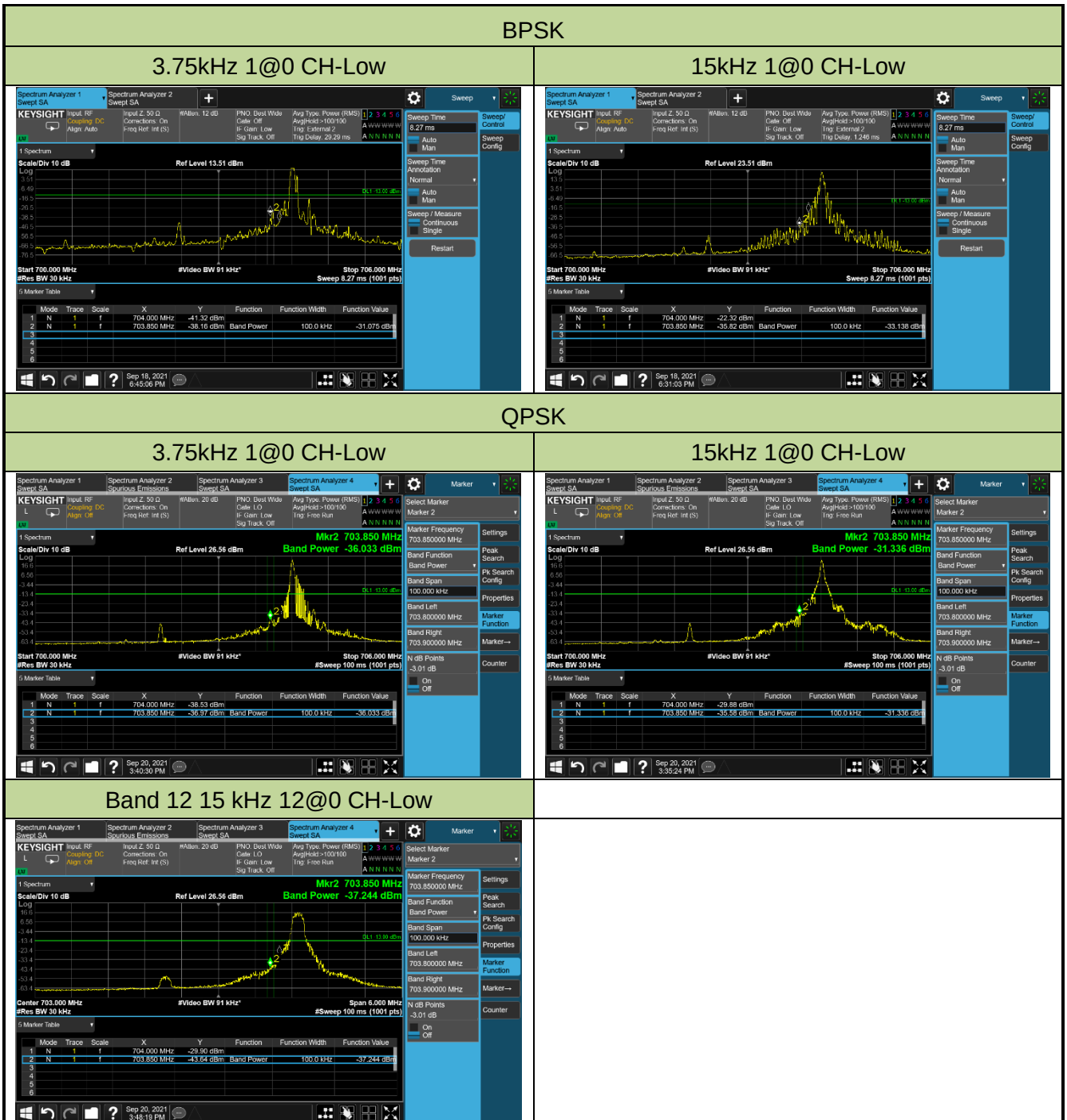
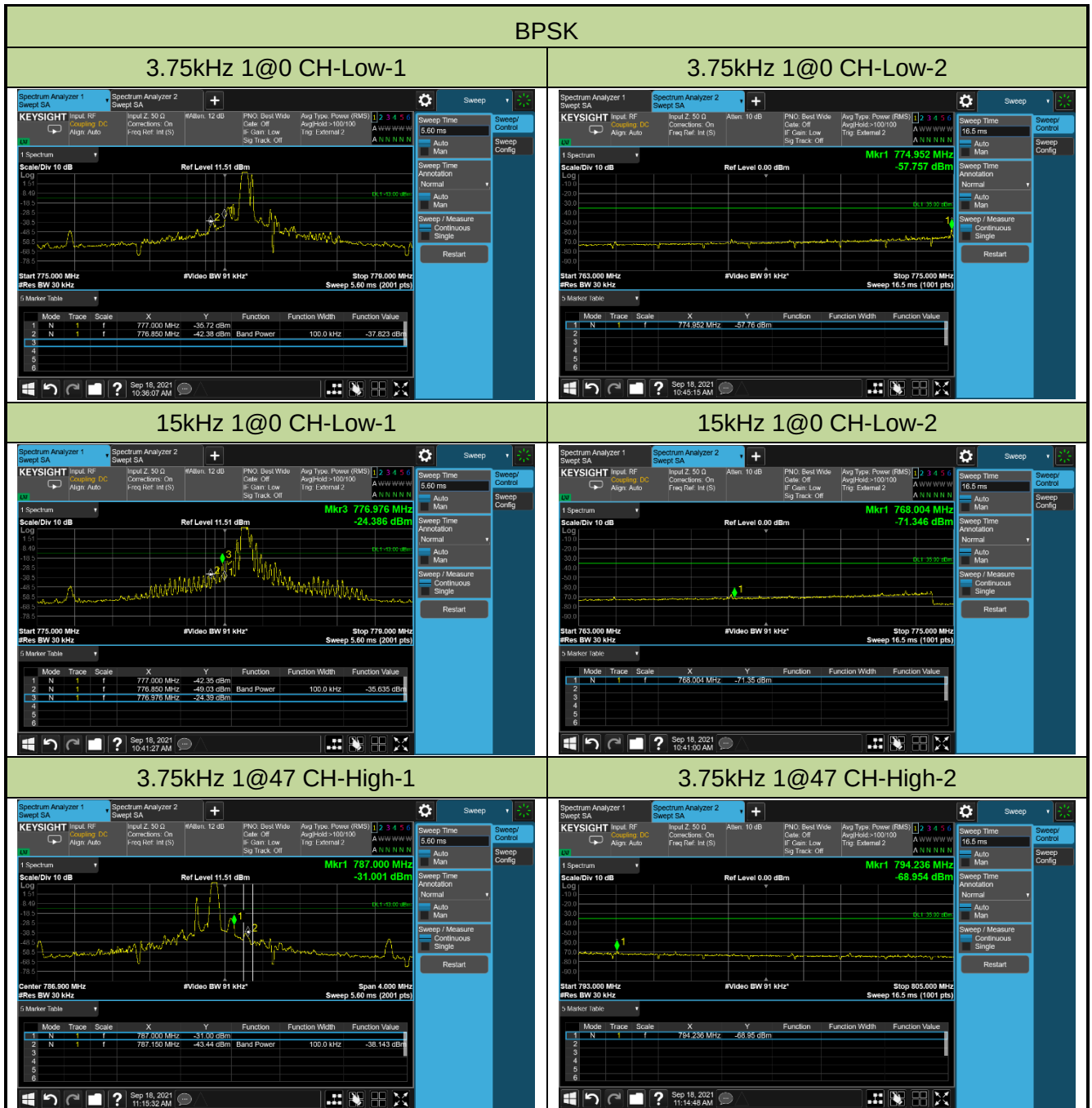
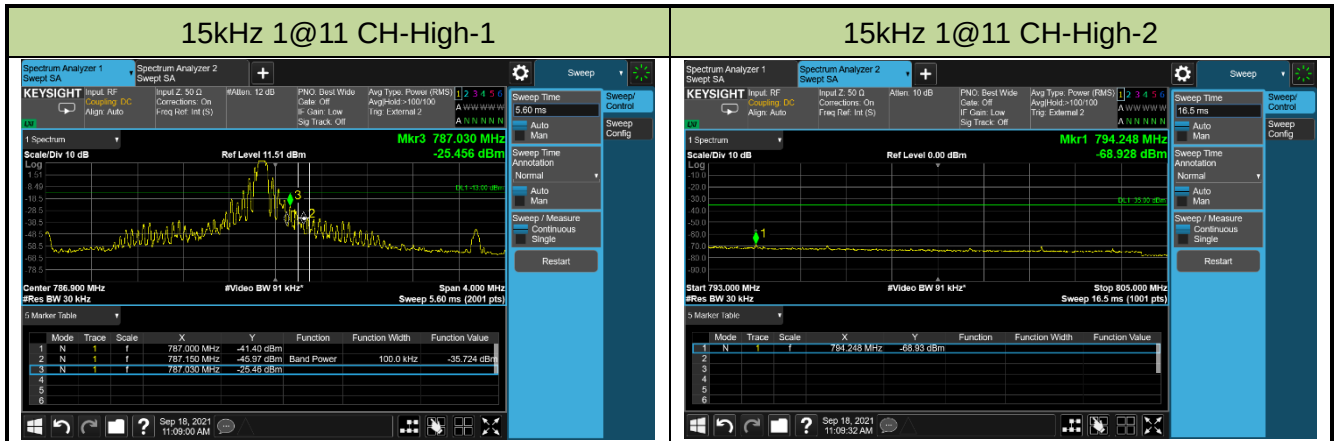


