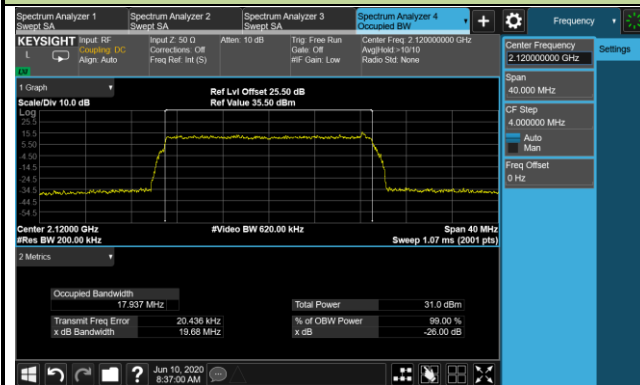
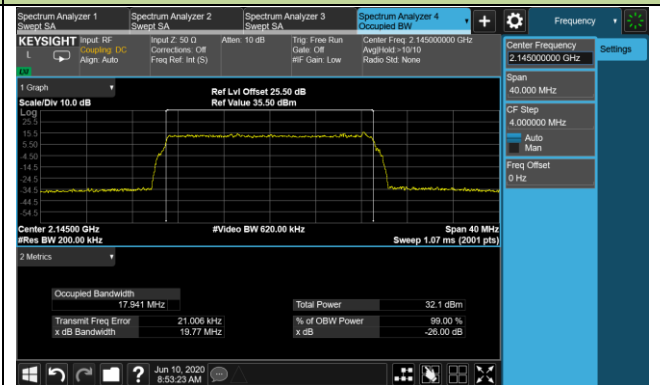


## 20MHz Channel Bandwidth - Carrier Position 95 kHz

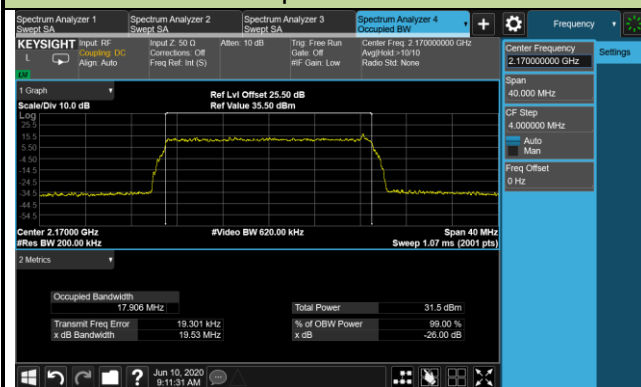
## Bottom Channel



## Middle Channel



## Top Channel



## **6.4. Band Edge Measurement**

### **6.4.1. Test Limit**

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. The emission limit equal to -13dBm.

This device can be implement MIMO function, so the limit of spurious emissions needs to be reduced by  $10 \cdot \log(\text{Numbers}_{\text{Ant}})$  according to FCC KDB 662911 D01 guidance.

The limit is adjusted to  $-13 \text{ dBm} - 10 \cdot \log(2) = -16.01 \text{ dBm}$

