



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

CERTIFICATION TEST REPORT

FOR

CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL NUMBER: A1778

FCC ID: BCG-E3091A

REPORT NUMBER: 16U23328-E8V6

ISSUE DATE: JULY 21, 2016

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

Prepared by
UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888



NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/07/2016	Initial Review	Mengistu Mekuria
V2	07/15/2016	Address TCB Questions	Chin Pang
V3	07/17/2016	Revised max power summary table, antenna gain table, test equipment list, test equipment list and spurious emission band 27	Tina Chu
V4	07/18/2016	Add antenna gain in EIRP tables	Mona Hua
V5	07/20/2016	Revised Section 6	Tina Chu
V6	07/21/2016	Revised Section 5.2 and 10.3	Tina Chu

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	8
2. TEST METHODOLOGY	9
3. FACILITIES AND ACCREDITATION	9
4. CALIBRATION AND UNCERTAINTY	10
4.1. MEASURING INSTRUMENT CALIBRATION	10
4.2. SAMPLE CALCULATION	10
4.3. MEASUREMENT UNCERTAINTY	10
5. EQUIPMENT UNDER TEST	11
5.1. DESCRIPTION OF EUT	11
5.2. MAXIMUM OUTPUT POWER.....	11
5.2.1. LAT	11
5.2.2. UAT	18
5.3. SOFTWARE AND FIRMWARE.....	24
5.4. MAXIMUM ANTENNA GAIN.....	24
5.5. WORST-CASE CONFIGURATION AND MODE	25
5.6. DESCRIPTION OF TEST SETUP.....	26
6. TEST AND MEASUREMENT EQUIPMENT	28
7. RF POWER OUTPUT VERIFICATION	29
7.1. LAT	30
7.1.1. LTE BAND 2	30
7.1.2. LTE BAND 4	36
7.1.3. LTE BAND 5	42
7.1.4. LTE BAND 7	46
7.1.5. LTE BAND 12	50
7.1.6. LTE BAND 13	54
7.1.7. LTE BAND 17	56
7.1.8. LTE BAND 25	58
7.1.9. LTE BAND 26	64
7.1.10. LTE BAND 27.....	68
7.1.11. LTE BAND 30.....	72
7.1.12. LTE BAND 41.....	74

7.2.	UAT	78
7.2.1.	LTE BAND 2	78
7.2.2.	LTE BAND 4	84
7.2.3.	LTE BAND 5	90
7.2.4.	LTE BAND 7	94
7.2.5.	LTE BAND 12	98
7.2.6.	LTE BAND 13	102
7.2.7.	LTE BAND 17	104
7.2.8.	LTE BAND 25	106
7.2.9.	LTE BAND 26	112
7.2.10.	LTE BAND 27.....	116
7.2.11.	LTE BAND 30.....	120
7.2.12.	LTE BAND 41.....	122
8.	CONDUCTED TEST RESULTS	126
8.1.	OCCUPIED BANDWIDTH	126
8.1.1.	LTE BAND 2	138
8.1.2.	LTE BAND 4	150
8.1.3.	LTE BAND 5	162
8.1.4.	LTE BAND 7	170
8.1.5.	LTE BAND 12	178
8.1.6.	LTE BAND 13	186
8.1.7.	LTE BAND 17	190
8.1.8.	LTE BAND 25	194
8.1.9.	LTE BAND 26	206
8.1.10.	LTE BAND 27.....	214
8.1.11.	LTE BAND 30.....	222
8.1.12.	LTE BAND 41.....	226
8.2.	BANDEDGE AND EMISSION MASK	234
8.2.1.	LTE BAND 2 BANDEDGE	237
8.2.2.	LTE BAND 4 BANDEDGE	285
8.2.3.	LTE BAND 5 BANDEDGE	333
8.2.4.	LTE BAND 7 ADJACENT CHANNEL POWER	365
8.2.5.	LTE BAND 12 BANDEDGE	389
8.2.6.	LTE BAND 13 EMISSION MASK	421

8.2.7.	LTE BAND 17 BANDEDGE	437
8.2.8.	LTE BAND 25 BANDEDGE	453
8.2.9.	LTE BAND 26 EMISSION MASK	501
8.2.10.	LTE BAND 27 EMISSION MASK	523
8.2.11.	LTE BAND 30 ADJACENT CHANNEL POWER	545
8.2.12.	LTE BAND 41 ADJACENT CHANNEL POWER	555
8.3.	OUT OF BAND EMISSIONS	579
8.3.1.	LTE BAND 2	580
8.3.2.	LTE BAND 4	598
8.3.3.	LTE BAND 5	616
8.3.4.	LTE BAND 7	628
8.3.5.	LTE BAND 12	640
8.3.6.	LTE BAND 13	652
8.3.7.	LTE BAND 17	656
8.3.8.	LTE BAND 25	662
8.3.9.	LTE BAND 26	680
8.3.10.	LTE BAND 27	690
8.3.11.	LTE BAND 30	700
8.3.12.	LTE BAND 41	713
9.	FREQUENCY STABILITY	725
9.1.	LTE BAND 2	726
9.2.	LTE BAND 4	727
9.3.	LTE BAND 5	728
9.4.	LTE BAND 7	729
9.5.	LTE BAND 12	730
9.6.	LTE BAND 13	731
9.7.	LTE BAND 17	732
9.8.	LTE BAND 25	733
9.9.	LTE BAND 26	734
9.10.	LTE BAND 27	735
9.11.	LTE BAND 30	736
9.12.	LTE BAND 41	737
10.	RADIATED TEST RESULTS	738
10.1.	RADIATED POWER (ERP & EIRP), LAT	738

10.1.1.	LTE BAND 2.....	754
10.1.2.	LTE BAND 4.....	766
10.1.3.	LTE BAND 5.....	778
10.1.4.	LTE BAND 7.....	786
10.1.5.	LTE BAND 12.....	794
10.1.6.	LTE BAND 13.....	802
10.1.7.	LTE BAND 17.....	806
10.1.8.	LTE BAND 25.....	810
10.1.9.	LTE BAND 26.....	822
10.1.10.	LTE BAND 27.....	830
10.1.11.	LTE BAND 30.....	838
10.1.12.	LTE BAND 41.....	842
10.2.	RADIATED POWER (ERP & EIRP), UAT	850
10.2.1.	LTE BAND 2.....	864
10.2.2.	LTE BAND 4.....	876
10.2.3.	LTE BAND 5.....	888
10.2.4.	LTE BAND 7.....	896
10.2.5.	LTE BAND 12.....	904
10.2.6.	LTE BAND 13.....	912
10.2.7.	LTE BAND 17.....	916
10.2.8.	LTE BAND 25.....	920
10.2.9.	LTE BAND 26.....	932
10.2.10.	LTE BAND 27.....	940
10.2.11.	LTE BAND 30.....	948
10.2.12.	LTE BAND 41.....	952
10.3.	PEAK-TO-AVERAGE RATIO	960
10.3.1.	LTE BAND 2.....	961
10.3.2.	LTE BAND 4.....	967
10.3.3.	LTE BAND 5.....	973
10.3.4.	LTE BAND 7.....	977
10.3.5.	LTE BAND 12.....	982
10.3.6.	LTE BAND 13.....	986
10.3.7.	LTE BAND 17.....	988
10.3.8.	LTE BAND 25.....	990
10.3.9.	LTE BAND 26.....	996

10.3.10.	LTE BAND 27.....	1000
10.3.11.	LTE BAND 30.....	1004
10.3.12.	LTE BAND 41.....	1006
10.4.	FIELD STRENGTH OF SPURIOUS RADIATION, LAT	1011
10.4.1.	LTE BAND 2.....	1013
10.4.2.	LTE BAND 4.....	1015
10.4.3.	LTE BAND 5.....	1017
10.4.4.	LTE BAND 7.....	1019
10.4.5.	LTE BAND 12.....	1021
10.4.6.	LTE BAND 13.....	1023
10.4.7.	LTE BAND 17.....	1025
10.4.8.	LTE BAND 25.....	1027
10.4.9.	LTE BAND 26.....	1029
10.4.10.	LTE BAND 27.....	1031
10.4.11.	LTE BAND 30.....	1033
10.4.12.	LTE BAND 41.....	1035
10.5.	FIELD STRENGTH OF SPURIOUS RADIATION, UAT.....	1037
10.5.1.	LTE BAND 2.....	1037
10.5.2.	LTE BAND 4.....	1039
10.5.3.	LTE BAND 5.....	1041
10.5.4.	LTE BAND 7.....	1043
10.5.5.	LTE BAND 12.....	1045
10.5.6.	LTE BAND 13.....	1047
10.5.7.	LTE BAND 17.....	1049
10.5.8.	LTE BAND 25.....	1051
10.5.9.	LTE BAND 26.....	1053
10.5.10.	LTE BAND 27.....	1055
10.5.11.	LTE BAND 30.....	1057
10.5.12.	LTE BAND 41.....	1059
11.	SETUP PHOTOS	1061

1. ATTESTATION OF TEST RESULTS

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

EUT DESCRIPTION: CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL: A1778

SERIAL NUMBER: C7CRQ00HHCWJ (CONDUCTED);
C7CRQ009HCWH (RADIATED)

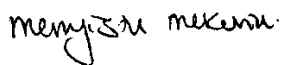
DATE TESTED: APRIL 7, 2016 – JULY 01, 2016

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

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

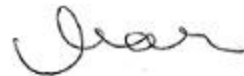
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section.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

Approved & Released For
UL Verification Services Inc. By:



MENGISTU MEKURIA
SENIOR ENGINEER
UL VERIFICATION SERVICES INC.

Prepared By:



MONA HUA
EMC TECHNICIAN
UL VERIFICATION SERVICES INC.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-D, FCC CFR 47 Part 2, FCC KDB 971168 D01 v02r02, Part 22, Part 24, Part 27 and Part 90.

3. FACILITIES AND ACCREDITATION

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

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

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance, 1000 to 18000 MHz	4.32 dB
Radiated Disturbance, 18000 to 26000 MHz	4.45 dB
Radiated Disturbance, 26000 to 40000 MHz	5.24 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT, Model A1778 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/ac, NFC 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:

5.2.1. LAT

OUTPUT POWER FOR LTE BAND 2

Part 24 / RSS 133 LTE Band 2						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1910	QPSK	24.9	309.0	25.0	312.6
		16QAM	24.0	251.2	24.1	254.1
3		QPSK	24.9	309.0	25.0	314.8
		16QAM	24.1	257.0	24.1	255.9
5		QPSK	24.9	309.0	25.0	312.6
		16QAM	24.0	251.2	24.1	254.1
10		QPSK	25.0	316.2	24.9	311.2
		16QAM	24.1	257.0	24.0	252.9
15		QPSK	24.9	309.0	24.9	305.5
		16QAM	24.0	251.2	24.0	248.3
20		QPSK	24.9	309.0	25.0	313.3
		16QAM	23.9	245.5	24.1	254.7

OUTPUT POWER FOR LTE BAND 4

Part 27 / RSS 139 LTE Band 4						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP(Average)	
			dBm	mW	dBm	mW
1.4	1710 - 1755	QPSK	24.8	302.0	23.7	231.7
		16QAM	24.2	263.0	23.0	197.2
3		QPSK	25.0	316.2	23.6	226.5
		16QAM	24.5	281.8	22.9	192.8
5		QPSK	24.9	309.0	23.5	221.3
		16QAM	24.3	269.2	22.8	188.4
10		QPSK	25.0	316.2	23.5	222.8
		16QAM	24.3	269.2	22.8	189.7
15		QPSK	25.0	316.2	23.5	224.4
		16QAM	24.0	251.2	22.8	191.0
20		QPSK	25.0	316.2	23.5	224.9
		16QAM	24.3	269.2	22.7	187.1

OUTPUT POWER FOR LTE BAND 5 AND 26

Part 22 /RSS 132 LTE Band 5 and 26						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
1.4	824 - 849	QPSK	24.0	251.2	20.1	101.39
		16QAM	23.3	213.8	20.3	106.66
3		QPSK	23.9	245.5	21.6	144.88
		16QAM	23.4	218.8	20.7	117.76
5		QPSK	24.0	251.2	21.0	124.74
		16QAM	23.4	218.8	20.0	99.08
10		QPSK	23.9	245.5	20.8	121.34
		16QAM	23.2	208.9	19.9	97.95

OUTPUT POWER FOR LTE BAND 7

Part 27 / RSS199 LTE Band 7						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2500 - 2570	QPSK	24.7	295.1	26.7	462.4
		16QAM	23.9	245.5	25.9	384.6
10		QPSK	24.5	281.8	26.5	450.8
		16QAM	23.9	245.5	25.8	383.7
15		QPSK	24.7	295.1	26.6	459.2
		16QAM	23.9	245.5	25.9	390.8
20		QPSK	24.7	295.1	26.4	439.5
		16QAM	24.0	251.2	25.7	374.1

OUTPUT POWER FOR LTE BAND 12

Part 27 /RSS 130 LTE Band 12						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	dBm
1.4	699-716	QPSK	25.0	316.2	17.2	52.48
		16QAM	24.2	263.0	16.9	48.98
3		QPSK	25.0	316.2	15.3	33.50
		16QAM	24.2	263.0	14.3	26.85
5		QPSK	25.0	316.2	15.3	33.96
		16QAM	24.2	263.0	14.3	26.92
10		QPSK	25.0	316.2	15.6	35.89
		16QAM	24.2	263.0	14.6	28.97

OUTPUT POWER FOR LTE BAND 13

Part 27 /RSS 130 LTE Band 13						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
5	777 - 787	QPSK	25.0	316.2	15.9	38.90
		16QAM	24.3	269.2	14.9	31.19
10		QPSK	25.0	316.2	15.8	37.58
		16QAM	24.1	257.0	14.9	30.55

OUTPUT POWER FOR LTE BAND 17

Part 27 /RSS 130 LTE Band 17						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
5	704-716	QPSK	25.0	316.2	18.2	65.3
		16QAM	24.2	263.0	17.4	54.3
10		QPSK	25.0	316.2	18.1	64.6
		16QAM	24.2	263.0	17.3	54.1

OUTPUT POWER FOR LTE BAND 25

Part 24 / RSS 133 LTE Band 25						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1915	QPSK	24.0	251.2	23.4	218.8
		16QAM	23.3	213.8	22.5	175.8
3		QPSK	24.0	251.2	23.4	216.3
		16QAM	23.3	213.8	22.5	175.8
5		QPSK	24.0	251.2	23.2	207.5
		16QAM	23.2	208.9	22.3	169.8
10		QPSK	24.0	251.2	23.2	210.4
		16QAM	23.3	213.8	22.3	171.4
15		QPSK	24.0	251.2	23.3	215.3
		16QAM	23.3	213.8	22.4	173.0
20		QPSK	24.0	251.2	23.4	220.8
		16QAM	23.2	208.9	22.6	182.8

OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	814-824	QPSK	23.9	245.5	18.7	74.3	20.9	121.9
		16QAM	23.1	204.2	17.9	61.9	20.1	101.6
3		QPSK	24.0	251.2	18.5	70.8	20.7	116.1
		16QAM	23.3	213.8	17.5	56.6	19.7	92.9
5		QPSK	24.0	251.2	18.5	70.1	20.6	115.1
		16QAM	23.2	208.9	17.5	56.6	19.7	92.9
10		QPSK	24.0	251.2	18.3	67.8	20.5	111.2
		16QAM	23.2	208.9	17.4	55.0	19.6	90.2

OUTPUT POWER FOR LTE BAND 27

Part 90 LTE Band 27								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	814-824	QPSK	24.0	251.2	18.7	73.5	20.8	120.5
		16QAM	23.2	208.9	17.9	61.1	20.0	100.2
3		QPSK	24.0	251.2	20.1	102.6	22.3	168.3
		16QAM	23.2	208.9	19.2	82.6	21.3	135.5
5		QPSK	24.0	251.2	20.1	102.3	22.3	167.9
		16QAM	23.2	208.9	19.1	81.8	21.3	134.3
10		QPSK	24.0	251.2	19.5	88.9	21.6	145.9
		16QAM	23.3	213.8	18.6	72.3	20.7	118.6

OUTPUT POWER FOR LTE BAND 30

Part 27 / RSS 195 LTE Band 30						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2305-2315	QPSK	22.3	169.8	20.9	122.2
		16QAM	21.5	141.3	20.1	101.6
10		QPSK	22.3	169.8	21.0	125.0
		16QAM	21.4	138.0	20.2	104.0

OUTPUT POWER FOR LTE BAND 41

Part 27 LTE Band 41						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2496-2690	QPSK	24.4	275.4	26.5	446.7
		16QAM	23.7	234.4	25.8	378.4
10		QPSK	24.4	275.4	26.6	452.9
		16QAM	23.7	234.4	25.9	385.5
15		QPSK	24.5	281.8	26.4	434.5
		16QAM	23.7	234.4	25.6	361.4
20		QPSK	24.5	281.8	26.4	434.5
		16QAM	23.7	234.4	25.7	369.8

5.2.2. UAT

OUTPUT POWER FOR LTE BAND 2

Part 24 / RSS 133 LTE Band 2						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1910	QPSK	20.9	123.0	22.4	174.6
		16QAM	20.1	102.3	21.6	142.9
3		QPSK	21.0	125.9	22.7	185.4
		16QAM	20.3	107.2	22.0	157.8
5		QPSK	21.0	125.9	22.8	192.3
		16QAM	20.4	109.6	22.0	160.0
10		QPSK	21.0	125.9	22.8	189.7
		16QAM	20.4	109.6	21.9	154.2
15		QPSK	21.0	125.9	22.8	191.9
		16QAM	20.3	107.2	22.0	157.8
20		QPSK	21.0	125.9	22.8	191.4
		16QAM	20.3	107.2	22.0	157.4

OUTPUT POWER FOR LTE BAND 4

Part 27 / RSS 139 LTE Band 4						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP(Average)	
			dBm	mW	dBm	mW
1.4	1710 - 1755	QPSK	20.9	123.0	21.6	143.5
		16QAM	20.4	109.6	20.7	116.7
3		QPSK	21.0	125.9	21.6	144.2
		16QAM	20.3	107.2	20.8	119.1
5		QPSK	21.0	125.9	21.6	144.5
		16QAM	20.3	107.2	20.8	119.4
10		QPSK	21.0	125.9	21.7	149.3
		16QAM	20.3	107.2	21.1	128.5
15		QPSK	20.9	123.0	21.4	139.3
		16QAM	20.1	102.3	20.6	114.8
20		QPSK	21.0	125.9	21.9	156.3
		16QAM	20.4	109.6	21.1	128.5

OUTPUT POWER FOR LTE BAND 5 AND 26

Part 22 /RSS 132 LTE Band 5 and 26						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
1.4	824 - 849	QPSK	22.5	177.8	19.5	88.72
		16QAM	21.8	151.4	18.8	75.51
3		QPSK	22.5	177.8	19.4	86.90
		16QAM	21.9	154.9	18.5	70.47
5		QPSK	22.5	177.8	19.6	91.83
		16QAM	21.9	154.9	18.8	75.51
10		QPSK	22.4	173.8	19.6	90.99
		16QAM	21.7	147.9	18.7	73.96

OUTPUT POWER FOR LTE BAND 7

Part 27 / RSS199 LTE Band 7						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2500 - 2570	QPSK	19.0	79.4	20.7	116.1
		16QAM	18.3	67.6	20.0	100.0
10		QPSK	19.0	79.4	20.6	113.5
		16QAM	18.4	69.2	19.9	97.7
15		QPSK	19.0	79.4	20.3	108.1
		16QAM	18.3	67.6	19.7	94.2
20		QPSK	19.0	79.4	20.4	110.4
		16QAM	18.3	67.6	20.1	101.2

OUTPUT POWER FOR LTE BAND 12

Part 27 /RSS 130 LTE Band 12						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	dBm
1.4	699-716	QPSK	23.5	223.9	18.0	63.39
		16QAM	22.7	186.2	17.2	52.84
3		QPSK	23.5	223.9	18.0	63.10
		16QAM	22.8	190.5	17.2	52.72
5		QPSK	23.5	223.9	18.1	63.83
		16QAM	22.9	195.0	17.3	53.09
10		QPSK	23.5	223.9	18.1	64.12
		16QAM	22.7	186.2	17.3	53.09

OUTPUT POWER FOR LTE BAND 13

Part 27 /RSS 130 LTE Band 13						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
5	777 - 787	QPSK	23.50	223.9	18.1	64.12
		16QAM	22.90	195.0	17.3	53.46
10		QPSK	23.50	223.9	18.7	74.30
		16QAM	22.70	186.2	17.9	61.80

OUTPUT POWER FOR LTE BAND 17

Part 27 /RSS 130 LTE Band 17						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)	
			dBm	mW	dBm	mW
5	704-716	QPSK	23.5	223.9	16.3	42.7
		16QAM	22.7	186.2	15.6	36.3
10		QPSK	23.5	223.9	16.3	42.4
		16QAM	22.7	186.2	15.6	36.0

OUTPUT POWER FOR LTE BAND 25

Part 24 / RSS 133 LTE Band 25						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
1.4	1850 - 1915	QPSK	21.0	125.9	21.5	140.9
		16QAM	20.2	104.7	20.7	117.2
3		QPSK	21.0	125.9	21.1	128.2
		16QAM	20.3	107.2	20.3	106.9
5		QPSK	21.0	125.9	21.4	137.7
		16QAM	20.5	112.2	20.6	114.3
10		QPSK	20.9	123.0	20.8	120.5
		16QAM	20.2	104.7	20.0	100.7
15		QPSK	21.0	125.9	21.3	135.2
		16QAM	20.2	104.7	20.5	112.5
20		QPSK	21.0	125.9	21.4	138.4
		16QAM	20.4	109.6	20.6	115.3

OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	814-824	QPSK	22.5	177.8	20.3	107.4	22.5	176.2
		16QAM	21.7	147.9	19.5	88.9	21.6	145.9
3		QPSK	22.5	177.8	20.6	113.5	22.7	186.2
		16QAM	21.8	149.6	19.7	94.2	21.9	154.5
5		QPSK	22.5	177.8	20.7	117.8	22.9	193.2
		16QAM	21.8	151.4	19.9	98.2	22.1	161.1
10		QPSK	22.5	177.8	20.5	113.0	22.7	185.4
		16QAM	21.7	147.9	19.7	93.8	21.9	153.8

OUTPUT POWER FOR LTE BAND 27

Part 90 LTE Band 27								
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		ERP (Average)		EIRP (Average)	
			dBm	mW	dBm	mW	dBm	mW
1.4	814-824	QPSK	22.5	177.8	22.2	166.0	24.4	272.3
		16QAM	21.6	144.5	21.8	150.0	23.9	246.0
3		QPSK	22.5	177.8	21.6	145.9	23.8	239.3
		16QAM	21.8	151.4	21.1	129.7	23.3	212.8
5		QPSK	22.5	177.8	21.6	143.9	23.7	236.0
		16QAM	21.6	144.5	21.2	132.7	23.4	217.8
10		QPSK	22.5	177.8	20.8	119.9	22.9	196.8
		16QAM	21.3	134.9	20.4	110.2	22.6	180.7

OUTPUT POWER FOR LTE BAND 30

Part 27 / RSS 195 LTE Band 30						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2305-2315	QPSK	20.0	100.0	19.7	92.7
		16QAM	19.4	87.1	18.9	78.2
10		QPSK	20.0	100.0	19.3	85.1
		16QAM	19.3	85.1	18.6	72.4

OUTPUT POWER FOR LTE BAND 41

Part 27 LTE Band 41						
Bandwidth (MHz)	Frequency Range	Modulation	Conducted (Average)		EIRP (Average)	
			dBm	mW	dBm	mW
5	2496-2690	QPSK	19.9	97.7	21.7	146.6
		16QAM	19.1	81.3	21.1	129.4
10		QPSK	19.9	97.7	21.0	127.1
		16QAM	19.1	81.3	20.7	117.8
15		QPSK	20.0	100.0	21.6	142.9
		16QAM	19.3	85.1	20.9	122.5
20		QPSK	20.0	100.0	21.5	142.2
		16QAM	19.2	83.2	20.5	111.4

5.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 0.26.02.

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

LTE BANDS	Port A (LAT) Antenna Gain (dBi)	Port B (UAT) Antenna Gain (dBi)
LTE Band 2, 1850 – 1910 MHz	0.09	0.54
LTE Band 4, 1710 – 1755 MHz	-1.59	-0.09
LTE Band 5, 824 – 849 MHz	-2.17	-2.33
LTE Band 7, 2500 – 2570 MHz	-0.80	-0.02
LTE Band 12, 699 – 716 MHz	-4.57	-4.64
LTE Band 13, 777 – 787 MHz	-4.58	-4.22
LTE Band 17, 704 – 716 MHz	-4.57	-4.64
LTE Band 25, 1850 – 1915 MHz	0.09	0.54
LTE Band 26, 814 – 824 MHz	-3.37	-3.72
LTE Band 27, 814 – 824 MHz	-3.37	-3.72
LTE Band 30, 2305 – 2315 MHz	-1.80	-1.08
LTE Band 41, 2496 – 2690 MHz	2.26	0.85

5.5. WORST-CASE CONFIGURATION AND MODE

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

The device has LTE Bands of:

Band 2, Band 4, Band 5, Band 7, Band 12, Band 13, Band 17, Band 25, Band 26, Band 27, Band 30, and Band 41.

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

We only performed the conducted test at LAT port as worst case since it has higher output powers.

LTE Band 26 (824-849MHz) is covered by LTE Band 5 because of the same frequency range, output power, and supported bandwidths.

The fundamental of the EUT was investigated in three orthogonal orientations X/Y/Z, it was determined that Flatbed orientation was worst-case orientation for cell bands without AC/DC adapter and headset; Landscape orientation was worst-case orientation for pcs bands without AC/DC adapter and headset; Flatbed orientation was worst orientation for Band 30, Band 41 and Band 7 without AC/DC adapter and headset.

5.6. DESCRIPTION OF TEST SETUP

TESTS SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
AC/DC adapter	APPLE	A1222	N/A
Laptop	Apple	MacBook Pro	730374GJAGW
DC power supply	Sorensen	XT 20-3	1318A00529

I/O CABLES (RF CONDUCTED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	3	US 115V	Un-shielded	2m	N/A
2	DC	1	DC	Un-shielded	1.4m	N/A
3	RF In/Out	1	EUT	Un-shielded	0.4m	N/A
4	RF In/Out	1	Barrel	N/A	N/A	N/A
5	RF In/Out	1	Communication Test Set	Un-shielded	1m	N/A

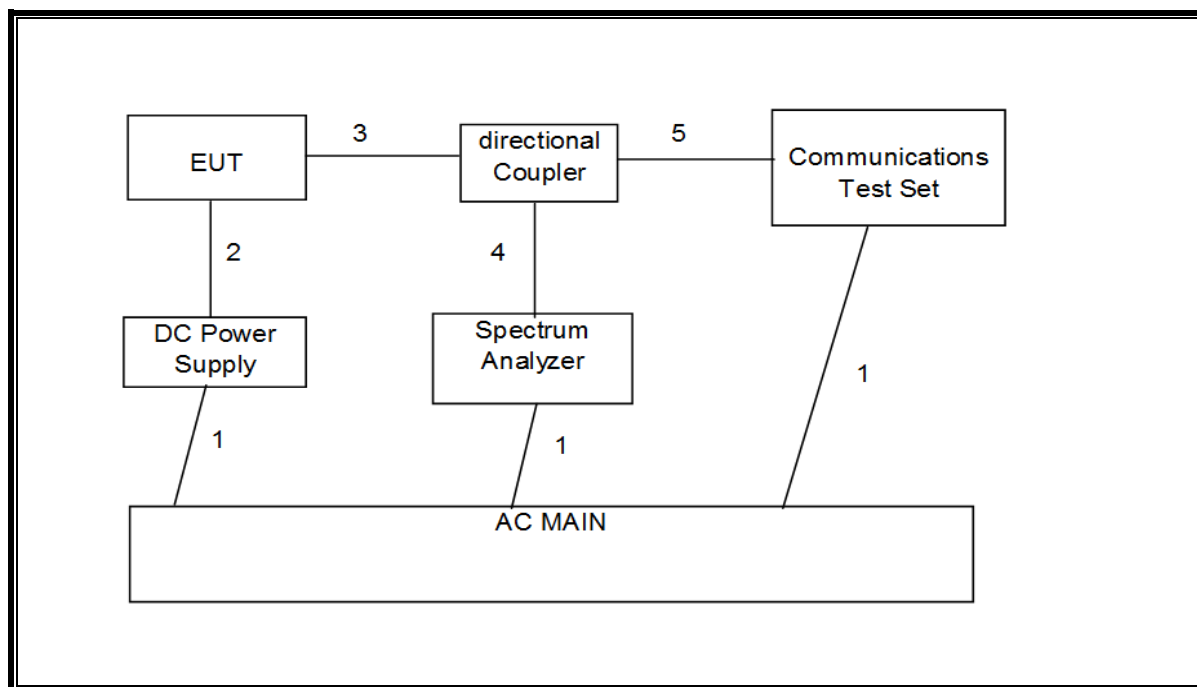
I/O CABLES (RF RADIATED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF In/Out	1	Antenna	Un-shielded	5m	NA

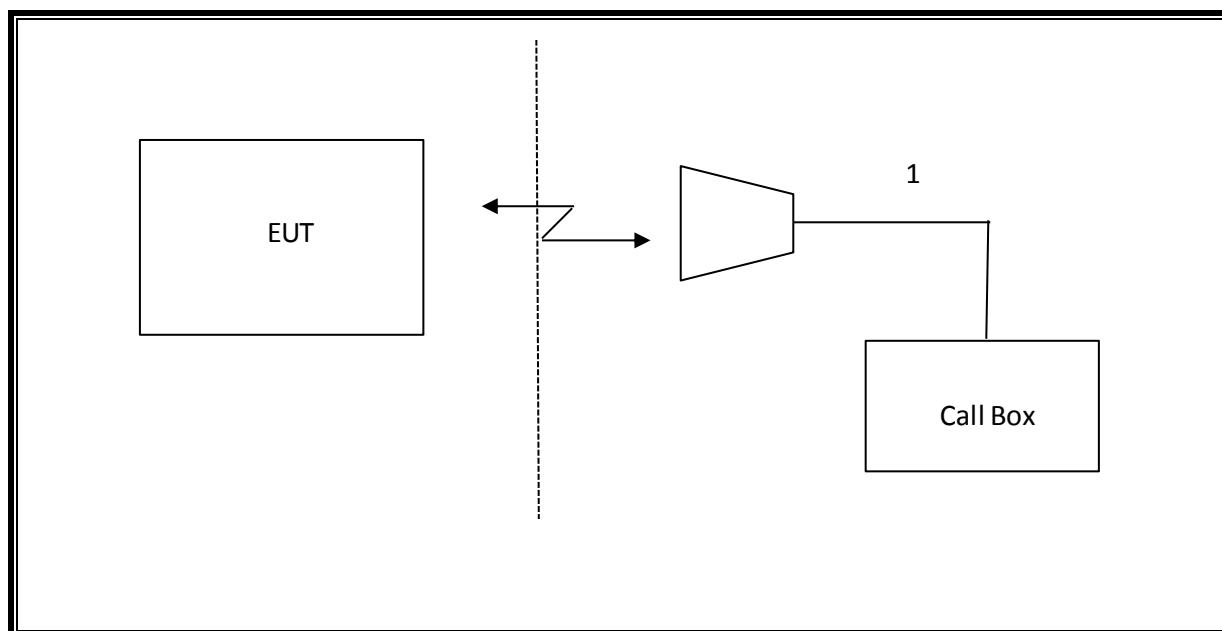
TEST SETUP

SETUP DIAGRAM FOR TESTS

CONDUCTED SETUP



RADIATED SETUP



6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	T No.	Cal Due
Spectrum Analyzer, PSA, 3Hz to 44GHz	Agilent	E4446A	T123	10/21/16
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T971	07/22/16
**Directional Coupler, 10dB SMA, 0.5GHz to 26.5GHz	Krytar	152610	T922	06/17/17
**P - Series Power Meter	Keysight	N1911A	T1245	05/03/17
**Wideband Power Sensor 50 MHz - 18 GHz	Keysight	N1921A	T1228	06/20/17
*Power Meter, P-series single channel	Keysight	N1911A	T1255	06/08/16
*Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	T1226	05/06/16
Spectrum Analyzer, PSA, 3Hz to 26.5GHz	Agilent	E4440A	T200	09/01/16
**Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T954	05/03/17
Directional Coupler, 10dB SMA, 0.5GHz to 26.5GHz	Krytar	152613	T1538	04/11/17
Wireless Communications Test Set, 8960 Series 10	Agilent	E5515C	T211	11/18/16
Antenna, Horn 1-18GHz	Emco	3115	T59	11/18/16
**Tuned Dipole, 400 - 1000MHz	ETS Lindgren	3121C DB4	T273	05/16/17
**Filter, Highpass 4.0GHz	Micro-Tronics	HPM13351	T1239	06/24/17
**Filter, HPF 1.2GHz	Wainwright Instruments	WHKX1.2/15G-6ST	T1182	05/31/17
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	09/14/16
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T1466	03/09/17
Directional Coupler, 10dB SMA, 0.5GHz to 26.5GHz	Krytar	152610	T1161	04/12/17
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T712	01/12/17
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T408	10/27/16
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	T1113	11/08/16
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T259	10/22/16
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T243	09/24/16
**Spectrum Analyzer, PXA, 3Hz to 44GHz	keysight	N9030A	T905	06/21/17
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T1526	04/15/17
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T136	03/14/17
**Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T900	05/03/17
Spectrum Analyzer, PXA, 3Hz to 44GHz	keysight	N9030A	PRE0126763	12/09/16
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T120	04/05/17
* Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826	T447	05/18/16
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T407	04/04/17
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	06/20/17

NOTE: * testing is completed before equipment calibration expiration date.

**Equipment was set to test after May 2016 or June 2016.

7. RF POWER OUTPUT VERIFICATION

LTE Measurement Procedure:

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

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

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

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

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

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

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

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

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

7.1. LAT

7.1.1. LTE BAND 2

ID:	50820	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	18607	1850.7	QPSK	1	0	24.8	28.4
				1	2	24.7	28.5
				1	5	24.8	28.4
				3	0	24.7	28.9
				3	1	24.7	28.7
				3	2	24.7	28.8
			16QAM	6	0	23.7	29.2
				1	0	24.0	28.4
				1	2	23.9	28.4
				1	5	24.0	28.4
				3	0	23.9	28.9
				3	1	23.8	29.0
				3	2	23.8	28.9
				6	0	22.9	29.1
1.4	18900	1880.0	QPSK	1	0	24.8	28.5
				1	2	24.8	28.5
				1	5	24.8	28.6
				3	0	24.8	28.8
				3	1	24.8	28.8
				3	2	24.8	28.9
			16QAM	6	0	23.8	29.0
				1	0	23.8	28.1
				1	2	23.8	28.1
				1	5	23.8	28.2
				3	0	23.7	28.5
				3	1	23.7	28.4
				3	2	23.6	28.5
				6	0	22.4	28.5
1.4	19193	1909.3	QPSK	1	0	24.9	28.4
				1	2	24.8	28.4
				1	5	24.9	28.4
				3	0	24.7	28.7
				3	1	24.7	28.7
				3	2	24.7	28.5
			16QAM	6	0	23.7	29.2
				1	0	24.0	28.2
				1	2	23.9	28.2
				1	5	23.9	28.2
				3	0	23.6	28.5
				3	1	23.6	28.9
				3	2	23.6	28.8
				6	0	22.7	28.7

OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	18615	1851.5	QPSK	1	0	24.7	28.6
				1	7	24.7	28.6
				1	14	24.8	28.6
				8	0	24.0	29.0
				8	4	24.0	29.0
				8	7	23.9	28.9
				15	0	24.0	29.4
			16QAM	1	0	23.9	28.2
				1	7	23.8	28.2
				1	14	23.9	28.3
				8	0	22.6	28.5
				8	4	22.5	28.4
				8	7	22.5	28.4
				15	0	22.4	28.5
3.0	18900	1880.0	QPSK	1	0	24.8	28.4
				1	7	24.8	28.4
				1	14	24.8	28.5
				8	0	23.9	28.6
				8	4	23.9	28.4
				8	7	23.8	28.4
				15	0	23.8	29.1
			16QAM	1	0	23.9	28.3
				1	7	23.9	28.3
				1	14	23.9	28.4
				8	0	22.8	28.5
				8	4	22.8	28.3
				8	7	22.7	28.4
				15	0	22.7	28.7
3.0	19185	1908.5	QPSK	1	0	24.9	28.5
				1	7	24.9	28.4
				1	14	24.8	28.5
				8	0	24.0	29.0
				8	4	24.0	28.8
				8	7	24.0	28.8
				15	0	24.0	29.5
			16QAM	1	0	24.1	28.6
				1	7	24.1	28.5
				1	14	24.0	28.5
				8	0	23.0	28.8
				8	4	23.0	28.5
				8	7	23.0	28.6
				15	0	23.0	29.5

OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak(dBm)
				Size	Offset		
5.0	18625	1852.5	QPSK	1	0	24.6	28.3
				1	12	24.6	28.3
				1	24	24.7	28.4
				12	0	23.8	29.1
				12	6	23.9	28.9
				12	11	23.8	29.1
				25	0	23.7	29.2
			16QAM	1	0	23.8	28.1
				1	12	23.8	28.2
				1	24	23.9	28.1
				12	0	22.8	28.9
				12	6	22.7	28.6
				12	11	22.9	28.8
				25	0	22.7	29.1
5.0	18900	1880.0	QPSK	1	0	24.9	28.5
				1	12	24.8	28.4
				1	24	24.9	28.5
				12	0	24.2	29.0
				12	6	24.1	28.8
				12	11	24.1	28.9
				25	0	24.0	29.2
			16QAM	1	0	23.9	28.0
				1	12	23.9	28.0
				1	24	24.0	28.2
				12	0	22.8	28.3
				12	6	22.9	28.2
				12	11	22.7	28.4
				25	0	22.5	28.8
5.0	19175	1907.5	QPSK	1	0	24.7	28.4
				1	12	24.7	28.2
				1	24	24.6	28.2
				12	0	23.9	28.9
				12	6	23.9	28.8
				12	11	23.9	28.7
				25	0	23.8	29.3
			16QAM	1	0	23.8	27.8
				1	12	23.8	27.7
				1	24	23.7	27.7
				12	0	22.7	28.4
				12	6	22.8	28.2
				12	11	22.7	28.2
				25	0	22.6	28.8

OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	18650	1855.0	QPSK	1	0	24.7	28.4
				1	24	24.7	28.4
				1	49	24.9	28.5
				25	0	23.8	28.9
				25	12	23.8	28.8
				25	24	23.8	28.8
				50	0	23.8	29.4
			16QAM	1	0	23.7	28.1
				1	24	23.8	28.2
				1	49	23.8	28.2
				25	0	22.4	28.6
				25	12	22.5	28.3
				25	24	22.5	28.4
				50	0	22.5	29.1
10.0	18900	1880.0	QPSK	1	0	24.8	28.3
				1	24	24.8	28.3
				1	49	24.8	28.5
				25	0	23.7	28.5
				25	12	23.8	28.4
				25	24	23.8	28.7
				50	0	23.7	29.4
			16QAM	1	0	23.8	28.0
				1	24	23.8	28.0
				1	49	23.9	28.2
				25	0	22.5	28.2
				25	12	22.6	28.1
				25	24	22.6	28.4
				50	0	22.5	28.9
10.0	19150	1905.0	QPSK	1	0	25.0	28.5
				1	24	25.0	28.3
				1	49	24.8	28.2
				25	0	23.6	28.8
				25	12	23.8	28.7
				25	24	23.8	28.7
				50	0	23.7	29.4
			16QAM	1	0	24.1	28.8
				1	24	24.1	28.7
				1	49	24.1	28.5
				25	0	23.0	29.1
				25	12	23.1	28.8
				25	24	23.1	28.8
				50	0	23.0	29.5

OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	18675	1857.5	QPSK	1	0	24.6	28.2
				1	37	24.7	28.3
				1	74	24.7	28.4
				36	0	23.5	28.7
				36	16	23.5	28.5
				36	35	23.5	28.5
				75	0	23.6	29.3
			16-QAM	1	0	23.6	28.1
				1	37	23.7	28.2
				1	74	23.7	28.3
				36	0	22.5	28.6
				36	16	22.5	28.3
				36	35	22.5	28.3
				75	0	22.6	29.4
15.0	18900	1880.0	QPSK	1	0	24.8	28.2
				1	37	24.7	28.2
				1	74	24.8	28.3
				36	0	23.5	28.5
				36	16	23.6	28.3
				36	35	23.6	28.7
				75	0	23.5	29.3
			16-QAM	1	0	23.7	28.2
				1	37	23.6	28.1
				1	74	23.8	28.3
				36	0	22.4	28.2
				36	16	22.5	28.1
				36	35	22.5	28.5
				75	0	22.4	28.9
15.0	19125	1902.5	QPSK	1	0	24.9	28.7
				1	37	24.9	28.5
				1	74	24.8	28.2
				36	0	23.7	29.0
				36	16	23.7	29.0
				36	35	23.8	29.1
				75	0	23.8	29.7
			16-QAM	1	0	24.0	28.2
				1	37	23.9	28.1
				1	74	23.8	27.8
				36	0	22.5	28.6
				36	16	22.5	28.6
				36	35	22.5	28.6
				75	0	22.5	29.2

OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	18700	1860.0	QPSK	1	0	24.7	28.2
				1	49	24.8	28.3
				1	99	24.8	28.5
				50	0	23.8	29.1
				50	24	23.8	28.6
				50	49	23.7	28.9
				100	0	23.8	29.5
			16-QAM	1	0	23.7	28.1
				1	49	23.8	28.3
				1	99	23.8	28.4
				50	0	22.7	28.8
				50	24	22.6	28.5
				50	49	22.5	28.6
				100	0	22.7	29.4
20.0	18900	1880.0	QPSK	1	0	24.8	28.4
				1	49	24.7	28.2
				1	99	24.8	28.5
				50	0	23.7	28.7
				50	24	23.7	28.7
				50	49	23.8	29.0
				100	0	23.7	29.7
			16-QAM	1	0	23.8	28.1
				1	49	23.8	27.9
				1	99	23.9	28.2
				50	0	22.4	28.2
				50	24	22.4	28.1
				50	49	22.4	28.4
				100	0	22.4	29.1
20.0	19100	1900.0	QPSK	1	0	24.9	28.6
				1	49	24.6	28.4
				1	99	24.7	28.0
				50	0	23.6	28.8
				50	24	23.6	28.8
				50	49	23.7	29.1
				100	0	23.6	29.6
			16-QAM	1	0	23.9	28.6
				1	49	23.7	28.4
				1	99	23.7	28.0
				50	0	22.5	28.6
				50	24	22.5	28.7
				50	49	22.7	28.9
				100	0	22.6	29.3

7.1.2. LTE BAND 4

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	19957	1710.7	QPSK	1	0	24.8	28.1
				1	2	24.8	28.4
				1	5	24.8	28.1
				3	0	24.6	28.6
				3	1	24.6	28.5
				3	2	24.6	28.4
			16QAM	6	0	23.6	28.8
				1	0	23.8	28.0
				1	2	23.8	28.2
				1	5	23.8	28.1
				3	0	23.7	28.5
				3	1	23.7	28.6
				3	2	23.7	28.5
				6	0	22.6	28.5
1.4	20175	1732.5	QPSK	1	0	24.7	28.6
				1	2	24.7	28.5
				1	5	24.7	28.4
				3	0	24.7	28.9
				3	1	24.7	28.8
				3	2	24.7	28.9
			16QAM	6	0	23.8	29.2
				1	0	24.0	28.3
				1	2	24.0	28.2
				1	5	24.0	28.2
				3	0	23.8	28.6
				3	1	23.7	28.6
				3	2	23.7	28.7
				6	0	22.6	28.8
1.4	20393	1754.3	QPSK	1	0	24.7	28.6
				1	2	24.7	28.6
				1	5	24.7	28.6
				3	0	24.7	28.8
				3	1	24.7	28.7
				3	2	24.7	28.7
			16QAM	6	0	23.7	29.1
				1	0	24.2	28.7
				1	2	24.2	28.7
				1	5	24.2	28.7
				3	0	24.0	28.9
				3	1	24.0	28.9
				3	2	23.9	29.1
				6	0	23.0	28.9

OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	19965	1711.5	QPSK	1	0	24.9	28.5
				1	7	24.8	28.4
				1	14	24.9	28.5
				8	0	24.0	28.8
				8	4	24.0	28.7
				8	7	23.9	28.6
				15	0	23.9	29.3
			16QAM	1	0	24.4	28.7
				1	7	24.4	28.8
				1	14	24.4	28.6
				8	0	23.1	28.9
				8	4	23.1	28.7
				8	7	23.1	28.6
				15	0	23.0	29.1
3.0	20175	1732.5	QPSK	1	0	24.9	28.8
				1	7	25.0	28.6
				1	14	24.9	28.5
				8	0	23.8	29.1
				8	4	23.9	29.0
				8	7	23.7	28.8
				15	0	23.7	29.1
			16QAM	1	0	24.2	28.9
				1	7	24.2	28.7
				1	14	24.1	28.6
				8	0	23.1	29.2
				8	4	23.1	28.9
				8	7	23.1	28.9
				15	0	23.0	29.1
3.0	20385	1753.5	QPSK	1	0	24.9	28.8
				1	7	24.9	28.8
				1	14	24.9	28.8
				8	0	23.9	29.0
				8	4	24.0	28.9
				8	7	24.0	28.9
				15	0	24.0	29.4
			16QAM	1	0	24.3	28.9
				1	7	24.5	28.8
				1	14	24.4	29.2
				8	0	23.1	29.2
				8	4	23.1	29.0
				8	7	23.1	29.1
				15	0	23.0	29.4

OUTPUT POWER FOR LTE BAND 4 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	19975	1712.5	QPSK	1	0	24.9	28.3
				1	12	24.9	28.2
				1	24	24.9	28.3
				12	0	23.8	29.0
				12	6	23.9	28.8
				12	11	23.7	28.8
				25	0	23.9	29.3
			16QAM	1	0	23.9	28.1
				1	12	23.9	28.1
				1	24	24.0	28.3
				12	0	23.0	28.9
				12	6	22.9	28.7
				12	11	23.0	28.8
				25	0	22.9	29.1
5.0	20175	1732.5	QPSK	1	0	24.8	28.5
				1	12	24.7	28.2
				1	24	24.7	28.0
				12	0	23.7	29.0
				12	6	23.8	28.7
				12	11	23.8	28.7
				25	0	23.8	29.0
			16QAM	1	0	24.3	28.7
				1	12	24.2	28.3
				1	24	24.2	28.3
				12	0	23.1	28.9
				12	6	23.2	28.7
				12	11	23.0	28.6
				25	0	22.9	29.2
5.0	20375	1752.5	QPSK	1	0	24.8	28.3
				1	12	24.7	28.4
				1	24	24.8	28.5
				12	0	23.8	28.9
				12	6	23.9	28.7
				12	11	23.8	28.9
				25	0	23.8	29.4
			16QAM	1	0	24.2	28.3
				1	12	24.1	28.4
				1	24	24.2	28.5
				12	0	23.1	28.8
				12	6	23.0	28.7
				12	11	23.1	28.8
				25	0	23.0	29.2

OUTPUT POWER FOR LTE BAND 4 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20000	1715.0	QPSK	1	0	24.8	28.3
				1	24	24.8	28.4
				1	49	24.9	28.6
				25	0	23.8	28.8
				25	12	23.9	28.8
				25	24	23.9	28.9
				50	0	23.9	29.4
			16QAM	1	0	24.0	28.3
				1	24	24.0	28.4
				1	49	24.0	28.7
				25	0	22.9	28.8
				25	12	22.9	28.7
				25	24	22.9	28.9
				50	0	23.0	29.3
10.0	20175	1732.5	QPSK	1	0	24.9	28.7
				1	24	24.8	28.3
				1	49	24.6	27.9
				25	0	23.8	28.9
				25	12	23.7	28.6
				25	24	23.7	28.6
				50	0	23.8	29.2
			16QAM	1	0	24.3	29.0
				1	24	24.1	28.5
				1	49	24.0	28.1
				25	0	22.9	29.0
				25	12	22.8	28.6
				25	24	22.8	28.6
				50	0	22.7	29.1
10.0	20350	1750.0	QPSK	1	0	24.8	28.0
				1	24	24.9	28.4
				1	49	25.0	28.6
				25	0	23.7	28.6
				25	12	23.8	28.6
				25	24	23.7	28.7
				50	0	23.8	29.4
			16QAM	1	0	24.1	28.2
				1	24	24.2	28.4
				1	49	24.3	28.5
				25	0	22.9	28.7
				25	12	23.0	28.6
				25	24	23.0	28.7
				50	0	22.9	29.3

OUTPUT POWER FOR LTE BAND 4 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	20025	1717.5	QPSK	1	0	24.5	28.1
				1	37	24.6	28.4
				1	74	24.5	28.5
				36	0	23.6	28.8
				36	16	23.7	28.6
				36	35	23.6	28.8
				75	0	23.6	29.6
			16-QAM	1	0	23.8	28.1
				1	37	23.9	28.4
				1	74	23.8	28.6
				36	0	22.7	28.8
				36	16	22.7	28.6
				36	35	22.7	28.8
				75	0	22.8	29.5
15.0	20175	1732.5	QPSK	1	0	24.9	28.7
				1	37	24.6	28.2
				1	74	24.5	27.7
				36	0	23.6	28.8
				36	16	23.5	28.6
				36	35	23.5	28.5
				75	0	23.6	29.4
			16-QAM	1	0	24.0	28.7
				1	37	23.8	28.2
				1	74	23.7	27.6
				36	0	22.7	28.9
				36	16	22.7	28.5
				36	35	22.6	28.5
				75	0	22.6	29.3
15.0	20325	1747.5	QPSK	1	0	24.8	27.7
				1	37	24.9	28.0
				1	74	25.0	28.4
				36	0	23.4	28.4
				36	16	23.5	28.4
				36	35	23.6	28.6
				75	0	23.6	29.3
			16-QAM	1	0	23.7	27.7
				1	37	23.9	28.0
				1	74	24.0	28.4
				36	0	22.5	28.2
				36	16	22.6	28.3
				36	35	22.6	28.4
				75	0	22.6	29.5

OUTPUT POWER FOR LTE BAND 4 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	20050	1720.0	QPSK	1	0	24.7	28.1
				1	49	24.7	28.5
				1	99	24.6	28.4
				50	0	23.7	28.9
				50	24	23.6	28.7
				50	49	23.6	28.8
				100	0	23.6	29.3
			16-QAM	1	0	24.1	28.2
				1	49	24.2	28.6
				1	99	24.2	28.6
				50	0	22.7	28.8
				50	24	22.7	28.7
				50	49	22.7	28.7
				100	0	22.7	29.4
20.0	20175	1732.5	QPSK	1	0	25.0	28.7
				1	49	24.7	28.2
				1	99	24.8	27.6
				50	0	23.6	28.7
				50	24	23.6	28.6
				50	49	23.5	28.5
				100	0	23.6	29.4
			16-QAM	1	0	24.3	28.7
				1	49	24.1	28.3
				1	99	23.9	27.6
				50	0	22.6	28.7
				50	24	22.5	28.6
				50	49	22.5	28.5
				100	0	22.6	29.4
20.0	20300	1745.0	QPSK	1	0	24.6	27.8
				1	49	24.4	27.8
				1	99	24.7	28.4
				50	0	23.5	28.5
				50	24	23.5	28.3
				50	49	23.6	28.7
				100	0	23.5	29.5
			16-QAM	1	0	24.0	27.8
				1	49	23.8	27.8
				1	99	24.0	28.4
				50	0	22.6	28.5
				50	24	22.5	28.3
				50	49	22.6	28.6
				100	0	22.6	29.4

7.1.3. LTE BAND 5

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	20407	824.7	QPSK	1	0	23.9	27.8
				1	2	23.8	27.7
				1	5	24.0	27.5
				3	0	23.8	28.0
				3	1	23.8	27.8
				3	2	23.8	27.9
			16QAM	6	0	22.8	28.2
				1	0	23.0	27.7
				1	2	23.0	27.6
				1	5	23.1	27.6
				3	0	22.9	28.1
				3	1	22.9	28.1
				3	2	22.9	28.0
				6	0	21.9	27.9
1.4	20525	836.5	QPSK	1	0	23.8	28.1
				1	2	23.9	28.1
				1	5	23.8	28.0
				3	0	23.9	28.3
				3	1	23.7	28.2
				3	2	23.9	28.1
			16QAM	6	0	22.9	28.2
				1	0	23.3	28.0
				1	2	23.3	28.0
				1	5	23.3	28.0
				3	0	23.1	28.2
				3	1	23.0	28.3
				3	2	23.0	28.2
				6	0	21.9	28.3
1.4	20643	848.3	QPSK	1	0	23.7	27.7
				1	2	23.8	27.5
				1	5	23.6	27.3
				3	0	23.7	27.9
				3	1	23.7	27.8
				3	2	23.7	27.6
			16QAM	6	0	22.8	28.1
				1	0	23.2	27.8
				1	2	23.1	27.6
				1	5	23.2	27.3
				3	0	22.9	28.0
				3	1	23.0	28.0
				3	2	22.8	27.9
				6	0	21.9	27.7

OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	20415	825.5	QPSK	1	0	23.8	27.8
				1	7	23.9	27.6
				1	14	23.8	27.6
				8	0	22.9	27.9
				8	4	23.0	27.7
				8	7	23.0	27.7
				15	0	23.0	28.4
			16QAM	1	0	23.4	27.9
				1	7	23.4	27.6
				1	14	23.4	27.6
				8	0	22.0	28.0
				8	4	22.1	27.7
				8	7	22.1	27.7
				15	0	22.0	28.2
3.0	20525	836.5	QPSK	1	0	23.9	28.1
				1	7	23.9	28.0
				1	14	23.9	28.1
				8	0	23.0	28.0
				8	4	23.0	28.0
				8	7	23.0	27.9
				15	0	23.0	28.5
			16QAM	1	0	23.4	28.1
				1	7	23.4	28.0
				1	14	23.3	28.1
				8	0	22.0	28.1
				8	4	22.0	28.0
				8	7	22.0	27.9
				15	0	22.1	28.5
3.0	20635	847.5	QPSK	1	0	23.8	27.8
				1	7	23.8	27.8
				1	14	23.7	27.5
				8	0	23.0	28.2
				8	4	22.9	28.1
				8	7	22.9	28.0
				15	0	22.9	28.5
			16QAM	1	0	23.2	27.8
				1	7	23.2	27.9
				1	14	23.1	27.4
				8	0	21.9	28.0
				8	4	21.8	27.9
				8	7	21.8	27.8
				15	0	21.9	28.3

OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	20425	826.5	QPSK	1	0	23.8	27.6
				1	12	23.8	27.4
				1	24	23.7	27.5
				12	0	23.0	27.8
				12	6	23.0	27.5
				12	11	23.0	27.7
				25	0	23.0	28.3
			16QAM	1	0	23.0	27.6
				1	12	23.0	27.4
				1	24	22.9	27.4
				12	0	22.1	27.8
				12	6	22.1	27.4
				12	11	22.1	27.5
				25	0	22.1	28.2
5.0	20525	836.5	QPSK	1	0	24.0	27.9
				1	12	23.9	27.8
				1	24	23.9	27.8
				12	0	23.0	28.1
				12	6	23.0	28.0
				12	11	22.9	27.9
				25	0	23.0	28.3
			16QAM	1	0	23.2	27.8
				1	12	23.3	27.8
				1	24	23.3	27.7
				12	0	22.2	28.0
				12	6	22.1	27.9
				12	11	22.1	27.8
				25	0	22.1	28.2
5.0	20625	846.5	QPSK	1	0	23.8	27.2
				1	12	23.8	27.6
				1	24	23.7	27.2
				12	0	23.0	27.8
				12	6	23.0	27.9
				12	11	22.9	28.0
				25	0	23.0	28.3
			16QAM	1	0	23.3	27.3
				1	12	23.4	27.6
				1	24	23.3	27.2
				12	0	22.0	27.7
				12	6	22.0	27.8
				12	11	21.9	27.9
				25	0	22.0	28.3

OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20450	829.0	QPSK	1	0	23.7	27.5
				1	24	23.6	27.3
				1	49	23.8	27.7
				25	0	22.8	27.7
				25	12	22.8	27.6
				25	24	22.7	27.8
				50	0	22.8	28.3
			16QAM	1	0	23.2	27.5
				1	24	23.0	27.6
				1	49	23.2	27.8
				25	0	21.9	27.7
				25	12	21.8	27.6
				25	24	21.7	27.8
				50	0	21.8	28.4
10.0	20525	836.5	QPSK	1	0	23.7	27.6
				1	24	23.7	27.8
				1	49	23.8	27.2
				25	0	22.9	28.0
				25	12	22.8	27.8
				25	24	22.8	27.7
				50	0	22.9	28.1
			16QAM	1	0	23.1	27.5
				1	24	23.2	27.8
				1	49	23.1	27.2
				25	0	21.9	27.9
				25	12	21.9	27.7
				25	24	21.9	27.6
				50	0	21.9	28.0
10.0	20600	844.0	QPSK	1	0	23.9	27.5
				1	24	23.8	27.2
				1	49	23.8	27.2
				25	0	22.8	27.7
				25	12	22.8	27.6
				25	24	22.9	28.0
				50	0	22.9	28.5
			16QAM	1	0	22.9	27.5
				1	24	22.7	27.4
				1	49	22.8	27.2
				25	0	22.0	27.6
				25	12	21.9	27.6
				25	24	21.9	28.0
				50	0	21.9	28.3

7.1.4. LTE BAND 7

ID:	38806	Date:	6/24/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	20775	2502.5	QPSK	1	0	24.4	27.5
				1	12	24.5	27.7
				1	24	24.3	28.0
				12	0	23.3	27.8
				12	6	23.4	27.8
				12	11	23.5	27.9
				25	0	23.4	28.7
			16QAM	1	0	23.2	27.4
				1	12	23.3	27.7
				1	24	23.5	28.0
				12	0	22.4	27.7
				12	6	22.5	27.7
				12	11	22.6	27.9
				25	0	22.5	28.6
5.0	21100	2535.0	QPSK	1	0	24.6	28.2
				1	12	24.6	28.1
				1	24	24.7	28.3
				12	0	23.7	28.5
				12	6	23.7	28.3
				12	11	23.7	28.5
				25	0	23.7	28.9
			16QAM	1	0	23.8	28.1
				1	12	23.9	28.1
				1	24	23.7	28.3
				12	0	22.8	28.4
				12	6	22.8	28.2
				12	11	22.8	28.4
				25	0	22.8	28.8
5.0	21425	2567.5	QPSK	1	0	24.5	28.3
				1	12	24.4	28.5
				1	24	24.5	28.2
				12	0	23.7	28.8
				12	6	23.7	28.8
				12	11	23.6	28.7
				25	0	23.6	29.0
			16QAM	1	0	23.5	28.5
				1	12	23.4	28.6
				1	24	23.3	28.2
				12	0	22.8	28.4
				12	6	22.8	28.5
				12	11	22.7	28.5
				25	0	22.8	27.0

OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20800	2505.0	QPSK	1	0	24.4	27.3
				1	24	24.3	27.8
				1	49	24.5	28.3
				25	0	23.2	27.7
				25	12	23.2	27.7
				25	24	23.3	28.2
				50	0	23.1	28.6
			16QAM	1	0	23.6	27.1
				1	24	23.7	27.7
				1	49	23.7	28.0
				25	0	22.2	27.5
				25	12	22.2	27.6
				25	24	22.3	28.0
				50	0	22.2	28.5
10.0	21100	2535.0	QPSK	1	0	24.3	27.7
				1	24	24.4	27.9
				1	49	24.4	28.2
				25	0	23.3	28.2
				25	12	23.4	28.1
				25	24	23.4	28.5
				50	0	23.3	29.0
			16QAM	1	0	23.8	27.9
				1	24	23.9	28.0
				1	49	23.8	28.4
				25	0	22.4	28.3
				25	12	22.4	28.0
				25	24	22.4	28.4
				50	0	22.3	28.8
10.0	21400	2565.0	QPSK	1	0	24.3	27.7
				1	24	24.3	28.0
				1	49	24.4	27.8
				25	0	23.3	28.4
				25	12	23.3	28.3
				25	24	23.3	28.5
				50	0	23.3	28.8
			16QAM	1	0	23.5	28.0
				1	24	23.7	28.2
				1	49	23.6	28.1
				25	0	22.4	28.4
				25	12	22.4	28.2
				25	24	22.4	28.5
				50	0	22.3	28.8

OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	20825	2507.5	QPSK	1	0	24.2	27.5
				1	37	24.7	28.4
				1	74	24.5	28.4
				36	0	23.3	28.2
				36	16	23.4	28.4
				36	35	23.4	28.6
				75	0	23.5	29.3
			16-QAM	1	0	23.6	27.4
				1	37	23.8	28.5
				1	74	23.7	28.4
				36	0	22.6	28.0
				36	16	22.5	28.2
				36	35	22.5	28.5
				75	0	22.5	29.1
15.0	21100	2535.0	QPSK	1	0	24.4	28.0
				1	37	24.6	28.1
				1	74	24.6	28.4
				36	0	23.4	28.5
				36	16	23.5	28.3
				36	35	23.5	28.7
				75	0	23.4	29.4
			16-QAM	1	0	23.7	27.9
				1	37	23.9	28.1
				1	74	23.9	28.5
				36	0	22.5	28.4
				36	16	22.6	28.3
				36	35	22.6	28.7
				75	0	22.5	29.1
15.0	21375	2562.5	QPSK	1	0	24.5	27.8
				1	37	24.7	28.2
				1	74	24.4	28.1
				36	0	23.5	28.5
				36	16	23.5	28.5
				36	35	23.5	28.7
				75	0	23.5	29.2
			16-QAM	1	0	23.5	27.8
				1	37	23.7	28.2
				1	74	23.5	28.2
				36	0	22.6	28.4
				36	16	22.6	28.3
				36	35	22.5	28.5
				75	0	22.5	29.3

OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	20850	2510.0	QPSK	1	0	24.6	28.1
				1	49	24.7	29.1
				1	99	24.7	28.7
				50	0	24.1	29.0
				50	24	24.1	29.1
				50	49	24.0	29.5
				100	0	24.1	29.9
			16-QAM	1	0	23.9	28.1
				1	49	24.0	29.2
				1	99	23.8	28.7
				50	0	23.1	28.9
				50	24	23.1	29.1
				50	49	23.0	29.4
				100	0	23.0	29.9
20.0	21100	2535.0	QPSK	1	0	24.5	28.6
				1	49	24.6	28.8
				1	99	24.7	29.1
				50	0	23.8	29.2
				50	24	23.9	29.1
				50	49	23.9	29.6
				100	0	24.0	30.1
			16-QAM	1	0	23.9	28.6
				1	49	24.0	28.8
				1	99	24.0	29.2
				50	0	23.1	29.1
				50	24	23.2	29.0
				50	49	23.2	29.4
				100	0	23.2	30.0
20.0	21350	2560.0	QPSK	1	0	24.5	28.6
				1	49	24.7	28.6
				1	99	24.6	29.0
				50	0	24.0	29.1
				50	24	23.9	29.0
				50	49	23.8	29.4
				100	0	23.8	30.0
			16-QAM	1	0	23.9	28.6
				1	49	24.0	28.6
				1	99	23.8	28.8
				50	0	22.9	29.0
				50	24	23.0	29.0
				50	49	23.0	29.4
				100	0	22.9	30.0

7.1.5. LTE BAND 12

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 12 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	23017	699.7	QPSK	1	0	24.8	28.7
				1	2	24.8	28.7
				1	5	24.8	28.8
				3	0	24.8	28.9
				3	1	24.8	28.9
				3	2	24.8	28.9
				6	0	23.8	29.1
			16QAM	1	0	24.0	28.7
				1	2	23.9	28.6
				1	5	24.0	28.8
				3	0	23.9	29.1
				3	1	23.9	29.0
				3	2	24.0	29.0
				6	0	22.8	29.1
1.4	23095	707.5	QPSK	1	0	24.8	28.7
				1	2	24.7	28.7
				1	5	24.9	28.5
				3	0	24.7	29.0
				3	1	24.7	28.9
				3	2	24.7	28.8
				6	0	23.8	29.2
			16QAM	1	0	24.2	28.7
				1	2	24.2	28.9
				1	5	24.1	28.5
				3	0	23.9	29.0
				3	1	23.9	29.0
				3	2	23.9	29.0
				6	0	22.8	29.3
1.4	23173	715.3	QPSK	1	0	25.0	28.8
				1	2	24.9	28.6
				1	5	25.0	28.6
				3	0	24.9	29.0
				3	1	24.8	29.1
				3	2	24.9	28.9
				6	0	23.9	29.3
			16QAM	1	0	24.2	28.8
				1	2	24.2	28.8
				1	5	24.2	28.7
				3	0	23.9	29.0
				3	1	23.9	29.2
				3	2	23.9	29.3
				6	0	23.0	29.2

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	23025	700.5	QPSK	1	0	24.7	28.7
				1	7	24.8	28.7
				1	14	24.8	28.8
				8	0	23.9	29.0
				8	4	23.9	28.9
				8	7	23.9	28.8
				15	0	23.9	29.3
			16QAM	1	0	24.1	28.8
				1	7	24.2	28.7
				1	14	24.1	28.8
				8	0	23.0	28.8
				8	4	23.0	28.8
				8	7	23.0	28.7
				15	0	22.9	29.4
3.0	23095	707.5	QPSK	1	0	24.8	28.8
				1	7	24.8	28.7
				1	14	24.7	28.5
				8	0	23.9	29.2
				8	4	23.9	28.9
				8	7	23.9	29.0
				15	0	23.9	29.3
			16QAM	1	0	24.2	28.8
				1	7	24.1	28.8
				1	14	24.1	28.6
				8	0	22.9	29.0
				8	4	22.9	28.8
				8	7	22.9	28.9
				15	0	22.9	29.3
3.0	23165	714.5	QPSK	1	0	24.9	28.8
				1	7	25.0	28.8
				1	14	24.8	28.7
				8	0	24.0	29.1
				8	4	24.0	28.9
				8	7	24.0	29.0
				15	0	24.0	29.6
			16QAM	1	0	24.2	28.9
				1	7	24.2	28.9
				1	14	24.2	28.7
				8	0	23.2	29.1
				8	4	23.2	28.9
				8	7	23.2	29.0
				15	0	23.1	29.4

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23035	701.5	QPSK	1	0	24.9	28.7
				1	12	25.0	28.7
				1	24	25.0	28.8
				12	0	24.1	29.2
				12	6	24.1	28.7
				12	11	24.1	29.0
				25	0	24.1	29.2
			16QAM	1	0	24.2	28.7
				1	12	24.2	28.7
				1	24	24.2	28.9
				12	0	23.2	29.2
				12	6	23.2	28.7
				12	11	23.2	28.9
				25	0	23.1	29.5
5.0	23095	707.5	QPSK	1	0	24.9	28.7
				1	12	24.8	28.5
				1	24	24.8	28.4
				12	0	24.0	29.2
				12	6	24.0	29.0
				12	11	24.0	29.0
				25	0	24.0	29.5
			16QAM	1	0	24.1	28.9
				1	12	24.2	28.7
				1	24	24.0	28.5
				12	0	23.1	29.0
				12	6	23.1	29.0
				12	11	23.1	28.9
				25	0	23.1	29.4
5.0	23155	713.5	QPSK	1	0	24.9	28.6
				1	12	24.9	28.6
				1	24	25.0	28.6
				12	0	24.1	28.9
				12	6	24.1	28.8
				12	11	24.1	29.2
				25	0	24.1	29.3
			16QAM	1	0	24.2	28.4
				1	12	24.1	28.5
				1	24	24.2	28.6
				12	0	23.2	29.0
				12	6	23.2	28.8
				12	11	23.2	28.8
				25	0	23.0	29.2

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23060	704.0	QPSK	1	0	24.8	28.4
				1	24	24.7	28.6
				1	49	24.7	28.3
				25	0	23.8	28.7
				25	12	23.7	28.4
				25	24	23.7	28.8
				50	0	23.8	29.0
			16QAM	1	0	24.0	28.5
				1	24	24.1	28.6
				1	49	24.0	28.4
				25	0	23.0	28.7
				25	12	22.9	28.5
				25	24	22.9	28.9
				50	0	22.8	28.9
10.0	23095	707.5	QPSK	1	0	24.7	28.6
				1	24	24.6	28.5
				1	49	24.7	28.4
				25	0	23.8	28.7
				25	12	23.7	28.8
				25	24	23.7	28.9
				50	0	23.7	29.4
			16QAM	1	0	24.2	28.6
				1	24	24.1	28.7
				1	49	24.1	28.4
				25	0	22.9	28.7
				25	12	22.8	28.8
				25	24	22.8	28.9
				50	0	22.9	29.4
10.0	23130	711.0	QPSK	1	0	24.9	28.6
				1	24	24.7	28.3
				1	49	25.0	28.4
				25	0	23.8	28.9
				25	12	23.7	28.8
				25	24	23.9	28.9
				50	0	23.9	29.8
			16QAM	1	0	23.9	28.6
				1	24	23.8	28.4
				1	49	23.9	28.5
				25	0	22.8	28.9
				25	12	22.8	28.8
				25	24	23.0	28.9
				50	0	23.0	29.6

7.1.6. LTE BAND 13

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23207	779.5	QPSK	1	0	24.8	28.1
				1	12	24.9	28.3
				1	24	25.0	28.8
				12	0	24.1	28.8
				12	6	24.1	28.8
				12	11	24.0	29.0
				25	0	24.1	29.5
			16QAM	1	0	24.2	28.1
				1	12	24.2	28.1
				1	24	24.3	28.9
				12	0	23.1	28.7
				12	6	23.1	28.8
				12	11	23.1	28.9
				25	0	23.1	29.4
5.0	23230	782.0	QPSK	1	0	24.8	28.6
				1	12	24.9	28.8
				1	24	24.8	28.0
				12	0	24.0	28.7
				12	6	24.0	29.2
				12	11	24.0	29.3
				25	0	24.1	29.3
			16QAM	1	0	24.1	28.5
				1	12	24.2	28.9
				1	24	24.1	28.3
				12	0	23.0	28.7
				12	6	23.1	29.2
				12	11	23.1	29.5
				25	0	23.1	29.3
5.0	23255	784.5	QPSK	1	0	25.0	28.9
				1	12	24.7	28.1
				1	24	24.8	28.0
				12	0	24.1	29.1
				12	6	24.0	28.5
				12	11	24.1	28.3
				25	0	24.1	29.5
			16QAM	1	0	24.2	28.8
				1	12	24.1	27.8
				1	24	24.1	27.9
				12	0	23.1	29.2
				12	6	23.1	28.5
				12	11	23.1	28.2
				25	0	23.2	29.2

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23230	782.0	QPSK	1	0	24.7	28.1
				1	24	25.0	28.8
				1	49	24.6	27.9
				25	0	23.9	28.9
				25	12	23.9	28.6
				25	24	23.9	29.0
				50	0	23.9	29.3
			16QAM	1	0	24.1	28.0
				1	24	24.1	28.9
				1	49	24.0	27.9
				25	0	23.0	28.8
				25	12	23.1	28.7
				25	24	23.1	29.0
				50	0	23.0	29.0

7.1.7. LTE BAND 17

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23755	706.5	QPSK	1	0	25.0	28.7
				1	12	24.9	28.7
				1	24	24.9	28.3
				12	0	23.9	28.8
				12	6	23.9	28.9
				12	11	23.8	28.7
				25	0	23.9	29.4
			16QAM	1	0	23.9	28.7
				1	12	23.9	28.7
				1	24	23.8	28.4
				12	0	23.0	28.8
				12	6	23.0	28.9
				12	11	23.0	28.8
				25	0	22.9	29.2
5.0	23790	710.0	QPSK	1	0	24.8	28.4
				1	12	24.7	28.3
				1	24	24.8	28.5
				12	0	23.8	28.8
				12	6	23.7	28.6
				12	11	23.8	28.8
				25	0	23.9	29.3
			16QAM	1	0	24.1	28.4
				1	12	24.0	28.3
				1	24	24.2	28.5
				12	0	22.9	28.8
				12	6	22.8	28.7
				12	11	22.8	28.8
				25	0	22.9	29.2
5.0	23825	713.5	QPSK	1	0	24.8	28.5
				1	12	24.9	28.5
				1	24	24.9	28.5
				12	0	23.9	28.8
				12	6	23.9	28.7
				12	11	24.0	28.8
				25	0	24.0	29.2
			16QAM	1	0	24.0	28.6
				1	12	24.2	28.5
				1	24	24.1	28.5
				12	0	23.0	28.9
				12	6	23.0	28.6
				12	11	23.0	28.7
				25	0	23.0	29.0

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23780	709.0	QPSK	1	0	25.0	28.6
				1	24	24.8	28.3
				1	49	25.0	28.4
				25	0	23.7	28.9
				25	12	23.7	28.7
				25	24	23.7	28.9
				50	0	23.7	29.5
			16QAM	1	0	24.2	28.7
				1	24	24.0	28.3
				1	49	24.1	28.4
				25	0	22.8	28.9
				25	12	22.8	28.7
				25	24	22.8	29.0
				50	0	22.7	29.4
10.0	23790	710.0	QPSK	1	0	24.9	28.6
				1	24	24.7	28.3
				1	49	24.9	28.5
				25	0	23.7	28.9
				25	12	23.6	28.8
				25	24	23.8	28.9
				50	0	23.8	29.8
			16QAM	1	0	24.1	28.6
				1	24	24.0	28.5
				1	49	24.2	28.6
				25	0	22.8	28.9
				25	12	22.7	28.7
				25	24	22.8	28.8
				50	0	22.8	29.4
10.0	23800	711.0	QPSK	1	0	24.9	28.6
				1	24	24.8	28.4
				1	49	24.9	28.4
				25	0	23.7	29.0
				25	12	23.7	28.8
				25	24	23.9	28.9
				50	0	23.9	29.6
			16QAM	1	0	24.2	28.6
				1	24	24.1	28.7
				1	49	24.2	28.5
				25	0	22.8	28.9
				25	12	22.8	28.7
				25	24	23.0	28.8
				50	0	22.9	29.6

7.1.8. LTE BAND 25

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	26047	1850.7	QPSK	1	0	23.8	27.5
				1	2	23.7	27.5
				1	5	23.8	27.5
				3	0	23.8	27.9
				3	1	23.8	27.8
				3	2	23.8	27.9
				6	0	22.8	28.4
			16QAM	1	0	22.9	27.4
				1	2	22.9	27.4
				1	5	22.9	27.5
				3	0	22.9	28.1
				3	1	22.9	28.0
				3	2	22.9	27.9
				6	0	21.8	27.9
1.4	26365	1882.5	QPSK	1	0	24.0	27.7
				1	2	23.9	27.7
				1	5	24.0	27.8
				3	0	23.9	28.1
				3	1	23.9	28.1
				3	2	23.9	28.0
				6	0	22.9	28.2
			16QAM	1	0	23.3	27.6
				1	2	23.3	27.7
				1	5	23.3	27.7
				3	0	23.0	28.1
				3	1	23.0	28.2
				3	2	23.0	28.1
				6	0	22.0	28.3
1.4	26683	1914.3	QPSK	1	0	23.9	27.3
				1	2	23.9	27.7
				1	5	23.9	27.1
				3	0	23.8	27.9
				3	1	23.8	27.6
				3	2	23.8	27.5
				6	0	22.9	28.2
			16QAM	1	0	23.1	27.4
				1	2	23.0	27.5
				1	5	23.0	27.1
				3	0	23.0	28.1
				3	1	23.0	28.2
				3	2	23.0	28.1
				6	0	22.1	28.1

OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	26055	1851.5	QPSK	1	0	23.9	27.6
				1	7	23.9	27.5
				1	14	23.9	27.6
				8	0	23.0	28.2
				8	4	22.9	28.1
				8	7	22.9	28.1
				15	0	22.9	28.4
			16QAM	1	0	23.2	27.8
				1	7	23.2	27.7
				1	14	23.2	27.7
				8	0	22.1	28.2
				8	4	22.1	27.9
				8	7	22.1	27.9
				15	0	22.0	28.4
3.0	26365	1882.5	QPSK	1	0	23.9	27.8
				1	7	24.0	27.8
				1	14	24.0	27.9
				8	0	23.1	27.9
				8	4	23.1	27.8
				8	7	23.1	27.8
				15	0	23.1	28.6
			16QAM	1	0	23.2	27.8
				1	7	23.3	27.8
				1	14	23.3	27.9
				8	0	22.3	28.0
				8	4	22.3	27.8
				8	7	22.3	27.9
				15	0	22.1	28.6
3.0	26675	1913.5	QPSK	1	0	23.9	27.6
				1	7	23.9	27.5
				1	14	23.9	27.3
				8	0	22.9	27.9
				8	4	23.0	27.8
				8	7	23.0	27.8
				15	0	23.0	28.2
			16QAM	1	0	23.2	27.6
				1	7	23.2	27.5
				1	14	23.2	27.5
				8	0	22.0	27.9
				8	4	22.1	28.0
				8	7	22.1	28.0
				15	0	22.1	28.3

OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	26065	1852.5	QPSK	1	0	23.9	27.5
				1	12	23.9	27.4
				1	24	24.0	27.5
				12	0	22.9	28.0
				12	6	22.9	27.8
				12	11	22.9	27.9
				25	0	22.9	28.4
			16QAM	1	0	23.0	27.4
				1	12	23.0	27.4
				1	24	23.1	27.4
				12	0	22.0	28.0
				12	6	22.1	27.9
				12	11	22.1	27.9
				25	0	21.9	28.3
5.0	26365	1882.5	QPSK	1	0	23.9	27.6
				1	12	23.8	27.6
				1	24	23.9	27.7
				12	0	22.9	27.8
				12	6	22.9	27.7
				12	11	22.9	27.8
				25	0	22.9	28.3
			16QAM	1	0	23.1	27.5
				1	12	23.1	27.6
				1	24	23.2	27.6
				12	0	22.1	27.6
				12	6	22.1	27.7
				12	11	22.1	27.8
				25	0	22.1	28.3
5.0	26665	1912.5	QPSK	1	0	23.8	27.3
				1	12	23.7	27.3
				1	24	23.8	27.1
				12	0	22.9	27.7
				12	6	22.8	27.4
				12	11	22.9	27.7
				25	0	22.8	28.0
			16QAM	1	0	23.0	27.4
				1	12	23.0	27.3
				1	24	23.2	27.1
				12	0	22.0	27.7
				12	6	21.9	27.5
				12	11	22.0	27.8
				25	0	22.0	28.0

OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	26090	1855.0	QPSK	1	0	24.0	28.0
				1	24	24.0	27.9
				1	49	24.0	27.9
				25	0	23.3	28.4
				25	12	23.3	28.3
				25	24	23.3	28.2
				50	0	23.2	28.9
			16QAM	1	0	23.2	28.0
				1	24	23.2	28.1
				1	49	23.3	28.1
				25	0	22.3	28.5
				25	12	22.3	28.2
				25	24	22.4	28.3
				50	0	22.3	29.1
10.0	26365	1882.5	QPSK	1	0	24.0	27.7
				1	24	24.0	27.9
				1	49	24.0	28.1
				25	0	23.2	28.1
				25	12	23.3	28.1
				25	24	23.3	28.2
				50	0	23.3	28.9
			16QAM	1	0	23.2	27.8
				1	24	23.2	28.1
				1	49	23.2	28.2
				25	0	22.3	28.1
				25	12	22.4	28.1
				25	24	22.4	28.2
				50	0	22.4	28.7
10.0	26640	1910.0	QPSK	1	0	24.0	27.8
				1	24	24.0	27.7
				1	49	24.0	27.5
				25	0	23.3	28.3
				25	12	23.2	27.9
				25	24	23.2	28.1
				50	0	23.2	28.6
			16QAM	1	0	23.1	28.0
				1	24	23.1	27.9
				1	49	23.1	27.7
				25	0	22.3	28.3
				25	12	22.2	28.0
				25	24	22.1	28.2
				50	0	22.2	23.8

OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	26115	1857.5	QPSK	1	0	23.9	28.0
				1	37	24.0	28.1
				1	74	24.0	28.2
				36	0	22.9	28.7
				36	16	22.7	28.4
				36	35	22.7	28.4
				75	0	22.8	29.1
			16-QAM	1	0	23.0	28.2
				1	37	23.2	28.2
				1	74	23.2	28.3
				36	0	21.8	28.7
				36	16	21.8	28.5
				36	35	21.8	28.4
				75	0	21.8	28.9
15.0	26365	1882.5	QPSK	1	0	23.7	28.1
				1	37	23.8	28.2
				1	74	23.8	28.3
				36	0	22.8	28.4
				36	16	22.8	28.5
				36	35	22.8	28.5
				75	0	22.8	29.1
			16-QAM	1	0	23.1	28.2
				1	37	23.2	28.3
				1	74	23.3	28.5
				36	0	21.8	28.4
				36	16	21.8	28.5
				36	35	21.8	28.6
				75	0	21.8	28.9
15.0	26615	1907.5	QPSK	1	0	23.7	28.2
				1	37	23.8	28.0
				1	74	23.7	28.0
				36	0	22.7	28.8
				36	16	22.8	28.6
				36	35	22.7	28.5
				75	0	22.9	29.4
			16-QAM	1	0	23.2	28.2
				1	37	23.2	28.1
				1	74	23.2	28.1
				36	0	21.8	28.9
				36	16	21.8	28.6
				36	35	21.7	28.4
				75	0	22.0	29.2

OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	26140	1860.0	QPSK	1	0	23.9	28.0
				1	49	23.9	28.1
				1	99	24.0	28.2
				50	0	22.7	28.5
				50	24	22.7	28.3
				50	49	22.6	28.4
				100	0	22.7	29.0
			16-QAM	1	0	23.1	28.0
				1	49	23.1	28.1
				1	99	23.2	28.2
				50	0	21.7	28.5
				50	24	21.7	28.3
				50	49	21.6	28.3
				100	0	21.8	29.1
20.0	26365	1882.5	QPSK	1	0	23.7	28.1
				1	49	23.7	28.1
				1	99	23.7	28.3
				50	0	22.7	28.4
				50	24	22.7	28.6
				50	49	22.7	28.6
				100	0	22.7	29.2
			16-QAM	1	0	23.1	28.2
				1	49	23.1	28.2
				1	99	23.1	28.4
				50	0	21.7	28.3
				50	24	21.7	28.5
				50	49	21.7	28.6
				100	0	21.7	29.1
20.0	26590	1905.0	QPSK	1	0	23.6	28.1
				1	49	23.7	28.0
				1	99	23.6	27.9
				50	0	22.5	28.8
				50	24	22.6	28.8
				50	49	22.6	28.6
				100	0	22.8	29.1
			16-QAM	1	0	23.1	28.3
				1	49	23.1	28.1
				1	99	23.0	27.9
				50	0	21.9	28.8
				50	24	21.8	28.8
				50	49	21.7	28.6
				100	0	21.9	29.1

7.1.9. LTE BAND 26

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	26697	814.7	QPSK	1	0	23.8	27.2
				1	2	23.8	27.3
				1	5	23.8	27.3
				3	0	23.9	27.7
				3	1	23.9	27.5
				3	2	23.9	27.5
				6	0	22.9	28.0
			16QAM	1	0	23.0	27.3
				1	2	23.0	27.3
				1	5	23.0	27.3
				3	0	23.0	27.8
				3	1	23.0	27.6
				3	2	23.0	27.6
				6	0	21.9	27.9
1.4	26740	819.0	QPSK	1	0	23.8	27.7
				1	2	23.8	27.8
				1	5	23.8	27.8
				3	0	23.8	28.0
				3	1	23.8	28.1
				3	2	23.8	27.9
				6	0	22.8	27.9
			16QAM	1	0	23.1	27.7
				1	2	23.1	28.0
				1	5	23.1	27.7
				3	0	22.9	28.0
				3	1	22.9	28.0
				3	2	22.9	28.0
				6	0	21.9	28.2
1.4	26783	823.3	QPSK	1	0	23.8	27.7
				1	2	23.8	27.7
				1	5	23.8	27.3
				3	0	23.8	27.9
				3	1	23.8	27.8
				3	2	23.8	27.6
				6	0	22.8	28.0
			16QAM	1	0	23.0	27.7
				1	2	23.0	27.6
				1	5	22.9	27.3
				3	0	22.8	28.1
				3	1	22.8	28.0
				3	2	22.8	28.0
				6	0	21.8	27.9

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	26705	815.5	QPSK	1	0	23.9	27.4
				1	7	24.0	27.5
				1	14	23.8	27.8
				8	0	23.1	27.8
				8	4	23.1	27.6
				8	7	23.1	27.7
				15	0	23.1	28.5
			16QAM	1	0	23.2	27.5
				1	7	23.2	27.6
				1	14	23.1	27.8
				8	0	22.2	27.8
				8	4	22.2	27.5
				8	7	22.2	27.6
				15	0	22.1	28.4
3.0	26740	819.0	QPSK	1	0	24.0	27.8
				1	7	23.9	27.8
				1	14	24.0	28.0
				8	0	23.0	28.0
				8	4	23.1	27.9
				8	7	23.0	27.9
				15	0	23.1	28.4
			16QAM	1	0	23.2	27.8
				1	7	23.2	27.8
				1	14	23.2	28.0
				8	0	22.1	28.0
				8	4	22.1	28.0
				8	7	22.1	27.8
				15	0	22.1	28.2
3.0	26775	822.5	QPSK	1	0	23.9	27.9
				1	7	23.9	27.9
				1	14	23.8	27.6
				8	0	23.1	28.2
				8	4	23.0	28.1
				8	7	23.0	28.1
				15	0	23.0	28.2
			16QAM	1	0	23.3	28.0
				1	7	23.3	28.1
				1	14	23.3	27.5
				8	0	22.1	28.0
				8	4	22.0	28.0
				8	7	22.0	28.0
				15	0	22.0	28.3

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	26715	816.5	QPSK	1	0	24.0	27.1
				1	12	23.8	27.5
				1	24	23.9	27.8
				12	0	23.0	27.6
				12	6	22.9	27.7
				12	11	22.9	28.0
				25	0	22.9	28.6
			16QAM	1	0	23.0	27.1
				1	12	23.0	27.4
				1	24	23.1	27.8
				12	0	22.1	27.6
				12	6	22.0	27.7
				12	11	22.0	28.1
				25	0	21.9	28.5
5.0	26740	819.0	QPSK	1	0	23.9	27.7
				1	12	23.8	27.5
				1	24	23.9	27.8
				12	0	22.9	27.9
				12	6	22.9	27.9
				12	11	22.9	28.0
				25	0	22.9	28.3
			16QAM	1	0	23.0	27.5
				1	12	23.1	27.5
				1	24	23.2	27.8
				12	0	22.0	27.7
				12	6	22.0	27.6
				12	11	22.0	27.7
				25	0	22.0	28.2
5.0	26765	821.5	QPSK	1	0	23.8	27.2
				1	12	23.8	27.6
				1	24	23.8	27.2
				12	0	23.0	27.9
				12	6	22.9	27.9
				12	11	22.8	28.1
				25	0	22.9	28.3
			16QAM	1	0	23.2	27.2
				1	12	23.1	27.6
				1	24	23.0	27.3
				12	0	22.1	27.8
				12	6	22.0	27.8
				12	11	22.0	27.9
				25	0	22.0	28.3

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	26740	819.0	QPSK	1	0	24.0	28.2
				1	24	23.9	28.8
				1	49	24.0	28.7
				25	0	23.0	29.0
				25	12	23.0	29.0
				25	24	23.0	29.1
				50	0	23.1	29.7
			16QAM	1	0	23.2	28.3
				1	24	23.1	28.9
				1	49	23.1	28.8
				25	0	22.1	29.1
				25	12	22.1	29.0
				25	24	22.2	29.1
				50	0	22.1	29.5

7.1.10. LTE BAND 27

ID:	44366	Date:	5/18/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 27 (1.4 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	27117	814.7	QPSK	1	0	24.0	27.8
				1	2	23.9	27.8
				1	5	24.0	27.9
				3	0	23.9	28.2
				3	1	23.9	28.1
				3	2	23.9	28.2
				6	0	22.9	28.2
			16QAM	1	0	23.1	27.8
				1	2	23.0	27.7
				1	5	23.1	27.9
				3	0	23.1	28.3
				3	1	23.0	28.1
				3	2	23.0	28.1
				6	0	21.9	28.0
1.4	27160	819.0	QPSK	1	0	23.9	27.1
				1	2	23.9	27.4
				1	5	23.9	27.1
				3	0	23.8	27.5
				3	1	23.8	27.4
				3	2	23.8	27.5
				6	0	22.8	27.8
			16QAM	1	0	23.0	27.1
				1	2	23.0	27.3
				1	5	23.0	27.2
				3	0	22.9	27.5
				3	1	22.9	27.5
				3	2	22.9	27.6
				6	0	22.0	27.8
1.4	27203	823.3	QPSK	1	0	23.9	27.7
				1	2	23.9	27.7
				1	5	24.0	27.7
				3	0	23.8	28.1
				3	1	23.9	28.0
				3	2	23.8	28.0
				6	0	22.9	28.4
			16QAM	1	0	23.1	27.8
				1	2	23.2	27.8
				1	5	23.2	27.7
				3	0	23.0	28.1
				3	1	23.1	28.3
				3	2	23.1	28.3
				6	0	22.1	28.1

OUTPUT POWER FOR LTE BAND 27 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	27125	815.5	QPSK	1	0	24.0	27.9
				1	7	23.9	27.8
				1	14	23.8	27.8
				8	0	23.0	28.0
				8	4	23.0	28.0
				8	7	23.0	27.8
				15	0	23.0	28.5
			16QAM	1	0	23.1	28.0
				1	7	23.0	27.9
				1	14	23.0	27.9
				8	0	22.2	28.2
				8	4	22.2	28.1
				8	7	22.1	27.9
				15	0	22.0	28.4
3.0	27160	819.0	QPSK	1	0	23.8	27.2
				1	7	23.8	27.3
				1	14	23.7	27.1
				8	0	23.0	27.5
				8	4	23.0	27.3
				8	7	23.0	27.4
				15	0	23.0	28.3
			16QAM	1	0	23.2	27.2
				1	7	23.2	27.3
				1	14	23.2	27.3
				8	0	22.0	27.6
				8	4	22.0	27.4
				8	7	22.0	27.6
				15	0	22.0	28.3
3.0	27195	822.5	QPSK	1	0	23.9	27.9
				1	7	24.0	27.8
				1	14	24.0	27.9
				8	0	23.0	28.2
				8	4	23.0	28.2
				8	7	23.0	28.1
				15	0	23.1	28.9
			16QAM	1	0	23.2	27.9
				1	7	23.2	28.0
				1	14	23.2	27.9
				8	0	22.0	28.0
				8	4	22.1	28.0
				8	7	22.0	27.9
				15	0	22.1	28.7

OUTPUT POWER FOR LTE BAND 27 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	27135	816.5	QPSK	1	0	24.0	27.7
				1	12	23.9	27.5
				1	24	23.9	27.2
				12	0	22.9	28.0
				12	6	22.8	27.7
				12	11	22.9	27.7
				25	0	22.8	28.1
			16QAM	1	0	23.1	27.6
				1	12	23.0	27.5
				1	24	23.0	23.0
				12	0	22.0	27.9
				12	6	22.0	27.8
				12	11	22.1	27.7
				25	0	21.9	27.9
5.0	27160	819.0	QPSK	1	0	23.7	27.0
				1	12	23.9	26.9
				1	24	23.7	26.9
				12	0	22.9	27.3
				12	6	22.8	27.1
				12	11	22.8	27.3
				25	0	22.8	28.0
			16QAM	1	0	23.2	26.9
				1	12	23.1	26.8
				1	24	23.2	27.2
				12	0	21.9	27.3
				12	6	21.9	27.1
				12	11	21.9	27.4
				25	0	21.9	27.9
5.0	27185	821.5	QPSK	1	0	23.8	27.2
				1	12	23.8	27.3
				1	24	23.9	27.4
				12	0	22.9	27.9
				12	6	22.8	27.9
				12	11	22.9	27.9
				25	0	22.8	28.3
			16QAM	1	0	23.1	27.2
				1	12	23.1	27.4
				1	24	23.2	27.5
				12	0	22.0	28.1
				12	6	21.9	27.9
				12	11	22.0	28.0
				25	0	22.0	28.6

