



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

FOR

**iPhone With GSM/WCDMA/HSPA+/DC-HSDPA/LTE, 1xRTT/CDMA 1xEVDO Rev. A,
Rev. B/Advanced Bluetooth EDR 2.1, and WiFi 802.11 a/b/g/n**

MODEL NUMBER: A1428 and A1429

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Prepared for

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

EUT DESCRIPTION: iPhone With GSM/WCDMA/HSPA+/DC-HSDPA/LTE,
1xRTT/CDMA 1xEVDO Rev. A, Rev.B/Advanced Bluetooth EDR
2.1, and WiFi 802.11 a/b/g/n

MODEL: A1428 and A1429

SERIAL NUMBER: A1428 (C39HL00PF4KW)-EVT2; A1429 (C39HL001F4LF)-EVT2

DATE TESTED: MAY 10 - JULY 27, 2012

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

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

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

Approved & Released For UL CCS By:

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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 and Part 27.

3. FACILITIES AND ACCREDITATION

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

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

4.3. MEASUREMENT UNCERTAINTY

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

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

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT, Model A1428 is a mobile phone with multimedia functions (music, application support, and video), cellular GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/LTE radio, IEEE 802.11a/b/g/n and Bluetooth radio. The rechargeable battery is not user accessible.

The EUT, Model A1429 is a mobile phone with multimedia functions (music, application support, and video), cellular GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/ CDMA1xRTT/EVDO Rev 0, A, B/1xAdvance/ LTE radio, IEEE 802.11a/b/g/n and Bluetooth radio. 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:

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

5.2.1. A1428 LAT PORT LTE BAND 2

Part 24 LTE Band 2 MODE (1.4.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1850.7 - 1909.3	QPSK RB6-0	27.60	575.4	31.52	1419.1
1850.7 - 1909.3	16QAM, RB6-0	27.50	562.3	29.52	895.4

Part 24 LTE Band 2 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1851.5 - 1908.5	QPSK RB15-0	27.80	602.6	31.52	1419.1
1851.5 - 1908.5	16QAM, RB15-0	27.60	575.4	30.42	1101.5

Part 24 LTE Band 2 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1852.5 - 1907.5	QPSK RB25-0	27.80	602.6	31.92	1556.0
1851.5 - 1908.5	16QAM, RB25-0	27.60	575.4	30.72	1180.3

Part 24 LTE Band 2 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1855 - 1905	QPSK RB50-0	27.90	616.6	31.12	1294.2
1855 - 1905	16QAM, RB50-0	27.50	562.3	30.46	1111.7

Part 24 LTE Band 2 MODE (15.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1857.5 - 1902.5	QPSK RB75-0	27.88	613.8	31.26	1336.6
1857.5 - 1902.5	16QAM, RB75-0	27.80	602.6	30.27	1064.1

Part 24 LTE Band 2 MODE (20.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1860 - 1900	QPSK RB100-0	27.68	586.1	31.56	1432.2
1860 - 1900	16QAM, RB100-0	27.63	579.4	30.66	1164.1

5.2.2. A1428 LAT PORT LTE BAND 4

Part 27 LTE Band 4 MODE (1.4.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1710.7 - 1754.3	QPSK RB6-0	28.55	716.1	27.37	545.8
1710.7 - 1754.3	16QAM, RB6-0	28.50	707.9	26.67	464.5

Part 27 LTE Band 4 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1711.5 - 1753.5	QPSK RB15-0	29.00	794.3	28.47	703.1
1711.5 - 1753.5	16QAM, RB15-0	28.90	776.2	27.47	558.5

Part 27 LTE Band 4 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1712.5 - 1752.5	QPSK RB25-0	28.80	758.6	27.86	610.9
1712.5 - 1752.5	16QAM, RB25-0	28.60	724.4	26.77	475.3

Part 27 LTE Band 4 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1715 - 1750	QPSK RB50-0	29.20	831.8	28.97	788.9
1715 - 1750	16QAM, RB50-0	29.00	794.3	27.97	626.6

Part 27 LTE Band 4 MODE (15.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1717.5 - 1747.50	QPSK RB75-0	29.20	831.8	29.17	826.0
1717.5 - 1747.50	16QAM RB75-0	29.10	812.8	28.17	656.1

Part 27 LTE Band 4 MODE (20.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1720 - 1745	QPSK RB100-0	29.19	829.9	28.87	770.9
1720 - 1745	16QAM, RB100-0	29.10	812.8	27.67	584.8

5.2.3. A1428 LAT PORT LTE BAND 5

Part 22 LTE Band 5 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
824.7 - 848.3	QPSK RB1-0	24.00	251.2	22.94	196.8
824.7 - 848.3	16QAM, RB1-0	23.60	229.1	21.94	156.3

Part 22 LTE Band 5 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
825.5 - 847.5	QPSK RB1-0	23.90	245.5	22.84	192.3
824.7 - 848.3	16QAM, RB1-0	23.40	218.8	22.34	171.4

Part 22 LTE Band 5 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
826.5 - 846.5	QPSK RB1-0	23.90	245.5	22.64	183.7
826.5 - 846.5	16QAM, RB1-0	23.63	230.7	22.34	171.4

Part 22 LTE Band 5 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
829 - 844	QPSK RB1-0	23.99	250.6	22.44	175.4
829 - 844	16QAM, RB1-0	23.70	234.4	21.87	153.8

5.2.4. A1428 LAT PORT LTE BAND 17

Part 27 LTE Band 17 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
706.5 - 713.5	QPSK RB1-0	24.00	251.2	23.62	230.1
706.5 - 713.5	16QAM, RB1-0	23.90	245.5	23.52	224.9

Part 27 LTE Band 17 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
709 - 711	QPSK RB1-0	24.00	251.2	23.52	224.9
709 - 711	16QAM, RB1-0	23.95	248.3	23.02	200.4

5.2.5. A1429 LAT PORT LTE BAND 5

Part 22 LTE Band 5 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
824.7 - 848.3	QPSK RB1-0	24.00	251.2	22.84	192.3
824.7 - 848.3	16QAM, RB1-0	23.60	229.1	22.24	167.5

Part 22 LTE Band 5 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
825.5 - 847.5	QPSK RB1-0	23.90	245.5	22.67	184.9
825.5 - 847.5	16QAM, RB1-0	23.40	218.8	22.07	161.1

Part 22 LTE Band 5 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
826.5 - 846.5	QPSK RB1-0	23.90	245.5	22.87	193.6
826.5 - 846.5	16QAM, RB1-0	23.63	230.7	22.57	180.7

Part 22 LTE Band 5 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
829 - 844	QPSK RB1-0	23.99	250.6	21.84	152.8
829 - 844	16QAM, RB1-0	23.70	234.4	21.14	130.0

5.2.6. A1429 LAT PORT LTE BAND 13

Part 27 LTE Band 13 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
779.5 - 784.5	QPSK RB1-0	23.97	249.5	23.52	224.9
779.5 - 784.5	16QAM, RB1-0	23.60	229.1	21.82	152.1

Part 27 LTE Band 13 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(AVERAGE)	
		dBm	mW	dBm	mW
782.00	QPSK RB1-0	23.99	250.6	23.12	205.1
782.00	16QAM, RB1-0	23.15	206.5	22.12	162.9

5.2.7. A1429 LAT PORT LTE BAND 25

Part 24 LTE Band 25 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1850.7 - 1914.3	QPSK RB6-0	27.60	575.4	27.36	544.5
1850.7 - 1914.3	16QAM, RB6-0	27.60	575.4	26.36	432.5

Part 24 LTE Band 25 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1851.5 - 1913.5	QPSK RB15-0	27.70	588.8	26.86	485.3
1851.5 - 1913.5	16QAM, RB15-0	27.50	562.3	25.42	348.3

Part 24 LTE Band 25 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1852.5 - 1912.5	QPSK RB25-0	27.80	602.6	28.66	734.5
1852.5 - 1912.5	16QAM, RB25-0	27.60	575.4	27.36	544.5

Part 24 LTE Band 25 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1855 - 1910	QPSK RB50-0	28.10	645.7	28.86	769.1
1855 - 1910	16QAM, RB50-0	27.60	575.4	27.36	544.5

Part 24 LTE Band 25 MODE (15.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1857.5 - 1907.5	QPSK RB50-0	28.00	631.0	28.16	654.6
1857.5 - 1907.5	16QAM, RB50-0	27.70	588.8	27.56	570.2

Part 24 LTE Band 25 MODE (20.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(PEAK)	
		dBm	mW	dBm	mW
1860 - 1905	QPSK RB100-0	27.90	616.6	28.40	691.8
1860 - 1905	16QAM, RB100-0	27.60	575.4	27.96	625.2

5.2.8. A1428 UAT PORT LTE BAND 2

Part 24 LTE Band 2 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1850.7 - 1909.3	QPSK RB6-0	27.80	602.6	23.90	245.5
1850.7 - 1909.3	16QAM, RB6-0	27.60	575.4	23.00	199.5

Part 24 LTE Band 2 MODE (3.0MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1851.5 - 1908.5	QPSK RB15-0	28.50	707.9	24.16	260.6
1851.5 - 1908.5	16QAM, RB15-0	28.10	645.7	23.46	221.8

Part 24 LTE Band 2 MODE (5.0MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1852.5 - 1907.5	QPSK RB25-0	27.95	623.7	24.36	272.9
1852.5 - 1907.5	16QAM, RB25-0	28.50	707.9	24.26	266.7

Part 24 LTE Band 2 MODE (10.0MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1855 - 1905	QPSK RB50-0	28.10	645.7	24.90	309.0
1855 - 1905	16QAM, RB50-0	27.87	612.4	24.16	260.6

Part 24 LTE Band 2 MODE (15.0MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1857.5 1902.5	QPSK RB75-0	28.00	631.0	26.30	426.6
1857.5 1902.5	16QAM, RB75-0	28.05	638.3	25.40	346.7

Part 24 LTE Band 2 MODE (20.0MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1860 - 1900	QPSK RB100-0	28.20	660.7	26.65	462.4
1860 - 1900	16QAM, RB100-0	28.10	645.7	25.06	320.6

5.2.9. A1428 UAT PORT LTE BAND 4

Part 27 LTE Band 4 MODE (1.4.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1710.7 - 1754.3	QPSK RB6-0	28.20	660.7	23.41	219.3
1710.7 - 1754.3	16QAM, RB6-0	28.00	631.0	22.51	178.2

Part 27 LTE Band 4 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1711.5 - 1753.5	QPSK RB15-0	27.95	623.7	23.67	232.8
1711.5 - 1753.5	16QAM, RB15-0	27.90	616.6	23.81	240.4

Part 27 LTE Band 4 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1712.5 -1752.5	QPSK RB25-0	28.30	676.1	23.97	249.5
1712.5 -1752.5	16QAM, RB25-0	28.20	660.7	23.07	202.8

Part 27 LTE Band 4 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1715 - 1750	QPSK RB50-0	28.60	724.4	23.37	217.3
1715 - 1750	16QAM, RB50-0	28.20	660.7	22.47	176.6

Part 27 LTE Band 4 MODE (15.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1717.5 - 1747.5	QPSK RB75-0	28.30	676.1	23.81	240.4
1717.5 - 1747.5	16QAM, RB75-0	28.30	676.1	22.91	195.4

Part 27 LTE Band 4 MODE (20.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1720 - 1745	QPSK RB100-0	28.56	717.8	23.81	240.4
1720 - 1745	16QAM, RB100-0	28.40	691.8	22.91	195.4

5.2.10. A1428 UAT PORT LTE BAND 17

Part 27 LTE Band 17 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
706.5 - 713.5	QPSK RB1-0	23.50	223.9	17.22	52.7
706.5 - 713.5	16QAM, RB1-0	22.50	177.8	16.42	43.9

Part 27 LTE Band 17 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
709 - 711	QPSK RB1-0	23.50	223.9	16.32	42.9
709 - 711	16QAM, RB1-0	22.49	177.4	15.42	34.8

5.2.11. A1428 UAT PORT LTE BAND 5

Part 22 LTE Band 5 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
824.7 - 848.3	QPSK RB1-0	23.50	223.9	22.54	179.5
824.7 - 848.3	16QAM, RB1-0	22.70	186.2	21.64	145.9

Part 22 LTE Band 5 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
825.5 - 847.5	QPSK RB1-0	23.50	223.9	22.34	171.4
825.5 - 847.5	16QAM, RB1-0	22.75	188.4	21.34	136.1

Part 22 LTE Band 5 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
826.5 - 846.5	QPSK RB1-0	23.50	223.9	22.14	163.7
826.5 - 846.5	16QAM, RB1-0	22.90	195.0	21.54	142.6

Part 22 LTE Band 5 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
829 - 844	QPSK RB1-0	23.50	223.9	22.14	163.7
829 - 844	16QAM, RB1-0	22.90	195.0	21.31	135.2

5.2.12. A1429 UAT PORT LTE BAND 13

Part 27 LTE Band 13 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
779.5 - 784.5	QPSK RB1-0	23.50	223.9	19.22	83.6
779.5 - 784.5	16QAM, RB1-0	23.30	213.8	18.42	69.5

Part 27 LTE Band 13 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Average)		ERP(Average)	
		dBm	mW	dBm	mW
782	QPSK, RB1-0	23.40	218.8	18.02	63.4
782	16QAM, RB1-0	23.10	204.2	17.32	54.0

5.2.13. A1429 UAT PORT LTE BAND 25

Part 24 LTE Band 25 MODE (1.4 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1850.7 - 1909.3	QPSK RB6-0	28.18	657.7	22.06	160.7
1850.7 - 1909.3	16QAM, RB6-0	27.90	616.6	20.86	121.9

Part 24 LTE Band 25 MODE (3.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1851.5 - 1913.5	QPSK RB15-0	27.90	616.6	24.16	260.6
1851.5 - 1913.5	16QAM, RB15-0	27.80	602.6	23.36	216.8

Part 24 LTE Band 25 MODE (5.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1852.5 - 1912.5	QPSK RB25-0	28.07	641.2	24.86	306.2
1852.5 - 1912.5	16QAM, RB25-0	28.05	638.3	23.96	248.9

Part 24 LTE Band 25 MODE (10.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1855 - 1912.5	QPSK RB50-0	28.40	691.8	25.16	328.1
1855 - 1912.5	16QAM, RB50-0	28.10	645.7	24.20	263.0

Part 24 LTE Band 25 Mode (15.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1857.5 - 1907.5	QPSK RB75-0	28.40	691.8	25.26	335.7
1857.5 - 1907.5	16QAM, RB75-0	28.30	676.1	24.26	266.7

Part 24 LTE Band 25 Mode (20.0 MHz BANDWIDTH)					
Frequency range (MHz)	Modulation	Conducted(Peak)		EIRP(Peak)	
		dBm	mW	dBm	mW
1860 - 1905	QPSK RB100-0	28.00	631.0	25.26	335.7
1860 - 1905	16QAM, RB100-0	27.90	616.6	24.46	279.3

5.3. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 0.11.04_DEBUG

The EUT software installed during testing was 10A341A

The EUT is linked with Agilent 8960 Communication, CMU200 and CMW500 Test Set.

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

LTE BANDS	A1428 LAT Antenna Gain (dBi)	A1429 LAT Antenna Gain (dBi)	A1428/A1429 UAT Antenna Gain(dBi)
LTE Band 2, 1850-1910MHz	0.66	1.04	-2.9
LTE Band 4, 1710 – 1755MHz	-0.51	N/A	-3.27
LTE Band 5, 824 – 849MHz	-1.25	-0.86	-4.33
LTE Band 13, 777 -787MHz	N/A	-1.87	-4.02
LTE Band 17, 704 – 716MHz	-2.39	N/A	-3.96
LTE Band 25, 1850 – 1915MHz	N/A	1.04	-2.9
CDMA BC10	N/A	-1.73	-5.47

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel for RF radiated emissions below 1GHz tests is channel with highest RF output power.

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

The A1428 device has LTE Bands of 2, 4, 5, and 17, and the A1429 has LTE Bands of 5, 13, and 25.

Both A1428 and A1429 devices have two ports of port A (LAT) and Port B (UAT). Port A has a most higher of output power than Port B from the result measurement except LTE bands 2 for A1428 and LTE band 25 for A1429 devices on port B.

For the A1428 device, all tests were performed as below,

_Port A: Both conducted and radiated emissions measurement with all LTE bands.

_Port B: All conducted emissions measurement and only EIRP radiated emissions on all LTE bands.

For the A1429 device, all tests were performed as below,

_Port A: Both conducted and radiated emissions measurement with all LTE bands.

_Port B: All conducted emissions measurement and only EIRP radiated emissions on all LTE bands.

For the fundamental investigation of radiated emissions, the EUT is investigated for vertical and horizontal antenna orientations and X Y and Z orientation and the worst case was determined to be at Y position on Cell band and Z position on PCS Band.

5.6. DESCRIPTION OF TEST SETUP

RADIATED TESTS SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	Manufacturer	Model	Serial Number
Earphone	Apple	NA	NA
AC Adaptor	Apple	A1385	D292066H2T2DHLHAC

I/O CABLES (RF Conducted Test)

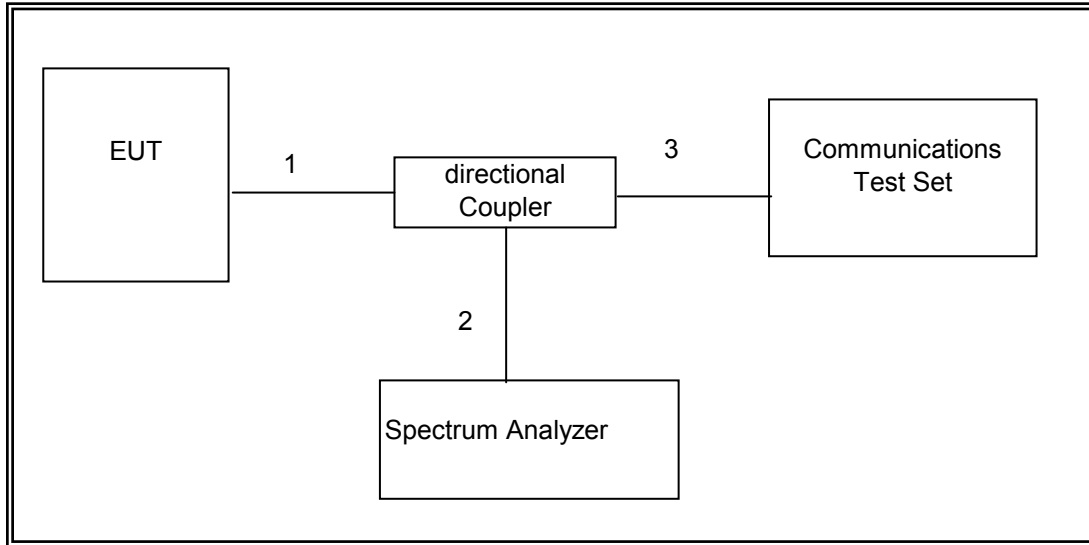
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	RFOut	1	Directional Coupler	Un-shielded	0.1m	NA
2	RF In/Out	1	Spectrum Analyzer	Un-shielded	None	NA
3	RF In/Out	1	Communications Test Set	Un-shielded	1.2m	NA

I/O CABLES (RF Radiated Test)

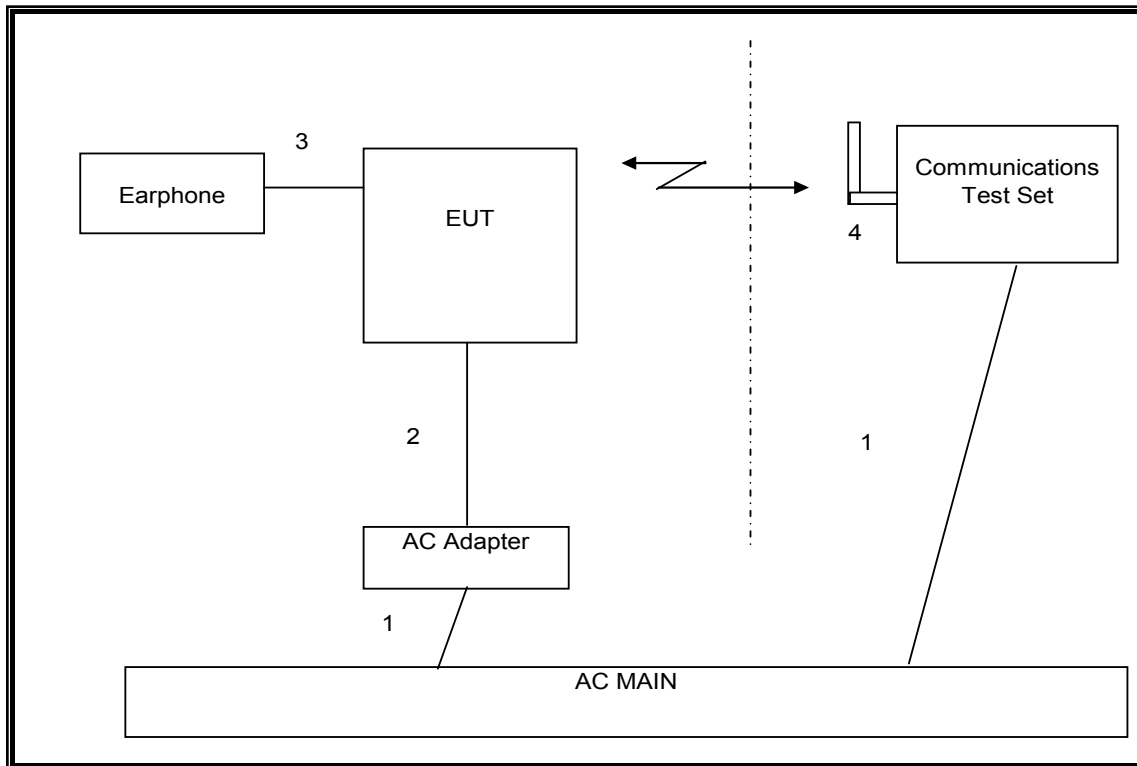
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	US 115V	Un-shielded	2m	NA
2	DC	1	US 115V	Un-shielded	1m	NA
3	Jack	1	Earphone	Un-shielded	0.5m	NA
4	RF In/Out	1	Antenna	Un-shielded	none	NA

TEST SETUP

CONDUCTED SETUP DIAGRAM FOR TESTS



RADIATED SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01159	04/09/13
Antenna, Horn, 18 GHz	EMCO	3115	C00872	09/20/12
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	02/07/13
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00885	11/11/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	11/11/12
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/19/13
Communications Test Set	Agilent / HP	E5515C	1000732	09/27/12
Wideband Communication Test Set	R & S	CMW 500	None	12/16/12
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	12/13/12
Temperature / Humidity Chamber	WATLOW Controls	SK-3102	None	CNR
Dual Channel Thermometer	Tektronix	DTM920	CCS-0048	05/21/13
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02689	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Directional Coupler	RF-Lambda	RFDC5M06G15	None	CNR
Vector signal generator, 6 GHz	Agilent / HP	E4438C	None	07/06/13
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121C DB4	C00993	07/16/13

7. RF POWER OUTPUT VERIFICATION

7.1. A1428 LAT PORT LTE BAND 2

Output power for LTE Band 2 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1850.7	18607	QPSK	1.4	1	0	27.10	22.48
				1	5	26.80	22.49
				3	2	27.40	22.22
				6	0	27.50	21.34
		16-QAM		1	0	26.90	21.46
				1	5	27.00	21.47
				3	2	27.38	21.42
				6	0	27.40	20.40
1880.0	18900	QPSK	1	0	26.90	22.50	
			1	5	27.01	22.49	
			3	2	27.60	22.50	
			6	0	27.60	21.62	
		16-QAM	1	0	26.90	21.44	
			1	5	26.86	21.50	
			3	2	27.50	21.50	
			6	0	27.50	20.50	
1909.3	19193	QPSK	1	0	26.80	22.4	
			1	5	26.80	22.38	
			3	2	27.30	22.30	
			6	0	27.40	21.46	
		16-QAM	1	0	26.70	21.40	
			1	5	26.60	21.38	
			3	2	27.20	21.20	
			6	0	27.30	20.30	

Output power for LTE Band 2 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1851.5	18615	QPSK	3.0	1	0	26.99	22.50
				1	14	26.90	22.50
				8	4	27.30	21.60
				15	0	27.50	21.47
		16-QAM		1	0	26.90	21.60
				1	14	27.10	21.47
				8	4	26.70	20.60
				15	0	27.60	20.60
1880.0	18900	QPSK	1	0	26.88	22.47	
			1	14	26.90	22.45	
			8	4	27.80	21.60	
			15	0	27.80	21.45	
		16-QAM	1	0	27.10	21.46	
			1	14	27.10	21.46	
			8	4	26.90	20.60	
			15	0	27.50	20.60	
1908.5	19185	QPSK	1	0	27.07	22.47	
			1	14	26.90	22.49	
			8	4	27.20	21.60	
			15	0	27.50	21.38	
		16-QAM	1	0	27.10	21.49	
			1	14	26.90	21.43	
			8	4	26.90	20.63	
			15	0	27.40	20.60	

Output power for LTE Band 2 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1852.5	18625	QPSK	5.0	1	0	27.20	22.46
				1	24	26.99	22.50
				12	6	27.20	21.60
				25	0	27.70	21.47
		16-QAM		1	0	27.20	21.7
				1	24	27.10	21.60
				12	6	27.40	20.80
				25	0	27.60	20.60
1880.0	18900	QPSK	5.0	1	0	27.09	22.44
				1	24	27.09	22.47
				12	6	27.38	21.60
				25	0	27.68	21.47
		16-QAM		1	0	27.12	21.61
				1	24	27.10	21.63
				12	6	27.37	20.65
				25	0	27.53	20.60
1907.5	19175	QPSK	5.0	1	0	27.09	22.45
				1	24	26.96	22.41
				12	6	27.18	21.60
				25	0	27.70	21.44
		16-QAM		1	0	26.70	21.60
				1	24	26.80	21.50
				12	6	27.10	20.50
				25	0	27.30	20.63

Output power for LTE Band 2 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1855	18650	QPSK	10.0	1	0	27.00	22.20
				1	49	26.83	22.40
				25	12	27.50	21.73
				50	0	27.59	21.30
		16-QAM		1	0	26.80	21.30
				1	49	26.68	21.40
				25	12	26.93	20.80
				50	0	27.30	20.80
1880.0	18900	QPSK	1	0	27.00	22.50	
			1	49	26.92	22.50	
			25	12	27.70	21.85	
			50	0	27.90	21.82	
		16-QAM	1	0	27.10	21.30	
			1	49	26.80	21.50	
			25	12	26.80	21.00	
			50	0	27.50	20.96	
1905	19150	QPSK	1	0	26.90	22.3	
			1	49	26.80	22.42	
			25	12	27.50	21.92	
			50	0	27.60	21.40	
		16-QAM	1	0	27.10	21.30	
			1	49	27.00	21.50	
			25	12	26.95	20.95	
			50	0	27.40	20.92	

Output power for LTE Band 2 (15 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1857.5	18675	QPSK	15.0	1	0	26.90	22.50
				1	74	26.74	22.30
				36	18	27.50	21.73
				75	0	27.88	21.45
		16-QAM		1	0	26.90	21.50
				1	74	26.80	21.50
				36	18	27.30	20.60
				75	0	27.80	20.80
1880.0	18900	QPSK	15.0	1	0	27.10	22.20
				1	74	26.75	22.40
				36	18	27.65	21.50
				75	0	27.80	21.30
		16-QAM		1	0	27.00	21.30
				1	74	27.00	21.40
				36	18	27.60	20.83
				75	0	27.75	20.84
1902.5	19125	QPSK	15.0	1	0	26.70	22.40
				1	74	26.80	22.39
				36	18	27.40	21.60
				75	0	27.80	21.50
		16-QAM		1	0	26.50	21.40
				1	74	26.80	21.50
				36	18	26.40	20.50
				75	0	27.30	20.60

Output power for LTE Band 2 (20 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1860	18700	QPSK	20	1	0	26.99	22.50
				1	99	26.80	22.37
				50	19	27.57	21.60
				100	0	27.68	21.40
		16-QAM		1	0	26.80	21.50
				1	99	26.90	21.40
				50	19	27.10	20.60
				100	0	27.63	20.60
1880.0	18900	QPSK	20	1	0	26.74	22.36
				1	99	26.70	22.35
				50	19	27.60	21.60
				100	0	27.60	21.40
		16-QAM		1	0	26.60	21.43
				1	99	26.60	21.38
				50	19	27.31	20.60
				100	0	27.56	20.60
1900	19100	QPSK	20	1	0	26.87	22.49
				1	99	26.77	22.39
				50	19	27.10	21.60
				100	0	27.53	21.39
		16-QAM		1	0	26.66	21.40
				1	99	26.71	21.48
				50	19	26.52	20.66
				100	0	27.13	20.61

7.2. A1428 LAT PORT LTE BAND 4

Output power for LTE Band 4 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1710.7	19957	QPSK	1.4	1	0	28.00	23.90
				1	5	28.20	23.86
				3	2	27.40	23.52
				6	0	28.15	23.25
		16-QAM		1	0	27.78	23.60
				1	5	27.63	23.55
				3	2	27.70	23.35
				6	0	28.10	22.30
1732.5	20175	QPSK		1	0	28.30	23.70
				1	5	28.10	23.66
				3	2	28.45	23.60
				6	0	28.55	22.70
		16-QAM		1	0	28.40	22.70
				1	5	28.40	22.72
				3	2	28.53	22.56
				6	0	28.50	21.60
1754.3	20393	QPSK		1	0	28.20	23.90
				1	5	28.10	23.80
				3	2	28.10	23.60
				6	0	28.50	23.30
		16-QAM		1	0	28.05	22.70
				1	5	28.00	22.60
				3	2	28.45	22.60
				6	0	28.45	21.50

Output power for LTE Band 4 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1711.5	19965	QPSK	3.0	1	0	28.00	23.90
				1	14	27.90	23.90
				8	4	28.20	23.05
				15	0	28.20	23.15
		16-QAM		1	0	28.10	22.90
				1	14	27.90	22.90
				8	4	27.80	22.15
				15	0	28.10	22.10
1732.5	20175	QPSK	3.0	1	0	28.40	23.88
				1	14	28.34	23.86
				8	4	29.00	23.02
				15	0	29.00	23.00
		16-QAM		1	0	28.50	22.90
				1	14	28.50	22.90
				8	4	28.35	22.10
				15	0	28.90	22.00
1753.5	20385	QPSK	3.0	1	0	27.85	23.90
				1	14	27.70	23.90
				8	4	28.35	23.10
				15	0	28.60	23.10
		16-QAM		1	0	27.80	22.80
				1	14	27.95	22.90
				8	4	28.00	22.18
				15	0	28.60	22.10

Output power for LTE Band 4 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1712.5	19975	QPSK	5.0	1	0	28.20	23.90
				1	24	28.00	23.90
				12	6	27.40	23.40
				25	0	28.70	23.00
		16-QAM		1	0	28.10	23.20
				1	24	28.10	23.20
				12	6	28.00	22.20
				25	0	28.40	22.20
1732.5	20175	QPSK	5.0	1	0	28.65	23.90
				1	24	28.40	23.22
				12	6	28.50	22.80
				25	0	28.93	22.82
		16-QAM		1	0	28.70	23.00
				1	24	28.40	23.40
				12	6	28.50	22.20
				25	0	28.50	21.90
1752.5	20375	QPSK	5.0	1	0	28.00	23.90
				1	24	28.00	23.89
				12	6	28.20	23.20
				25	0	28.80	23.20
		16-QAM		1	0	28.00	23.20
				1	24	28.00	23.40
				12	6	28.30	22.40
				25	0	28.60	22.30

Output power for LTE Band 4 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1715	20000	QPSK	10.0	1	0	28.00	23.9
				1	49	28.40	23.80
				25	12	28.20	23.70
				50	0	28.95	23.65
		16-QAM		1	0	28.02	23.60
				1	49	28.80	23.60
				25	12	27.55	22.50
				50	0	28.80	23.80
1732.5	20175	QPSK		1	0	28.47	23.90
				1	49	28.18	23.80
				25	12	29.00	23.00
				50	0	29.20	23.15
		16-QAM		1	0	28.30	22.80
				1	49	28.40	22.80
				25	12	28.70	22.20
				50	0	29.00	22.15
1750	20350	QPSK		1	0	27.84	23.89
				1	49	27.72	23.90
				25	12	28.20	23.20
				50	0	28.85	23.18
		16-QAM		1	0	28.00	22.87
				1	49	27.85	22.90
				25	12	28.05	22.30
				50	0	28.50	22.20

Output power for LTE Band 4 (15 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1717.5	20025	QPSK	15.0	1	0	27.90	23.90
				1	74	28.30	23.90
				36	18	28.42	23.18
				75	0	29.05	23.13
		16-QAM		1	0	28.20	22.90
				1	74	28.25	22.90
				36	18	28.60	22.70
				75	0	28.82	22.05
1732.5	20175	QPSK	15.0	1	0	28.49	23.85
				1	74	27.95	23.75
				36	18	28.87	23.05
				75	0	29.20	22.92
		16-QAM		1	0	28.20	22.90
				1	74	28.20	22.79
				36	18	28.94	22.02
				75	0	29.10	22.00
1747.5	20325	QPSK	15.0	1	0	27.90	23.90
				1	74	27.90	23.90
				36	18	28.10	23.00
				75	0	28.80	23.10
		16-QAM		1	0	28.16	22.90
				1	74	27.80	22.90
				36	18	28.10	22.00
				75	0	28.67	22.10

Output power for LTE Band 4 (20 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1720	20050	QPSK	20.0	1	0	27.95	23.85
				1	99	28.80	23.30
				50	24	28.70	23.47
				100	0	29.15	23.35
		16-QAM		1	0	28.02	23.10
				1	99	29.00	22.50
				50	19	28.60	22.50
				100	0	29.10	22.46
1732.5	20175	QPSK	20.0	1	0	28.90	23.87
				1	99	28.00	23.64
				50	24	28.70	22.95
				100	0	29.19	23.00
		16-QAM		1	0	28.90	23.30
				1	99	28.00	23.30
				50	19	28.95	22.00
				100	0	29.00	22.10
1745	20300	QPSK	20.0	1	0	28.90	23.80
				1	99	28.8	23.80
				50	24	28.05	23.45
				100	0	29.00	23.38
		16-QAM		1	0	28.50	23.20
				1	99	28.30	23.30
				50	19	28.00	22.55
				100	0	28.70	22.40

7.3. A1428 LAT PORT LTE BAND 17

5 MHz BANDWIDTH

Freq(MHz)	UL Ch #.	Band(MHz)	Mode	RB Size	RB Offset	Peak(dBm)	Average(dBm)
706.5	23755	5.0	QPSK	1	0	28.90	24.00
				1	24	27.25	23.80
				12	6	27.50	22.90
				25	0	28.30	22.97
			16QAM	1	0	28.80	23.90
				1	24	27.60	23.40
				12	6	27.80	22.20
				25	0	28.30	22.00
710	23790		QPSK	1	0	27.35	23.83
				1	24	27.50	23.60
				12	6	27.00	22.90
				25	0	28.02	22.97
			16QAM	1	0	27.80	23.60
				1	24	27.68	23.10
				12	6	26.70	22.20
				25	0	27.05	22.05
713.5	23825		QPSK	1	0	27.50	23.90
				1	24	27.70	23.90
				12	6	27.40	23.00
				25	0	28.20	22.95
			16QAM	1	0	27.40	23.69
				1	24	28.40	23.68
				12	6	27.10	22.25
				25	0	27.70	22.00

10 MHz BANDWIDTH

Freq(MHz)	UL Ch #.	Band	Mode	RB Size	RB Offset	Peak(dBm)	Average(dBm)	
709	23780	10.0	QPSK	1	0	28.30	23.90	
				1	49	27.60	24.00	
				25	12	27.20	23.04	
				50	0	28.00	22.94	
			16QAM	1	0	28.60	23.70	
				1	49	27.80	23.70	
				25	12	26.70	22.00	
710	23790		10.0	QPSK	50	0	28.0	22.20
					1	0	28.00	24.00
					1	49	27.90	24.00
					25	12	27.30	22.98
				16QAM	50	0	28.00	22.95
					1	0	28.20	23.75
					1	49	27.90	23.70
711	23800	10.0		QPSK	25	12	26.62	21.98
					50	0	28.00	22.15
					1	0	27.90	23.80
					1	49	27.94	23.80
				16QAM	25	12	27.30	23.02
					50	0	27.80	22.93
					1	0	27.98	23.95
			10.0	16QAM	1	49	28.10	23.62
					25	12	26.70	21.95
					50	0	28.00	22.10

7.4. A1428 LAT PORT LTE BAND 5

Output power for LTE Band 5 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average
824.7		QPSK	1.4	1	0	28.62	23.99
				1	5	28.60	23.94
				3	2	29.07	23.90
				6	0	29.10	22.95
		16-QAM		1	0	28.00	22.50
				1	5	28.00	22.50
				3	2	29.50	22.40
				6	0	29.00	22.00
836.5	20525	QPSK	1	0	28.85	24.00	
			1	5	28.80	23.96	
			3	2	29.00	23.80	
			6	0	28.70	23.00	
		16-QAM	1	0	28.30	23.60	
			1	5	28.30	23.50	
			3	2	29.00	22.90	
			6	0	28.30	22.00	
848.3		QPSK	1	0	28.70	23.96	
			1	5	28.70	23.80	
			3	2	28.60	23.80	
			6	0	28.70	22.85	
		16-QAM	1	0	28.60	23.10	
			1	5	28.50	22.70	
			3	2	29.00	23.08	
			6	0	29.00	21.90	

Output power for LTE Band 5 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
825.5	20415	QPSK	3.0	1	0	29.00	23.88
				1	14	28.90	23.71
				8	4	28.70	22.78
				15	0	28.70	22.88
		16-QAM		1	0	28.90	23.40
				1	14	29.00	23.00
				8	4	28.60	21.83
				15	0	28.70	22.00
836.5	20525	QPSK	3.0	1	0	28.90	23.90
				1	14	28.87	23.83
				8	4	28.60	22.80
				15	0	28.60	22.88
		16-QAM		1	0	28.90	23.20
				1	14	28.90	23.20
				8	4	28.50	21.93
				15	0	28.40	21.95
847.5	20635	QPSK	3.0	1	0	29.00	23.86
				1	14	28.60	23.60
				8	4	28.60	22.70
				15	0	28.90	22.65
		16-QAM		1	0	29.02	23.30
				1	14	28.50	23.10
				8	4	28.60	21.77
				15	0	28.60	21.72

Output power for LTE Band 5 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average
826.5	20425	QPSK	5.0	1	0	28.80	23.90
				1	24	28.80	23.83
				12	6	28.40	22.80
				25	0	28.90	22.92
		16-QAM		1	0	29.20	23.63
				1	24	29.20	23.54
				12	6	28.70	22.20
				25	0	28.70	21.95
836.5	20525	QPSK	5.0	1	0	28.75	23.80
				1	24	28.70	23.70
				12	6	28.50	22.80
				25	0	29.00	22.87
		16-QAM		1	0	29.30	23.56
				1	24	29.10	23.50
				12	6	28.50	22.23
				25	0	28.70	21.95
846.5	20625	QPSK	5.0	1	0	28.85	23.75
				1	24	28.53	23.60
				12	6	28.60	22.75
				25	0	28.50	22.83
		16-QAM		1	0	29.20	23.20
				1	24	28.90	23.20
				12	6	29.00	22.13
				25	0	28.90	21.83

Output power for LTE Band 5 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
829	20405	QPSK	10.0	1	0	27.61	23.80
				1	49	28.91	23.80
				25	12	28.99	23.17
				50	0	29.10	23.10
		16-QAM		1	0	27.52	23.50
				1	49	28.92	23.50
				25	12	28.78	22.09
				50	0	29.15	22.49
836.5	20525	QPSK	10.0	1	0	28.91	23.96
				1	49	28.97	23.99
				25	12	28.91	23.29
				50	0	29.15	23.25
		16-QAM		1	0	29.24	23.55
				1	49	29.15	23.60
				25	12	28.85	22.15
				50	0	29.27	22.25
844	20600	QPSK	10.0	1	0	29.09	23.96
				1	49	28.72	23.78
				25	12	28.95	23.13
				50	0	29.23	23.19
		16-QAM		1	0	29.02	23.70
				1	49	28.78	22.96
				25	12	28.92	22.08
				50	0	29.05	22.95

7.5. A1429 LAT PORT LTE BAND 13

5MHz Bandwidth

LTE 5MHz BAND 13					
Frequency	RB CONFIGURATION	START RB OFFSET	MODE	Peak (dBm)	Average (dBm)
779.5	1	0	QPSK	28.16	23.94
	1	24		28.46	23.84
	12	6		28.36	23.01
	25	0		28.53	22.97
	1	0	16QAM	28.28	23.50
	1	24		28.65	23.38
	12	6		28.36	22.30
	25	0		28.59	22.02
782	1	0	QPSK	28.60	23.97
	1	24		28.05	23.80
	12	6		28.00	23.00
	25	0		28.50	23.00
	1	0	16QAM	28.70	23.50
	1	24		28.30	23.30
	12	6		28.20	22.30
	25	0		28.40	22.00
784.5	1	0	QPSK	28.52	23.95
	1	24		28.10	23.78
	12	6		28.01	22.96
	25	0		28.48	22.97
	1	0	16QAM	28.76	23.60
	1	24		28.26	23.31
	12	6		28.10	22.24
	25	0		28.59	22.08

10MHz Bandwidth

LTE 10 MHz BAND 13					
Frequency Range (MHz)	RB CONFIGURATION	START RB OFFSET	MODE	Peak (dBm)	Average (dBm)
782	1	0	QPSK	28.12	23.99
	1	49		28.13	23.99
	25	12		28.35	23.10
	50	0		28.40	23.05
	1	0	16QAM	28.15	23.15
	1	49		28.12	23.14
	25	12		28.20	21.96
	50	0		28.59	22.15

7.6. A1429 LAT PORT LTE BAND 25

Output power for LTE Band 25 (1.4MHz)

Frequency	UL CH #	Bandwidth	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)	
1850.7	26047.0	1.4	QPSK	RB 1-0	27.05	22.50	
				RB 1-5	27.01	22.48	
				RB 3-2	27.50	22.49	
				RB 6-0	27.50	21.43	
			16QAM	RB 1-0	27.30	21.50	
				RB 1-5	27.20	21.46	
				RB 3-2	27.60	21.44	
QPSK	RB 6-0		27.60	20.48			
	1882.5		26365.0	QPSK	RB 1-0	27.10	22.50
					RB 1-5	27.10	22.46
					RB 3-2	27.60	22.50
RB 6-0					27.60	21.50	
16QAM	RB 1-0		26.60	21.37			
	RB 1-5		26.80	21.40			
	RB 3-2	27.00	21.40				
	RB 6-0	27.10	20.50				
1914.3	26683.0	QPSK	RB 1-0	26.60	22.40		
			RB 1-5	26.50	22.38		
			RB 3-2	27.20	22.30		
			RB 6-0	27.20	21.30		
		16QAM	RB 1-0	26.90	21.40		
			RB 1-5	26.80	21.37		
			RB 3-2	27.10	21.30		
			RB 6-0	27.10	20.35		

Output power for LTE Band 25 (3.0MHz)

Freq (MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1851.5	26055.0	3.0	QPSK	RB 1-0	27.05	22.50
				RB 1-14	26.93	22.52
				RB 8-4	27.50	21.60
				RB 15-0	27.50	21.46
			16QAM	RB 1-0	27.10	21.50
				RB 1-14	27.10	21.42
				RB 8-4	27.10	20.60
RB 15-0	27.40			20.60		
1882.5	26365.0		QPSK	RB 1-0	27.30	22.50
				RB 1-14	27.30	22.50
				RB 8-4	27.20	21.60
				RB 15-0	27.70	21.40
			16QAM	RB 1-0	26.80	21.50
				RB 1-14	27.01	21.50
		RB 8-4		27.10	20.63	
RB 15-0	27.50	20.50				
1913.5	26675.0	QPSK	RB 1-0	27.00	22.46	
			RB 1-14	26.60	22.49	
			RB 8-4	27.50	21.46	
			RB 15-0	27.50	21.37	
		16QAM	RB 1-0	27.10	21.43	
			RB 1-14	26.80	21.40	
			RB 8-4	26.80	20.50	
RB 15-0	27.40		20.50			

Output power for LTE Band 25 (5.0MHz)

Freq (MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1852.5	26065.0	5.0	QPSK	RB 1-0	27.20	22.50
				RB 1-24	27.10	22.50
				RB 12-6	27.20	21.60
				RB 25-0	27.80	21.40
			16QAM	RB 1-0	26.80	21.50
				RB 1-24	27.00	21.60
				RB 12-6	27.10	20.60
1882.5	26365.0		QPSK	RB 1-0	27.40	22.50
				RB 1-24	27.35	22.50
				RB 12-6	27.30	21.50
				RB 25-0	27.70	21.40
1912.5	26665.0		16QAM	RB 1-0	26.80	21.50
				RB 1-24	26.80	21.60
				RB 12-6	27.30	20.60
		RB 25-0		27.50	20.60	
1912.5	26665.0	QPSK	RB 1-0	27.10	22.45	
			RB 1-24	26.80	22.50	
			RB 12-6	27.10	21.50	
			RB 25-0	27.80	21.30	
		16QAM	RB 1-0	27.01	21.50	
			RB 1-24	26.80	21.46	
			RB 12-6	27.30	20.50	
			RB 25-0	27.20	20.45	

Output power for LTE Band 25 (10.0MHz)

Band	UL CH #	Band	Mode	UL RB Allocation	Peak	Average
1855	26090.0	10.0	QPSK	RB 1-0	27.10	22.50
				RB 1-49	26.90	22.50
				RB 25-12	27.70	21.50
				RB 50-0	27.70	21.40
			16QAM	RB 1-0	27.10	21.50
				RB 1-49	27.10	21.45
				RB 25-12	27.00	20.50
				RB 50-0	27.40	20.60
1882.5	26365.0		QPSK	RB 1-0	27.30	22.50
				RB 1-49	27.10	22.50
				RB 25-12	28.10	21.60
				RB 50-0	28.10	21.50
			16QAM	RB 1-0	26.80	21.50
				RB 1-49	26.80	21.40
				RB 25-12	27.30	20.50
				RB 50-0	27.60	20.60
1910	26640.0	QPSK	RB 1-0	26.90	22.50	
			RB 1-49	26.90	22.40	
			RB 25-12	27.50	21.50	
			RB 50-0	27.80	21.40	
		16QAM	RB 1-0	27.10	21.50	
			RB 1-49	26.80	21.35	
			RB 25-12	27.20	20.50	
			RB 50-0	27.40	20.50	

Output power for LTE Band 25 (15.0MHz)

Freq (MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak	Average
1857.5	26115.0	15.0	QPSK	RB 1-0	27.10	22.50
				RB 1-74	27.20	22.50
				RB 36-18	27.60	21.68
				RB 75-0	27.90	21.61
			16QAM	RB 1-0	27.40	21.60
				RB 1-74	26.80	21.45
				RB 36-18	27.30	20.85
				RB 75-0	27.50	20.66
1882.5	26365.0	15.0	QPSK	RB 1-0	27.20	22.50
				RB 1-74	27.05	22.48
				RB 36-18	27.70	21.63
				RB 75-0	28.00	21.40
			16QAM	RB 1-0	26.90	21.50
				RB 1-74	26.90	21.43
				RB 36-18	27.40	20.60
				RB 75-0	27.60	20.60
1907.5	26615.0	15.0	QPSK	RB 1-0	26.80	22.20
				RB 1-74	26.50	22.30
				RB 36-18	27.40	21.70
				RB 75-0	27.75	20.94
			16QAM	RB 1-0	27.05	21.20
				RB 1-74	26.50	21.10
				RB 36-18	26.30	20.80
				RB 75-0	27.70	20.75

Output power for LTE Band 25 (20.0MHz)

Freq(MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1860	26140.0	20.0	QPSK	RB 1-0	27.15	22.40
				RB 1-99	26.95	22.45
				RB 50-19	27.60	21.75
				RB 100-0	27.60	21.00
			16QAM	RB 1-0	27.00	21.50
				RB 1-99	26.80	21.40
				RB 50-19	27.20	20.70
				RB 100-0	27.60	20.70
1882.5	26365.0	20.0	QPSK	RB 1-0	27.18	22.40
				RB 1-99	27.01	22.40
				RB 50-19	28.00	21.60
				RB 100-0	27.90	21.40
			16QAM	RB 1-0	27.00	21.30
				RB 1-99	27.00	21.36
				RB 50-19	27.50	20.93
				RB 100-0	27.50	20.95
1905	26590.0	20.0	QPSK	RB 1-0	26.85	22.20
				RB 1-99	26.48	22.10
				RB 50-19	27.50	21.75
				RB 100-0	27.50	21.00
			16QAM	RB 1-0	27.00	21.20
				RB 1-99	26.40	21.10
				RB 50-19	27.18	20.75
				RB 100-0	27.60	20.80

7.7. A1428 UAT PORT LTE BAND 2

Output power for LTE Band 2 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1850.7	18607	QPSK	1.4	1	0	26.90	22.70
				1	5	26.70	22.70
				3	2	27.48	22.50
				6	0	27.60	21.60
		16-QAM		1	0	27.00	21.90
				1	5	27.10	21.70
				3	2	27.40	21.50
				6	0	27.50	20.60
1880.0	18900	QPSK		1	0	27.16	22.90
				1	5	27.10	22.80
				3	2	27.50	22.80
				6	0	27.70	21.80
		16-QAM		1	0	27.30	21.90
				1	5	27.40	21.86
				3	2	27.60	21.69
				6	0	27.60	20.70
1909.3	19193	QPSK		1	0	27.30	22.90
				1	5	27.40	22.80
				3	2	27.50	22.65
				6	0	27.80	21.70
		16-QAM		1	0	26.70	21.60
				1	5	26.50	21.60
				3	2	27.25	21.50
				6	0	27.50	20.80

Output power for LTE Band 2 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1851.5	18615	QPSK	3.0	1	0	27.50	23.00
				1	14	27.40	22.98
				8	4	27.50	22.38
				15	0	28.10	22.52
		16-QAM		1	0	27.20	22.50
				1	14	27.30	22.50
				8	4	27.40	21.10
				15	0	27.80	21.50
1880.0	18900	QPSK		1	0	27.80	22.98
				1	14	27.70	22.95
				8	4	27.60	22.08
				15	0	28.50	22.10
		16-QAM		1	0	27.60	22.58
				1	14	27.60	22.40
				8	4	27.50	21.25
				15	0	28.10	21.25
1908.5	19185	QPSK		1	0	27.90	22.96
				1	14	27.70	22.95
				8	4	27.50	22.15
				15	0	28.00	22.20
		16-QAM		1	0	27.60	22.40
				1	14	27.50	22.30
				8	4	27.36	21.25
				15	0	27.80	21.28

Output power for LTE Band 2 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1852.5	18625	QPSK	5.0	1	0	27.60	22.95
				1	24	27.50	23.00
				12	6	27.15	21.98
				25	0	27.80	22.00
		16-QAM		1	0	28.00	22.78
				1	24	27.86	22.80
				12	6	27.50	21.28
				25	0	28.10	21.00
1880.0	18900	QPSK		1	0	27.80	22.85
				1	24	27.75	22.80
				12	6	27.40	21.80
				25	0	27.90	21.80
		16-QAM		1	0	28.40	22.75
				1	24	28.40	22.50
				12	6	28.00	21.10
				25	0	28.50	20.85
1907.5	19175	QPSK		1	0	27.50	22.98
				1	24	27.40	22.70
				12	6	27.20	22.00
				25	0	27.95	21.92
		16-QAM		1	0	27.89	22.85
				1	24	27.85	22.67
				12	6	27.80	21.35
				25	0	27.90	20.98

Output power for LTE Band 2 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1855	18650	QPSK	10.0	1	0	27.36	22.96
				1	49	27.40	22.90
				25	12	27.50	22.15
				50	0	27.95	22.20
		16-QAM		1	0	27.76	22.30
				1	49	27.40	22.65
				25	12	27.20	21.05
				50	0	27.80	21.25
1880.0	18900	QPSK	1	0	28.00	22.93	
			1	49	27.75	22.75	
			25	12	27.80	21.80	
			50	0	28.10	21.82	
		16-QAM	1	0	27.90	22.30	
			1	49	27.84	23.34	
			25	12	27.50	20.98	
			50	0	27.87	20.97	
1905	19150	QPSK	1	0	27.20	23.00	
			1	49	27.60	22.80	
			25	12	27.80	22.08	
			50	0	27.80	22.02	
		16-QAM	1	0	27.70	22.75	
			1	49	27.70	22.00	
			25	12	27.70	21.40	
			50	0	27.80	21.30	

Output power for LTE Band 2 (15 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1857.5	18675	QPSK	15.0	1	0	27.80	22.80
				1	74	27.40	23.00
				36	18	27.30	21.99
				75	0	27.90	21.92
		16-QAM		1	0	27.60	22.36
				1	74	27.43	22.50
				36	18	27.20	21.16
				75	0	27.60	21.28
1880.0	18900	QPSK	1	0	27.96	23.00	
			1	74	27.65	22.50	
			36	18	27.95	21.92	
			75	0	28.00	21.75	
		16-QAM	1	0	27.90	22.61	
			1	74	27.63	21.67	
			36	18	28.00	21.00	
			75	0	28.05	20.88	
1902.5	19125	QPSK	1	0	27.45	22.99	
			1	74	27.50	22.50	
			36	18	27.40	22.00	
			75	0	27.93	22.0	
		16-QAM	1	0	27.38	22.35	
			1	74	27.60	22.10	
			36	18	27.50	21.3	
			75	0	27.78	21.15	

Output power for LTE Band 2 (20 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
1860	18700	QPSK	20	1	0	27.65	22.73
				1	99	27.75	22.99
				50	24	27.60	22.00
				100	0	27.90	22.07
		16-QAM		1	0	27.30	21.92
				1	99	27.80	22.50
				50	19	27.30	21.09
				100	0	28.10	21.13
1880.0	18900	QPSK	1	0	27.60	22.95	
			1	99	27.60	22.34	
			50	24	28.02	21.84	
			100	0	28.20	21.81	
		16-QAM	1	0	27.70	22.50	
			1	99	27.60	21.67	
			50	19	27.90	20.98	
			100	0	28.00	20.91	
1900	19100	QPSK	1	0	27.60	22.45	
			1	99	27.60	22.58	
			50	24	27.50	21.97	
			100	0	27.80	21.95	
		16-QAM	1	0	27.40	21.85	
			1	99	27.50	21.98	
			50	19	27.08	21.02	
			100	0	27.70	21.02	

7.8. A1428 UAT PORT LTE BAND 4

Output power for LTE Band 4 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1710.7	19957	QPSK	1.4	1	0	27.40	22.90
				1	5	27.10	22.80
				3	2	28.00	22.65
				6	0	28.00	21.80
		16-QAM		1	0	27.60	21.90
				1	5	27.20	21.80
				3	2	27.80	21.60
				6	0	27.80	20.70
1732.5	20175	QPSK	1	0	27.46	22.95	
			1	5	27.42	22.97	
			3	2	27.80	22.80	
			6	0	27.80	21.90	
		16-QAM	1	0	27.60	21.95	
			1	5	27.50	21.90	
			3	2	27.70	21.85	
			6	0	27.70	20.80	
1754.3	20393	QPSK	1	0	27.09	22.80	
			1	5	27.05	22.79	
			3	2	27.45	22.65	
			6	0	27.50	21.80	
		16-QAM	1	0	27.30	21.80	
			1	5	27.00	21.80	
			3	2	27.50	21.60	
			6	0	27.50	20.70	

Output power for LTE Band 4 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1711.5	19965	QPSK	3.0	1	0	27.30	22.85
				1	14	27.00	22.50
				8	4	27.90	21.75
				15	0	27.90	21.90
		16-QAM		1	0	27.50	21.80
				1	14	27.20	21.50
				8	4	27.20	20.85
				15	0	27.70	20.80
1732.5	20175	QPSK	3.0	1	0	27.40	22.90
				1	14	27.50	23.00
				8	4	27.80	22.20
				15	0	27.80	22.20
		16-QAM		1	0	27.50	21.80
				1	14	27.75	22.00
				8	4	27.45	21.20
				15	0	27.90	21.10
1753.5	20385	QPSK	3.0	1	0	27.20	22.80
				1	14	27.10	22.80
				8	4	27.72	21.92
				15	0	27.95	22.00
		16-QAM		1	0	27.40	21.75
				1	14	27.00	21.90
				8	4	27.25	21.00
				15	0	27.75	20.92

Output power for LTE Band 4 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak (dBm)	Average (dBm)
1712.5	19975	QPSK	5.0	1	0	27.70	22.90
				1	24	27.70	22.60
				12	6	27.30	21.80
				25	0	27.70	21.80
		16-QAM		1	0	28.00	22.70
				1	24	28.10	22.40
				12	6	27.60	21.00
				25	0	28.20	20.80
1732.5	20175	QPSK	5.0	1	0	27.60	22.75
				1	24	27.80	22.90
				12	6	27.50	21.80
				25	0	28.30	21.80
		16-QAM		1	0	28.00	22.40
				1	24	27.80	22.20
				12	6	28.00	22.50
				25	0	28.10	20.90
1752.5	20375	QPSK	5.0	1	0	27.80	22.90
				1	24	27.80	23.00
				12	6	27.30	21.80
				25	0	28.00	21.90
		16-QAM		1	0	28.30	22.60
				1	24	27.70	22.70
				12	6	27.50	21.20
				25	0	28.10	21.00

Output power for LTE Band 4 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1715	20000	QPSK	10.0	1	0	28.00	23.00
				1	49	27.80	22.50
				25	12	27.90	21.85
				50	0	28.05	21.85
		16-QAM		1	0	27.80	22.20
				1	49	27.72	22.00
				25	12	27.60	20.93
				50	0	27.90	20.94
1732.5	20175	QPSK	10.0	1	0	28.13	22.96
				1	49	28.40	23.00
				25	12	28.05	22.25
				50	0	28.60	22.40
		16-QAM		1	0	28.10	22.40
				1	49	28.00	23.00
				25	12	27.75	21.48
				50	0	28.20	21.45
1750	20350	QPSK	10.0	1	0	27.80	23.00
				1	49	27.60	22.90
				25	12	27.89	22.00
				50	0	27.90	22.00
		16-QAM		1	0	28.06	22.87
				1	49	27.65	22.36
				25	12	27.58	21.06
				50	0	28.10	21.00

Output power for LTE Band 4 (15 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1717.5	20025	QPSK	15.0	1	0	28.10	23.00
				1	74	27.80	22.90
				36	18	28.10	22.0
				75	0	28.30	22.0
		16-QAM		1	0	27.90	22.5
				1	74	28.00	22.3
				36	18	27.85	21.0
				75	0	28.00	21.0
1732.5	20175	QPSK	15.0	1	0	27.90	22.80
				1	74	28.20	23.00
				36	18	28.30	22.23
				75	0	28.80	22.20
		16-QAM		1	0	28.10	22.40
				1	74	28.20	22.80
				36	18	28.30	21.30
				75	0	28.30	21.27
1747.5	20325	QPSK	15.0	1	0	27.60	23.00
				1	74	27.40	22.70
				36	18	28.10	21.90
				75	0	28.20	22.00
		16-QAM		1	0	28.00	22.70
				1	74	28.00	22.50
				36	18	28.10	21.00
				75	0	28.20	21.0

Output power for LTE Band 4 (20 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average (dBm)
1720	20050	QPSK	20.0	1	0	27.64	22.9
				1	99	27.70	22.86
				50	24	28.10	21.86
				100	0	28.56	21.87
		16-QAM		1	0	27.00	21.07
				1	99	26.70	21.12
				50	19	27.80	20.8
				100	0	28.00	20.9
1732.5	20175	QPSK	20.0	1	0	27.55	22.95
				1	99	27.50	23.00
				50	24	28.20	22.20
				100	0	28.30	22.15
		16-QAM		1	0	27.00	21.50
				1	99	27.60	22.00
				50	19	27.75	21.08
				100	0	28.20	21.15
1745	20300	QPSK	20.0	1	0	27.50	23.00
				1	99	27.10	22.90
				50	24	28.10	22.30
				100	0	28.30	22.10
		16-QAM		1	0	27.40	21.98
				1	99	26.80	21.80
				50	19	27.80	21.30
				100	0	28.40	21.20

7.9. A1428 UAT PORT LTE BAND 17

Output power for LTE Band 17 (5 MHz)

Freq(MHz)	UL Ch #.	Band(MHz)	Mode	RB Size	RB Offset	Peak(dBm)	Average(dBm)
706.5	23755	5.0	QPSK	1	0	26.90	23.40
				1	24	26.10	23.35
				12	6	26.08	22.47
				25	0	27.30	22.38
			16QAM	1	0	26.80	22.50
				1	24	26.01	22.60
				12	6	26.80	21.50
				25	0	26.77	21.50
710	23790	5.0	QPSK	1	0	25.90	23.40
				1	24	26.89	23.40
				12	6	26.06	22.50
				25	0	27.20	22.40
			16QAM	1	0	25.90	22.50
				1	24	26.60	22.50
				12	6	25.70	21.60
				25	0	26.70	21.60
713.5	23825	5.0	QPSK	1	0	26.60	23.50
				1	24	26.80	23.40
				12	6	27.06	22.60
				25	0	27.90	22.50
			16QAM	1	0	26.30	22.50
				1	24	26.70	22.40
				12	6	26.80	21.60
				25	0	27.40	21.60

Output power for LTE Band 17 (10 MHz)

Freq(MHz)	UL Ch #.	Band	Mode	RB Size	RB Offset	Peak(dBm)	Average(dBm)
709	23780	10.0	QPSK	1	0	26.80	23.50
				1	49	26.90	23.50
				25	12	26.15	22.5
				50	0	27.50	22.4
			16QAM	1	0	26.30	22.40
				1	49	26.90	22.40
				25	12	25.90	21.50
				50	0	26.8	21.50
710	23790		QPSK	1	0	26.60	23.50
				1	49	26.90	23.50
				25	12	26.30	22.60
				50	0	27.40	22.60
			16QAM	1	0	26.00	22.40
				1	49	26.30	22.40
				25	12	26.00	21.60
				50	0	26.90	21.60
711	23800	QPSK	1	0	26.20	23.40	
			1	49	26.90	23.30	
			25	12	26.60	22.50	
			50	0	27.70	22.40	
		16QAM	1	0	25.90	22.49	
			1	49	26.50	22.45	
			25	12	26.00	21.60	
			50	0	27.00	21.60	

7.10. A1428 UAT PORT LTE BAND 5

Output power for LTE Band 5 (1.4MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average
824.7	20407	QPSK	1.4	1	0	27.70	23.50
				1	5	27.50	23.40
				3	2	28.20	23.40
				6	0	28.20	22.70
		16-QAM		1	0	27.70	22.70
				1	5	27.60	22.60
				3	2	28.30	22.50
				6	0	28.20	21.50
836.5	20525	QPSK		1	0	27.60	23.30
				1	5	27.50	23.30
				3	2	28.50	23.20
				6	0	28.60	22.40
		16-QAM		1	0	28.10	22.50
				1	5	28.00	22.50
				3	2	28.40	22.20
				6	0	28.35	21.23
848.3	20643	QPSK		1	0	27.60	23.40
				1	5	27.40	23.20
				3	2	28.11	23.20
				6	0	28.06	22.50
		16-QAM		1	0	27.80	22.50
				1	5	27.50	22.50
				3	2	28.10	22.40
				6	0	28.40	21.40

Output power for LTE Band 5 (3 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
825.5	20415	QPSK	3.0	1	0	27.74	23.50
				1	14	27.67	23.45
				8	4	28.15	22.78
				15	0	28.20	22.77
		16-QAM		1	0	27.60	22.75
				1	14	27.80	22.60
				8	4	27.50	21.80
				15	0	28.20	21.75
836.5	20525	QPSK		1	0	27.85	23.40
				1	14	27.86	23.30
				8	4	28.50	22.50
				15	0	28.30	22.10
		16-QAM		1	0	26.83	22.50
				1	14	27.85	22.45
				8	4	27.80	21.50
				15	0	28.70	21.60
847.5	20635	QPSK		1	0	27.40	23.50
				1	14	26.90	22.70
				8	4	27.95	22.50
				15	0	27.90	22.50
		16-QAM		1	0	27.80	22.50
				1	14	27.20	22.48
				8	4	27.50	21.70
				15	0	28.25	21.52

Output power for LTE Band 5 (5 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Peak Power (dBm)	Average
826.5	20425	QPSK	5.0	1	0	27.94	23.50
				1	24	27.99	23.40
				12	6	28.20	22.90
				25	0	28.50	22.75
		16-QAM		1	0	26.97	22.50
				1	24	26.90	22.42
				12	6	27.90	21.90
				25	0	28.20	21.80
836.5	20525	QPSK	5.0	1	0	28.40	23.50
				1	24	28.37	23.48
				12	6	29.20	22.55
				25	0	29.75	22.60
		16-QAM		1	0	29.06	22.90
				1	24	28.30	22.86
				12	6	28.9	21.70
				25	0	28.40	21.58
846.5	20625	QPSK	5.0	1	0	27.40	23.50
				1	24	27.20	22.75
				12	6	27.69	22.70
				25	0	28.20	22.70
		16-QAM		1	0	26.70	22.50
				1	24	26.50	21.75
				12	6	27.75	21.75
				25	0	28.2	21.75

Output power for LTE Band 5 (10 MHz)

Freq. (MHz)	UL Channel	Modulation	BW (MHz)	RB Size	RB Offset	Max Peak Power (dBm)	Average
829	20405	QPSK	10.0	1	0	27.70	23.50
				1	49	27.90	23.30
				25	12	28.60	22.95
				50	0	28.70	23.00
		16-QAM		1	0	28.00	22.90
				1	49	28.00	22.50
				25	12	28.05	22.05
				50	0	28.40	22.00
836.5	20525	QPSK	10.0	1	0	27.96	23.50
				1	49	27.80	23.50
				25	12	28.70	22.70
				50	0	28.80	22.70
		16-QAM		1	0	28.40	22.65
				1	49	27.80	22.60
				25	12	28.30	21.80
				50	0	28.60	21.75
844	20600	QPSK	10.0	1	0	27.78	23.50
				1	49	27.50	23.23
				25	12	28.10	23.15
				50	0	28.40	23.10
		16-QAM		1	0	27.90	22.70
				1	49	27.60	22.42
				25	12	27.90	22.20
				50	0	28.30	22.15

7.11. A1429 UAT PORT LTE BAND 13

Output power for LTE Band 13 (5 MHz)

LTE 5MHz BAND 13					
Frequency	RB CONFIGURATION	START RB OFFSET	MODE	Peak (dBm)	Average (dBm)
779.5	1	0	QPSK	27.60	23.50
	1	24		28.05	23.47
	12	6		27.70	22.60
	25	0		28.00	22.65
	1	0	16QAM	27.80	23.30
	1	24		28.45	23.30
	12	6		28.20	22.00
	25	0		28.20	21.70
782	1	0	QPSK	27.85	23.50
	1	24		27.80	23.45
	12	6		27.80	22.70
	25	0		28.60	22.80
	1	0	16QAM	27.78	23.30
	1	24		27.74	23.30
	12	6		28.00	22.00
	25	0		28.40	21.87
784.5	1	0	QPSK	27.90	23.50
	1	24		27.30	23.40
	12	6		27.30	22.60
	25	0		28.00	22.70
	1	0	16QAM	27.60	23.50
	1	24		26.80	23.00
	12	6		26.75	22.00
	25	0		28.00	21.83

10MHz Bandwidth

LTE 10 MHz BAND 13					
Frequency Range (MHz)	RB CONFIGURATION	START RB OFFSET	MODE	Peak (dBm)	Average (dBm)
LTE Band 13	1	0	QPSK	27.70	23.40
	1	49		27.70	23.40
	25	12		28.10	22.80
	50	0		28.02	22.74
	1	0	16QAM	27.70	23.10
	1	49		28.00	23.00
	25	12		27.85	21.70
	50	0		28.30	21.96

7.12. A1429 UAT PORT LTE BAND 25

Output power for LTE Band 25(1.4 MHz)

Frequency	UL CH #	Bandwidth	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1850.7	26047.0	1.4	QPSK	RB 1-0	27.05	23.0
				RB 1-5	26.95	23.0
				RB 3-2	27.25	22.9
				RB 6-0	28.18	22.6
			16QAM	RB 1-0	26.92	22.3
				RB 1-5	26.85	22.3
				RB 3-2	27.50	22.3
				RB 6-0	27.50	21.6
1882.5	26365.0	1.4	QPSK	RB 1-0	26.88	23.00
				RB 1-5	26.87	22.99
				RB 3-2	27.45	22.90
				RB 6-0	27.90	22.80
			16QAM	RB 1-0	27.50	22.75
				RB 1-5	27.40	22.72
				RB 3-2	27.60	22.56
				RB 6-0	27.90	21.70
1914.3	26683.0	1.4	QPSK	RB 1-0	26.15	23.0
				RB 1-5	26.10	23.0
				RB 3-2	26.30	22.9
				RB 6-0	27.18	22.8
			16QAM	RB 1-0	26.50	22.7
				RB 1-5	26.45	22.8
				RB 3-2	26.40	22.6
				RB 6-0	27.08	21.6

Output power for LTE Band 25 (3.0 MHz)

Freq (MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)	
1851.5	26055.0	3.0	QPSK	RB 1-0	27.60	23.0	
				RB 1-14	27.50	23.0	
				RB 8-4	27.50	22.2	
				RB 15-0	27.90	22.3	
			16QAM	RB 1-0	27.60	22.4	
				RB 1-14	27.50	22.7	
				RB 8-4	27.40	21.3	
RB 15-0	27.60			21.5			
1882.5	26365.0		3.0	QPSK	RB 1-0	27.70	23.0
					RB 1-14	27.70	23.0
					RB 8-4	27.50	22.0
					RB 15-0	27.80	22.1
				16QAM	RB 1-0	27.70	22.4
					RB 1-14	27.75	22.6
		RB 8-4			27.50	21.2	
RB 15-0	27.80	21.3					
1913.5	26675.0	3.0		QPSK	RB 1-0	27.30	23.0
					RB 1-14	27.30	22.9
					RB 8-4	27.20	22.2
					RB 15-0	27.60	22.2
				16QAM	RB 1-0	27.50	22.4
					RB 1-14	27.40	22.8
			RB 8-4		27.20	21.7	
RB 15-0	27.50		21.3				

Output power for LTE Band 25 (5.0 MHz)

Freq (MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1852.5	26065.0	5.0	QPSK	RB 1-0	27.40	23.0
				RB 1-24	27.30	22.9
				RB 12-6	27.30	22.4
				RB 25-0	27.80	22.4
			16QAM	RB 1-0	27.70	23.0
				RB 1-24	27.70	23.0
				RB 12-6	27.50	21.8
				RB 25-0	27.80	21.5
1882.5	26365.0	5.0	QPSK	RB 1-0	27.80	23.0
				RB 1-24	27.54	23.0
				RB 12-6	27.37	22.2
				RB 25-0	28.07	22.4
			16QAM	RB 1-0	28.00	22.9
				RB 1-24	27.86	22.7
				RB 12-6	27.96	21.5
				RB 25-0	28.05	21.5
1912.5	26665.0	5.0	QPSK	RB 1-0	27.60	23.0
				RB 1-24	27.20	23.0
				RB 12-6	27.10	22.1
				RB 25-0	28.00	22.4
			16QAM	RB 1-0	28.10	22.8
				RB 1-24	27.70	22.8
				RB 12-6	27.50	21.4
				RB 25-0	27.90	21.3

Output power for LTE Band 25 (10.0 MHz)

Band	UL CH #	Band	Mode	UL RB Allocation	Peak	Average
1855	26090.0	10.0	QPSK	RB 1-0	26.80	23.00
				RB 1-49	26.50	23.00
				RB 25-12	27.10	22.98
				RB 50-0	27.90	23.00
16QAM	26090.0		16QAM	RB 1-0	27.00	22.60
				RB 1-49	26.60	22.20
				RB 25-12	27.00	22.00
				RB 50-0	27.70	22.00
1882.5	26365.0		QPSK	RB 1-0	27.20	23.00
				RB 1-49	26.80	22.87
				RB 25-12	27.80	23.00
				RB 50-0	28.40	22.90
16QAM	26365.0	16QAM	RB 1-0	27.80	22.80	
			RB 1-49	27.30	22.63	
			RB 25-12	27.60	21.97	
			RB 50-0	28.10	21.96	
1910	26640.0	QPSK	RB 1-0	26.70	23.00	
			RB 1-49	26.40	22.80	
			RB 25-12	27.00	22.70	
			RB 50-0	27.70	22.70	
16QAM	26640.0	16QAM	RB 1-0	27.00	22.50	
			RB 1-49	26.40	22.50	
			RB 25-12	26.85	21.80	
			RB 50-0	27.50	21.70	

Output power for LTE Band 25 (15.0 MHz)

UL CH #	Band	Mode	UL RB Allocation	Peak	Average	
26115.0	15.0	QPSK	RB 1-0	27.60	23.0	
			RB 1-74	27.50	22.8	
			RB 36-18	27.70	22.7	
			RB 75-0	27.70	22.5	
		16QAM	RB 1-0	27.60	22.7	
			RB 1-74	27.90	22.7	
			RB 36-18	27.80	21.7	
			RB 75-0	28.10	21.7	
26365.0		15.0	QPSK	RB 1-0	28.20	23.0
				RB 1-74	27.30	23.0
				RB 36-18	27.93	22.2
				RB 75-0	28.30	22.3
			16QAM	RB 1-0	28.10	22.8
				RB 1-74	27.30	22.3
				RB 36-18	27.80	21.5
				RB 75-0	28.20	21.4
26615.0	15.0	QPSK	RB 1-0	27.80	23.0	
			RB 1-74	27.20	22.8	
			RB 36-18	27.80	22.3	
			RB 75-0	28.40	22.3	
		16QAM	RB 1-0	27.70	22.5	
			RB 1-74	27.00	22.4	
			RB 36-18	27.70	21.5	
			RB 75-0	28.30	21.4	

Output power for LTE Band 25 (20.0 MHz)

Freq(MHz)	UL CH #	Band	Mode	UL RB Allocation	Peak(dBm)	Average(dBm)
1860	26140.0	20.0	QPSK	RB 1-0	26.78	22.96
				RB 1-99	26.65	23.00
				RB 50-24	26.70	22.80
				RB 100-0	27.68	22.70
			16QAM	RB 1-0	26.78	22.30
				RB 1-99	26.95	22.63
				RB 50-24	26.69	21.90
				RB 100-0	27.61	21.93
1882.5	26365.0	20.0	QPSK	RB 1-0	26.95	22.96
				RB 1-99	26.28	22.90
				RB 50-19	27.65	22.80
				RB 100-0	28.00	22.75
			16QAM	RB 1-0	27.20	22.75
				RB 1-99	26.60	22.30
				RB 50-24	27.50	21.70
				RB 100-0	27.90	21.75
1905	26590.0	20.0	QPSK	RB 1-0	26.30	22.97
				RB 1-99	26.13	22.65
				RB 50-19	27.00	22.84
				RB 100-0	27.81	22.85
			16QAM	RB 1-0	26.60	22.73
				RB 1-99	26.38	22.38
				RB 50-24	27.02	21.90
				RB 100-0	27.75	21.88

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 17
- LTE Band 5
- LTE band 13
- LTE band 25

RESULTS

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 2	1.4 MHz BAND QPSK	3/2	1850.7	556.3776	875.121
		6/0		1225.1	1428.0
	1.4 MHz BAND 16QAM	3/2		567.5121	748.698
		6/0		1207.3	1446.0
	1.4 MHz BAND QPSK	3/2	1880.0	554.8160	827.127
		6/0		1217.4	1407.0
	1.4 MHz BAND 16QAM	3/2		557.5232	826.779
		6/0		1210.4	1395.0
	1.4 MHz BAND QPSK	3/2	1909.3	563.2021	719.293
		6/0		1214.70	1407.0
	1.4 MHz BAND 16QAM	3/2		557.1806	858.715
		6/0		1210.4	1408.0
	3.0 MHz BAND QPSK	8/4	1851.5	1461.4	1754
		15/0		2699.6	2891
	3.0 MHz BAND 16QAM	8/4		1451.30	1754
		15/0		2732.6	3009
	3.0 MHz BAND QPSK	8/4	1880.0	1450.4	1755.0
		15/0		2736.6	2896.0
	3.0 MHz BAND 16QAM	8/4		1456.8	2003
		15/0		2724.7	2954
	3.0 MHz BAND QPSK	8/4	1908.5	1467.4	1878
		15/0		2694.3	2934
	3.0 MHz BAND 16QAM	8/4		1444.0	1844
		15/0		2697.1	2990
	5.0 MHz BAND QPSK	12/6	1852.5	2155.8	2617
		25/0		4485.0	4740
	5.0 MHz BAND 16QAM	12/6		2155.70	2759
		25/0		4494.9	5018
5.0 MHz BAND QPSK	12/6	1880.0	2161.70	2397	
	25/0		4481.20	4630	
5.0 MHz BAND 16QAM	12/6		2176.3	2504	
	25/0		4458.6	4658	
5.0 MHz BAND QPSK	12/6	1907.5	2160.9	2274	
	25/0		4474.6	4772	
5.0 MHz BAND 16QAM	12/6		2117.4	2521	
	25/0		4482.3	4780	

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 2	10 MHz BAND QPSK	25/12	1855	4443.0	5265
		50/0		8918.1	9412
	10 MHz BAND 16QAM	25/12		4468.10	5025
		50/0		8926.4	9434
	10 MHz BAND QPSK	25/12	1880.0	4431.8	5053
		50/0		8927.6	9449
	10 MHz BAND 16QAM	25/12		4425.4	5425
		50/0		8949	9412
	10 MHz BAND QPSK	25/12	1905	4490	5270
		50/0		8955.4	9650
	10 MHz BAND 16QAM	25/12		4488.4	5022
		50/0		8979.3	9378
	15 MHz BAND QPSK	36/18	1857.5	6473.1	6855
		75/0		13331.8	14045
	15 MHz BAND 16QAM	36/18		6480	6825
		75/0		13347.4	13826
	15 MHz BAND QPSK	36/18	1880.0	6445.50	6871
		75/0		13450.0	13900.0
	15 MHz BAND 16QAM	36/18		6441.2	7055
		75/0		13293.80	13910.0
	15 MHz BAND QPSK	36/18	1902.5	6532.8	6811.0
		75/0		13364.90	14039.0
	15 MHz BAND 16QAM	36/18		6518.9	6774
		75/0		13314.7	13927.0
	20 MHz BAND QPSK	50/19	1860	9065.4	9402
		100/0		17925.5	18688.00
	20 MHz BAND 16QAM	50/19		8900.4	9548
		100/0		17677.80	18674.0
20 MHz BAND QPSK	50/19	1880.0	8926.2	9431	
	100/0		17904.0	18687.0	
20 MHz BAND 16QAM	50/19		8902.3	9350	
	100/0		17848.30	18694.0	
20 MHz BAND QPSK	50/19	1900	8926.4	9548	
	100/0		17928.0	18938.00	
20 MHz BAND 16QAM	50/19		8906.10	9295.0	
	100/0		17714.90	18798.0	

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 4	1.4 MHz BAND QPSK	3/2	1710.7	565.3861	755.048
		6/0		1079.50	1197.0
	1.4 MHz BAND 16QAM	3/2		563.8841	830.8
		6/0		1084.70	1230.00
	1.4 MHz BAND QPSK	3/2	1732.5	556.4507	700.307
		6/0		1063.90	1196.0
	1.4 MHz BAND 16QAM	3/2		559.4506	764.217
		6/0		1081.70	1194.0
	1.4 MHz BAND QPSK	3/2	1754.3	570.2994	766.237
		6/0		1103.50	1205.0
	1.4 MHz BAND 16QAM	3/2		569.2222	826.544
		6/0		1080.50	1202.0
	3.0 MHz BAND QPSK	8/4	1711.5	1444.80	1740.0
		15/0		2682.40	2883.0
	3.0 MHz BAND 16QAM	8/4		1435.30	1913.0
		15/0		2663.80	2901.0
	3.0 MHz BAND QPSK	8/4	1732.5	1434.90	1877.0
		15/0		2687.30	2885.0
	3.0 MHz BAND 16QAM	8/4		1426.40	1822.0
		15/0		2655.70	2885.0
	3.0 MHz BAND QPSK	8/4	1753.5	1459.8	1668.0
		15/0		2684.10	2830.0
	3.0 MHz BAND 16QAM	8/4		1426.90	1915.0
		15/0		2666.70	2796.0
	5.0 MHz BAND QPSK	12/6	1712.5	2163.80	2507.0
		25/0		4472.20	4778.0
	5.0 MHz BAND 16QAM	12/6		2153.60	2398.0
		25/0		4464.20	4686.0
	5.0 MHz BAND QPSK	12/6	1732.5	2150.80	2247.0
		25/0		4412.40	4866.0
5.0 MHz BAND 16QAM	12/6	2157.10		2354.0	
	25/0	4404.10		4963.0	
5.0 MHz BAND QPSK	12/6	1752.5	2131.70	2505.0	
	25/0		4432.90	4687.0	
5.0 MHz BAND 16QAM	12/6		2137.90	2233.0	
	25/0		4467.00	5014.0	

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 4	10 MHz BAND QPSK	25/12	1715	4422.8	4682.0
		50/0		8809.1	9265.0
	10 MHz BAND 16QAM	25/12		4457.1	4677.0
		50/0		8908.9	9290.0
	10 MHz BAND QPSK	25/12	1732.5	4443.60	4670.0
		50/0		8911.8	9376.0
	10 MHz BAND 16QAM	25/12		4454.0	4686.0
		50/0		9048.9	9735.0
	10 MHz BAND QPSK	25/12	1750.0	4473.1	4675.0
		50/0		8963.3	9253.0
	10 MHz BAND 16QAM	25/12		4448.3	4690.0
		50/0		8924.6	9339.0
	15 MHz BAND QPSK	36/18	1717.5	6468.9	6766.0
		75/0		13431.0	14327.0
	15 MHz BAND 16QAM	36/18		6386.3	6790.0
		75/0		13394.0	14470.0
	15 MHz BAND QPSK	36/18	1732.5	6498.4	8527.0
		75/0		13633.6	14380.0
	15 MHz BAND 16QAM	36/18		6481.1	6894.0
		75/0		13664.4	14454.0
	15 MHz BAND QPSK	36/18	1747.5	6462.7	6904.0
		75/0		13401.8	14237
	15 MHz BAND 16QAM	36/18		6402.3	6822
		75/0		13236.6	14244.0
20 MHz BAND QPSK	50/19	1720	8998.3	9403.0	
	100/0		17907.1	18815.0	
20 MHz BAND 16QAM	50/19		8778.7	9365.0	
	100/0		17983.6	19607.0	
20 MHz BAND QPSK	50/19	1732.5	8886.1	9326.0	
	100/0		18105.9	18706.0	
20 MHz BAND 16QAM	50/19		8895.6	9320.0	
	100/0		17906.1	18952.0	
20 MHz BAND QPSK	50/19	1745	8889.6	9300.0	
	100/0		17788.6	18888.00	
20 MHz BAND 16QAM	50/19		8960.8	9603.0	
	100/0		17863.4	18619.0	

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 17	5 MHz BAND QPSK	12/6	706.5	2161.6	2338.0
		25/0		4400.1	4666.0
	12/6	2155.2		2272.0	
	25/0	4462.8		4667.0	
	5 MHz BAND 16QAM	12/6	710	2142.7	2362.0
		25/0		4412.1	4675.0
	12/6	2152.2		2330.0	
	25/0	4433.9		4680.0	
	5 MHz BAND QPSK	12/6	713.5	2164.9	2483.0
		25/0		4480.1	4730.0
	5 MHz BAND 16QAM	12/6		2155.6	3153.0
		25/0		4469.8	4623.0
	10 MHz BAND QPSK	25/12	709	4454.2	5092.0
		50/0		8951.2	9276.0
	10 MHz BAND 16QAM	25/12		4522.0	5225.0
		50/0		8862.5	9311.0
	10 MHz BAND QPSK	25/12	710	4431.6	4667.0
		50/0		8823.2	9195.0
	10 MHz BAND 16QAM	25/12		4480.2	4679.0
		50/0		8928.0	9348.0
10 MHz BAND QPSK	25/12	711	4390.1	4670.0	
	50/0		8760.6	9334.0	
10 MHz BAND 16QAM	25/12		4434.4	4674.0	
	50/0		8891.6	9450.0	

Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 5	1.4 MHz BAND QPSK	3/2	824.7	558.2781	754.340
		6/0		1077.2	1221.0
	1.4 MHz BAND 16QAM	3/2	824.7	542.1476	837.930
		6/0		1061.0	1214.0
	1.4 MHz BAND QPSK	3/2	836.5	552.3226	825.544
		6/0		1084.4	1208.0
	1.4 MHz BAND 16QAM	3/2	836.5	558.0822	827.497
		6/0		1076.8	1166.0
	1.4 MHz BAND QPSK	3/2	848.3	555.4264	812.864
		6/0		1065.5	1278.0
	1.4 MHz BAND 16QAM	3/2	848.3	550.2912	754.725
		6/0		1080.5	1286.0
	3.0 MHz BAND QPSK	8/4	825.5	1455.3	1779.0
		15/0		2667.5	2880.0
	3.0 MHz BAND 16QAM	8/4	825.5	1437.4	1757.0
		15/0		2669.4	2818.0
	3.0 MHz BAND QPSK	8/4	836.5	1449.8	1556.0
		15/0		2668.10	2806.0
	3.0 MHz BAND 16QAM	8/4	836.5	1449.20	1669.0
		15/0		2690.8	2896.0
	3.0 MHz BAND QPSK	8/4	847.5	1439.9	1879.0
		15/0		2675.90	2817.0
	3.0 MHz BAND 16QAM	8/4	847.5	1446.90	1760.0
		15/0		2664.80	2831.0
	5.0 MHz BAND QPSK	12/6	821.5	2146.7	2738.0
		25/0		4482.6	4770.0
	5.0 MHz BAND 16QAM	12/6	821.5	2141.1	2345.0
		25/0		4461.5	4765.0
	5.0 MHz BAND QPSK	12/6	836.5	2133.20	2596.0
		25/0		4507.4	4820.0
	5.0 MHz BAND 16QAM	12/6	836.5	2149.6	2628.0
		25/0		4445.6	4654.0
	5.0 MHz BAND QPSK	12/6	846.5	2139.5	2735.0
		25/0		4438.8	4647.0
	5.0 MHz BAND 16QAM	12/6	846.5	2160.2	2506.0
		25/0		4436.5	4674.0
10 MHz BAND QPSK	25/12	829	4467.6	5019.0	
	50/0		8872.2	9315.0	
10 MHz BAND 16QAM	25/12	829	4426.7	5028.0	
	50/0		8860.3	9386.0	
10 MHz BAND QPSK	25/12	836.5	4479.9	5520.0	
	50/0		8797.0	9289.0	
10 MHz BAND 16QAM	25/12	836.5	4485.10	4720.0	
	50/0		8870.5	9349.0	
10 MHz BAND QPSK	25/12	844	4500.3	5002.0	
	50/0		8792.90	9296.0	
10 MHz BAND 16QAM	25/12	844	4414.8	5042.0	
	50/0		8843.6	9291.0	

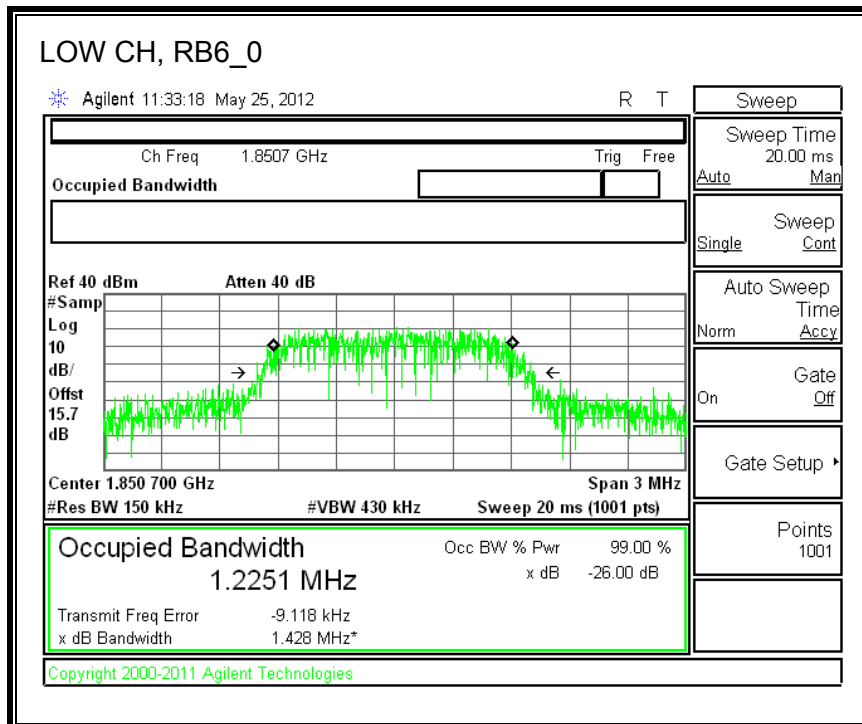
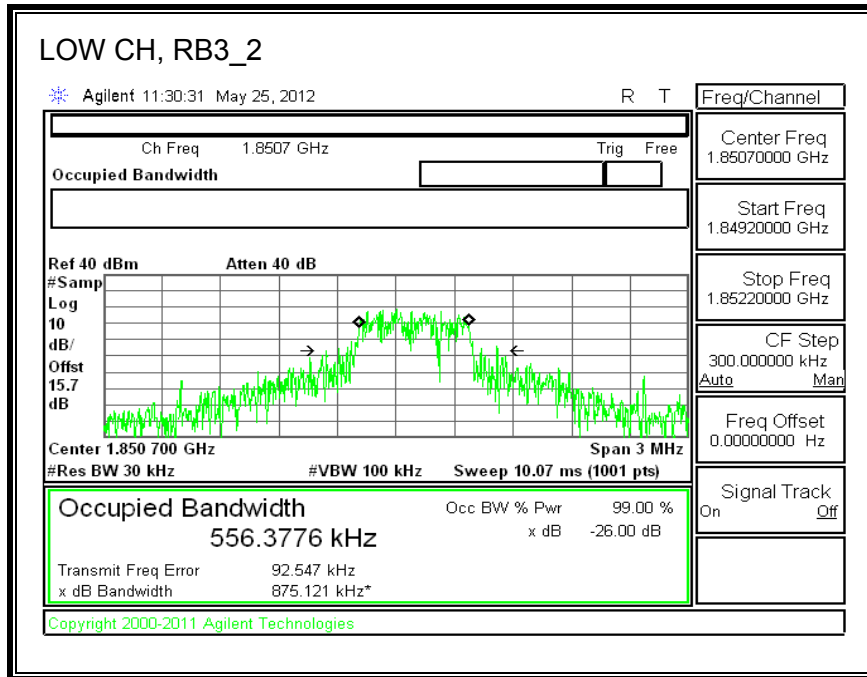
Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 13	5 MHz BAND QPSK	12/6	779.5	2155.2	2681.0
		25/0		4436.7	4614.0
	5 MHz BAND 16QAM	12/6		2123.1	2336.0
		25/0		4403.4	4698.0
	5 MHz BAND QPSK	12/6	782.0	2171.2	2297.0
		25/0		4510.5	4660.0
	5 MHz BAND 16QAM	12/6		2132.9	2649.0
		25/0		4428.5	4775.0
	5 MHz BAND QPSK	12/6	784.5	2130.8	2396.0
		25/0		4501.9	4646.0
	5 MHz BAND 16QAM	12/6		2146.8	2415.0
		25/0		4493.0	4643.0
	10 MHz BAND QPSK	25/12	782.0	4504.7	5764.0
		50/0		8820.60	9333.0
	10 MHz BAND 16QAM	25/12		4460.4	5017.0
		50/0		8718.5	9304.0

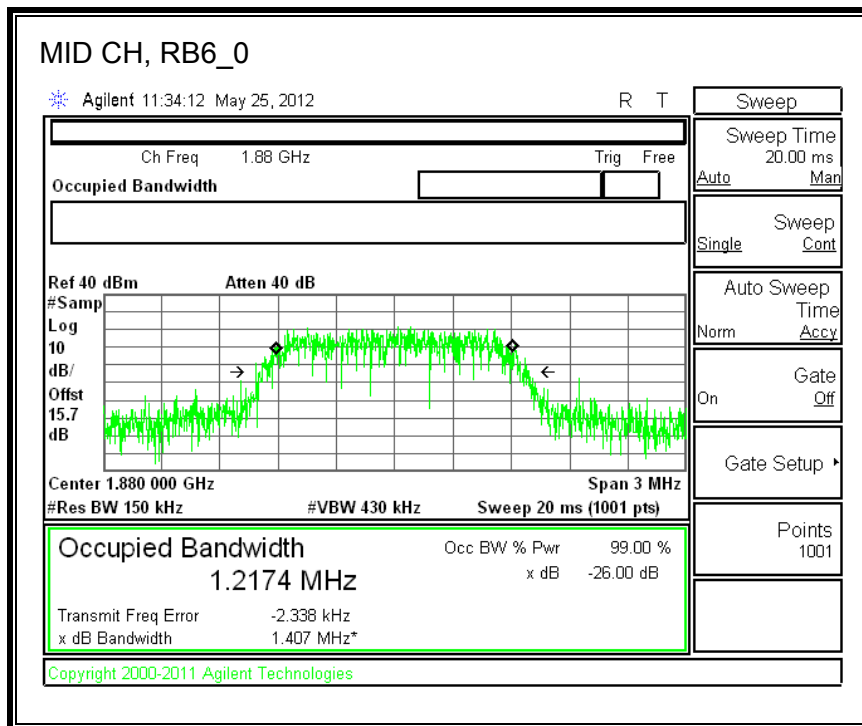
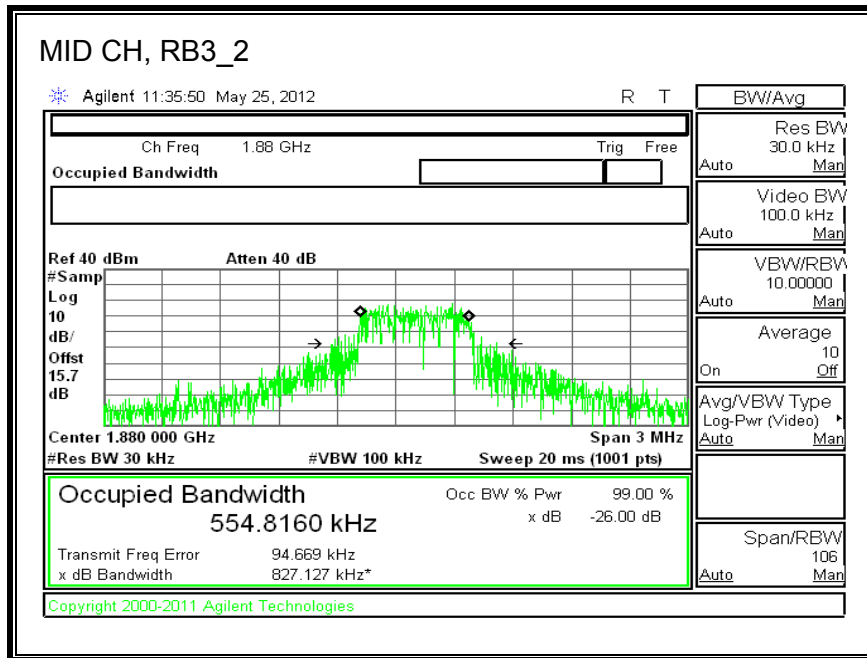
Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 25	1.4 MHz BAND QPSK	3/2	1850.7	565.3889	841.485
		6/0		1203.2	1426.0
	1.4 MHz BAND 16QAM	3/2		54.7162	861.088
		6/0		1221.8	1375.0
	1.4 MHz BAND QPSK	3/2	1882.5	557.8713	762.887
		6/0		1228.2	1414.0
	1.4 MHz BAND 16QAM	3/2		576.7743	764.441
		6/0		1181.4	1407.0
	1.4 MHz BAND QPSK	3/2	1914.3	561.3029	809.242
		6/0		1198.7	1391.0
	1.4 MHz BAND 16QAM	3/2		565.5348	754.750
		6/0		1198.7	1344.0
	3.0 MHz BAND QPSK	8/4	1851.5	1433.0	1741.0
		15/0		2708.2	2916.0
	3.0 MHz BAND 16QAM	8/4		1428.5	1636.0
		15/0		2722.4	3129.0
	3.0 MHz BAND QPSK	8/4	1882.5	1455.5	1639.0
		15/0		2721.3	2930.0
	3.0 MHz BAND 16QAM	8/4		1441.7	1656.0
		15/0		2724.0	3127.0
	3.0 MHz BAND QPSK	8/4	1913.5	1455.4	1656.0
		15/0		2724.0	2938.0
	3.0 MHz BAND 16QAM	8/4		1434.8	2005.0
		15/0		2740.5	2888.0
	5.0 MHz BAND QPSK	12/6	1852.5	2163.9	2770.0
		25/0		4492.5	4789.0
	5.0 MHz BAND 16QAM	12/6		2120.8	2394.0
		25/0		4505.1	4771.0
5.0 MHz BAND QPSK	12/6	1882.5	2151.8	2411.0	
	25/0		4465.4	4786.0	
5.0 MHz BAND 16QAM	12/6		2151.2	2633.0	
	25/0		4469.7	4792.0	
5.0 MHz BAND QPSK	12/6	1912.5	2152.4	2526.0	
	25/0		4495.7	4677.0	
5.0 MHz BAND 16QAM	12/6		2156.4	2647.0	
	25/0		4484.5	4660.0	

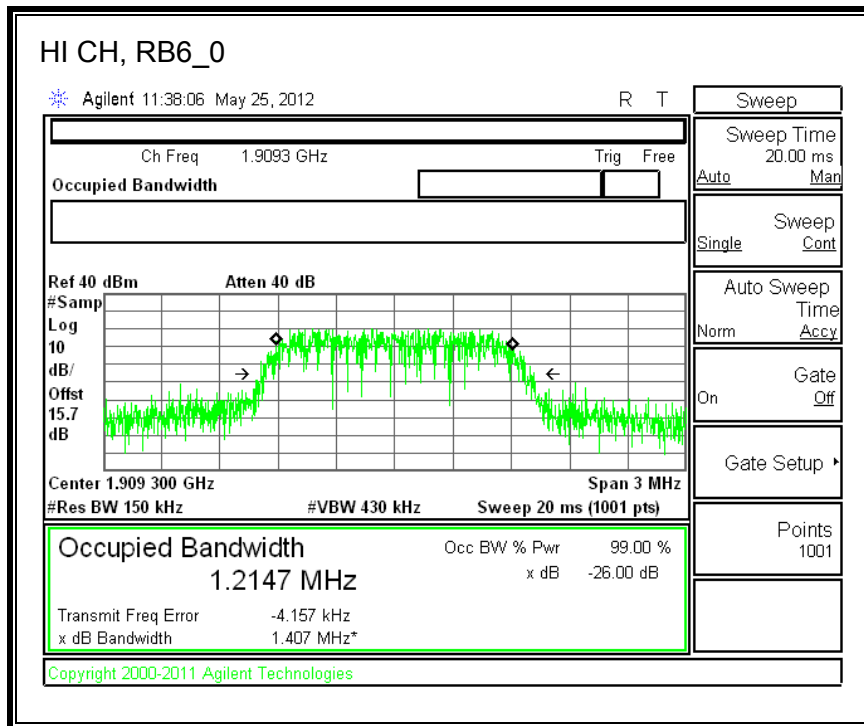
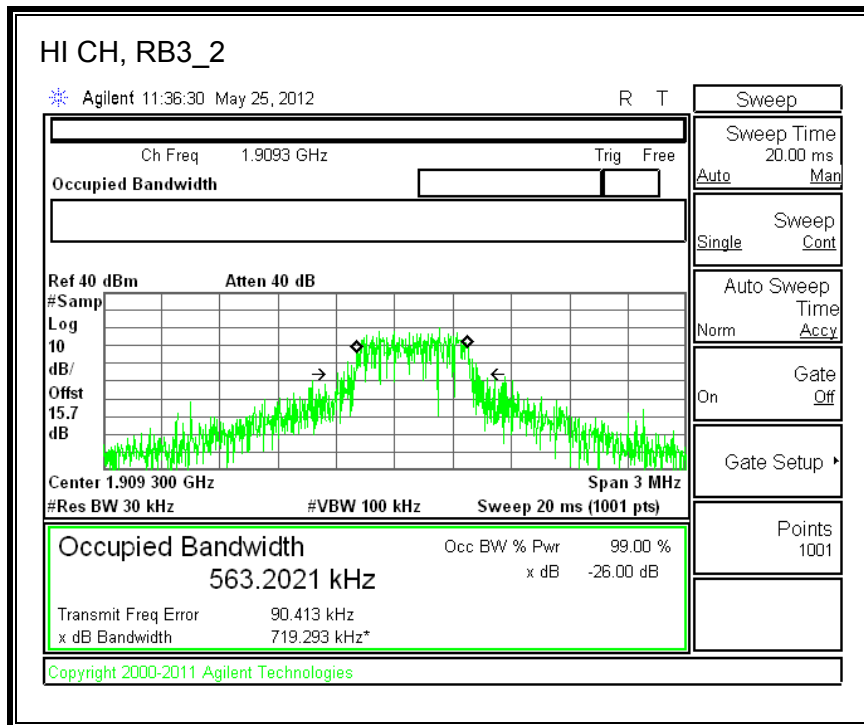
Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE BAND 25	10 MHz BAND QPSK	25/12	1855	4436.2	4805.0
		50/0		8909.5	9299.0
	10 MHz BAND 16QAM	25/12		4479.3	4775.0
		50/0		8820.9	9307.0
	10 MHz BAND QPSK	25/12	1882.5	4436.2	4805.0
		50/0		8892.3	9393.0
	10 MHz BAND 16QAM	25/12		4428.2	4990.0
		50/0		8971.3	9554.0
	10 MHz BAND QPSK	25/12	1910	4480.7	5167.0
		50/0		8875.8	9352.0
	10 MHz BAND 16QAM	25/12		4499.5	5292.0
		50/0		8928.2	9346.0
	15 MHz BAND QPSK	36/18	1857.5	6484.0	6968.0
		75/0		13343.4	14062.0
	15 MHz BAND 16QAM	36/18		6447.3	6823.0
		75/0		13328.4	14027.0
	15 MHz BAND QPSK	36/18	1882.5	6463.5	6873.0
		75/0		13333.7	13875.0
	15 MHz BAND 16QAM	36/18		6485.3	7519.0
		75/0		13335.3	13818.0
	15 MHz BAND QPSK	36/18	1907.5	6459.0	6841.0
		75/0		13308.6	13832.0
	15 MHz BAND 16QAM	36/18		6488.6	6898.0
		75/0		13263.2	13881.0
20 MHz BAND QPSK	50/19	1860	8798.5	10529.0	
	100/0		17837.5	19101.0	
20 MHz BAND 16QAM	50/19		8880.5	9550.0	
	100/0		17833.5	18793.0	
20 MHz BAND QPSK	50/19	1882.5	8884.4	10007.0	
	100/0		17961.3	18783.0	
20 MHz BAND 16QAM	50/19		8966.10	10031.0	
	100/0		17692.4	18867.0	
20 MHz BAND QPSK	50/19	1905	8967.4	9319.0	
	100/0		18017.4	18900.0	
20 MHz BAND 16QAM	50/19		8893.0	9286.0	
	100/0		17692.4	18867.0	

Band 2 (1.4 MHz BAND WIDTH)

LTE QPSK

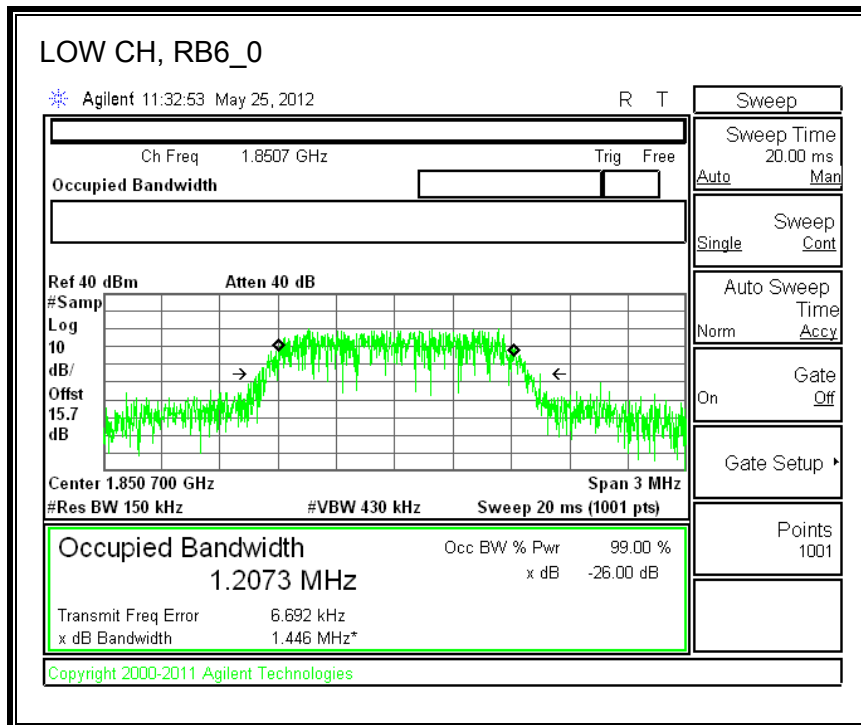
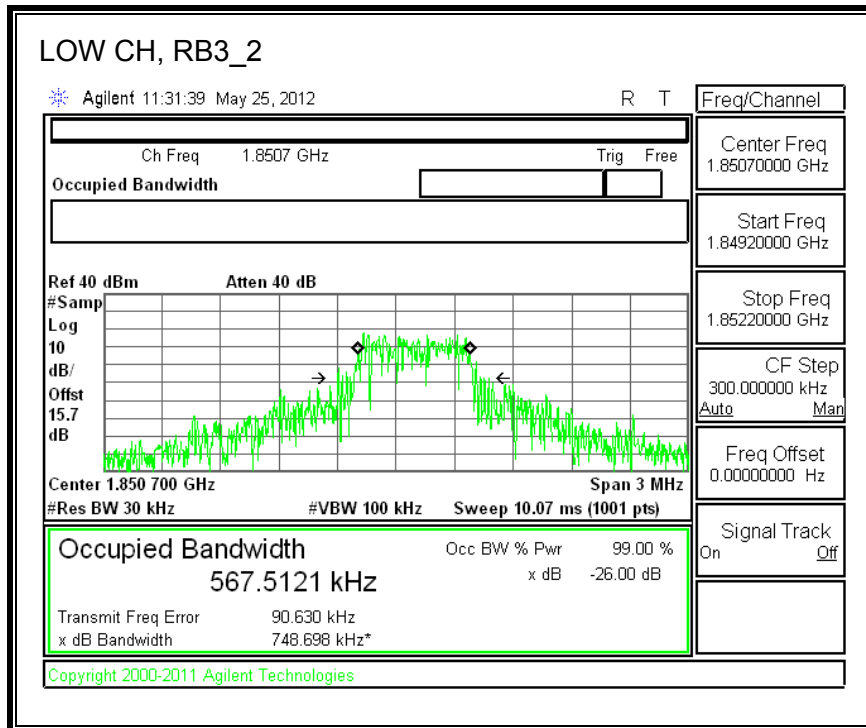


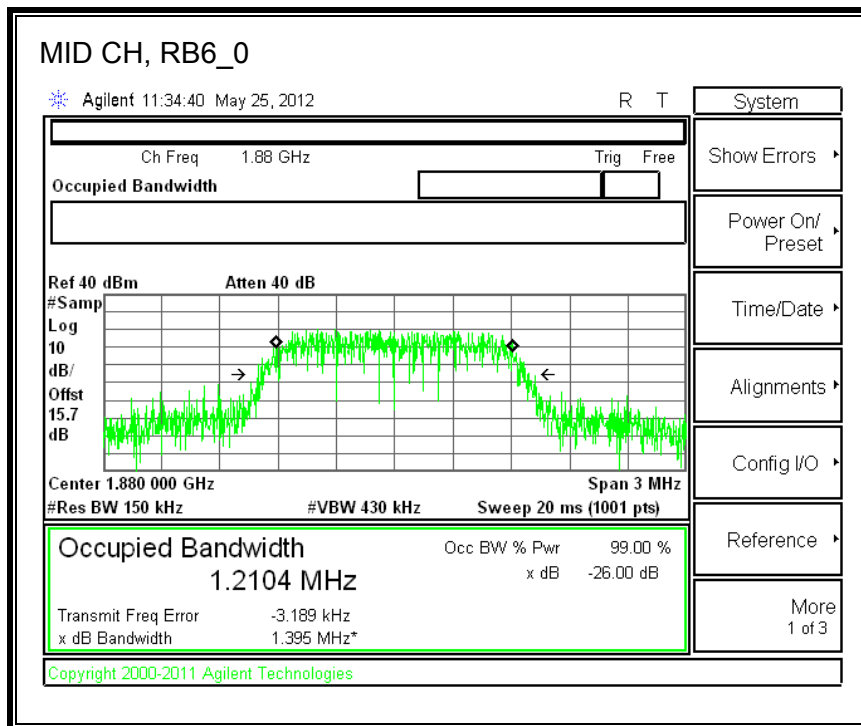
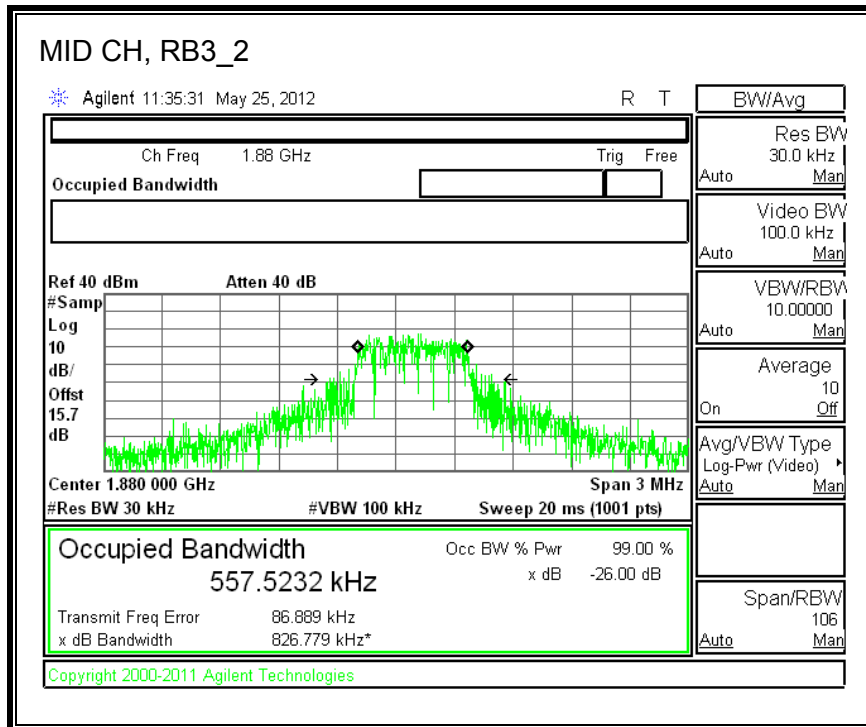


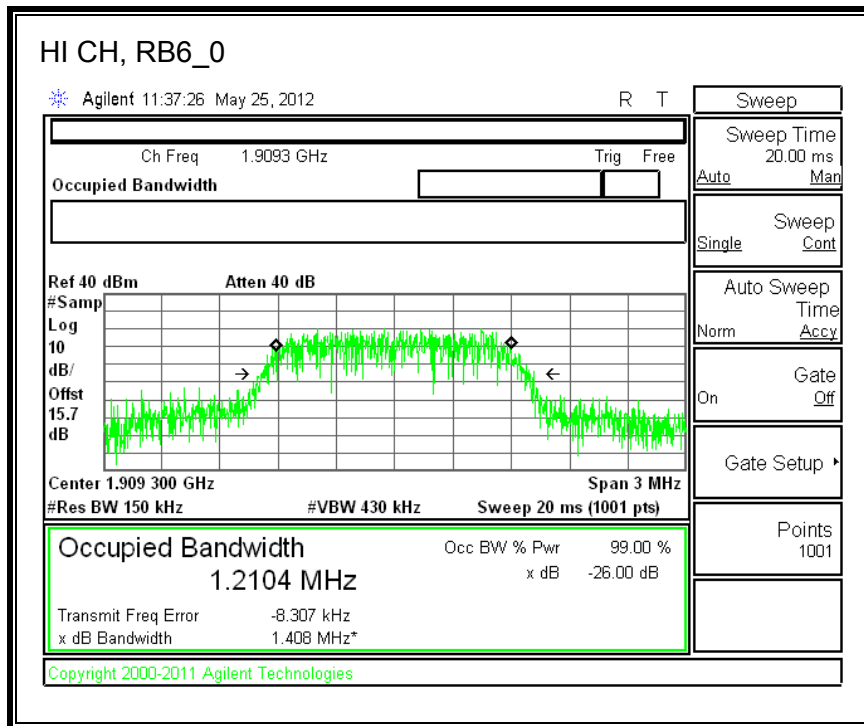
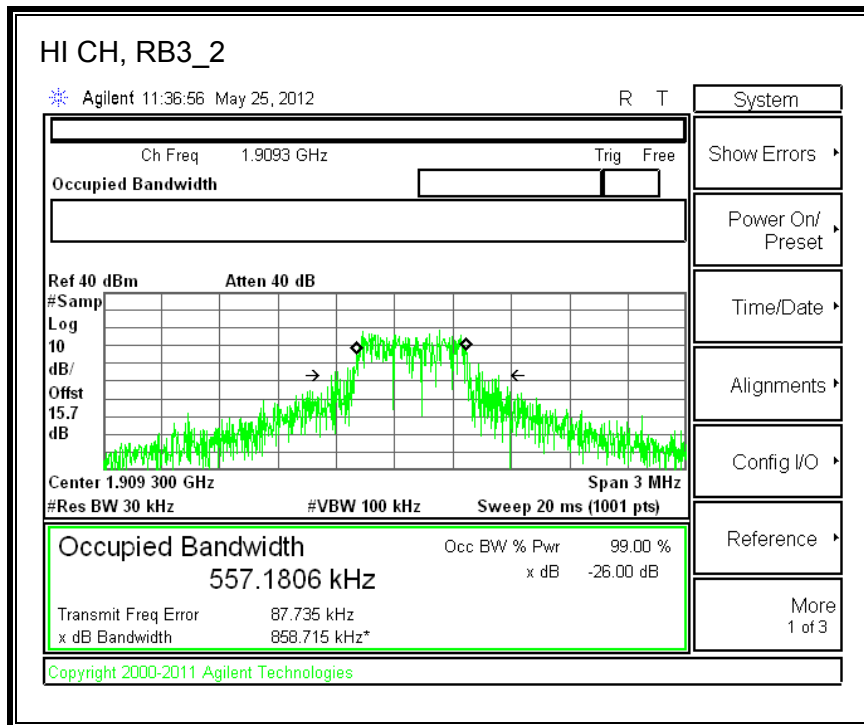


Band 2 (1.4 MHz BAND WIDTH)

LTE 16QAM

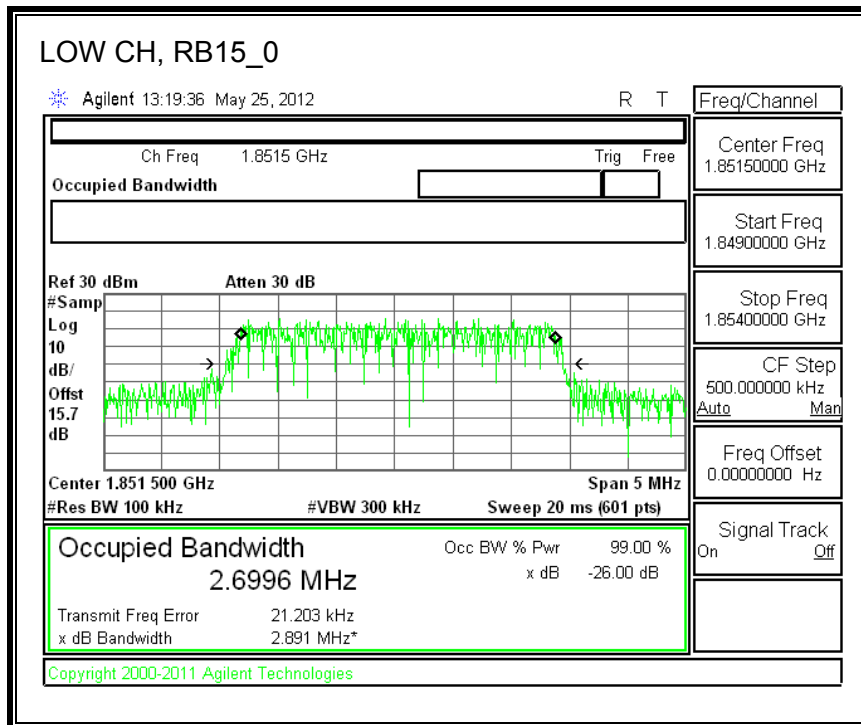
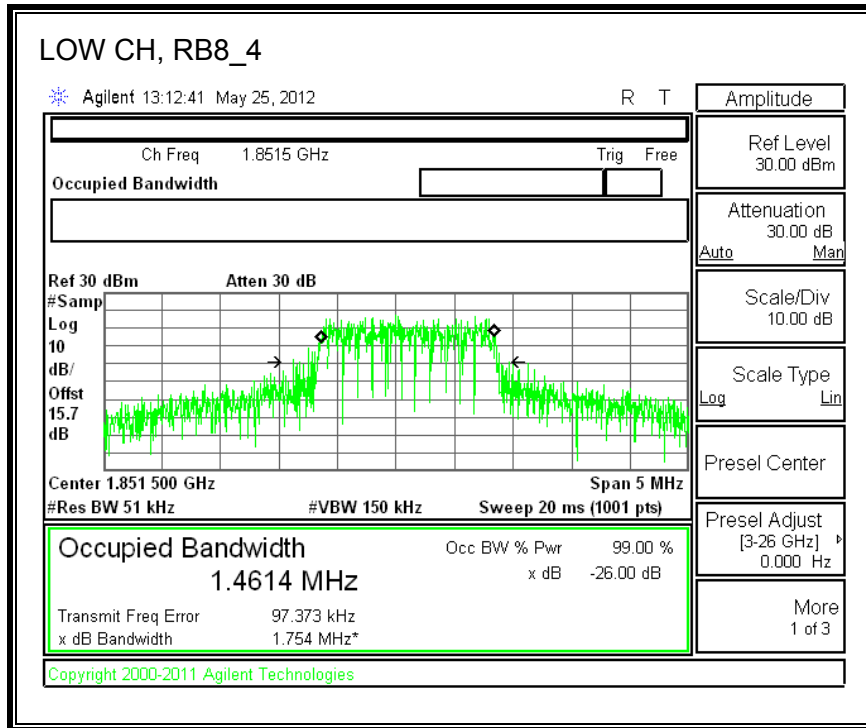