|               |                 |             |            |
|---------------|-----------------|-------------|------------|
| Product       | Wireless MODULE | Test Site   | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date   | 2021/09/18 |
| Test Band     | Band 17         | Test Result | Pass       |



|               |                 |             |            |
|---------------|-----------------|-------------|------------|
| Product       | Wireless MODULE | Test Site   | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date   | 2021/09/18 |
| Test Band     | Band 13         | Test Result | Pass       |



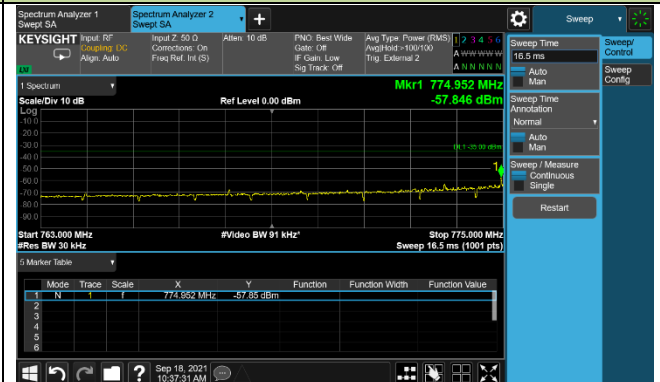


# QPSK

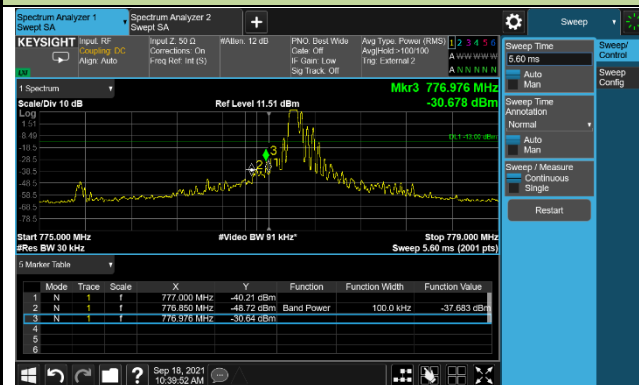
## 3.75kHz 1@0 CH-Low-1



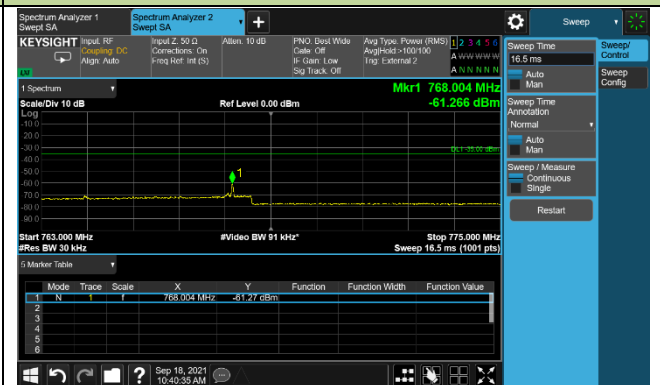
## 3.75kHz 1@0 CH-Low-2



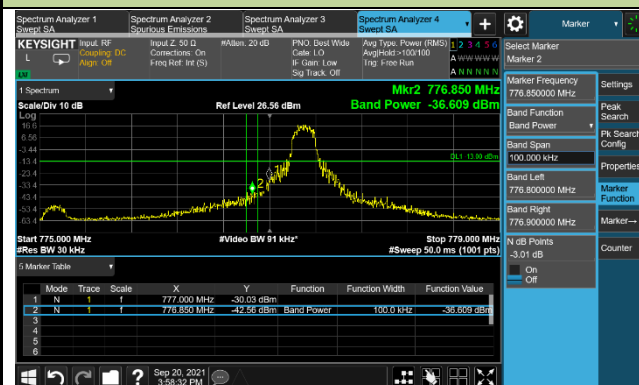
## 15kHz 1@0 CH-Low-1



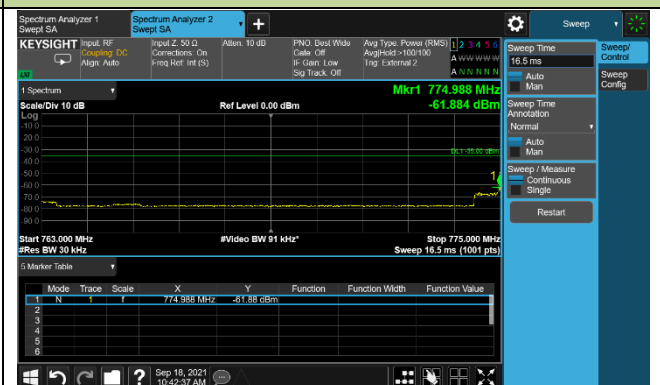
## 15kHz 1@0 CH-Low-2



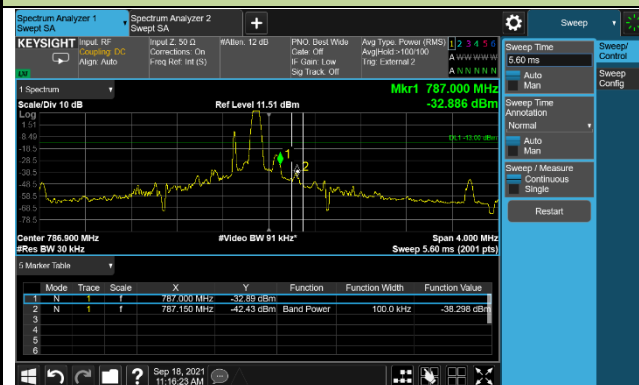
## 15kHz 12@0 CH-low-1



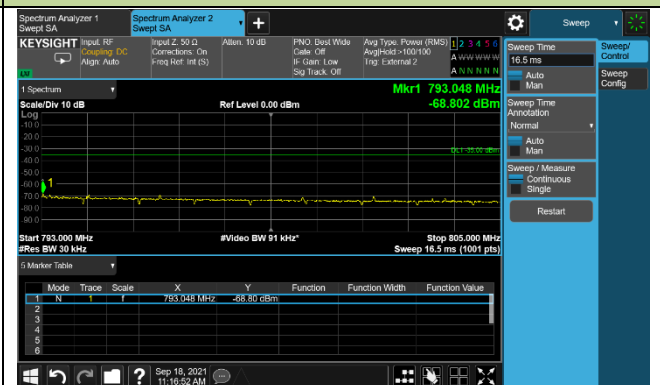
## 15kHz 12@0 CH-low-2



## 3.75kHz 1@47 CH-High-1



## 3.75kHz 1@47 CH-High-2





## 4.6. Peak to Average Ratio

### 4.6.1. Test Limit

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

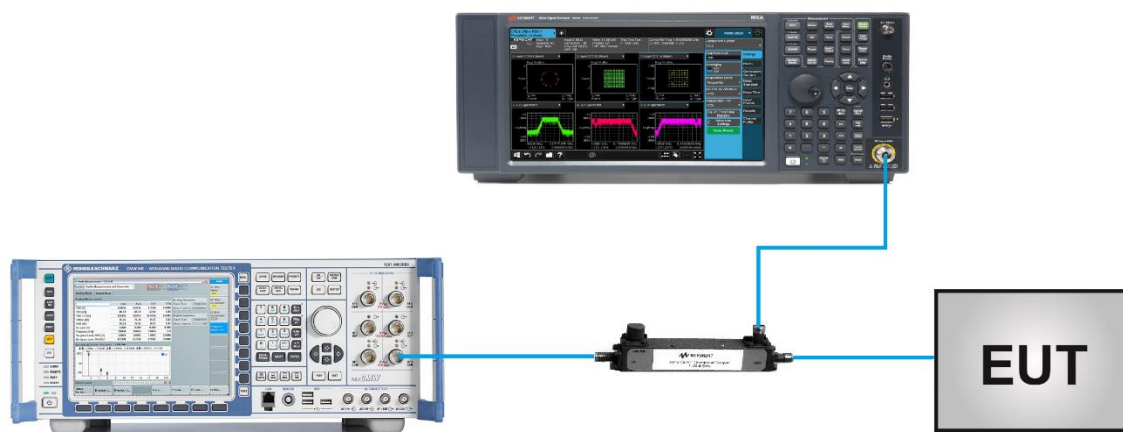
