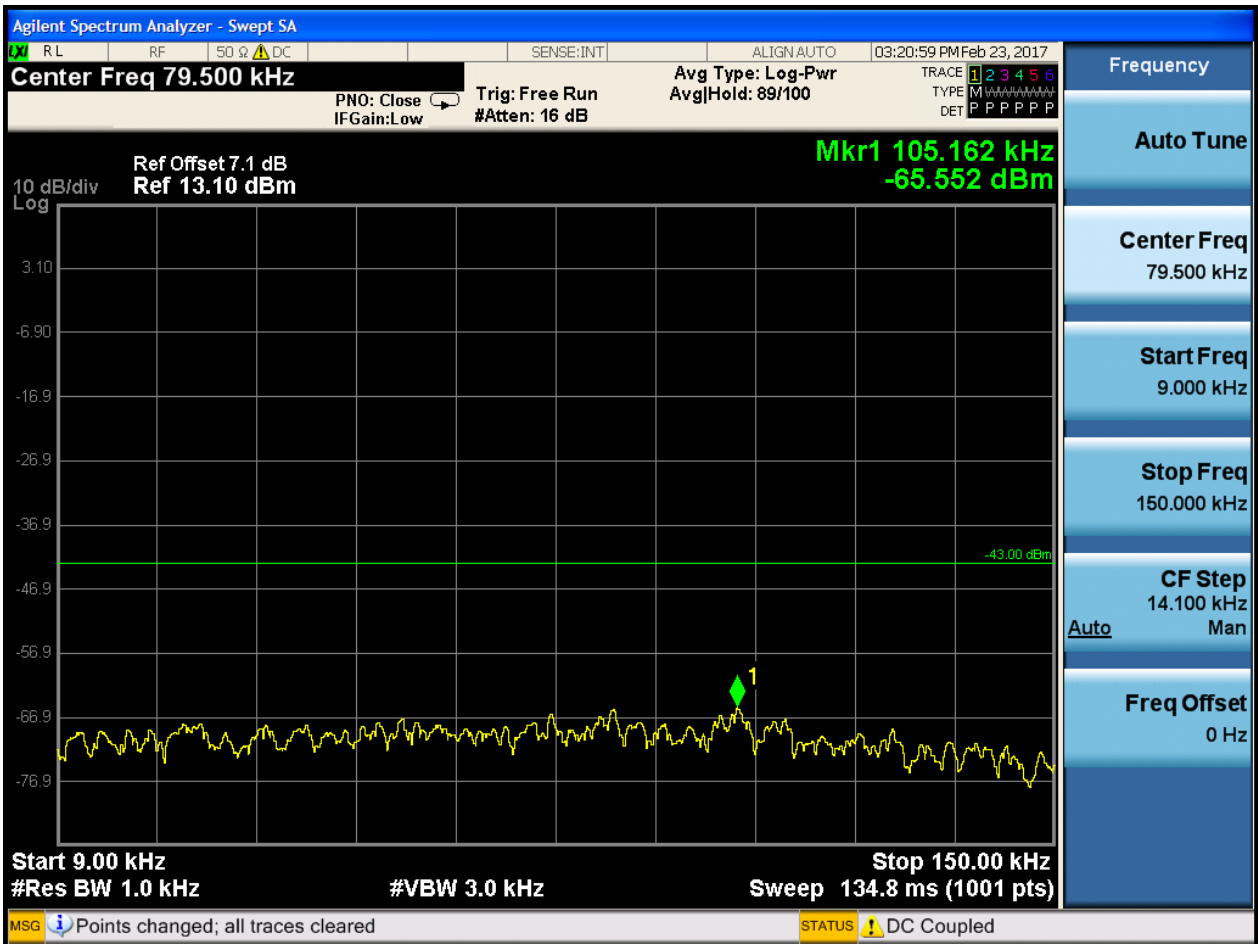


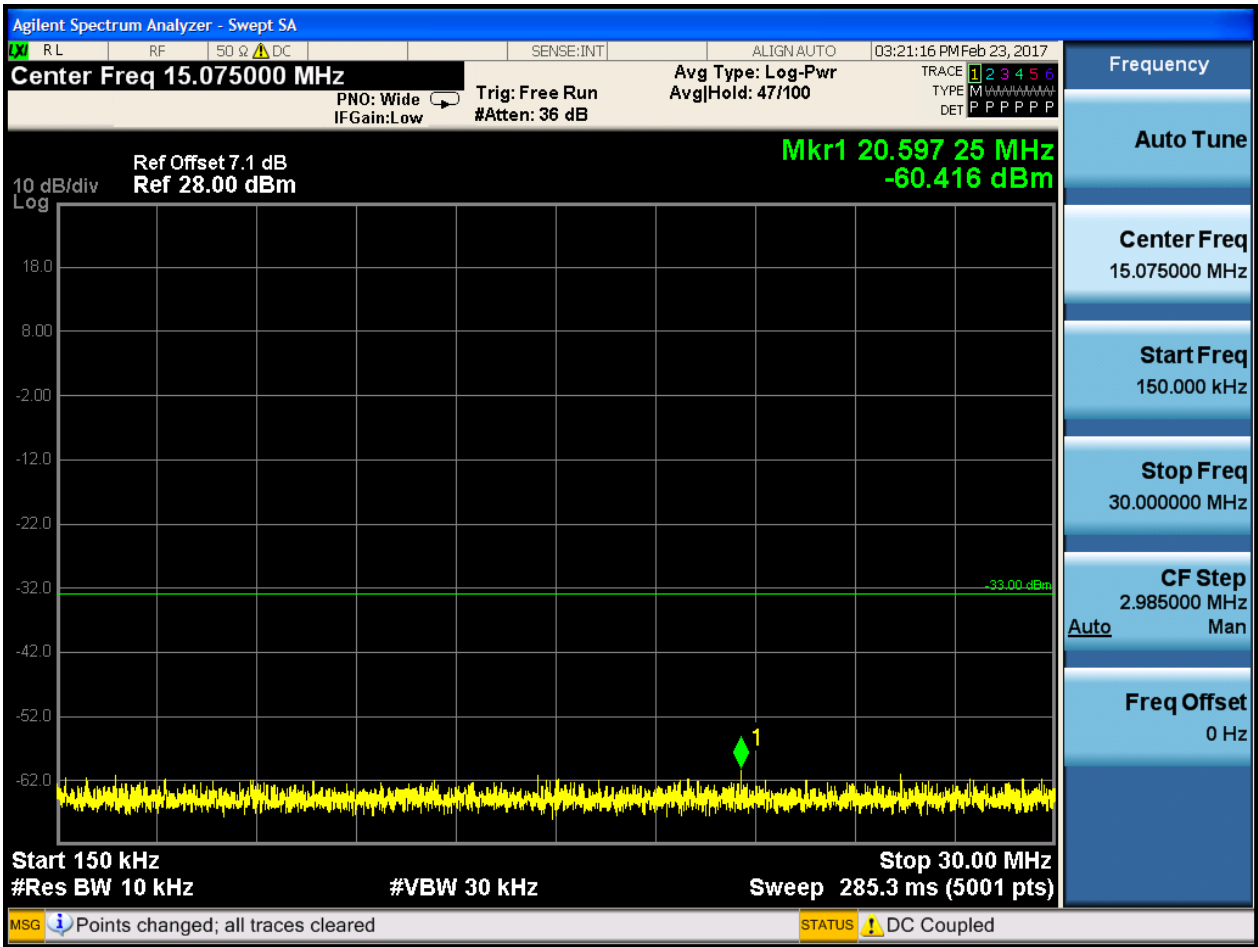


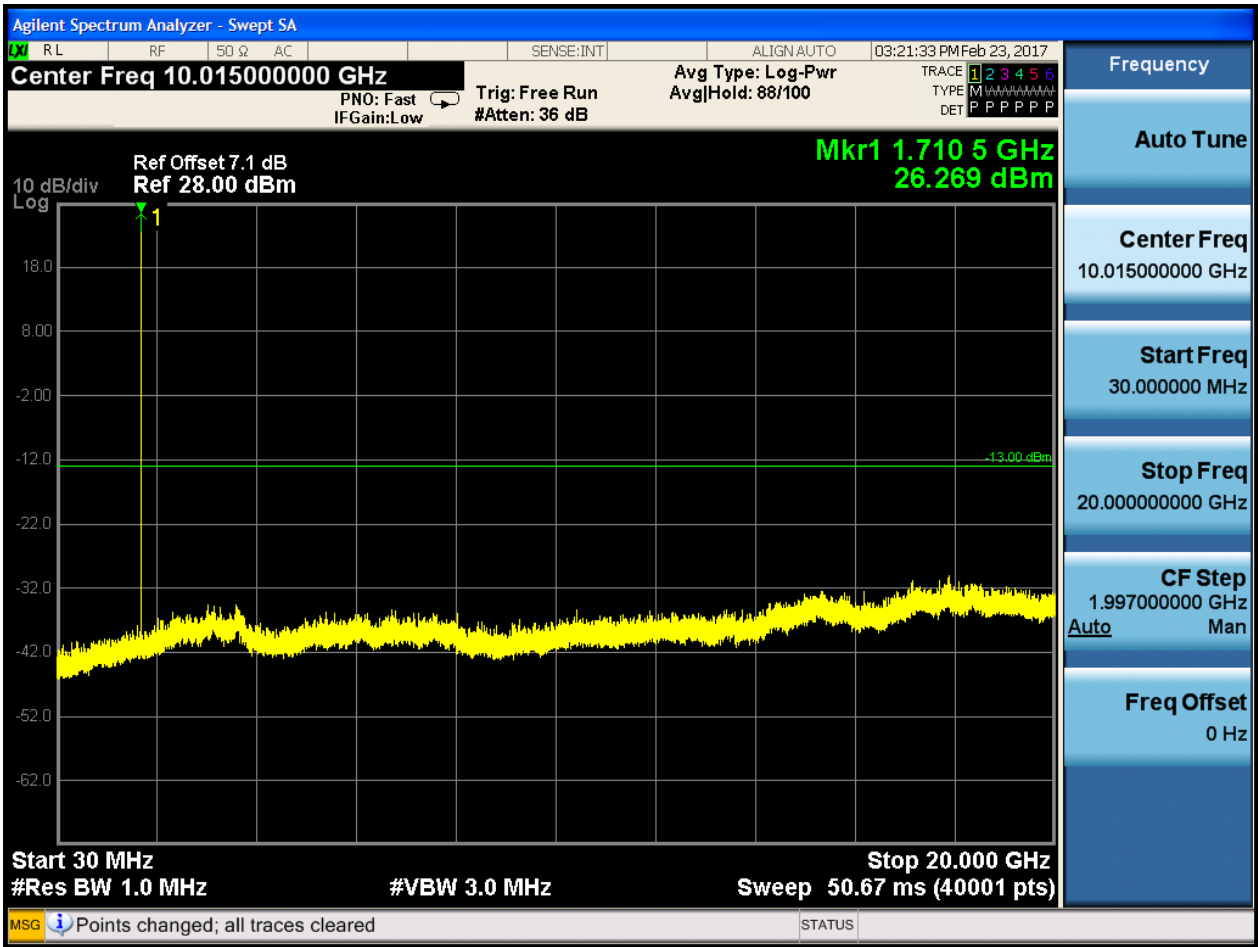
6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