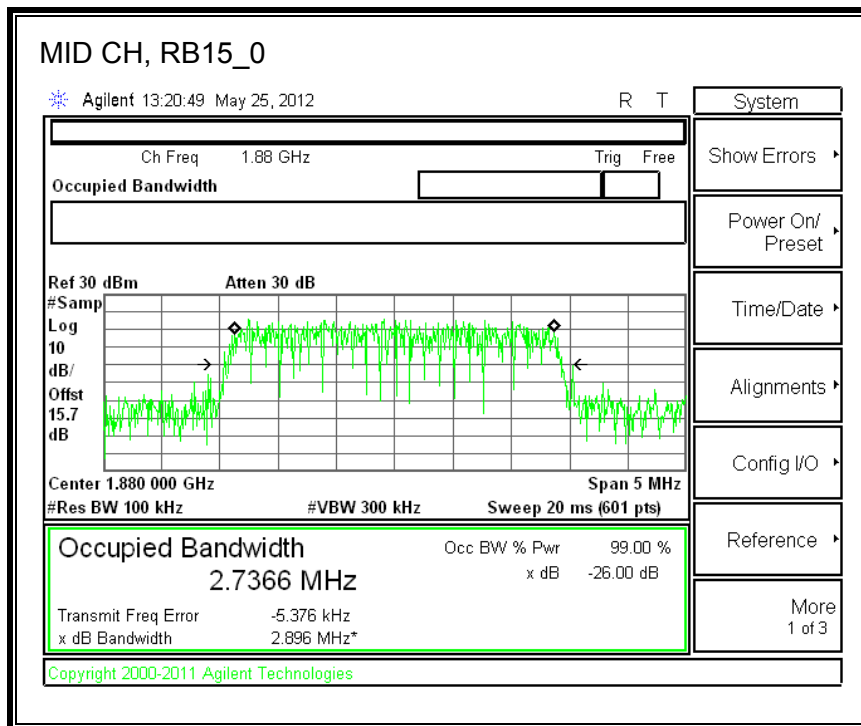
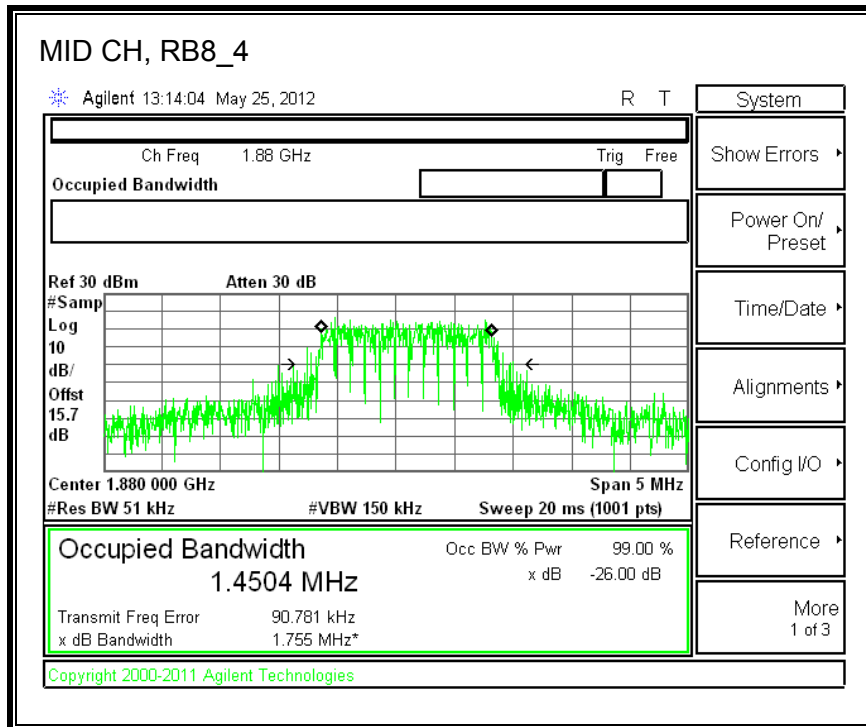


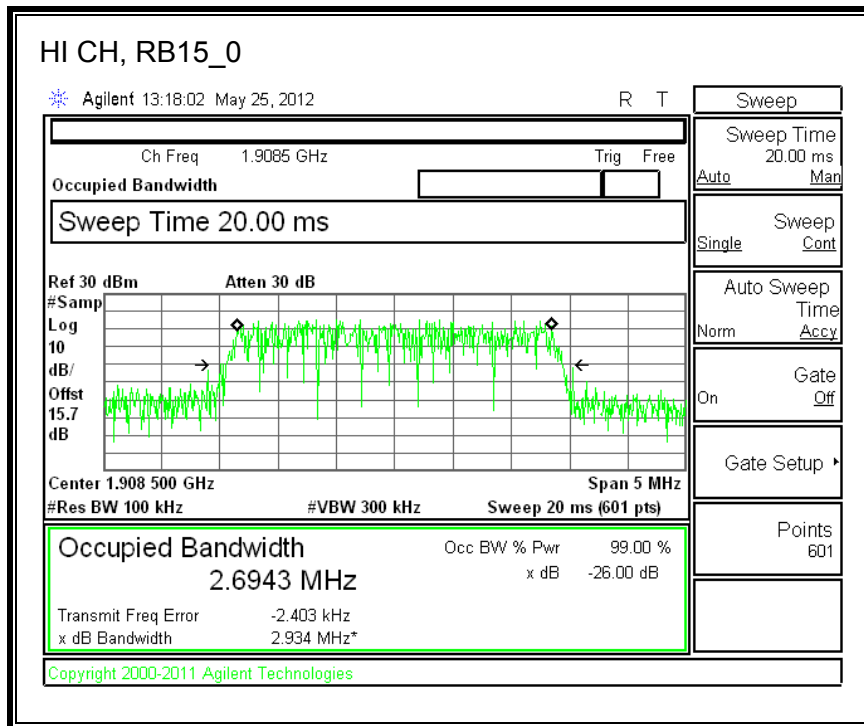
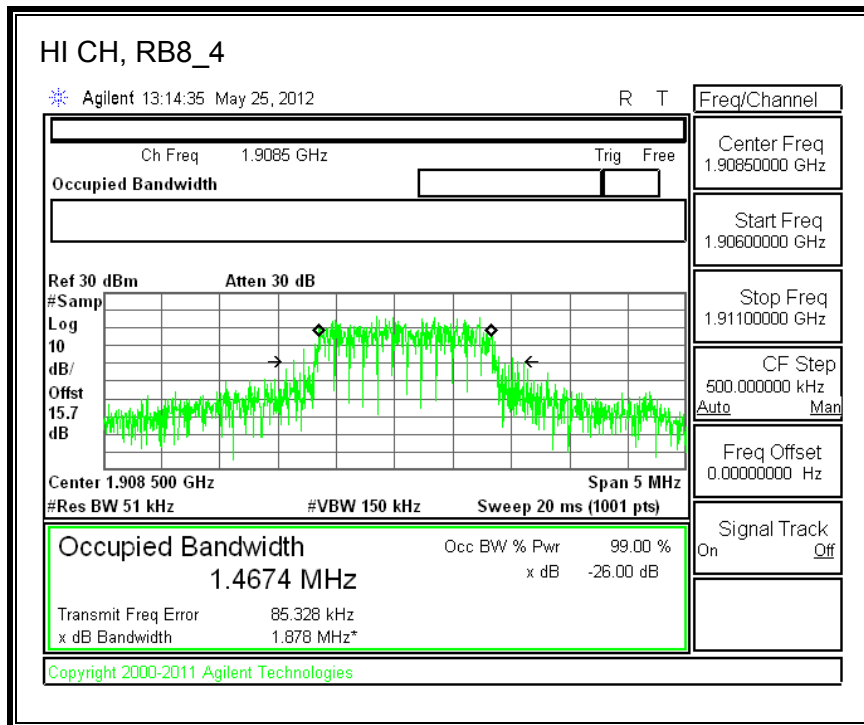


Band 2 (3.0 MHz BAND WIDTH)

LTE QPSK

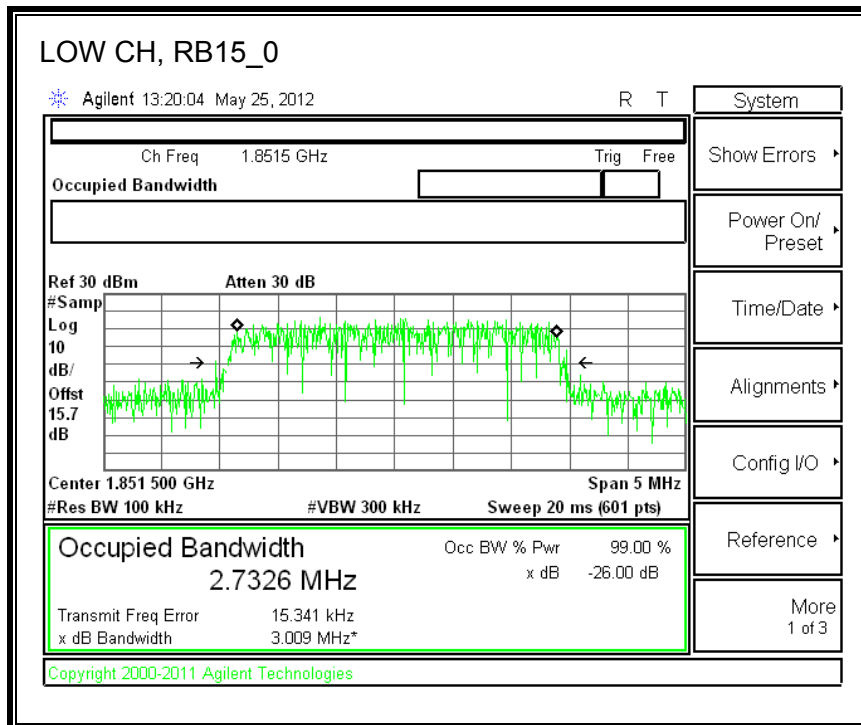
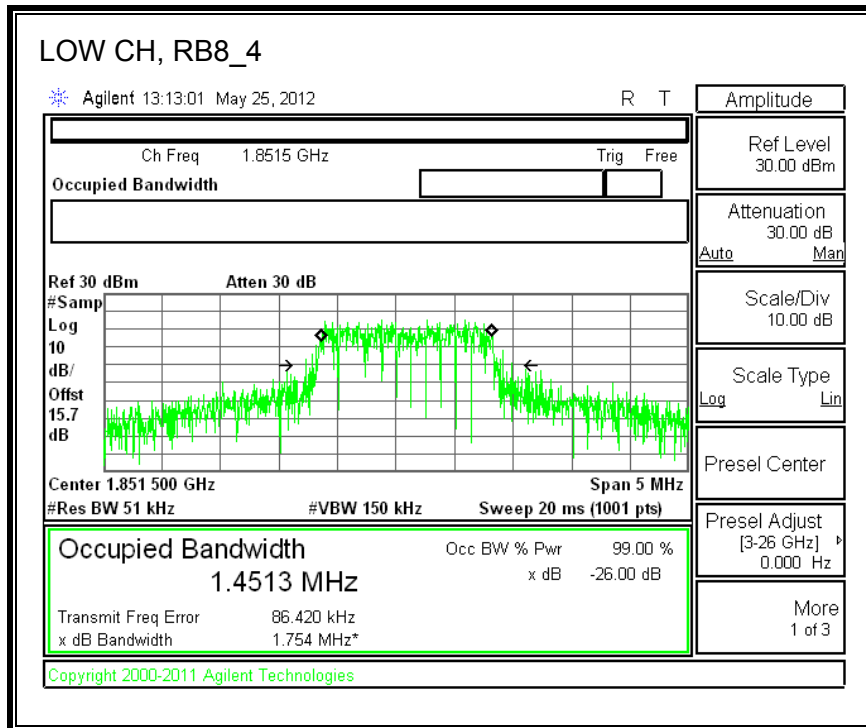


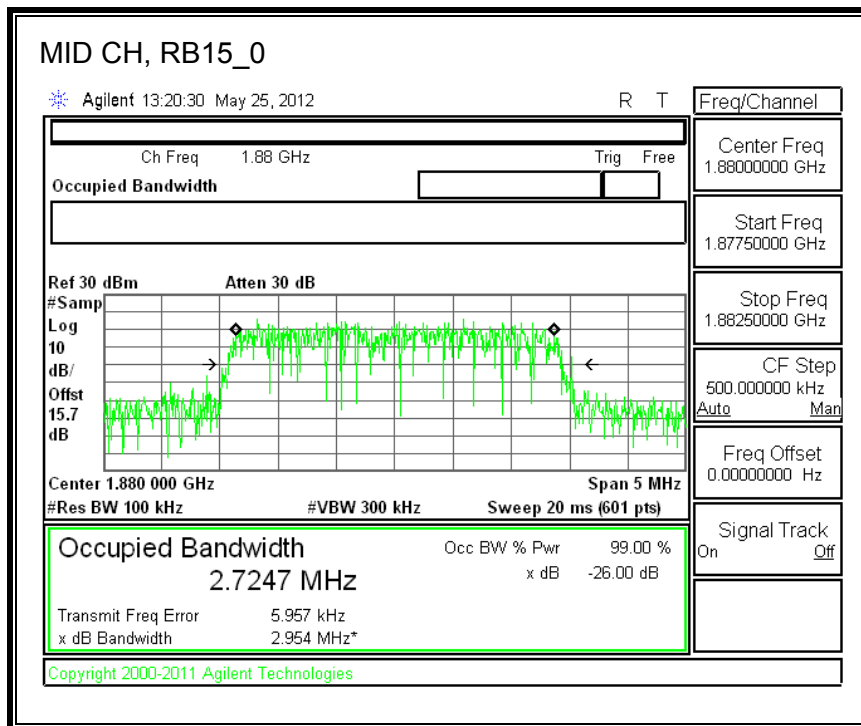
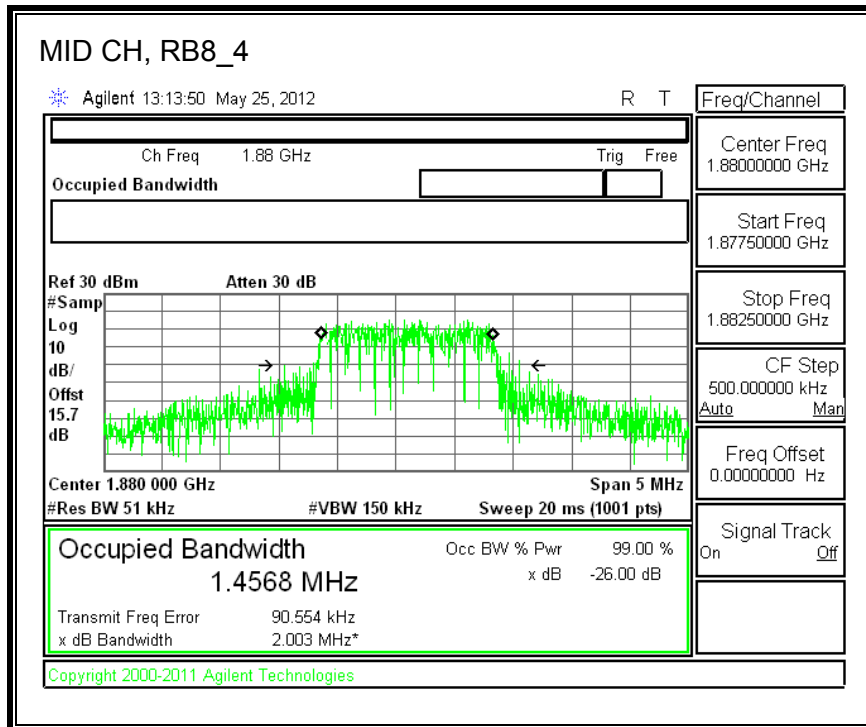


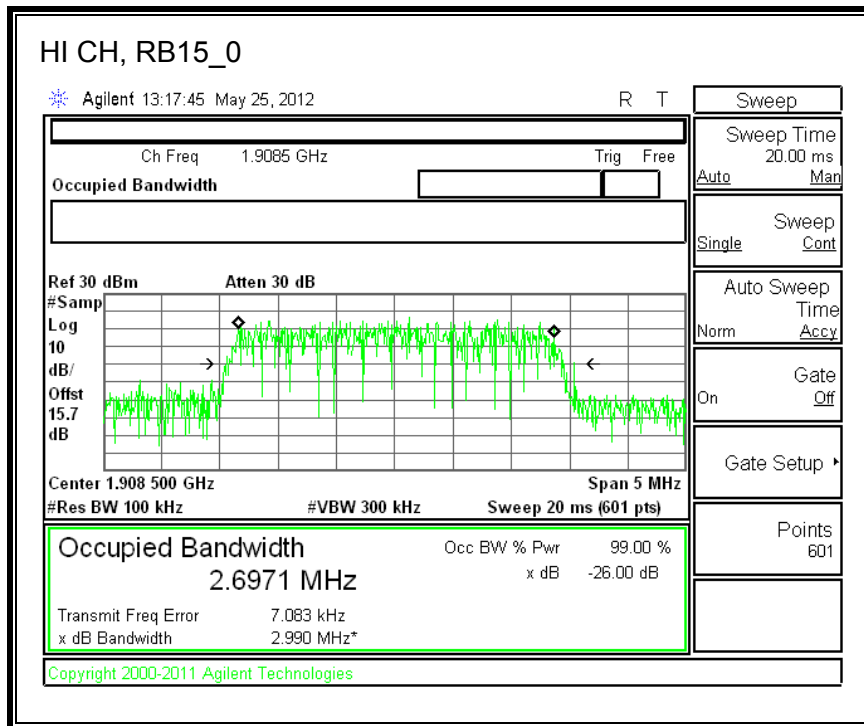
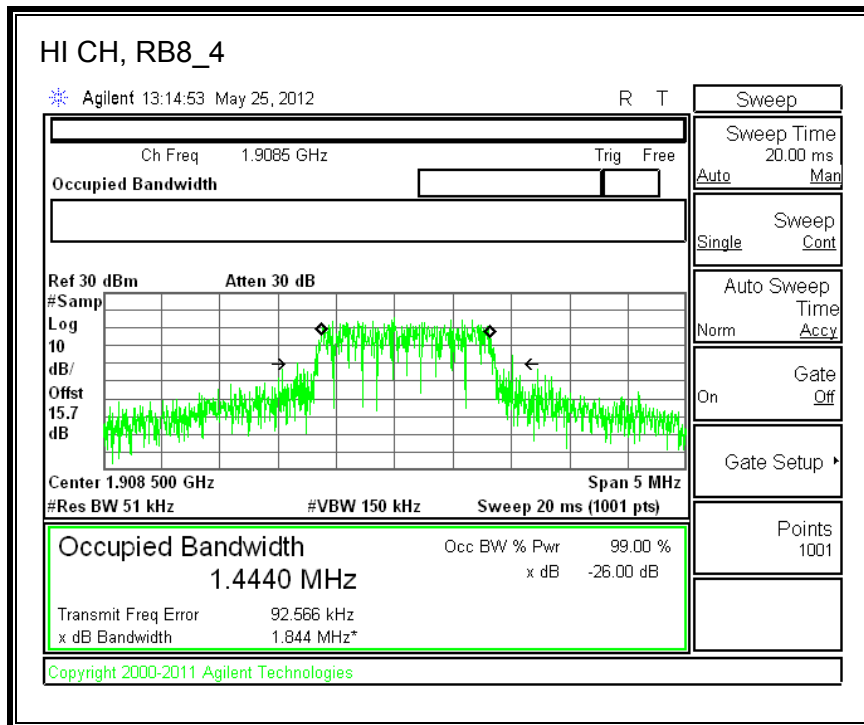


Band 2 (3.0 MHz BAND WIDTH)

LTE 16QAM

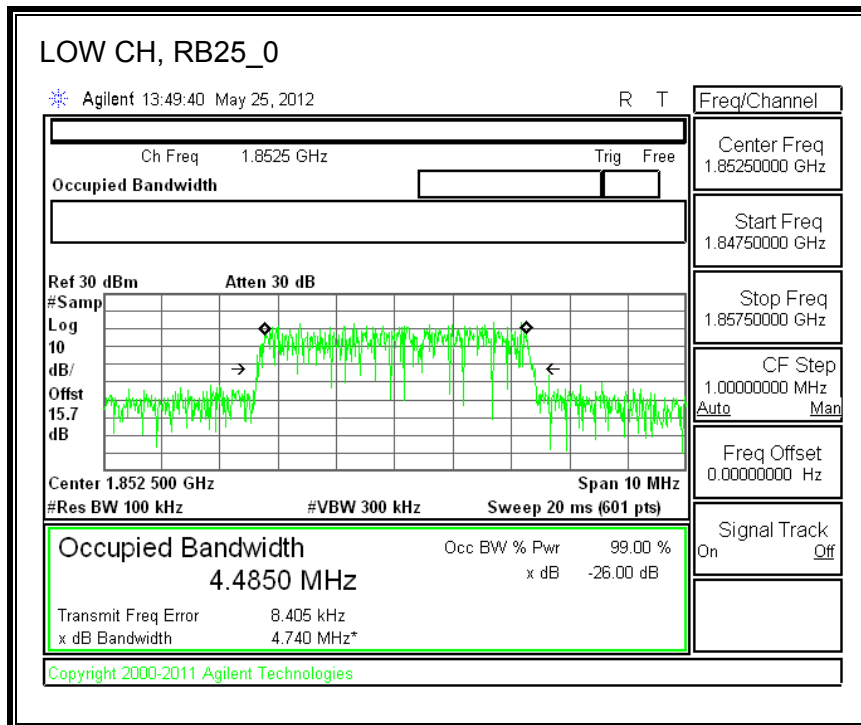
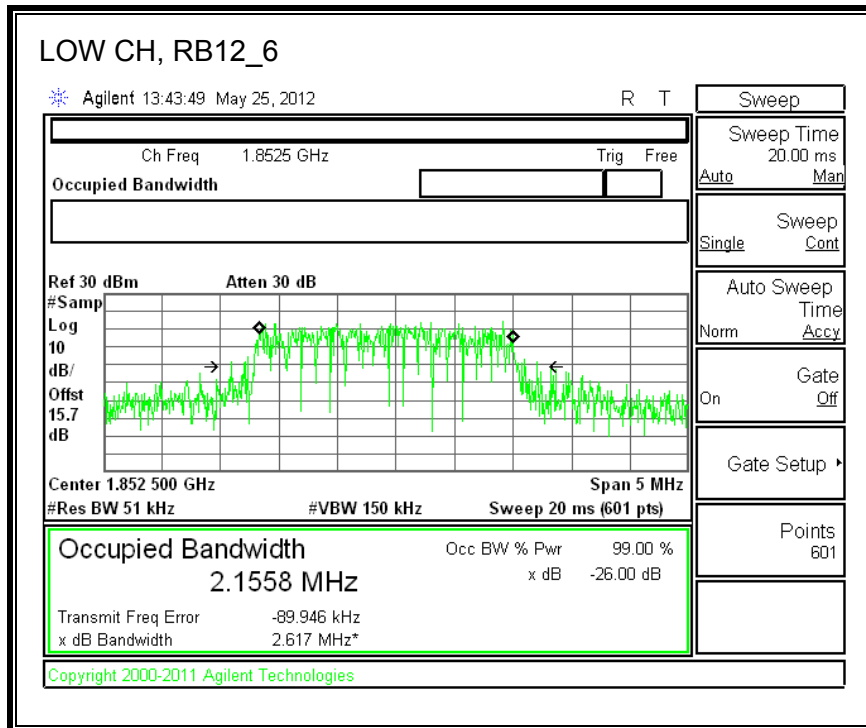


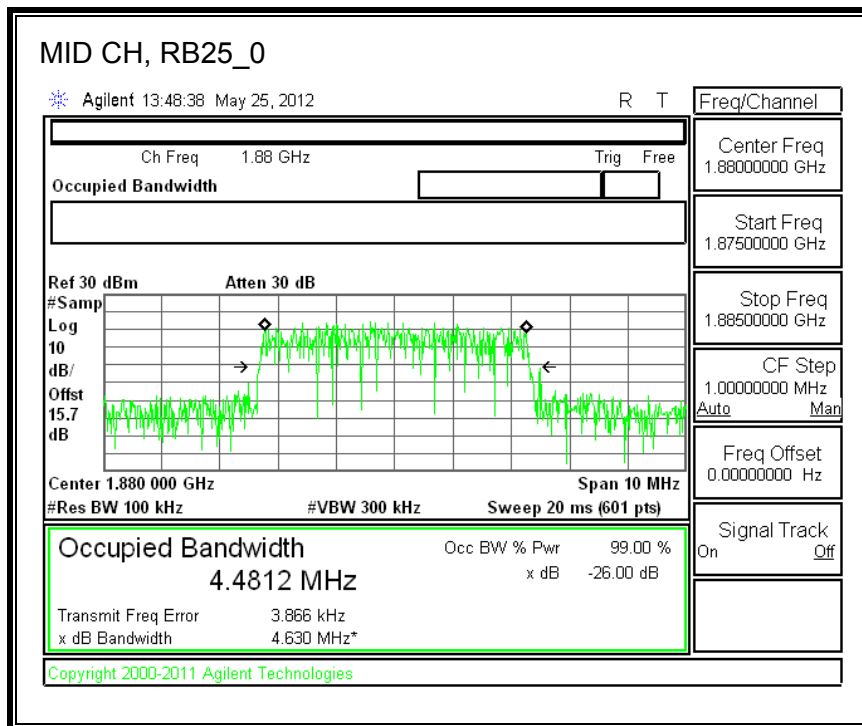
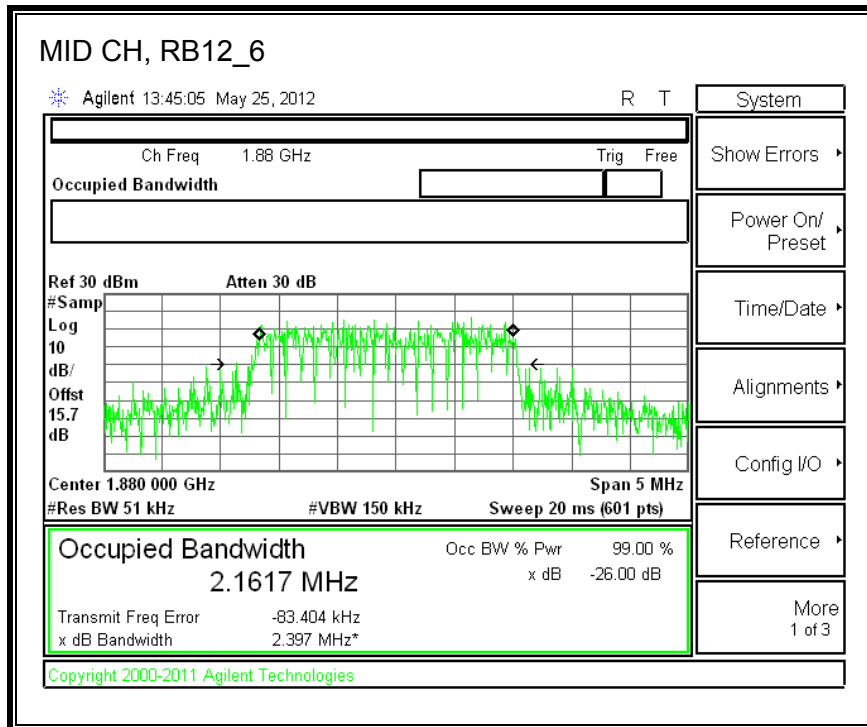


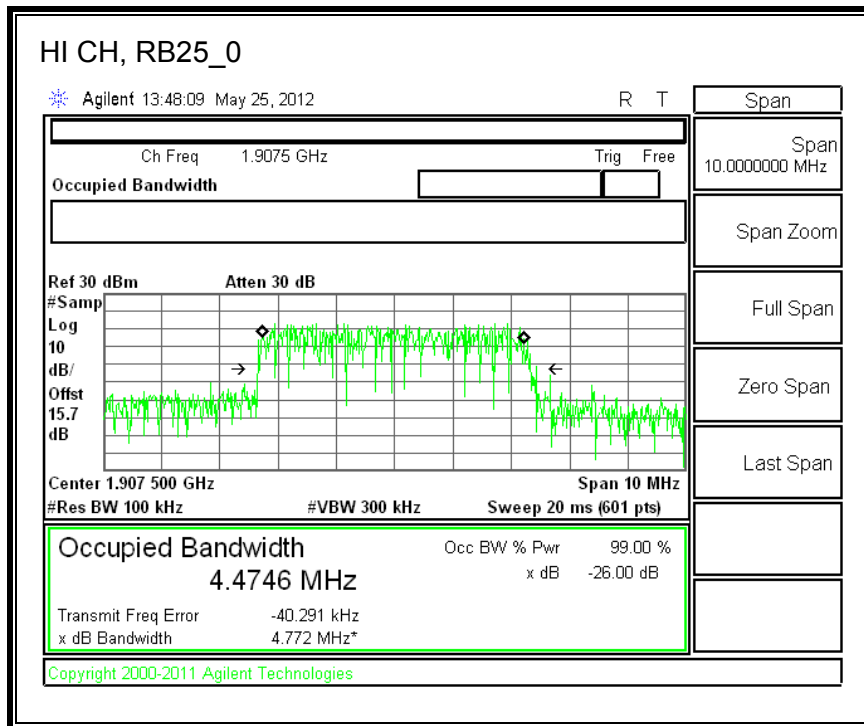
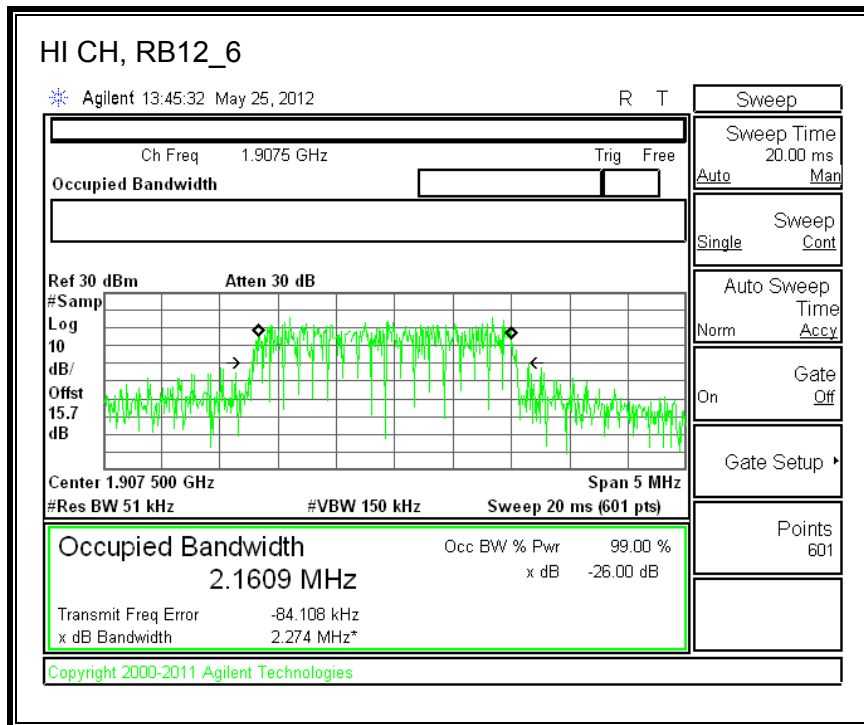


Band 2 (5.0 MHz BAND WIDTH)

LTE QPSK

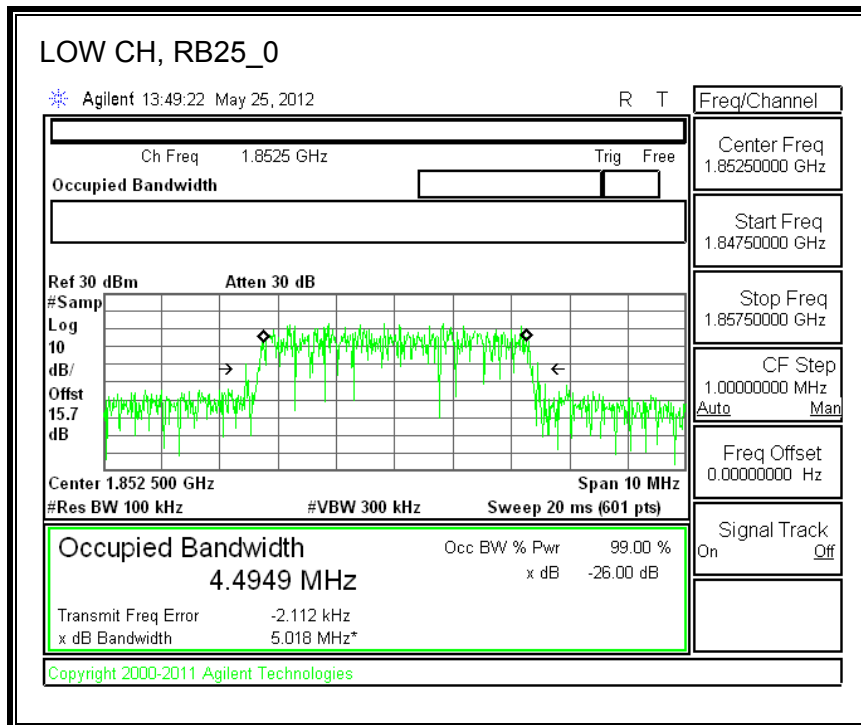
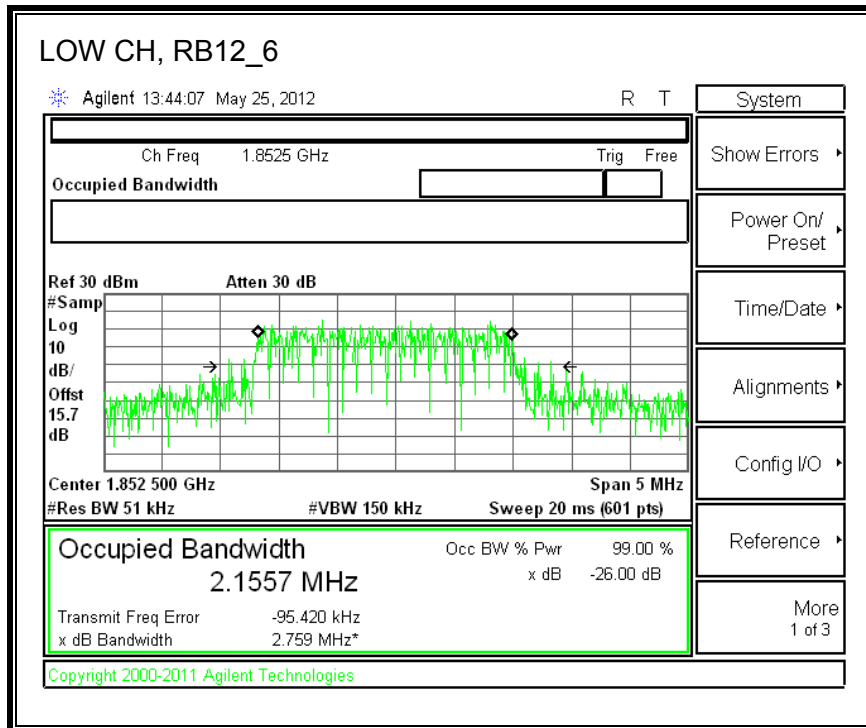


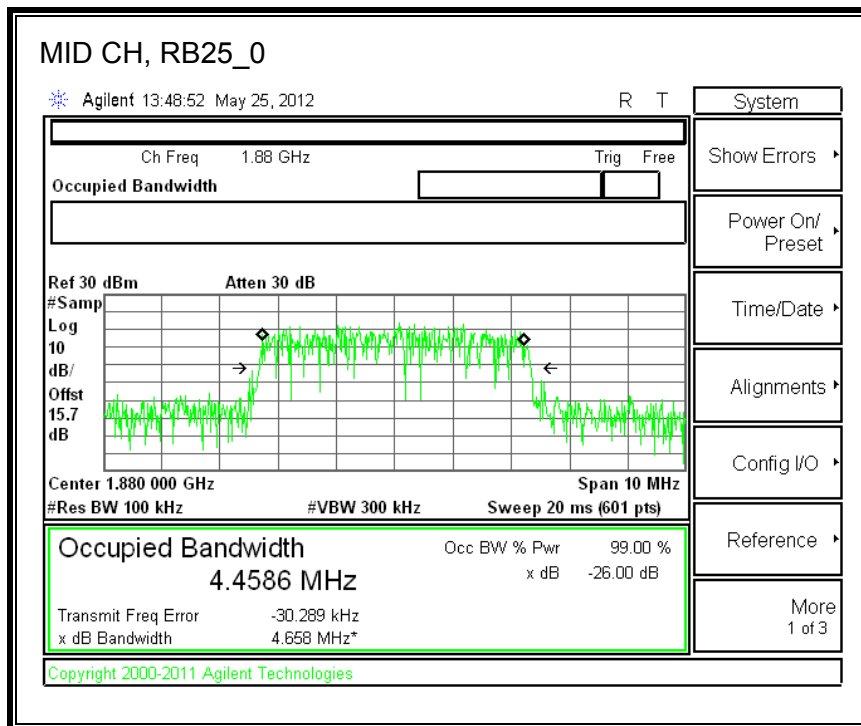
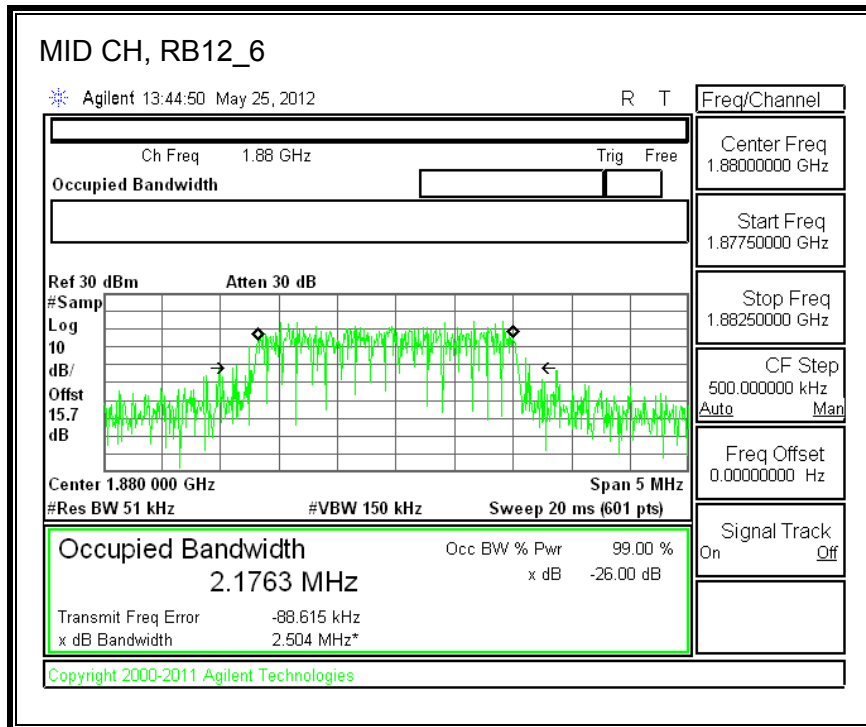


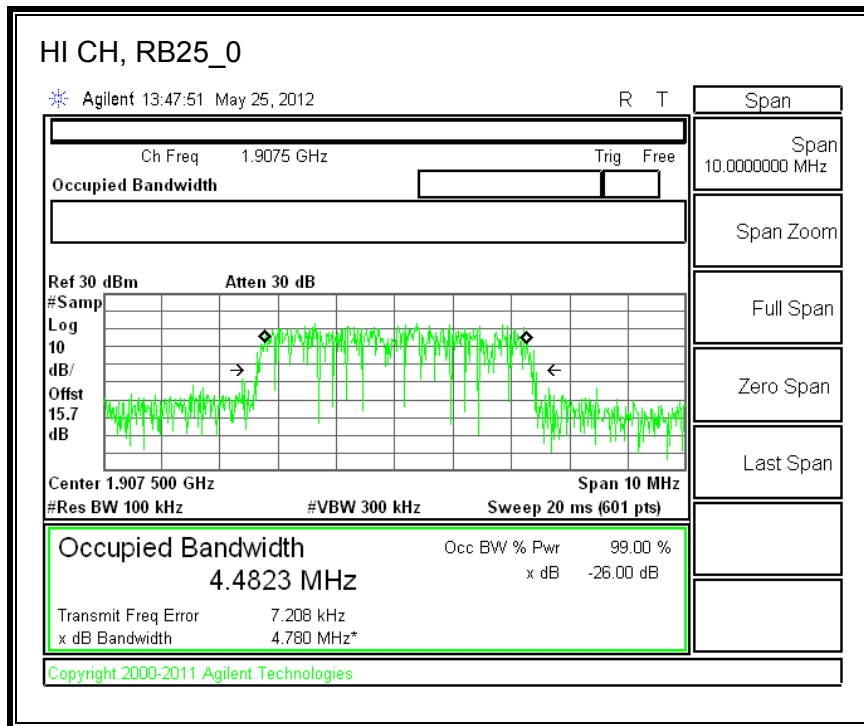
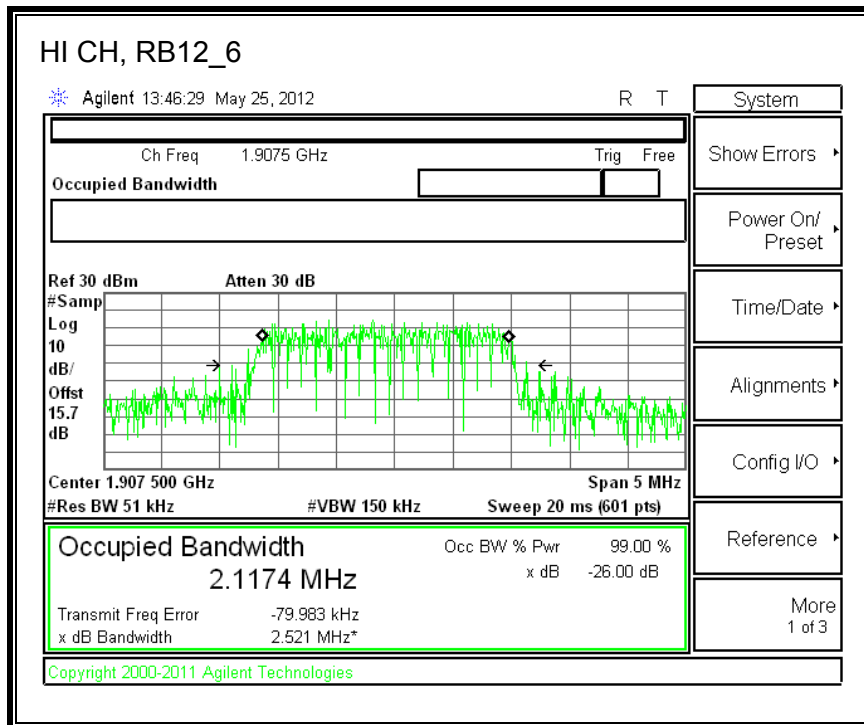


Band 2 (5 MHz BAND WIDTH)

LTE 16QAM

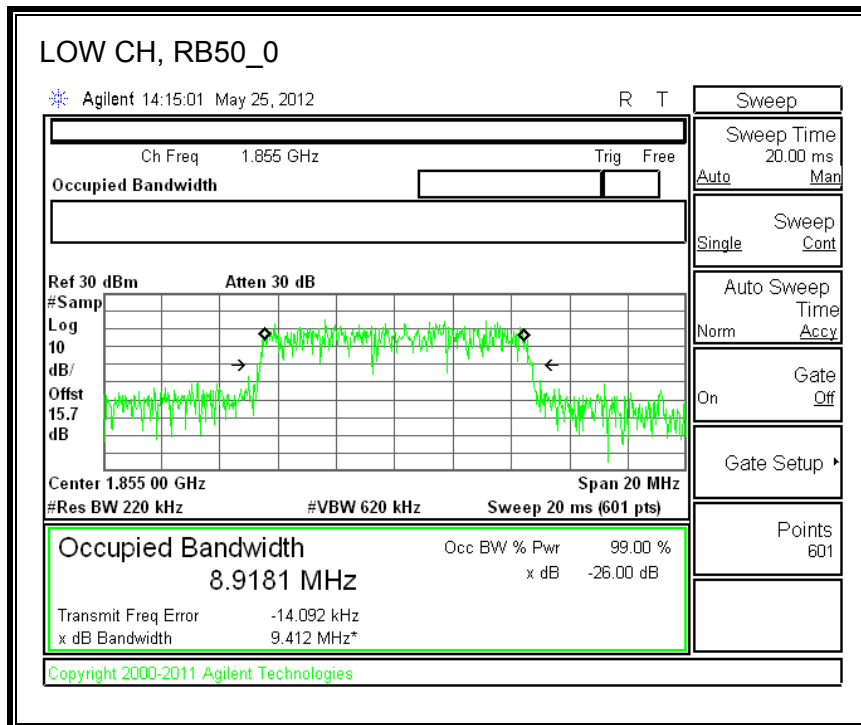
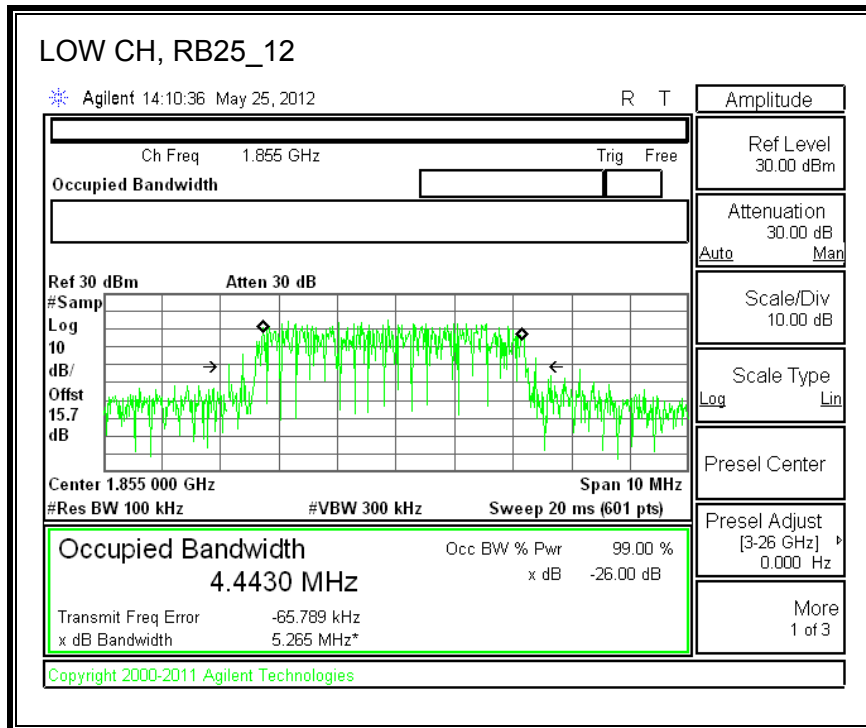


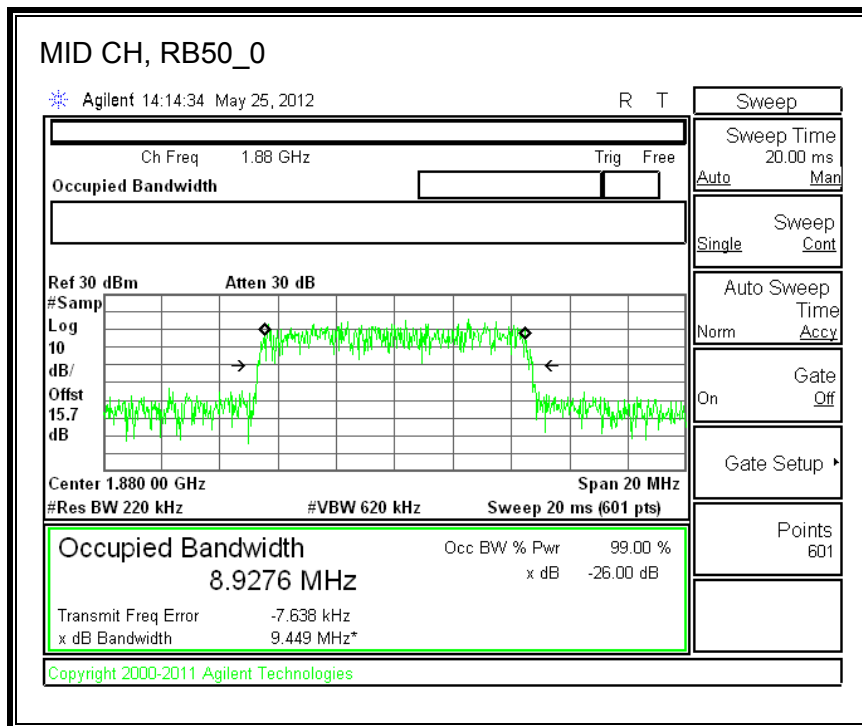
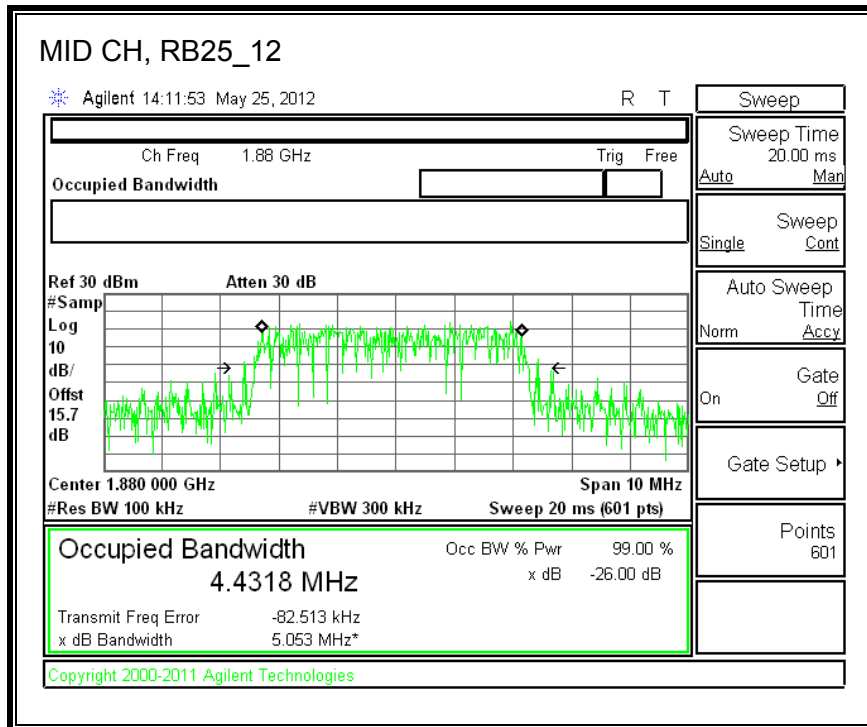


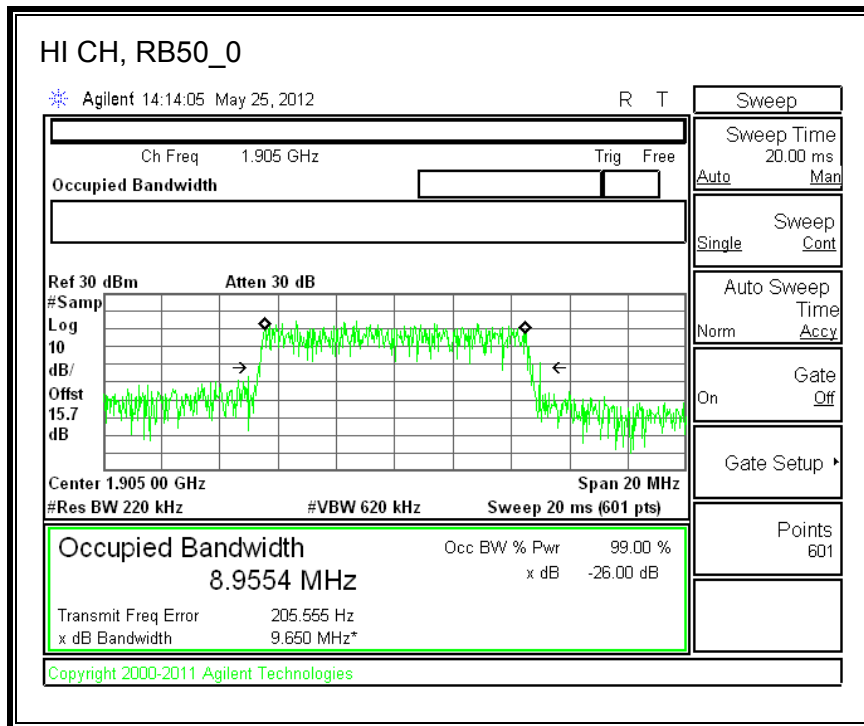
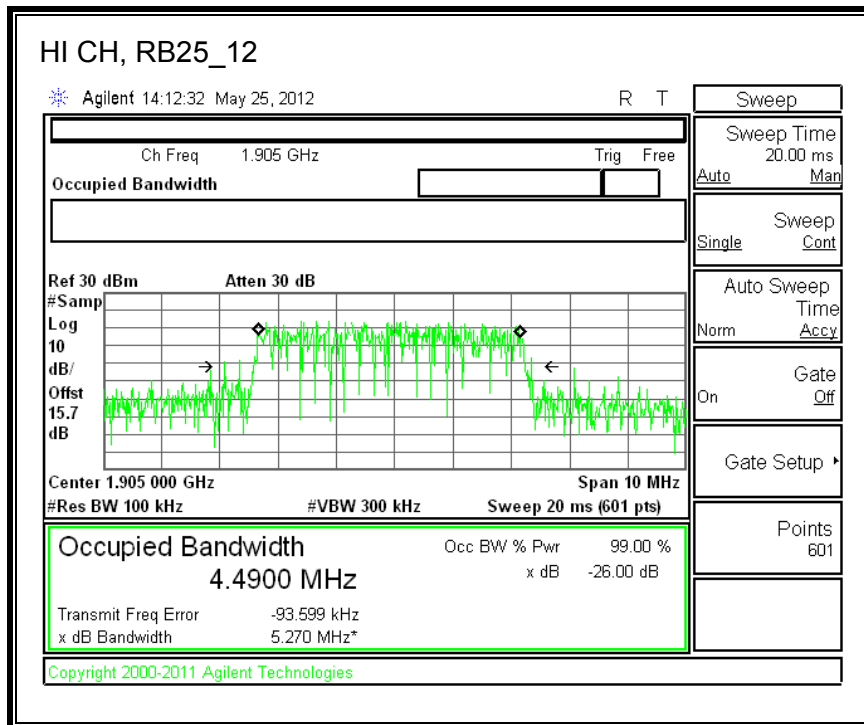


Band 2 (10.0 MHz BAND WIDTH)

LTE QPSK

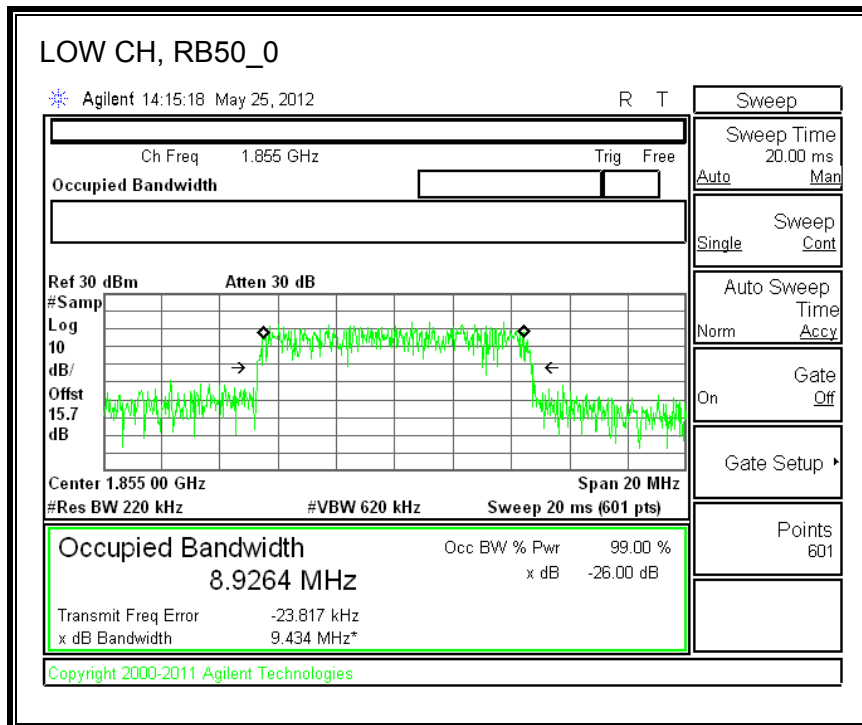
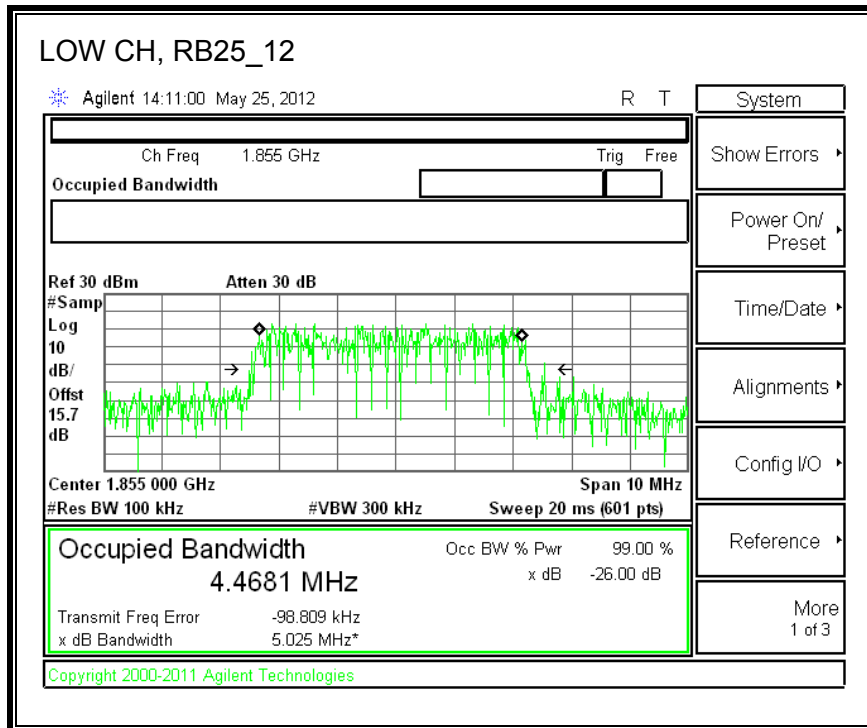


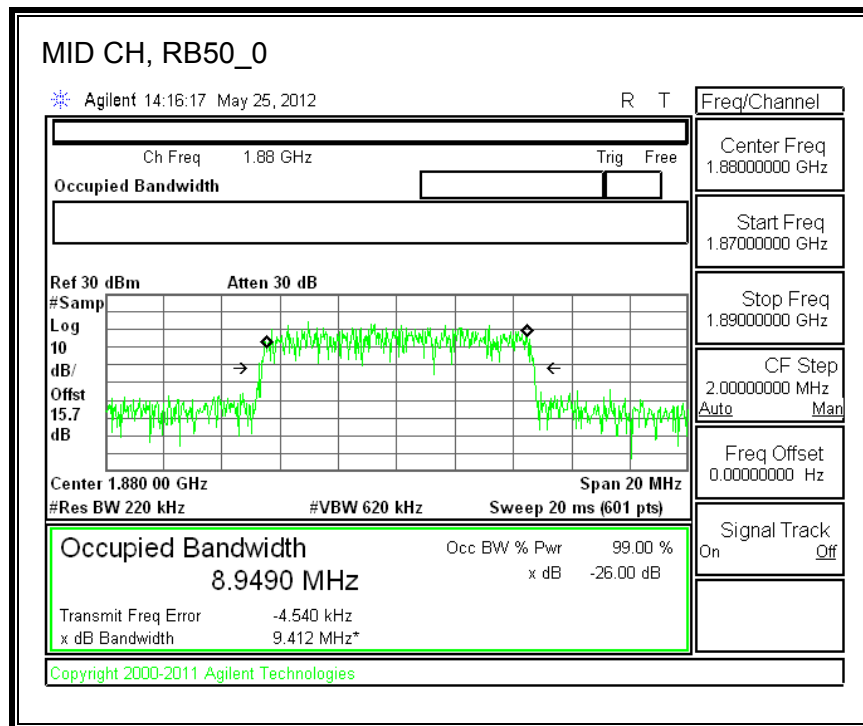
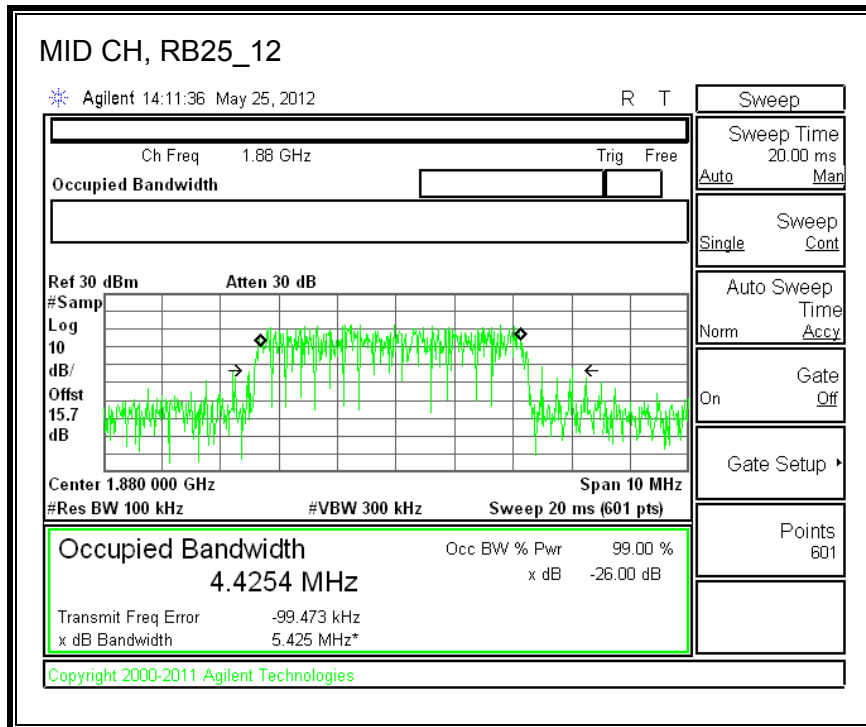


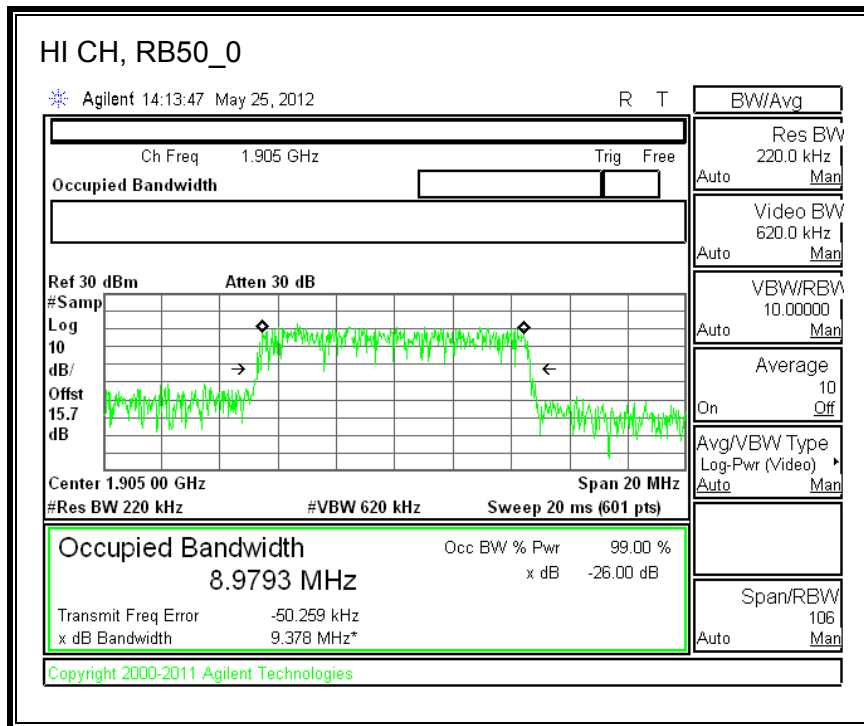
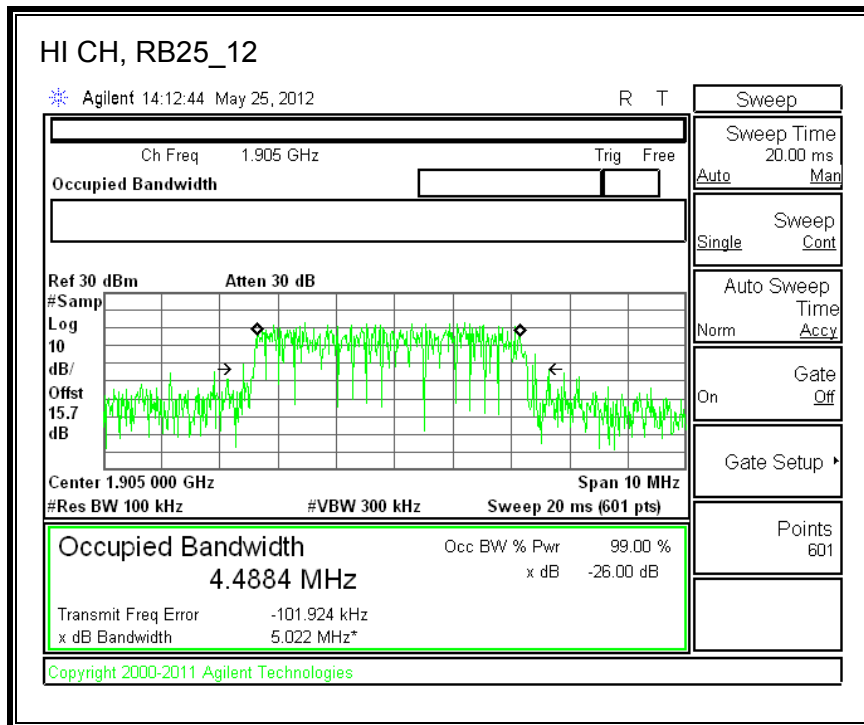


Band 2 (10 MHz BAND WIDTH)

LTE 16QAM

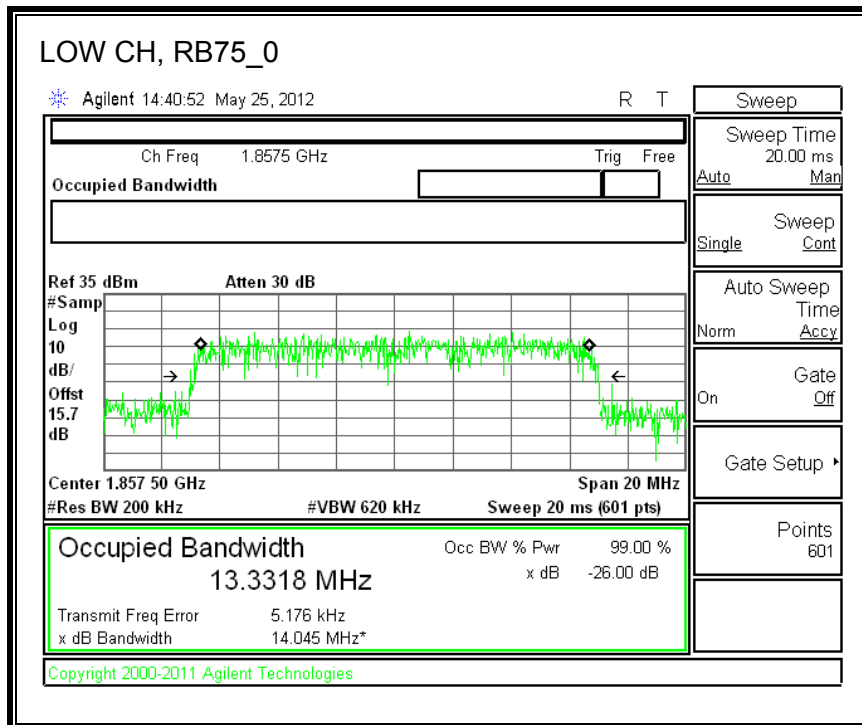
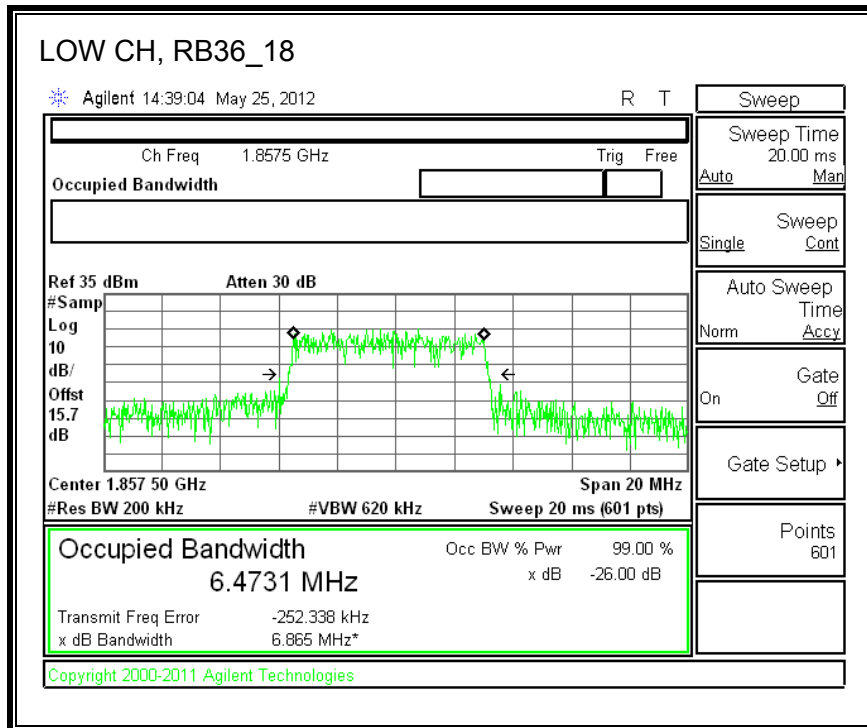


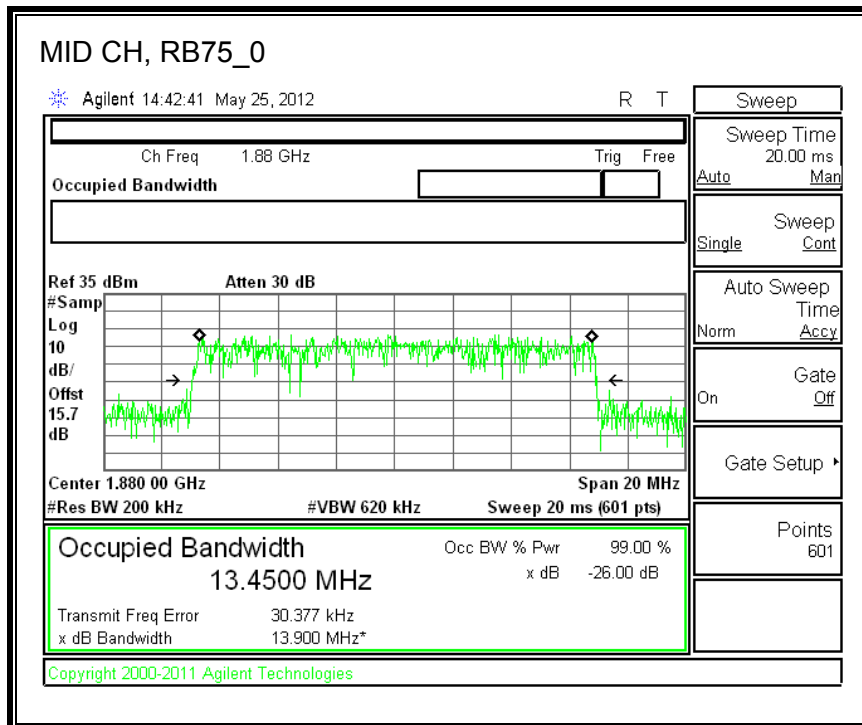
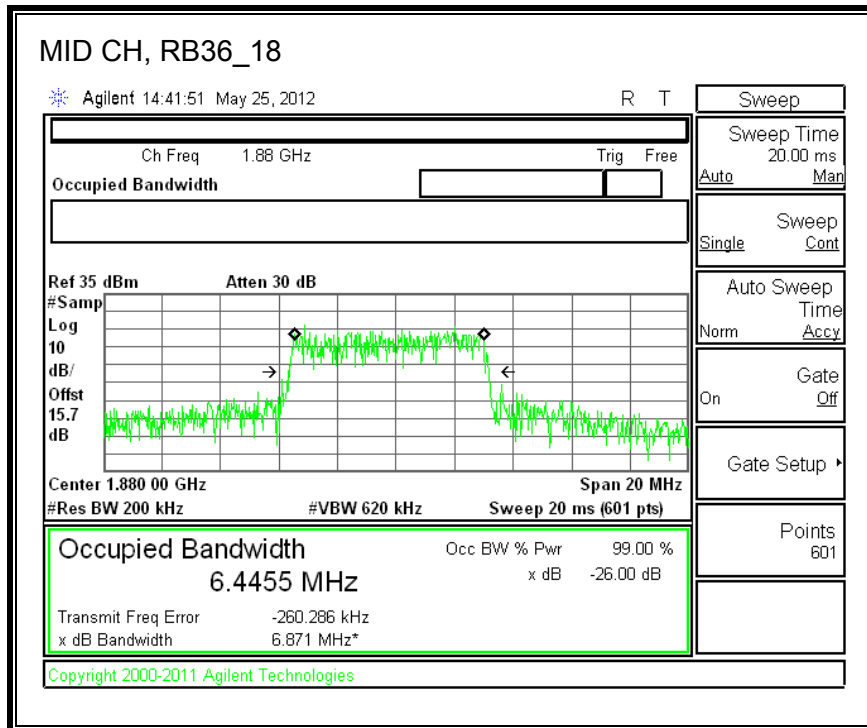


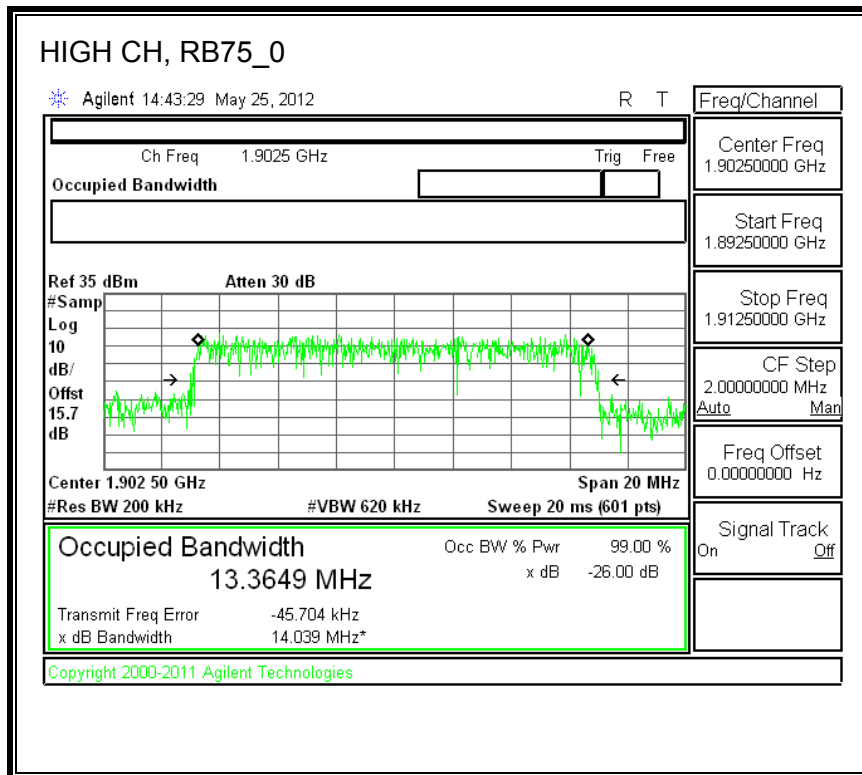
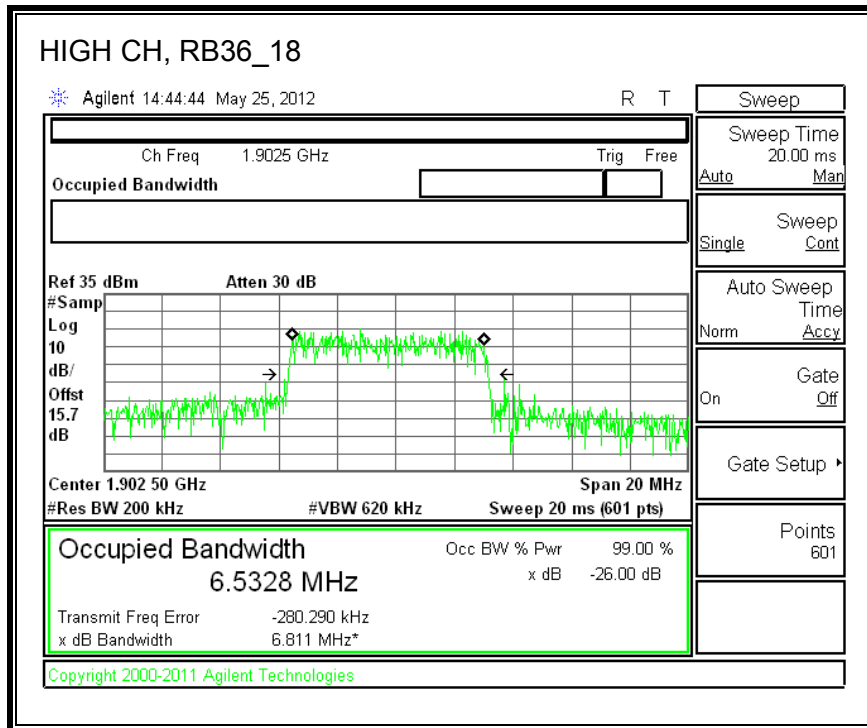


Band 2 (15.0 MHz BAND WIDTH)

LTE QPSK

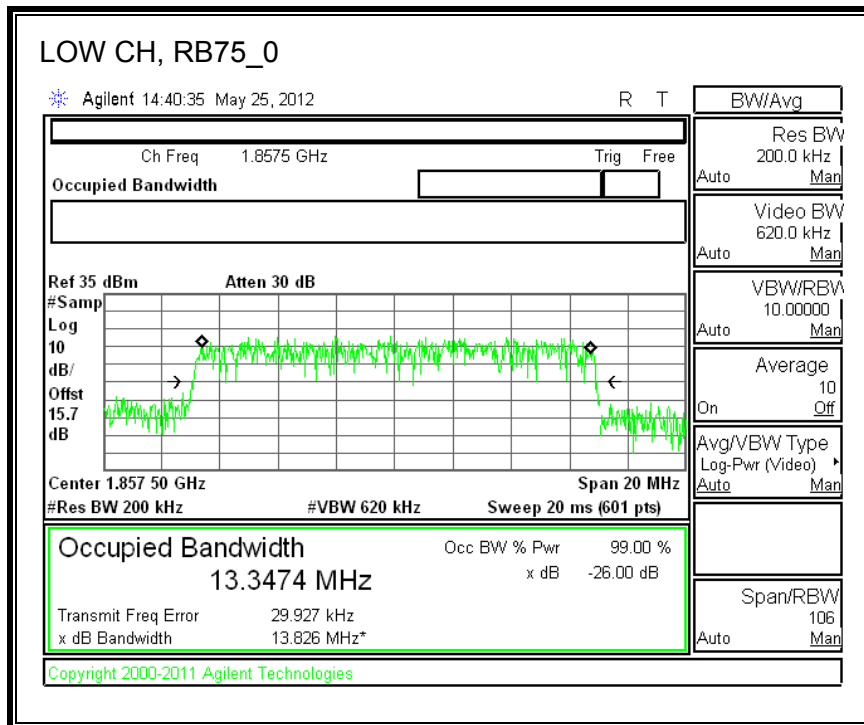
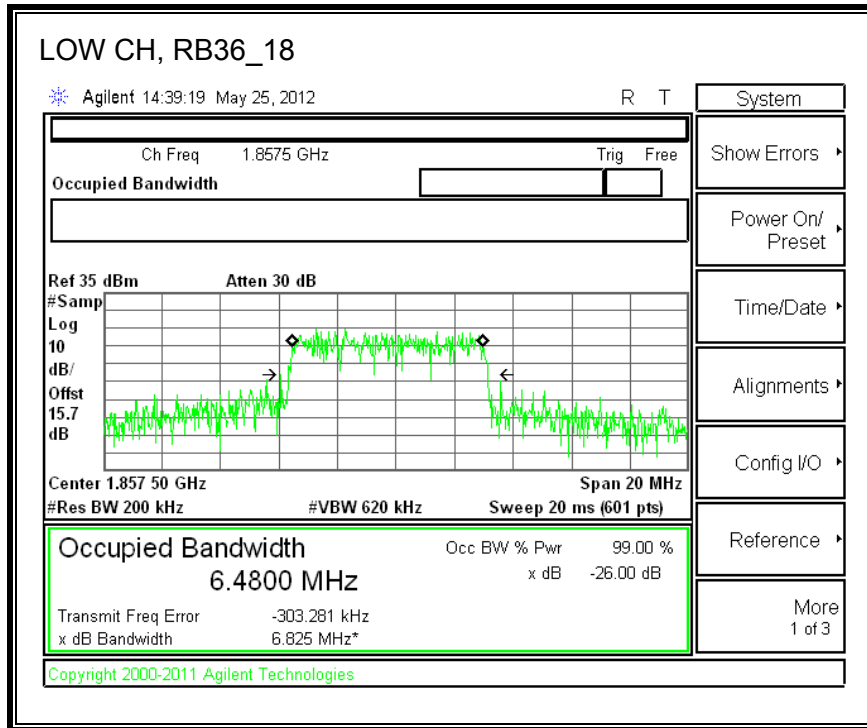


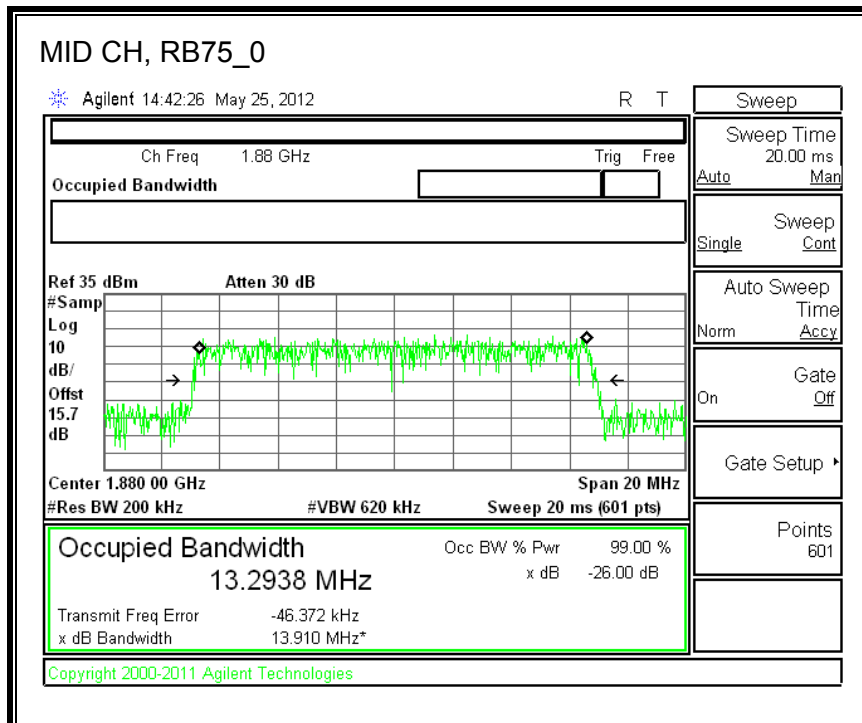
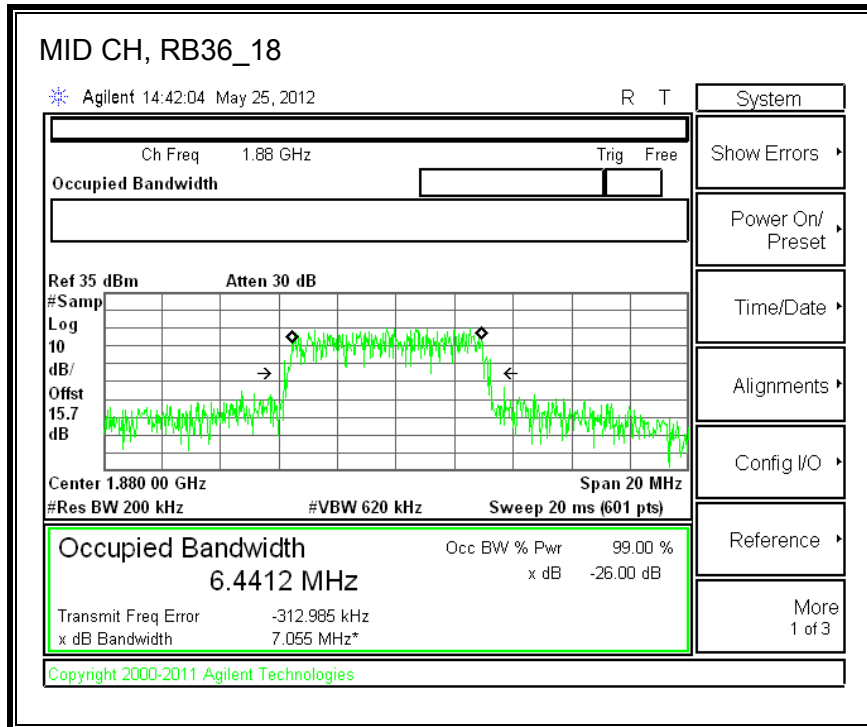


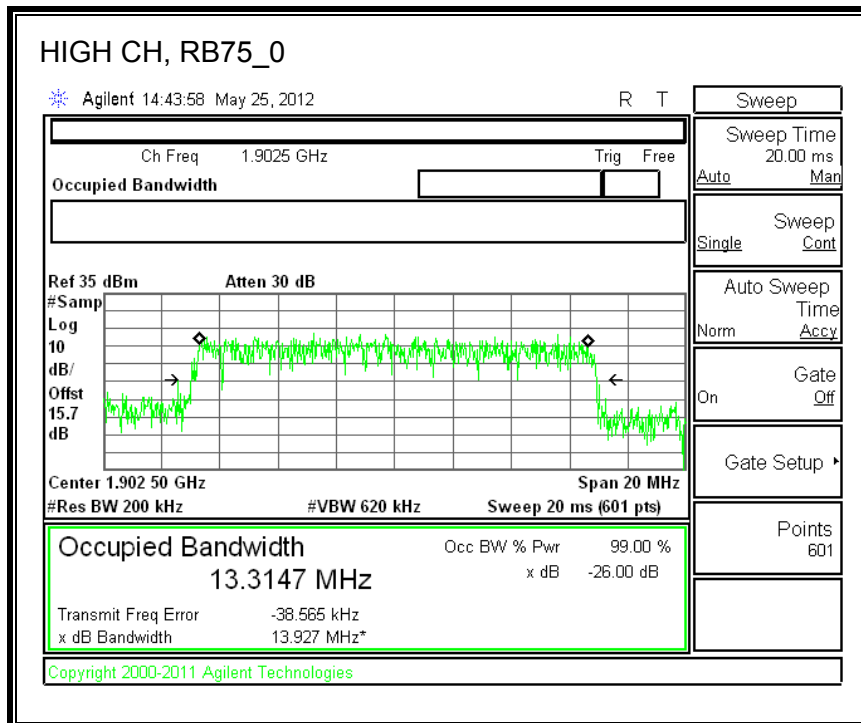
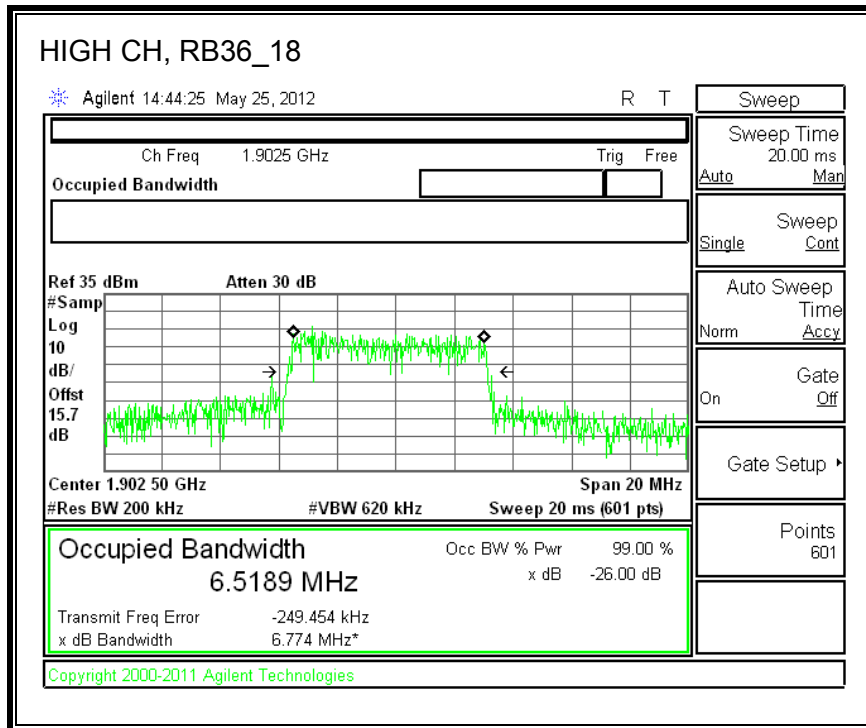


Band 2 (15.0 MHz BAND WIDTH)

LTE 16QAM

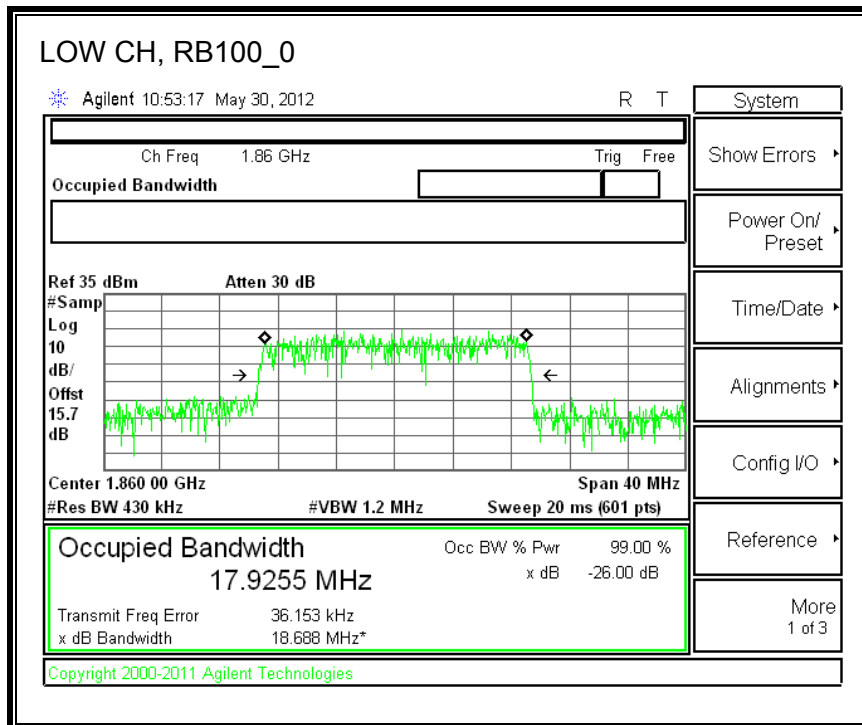
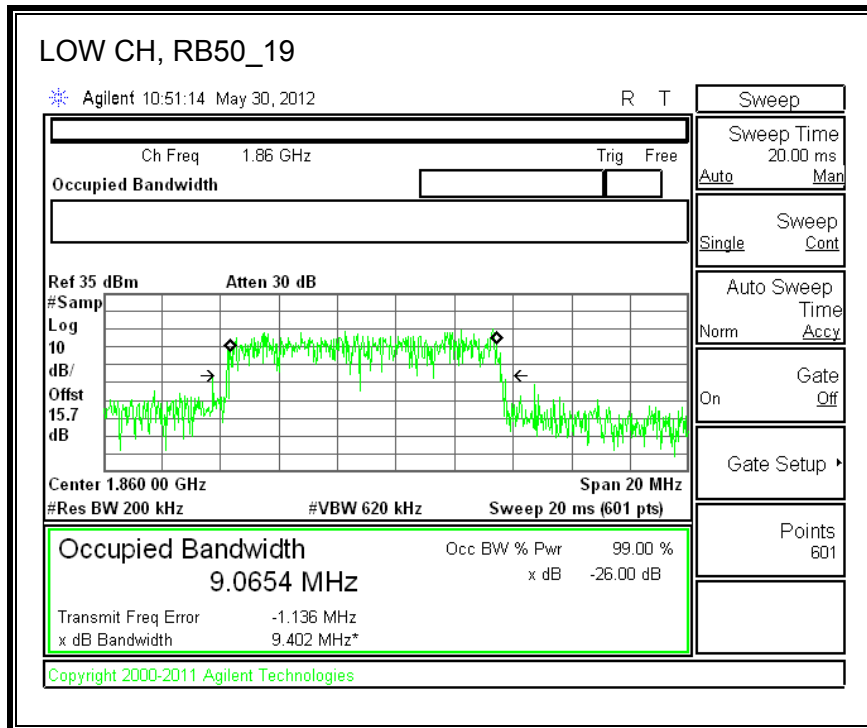


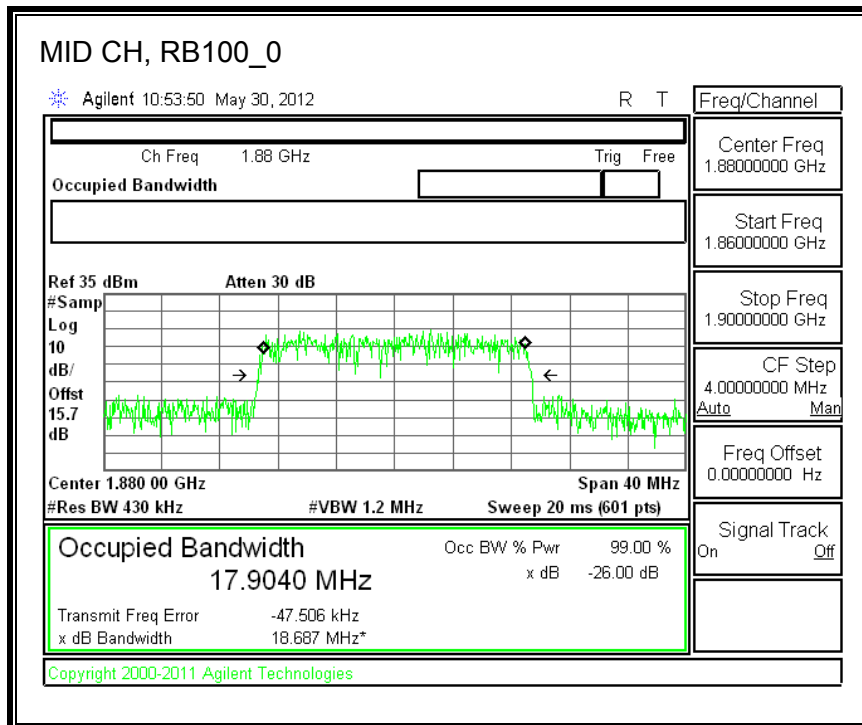
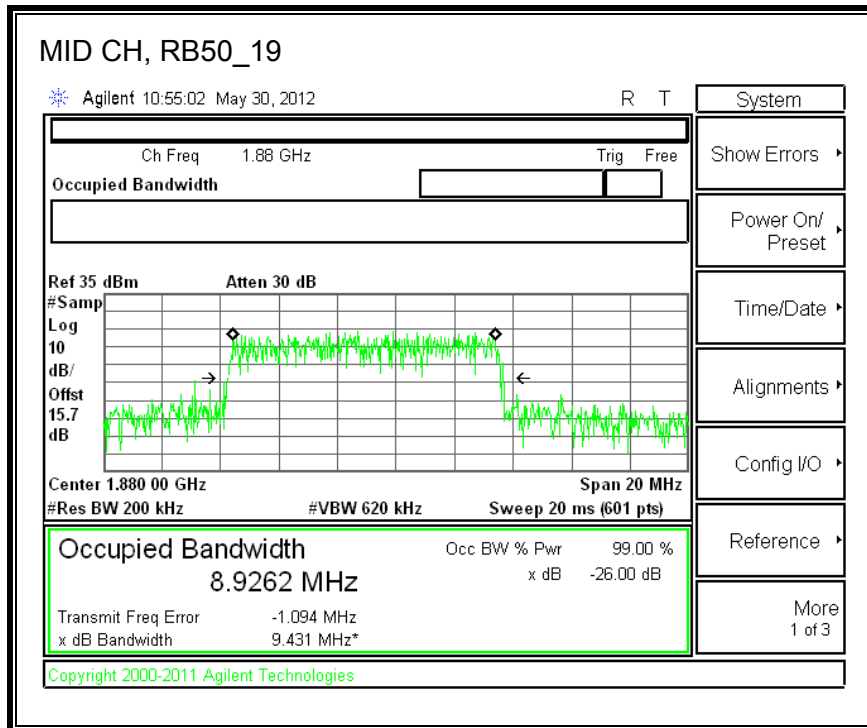


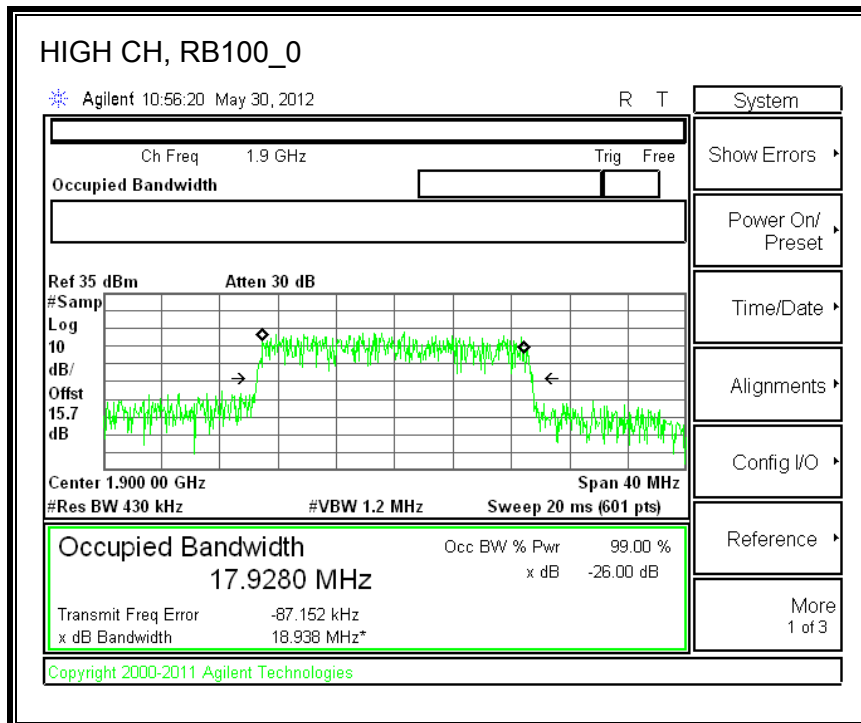
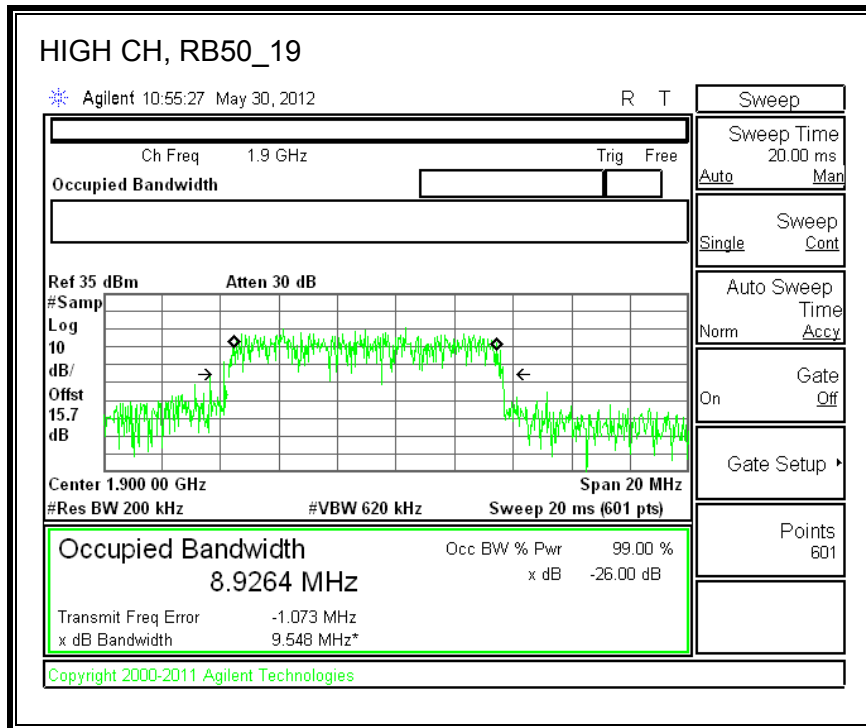


Band 2 (20.0 MHz BAND WIDTH)

LTE QPSK

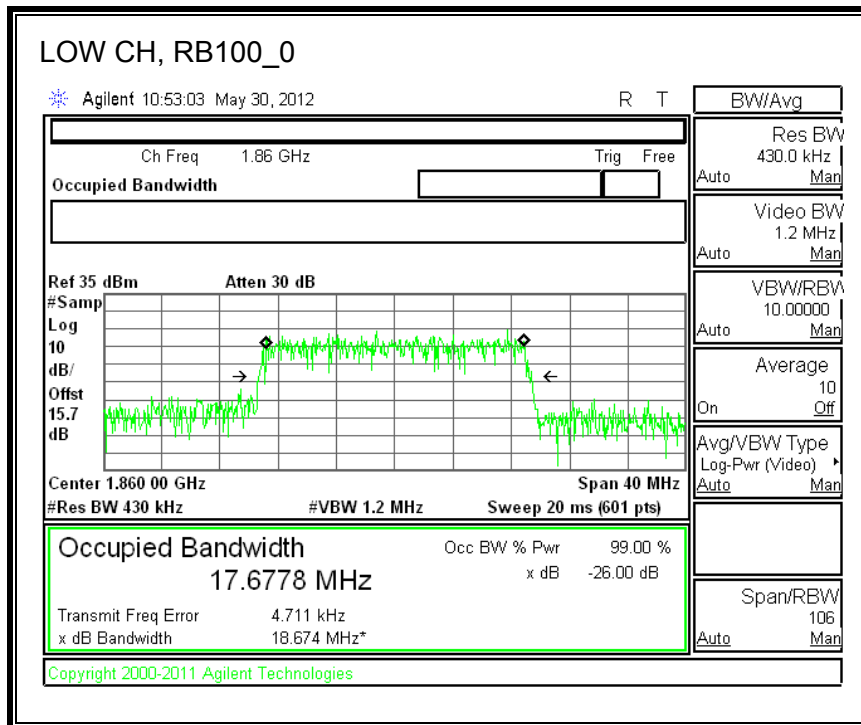
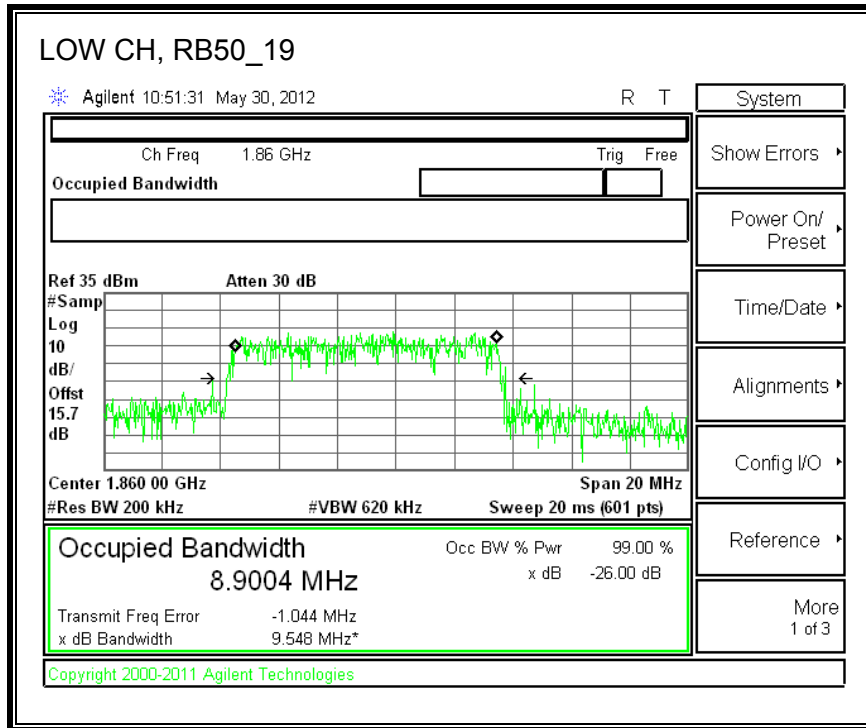


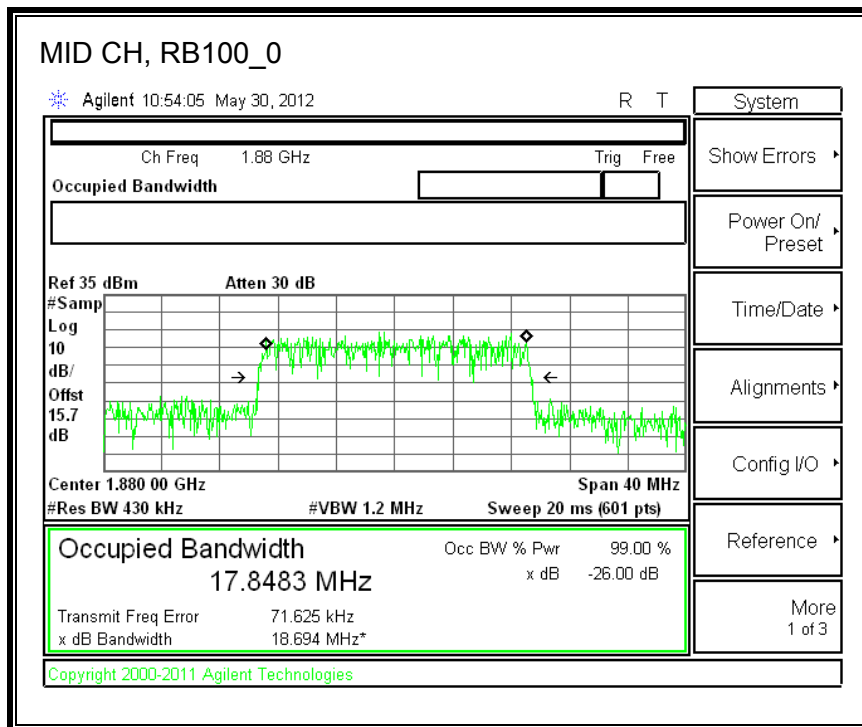
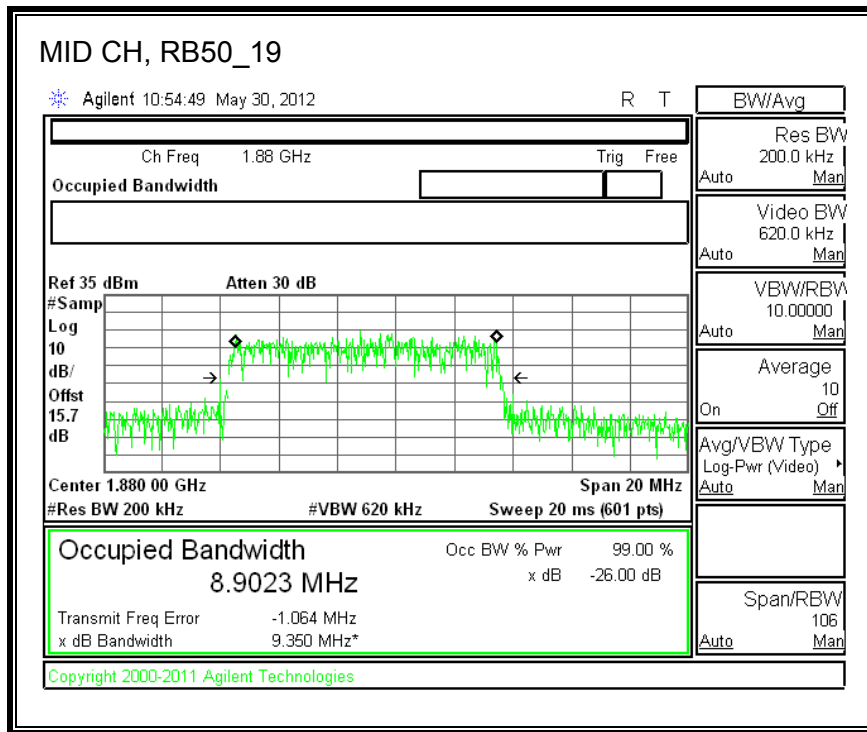


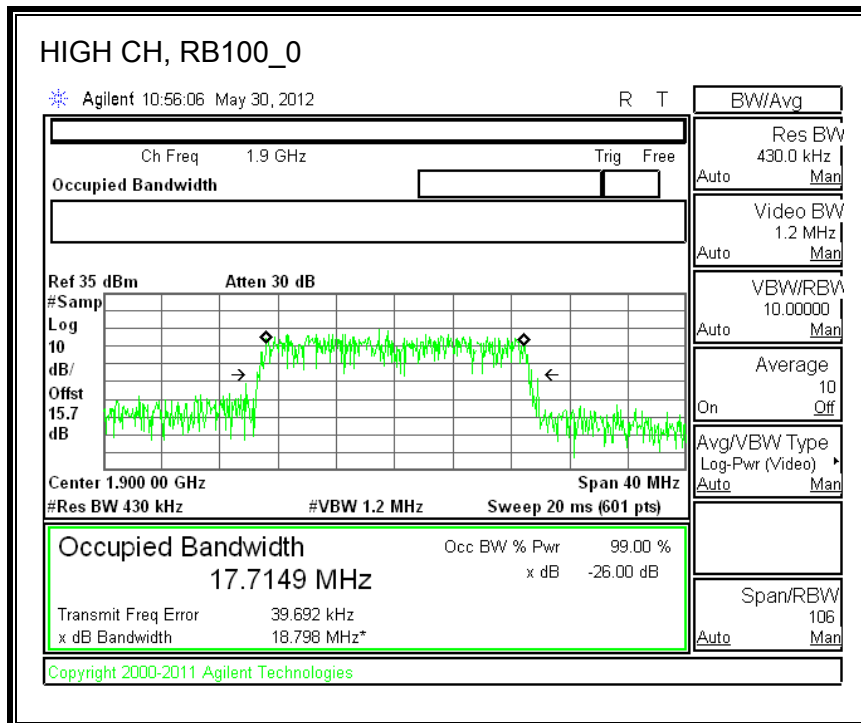
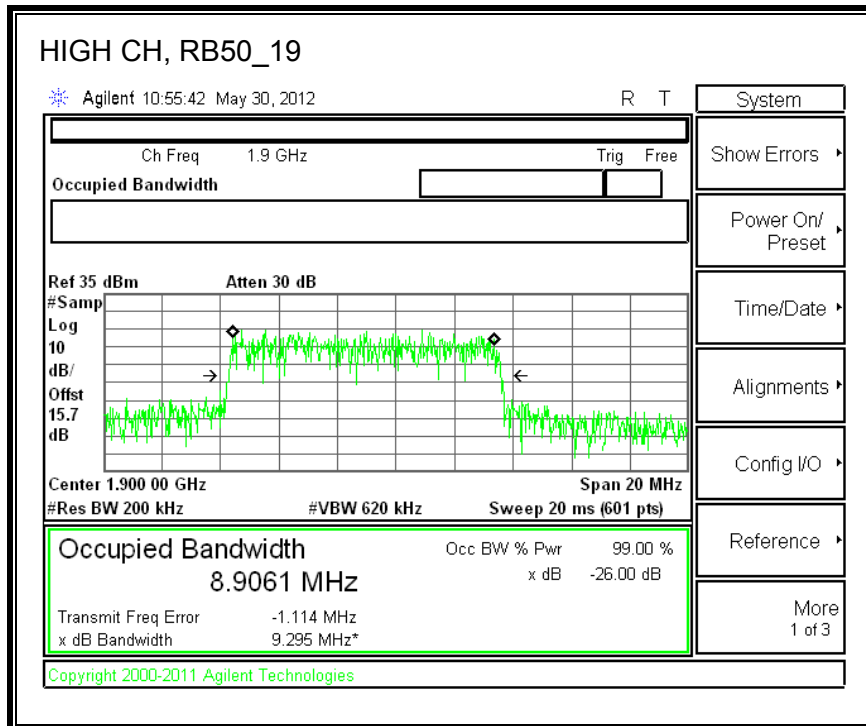


Band 2 (20.0 MHz BAND WIDTH)

LTE 16QAM

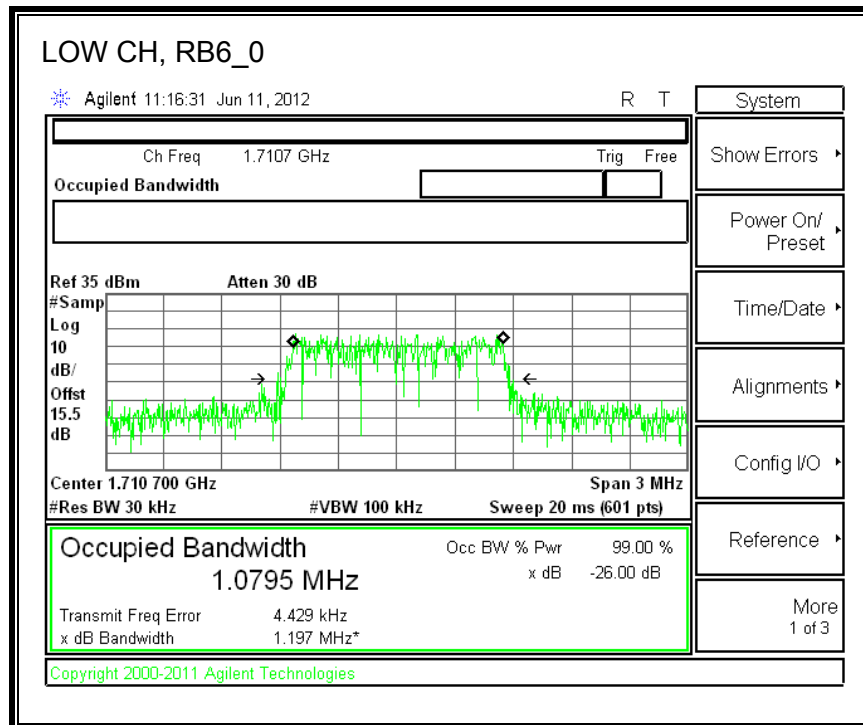
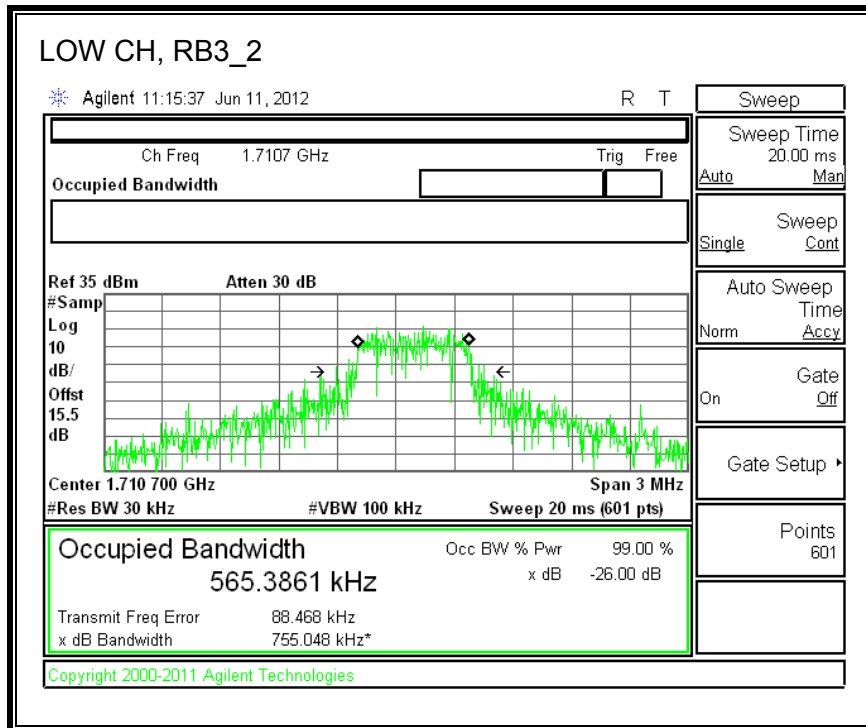