### **6.4.2. Test Procedure Used**

KDB 971168 D01v03r01 - Section 6.1

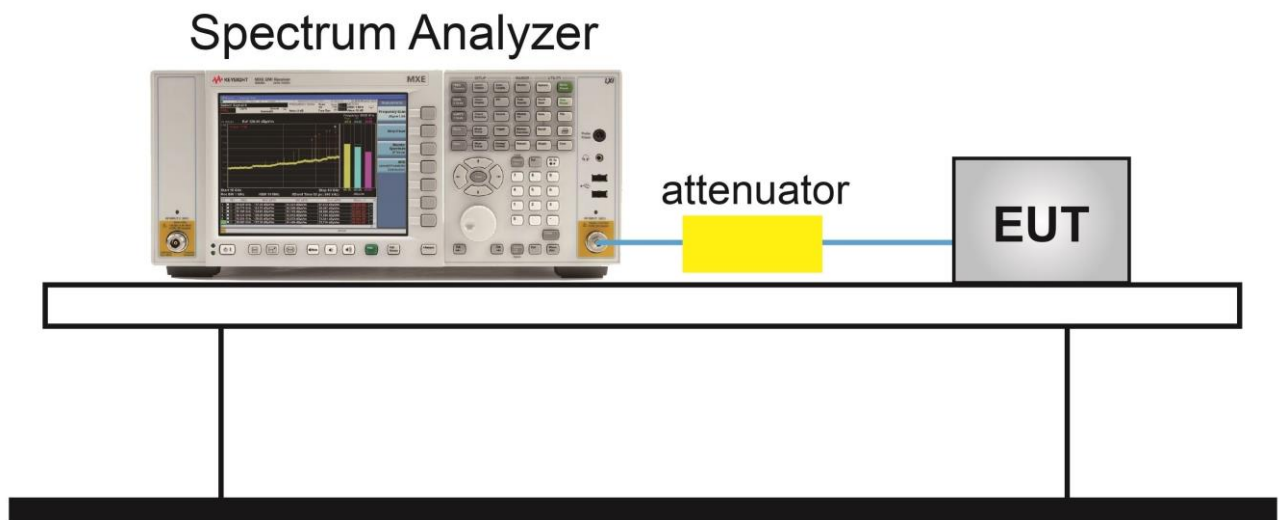
ANSI C63.26-2015 - Section 5.7.1

### **6.4.3. Test Setting**

1. Set the analyzer frequency to low or high channel.
1. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW;
2. VBW  $\geq 3 \cdot \text{RBW}$
3. Sweep time = auto
4. Detector = power averaging (rms)
5. Set sweep trigger to "free run."
6. 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.

#### 6.4.4. Test Setup



#### 6.4.5. Test Setup

|                    |                                    |               |                         |
|--------------------|------------------------------------|---------------|-------------------------|
| Product            | AirScale Indoor Radio<br>ASiR-pRRH | Test Engineer | Peter Xu                |
| Test Site          | SR6                                | Test Date     | 2020/06/05 ~ 2020/06/06 |
| Test Configuration | LTE Band 2 (Single Carrier)        |               |                         |

| Frequency<br>(MHz) | Carrier Position<br>(kHz) | Channel<br>Bandwidth<br>(MHz) | Max Band Edge<br>(dBm) |        | Limit<br>(dBm) | Result |
|--------------------|---------------------------|-------------------------------|------------------------|--------|----------------|--------|
|                    |                           |                               | Ant 0                  | Ant 1  |                |        |
| Guard band         |                           |                               |                        |        |                |        |
| 1935               | -4597.5                   | 10                            | -31.22                 | -30.66 | ≤ -16.01       | Pass   |
| 1985               | 4597.5                    | 10                            | -32.09                 | -32.89 | ≤ -16.01       | Pass   |
| 1937.5             | -6892.5                   | 15                            | -33.37                 | -33.10 | ≤ -16.01       | Pass   |
| 1982.5             | 6892.5                    | 15                            | -34.28                 | -34.78 | ≤ -16.01       | Pass   |
| 1940               | -9097.5                   | 20                            | -36.50                 | -34.97 | ≤ -16.01       | Pass   |
| 1980               | 9097.5                    | 20                            | -37.68                 | -37.02 | ≤ -16.01       | Pass   |
| In band            |                           |                               |                        |        |                |        |
| 1935               | 4                         | 10                            | -32.74                 | -33.96 | ≤ -16.01       | Pass   |
| 1985               | 45                        | 10                            | -35.61                 | -36.00 | ≤ -16.01       | Pass   |
| 1937.5             | 2                         | 15                            | -34.36                 | -35.42 | ≤ -16.01       | Pass   |
| 1982.5             | 72                        | 15                            | -35.96                 | -37.59 | ≤ -16.01       | Pass   |
| 1940               | 2                         | 20                            | -35.12                 | -35.56 | ≤ -16.01       | Pass   |
| 1980               | 95                        | 20                            | -37.82                 | -38.71 | ≤ -16.01       | Pass   |

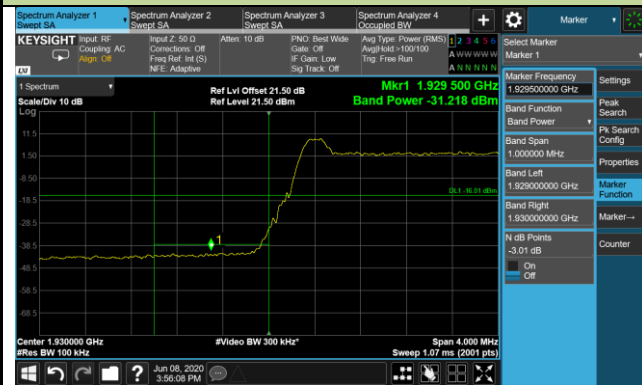
|                    |                                    |               |            |
|--------------------|------------------------------------|---------------|------------|
| Product            | AirScale Indoor Radio<br>ASiR-pRRH | Test Engineer | Peter Xu   |
| Test Site          | SR6                                | Test Date     | 2020/06/08 |
| Test Configuration | LTE Band 66 (Single Carrier)       |               |            |

