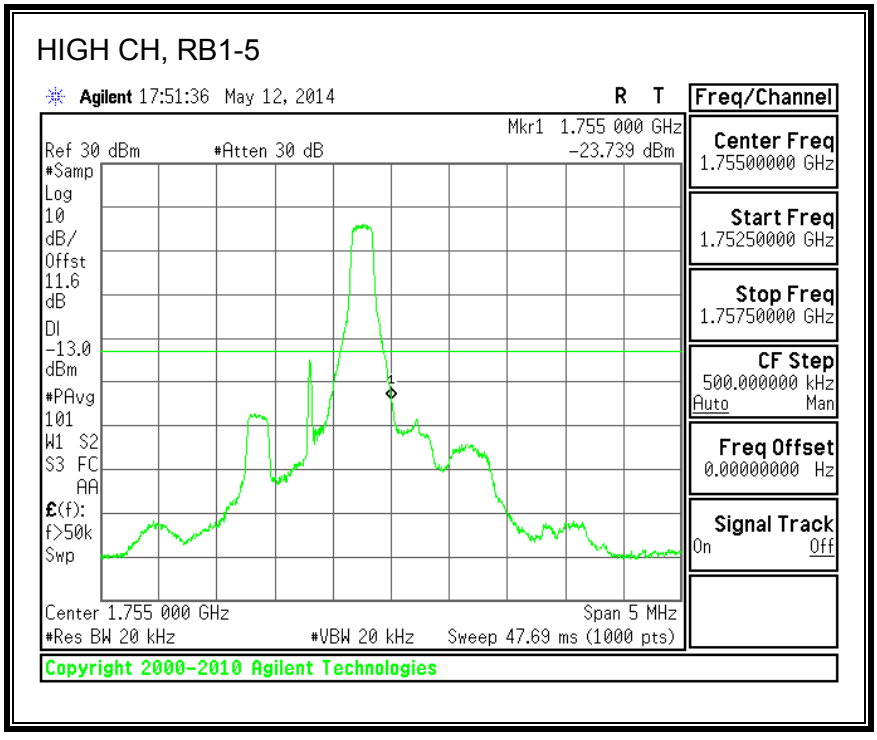
HIGH CH, RB1-0



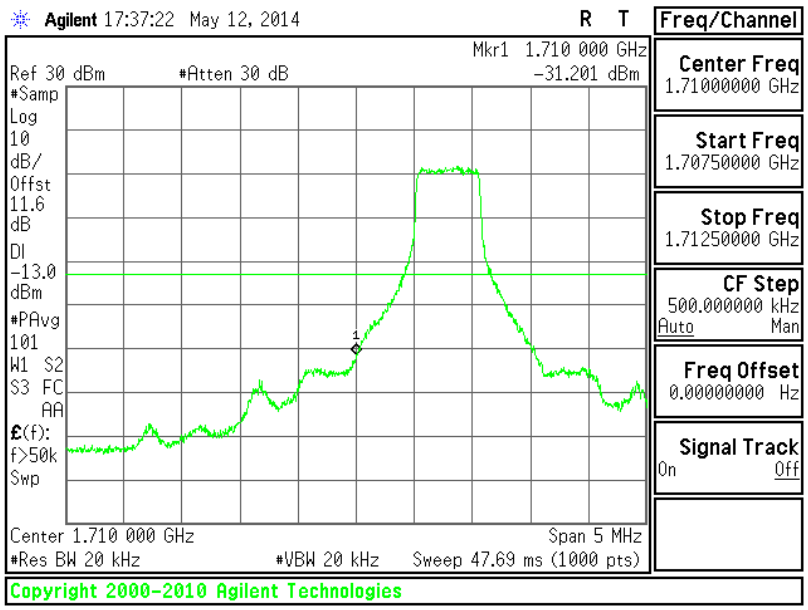
LOW CH, RB1-5



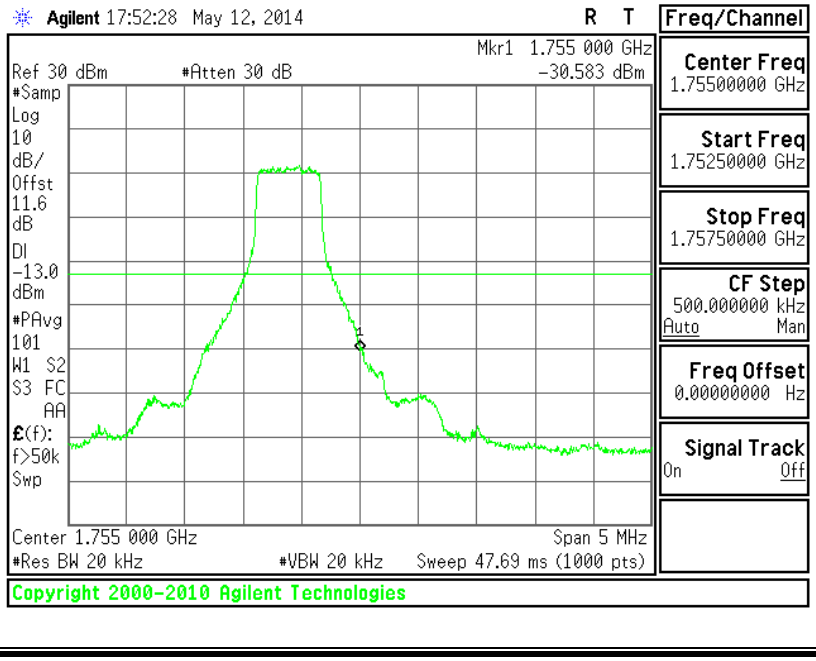
HIGH CH, RB1-5



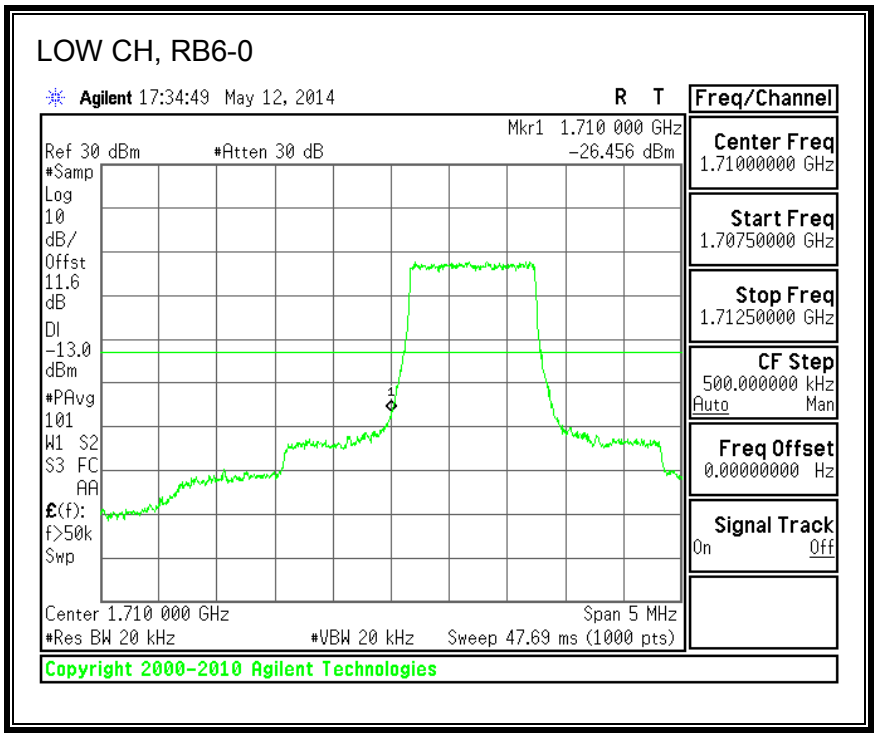
LOW CH, RB3-2



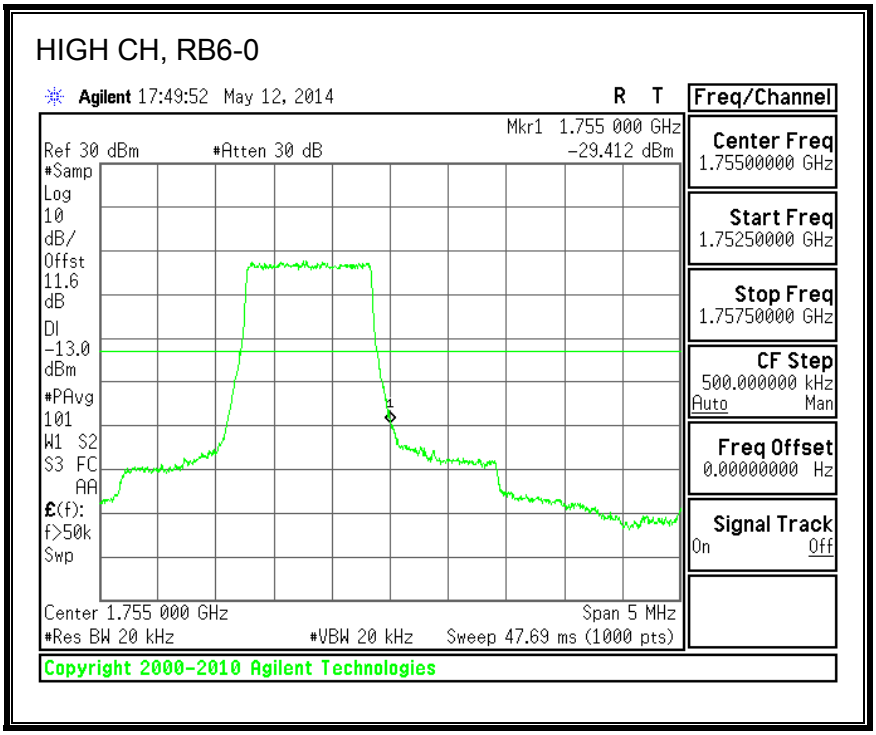
HIGH CH, RB3-2



LOW CH, RB6-0

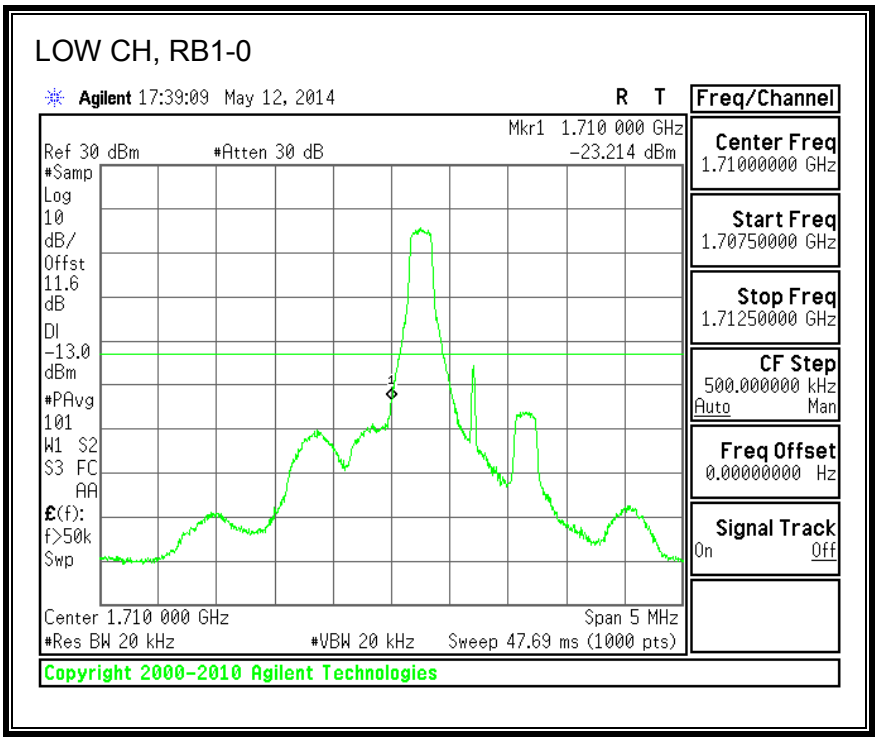


HIGH CH, RB6-0

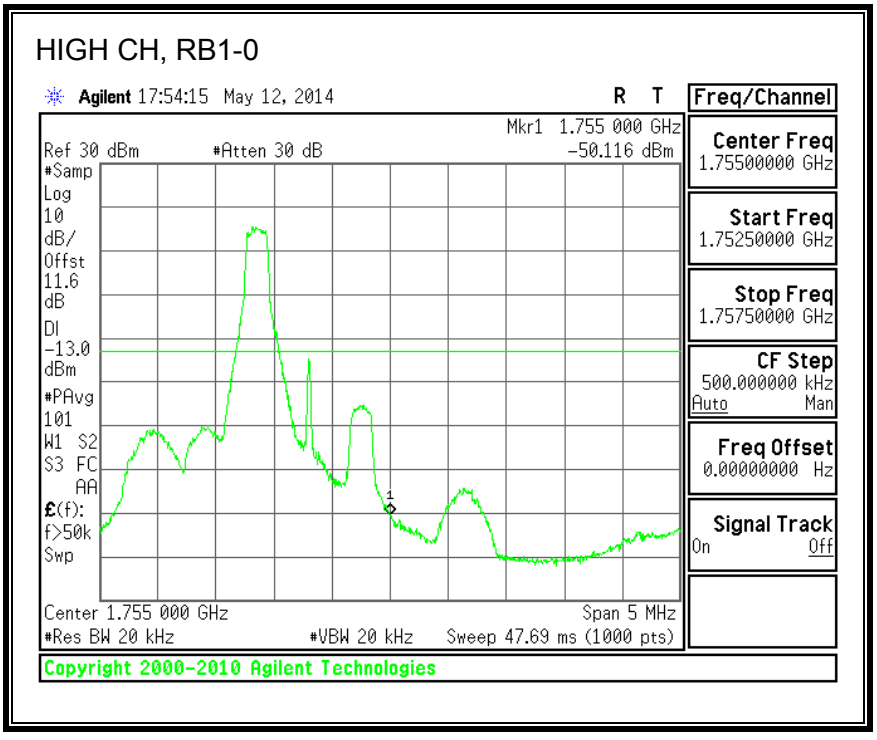


16QAM, (1.4 MHz BAND WIDTH)

