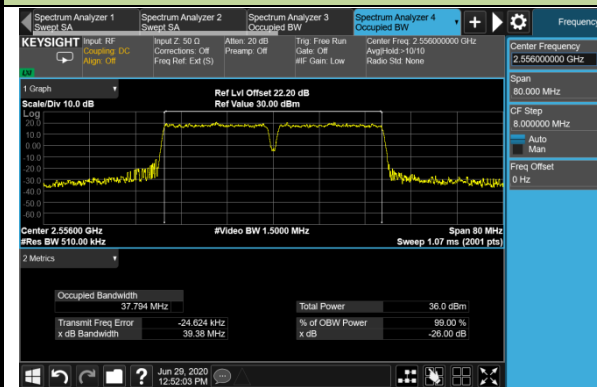
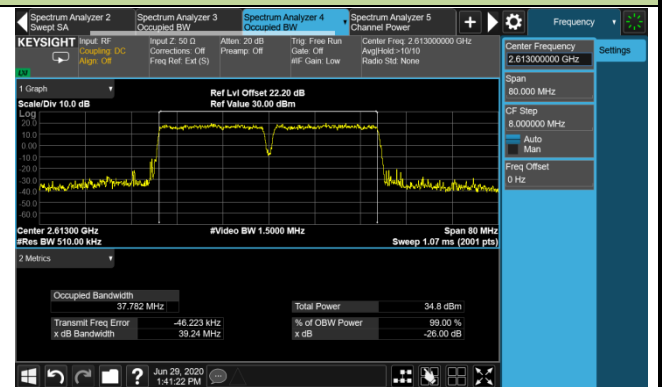