OUTPUT POWER FOR LTE BAND 27 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	27160	819.0	QPSK	1	0	23.9	27.9
				1	24	23.9	28.1
				1	49	24.0	28.5
				25	0	22.9	28.6
				25	12	22.9	28.6
				25	24	22.8	28.8
				50	0	22.9	29.2
			16QAM	1	0	23.2	27.9
				1	24	23.2	28.2
				1	49	23.3	28.6
				25	0	22.0	28.6
				25	12	22.0	28.6
				25	24	22.0	28.8
				50	0	22.0	29.1

7.1.11. LTE BAND 30

ID:	38806	Date:	6/24/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	27685	2307.5	QPSK	1	0	22.3	26.6
				1	12	22.0	26.5
				1	24	22.0	26.5
				12	0	21.2	27.0
				12	6	21.1	26.9
				12	11	21.0	26.9
				25	0	21.1	26.9
			16QAM	1	0	21.5	26.6
				1	12	21.2	26.5
				1	24	21.2	26.4
				12	0	20.4	27.1
				12	6	20.2	27.0
				12	11	20.1	27.0
				25	0	20.1	27.3
5.0	27710	2310.0	QPSK	1	0	22.0	26.5
				1	12	22.1	26.3
				1	24	22.0	26.3
				12	0	21.0	26.8
				12	6	21.1	26.7
				12	11	21.1	26.7
				25	0	21.1	26.8
			16QAM	1	0	21.5	26.5
				1	12	21.5	26.3
				1	24	21.4	26.2
				12	0	20.1	26.6
				12	6	20.1	26.6
				12	11	20.1	26.6
				25	0	20.2	27.1
5.0	27735	2312.5	QPSK	1	0	22.0	26.4
				1	12	22.0	26.4
				1	24	22.1	26.4
				12	0	21.1	26.7
				12	6	21.1	26.6
				12	11	21.2	26.7
				25	0	21.1	27.0
			16QAM	1	0	21.3	26.3
				1	12	21.4	26.4
				1	24	21.5	26.4
				12	0	20.2	26.9
				12	6	20.1	26.7
				12	11	20.3	26.8
				25	0	20.2	26.9

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	27710	2310.0	QPSK	1	0	22.3	26.5
				1	24	22.2	26.3
				1	49	22.1	26.3
				25	0	21.0	27.0
				25	12	20.9	26.8
				25	24	21.0	26.8
				50	0	21.0	27.0
			16QAM	1	0	21.4	26.7
				1	24	21.3	26.4
				1	49	21.3	26.4
				25	0	20.1	26.7
				25	12	20.0	26.6
				25	24	20.2	26.7
				50	0	20.0	27.0

7.1.12. LTE BAND 41

ID:	38806	Date:	6/24/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	39675	2498.5	QPSK	1	0	24.3	27.4
				1	12	24.3	27.4
				1	24	24.4	27.5
				12	0	23.1	27.6
				12	6	23.1	27.5
				12	11	23.1	27.6
				25	0	23.0	28.4
			16QAM	1	0	23.6	27.4
				1	12	23.6	27.5
				1	24	23.7	27.5
				12	0	22.1	27.6
				12	6	22.1	27.5
				12	11	22.1	27.6
				25	0	22.2	28.0
5.0	40620	2593.0	QPSK	1	0	24.4	28.4
				1	12	24.3	28.3
				1	24	24.4	28.3
				12	0	23.4	28.4
				12	6	23.4	28.3
				12	11	23.3	28.4
				25	0	23.3	28.9
			16QAM	1	0	23.6	28.4
				1	12	23.6	28.3
				1	24	23.7	28.3
				12	0	22.4	28.3
				12	6	22.4	28.3
				12	11	22.4	28.3
				25	0	22.6	29.0
5.0	41565	2687.5	QPSK	1	0	24.2	27.7
				1	12	24.1	27.6
				1	24	24.1	27.7
				12	0	23.1	28.1
				12	6	22.9	28.0
				12	11	23.0	28.2
				25	0	23.0	28.5
			16QAM	1	0	23.7	28.0
				1	12	23.6	28.0
				1	24	23.6	28.1
				12	0	22.2	28.0
				12	6	22.1	27.9
				12	11	22.1	28.0
				25	0	22.0	28.4

OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	39700	2501.0	QPSK	1	0	24.2	27.6
				1	24	24.3	27.6
				1	49	24.4	27.9
				25	0	23.4	27.6
				25	12	23.5	27.5
				25	24	23.5	27.8
				50	0	23.5	28.4
			16QAM	1	0	23.4	27.2
				1	24	23.4	27.4
				1	49	23.5	27.6
				25	0	22.4	27.6
				25	12	22.5	27.5
				25	24	22.5	27.9
				50	0	22.5	28.3
10.0	40620	2593.0	QPSK	1	0	24.3	28.3
				1	24	24.3	28.3
				1	49	24.3	28.3
				25	0	23.4	28.3
				25	12	23.4	28.2
				25	24	23.4	28.3
				50	0	23.4	28.9
			16QAM	1	0	23.7	28.3
				1	24	23.6	28.3
				1	49	23.7	28.4
				25	0	22.3	28.3
				25	12	22.1	28.2
				25	24	22.1	28.3
				50	0	22.2	29.0
10.0	41540	2685.0	QPSK	1	0	24.4	27.6
				1	24	24.3	27.7
				1	49	24.2	27.7
				25	0	23.6	28.0
				25	12	23.5	27.9
				25	24	23.5	28.0
				50	0	23.5	28.5
			16QAM	1	0	23.5	27.8
				1	24	23.4	27.7
				1	49	23.3	27.9
				25	0	22.3	28.0
				25	12	22.2	27.9
				25	24	22.1	28.0
				50	0	22.1	28.5

OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	39725	2503.5	QPSK	1	0	24.3	27.2
				1	37	24.4	27.5
				1	74	24.5	27.6
				36	0	23.4	27.8
				36	16	23.4	27.8
				36	35	23.5	27.9
				75	0	23.4	28.7
			16-QAM	1	0	23.5	27.3
				1	37	23.6	27.5
				1	74	23.6	27.6
				36	0	22.2	27.8
				36	16	22.2	27.8
				36	35	22.3	27.9
				75	0	22.1	28.5
15.0	40620	2593.0	QPSK	1	0	24.3	28.3
				1	37	24.2	28.3
				1	74	24.4	28.2
				36	0	23.3	28.4
				36	16	23.3	28.3
				36	35	23.3	28.4
				75	0	23.3	29.1
			16-QAM	1	0	23.7	28.3
				1	37	23.6	28.4
				1	74	23.5	28.2
				36	0	22.4	28.4
				36	16	22.5	28.3
				36	35	22.5	28.4
				75	0	22.3	29.1
15.0	41515	2682.5	QPSK	1	0	24.5	27.6
				1	37	24.4	27.6
				1	74	24.3	27.7
				36	0	23.6	28.0
				36	16	23.6	27.9
				36	35	23.5	28.1
				75	0	23.4	28.7
			16-QAM	1	0	23.7	27.6
				1	37	23.5	27.6
				1	74	23.4	27.7
				36	0	22.3	28.0
				36	16	22.2	27.9
				36	35	22.1	28.1
				75	0	22.2	28.7

OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	39750	2506.0	QPSK	1	0	24.3	27.5
				1	49	24.3	27.7
				1	99	24.4	28.0
				50	0	23.2	27.9
				50	24	23.1	27.9
				50	49	23.2	28.0
				100	0	23.0	28.7
			16-QAM	1	0	23.6	27.6
				1	49	23.7	27.8
				1	99	23.7	28.0
				50	0	22.3	27.8
				50	24	22.3	27.8
				50	49	22.3	28.0
				100	0	22.2	28.8
20.0	40620	2593.0	QPSK	1	0	24.5	28.3
				1	49	24.5	28.3
				1	99	24.4	28.2
				50	0	23.4	28.4
				50	24	23.4	28.3
				50	49	23.4	28.5
				100	0	23.3	29.1
			16-QAM	1	0	23.7	28.3
				1	49	23.6	28.4
				1	99	23.6	28.3
				50	0	22.4	28.4
				50	24	22.5	28.3
				50	49	22.5	28.5
				100	0	22.3	29.1
20.0	41490	2680.0	QPSK	1	0	24.3	27.7
				1	49	24.2	27.7
				1	99	24.4	27.7
				50	0	23.3	27.9
				50	24	23.2	27.9
				50	49	23.1	28.0
				100	0	23.0	28.8
			16-QAM	1	0	23.7	27.8
				1	49	23.5	27.7
				1	99	23.6	27.9
				50	0	22.3	27.9
				50	24	22.2	27.9
				50	49	22.1	28.0
				100	0	22.1	28.7

7.2. UAT

7.2.1. LTE BAND 2

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	18607	1850.7	QPSK	1	0	20.8	23.8
				1	2	20.7	24.0
				1	5	20.7	23.8
				3	0	20.7	24.4
				3	1	20.7	24.3
				3	2	20.7	24.3
			16QAM	6	0	19.8	24.7
				1	0	19.9	23.9
				1	2	19.8	24.0
				1	5	19.9	23.8
				3	0	19.8	24.5
				3	1	19.7	24.6
				3	2	19.7	24.5
				6	0	18.9	24.5
1.4	18900	1880.0	QPSK	1	0	20.9	24.4
				1	2	20.9	24.5
				1	5	20.9	24.4
				3	0	20.7	24.8
				3	1	20.7	24.6
				3	2	20.8	24.8
			16QAM	6	0	19.9	24.9
				1	0	20.0	24.4
				1	2	20.0	24.5
				1	5	20.1	24.5
				3	0	19.9	24.9
				3	1	19.9	24.9
				3	2	20.0	24.9
				6	0	18.9	24.9
1.4	19193	1909.3	QPSK	1	0	20.8	24.2
				1	2	20.7	24.2
				1	5	20.9	24.1
				3	0	20.7	24.6
				3	1	20.6	24.5
				3	2	20.6	24.4
			16QAM	6	0	19.7	25.2
				1	0	19.9	24.1
				1	2	19.9	24.3
				1	5	19.9	24.1
				3	0	19.7	24.6
				3	1	19.7	24.9
				3	2	19.7	24.7
				6	0	18.7	24.8

OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	18615	1851.5	QPSK	1	0	20.9	23.4
				1	7	20.9	23.5
				1	14	21.0	23.7
				8	0	20.0	24.1
				8	4	20.0	24.0
				8	7	20.0	24.0
				15	0	20.0	24.8
			16QAM	1	0	20.2	23.4
				1	7	20.3	23.8
				1	14	20.3	23.9
				8	0	19.0	24.0
				8	4	19.1	23.9
				8	7	19.1	23.9
				15	0	19.0	24.6
3.0	18900	1880.0	QPSK	1	0	20.8	24.1
				1	7	20.9	24.1
				1	14	20.9	24.1
				8	0	19.4	24.2
				8	4	19.4	24.1
				8	7	19.5	24.2
				15	0	19.5	24.8
			16QAM	1	0	19.9	24.0
				1	7	20.0	24.2
				1	14	20.0	24.0
				8	0	18.8	24.3
				8	4	18.8	24.1
				8	7	18.9	24.2
				15	0	18.8	24.8
3.0	19185	1908.5	QPSK	1	0	20.8	24.1
				1	7	20.8	23.9
				1	14	20.7	23.8
				8	0	19.9	24.3
				8	4	19.9	24.2
				8	7	19.9	24.2
				15	0	19.9	24.8
			16QAM	1	0	19.9	23.8
				1	7	19.9	23.8
				1	14	19.8	23.7
				8	0	18.9	24.2
				8	4	19.0	24.0
				8	7	18.9	23.9
				15	0	18.9	24.7

OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak(dBm)
				Size	Offset		
5.0	18625	1852.5	QPSK	1	0	20.8	23.9
				1	12	20.8	24.0
				1	24	20.8	24.3
				12	0	20.2	24.8
				12	6	20.3	24.7
				12	11	20.3	24.9
			16QAM	25	0	20.0	24.9
				1	0	19.8	23.9
				1	12	19.9	24.3
				1	24	19.9	24.3
				12	0	18.8	24.7
				12	6	18.9	24.7
5.0	18900	1880.0	QPSK	12	11	19.0	24.9
				25	0	18.9	25.0
			16QAM	1	0	20.9	24.5
				1	12	21.0	24.2
				1	24	21.0	24.2
				12	0	20.1	25.0
				12	6	20.1	24.8
				12	11	20.1	24.8
			16QAM	25	0	19.9	25.3
				1	0	20.2	24.2
				1	12	20.3	24.2
				1	24	20.4	24.3
5.0	19175	1907.5	QPSK	12	0	18.9	25.0
				12	6	19.0	24.7
				12	11	19.0	25.0
				25	0	19.0	25.2
			16QAM	1	0	20.8	24.2
				1	12	20.7	24.0
				1	24	20.6	23.9
				12	0	20.1	24.8
				12	6	20.2	24.4
				12	11	20.2	24.4
				25	0	19.7	25.1
5.0	19175	1907.5	QPSK	1	0	20.1	24.2
				1	12	20.1	23.9
				1	24	20.0	23.9
				12	0	18.9	25.0
				12	6	18.8	24.7
				12	11	18.8	24.7
			16QAM	25	0	18.8	25.1
				1	0	20.1	24.2
				1	12	20.1	23.9
				1	24	20.0	23.9
				12	0	18.9	25.0
				12	6	18.8	24.7
				12	11	18.8	24.7
				25	0	18.8	25.1

OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	18650	1855.0	QPSK	1	0	20.8	24.0
				1	24	20.9	24.3
				1	49	20.9	24.2
				25	0	20.1	25.0
				25	12	20.0	24.8
				25	24	20.0	24.9
				50	0	20.1	25.5
			16QAM	1	0	20.2	24.1
				1	24	20.3	24.4
				1	49	20.4	24.1
				25	0	19.2	25.0
				25	12	19.2	24.8
				25	24	19.2	24.9
				50	0	19.1	25.4
10.0	18900	1880.0	QPSK	1	0	20.9	24.4
				1	24	20.9	24.4
				1	49	21.0	24.6
				25	0	19.9	24.9
				25	12	20.0	24.8
				25	24	20.0	25.1
				50	0	20.0	25.7
			16QAM	1	0	20.1	24.5
				1	24	20.1	24.5
				1	49	20.2	24.5
				25	0	19.1	24.9
				25	12	19.1	24.8
				25	24	19.2	25.1
				50	0	19.1	25.4
10.0	19150	1905.0	QPSK	1	0	20.9	24.5
				1	24	21.0	24.6
				1	49	20.9	24.3
				25	0	19.8	25.1
				25	12	20.0	25.0
				25	24	19.9	25.0
				50	0	20.0	25.7
			16QAM	1	0	20.2	24.5
				1	24	20.3	24.5
				1	49	20.2	24.3
				25	0	18.9	24.9
				25	12	19.0	24.9
				25	24	19.0	24.9
				50	0	19.0	25.6

OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	18675	1857.5	QPSK	1	0	20.9	24.5
				1	37	21.0	24.7
				1	74	21.0	24.6
				36	0	20.1	25.4
				36	16	20.1	25.2
				36	35	20.1	25.2
				75	0	20.1	26.0
			16-QAM	1	0	20.2	24.5
				1	37	20.2	24.8
				1	74	20.1	24.6
				36	0	19.2	25.4
				36	16	19.1	25.1
				36	35	19.1	25.1
				75	0	19.1	25.7
15.0	18900	1880.0	QPSK	1	0	21.0	24.6
				1	37	21.0	24.8
				1	74	21.0	24.9
				36	0	20.2	25.3
				36	16	20.2	25.3
				36	35	20.3	25.5
				75	0	20.3	26.3
			16-QAM	1	0	20.1	24.7
				1	37	20.0	24.8
				1	74	20.1	25.0
				36	0	19.3	25.3
				36	16	19.4	25.3
				36	35	19.5	25.5
				75	0	19.5	26.0
15.0	19125	1902.5	QPSK	1	0	21.0	24.9
				1	37	21.0	24.8
				1	74	21.0	24.5
				36	0	20.1	25.3
				36	16	20.2	25.3
				36	35	20.2	25.5
				75	0	20.3	26.1
			16-QAM	1	0	20.3	24.9
				1	37	20.3	24.8
				1	74	20.3	24.6
				36	0	19.2	25.3
				36	16	19.3	25.2
				36	35	19.4	25.5
				75	0	19.4	26.1

OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	18700	1860.0	QPSK	1	0	20.8	23.6
				1	49	20.9	23.8
				1	99	20.9	23.8
				50	0	20.0	24.6
				50	24	19.9	24.3
				50	49	19.9	24.2
				100	0	20.0	25.1
			16-QAM	1	0	20.2	23.7
				1	49	20.3	23.9
				1	99	20.3	23.9
				50	0	19.1	24.6
				50	24	19.0	24.2
				50	49	19.0	24.2
				100	0	19.0	25.1
20.0	18900	1880.0	QPSK	1	0	20.9	23.8
				1	49	20.9	24.0
				1	99	21.0	24.2
				50	0	20.1	24.7
				50	24	20.3	24.7
				50	49	20.2	24.9
				100	0	20.3	25.6
			16-QAM	1	0	19.9	24.0
				1	49	20.2	24.1
				1	99	20.2	24.3
				50	0	19.2	24.5
				50	24	19.3	24.6
				50	49	19.3	24.8
				100	0	19.3	25.5
20.0	19100	1900.0	QPSK	1	0	21.0	24.3
				1	49	20.8	24.1
				1	99	20.8	23.7
				50	0	19.8	24.5
				50	24	19.8	24.6
				50	49	19.9	25.0
				100	0	20.0	25.4
			16-QAM	1	0	20.0	24.3
				1	49	19.8	24.1
				1	99	19.9	23.9
				50	0	18.5	24.4
				50	24	18.5	24.5
				50	49	18.7	24.8
				100	0	18.6	25.3

7.2.2. LTE BAND 4

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	19957	1710.7	QPSK	1	0	20.9	24.2
				1	2	20.9	24.3
				1	5	20.9	24.2
				3	0	20.9	24.7
				3	1	20.9	24.6
				3	2	20.9	24.6
				6	0	19.9	24.9
			16QAM	1	0	20.0	24.1
				1	2	20.0	24.2
				1	5	20.0	24.1
				3	0	20.0	24.8
				3	1	20.0	24.6
				3	2	20.0	24.6
				6	0	18.9	24.7
1.4	20175	1732.5	QPSK	1	0	20.8	24.6
				1	2	20.8	24.5
				1	5	20.8	24.6
				3	0	20.8	24.9
				3	1	20.8	24.9
				3	2	20.8	24.9
				6	0	19.9	25.2
			16QAM	1	0	20.4	24.6
				1	2	20.3	24.6
				1	5	20.3	24.6
				3	0	20.1	24.8
				3	1	20.0	24.8
				3	2	20.0	24.8
				6	0	19.0	25.1
1.4	20393	1754.3	QPSK	1	0	20.9	24.8
				1	2	20.9	24.9
				1	5	20.8	24.8
				3	0	20.9	25.1
				3	1	20.9	25.2
				3	2	20.9	25.0
				6	0	19.9	25.3
			16QAM	1	0	20.3	25.0
				1	2	20.2	25.2
				1	5	20.2	24.9
				3	0	20.1	25.2
				3	1	20.1	25.3
				3	2	20.1	25.4
				6	0	19.1	25.2

OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	19965	1711.5	QPSK	1	0	20.8	24.3
				1	7	20.9	24.3
				1	14	20.8	24.7
				8	0	20.0	24.8
				8	4	20.0	24.6
				8	7	20.0	24.7
				15	0	20.0	25.3
			16QAM	1	0	20.1	24.3
				1	7	20.2	24.5
				1	14	20.1	24.4
				8	0	19.1	24.7
				8	4	19.1	24.6
				8	7	19.1	24.6
				15	0	19.0	25.4
3.0	20175	1732.5	QPSK	1	0	20.9	24.8
				1	7	20.9	24.6
				1	14	20.9	24.5
				8	0	20.0	24.9
				8	4	20.0	24.8
				8	7	20.0	24.7
				15	0	20.0	25.4
			16QAM	1	0	20.2	24.7
				1	7	20.2	24.6
				1	14	20.2	24.7
				8	0	18.9	24.9
				8	4	18.9	24.8
				8	7	19.0	24.7
				15	0	19.1	25.2
3.0	20385	1753.5	QPSK	1	0	21.0	24.9
				1	7	21.0	24.9
				1	14	20.9	24.9
				8	0	20.1	25.2
				8	4	20.0	25.1
				8	7	20.0	25.1
				15	0	20.0	25.4
			16QAM	1	0	20.3	24.9
				1	7	20.2	24.9
				1	14	20.2	25.0
				8	0	19.1	25.0
				8	4	19.1	24.9
				8	7	19.1	24.9
				15	0	19.0	26.1

OUTPUT POWER FOR LTE BAND 4 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	19975	1712.5	QPSK	1	0	20.9	24.3
				1	12	20.9	24.1
				1	24	21.0	24.4
				12	0	20.1	25.1
				12	6	20.1	24.9
				12	11	20.1	24.9
				25	0	20.0	25.5
			16QAM	1	0	20.1	24.1
				1	12	20.1	24.3
				1	24	20.3	24.3
				12	0	19.3	25.0
				12	6	19.2	24.8
				12	11	19.3	24.9
				25	0	19.0	25.1
5.0	20175	1732.5	QPSK	1	0	20.8	24.4
				1	12	20.8	24.2
				1	24	20.8	24.1
				12	0	20.0	25.0
				12	6	20.0	24.7
				12	11	20.0	24.8
				25	0	19.8	24.9
			16QAM	1	0	20.3	24.5
				1	12	20.2	24.3
				1	24	20.1	24.2
				12	0	19.1	25.0
				12	6	19.1	24.7
				12	11	19.0	24.8
				25	0	19.0	25.2
5.0	20375	1752.5	QPSK	1	0	20.9	24.6
				1	12	20.8	24.7
				1	24	20.8	24.6
				12	0	20.2	25.2
				12	6	20.1	25.0
				12	11	20.1	25.2
				25	0	19.9	25.3
			16QAM	1	0	19.9	24.5
				1	12	19.7	24.6
				1	24	19.7	24.6
				12	0	19.2	25.2
				12	6	19.1	25.0
				12	11	19.1	25.2
				25	0	19.1	25.4

OUTPUT POWER FOR LTE BAND 4 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20000	1715.0	QPSK	1	0	20.7	24.2
				1	24	20.9	24.2
				1	49	20.9	24.3
				25	0	19.8	25.0
				25	12	19.9	24.8
				25	24	19.8	24.8
			16QAM	50	0	19.8	25.4
				1	0	20.1	24.3
				1	24	20.2	24.4
				1	49	20.3	24.4
				25	0	18.9	24.9
				25	12	19.0	24.7
				25	24	19.0	24.7
				50	0	18.9	25.3
10.0	20175	1732.5	QPSK	1	0	20.8	24.5
				1	24	20.7	24.3
				1	49	20.8	24.1
				25	0	19.8	24.9
				25	12	19.8	24.6
				25	24	19.7	24.6
			16QAM	50	0	19.7	25.3
				1	0	20.3	24.7
				1	24	20.1	24.4
				1	49	20.1	24.2
				25	0	19.0	24.9
				25	12	18.9	24.5
				25	24	18.9	24.6
				50	0	18.8	25.2
10.0	20350	1750.0	QPSK	1	0	20.9	24.2
				1	24	21.0	24.5
				1	49	20.9	24.7
				25	0	19.9	24.8
				25	12	19.8	24.7
				25	24	19.7	24.9
			16QAM	50	0	19.9	25.5
				1	0	20.2	24.3
				1	24	20.2	24.6
				1	49	20.2	24.7
				25	0	19.0	24.7
				25	12	19.0	24.7
				25	24	18.9	24.9
				50	0	19.0	25.5

OUTPUT POWER FOR LTE BAND 4 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	20025	1717.5	QPSK	1	0	20.9	24.0
				1	37	20.9	24.1
				1	74	20.8	24.1
				36	0	19.7	24.8
				36	16	19.7	24.6
				36	35	19.6	24.6
				75	0	19.6	25.4
			16-QAM	1	0	19.9	24.1
				1	37	20.1	24.2
				1	74	20.0	24.2
				36	0	18.9	24.7
				36	16	18.9	24.5
				36	35	18.9	24.5
				75	0	18.7	25.2
15.0	20175	1732.5	QPSK	1	0	20.7	24.3
				1	37	20.9	24.1
				1	74	20.8	23.8
				36	0	19.6	24.8
				36	16	19.5	24.4
				36	35	19.5	24.5
				75	0	19.5	25.5
			16-QAM	1	0	20.1	24.3
				1	37	19.9	24.1
				1	74	19.9	23.9
				36	0	18.7	24.8
				36	16	18.7	24.5
				36	35	18.7	24.5
				75	0	18.6	25.3
15.0	20325	1747.5	QPSK	1	0	20.7	23.9
				1	37	20.7	24.1
				1	74	20.8	24.3
				36	0	19.6	24.6
				36	16	19.7	24.6
				36	35	19.6	24.8
				75	0	19.7	25.5
			16-QAM	1	0	19.7	23.9
				1	37	19.8	24.1
				1	74	19.7	24.4
				36	0	18.7	24.5
				36	16	18.7	24.5
				36	35	18.7	24.7
				75	0	18.7	25.5

OUTPUT POWER FOR LTE BAND 4 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	20050	1720.0	QPSK	1	0	20.9	24.2
				1	49	21.0	24.5
				1	99	20.9	24.5
				50	0	20.0	25.2
				50	24	20.0	25.0
				50	49	19.9	24.9
				100	0	19.8	25.7
			16-QAM	1	0	20.4	24.4
				1	49	20.4	24.5
				1	99	20.3	24.6
				50	0	19.1	25.2
				50	24	19.0	24.9
				50	49	18.9	24.9
				100	0	18.9	25.7
20.0	20175	1732.5	QPSK	1	0	20.9	24.5
				1	49	20.7	24.3
				1	99	20.8	24.2
				50	0	19.9	25.0
				50	24	19.8	24.7
				50	49	19.8	24.8
				100	0	19.8	25.6
			16-QAM	1	0	20.4	24.5
				1	49	20.1	24.5
				1	99	20.2	24.2
				50	0	19.0	25.1
				50	24	18.9	24.8
				50	49	18.9	24.9
				100	0	18.9	25.7
20.0	20300	1745.0	QPSK	1	0	20.8	24.2
				1	49	20.9	24.2
				1	99	20.8	24.6
				50	0	20.0	25.0
				50	24	20.0	24.8
				50	49	19.9	25.1
				100	0	20.0	26.0
			16-QAM	1	0	20.1	24.2
				1	49	20.2	24.3
				1	99	20.1	24.8
				50	0	19.0	24.9
				50	24	19.0	24.7
				50	49	19.0	25.0
				100	0	19.1	25.8

7.2.3. LTE BAND 5

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	20407	824.7	QPSK	1	0	22.4	26.2
				1	2	22.4	26.1
				1	5	22.4	26.2
				3	0	22.4	26.4
				3	1	22.4	26.3
				3	2	22.4	26.3
				6	0	21.5	26.8
			16QAM	1	0	21.6	26.1
				1	2	21.6	26.1
				1	5	21.6	26.2
				3	0	21.6	26.7
				3	1	21.5	26.4
				3	2	21.5	26.4
				6	0	20.6	26.7
1.4	20525	836.5	QPSK	1	0	22.4	26.5
				1	2	22.4	26.3
				1	5	22.4	26.3
				3	0	22.5	26.9
				3	1	22.5	26.5
				3	2	22.4	26.5
				6	0	21.6	26.7
			16QAM	1	0	21.8	26.6
				1	2	21.8	26.3
				1	5	21.8	26.4
				3	0	21.8	26.8
				3	1	21.7	26.6
				3	2	21.7	26.7
				6	0	20.6	26.5
1.4	20643	848.3	QPSK	1	0	22.4	25.8
				1	2	22.4	25.7
				1	5	22.3	25.4
				3	0	22.5	26.1
				3	1	22.5	25.7
				3	2	22.4	25.9
				6	0	21.4	26.2
			16QAM	1	0	21.7	25.7
				1	2	21.6	25.8
				1	5	21.6	25.5
				3	0	21.6	26.0
				3	1	21.6	26.0
				3	2	21.5	25.9
				6	0	20.6	26.1

OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	20415	825.5	QPSK	1	0	22.4	26.1
				1	7	22.3	26.1
				1	14	22.2	26.2
				8	0	21.6	26.3
				8	4	21.5	26.2
				8	7	21.5	26.3
				15	0	21.5	27.1
			16QAM	1	0	21.9	26.2
				1	7	21.8	26.2
				1	14	21.7	26.2
				8	0	20.6	26.2
				8	4	20.5	26.1
				8	7	20.5	26.2
				15	0	20.4	26.5
3.0	20525	836.5	QPSK	1	0	22.5	26.7
				1	7	22.4	26.3
				1	14	22.4	26.1
				8	0	21.6	26.8
				8	4	21.6	26.6
				8	7	21.6	26.2
				15	0	21.6	27.0
			16QAM	1	0	21.9	26.8
				1	7	21.8	26.3
				1	14	21.7	26.1
				8	0	20.6	26.6
				8	4	20.5	26.4
				8	7	20.5	26.2
				15	0	20.5	27.1
3.0	20635	847.5	QPSK	1	0	22.3	26.2
				1	7	22.3	25.7
				1	14	22.2	25.3
				8	0	21.4	26.4
				8	4	21.5	26.1
				8	7	21.4	25.9
				15	0	21.5	26.7
			16QAM	1	0	21.7	26.2
				1	7	21.8	25.9
				1	14	21.7	25.4
				8	0	20.5	26.3
				8	4	20.6	26.0
				8	7	20.5	25.8
				15	0	20.4	26.6

OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	20425	826.5	QPSK	1	0	22.5	25.9
				1	12	22.3	25.8
				1	24	22.4	26.1
				12	0	21.4	26.3
				12	6	21.4	26.2
				12	11	21.4	26.4
				25	0	21.4	26.9
			16QAM	1	0	21.7	25.9
				1	12	21.7	25.9
				1	24	21.7	26.2
				12	0	20.5	26.2
				12	6	20.5	26.1
				12	11	20.5	26.3
				25	0	20.5	26.8
5.0	20525	836.5	QPSK	1	0	22.5	26.5
				1	12	22.3	26.1
				1	24	22.3	25.8
				12	0	21.5	26.5
				12	6	21.5	26.1
				12	11	21.5	26.1
				25	0	21.5	26.7
			16QAM	1	0	21.8	26.6
				1	12	21.9	26.1
				1	24	21.9	25.8
				12	0	20.6	26.5
				12	6	20.5	26.0
				12	11	20.5	26.0
				25	0	20.5	26.5
5.0	20625	846.5	QPSK	1	0	22.3	26.2
				1	12	22.3	25.8
				1	24	22.4	25.3
				12	0	21.3	26.4
				12	6	21.4	26.1
				12	11	21.4	25.9
				25	0	21.4	26.7
			16QAM	1	0	21.5	26.1
				1	12	21.5	25.8
				1	24	21.5	25.4
				12	0	20.4	26.4
				12	6	20.4	26.2
				12	11	20.5	26.0
				25	0	20.4	26.8

OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20450	829.0	QPSK	1	0	22.4	25.8
				1	24	22.2	26.2
				1	49	22.4	26.5
				25	0	21.5	26.3
				25	12	21.5	26.6
				25	24	21.5	26.9
				50	0	21.5	27.3
			16QAM	1	0	21.5	25.8
				1	24	21.5	26.3
				1	49	21.6	26.5
				25	0	20.3	26.3
				25	12	20.4	26.5
				25	24	20.5	27.0
				50	0	20.4	27.2
10.0	20525	836.5	QPSK	1	0	22.3	26.6
				1	24	22.3	26.0
				1	49	22.2	25.6
				25	0	21.4	26.7
				25	12	21.4	25.9
				25	24	21.4	26.0
				50	0	21.4	26.6
			16QAM	1	0	21.7	26.6
				1	24	21.6	26.0
				1	49	21.6	25.6
				25	0	20.5	26.5
				25	12	20.5	25.9
				25	24	20.5	25.9
				50	0	20.4	26.5
10.0	20600	844.0	QPSK	1	0	22.4	25.6
				1	24	22.2	26.1
				1	49	22.2	25.1
				25	0	21.3	26.2
				25	12	21.2	26.2
				25	24	21.3	26.3
				50	0	21.3	26.9
			16QAM	1	0	21.6	25.6
				1	24	21.4	26.1
				1	49	21.5	25.4
				25	0	20.4	26.2
				25	12	20.3	26.2
				25	24	20.4	26.3
				50	0	20.4	26.9

7.2.4. LTE BAND 7

ID:	38806	Date:	6/24/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	20775	2502.5	QPSK	1	0	18.7	21.1
				1	12	18.6	21.0
				1	24	18.6	21.3
				12	0	17.8	22.3
				12	6	17.7	22.0
				12	11	17.7	22.2
				25	0	17.7	22.6
			16QAM	1	0	18.1	21.7
				1	12	18.0	21.8
				1	24	17.9	21.9
				12	0	16.9	22.1
				12	6	16.9	22.0
				12	11	16.8	22.1
				25	0	16.8	22.7
5.0	21100	2535.0	QPSK	1	0	18.8	22.6
				1	12	18.7	22.3
				1	24	18.7	22.4
				12	0	17.9	22.7
				12	6	17.9	22.5
				12	11	17.8	22.6
				25	0	17.8	23.1
			16QAM	1	0	17.9	22.3
				1	12	17.8	22.1
				1	24	17.8	22.3
				12	0	17.0	22.6
				12	6	16.9	22.4
				12	11	16.9	22.5
				25	0	16.9	23.0
5.0	21425	2567.5	QPSK	1	0	19.0	22.6
				1	12	19.0	22.6
				1	24	19.0	22.6
				12	0	17.9	22.8
				12	6	18.0	22.7
				12	11	18.1	22.9
				25	0	18.0	23.3
			16QAM	1	0	18.1	22.4
				1	12	18.1	22.4
				1	24	18.3	22.7
				12	0	17.0	22.8
				12	6	17.0	22.6
				12	11	17.1	22.7
				25	0	17.0	23.2

OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	20800	2505.0	QPSK	1	0	18.8	21.3
				1	24	18.9	21.9
				1	49	19.0	22.0
				25	0	17.5	22.2
				25	12	17.4	22.0
				25	24	17.4	22.3
				50	0	17.5	22.8
			16QAM	1	0	17.9	21.6
				1	24	17.8	21.9
				1	49	18.0	22.0
				25	0	16.7	22.2
				25	12	16.6	22.0
				25	24	16.6	22.2
				50	0	16.5	22.6
10.0	21100	2535.0	QPSK	1	0	18.8	22.4
				1	24	18.9	22.3
				1	49	18.9	22.4
				25	0	17.7	22.6
				25	12	17.6	22.3
				25	24	17.6	22.5
				50	0	17.7	23.0
			16QAM	1	0	18.1	22.4
				1	24	18.1	22.1
				1	49	18.0	22.1
				25	0	16.8	22.6
				25	12	16.8	22.4
				25	24	16.7	22.6
				50	0	16.6	23.1
10.0	21400	2565.0	QPSK	1	0	18.6	22.4
				1	24	18.6	22.4
				1	49	18.8	22.6
				25	0	17.5	22.6
				25	12	17.5	22.4
				25	24	17.7	22.7
				50	0	17.6	23.3
			16QAM	1	0	18.1	22.4
				1	24	18.1	22.4
				1	49	18.4	22.7
				25	0	16.6	22.6
				25	12	16.7	22.6
				25	24	16.9	22.7
				50	0	16.7	23.1

OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	20825	2507.5	QPSK	1	0	18.8	21.9
				1	37	18.7	22.2
				1	74	19.0	22.7
				36	0	17.8	22.5
				36	16	17.7	22.3
				36	35	17.7	22.5
				75	0	17.8	23.5
			16-QAM	1	0	17.9	22.0
				1	37	17.7	22.0
				1	74	18.0	22.4
				36	0	16.9	22.5
				36	16	16.7	22.3
				36	35	16.7	22.5
				75	0	16.8	23.2
15.0	21100	2535.0	QPSK	1	0	19.0	22.8
				1	37	18.9	22.4
				1	74	18.9	22.6
				36	0	17.8	23.0
				36	16	17.9	22.6
				36	35	17.8	22.9
				75	0	17.9	23.7
			16-QAM	1	0	18.3	22.4
				1	37	18.3	22.3
				1	74	18.3	22.3
				36	0	17.0	22.9
				36	16	17.1	22.7
				36	35	17.0	22.9
				75	0	17.0	23.4
15.0	21375	2562.5	QPSK	1	0	19.0	22.7
				1	37	18.7	22.6
				1	74	19.0	22.8
				36	0	17.7	23.2
				36	16	17.7	22.8
				36	35	17.7	23.1
				75	0	17.8	23.6
			16-QAM	1	0	18.0	22.6
				1	37	17.8	22.4
				1	74	18.0	22.6
				36	0	16.8	23.0
				36	16	16.8	22.7
				36	35	16.9	22.9
				75	0	16.9	23.6

OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	20850	2510.0	QPSK	1	0	18.8	21.6
				1	49	18.7	22.0
				1	99	18.9	22.4
				50	0	17.9	22.2
				50	24	18.0	22.0
				50	49	17.9	22.7
				100	0	17.5	23.2
			16-QAM	1	0	17.8	21.7
				1	49	17.7	21.9
				1	99	18.0	22.4
				50	0	16.9	22.1
				50	24	17.0	22.0
				50	49	17.0	22.7
				100	0	16.5	23.0
20.0	21100	2535.0	QPSK	1	0	18.8	22.5
				1	49	18.7	22.1
				1	99	18.9	22.5
				50	0	17.9	22.6
				50	24	17.8	22.4
				50	49	17.8	22.6
				100	0	17.8	23.3
			16-QAM	1	0	18.0	22.4
				1	49	18.0	22.0
				1	99	18.1	22.3
				50	0	16.9	22.6
				50	24	16.9	22.4
				50	49	16.9	22.7
				100	0	16.9	23.3
20.0	21350	2560.0	QPSK	1	0	19.0	22.4
				1	49	18.7	22.1
				1	99	18.9	22.5
				50	0	17.9	22.8
				50	24	17.6	22.5
				50	49	17.7	22.7
				100	0	17.8	23.4
			16-QAM	1	0	18.2	22.4
				1	49	17.9	22.1
				1	99	18.3	22.3
				50	0	16.9	22.8
				50	24	16.8	22.5
				50	49	16.8	22.7
				100	0	16.8	23.3

7.2.5. LTE BAND 12

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 12 (1.4MHZz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	23017	699.7	QPSK	1	0	23.4	27.7
				1	2	23.4	27.7
				1	5	23.4	27.7
				3	0	23.5	28.1
				3	1	23.5	28.0
				3	2	23.5	28.1
				6	0	22.5	28.0
			16QAM	1	0	22.7	27.6
				1	2	22.7	27.7
				1	5	22.6	27.6
				3	0	22.5	28.0
				3	1	22.5	28.0
				3	2	22.5	27.9
				6	0	21.4	27.8
1.4	23095	707.5	QPSK	1	0	23.4	27.4
				1	2	23.4	27.4
				1	5	23.5	27.4
				3	0	23.4	27.9
				3	1	23.4	27.8
				3	2	23.4	27.8
				6	0	22.5	27.9
			16QAM	1	0	22.7	27.5
				1	2	22.7	27.7
				1	5	22.7	27.5
				3	0	22.6	27.9
				3	1	22.6	27.9
				3	2	22.6	27.9
				6	0	21.8	27.8
1.4	23173	715.3	QPSK	1	0	23.2	27.1
				1	2	23.3	27.1
				1	5	23.3	26.8
				3	0	23.3	27.4
				3	1	23.3	27.4
				3	2	23.3	27.4
				6	0	22.2	27.8
			16QAM	1	0	22.5	27.0
				1	2	22.5	27.1
				1	5	22.5	26.8
				3	0	22.4	27.5
				3	1	22.4	27.6
				3	2	22.3	27.5
				6	0	21.3	27.5

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	23025	700.5	QPSK	1	0	23.5	27.8
				1	7	23.5	27.8
				1	14	23.4	27.7
				8	0	22.5	28.2
				8	4	22.5	27.9
				8	7	22.5	27.9
				15	0	22.5	28.0
			16QAM	1	0	22.8	27.9
				1	7	22.6	27.8
				1	14	22.5	27.6
				8	0	21.7	28.0
				8	4	21.6	27.7
				8	7	21.6	27.7
				15	0	21.5	28.0
3.0	23095	707.5	QPSK	1	0	23.5	27.5
				1	7	23.5	27.5
				1	14	23.4	27.6
				8	0	22.6	27.8
				8	4	22.6	27.8
				8	7	22.6	27.7
				15	0	22.5	28.2
			16QAM	1	0	22.7	27.5
				1	7	22.8	27.5
				1	14	22.8	27.6
				8	0	21.6	27.4
				8	4	21.6	27.5
				8	7	21.6	27.4
				15	0	21.6	28.4
3.0	23165	714.5	QPSK	1	0	23.3	27.5
				1	7	23.3	27.3
				1	14	23.2	26.8
				8	0	22.4	27.7
				8	4	22.4	27.6
				8	7	22.4	27.5
				15	0	22.4	27.9
			16QAM	1	0	22.7	27.6
				1	7	22.7	27.4
				1	14	22.5	27.1
				8	0	21.3	27.7
				8	4	21.3	27.5
				8	7	21.3	27.4
				15	0	21.4	27.6

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23035	701.5	QPSK	1	0	23.5	27.5
				1	12	23.3	27.3
				1	24	23.4	27.1
				12	0	22.6	27.8
				12	6	22.4	27.3
				12	11	22.4	27.3
				25	0	22.4	27.9
			16QAM	1	0	22.7	27.4
				1	12	22.6	27.3
				1	24	22.6	27.0
				12	0	21.7	27.7
				12	6	21.5	27.3
				12	11	21.5	27.2
				25	0	21.4	27.6
5.0	23095	707.5	QPSK	1	0	23.3	27.2
				1	12	23.3	27.1
				1	24	23.4	27.3
				12	0	22.4	27.7
				12	6	22.4	27.6
				12	11	22.3	27.8
				25	0	22.5	28.1
			16QAM	1	0	22.6	27.1
				1	12	22.7	27.2
				1	24	22.9	27.3
				12	0	21.5	27.6
				12	6	21.5	27.5
				12	11	21.5	27.7
				25	0	21.5	27.8
5.0	23155	713.5	QPSK	1	0	23.4	27.4
				1	12	23.2	27.2
				1	24	23.2	26.7
				12	0	22.4	27.8
				12	6	22.2	27.6
				12	11	22.2	27.4
				25	0	22.3	27.9
			16QAM	1	0	22.8	27.4
				1	12	22.7	27.2
				1	24	22.5	26.6
				12	0	21.5	27.8
				12	6	21.3	27.5
				12	11	21.2	27.3
				25	0	21.3	27.7

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23060	704.0	QPSK	1	0	23.5	27.5
				1	24	23.2	26.9
				1	49	23.4	27.3
				25	0	22.5	27.3
				25	12	22.5	26.8
				25	24	22.6	27.5
				50	0	22.5	27.6
			16QAM	1	0	22.6	27.5
				1	24	22.5	26.9
				1	49	22.6	27.3
				25	0	21.2	27.4
				25	12	21.2	26.8
				25	24	21.4	27.3
				50	0	21.2	27.4
10.0	23095	707.5	QPSK	1	0	23.2	26.9
				1	24	23.3	27.1
				1	49	23.3	27.3
				25	0	22.2	27.5
				25	12	22.3	27.6
				25	24	22.3	27.9
				50	0	22.3	28.3
			16QAM	1	0	22.3	26.9
				1	24	22.6	27.3
				1	49	22.7	27.3
				25	0	21.3	27.5
				25	12	21.4	27.6
				25	24	21.5	28.0
				50	0	21.4	28.1
10.0	23130	711.0	QPSK	1	0	23.3	27.1
				1	24	23.3	27.3
				1	49	23.4	26.9
				25	0	22.3	27.9
				25	12	22.3	27.8
				25	24	22.5	27.6
				50	0	22.3	28.1
			16QAM	1	0	22.5	27.1
				1	24	22.5	27.4
				1	49	22.4	26.8
				25	0	21.4	28.0
				25	12	21.4	27.9
				25	24	21.2	27.6
				50	0	21.3	28.1

7.2.6. LTE BAND 13

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23207	779.5	QPSK	1	0	23.3	26.79
				1	12	23.4	27.08
				1	24	23.4	27.34
				12	0	22.3	27.32
				12	6	22.2	27.42
				12	11	22.3	27.66
				25	0	22.4	28.09
			16QAM	1	0	22.5	26.48
				1	12	22.3	26.92
				1	24	22.6	27.18
				12	0	21.4	27.35
				12	6	21.3	27.35
				12	11	21.5	27.56
				25	0	21.4	27.90
5.0	23230	782.0	QPSK	1	0	23.3	26.99
				1	12	23.5	27.11
				1	24	23.4	26.65
				12	0	22.4	27.38
				12	6	22.5	27.62
				12	11	22.4	27.67
				25	0	22.4	27.84
			16QAM	1	0	22.8	27.01
				1	12	22.9	27.20
				1	24	22.7	26.60
				12	0	21.5	27.37
				12	6	21.5	27.46
				12	11	21.5	27.54
				25	0	21.4	27.59
5.0	23255	784.5	QPSK	1	0	23.4	27.12
				1	12	23.2	26.52
				1	24	23.3	26.91
				12	0	22.3	27.44
				12	6	22.3	27.14
				12	11	22.2	27.04
				25	0	22.2	27.95
			16QAM	1	0	22.3	27.32
				1	12	22.3	26.77
				1	24	22.4	26.76
				12	0	21.5	27.64
				12	6	21.4	27.14
				12	11	21.4	27.05
				25	0	21.4	27.84

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23230	782.0	QPSK	1	0	23.5	27.0
				1	24	23.5	27.4
				1	49	23.2	26.7
				25	0	22.5	27.8
				25	12	22.7	27.5
				25	24	22.5	27.7
				50	0	22.7	28.0
			16QAM	1	0	22.6	26.8
				1	24	22.7	27.4
				1	49	22.5	26.7
				25	0	21.6	27.8
				25	12	21.7	27.6
				25	24	21.6	27.8
				50	0	21.7	27.9

7.2.7. LTE BAND 17

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	23755	706.5	QPSK	1	0	23.3	27.2
				1	12	23.4	27.3
				1	24	23.4	27.5
				12	0	22.5	27.7
				12	6	22.6	27.7
				12	11	22.6	27.8
				25	0	22.6	28.1
			16QAM	1	0	22.6	27.3
				1	12	22.7	27.3
				1	24	22.7	27.5
				12	0	21.6	27.6
				12	6	21.7	27.5
				12	11	21.7	27.7
				25	0	21.7	28.0
5.0	23790	710.0	QPSK	1	0	23.5	27.3
				1	12	23.5	27.4
				1	24	23.4	27.4
				12	0	22.6	27.9
				12	6	22.6	28.0
				12	11	22.6	28.1
				25	0	22.6	28.3
			16QAM	1	0	22.5	27.3
				1	12	22.5	27.5
				1	24	22.5	27.5
				12	0	21.7	27.9
				12	6	21.7	27.9
				12	11	21.6	28.0
				25	0	21.6	28.1
5.0	23825	713.5	QPSK	1	0	23.4	27.6
				1	12	23.4	27.3
				1	24	23.3	26.8
				12	0	22.5	27.9
				12	6	22.4	27.7
				12	11	22.3	27.6
				25	0	22.4	27.9
			16QAM	1	0	22.6	27.6
				1	12	22.5	27.3
				1	24	22.7	26.8
				12	0	21.6	27.8
				12	6	21.4	27.6
				12	11	21.4	27.6
				25	0	21.5	28.1

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	23780	709.0	QPSK	1	0	23.4	27.1
				1	24	23.5	27.4
				1	49	23.3	27.3
				25	0	22.3	27.7
				25	12	22.3	27.7
				25	24	22.3	27.8
			16QAM	50	0	22.4	28.4
				1	0	22.5	27.1
				1	24	22.7	27.5
				1	49	22.5	27.4
				25	0	21.4	27.7
				25	12	21.4	27.8
				25	24	21.4	28.0
				50	0	21.5	28.1
10.0	23790	710.0	QPSK	1	0	23.3	27.1
				1	24	23.4	27.4
				1	49	23.4	27.0
				25	0	22.4	27.8
				25	12	22.4	27.9
				25	24	22.3	27.8
			16QAM	50	0	22.4	28.4
				1	0	22.6	27.1
				1	24	22.6	27.4
				1	49	22.4	27.0
				25	0	21.5	28.0
				25	12	21.6	28.0
				25	24	21.4	28.0
				50	0	21.5	28.3
10.0	23800	711.0	QPSK	1	0	23.4	27.2
				1	24	23.5	27.4
				1	49	23.4	26.8
				25	0	22.4	28.0
				25	12	22.4	28.0
				25	24	22.4	27.7
			16QAM	50	0	22.4	28.2
				1	0	22.5	27.2
				1	24	22.6	27.6
				1	49	22.3	26.8
				25	0	21.5	28.1
				25	12	21.5	28.0
				25	24	21.3	27.8
				50	0	21.4	28.4

7.2.8. LTE BAND 25

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	26047	1850.7	QPSK	1	0	20.9	23.9
				1	2	20.8	24.1
				1	5	20.8	23.9
				3	0	20.8	24.4
				3	1	20.8	24.3
				3	2	20.8	24.4
				6	0	19.8	24.9
			16QAM	1	0	20.1	23.9
				1	2	20.1	24.0
				1	5	20.0	23.9
				3	0	19.9	24.4
				3	1	19.9	24.5
				3	2	19.9	24.3
				6	0	18.9	24.6
1.4	26365	1882.5	QPSK	1	0	20.8	24.5
				1	2	20.8	24.5
				1	5	20.8	24.5
				3	0	20.9	25.0
				3	1	20.9	25.0
				3	2	20.9	24.9
				6	0	20.0	25.1
			16QAM	1	0	20.1	24.5
				1	2	20.1	24.5
				1	5	20.1	24.6
				3	0	20.2	25.0
				3	1	20.2	25.0
				3	2	20.2	25.0
				6	0	19.2	25.1
1.4	26683	1914.3	QPSK	1	0	20.9	23.9
				1	2	20.8	23.9
				1	5	20.9	23.5
				3	0	21.0	24.4
				3	1	21.0	24.0
				3	2	21.0	23.9
				6	0	19.9	24.6
			16QAM	1	0	20.0	23.9
				1	2	20.0	24.1
				1	5	20.0	23.5
				3	0	19.9	24.2
				3	1	19.8	24.2
				3	2	19.9	24.2
				6	0	18.7	24.7

OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	26055	1851.5	QPSK	1	0	20.9	24.0
				1	7	20.9	24.2
				1	14	20.9	24.4
				8	0	20.0	24.7
				8	4	20.0	24.6
				8	7	19.9	24.7
				15	0	20.0	25.1
			16QAM	1	0	20.0	24.1
				1	7	20.1	24.2
				1	14	20.1	24.3
				8	0	19.0	24.6
				8	4	19.1	24.5
				8	7	19.1	24.6
				15	0	19.0	25.1
3.0	26365	1882.5	QPSK	1	0	21.0	24.6
				1	7	21.0	24.6
				1	14	20.9	24.6
				8	0	20.1	25.0
				8	4	20.1	24.9
				8	7	20.1	24.9
				15	0	20.1	25.6
			16QAM	1	0	20.3	24.7
				1	7	20.3	24.9
				1	14	20.3	25.0
				8	0	19.2	25.1
				8	4	19.2	24.9
				8	7	19.2	24.9
				15	0	19.2	25.8
3.0	26675	1913.5	QPSK	1	0	20.9	24.2
				1	7	20.8	24.1
				1	14	20.8	23.9
				8	0	20.0	24.6
				8	4	20.0	24.6
				8	7	20.0	24.5
				15	0	20.0	25.2
			16QAM	1	0	19.9	24.2
				1	7	19.9	24.3
				1	14	19.9	24.0
				8	0	18.8	24.6
				8	4	18.9	24.6
				8	7	18.8	24.5
				15	0	18.8	24.9

OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	26065	1852.5	QPSK	1	0	20.9	23.8
				1	12	20.9	23.8
				1	24	21.0	24.0
				12	0	20.0	24.6
				12	6	20.1	24.6
				12	11	20.1	24.8
				25	0	20.0	25.2
			16QAM	1	0	20.4	24.1
				1	12	20.5	24.3
				1	24	20.5	24.4
				12	0	19.2	24.6
				12	6	19.3	24.6
				12	11	19.3	24.7
				25	0	19.2	25.2
5.0	26365	1882.5	QPSK	1	0	21.0	24.3
				1	12	20.9	24.2
				1	24	20.9	24.3
				12	0	20.1	24.9
				12	6	20.0	24.8
				12	11	20.0	24.9
				25	0	20.0	25.3
			16QAM	1	0	20.3	24.4
				1	12	20.3	24.3
				1	24	20.3	24.4
				12	0	19.1	24.9
				12	6	19.1	24.7
				12	11	19.1	24.8
				25	0	19.1	25.5
5.0	26665	1912.5	QPSK	1	0	20.9	24.2
				1	12	20.8	24.0
				1	24	20.7	23.5
				12	0	19.7	24.5
				12	6	19.7	24.2
				12	11	19.7	24.5
				25	0	19.7	24.7
			16QAM	1	0	20.0	23.9
				1	12	19.8	23.8
				1	24	19.8	23.5
				12	0	18.9	24.4
				12	6	18.8	24.3
				12	11	18.9	24.6
				25	0	18.8	24.8

OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	26090	1855.0	QPSK	1	0	20.8	23.8
				1	24	20.9	24.2
				1	49	20.9	23.8
				25	0	19.8	24.5
				25	12	19.7	24.4
				25	24	19.7	24.5
				50	0	19.8	25.2
			16QAM	1	0	20.0	23.8
				1	24	20.2	24.1
				1	49	20.1	23.9
				25	0	18.9	24.5
				25	12	18.8	24.4
				25	24	18.8	24.5
				50	0	18.8	24.9
10.0	26365	1882.5	QPSK	1	0	20.8	24.1
				1	24	20.9	24.2
				1	49	20.9	24.3
				25	0	19.7	24.7
				25	12	19.7	24.6
				25	24	19.6	24.7
				50	0	19.7	25.4
			16QAM	1	0	20.0	24.1
				1	24	20.1	24.3
				1	49	20.1	24.3
				25	0	18.8	24.6
				25	12	18.8	24.6
				25	24	18.7	24.6
				50	0	18.7	25.4
10.0	26640	1910.0	QPSK	1	0	20.9	23.9
				1	24	20.8	23.8
				1	49	20.7	23.5
				25	0	19.9	24.7
				25	12	19.8	24.2
				25	24	19.7	24.2
				50	0	19.8	24.8
			16QAM	1	0	20.2	24.2
				1	24	20.0	24.0
				1	49	19.9	23.4
				25	0	19.2	24.7
				25	12	19.0	24.3
				25	24	18.9	24.3
				50	0	19.0	24.9

OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	26115	1857.5	QPSK	1	0	20.9	24.2
				1	37	21.0	24.4
				1	74	20.9	24.2
				36	0	19.7	25.0
				36	16	19.7	24.8
				36	35	19.7	24.7
				75	0	19.8	25.7
			16-QAM	1	0	20.1	24.2
				1	37	20.2	24.3
				1	74	20.1	24.1
				36	0	18.8	25.1
				36	16	18.7	24.8
				36	35	18.7	24.7
				75	0	18.8	25.5
15.0	26365	1882.5	QPSK	1	0	20.9	24.4
				1	37	21.0	24.5
				1	74	20.9	24.6
				36	0	19.9	25.2
				36	16	20.0	25.1
				36	35	20.0	25.2
				75	0	20.0	26.0
			16-QAM	1	0	20.0	24.4
				1	37	20.1	24.5
				1	74	20.1	24.6
				36	0	19.0	25.0
				36	16	19.1	25.1
				36	35	19.0	25.2
				75	0	19.1	25.8
15.0	26615	1907.5	QPSK	1	0	21.0	24.5
				1	37	21.0	24.5
				1	74	20.8	23.6
				36	0	19.9	25.5
				36	16	19.9	25.2
				36	35	19.8	25.0
				75	0	19.8	25.7
			16-QAM	1	0	19.9	24.5
				1	37	20.0	24.2
				1	74	19.7	23.8
				36	0	19.0	25.3
				36	16	18.9	25.1
				36	35	18.8	24.9
				75	0	19.0	25.8

OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	26140	1860.0	QPSK	1	0	20.9	24.0
				1	49	21.0	24.3
				1	99	21.0	24.1
				50	0	20.2	24.9
				50	24	20.2	24.7
				50	49	20.1	24.6
				100	0	20.2	25.6
			16-QAM	1	0	20.3	24.1
				1	49	20.3	24.2
				1	99	20.3	24.2
				50	0	19.3	25.1
				50	24	19.3	24.7
				50	49	19.2	24.8
				100	0	19.2	25.5
20.0	26365	1882.5	QPSK	1	0	20.7	24.3
				1	49	20.9	24.5
				1	99	20.8	24.6
				50	0	19.9	25.1
				50	24	20.0	25.2
				50	49	20.0	25.2
				100	0	20.0	25.9
			16-QAM	1	0	20.2	24.4
				1	49	20.4	24.6
				1	99	20.3	24.6
				50	0	19.0	25.0
				50	24	19.1	25.1
				50	49	19.0	25.2
				100	0	19.0	25.9
20.0	26590	1905.0	QPSK	1	0	20.9	24.4
				1	49	21.0	24.6
				1	99	20.7	23.7
				50	0	19.7	25.3
				50	24	19.8	25.3
				50	49	19.8	25.3
				100	0	20.0	25.9
			16-QAM	1	0	20.0	24.4
				1	49	20.1	24.4
				1	99	19.9	23.8
				50	0	18.8	25.3
				50	24	18.9	25.3
				50	49	18.8	25.2
				100	0	19.0	25.8

7.2.9. LTE BAND 26

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	26697	814.7	QPSK	1	0	22.4	26.4
				1	2	22.4	26.4
				1	5	22.4	26.3
				3	0	22.5	26.7
				3	1	22.5	26.6
				3	2	22.4	26.7
				6	0	21.5	27.1
			16QAM	1	0	21.7	26.3
				1	2	21.7	26.4
				1	5	21.7	26.3
				3	0	21.7	26.8
				3	1	21.6	26.8
				3	2	21.6	26.7
				6	0	20.6	26.7
1.4	26740	819.0	QPSK	1	0	22.4	26.7
				1	2	22.4	26.8
				1	5	22.4	26.7
				3	0	22.4	27.1
				3	1	22.4	27.2
				3	2	22.4	27.1
				6	0	21.4	26.9
			16QAM	1	0	21.5	26.6
				1	2	21.5	27.0
				1	5	21.6	26.6
				3	0	21.5	27.1
				3	1	21.5	27.1
				3	2	21.5	27.3
				6	0	20.5	27.0
1.4	26783	823.3	QPSK	1	0	22.3	25.6
				1	2	22.2	25.6
				1	5	22.2	25.3
				3	0	22.4	26.0
				3	1	22.4	25.7
				3	2	22.4	25.6
				6	0	21.4	26.0
			16QAM	1	0	21.4	25.6
				1	2	21.3	25.4
				1	5	21.3	25.3
				3	0	21.5	25.9
				3	1	21.4	25.8
				3	2	21.4	25.8
				6	0	20.4	26.1

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	26705	815.5	QPSK	1	0	22.5	26.3
				1	7	22.4	26.4
				1	14	22.3	26.3
				8	0	21.4	26.6
				8	4	21.4	26.6
				8	7	21.4	26.6
				15	0	21.4	27.3
			16QAM	1	0	21.7	26.3
				1	7	21.8	26.4
				1	14	21.6	26.3
				8	0	20.6	26.5
				8	4	20.5	26.3
				8	7	20.5	26.4
				15	0	20.4	27.2
3.0	26740	819.0	QPSK	1	0	22.4	26.4
				1	7	22.5	26.6
				1	14	22.4	26.7
				8	0	21.5	26.9
				8	4	21.5	26.8
				8	7	21.5	26.9
				15	0	21.5	26.8
			16QAM	1	0	21.6	26.5
				1	7	21.6	26.7
				1	14	21.6	26.8
				8	0	20.3	26.7
				8	4	20.4	26.7
				8	7	20.4	26.7
				15	0	20.4	27.3
3.0	26775	822.5	QPSK	1	0	22.5	26.1
				1	7	22.5	25.6
				1	14	22.4	25.2
				8	0	21.5	26.2
				8	4	21.6	25.9
				8	7	21.6	25.7
				15	0	21.3	26.4
			16QAM	1	0	21.3	26.0
				1	7	21.4	25.6
				1	14	21.3	25.4
				8	0	20.3	26.0
				8	4	20.3	25.8
				8	7	20.3	25.6
				15	0	20.3	26.3

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	26715	816.5	QPSK	1	0	22.5	26.5
				1	12	22.3	26.5
				1	24	22.4	26.4
				12	0	21.7	26.9
				12	6	21.5	27.0
				12	11	21.5	27.0
				25	0	21.5	27.4
			16QAM	1	0	21.8	26.3
				1	12	21.6	26.3
				1	24	21.6	26.3
				12	0	20.8	26.9
				12	6	20.7	26.9
				12	11	20.7	27.1
				25	0	20.6	27.2
5.0	26740	819.0	QPSK	1	0	22.4	26.7
				1	12	22.4	26.5
				1	24	22.5	26.6
				12	0	21.5	27.0
				12	6	21.5	27.1
				12	11	21.5	27.0
				25	0	21.5	27.4
			16QAM	1	0	21.6	26.4
				1	12	21.6	26.6
				1	24	21.6	26.6
				12	0	20.3	27.0
				12	6	20.3	27.1
				12	11	20.2	27.2
				25	0	20.2	27.5
5.0	26765	821.5	QPSK	1	0	22.4	26.2
				1	12	22.4	25.9
				1	24	22.3	25.2
				12	0	21.4	26.4
				12	6	21.5	26.2
				12	11	21.5	26.1
				25	0	21.4	26.7
			16QAM	1	0	21.7	26.2
				1	12	21.6	25.9
				1	24	21.7	25.3
				12	0	20.4	26.6
				12	6	20.5	26.2
				12	11	20.6	26.1
				25	0	20.6	26.7

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	26740	819.0	QPSK	1	0	22.5	26.4
				1	24	22.4	26.4
				1	49	22.4	25.9
				25	0	21.4	26.9
				25	12	21.4	26.6
				25	24	21.5	26.4
				50	0	21.6	27.1
			16QAM	1	0	21.7	26.4
				1	24	21.6	26.4
				1	49	21.6	25.9
				25	0	20.6	27.0
				25	12	20.6	26.7
				25	24	20.6	26.4
				50	0	20.6	27.2

7.2.10. LTE BAND 27

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 27 (1.4 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
1.4	27117	814.7	QPSK	1	0	22.5	26.4
				1	2	22.4	26.3
				1	5	22.5	26.3
				3	0	22.4	26.6
				3	1	22.4	26.5
				3	2	22.4	26.6
				6	0	21.4	26.9
			16QAM	1	0	21.6	26.3
				1	2	21.6	26.4
				1	5	21.6	26.3
				3	0	21.6	26.7
				3	1	21.6	26.7
				3	2	21.6	26.7
				6	0	20.4	26.7
1.4	27160	819.0	QPSK	1	0	22.4	25.9
				1	2	22.2	26.1
				1	5	22.3	25.7
				3	0	22.4	26.5
				3	1	22.3	26.4
				3	2	22.3	26.3
				6	0	21.4	26.5
			16QAM	1	0	21.6	26.0
				1	2	21.6	26.3
				1	5	21.6	25.8
				3	0	21.4	26.4
				3	1	21.4	26.4
				3	2	21.4	26.3
				6	0	20.6	26.7
1.4	27203	823.3	QPSK	1	0	22.5	26.2
				1	2	22.4	26.3
				1	5	22.5	26.1
				3	0	22.5	26.6
				3	1	22.4	26.4
				3	2	22.4	26.3
				6	0	21.5	26.6
			16QAM	1	0	21.6	26.2
				1	2	21.5	26.2
				1	5	21.6	26.1
				3	0	21.5	26.6
				3	1	21.5	26.7
				3	2	21.5	26.6
				6	0	20.5	26.4

OUTPUT POWER FOR LTE BAND 27 (3.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
3.0	27125	815.5	QPSK	1	0	22.4	26.3
				1	7	22.5	26.0
				1	14	22.5	25.9
				8	0	21.4	26.5
				8	4	21.4	26.5
				8	7	21.4	26.1
				15	0	21.4	26.6
			16QAM	1	0	21.8	26.3
				1	7	21.8	26.1
				1	14	21.8	26.0
				8	0	20.5	26.4
				8	4	20.4	26.3
				8	7	20.5	26.1
				15	0	20.3	26.6
3.0	27160	819.0	QPSK	1	0	22.4	25.8
				1	7	22.3	25.9
				1	14	22.3	25.6
				8	0	21.3	26.4
				8	4	21.3	26.2
				8	7	21.3	26.1
				15	0	21.3	26.9
			16QAM	1	0	21.7	26.0
				1	7	21.7	25.9
				1	14	21.6	26.3
				8	0	20.3	26.3
				8	4	20.3	26.2
				8	7	20.3	26.1
				15	0	20.3	27.0
3.0	27195	822.5	QPSK	1	0	22.3	26.2
				1	7	22.4	26.1
				1	14	22.2	26.0
				8	0	21.3	26.7
				8	4	21.3	26.6
				8	7	21.4	26.3
				15	0	21.4	26.9
			16QAM	1	0	21.5	26.3
				1	7	21.5	26.2
				1	14	21.5	26.1
				8	0	20.5	26.6
				8	4	20.5	26.5
				8	7	20.5	26.2
				15	0	20.4	26.7

OUTPUT POWER FOR LTE BAND 27 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	27135	816.5	QPSK	1	0	22.5	26.3
				1	12	22.5	25.9
				1	24	22.4	25.8
				12	0	21.5	26.3
				12	6	21.5	26.1
				12	11	21.5	26.1
				25	0	21.5	26.6
			16QAM	1	0	21.6	26.1
				1	12	21.5	25.9
				1	24	21.5	25.8
				12	0	20.6	26.2
				12	6	20.6	26.0
				12	11	20.6	26.1
				25	0	20.6	26.6
5.0	27160	819.0	QPSK	1	0	22.4	25.8
				1	12	22.2	25.8
				1	24	22.3	25.7
				12	0	21.5	26.5
				12	6	21.4	26.5
				12	11	21.5	26.5
				25	0	21.4	26.9
			16QAM	1	0	21.5	25.9
				1	12	21.3	25.8
				1	24	21.4	25.7
				12	0	20.5	26.5
				12	6	20.5	26.3
				12	11	20.5	26.3
				25	0	20.5	27.0
5.0	27185	821.5	QPSK	1	0	22.2	25.9
				1	12	22.2	26.1
				1	24	22.3	25.9
				12	0	21.5	27.0
				12	6	21.5	26.7
				12	11	21.5	26.5
				25	0	21.5	27.1
			16QAM	1	0	21.4	26.0
				1	12	21.5	26.2
				1	24	21.5	26.0
				12	0	20.6	26.9
				12	6	20.6	26.7
				12	11	20.6	26.7
				25	0	20.6	26.9

OUTPUT POWER FOR LTE BAND 27 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	27160	819.0	QPSK	1	0	22.4	25.9
				1	24	22.3	25.9
				1	49	22.5	25.8
				25	0	21.3	26.5
				25	12	21.3	26.5
				25	24	21.3	26.8
				50	0	21.4	27.2
			16QAM	1	0	21.3	25.8
				1	24	21.2	25.8
				1	49	21.3	26.0
				25	0	20.4	26.6
				25	12	20.3	26.5
				25	24	20.3	26.8
				50	0	20.3	27.0

7.2.11. LTE BAND 30

ID:	50820	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 30 (5.0 MH)

Bandwidth	UL Channel	Frequency	Modulation	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	27685	2307.5	QPSK	1	0	20.0	24.2
				1	12	19.9	23.9
				1	24	19.9	23.9
				12	0	19.2	24.4
				12	6	19.1	24.2
				12	11	19.2	24.2
				25	0	19.1	24.7
			16QAM	1	0	19.1	23.8
				1	12	19.0	23.7
				1	24	19.0	23.7
				12	0	18.2	24.4
				12	6	18.2	24.2
				12	11	18.3	24.3
				25	0	18.1	24.4
5.0	27710	2310.0	QPSK	1	0	19.9	23.8
				1	12	19.9	23.6
				1	24	19.8	23.5
				12	0	19.2	24.2
				12	6	19.1	23.9
				12	11	19.1	23.9
				25	0	19.1	24.6
			16QAM	1	0	19.4	24.0
				1	12	19.4	23.7
				1	24	19.4	23.6
				12	0	18.2	24.2
				12	6	18.2	23.9
				12	11	18.2	23.8
				25	0	18.3	24.6
5.0	27735	2312.5	QPSK	1	0	20.0	23.7
				1	12	19.8	23.5
				1	24	19.6	23.2
				12	0	19.1	23.8
				12	6	19.1	23.6
				12	11	19.1	23.6
				25	0	19.1	24.3
			16QAM	1	0	19.4	23.6
				1	12	19.3	23.4
				1	24	19.0	23.1
				12	0	18.2	23.9
				12	6	18.2	23.7
				12	11	18.2	23.7
				25	0	18.4	24.4

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	27710	2310.0	QPSK	1	0	20.0	24.0
				1	24	20.0	23.7
				1	49	19.7	23.3
				25	0	19.1	24.3
				25	12	19.2	24.0
				25	24	19.1	23.9
				50	0	19.2	24.8
			16QAM	1	0	19.3	23.9
				1	24	19.2	23.6
				1	49	19.0	23.2
				25	0	18.2	24.4
				25	12	18.3	24.1
				25	24	18.3	24.0
				50	0	18.2	24.7

7.2.12. LTE BAND 41

ID:	44366	Date:	5/27/16
------------	-------	--------------	---------

OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
5.0	39675	2498.5	QPSK	1	0	19.7	21.5
				1	12	19.9	22.0
				1	24	19.8	22.1
				12	0	19.0	22.5
				12	6	19.0	22.7
				12	11	19.0	22.8
				25	0	18.7	23.4
			16QAM	1	0	18.8	21.6
				1	12	18.7	21.8
				1	24	18.6	22.0
				12	0	17.6	21.8
				12	6	17.6	21.8
				12	11	17.6	22.0
				25	0	17.5	22.4
5.0	40620	2593.0	QPSK	1	0	19.8	23.1
				1	12	19.7	23.0
				1	24	19.7	23.1
				12	0	18.8	23.4
				12	6	18.8	23.4
				12	11	18.8	23.4
				25	0	18.7	24.0
			16QAM	1	0	19.1	22.9
				1	12	19.0	22.8
				1	24	19.1	22.9
				12	0	18.4	23.0
				12	6	18.4	23.0
				12	11	18.3	22.9
				25	0	18.5	23.6
5.0	41565	2687.5	QPSK	1	0	19.9	23.3
				1	12	19.8	23.2
				1	24	19.8	23.1
				12	0	18.9	23.4
				12	6	18.8	23.2
				12	11	18.8	23.3
				25	0	18.8	24.1
			16QAM	1	0	18.9	23.0
				1	12	18.8	22.8
				1	24	18.7	22.7
				12	0	17.6	23.0
				12	6	17.6	22.9
				12	11	17.5	22.9
				25	0	17.5	23.3

OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
10.0	39700	2501.0	QPSK	1	0	19.8	22.4
				1	24	19.9	23.1
				1	49	19.9	23.2
				25	0	19.1	23.0
				25	12	19.1	23.0
				25	24	19.1	23.3
				50	0	19.1	24.0
			16QAM	1	0	19.0	22.4
				1	24	19.0	23.0
				1	49	19.1	23.1
				25	0	18.2	23.0
				25	12	18.3	23.0
				25	24	18.3	23.2
				50	0	18.1	23.7
10.0	40620	2593.0	QPSK	1	0	19.8	23.4
				1	24	19.7	23.3
				1	49	19.8	23.3
				25	0	18.9	23.6
				25	12	18.8	23.4
				25	24	18.9	23.5
				50	0	19.0	24.3
			16QAM	1	0	19.1	23.3
				1	24	19.0	23.2
				1	49	19.0	23.3
				25	0	17.9	23.4
				25	12	17.8	23.3
				25	24	17.8	23.3
				50	0	17.7	23.9
10.0	41540	2685.0	QPSK	1	0	19.9	23.9
				1	24	19.9	23.8
				1	49	19.8	23.5
				25	0	19.3	24.0
				25	12	19.3	23.9
				25	24	19.3	23.9
				50	0	19.2	24.5
			16QAM	1	0	19.0	23.4
				1	24	18.9	23.3
				1	49	18.9	23.1
				25	0	18.1	23.5
				25	12	18.0	23.4
				25	24	18.0	23.4
				50	0	18.0	24.1

OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
15.0	39725	2503.5	QPSK	1	0	19.8	22.0
				1	37	20.0	22.9
				1	74	20.0	22.9
				36	0	19.2	22.9
				36	16	19.3	23.0
				36	35	19.3	23.1
				75	0	19.2	23.9
			16-QAM	1	0	19.3	23.2
				1	37	19.3	23.8
				1	74	19.3	23.9
				36	0	18.5	23.9
				36	16	18.4	24.0
				36	35	18.4	24.1
				75	0	18.5	25.0
15.0	40620	2593.0	QPSK	1	0	19.9	23.3
				1	37	19.8	23.1
				1	74	19.7	23.1
				36	0	18.7	23.6
				36	16	18.6	23.4
				36	35	18.7	23.5
				75	0	18.6	24.4
			16-QAM	1	0	19.1	23.2
				1	37	19.0	23.1
				1	74	18.9	23.1
				36	0	18.0	23.3
				36	16	18.0	23.2
				36	35	18.0	23.2
				75	0	17.9	24.0
15.0	41515	2682.5	QPSK	1	0	19.7	23.3
				1	37	19.8	23.6
				1	74	19.8	23.4
				36	0	19.1	24.0
				36	16	19.1	23.8
				36	35	19.1	23.9
				75	0	19.0	24.6
			16-QAM	1	0	19.0	23.5
				1	37	19.0	23.7
				1	74	18.9	23.4
				36	0	18.2	23.9
				36	16	18.2	23.7
				36	35	18.2	23.8
				75	0	18.2	24.5

OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Bandwidth	UL Channel	Frequency	Mode	RB	RB	Average (dBm)	Peak (dBm)
				Size	Offset		
20.0	39750	2506.0	QPSK	1	0	19.6	22.0
				1	49	20.0	23.1
				1	99	19.7	23.1
				50	0	18.9	23.3
				50	24	18.9	23.3
				50	49	18.9	23.3
				100	0	18.8	24.1
			16-QAM	1	0	19.1	22.4
				1	49	19.1	23.0
				1	99	19.0	23.1
				50	0	18.1	23.2
				50	24	18.1	23.2
				50	49	18.1	23.2
				100	0	17.9	24.1
20.0	40620	2593.0	QPSK	1	0	19.8	23.2
				1	49	19.6	23.0
				1	99	19.7	23.0
				50	0	18.7	23.4
				50	24	18.6	23.2
				50	49	18.6	23.3
				100	0	18.4	24.1
			16-QAM	1	0	19.0	23.2
				1	49	18.8	23.0
				1	99	18.9	23.0
				50	0	18.0	23.4
				50	24	17.9	23.2
				50	49	17.8	23.3
				100	0	17.7	24.3
20.0	41490	2680.0	QPSK	1	0	19.8	23.2
				1	49	19.8	23.5
				1	99	19.8	23.3
				50	0	19.0	23.8
				50	24	19.0	23.6
				50	49	19.0	23.8
				100	0	18.8	24.4
			16-QAM	1	0	19.2	23.2
				1	49	19.1	23.5
				1	99	19.0	23.3
				50	0	18.0	23.7
				50	24	18.0	23.6
				50	49	18.0	23.7
				100	0	17.9	24.3

8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

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

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 27
- LTE Band 30
- LTE Band 41

RESULTS

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 2	1.4 MHz BAND QPSK	1/0	1880	0.3242576	0.453297
	1.4 MHz BAND QPSK	6/0	1880	1.0809	1.283
	1.4 MHz BAND 16QAM	1/0	1880	0.3519681	0.472487
	1.4 MHz BAND 16QAM	6/0	1880	1.0719	1.28
	3.0 MHz BAND QPSK	1/0	1880	0.2887580	0.428245
	3.0 MHz BAND QPSK	15/0	1880	2.6758	2.965
	3.0 MHz BAND 16QAM	1/0	1880	0.2998614	0.464212
	3.0 MHz BAND 16QAM	15/0	1880	2.6816	2.944
	5.0 MHz BAND QPSK	1/0	1880	0.2595364	0.442118
	5.0 MHz BAND QPSK	25/0	1880	4.4621	5.029
	5.0 MHz BAND 16QAM	1/0	1880	0.2582188	0.429447
	5.0 MHz BAND 16QAM	25/0	1880	4.464	5.114
	10.0 MHz BAND QPSK	1/0	1880	0.2913941	0.432839
	10.0 MHz BAND QPSK	50/0	1880	8.8905	9.977
	10.0 MHz BAND 16QAM	1/0	1880	0.3396767	0.486746
	10.0 MHz BAND 16QAM	50/0	1880	8.9934	9.843
	15.0 MHz BAND QPSK	1/0	1880	0.2818903	0.457506
	15.0 MHz BAND QPSK	75/0	1880	13.4409	14.051
	15.0 MHz BAND 16QAM	1/0	1880	0.2959645	0.431682
	15.0 MHz BAND 16QAM	75/0	1880	13.3992	14.541
	20.0 MHz BAND QPSK	1/0	1880	0.2830778	0.465362
	20.0 MHz BAND QPSK	100/0	1880	17.9117	19.727
	20.0 MHz BAND 16QAM	1/0	1880	0.2757199	0.471971
	20.0 MHz BAND 16QAM	100/0	1880	17.8621	19.433

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 4	1.4 MHz BAND QPSK	1/0	1732.5	0.3153847	0.428344
	1.4 MHz BAND QPSK	6/0	1732.5	1.0764	1.283
	1.4 MHz BAND 16QAM	1/0	1732.5	0.3620146	0.406723
	1.4 MHz BAND 16QAM	6/0	1732.5	1.0768	1.287
	3.0 MHz BAND QPSK	1/0	1732.5	0.2656678	0.407074
	3.0 MHz BAND QPSK	15/0	1732.5	2.6754	2.961
	3.0 MHz BAND 16QAM	1/0	1732.5	0.2912630	0.437098
	3.0 MHz BAND 16QAM	15/0	1732.5	2.6926	2.885
	5.0 MHz BAND QPSK	1/0	1732.5	0.2366621	0.412710
	5.0 MHz BAND QPSK	25/0	1732.5	4.4654	4.778
	5.0 MHz BAND 16QAM	1/0	1732.5	0.2468923	0.414355
	5.0 MHz BAND 16QAM	25/0	1732.5	4.5191	4.751
	10.0 MHz BAND QPSK	1/0	1732.5	0.2939370	0.439901
	10.0 MHz BAND QPSK	50/0	1732.5	8.9372	10.044
	10.0 MHz BAND 16QAM	1/0	1732.5	0.3069493	0.485462
	10.0 MHz BAND 16QAM	50/0	1732.5	8.9308	9.825
	15.0 MHz BAND QPSK	1/0	1732.5	0.2817677	0.419077
	15.0 MHz BAND QPSK	75/0	1732.5	13.3667	14.221
	15.0 MHz BAND 16QAM	1/0	1732.5	0.3034667	0.468156
	15.0 MHz BAND 16QAM	75/0	1732.5	13.4062	14.832
	20.0 MHz BAND QPSK	1/0	1732.5	0.2800899	0.459117
	20.0 MHz BAND QPSK	100/0	1732.5	17.9098	18.677
	20.0 MHz BAND 16QAM	1/0	1732.5	0.2923872	0.436374
	20.0 MHz BAND 16QAM	100/0	1732.5	17.7536	18.599

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 5	1.4 MHz BAND QPSK	1/0	836.5	0.3001510	0.434272
	1.4 MHz BAND QPSK	6/0	836.5	1.0866	1.276
	1.4 MHz BAND 16QAM	1/0	836.5	0.3276801	0.411383
	1.4 MHz BAND 16QAM	6/0	836.5	1.0776	1.263
	3.0 MHz BAND QPSK	1/0	836.5	0.2561508	0.386986
	3.0 MHz BAND QPSK	15/0	836.5	2.6879	2.941
	3.0 MHz BAND 16QAM	1/0	836.5	0.2778437	0.410206
	3.0 MHz BAND 16QAM	15/0	836.5	2.688	2.969
	5.0 MHz BAND QPSK	1/0	836.5	0.2328348	0.393437
	5.0 MHz BAND QPSK	25/0	836.5	4.4575	5.169
	5.0 MHz BAND 16QAM	1/0	836.5	0.2371586	0.411234
	5.0 MHz BAND 16QAM	25/0	836.5	4.4608	5.021
	10.0 MHz BAND QPSK	1/0	836.5	0.2887482	0.418885
	10.0 MHz BAND QPSK	50/0	836.5	8.8991	10.079
	10.0 MHz BAND 16QAM	1/0	836.5	0.2934193	0.444649
	10.0 MHz BAND 16QAM	50/0	836.5	8.9627	10.059

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 7	5.0 MHz BAND QPSK	1/0	2535	0.2459965	0.426024
	5.0 MHz BAND QPSK	25/0	2535	4.4565	5.102
	5.0 MHz BAND 16QAM	1/0	2535	0.2608677	0.432337
	5.0 MHz BAND 16QAM	25/0	2535	4.492	5.094
	10.0 MHz BAND QPSK	1/0	2535	0.3052942	0.492369
	10.0 MHz BAND QPSK	50/0	2535	8.9433	9.689
	10.0 MHz BAND 16QAM	1/0	2535	0.2953998	0.447185
	10.0 MHz BAND 16QAM	50/0	2535	8.8473	9.768
	15.0 MHz BAND QPSK	1/0	2535	0.2903	0.479516
	15.0 MHz BAND QPSK	75/0	2535	13.4276	14.691
	15.0 MHz BAND 16QAM	1/0	2535	0.3083047	0.477969
	15.0 MHz BAND 16QAM	75/0	2535	13.3928	14.014
	20.0 MHz BAND QPSK	1/0	2535	0.2870211	0.477978
	20.0 MHz BAND QPSK	100/0	2535	17.9534	18.897
	20.0 MHz BAND 16QAM	1/0	2535	0.2939737	0.476017
	20.0 MHz BAND 16QAM	100/0	2535	17.8872	18.729

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 12	1.4 MHz BAND QPSK	1/0	707.5	0.2636877	0.415862
	1.4 MHz BAND QPSK	6/0	707.5	1.0853	1.271
	1.4 MHz BAND 16QAM	1/0	707.5	0.2851009	0.406389
	1.4 MHz BAND 16QAM	6/0	707.5	1.082	1.273
	3.0 MHz BAND QPSK	1/0	707.5	0.2748472	0.429815
	3.0 MHz BAND QPSK	15/0	707.5	2.6864	2.905
	3.0 MHz BAND 16QAM	1/0	707.5	0.3004380	0.442829
	3.0 MHz BAND 16QAM	15/0	707.5	2.6796	2.971
	5.0 MHz BAND QPSK	1/0	707.5	0.2431336	0.419292
	5.0 MHz BAND QPSK	25/0	707.5	4.4709	5.016
	5.0 MHz BAND 16QAM	1/0	707.5	0.2512528	0.483369
	5.0 MHz BAND 16QAM	25/0	707.5	4.473	5.149
	10.0 MHz BAND QPSK	1/0	707.5	0.2720944	0.438236
	10.0 MHz BAND QPSK	50/0	707.5	8.9768	9.69
	10.0 MHz BAND 16QAM	1/0	707.5	0.3102298	0.439969
	10.0 MHz BAND 16QAM	50/0	707.5	8.9191	9.978

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 13	5.0 MHz BAND QPSK	1/0	782	0.2406504	0.406808
	5.0 MHz BAND QPSK	25/0	782	4.4732	4.913
	5.0 MHz BAND 16QAM	1/0	782	0.2481778	0.424591
	5.0 MHz BAND 16QAM	25/0	782	4.4657	5.051
	10.0 MHz BAND QPSK	1/0	782	0.2742075	0.412644
	10.0 MHz BAND QPSK	50/0	782	8.8769	9.714
	10.0 MHz BAND 16QAM	1/0	782	0.2820450	0.410412
	10.0 MHz BAND 16QAM	50/0	782	8.9494	9.601

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 17	5.0 MHz BAND QPSK	1/0	710	0.2406259	0.390012
	5.0 MHz BAND QPSK	25/0	710	4.4625	5.013
	5.0 MHz BAND 16QAM	1/0	710	0.2571611	0.435142
	5.0 MHz BAND 16QAM	25/0	710	4.4538	4.984
	10.0 MHz BAND QPSK	1/0	710	0.2851479	0.462758
	10.0 MHz BAND QPSK	50/0	710	8.9075	9.802
	10.0 MHz BAND 16QAM	1/0	710	0.3316449	0.482524
	10.0 MHz BAND 16QAM	50/0	710	8.9129	9.724

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 25	1.4 MHz BAND QPSK	1/0	1882.5	0.3114436	0.456163
	1.4 MHz BAND QPSK	6/0	1882.5	1.0862	1.300
	1.4 MHz BAND 16QAM	1/0	1882.5	0.3217597	0.437649
	1.4 MHz BAND 16QAM	6/0	1882.5	1.0865	1.295
	3.0 MHz BAND QPSK	1/0	1882.5	0.282801	0.414919
	3.0 MHz BAND QPSK	15/0	1882.5	2.6839	2.993
	3.0 MHz BAND 16QAM	1/0	1882.5	0.3035543	0.429573
	3.0 MHz BAND 16QAM	15/0	1882.5	2.6886	3.022
	5.0 MHz BAND QPSK	1/0	1882.5	0.2471411	0.443400
	5.0 MHz BAND QPSK	25/0	1882.5	4.4899	5.187
	5.0 MHz BAND 16QAM	1/0	1882.5	0.2508464	0.415143
	5.0 MHz BAND 16QAM	25/0	1882.5	4.4915	5.170
	10.0 MHz BAND QPSK	1/0	1882.5	0.2900337	0.456514
	10.0 MHz BAND QPSK	50/0	1882.5	8.9593	10.341
	10.0 MHz BAND 16QAM	1/0	1882.5	0.3104555	0.453166
	10.0 MHz BAND 16QAM	50/0	1882.5	8.9781	10.386
	15.0 MHz BAND QPSK	1/0	1882.5	0.2937765	0.462488
	15.0 MHz BAND QPSK	75/0	1882.5	13.4356	14.883
	15.0 MHz BAND 16QAM	1/0	1882.5	0.3241668	0.479133
	15.0 MHz BAND 16QAM	75/0	1882.5	13.4325	14.817
	20.0 MHz BAND QPSK	1/0	1882.5	0.2762089	0.471212
	20.0 MHz BAND QPSK	100/0	1882.5	17.8306	19.387
	20.0 MHz BAND 16QAM	1/0	1882.5	0.3043508	0.453990
	20.0 MHz BAND 16QAM	100/0	1882.5	17.913	19.542

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 26	1.4 MHz BAND QPSK	1/0	819	0.3097954	0.428833
	1.4 MHz BAND QPSK	6/0	819	1.0842	1.299
	1.4 MHz BAND 16QAM	1/0	819	0.3241596	0.437449
	1.4 MHz BAND 16QAM	6/0	819	1.0931	1.296
	3.0 MHz BAND QPSK	1/0	819	0.255001	0.385766
	3.0 MHz BAND QPSK	15/0	819	2.698	2.997
	3.0 MHz BAND 16QAM	1/0	819	0.2681589	0.411635
	3.0 MHz BAND 16QAM	15/0	819	2.6997	3.012
	5.0 MHz BAND QPSK	1/0	819	0.2359352	0.388613
	5.0 MHz BAND QPSK	25/0	819	4.4794	5.217
	5.0 MHz BAND 16QAM	1/0	819	0.2315974	0.384289
	5.0 MHz BAND 16QAM	25/0	819	4.4864	5.181
	10.0 MHz BAND QPSK	1/0	819	0.2640249	0.432999
	10.0 MHz BAND QPSK	50/0	819	8.9649	10.42
	10.0 MHz BAND 16QAM	1/0	819	0.2882590	0.452998
	10.0 MHz BAND 16QAM	50/0	819	8.9757	10.395