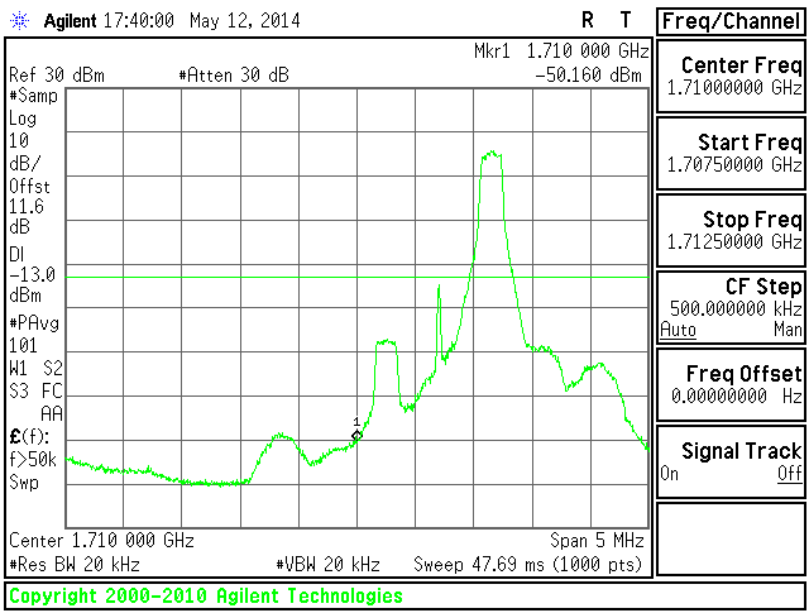
LOW CH, RB1-0



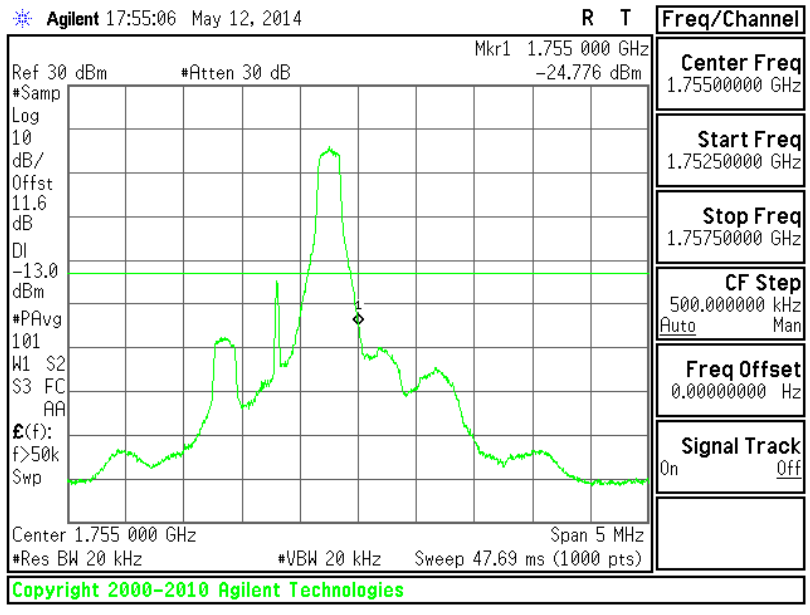
HIGH CH, RB1-0



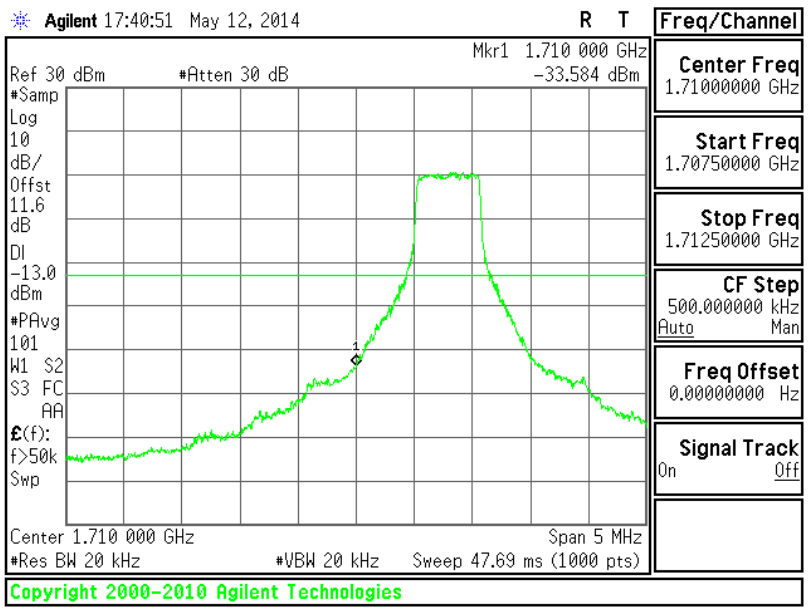
LOW CH, RB1-5



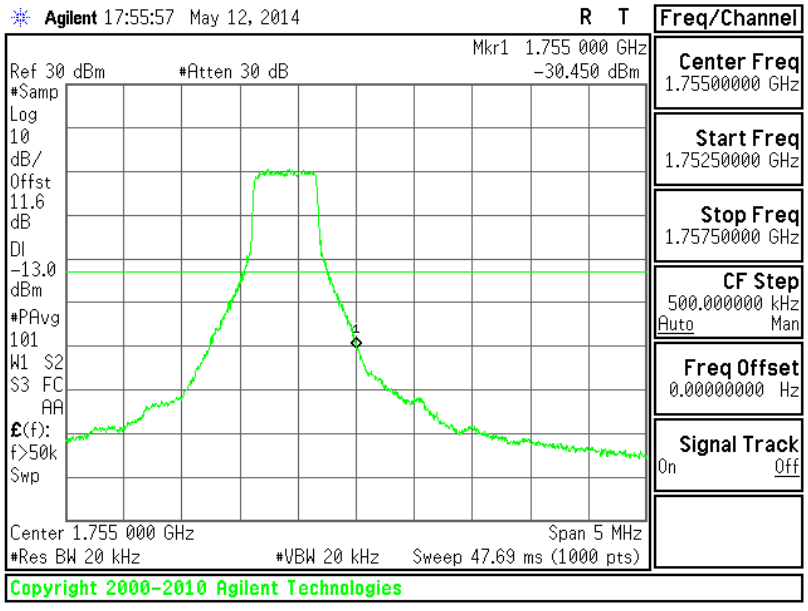
HIGH CH, RB1-5



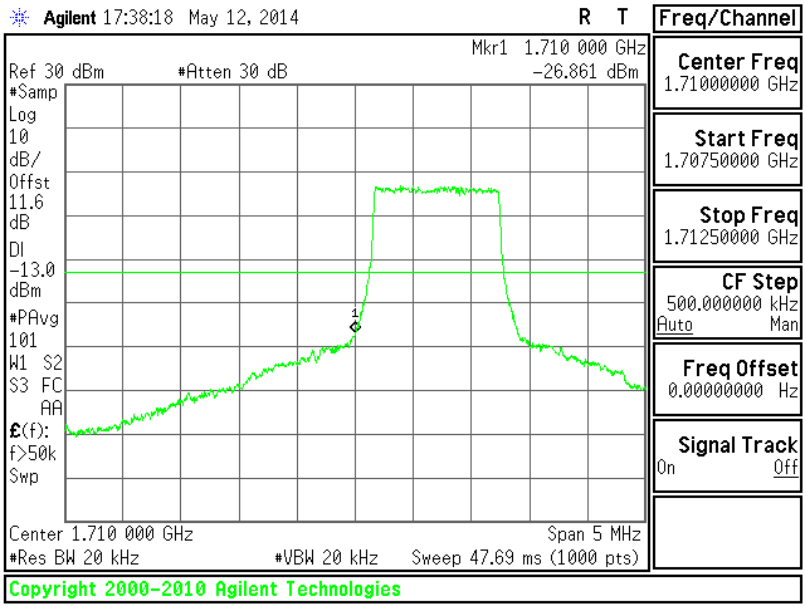
LOW CH, RB3-2



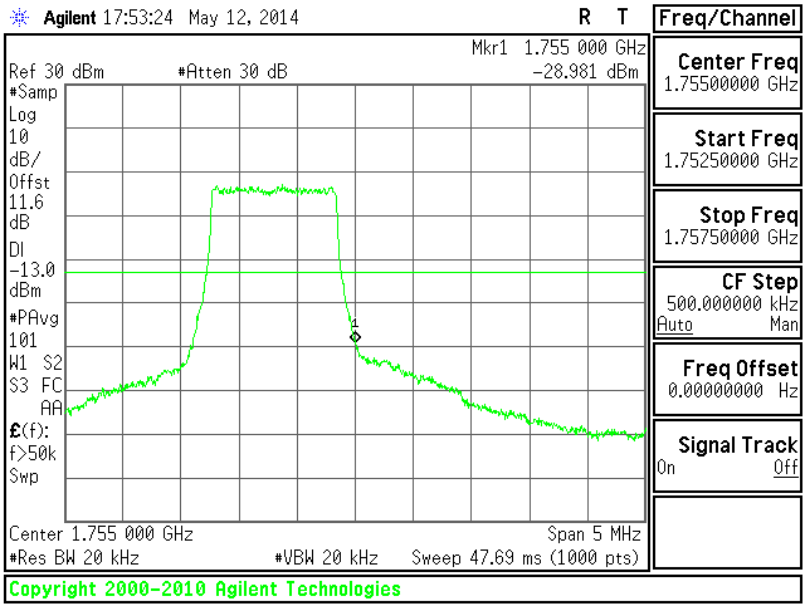
HIGH CH, RB3-2



LOW CH, RB6-0

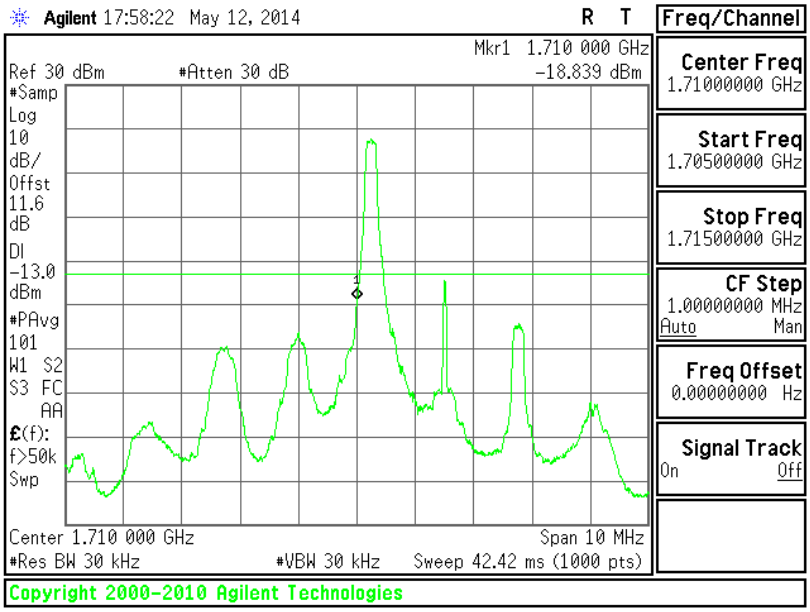


HIGH CH, RB6-0

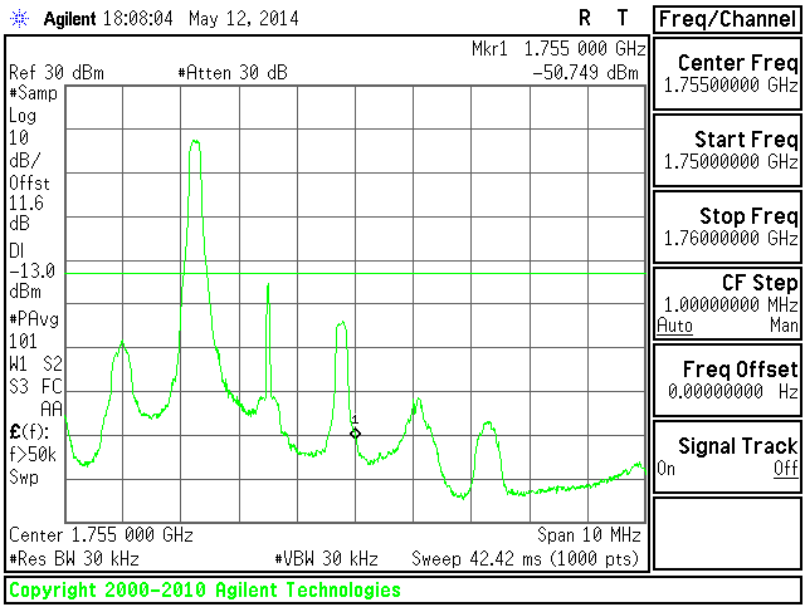


QPSK, (3.0 MHz BAND WIDTH)