## LTE Emission Bandwidth - QPSK

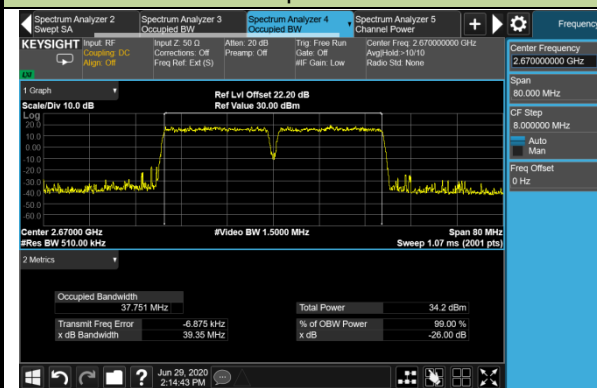
### Bottom Channel



### Middle Channel

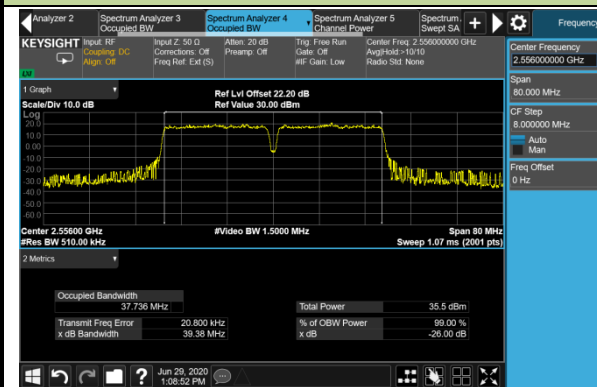


### Top Channel

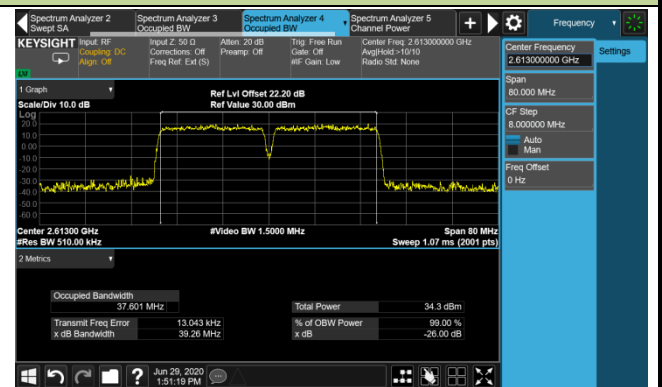


## LTE Emission Bandwidth - 16QAM

### Bottom Channel



### Middle Channel

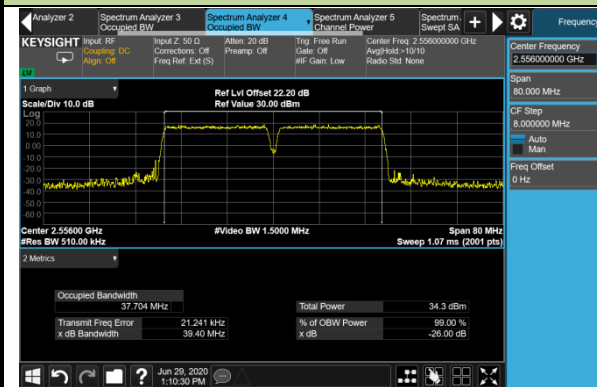


### Top Channel

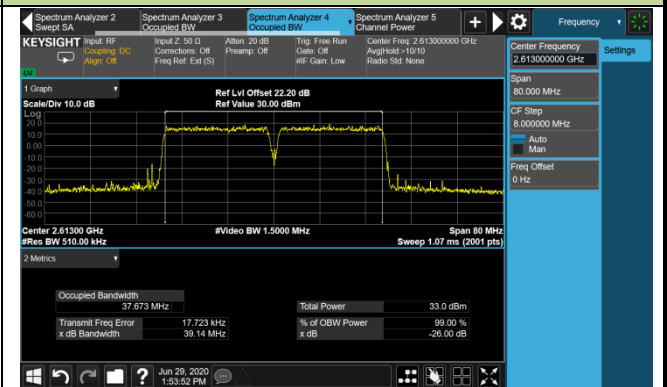


## LTE Emission Bandwidth - 64QAM

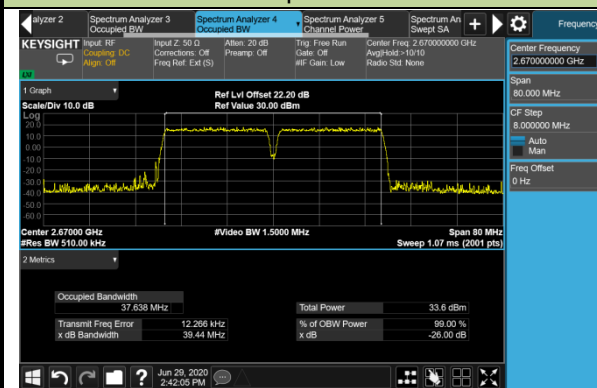
### Bottom Channel



### Middle Channel

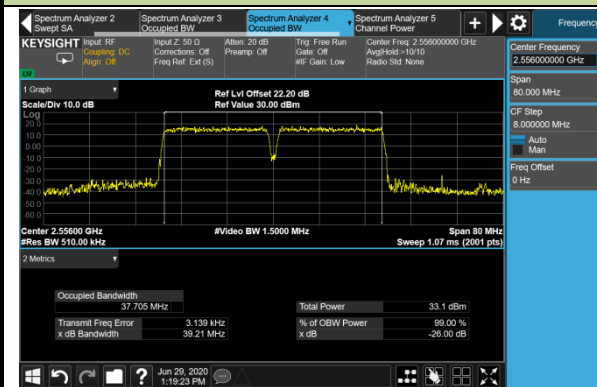


### Top Channel

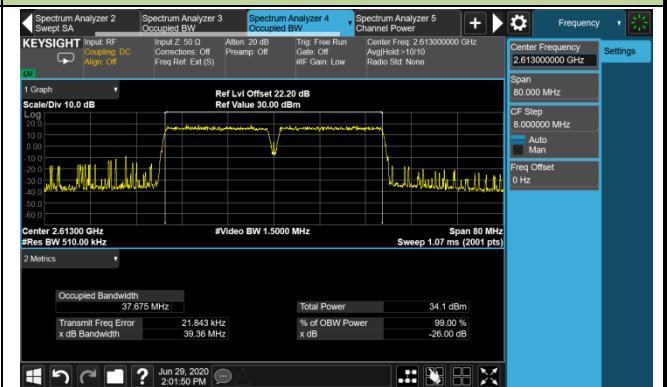


## LTE Emission Bandwidth - 256QAM

### Bottom Channel



### Middle Channel



### Top Channel

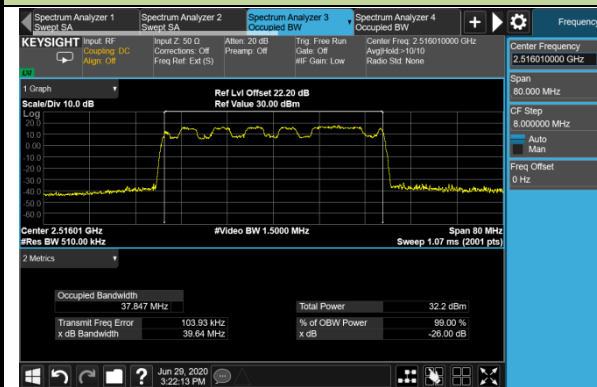


|                    |                                                                                                                                                                                     |               |            |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| Product            | AirScale Indoor Radio ASiR 5G-pRRH                                                                                                                                                  | Test Engineer | Kevin Ker  |
| Test Site          | SR2                                                                                                                                                                                 | Test Date     | 2020/06/29 |
| Test Configuration | 5G NR 40MHz + LTE 20 + 20 + 20MHz                                                                                                                                                   |               |            |
| Test Channel       | Bottom Channel: 5G NR 2516.01MHz, LTE 2546 + 2566 + 2586MHz<br>Middle Channel: 5G NR 2563.02MHz, LTE 2593 + 2613 + 2633MHz<br>Top Channel: 5G NR 2610MHz, LTE 2640 + 2660 + 2680MHz |               |            |

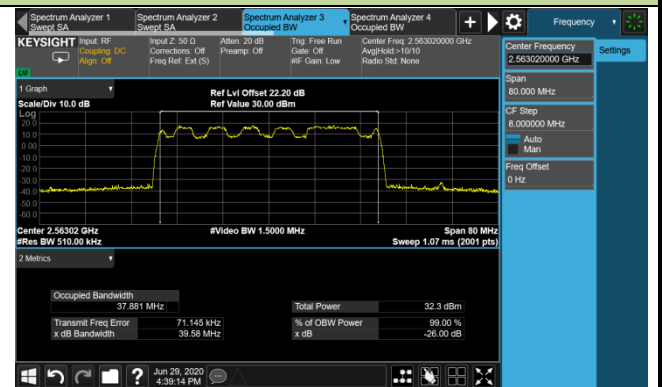
| Modulation                                      | Frequency<br>(MHz) | Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |       | Total 26dB<br>Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) |       | Total 99%<br>Bandwidth<br>(MHz) |
|-------------------------------------------------|--------------------|--------------------|-------------------------|-------|----------------------------------|------------------------|-------|---------------------------------|
|                                                 |                    |                    | 5G NR                   | LTE   |                                  | 5G NR                  | LTE   |                                 |
| Ant 0 / Ant 0+1 (5G NR) + Ant 3 / Ant 2+3 (LTE) |                    |                    |                         |       |                                  |                        |       |                                 |