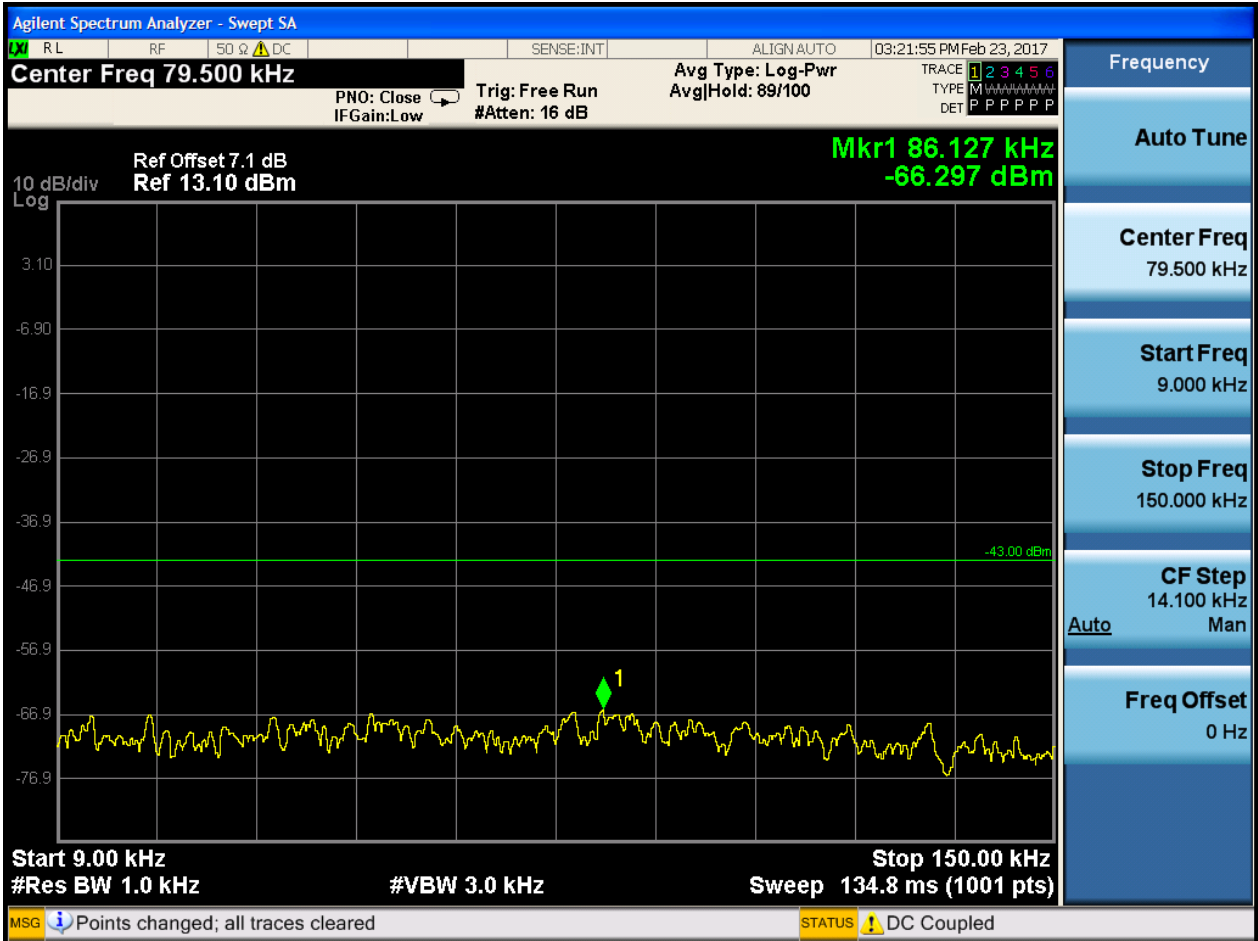


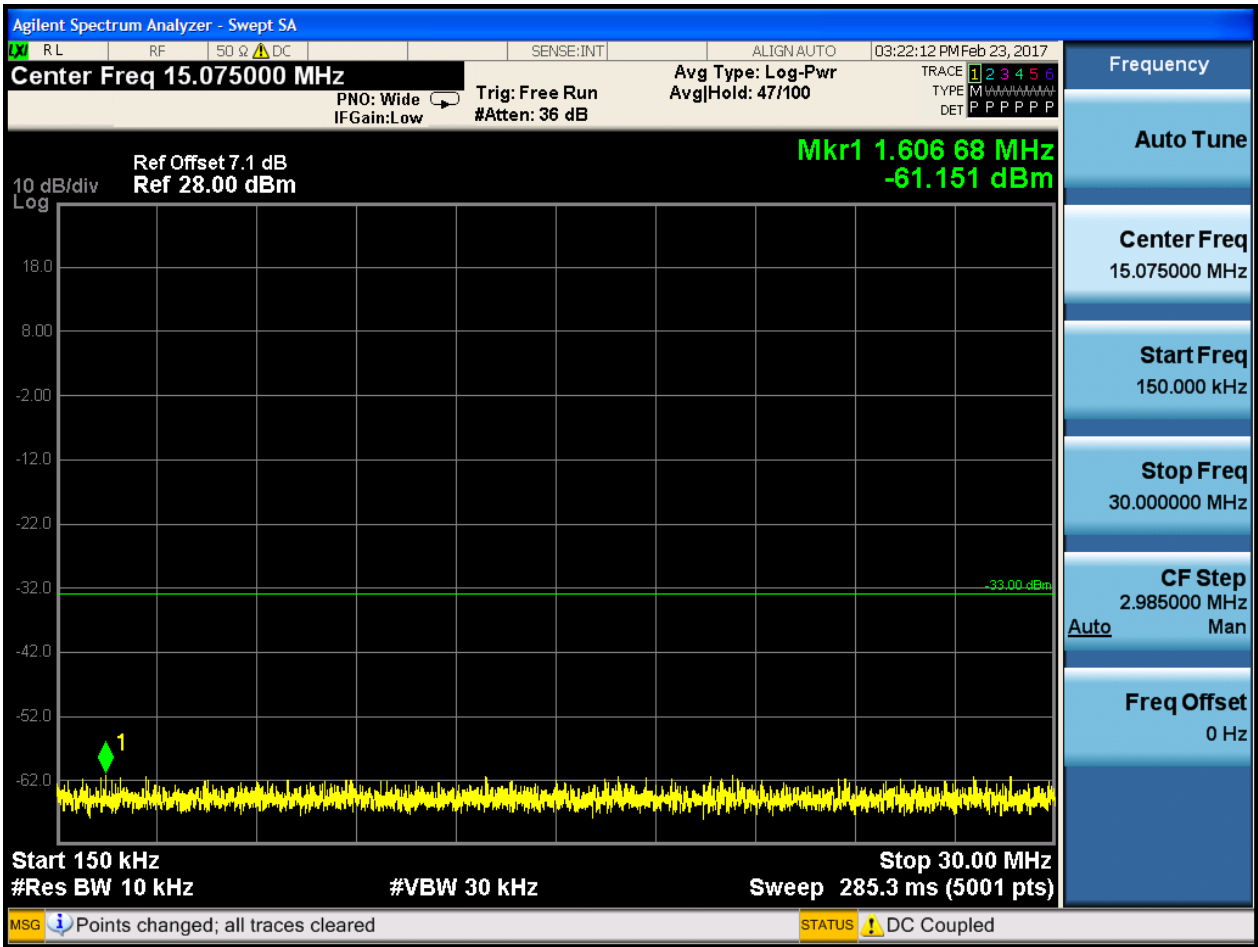


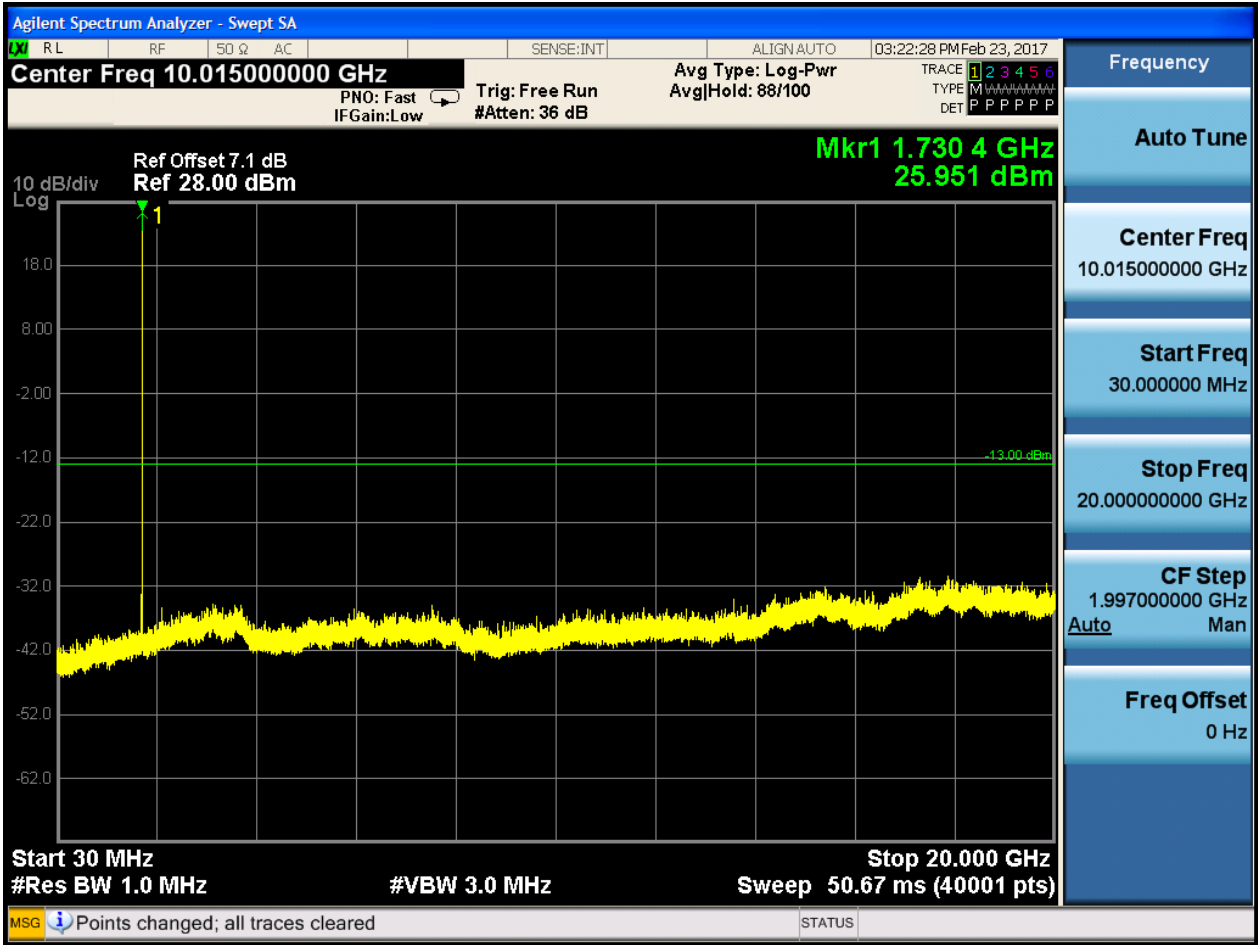


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0





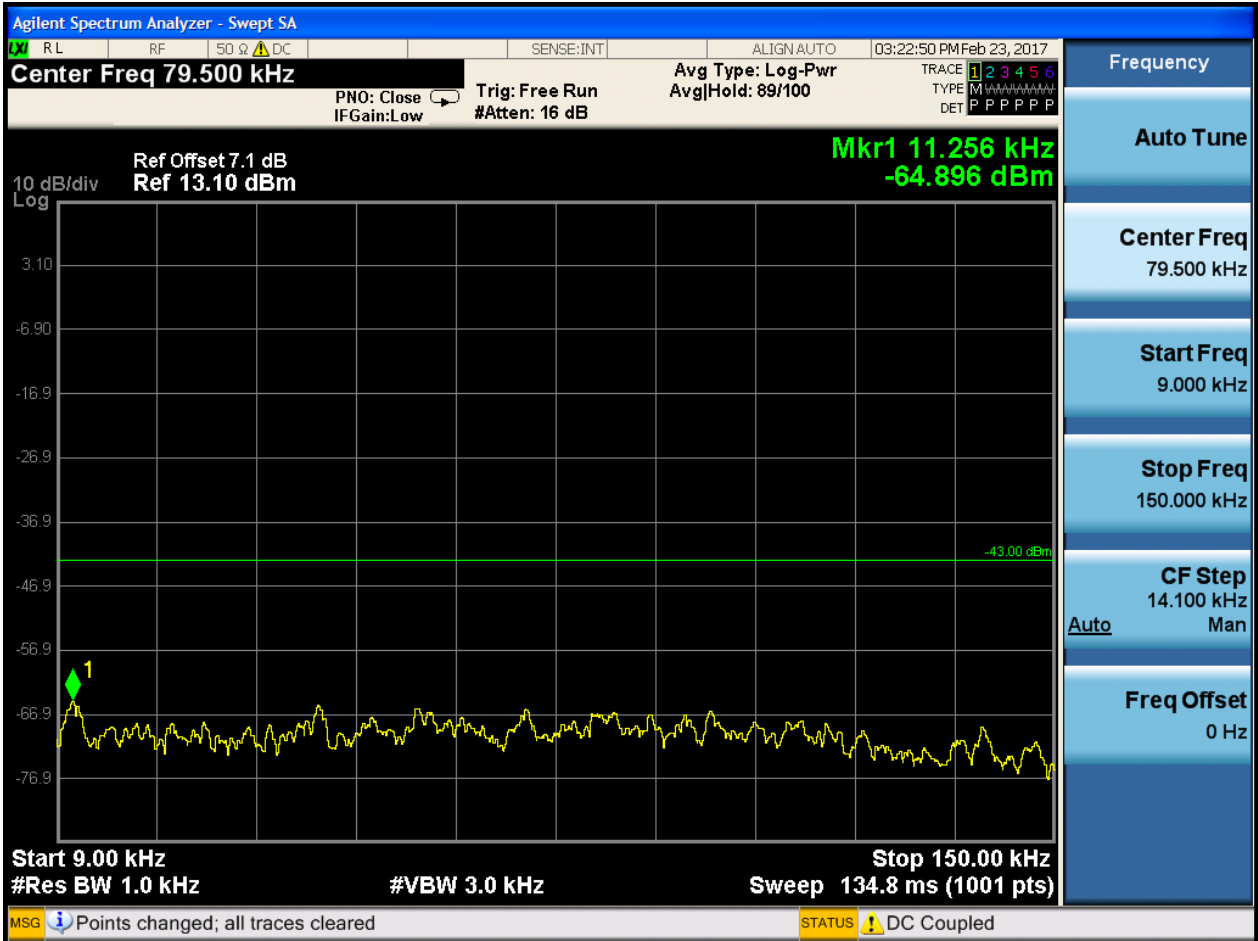


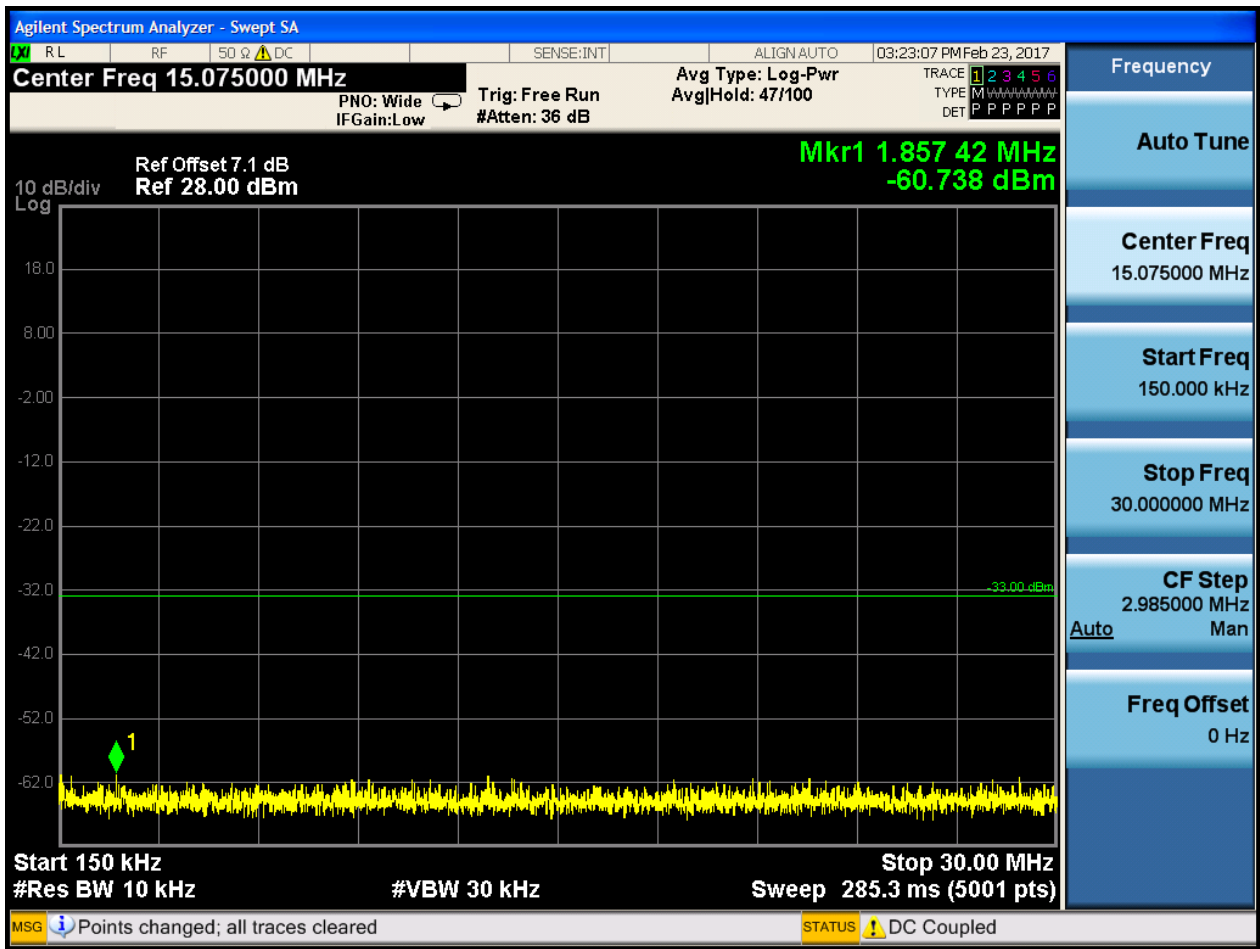


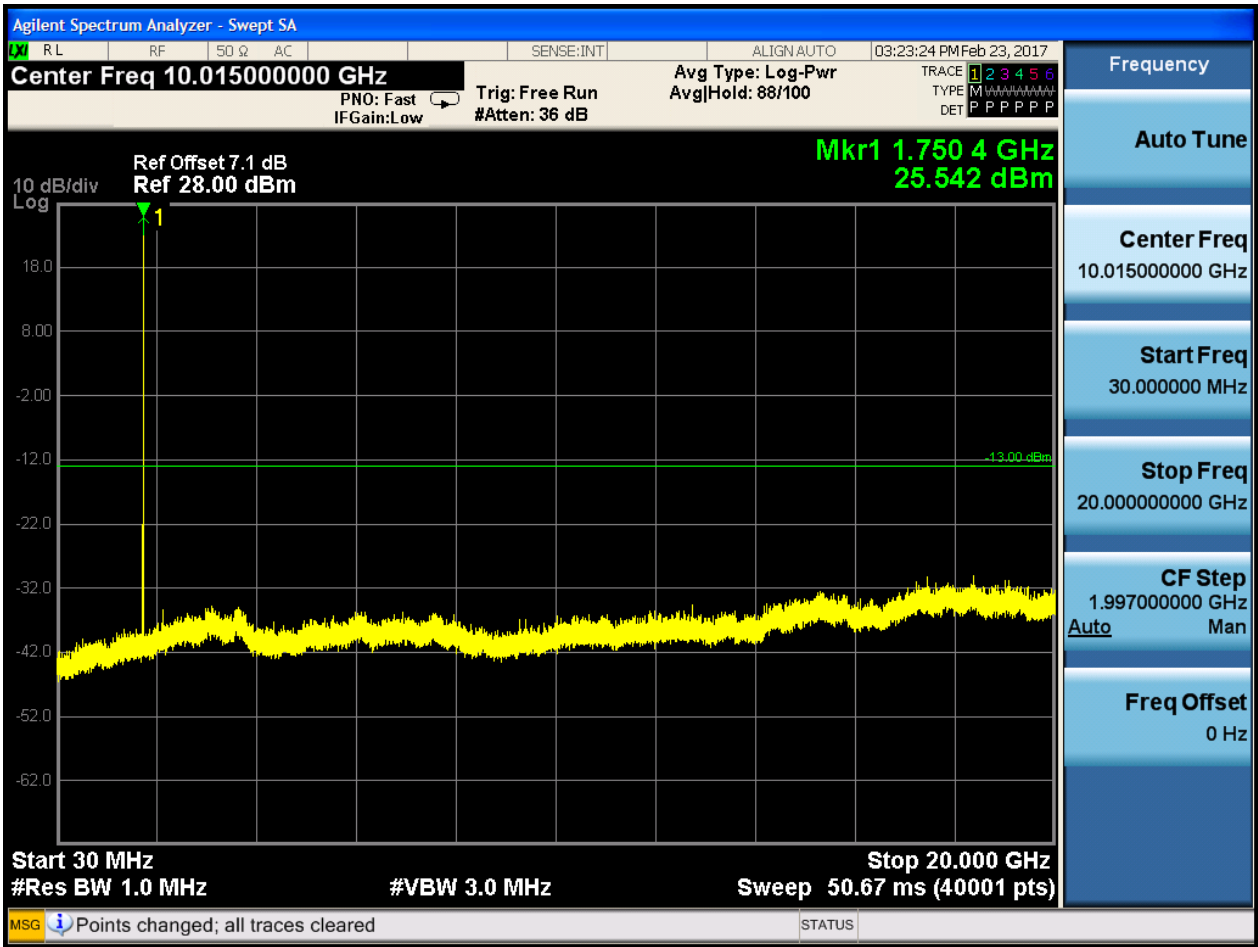


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