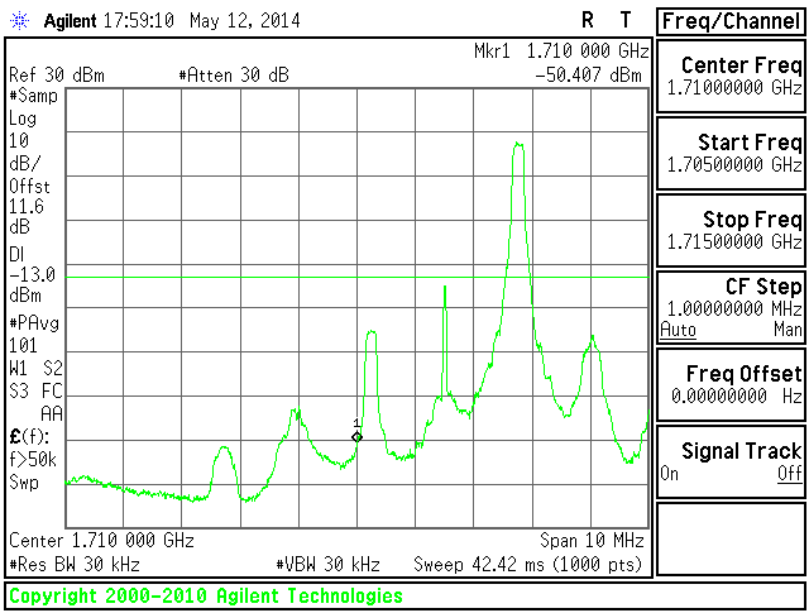
LOW CH, RB1-0



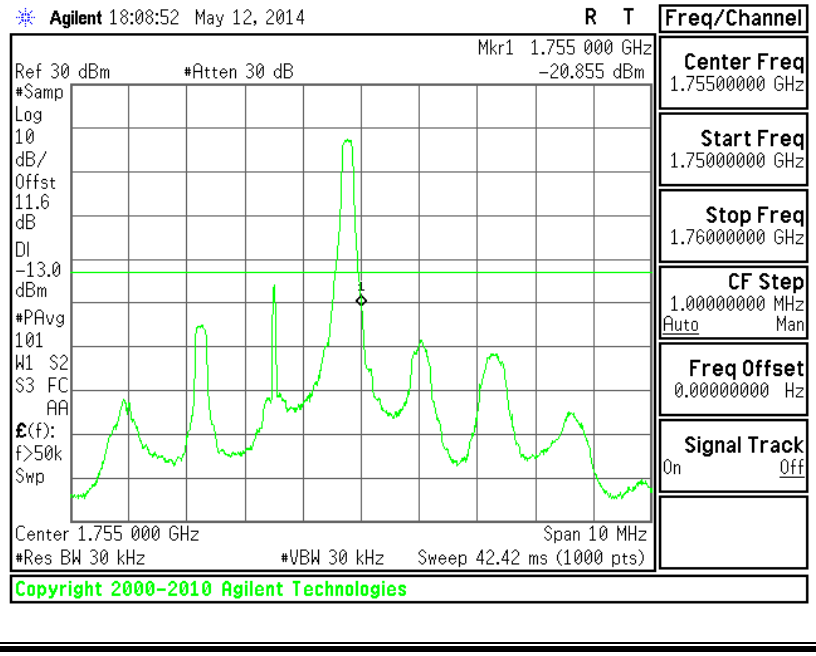
HIGH CH, RB1-0



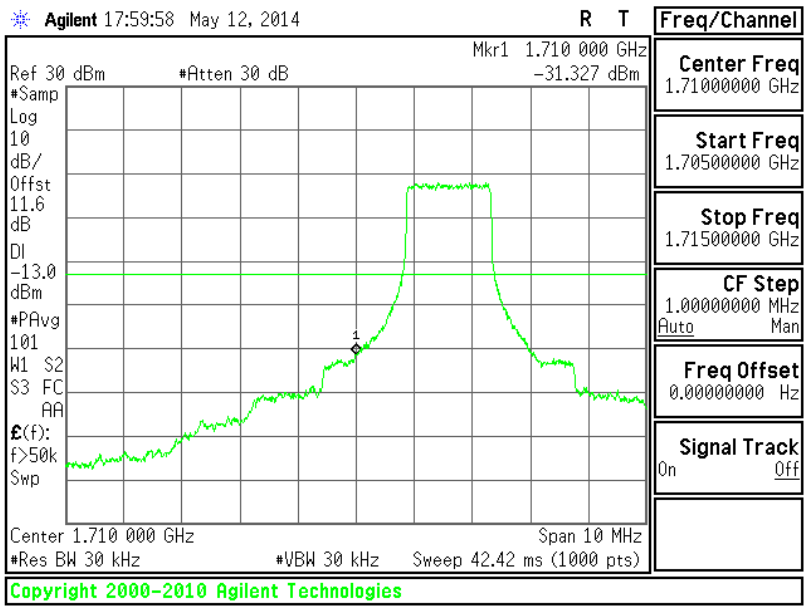
LOW CH, RB1-14



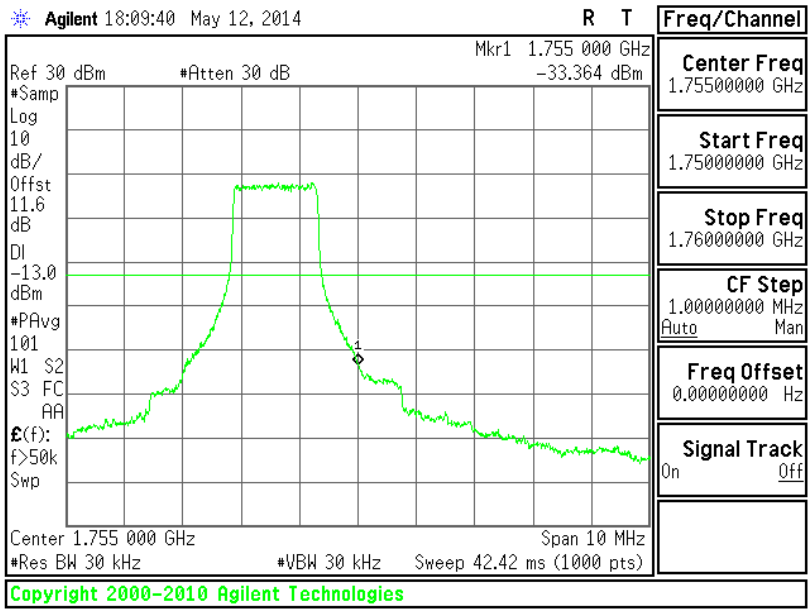
HIGH CH, RB1-14



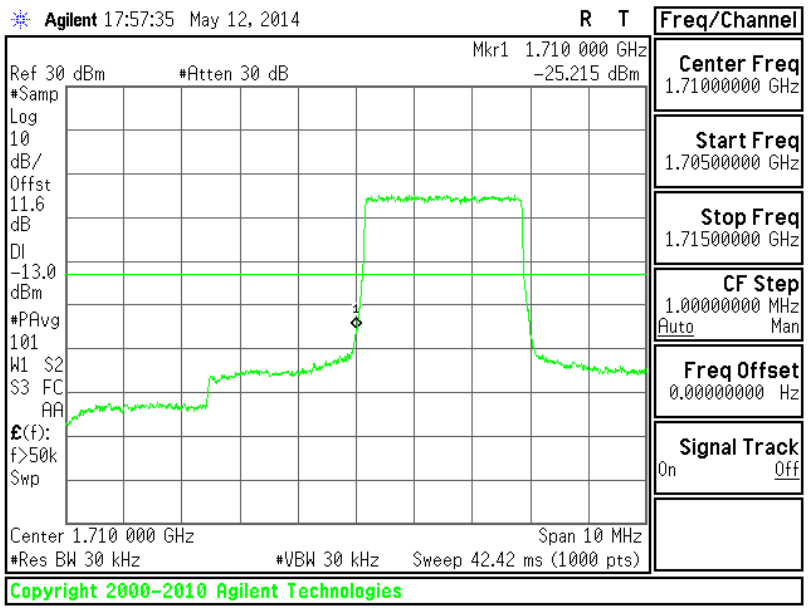
LOW CH, RB8-4



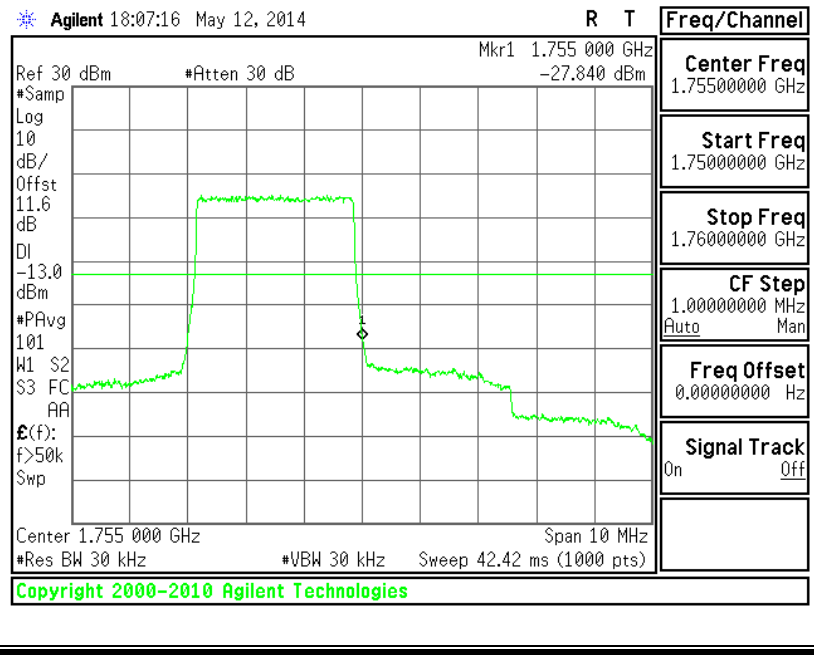
HIGH CH, RB8-4



LOW CH, RB15-0

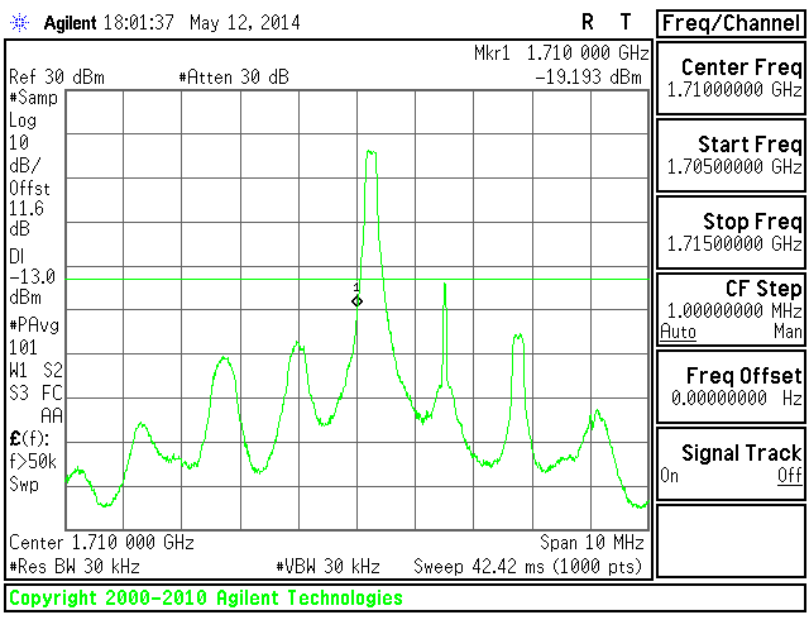


HIGH CH, RB15-0

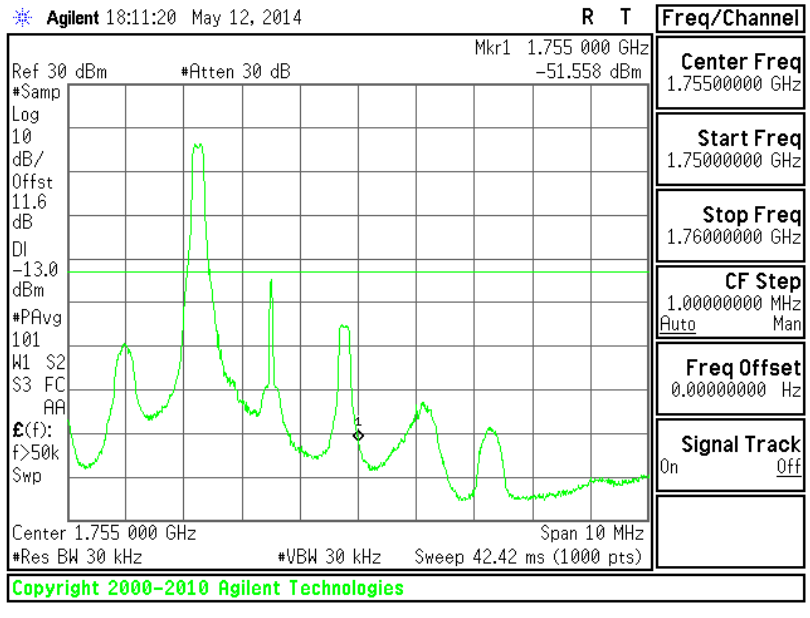


16QAM, (3.0 MHz BAND WIDTH)