### 4.6.2. Test Procedure Used

ANSI C63.26-2015 - Section 5.2.3.4 (CCDF).

### 4.6.3. Test Setting

1. Set the resolution / measurement bandwidth  $\geq$  signal's occupied bandwidth
2. Set the number of counts to a value that stabilizes the measured CCDF curve
3. Record the maximum PARR level associated with a probability of 0.1%

### 4.6.4. Test Setup



|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/14 |
| Test Band     | Band 2/25       |           |            |

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The main display area shows a 2 Graph with a Gaussian fit. The left panel shows Average Power at 19.09 dBm and Peak at 30.62 dBm. The right panel shows settings for Center Frequency at 1.882500000 GHz and CF Step at 5.0000000 Mhz. The bottom status bar shows the date and time as Sep 14, 2021, 2:32:37 PM.

|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/14 |
| Test Band     | Band 4/66       |           |            |

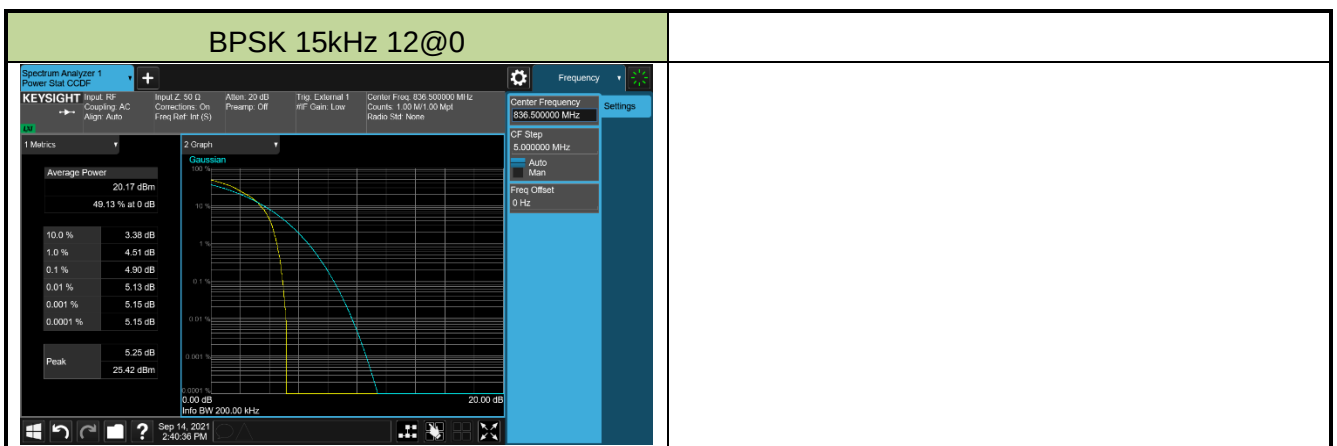
| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Peak to Average Ratio (dB) | Limit (dB) | Result |
|-----------------|---------------------------|--------------------|----------------------------|------------|--------|
| 1745.0          | 15                        | 12@0               | 4.74                       | ≤ 13.00    | Pass   |