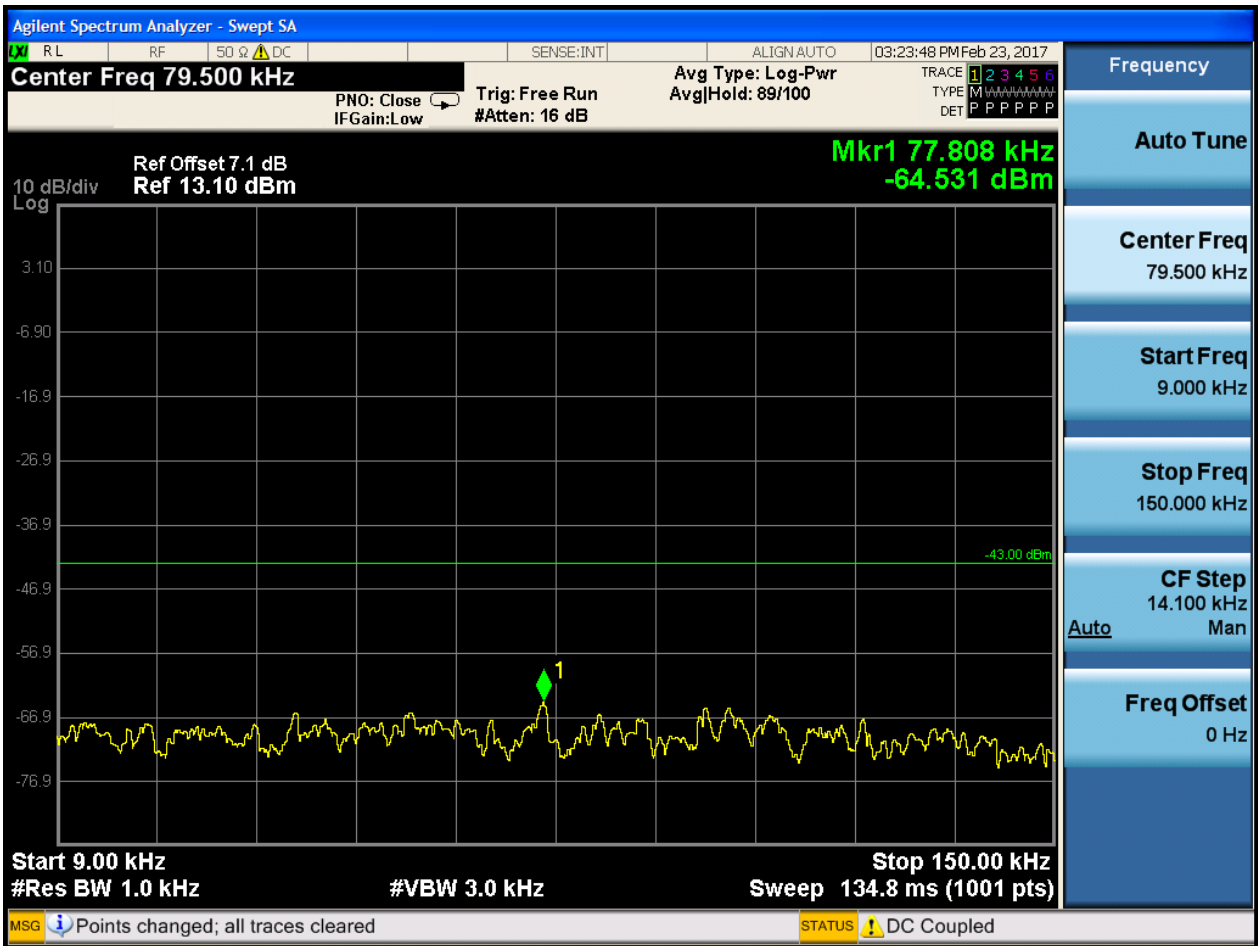


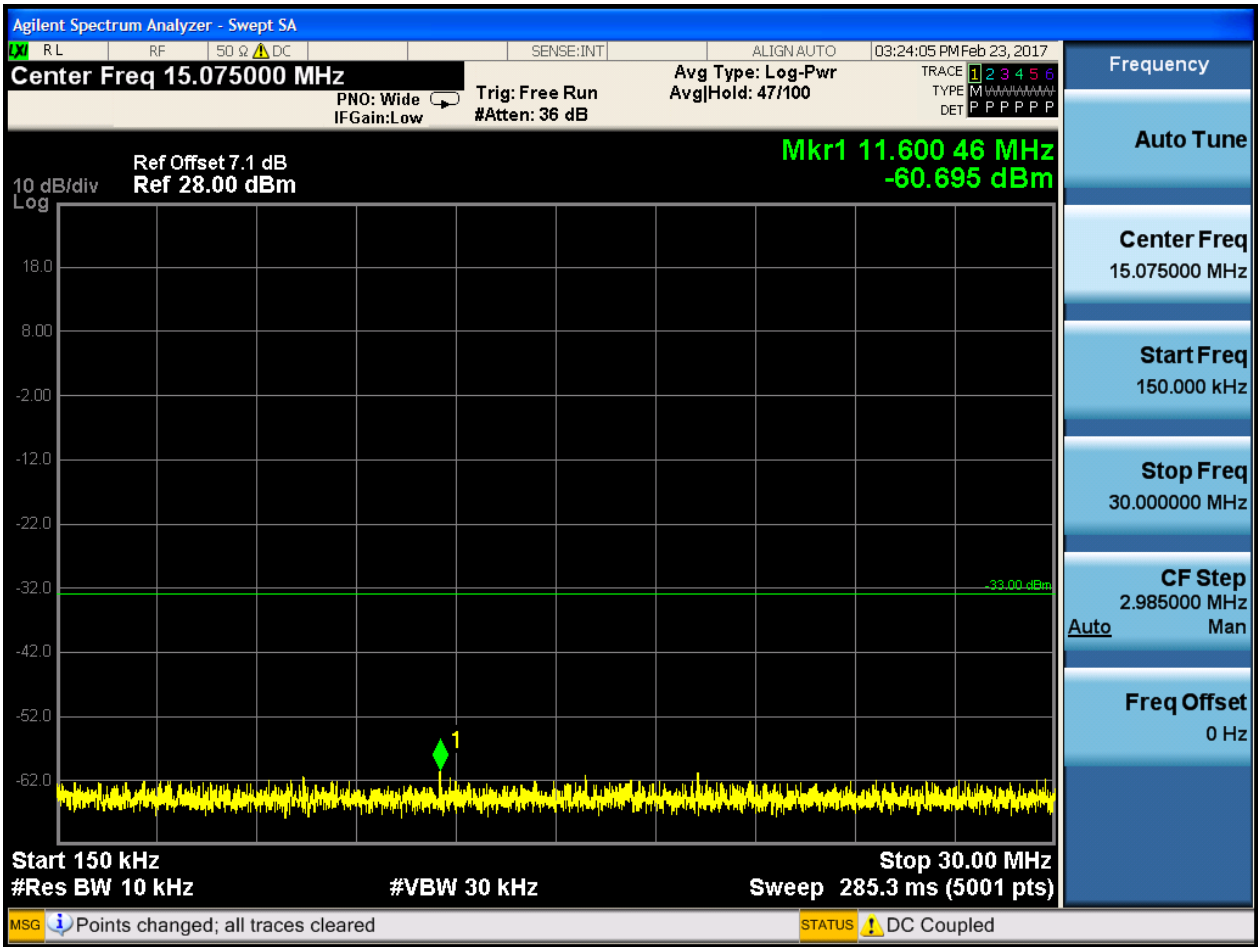


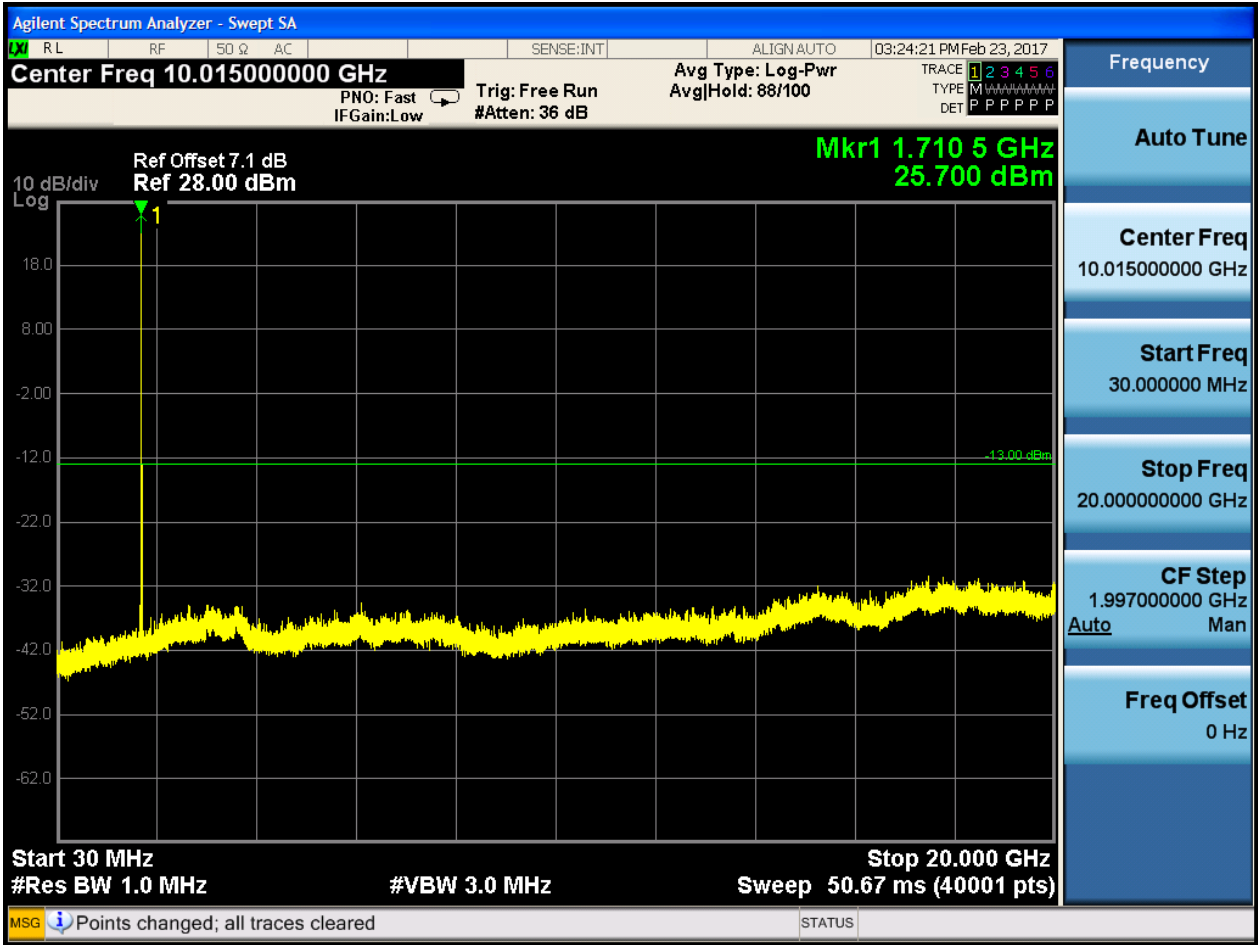
6.1.1.2.4 Test Bandwidth = 10

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



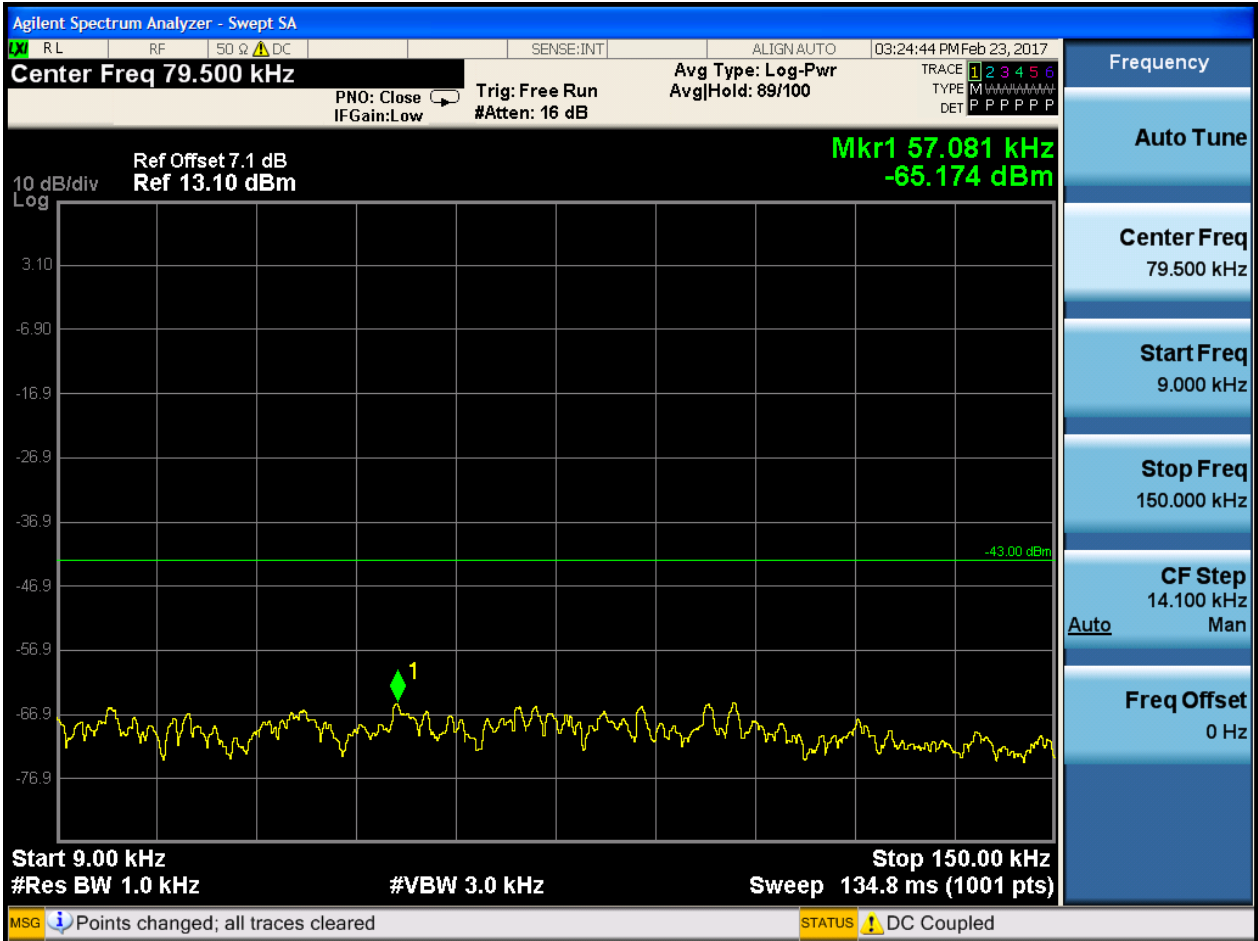


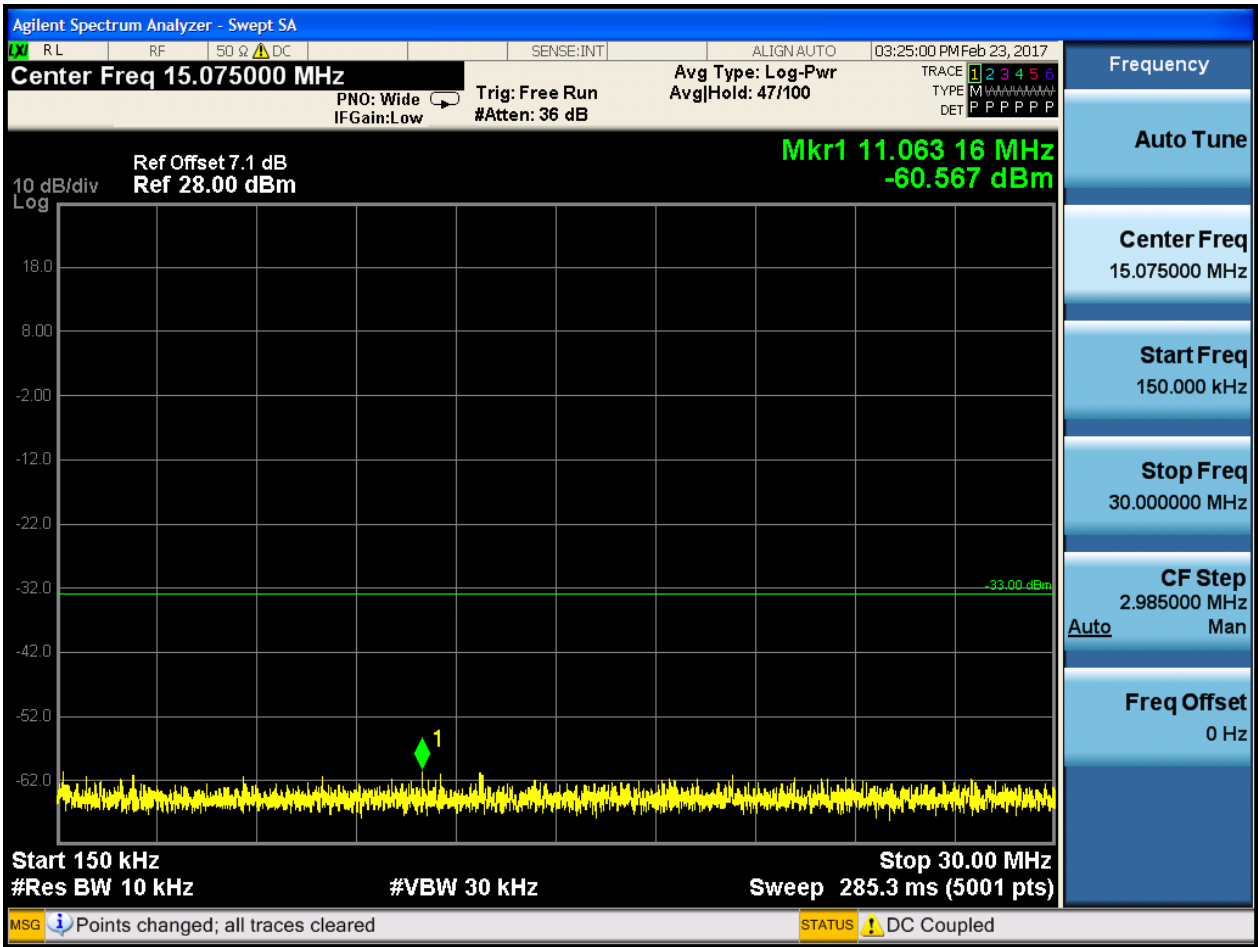




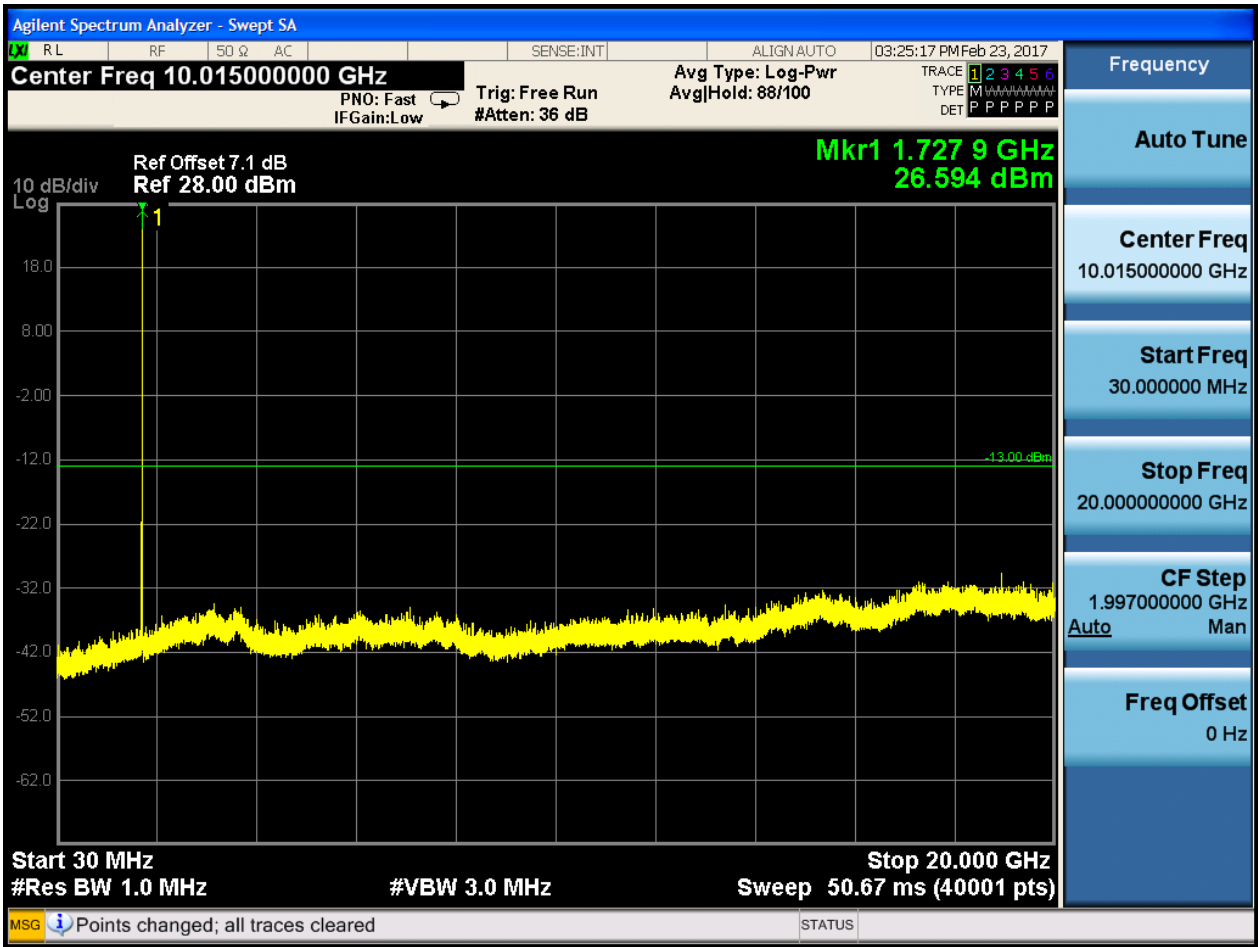
6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0





