



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

**FOR**

**CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS**

**MODEL NUMBER: A1549**

**FCC ID: BCG-E2816A**

**REPORT NUMBER: 14U17673-E19, REVISION D**

**ISSUE DATE: AUGUST 27, 2014**

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**NVLAP LAB CODE 200065-0**

Revision History

| <u>Rev.</u> | <u>Issue Date</u> | <u>Revisions</u>          | <u>Revised By</u> |
|-------------|-------------------|---------------------------|-------------------|
| --          | 07/25/2014        | Initial Issue             | M. Mekuria        |
| A           | 07/29/2014        | Update EUT Description    | C. Pang           |
| B           | 07/30/2014        | Update Data               | C. Pang           |
| C           | 08/01/2014        | Address all TCB Questions | M. Mekuria        |
| D           | 08/27/2014        | Add CDMA 1x Advanced      | M. Hua            |

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# 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:** A1549

**SERIAL NUMBER:** 920-3961-04 (Conducted); C39MR003G32J (Radiated)

**DATE TESTED:** APRIL 20 –AUGUST 02, 2014

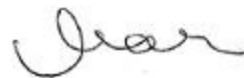
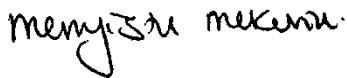
| APPLICABLE STANDARDS                 |              |
|--------------------------------------|--------------|
| STANDARD                             | TEST RESULTS |
| FCC CFR47 PART 22H, 24E, 27, and 90S | Pass         |

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

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

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Tested By:



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SENIOR ENGINEER  
UL VERIFICATION SERVICES INC.

MONA HUA  
EMC ENGINEER  
UL VERIFICATION SERVICES INC.

## 2. TEST METHODOLOGY

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

## 3. FACILITIES AND ACCREDITATION

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

| 47173 Benicia Street               | 47266 Benicia Street                          |
|------------------------------------|---|
| <input type="checkbox"/> Chamber A | <input checked="" type="checkbox"/> Chamber D |
| <input type="checkbox"/> Chamber B | <input checked="" type="checkbox"/> Chamber E |
| <input type="checkbox"/> Chamber C | <input checked="" type="checkbox"/> Chamber F |
|                                    | <input type="checkbox"/> Chamber G            |
|                                    | <input type="checkbox"/> Chamber H            |

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

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

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

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

### 4.3. MEASUREMENT UNCERTAINTY

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

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

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



## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

Model A1549 is a mobile phone with multimedia functions (music, application support, and video), Cellular GSM/GPRS/EGPRS/CDMA2000 1xRTT/1x Advanced/EVDO Rev.A/ EVDO Rev.B/WCDMA/HSPA+/DC-HSDPA/LTE FDD & Carrier Aggregation radio, IEEE 802.11a/b/g/n/ac radio, Bluetooth radio and NFC. The rechargeable battery is not user accessible.

## 5.2. MAXIMUM OUTPUT POWER

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

### LAT OUTPUT POWER FOR LTE BAND 2

| Part 24 LTE Band 2 |                 |            |                    |       |               |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                | 1850 - 1910     | QPSK       | 23.50              | 223.9 | 26.30         | 426.6 |
|                    |                 | 16QAM      | 22.38              | 173.0 | 25.43         | 349.1 |
| 3                  |                 | QPSK       | 23.60              | 229.1 | 26.41         | 437.5 |
|                    |                 | 16QAM      | 22.44              | 175.4 | 25.52         | 356.5 |
| 5                  |                 | QPSK       | 23.48              | 222.8 | 26.48         | 444.6 |
|                    |                 | 16QAM      | 22.36              | 172.2 | 25.61         | 363.9 |
| 10                 |                 | QPSK       | 23.41              | 219.3 | 26.56         | 452.9 |
|                    |                 | 16QAM      | 22.36              | 172.2 | 25.69         | 370.7 |
| 15                 |                 | QPSK       | 23.47              | 222.3 | 26.86         | 485.3 |
|                    |                 | 16QAM      | 22.36              | 172.2 | 25.99         | 397.2 |
| 20                 |                 | QPSK       | 23.57              | 227.5 | 27.11         | 514.0 |
|                    |                 | 16QAM      | 22.33              | 171.0 | 26.24         | 420.7 |

### UAT OUTPUT POWER FOR LTE BAND 2

| Part 24 LTE Band 2 |                 |            |                    |       |               |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                | 1850 - 1910     | QPSK       | 23.17              | 207.5 | 20.96         | 124.7 |
|                    |                 | 16QAM      | 22.18              | 165.2 | 20.03         | 100.7 |
| 3                  |                 | QPSK       | 23.18              | 208.0 | 21.11         | 129.1 |
|                    |                 | 16QAM      | 22.11              | 162.6 | 20.18         | 104.2 |
| 5                  |                 | QPSK       | 23.13              | 205.6 | 20.96         | 124.7 |
|                    |                 | 16QAM      | 22.29              | 169.4 | 20.03         | 100.7 |
| 10                 |                 | QPSK       | 23.17              | 207.5 | 21.40         | 138.0 |
|                    |                 | 16QAM      | 22.12              | 162.9 | 20.47         | 111.4 |
| 15                 |                 | QPSK       | 23.17              | 207.5 | 21.16         | 130.6 |
|                    |                 | 16QAM      | 22.09              | 161.8 | 20.23         | 105.4 |
| 20                 |                 | QPSK       | 23.27              | 212.3 | 20.60         | 114.8 |
|                    |                 | 16QAM      | 22.06              | 160.7 | 19.67         | 92.7  |

**LAT OUTPUT POWER FOR LTE BAND 4**

| Part 27 LTE Band 4 |                 |            |                    |       |               |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                | 1710 - 1755     | QPSK       | 23.95              | 248.3 | 24.73         | 297.2 |
|                    |                 | 16QAM      | 22.96              | 197.7 | 23.75         | 237.1 |
| 3                  |                 | QPSK       | 23.88              | 244.3 | 25.00         | 316.2 |
|                    |                 | 16QAM      | 22.84              | 192.3 | 24.08         | 255.9 |
| 5                  |                 | QPSK       | 23.89              | 244.9 | 25.12         | 325.1 |
|                    |                 | 16QAM      | 22.99              | 199.1 | 24.26         | 266.7 |
| 10                 |                 | QPSK       | 23.86              | 243.2 | 25.18         | 329.6 |
|                    |                 | 16QAM      | 22.85              | 192.8 | 23.84         | 242.1 |
| 15                 |                 | QPSK       | 23.79              | 239.3 | 25.18         | 329.6 |
|                    |                 | 16QAM      | 22.76              | 188.8 | 24.26         | 266.7 |
| 20                 | QPSK            | 23.86      | 243.2              | 25.08 | 322.1         |       |
|                    | 16QAM           | 22.75      | 188.4              | 24.16 | 260.6         |       |

**UAT OUTPUT POWER FOR LTE BAND 4**

| Part 27 LTE Band 4 |                 |            |                    |       |               |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                | 1710 - 1755     | QPSK       | 22.92              | 195.9 | 20.30         | 107.2 |
|                    |                 | 16QAM      | 21.98              | 157.8 | 19.47         | 88.5  |
| 3                  |                 | QPSK       | 22.88              | 194.1 | 20.60         | 114.8 |
|                    |                 | 16QAM      | 21.92              | 155.6 | 19.77         | 94.8  |
| 5                  |                 | QPSK       | 22.91              | 195.4 | 20.90         | 123.0 |
|                    |                 | 16QAM      | 22.04              | 160.0 | 20.07         | 101.6 |
| 10                 |                 | QPSK       | 22.86              | 193.2 | 21.18         | 131.2 |
|                    |                 | 16QAM      | 21.76              | 150.0 | 19.92         | 98.2  |
| 15                 |                 | QPSK       | 22.90              | 195.0 | 20.88         | 122.5 |
|                    |                 | 16QAM      | 21.80              | 151.4 | 20.92         | 123.6 |
| 20                 | QPSK            | 22.95      | 197.2              | 20.60 | 114.8         |       |
|                    | 16QAM           | 21.84      | 152.8              | 19.77 | 94.8          |       |

**LAT OUTPUT POWER FOR LTE BAND 5**

| Part 22 LTE Band 5 |                 |            |                    |       |               |      |                |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW    |
| 1.4                | 824 - 849       | QPSK       | 23.89              | 244.9 | 19.31         | 85.3 | 21.46          | 140.0 |
|                    |                 | 16QAM      | 22.57              | 180.7 | 18.47         | 70.3 | 20.62          | 115.3 |
| 3                  |                 | QPSK       | 23.79              | 239.3 | 19.45         | 88.1 | 21.60          | 144.5 |
|                    |                 | 16QAM      | 22.65              | 184.1 | 18.52         | 71.1 | 20.67          | 116.7 |
| 5                  |                 | QPSK       | 23.73              | 236.0 | 19.35         | 86.1 | 21.50          | 141.3 |
|                    |                 | 16QAM      | 22.70              | 186.2 | 18.28         | 67.3 | 20.43          | 110.4 |
| 10                 |                 | QPSK       | 23.77              | 238.2 | 19.42         | 87.5 | 21.57          | 143.5 |
|                    |                 | 16QAM      | 22.65              | 184.1 | 18.33         | 68.1 | 20.48          | 111.7 |

**UAT OUTPUT POWER FOR LTE BAND 5**

| Part 22 LTE Band 5 |                 |            |                    |       |               |      |                |       |
|--------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|-------|
| Bandwidth (MHz)    | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |       |
|                    |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW    |
| 1.4                | 824 - 849       | QPSK       | 23.56              | 227.0 | 18.05         | 63.8 | 20.20          | 104.7 |
|                    |                 | 16QAM      | 22.66              | 184.5 | 17.02         | 50.4 | 19.17          | 82.6  |
| 3                  |                 | QPSK       | 23.52              | 224.9 | 18.73         | 74.6 | 20.88          | 122.5 |
|                    |                 | 16QAM      | 22.44              | 175.4 | 17.99         | 63.0 | 20.14          | 103.3 |
| 5                  |                 | QPSK       | 23.52              | 224.9 | 18.32         | 67.9 | 20.47          | 111.4 |
|                    |                 | 16QAM      | 22.60              | 182.0 | 17.12         | 51.5 | 19.27          | 84.5  |
| 10                 |                 | QPSK       | 23.49              | 223.4 | 18.56         | 71.8 | 20.71          | 117.8 |
|                    |                 | 16QAM      | 22.46              | 176.2 | 17.17         | 52.1 | 19.32          | 85.5  |

**LAT OUTPUT POWER FOR LTE BAND 13**

| Part 27 LTE Band 13 |                 |            |                    |       |               |      |                |       |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|-------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |       |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW    |
| 5                   | 777 - 787       | QPSK       | 23.79              | 239.3 | 18.31         | 67.8 | 20.46          | 111.2 |
|                     |                 | 16QAM      | 22.80              | 190.5 | 17.20         | 52.5 | 19.35          | 86.1  |
| 10                  |                 | QPSK       | 23.87              | 243.8 | 17.92         | 61.9 | 20.07          | 101.6 |
|                     |                 | 16QAM      | 22.70              | 186.2 | 17.20         | 52.5 | 19.35          | 86.1  |

**UAT OUTPUT POWER FOR LTE BAND 13**

| Part 27 LTE Band 13 |                 |            |                    |       |               |      |                |      |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |      |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW   |
| 5                   | 777 - 787       | QPSK       | 23.61              | 229.6 | 17.45         | 55.6 | 19.60          | 91.2 |
|                     |                 | 16QAM      | 22.69              | 185.8 | 16.32         | 42.9 | 18.47          | 70.3 |
| 10                  |                 | QPSK       | 23.56              | 227.0 | 16.89         | 48.9 | 19.04          | 80.2 |
|                     |                 | 16QAM      | 22.45              | 175.8 | 15.99         | 39.7 | 18.14          | 65.2 |

**LAT OUTPUT POWER FOR LTE BAND 17**

| Part 27 LTE Band 17 |                 |            |                    |       |               |      |                |       |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|-------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |       |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW    |
| 5                   | 704 - 716       | QPSK       | 23.86              | 243.2 | 18.23         | 66.5 | 20.38          | 109.1 |
|                     |                 | 16QAM      | 22.77              | 189.2 | 17.21         | 52.6 | 19.36          | 86.3  |
| 10                  |                 | QPSK       | 23.85              | 242.7 | 18.30         | 67.6 | 20.45          | 110.9 |
|                     |                 | 16QAM      | 22.74              | 187.9 | 17.22         | 52.7 | 19.37          | 86.5  |

**UAT OUTPUT POWER FOR LTE BAND 17**

| Part 27 LTE Band 17 |                 |            |                    |       |               |      |                |      |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |      |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW   |
| 5                   | 704 - 716       | QPSK       | 23.53              | 225.4 | 14.28         | 26.8 | 16.43          | 44.0 |
|                     |                 | 16QAM      | 22.27              | 168.7 | 13.38         | 21.8 | 15.53          | 35.7 |
| 10                  |                 | QPSK       | 23.58              | 228.0 | 14.46         | 27.9 | 16.61          | 45.8 |
|                     |                 | 16QAM      | 22.20              | 166.0 | 13.56         | 22.7 | 15.71          | 37.2 |

**LAT OUTPUT POWER FOR LTE BAND 25**

| Part 24 LTE Band 25 |                 |            |                    |       |               |       |
|---------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                     |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                 | 1850 - 1915     | QPSK       | 23.35              | 216.3 | 26.32         | 428.5 |
|                     |                 | 16QAM      | 22.18              | 165.2 | 25.41         | 347.5 |
| 3                   |                 | QPSK       | 23.29              | 213.3 | 26.31         | 427.6 |
|                     |                 | 16QAM      | 22.19              | 165.6 | 25.40         | 346.7 |
| 5                   |                 | QPSK       | 23.30              | 213.8 | 26.43         | 439.5 |
|                     |                 | 16QAM      | 22.33              | 171.0 | 25.54         | 358.1 |
| 10                  |                 | QPSK       | 23.29              | 213.3 | 26.65         | 462.4 |
|                     |                 | 16QAM      | 22.23              | 167.1 | 25.72         | 373.3 |
| 15                  |                 | QPSK       | 23.19              | 208.4 | 26.52         | 448.7 |
|                     |                 | 16QAM      | 22.11              | 162.6 | 25.59         | 362.2 |
| 20                  | QPSK            | 23.37      | 217.3              | 26.70 | 467.7         |       |
|                     | 16QAM           | 22.13      | 163.3              | 25.79 | 379.3         |       |

**UAT OUTPUT POWER FOR LTE BAND 25**

| Part 24 LTE Band 25 |                 |            |                    |       |               |       |
|---------------------|-----------------|------------|--------------------|-------|---------------|-------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | EIRP(Average) |       |
|                     |                 |            | dBm                | mW    | dBm           | mW    |
| 1.4                 | 1850 - 1915     | QPSK       | 23.24              | 210.9 | 21.31         | 135.2 |
|                     |                 | 16QAM      | 22.03              | 159.6 | 20.36         | 108.6 |
| 3                   |                 | QPSK       | 23.16              | 207.0 | 21.40         | 138.0 |
|                     |                 | 16QAM      | 21.94              | 156.3 | 20.45         | 110.9 |
| 5                   |                 | QPSK       | 23.15              | 206.5 | 20.81         | 120.5 |
|                     |                 | 16QAM      | 21.99              | 158.1 | 19.86         | 96.8  |
| 10                  |                 | QPSK       | 23.15              | 206.5 | 21.23         | 132.7 |
|                     |                 | 16QAM      | 21.95              | 156.7 | 20.28         | 106.7 |
| 15                  |                 | QPSK       | 23.19              | 208.4 | 20.83         | 121.1 |
|                     |                 | 16QAM      | 21.96              | 157.0 | 19.88         | 97.3  |
| 20                  | QPSK            | 23.22      | 209.9              | 21.32 | 135.5         |       |
|                     | 16QAM           | 21.97      | 157.4              | 20.37 | 108.9         |       |

**LAT OUTPUT POWER FOR LTE BAND 26**

| Part 90 LTE Band 26 |                 |            |                    |       |               |      |                |       |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|-------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |       |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW    |
| 3                   | 814 - 824       | QPSK       | 22.83              | 191.9 | 18.66         | 73.5 | 20.81          | 120.5 |
|                     |                 | 16QAM      | 21.75              | 149.6 | 17.71         | 59.0 | 19.86          | 96.8  |
| 5                   |                 | QPSK       | 22.77              | 189.2 | 18.71         | 74.3 | 20.86          | 121.9 |
|                     |                 | 16QAM      | 21.99              | 158.1 | 17.67         | 58.5 | 19.82          | 95.9  |
| 10                  |                 | QPSK       | 22.88              | 194.1 | 18.08         | 64.3 | 20.23          | 105.4 |
|                     |                 | 16QAM      | 21.71              | 148.3 | 17.39         | 54.8 | 19.54          | 89.9  |

**UAT OUTPUT POWER FOR LTE BAND 26**

| Part 90 LTE Band 26 |                 |            |                    |       |               |      |                |      |
|---------------------|-----------------|------------|--------------------|-------|---------------|------|----------------|------|
| Bandwidth (MHz)     | Frequency Range | Modulation | Conducted(Average) |       | ERP (Average) |      | EIRP (Average) |      |
|                     |                 |            | dBm                | mW    | dBm           | mW   | dBm            | mW   |
| 3                   | 814 - 824       | QPSK       | 22.80              | 190.5 | 16.45         | 44.2 | 18.60          | 72.4 |
|                     |                 | 16QAM      | 21.68              | 147.2 | 15.55         | 35.9 | 17.70          | 58.9 |
| 5                   |                 | QPSK       | 22.72              | 187.1 | 16.12         | 40.9 | 18.27          | 67.1 |
|                     |                 | 16QAM      | 21.98              | 157.8 | 15.02         | 31.8 | 17.17          | 52.1 |
| 10                  |                 | QPSK       | 22.78              | 189.7 | 16.02         | 40.0 | 18.17          | 65.6 |
|                     |                 | 16QAM      | 21.86              | 153.5 | 15.12         | 32.5 | 17.27          | 53.3 |



### 5.3. SOFTWARE AND FIRMWARE

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

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

### 5.4. MAXIMUM ANTENNA GAIN

Please see table below:

| LAT LTE BANDS                | Antenna Gain (dBi) |
|------------------------------|--------------------|
| LTE Band 2, 1850 – 1910 MHz  | 2.9                |
| LTE Band 4, 1710 – 1755 MHz  | 1.22               |
| LTE Band 5, 824 – 849 MHz    | -2.32              |
| LTE Band 13, 777 – 787 MHz   | -3.92              |
| LTE Band 17, 704 – 716 MHz   | -2.5               |
| LTE Band 25, 1850 – 1915 MHz | 2.9                |
| LTE Band 26, 814 – 824 MHz   | -2.62              |

| UAT LTE BANDS                | Antenna Gain (dBi) |
|------------------------------|--------------------|
| LTE Band 2, 1850 – 1910 MHz  | -1.29              |
| LTE Band 4, 1710 – 1755 MHz  | -1.18              |
| LTE Band 5, 824 – 849 MHz    | -5.41              |
| LTE Band 13, 777 – 787 MHz   | -4.42              |
| LTE Band 17, 704 – 716 MHz   | -5.23              |
| LTE Band 25, 1850 – 1915 MHz | -1.29              |
| LTE Band 26, 814 – 824 MHz   | -5.17              |

## 5.5. WORST-CASE CONFIGURATION AND MODE

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

The device has LTE Bands of:

Band 2, Band 4, Band 5, Band 13, Band 17, Band 25, and Band 26.

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

For the fundamental investigation of radiated emissions, the EUT is investigated for vertical and horizontal antenna orientations and on its X Y and Z orientation. After the investigations, the worst case was determined to be at X orientation to all LTE bands.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

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

### I/O CABLES (RF Conducted Test)

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

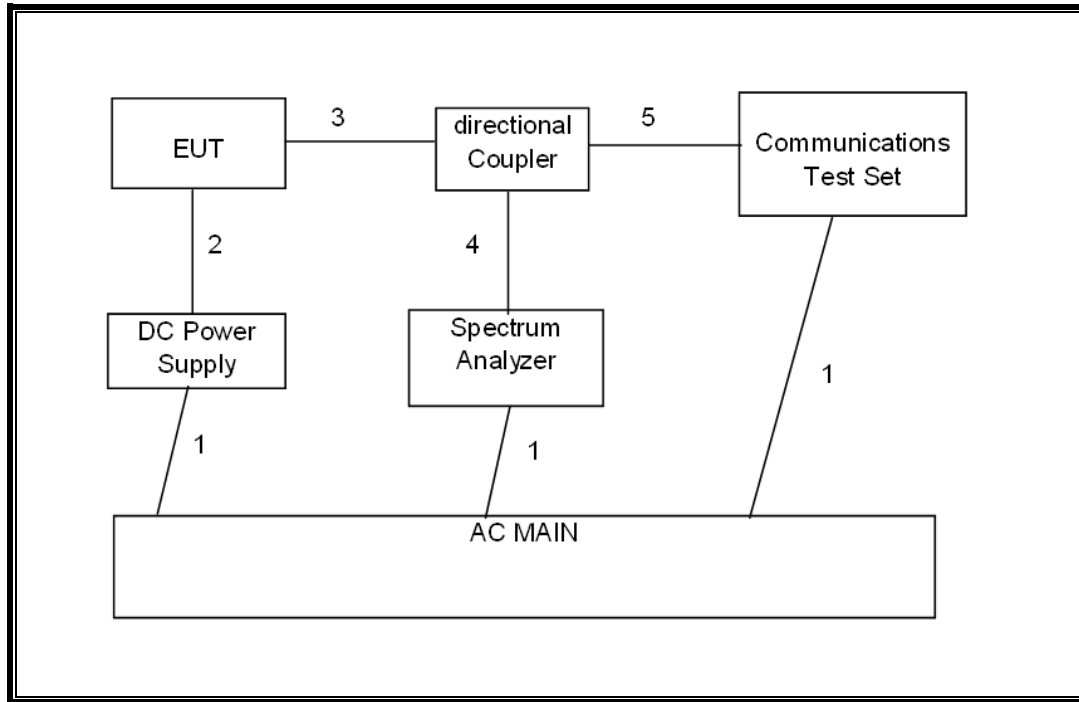
### I/O CABLES (RF Radiated Test)

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

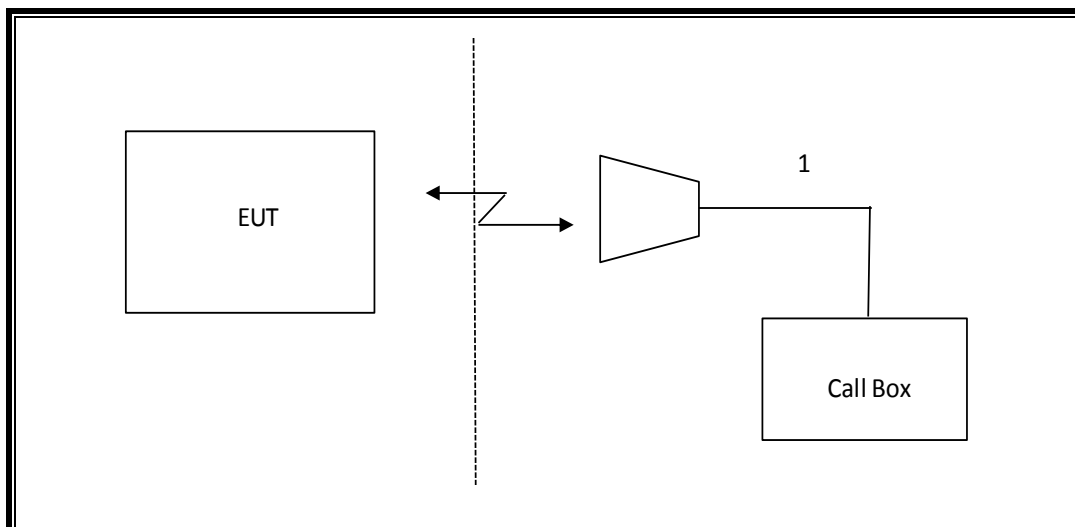
### TEST SETUP

**SETUP DIAGRAM FOR TESTS**

**CONDUCTED SETUP DIAGRAM FOR TESTS**



**RADIATED SETUP DIAGRAM FOR TESTS**



## 6. TEST AND MEASUREMENT EQUIPMENT

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

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

## 7. RF POWER OUTPUT VERIFICATION

### LTE Measurement Procedure:

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

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

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

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

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

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS\_01".3

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

| Network Signalling value | Requirements (sub-clause) | E-UTRA Band              | Channel bandwidth (MHz) | Resources Blocks ( $N_{RB}$ ) | A-MPR (dB)    |
|--------------------------|---------------------------|--------------------------|-------------------------|-------------------------------|---------------|
| NS_01                    | 6.6.2.1.1                 | Table 5.5-1              | 1.4, 3, 5, 10, 15, 20   | Table 5.6-1                   | NA            |
| NS_03                    | 6.6.2.2.1                 | 2, 4, 10, 23, 25, 35, 36 | 3                       | >5                            | ≤ 1           |
|                          |                           |                          | 5                       | >6                            | ≤ 1           |
|                          |                           |                          | 10                      | >6                            | ≤ 1           |
|                          |                           |                          | 15                      | >8                            | ≤ 1           |
| 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<br>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 <sup>1</sup>          | 1.4, 3, 5, 10           | Table 6.2.4-5                 | Table 6.2.4-5 |
| ..                       |                           |                          |                         |                               |               |
| NS_32                    | -                         | -                        | -                       | -                             | -             |

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

### 7.1. LTE BAND 2

#### LAT OUTPUT POWER FOR LTE BAND 2 (1.4MHZ)

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 18607      | 1850.7    | QPSK       | 1    | 0      | 27.77            | 23.08         |
|           |            |           |            | 1    | 2      | 28.26            | 23.02         |
|           |            |           |            | 1    | 5      | 28.07            | 22.95         |
|           |            |           |            | 3    | 0      | 28.28            | 23.00         |
|           |            |           |            | 3    | 1      | 28.50            | 23.05         |
|           |            |           |            | 3    | 2      | 28.39            | 23.03         |
|           |            |           | 16QAM      | 6    | 0      | 28.46            | 22.18         |
|           |            |           |            | 1    | 0      | 27.88            | 21.94         |
|           |            |           |            | 1    | 2      | 28.43            | 21.85         |
|           |            |           |            | 1    | 5      | 28.21            | 21.80         |
|           |            |           |            | 3    | 0      | 28.39            | 21.75         |
|           |            |           |            | 3    | 1      | 28.54            | 21.70         |
|           |            |           |            | 3    | 2      | 28.38            | 21.72         |
|           |            |           |            | 6    | 0      | 28.36            | 21.18         |
| 1.4       | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.58            | 23.50         |
|           |            |           |            | 1    | 2      | 27.24            | 23.40         |
|           |            |           |            | 1    | 5      | 27.12            | 23.29         |
|           |            |           |            | 3    | 0      | 27.19            | 23.40         |
|           |            |           |            | 3    | 1      | 27.51            | 23.36         |
|           |            |           |            | 3    | 2      | 27.35            | 23.30         |
|           |            |           | 16QAM      | 6    | 0      | 27.37            | 22.46         |
|           |            |           |            | 1    | 0      | 27.49            | 22.15         |
|           |            |           |            | 1    | 2      | 27.23            | 22.03         |
|           |            |           |            | 1    | 5      | 27.15            | 21.99         |
|           |            |           |            | 3    | 0      | 27.20            | 21.85         |
|           |            |           |            | 3    | 1      | 27.32            | 21.90         |
|           |            |           |            | 3    | 2      | 27.28            | 21.87         |
|           |            |           |            | 6    | 0      | 27.31            | 21.43         |
| 1.4       | 19193      | 1909.3    | QPSK       | 1    | 0      | 27.82            | <b>23.50</b>  |
|           |            |           |            | 1    | 2      | 28.39            | 23.48         |
|           |            |           |            | 1    | 5      | 28.05            | 23.47         |
|           |            |           |            | 3    | 0      | <b>28.33</b>     | 23.35         |
|           |            |           |            | 3    | 1      | <b>28.51</b>     | 23.40         |
|           |            |           |            | 3    | 2      | 28.42            | 23.36         |
|           |            |           | 16QAM      | 6    | 0      | 28.46            | 22.44         |
|           |            |           |            | 1    | 0      | 28.00            | <b>22.38</b>  |
|           |            |           |            | 1    | 2      | 28.43            | 22.26         |
|           |            |           |            | 1    | 5      | 28.09            | 22.15         |
|           |            |           |            | 3    | 0      | 28.47            | 22.10         |
|           |            |           |            | 3    | 1      | <b>28.55</b>     | 22.08         |
|           |            |           |            | 3    | 2      | 28.27            | 22.05         |
|           |            |           |            | 6    | 0      | 28.37            | 21.48         |

**LAT OUTPUT POWER FOR LTE BAND 2 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation   | RB   | RB           | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------------|------|--------------|------------------|---------------|
|           |            |           |              | Size | Offset       |                  |               |
| 3.0       | 18615      | 1851.5    | QPSK         | 1    | 0            | 28.04            | 23.00         |
|           |            |           |              | 1    | 7            | 28.22            | 22.92         |
|           |            |           |              | 1    | 14           | 28.02            | 22.95         |
|           |            |           |              | 8    | 0            | 28.27            | 22.00         |
|           |            |           |              | 8    | 4            | 27.59            | 22.00         |
|           |            |           |              | 8    | 7            | 27.54            | 22.00         |
|           |            |           |              | 15   | 0            | 27.56            | 21.93         |
|           |            |           | 16QAM        | 1    | 0            | 27.96            | 21.86         |
|           |            |           |              | 1    | 7            | 26.92            | 21.75         |
|           |            |           |              | 1    | 14           | 26.56            | 21.72         |
|           |            |           |              | 8    | 0            | 26.73            | 21.05         |
|           |            |           |              | 8    | 4            | 27.29            | 21.03         |
|           |            |           |              | 8    | 7            | 27.19            | 21.00         |
|           |            |           |              | 15   | 0            | 27.17            | 21.00         |
|           |            |           |              | 3.0  | 18900        | 1880.0           | QPSK          |
| 1         | 7          | 27.22     | 23.46        |      |              |                  |               |
| 1         | 14         | 27.09     | <b>23.60</b> |      |              |                  |               |
| 8         | 0          | 27.23     | 22.64        |      |              |                  |               |
| 8         | 4          | 27.31     | 22.53        |      |              |                  |               |
| 8         | 7          | 27.27     | 22.59        |      |              |                  |               |
| 15        | 0          | 27.25     | 22.52        |      |              |                  |               |
| 16QAM     | 1          | 0         | 27.42        |      |              |                  | 22.20         |
|           | 1          | 7         | 27.20        |      |              |                  | 22.07         |
|           | 1          | 14        | 27.12        |      |              |                  | 22.00         |
|           | 8          | 0         | 27.21        |      |              |                  | 21.46         |
|           | 8          | 4         | 27.17        |      |              |                  | 21.30         |
|           | 8          | 7         | 27.19        |      |              |                  | 21.30         |
|           | 15         | 0         | 27.24        |      |              |                  | 21.30         |
|           | 3.0        | 19185     | 1908.5       |      |              |                  | QPSK          |
| 1         |            |           |              | 7    | 27.00        | 23.46            |               |
| 1         |            |           |              | 14   | 27.68        | 23.43            |               |
| 8         |            |           |              | 0    | <b>28.32</b> | 22.52            |               |
| 8         |            |           |              | 4    | 27.48        | 22.55            |               |
| 8         |            |           |              | 7    | 27.57        | 22.56            |               |
| 15        |            |           |              | 0    | 27.57        | 22.51            |               |
| 16QAM     |            |           |              | 1    | 0            | <b>28.06</b>     | <b>22.44</b>  |
|           |            |           |              | 1    | 7            | 26.92            | 22.31         |
|           |            |           |              | 1    | 14           | 26.63            | 22.32         |
|           |            |           |              | 8    | 0            | 27.33            | 21.52         |
|           |            |           |              | 8    | 4            | 27.12            | 21.51         |
|           |            |           |              | 8    | 7            | 27.05            | 21.46         |
|           |            |           |              | 15   | 0            | 27.26            | 21.51         |



**LAT OUTPUT POWER FOR LTE BAND 2 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 5.0       | 18625      | 1852.5    | QPSK       | 1    | 0      | 28.16            | 23.07         |
|           |            |           |            | 1    | 12     | 28.16            | 23.00         |
|           |            |           |            | 1    | 24     | 27.99            | 22.94         |
|           |            |           |            | 12   | 0      | 27.47            | 22.03         |
|           |            |           |            | 12   | 6      | 27.76            | 22.08         |
|           |            |           |            | 12   | 11     | 27.47            | 22.01         |
|           |            |           |            | 25   | 0      | 27.64            | 22.03         |
|           |            |           | 16QAM      | 1    | 0      | <b>28.20</b>     | 21.80         |
|           |            |           |            | 1    | 12     | 28.17            | 21.82         |
|           |            |           |            | 1    | 24     | 27.51            | 21.89         |
|           |            |           |            | 12   | 0      | 27.26            | 21.09         |
|           |            |           |            | 12   | 6      | 27.53            | 21.03         |
|           |            |           |            | 12   | 11     | 27.41            | 21.02         |
|           |            |           |            | 25   | 0      | 26.92            | 21.04         |
| 5.0       | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.76            | 23.28         |
|           |            |           |            | 1    | 12     | 27.10            | 23.29         |
|           |            |           |            | 1    | 24     | 27.06            | 23.34         |
|           |            |           |            | 12   | 0      | 27.28            | 22.43         |
|           |            |           |            | 12   | 6      | 27.24            | 22.37         |
|           |            |           |            | 12   | 11     | 27.25            | 22.42         |
|           |            |           |            | 25   | 0      | 27.27            | 22.34         |
|           |            |           | 16QAM      | 1    | 0      | 27.55            | 22.15         |
|           |            |           |            | 1    | 12     | 27.13            | 22.02         |
|           |            |           |            | 1    | 24     | 27.08            | 22.18         |
|           |            |           |            | 12   | 0      | 27.32            | 21.44         |
|           |            |           |            | 12   | 6      | 27.20            | 21.33         |
|           |            |           |            | 12   | 11     | 27.16            | 21.30         |
|           |            |           |            | 25   | 0      | 27.20            | 21.31         |
| 5.0       | 19175      | 1907.5    | QPSK       | 1    | 0      | 27.69            | <b>23.48</b>  |
|           |            |           |            | 1    | 12     | 27.07            | 23.40         |
|           |            |           |            | 1    | 24     | 26.91            | 23.32         |
|           |            |           |            | 12   | 0      | <b>28.21</b>     | 22.63         |
|           |            |           |            | 12   | 6      | 27.14            | 22.49         |
|           |            |           |            | 12   | 11     | 27.31            | 22.53         |
|           |            |           |            | 25   | 0      | 27.58            | 22.56         |
|           |            |           | 16QAM      | 1    | 0      | 27.76            | <b>22.36</b>  |
|           |            |           |            | 1    | 12     | 27.10            | 22.31         |
|           |            |           |            | 1    | 24     | 27.19            | 22.32         |
|           |            |           |            | 12   | 0      | 28.02            | 21.45         |
|           |            |           |            | 12   | 6      | 27.12            | 21.31         |
|           |            |           |            | 12   | 11     | 27.02            | 21.40         |
|           |            |           |            | 25   | 0      | 27.16            | 21.42         |

**LAT OUTPUT POWER FOR LTE BAND 2 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 10.0      | 18650      | 1855.0    | QPSK       | 1    | 0      | 27.37            | 23.08         |
|           |            |           |            | 1    | 24     | 28.12            | 23.02         |
|           |            |           |            | 1    | 49     | 26.81            | 22.91         |
|           |            |           |            | 25   | 0      | 27.03            | 22.10         |
|           |            |           |            | 25   | 12     | 27.71            | 22.00         |
|           |            |           |            | 25   | 24     | 26.98            | 22.02         |
|           |            |           |            | 50   | 0      | 27.16            | 22.11         |
|           |            |           | 16QAM      | 1    | 0      | <b>27.77</b>     | 21.97         |
|           |            |           |            | 1    | 24     | 26.77            | 21.88         |
|           |            |           |            | 1    | 49     | 26.83            | 21.77         |
|           |            |           |            | 25   | 0      | 27.05            | 21.17         |
|           |            |           |            | 25   | 12     | 27.62            | 21.07         |
|           |            |           |            | 25   | 24     | 26.97            | 21.01         |
|           |            |           |            | 50   | 0      | 27.16            | 21.08         |
| 10.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.81            | 23.28         |
|           |            |           |            | 1    | 24     | 26.99            | 23.34         |
|           |            |           |            | 1    | 49     | 27.03            | 23.40         |
|           |            |           |            | 25   | 0      | 27.33            | 22.40         |
|           |            |           |            | 25   | 12     | 27.17            | 22.48         |
|           |            |           |            | 25   | 24     | 27.25            | 22.46         |
|           |            |           |            | 50   | 0      | 27.36            | 22.46         |
|           |            |           | 16QAM      | 1    | 0      | 27.67            | 22.15         |
|           |            |           |            | 1    | 24     | 26.99            | 22.04         |
|           |            |           |            | 1    | 49     | 27.06            | 22.00         |
|           |            |           |            | 25   | 0      | 27.37            | 21.51         |
|           |            |           |            | 25   | 12     | 27.15            | 21.36         |
|           |            |           |            | 25   | 24     | 27.21            | 21.32         |
|           |            |           |            | 50   | 0      | 27.32            | 21.33         |
| 10.0      | 19150      | 1905.0    | QPSK       | 1    | 0      | 27.83            | 23.37         |
|           |            |           |            | 1    | 24     | 27.14            | 23.39         |
|           |            |           |            | 1    | 49     | 27.03            | <b>23.41</b>  |
|           |            |           |            | 25   | 0      | <b>28.19</b>     | 22.56         |
|           |            |           |            | 25   | 12     | 27.25            | 22.48         |
|           |            |           |            | 25   | 24     | 27.14            | 22.46         |
|           |            |           |            | 50   | 0      | 27.46            | 22.66         |
|           |            |           | 16QAM      | 1    | 0      | 27.35            | 22.33         |
|           |            |           |            | 1    | 24     | 27.13            | 22.35         |
|           |            |           |            | 1    | 49     | 27.04            | <b>22.36</b>  |
|           |            |           |            | 25   | 0      | 27.00            | 21.48         |
|           |            |           |            | 25   | 12     | 27.30            | 21.42         |
|           |            |           |            | 25   | 24     | 27.17            | 21.38         |
|           |            |           |            | 50   | 0      | 27.06            | 21.46         |

**LAT OUTPUT POWER FOR LTE BAND 2 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 15.0      | 18675      | 1857.5    | QPSK       | 1    | 0      | <b>28.52</b>     | 23.07         |
|           |            |           |            | 1    | 37     | 28.26            | 23.09         |
|           |            |           |            | 1    | 74     | 26.93            | 23.06         |
|           |            |           |            | 36   | 0      | 26.90            | 22.13         |
|           |            |           |            | 36   | 16     | 27.76            | 22.20         |
|           |            |           |            | 36   | 35     | 27.71            | 22.26         |
|           |            |           |            | 75   | 0      | 27.77            | 22.17         |
|           |            |           | 16-QAM     | 1    | 0      | 28.37            | 21.88         |
|           |            |           |            | 1    | 37     | 26.88            | 21.92         |
|           |            |           |            | 1    | 74     | 26.93            | 21.84         |
|           |            |           |            | 36   | 0      | 26.92            | 21.21         |
|           |            |           |            | 36   | 16     | 27.79            | 21.20         |
|           |            |           |            | 36   | 35     | 27.27            | 21.21         |
|           |            |           |            | 75   | 0      | 27.12            | 21.26         |
| 15.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.74            | 23.41         |
|           |            |           |            | 1    | 37     | 26.96            | 23.46         |
|           |            |           |            | 1    | 74     | 27.02            | 23.40         |
|           |            |           |            | 36   | 0      | 27.30            | 22.67         |
|           |            |           |            | 36   | 16     | 27.14            | 22.57         |
|           |            |           |            | 36   | 35     | 27.21            | 22.48         |
|           |            |           |            | 75   | 0      | 27.29            | 22.46         |
|           |            |           | 16-QAM     | 1    | 0      | <b>28.48</b>     | 22.20         |
|           |            |           |            | 1    | 37     | 26.96            | 22.18         |
|           |            |           |            | 1    | 74     | 27.05            | 22.01         |
|           |            |           |            | 36   | 0      | 27.33            | 21.48         |
|           |            |           |            | 36   | 16     | 27.16            | 21.34         |
|           |            |           |            | 36   | 35     | 27.19            | 21.32         |
|           |            |           |            | 75   | 0      | 27.32            | 21.34         |
| 15.0      | 19125      | 1902.5    | QPSK       | 1    | 0      | 27.93            | 23.43         |
|           |            |           |            | 1    | 37     | 27.10            | <b>23.47</b>  |
|           |            |           |            | 1    | 74     | 27.05            | 23.45         |
|           |            |           |            | 36   | 0      | 28.20            | 22.62         |
|           |            |           |            | 36   | 16     | 27.63            | 22.57         |
|           |            |           |            | 36   | 35     | 27.22            | 22.52         |
|           |            |           |            | 75   | 0      | 27.52            | 22.59         |
|           |            |           | 16-QAM     | 1    | 0      | 28.40            | <b>22.36</b>  |
|           |            |           |            | 1    | 37     | 27.06            | 22.30         |
|           |            |           |            | 1    | 74     | 27.06            | 22.27         |
|           |            |           |            | 36   | 0      | 27.40            | 21.45         |
|           |            |           |            | 36   | 16     | 27.28            | 21.45         |
|           |            |           |            | 36   | 35     | 27.21            | 21.45         |
|           |            |           |            | 75   | 0      | 27.21            | 21.37         |

**LAT OUTPUT POWER FOR LTE BAND 2 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 20.0      | 18700      | 1860.0    | QPSK       | 1    | 0      | 28.40            | 23.07         |
|           |            |           |            | 1    | 49     | 28.38            | 23.03         |
|           |            |           |            | 1    | 99     | 28.10            | 23.03         |
|           |            |           |            | 50   | 0      | 27.80            | 22.13         |
|           |            |           |            | 50   | 24     | 27.82            | 22.10         |
|           |            |           |            | 50   | 49     | 27.84            | 22.06         |
|           |            |           |            | 100  | 0      | 27.78            | 22.03         |
|           |            |           | 16-QAM     | 1    | 0      | <b>28.15</b>     | 21.75         |
|           |            |           |            | 1    | 49     | 28.06            | 21.73         |
|           |            |           |            | 1    | 99     | 26.94            | 21.71         |
|           |            |           |            | 50   | 0      | 26.84            | 21.15         |
|           |            |           |            | 50   | 24     | 27.72            | 21.01         |
|           |            |           |            | 50   | 49     | 27.13            | 21.03         |
|           |            |           |            | 100  | 0      | 27.18            | 21.00         |
| 20.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.65            | 23.51         |
|           |            |           |            | 1    | 49     | 27.48            | 23.55         |
|           |            |           |            | 1    | 99     | 27.06            | 23.49         |
|           |            |           |            | 50   | 0      | 27.25            | 22.60         |
|           |            |           |            | 50   | 24     | 27.42            | 22.48         |
|           |            |           |            | 50   | 49     | 27.20            | 22.41         |
|           |            |           |            | 100  | 0      | 27.28            | 22.55         |
|           |            |           | 16-QAM     | 1    | 0      | 28.13            | 22.19         |
|           |            |           |            | 1    | 49     | 26.79            | 22.06         |
|           |            |           |            | 1    | 99     | 27.05            | 22.17         |
|           |            |           |            | 50   | 0      | 27.26            | 21.47         |
|           |            |           |            | 50   | 24     | 27.42            | 21.32         |
|           |            |           |            | 50   | 49     | 27.22            | 21.33         |
|           |            |           |            | 100  | 0      | 27.32            | 21.36         |
| 20.0      | 19100      | 1900.0    | QPSK       | 1    | 0      | 28.14            | <b>23.57</b>  |
|           |            |           |            | 1    | 49     | 27.15            | 23.49         |
|           |            |           |            | 1    | 99     | 27.17            | 23.55         |
|           |            |           |            | 50   | 0      | <b>28.42</b>     | 22.58         |
|           |            |           |            | 50   | 24     | 27.54            | 22.46         |
|           |            |           |            | 50   | 49     | 27.23            | 22.53         |
|           |            |           |            | 100  | 0      | 27.95            | 22.40         |
|           |            |           | 16-QAM     | 1    | 0      | 28.14            | 22.30         |
|           |            |           |            | 1    | 49     | 27.16            | <b>22.33</b>  |
|           |            |           |            | 1    | 99     | 27.00            | 22.23         |
|           |            |           |            | 50   | 0      | 27.60            | 21.42         |
|           |            |           |            | 50   | 24     | 27.27            | 21.50         |
|           |            |           |            | 50   | 49     | 27.23            | 21.52         |
|           |            |           |            | 100  | 0      | 27.56            | 21.39         |

**UAT OUTPUT POWER FOR LTE BAND 2 (1.4MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 18607      | 1850.7    | QPSK       | 1    | 0      | 25.67            | 22.91         |
|           |            |           |            | 1    | 2      | 26.53            | 22.93         |
|           |            |           |            | 1    | 5      | 25.68            | 22.93         |
|           |            |           |            | 3    | 0      | 26.49            | 22.85         |
|           |            |           |            | 3    | 1      | 26.64            | 22.90         |
|           |            |           |            | 3    | 2      | 26.59            | 22.92         |
|           |            |           | 16QAM      | 6    | 0      | 26.62            | 21.94         |
|           |            |           |            | 1    | 0      | 26.30            | 21.99         |
|           |            |           |            | 1    | 2      | 26.52            | 21.96         |
|           |            |           |            | 1    | 5      | 26.45            | 21.94         |
|           |            |           |            | 3    | 0      | 26.62            | 21.90         |
|           |            |           |            | 3    | 1      | 26.57            | 21.85         |
|           |            |           |            | 3    | 2      | 26.56            | 21.95         |
|           |            |           |            | 6    | 0      | 26.58            | 21.02         |
| 1.4       | 18900      | 1880.0    | QPSK       | 1    | 0      | <b>27.49</b>     | <b>23.17</b>  |
|           |            |           |            | 1    | 2      | 27.25            | 23.15         |
|           |            |           |            | 1    | 5      | 27.19            | 23.11         |
|           |            |           |            | 3    | 0      | 27.22            | 23.00         |
|           |            |           |            | 3    | 1      | 27.44            | 23.10         |
|           |            |           |            | 3    | 2      | 27.38            | 23.10         |
|           |            |           | 16QAM      | 6    | 0      | 27.38            | 22.24         |
|           |            |           |            | 1    | 0      | <b>27.42</b>     | 22.17         |
|           |            |           |            | 1    | 2      | 27.23            | <b>22.18</b>  |
|           |            |           |            | 1    | 5      | 27.16            | 22.13         |
|           |            |           |            | 3    | 0      | 27.22            | 22.10         |
|           |            |           |            | 3    | 1      | 27.32            | 22.05         |
|           |            |           |            | 3    | 2      | 27.25            | 22.00         |
|           |            |           |            | 6    | 0      | 27.28            | 21.12         |
| 1.4       | 19193      | 1909.3    | QPSK       | 1    | 0      | 27.17            | 23.01         |
|           |            |           |            | 1    | 2      | 26.98            | 22.96         |
|           |            |           |            | 1    | 5      | 26.81            | 22.92         |
|           |            |           |            | 3    | 0      | 26.78            | 22.87         |
|           |            |           |            | 3    | 1      | 27.16            | 22.90         |
|           |            |           |            | 3    | 2      | 27.01            | 22.85         |
|           |            |           | 16QAM      | 6    | 0      | 26.94            | 21.97         |
|           |            |           |            | 1    | 0      | 27.07            | 21.92         |
|           |            |           |            | 1    | 2      | 26.95            | 21.94         |
|           |            |           |            | 1    | 5      | 26.81            | 22.00         |
|           |            |           |            | 3    | 0      | 26.80            | 22.00         |
|           |            |           |            | 3    | 1      | 27.00            | 21.90         |
|           |            |           |            | 3    | 2      | 26.92            | 21.87         |
|           |            |           |            | 6    | 0      | 26.90            | 21.02         |

**UAT OUTPUT POWER FOR LTE BAND 2 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------------|------|--------|------------------|---------------|
|           |            |           |              | Size | Offset |                  |               |
| 3.0       | 18615      | 1851.5    | QPSK         | 1    | 0      | 27.15            | 22.92         |
|           |            |           |              | 1    | 7      | 26.60            | 22.92         |
|           |            |           |              | 1    | 14     | 26.59            | 22.91         |
|           |            |           |              | 8    | 0      | 26.85            | 22.03         |
|           |            |           |              | 8    | 4      | 26.76            | 21.97         |
|           |            |           |              | 8    | 7      | 26.78            | 21.99         |
|           |            |           | 16QAM        | 15   | 0      | 26.83            | 21.99         |
|           |            |           |              | 1    | 0      | 27.14            | 21.94         |
|           |            |           |              | 1    | 7      | 26.56            | 21.85         |
|           |            |           |              | 1    | 14     | 26.62            | 21.93         |
|           |            |           |              | 8    | 0      | 26.83            | 21.08         |
|           |            |           |              | 8    | 4      | 26.64            | 21.07         |
|           |            |           |              | 8    | 7      | 26.68            | 21.06         |
|           |            |           |              | 15   | 0      | 26.72            | 21.00         |
|           |            |           |              | 3.0  | 18900  | 1880.0           | QPSK          |
| 1         | 7          | 27.18     | 23.17        |      |        |                  |               |
| 1         | 14         | 27.14     | 23.13        |      |        |                  |               |
| 8         | 0          | 27.29     | 22.20        |      |        |                  |               |
| 8         | 4          | 27.20     | 22.18        |      |        |                  |               |
| 8         | 7          | 27.14     | 22.13        |      |        |                  |               |
| 16QAM     | 15         | 0         | 27.18        |      |        |                  | 22.13         |
|           | 1          | 0         | <b>27.49</b> |      |        |                  | 22.09         |
|           | 1          | 7         | 27.15        |      |        |                  | 22.06         |
|           | 1          | 14        | 27.15        |      |        |                  | <b>22.11</b>  |
|           | 8          | 0         | 27.25        |      |        |                  | 21.17         |
|           | 8          | 4         | 26.99        |      |        |                  | 21.18         |
|           | 8          | 7         | 26.92        |      |        |                  | 21.23         |
|           | 15         | 0         | 26.98        |      |        |                  | 21.24         |
|           | 3.0        | 19185     | 1908.5       |      |        |                  | QPSK          |
| 1         |            |           |              | 7    | 27.18  | 23.02            |               |
| 1         |            |           |              | 14   | 26.87  | 23.00            |               |
| 8         |            |           |              | 0    | 26.72  | 21.91            |               |
| 8         |            |           |              | 4    | 27.06  | 21.96            |               |
| 8         |            |           |              | 7    | 26.94  | 21.99            |               |
| 16QAM     |            |           |              | 15   | 0      | 26.92            | 21.89         |
|           |            |           |              | 1    | 0      | 27.12            | 21.87         |
|           |            |           |              | 1    | 7      | 27.19            | 21.86         |
|           |            |           |              | 1    | 14     | 26.92            | 21.89         |
|           |            |           |              | 8    | 0      | 26.76            | 20.97         |
|           |            |           |              | 8    | 4      | 26.80            | 20.98         |
|           |            |           |              | 8    | 7      | 26.71            | 21.01         |
|           |            |           |              | 15   | 0      | 26.80            | 20.95         |

**UAT OUTPUT POWER FOR LTE BAND 2 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 5.0       | 18625      | 1852.5    | QPSK       | 1    | 0      | 27.18            | 22.96         |
|           |            |           |            | 1    | 12     | 26.56            | 22.90         |
|           |            |           |            | 1    | 24     | 26.73            | 22.99         |
|           |            |           |            | 12   | 0      | 27.01            | 22.02         |
|           |            |           |            | 12   | 6      | 26.75            | 22.02         |
|           |            |           |            | 12   | 11     | 26.81            | 21.96         |
|           |            |           | 16QAM      | 25   | 0      | 26.97            | 22.03         |
|           |            |           |            | 1    | 0      | 27.29            | 21.92         |
|           |            |           |            | 1    | 12     | 26.56            | 22.08         |
|           |            |           |            | 1    | 24     | 26.77            | 22.10         |
|           |            |           |            | 12   | 0      | 27.04            | 21.05         |
|           |            |           |            | 12   | 6      | 26.70            | 20.96         |
|           |            |           |            | 12   | 11     | 26.73            | 21.04         |
|           |            |           |            | 25   | 0      | 26.86            | 21.03         |
| 5.0       | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.55            | 23.11         |
|           |            |           |            | 1    | 12     | 27.13            | 23.11         |
|           |            |           |            | 1    | 24     | 27.13            | 23.13         |
|           |            |           |            | 12   | 0      | 27.39            | 22.17         |
|           |            |           |            | 12   | 6      | 27.22            | 22.20         |
|           |            |           |            | 12   | 11     | 27.14            | 22.14         |
|           |            |           | 16QAM      | 25   | 0      | 27.22            | 22.15         |
|           |            |           |            | 1    | 0      | 27.49            | 22.18         |
|           |            |           |            | 1    | 12     | 27.12            | 22.29         |
|           |            |           |            | 1    | 24     | 27.14            | 22.26         |
|           |            |           |            | 12   | 0      | 27.41            | 21.22         |
|           |            |           |            | 12   | 6      | 27.13            | 21.18         |
|           |            |           |            | 12   | 11     | 27.11            | 21.26         |
|           |            |           |            | 25   | 0      | 27.13            | 21.17         |
| 5.0       | 19175      | 1907.5    | QPSK       | 1    | 0      | 27.37            | 22.85         |
|           |            |           |            | 1    | 12     | 27.28            | 22.95         |
|           |            |           |            | 1    | 24     | 27.06            | 22.90         |
|           |            |           |            | 12   | 0      | 26.74            | 21.98         |
|           |            |           |            | 12   | 6      | 27.15            | 21.95         |
|           |            |           |            | 12   | 11     | 26.96            | 21.95         |
|           |            |           | 16QAM      | 25   | 0      | 26.93            | 21.96         |
|           |            |           |            | 1    | 0      | 27.36            | 21.98         |
|           |            |           |            | 1    | 12     | 27.28            | 22.10         |
|           |            |           |            | 1    | 24     | 27.08            | 22.05         |
|           |            |           |            | 12   | 0      | 26.81            | 20.96         |
|           |            |           |            | 12   | 6      | 26.91            | 20.96         |
|           |            |           |            | 12   | 11     | 26.69            | 20.96         |
|           |            |           |            | 25   | 0      | 26.70            | 21.02         |

**UAT OUTPUT POWER FOR LTE BAND 2 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 10.0      | 18650      | 1855.0    | QPSK       | 1    | 0      | 27.33            | 22.91         |
|           |            |           |            | 1    | 24     | 26.63            | 22.92         |
|           |            |           |            | 1    | 49     | 26.97            | 22.90         |
|           |            |           |            | 25   | 0      | 27.33            | 21.92         |
|           |            |           |            | 25   | 12     | 26.87            | 21.98         |
|           |            |           |            | 25   | 24     | 27.07            | 22.05         |
|           |            |           | 16QAM      | 50   | 0      | 27.16            | 21.92         |
|           |            |           |            | 1    | 0      | 27.25            | 21.88         |
|           |            |           |            | 1    | 24     | 26.60            | 21.90         |
|           |            |           |            | 1    | 49     | 26.95            | 21.92         |
|           |            |           |            | 25   | 0      | 27.32            | 21.08         |
|           |            |           |            | 25   | 12     | 26.82            | 21.05         |
|           |            |           |            | 25   | 24     | 27.04            | 21.11         |
|           |            |           |            | 50   | 0      | 27.14            | 21.02         |
| 10.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | <b>27.75</b>     | 23.10         |
|           |            |           |            | 1    | 24     | 26.95            | <b>23.17</b>  |
|           |            |           |            | 1    | 49     | 27.09            | 23.15         |
|           |            |           |            | 25   | 0      | 27.52            | 22.17         |
|           |            |           |            | 25   | 12     | 27.08            | 22.17         |
|           |            |           |            | 25   | 24     | 27.23            | 22.23         |
|           |            |           | 16QAM      | 50   | 0      | 27.37            | 22.14         |
|           |            |           |            | 1    | 0      | 27.32            | <b>22.12</b>  |
|           |            |           |            | 1    | 24     | 26.94            | 22.10         |
|           |            |           |            | 1    | 49     | 27.10            | 22.02         |
|           |            |           |            | 25   | 0      | 27.21            | 21.14         |
|           |            |           |            | 25   | 12     | 27.13            | 21.18         |
|           |            |           |            | 25   | 24     | 27.13            | 21.22         |
|           |            |           |            | 50   | 0      | 27.33            | 21.19         |
| 10.0      | 19150      | 1905.0    | QPSK       | 1    | 0      | 27.31            | 22.91         |
|           |            |           |            | 1    | 24     | 27.09            | 22.96         |
|           |            |           |            | 1    | 49     | 27.17            | 22.87         |
|           |            |           |            | 25   | 0      | 26.79            | 22.01         |
|           |            |           |            | 25   | 12     | 27.12            | 22.03         |
|           |            |           |            | 25   | 24     | 27.17            | 21.96         |
|           |            |           | 16QAM      | 50   | 0      | 27.01            | 21.93         |
|           |            |           |            | 1    | 0      | <b>27.47</b>     | 21.92         |
|           |            |           |            | 1    | 24     | 27.07            | 21.85         |
|           |            |           |            | 1    | 49     | 27.13            | 21.90         |
|           |            |           |            | 25   | 0      | 26.81            | 21.05         |
|           |            |           |            | 25   | 12     | 27.11            | 20.96         |
|           |            |           |            | 25   | 24     | 26.96            | 20.95         |
|           |            |           |            | 50   | 0      | 27.04            | 20.96         |



**UAT OUTPUT POWER FOR LTE BAND 2 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 15.0      | 18675      | 1857.5    | QPSK       | 1    | 0      | 27.42            | 22.96         |
|           |            |           |            | 1    | 37     | 26.61            | 22.99         |
|           |            |           |            | 1    | 74     | 27.16            | 22.91         |
|           |            |           |            | 36   | 0      | 27.14            | 21.95         |
|           |            |           |            | 36   | 16     | 27.02            | 22.12         |
|           |            |           |            | 36   | 35     | 27.14            | 22.03         |
|           |            |           |            | 75   | 0      | 27.23            | 22.13         |
|           |            |           | 16-QAM     | 1    | 0      | 27.35            | 21.91         |
|           |            |           |            | 1    | 37     | 26.60            | 21.86         |
|           |            |           |            | 1    | 74     | 27.18            | 21.86         |
|           |            |           |            | 36   | 0      | 27.16            | 21.10         |
|           |            |           |            | 36   | 16     | 27.05            | 21.13         |
|           |            |           |            | 36   | 35     | 27.13            | 21.01         |
|           |            |           |            | 75   | 0      | 27.24            | 21.04         |
| 15.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.71            | 23.05         |
|           |            |           |            | 1    | 37     | 26.95            | 23.06         |
|           |            |           |            | 1    | 74     | 27.10            | 23.17         |
|           |            |           |            | 36   | 0      | 27.55            | 22.11         |
|           |            |           |            | 36   | 16     | 27.10            | 22.24         |
|           |            |           |            | 36   | 35     | 27.17            | 22.25         |
|           |            |           |            | 75   | 0      | 27.33            | 22.18         |
|           |            |           | 16-QAM     | 1    | 0      | 27.64            | 22.06         |
|           |            |           |            | 1    | 37     | 26.91            | 22.09         |
|           |            |           |            | 1    | 74     | 27.09            | 22.06         |
|           |            |           |            | 36   | 0      | 27.50            | 21.20         |
|           |            |           |            | 36   | 16     | 27.09            | 21.21         |
|           |            |           |            | 36   | 35     | 27.16            | 21.23         |
|           |            |           |            | 75   | 0      | 27.32            | 21.17         |
| 15.0      | 19125      | 1902.5    | QPSK       | 1    | 0      | 27.57            | 22.96         |
|           |            |           |            | 1    | 37     | 27.17            | 23.11         |
|           |            |           |            | 1    | 74     | 27.07            | 23.01         |
|           |            |           |            | 36   | 0      | 26.73            | 21.94         |
|           |            |           |            | 36   | 16     | 27.18            | 22.10         |
|           |            |           |            | 36   | 35     | 27.07            | 22.10         |
|           |            |           |            | 75   | 0      | 27.08            | 21.98         |
|           |            |           | 16-QAM     | 1    | 0      | 27.44            | 21.90         |
|           |            |           |            | 1    | 37     | 27.15            | 22.03         |
|           |            |           |            | 1    | 74     | 27.08            | 21.93         |
|           |            |           |            | 36   | 0      | 26.79            | 21.14         |
|           |            |           |            | 36   | 16     | 27.14            | 21.14         |
|           |            |           |            | 36   | 35     | 26.96            | 21.08         |
|           |            |           |            | 75   | 0      | 27.07            | 21.03         |

**UAT OUTPUT POWER FOR LTE BAND 2 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 20.0      | 18700      | 1860.0    | QPSK       | 1    | 0      | 27.06            | 22.94         |
|           |            |           |            | 1    | 49     | 27.02            | 23.01         |
|           |            |           |            | 1    | 99     | 27.21            | 22.90         |
|           |            |           |            | 50   | 0      | 26.85            | 22.09         |
|           |            |           |            | 50   | 24     | 27.01            | 22.12         |
|           |            |           |            | 50   | 49     | 27.16            | 22.07         |
|           |            |           | 16-QAM     | 100  | 0      | 27.13            | 22.15         |
|           |            |           |            | 1    | 0      | 27.19            | 21.86         |
|           |            |           |            | 1    | 49     | 26.47            | 21.89         |
|           |            |           |            | 1    | 99     | 27.17            | 21.97         |
|           |            |           |            | 50   | 0      | 26.84            | 21.19         |
|           |            |           |            | 50   | 24     | 27.02            | 21.15         |
|           |            |           |            | 50   | 49     | 27.17            | 21.18         |
|           |            |           |            | 100  | 0      | 27.15            | 21.26         |
| 20.0      | 18900      | 1880.0    | QPSK       | 1    | 0      | 27.26            | 23.12         |
|           |            |           |            | 1    | 49     | 26.77            | 23.27         |
|           |            |           |            | 1    | 99     | 27.08            | 23.23         |
|           |            |           |            | 50   | 0      | 27.46            | 22.32         |
|           |            |           |            | 50   | 24     | 27.01            | 22.25         |
|           |            |           |            | 50   | 49     | 27.17            | 22.25         |
|           |            |           | 16-QAM     | 100  | 0      | 27.37            | 22.34         |
|           |            |           |            | 1    | 0      | 27.52            | 22.06         |
|           |            |           |            | 1    | 49     | 26.77            | 22.05         |
|           |            |           |            | 1    | 99     | 27.10            | 21.97         |
|           |            |           |            | 50   | 0      | 27.47            | 21.21         |
|           |            |           |            | 50   | 24     | 27.04            | 21.22         |
|           |            |           |            | 50   | 49     | 27.22            | 21.19         |
|           |            |           |            | 100  | 0      | 27.40            | 21.17         |
| 20.0      | 19100      | 1900.0    | QPSK       | 1    | 0      | 27.77            | 22.93         |
|           |            |           |            | 1    | 49     | 27.39            | 23.02         |
|           |            |           |            | 1    | 99     | 26.95            | 23.05         |
|           |            |           |            | 50   | 0      | 26.70            | 22.10         |
|           |            |           |            | 50   | 24     | 27.22            | 22.10         |
|           |            |           |            | 50   | 49     | 27.07            | 22.08         |
|           |            |           | 16-QAM     | 100  | 0      | 27.11            | 22.05         |
|           |            |           |            | 1    | 0      | 27.41            | 21.86         |
|           |            |           |            | 1    | 49     | 27.36            | 21.86         |
|           |            |           |            | 1    | 99     | 26.95            | 21.85         |
|           |            |           |            | 50   | 0      | 26.80            | 21.00         |
|           |            |           |            | 50   | 24     | 27.19            | 21.07         |
|           |            |           |            | 50   | 49     | 27.08            | 21.00         |
|           |            |           |            | 100  | 0      | 27.14            | 21.05         |

### 7.2. LTE BAND 4

#### LAT OUTPUT POWER FOR LTE BAND 4 (1.4MHZ)

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 19957      | 1710.7    | QPSK       | 1    | 0      | 27.73            | 23.73         |
|           |            |           |            | 1    | 2      | 28.18            | 23.53         |
|           |            |           |            | 1    | 5      | 27.99            | 23.50         |
|           |            |           |            | 3    | 0      | 28.18            | 23.60         |
|           |            |           |            | 3    | 1      | 28.22            | 23.65         |
|           |            |           |            | 3    | 2      | 28.19            | 23.70         |
|           |            |           | 16QAM      | 6    | 0      | 28.20            | 22.88         |
|           |            |           |            | 1    | 0      | 27.88            | 22.70         |
|           |            |           |            | 1    | 2      | 28.19            | 22.72         |
|           |            |           |            | 1    | 5      | 28.07            | 22.73         |
|           |            |           |            | 3    | 0      | 28.18            | 22.65         |
|           |            |           |            | 3    | 1      | 28.23            | 22.60         |
|           |            |           |            | 3    | 2      | 28.16            | 22.70         |
|           |            |           |            | 6    | 0      | 28.21            | 21.83         |
| 1.4       | 20175      | 1732.5    | QPSK       | 1    | 0      | 28.16            | <b>23.95</b>  |
|           |            |           |            | 1    | 2      | 28.50            | 23.80         |
|           |            |           |            | 1    | 5      | 28.29            | 23.76         |
|           |            |           |            | 3    | 0      | 28.49            | 23.70         |
|           |            |           |            | 3    | 1      | <b>28.71</b>     | 23.71         |
|           |            |           |            | 3    | 2      | 28.65            | 23.80         |
|           |            |           | 16QAM      | 6    | 0      | 28.66            | 22.90         |
|           |            |           |            | 1    | 0      | 28.16            | <b>22.96</b>  |
|           |            |           |            | 1    | 2      | 28.61            | 22.88         |
|           |            |           |            | 1    | 5      | 28.41            | 22.83         |
|           |            |           |            | 3    | 0      | 28.60            | 22.80         |
|           |            |           |            | 3    | 1      | <b>28.66</b>     | 22.75         |
|           |            |           |            | 3    | 2      | 28.60            | 22.85         |
|           |            |           |            | 6    | 0      | 28.62            | 21.88         |
| 1.4       | 20393      | 1754.3    | QPSK       | 1    | 0      | 27.89            | 23.89         |
|           |            |           |            | 1    | 2      | 27.97            | 23.71         |
|           |            |           |            | 1    | 5      | 27.89            | 23.74         |
|           |            |           |            | 3    | 0      | 27.94            | 23.60         |
|           |            |           |            | 3    | 1      | 28.08            | 23.50         |
|           |            |           |            | 3    | 2      | 28.02            | 23.55         |
|           |            |           | 16QAM      | 6    | 0      | 28.03            | 22.82         |
|           |            |           |            | 1    | 0      | 28.02            | 22.92         |
|           |            |           |            | 1    | 2      | 27.93            | 22.74         |
|           |            |           |            | 1    | 5      | 27.86            | 22.72         |
|           |            |           |            | 3    | 0      | 27.92            | 22.65         |
|           |            |           |            | 3    | 1      | 27.99            | 22.70         |
|           |            |           |            | 3    | 2      | 27.99            | 22.75         |
|           |            |           |            | 6    | 0      | 28.00            | 21.88         |

**LAT OUTPUT POWER FOR LTE BAND 4 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency    | Modulation   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|--------------|--------------|------|--------|------------------|---------------|
|           |            |              |              | Size | Offset |                  |               |
| 3.0       | 19965      | 1711.5       | QPSK         | 1    | 0      | 27.87            | 23.77         |
|           |            |              |              | 1    | 7      | 28.10            | 23.51         |
|           |            |              |              | 1    | 14     | 27.88            | 23.51         |
|           |            |              |              | 8    | 0      | 28.18            | 22.73         |
|           |            |              |              | 8    | 4      | 27.40            | 22.71         |
|           |            |              |              | 8    | 7      | 27.27            | 22.72         |
|           |            |              | 16QAM        | 15   | 0      | 27.50            | 22.74         |
|           |            |              |              | 1    | 0      | 27.87            | 22.72         |
|           |            |              |              | 1    | 7      | 27.74            | 22.71         |
|           |            |              |              | 1    | 14     | 27.64            | 22.72         |
|           |            |              |              | 8    | 0      | 27.88            | 21.72         |
|           |            |              |              | 8    | 4      | 27.14            | 21.74         |
|           |            |              |              | 8    | 7      | 27.14            | 21.72         |
|           |            |              |              | 15   | 0      | 27.30            | 21.71         |
|           |            |              |              | 3.0  | 20175  | 1732.5           | QPSK          |
| 1         | 7          | <b>28.47</b> | 23.77        |      |        |                  |               |
| 1         | 14         | 28.21        | 23.70        |      |        |                  |               |
| 8         | 0          | 28.43        | 22.93        |      |        |                  |               |
| 8         | 4          | 27.86        | 22.85        |      |        |                  |               |
| 8         | 7          | 27.73        | 22.87        |      |        |                  |               |
| 16QAM     | 15         | 0            | 27.89        |      |        |                  | 22.84         |
|           | 1          | 0            | 27.93        |      |        |                  | <b>22.84</b>  |
|           | 1          | 7            | <b>28.11</b> |      |        |                  | 22.71         |
|           | 1          | 14           | 27.88        |      |        |                  | 22.73         |
|           | 8          | 0            | 28.09        |      |        |                  | 21.85         |
|           | 8          | 4            | 27.55        |      |        |                  | 21.89         |
|           | 8          | 7            | 27.49        |      |        |                  | 21.88         |
|           | 15         | 0            | 27.60        |      |        |                  | 21.89         |
|           | 3.0        | 20385        | 1753.5       |      |        |                  | QPSK          |
| 1         |            |              |              | 7    | 27.89  | 23.83            |               |
| 1         |            |              |              | 14   | 27.82  | 23.72            |               |
| 8         |            |              |              | 0    | 27.95  | 22.90            |               |
| 8         |            |              |              | 4    | 27.84  | 22.89            |               |
| 8         |            |              |              | 7    | 27.76  | 22.86            |               |
| 16QAM     |            |              |              | 15   | 0      | 27.69            | 22.74         |
|           |            |              |              | 1    | 0      | 28.06            | 22.80         |
|           |            |              |              | 1    | 7      | 27.92            | 22.71         |
|           |            |              |              | 1    | 14     | 27.77            | 22.71         |
|           |            |              |              | 8    | 0      | 27.95            | 21.83         |
|           |            |              |              | 8    | 4      | 27.57            | 21.94         |
|           |            |              |              | 8    | 7      | 27.49            | 21.88         |
|           |            |              |              | 15   | 0      | 27.45            | 21.80         |

**LAT OUTPUT POWER FOR LTE BAND 4 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 19975      | 1712.5    | QPSK  | 1    | 0      | 28.00            | 23.71         |
|           |            |           |       | 1    | 12     | 27.95            | 23.52         |
|           |            |           |       | 1    | 24     | 27.94            | 23.52         |
|           |            |           |       | 12   | 0      | 28.20            | 22.80         |
|           |            |           |       | 12   | 6      | 27.59            | 22.72         |
|           |            |           |       | 12   | 11     | 27.45            | 22.81         |
|           |            |           |       | 25   | 0      | 27.61            | 22.72         |
|           |            |           | 16QAM | 1    | 0      | 27.89            | 22.75         |
|           |            |           |       | 1    | 12     | 27.99            | 22.72         |
|           |            |           |       | 1    | 24     | 28.06            | 22.75         |
|           |            |           |       | 12   | 0      | 28.24            | 21.90         |
|           |            |           |       | 12   | 6      | 27.29            | 21.74         |
|           |            |           |       | 12   | 11     | 27.25            | 21.71         |
|           |            |           |       | 25   | 0      | 27.33            | 21.73         |
| 5.0       | 20175      | 1732.5    | QPSK  | 1    | 0      | <b>28.45</b>     | <b>23.89</b>  |
|           |            |           |       | 1    | 12     | 28.31            | 23.83         |
|           |            |           |       | 1    | 24     | 28.13            | 23.71         |
|           |            |           |       | 12   | 0      | 28.29            | 22.89         |
|           |            |           |       | 12   | 6      | 27.94            | 22.89         |
|           |            |           |       | 12   | 11     | 27.74            | 22.87         |
|           |            |           |       | 25   | 0      | 27.84            | 22.91         |
|           |            |           | 16QAM | 1    | 0      | 28.15            | 22.91         |
|           |            |           |       | 1    | 12     | <b>28.38</b>     | 22.93         |
|           |            |           |       | 1    | 24     | 28.26            | 22.93         |
|           |            |           |       | 12   | 0      | 28.35            | 21.89         |
|           |            |           |       | 12   | 6      | 27.62            | 21.90         |
|           |            |           |       | 12   | 11     | 27.50            | 21.89         |
|           |            |           |       | 25   | 0      | 27.56            | 21.93         |
| 5.0       | 20375      | 1752.5    | QPSK  | 1    | 0      | 28.21            | 23.84         |
|           |            |           |       | 1    | 12     | 27.99            | 23.83         |
|           |            |           |       | 1    | 24     | 27.82            | 23.74         |
|           |            |           |       | 12   | 0      | 27.93            | 22.83         |
|           |            |           |       | 12   | 6      | 27.91            | 22.91         |
|           |            |           |       | 12   | 11     | 27.71            | 22.96         |
|           |            |           |       | 25   | 0      | 27.78            | 22.86         |
|           |            |           | 16QAM | 1    | 0      | 28.06            | <b>22.99</b>  |
|           |            |           |       | 1    | 12     | 28.02            | 22.87         |
|           |            |           |       | 1    | 24     | 27.87            | 22.95         |
|           |            |           |       | 12   | 0      | 27.96            | 21.85         |
|           |            |           |       | 12   | 6      | 27.64            | 21.85         |
|           |            |           |       | 12   | 11     | 27.46            | 21.87         |
|           |            |           |       | 25   | 0      | 27.51            | 21.92         |

**LAT OUTPUT POWER FOR LTE BAND 4 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 20000      | 1715.0    | QPSK  | 1    | 0      | 28.43            | 23.71         |
|           |            |           |       | 1    | 24     | 27.93            | 23.53         |
|           |            |           |       | 1    | 49     | 28.13            | 23.58         |
|           |            |           |       | 25   | 0      | 28.23            | 22.86         |
|           |            |           |       | 25   | 12     | 27.63            | 22.73         |
|           |            |           |       | 25   | 24     | 27.78            | 22.75         |
|           |            |           | 16QAM | 50   | 0      | 27.85            | 22.75         |
|           |            |           |       | 1    | 0      | 28.17            | 22.73         |
|           |            |           |       | 1    | 24     | 27.62            | 22.71         |
|           |            |           |       | 1    | 49     | 27.79            | 22.77         |
|           |            |           |       | 25   | 0      | 27.95            | 21.76         |
|           |            |           |       | 25   | 12     | 27.56            | 21.73         |
|           |            |           |       | 25   | 24     | 27.54            | 21.74         |
|           |            |           |       | 50   | 0      | 27.70            | 21.74         |
| 10.0      | 20175      | 1732.5    | QPSK  | 1    | 0      | <b>28.64</b>     | 23.84         |
|           |            |           |       | 1    | 24     | 28.21            | 23.74         |
|           |            |           |       | 1    | 49     | 28.27            | 23.72         |
|           |            |           |       | 25   | 0      | 28.29            | 22.92         |
|           |            |           |       | 25   | 12     | 27.89            | 22.95         |
|           |            |           |       | 25   | 24     | 27.91            | 22.87         |
|           |            |           | 16QAM | 50   | 0      | 27.90            | 22.87         |
|           |            |           |       | 1    | 0      | 28.00            | <b>22.85</b>  |
|           |            |           |       | 1    | 24     | 28.00            | 22.76         |
|           |            |           |       | 1    | 49     | 27.87            | 22.78         |
|           |            |           |       | 25   | 0      | 27.96            | 21.91         |
|           |            |           |       | 25   | 12     | 27.79            | 21.85         |
|           |            |           |       | 25   | 24     | 27.64            | 21.91         |
|           |            |           |       | 50   | 0      | 27.72            | 21.89         |
| 10.0      | 20350      | 1750.0    | QPSK  | 1    | 0      | 28.18            | 23.83         |
|           |            |           |       | 1    | 24     | 28.20            | <b>23.86</b>  |
|           |            |           |       | 1    | 49     | 27.90            | 23.72         |
|           |            |           |       | 25   | 0      | 27.95            | 22.88         |
|           |            |           |       | 25   | 12     | 27.79            | 22.93         |
|           |            |           |       | 25   | 24     | 27.79            | 22.84         |
|           |            |           | 16QAM | 50   | 0      | 27.81            | 22.83         |
|           |            |           |       | 1    | 0      | <b>28.27</b>     | 22.77         |
|           |            |           |       | 1    | 24     | 27.98            | 22.78         |
|           |            |           |       | 1    | 49     | 27.84            | 22.81         |
|           |            |           |       | 25   | 0      | 27.85            | 21.80         |
|           |            |           |       | 25   | 12     | 27.68            | 21.93         |
|           |            |           |       | 25   | 24     | 27.57            | 21.83         |
|           |            |           |       | 50   | 0      | 27.73            | 21.83         |

**LAT OUTPUT POWER FOR LTE BAND 4 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 15.0      | 20025      | 1717.5    | QPSK   | 1    | 0      | 28.15            | 23.67         |
|           |            |           |        | 1    | 37     | 28.10            | 23.50         |
|           |            |           |        | 1    | 74     | 28.14            | 23.60         |
|           |            |           |        | 36   | 0      | 28.36            | 22.86         |
|           |            |           |        | 36   | 16     | 27.80            | 22.74         |
|           |            |           |        | 36   | 35     | 27.76            | 22.79         |
|           |            |           |        | 75   | 0      | 27.84            | 22.84         |
|           |            |           | 16-QAM | 1    | 0      | 28.20            | 22.70         |
|           |            |           |        | 1    | 37     | 27.68            | 22.71         |
|           |            |           |        | 1    | 74     | 27.87            | 22.73         |
|           |            |           |        | 36   | 0      | 28.05            | 21.79         |
|           |            |           |        | 36   | 16     | 27.76            | 21.75         |
|           |            |           |        | 36   | 35     | 27.70            | 21.81         |
|           |            |           |        | 75   | 0      | 27.76            | 21.81         |
| 15.0      | 20175      | 1732.5    | QPSK   | 1    | 0      | 28.39            | 23.72         |
|           |            |           |        | 1    | 37     | <b>28.46</b>     | 23.67         |
|           |            |           |        | 1    | 74     | 28.25            | 23.74         |
|           |            |           |        | 36   | 0      | 28.31            | 22.98         |
|           |            |           |        | 36   | 16     | 28.06            | 22.88         |
|           |            |           |        | 36   | 35     | 27.87            | 22.91         |
|           |            |           |        | 75   | 0      | 27.89            | 22.97         |
|           |            |           | 16-QAM | 1    | 0      | <b>28.20</b>     | <b>22.76</b>  |
|           |            |           |        | 1    | 37     | 28.11            | 22.71         |
|           |            |           |        | 1    | 74     | 27.87            | 22.65         |
|           |            |           |        | 36   | 0      | 27.88            | 21.77         |
|           |            |           |        | 36   | 16     | 27.95            | 21.81         |
|           |            |           |        | 36   | 35     | 27.73            | 21.82         |
|           |            |           |        | 75   | 0      | 27.88            | 21.86         |
| 15.0      | 20325      | 1747.5    | QPSK   | 1    | 0      | 28.31            | <b>23.79</b>  |
|           |            |           |        | 1    | 37     | 28.33            | 23.77         |
|           |            |           |        | 1    | 74     | 27.94            | 23.74         |
|           |            |           |        | 36   | 0      | 27.84            | 22.88         |
|           |            |           |        | 36   | 16     | 27.97            | 22.95         |
|           |            |           |        | 36   | 35     | 27.83            | 22.83         |
|           |            |           |        | 75   | 0      | 27.77            | 22.91         |
|           |            |           | 16-QAM | 1    | 0      | 28.09            | 22.65         |
|           |            |           |        | 1    | 37     | 27.93            | 22.65         |
|           |            |           |        | 1    | 74     | 27.86            | 22.66         |
|           |            |           |        | 36   | 0      | 27.81            | 21.76         |
|           |            |           |        | 36   | 16     | 27.90            | 21.88         |
|           |            |           |        | 36   | 35     | 27.72            | 21.79         |
|           |            |           |        | 75   | 0      | 27.77            | 21.86         |