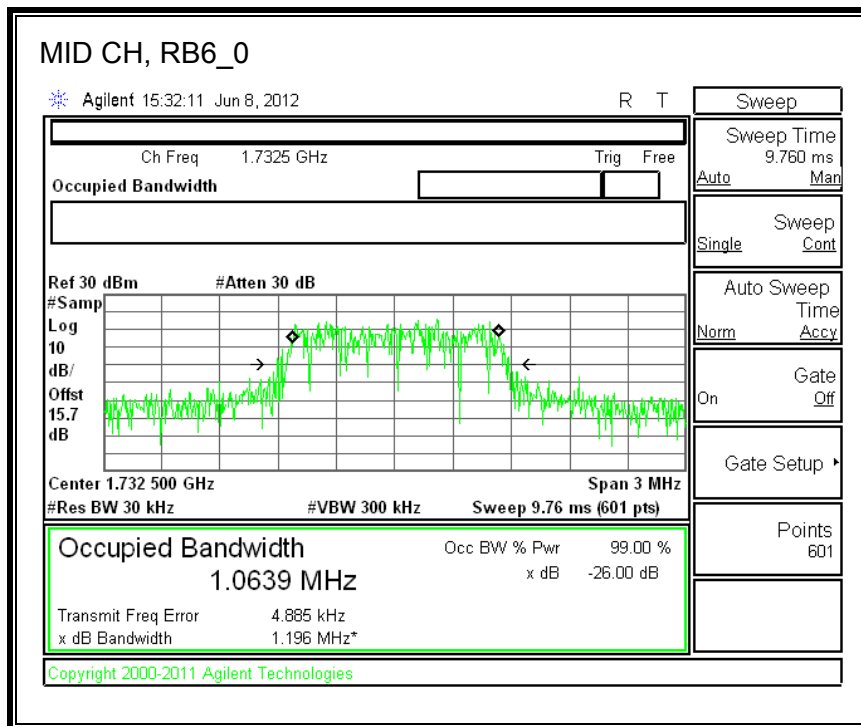
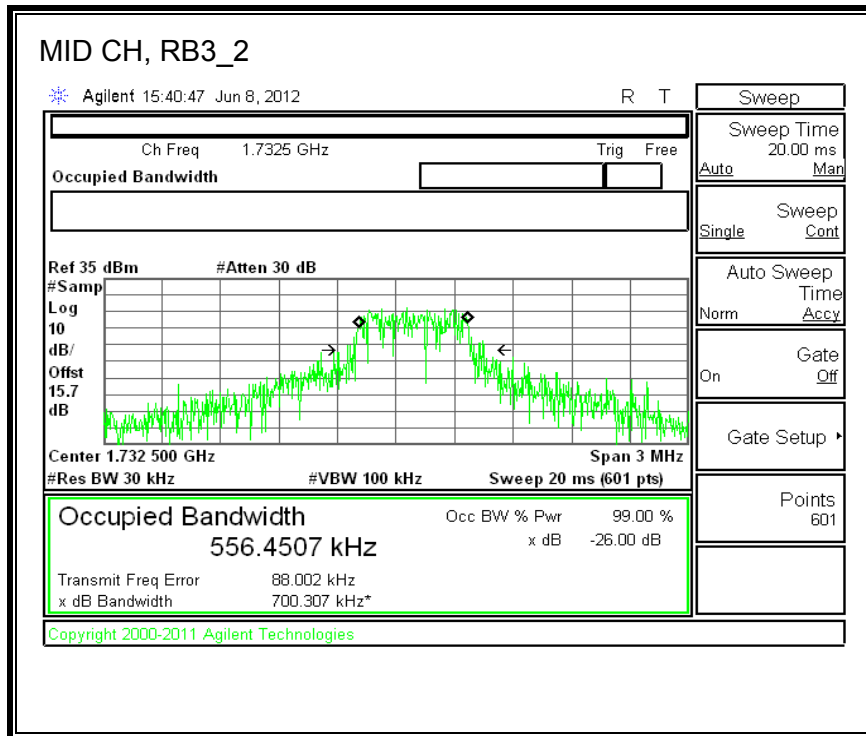


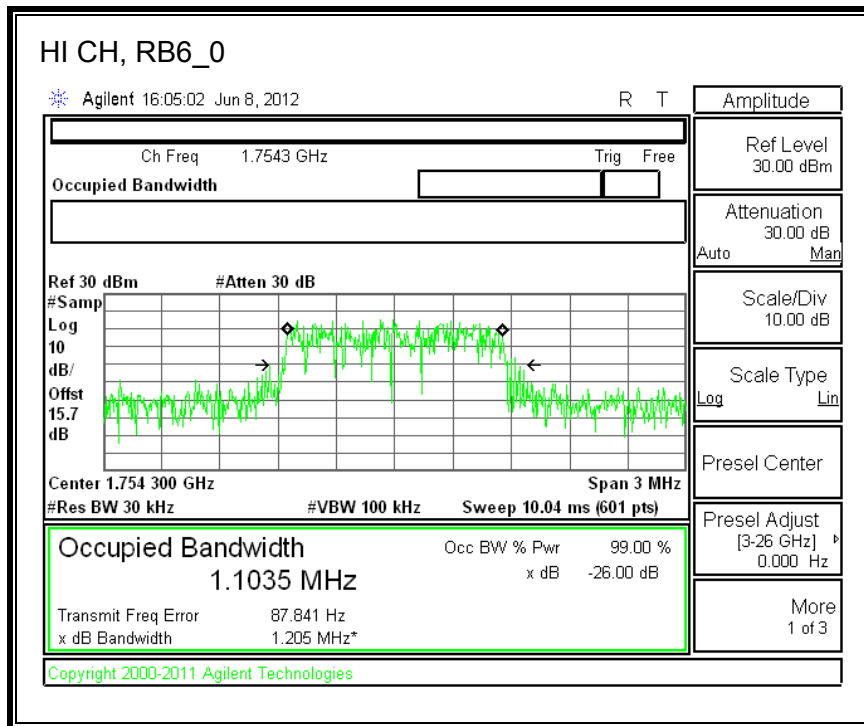
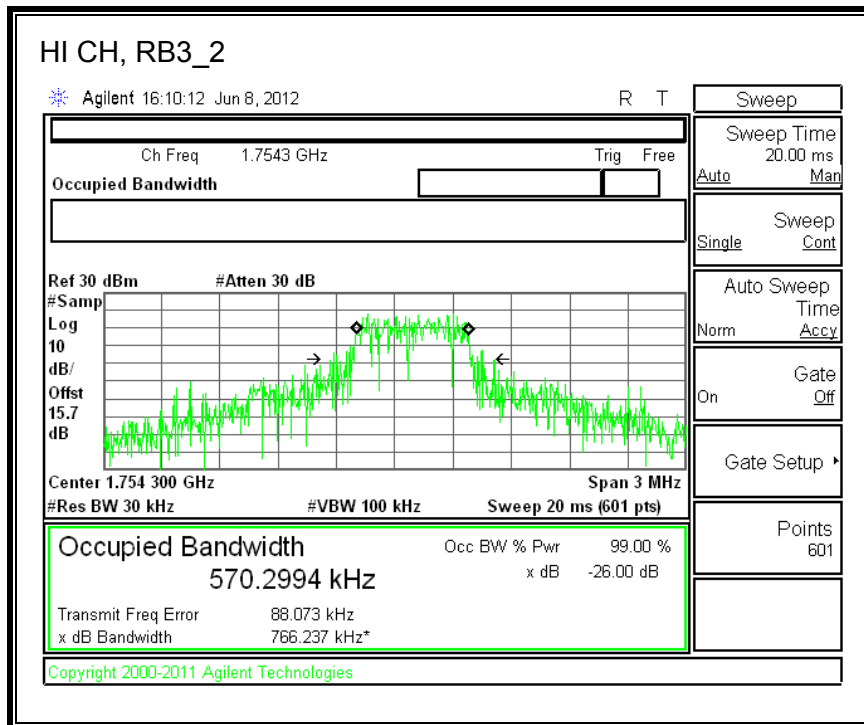


Band 4 (1.4 MHz BAND WIDTH)

LTE QPSK

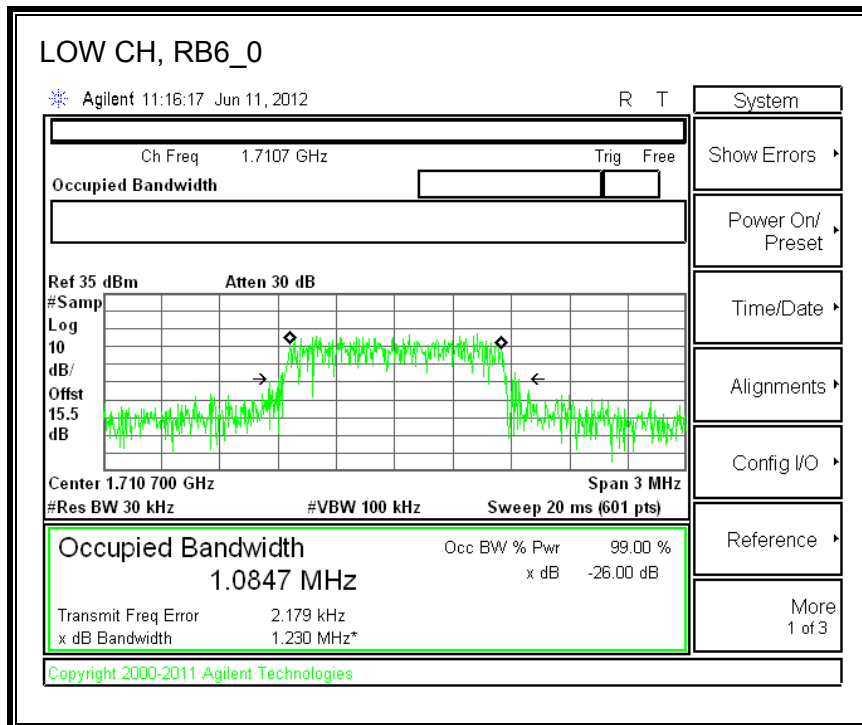
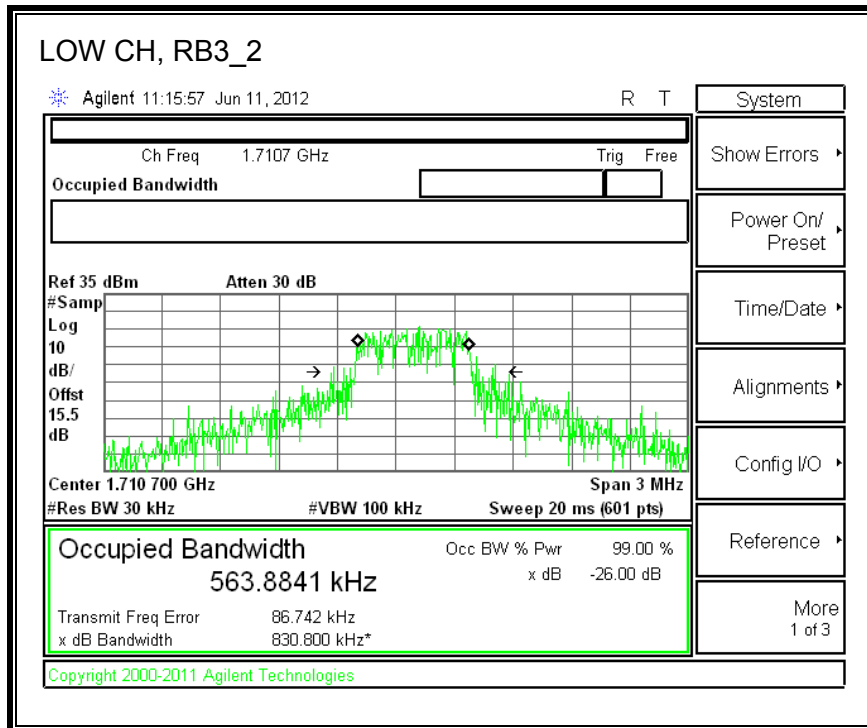


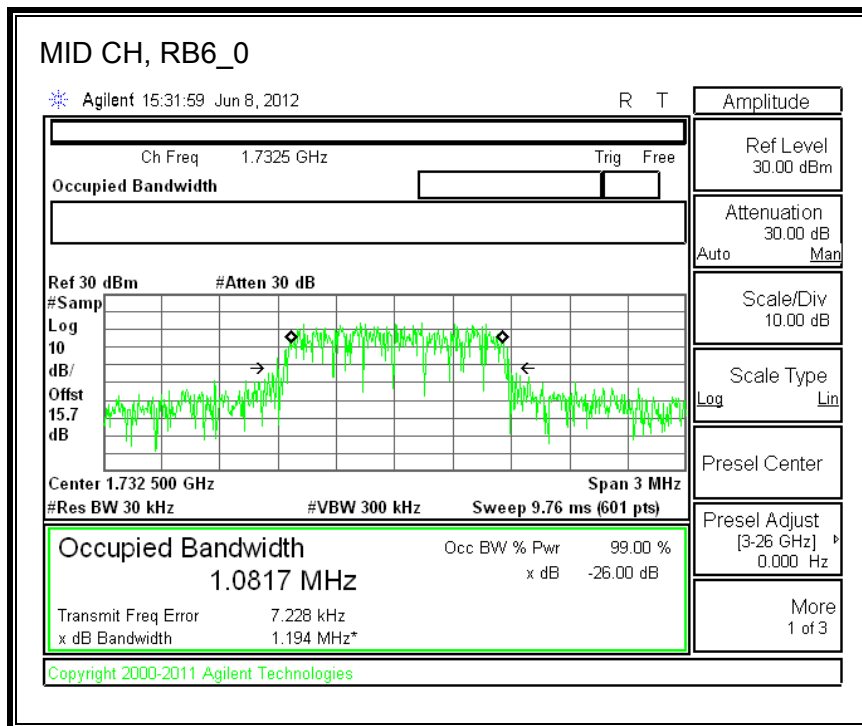
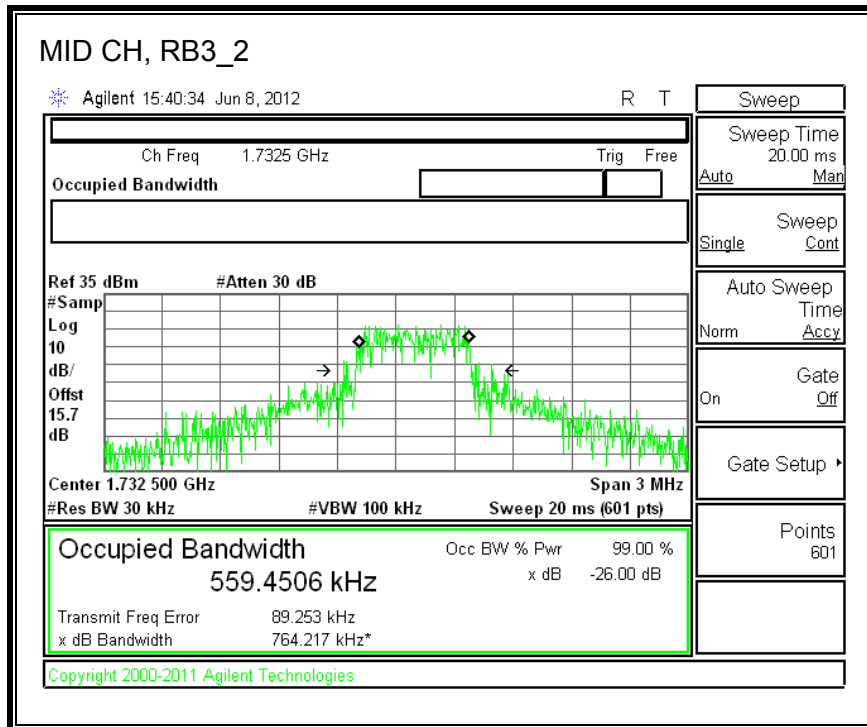


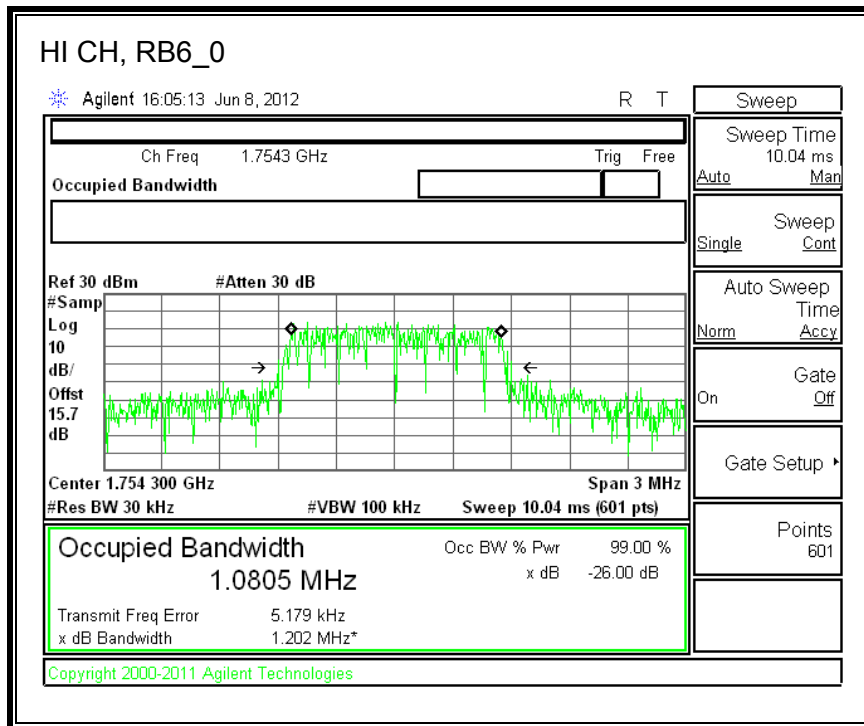
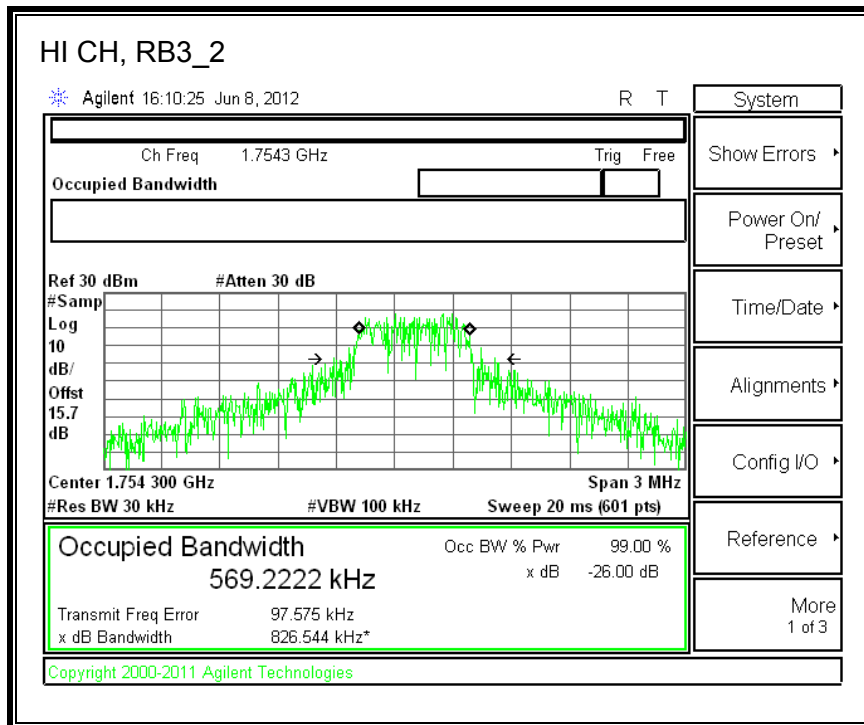


Band 4 (1.4 MHz BAND WIDTH)

LTE 16QAM

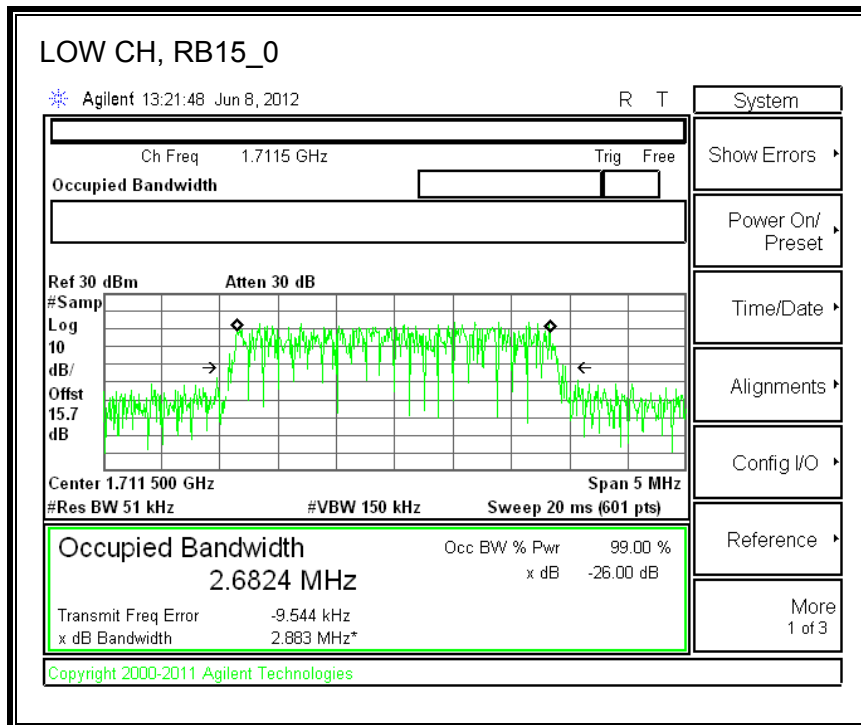
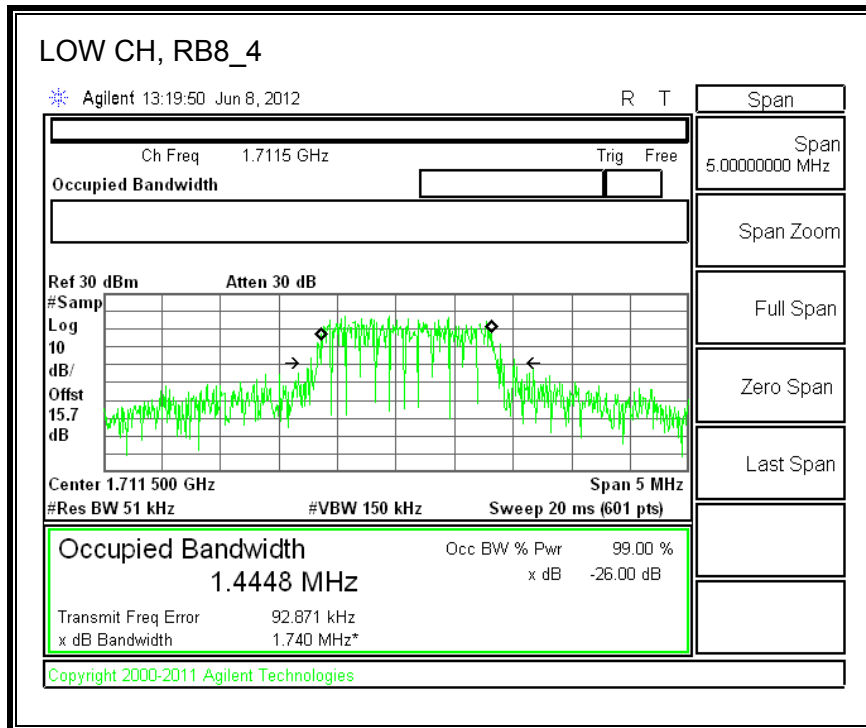


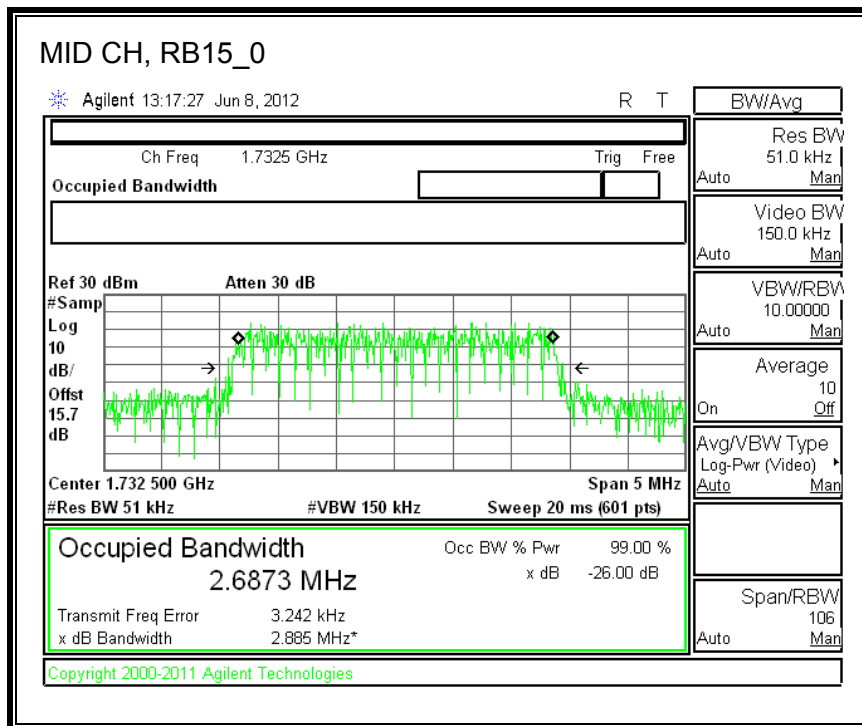
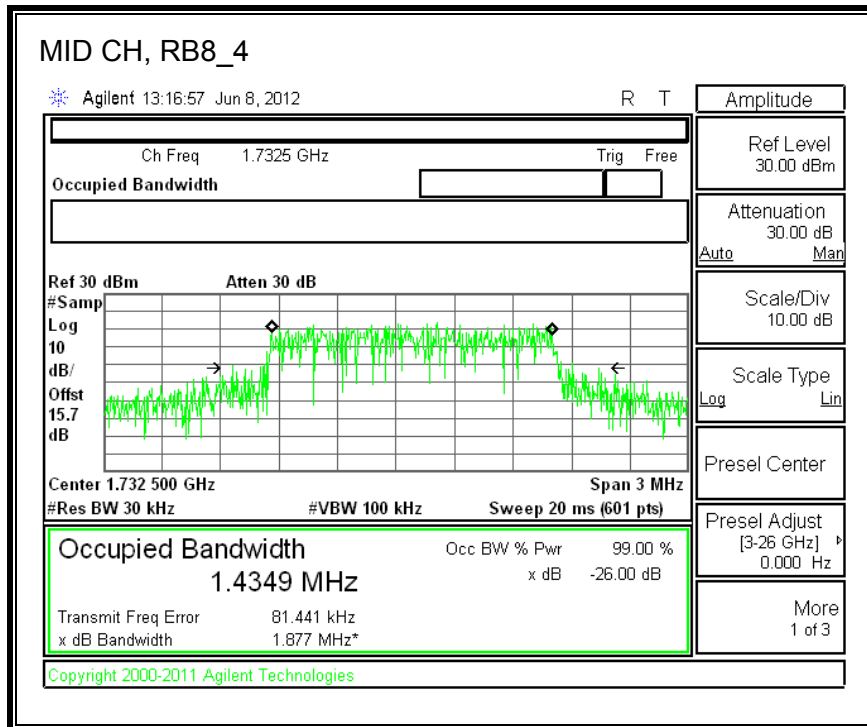


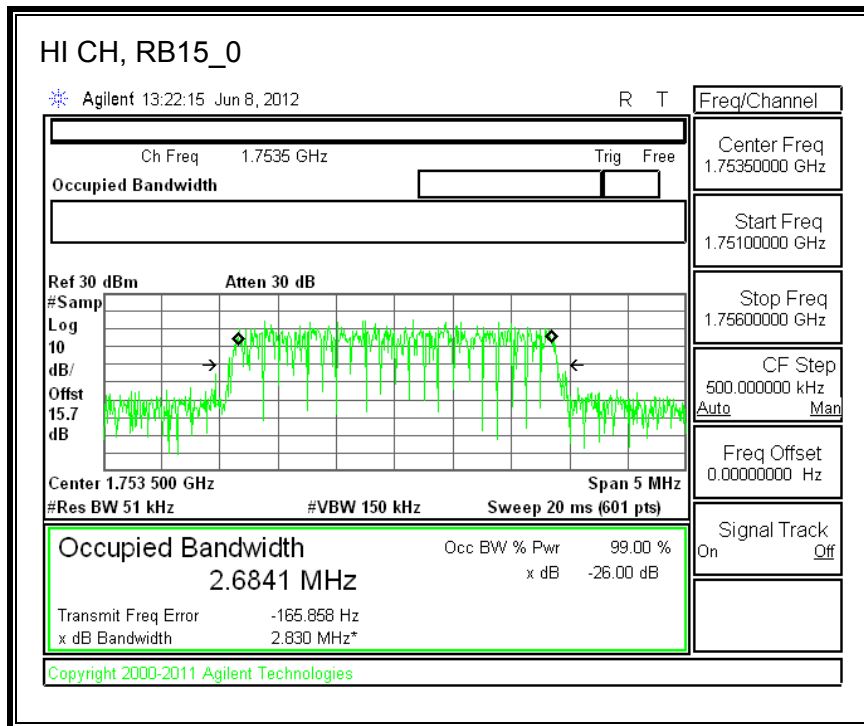
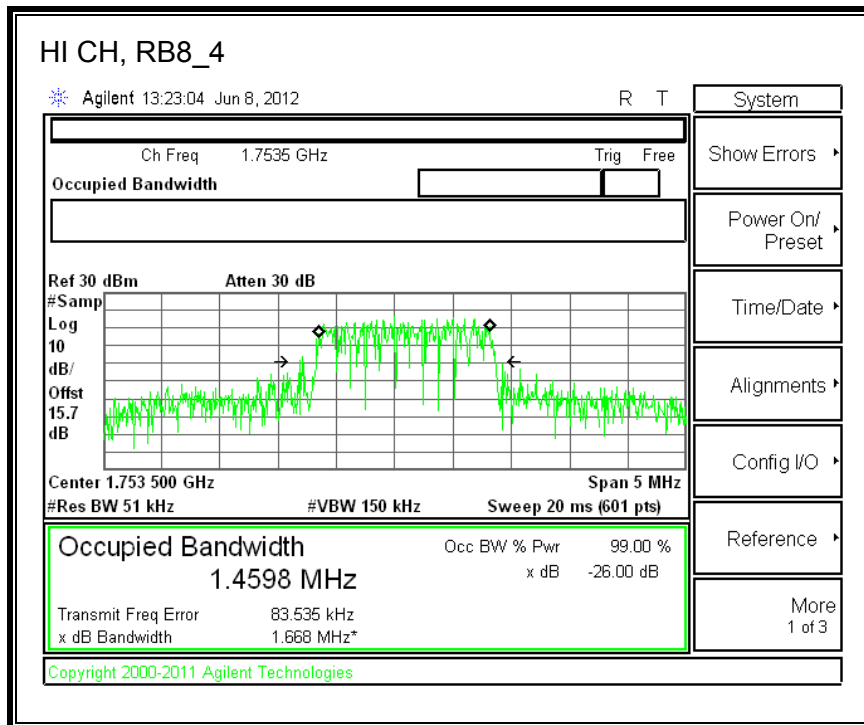


Band 4 (3.0 MHz BAND WIDTH)

LTE QPSK

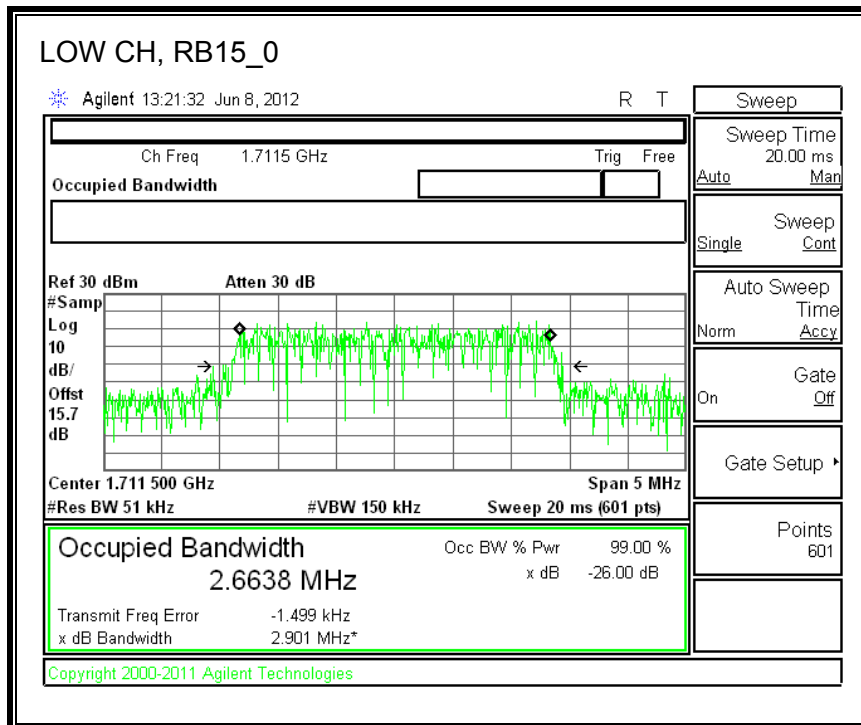
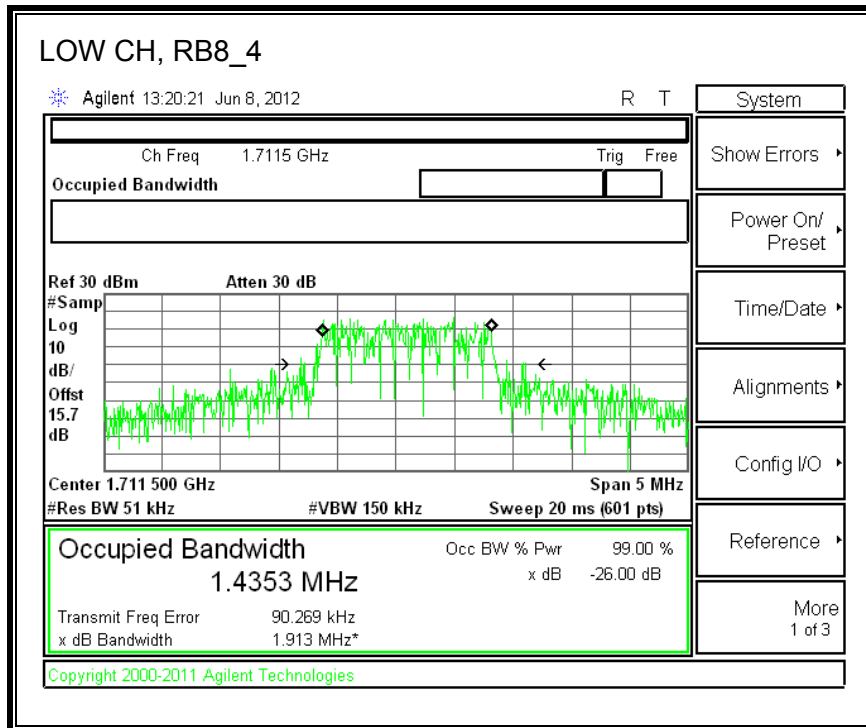


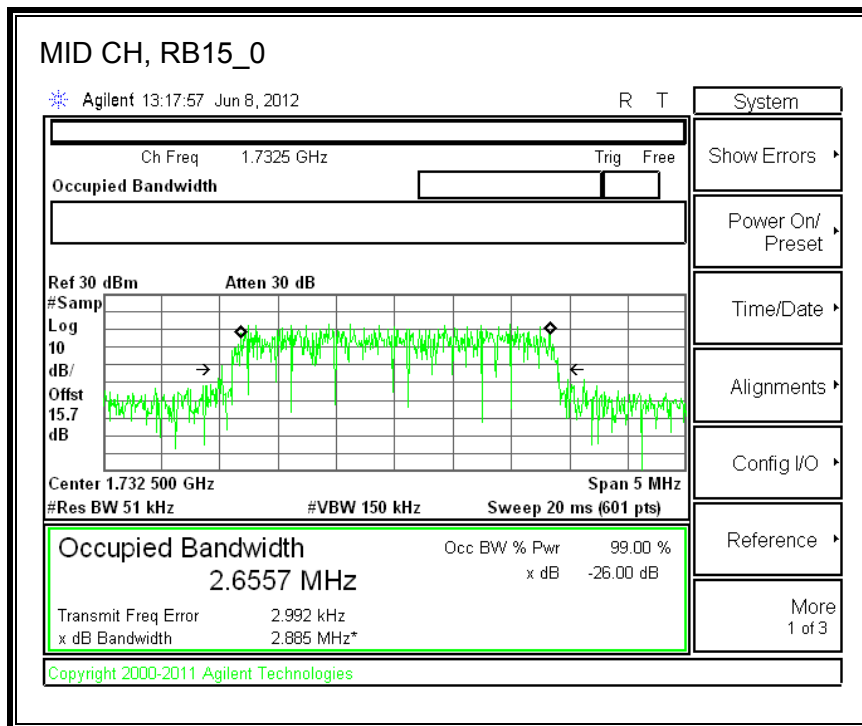
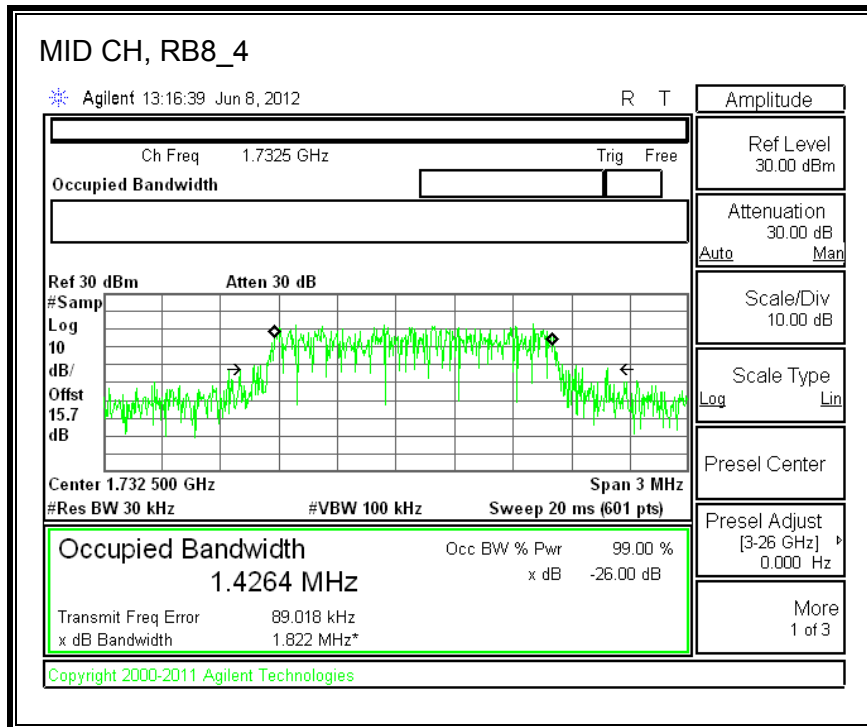


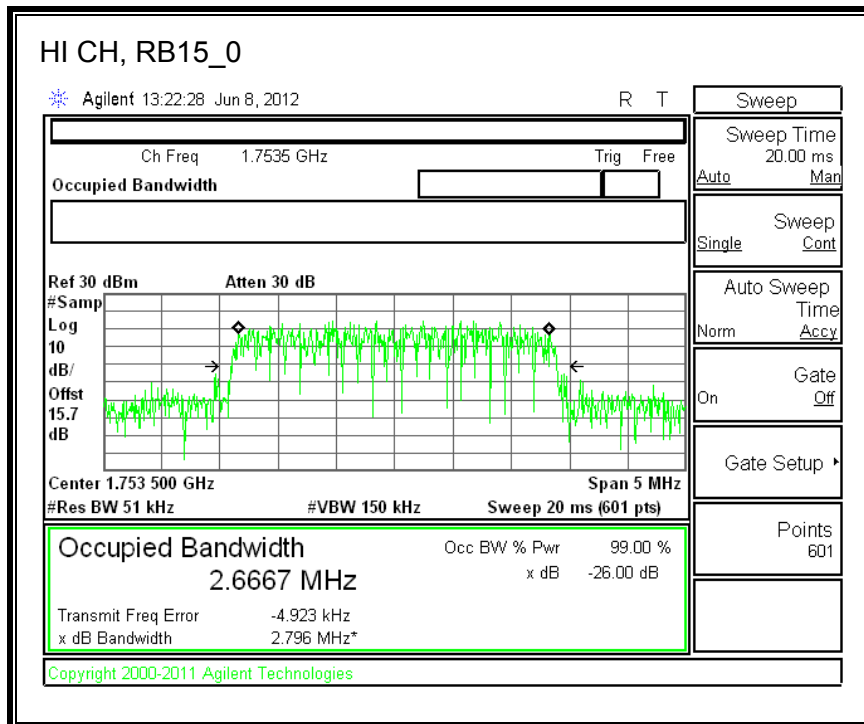
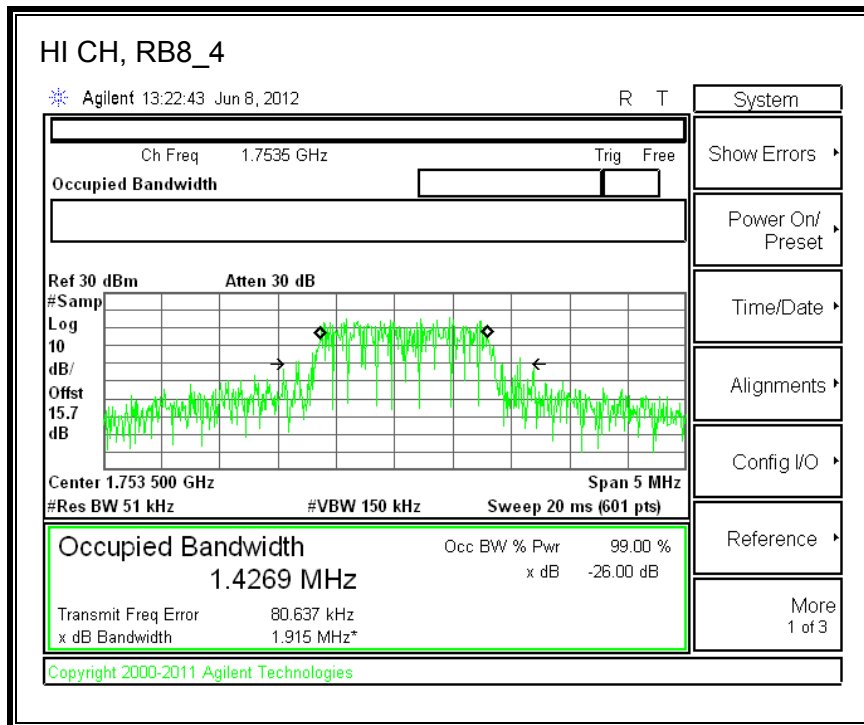


Band 4 (3.0 MHz BAND WIDTH)

LTE 16QAM

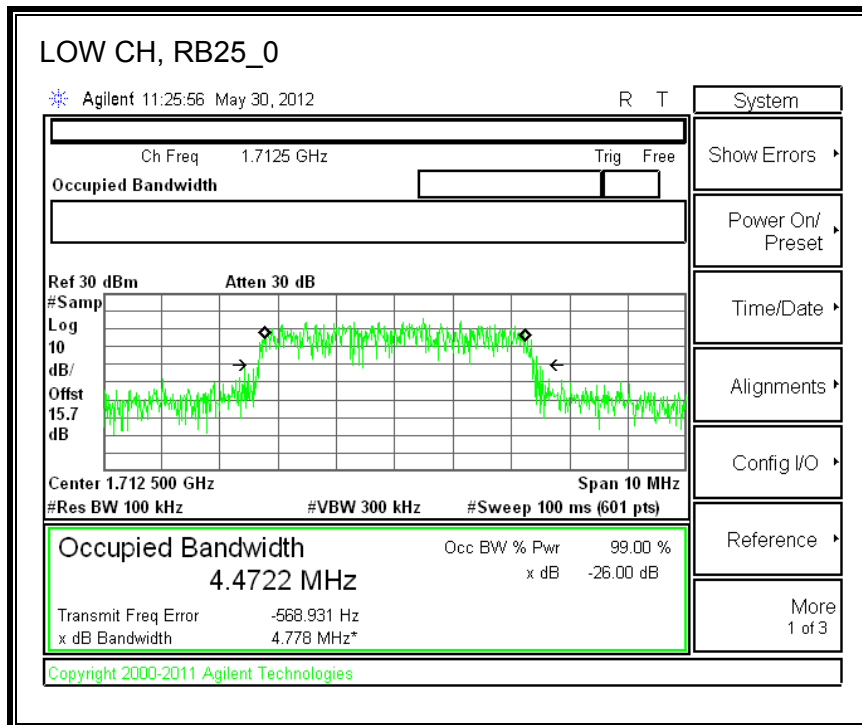
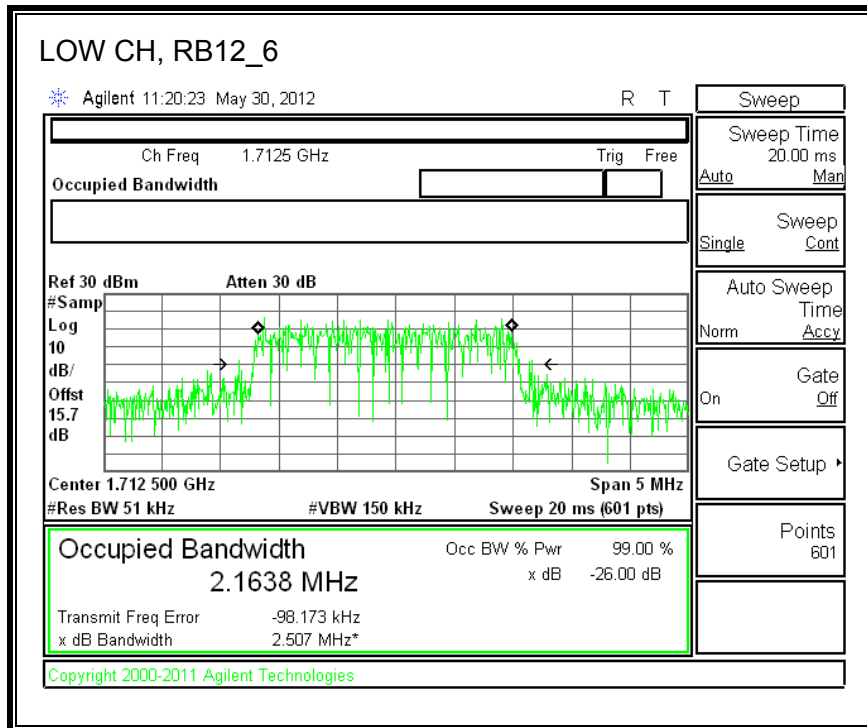


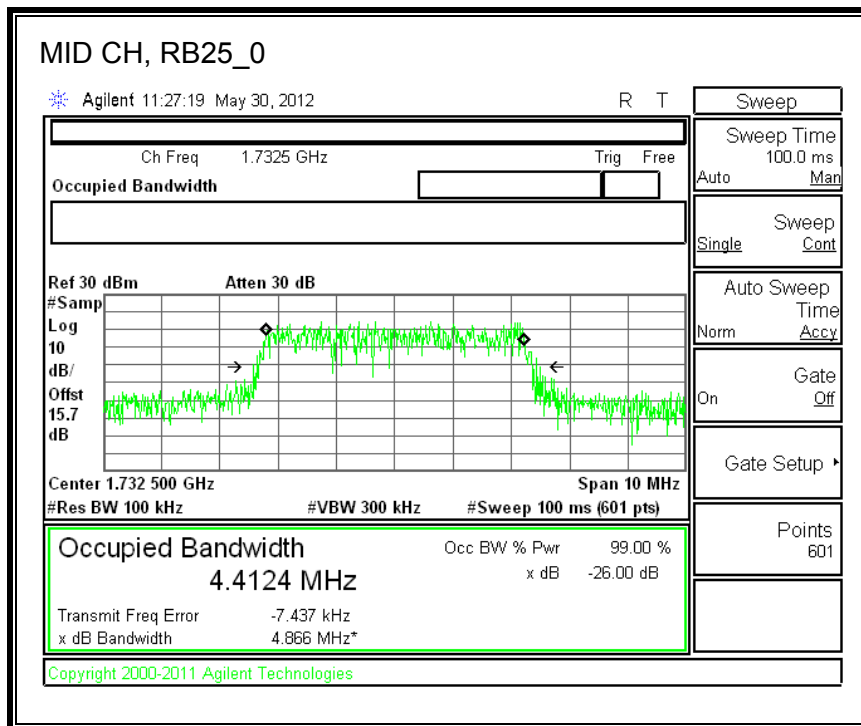
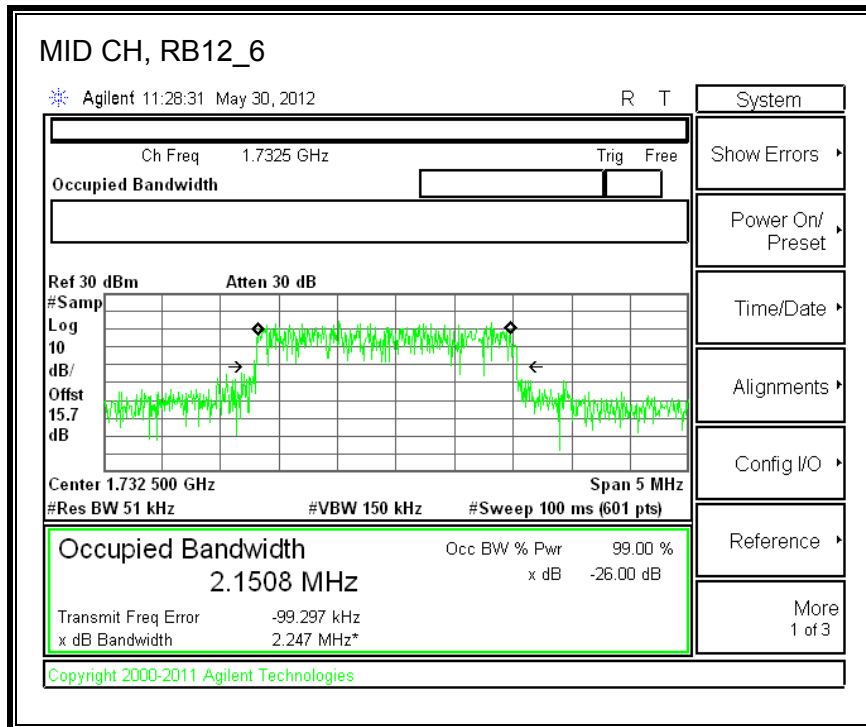


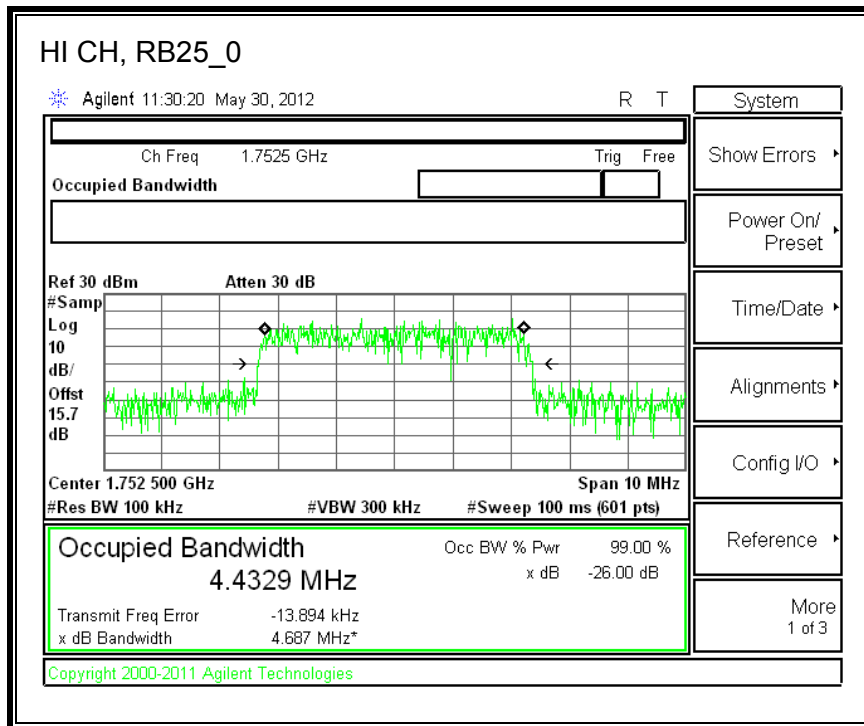
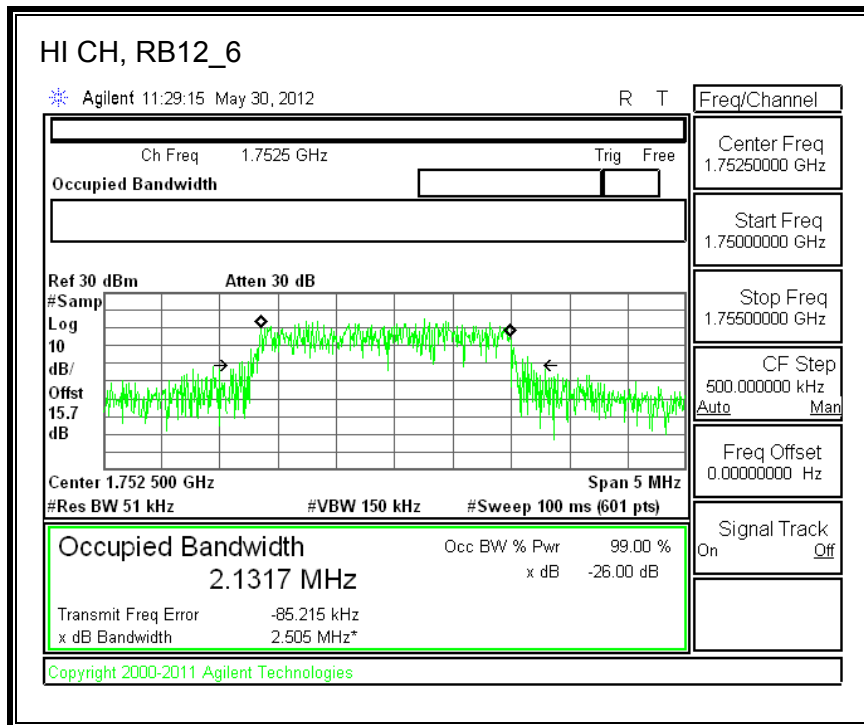


Band 4 (5.0 MHz BAND WIDTH)

LTE QPSK

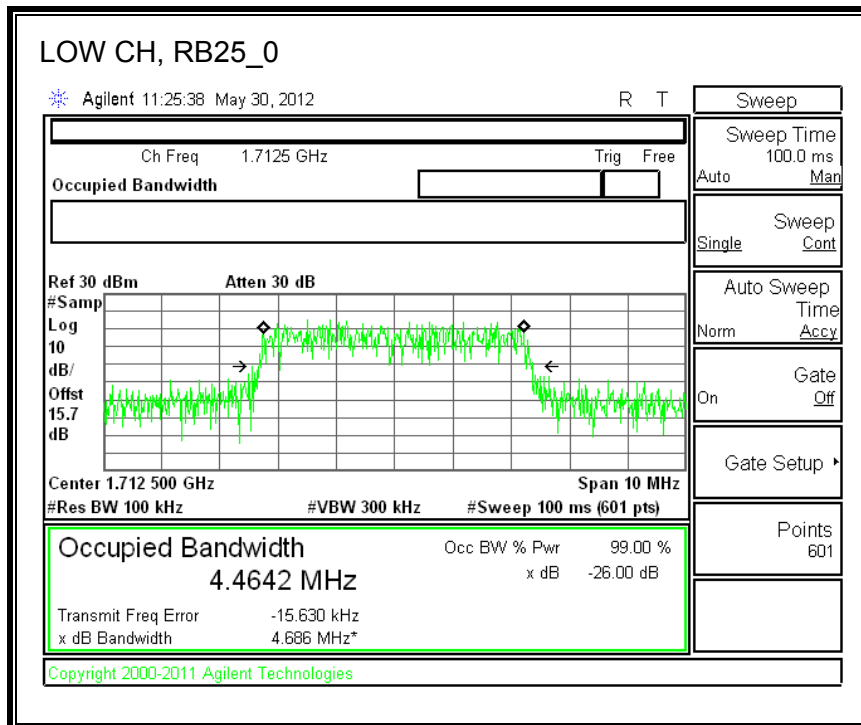
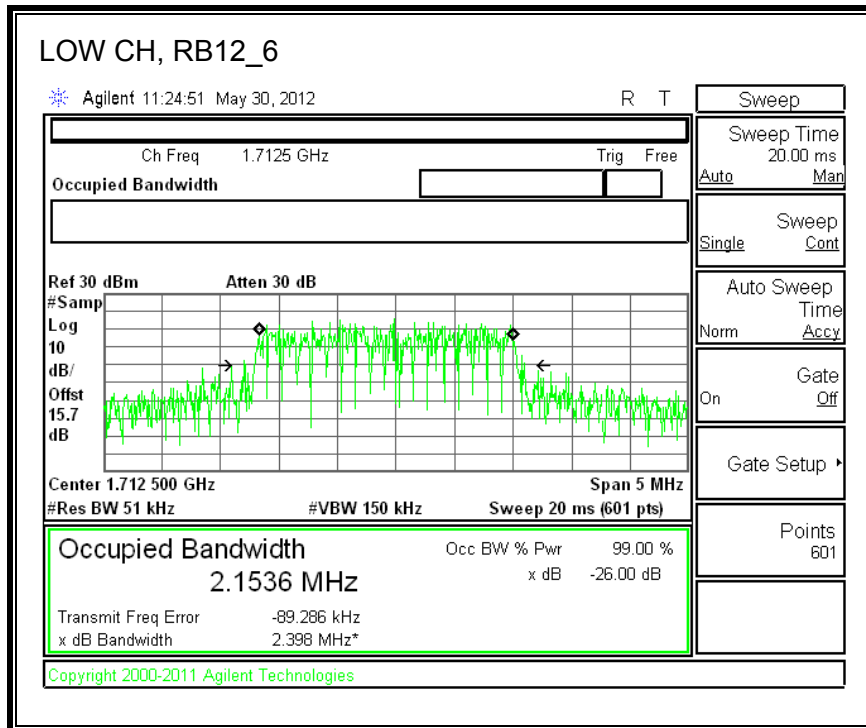


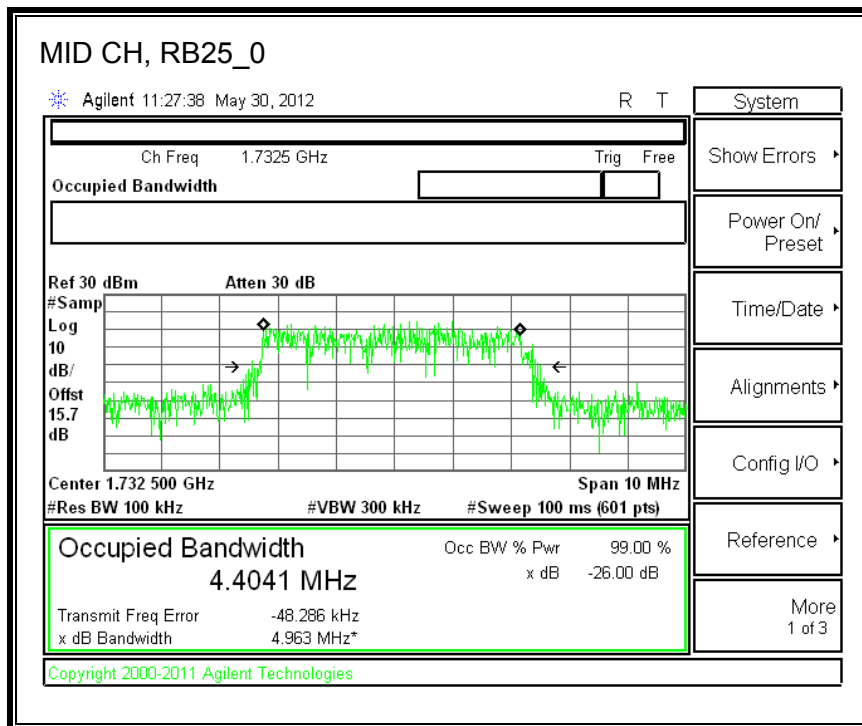
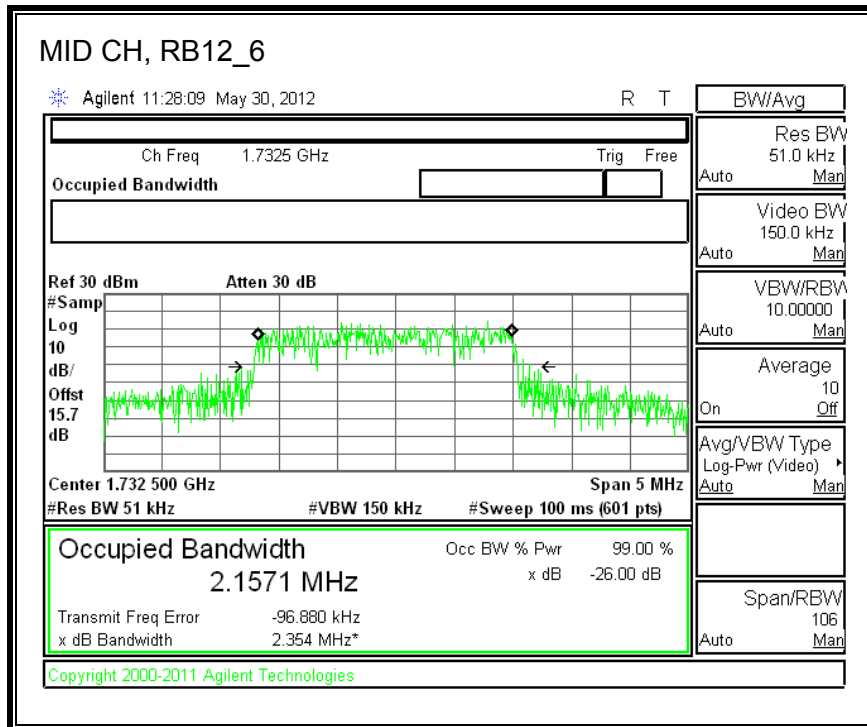


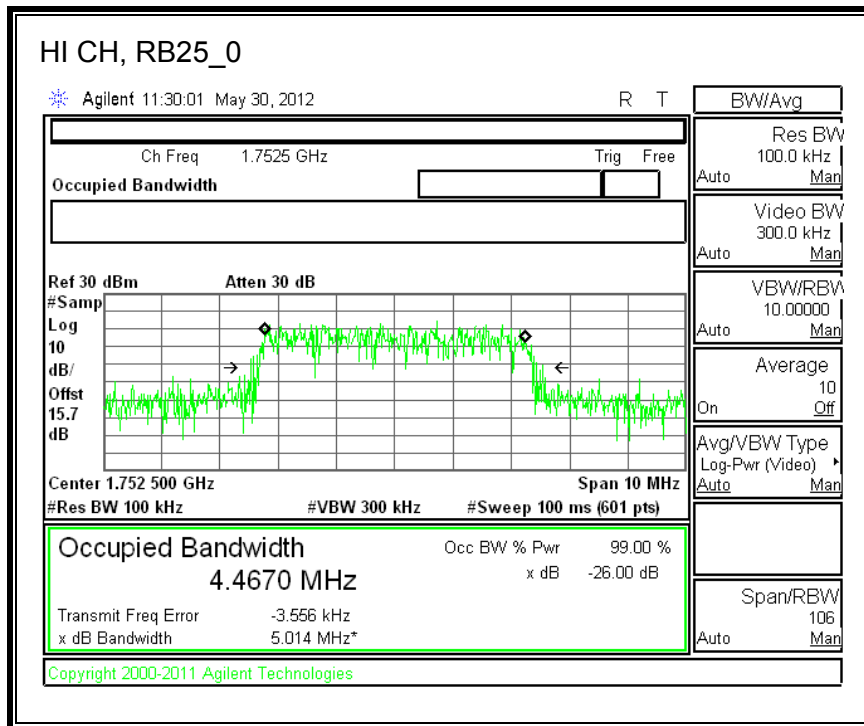
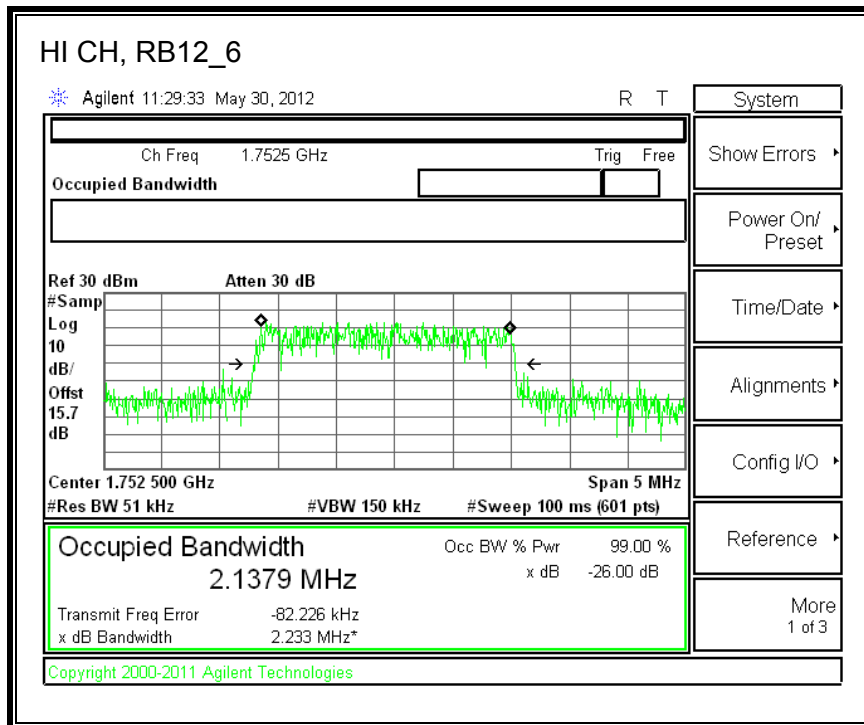


Band 4 (5 MHz BAND WIDTH)

LTE 16QAM

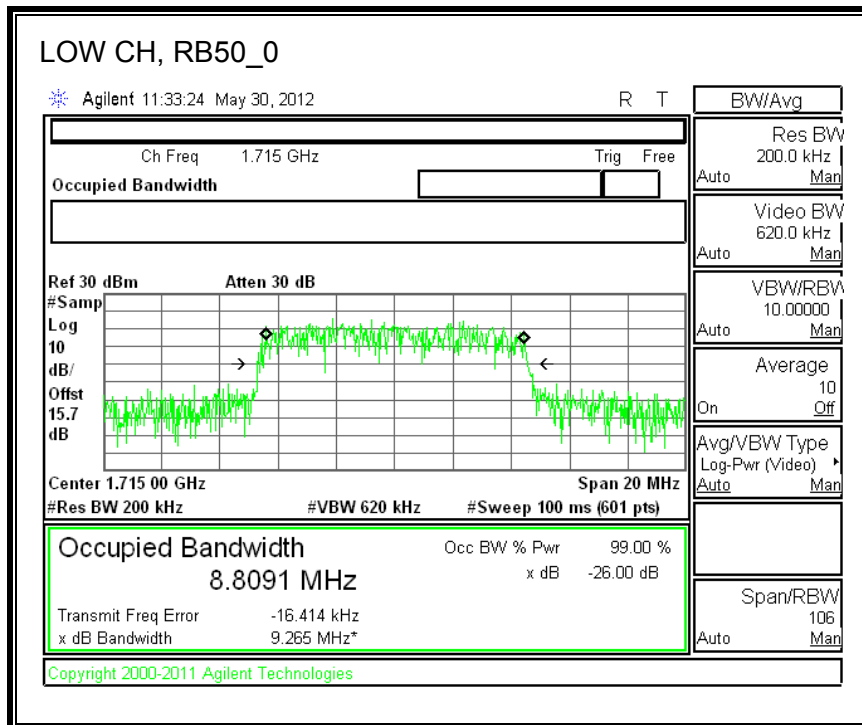
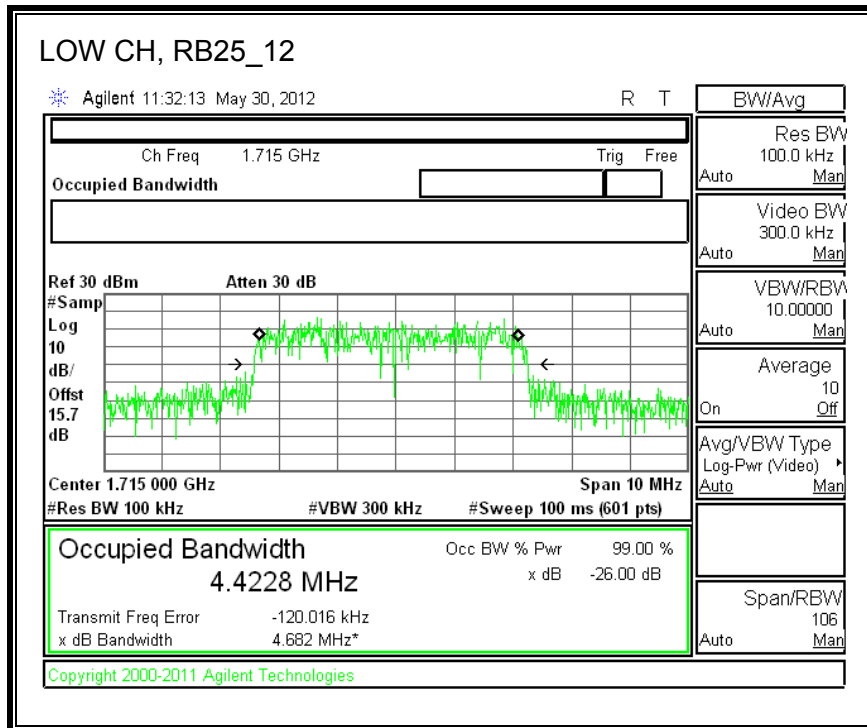


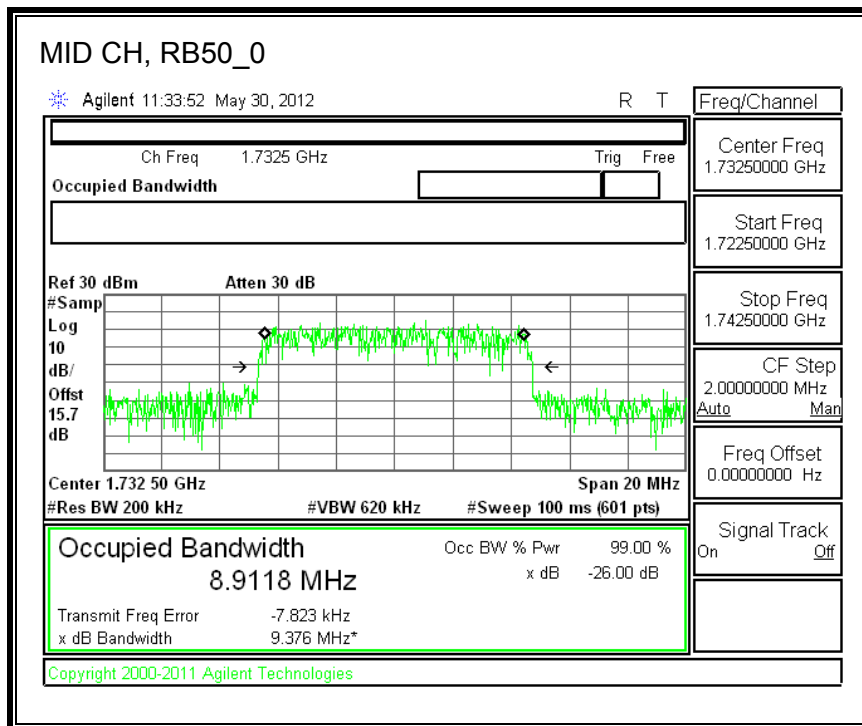
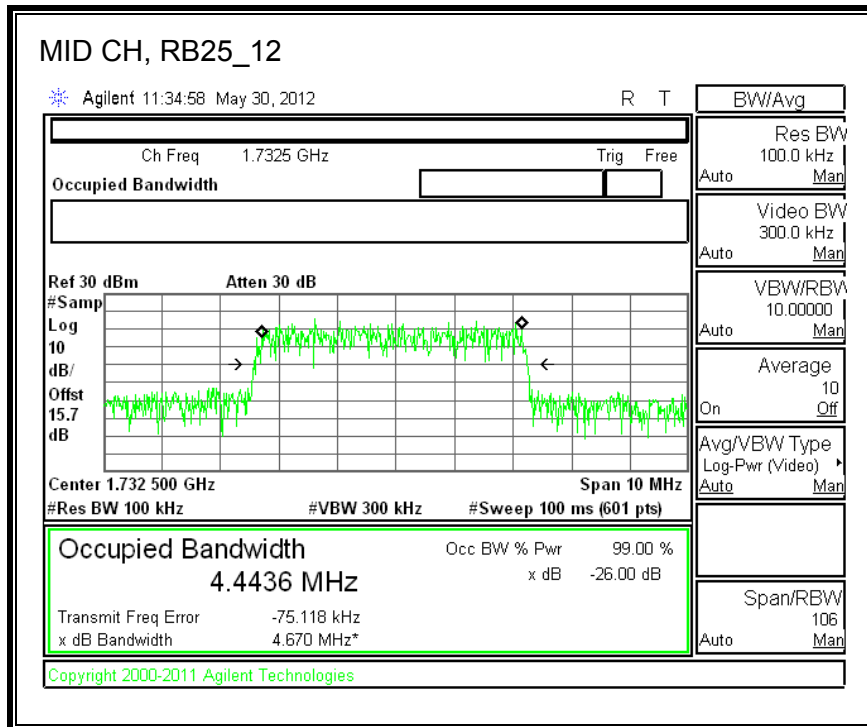


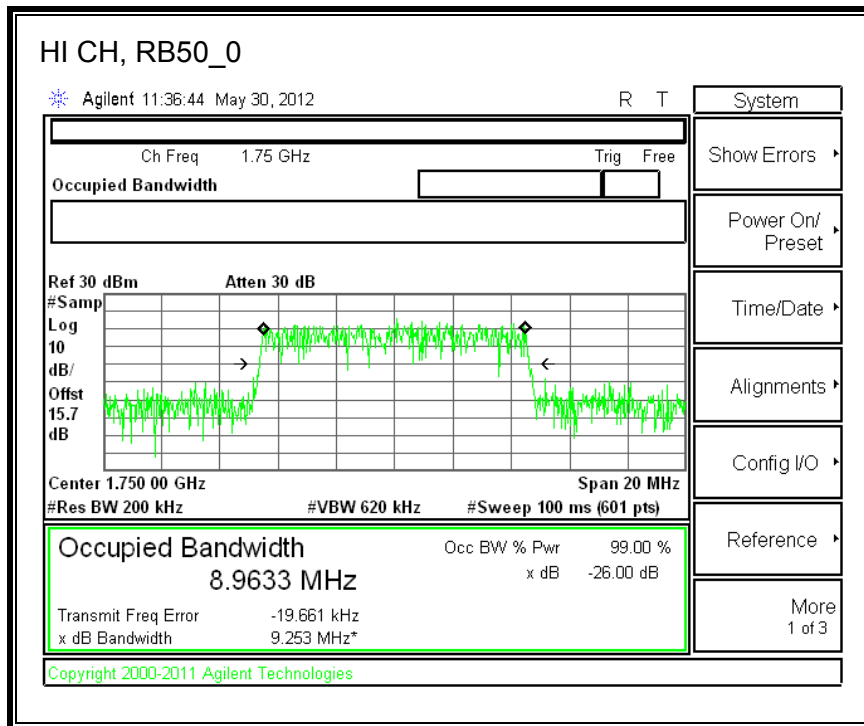
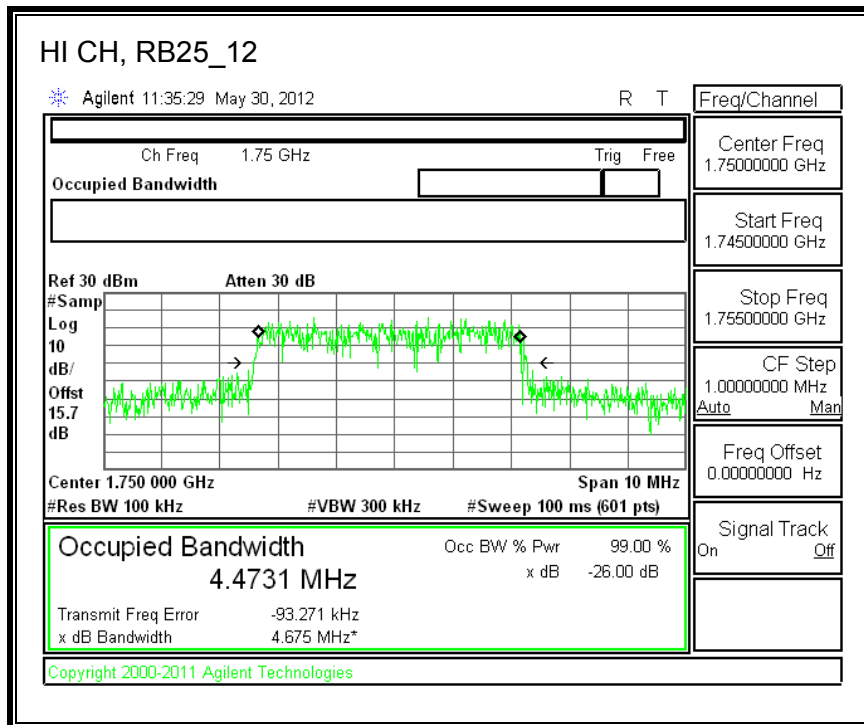


Band 4 (10.0 MHz BAND WIDTH)

LTE QPSK

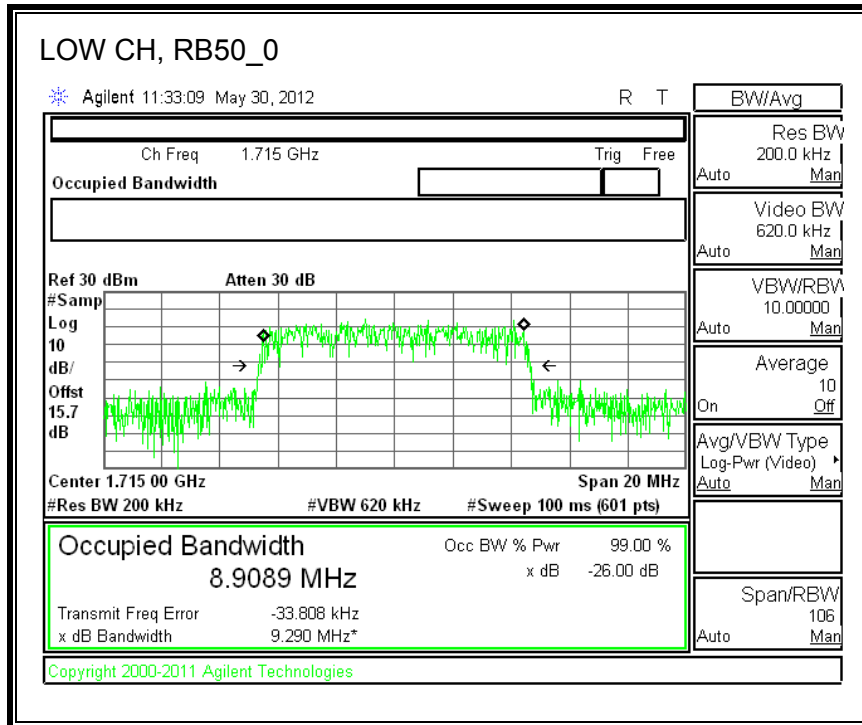
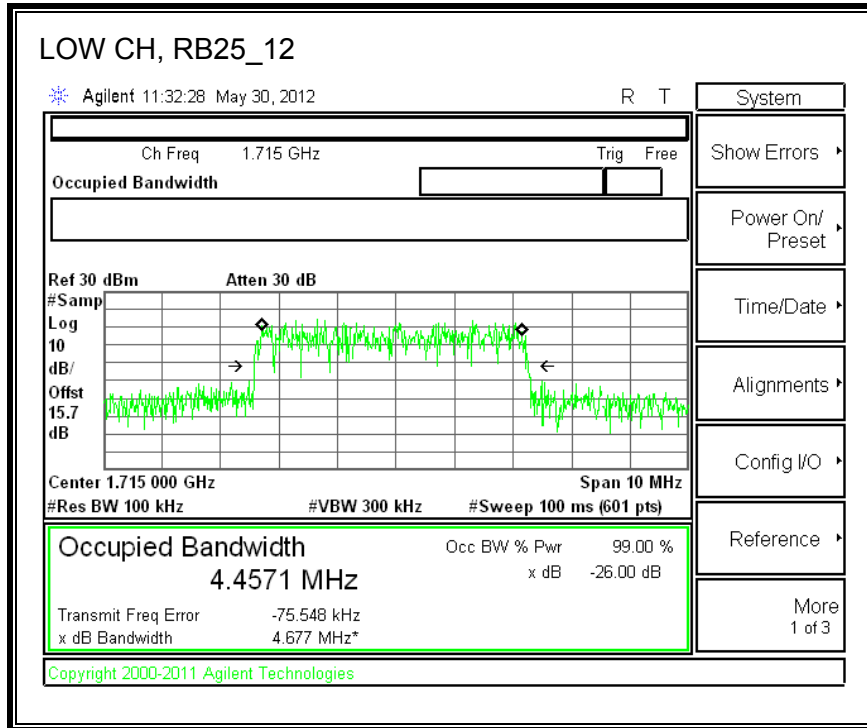


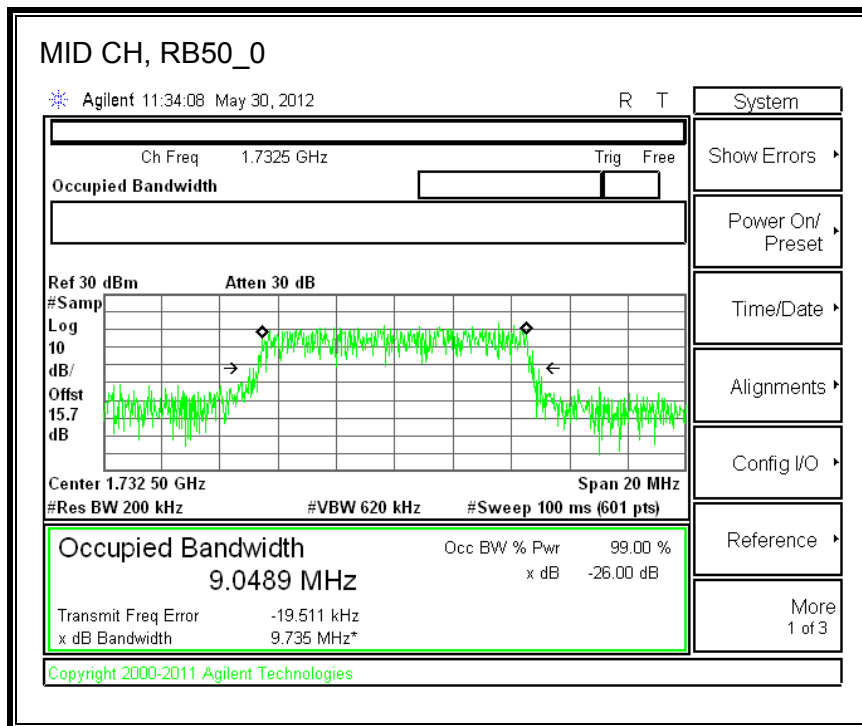
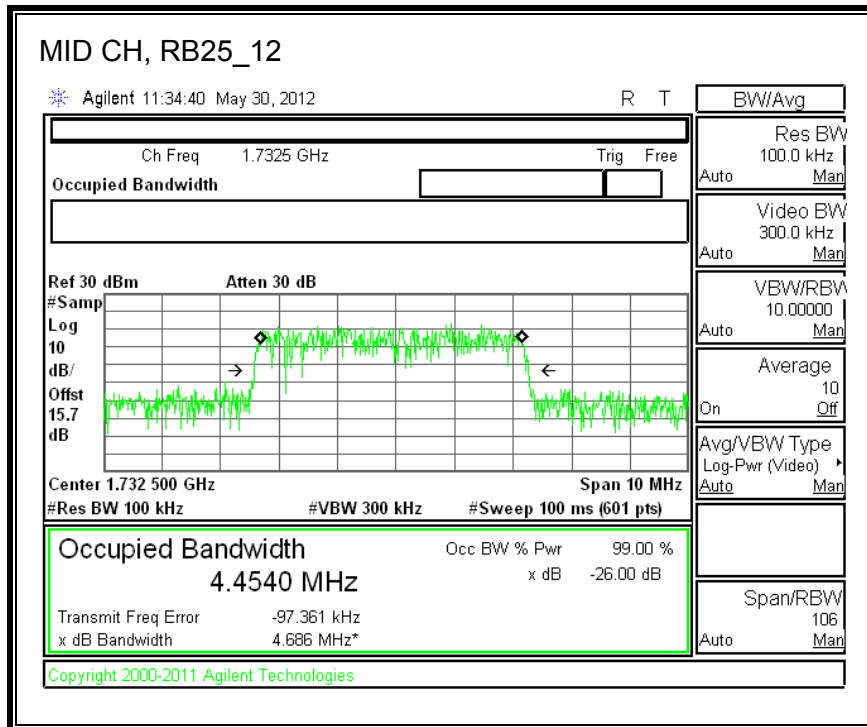


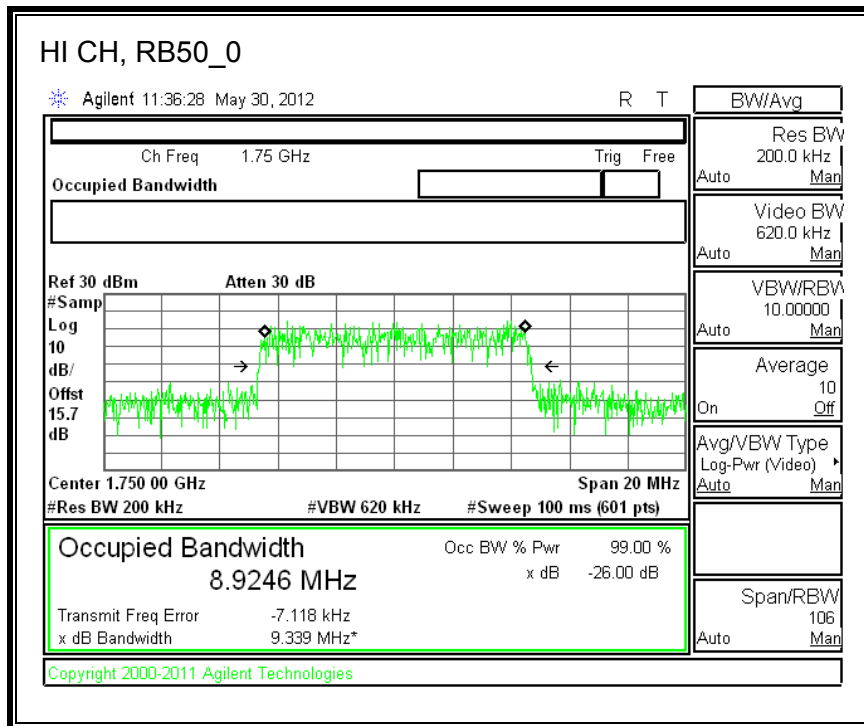
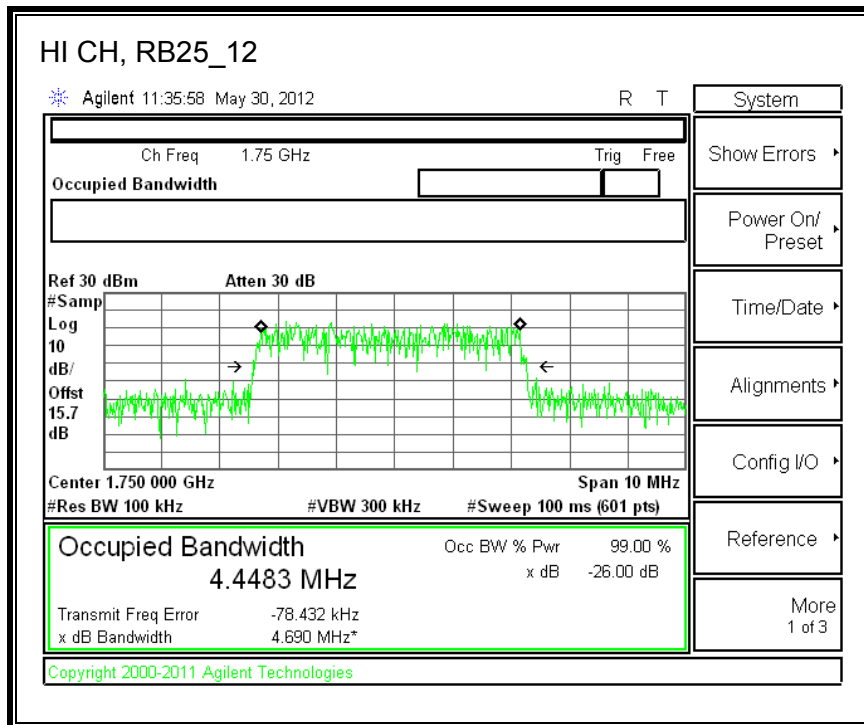


Band 4 (10 MHz BAND WIDTH)

LTE 16QAM

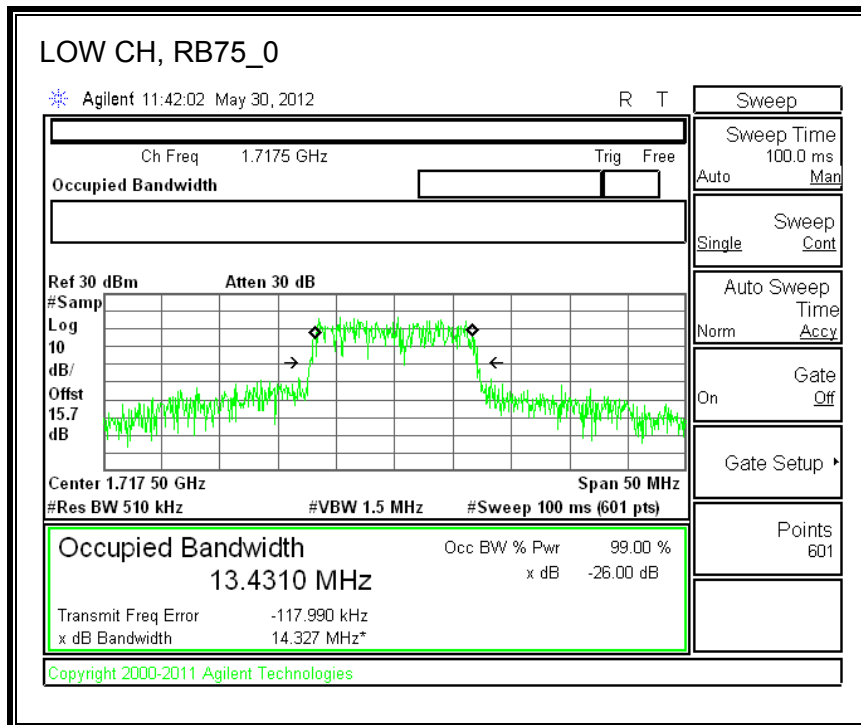
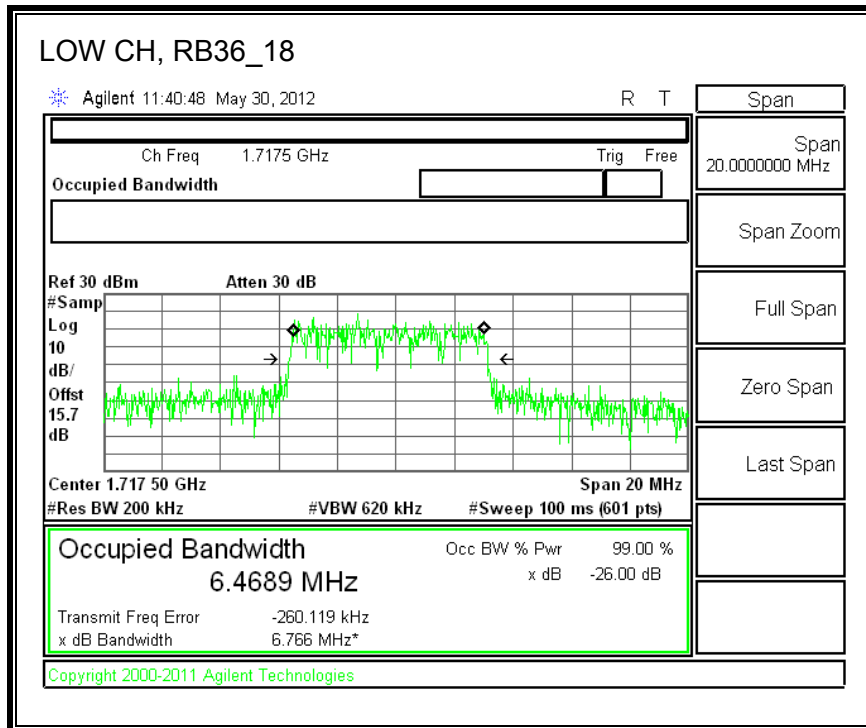


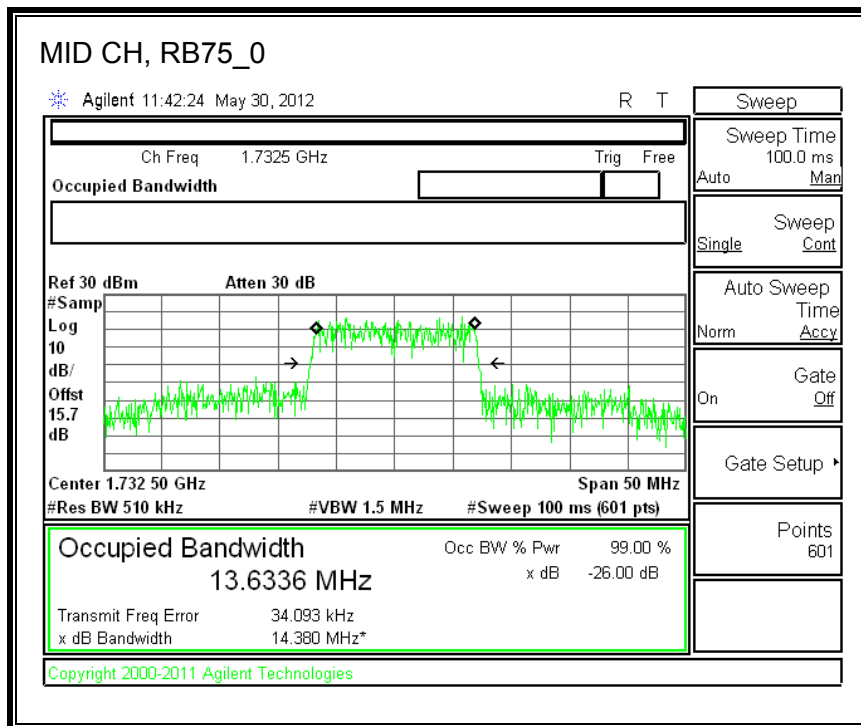
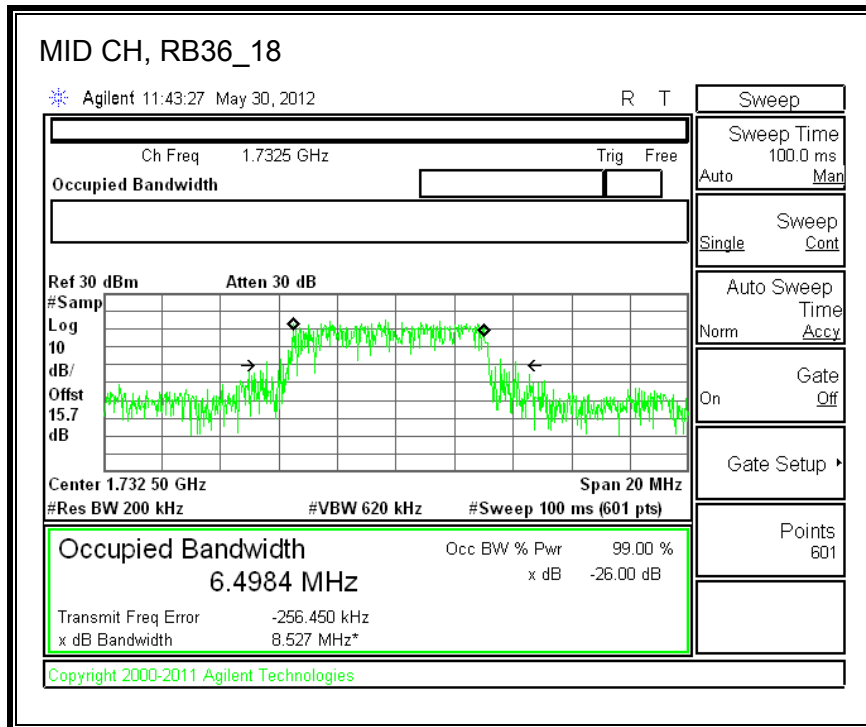


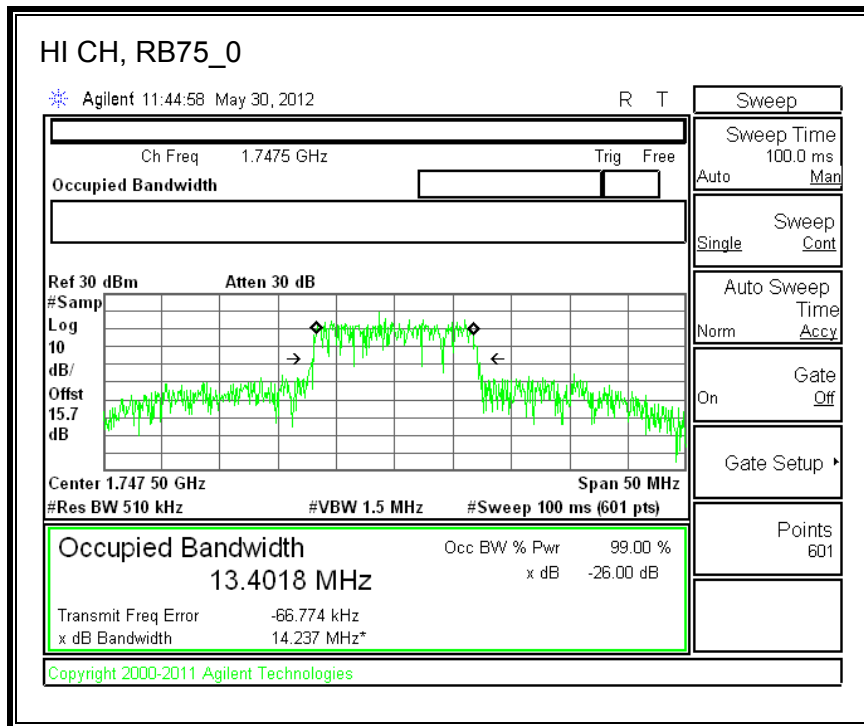
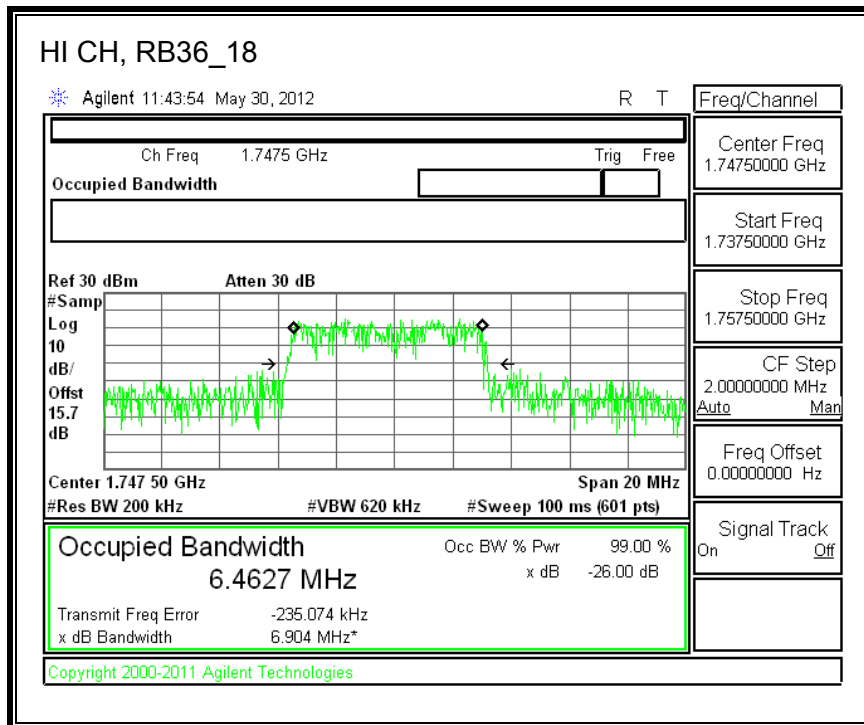


Band 4 (15.0 MHz BAND WIDTH)

LTE QPSK

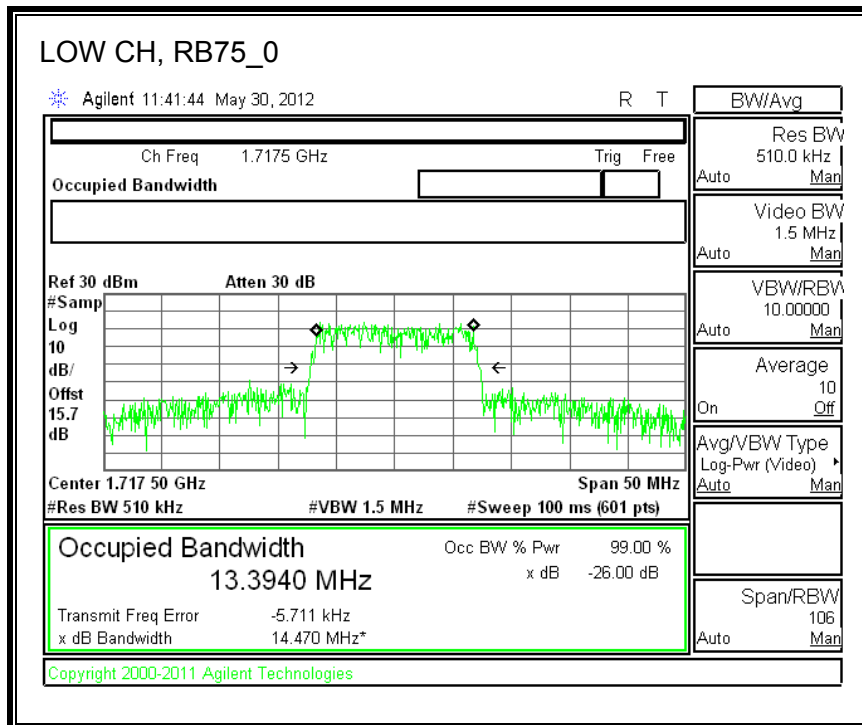
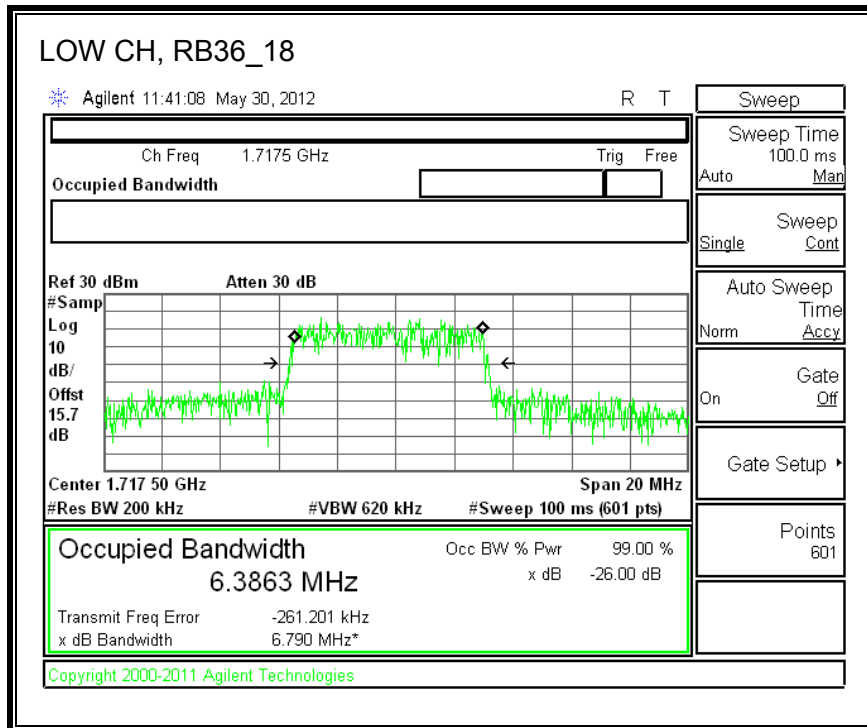


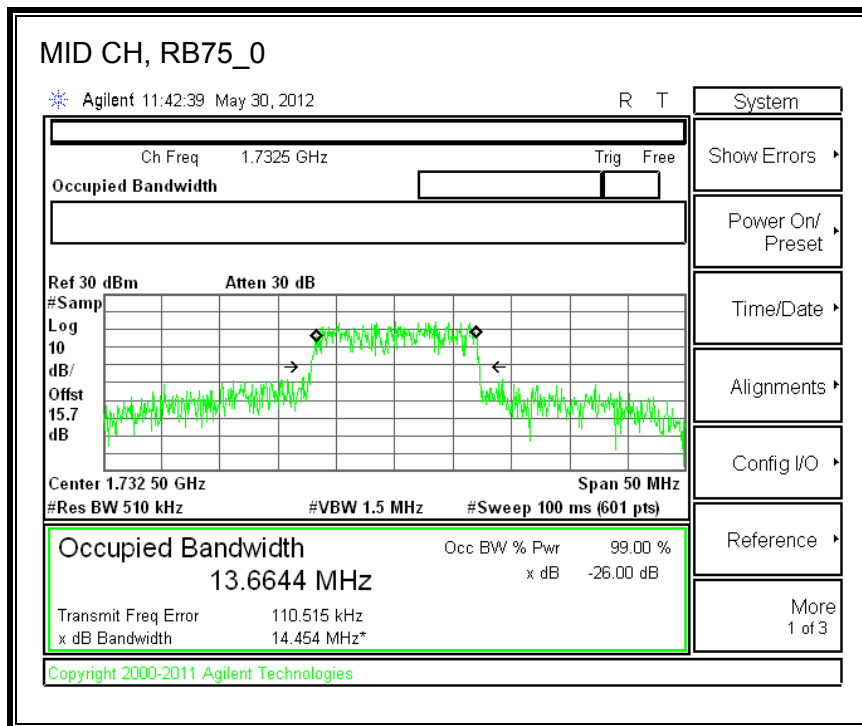
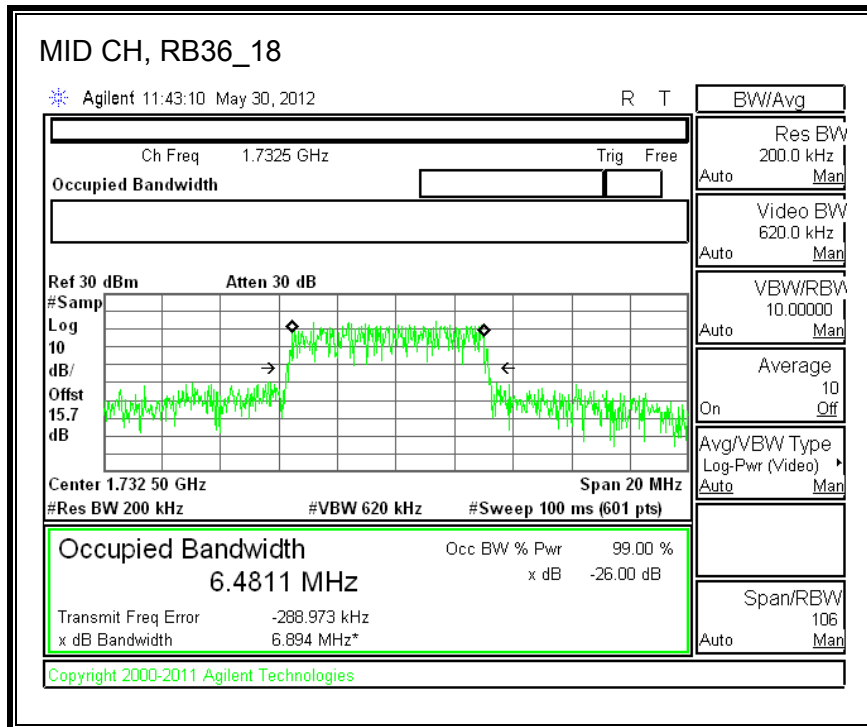


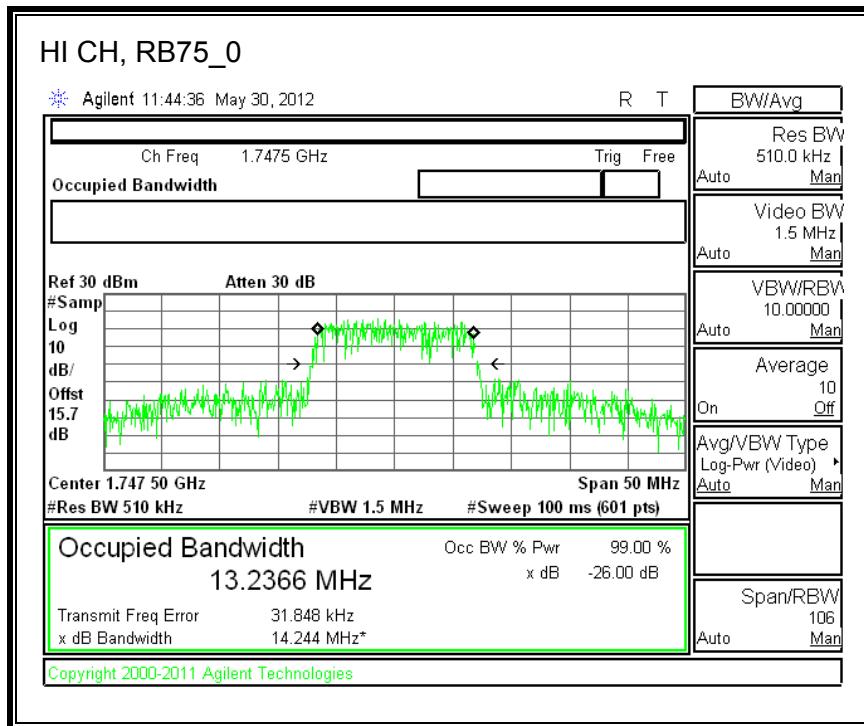
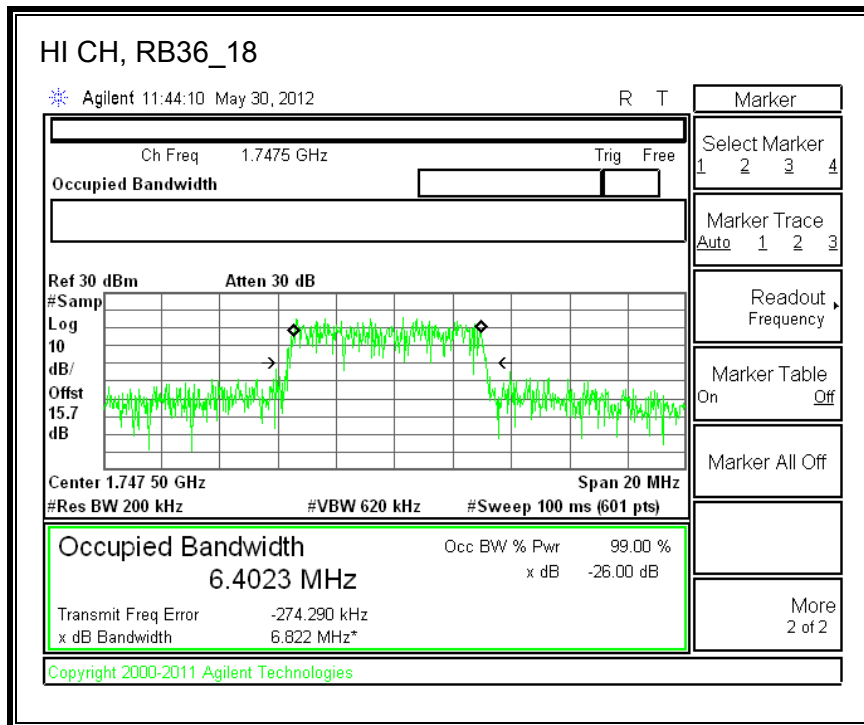


Band 4 (15 MHz BAND WIDTH)

LTE 16QAM

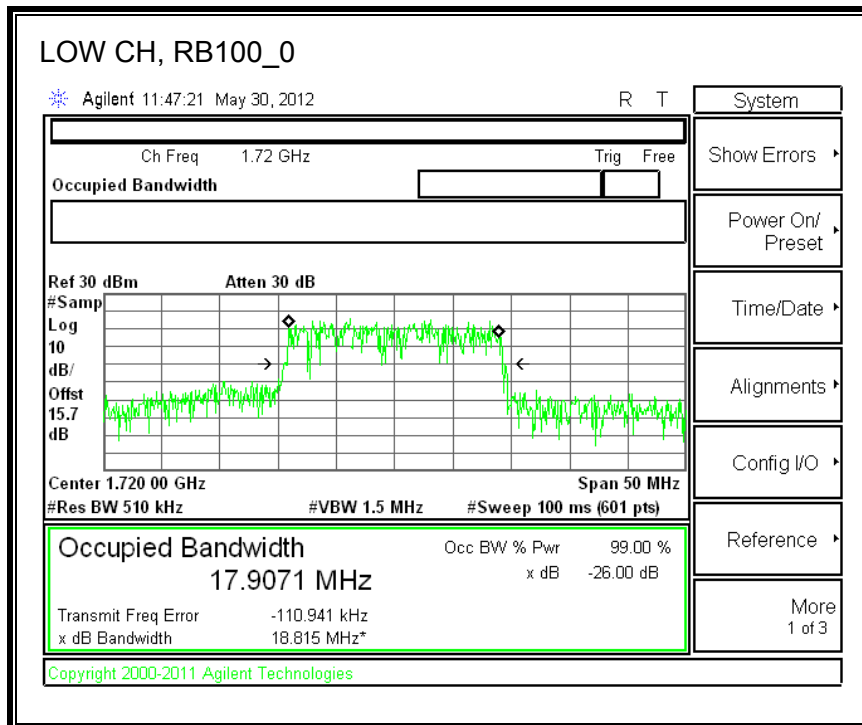
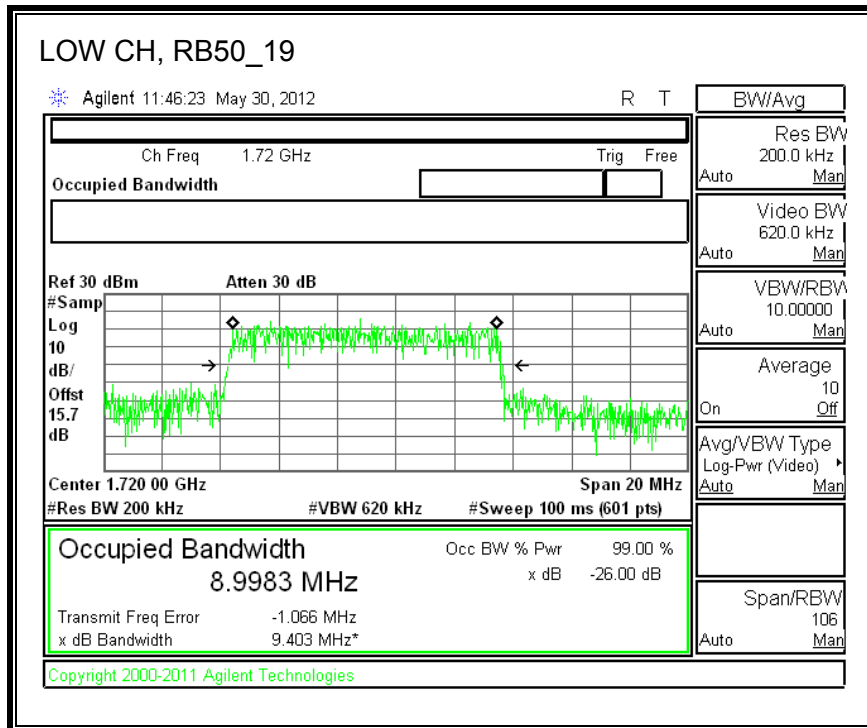


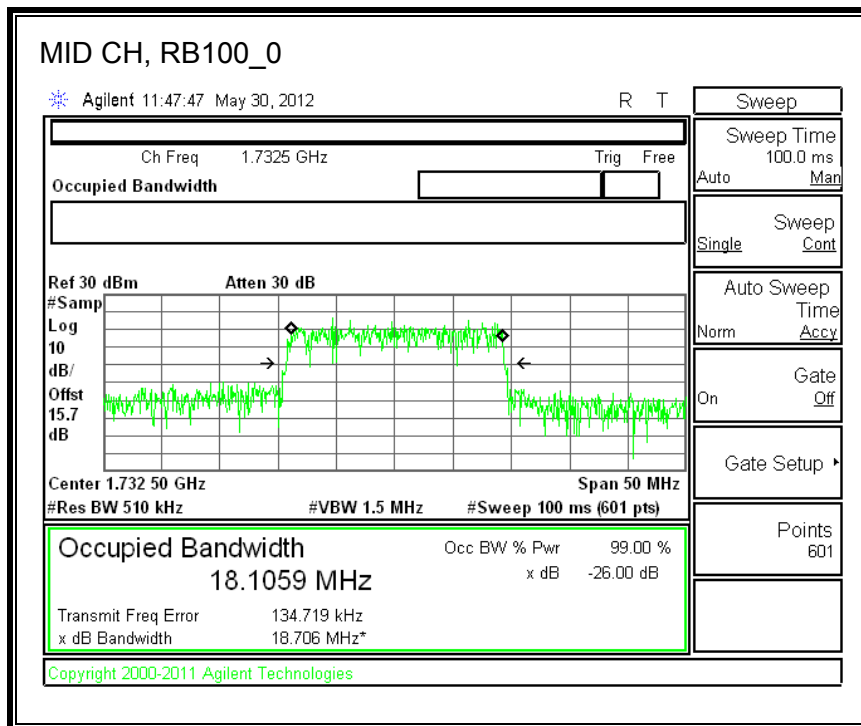
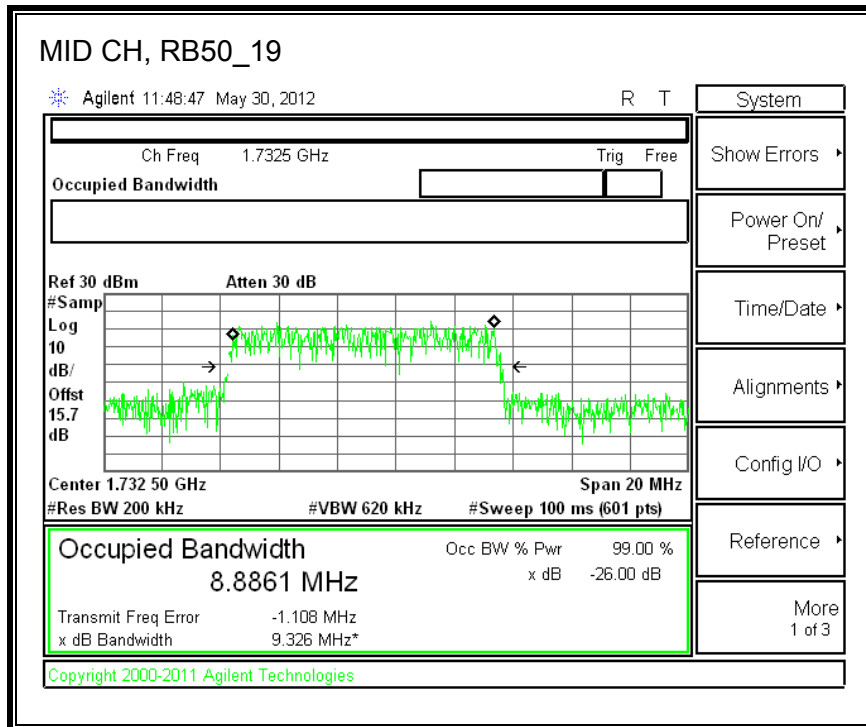