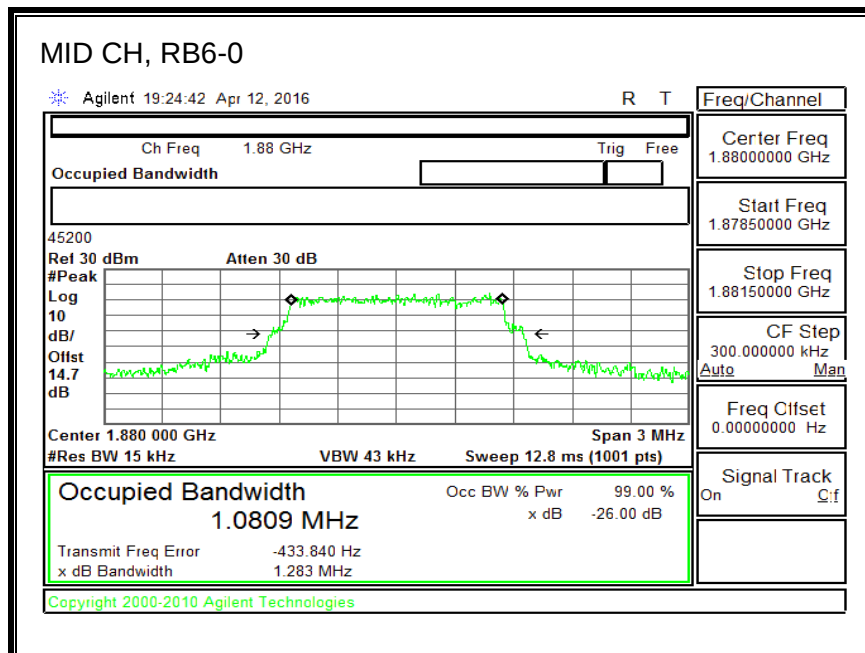
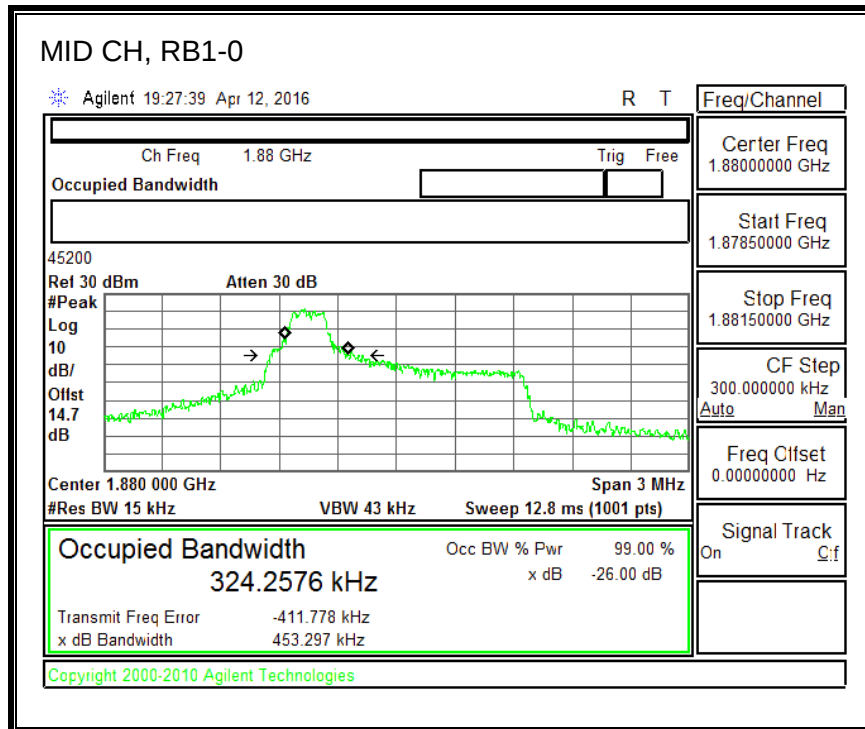
BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 27	1.4 MHz BAND QPSK	1/0	819	0.3249708	0.464141
	1.4 MHz BAND QPSK	6/0	819	1.0847	1.297
	1.4 MHz BAND 16QAM	1/0	819	0.3519540	0.469941
	1.4 MHz BAND 16QAM	6/0	819	1.08390	1.293
	3.0 MHz BAND QPSK	1/0	819	0.2741761	0.415339
	3.0 MHz BAND QPSK	15/0	819	2.6885	2.997
	3.0 MHz BAND 16QAM	1/0	819	0.2717750	0.424560
	3.0 MHz BAND 16QAM	15/0	819	2.6973	3.021
	5.0 MHz BAND QPSK	1/0	819	0.2377274	0.388932
	5.0 MHz BAND QPSK	25/0	819	4.4929	5.199
	5.0 MHz BAND 16QAM	1/0	819	0.2398283	0.400158
	5.0 MHz BAND 16QAM	25/0	819	4.4746	5.121
	10.0 MHz BAND QPSK	1/0	819	0.2885796	0.449671
	10.0 MHz BAND QPSK	50/0	819	8.9778	10.324
	10.0 MHz BAND 16QAM	1/0	819	0.2815065	0.452394
	10.0 MHz BAND 16QAM	50/0	819	8.9598	10.231

BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 30	5.0 MHz BAND QPSK	1/0	2310	0.2554377	0.425194
	5.0 MHz BAND QPSK	25/0	2310	4.4951	5.207
	5.0 MHz BAND 16QAM	1/0	2310	0.2590863	0.403816
	5.0 MHz BAND 16QAM	25/0	2310	4.4861	5.184
	10.0 MHz BAND QPSK	1/0	2310	0.2813158	0.438955
	10.0 MHz BAND QPSK	50/0	2310	8.9624	10.442
	10.0 MHz BAND 16QAM	1/0	2310	0.3210148	0.478642
	10.0 MHz BAND 16QAM	50/0	2310	8.9523	9.972

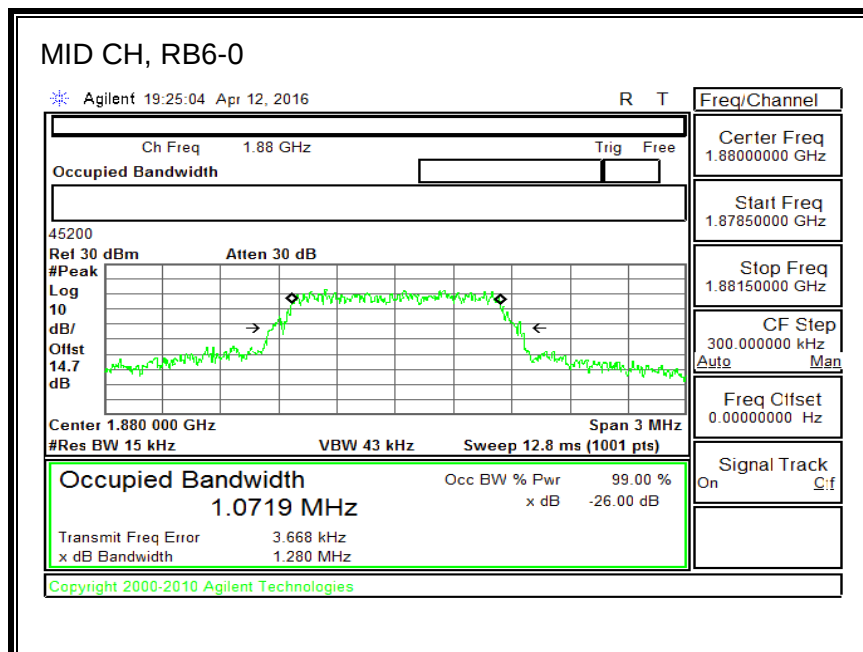
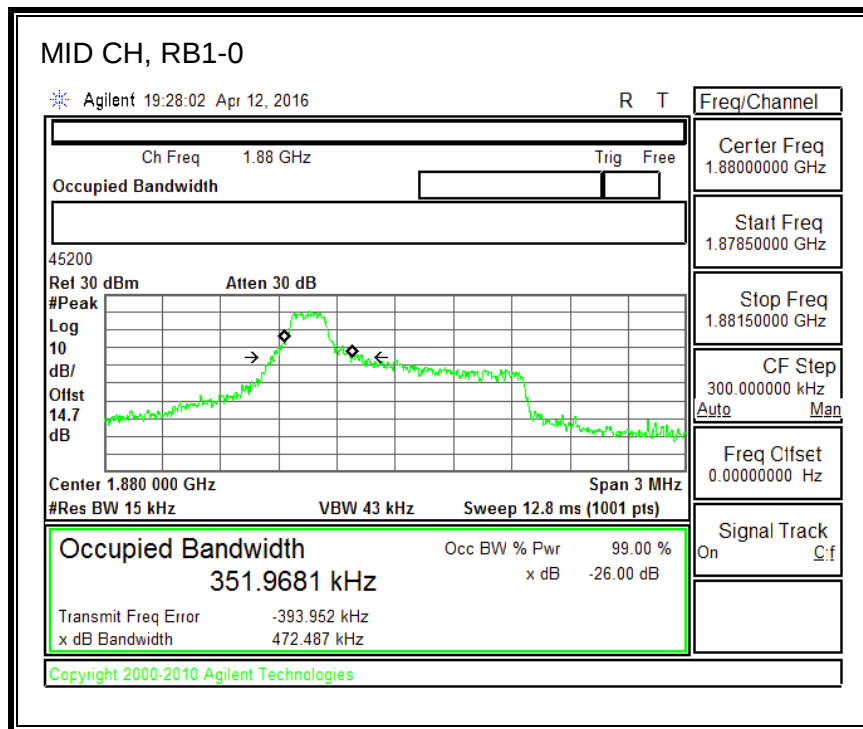
BAND	MODE	RB SIZE/ RB OFFSET	f (MHz)	99% BW (MHz)	- 26dB BW (MHz)
LTE BAND 41	5.0 MHz BAND QPSK	1/0	2593	0.2400651	0.380026
	5.0 MHz BAND QPSK	25/0	2593	4.4829	5.122
	5.0 MHz BAND 16QAM	1/0	2593	0.3231573	0.418596
	5.0 MHz BAND 16QAM	25/0	2593	4.4775	5.208
	10.0 MHz BAND QPSK	1/0	2593	0.3719984	0.491654
	10.0 MHz BAND QPSK	50/0	2593	8.9161	9.230
	10.0 MHz BAND 16QAM	1/0	2593	0.3702360	0.455471
	10.0 MHz BAND 16QAM	50/0	2593	8.9273	9.452
	15.0 MHz BAND QPSK	1/0	2593	0.2802280	0.481496
	15.0 MHz BAND QPSK	75/0	2593	13.2877	14.285
	15.0 MHz BAND 16QAM	1/0	2593	0.2983834	0.480794
	15.0 MHz BAND 16QAM	75/0	2593	13.4017	14.215
	20.0 MHz BAND QPSK	1/0	2593	0.3251402	0.474118
	20.0 MHz BAND QPSK	100/0	2593	17.9037	18.878
	20.0 MHz BAND 16QAM	1/0	2593	0.2894026	0.443303
	20.0 MHz BAND 16QAM	100/0	2593	17.836	18.615

8.1.1. LTE BAND 2

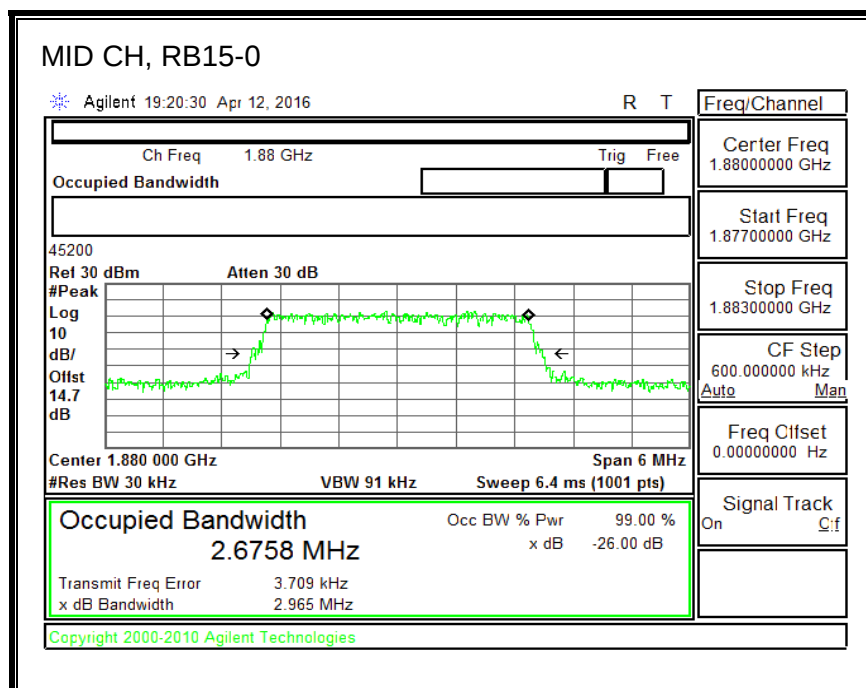
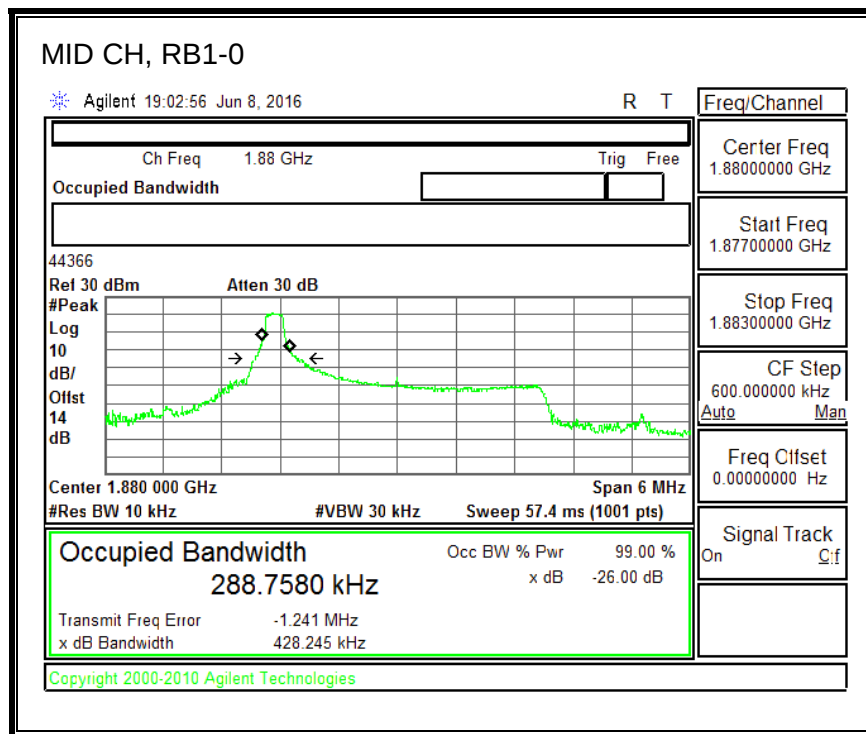
QPSK, (1.4 MHz BAND WIDTH)



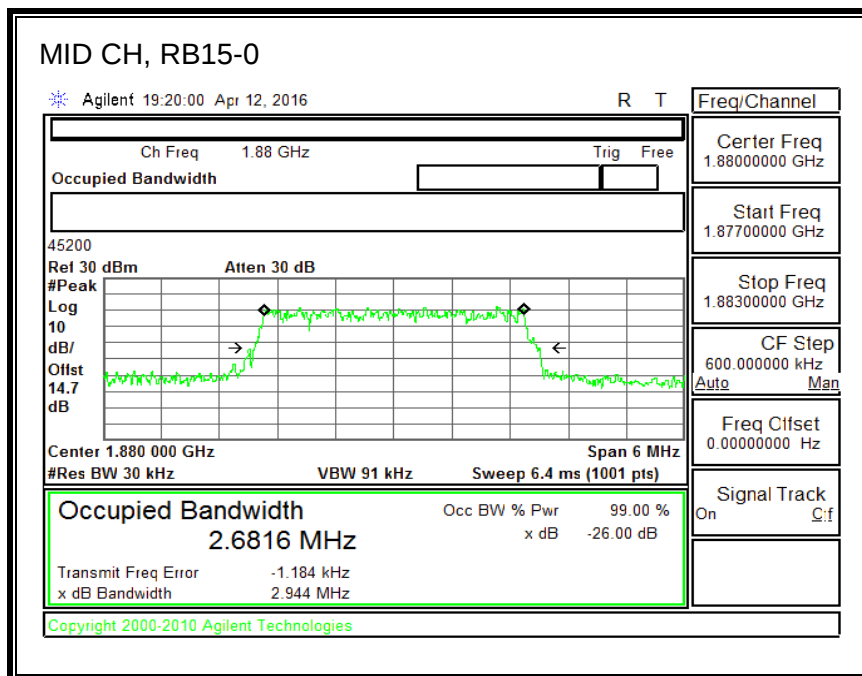
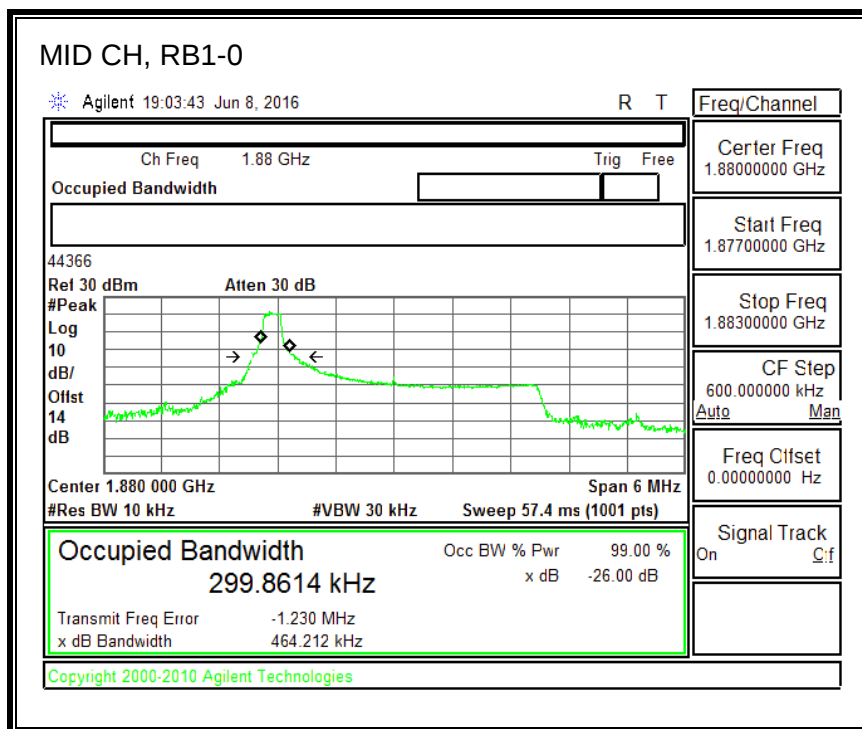
16QAM, (1.4 MHz BAND WIDTH)



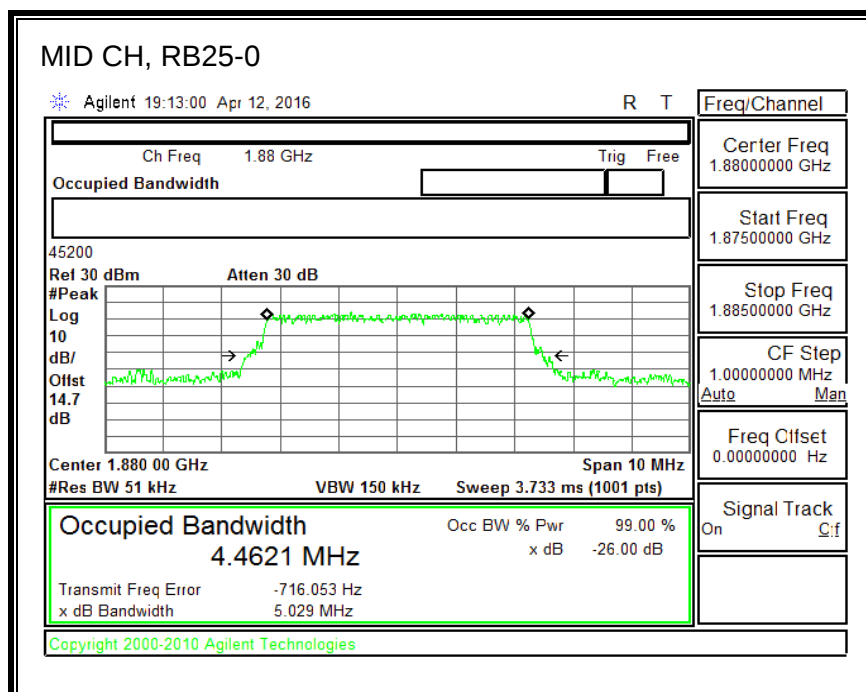
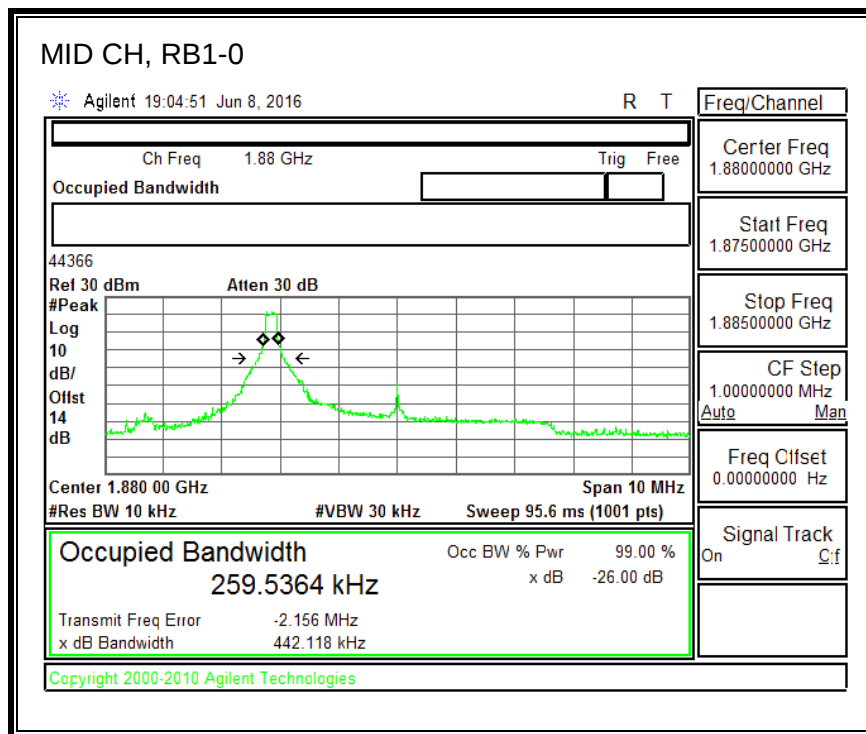
QPSK, (3.0 MHz BAND WIDTH)



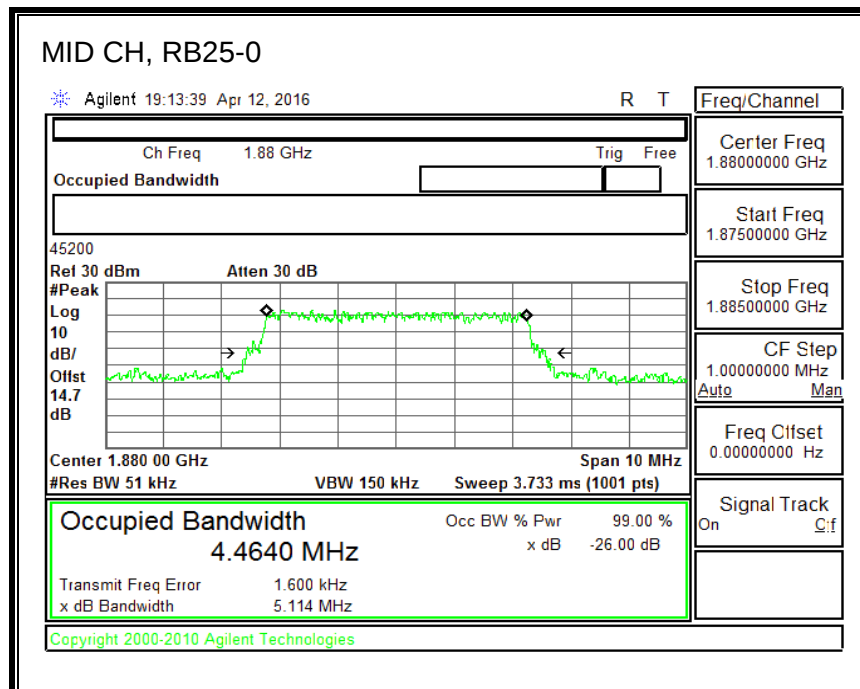
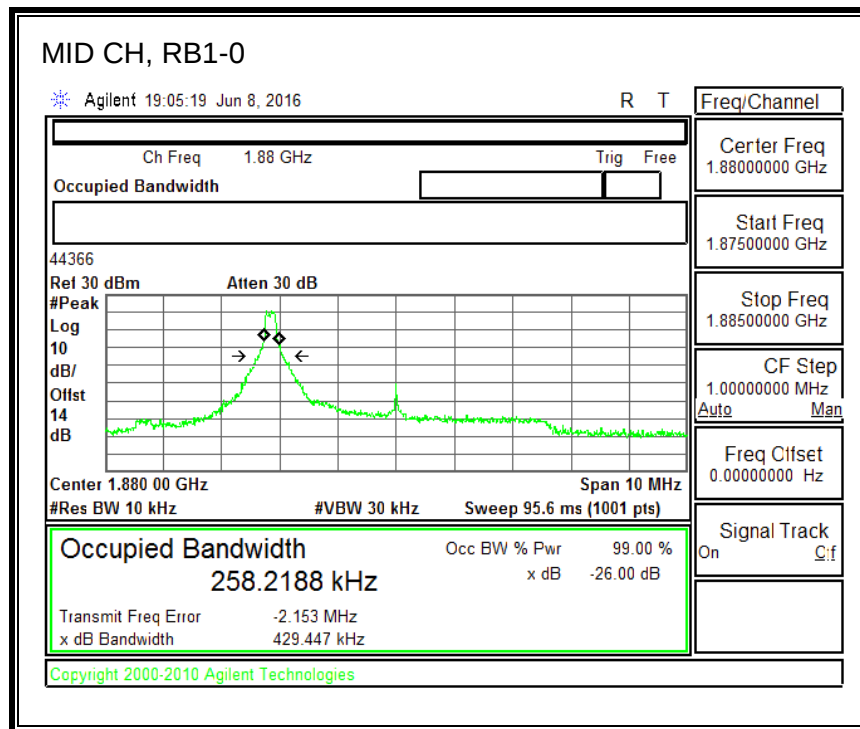
16QAM, (3.0 MHz BAND WIDTH)



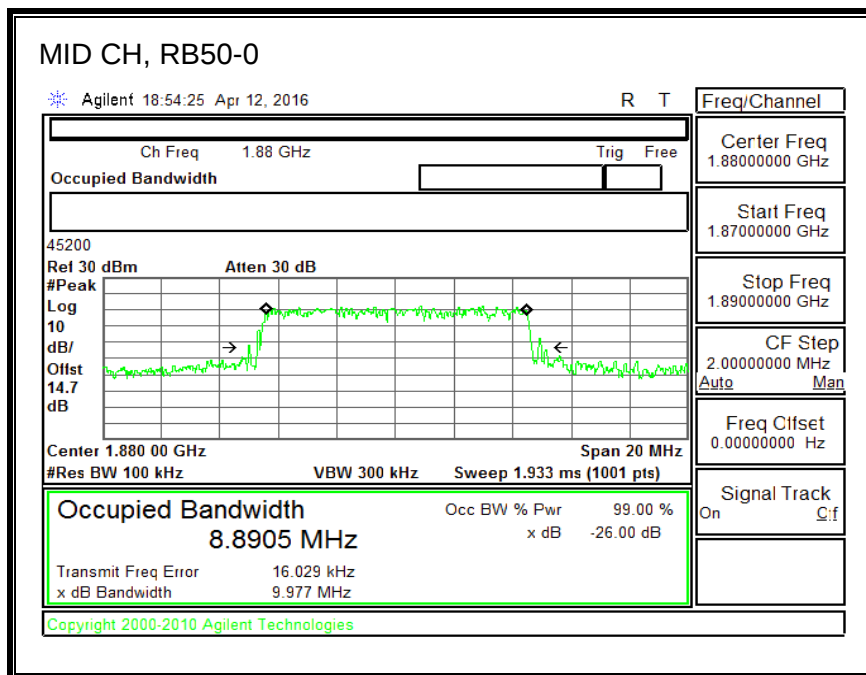
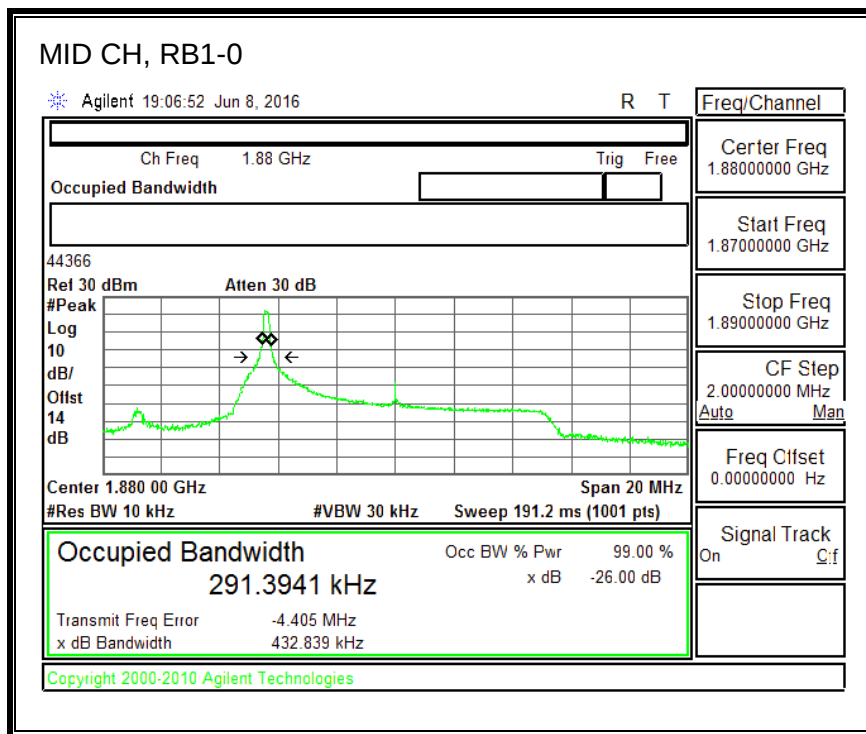
QPSK, (5.0 MHz BAND WIDTH)



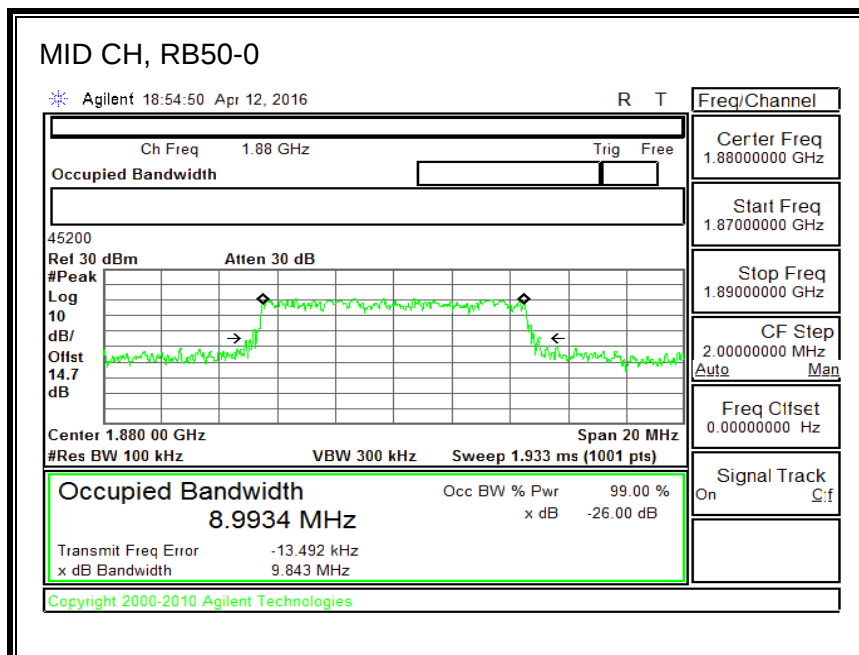
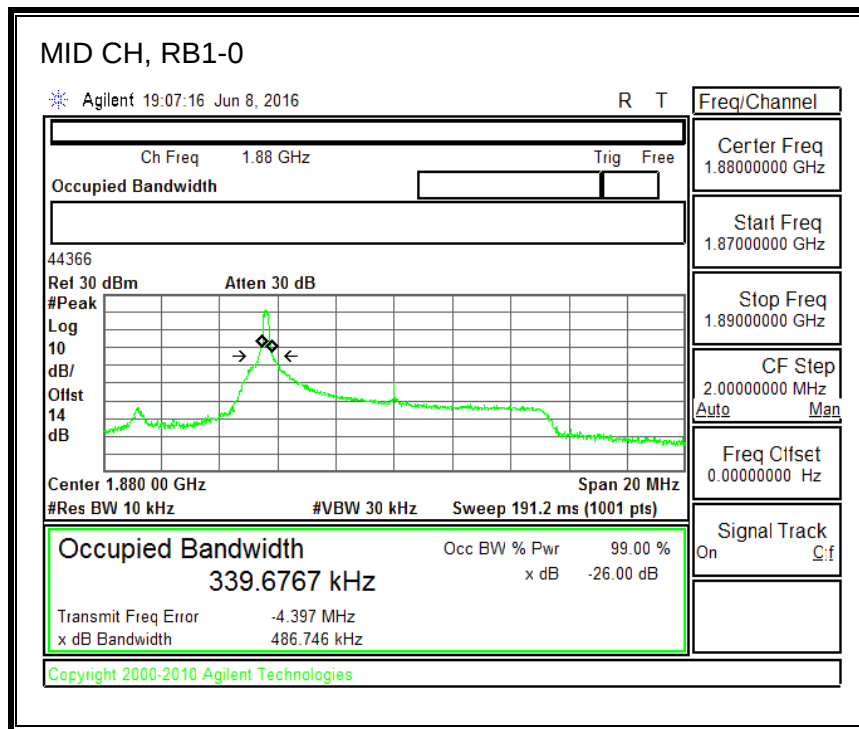
16QAM, (5.0 MHz BAND WIDTH)



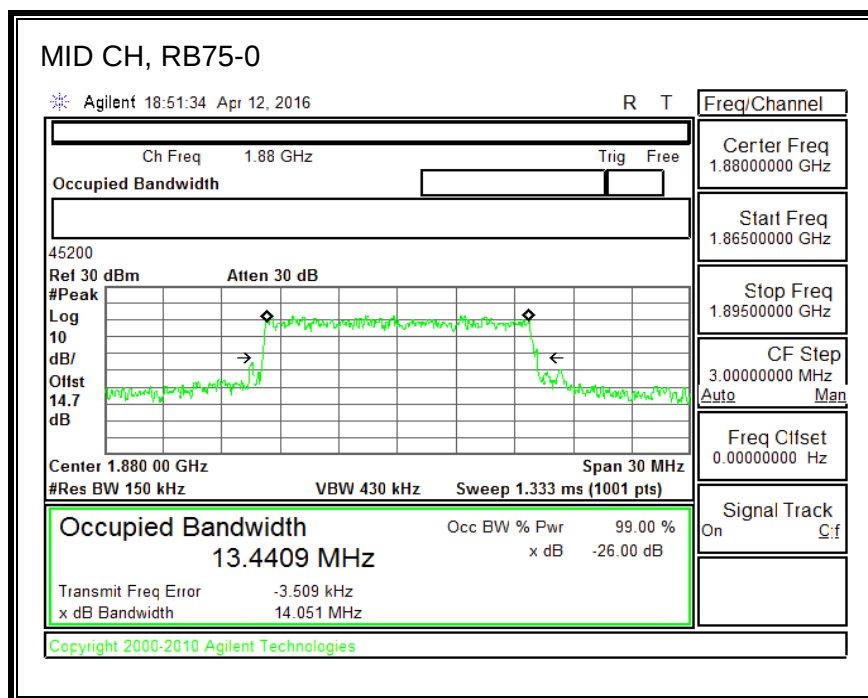
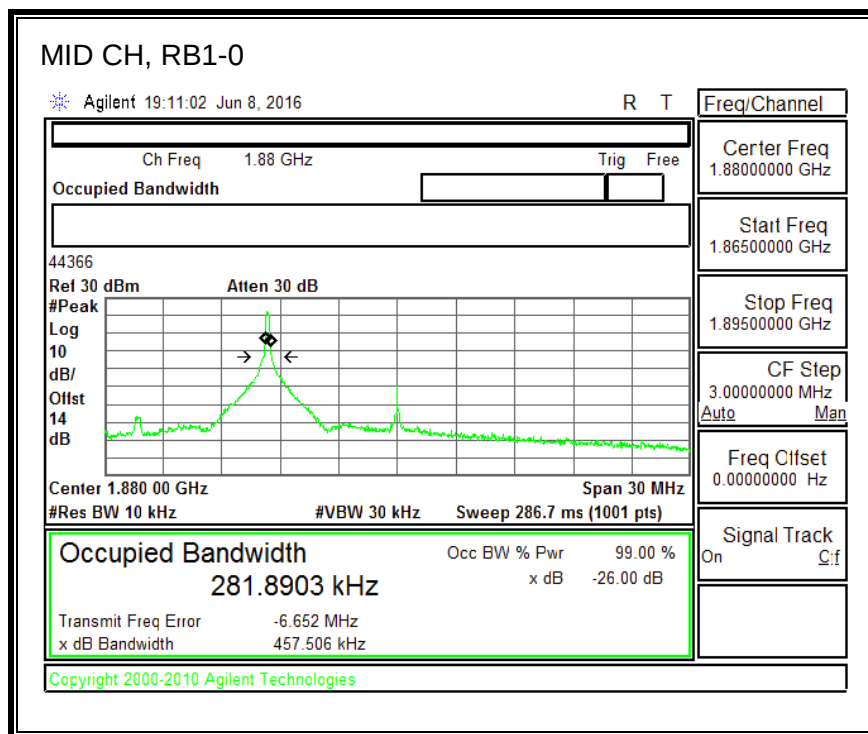
QPSK, (10.0 MHz BAND WIDTH)



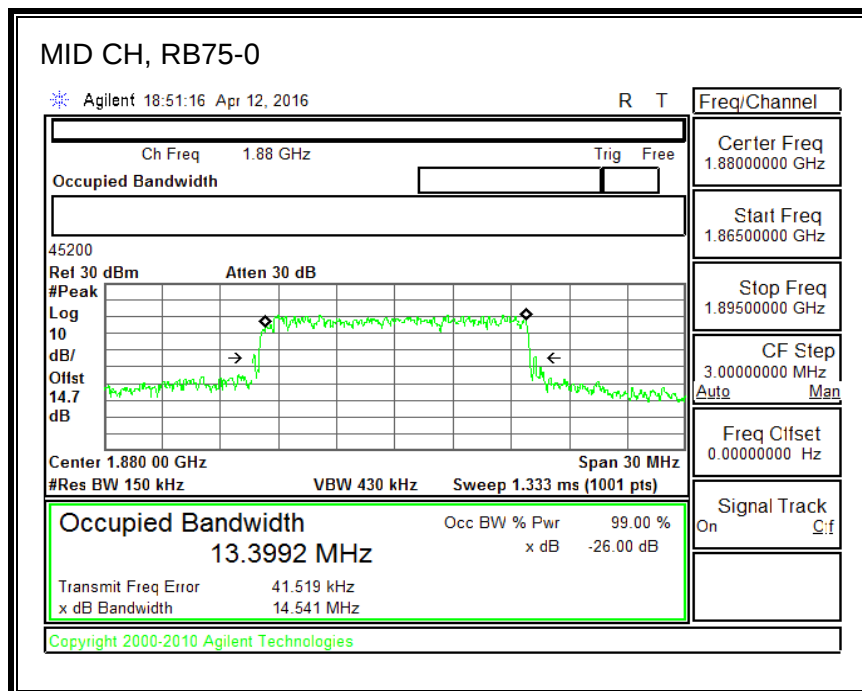
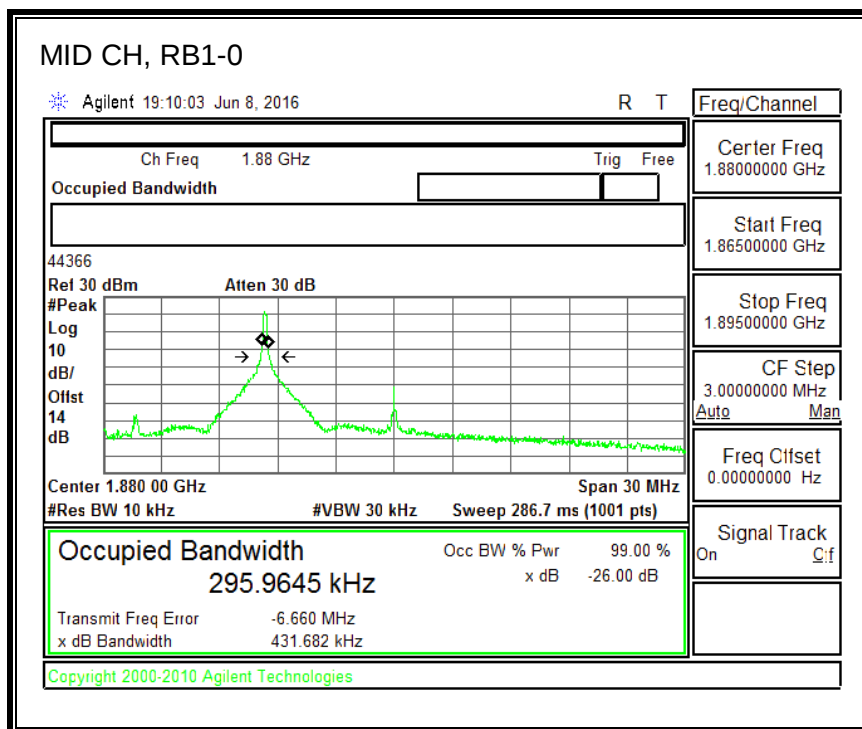
16QAM, (10.0 MHz BAND WIDTH)



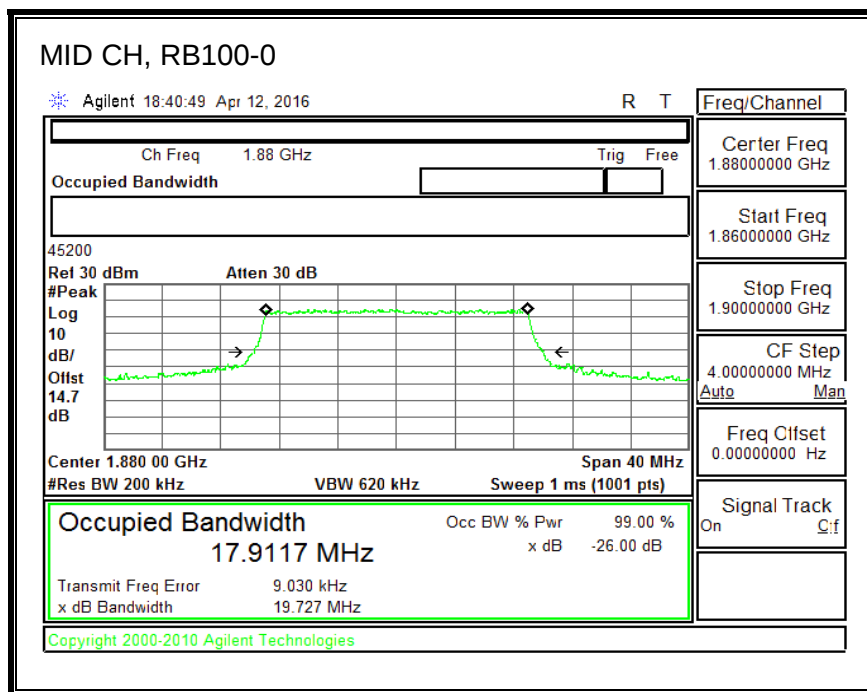
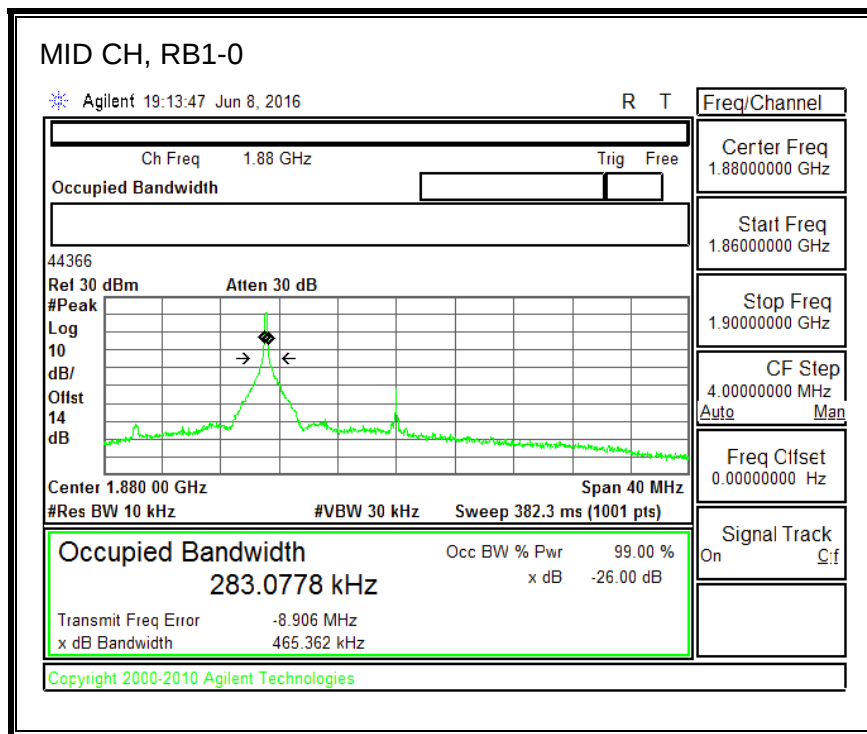
QPSK, (15.0 MHz BAND WIDTH)



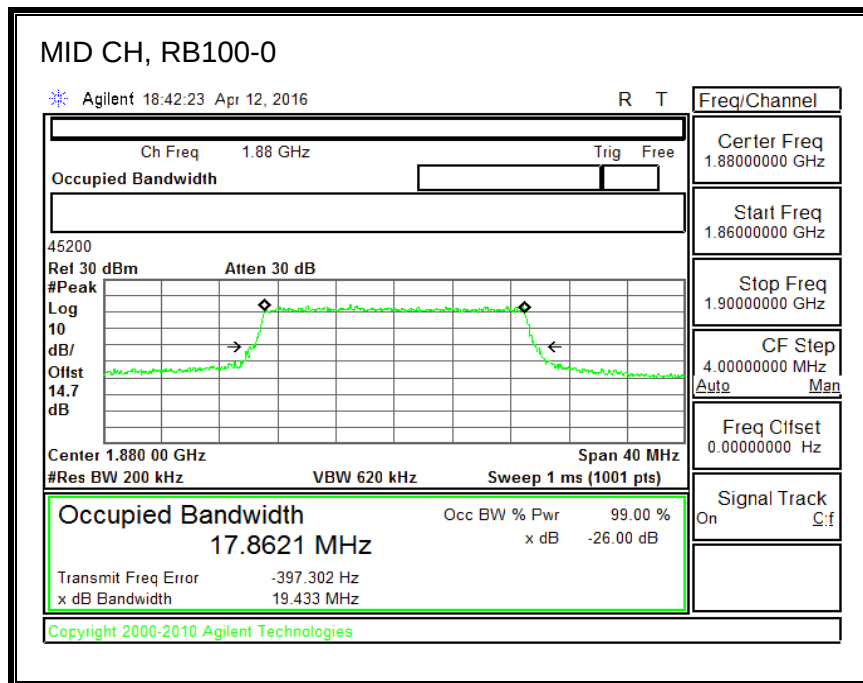
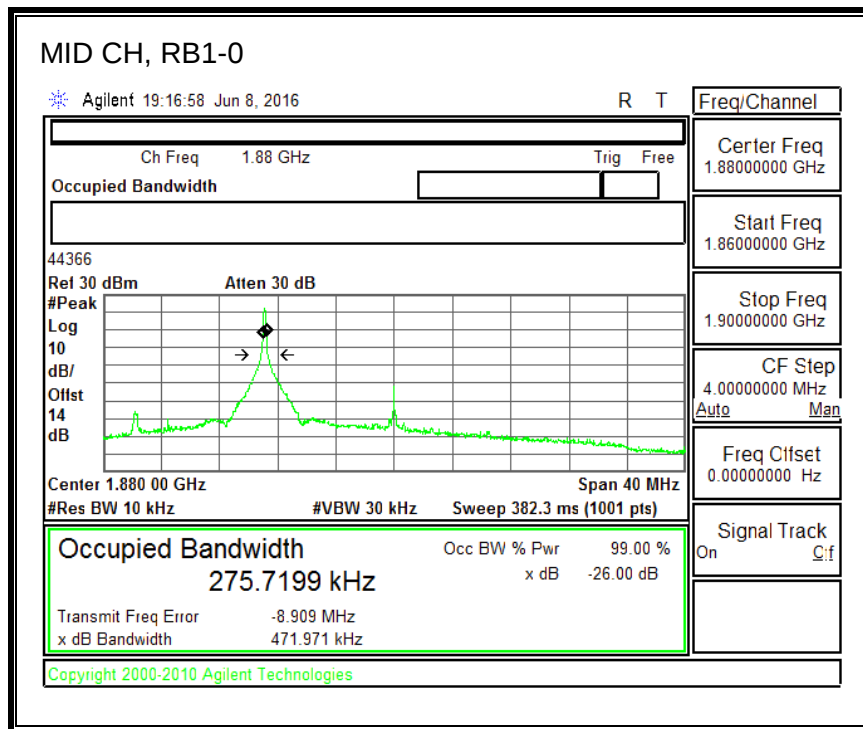
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

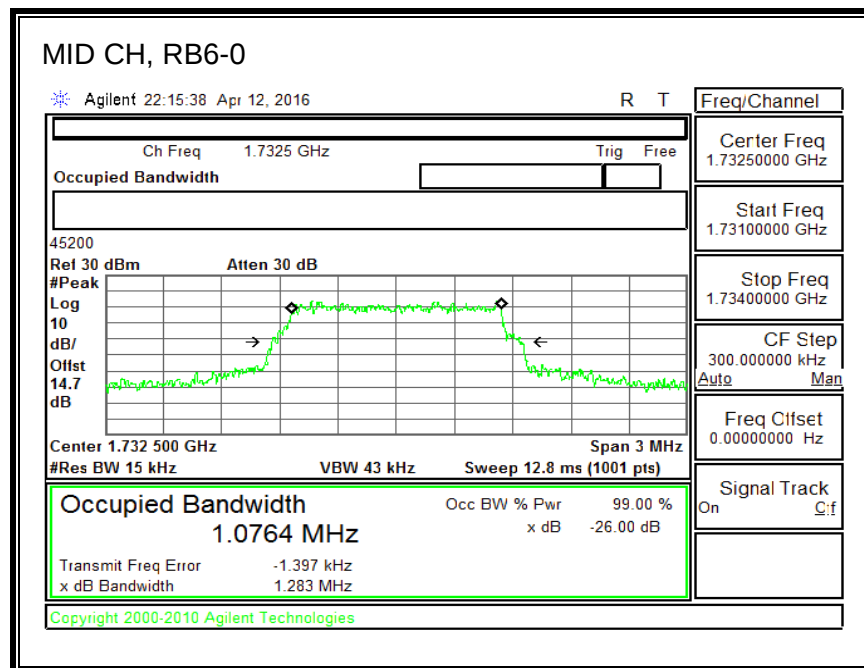
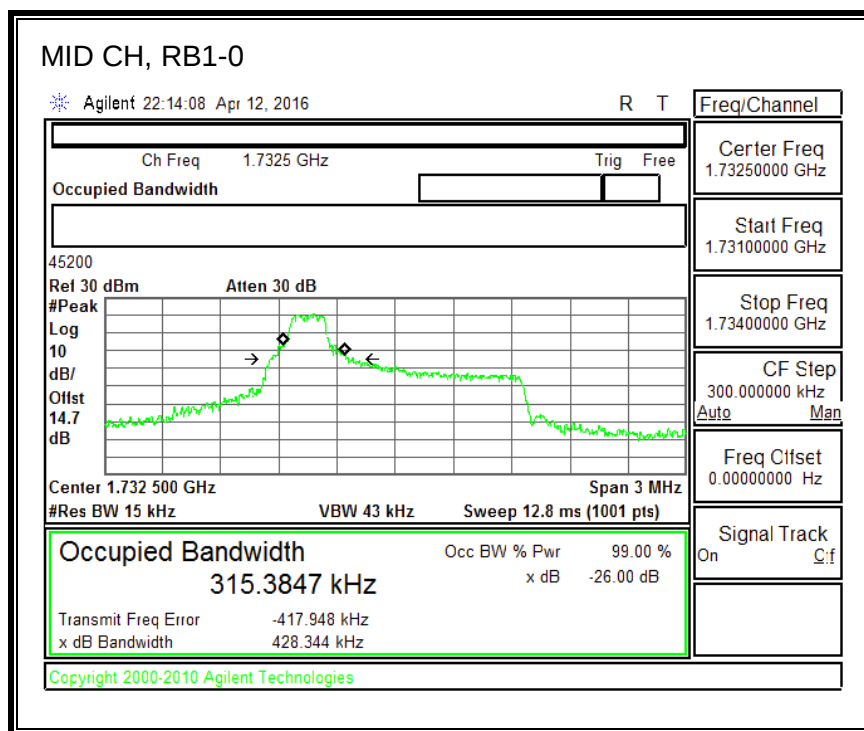


16QAM, (20.0 MHz BAND WIDTH)

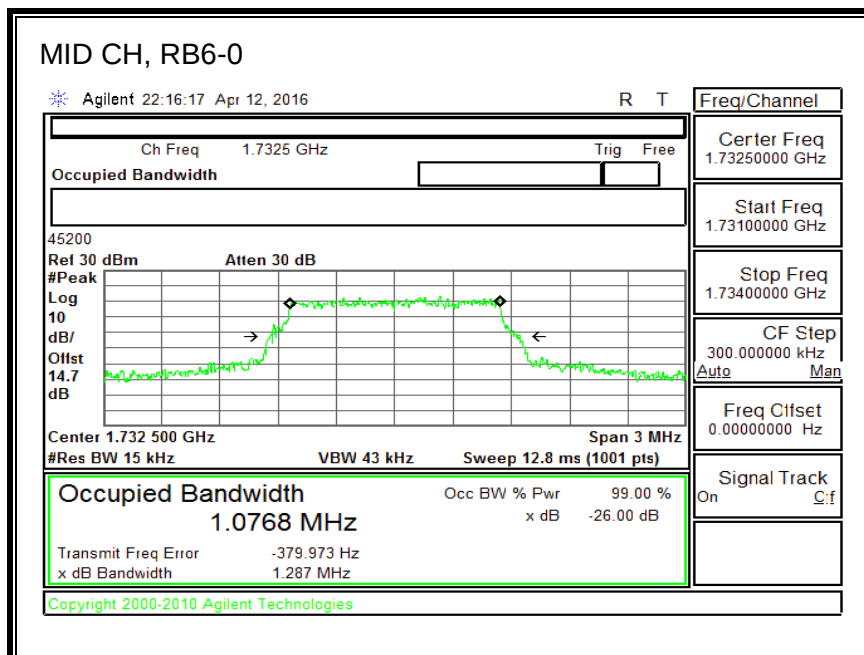
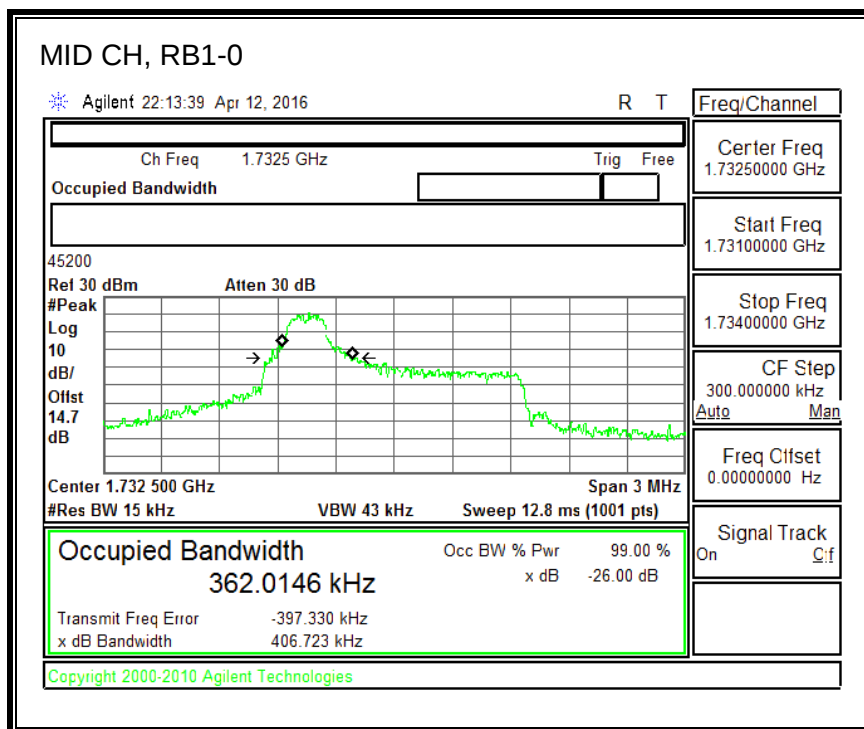


8.1.2. LTE BAND 4

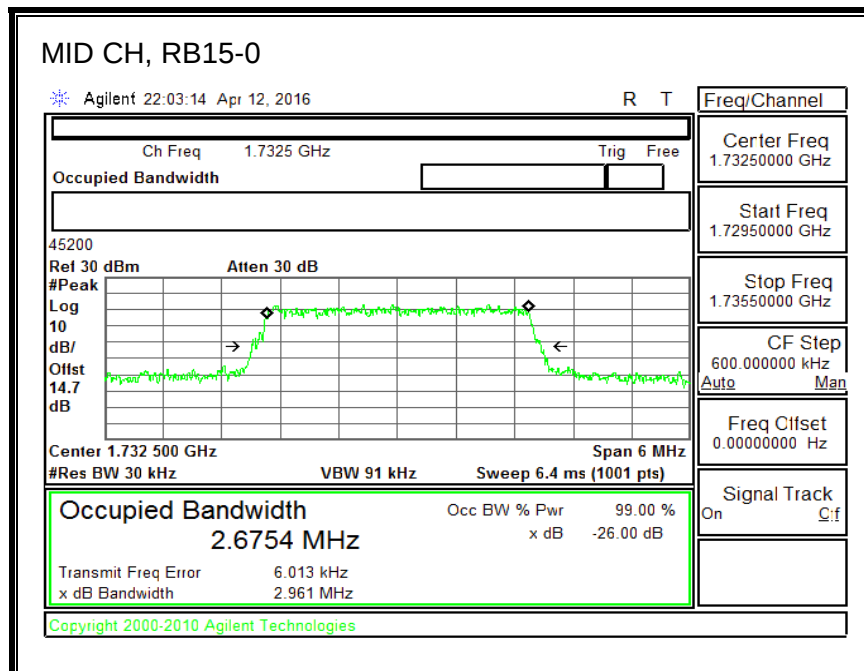
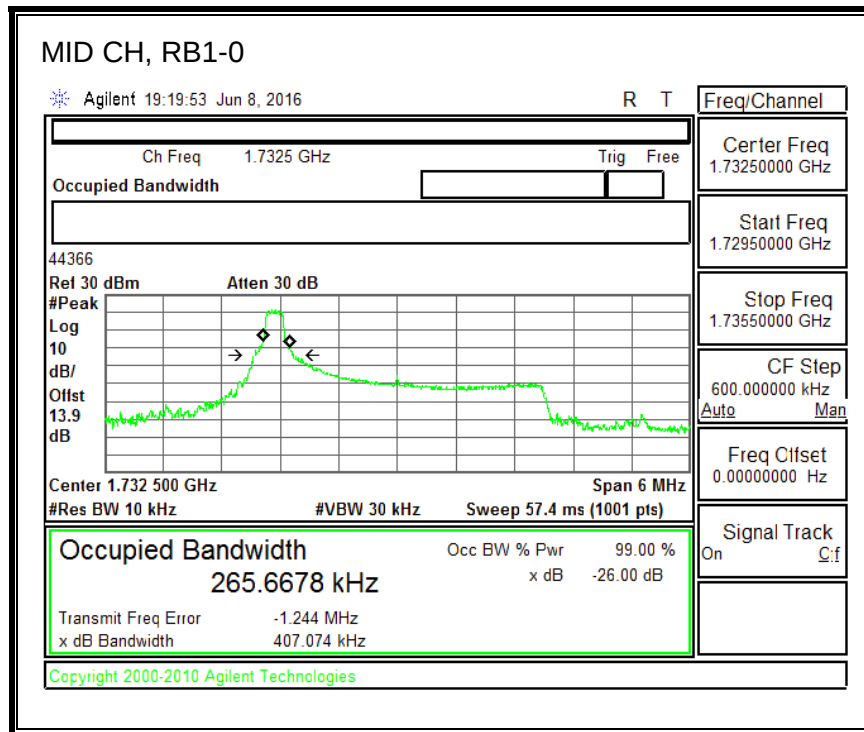
QPSK, (1.4 MHz BAND WIDTH)



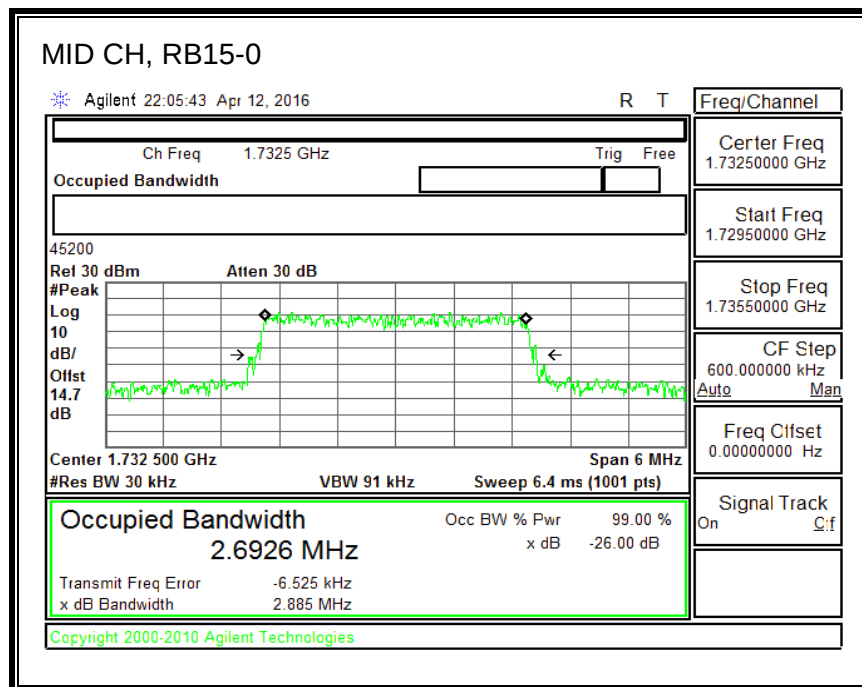
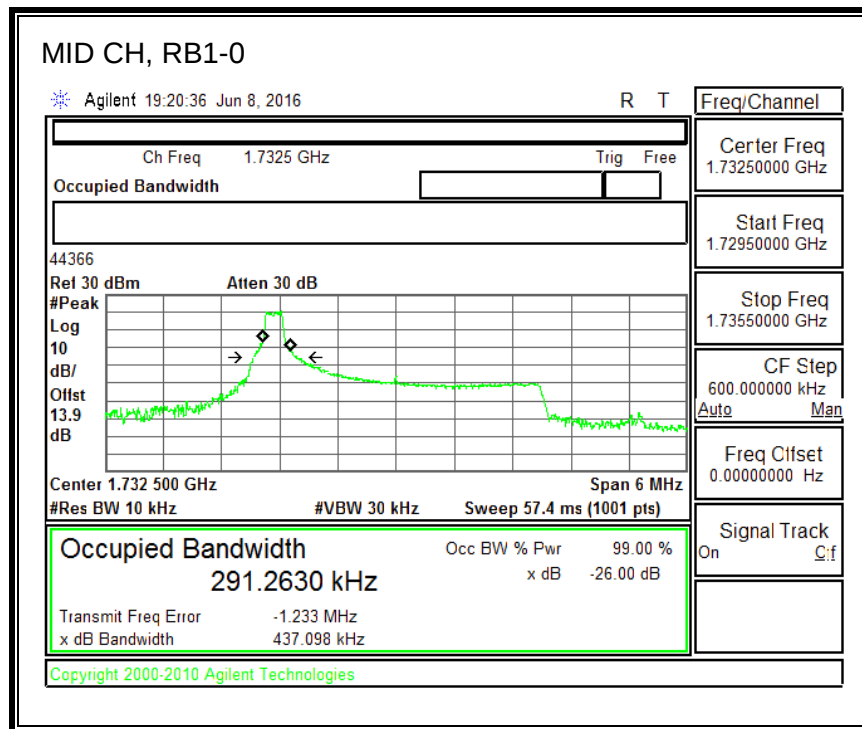
16QAM, (1.4 MHz BAND WIDTH)



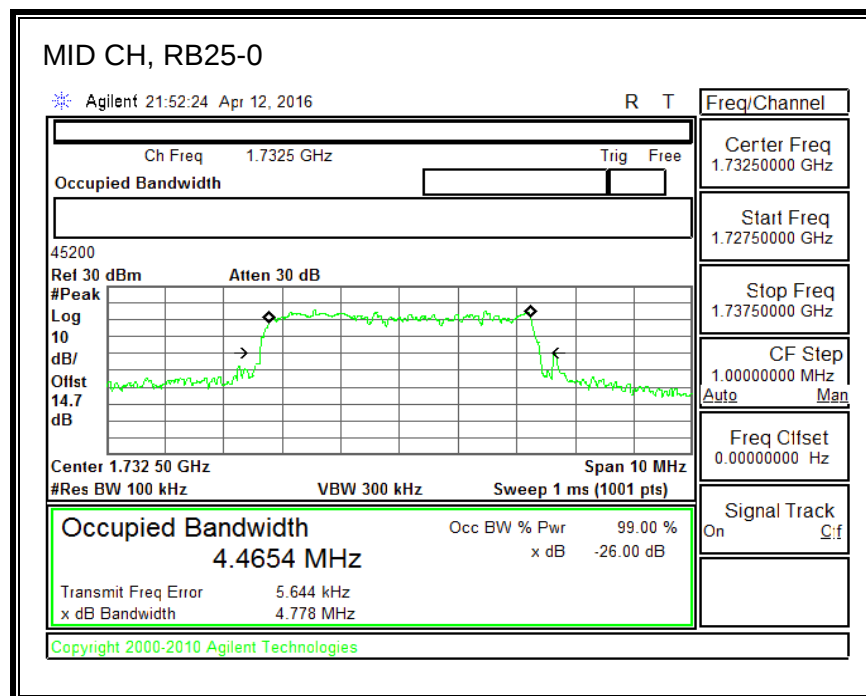
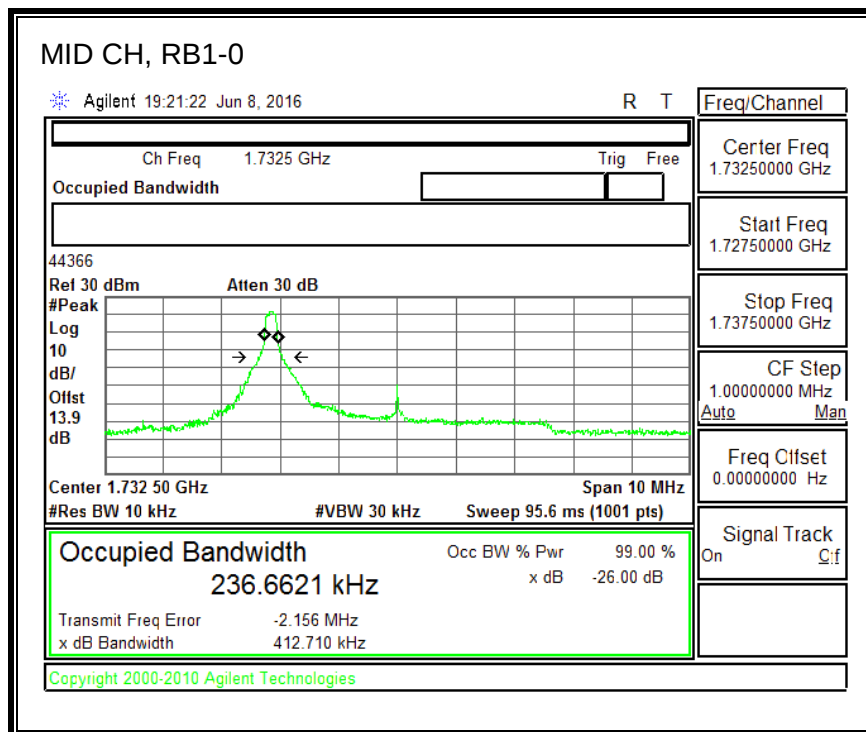
QPSK, (3.0 MHz BAND WIDTH)



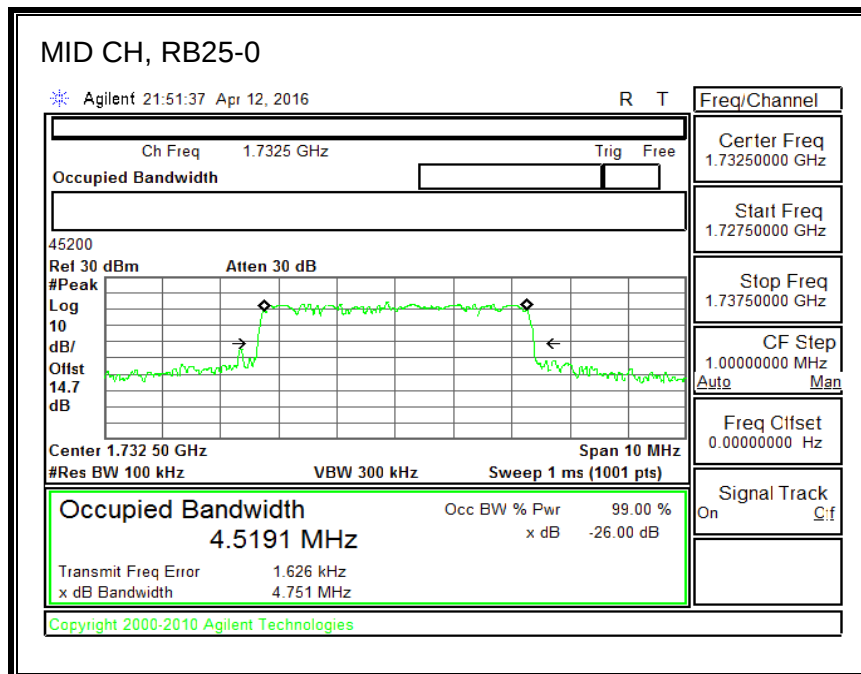
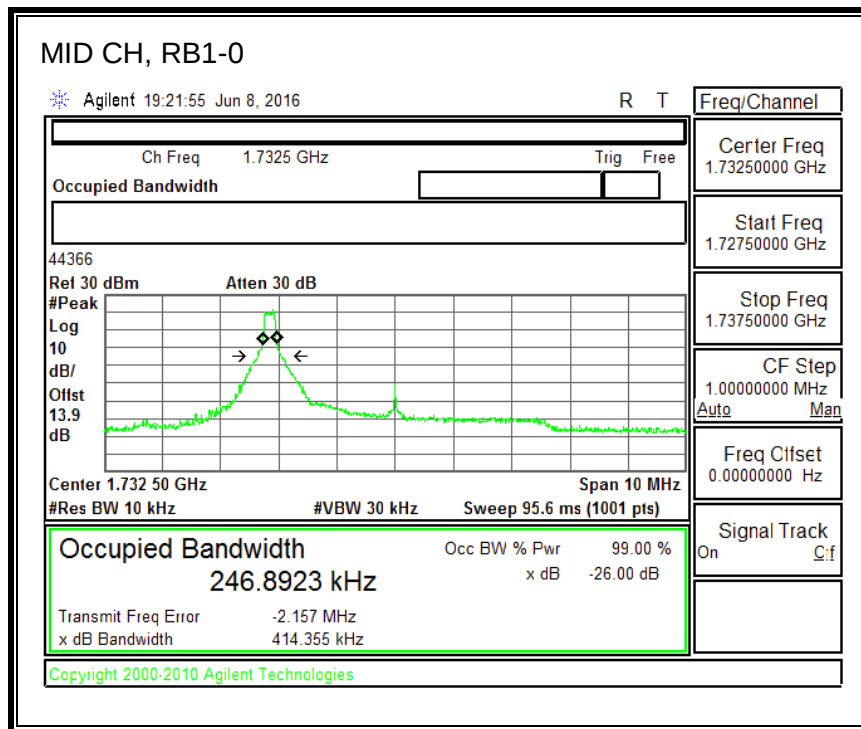
16QAM, (3.0 MHz BAND WIDTH)



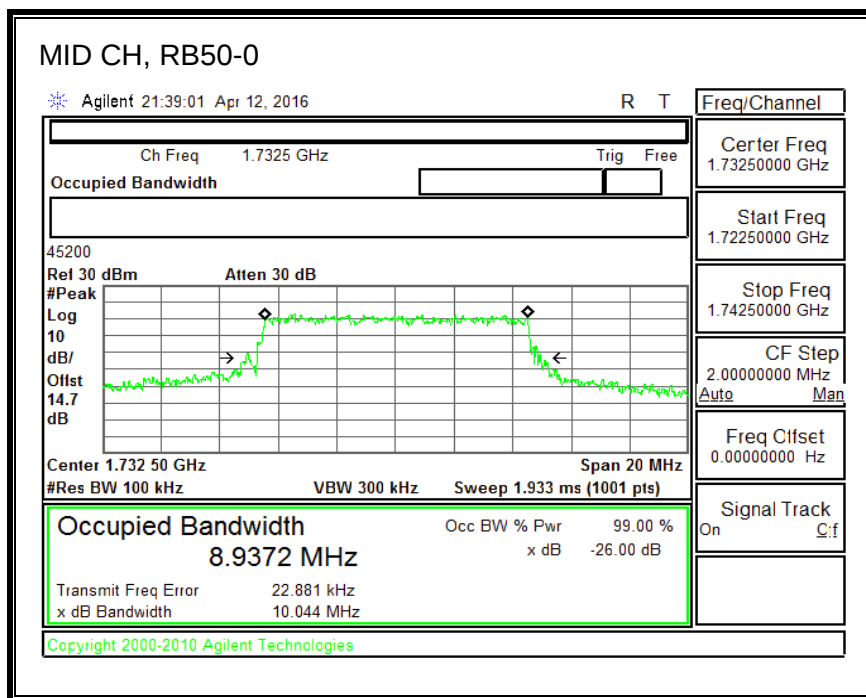
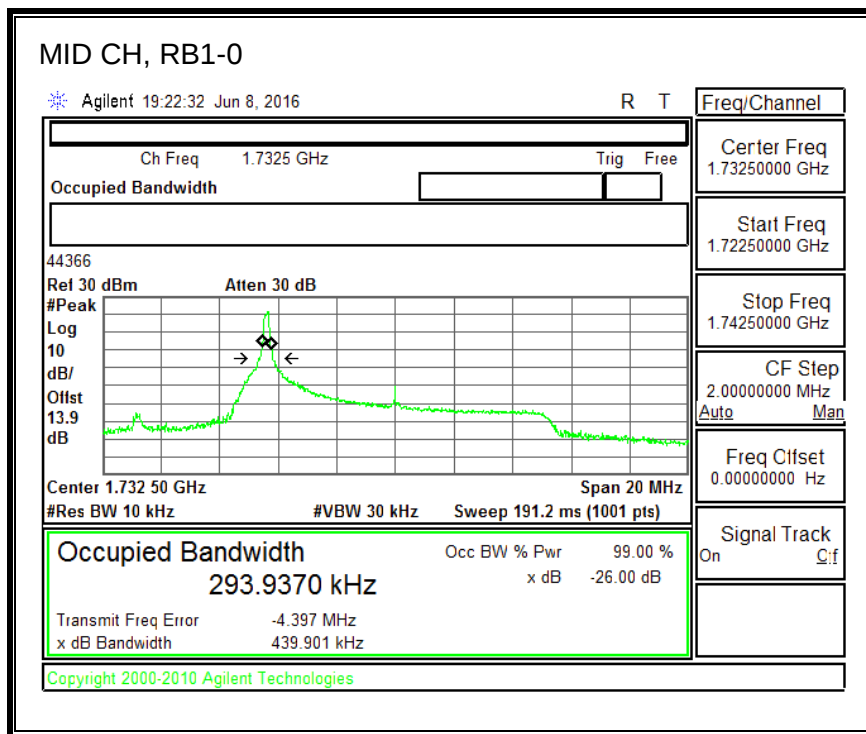
QPSK, (5.0 MHz BAND WIDTH)



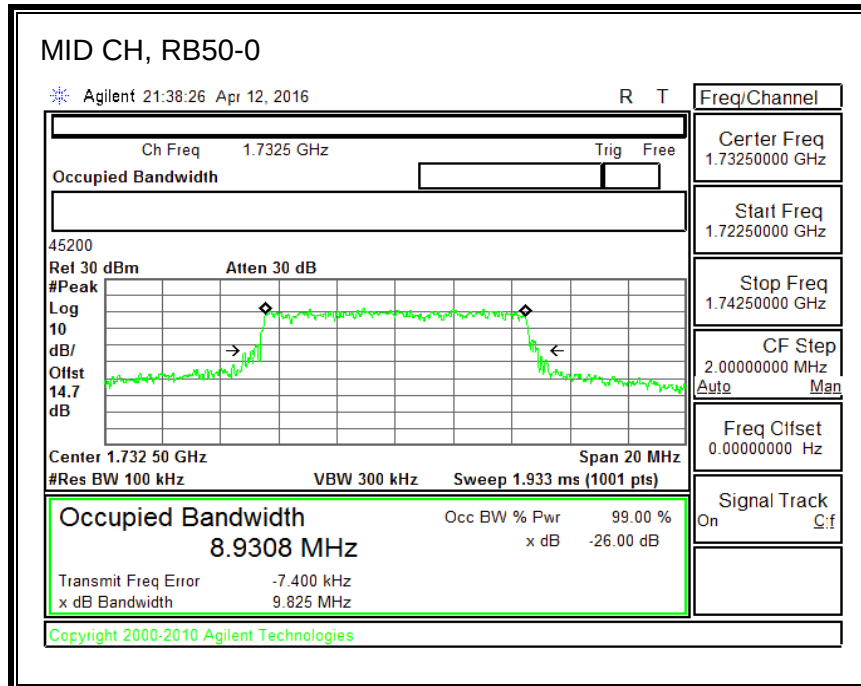
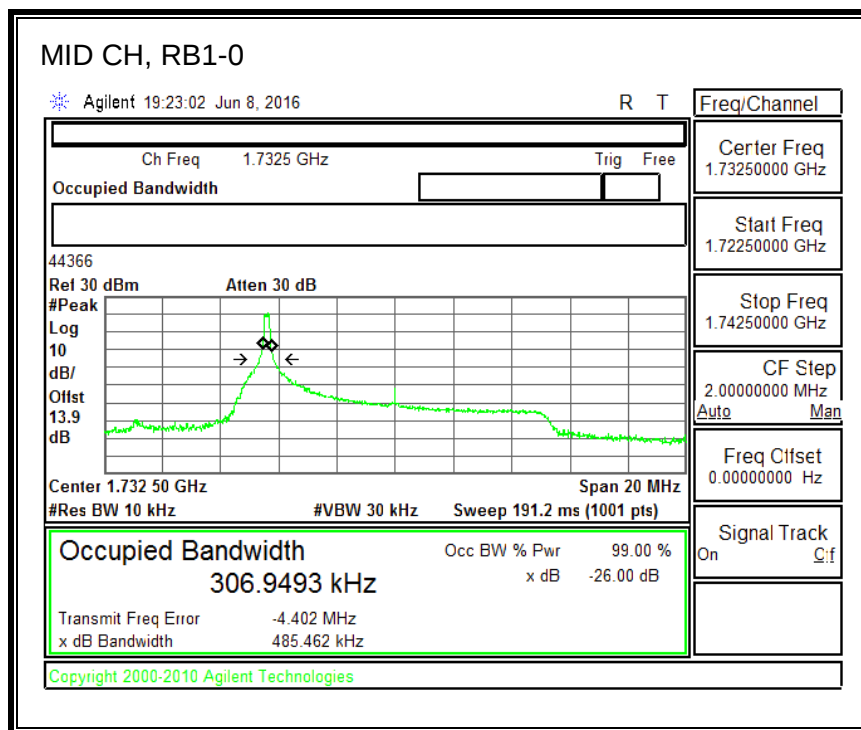
16QAM, (5.0 MHz BAND WIDTH)



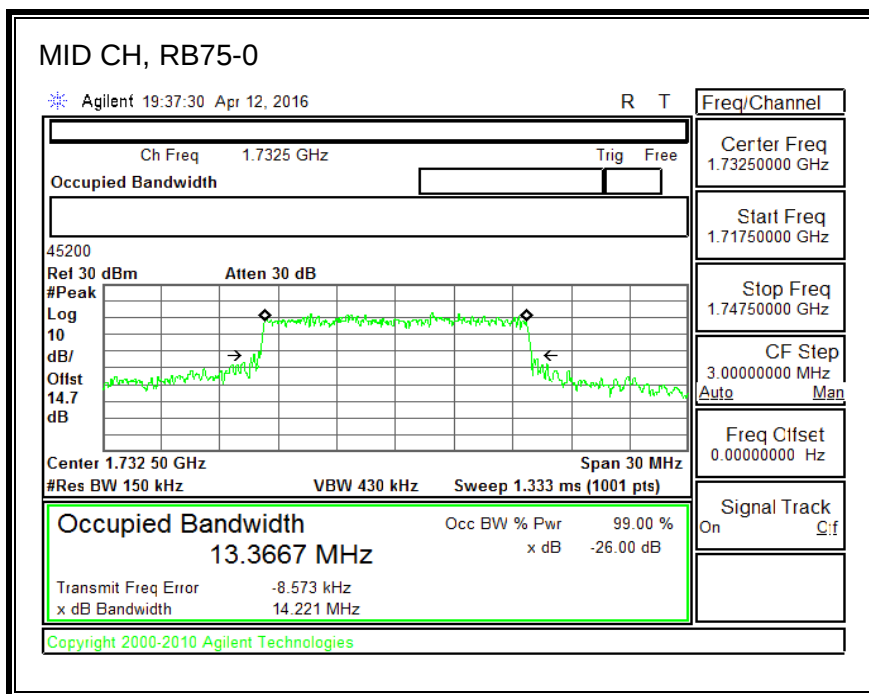
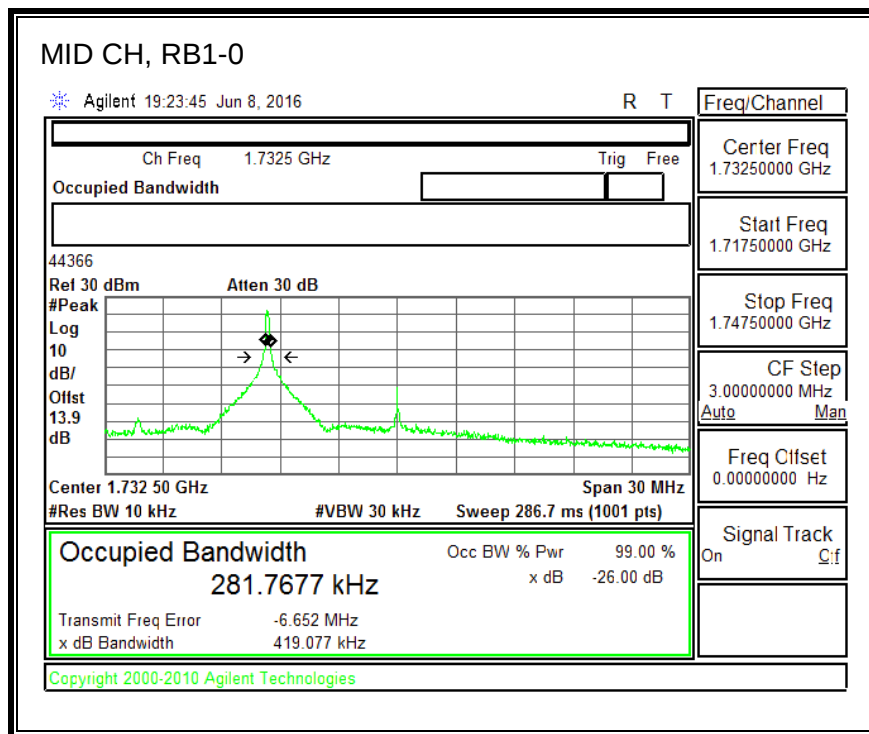
QPSK, (10.0 MHz BAND WIDTH)



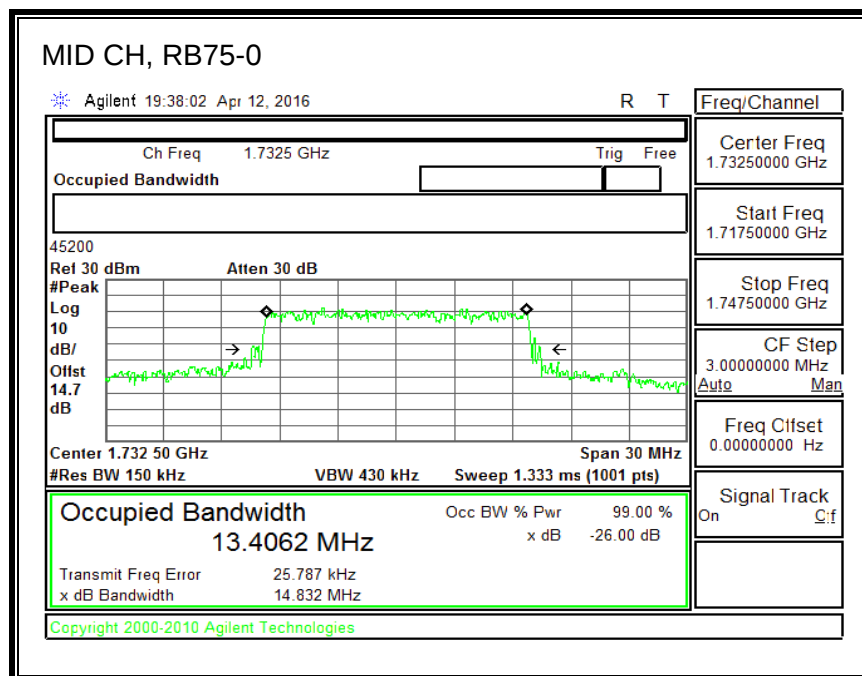
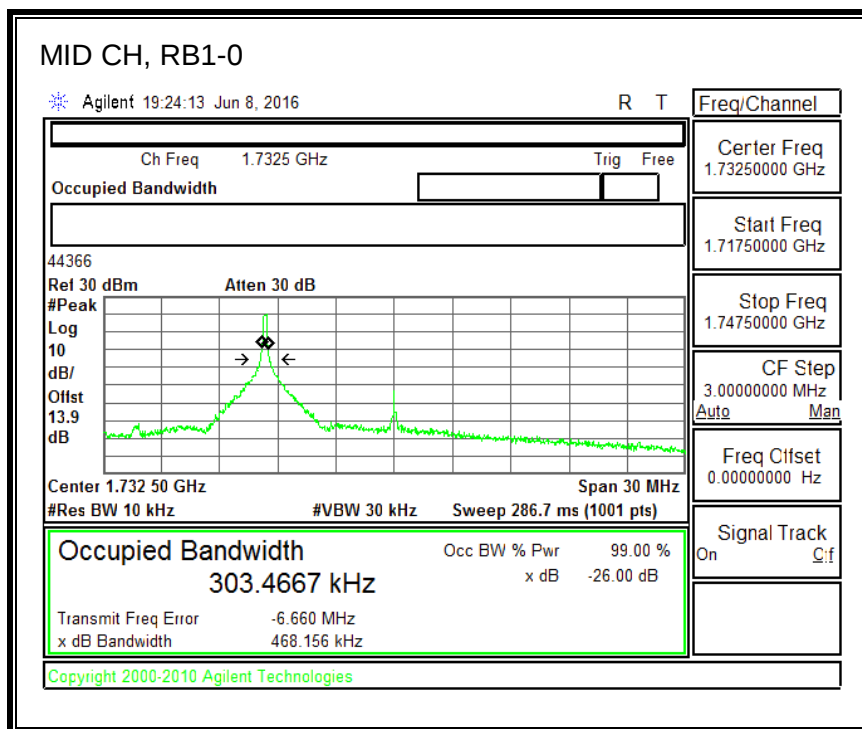
16QAM, (10.0 MHz BAND WIDTH)



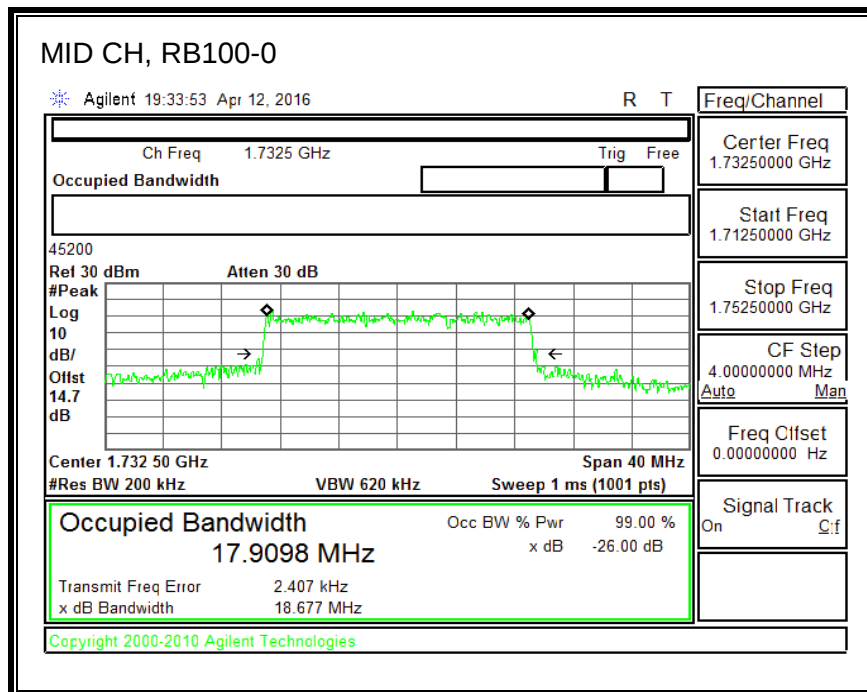
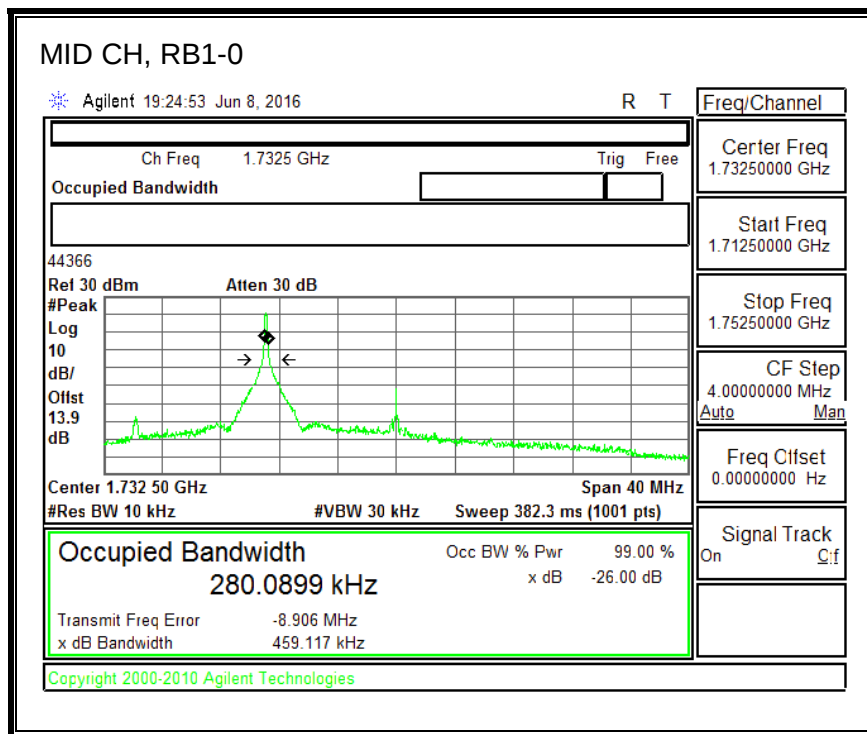
QPSK, (15.0 MHz BAND WIDTH)