| QPSK                                            | Bottom             | 40+60              | 39.64                   | 59.49 | 99.13                            | 37.85                  | 57.49 | 95.34                           |
|                                                 | Middle             | 40+60              | 39.58                   | 59.34 | 98.92                            | 37.88                  | 57.60 | 95.48                           |
|                                                 | Top                | 40+60              | 39.54                   | 59.64 | 99.18                            | 37.84                  | 57.50 | 95.34                           |
| 16QAM                                           | Bottom             | 40+60              | 39.61                   | 59.44 | 99.05                            | 37.84                  | 57.51 | 95.35                           |
|                                                 | Middle             | 40+60              | 39.66                   | 59.37 | 99.03                            | 37.88                  | 57.44 | 95.32                           |
|                                                 | Top                | 40+60              | 39.50                   | 59.38 | 98.88                            | 37.85                  | 57.49 | 95.34                           |
| 64QAM                                           | Bottom             | 40+60              | 39.52                   | 59.59 | 99.11                            | 37.79                  | 57.55 | 95.34                           |
|                                                 | Middle             | 40+60              | 39.65                   | 59.40 | 99.05                            | 37.82                  | 57.51 | 95.33                           |
|                                                 | Top                | 40+60              | 39.72                   | 59.61 | 99.33                            | 37.83                  | 57.47 | 95.30                           |
| 256QAM                                          | Bottom             | 40+60              | 39.50                   | 59.56 | 99.06                            | 37.78                  | 57.50 | 95.28                           |
|                                                 | Middle             | 40+60              | 39.68                   | 59.43 | 99.11                            | 37.78                  | 57.46 | 95.24                           |
|                                                 | Top                | 40+60              | 39.52                   | 59.47 | 98.99                            | 37.79                  | 57.61 | 95.40                           |