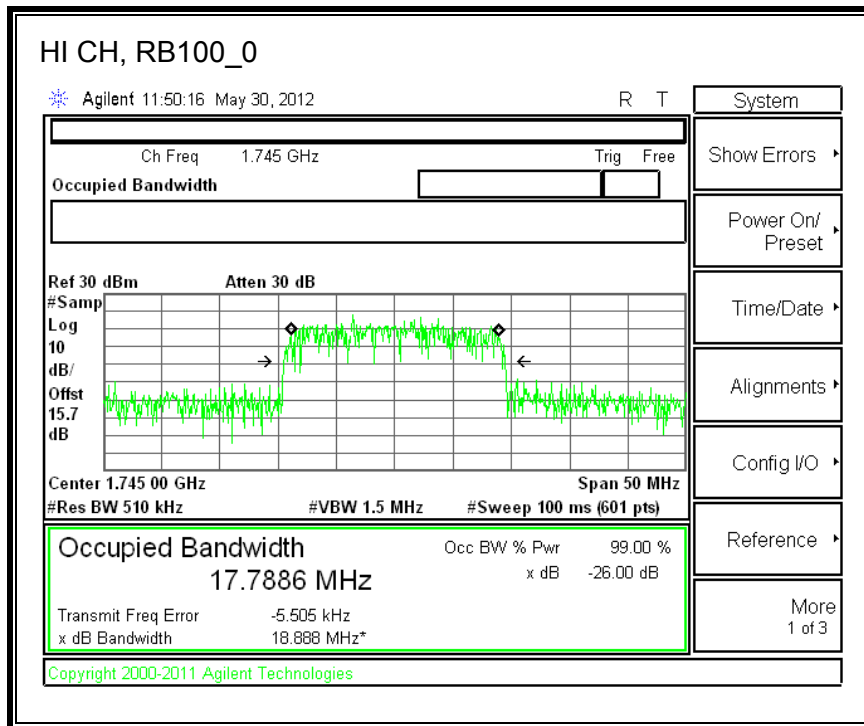
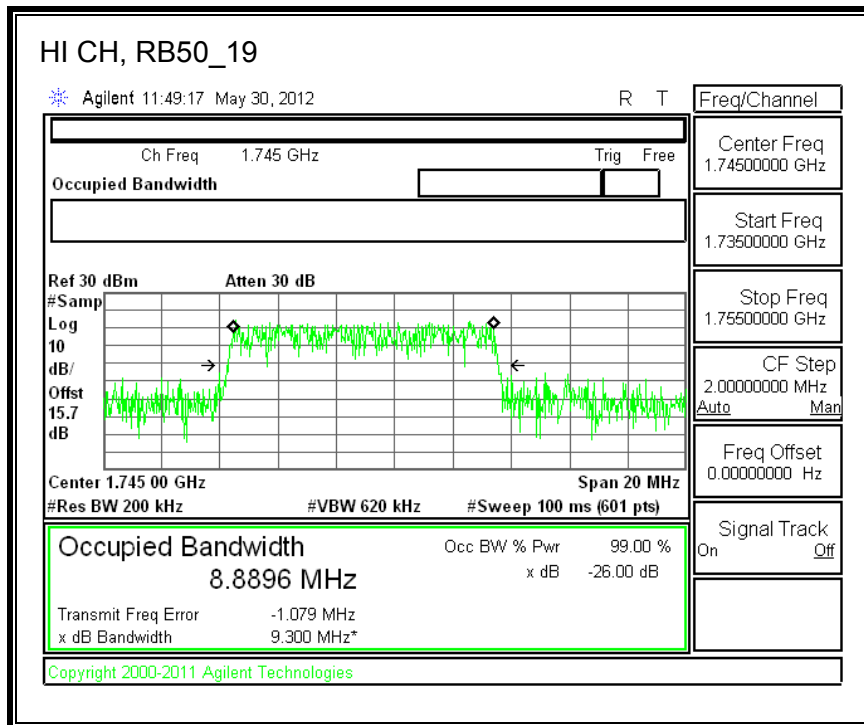


Band 4 (20.0 MHz BAND WIDTH)

LTE QPSK

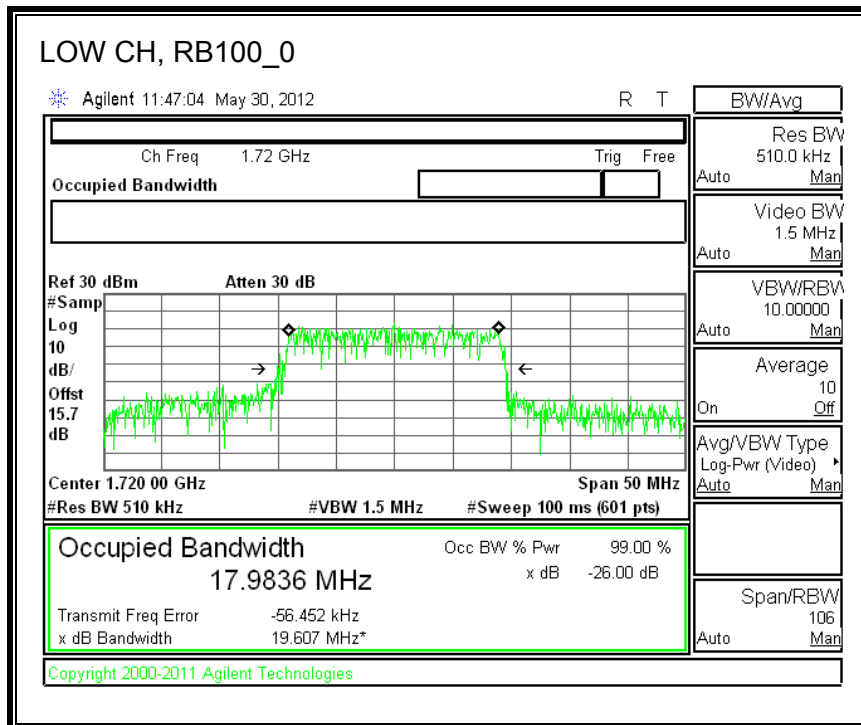
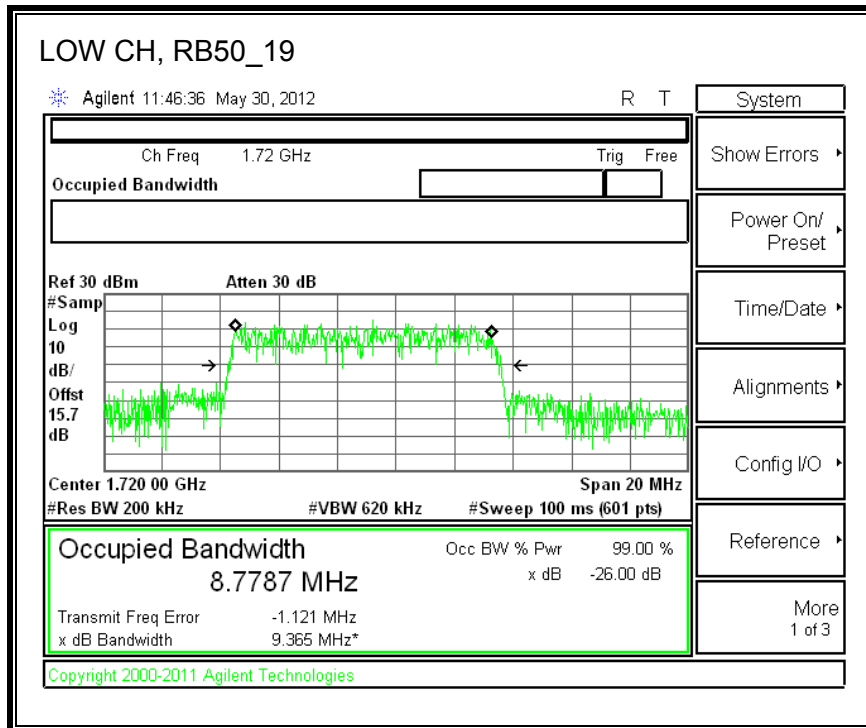


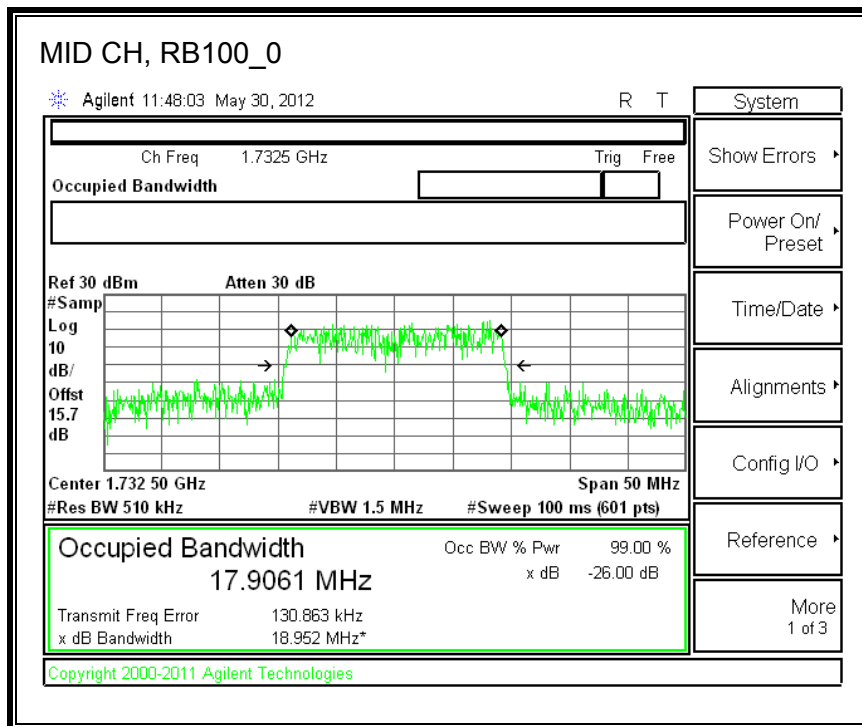
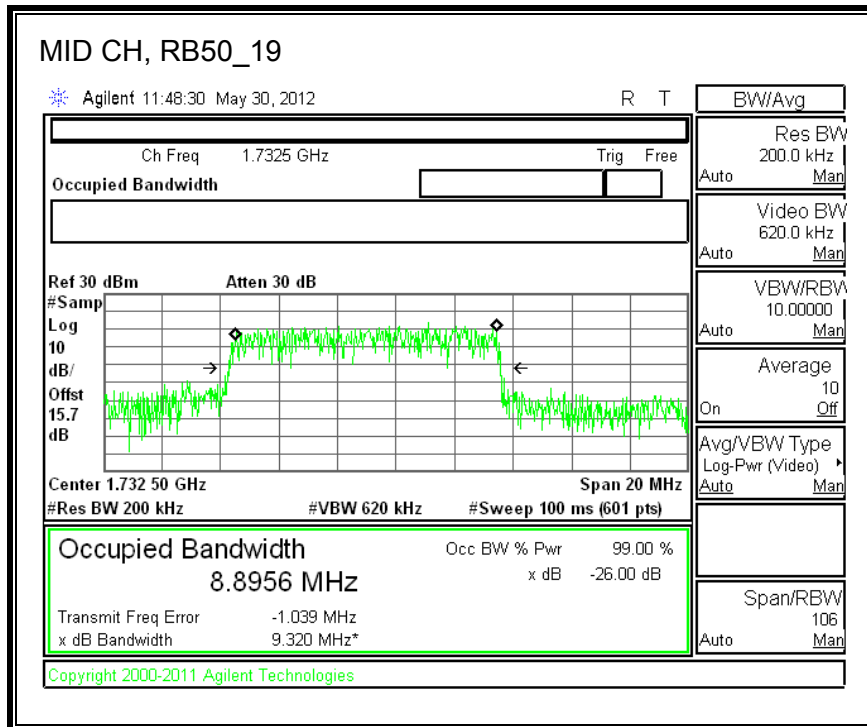


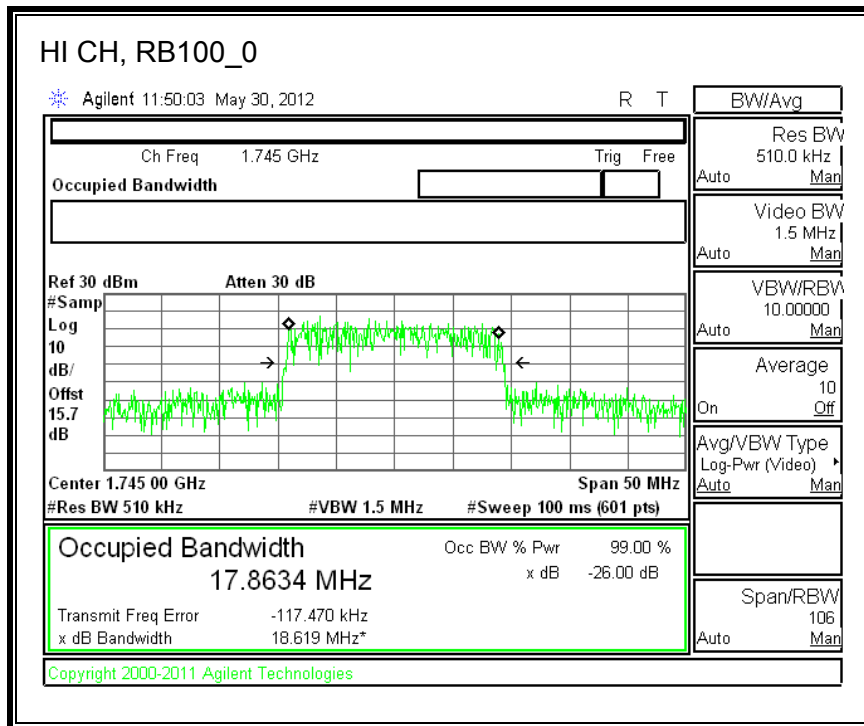
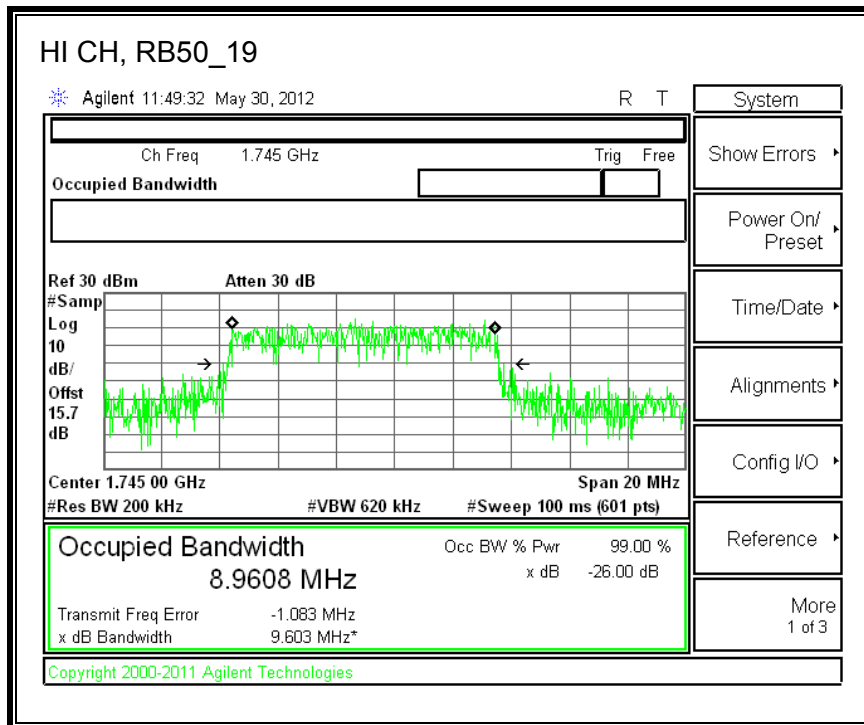


Band 4 (20 MHz BAND WIDTH)

LTE 16QAM

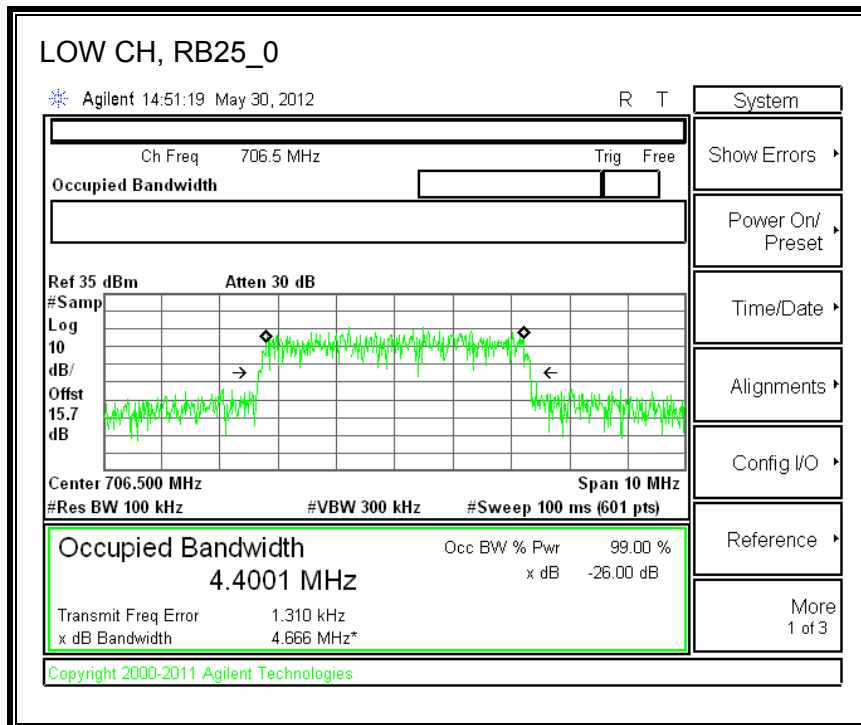
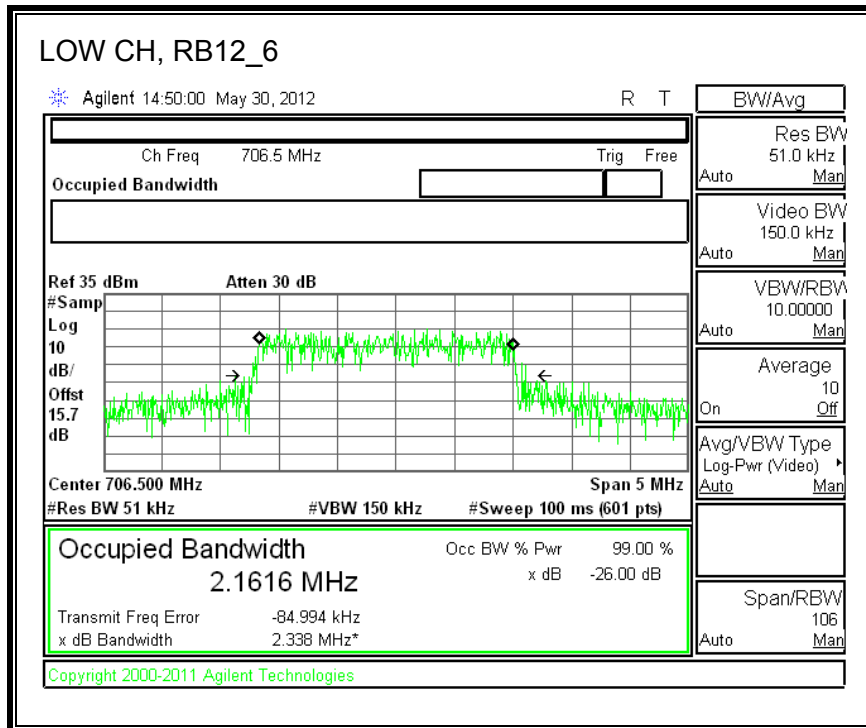


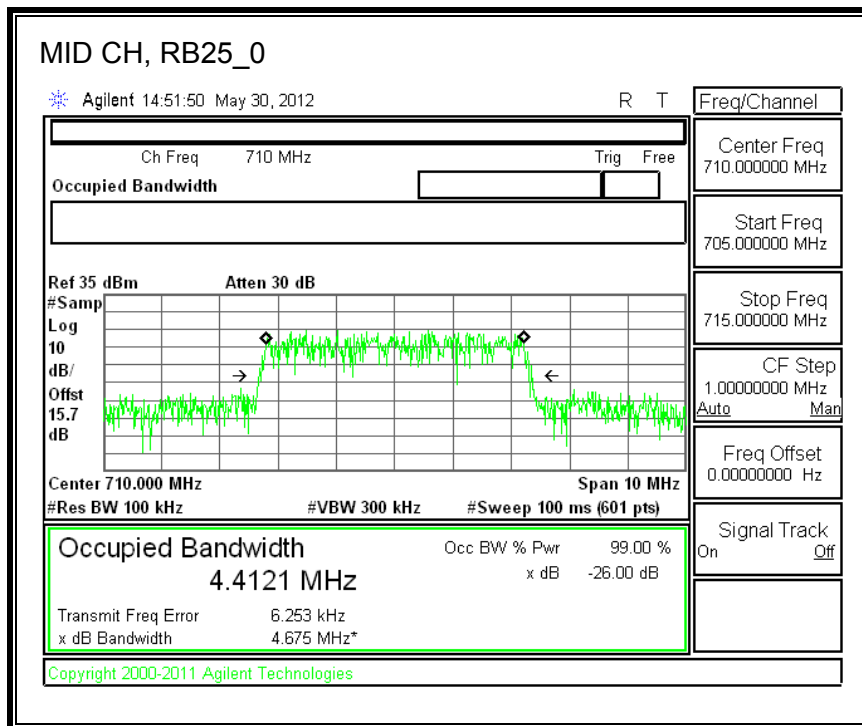
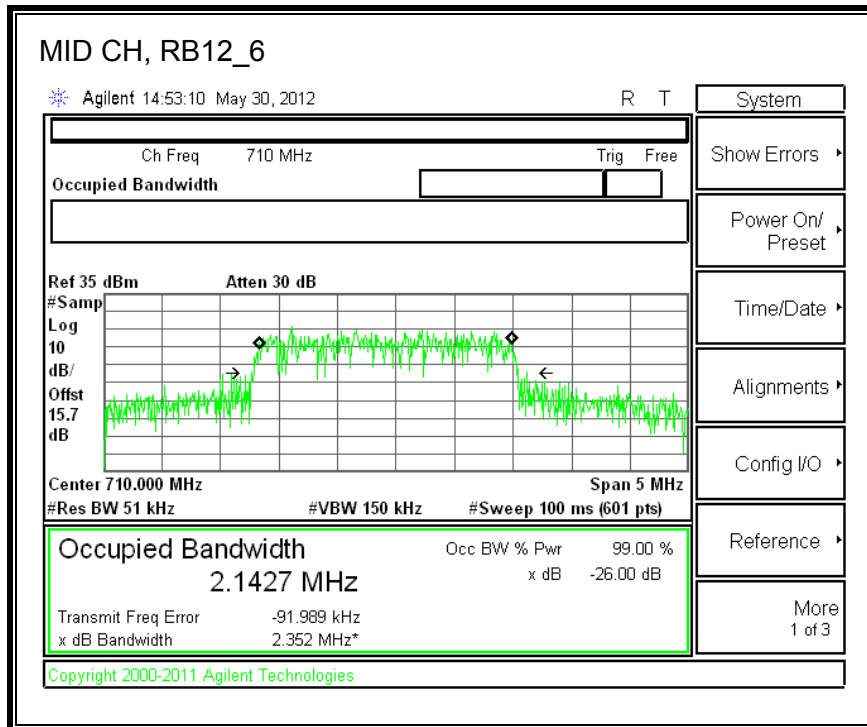


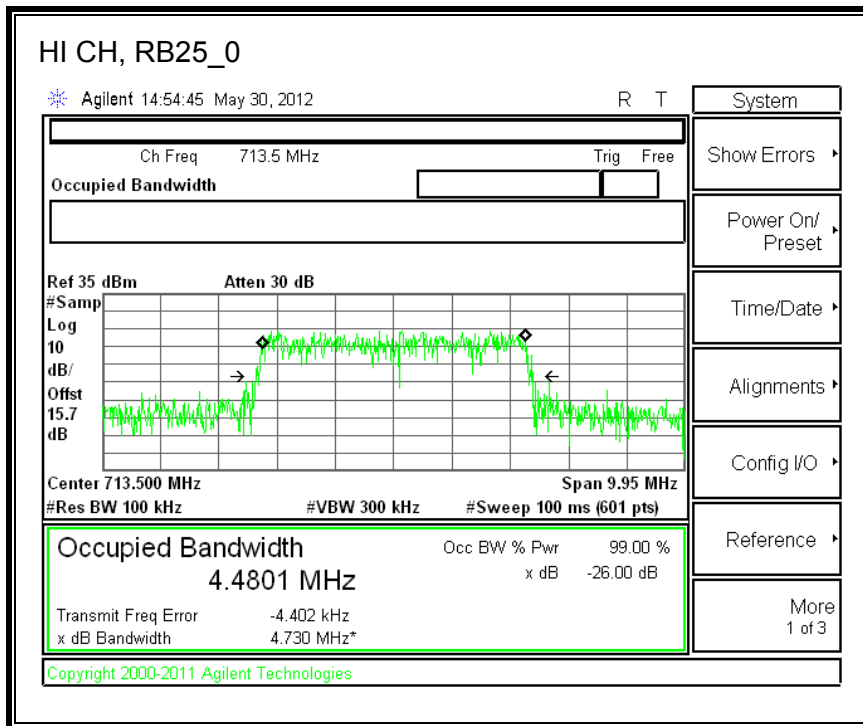
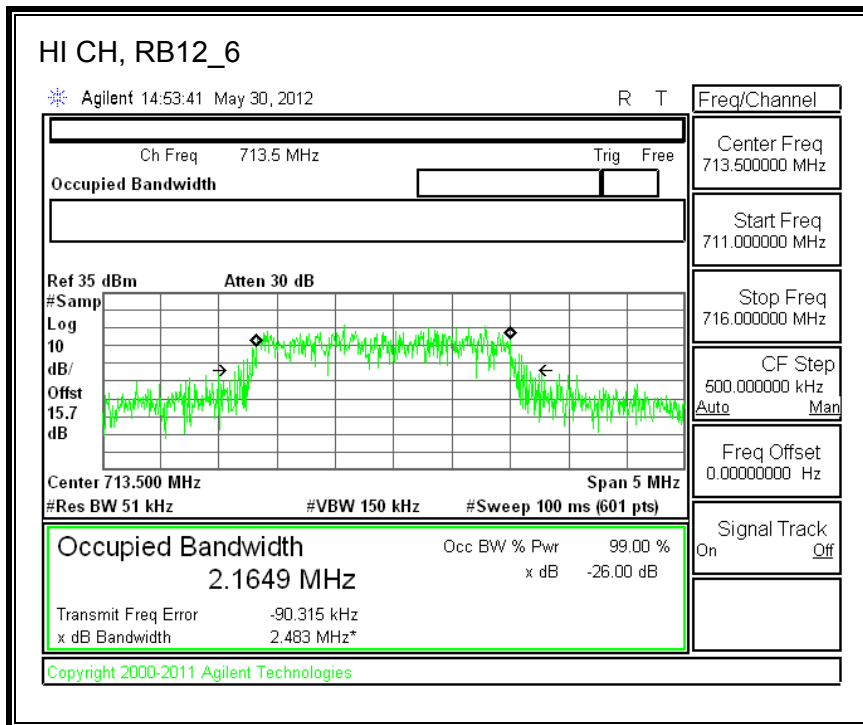


Band 17 (5.0 MHz BAND WIDTH)

LTE QPSK

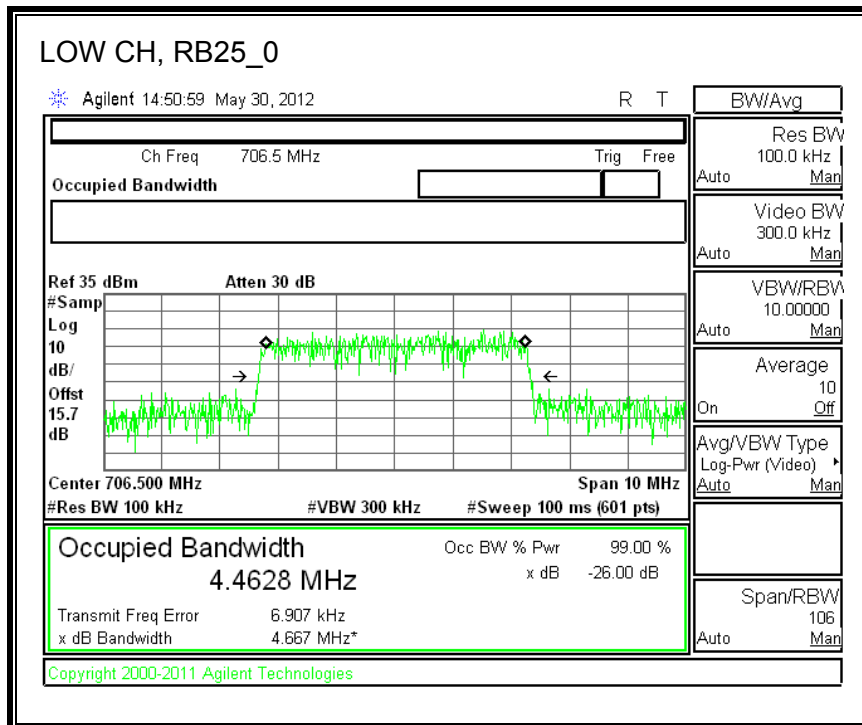
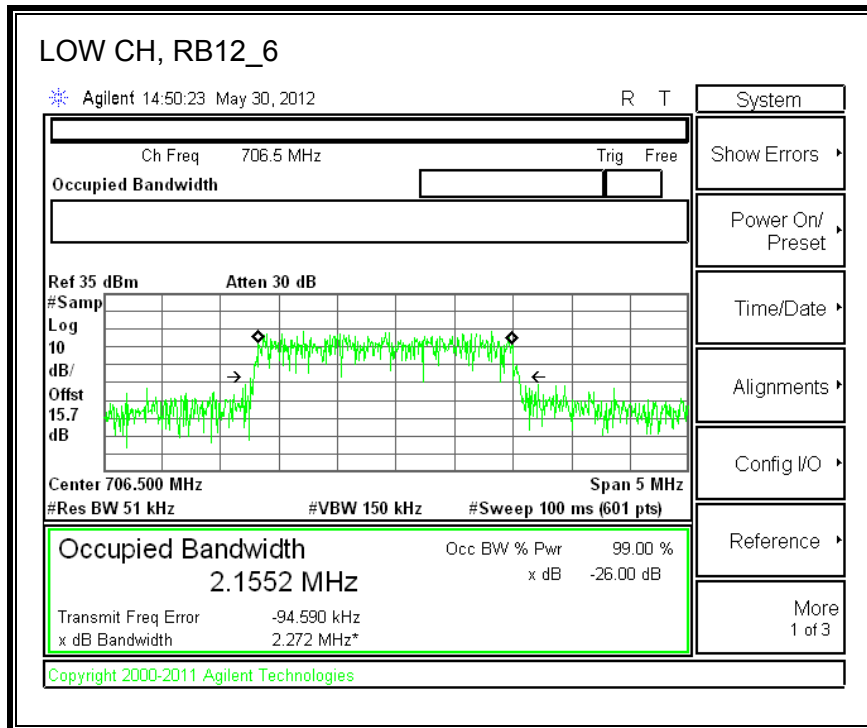


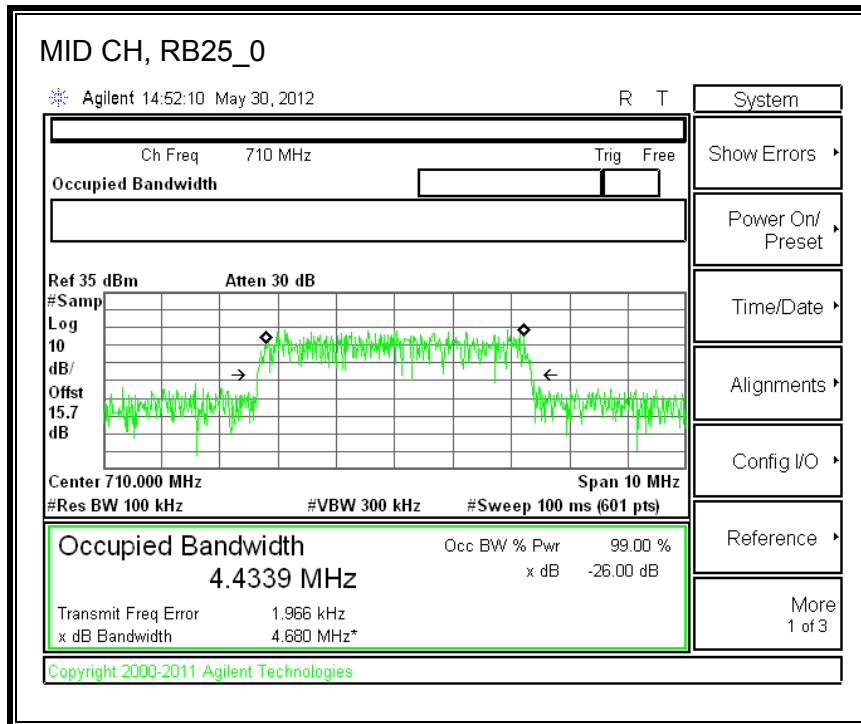
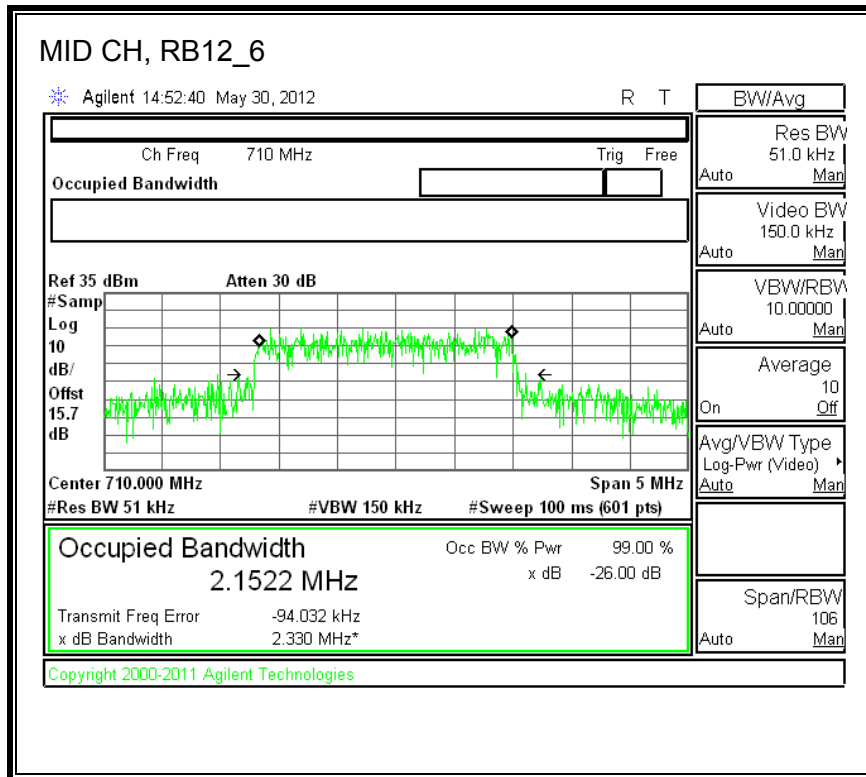


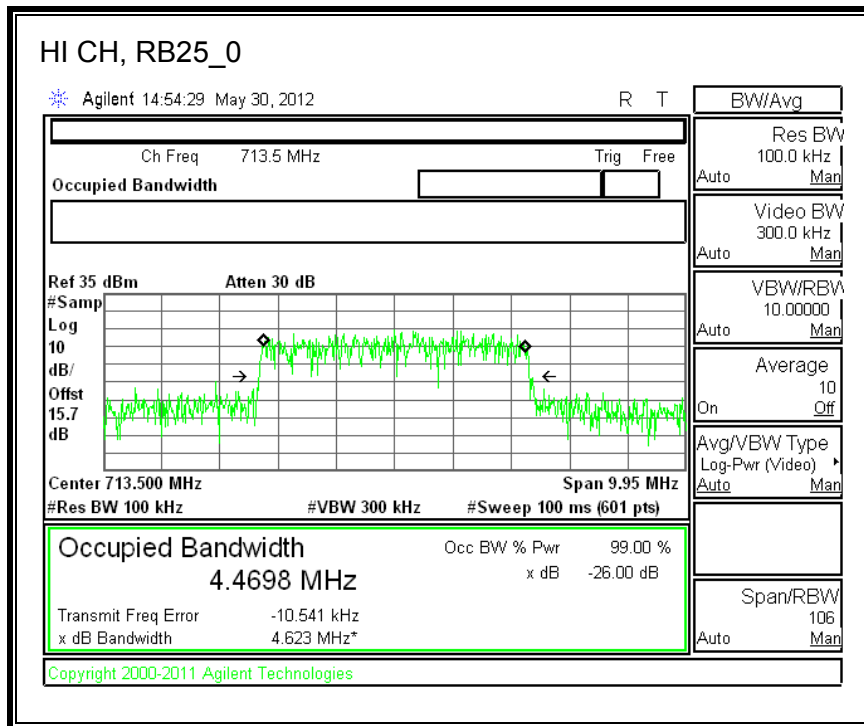
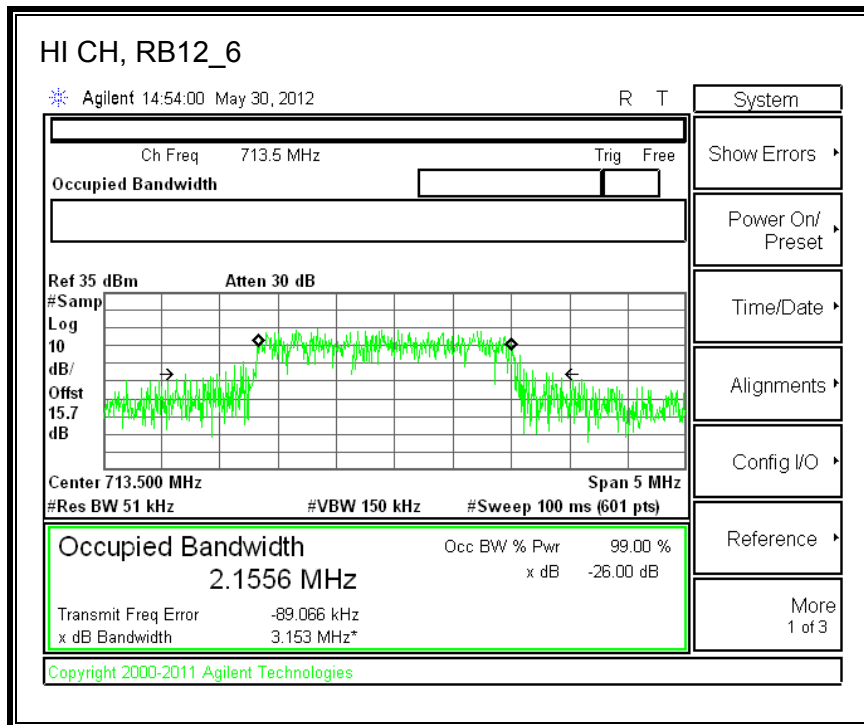


Band 17 (5 MHz BAND WIDTH)

LTE 16QAM

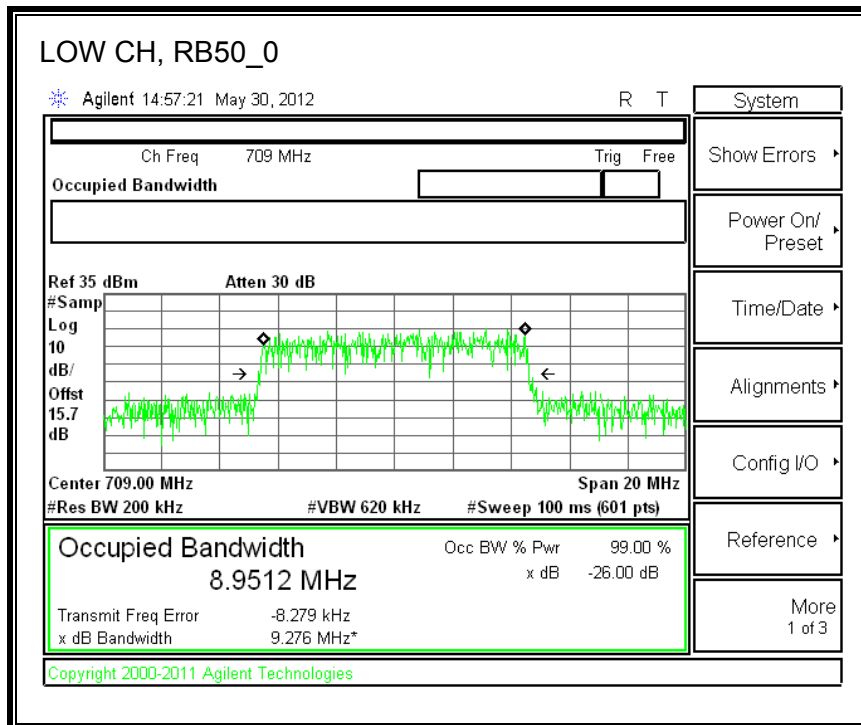
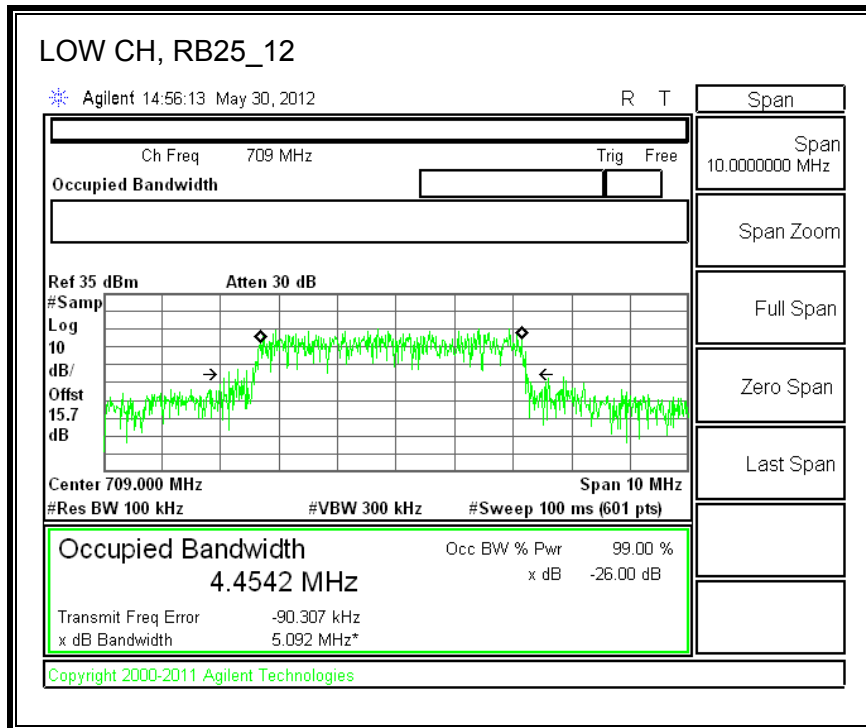


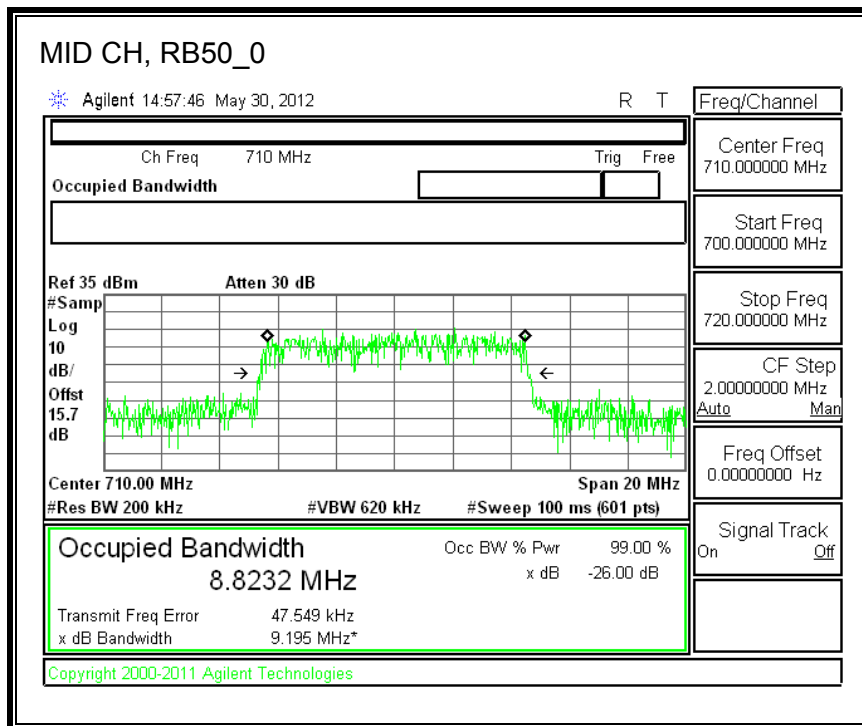
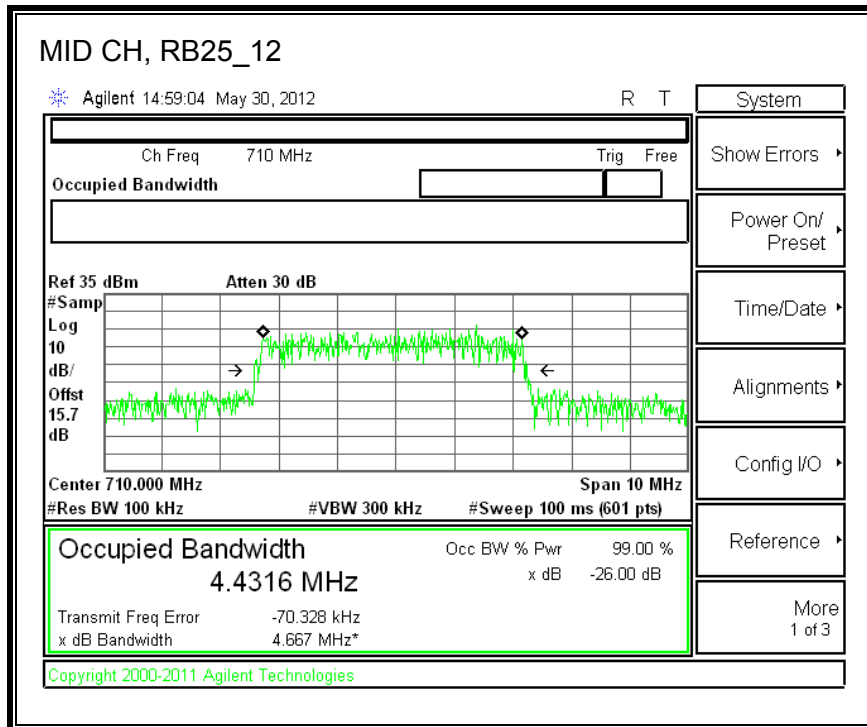


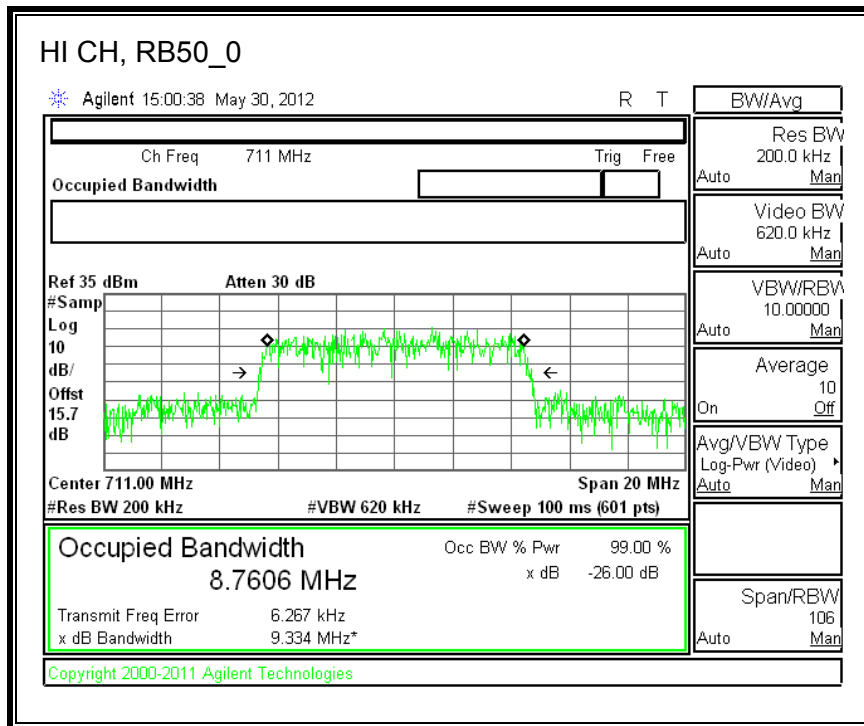
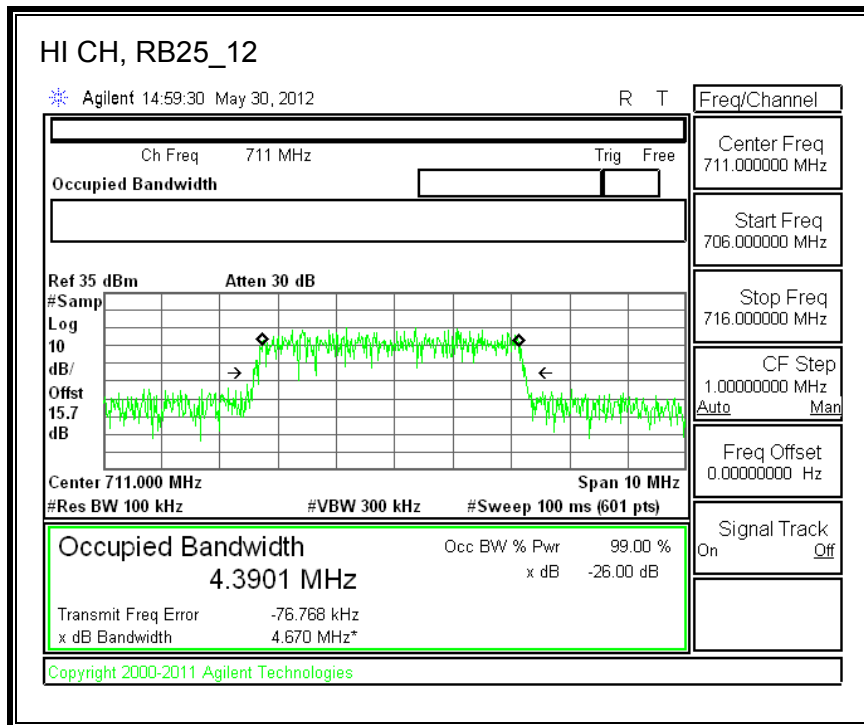


Band 17 (10.0 MHz BAND WIDTH)

LTE QPSK

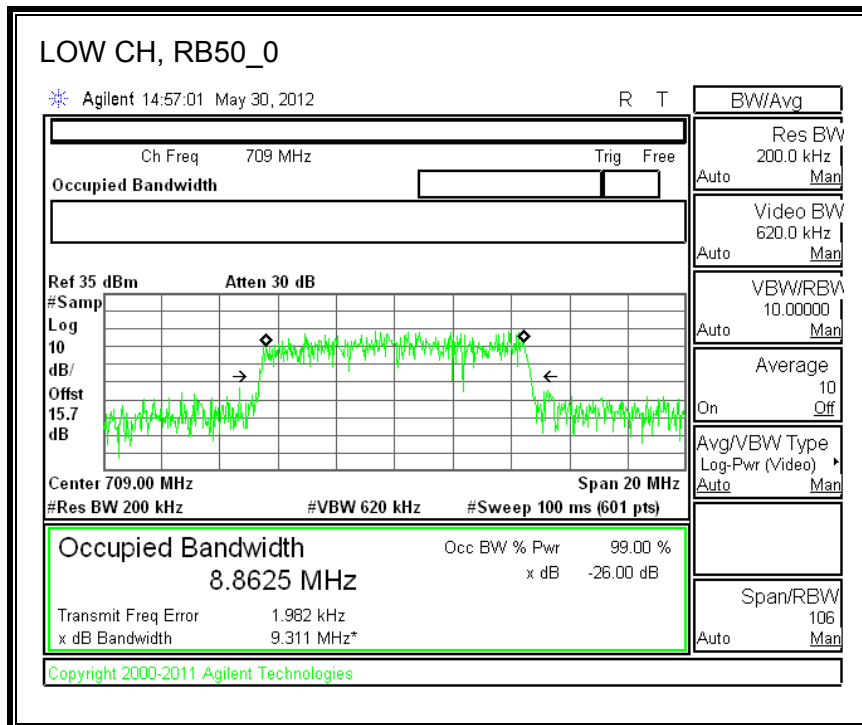
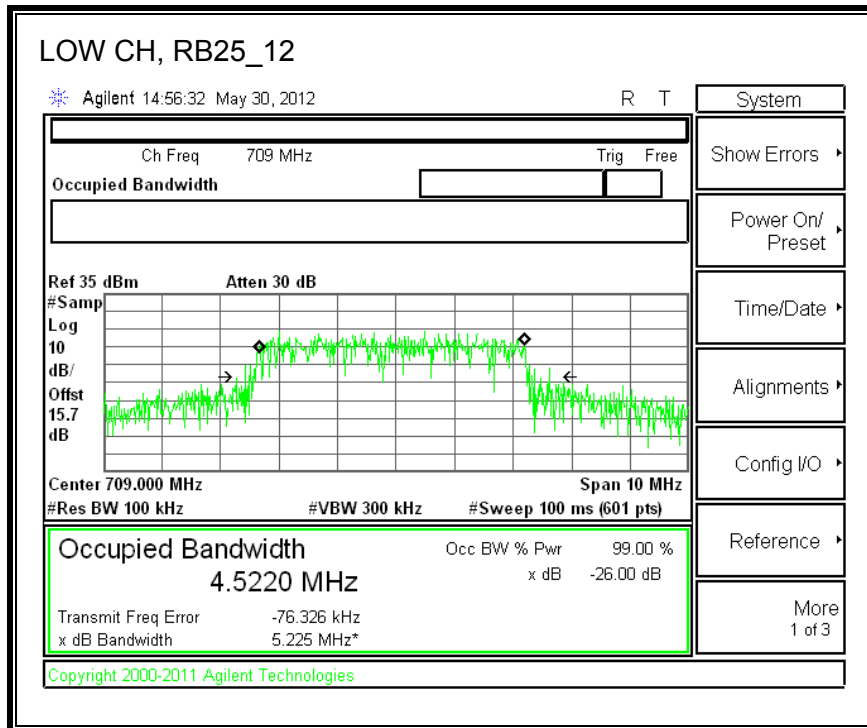


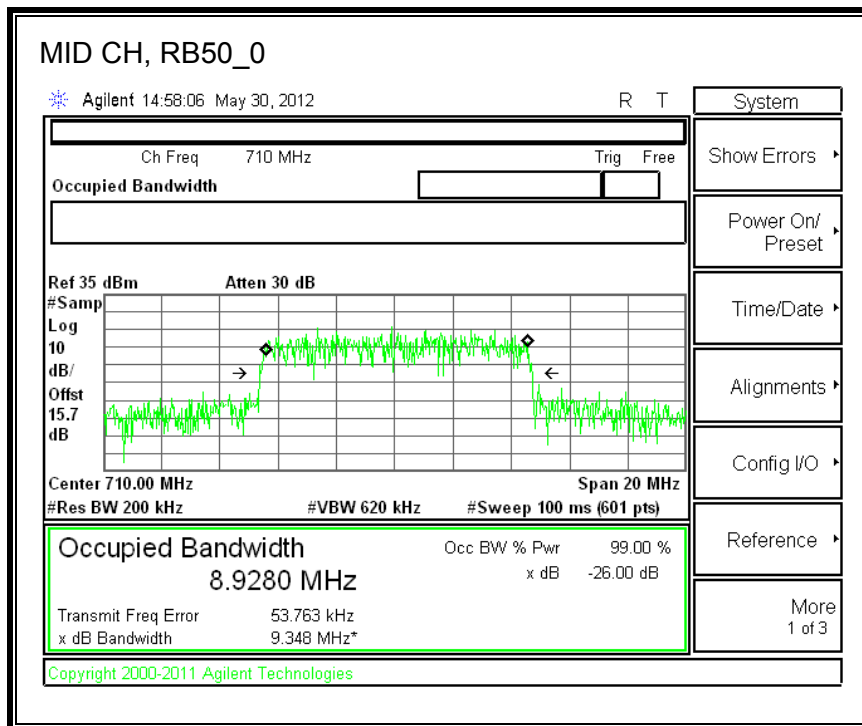
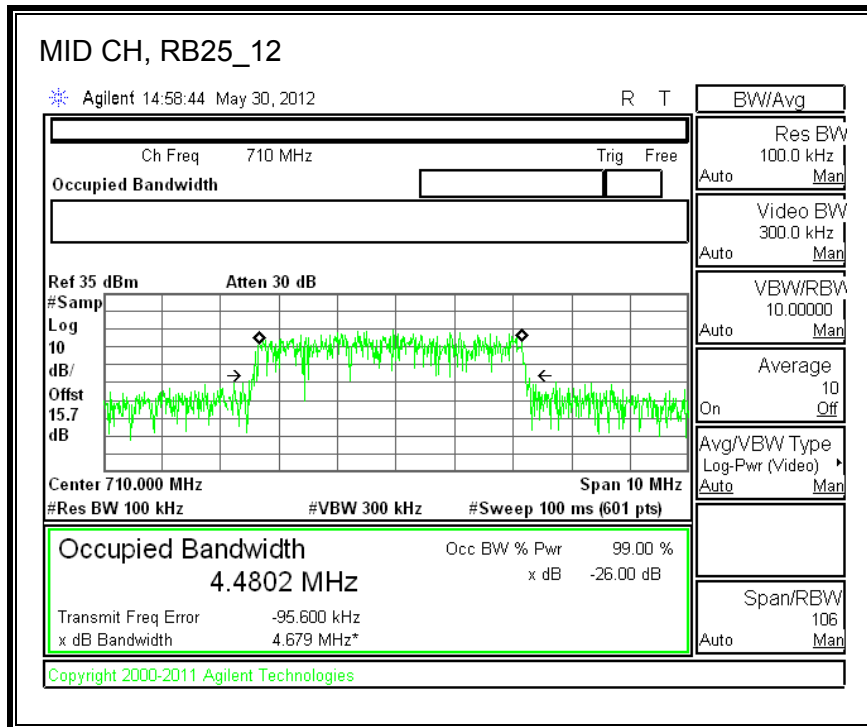


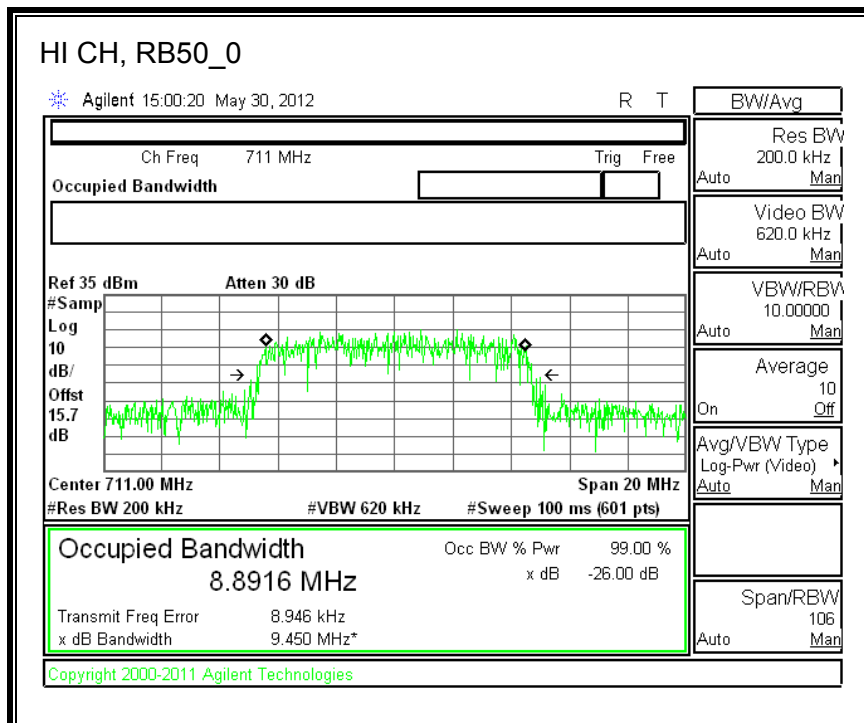
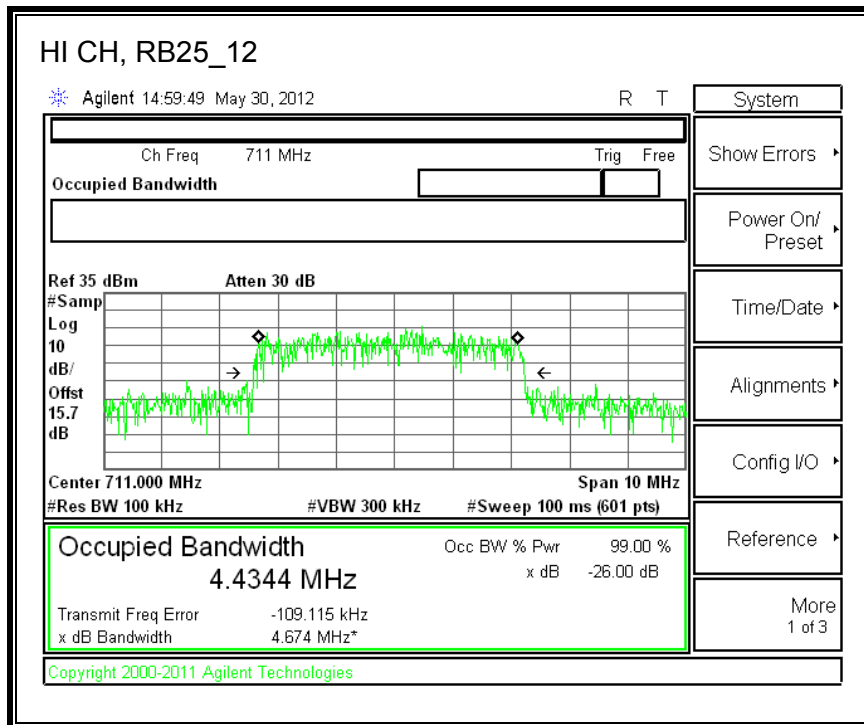


Band 17 (10 MHz BAND WIDTH)

LTE 16QAM

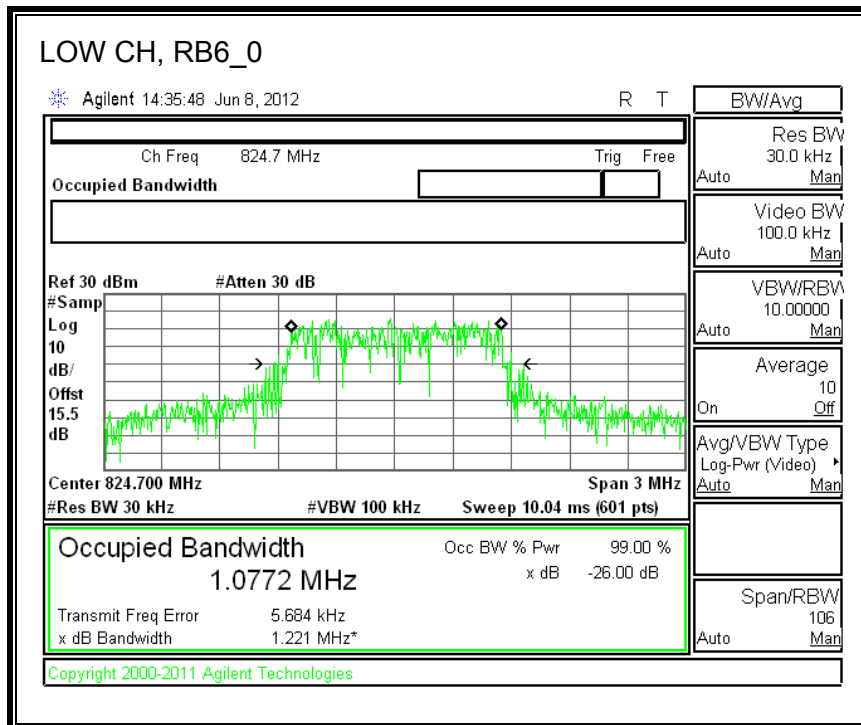
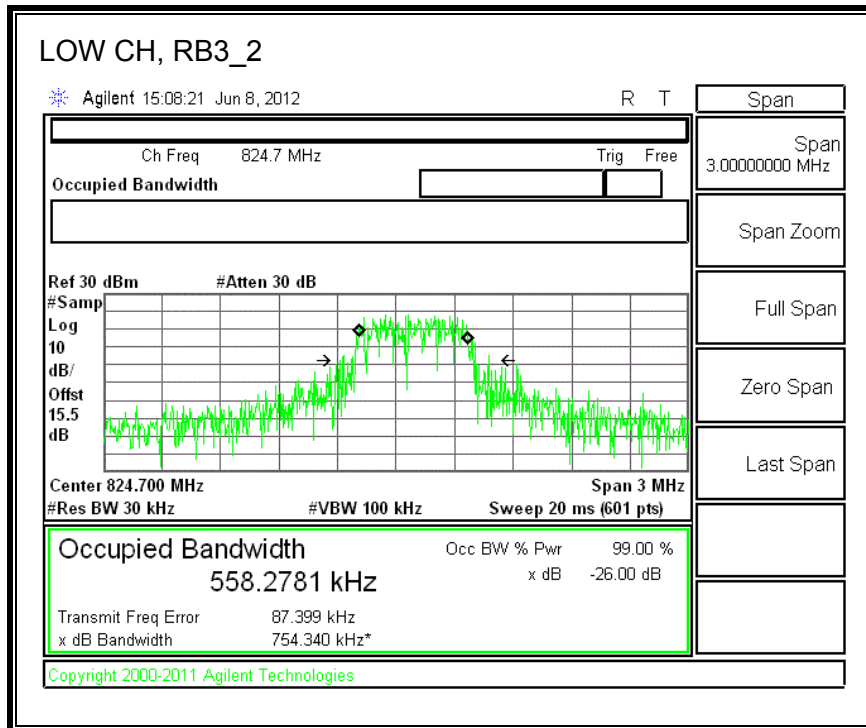


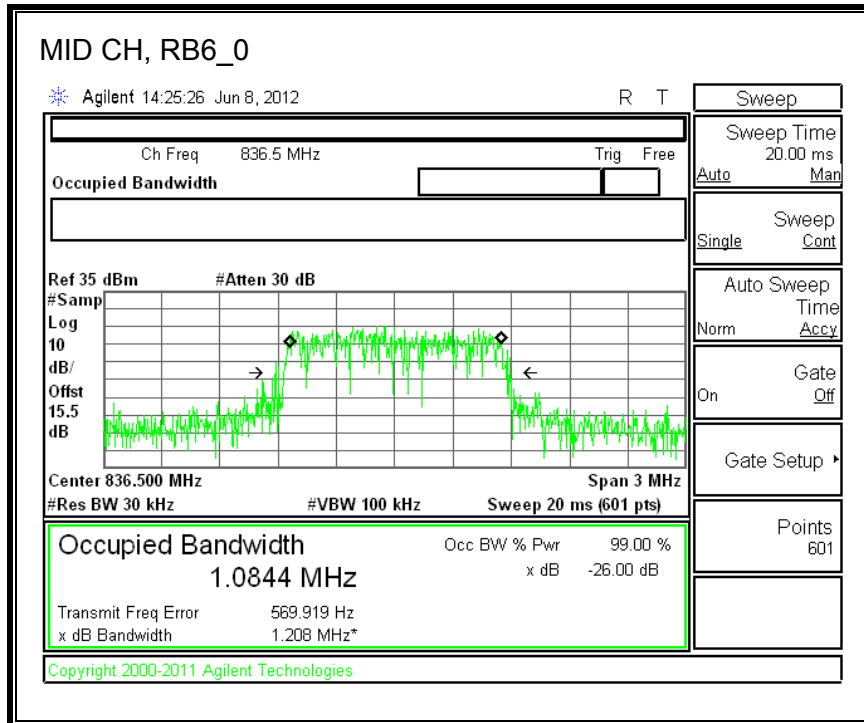
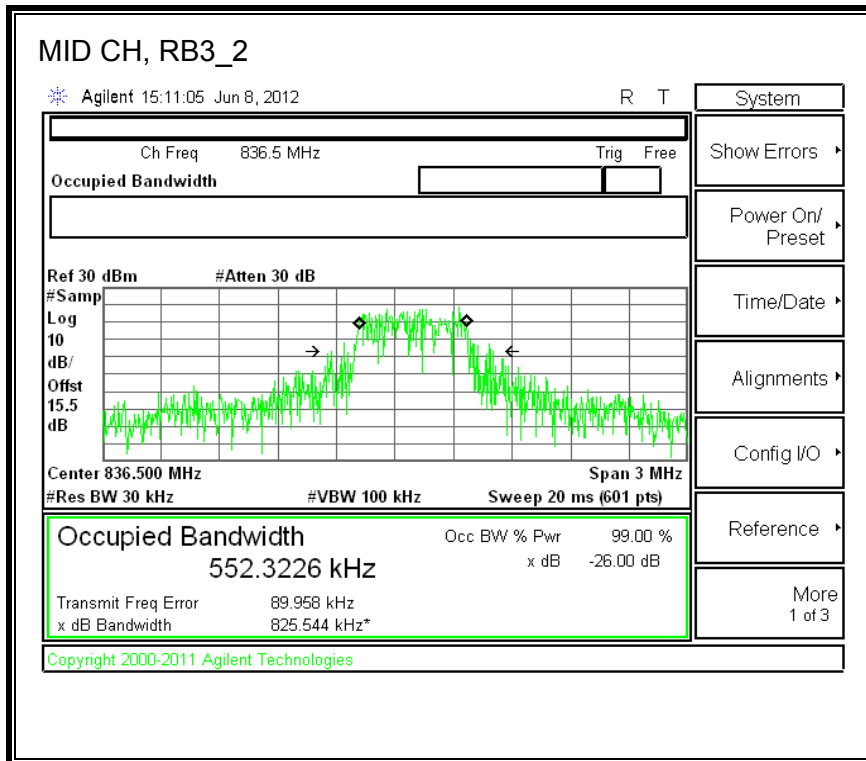


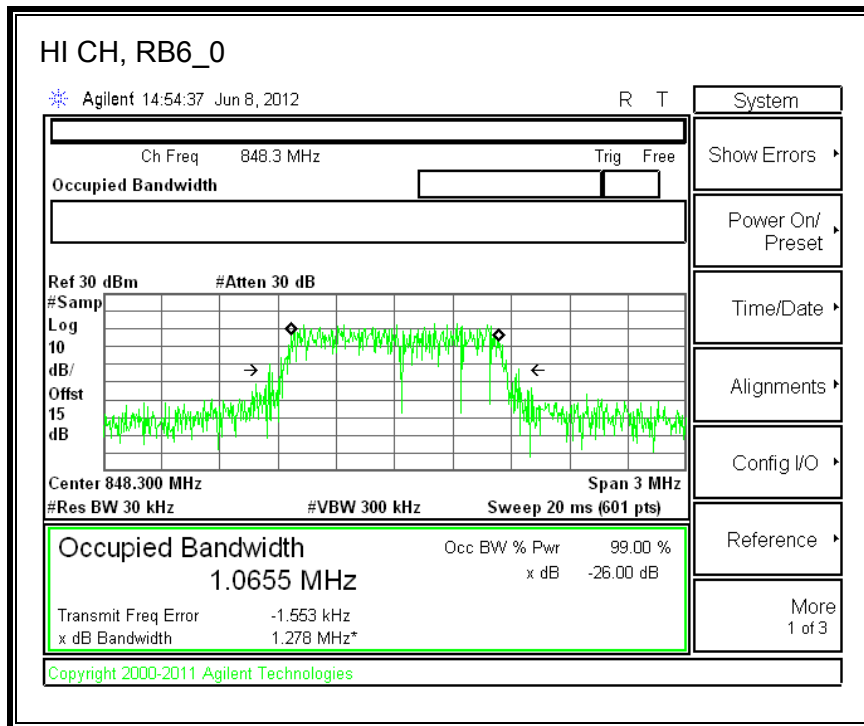
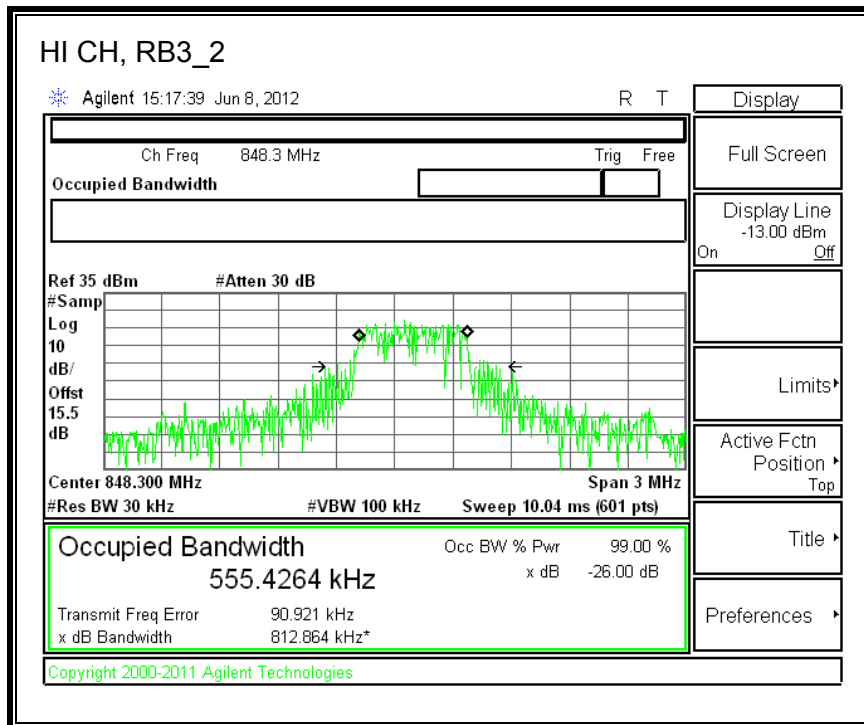


Band 5 (1.4 MHz BAND WIDTH)

LTE QPSK

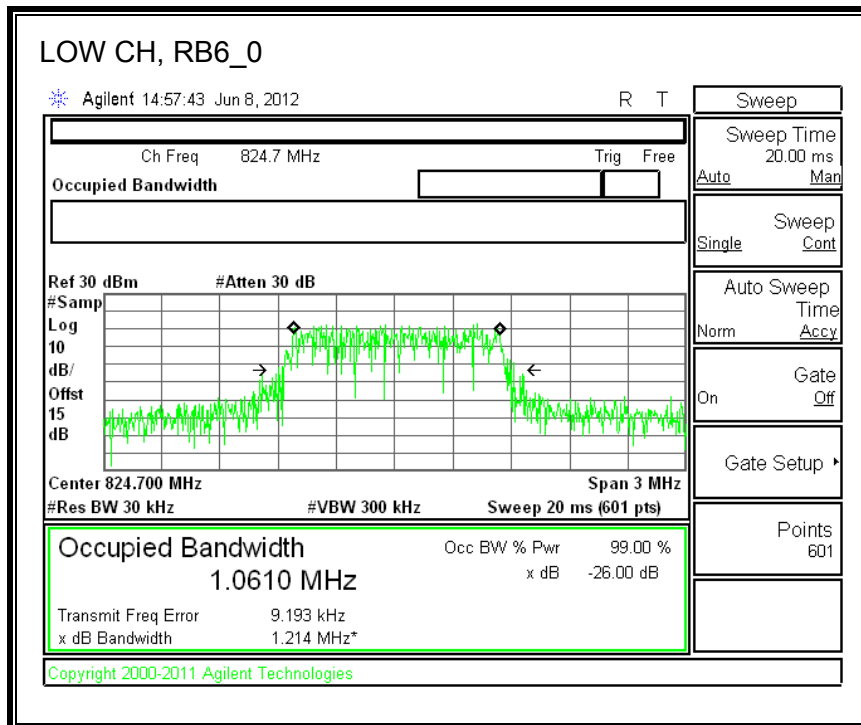
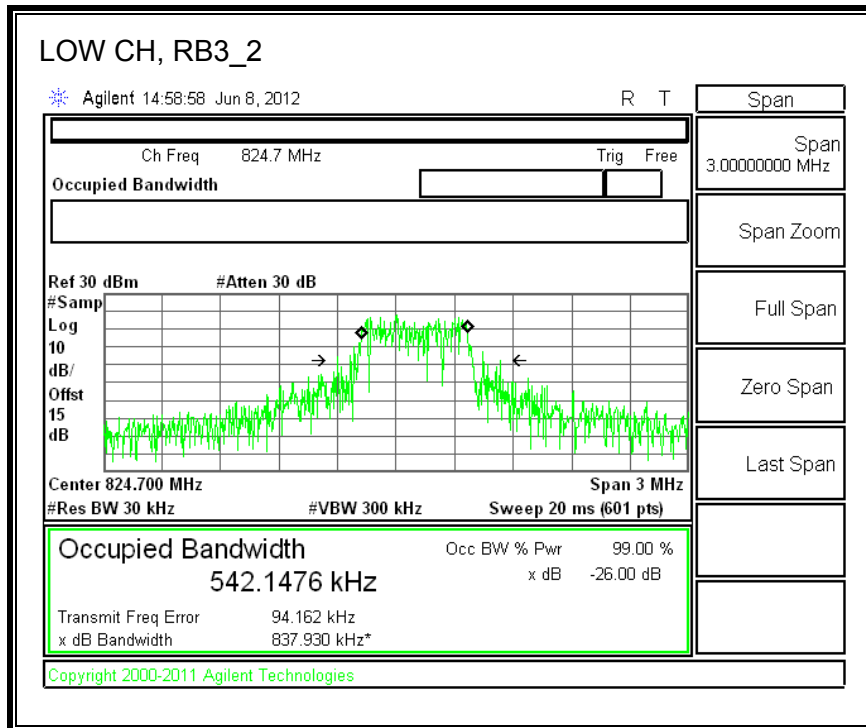


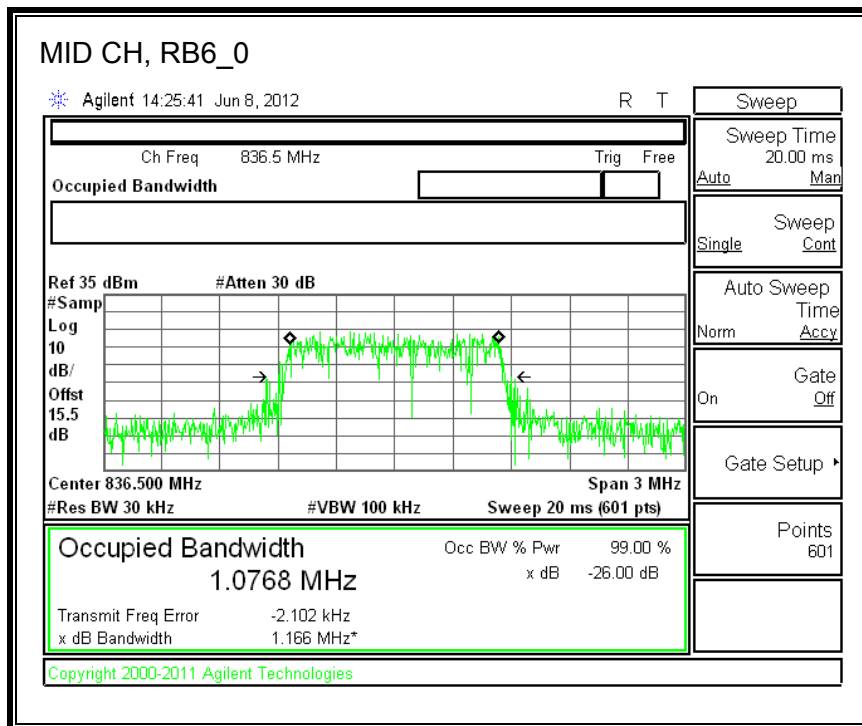
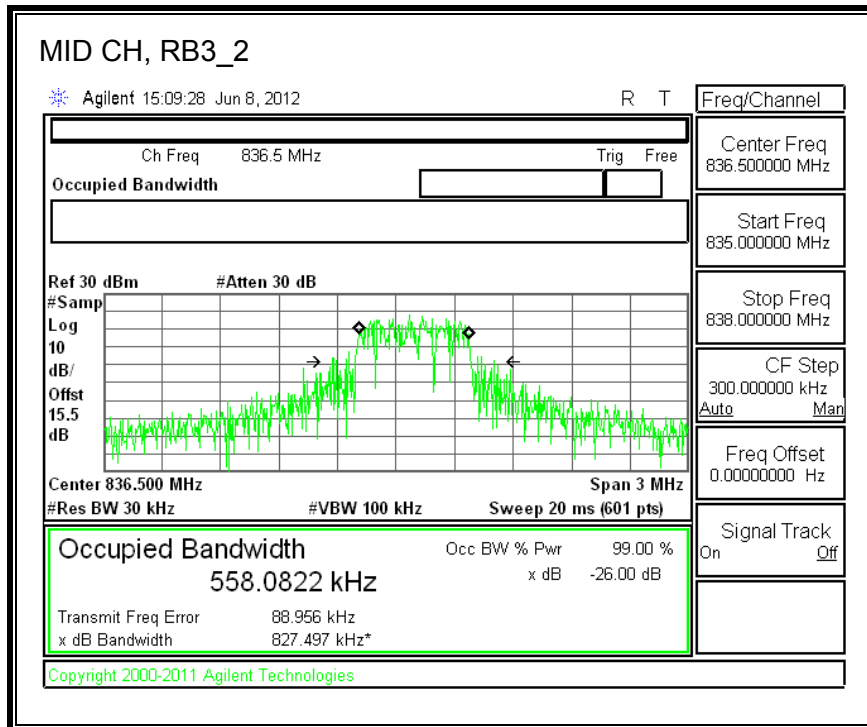


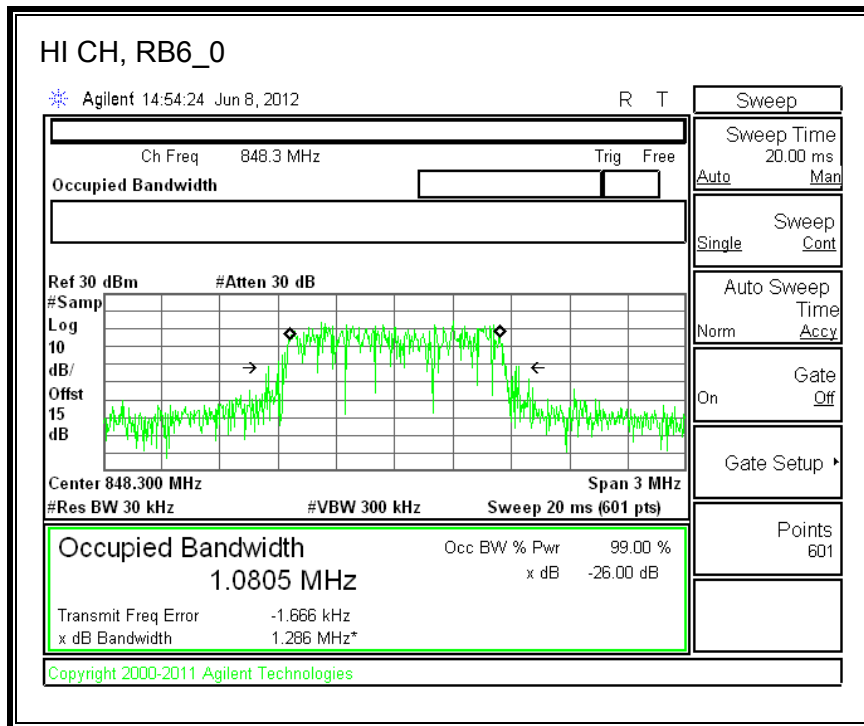
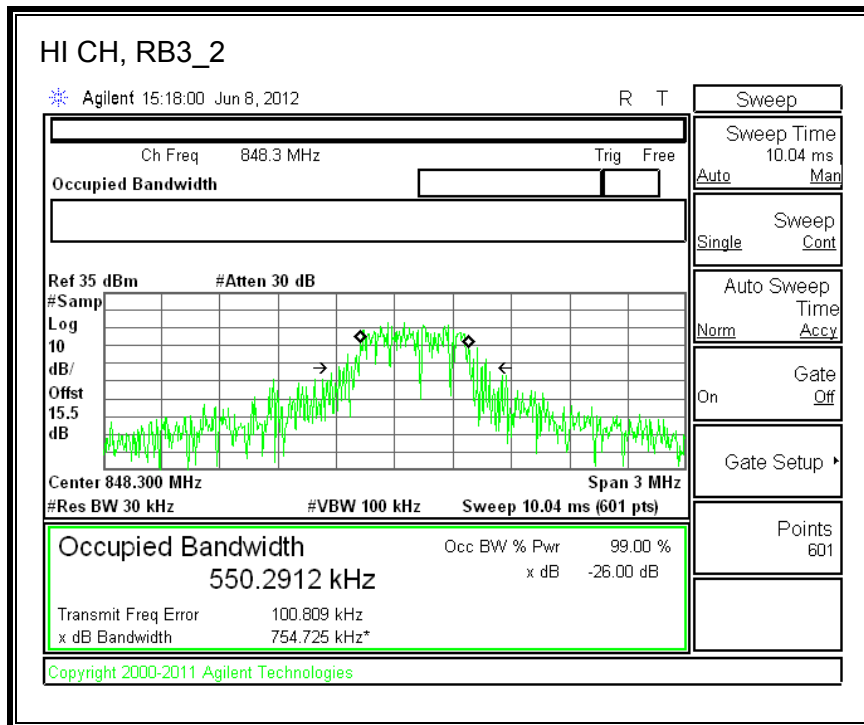


Band 5 (1.4 MHz BAND WIDTH)

LTE 16QAM

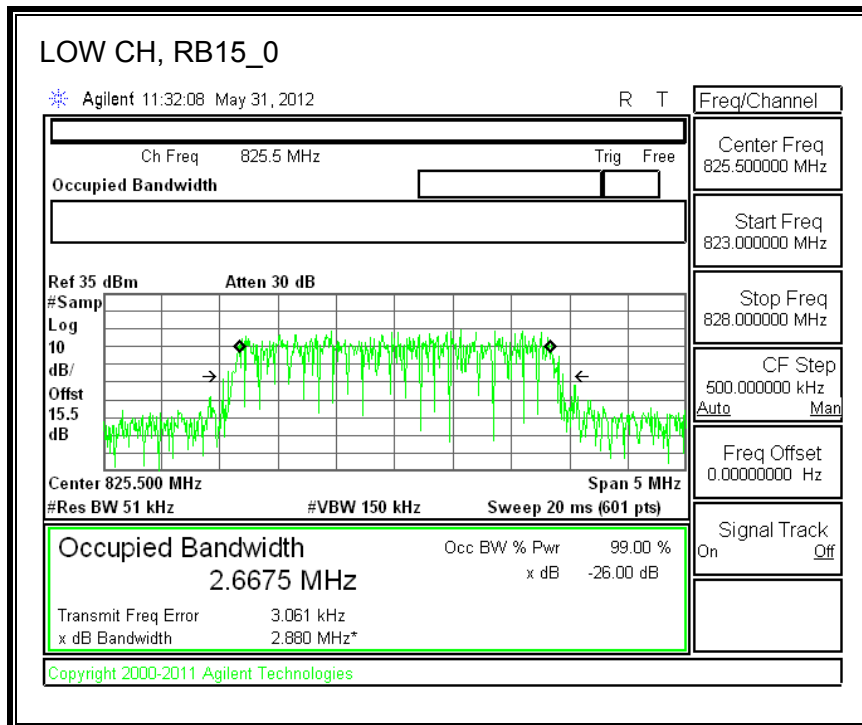
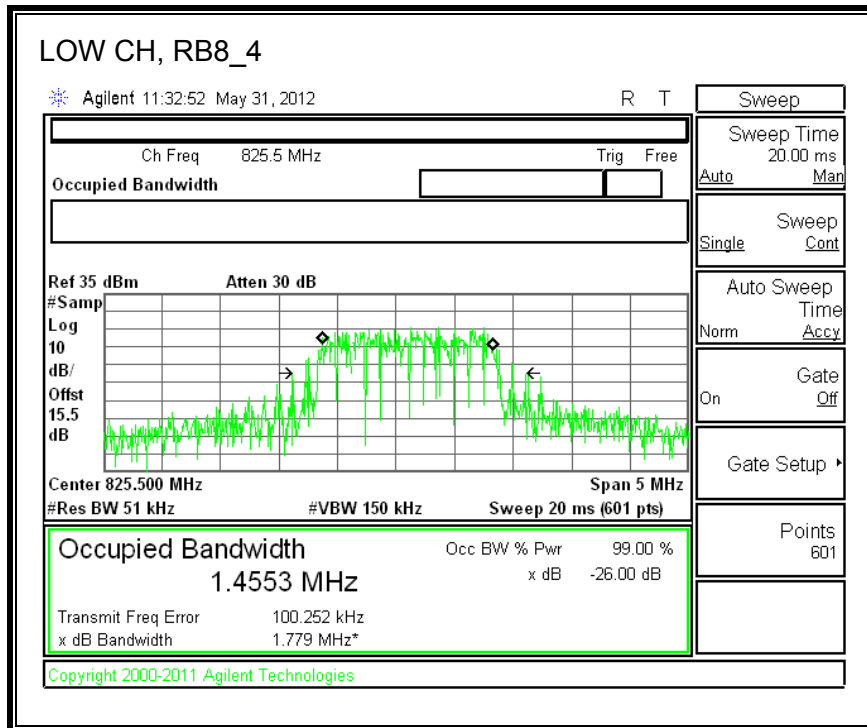


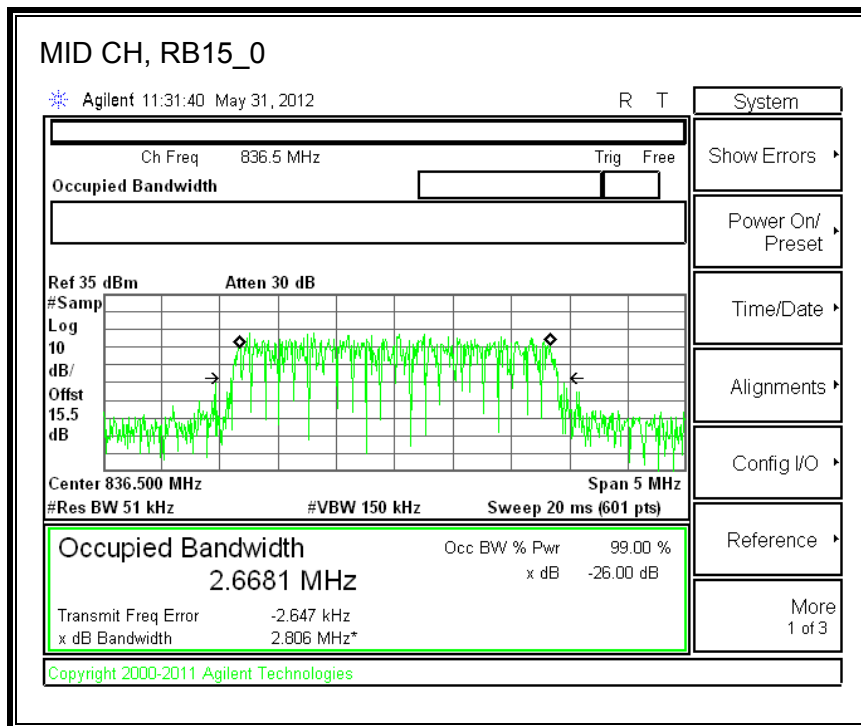
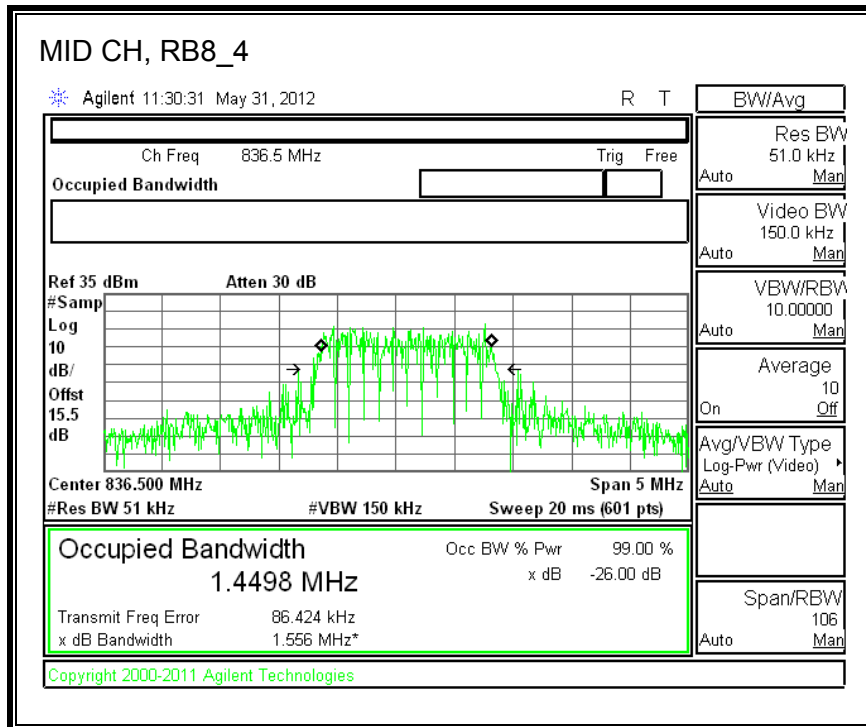


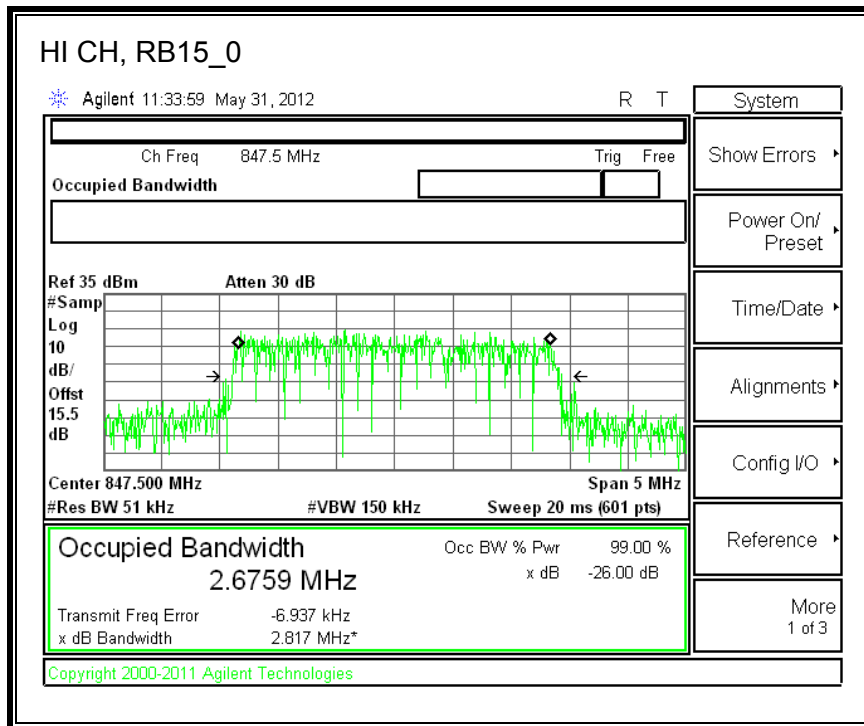
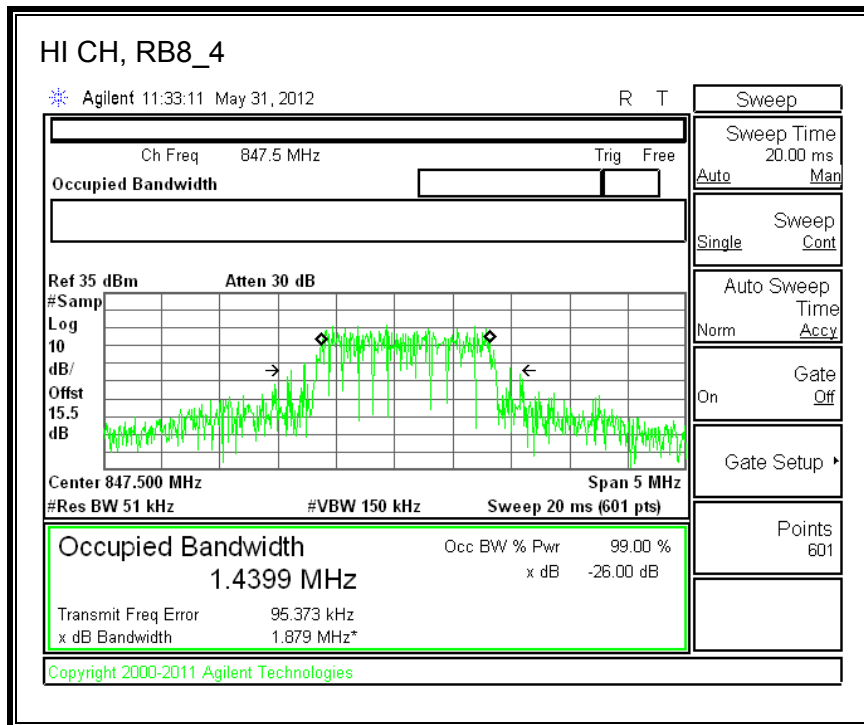


Band 5 (3.0 MHz BAND WIDTH)

LTE QPSK

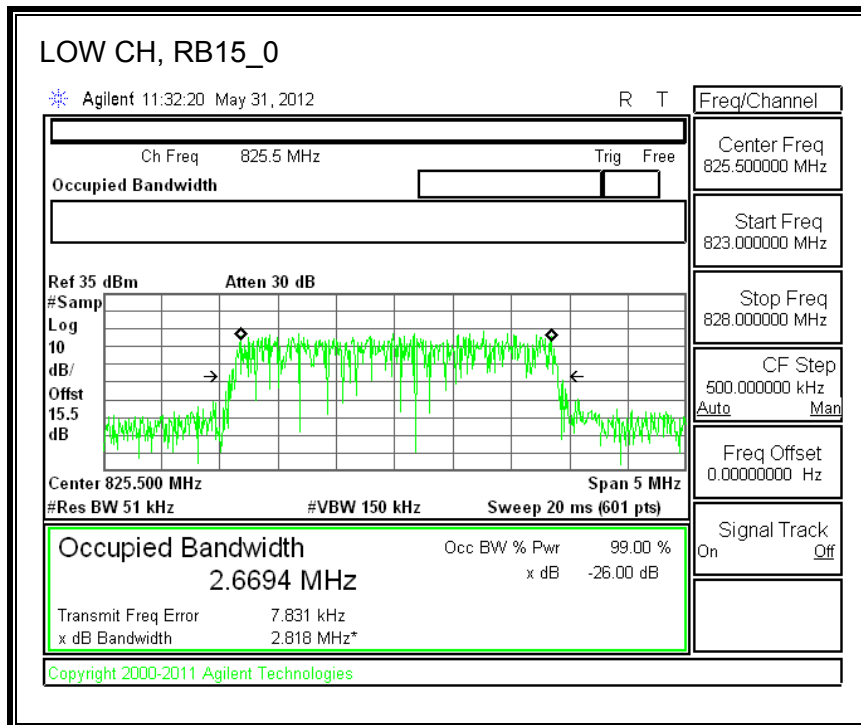
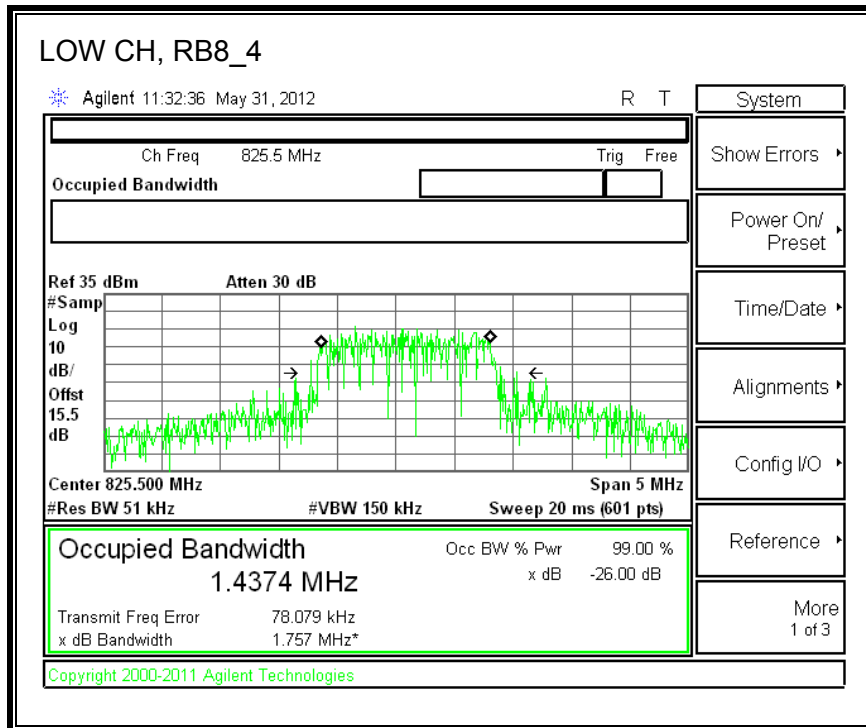


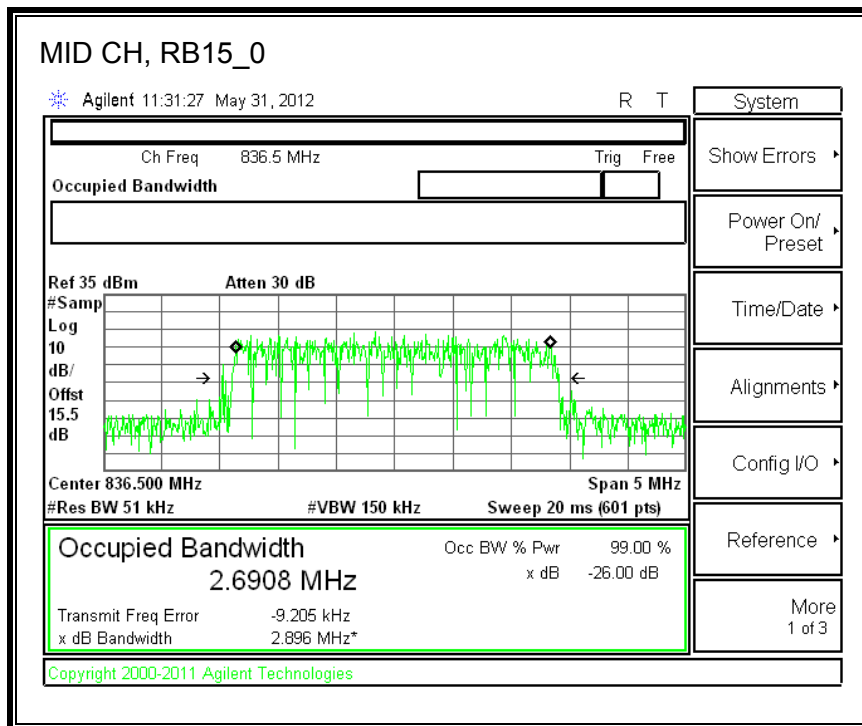
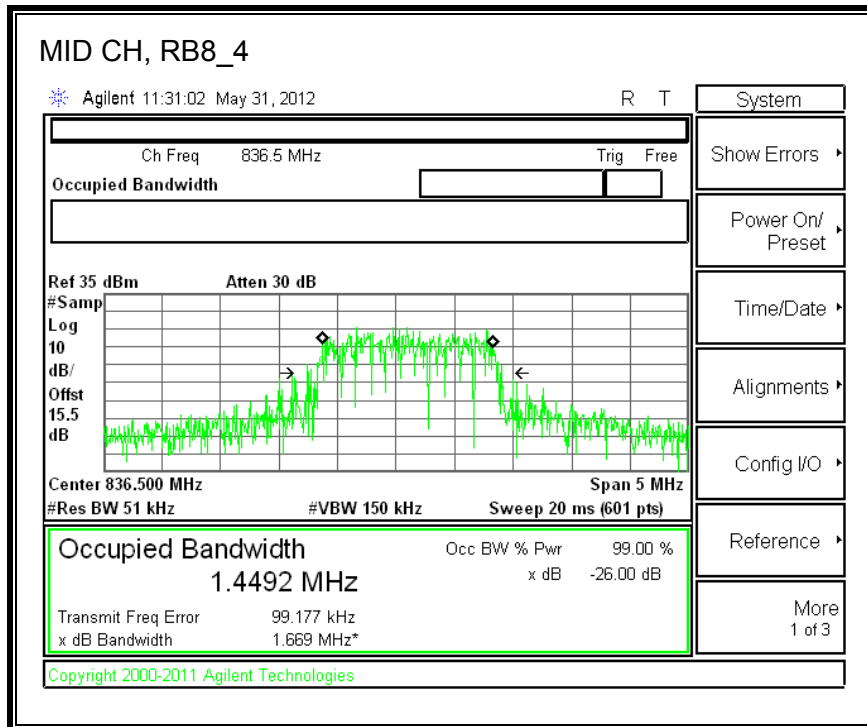


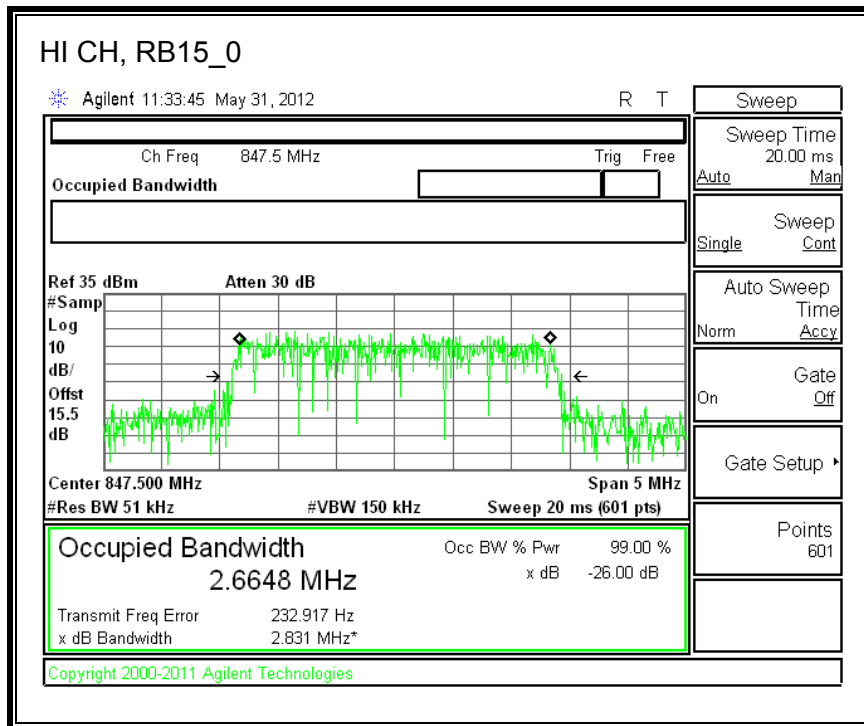
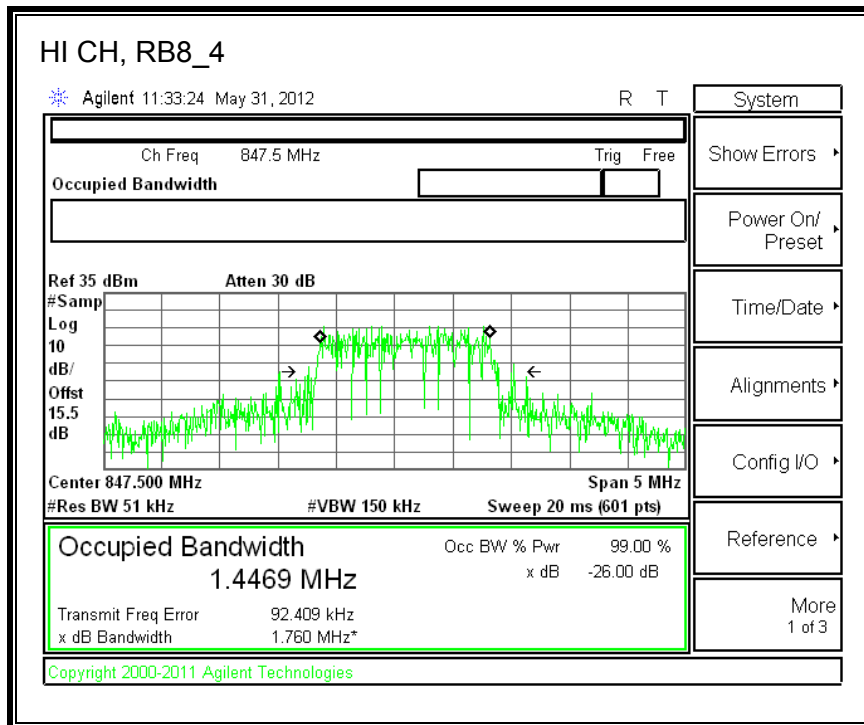


Band 5 (3.0 MHz BAND WIDTH)

LTE 16QAM

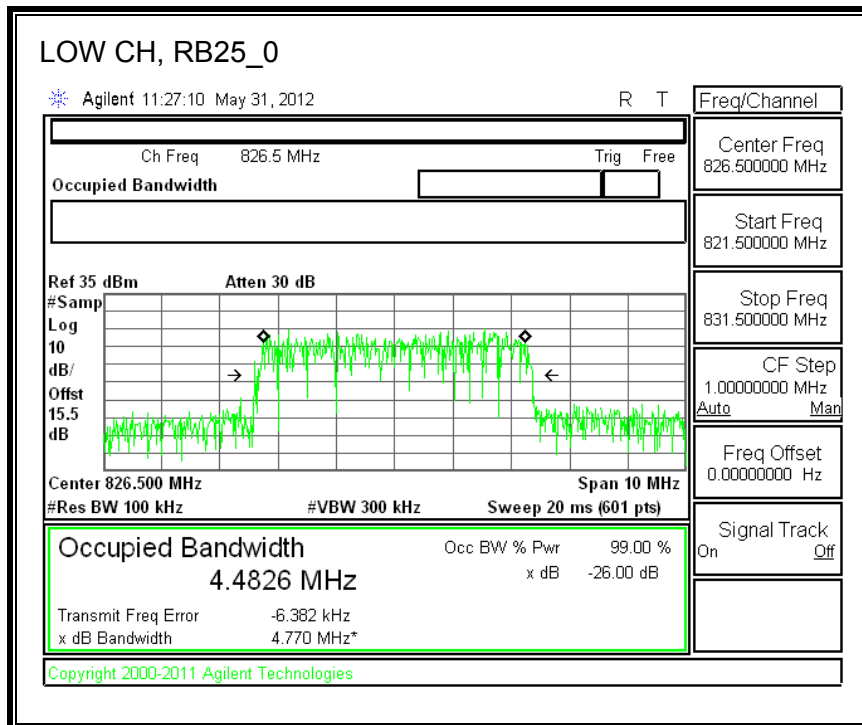
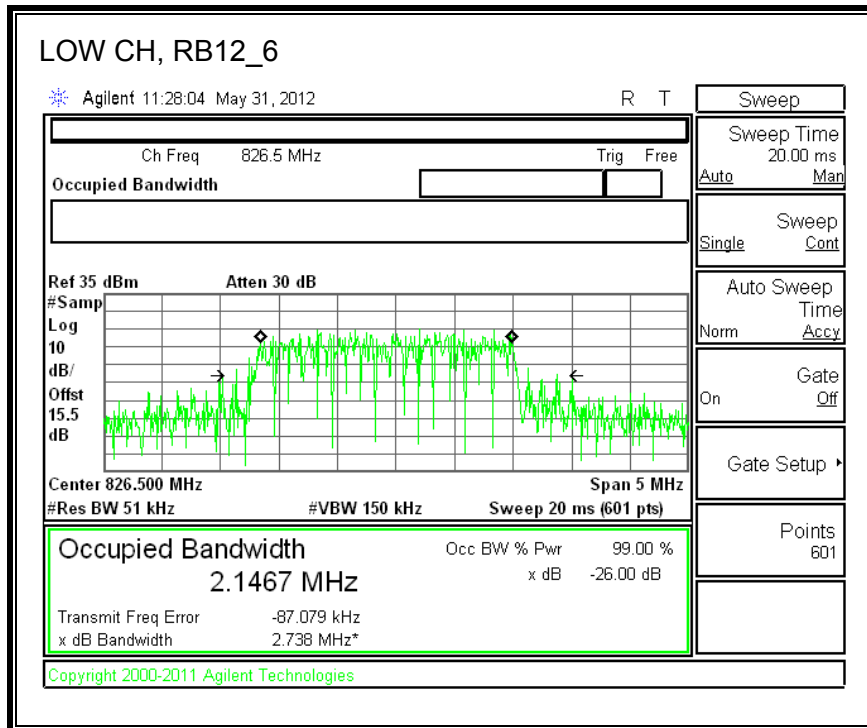


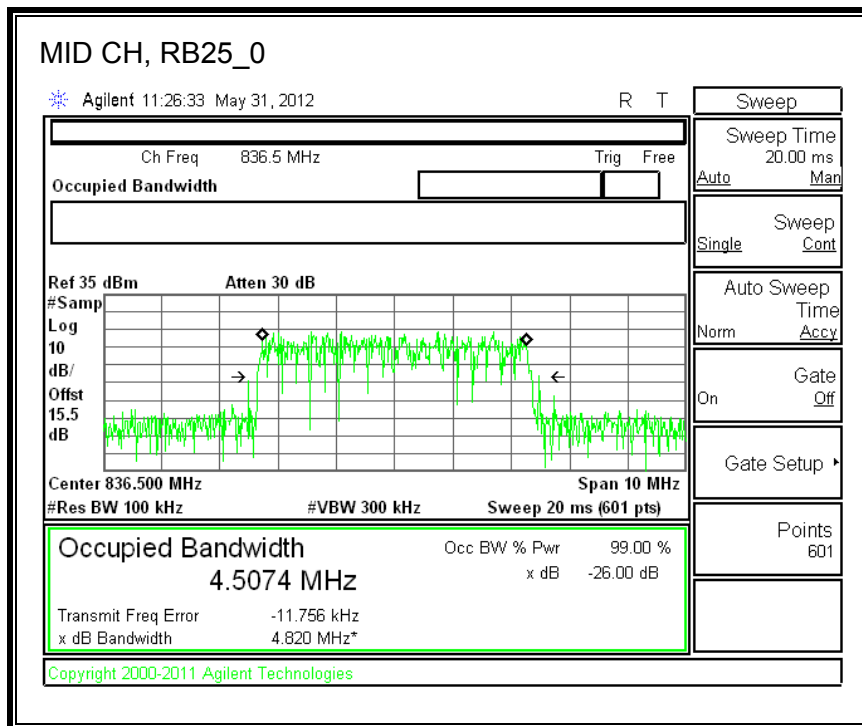
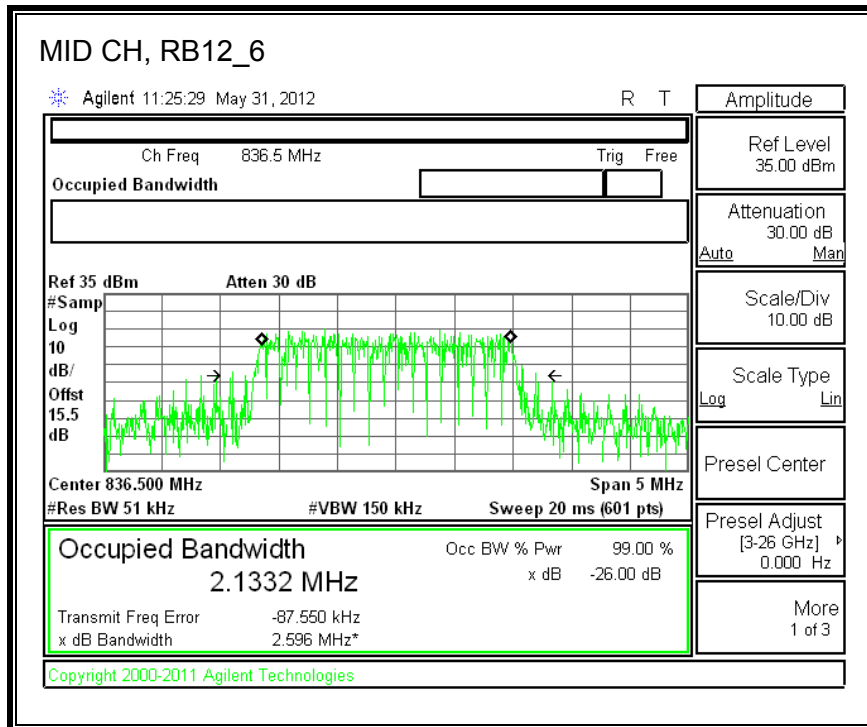