| Frequency<br>(MHz) | Carrier Position<br>(kHz) | Channel<br>Bandwidth<br>(MHz) | Max Band Edge<br>(dBm) |        | Limit<br>(dBm) | Result |
|--------------------|---------------------------|-------------------------------|------------------------|--------|----------------|--------|
|                    |                           |                               | Ant 0                  | Ant 1  |                |        |
| Guard band         |                           |                               |                        |        |                |        |
| 2115               | -4597.5                   | 10                            | -32.05                 | -32.03 | ≤ -16.01       | Pass   |
| 2175               | 4597.5                    | 10                            | -30.58                 | -30.47 | ≤ -16.01       | Pass   |
| 2117.5             | -6892.5                   | 15                            | -34.06                 | -33.49 | ≤ -16.01       | Pass   |
| 2172.5             | 6892.5                    | 15                            | -33.36                 | -33.08 | ≤ -16.01       | Pass   |
| 2120               | -9097.5                   | 20                            | -35.68                 | -35.41 | ≤ -16.01       | Pass   |
| 2170               | 9097.5                    | 20                            | -34.88                 | -34.43 | ≤ -16.01       | Pass   |
| In band            |                           |                               |                        |        |                |        |
| 2115               | 4                         | 10                            | -34.28                 | -34.48 | ≤ -16.01       | Pass   |
| 2175               | 45                        | 10                            | -33.14                 | -33.43 | ≤ -16.01       | Pass   |
| 2117.5             | 2                         | 15                            | -35.60                 | -35.57 | ≤ -16.01       | Pass   |
| 2172.5             | 72                        | 15                            | -34.47                 | -35.14 | ≤ -16.01       | Pass   |
| 2120               | 4                         | 20                            | -36.70                 | -36.76 | ≤ -16.01       | Pass   |
| 2170               | 95                        | 20                            | -35.28                 | -36.12 | ≤ -16.01       | Pass   |