**LAT OUTPUT POWER FOR LTE BAND 4 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 20.0      | 20050      | 1720.0    | QPSK   | 1    | 0      | 27.93            | 23.74         |
|           |            |           |        | 1    | 49     | 28.15            | 23.61         |
|           |            |           |        | 1    | 99     | 28.31            | 23.68         |
|           |            |           |        | 50   | 0      | <b>28.53</b>     | 22.88         |
|           |            |           |        | 50   | 24     | 27.96            | 22.83         |
|           |            |           |        | 50   | 49     | 27.82            | 22.84         |
|           |            |           |        | 100  | 0      | 27.94            | 22.90         |
|           |            |           | 16-QAM | 1    | 0      | 27.88            | 22.67         |
|           |            |           |        | 1    | 49     | 27.88            | 22.74         |
|           |            |           |        | 1    | 99     | 28.01            | 22.75         |
|           |            |           |        | 50   | 0      | 28.25            | 21.79         |
|           |            |           |        | 50   | 24     | 27.74            | 21.79         |
|           |            |           |        | 50   | 49     | 27.76            | 21.83         |
|           |            |           |        | 100  | 0      | 27.94            | 21.88         |
| 20.0      | 20175      | 1732.5    | QPSK   | 1    | 0      | 27.71            | 23.82         |
|           |            |           |        | 1    | 49     | 28.52            | 23.78         |
|           |            |           |        | 1    | 99     | 28.38            | 23.85         |
|           |            |           |        | 50   | 0      | 28.31            | 22.89         |
|           |            |           |        | 50   | 24     | 28.02            | 22.92         |
|           |            |           |        | 50   | 49     | 27.86            | 22.87         |
|           |            |           |        | 100  | 0      | 27.98            | 22.82         |
|           |            |           | 16-QAM | 1    | 0      | 27.83            | 22.71         |
|           |            |           |        | 1    | 49     | <b>28.28</b>     | 22.70         |
|           |            |           |        | 1    | 99     | 28.03            | 22.70         |
|           |            |           |        | 50   | 0      | 28.10            | 21.84         |
|           |            |           |        | 50   | 24     | 27.93            | 21.79         |
|           |            |           |        | 50   | 49     | 27.75            | 21.79         |
|           |            |           |        | 100  | 0      | 27.83            | 21.81         |
| 20.0      | 20300      | 1745.0    | QPSK   | 1    | 0      | 27.95            | 23.79         |
|           |            |           |        | 1    | 49     | 28.48            | <b>23.86</b>  |
|           |            |           |        | 1    | 99     | 28.10            | 23.82         |
|           |            |           |        | 50   | 0      | 27.79            | 22.80         |
|           |            |           |        | 50   | 24     | 27.94            | 22.90         |
|           |            |           |        | 50   | 49     | 27.83            | 22.88         |
|           |            |           |        | 100  | 0      | 27.79            | 22.78         |
|           |            |           | 16-QAM | 1    | 0      | 27.91            | 22.72         |
|           |            |           |        | 1    | 49     | 28.16            | 22.68         |
|           |            |           |        | 1    | 99     | 28.00            | <b>22.75</b>  |
|           |            |           |        | 50   | 0      | 27.80            | 21.76         |
|           |            |           |        | 50   | 24     | 27.83            | 21.83         |
|           |            |           |        | 50   | 49     | 27.73            | 21.76         |
|           |            |           |        | 100  | 0      | 27.77            | 21.77         |



**UAT OUTPUT POWER FOR LTE BAND 4 (1.4MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 19957      | 1710.7    | QPSK       | 1    | 0      | 27.43            | 22.85         |
|           |            |           |            | 1    | 2      | 27.71            | 22.84         |
|           |            |           |            | 1    | 5      | 27.46            | 22.89         |
|           |            |           |            | 3    | 0      | 27.76            | 22.70         |
|           |            |           |            | 3    | 1      | 27.88            | 22.80         |
|           |            |           |            | 3    | 2      | 27.81            | 22.75         |
|           |            |           | 16QAM      | 6    | 0      | 27.86            | 21.89         |
|           |            |           |            | 1    | 0      | 27.38            | 21.92         |
|           |            |           |            | 1    | 2      | 27.74            | 21.86         |
|           |            |           |            | 1    | 5      | 27.63            | 21.91         |
|           |            |           |            | 3    | 0      | 27.81            | 21.76         |
|           |            |           |            | 3    | 1      | 27.93            | 21.80         |
|           |            |           |            | 3    | 2      | 27.79            | 21.82         |
|           |            |           |            | 6    | 0      | 27.79            | 21.02         |
| 1.4       | 20175      | 1732.5    | QPSK       | 1    | 0      | 27.35            | 22.80         |
|           |            |           |            | 1    | 2      | 27.82            | 22.87         |
|           |            |           |            | 1    | 5      | 27.56            | 22.92         |
|           |            |           |            | 3    | 0      | 27.78            | 22.70         |
|           |            |           |            | 3    | 1      | 27.92            | 22.75         |
|           |            |           |            | 3    | 2      | 27.89            | 22.80         |
|           |            |           | 16QAM      | 6    | 0      | 28.00            | 21.92         |
|           |            |           |            | 1    | 0      | 27.54            | 21.92         |
|           |            |           |            | 1    | 2      | 27.89            | 21.89         |
|           |            |           |            | 1    | 5      | 27.67            | 21.91         |
|           |            |           |            | 3    | 0      | 27.90            | 21.70         |
|           |            |           |            | 3    | 1      | 27.93            | 21.73         |
|           |            |           |            | 3    | 2      | 27.90            | 21.80         |
|           |            |           |            | 6    | 0      | 27.84            | 20.97         |
| 1.4       | 20393      | 1754.3    | QPSK       | 1    | 0      | 27.39            | 22.78         |
|           |            |           |            | 1    | 2      | 27.68            | 22.91         |
|           |            |           |            | 1    | 5      | 27.46            | 22.71         |
|           |            |           |            | 3    | 0      | 27.73            | 22.70         |
|           |            |           |            | 3    | 1      | 27.93            | 22.65         |
|           |            |           |            | 3    | 2      | 27.79            | 22.72         |
|           |            |           | 16QAM      | 6    | 0      | 27.82            | 21.94         |
|           |            |           |            | 1    | 0      | 27.47            | 21.98         |
|           |            |           |            | 1    | 2      | 27.79            | 21.92         |
|           |            |           |            | 1    | 5      | 27.65            | 21.98         |
|           |            |           |            | 3    | 0      | 27.81            | 21.75         |
|           |            |           |            | 3    | 1      | 27.94            | 21.80         |
|           |            |           |            | 3    | 2      | 27.76            | 21.82         |
|           |            |           |            | 6    | 0      | 27.78            | 20.97         |

**UAT OUTPUT POWER FOR LTE BAND 4 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency    | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|--------------|------------|------|--------|------------------|---------------|
|           |            |              |            | Size | Offset |                  |               |
| 3.0       | 19965      | 1711.5       | QPSK       | 1    | 0      | 27.42            | 22.78         |
|           |            |              |            | 1    | 7      | 27.58            | 22.79         |
|           |            |              |            | 1    | 14     | 27.36            | 22.81         |
|           |            |              |            | 8    | 0      | 27.68            | 21.93         |
|           |            |              |            | 8    | 4      | 27.12            | 21.92         |
|           |            |              |            | 8    | 7      | 26.90            | 21.87         |
|           |            |              | 16QAM      | 15   | 0      | 27.05            | 21.92         |
|           |            |              |            | 1    | 0      | 27.47            | 21.76         |
|           |            |              |            | 1    | 7      | 27.29            | 21.76         |
|           |            |              |            | 1    | 14     | 27.14            | 21.80         |
|           |            |              |            | 8    | 0      | 27.29            | 20.82         |
|           |            |              |            | 8    | 4      | 26.70            | 21.02         |
|           |            |              |            | 8    | 7      | 26.71            | 20.96         |
|           |            |              |            | 15   | 0      | 26.74            | 20.98         |
|           |            |              |            | 3.0  | 20175  | 1732.5           | QPSK          |
| 1         | 7          | <b>27.74</b> | 22.79      |      |        |                  |               |
| 1         | 14         | 27.46        | 22.84      |      |        |                  |               |
| 8         | 0          | 27.70        | 21.93      |      |        |                  |               |
| 8         | 4          | 27.19        | 21.92      |      |        |                  |               |
| 8         | 7          | 26.88        | 21.95      |      |        |                  |               |
| 16QAM     | 15         | 0            | 27.05      |      |        |                  | 21.90         |
|           | 1          | 0            | 27.39      |      |        |                  | 21.76         |
|           | 1          | 7            | 27.40      |      |        |                  | 21.76         |
|           | 1          | 14           | 27.16      |      |        |                  | 21.83         |
|           | 8          | 0            | 27.37      |      |        |                  | 20.82         |
|           | 8          | 4            | 26.84      |      |        |                  | 20.92         |
|           | 8          | 7            | 26.74      |      |        |                  | 20.92         |
|           | 15         | 0            | 26.88      |      |        |                  | 20.94         |
|           | 3.0        | 20385        | 1753.5     |      |        |                  | QPSK          |
| 1         |            |              |            | 7    | 27.61  | 22.88            |               |
| 1         |            |              |            | 14   | 27.39  | 22.71            |               |
| 8         |            |              |            | 0    | 27.65  | 21.96            |               |
| 8         |            |              |            | 4    | 27.13  | 21.92            |               |
| 8         |            |              |            | 7    | 26.98  | 22.04            |               |
| 16QAM     |            |              |            | 15   | 0      | 27.05            | 21.93         |
|           |            |              |            | 1    | 0      | <b>27.47</b>     | <b>21.92</b>  |
|           |            |              |            | 1    | 7      | 27.31            | 21.77         |
|           |            |              |            | 1    | 14     | 27.12            | 21.83         |
|           |            |              |            | 8    | 0      | 27.33            | 20.84         |
|           |            |              |            | 8    | 4      | 26.77            | 21.01         |
|           |            |              |            | 8    | 7      | 26.74            | 20.93         |
|           |            |              |            | 15   | 0      | 26.76            | 21.08         |

**UAT OUTPUT POWER FOR LTE BAND 4 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 19975      | 1712.5    | QPSK  | 1    | 0      | 27.62            | 22.87         |
|           |            |           |       | 1    | 12     | 27.45            | 22.82         |
|           |            |           |       | 1    | 24     | 27.34            | 22.84         |
|           |            |           |       | 12   | 0      | 27.56            | 21.92         |
|           |            |           |       | 12   | 6      | 27.15            | 21.93         |
|           |            |           |       | 12   | 11     | 26.88            | 21.90         |
|           |            |           |       | 25   | 0      | 27.04            | 21.93         |
|           |            |           | 16QAM | 1    | 0      | 27.81            | 21.96         |
|           |            |           |       | 1    | 12     | 27.56            | 21.97         |
|           |            |           |       | 1    | 24     | 27.53            | 21.82         |
|           |            |           |       | 12   | 0      | 27.62            | 20.89         |
|           |            |           |       | 12   | 6      | 26.90            | 20.91         |
|           |            |           |       | 12   | 11     | 26.70            | 20.92         |
|           |            |           |       | 25   | 0      | 26.82            | 21.02         |
| 5.0       | 20175      | 1732.5    | QPSK  | 1    | 0      | 27.56            | 22.80         |
|           |            |           |       | 1    | 12     | 27.87            | 22.83         |
|           |            |           |       | 1    | 24     | 27.36            | 22.82         |
|           |            |           |       | 12   | 0      | 27.53            | 21.95         |
|           |            |           |       | 12   | 6      | 27.21            | 21.91         |
|           |            |           |       | 12   | 11     | 26.97            | 21.87         |
|           |            |           |       | 25   | 0      | 27.01            | 21.87         |
|           |            |           | 16QAM | 1    | 0      | 27.62            | 22.00         |
|           |            |           |       | 1    | 12     | 27.76            | 22.01         |
|           |            |           |       | 1    | 24     | 27.61            | 21.85         |
|           |            |           |       | 12   | 0      | 27.64            | 20.94         |
|           |            |           |       | 12   | 6      | 26.99            | 20.94         |
|           |            |           |       | 12   | 11     | 26.78            | 20.94         |
|           |            |           |       | 25   | 0      | 26.85            | 21.06         |
| 5.0       | 20375      | 1752.5    | QPSK  | 1    | 0      | 27.51            | 22.78         |
|           |            |           |       | 1    | 12     | 27.41            | 22.91         |
|           |            |           |       | 1    | 24     | 27.33            | 22.73         |
|           |            |           |       | 12   | 0      | 27.51            | 21.97         |
|           |            |           |       | 12   | 6      | 27.15            | 21.86         |
|           |            |           |       | 12   | 11     | 26.96            | 22.02         |
|           |            |           |       | 25   | 0      | 26.98            | 21.98         |
|           |            |           | 16QAM | 1    | 0      | 27.38            | 22.04         |
|           |            |           |       | 1    | 12     | 27.53            | 21.95         |
|           |            |           |       | 1    | 24     | 27.52            | 21.82         |
|           |            |           |       | 12   | 0      | 27.65            | 21.06         |
|           |            |           |       | 12   | 6      | 26.88            | 20.95         |
|           |            |           |       | 12   | 11     | 26.82            | 20.94         |
|           |            |           |       | 25   | 0      | 26.78            | 21.01         |

**UAT OUTPUT POWER FOR LTE BAND 4 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 20000      | 1715.0    | QPSK  | 1    | 0      | <b>28.04</b>     | 22.80         |
|           |            |           |       | 1    | 24     | 27.44            | 22.83         |
|           |            |           |       | 1    | 49     | 27.49            | 22.83         |
|           |            |           |       | 25   | 0      | 27.63            | 21.93         |
|           |            |           |       | 25   | 12     | 27.16            | 21.93         |
|           |            |           |       | 25   | 24     | 27.14            | 21.92         |
|           |            |           | 16QAM | 50   | 0      | 27.24            | 21.93         |
|           |            |           |       | 1    | 0      | 27.89            | 21.76         |
|           |            |           |       | 1    | 24     | 27.19            | <b>21.76</b>  |
|           |            |           |       | 1    | 49     | 27.18            | 21.76         |
|           |            |           |       | 25   | 0      | 27.40            | 20.94         |
|           |            |           |       | 25   | 12     | 27.12            | 20.97         |
|           |            |           |       | 25   | 24     | 27.00            | 20.90         |
|           |            |           |       | 50   | 0      | 27.22            | 20.99         |
| 10.0      | 20175      | 1732.5    | QPSK  | 1    | 0      | 27.64            | 22.81         |
|           |            |           |       | 1    | 24     | 27.65            | 22.82         |
|           |            |           |       | 1    | 49     | 27.48            | 22.82         |
|           |            |           |       | 25   | 0      | 27.54            | 21.93         |
|           |            |           |       | 25   | 12     | 27.22            | 21.90         |
|           |            |           |       | 25   | 24     | 27.14            | 22.00         |
|           |            |           | 16QAM | 50   | 0      | 27.09            | 21.95         |
|           |            |           |       | 1    | 0      | <b>27.99</b>     | 21.76         |
|           |            |           |       | 1    | 24     | 27.38            | 21.76         |
|           |            |           |       | 1    | 49     | 27.23            | 21.75         |
|           |            |           |       | 25   | 0      | 27.21            | 20.88         |
|           |            |           |       | 25   | 12     | 27.16            | 20.86         |
|           |            |           |       | 25   | 24     | 26.99            | 20.94         |
|           |            |           |       | 50   | 0      | 27.01            | 20.98         |
| 10.0      | 20350      | 1750.0    | QPSK  | 1    | 0      | 27.69            | 22.81         |
|           |            |           |       | 1    | 24     | 27.41            | <b>22.86</b>  |
|           |            |           |       | 1    | 49     | 27.38            | 22.66         |
|           |            |           |       | 25   | 0      | 27.53            | 21.95         |
|           |            |           |       | 25   | 12     | 27.05            | 21.89         |
|           |            |           |       | 25   | 24     | 26.97            | 21.96         |
|           |            |           | 16QAM | 50   | 0      | 27.05            | 21.98         |
|           |            |           |       | 1    | 0      | 27.19            | 21.76         |
|           |            |           |       | 1    | 24     | 27.15            | 21.76         |
|           |            |           |       | 1    | 49     | 27.07            | 21.75         |
|           |            |           |       | 25   | 0      | 27.29            | 20.99         |
|           |            |           |       | 25   | 12     | 26.98            | 20.98         |
|           |            |           |       | 25   | 24     | 26.87            | 20.96         |
|           |            |           |       | 50   | 0      | 26.99            | 20.97         |

**UAT OUTPUT POWER FOR LTE BAND 4 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 15.0      | 20025      | 1717.5    | QPSK   | 1    | 0      | 27.81            | 22.84         |
|           |            |           |        | 1    | 37     | 27.57            | 22.85         |
|           |            |           |        | 1    | 74     | 27.56            | 22.86         |
|           |            |           |        | 36   | 0      | 27.72            | 21.99         |
|           |            |           |        | 36   | 16     | 27.31            | 21.98         |
|           |            |           |        | 36   | 35     | 27.14            | 22.05         |
|           |            |           |        | 75   | 0      | 27.27            | 22.06         |
|           |            |           | 16-QAM | 1    | 0      | <b>27.97</b>     | 21.76         |
|           |            |           |        | 1    | 37     | 27.22            | 21.76         |
|           |            |           |        | 1    | 74     | 27.28            | 21.79         |
|           |            |           |        | 36   | 0      | 27.39            | 20.96         |
|           |            |           |        | 36   | 16     | 27.26            | 21.00         |
|           |            |           |        | 36   | 35     | 27.16            | 20.93         |
|           |            |           |        | 75   | 0      | 27.29            | 21.06         |
| 15.0      | 20175      | 1732.5    | QPSK   | 1    | 0      | <b>27.98</b>     | 22.83         |
|           |            |           |        | 1    | 37     | 27.79            | 22.87         |
|           |            |           |        | 1    | 74     | 27.50            | 22.88         |
|           |            |           |        | 36   | 0      | 27.50            | 22.00         |
|           |            |           |        | 36   | 16     | 27.41            | 22.02         |
|           |            |           |        | 36   | 35     | 27.12            | 22.02         |
|           |            |           |        | 75   | 0      | 27.13            | 22.02         |
|           |            |           | 16-QAM | 1    | 0      | 27.71            | <b>21.80</b>  |
|           |            |           |        | 1    | 37     | 27.45            | 21.76         |
|           |            |           |        | 1    | 74     | 27.23            | 21.76         |
|           |            |           |        | 36   | 0      | 27.18            | 20.98         |
|           |            |           |        | 36   | 16     | 27.33            | 20.97         |
|           |            |           |        | 36   | 35     | 27.05            | 20.91         |
|           |            |           |        | 75   | 0      | 27.13            | 21.03         |
| 15.0      | 20325      | 1747.5    | QPSK   | 1    | 0      | 27.90            | <b>22.90</b>  |
|           |            |           |        | 1    | 37     | 27.50            | 22.89         |
|           |            |           |        | 1    | 74     | 27.43            | 22.71         |
|           |            |           |        | 36   | 0      | 27.64            | 21.94         |
|           |            |           |        | 36   | 16     | 27.23            | 21.81         |
|           |            |           |        | 36   | 35     | 26.97            | 21.96         |
|           |            |           |        | 75   | 0      | 27.11            | 22.01         |
|           |            |           | 16-QAM | 1    | 0      | 27.79            | 21.76         |
|           |            |           |        | 1    | 37     | 27.16            | 21.78         |
|           |            |           |        | 1    | 74     | 27.05            | 21.78         |
|           |            |           |        | 36   | 0      | 27.21            | 20.92         |
|           |            |           |        | 36   | 16     | 27.13            | 20.93         |
|           |            |           |        | 36   | 35     | 26.91            | 20.85         |
|           |            |           |        | 75   | 0      | 27.04            | 21.02         |

**UAT OUTPUT POWER FOR LTE BAND 4 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 20.0      | 20050      | 1720.0    | QPSK   | 1    | 0      | 27.83            | 22.60         |
|           |            |           |        | 1    | 49     | 27.78            | 22.95         |
|           |            |           |        | 1    | 99     | 27.83            | 22.92         |
|           |            |           |        | 50   | 0      | 27.87            | 21.93         |
|           |            |           |        | 50   | 24     | 27.49            | 21.97         |
|           |            |           |        | 50   | 49     | 27.31            | 22.04         |
|           |            |           |        | 100  | 0      | 27.52            | 21.90         |
|           |            |           | 16-QAM | 1    | 0      | 27.77            | 21.76         |
|           |            |           |        | 1    | 49     | 27.48            | 21.76         |
|           |            |           |        | 1    | 99     | 27.46            | 21.76         |
|           |            |           |        | 50   | 0      | 27.57            | 20.97         |
|           |            |           |        | 50   | 24     | 27.28            | 21.00         |
|           |            |           |        | 50   | 49     | 27.30            | 20.89         |
|           |            |           |        | 100  | 0      | 27.45            | 20.97         |
| 20.0      | 20175      | 1732.5    | QPSK   | 1    | 0      | 27.53            | 22.70         |
|           |            |           |        | 1    | 49     | 27.98            | 22.95         |
|           |            |           |        | 1    | 99     | 27.68            | 22.89         |
|           |            |           |        | 50   | 0      | 27.64            | 22.03         |
|           |            |           |        | 50   | 24     | 27.42            | 22.00         |
|           |            |           |        | 50   | 49     | 27.20            | 22.00         |
|           |            |           |        | 100  | 0      | 27.21            | 21.97         |
|           |            |           | 16-QAM | 1    | 0      | 27.20            | 21.76         |
|           |            |           |        | 1    | 49     | 27.67            | 21.77         |
|           |            |           |        | 1    | 99     | 27.35            | 21.82         |
|           |            |           |        | 50   | 0      | 27.37            | 20.91         |
|           |            |           |        | 50   | 24     | 27.34            | 20.90         |
|           |            |           |        | 50   | 49     | 27.08            | 20.92         |
|           |            |           |        | 100  | 0      | 27.11            | 20.93         |
| 20.0      | 20300      | 1745.0    | QPSK   | 1    | 0      | 27.49            | 22.61         |
|           |            |           |        | 1    | 49     | 27.74            | 22.94         |
|           |            |           |        | 1    | 99     | 27.59            | 22.70         |
|           |            |           |        | 50   | 0      | 27.76            | 21.92         |
|           |            |           |        | 50   | 24     | 27.29            | 21.99         |
|           |            |           |        | 50   | 49     | 27.10            | 21.90         |
|           |            |           |        | 100  | 0      | 27.25            | 21.98         |
|           |            |           | 16-QAM | 1    | 0      | 27.51            | 21.76         |
|           |            |           |        | 1    | 49     | 27.44            | 21.77         |
|           |            |           |        | 1    | 99     | 27.21            | 21.84         |
|           |            |           |        | 50   | 0      | 27.43            | 20.94         |
|           |            |           |        | 50   | 24     | 27.10            | 21.03         |
|           |            |           |        | 50   | 49     | 26.90            | 20.88         |
|           |            |           |        | 100  | 0      | 27.05            | 20.88         |

### 7.3. LTE BAND 5

#### LAT OUTPUT POWER FOR LTE BAND 5 (1.4MHZ)

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 20407      | 824.7     | QPSK       | 1    | 0      | 27.84            | 23.83         |
|           |            |           |            | 1    | 2      | 28.39            | 23.85         |
|           |            |           |            | 1    | 5      | 28.16            | 23.73         |
|           |            |           |            | 3    | 0      | 28.32            | 23.65         |
|           |            |           |            | 3    | 1      | 28.38            | 23.70         |
|           |            |           |            | 3    | 2      | 28.32            | 23.72         |
|           |            |           | 16QAM      | 6    | 0      | 28.34            | 22.85         |
|           |            |           |            | 1    | 0      | 27.93            | 22.54         |
|           |            |           |            | 1    | 2      | 28.35            | 22.52         |
|           |            |           |            | 1    | 5      | 28.21            | 22.39         |
|           |            |           |            | 3    | 0      | 28.32            | 22.40         |
|           |            |           |            | 3    | 1      | 28.38            | 22.41         |
|           |            |           |            | 3    | 2      | 28.28            | 22.50         |
|           |            |           |            | 6    | 0      | 28.28            | 21.75         |
| 1.4       | 20525      | 836.5     | QPSK       | 1    | 0      | 28.06            | 23.71         |
|           |            |           |            | 1    | 2      | 28.46            | 23.67         |
|           |            |           |            | 1    | 5      | 28.24            | 23.72         |
|           |            |           |            | 3    | 0      | 28.42            | 23.56         |
|           |            |           |            | 3    | 1      | 28.50            | 23.60         |
|           |            |           |            | 3    | 2      | 28.48            | 23.62         |
|           |            |           | 16QAM      | 6    | 0      | 28.42            | 22.79         |
|           |            |           |            | 1    | 0      | 28.16            | 22.43         |
|           |            |           |            | 1    | 2      | 28.46            | 22.43         |
|           |            |           |            | 1    | 5      | 28.33            | 22.42         |
|           |            |           |            | 3    | 0      | 28.48            | 22.30         |
|           |            |           |            | 3    | 1      | 28.53            | 22.31         |
|           |            |           |            | 3    | 2      | 28.45            | 22.40         |
|           |            |           |            | 6    | 0      | 28.44            | 21.65         |
| 1.4       | 20643      | 848.3     | QPSK       | 1    | 0      | 28.17            | 23.89         |
|           |            |           |            | 1    | 2      | 28.52            | 23.79         |
|           |            |           |            | 1    | 5      | 28.41            | 23.75         |
|           |            |           |            | 3    | 0      | 28.45            | 23.70         |
|           |            |           |            | 3    | 1      | 28.62            | 23.65         |
|           |            |           |            | 3    | 2      | 28.58            | 23.72         |
|           |            |           | 16QAM      | 6    | 0      | 28.55            | 22.82         |
|           |            |           |            | 1    | 0      | 28.26            | 22.56         |
|           |            |           |            | 1    | 2      | 28.32            | 22.57         |
|           |            |           |            | 1    | 5      | 28.24            | 22.53         |
|           |            |           |            | 3    | 0      | 28.15            | 22.42         |
|           |            |           |            | 3    | 1      | 28.63            | 22.45         |
|           |            |           |            | 3    | 2      | 28.61            | 22.50         |
|           |            |           |            | 6    | 0      | 28.57            | 21.66         |

**LAT OUTPUT POWER FOR LTE BAND 5 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 3.0       | 20415      | 825.5     | QPSK       | 1    | 0      | 28.19            | 23.71         |
|           |            |           |            | 1    | 7      | 28.33            | 23.70         |
|           |            |           |            | 1    | 14     | 28.06            | <b>23.79</b>  |
|           |            |           |            | 8    | 0      | 28.47            | 22.89         |
|           |            |           |            | 8    | 4      | 27.63            | 22.69         |
|           |            |           |            | 8    | 7      | 27.44            | 22.74         |
|           |            |           | 16QAM      | 15   | 0      | 27.69            | 22.72         |
|           |            |           |            | 1    | 0      | 27.69            | 22.52         |
|           |            |           |            | 1    | 7      | 27.89            | 22.56         |
|           |            |           |            | 1    | 14     | 27.62            | 22.48         |
|           |            |           |            | 8    | 0      | 28.03            | 21.84         |
|           |            |           |            | 8    | 4      | 27.46            | 21.73         |
|           |            |           |            | 8    | 7      | 27.22            | 21.74         |
|           |            |           |            | 15   | 0      | 27.41            | 21.84         |
| 3.0       | 20525      | 836.5     | QPSK       | 1    | 0      | 28.19            | 23.70         |
|           |            |           |            | 1    | 7      | 28.39            | 23.70         |
|           |            |           |            | 1    | 14     | 28.16            | 23.72         |
|           |            |           |            | 8    | 0      | 28.36            | 22.80         |
|           |            |           |            | 8    | 4      | 27.71            | 22.78         |
|           |            |           |            | 8    | 7      | 27.57            | 22.71         |
|           |            |           | 16QAM      | 15   | 0      | 27.58            | 22.74         |
|           |            |           |            | 1    | 0      | 28.06            | 22.52         |
|           |            |           |            | 1    | 7      | 28.01            | 22.58         |
|           |            |           |            | 1    | 14     | 27.79            | 22.41         |
|           |            |           |            | 8    | 0      | 27.99            | 21.75         |
|           |            |           |            | 8    | 4      | 27.50            | 21.56         |
|           |            |           |            | 8    | 7      | 27.38            | 21.56         |
|           |            |           |            | 15   | 0      | 27.45            | 21.80         |
| 3.0       | 20635      | 847.5     | QPSK       | 1    | 0      | 28.18            | 23.74         |
|           |            |           |            | 1    | 7      | <b>28.49</b>     | 23.70         |
|           |            |           |            | 1    | 14     | 28.25            | 23.74         |
|           |            |           |            | 8    | 0      | 28.42            | 22.77         |
|           |            |           |            | 8    | 4      | 27.89            | 22.82         |
|           |            |           |            | 8    | 7      | 27.79            | 22.84         |
|           |            |           | 16QAM      | 15   | 0      | 27.86            | 22.78         |
|           |            |           |            | 1    | 0      | 28.05            | 22.59         |
|           |            |           |            | 1    | 7      | 27.78            | <b>22.65</b>  |
|           |            |           |            | 1    | 14     | 27.65            | 22.60         |
|           |            |           |            | 8    | 0      | <b>28.20</b>     | 21.58         |
|           |            |           |            | 8    | 4      | 27.59            | 21.70         |
|           |            |           |            | 8    | 7      | 27.37            | 21.65         |
|           |            |           |            | 15   | 0      | 27.68            | 21.71         |



**LAT OUTPUT POWER FOR LTE BAND 5 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 20425      | 826.5     | QPSK  | 1    | 0      | 28.10            | <b>23.73</b>  |
|           |            |           |       | 1    | 12     | 28.28            | 23.72         |
|           |            |           |       | 1    | 24     | 28.11            | 23.71         |
|           |            |           |       | 12   | 0      | 28.34            | 22.88         |
|           |            |           |       | 12   | 6      | 27.73            | 22.72         |
|           |            |           |       | 12   | 11     | 27.59            | 22.73         |
|           |            |           |       | 25   | 0      | 27.67            | 22.71         |
|           |            |           | 16QAM | 1    | 0      | 28.16            | 22.57         |
|           |            |           |       | 1    | 12     | 28.29            | 22.55         |
|           |            |           |       | 1    | 24     | 28.20            | <b>22.70</b>  |
|           |            |           |       | 12   | 0      | 28.39            | 21.79         |
|           |            |           |       | 12   | 6      | 27.41            | 21.72         |
|           |            |           |       | 12   | 11     | 27.38            | 21.80         |
|           |            |           |       | 25   | 0      | 27.39            | 21.76         |
| 5.0       | 20525      | 836.5     | QPSK  | 1    | 0      | 28.19            | 23.70         |
|           |            |           |       | 1    | 12     | 28.33            | 23.67         |
|           |            |           |       | 1    | 24     | 28.10            | 23.72         |
|           |            |           |       | 12   | 0      | 28.25            | 22.78         |
|           |            |           |       | 12   | 6      | 27.82            | 22.71         |
|           |            |           |       | 12   | 11     | 27.67            | 22.76         |
|           |            |           |       | 25   | 0      | 27.63            | 22.70         |
|           |            |           | 16QAM | 1    | 0      | 28.04            | 22.57         |
|           |            |           |       | 1    | 12     | 28.37            | 22.61         |
|           |            |           |       | 1    | 24     | 28.18            | 22.50         |
|           |            |           |       | 12   | 0      | 28.31            | 21.70         |
|           |            |           |       | 12   | 6      | 27.62            | 21.67         |
|           |            |           |       | 12   | 11     | 27.39            | 21.72         |
|           |            |           |       | 25   | 0      | 27.48            | 21.68         |
| 5.0       | 20625      | 846.5     | QPSK  | 1    | 0      | 28.35            | 23.71         |
|           |            |           |       | 1    | 12     | 28.35            | 23.66         |
|           |            |           |       | 1    | 24     | 28.15            | 23.71         |
|           |            |           |       | 12   | 0      | <b>28.40</b>     | 22.79         |
|           |            |           |       | 12   | 6      | 27.80            | 22.85         |
|           |            |           |       | 12   | 11     | 27.72            | 22.84         |
|           |            |           |       | 25   | 0      | 27.79            | 22.82         |
|           |            |           | 16QAM | 1    | 0      | 28.29            | 22.60         |
|           |            |           |       | 1    | 12     | 28.45            | 22.57         |
|           |            |           |       | 1    | 24     | 28.25            | 22.64         |
|           |            |           |       | 12   | 0      | <b>28.50</b>     | 21.49         |
|           |            |           |       | 12   | 6      | 27.66            | 21.77         |
|           |            |           |       | 12   | 11     | 27.49            | 21.69         |
|           |            |           |       | 25   | 0      | 27.51            | 21.66         |

**LAT OUTPUT POWER FOR LTE BAND 5 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 20450      | 829.0     | QPSK  | 1    | 0      | 28.46            | <b>23.77</b>  |
|           |            |           |       | 1    | 24     | 28.10            | 23.70         |
|           |            |           |       | 1    | 49     | 28.20            | 23.66         |
|           |            |           |       | 25   | 0      | 28.11            | 22.73         |
|           |            |           |       | 25   | 12     | 27.74            | 22.78         |
|           |            |           |       | 25   | 24     | 27.68            | 22.72         |
|           |            |           |       | 50   | 0      | 27.64            | 22.71         |
|           |            |           | 16QAM | 1    | 0      | 27.76            | 22.58         |
|           |            |           |       | 1    | 24     | 27.57            | 22.56         |
|           |            |           |       | 1    | 49     | 27.87            | 22.56         |
|           |            |           |       | 25   | 0      | 27.78            | 21.85         |
|           |            |           |       | 25   | 12     | 27.56            | 21.81         |
|           |            |           |       | 25   | 24     | 27.48            | 21.78         |
|           |            |           |       | 50   | 0      | 27.56            | 21.78         |
| 10.0      | 20525      | 836.5     | QPSK  | 1    | 0      | 28.45            | 23.75         |
|           |            |           |       | 1    | 24     | 28.16            | 23.65         |
|           |            |           |       | 1    | 49     | 28.21            | 23.72         |
|           |            |           |       | 25   | 0      | 28.24            | 22.87         |
|           |            |           |       | 25   | 12     | 27.74            | 22.78         |
|           |            |           |       | 25   | 24     | 27.68            | 22.75         |
|           |            |           |       | 50   | 0      | 27.60            | 22.73         |
|           |            |           | 16QAM | 1    | 0      | 27.75            | <b>22.65</b>  |
|           |            |           |       | 1    | 24     | 27.73            | 22.53         |
|           |            |           |       | 1    | 49     | 27.84            | 22.52         |
|           |            |           |       | 25   | 0      | 27.80            | 21.61         |
|           |            |           |       | 25   | 12     | 27.58            | 21.77         |
|           |            |           |       | 25   | 24     | 27.48            | 21.69         |
|           |            |           |       | 50   | 0      | 27.47            | 21.77         |
| 10.0      | 20600      | 844.0     | QPSK  | 1    | 0      | <b>28.78</b>     | 23.69         |
|           |            |           |       | 1    | 24     | 28.09            | 23.68         |
|           |            |           |       | 1    | 49     | 28.24            | 23.74         |
|           |            |           |       | 25   | 0      | 28.33            | 22.73         |
|           |            |           |       | 25   | 12     | 27.70            | 22.76         |
|           |            |           |       | 25   | 24     | 27.73            | 22.83         |
|           |            |           |       | 50   | 0      | 27.78            | 22.86         |
|           |            |           | 16QAM | 1    | 0      | 27.77            | 22.59         |
|           |            |           |       | 1    | 24     | 27.67            | 22.52         |
|           |            |           |       | 1    | 49     | <b>27.96</b>     | 22.64         |
|           |            |           |       | 25   | 0      | 27.81            | 21.62         |
|           |            |           |       | 25   | 12     | 27.49            | 21.78         |
|           |            |           |       | 25   | 24     | 27.50            | 21.76         |
|           |            |           |       | 50   | 0      | 27.60            | 21.74         |

**UAT OUTPUT POWER FOR LTE BAND 5 (1.4MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 20407      | 824.7     | QPSK       | 1    | 0      | 27.71            | <b>23.56</b>  |
|           |            |           |            | 1    | 2      | 28.09            | 23.51         |
|           |            |           |            | 1    | 5      | 27.84            | 23.53         |
|           |            |           |            | 3    | 0      | 28.03            | 23.45         |
|           |            |           |            | 3    | 1      | <b>28.25</b>     | 23.48         |
|           |            |           |            | 3    | 2      | 28.18            | 23.50         |
|           |            |           | 16QAM      | 6    | 0      | 28.19            | 22.56         |
|           |            |           |            | 1    | 0      | 27.73            | 22.62         |
|           |            |           |            | 1    | 2      | 28.16            | 22.55         |
|           |            |           |            | 1    | 5      | 27.95            | <b>22.66</b>  |
|           |            |           |            | 3    | 0      | 28.12            | 22.50         |
|           |            |           |            | 3    | 1      | <b>28.29</b>     | 22.48         |
|           |            |           |            | 3    | 2      | 28.13            | 22.60         |
|           |            |           |            | 6    | 0      | 28.06            | 21.64         |
| 1.4       | 20525      | 836.5     | QPSK       | 1    | 0      | 27.39            | 23.42         |
|           |            |           |            | 1    | 2      | 27.76            | 23.41         |
|           |            |           |            | 1    | 5      | 27.55            | 23.51         |
|           |            |           |            | 3    | 0      | 27.76            | 23.32         |
|           |            |           |            | 3    | 1      | 27.97            | 23.40         |
|           |            |           |            | 3    | 2      | 27.80            | 23.35         |
|           |            |           | 16QAM      | 6    | 0      | 27.82            | 22.46         |
|           |            |           |            | 1    | 0      | 27.26            | 22.49         |
|           |            |           |            | 1    | 2      | 27.76            | 22.43         |
|           |            |           |            | 1    | 5      | 27.66            | 22.56         |
|           |            |           |            | 3    | 0      | 27.81            | 22.40         |
|           |            |           |            | 3    | 1      | 27.96            | 22.42         |
|           |            |           |            | 3    | 2      | 27.72            | 22.50         |
|           |            |           |            | 6    | 0      | 27.76            | 21.50         |
| 1.4       | 20643      | 848.3     | QPSK       | 1    | 0      | 27.41            | 23.35         |
|           |            |           |            | 1    | 2      | 27.76            | 23.36         |
|           |            |           |            | 1    | 5      | 27.61            | 23.35         |
|           |            |           |            | 3    | 0      | 27.88            | 23.30         |
|           |            |           |            | 3    | 1      | 27.78            | 23.25         |
|           |            |           |            | 3    | 2      | 27.69            | 23.26         |
|           |            |           | 16QAM      | 6    | 0      | 27.66            | 22.42         |
|           |            |           |            | 1    | 0      | 27.49            | 22.43         |
|           |            |           |            | 1    | 2      | 27.78            | 22.45         |
|           |            |           |            | 1    | 5      | 27.60            | 22.47         |
|           |            |           |            | 3    | 0      | 27.78            | 22.35         |
|           |            |           |            | 3    | 1      | 27.73            | 22.36         |
|           |            |           |            | 3    | 2      | 27.67            | 22.40         |
|           |            |           |            | 6    | 0      | 27.63            | 21.50         |

**UAT OUTPUT POWER FOR LTE BAND 5 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 3.0       | 20415      | 825.5     | QPSK       | 1    | 0      | 27.52            | <b>23.52</b>  |
|           |            |           |            | 1    | 7      | 28.04            | 23.46         |
|           |            |           |            | 1    | 14     | 27.78            | 23.50         |
|           |            |           |            | 8    | 0      | <b>28.06</b>     | 22.48         |
|           |            |           |            | 8    | 4      | 27.38            | 22.53         |
|           |            |           |            | 8    | 7      | 27.35            | 22.51         |
|           |            |           |            | 15   | 0      | 27.32            | 22.66         |
|           |            |           | 16QAM      | 1    | 0      | <b>27.81</b>     | 22.42         |
|           |            |           |            | 1    | 7      | 27.68            | 22.37         |
|           |            |           |            | 1    | 14     | 27.38            | 22.44         |
|           |            |           |            | 8    | 0      | 27.74            | 21.50         |
|           |            |           |            | 8    | 4      | 27.01            | 21.61         |
|           |            |           |            | 8    | 7      | 26.96            | 21.66         |
|           |            |           |            | 15   | 0      | 27.04            | 21.66         |
|           |            |           |            | 3.0  | 20525  | 836.5            | QPSK          |
| 1         | 7          | 27.76     | 23.44      |      |        |                  |               |
| 1         | 14         | 27.49     | 23.47      |      |        |                  |               |
| 8         | 0          | 27.82     | 22.53      |      |        |                  |               |
| 8         | 4          | 27.10     | 22.46      |      |        |                  |               |
| 8         | 7          | 26.95     | 22.42      |      |        |                  |               |
| 15        | 0          | 27.04     | 22.49      |      |        |                  |               |
| 16QAM     | 1          | 0         | 27.50      |      |        |                  | 22.40         |
|           | 1          | 7         | 27.35      |      |        |                  | <b>22.44</b>  |
|           | 1          | 14        | 27.06      |      |        |                  | 22.42         |
|           | 8          | 0         | 27.43      |      |        |                  | 21.45         |
|           | 8          | 4         | 26.86      |      |        |                  | 21.59         |
|           | 8          | 7         | 26.64      |      |        |                  | 21.48         |
|           | 15         | 0         | 26.75      |      |        |                  | 21.58         |
|           | 3.0        | 20635     | 847.5      |      |        |                  | QPSK          |
| 1         |            |           |            | 7    | 27.84  | 23.41            |               |
| 1         |            |           |            | 14   | 27.58  | 23.36            |               |
| 8         |            |           |            | 0    | 27.90  | 22.47            |               |
| 8         |            |           |            | 4    | 27.29  | 22.40            |               |
| 8         |            |           |            | 7    | 27.16  | 22.40            |               |
| 15        |            |           |            | 0    | 27.25  | 22.53            |               |
| 16QAM     |            |           |            | 1    | 0      | 27.41            | 22.41         |
|           |            |           |            | 1    | 7      | 27.49            | 22.30         |
|           |            |           |            | 1    | 14     | 27.26            | 22.28         |
|           |            |           |            | 8    | 0      | 27.44            | 21.42         |
|           |            |           |            | 8    | 4      | 26.89            | 21.60         |
|           |            |           |            | 8    | 7      | 26.81            | 21.48         |
|           |            |           |            | 15   | 0      | 26.87            | 21.54         |

**UAT OUTPUT POWER FOR LTE BAND 5 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 20425      | 826.5     | QPSK  | 1    | 0      | <b>28.00</b>     | 23.44         |
|           |            |           |       | 1    | 12     | 27.99            | 23.43         |
|           |            |           |       | 1    | 24     | 27.73            | <b>23.52</b>  |
|           |            |           |       | 12   | 0      | 27.94            | 22.52         |
|           |            |           |       | 12   | 6      | 27.44            | 22.54         |
|           |            |           |       | 12   | 11     | 27.27            | 22.56         |
|           |            |           |       | 25   | 0      | 27.36            | 22.64         |
|           |            |           | 16QAM | 1    | 0      | 27.92            | 22.61         |
|           |            |           |       | 1    | 12     | <b>28.12</b>     | <b>22.60</b>  |
|           |            |           |       | 1    | 24     | 27.84            | 22.58         |
|           |            |           |       | 12   | 0      | 28.03            | 21.60         |
|           |            |           |       | 12   | 6      | 27.24            | 21.55         |
|           |            |           |       | 12   | 11     | 27.03            | 21.57         |
|           |            |           |       | 25   | 0      | 27.11            | 21.64         |
| 5.0       | 20525      | 836.5     | QPSK  | 1    | 0      | 27.63            | 23.49         |
|           |            |           |       | 1    | 12     | 27.68            | 23.45         |
|           |            |           |       | 1    | 24     | 27.42            | 23.48         |
|           |            |           |       | 12   | 0      | 27.72            | 22.61         |
|           |            |           |       | 12   | 6      | 27.15            | 22.49         |
|           |            |           |       | 12   | 11     | 26.91            | 22.49         |
|           |            |           |       | 25   | 0      | 26.98            | 22.50         |
|           |            |           | 16QAM | 1    | 0      | 27.79            | 22.45         |
|           |            |           |       | 1    | 12     | 27.77            | 22.49         |
|           |            |           |       | 1    | 24     | 27.43            | 22.48         |
|           |            |           |       | 12   | 0      | 27.78            | 21.51         |
|           |            |           |       | 12   | 6      | 26.95            | 21.54         |
|           |            |           |       | 12   | 11     | 26.66            | 21.47         |
|           |            |           |       | 25   | 0      | 26.67            | 21.45         |
| 5.0       | 20625      | 846.5     | QPSK  | 1    | 0      | 27.74            | 23.46         |
|           |            |           |       | 1    | 12     | 27.88            | 23.42         |
|           |            |           |       | 1    | 24     | 27.58            | 23.40         |
|           |            |           |       | 12   | 0      | 27.58            | 22.60         |
|           |            |           |       | 12   | 6      | 27.37            | 22.54         |
|           |            |           |       | 12   | 11     | 27.11            | 22.46         |
|           |            |           |       | 25   | 0      | 27.11            | 22.51         |
|           |            |           | 16QAM | 1    | 0      | 27.71            | 22.36         |
|           |            |           |       | 1    | 12     | 27.94            | 22.43         |
|           |            |           |       | 1    | 24     | 27.68            | 22.36         |
|           |            |           |       | 12   | 0      | 27.69            | 21.46         |
|           |            |           |       | 12   | 6      | 27.16            | 21.46         |
|           |            |           |       | 12   | 11     | 26.90            | 21.44         |
|           |            |           |       | 25   | 0      | 26.85            | 21.48         |

**UAT OUTPUT POWER FOR LTE BAND 5 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 20450      | 829.0     | QPSK  | 1    | 0      | 28.16            | 23.45         |
|           |            |           |       | 1    | 24     | 27.79            | 23.48         |
|           |            |           |       | 1    | 49     | 27.81            | 23.46         |
|           |            |           |       | 25   | 0      | 27.55            | 22.55         |
|           |            |           |       | 25   | 12     | 27.37            | 22.53         |
|           |            |           |       | 25   | 24     | 27.28            | 22.55         |
|           |            |           |       | 50   | 0      | 27.18            | 22.53         |
|           |            |           | 16QAM | 1    | 0      | 27.31            | 22.35         |
|           |            |           |       | 1    | 24     | 27.35            | 22.42         |
|           |            |           |       | 1    | 49     | 27.37            | <b>22.46</b>  |
|           |            |           |       | 25   | 0      | 27.13            | 21.60         |
|           |            |           |       | 25   | 12     | 27.18            | 21.64         |
|           |            |           |       | 25   | 24     | 27.12            | 21.64         |
|           |            |           |       | 50   | 0      | 27.06            | 21.54         |
| 10.0      | 20525      | 836.5     | QPSK  | 1    | 0      | 27.51            | <b>23.49</b>  |
|           |            |           |       | 1    | 24     | 27.58            | 23.43         |
|           |            |           |       | 1    | 49     | 27.54            | 23.40         |
|           |            |           |       | 25   | 0      | 27.63            | 22.62         |
|           |            |           |       | 25   | 12     | 27.08            | 22.55         |
|           |            |           |       | 25   | 24     | 26.93            | 22.55         |
|           |            |           |       | 50   | 0      | 27.00            | 22.52         |
|           |            |           | 16QAM | 1    | 0      | <b>27.73</b>     | 22.44         |
|           |            |           |       | 1    | 24     | 27.22            | 22.41         |
|           |            |           |       | 1    | 49     | 27.14            | 22.35         |
|           |            |           |       | 25   | 0      | 27.20            | 21.45         |
|           |            |           |       | 25   | 12     | 26.96            | 21.56         |
|           |            |           |       | 25   | 24     | 26.83            | 21.55         |
|           |            |           |       | 50   | 0      | 26.88            | 21.52         |
| 10.0      | 20600      | 844.0     | QPSK  | 1    | 0      | <b>28.22</b>     | 23.42         |
|           |            |           |       | 1    | 24     | 27.54            | 23.37         |
|           |            |           |       | 1    | 49     | 27.77            | 23.36         |
|           |            |           |       | 25   | 0      | 27.58            | 22.51         |
|           |            |           |       | 25   | 12     | 27.19            | 22.54         |
|           |            |           |       | 25   | 24     | 27.22            | 22.52         |
|           |            |           |       | 50   | 0      | 27.23            | 22.48         |
|           |            |           | 16QAM | 1    | 0      | 27.60            | 22.32         |
|           |            |           |       | 1    | 24     | 27.23            | 22.29         |
|           |            |           |       | 1    | 49     | 27.47            | 22.26         |
|           |            |           |       | 25   | 0      | 27.21            | 21.48         |
|           |            |           |       | 25   | 12     | 27.03            | 21.55         |
|           |            |           |       | 25   | 24     | 27.12            | 21.44         |
|           |            |           |       | 50   | 0      | 26.98            | 21.45         |

### 7.4. LTE BAND 13

#### LAT OUTPUT POWER FOR LTE BAND 13 (5.0 MHZ)

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 23207      | 779.5     | QPSK  | 1    | 0      | 28.24            | 23.51         |
|           |            |           |       | 1    | 12     | 27.28            | 23.72         |
|           |            |           |       | 1    | 24     | 28.14            | 23.73         |
|           |            |           |       | 12   | 0      | <b>28.43</b>     | 22.84         |
|           |            |           |       | 12   | 6      | 27.78            | 22.86         |
|           |            |           |       | 12   | 11     | 27.85            | 22.83         |
|           |            |           | 16QAM | 25   | 0      | 27.80            | 22.88         |
|           |            |           |       | 1    | 0      | 28.32            | 22.31         |
|           |            |           |       | 1    | 12     | 27.83            | 22.76         |
|           |            |           |       | 1    | 24     | 28.17            | 22.79         |
|           |            |           |       | 12   | 0      | 28.37            | 21.78         |
|           |            |           |       | 12   | 6      | 27.77            | 21.79         |
|           |            |           |       | 12   | 11     | 27.68            | 21.77         |
|           |            |           |       | 25   | 0      | 27.68            | 21.97         |
|           |            |           |       | 5.0  | 23230  | 782.0            | QPSK          |
| 1         | 12         | 28.12     | 23.62 |      |        |                  |               |
| 1         | 24         | 28.19     | 23.72 |      |        |                  |               |
| 12        | 0          | 28.26     | 22.87 |      |        |                  |               |
| 12        | 6          | 27.95     | 22.82 |      |        |                  |               |
| 12        | 11         | 27.75     | 22.85 |      |        |                  |               |
| 16QAM     | 25         | 0         | 27.74 |      |        |                  | 22.84         |
|           | 1          | 0         | 28.32 |      |        |                  | 22.53         |
|           | 1          | 12        | 28.19 |      |        |                  | 22.50         |
|           | 1          | 24        | 28.28 |      |        |                  | 22.66         |
|           | 12         | 0         | 28.31 |      |        |                  | 21.77         |
|           | 12         | 6         | 27.73 |      |        |                  | 21.79         |
|           | 12         | 11        | 27.60 |      |        |                  | 21.79         |
|           | 25         | 0         | 27.58 |      |        |                  | 21.80         |
|           | 5.0        | 23255     | 784.5 |      |        |                  | QPSK          |
| 1         |            |           |       | 12   | 28.29  | 23.63            |               |
| 1         |            |           |       | 24   | 28.22  | <b>23.79</b>     |               |
| 12        |            |           |       | 0    | 28.22  | 22.85            |               |
| 12        |            |           |       | 6    | 27.89  | 22.77            |               |
| 12        |            |           |       | 11   | 27.73  | 22.83            |               |
| 16QAM     |            |           |       | 25   | 0      | 27.78            | 22.80         |
|           |            |           |       | 1    | 0      | <b>28.39</b>     | 22.30         |
|           |            |           |       | 1    | 12     | 28.35            | 22.63         |
|           |            |           |       | 1    | 24     | 28.28            | <b>22.80</b>  |
|           |            |           |       | 12   | 0      | 28.33            | 21.75         |
|           |            |           |       | 12   | 6      | 27.68            | 21.70         |
|           |            |           |       | 12   | 11     | 27.48            | 21.72         |
|           |            |           |       | 25   | 0      | 27.54            | 21.90         |

**LAT OUTPUT POWER FOR LTE BAND 13 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 23230      | 782.0     | QPSK  | 1    | 0      | 27.86            | 23.54         |
|           |            |           |       | 1    | 24     | 27.45            | 23.78         |
|           |            |           |       | 1    | 49     | <b>28.37</b>     | <b>23.87</b>  |
|           |            |           |       | 25   | 0      | 28.29            | 22.88         |
|           |            |           |       | 25   | 12     | 27.90            | 22.79         |
|           |            |           |       | 25   | 24     | 27.81            | 22.80         |
|           |            |           |       | 50   | 0      | 27.74            | 22.77         |
|           |            |           | 16QAM | 1    | 0      | <b>28.31</b>     | 22.45         |
|           |            |           |       | 1    | 24     | 27.48            | 22.60         |
|           |            |           |       | 1    | 49     | 27.99            | <b>22.70</b>  |
|           |            |           |       | 25   | 0      | 28.06            | 21.80         |
|           |            |           |       | 25   | 12     | 27.99            | 21.67         |
|           |            |           |       | 25   | 24     | 27.76            | 21.64         |
|           |            |           |       | 50   | 0      | 27.65            | 21.78         |



**UAT OUTPUT POWER FOR LTE BAND 13 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB    | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|-------|--------|------------------|---------------|
|           |            |           |       | Size  | Offset |                  |               |
| 5.0       | 23207      | 779.5     | QPSK  | 1     | 0      | 27.82            | 23.56         |
|           |            |           |       | 1     | 12     | <b>28.62</b>     | 23.53         |
|           |            |           |       | 1     | 24     | 27.37            | <b>23.61</b>  |
|           |            |           |       | 12    | 0      | 27.53            | 22.52         |
|           |            |           |       | 12    | 6      | 28.10            | 22.66         |
|           |            |           |       | 12    | 11     | 27.50            | 22.56         |
|           |            |           | 16QAM | 25    | 0      | 27.56            | 22.64         |
|           |            |           |       | 1     | 0      | 27.91            | 22.63         |
|           |            |           |       | 1     | 12     | <b>28.44</b>     | <b>22.69</b>  |
|           |            |           |       | 1     | 24     | 27.41            | 22.61         |
|           |            |           |       | 12    | 0      | 27.56            | 21.50         |
|           |            |           |       | 12    | 6      | 27.89            | 21.56         |
| 5.0       | 23230      | 782.0     | QPSK  | 12    | 11     | 27.47            | 21.57         |
|           |            |           |       | 25    | 0      | 27.48            | 21.49         |
|           |            |           |       | 1     | 0      | 27.98            | 23.49         |
|           |            |           |       | 1     | 12     | 27.45            | 23.53         |
|           |            |           |       | 1     | 24     | 27.57            | 23.51         |
|           |            |           |       | 12    | 0      | 27.44            | 22.48         |
|           |            |           | 16QAM | 12    | 6      | 27.63            | 22.62         |
|           |            |           |       | 12    | 11     | 27.53            | 22.45         |
|           |            |           |       | 25    | 0      | 27.54            | 22.60         |
|           |            |           |       | 1     | 0      | 27.90            | 22.44         |
|           |            |           |       | 1     | 12     | 27.44            | 22.60         |
|           |            |           |       | 1     | 24     | 27.61            | 22.62         |
| 5.0       | 23255      | 784.5     | QPSK  | 12    | 0      | 27.46            | 21.51         |
|           |            |           |       | 12    | 6      | 27.57            | 21.52         |
|           |            |           |       | 12    | 11     | 27.47            | 21.54         |
|           |            |           |       | 25    | 0      | 27.40            | 21.46         |
|           |            |           |       | 1     | 0      | 28.03            | 23.44         |
|           |            |           |       | 1     | 12     | 27.61            | 23.50         |
|           |            |           | 16QAM | 1     | 24     | 27.50            | 23.55         |
|           |            |           |       | 12    | 0      | 27.40            | 22.56         |
|           |            |           |       | 12    | 6      | 27.63            | 22.58         |
|           |            |           |       | 12    | 11     | 27.53            | 22.45         |
|           |            |           |       | 25    | 0      | 27.50            | 22.53         |
|           |            |           |       | 1     | 0      | 27.94            | 22.43         |
| 16QAM     | 1          | 12        | 27.59 | 22.63 |        |                  |               |
|           | 1          | 24        | 27.50 | 22.60 |        |                  |               |
|           | 12         | 0         | 27.41 | 21.61 |        |                  |               |
|           | 12         | 6         | 27.47 | 21.44 |        |                  |               |
|           | 12         | 11        | 27.39 | 21.49 |        |                  |               |
|           | 25         | 0         | 27.47 | 21.43 |        |                  |               |

**UAT OUTPUT POWER FOR LTE BAND 13 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 23230      | 782.0     | QPSK  | 1    | 0      | 27.81            | 23.48         |
|           |            |           |       | 1    | 24     | <b>28.41</b>     | 23.50         |
|           |            |           |       | 1    | 49     | 27.62            | <b>23.56</b>  |
|           |            |           |       | 25   | 0      | 27.43            | 22.53         |
|           |            |           |       | 25   | 12     | 27.54            | 22.68         |
|           |            |           |       | 25   | 24     | 27.60            | 22.50         |
|           |            |           |       | 50   | 0      | 27.54            | 22.65         |
|           |            |           | 16QAM | 1    | 0      | 27.77            | 22.31         |
|           |            |           |       | 1    | 24     | <b>28.12</b>     | 22.42         |
|           |            |           |       | 1    | 49     | 27.61            | <b>22.45</b>  |
|           |            |           |       | 25   | 0      | 27.44            | 21.47         |
|           |            |           |       | 25   | 12     | 27.57            | 21.50         |
|           |            |           |       | 25   | 24     | 27.50            | 21.51         |
|           |            |           |       | 50   | 0      | 27.51            | 21.50         |

### 7.5. LTE BAND 17

#### LAT OUTPUT POWER FOR LTE BAND 17 (5.0 MHZ)

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 23755      | 706.5     | QPSK  | 1    | 0      | <b>28.40</b>     | 23.76         |
|           |            |           |       | 1    | 12     | 27.96            | 23.71         |
|           |            |           |       | 1    | 24     | 28.09            | <b>23.86</b>  |
|           |            |           |       | 12   | 0      | 28.26            | 22.88         |
|           |            |           |       | 12   | 6      | 27.51            | 22.92         |
|           |            |           |       | 12   | 11     | 27.53            | 22.91         |
|           |            |           |       | 25   | 0      | 27.61            | 22.85         |
|           |            |           | 16QAM | 1    | 0      | 28.00            | 22.59         |
|           |            |           |       | 1    | 12     | 28.02            | 22.77         |
|           |            |           |       | 1    | 24     | 28.24            | 22.72         |
|           |            |           |       | 12   | 0      | <b>28.38</b>     | 21.83         |
|           |            |           |       | 12   | 6      | 27.40            | 21.82         |
|           |            |           |       | 12   | 11     | 27.38            | 21.88         |
|           |            |           |       | 25   | 0      | 27.45            | 21.91         |
|           |            |           |       | 5.0  | 23790  | 710.0            | QPSK          |
| 1         | 12         | 28.26     | 23.78 |      |        |                  |               |
| 1         | 24         | 28.17     | 23.81 |      |        |                  |               |
| 12        | 0          | 28.27     | 22.84 |      |        |                  |               |
| 12        | 6          | 27.73     | 22.89 |      |        |                  |               |
| 12        | 11         | 27.59     | 22.84 |      |        |                  |               |
| 25        | 0          | 27.69     | 22.94 |      |        |                  |               |
| 16QAM     | 1          | 0         | 28.13 |      |        |                  | 22.59         |
|           | 1          | 12        | 28.35 |      |        |                  | 22.69         |
|           | 1          | 24        | 28.33 |      |        |                  | 22.67         |
|           | 12         | 0         | 28.30 |      |        |                  | 21.91         |
|           | 12         | 6         | 27.66 |      |        |                  | 21.91         |
|           | 12         | 11        | 27.53 |      |        |                  | 21.86         |
|           | 25         | 0         | 27.57 |      |        |                  | 21.91         |
|           | 5.0        | 23825     | 713.5 |      |        |                  | QPSK          |
| 1         |            |           |       | 12   | 28.30  | 23.74            |               |
| 1         |            |           |       | 24   | 28.14  | 23.80            |               |
| 12        |            |           |       | 0    | 28.26  | 22.87            |               |
| 12        |            |           |       | 6    | 27.77  | 22.94            |               |
| 12        |            |           |       | 11   | 27.66  | 22.89            |               |
| 25        |            |           |       | 0    | 27.61  | 22.90            |               |
| 16QAM     |            |           |       | 1    | 0      | 28.31            | 22.61         |
|           |            |           |       | 1    | 12     | 28.37            | <b>22.77</b>  |
|           |            |           |       | 1    | 24     | 28.34            | 22.69         |
|           |            |           |       | 12   | 0      | 28.31            | 21.91         |
|           |            |           |       | 12   | 6      | 27.60            | 21.86         |
|           |            |           |       | 12   | 11     | 27.55            | 21.85         |
|           |            |           |       | 25   | 0      | 27.54            | 21.90         |

**LAT OUTPUT POWER FOR LTE BAND 17 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 23780      | 709.0     | QPSK  | 1    | 0      | 27.77            | 23.71         |
|           |            |           |       | 1    | 24     | 28.01            | 23.81         |
|           |            |           |       | 1    | 49     | 28.29            | 23.77         |
|           |            |           |       | 25   | 0      | 28.29            | 22.85         |
|           |            |           |       | 25   | 12     | 27.65            | 22.91         |
|           |            |           |       | 25   | 24     | 27.69            | 22.98         |
|           |            |           |       | 50   | 0      | 27.78            | 22.92         |
|           |            |           | 16QAM | 1    | 0      | <b>28.44</b>     | 22.55         |
|           |            |           |       | 1    | 24     | 27.62            | 22.68         |
|           |            |           |       | 1    | 49     | 27.97            | 22.69         |
|           |            |           |       | 25   | 0      | 27.98            | 21.86         |
|           |            |           |       | 25   | 12     | 27.56            | 21.96         |
|           |            |           |       | 25   | 24     | 27.65            | 21.92         |
|           |            |           |       | 50   | 0      | 27.66            | 21.93         |
| 10.0      | 23790      | 710.0     | QPSK  | 1    | 0      | 28.25            | 23.66         |
|           |            |           |       | 1    | 24     | 28.20            | <b>23.85</b>  |
|           |            |           |       | 1    | 49     | 28.22            | 23.74         |
|           |            |           |       | 25   | 0      | 28.22            | 22.82         |
|           |            |           |       | 25   | 12     | 27.64            | 22.91         |
|           |            |           |       | 25   | 24     | 27.71            | 22.95         |
|           |            |           |       | 50   | 0      | 27.64            | 22.92         |
|           |            |           | 16QAM | 1    | 0      | 27.87            | 22.52         |
|           |            |           |       | 1    | 24     | 27.90            | <b>22.74</b>  |
|           |            |           |       | 1    | 49     | 27.99            | 22.68         |
|           |            |           |       | 25   | 0      | 27.87            | 21.87         |
|           |            |           |       | 25   | 12     | 27.70            | 21.94         |
|           |            |           |       | 25   | 24     | 27.63            | 21.84         |
|           |            |           |       | 50   | 0      | 27.61            | 21.93         |
| 10.0      | 23800      | 711.0     | QPSK  | 1    | 0      | 28.12            | 23.68         |
|           |            |           |       | 1    | 24     | 28.16            | 23.82         |
|           |            |           |       | 1    | 49     | <b>28.30</b>     | 23.81         |
|           |            |           |       | 25   | 0      | 28.23            | 22.84         |
|           |            |           |       | 25   | 12     | 27.72            | 22.85         |
|           |            |           |       | 25   | 24     | 27.71            | 22.93         |
|           |            |           |       | 50   | 0      | 27.66            | 22.93         |
|           |            |           | 16QAM | 1    | 0      | 28.26            | 22.52         |
|           |            |           |       | 1    | 24     | 27.82            | 22.71         |
|           |            |           |       | 1    | 49     | 27.97            | 22.67         |
|           |            |           |       | 25   | 0      | 27.92            | 21.89         |
|           |            |           |       | 25   | 12     | 27.60            | 21.94         |
|           |            |           |       | 25   | 24     | 27.69            | 21.94         |
|           |            |           |       | 50   | 0      | 27.62            | 21.97         |

**UAT OUTPUT POWER FOR LTE BAND 17 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 23755      | 706.5     | QPSK  | 1    | 0      | 27.99            | 23.40         |
|           |            |           |       | 1    | 12     | 27.92            | 23.52         |
|           |            |           |       | 1    | 24     | 28.02            | 23.46         |
|           |            |           |       | 12   | 0      | <b>28.47</b>     | 22.60         |
|           |            |           |       | 12   | 6      | 27.61            | 22.58         |
|           |            |           |       | 12   | 11     | 27.54            | 22.38         |
|           |            |           |       | 25   | 0      | 27.65            | 22.47         |
|           |            |           | 16QAM | 1    | 0      | 28.20            | 22.16         |
|           |            |           |       | 1    | 12     | 27.98            | 22.25         |
|           |            |           |       | 1    | 24     | 28.11            | 22.10         |
|           |            |           |       | 12   | 0      | 28.42            | 21.15         |
|           |            |           |       | 12   | 6      | 27.40            | 21.14         |
|           |            |           |       | 12   | 11     | 27.35            | 21.04         |
|           |            |           |       | 25   | 0      | 27.44            | 21.07         |
| 5.0       | 23790      | 710.0     | QPSK  | 1    | 0      | 28.15            | 23.47         |
|           |            |           |       | 1    | 12     | 28.21            | 23.47         |
|           |            |           |       | 1    | 24     | 28.22            | <b>23.53</b>  |
|           |            |           |       | 12   | 0      | 28.28            | 22.55         |
|           |            |           |       | 12   | 6      | 27.80            | 22.64         |
|           |            |           |       | 12   | 11     | 27.79            | 22.44         |
|           |            |           |       | 25   | 0      | 27.72            | 22.49         |
|           |            |           | 16QAM | 1    | 0      | 28.33            | 22.18         |
|           |            |           |       | 1    | 12     | 28.24            | 22.21         |
|           |            |           |       | 1    | 24     | 28.35            | 22.11         |
|           |            |           |       | 12   | 0      | 28.41            | 21.12         |
|           |            |           |       | 12   | 6      | 27.72            | 21.20         |
|           |            |           |       | 12   | 11     | 27.72            | 21.16         |
|           |            |           |       | 25   | 0      | 27.63            | 21.17         |
| 5.0       | 23825      | 713.5     | QPSK  | 1    | 0      | 28.09            | 23.46         |
|           |            |           |       | 1    | 12     | 28.26            | 23.50         |
|           |            |           |       | 1    | 24     | 28.13            | 23.51         |
|           |            |           |       | 12   | 0      | 28.19            | 22.54         |
|           |            |           |       | 12   | 6      | 27.85            | 22.63         |
|           |            |           |       | 12   | 11     | 27.73            | 22.42         |
|           |            |           |       | 25   | 0      | 27.65            | 22.48         |
|           |            |           | 16QAM | 1    | 0      | <b>28.46</b>     | 22.14         |
|           |            |           |       | 1    | 12     | 28.40            | <b>22.27</b>  |
|           |            |           |       | 1    | 24     | 28.28            | 22.17         |
|           |            |           |       | 12   | 0      | 28.22            | 21.03         |
|           |            |           |       | 12   | 6      | 27.71            | 21.18         |
|           |            |           |       | 12   | 11     | 27.57            | 21.09         |
|           |            |           |       | 25   | 0      | 27.59            | 21.16         |

**UAT OUTPUT POWER FOR LTE BAND 17 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 23780      | 709.0     | QPSK  | 1    | 0      | 28.40            | <b>23.58</b>  |
|           |            |           |       | 1    | 24     | 27.98            | 23.52         |
|           |            |           |       | 1    | 49     | 28.32            | 23.54         |
|           |            |           |       | 25   | 0      | 28.29            | 22.54         |
|           |            |           |       | 25   | 12     | 27.63            | 22.56         |
|           |            |           |       | 25   | 24     | 27.76            | 22.46         |
|           |            |           |       | 50   | 0      | 27.78            | 22.52         |
|           |            |           | 16QAM | 1    | 0      | <b>28.23</b>     | 22.14         |
|           |            |           |       | 1    | 24     | 27.64            | 22.18         |
|           |            |           |       | 1    | 49     | 27.95            | 21.94         |
|           |            |           |       | 25   | 0      | 27.99            | 21.13         |
|           |            |           |       | 25   | 12     | 27.62            | 21.18         |
|           |            |           |       | 25   | 24     | 27.71            | 21.19         |
|           |            |           |       | 50   | 0      | 27.74            | 21.16         |
| 10.0      | 23790      | 710.0     | QPSK  | 1    | 0      | <b>28.66</b>     | 23.48         |
|           |            |           |       | 1    | 24     | 28.11            | 23.46         |
|           |            |           |       | 1    | 49     | 28.31            | 23.49         |
|           |            |           |       | 25   | 0      | 28.25            | 22.54         |
|           |            |           |       | 25   | 12     | 27.70            | 22.62         |
|           |            |           |       | 25   | 24     | 27.74            | 22.43         |
|           |            |           |       | 50   | 0      | 27.73            | 22.53         |
|           |            |           | 16QAM | 1    | 0      | 28.16            | 22.12         |
|           |            |           |       | 1    | 24     | 27.82            | 22.14         |
|           |            |           |       | 1    | 49     | 28.03            | 21.98         |
|           |            |           |       | 25   | 0      | 27.83            | 21.17         |
|           |            |           |       | 25   | 12     | 27.78            | 21.23         |
|           |            |           |       | 25   | 24     | 27.80            | 21.21         |
|           |            |           |       | 50   | 0      | 27.73            | 21.23         |
| 10.0      | 23800      | 711.0     | QPSK  | 1    | 0      | 28.04            | 23.54         |
|           |            |           |       | 1    | 24     | 28.11            | 23.55         |
|           |            |           |       | 1    | 49     | 28.37            | 23.55         |
|           |            |           |       | 25   | 0      | 28.29            | 22.56         |
|           |            |           |       | 25   | 12     | 27.70            | 22.65         |
|           |            |           |       | 25   | 24     | 27.85            | 22.44         |
|           |            |           |       | 50   | 0      | 27.77            | 22.51         |
|           |            |           | 16QAM | 1    | 0      | 27.99            | 22.16         |
|           |            |           |       | 1    | 24     | 27.74            | <b>22.20</b>  |
|           |            |           |       | 1    | 49     | 27.98            | 21.94         |
|           |            |           |       | 25   | 0      | 27.87            | 21.18         |
|           |            |           |       | 25   | 12     | 27.77            | 21.25         |
|           |            |           |       | 25   | 24     | 27.71            | 21.13         |
|           |            |           |       | 50   | 0      | 27.73            | 21.20         |

### 7.6. LTE BAND 25

#### LAT OUTPUT POWER FOR LTE BAND 25 (1.4MHZ)

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 26047      | 1850.7    | QPSK       | 1    | 0      | 27.78            | 23.19         |
|           |            |           |            | 1    | 2      | 28.27            | 23.27         |
|           |            |           |            | 1    | 5      | 28.04            | <b>23.35</b>  |
|           |            |           |            | 3    | 0      | 28.28            | 23.20         |
|           |            |           |            | 3    | 1      | <b>28.49</b>     | 23.25         |
|           |            |           |            | 3    | 2      | 28.40            | 23.22         |
|           |            |           | 16QAM      | 6    | 0      | 28.41            | 22.07         |
|           |            |           |            | 1    | 0      | 27.93            | 22.06         |
|           |            |           |            | 1    | 2      | 28.38            | 22.08         |
|           |            |           |            | 1    | 5      | 28.17            | 22.08         |
|           |            |           |            | 3    | 0      | 28.32            | 22.00         |
|           |            |           |            | 3    | 1      | <b>28.47</b>     | 22.05         |
|           |            |           |            | 3    | 2      | 28.31            | 22.01         |
|           |            |           |            | 6    | 0      | 28.30            | 21.05         |
| 1.4       | 26365      | 1882.5    | QPSK       | 1    | 0      | 27.50            | 23.20         |
|           |            |           |            | 1    | 2      | 27.26            | 23.25         |
|           |            |           |            | 1    | 5      | 27.18            | 23.26         |
|           |            |           |            | 3    | 0      | 27.23            | 23.10         |
|           |            |           |            | 3    | 1      | 27.52            | 23.15         |
|           |            |           |            | 3    | 2      | 27.42            | 23.20         |
|           |            |           | 16QAM      | 6    | 0      | 27.40            | 22.17         |
|           |            |           |            | 1    | 0      | 27.45            | 22.15         |
|           |            |           |            | 1    | 2      | 27.27            | <b>22.18</b>  |
|           |            |           |            | 1    | 5      | 27.18            | 22.16         |
|           |            |           |            | 3    | 0      | 27.27            | 22.12         |
|           |            |           |            | 3    | 1      | 27.34            | 22.10         |
|           |            |           |            | 3    | 2      | 27.29            | 22.08         |
|           |            |           |            | 6    | 0      | 27.33            | 21.22         |
| 1.4       | 26683      | 1914.3    | QPSK       | 1    | 0      | 27.72            | 23.05         |
|           |            |           |            | 1    | 2      | 28.17            | 23.06         |
|           |            |           |            | 1    | 5      | 28.00            | 23.08         |
|           |            |           |            | 3    | 0      | 28.14            | 23.00         |
|           |            |           |            | 3    | 1      | 28.34            | 23.01         |
|           |            |           |            | 3    | 2      | 28.28            | 23.00         |
|           |            |           | 16QAM      | 6    | 0      | 28.18            | 22.10         |
|           |            |           |            | 1    | 0      | 27.84            | 22.10         |
|           |            |           |            | 1    | 2      | 28.21            | 22.06         |
|           |            |           |            | 1    | 5      | 28.07            | 22.06         |
|           |            |           |            | 3    | 0      | 28.16            | 22.00         |
|           |            |           |            | 3    | 1      | 28.36            | 22.01         |
|           |            |           |            | 3    | 2      | 28.25            | 22.00         |
|           |            |           |            | 6    | 0      | 28.25            | 21.26         |

**LAT OUTPUT POWER FOR LTE BAND 25 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 3.0       | 26055      | 1851.5    | QPSK       | 1    | 0      | 27.90            | 23.17         |
|           |            |           |            | 1    | 7      | 28.20            | 23.19         |
|           |            |           |            | 1    | 14     | 27.74            | <b>23.29</b>  |
|           |            |           |            | 8    | 0      | <b>28.21</b>     | 22.33         |
|           |            |           |            | 8    | 4      | 27.51            | 22.28         |
|           |            |           |            | 8    | 7      | 27.40            | 22.33         |
|           |            |           |            | 15   | 0      | 27.46            | 22.29         |
|           |            |           | 16QAM      | 1    | 0      | <b>27.92</b>     | 22.19         |
|           |            |           |            | 1    | 7      | 26.86            | 22.15         |
|           |            |           |            | 1    | 14     | 26.51            | <b>22.19</b>  |
|           |            |           |            | 8    | 0      | 26.65            | 21.32         |
|           |            |           |            | 8    | 4      | 27.10            | 21.28         |
|           |            |           |            | 8    | 7      | 26.81            | 21.34         |
|           |            |           |            | 15   | 0      | 26.78            | 21.29         |
|           |            |           |            | 3.0  | 26365  | 1882.5           | QPSK          |
| 1         | 7          | 27.15     | 23.17      |      |        |                  |               |
| 1         | 14         | 27.15     | 23.20      |      |        |                  |               |
| 8         | 0          | 27.27     | 22.27      |      |        |                  |               |
| 8         | 4          | 27.33     | 22.34      |      |        |                  |               |
| 8         | 7          | 27.19     | 22.22      |      |        |                  |               |
| 15        | 0          | 27.28     | 22.25      |      |        |                  |               |
| 16QAM     | 1          | 0         | 27.36      |      |        |                  | 22.12         |
|           | 1          | 7         | 27.14      |      |        |                  | 22.06         |
|           | 1          | 14        | 27.21      |      |        |                  | 22.14         |
|           | 8          | 0         | 27.27      |      |        |                  | 21.40         |
|           | 8          | 4         | 27.01      |      |        |                  | 21.22         |
|           | 8          | 7         | 27.03      |      |        |                  | 21.32         |
|           | 15         | 0         | 27.07      |      |        |                  | 21.39         |
|           | 3.0        | 26675     | 1913.5     |      |        |                  | QPSK          |
| 1         |            |           |            | 7    | 28.02  | 23.07            |               |
| 1         |            |           |            | 14   | 27.88  | 23.06            |               |
| 8         |            |           |            | 0    | 28.10  | 22.12            |               |
| 8         |            |           |            | 4    | 27.47  | 22.05            |               |
| 8         |            |           |            | 7    | 27.36  | 22.07            |               |
| 15        |            |           |            | 0    | 27.36  | 22.14            |               |
| 16QAM     |            |           |            | 1    | 0      | 27.78            | 22.06         |
|           |            |           |            | 1    | 7      | 27.34            | 21.97         |
|           |            |           |            | 1    | 14     | 27.22            | 22.05         |
|           |            |           |            | 8    | 0      | 27.84            | 21.16         |
|           |            |           |            | 8    | 4      | 27.18            | 21.16         |
|           |            |           |            | 8    | 7      | 27.08            | 21.16         |
|           |            |           |            | 15   | 0      | 27.21            | 21.16         |



**LAT OUTPUT POWER FOR LTE BAND 25 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 26065      | 1852.5    | QPSK  | 1    | 0      | 27.29            | 23.13         |
|           |            |           |       | 1    | 12     | <b>28.19</b>     | 23.29         |
|           |            |           |       | 1    | 24     | 27.46            | <b>23.30</b>  |
|           |            |           |       | 12   | 0      | 26.79            | 22.33         |
|           |            |           |       | 12   | 6      | 27.57            | 22.26         |
|           |            |           |       | 12   | 11     | 27.05            | 22.31         |
|           |            |           |       | 25   | 0      | 26.83            | 22.33         |
|           |            |           | 16QAM | 1    | 0      | <b>28.11</b>     | 22.27         |
|           |            |           |       | 1    | 12     | 28.04            | 22.26         |
|           |            |           |       | 1    | 24     | 27.47            | 22.29         |
|           |            |           |       | 12   | 0      | 27.00            | 21.33         |
|           |            |           |       | 12   | 6      | 27.23            | 21.26         |
|           |            |           |       | 12   | 11     | 26.76            | 21.31         |
|           |            |           |       | 25   | 0      | 26.82            | 21.28         |
| 5.0       | 26365      | 1882.5    | QPSK  | 1    | 0      | 27.57            | 23.26         |
|           |            |           |       | 1    | 12     | 27.10            | 23.20         |
|           |            |           |       | 1    | 24     | 27.17            | 23.23         |
|           |            |           |       | 12   | 0      | 27.24            | 22.23         |
|           |            |           |       | 12   | 6      | 27.27            | 22.21         |
|           |            |           |       | 12   | 11     | 27.17            | 22.21         |
|           |            |           |       | 25   | 0      | 27.28            | 22.30         |
|           |            |           | 16QAM | 1    | 0      | 27.61            | 22.17         |
|           |            |           |       | 1    | 12     | 27.15            | <b>22.33</b>  |
|           |            |           |       | 1    | 24     | 27.21            | 22.31         |
|           |            |           |       | 12   | 0      | 27.30            | 21.32         |
|           |            |           |       | 12   | 6      | 27.16            | 21.24         |
|           |            |           |       | 12   | 11     | 27.05            | 21.18         |
|           |            |           |       | 25   | 0      | 27.19            | 21.32         |
| 5.0       | 26665      | 1912.5    | QPSK  | 1    | 0      | 28.02            | 23.02         |
|           |            |           |       | 1    | 12     | 27.15            | 23.05         |
|           |            |           |       | 1    | 24     | 27.79            | 23.07         |
|           |            |           |       | 12   | 0      | 27.94            | 22.14         |
|           |            |           |       | 12   | 6      | 27.37            | 22.10         |
|           |            |           |       | 12   | 11     | 27.31            | 22.08         |
|           |            |           |       | 25   | 0      | 27.42            | 22.08         |
|           |            |           | 16QAM | 1    | 0      | 28.07            | 22.19         |
|           |            |           |       | 1    | 12     | 27.34            | 22.18         |
|           |            |           |       | 1    | 24     | 27.95            | 22.19         |
|           |            |           |       | 12   | 0      | 28.11            | 21.10         |
|           |            |           |       | 12   | 6      | 27.09            | 21.16         |
|           |            |           |       | 12   | 11     | 27.23            | 21.15         |
|           |            |           |       | 25   | 0      | 27.25            | 21.21         |

**LAT OUTPUT POWER FOR LTE BAND 25 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 26090      | 1855.0    | QPSK  | 1    | 0      | 27.44            | 23.16         |
|           |            |           |       | 1    | 24     | <b>28.07</b>     | 23.27         |
|           |            |           |       | 1    | 49     | 26.76            | 23.28         |
|           |            |           |       | 25   | 0      | 26.98            | 22.29         |
|           |            |           |       | 25   | 12     | 27.64            | 22.29         |
|           |            |           |       | 25   | 24     | 26.91            | 22.29         |
|           |            |           | 16QAM | 50   | 0      | 27.09            | 22.34         |
|           |            |           |       | 1    | 0      | 27.44            | 22.12         |
|           |            |           |       | 1    | 24     | 26.55            | 22.12         |
|           |            |           |       | 1    | 49     | 26.78            | 22.17         |
|           |            |           |       | 25   | 0      | 27.03            | 21.35         |
|           |            |           |       | 25   | 12     | 26.87            | 21.23         |
|           |            |           |       | 25   | 24     | 26.92            | 21.31         |
|           |            |           |       | 50   | 0      | 27.04            | 21.30         |
| 10.0      | 26365      | 1882.5    | QPSK  | 1    | 0      | 27.78            | 23.21         |
|           |            |           |       | 1    | 24     | 27.06            | 23.22         |
|           |            |           |       | 1    | 49     | 27.16            | 23.21         |
|           |            |           |       | 25   | 0      | 27.34            | 22.26         |
|           |            |           |       | 25   | 12     | 27.16            | 22.22         |
|           |            |           |       | 25   | 24     | 27.22            | 22.28         |
|           |            |           | 16QAM | 50   | 0      | 27.32            | 22.27         |
|           |            |           |       | 1    | 0      | 27.33            | <b>22.23</b>  |
|           |            |           |       | 1    | 24     | 27.07            | 22.10         |
|           |            |           |       | 1    | 49     | 27.16            | 22.10         |
|           |            |           |       | 25   | 0      | 27.38            | 21.35         |
|           |            |           |       | 25   | 12     | 27.19            | 21.22         |
|           |            |           |       | 25   | 24     | 27.15            | 21.31         |
|           |            |           |       | 50   | 0      | 27.33            | 21.40         |
| 10.0      | 26640      | 1910.0    | QPSK  | 1    | 0      | 27.68            | 23.11         |
|           |            |           |       | 1    | 24     | 26.98            | 23.24         |
|           |            |           |       | 1    | 49     | 27.68            | <b>23.29</b>  |
|           |            |           |       | 25   | 0      | 28.03            | 22.23         |
|           |            |           |       | 25   | 12     | 26.91            | 22.20         |
|           |            |           |       | 25   | 24     | 27.31            | 22.25         |
|           |            |           | 16QAM | 50   | 0      | 27.55            | 22.10         |
|           |            |           |       | 1    | 0      | <b>27.70</b>     | 22.23         |
|           |            |           |       | 1    | 24     | 27.00            | 22.14         |
|           |            |           |       | 1    | 49     | 26.31            | 22.17         |
|           |            |           |       | 25   | 0      | 27.56            | 21.28         |
|           |            |           |       | 25   | 12     | 26.94            | 21.23         |
|           |            |           |       | 25   | 24     | 26.95            | 21.22         |
|           |            |           |       | 50   | 0      | 27.49            | 21.42         |