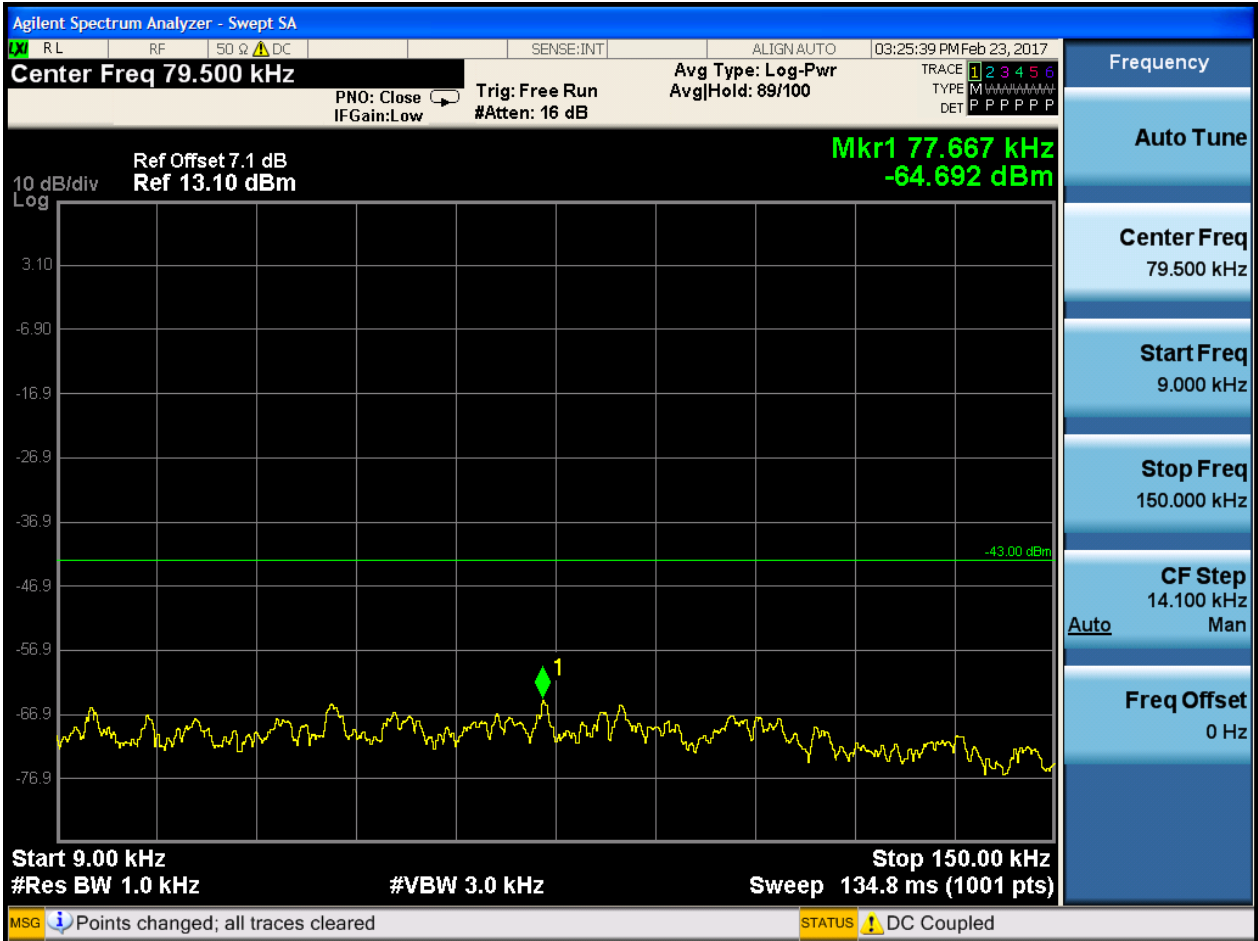


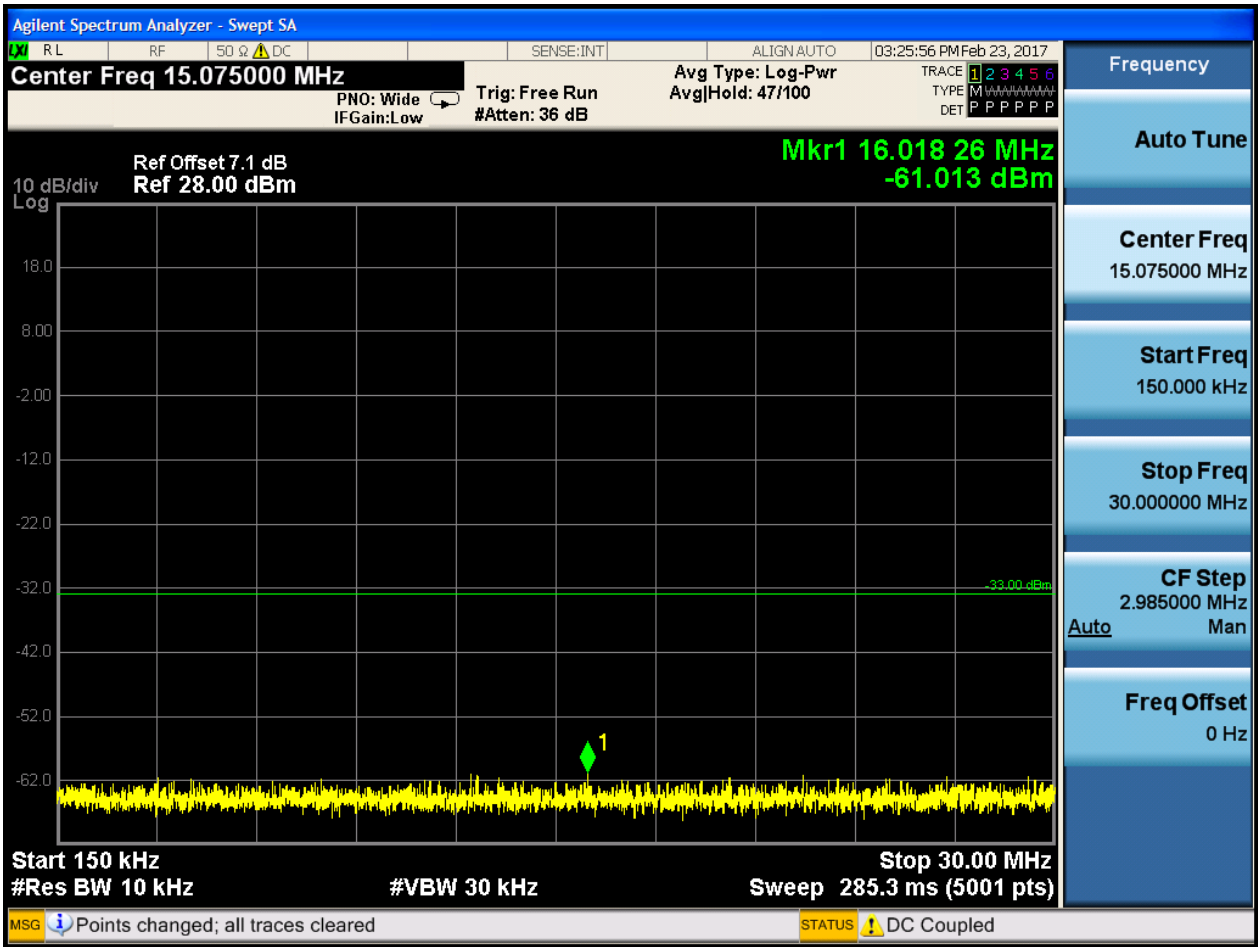


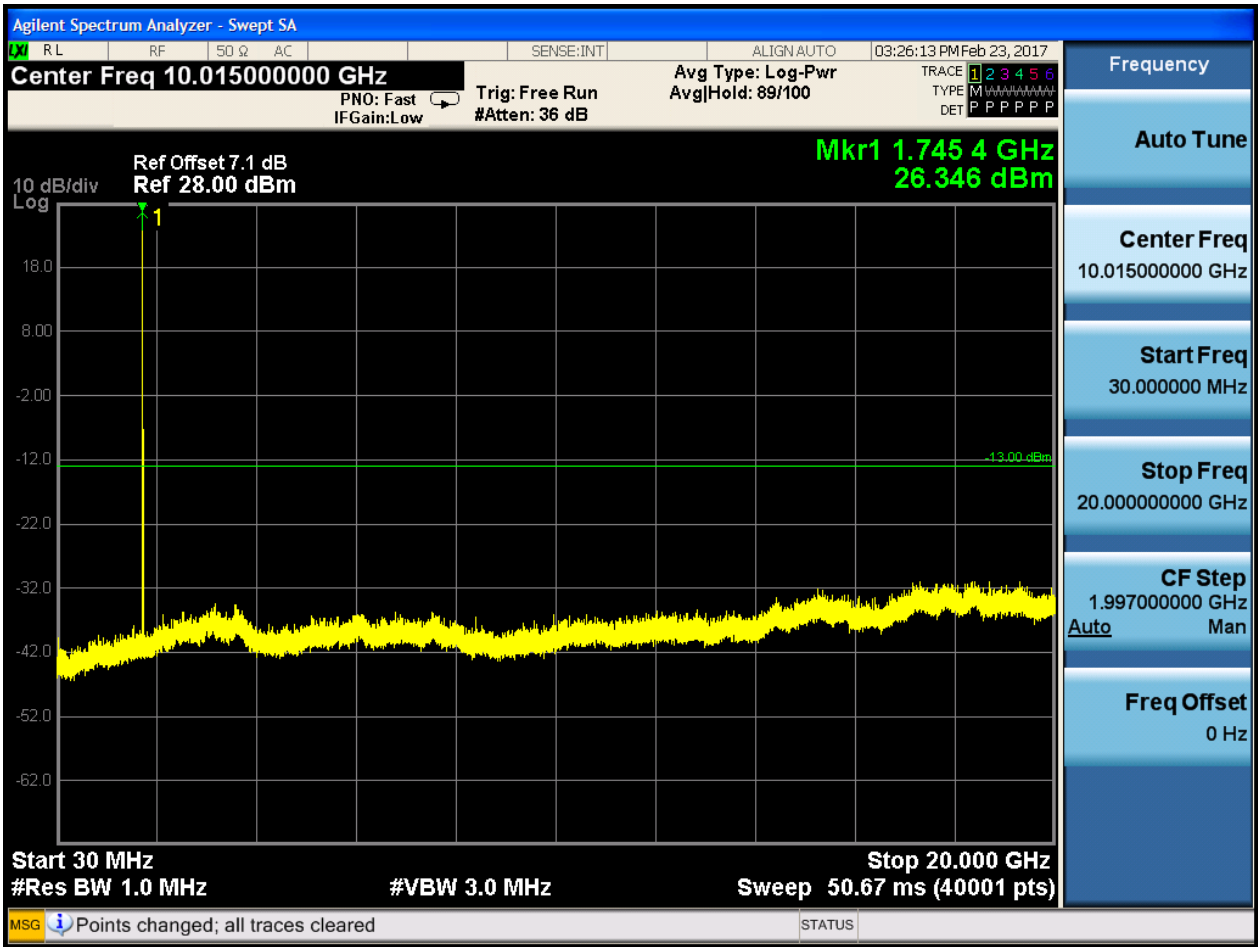


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0





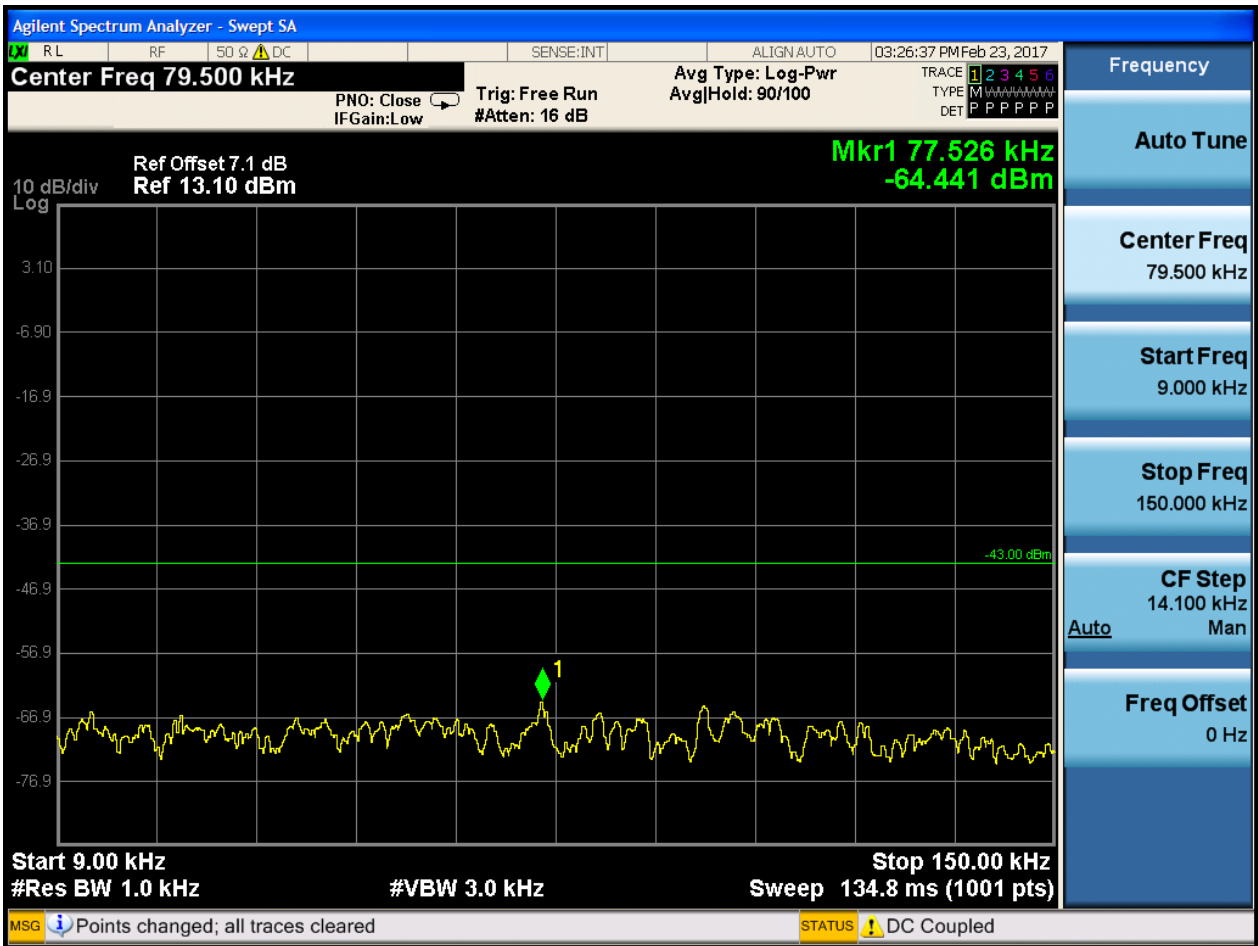


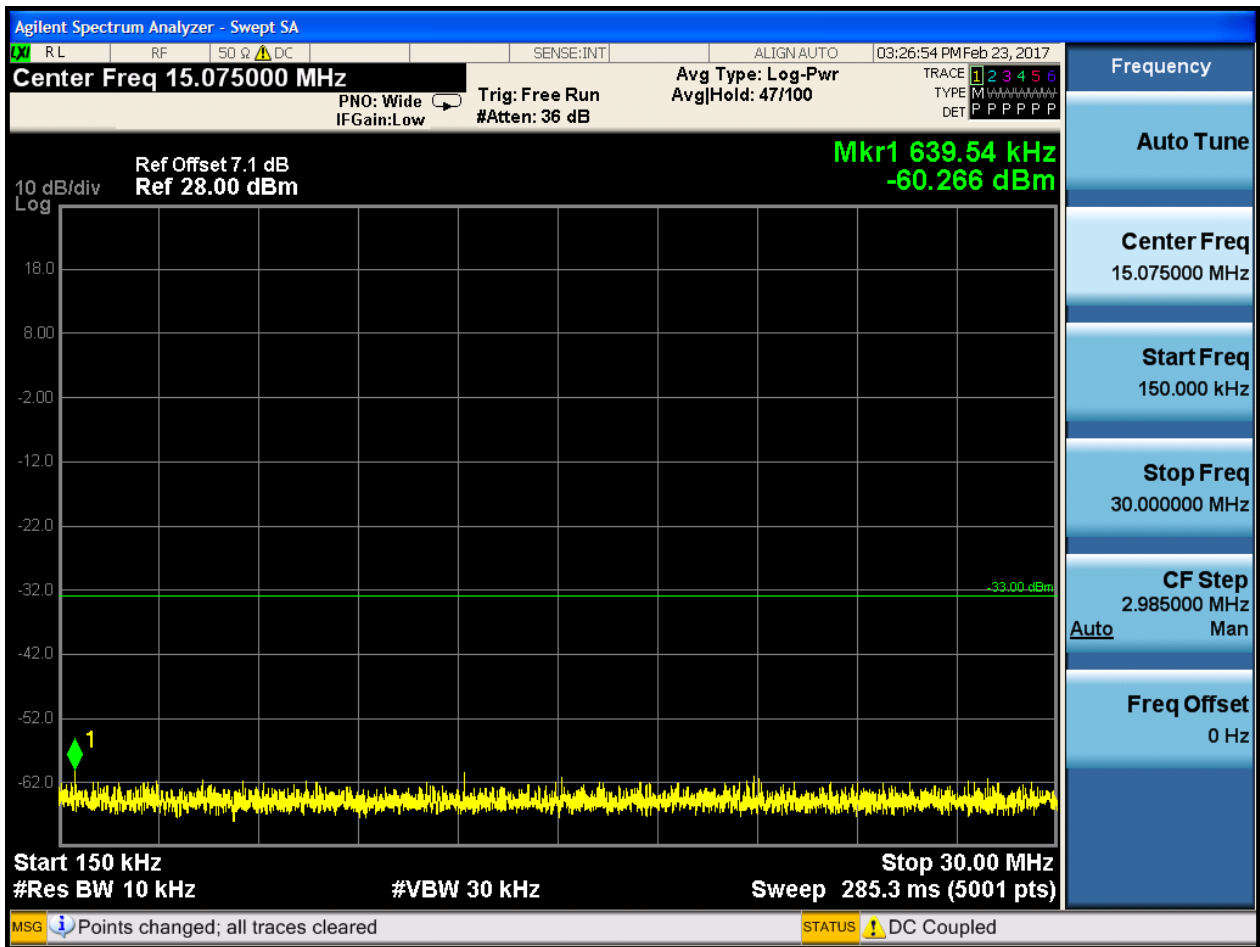


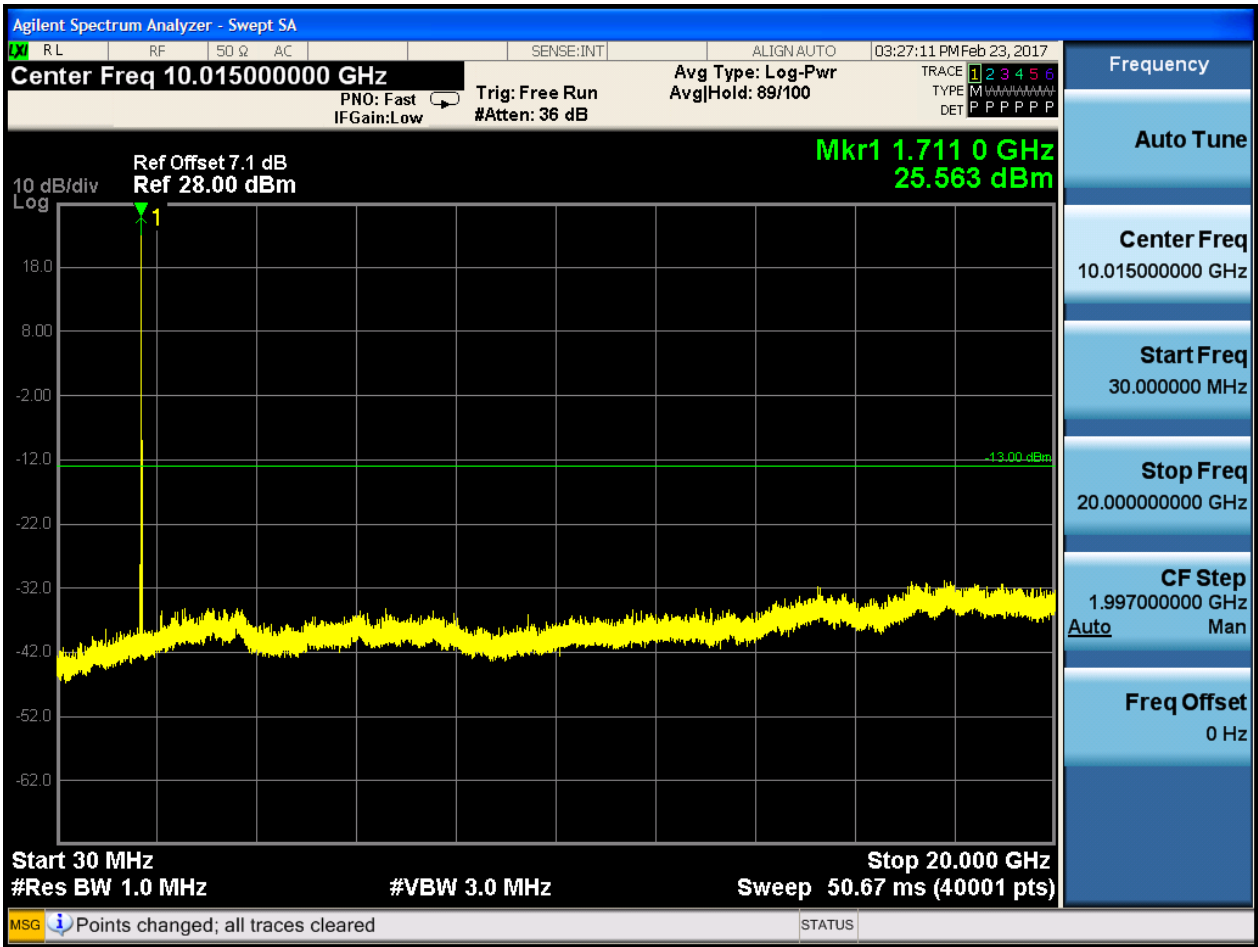
6.1.1.2.5 Test Bandwidth = 15

6.1.1.2.5.1 Test Channel = LCH

6.1.1.2.5.1.1 Test RB = RB1#0



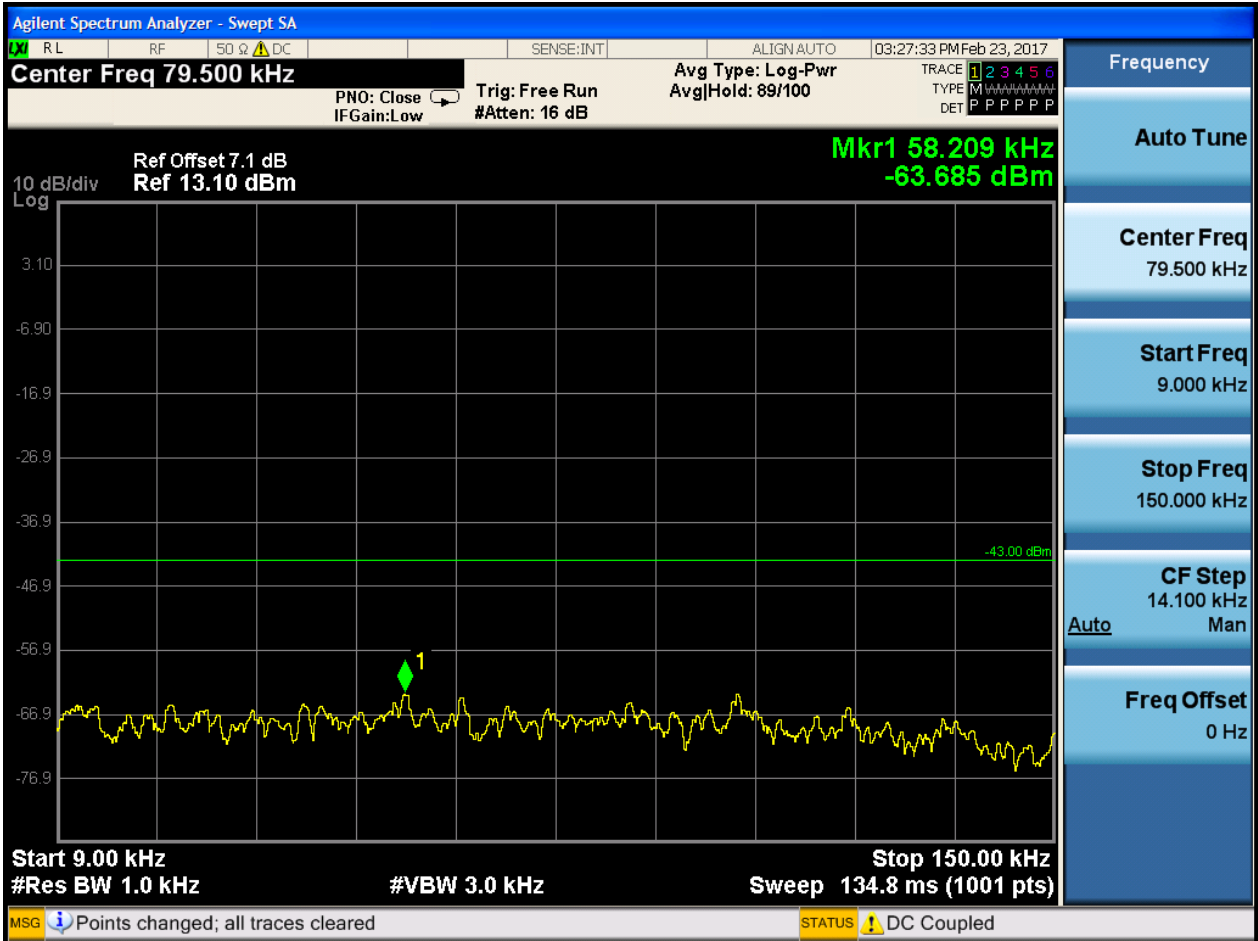




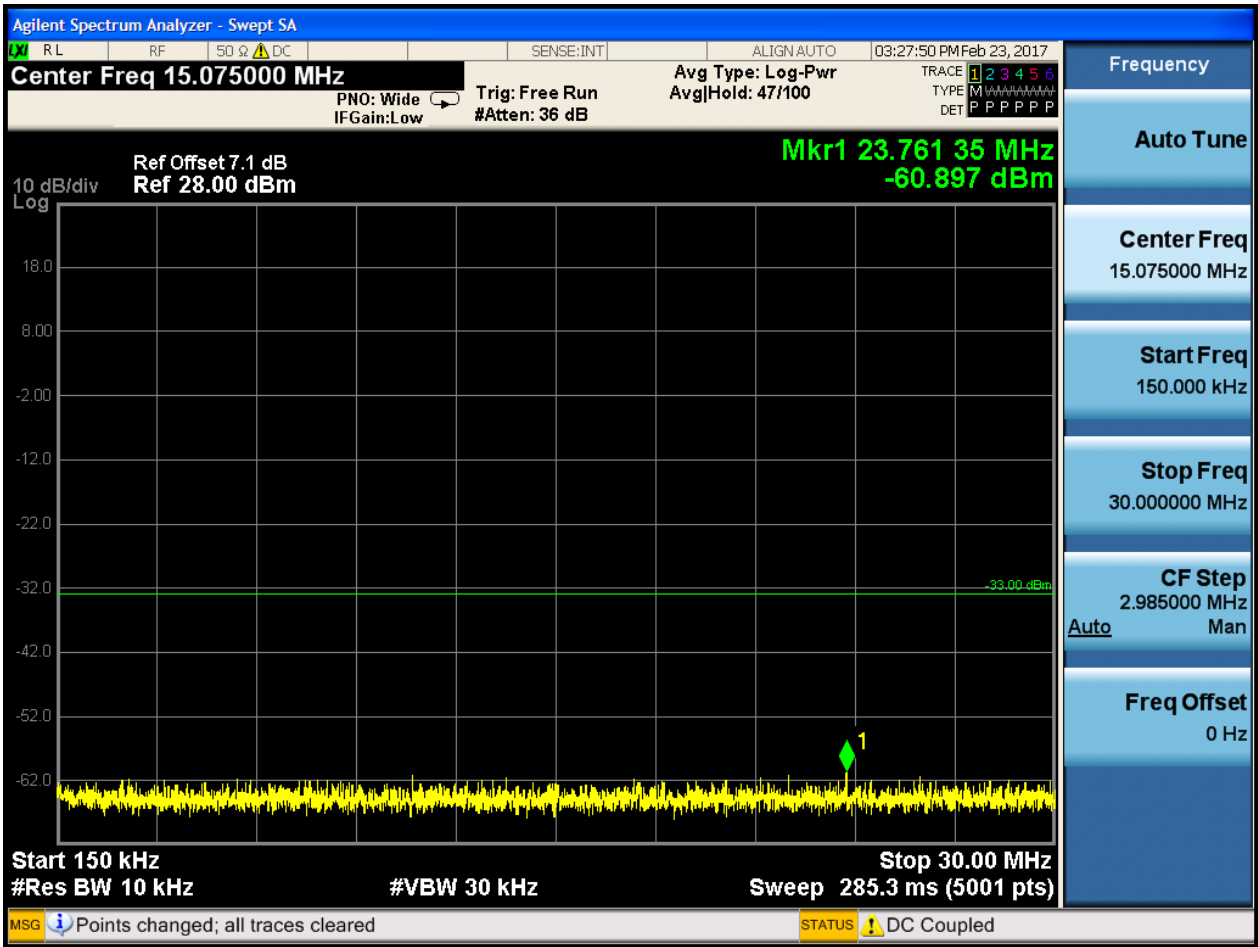


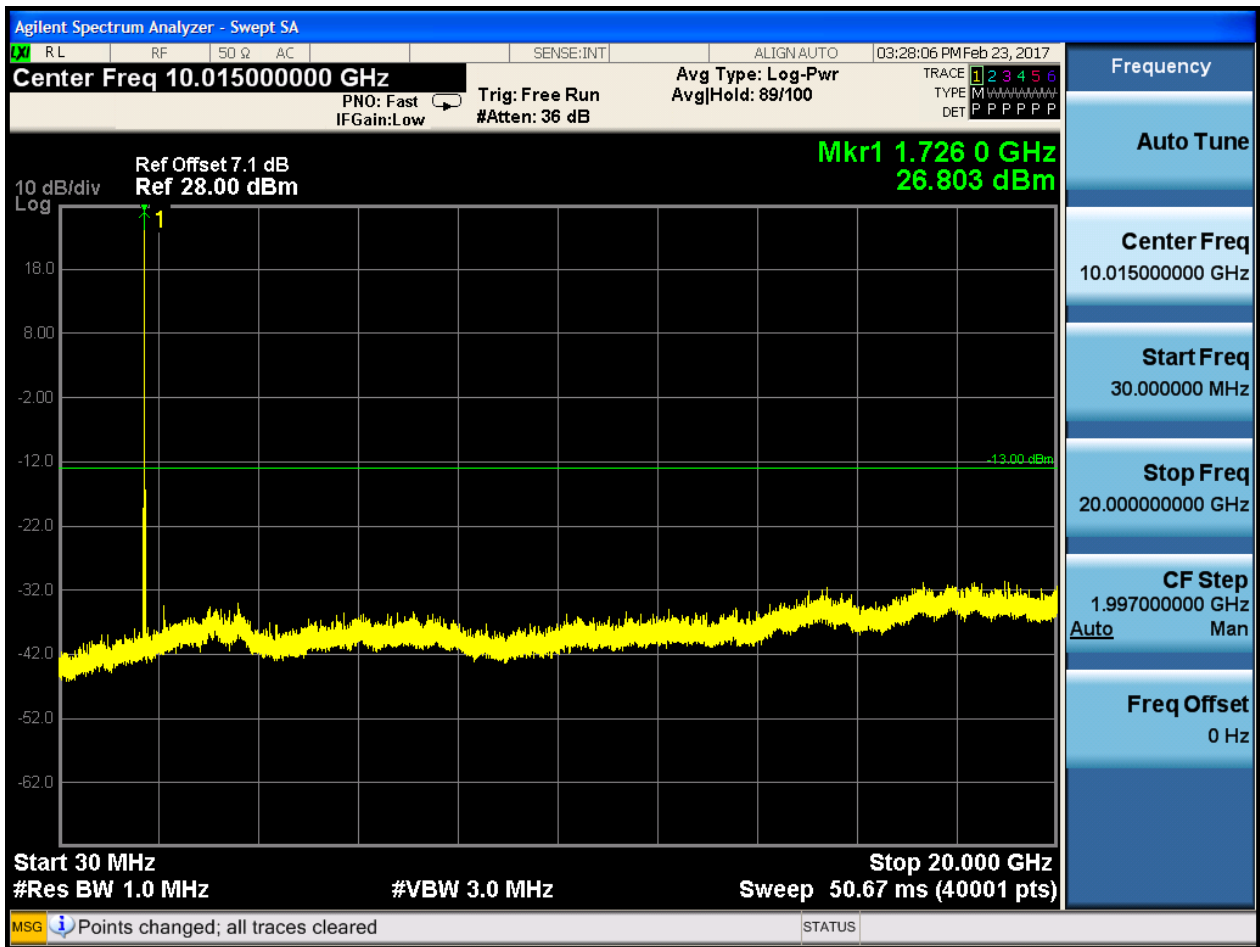