## 5G NR Emission Bandwidth - QPSK

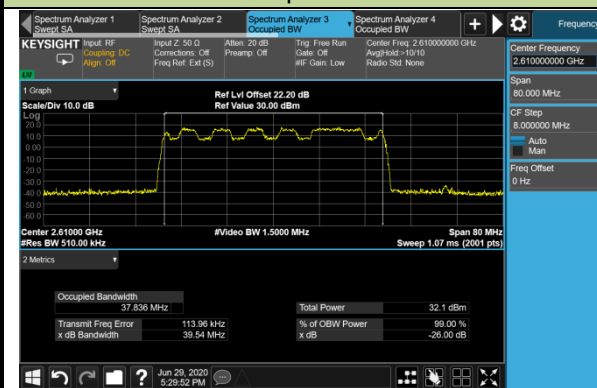
### Bottom Channel



### Middle Channel

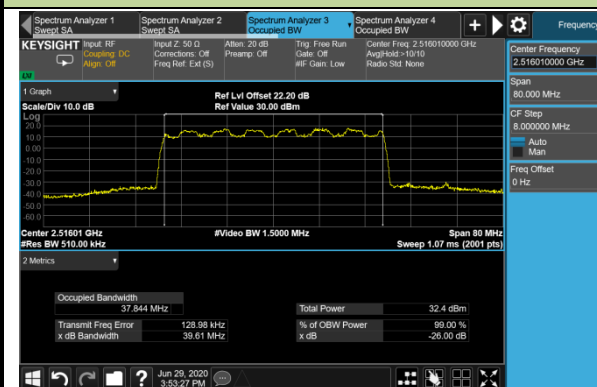


### Top Channel

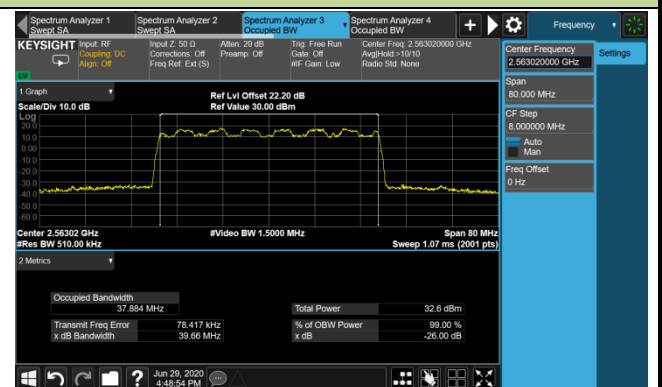


## 5G NR Emission Bandwidth - 16QAM

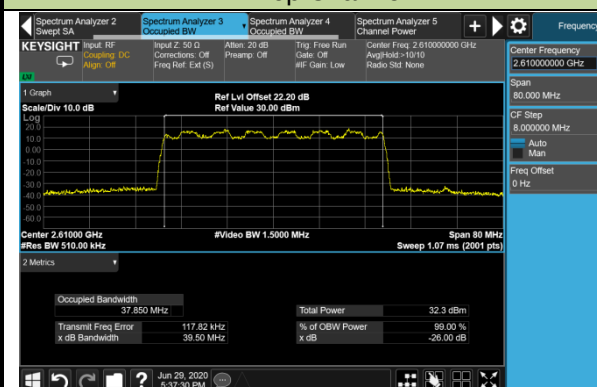
### Bottom Channel



### Middle Channel

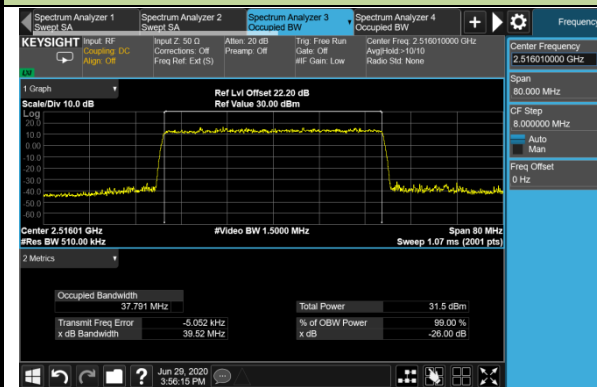


### Top Channel

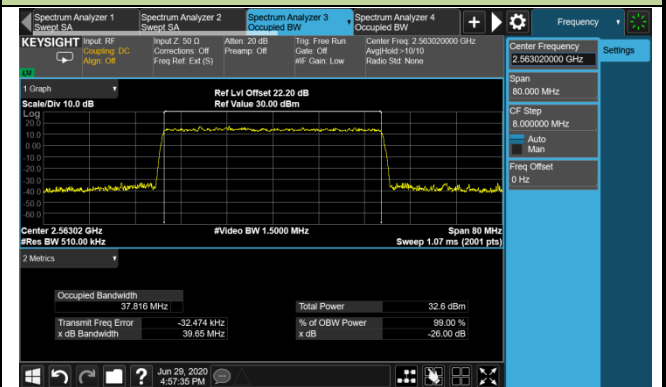


## 5G NR Emission Bandwidth - 64QAM

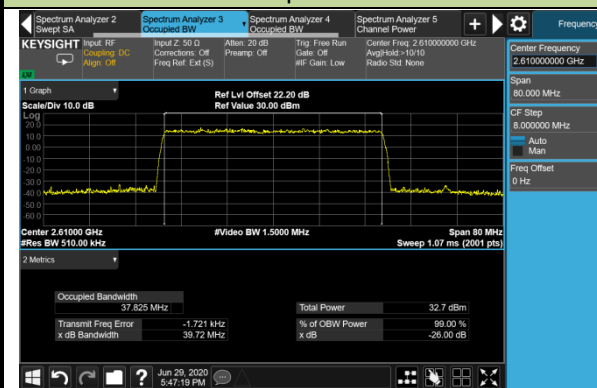
## Bottom Channel



## Middle Channel

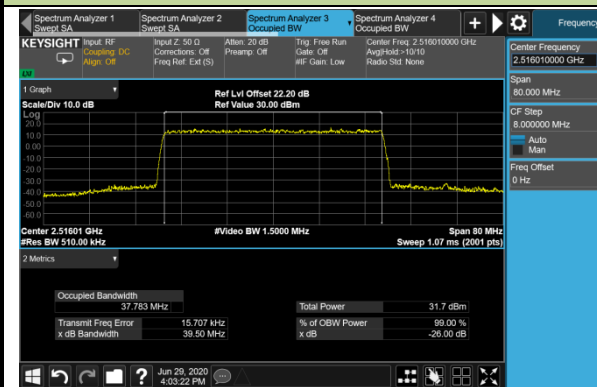


## Top Channel

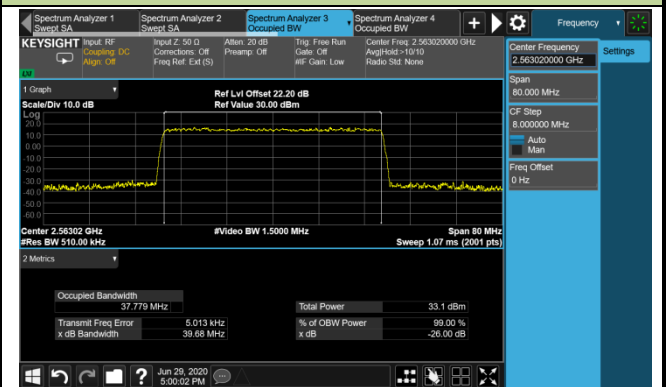


## 5G NR Emission Bandwidth - 256QAM

## Bottom Channel



## Middle Channel

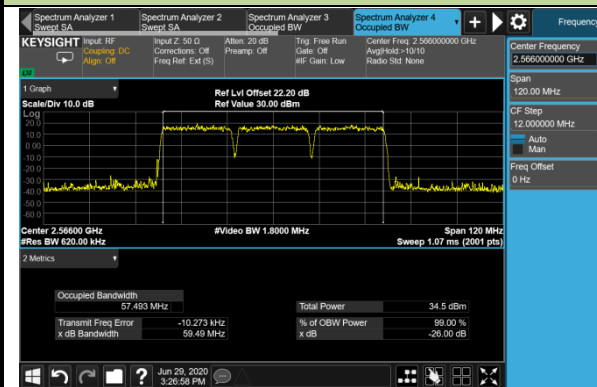


## Top Channel

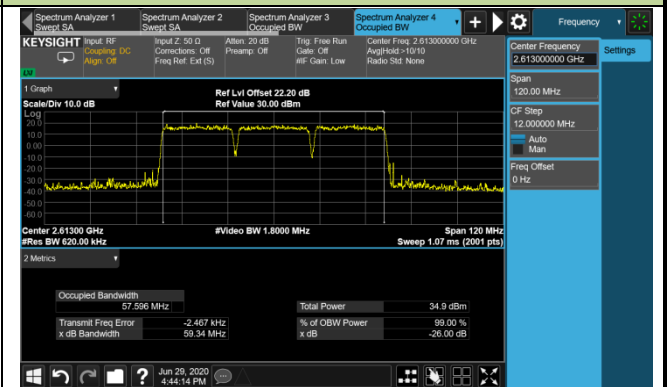


## LTE Emission Bandwidth - QPSK

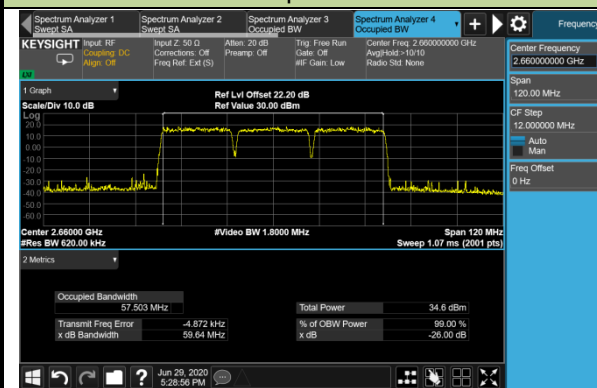
### Bottom Channel



### Middle Channel

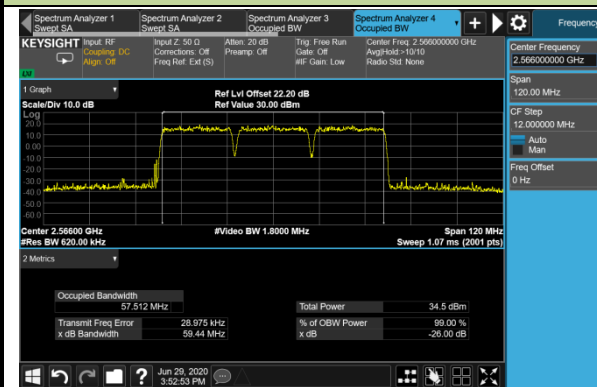


### Top Channel

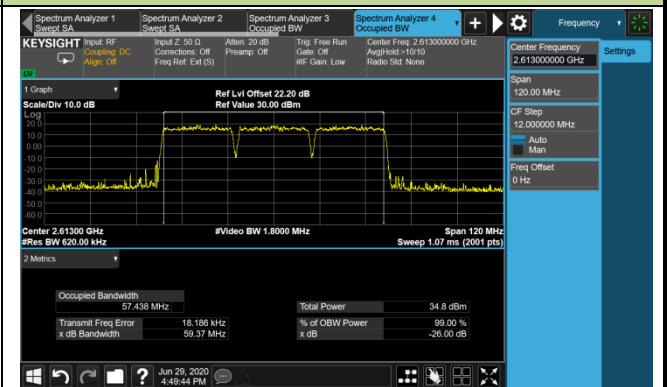


## LTE Emission Bandwidth - 16QAM

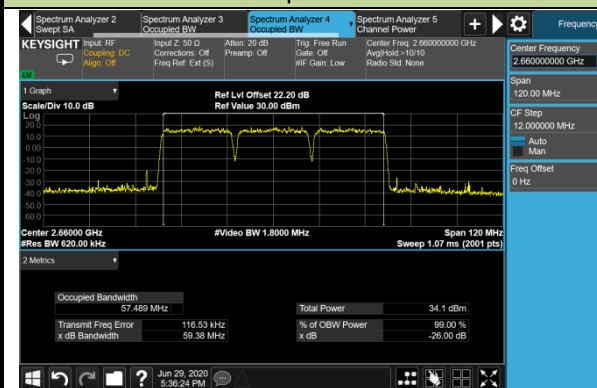
### Bottom Channel



### Middle Channel

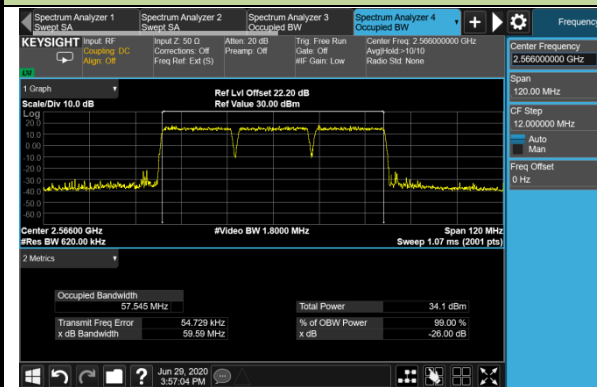


### Top Channel

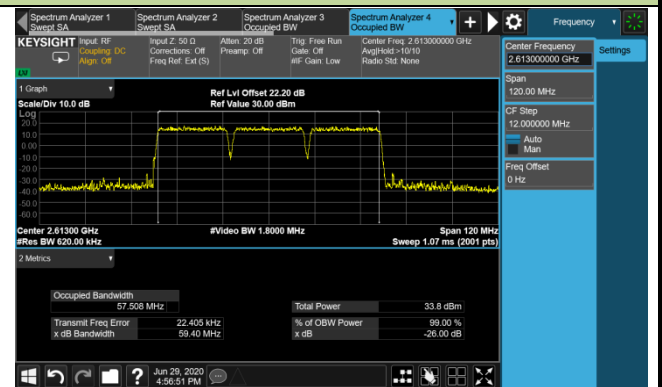


## LTE Emission Bandwidth - 64QAM

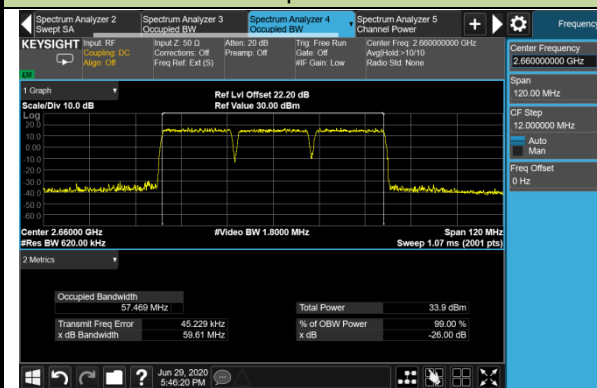
### Bottom Channel



### Middle Channel

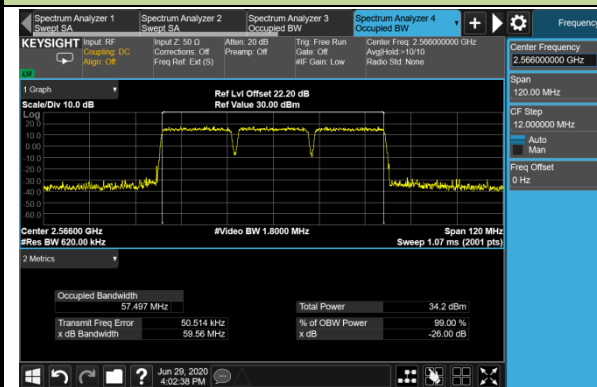


### Top Channel

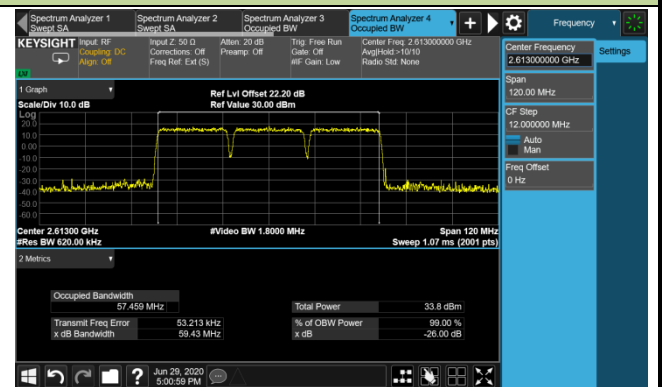


## LTE Emission Bandwidth - 256QAM

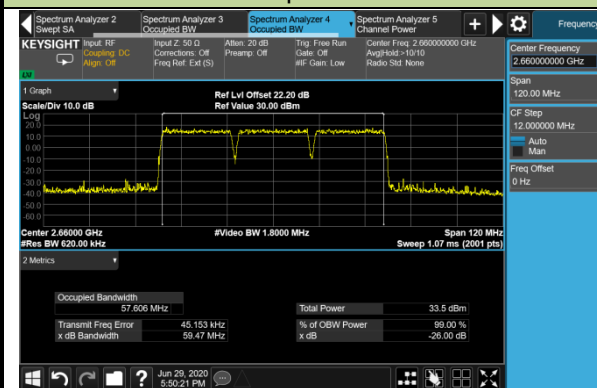
### Bottom Channel



### Middle Channel



### Top Channel

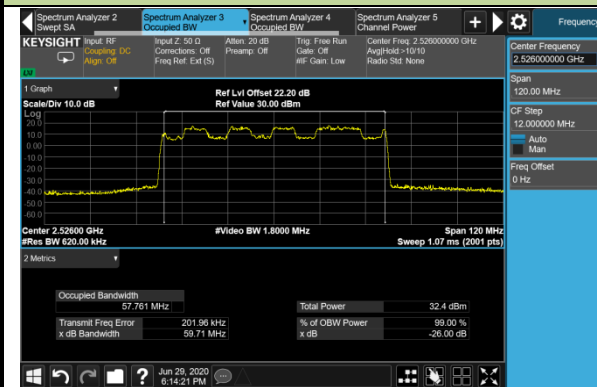


|                    |                                                                                                                                     |               |            |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| Product            | AirScale Indoor Radio ASiR 5G-pRRH                                                                                                  | Test Engineer | Kevin Ker  |