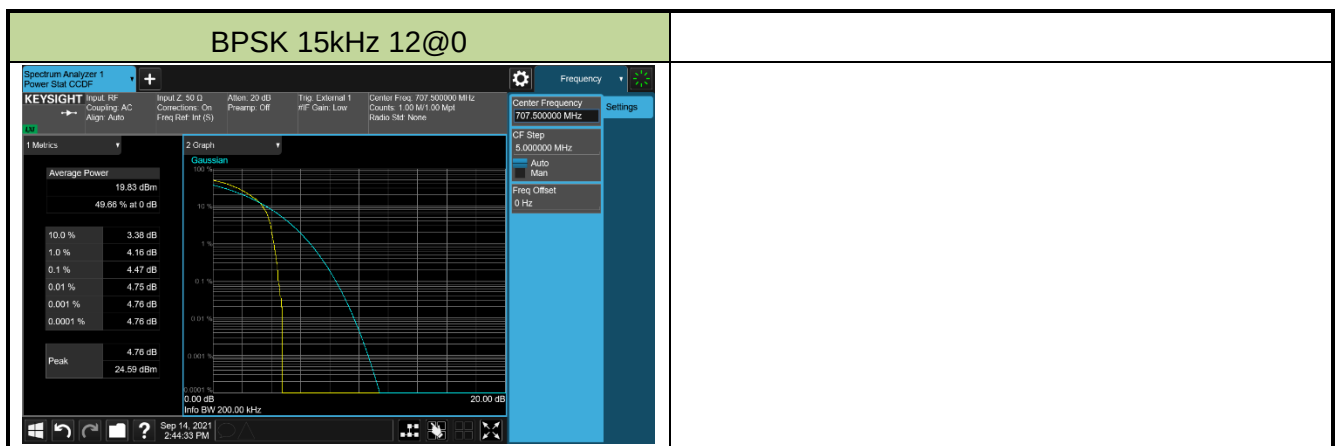
|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/14 |
| Test Band     | Band 5/26       |           |            |

| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Peak to Average Ratio (dB) | Limit (dB) | Result |
|-----------------|---------------------------|--------------------|----------------------------|------------|--------|
| 836.5           | 15                        | 12@0               | 4.74                       | ≤ 13.00    | Pass   |



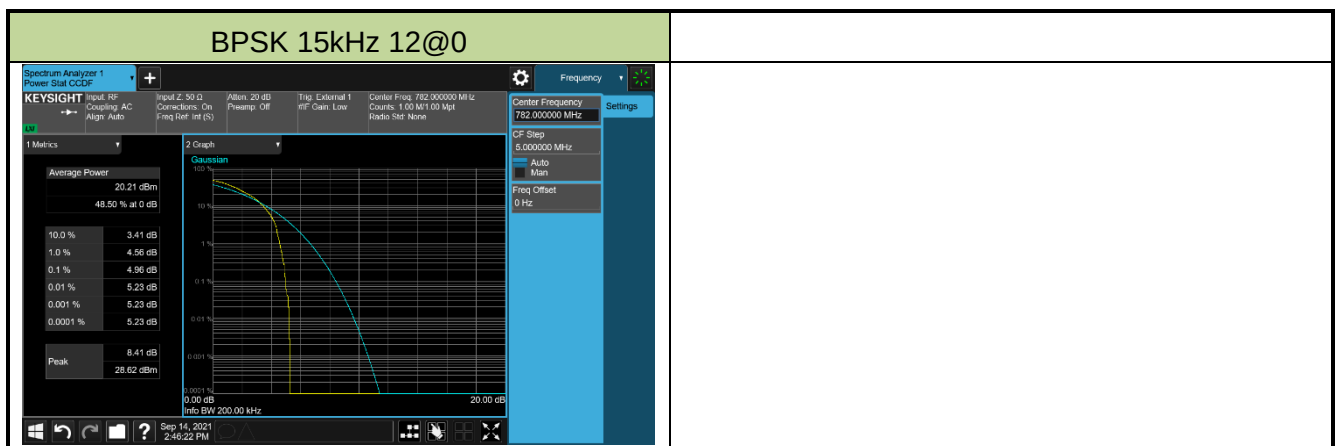
|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/14 |
| Test Band     | Band 17/12      |           |            |

| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Peak to Average Ratio (dB) | Limit (dB) | Result |
|-----------------|---------------------------|--------------------|----------------------------|------------|--------|
| 706.0           | 15                        | 12@0               | 4.47                       | ≤ 13.00    | Pass   |



|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/14 |
| Test Band     | Band 13         |           |            |

| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Peak to Average Ratio (dB) | Limit (dB) | Result |
|-----------------|---------------------------|--------------------|----------------------------|------------|--------|
| 782.0           | 15                        | 12@0               | 4.96                       | ≤ 13.00    | Pass   |



## **4.7. Conducted Spurious Emissions**

### **4.7.1. Test Limit**

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

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.

### **4.7.2. Test Procedure Used**

ANSI C63.26-2015 - Section 5.7

### **4.7.3. Test Setting**

1. Set the analyzer frequency to low, mid, high channel.
2. RBW = 1MHz
3. VBW  $\geq 3 \times$  RBW
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power.
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.