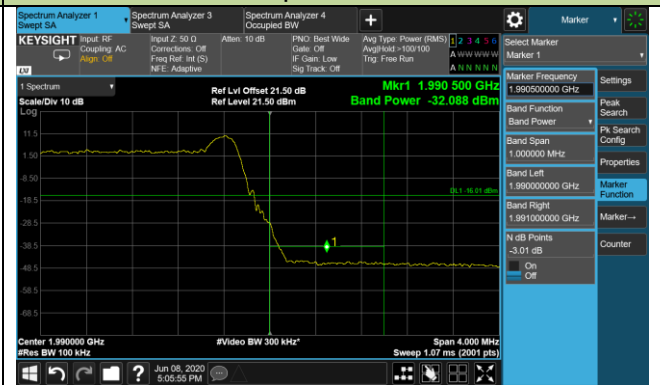
# Band 2 Guard band

## 10MHz Channel Bandwidth - Ant 0

### Bottom Channel

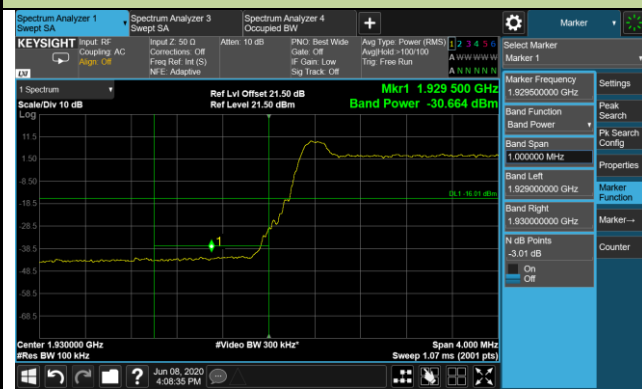


### Top Channel

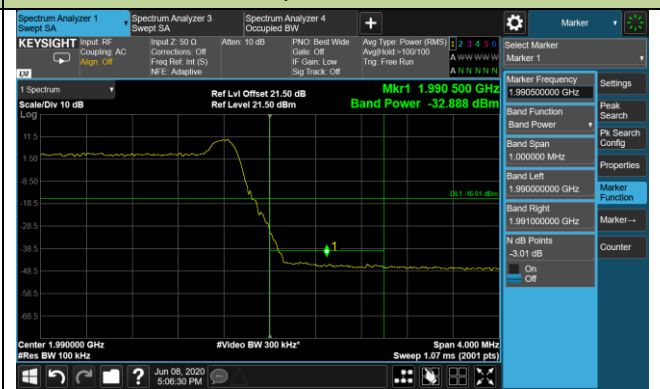


## 10MHz Channel Bandwidth - Ant 1

### Bottom Channel

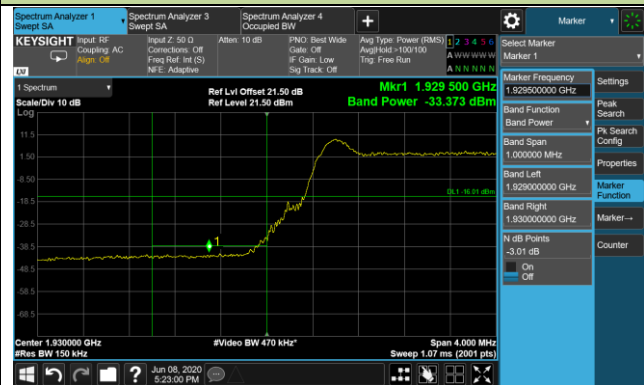


### Top Channel

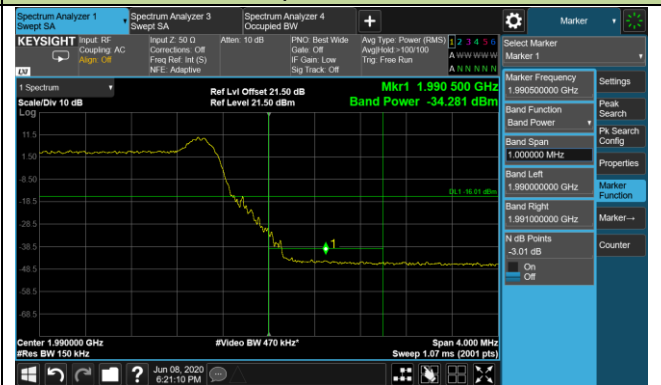


## 15MHz Channel Bandwidth - Ant 0

## Bottom Channel



## Top Channel



## 15MHz Channel Bandwidth - Ant 1

## Bottom Channel

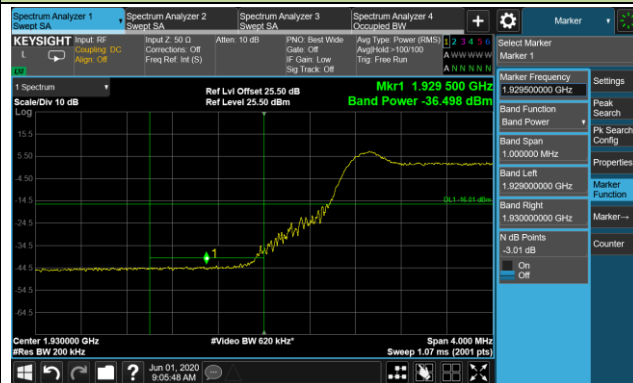


## Top Channel

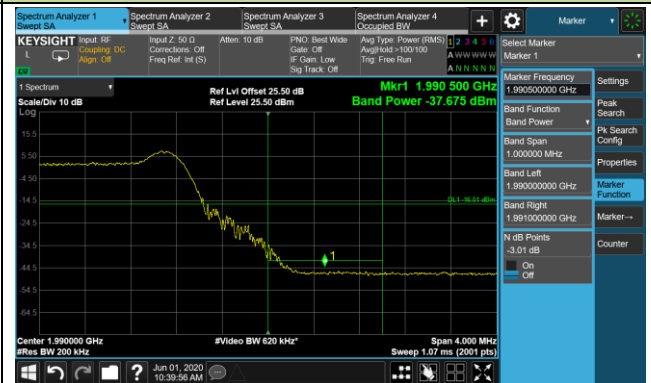