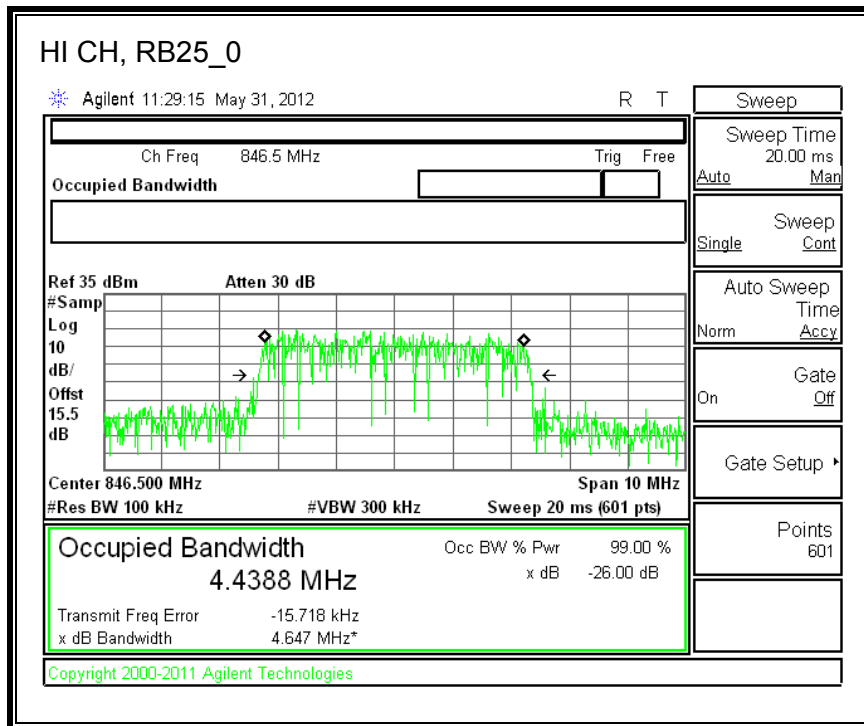
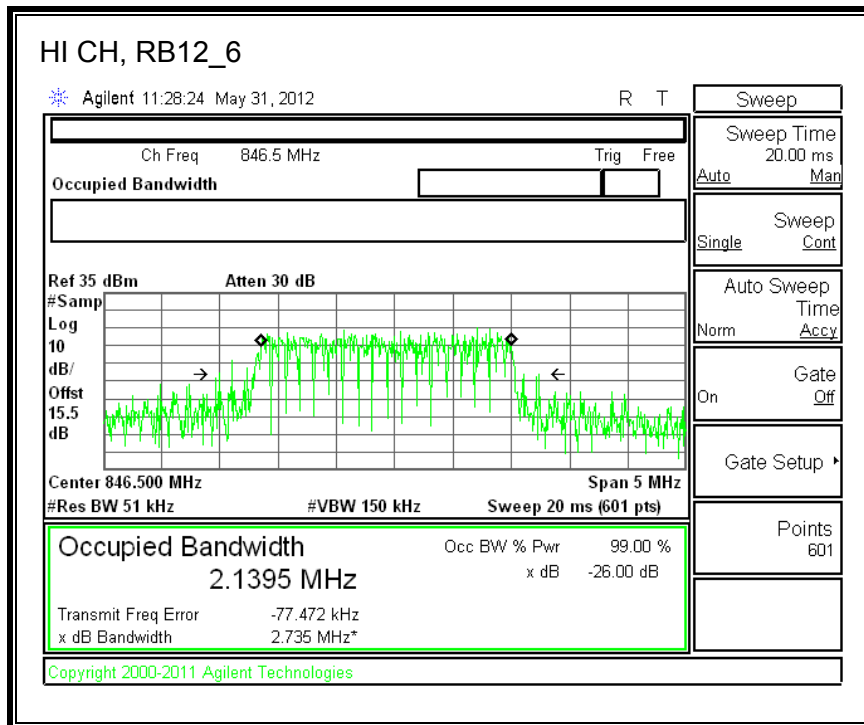


Band 5 (5.0 MHz BAND WIDTH)

LTE QPSK

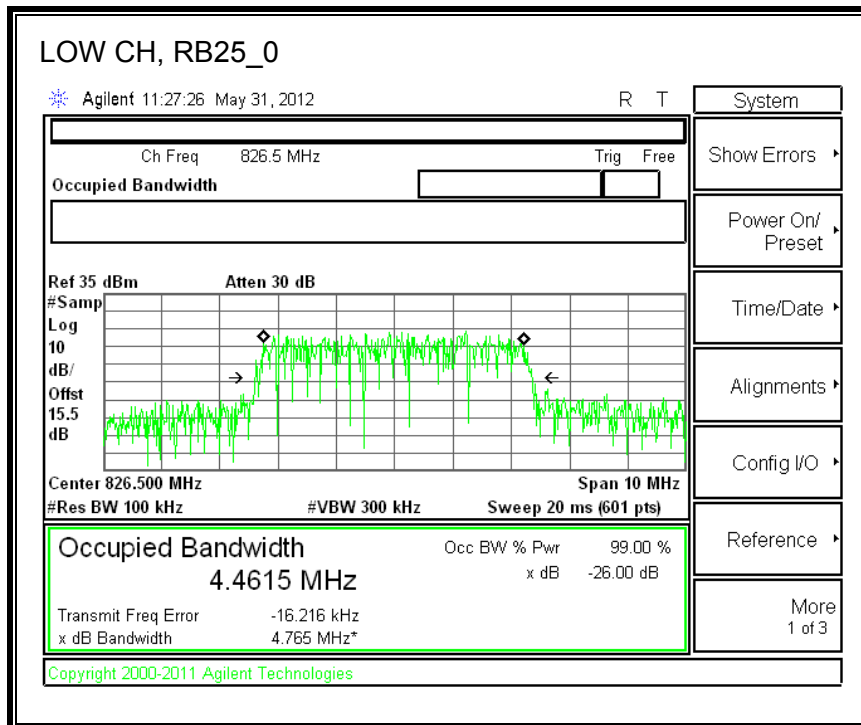
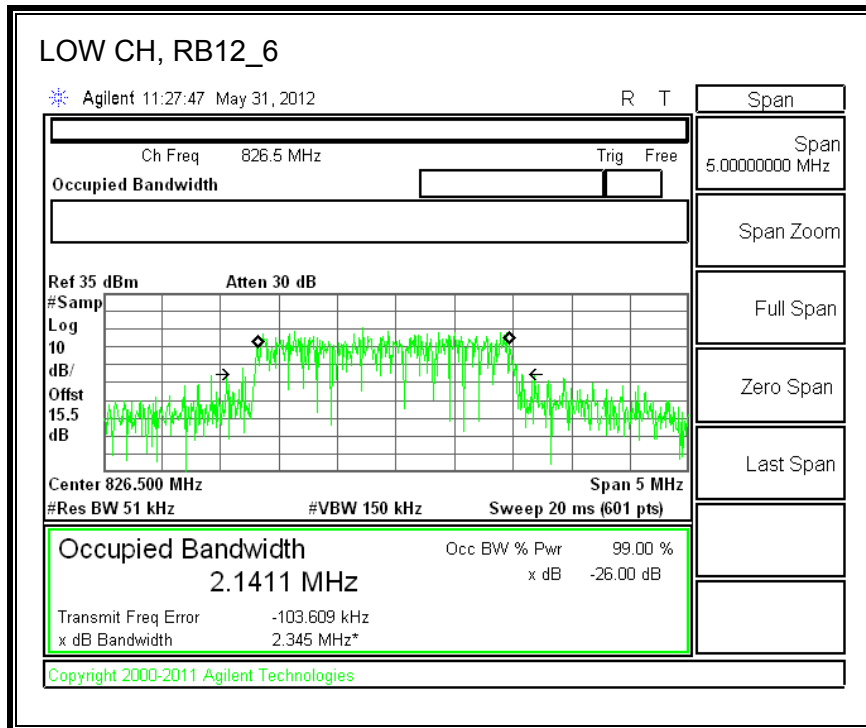


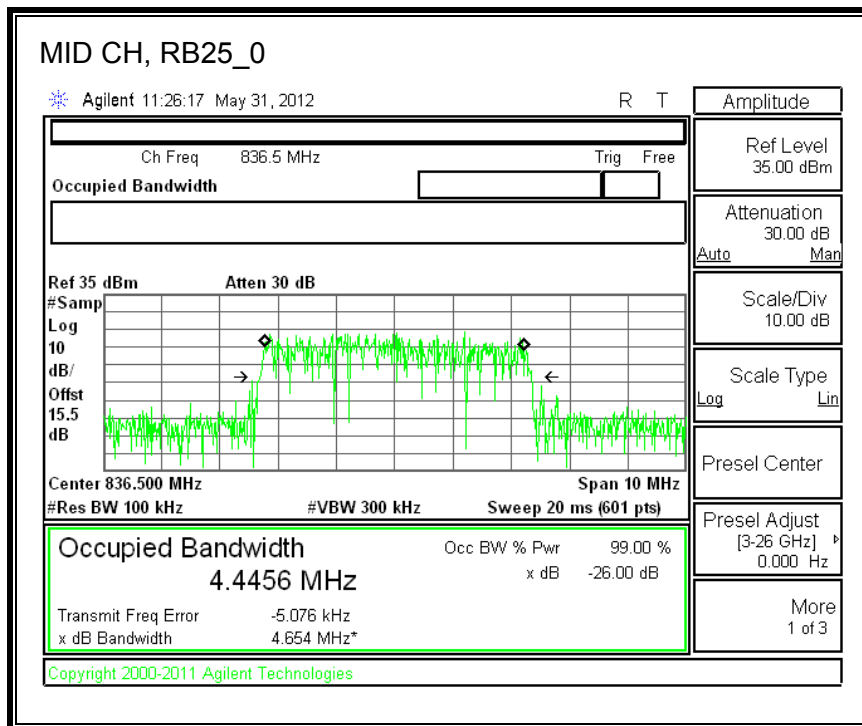
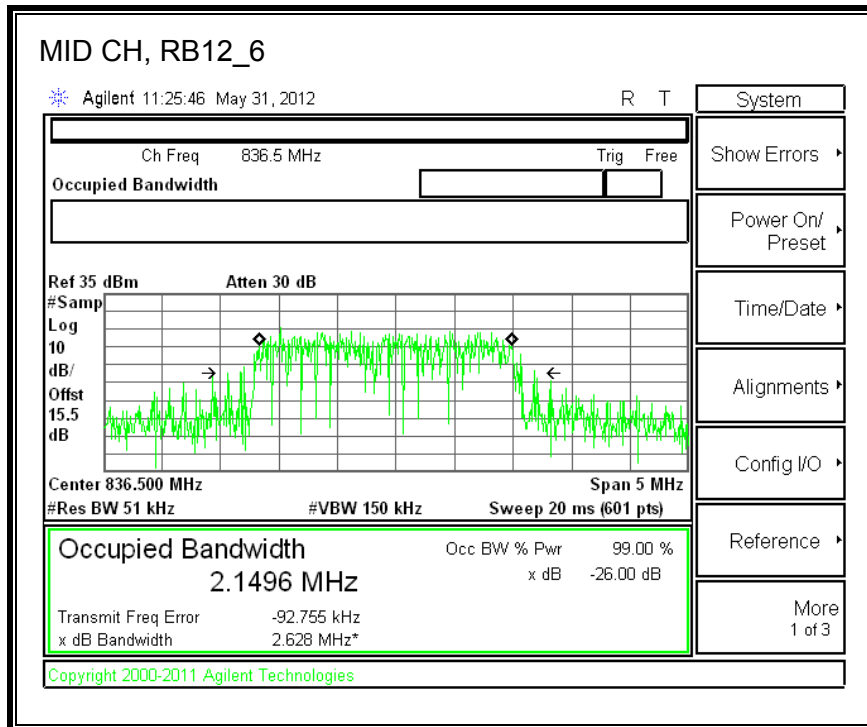


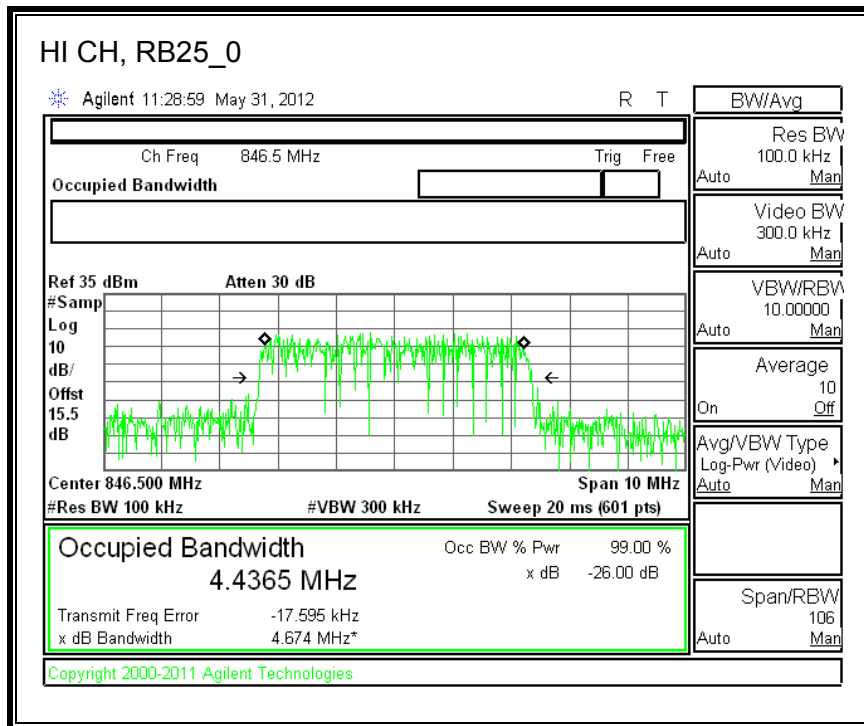
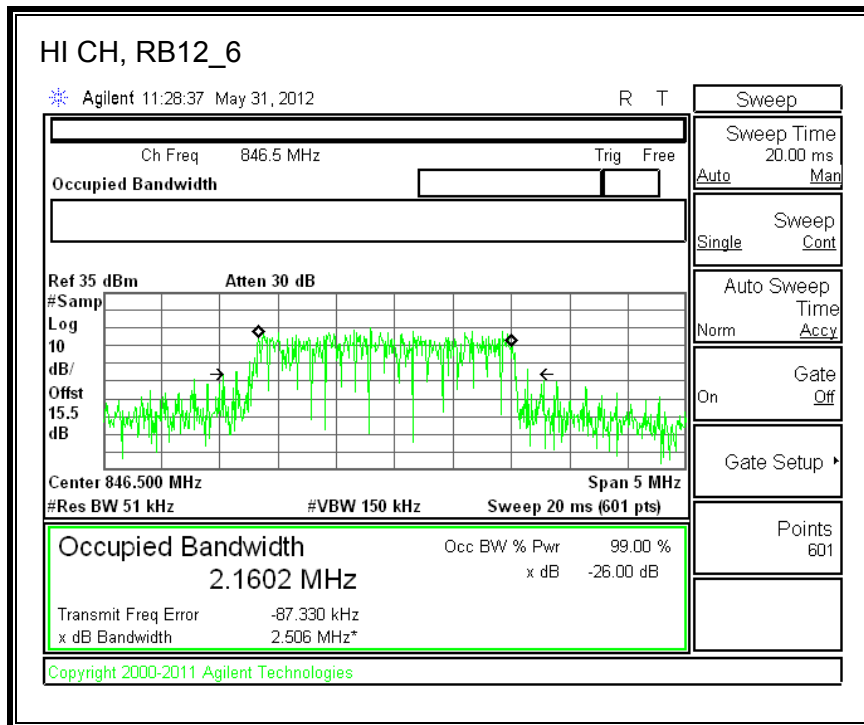


Band 5 (5 MHz BAND WIDTH)

LTE 16QAM

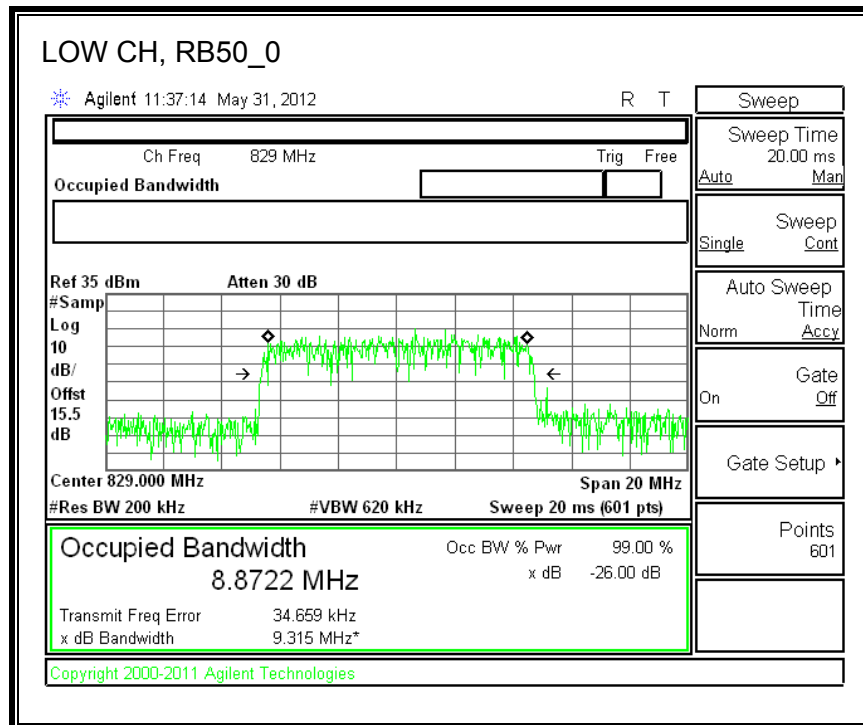
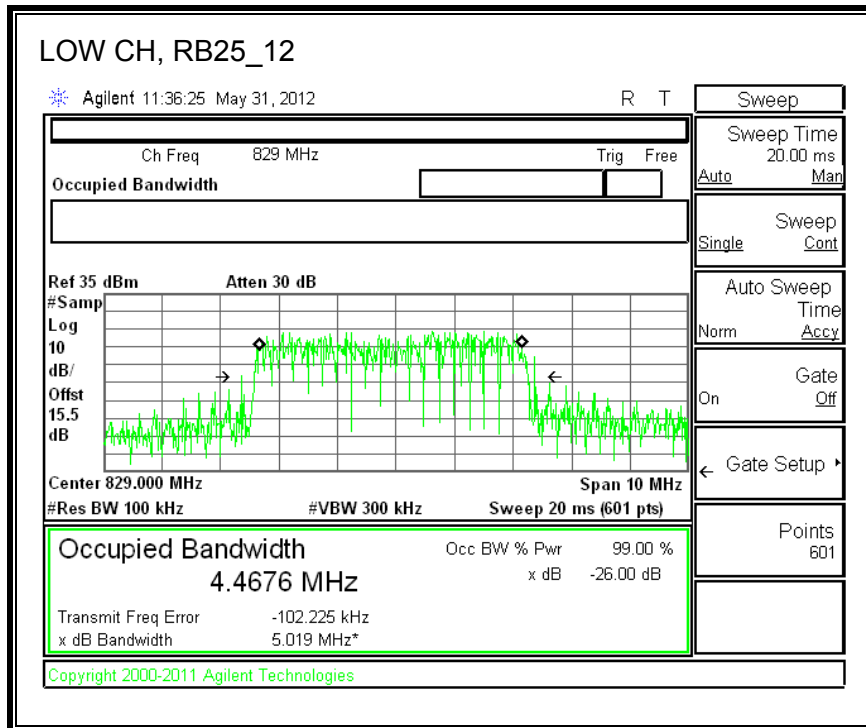


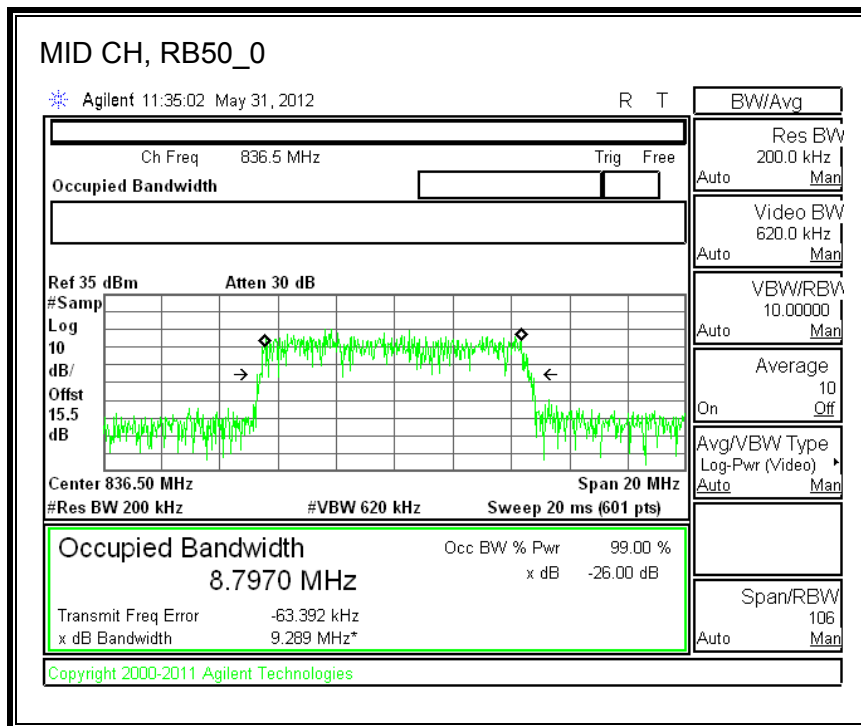
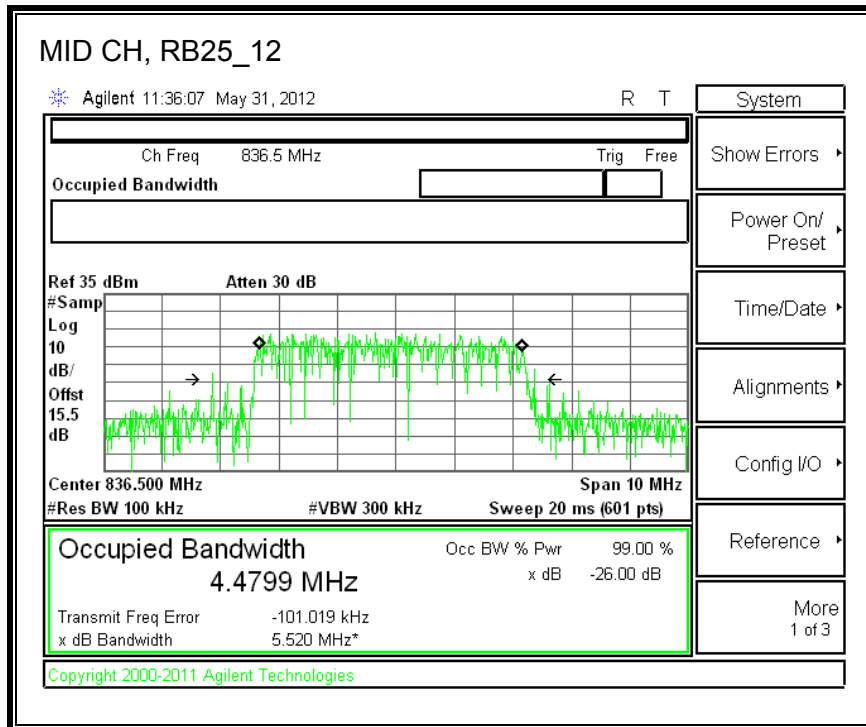


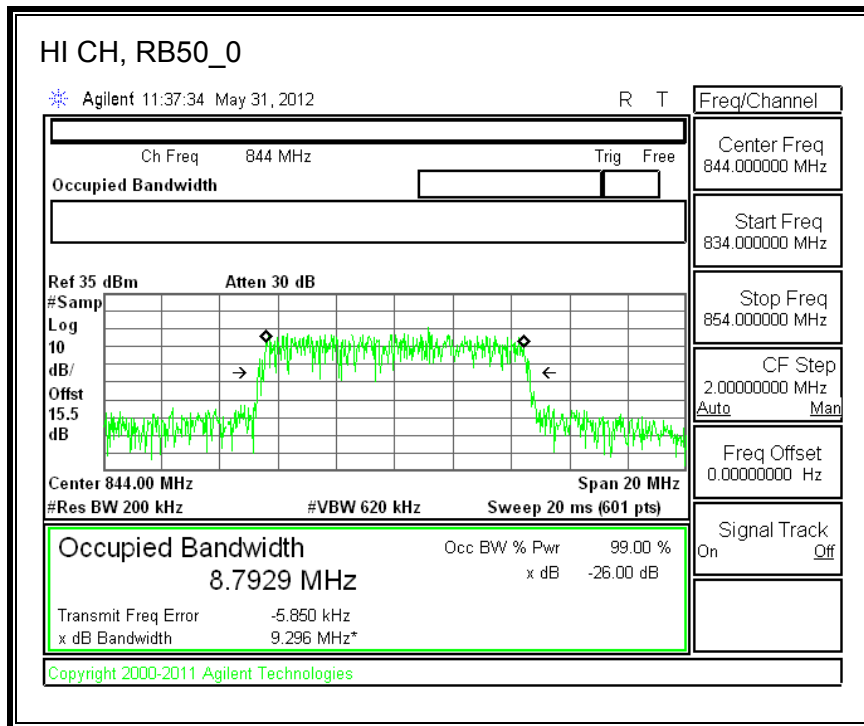
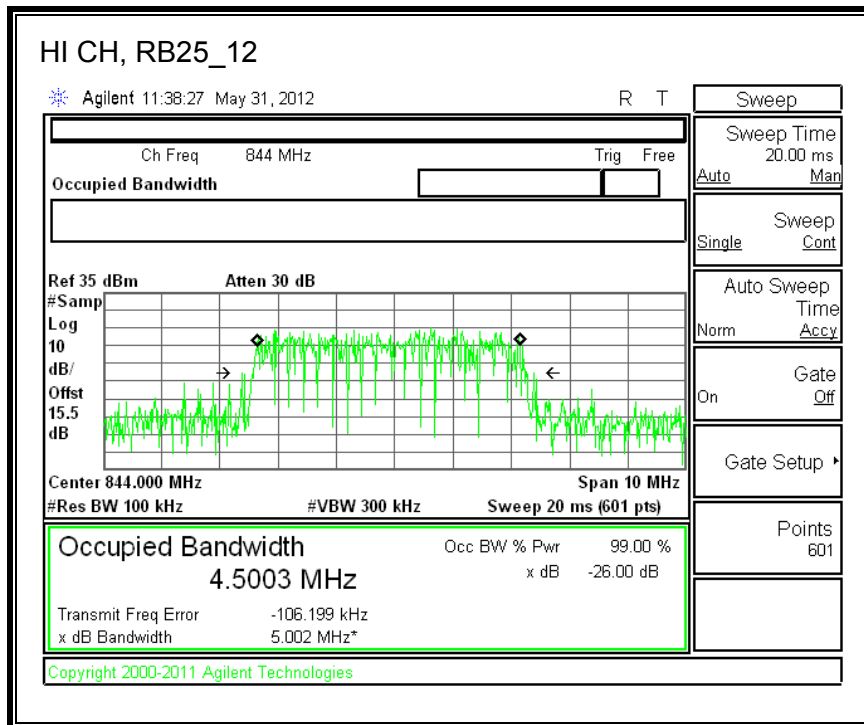


Band 5 (10.0 MHz BAND WIDTH)

LTE QPSK

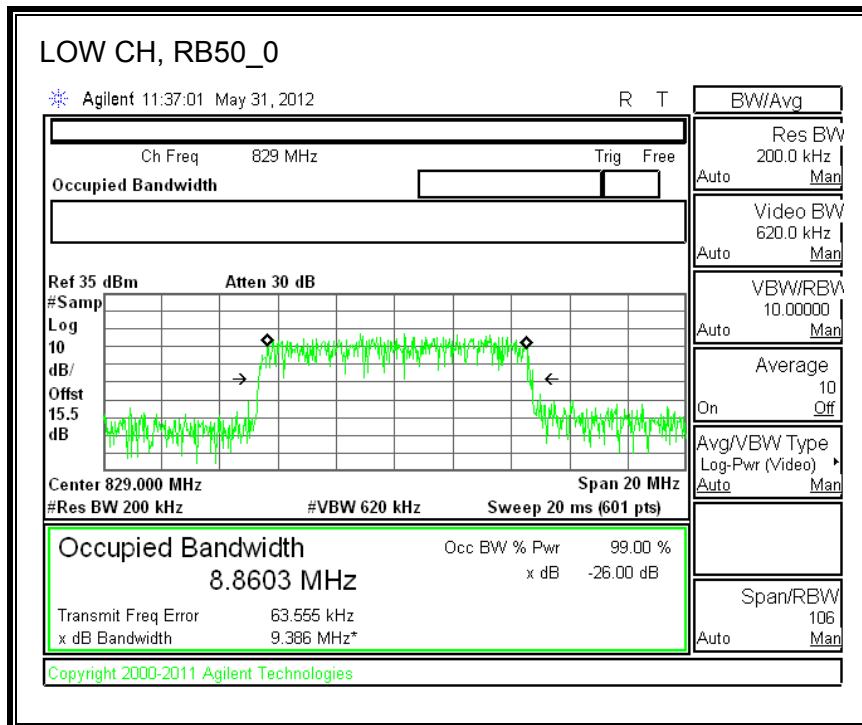
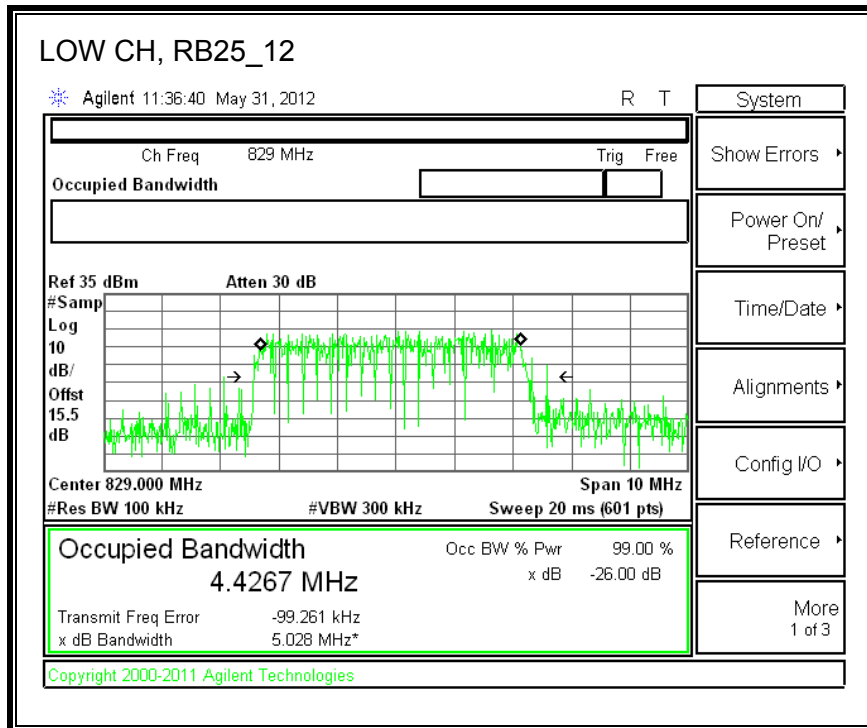


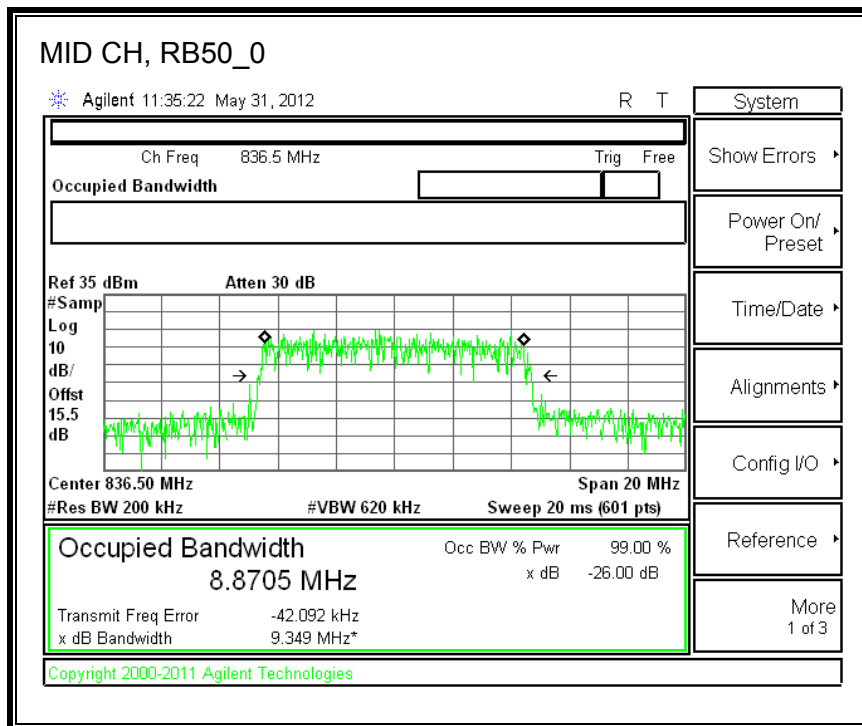
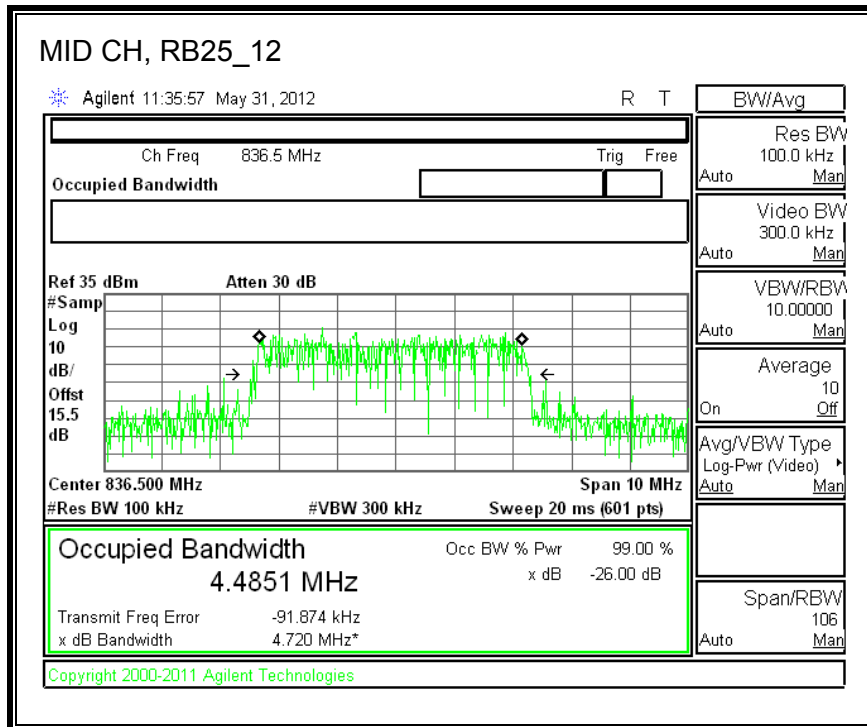


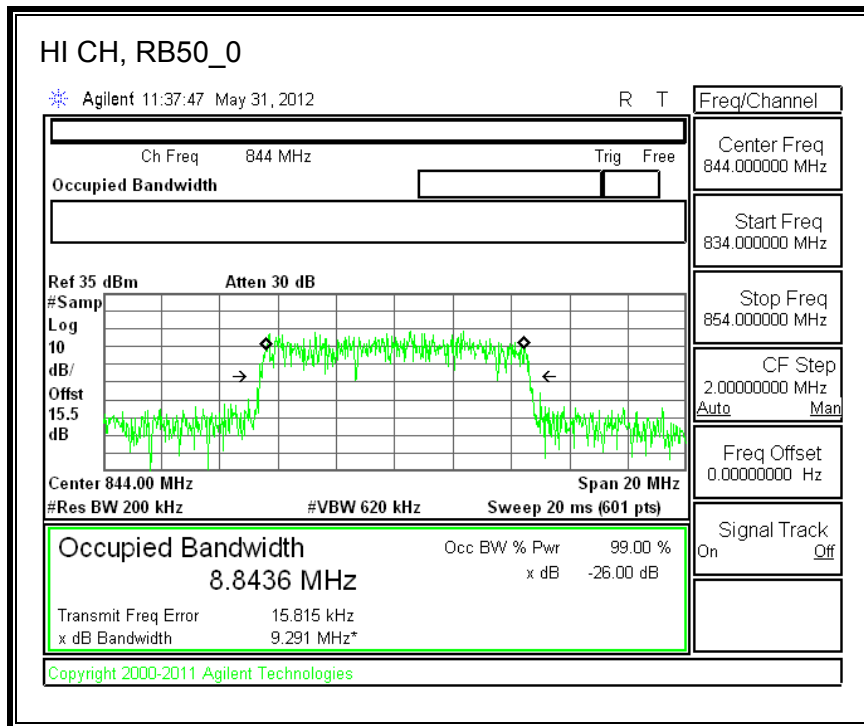
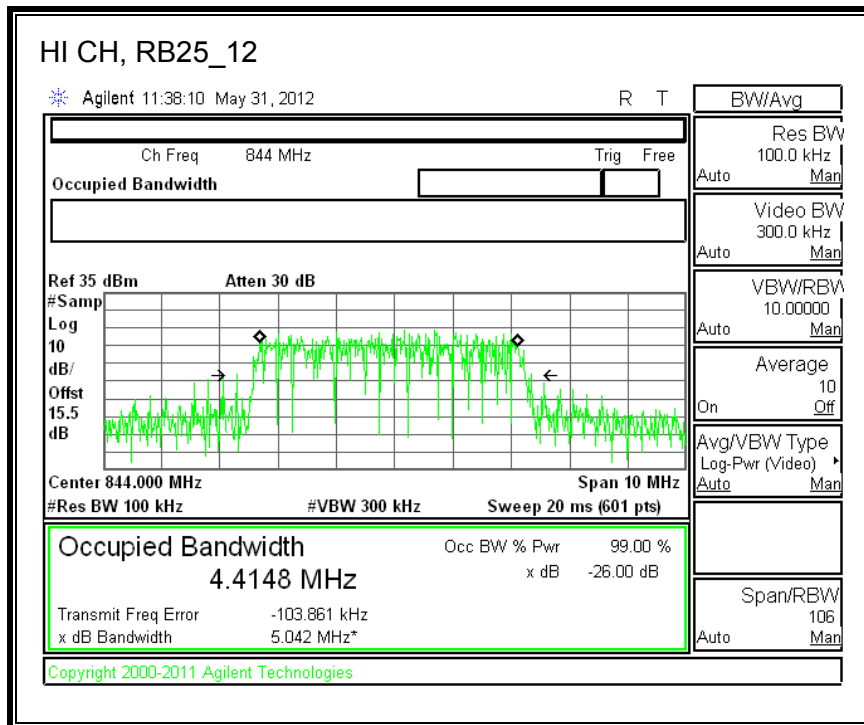


Band 5 (10 MHz BAND WIDTH)

LTE 16QAM

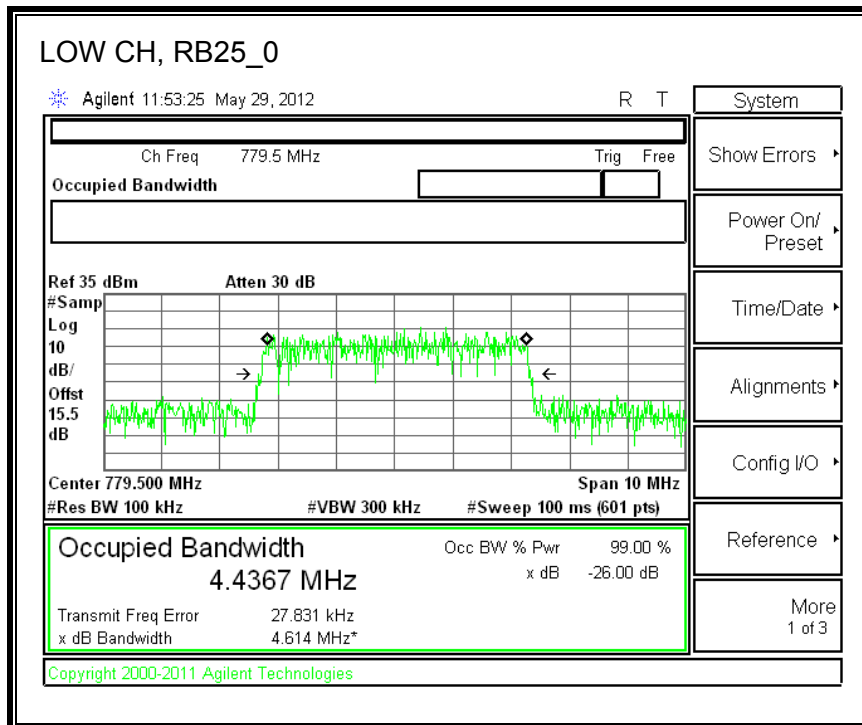
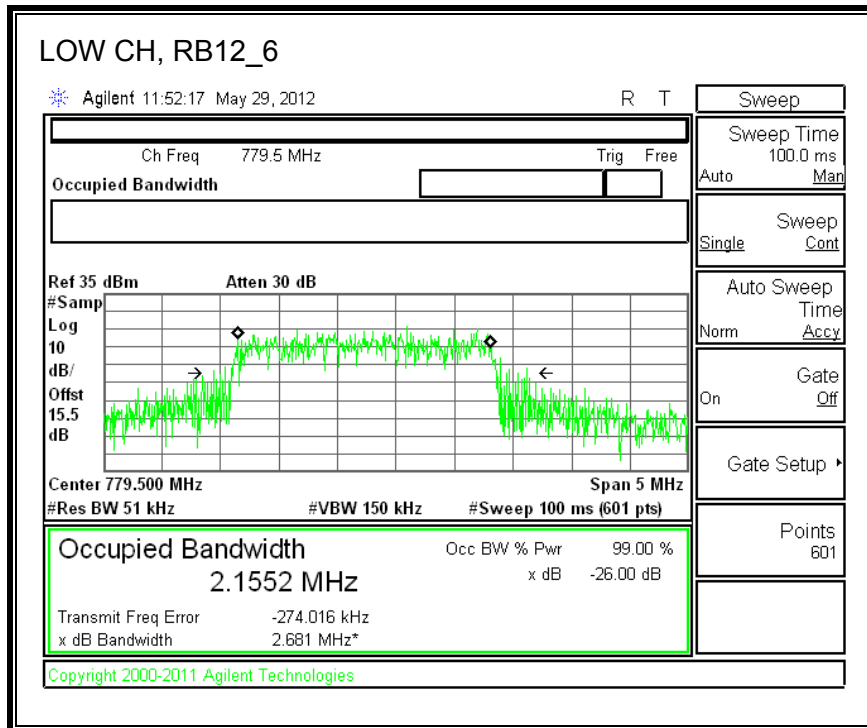


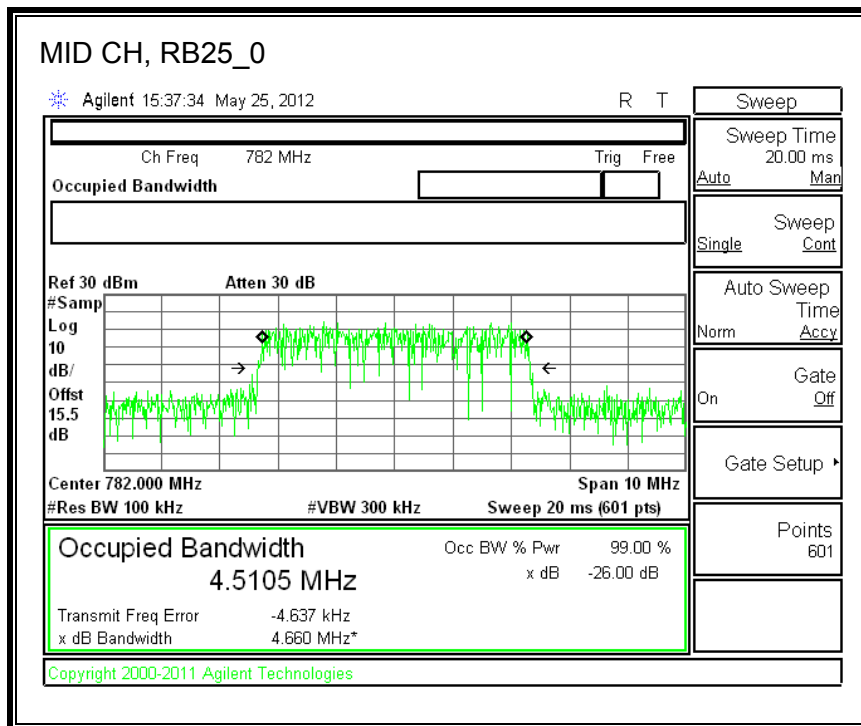
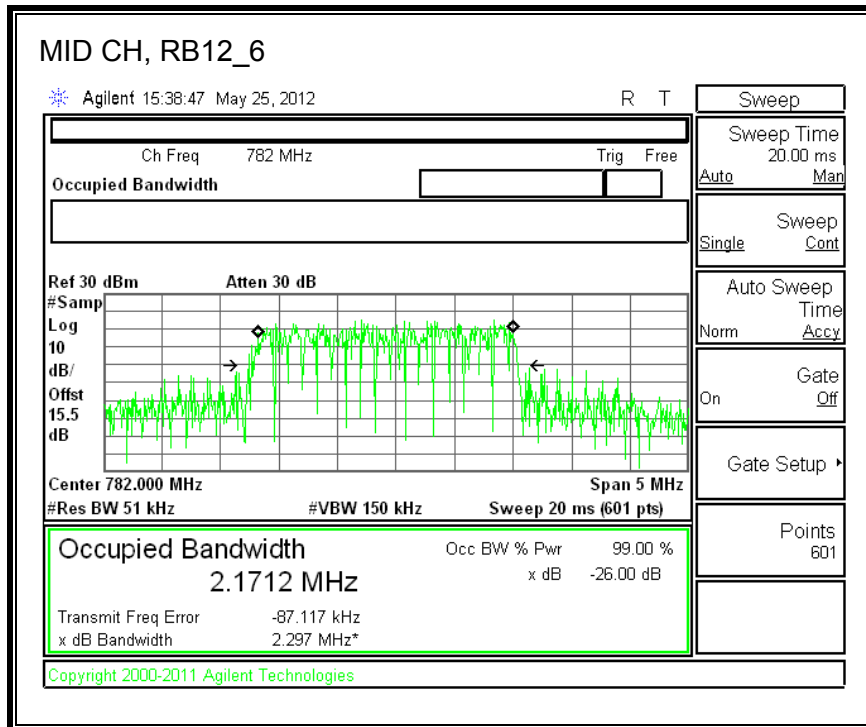


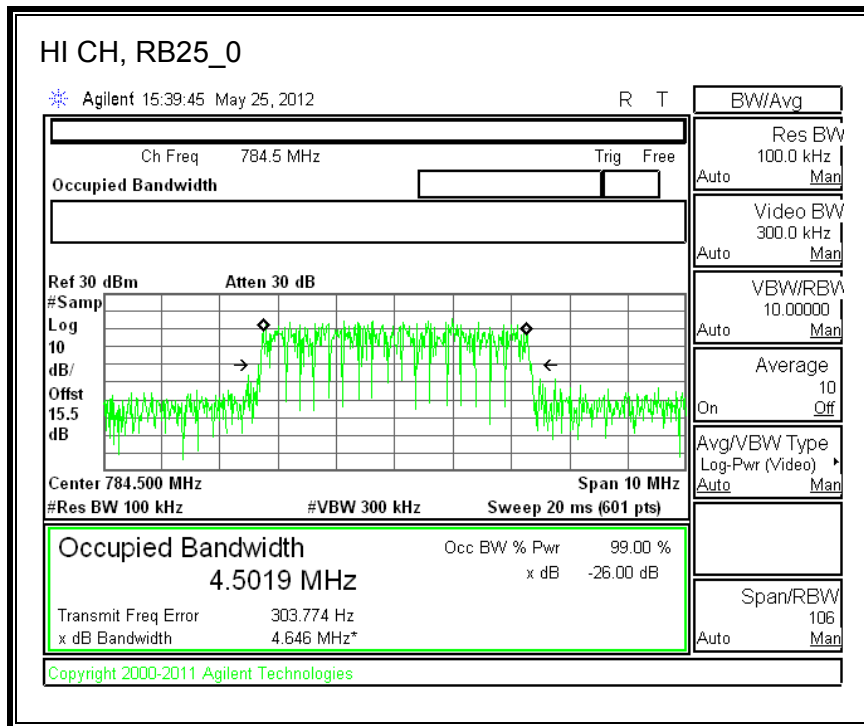
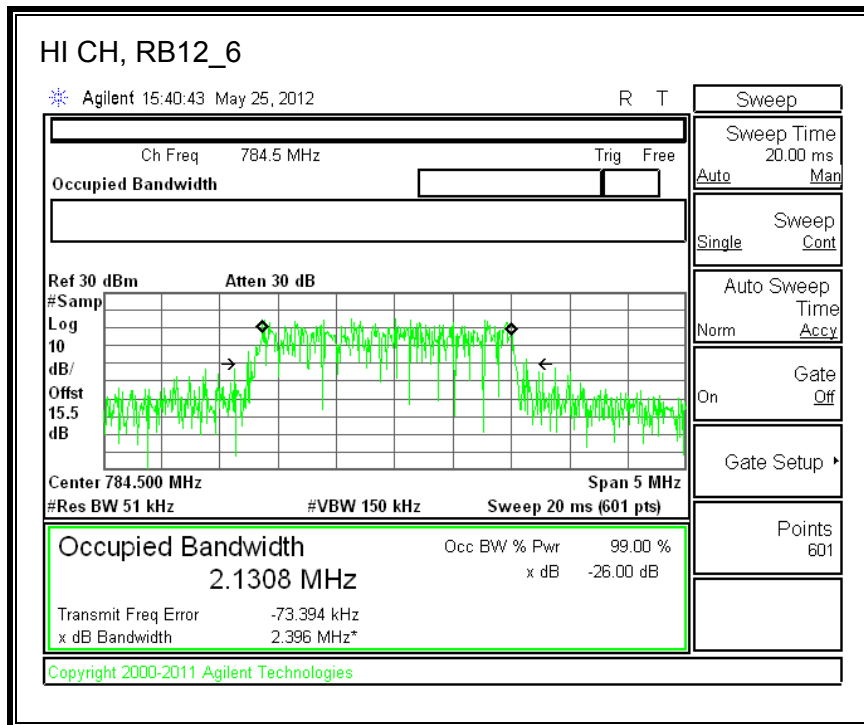


Band 13 (5.0 MHz BAND WIDTH)

LTE QPSK

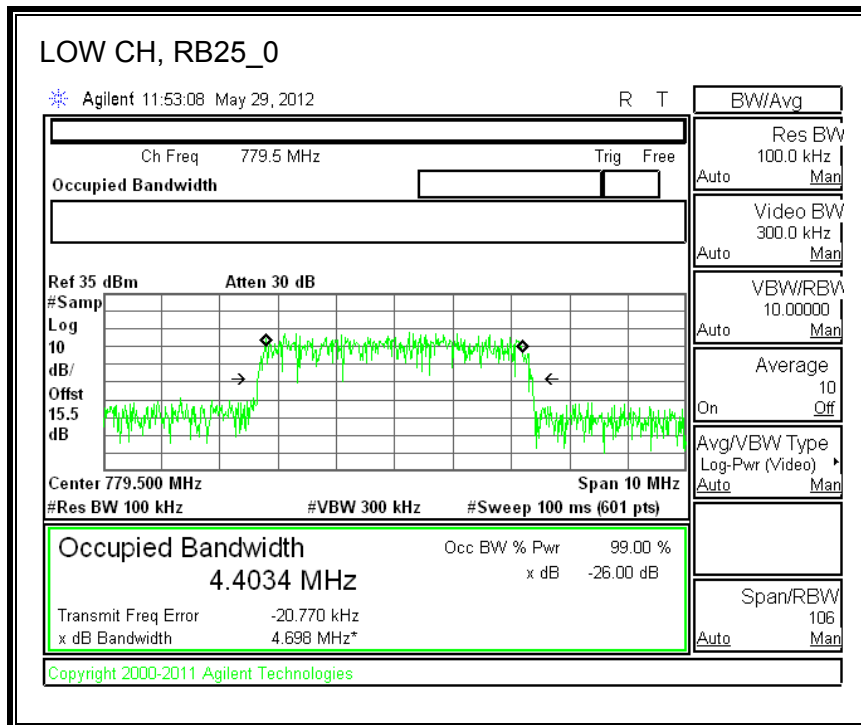
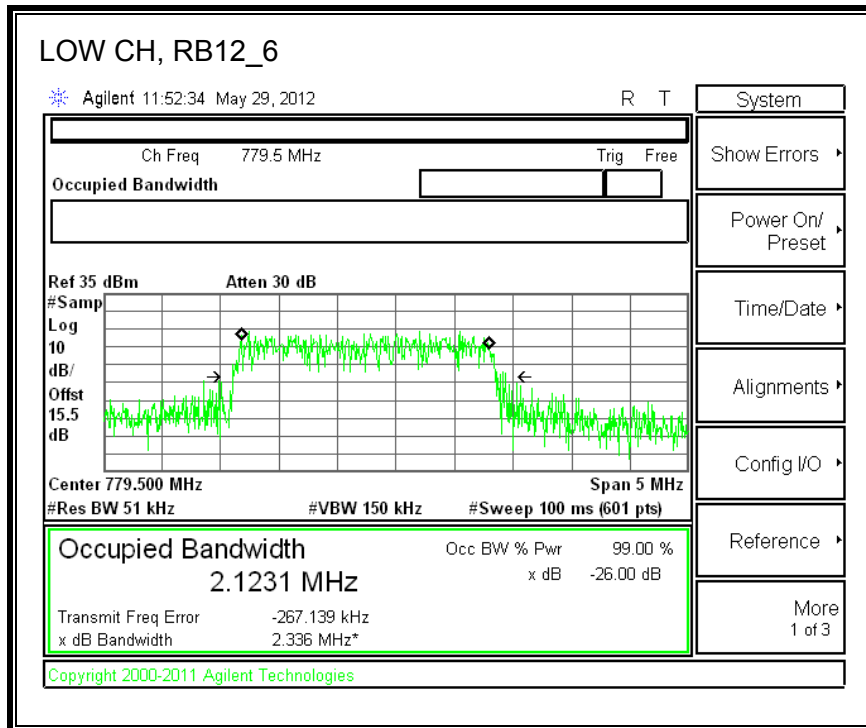


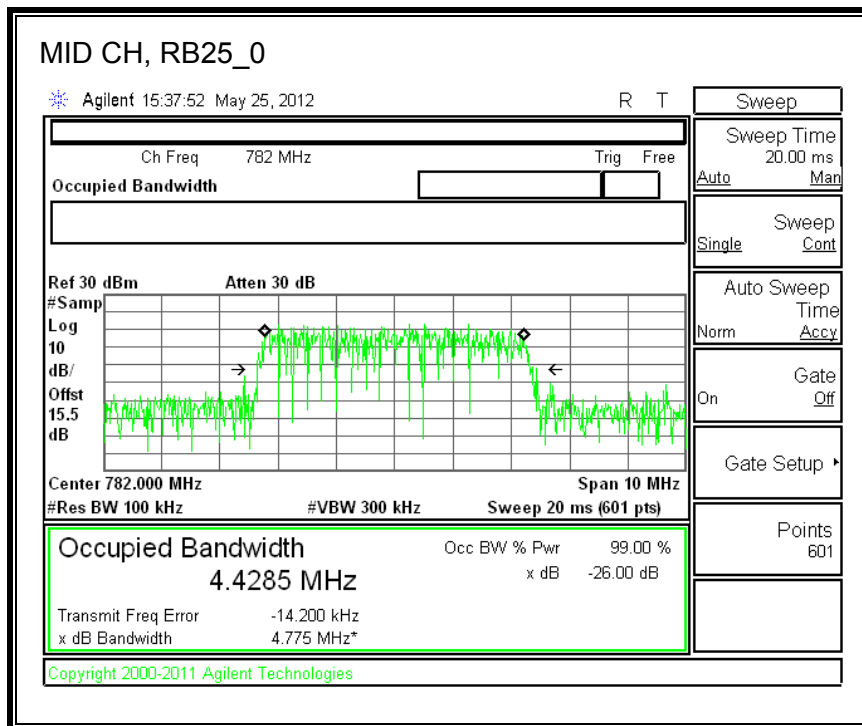
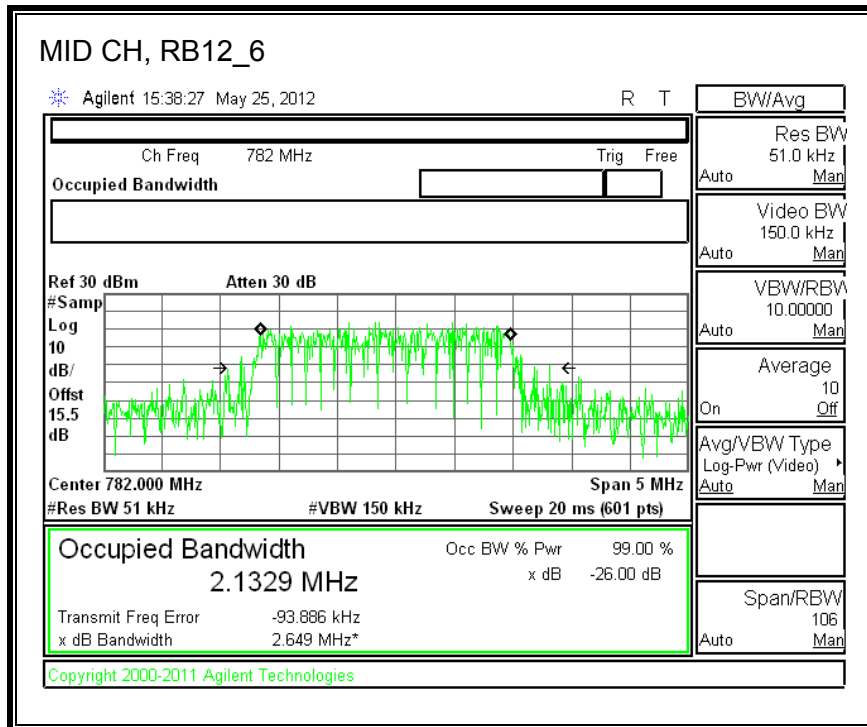


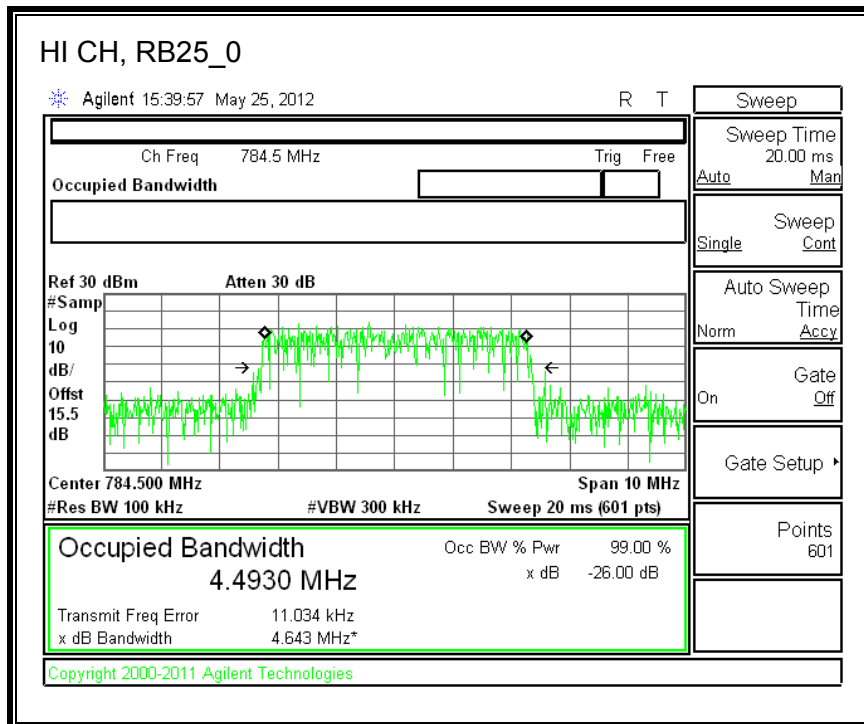
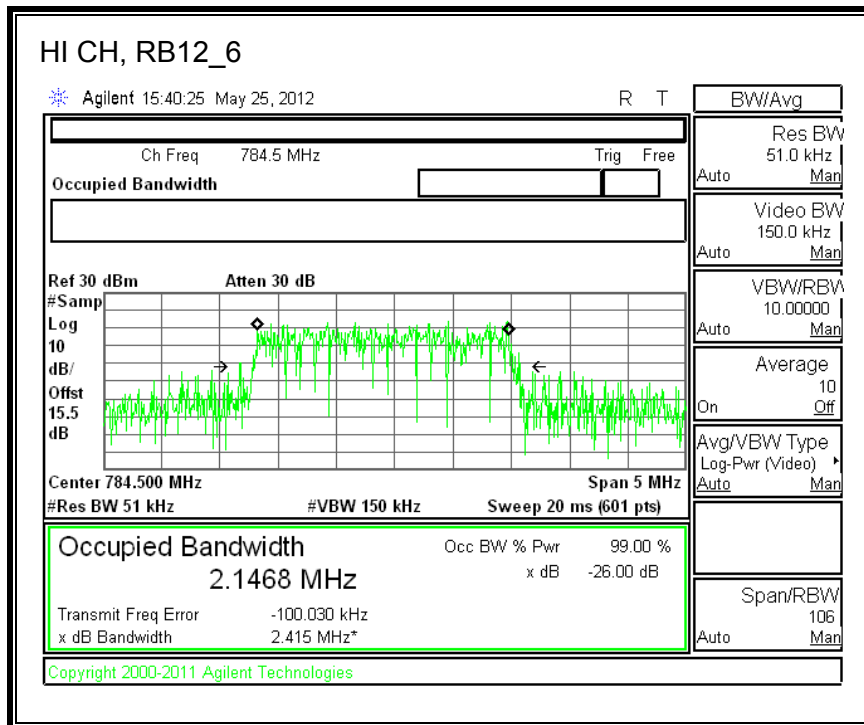


Band 13 (5 MHz BAND WIDTH)

LTE 16QAM

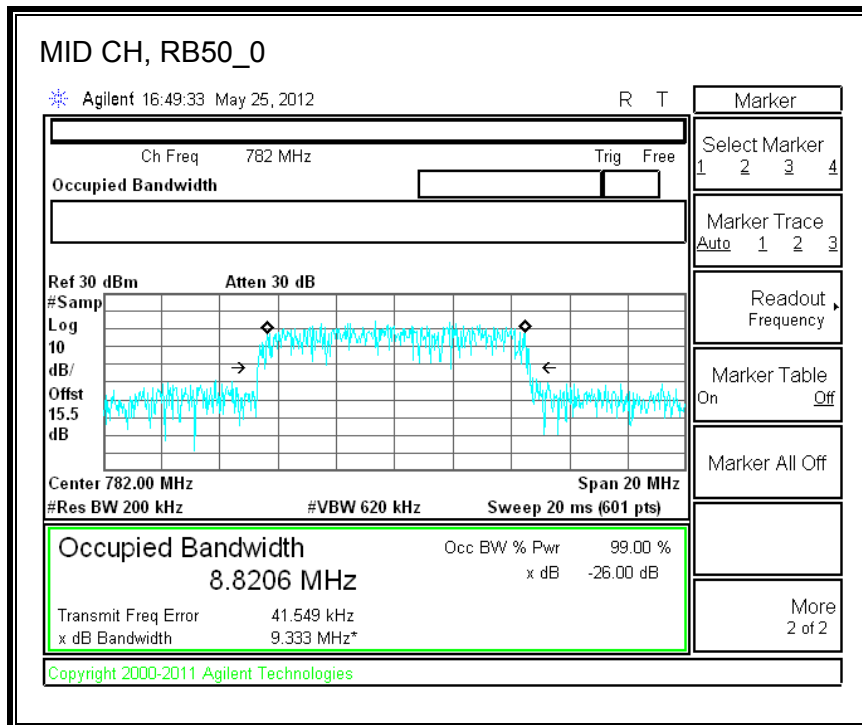
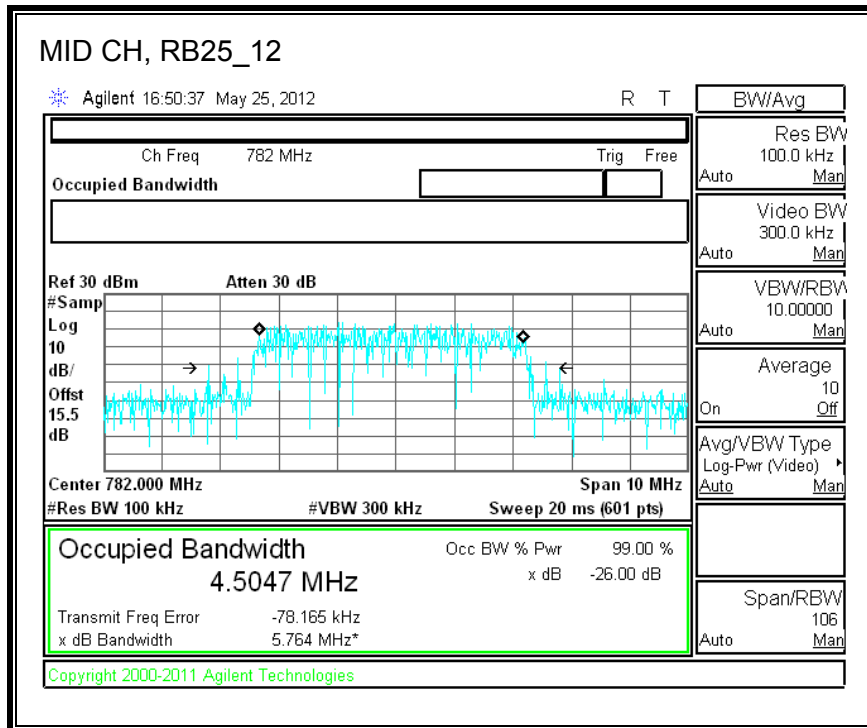






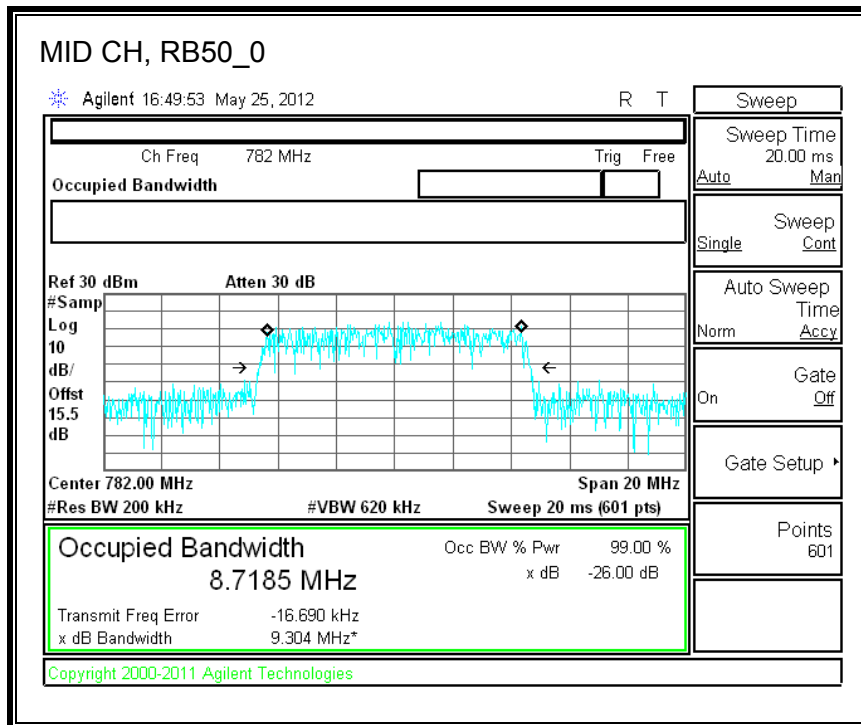
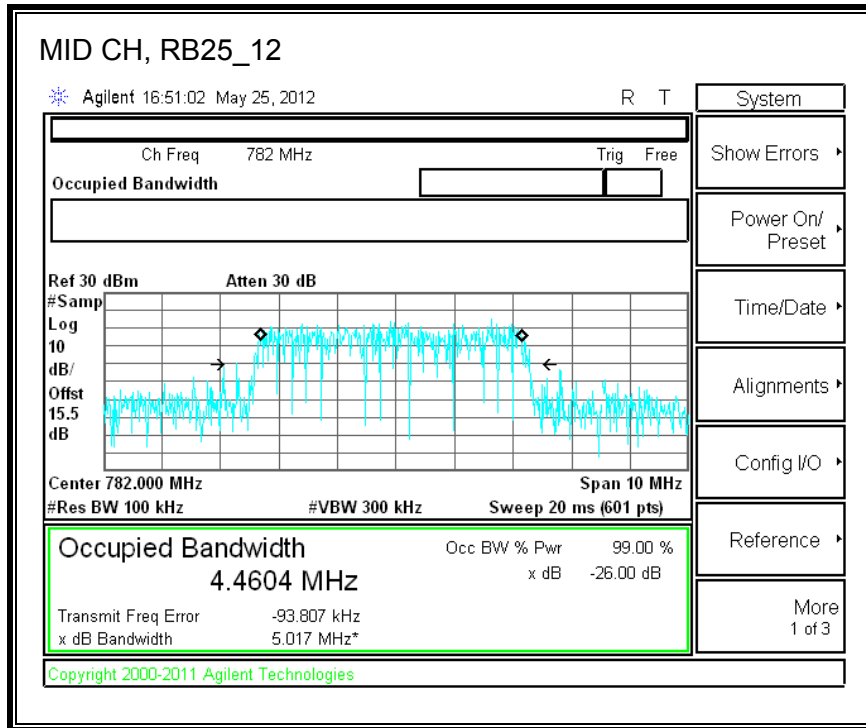
Band 13 (10.0 MHz BAND WIDTH)

LTE QPSK



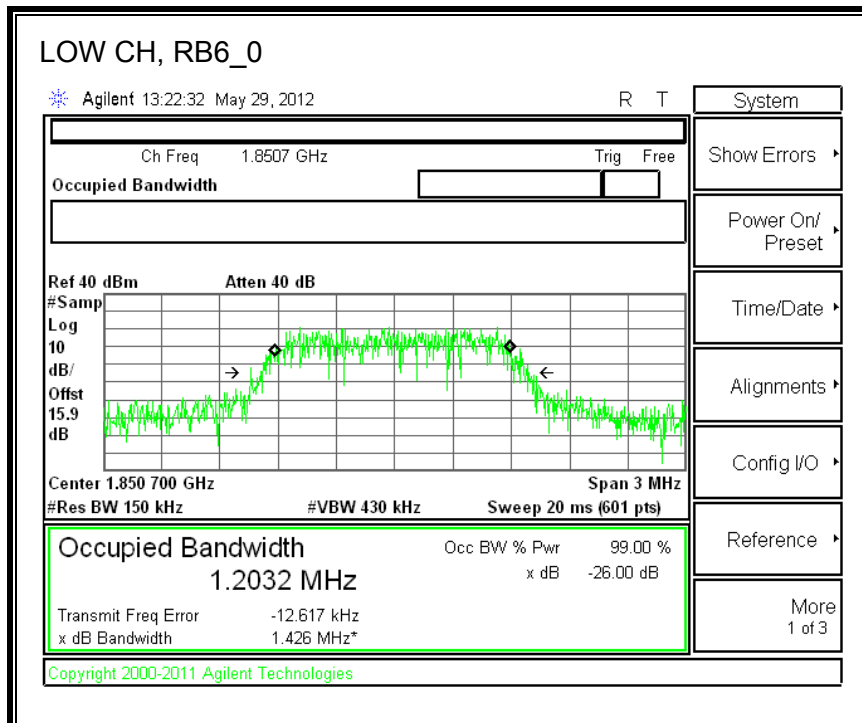
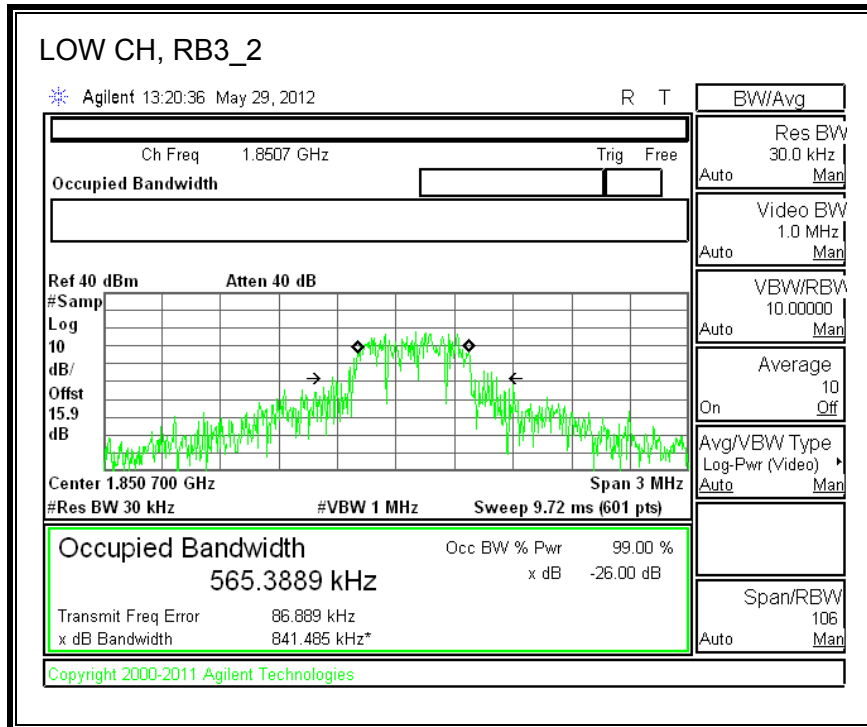
Band 13 (10 MHz BAND WIDTH)

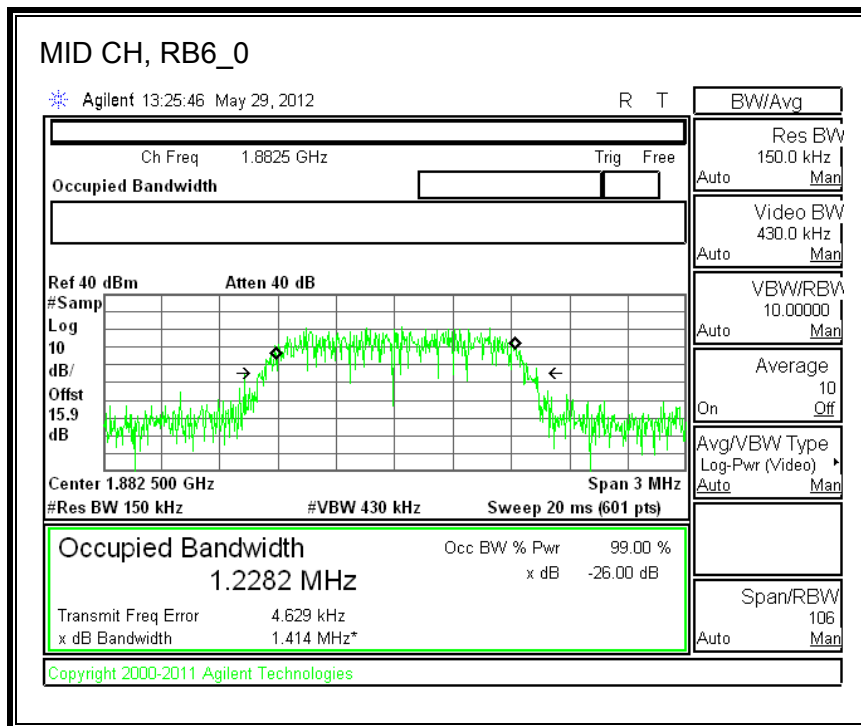
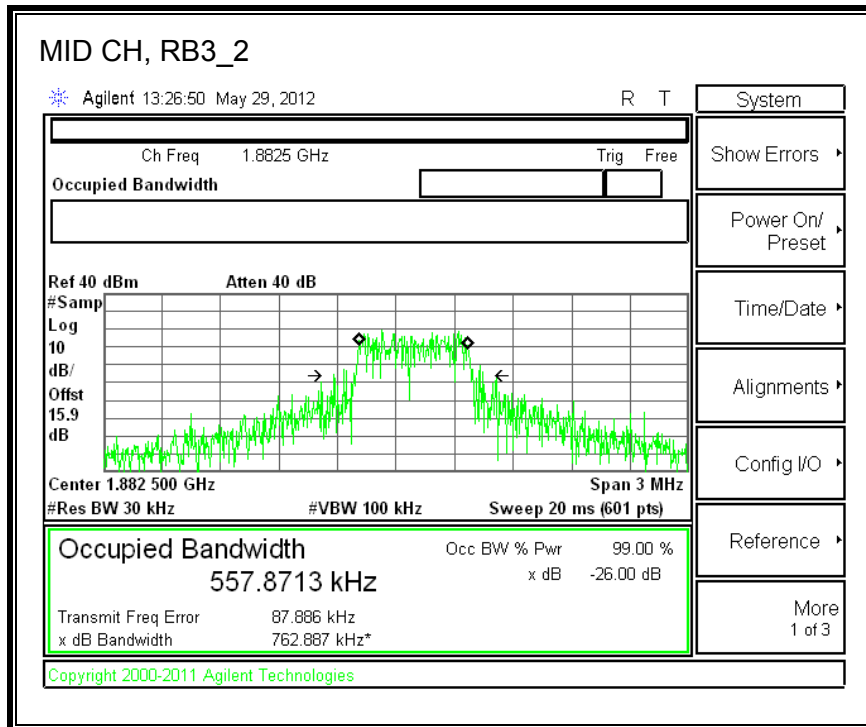
LTE 16QAM

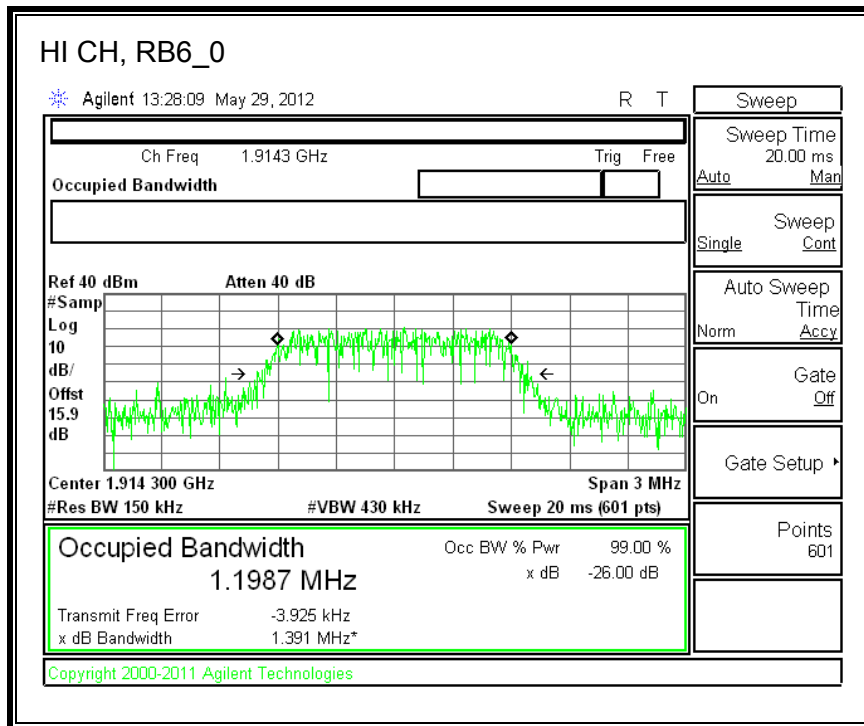
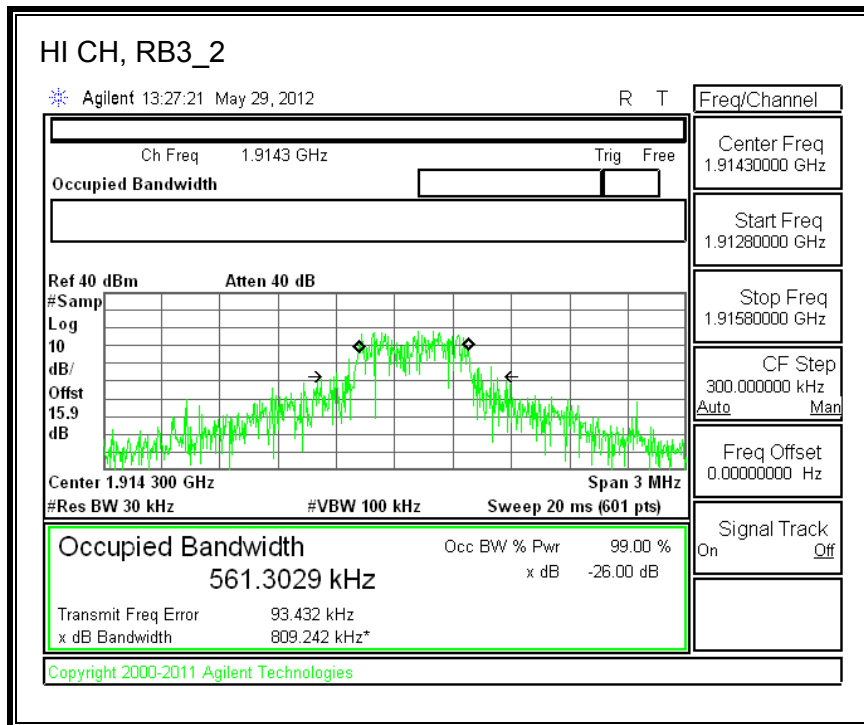


Band 25 (1.4 MHz BAND WIDTH)

LTE QPSK

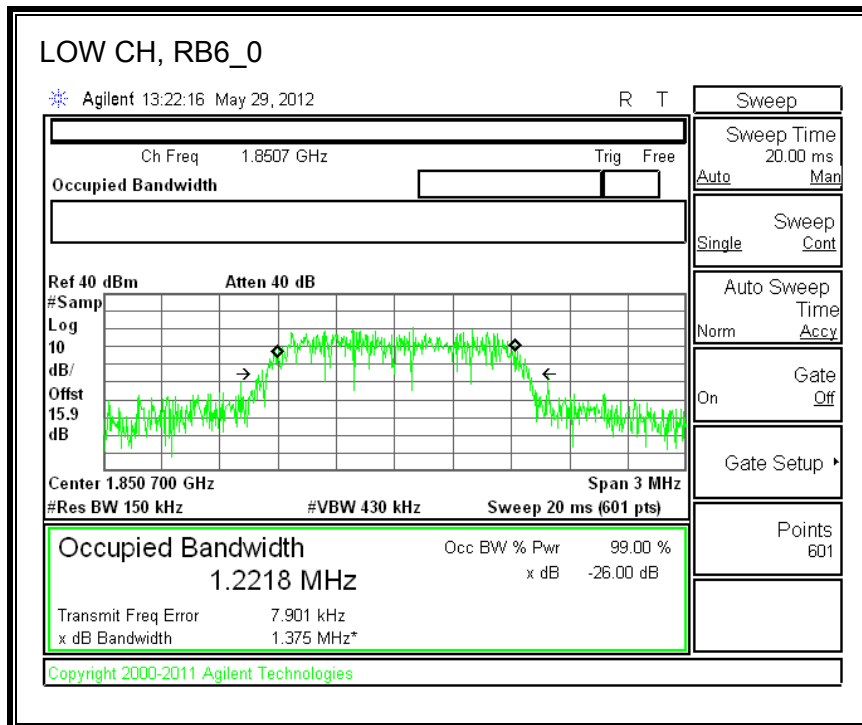
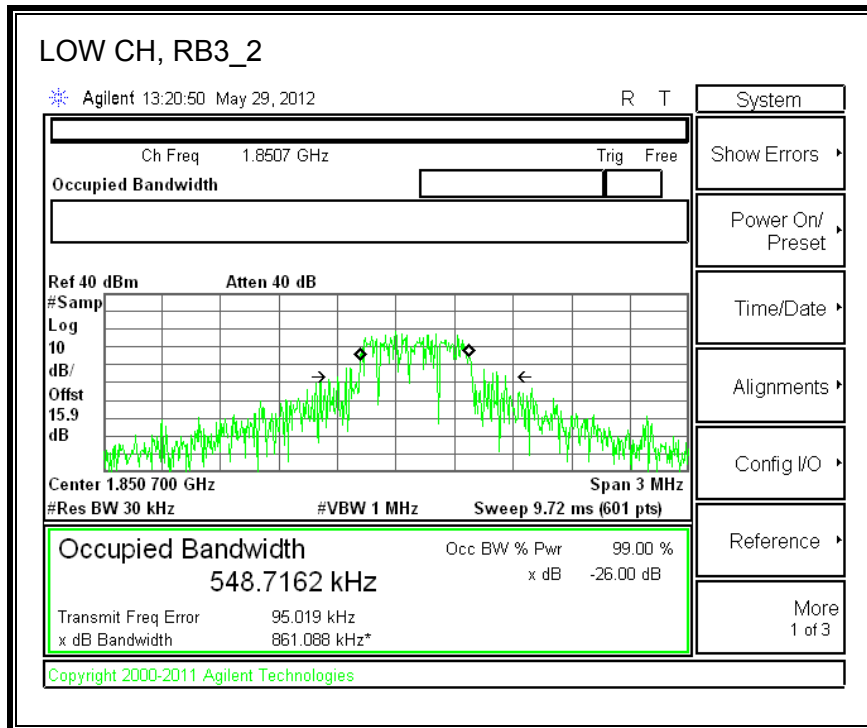


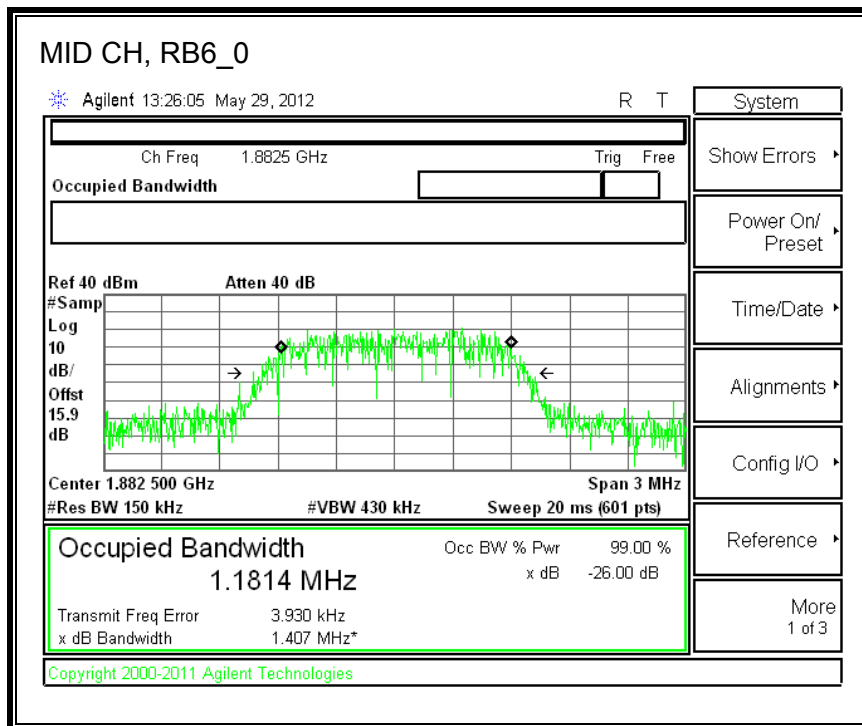
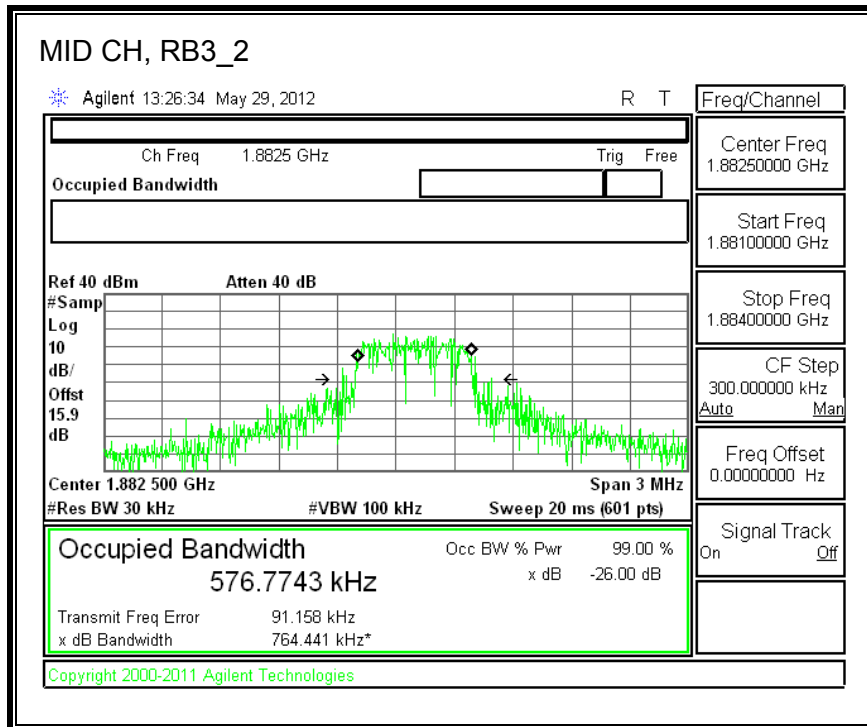


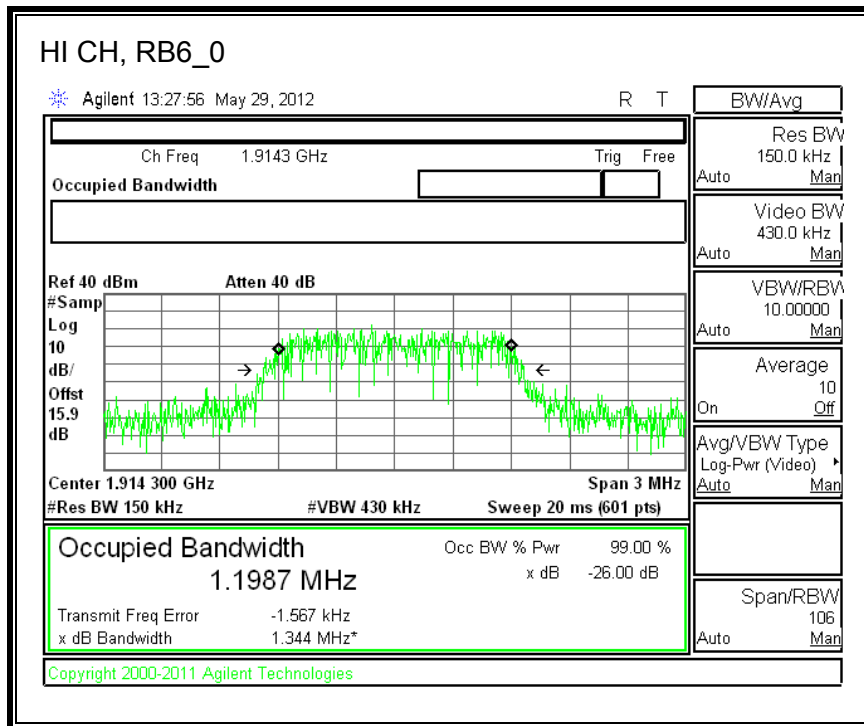
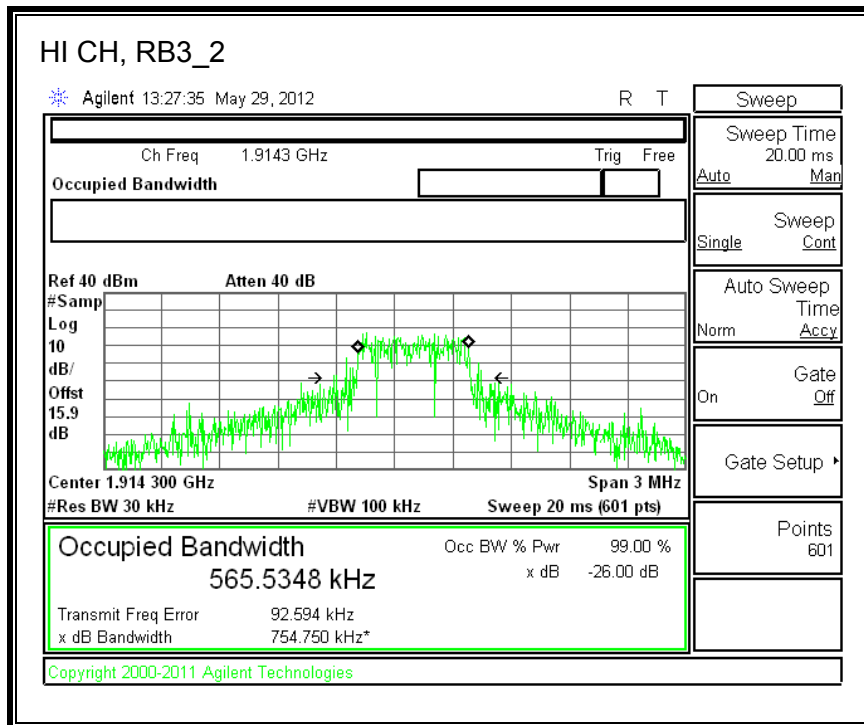


Band 25 (1.4 MHz BAND WIDTH)

LTE 16QAM

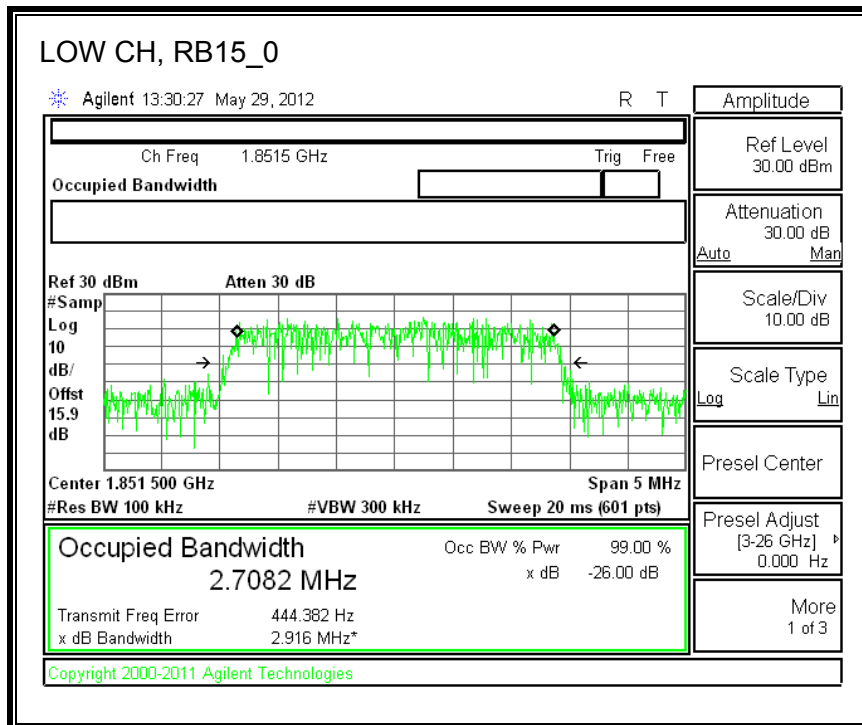
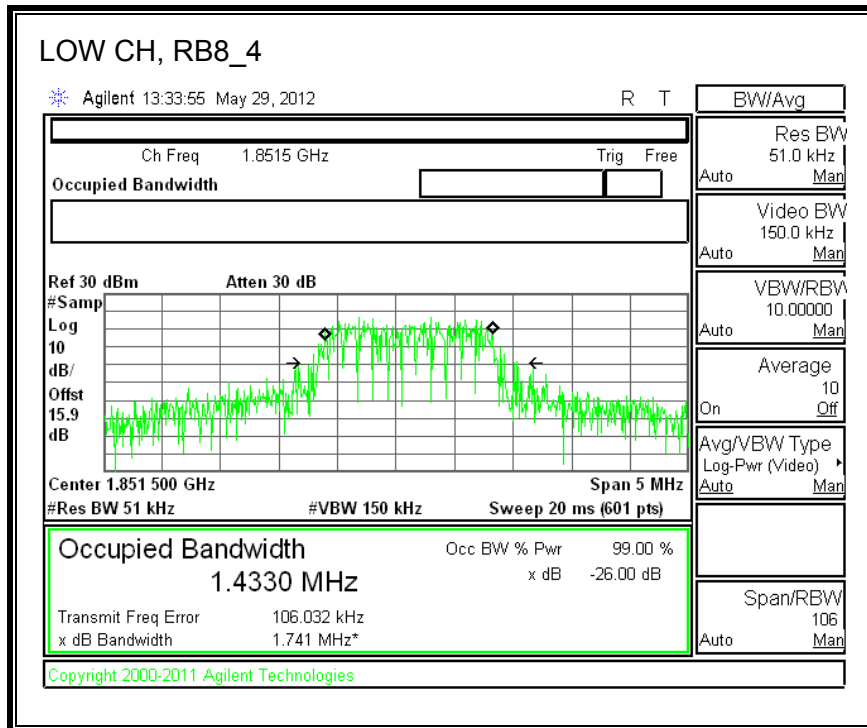


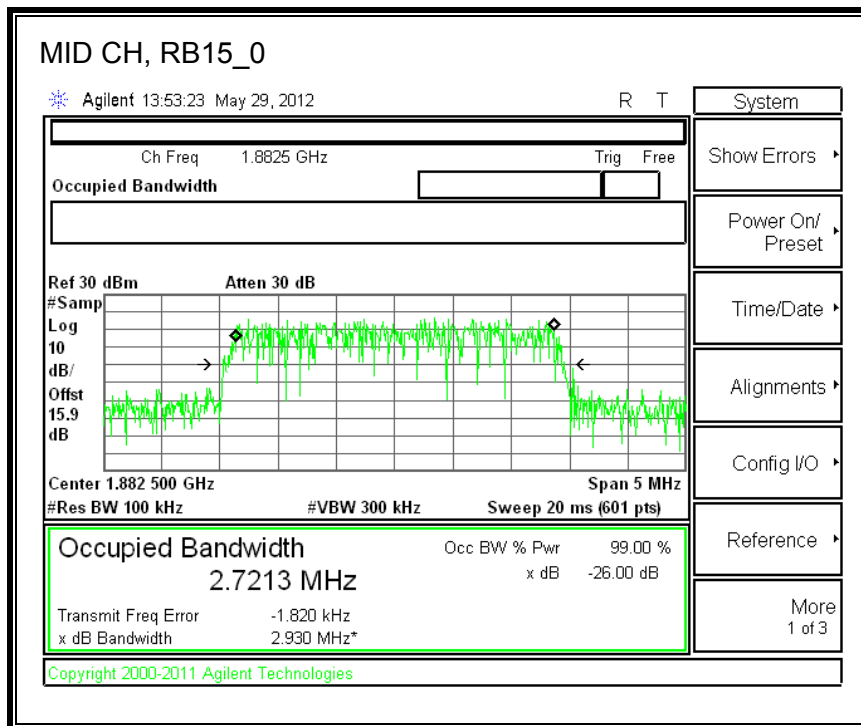
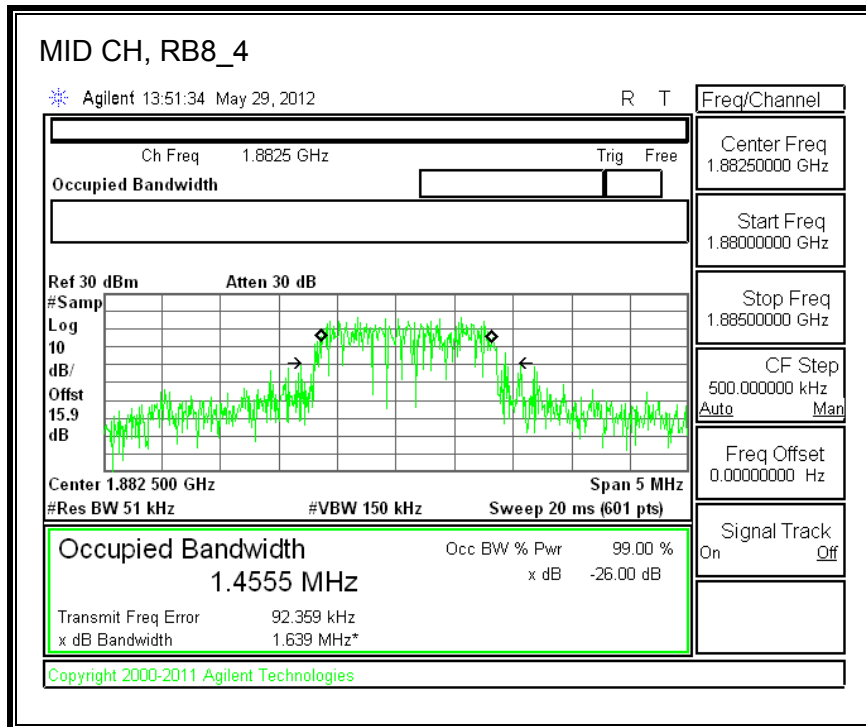


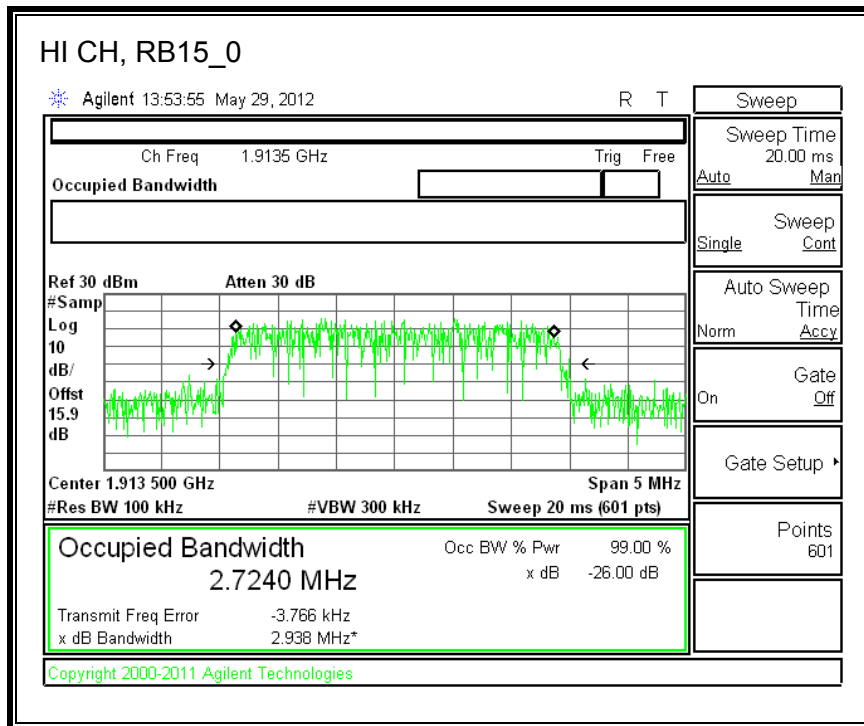
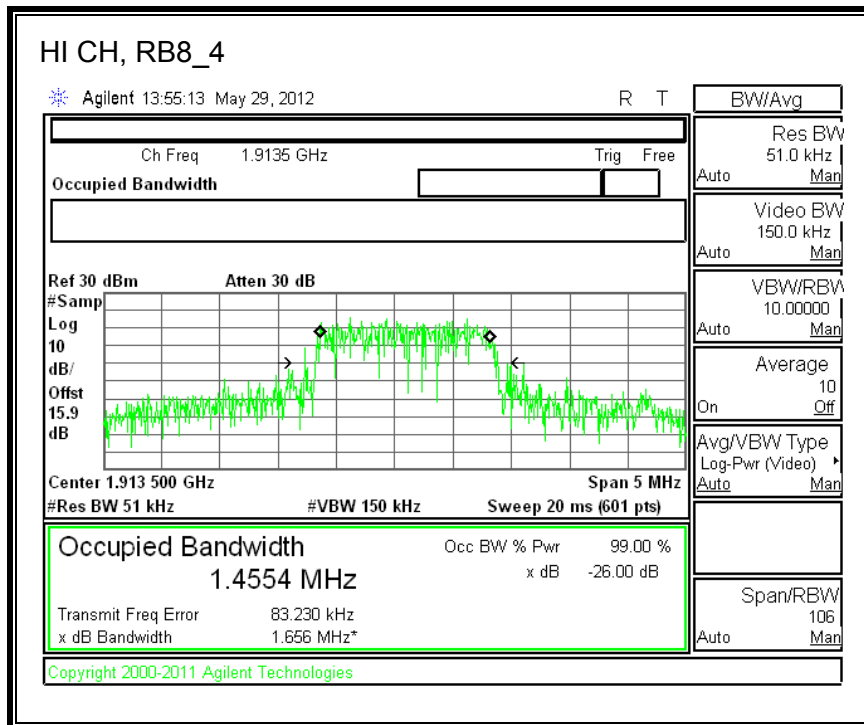


Band 25 (3.0 MHz BAND WIDTH)

LTE QPSK

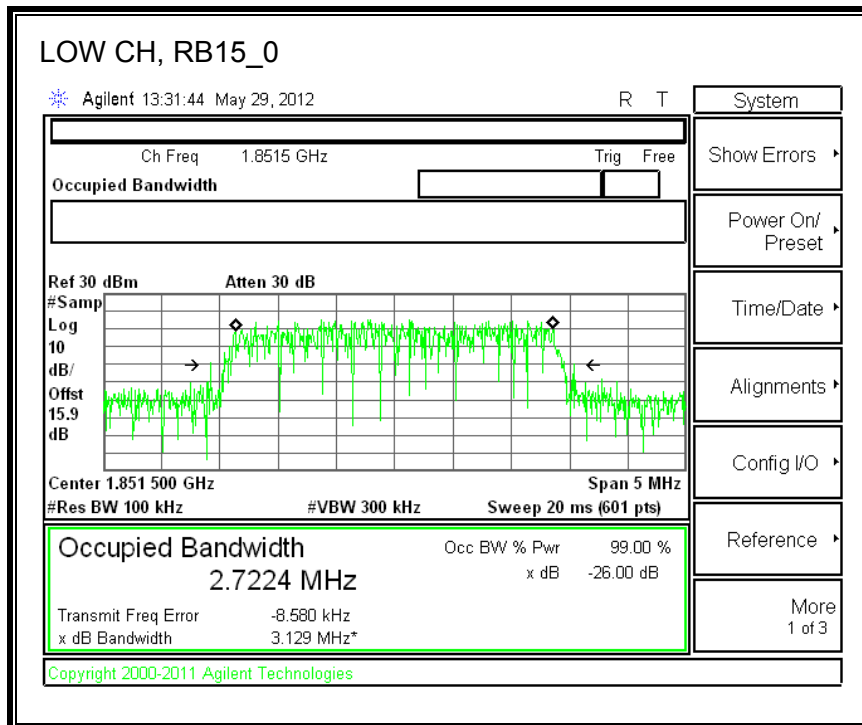
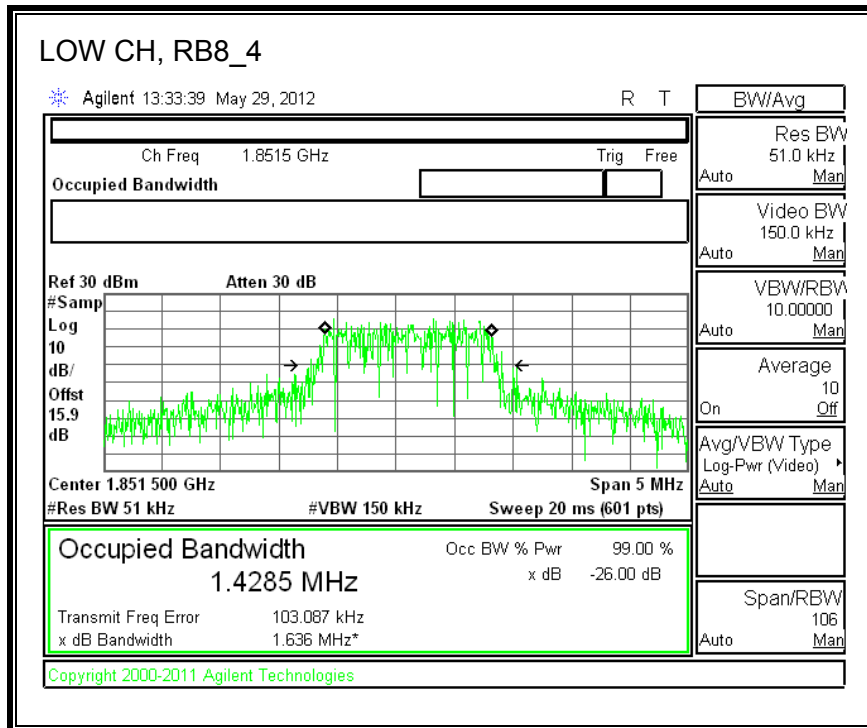


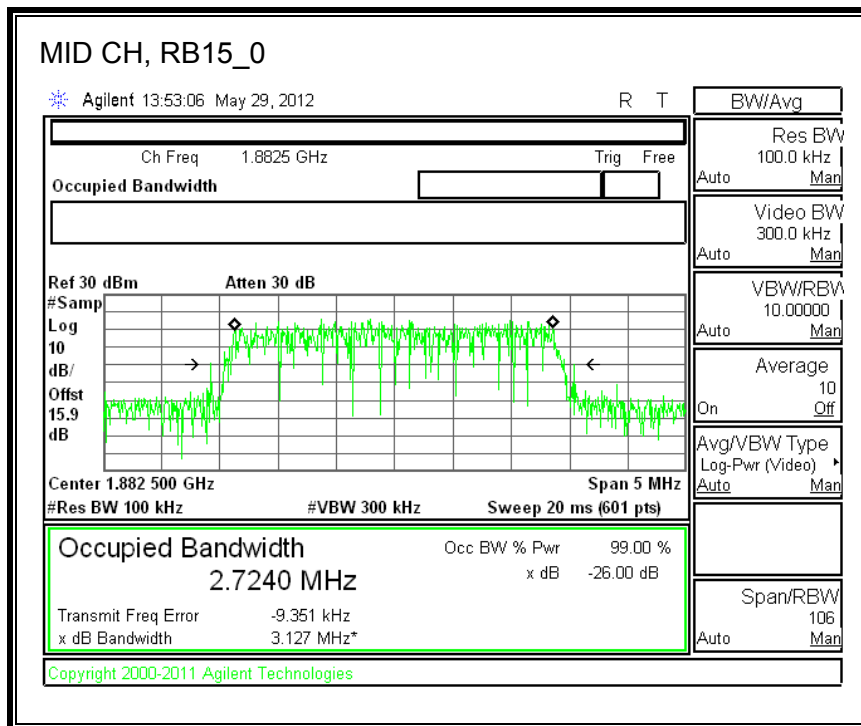
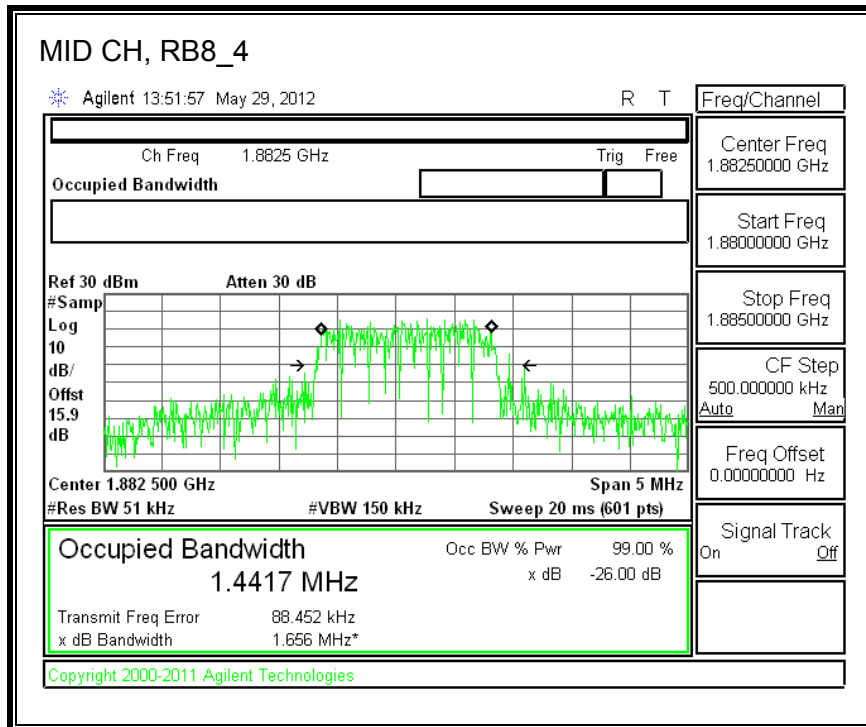


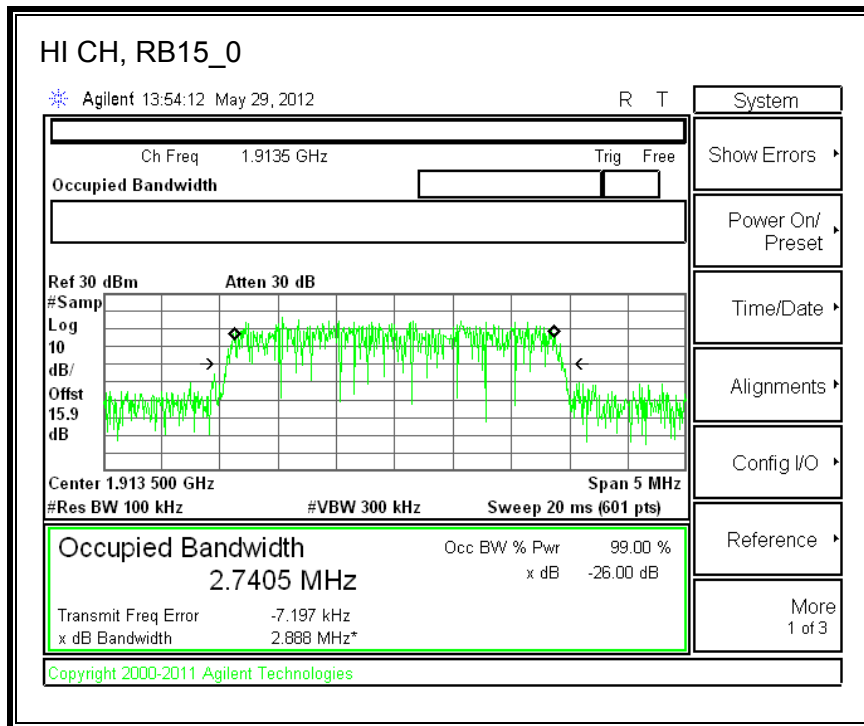
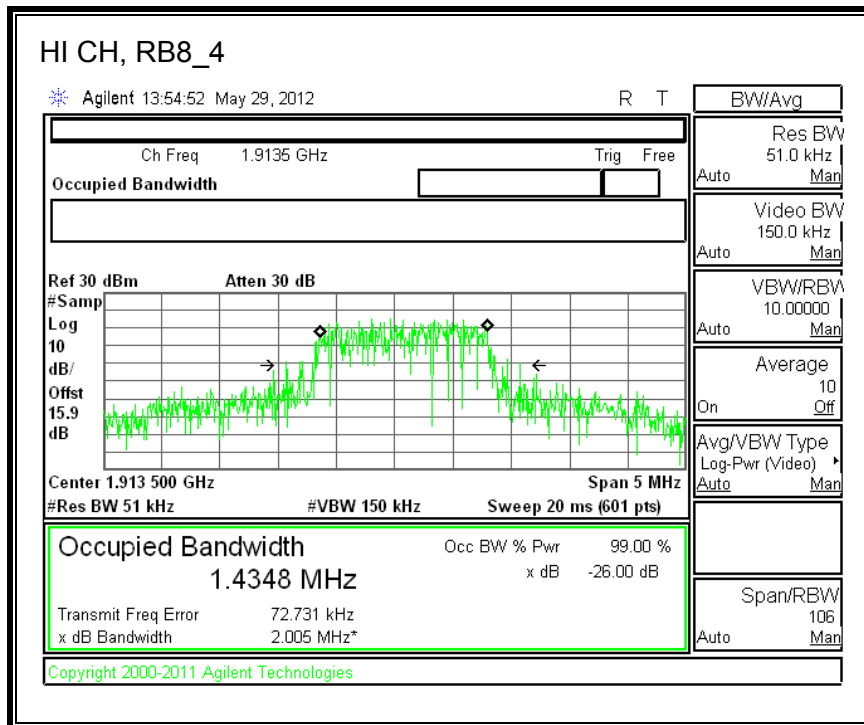


Band 2 (3.0 MHz BAND WIDTH)

LTE 16QAM

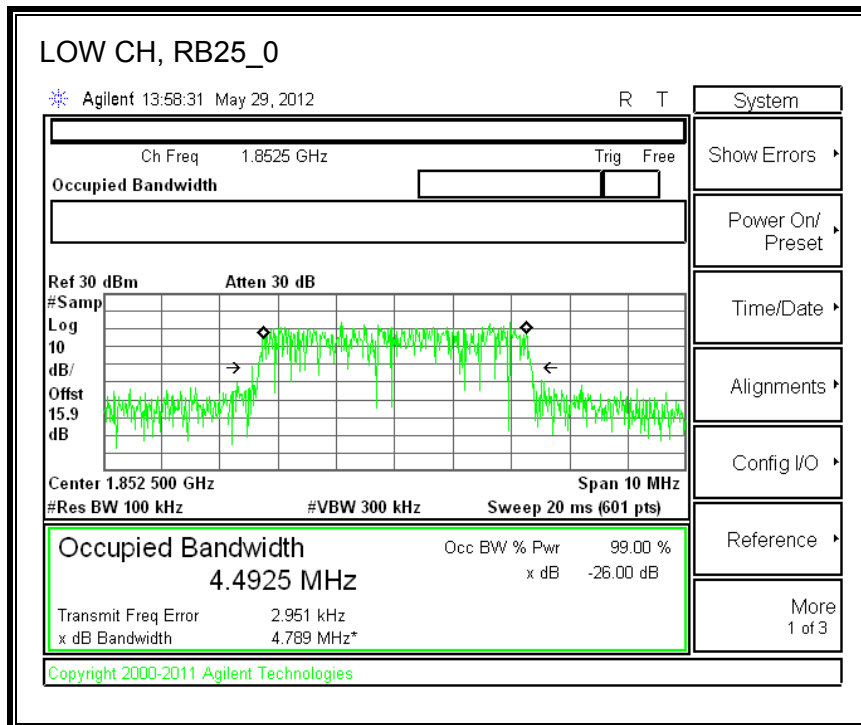
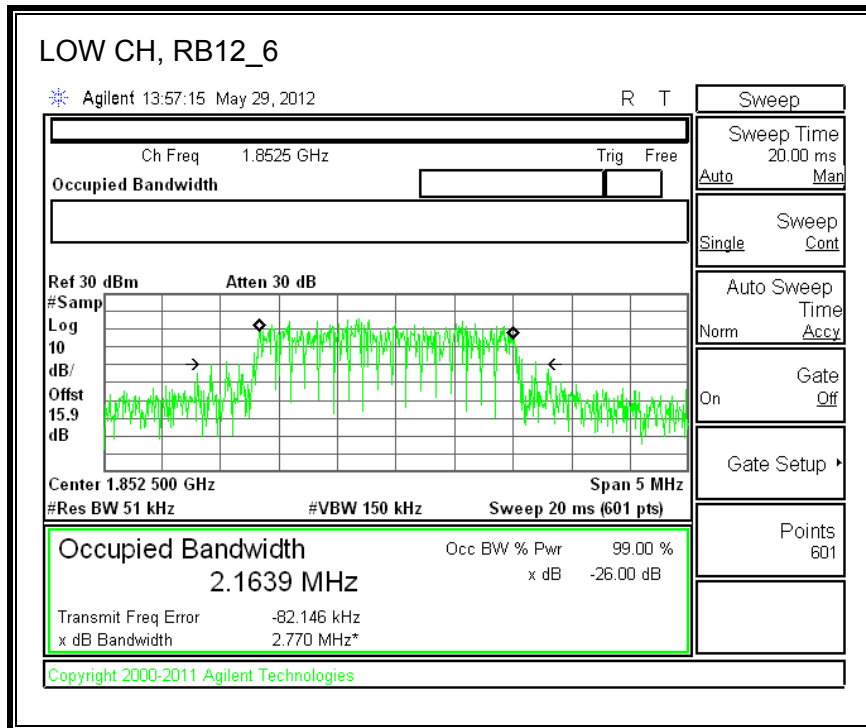