To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

#### 4.7.4.Test Setup



#### 4.7.5. Test Result

|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/26 |
| Test Band     | Band 2/25       |           |            |

| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Frequency Range (MHz) | Max Spurious Emissions (dBm) | Limit (dBm) | Result |
|-----------------|---------------------------|--------------------|-----------------------|------------------------------|-------------|--------|
| BPSK            |                           |                    |                       |                              |             |        |
| 1850.2          | 3.75                      | 1@0                | 30 ~ 27000            | -39.13                       | ≤ -13.00    | Pass   |
| 1850.2          | 15                        | 1@0                | 30 ~ 27000            | -39.33                       | ≤ -13.00    | Pass   |
| 1882.5          | 3.75                      | 1@23               | 30 ~ 27000            | -42.23                       | ≤ -13.00    | Pass   |
| 1882.5          | 15                        | 1@5                | 30 ~ 27000            | -42.97                       | ≤ -13.00    | Pass   |
| 1914.8          | 3.75                      | 1@47               | 30 ~ 27000            | -44.72                       | ≤ -13.00    | Pass   |
| 1914.8          | 15                        | 1@11               | 30 ~ 27000            | -41.08                       | ≤ -13.00    | Pass   |
| QPSK            |                           |                    |                       |                              |             |        |
| 1850.2          | 3.75                      | 1@0                | 30 ~ 27000            | -39.07                       | ≤ -13.00    | Pass   |
| 1850.2          | 15                        | 1@0                | 30 ~ 27000            | -38.83                       | ≤ -13.00    | Pass   |
| 1850.2          | 15                        | 12@0               | 30 ~ 27000            | -39.52                       | ≤ -13.00    | Pass   |
| 1882.5          | 3.75                      | 1@23               | 30 ~ 27000            | -42.05                       | ≤ -13.00    | Pass   |
| 1882.5          | 15                        | 1@5                | 30 ~ 27000            | -42.82                       | ≤ -13.00    | Pass   |
| 1882.5          | 15                        | 12@0               | 30 ~ 27000            | -42.92                       | ≤ -13.00    | Pass   |
| 1914.8          | 3.75                      | 1@47               | 30 ~ 27000            | -41.53                       | ≤ -13.00    | Pass   |
| 1914.8          | 15                        | 1@11               | 30 ~ 27000            | -42.23                       | ≤ -13.00    | Pass   |
| 1914.8          | 15                        | 12@0               | 30 ~ 27000            | -40.91                       | ≤ -13.00    | Pass   |

## 1850.2 MHz

## BPSK 3.75kHz 1@0



## BPSK 15kHz 1@0



## QPSK 3.75kHz 1@0



## QPSK 15kHz 1@0



## QPSK 15kHz 12@0



## 1882.5 MHz

## BPSK 3.75kHz 1@23



## BPSK 15kHz 1@5



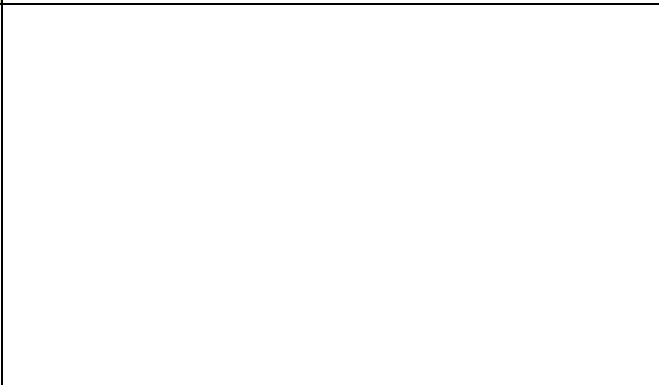
## QPSK 3.75kHz 1@23



## QPSK 15kHz 1@5



## QPSK 15kHz 12@0





## 1914.8 MHz

## BPSK 3.75kHz 1@47



## BPSK 15kHz 1@11



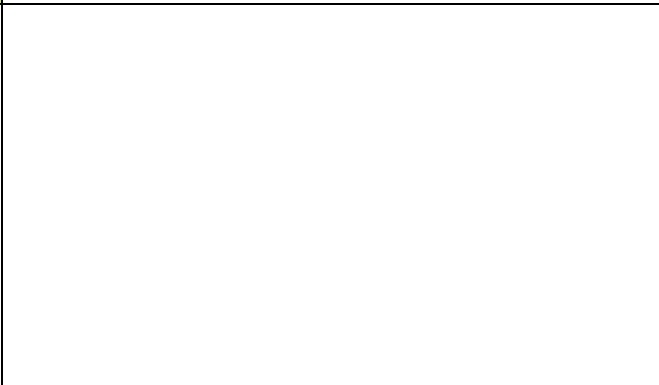
## QPSK 3.75kHz 1@47



## QPSK 15kHz 1@11



## QPSK 15kHz 12@0



|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/26 |
| Test Band     | Band 4/66       |           |            |

| Frequency<br>(MHz) | Sub-carrier<br>spacing<br>(kHz) | N <sub>tones</sub> | Frequency<br>Range<br>(MHz) | Max Spurious<br>Emissions<br>(dBm) | Limit<br>(dBm) | Result |
|--------------------|---------------------------------|--------------------|-----------------------------|------------------------------------|----------------|--------|
| BPSK               |                                 |                    |                             |                                    |                |        |
| 1710.1             | 3.75                            | 1@0                | 30 ~ 27000                  | -43.85                             | ≤ -13.00       | Pass   |
| 1710.1             | 15                              | 1@0                | 30 ~ 27000                  | -44.26                             | ≤ -13.00       | Pass   |
| 1745.0             | 3.75                            | 1@23               | 30 ~ 27000                  | -42.24                             | ≤ -13.00       | Pass   |
| 1745.0             | 15                              | 1@5                | 30 ~ 27000                  | -42.22                             | ≤ -13.00       | Pass   |
| 1779.9             | 3.75                            | 1@47               | 30 ~ 27000                  | -39.15                             | ≤ -13.00       | Pass   |
| 1779.9             | 15                              | 1@11               | 30 ~ 27000                  | -41.18                             | ≤ -13.00       | Pass   |
| QPSK               |                                 |                    |                             |                                    |                |        |
| 1710.1             | 3.75                            | 1@0                | 30 ~ 27000                  | -44.17                             | ≤ -13.00       | Pass   |
| 1710.1             | 15                              | 1@0                | 30 ~ 27000                  | -43.71                             | ≤ -13.00       | Pass   |
| 1710.1             | 15                              | 12@0               | 30 ~ 27000                  | -44.02                             | ≤ -13.00       | Pass   |
| 1745.0             | 3.75                            | 1@23               | 30 ~ 27000                  | -42.50                             | ≤ -13.00       | Pass   |
| 1745.0             | 15                              | 1@5                | 30 ~ 27000                  | -42.77                             | ≤ -13.00       | Pass   |
| 1745.0             | 15                              | 12@0               | 30 ~ 27000                  | -42.74                             | ≤ -13.00       | Pass   |
| 1779.9             | 3.75                            | 1@47               | 30 ~ 27000                  | -40.54                             | ≤ -13.00       | Pass   |
| 1779.9             | 15                              | 1@11               | 30 ~ 27000                  | -39.84                             | ≤ -13.00       | Pass   |
| 1779.9             | 15                              | 12@0               | 30 ~ 27000                  | -40.92                             | ≤ -13.00       | Pass   |