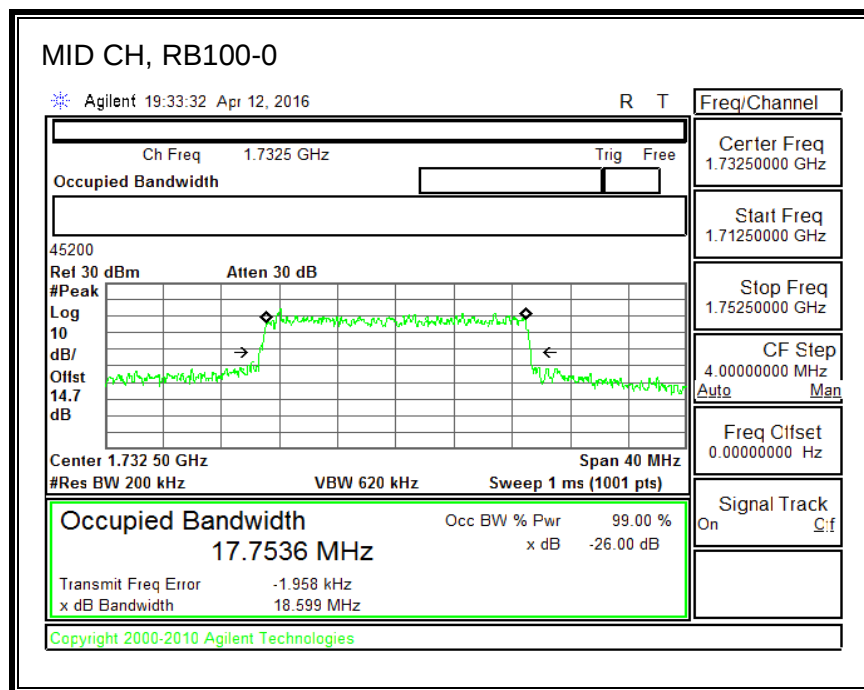
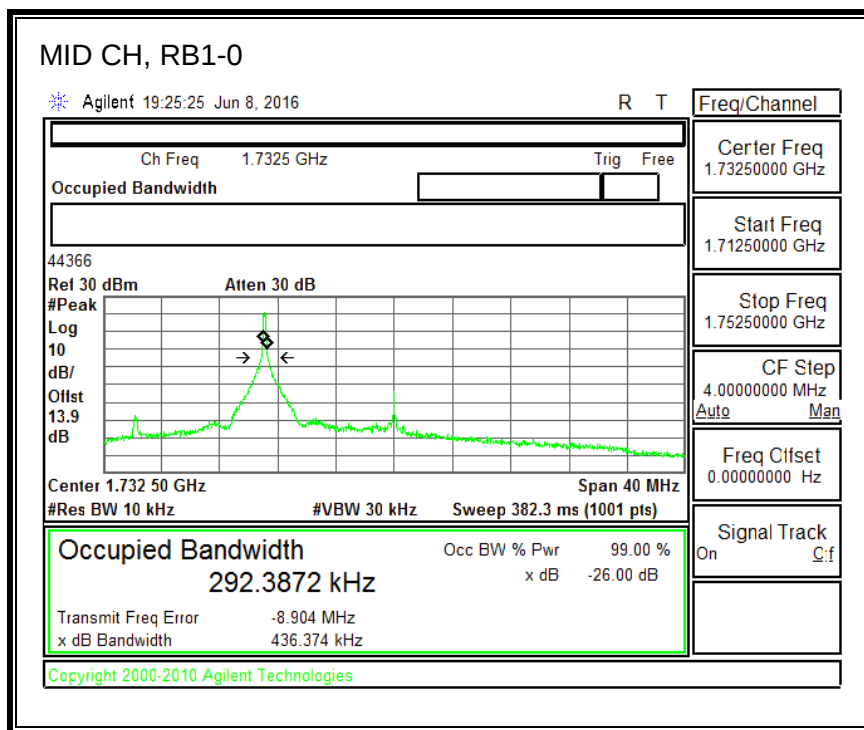
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

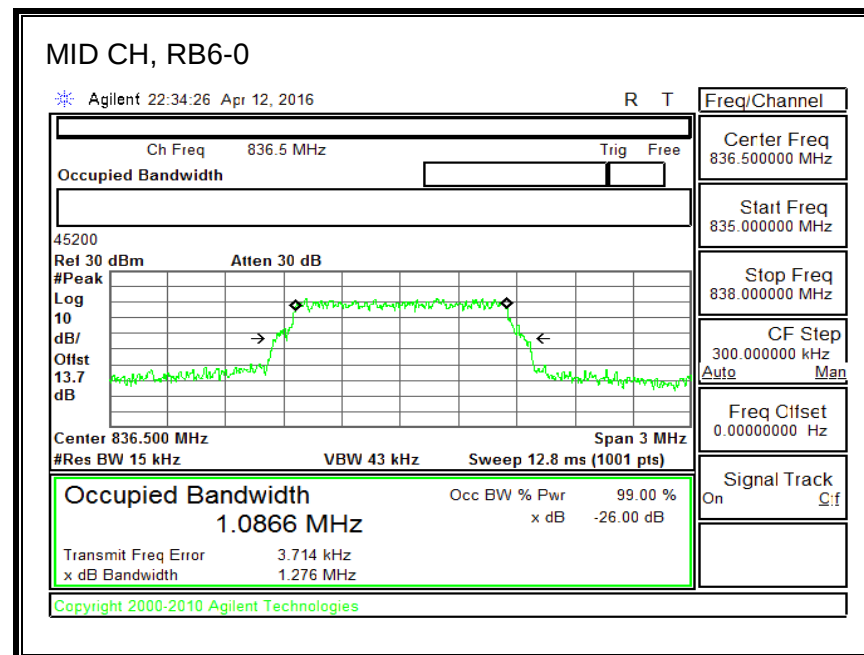
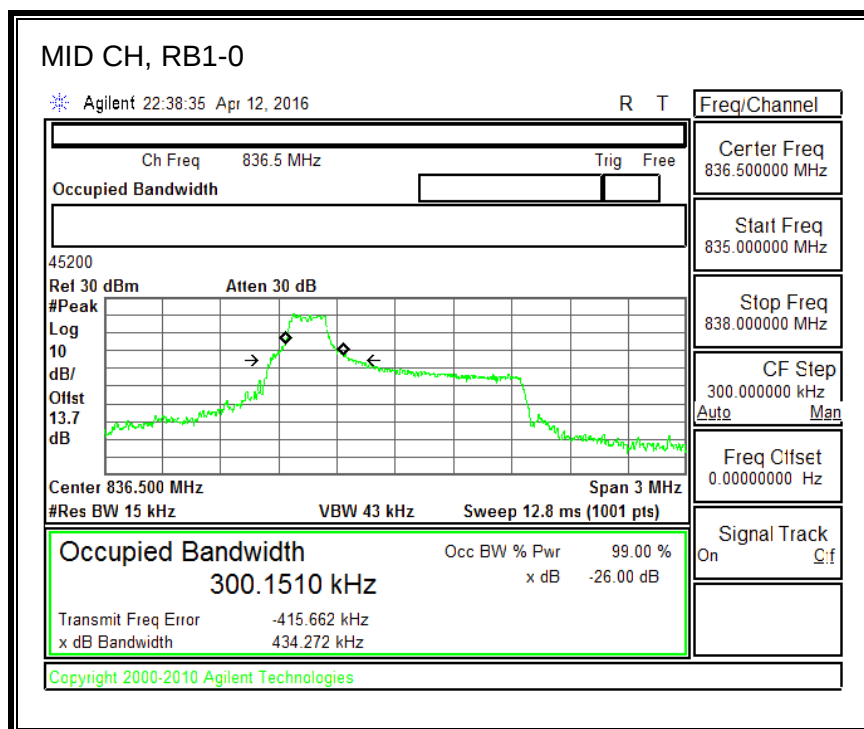


16QAM, (20.0 MHz BAND WIDTH)

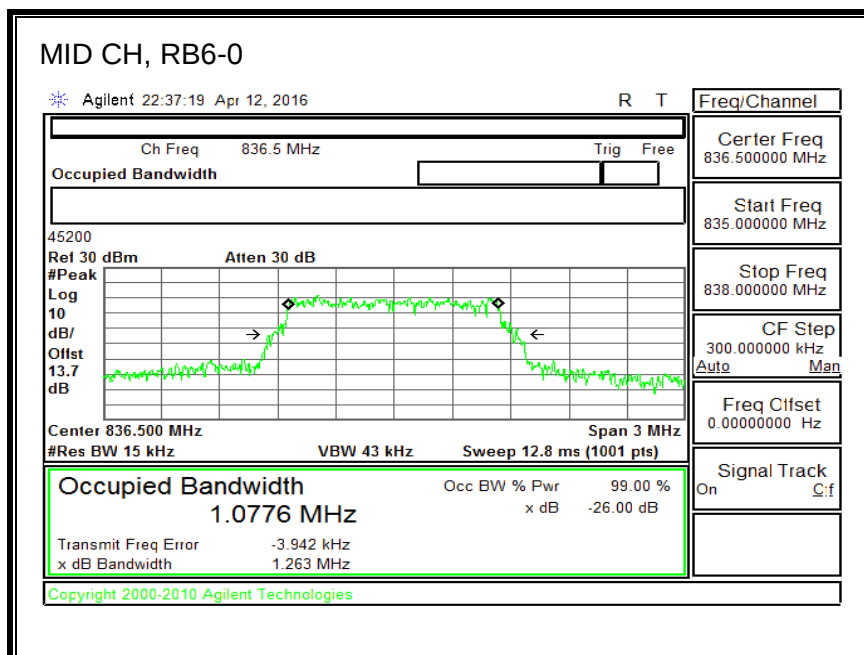
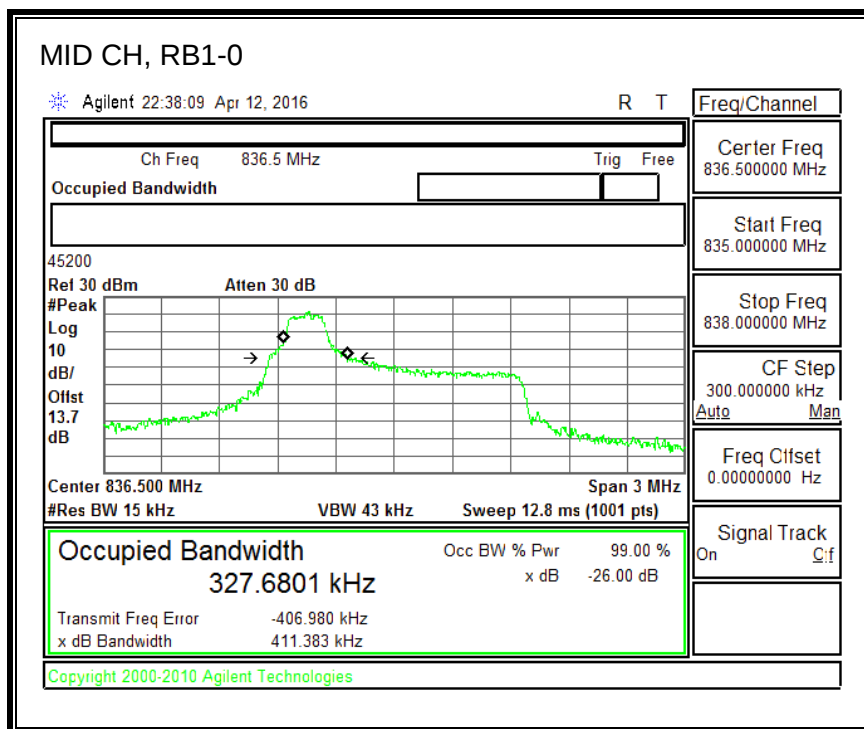


8.1.3. LTE BAND 5

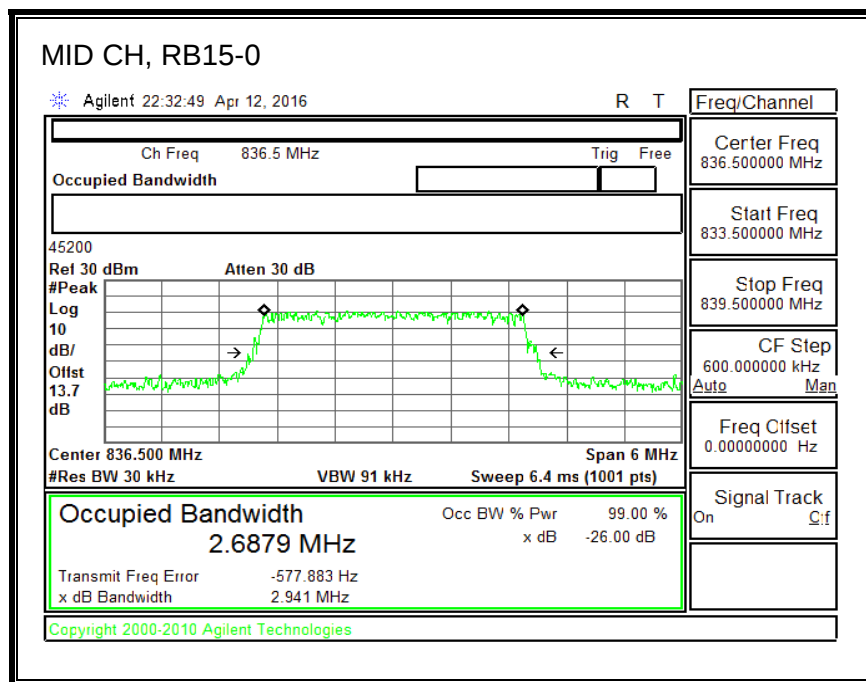
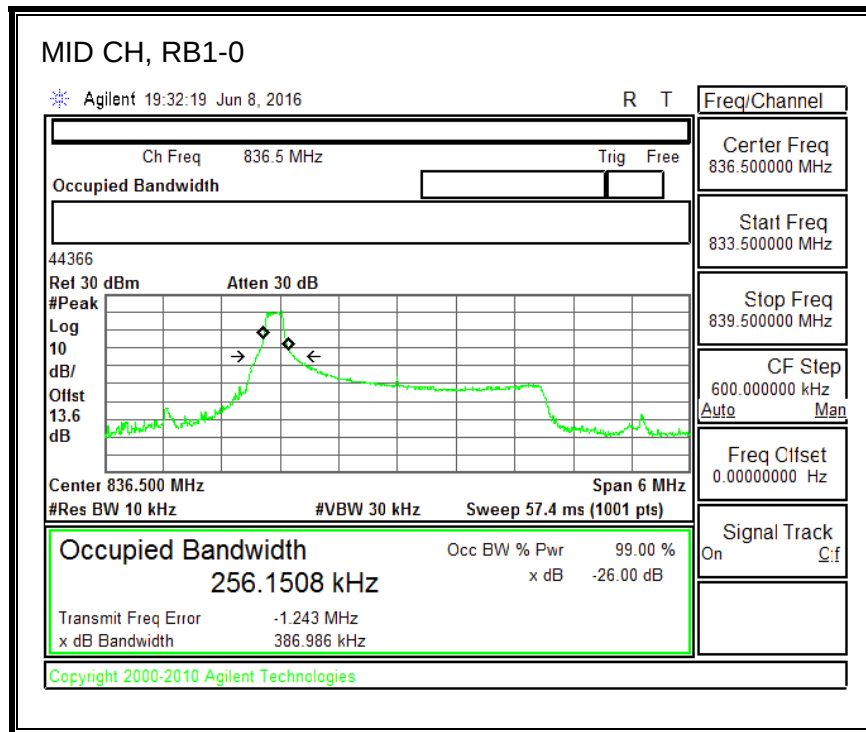
QPSK, (1.4 MHz BAND WIDTH)



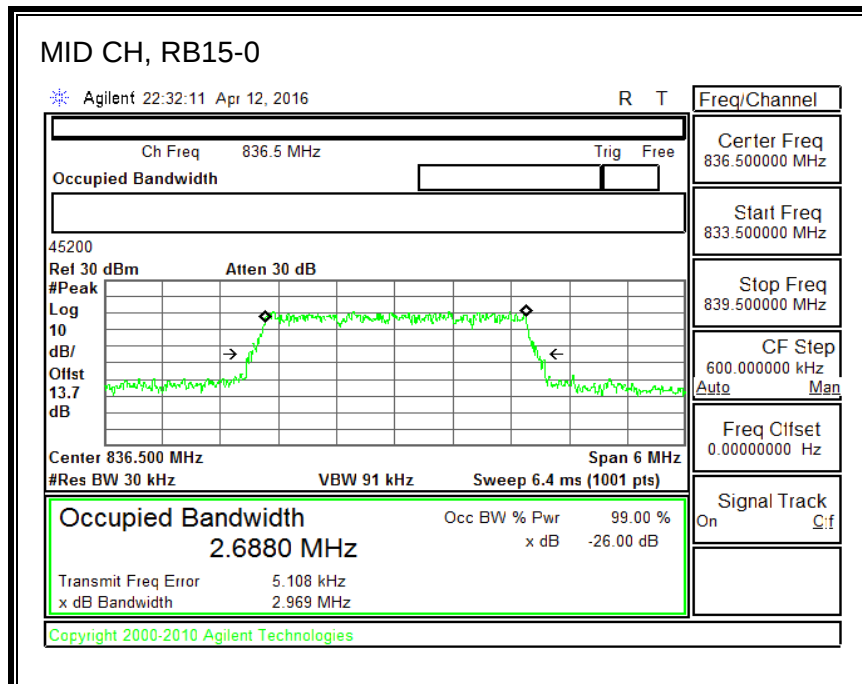
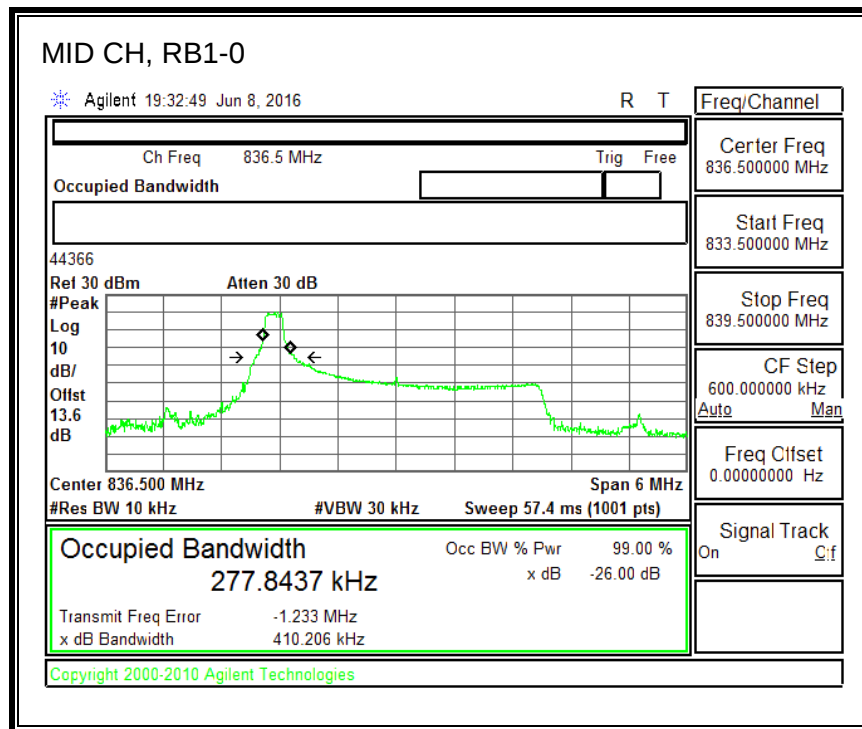
16QAM, (1.4 MHz BAND WIDTH)



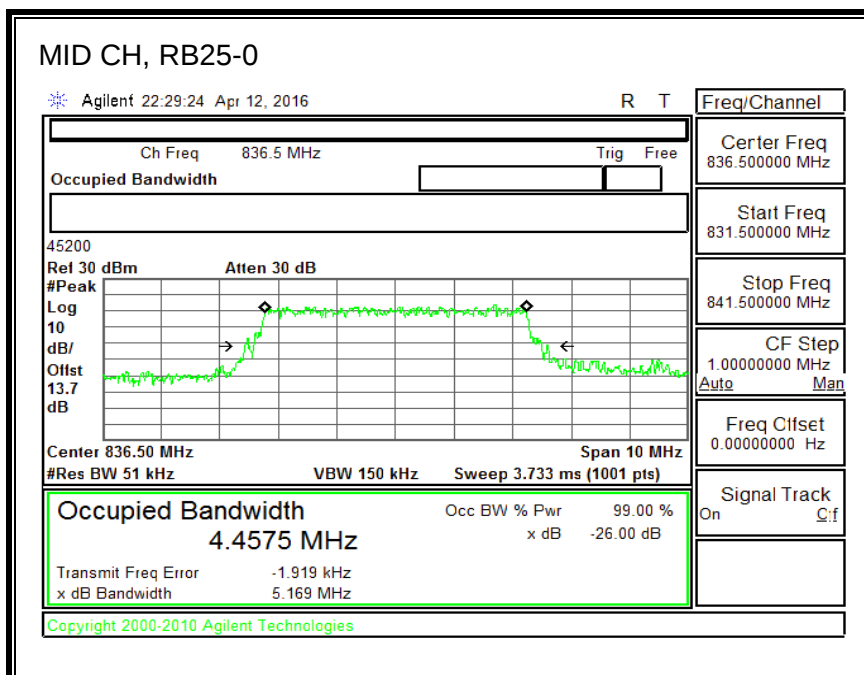
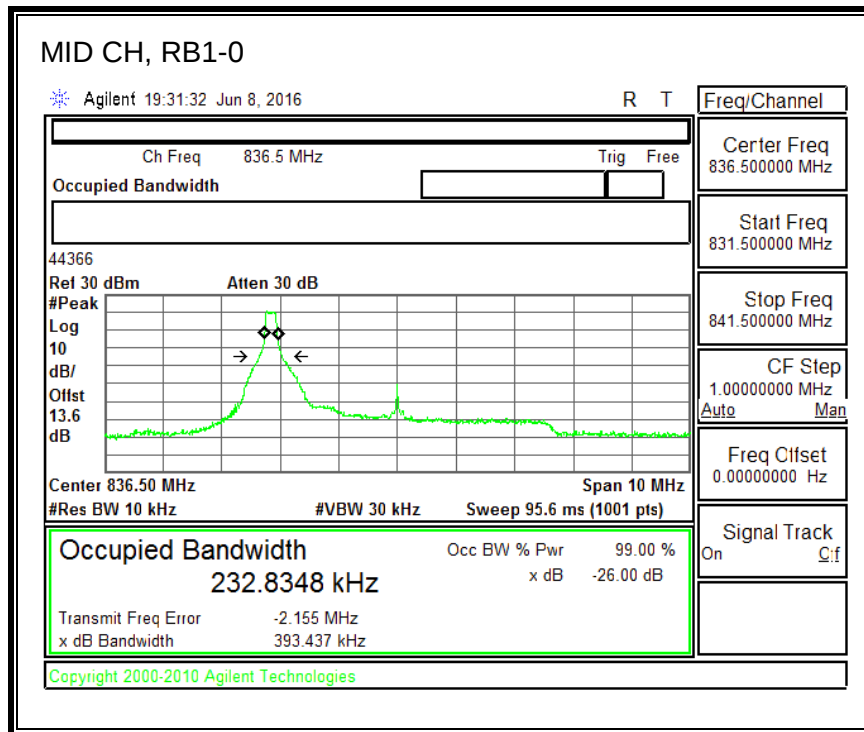
QPSK, (3.0 MHz BAND WIDTH)



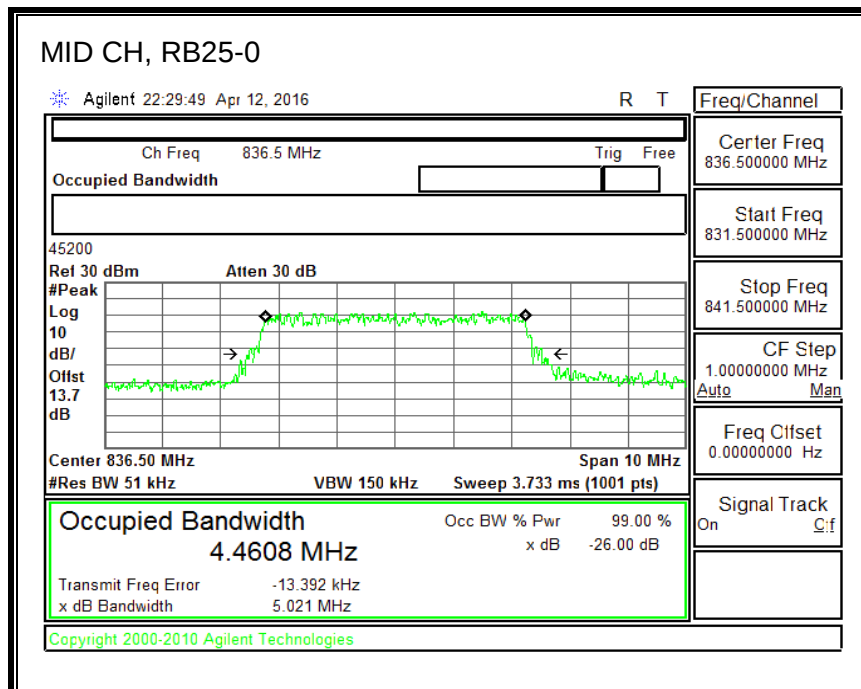
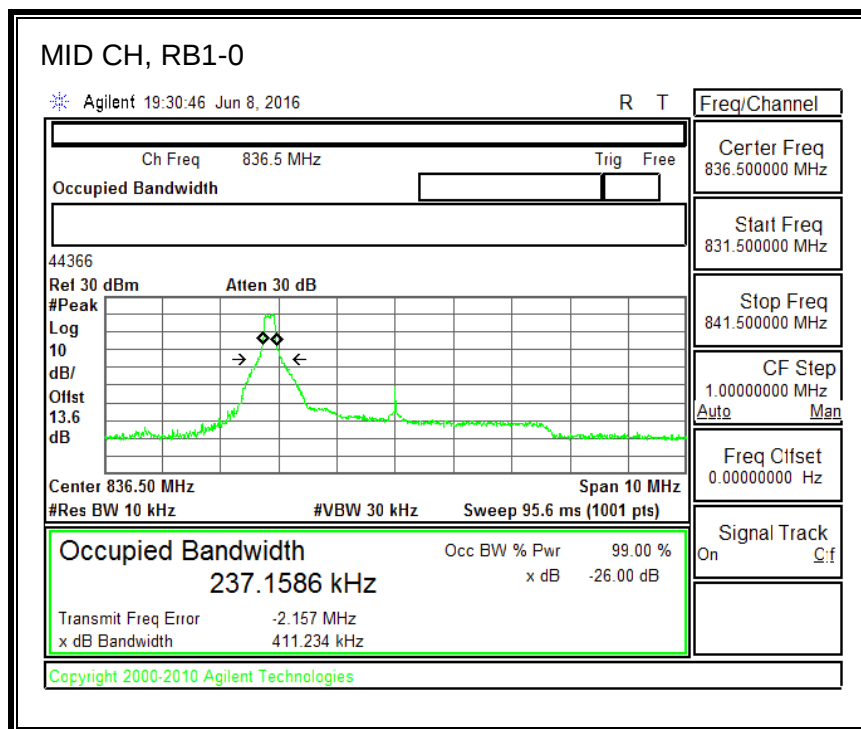
16QAM, (3.0 MHz BAND WIDTH)



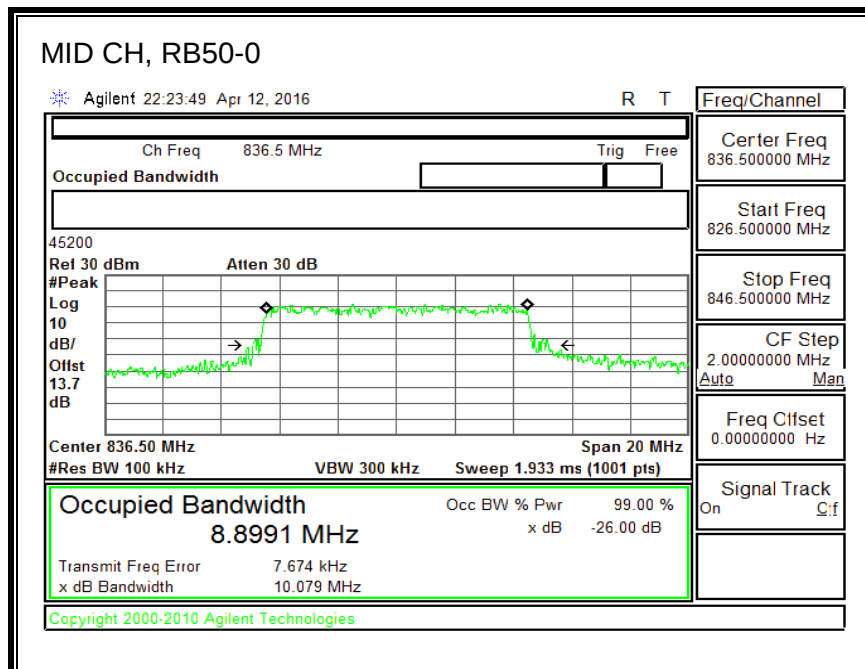
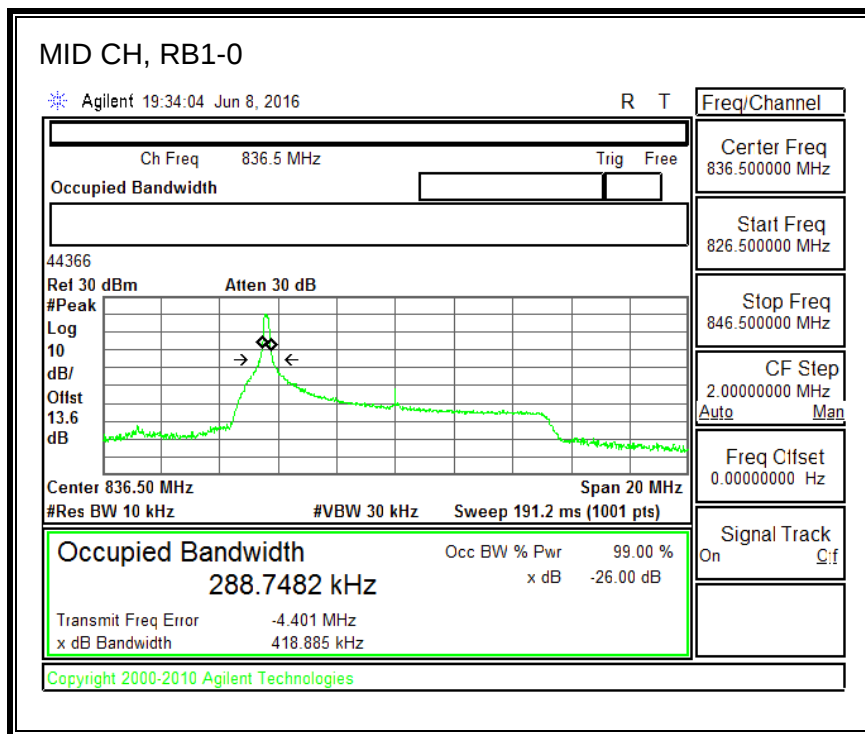
QPSK, (5.0 MHz BAND WIDTH)



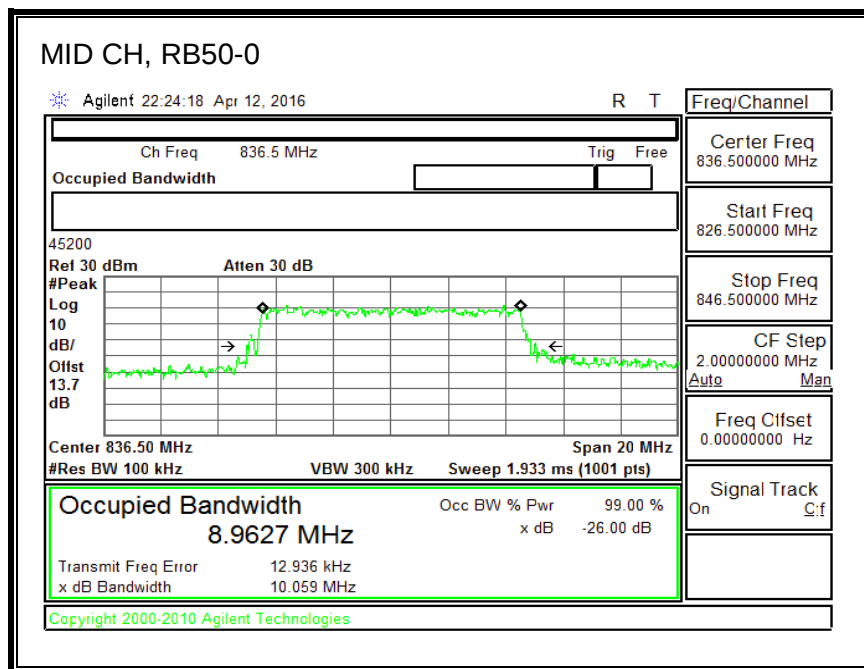
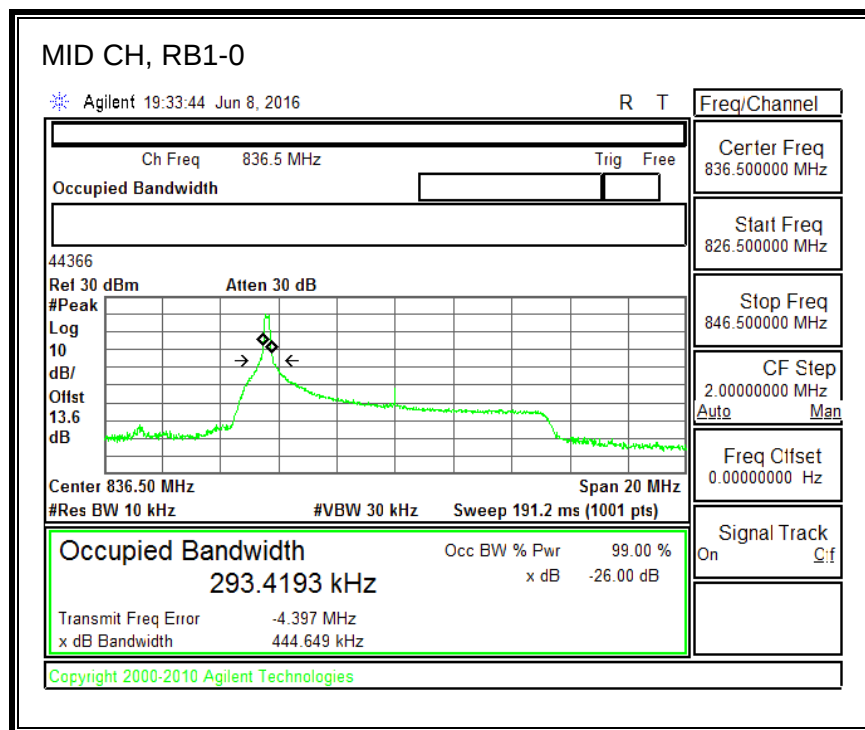
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

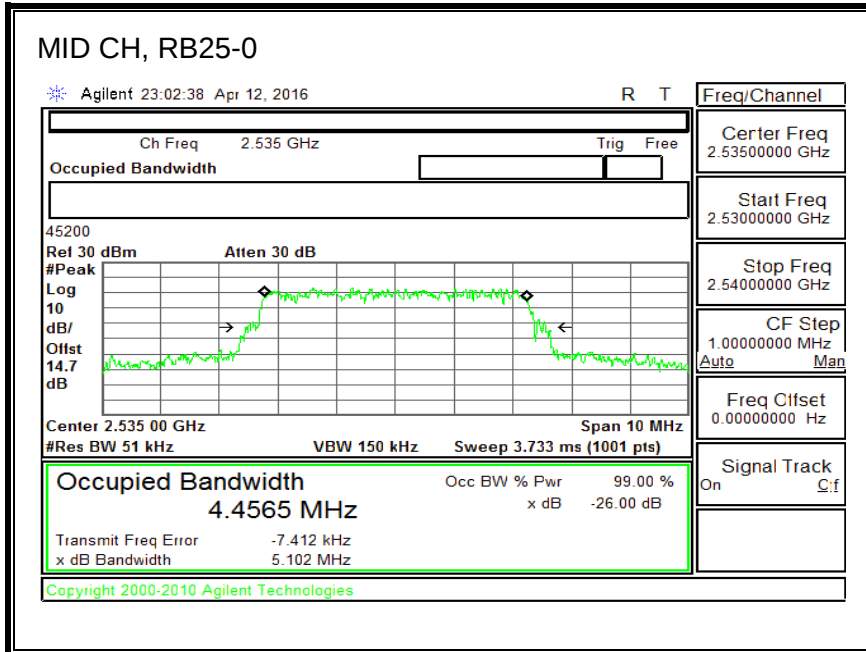
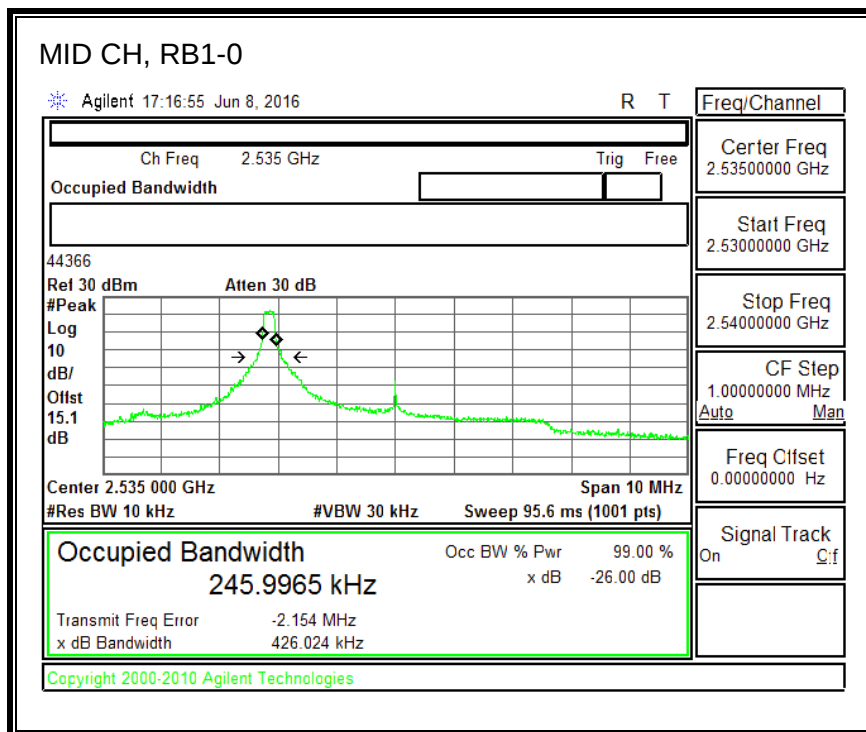


16QAM, (10.0 MHz BAND WIDTH)

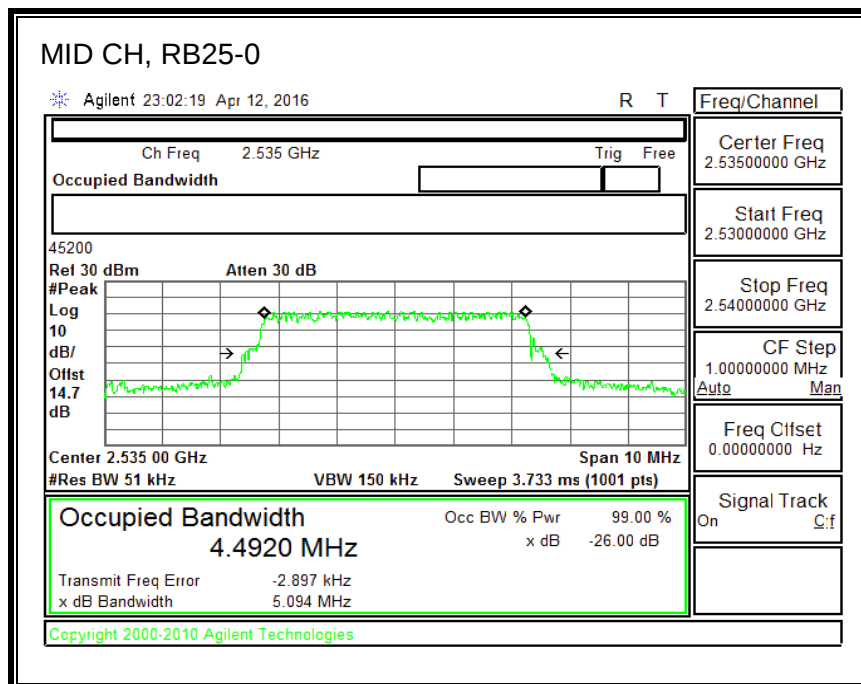
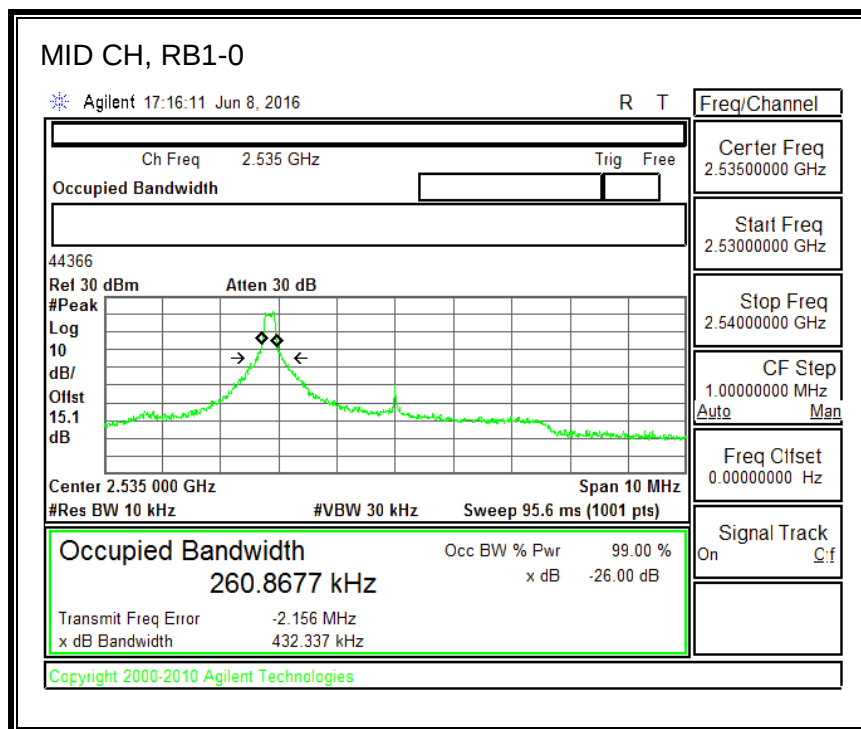


8.1.4. LTE BAND 7

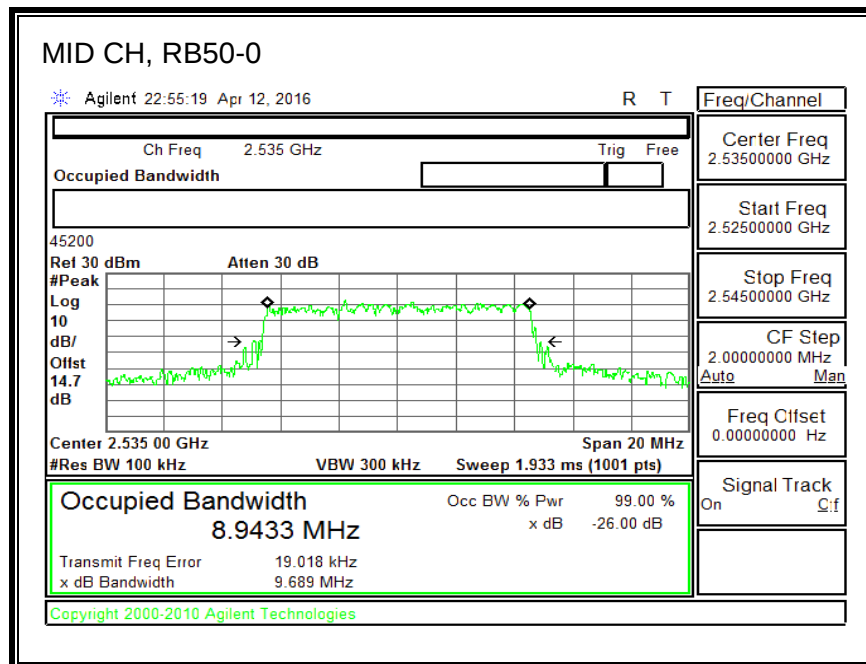
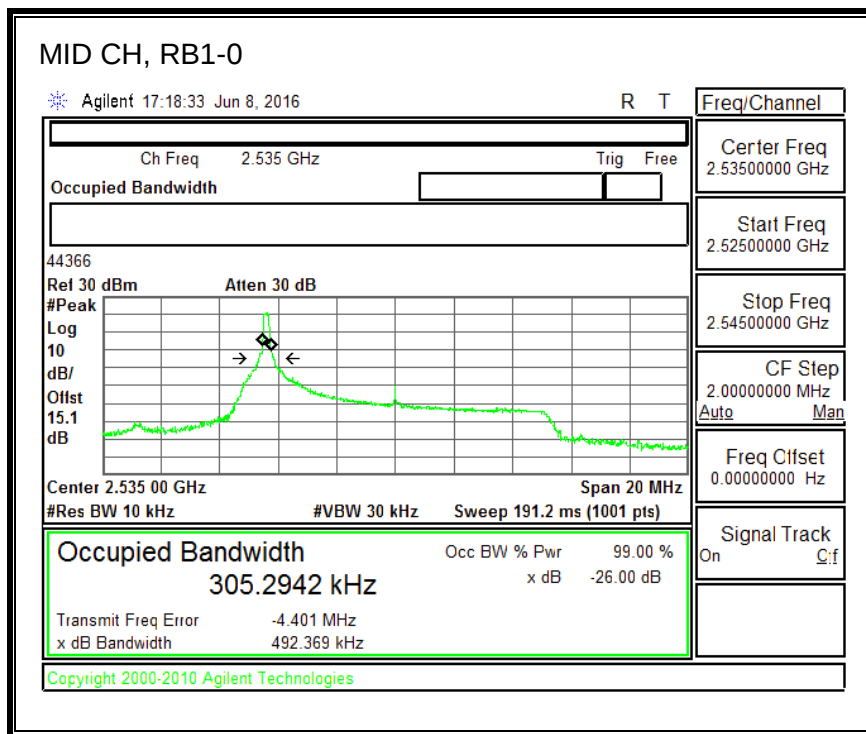
QPSK, (5.0 MHz BAND WIDTH)



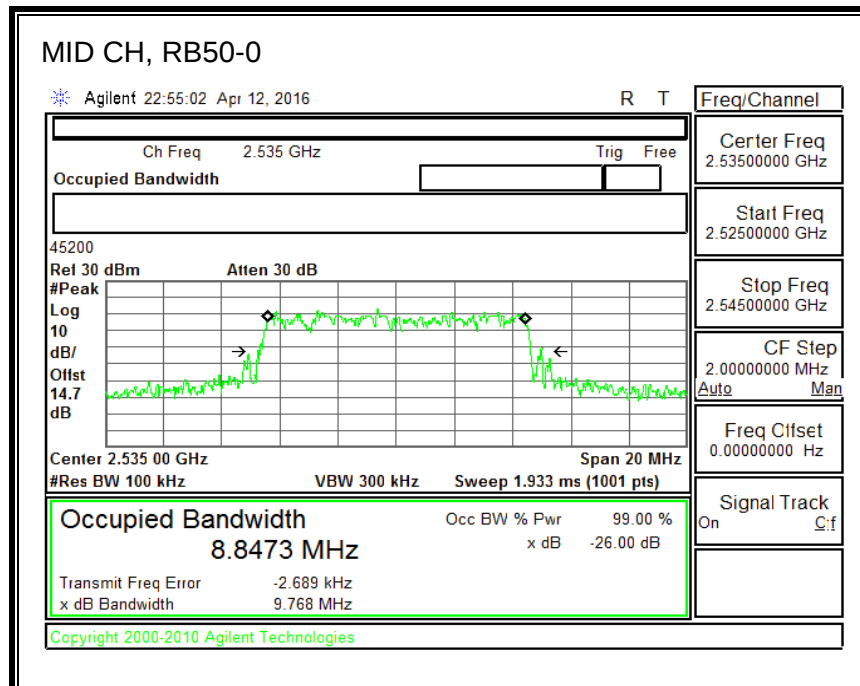
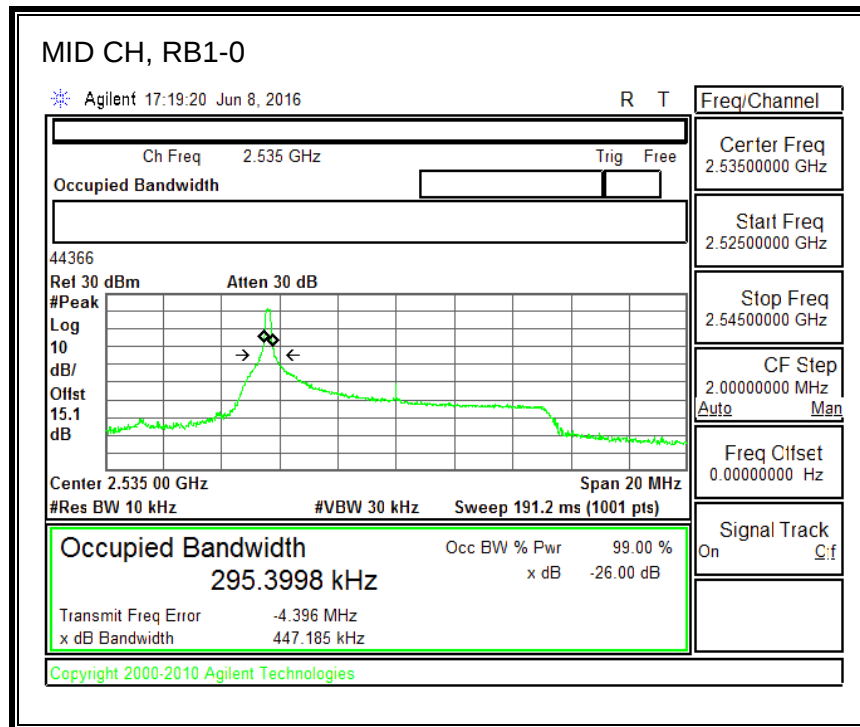
16QAM, (5.0 MHz BAND WIDTH)



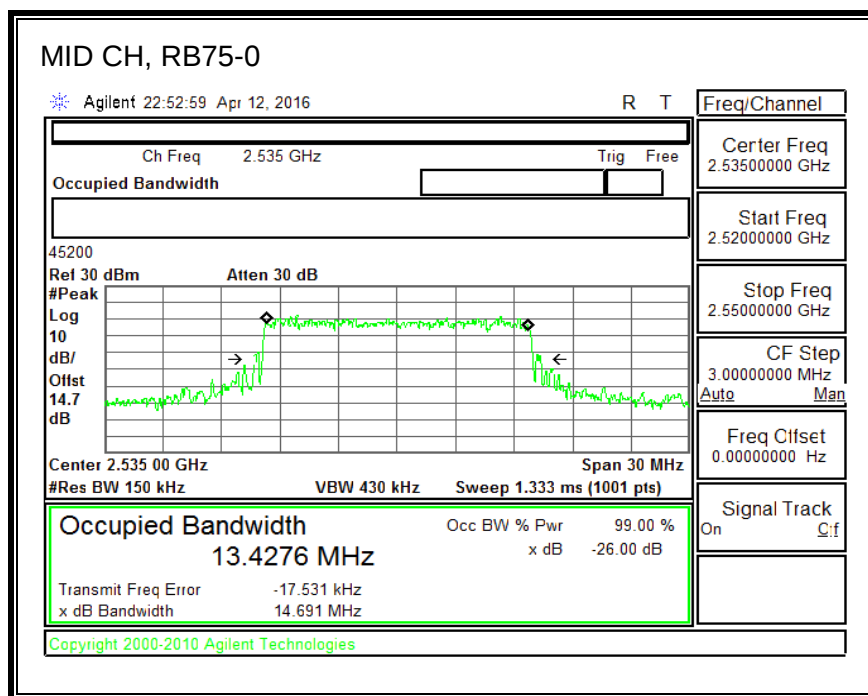
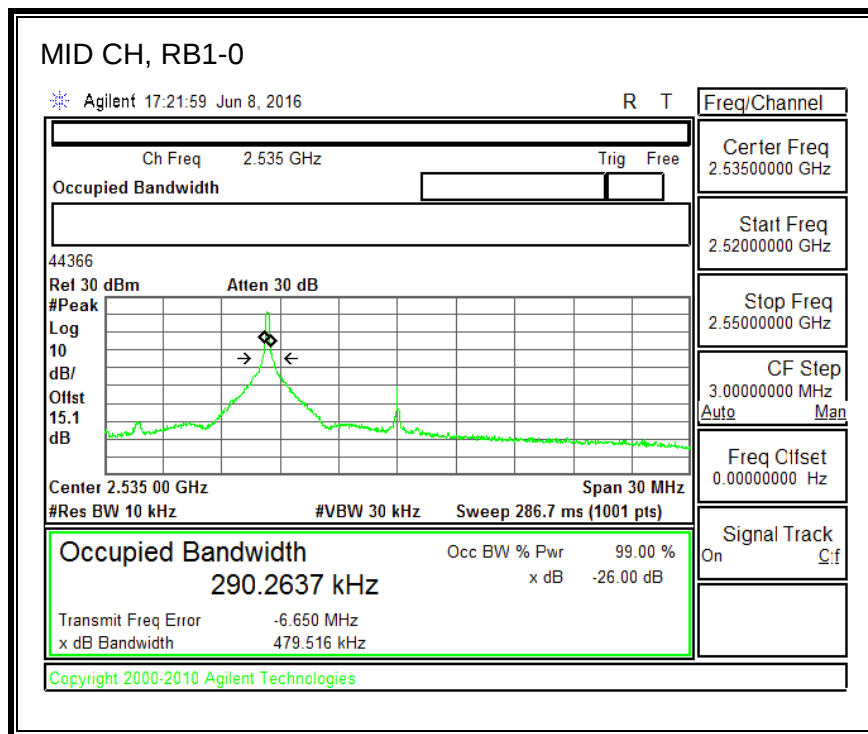
QPSK, (10.0 MHz BAND WIDTH)



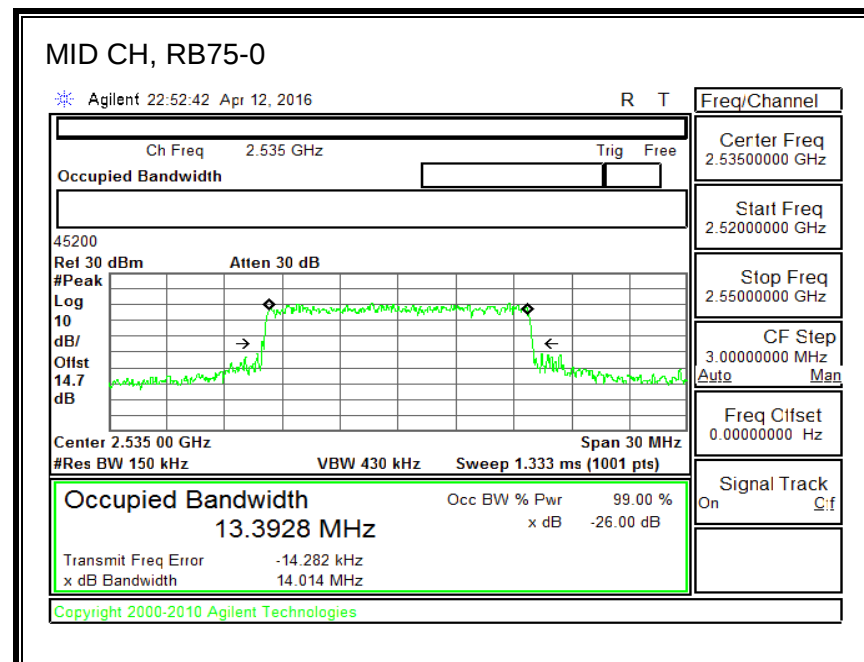
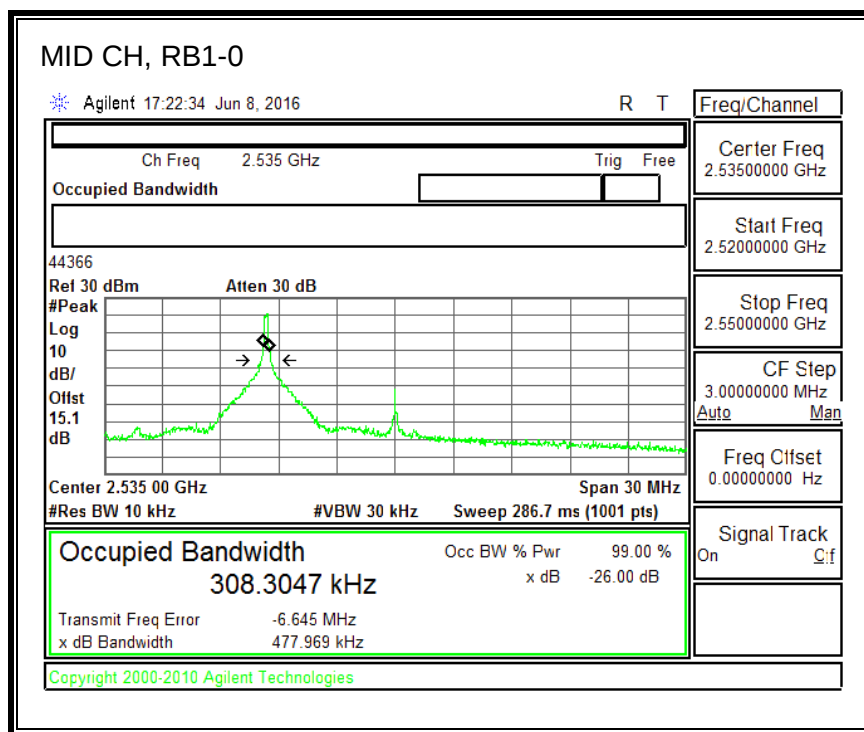
16QAM, (10.0 MHz BAND WIDTH)



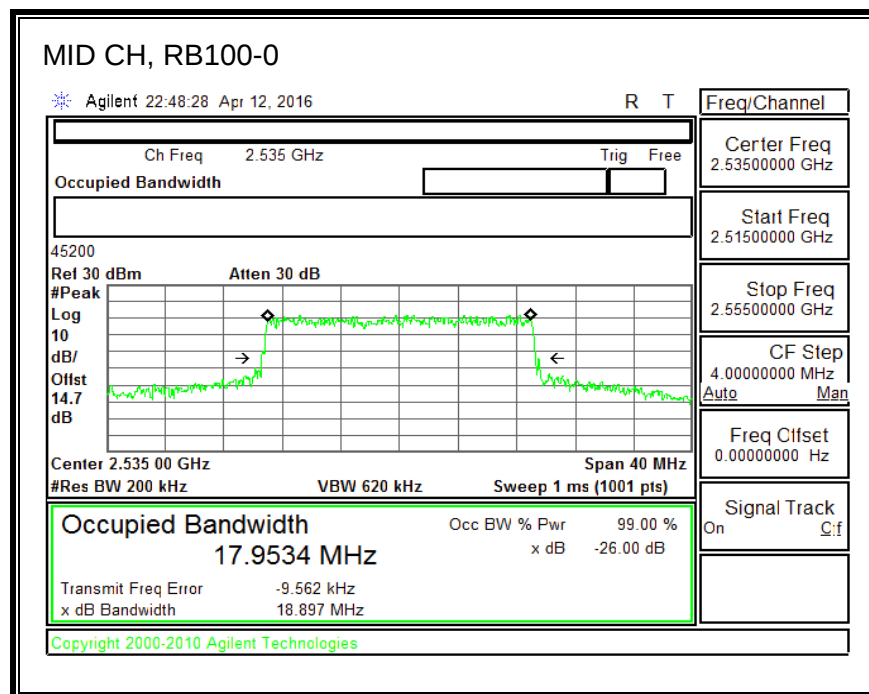
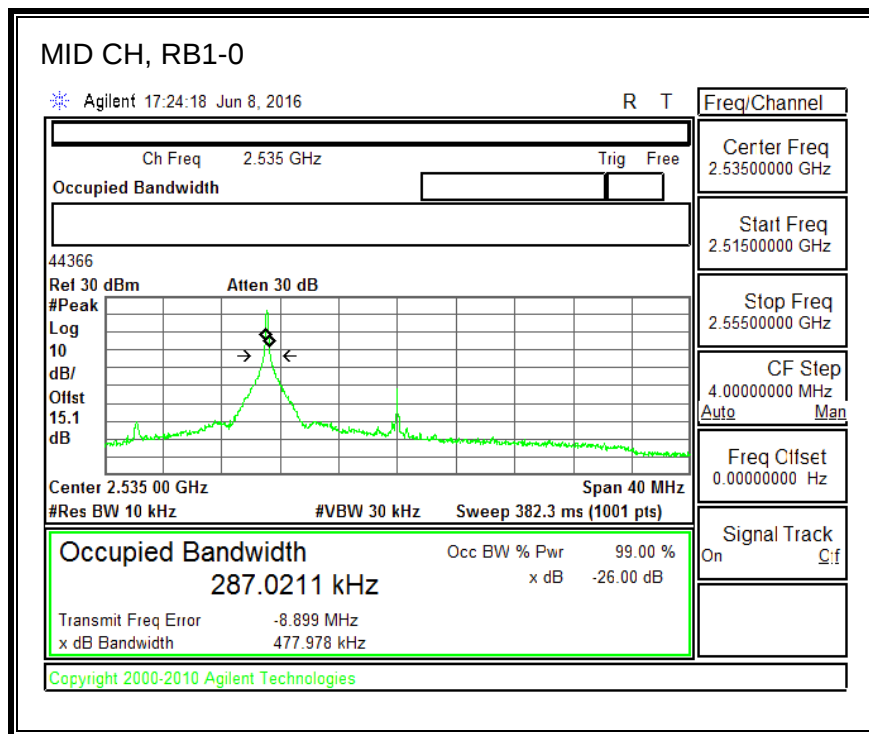
QPSK, (15.0 MHz BAND WIDTH)



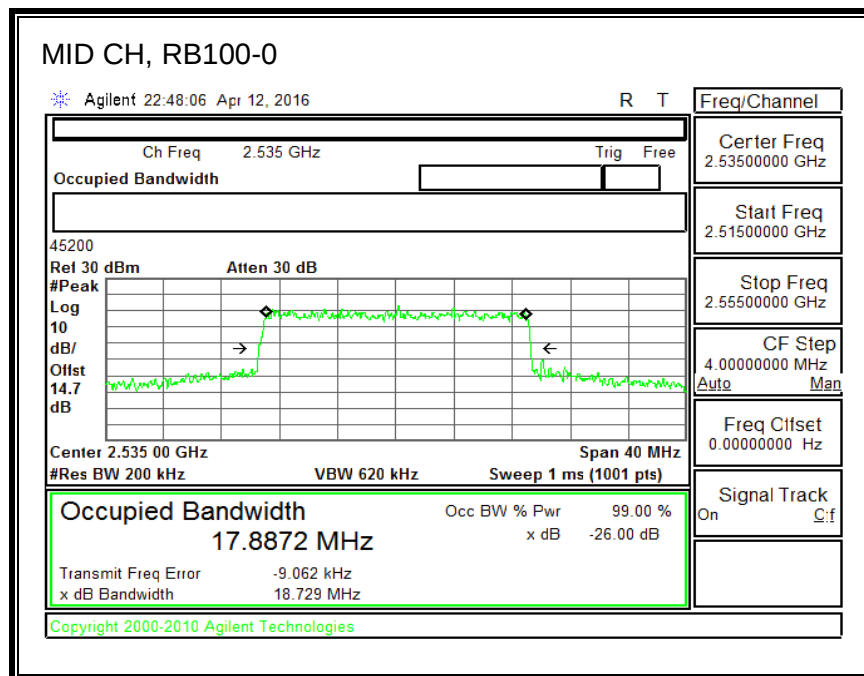
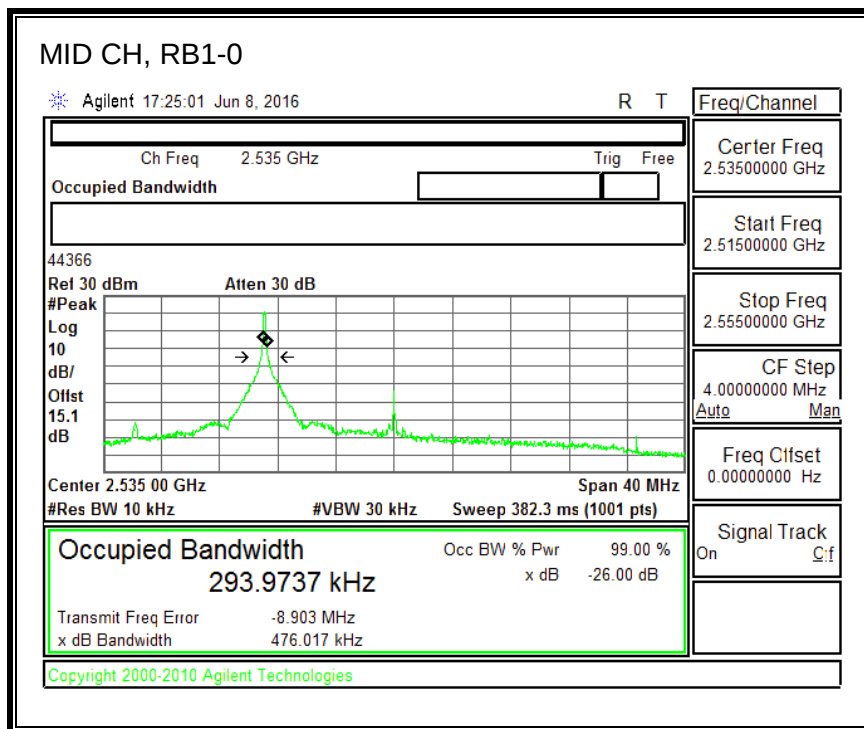
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

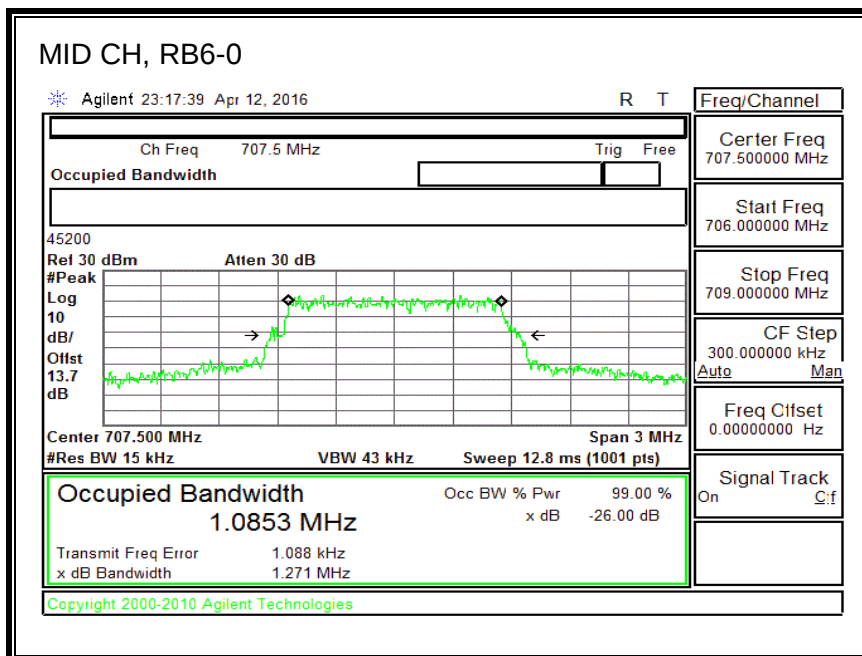
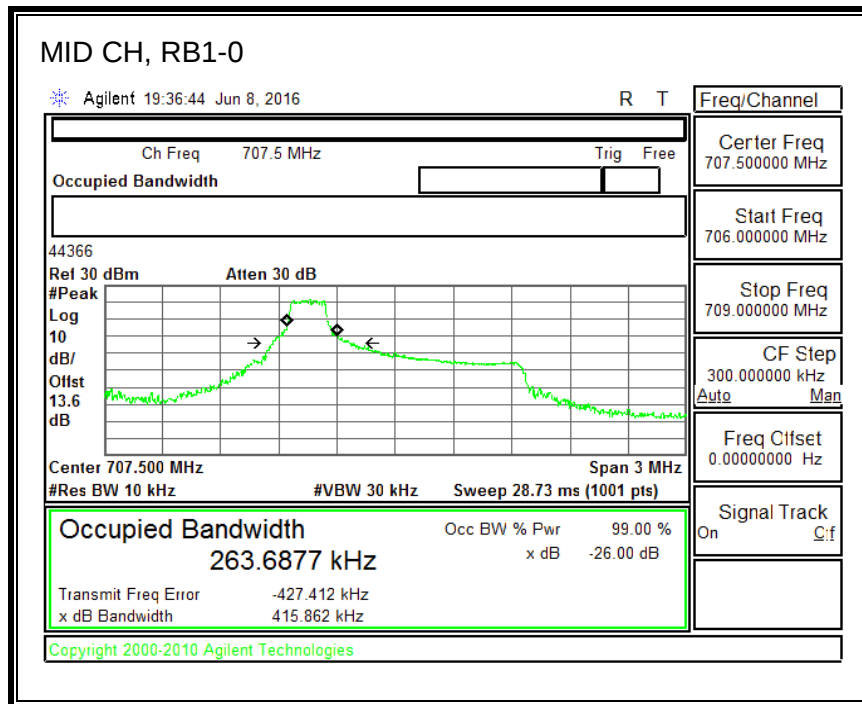


16QAM, (20.0 MHz BAND WIDTH)

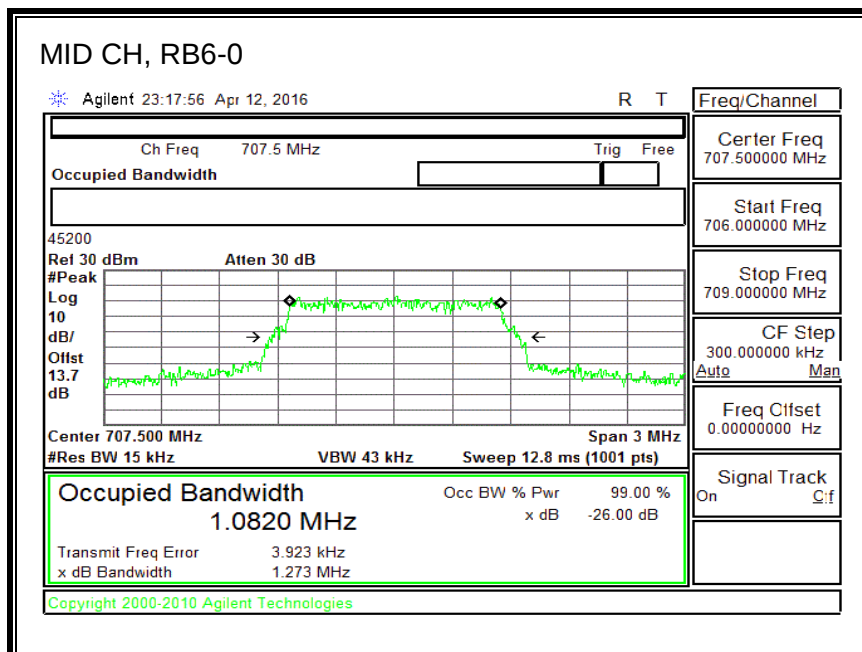
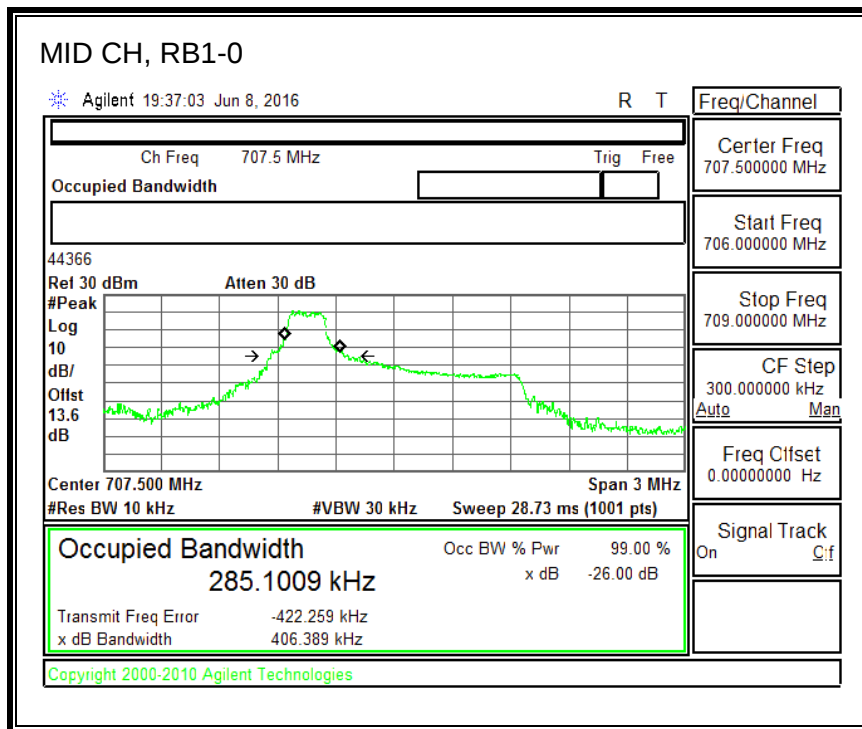


8.1.5. LTE BAND 12

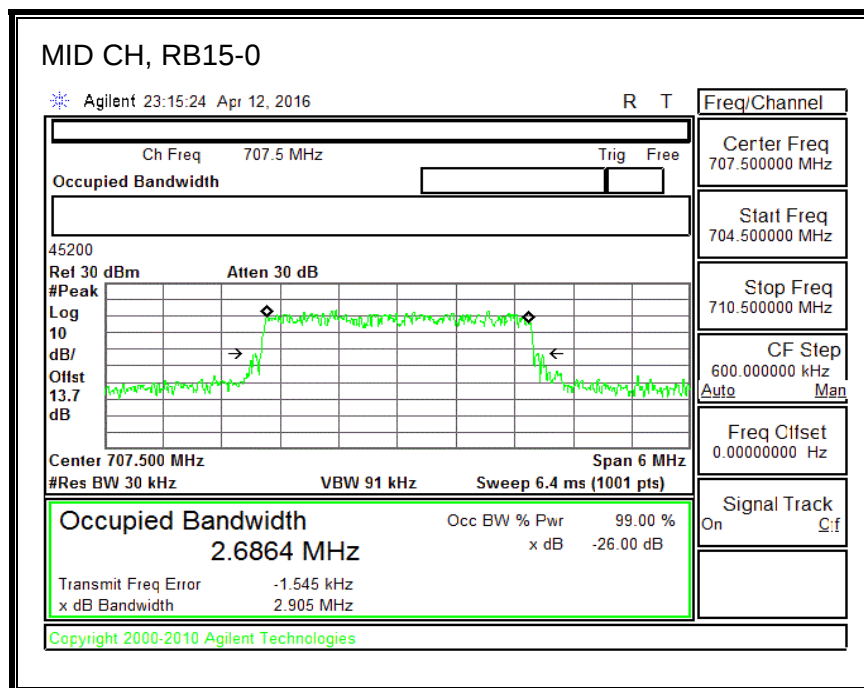
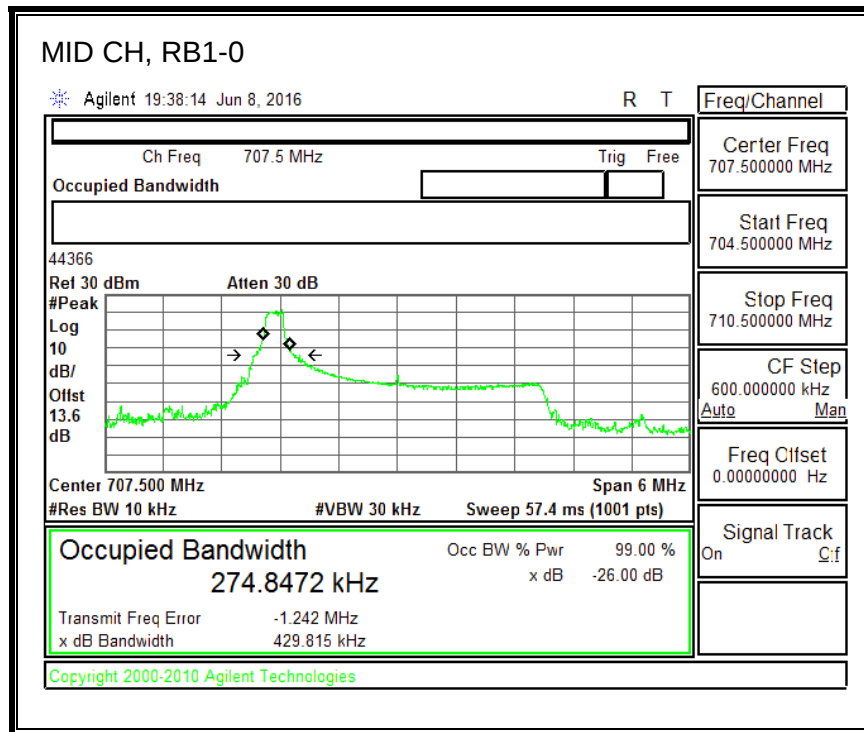
QPSK, (1.4 MHz BAND WIDTH)



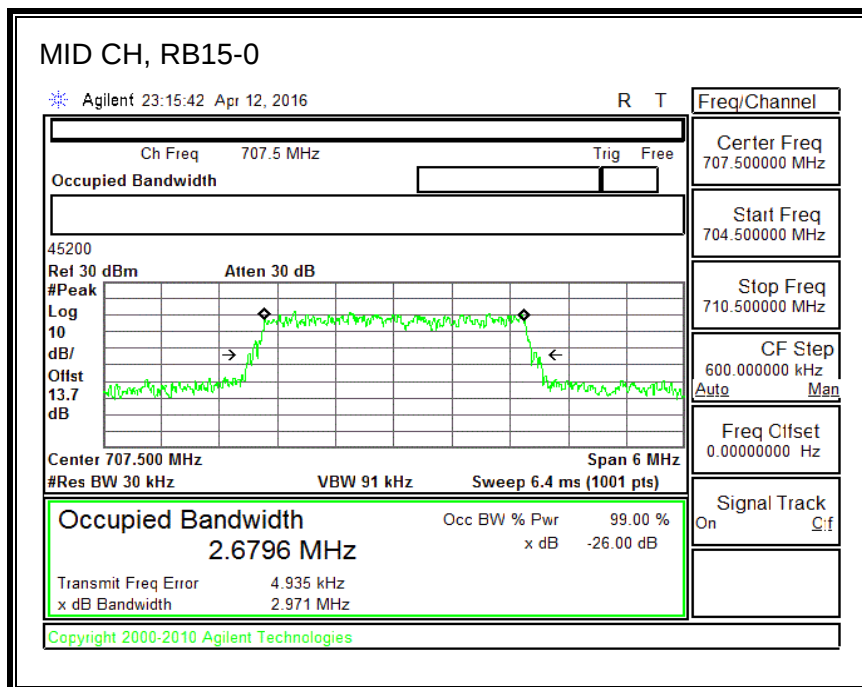
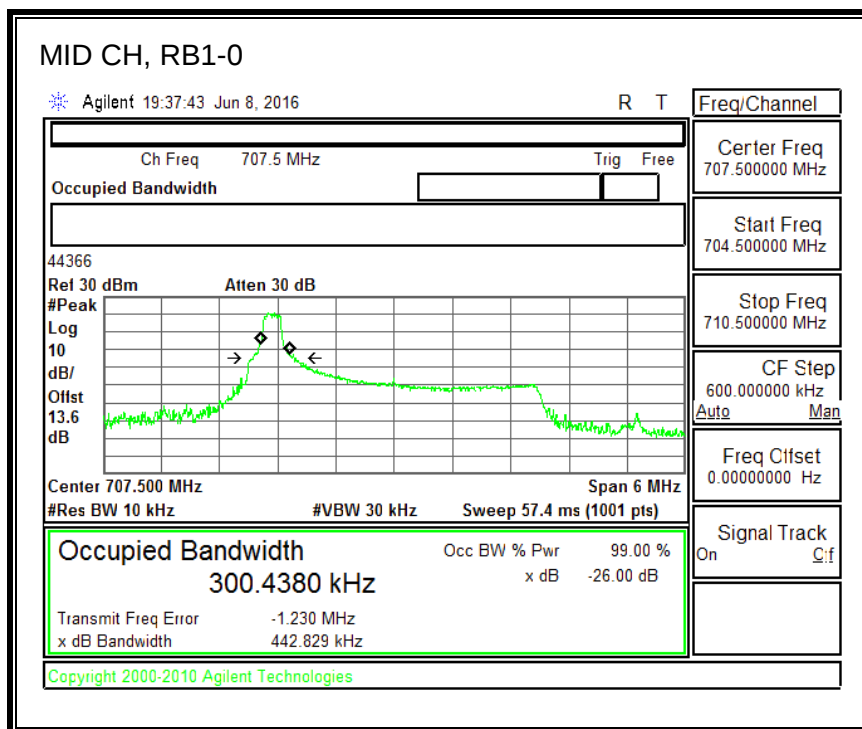
16QAM, (1.4 MHz BAND WIDTH)



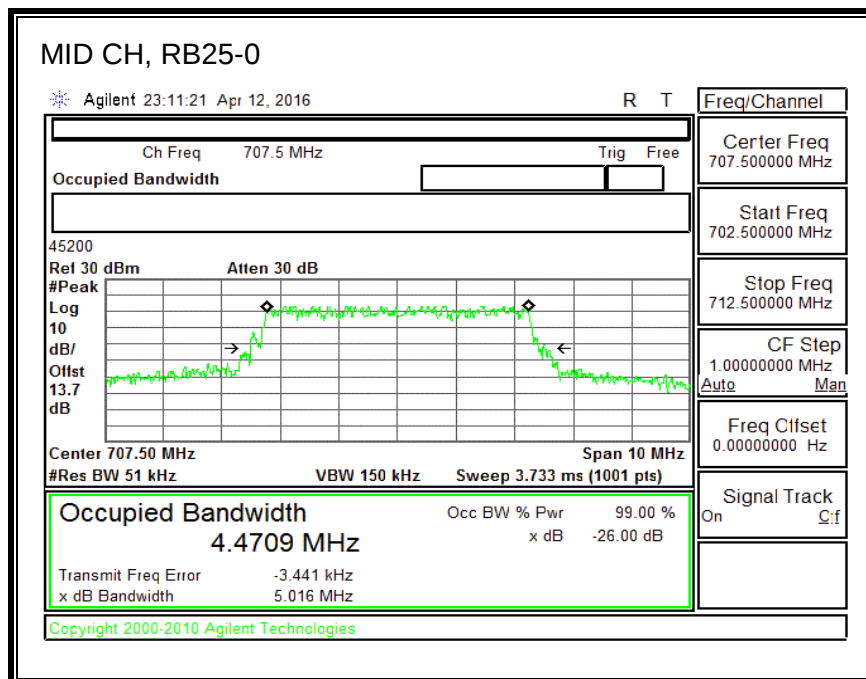
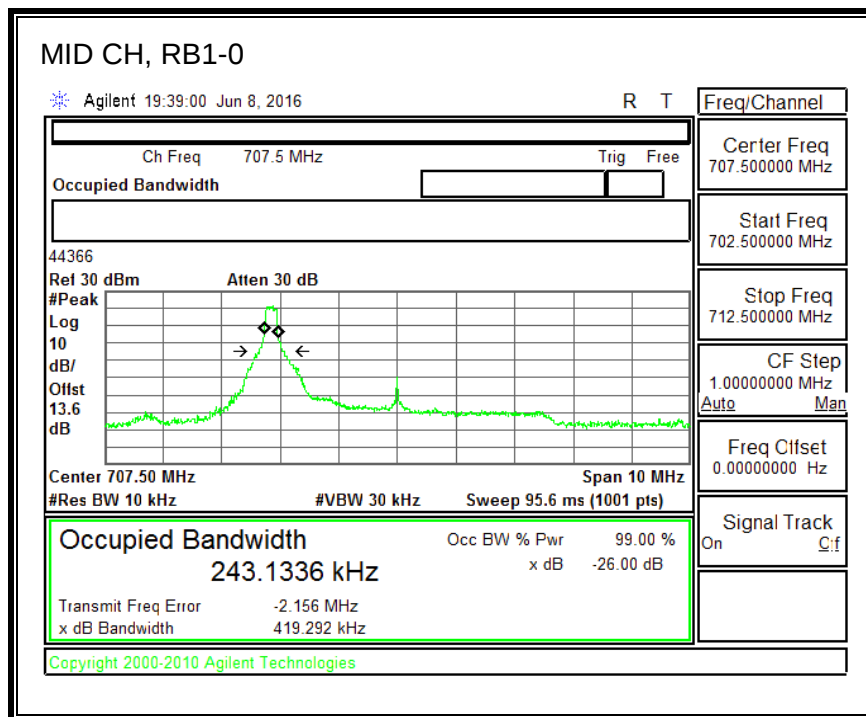
QPSK, (3.0 MHz BAND WIDTH)



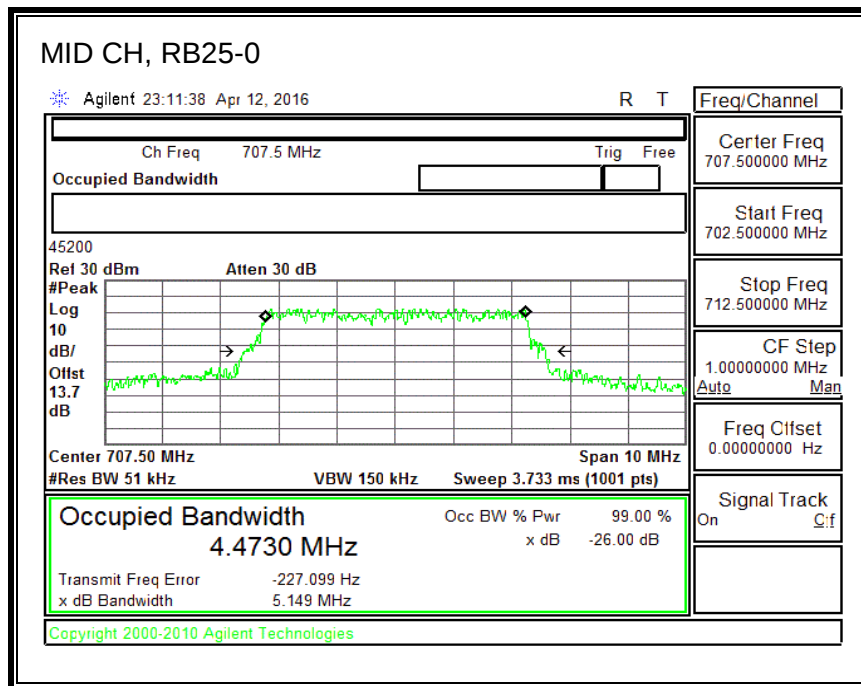
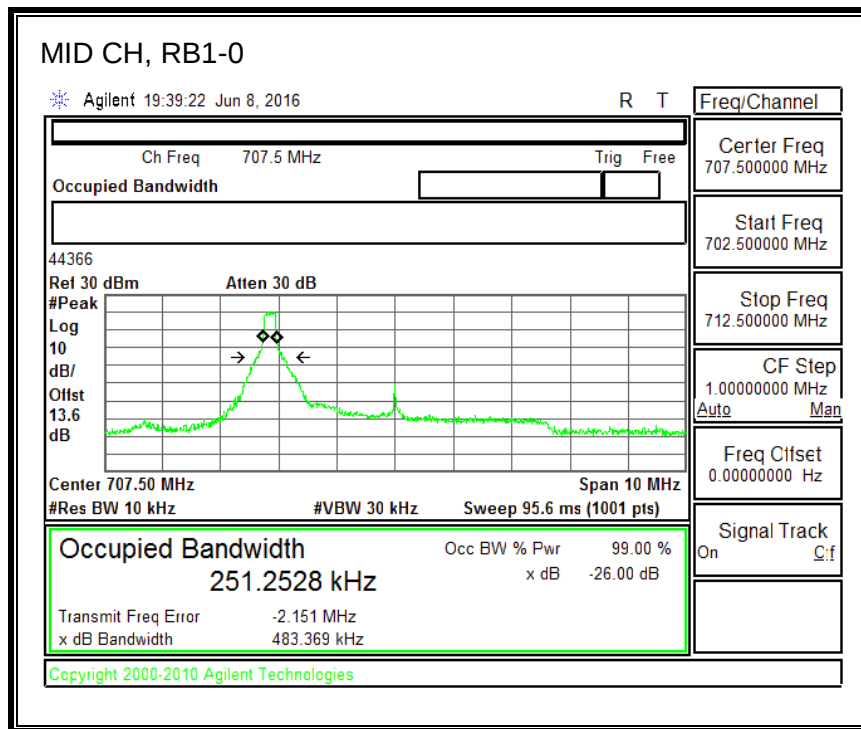
16QAM, (3.0 MHz BAND WIDTH)



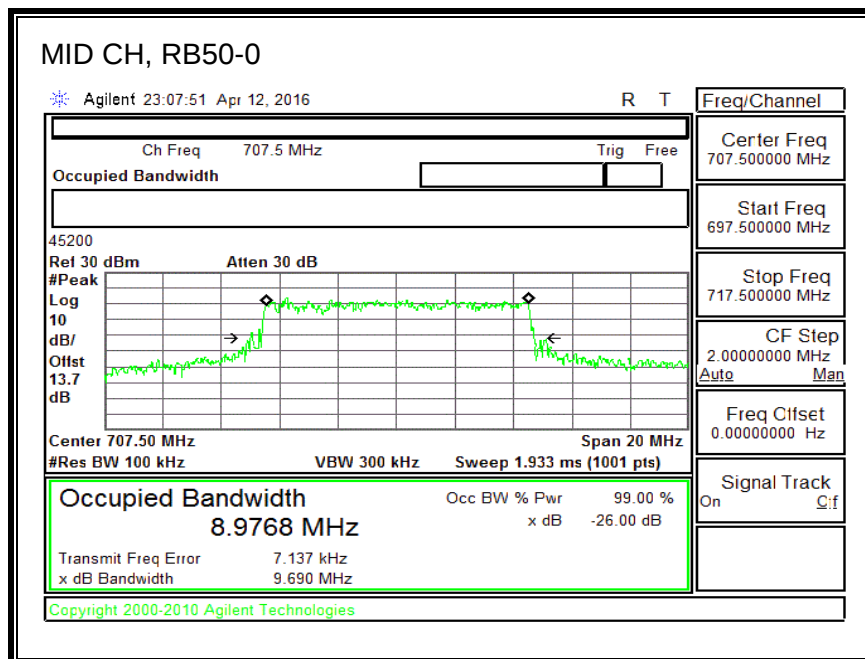
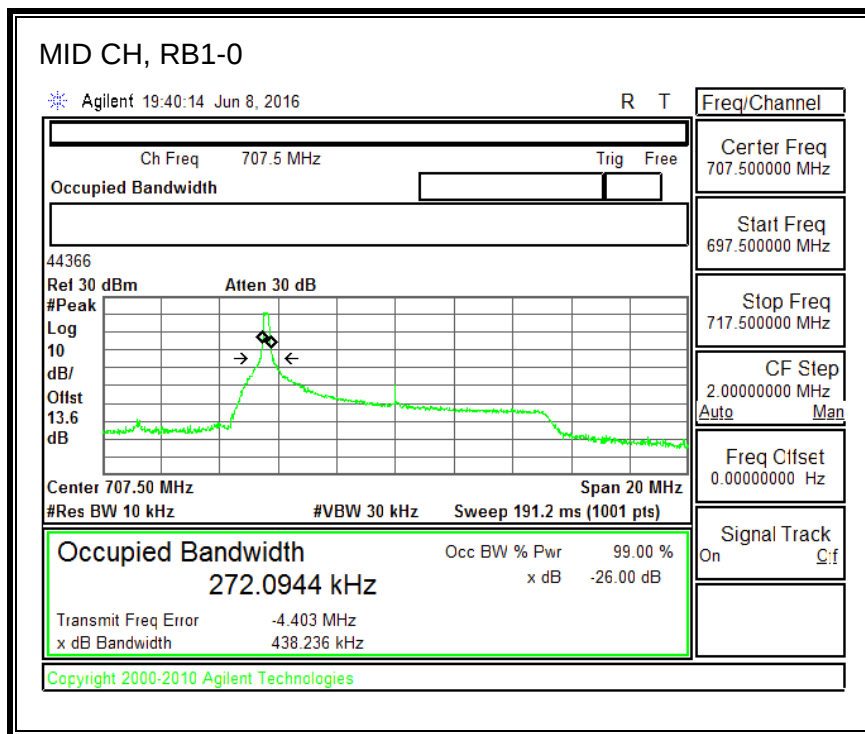
QPSK, (5.0 MHz BAND WIDTH)