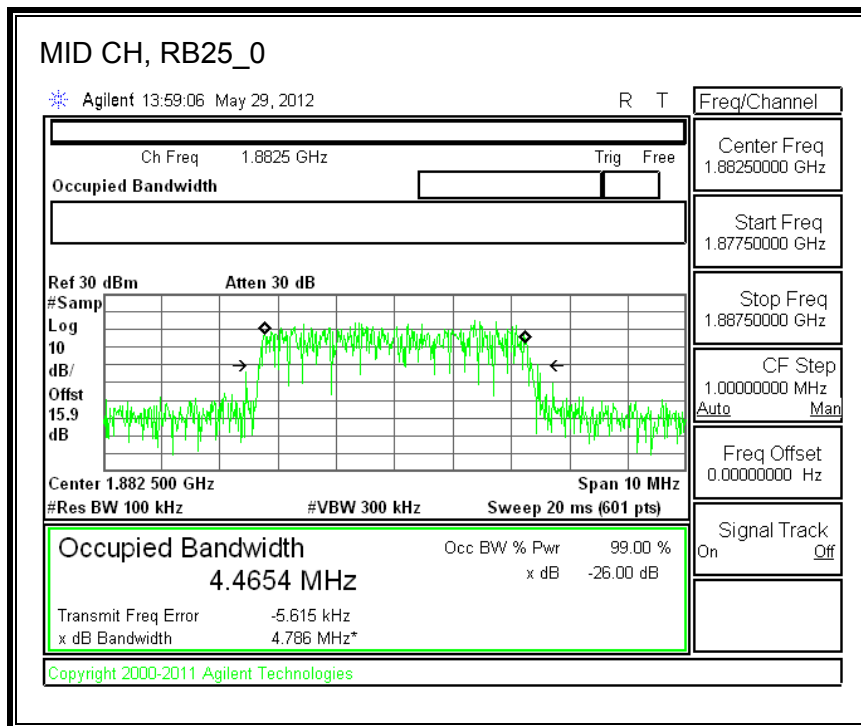
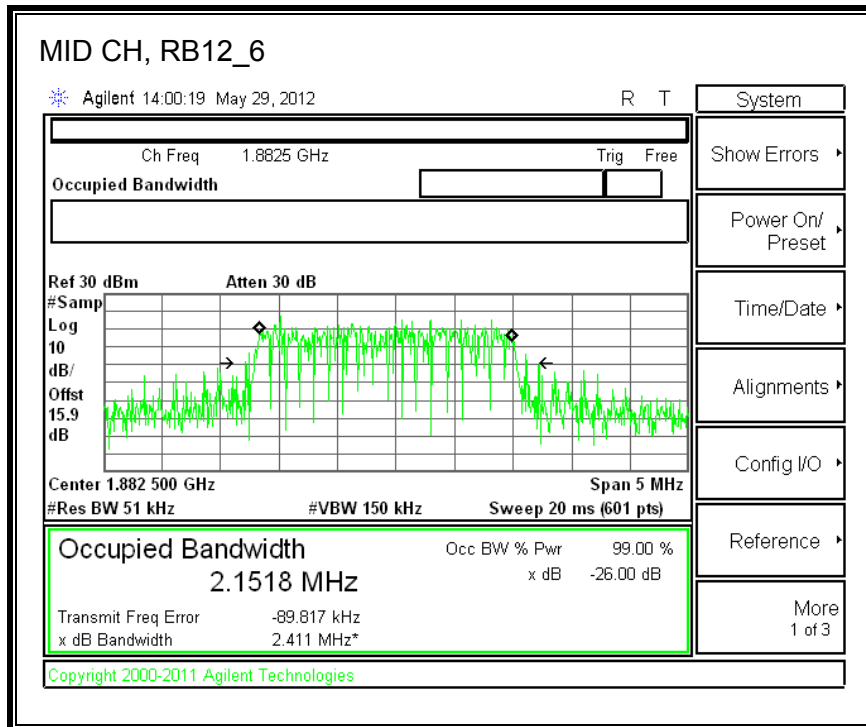


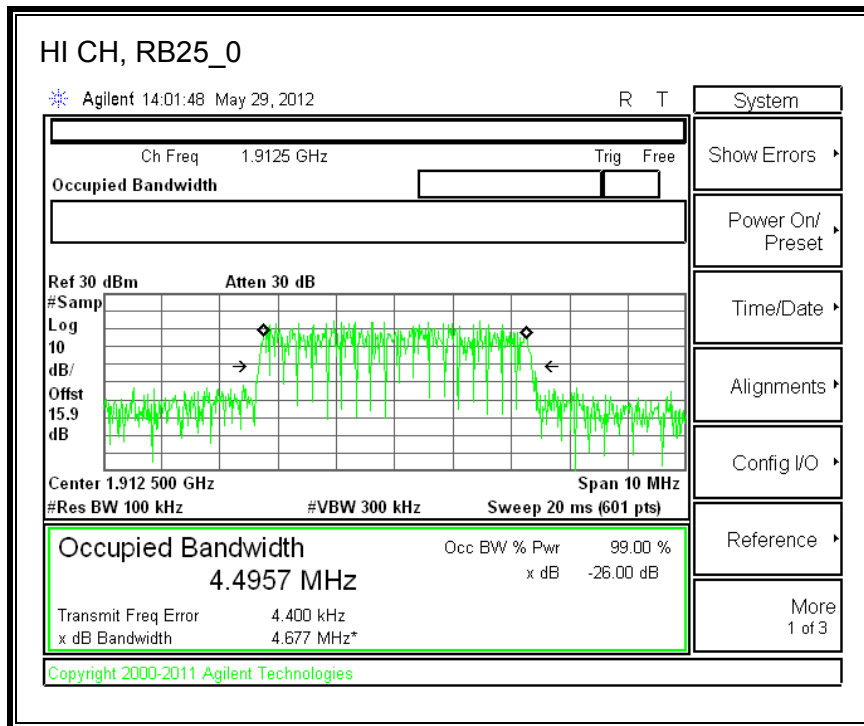
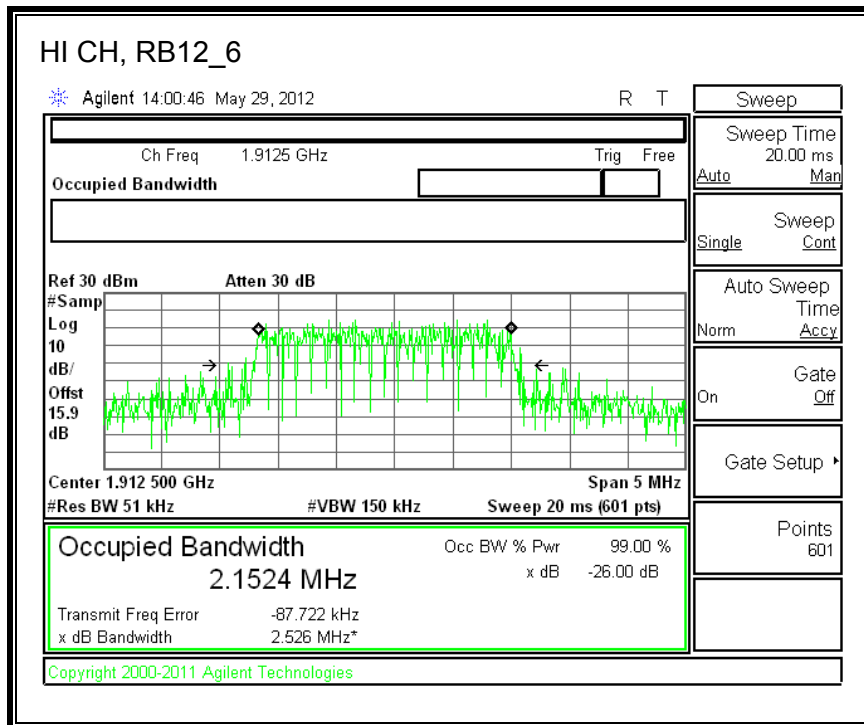


Band 25 (5.0 MHz BAND WIDTH)

LTE QPSK

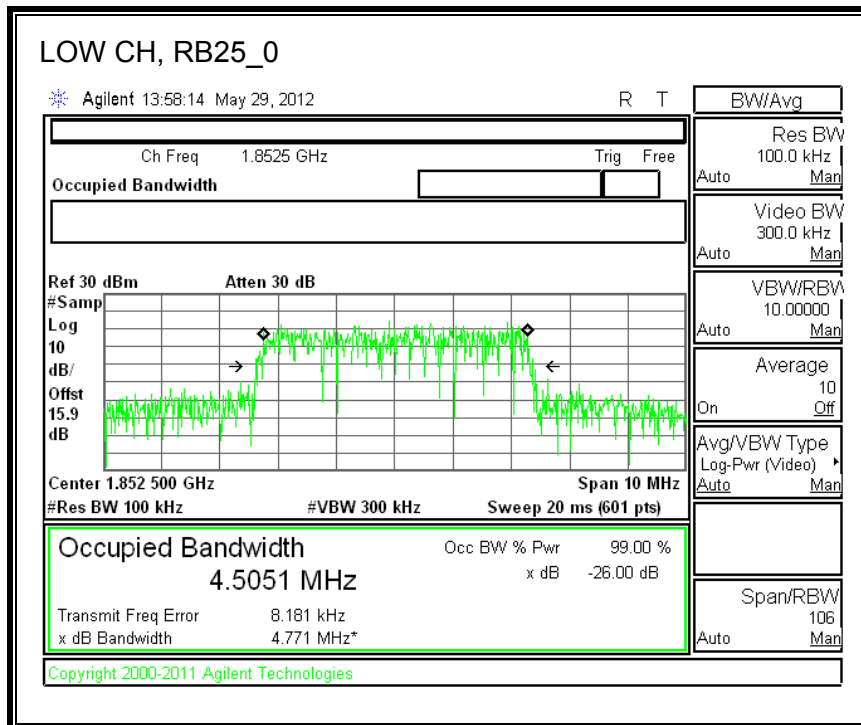
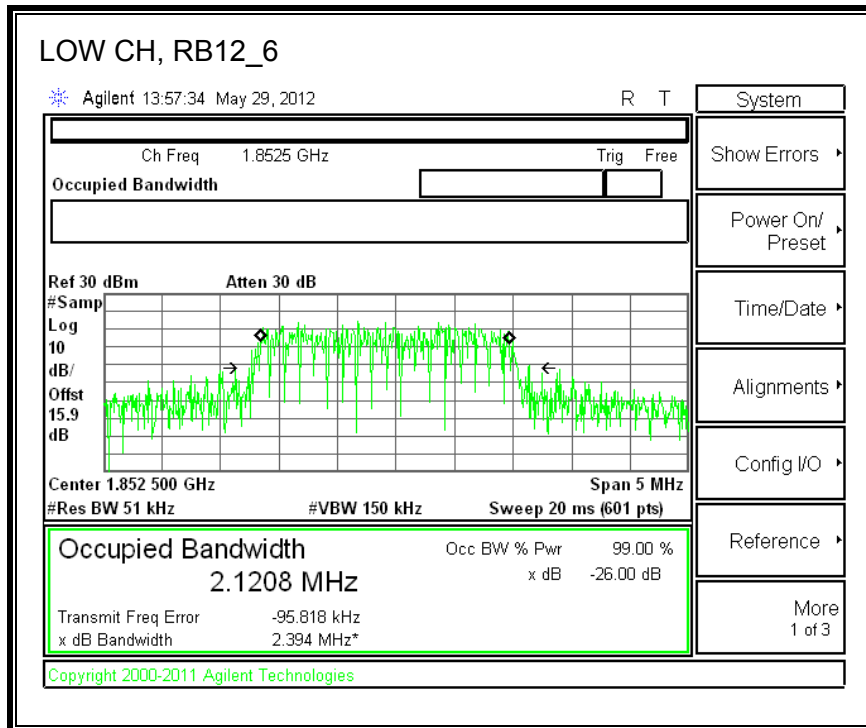


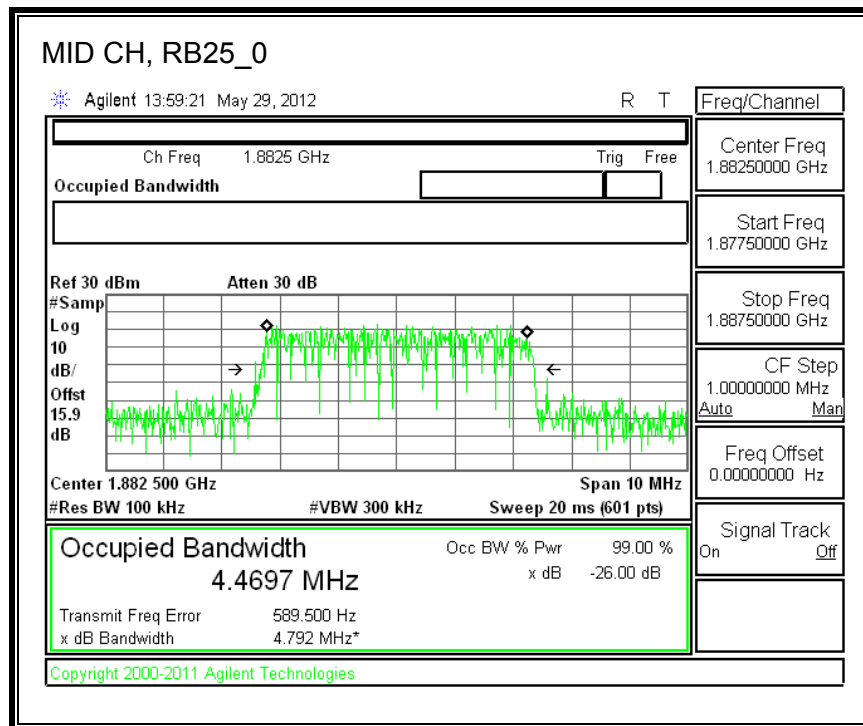
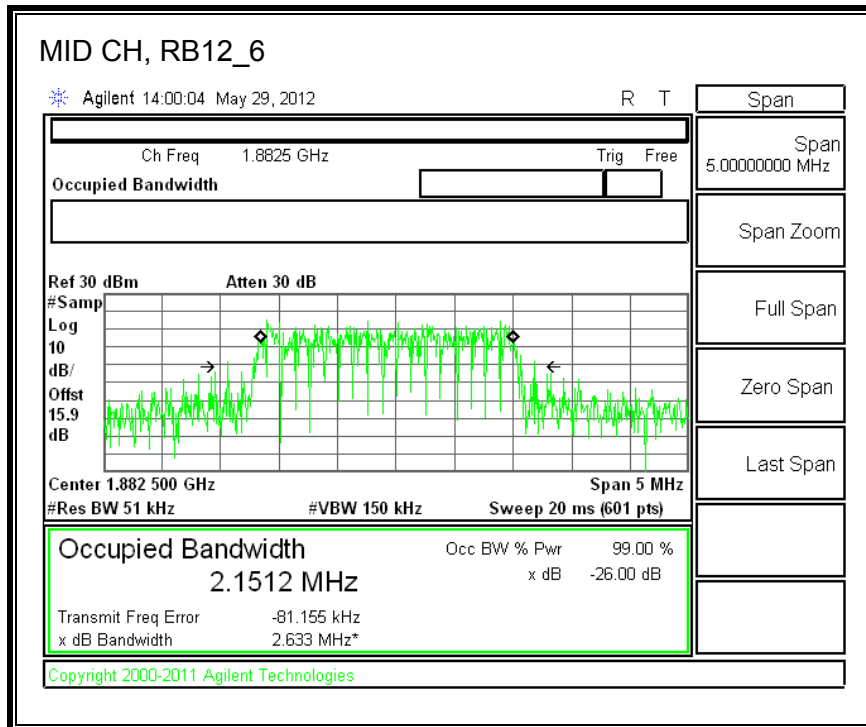


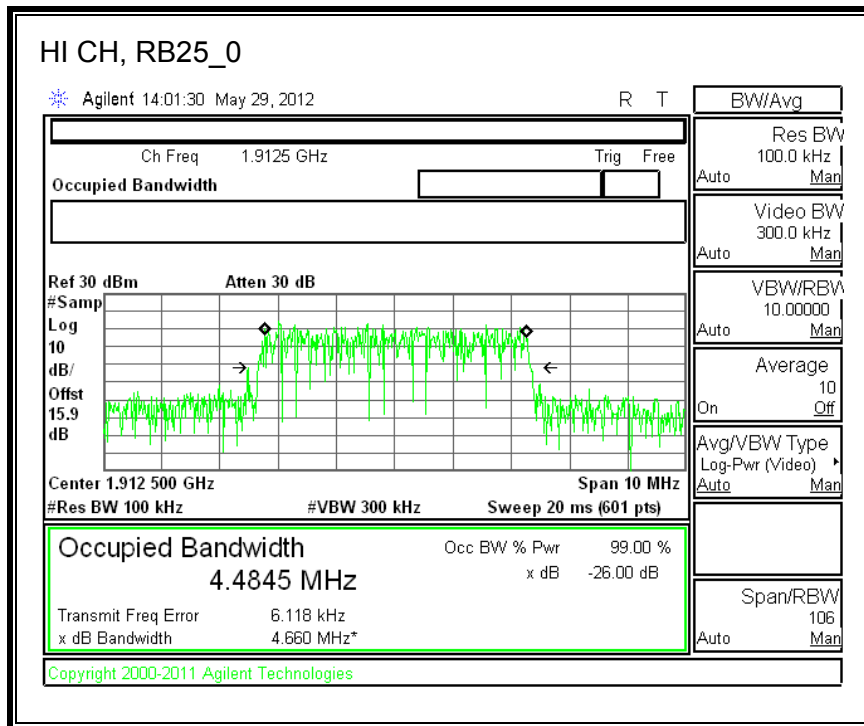
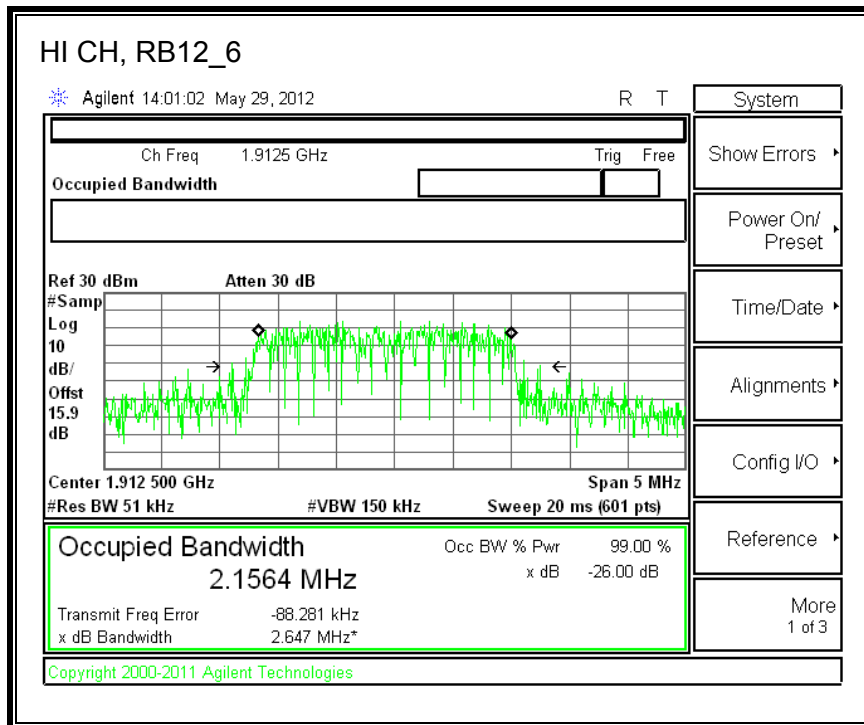


Band 25 (5 MHz BAND WIDTH)

LTE 16QAM

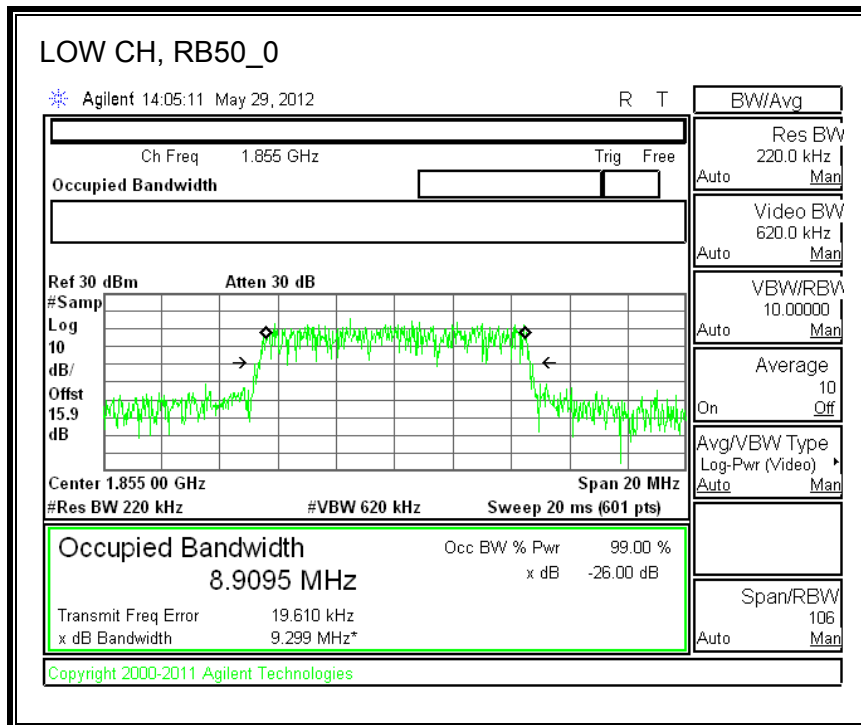
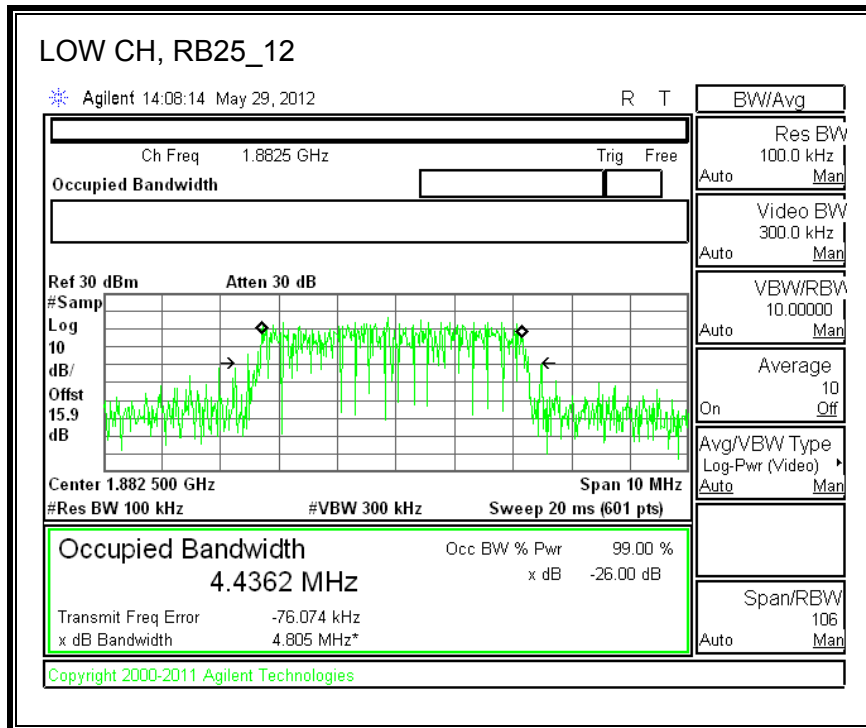


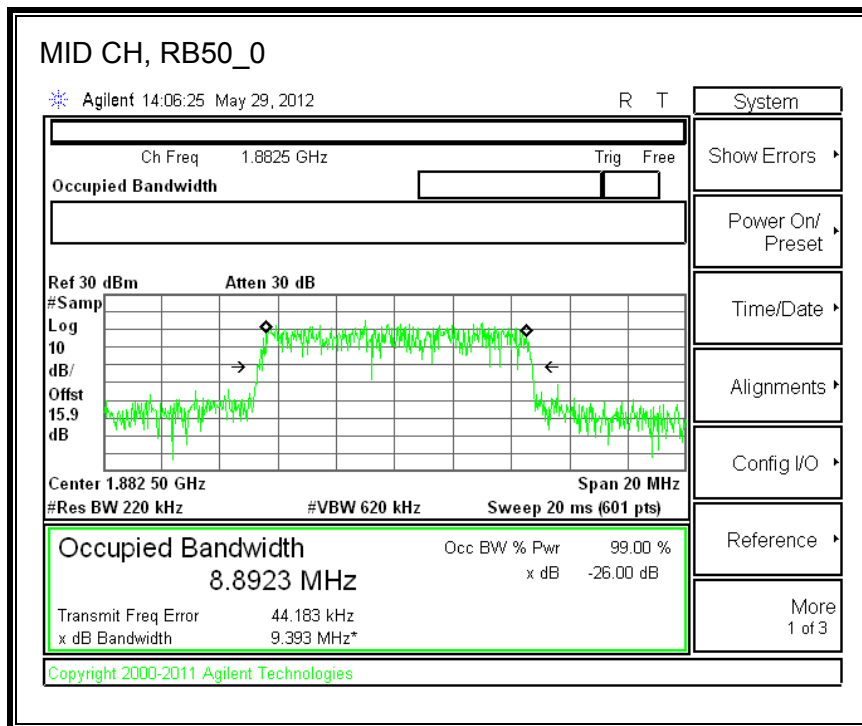
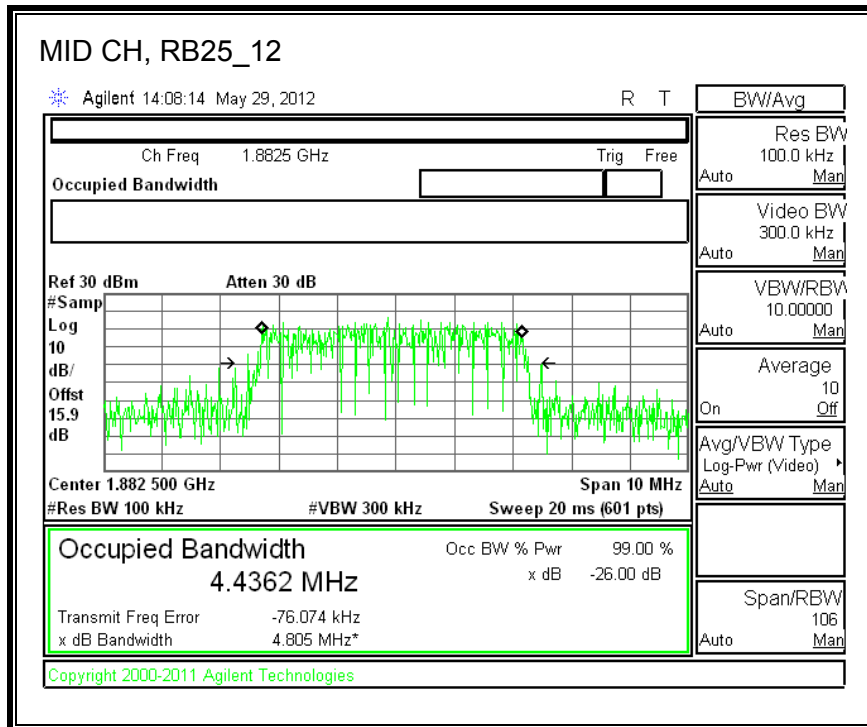


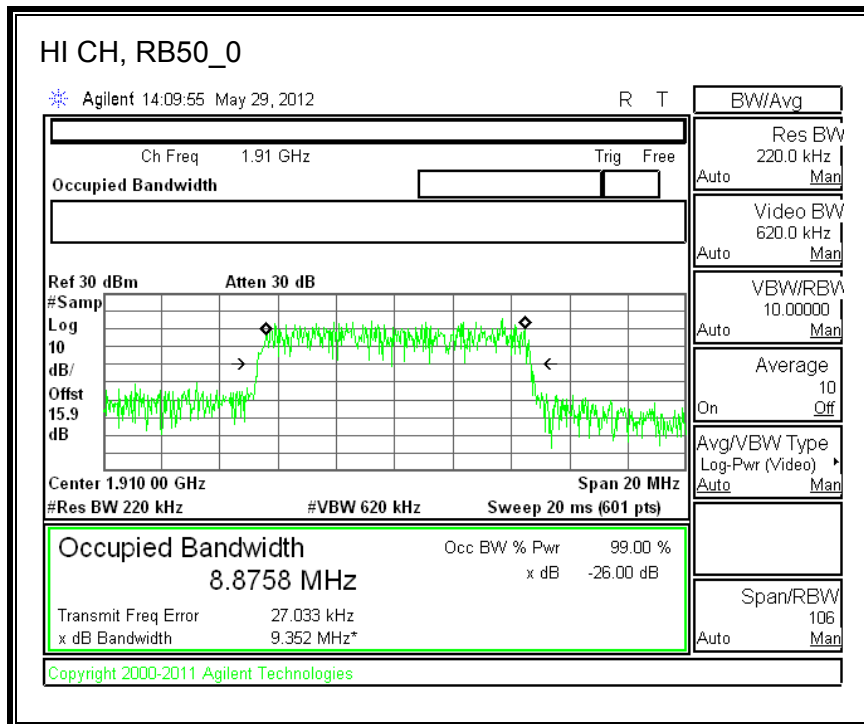
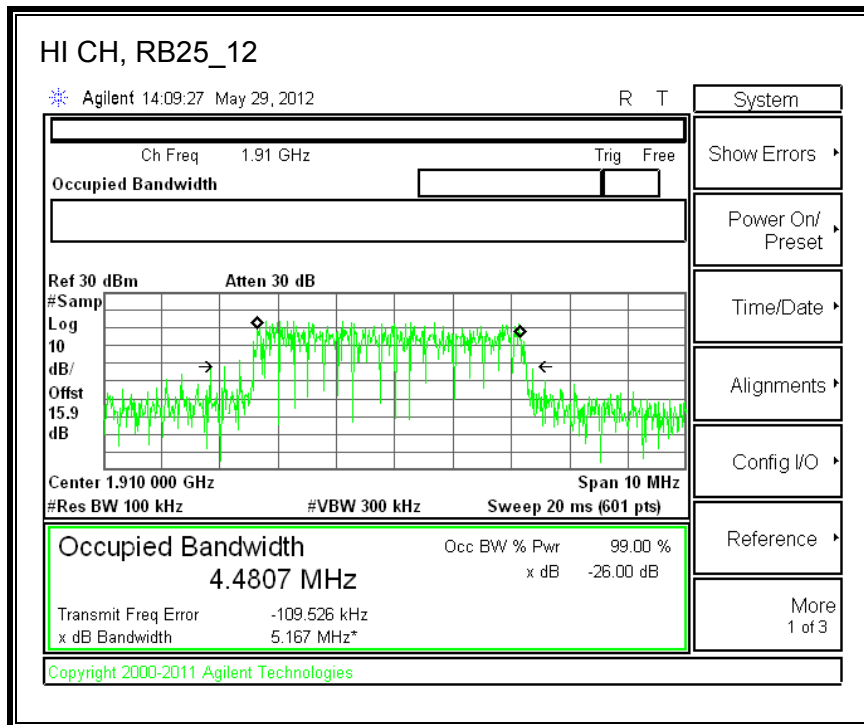


Band 25 (10.0 MHz BAND WIDTH)

LTE QPSK

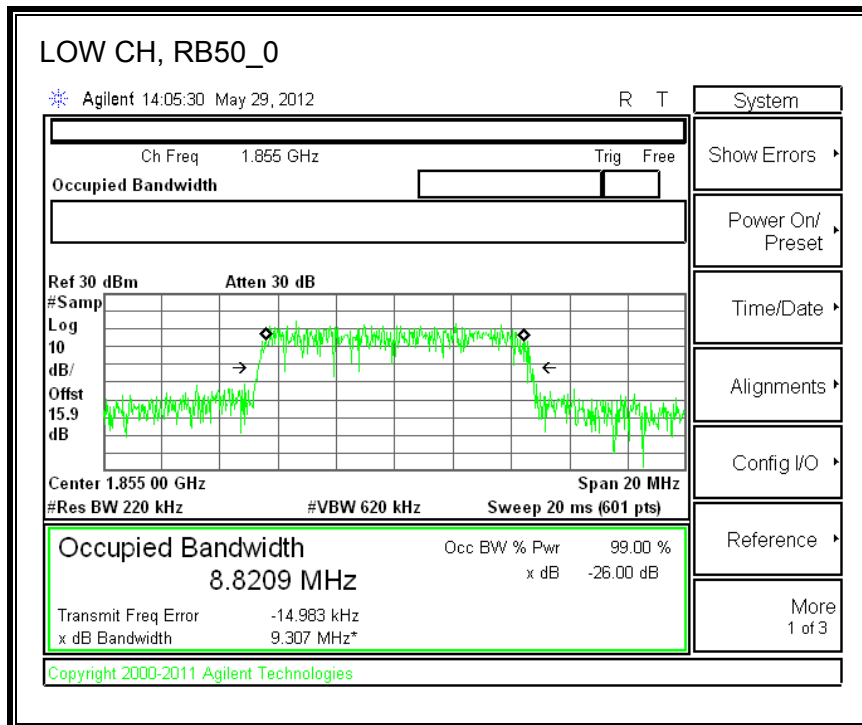
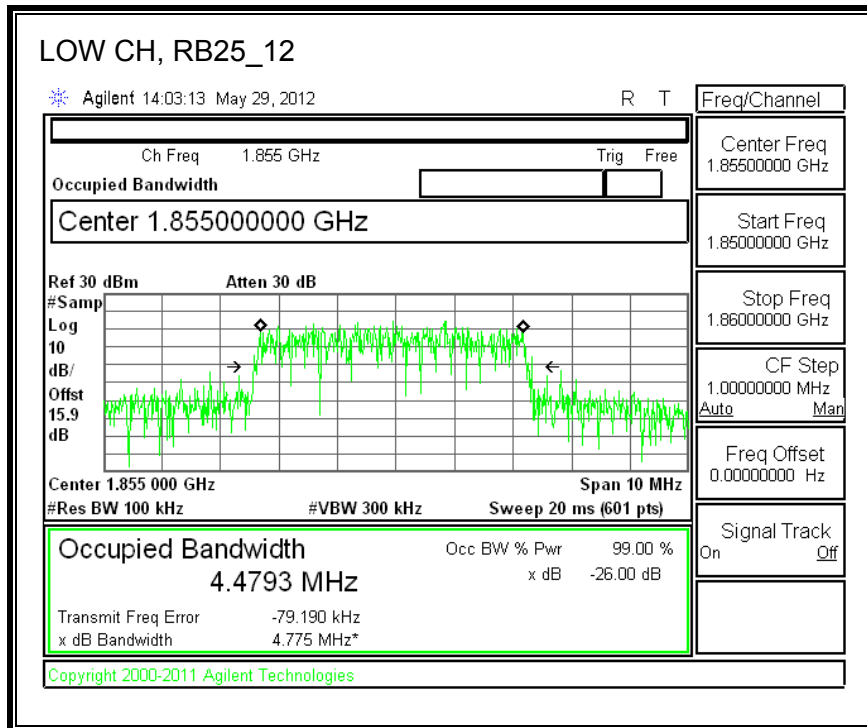


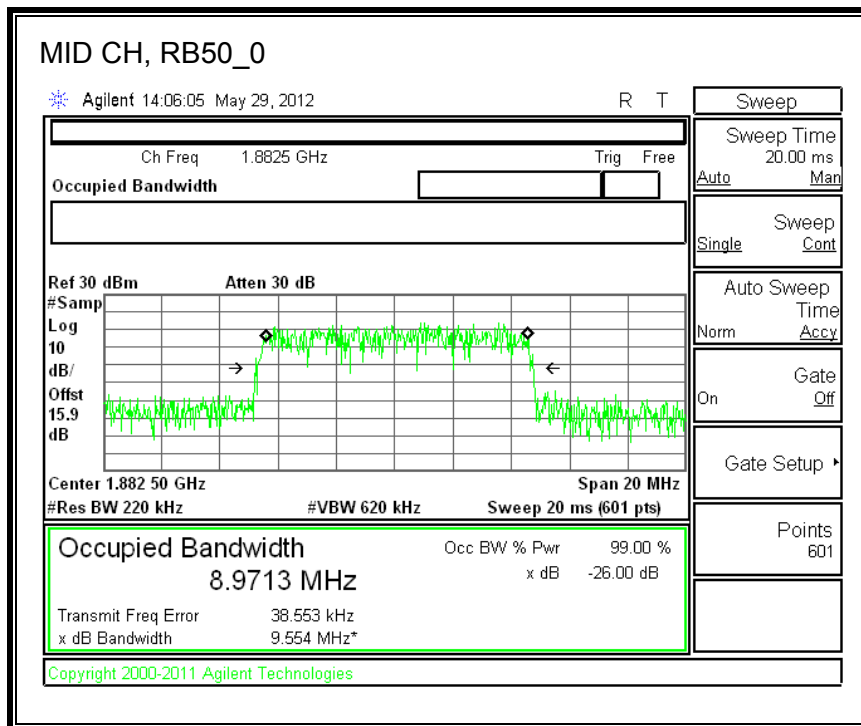
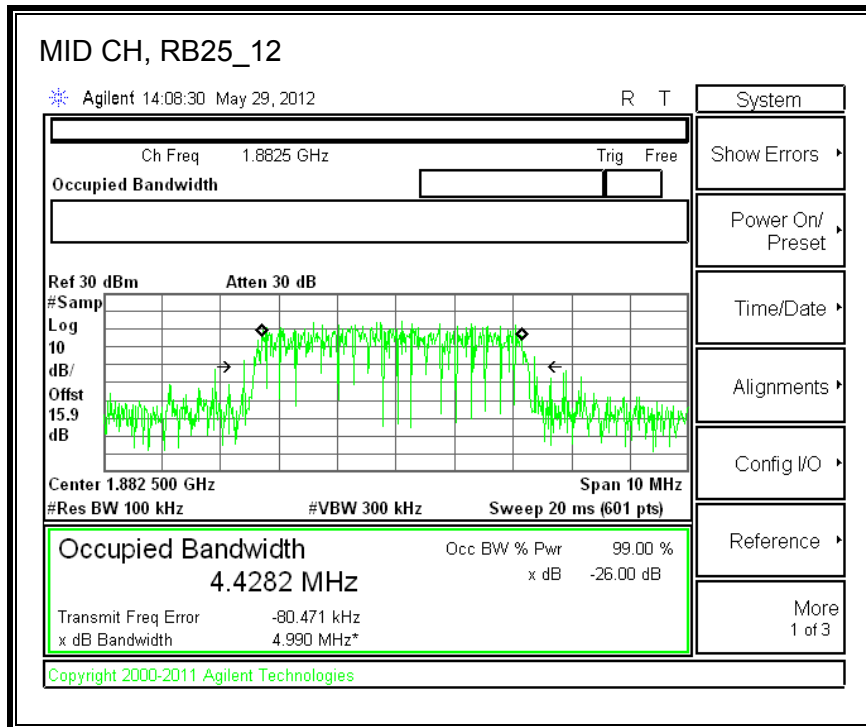


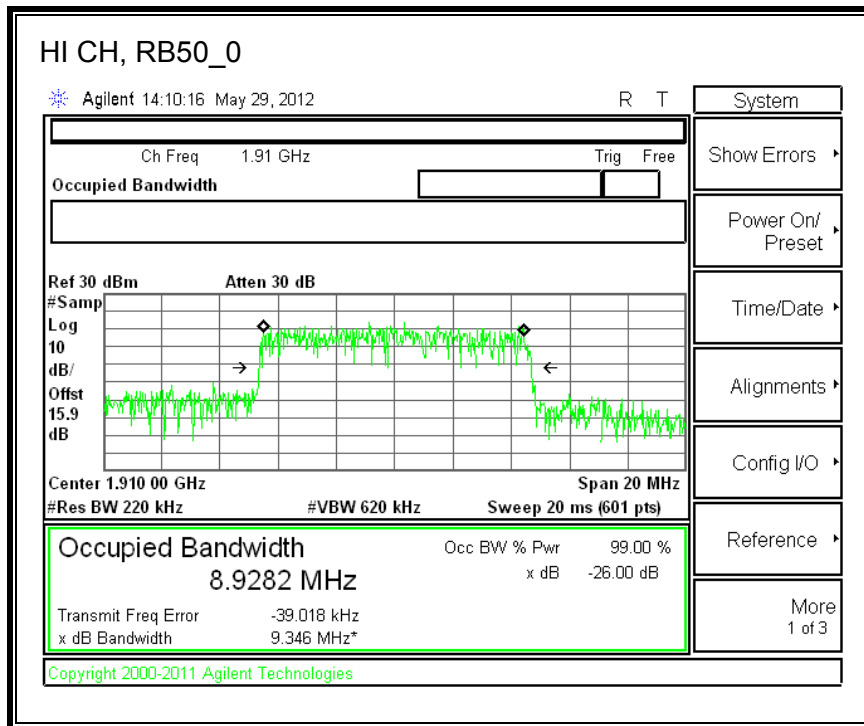
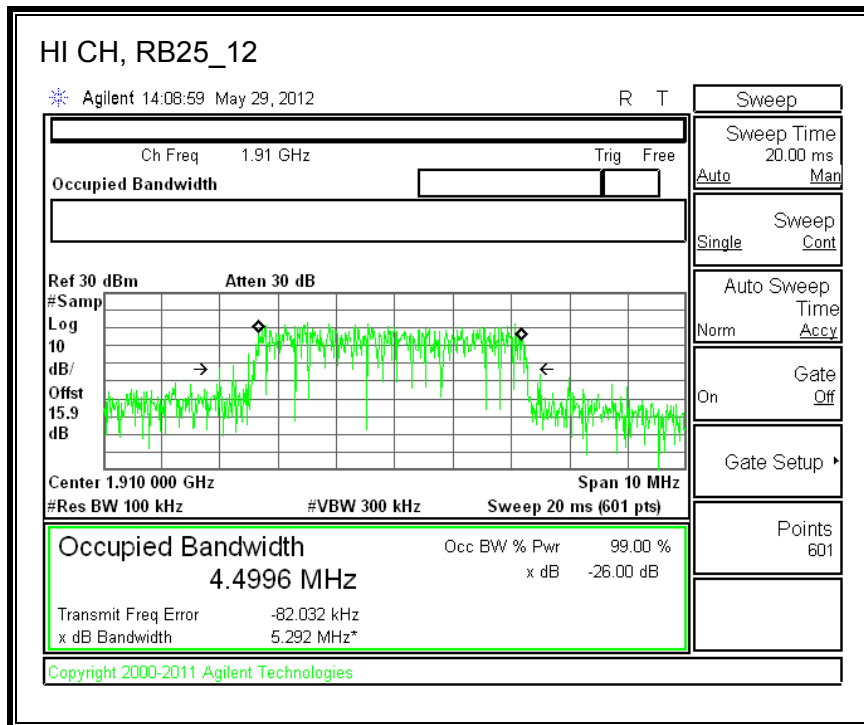


Band 25 (10 MHz BAND WIDTH)

LTE 16QAM

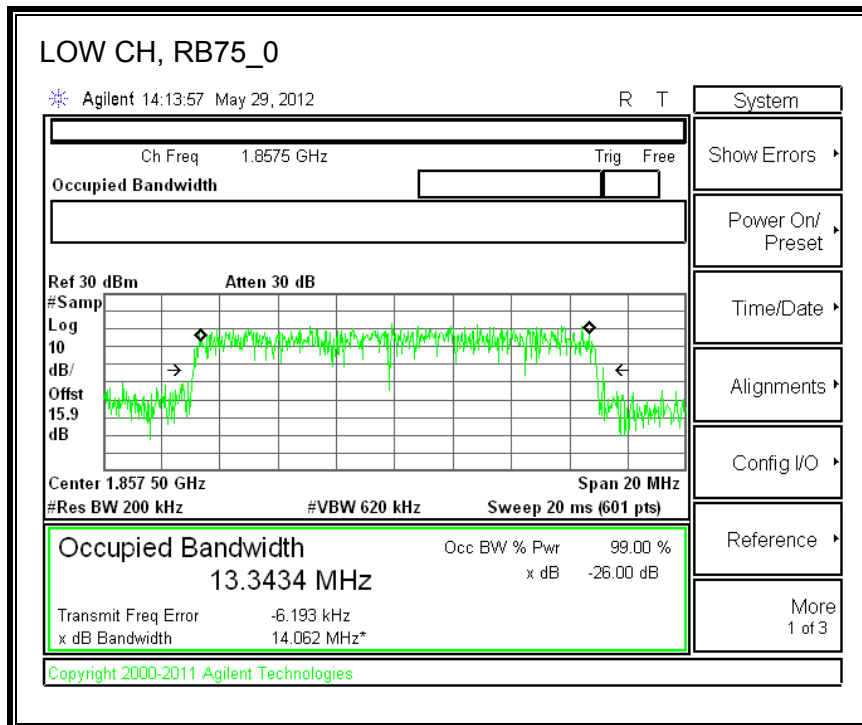
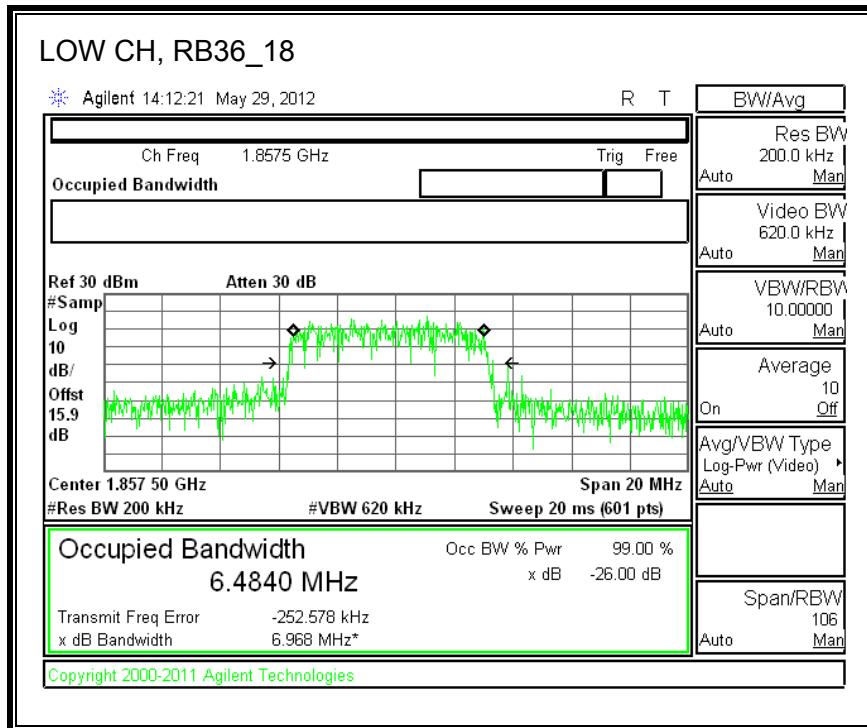


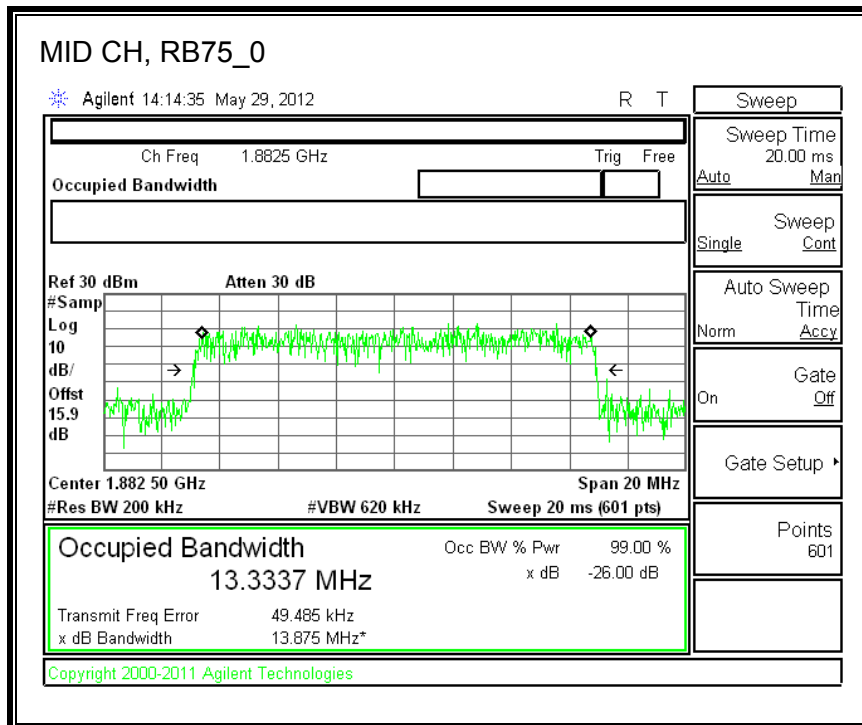
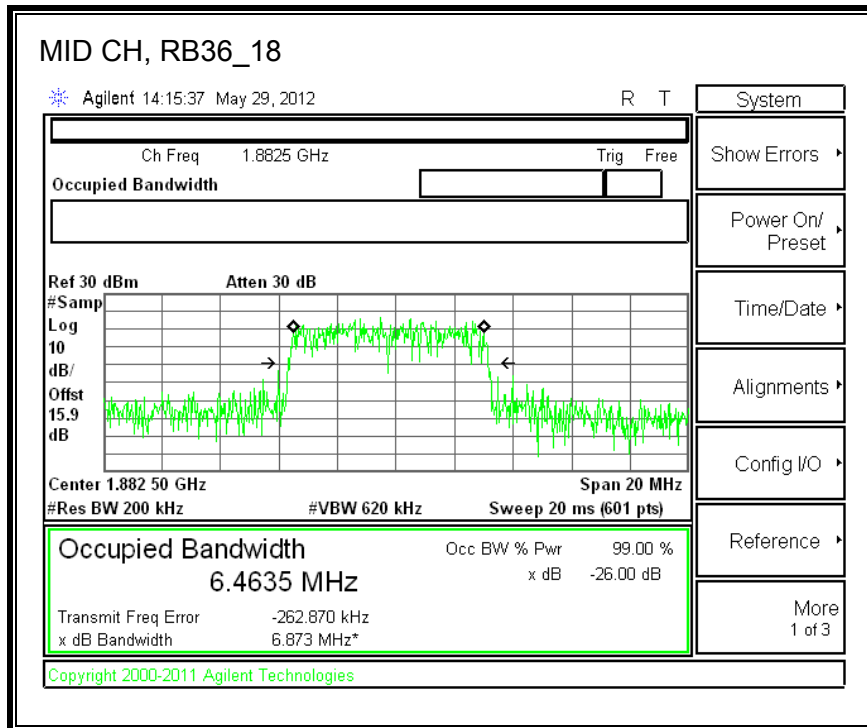


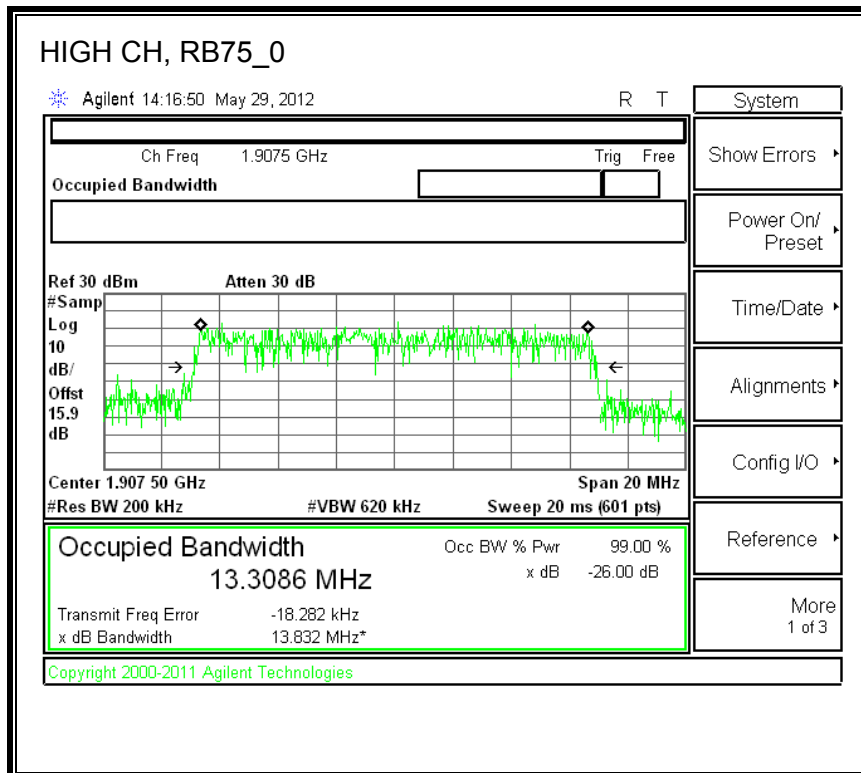
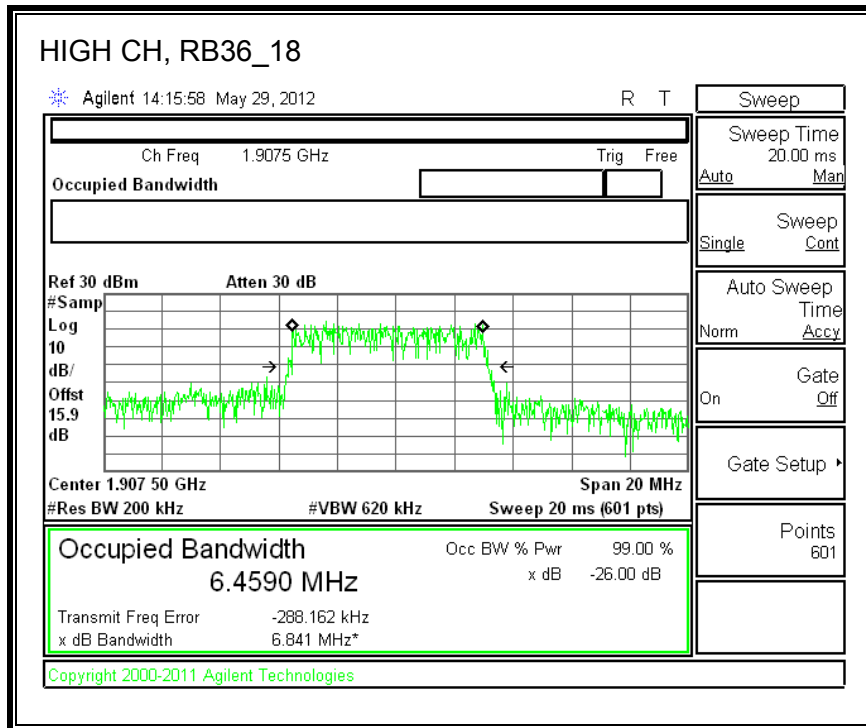


Band 25 (15.0 MHz BAND WIDTH)

LTE QPSK

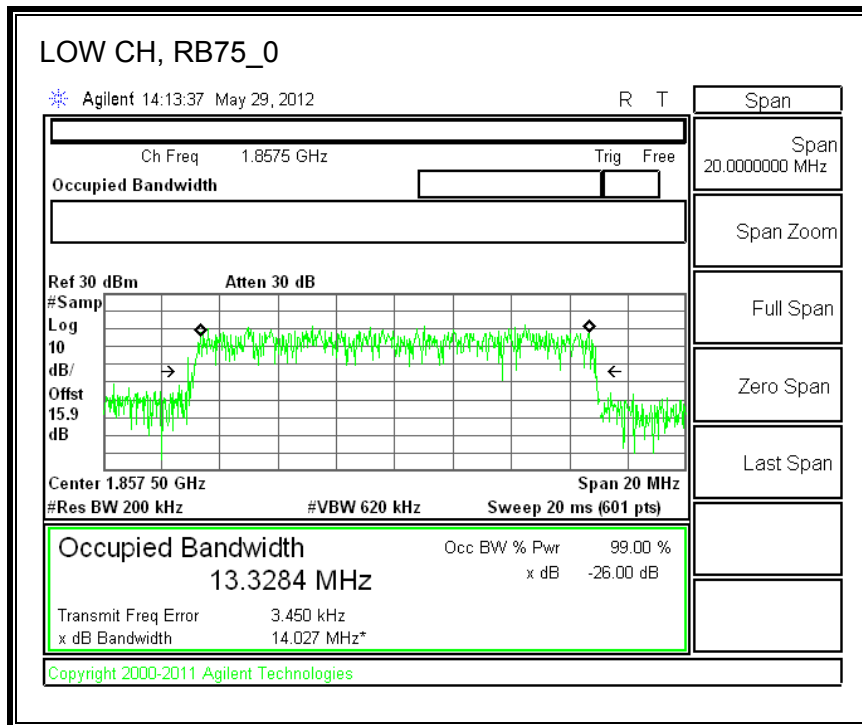
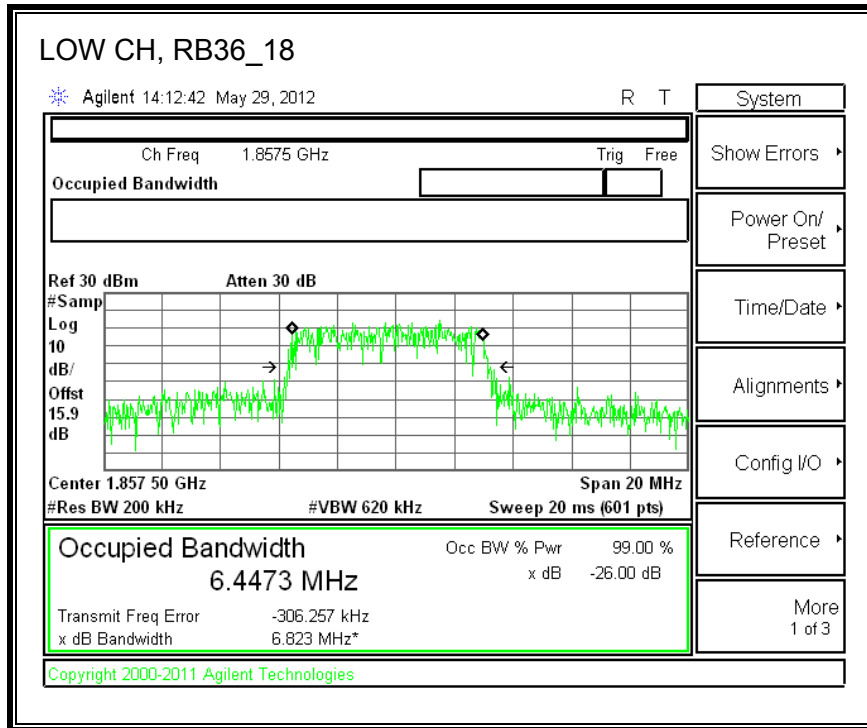


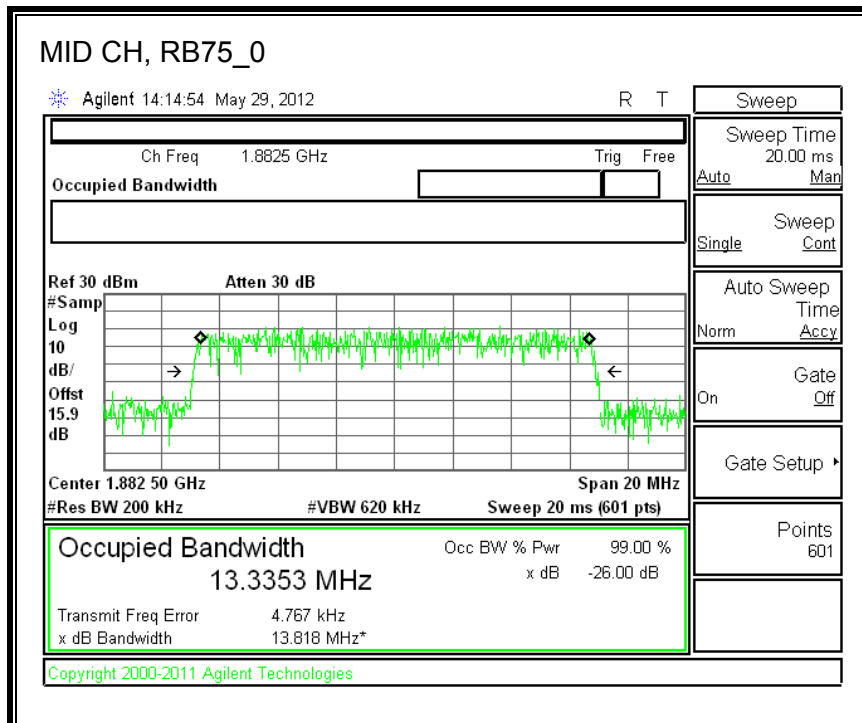
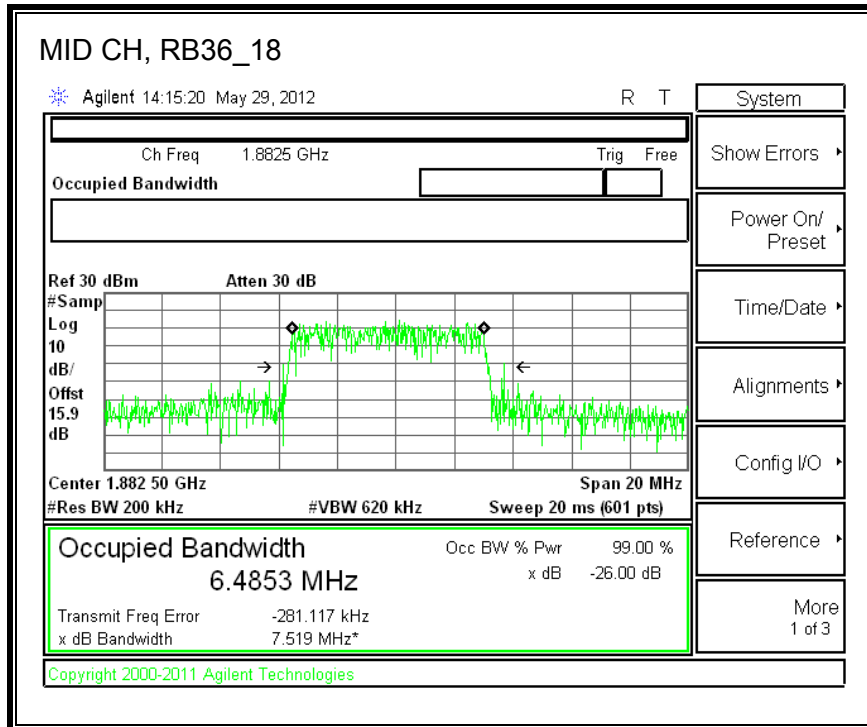


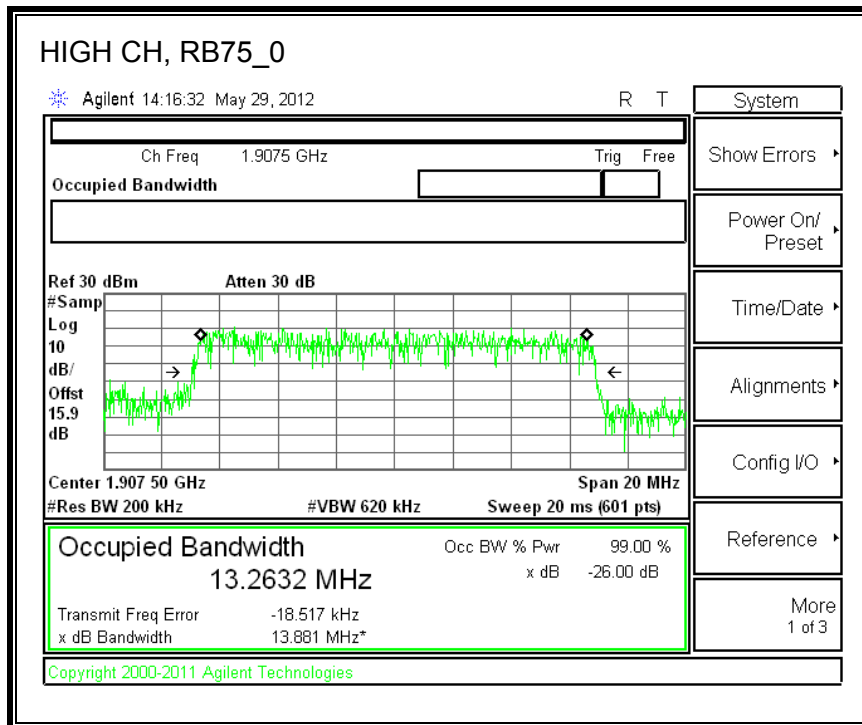
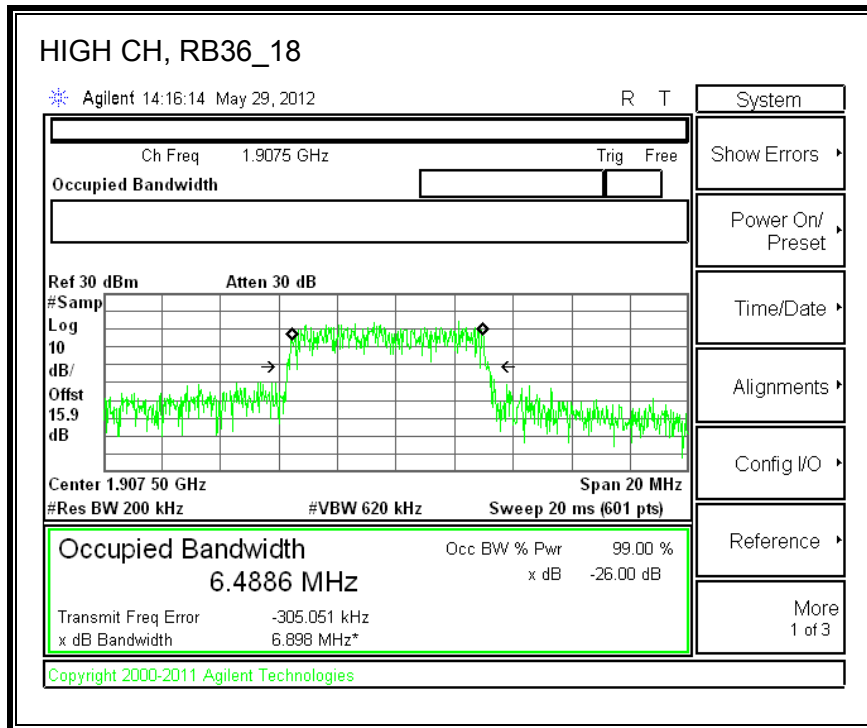


Band 25 (15.0 MHz BAND WIDTH)

LTE 16QAM

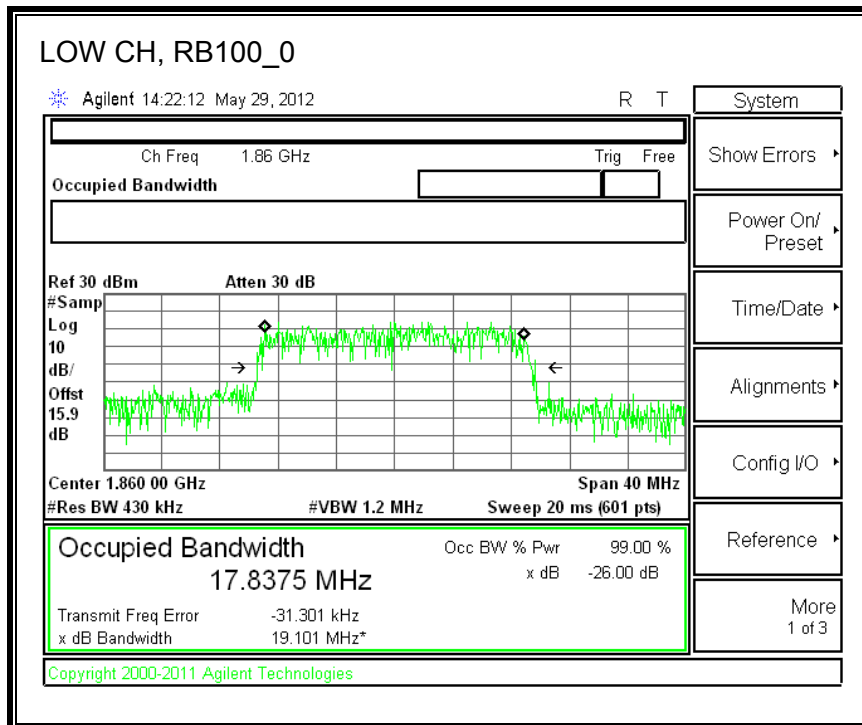
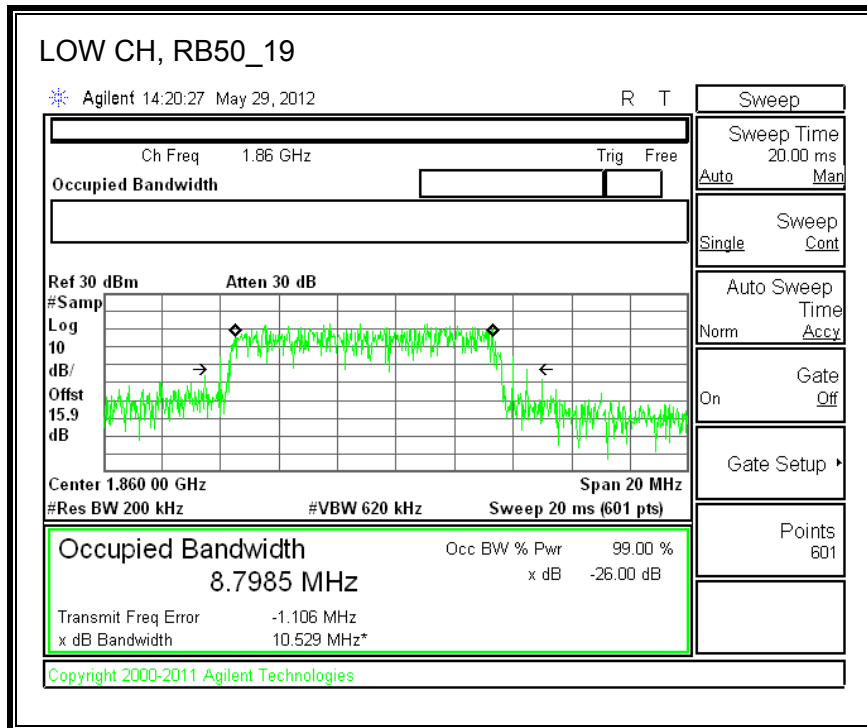


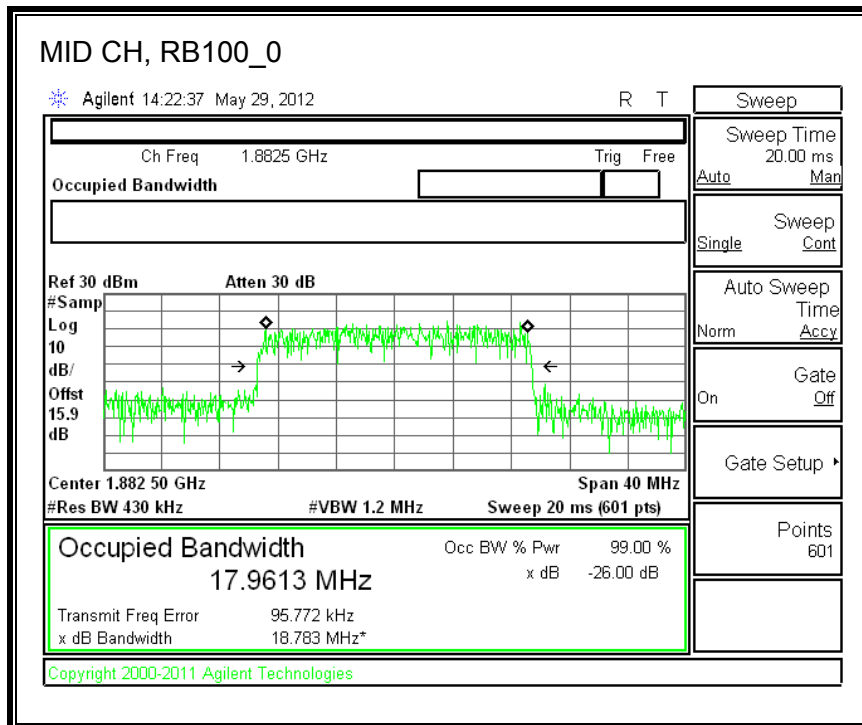
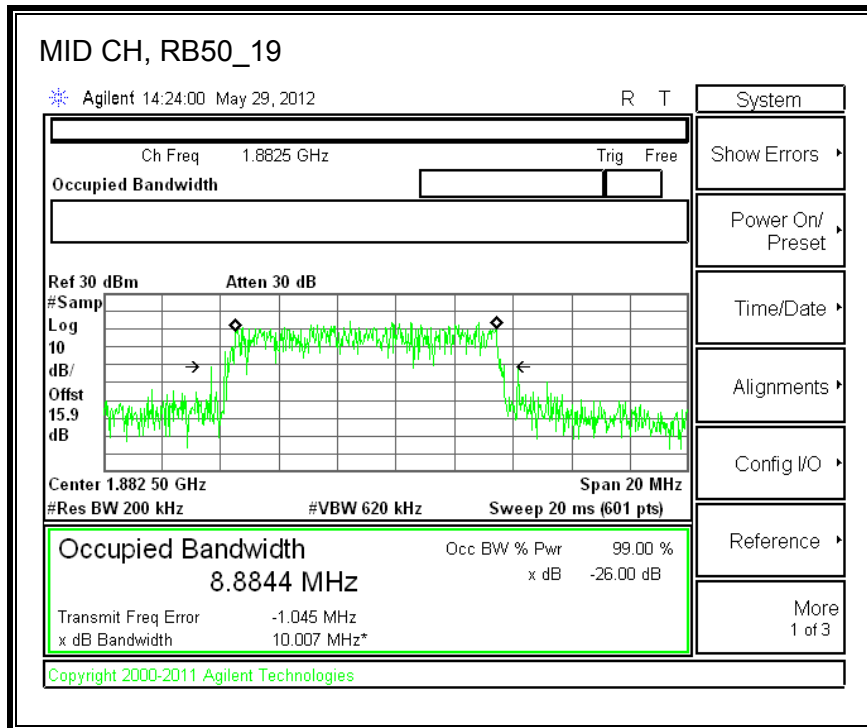


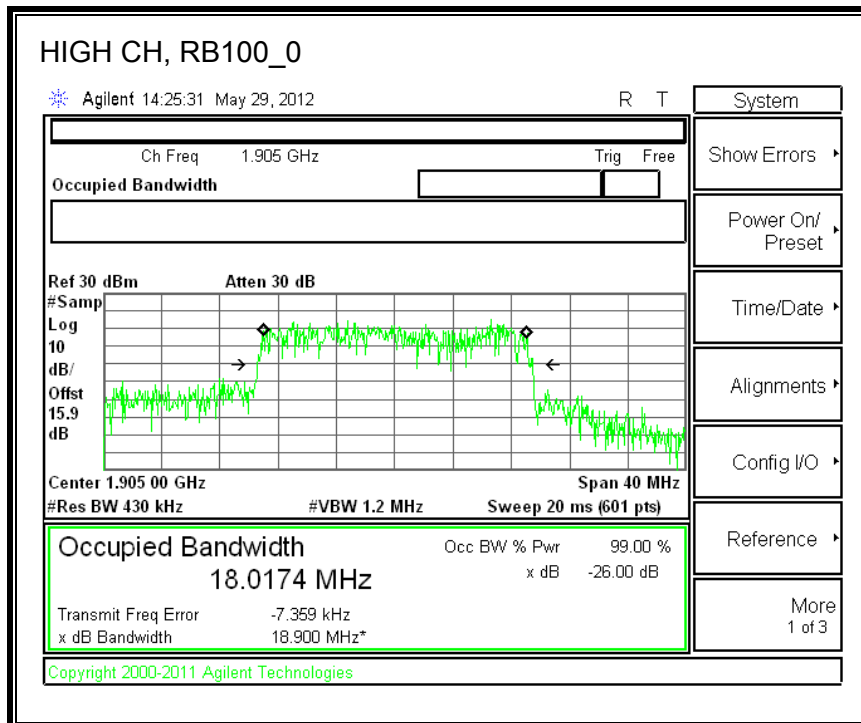
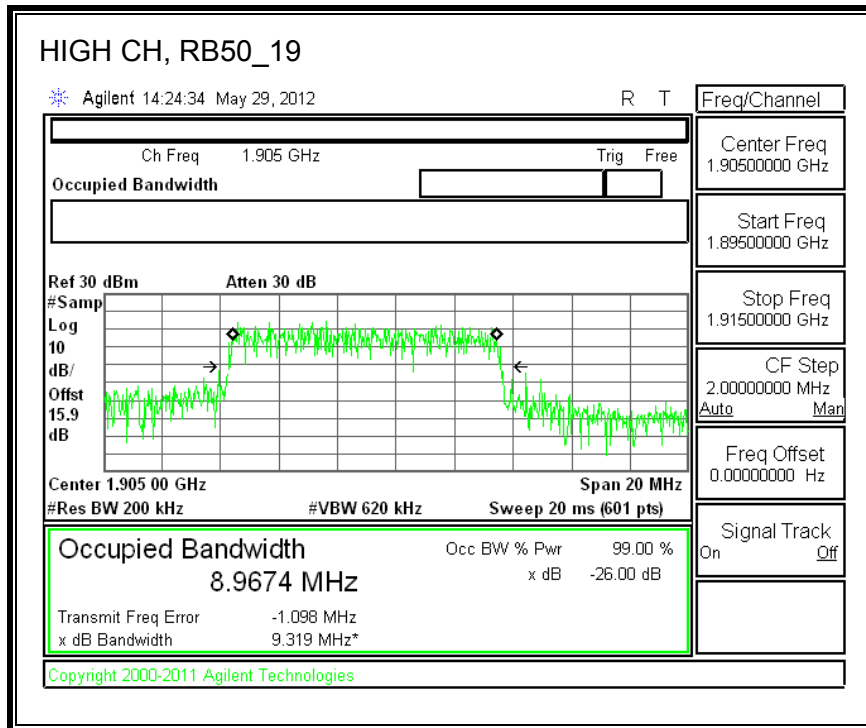


Band 25 (20.0 MHz BAND WIDTH)

LTE QPSK

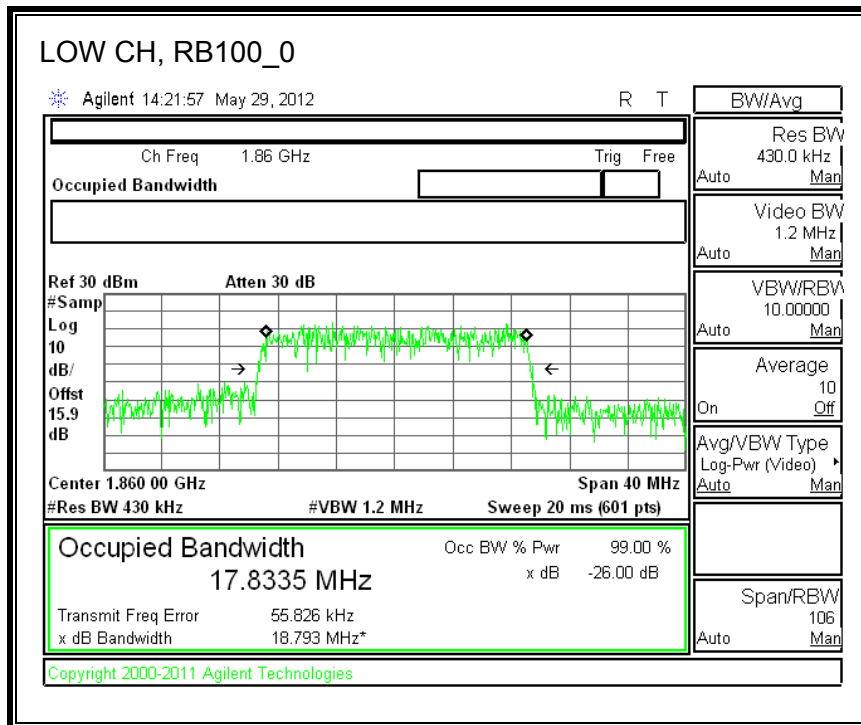
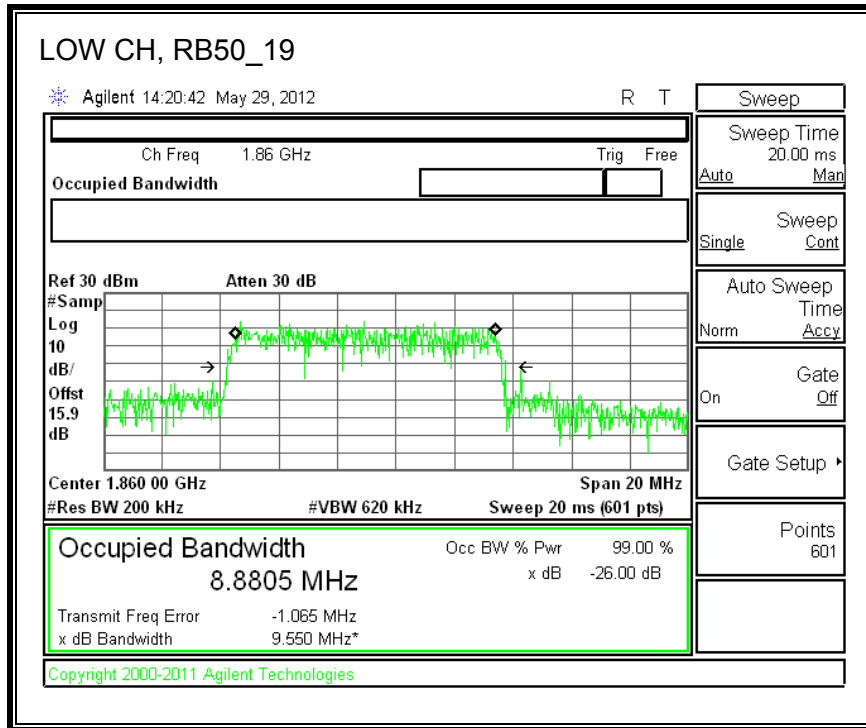


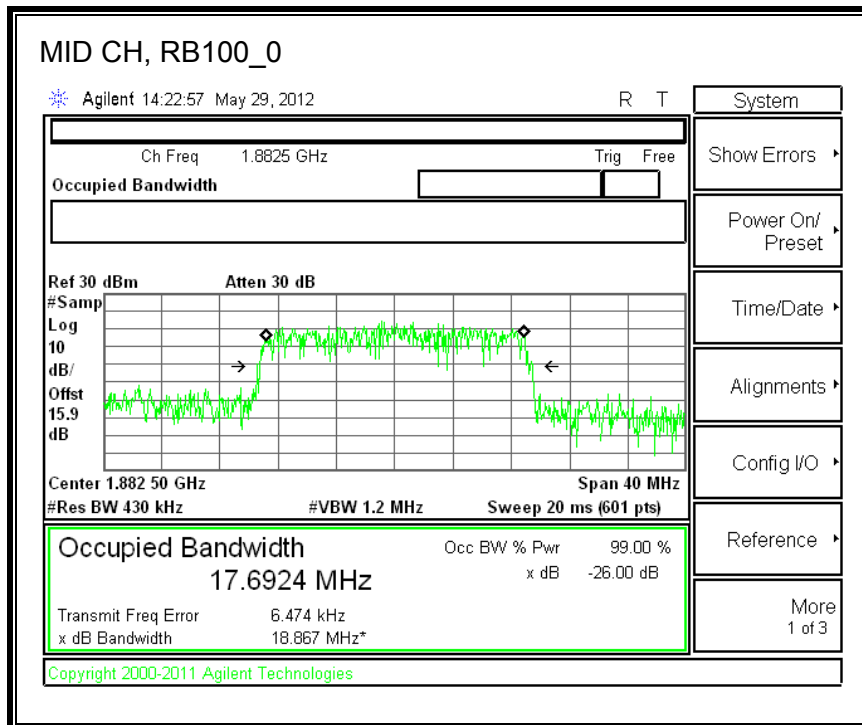
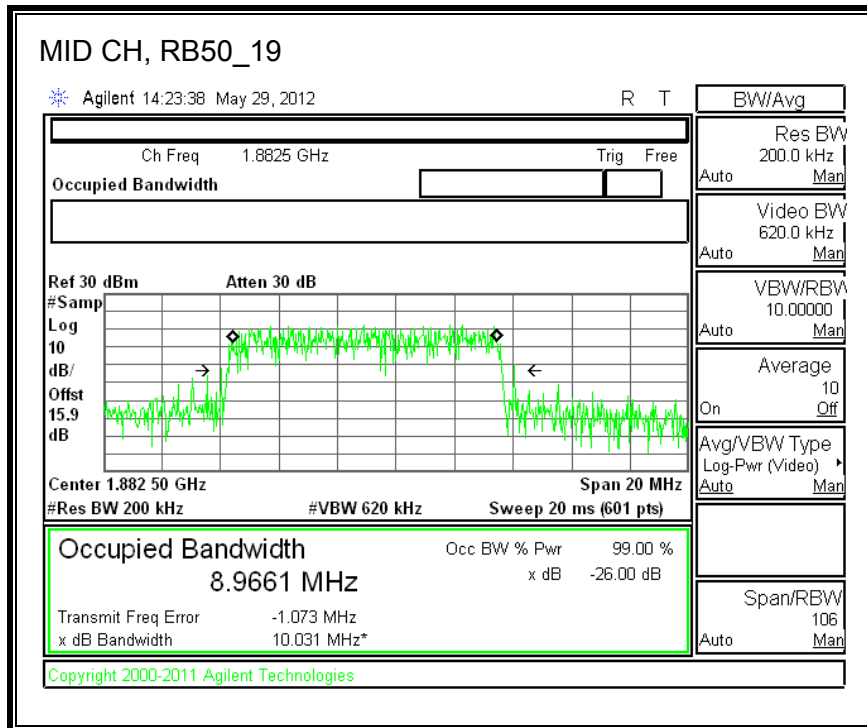


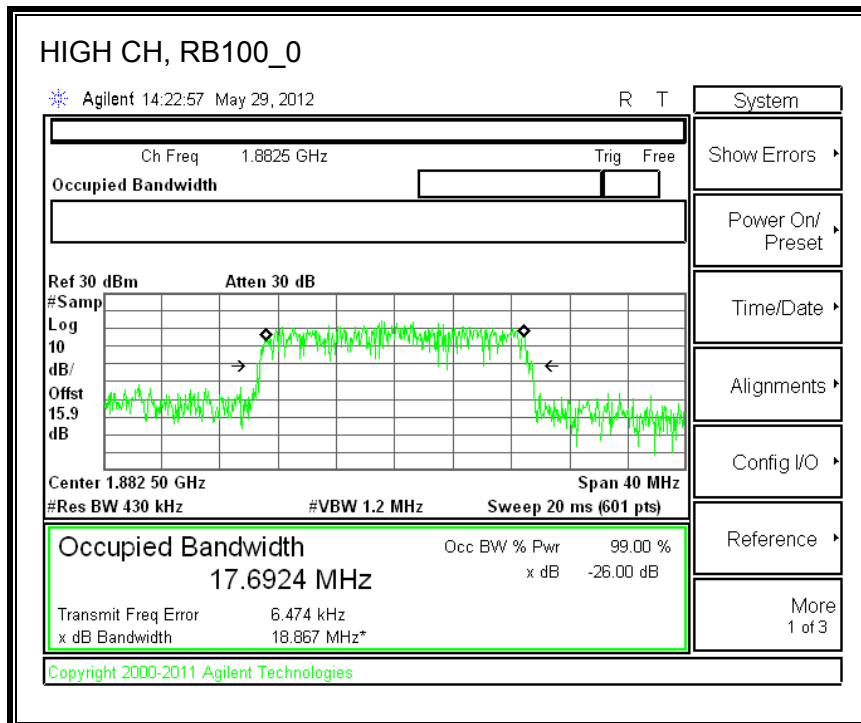
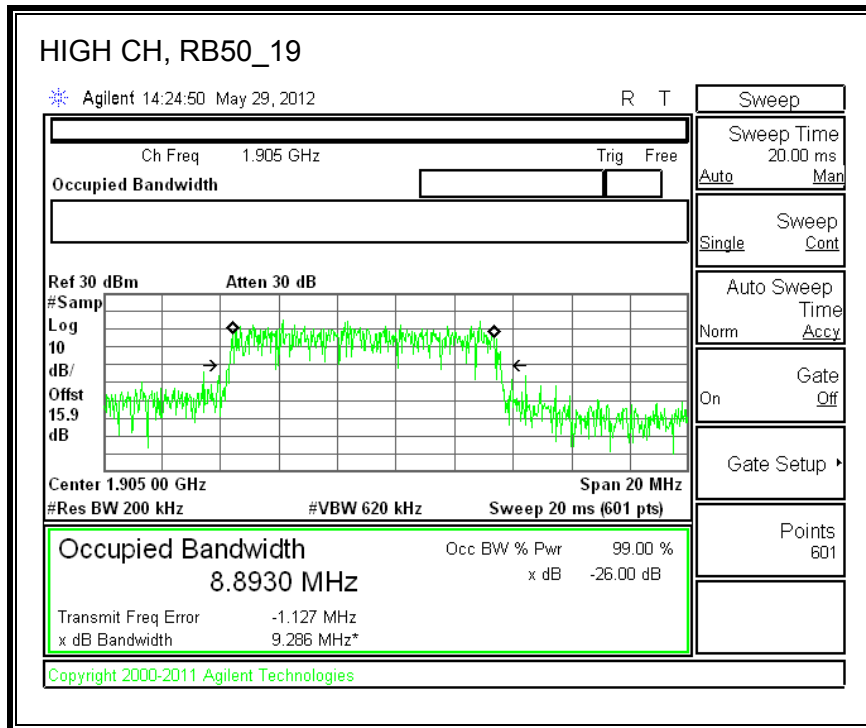


Band 25 (20.0 MHz BAND WIDTH)

LTE 16QAM







8.2. BAND EDGE

RULE PART(S)

- FCC: §22.359, 24.238, and 27.53
-
- LIMITS
- The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.
- TEST PROCEDURE
- The transmitter output was connected to a 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 (704, 716, 824, 849, 1710 and 1755, 1850 and 1910 MHz)
 - Set a marker to point the corresponding band edge frequency in each test case.
 - Set display line at -13 dBm
 - Set resolution bandwidth to at least 1% of emission bandwidth.

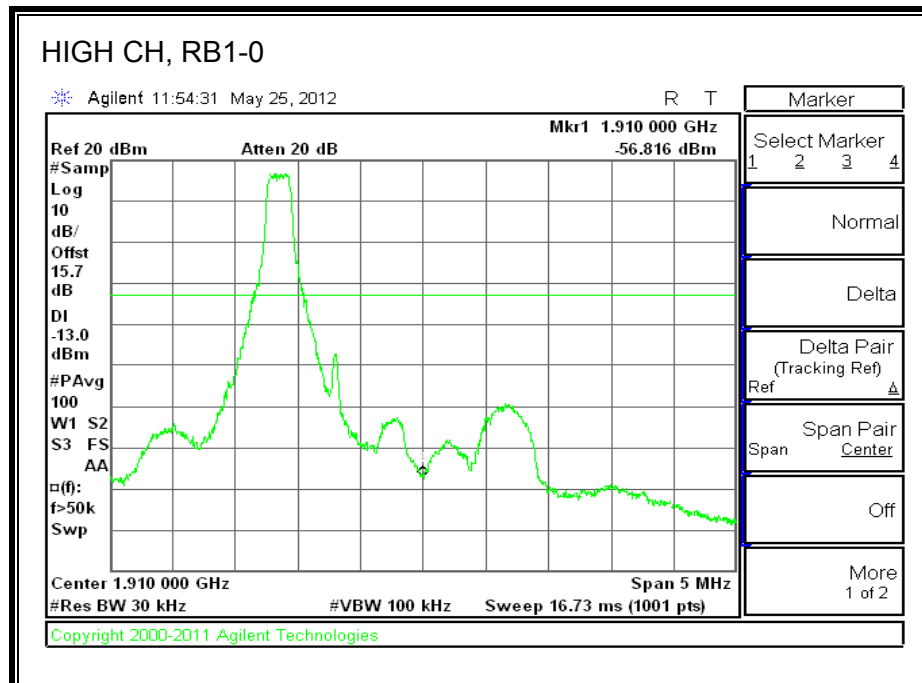
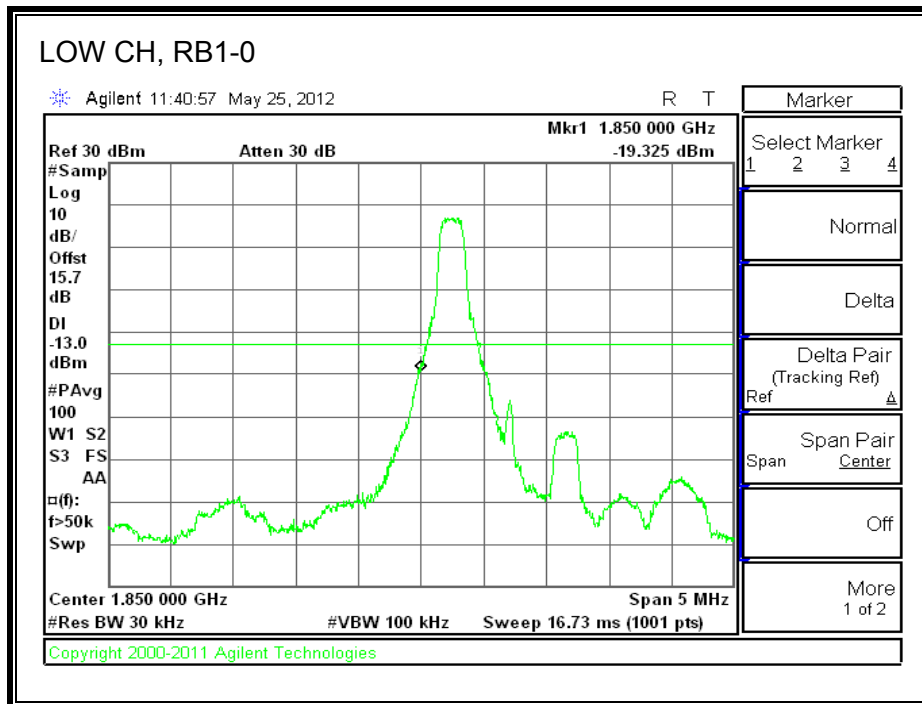
MODES TESTED

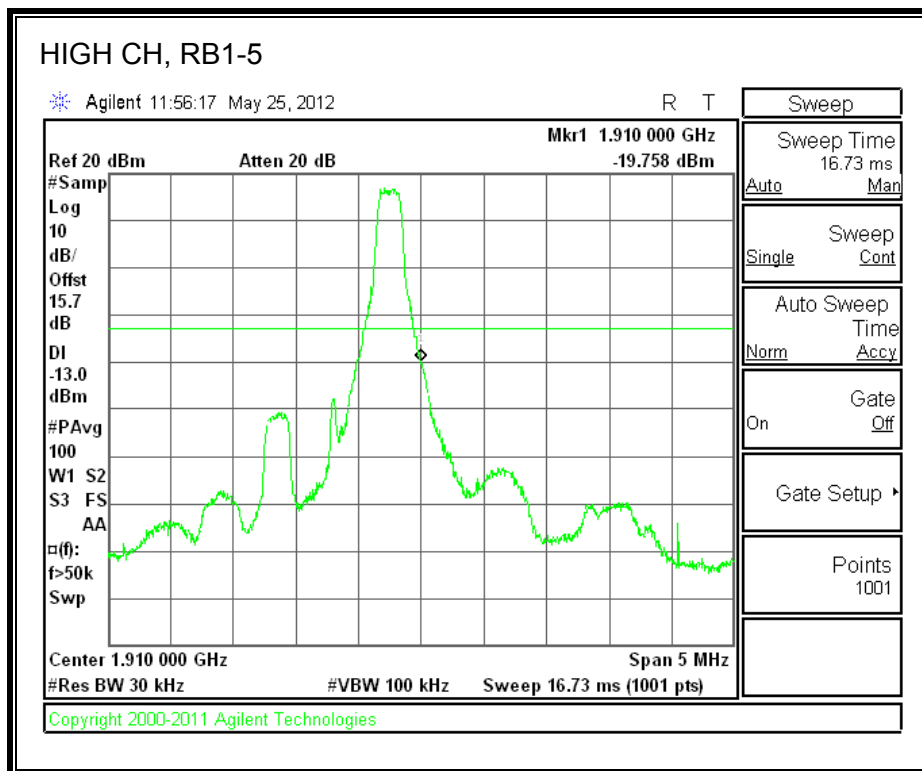
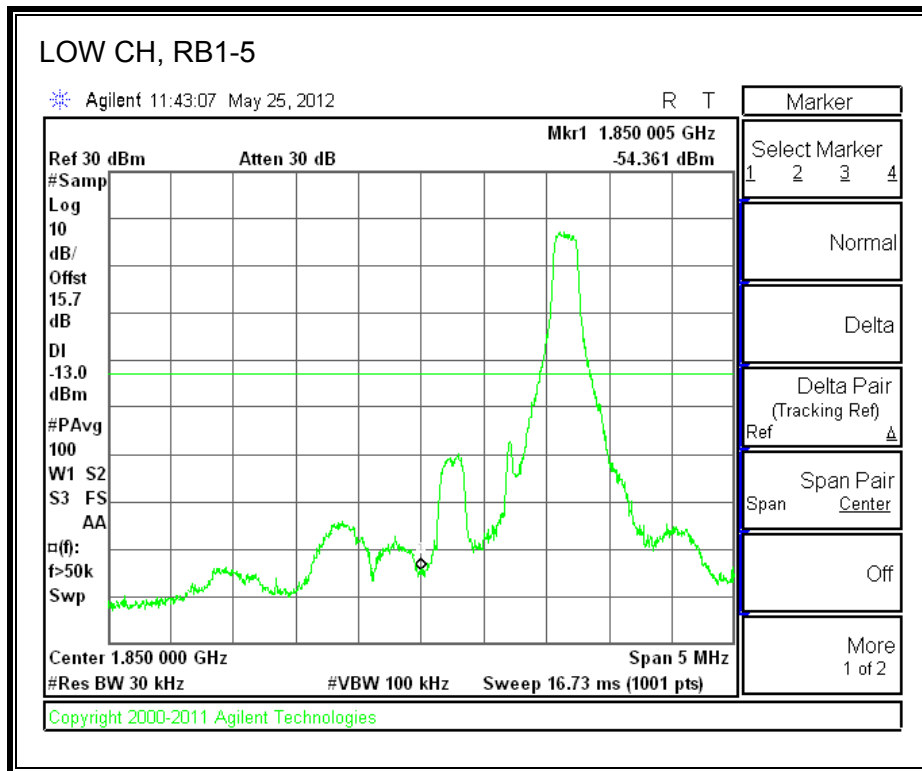
- Band 2
- Band 4
- Band 17
- Band 5
- Band 13
- Band 25

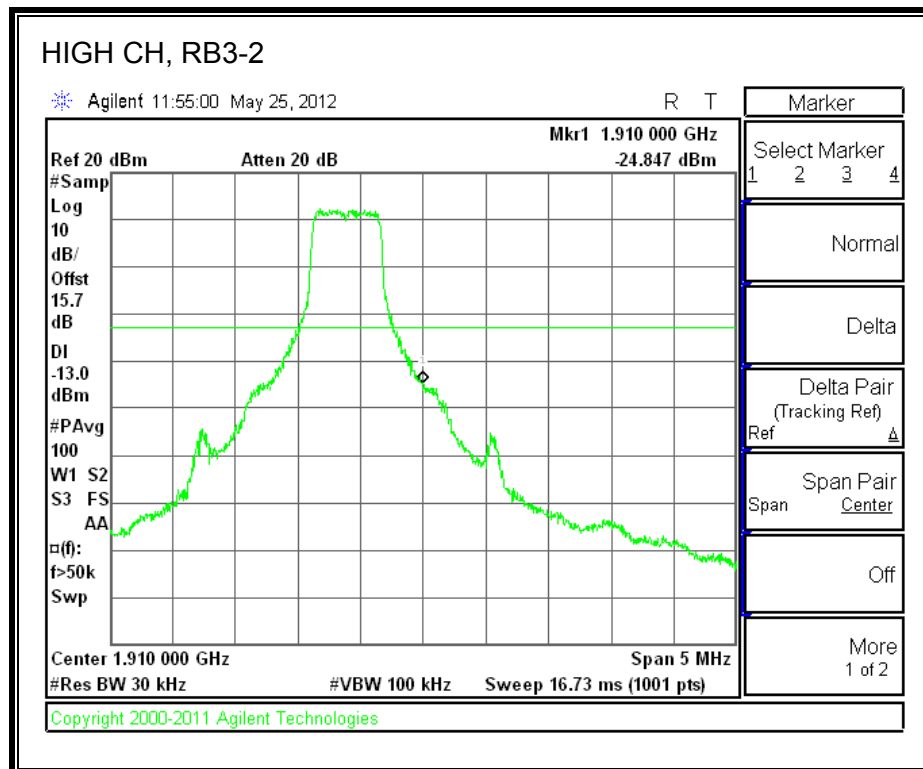
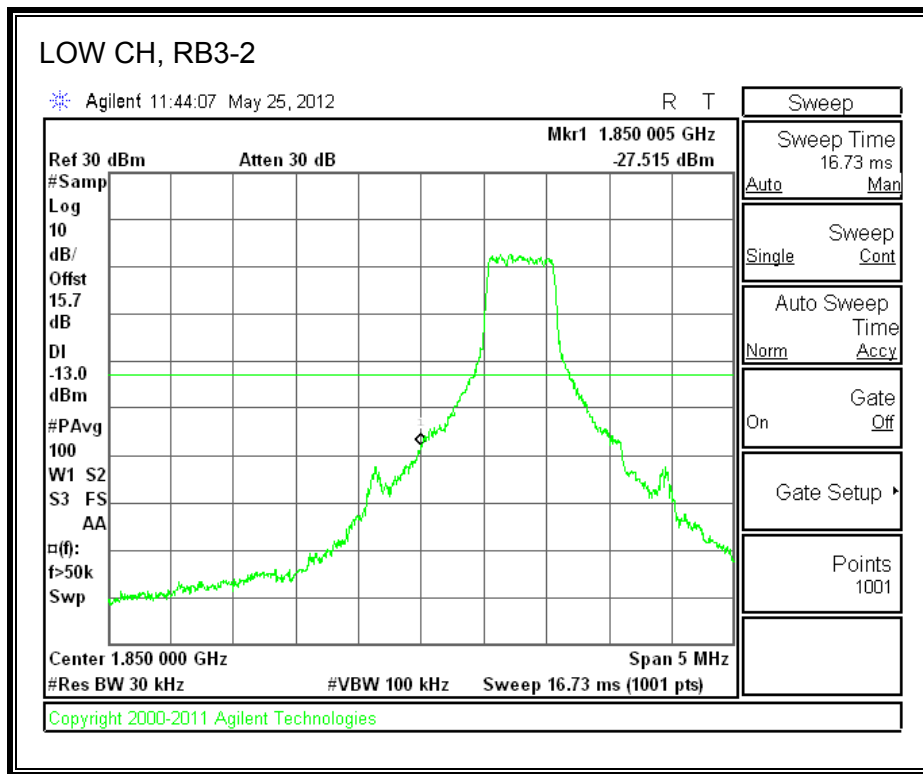
RESULTS

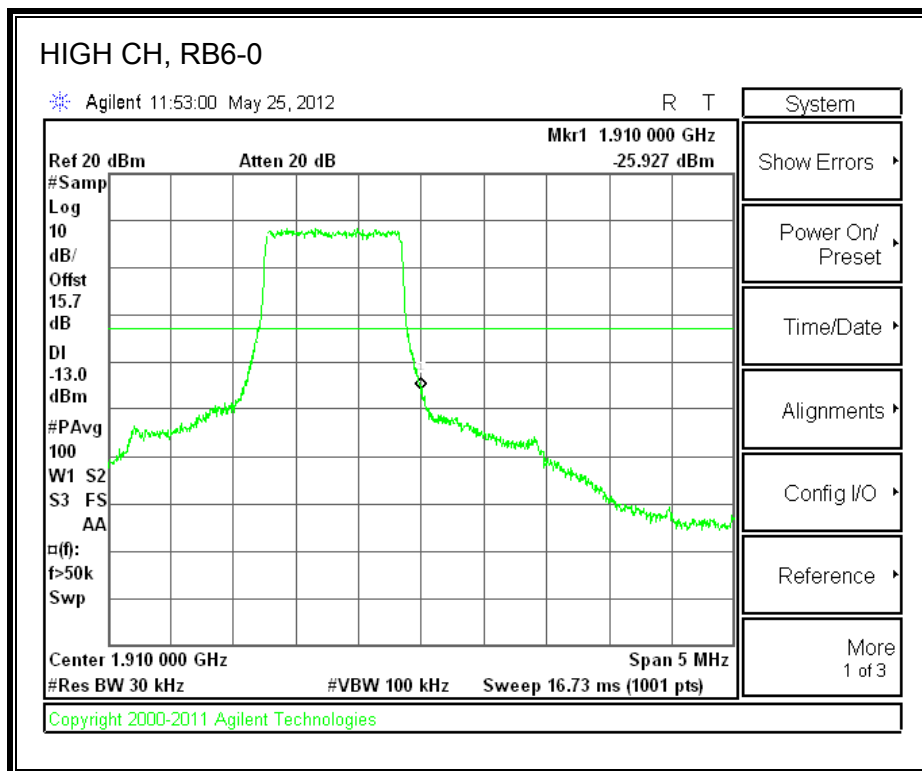
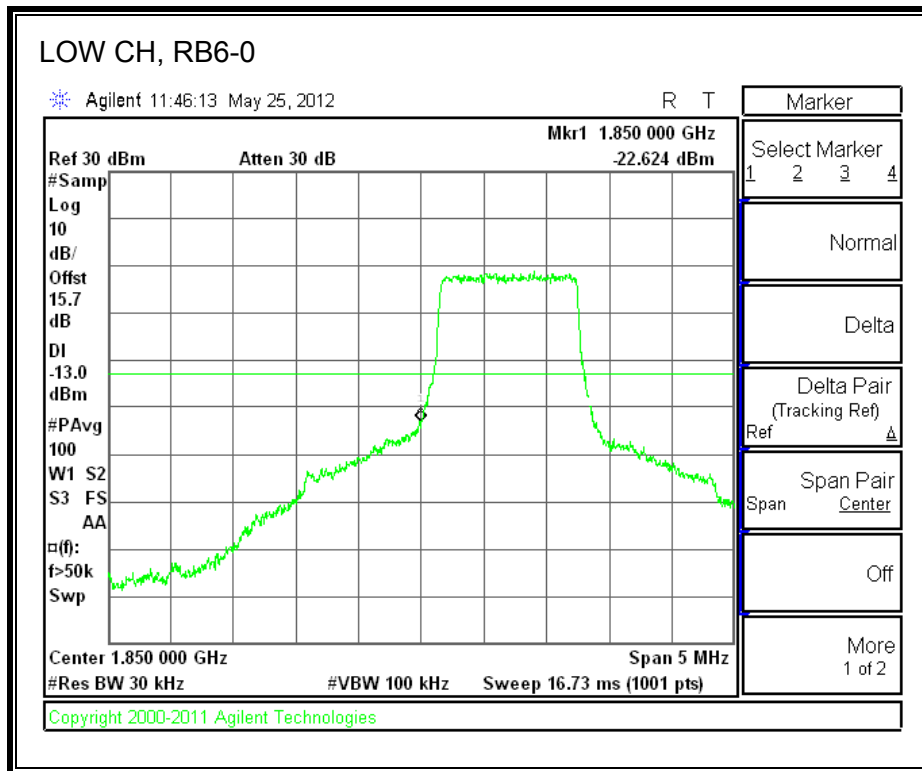
8.2.1. A1428 UAT PORT LTE BAND 2

LTE QPSK Band 2 (1.4 MHz BAND WIDTH)

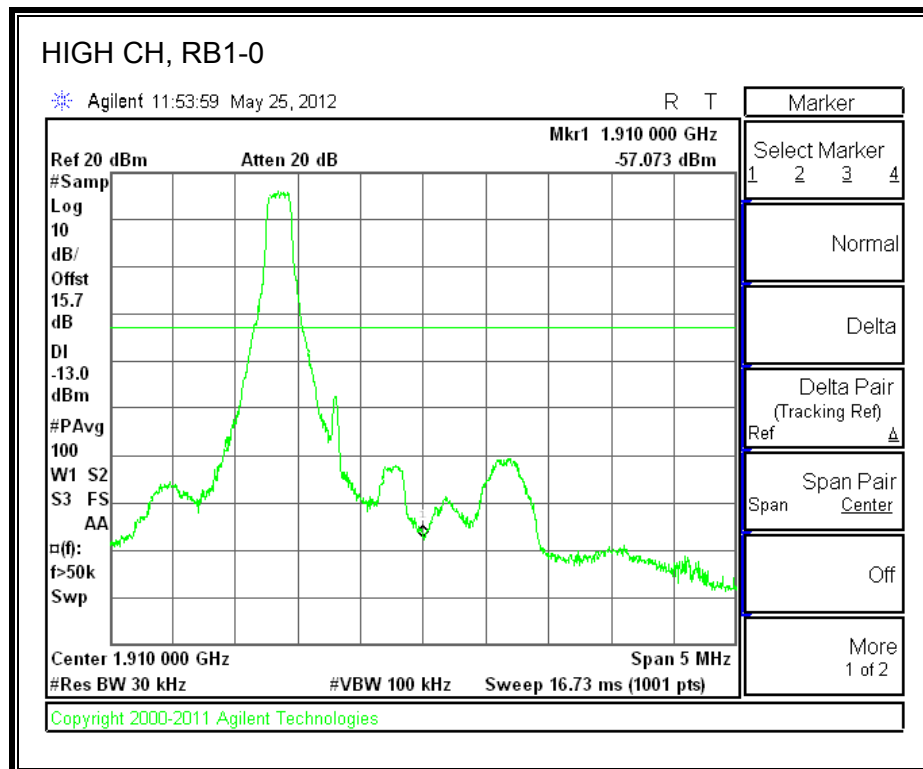
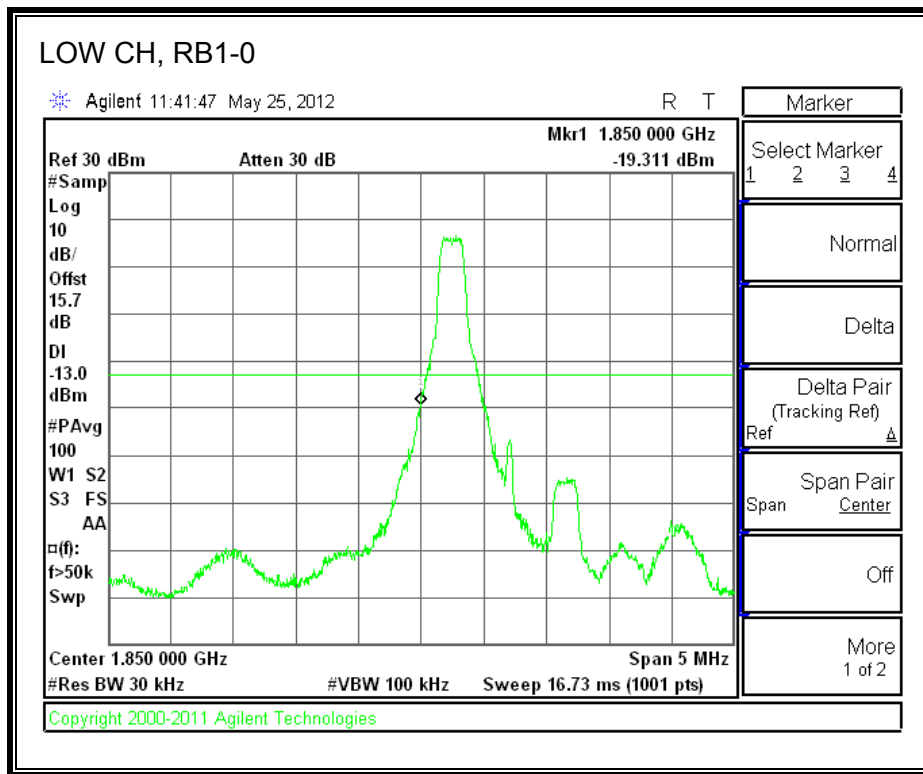


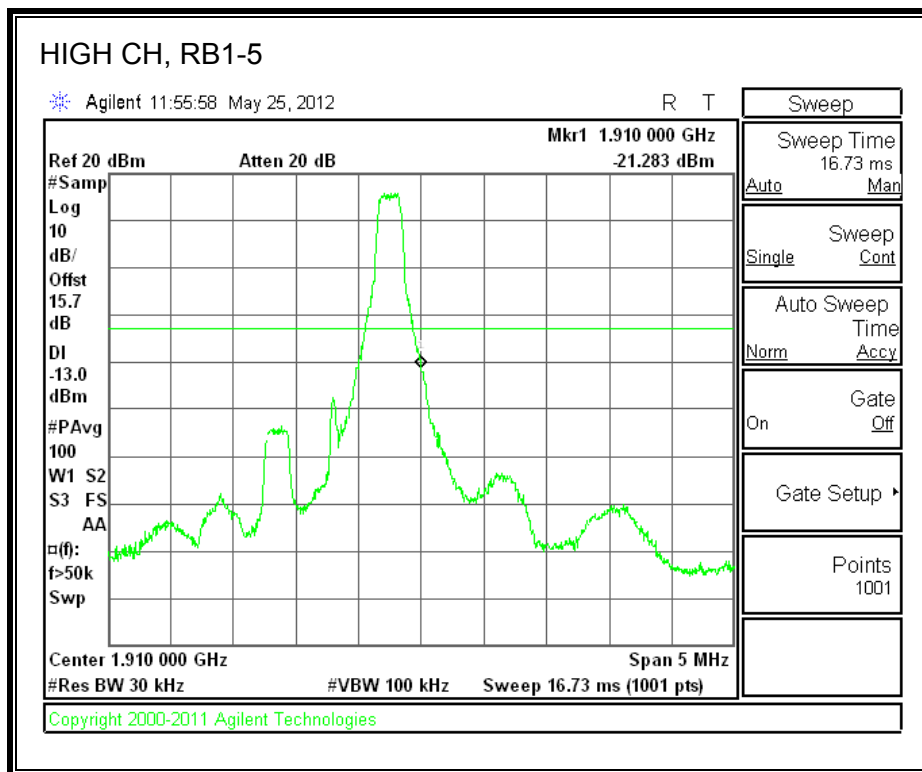
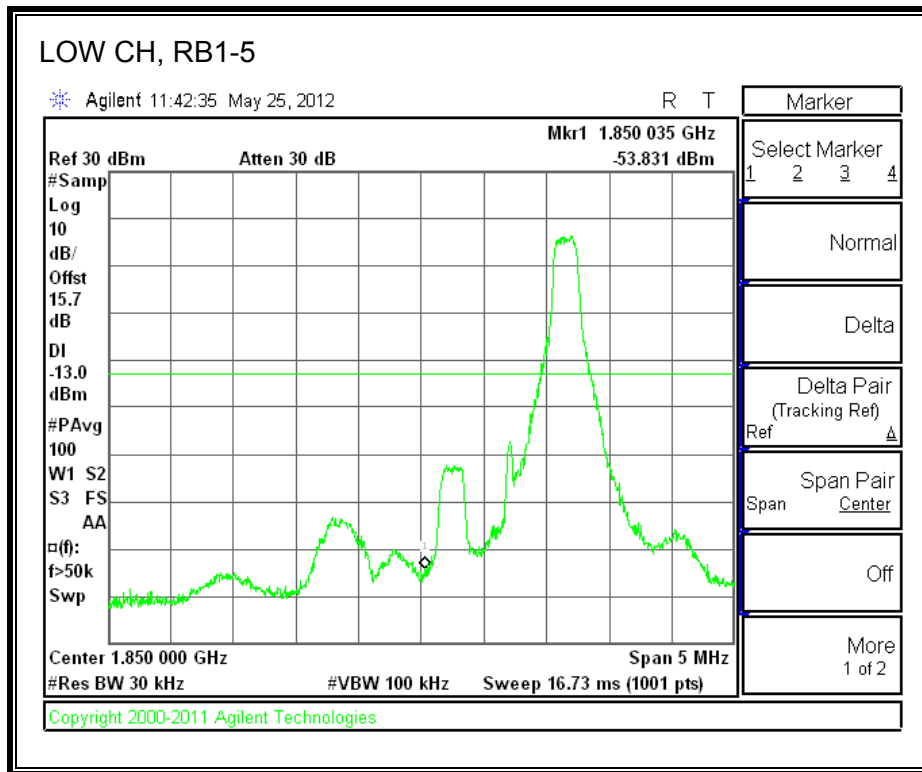