## 1710.1 MHz

## BPSK 3.75kHz 1@0



## BPSK 15kHz 1@0



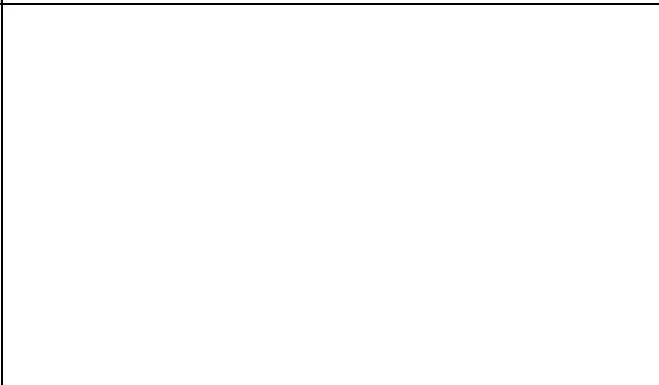
## QPSK 3.75kHz 1@0



## QPSK 15kHz 1@0



## QPSK 15kHz 12@0



## 1745 MHz

## BPSK 3.75kHz 1@23



## BPSK 15kHz 1@5



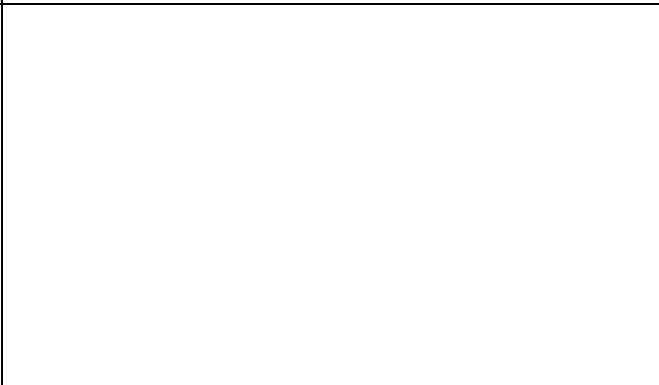
## QPSK 3.75kHz 1@23



## QPSK 15kHz 1@5



## QPSK 15kHz 12@0



## 1779.9MHz

## BPSK 3.75kHz 1@47



## BPSK 15kHz 1@11



## QPSK 3.75kHz 1@47



## QPSK 15kHz 1@11



## QPSK 15kHz 12@0

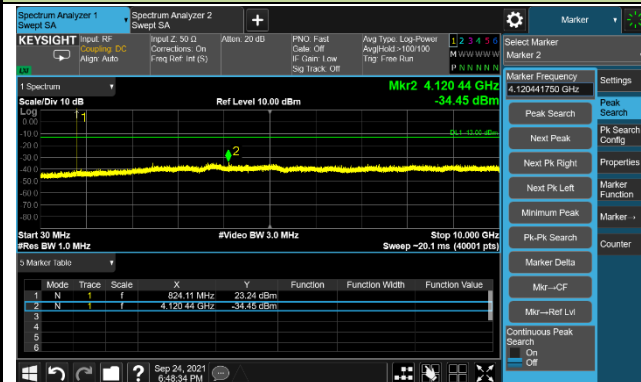


|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/24 |
| Test Band     | Band 5/26       |           |            |

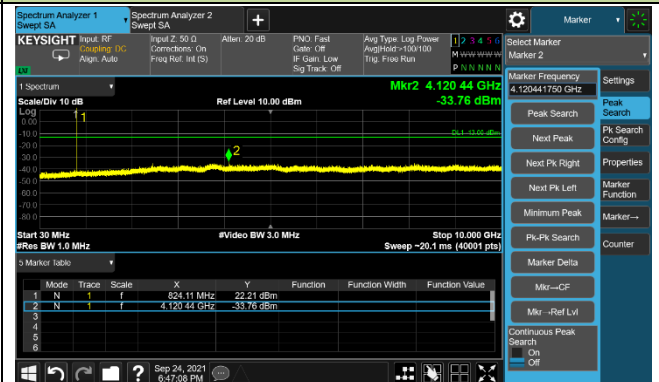
| Frequency (MHz) | Sub-carrier spacing (kHz) | N <sub>tones</sub> | Frequency Range (MHz) | Max Spurious Emissions (dBm) | Limit (dBm) | Result |
|-----------------|---------------------------|--------------------|-----------------------|------------------------------|-------------|--------|
| BPSK            |                           |                    |                       |                              |             |        |
| 824.1           | 3.75                      | 1@0                | 30 ~ 10000            | -34.45                       | ≤ -13.00    | Pass   |
| 824.1           | 15                        | 1@0                | 30 ~ 10000            | -33.76                       | ≤ -13.00    | Pass   |
| 836.5           | 3.75                      | 1@23               | 30 ~ 10000            | -32.21                       | ≤ -13.00    | Pass   |
| 836.5           | 15                        | 1@5                | 30 ~ 10000            | -31.95                       | ≤ -13.00    | Pass   |
| 848.9           | 3.75                      | 1@47               | 30 ~ 10000            | -32.36                       | ≤ -13.00    | Pass   |
| 848.9           | 15                        | 1@11               | 30 ~ 10000            | -32.61                       | ≤ -13.00    | Pass   |
| QPSK            |                           |                    |                       |                              |             |        |
| 824.1           | 3.75                      | 1@0                | 30 ~ 10000            | -32.92                       | ≤ -13.00    | Pass   |
| 824.1           | 15                        | 1@0                | 30 ~ 10000            | -34.14                       | ≤ -13.00    | Pass   |
| 824.1           | 15                        | 12@0               | 30 ~ 10000            | -32.94                       | ≤ -13.00    | Pass   |
| 836.5           | 3.75                      | 1@23               | 30 ~ 10000            | -38.67                       | ≤ -13.00    | Pass   |
| 836.5           | 15                        | 1@5                | 30 ~ 10000            | -33.61                       | ≤ -13.00    | Pass   |
| 836.5           | 15                        | 12@0               | 30 ~ 10000            | -32.95                       | ≤ -13.00    | Pass   |
| 848.9           | 3.75                      | 1@47               | 30 ~ 10000            | -32.12                       | ≤ -13.00    | Pass   |
| 848.9           | 15                        | 1@11               | 30 ~ 10000            | -31.95                       | ≤ -13.00    | Pass   |
| 848.9           | 15                        | 12@0               | 30 ~ 10000            | -31.68                       | ≤ -13.00    | Pass   |