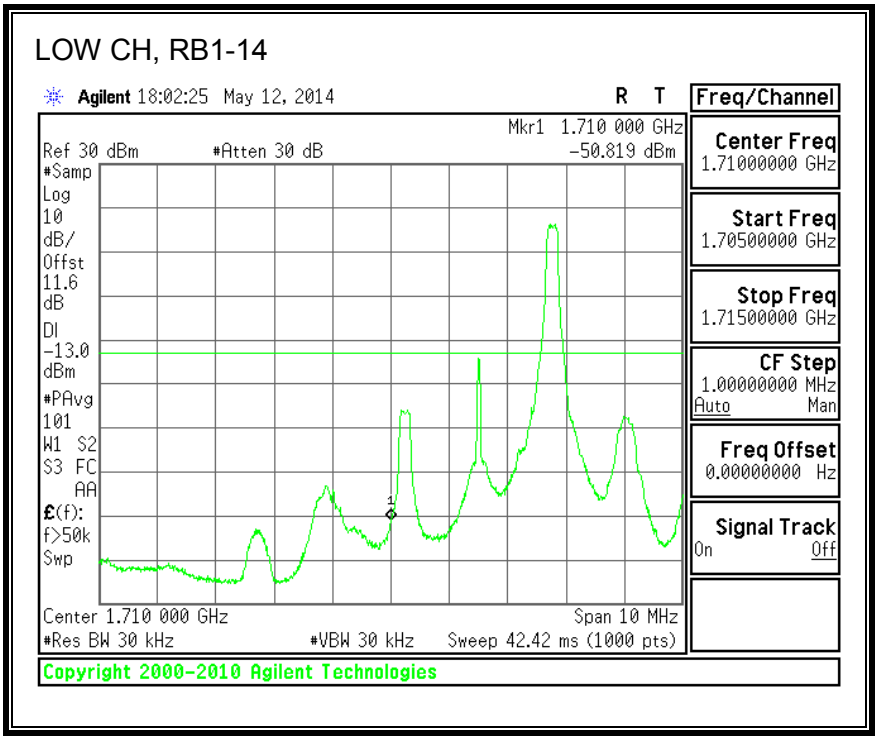
LOW CH, RB1-0



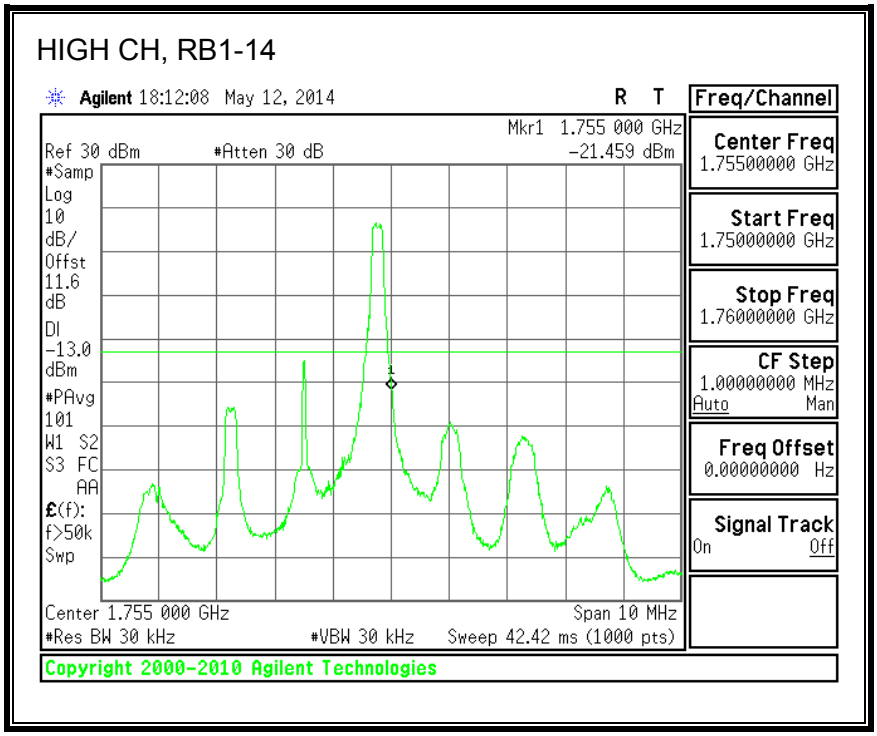
HIGH CH, RB1-0



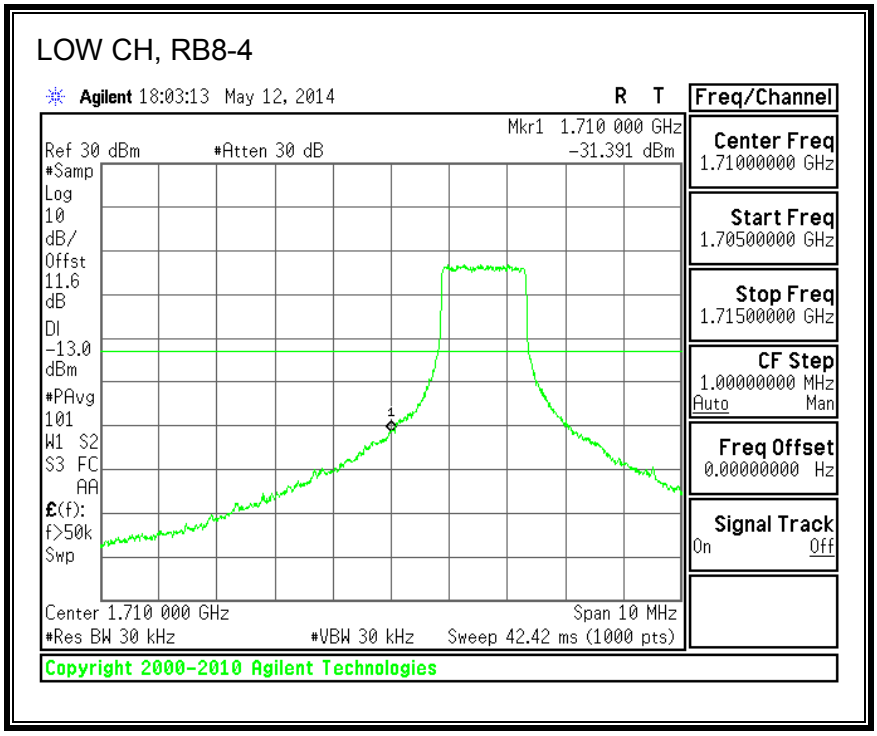
LOW CH, RB1-14



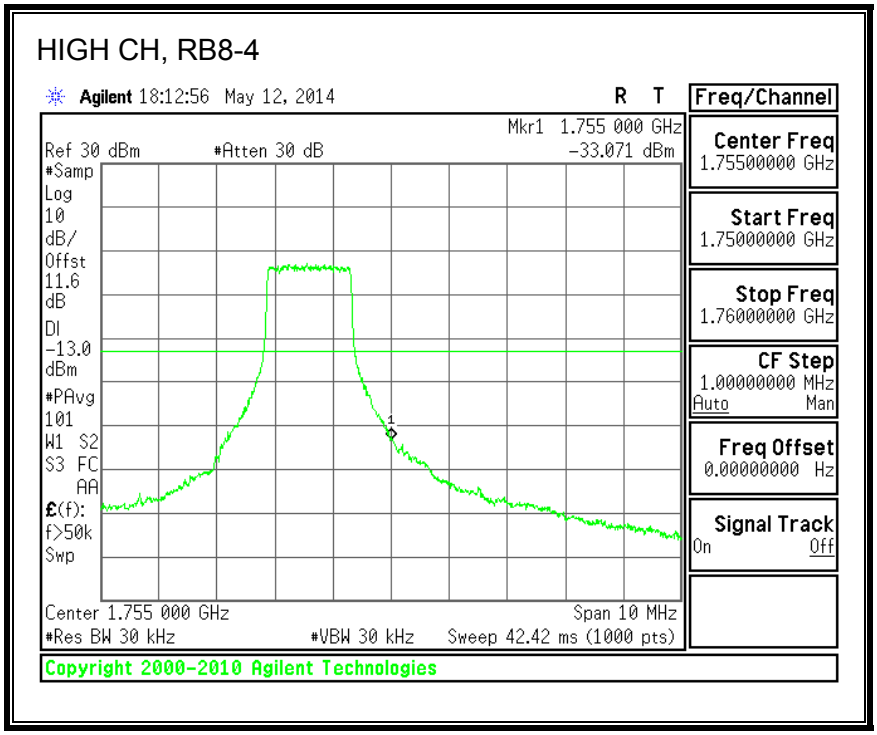
HIGH CH, RB1-14



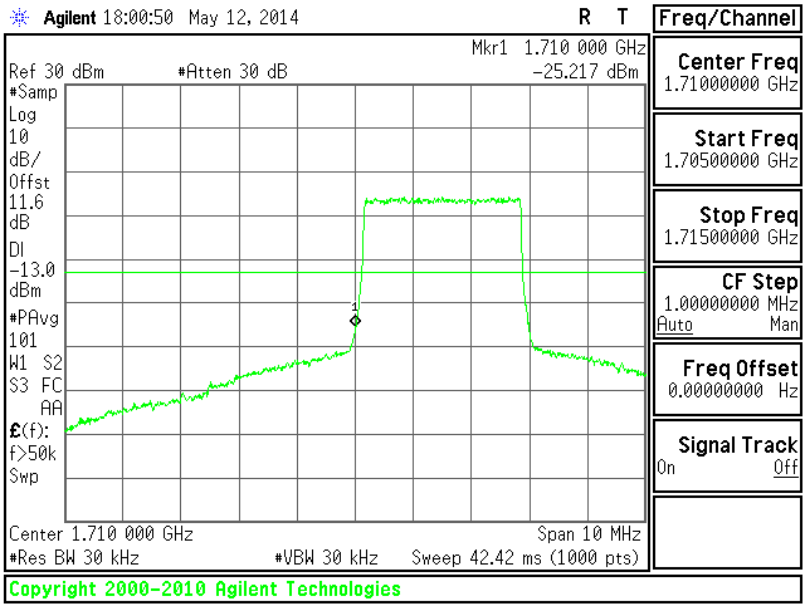
LOW CH, RB8-4



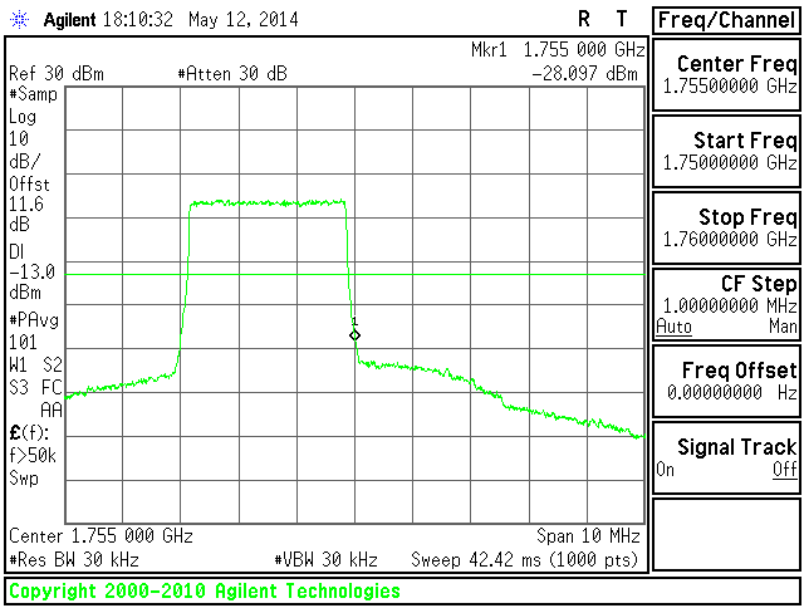
HIGH CH, RB8-4



LOW CH, RB15-0

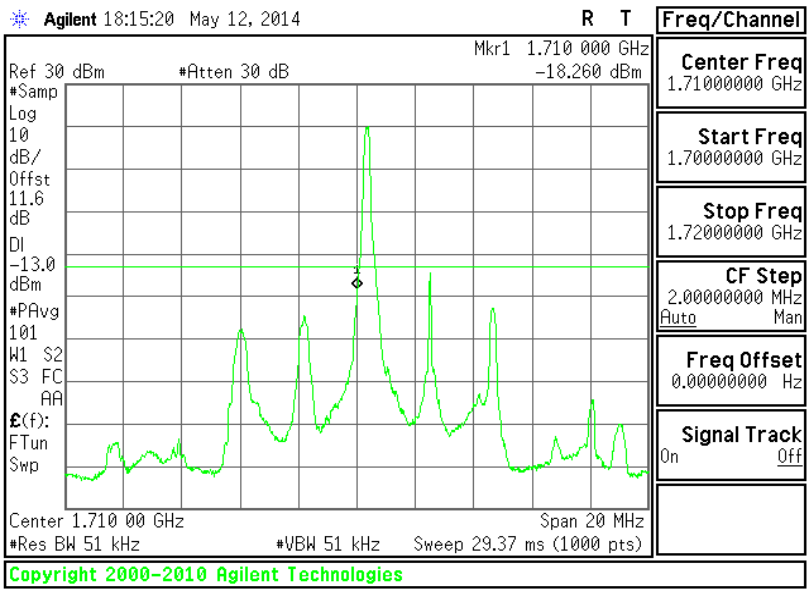


HIGH CH, RB15-0

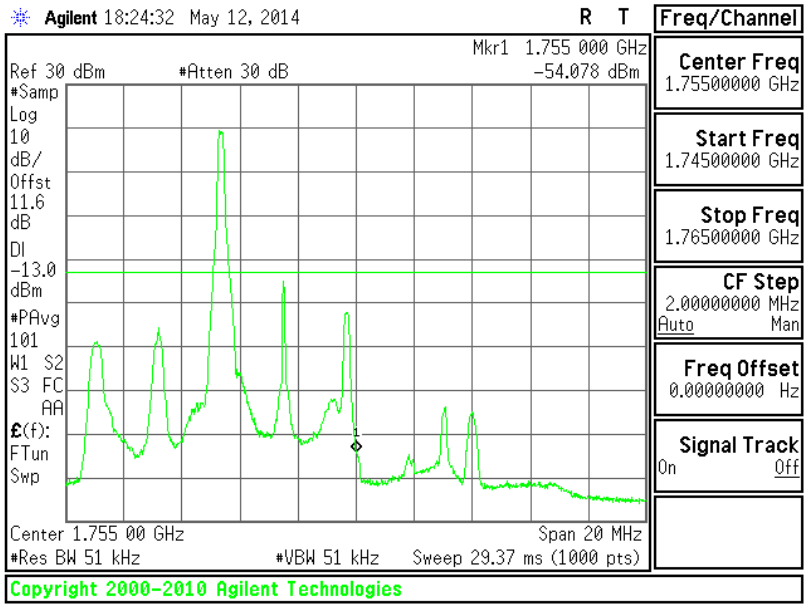


QPSK, (5.0 MHz BAND WIDTH)

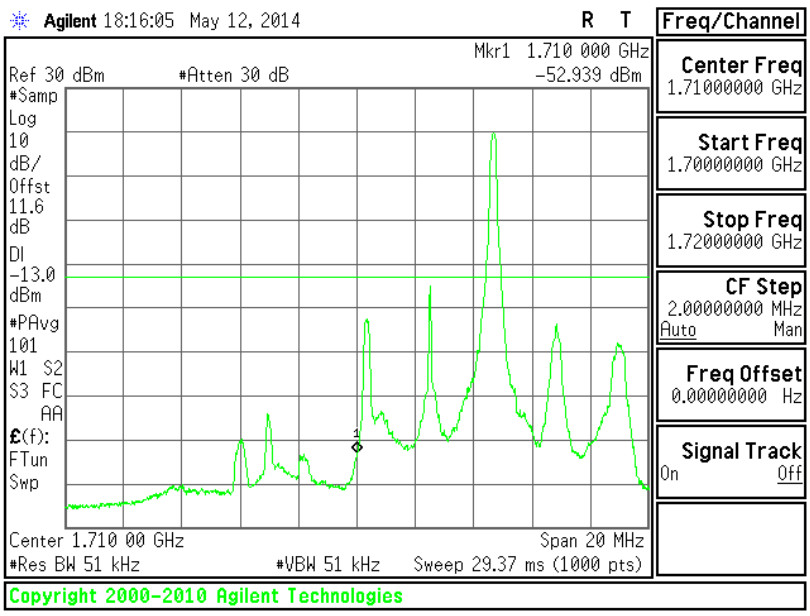
LOW CH, RB1-0



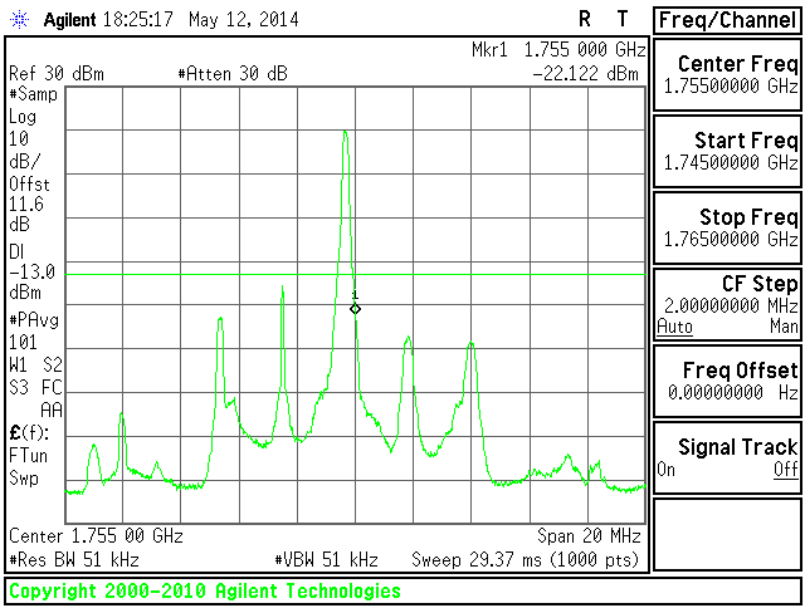
HIGH CH, RB1-0



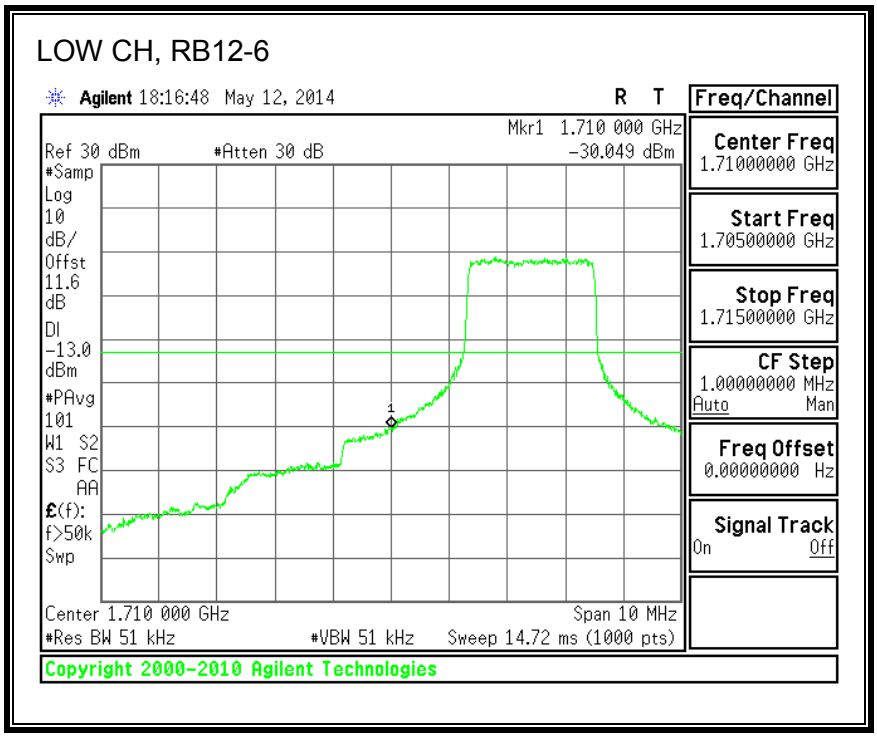
LOW CH, RB1-24



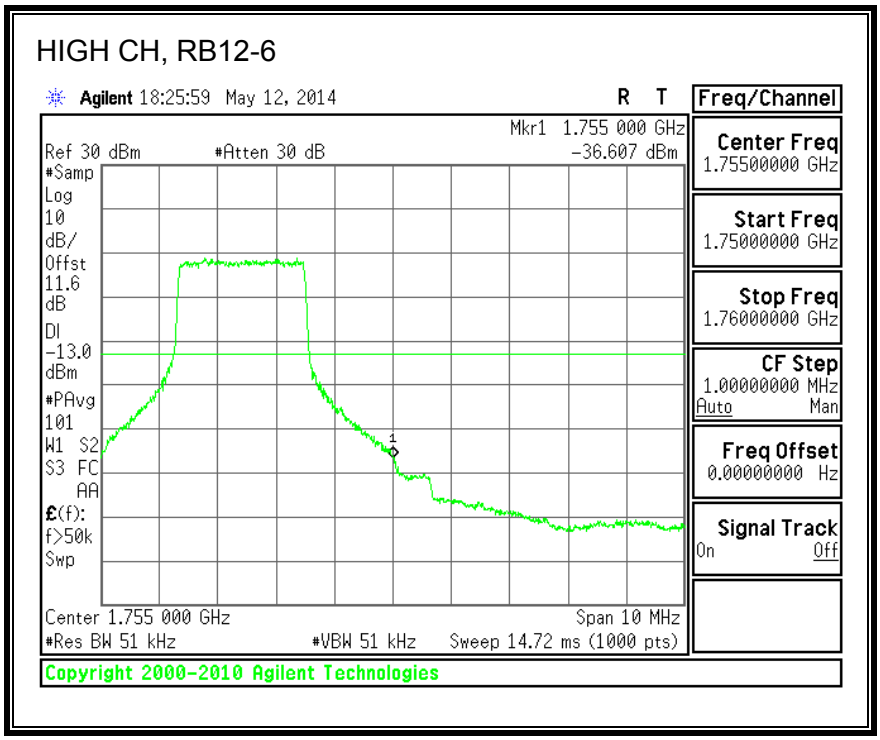
HIGH CH, RB1-24



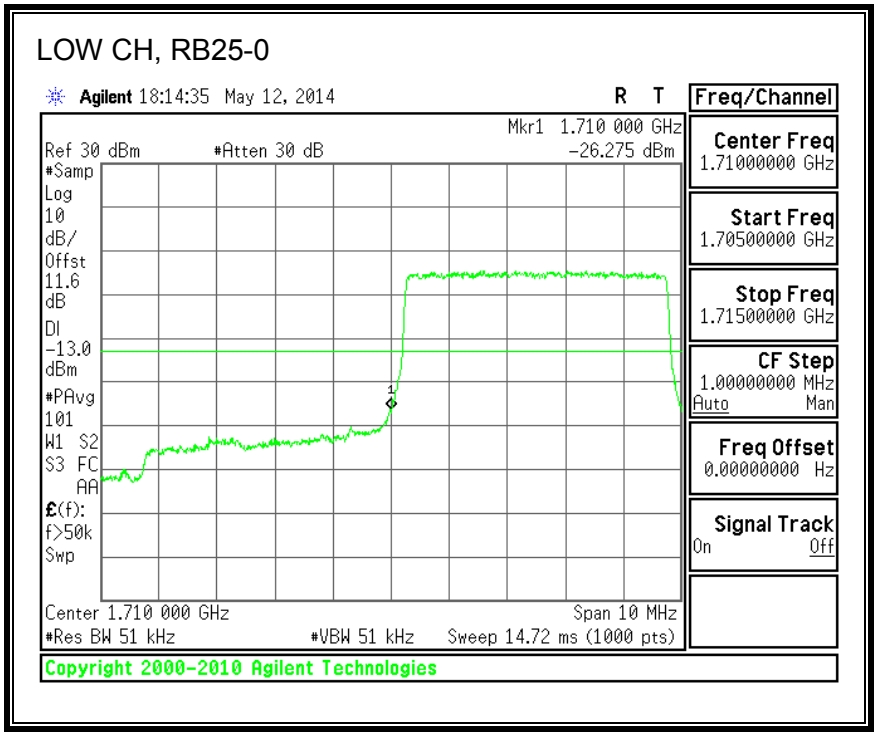
LOW CH, RB12-6



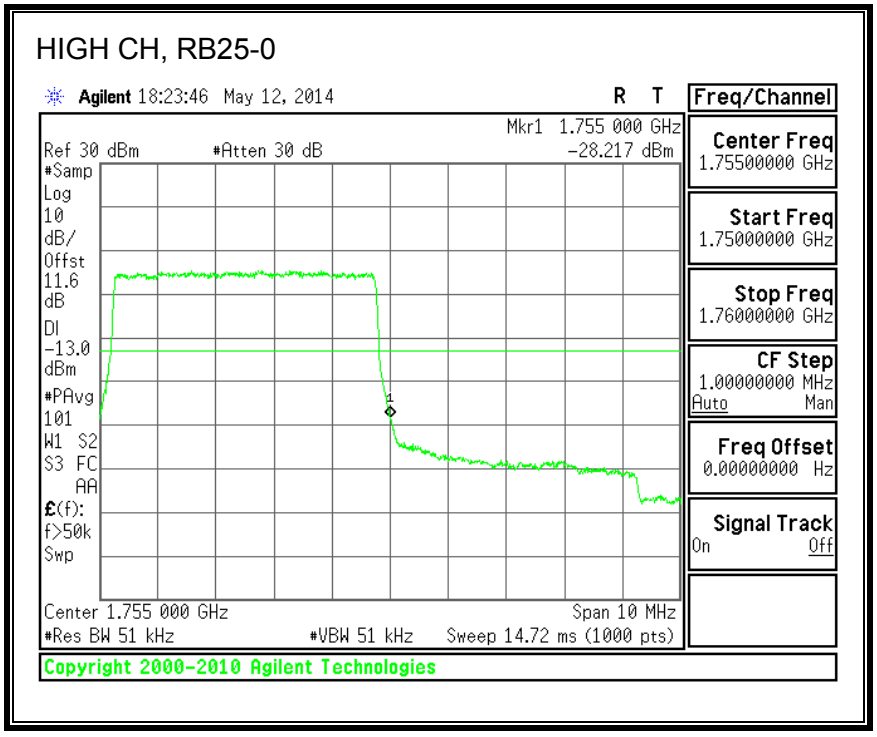
HIGH CH, RB12-6



LOW CH, RB25-0

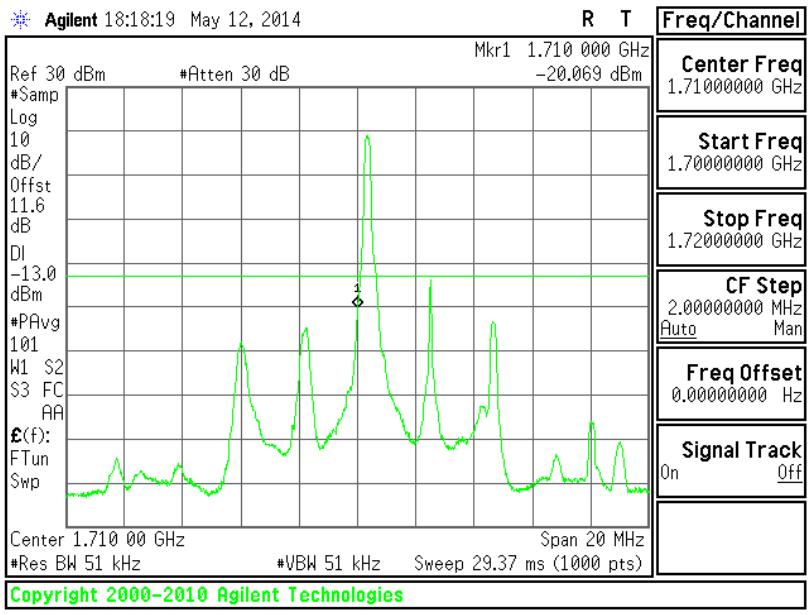


HIGH CH, RB25-0

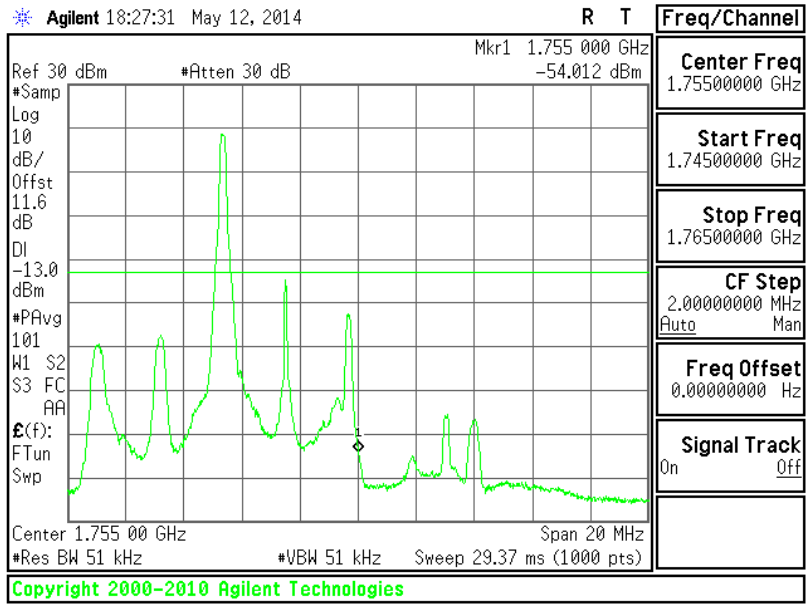


16QAM, (5.0 MHz BAND WIDTH)