6.1.1.2.5.2 Test Channel = MCH

6.1.1.2.5.2.1 Test RB = RB1#0





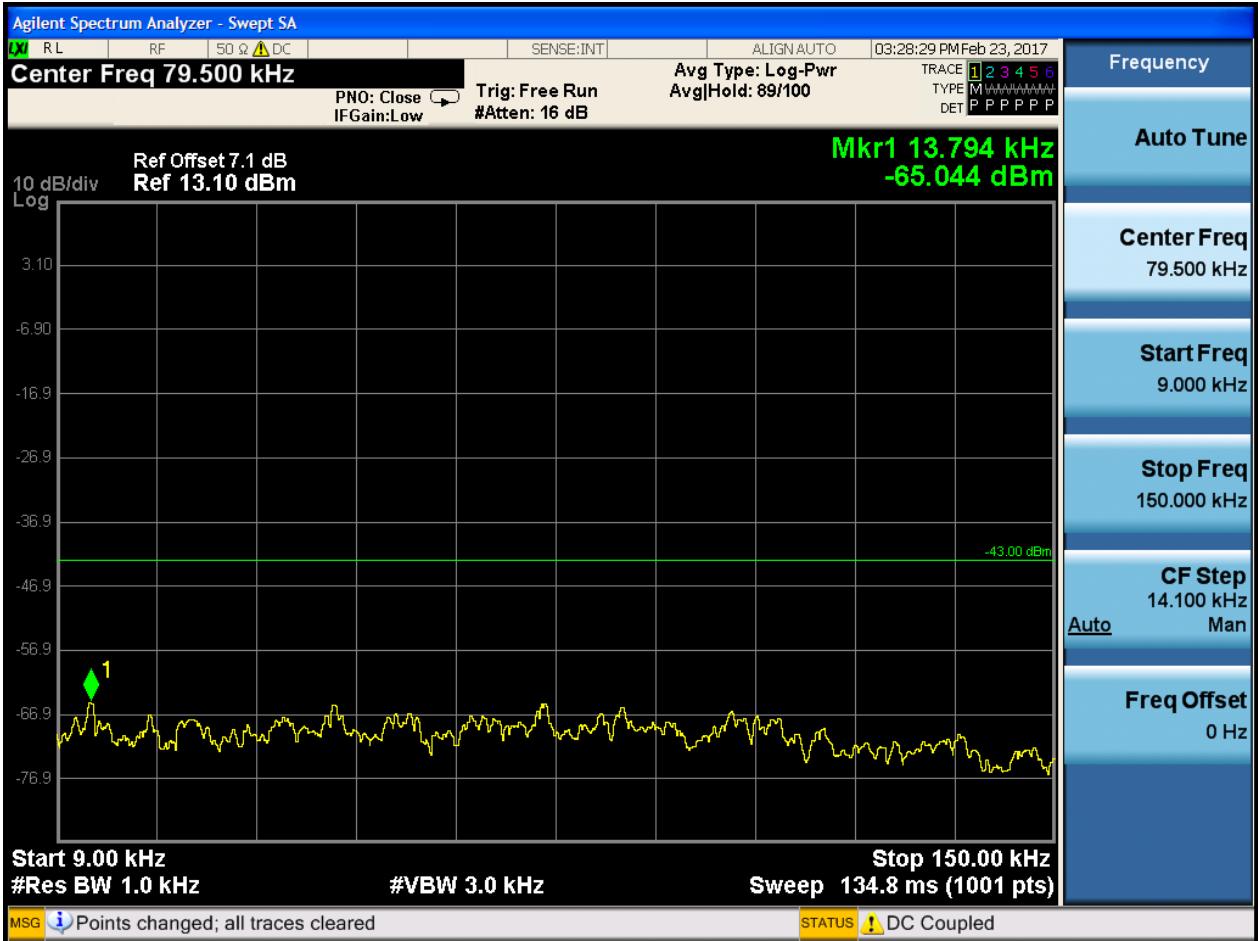


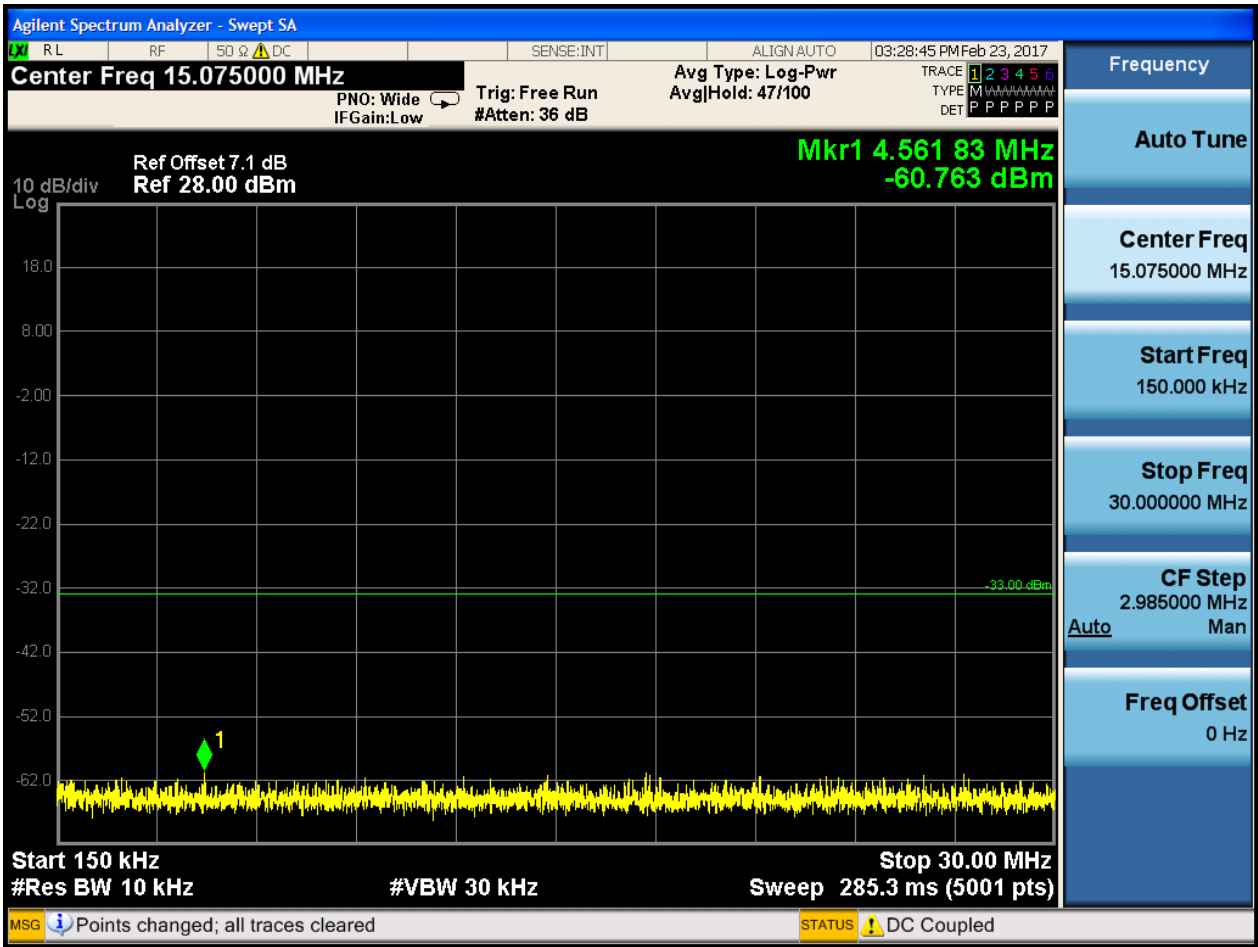


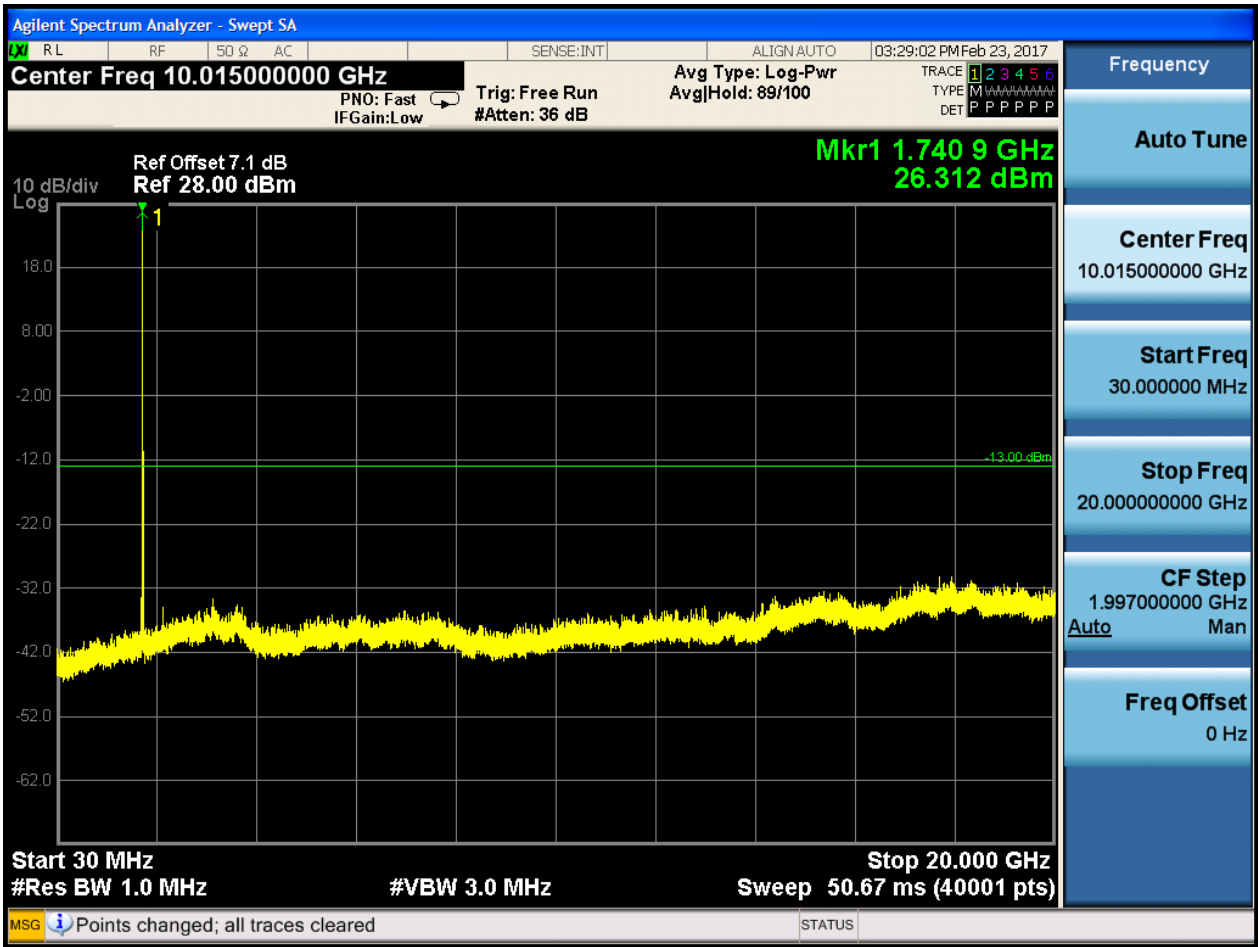


6.1.1.2.5.3 Test Channel = HCH

6.1.1.2.5.3.1 Test RB = RB1#0





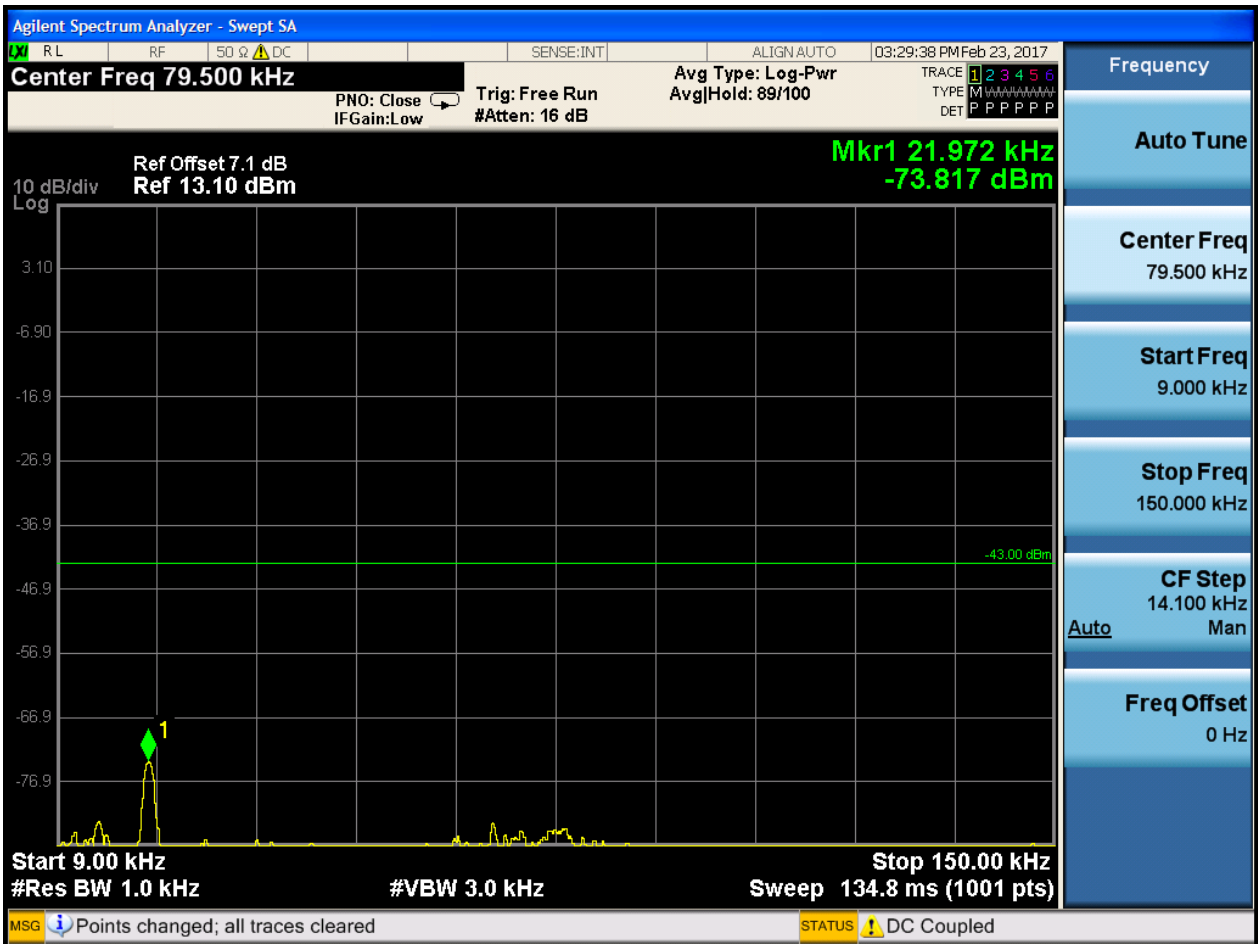


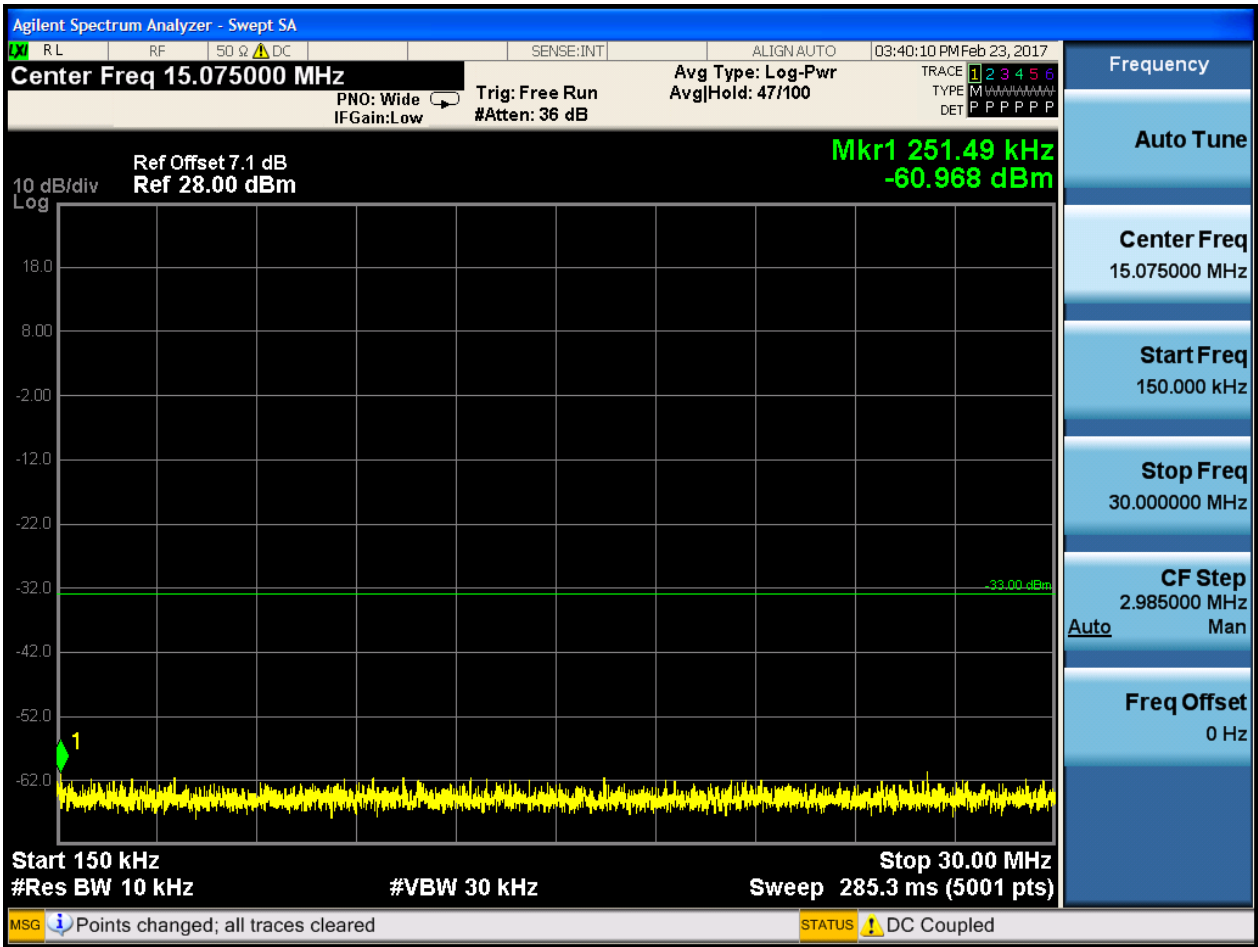


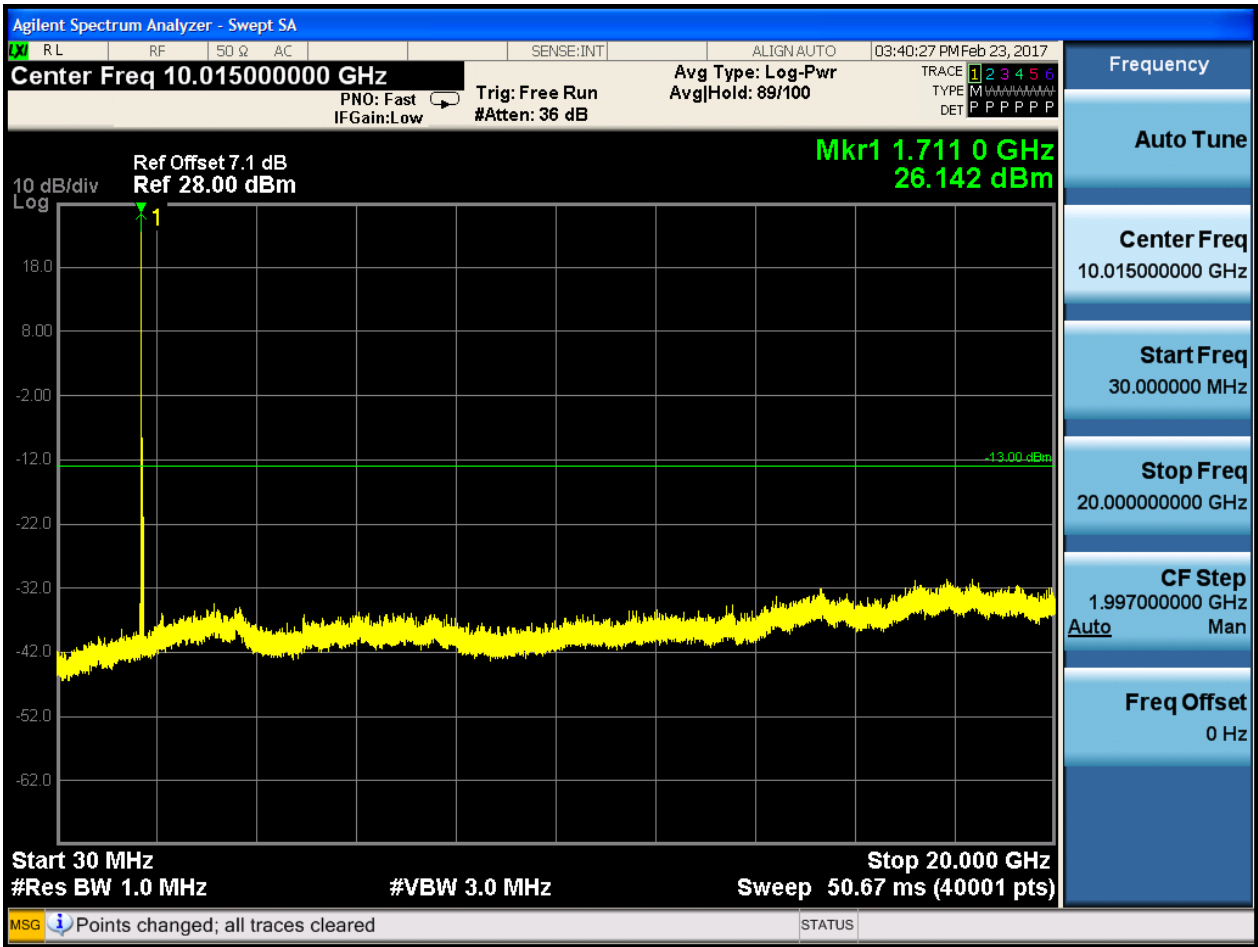
6.1.1.2.6 Test Bandwidth = 20

6.1.1.2.6.1 Test Channel = LCH

6.1.1.2.6.1.1 Test RB = RB1#0





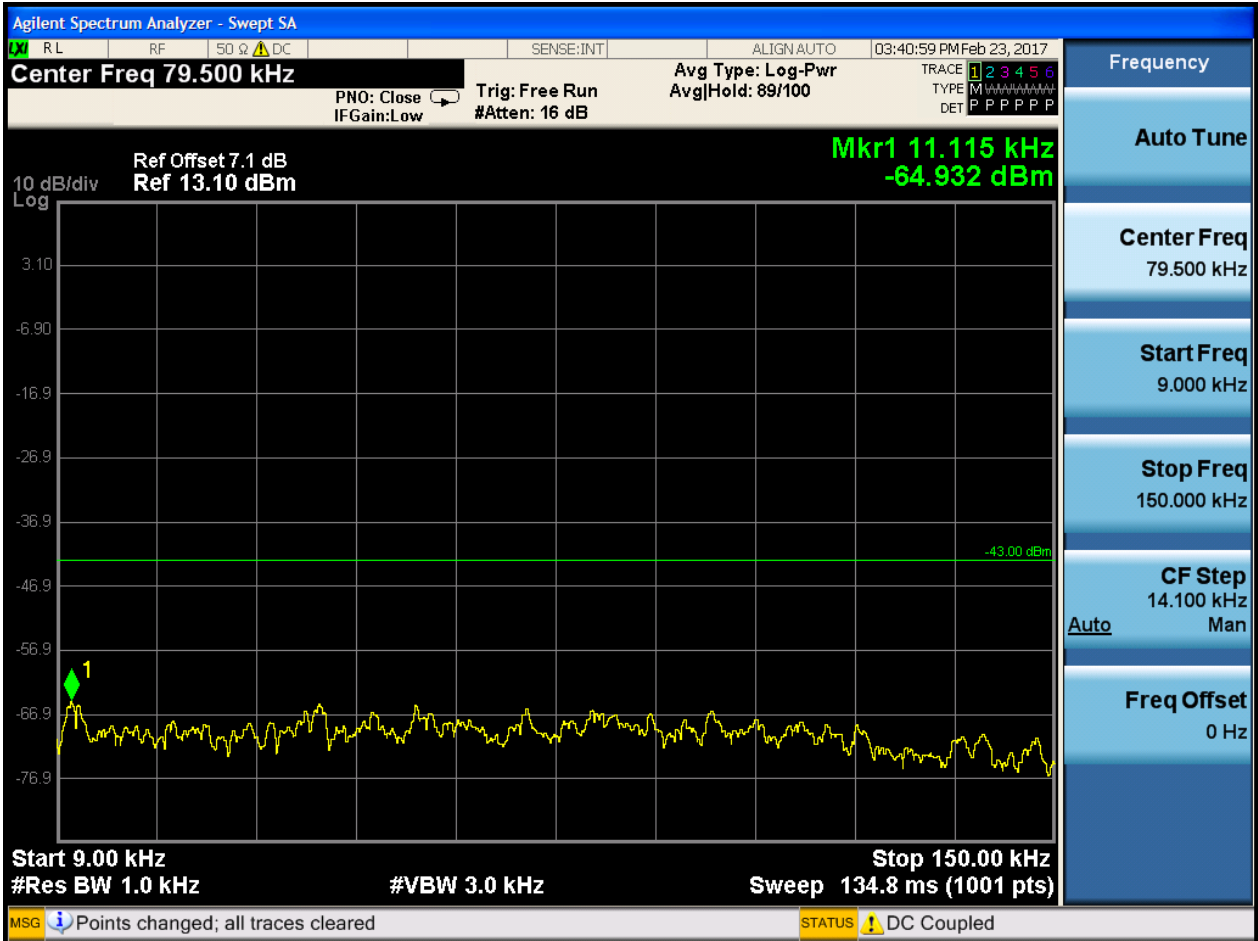