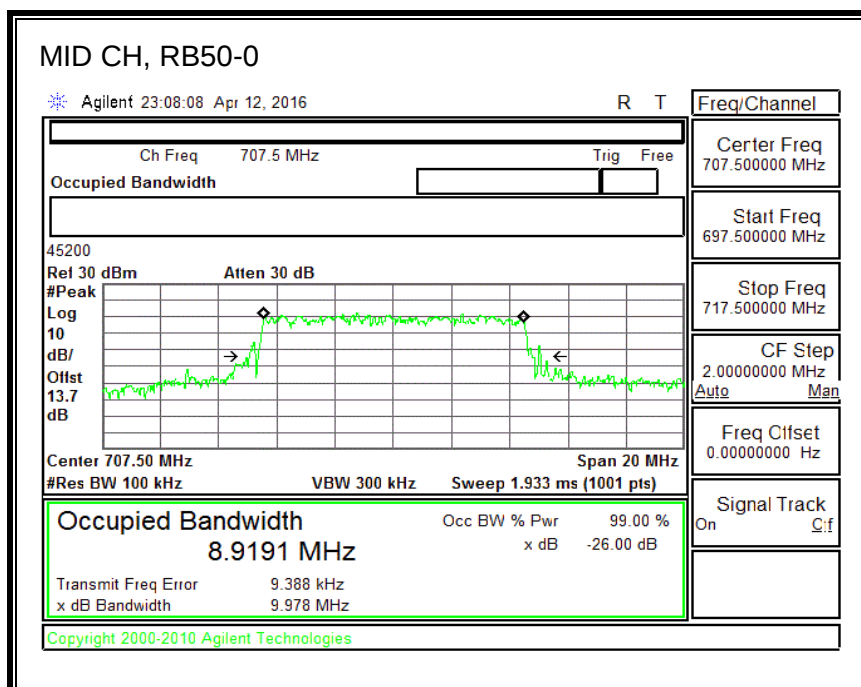
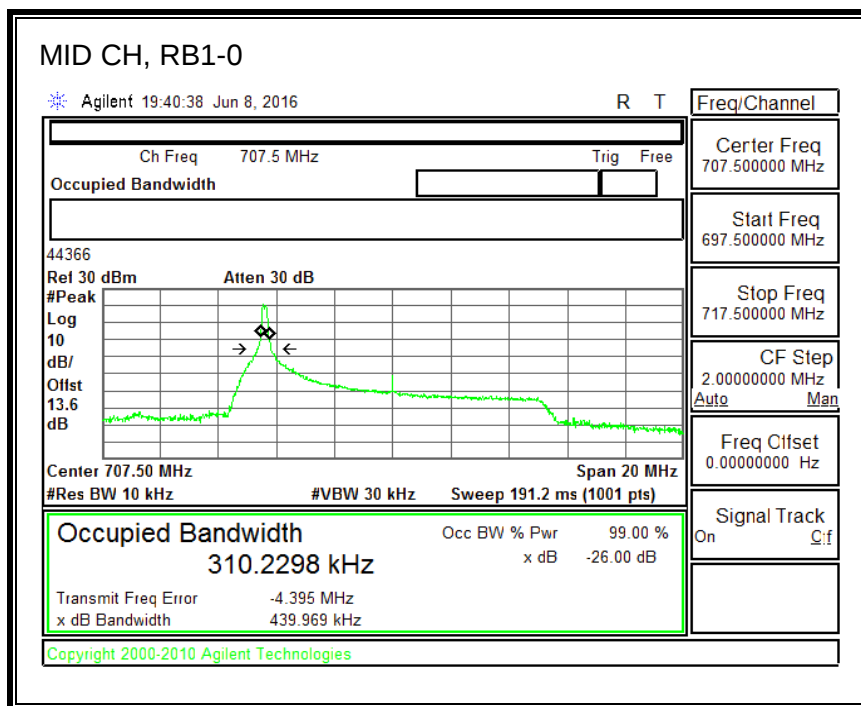
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

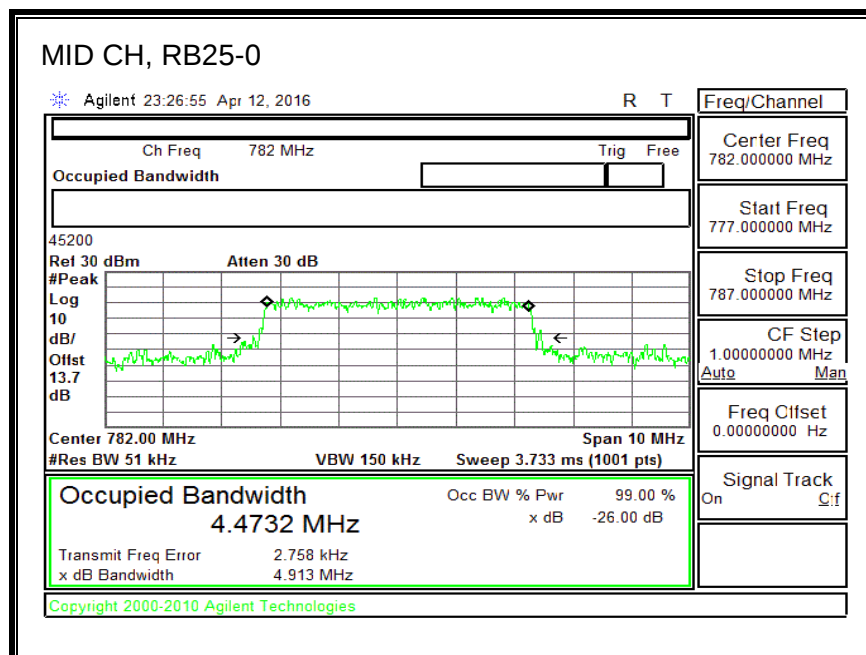
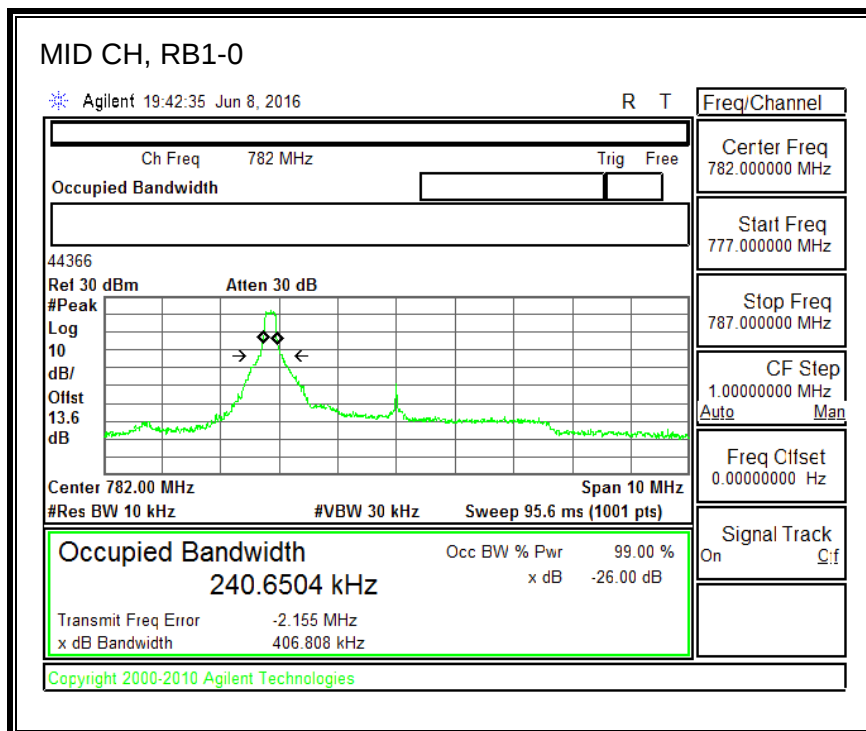


16QAM, (10.0 MHz BAND WIDTH)

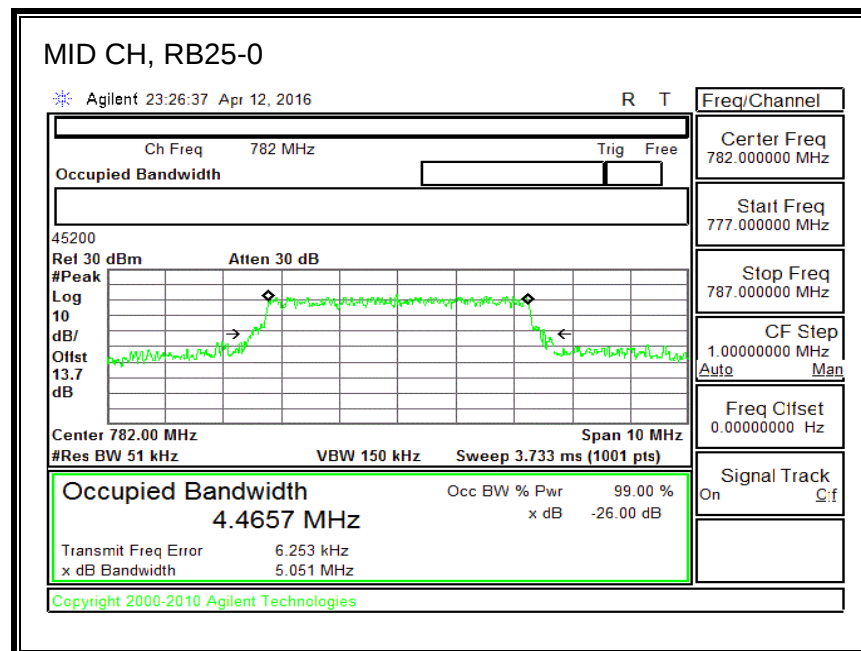
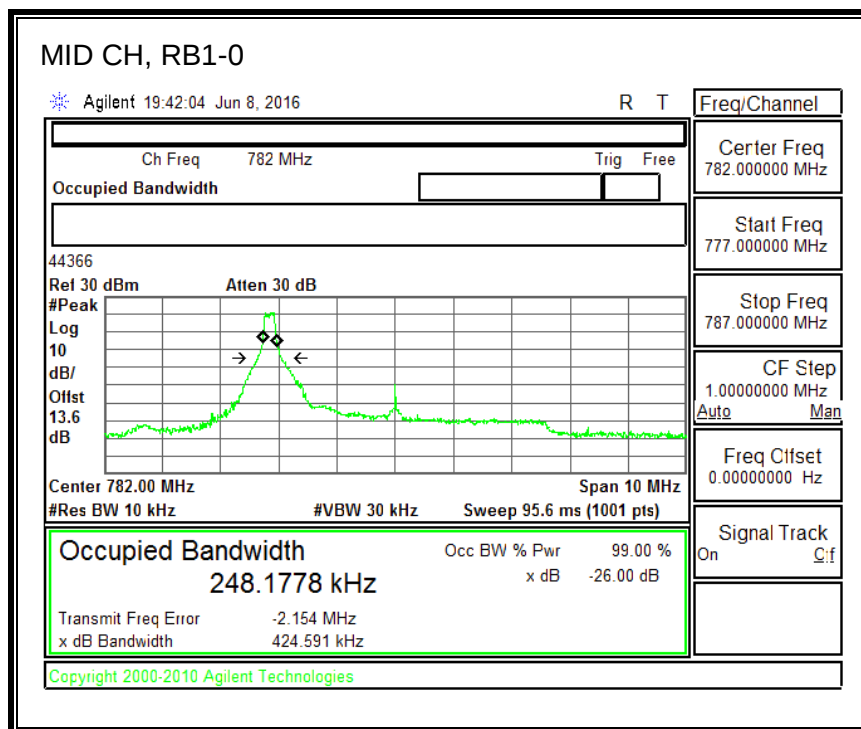


8.1.6. LTE BAND 13

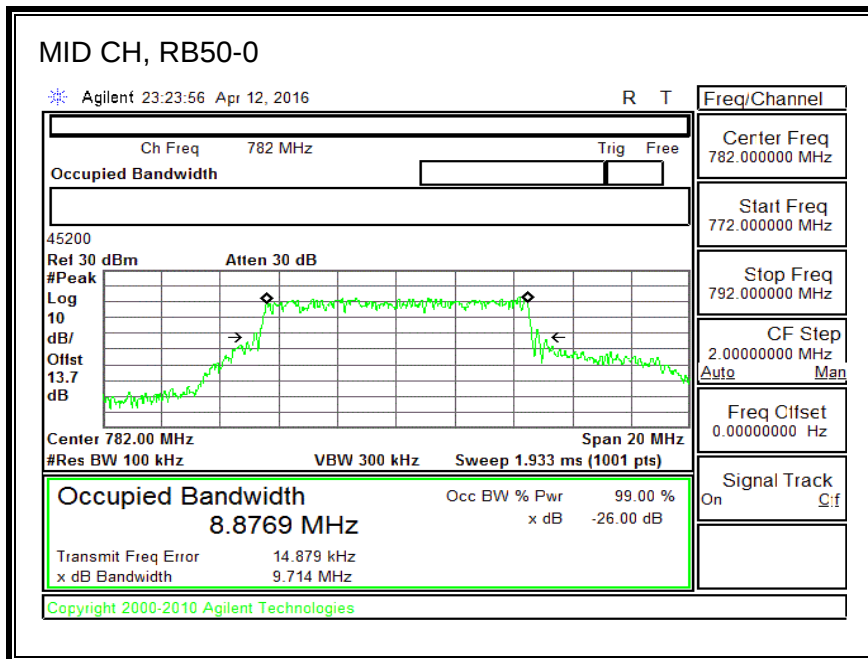
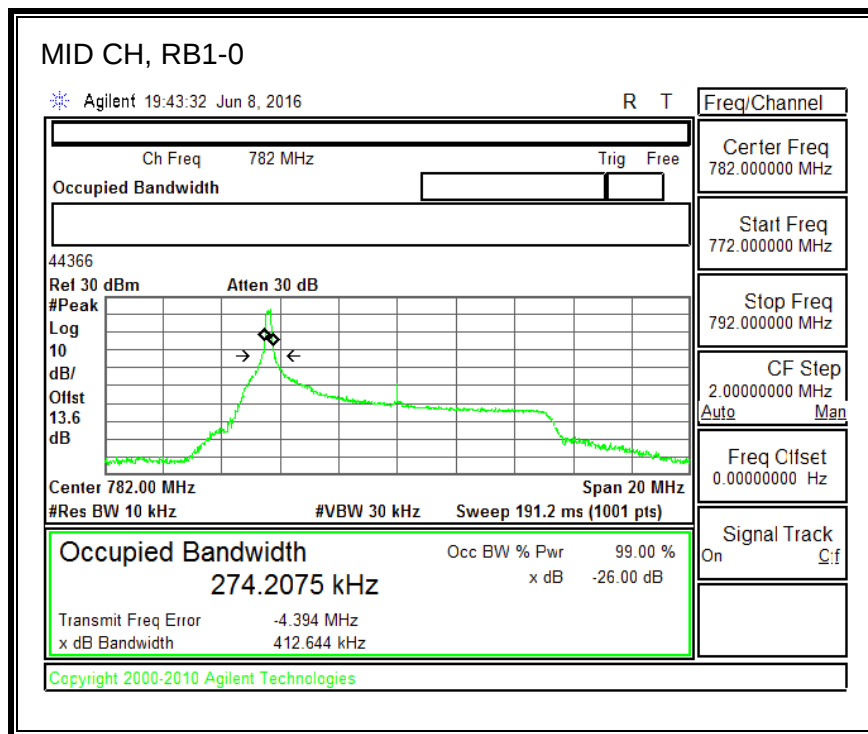
QPSK, (5.0 MHz BAND WIDTH)



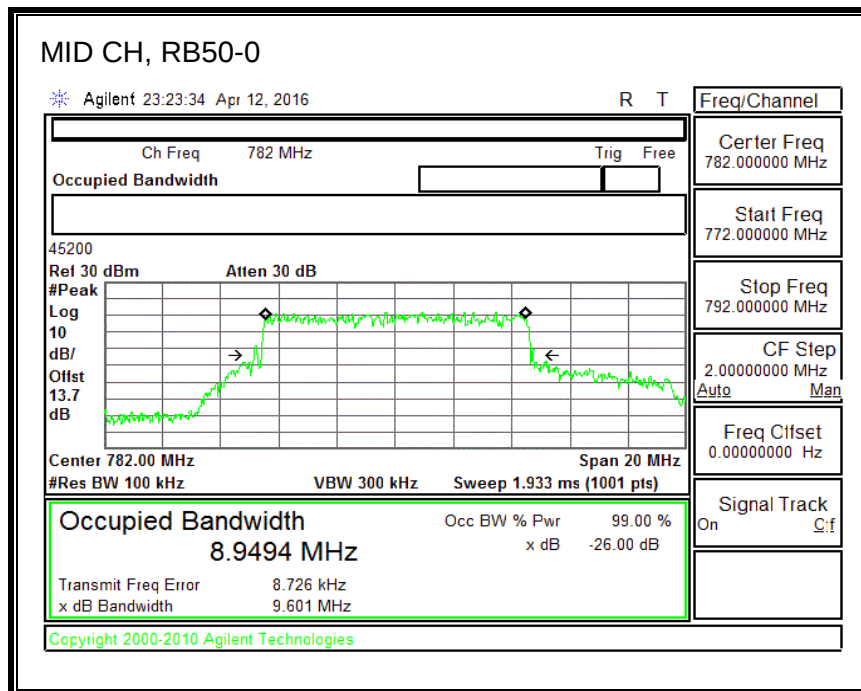
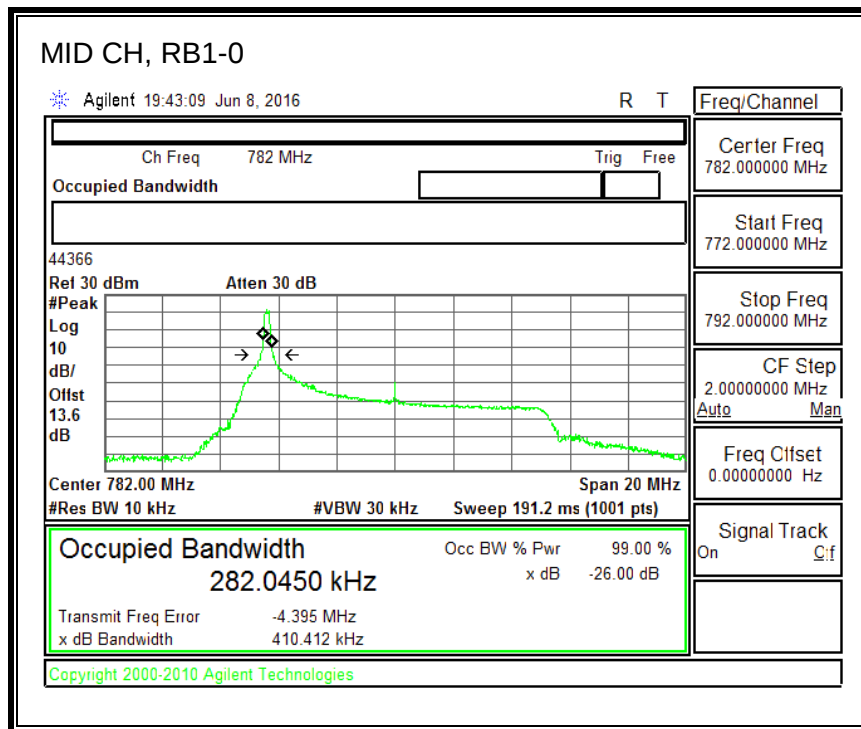
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

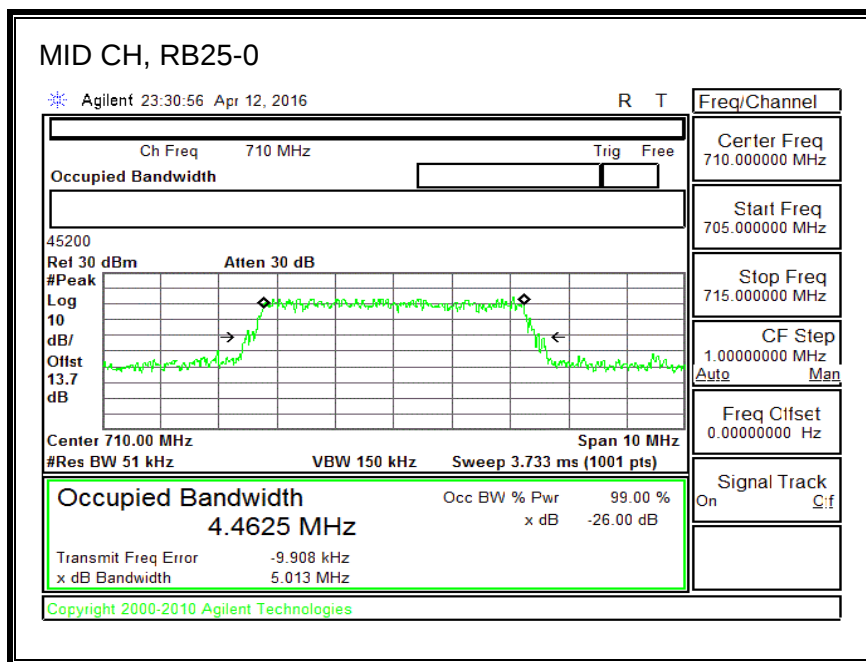
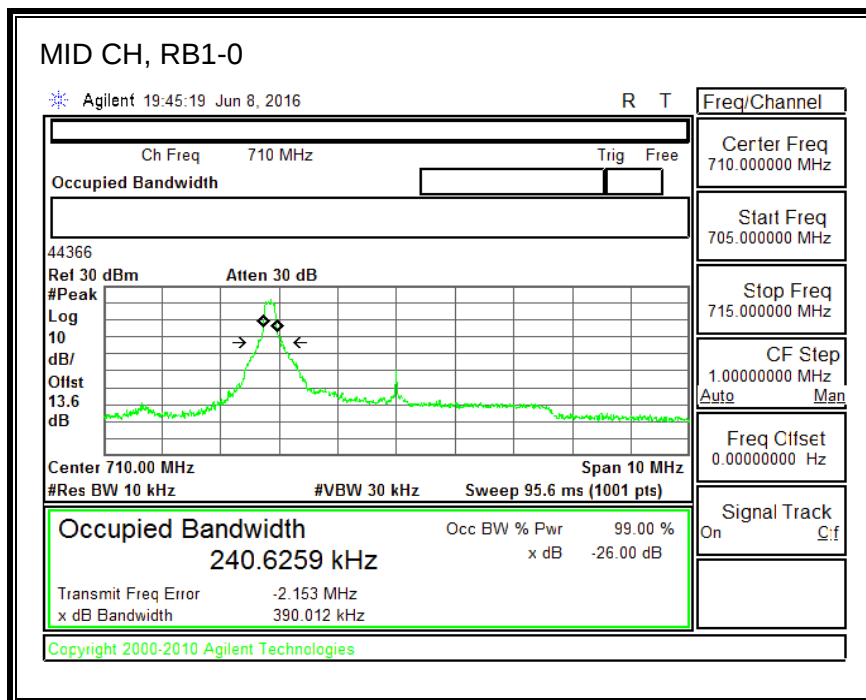


16QAM, (10.0 MHz BAND WIDTH)

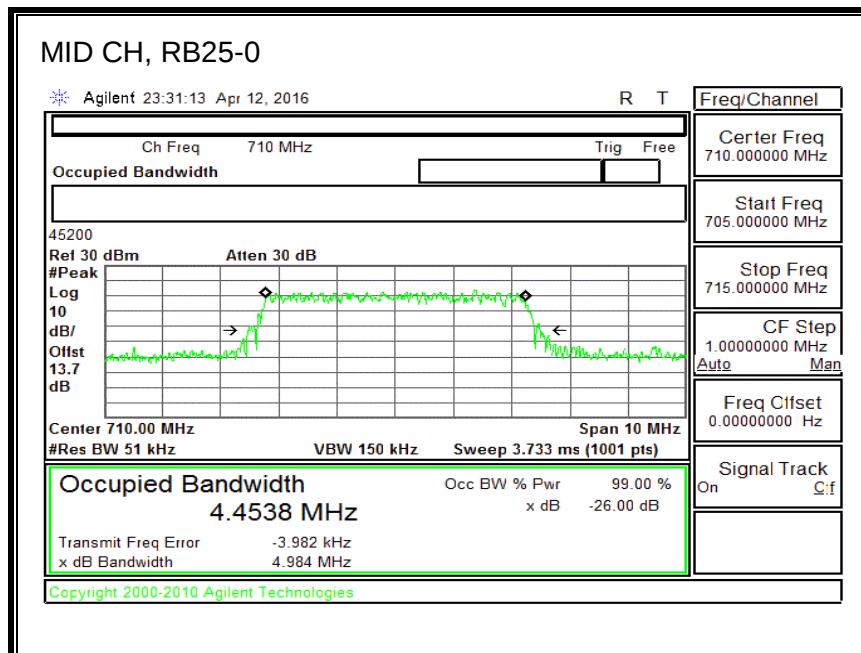
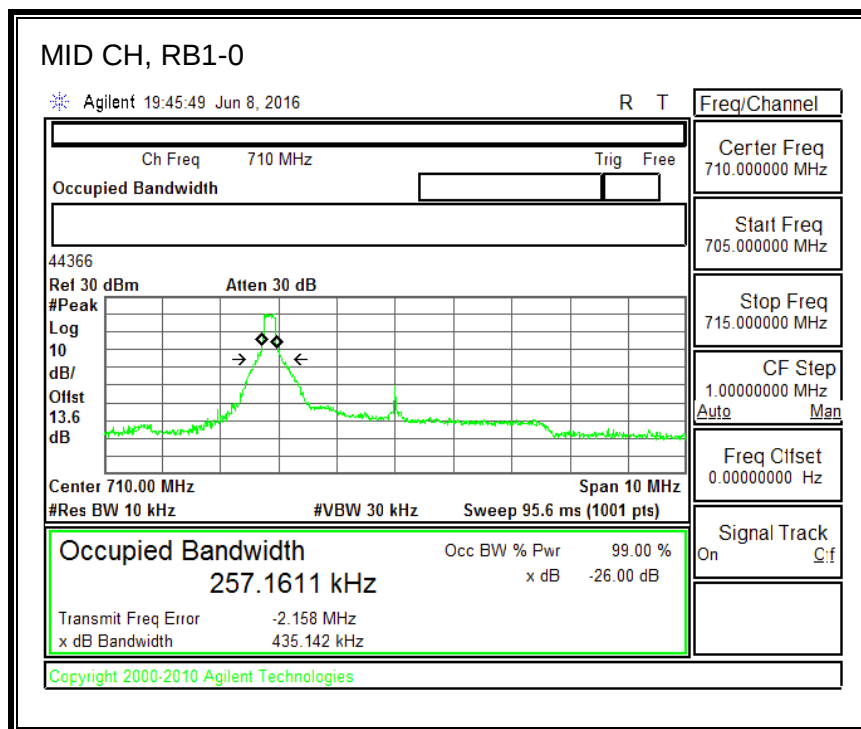


8.1.7. LTE BAND 17

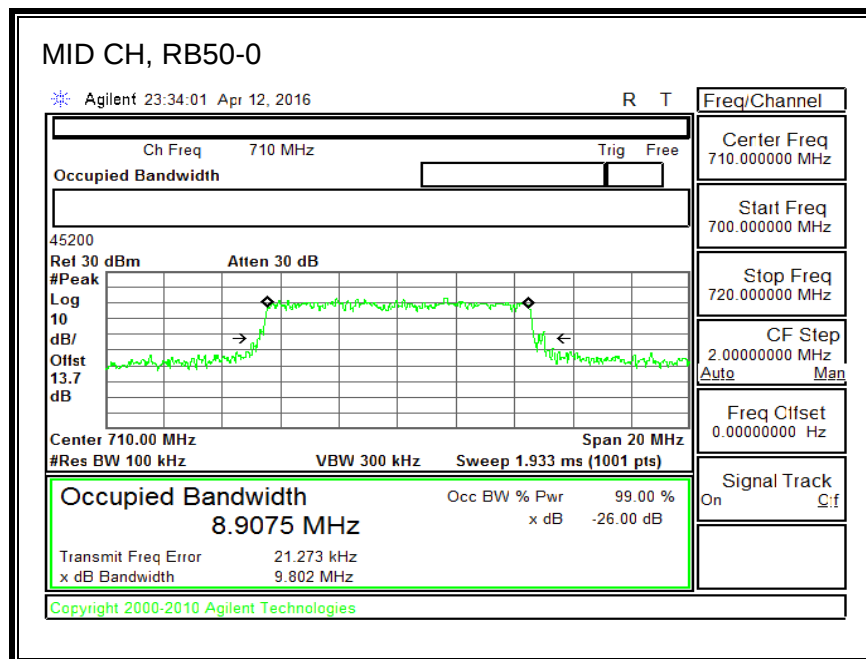
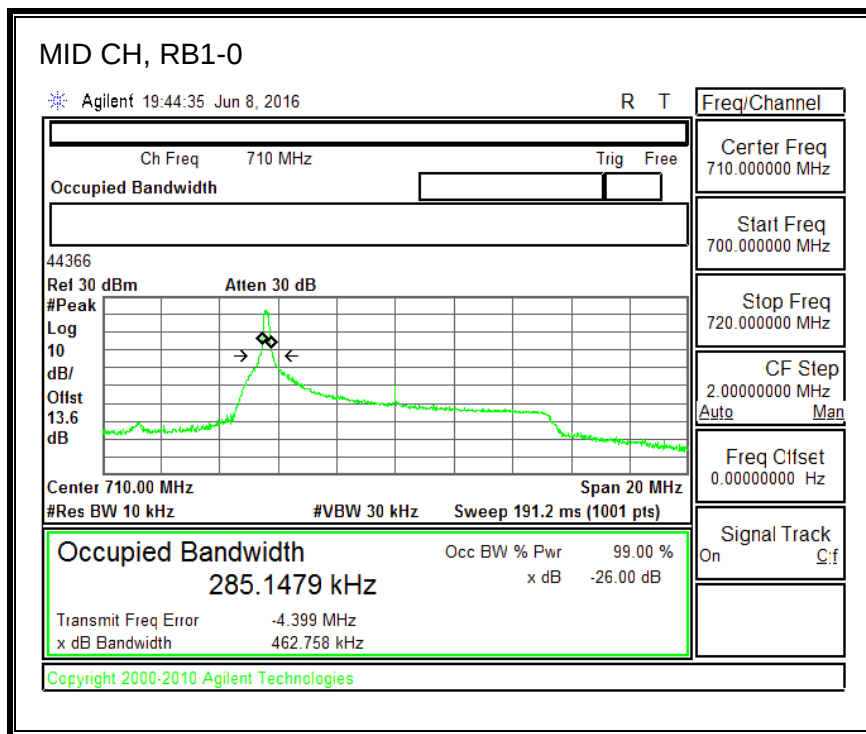
QPSK, (5.0 MHz BAND WIDTH)



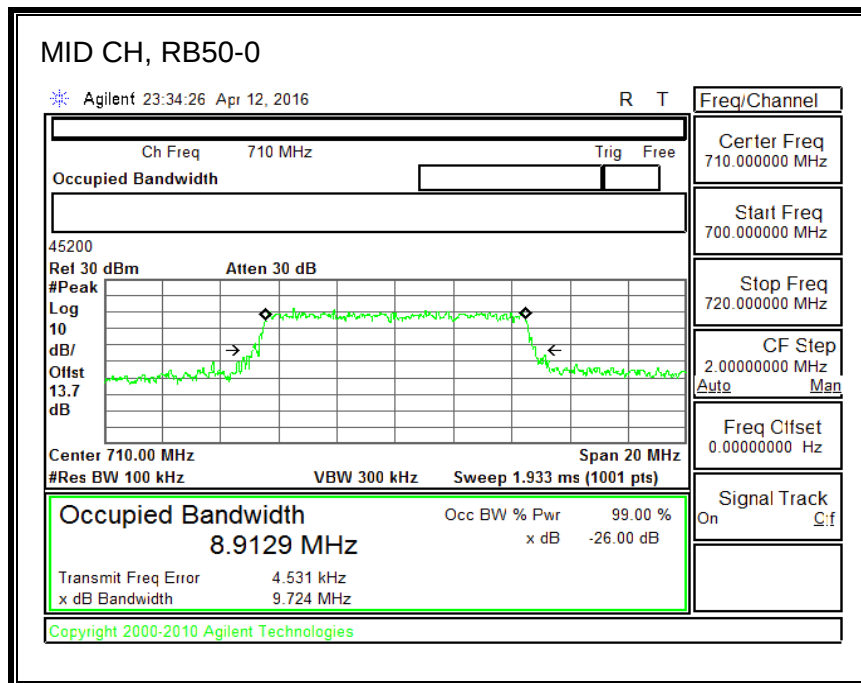
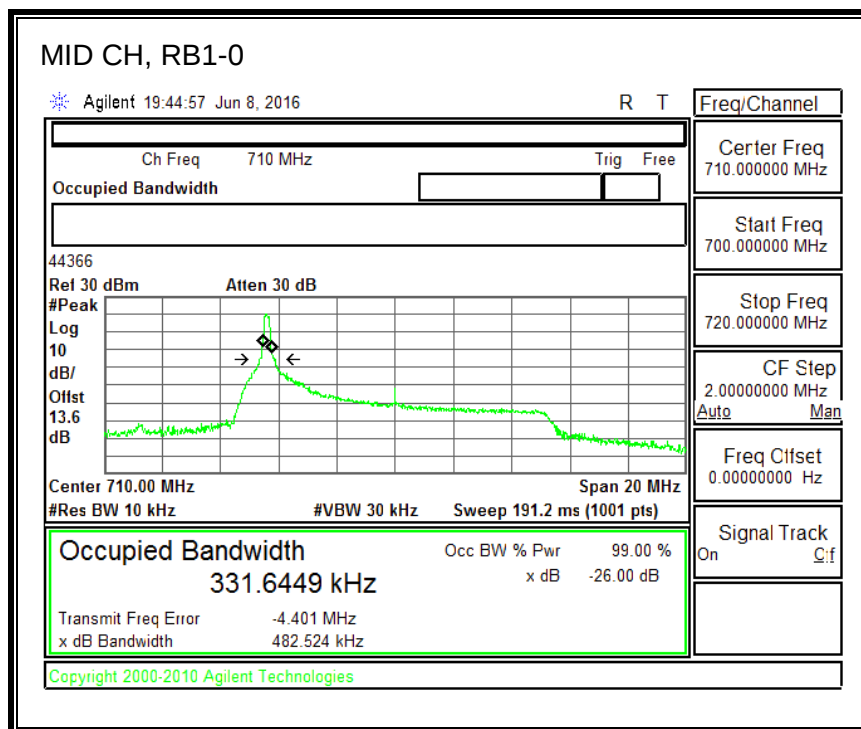
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

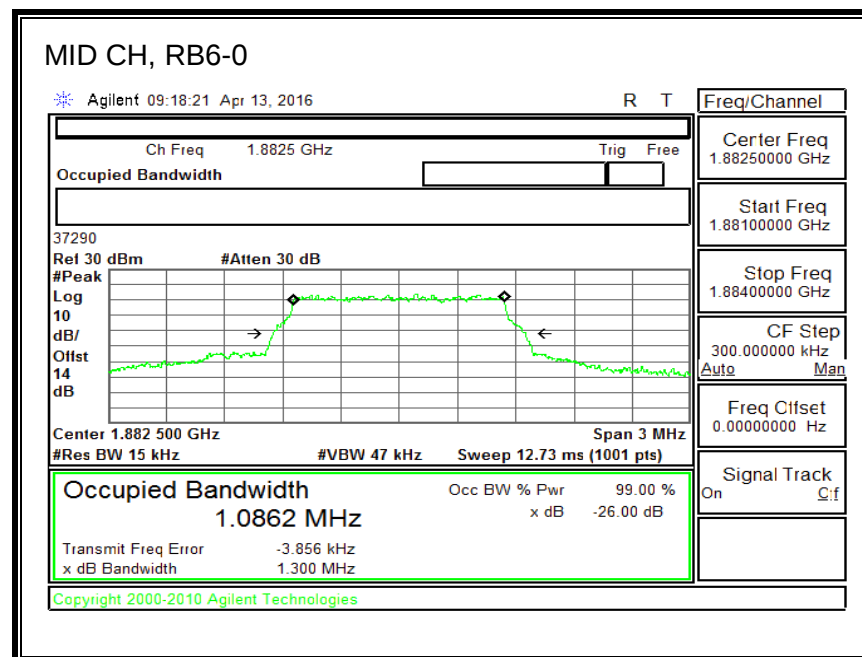
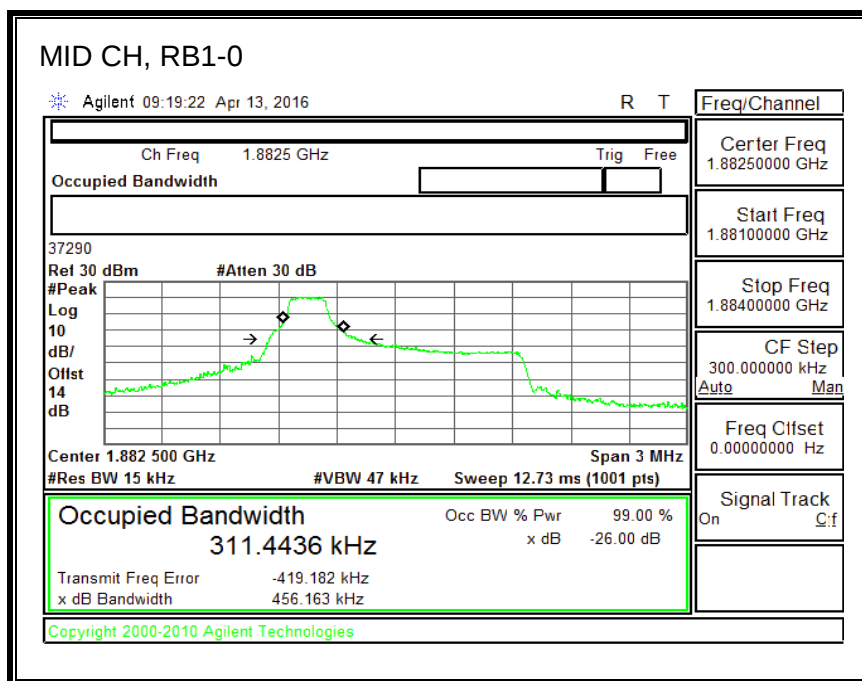


16QAM, (10.0 MHz BAND WIDTH)

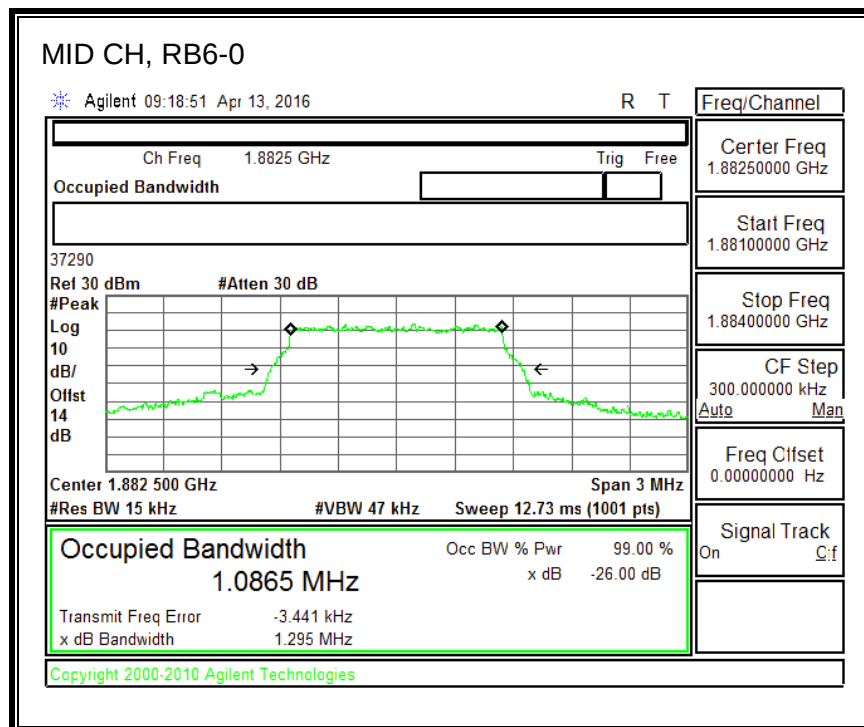
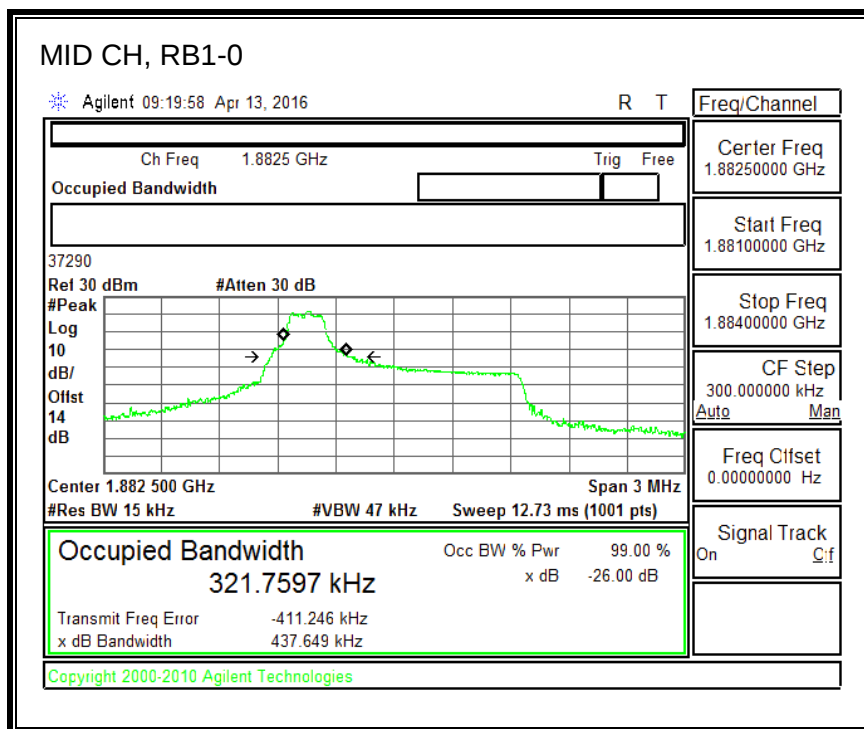


8.1.8. LTE BAND 25

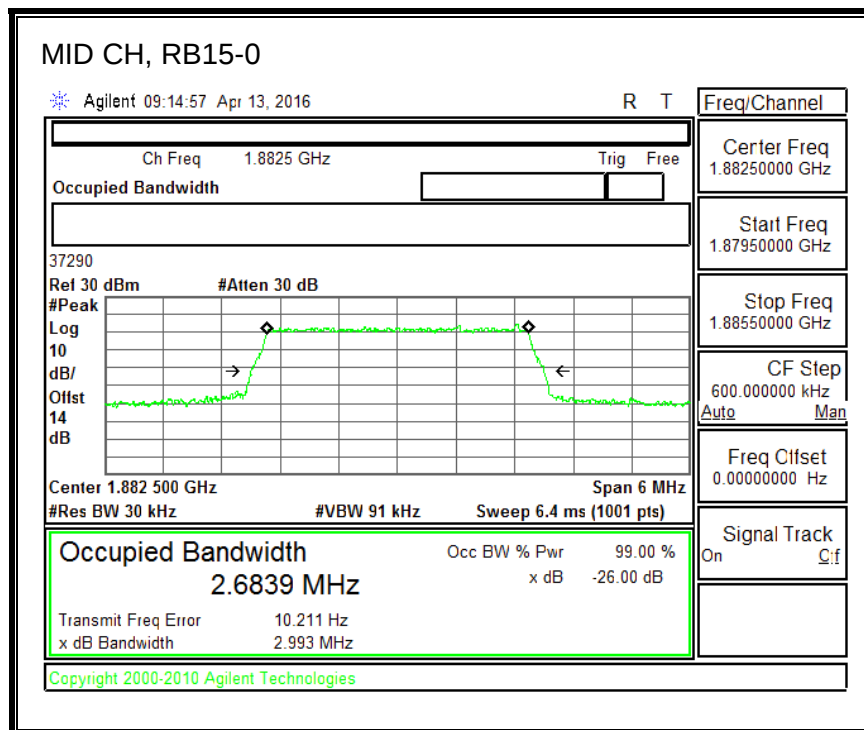
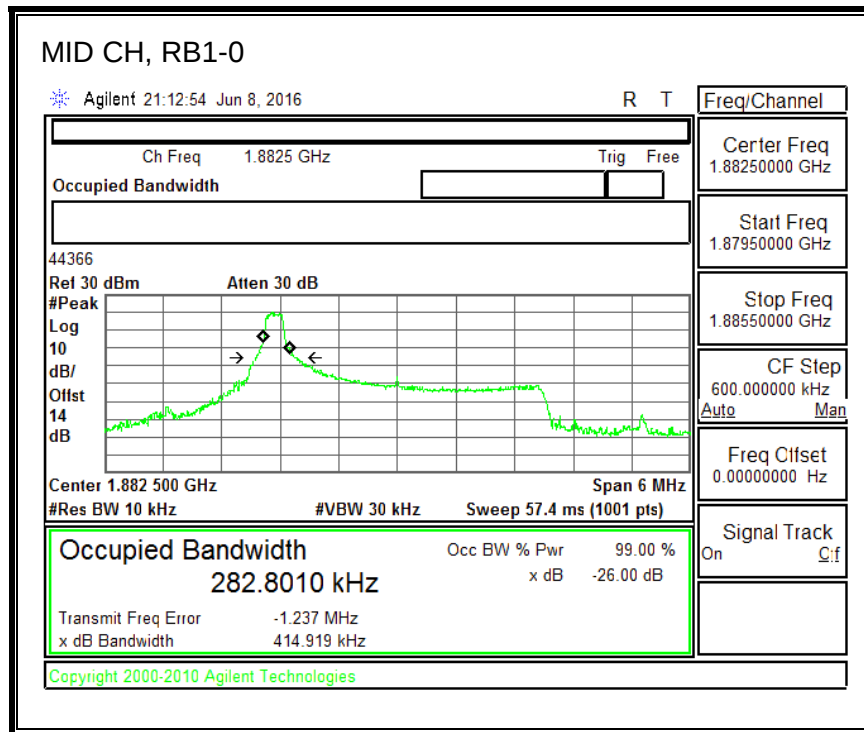
QPSK, (1.4 MHz BAND WIDTH)



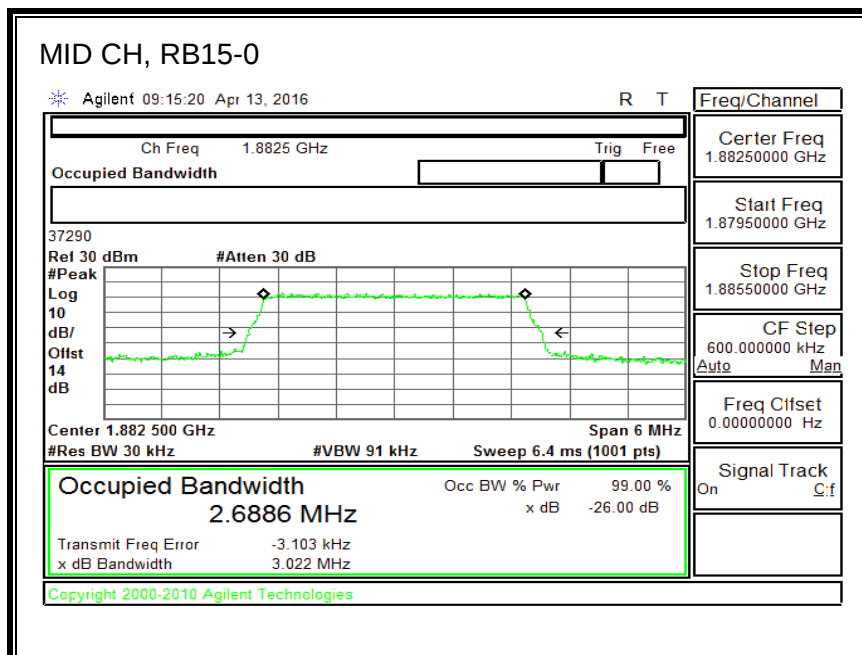
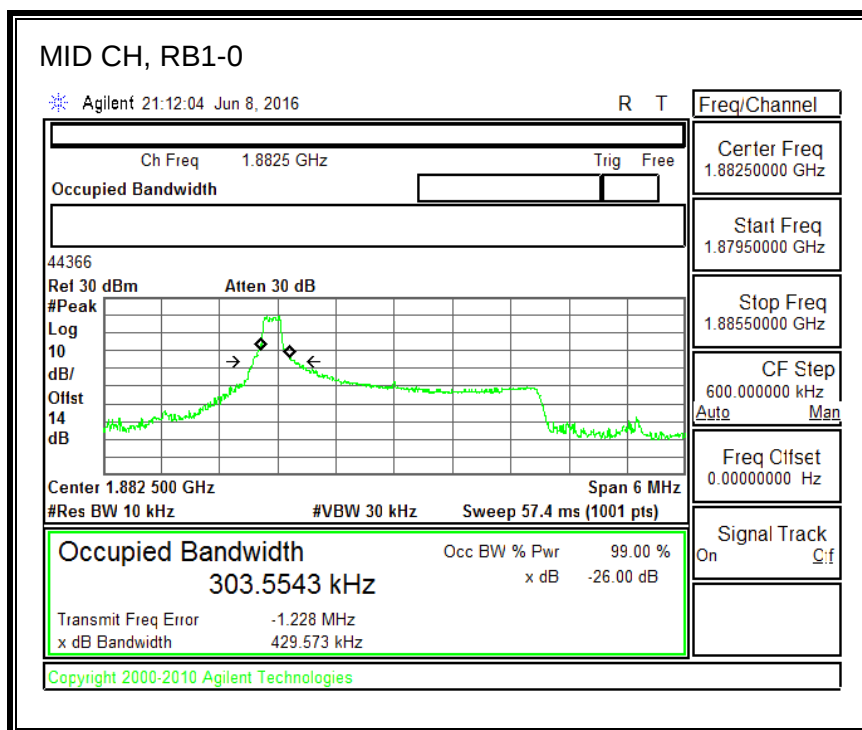
16QAM, (1.4 MHz BAND WIDTH)



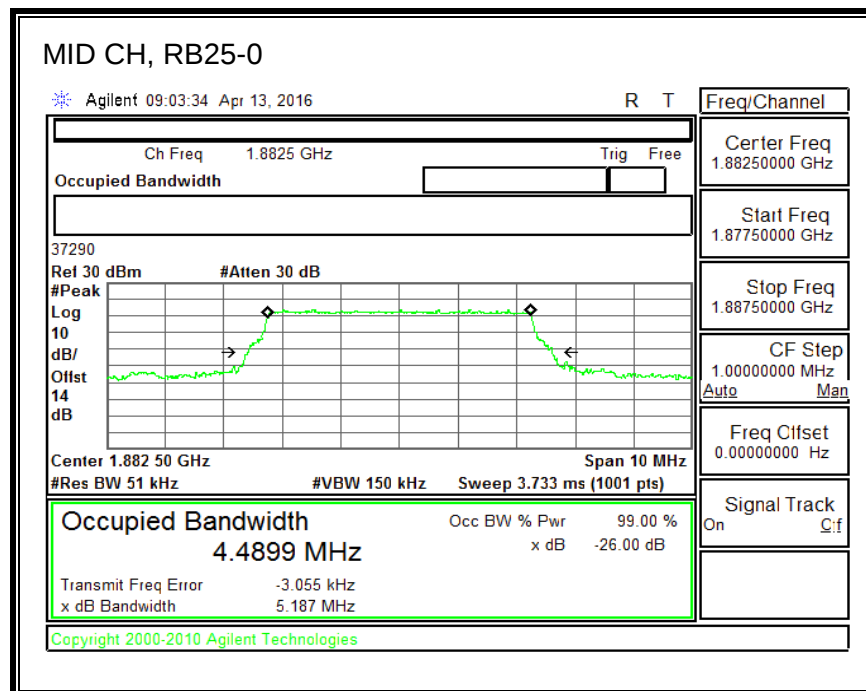
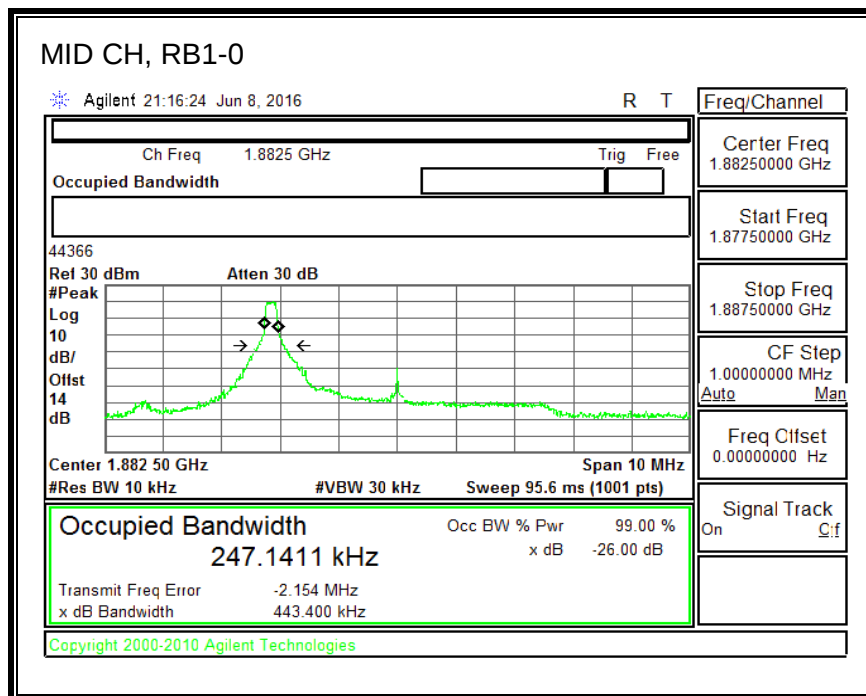
QPSK, (3.0 MHz BAND WIDTH)



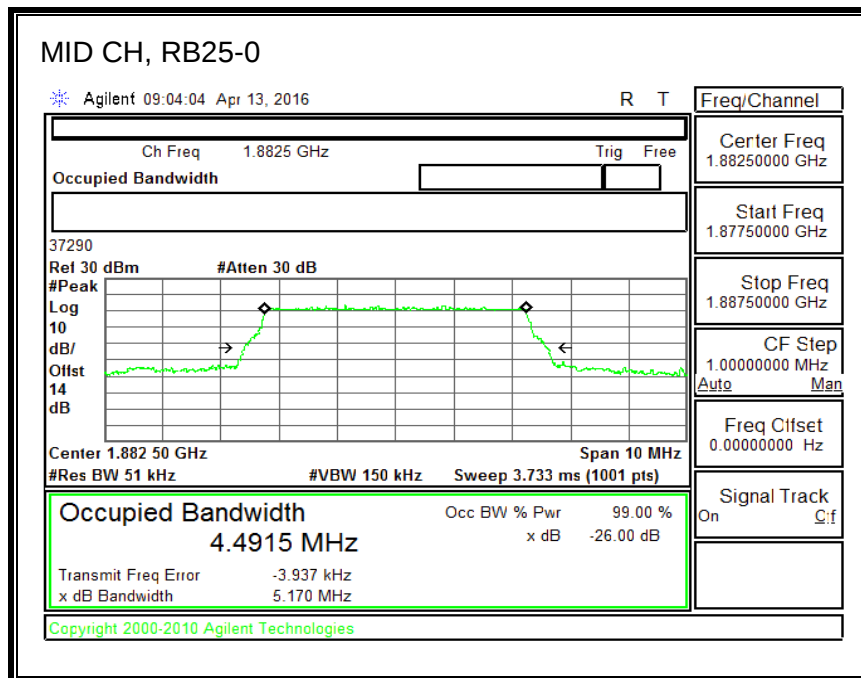
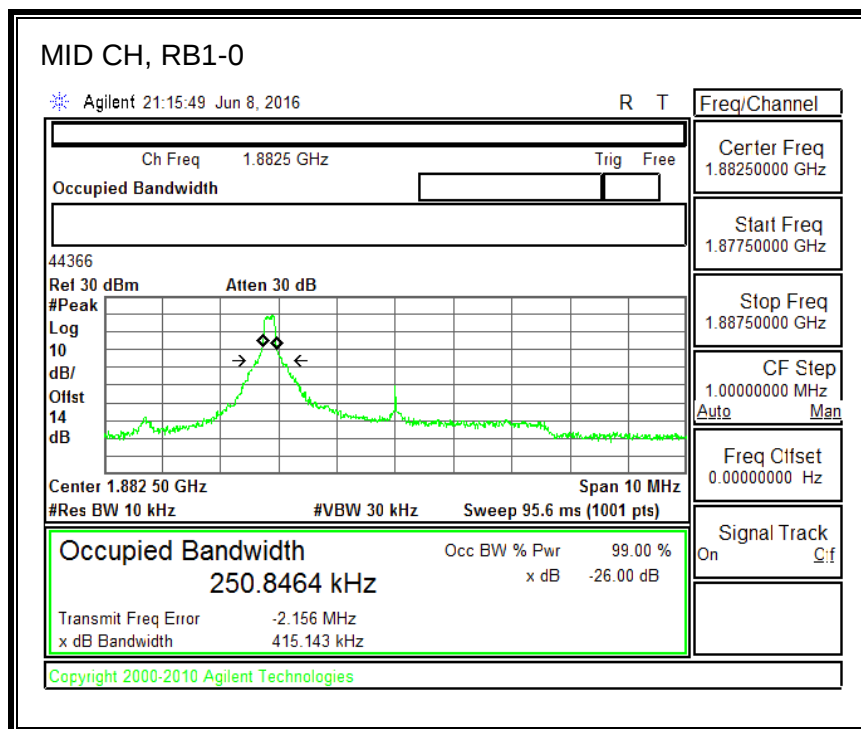
16QAM, (3.0 MHz BAND WIDTH)



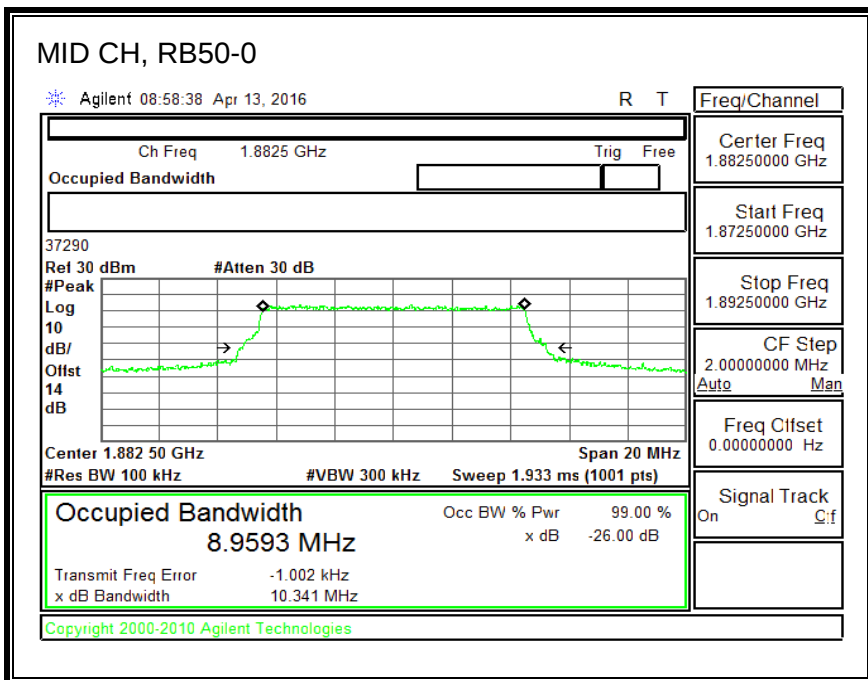
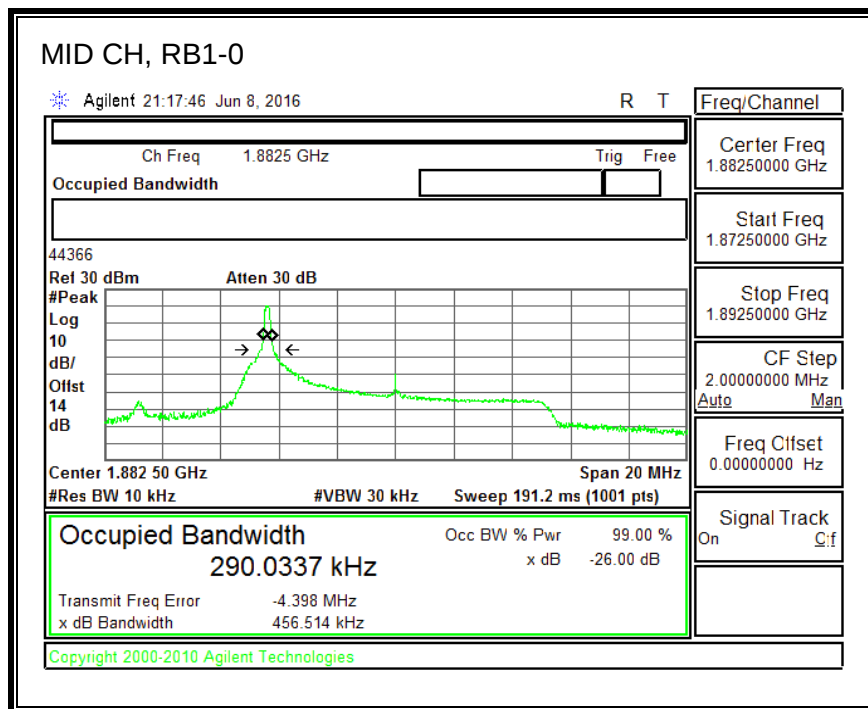
QPSK, (5.0 MHz BAND WIDTH)



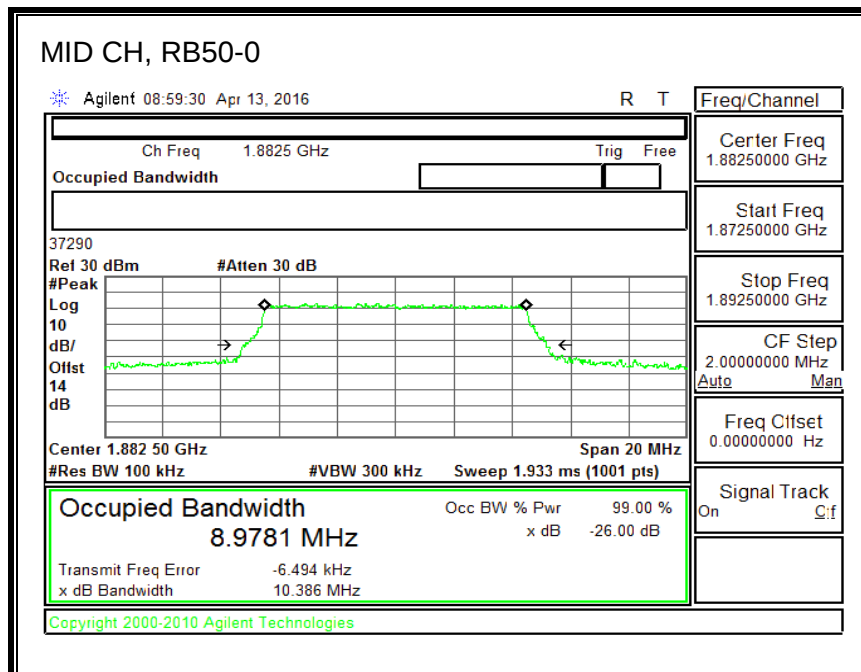
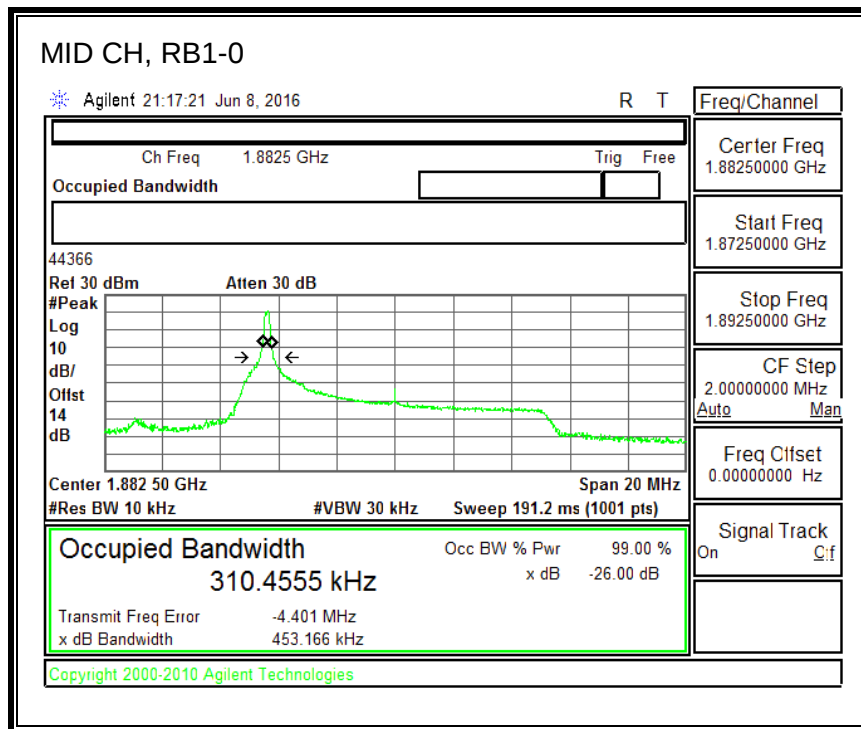
16QAM, (5.0 MHz BAND WIDTH)



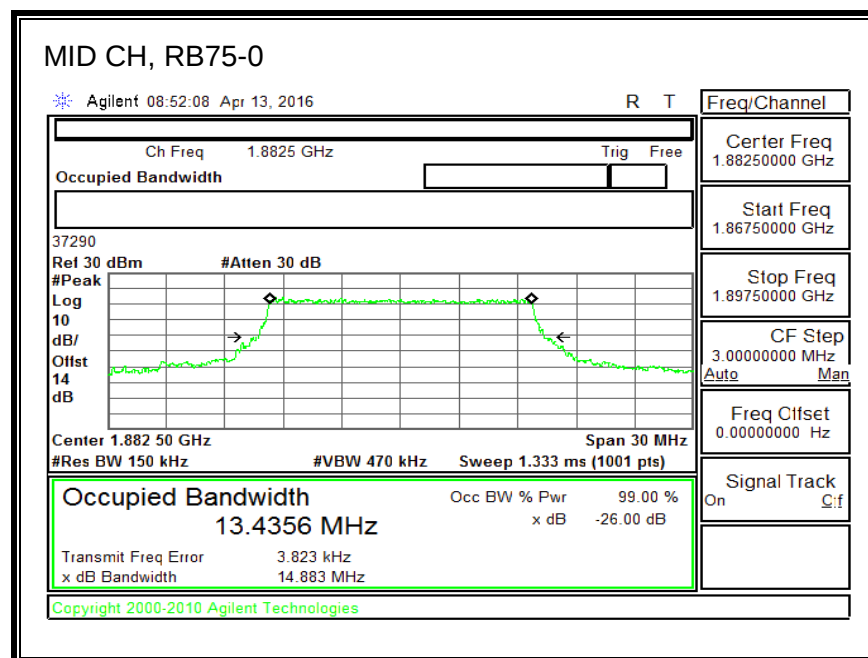
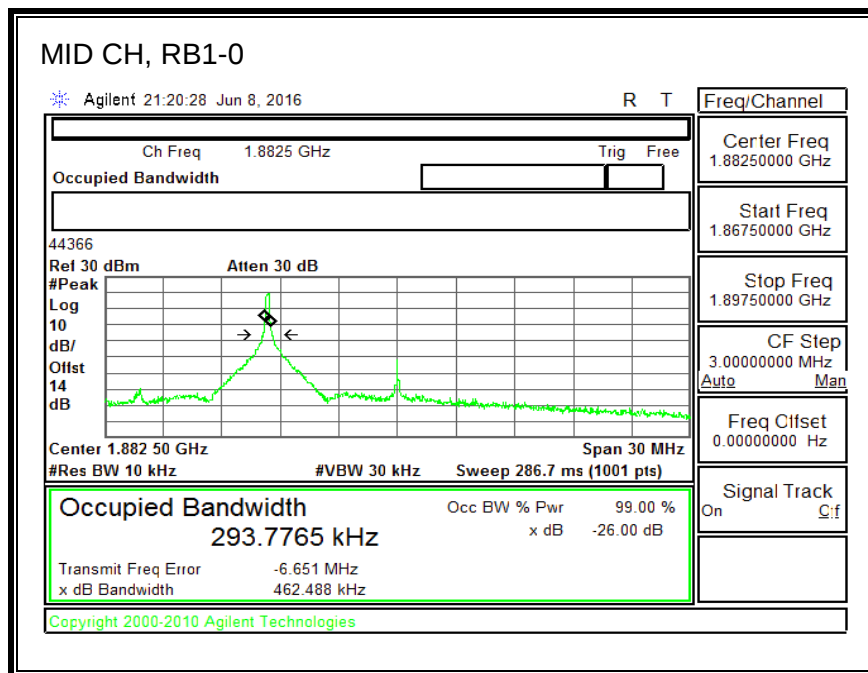
QPSK, (10.0 MHz BAND WIDTH)



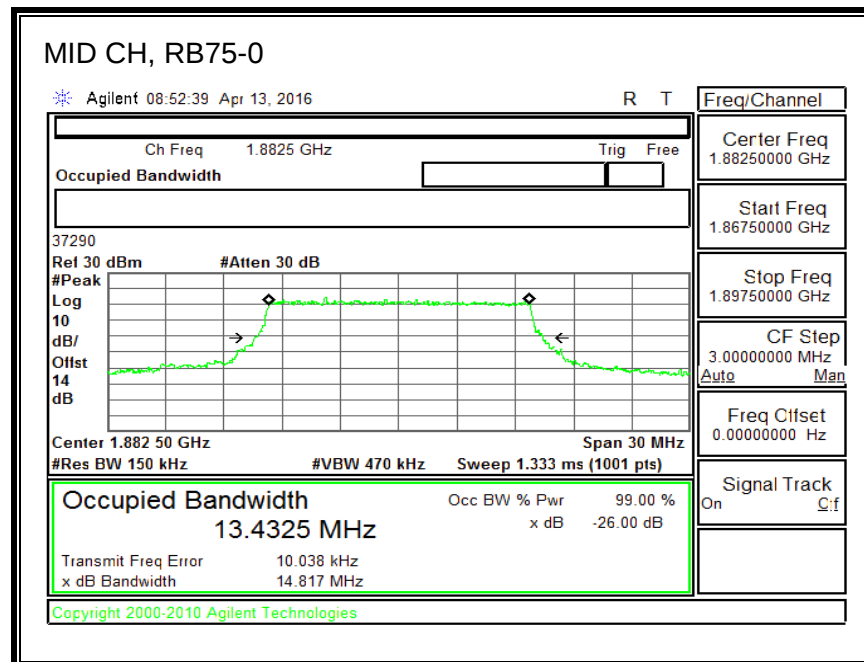
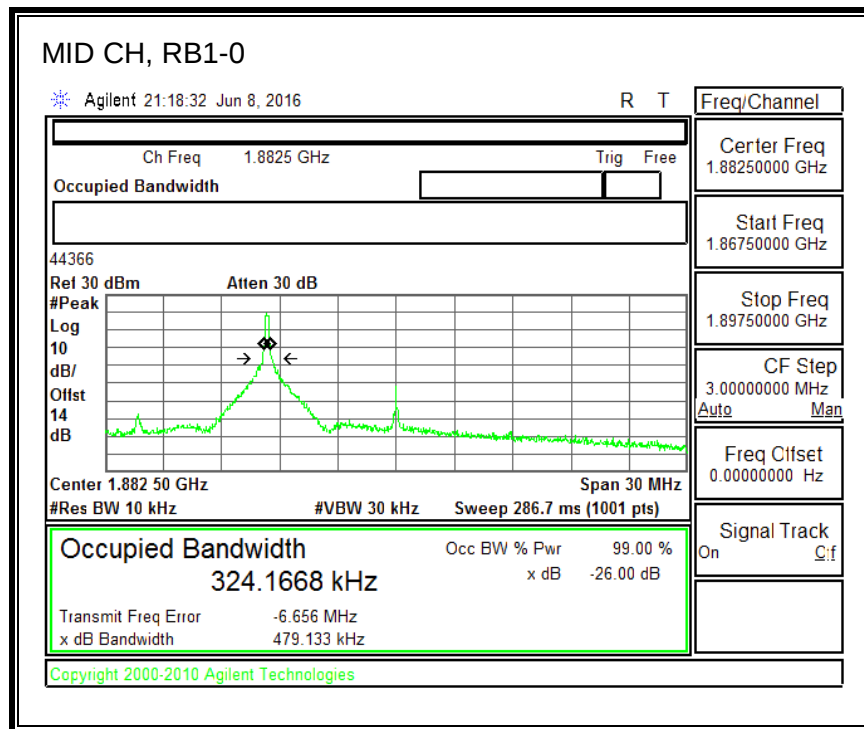
16QAM, (10.0 MHz BAND WIDTH)



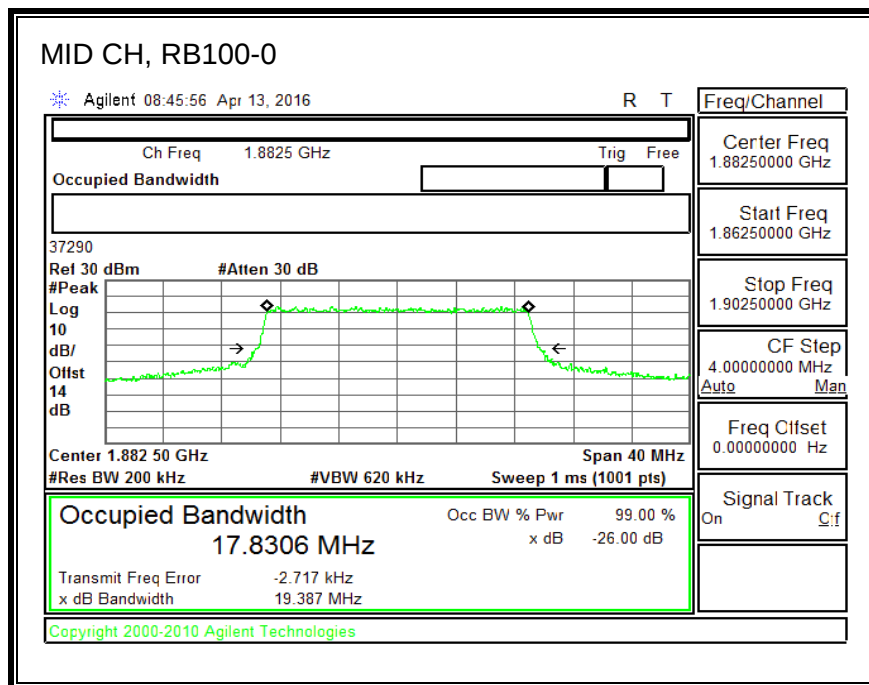
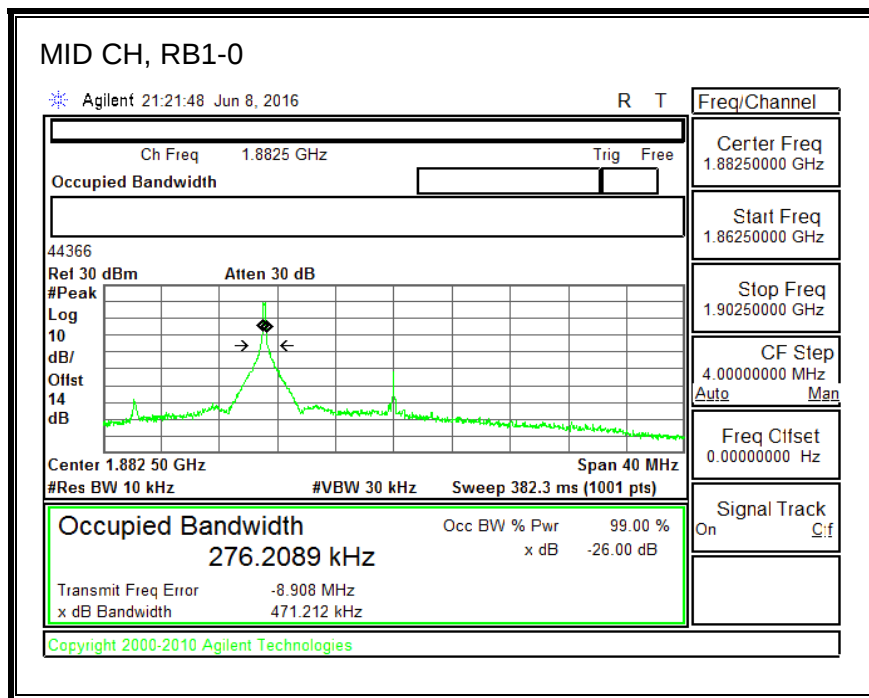
QPSK, (15.0 MHz BAND WIDTH)



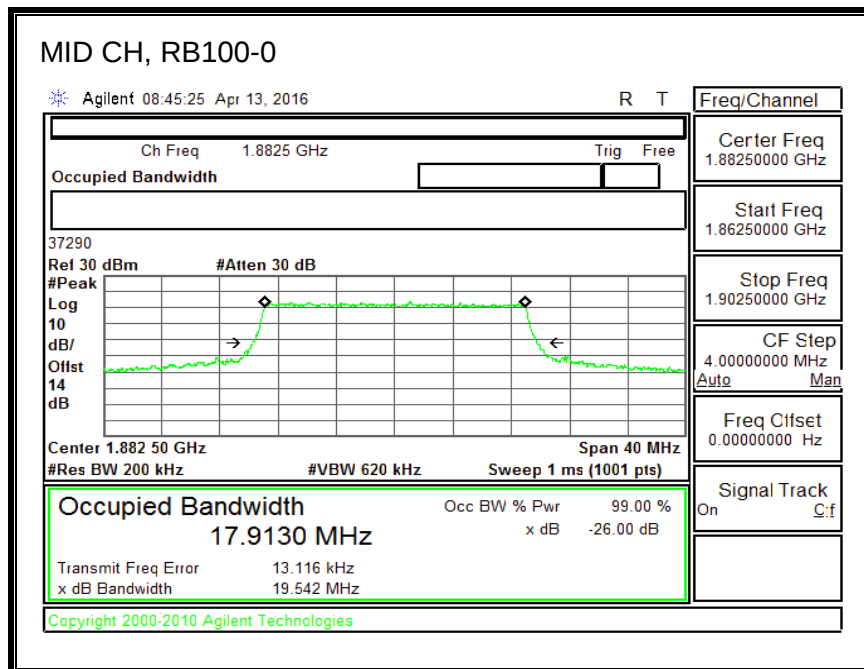
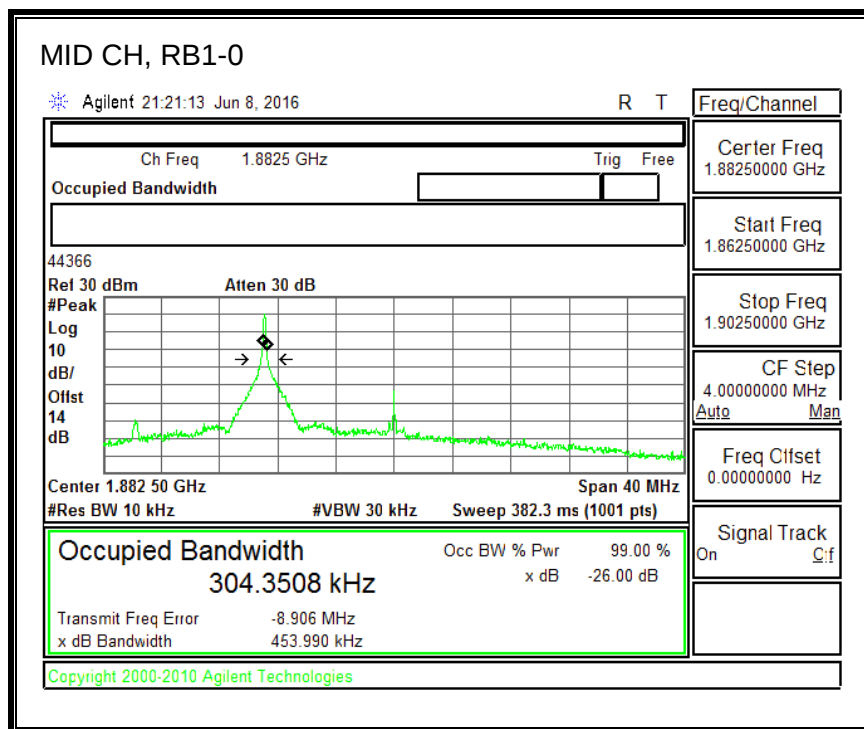
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)

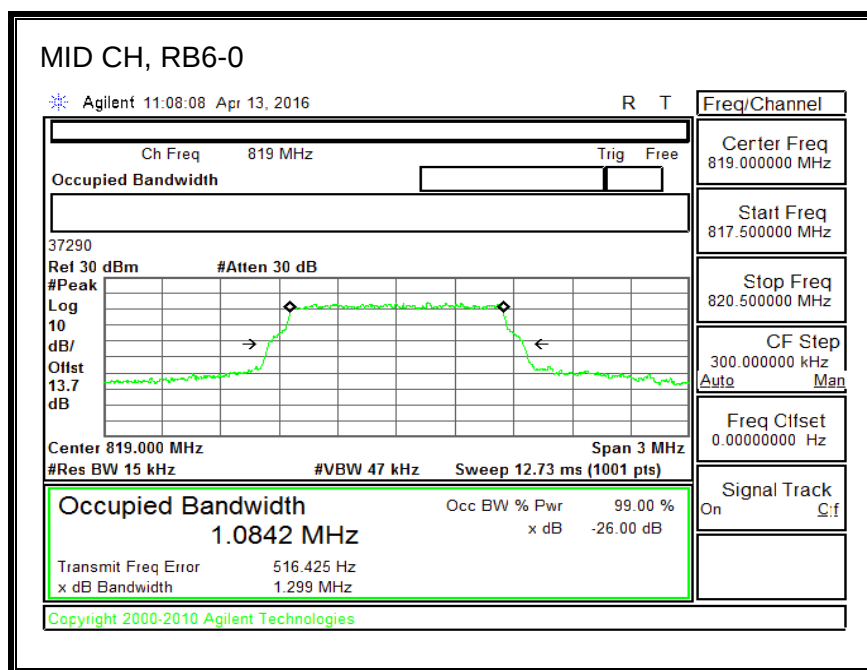
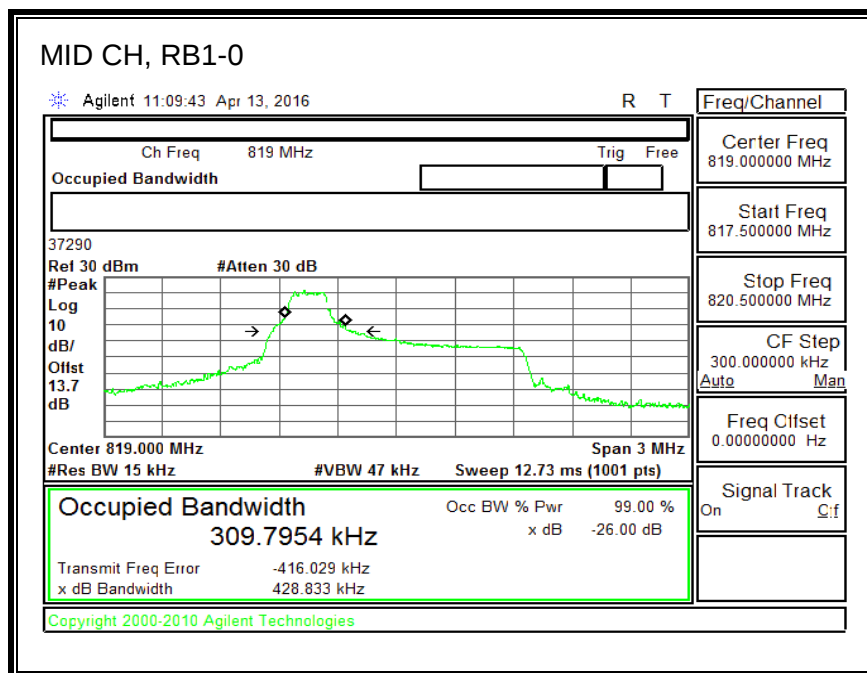


16QAM, (20.0 MHz BAND WIDTH)

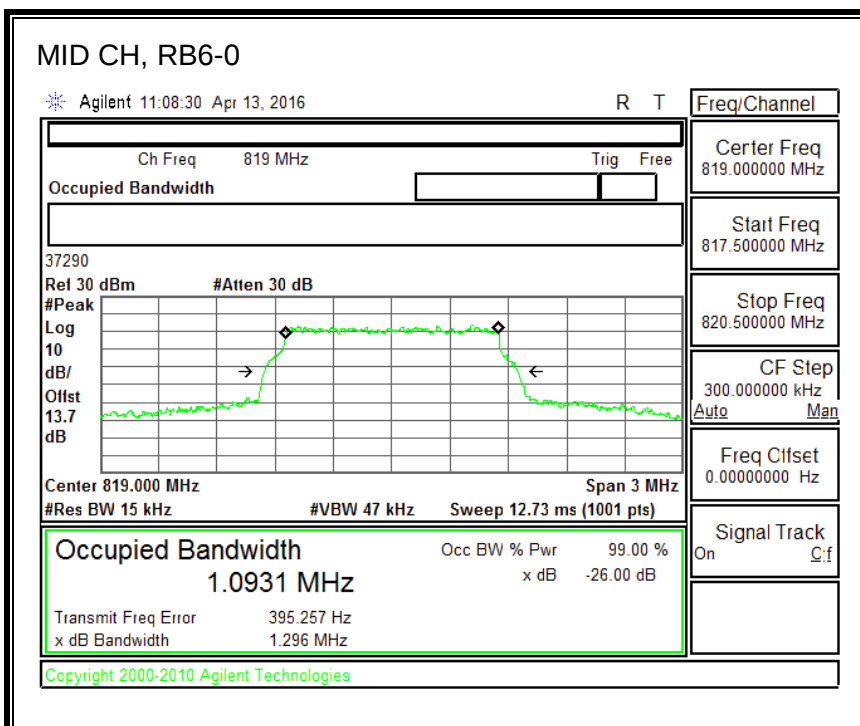
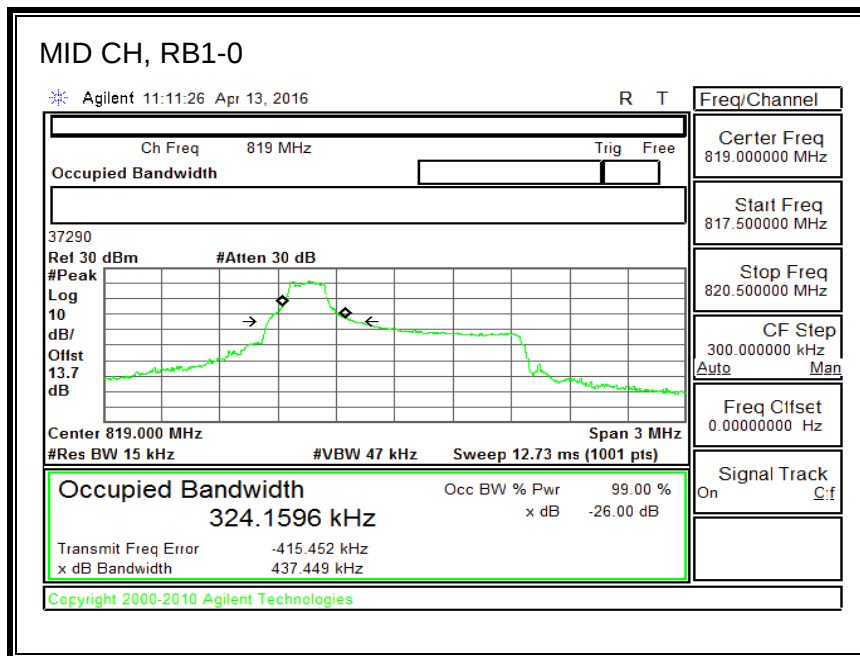


8.1.9. LTE BAND 26

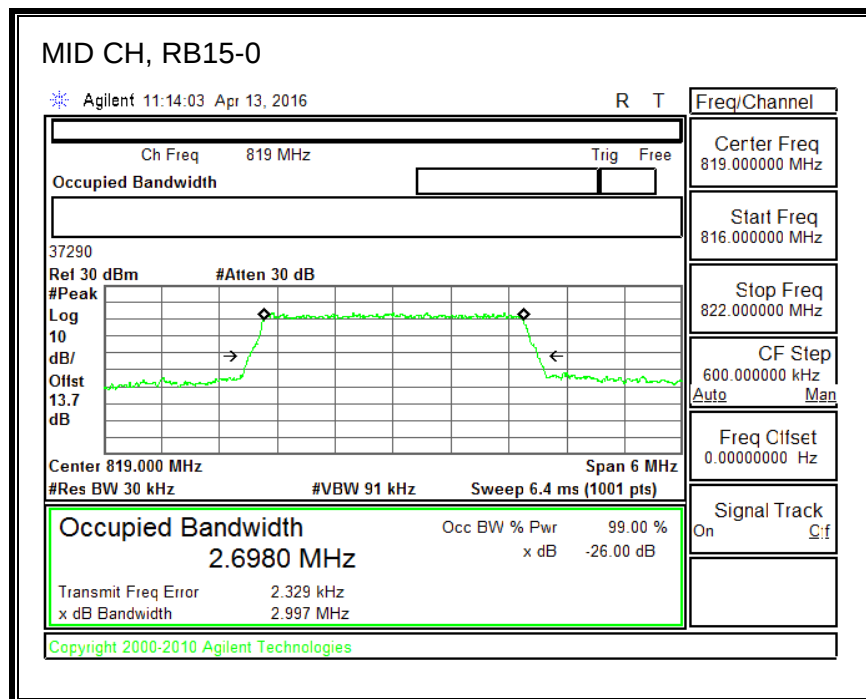
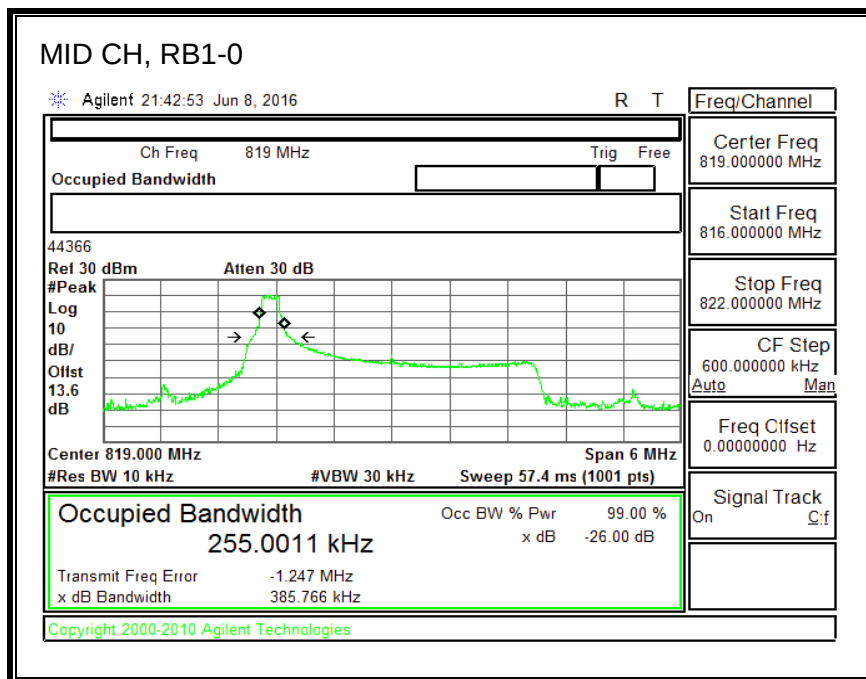
QPSK, (1.4 MHz BAND WIDTH)