## 20MHz Channel Bandwidth - Ant 0

## Bottom Channel



## Top Channel



## 20MHz Channel Bandwidth - Ant 1

## Bottom Channel



## Top Channel

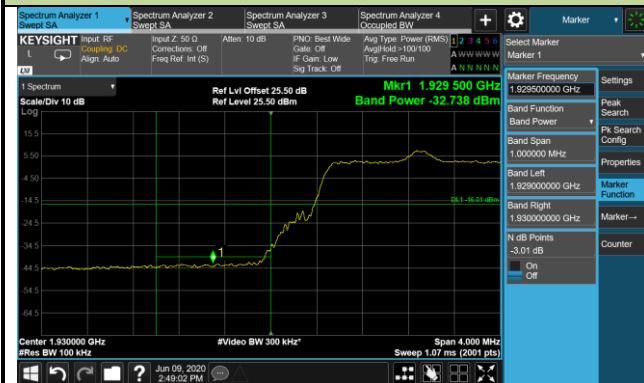




# Band 2 In band

## 10MHz Channel Bandwidth - Ant 0

### Bottom Channel

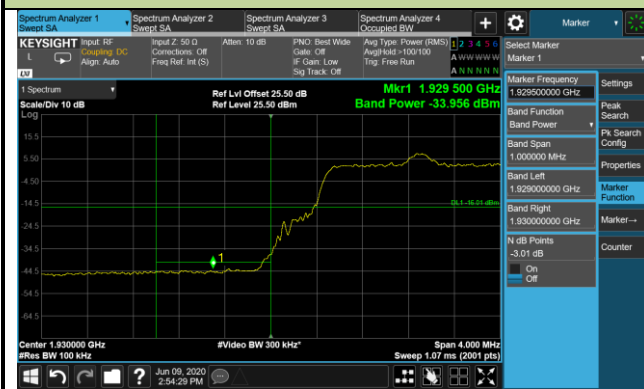


### Top Channel



## 10MHz Channel Bandwidth - Ant 1

### Bottom Channel

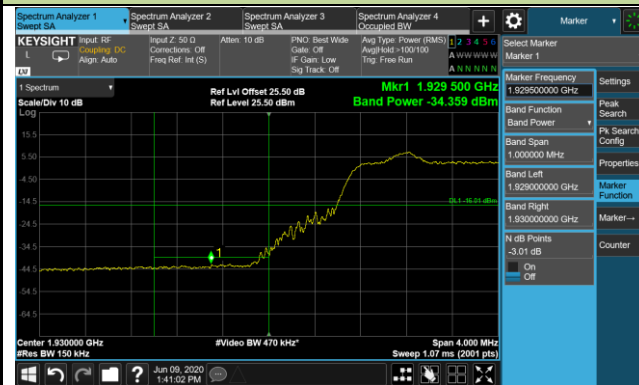


### Top Channel



## 15MHz Channel Bandwidth - Ant 0

## Bottom Channel

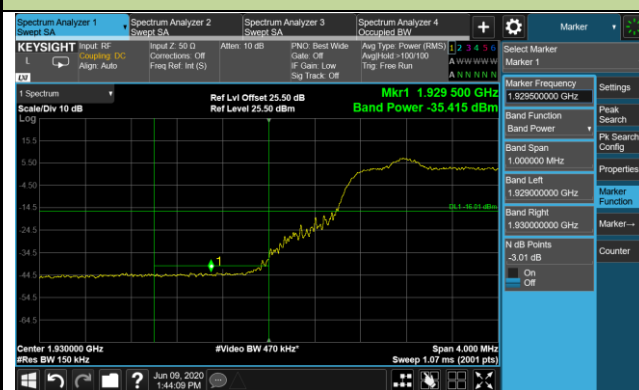


## Top Channel



## 15MHz Channel Bandwidth - Ant 1

## Bottom Channel

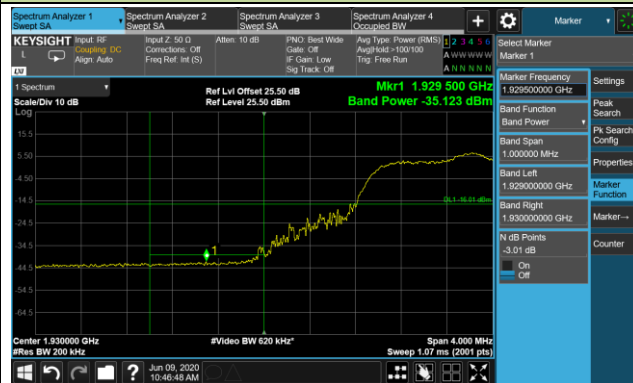


## Top Channel

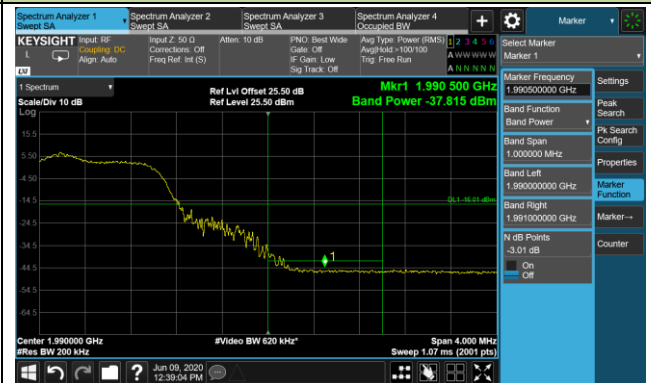