**LAT OUTPUT POWER FOR LTE BAND 25 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 15.0      | 26115      | 1857.5    | QPSK   | 1    | 0      | 27.48            | 23.16         |
|           |            |           |        | 1    | 37     | <b>28.37</b>     | 23.16         |
|           |            |           |        | 1    | 74     | 26.88            | 23.16         |
|           |            |           |        | 36   | 0      | 26.81            | 22.23         |
|           |            |           |        | 36   | 16     | 27.67            | 22.34         |
|           |            |           |        | 36   | 35     | 26.99            | 22.29         |
|           |            |           |        | 75   | 0      | 27.05            | 22.28         |
|           |            |           | 16-QAM | 1    | 0      | 27.66            | 22.09         |
|           |            |           |        | 1    | 37     | 26.52            | 22.06         |
|           |            |           |        | 1    | 74     | 26.92            | 22.06         |
|           |            |           |        | 36   | 0      | 26.85            | 21.33         |
|           |            |           |        | 36   | 16     | 27.08            | 21.27         |
|           |            |           |        | 36   | 35     | 26.99            | 21.28         |
|           |            |           |        | 75   | 0      | 27.02            | 21.30         |
| 15.0      | 26365      | 1882.5    | QPSK   | 1    | 0      | 27.66            | 23.17         |
|           |            |           |        | 1    | 37     | 26.90            | 23.16         |
|           |            |           |        | 1    | 74     | 27.13            | <b>23.19</b>  |
|           |            |           |        | 36   | 0      | 27.18            | 22.27         |
|           |            |           |        | 36   | 16     | 27.16            | 22.33         |
|           |            |           |        | 36   | 35     | 27.21            | 22.31         |
|           |            |           |        | 75   | 0      | 27.26            | 22.25         |
|           |            |           | 16-QAM | 1    | 0      | 27.54            | 22.06         |
|           |            |           |        | 1    | 37     | 26.91            | 22.06         |
|           |            |           |        | 1    | 74     | 27.18            | 22.07         |
|           |            |           |        | 36   | 0      | 27.25            | 21.35         |
|           |            |           |        | 36   | 16     | 27.16            | 21.26         |
|           |            |           |        | 36   | 35     | 27.19            | 21.39         |
|           |            |           |        | 75   | 0      | 27.25            | 21.41         |
| 15.0      | 26615      | 1907.5    | QPSK   | 1    | 0      | 27.89            | 22.99         |
|           |            |           |        | 1    | 37     | 27.00            | 23.06         |
|           |            |           |        | 1    | 74     | 26.65            | 23.05         |
|           |            |           |        | 36   | 0      | 28.04            | 22.19         |
|           |            |           |        | 36   | 16     | 27.17            | 22.22         |
|           |            |           |        | 36   | 35     | 26.88            | 22.14         |
|           |            |           |        | 75   | 0      | 27.63            | 22.23         |
|           |            |           | 16-QAM | 1    | 0      | <b>28.19</b>     | 22.06         |
|           |            |           |        | 1    | 37     | 27.01            | 21.95         |
|           |            |           |        | 1    | 74     | 26.68            | <b>22.11</b>  |
|           |            |           |        | 36   | 0      | 27.75            | 21.18         |
|           |            |           |        | 36   | 16     | 27.22            | 21.25         |
|           |            |           |        | 36   | 35     | 26.91            | 21.16         |
|           |            |           |        | 75   | 0      | 27.45            | 21.21         |

**LAT OUTPUT POWER FOR LTE BAND 25 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 20.0      | 26140      | 1860.0    | QPSK   | 1    | 0      | 27.28            | 23.16         |
|           |            |           |        | 1    | 49     | <b>28.29</b>     | 23.29         |
|           |            |           |        | 1    | 99     | 26.85            | 23.36         |
|           |            |           |        | 50   | 0      | 27.21            | 22.33         |
|           |            |           |        | 50   | 24     | 27.29            | 22.32         |
|           |            |           |        | 50   | 49     | 26.98            | 22.28         |
|           |            |           | 16-QAM | 100  | 0      | 26.91            | 22.29         |
|           |            |           |        | 1    | 0      | 27.33            | 22.06         |
|           |            |           |        | 1    | 49     | 27.59            | 22.05         |
|           |            |           |        | 1    | 99     | 26.81            | 22.11         |
|           |            |           |        | 50   | 0      | 26.74            | 21.33         |
|           |            |           |        | 50   | 24     | 26.94            | 21.24         |
|           |            |           |        | 50   | 49     | 26.98            | 21.38         |
|           |            |           |        | 100  | 0      | 26.95            | 21.33         |
| 20.0      | 26365      | 1882.5    | QPSK   | 1    | 0      | 27.35            | 23.24         |
|           |            |           |        | 1    | 49     | 26.85            | 23.21         |
|           |            |           |        | 1    | 99     | 27.19            | <b>23.37</b>  |
|           |            |           |        | 50   | 0      | 27.11            | 22.37         |
|           |            |           |        | 50   | 24     | 27.10            | 22.26         |
|           |            |           |        | 50   | 49     | 27.18            | 22.36         |
|           |            |           | 16-QAM | 100  | 0      | 27.28            | 22.28         |
|           |            |           |        | 1    | 0      | 27.33            | 22.06         |
|           |            |           |        | 1    | 49     | 26.83            | 22.07         |
|           |            |           |        | 1    | 99     | 27.18            | <b>22.13</b>  |
|           |            |           |        | 50   | 0      | 27.13            | 21.37         |
|           |            |           |        | 50   | 24     | 27.08            | 21.24         |
|           |            |           |        | 50   | 49     | 27.19            | 21.38         |
|           |            |           |        | 100  | 0      | 27.27            | 21.45         |
| 20.0      | 26590      | 1905.0    | QPSK   | 1    | 0      | 27.71            | 23.08         |
|           |            |           |        | 1    | 49     | 26.95            | 23.10         |
|           |            |           |        | 1    | 99     | 26.95            | 23.10         |
|           |            |           |        | 50   | 0      | 28.22            | 22.21         |
|           |            |           |        | 50   | 24     | 27.21            | 22.14         |
|           |            |           |        | 50   | 49     | 27.04            | 22.13         |
|           |            |           | 16-QAM | 100  | 0      | 27.82            | 22.15         |
|           |            |           |        | 1    | 0      | <b>28.21</b>     | 22.06         |
|           |            |           |        | 1    | 49     | 26.92            | 21.95         |
|           |            |           |        | 1    | 99     | 26.98            | 22.05         |
|           |            |           |        | 50   | 0      | 27.95            | 21.19         |
|           |            |           |        | 50   | 24     | 27.28            | 21.23         |
|           |            |           |        | 50   | 49     | 27.04            | 21.20         |
|           |            |           |        | 100  | 0      | 27.65            | 21.21         |

**UAT OUTPUT POWER FOR LTE BAND 25 (1.4MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 1.4       | 26047      | 1850.7    | QPSK       | 1    | 0      | 27.09            | 22.84         |
|           |            |           |            | 1    | 2      | 26.69            | 22.98         |
|           |            |           |            | 1    | 5      | 26.64            | 22.89         |
|           |            |           |            | 3    | 0      | 26.72            | 22.70         |
|           |            |           |            | 3    | 1      | 26.98            | 22.75         |
|           |            |           |            | 3    | 2      | 26.86            | 22.80         |
|           |            |           |            | 6    | 0      | 26.89            | 22.04         |
|           |            |           | 16QAM      | 1    | 0      | 27.04            | 21.79         |
|           |            |           |            | 1    | 2      | 26.84            | 21.90         |
|           |            |           |            | 1    | 5      | 26.63            | <b>22.03</b>  |
|           |            |           |            | 3    | 0      | 26.72            | 21.80         |
|           |            |           |            | 3    | 1      | 26.77            | 21.75         |
|           |            |           |            | 3    | 2      | 26.73            | 21.80         |
|           |            |           |            | 6    | 0      | 26.77            | 21.05         |
| 1.4       | 26365      | 1882.5    | QPSK       | 1    | 0      | 27.61            | 23.11         |
|           |            |           |            | 1    | 2      | 27.46            | 23.14         |
|           |            |           |            | 1    | 5      | 27.41            | 23.16         |
|           |            |           |            | 3    | 0      | 27.49            | 22.10         |
|           |            |           |            | 3    | 1      | 27.66            | 22.00         |
|           |            |           |            | 3    | 2      | 27.60            | 22.05         |
|           |            |           |            | 6    | 0      | 27.63            | 22.17         |
|           |            |           | 16QAM      | 1    | 0      | 27.58            | 21.91         |
|           |            |           |            | 1    | 2      | 27.49            | 21.90         |
|           |            |           |            | 1    | 5      | 27.43            | 21.95         |
|           |            |           |            | 3    | 0      | 27.50            | 21.80         |
|           |            |           |            | 3    | 1      | 27.56            | 21.85         |
|           |            |           |            | 3    | 2      | 27.52            | 21.90         |
|           |            |           |            | 6    | 0      | 27.56            | 21.26         |
| 1.4       | 26683      | 1914.3    | QPSK       | 1    | 0      | 27.63            | 23.03         |
|           |            |           |            | 1    | 2      | 28.08            | <b>23.24</b>  |
|           |            |           |            | 1    | 5      | 27.92            | 23.17         |
|           |            |           |            | 3    | 0      | 28.12            | 23.15         |
|           |            |           |            | 3    | 1      | <b>28.32</b>     | 23.20         |
|           |            |           |            | 3    | 2      | 28.27            | 23.18         |
|           |            |           |            | 6    | 0      | 28.27            | 22.22         |
|           |            |           | 16QAM      | 1    | 0      | 27.68            | 21.91         |
|           |            |           |            | 1    | 2      | 28.19            | 21.94         |
|           |            |           |            | 1    | 5      | 27.98            | 21.92         |
|           |            |           |            | 3    | 0      | 28.18            | 21.70         |
|           |            |           |            | 3    | 1      | <b>28.28</b>     | 21.75         |
|           |            |           |            | 3    | 2      | 28.19            | 21.80         |
|           |            |           |            | 6    | 0      | 28.15            | 21.25         |

**UAT OUTPUT POWER FOR LTE BAND 25 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Modulation | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|------|--------|------------------|---------------|
|           |            |           |            | Size | Offset |                  |               |
| 3.0       | 26055      | 1851.5    | QPSK       | 1    | 0      | 27.36            | 22.81         |
|           |            |           |            | 1    | 7      | 26.65            | 22.96         |
|           |            |           |            | 1    | 14     | 26.67            | 22.94         |
|           |            |           |            | 8    | 0      | 26.90            | 22.03         |
|           |            |           |            | 8    | 4      | 26.83            | 22.03         |
|           |            |           |            | 8    | 7      | 26.84            | 21.99         |
|           |            |           |            | 15   | 0      | 26.89            | 22.06         |
|           |            |           | 16QAM      | 1    | 0      | 27.23            | 21.77         |
|           |            |           |            | 1    | 7      | 26.64            | 21.79         |
|           |            |           |            | 1    | 14     | 26.68            | 21.80         |
|           |            |           |            | 8    | 0      | 26.92            | 21.06         |
|           |            |           |            | 8    | 4      | 26.70            | 21.08         |
|           |            |           |            | 8    | 7      | 26.70            | 21.02         |
|           |            |           |            | 15   | 0      | 26.76            | 21.01         |
| 3.0       | 26365      | 1882.5    | QPSK       | 1    | 0      | 27.67            | <b>23.16</b>  |
|           |            |           |            | 1    | 7      | 27.35            | 23.09         |
|           |            |           |            | 1    | 14     | 27.41            | 23.07         |
|           |            |           |            | 8    | 0      | 27.51            | 22.15         |
|           |            |           |            | 8    | 4      | 27.39            | 22.14         |
|           |            |           |            | 8    | 7      | 27.20            | 22.24         |
|           |            |           |            | 15   | 0      | 27.19            | 22.17         |
|           |            |           | 16QAM      | 1    | 0      | 27.45            | 21.90         |
|           |            |           |            | 1    | 7      | 27.32            | 21.93         |
|           |            |           |            | 1    | 14     | 27.02            | <b>21.94</b>  |
|           |            |           |            | 8    | 0      | <b>27.54</b>     | 21.25         |
|           |            |           |            | 8    | 4      | 27.12            | 21.19         |
|           |            |           |            | 8    | 7      | 27.06            | 21.19         |
|           |            |           |            | 15   | 0      | 26.96            | 21.22         |
| 3.0       | 26675      | 1913.5    | QPSK       | 1    | 0      | 27.07            | 22.96         |
|           |            |           |            | 1    | 7      | 26.49            | 23.13         |
|           |            |           |            | 1    | 14     | 26.30            | 23.03         |
|           |            |           |            | 8    | 0      | <b>28.05</b>     | 22.04         |
|           |            |           |            | 8    | 4      | 26.74            | 22.13         |
|           |            |           |            | 8    | 7      | 26.79            | 22.11         |
|           |            |           |            | 15   | 0      | 27.30            | 22.24         |
|           |            |           | 16QAM      | 1    | 0      | 27.06            | 21.76         |
|           |            |           |            | 1    | 7      | 26.40            | 21.93         |
|           |            |           |            | 1    | 14     | 26.30            | 21.89         |
|           |            |           |            | 8    | 0      | 26.84            | 21.27         |
|           |            |           |            | 8    | 4      | 26.52            | 21.11         |
|           |            |           |            | 8    | 7      | 26.48            | 21.13         |
|           |            |           |            | 15   | 0      | 26.64            | 21.24         |

**UAT OUTPUT POWER FOR LTE BAND 25 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 26065      | 1852.5    | QPSK  | 1    | 0      | 27.29            | 22.83         |
|           |            |           |       | 1    | 12     | 26.64            | 22.94         |
|           |            |           |       | 1    | 24     | 26.81            | 22.86         |
|           |            |           |       | 12   | 0      | 27.09            | 21.83         |
|           |            |           |       | 12   | 6      | 26.85            | 22.00         |
|           |            |           |       | 12   | 11     | 26.86            | 21.90         |
|           |            |           | 16QAM | 25   | 0      | 27.00            | 22.04         |
|           |            |           |       | 1    | 0      | 27.21            | 21.86         |
|           |            |           |       | 1    | 12     | 26.63            | 21.89         |
|           |            |           |       | 1    | 24     | 26.83            | <b>21.99</b>  |
|           |            |           |       | 12   | 0      | 27.11            | 21.00         |
|           |            |           |       | 12   | 6      | 26.80            | 20.83         |
|           |            |           |       | 12   | 11     | 26.67            | 20.95         |
|           |            |           |       | 25   | 0      | 26.73            | 20.93         |
| 5.0       | 26365      | 1882.5    | QPSK  | 1    | 0      | 27.63            | <b>23.15</b>  |
|           |            |           |       | 1    | 12     | 27.29            | 23.09         |
|           |            |           |       | 1    | 24     | 27.40            | 23.02         |
|           |            |           |       | 12   | 0      | 27.54            | 22.04         |
|           |            |           |       | 12   | 6      | 27.33            | 22.16         |
|           |            |           |       | 12   | 11     | 27.23            | 22.15         |
|           |            |           | 16QAM | 25   | 0      | 27.32            | 22.10         |
|           |            |           |       | 1    | 0      | 27.76            | 21.94         |
|           |            |           |       | 1    | 12     | 27.29            | 21.92         |
|           |            |           |       | 1    | 24     | 27.44            | 21.93         |
|           |            |           |       | 12   | 0      | 27.60            | 21.23         |
|           |            |           |       | 12   | 6      | 27.24            | 21.10         |
|           |            |           |       | 12   | 11     | 27.07            | 21.19         |
|           |            |           |       | 25   | 0      | 27.04            | 21.11         |
| 5.0       | 26665      | 1912.5    | QPSK  | 1    | 0      | 27.05            | 22.96         |
|           |            |           |       | 1    | 12     | 26.62            | 23.12         |
|           |            |           |       | 1    | 24     | 26.40            | 23.03         |
|           |            |           |       | 12   | 0      | <b>27.96</b>     | 22.05         |
|           |            |           |       | 12   | 6      | 26.65            | 22.11         |
|           |            |           |       | 12   | 11     | 26.50            | 22.03         |
|           |            |           | 16QAM | 25   | 0      | 26.64            | 22.00         |
|           |            |           |       | 1    | 0      | 26.99            | 21.72         |
|           |            |           |       | 1    | 12     | 26.66            | 21.72         |
|           |            |           |       | 1    | 24     | 26.65            | 21.87         |
|           |            |           |       | 12   | 0      | <b>27.80</b>     | 21.25         |
|           |            |           |       | 12   | 6      | 26.62            | 21.13         |
|           |            |           |       | 12   | 11     | 26.46            | 21.14         |
|           |            |           |       | 25   | 0      | 26.47            | 21.12         |

**UAT OUTPUT POWER FOR LTE BAND 25 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 26090      | 1855.0    | QPSK  | 1    | 0      | 27.60            | 22.90         |
|           |            |           |       | 1    | 24     | 26.68            | 22.97         |
|           |            |           |       | 1    | 49     | 27.06            | 22.98         |
|           |            |           |       | 25   | 0      | 27.41            | 21.82         |
|           |            |           |       | 25   | 12     | 27.00            | 22.04         |
|           |            |           |       | 25   | 24     | 27.10            | 21.84         |
|           |            |           | 16QAM | 50   | 0      | 27.24            | 22.02         |
|           |            |           |       | 1    | 0      | 27.52            | 21.75         |
|           |            |           |       | 1    | 24     | 26.67            | 21.84         |
|           |            |           |       | 1    | 49     | 27.05            | 21.86         |
|           |            |           |       | 25   | 0      | 26.31            | 20.82         |
|           |            |           |       | 25   | 12     | 26.90            | 20.86         |
|           |            |           |       | 25   | 24     | 27.01            | 21.02         |
|           |            |           |       | 50   | 0      | 27.08            | 20.99         |
| 10.0      | 26365      | 1882.5    | QPSK  | 1    | 0      | 27.60            | <b>23.15</b>  |
|           |            |           |       | 1    | 24     | 27.16            | 23.13         |
|           |            |           |       | 1    | 49     | 27.38            | 23.03         |
|           |            |           |       | 25   | 0      | 27.69            | 22.04         |
|           |            |           |       | 25   | 12     | 27.31            | 22.21         |
|           |            |           |       | 25   | 24     | 27.39            | 22.13         |
|           |            |           | 16QAM | 50   | 0      | 27.45            | 22.15         |
|           |            |           |       | 1    | 0      | <b>27.80</b>     | 21.80         |
|           |            |           |       | 1    | 24     | 27.19            | <b>21.95</b>  |
|           |            |           |       | 1    | 49     | 27.37            | 21.82         |
|           |            |           |       | 25   | 0      | 26.57            | 21.21         |
|           |            |           |       | 25   | 12     | 27.29            | 21.11         |
|           |            |           |       | 25   | 24     | 27.27            | 21.11         |
|           |            |           |       | 50   | 0      | 27.27            | 21.15         |
| 10.0      | 26640      | 1910.0    | QPSK  | 1    | 0      | 27.59            | 22.96         |
|           |            |           |       | 1    | 24     | 27.34            | 23.12         |
|           |            |           |       | 1    | 49     | 26.67            | 23.02         |
|           |            |           |       | 25   | 0      | <b>27.91</b>     | 21.92         |
|           |            |           |       | 25   | 12     | 27.05            | 22.18         |
|           |            |           |       | 25   | 24     | 26.77            | 22.00         |
|           |            |           | 16QAM | 50   | 0      | 26.62            | 22.13         |
|           |            |           |       | 1    | 0      | 27.01            | 21.70         |
|           |            |           |       | 1    | 24     | 27.15            | 21.91         |
|           |            |           |       | 1    | 49     | 26.62            | 21.94         |
|           |            |           |       | 25   | 0      | 26.44            | 21.12         |
|           |            |           |       | 25   | 12     | 26.99            | 21.10         |
|           |            |           |       | 25   | 24     | 26.68            | 21.12         |
|           |            |           |       | 50   | 0      | 26.64            | 21.15         |



**UAT OUTPUT POWER FOR LTE BAND 25 (15.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 15.0      | 26115      | 1857.5    | QPSK   | 1    | 0      | 27.57            | 23.03         |
|           |            |           |        | 1    | 37     | 26.64            | 23.05         |
|           |            |           |        | 1    | 74     | 27.22            | 22.94         |
|           |            |           |        | 36   | 0      | 27.12            | 21.84         |
|           |            |           |        | 36   | 16     | 27.05            | 22.01         |
|           |            |           |        | 36   | 35     | 27.15            | 21.96         |
|           |            |           |        | 75   | 0      | 27.17            | 22.13         |
|           |            |           | 16-QAM | 1    | 0      | 27.46            | 21.79         |
|           |            |           |        | 1    | 37     | 26.63            | 21.83         |
|           |            |           |        | 1    | 74     | 27.23            | 21.87         |
|           |            |           |        | 36   | 0      | 27.16            | 20.81         |
|           |            |           |        | 36   | 16     | 27.02            | 20.90         |
|           |            |           |        | 36   | 35     | 27.16            | 21.13         |
|           |            |           |        | 75   | 0      | 27.16            | 21.05         |
| 15.0      | 26365      | 1882.5    | QPSK   | 1    | 0      | 27.74            | <b>23.19</b>  |
|           |            |           |        | 1    | 37     | 26.91            | 23.13         |
|           |            |           |        | 1    | 74     | 27.32            | 23.04         |
|           |            |           |        | 36   | 0      | 27.49            | 22.00         |
|           |            |           |        | 36   | 16     | 27.23            | 22.26         |
|           |            |           |        | 36   | 35     | 27.34            | 22.20         |
|           |            |           |        | 75   | 0      | 27.41            | 22.23         |
|           |            |           | 16-QAM | 1    | 0      | <b>27.69</b>     | 21.95         |
|           |            |           |        | 1    | 37     | 26.91            | 21.89         |
|           |            |           |        | 1    | 74     | 27.33            | 21.75         |
|           |            |           |        | 36   | 0      | 27.36            | 21.13         |
|           |            |           |        | 36   | 16     | 27.22            | 21.23         |
|           |            |           |        | 36   | 35     | 27.31            | 21.15         |
|           |            |           |        | 75   | 0      | 27.37            | 21.20         |
| 15.0      | 26615      | 1907.5    | QPSK   | 1    | 0      | 27.50            | 23.01         |
|           |            |           |        | 1    | 37     | 27.02            | 23.14         |
|           |            |           |        | 1    | 74     | 26.98            | 23.02         |
|           |            |           |        | 36   | 0      | <b>27.99</b>     | 21.98         |
|           |            |           |        | 36   | 16     | 27.31            | 22.12         |
|           |            |           |        | 36   | 35     | 27.05            | 22.02         |
|           |            |           |        | 75   | 0      | 26.81            | 22.12         |
|           |            |           | 16-QAM | 1    | 0      | 27.52            | 21.93         |
|           |            |           |        | 1    | 37     | 27.03            | <b>21.96</b>  |
|           |            |           |        | 1    | 74     | 27.02            | 21.86         |
|           |            |           |        | 36   | 0      | 26.89            | 21.14         |
|           |            |           |        | 36   | 16     | 27.24            | 21.15         |
|           |            |           |        | 36   | 35     | 27.00            | 21.13         |
|           |            |           |        | 75   | 0      | 26.83            | 21.10         |

**UAT OUTPUT POWER FOR LTE BAND 25 (20.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode   | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|--------|------|--------|------------------|---------------|
|           |            |           |        | Size | Offset |                  |               |
| 20.0      | 26140      | 1860.0    | QPSK   | 1    | 0      | 27.31            | 22.98         |
|           |            |           |        | 1    | 49     | 27.06            | 23.10         |
|           |            |           |        | 1    | 99     | 27.23            | 23.04         |
|           |            |           |        | 50   | 0      | 26.81            | 22.01         |
|           |            |           |        | 50   | 24     | 27.09            | 22.05         |
|           |            |           |        | 50   | 49     | 27.20            | 22.00         |
|           |            |           |        | 100  | 0      | 27.14            | 22.06         |
|           |            |           | 16-QAM | 1    | 0      | 27.27            | 21.75         |
|           |            |           |        | 1    | 49     | 26.54            | 21.89         |
|           |            |           |        | 1    | 99     | 27.25            | 21.95         |
|           |            |           |        | 50   | 0      | 26.87            | 20.94         |
|           |            |           |        | 50   | 24     | 27.07            | 20.91         |
|           |            |           |        | 50   | 49     | 27.11            | 21.11         |
|           |            |           |        | 100  | 0      | 27.13            | 21.16         |
| 20.0      | 26365      | 1882.5    | QPSK   | 1    | 0      | 27.56            | 23.10         |
|           |            |           |        | 1    | 49     | 26.82            | 23.21         |
|           |            |           |        | 1    | 99     | 27.33            | 23.16         |
|           |            |           |        | 50   | 0      | 27.33            | 22.03         |
|           |            |           |        | 50   | 24     | 27.18            | 22.27         |
|           |            |           |        | 50   | 49     | 27.35            | 22.20         |
|           |            |           |        | 100  | 0      | 27.42            | 22.26         |
|           |            |           | 16-QAM | 1    | 0      | 27.64            | 21.92         |
|           |            |           |        | 1    | 49     | 26.83            | 21.94         |
|           |            |           |        | 1    | 99     | 27.33            | 21.87         |
|           |            |           |        | 50   | 0      | 27.37            | 21.19         |
|           |            |           |        | 50   | 24     | 27.17            | 21.23         |
|           |            |           |        | 50   | 49     | 27.34            | 21.15         |
|           |            |           |        | 100  | 0      | 27.44            | 21.21         |
| 20.0      | 26590      | 1905.0    | QPSK   | 1    | 0      | 27.93            | 23.00         |
|           |            |           |        | 1    | 49     | 26.99            | 23.22         |
|           |            |           |        | 1    | 99     | 27.13            | 23.10         |
|           |            |           |        | 50   | 0      | 28.19            | 22.05         |
|           |            |           |        | 50   | 24     | 27.32            | 22.15         |
|           |            |           |        | 50   | 49     | 27.08            | 22.02         |
|           |            |           |        | 100  | 0      | 27.07            | 22.15         |
|           |            |           | 16-QAM | 1    | 0      | 27.77            | 21.89         |
|           |            |           |        | 1    | 49     | 27.00            | 21.93         |
|           |            |           |        | 1    | 99     | 27.15            | 21.97         |
|           |            |           |        | 50   | 0      | 27.88            | 21.17         |
|           |            |           |        | 50   | 24     | 27.24            | 21.15         |
|           |            |           |        | 50   | 49     | 27.12            | 21.15         |
|           |            |           |        | 100  | 0      | 27.02            | 21.11         |

### 7.7. LTE BAND 26

#### LAT OUTPUT POWER FOR LTE BAND 26 (3.0 MHZ)

| Bandwidth | UL Channel | Frequency | Modulation | RB    | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|------------|-------|--------|------------------|---------------|
|           |            |           |            | Size  | Offset |                  |               |
| 3.0       | 26705      | 820.3     | QPSK       | 1     | 0      | 27.02            | 22.71         |
|           |            |           |            | 1     | 7      | 27.32            | 22.75         |
|           |            |           |            | 1     | 14     | 27.23            | 22.79         |
|           |            |           |            | 8     | 0      | <b>27.43</b>     | 21.97         |
|           |            |           |            | 8     | 4      | 26.98            | 21.94         |
|           |            |           |            | 8     | 7      | 26.86            | 21.92         |
|           |            |           |            | 15    | 0      | 26.92            | 21.92         |
|           |            |           | 16QAM      | 1     | 0      | 27.07            | 21.54         |
|           |            |           |            | 1     | 7      | 27.15            | 21.67         |
|           |            |           |            | 1     | 14     | 26.96            | 21.70         |
|           |            |           |            | 8     | 0      | 27.16            | 20.95         |
|           |            |           |            | 8     | 4      | 26.57            | 20.95         |
|           |            |           |            | 8     | 7      | 26.48            | 20.92         |
|           |            |           |            | 15    | 0      | 26.53            | 20.92         |
|           |            |           | 3.0        | 26865 | 821.3  | QPSK             | 1             |
| 1         | 7          | 27.42     |            |       |        |                  | 22.71         |
| 1         | 14         | 27.19     |            |       |        |                  | 22.77         |
| 8         | 0          | 27.42     |            |       |        |                  | 21.92         |
| 8         | 4          | 26.96     |            |       |        |                  | 21.94         |
| 8         | 7          | 26.88     |            |       |        |                  | 21.92         |
| 15        | 0          | 26.98     |            |       |        |                  | 21.89         |
| 16QAM     | 1          | 0         |            |       |        | 27.22            | 21.55         |
|           | 1          | 7         |            |       |        | 27.19            | 21.70         |
|           | 1          | 14        |            |       |        | 26.90            | <b>21.75</b>  |
|           | 8          | 0         |            |       |        | <b>27.23</b>     | 20.93         |
|           | 8          | 4         |            |       |        | 26.70            | 20.93         |
|           | 8          | 7         |            |       |        | 26.59            | 20.93         |
|           | 15         | 0         |            |       |        | 26.66            | 20.93         |
| 3.0       | 27025      | 822.3     |            |       |        | QPSK             | 1             |
|           |            |           | 1          | 7     | 27.43  |                  | 22.74         |
|           |            |           | 1          | 14    | 27.21  |                  | <b>22.83</b>  |
|           |            |           | 8          | 0     | 27.35  |                  | 21.90         |
|           |            |           | 8          | 4     | 27.04  |                  | 21.91         |
|           |            |           | 8          | 7     | 26.89  |                  | 21.94         |
|           |            |           | 15         | 0     | 26.96  |                  | 21.94         |
|           |            |           | 16QAM      | 1     | 0      | 27.21            | 21.59         |
|           |            |           |            | 1     | 7      | 27.18            | 21.69         |
|           |            |           |            | 1     | 14     | 26.94            | 21.74         |
|           |            |           |            | 8     | 0      | 27.20            | 20.92         |
|           |            |           |            | 8     | 4      | 26.63            | 20.93         |
|           |            |           |            | 8     | 7      | 26.57            | 20.90         |
|           |            |           |            | 15    | 0      | 26.66            | 20.91         |

**LAT OUTPUT POWER FOR LTE BAND 26 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 26865      | 821.3     | QPSK  | 1    | 0      | <b>27.45</b>     | 22.64         |
|           |            |           |       | 1    | 12     | 27.25            | 22.76         |
|           |            |           |       | 1    | 24     | 27.17            | <b>22.77</b>  |
|           |            |           |       | 12   | 0      | 27.27            | 21.95         |
|           |            |           |       | 12   | 6      | 26.97            | 21.92         |
|           |            |           |       | 12   | 11     | 26.84            | 21.89         |
|           |            |           |       | 25   | 0      | 26.88            | 21.91         |
|           |            |           | 16QAM | 1    | 0      | 27.29            | 21.73         |
|           |            |           |       | 1    | 12     | 27.39            | 21.93         |
|           |            |           |       | 1    | 24     | 27.29            | <b>21.99</b>  |
|           |            |           |       | 12   | 0      | <b>27.40</b>     | 20.90         |
|           |            |           |       | 12   | 6      | 26.79            | 20.84         |
|           |            |           |       | 12   | 11     | 26.63            | 20.67         |
|           |            |           |       | 25   | 0      | 26.69            | 20.85         |

**LAT OUTPUT POWER FOR LTE BAND 26 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 26740      | 819.0     | QPSK  | 1    | 0      | 27.03            | 22.75         |
|           |            |           |       | 1    | 24     | 27.24            | 22.84         |
|           |            |           |       | 1    | 49     | 27.11            | <b>22.88</b>  |
|           |            |           |       | 25   | 0      | 27.52            | 21.74         |
|           |            |           |       | 25   | 12     | 27.72            | 21.76         |
|           |            |           |       | 25   | 24     | 27.67            | 21.58         |
|           |            |           |       | 50   | 0      | <b>27.74</b>     | 21.49         |
|           |            |           | 16QAM | 1    | 0      | 26.44            | 21.62         |
|           |            |           |       | 1    | 24     | 26.46            | 21.66         |
|           |            |           |       | 1    | 49     | 26.51            | <b>21.71</b>  |
|           |            |           |       | 25   | 0      | 26.66            | 20.68         |
|           |            |           |       | 25   | 12     | 26.71            | 20.74         |
|           |            |           |       | 25   | 24     | <b>26.87</b>     | 20.65         |
|           |            |           |       | 50   | 0      | 26.75            | 20.55         |

**UAT OUTPUT POWER FOR LTE BAND 26 (3.0 MHZ)**

| Bandwidth | UL Channel | Frequency    | Modulation | RB    | RB           | Peak Power (dBm) | Average (dBm) |
|-----------|------------|--------------|------------|-------|--------------|------------------|---------------|
|           |            |              |            | Size  | Offset       |                  |               |
| 3.0       | 26705      | 820.3        | QPSK       | 1     | 0            | 27.46            | 22.34         |
|           |            |              |            | 1     | 7            | 27.46            | 22.79         |
|           |            |              |            | 1     | 14           | 27.64            | 22.72         |
|           |            |              |            | 8     | 0            | 26.95            | 21.89         |
|           |            |              |            | 8     | 4            | 27.04            | 21.83         |
|           |            |              |            | 8     | 7            | 27.05            | 21.86         |
|           |            |              | 15         | 0     | 27.40        | 21.84            |               |
|           |            |              | 16QAM      | 1     | 0            | 27.21            | 21.36         |
|           |            |              |            | 1     | 7            | 27.09            | <b>21.68</b>  |
|           |            |              |            | 1     | 14           | 27.32            | 21.58         |
|           |            |              |            | 8     | 0            | 26.72            | 20.92         |
|           |            |              |            | 8     | 4            | 26.71            | 20.86         |
|           |            |              |            | 8     | 7            | 26.81            | 20.87         |
|           |            |              | 15         | 0     | 27.18        | 20.86            |               |
|           |            |              | 3.0        | 26865 | 821.3        | QPSK             | 1             |
| 1         | 7          | 27.45        |            |       |              |                  | 22.72         |
| 1         | 14         | 27.74        |            |       |              |                  | <b>22.80</b>  |
| 8         | 0          | 26.99        |            |       |              |                  | 21.84         |
| 8         | 4          | 27.01        |            |       |              |                  | 21.81         |
| 8         | 7          | 26.95        |            |       |              |                  | 21.85         |
| 15        | 0          | 27.31        |            |       |              | 21.82            |               |
| 16QAM     | 1          | 0            |            |       |              | 27.24            | 21.29         |
|           | 1          | 7            |            |       |              | 27.12            | 21.61         |
|           | 1          | 14           |            |       |              | 27.41            | 21.56         |
|           | 8          | 0            |            |       |              | 26.86            | 20.92         |
|           | 8          | 4            |            |       |              | 26.84            | 20.85         |
|           | 8          | 7            |            |       |              | 26.81            | 20.84         |
| 15        | 0          | <b>27.58</b> |            |       |              | 20.84            |               |
| 3.0       | 27025      | 822.3        |            |       |              | QPSK             | 1             |
|           |            |              | 1          | 7     | 27.52        |                  | 22.69         |
|           |            |              | 1          | 14    | <b>27.76</b> |                  | 22.67         |
|           |            |              | 8          | 0     | 27.19        |                  | 21.86         |
|           |            |              | 8          | 4     | 27.17        |                  | 21.82         |
|           |            |              | 8          | 7     | 27.21        |                  | 21.81         |
|           |            |              | 15         | 0     | 27.37        | 21.81            |               |
|           |            |              | 16QAM      | 1     | 0            | 27.32            | 21.33         |
|           |            |              |            | 1     | 7            | 27.26            | 21.66         |
|           |            |              |            | 1     | 14           | 27.40            | 21.54         |
|           |            |              |            | 8     | 0            | 26.76            | 20.91         |
|           |            |              |            | 8     | 4            | 26.77            | 20.87         |
|           |            |              |            | 8     | 7            | 26.86            | 20.82         |
|           |            |              | 15         | 0     | 27.21        | 20.81            |               |

**UAT OUTPUT POWER FOR LTE BAND 26 (5.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 5.0       | 26865      | 821.3     | QPSK  | 1    | 0      | 27.43            | 22.32         |
|           |            |           |       | 1    | 12     | 27.38            | <b>22.72</b>  |
|           |            |           |       | 1    | 24     | <b>27.63</b>     | 22.66         |
|           |            |           |       | 12   | 0      | 27.08            | 21.85         |
|           |            |           |       | 12   | 6      | 27.08            | 21.86         |
|           |            |           |       | 12   | 11     | 27.14            | 21.83         |
|           |            |           |       | 25   | 0      | 27.63            | 21.83         |
|           |            |           | 16QAM | 1    | 0      | 27.50            | 21.87         |
|           |            |           |       | 1    | 12     | 27.50            | <b>21.98</b>  |
|           |            |           |       | 1    | 24     | <b>27.74</b>     | 21.87         |
|           |            |           |       | 12   | 0      | 26.84            | 20.84         |
|           |            |           |       | 12   | 6      | 26.80            | 20.77         |
|           |            |           |       | 12   | 11     | 26.83            | 20.74         |
|           |            |           |       | 25   | 0      | 27.41            | 20.74         |

**UAT OUTPUT POWER FOR LTE BAND 26 (10.0 MHZ)**

| Bandwidth | UL Channel | Frequency | Mode  | RB   | RB     | Peak Power (dBm) | Average (dBm) |
|-----------|------------|-----------|-------|------|--------|------------------|---------------|
|           |            |           |       | Size | Offset |                  |               |
| 10.0      | 26740      | 819.0     | QPSK  | 1    | 0      | 27.00            | 22.71         |
|           |            |           |       | 1    | 24     | 27.22            | 22.69         |
|           |            |           |       | 1    | 49     | 27.23            | <b>22.78</b>  |
|           |            |           |       | 25   | 0      | 27.44            | 21.70         |
|           |            |           |       | 25   | 12     | 27.45            | 21.68         |
|           |            |           |       | 25   | 24     | 27.58            | 21.46         |
|           |            |           |       | 50   | 0      | <b>27.69</b>     | 21.51         |
|           |            |           | 16QAM | 1    | 0      | 26.47            | 21.59         |
|           |            |           |       | 1    | 24     | 26.51            | 21.70         |
|           |            |           |       | 1    | 49     | 26.52            | <b>21.86</b>  |
|           |            |           |       | 25   | 0      | 26.68            | 20.67         |
|           |            |           |       | 25   | 12     | 26.77            | 20.64         |
|           |            |           |       | 25   | 24     | 26.80            | 20.41         |
|           |            |           |       | 50   | 0      | <b>26.84</b>     | 20.60         |

## 8. CONDUCTED TEST RESULTS

### 8.1. OCCUPIED BANDWIDTH

#### RULE PART(S)

FCC: §2.1049

#### LIMITS

For reporting purposes only

#### TEST PROCEDURE

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

#### MODES TESTED

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

#### RESULTS

| BAND       | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 2 | 1.4 MHz BAND QPSK   | 6/0                | 1880    | 1.0874       | 1.205           |
|            | 1.4 MHz BAND 16QAM  | 6/0                | 1880    | 1.0766       | 1.152           |
|            | 3.0 MHz BAND QPSK   | 15/0               | 1880    | 2.6644       | 2.803           |
|            | 3.0 MHz BAND 16QAM  | 15/0               | 1880    | 2.6822       | 2.809           |
|            | 5.0 MHz BAND QPSK   | 25/0               | 1880    | 4.4516       | 4.767           |
|            | 5.0 MHz BAND 16QAM  | 25/0               | 1880    | 4.4191       | 4.711           |
|            | 10.0 MHz BAND QPSK  | 50/0               | 1880    | 8.8266       | 9.323           |
|            | 10.0 MHz BAND 16QAM | 50/0               | 1880    | 8.8746       | 9.545           |
|            | 15.0 MHz BAND QPSK  | 75/0               | 1880    | 13.3180      | 13.928          |
|            | 15.0 MHz BAND 16QAM | 75/0               | 1880    | 13.4087      | 13.995          |
|            | 20.0 MHz BAND QPSK  | 100/0              | 1880    | 17.7697      | 18.613          |
|            | 20.0 MHz BAND 16QAM | 100/0              | 1880    | 17.8948      | 18.676          |



| BAND       | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 4 | 1.4 MHz BAND QPSK   | 6/0                | 1732.5  | 1.0680       | 1.215           |
|            | 1.4 MHz BAND 16QAM  | 6/0                | 1732.5  | 1.0887       | 1.212           |
|            | 3.0 MHz BAND QPSK   | 15/0               | 1732.5  | 2.6750       | 2.885           |
|            | 3.0 MHz BAND 16QAM  | 15/0               | 1732.5  | 2.6948       | 2.874           |
|            | 5.0 MHz BAND QPSK   | 25/0               | 1732.5  | 4.4851       | 4.684           |
|            | 5.0 MHz BAND 16QAM  | 25/0               | 1732.5  | 4.4108       | 4.790           |
|            | 10.0 MHz BAND QPSK  | 50/0               | 1732.5  | 8.9982       | 9.374           |
|            | 10.0 MHz BAND 16QAM | 50/0               | 1732.5  | 8.9688       | 9.411           |
|            | 15.0 MHz BAND QPSK  | 75/0               | 1732.5  | 13.4803      | 14.105          |
|            | 15.0 MHz BAND 16QAM | 75/0               | 1732.5  | 13.2216      | 14.053          |
|            | 20.0 MHz BAND QPSK  | 100/0              | 1732.5  | 17.9492      | 18.637          |
|            | 20.0 MHz BAND 16QAM | 100/0              | 1732.5  | 17.9157      | 18.885          |

| BAND       | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 5 | 1.4 MHz BAND QPSK   | 6/0                | 836.5   | 1.0849       | 1.234           |
|            | 1.4 MHz BAND 16QAM  | 6/0                | 836.5   | 1.0764       | 1.187           |
|            | 3.0 MHz BAND QPSK   | 15/0               | 836.5   | 2.6937       | 2.816           |
|            | 3.0 MHz BAND 16QAM  | 15/0               | 836.5   | 2.6603       | 2.858           |
|            | 5.0 MHz BAND QPSK   | 25/0               | 836.5   | 4.4450       | 4.774           |
|            | 5.0 MHz BAND 16QAM  | 25/0               | 836.5   | 4.4791       | 4.671           |
|            | 10.0 MHz BAND QPSK  | 50/0               | 836.5   | 8.9295       | 9.464           |
|            | 10.0 MHz BAND 16QAM | 50/0               | 836.5   | 8.8866       | 9.440           |

| BAND        | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|-------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 13 | 5.0 MHz BAND QPSK   | 25/0               | 782     | 4.4389       | 4.703           |
|             | 5.0 MHz BAND 16QAM  | 25/0               | 782     | 4.4622       | 4.770           |
|             | 10.0 MHz BAND QPSK  | 50/0               | 782     | 8.8279       | 9.267           |
|             | 10.0 MHz BAND 16QAM | 50/0               | 782     | 8.7977       | 9.412           |

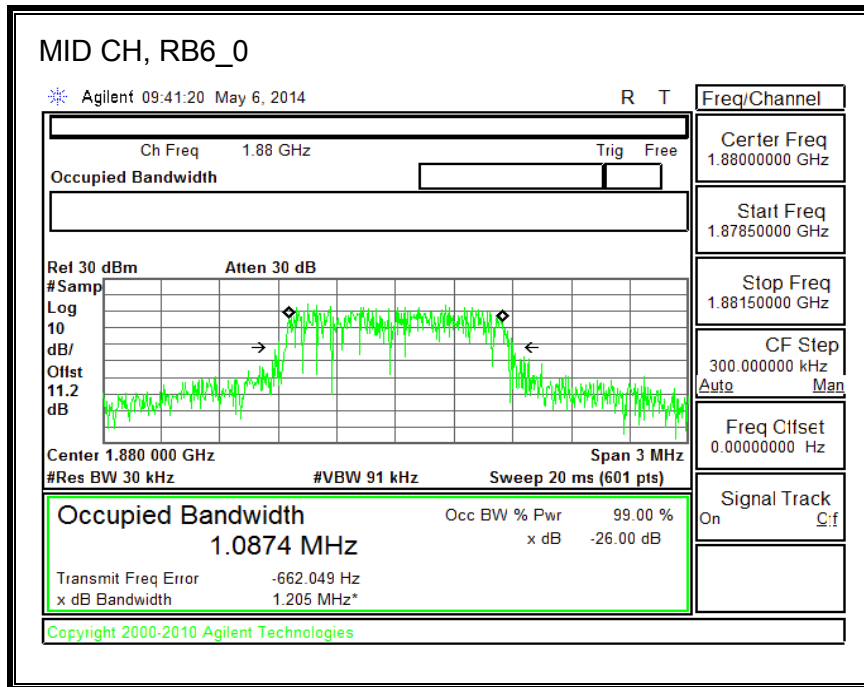
| BAND        | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|-------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 17 | 5.0 MHz BAND QPSK   | 25/0               | 710     | 4.4584       | 4.777           |
|             | 5.0 MHz BAND 16QAM  | 25/0               | 710     | 4.4921       | 4.774           |
|             | 10.0 MHz BAND QPSK  | 50/0               | 710     | 8.9355       | 9.385           |
|             | 10.0 MHz BAND 16QAM | 50/0               | 710     | 8.8509       | 9.39            |

| BAND        | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|-------------|---------------------|--------------------|---------|--------------|-----------------|
| LTE BAND 25 | 1.4 MHz BAND QPSK   | 6/0                | 1882.5  | 1.081        | 1.16            |
|             | 1.4 MHz BAND 16QAM  | 6/0                | 1882.5  | 1.0799       | 1.217           |
|             | 3.0 MHz BAND QPSK   | 15/0               | 1882.5  | 2.6945       | 2.886           |
|             | 3.0 MHz BAND 16QAM  | 15/0               | 1882.5  | 2.6702       | 2.838           |
|             | 5.0 MHz BAND QPSK   | 25/0               | 1882.5  | 4.4204       | 4.764           |
|             | 5.0 MHz BAND 16QAM  | 25/0               | 1882.5  | 4.4905       | 4.658           |
|             | 10.0 MHz BAND QPSK  | 50/0               | 1882.5  | 8.9679       | 9.363           |
|             | 10.0 MHz BAND 16QAM | 50/0               | 1882.5  | 8.9323       | 9.279           |
|             | 15.0 MHz BAND QPSK  | 75/0               | 1882.5  | 13.3269      | 14.048          |
|             | 15.0 MHz BAND 16QAM | 75/0               | 1882.5  | 13.2543      | 14.002          |
|             | 20.0 MHz BAND QPSK  | 100/0              | 1882.5  | 17.8456      | 18.712          |
|             | 20.0 MHz BAND 16QAM | 100/0              | 1882.5  | 17.8634      | 18.722          |

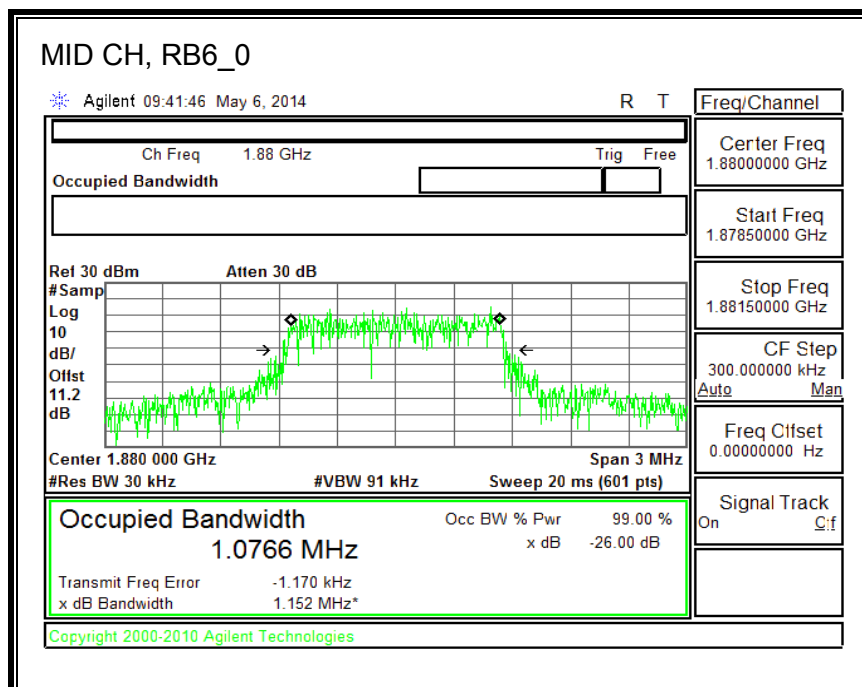
| BAND    | MODE                | RB SIZE/ RB OFFSET | f (MHz) | 99% BW (MHz) | - 26dB BW (MHz) |
|---------|---------------------|--------------------|---------|--------------|-----------------|
| BAND 26 | 3.0 MHz BAND QPSK   | 15/0               | 821.3   | 2.6801       | 2.896           |
|         | 3.0 MHz BAND 16QAM  | 15/0               | 821.3   | 2.6637       | 2.861           |
|         | 5.0 MHz BAND QPSK   | 25/0               | 821.3   | 4.4680       | 4.661           |
|         | 5.0 MHz BAND 16QAM  | 25/0               | 821.3   | 4.4351       | 4.673           |
|         | 10.0 MHz BAND QPSK  | 50/0               | 821.3   | 8.8836       | 9.545           |
|         | 10.0 MHz BAND 16QAM | 50/0               | 821.3   | 8.9334       | 9.313           |

### 8.1.1. LTE BAND 2

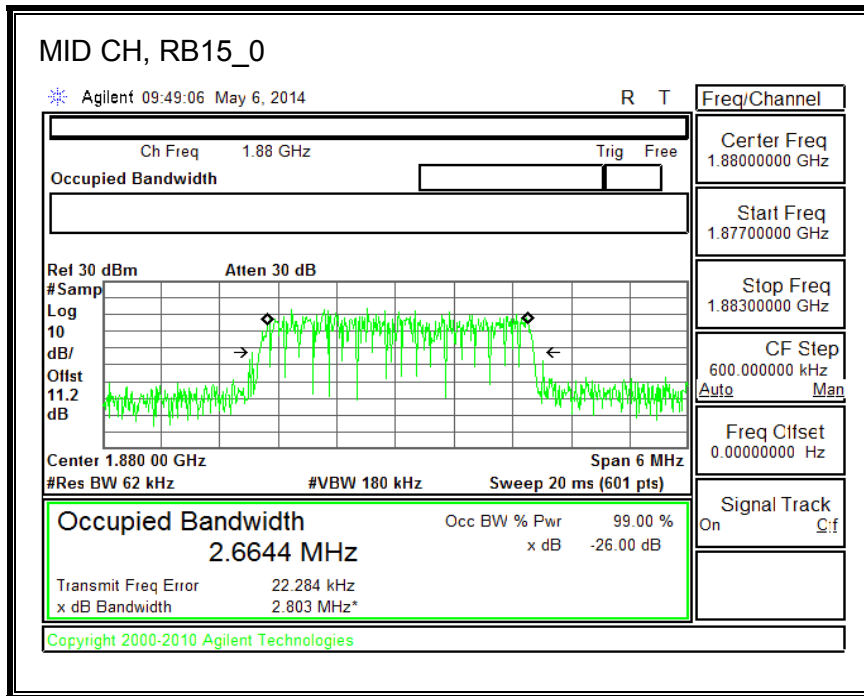
#### QPSK, (1.4 MHz BAND WIDTH)



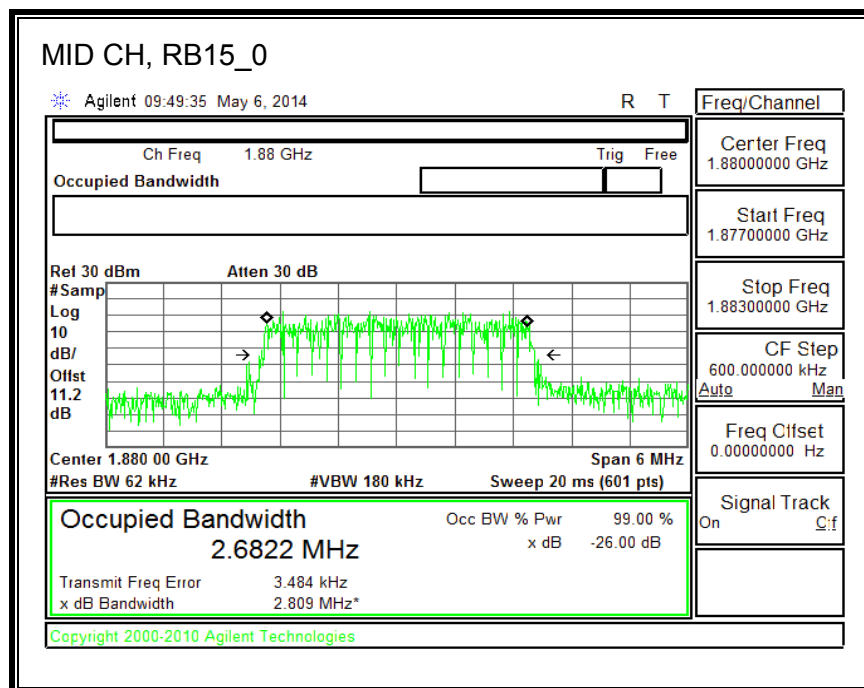
#### 16QAM, (1.4 MHz BAND WIDTH)



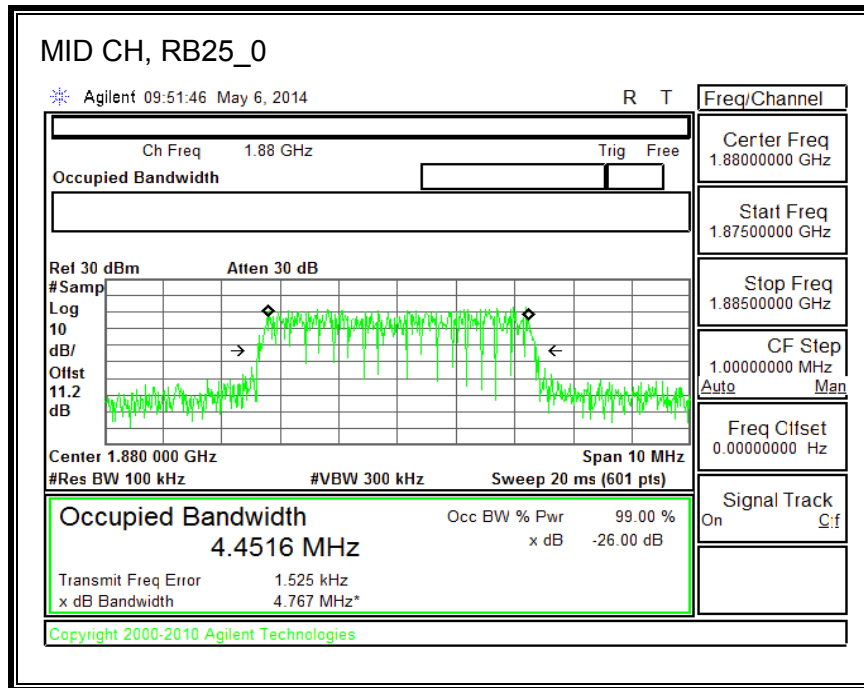
**QPSK, (3.0 MHz BAND WIDTH)**



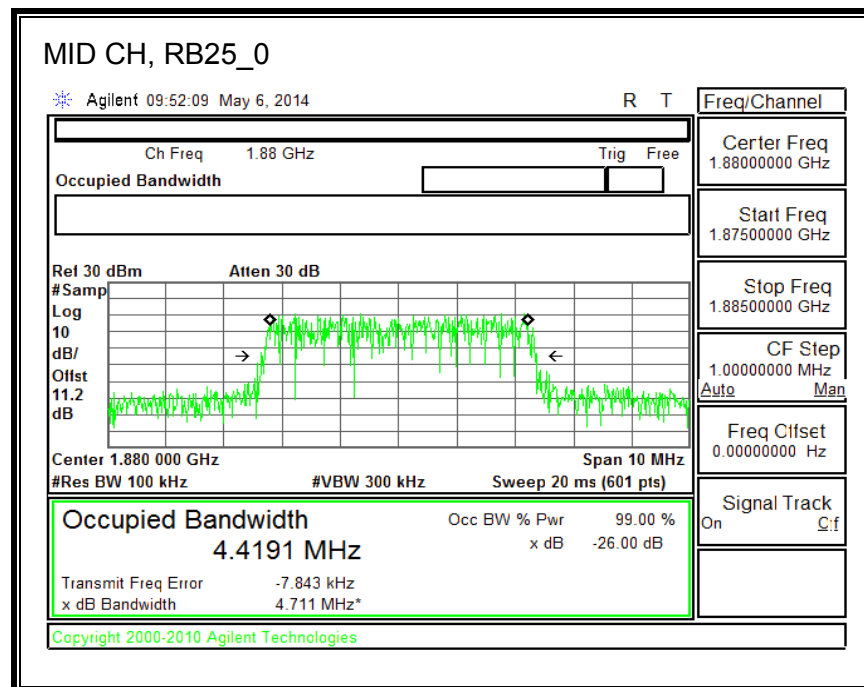
**16QAM, (3.0 MHz BAND WIDTH)**



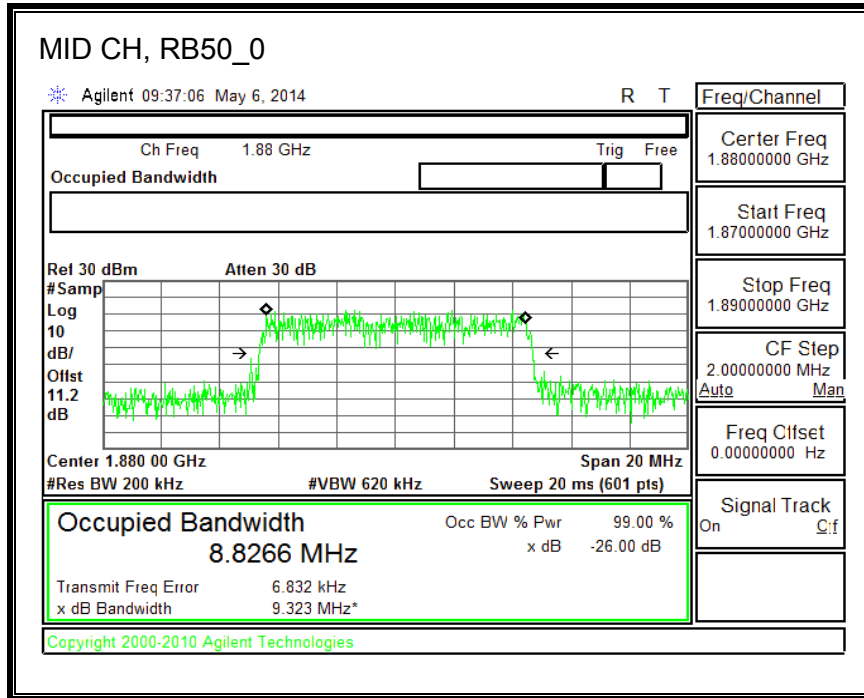
**QPSK, (5.0 MHz BAND WIDTH)**



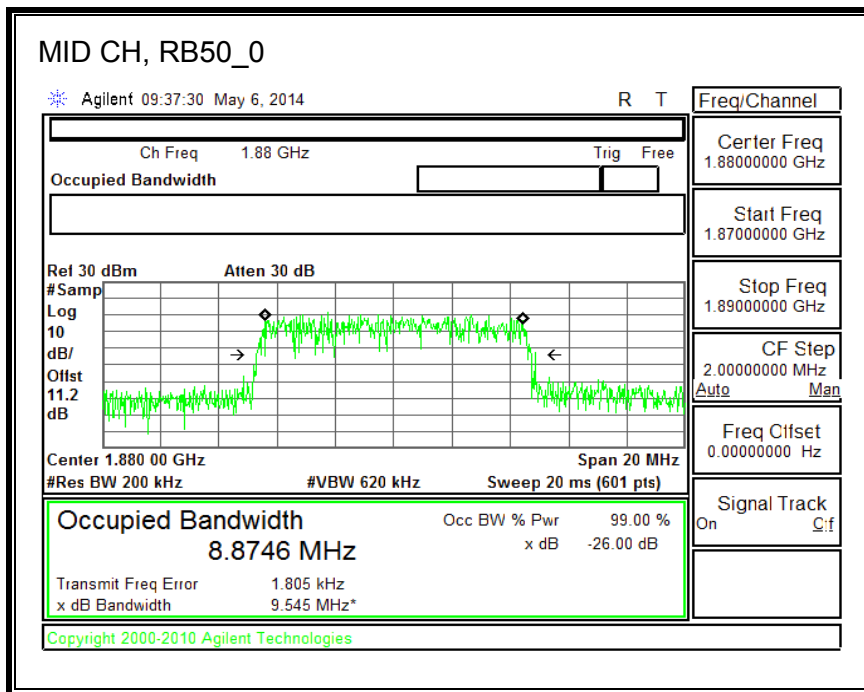
**16QAM, (5.0 MHz BAND WIDTH)**



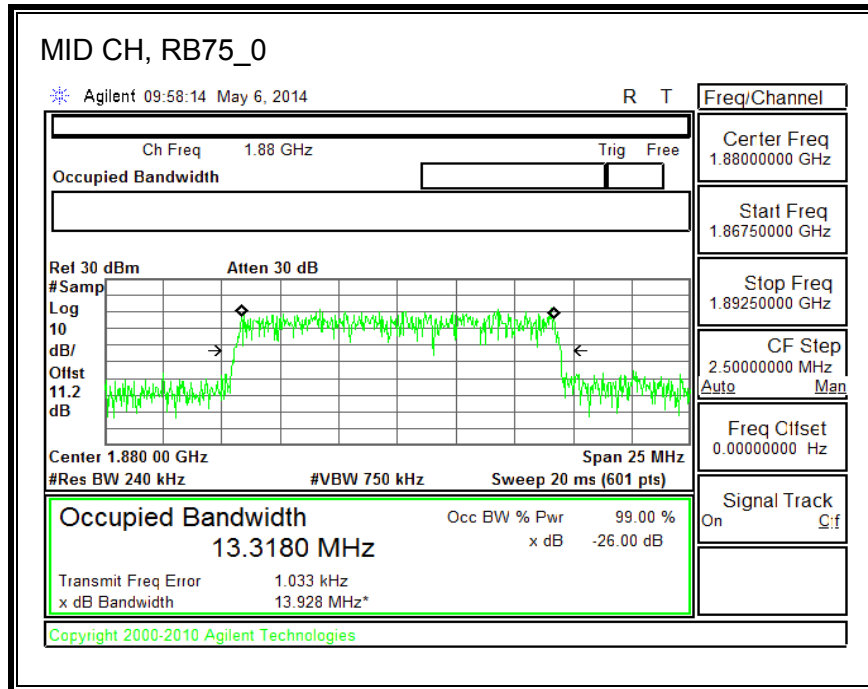
**QPSK, (10.0 MHz BAND WIDTH)**



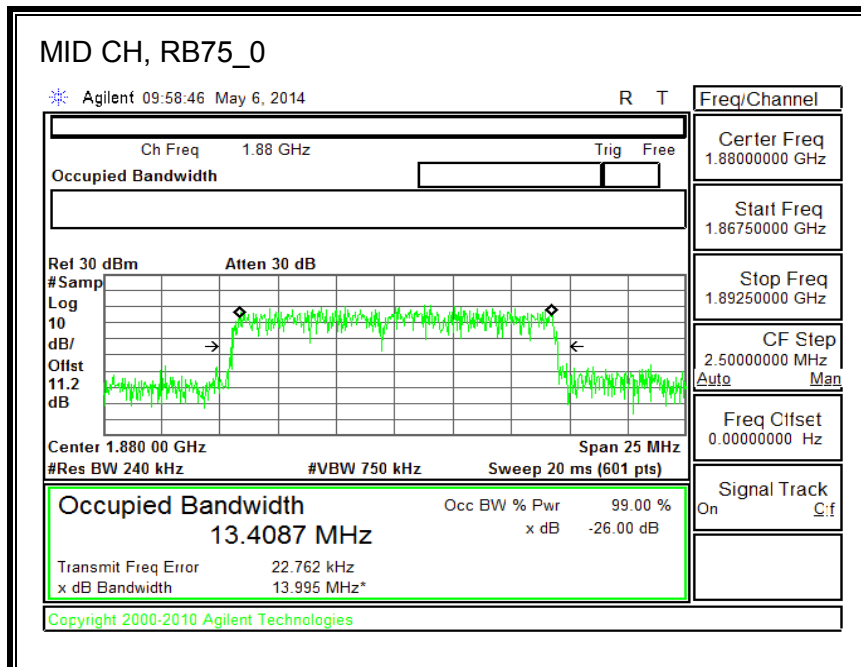
**16QAM, (10.0 MHz BAND WIDTH)**



**QPSK, (15.0 MHz BAND WIDTH)**

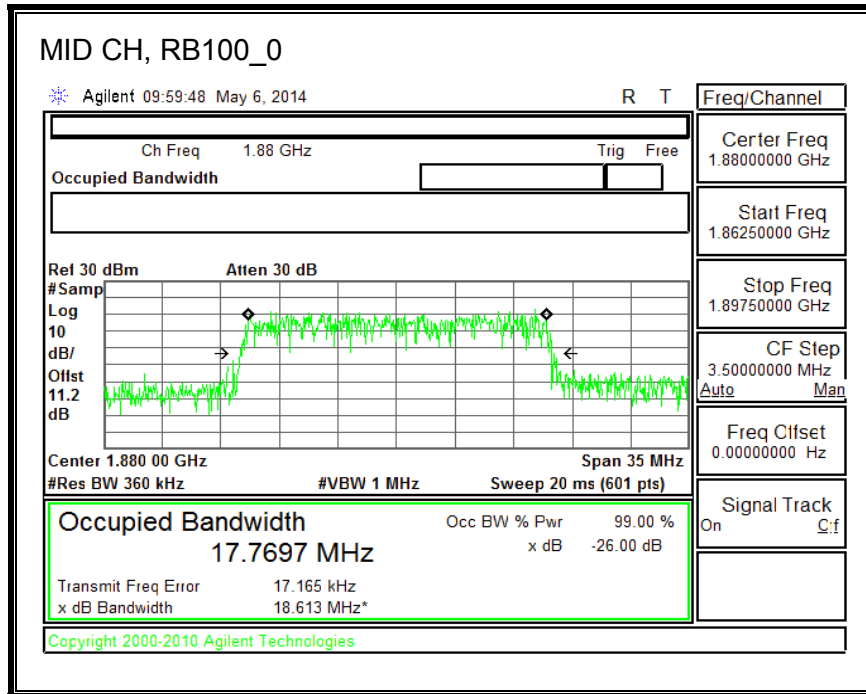


**16QAM, (15.0 MHz BAND WIDTH)**

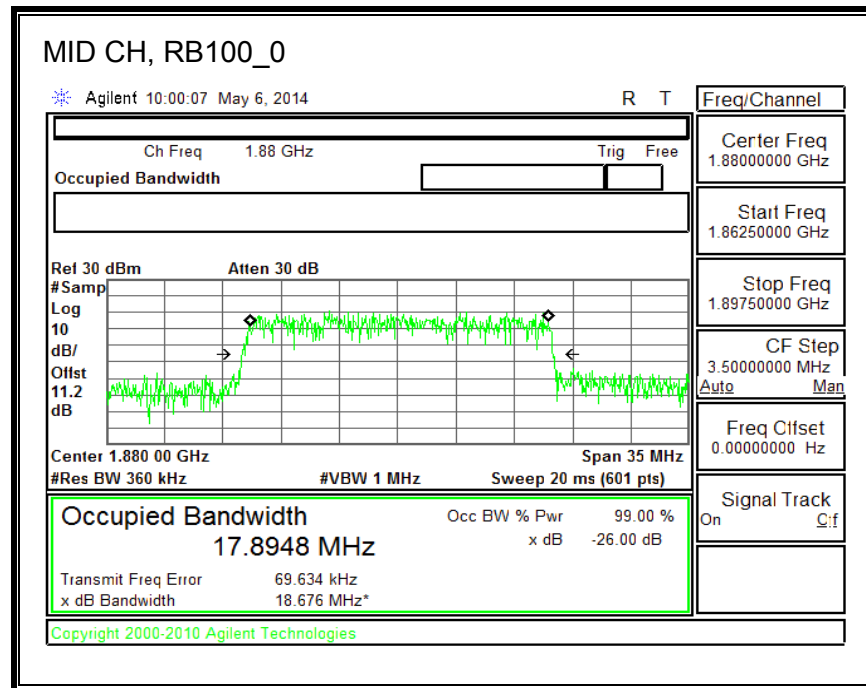




**QPSK, (20.0 MHz BAND WIDTH)**

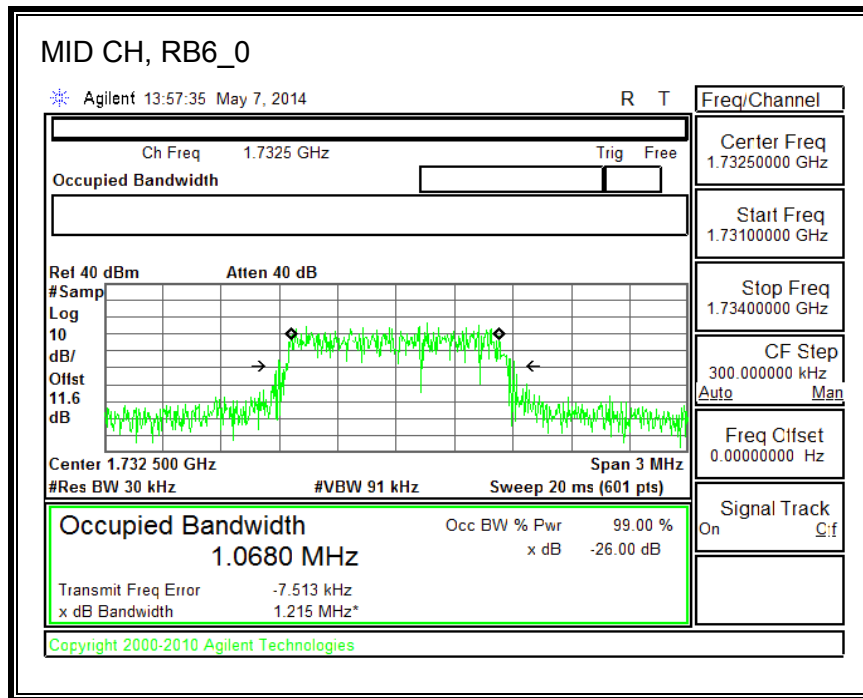


**16QAM, (20.0 MHz BAND WIDTH)**

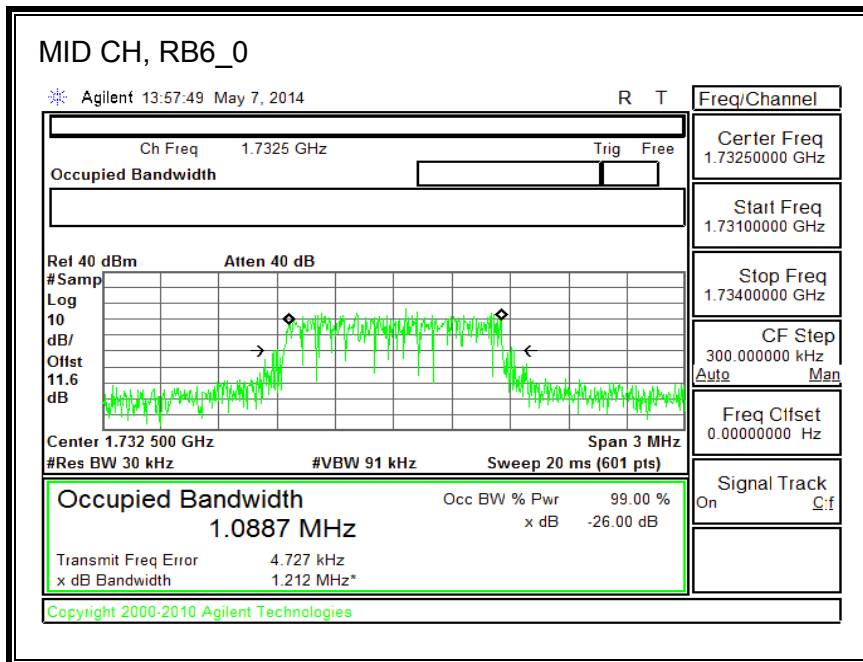


### 8.1.2. LTE BAND 4

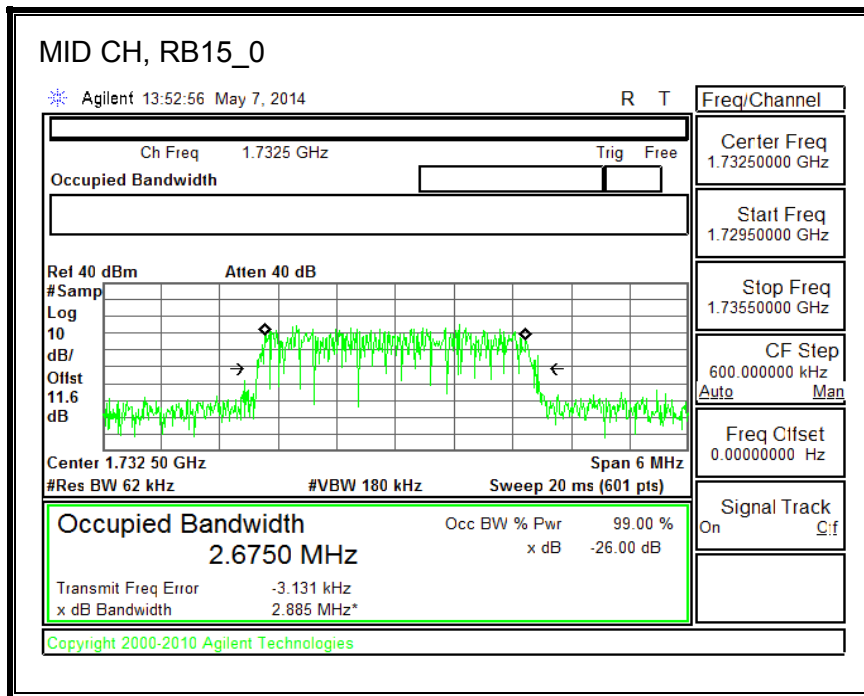
#### QPSK, (1.4 MHz BAND WIDTH)



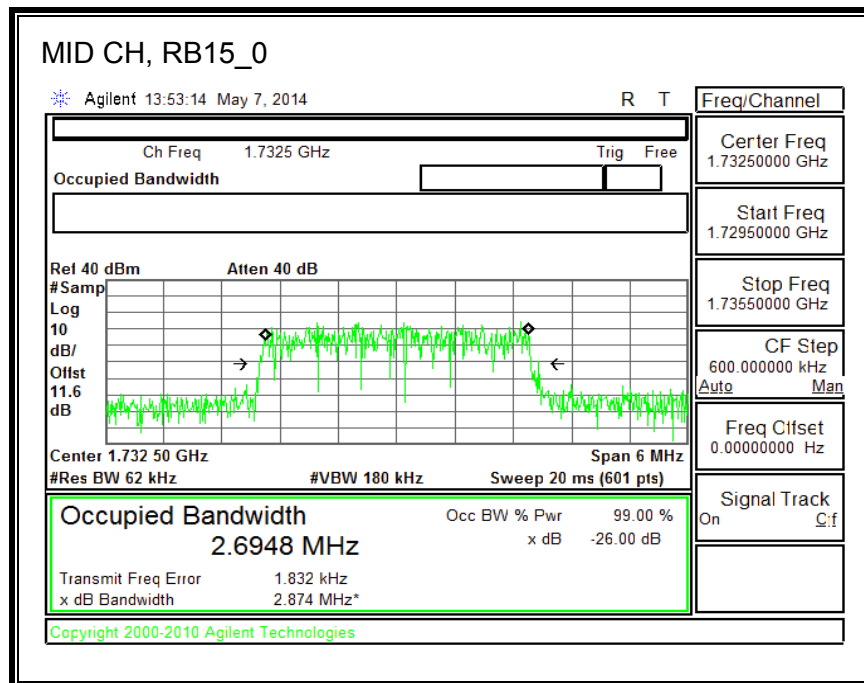
#### 16QAM, (1.4 MHz BAND WIDTH)