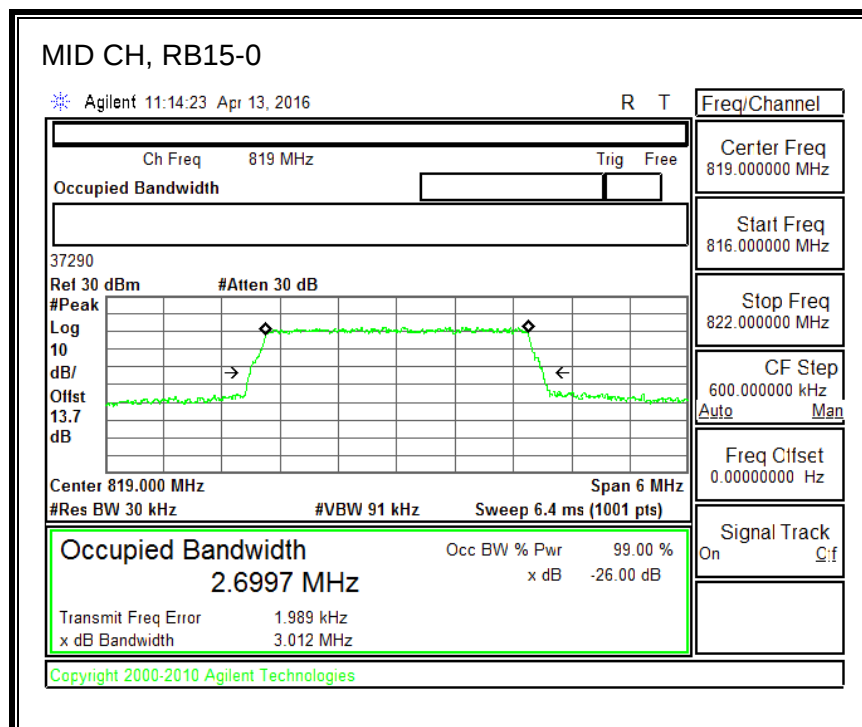
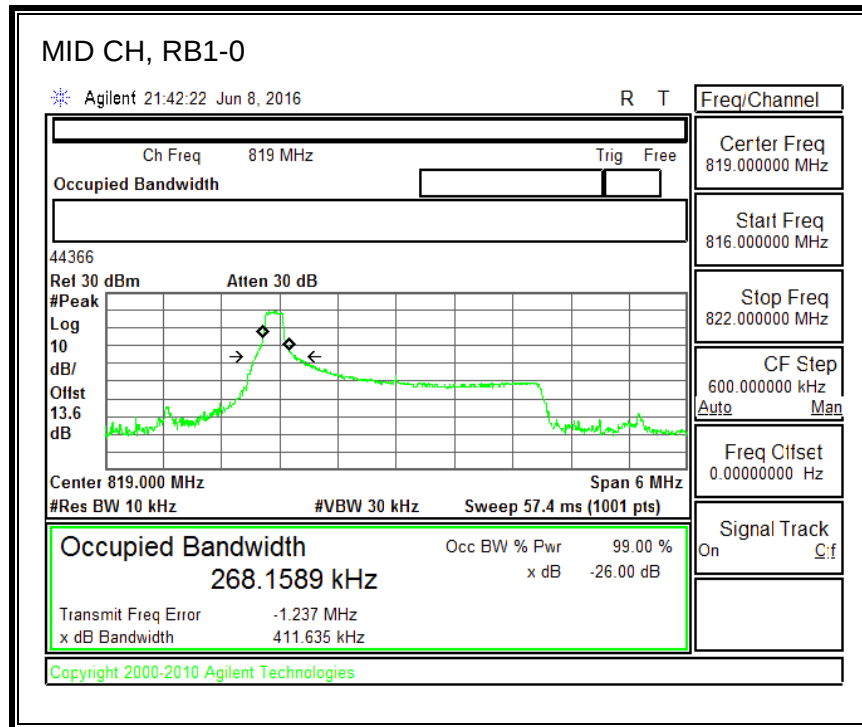
16QAM, (1.4 MHz BAND WIDTH)



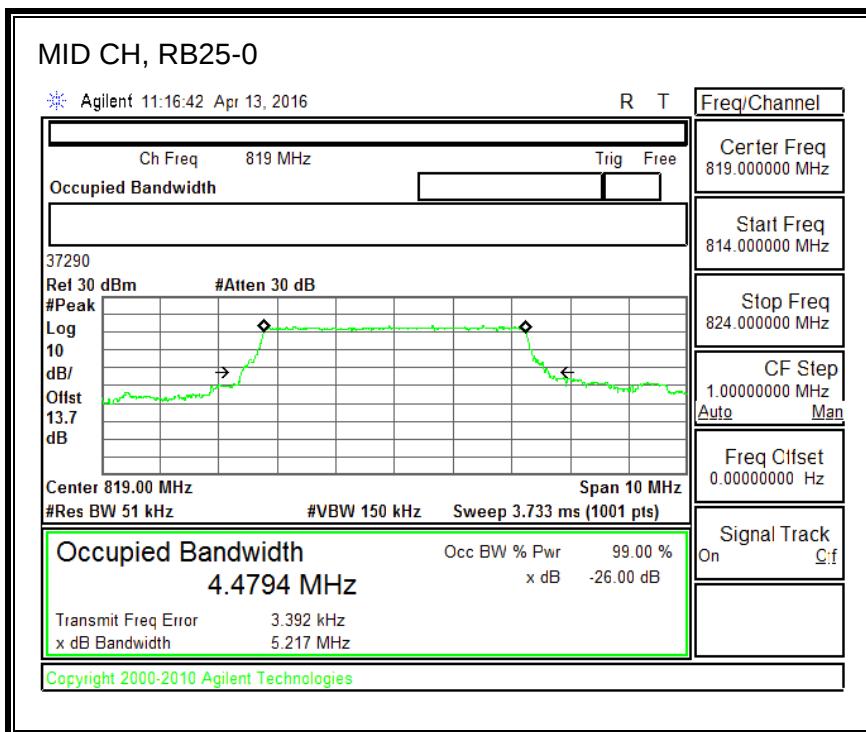
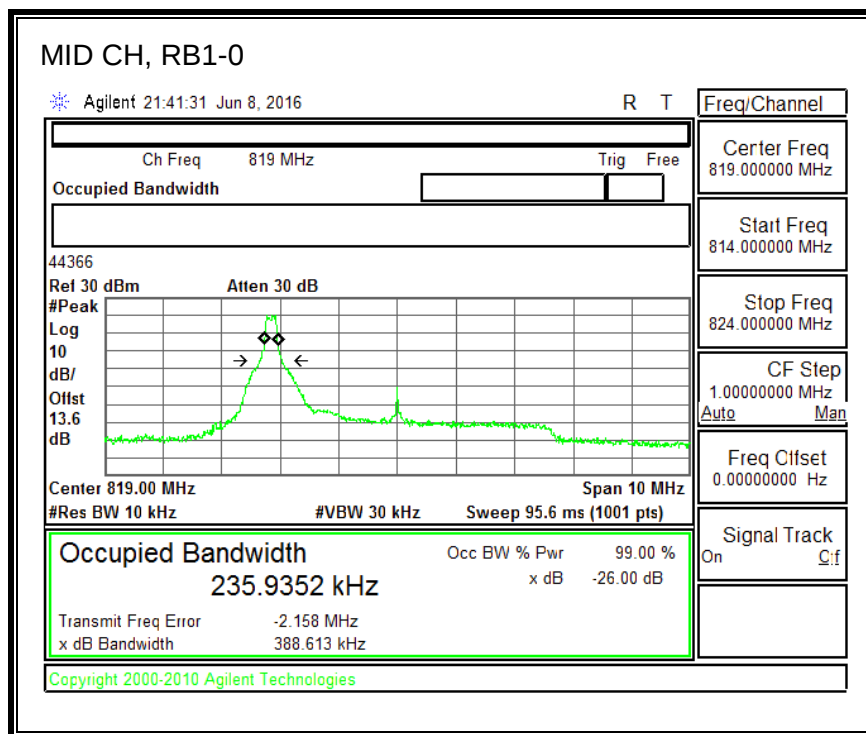
QPSK, (3.0 MHz BAND WIDTH)



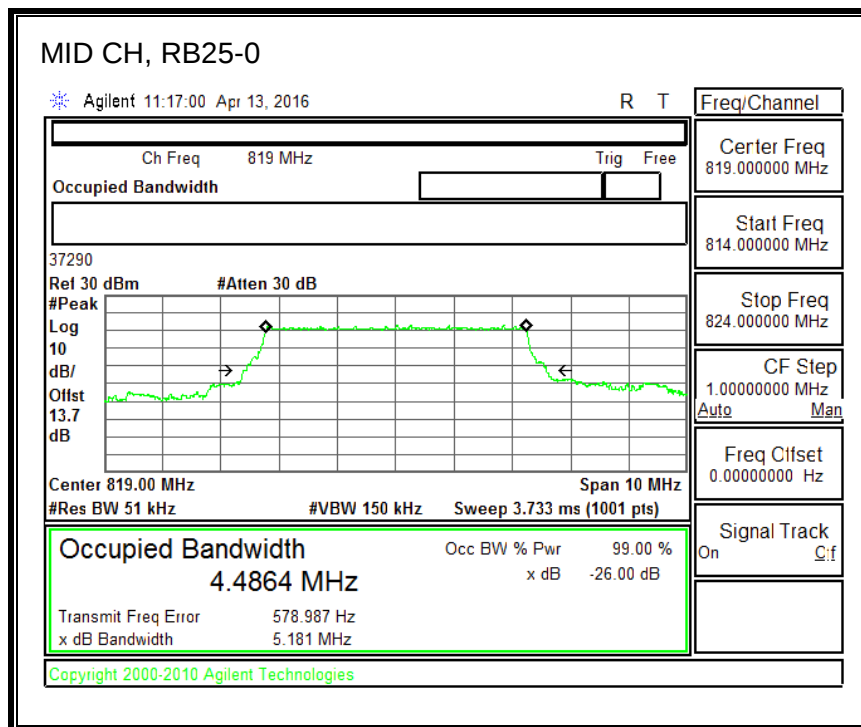
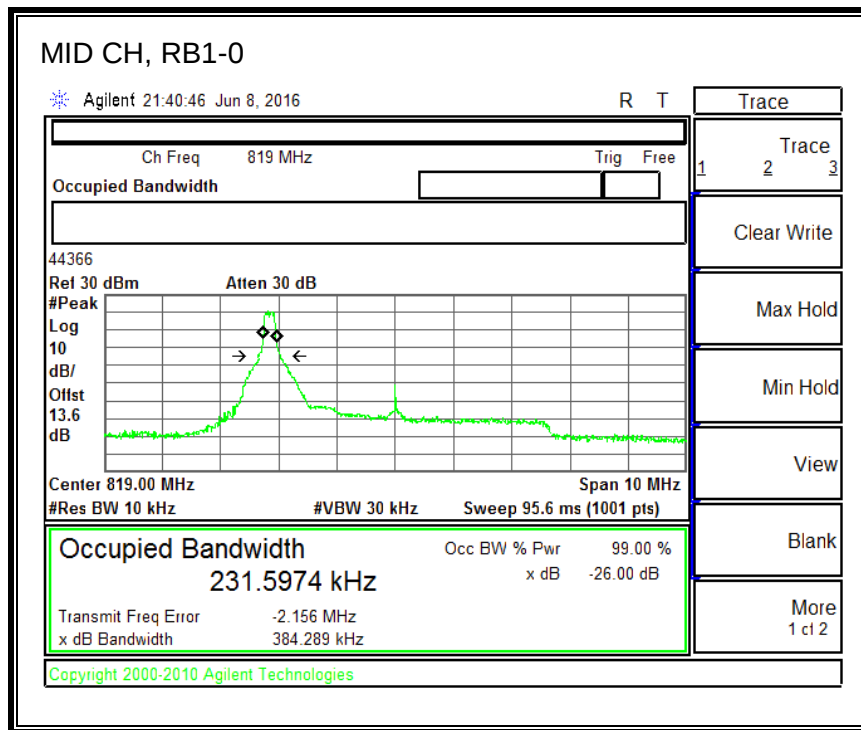
16QAM, (3.0 MHz BAND WIDTH)



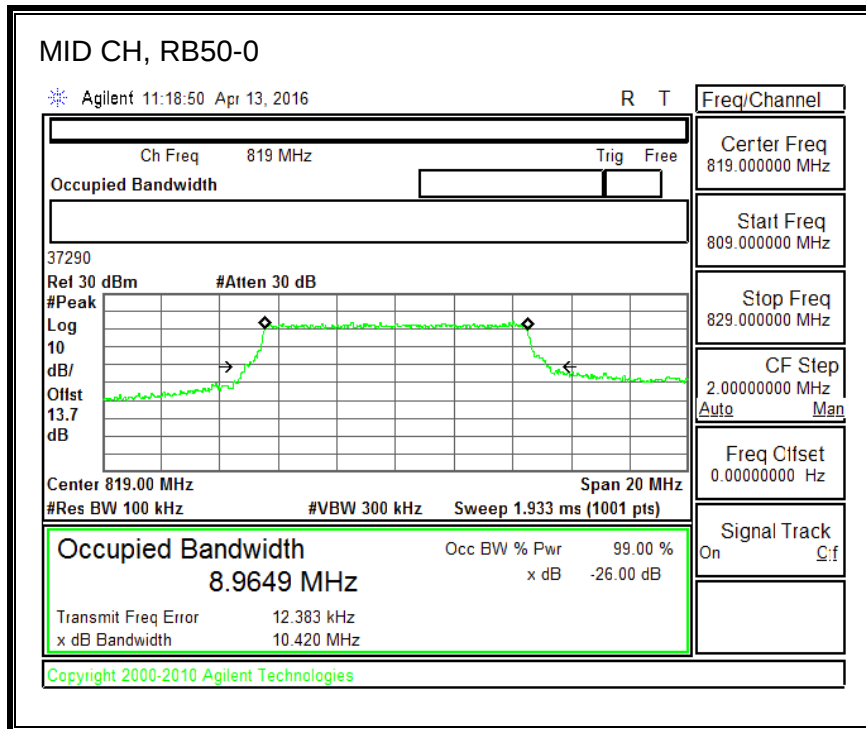
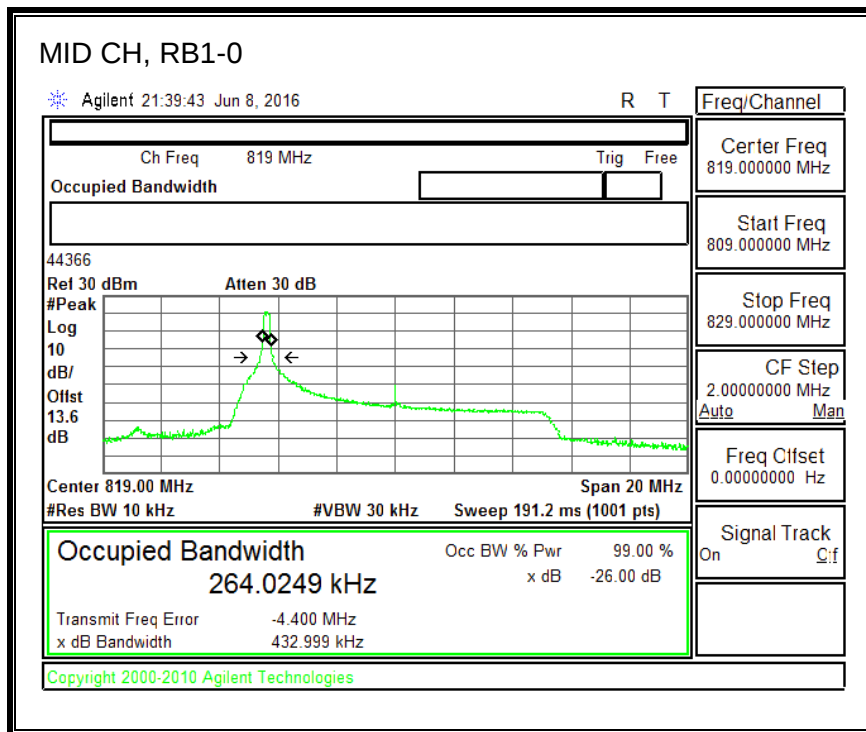
QPSK, (5.0 MHz BAND WIDTH)



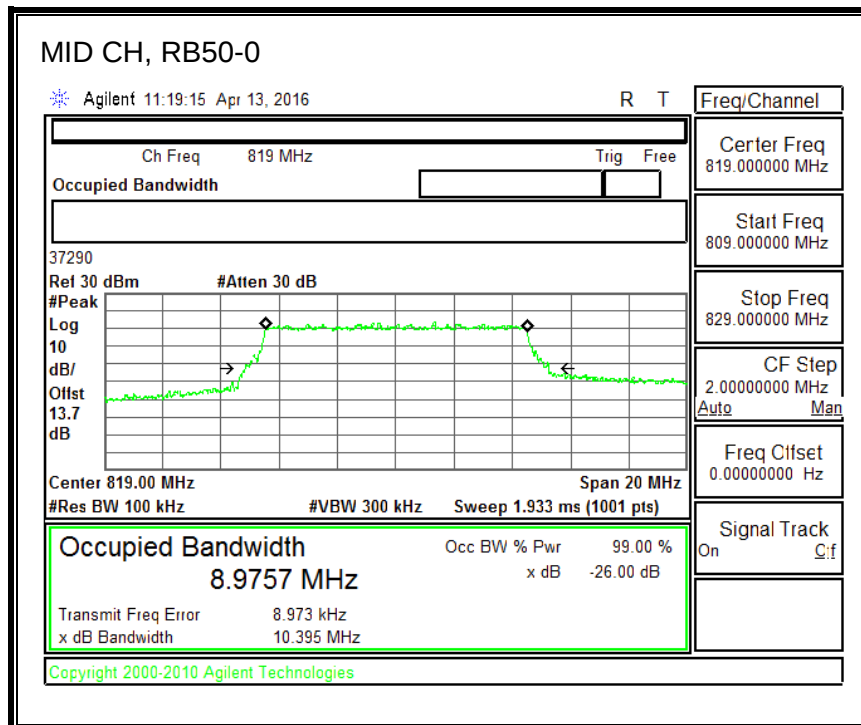
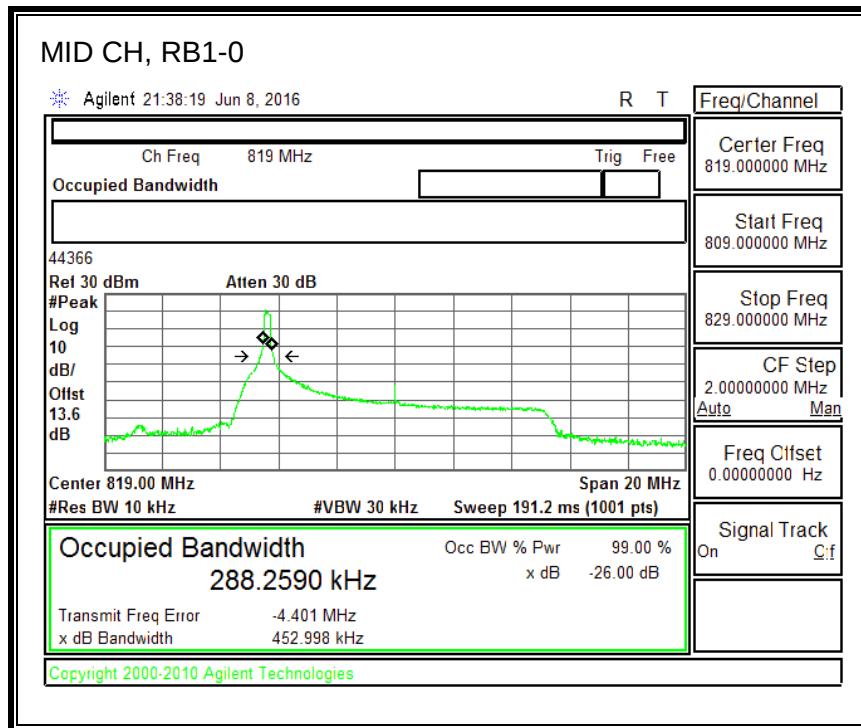
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

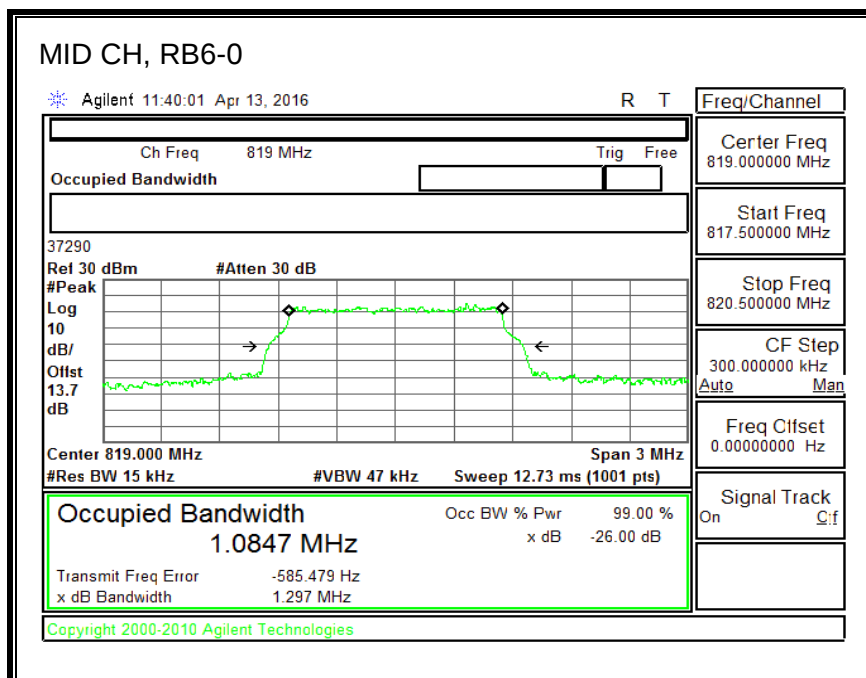
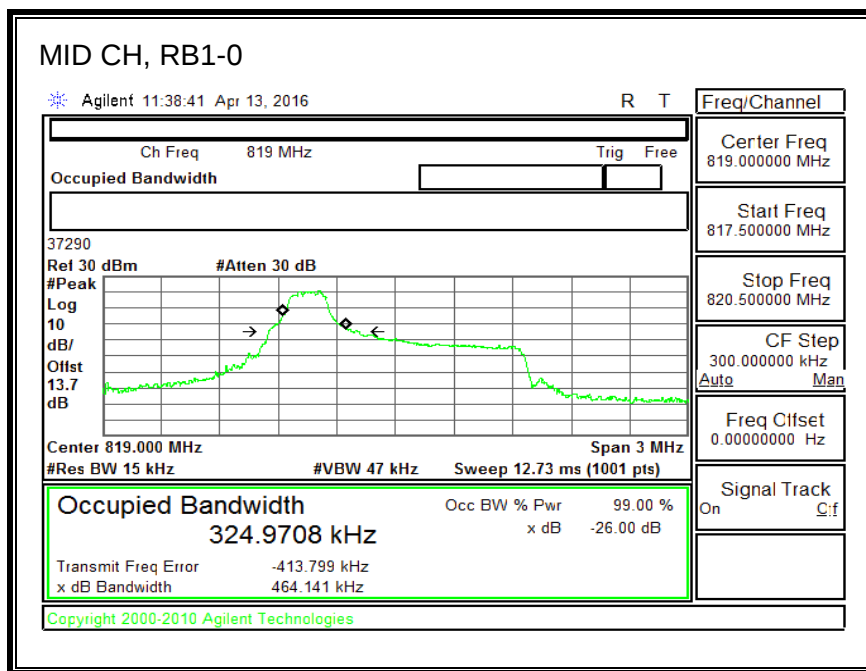


16QAM, (10.0 MHz BAND WIDTH)

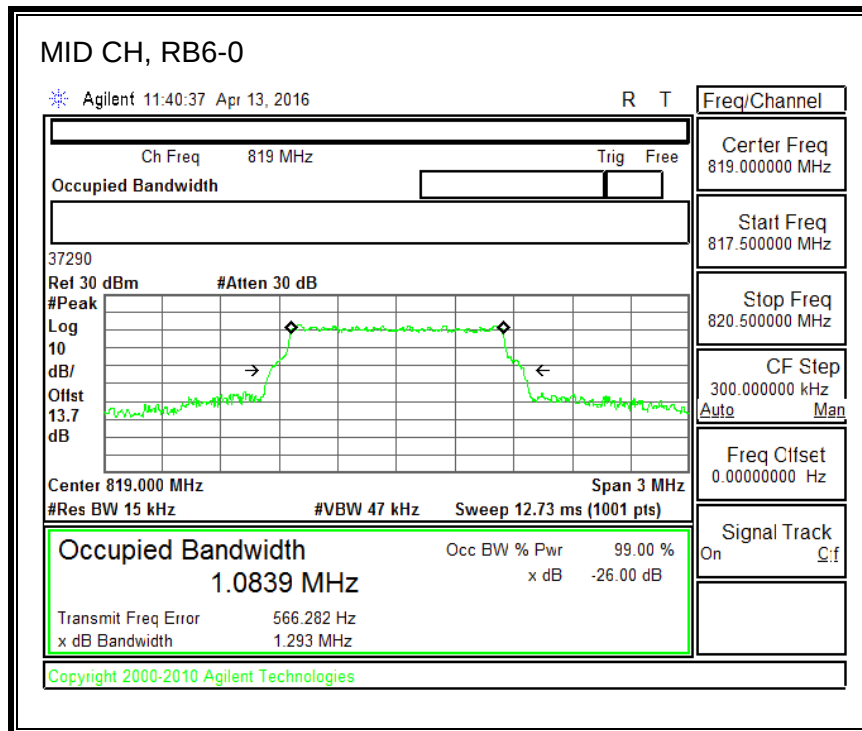
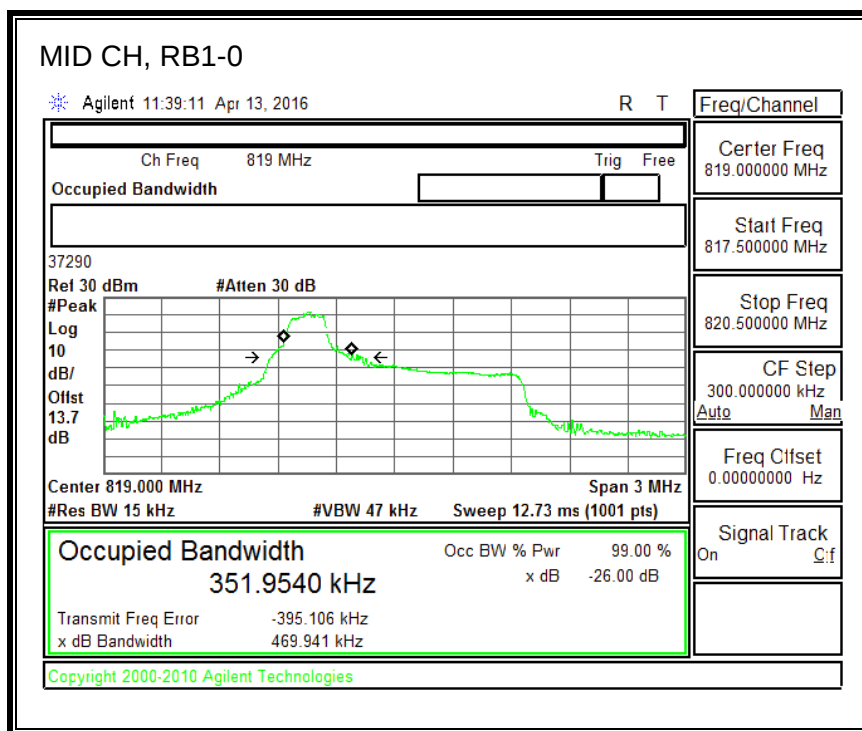


8.1.10. LTE BAND 27

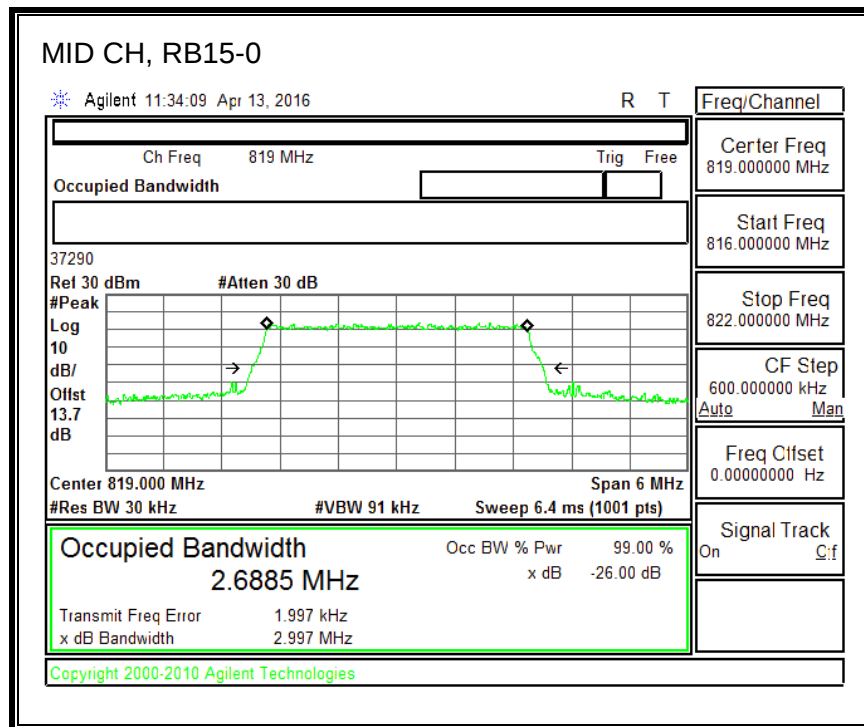
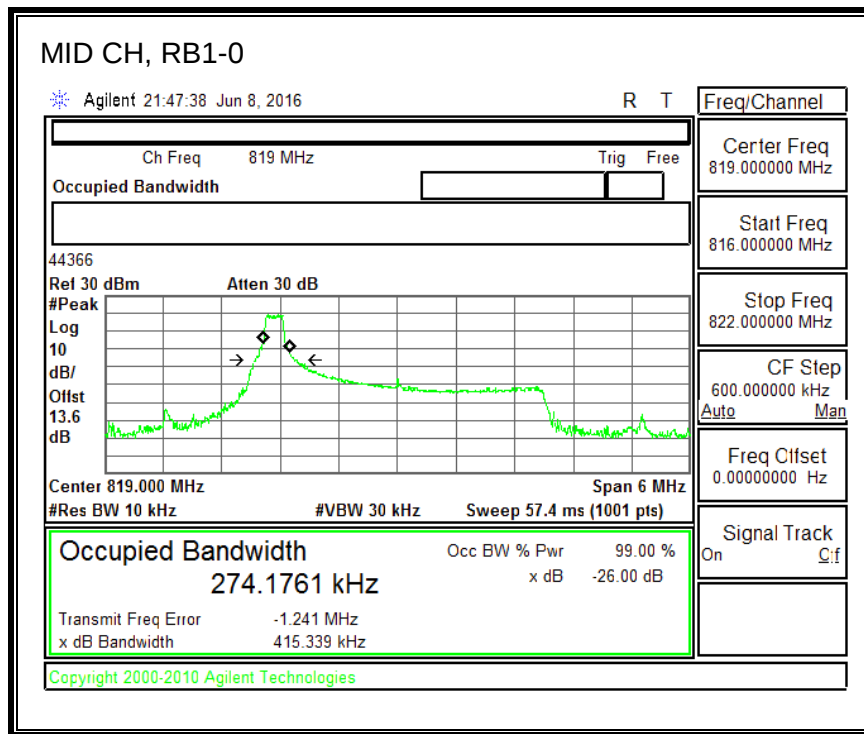
QPSK, (1.4 MHz BAND WIDTH)



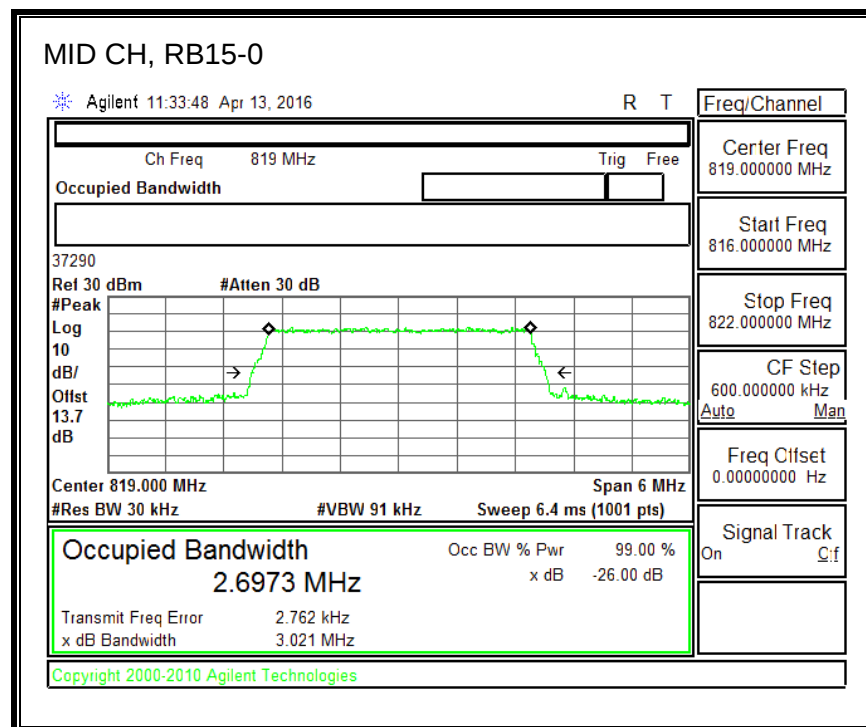
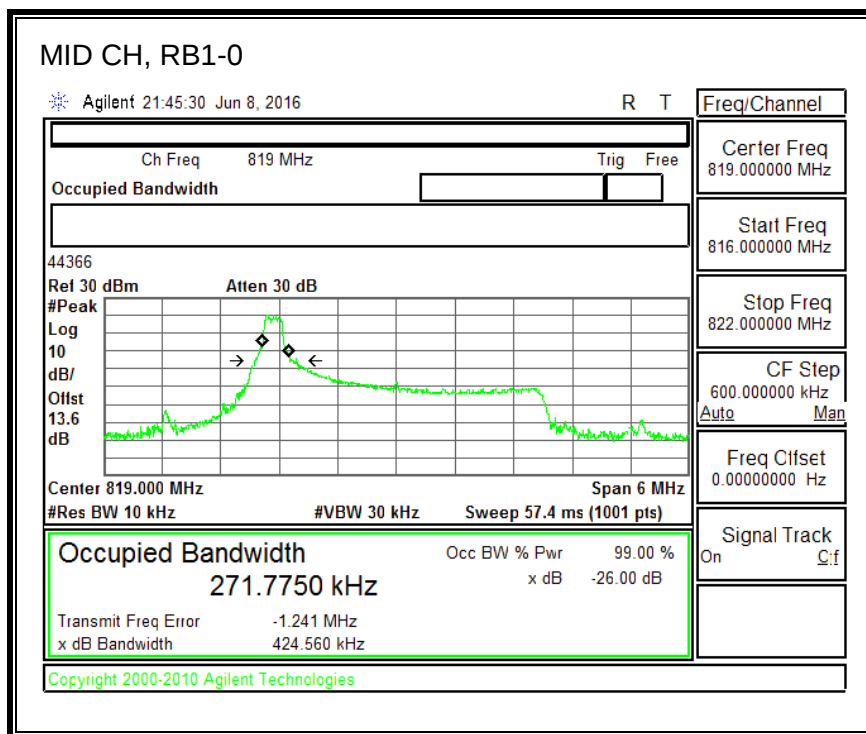
16QAM, (1.4 MHz BAND WIDTH)



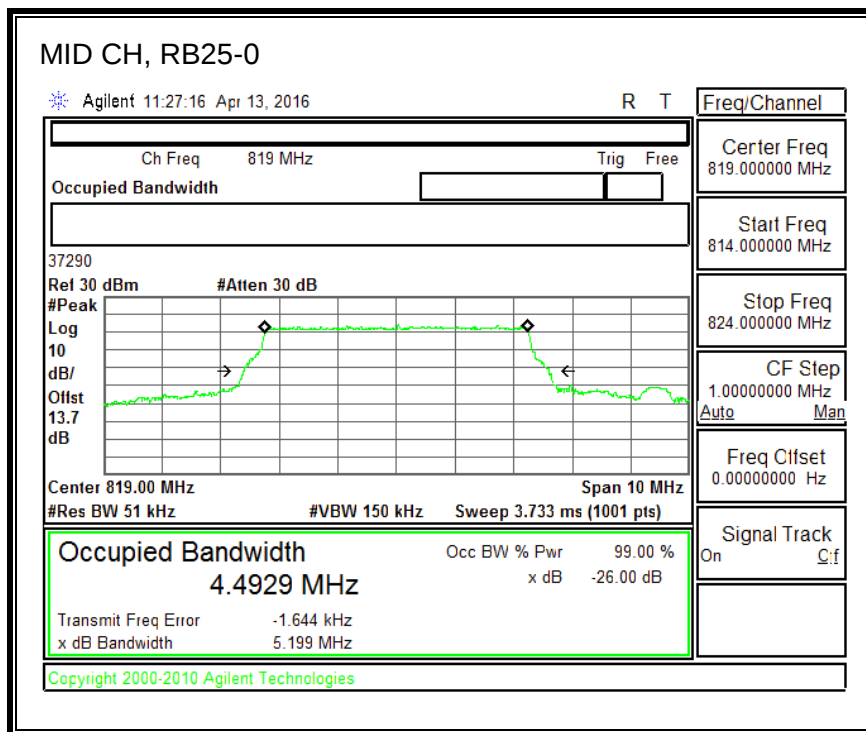
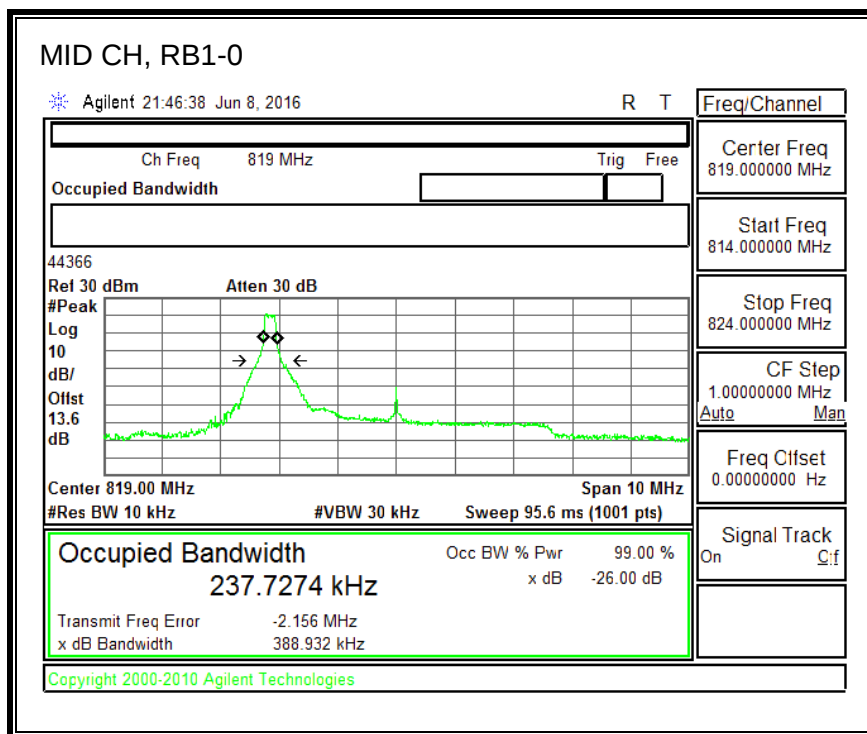
QPSK, (3.0 MHz BAND WIDTH)



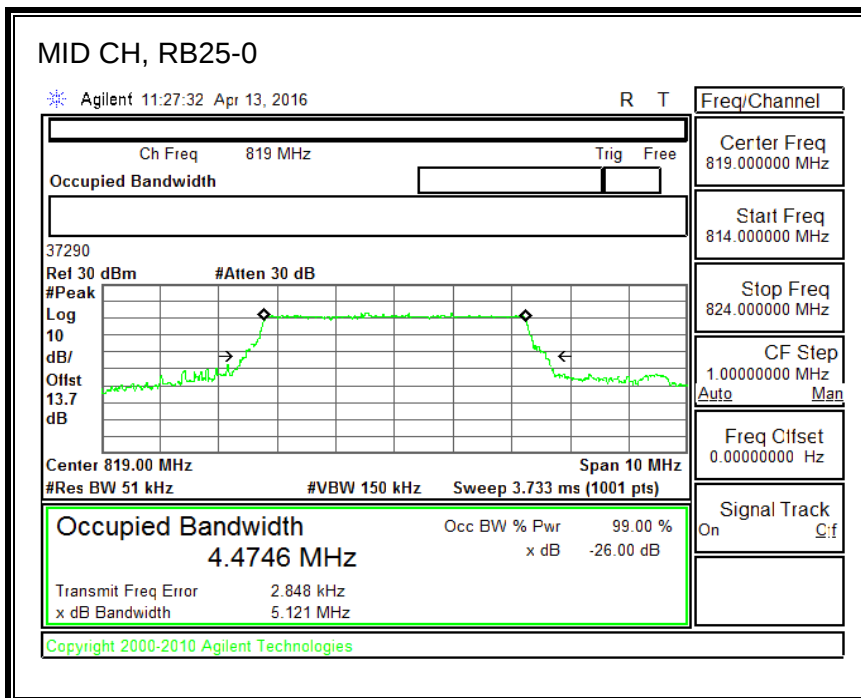
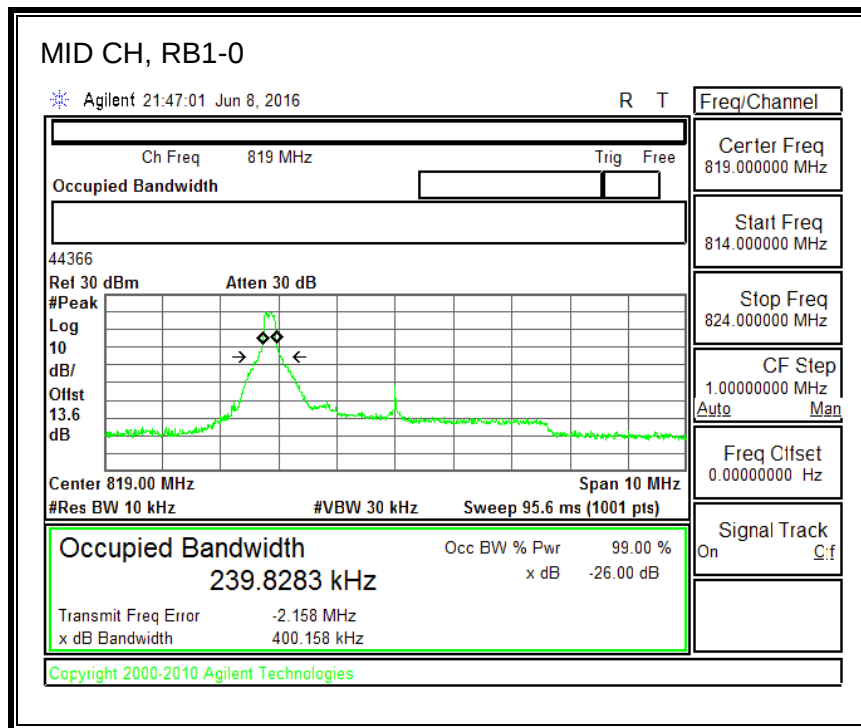
16QAM, (3.0 MHz BAND WIDTH)



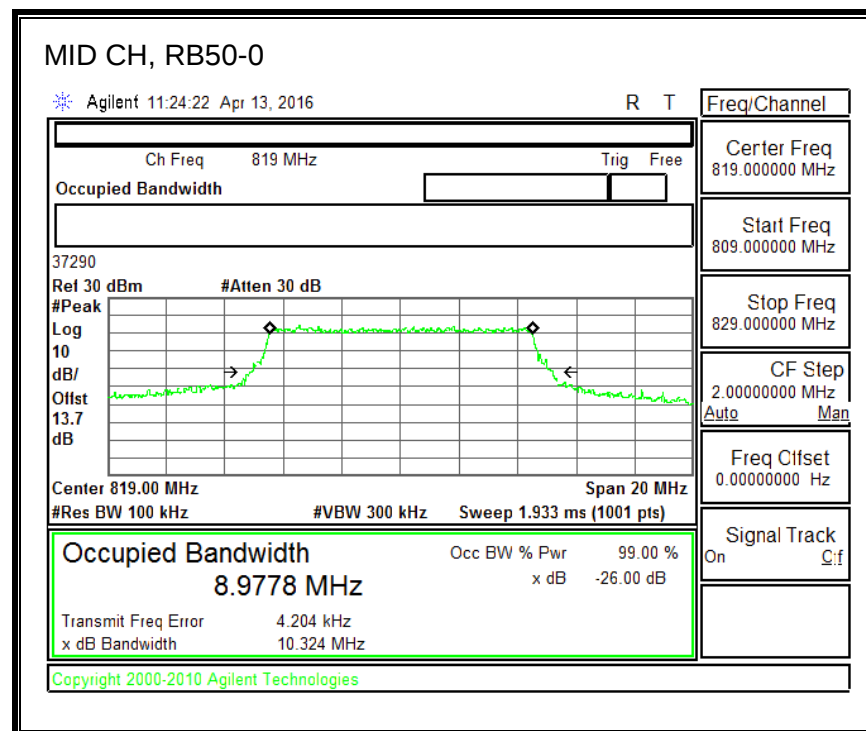
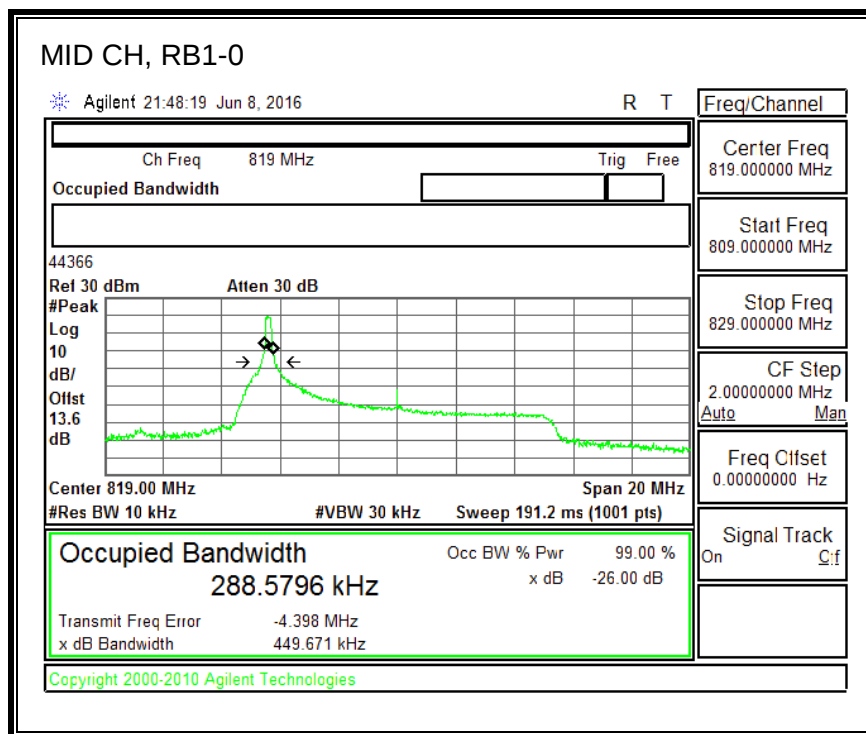
QPSK, (5.0 MHz BAND WIDTH)



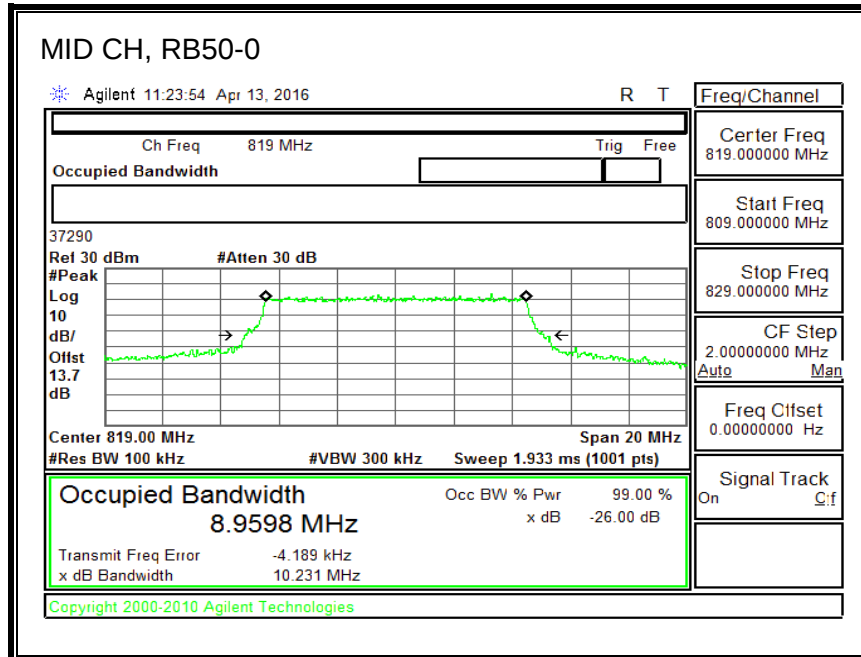
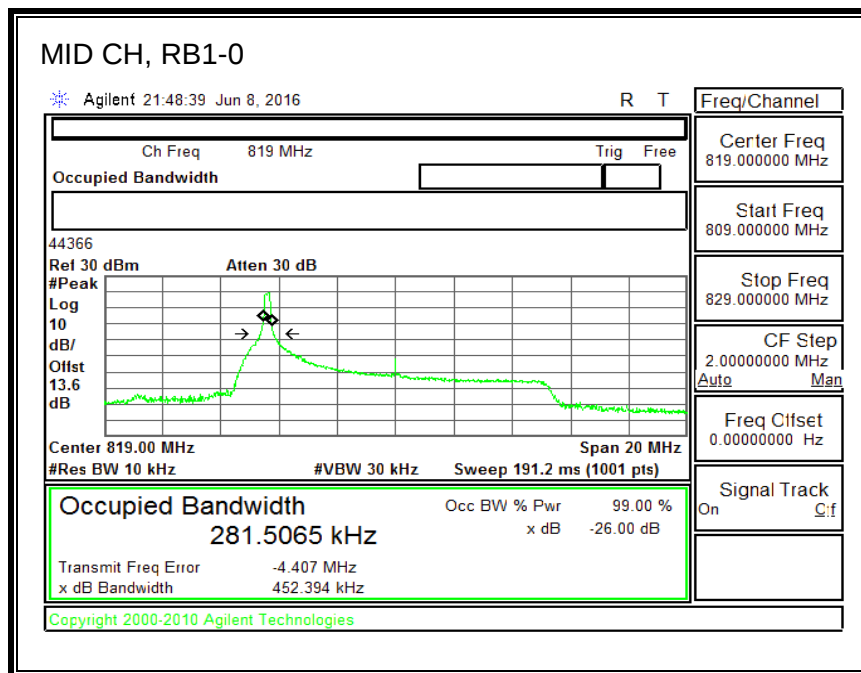
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

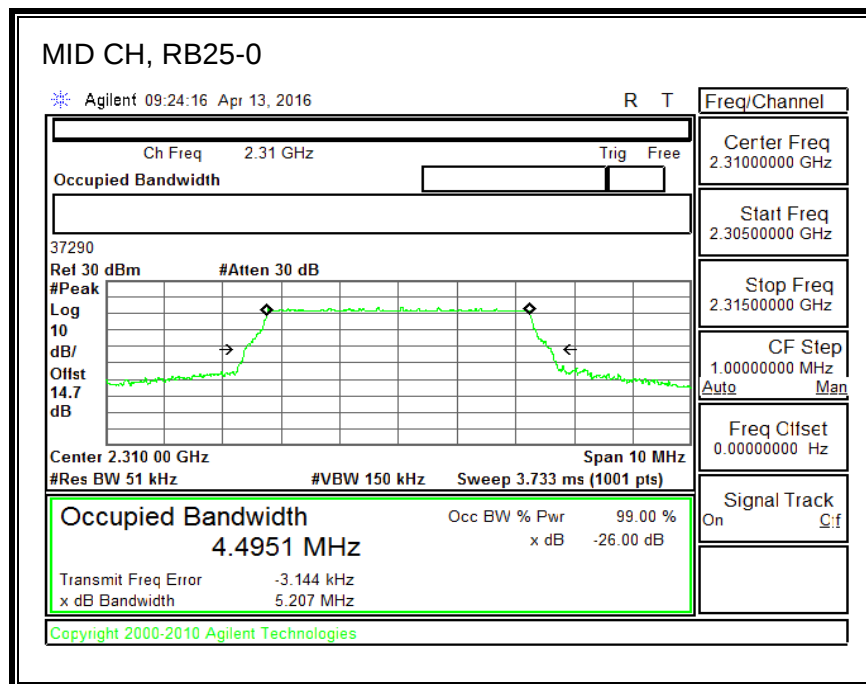
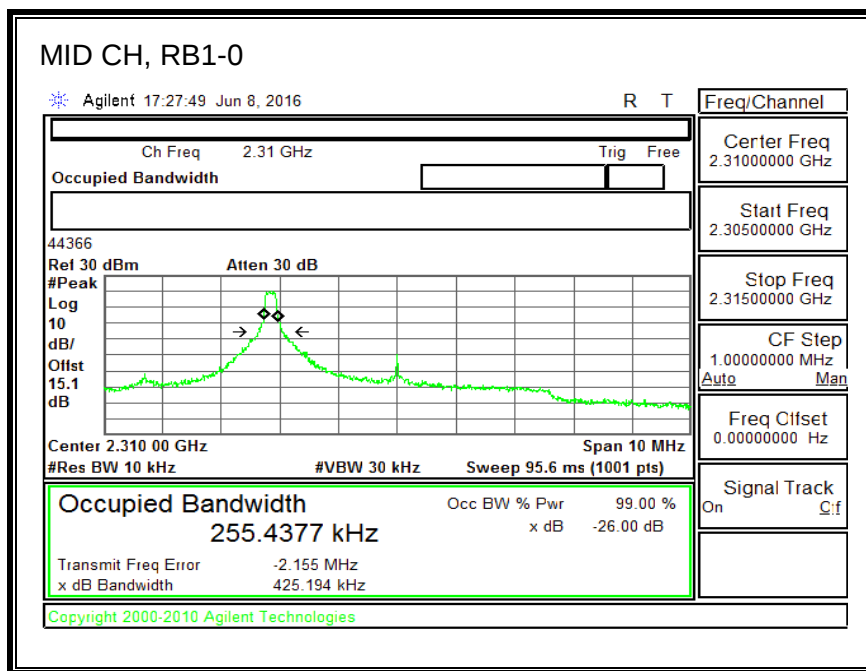


16QAM, (10.0 MHz BAND WIDTH)

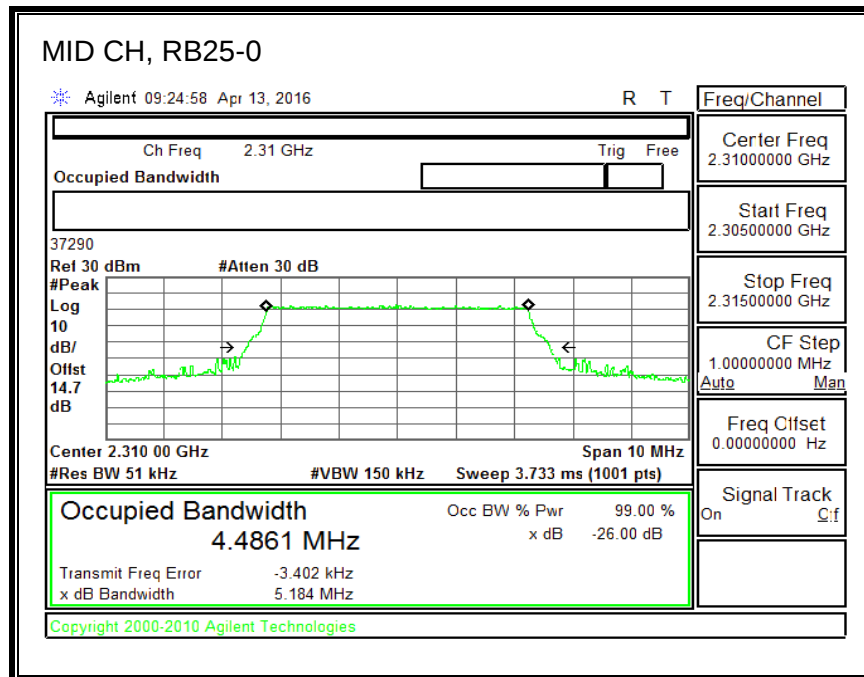
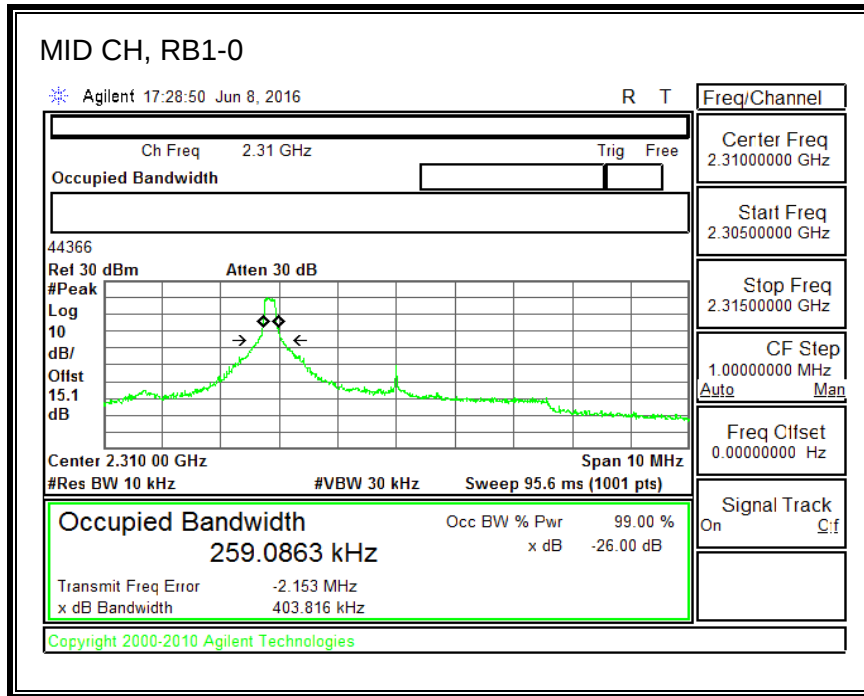


8.1.11. LTE BAND 30

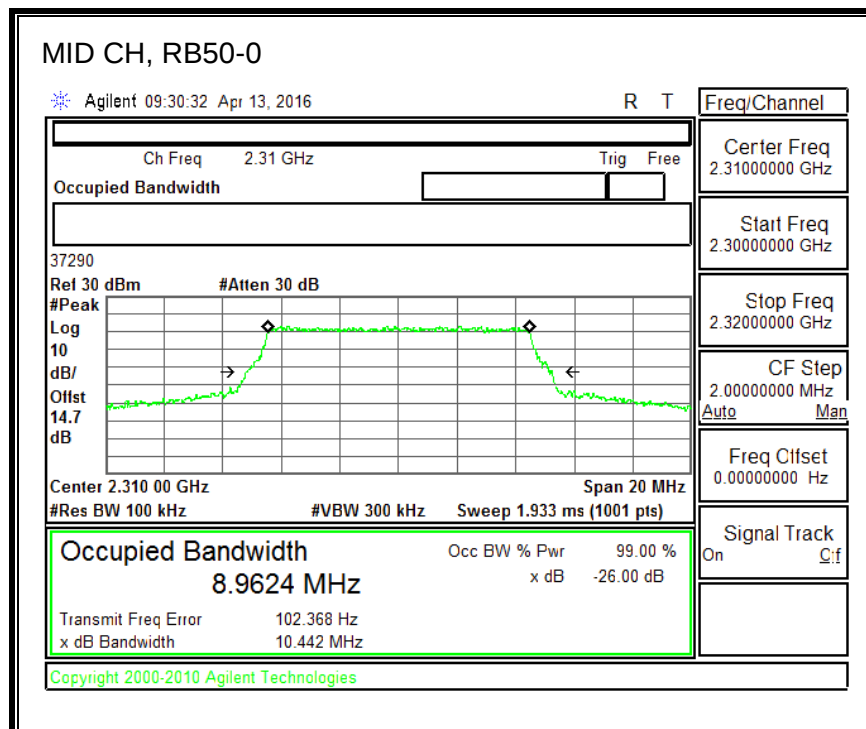
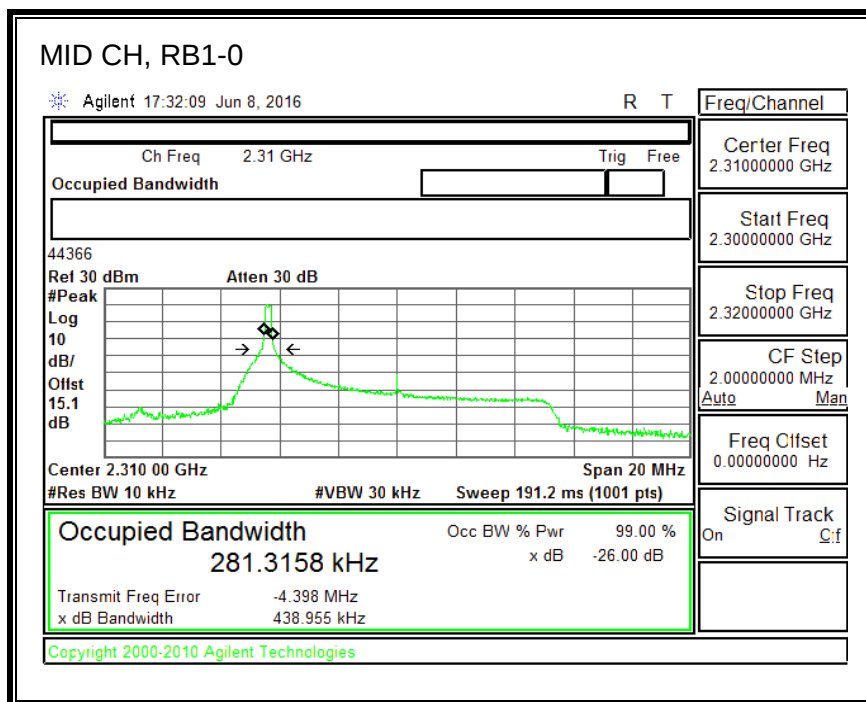
QPSK, (5.0 MHz BAND WIDTH)



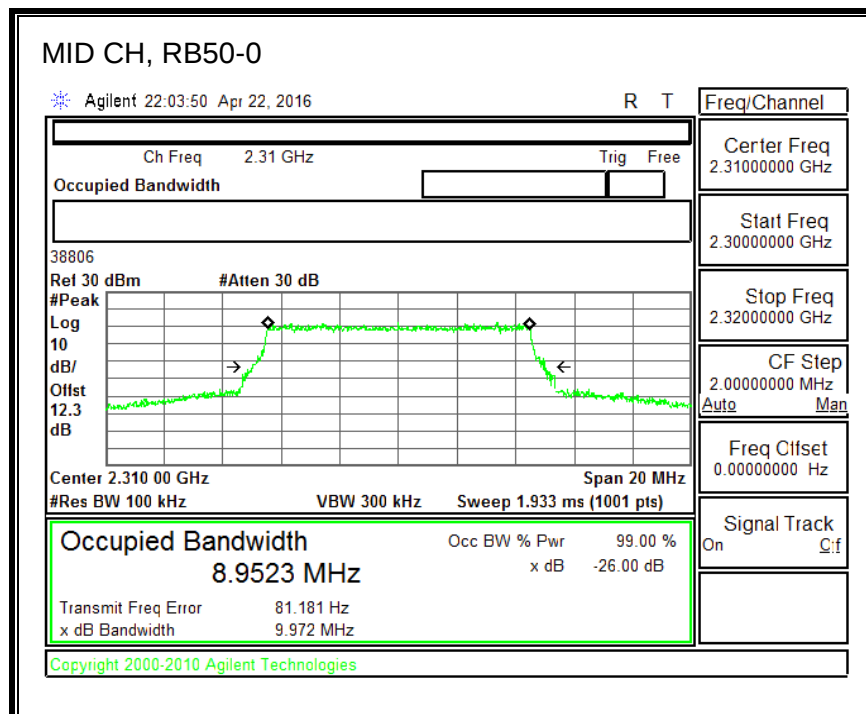
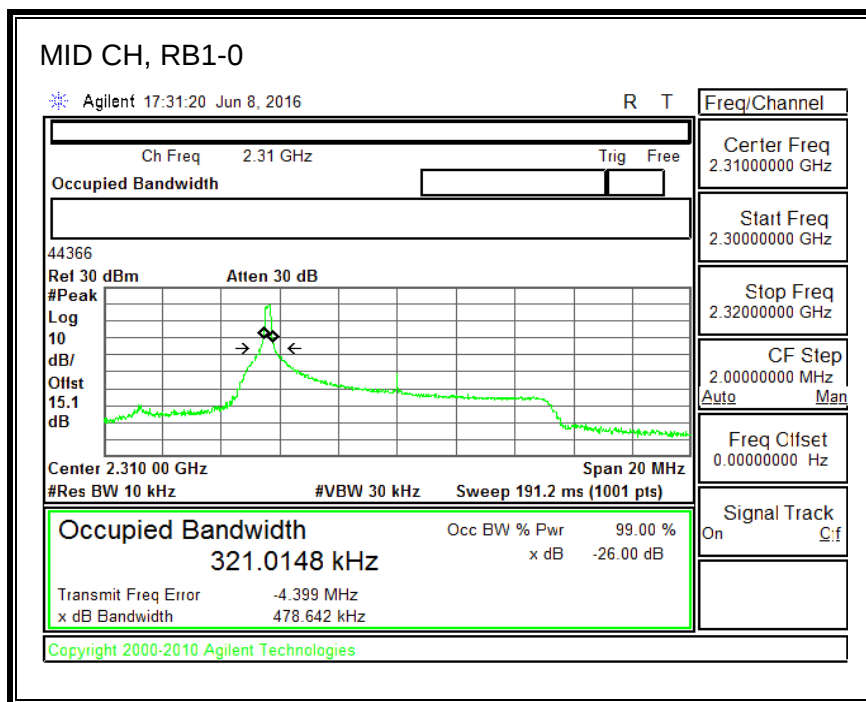
16QAM, (5.0 MHz BAND WIDTH)



QPSK, (10.0 MHz BAND WIDTH)

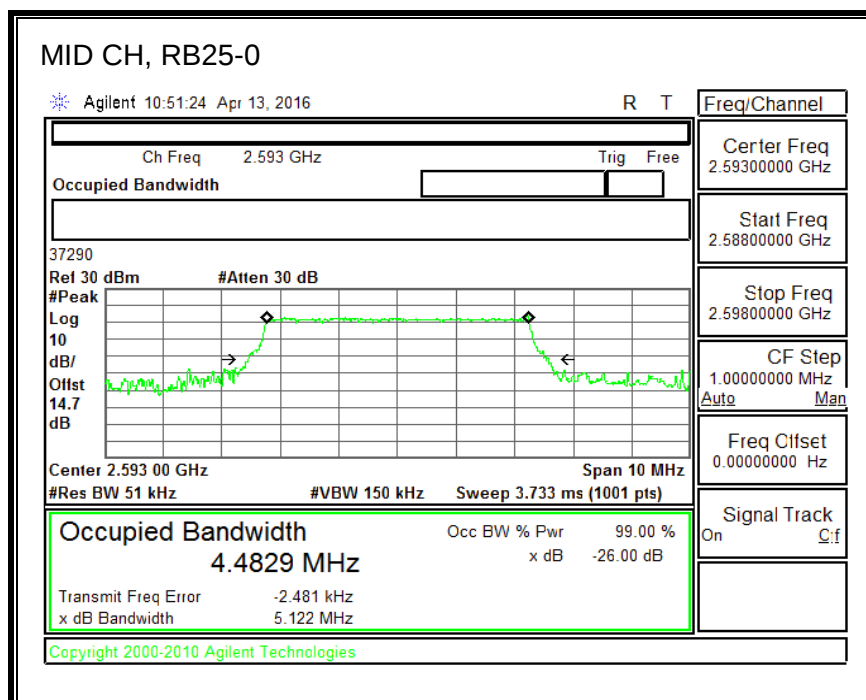
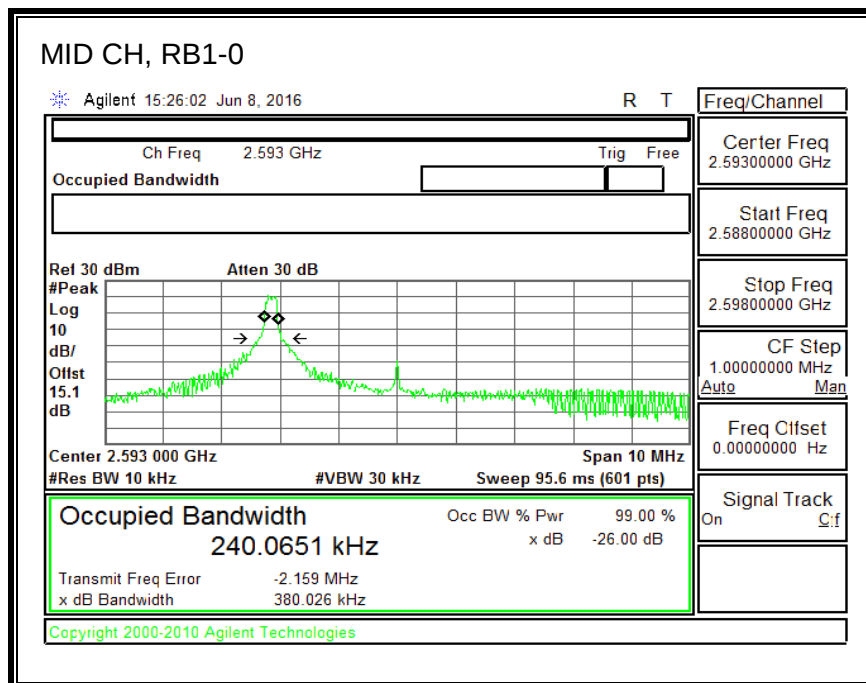


16QAM, (10.0 MHz BAND WIDTH)

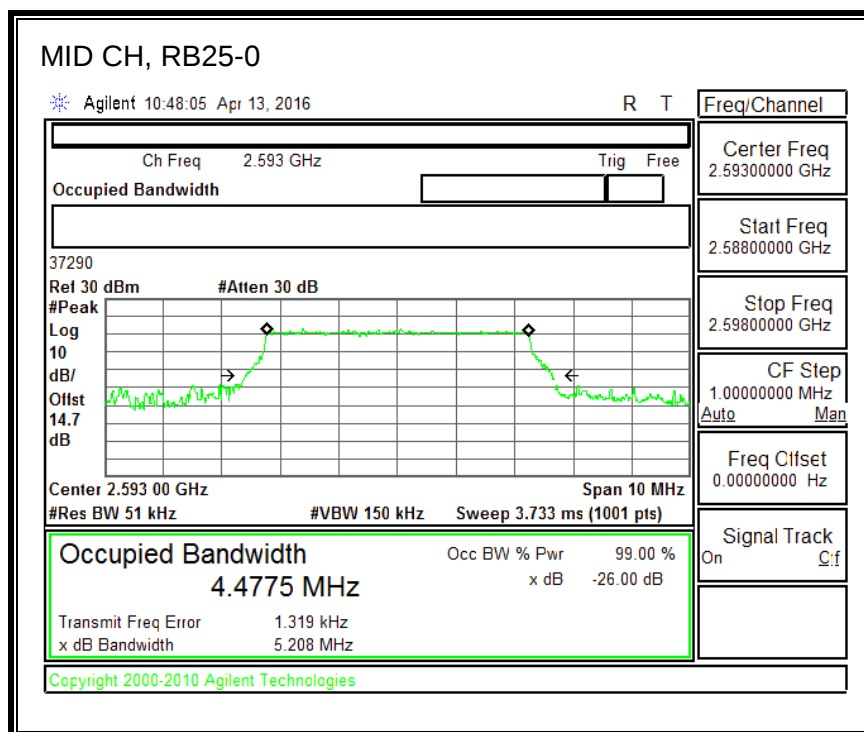
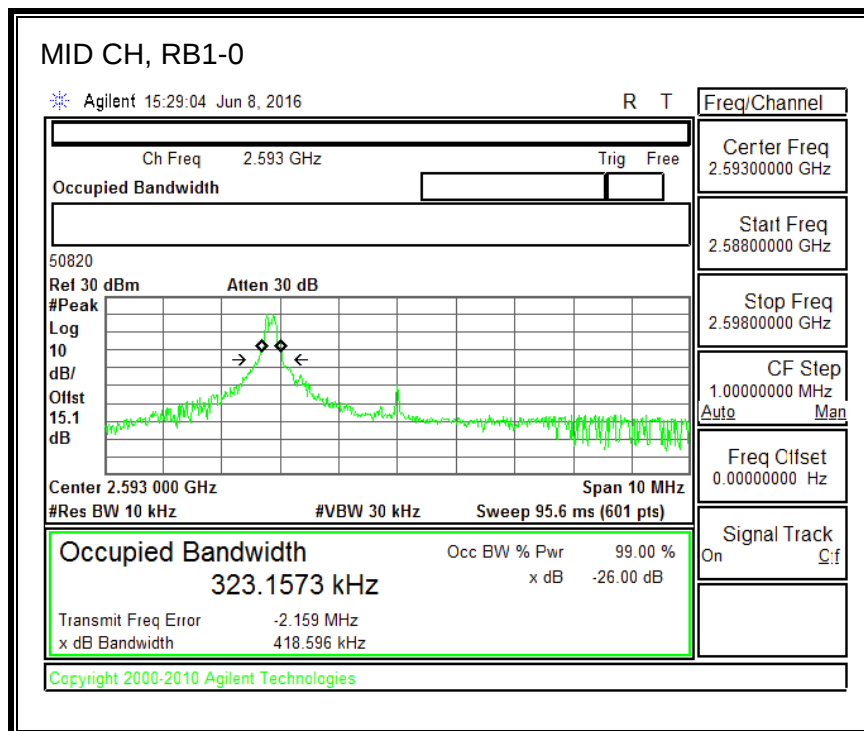


8.1.12. LTE BAND 41

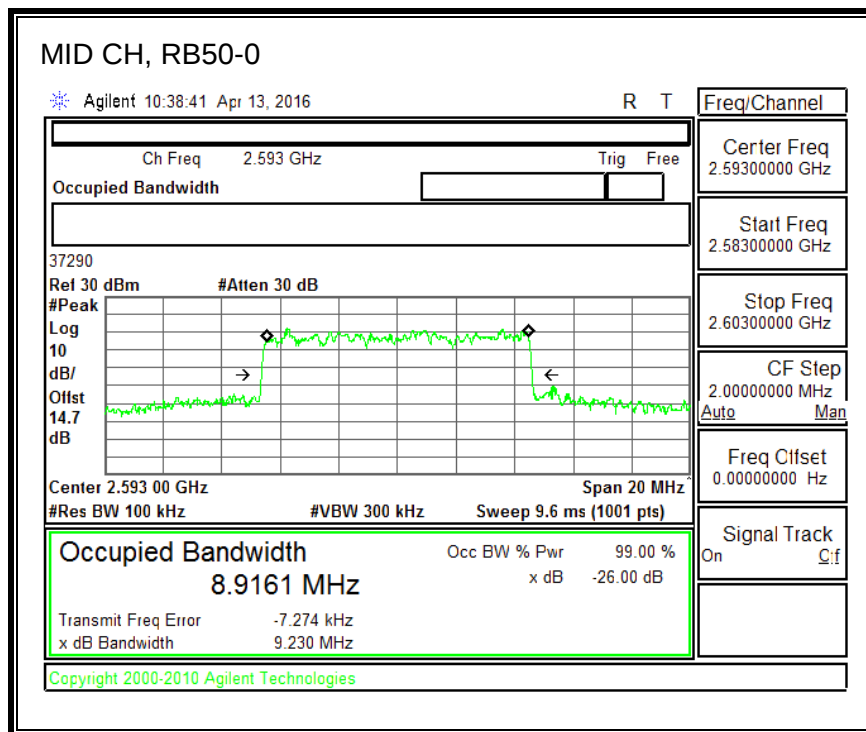
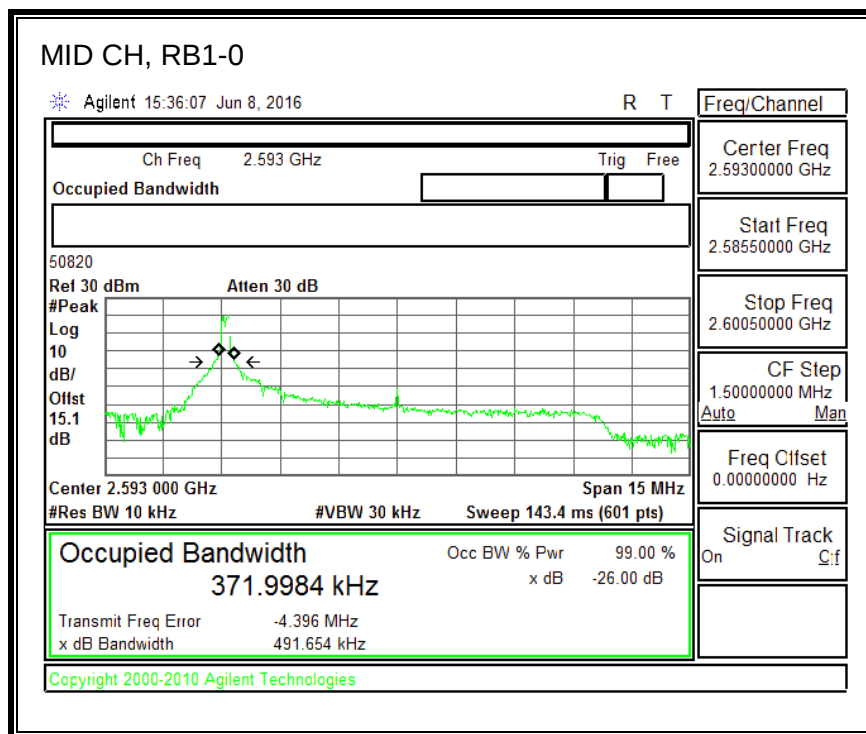
QPSK, (5.0 MHz BAND WIDTH)



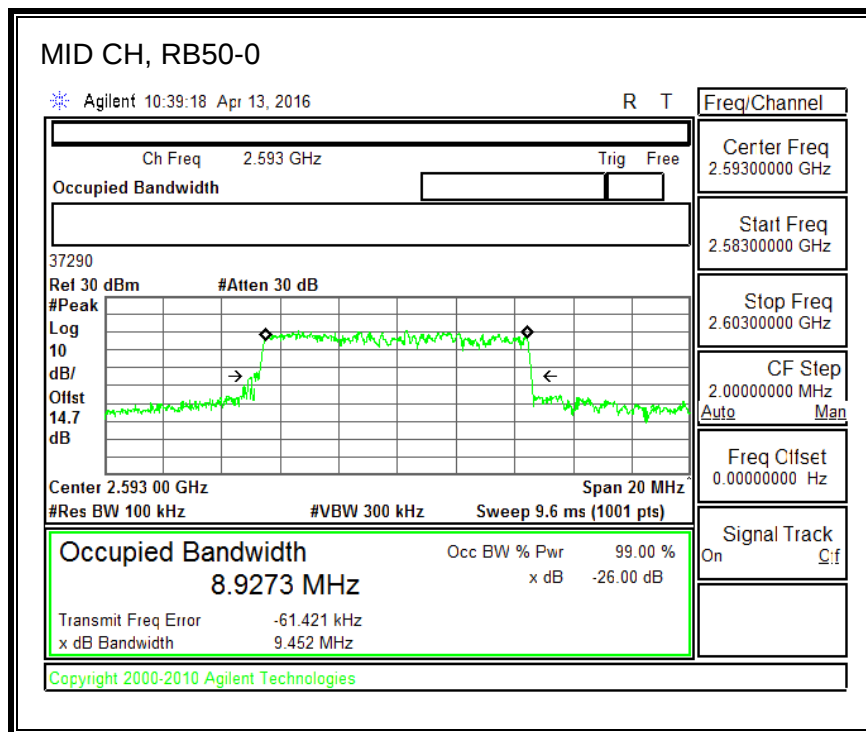
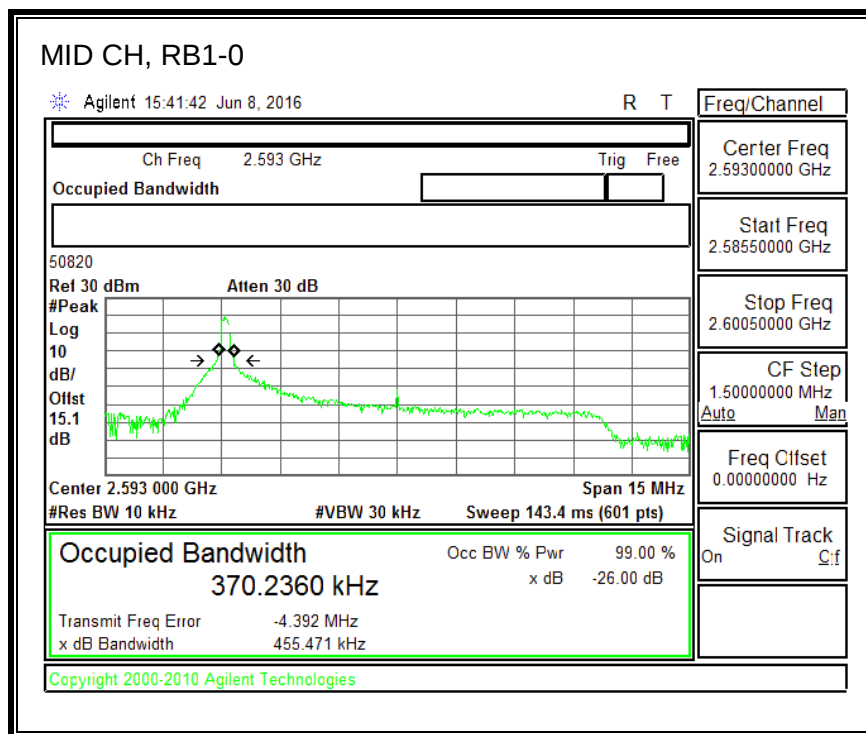
16QAM, (5.0 MHz BAND WIDTH)



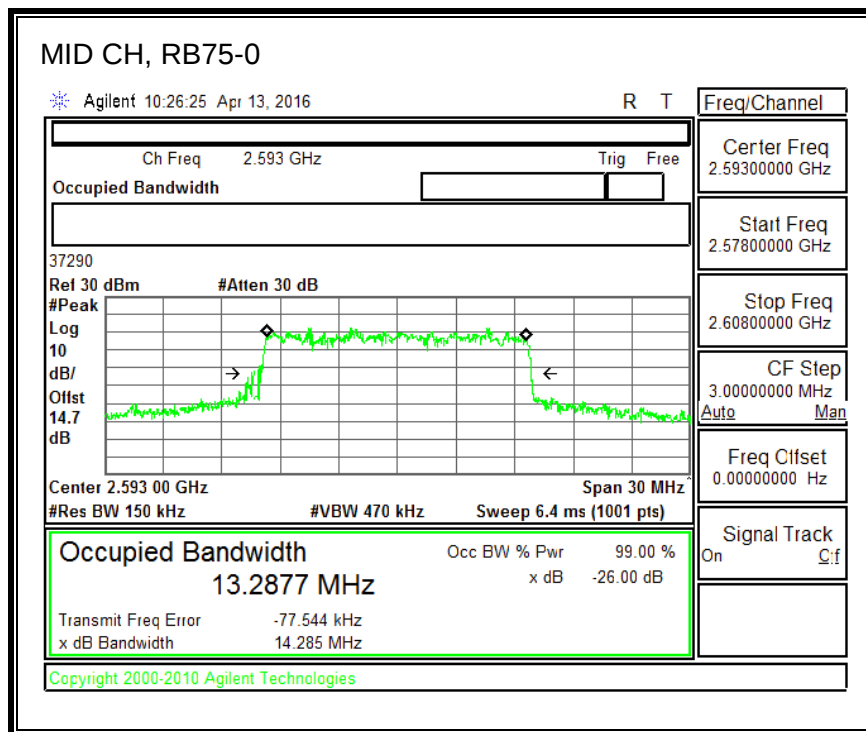
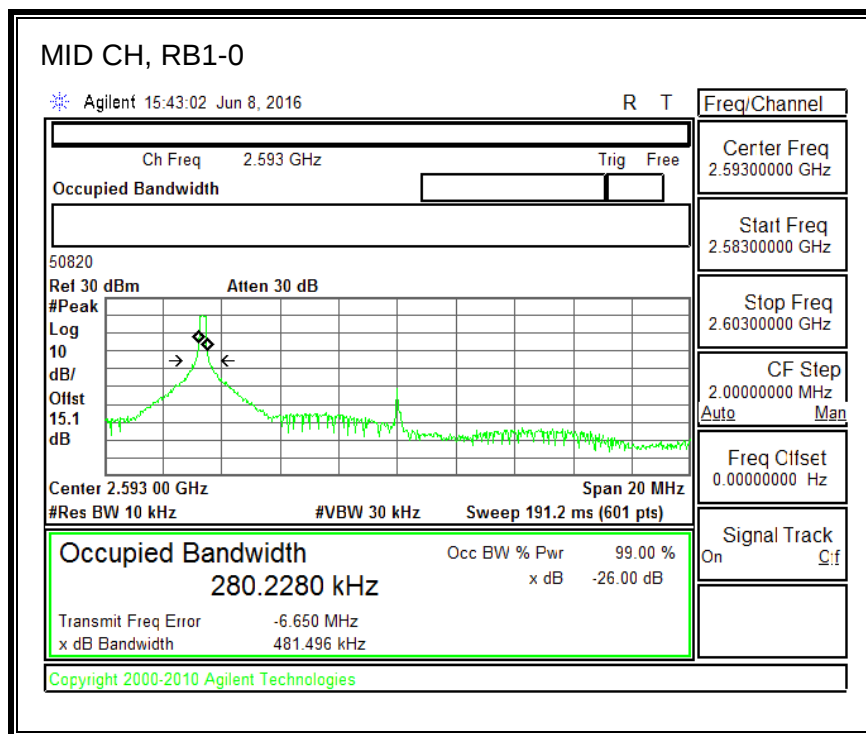
QPSK, (10.0 MHz BAND WIDTH)



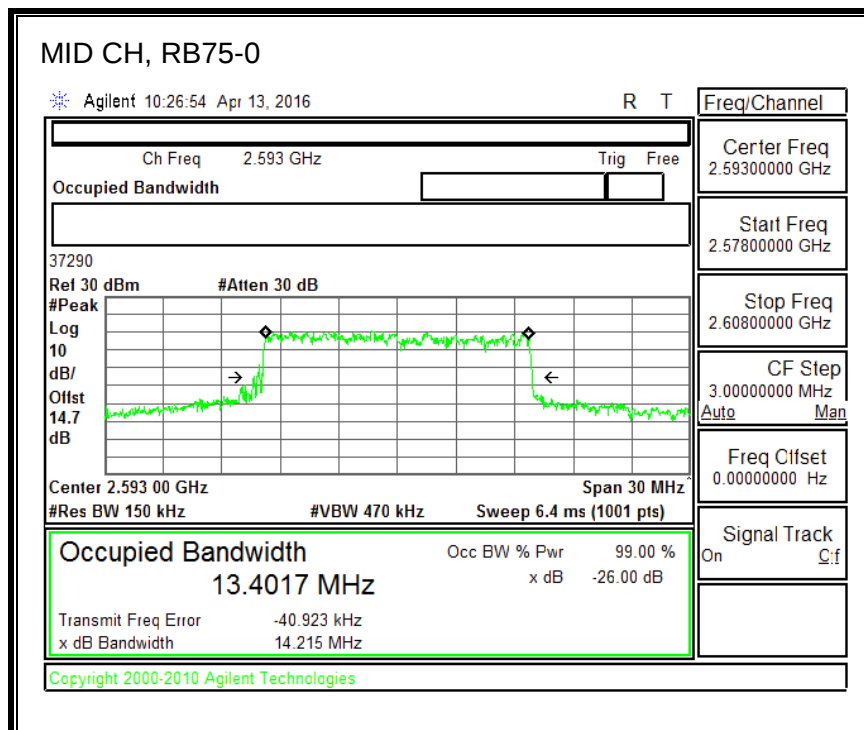
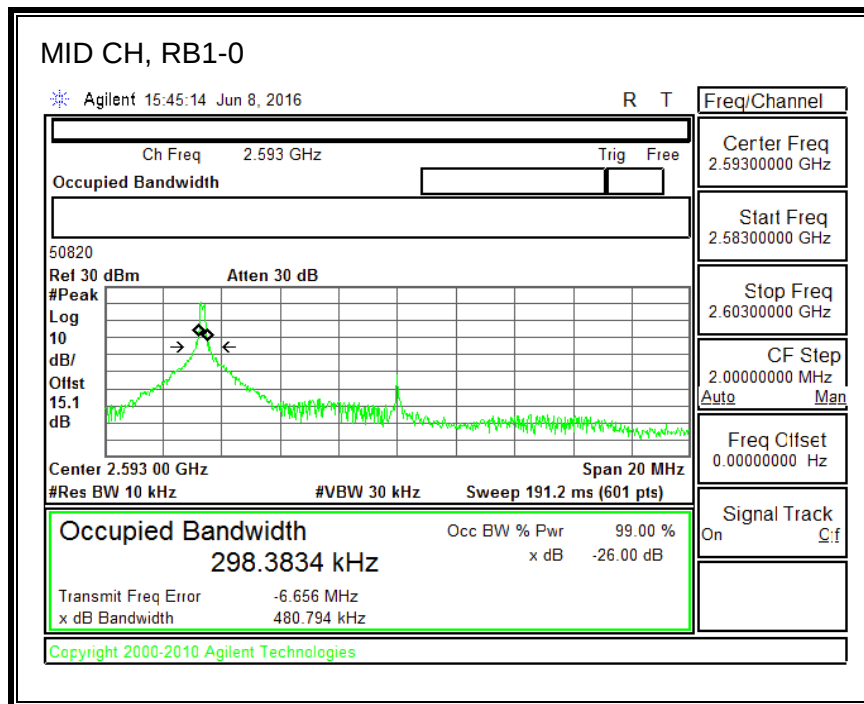
16QAM, (10.0 MHz BAND WIDTH)



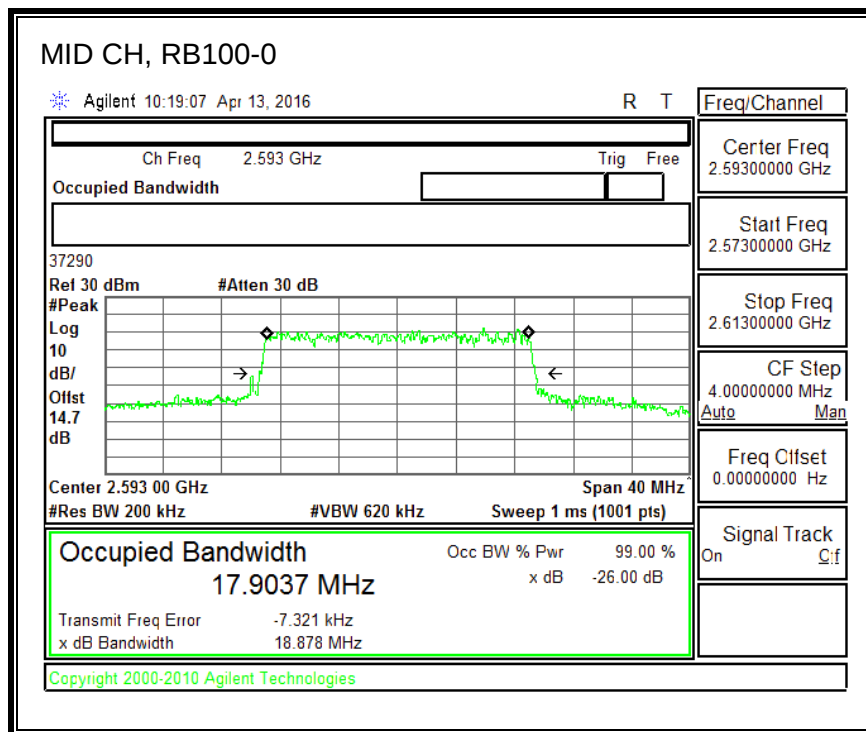
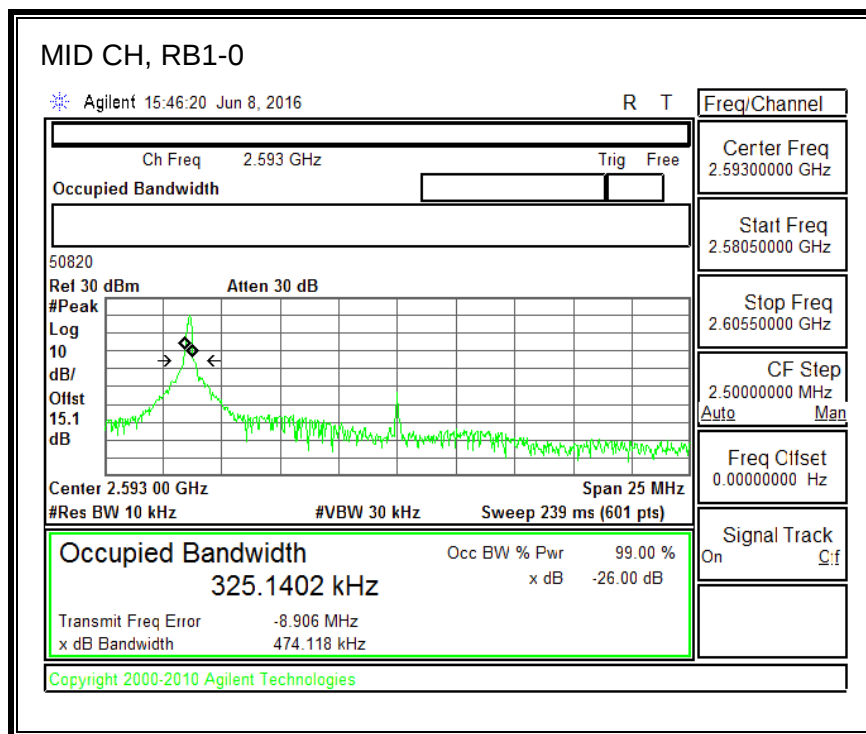
QPSK, (15.0 MHz BAND WIDTH)



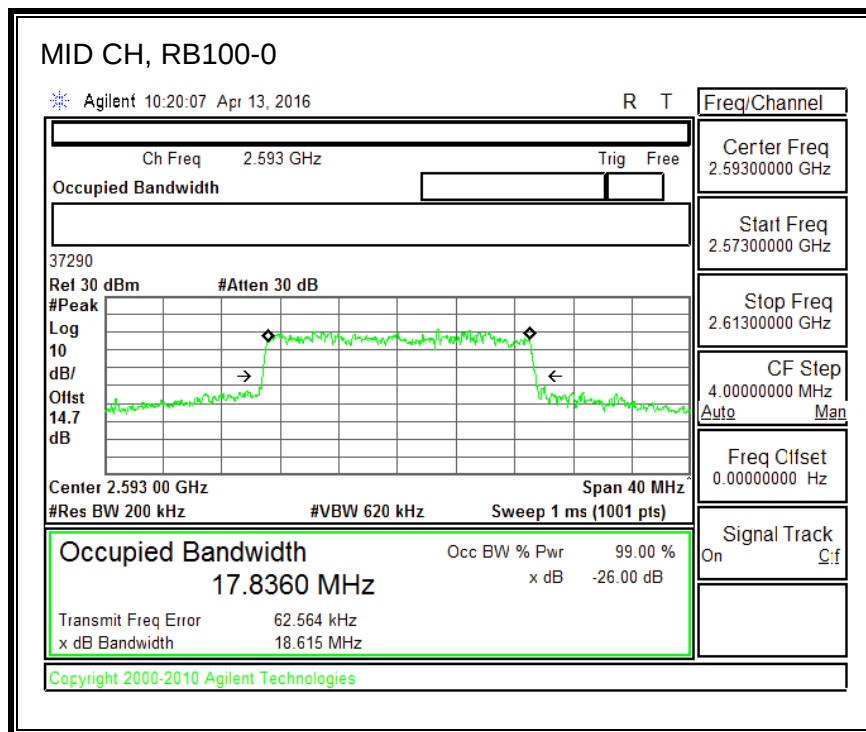
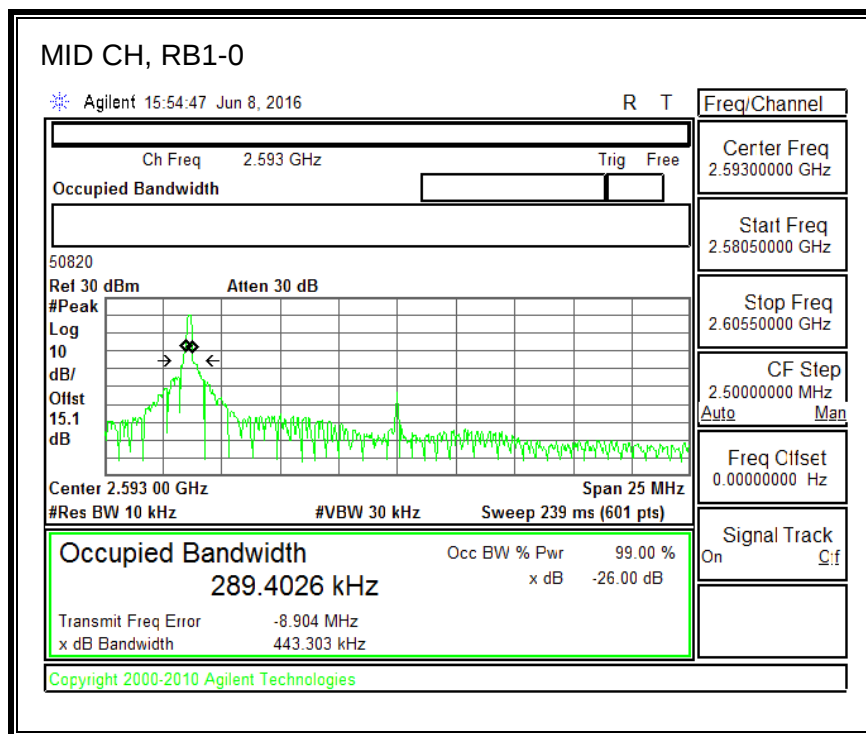
16QAM, (15.0 MHz BAND WIDTH)



QPSK, (20.0 MHz BAND WIDTH)



16QAM, (20.0 MHz BAND WIDTH)



8.2. BANEDGE AND EMISSION MASK

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53, and §90.691

LIMITS

FCC: §24.238, §27.53

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

FCC: §90.210, and §90.691 (LTE BAND 26)

(a)(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(a)(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

FCC: §27.53

(c) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC: §27.53 (LTE BAND 41)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Show citation box.