| Test Site          | SR2                                                                                                                                 | Test Date     | 2020/06/30 |
| Test Configuration | 5G NR 60MHz + LTE 20MHz                                                                                                             |               |            |
| Test Channel       | Bottom Channel: 5G NR 2526MHz, LTE 2566MHz<br>Middle Channel: 5G NR 2583MHz, LTE 2623MHz<br>Top Channel: 5G NR 2640MHz, LTE 2680MHz |               |            |

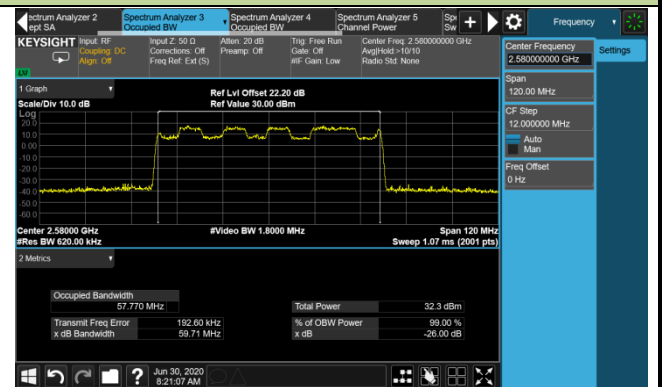
| Modulation                                      | Frequency<br>(MHz) | Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |       | Total 26dB<br>Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) |       | Total 99%<br>Bandwidth<br>(MHz) |
|-------------------------------------------------|--------------------|--------------------|-------------------------|-------|----------------------------------|------------------------|-------|---------------------------------|
|                                                 |                    |                    | 5G NR                   | LTE   |                                  | 5G NR                  | LTE   |                                 |
| Ant 0 / Ant 0+1 (5G NR) + Ant 3 / Ant 2+3 (LTE) |                    |                    |                         |       |                                  |                        |       |                                 |
| QPSK                                            | Bottom             | 60+20              | 59.71                   | 18.74 | 78.45                            | 57.76                  | 17.86 | 75.62                           |
|                                                 | Middle             | 60+20              | 59.71                   | 18.88 | 78.59                            | 57.77                  | 17.90 | 75.67                           |
|                                                 | Top                | 60+20              | 59.82                   | 18.87 | 78.69                            | 57.84                  | 17.90 | 75.74                           |