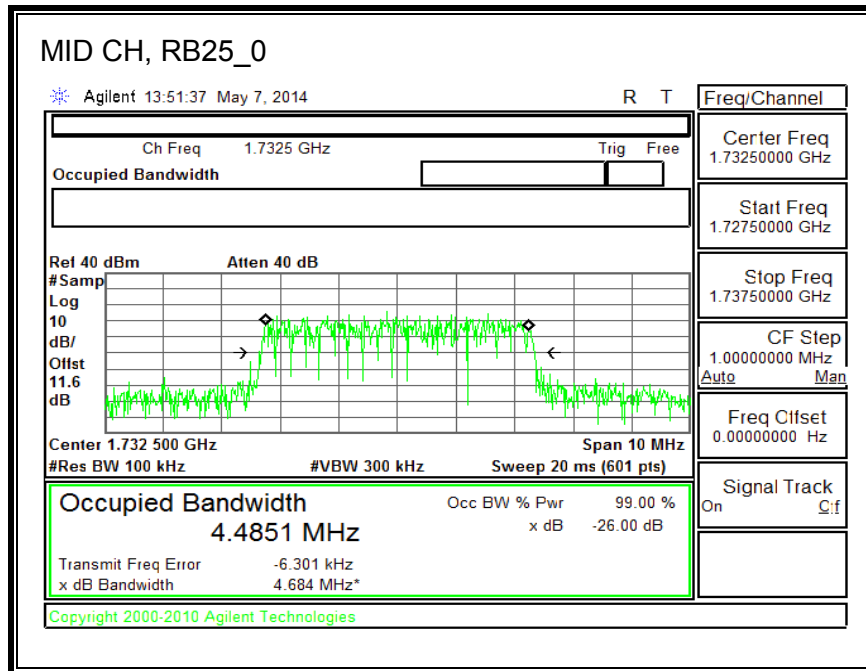
**QPSK, (3.0 MHz BAND WIDTH)**



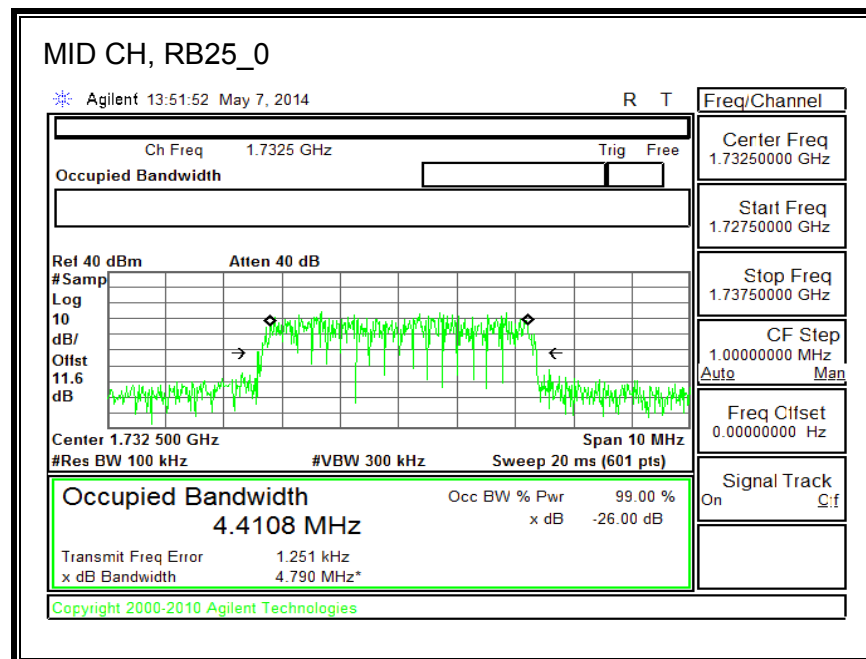
**16QAM, (3.0 MHz BAND WIDTH)**



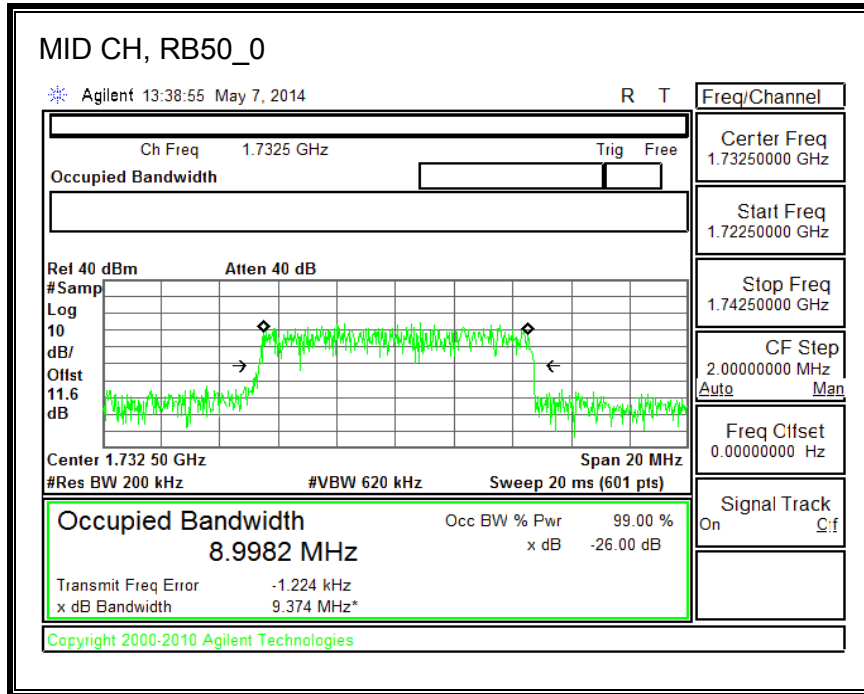
**QPSK, (5.0 MHz BAND WIDTH)**



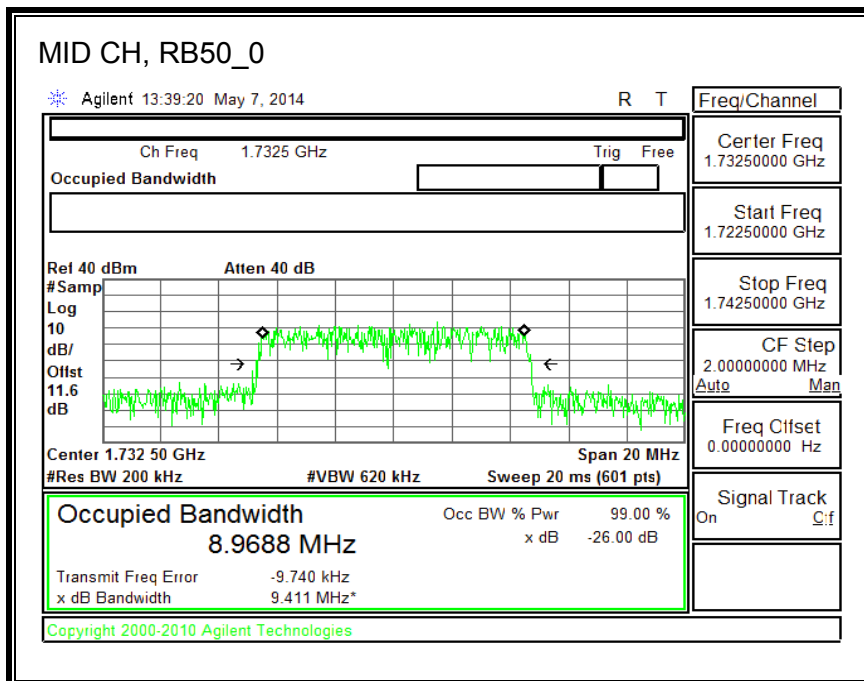
**16QAM, (5.0 MHz BAND WIDTH)**



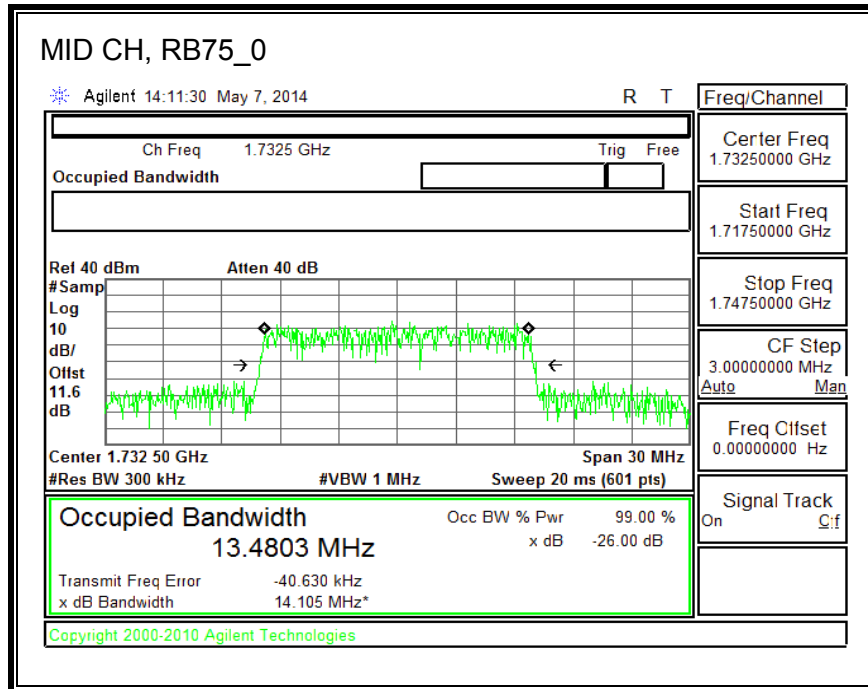
**QPSK, (10.0 MHz BAND WIDTH)**



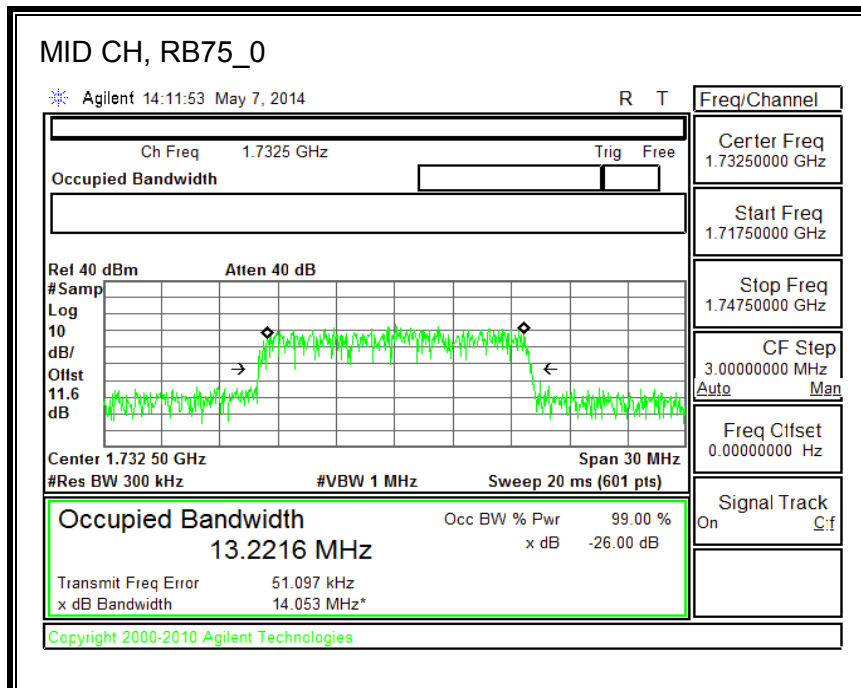
**16QAM, (10.0 MHz BAND WIDTH)**



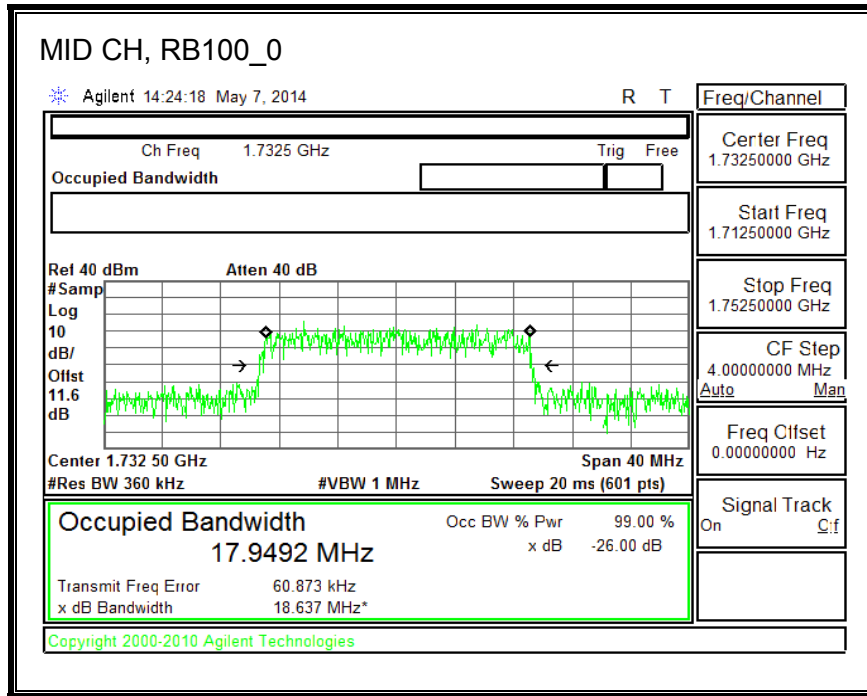
**QPSK, (15.0 MHz BAND WIDTH)**



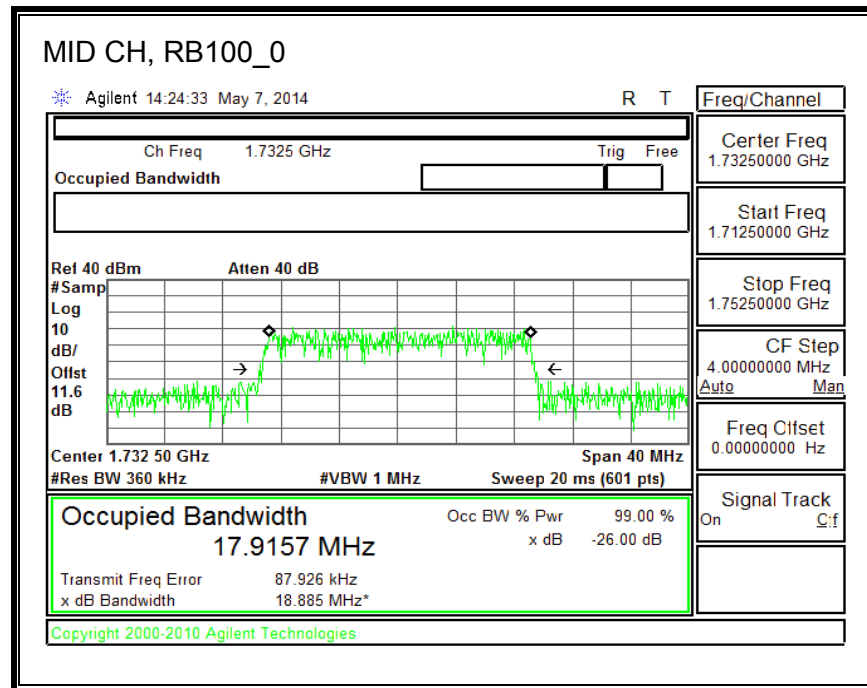
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

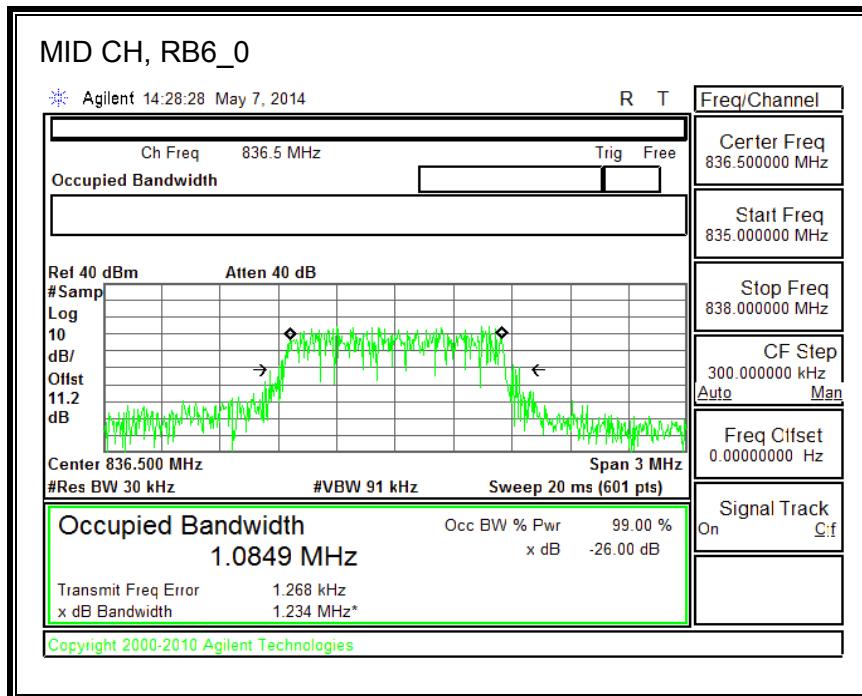


**16QAM, (20.0 MHz BAND WIDTH)**

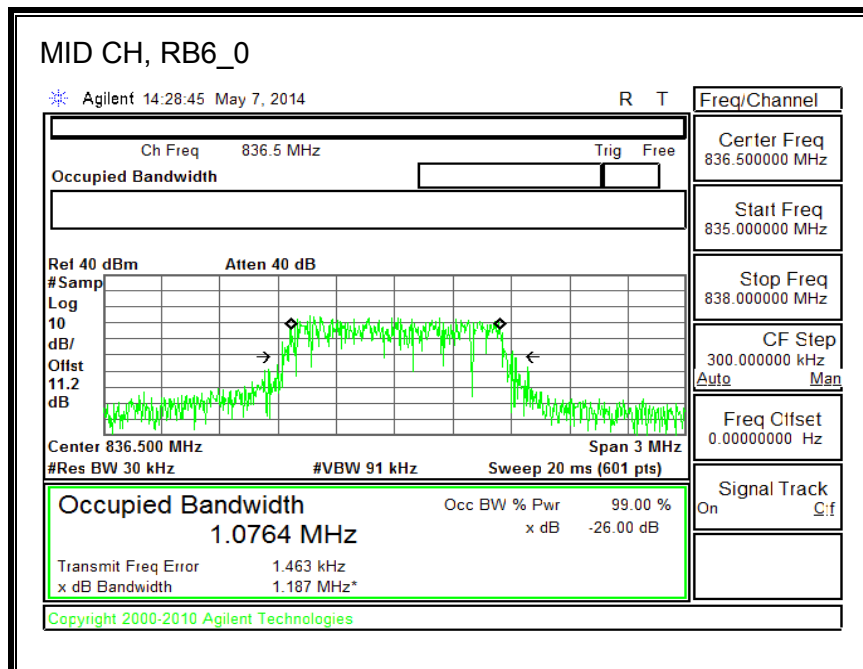


### 8.1.3. LTE BAND 5

#### QPSK, (1.4 MHz BAND WIDTH)

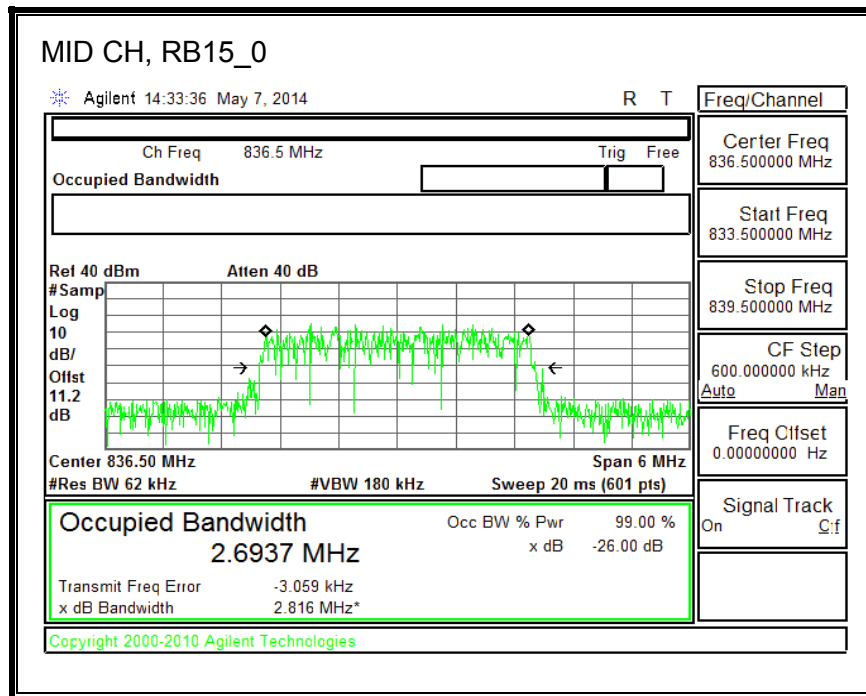


#### 16QAM, (1.4 MHz BAND WIDTH)

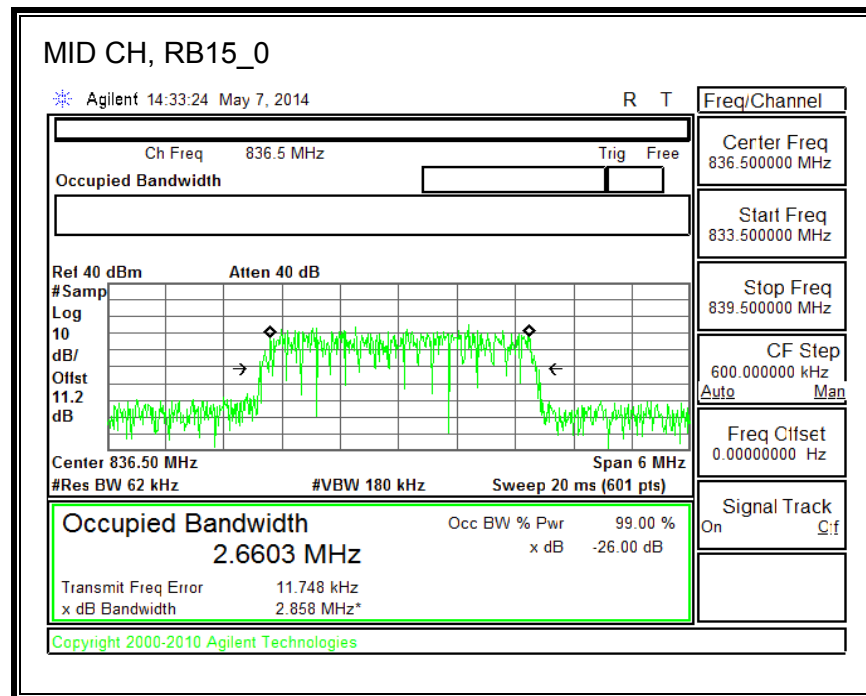




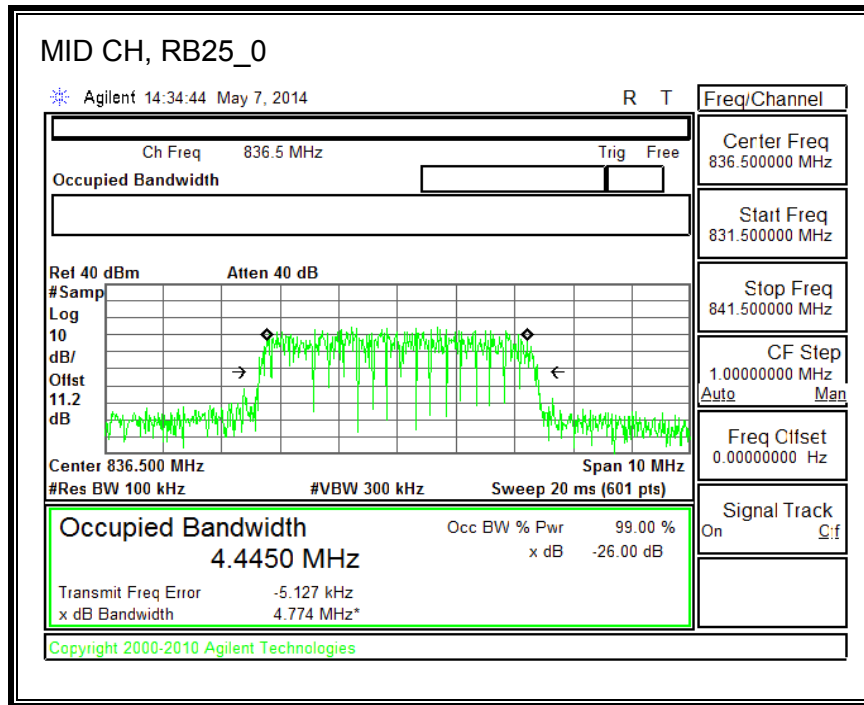
**QPSK, (3.0 MHz BAND WIDTH)**



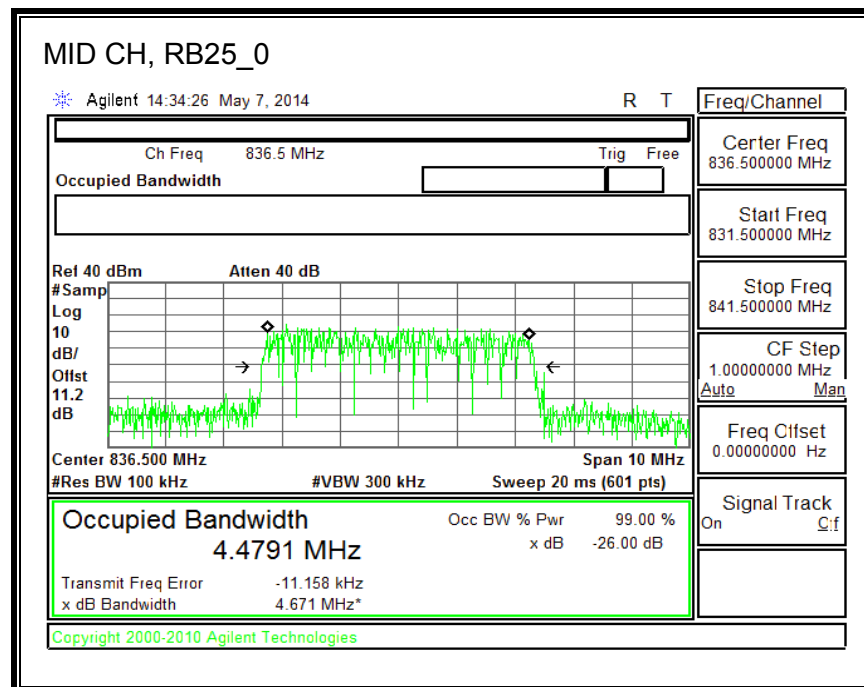
**16QAM, (3.0 MHz BAND WIDTH)**



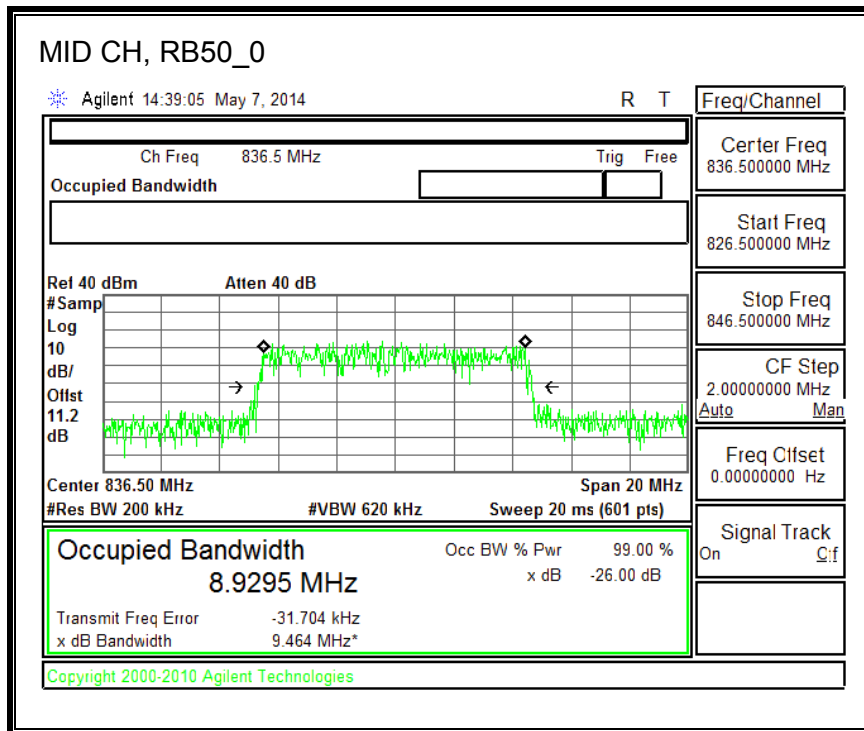
**QPSK, (5.0 MHz BAND WIDTH)**



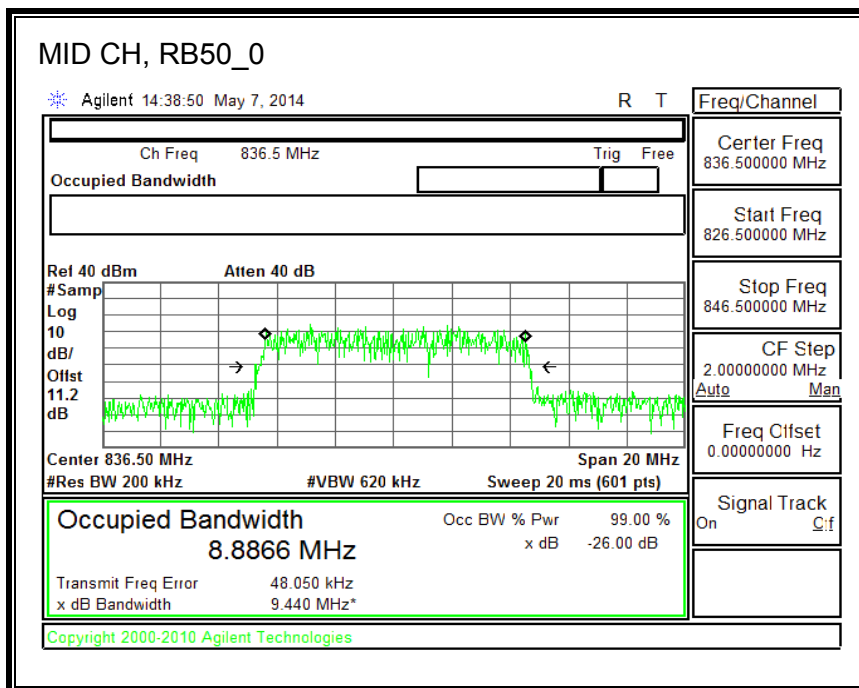
**16QAM, (5.0 MHz BAND WIDTH)**



**QPSK, (10.0 MHz BAND WIDTH)**

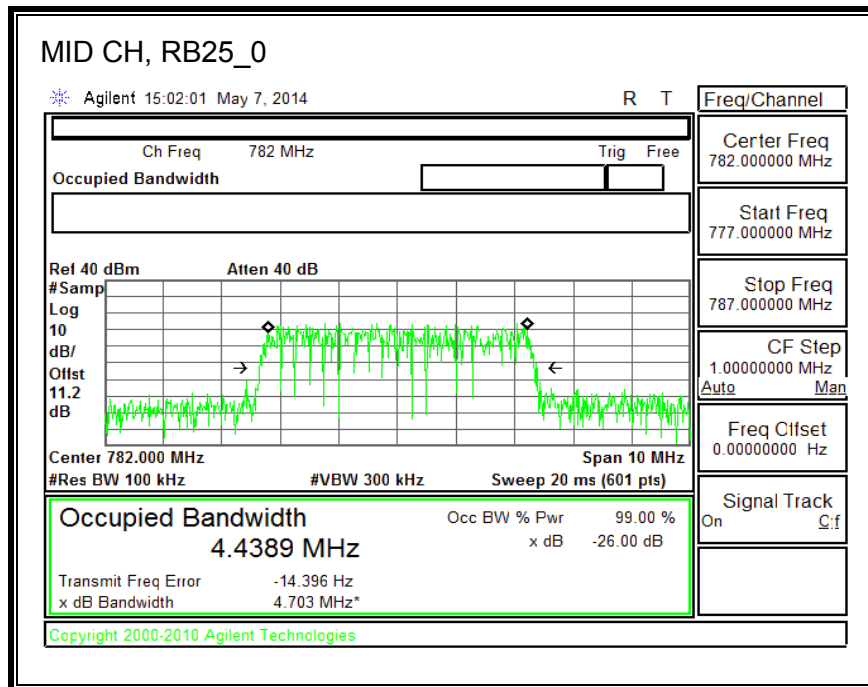


**16QAM, (10.0 MHz BAND WIDTH)**

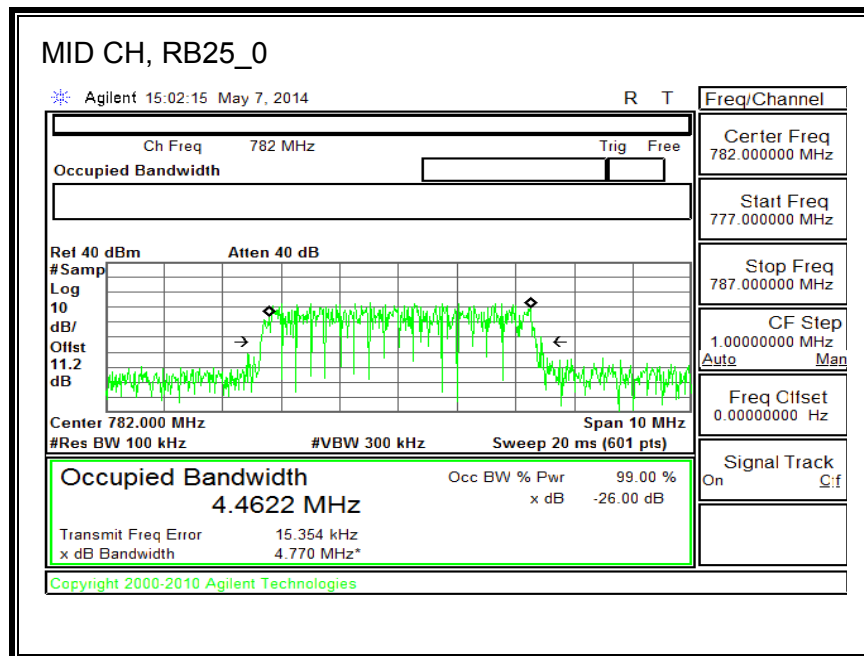


### 8.1.4. LTE BAND 13

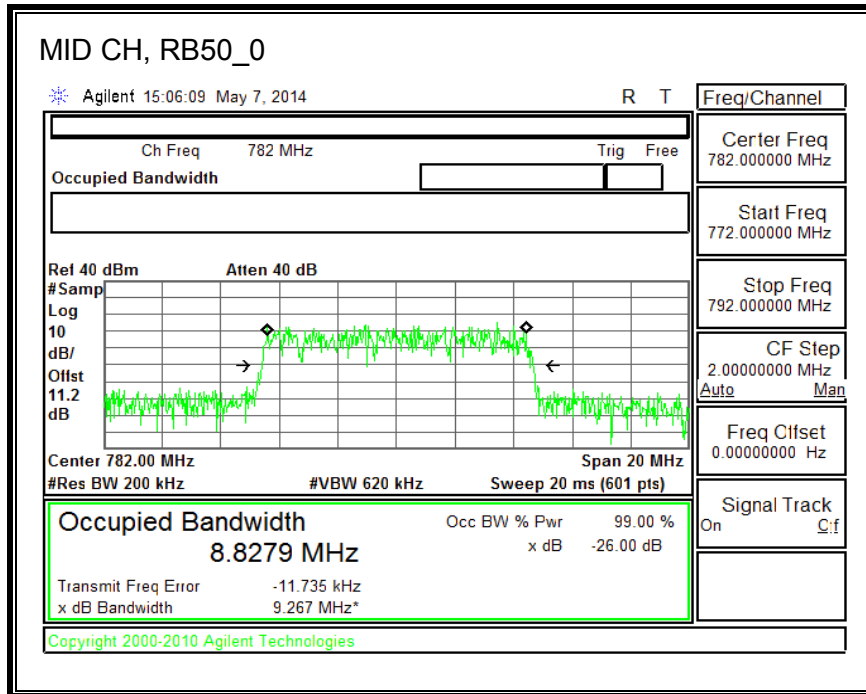
#### QPSK, (5.0 MHz BAND WIDTH)



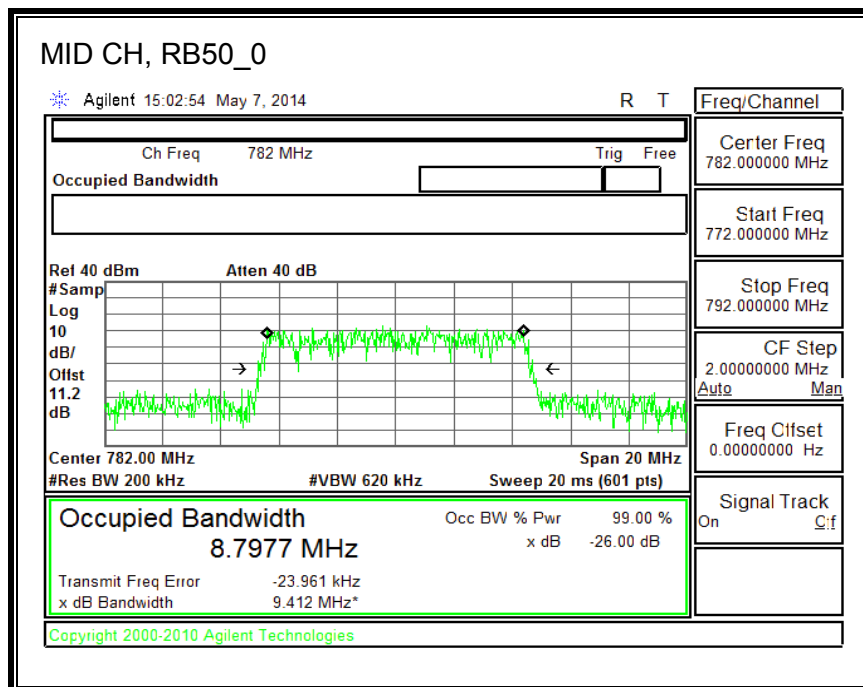
#### 16QAM, (5.0 MHz BAND WIDTH)



**QPSK, (10.0 MHz BAND WIDTH)**

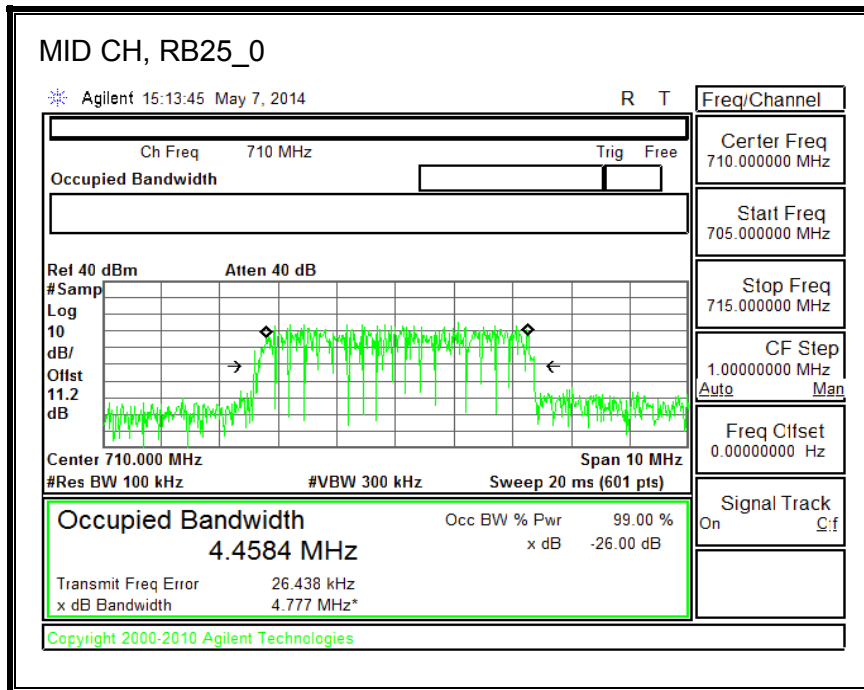


**16QAM, (10.0 MHz BAND WIDTH)**

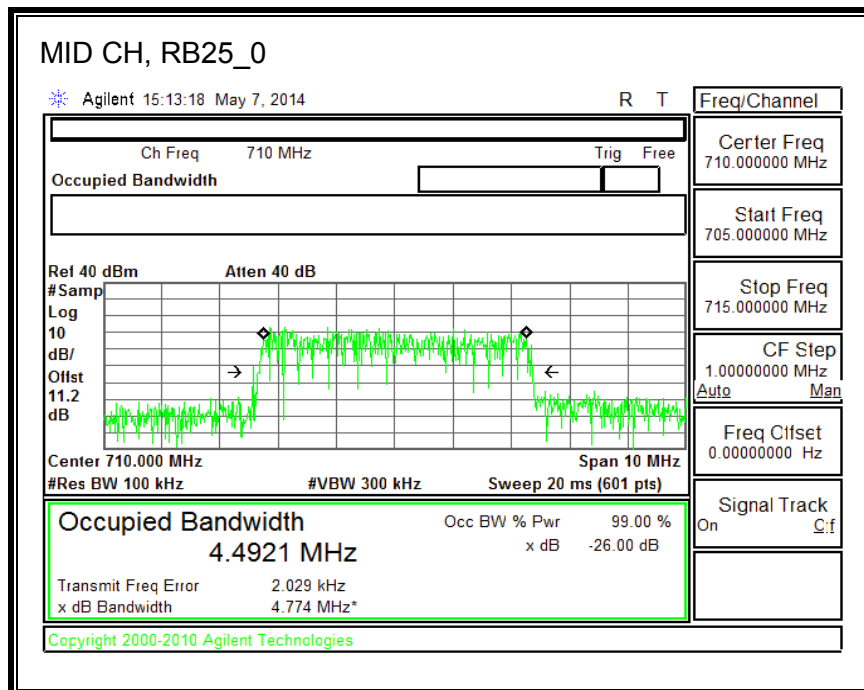


### 8.1.5. LTE BAND 17

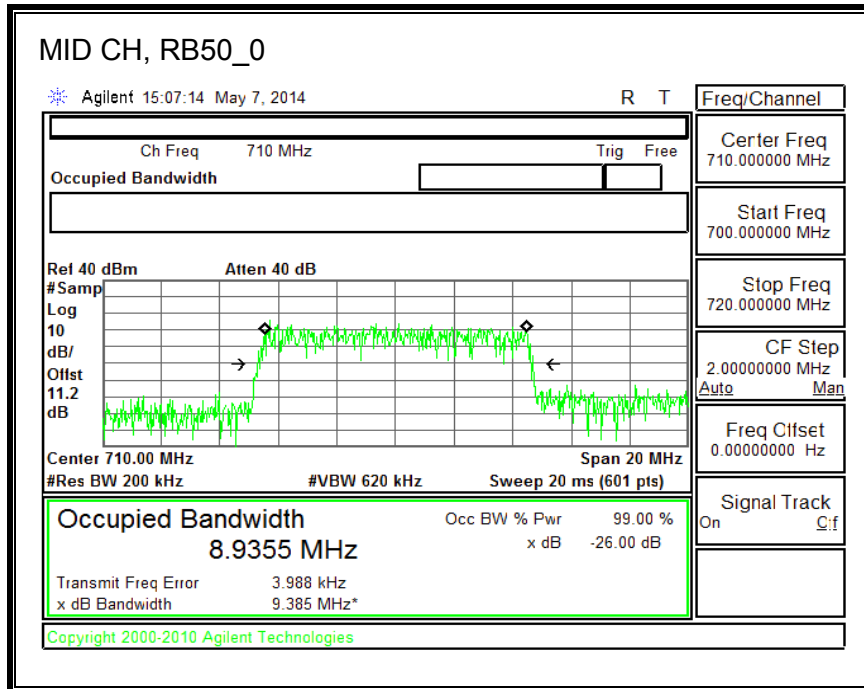
#### QPSK, (5.0 MHz BAND WIDTH)



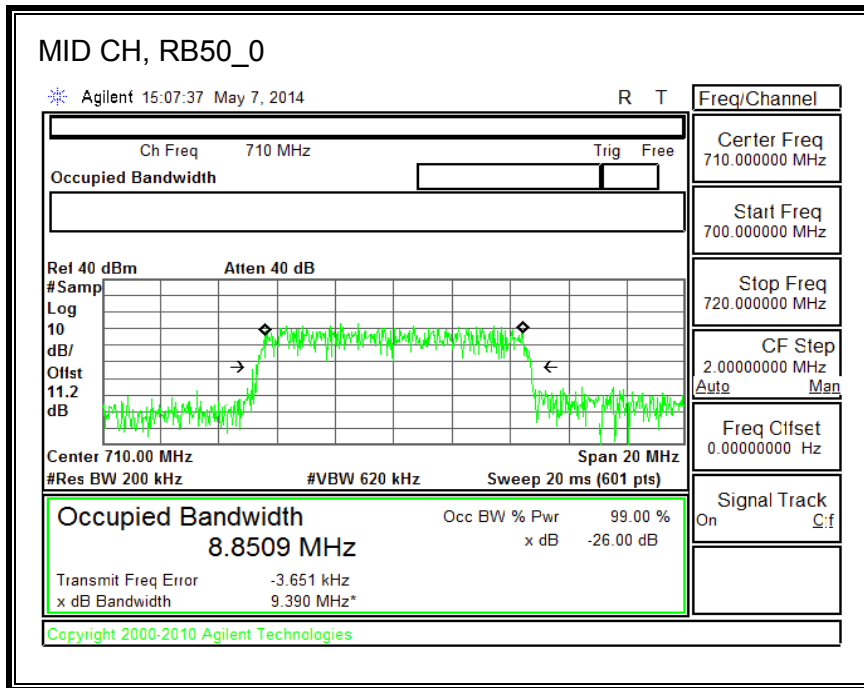
#### 16QAM, (5.0 MHz BAND WIDTH)



**QPSK, (10.0 MHz BAND WIDTH)**

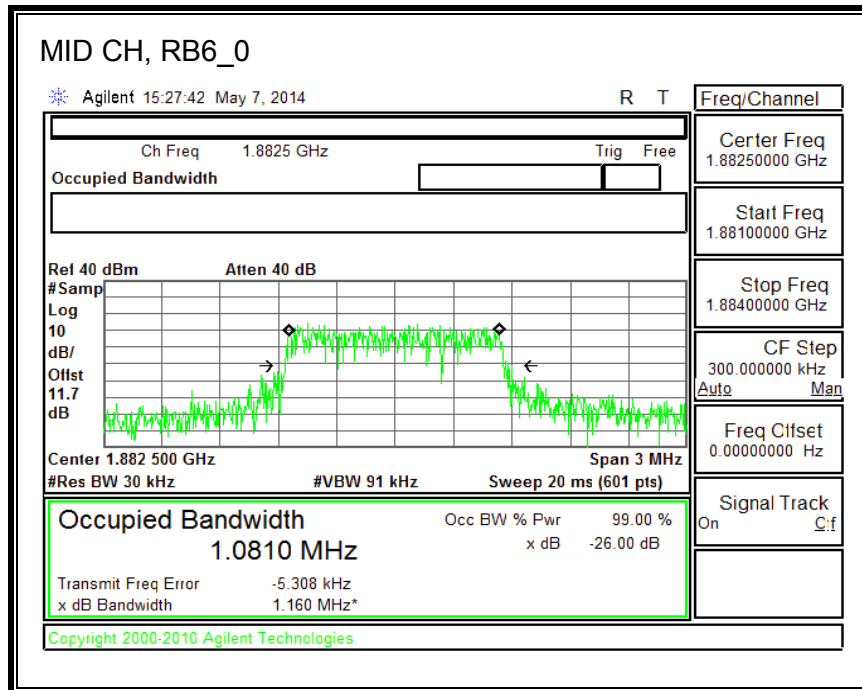


**16QAM, (10.0 MHz BAND WIDTH)**

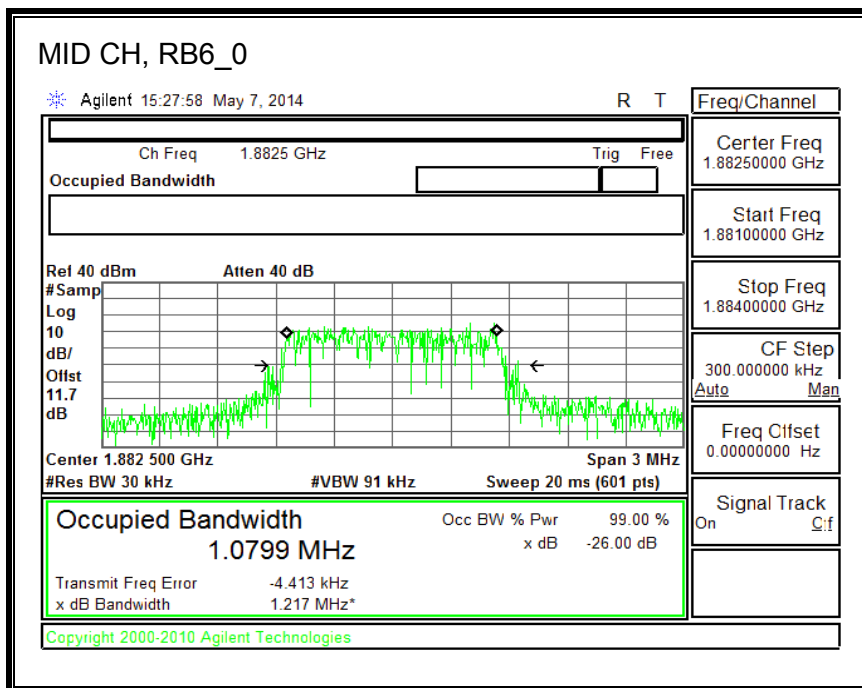


### 8.1.6. LTE BAND 25

#### QPSK, (1.4 MHz BAND WIDTH)

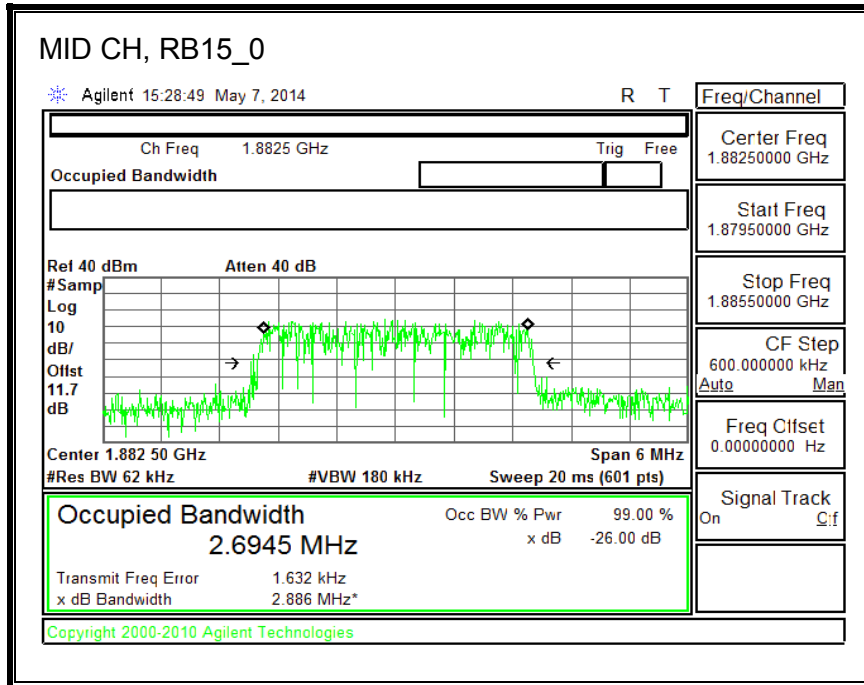


#### 16QAM, (1.4 MHz BAND WIDTH)

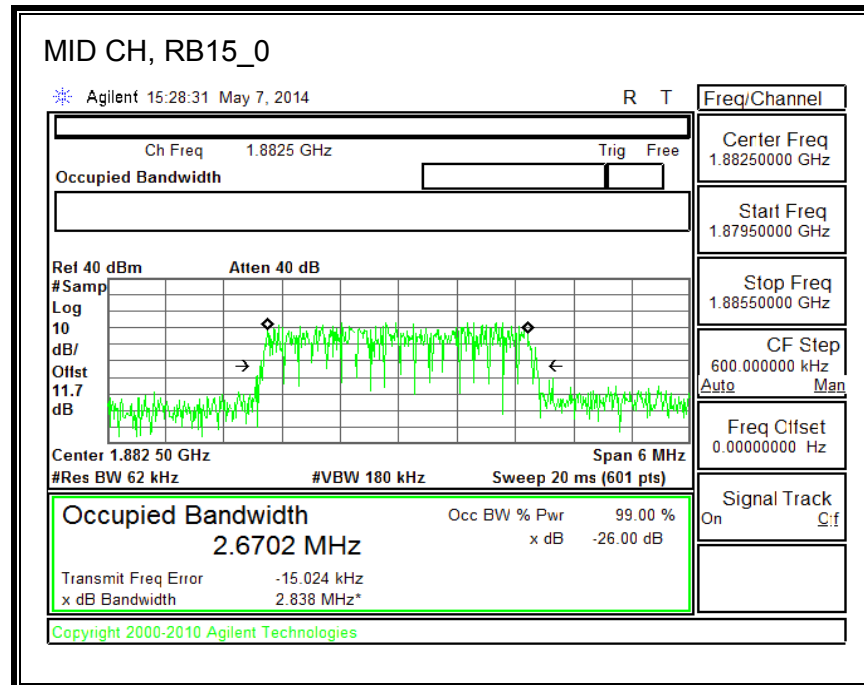




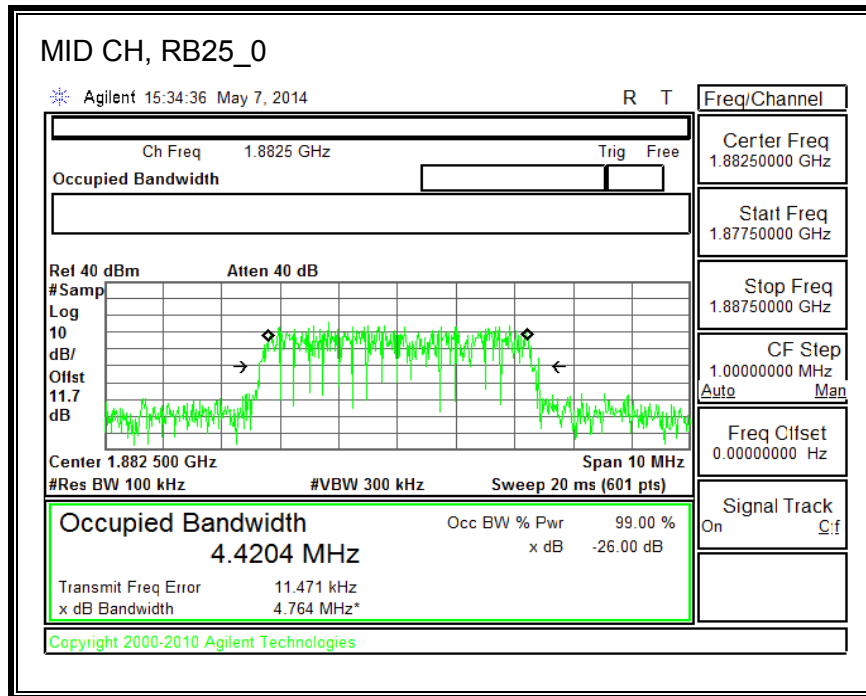
**QPSK, (3.0 MHz BAND WIDTH)**



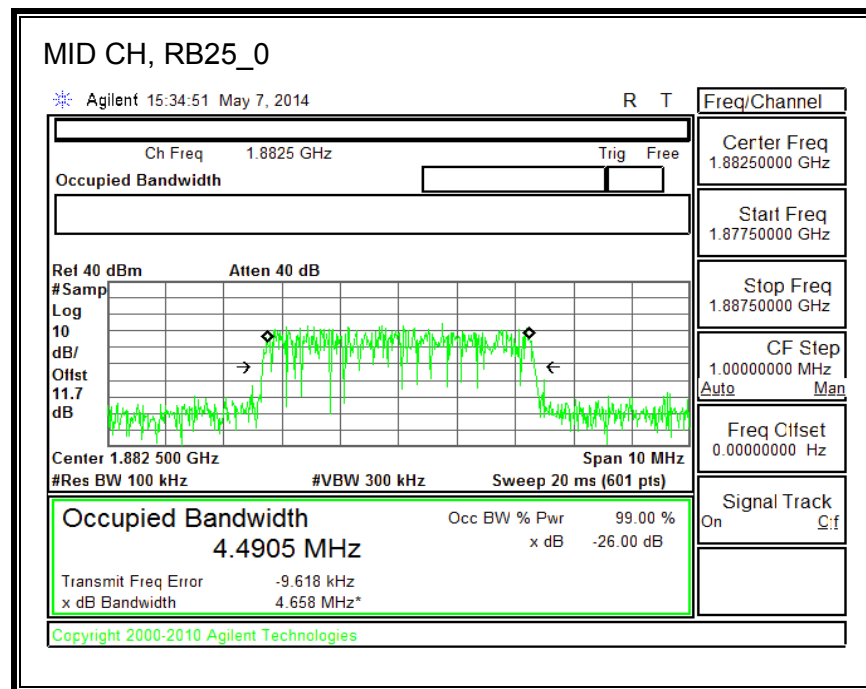
**16QAM, (3.0 MHz BAND WIDTH)**



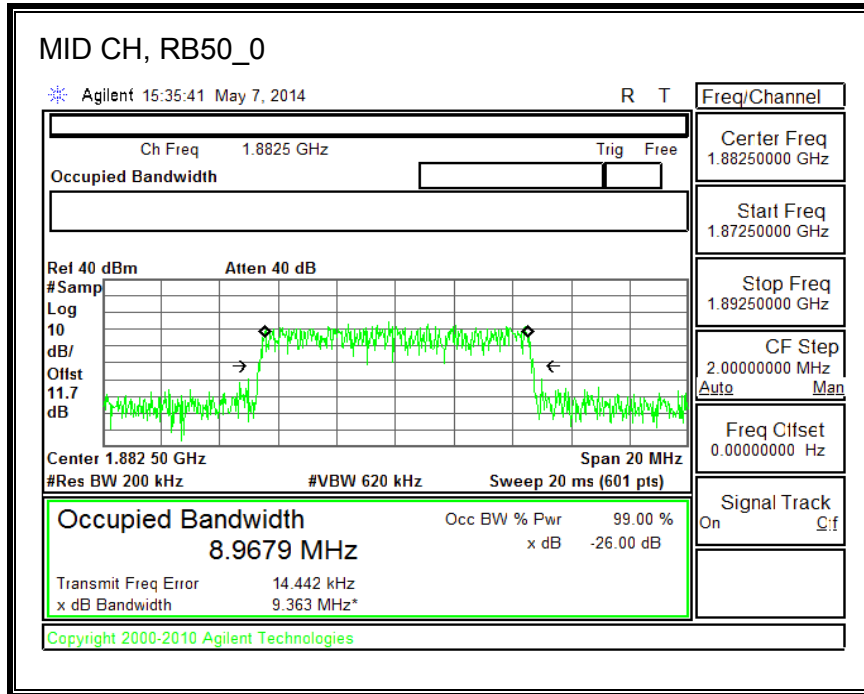
**QPSK, (5.0 MHz BAND WIDTH)**



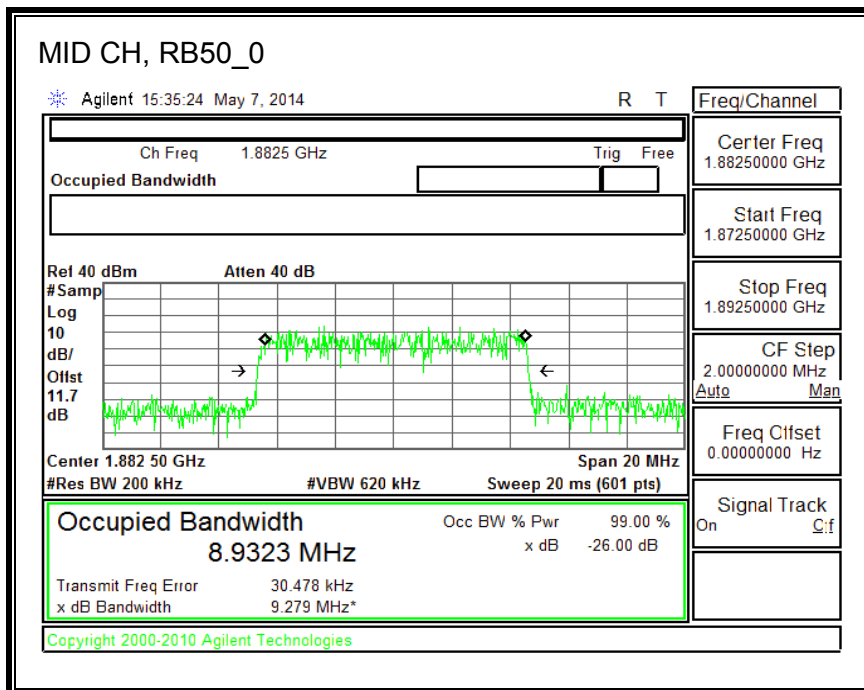
**16QAM, (5.0 MHz BAND WIDTH)**



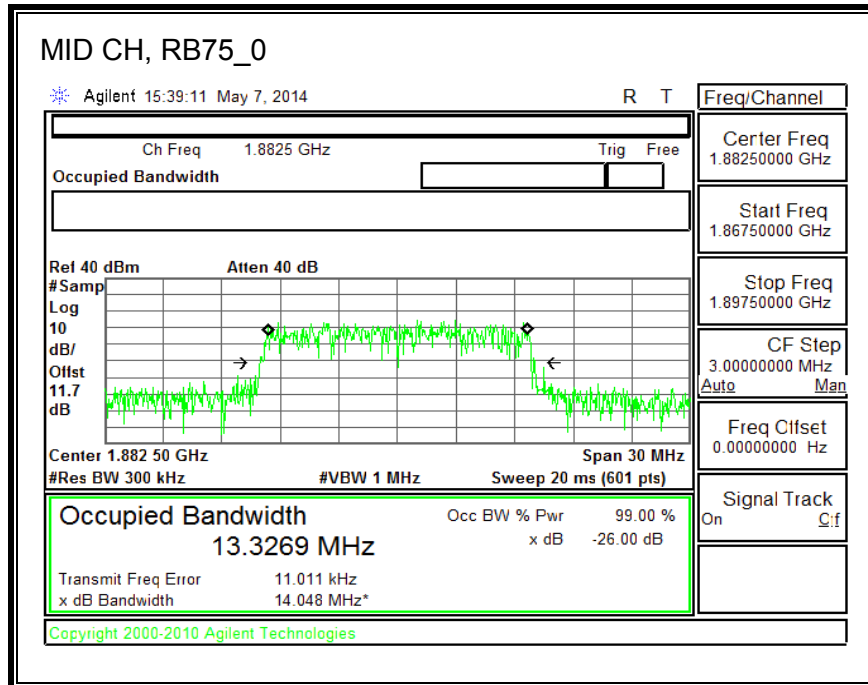
**QPSK, (10.0 MHz BAND WIDTH)**



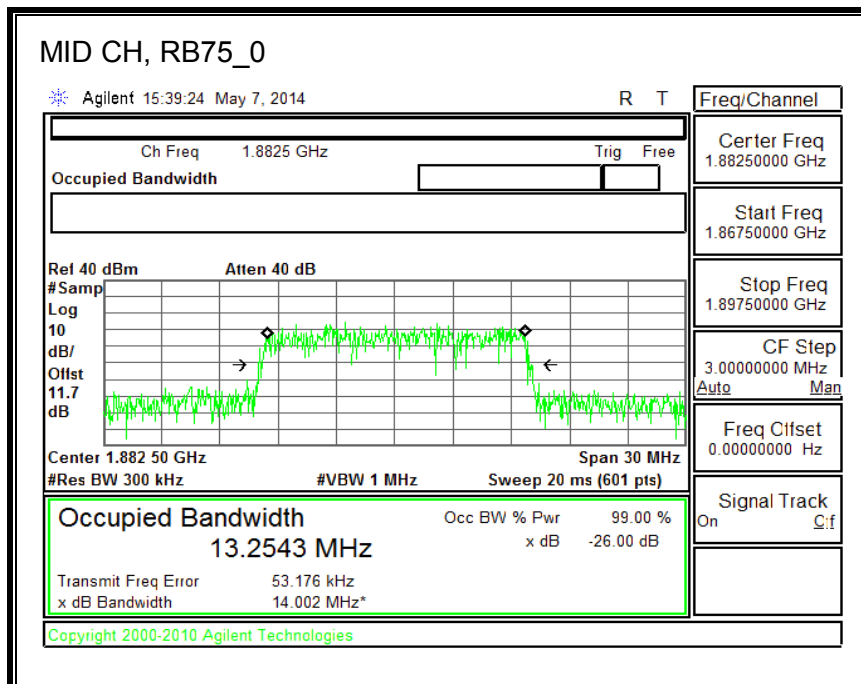
**16QAM, (10.0 MHz BAND WIDTH)**



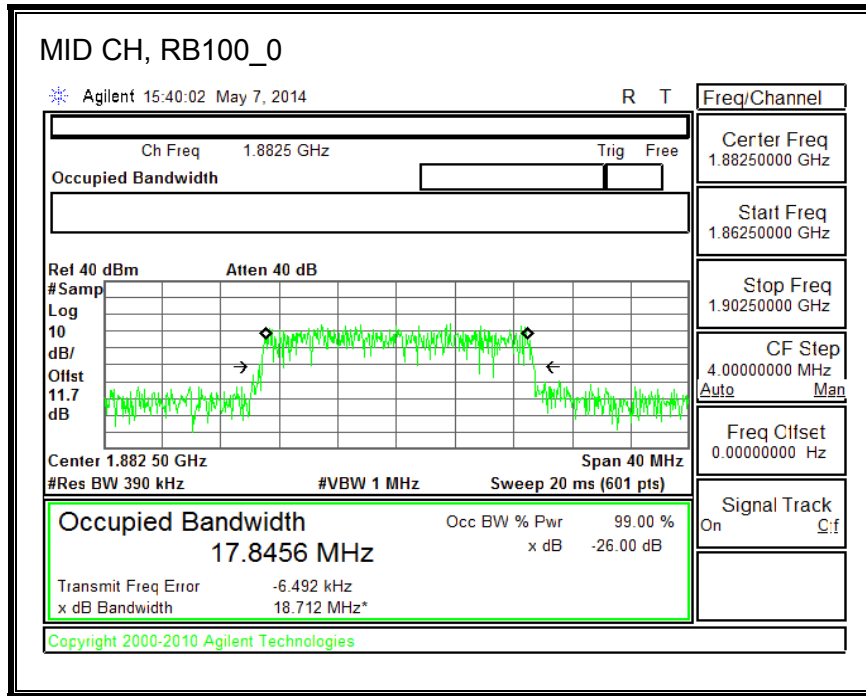
**QPSK, (15.0 MHz BAND WIDTH)**



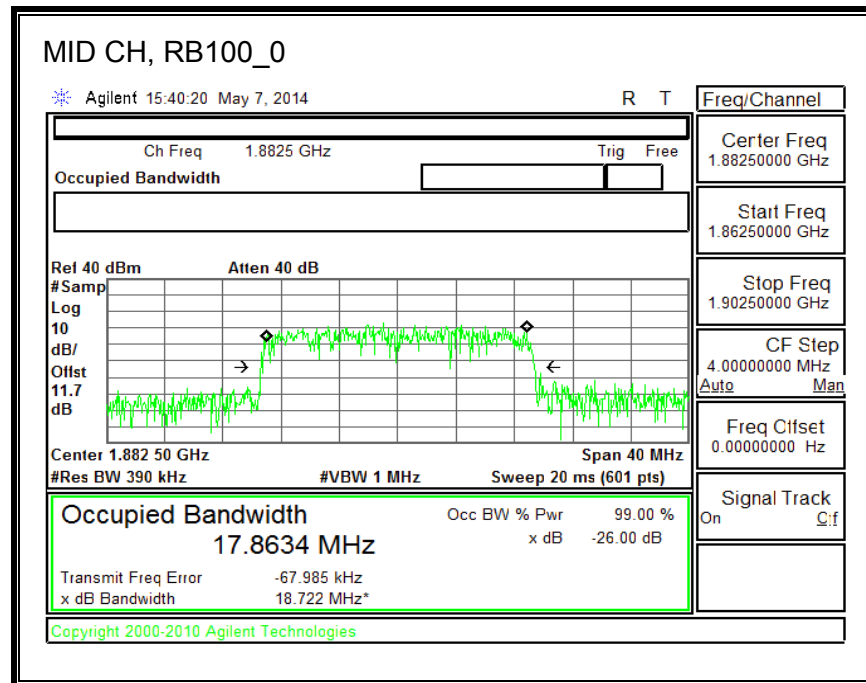
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

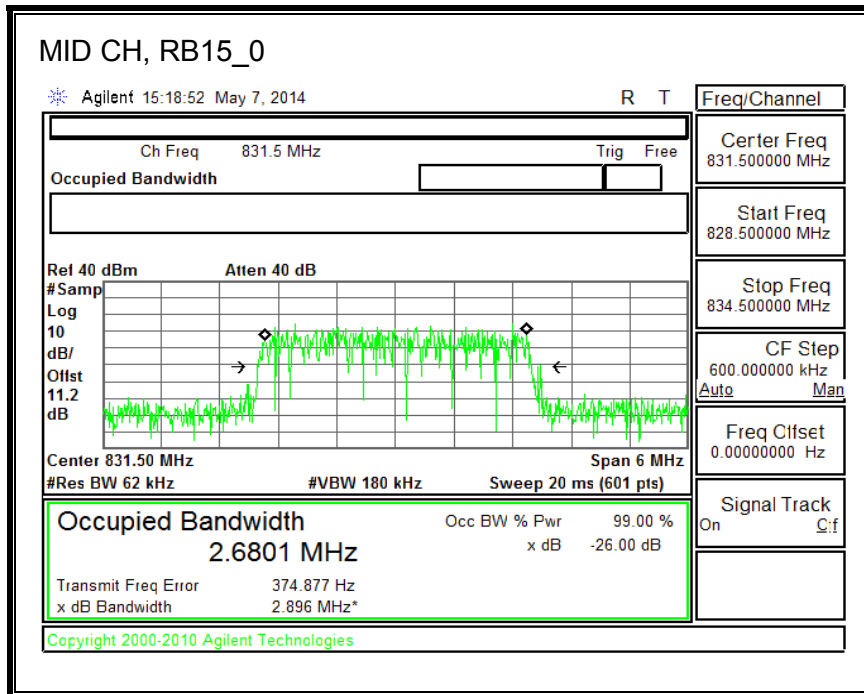


**16QAM, (20.0 MHz BAND WIDTH)**

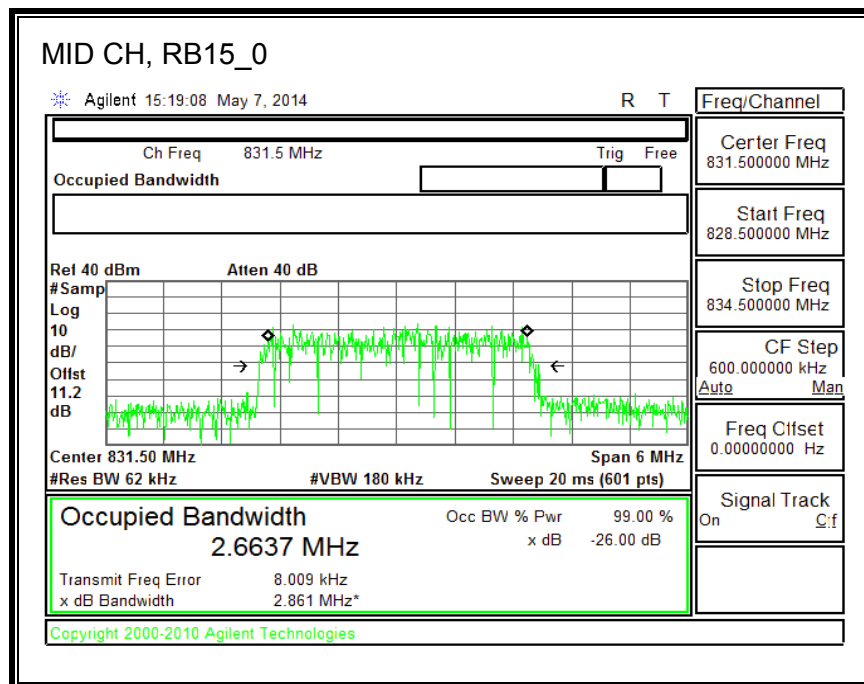


### 8.1.7. LTE BAND 26

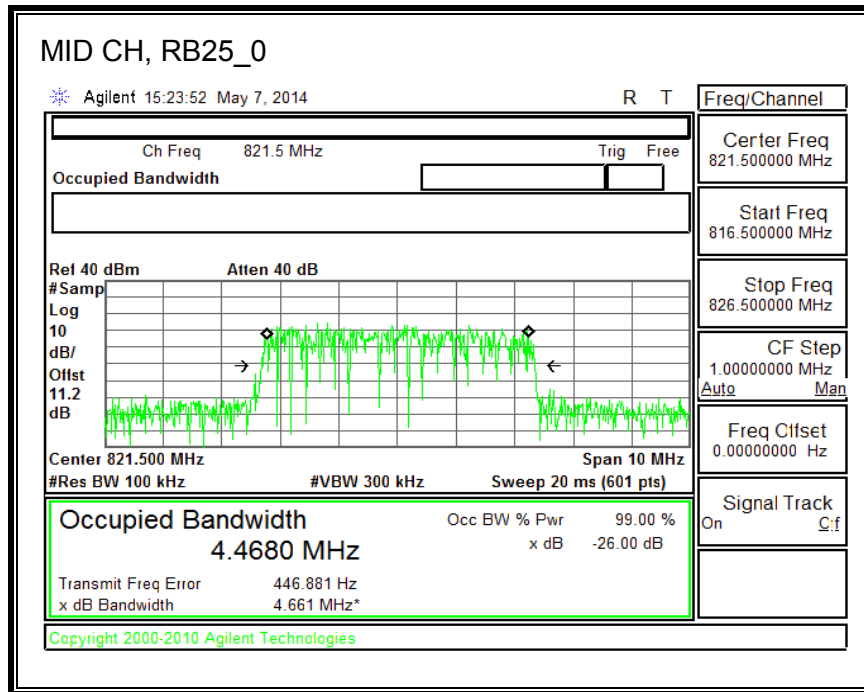
#### QPSK, (3.0 MHz BAND WIDTH)



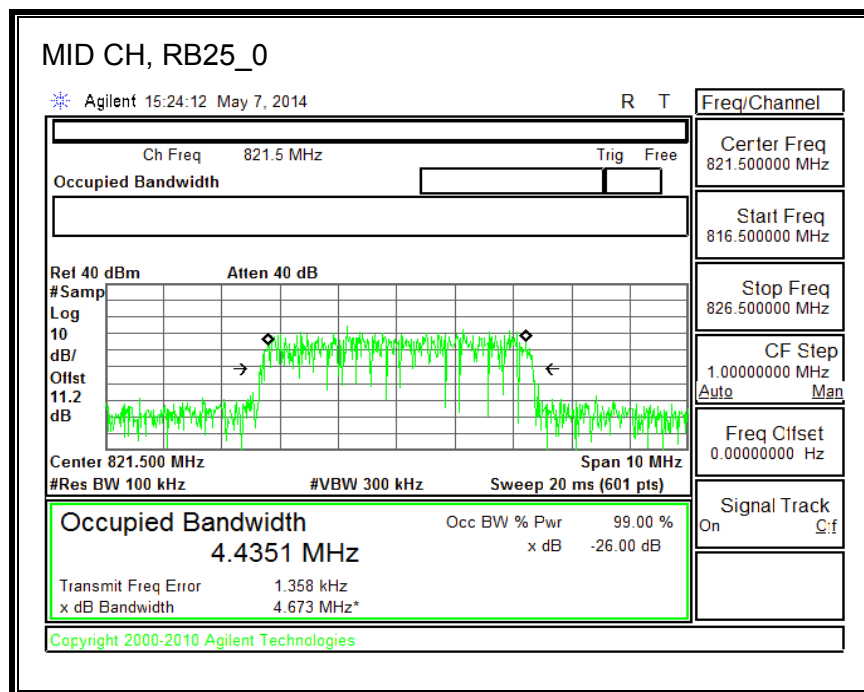
#### 16QAM, (3.0 MHz BAND WIDTH)



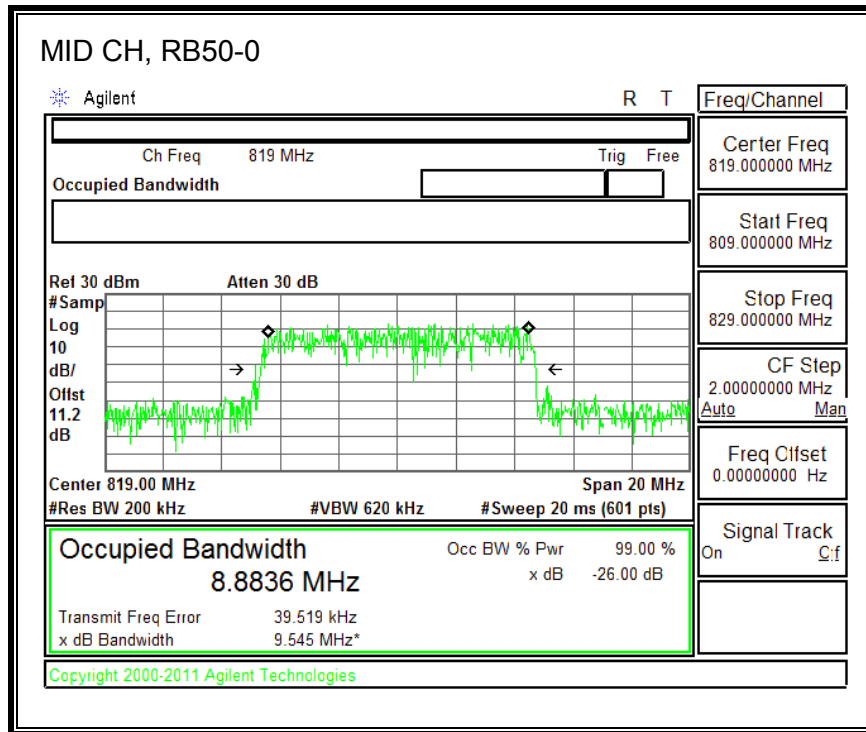
**QPSK, (5.0 MHz BAND WIDTH)**



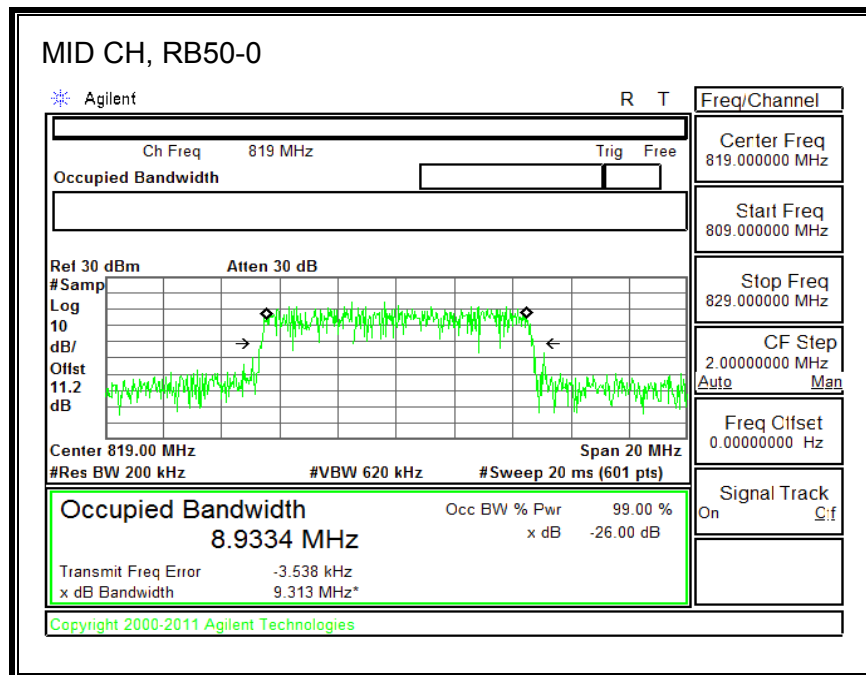
**16QAM, (5.0 MHz BAND WIDTH)**



**QPSK, (10.0 MHz BAND WIDTH)**



**16QAM, (10.0 MHz BAND WIDTH)**





## 8.2. BANDEDGE AND EMISSION MASK

### RULE PART(S)

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

FCC: §22.359

### LIMITS

FCC: §22.359, §24.238, §27.53

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

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

(a)(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  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. (NOTE: Use 100 kHz reference bandwidth.)

FCC: §27.53

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

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

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

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

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

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

(m)(4) For mobile digital stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge and  $55 + 10 \log (P)$  dB at 5.5 megahertz from the channel edges.

(Channel edges are defined under §27.5 (i) Frequency assignment for the BRS/EBS band)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

**RULE PART(S) for Emission Mask**

FCC: §90.210, and §90.691

(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  $116 \text{ Log}_{10}(f/6.1)$  decibels or  $50 + 10 \text{ Log}_{10}(P)$  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  $43 + 10 \text{ Log}_{10}(P)$  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. {NOTE: Use 100 kHz reference bandwidth.}

**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 1910MHz)

Set a marker to point the corresponding band edge frequency in each test case.

Set display line at -13 dBm

Set resolution bandwidth to at least 1% of emission bandwidth.