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

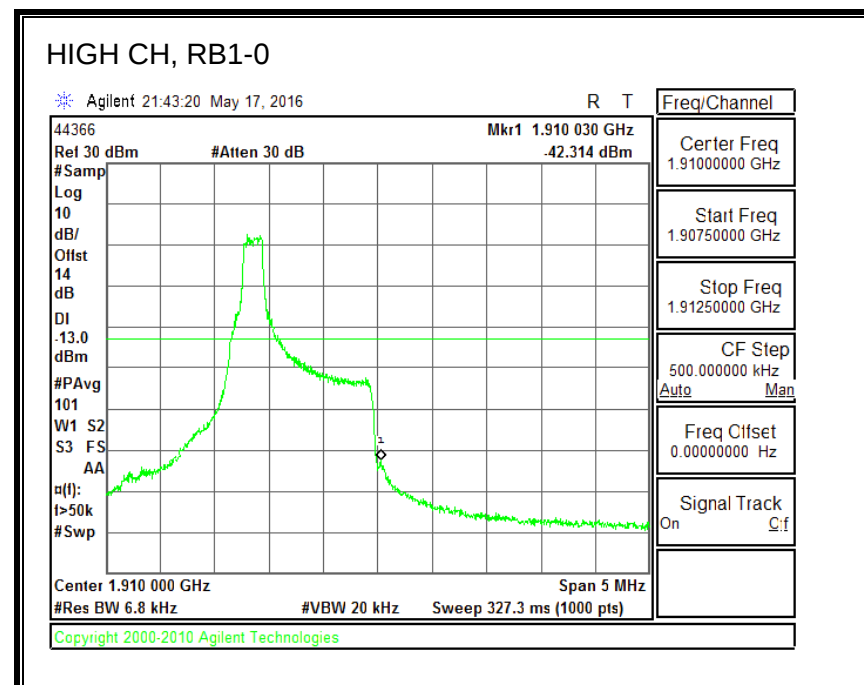
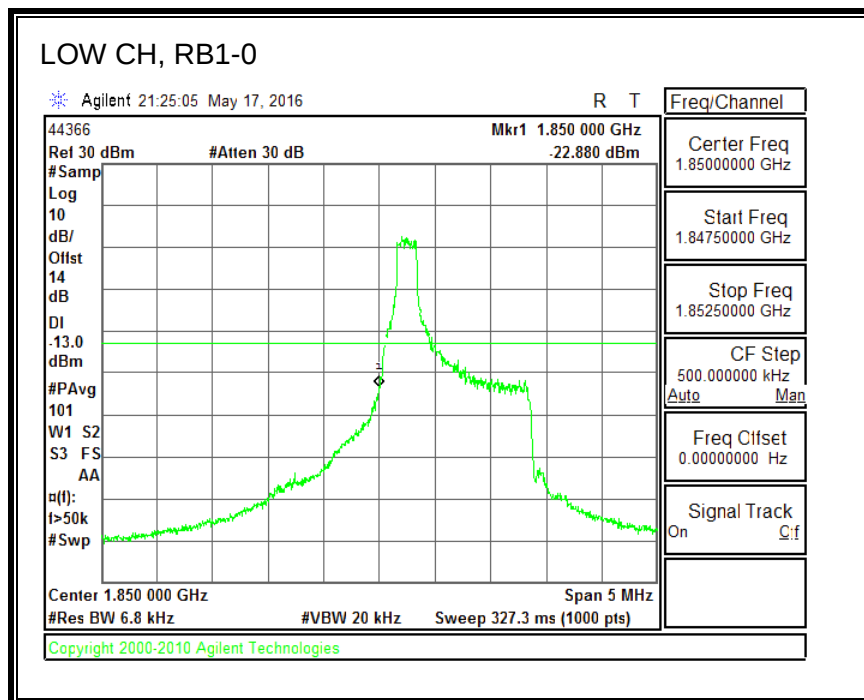
- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 27
- LTE Band 30
- LTE Band 41

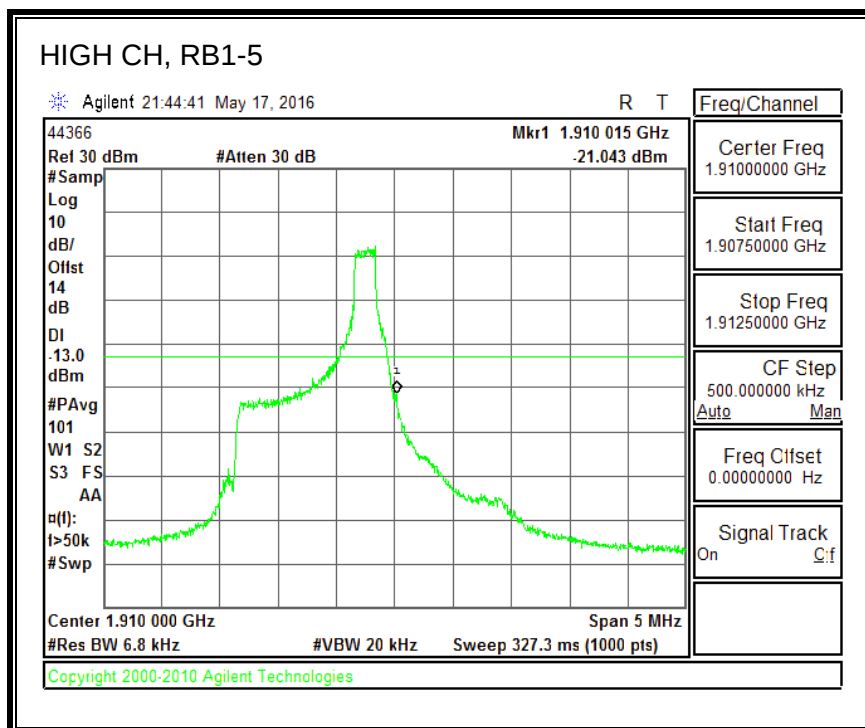
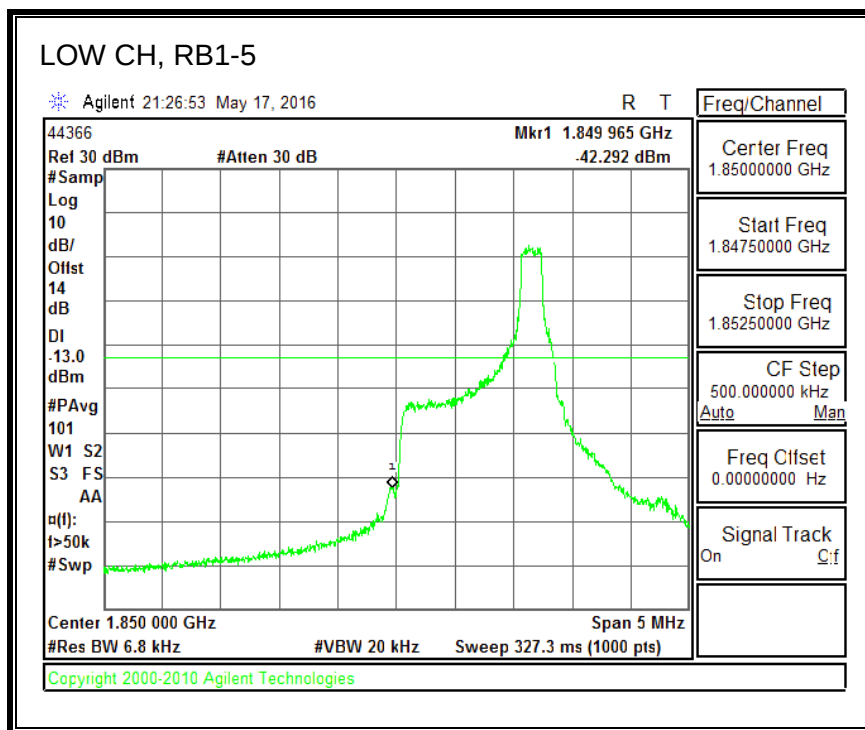
RESULTS

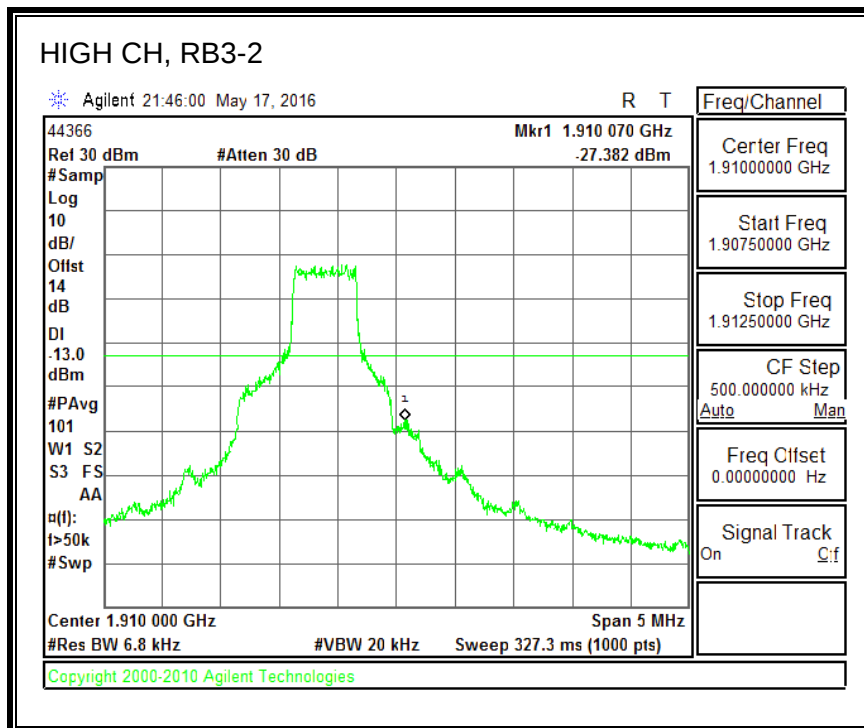
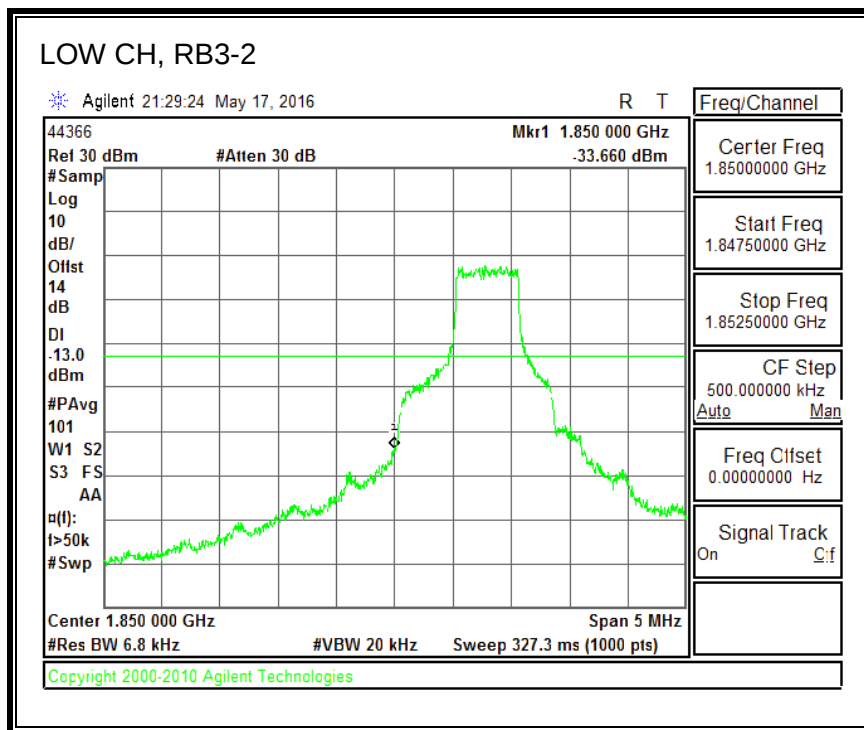
8.2.1. LTE BAND 2 BANDEDGE

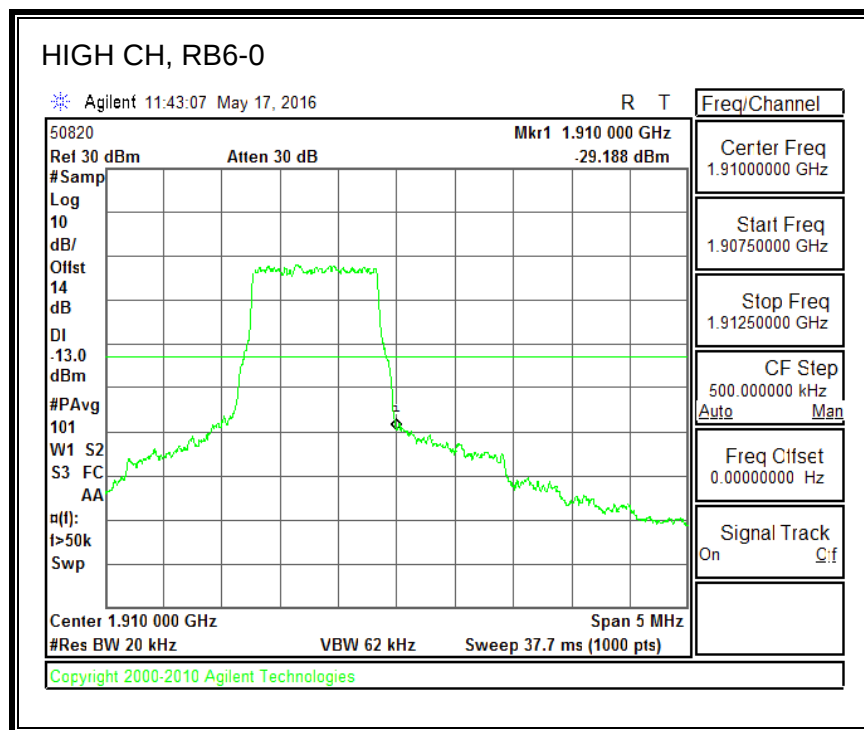
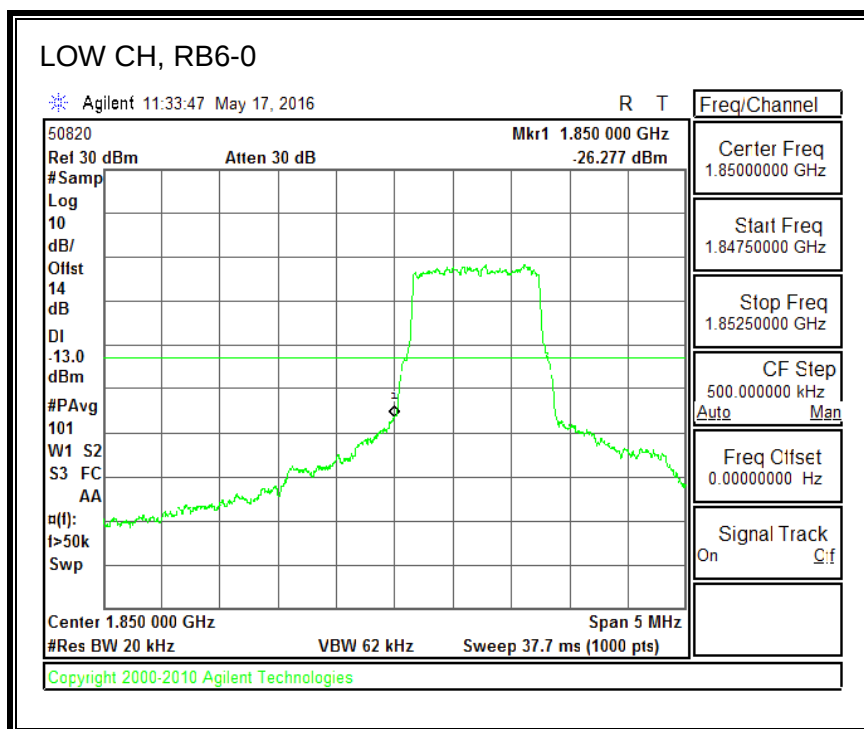
ID:	38806	Date:	5/17/16
------------	-------	--------------	---------

QPSK, (1.4 MHz BAND WIDTH)

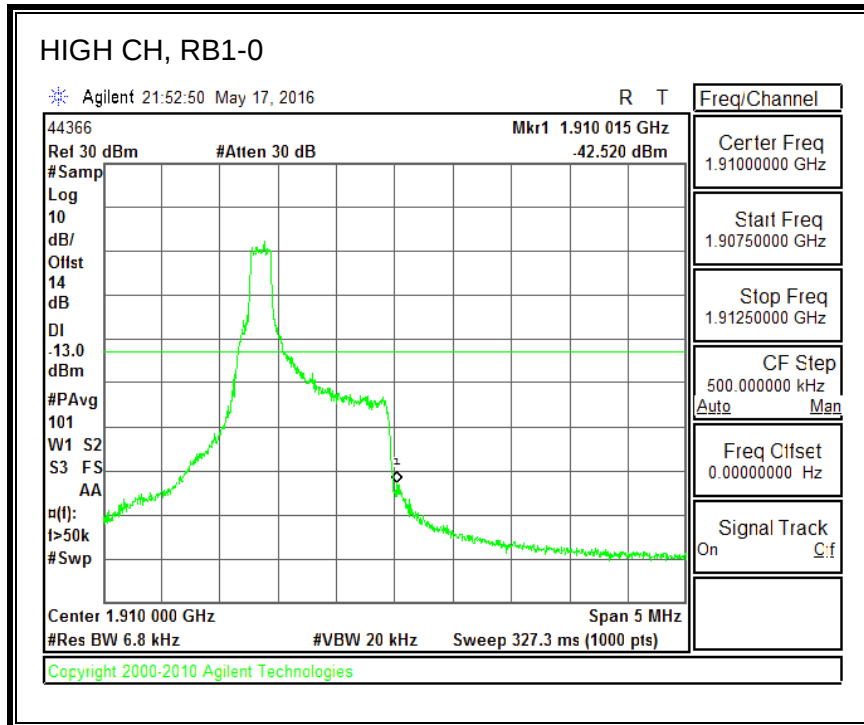
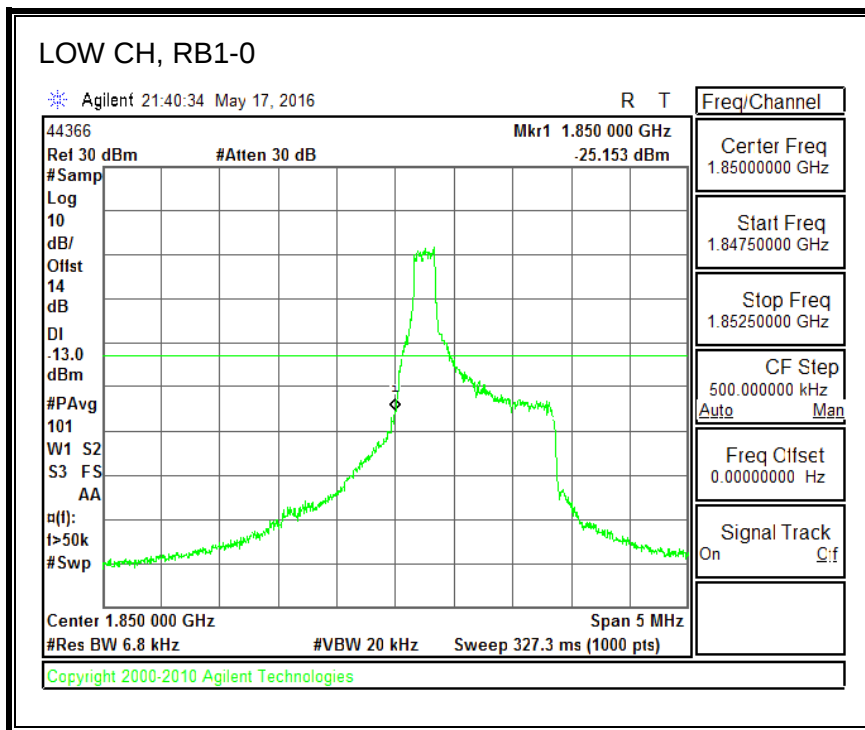


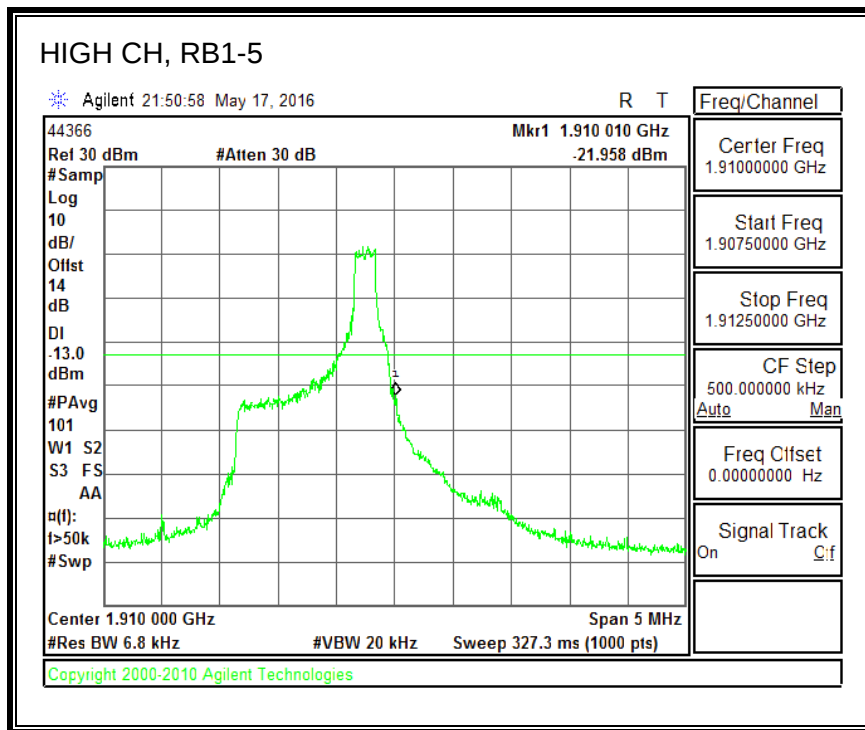
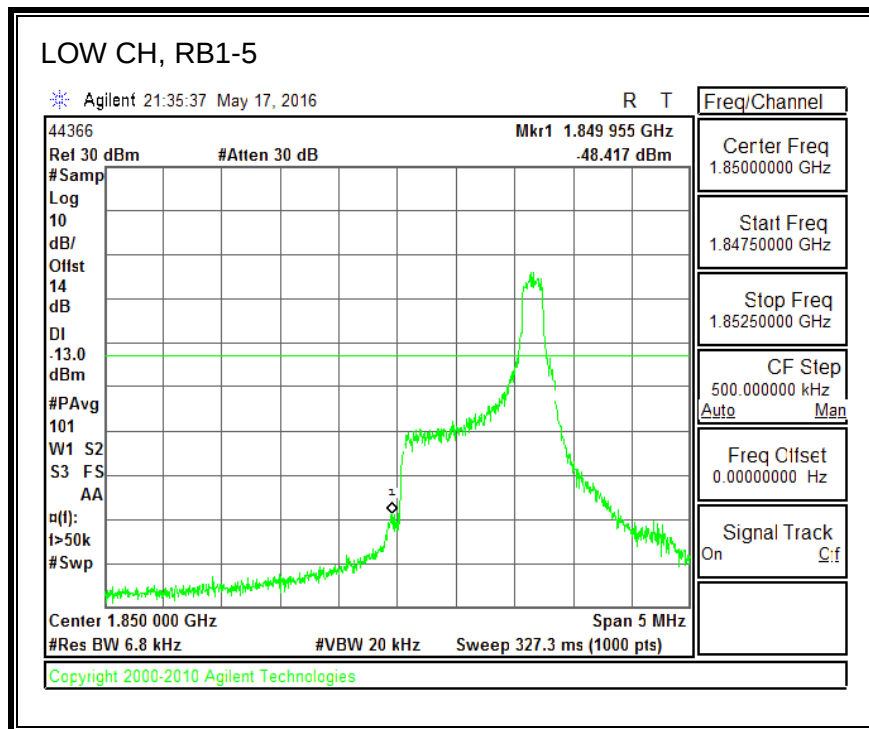


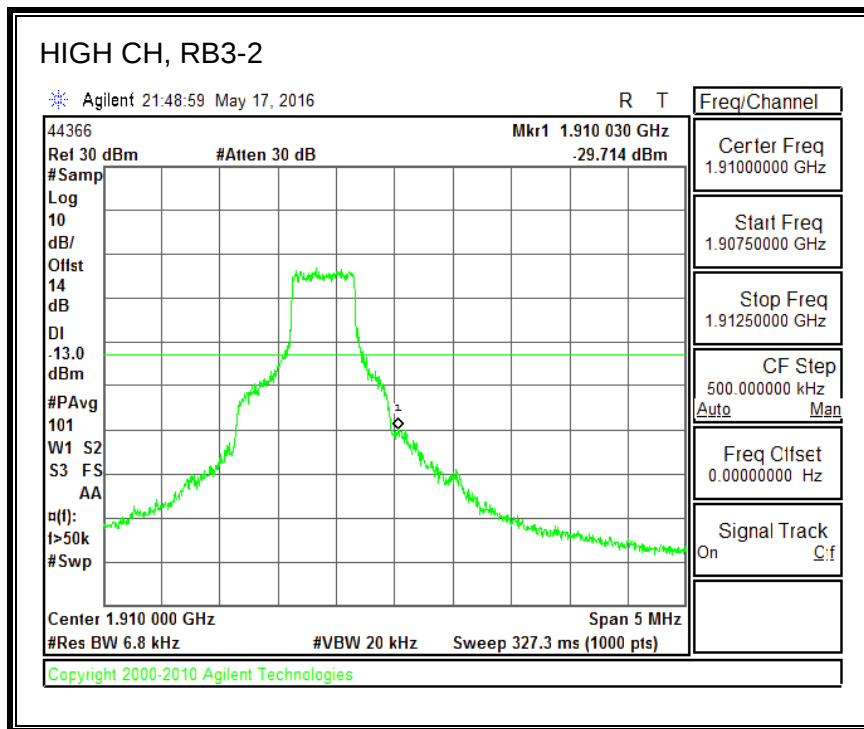
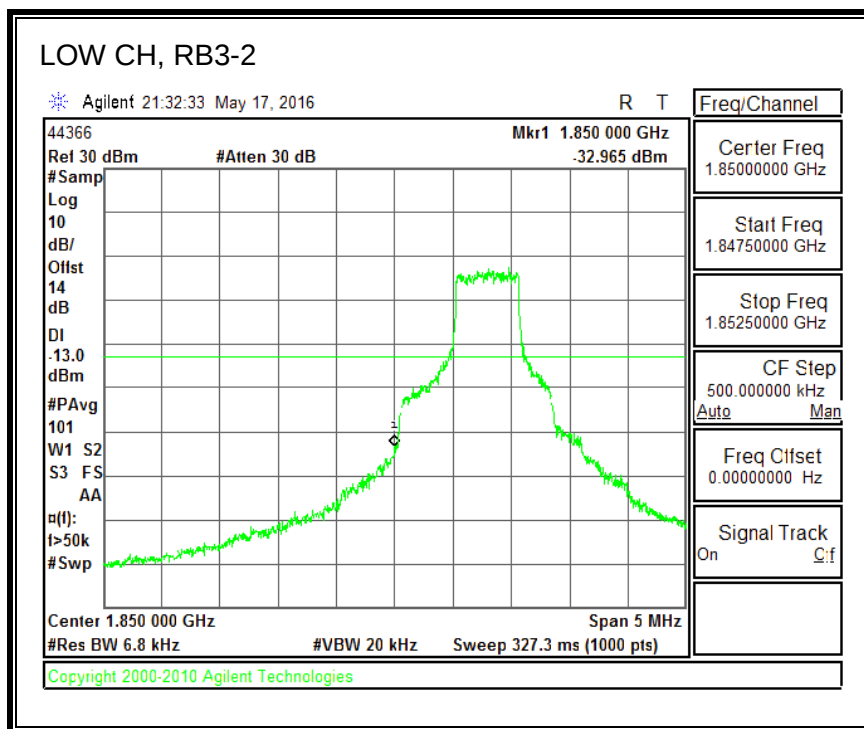


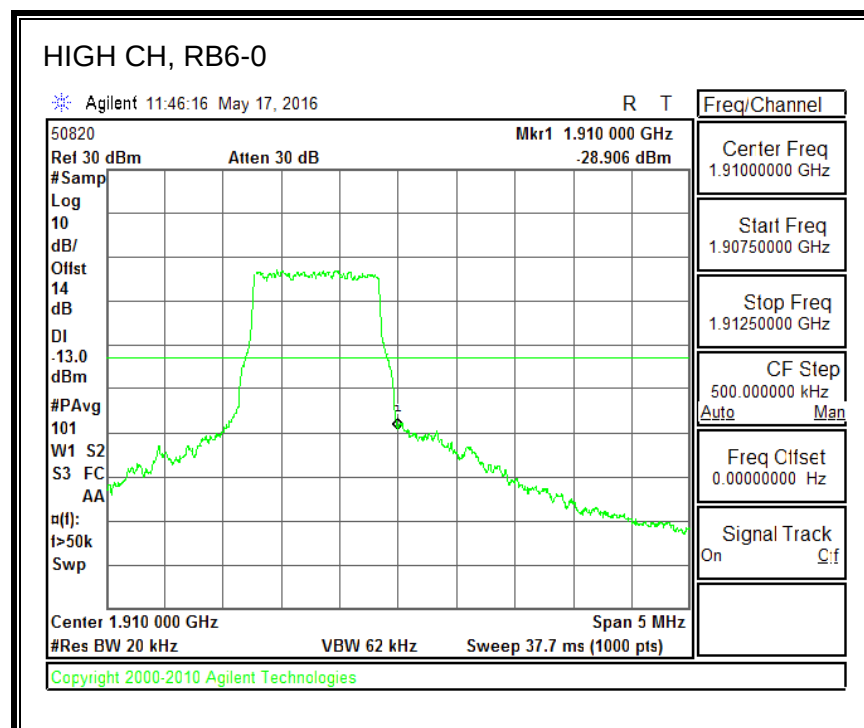
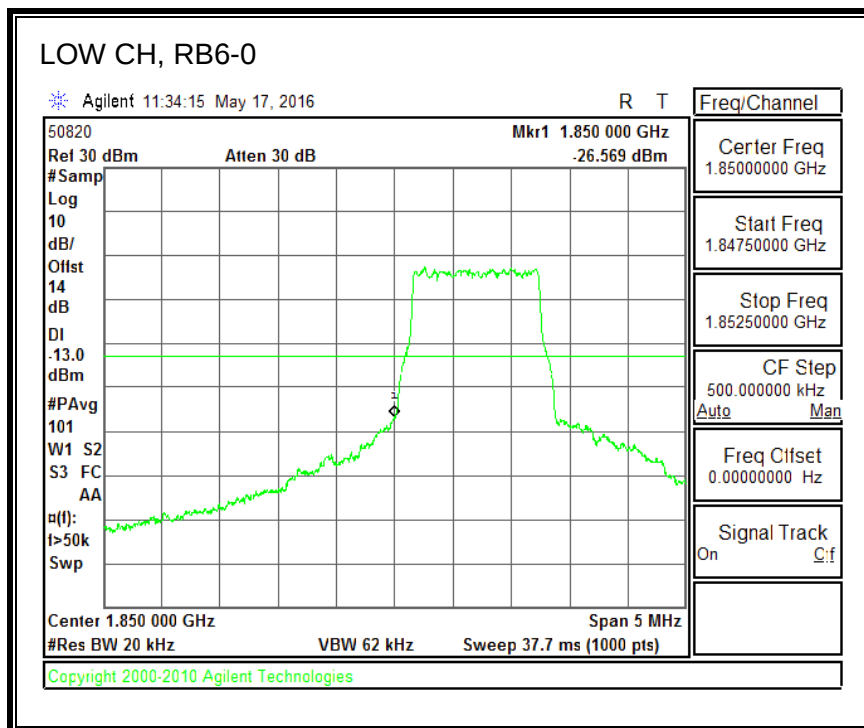


16QAM, (1.4 MHz BAND WIDTH)

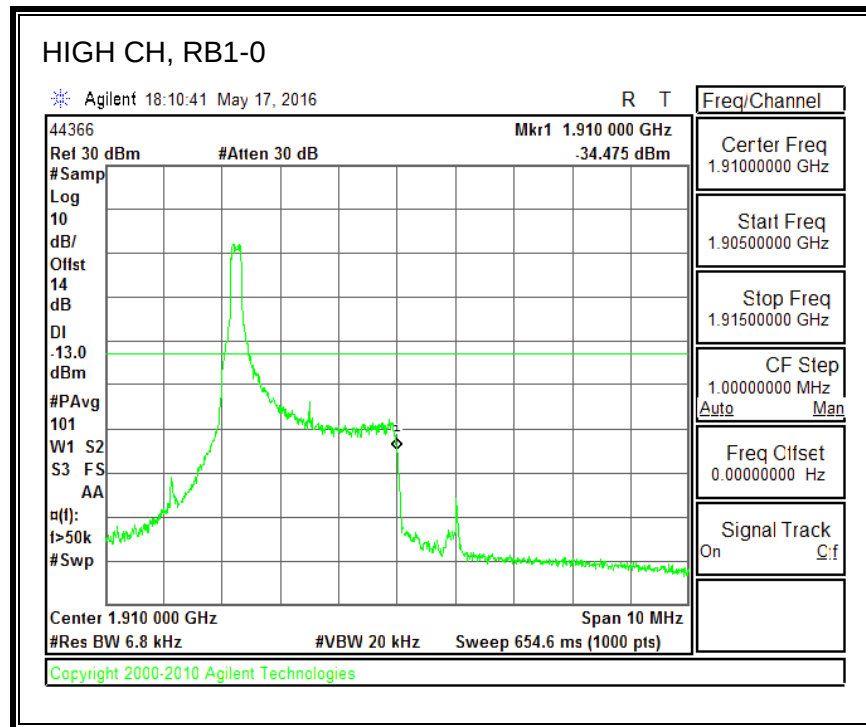
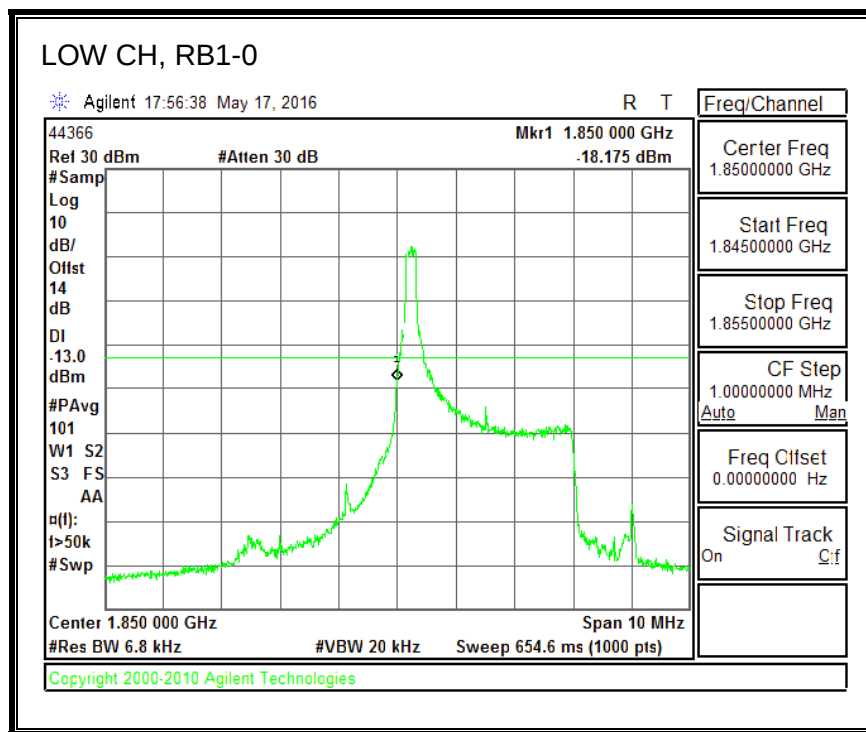


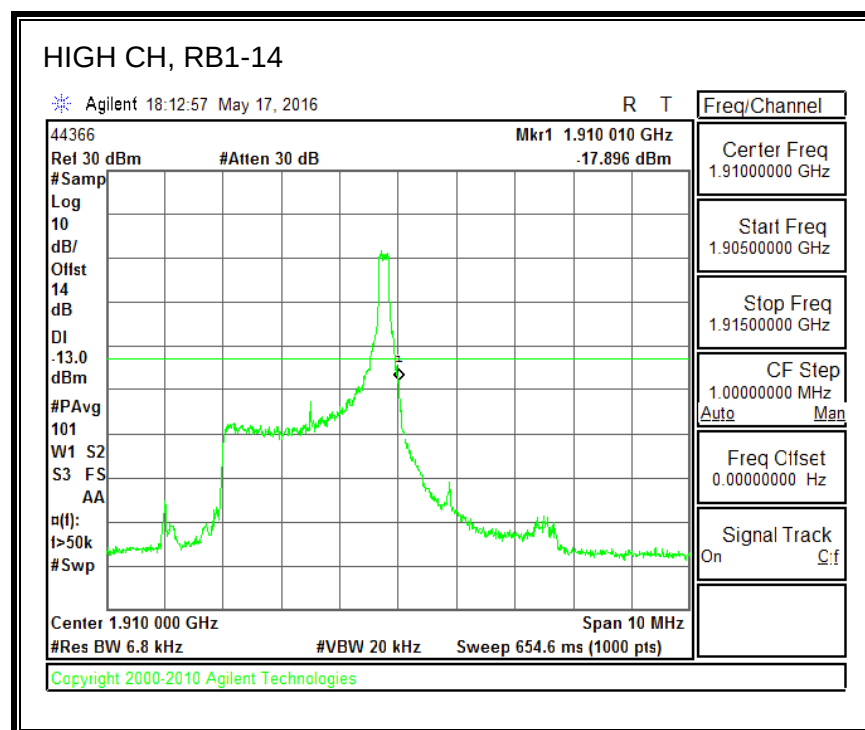
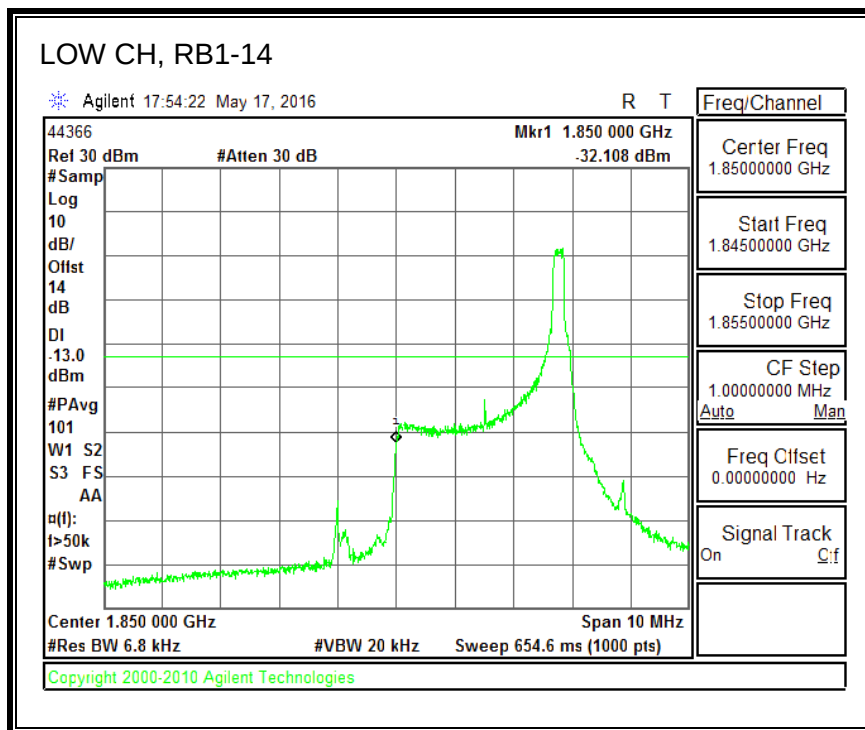


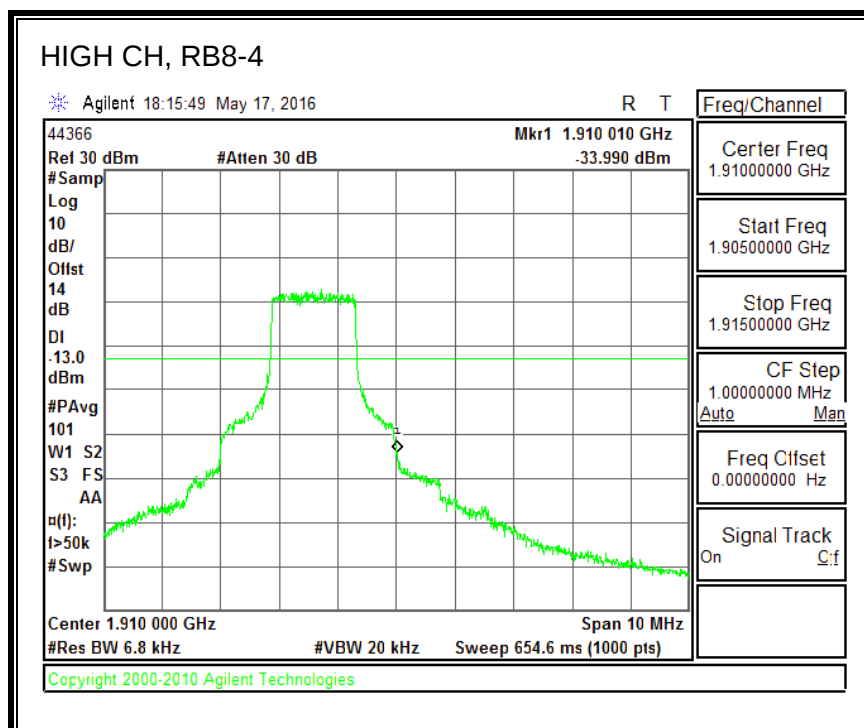
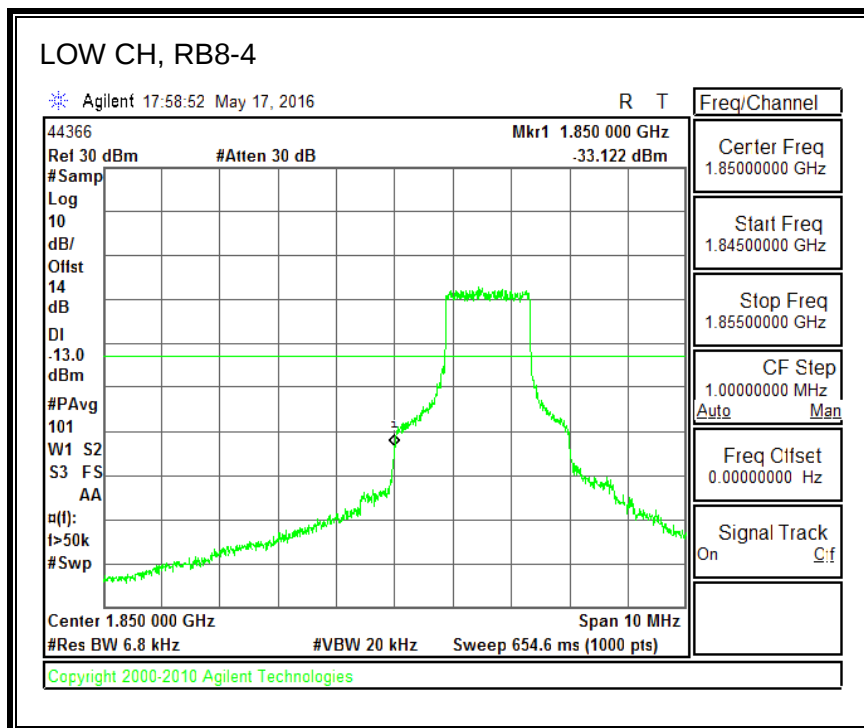


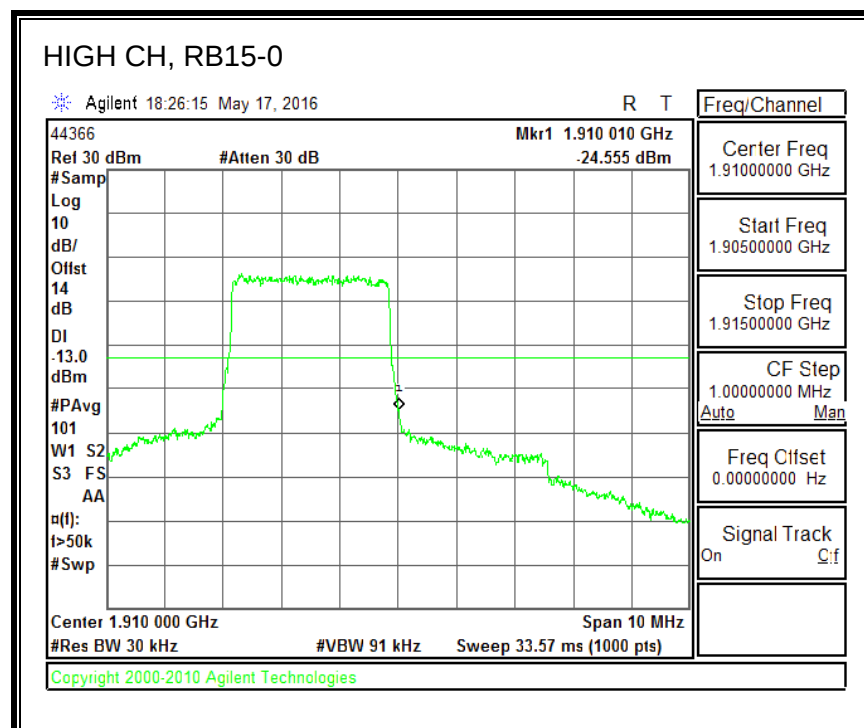
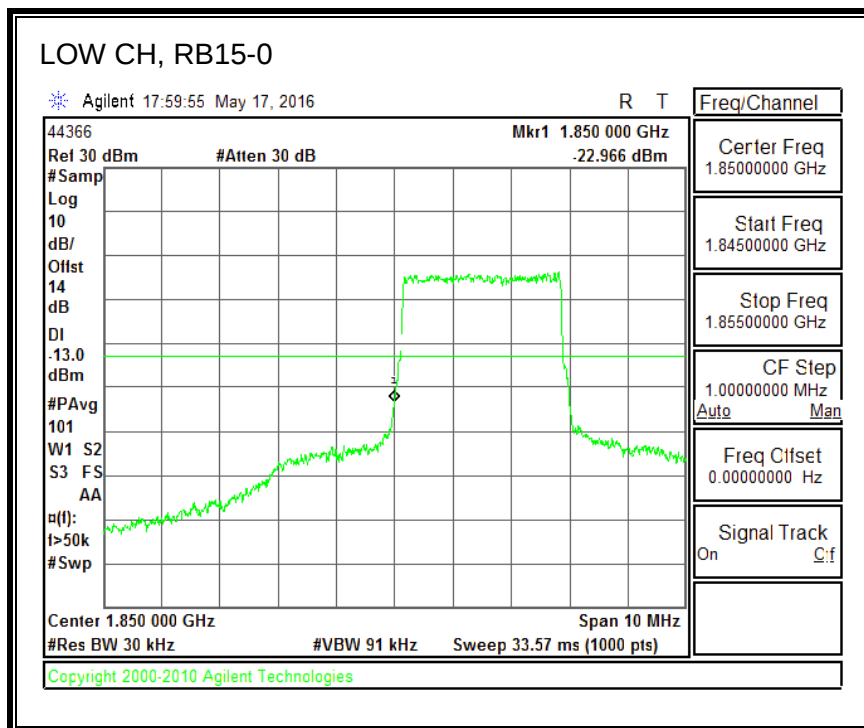


QPSK, (3.0 MHz BAND WIDTH)

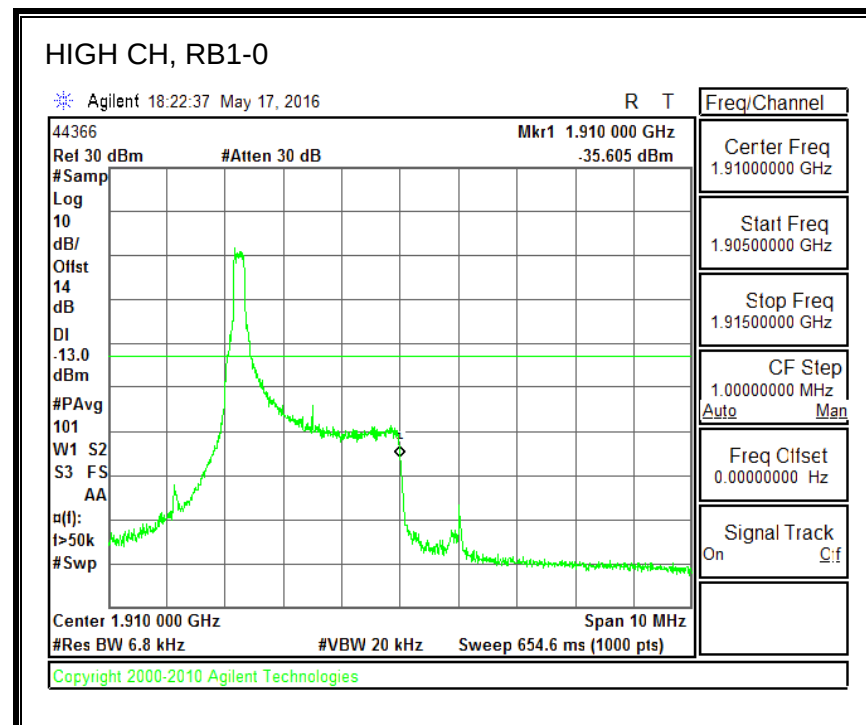
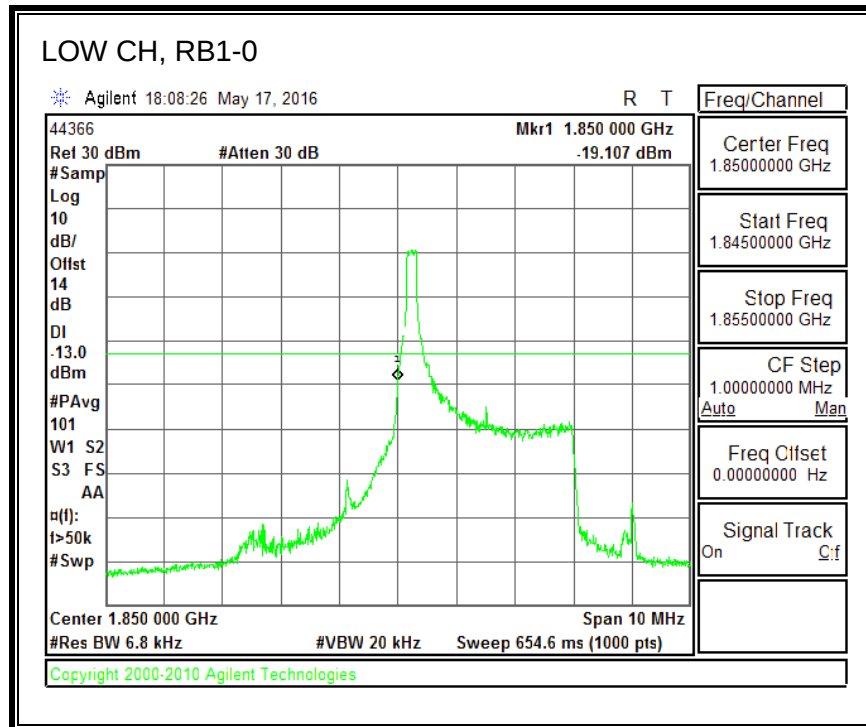


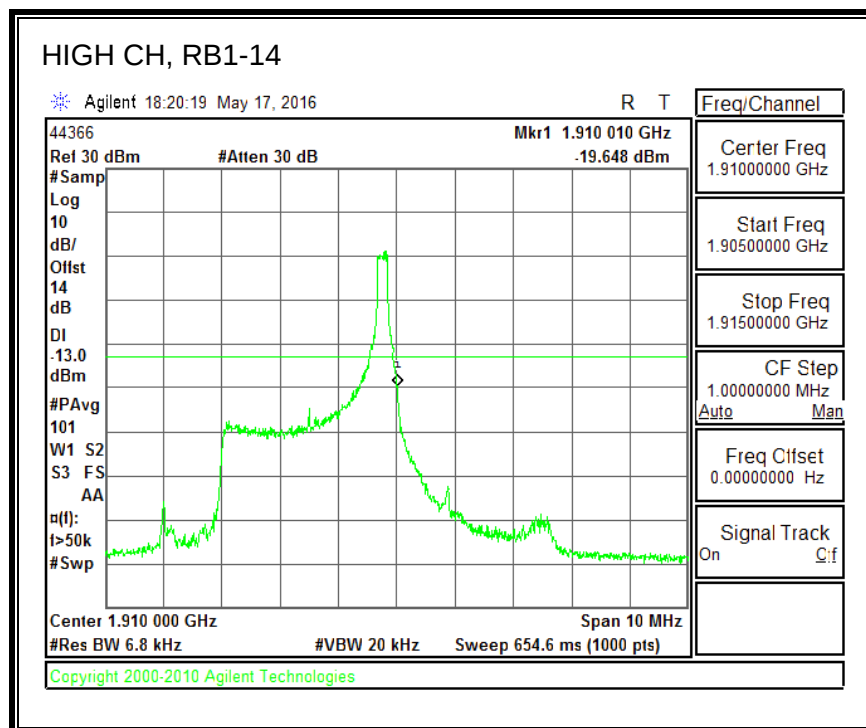
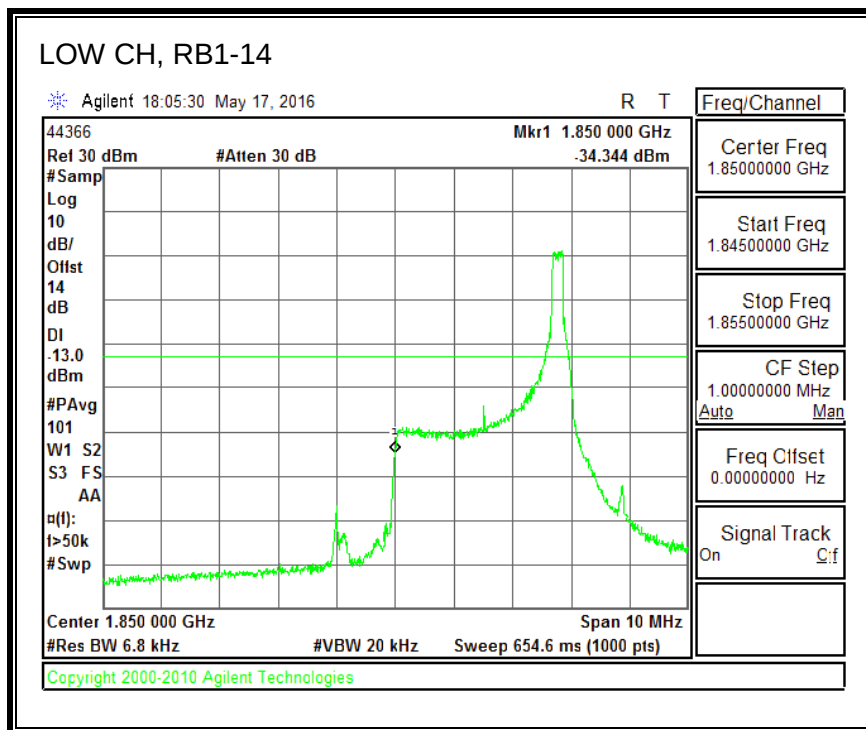


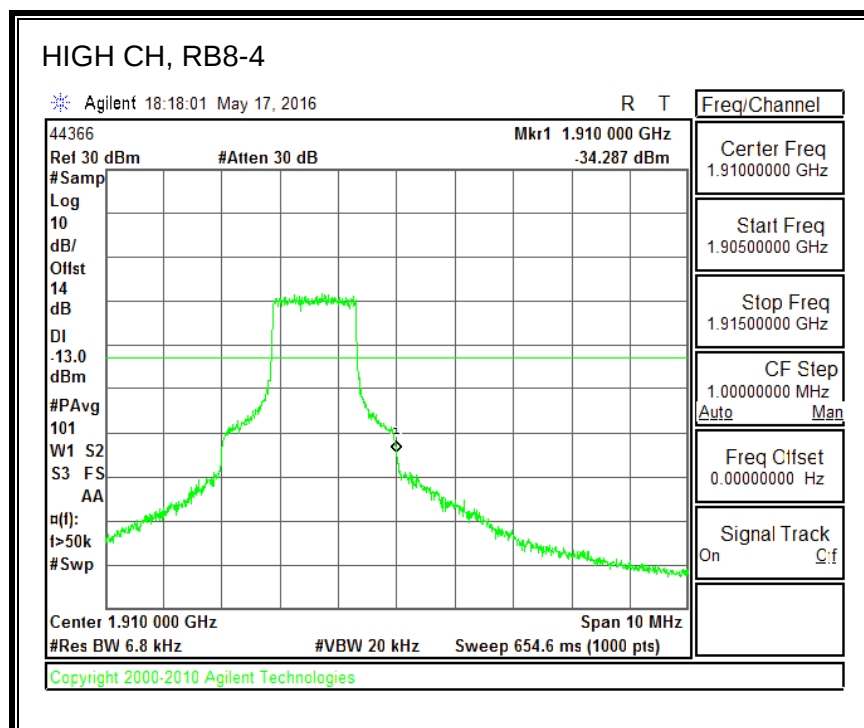
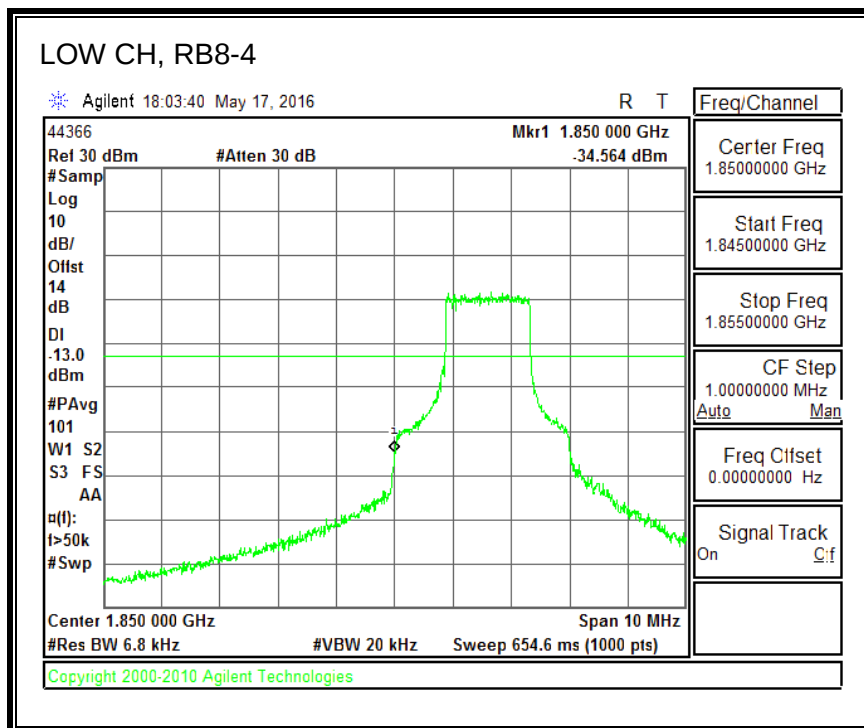


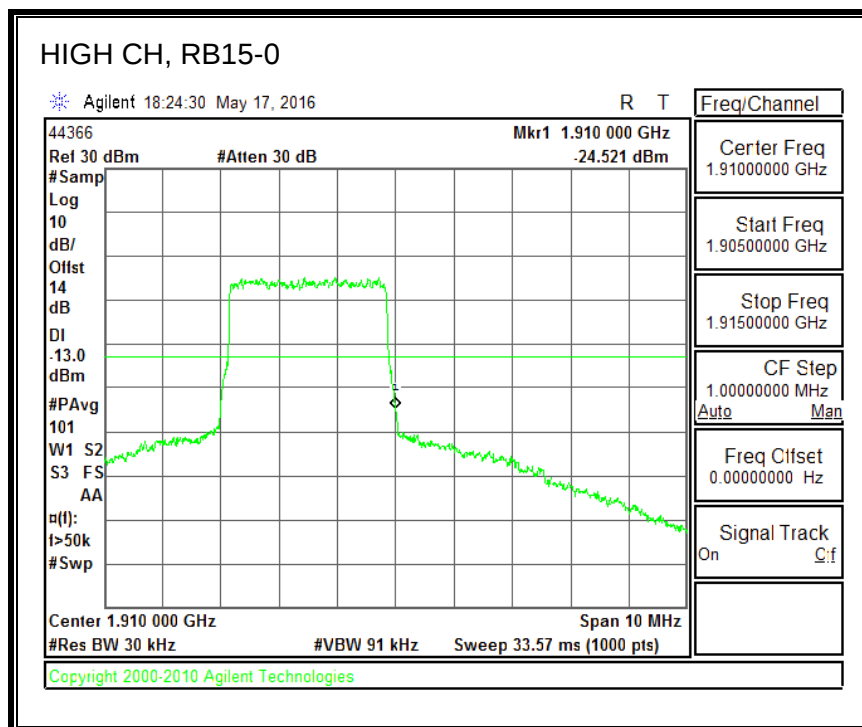
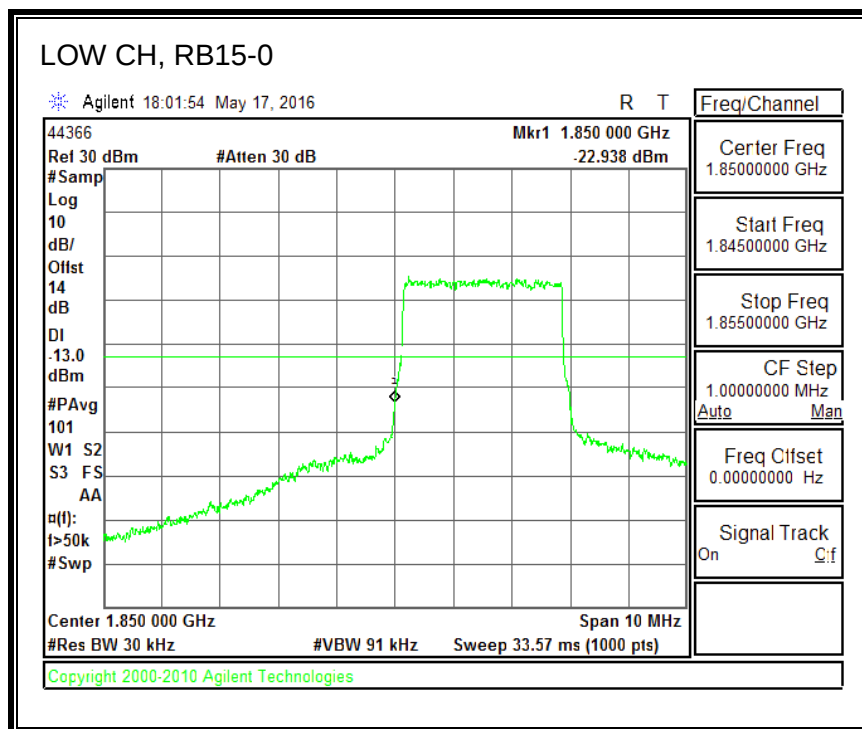


16QAM, (3.0 MHz BAND WIDTH)

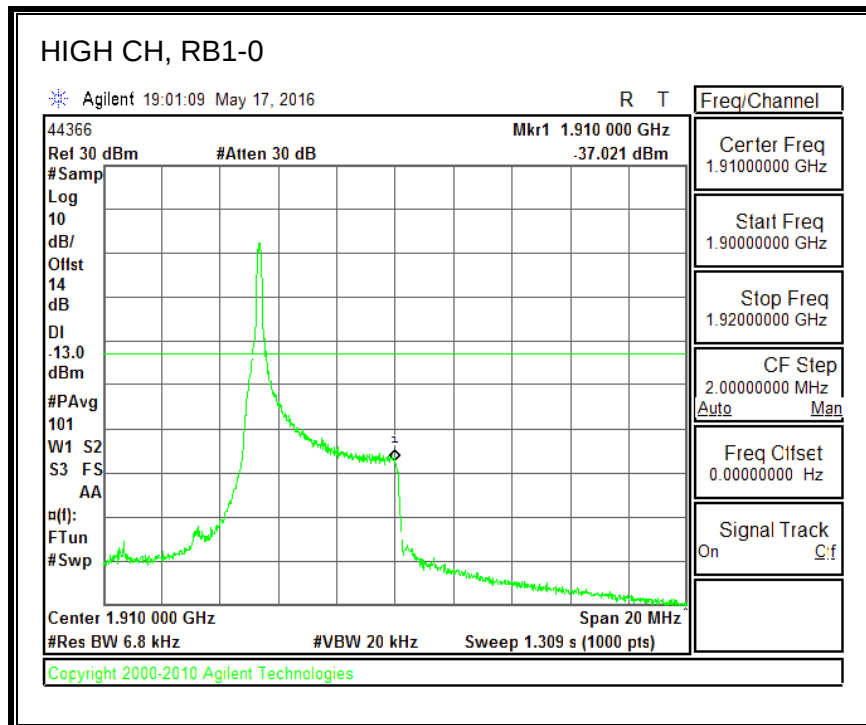
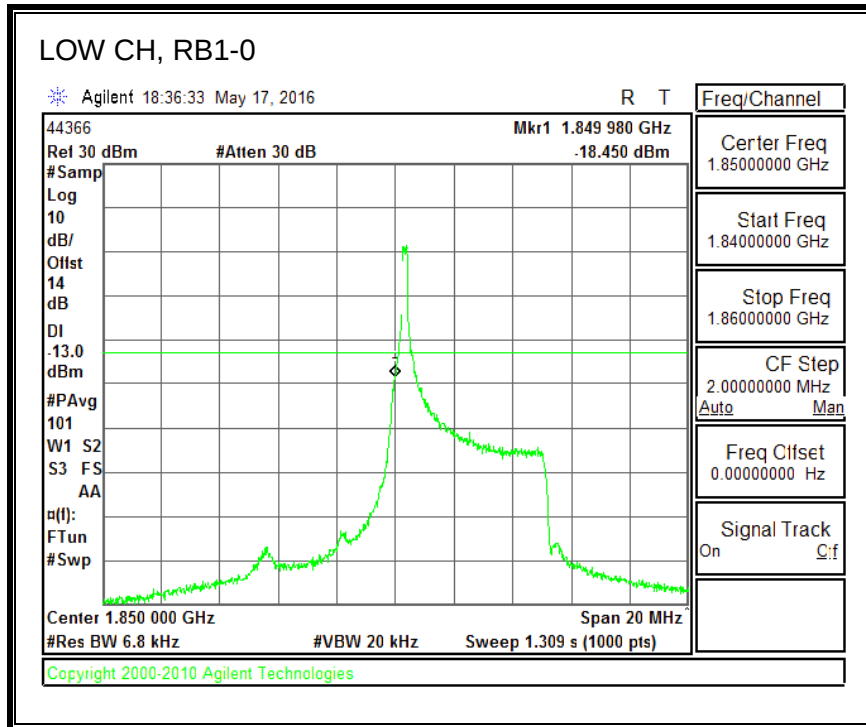


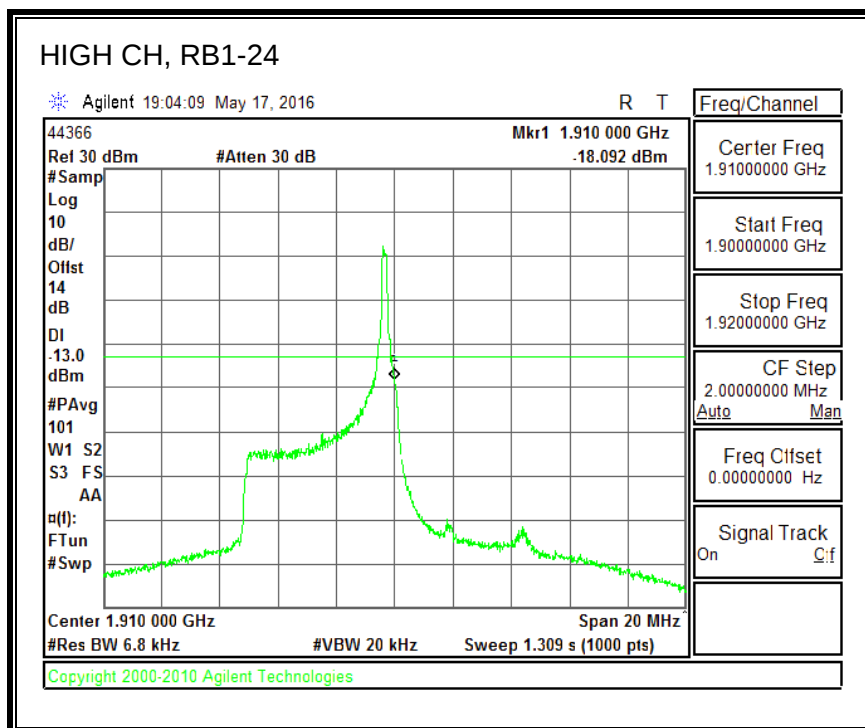
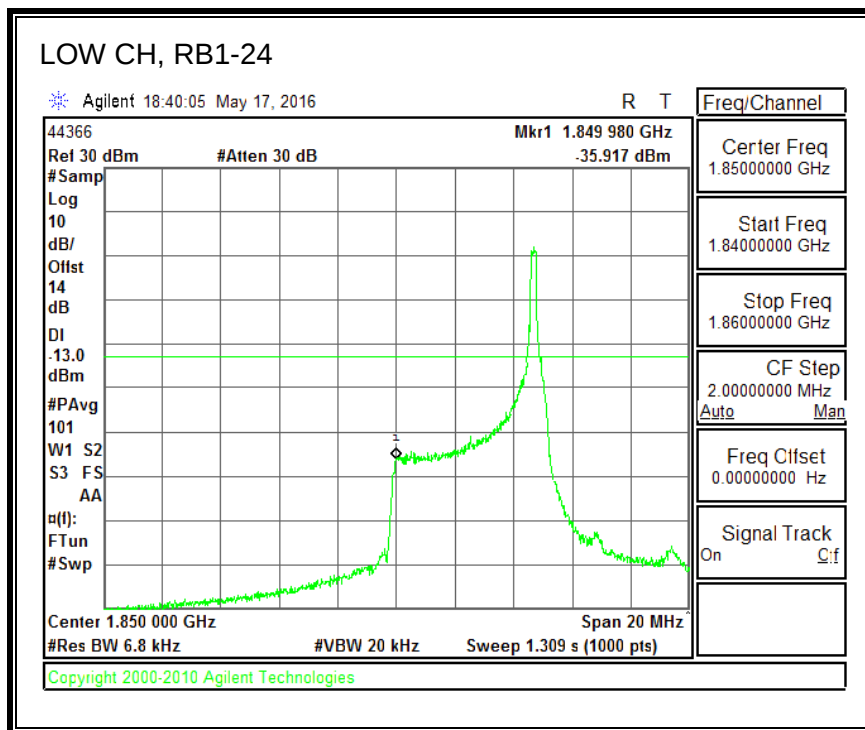


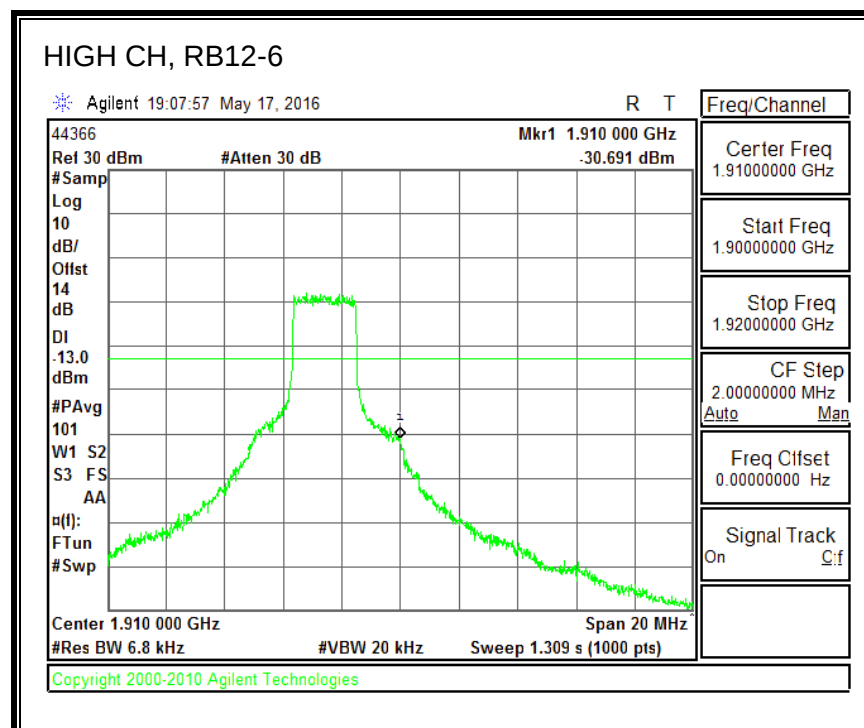
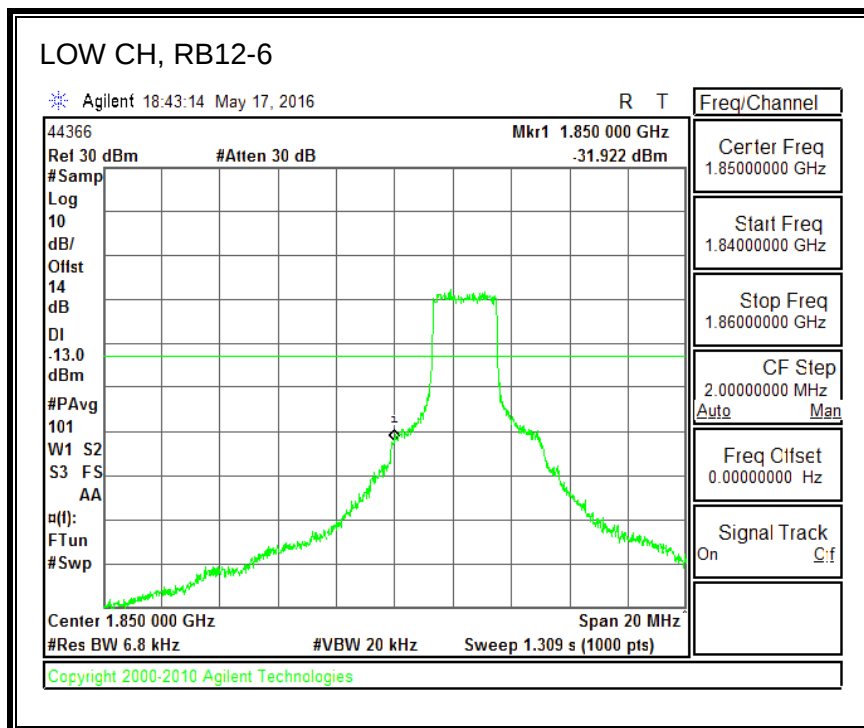


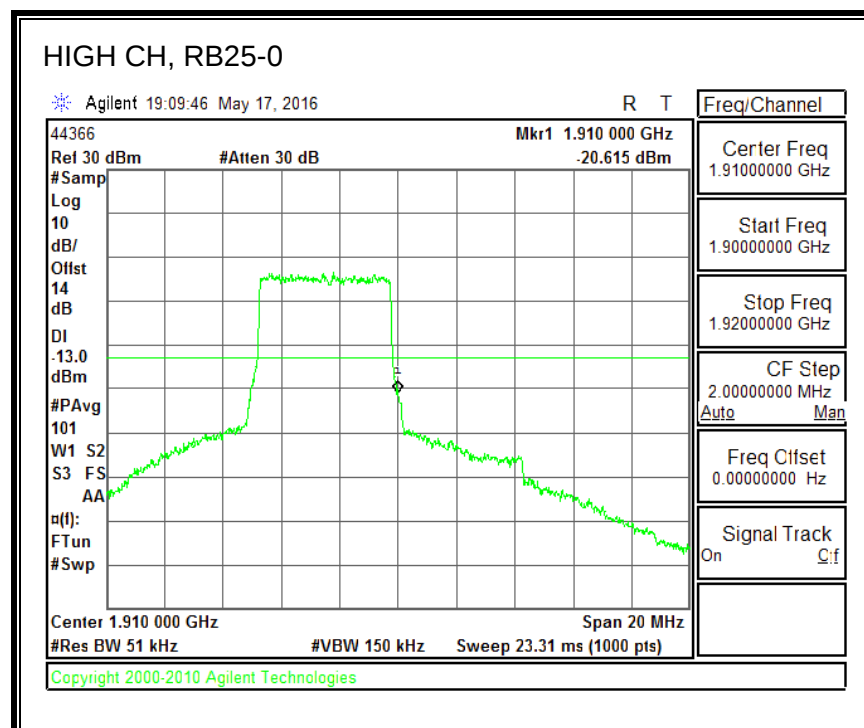
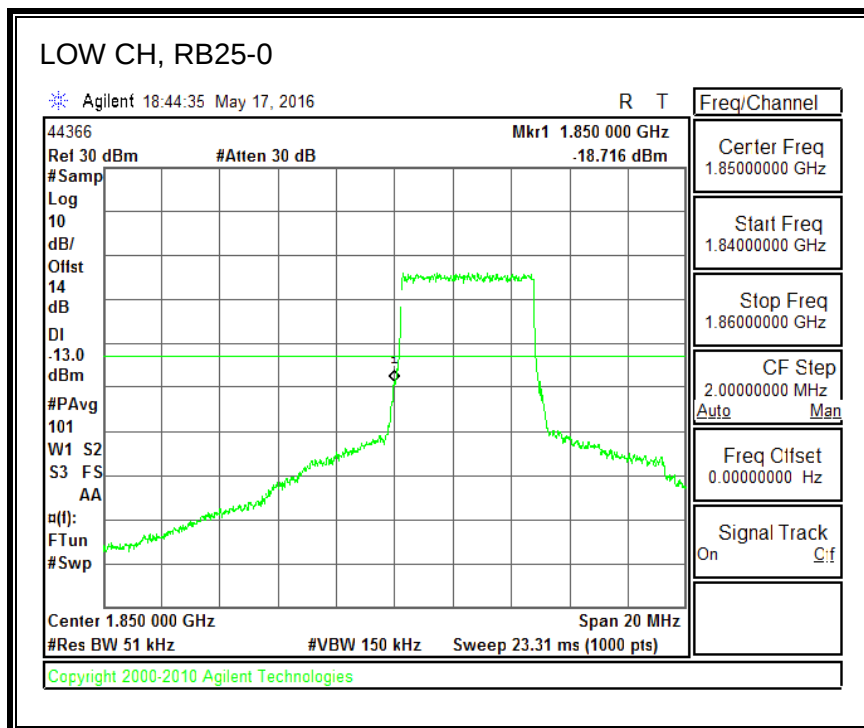


QPSK, (5.0 MHz BAND WIDTH)

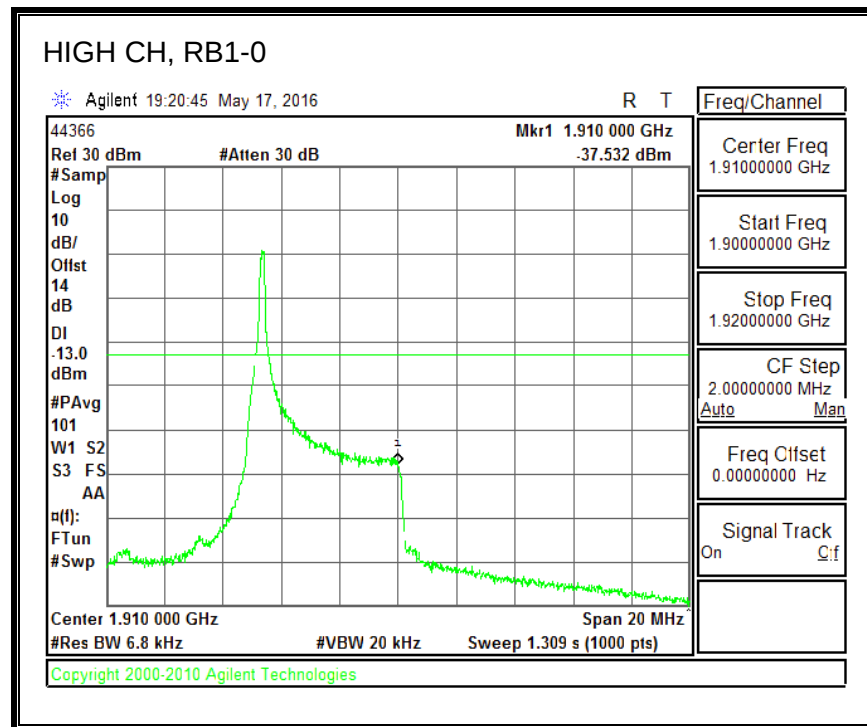
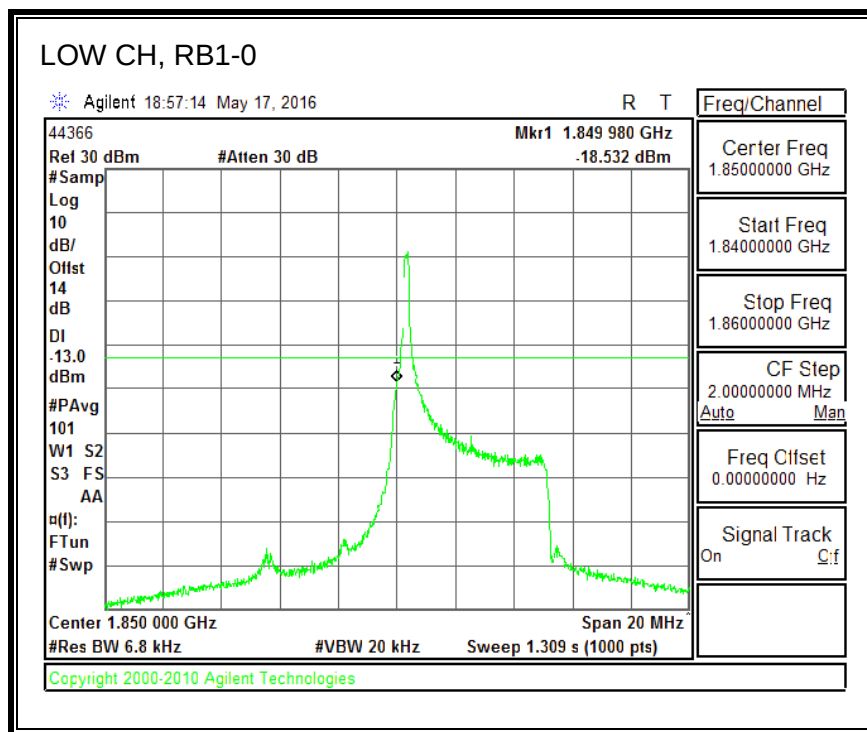