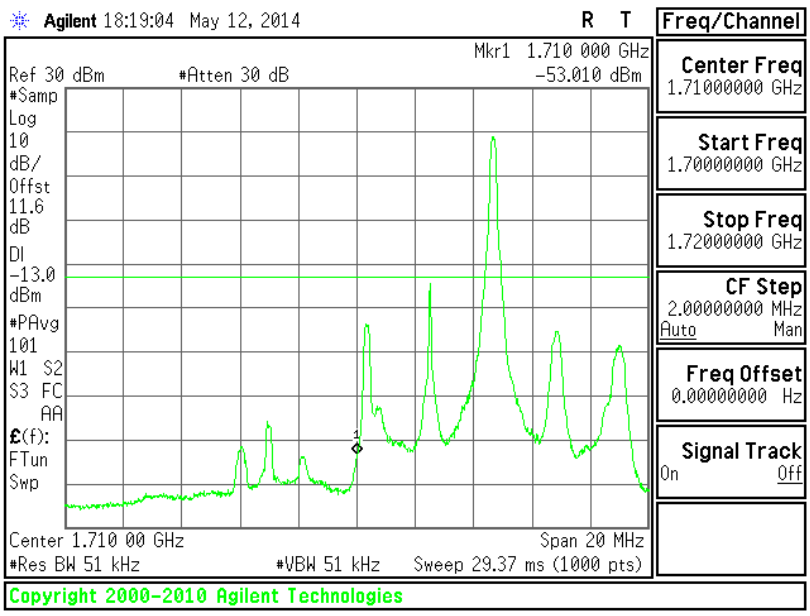
LOW CH, RB1-0



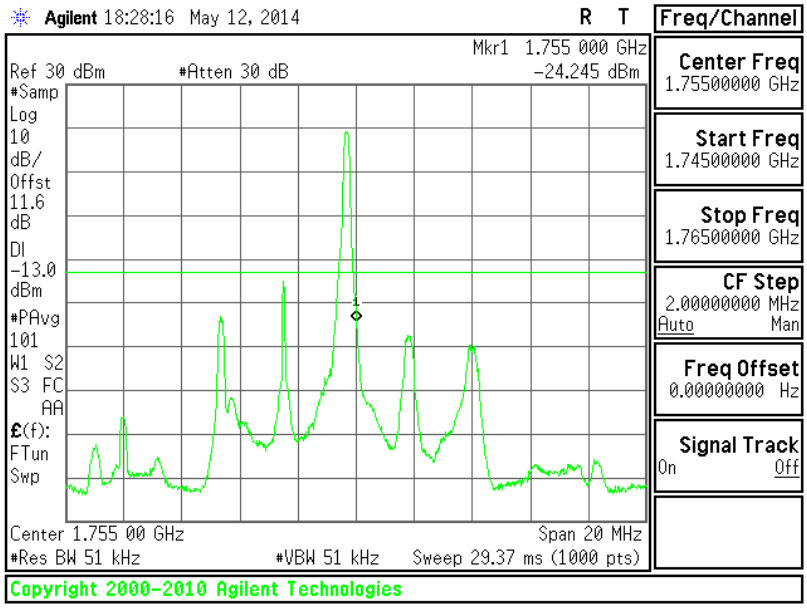
HIGH CH, RB1-0



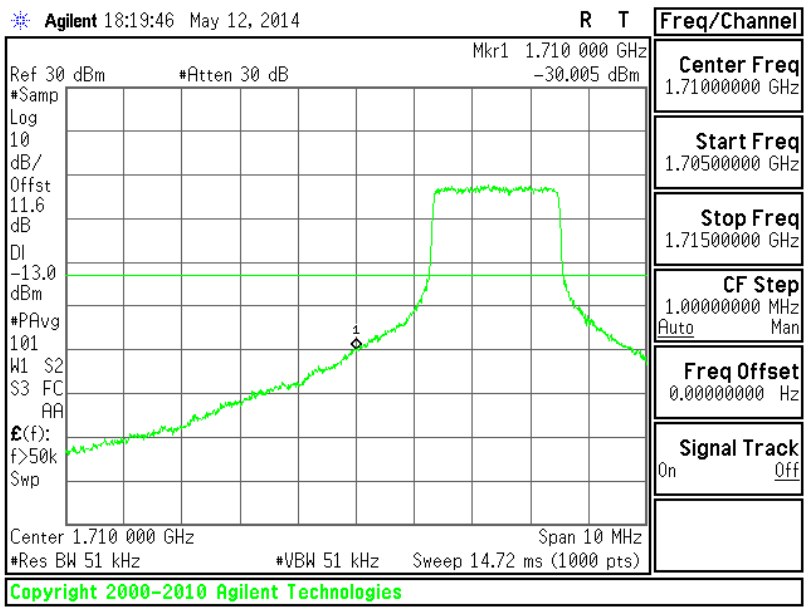
LOW CH, RB1-24



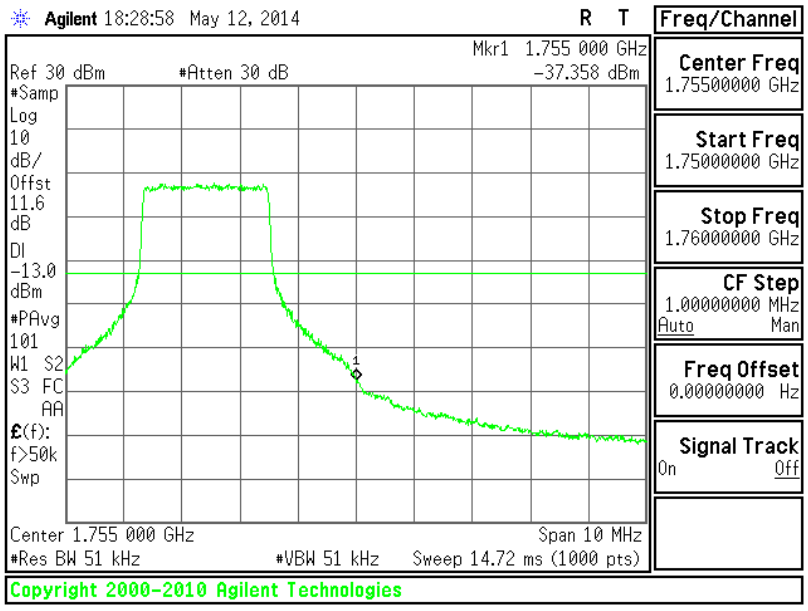
HIGH CH, RB1-24



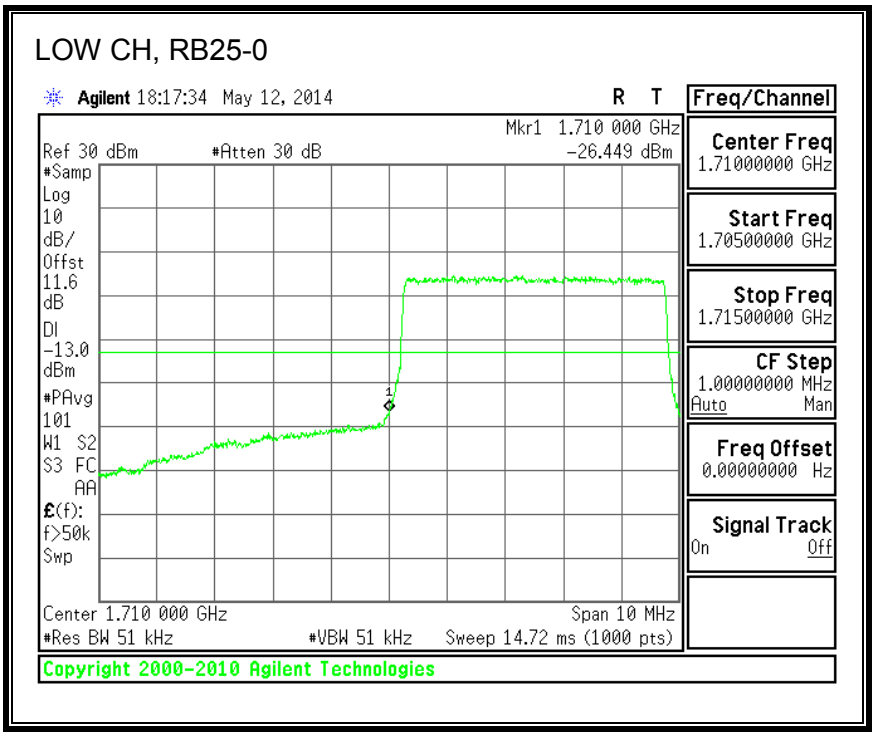
LOW CH, RB12-6



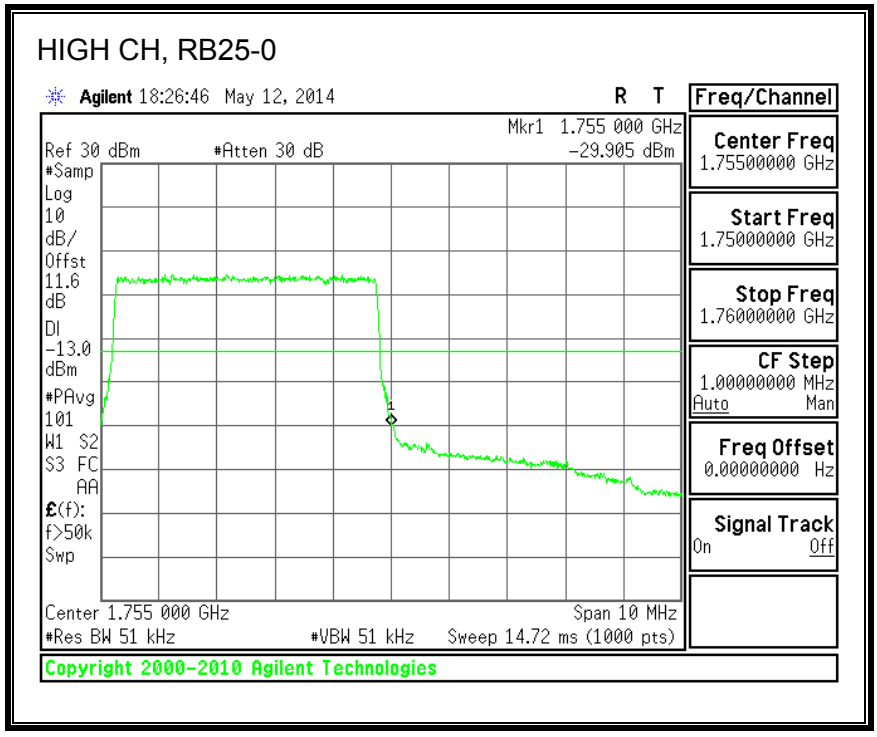
HIGH CH, RB12-6



LOW CH, RB25-0

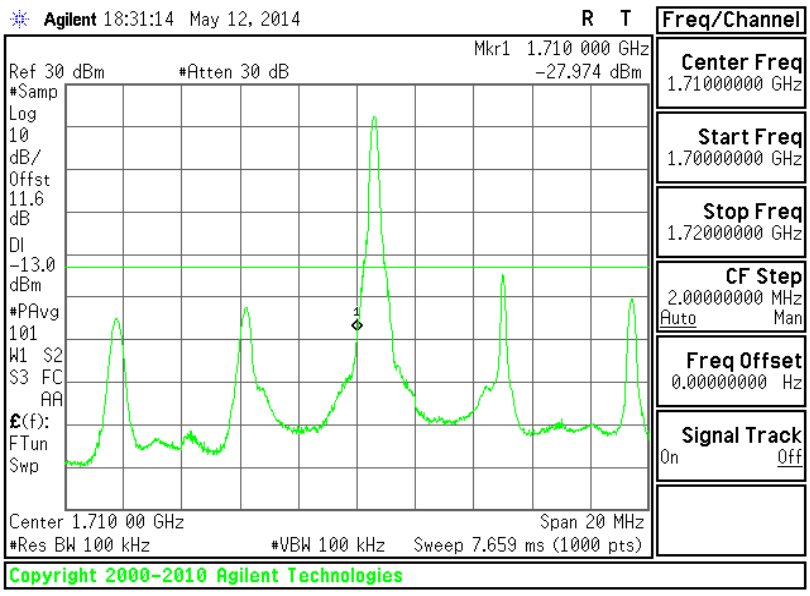


HIGH CH, RB25-0

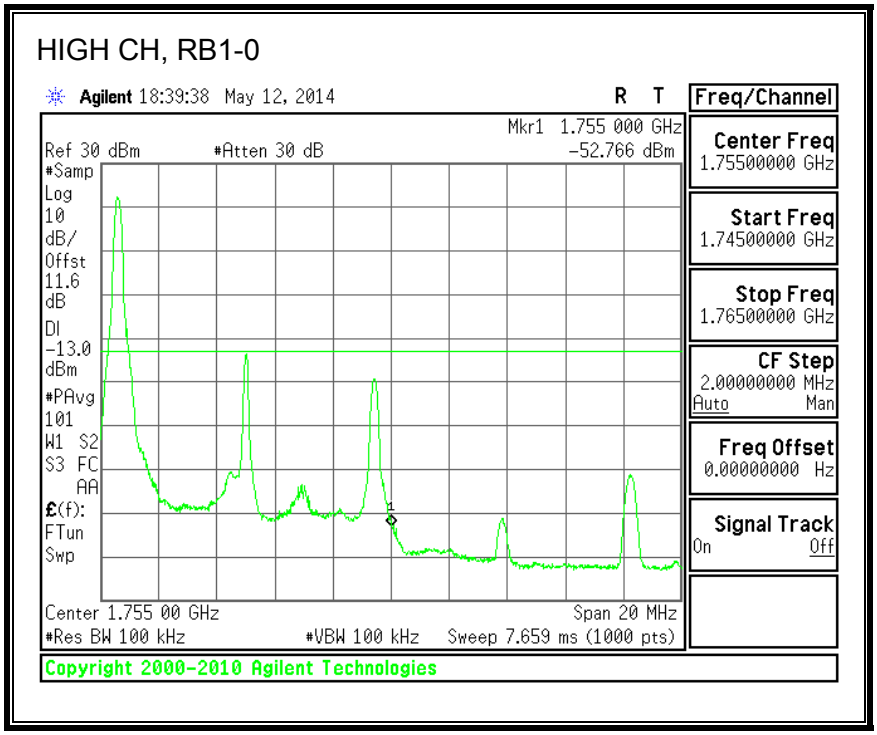


QPSK, (10.0 MHz BAND WIDTH)