| 16QAM                                           | Bottom             | 60+20              | 59.79                   | 18.82 | 78.61                            | 57.77                  | 17.92 | 75.69                           |
|                                                 | Middle             | 60+20              | 59.84                   | 18.84 | 78.68                            | 57.87                  | 17.87 | 75.74                           |
|                                                 | Top                | 60+20              | 59.92                   | 18.78 | 78.70                            | 57.87                  | 17.85 | 75.72                           |
| 64QAM                                           | Bottom             | 60+20              | 59.77                   | 18.88 | 78.65                            | 57.81                  | 17.90 | 75.71                           |
|                                                 | Middle             | 60+20              | 59.75                   | 18.92 | 78.67                            | 57.84                  | 17.86 | 75.70                           |
|                                                 | Top                | 60+20              | 59.88                   | 19.03 | 78.91                            | 57.84                  | 17.86 | 75.70                           |
| 256QAM                                          | Bottom             | 60+20              | 59.85                   | 18.96 | 78.81                            | 57.62                  | 17.83 | 75.45                           |
|                                                 | Middle             | 60+20              | 59.88                   | 18.81 | 78.69                            | 57.75                  | 17.88 | 75.63                           |
|                                                 | Top                | 60+20              | 59.81                   | 18.96 | 78.77                            | 57.71                  | 17.91 | 75.62                           |