## 20MHz Channel Bandwidth - Ant 0

## Bottom Channel

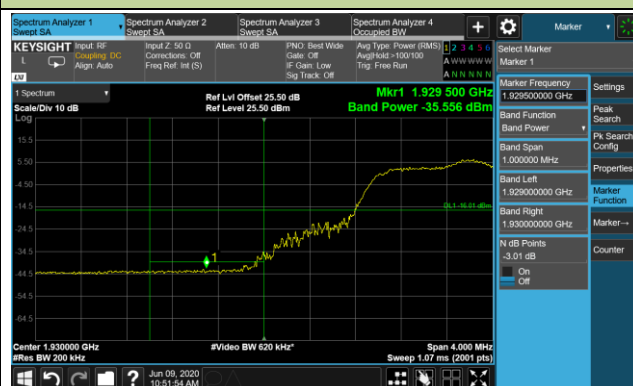


## Top Channel



## 20MHz Channel Bandwidth - Ant 1

## Bottom Channel



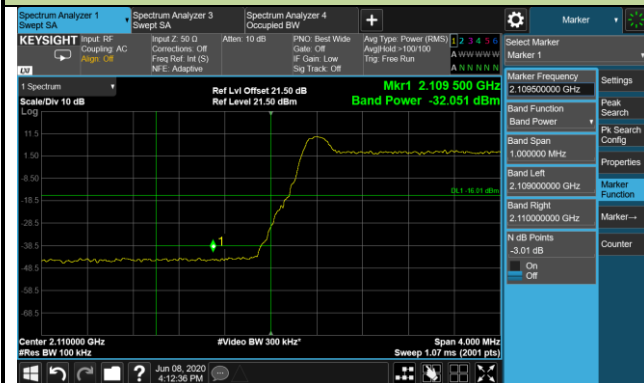
## Top Channel



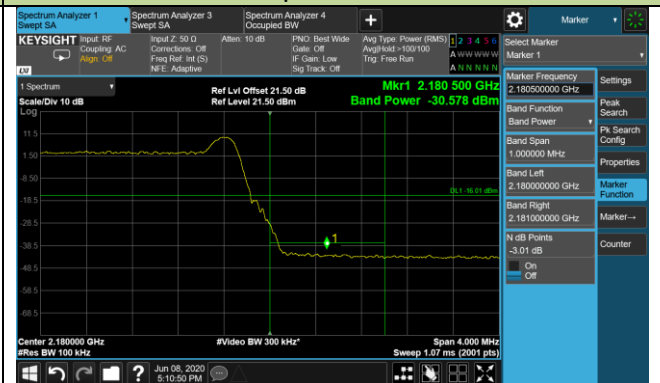
# Band 66 Guard band

## 10MHz Channel Bandwidth - Ant 0

### Bottom Channel

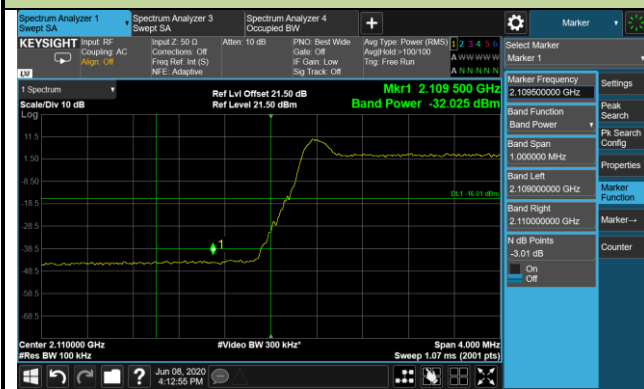


### Top Channel

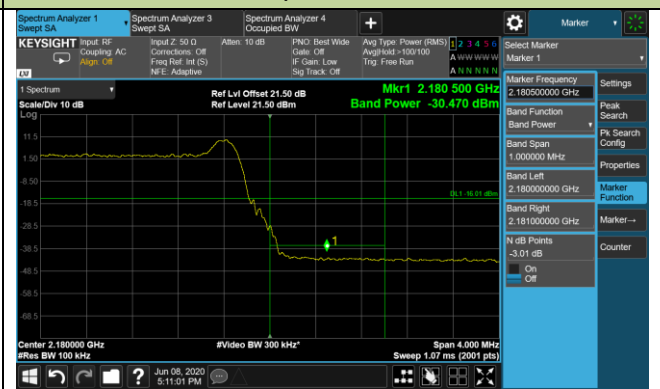


## 10MHz Channel Bandwidth - Ant 1

### Bottom Channel

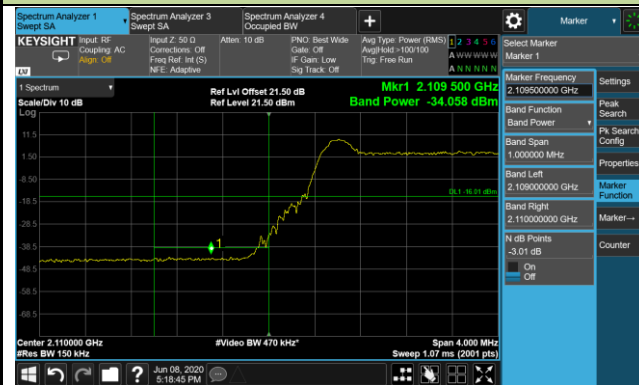


### Top Channel



## 15MHz Channel Bandwidth - Ant 0

## Bottom Channel

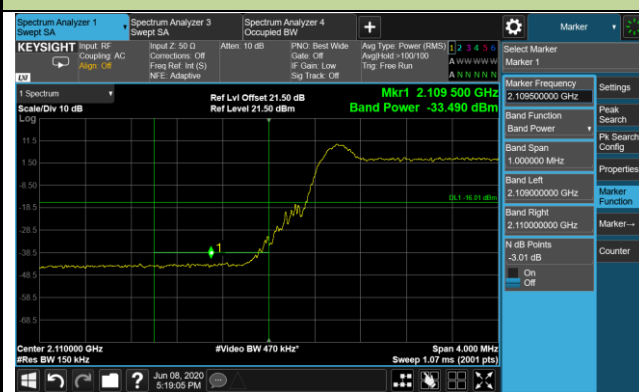