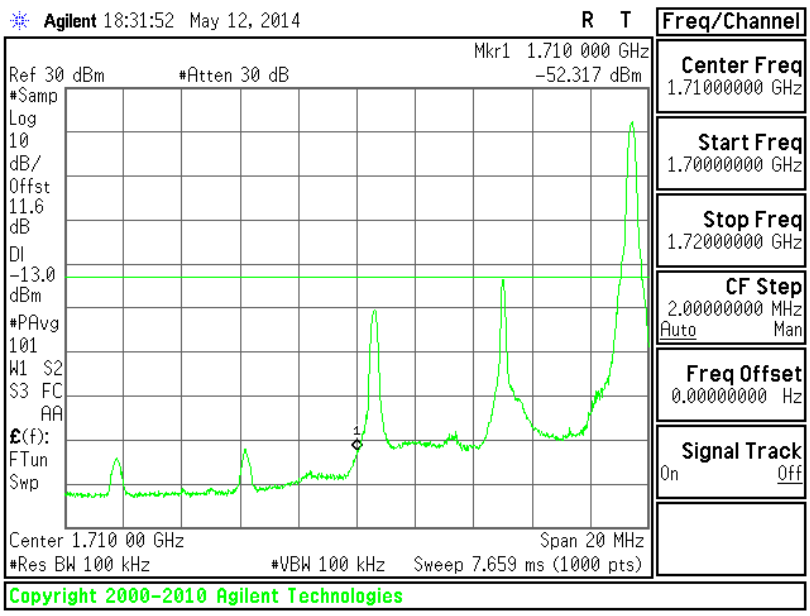
LOW CH, RB1-0



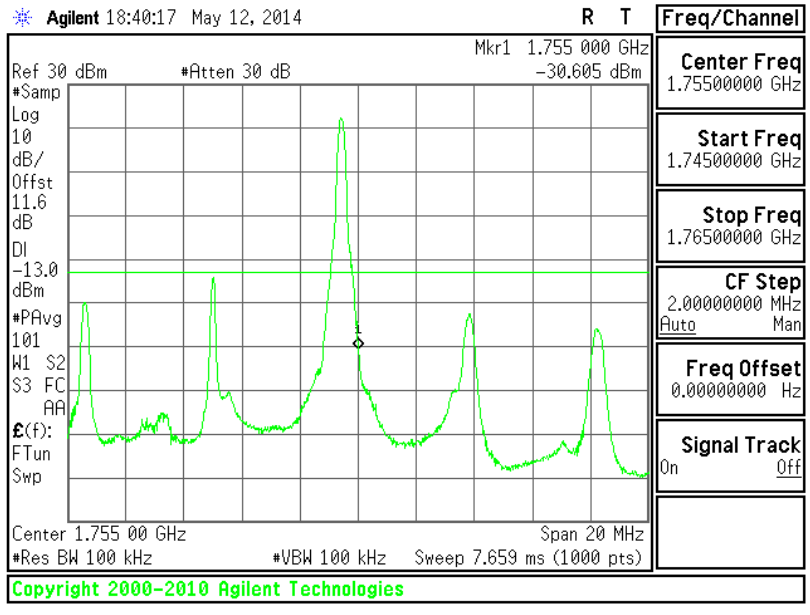
HIGH CH, RB1-0



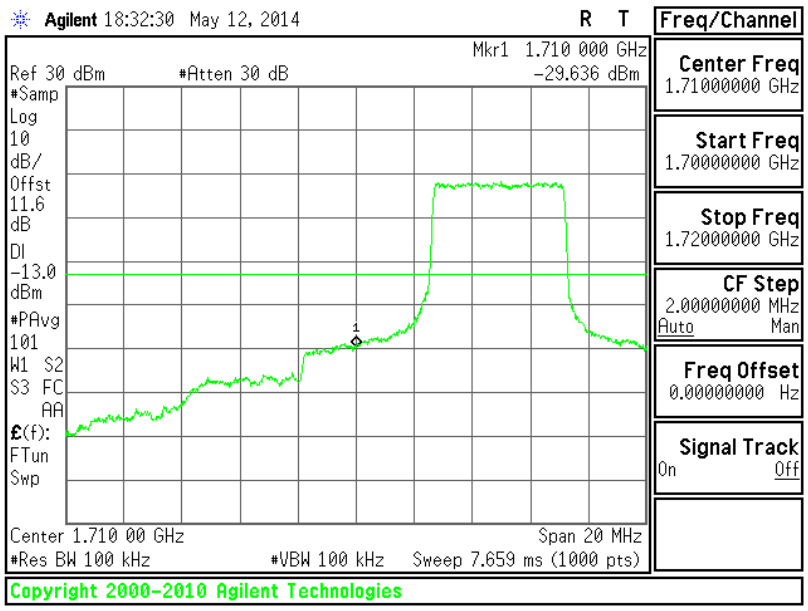
LOW CH, RB1-49



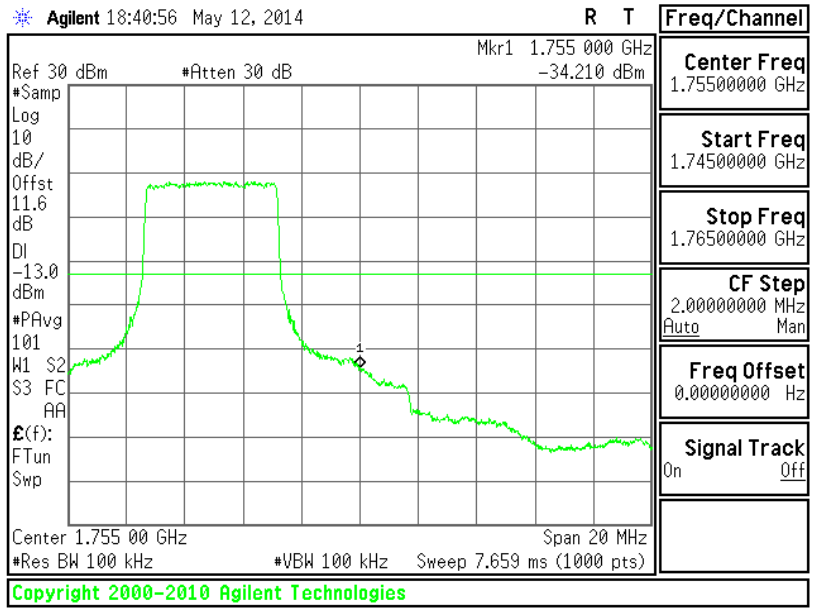
HIGH CH, RB1-49



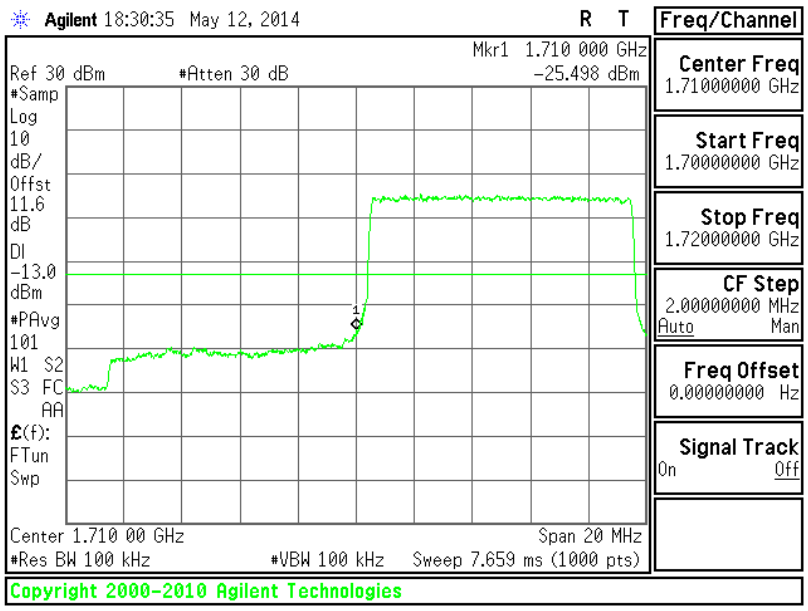
LOW CH, RB25-12



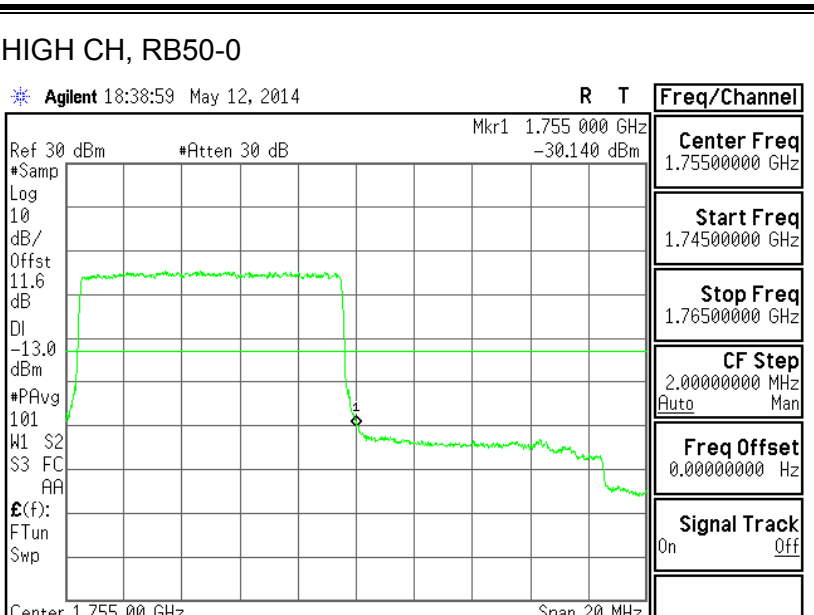
HIGH CH, RB25-12



LOW CH, RB50-0

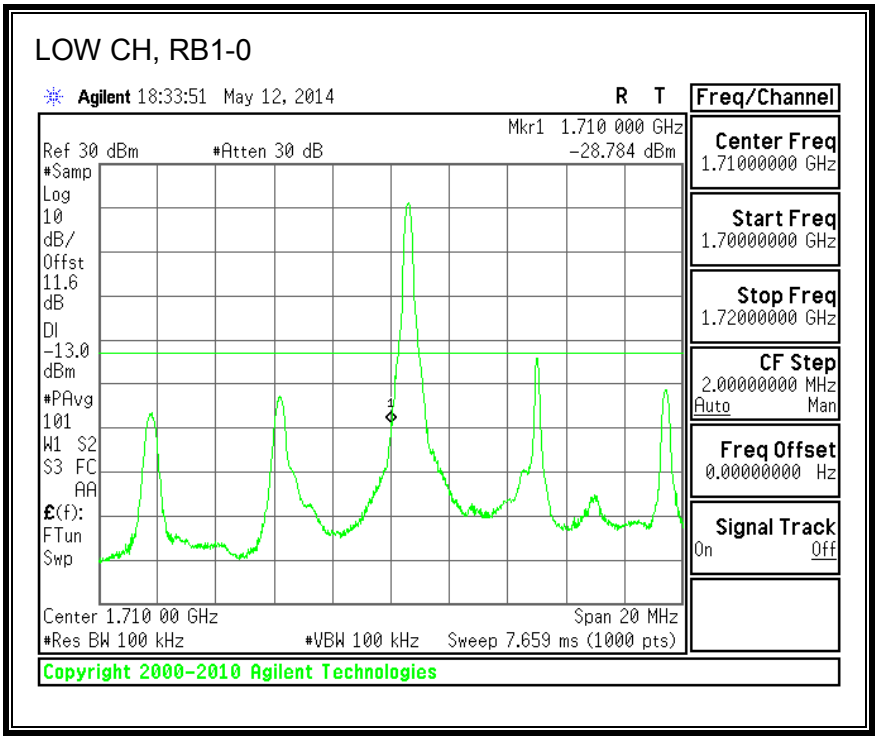


HIGH CH, RB50-0

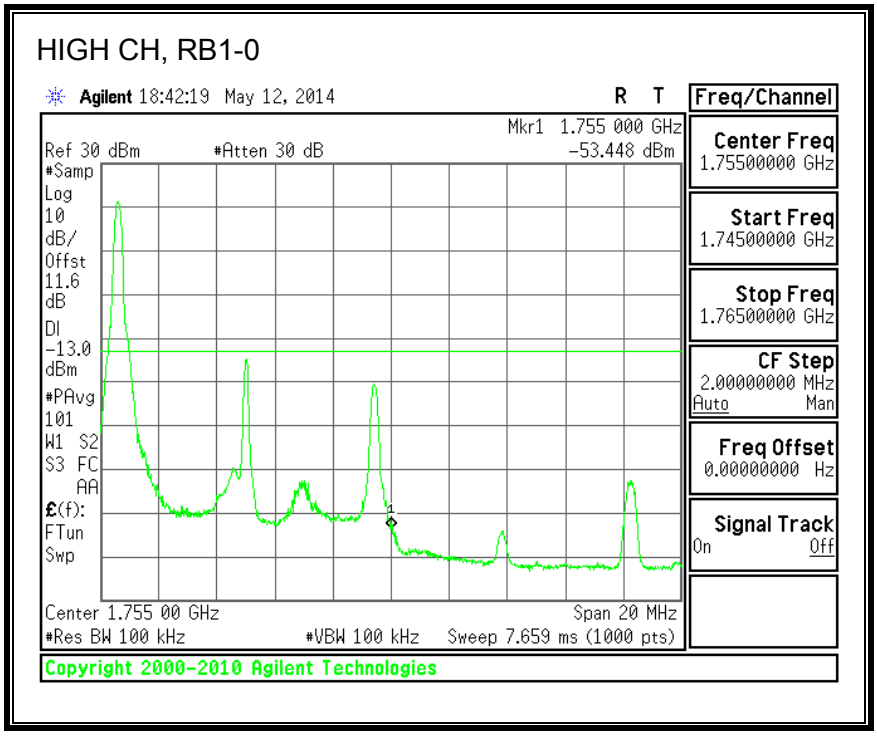


16QAM, (10.0 MHz BAND WIDTH)