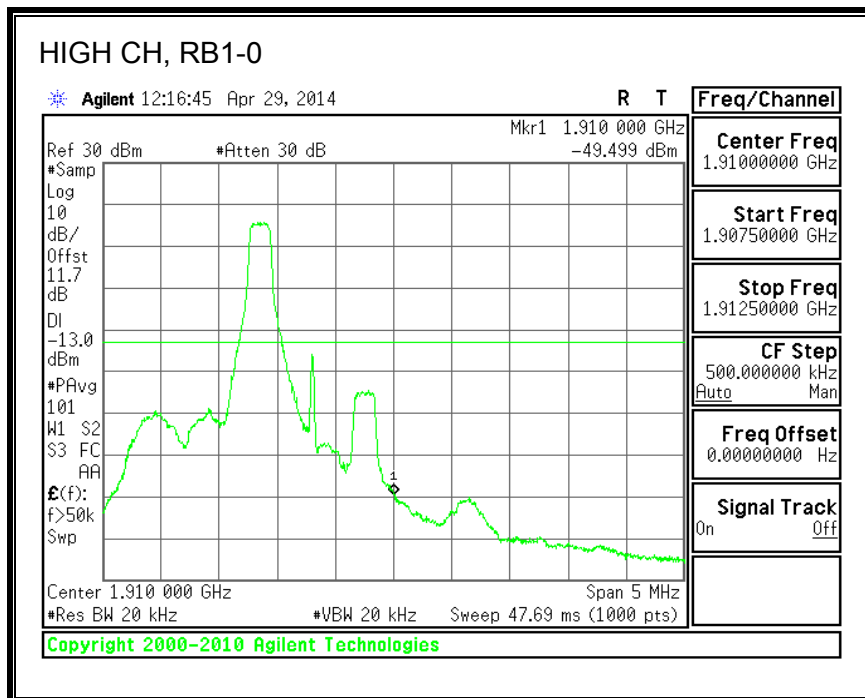
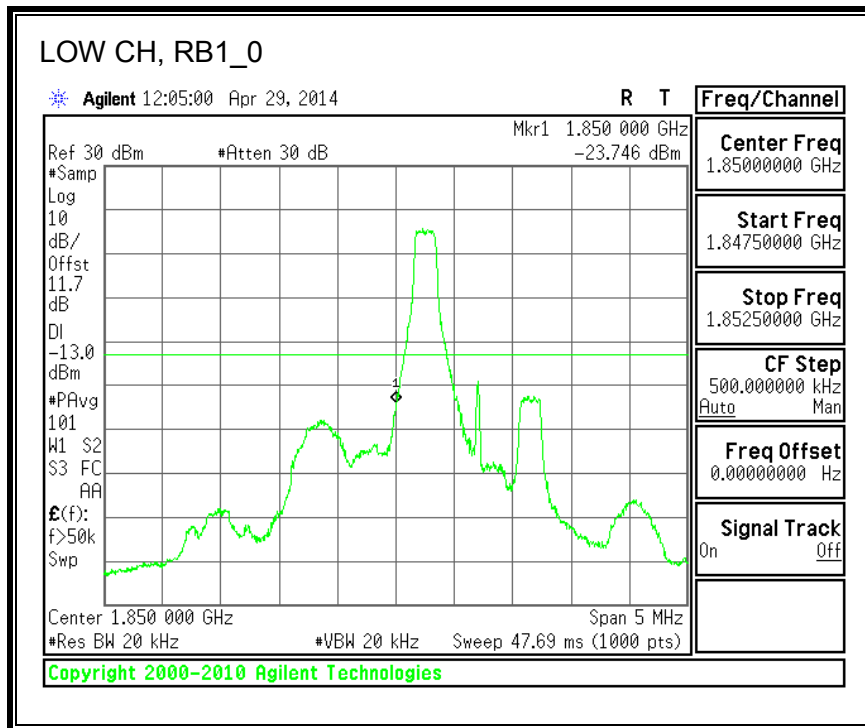
**MODES TESTED**

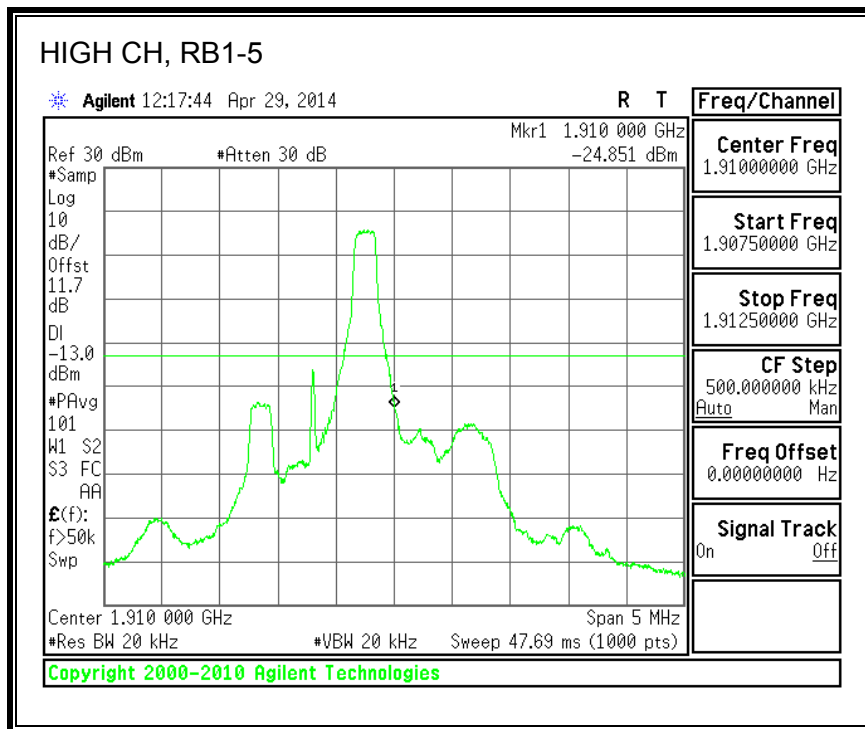
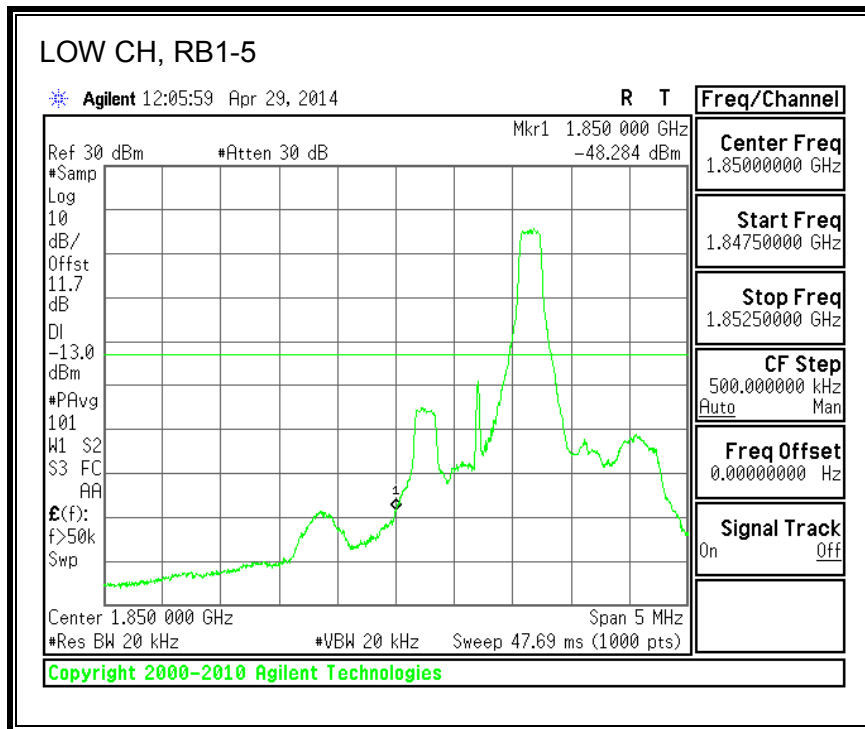
- Band 2
- Band 4
- Band 5
- Band 13
- Band 17
- Band 25
- Band 26

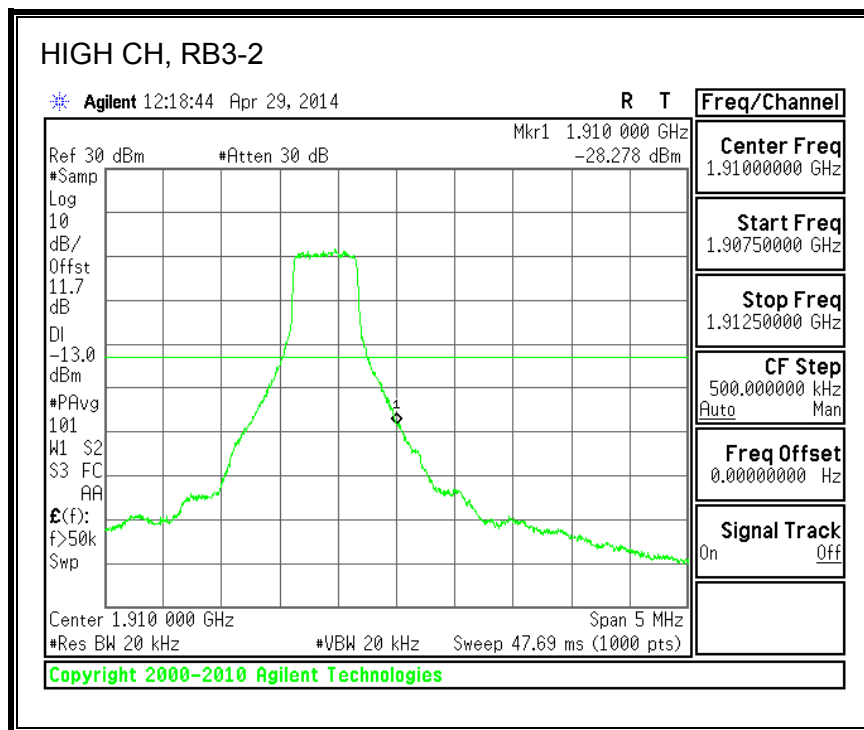
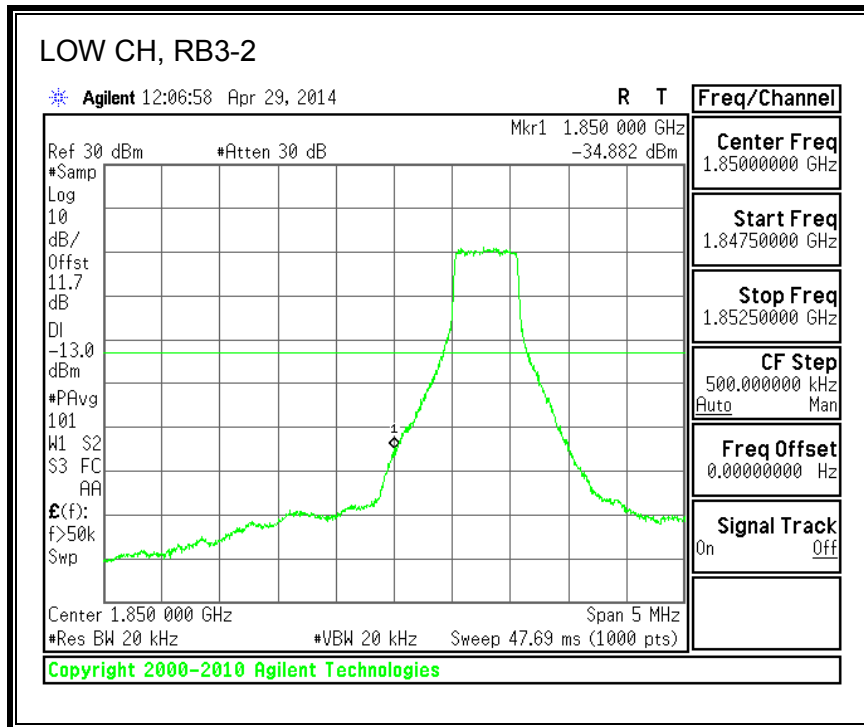
**RESULTS**

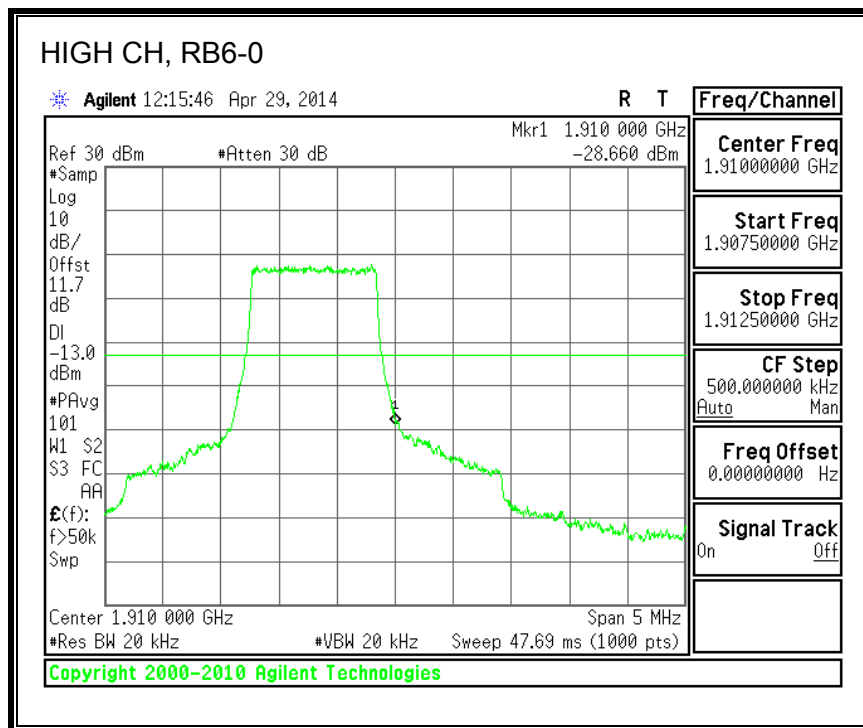
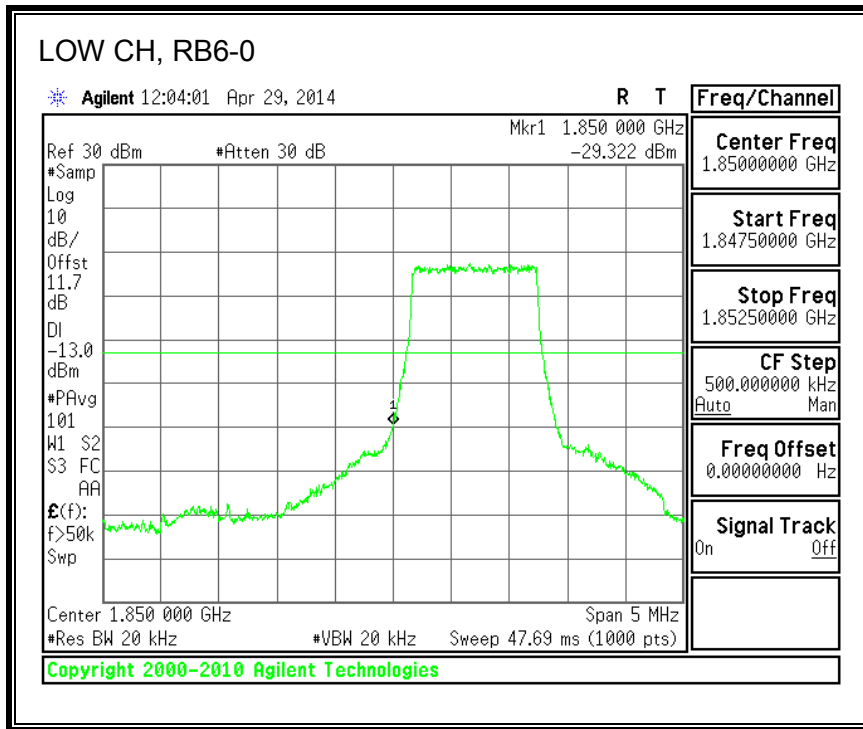
### 8.2.1. LTE BAND 2 BANDEDGE

#### QPSK, (1.4 MHz BAND WIDTH)

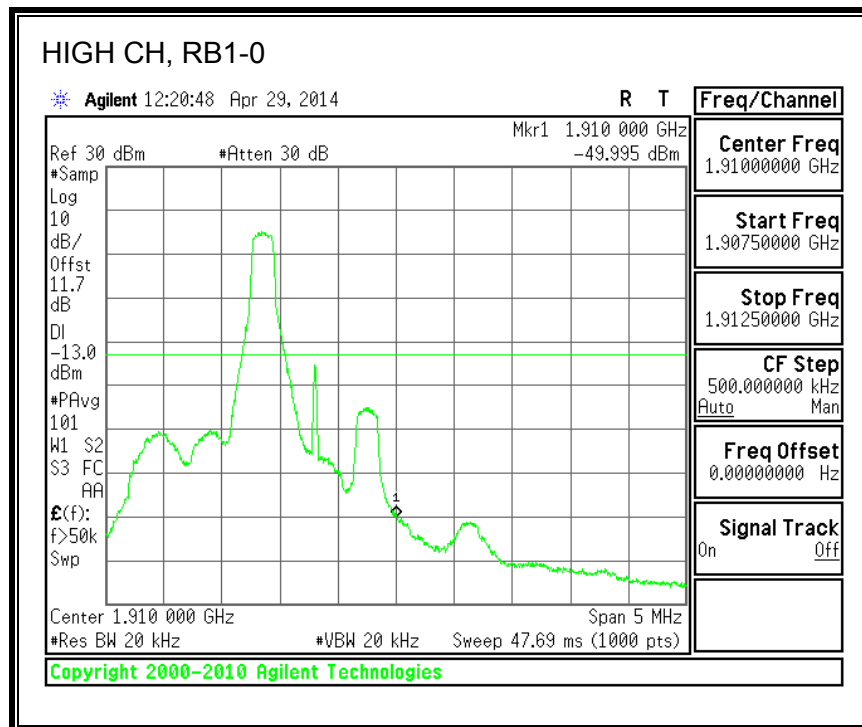
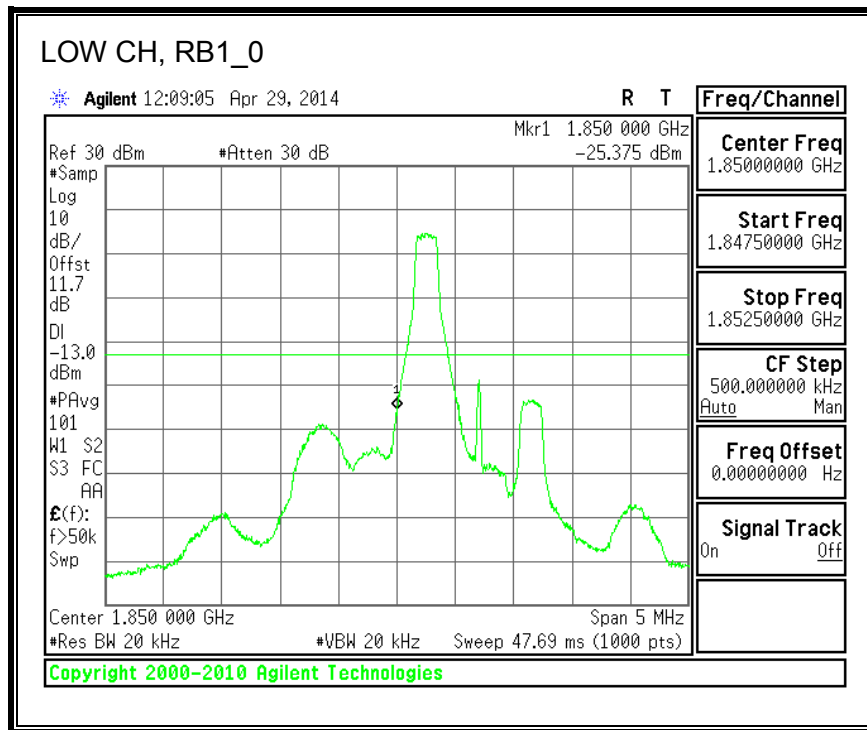


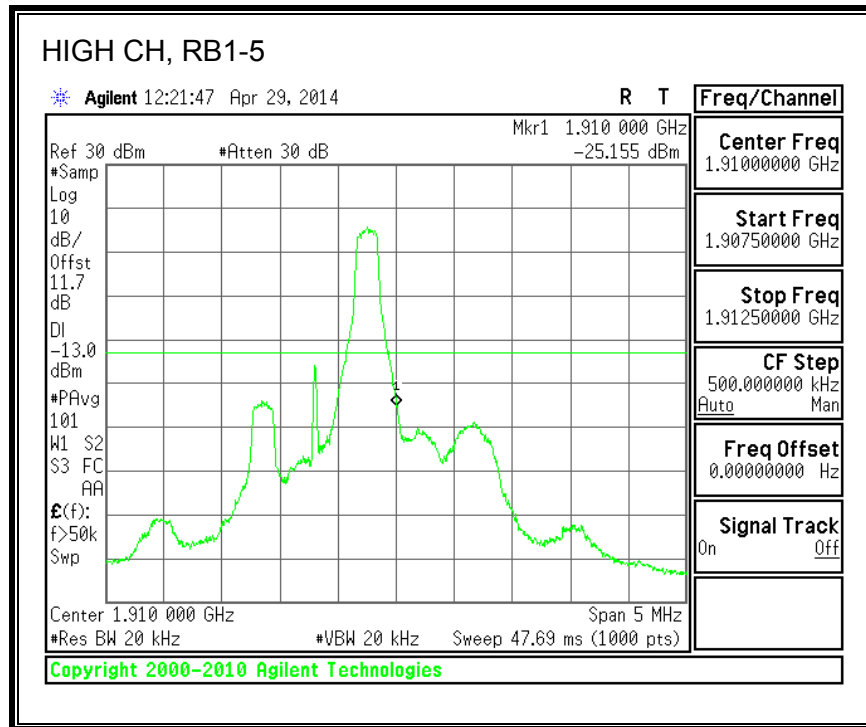
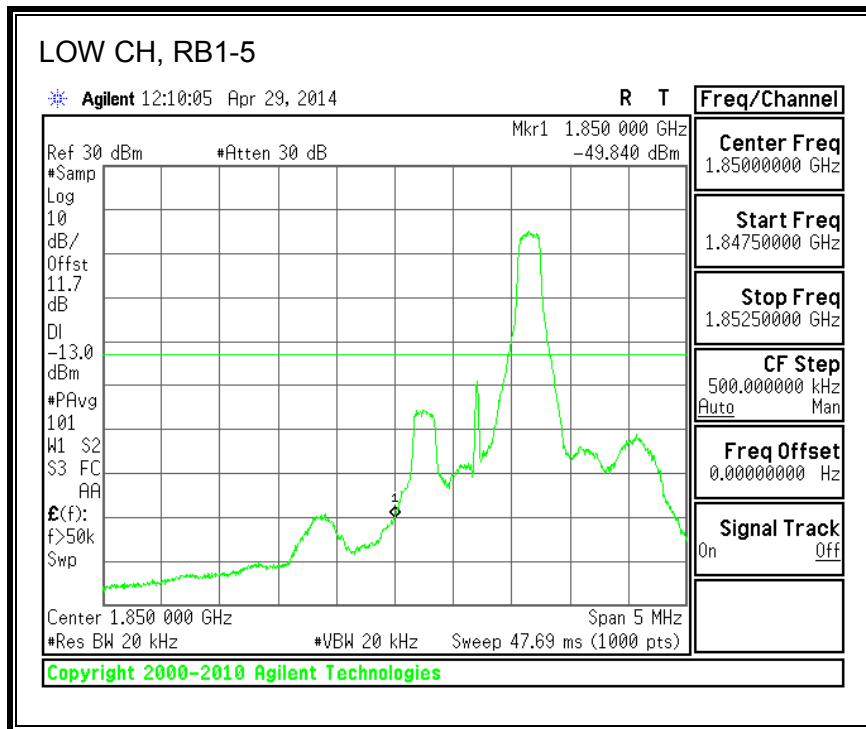




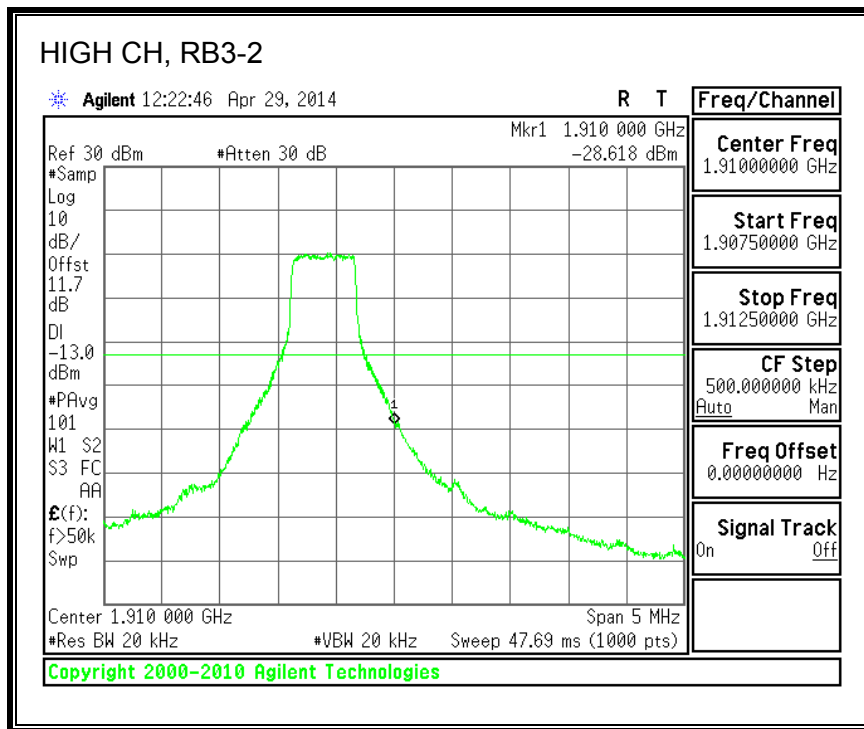
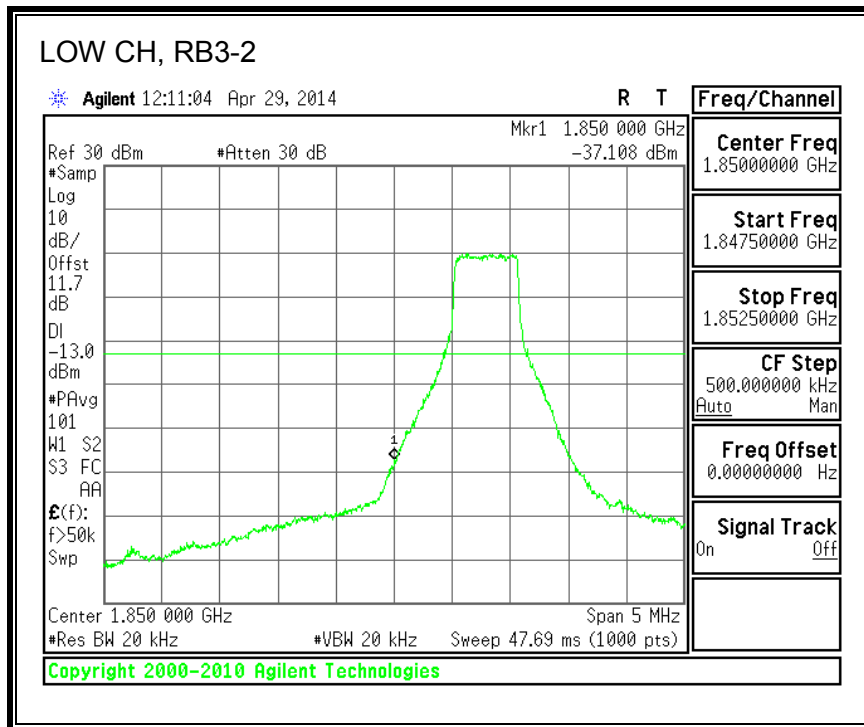


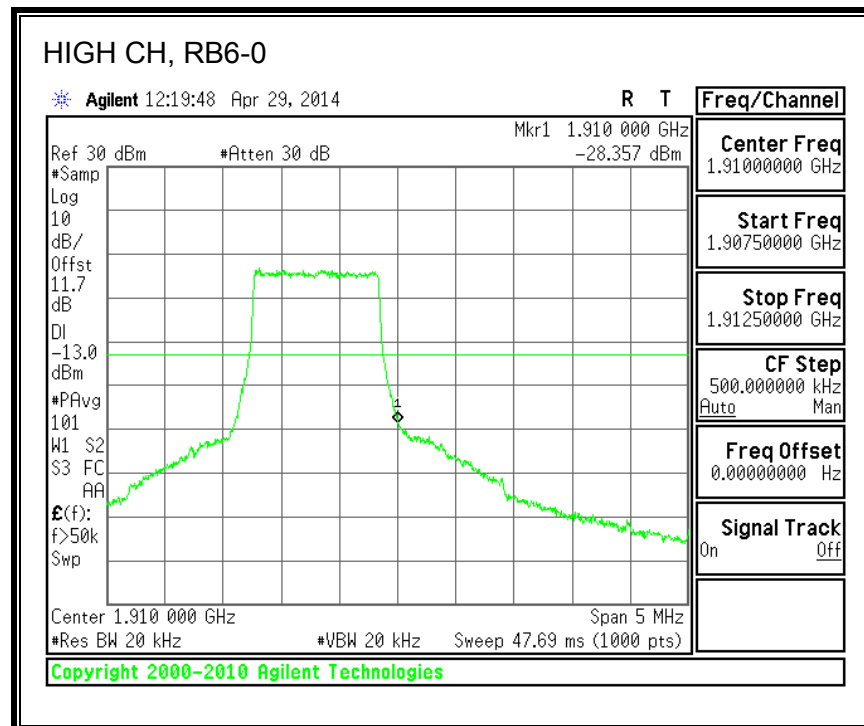
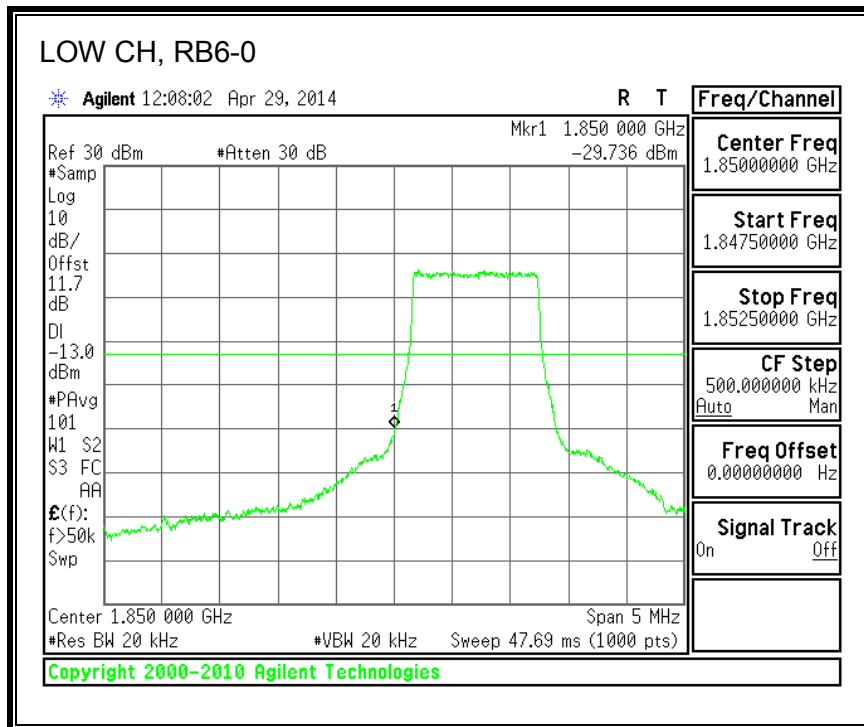
**16QAM, (1.4 MHz BAND WIDTH)**



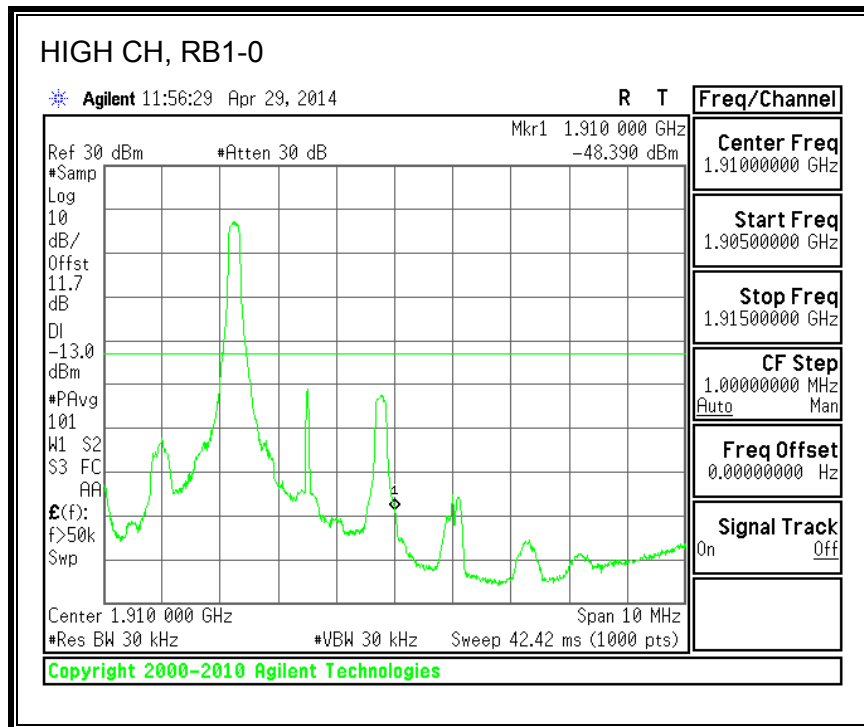
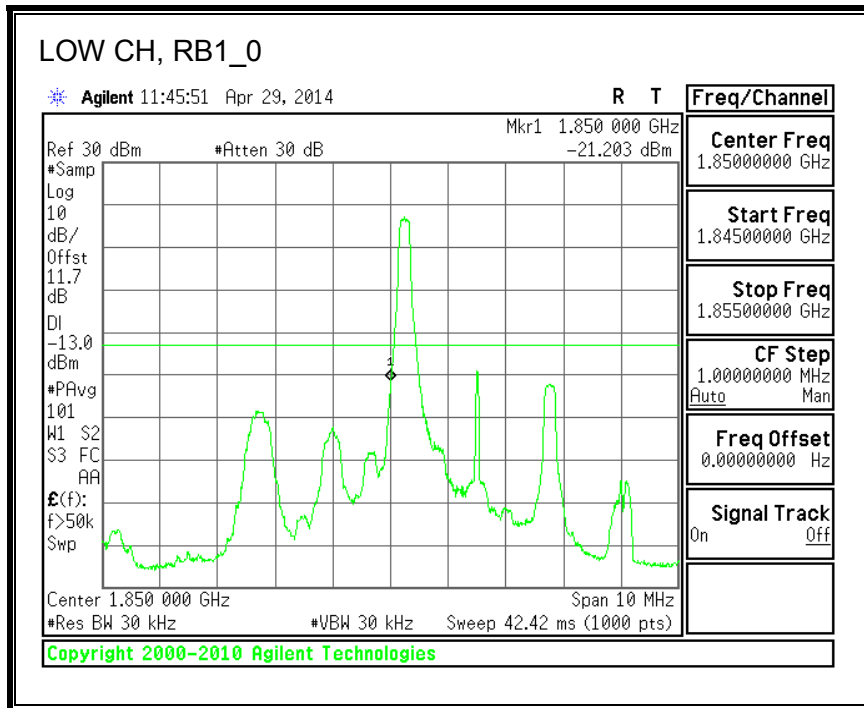


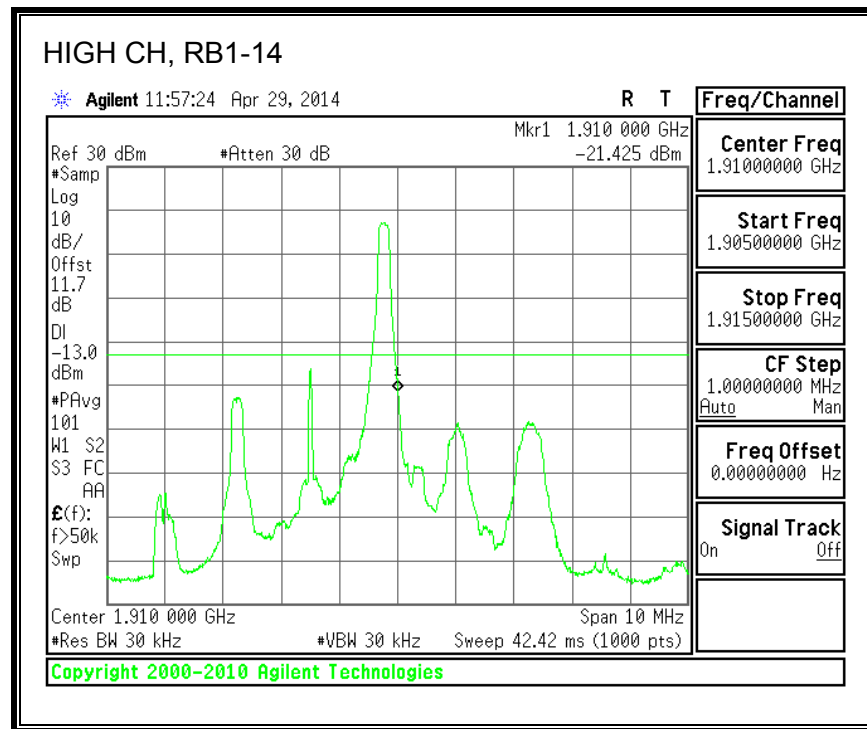
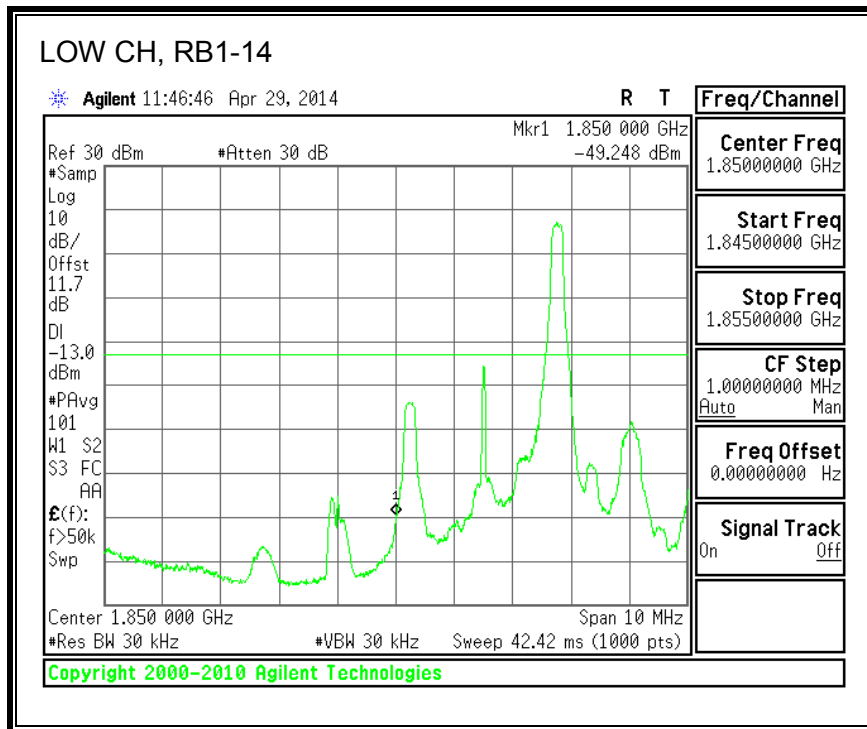


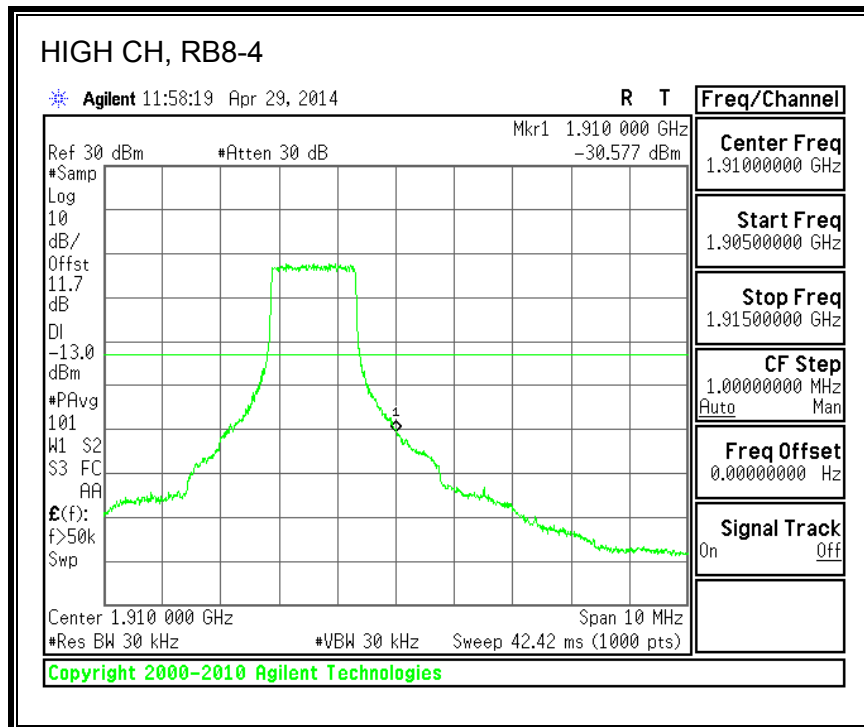
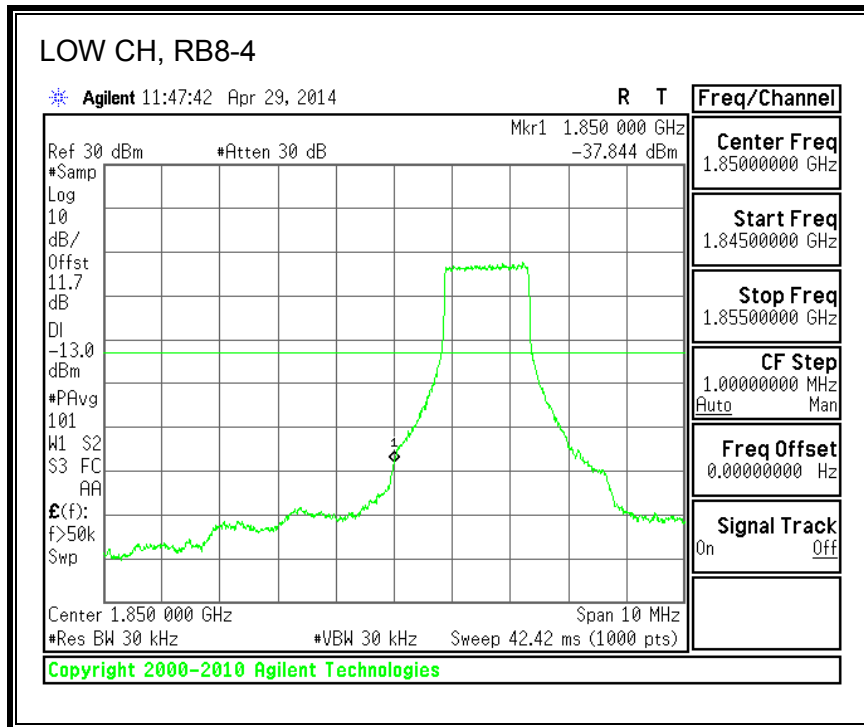


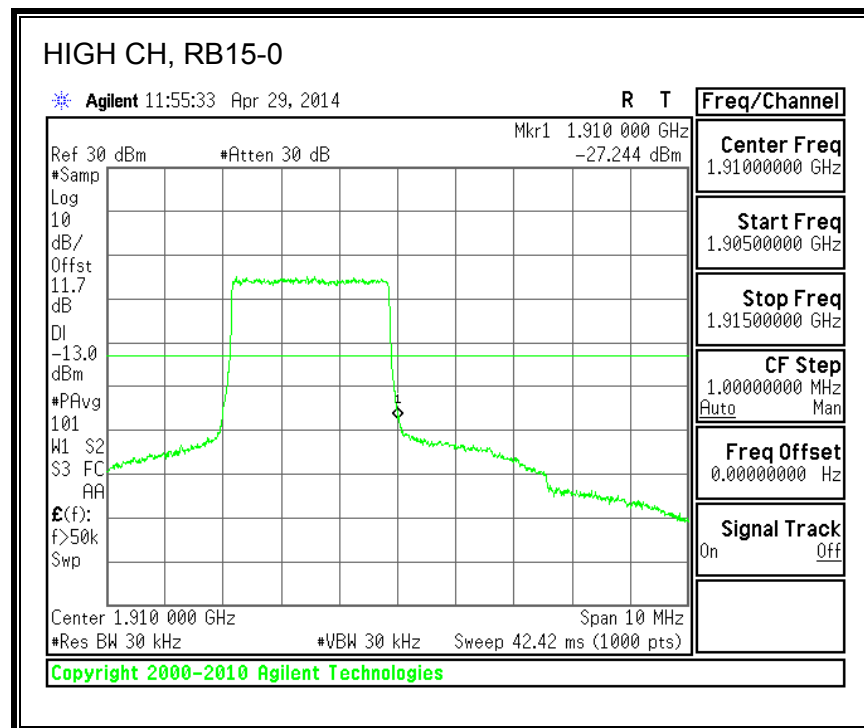
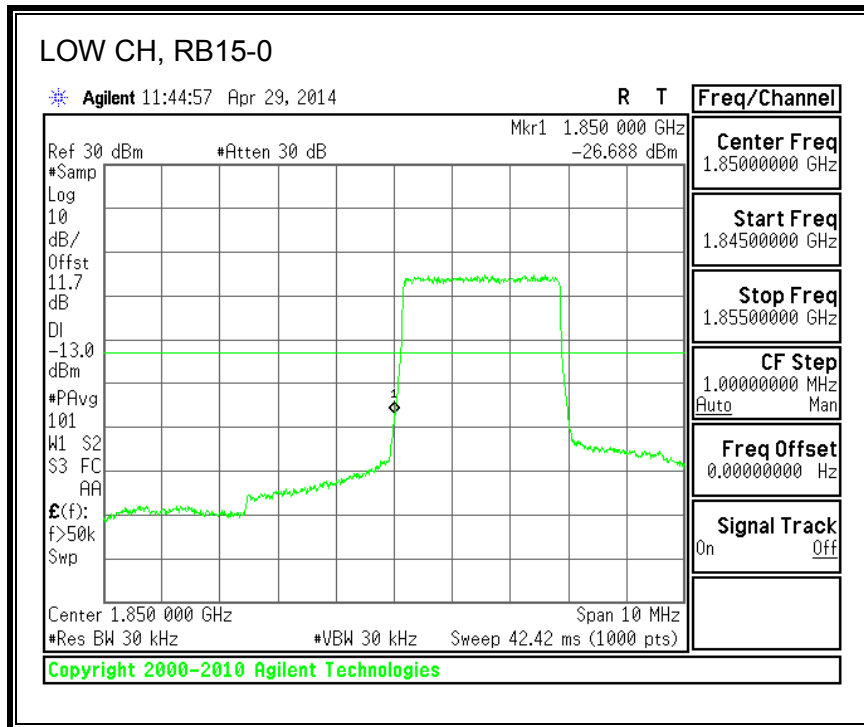


**QPSK, (3.0 MHz BAND WIDTH)**

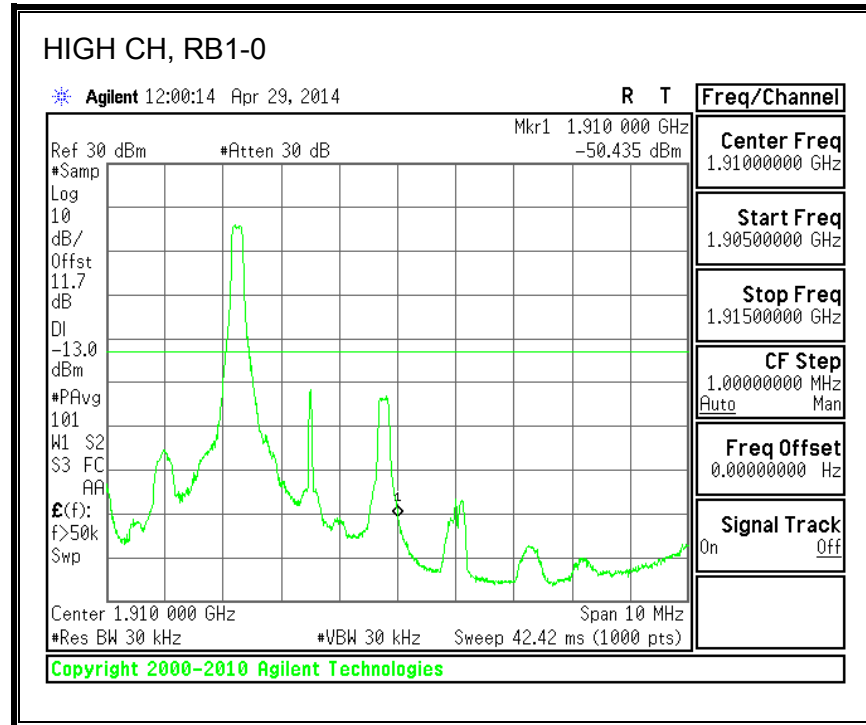
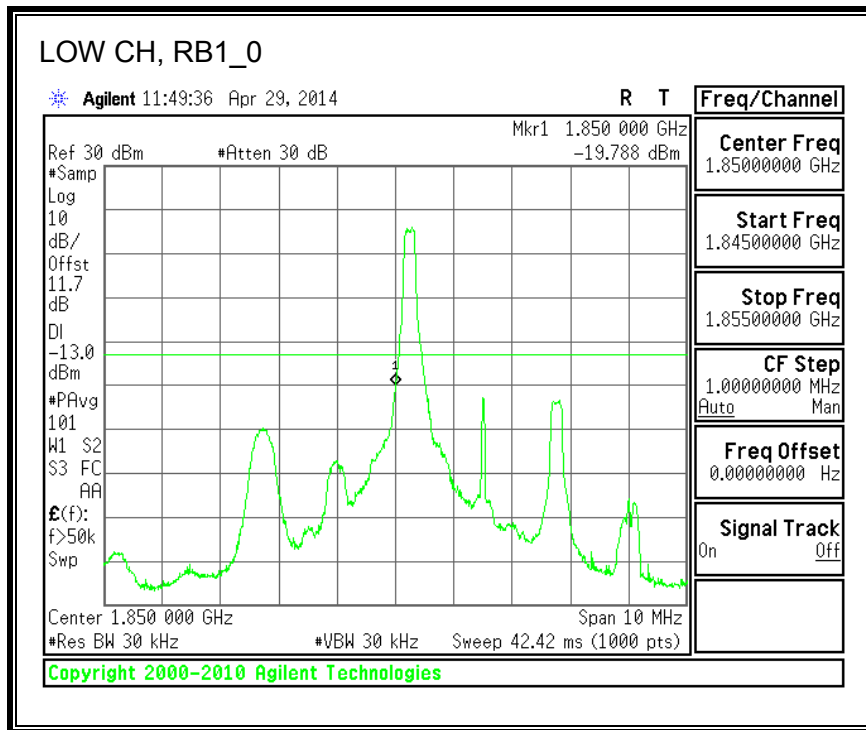


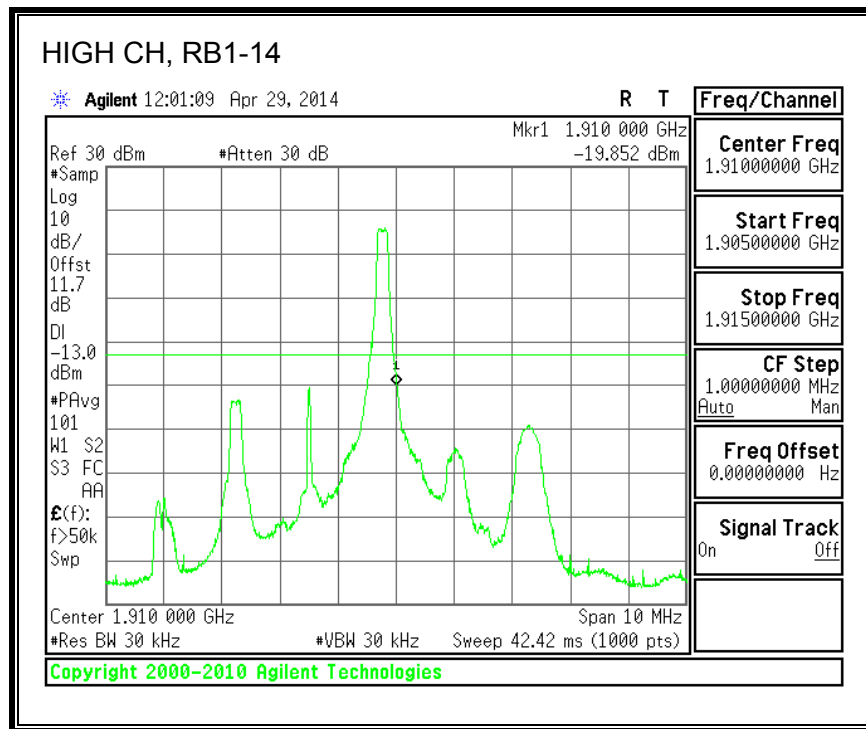
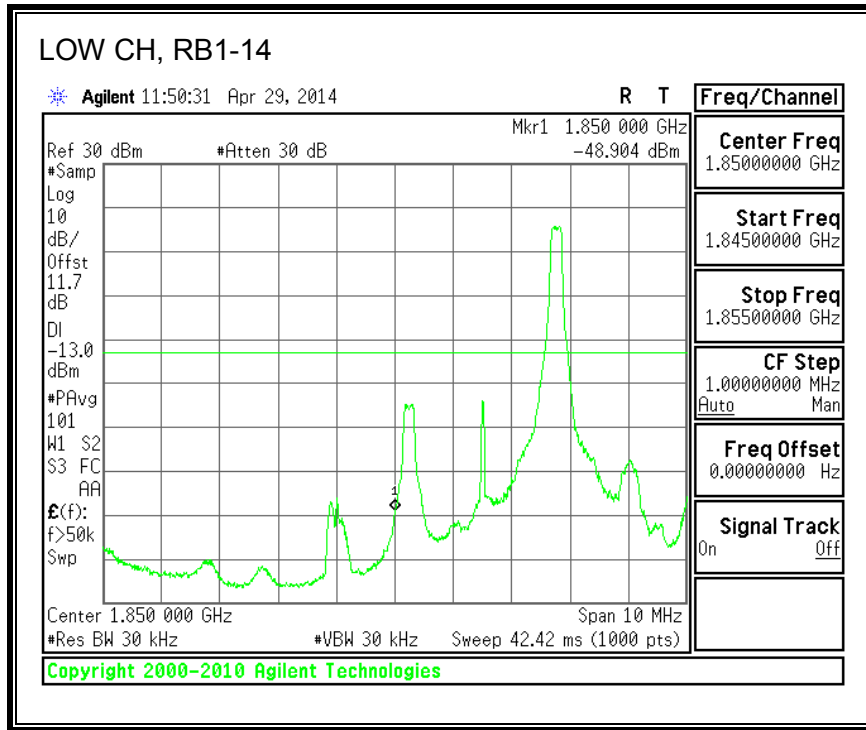




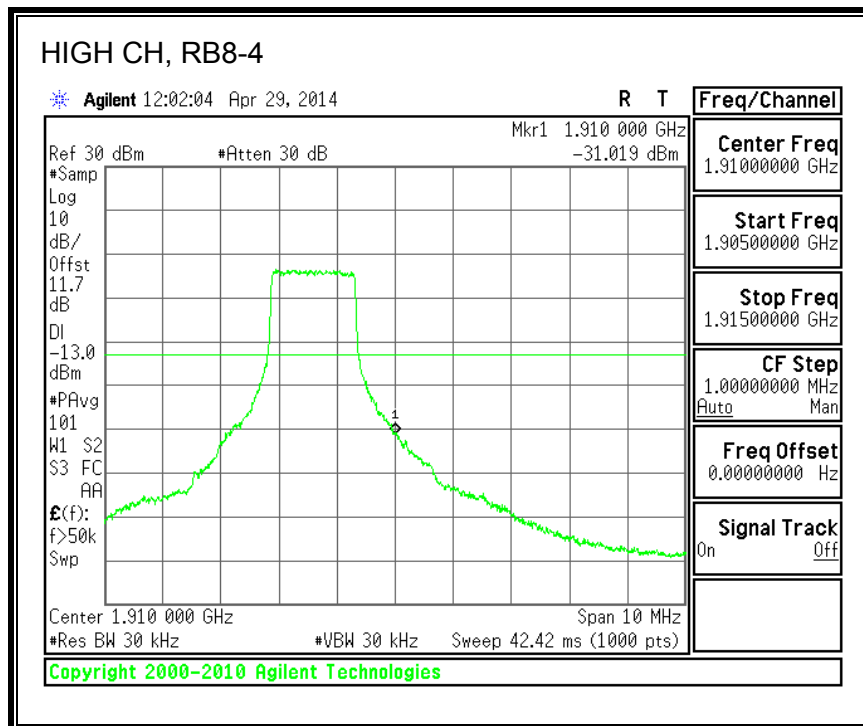
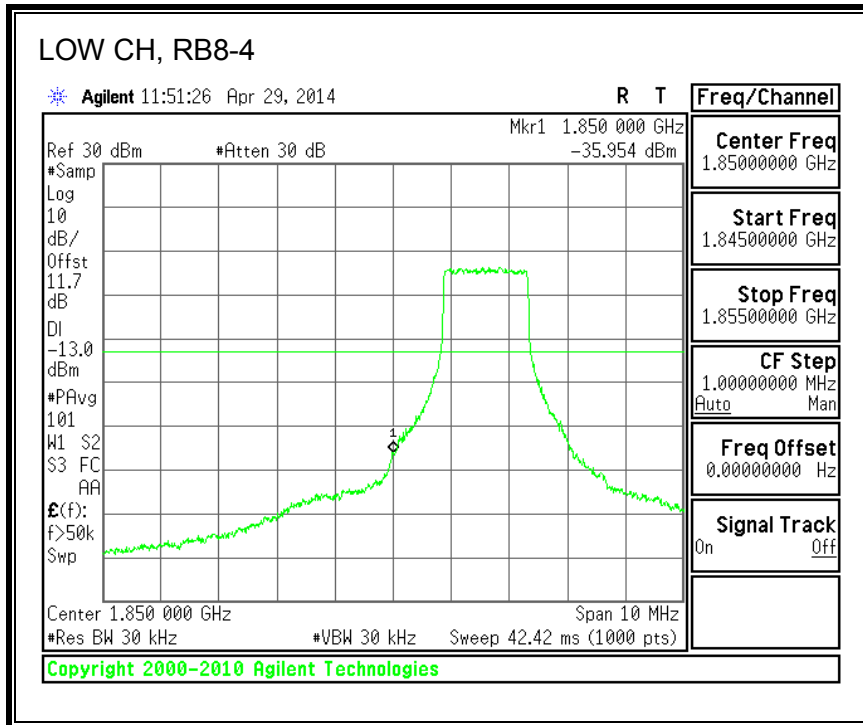


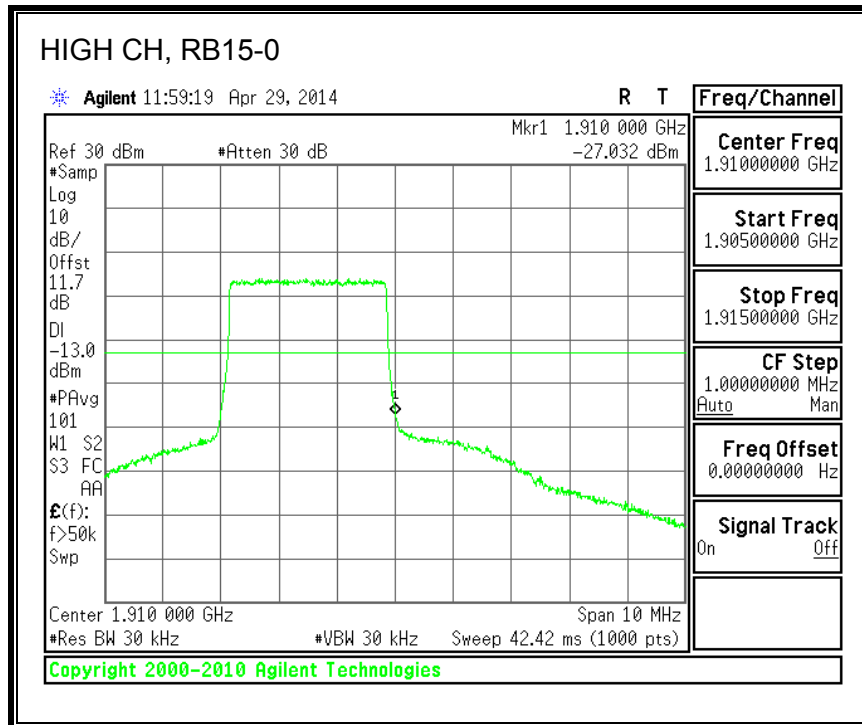
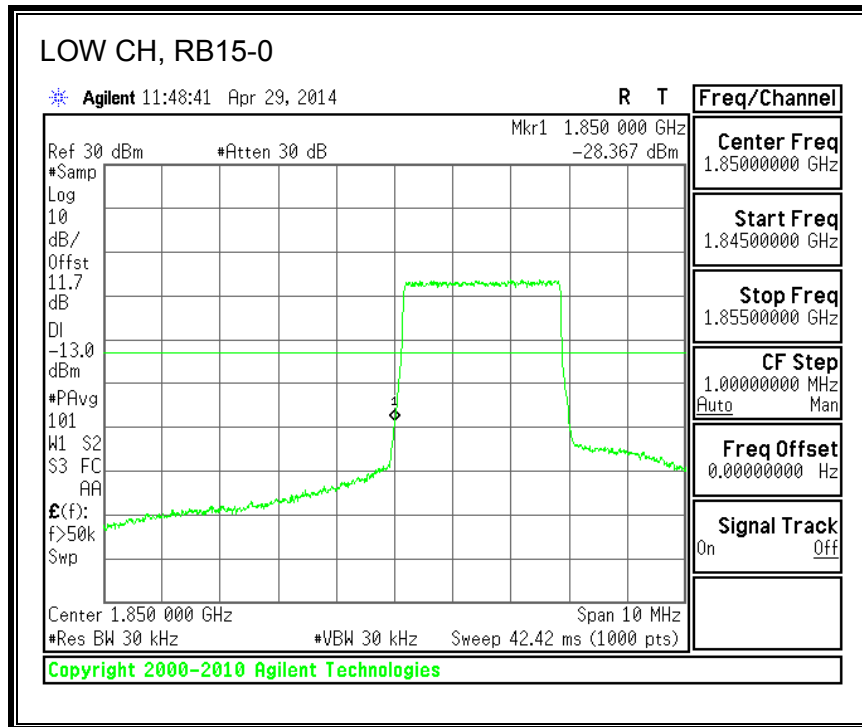
**16QAM, (3.0 MHz BAND WIDTH)**



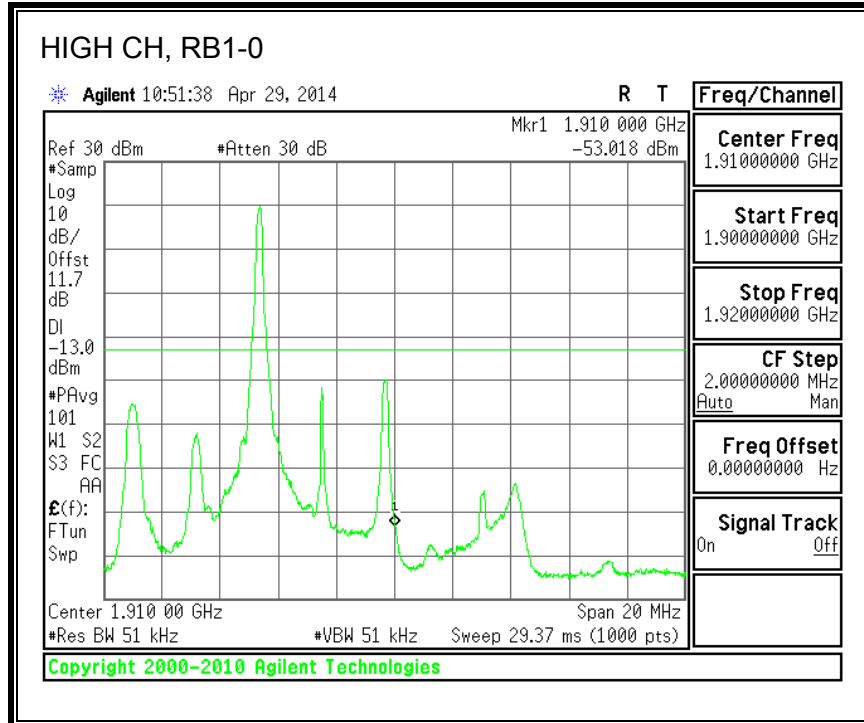
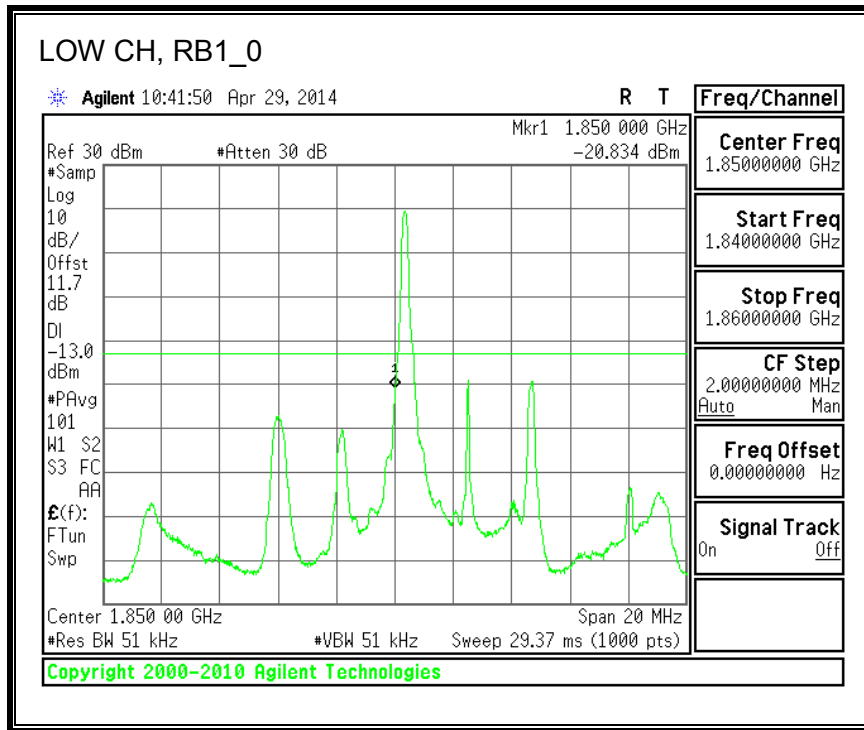


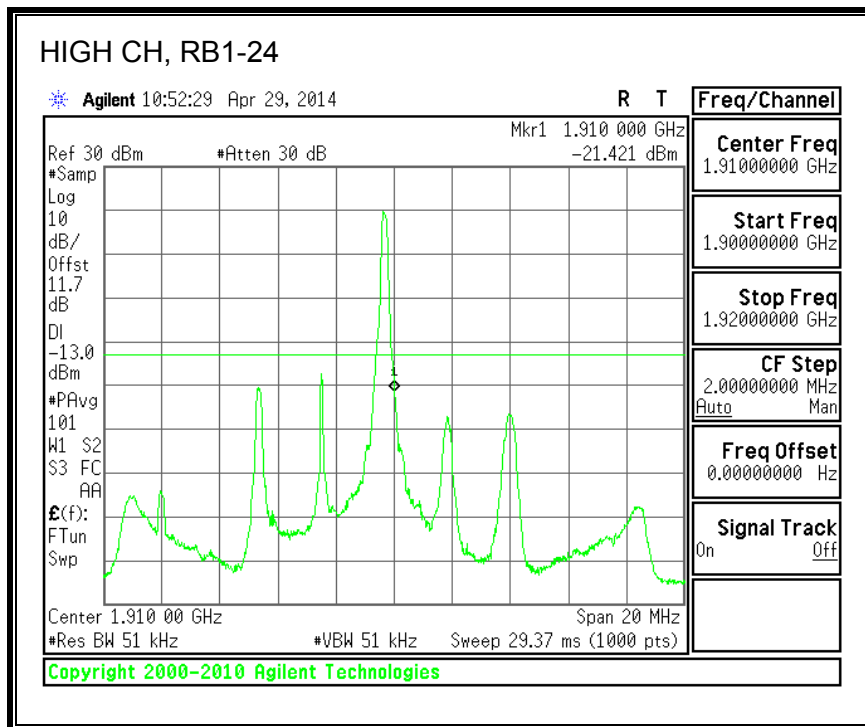
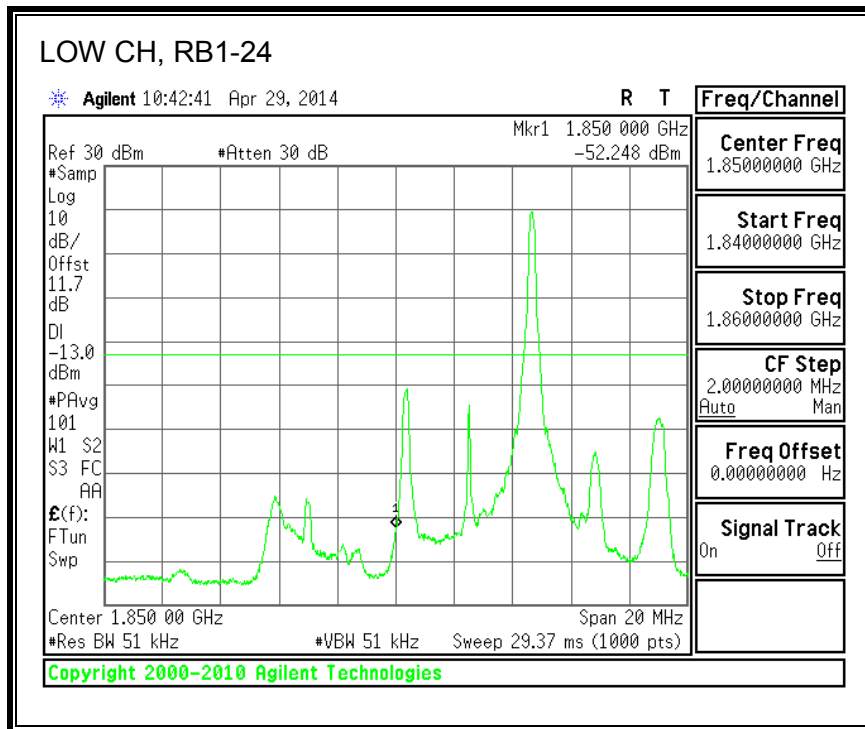


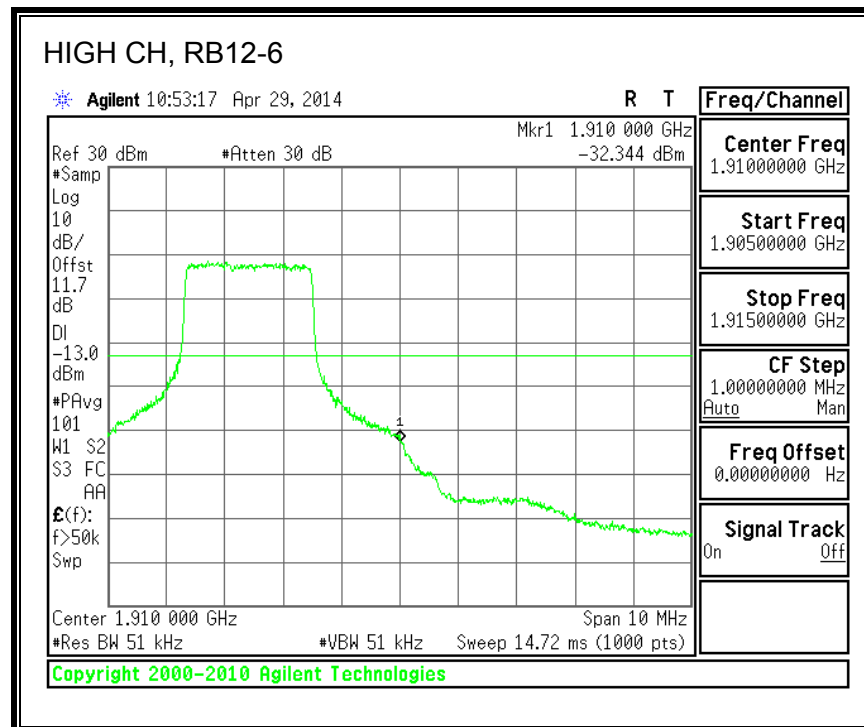
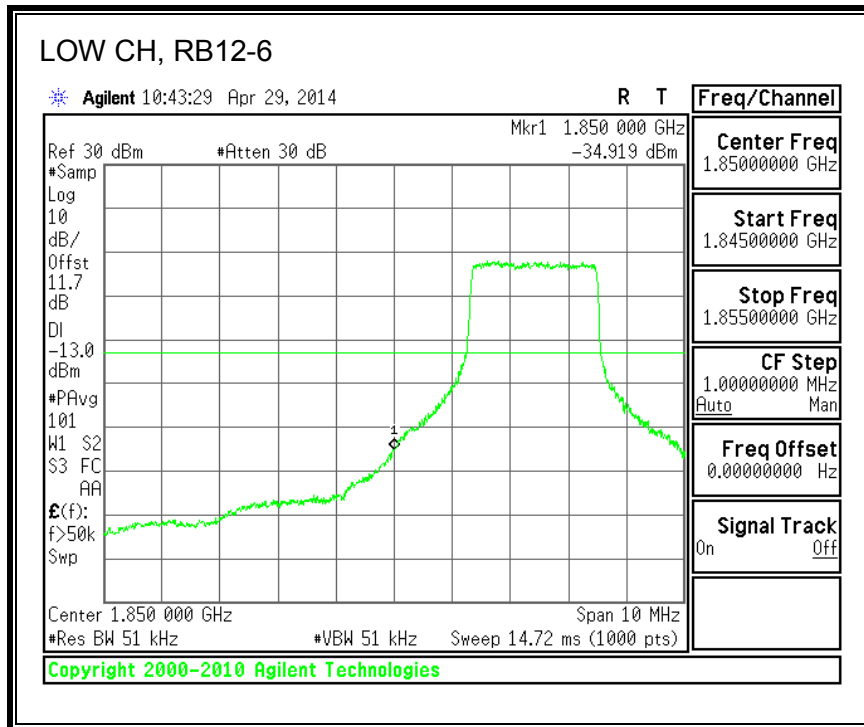


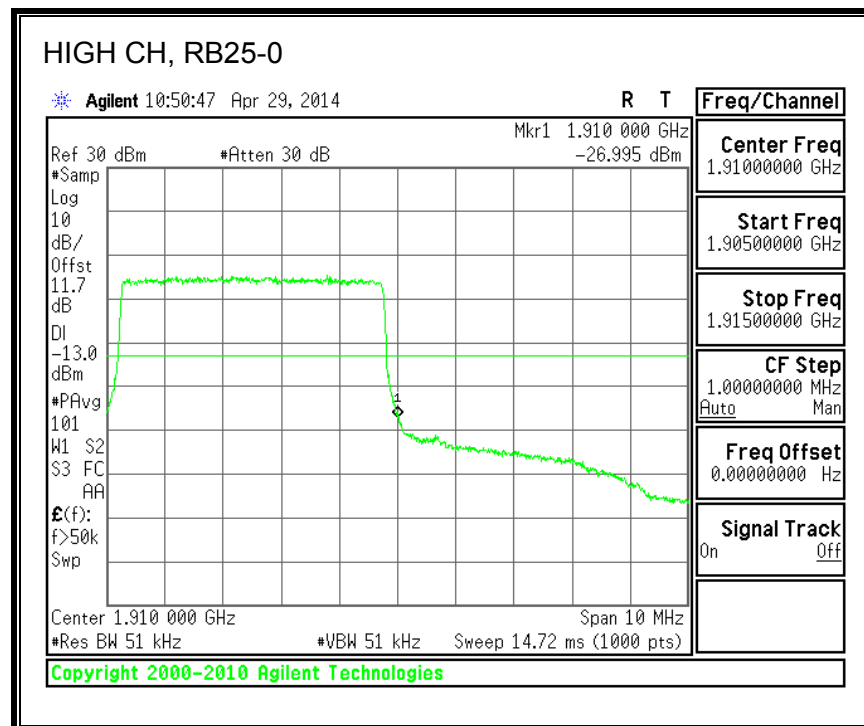
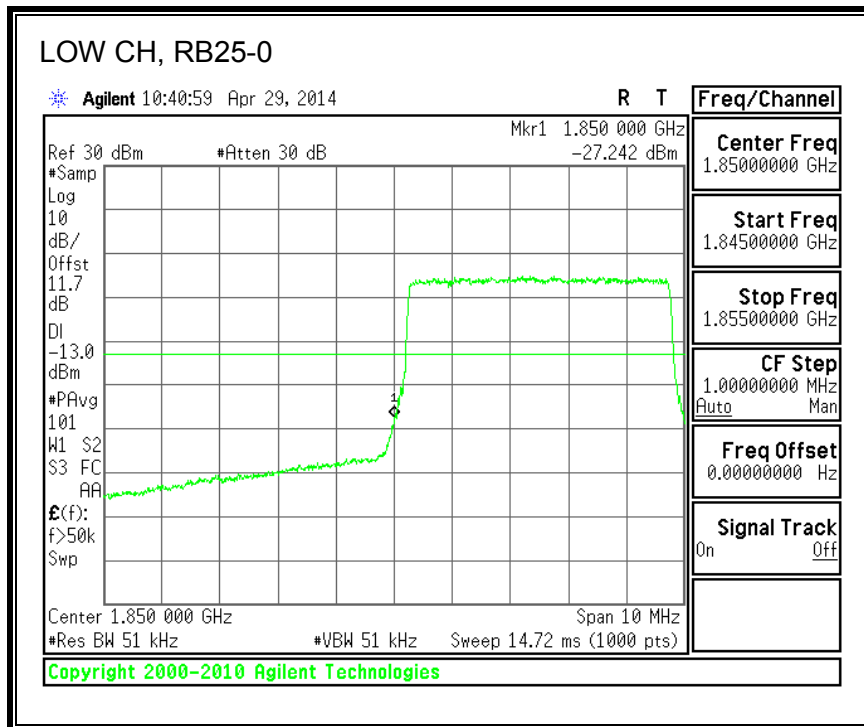


**QPSK, (5.0 MHz BAND WIDTH)**

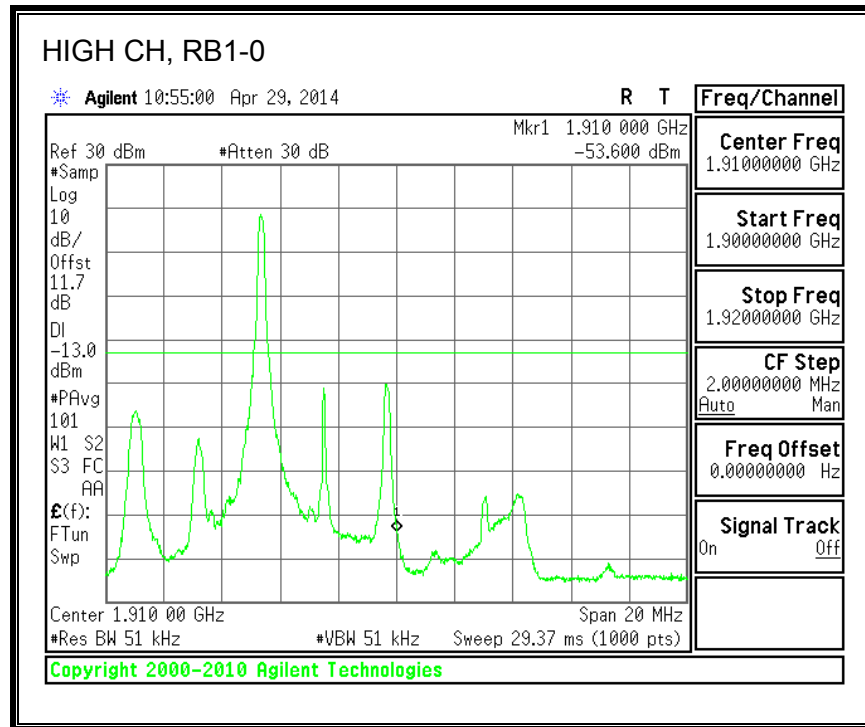
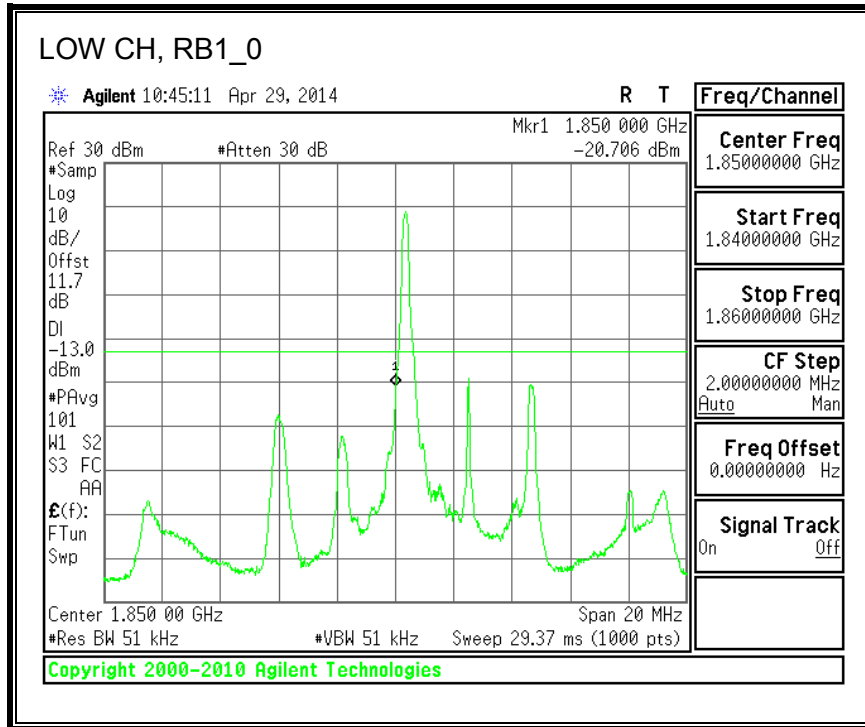


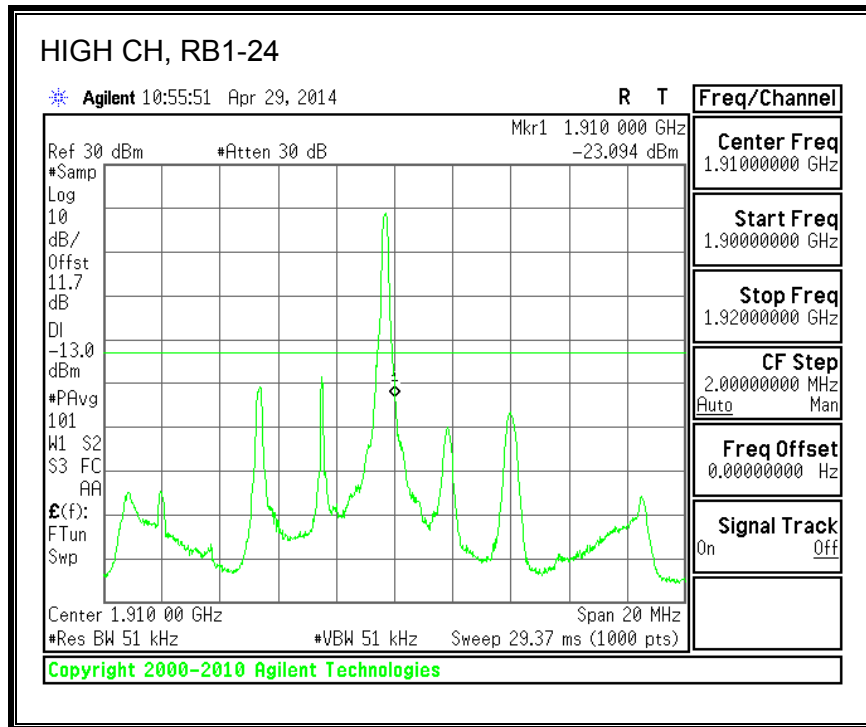
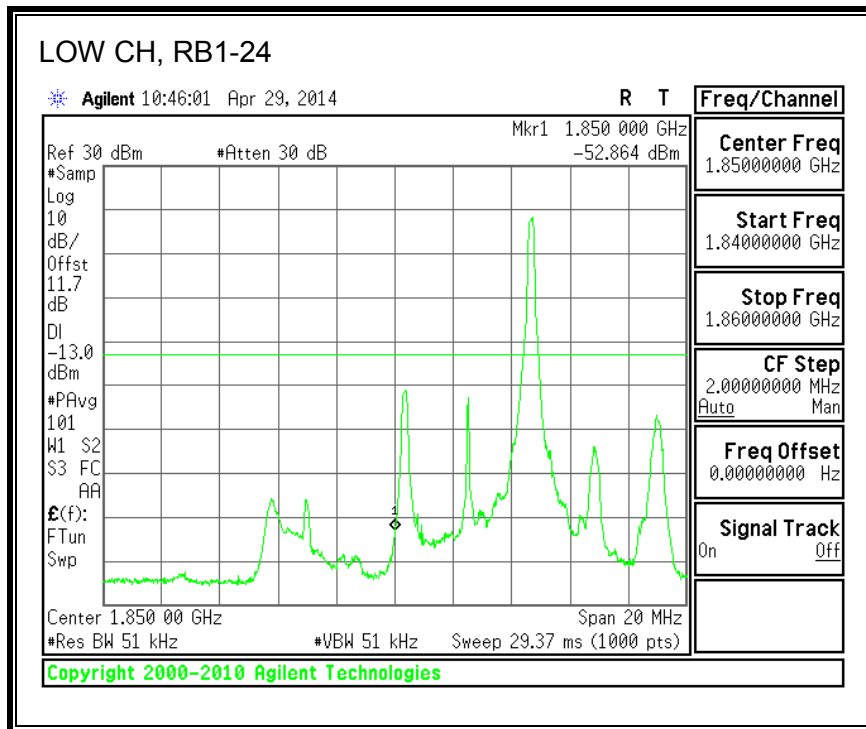