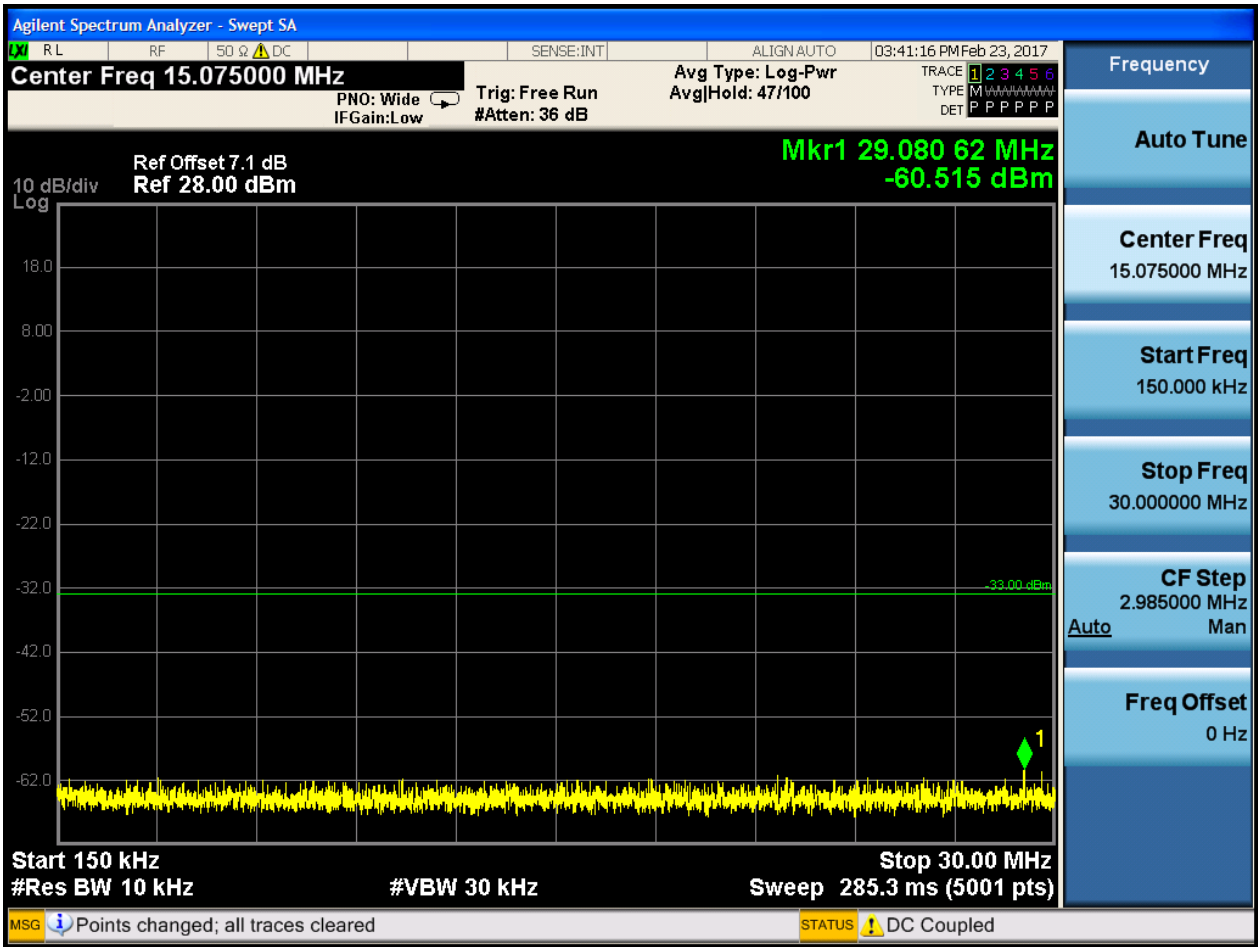


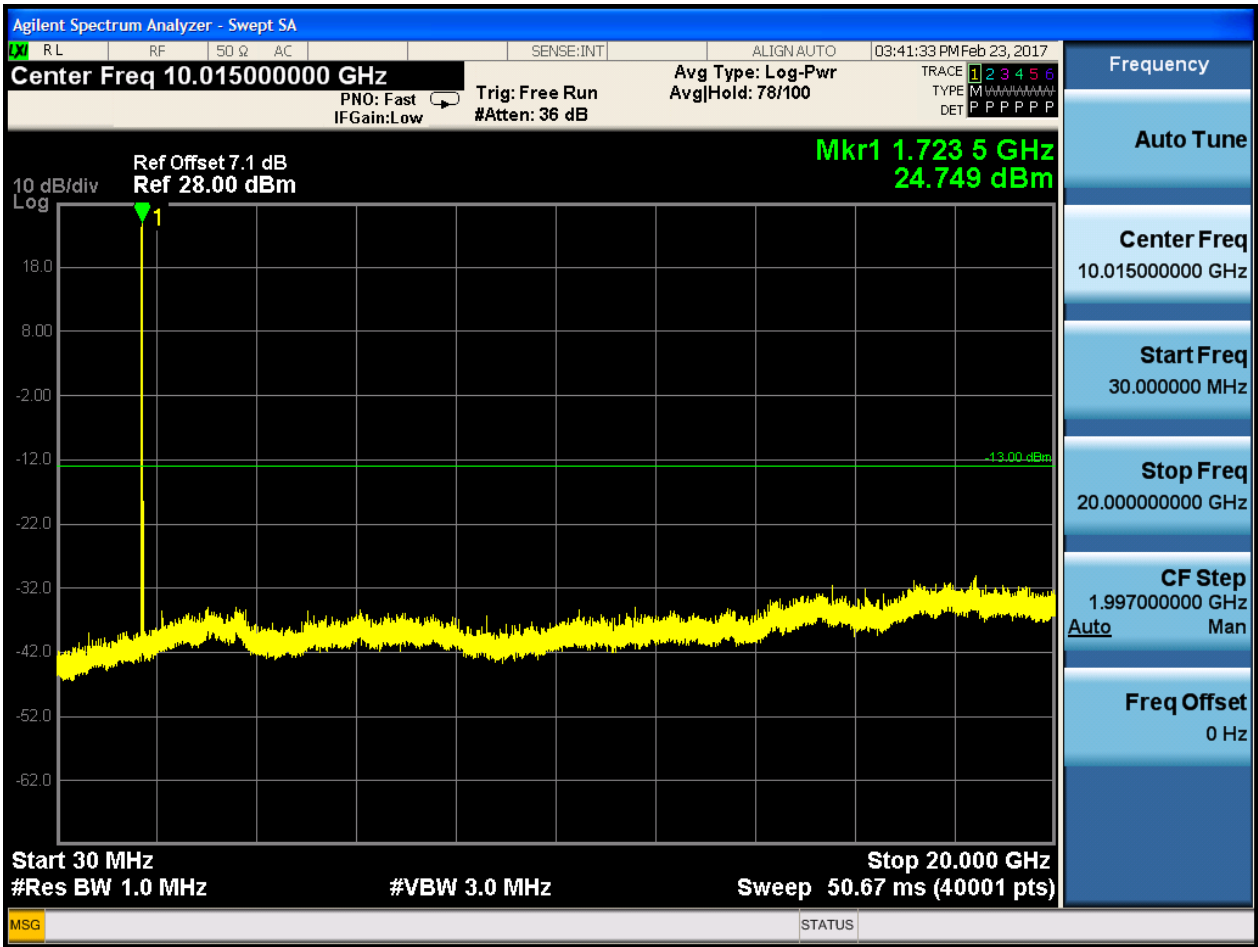


6.1.1.2.6.2 Test Channel = MCH

6.1.1.2.6.2.1 Test RB = RB1#0



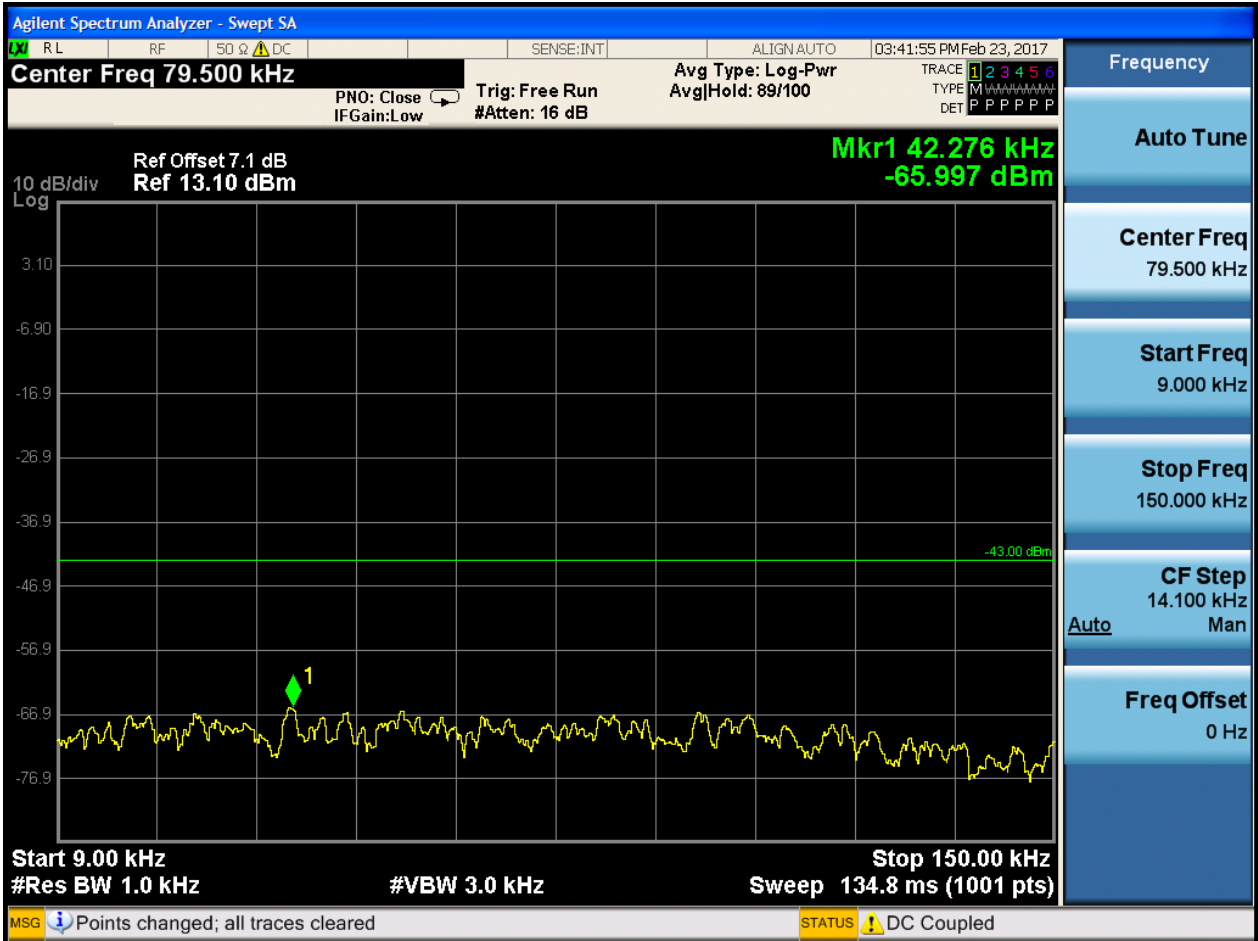


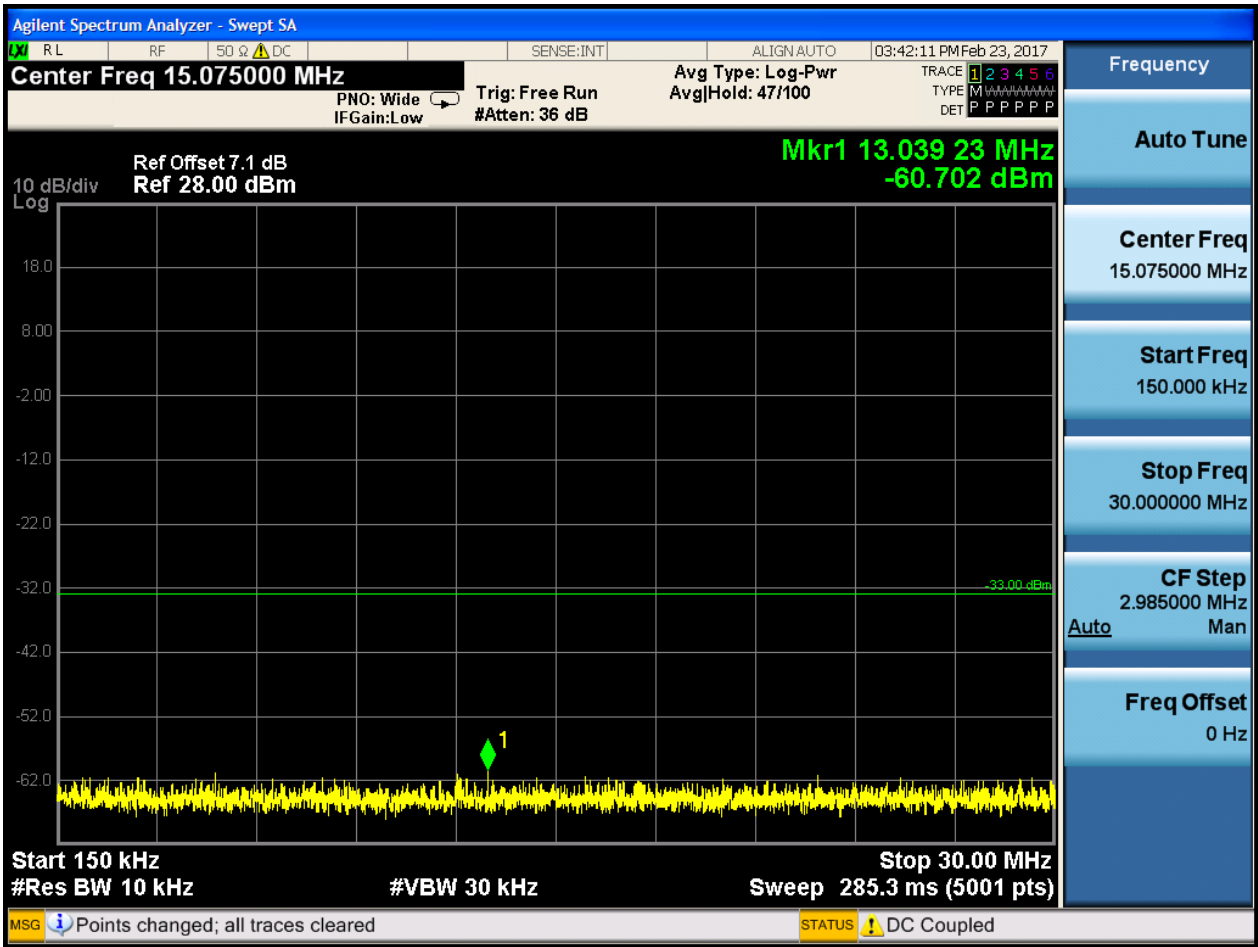


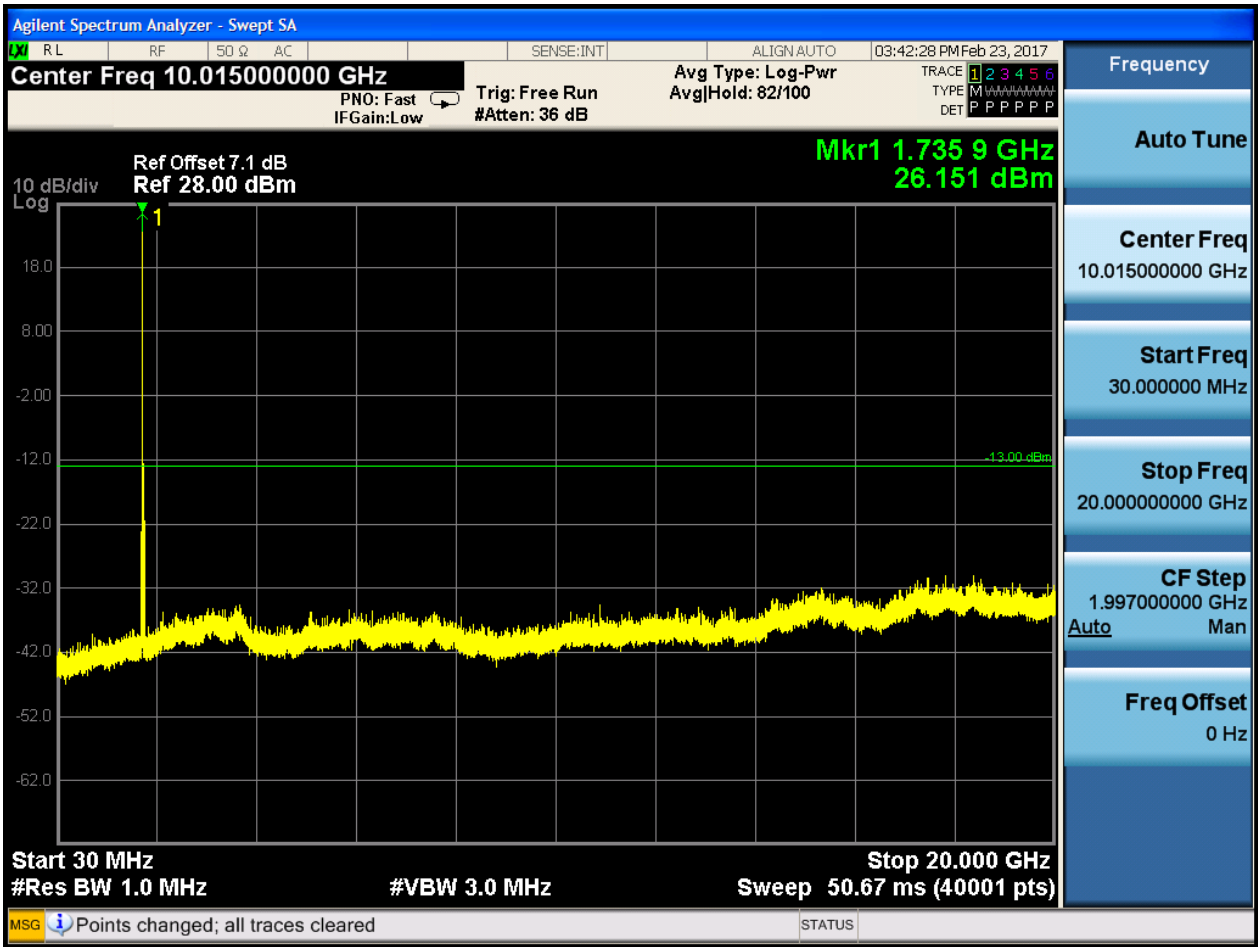


6.1.1.2.6.3 Test Channel = HCH

6.1.1.2.6.3.1 Test RB = RB1#0







## 7Appendix\_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

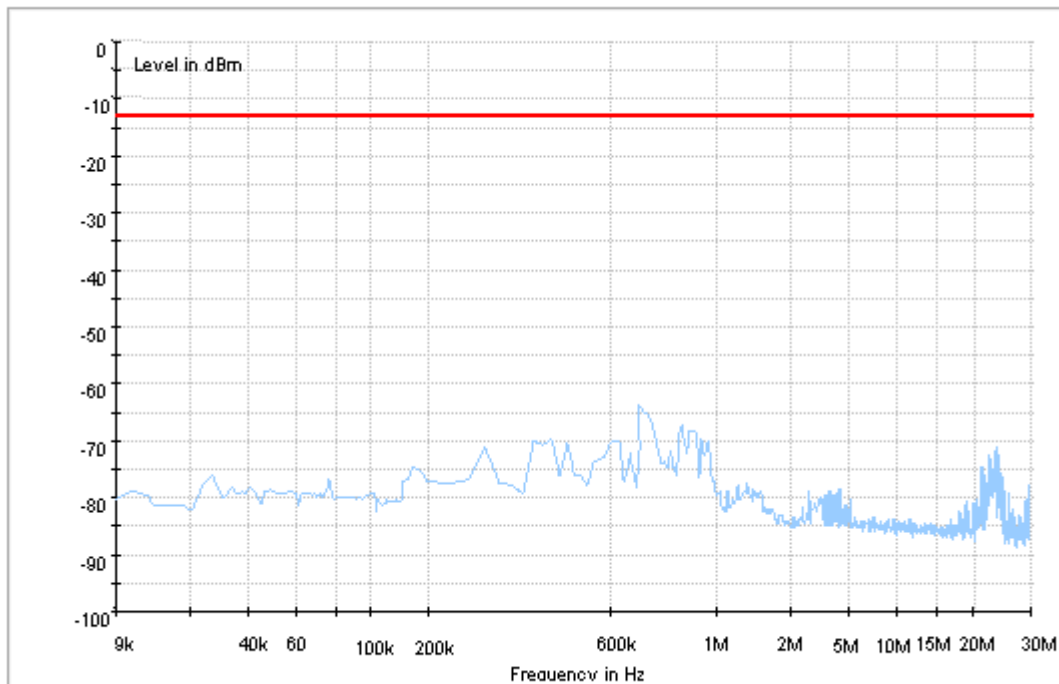
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