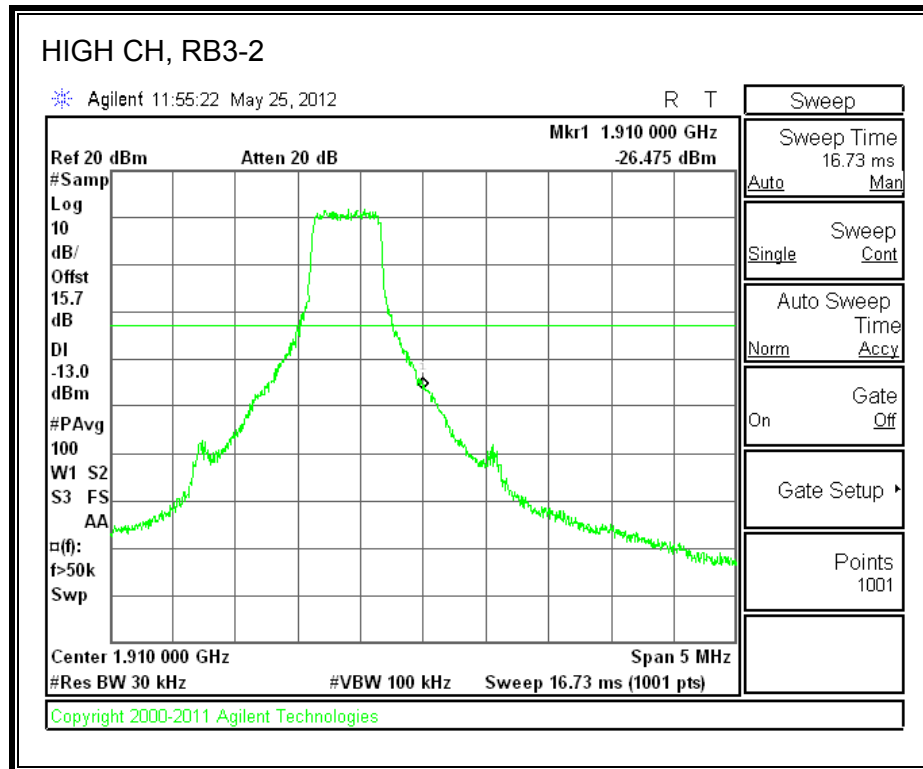
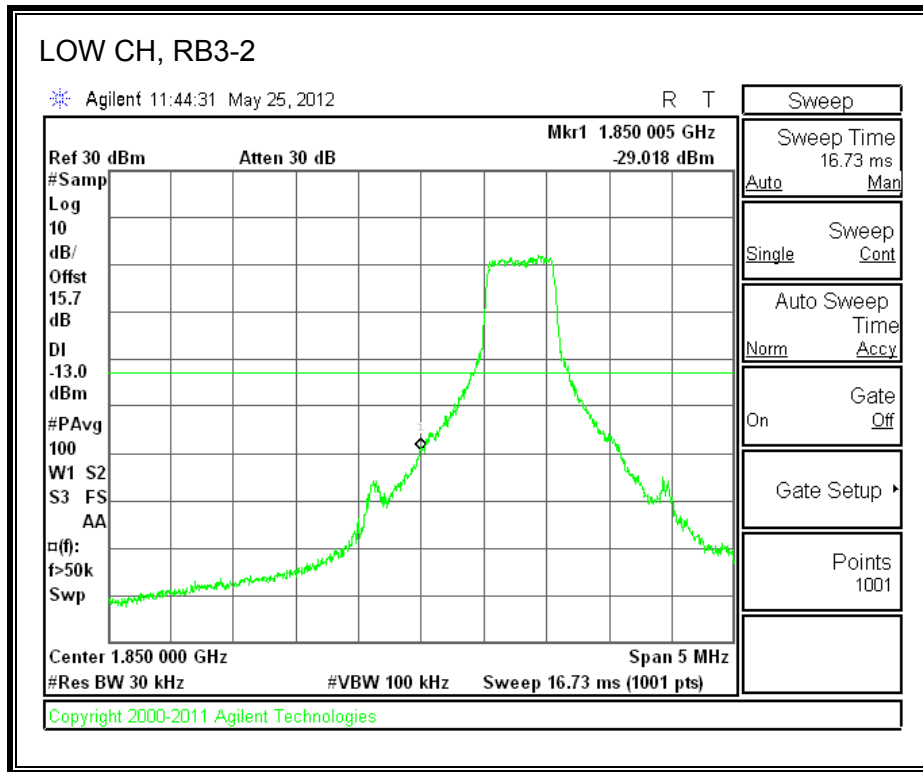


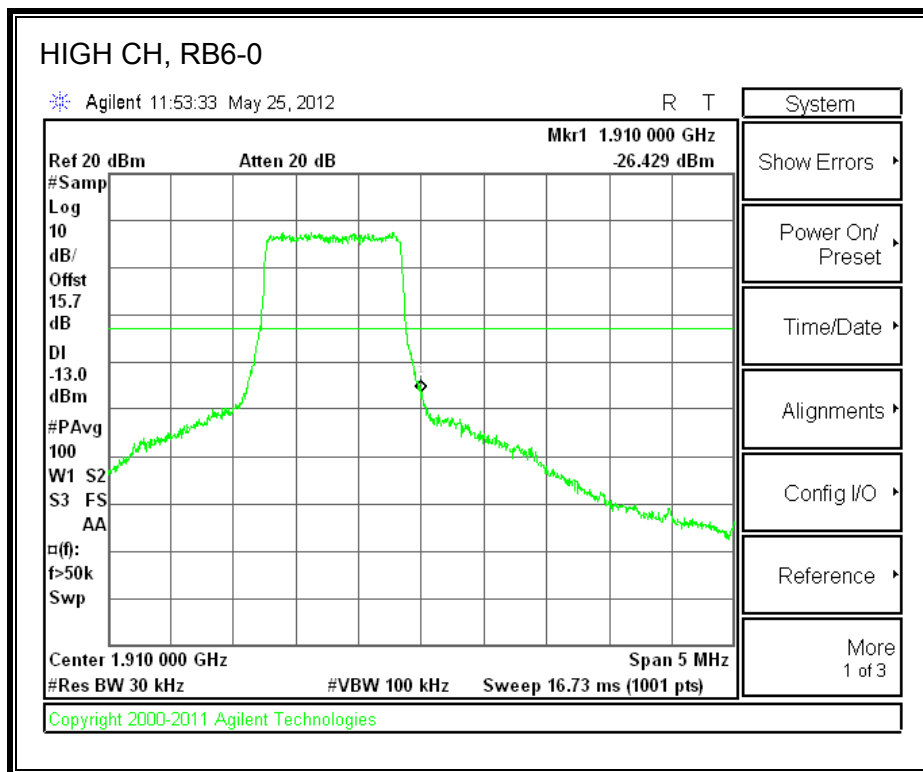
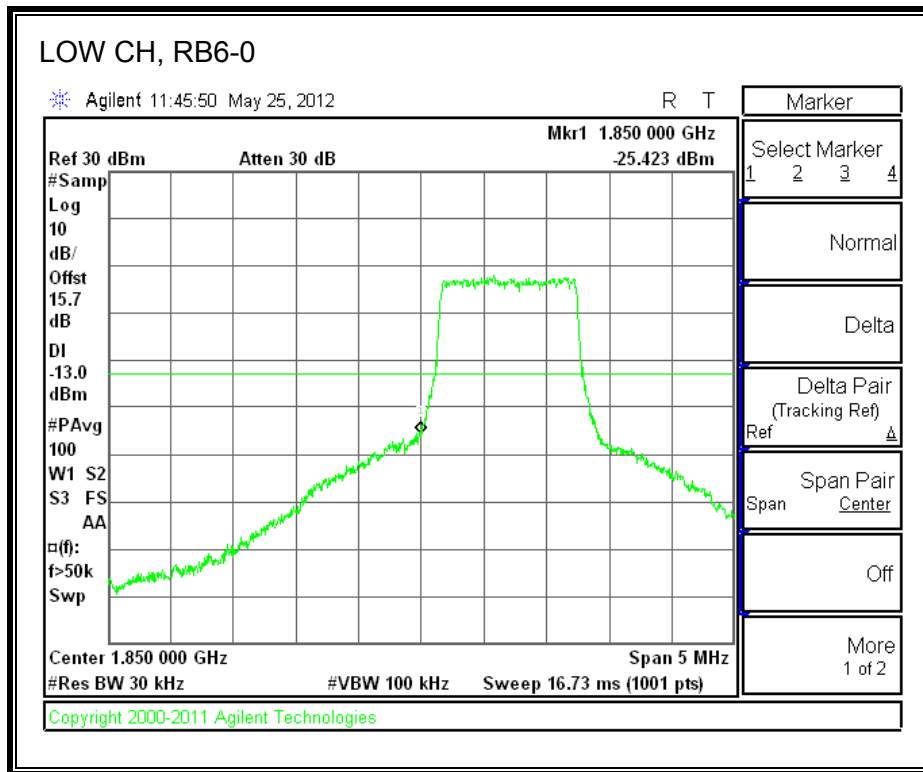


LTE 16QAM Band 2 (1.4 MHz BAND WIDTH)

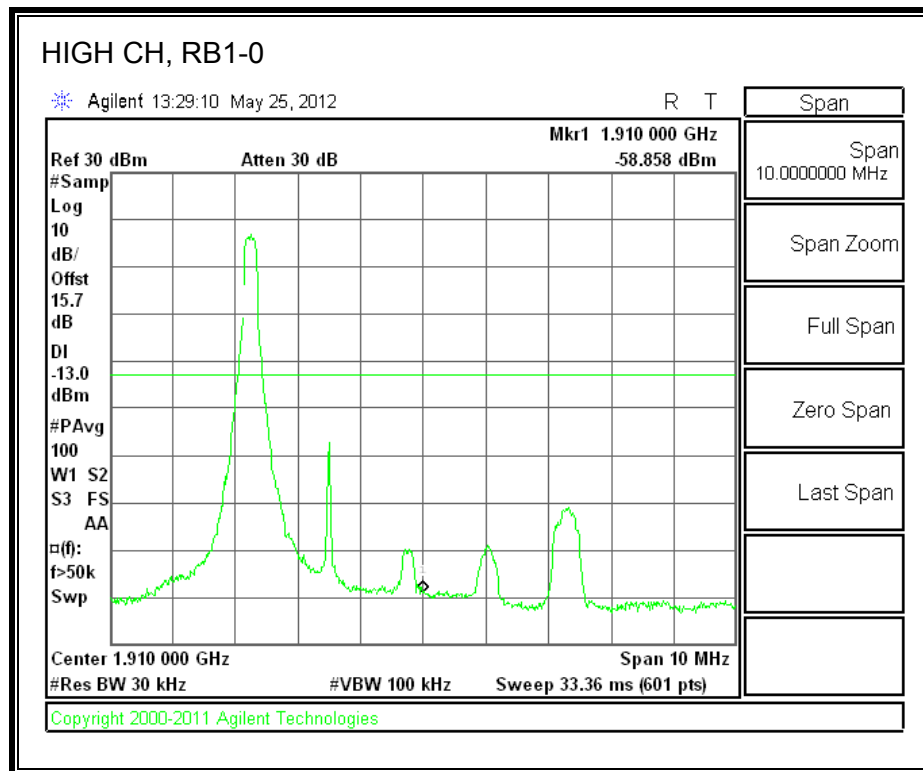
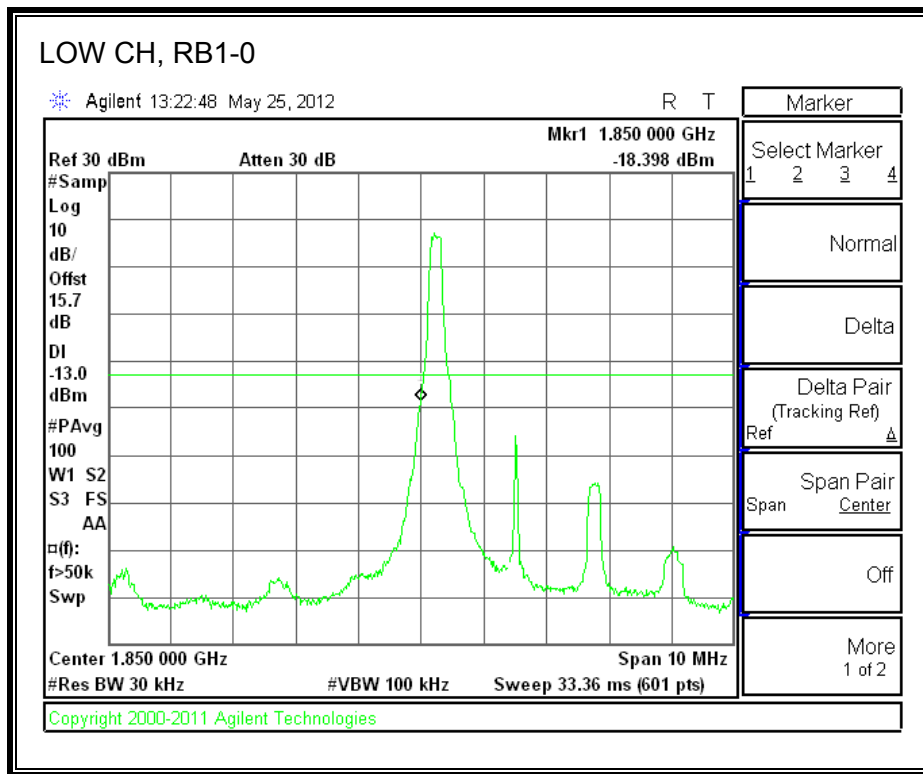


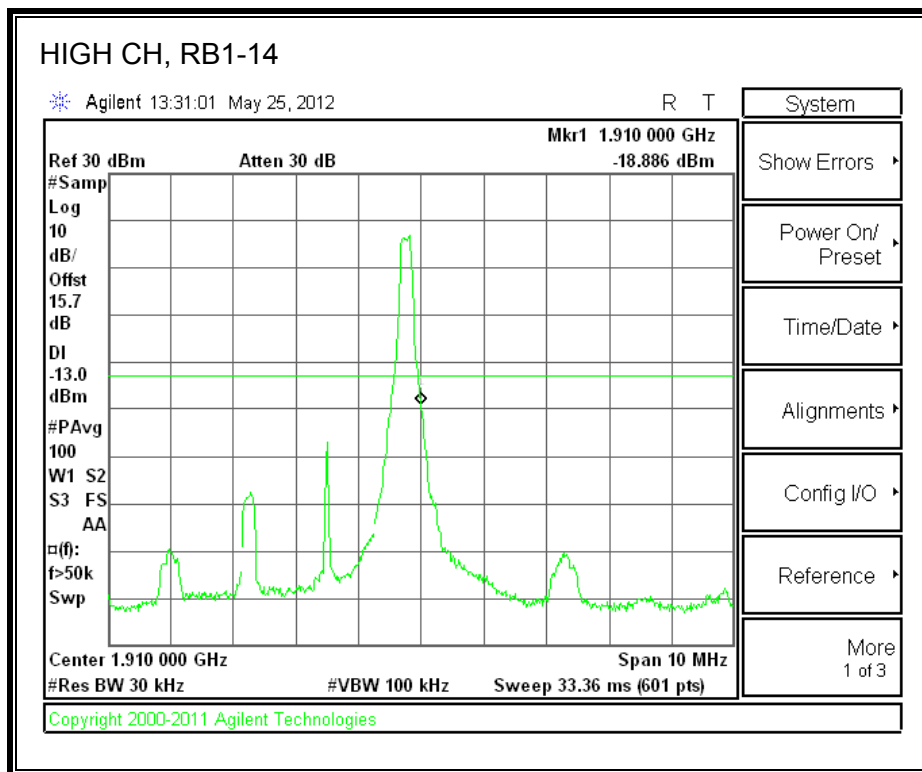
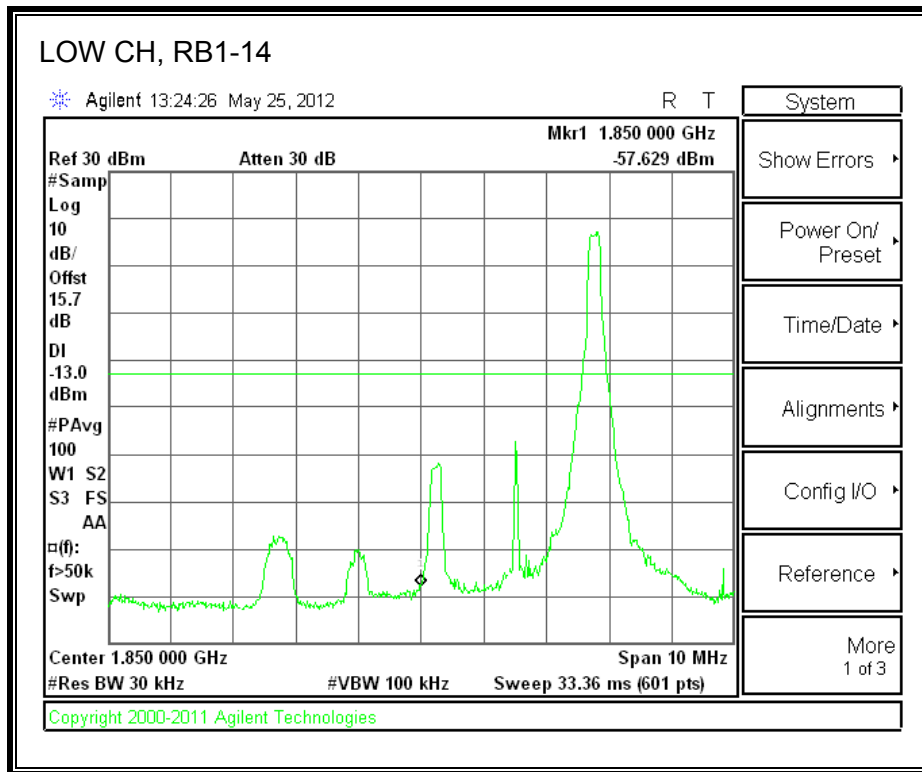


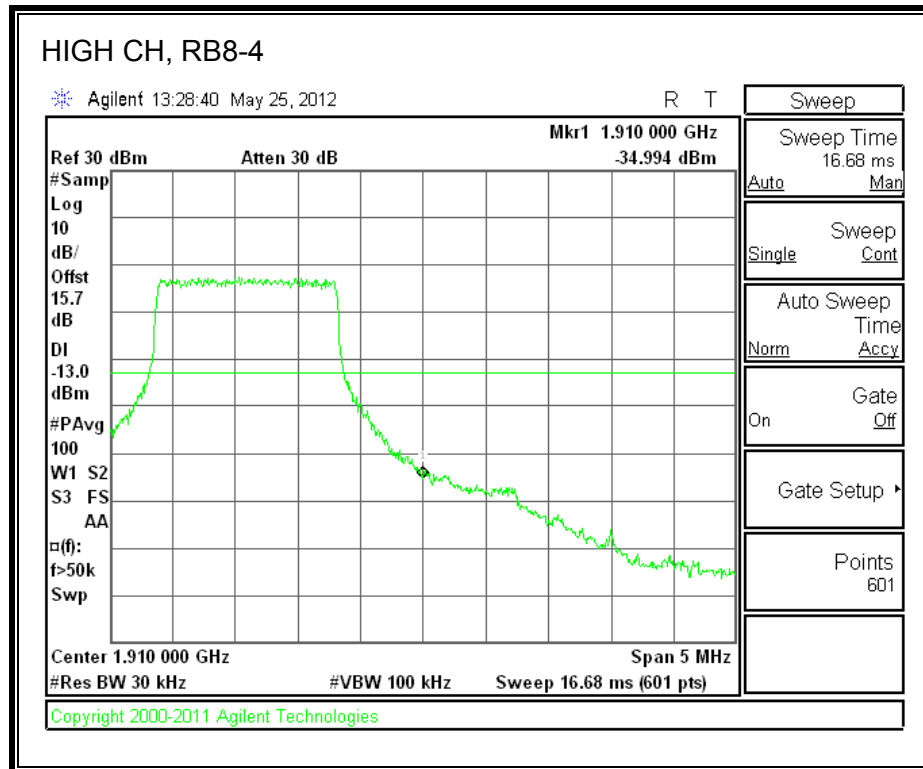
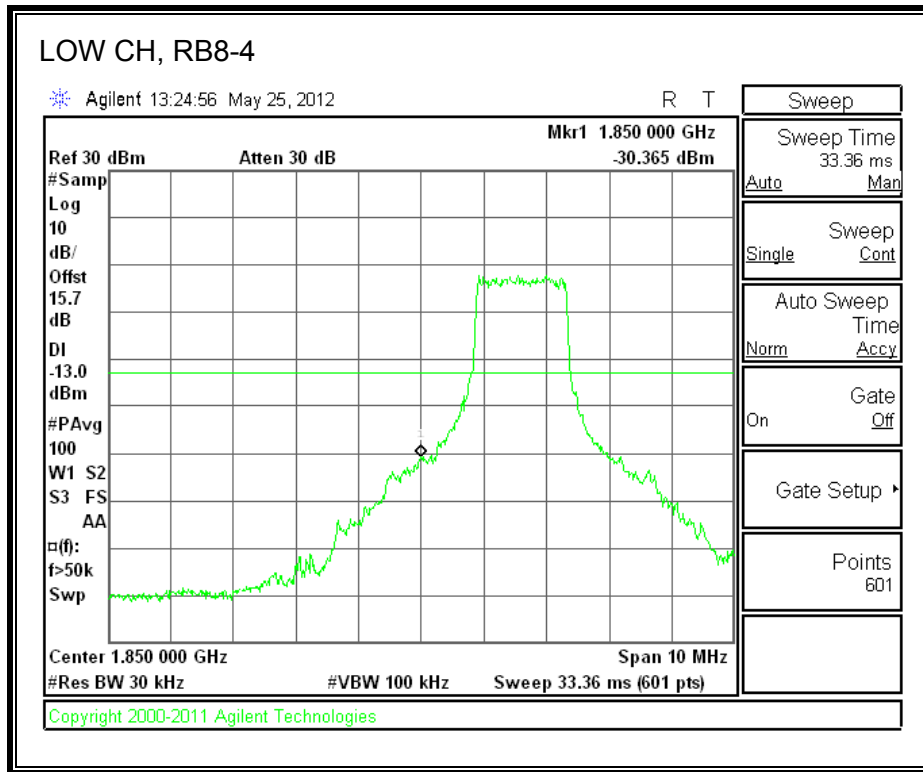


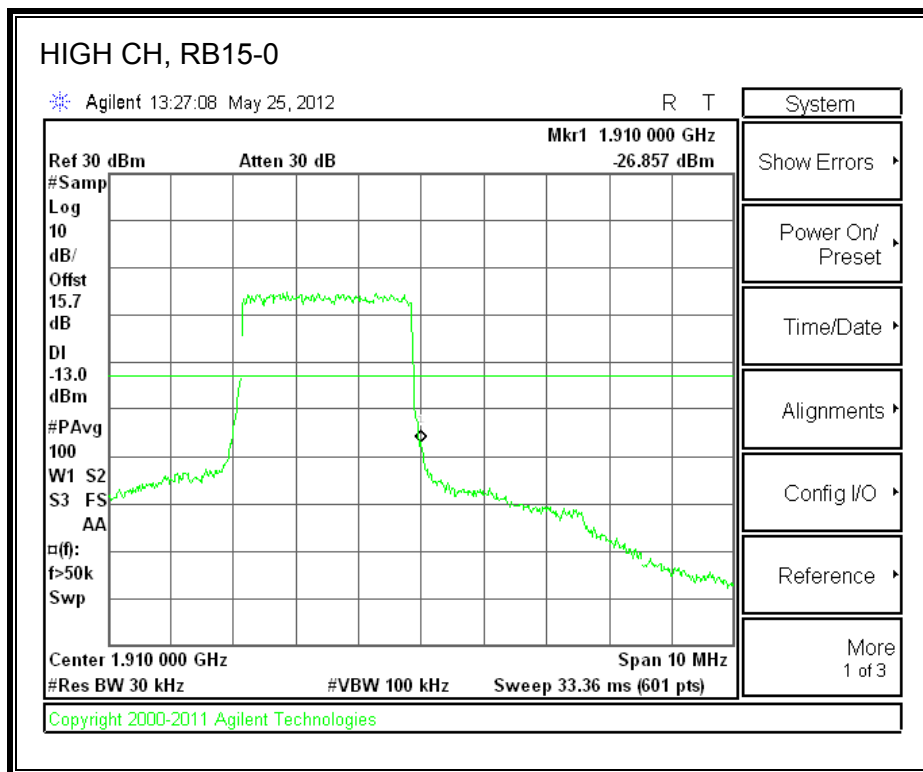
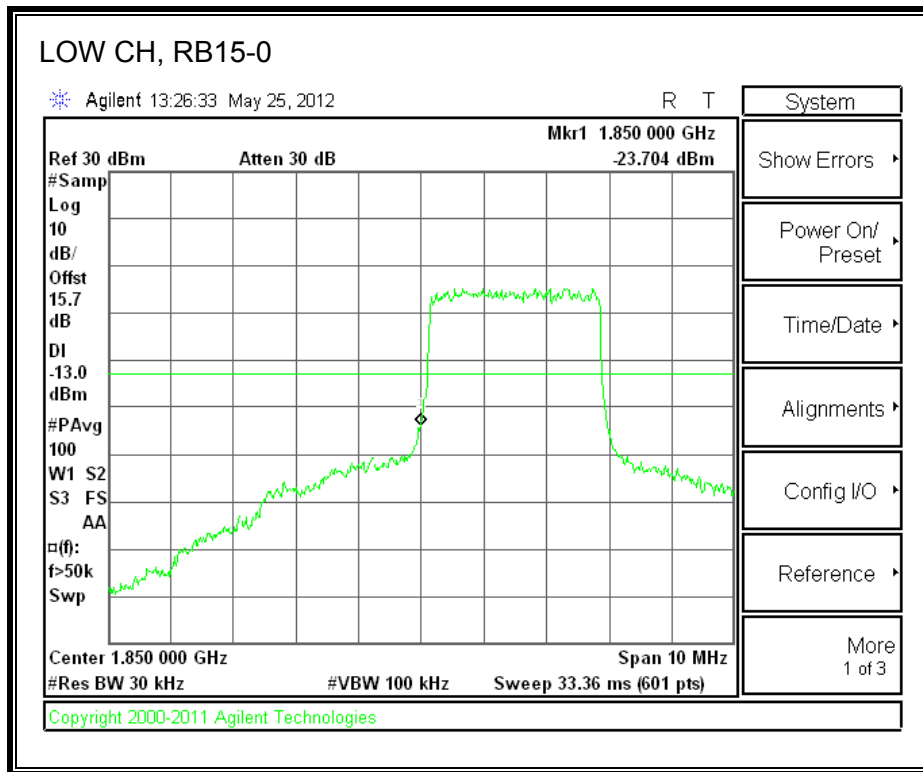


LTE QPSK Band 2 (3.0 MHz BAND WIDTH)

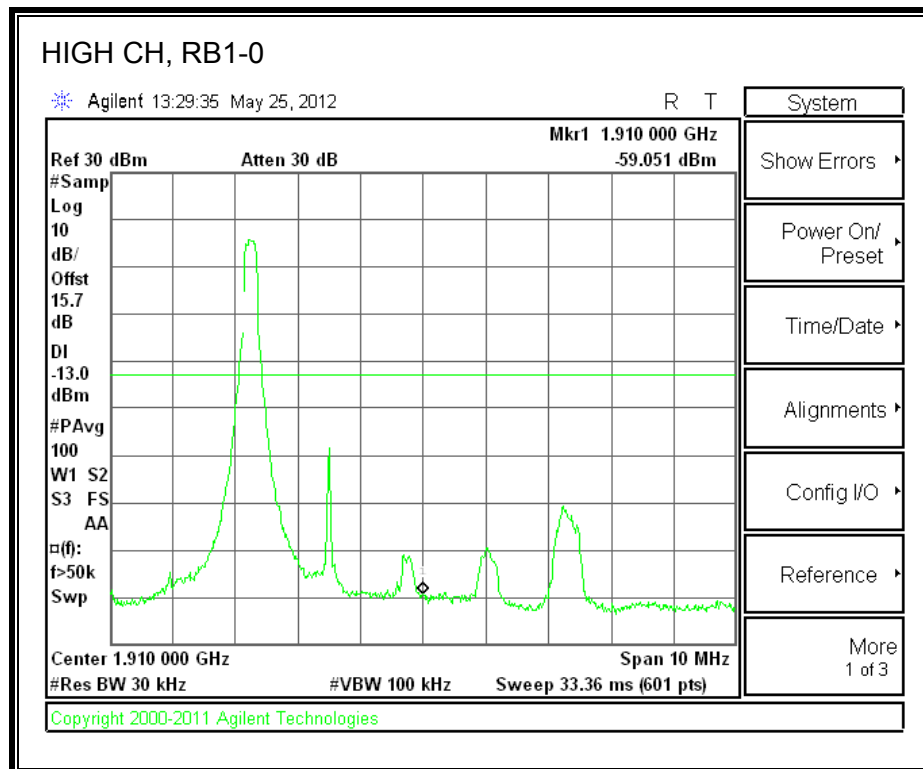
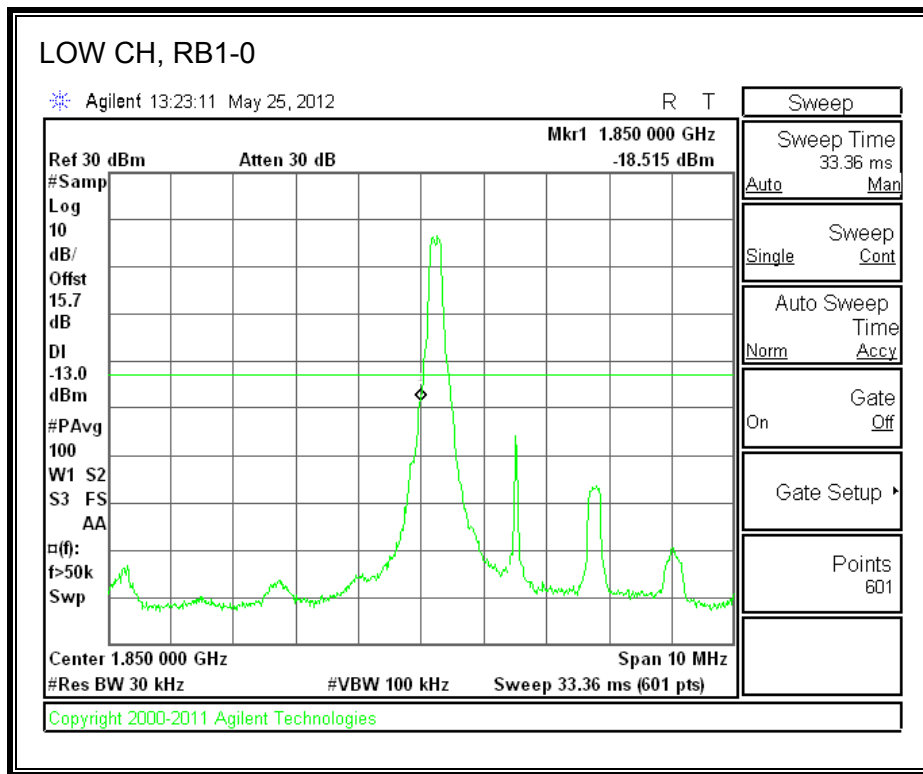


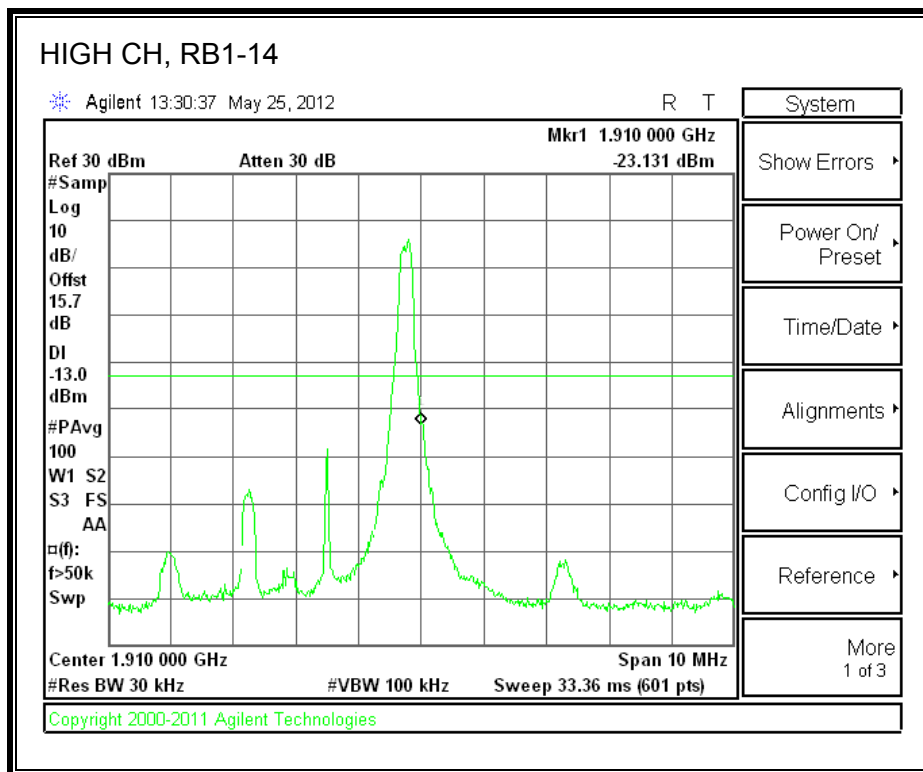
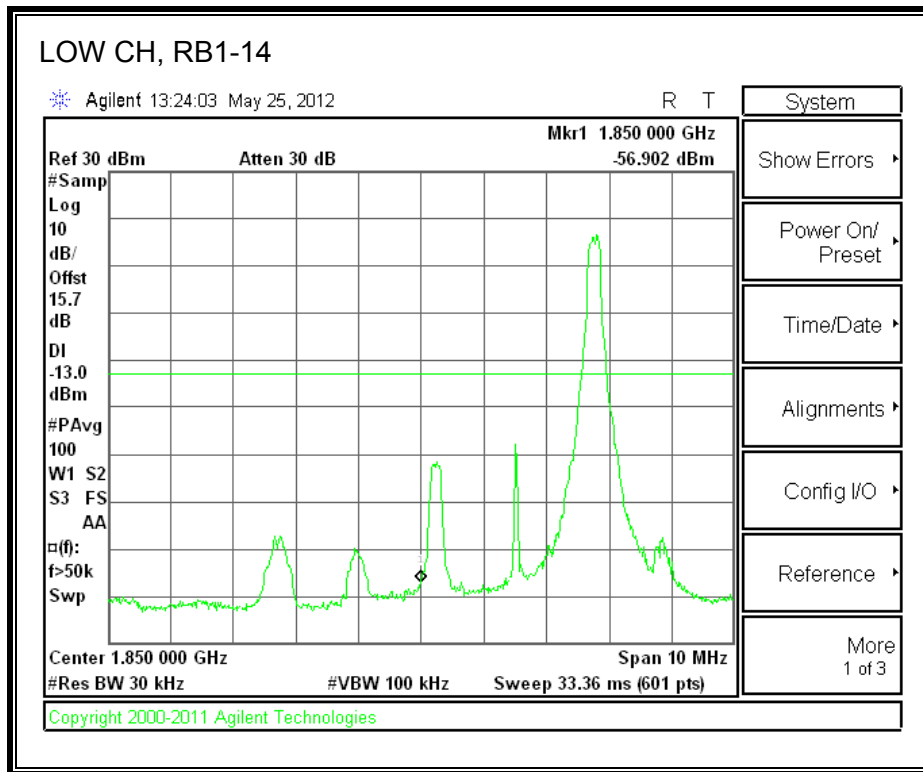


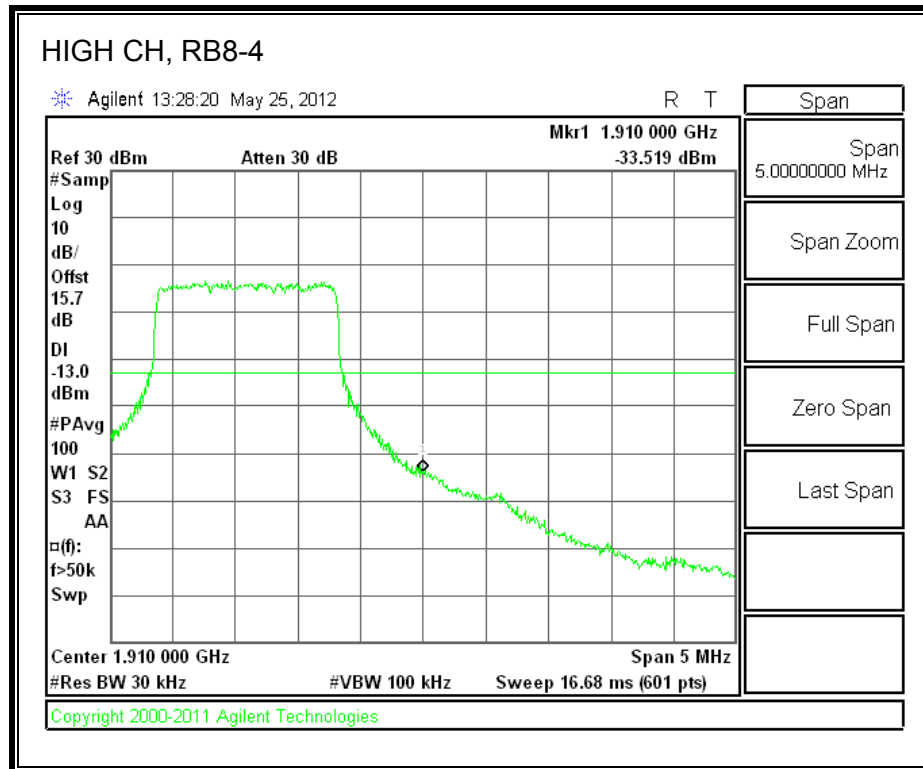
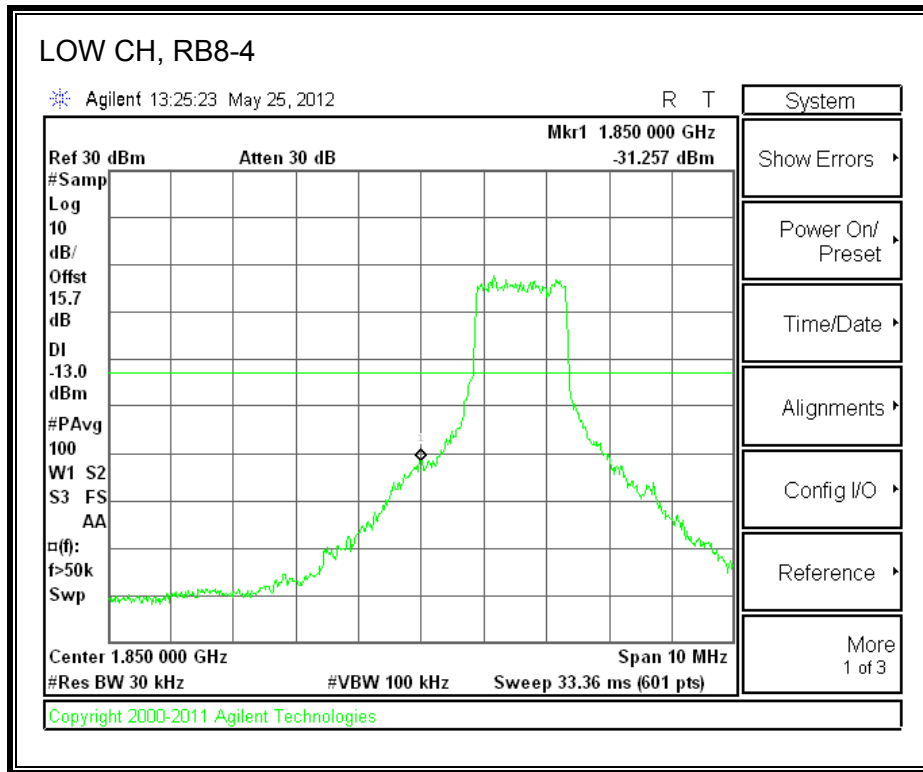


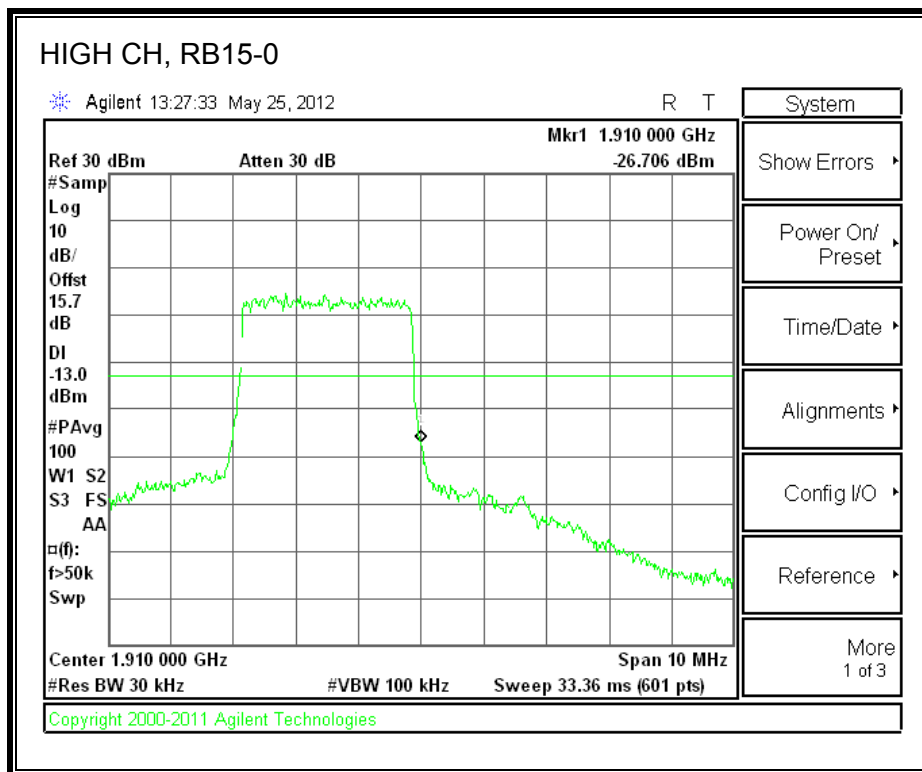
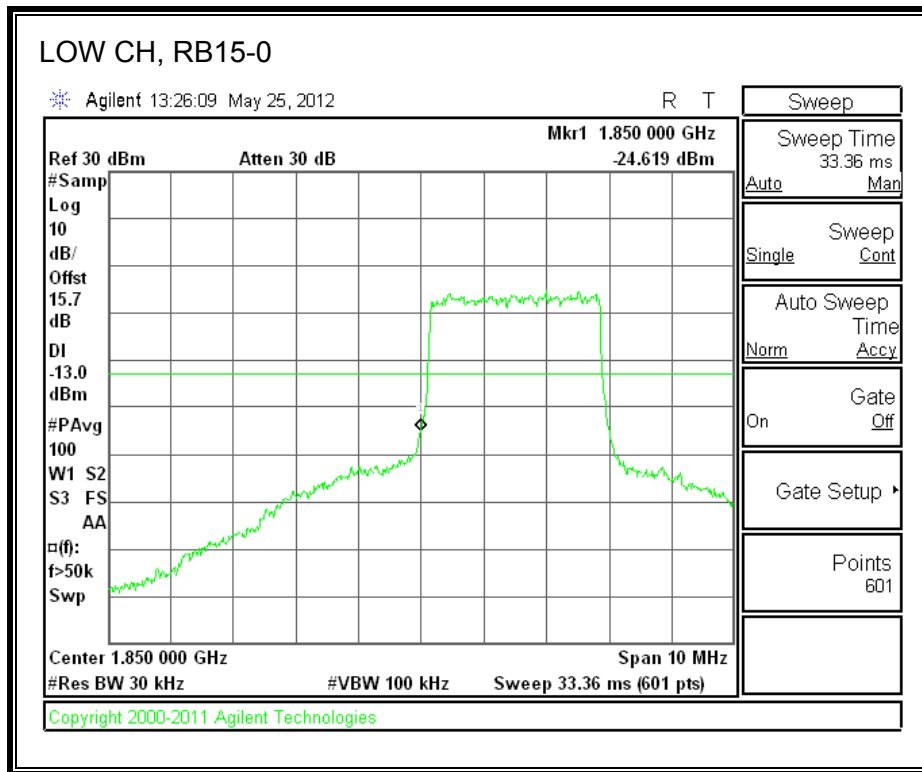


LTE 16QAM Band 2 (3.0 MHz BAND WIDTH)

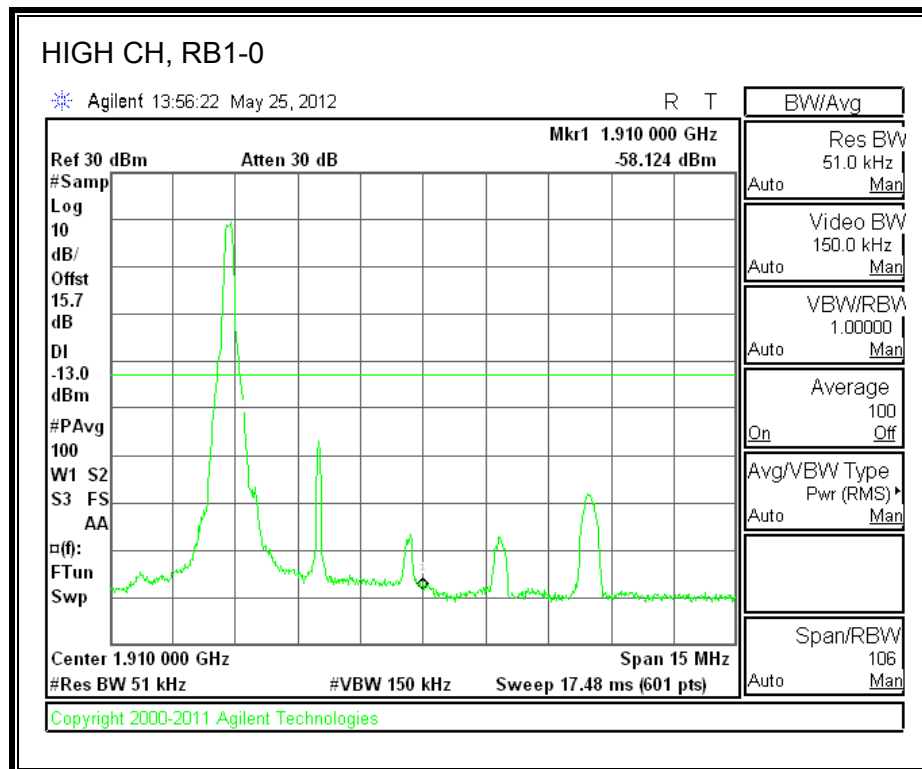
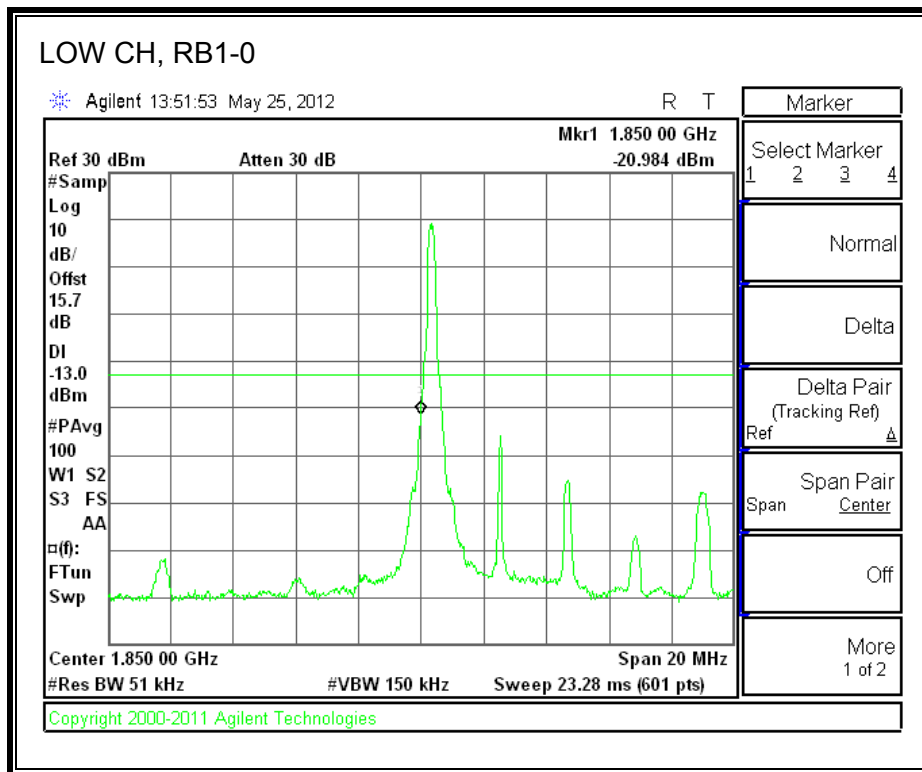


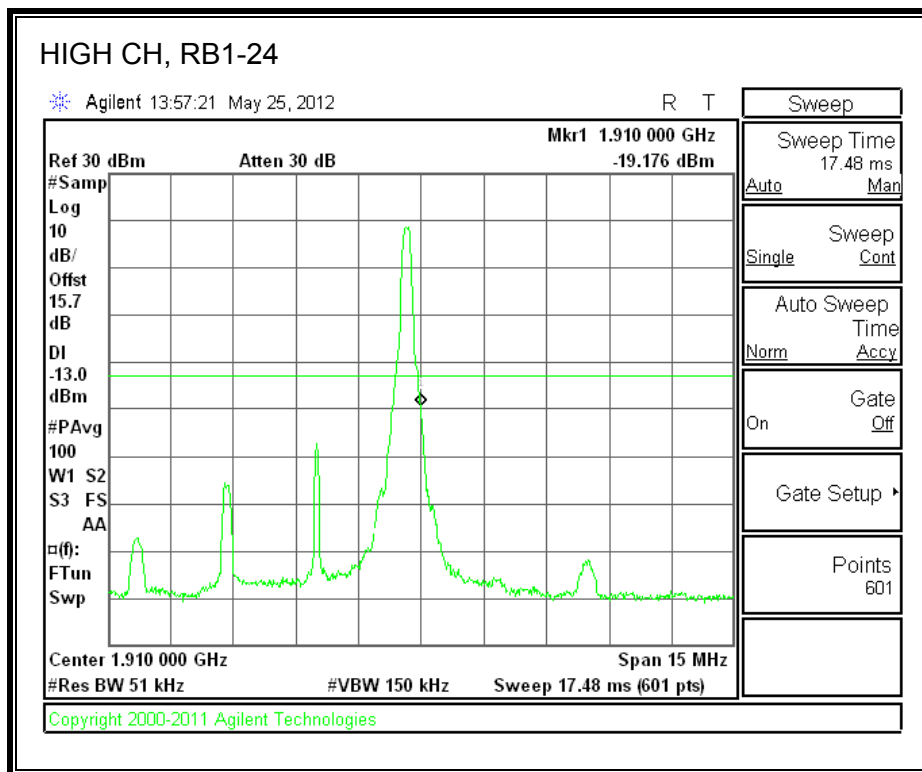
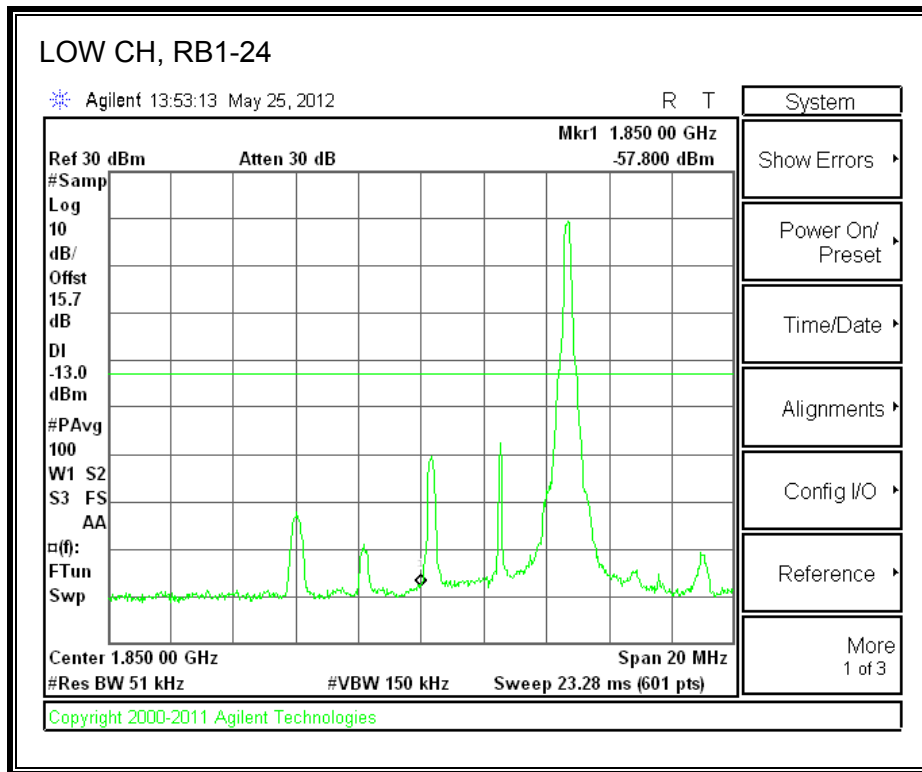


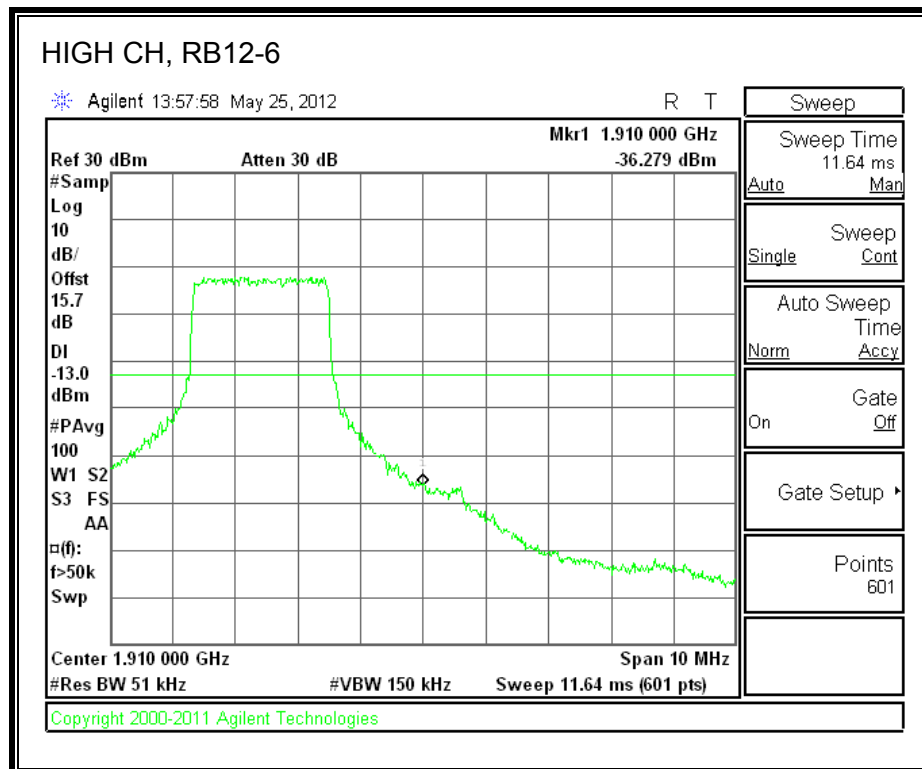
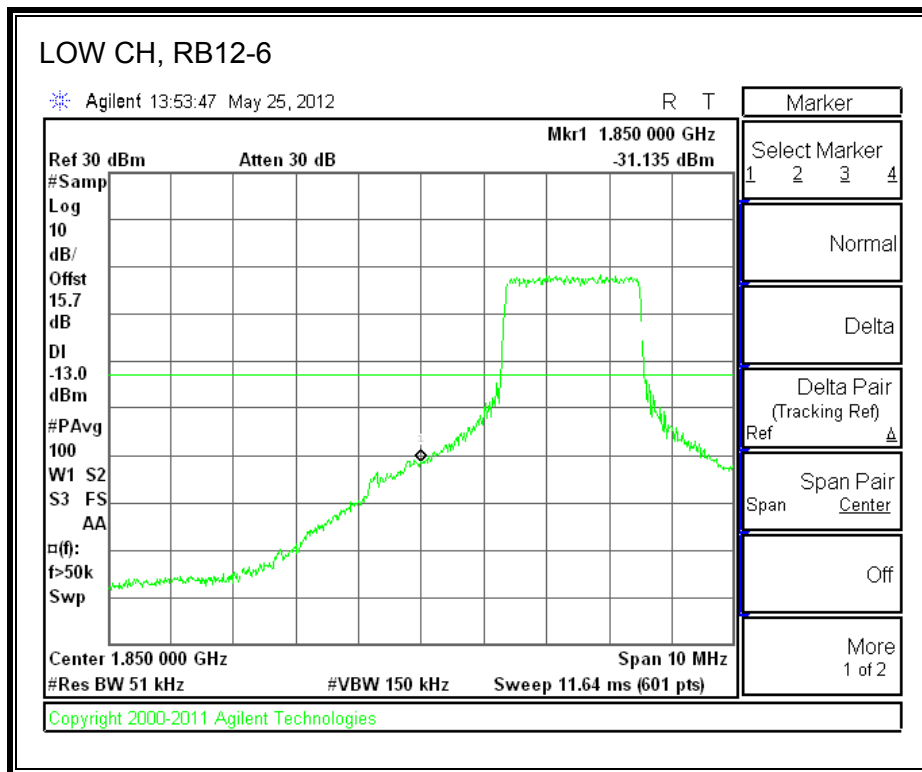


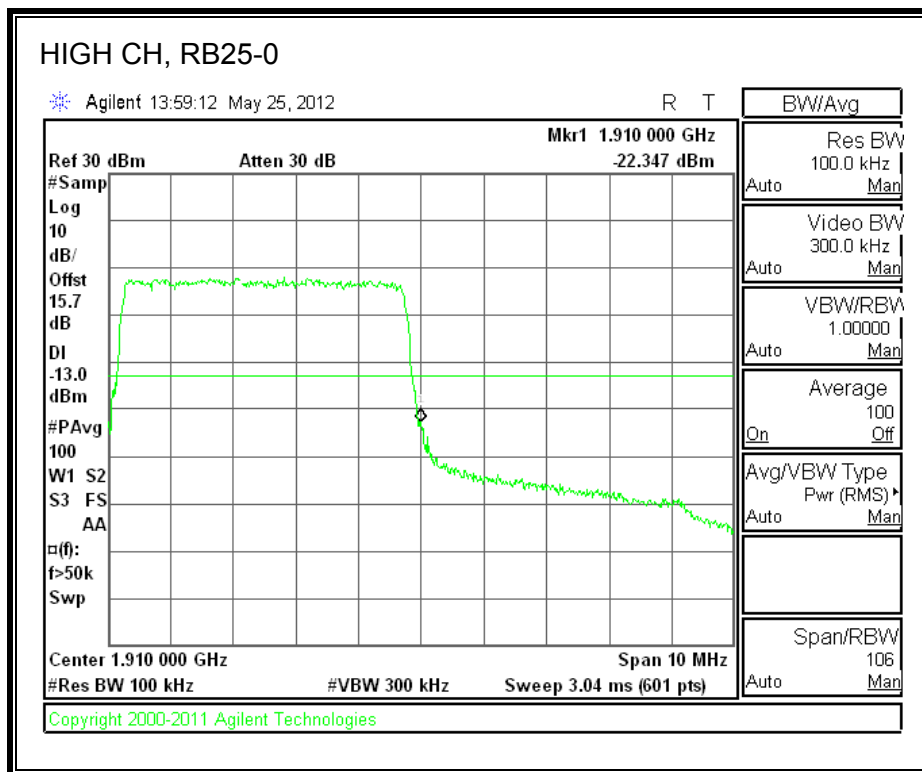
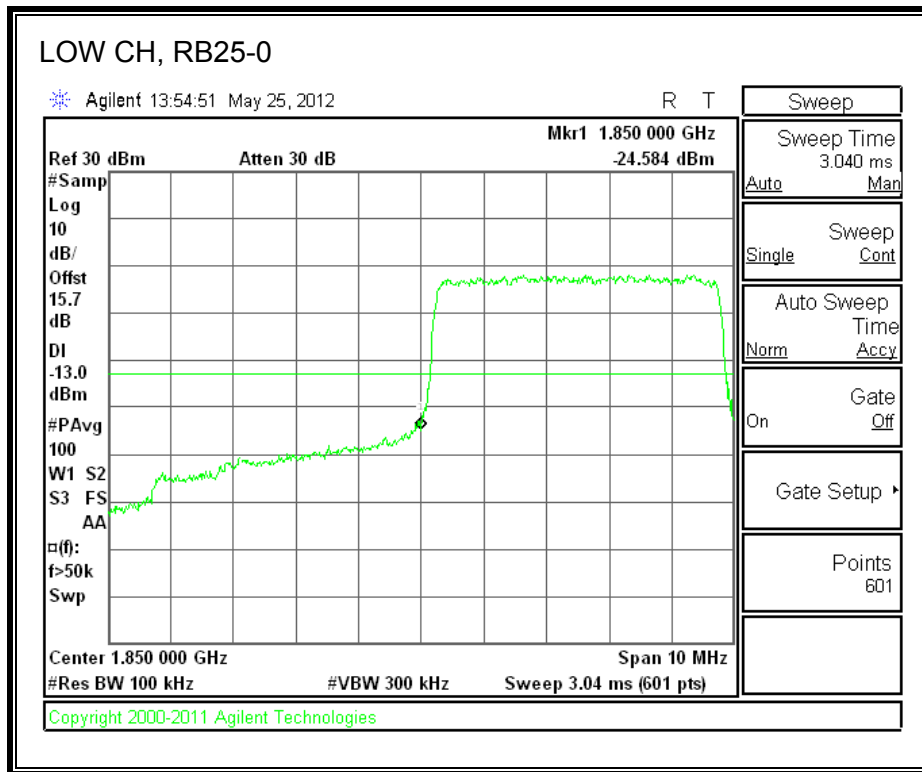


LTE QPSK Band 5 (5.0 MHz BAND WIDTH)

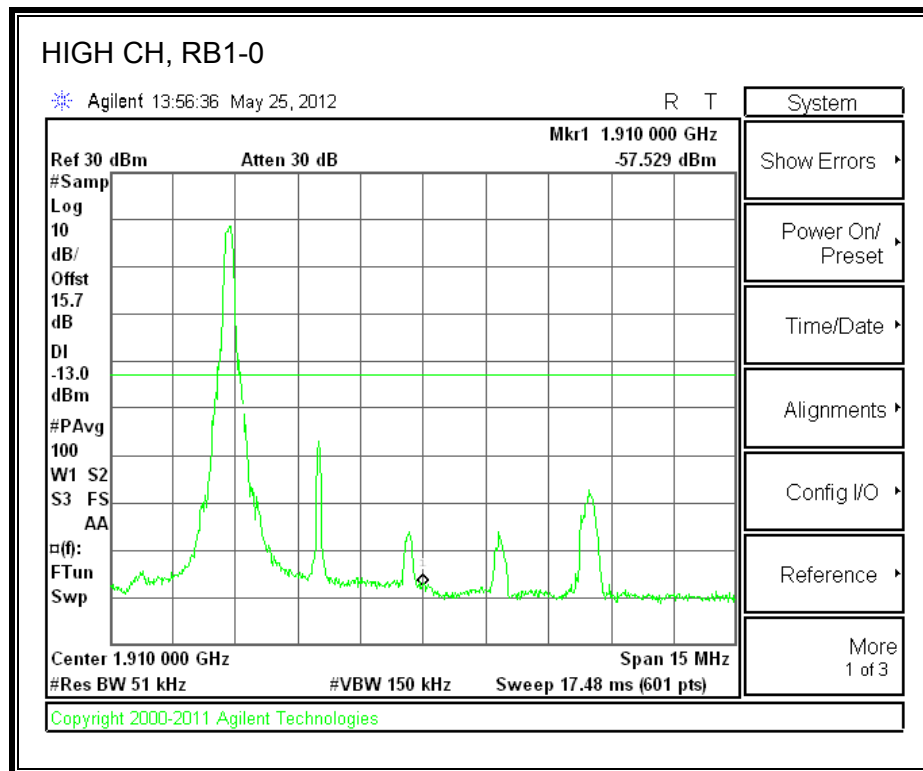
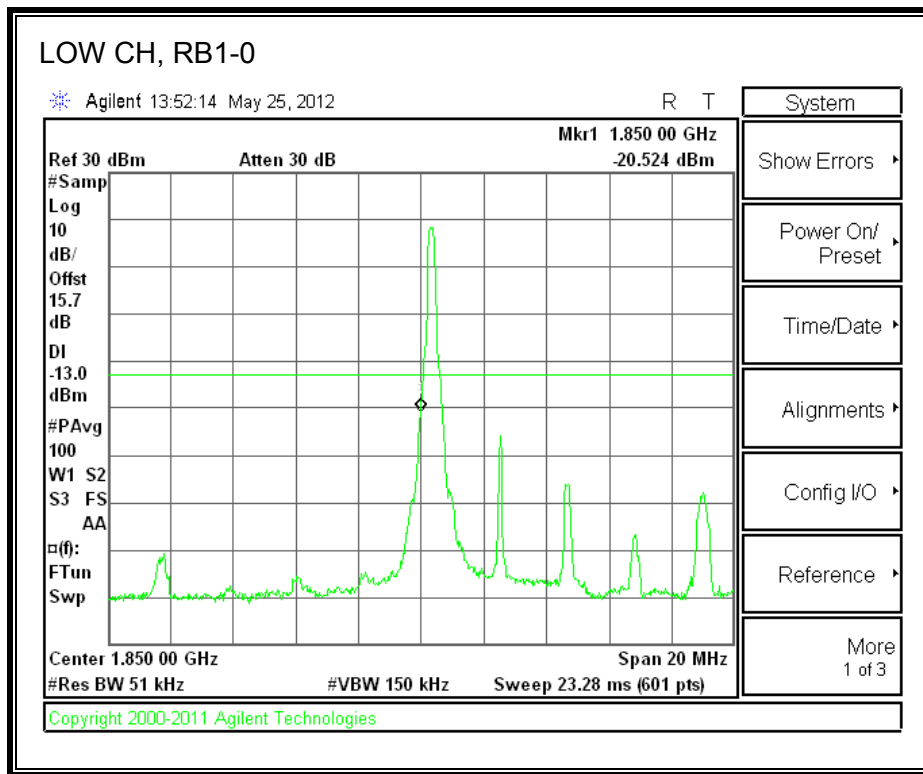


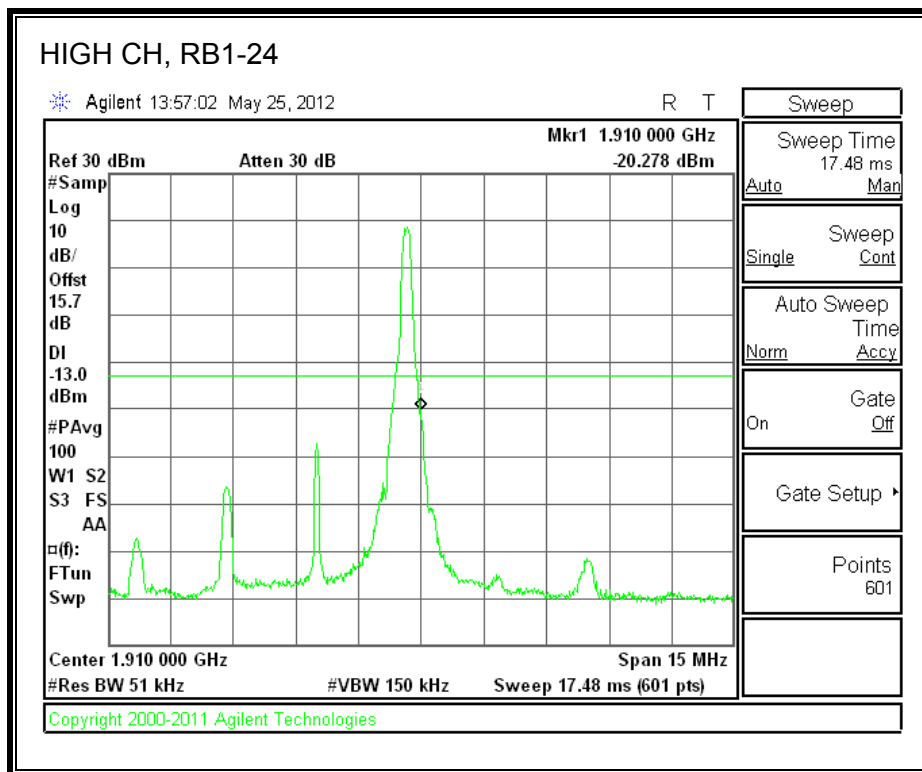
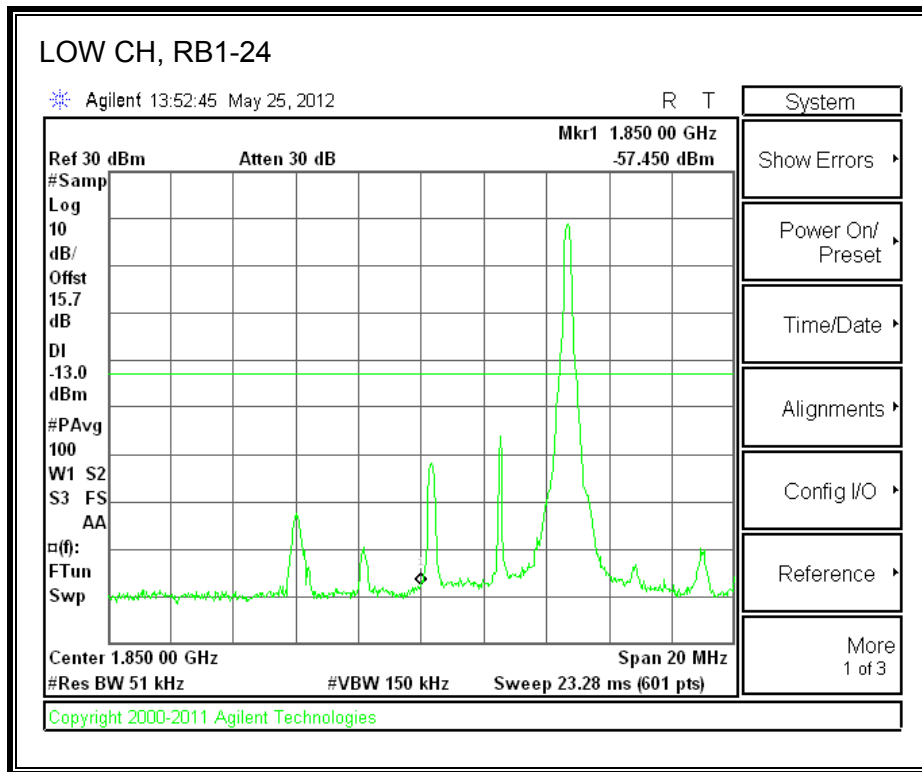


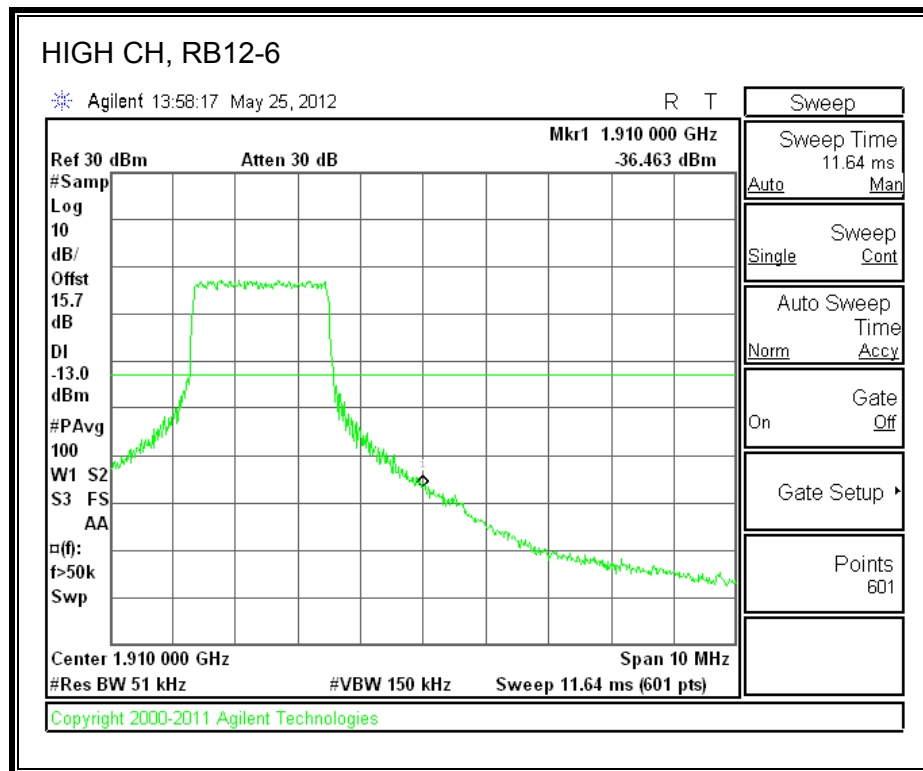
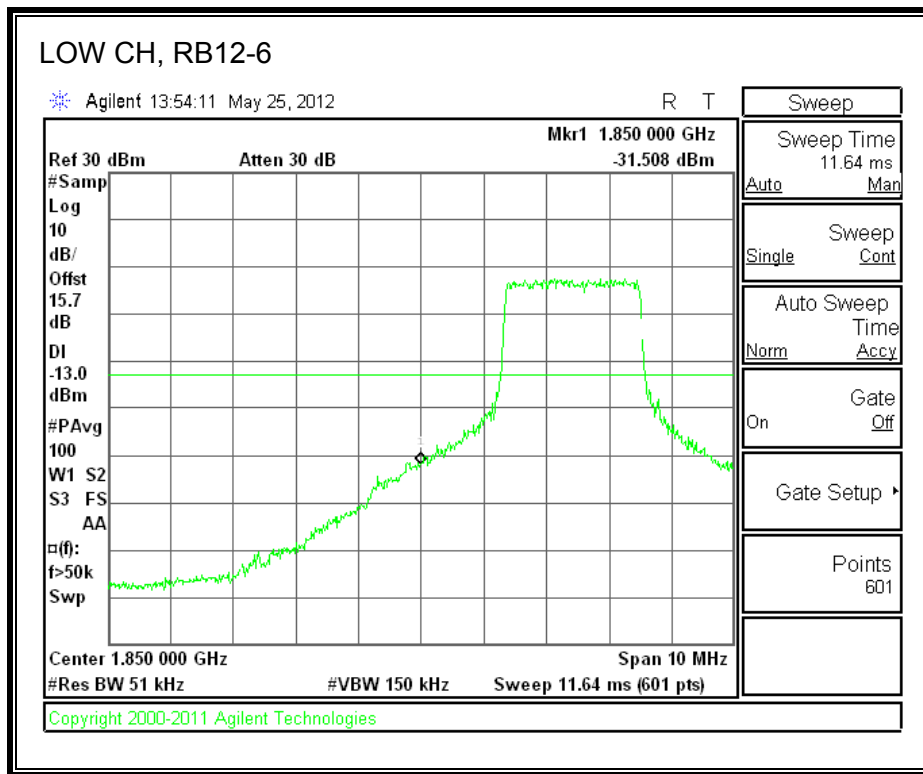


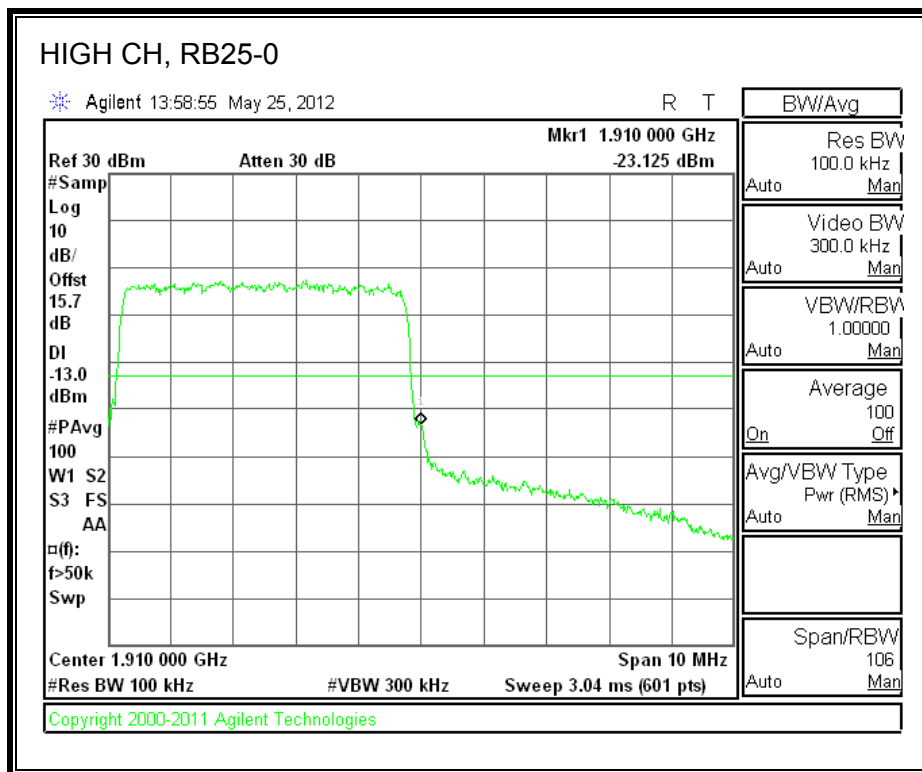
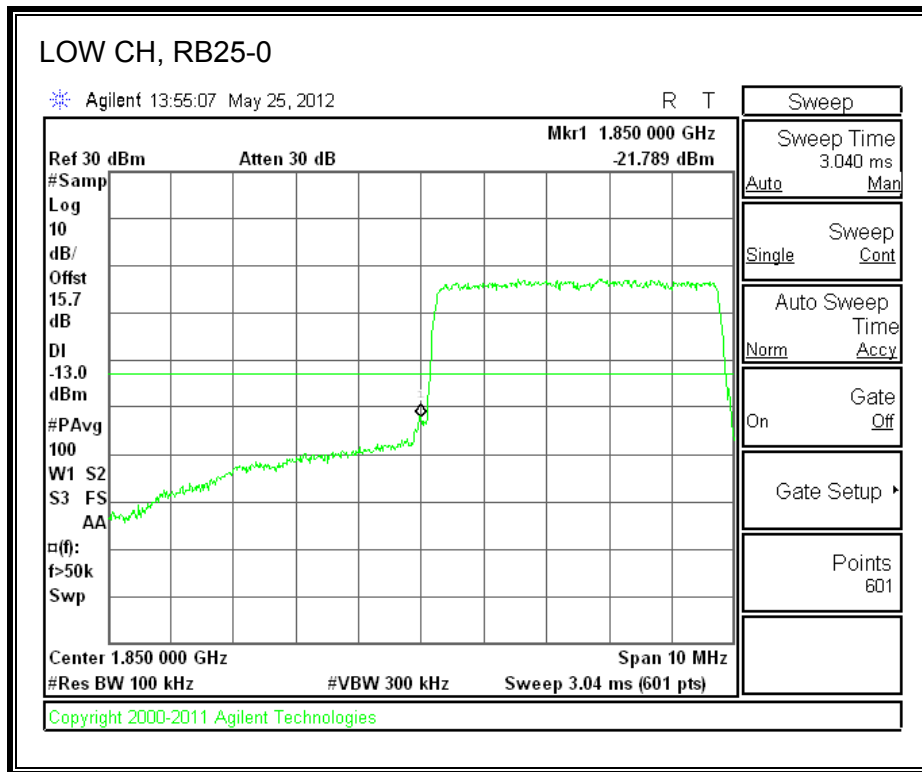


LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)

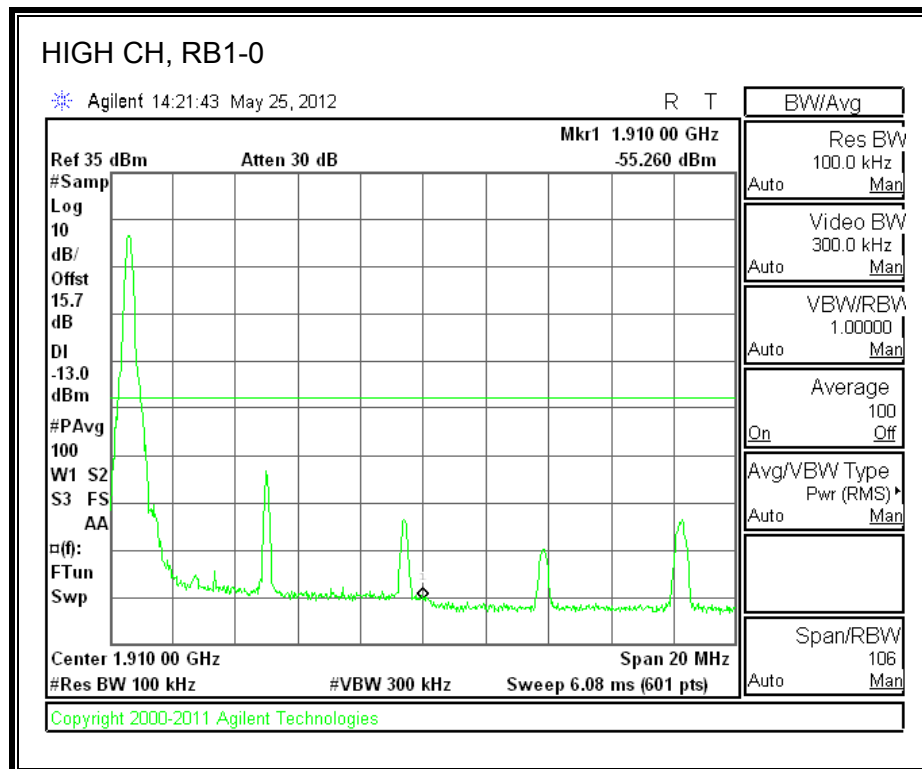
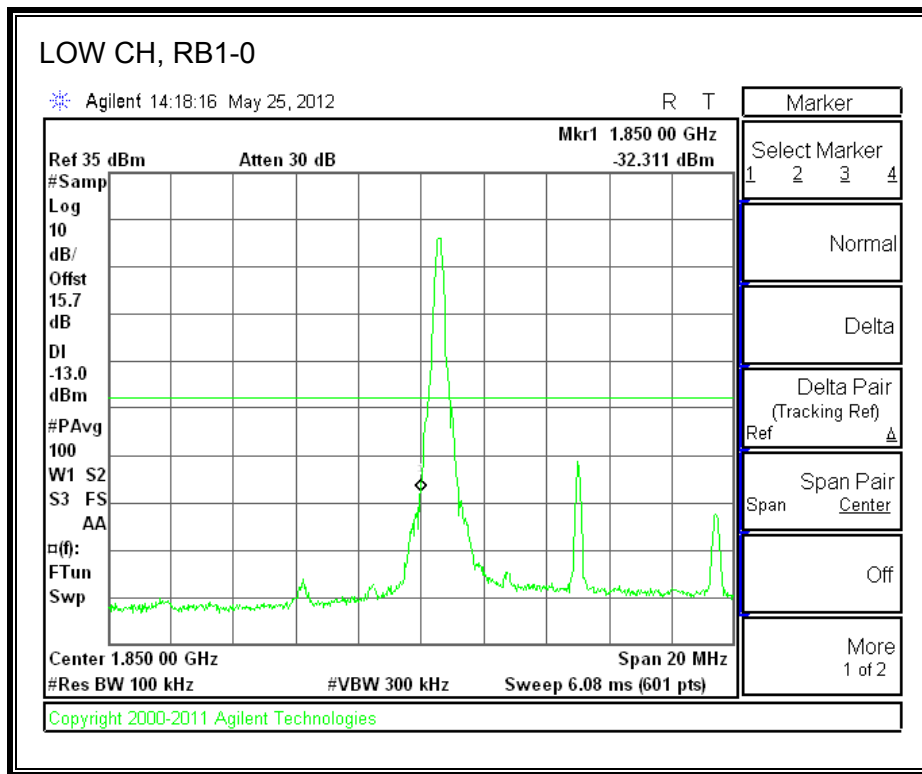


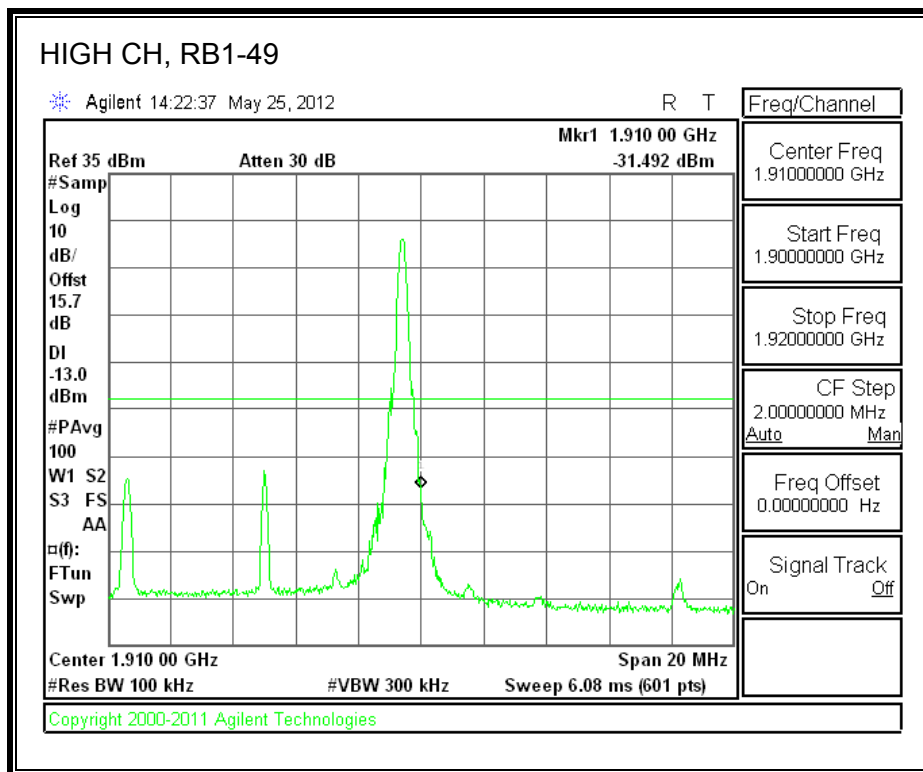
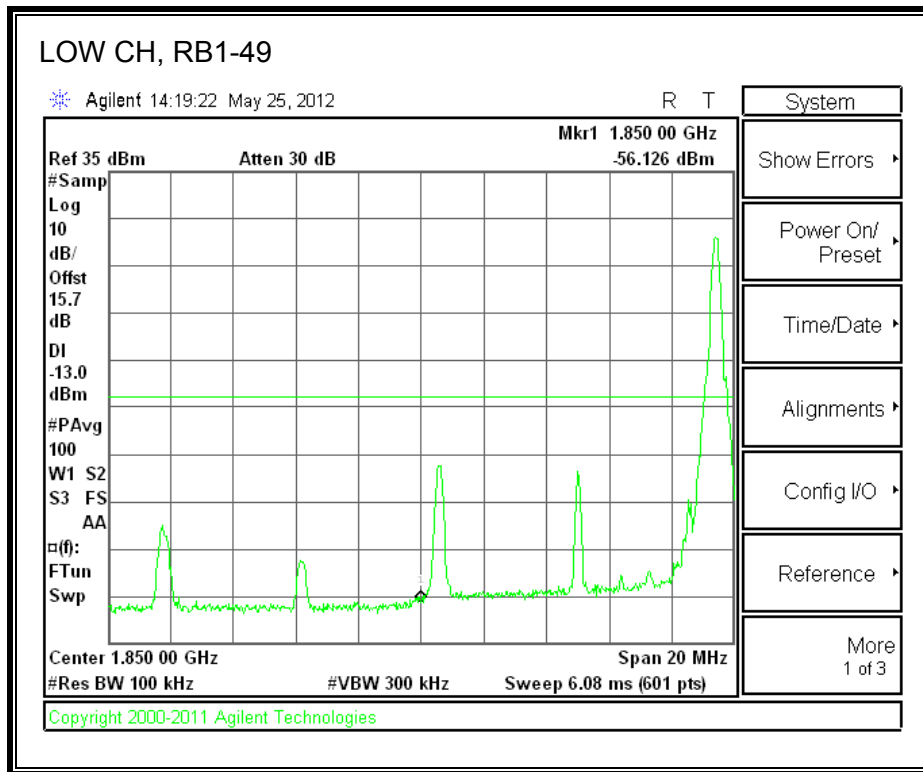


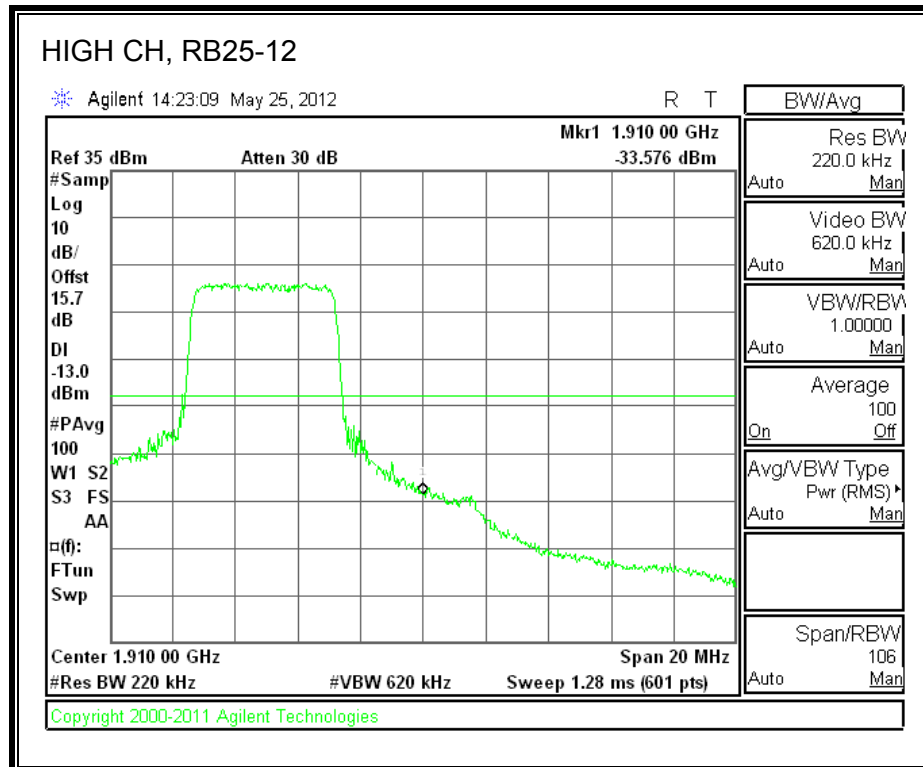
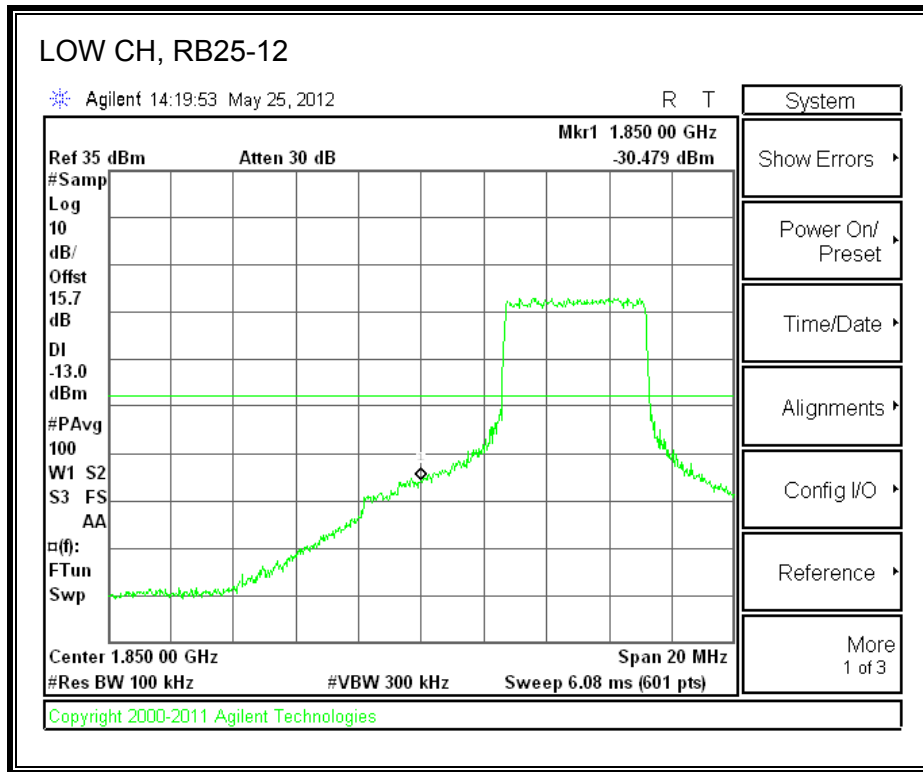


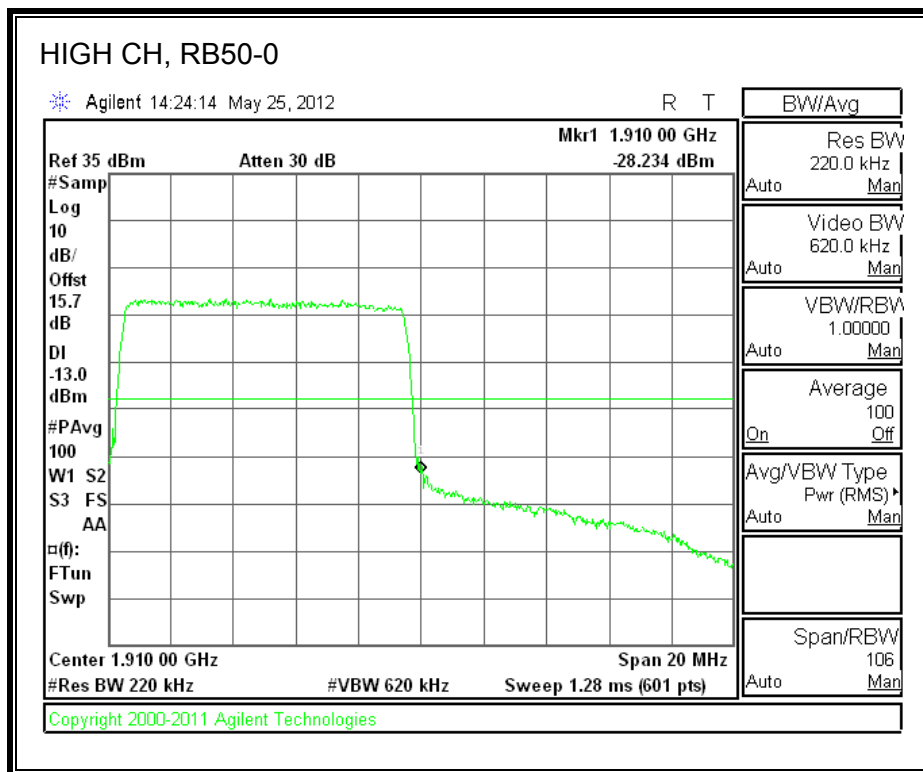
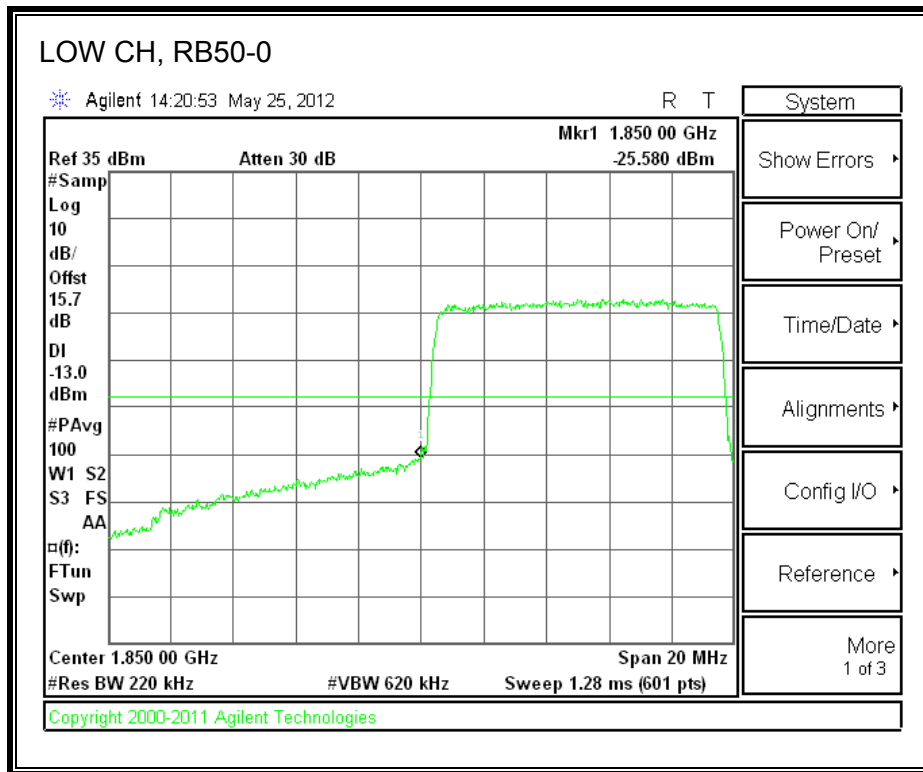


LTE QPSK Band 2 (10.0 MHz BAND WIDTH)

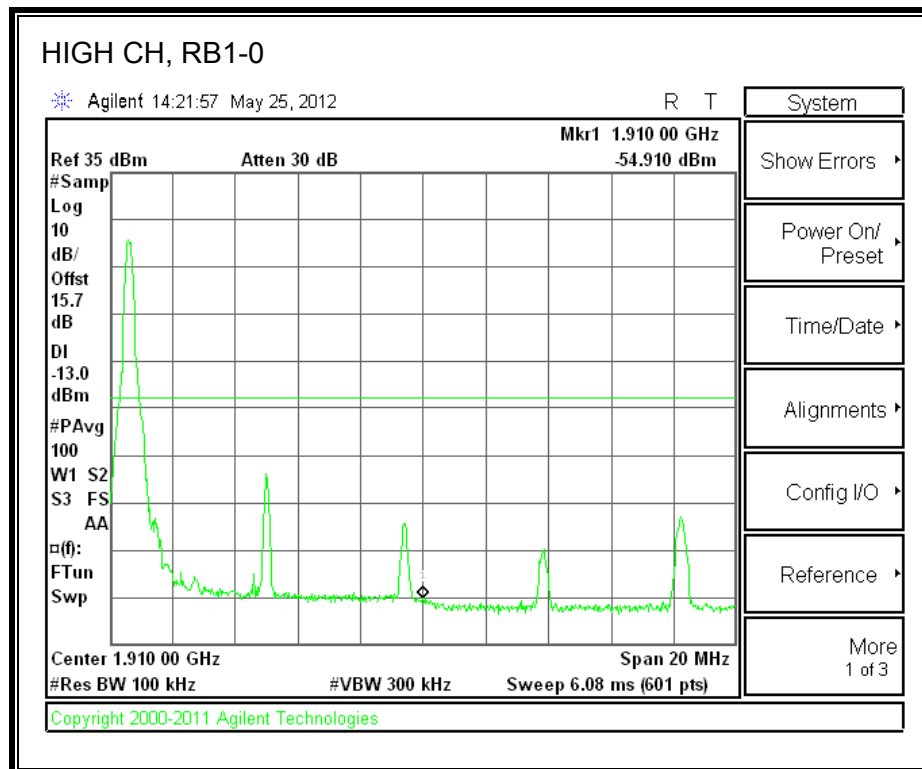
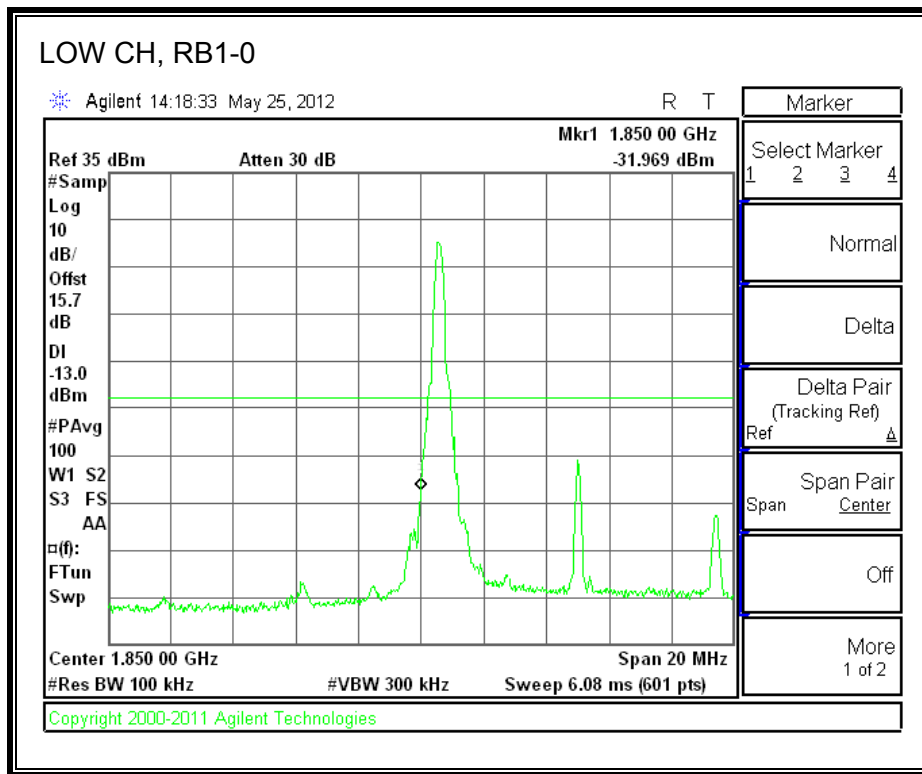


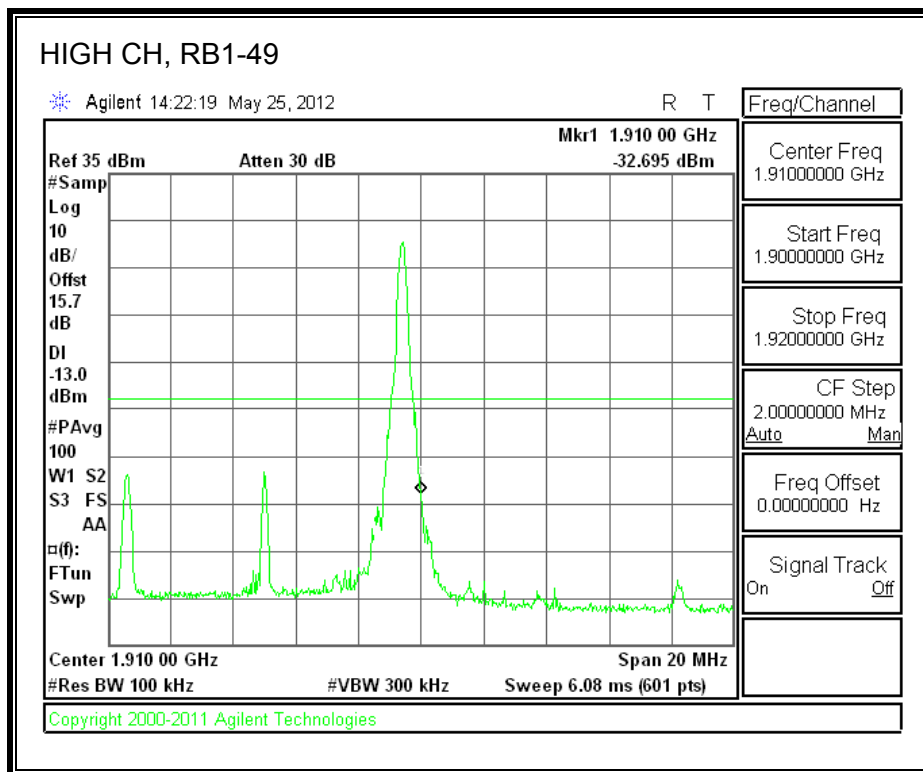
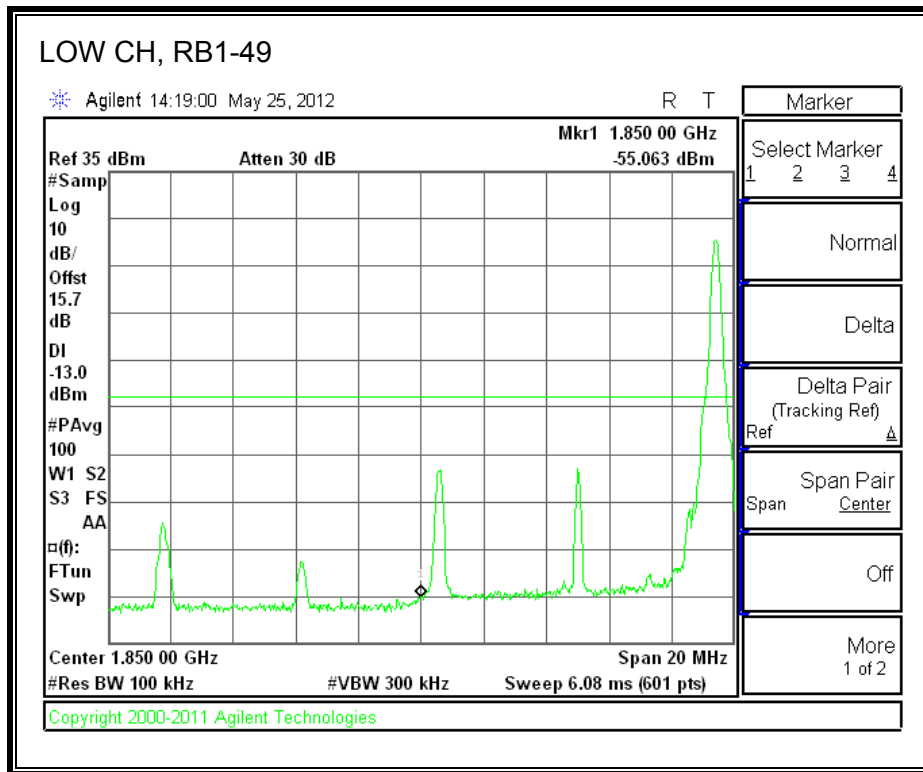


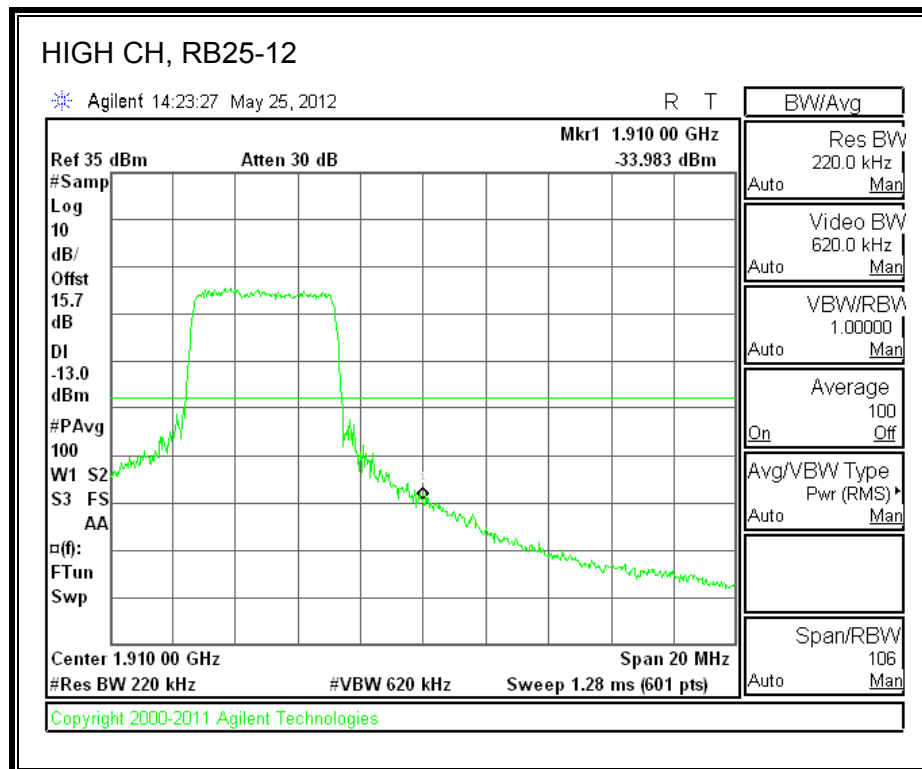
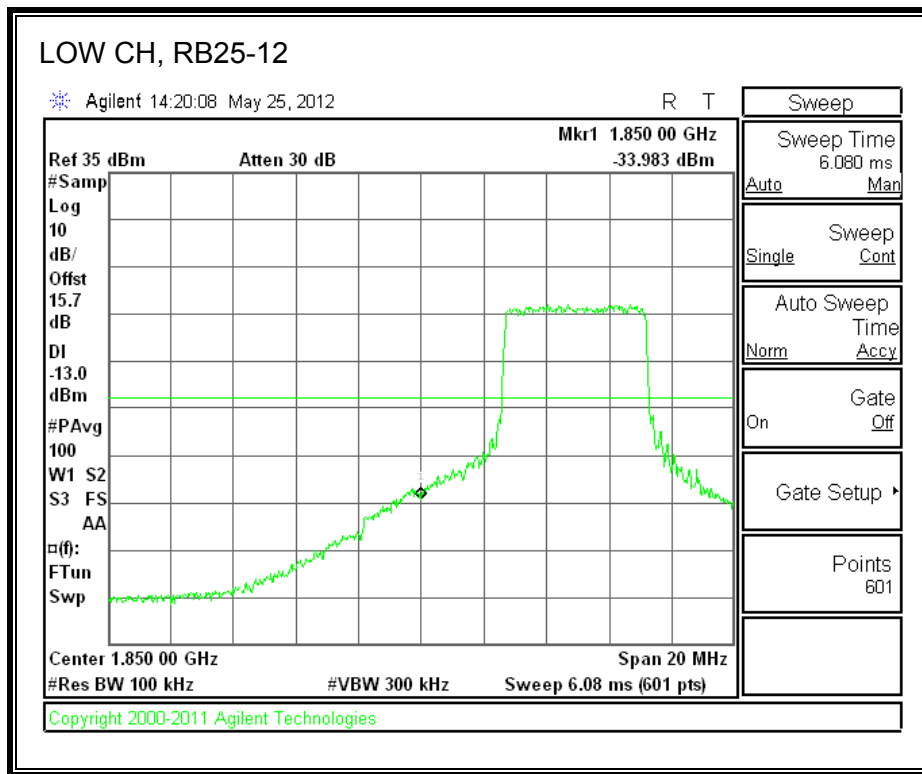


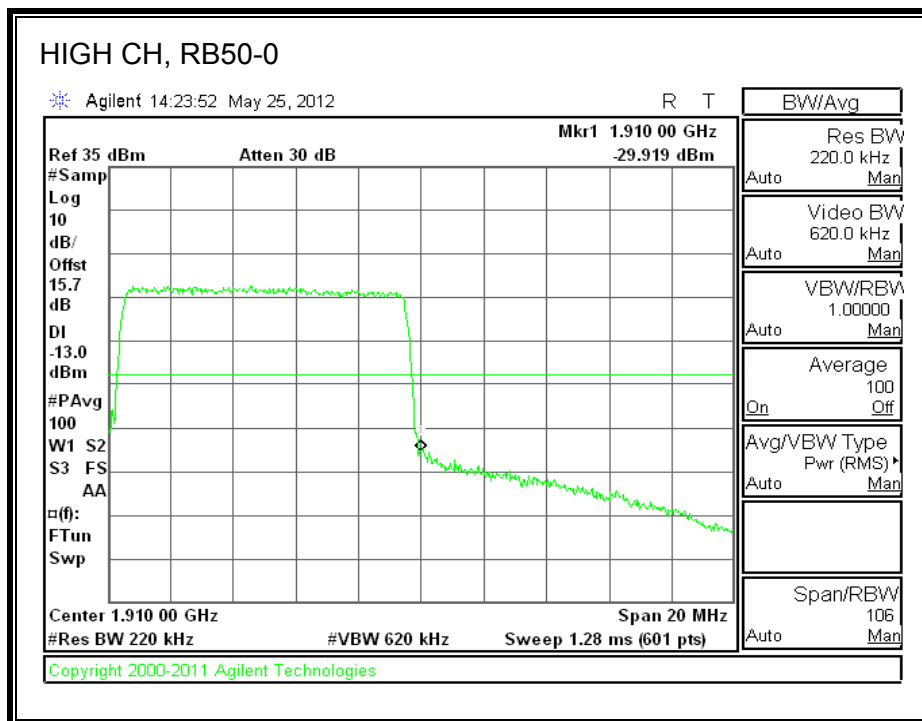
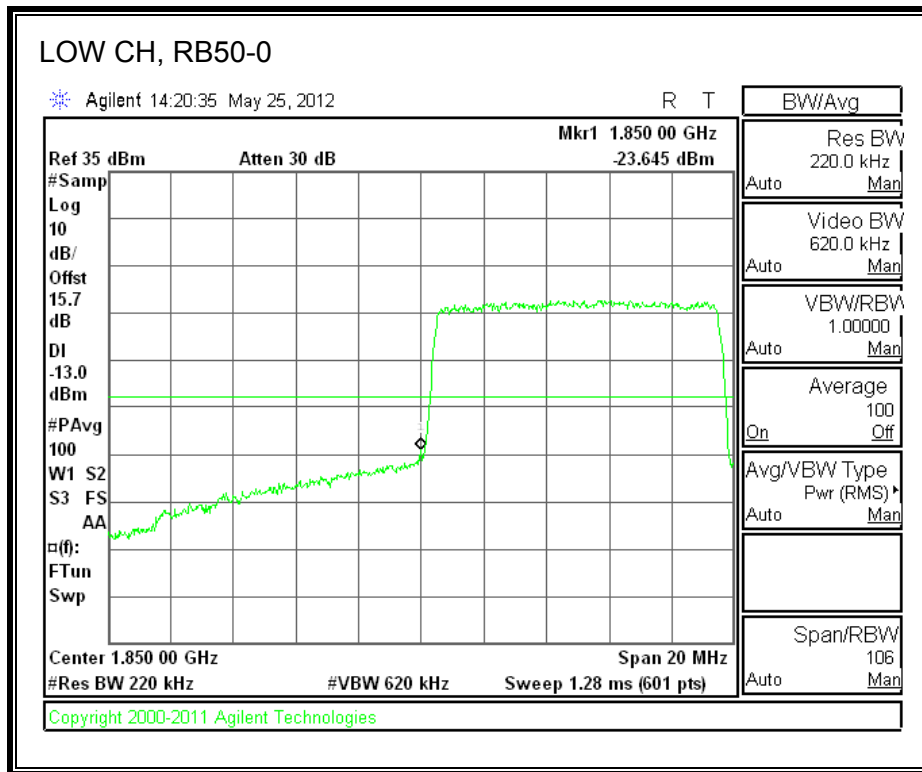


LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)

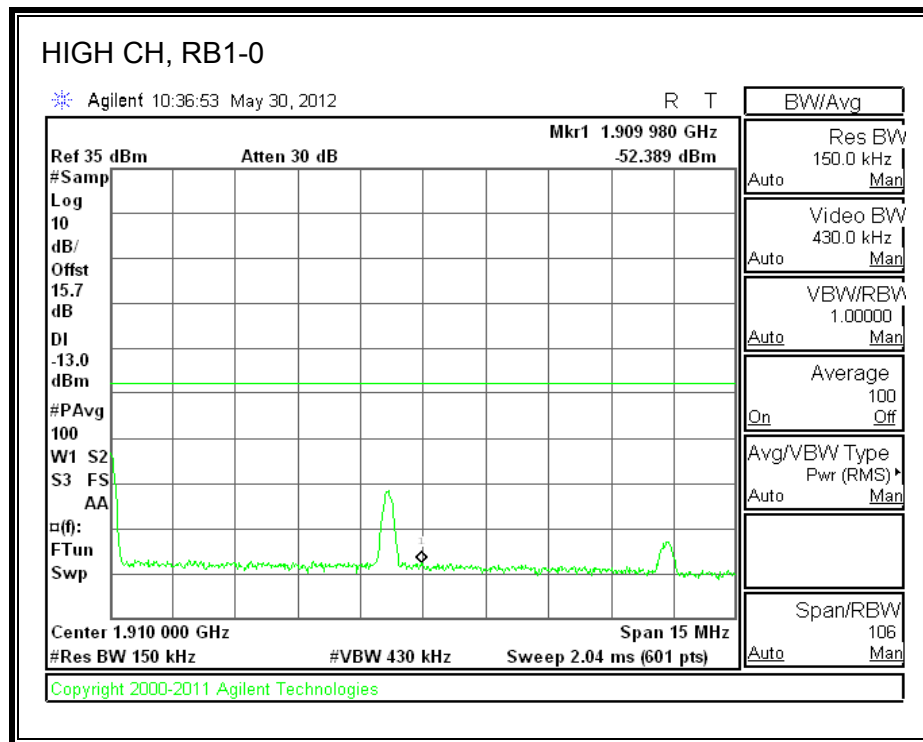
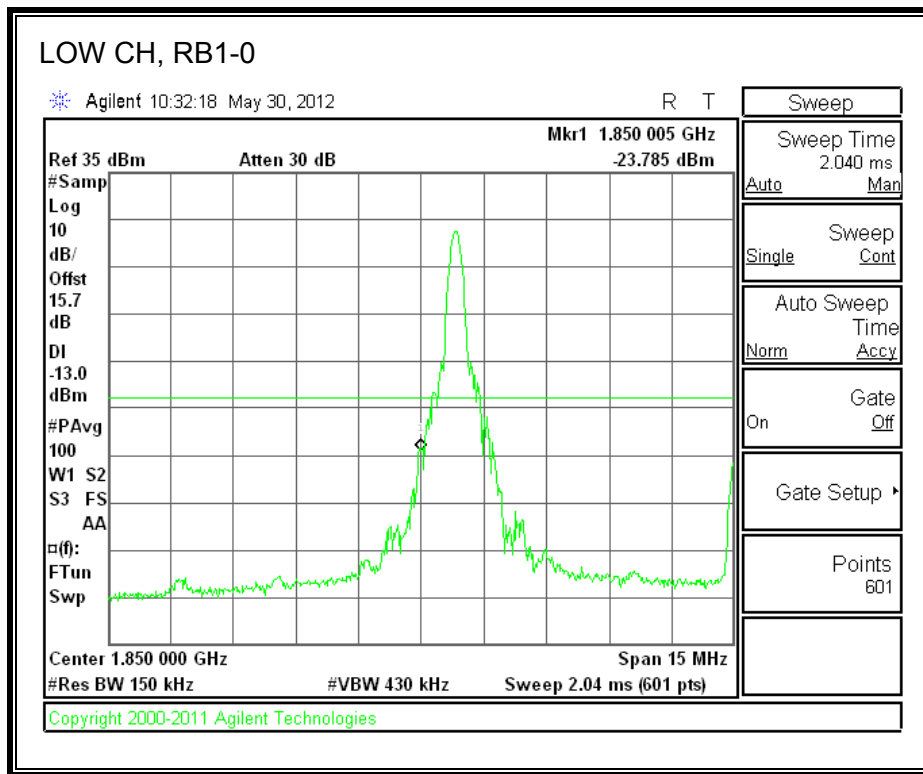