## Top Channel



## 15MHz Channel Bandwidth - Ant 1

## Bottom Channel

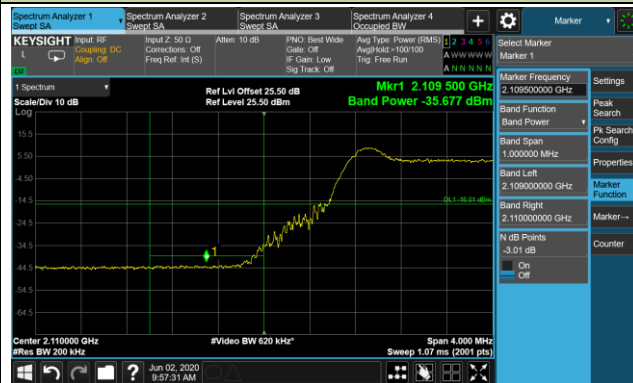


## Top Channel

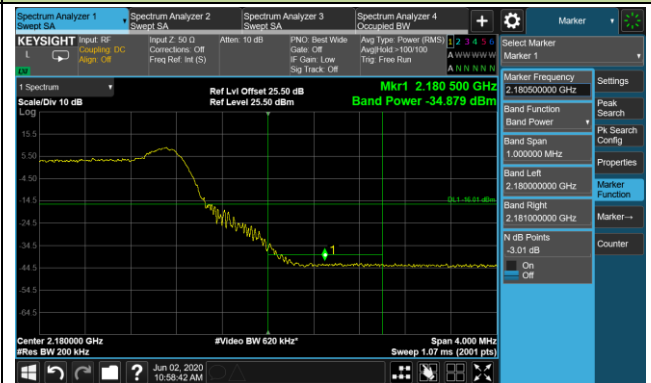


## 20MHz Channel Bandwidth - Ant 0

## Bottom Channel



## Top Channel



## 20MHz Channel Bandwidth - Ant 1

## Bottom Channel



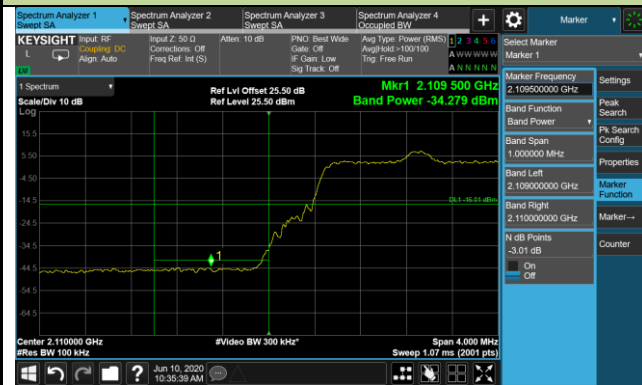
## Top Channel



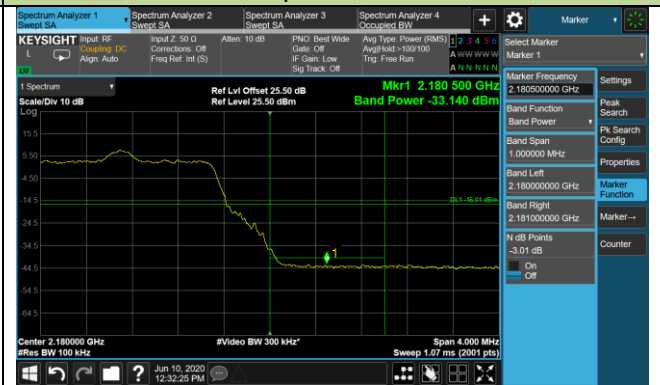
# Band 66 In band

## 10MHz Channel Bandwidth - Ant 0

### Bottom Channel

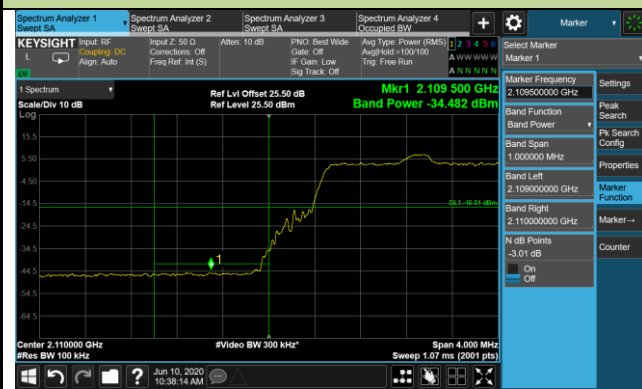


### Top Channel



## 10MHz Channel Bandwidth - Ant 1

### Bottom Channel

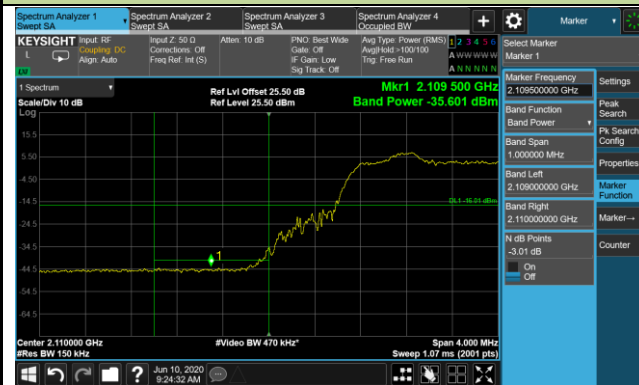