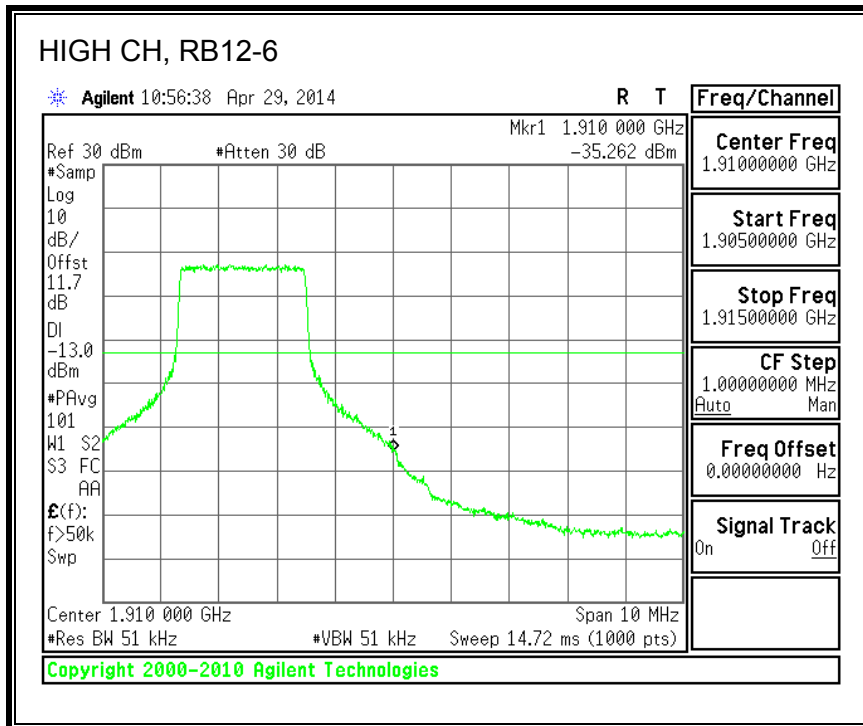
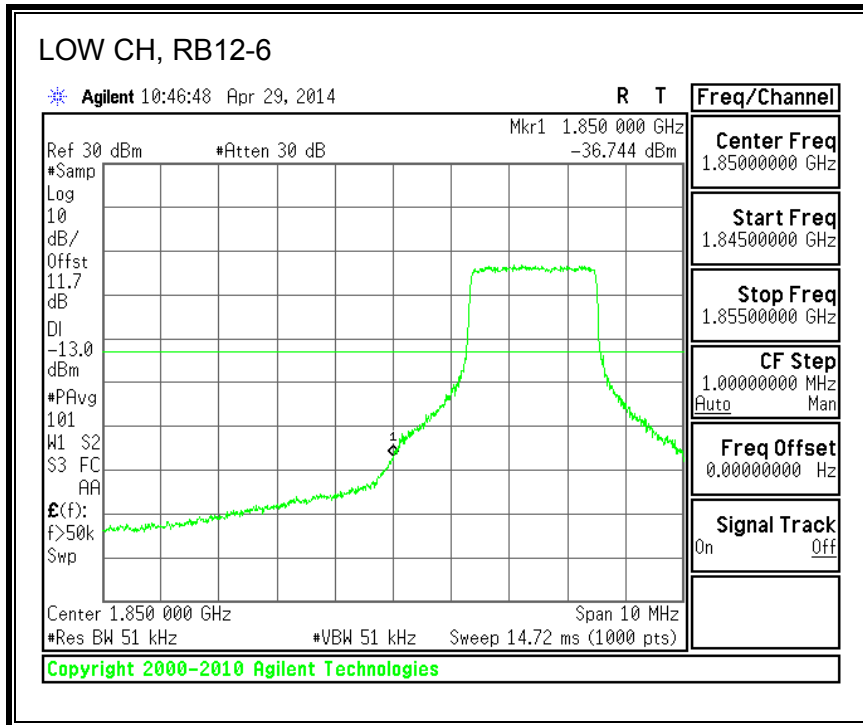


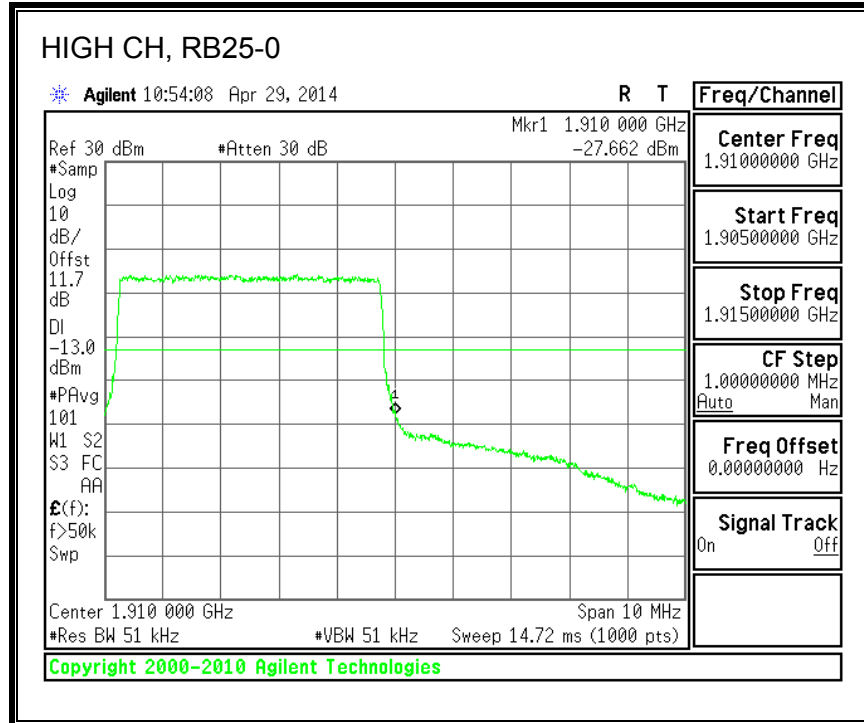
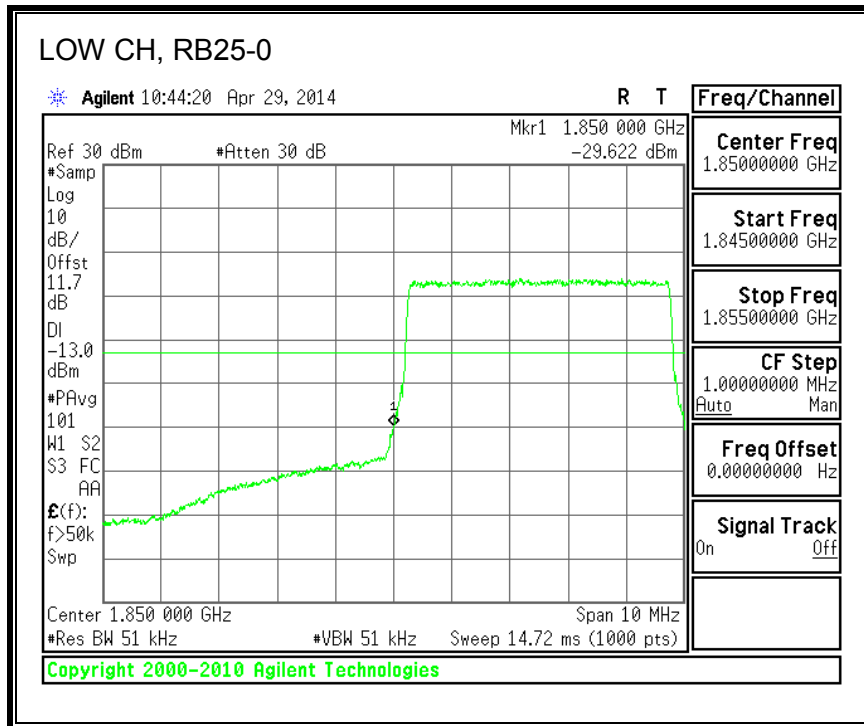
**16QAM, (5.0 MHz BAND WIDTH)**



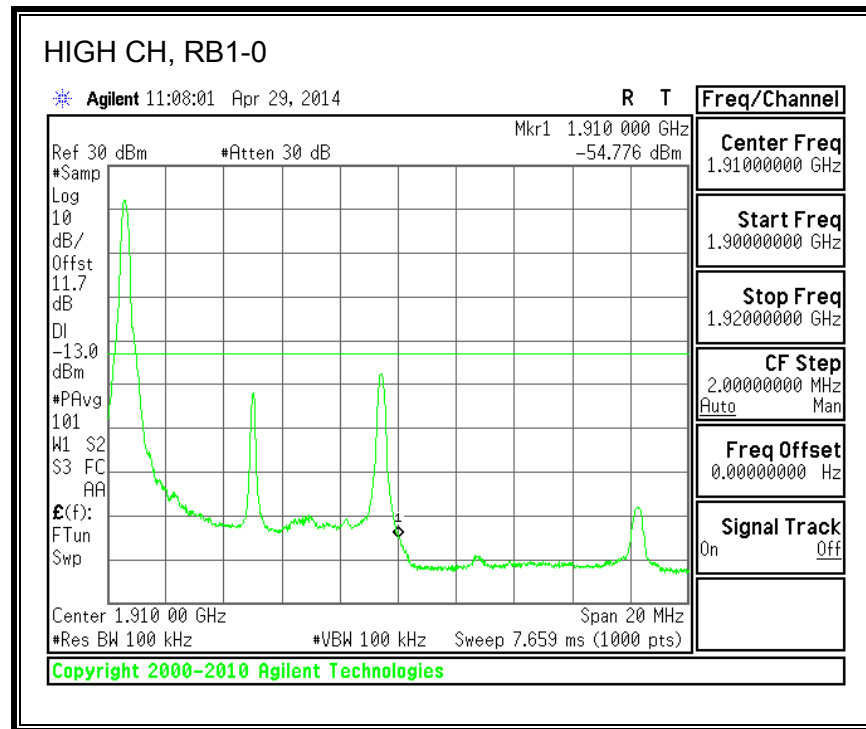
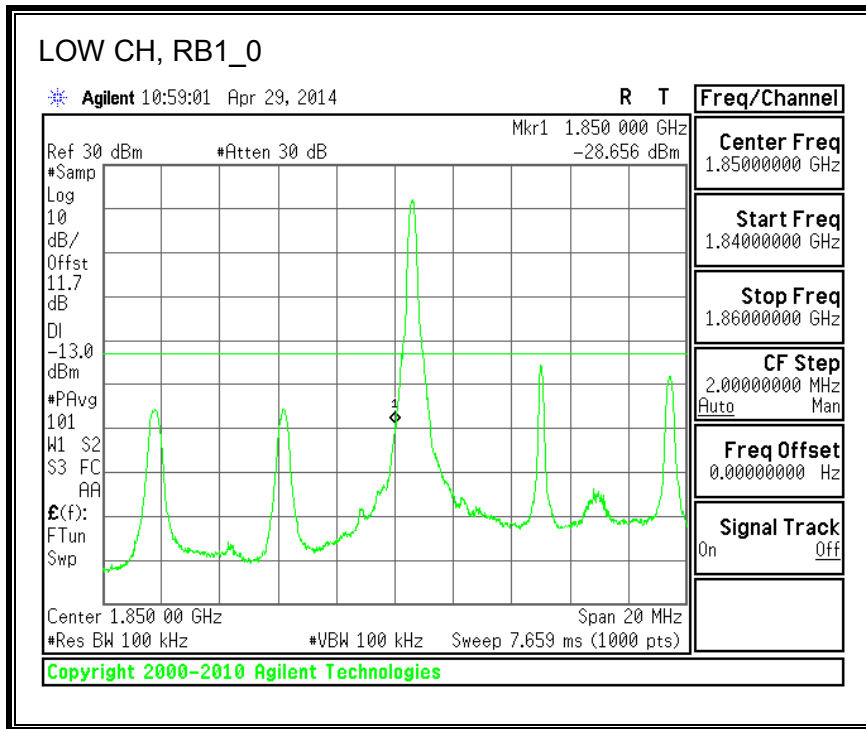


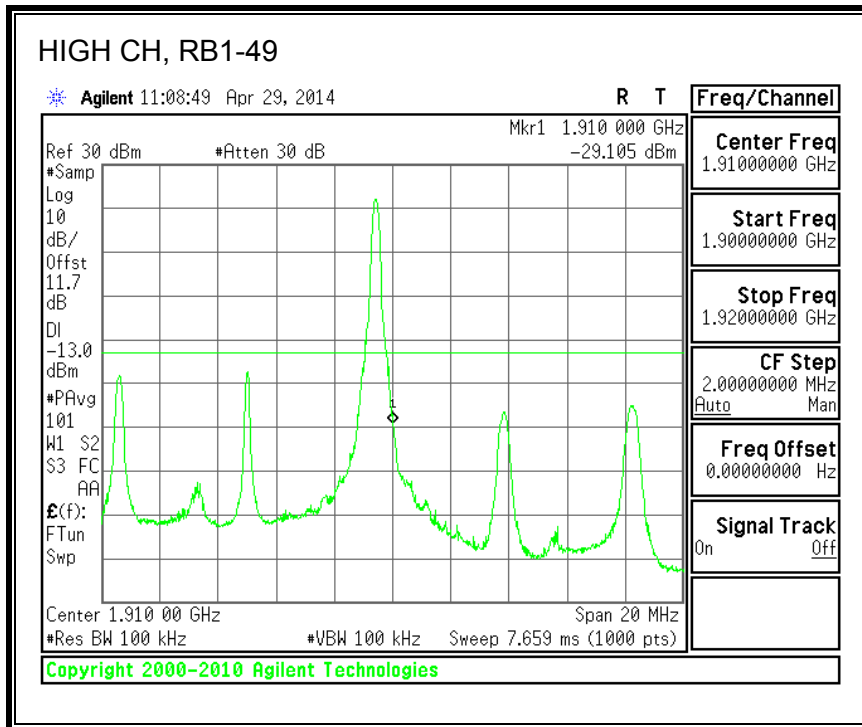
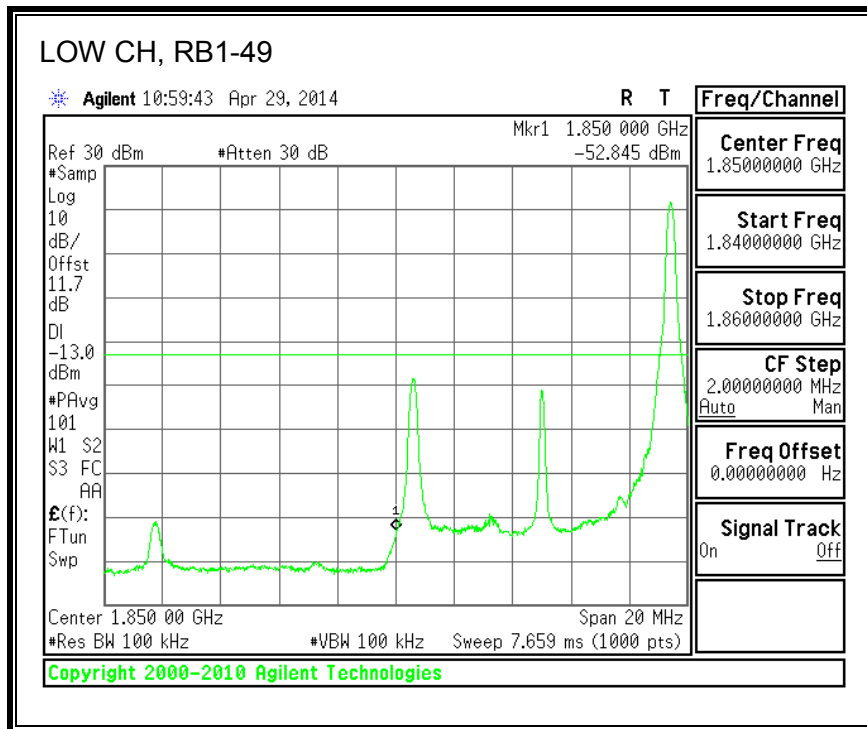


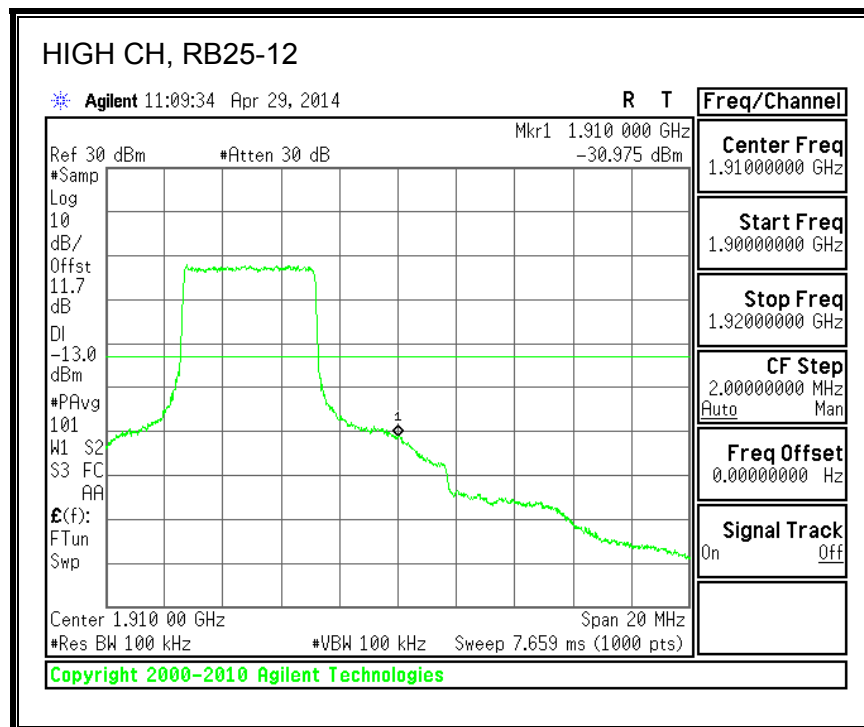
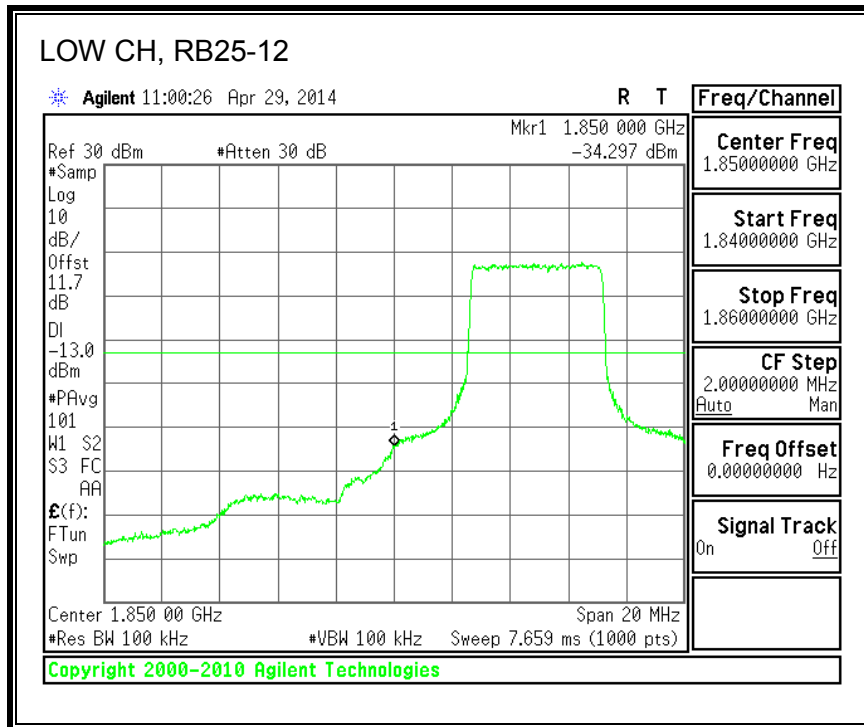


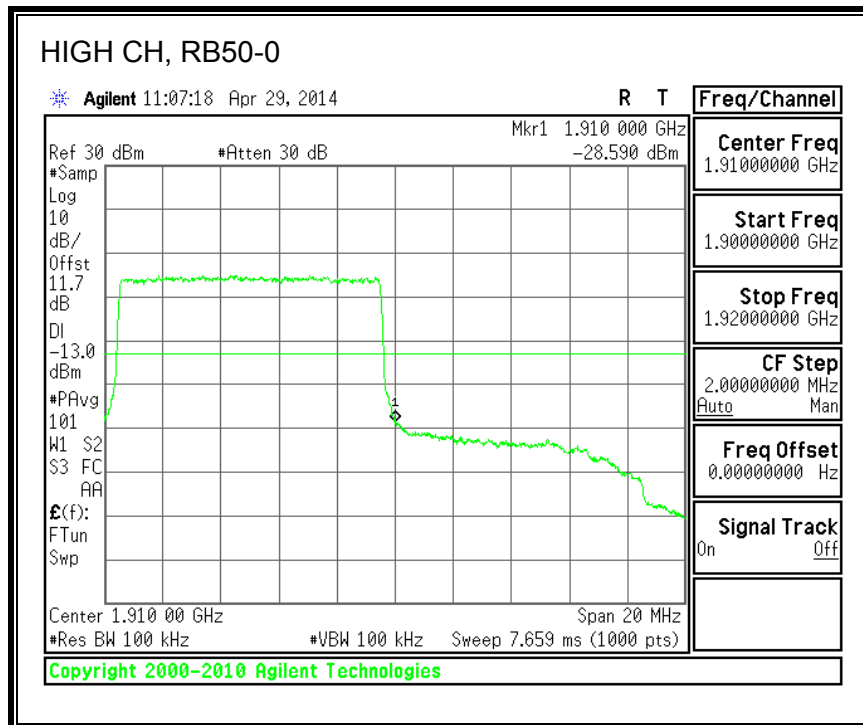
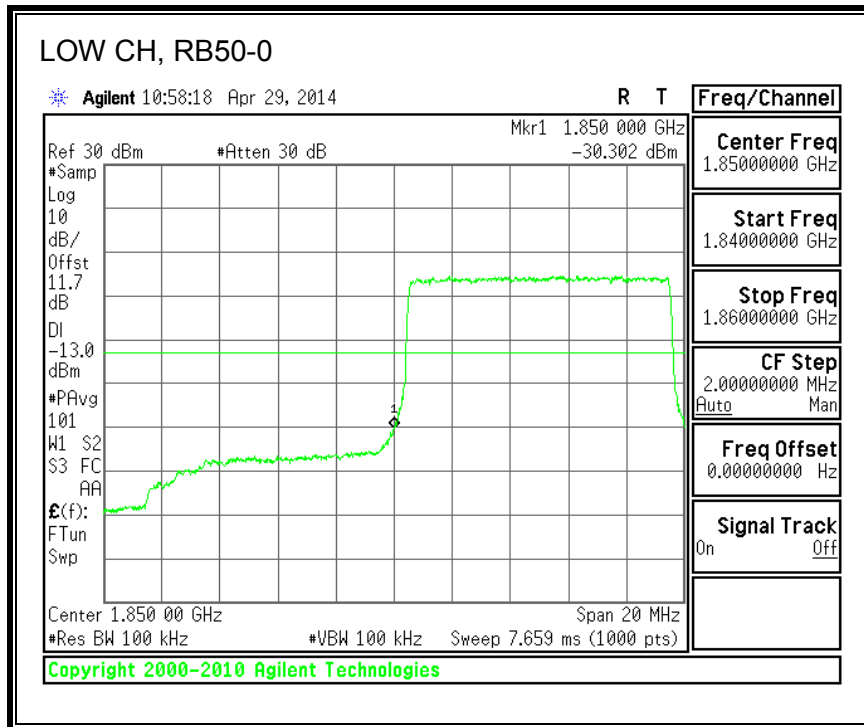


**QPSK, (10.0 MHz BAND WIDTH)**

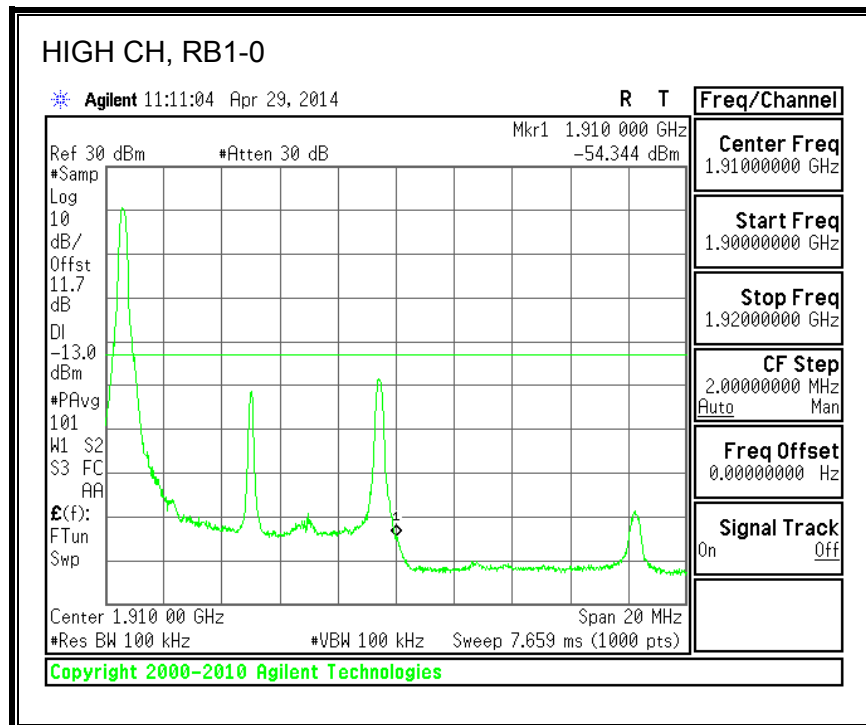
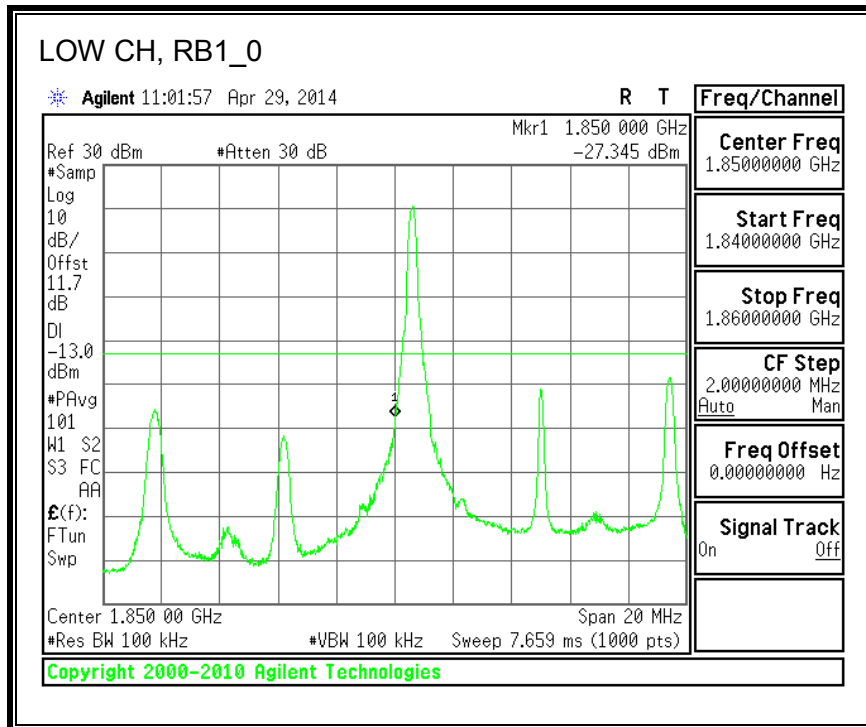


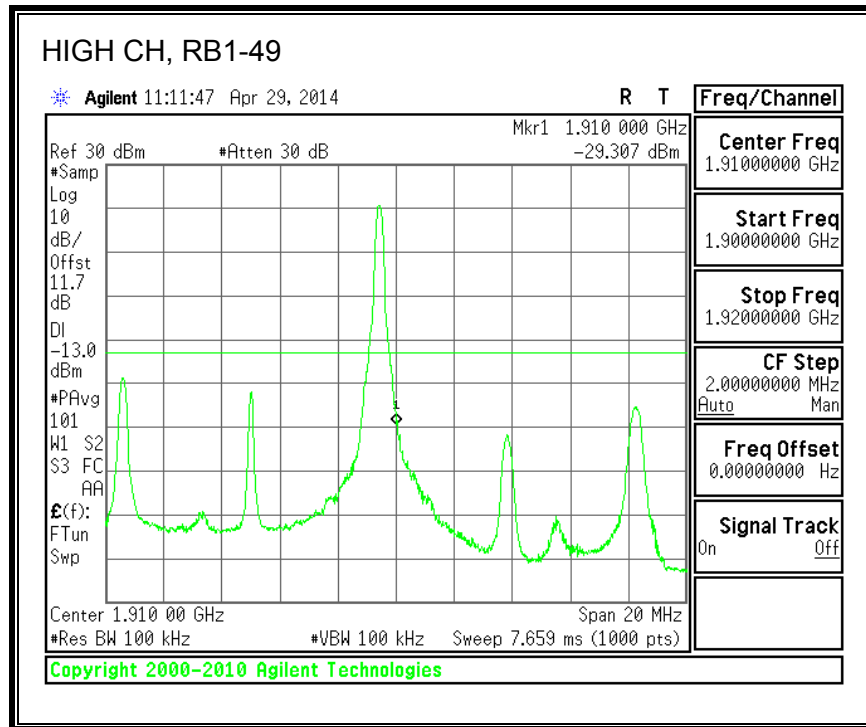
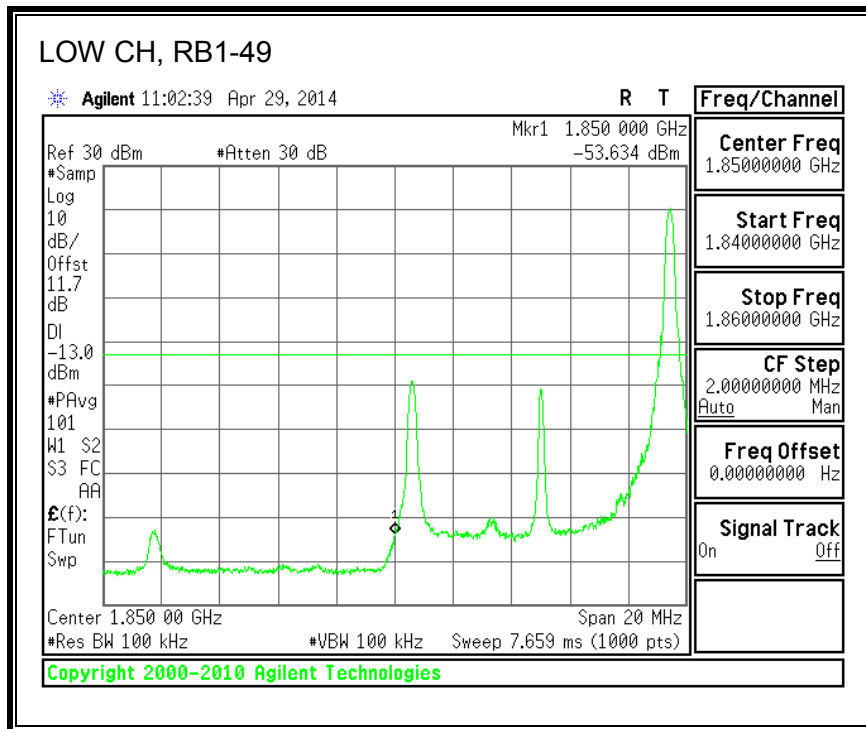




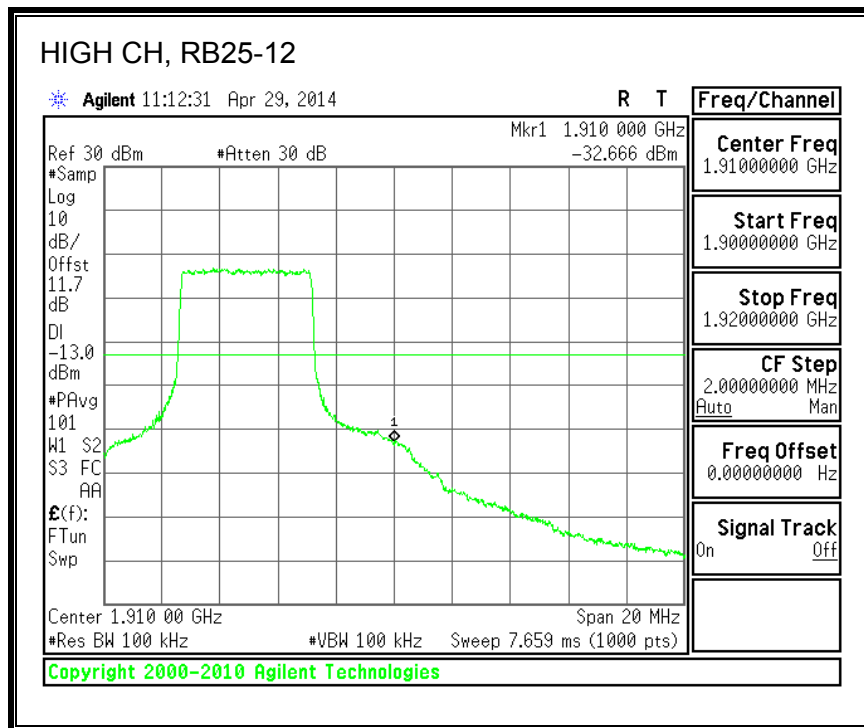
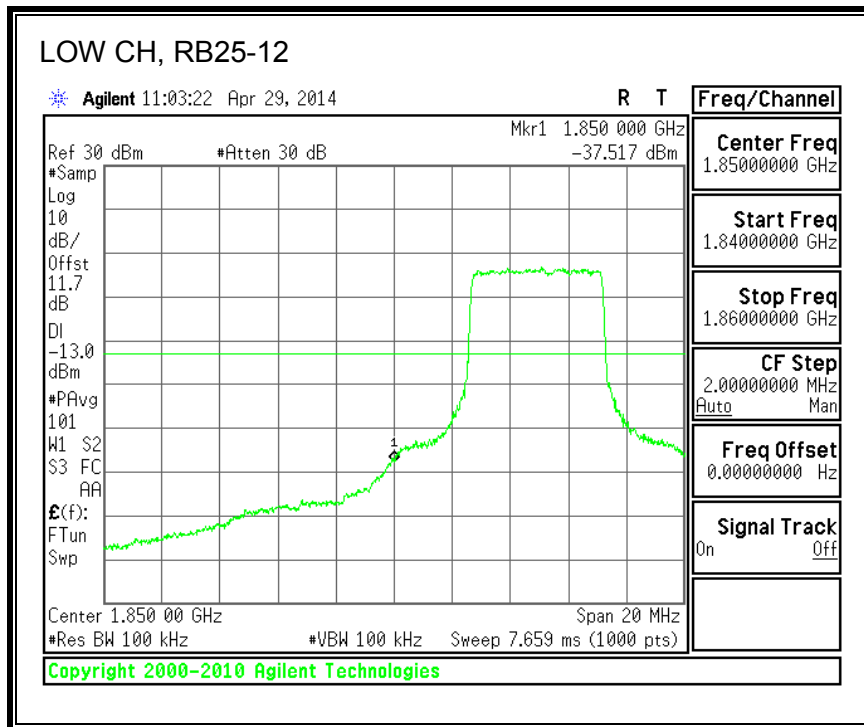


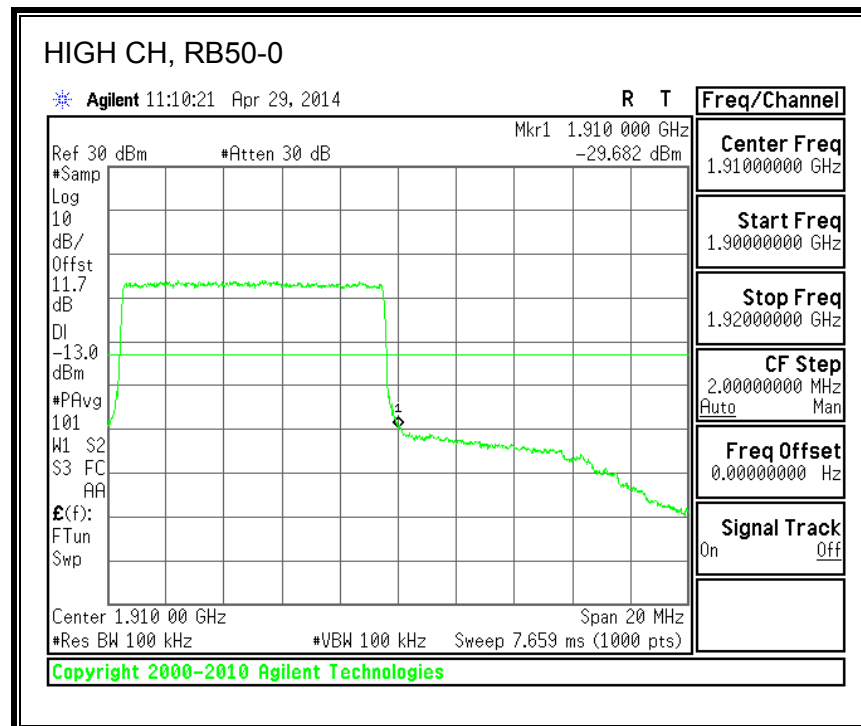
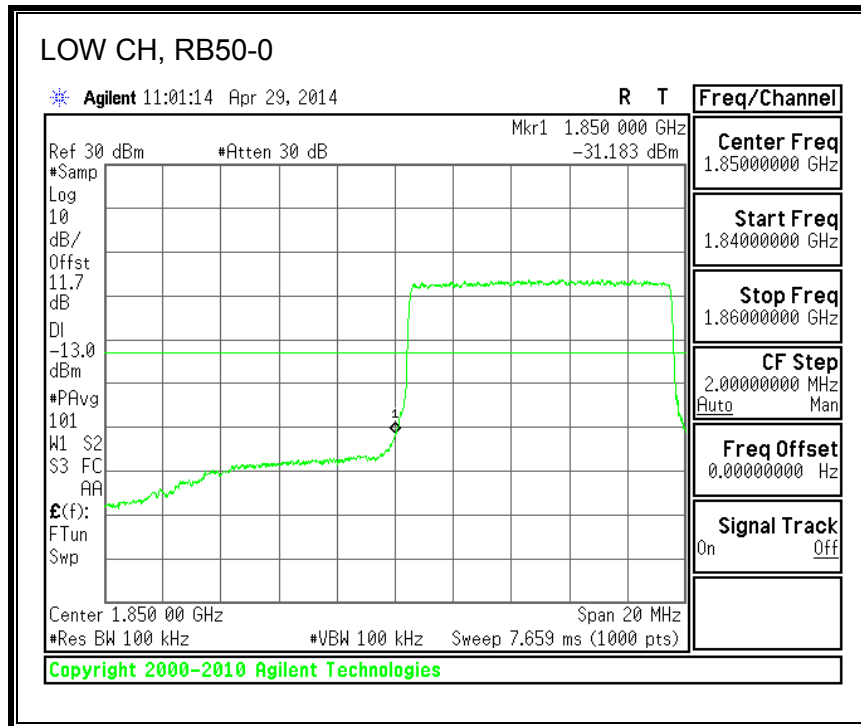
**16QAM, (10.0 MHz BAND WIDTH)**



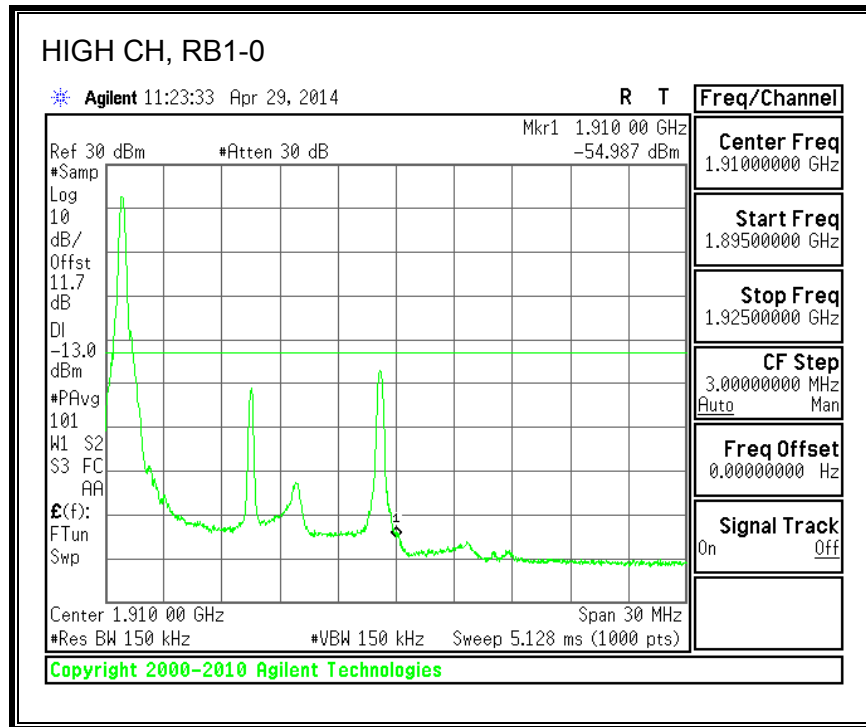
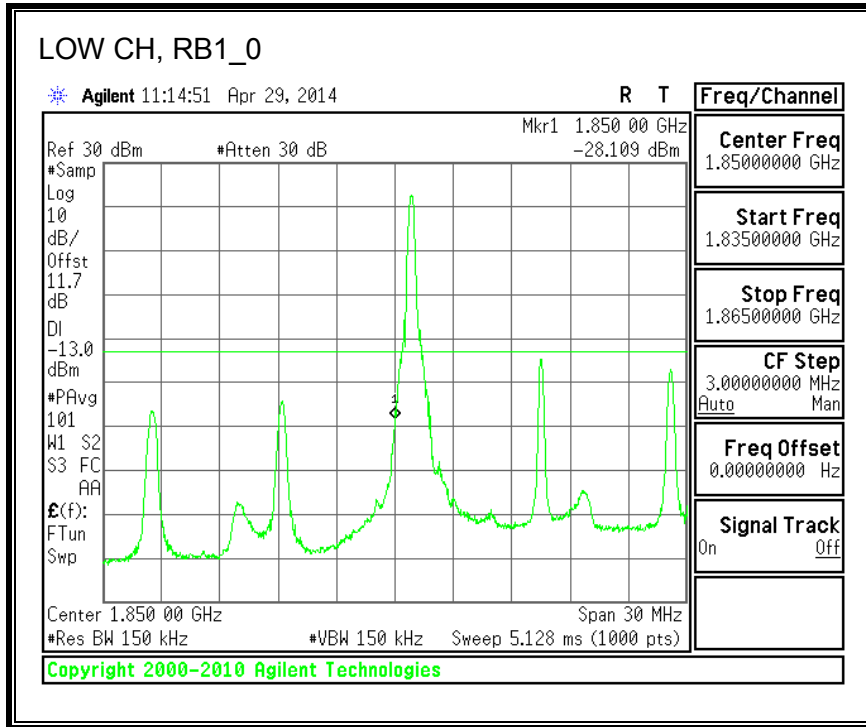


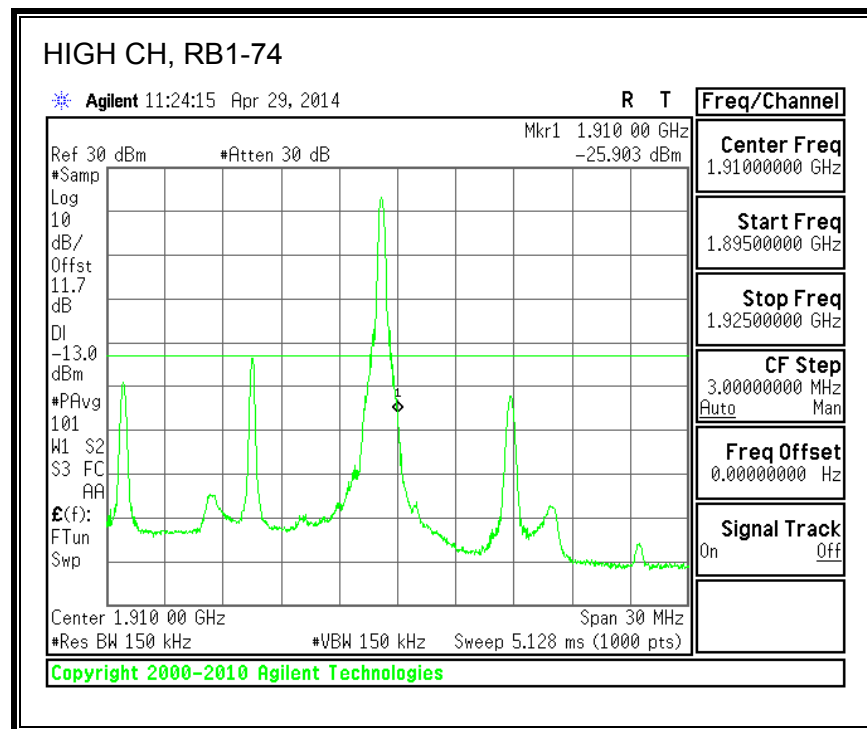
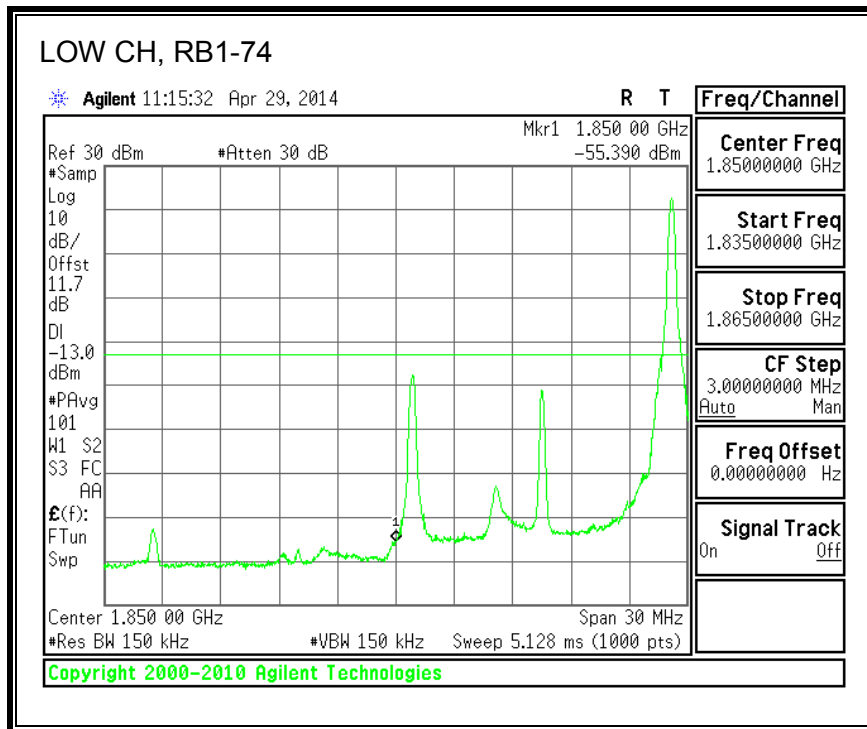


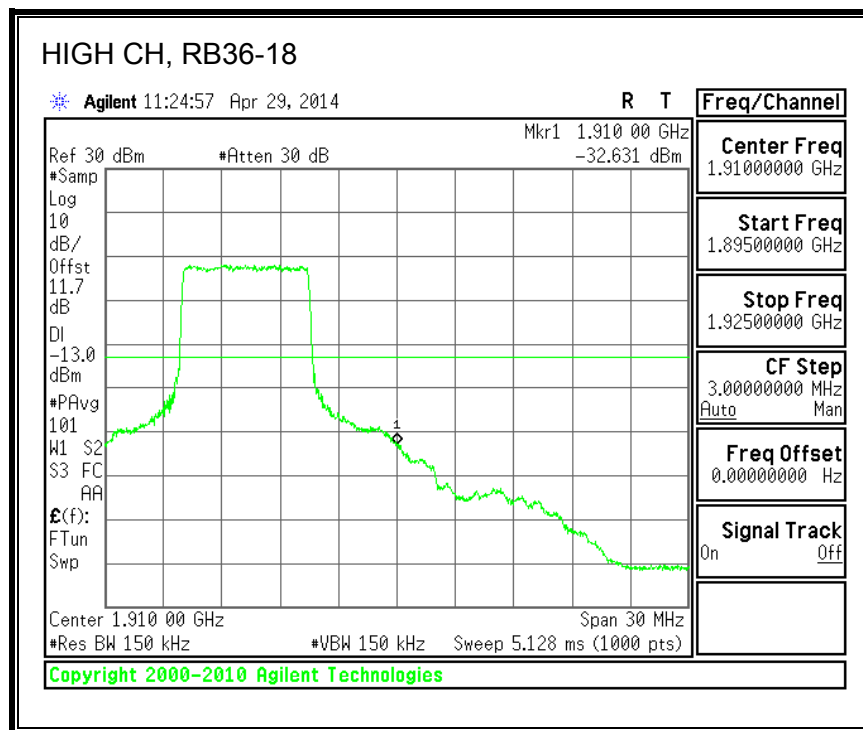
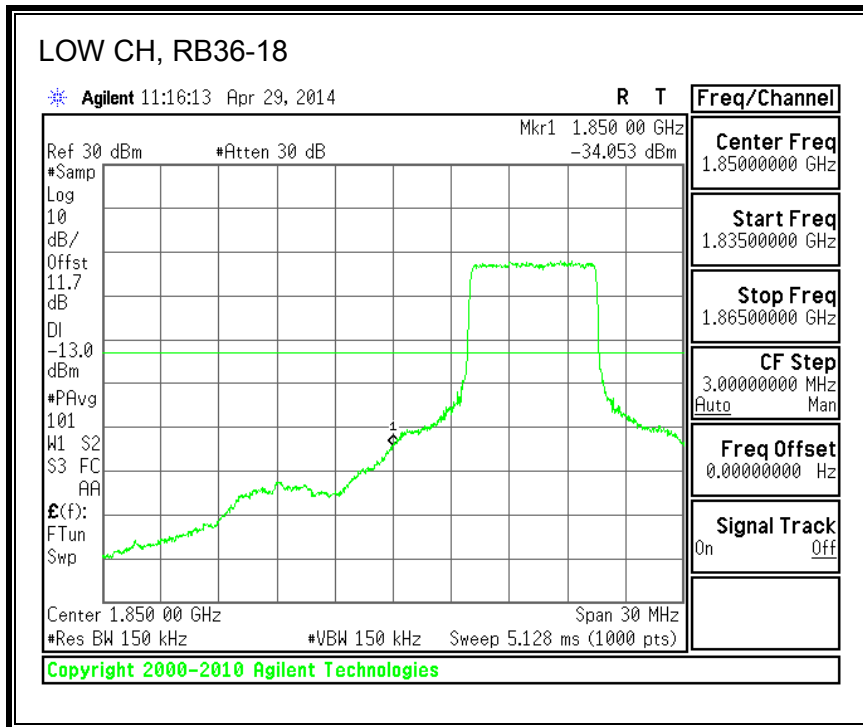


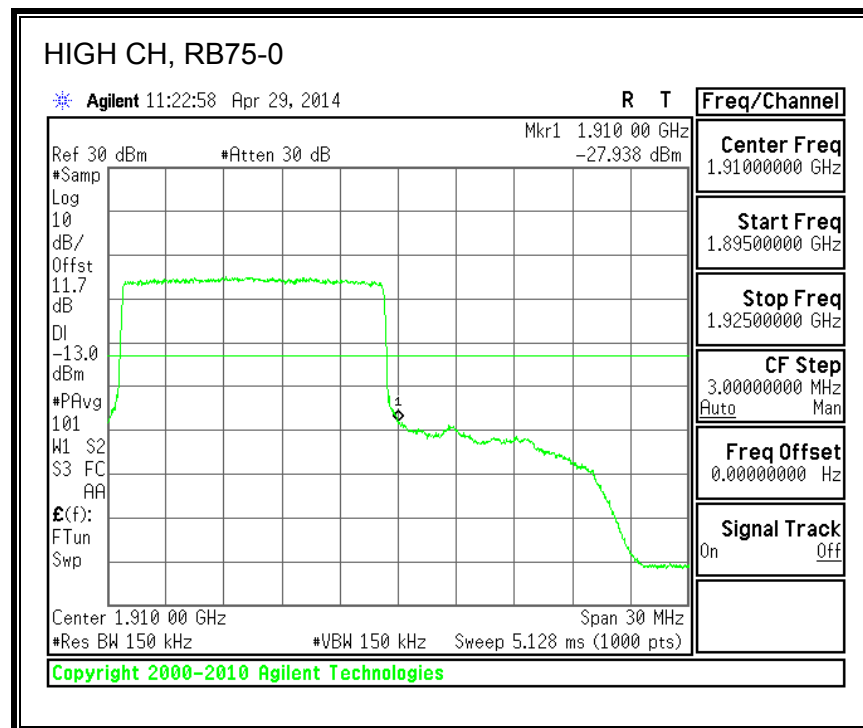
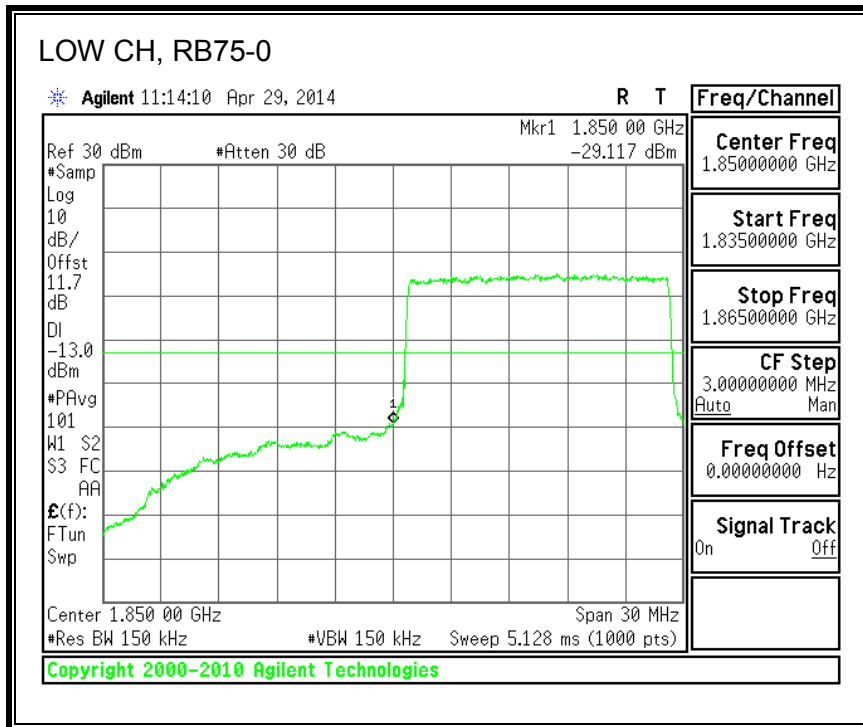


**QPSK, (15.0 MHz BAND WIDTH)**

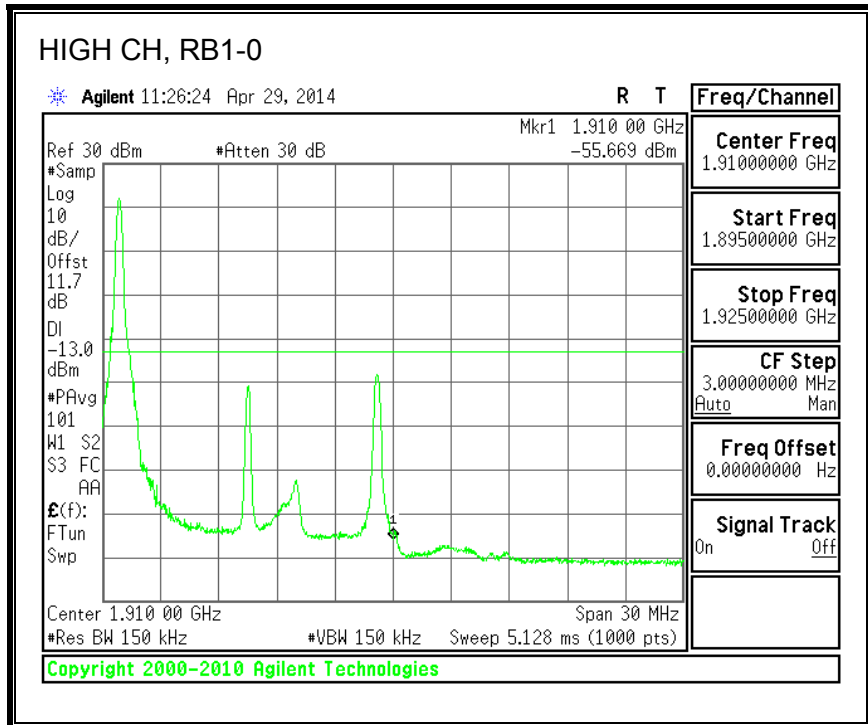
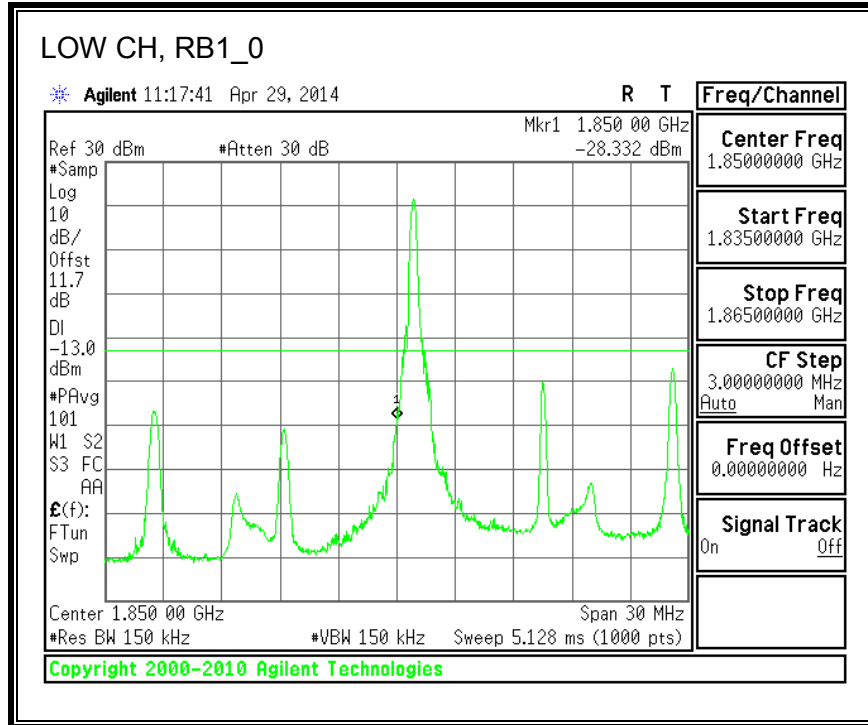


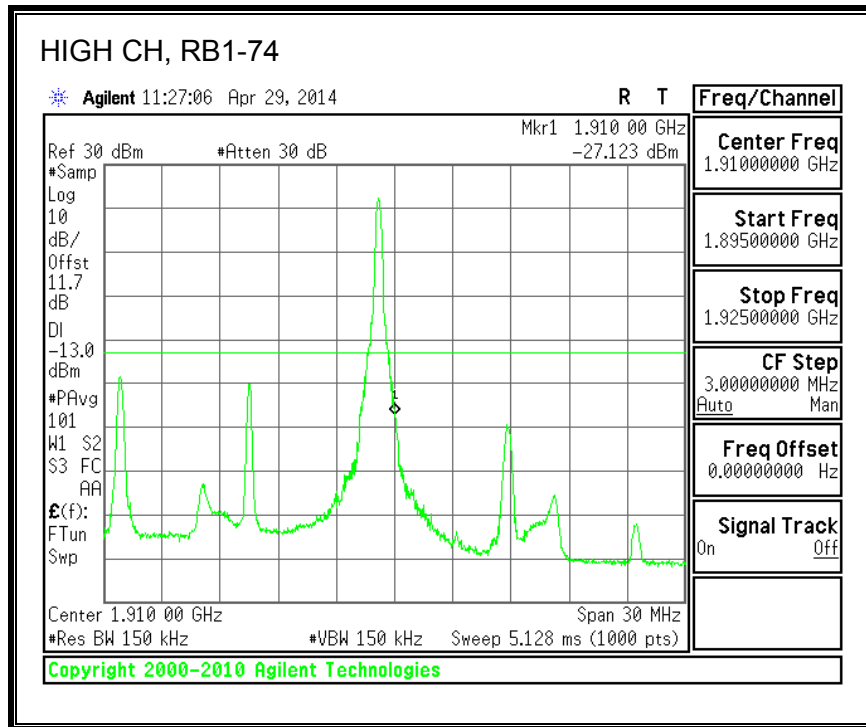
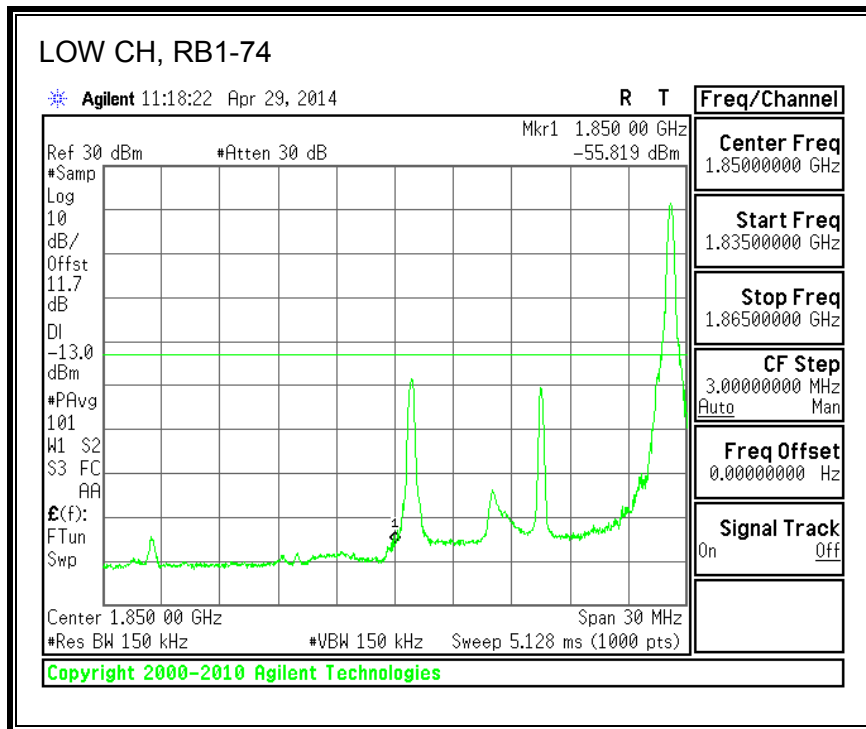




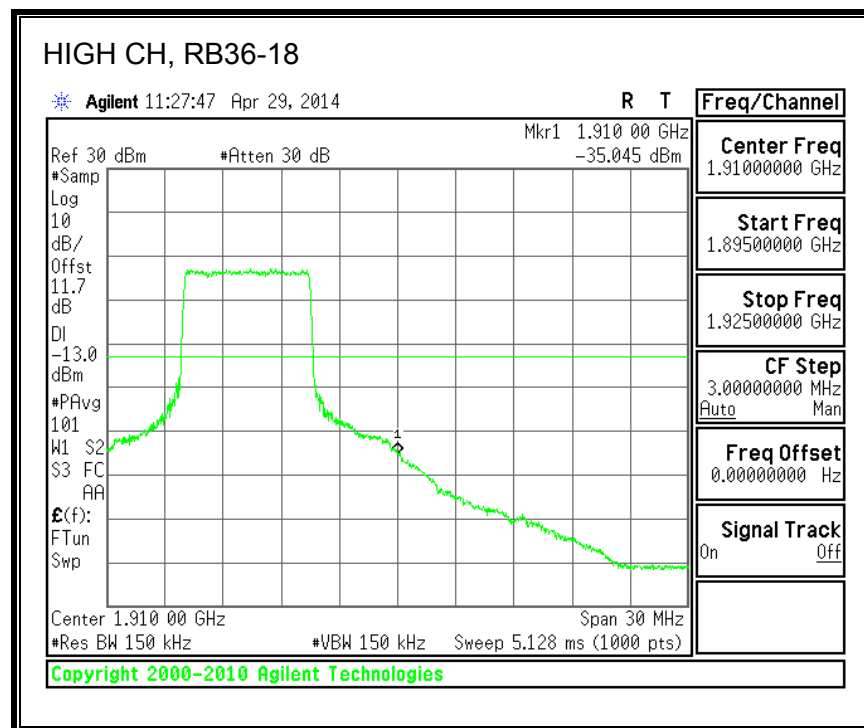
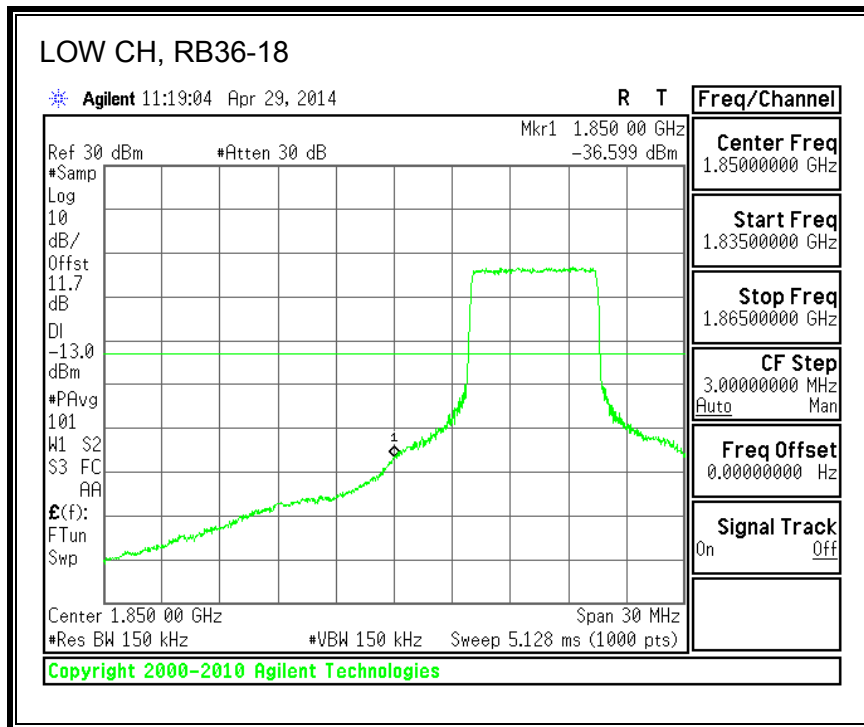


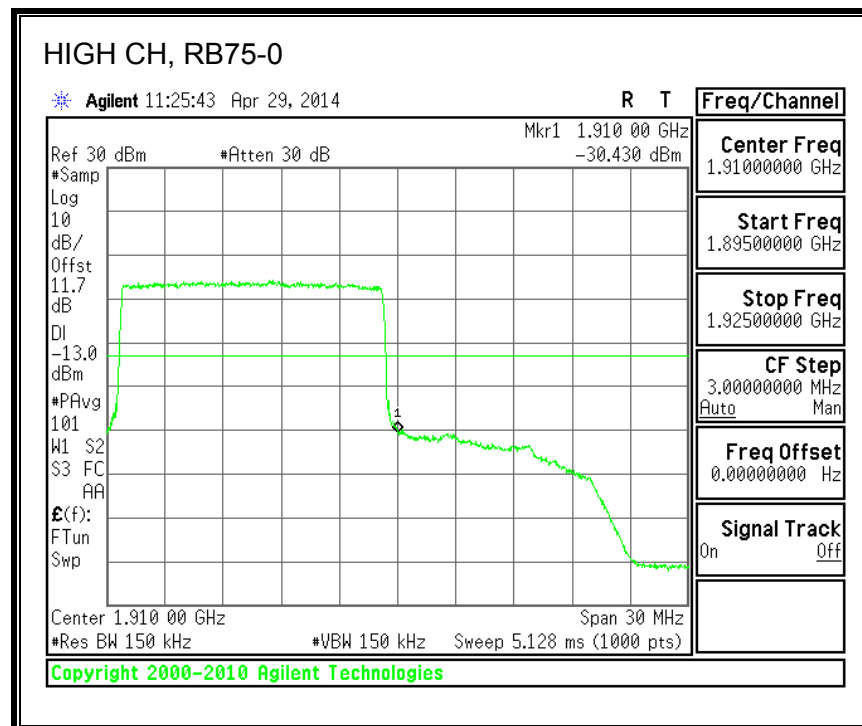
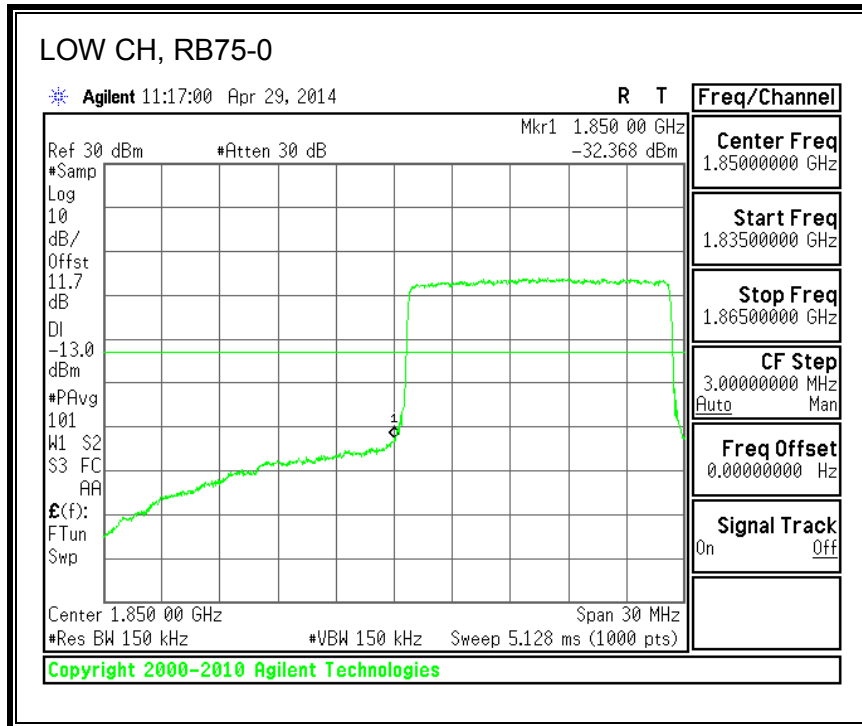
**16QAM, (15.0 MHz BAND WIDTH)**



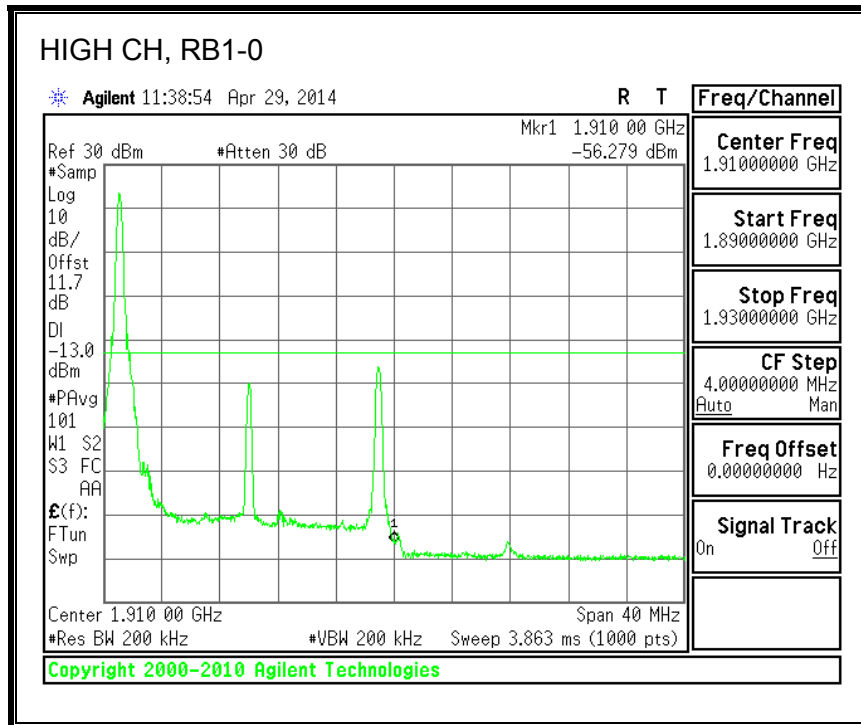
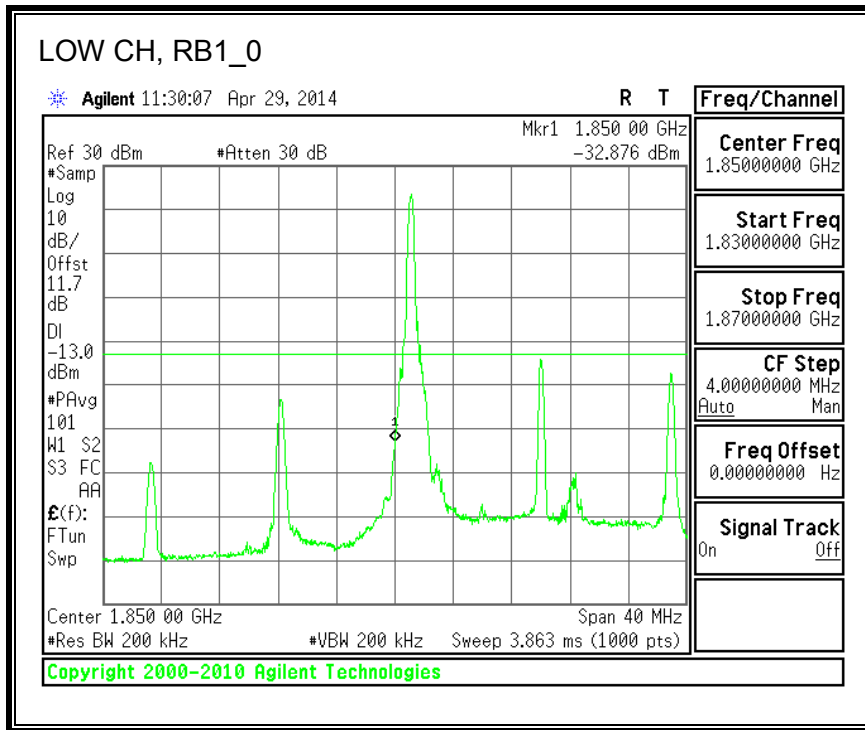


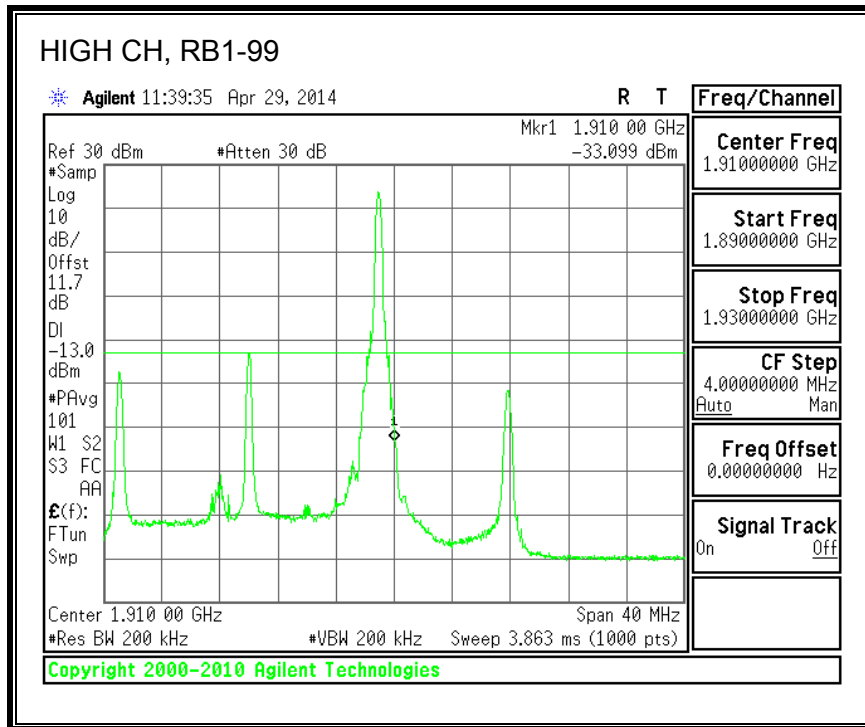
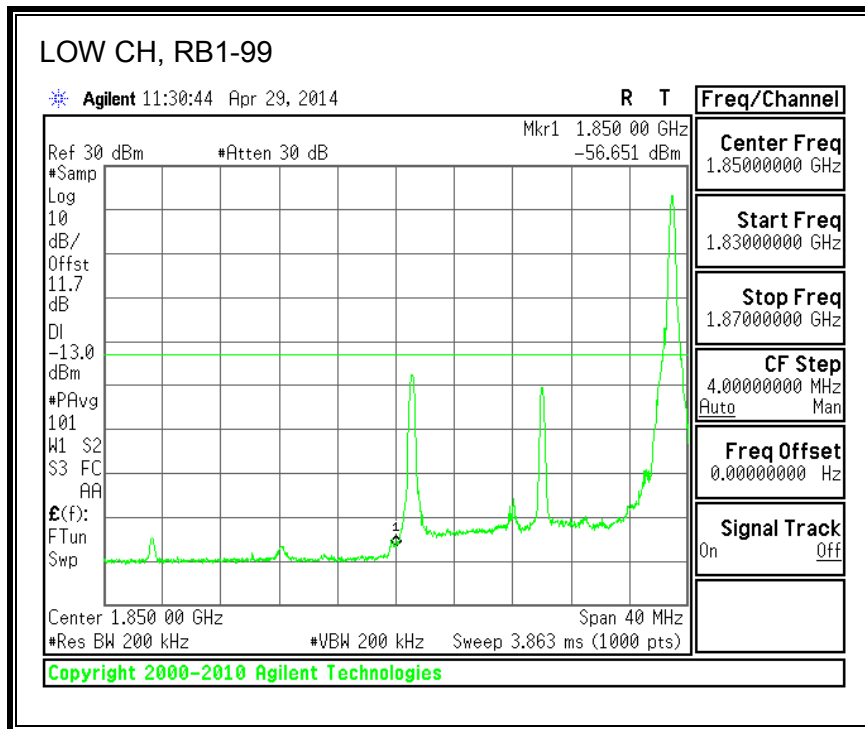