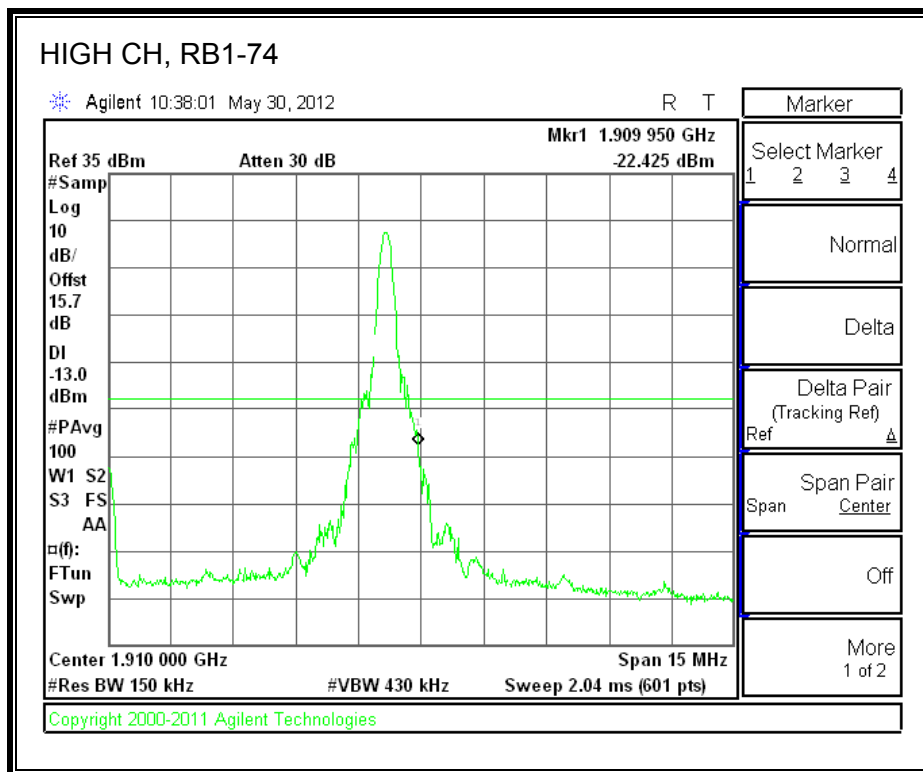
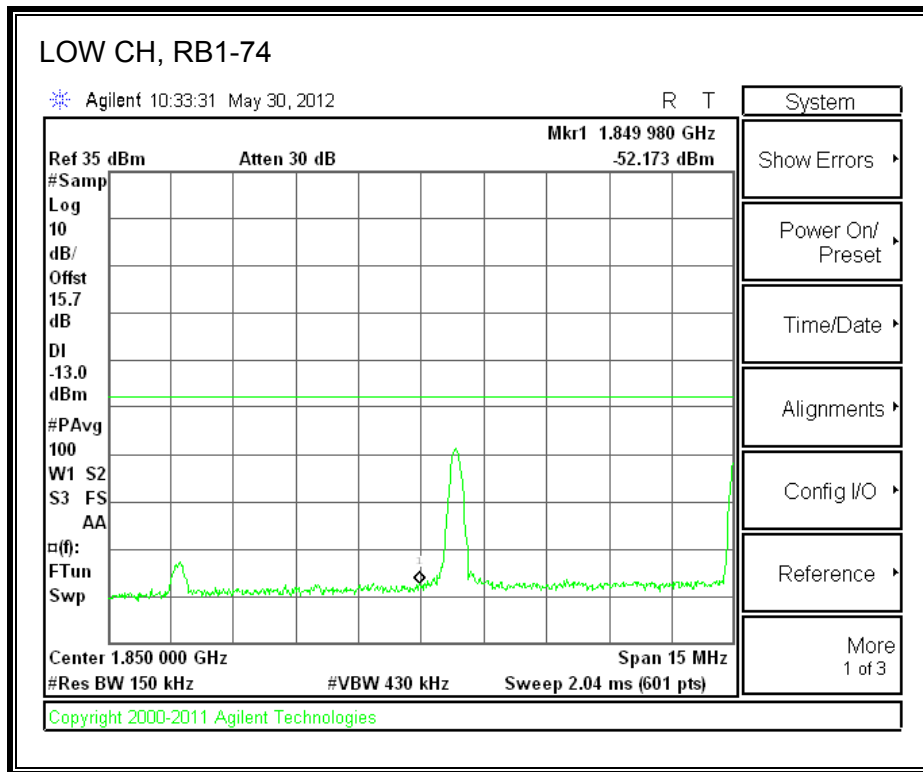


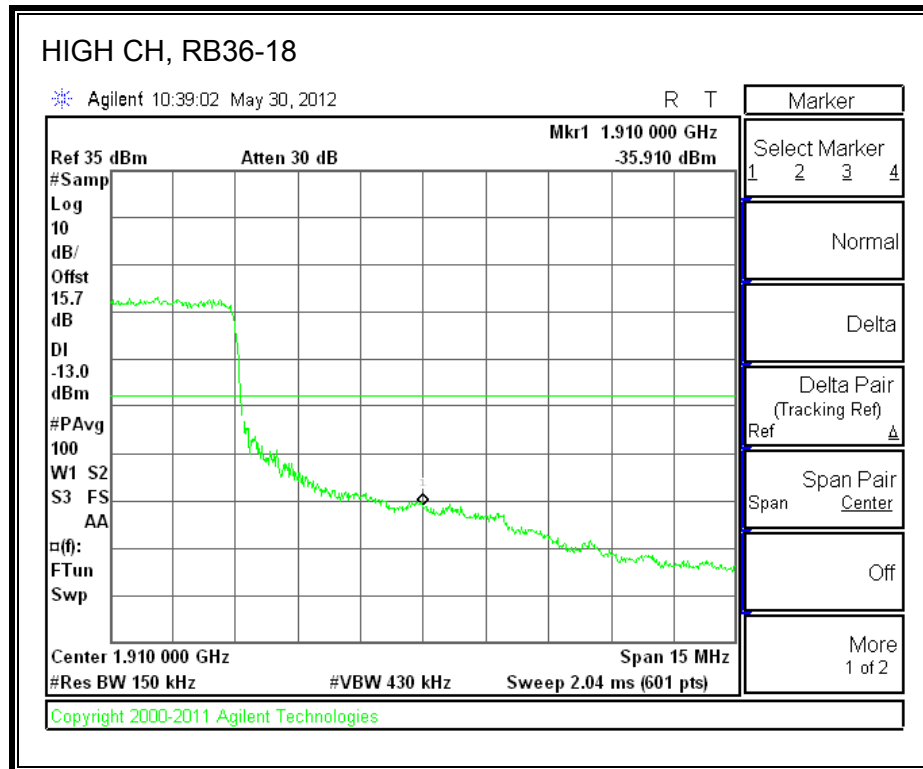
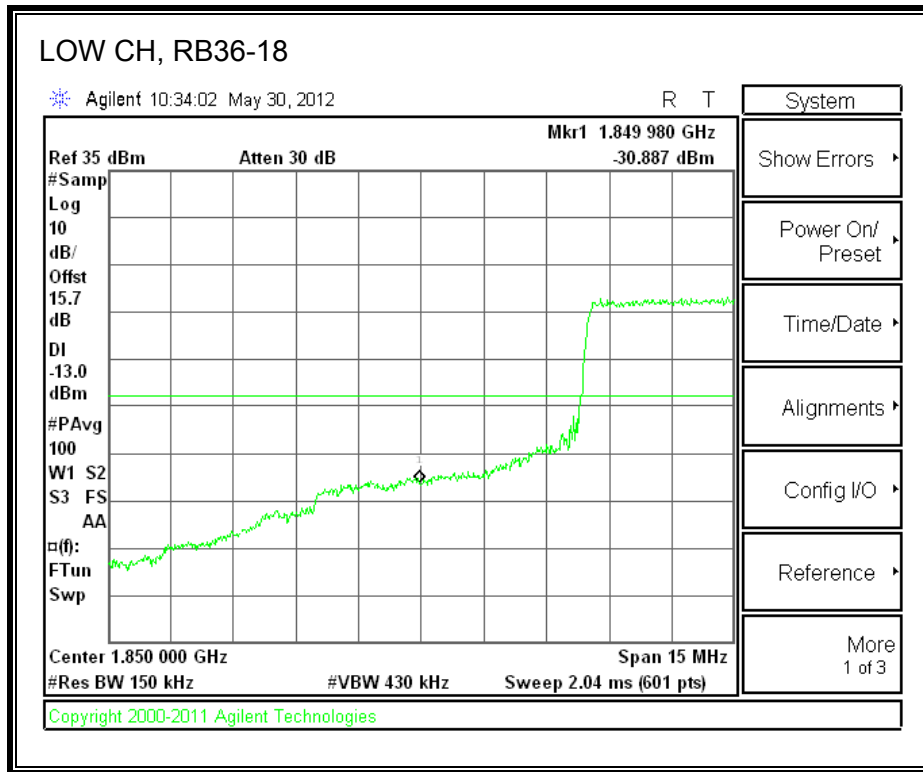


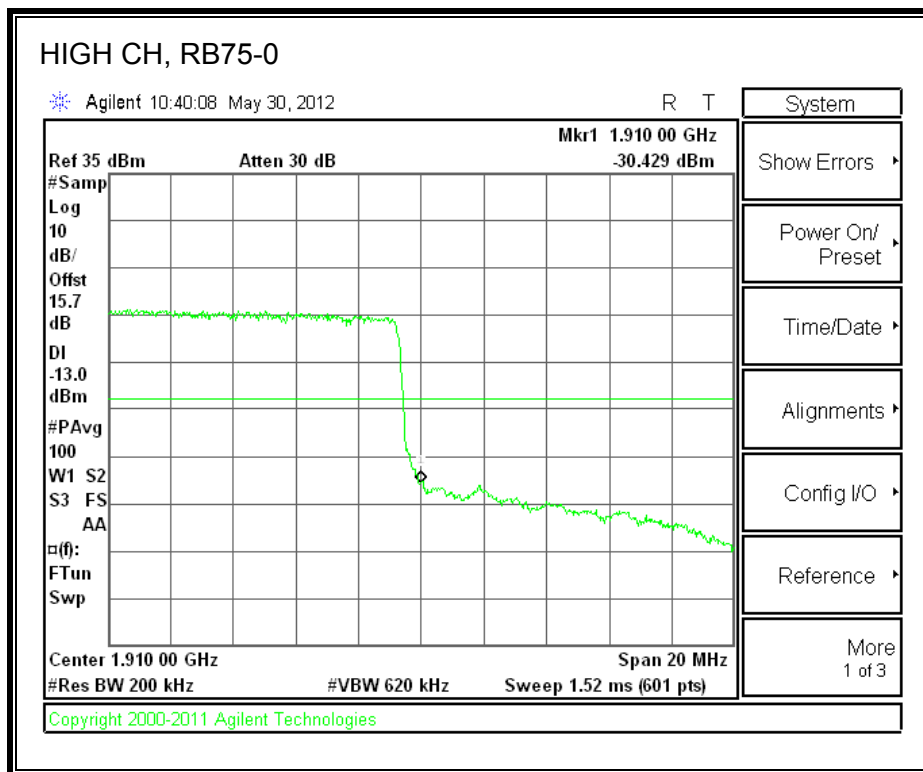
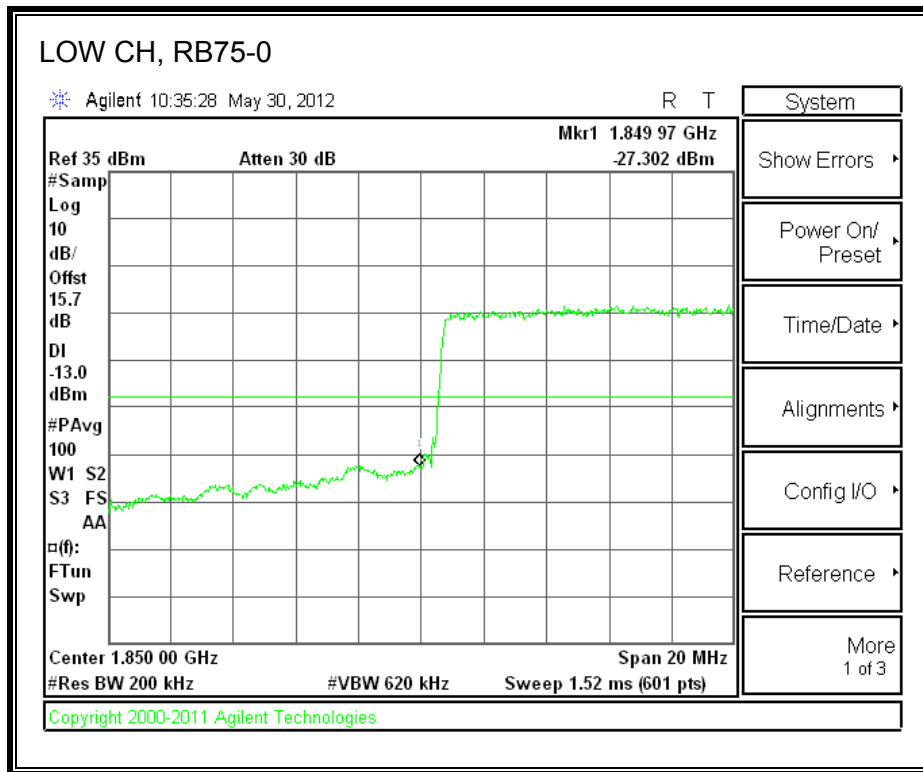


LTE QPSK Band 2 (15.0 MHz BAND WIDTH)

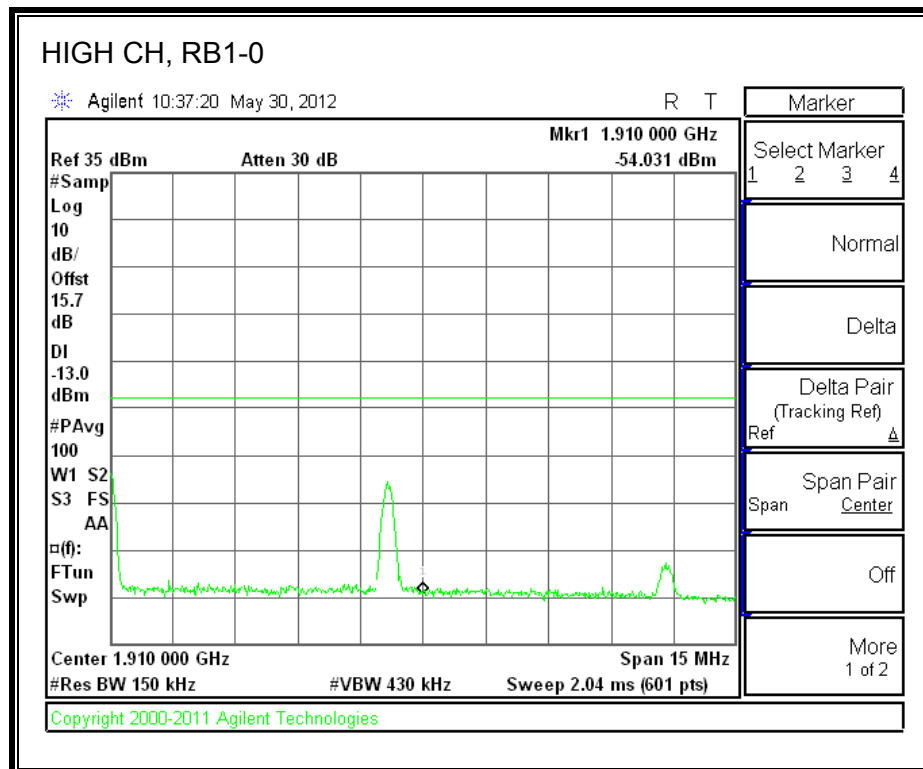
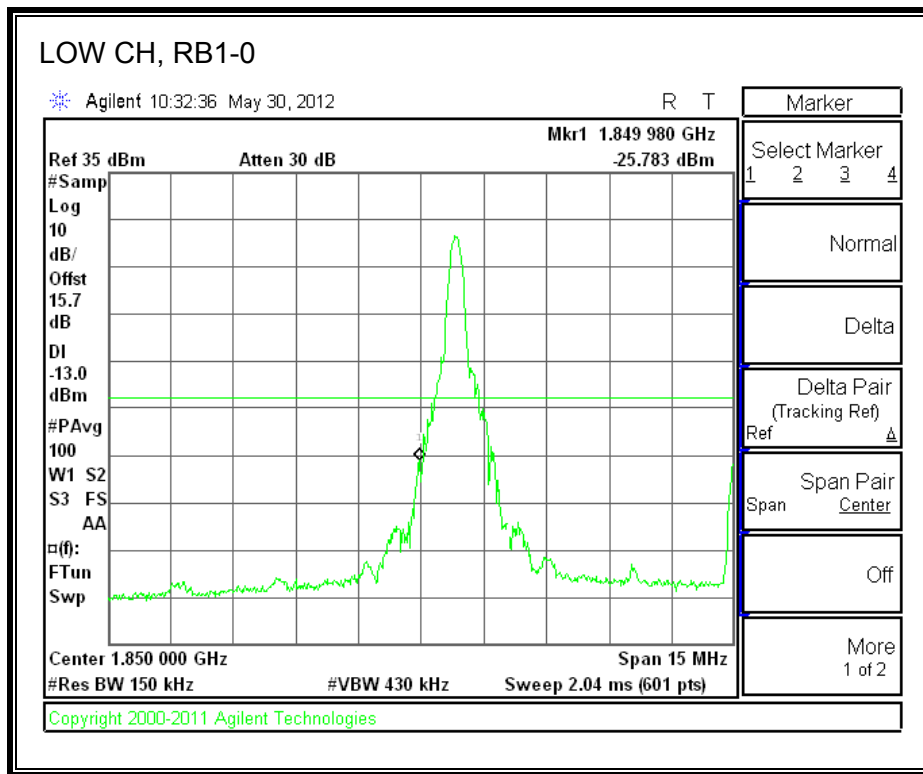


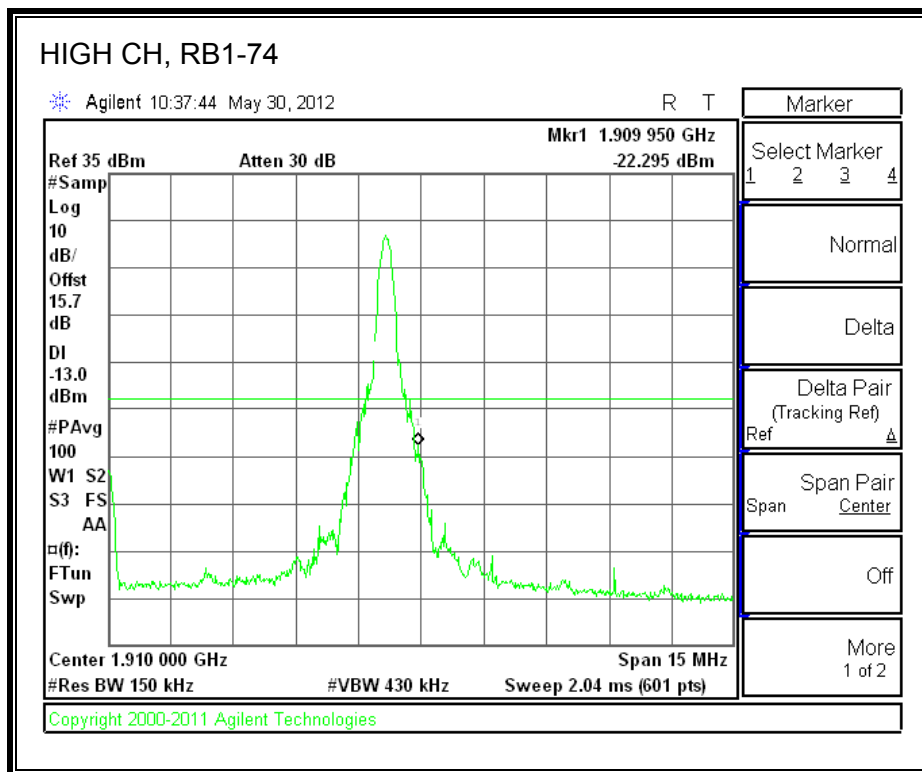
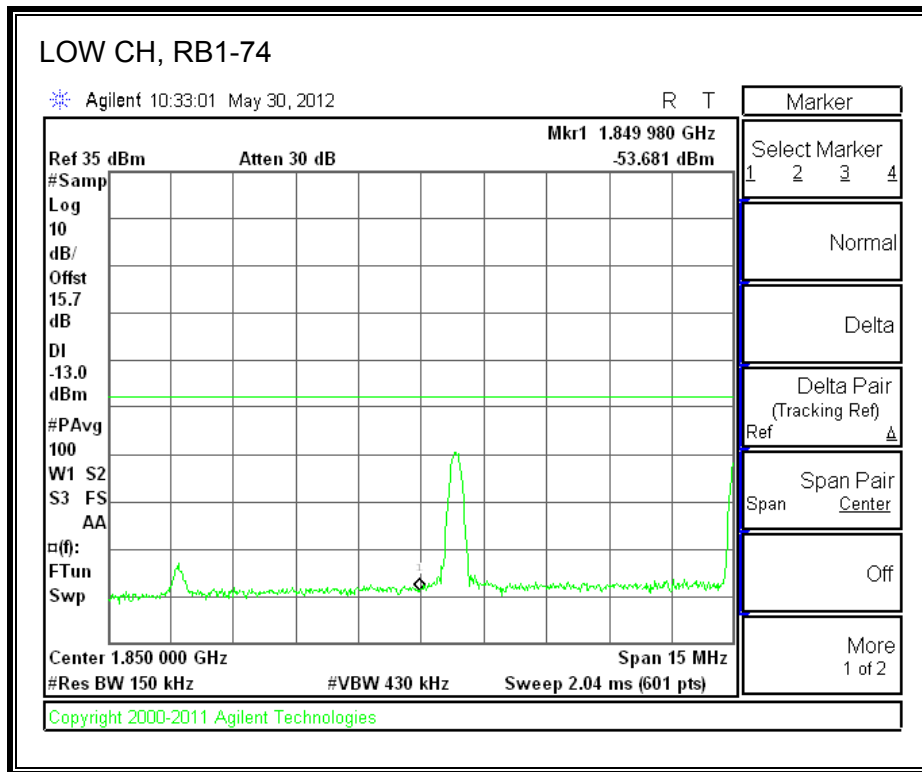


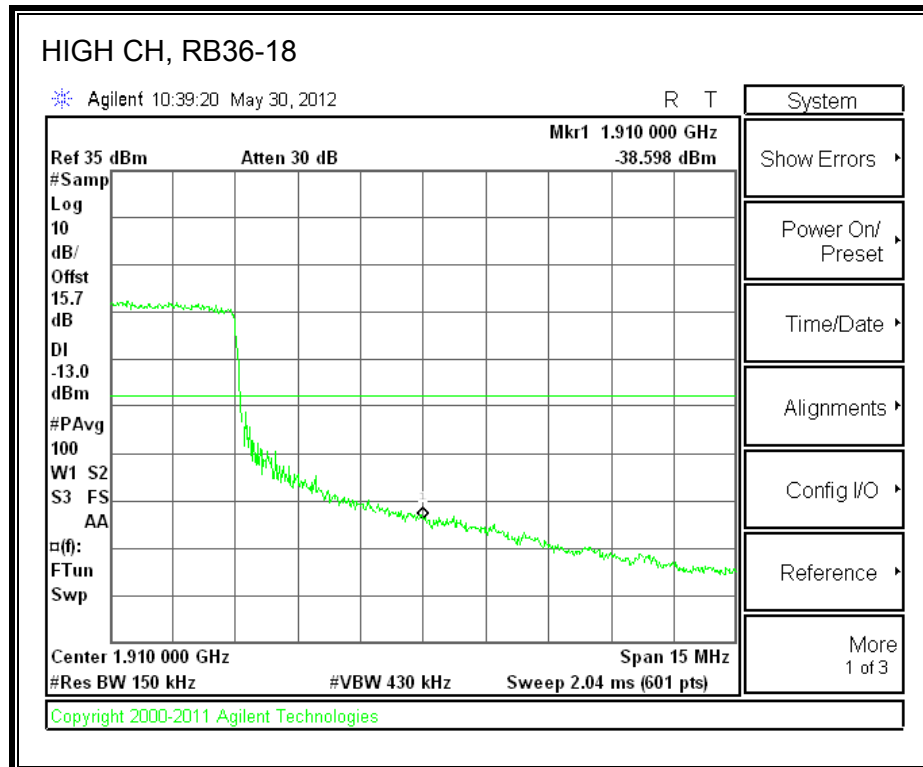
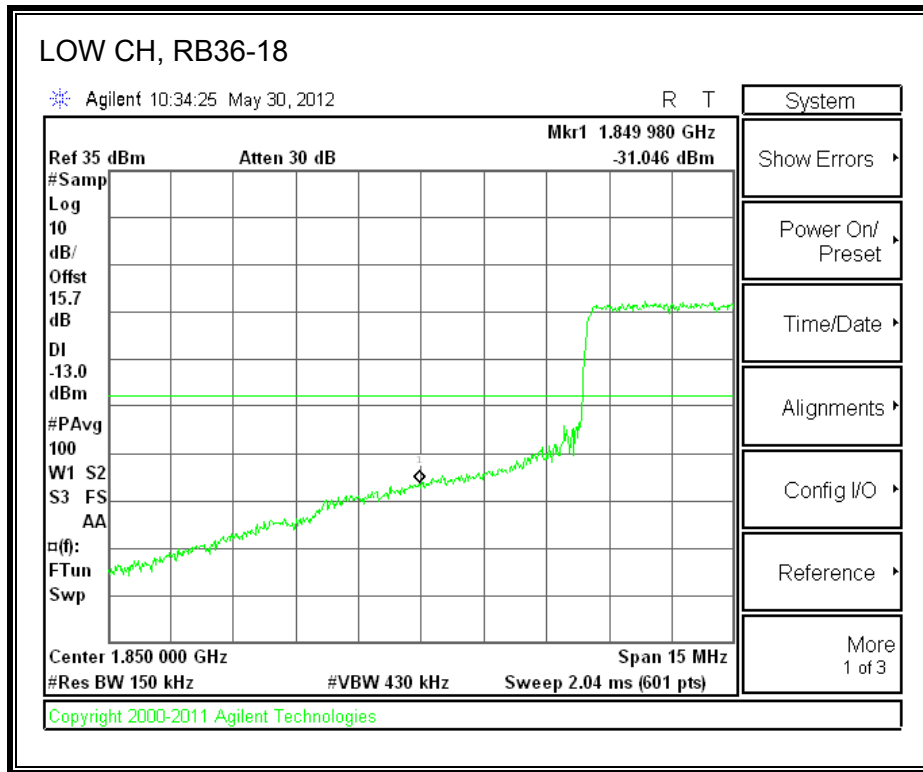


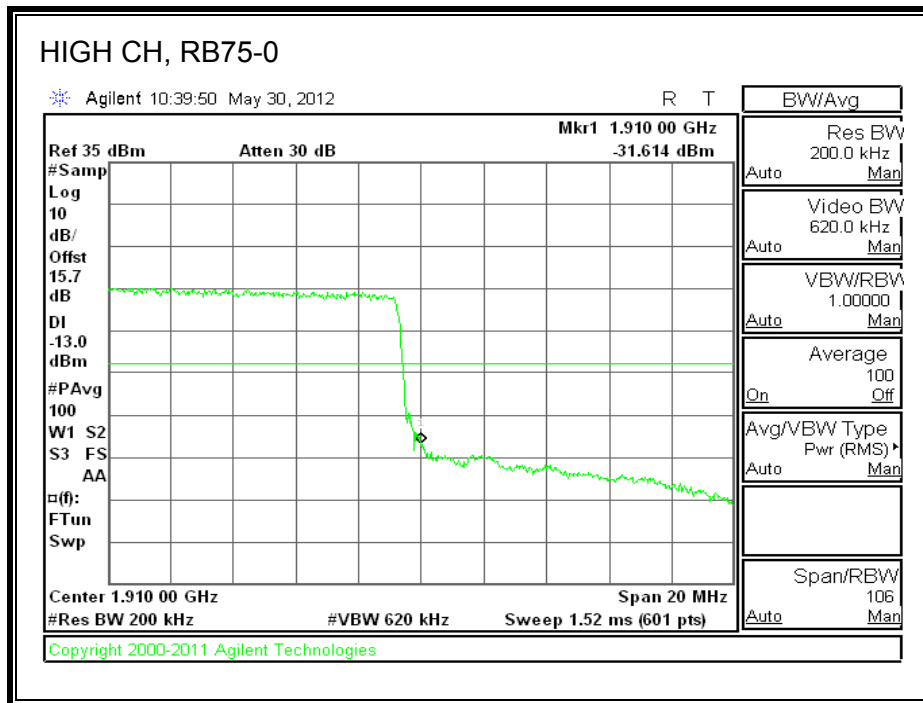
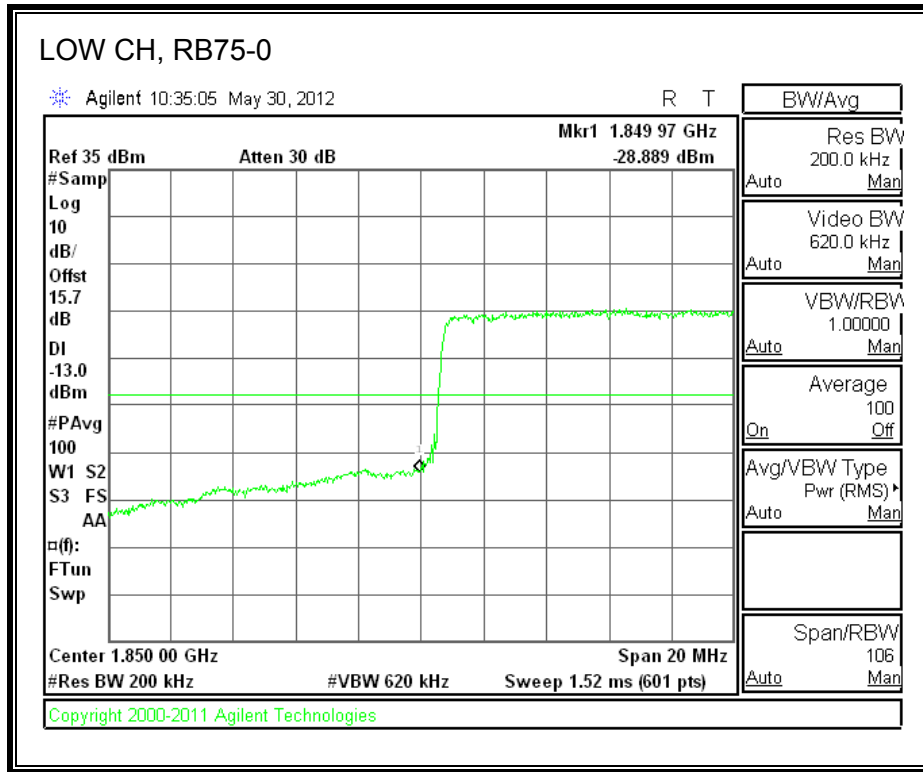


LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)

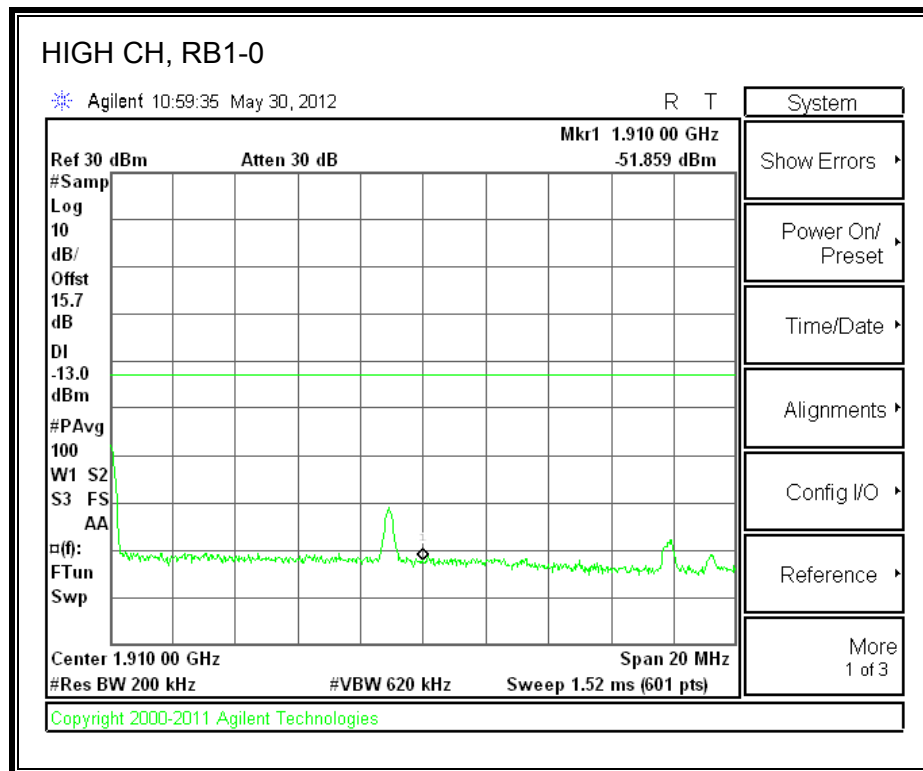
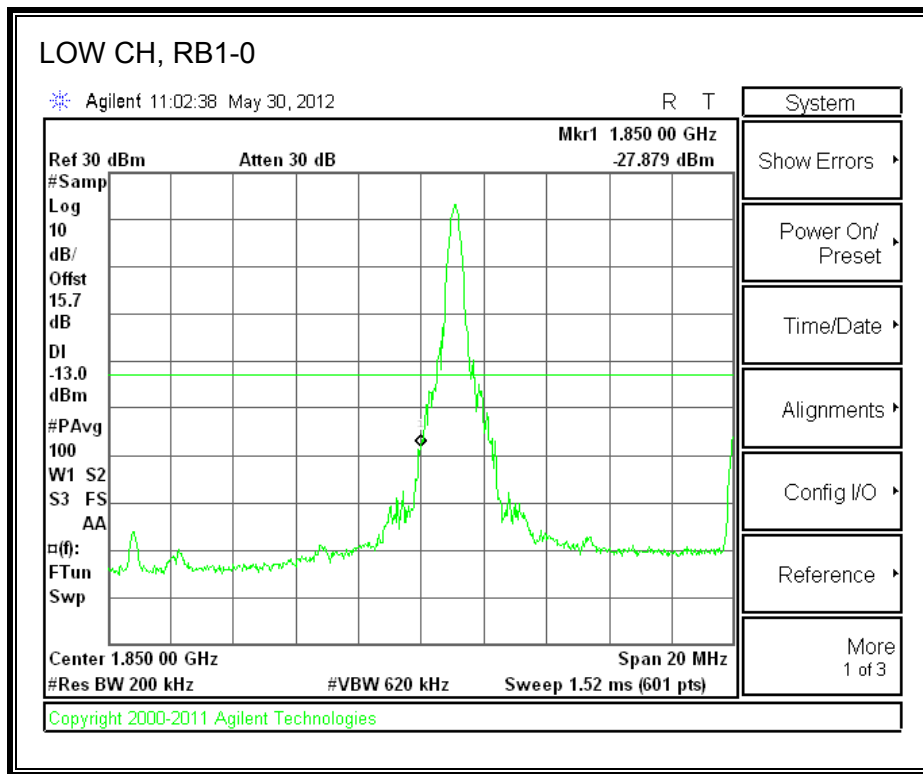


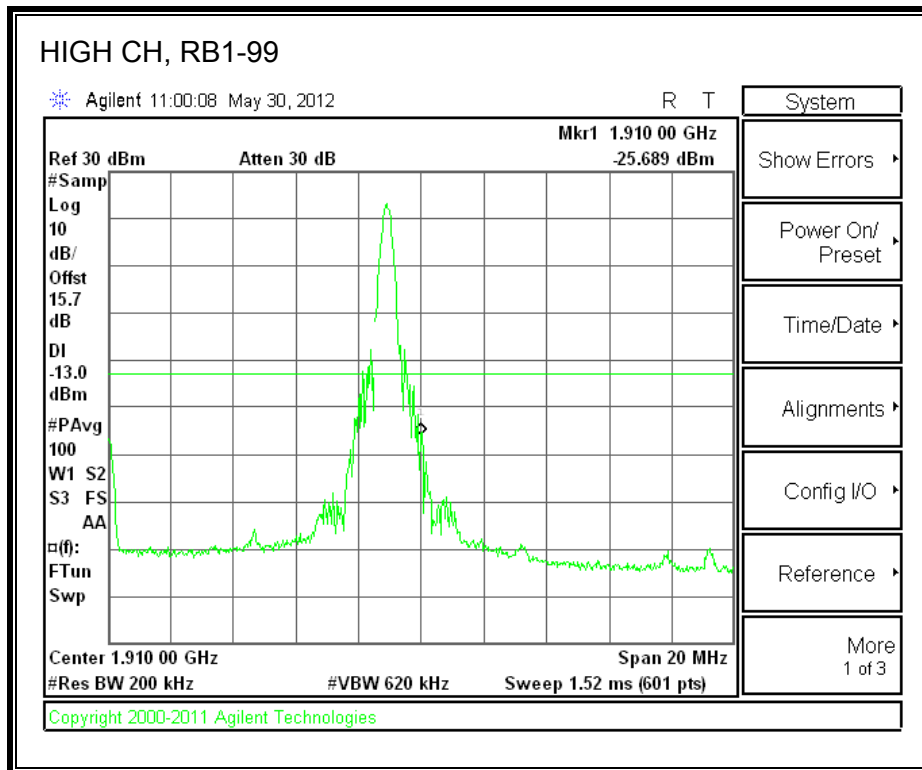
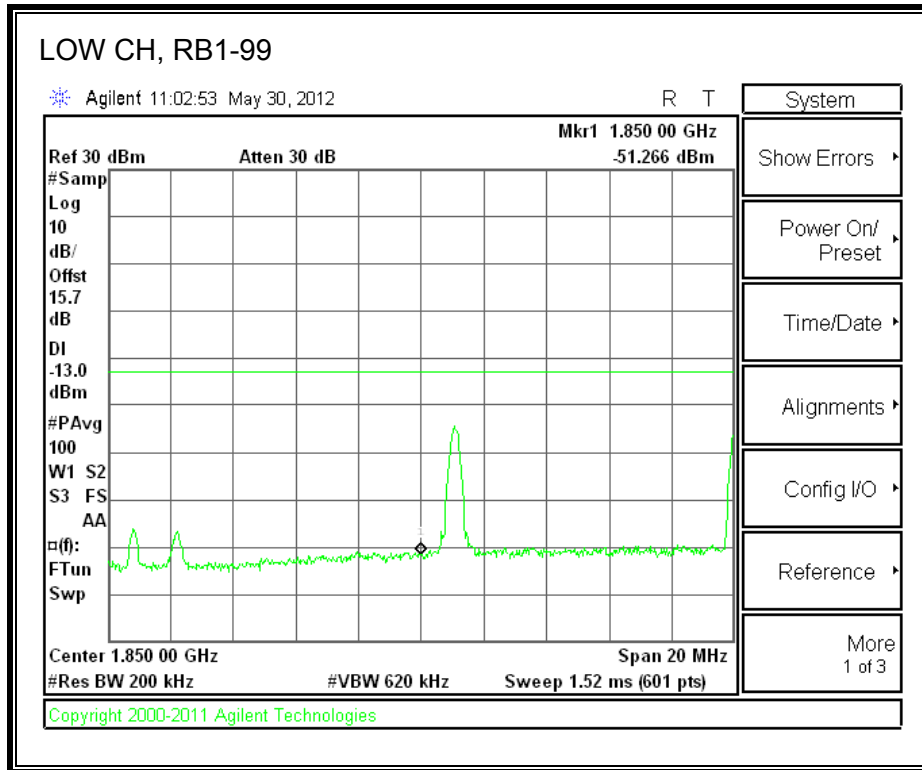


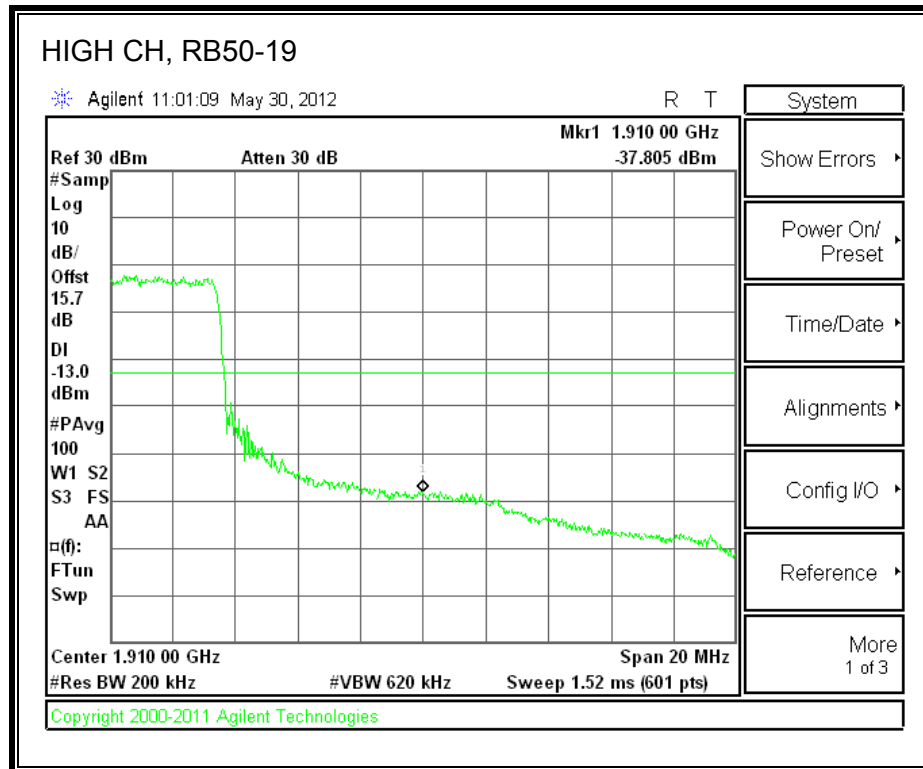
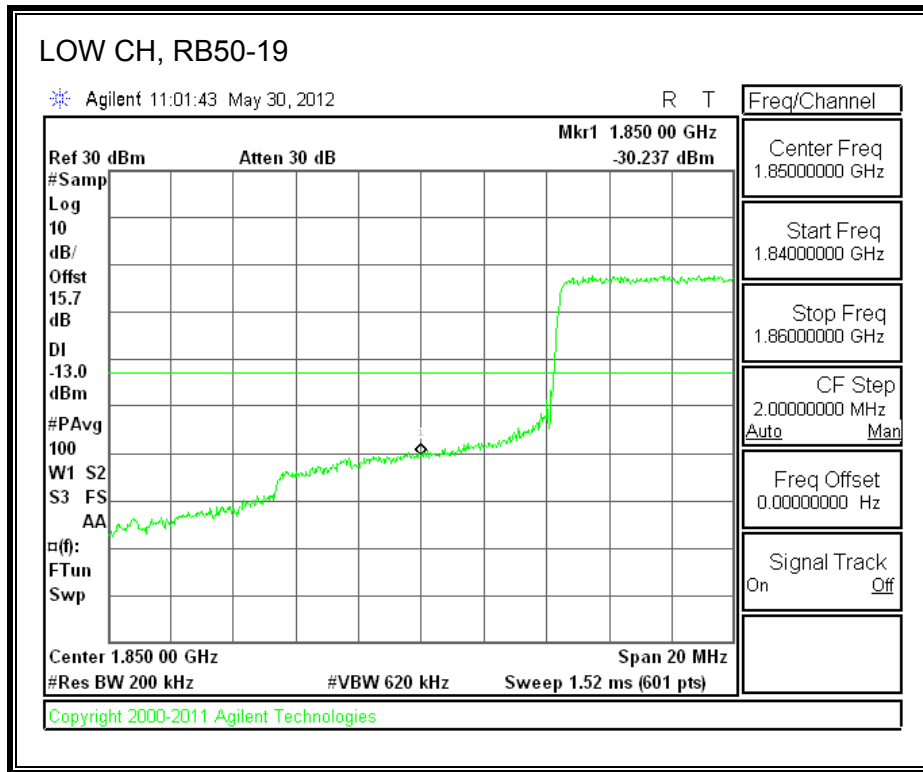


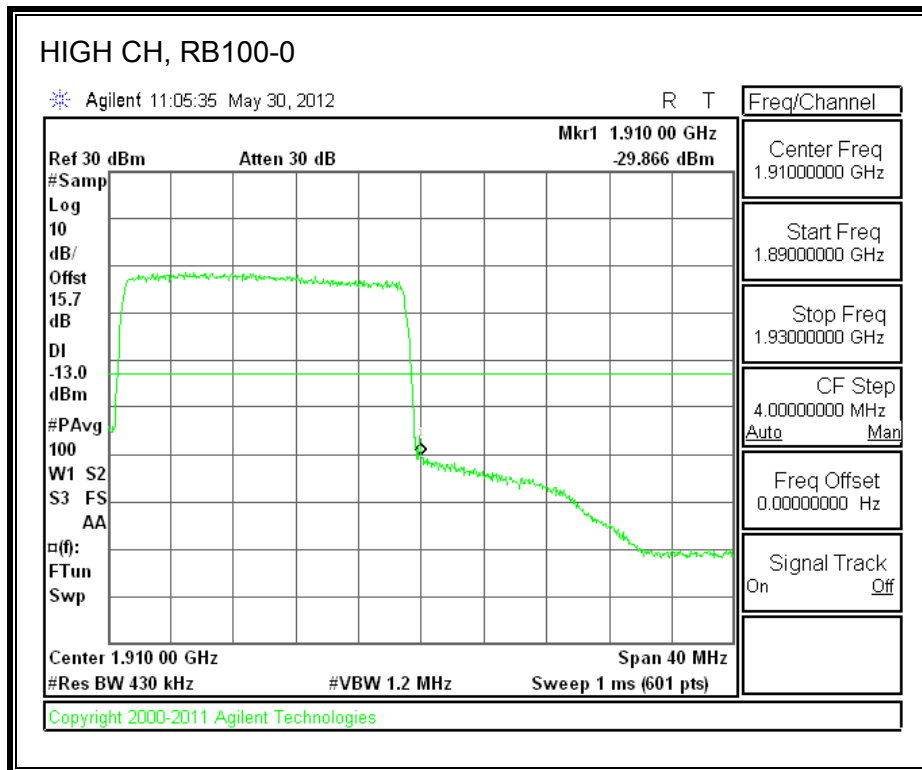
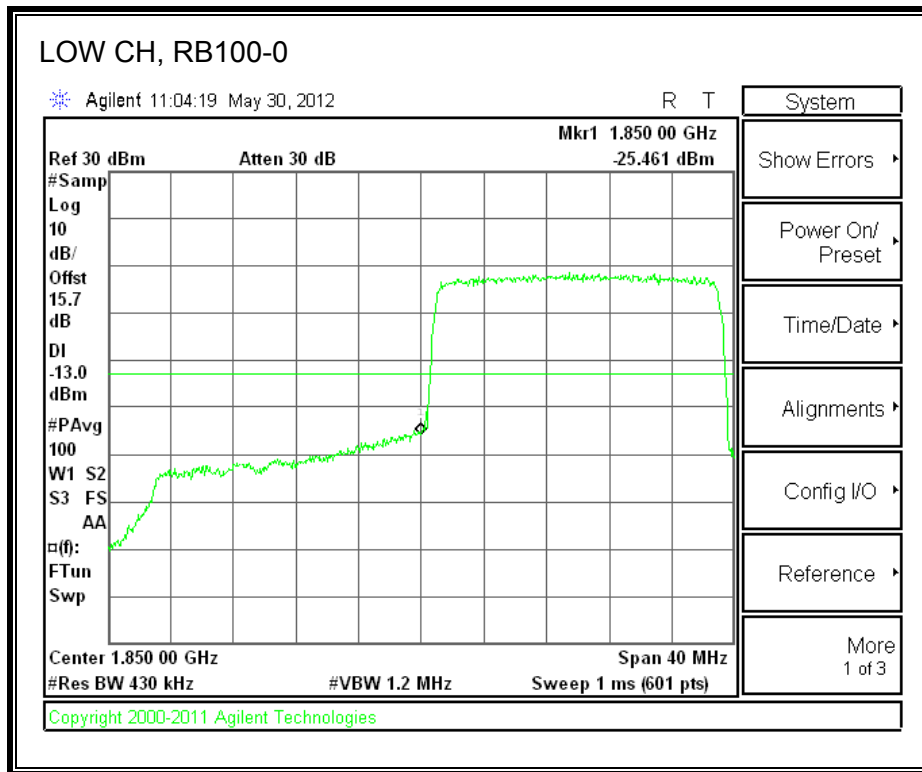


LTE QPSK Band 2 (20.0 MHz BAND WIDTH)

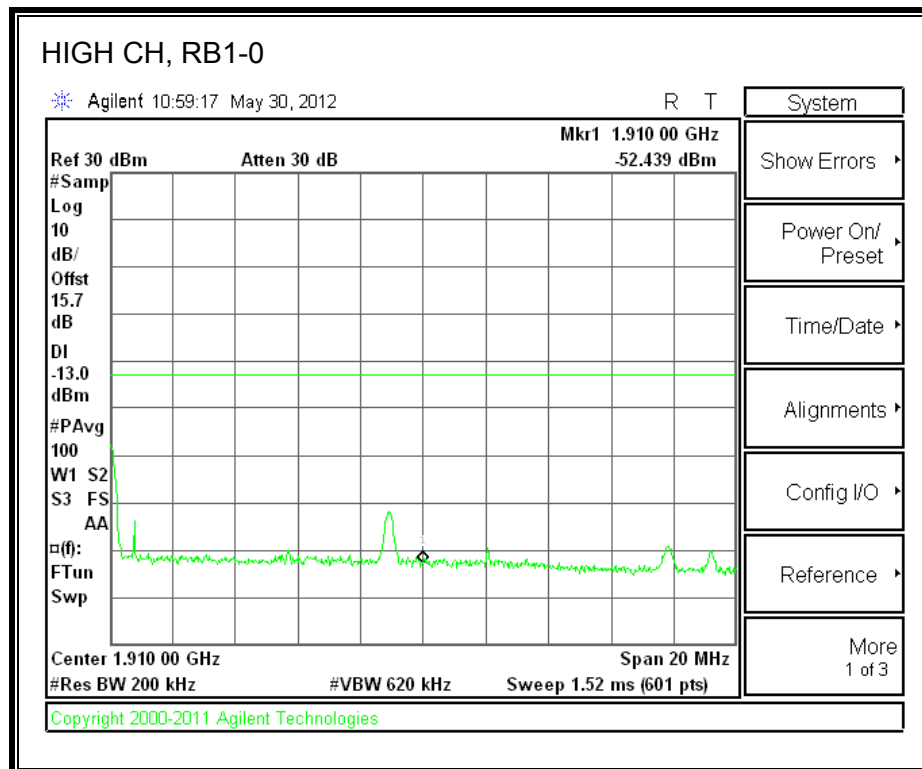
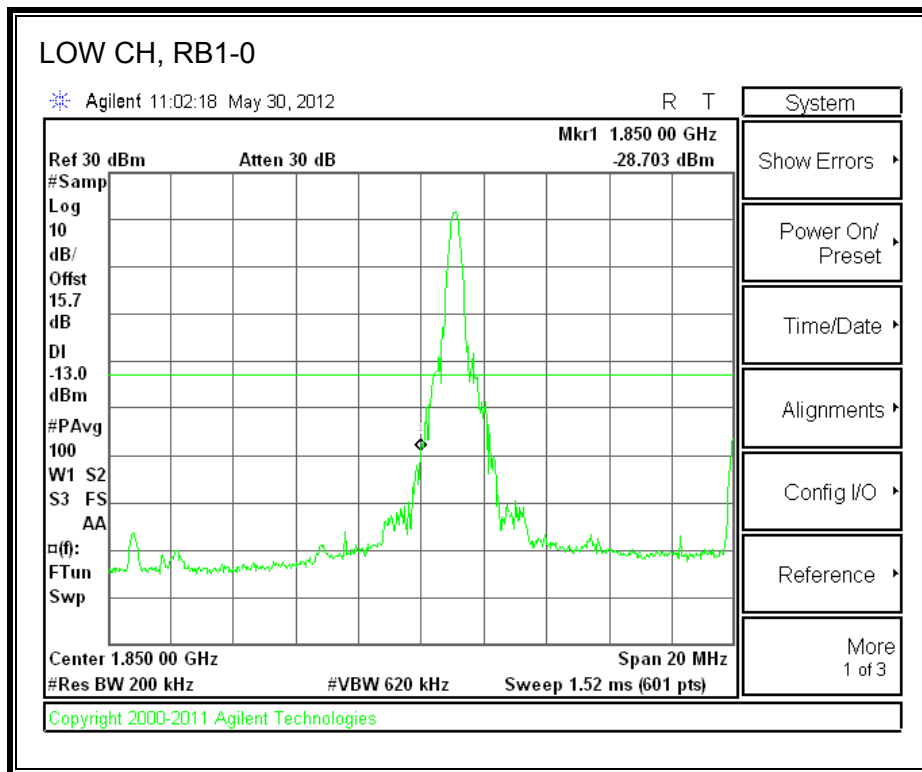


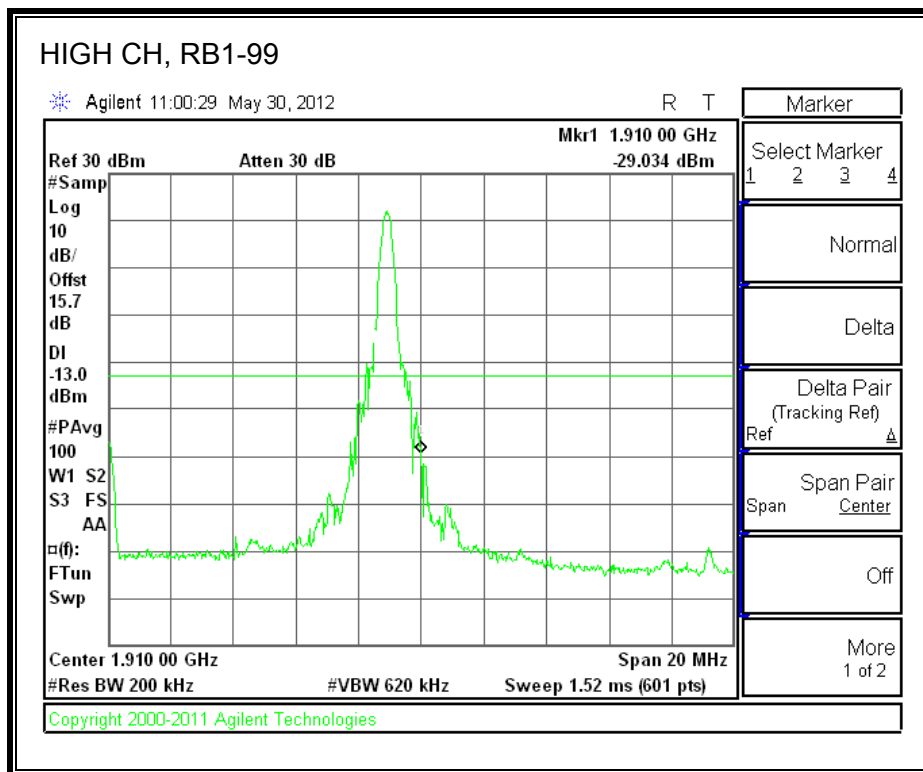
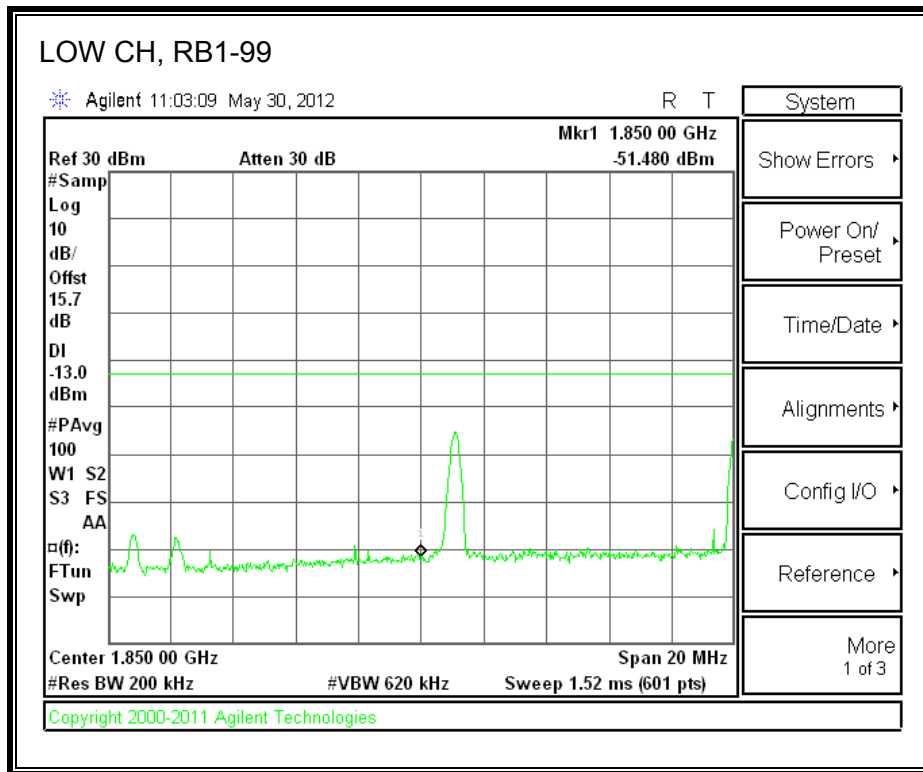


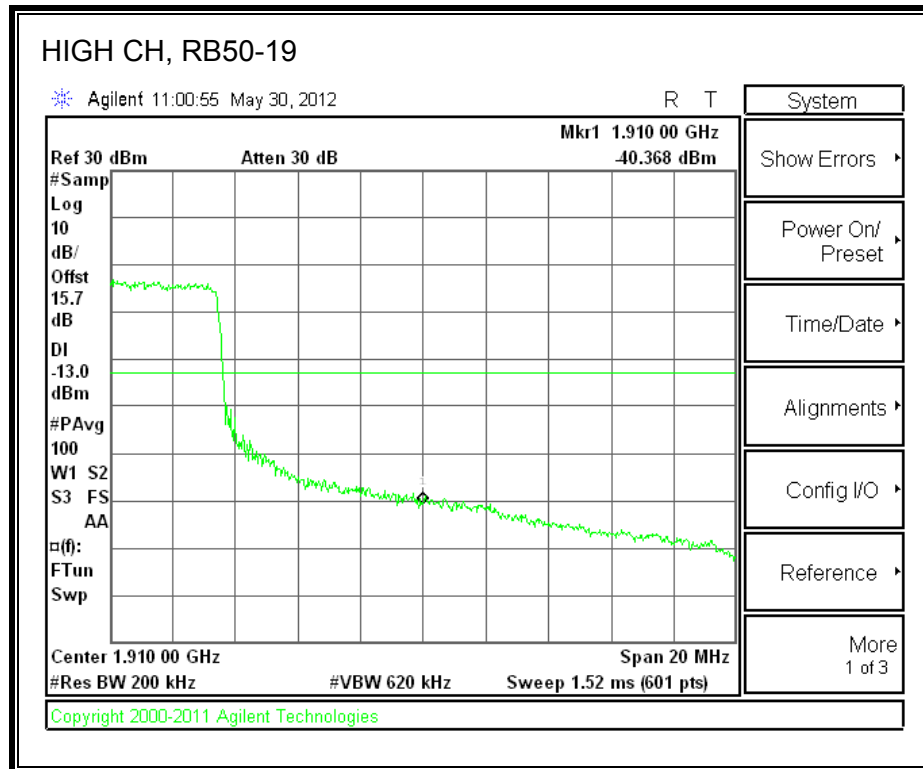
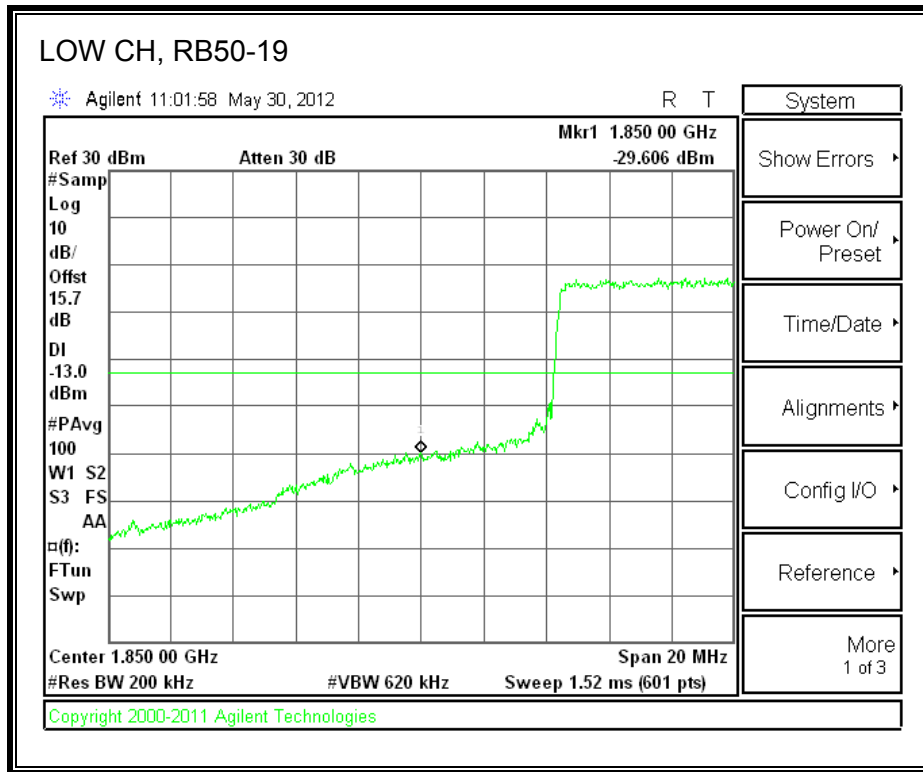


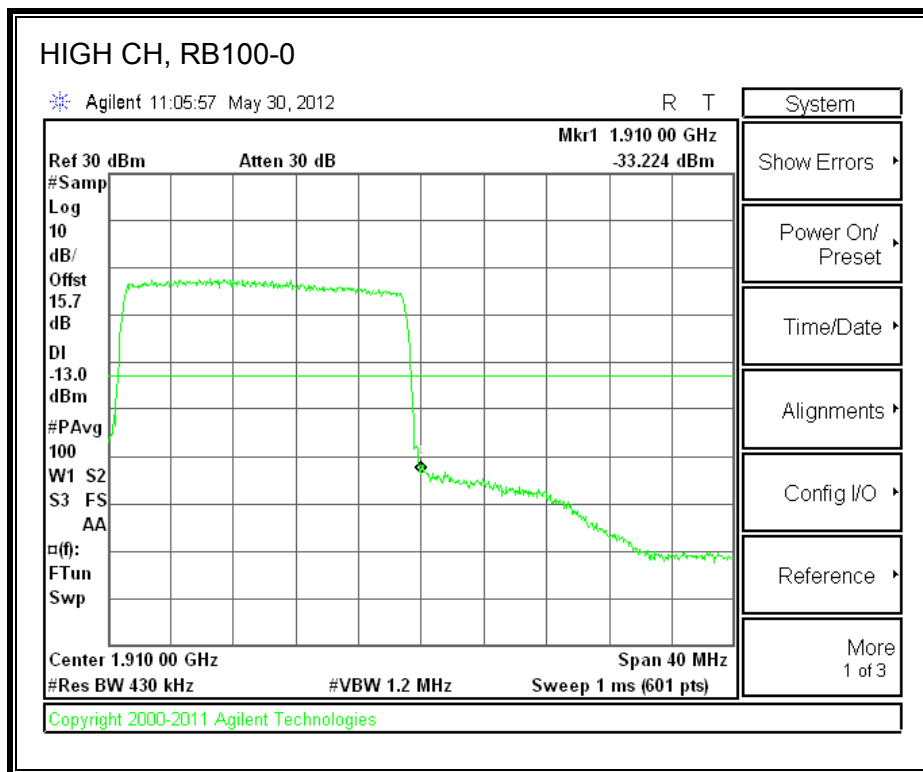
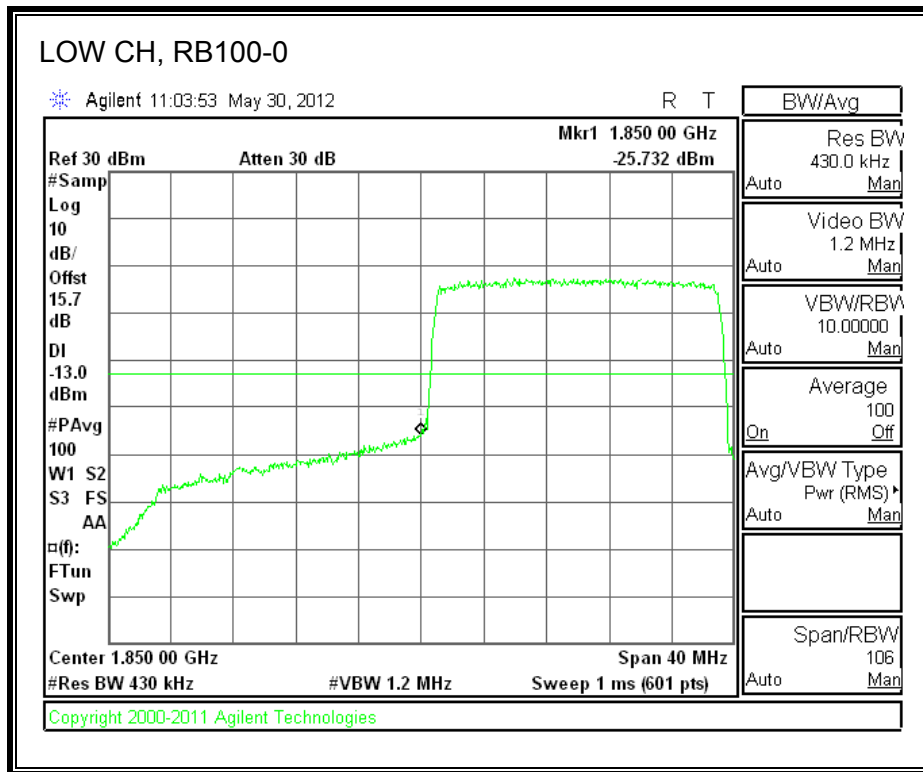


LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)



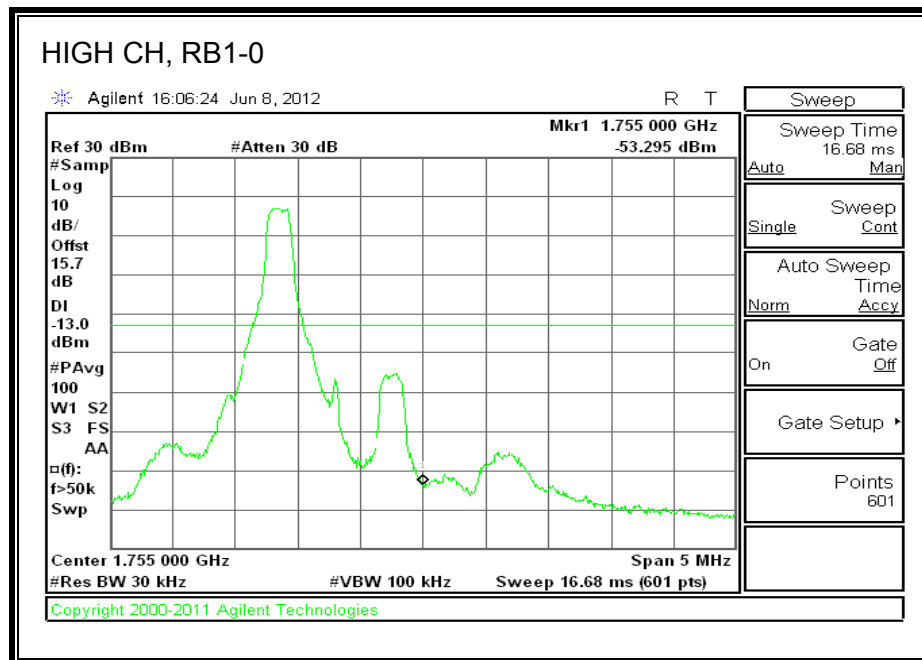
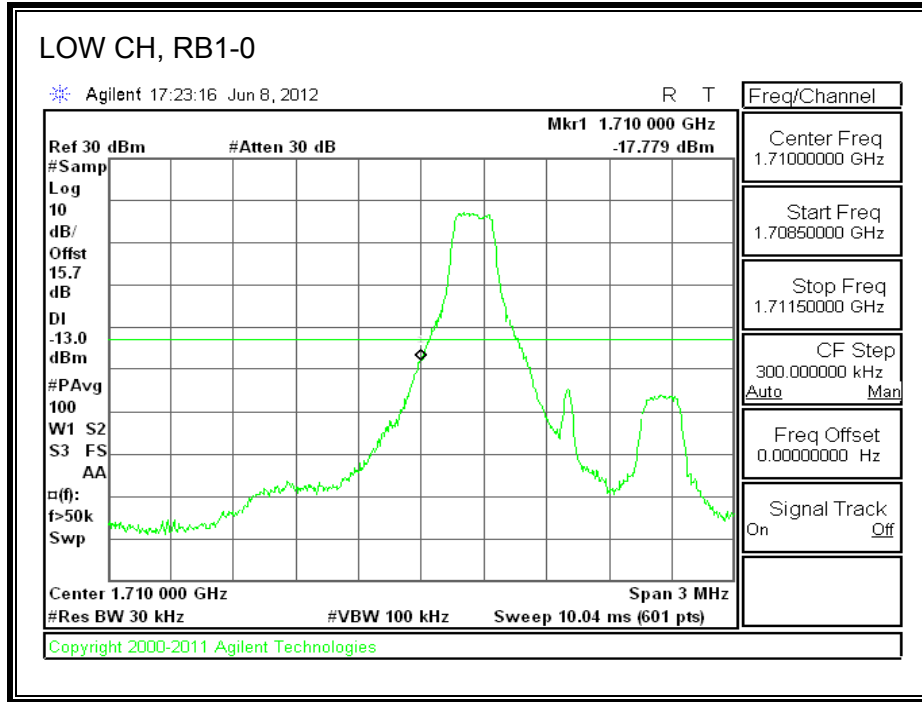


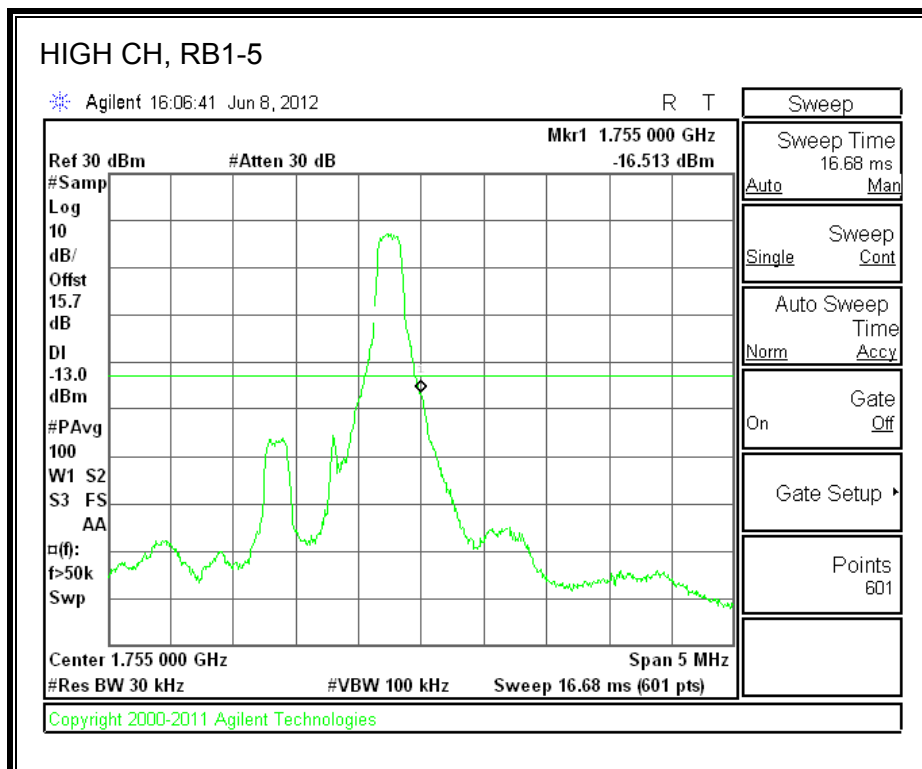
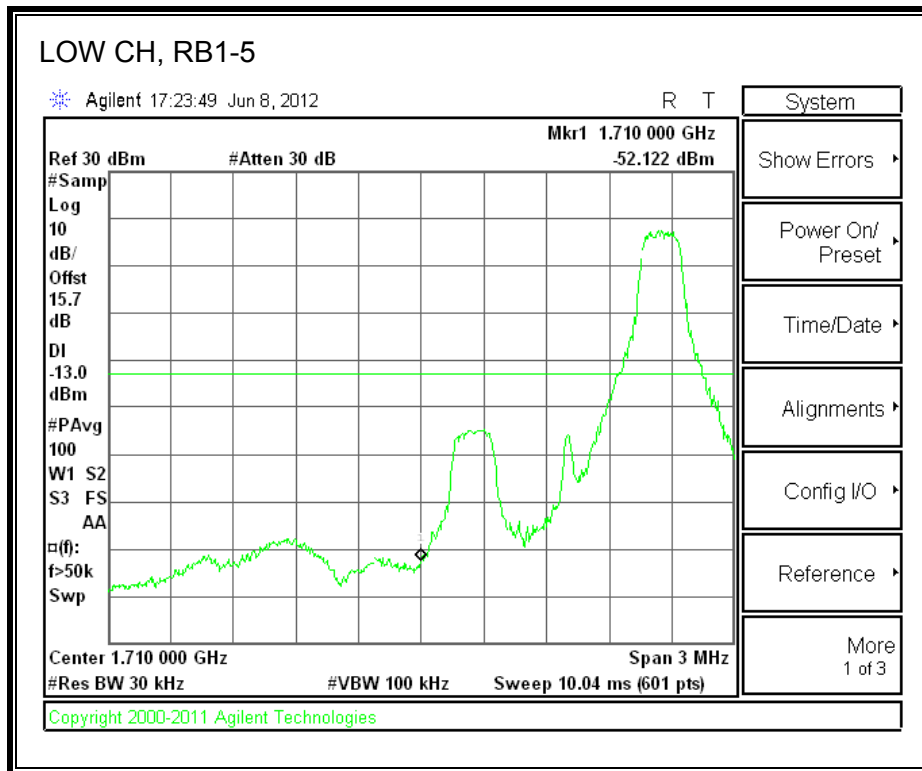


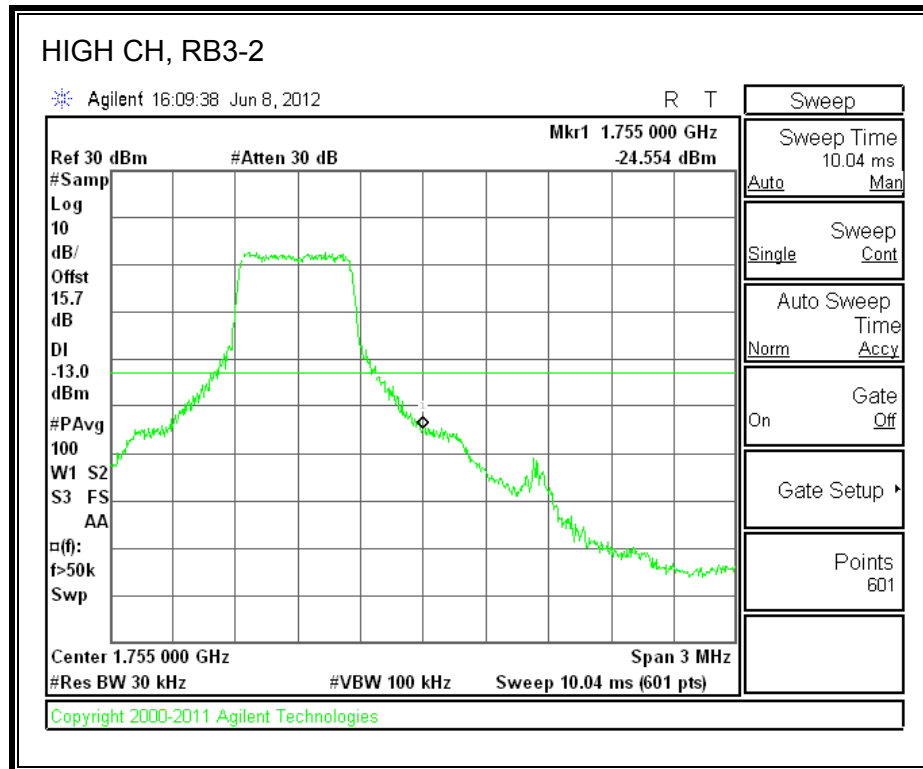
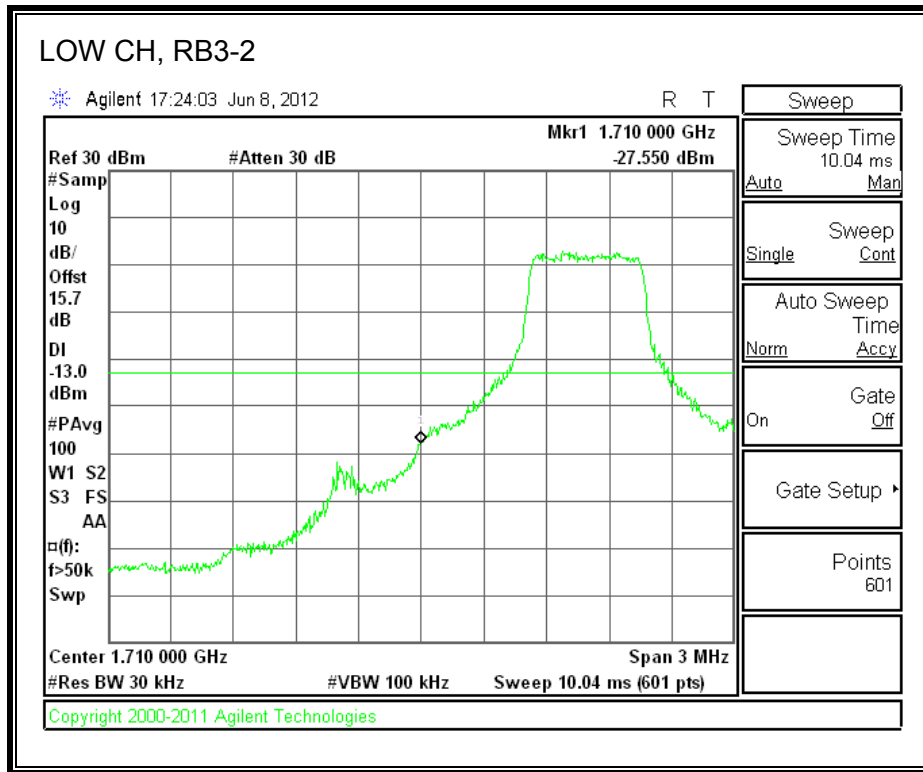


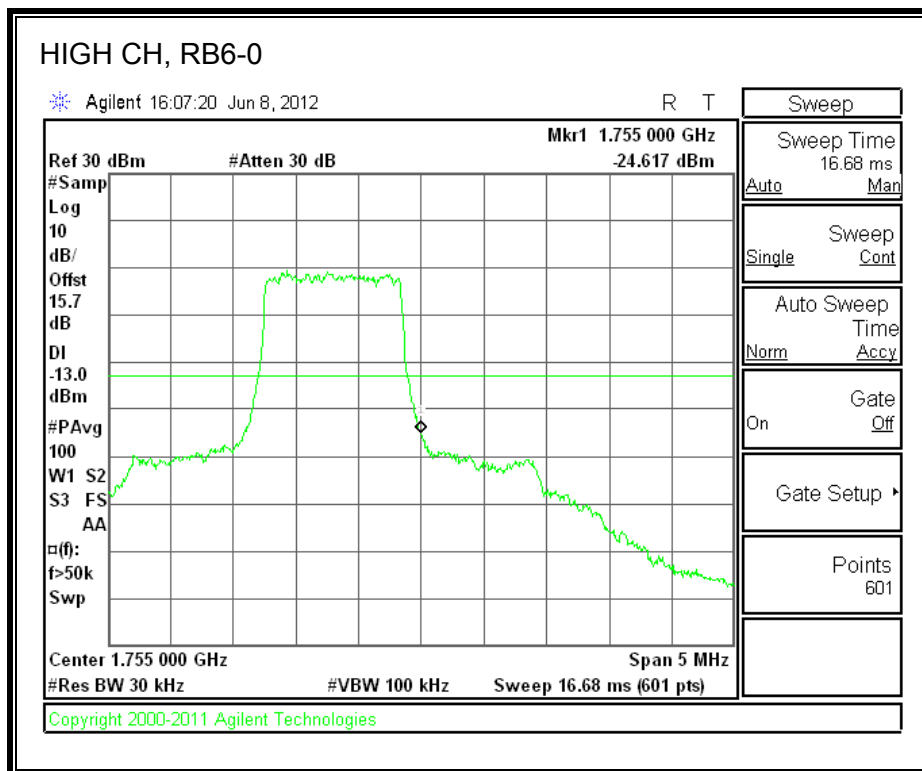
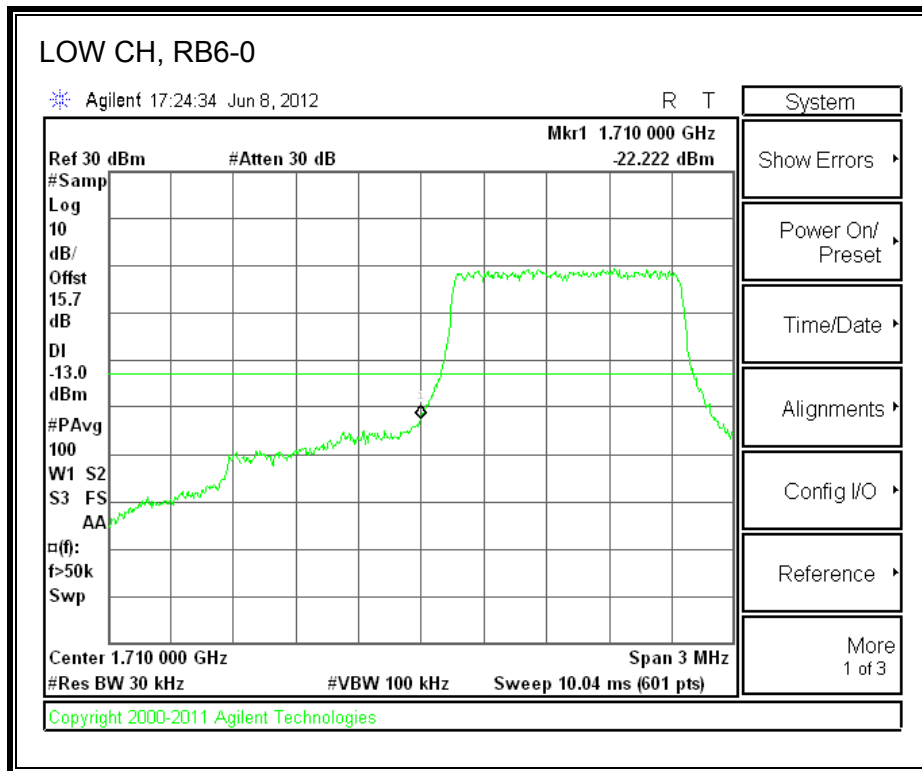
8.2.2. A1428 LAT PORT LTE BAND 4

LTE QPSK Band 4 (1.4 MHz BAND WIDTH)

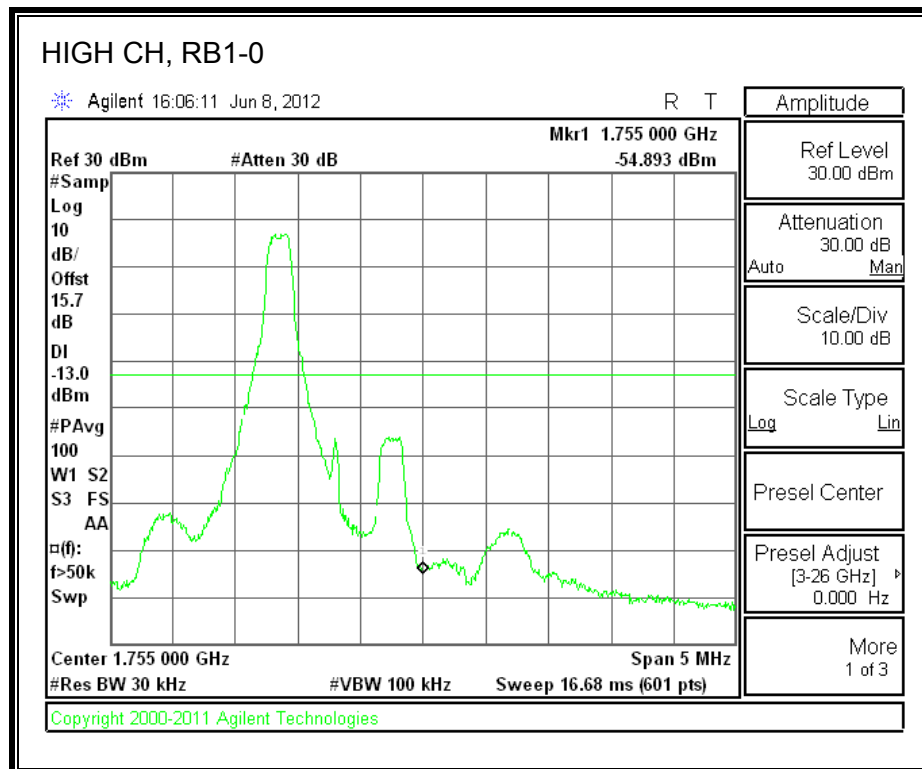
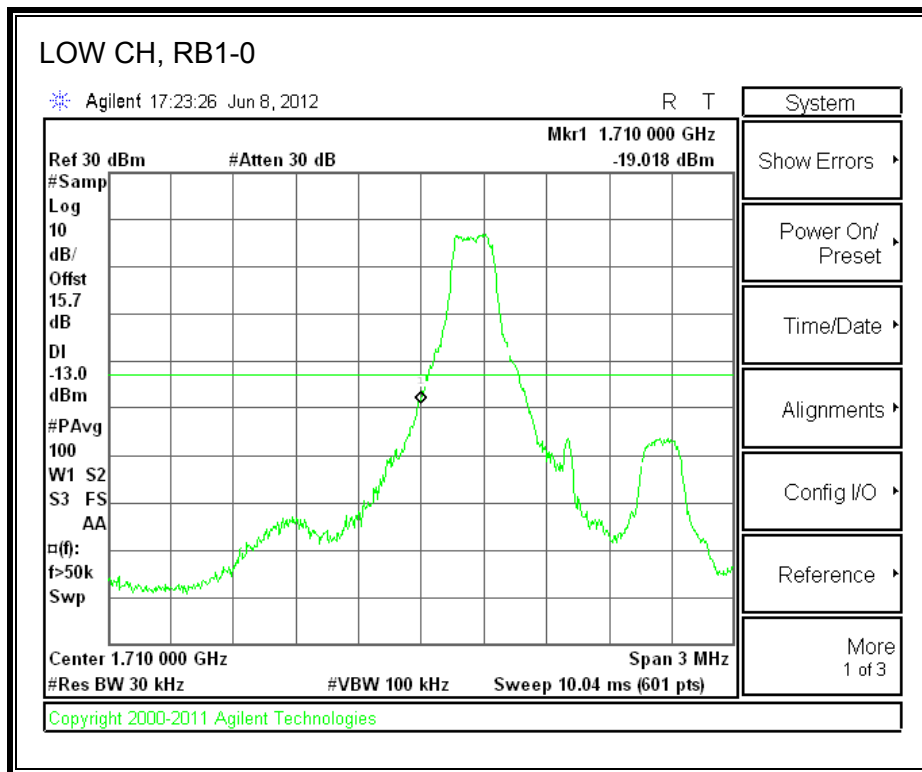


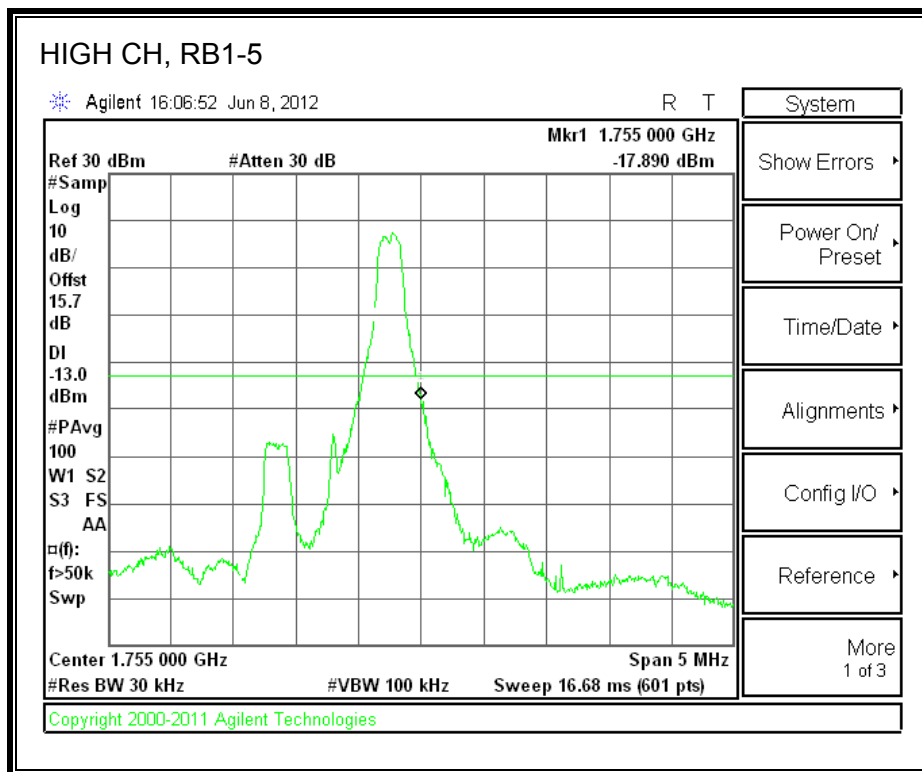
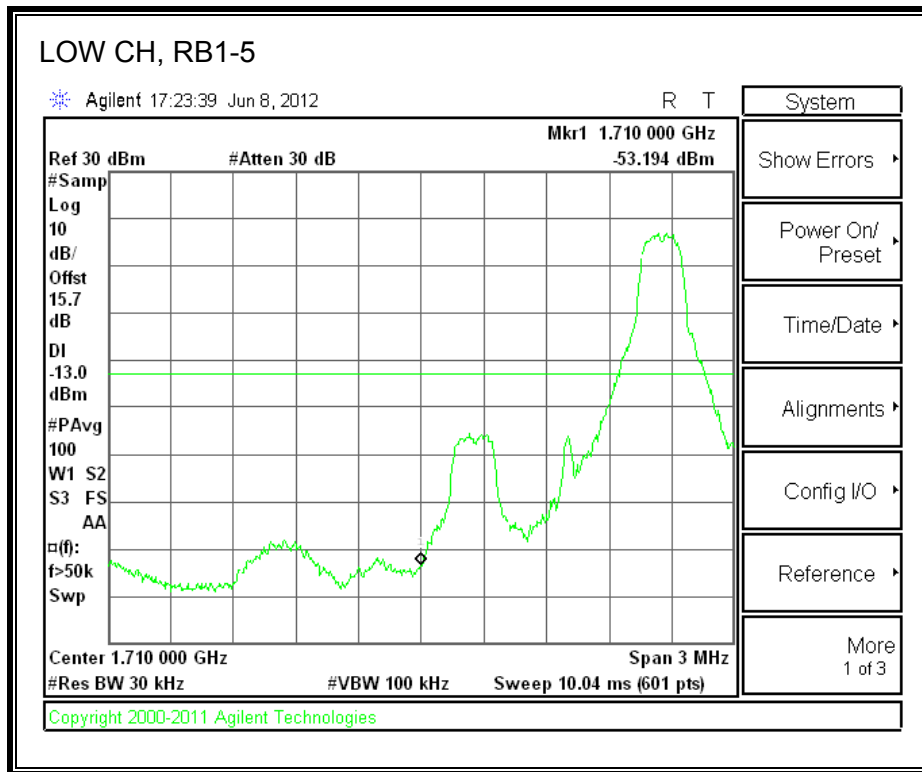


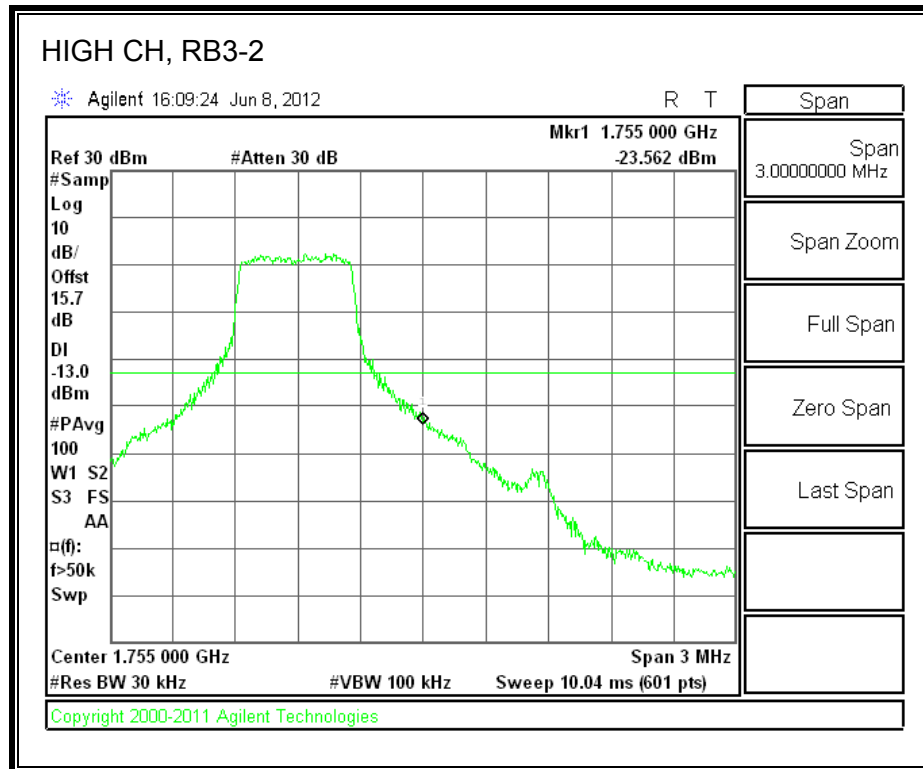
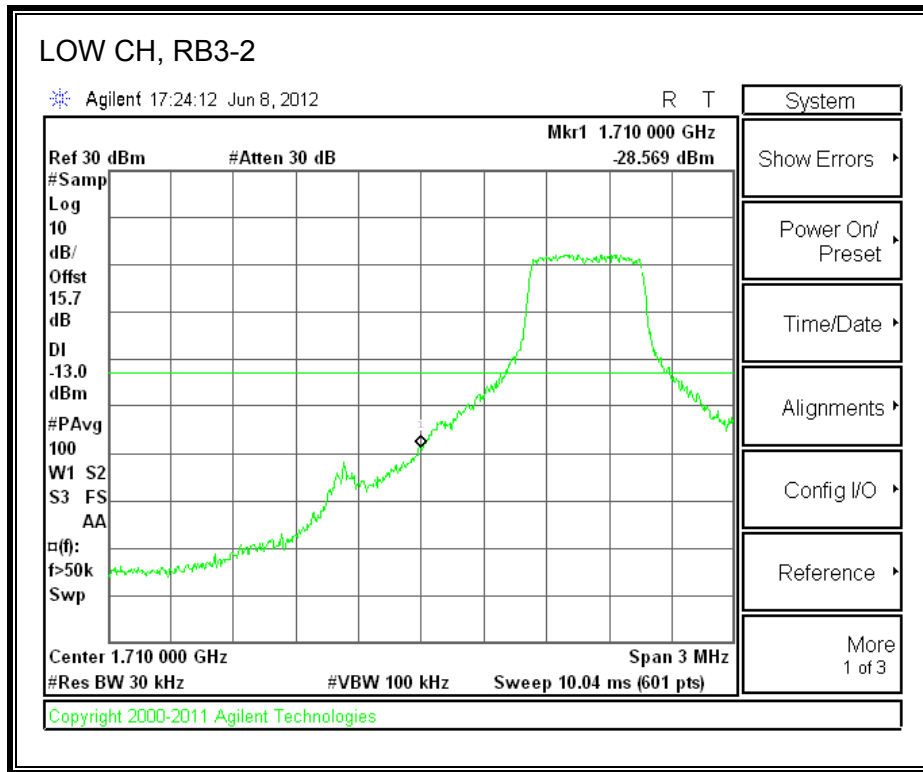


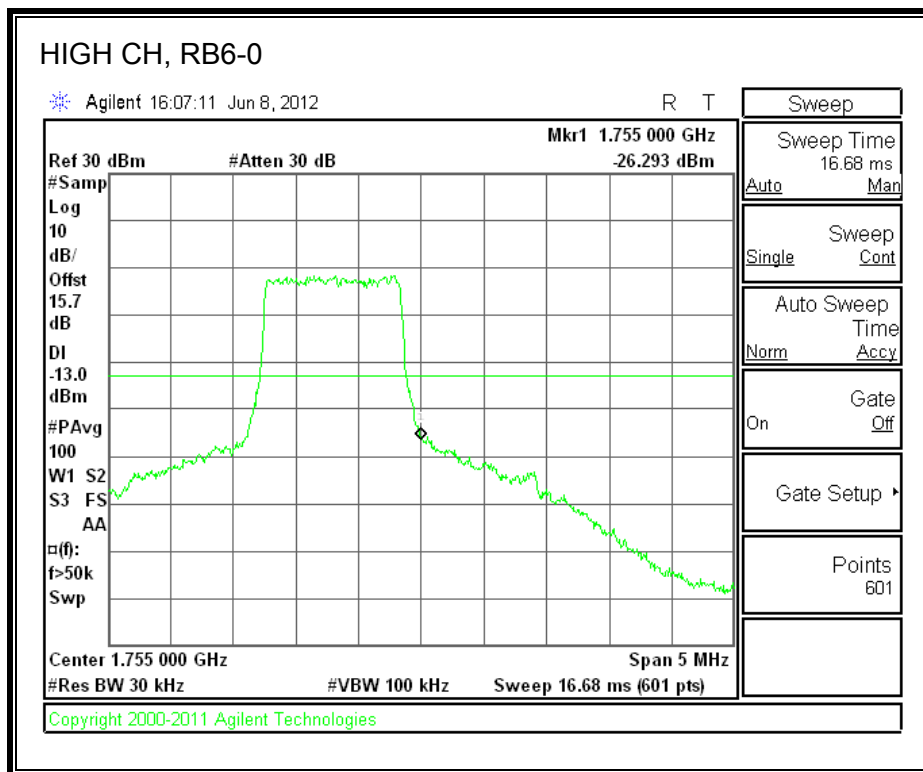
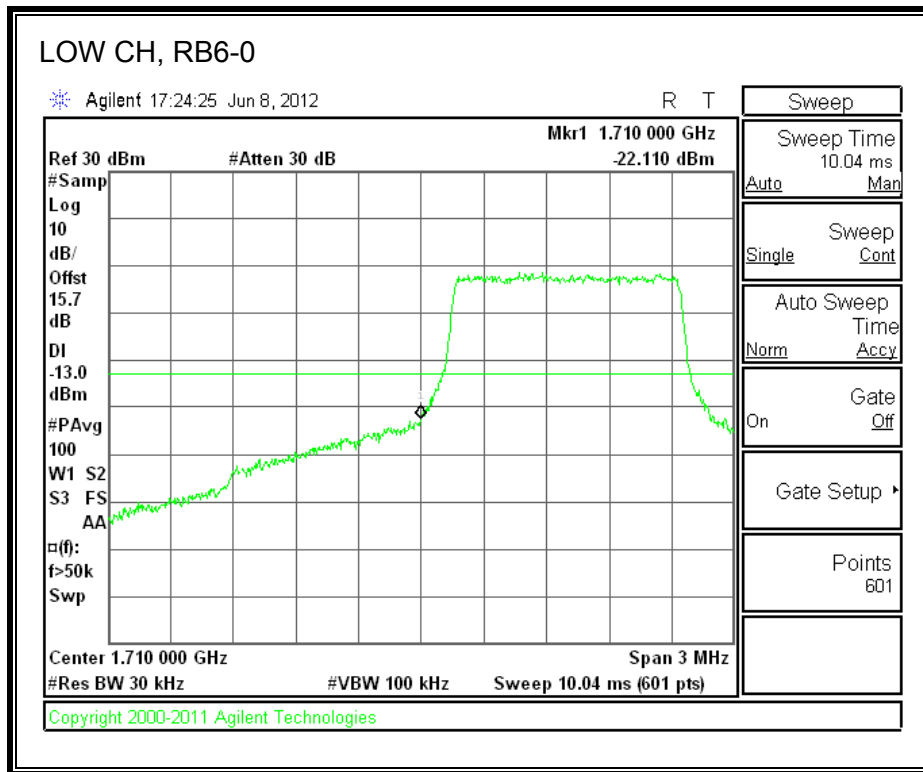


LTE 16QAM Band 4 (1.4 MHz BAND WIDTH)

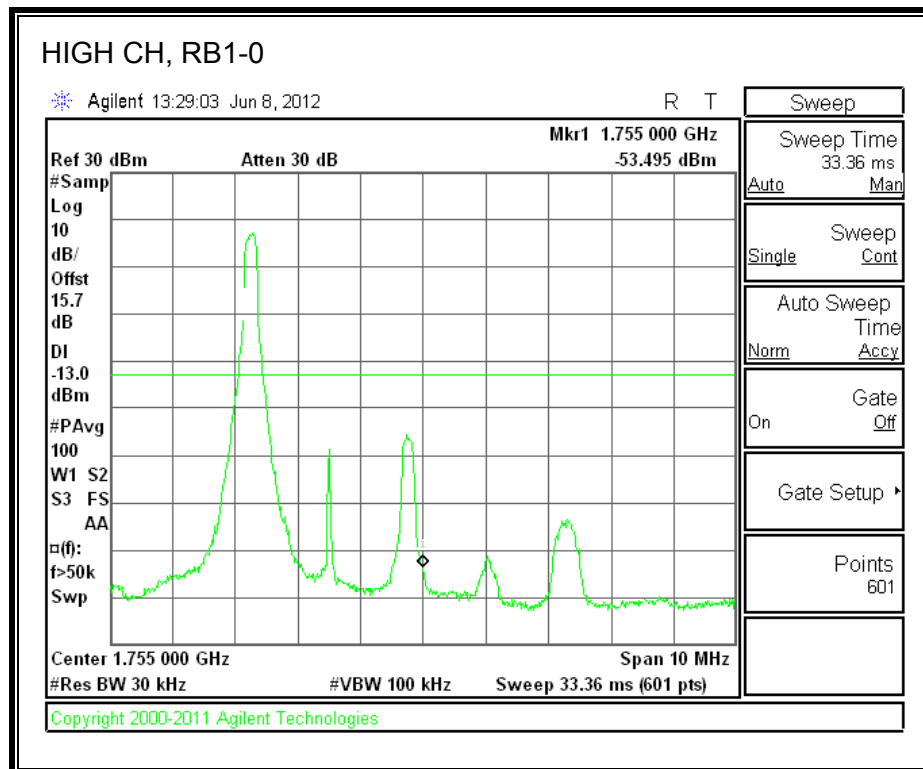
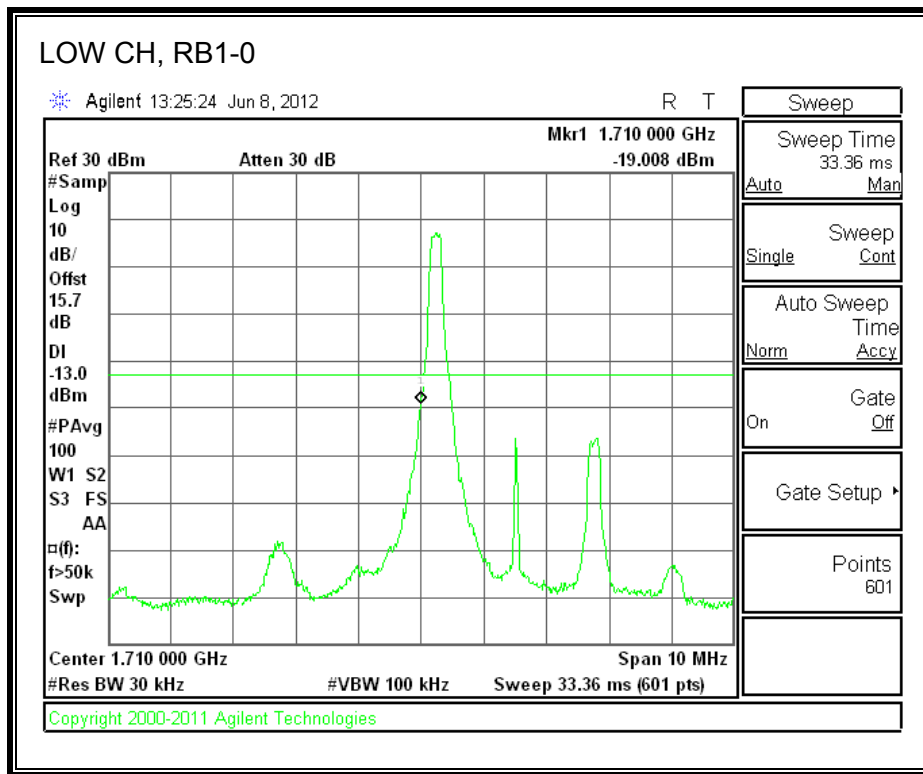


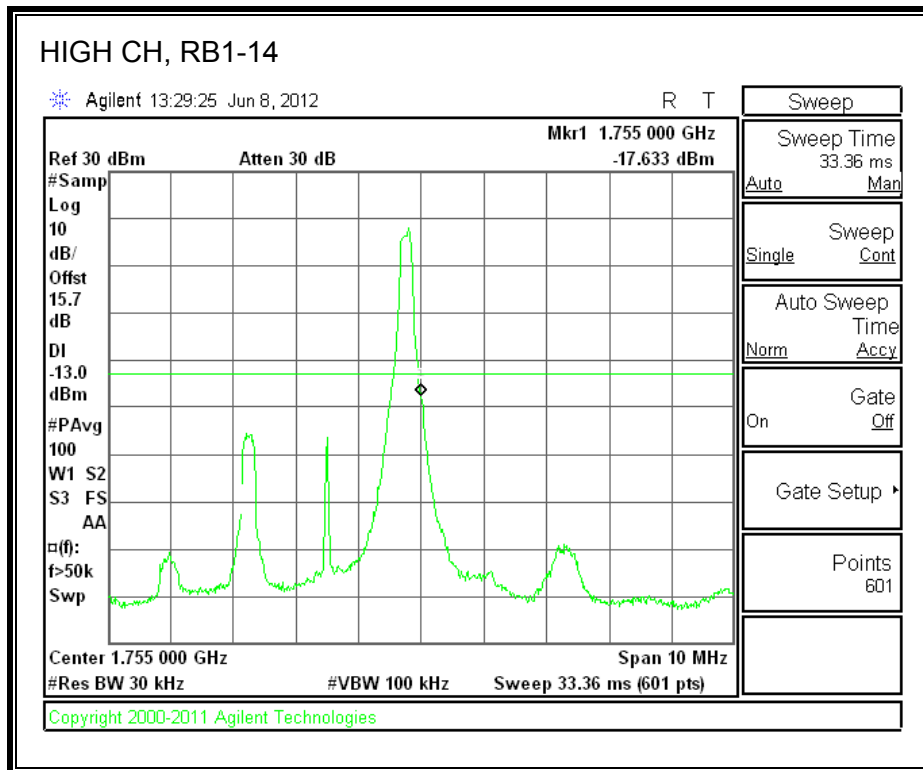
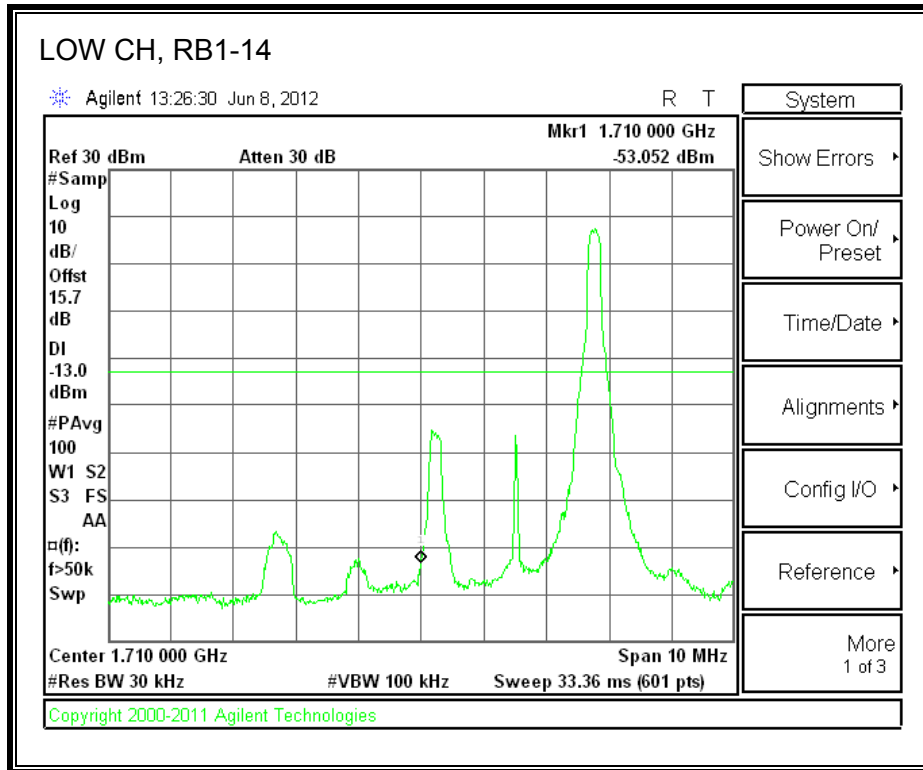


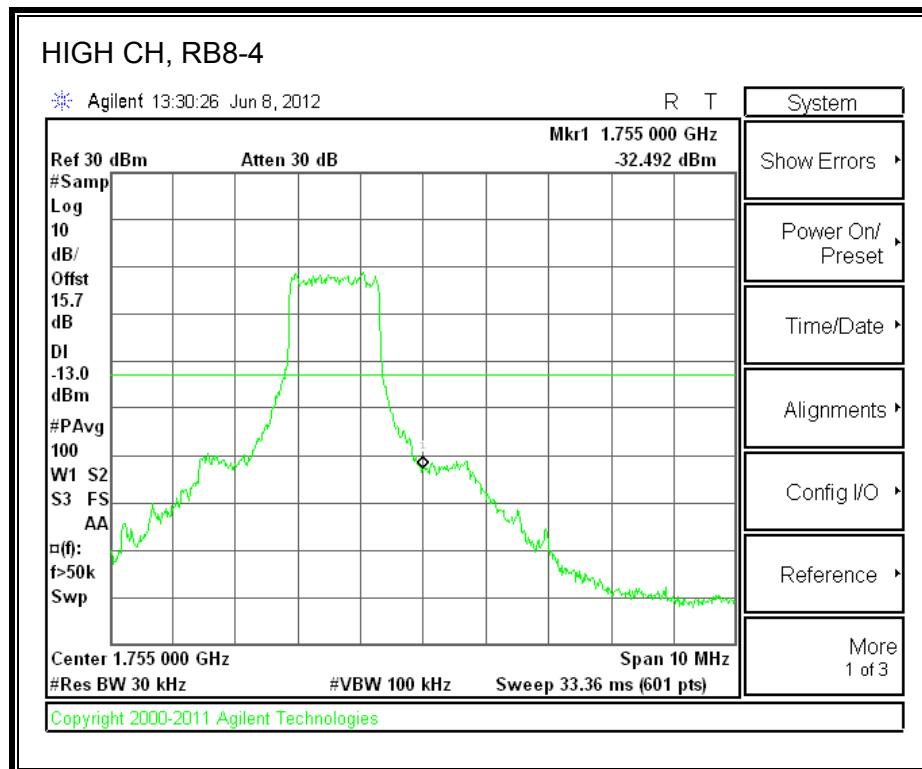
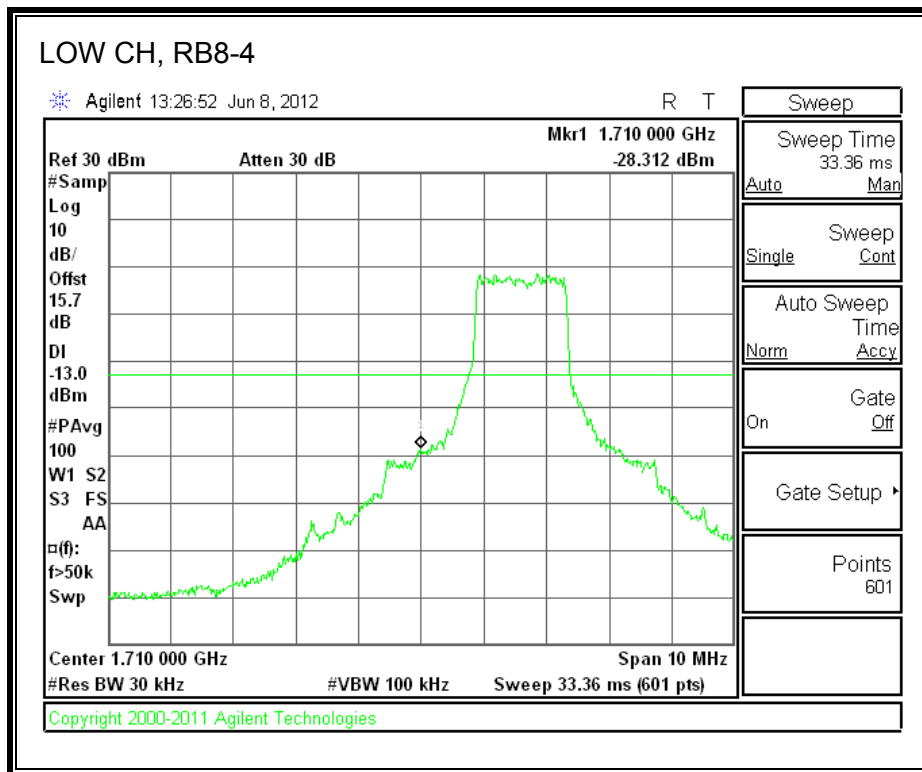


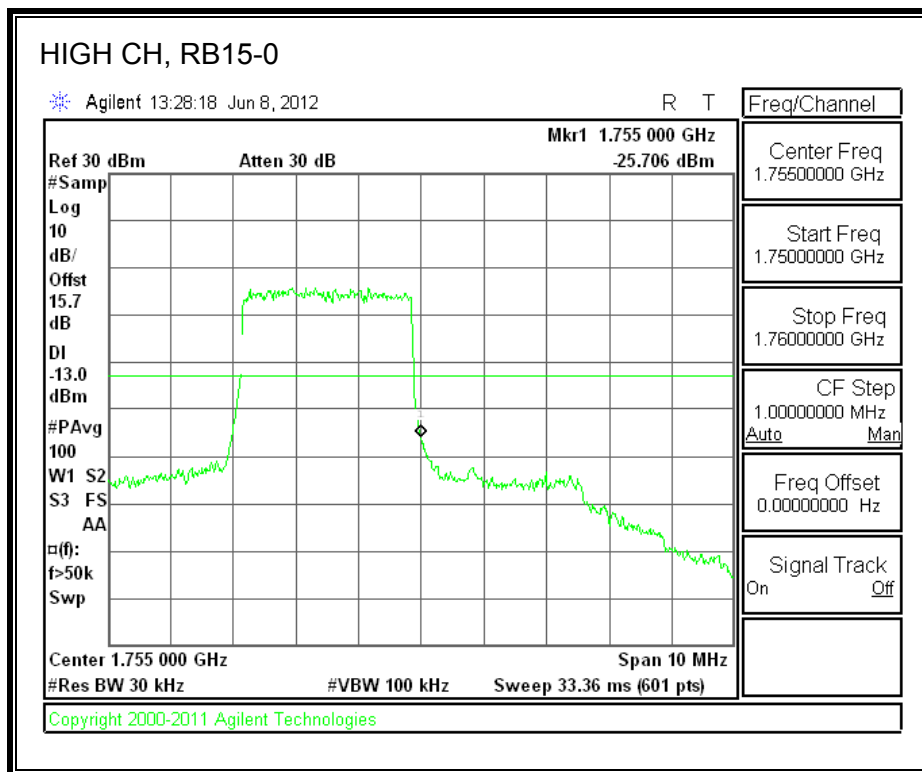
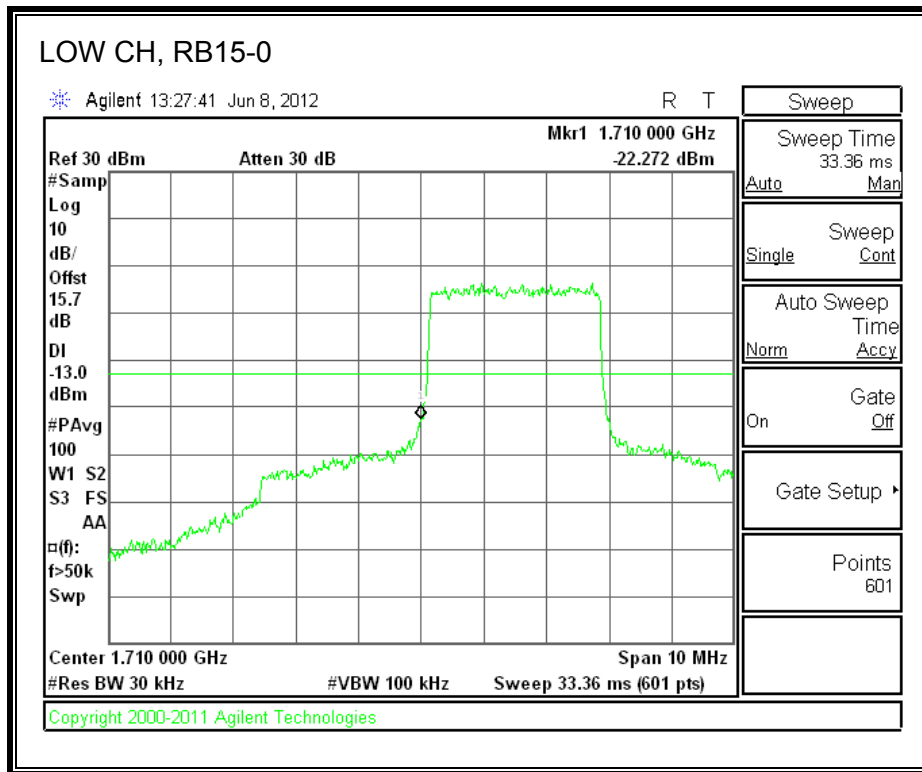


LTE QPSK Band 4 (3.0 MHz BAND WIDTH)









LTE 16QAM Band 4 (3.0 MHz BAND WIDTH)