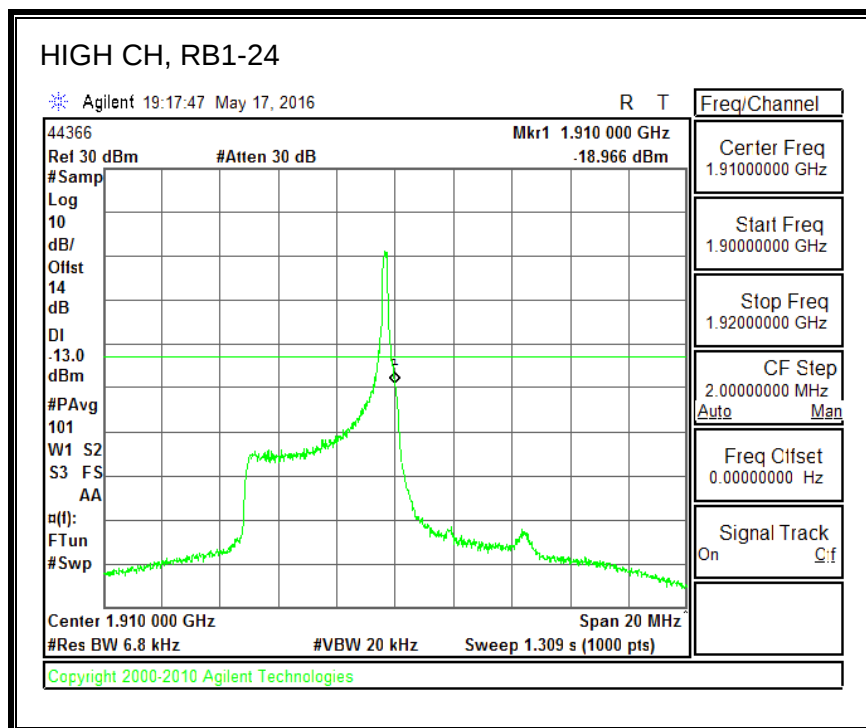
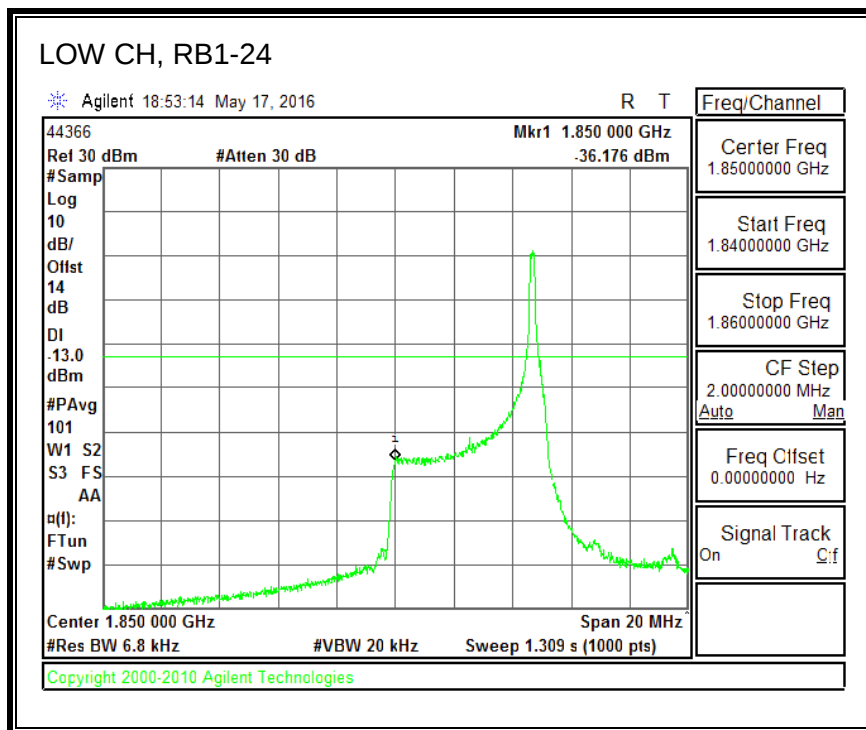


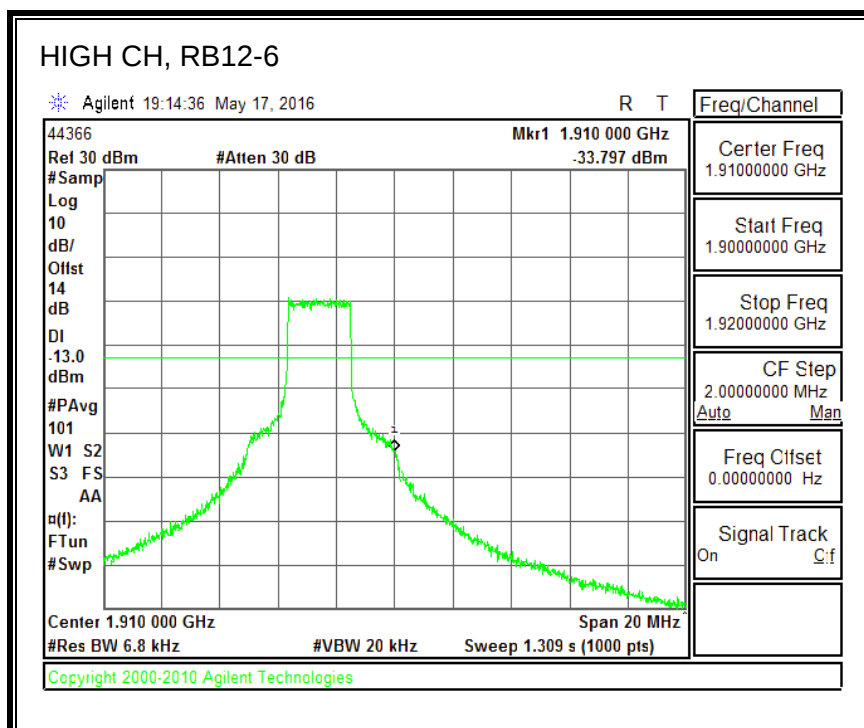
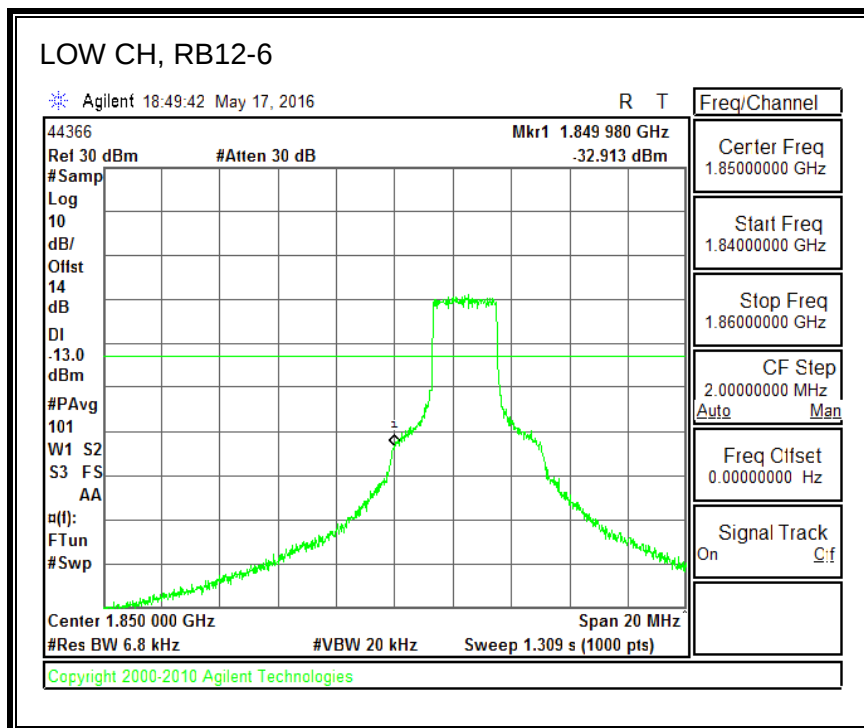


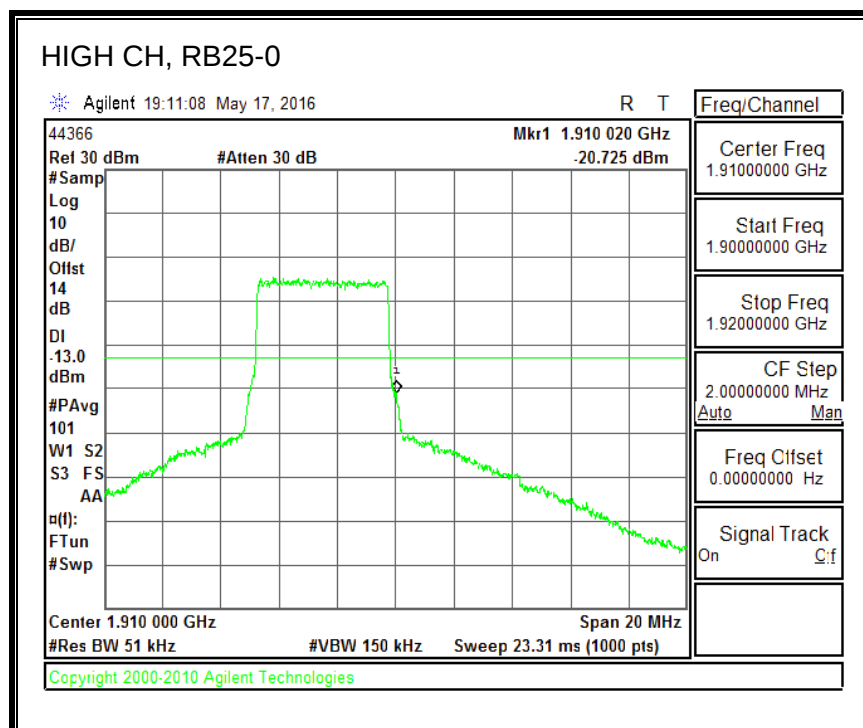
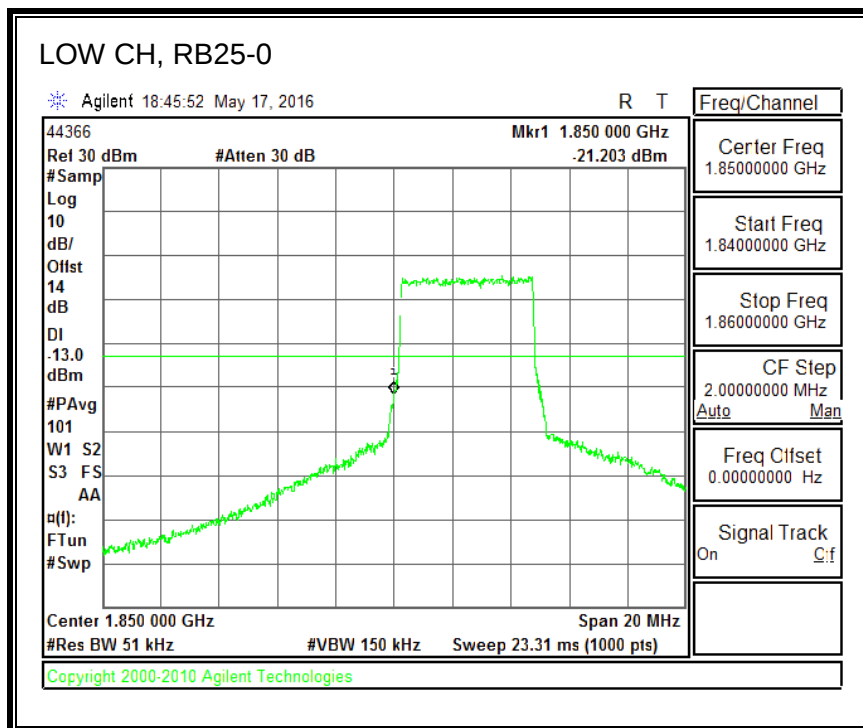


16QAM, (5.0 MHz BAND WIDTH)

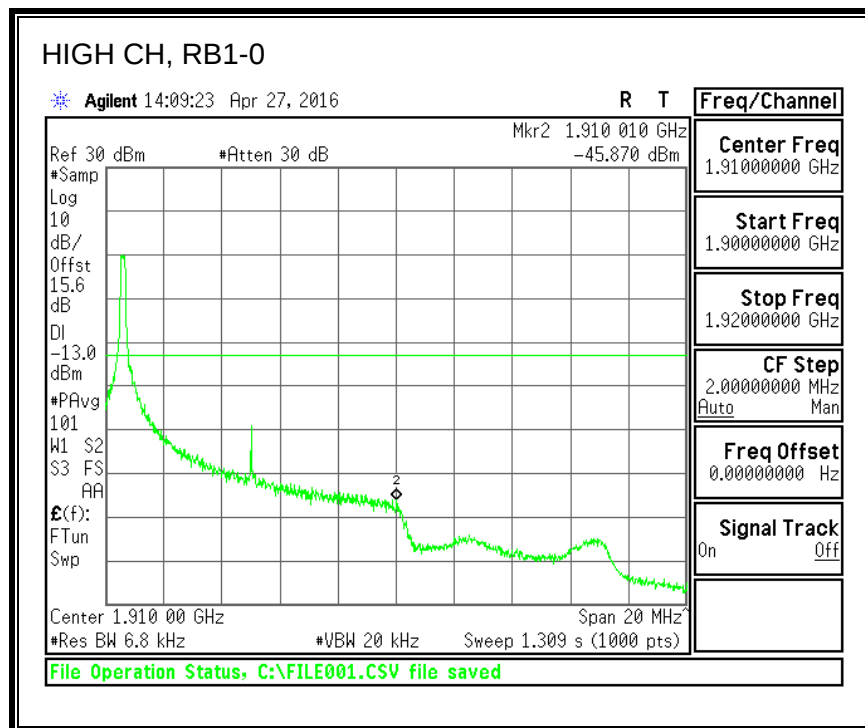
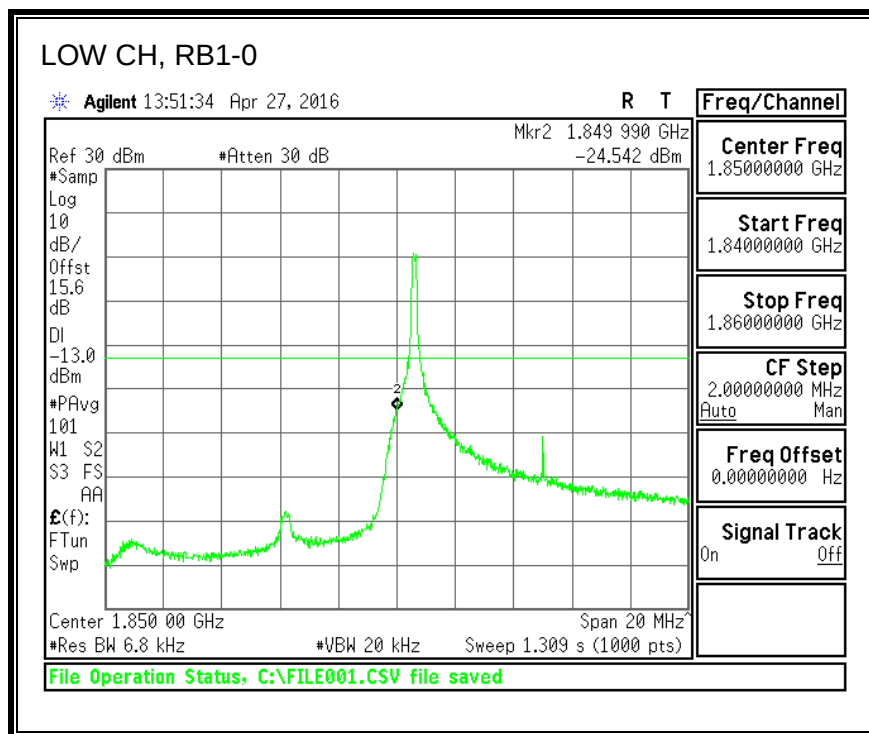


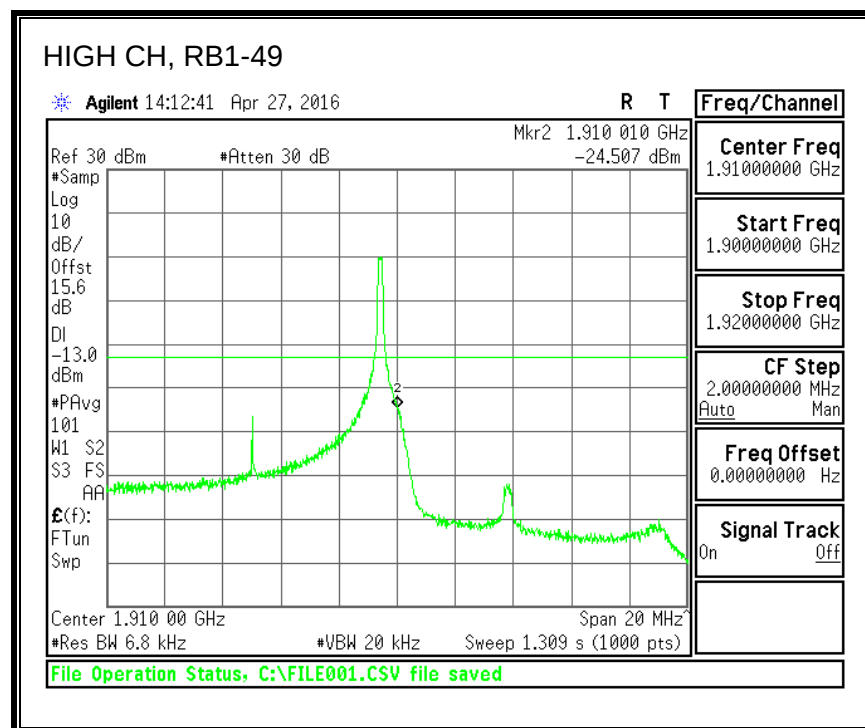
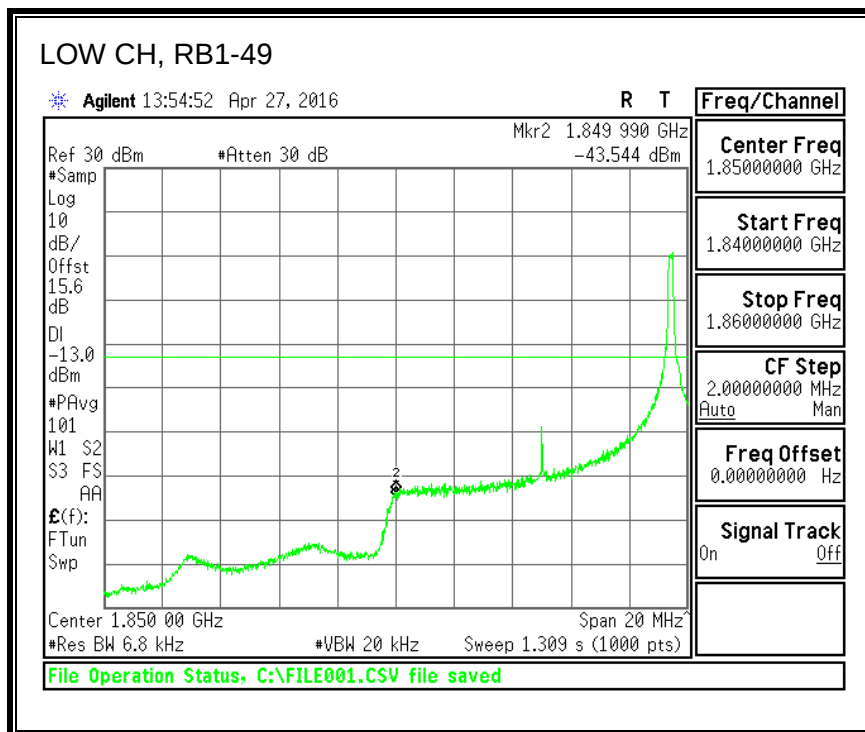


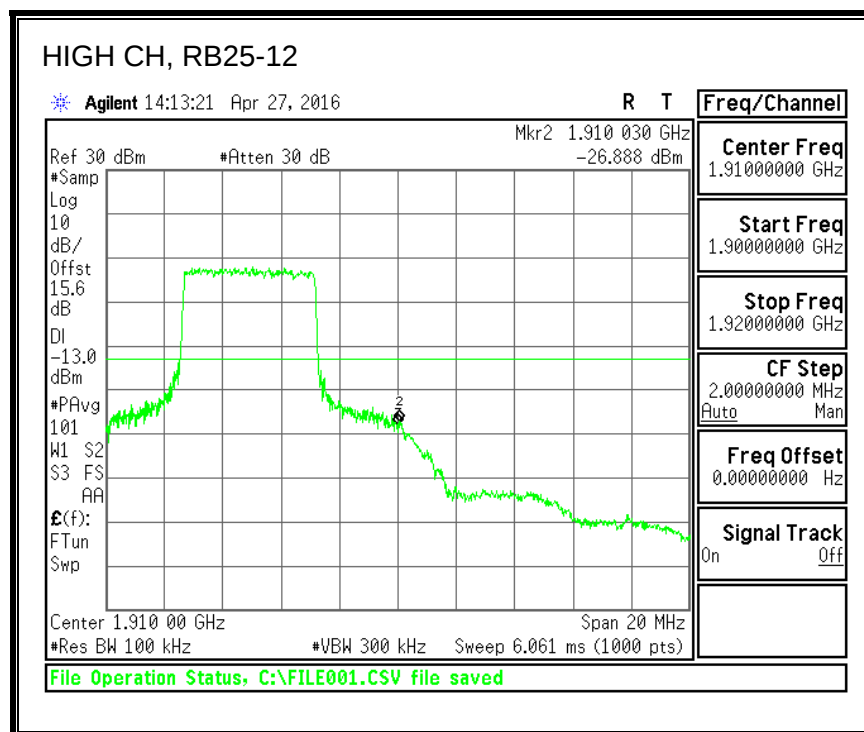
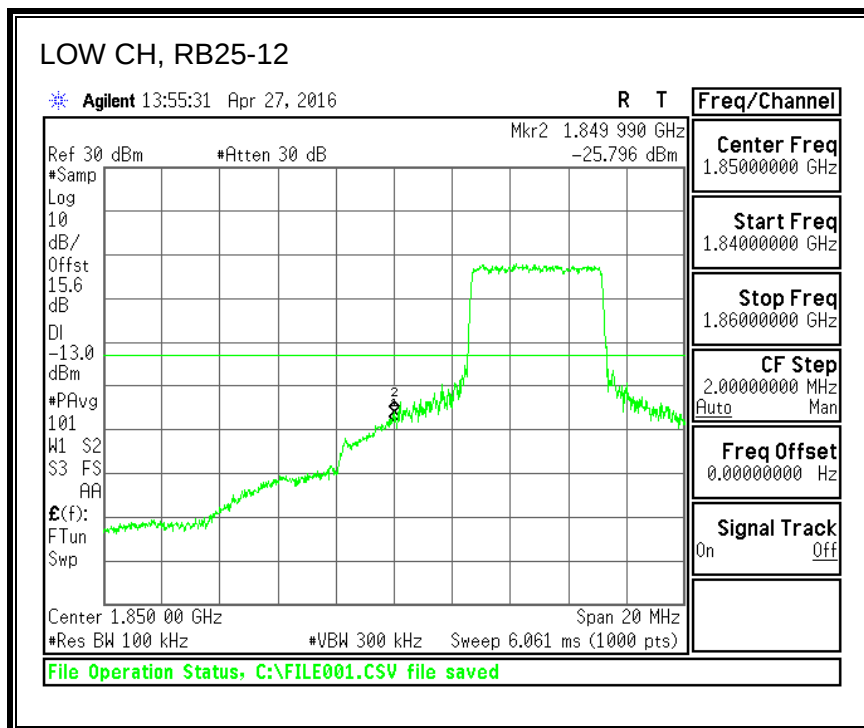


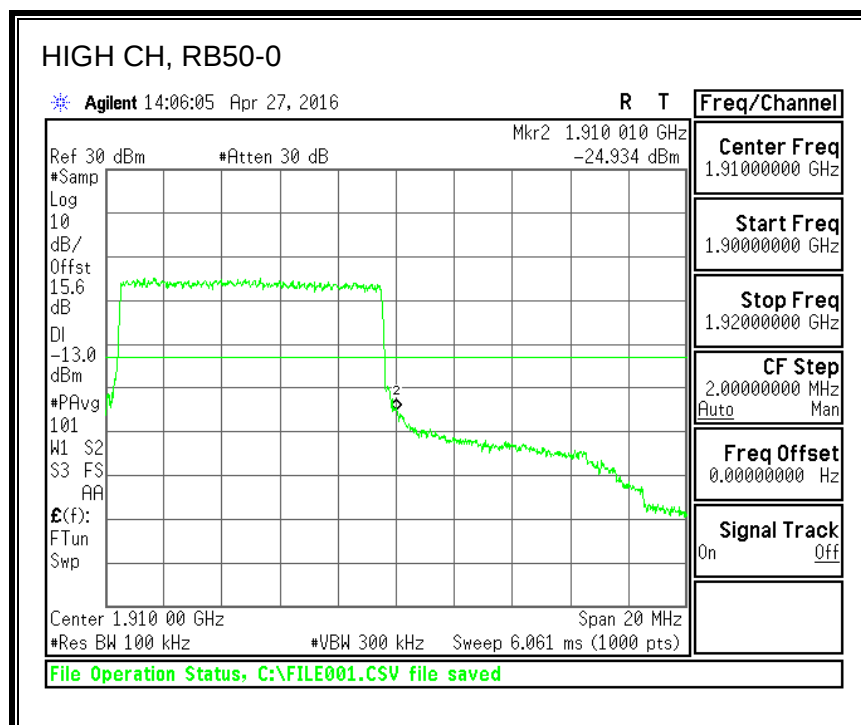
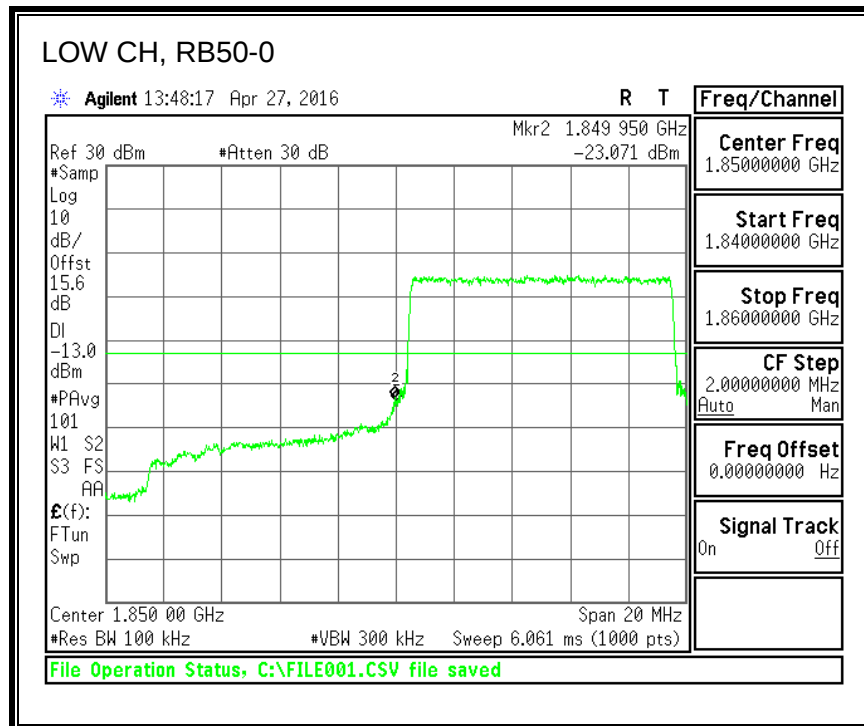


QPSK, (10.0 MHz BAND WIDTH)

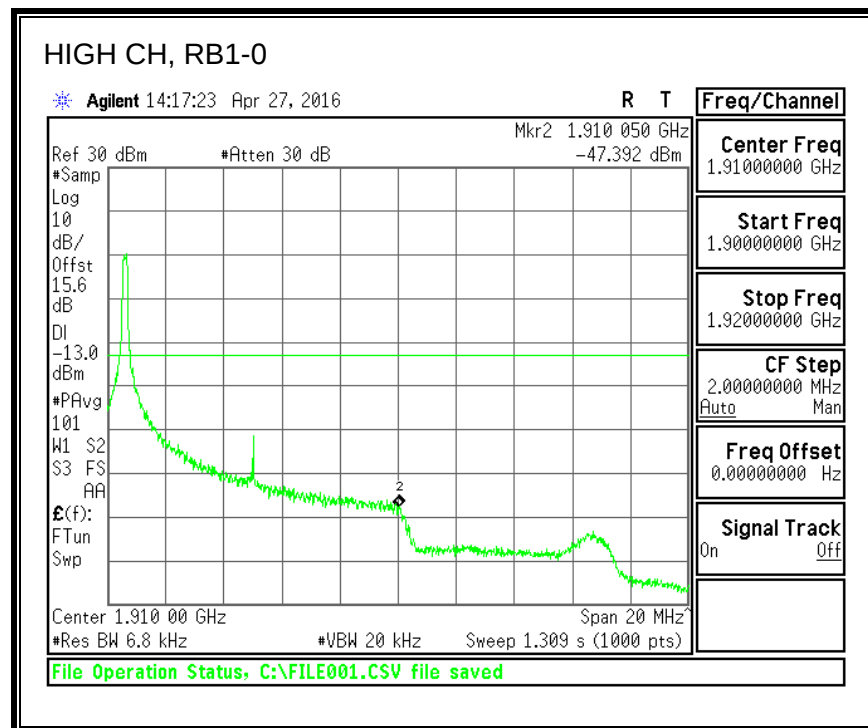
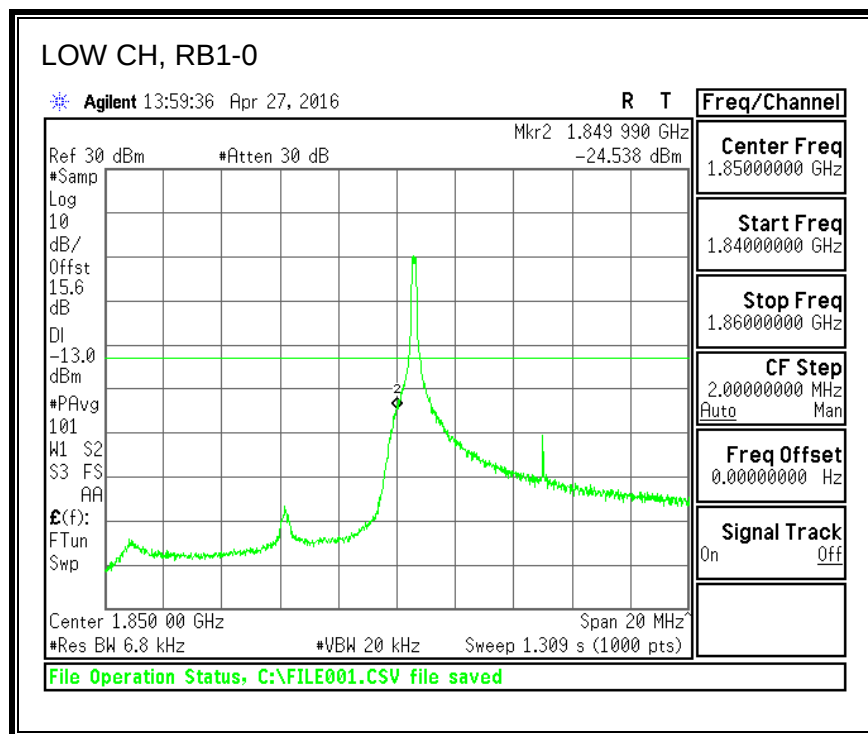


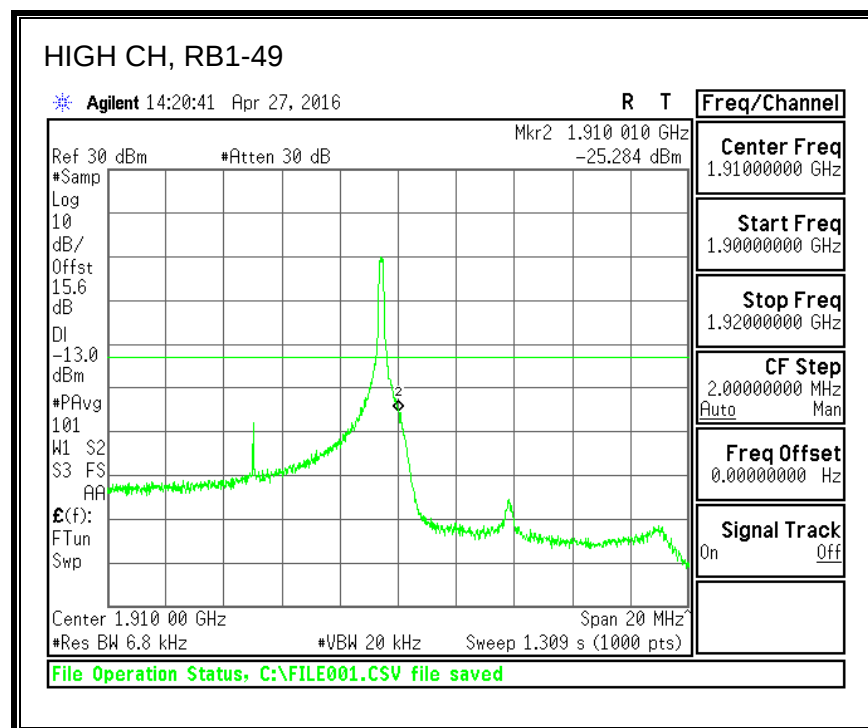
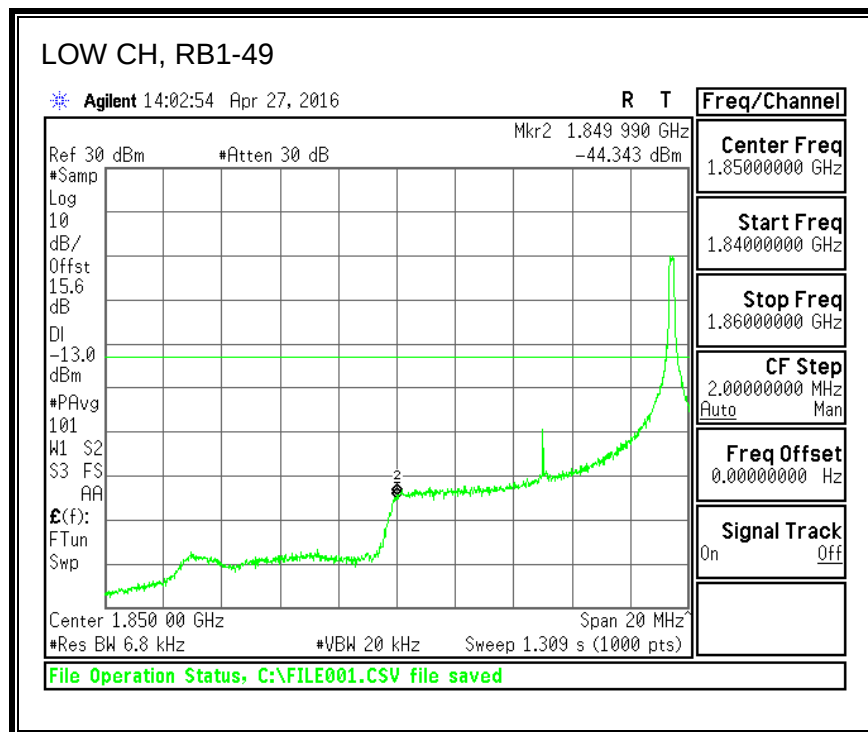


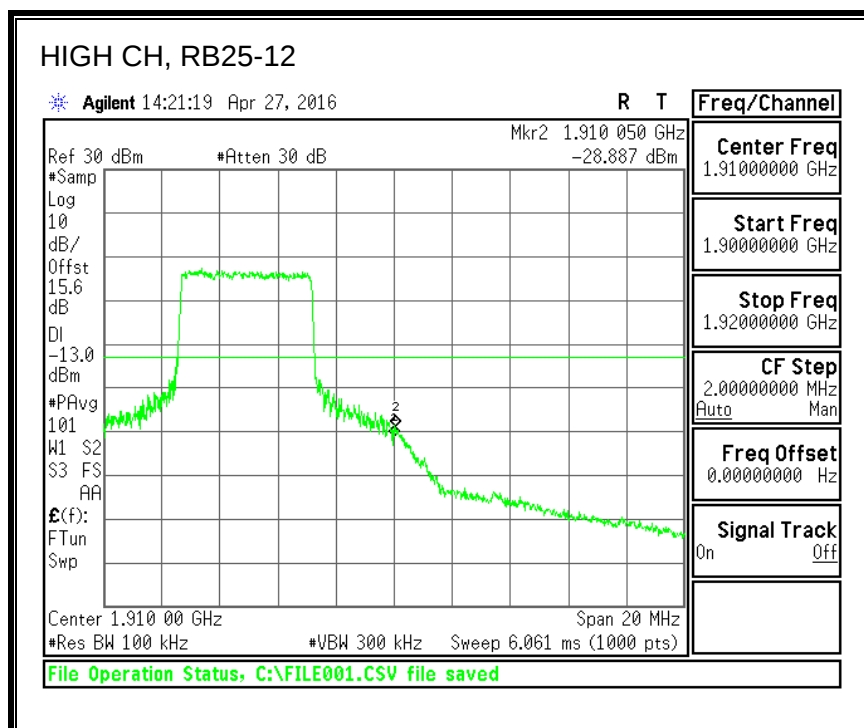
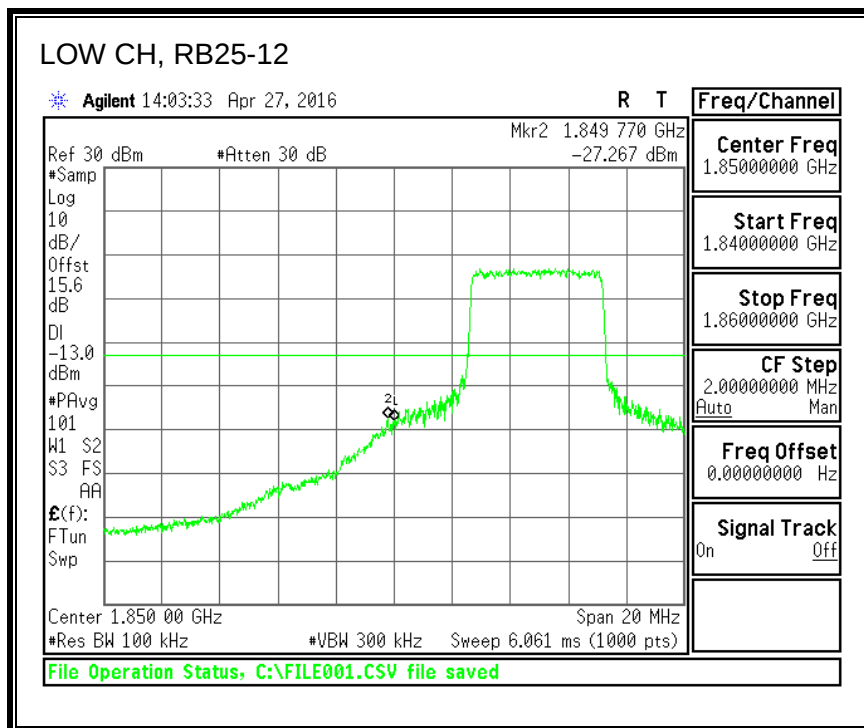


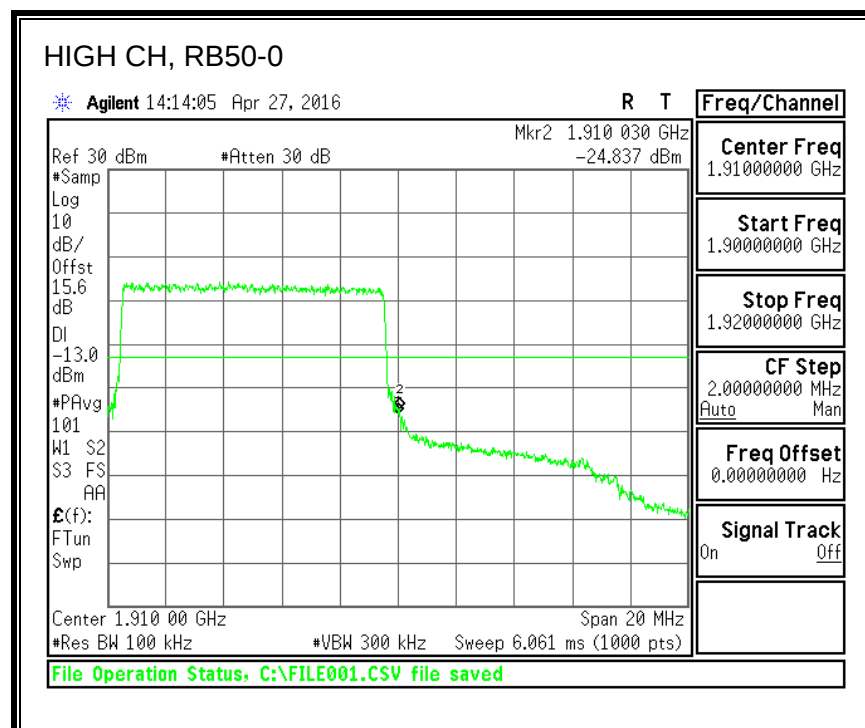
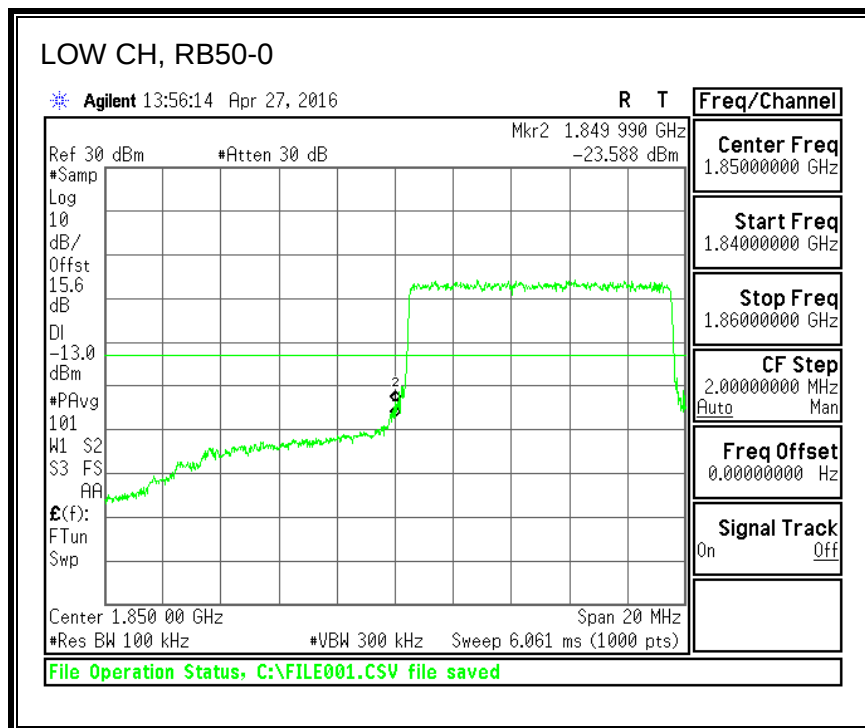


16QAM, (10.0 MHz BAND WIDTH)

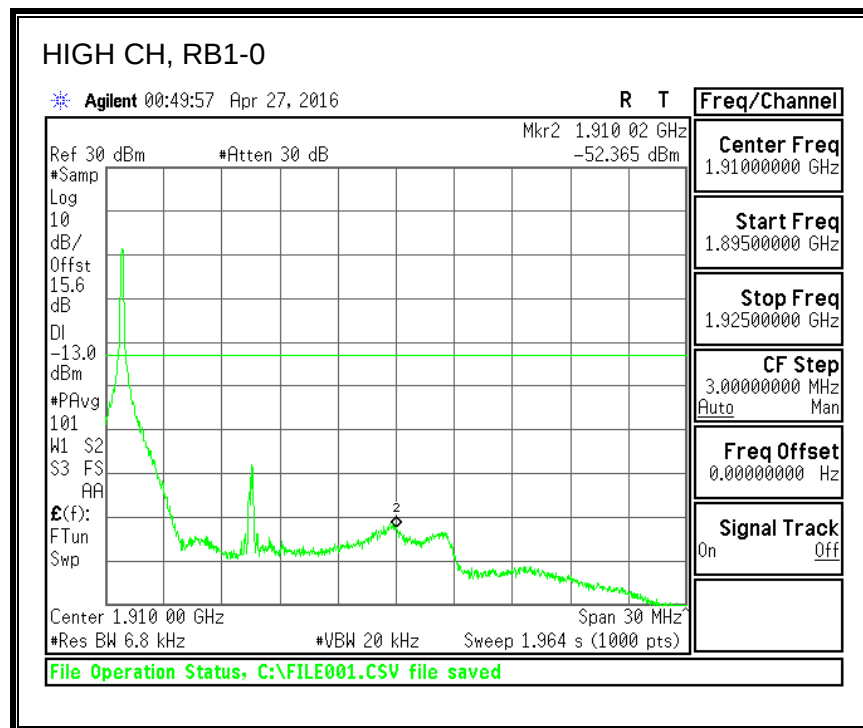
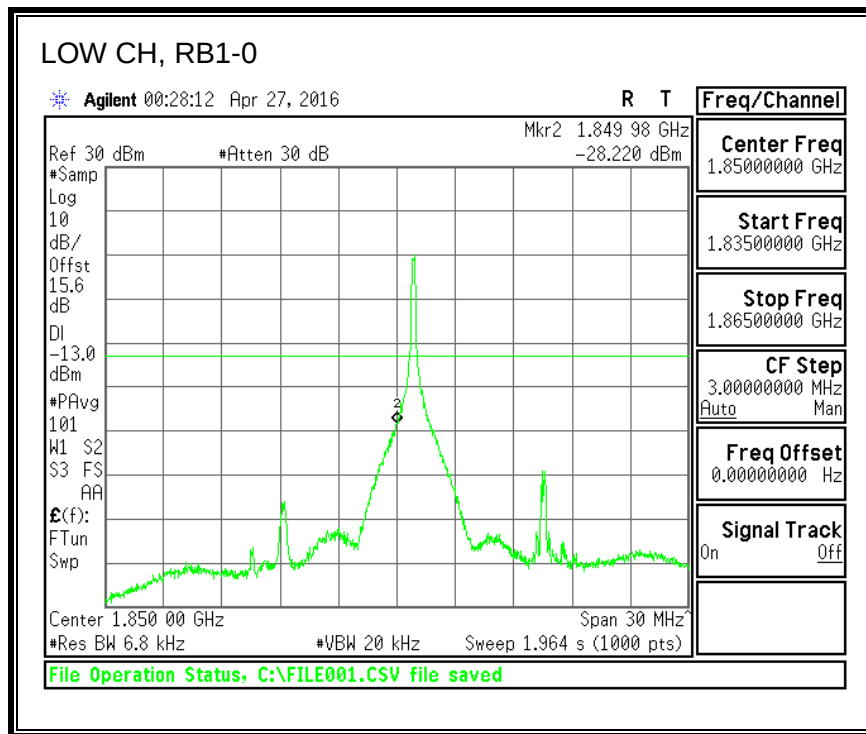


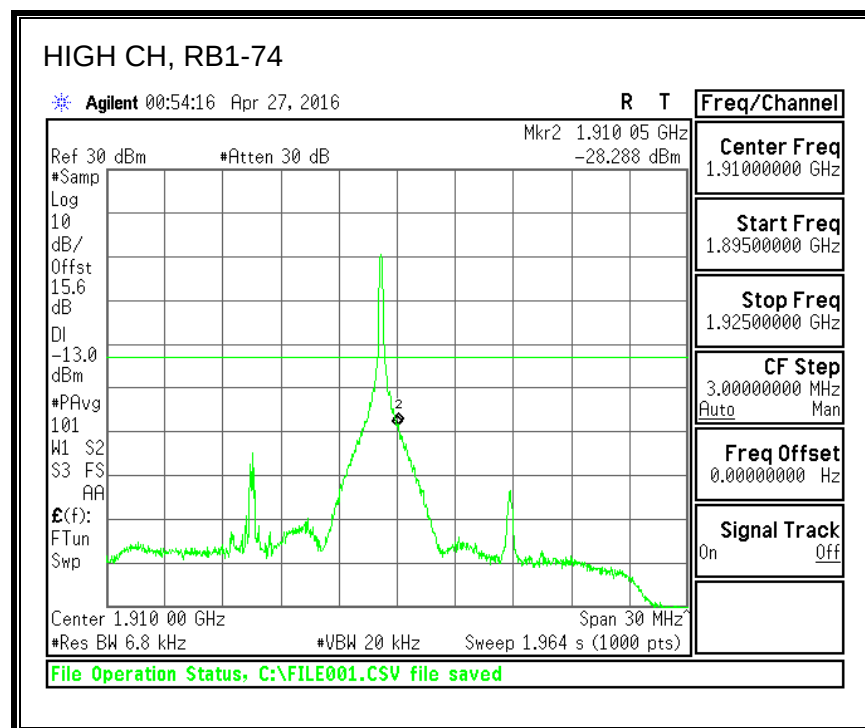
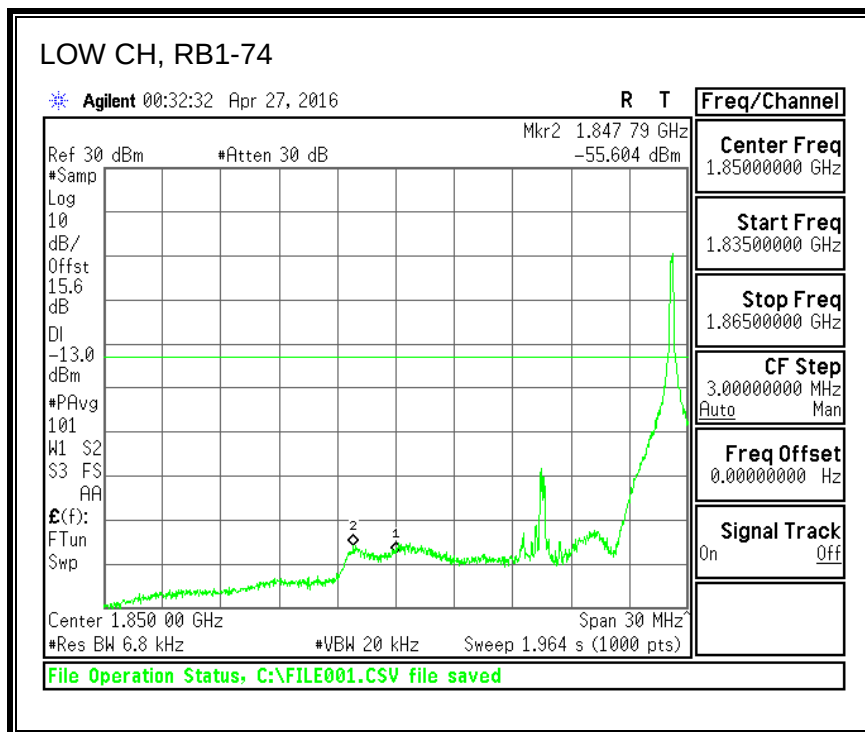


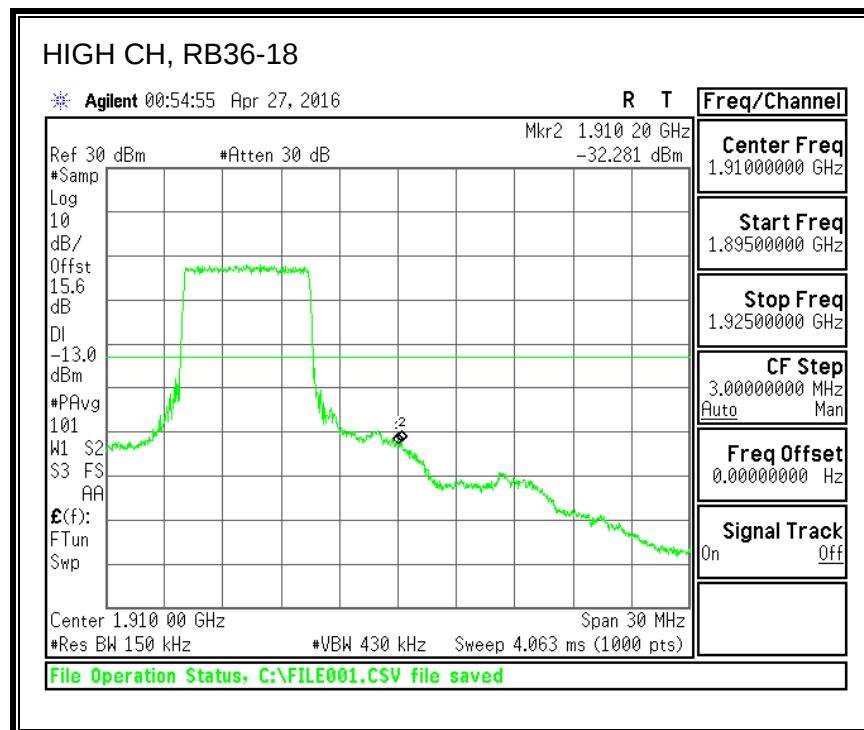
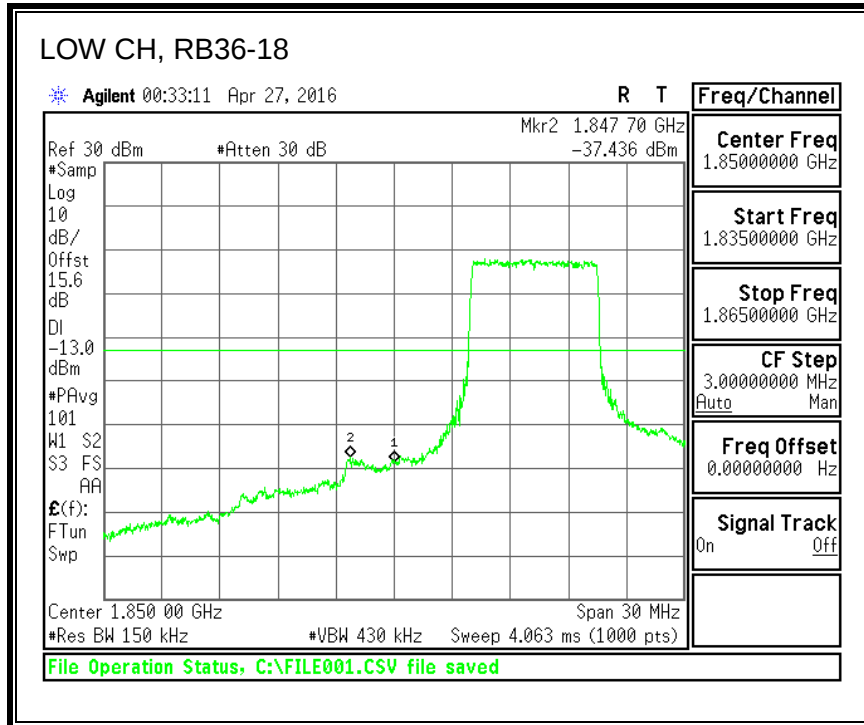


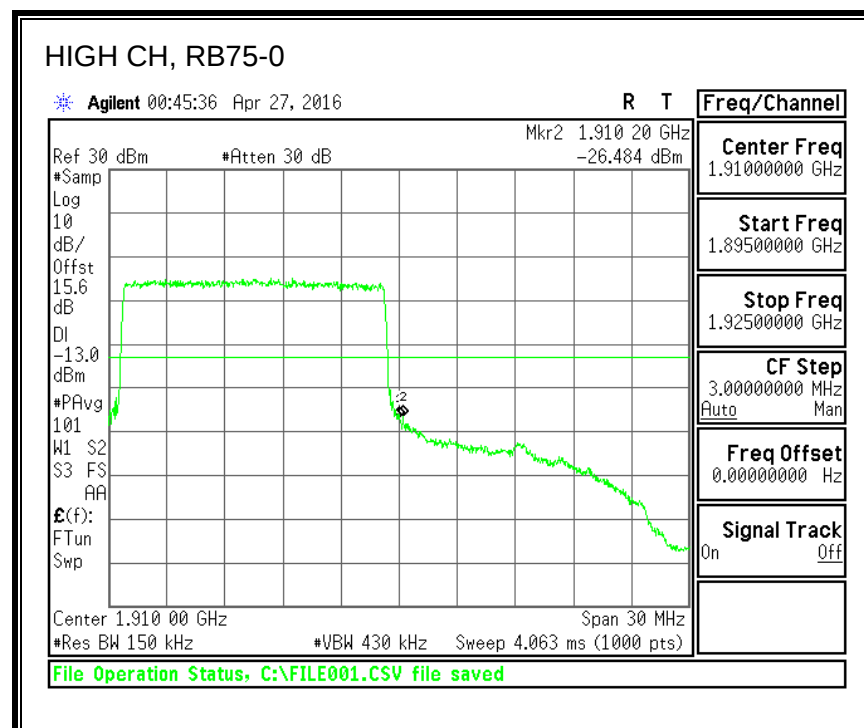
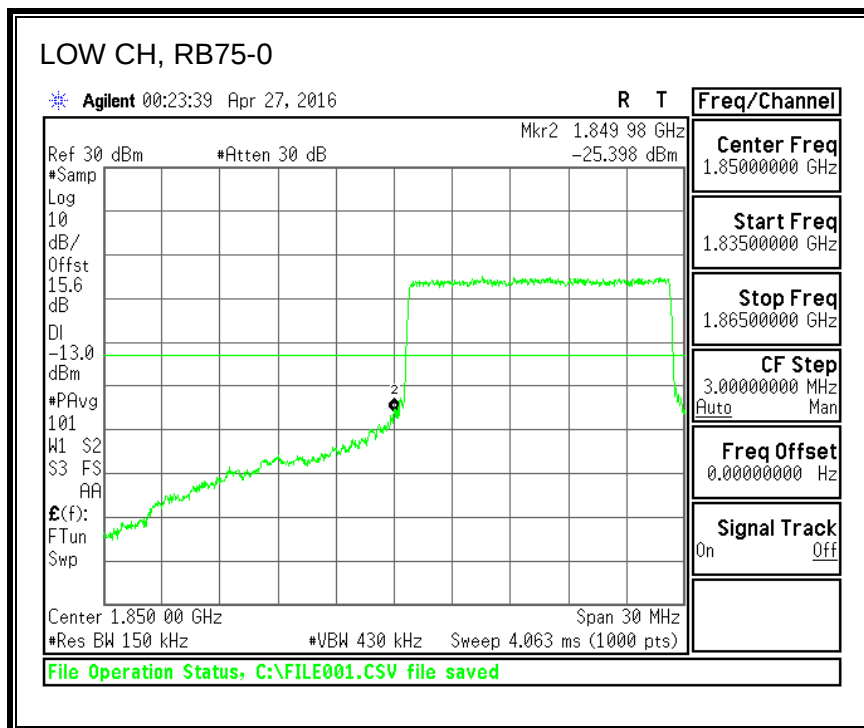


QPSK, (15.0 MHz BAND WIDTH)

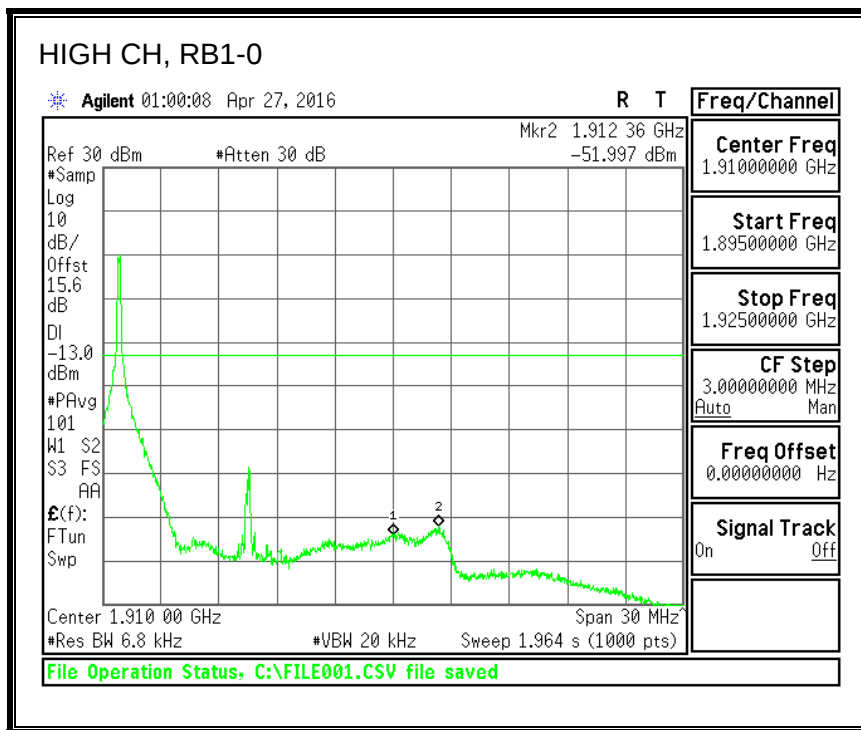
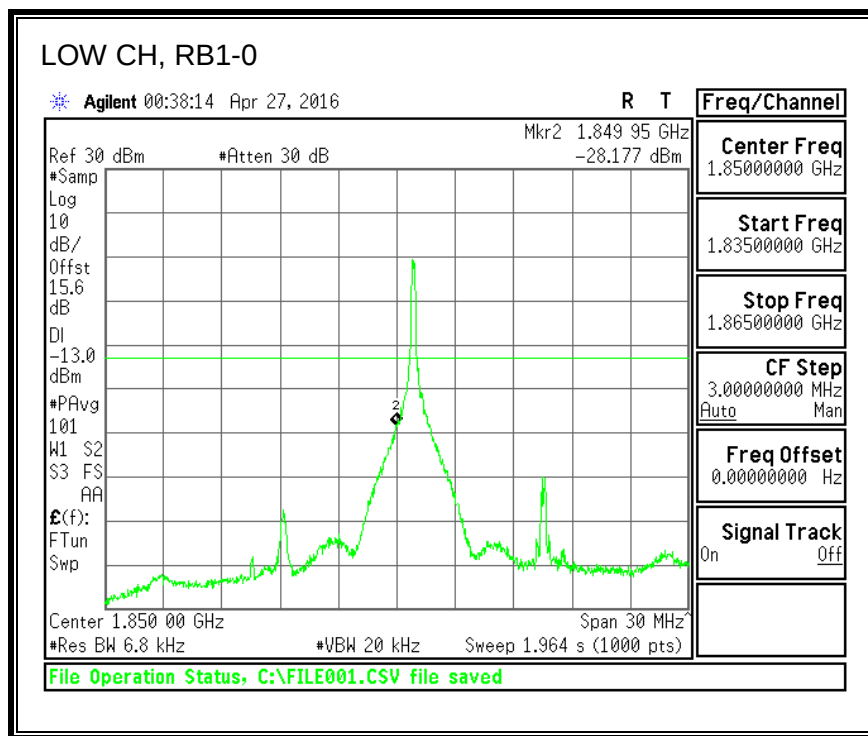


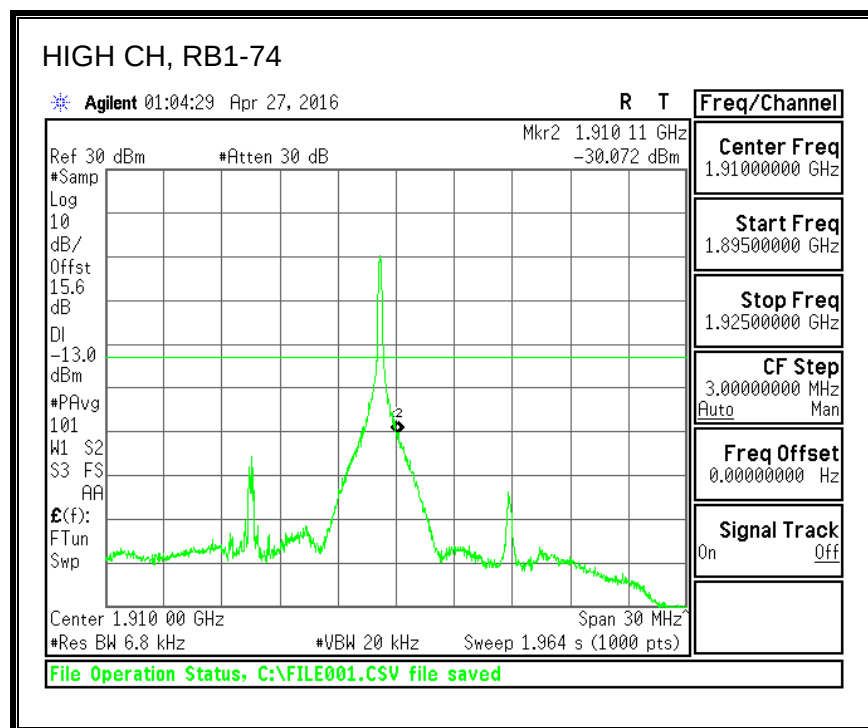
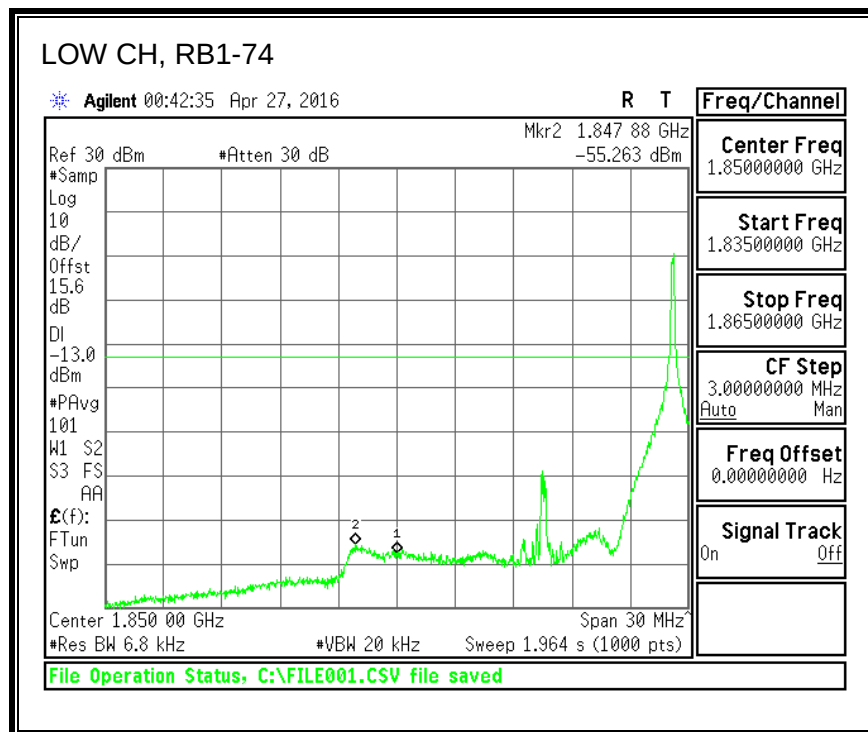


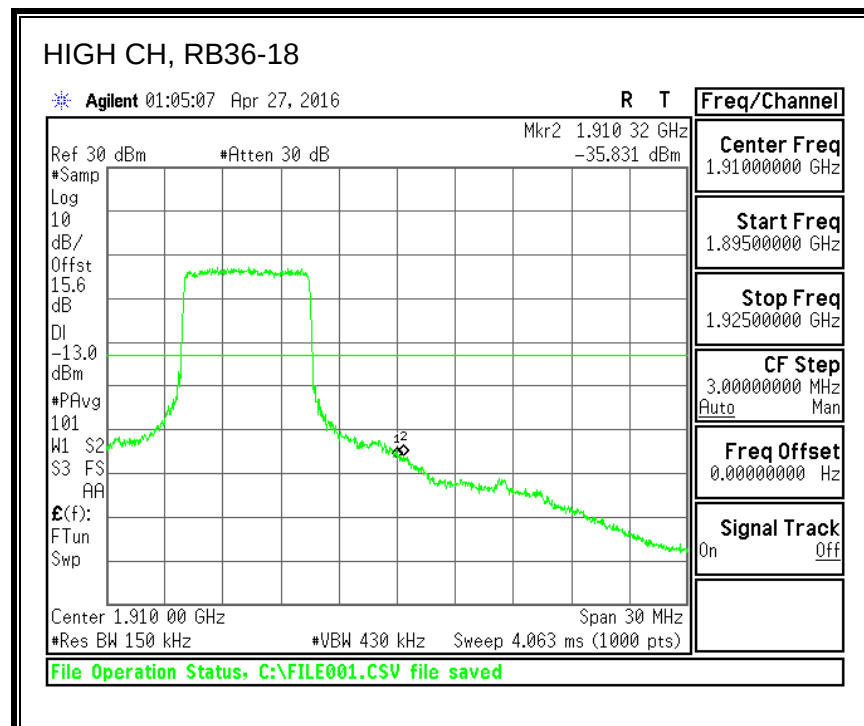
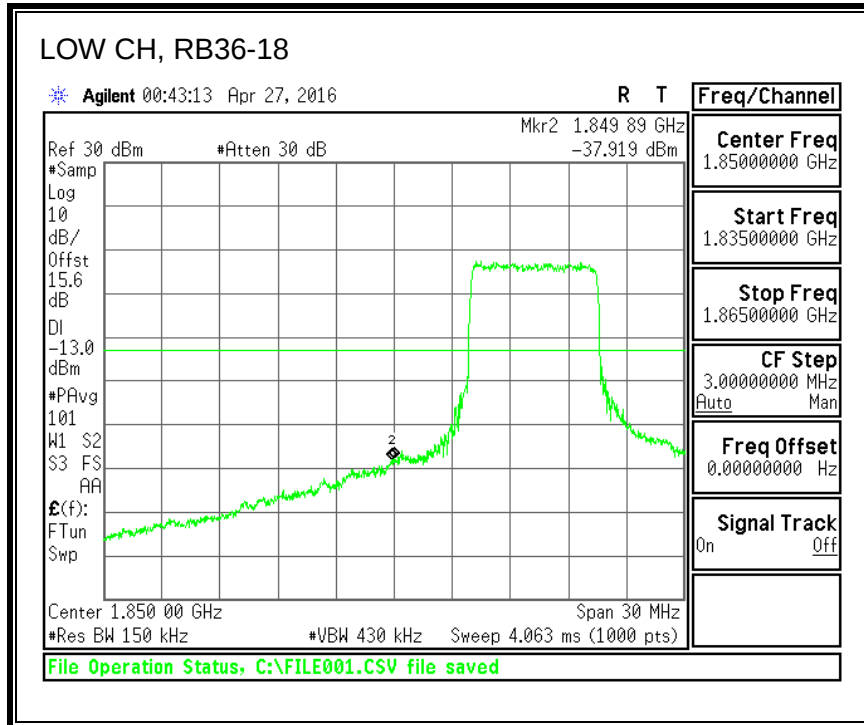


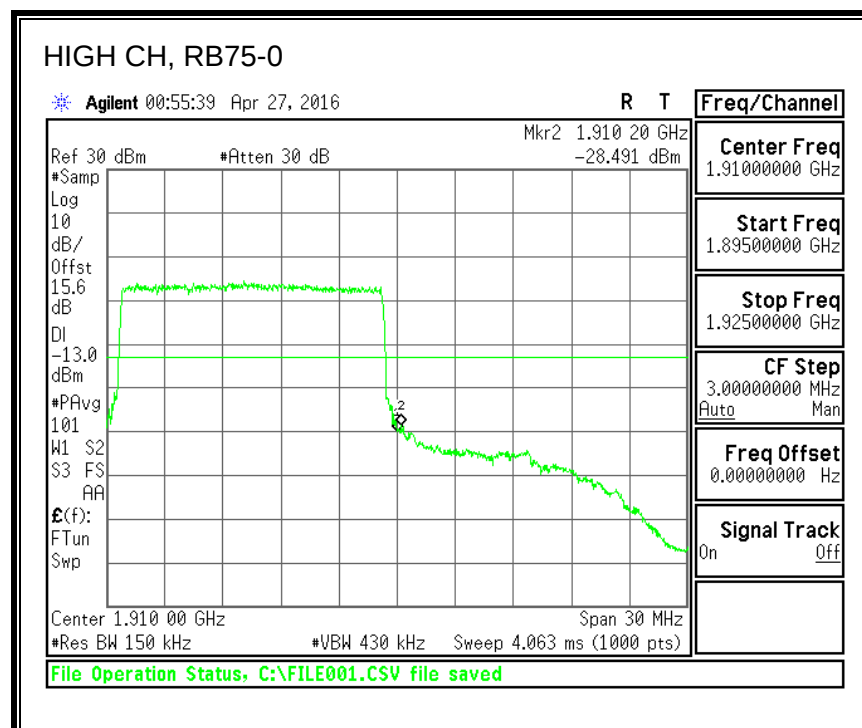
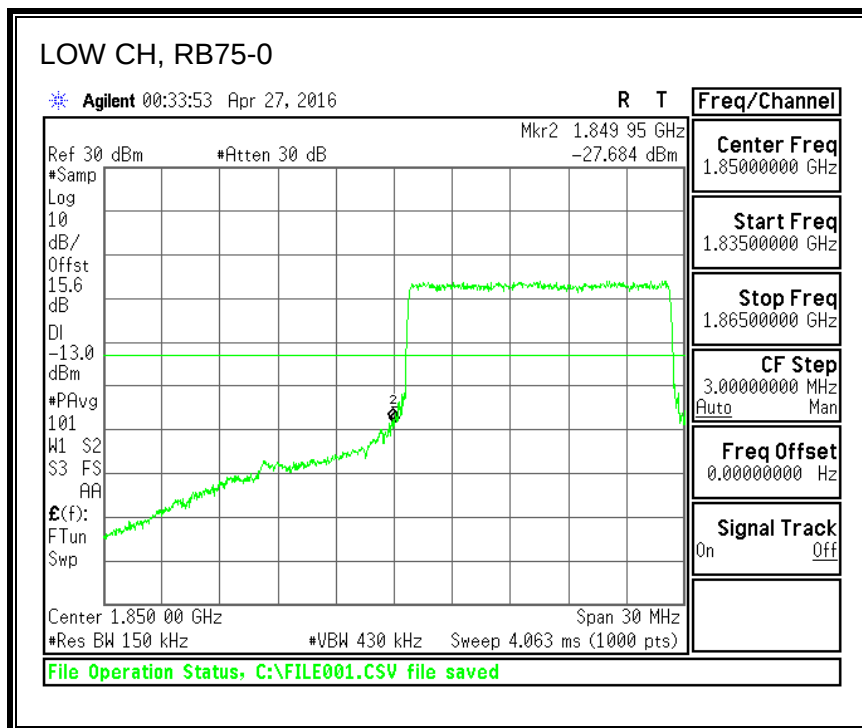


16QAM, (15.0 MHz BAND WIDTH)

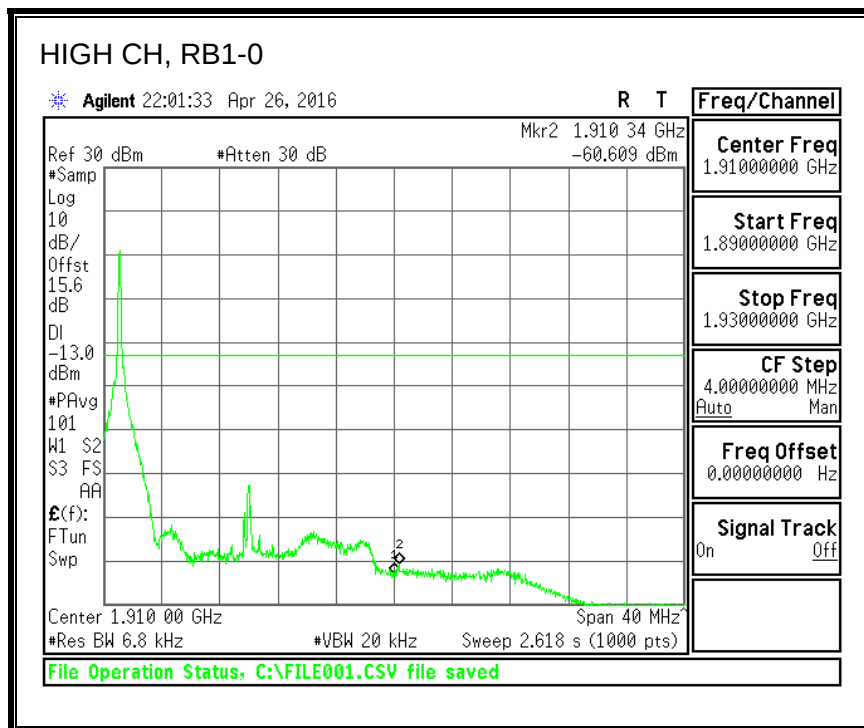
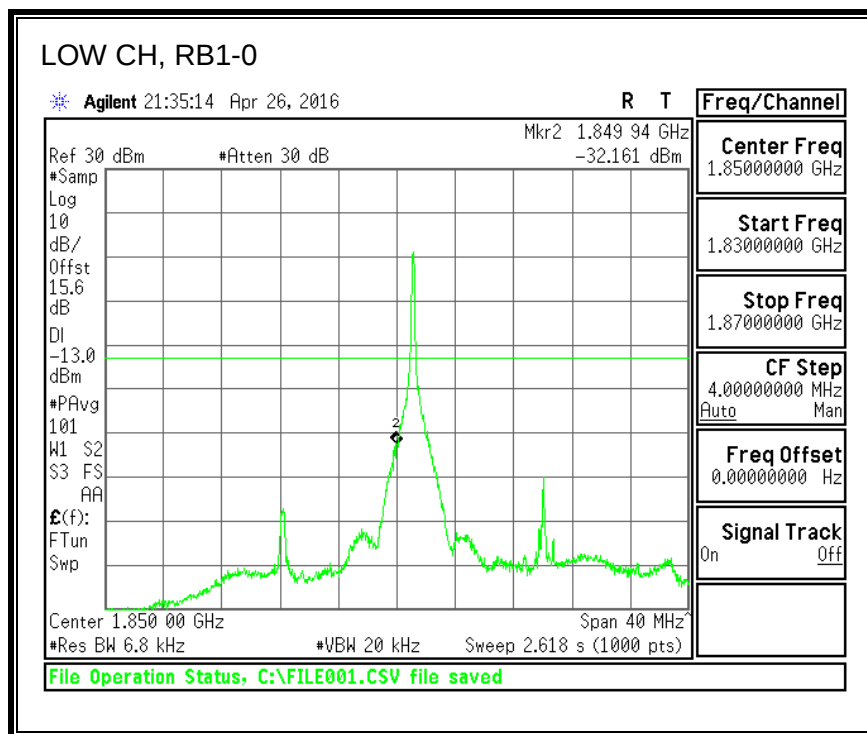


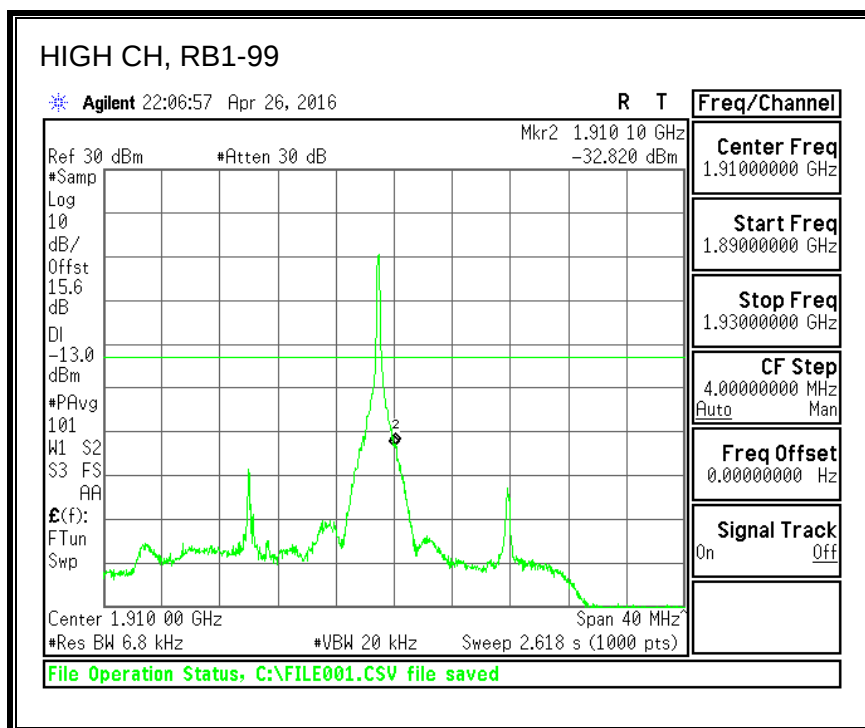
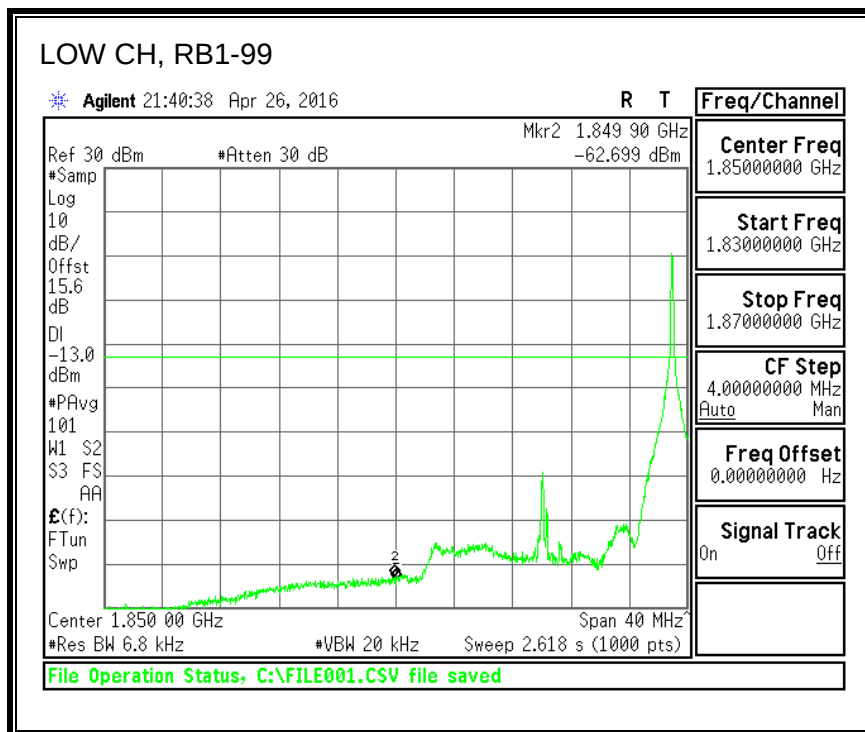


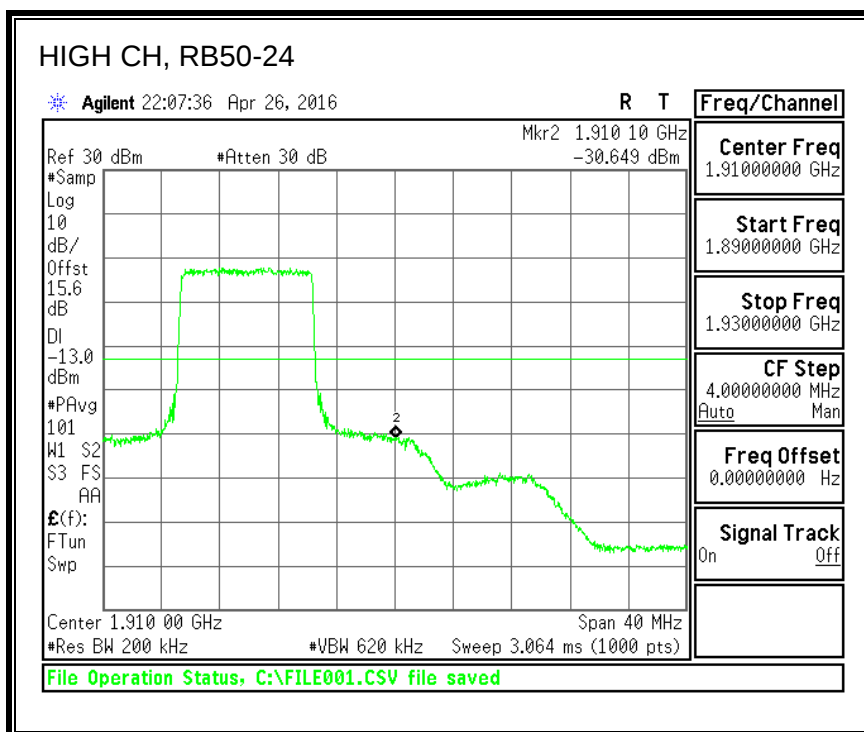
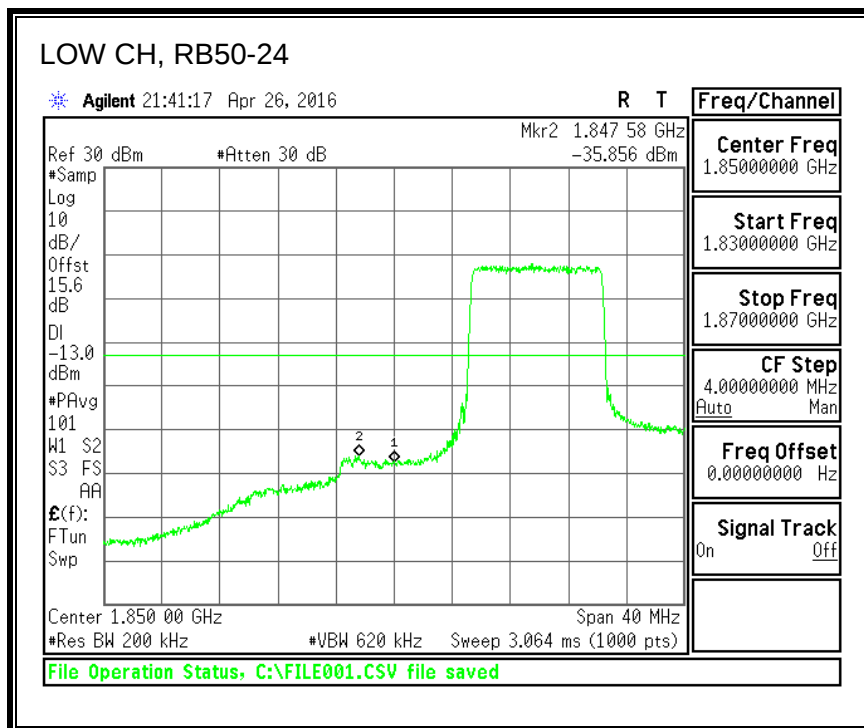


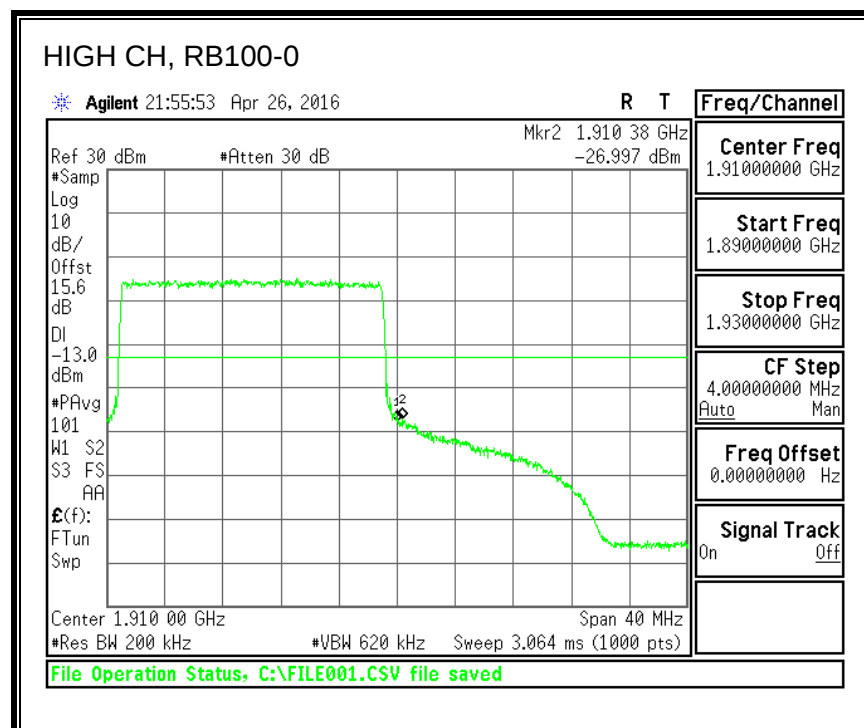
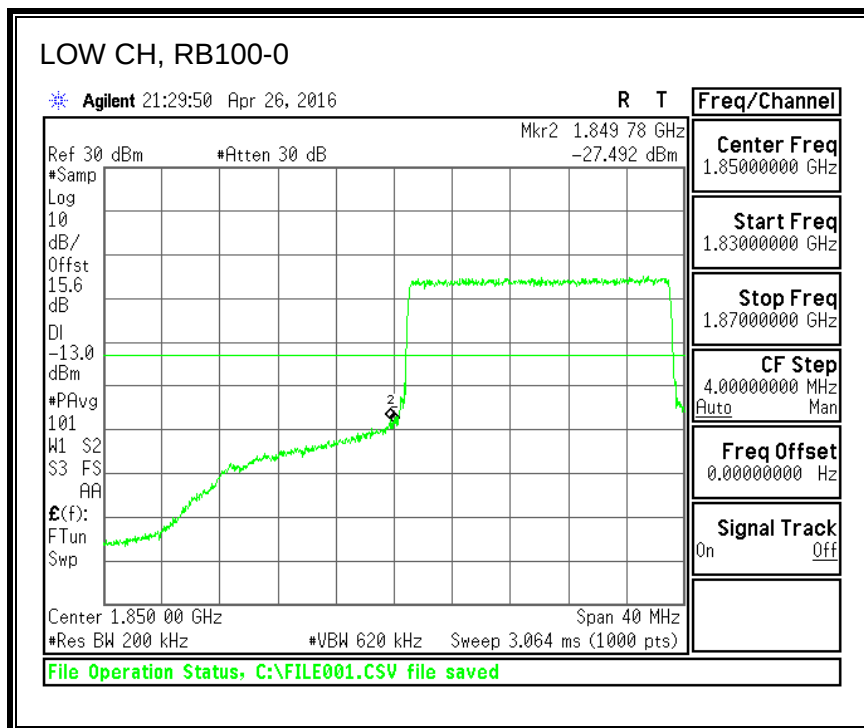


QPSK, (20.0 MHz BAND WIDTH)









16QAM, (20.0 MHz BAND WIDTH)