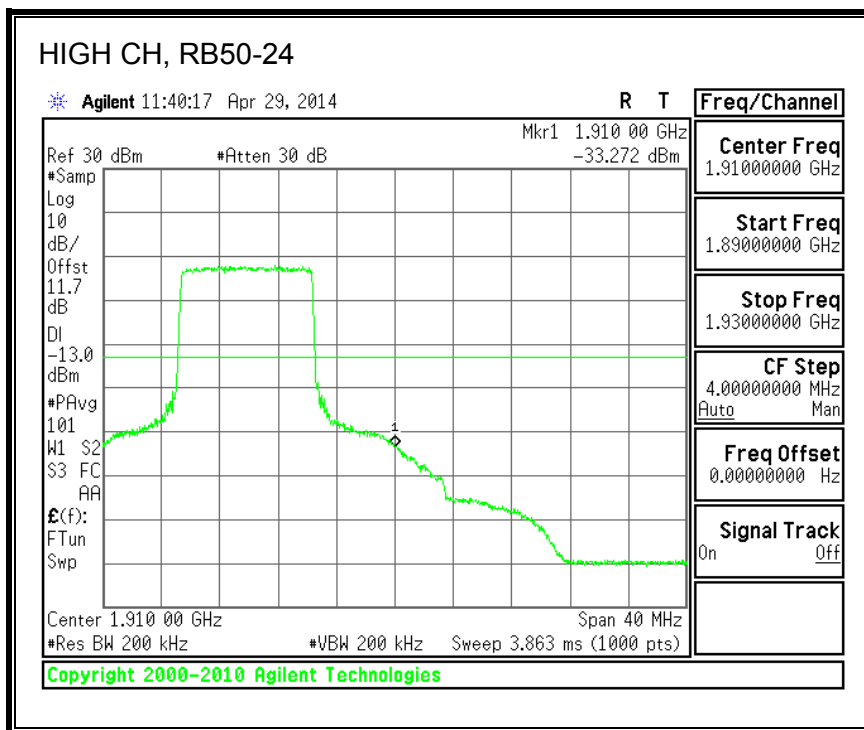
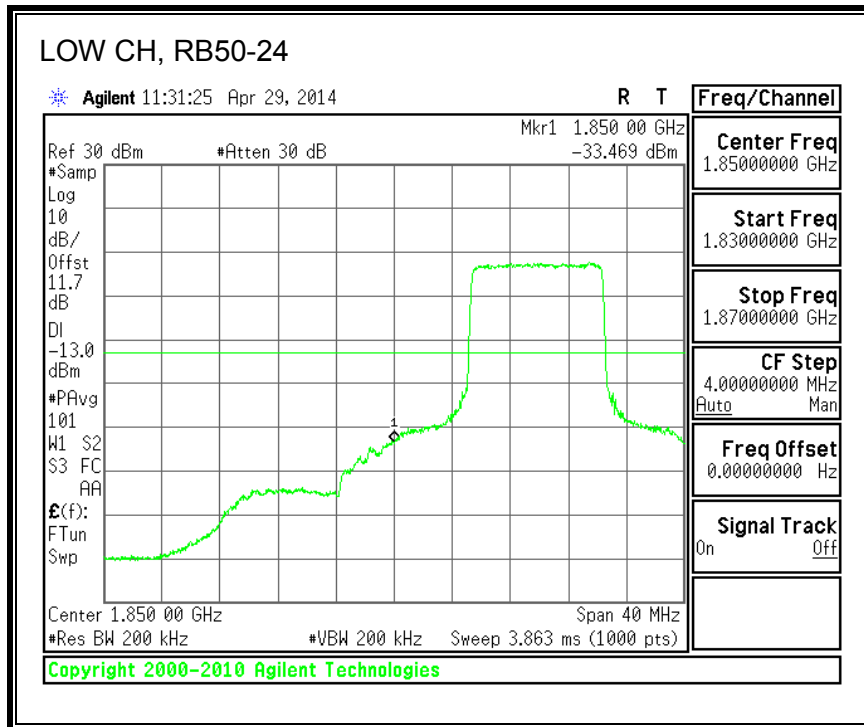


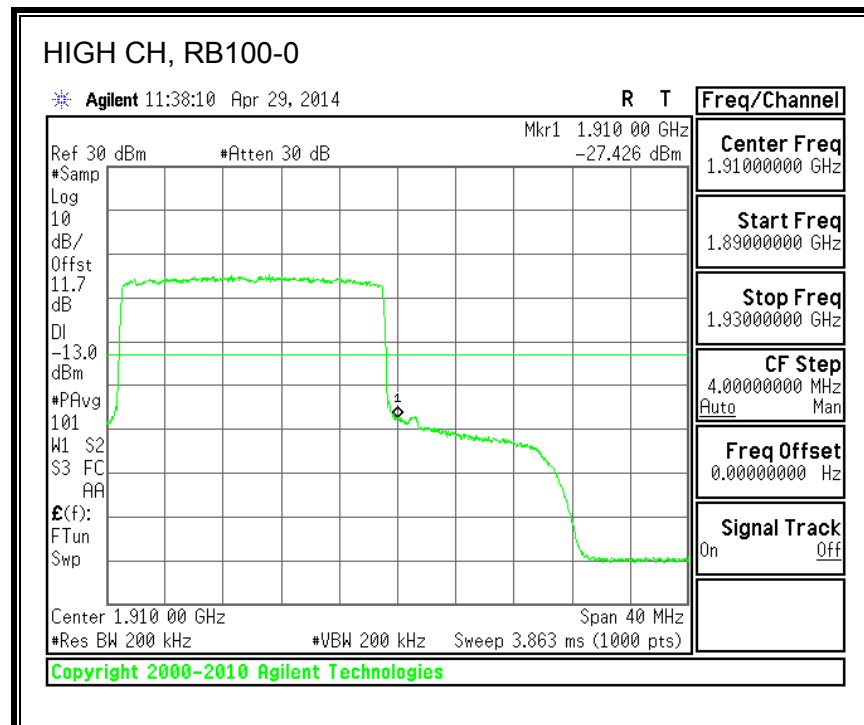
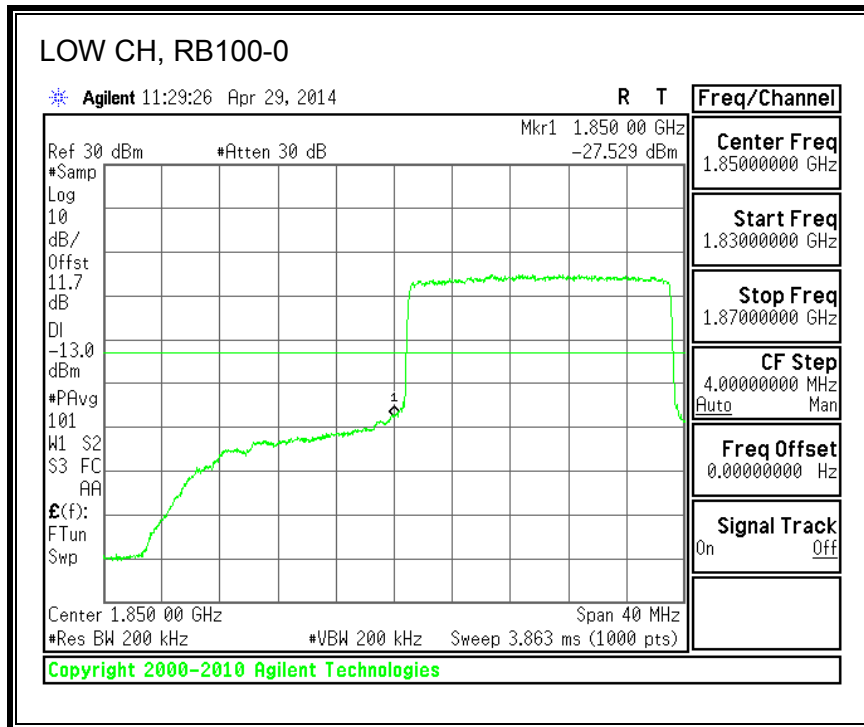


**QPSK, (20.0 MHz BAND WIDTH)**

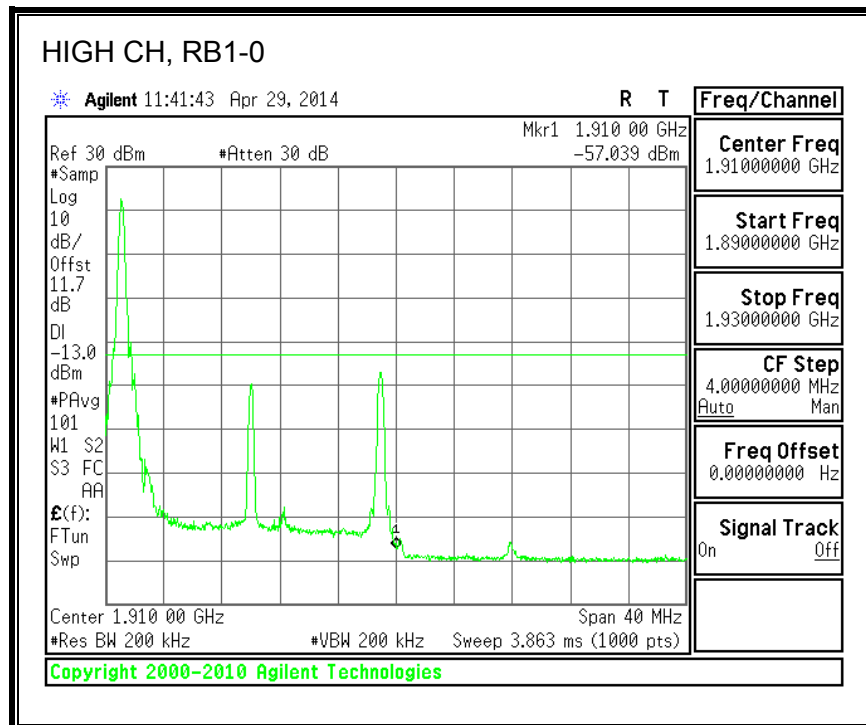
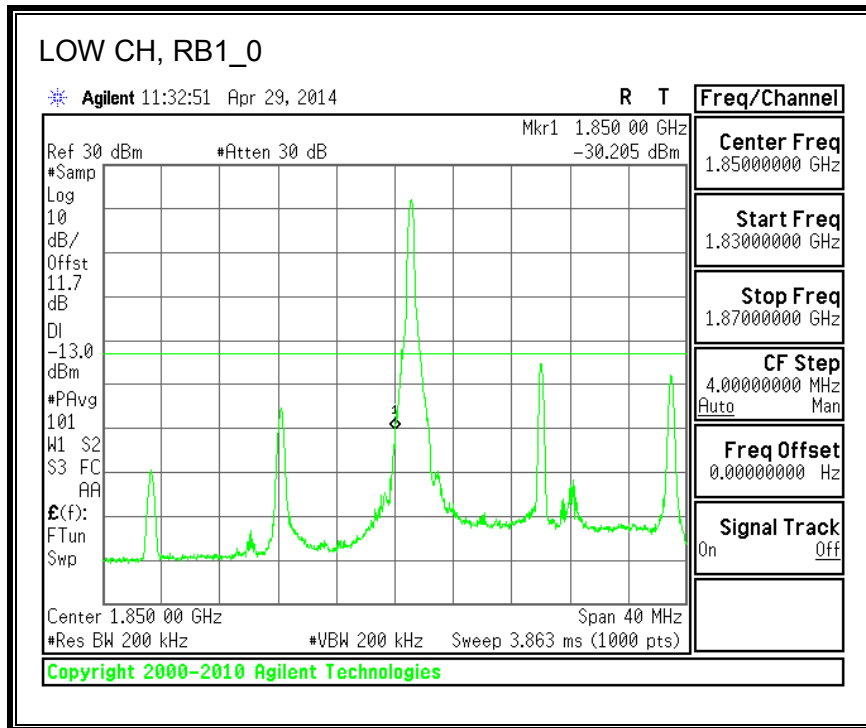


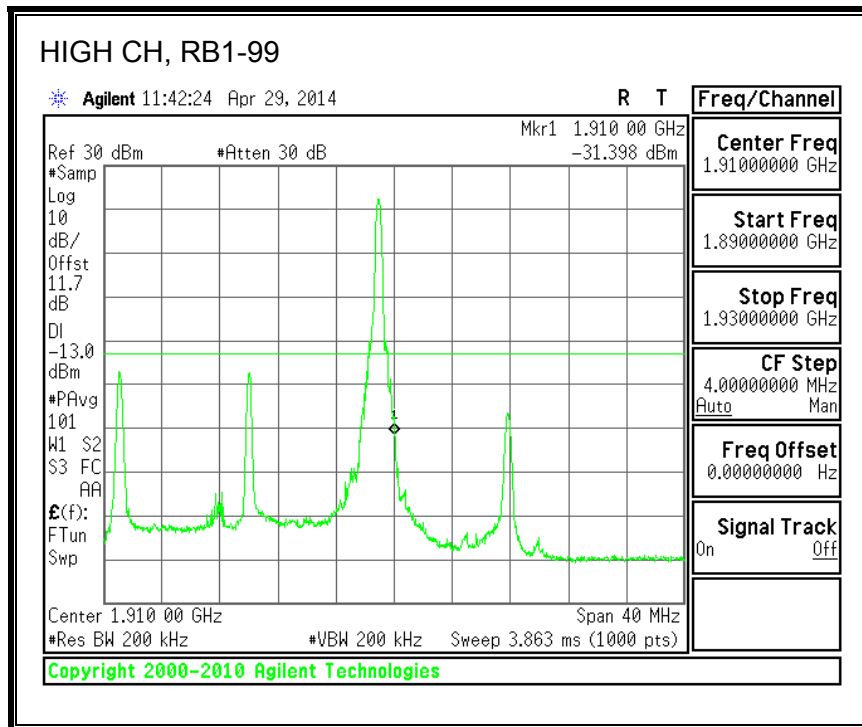
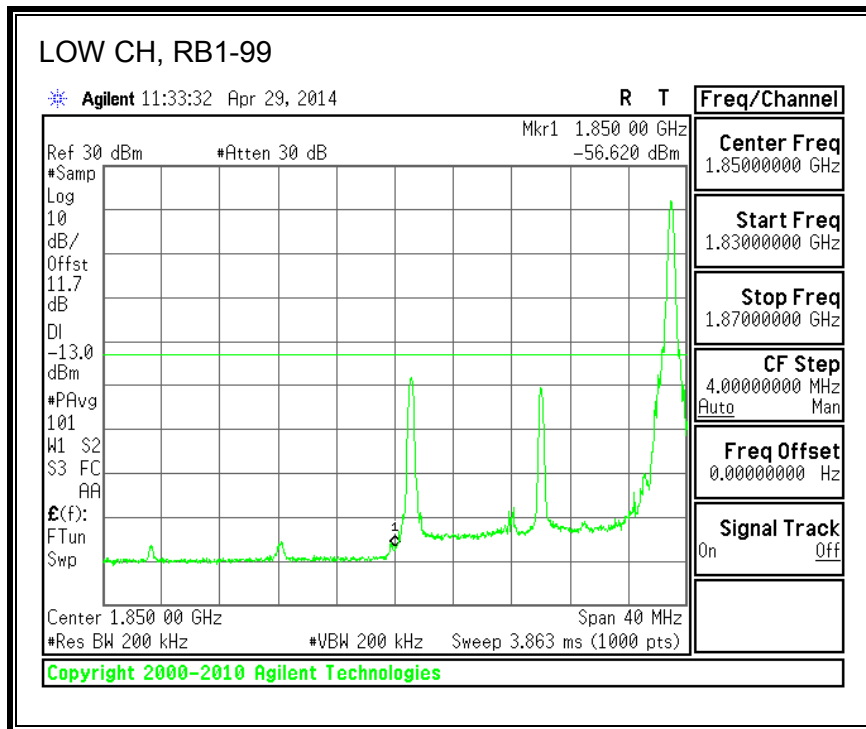




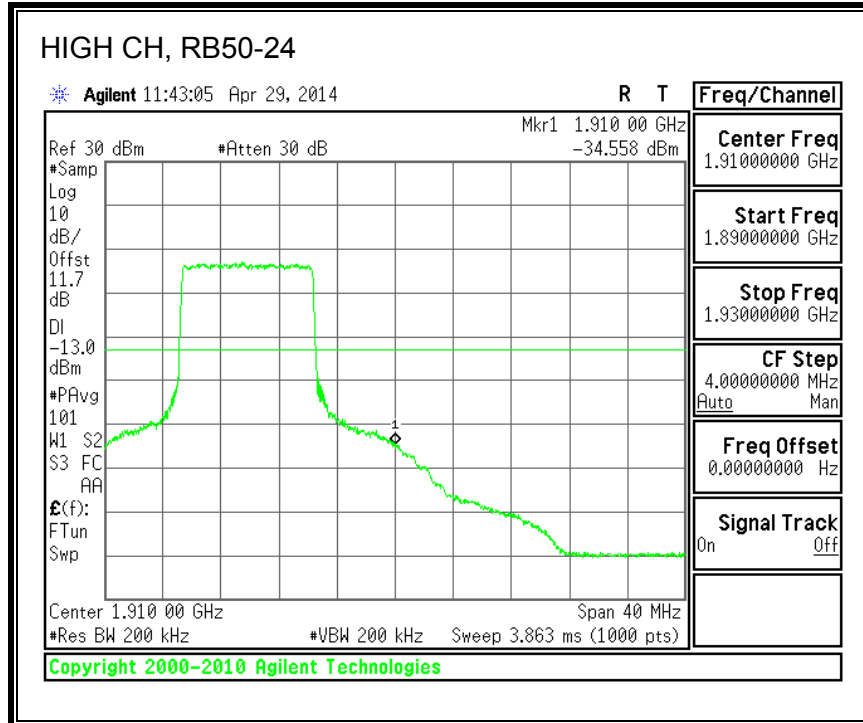
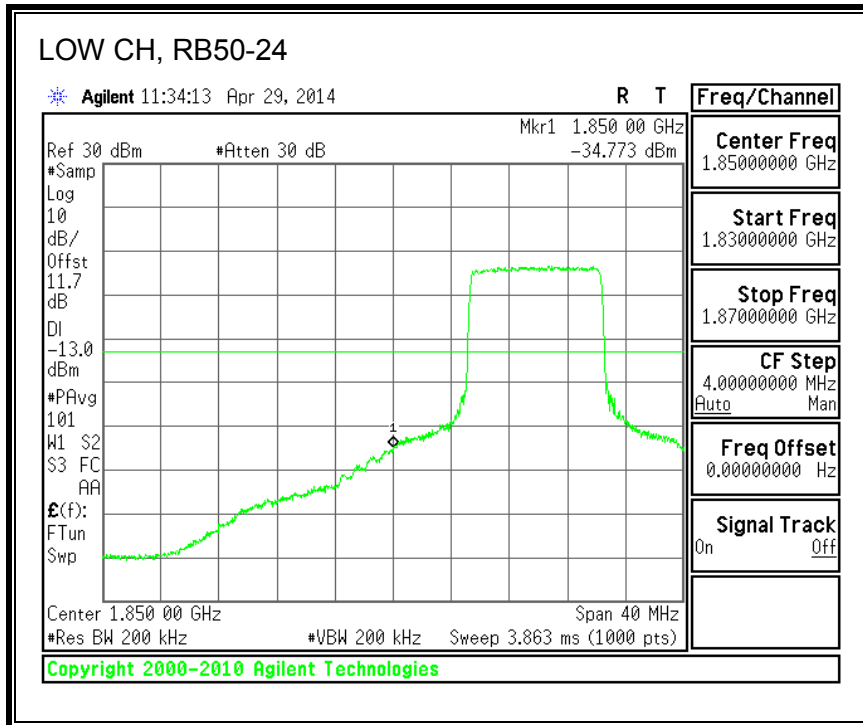


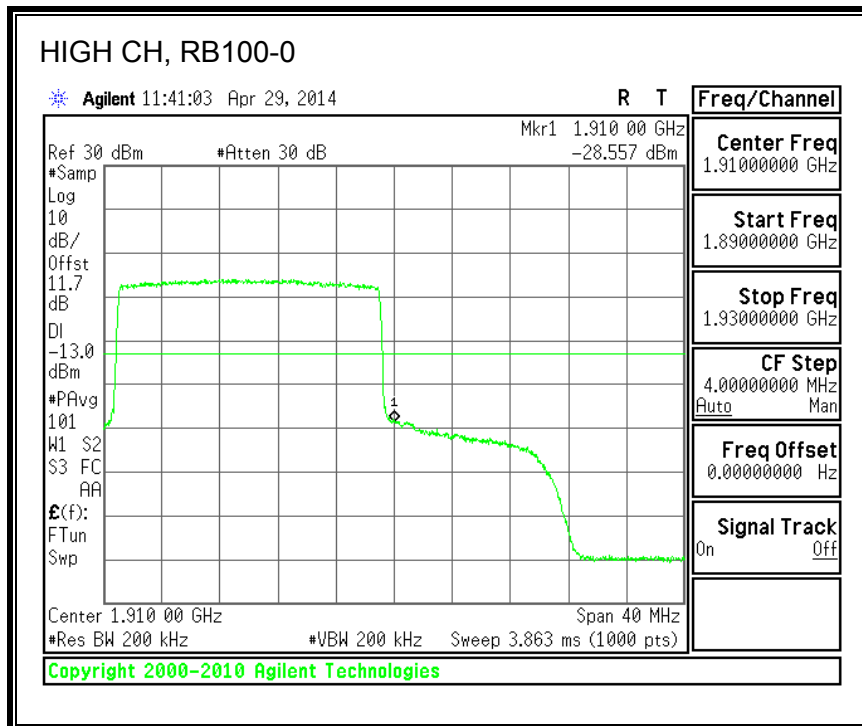
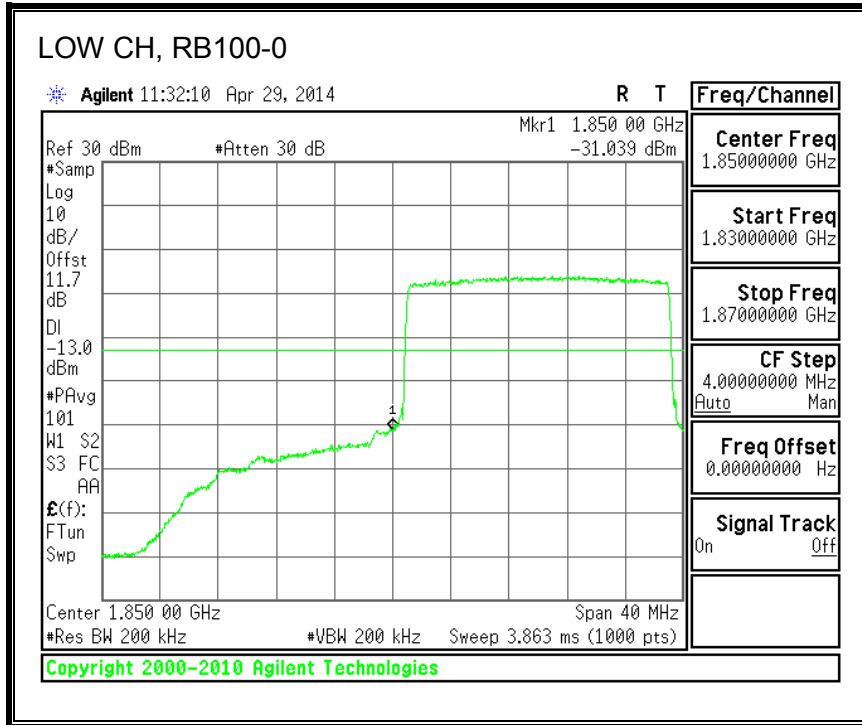
**16QAM, (20.0 MHz BAND WIDTH)**



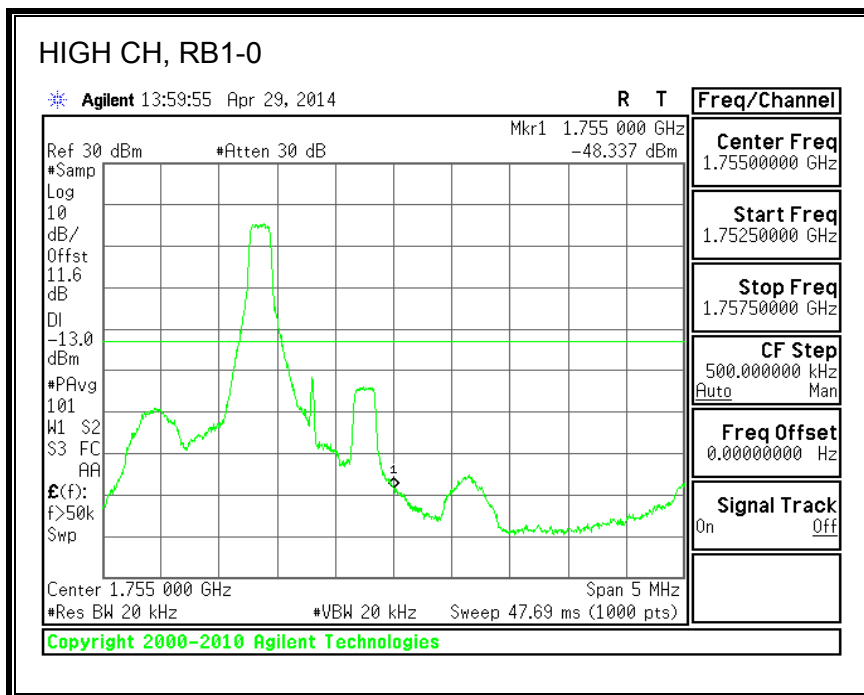
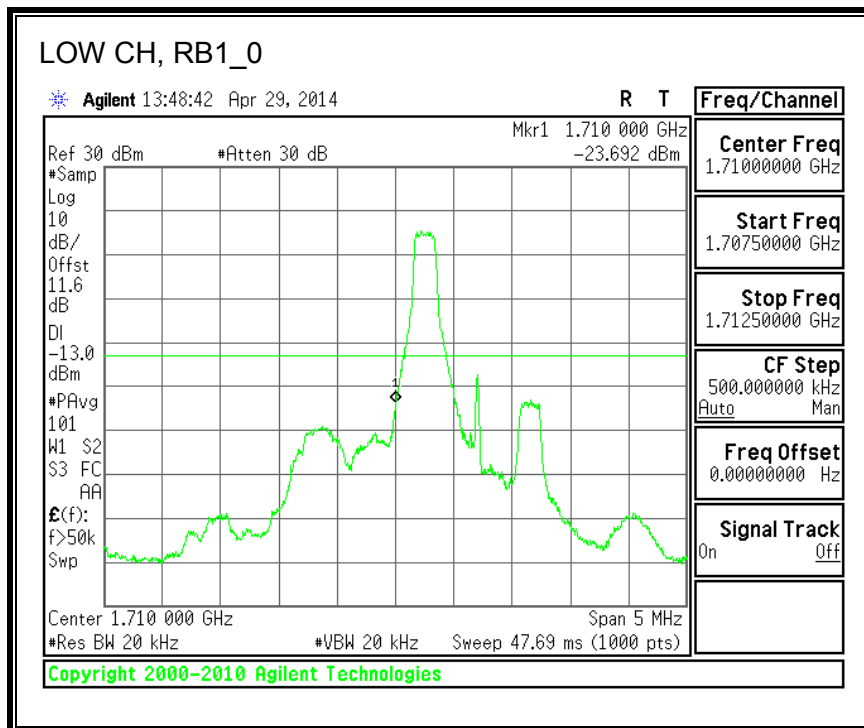


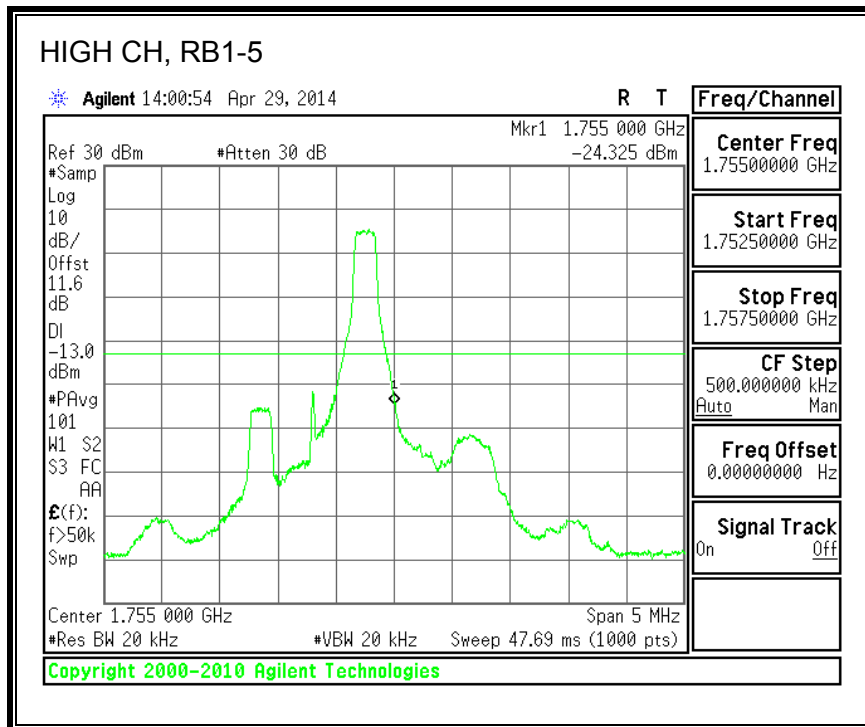
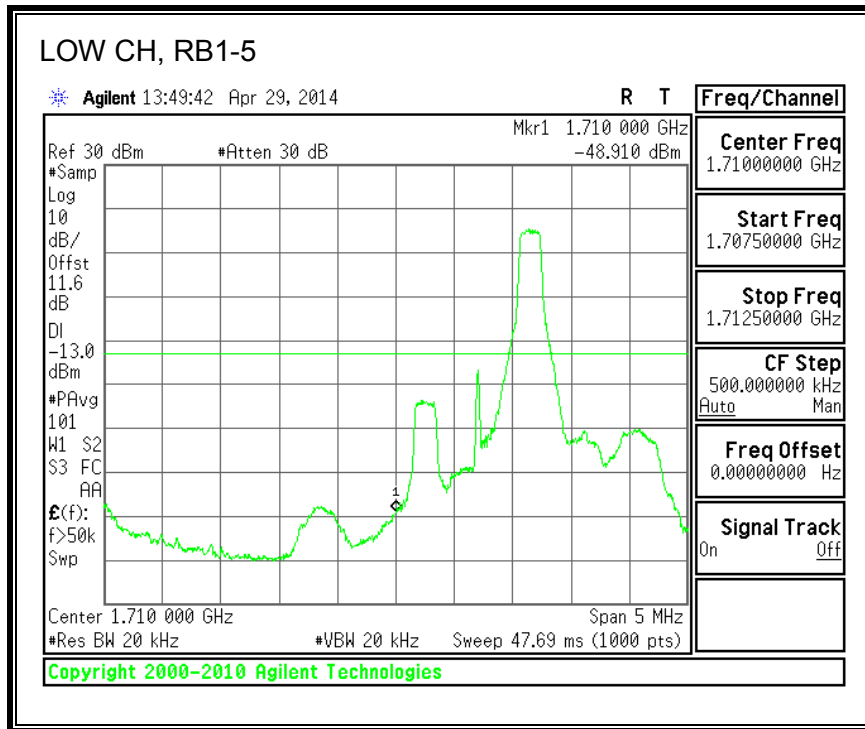


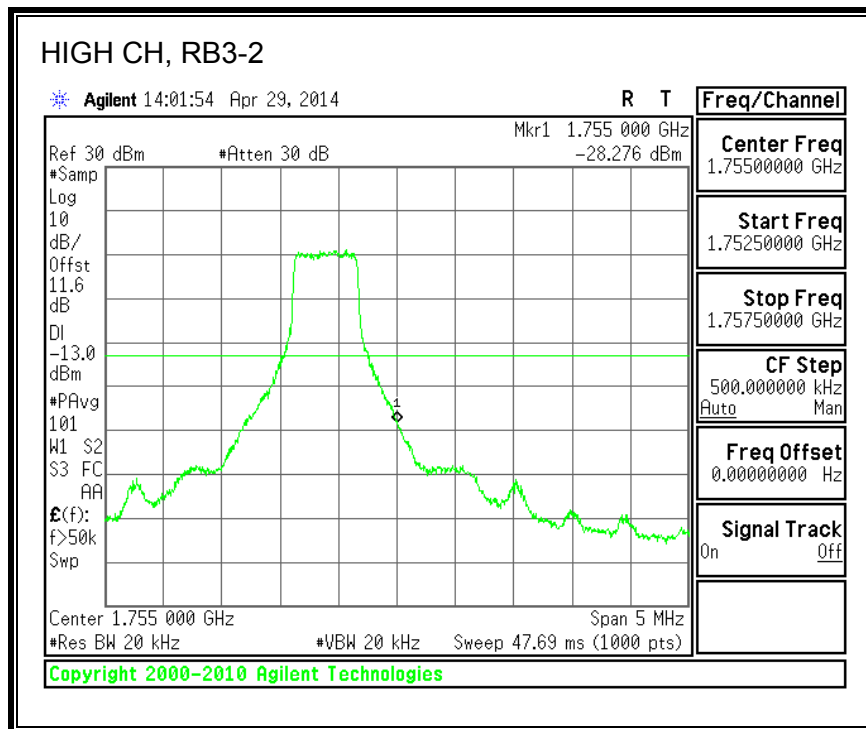
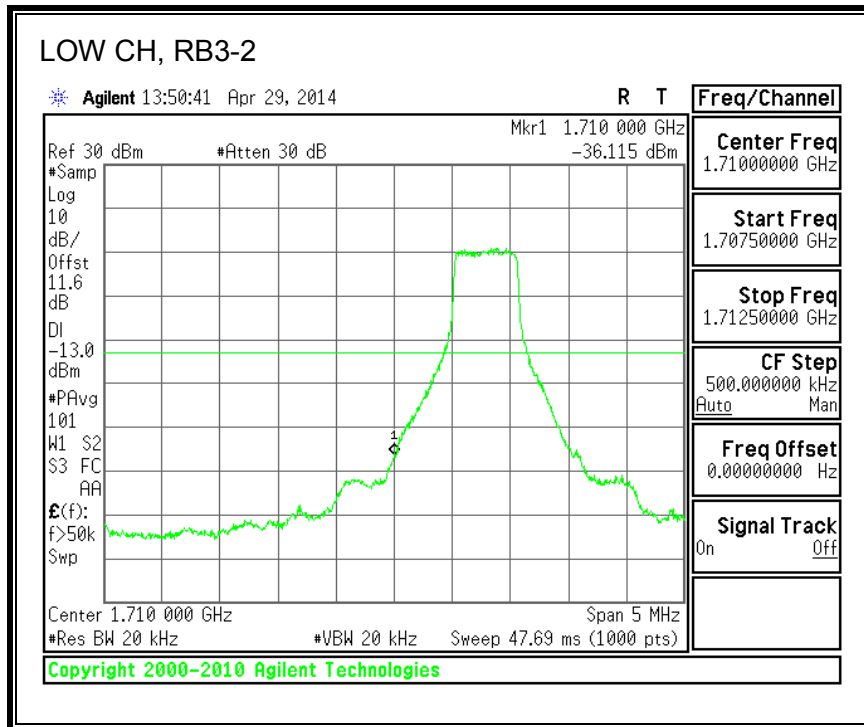


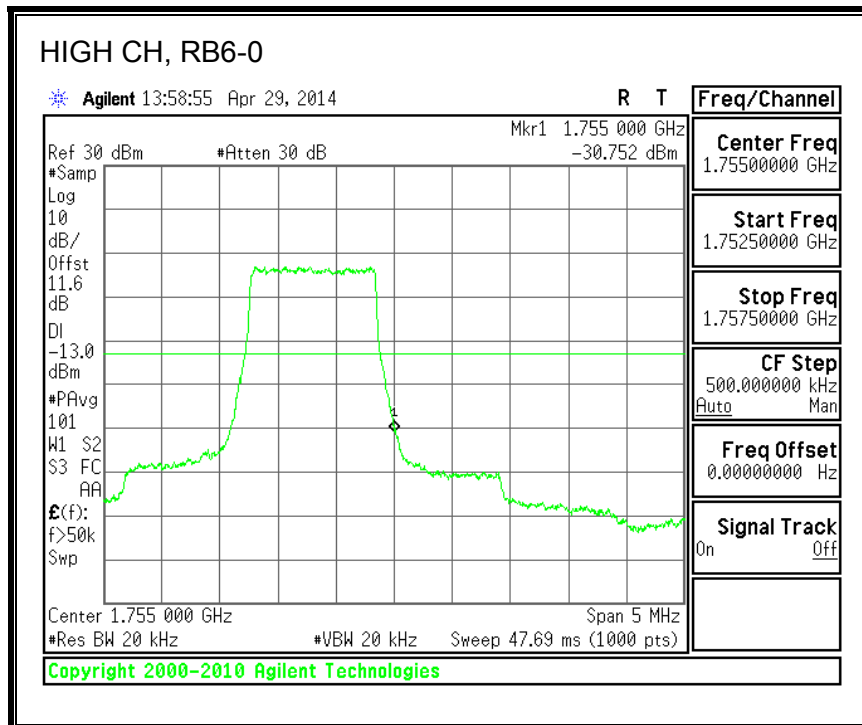
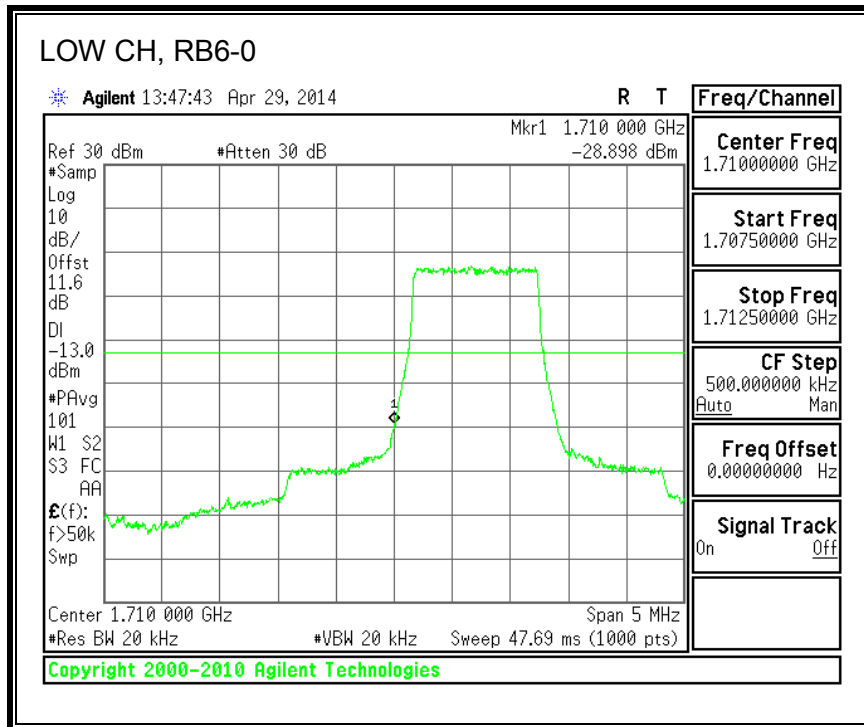


**8.2.2. LTE BAND 4 BANDEDGE**  
**QPSK, (1.4 MHz BAND WIDTH)**

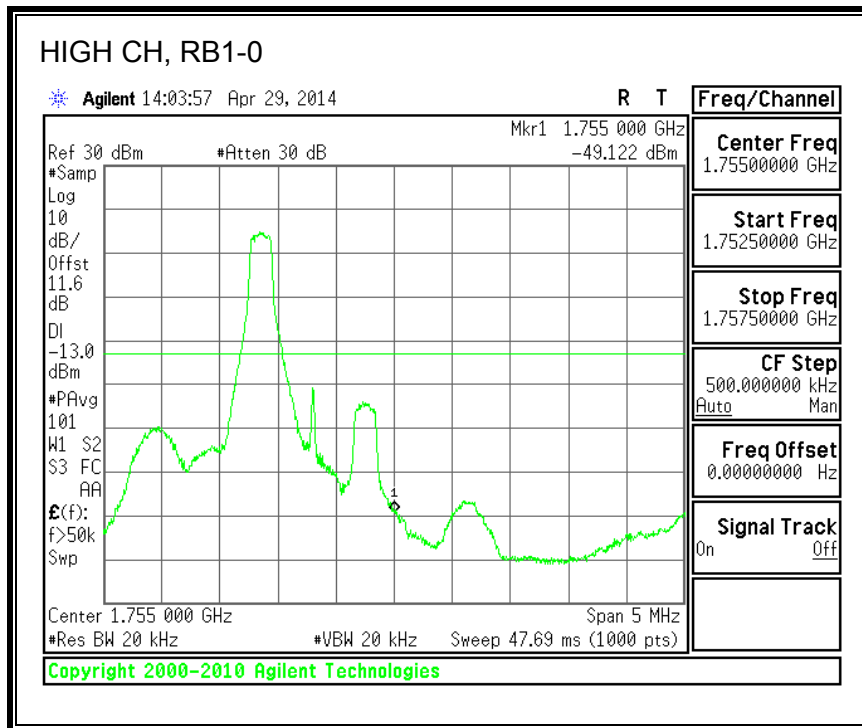
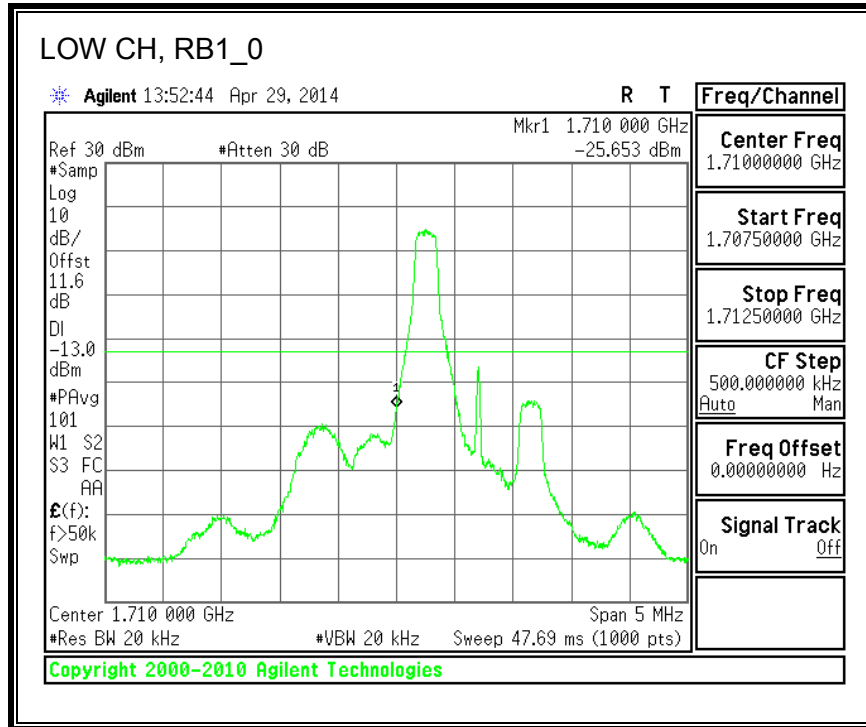


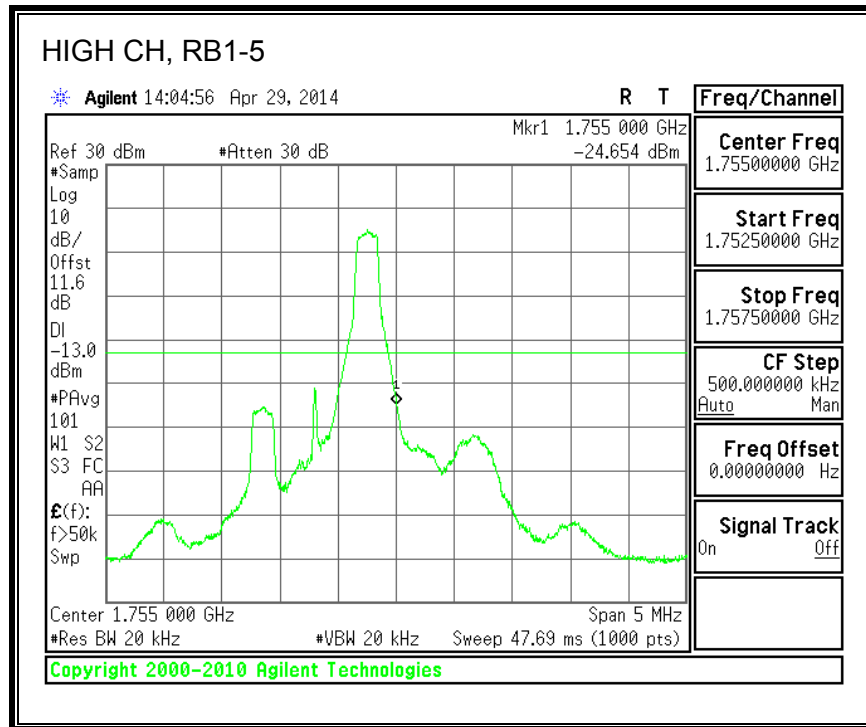
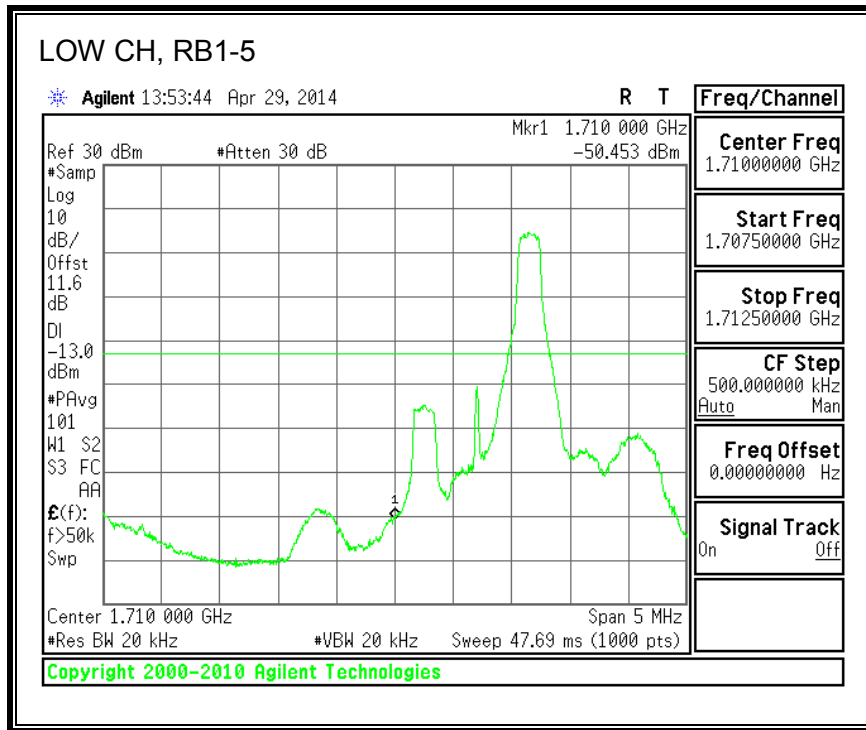




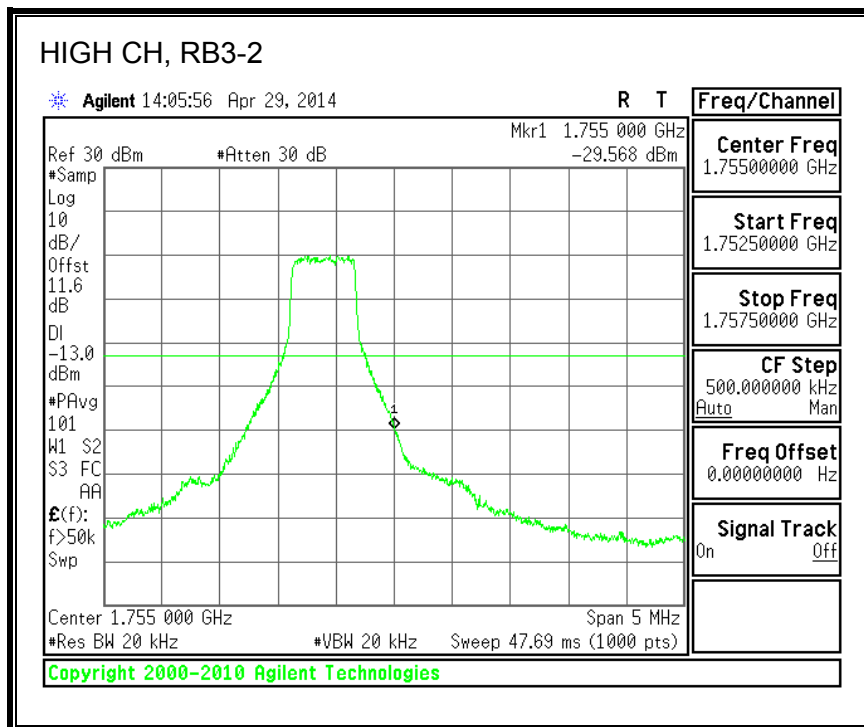
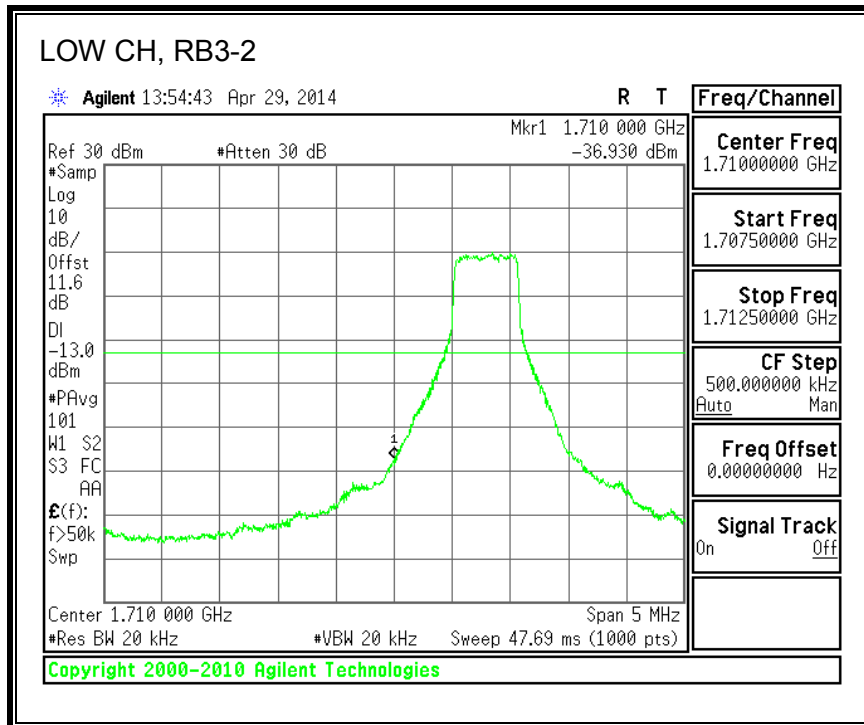


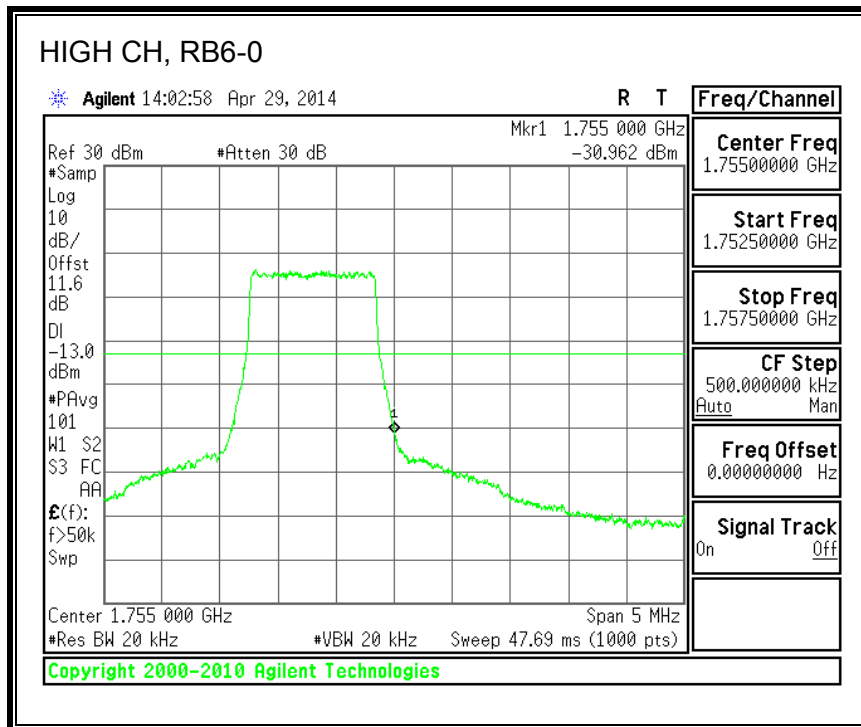
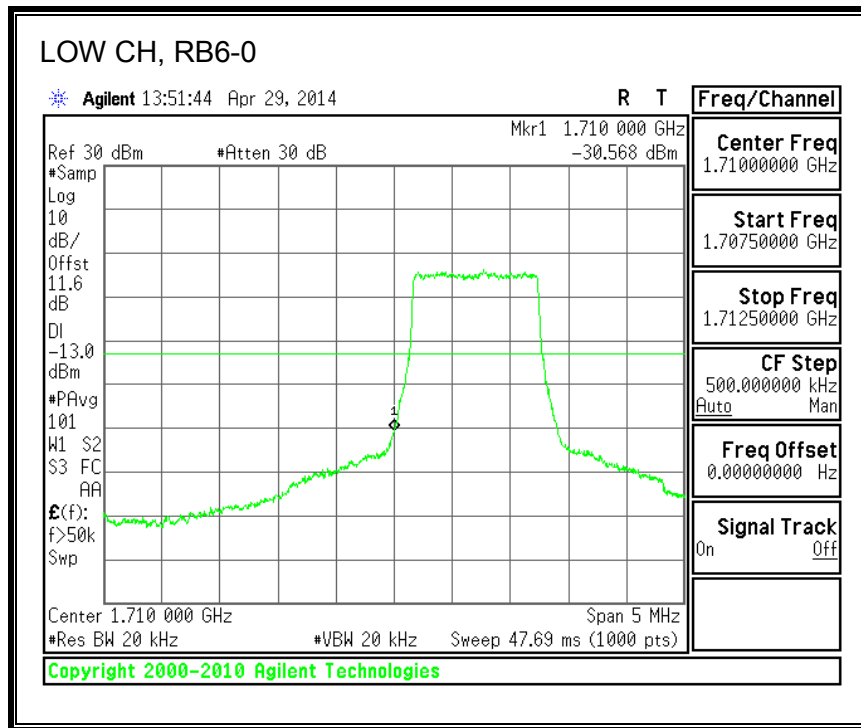
**16QAM, (1.4 MHz BAND WIDTH)**



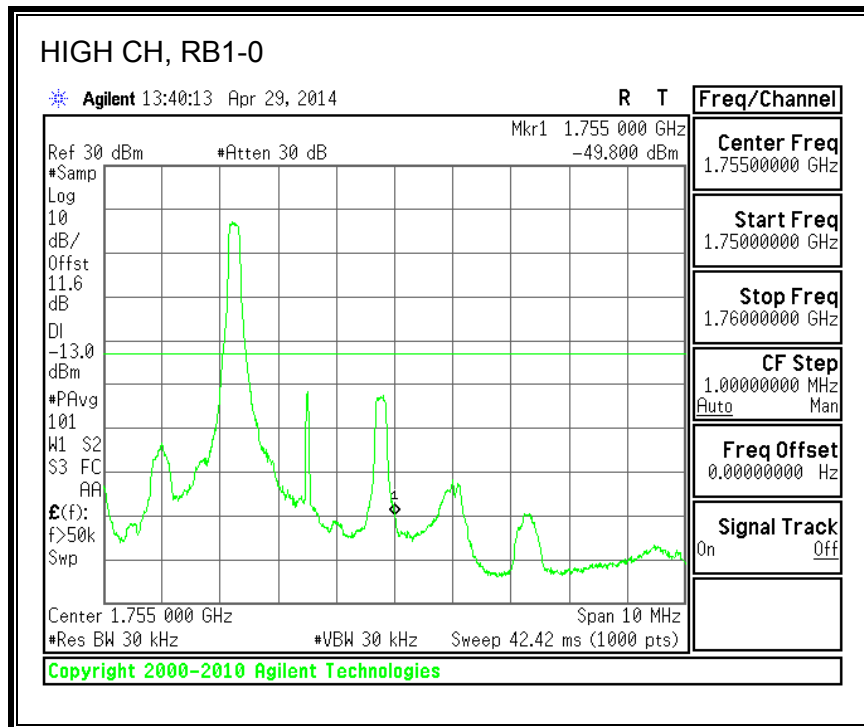
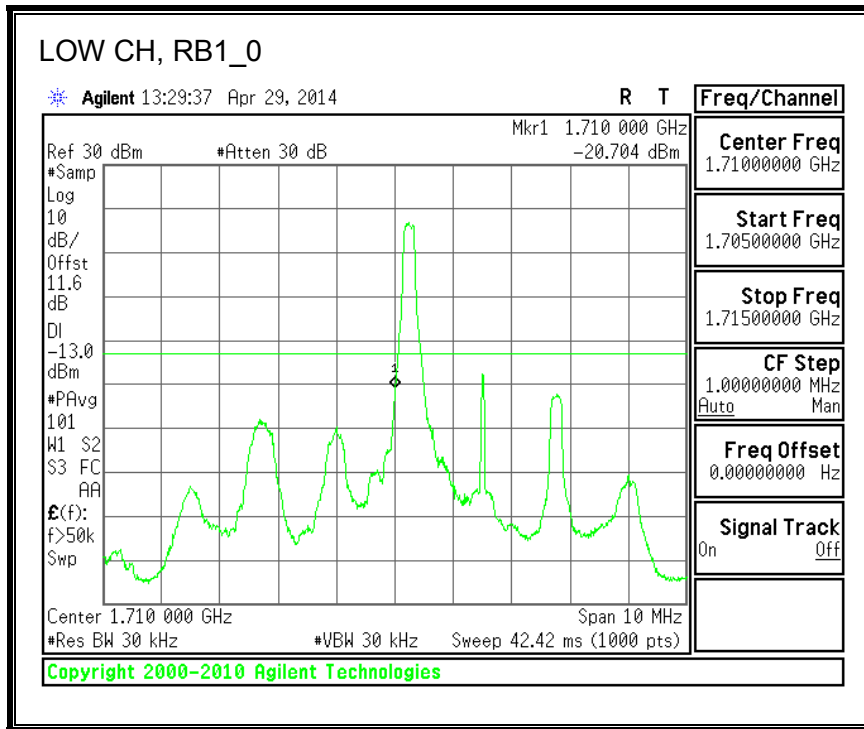


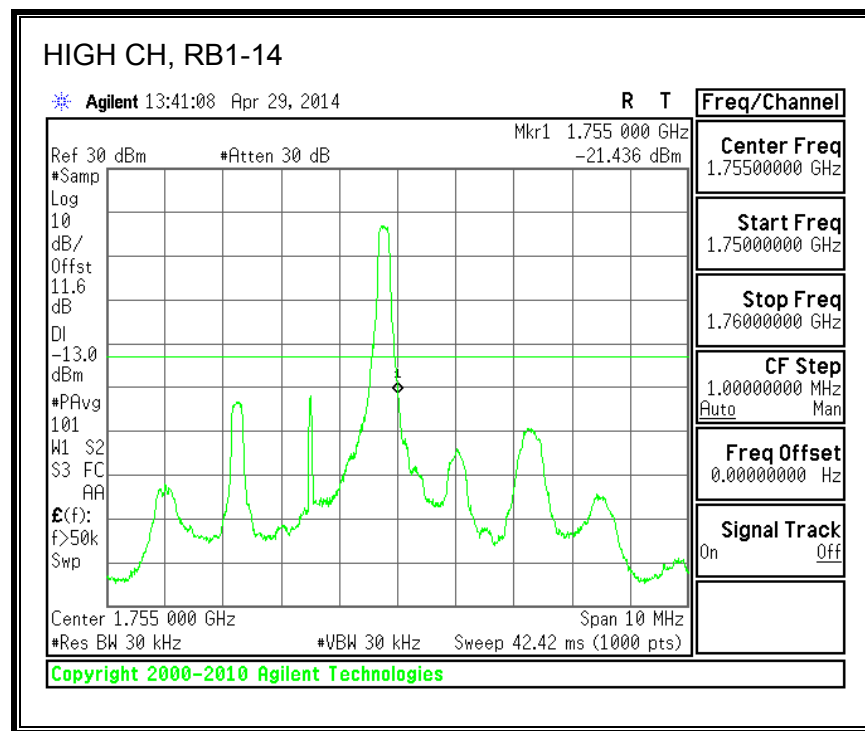
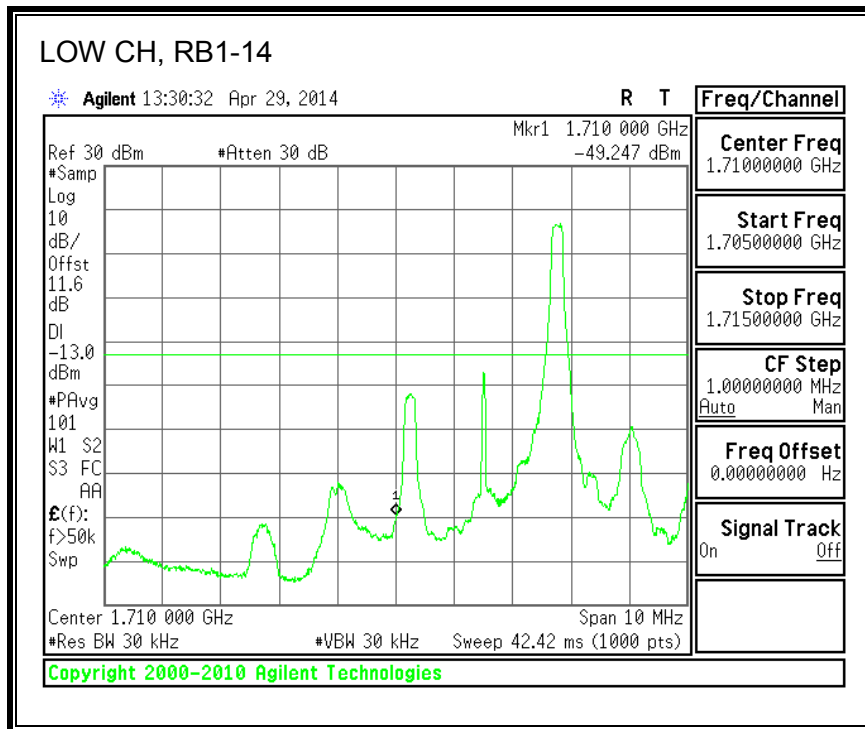


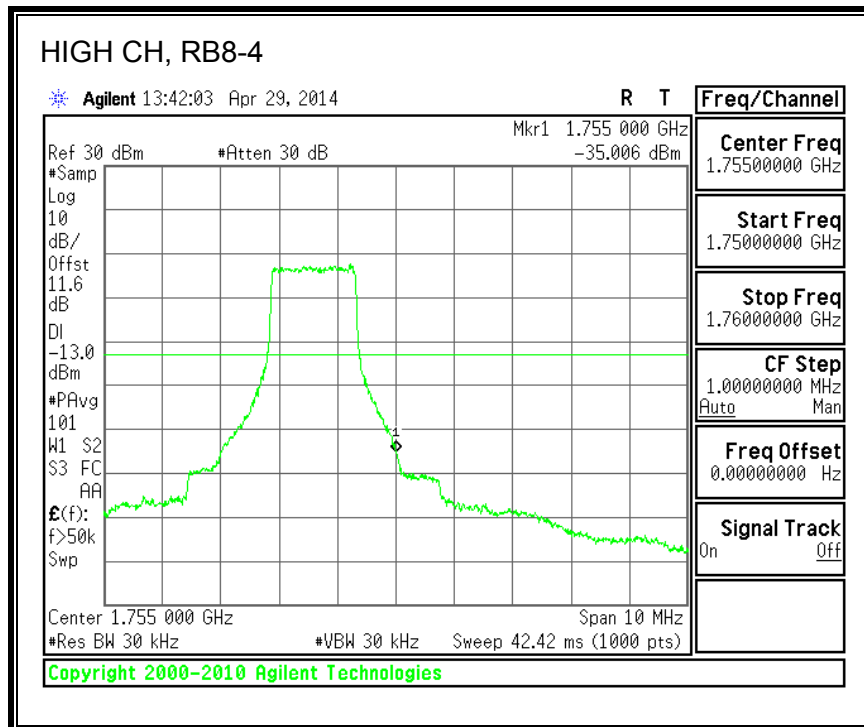
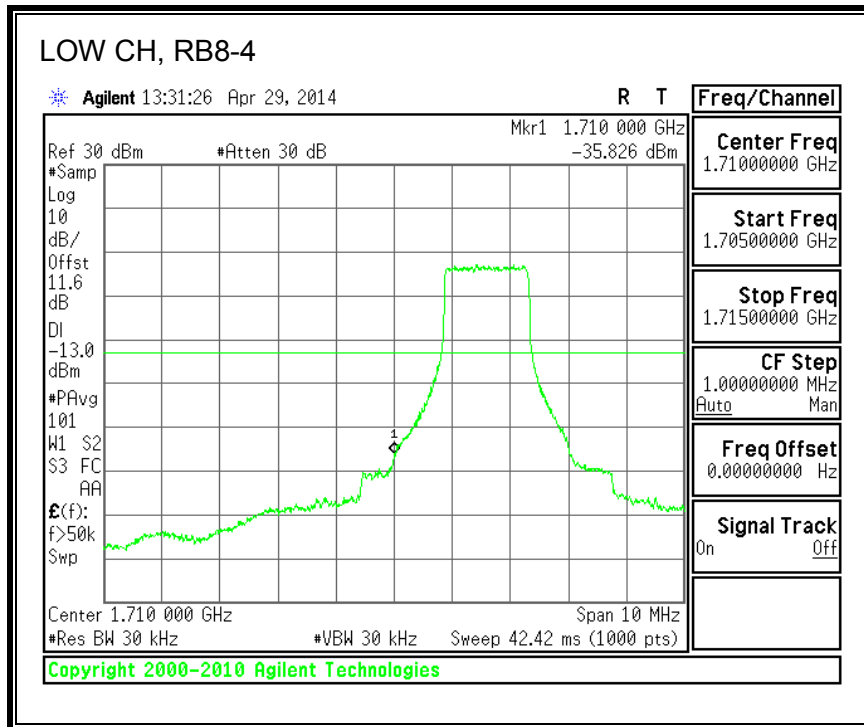


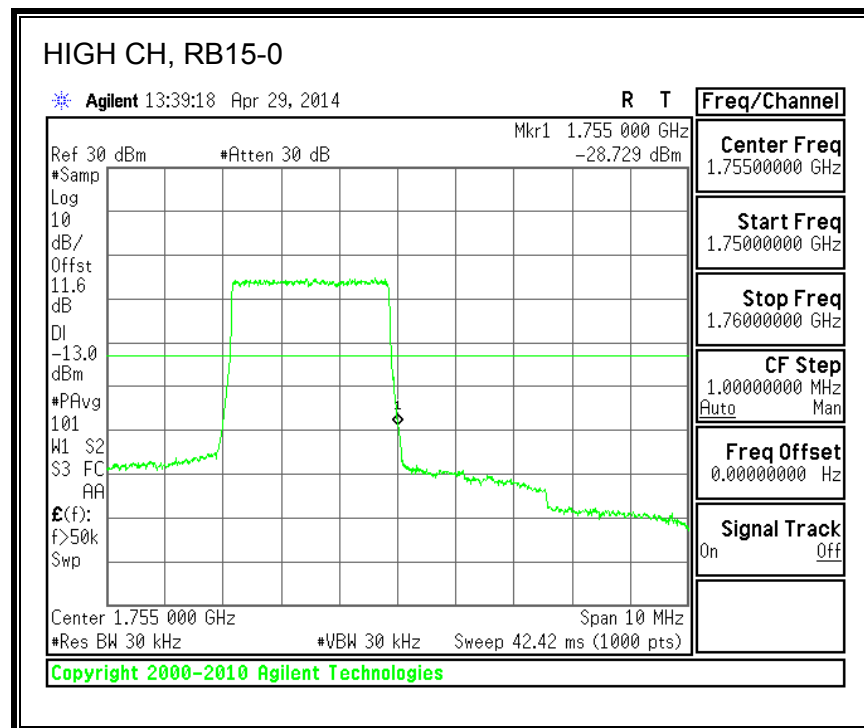
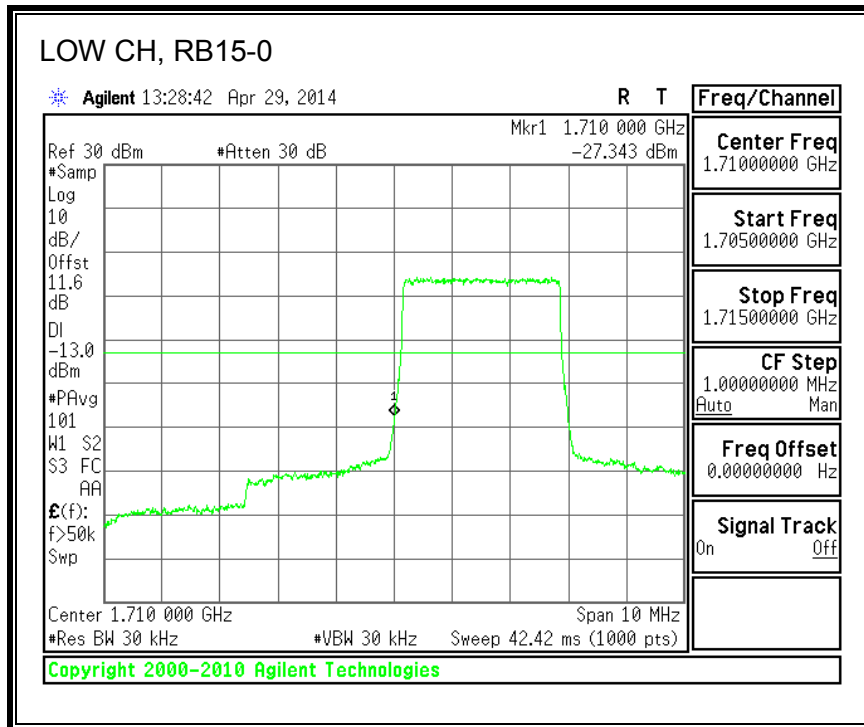


**QPSK, (3.0 MHz BAND WIDTH)**

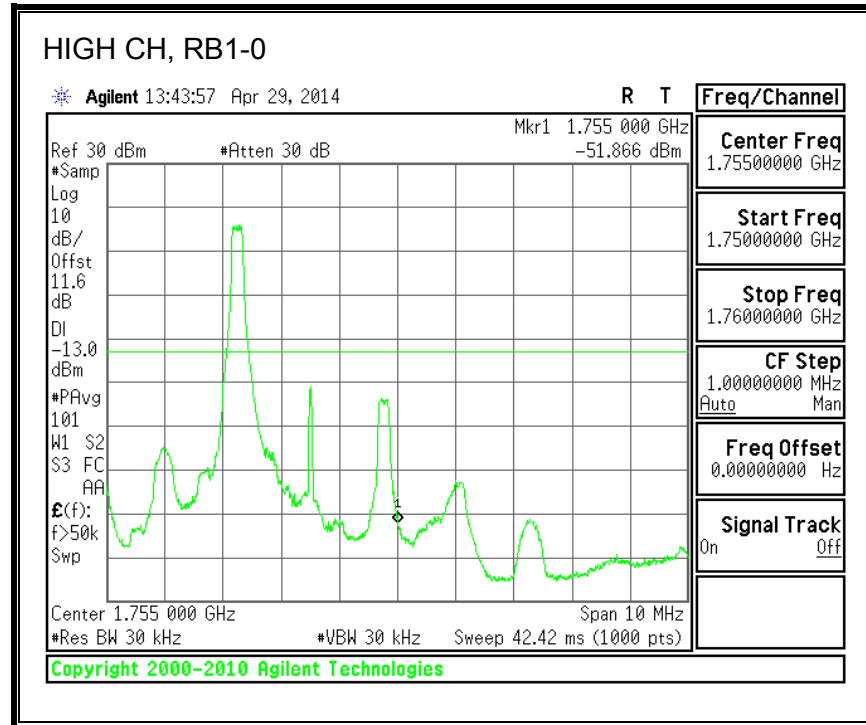
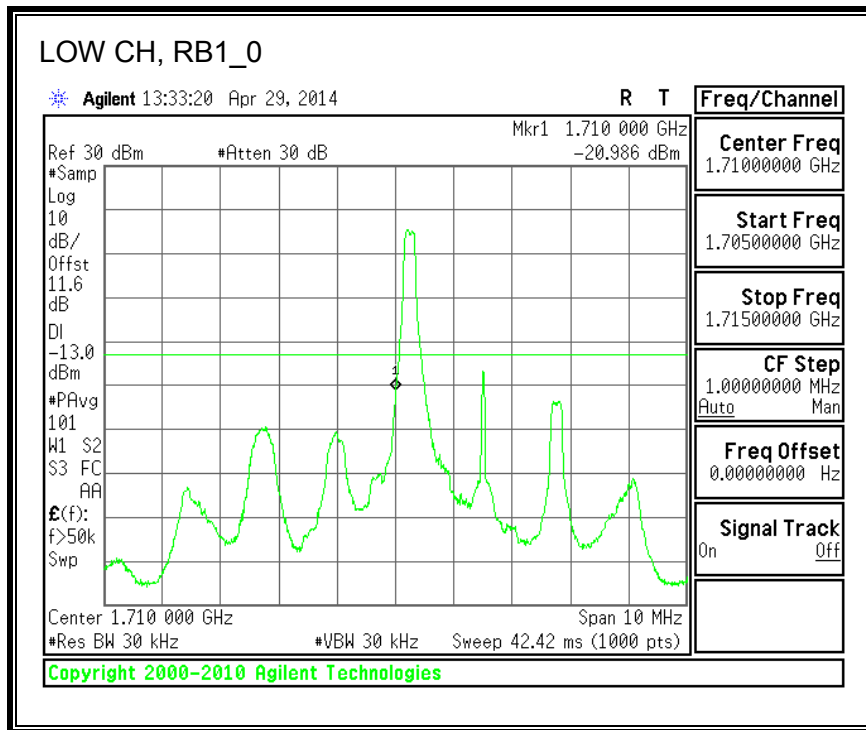


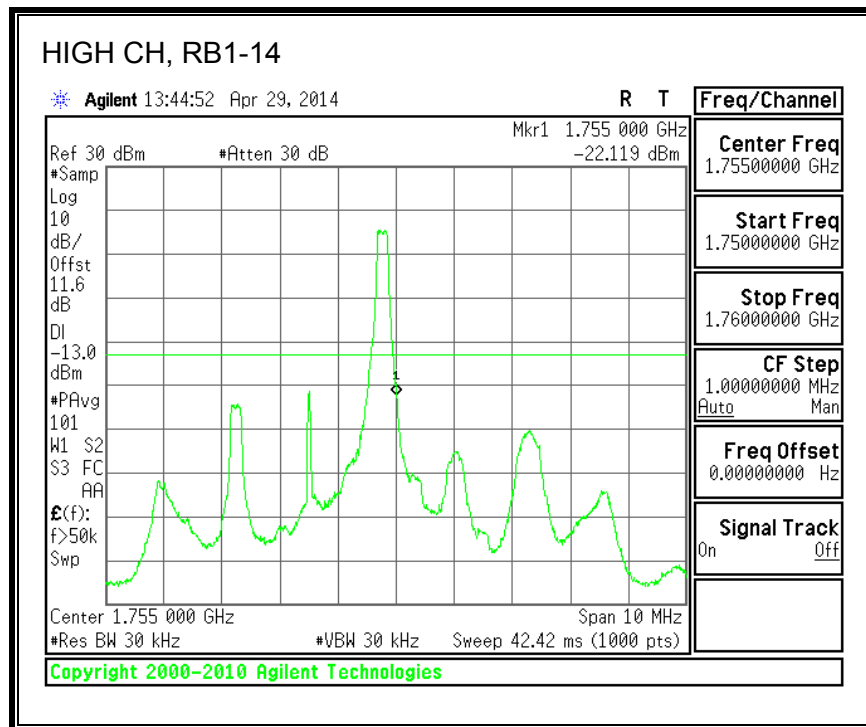
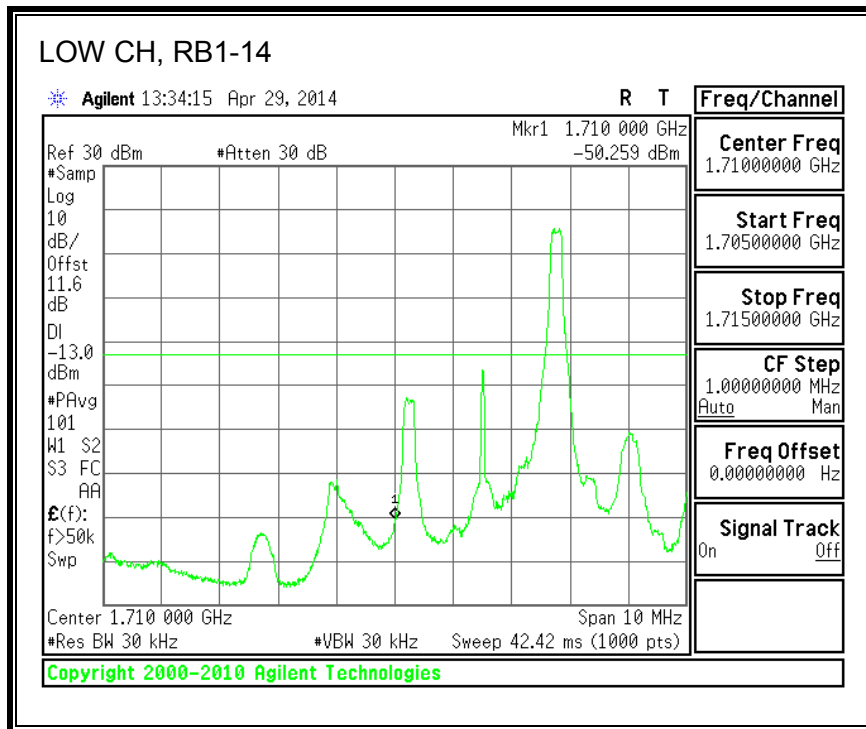




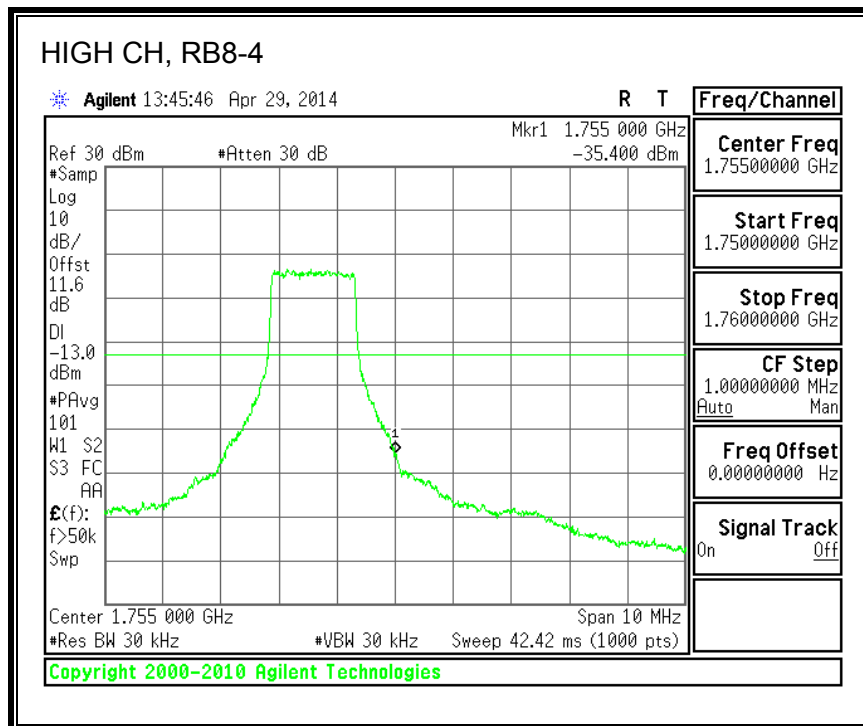
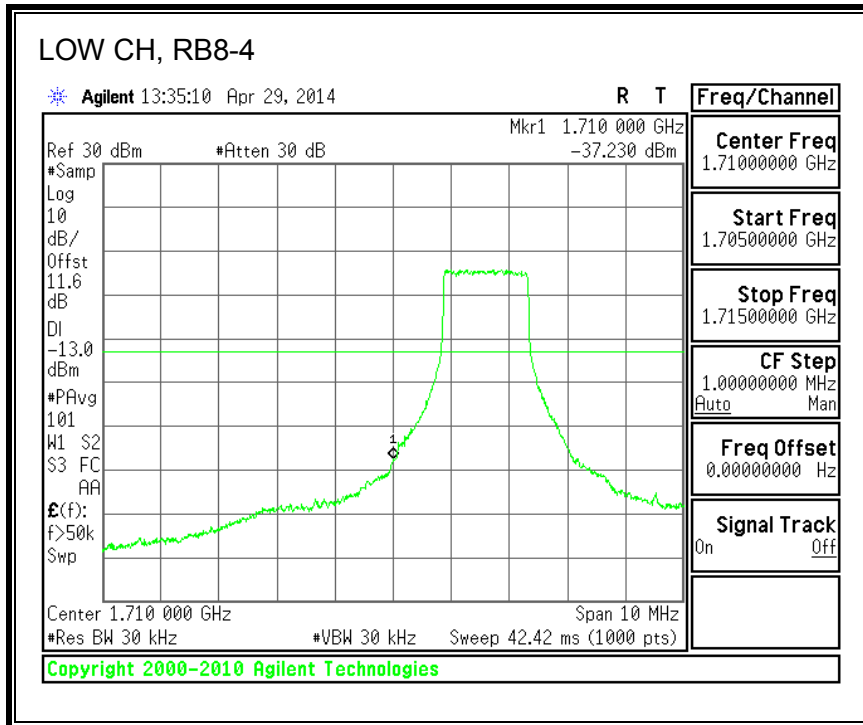