## 824.1 MHz

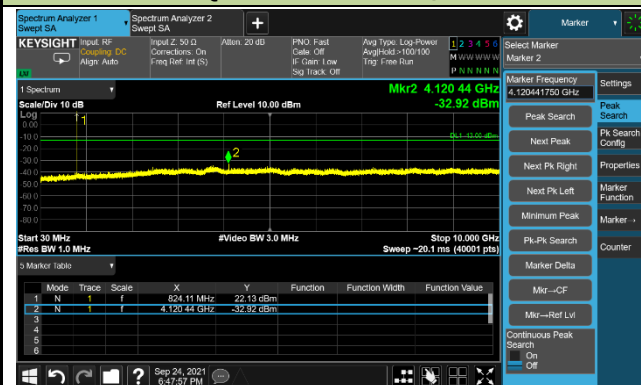
## BPSK 3.75kHz 1@0



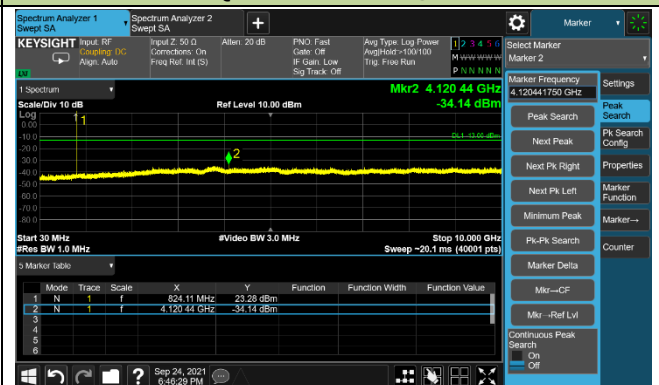
## BPSK 15kHz 1@0



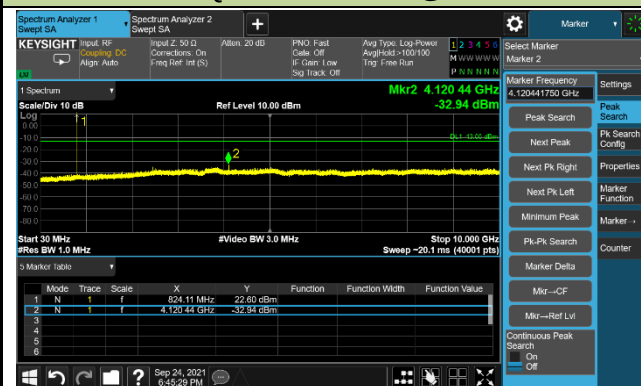
## QPSK 3.75kHz 1@0



## QPSK 15kHz 1@0

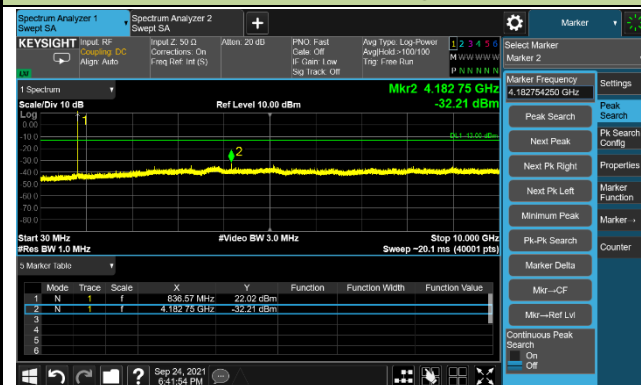


## QPSK 15kHz 12@0

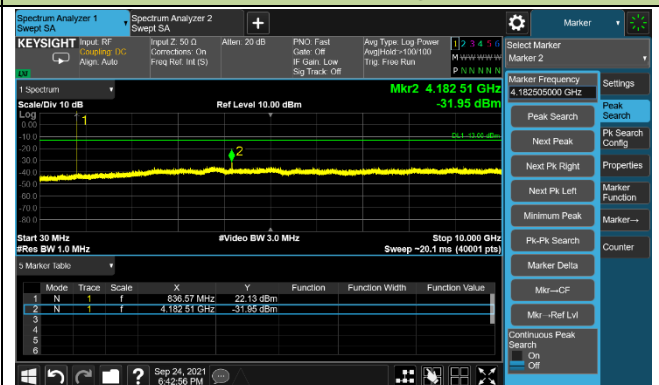


## 836.5 MHz

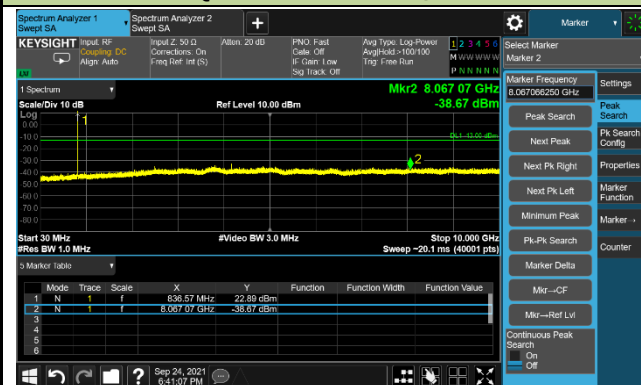
## BPSK 3.75kHz 1@23



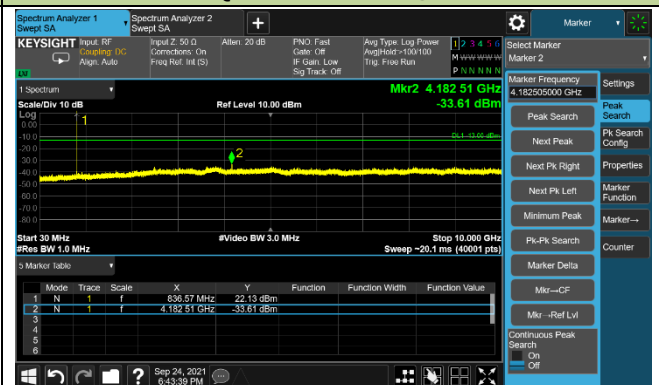
## BPSK 15kHz 1@5



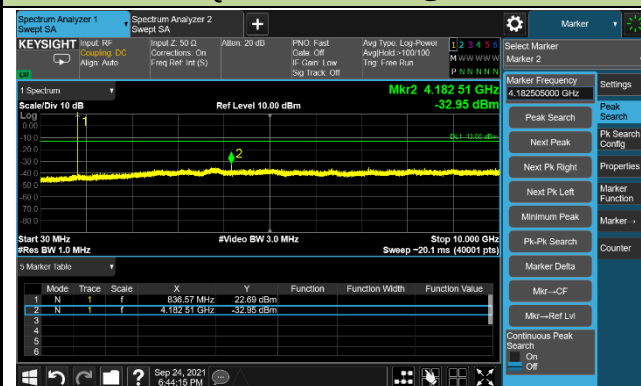
## QPSK 3.75kHz 1@23



## QPSK 15kHz 1@5



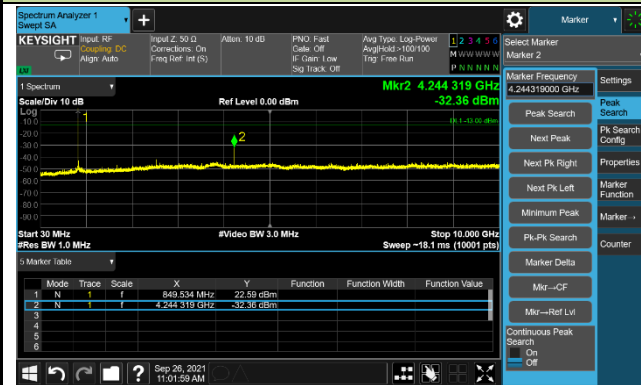
## QPSK 15kHz 12@0



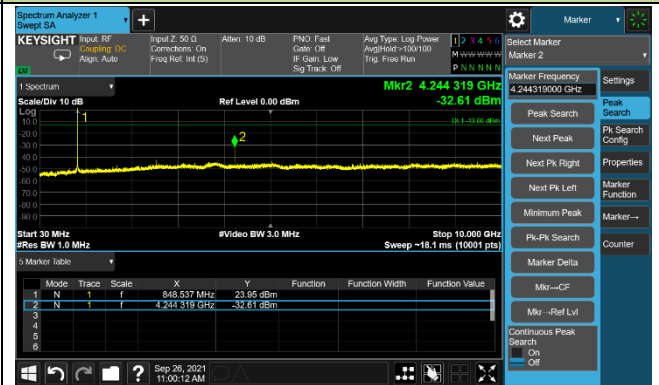


## 848.9 MHz

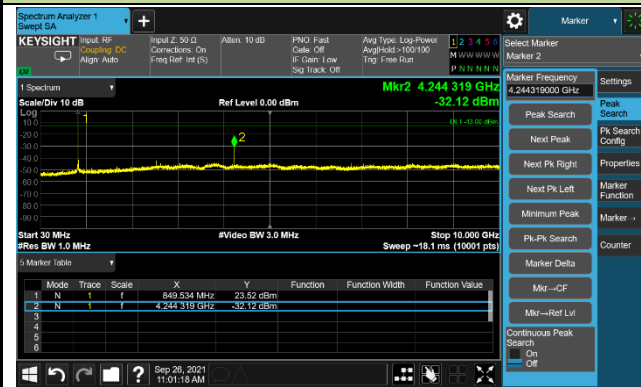
## BPSK 3.75kHz 1@47



## BPSK 15kHz 1@11



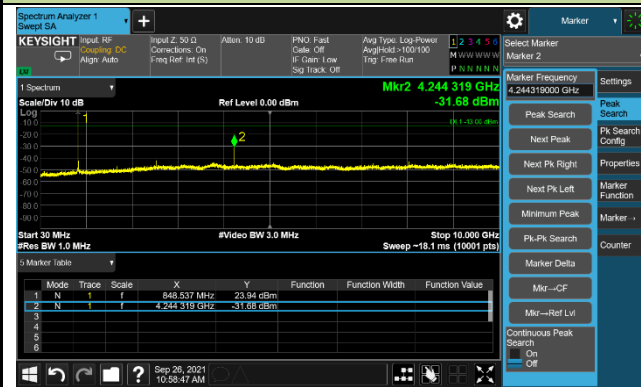
## QPSK 3.75kHz 1@47



## QPSK 15kHz 1@11



## QPSK 15kHz 12@0



|               |                 |           |            |
|---------------|-----------------|-----------|------------|
| Product       | Wireless MODULE | Test Site | WZ-SR6     |
| Test Engineer | Cloud Guo       | Test Date | 2021/09/26 |
| Test Band     | Band 17/12      |           |            |

| Frequency<br>(MHz) | Sub-carrier<br>spacing<br>(kHz) | N <sub>tones</sub> | Frequency<br>Range<br>(MHz) | Max Spurious<br>Emissions<br>(dBm) | Limit<br>(dBm) | Result |
|--------------------|---------------------------------|--------------------|-----------------------------|------------------------------------|----------------|--------|
| BPSK               |                                 |                    |                             |                                    |                |        |
| 699.3              | 3.75                            | 1@0                | 30 ~ 10000                  | -43.42                             | ≤ -13.00       | Pass   |
| 699.3              | 15                              | 1@0                | 30 ~ 10000                  | -39.92                             | ≤ -13.00       | Pass   |
| 706.0              | 3.75                            | 1@23               | 30 ~ 10000                  | -42.15                             | ≤ -13.00       | Pass   |