### Part I - Test Plots

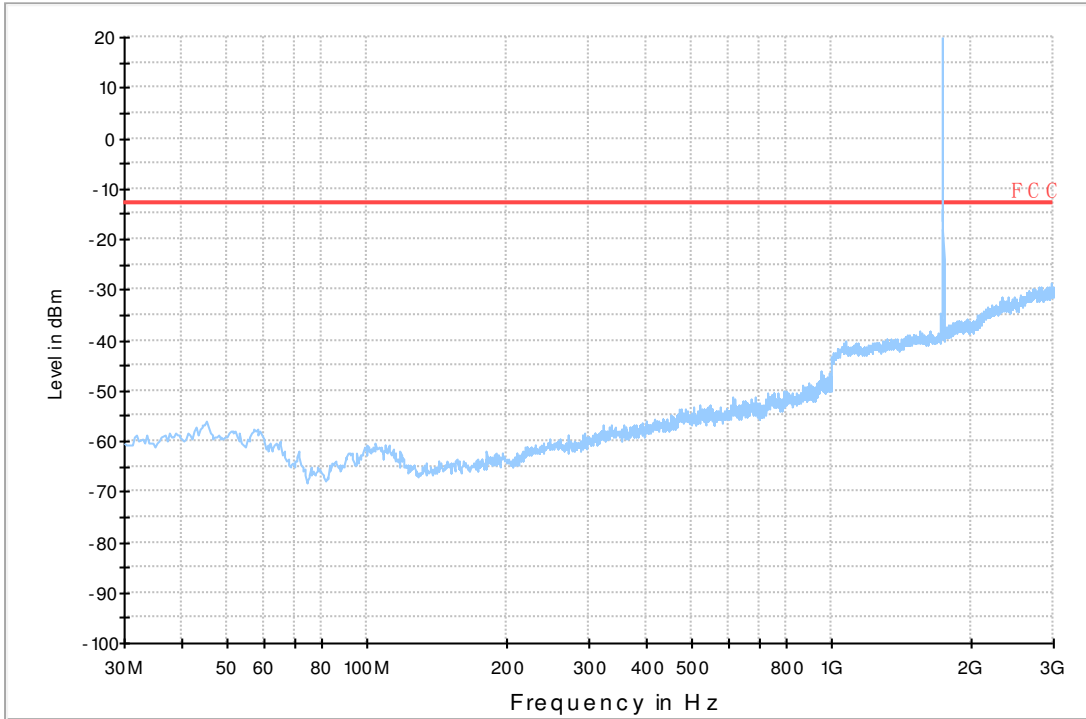
#### 7.1 For LTE

##### 7.1.1 Test Band = BAND4

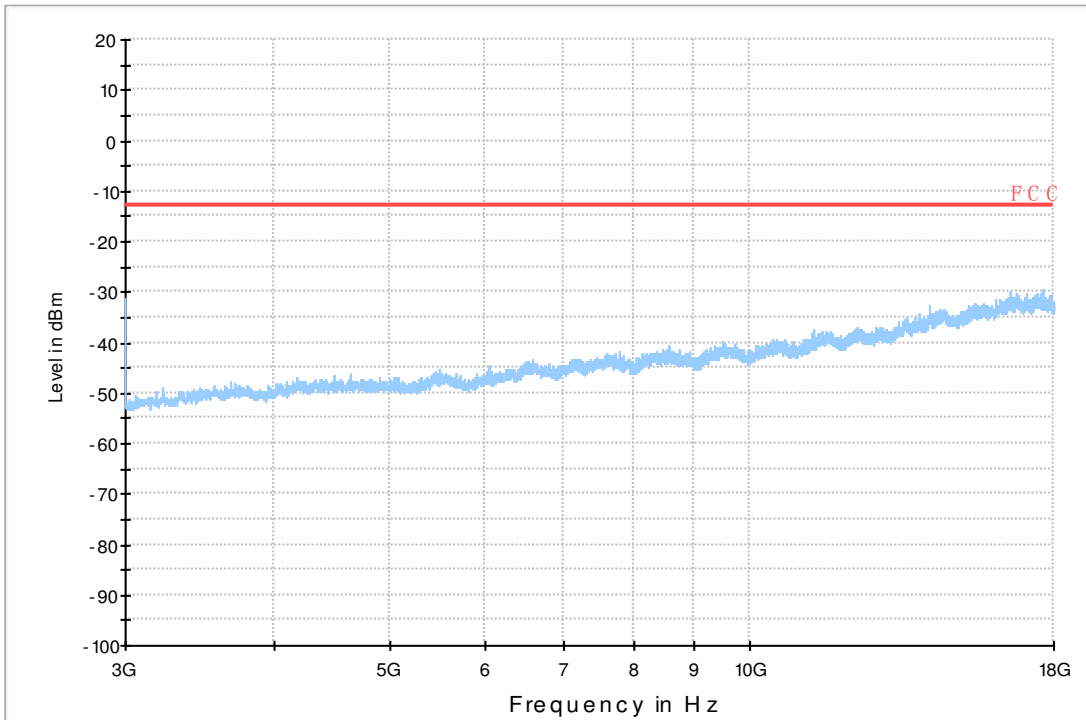
##### 7.1.1.1 Test Bandwidth = 1.4



Copy of RSE-TX-DIRECTOR ABOVE 1.5G\_L

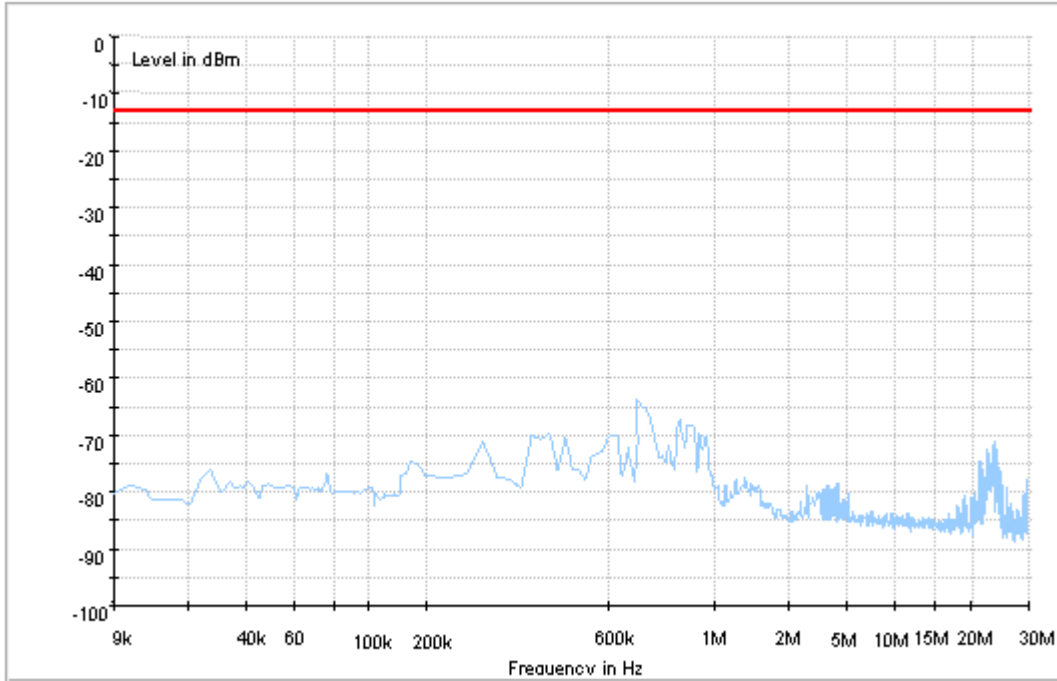


Copy of RSE-TX-DIRECTOR ABOVE 1.5G\_H

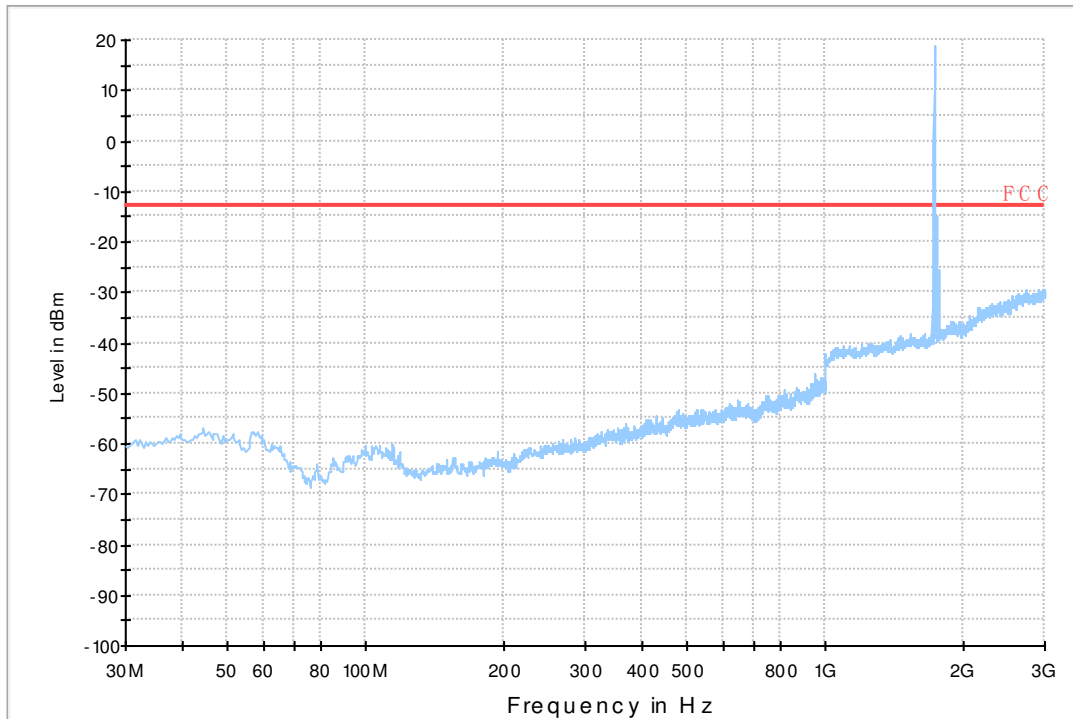




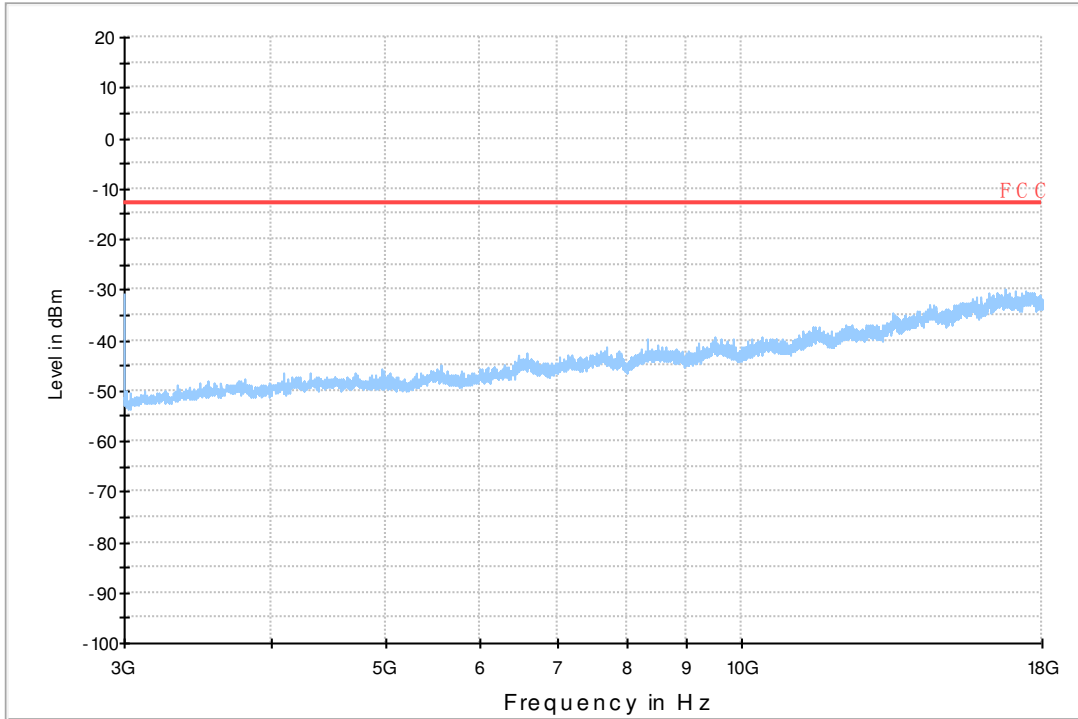
### 7.1.1.2 Test Bandwidth = 20



Copy of RSE-TX-DIRECTOR ABOVE 1.5G\_L



Copy of RSE-TX-DIRECTOR ABOVE 1.5G\_H



## 8Appendix\_H: Frequency Stability

### 8.1 For LTE

#### 8.1.1 Frequency Error vs. Voltage:

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|----------------------|--------------|------------|------------|------------------|-----------------------|---------|
| BAND4     | LTE/TM1   | 1.4                  | LCH          | TN         | VL         | -3.66            | -0.00214              | PASS    |
|           |           |                      |              |            | VN         | -8.45            | -0.00494              | PASS    |
|           |           |                      |              |            | VH         | 3.98             | 0.00233               | PASS    |
|           |           |                      | MCH          | TN         | VL         | 1.30             | 0.00075               | PASS    |
|           |           |                      |              |            | VN         | 1.87             | 0.00108               | PASS    |
|           |           |                      |              |            | VH         | 2.13             | 0.00123               | PASS    |
|           |           |                      | HCH          | TN         | VL         | -3.40            | -0.00194              | PASS    |
|           |           |                      |              |            | VN         | -1.50            | -0.00086              | PASS    |
|           |           |                      |              |            | VH         | 0.14             | 0.00008               | PASS    |
|           |           | 3                    | LCH          | TN         | VL         | 2.95             | 0.00172               | PASS    |
|           |           |                      |              |            | VN         | 2.69             | 0.00157               | PASS    |
|           |           |                      |              |            | VH         | 3.68             | 0.00215               | PASS    |
|           |           |                      | MCH          | TN         | VL         | -6.82            | -0.00394              | PASS    |
|           |           |                      |              |            | VN         | -1.20            | -0.00069              | PASS    |
|           |           |                      |              |            | VH         | -4.13            | -0.00238              | PASS    |
|           |           |                      | HCH          | TN         | VL         | 1.49             | 0.00085               | PASS    |
|           |           |                      |              |            | VN         | 2.07             | 0.00118               | PASS    |
|           |           |                      |              |            | VH         | 0.19             | 0.00011               | PASS    |
|           |           | 5                    | LCH          | TN         | VL         | 8.41             | 0.00491               | PASS    |
|           |           |                      |              |            | VN         | 11.62            | 0.00679               | PASS    |
|           |           |                      |              |            | VH         | 2.32             | 0.00135               | PASS    |
|           |           |                      | MCH          | TN         | VL         | 7.68             | 0.00443               | PASS    |
|           |           |                      |              |            | VN         | 0.59             | 0.00034               | PASS    |
|           |           |                      |              |            | VH         | -7.31            | -0.00422              | PASS    |
|           |           |                      | HCH          | TN         | VL         | -1.16            | -0.00066              | PASS    |
|           |           |                      |              |            | VN         | -2.10            | -0.0012               | PASS    |
|           |           |                      |              |            | VH         | -3.26            | -0.00186              | PASS    |
|           |           | 10                   | LCH          | TN         | VL         | -5.01            | -0.00292              | PASS    |
|           |           |                      |              |            | VN         | 2.30             | 0.00134               | PASS    |
|           |           |                      |              |            | VH         | -2.86            | -0.00167              | PASS    |
|           |           |                      | MCH          | TN         | VL         | 7.15             | 0.00413               | PASS    |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict  |         |      |
|-----------|-----------|----------------------|--------------|------------|------------|------------------|-----------------------|----------|---------|------|
|           |           |                      |              |            | VN         | -13.38           | -0.00772              | PASS     |         |      |
|           |           |                      |              |            | VH         | -3.00            | -0.00173              | PASS     |         |      |
|           |           |                      |              |            | HCH        | TN               | VL                    | 7.60     | 0.00434 | PASS |
|           |           |                      |              |            |            |                  | VN                    | 3.72     | 0.00213 | PASS |
|           |           |                      |              |            | VH         | 4.39             | 0.00251               | PASS     |         |      |
|           |           |                      | 15           | LCH        | TN         | VL               | -2.02                 | -0.00118 | PASS    |      |
|           |           |                      |              |            |            | VN               | -3.43                 | -0.002   | PASS    |      |
|           |           |                      |              |            |            | VH               | -2.03                 | -0.00118 | PASS    |      |
|           |           |                      |              | MCH        | TN         | VL               | -0.36                 | -0.00021 | PASS    |      |
|           |           |                      |              |            |            | VN               | 2.36                  | 0.00136  | PASS    |      |
|           |           | VH                   |              |            |            | 4.79             | 0.00276               | PASS     |         |      |
|           |           | HCH                  |              | TN         | VL         | 9.51             | 0.00544               | PASS     |         |      |
|           |           |                      |              |            | VN         | 9.74             | 0.00557               | PASS     |         |      |
|           |           |                      |              |            | VH         | 7.21             | 0.00413               | PASS     |         |      |
|           |           | 20                   | LCH          | TN         | VL         | 1.59             | 0.00092               | PASS     |         |      |
|           |           |                      |              |            | VN         | 0.53             | 0.00031               | PASS     |         |      |
|           |           |                      |              |            | VH         | 2.16             | 0.00126               | PASS     |         |      |
|           |           |                      | MCH          | TN         | VL         | 1.37             | 0.00079               | PASS     |         |      |
|           |           |                      |              |            | VN         | -0.40            | -0.00023              | PASS     |         |      |
|           |           |                      |              |            | VH         | -1.29            | -0.00074              | PASS     |         |      |
|           |           |                      | HCH          | TN         | VL         | -0.17            | -0.0001               | PASS     |         |      |
|           |           |                      |              |            | VN         | -7.77            | -0.00445              | PASS     |         |      |
|           |           |                      |              |            | VH         | -5.06            | -0.0029               | PASS     |         |      |
|           |           | LTE/TM2              | 1.4          | LCH        | TN         | VL               | -9.01                 | -0.00527 | PASS    |      |
|           |           |                      |              |            |            | VN               | 11.49                 | 0.00672  | PASS    |      |
|           |           |                      |              |            |            | VH               | -12.20                | -0.00713 | PASS    |      |
|           |           |                      |              | MCH        | TN         | VL               | 3.55                  | 0.00205  | PASS    |      |
|           |           |                      |              |            |            | VN               | 1.29                  | 0.00074  | PASS    |      |
|           |           |                      |              |            |            | VH               | 1.82                  | 0.00105  | PASS    |      |
|           |           |                      |              | HCH        | TN         | VL               | 0.06                  | 0.00003  | PASS    |      |
|           |           |                      |              |            |            | VN               | -1.86                 | -0.00106 | PASS    |      |
|           |           |                      |              |            |            | VH               | -2.26                 | -0.00129 | PASS    |      |
|           |           |                      | 3            | LCH        | TN         | VL               | 3.12                  | 0.00182  | PASS    |      |
|           |           |                      |              |            |            | VN               | 2.96                  | 0.00173  | PASS    |      |
|           |           |                      |              |            |            | VH               | -0.41                 | -0.00024 | PASS    |      |
|           |           |                      |              | MCH        | TN         | VL               | -0.16                 | -0.00009 | PASS    |      |
|           |           |                      |              |            |            | VN               | 6.52                  | 0.00376  | PASS    |      |
|           |           |                      |              |            |            | VH               | -0.39                 | -0.00023 | PASS    |      |
|           |           | HCH                  | TN           | VL         | 0.26       | 0.00015          | PASS                  |          |         |      |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|----------------------|--------------|------------|------------|------------------|-----------------------|---------|
|           |           |                      |              |            | VN         | 1.46             | 0.00083               | PASS    |
|           |           |                      |              |            | VH         | 0.94             | 0.00054               | PASS    |
|           |           | 5                    | LCH          | TN         | VL         | 5.16             | 0.00301               | PASS    |
|           |           |                      |              |            | VN         | 7.70             | 0.0045                | PASS    |
|           |           |                      |              |            | VH         | 6.90             | 0.00403               | PASS    |
|           |           |                      | MCH          | TN         | VL         | 0.34             | 0.0002                | PASS    |
|           |           |                      |              |            | VN         | 1.63             | 0.00094               | PASS    |
|           |           |                      |              |            | VH         | 5.06             | 0.00292               | PASS    |
|           |           |                      | HCH          | TN         | VL         | -0.69            | -0.00039              | PASS    |
|           |           |                      |              |            | VN         | -1.29            | -0.00074              | PASS    |
|           |           |                      |              |            | VH         | -1.90            | -0.00108              | PASS    |
|           |           | 10                   | LCH          | TN         | VL         | -1.07            | -0.00062              | PASS    |
|           |           |                      |              |            | VN         | -0.96            | -0.00056              | PASS    |
|           |           |                      |              |            | VH         | -1.52            | -0.00089              | PASS    |
|           |           |                      | MCH          | TN         | VL         | 1.34             | 0.00077               | PASS    |
|           |           |                      |              |            | VN         | 3.12             | 0.0018                | PASS    |
|           |           |                      |              |            | VH         | 3.19             | 0.00184               | PASS    |
|           |           |                      | HCH          | TN         | VL         | 1.86             | 0.00106               | PASS    |
|           |           |                      |              |            | VN         | 2.93             | 0.00167               | PASS    |
|           |           |                      |              |            | VH         | 2.89             | 0.00165               | PASS    |
|           |           | 15                   | LCH          | TN         | VL         | -2.82            | -0.00164              | PASS    |
|           |           |                      |              |            | VN         | -2.25            | -0.00131              | PASS    |
|           |           |                      |              |            | VH         | -2.59            | -0.00151              | PASS    |
|           |           |                      | MCH          | TN         | VL         | -1.33            | -0.00077              | PASS    |
|           |           |                      |              |            | VN         | -0.21            | -0.00012              | PASS    |
|           |           |                      |              |            | VH         | -0.33            | -0.00019              | PASS    |
|           |           |                      | HCH          | TN         | VL         | 8.73             | 0.005                 | PASS    |
|           |           |                      |              |            | VN         | 7.65             | 0.00438               | PASS    |
|           |           |                      |              |            | VH         | 2.12             | 0.00121               | PASS    |
|           |           | 20                   | LCH          | TN         | VL         | 2.27             | 0.00132               | PASS    |
|           |           |                      |              |            | VN         | 2.50             | 0.00145               | PASS    |
|           |           |                      |              |            | VH         | 1.95             | 0.00113               | PASS    |
|           |           |                      | MCH          | TN         | VL         | -0.56            | -0.00032              | PASS    |
|           |           |                      |              |            | VN         | -0.13            | -0.00008              | PASS    |
|           |           |                      |              |            | VH         | 0.03             | 0.00002               | PASS    |
|           |           |                      | HCH          | TN         | VL         | 1.24             | 0.00071               | PASS    |
|           |           |                      |              |            | VN         | 2.16             | 0.00124               | PASS    |
|           |           |                      |              |            | VH         | 1.30             | 0.00074               | PASS    |

## 8.1.2 Frequency Error vs. Temperature:

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|
| BAND4     | LTE/TM1   | 1.4                  | LCH          | VN         | -30       | -6.35            | -0.00371              | PASS    |
|           |           |                      |              |            | -20       | -4.22            | -0.00247              | PASS    |
|           |           |                      |              |            | -10       | -6.44            | -0.00376              | PASS    |
|           |           |                      |              |            | 0         | -1.09            | -0.00064              | PASS    |
|           |           |                      |              |            | 10        | -2.05            | -0.0012               | PASS    |
|           |           |                      |              |            | 20        | -2.17            | -0.00127              | PASS    |
|           |           |                      |              |            | 30        | 0.23             | 0.00013               | PASS    |
|           |           |                      |              |            | 40        | 1.76             | 0.00103               | PASS    |
|           |           |                      |              |            | 50        | 4.61             | 0.00269               | PASS    |
|           |           |                      | MCH          | VN         | -30       | 2.25             | 0.0013                | PASS    |
|           |           |                      |              |            | -20       | 1.07             | 0.00062               | PASS    |
|           |           |                      |              |            | -10       | 1.97             | 0.00114               | PASS    |
|           |           |                      |              |            | 0         | 0.37             | 0.00021               | PASS    |
|           |           |                      |              |            | 10        | 5.78             | 0.00334               | PASS    |
|           |           |                      |              |            | 20        | 7.20             | 0.00416               | PASS    |
|           |           | 30                   |              |            | 0.14      | 0.00008          | PASS                  |         |
|           |           | 40                   |              |            | 2.49      | 0.00144          | PASS                  |         |
|           |           | 50                   |              |            | 1.72      | 0.00099          | PASS                  |         |
|           |           | HCH                  | VN           | -30        | -1.23     | -0.0007          | PASS                  |         |
|           |           |                      |              | -20        | -2.75     | -0.00157         | PASS                  |         |
|           |           |                      |              | -10        | -1.04     | -0.00059         | PASS                  |         |
|           |           |                      |              | 0          | -1.63     | -0.00093         | PASS                  |         |
|           |           |                      |              | 10         | -2.49     | -0.00142         | PASS                  |         |
|           |           |                      |              | 20         | -0.44     | -0.00025         | PASS                  |         |
|           |           |                      |              | 30         | -2.46     | -0.0014          | PASS                  |         |
|           |           |                      |              | 40         | -2.05     | -0.00117         | PASS                  |         |
|           |           |                      |              | 50         | -0.33     | -0.00019         | PASS                  |         |
|           |           | 3                    | LCH          | VN         | -30       | 2.46             | 0.00144               | PASS    |
|           |           |                      |              |            | -20       | 3.09             | 0.00181               | PASS    |
|           |           |                      |              |            | -10       | 1.37             | 0.0008                | PASS    |
| 0         | 0.06      |                      |              |            | 0.00004   | PASS             |                       |         |
| 10        | 2.85      |                      |              |            | 0.00167   | PASS             |                       |         |
| 20        | 6.11      |                      |              |            | 0.00357   | PASS             |                       |         |
| 30        | 3.59      |                      |              |            | 0.0021    | PASS             |                       |         |
| 40        | 3.93      |                      |              |            | 0.0023    | PASS             |                       |         |
| 50        | -2.82     |                      |              |            | -0.00165  | PASS             |                       |         |
| MCH       | VN        |                      |              |            | -30       | 1.77             | 0.00102               | PASS    |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |          |      |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|----------|------|
|           |           |                      |              |            | -20       | 0.49             | 0.00028               | PASS    |          |      |
|           |           |                      |              |            | -10       | 3.68             | 0.00212               | PASS    |          |      |
|           |           |                      |              |            | 0         | 0.17             | 0.0001                | PASS    |          |      |
|           |           |                      |              |            | 10        | 3.60             | 0.00208               | PASS    |          |      |
|           |           |                      |              |            | 20        | 6.35             | 0.00367               | PASS    |          |      |
|           |           |                      |              |            | 30        | -5.68            | -0.00328              | PASS    |          |      |
|           |           |                      |              |            | 40        | 4.91             | 0.00283               | PASS    |          |      |
|           |           |                      |              |            | 50        | -1.76            | -0.00102              | PASS    |          |      |
|           |           |                      | HCH          | VN         | -30       | -0.06            | -0.00003              | PASS    |          |      |
|           |           |                      |              |            | -20       | 1.43             | 0.00082               | PASS    |          |      |
|           |           |                      |              |            | -10       | 0.44             | 0.00025               | PASS    |          |      |
|           |           |                      |              |            | 0         | 0.82             | 0.00047               | PASS    |          |      |
|           |           |                      |              |            | 10        | 1.24             | 0.00071               | PASS    |          |      |
|           |           |                      |              |            | 20        | 0.80             | 0.00046               | PASS    |          |      |
|           |           |                      |              |            | 30        | 1.07             | 0.00061               | PASS    |          |      |
|           |           |                      |              |            | 40        | 1.10             | 0.00063               | PASS    |          |      |
|           |           |                      | LCH          | VN         | -30       | -0.27            | -0.00016              | PASS    |          |      |
|           |           |                      |              |            | -20       | -1.67            | -0.00098              | PASS    |          |      |
|           |           |                      |              |            | -10       | -0.04            | -0.00002              | PASS    |          |      |
|           |           |                      |              |            | 0         | 0.59             | 0.00034               | PASS    |          |      |
|           |           | 10                   |              |            | -0.21     | -0.00012         | PASS                  |         |          |      |
|           |           | 20                   |              |            | -2.66     | -0.00155         | PASS                  |         |          |      |
|           |           | 30                   |              |            | 1.23      | 0.00072          | PASS                  |         |          |      |
|           |           | 40                   |              |            | -2.25     | -0.00131         | PASS                  |         |          |      |
|           |           | MCH                  | VN           | -30        | -3.66     | -0.00211         | PASS                  |         |          |      |
|           |           |                      |              | -20        | 0.97      | 0.00056          | PASS                  |         |          |      |
|           |           |                      |              | -10        | 5.85      | 0.00338          | PASS                  |         |          |      |
|           |           |                      |              | 0          | -3.12     | -0.0018          | PASS                  |         |          |      |
|           |           |                      |              | 10         | 4.22      | 0.00244          | PASS                  |         |          |      |
|           |           |                      |              | 20         | -0.11     | -0.00006         | PASS                  |         |          |      |
|           |           |                      |              | 30         | 1.42      | 0.00082          | PASS                  |         |          |      |
|           |           |                      |              | 40         | -1.56     | -0.0009          | PASS                  |         |          |      |
|           |           | HCH                  | VN           | 50         | 0.96      | 0.00055          | PASS                  |         |          |      |
|           |           |                      |              | -30        | -1.17     | -0.00067         | PASS                  |         |          |      |
|           |           |                      |              | -20        | -2.35     | -0.00134         | PASS                  |         |          |      |
|           |           |                      |              | -10        | -1.46     | -0.00083         | PASS                  |         |          |      |
|           |           |                      |              |            |           |                  | 0                     | -1.87   | -0.00107 | PASS |



| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |       |          |      |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|-------|----------|------|
|           |           |                      |              |            | 10        | -1.07            | -0.00061              | PASS    |       |          |      |
|           |           |                      |              |            | 20        | -2.59            | -0.00148              | PASS    |       |          |      |
|           |           |                      |              |            | 30        | -2.07            | -0.00118              | PASS    |       |          |      |
|           |           |                      |              |            | 40        | -1.03            | -0.00059              | PASS    |       |          |      |
|           |           |                      |              |            | 50        | -3.39            | -0.00193              | PASS    |       |          |      |
|           |           |                      |              |            | 10        | LCH              | VN                    | -30     | -2.22 | -0.00129 | PASS |
|           |           |                      |              |            |           |                  |                       | -20     | -0.72 | -0.00042 | PASS |
|           |           |                      |              |            |           |                  |                       | -10     | -1.67 | -0.00097 | PASS |
|           |           |                      |              |            |           |                  |                       | 0       | -2.29 | -0.00134 | PASS |
|           |           |                      |              |            |           |                  |                       | 10      | -0.82 | -0.00048 | PASS |
|           |           | 20                   | -2.72        | -0.00159   |           |                  |                       | PASS    |       |          |      |
|           |           | 30                   | -0.72        | -0.00042   |           |                  |                       | PASS    |       |          |      |
|           |           | 40                   | -0.34        | -0.0002    |           |                  |                       | PASS    |       |          |      |
|           |           | 50                   | -0.06        | -0.00003   |           |                  |                       | PASS    |       |          |      |
|           |           | 10                   | MCH          | VN         |           |                  |                       | -30     | -1.73 | -0.001   | PASS |
|           |           |                      |              |            | -20       | -0.31            | -0.00018              | PASS    |       |          |      |
|           |           |                      |              |            | -10       | 1.93             | 0.00111               | PASS    |       |          |      |
|           |           |                      |              |            | 0         | -0.56            | -0.00032              | PASS    |       |          |      |
|           |           |                      |              |            | 10        | -1.43            | -0.00083              | PASS    |       |          |      |
|           |           |                      |              |            | 20        | 1.09             | 0.00063               | PASS    |       |          |      |
|           |           |                      |              |            | 30        | 0.49             | 0.00028               | PASS    |       |          |      |
|           |           |                      |              |            | 40        | -0.09            | -0.00005              | PASS    |       |          |      |
|           |           |                      |              |            | 50        | 0.41             | 0.00024               | PASS    |       |          |      |
|           |           |                      |              |            | 10        | HCH              | VN                    | -30     | 3.81  | 0.00218  | PASS |
|           |           | -20                  | 2.66         | 0.00152    |           |                  |                       | PASS    |       |          |      |
|           |           | -10                  | 3.45         | 0.00197    |           |                  |                       | PASS    |       |          |      |
|           |           | 0                    | 2.83         | 0.00162    |           |                  |                       | PASS    |       |          |      |
|           |           | 10                   | 4.61         | 0.00263    |           |                  |                       | PASS    |       |          |      |
|           |           | 20                   | 2.70         | 0.00154    |           |                  |                       | PASS    |       |          |      |
|           |           | 30                   | 1.93         | 0.0011     |           |                  |                       | PASS    |       |          |      |
|           |           | 40                   | 2.90         | 0.00166    |           |                  |                       | PASS    |       |          |      |
|           |           | 50                   | 3.95         | 0.00226    |           |                  |                       | PASS    |       |          |      |
|           |           | 15                   | LCH          | VN         |           |                  |                       | -30     | -0.36 | -0.00021 | PASS |
|           |           |                      |              |            | -20       | -0.56            | -0.00033              | PASS    |       |          |      |
|           |           |                      |              |            | -10       | -1.39            | -0.00081              | PASS    |       |          |      |
|           |           |                      |              |            | 0         | -1.44            | -0.00084              | PASS    |       |          |      |
| 10        | -1.54     |                      |              |            | -0.0009   | PASS             |                       |         |       |          |      |
| 20        | -0.89     |                      |              |            | -0.00052  | PASS             |                       |         |       |          |      |
| 30        | -0.31     |                      |              |            | -0.00018  | PASS             |                       |         |       |          |      |





| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict  |        |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|----------|--------|
|           |           |                      |              |            | 40        | -0.20            | -0.00012              | PASS     |        |
|           |           |                      |              |            | 50        | -0.60            | -0.00035              | PASS     |        |
|           |           |                      | MCH          | VN         | -30       | 2.59             | 0.00149               | PASS     |        |
|           |           |                      |              |            | -20       | -2.02            | -0.00117              | PASS     |        |
|           |           |                      |              |            | -10       | 4.98             | 0.00287               | PASS     |        |
|           |           |                      |              |            | 0         | -2.68            | -0.00155              | PASS     |        |
|           |           |                      |              |            | 10        | -1.63            | -0.00094              | PASS     |        |
|           |           |                      |              |            | 20        | 5.32             | 0.00307               | PASS     |        |
|           |           |                      |              |            | 30        | -3.48            | -0.00201              | PASS     |        |
|           |           |                      |              |            | 40        | -3.82            | -0.0022               | PASS     |        |
|           |           |                      |              |            | 50        | 1.13             | 0.00065               | PASS     |        |
|           |           |                      |              |            | HCH       | VN               | -30                   | 2.09     | 0.0012 |
|           |           |                      | -20          | 3.49       |           |                  | 0.002                 | PASS     |        |
|           |           |                      | -10          | 3.93       |           |                  | 0.00225               | PASS     |        |
|           |           |                      | 0            | 0.09       |           |                  | 0.00005               | PASS     |        |
|           |           |                      | 10           | 0.62       |           |                  | 0.00035               | PASS     |        |
|           |           |                      | 20           | 2.56       |           |                  | 0.00146               | PASS     |        |
|           |           |                      | 30           | 0.83       |           |                  | 0.00047               | PASS     |        |
|           |           | 40                   | 3.30         | 0.00189    |           |                  | PASS                  |          |        |
|           |           | 20                   |              | LCH        | VN        | -30              | 2.42                  | 0.00141  | PASS   |
|           |           |                      |              |            |           | -20              | 3.03                  | 0.00176  | PASS   |
|           |           |                      |              |            |           | -10              | 2.05                  | 0.00119  | PASS   |
|           |           |                      |              |            |           | 0                | 2.90                  | 0.00169  | PASS   |
|           |           |                      |              |            |           | 10               | 1.57                  | 0.00091  | PASS   |
|           |           |                      |              |            |           | 20               | 2.63                  | 0.00153  | PASS   |
|           |           |                      |              |            |           | 30               | 2.70                  | 0.00157  | PASS   |
|           |           |                      |              |            |           | 40               | 1.73                  | 0.00101  | PASS   |
|           |           |                      |              |            |           | 50               | 1.99                  | 0.00116  | PASS   |
|           |           |                      |              | MCH        | VN        | -30              | 0.86                  | 0.0005   | PASS   |
|           |           |                      |              |            |           | -20              | 0.27                  | 0.00016  | PASS   |
|           |           |                      |              |            |           | -10              | -2.03                 | -0.00117 | PASS   |
|           |           |                      |              |            |           | 0                | -0.63                 | -0.00036 | PASS   |
|           |           |                      |              |            |           | 10               | 0.77                  | 0.00044  | PASS   |
|           |           |                      |              |            |           | 20               | -0.27                 | -0.00016 | PASS   |
|           |           |                      |              |            |           | 30               | -0.27                 | -0.00016 | PASS   |
|           |           |                      |              |            |           | 40               | -0.79                 | -0.00046 | PASS   |
| 50        | 0.17      |                      |              |            |           | 0.0001           | PASS                  |          |        |
| HCH       | VN        | -30                  | -17.29       | -0.00991   | PASS      |                  |                       |          |        |



| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |          |      |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|----------|------|
|           |           |                      |              |            | -20       | -6.95            | -0.00398              | PASS    |          |      |
|           |           |                      |              |            | -10       | -3.26            | -0.00187              | PASS    |          |      |
|           |           |                      |              |            | 0         | 1.46             | 0.00084               | PASS    |          |      |
|           |           |                      |              |            | 10        | 2.19             | 0.00126               | PASS    |          |      |
|           |           |                      |              |            | 20        | 0.31             | 0.00018               | PASS    |          |      |
|           |           |                      |              |            | 30        | 6.08             | 0.00348               | PASS    |          |      |
|           |           |                      |              |            | 40        | 1.69             | 0.00097               | PASS    |          |      |
|           |           |                      |              |            | 50        | 0.63             | 0.00036               | PASS    |          |      |
|           | LTE/TM2   | 1.4                  | LCH          | VN         | -30       | -0.89            | -0.00052              | PASS    |          |      |
|           |           |                      |              |            | -20       | 1.50             | 0.00088               | PASS    |          |      |
|           |           |                      |              |            | -10       | -12.17           | -0.00711              | PASS    |          |      |
|           |           |                      |              |            | 0         | -4.48            | -0.00262              | PASS    |          |      |
|           |           |                      |              |            | 10        | -3.16            | -0.00185              | PASS    |          |      |
|           |           |                      |              |            | 20        | -4.46            | -0.00261              | PASS    |          |      |
|           |           |                      |              |            | 30        | -5.32            | -0.00311              | PASS    |          |      |
|           |           |                      |              |            | 40        | -12.36           | -0.00723              | PASS    |          |      |
|           |           |                      |              |            | 50        | 3.28             | 0.00192               | PASS    |          |      |
|           |           |                      |              |            | MCH       | VN               | -30                   | 8.01    | 0.00462  | PASS |
|           |           |                      |              |            |           |                  | -20                   | 0.09    | 0.00005  | PASS |
|           |           |                      |              |            |           |                  | -10                   | -4.53   | -0.00261 | PASS |
|           |           |                      |              |            |           |                  | 0                     | 15.15   | 0.00874  | PASS |
|           |           |                      |              |            |           |                  | 10                    | -1.34   | -0.00077 | PASS |
|           |           |                      |              |            |           |                  | 20                    | 0.74    | 0.00043  | PASS |
|           |           |                      | 30           | -4.38      |           |                  | -0.00253              | PASS    |          |      |
|           |           |                      | 40           | -2.43      |           |                  | -0.0014               | PASS    |          |      |
|           |           |                      | 50           | -9.84      |           |                  | -0.00568              | PASS    |          |      |
|           |           |                      | HCH          | VN         |           |                  | -30                   | -1.14   | -0.00065 | PASS |
|           |           |                      |              |            | -20       | -2.25            | -0.00128              | PASS    |          |      |
|           |           |                      |              |            | -10       | 0.04             | 0.00002               | PASS    |          |      |
|           |           |                      |              |            | 0         | -1.56            | -0.00089              | PASS    |          |      |
|           |           |                      |              |            | 10        | -0.86            | -0.00049              | PASS    |          |      |
|           |           |                      |              |            | 20        | -0.82            | -0.00047              | PASS    |          |      |
|           |           |                      |              |            | 30        | -3.98            | -0.00227              | PASS    |          |      |
| 40        | -0.49     | -0.00028             |              |            | PASS      |                  |                       |         |          |      |
| 50        | 0.47      | 0.00027              |              |            | PASS      |                  |                       |         |          |      |
| 3         | LCH       | VN                   | -30          | -0.72      | -0.00042  | PASS             |                       |         |          |      |
|           |           |                      | -20          | 3.62       | 0.00212   | PASS             |                       |         |          |      |
|           |           |                      | -10          | 4.13       | 0.00241   | PASS             |                       |         |          |      |
|           |           |                      | 0            | 1.76       | 0.00103   | PASS             |                       |         |          |      |



| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict  |      |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|----------|------|
|           |           | 5                    |              |            | 10        | 4.65             | 0.00272               | PASS     |      |
|           |           |                      |              |            | 20        | 0.23             | 0.00013               | PASS     |      |
|           |           |                      |              |            | 30        | 4.38             | 0.00256               | PASS     |      |
|           |           |                      |              |            | 40        | 2.47             | 0.00144               | PASS     |      |
|           |           |                      |              |            | 50        | 5.01             | 0.00293               | PASS     |      |
|           |           |                      | MCH          | VN         | -30       | -0.53            | -0.00031              | PASS     |      |
|           |           |                      |              |            | -20       | 4.11             | 0.00237               | PASS     |      |
|           |           |                      |              |            | -10       | 4.48             | 0.00259               | PASS     |      |
|           |           |                      |              |            | 0         | 3.23             | 0.00186               | PASS     |      |
|           |           |                      |              |            | 10        | 9.27             | 0.00535               | PASS     |      |
|           |           |                      |              |            | 20        | 5.31             | 0.00306               | PASS     |      |
|           |           |                      |              |            | 30        | 2.29             | 0.00132               | PASS     |      |
|           |           |                      |              |            | 40        | 3.09             | 0.00178               | PASS     |      |
|           |           |                      |              |            | 50        | 4.32             | 0.00249               | PASS     |      |
|           |           |                      | HCH          | VN         | -30       | 0.14             | 0.00008               | PASS     |      |
|           |           |                      |              |            | -20       | 1.93             | 0.0011                | PASS     |      |
|           |           |                      |              |            | -10       | 2.40             | 0.00137               | PASS     |      |
|           |           |                      |              |            | 0         | 2.22             | 0.00127               | PASS     |      |
|           |           |                      |              |            | 10        | 2.98             | 0.0017                | PASS     |      |
|           |           |                      |              |            | 20        | 2.00             | 0.00114               | PASS     |      |
|           |           |                      |              |            | 30        | 2.72             | 0.00155               | PASS     |      |
|           |           |                      |              |            | 40        | 1.89             | 0.00108               | PASS     |      |
|           |           |                      | LCH          | VN         | -30       | 0.93             | 0.00054               | PASS     |      |
|           |           |                      |              |            | -20       | 4.01             | 0.00234               | PASS     |      |
|           |           | -10                  |              |            | 6.29      | 0.00367          | PASS                  |          |      |
|           |           | 0                    |              |            | 0.70      | 0.00041          | PASS                  |          |      |
|           |           | 10                   |              |            | 4.23      | 0.00247          | PASS                  |          |      |
|           |           | 20                   |              |            | 3.50      | 0.00204          | PASS                  |          |      |
|           |           | 30                   |              |            | 5.21      | 0.00304          | PASS                  |          |      |
|           |           | 40                   |              |            | 3.33      | 0.00194          | PASS                  |          |      |
|           |           | 50                   |              |            | 3.18      | 0.00186          | PASS                  |          |      |
|           |           | MCH                  |              |            | VN        | -30              | -2.47                 | -0.00143 | PASS |
|           |           |                      |              |            |           | -20              | -1.37                 | -0.00079 | PASS |
|           |           |                      |              |            |           | -10              | -0.47                 | -0.00027 | PASS |
|           |           |                      | 0            | 3.68       |           | 0.00212          | PASS                  |          |      |
|           |           |                      | 10           | -1.59      |           | -0.00092         | PASS                  |          |      |
| 20        | -3.16     |                      | -0.00182     | PASS       |           |                  |                       |          |      |
| 30        | -1.13     |                      | -0.00065     | PASS       |           |                  |                       |          |      |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict  |          |      |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|----------|----------|------|
|           |           |                      |              |            | 40        | -0.34            | -0.0002               | PASS     |          |      |
|           |           |                      |              |            | 50        | 4.84             | 0.00279               | PASS     |          |      |
|           |           |                      | HCH          | VN         | -30       | -2.30            | -0.00131              | PASS     |          |      |
|           |           |                      |              |            | -20       | -1.17            | -0.00067              | PASS     |          |      |
|           |           |                      |              |            | -10       | -1.49            | -0.00085              | PASS     |          |      |
|           |           |                      |              |            | 0         | -0.44            | -0.00025              | PASS     |          |      |
|           |           |                      |              |            | 10        | -2.02            | -0.00115              | PASS     |          |      |
|           |           |                      |              |            | 20        | -0.39            | -0.00022              | PASS     |          |      |
|           |           |                      |              |            | 30        | -2.02            | -0.00115              | PASS     |          |      |
|           |           |                      |              |            | 40        | -0.49            | -0.00028              | PASS     |          |      |
|           |           | 50                   | -1.90        | -0.00108   | PASS      |                  |                       |          |          |      |
|           |           |                      |              |            | LCH       | VN               | -30                   | -2.36    | -0.00138 | PASS |
|           |           |                      |              |            |           |                  | -20                   | -6.52    | -0.0038  | PASS |
|           |           |                      |              |            |           |                  | -10                   | -1.56    | -0.00091 | PASS |
|           |           |                      |              |            |           |                  | 0                     | -1.87    | -0.00109 | PASS |
|           |           |                      |              |            |           |                  | 10                    | -1.60    | -0.00093 | PASS |
|           |           |                      |              |            |           |                  | 20                    | -1.76    | -0.00103 | PASS |
|           |           |                      |              |            |           |                  | 30                    | -1.72    | -0.001   | PASS |
|           |           |                      |              |            |           |                  | 40                    | -1.56    | -0.00091 | PASS |
|           |           |                      |              |            |           |                  | 50                    | -1.10    | -0.00064 | PASS |
|           |           |                      |              |            |           |                  |                       |          |          | MCH  |
|           |           | -20                  | 0.40         | 0.00023    | PASS      |                  |                       |          |          |      |
|           |           | -10                  | 3.92         | 0.00226    | PASS      |                  |                       |          |          |      |
|           |           | 0                    | 0.37         | 0.00021    | PASS      |                  |                       |          |          |      |
|           |           | 10                   | 1.40         | 0.00081    | PASS      |                  |                       |          |          |      |
|           |           | 20                   | -0.66        | -0.00038   | PASS      |                  |                       |          |          |      |
|           |           | 30                   | 0.92         | 0.00053    | PASS      |                  |                       |          |          |      |
|           |           | 40                   | 0.16         | 0.00009    | PASS      |                  |                       |          |          |      |
|           |           | 50                   | 2.63         | 0.00152    | PASS      |                  |                       |          |          |      |
|           |           |                      |              |            | HCH       | VN               |                       |          |          |      |
|           |           |                      |              |            |           |                  | -20                   | 3.66     | 0.00209  | PASS |
|           |           |                      |              |            |           |                  | -10                   | 5.09     | 0.00291  | PASS |
|           |           |                      |              |            |           |                  | 0                     | 4.35     | 0.00249  | PASS |
|           |           |                      |              |            |           |                  | 10                    | 3.28     | 0.00187  | PASS |
|           |           |                      |              |            |           |                  | 20                    | 2.33     | 0.00133  | PASS |
|           |           |                      |              |            |           |                  | 30                    | 4.06     | 0.00232  | PASS |
|           |           |                      |              |            |           |                  | 40                    | 3.75     | 0.00214  | PASS |
|           |           | 50                   | 3.46         | 0.00198    | PASS      |                  |                       |          |          |      |
|           |           | 15                   |              | LCH        | VN        | -30              | -0.16                 | -0.00009 | PASS     |      |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|
|           |           |                      |              |            | -20       | -0.73            | -0.00043              | PASS    |
|           |           |                      |              |            | -10       | -0.69            | -0.0004               | PASS    |
|           |           |                      |              |            | 0         | 0.07             | 0.00004               | PASS    |
|           |           |                      |              |            | 10        | -2.17            | -0.00126              | PASS    |
|           |           |                      |              |            | 20        | -3.02            | -0.00176              | PASS    |
|           |           |                      |              |            | 30        | -1.97            | -0.00115              | PASS    |
|           |           |                      |              |            | 40        | -2.90            | -0.00169              | PASS    |
|           |           |                      |              |            | 50        | -1.53            | -0.00089              | PASS    |
|           |           |                      | MCH          | VN         | -30       | -1.59            | -0.00092              | PASS    |
|           |           |                      |              |            | -20       | 1.40             | 0.00081               | PASS    |
|           |           |                      |              |            | -10       | -0.92            | -0.00053              | PASS    |
|           |           |                      |              |            | 0         | 0.07             | 0.00004               | PASS    |
|           |           |                      |              |            | 10        | 1.26             | 0.00073               | PASS    |
|           |           |                      |              |            | 20        | 4.21             | 0.00243               | PASS    |
|           |           |                      |              |            | 30        | -5.24            | -0.00302              | PASS    |
|           |           |                      |              |            | 40        | -2.50            | -0.00144              | PASS    |
|           |           |                      | HCH          | VN         | -30       | 4.52             | 0.00259               | PASS    |
|           |           |                      |              |            | -20       | 4.05             | 0.00232               | PASS    |
|           |           |                      |              |            | -10       | 5.46             | 0.00312               | PASS    |
|           |           |                      |              |            | 0         | -0.82            | -0.00047              | PASS    |
|           |           |                      |              |            | 10        | 4.43             | 0.00254               | PASS    |
|           |           |                      |              |            | 20        | 10.97            | 0.00628               | PASS    |
|           |           |                      |              |            | 30        | 7.38             | 0.00422               | PASS    |
|           |           |                      |              |            | 40        | 15.82            | 0.00905               | PASS    |
|           |           | 20                   | LCH          | VN         | -30       | 1.50             | 0.00087               | PASS    |
|           |           |                      |              |            | -20       | 2.26             | 0.00131               | PASS    |
|           |           |                      |              |            | -10       | 2.13             | 0.00124               | PASS    |
|           |           |                      |              |            | 0         | 2.02             | 0.00117               | PASS    |
|           |           |                      |              |            | 10        | 0.59             | 0.00034               | PASS    |
|           |           |                      |              |            | 20        | 1.79             | 0.00104               | PASS    |
|           |           |                      |              |            | 30        | 0.77             | 0.00045               | PASS    |
|           |           |                      |              |            | 40        | 2.78             | 0.00162               | PASS    |
|           |           |                      |              |            | 50        | 1.44             | 0.00084               | PASS    |
|           |           |                      |              |            | MCH       | VN               | -30                   | -7.52   |
|           |           |                      | -20          | 0.14       |           |                  | 0.00008               | PASS    |
|           |           |                      | -10          | 0.27       |           |                  | 0.00016               | PASS    |
| 0         | -0.46     | -0.00027             | PASS         |            |           |                  |                       |         |



| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Volt. | Test Temp | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|----------------------|--------------|------------|-----------|------------------|-----------------------|---------|
|           |           |                      |              |            | 10        | -2.40            | -0.00139              | PASS    |
|           |           |                      |              |            | 20        | -0.30            | -0.00017              | PASS    |
|           |           |                      |              |            | 30        | -1.67            | -0.00096              | PASS    |
|           |           |                      |              |            | 40        | -1.80            | -0.00104              | PASS    |
|           |           |                      |              |            | 50        | -5.46            | -0.00315              | PASS    |
|           |           |                      | HCH          | VN         | -30       | -3.00            | -0.00172              | PASS    |
|           |           |                      |              |            | -20       | 6.88             | 0.00394               | PASS    |
|           |           |                      |              |            | -10       | -4.33            | -0.00248              | PASS    |
|           |           |                      |              |            | 0         | -6.44            | -0.00369              | PASS    |
|           |           |                      |              |            | 10        | -1.20            | -0.00069              | PASS    |
|           |           |                      |              |            | 20        | -11.54           | -0.00661              | PASS    |
|           |           |                      |              |            | 30        | -3.96            | -0.00227              | PASS    |
|           |           |                      |              |            | 40        | -2.10            | -0.0012               | PASS    |
|           |           |                      |              |            | 50        | -13.45           | -0.00771              | PASS    |

END