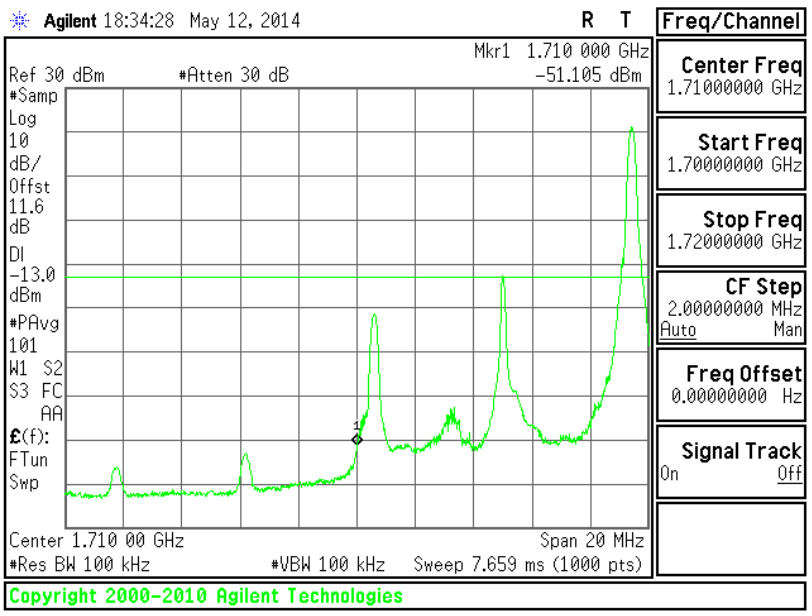
LOW CH, RB1-0



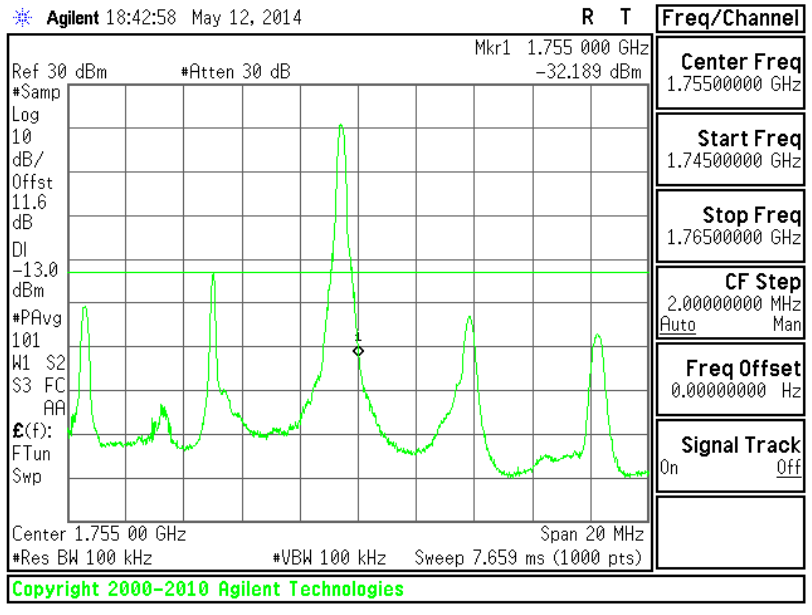
HIGH CH, RB1-0



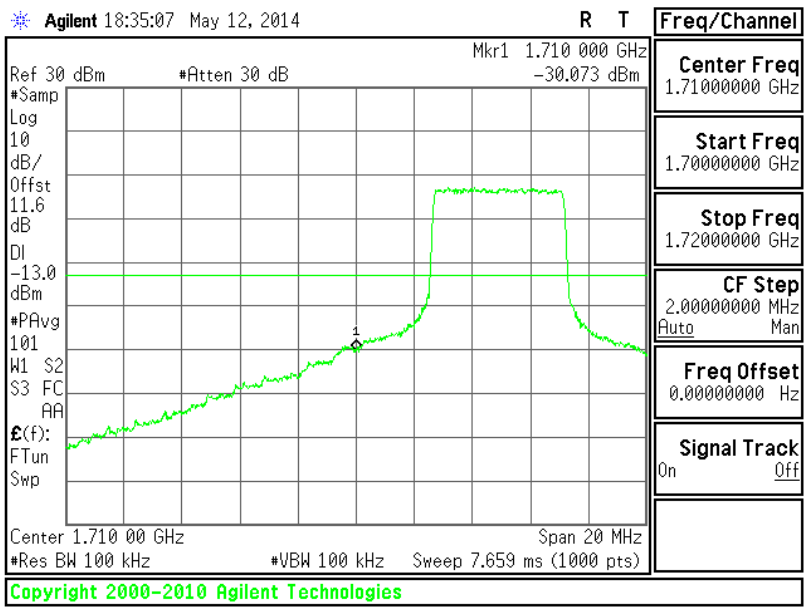
LOW CH, RB1-49



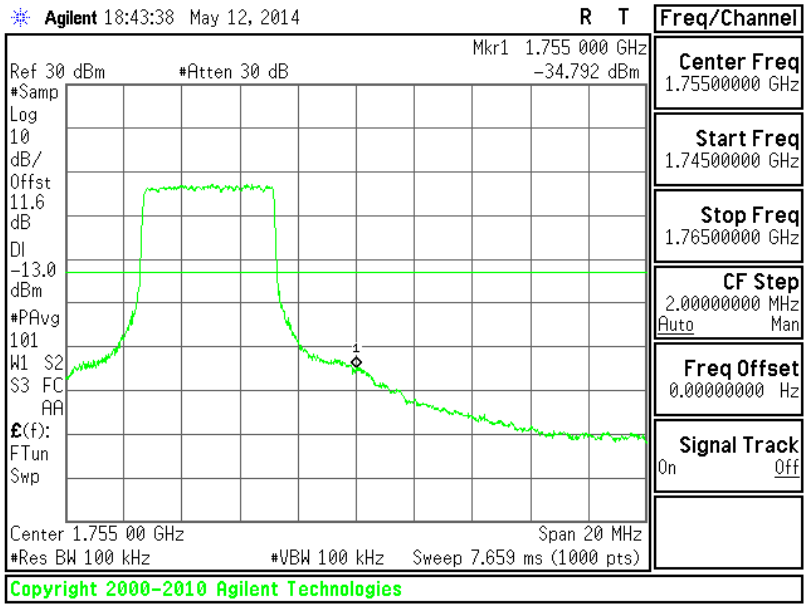
HIGH CH, RB1-49



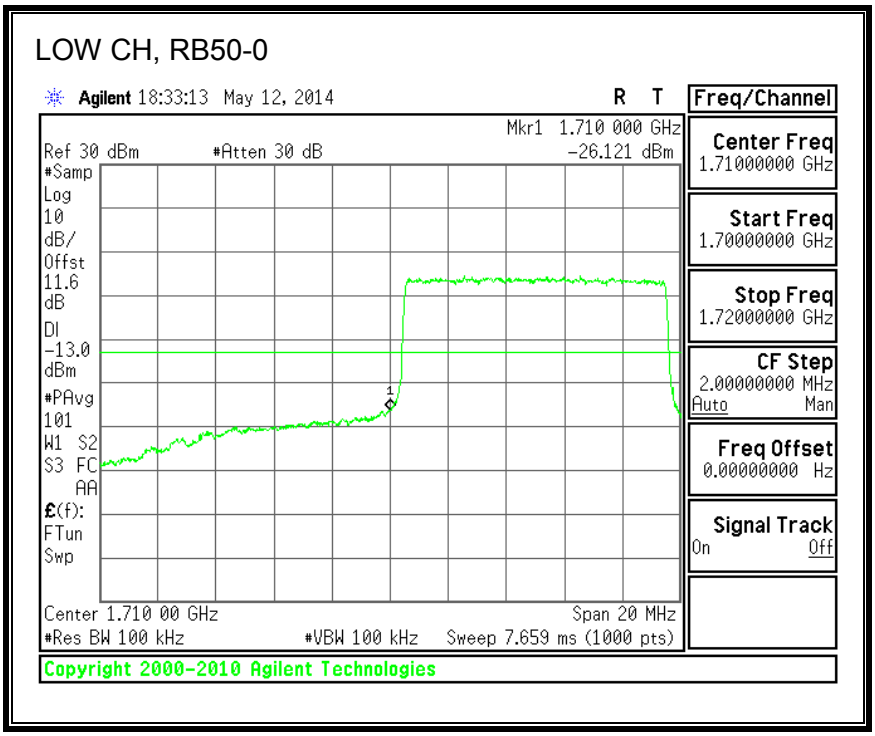
LOW CH, RB25-12



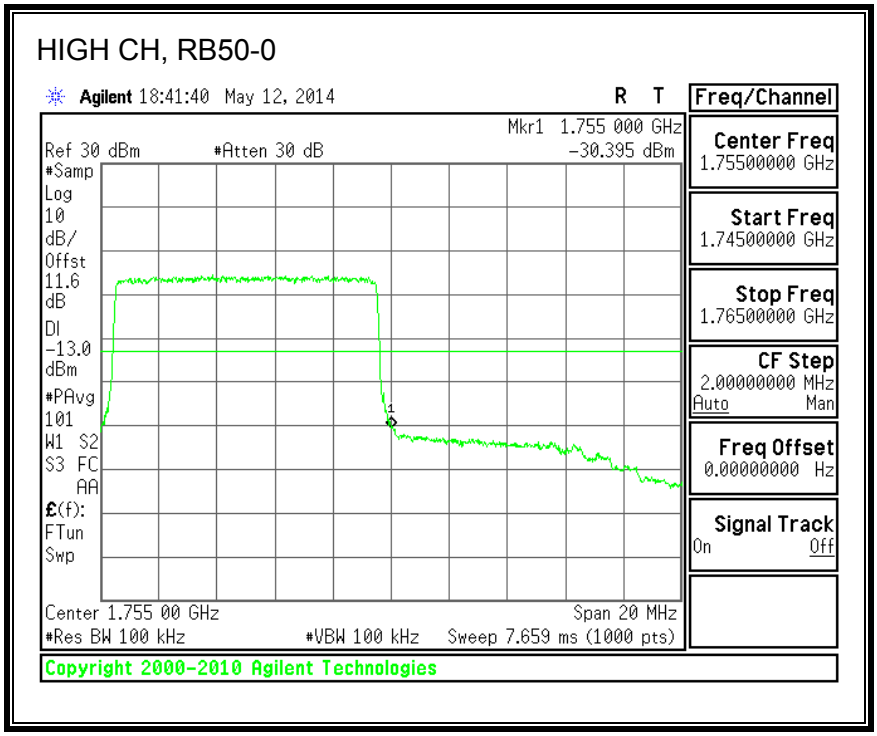
HIGH CH, RB25-12



LOW CH, RB50-0

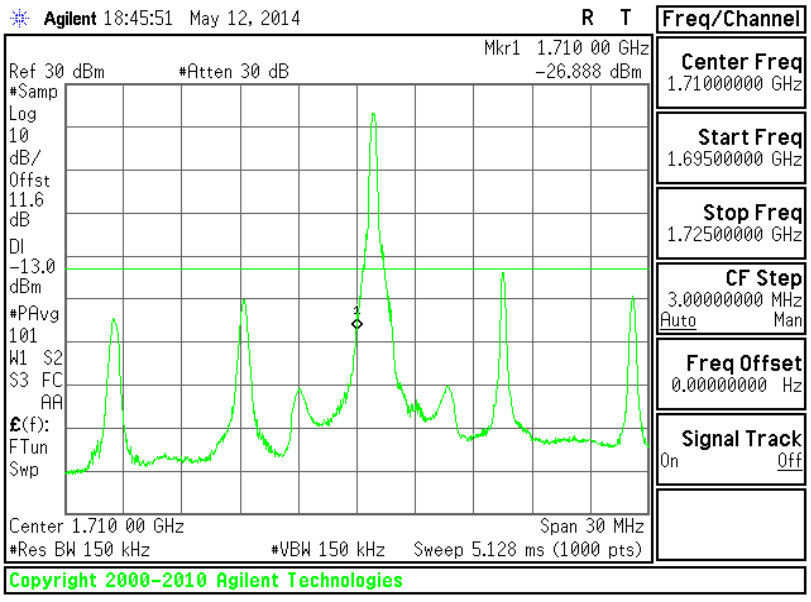


HIGH CH, RB50-0

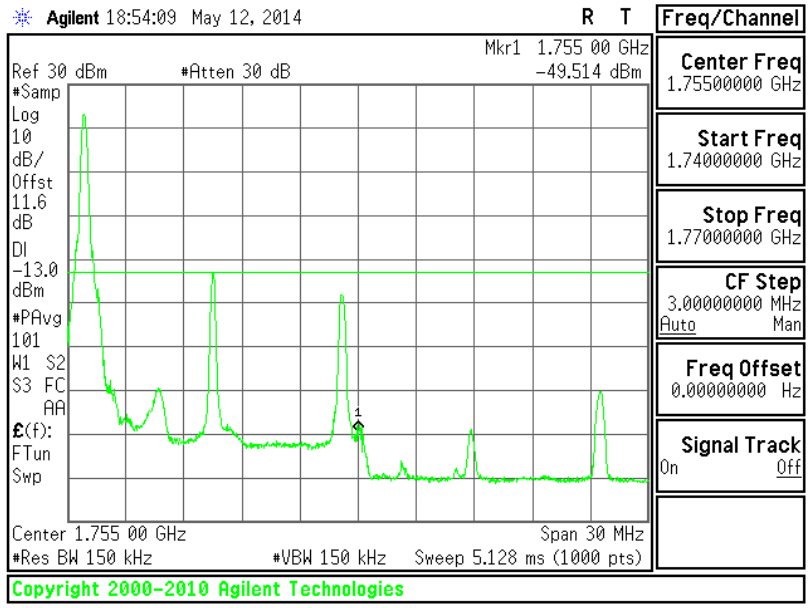


QPSK, (15.0 MHz BAND WIDTH)