| 706.0              | 15                              | 1@5                | 30 ~ 10000                  | -42.59                             | ≤ -13.00       | Pass   |
| 715.7              | 3.75                            | 1@47               | 30 ~ 10000                  | -40.38                             | ≤ -13.00       | Pass   |
| 715.7              | 15                              | 1@11               | 30 ~ 10000                  | -39.68                             | ≤ -13.00       | Pass   |
| QPSK               |                                 |                    |                             |                                    |                |        |
| 699.3              | 3.75                            | 1@0                | 30 ~ 10000                  | -41.85                             | ≤ -13.00       | Pass   |
| 699.3              | 15                              | 1@0                | 30 ~ 10000                  | -40.52                             | ≤ -13.00       | Pass   |
| 699.3              | 15                              | 12@0               | 30 ~ 10000                  | -40.19                             | ≤ -13.00       | Pass   |
| 706.0              | 3.75                            | 1@23               | 30 ~ 10000                  | -42.19                             | ≤ -13.00       | Pass   |
| 706.0              | 15                              | 1@5                | 30 ~ 10000                  | -42.75                             | ≤ -13.00       | Pass   |
| 706.0              | 15                              | 12@0               | 30 ~ 10000                  | -39.00                             | ≤ -13.00       | Pass   |
| 715.7              | 3.75                            | 1@47               | 30 ~ 10000                  | -40.01                             | ≤ -13.00       | Pass   |
| 715.7              | 15                              | 1@11               | 30 ~ 10000                  | -38.63                             | ≤ -13.00       | Pass   |
| 715.7              | 15                              | 12@0               | 30 ~ 10000                  | -39.96                             | ≤ -13.00       | Pass   |