## 5G NR Emission Bandwidth - QPSK

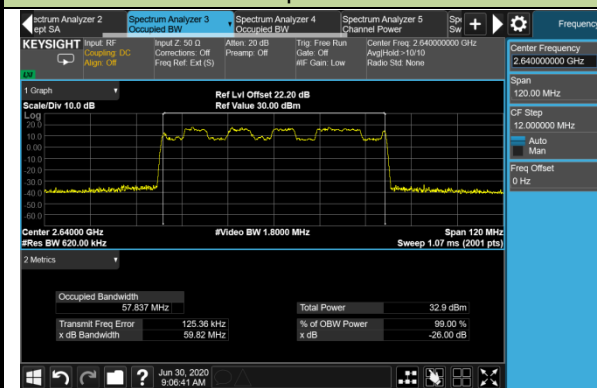
### Bottom Channel



### Middle Channel

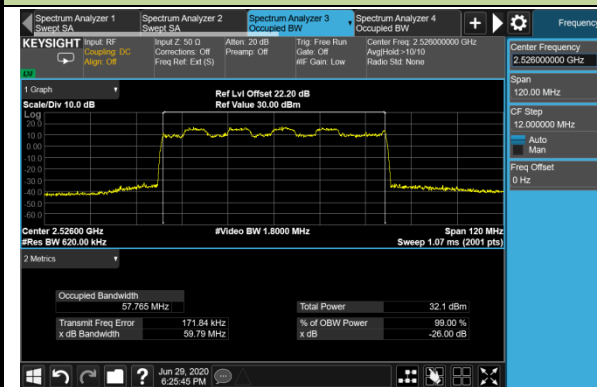


### Top Channel

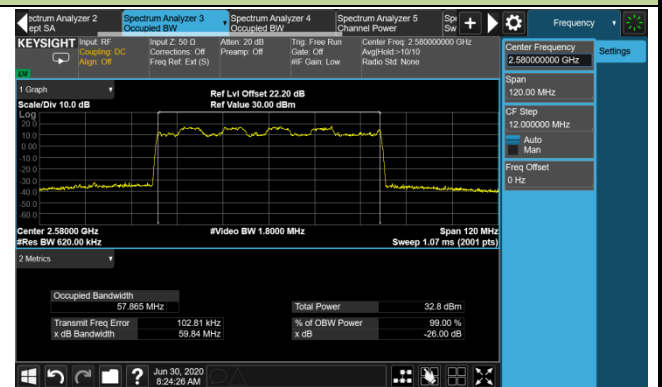


## 5G NR Emission Bandwidth - 16QAM

### Bottom Channel



### Middle Channel

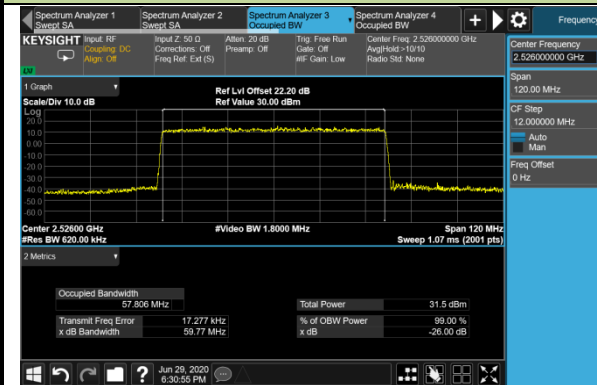


### Top Channel

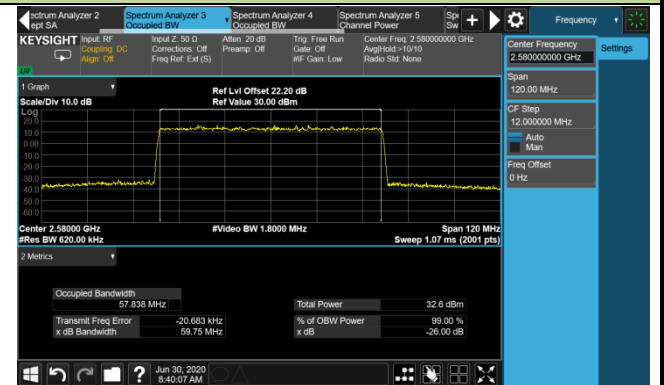


## 5G NR Emission Bandwidth - 64QAM

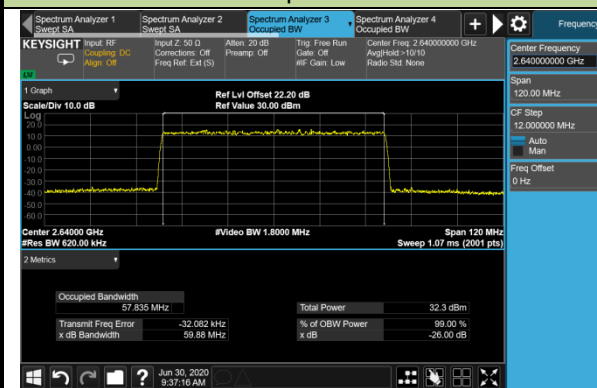
## Bottom Channel



## Middle Channel

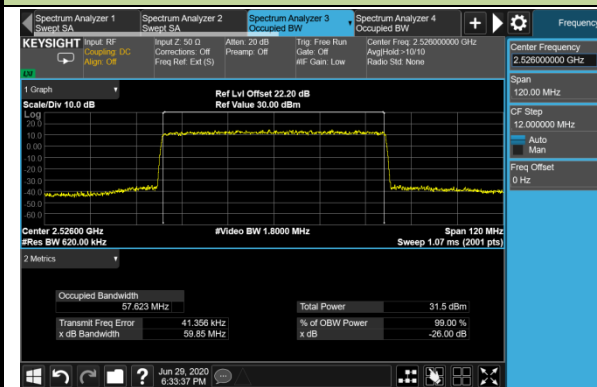