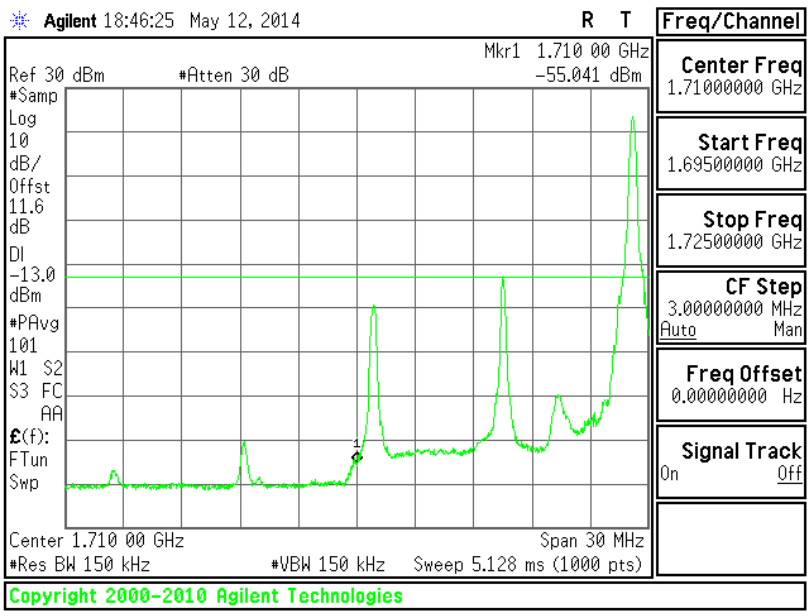
LOW CH, RB1-0



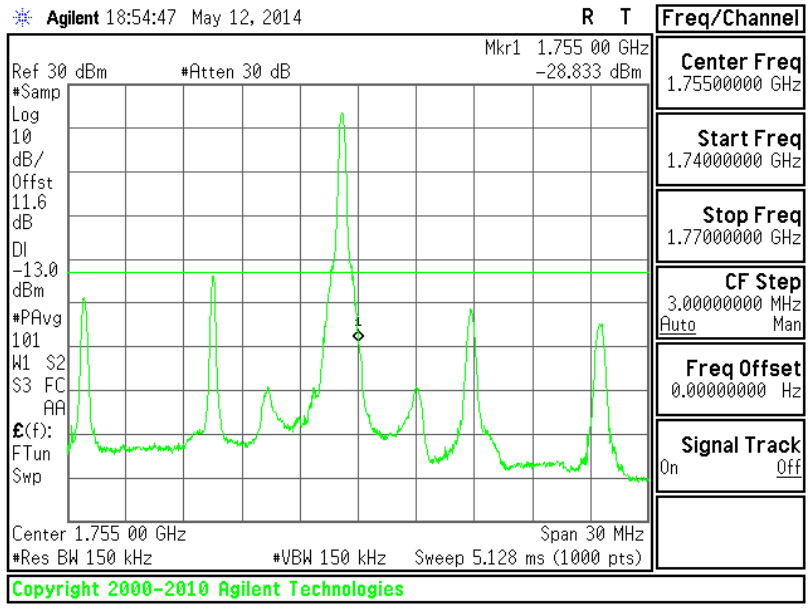
HIGH CH, RB1-0



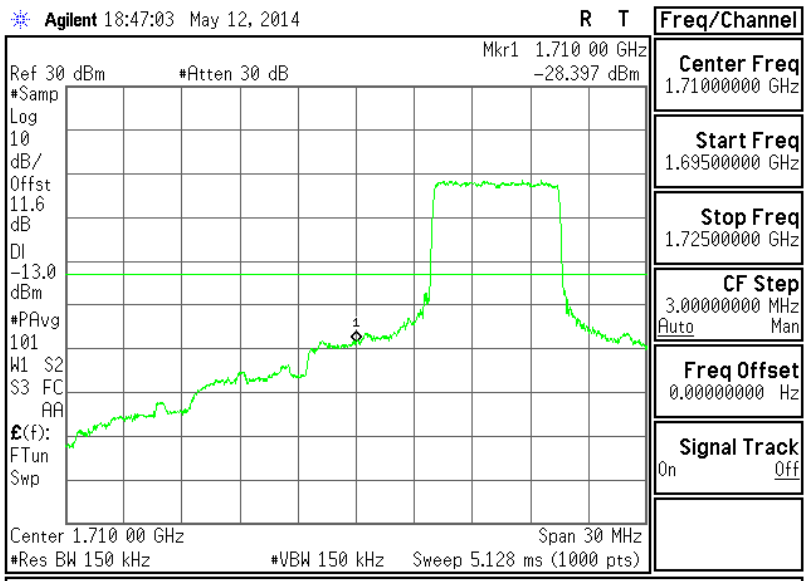
LOW CH, RB1-74



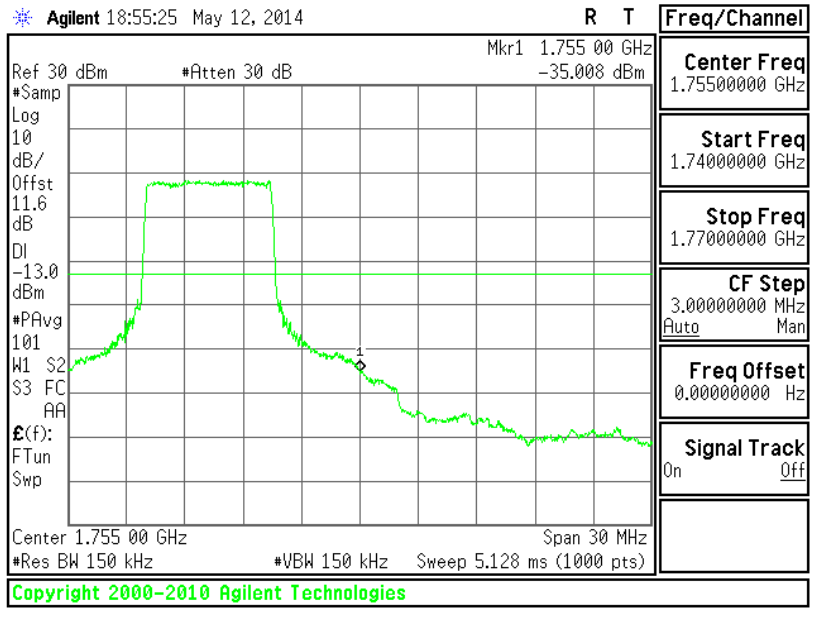
HIGH CH, RB1-74



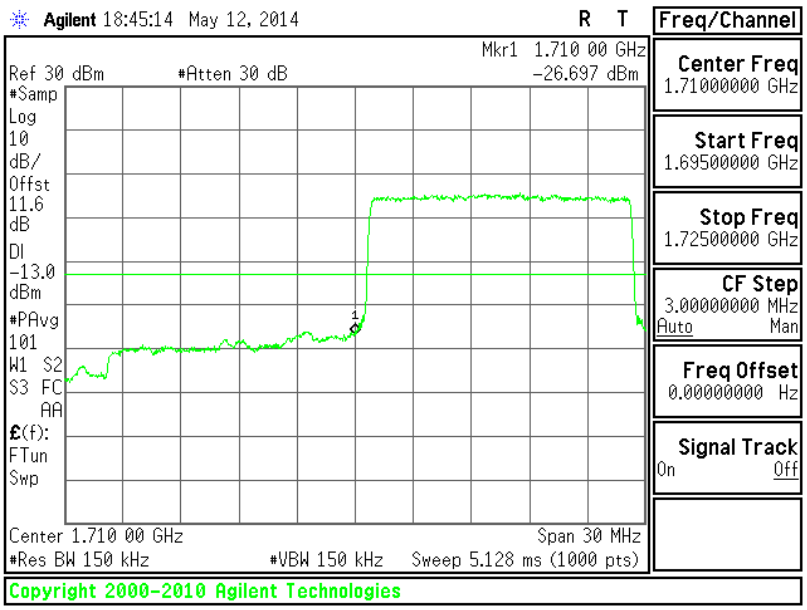
LOW CH, RB36-18



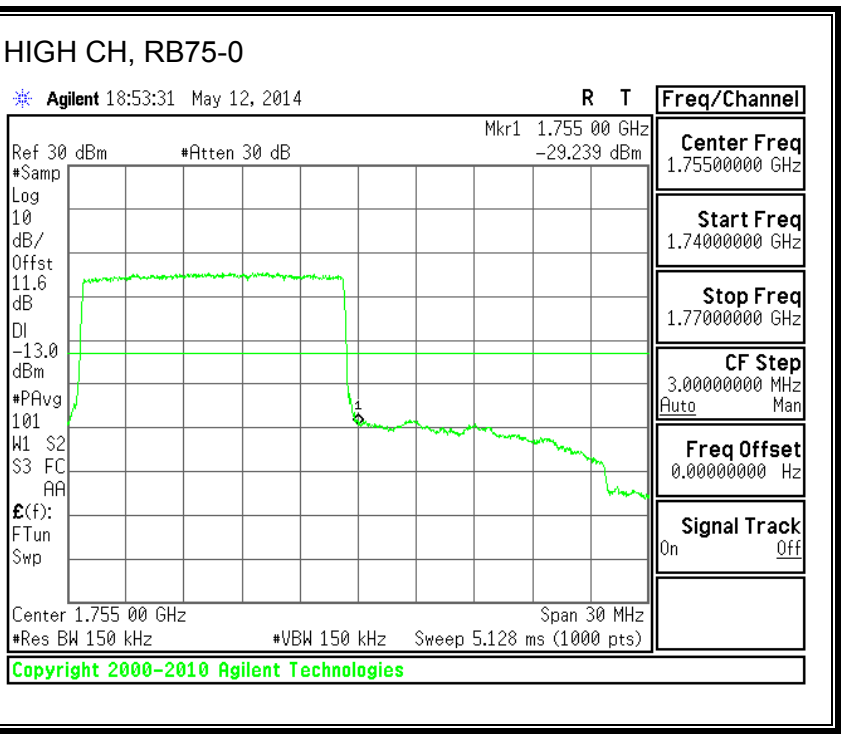
HIGH CH, RB36-18



LOW CH, RB75-0

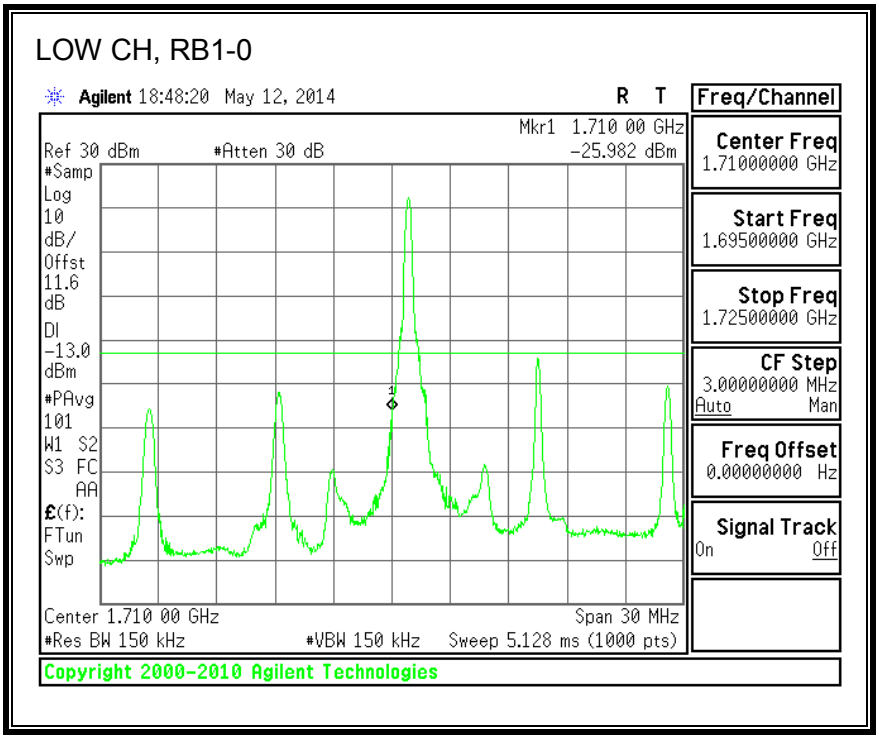


HIGH CH, RB75-0

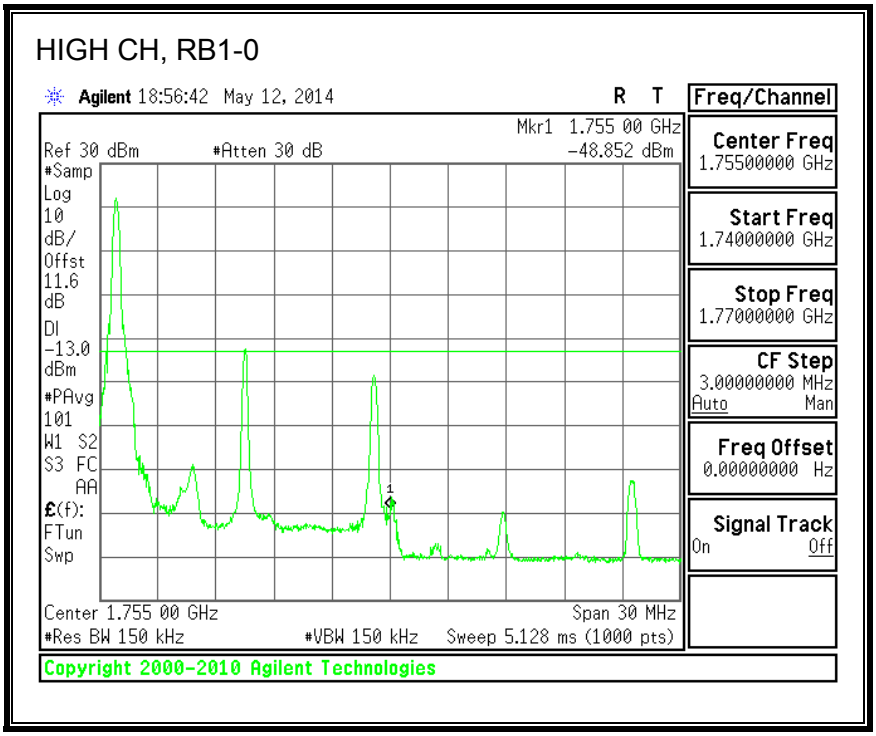


16QAM, (15.0 MHz BAND WIDTH)

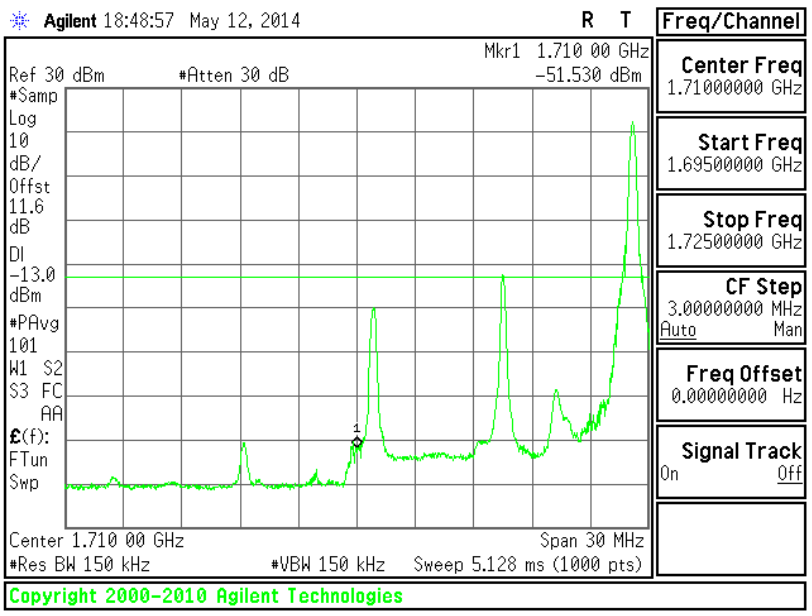
LOW CH, RB1-0



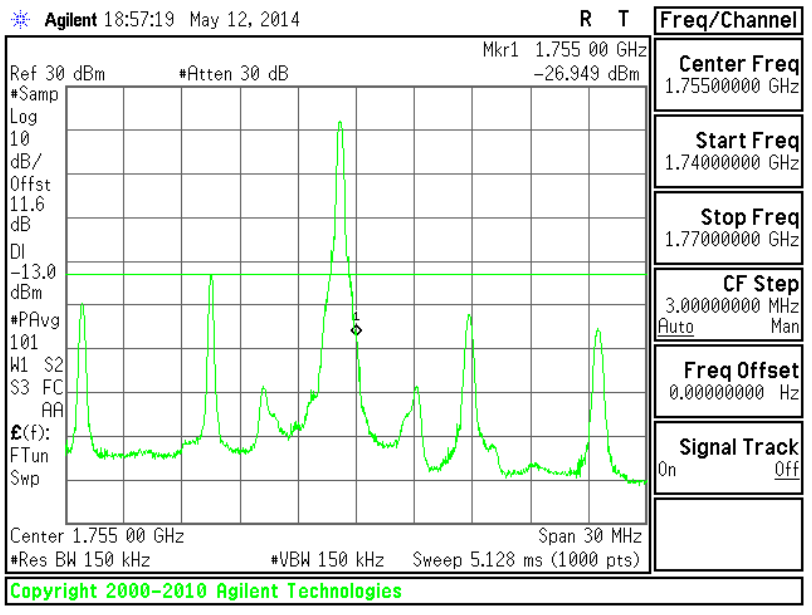
HIGH CH, RB1-0



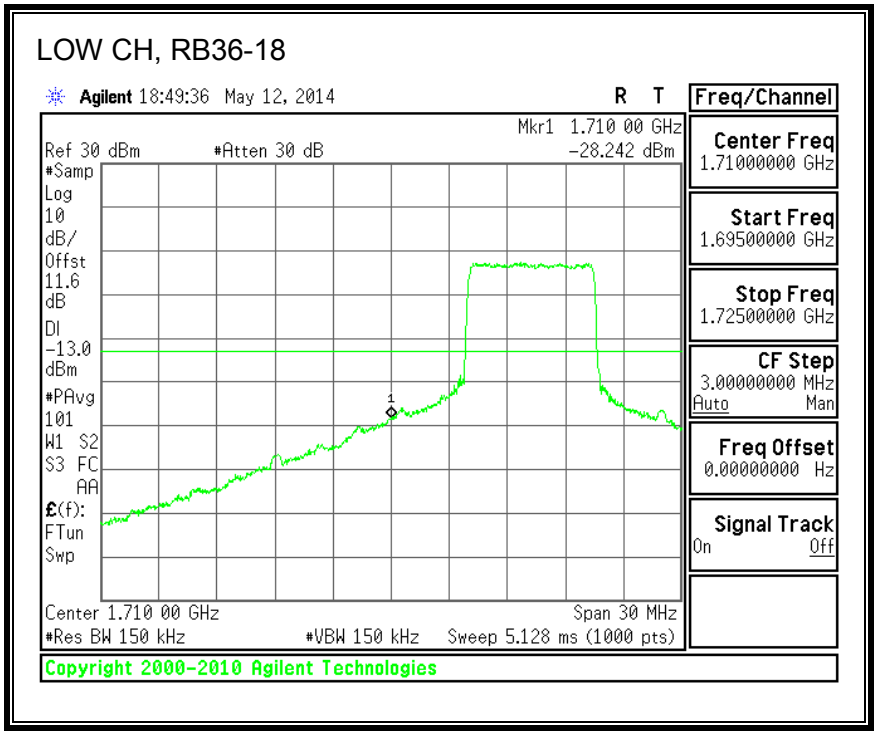
LOW CH, RB1-74



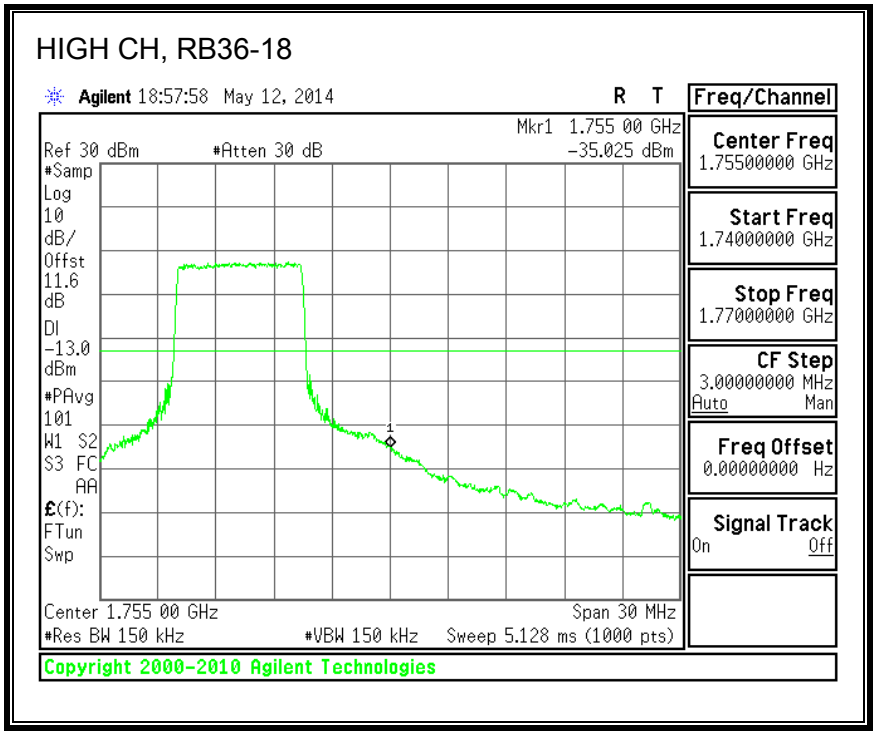
HIGH CH, RB1-74



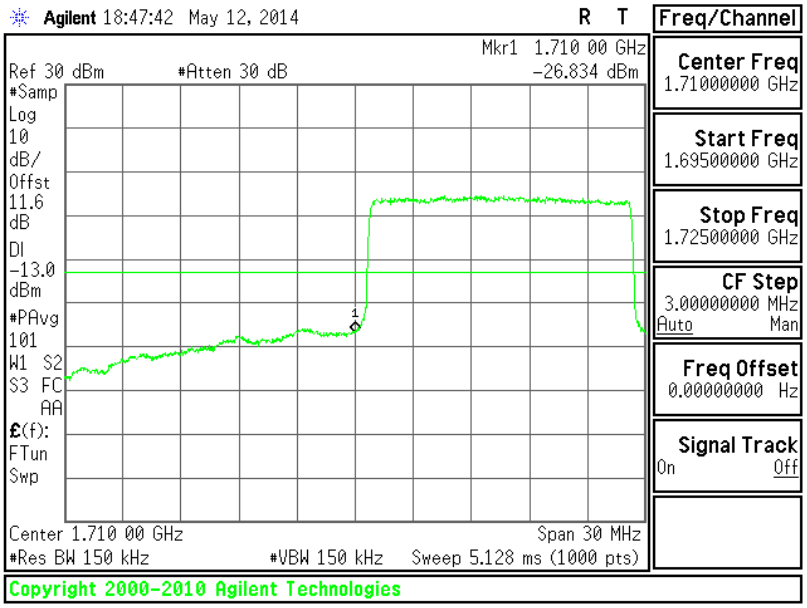
LOW CH, RB36-18



HIGH CH, RB36-18



LOW CH, RB75-0



HIGH CH, RB75-0