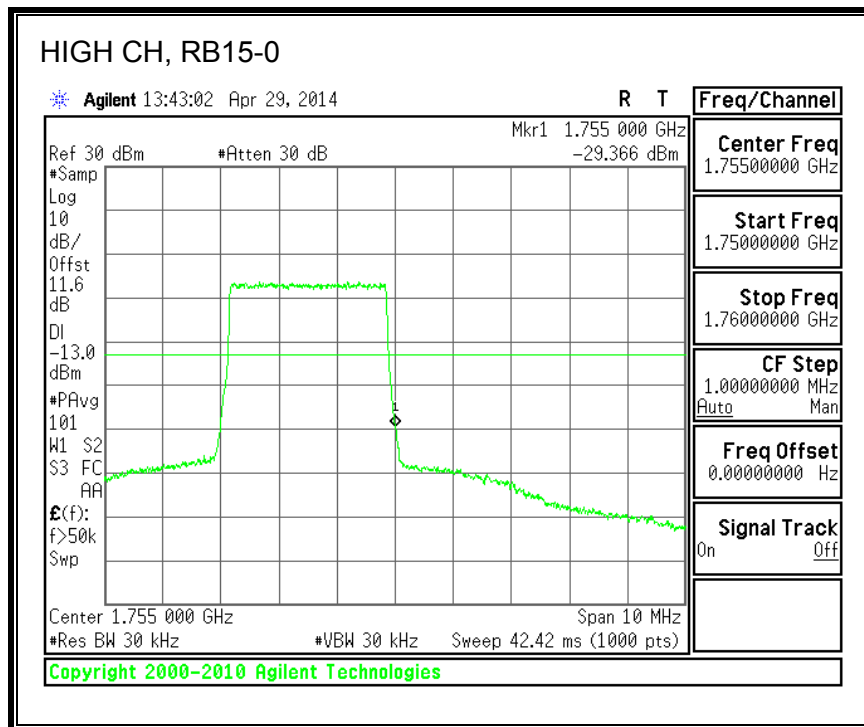
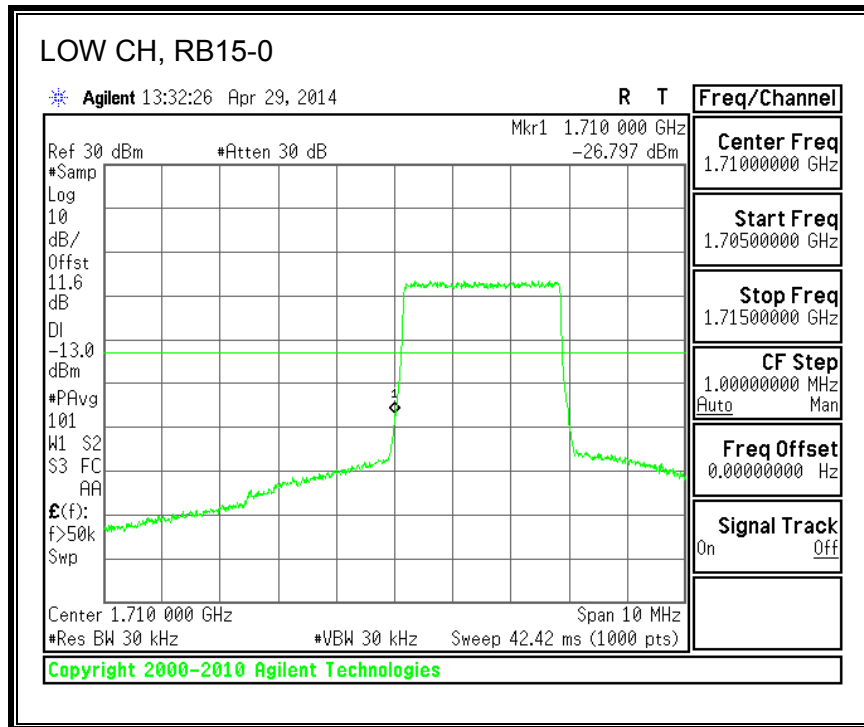
**16QAM, (3.0 MHz BAND WIDTH)**



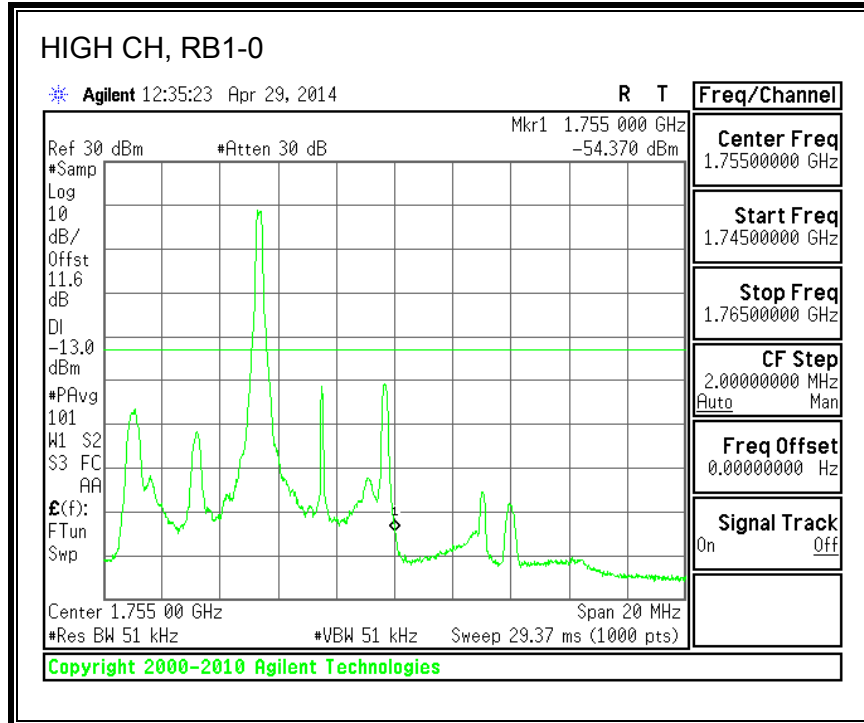
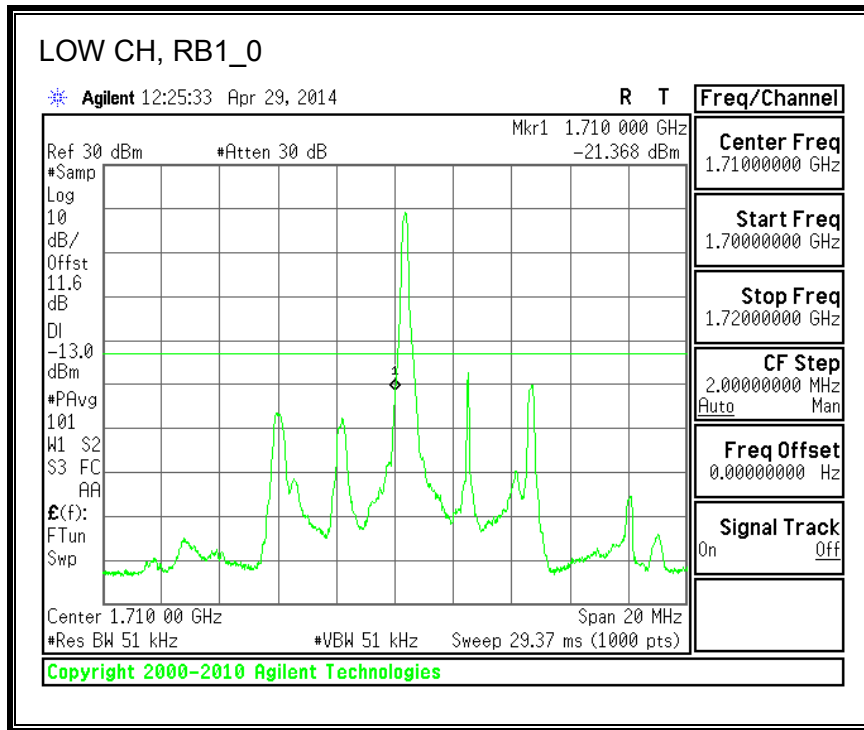


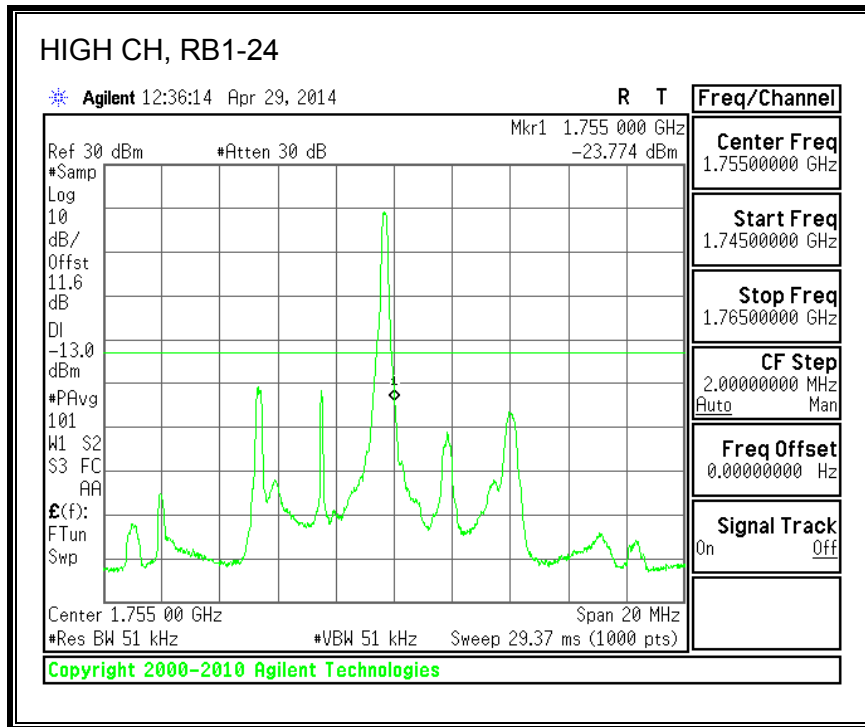
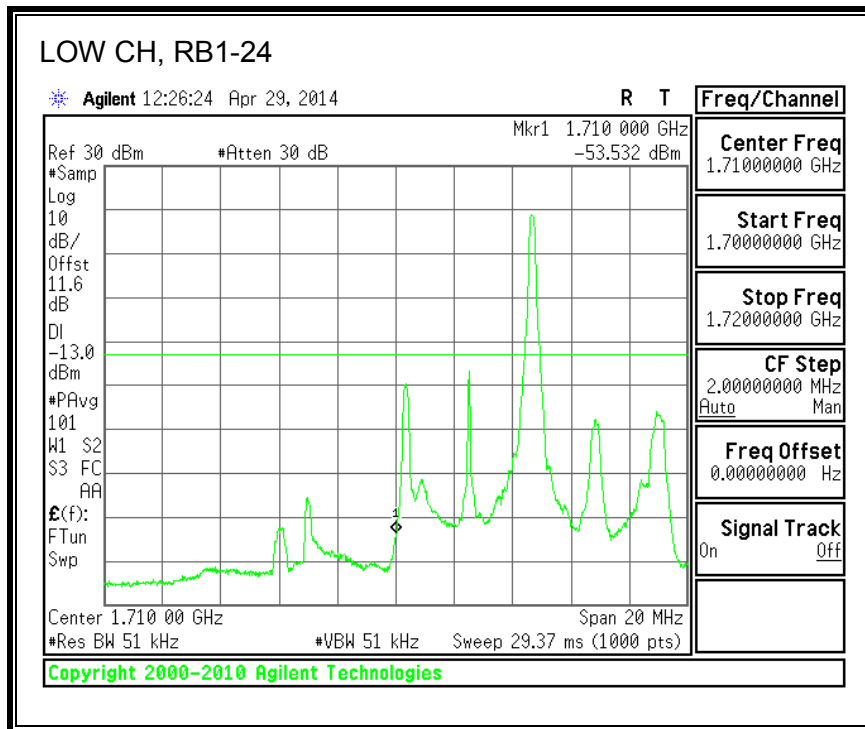


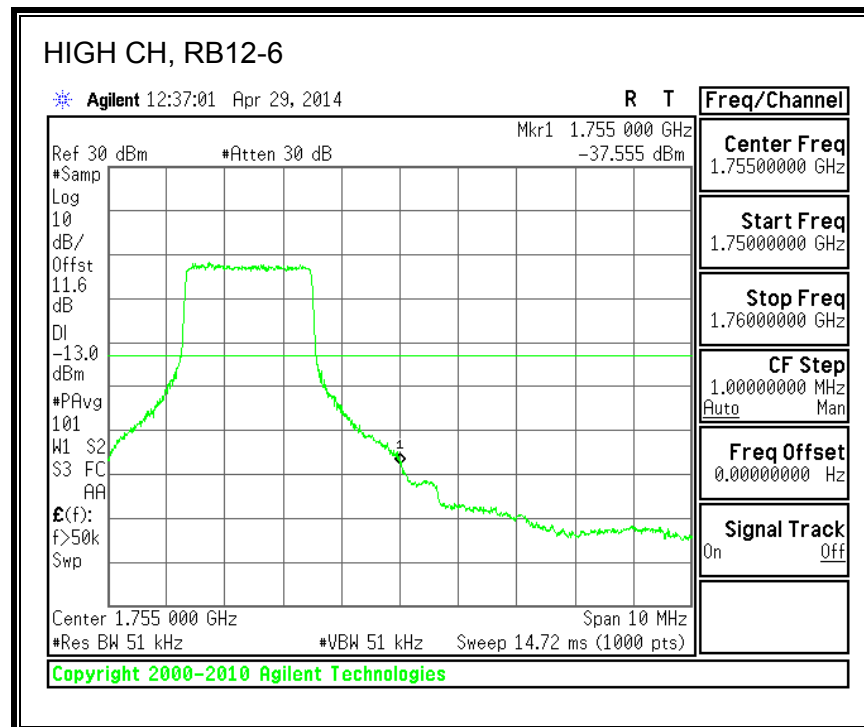
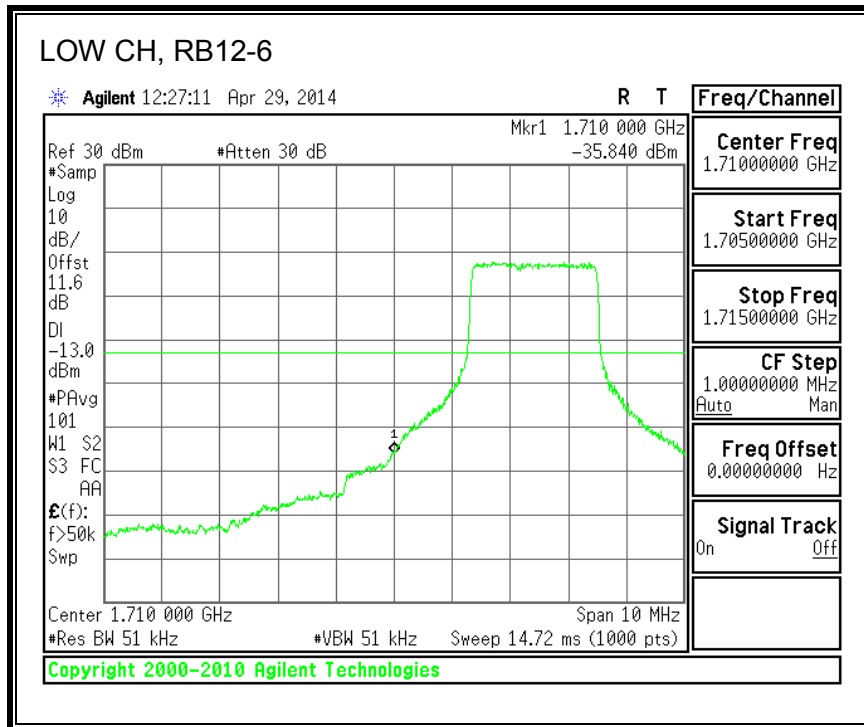


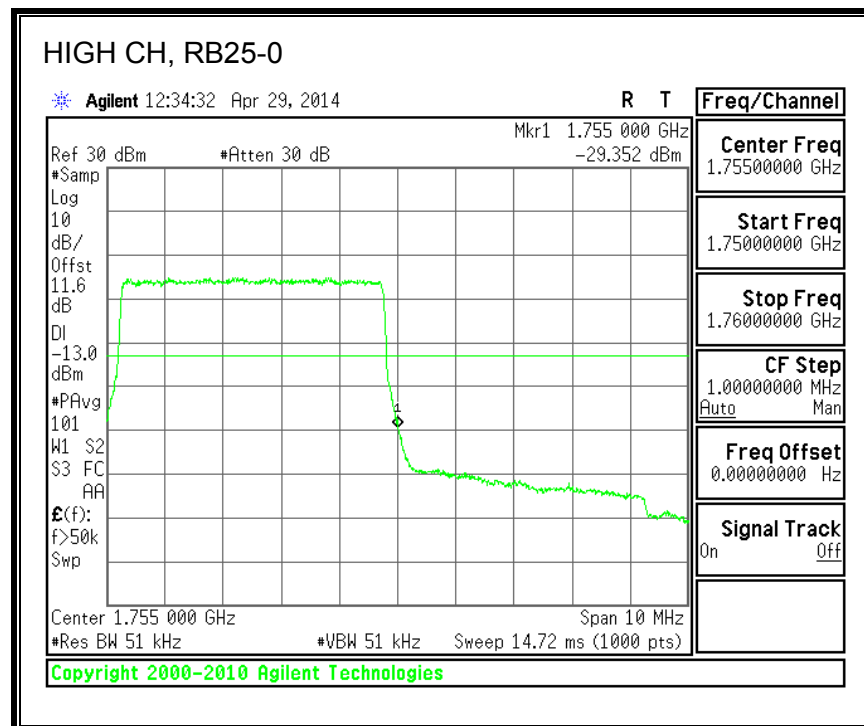
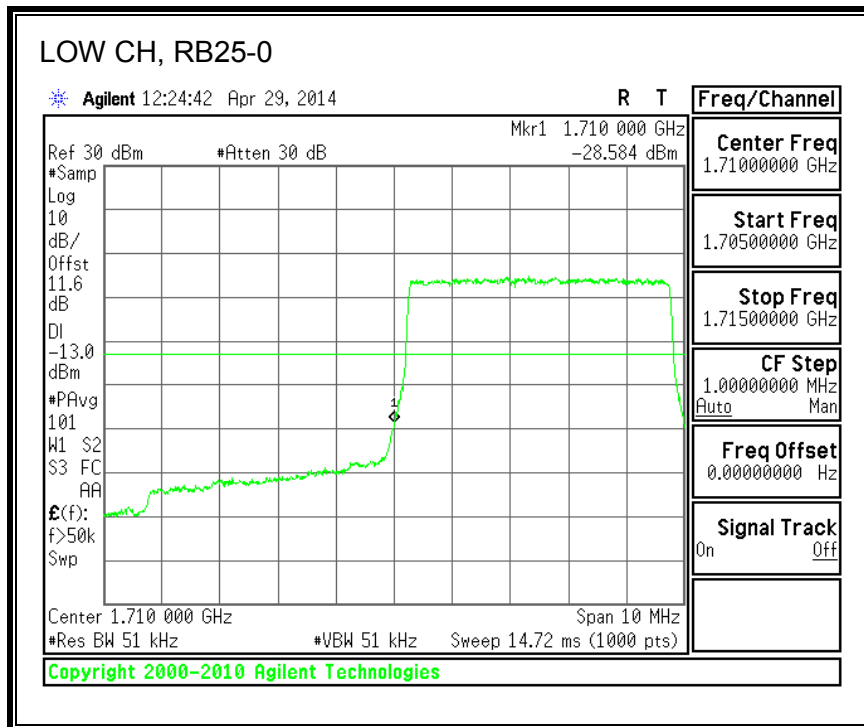


**QPSK, (5.0 MHz BAND WIDTH)**

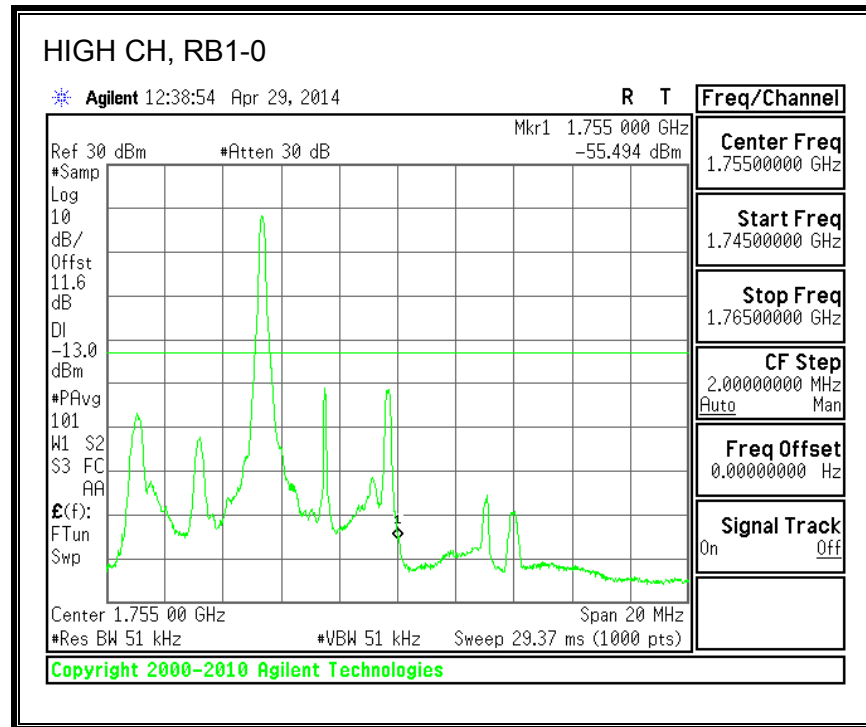
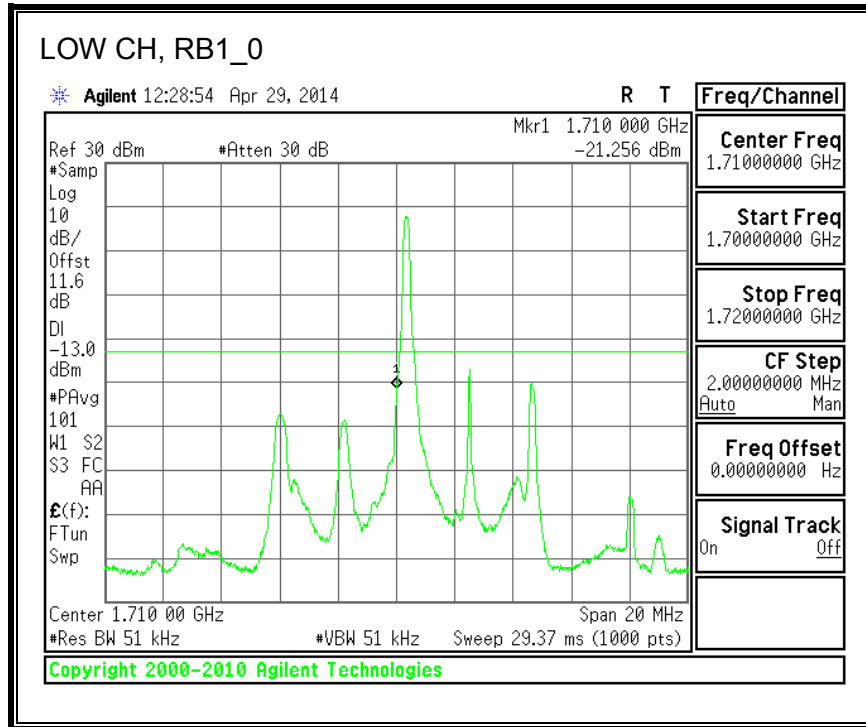


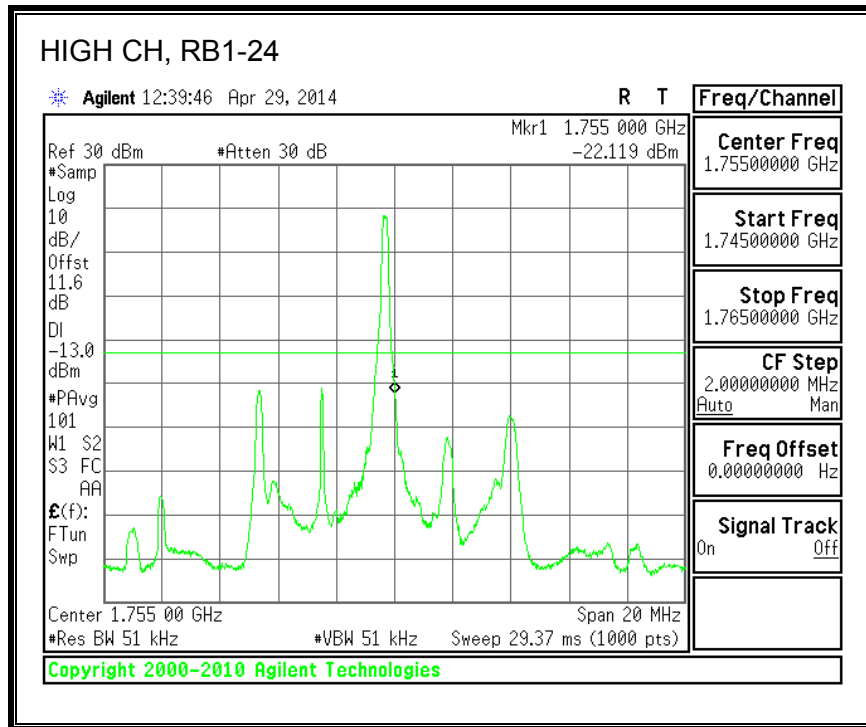
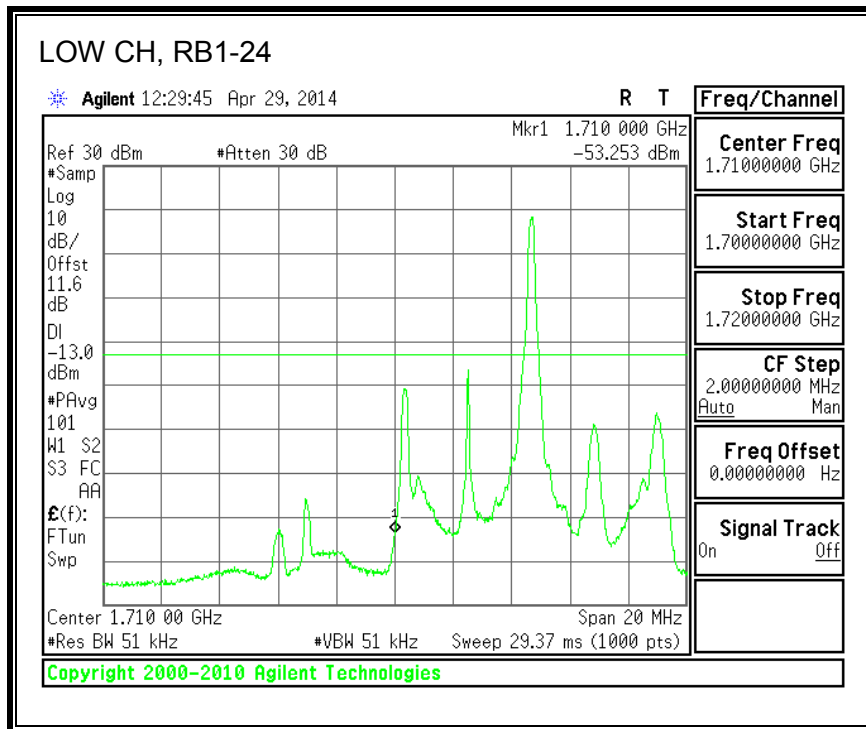




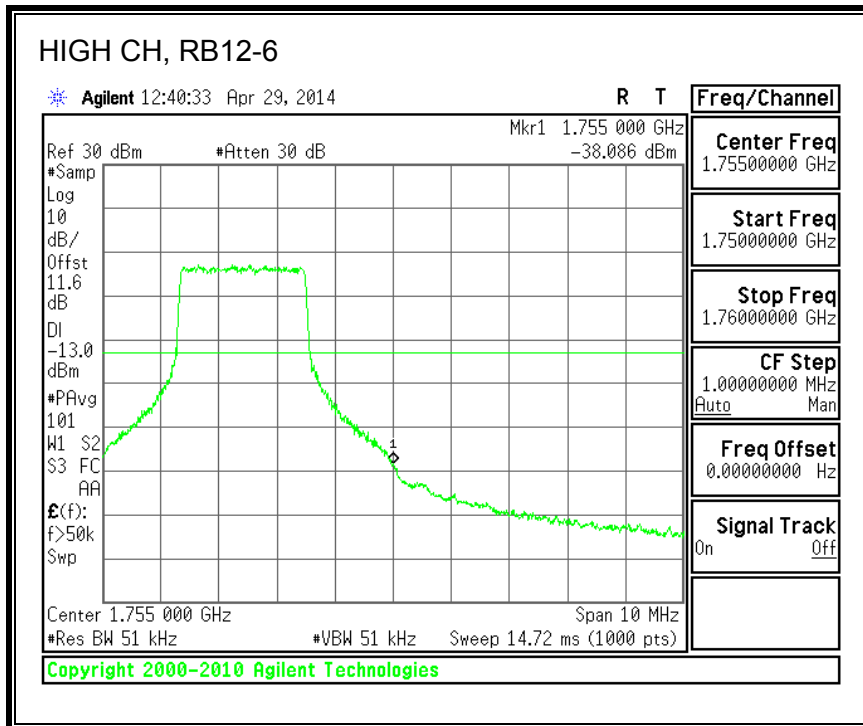
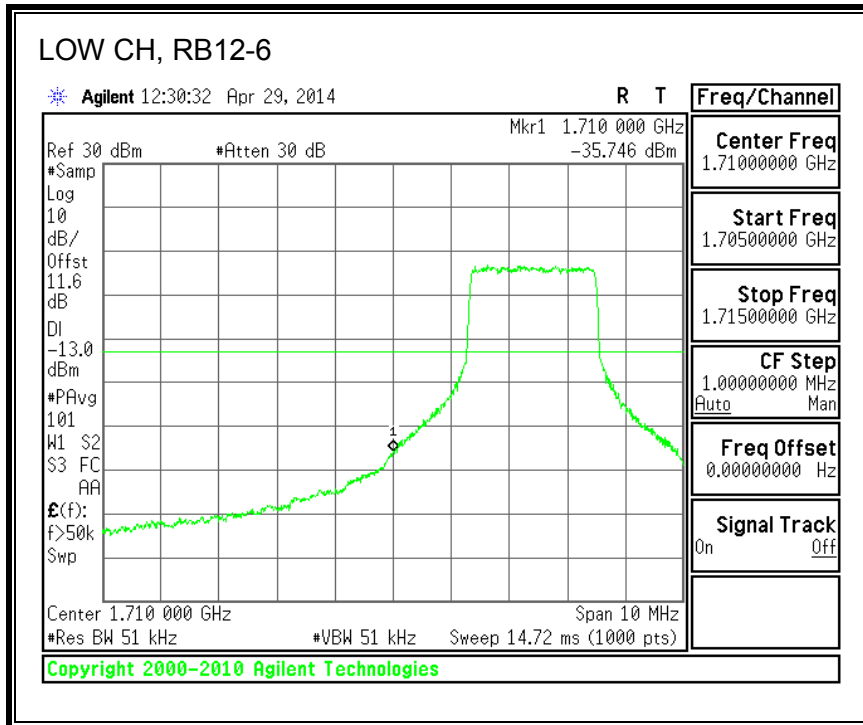


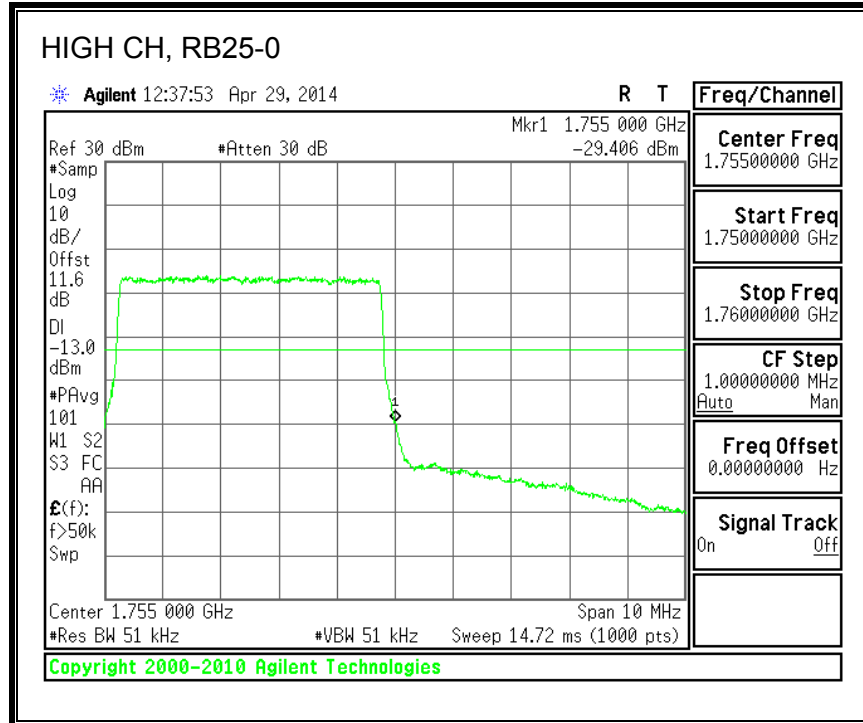
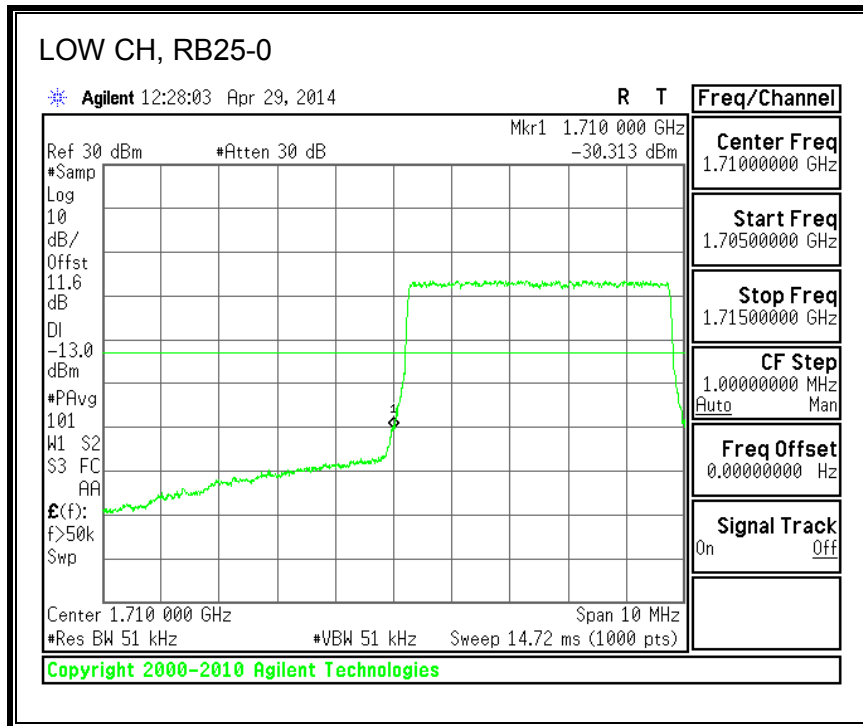
**16QAM, (5.0 MHz BAND WIDTH)**



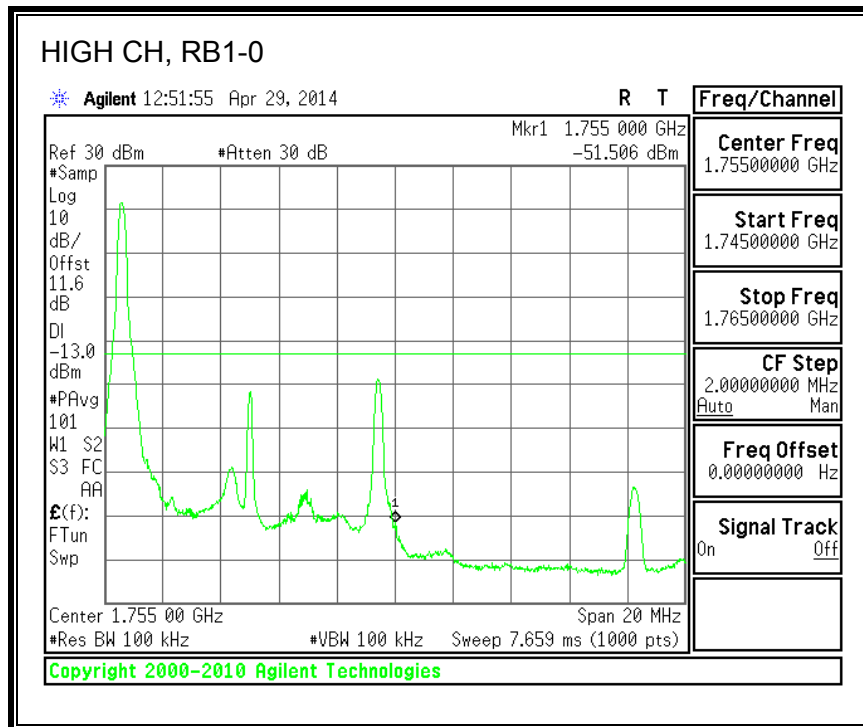
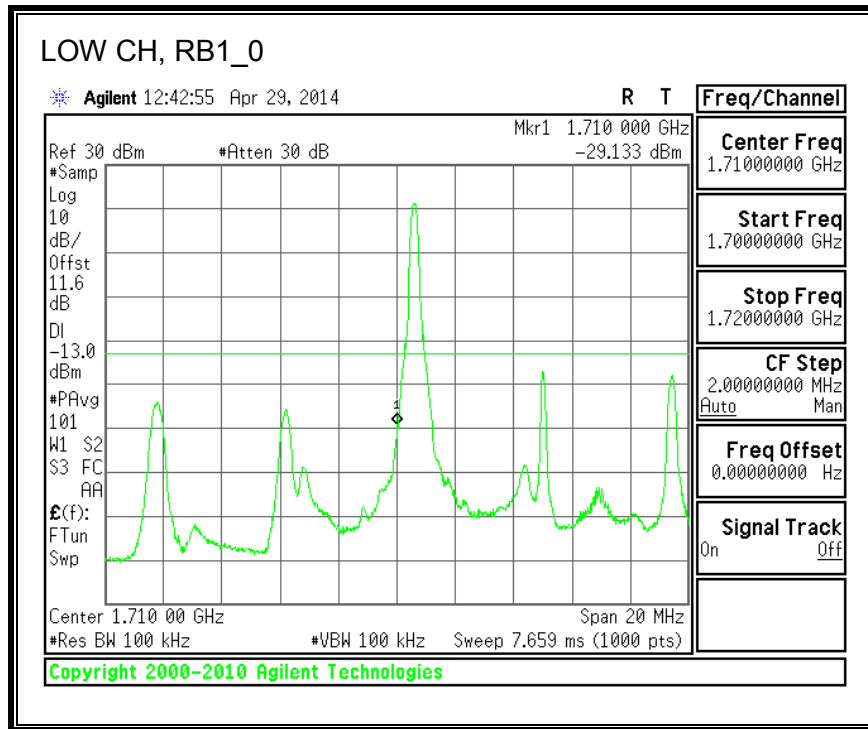


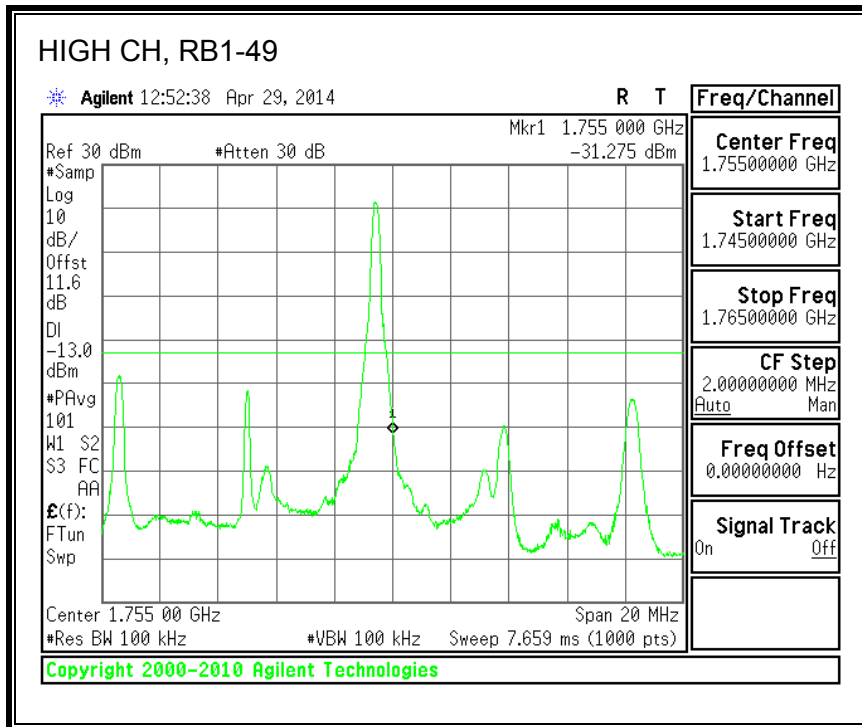
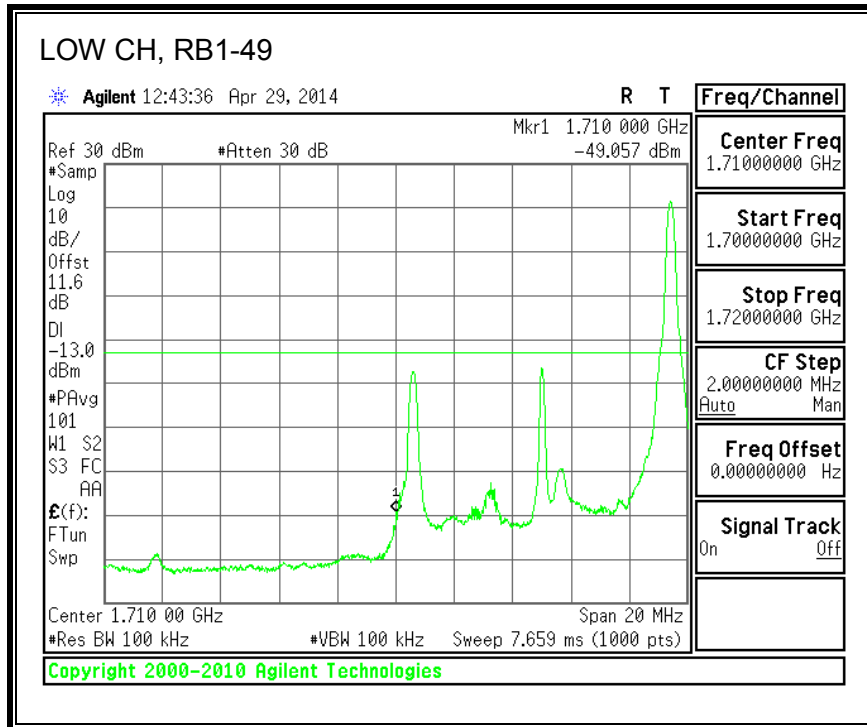


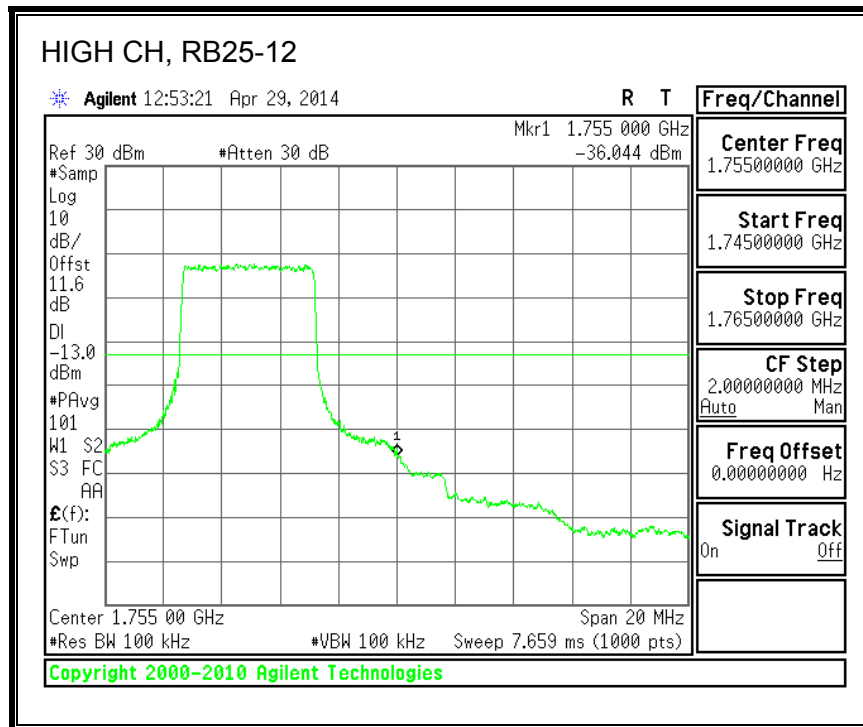
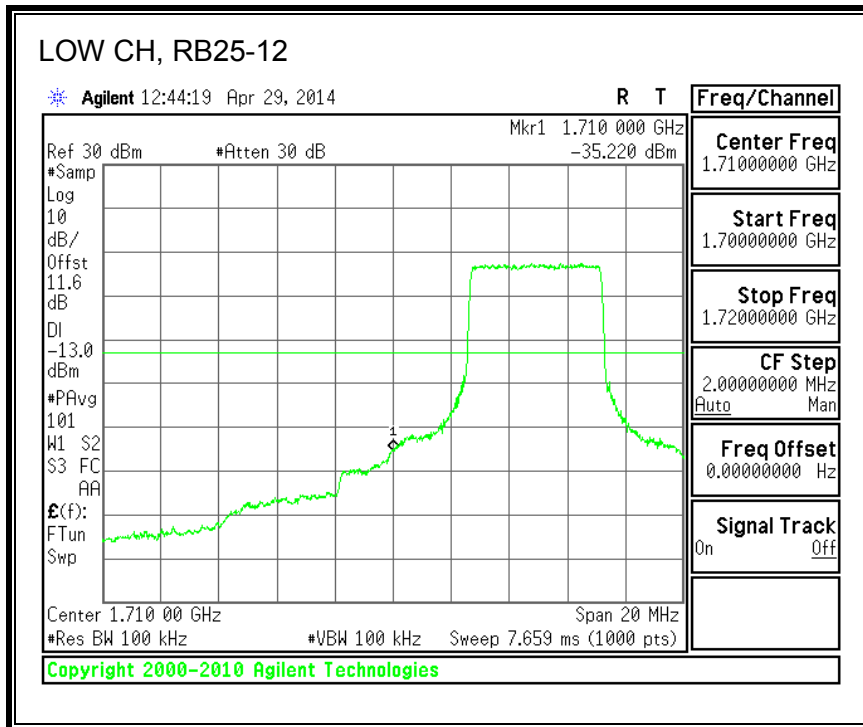


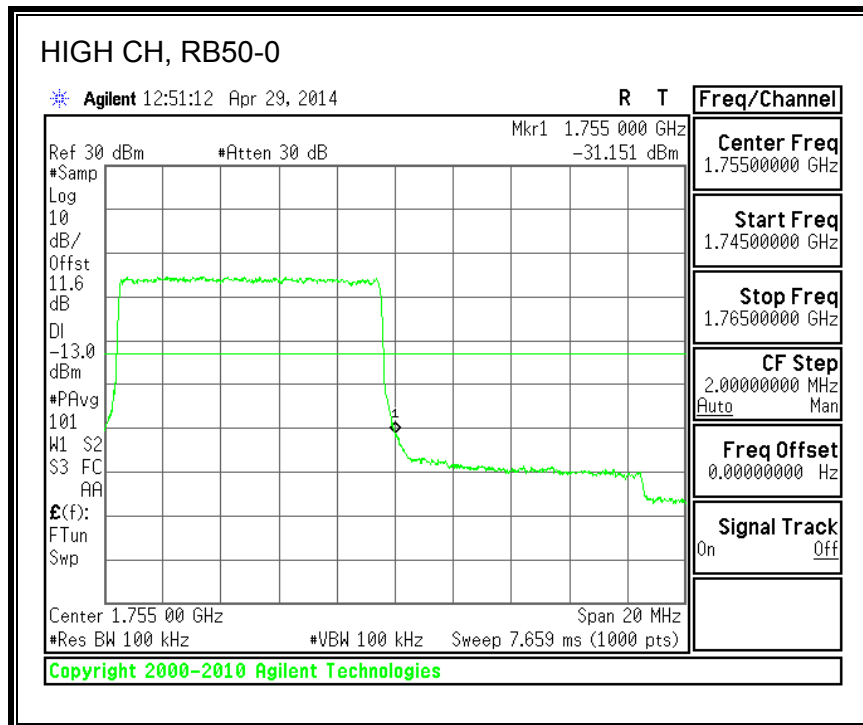
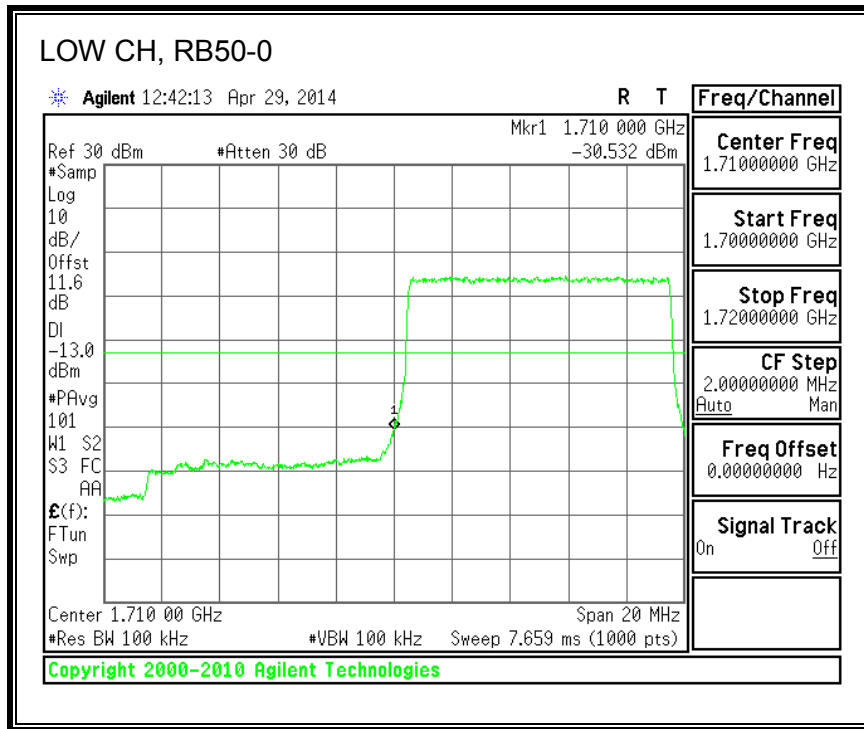


**QPSK, (10.0 MHz BAND WIDTH)**

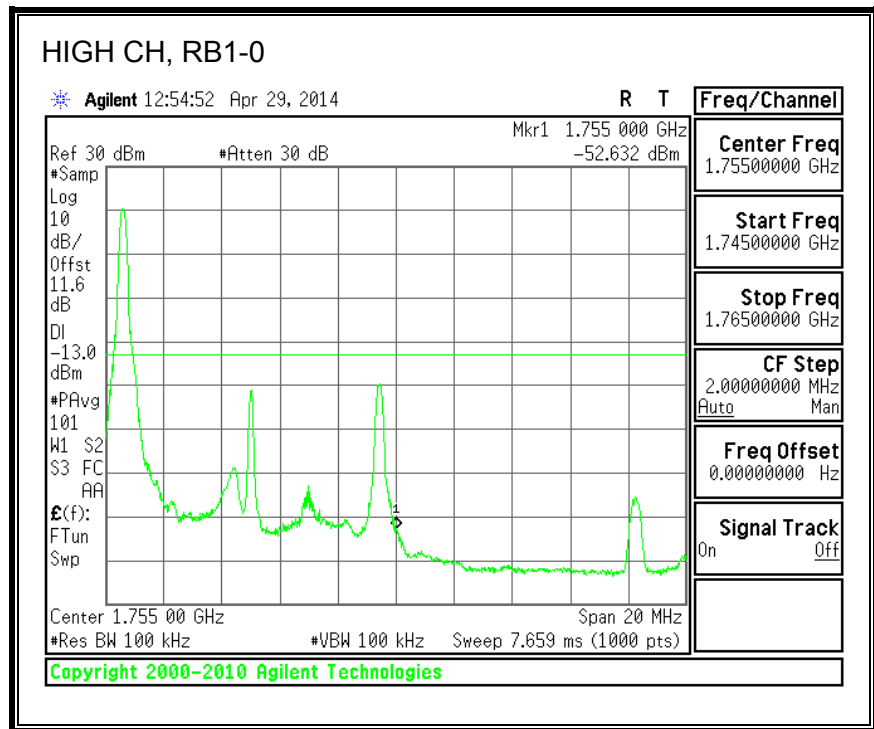
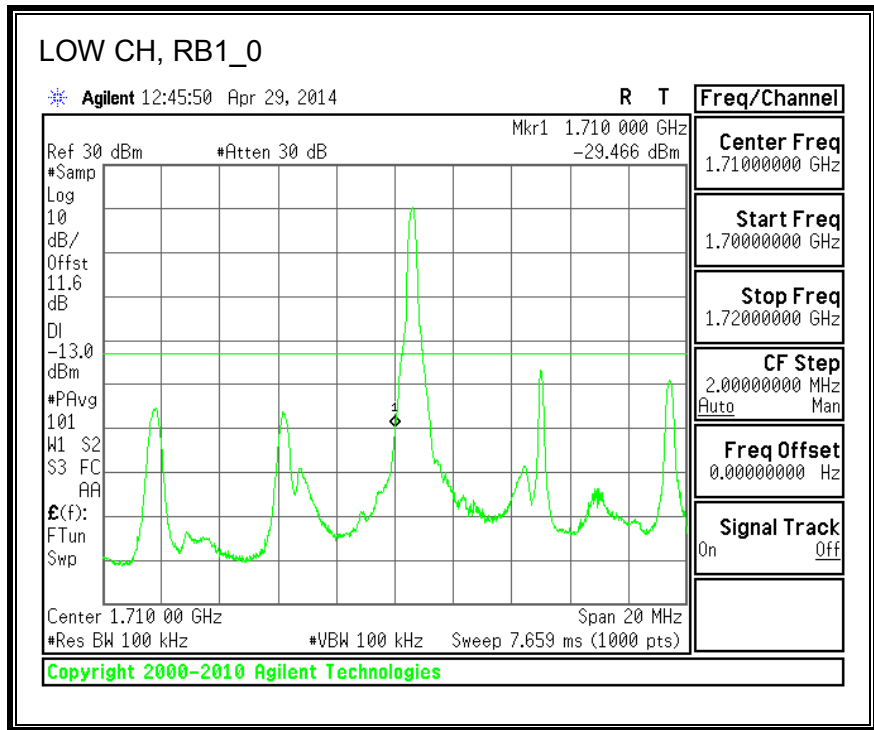


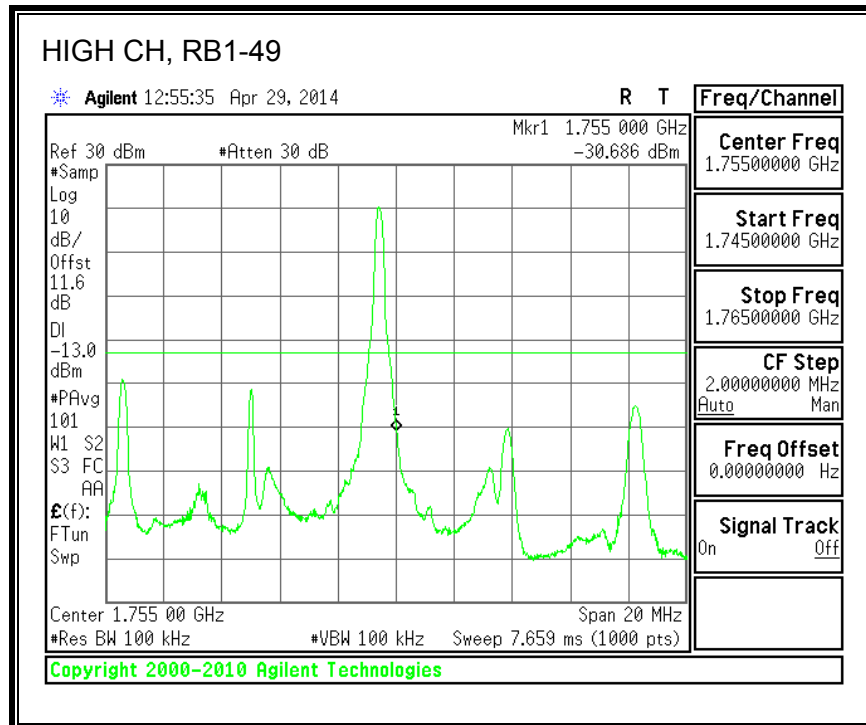
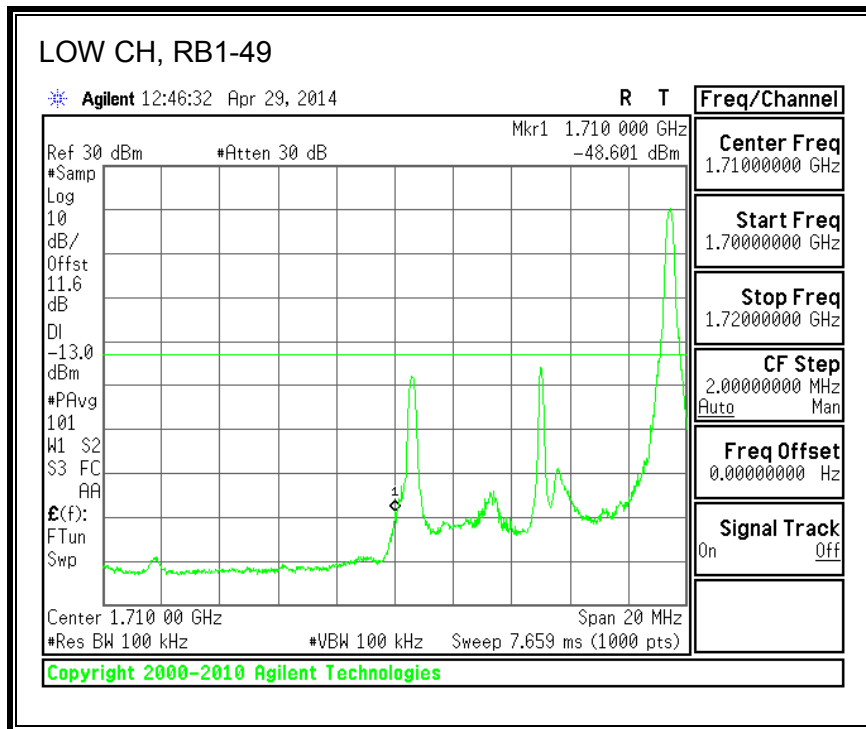




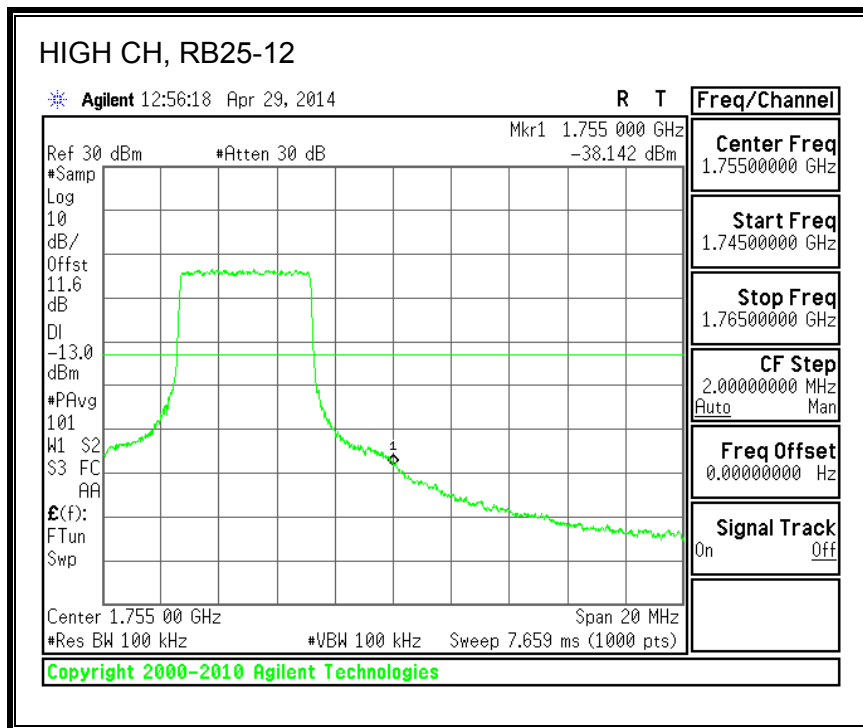
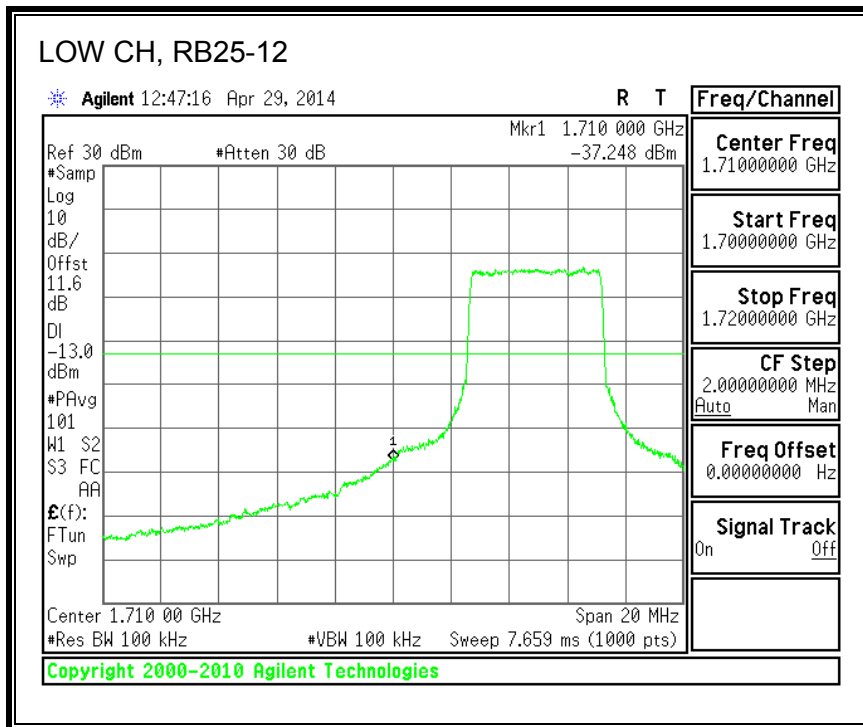


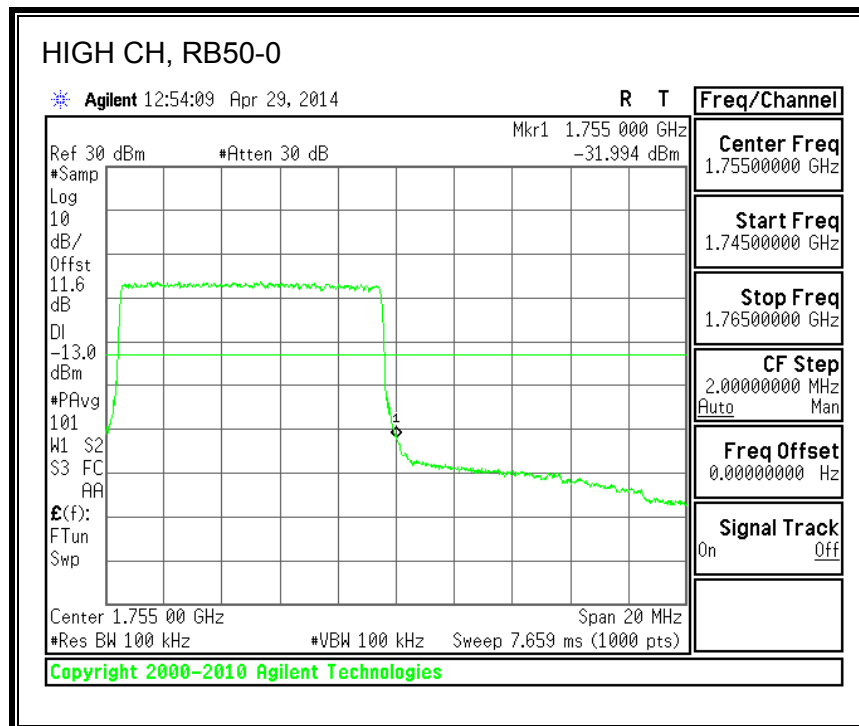
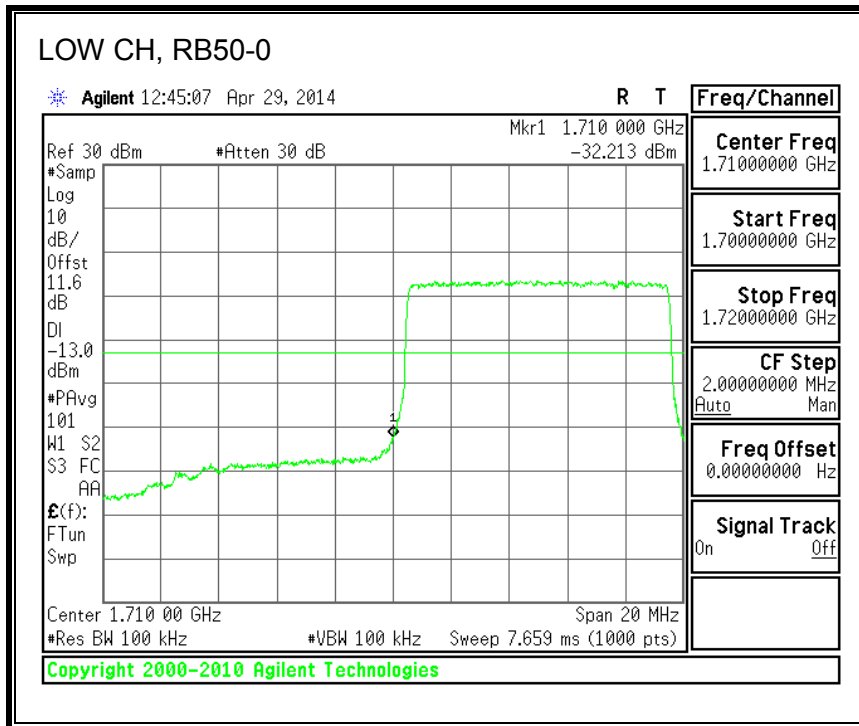
**16QAM, (10.0 MHz BAND WIDTH)**



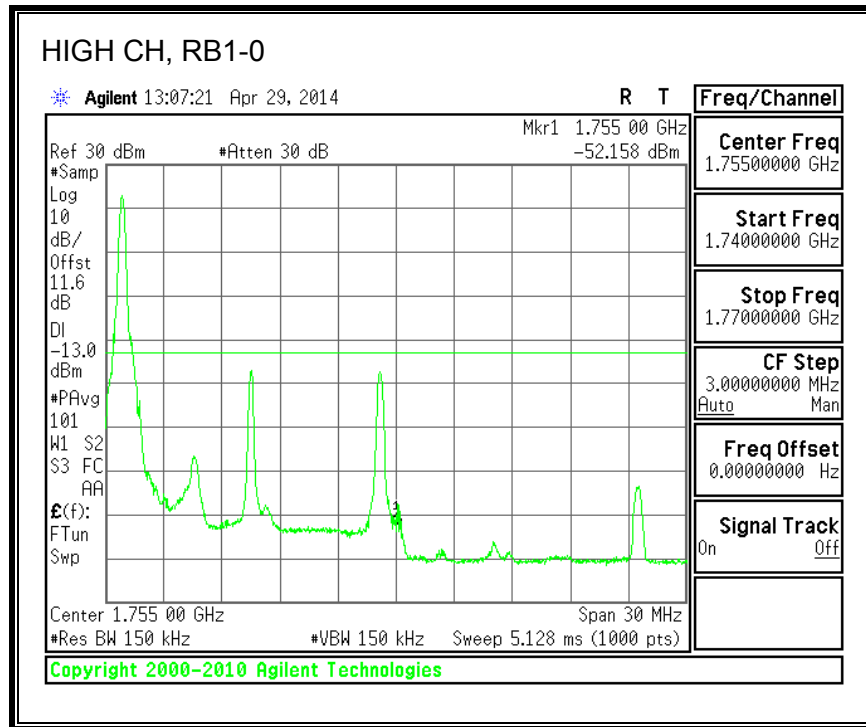
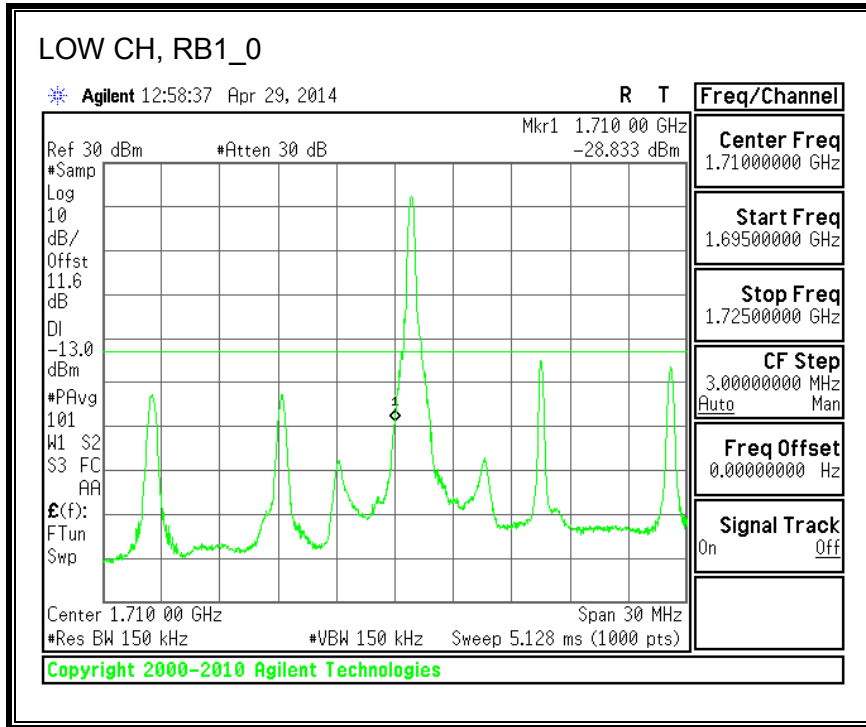


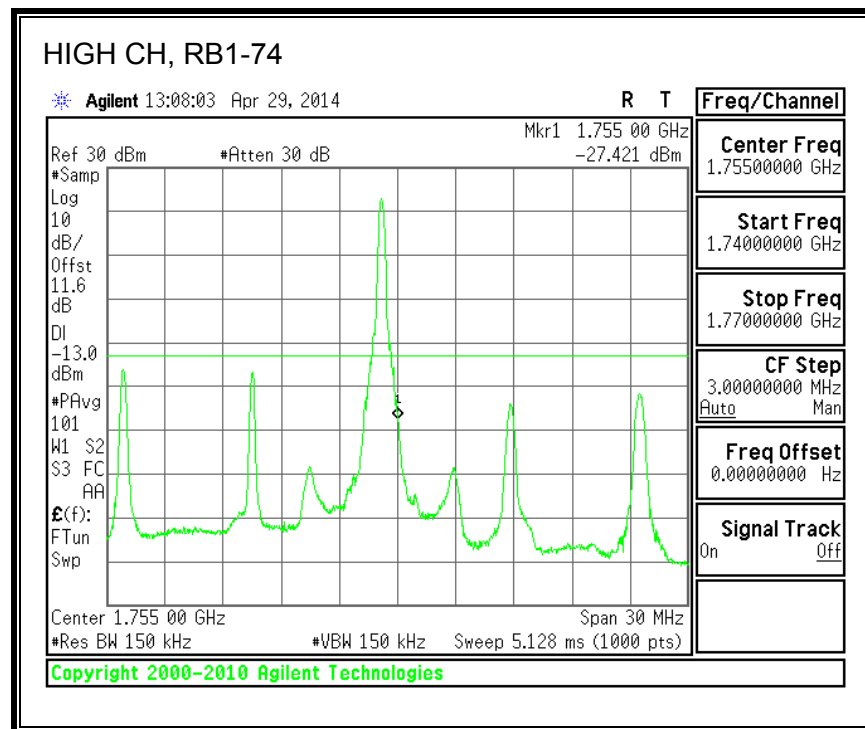
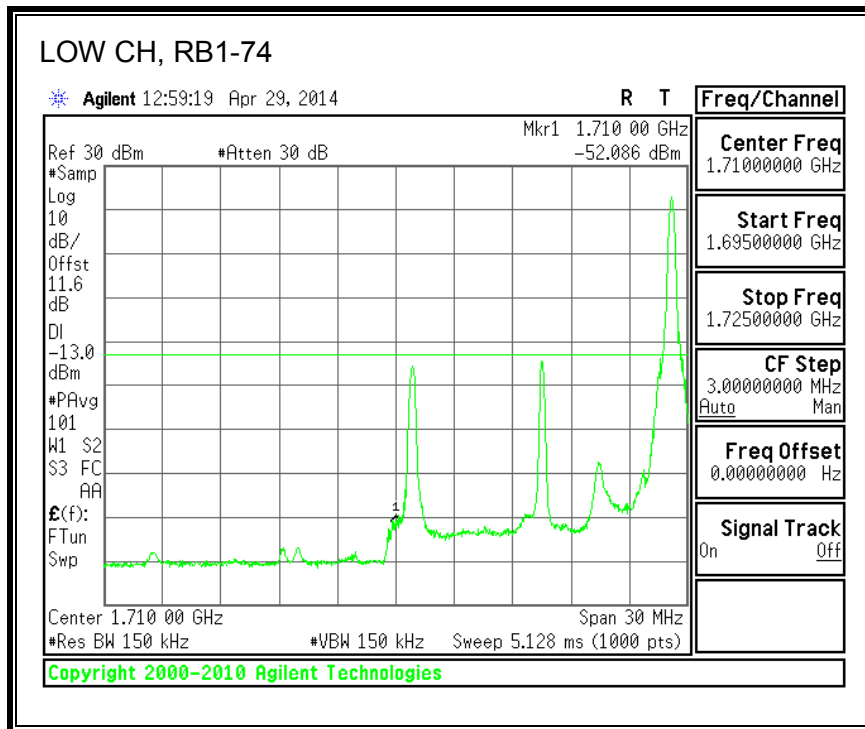


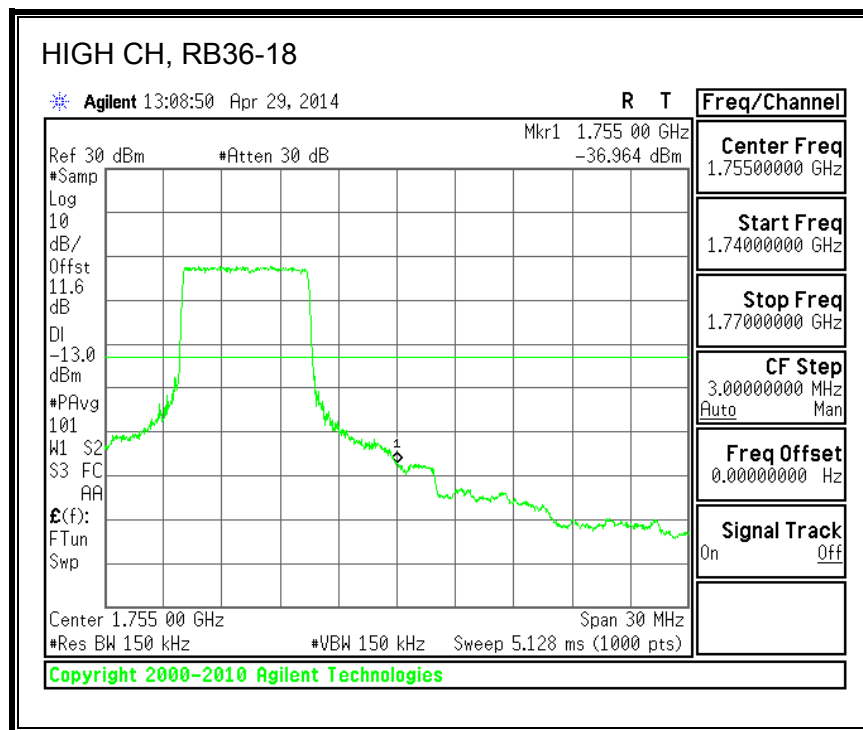
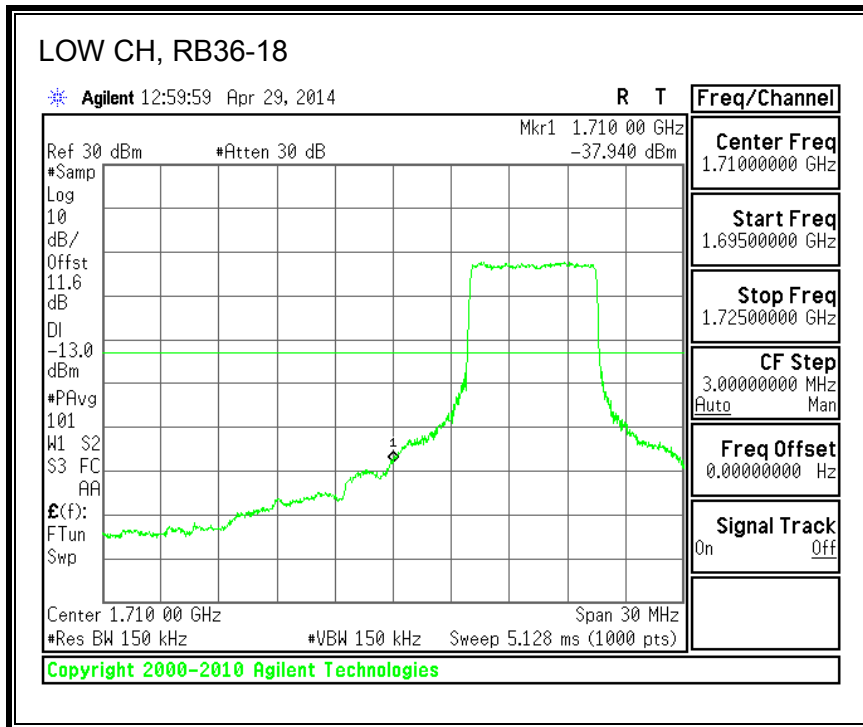


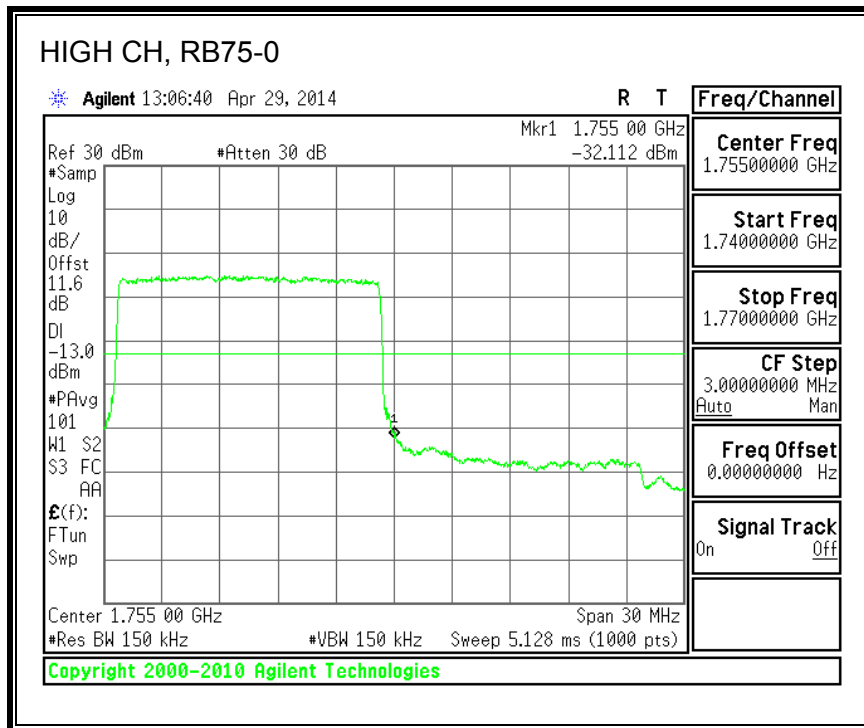
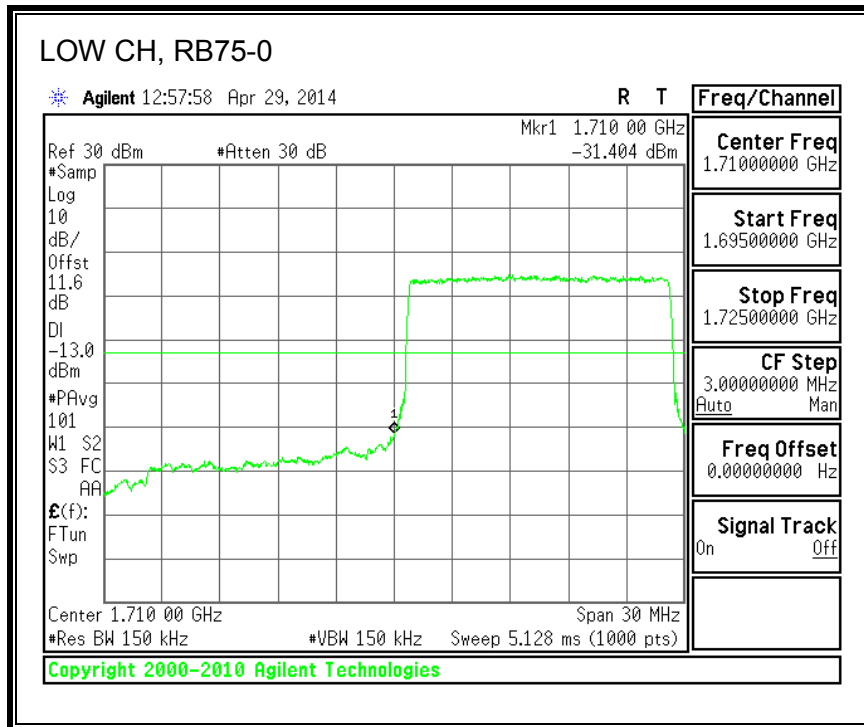


**QPSK, (15.0 MHz BAND WIDTH)**









**16QAM, (15.0 MHz BAND WIDTH)**