### Top Channel



## 15MHz Channel Bandwidth - Ant 0

## Bottom Channel

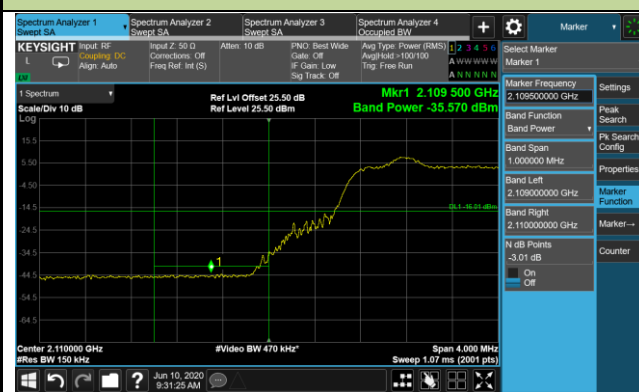


## Top Channel



## 15MHz Channel Bandwidth - Ant 1

## Bottom Channel



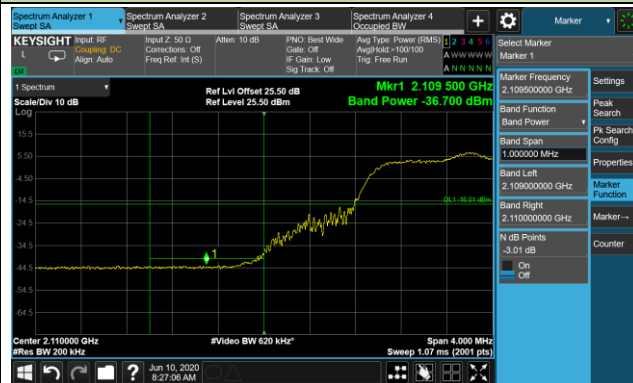
## Top Channel



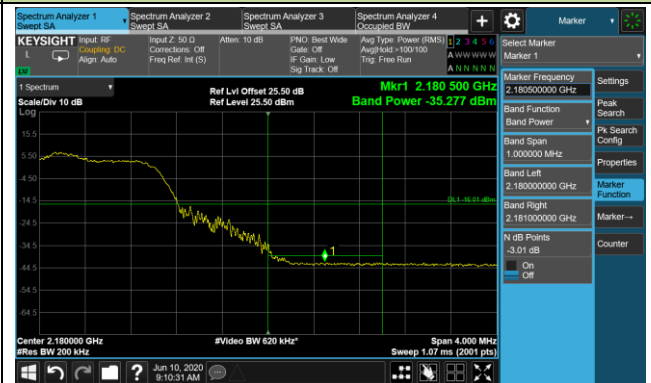


## 20MHz Channel Bandwidth - Ant 0

## Bottom Channel

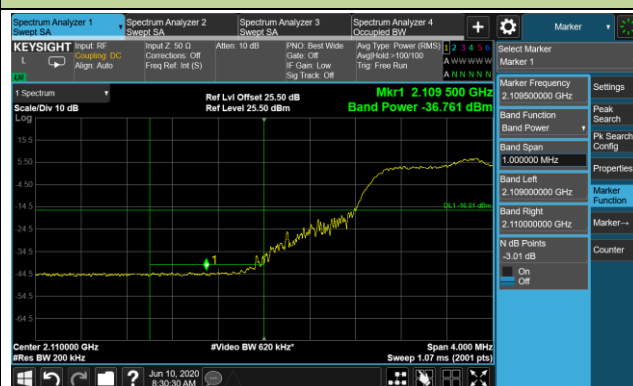


## Top Channel



## 20MHz Channel Bandwidth - Ant 1

## Bottom Channel



## Top Channel



## 7. CONCLUSION

The data collected relate only the item(s) tested and show that the **AirScale Indoor Radio ASiR-pRRH** is compliance with FCC Rules.

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The End