## Top Channel

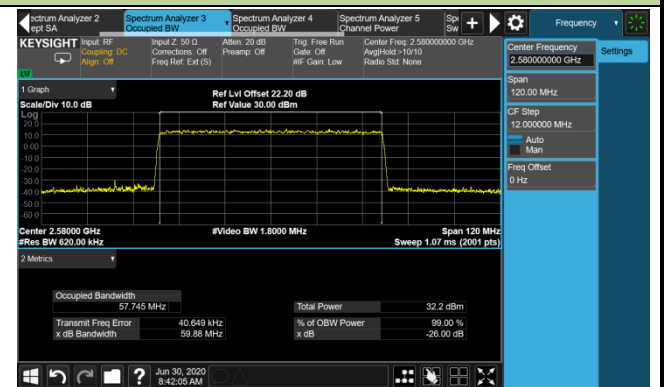


## 5G NR Emission Bandwidth - 256QAM

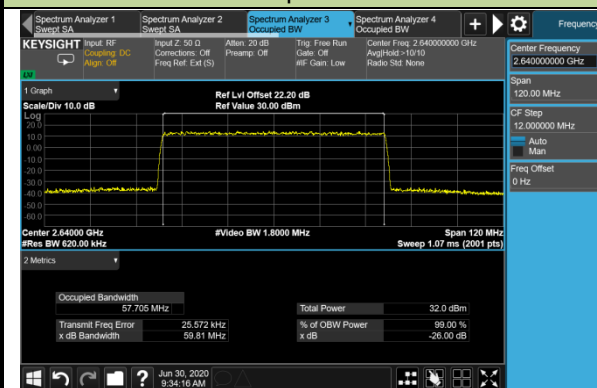
## Bottom Channel



## Middle Channel

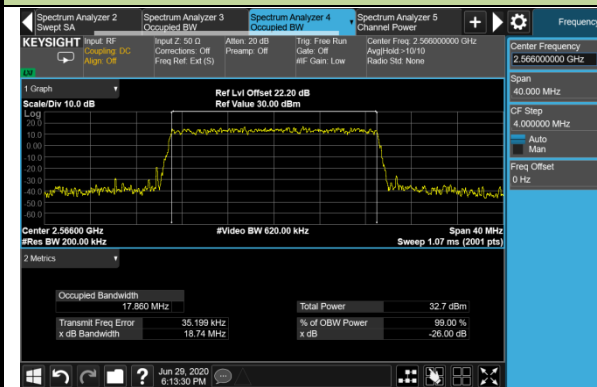


## Top Channel

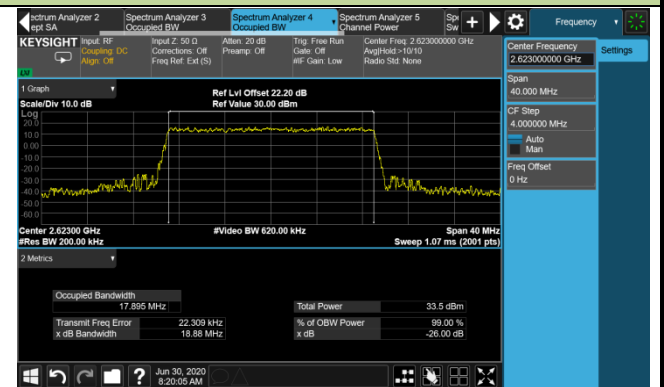


## LTE Emission Bandwidth - QPSK

### Bottom Channel



### Middle Channel

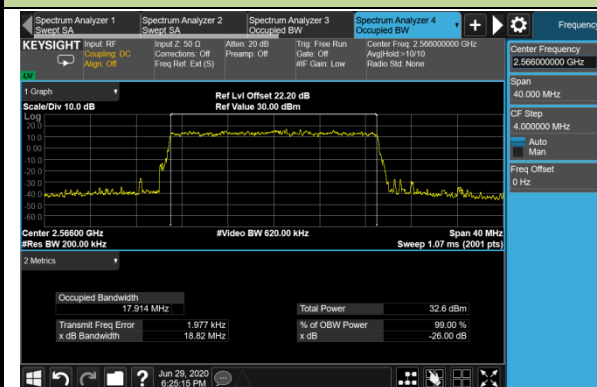


### Top Channel

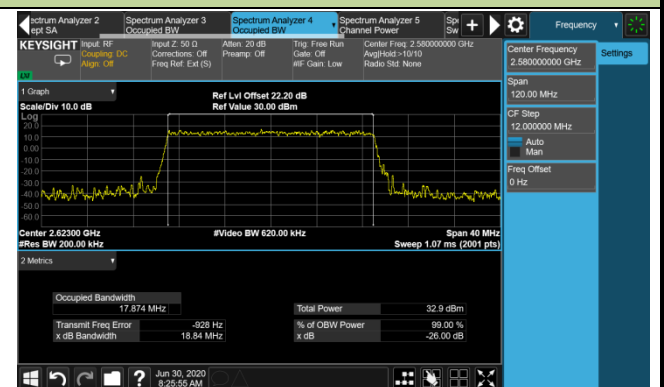


## LTE Emission Bandwidth - 16QAM

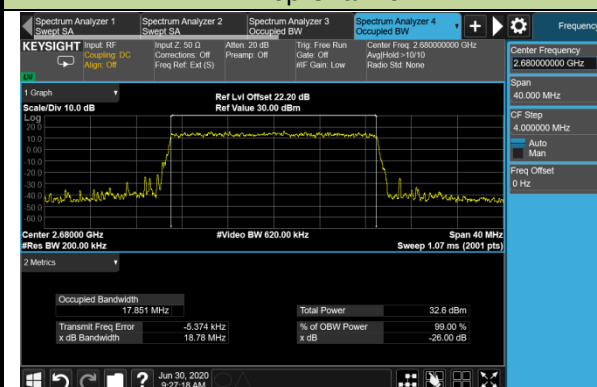
### Bottom Channel



### Middle Channel

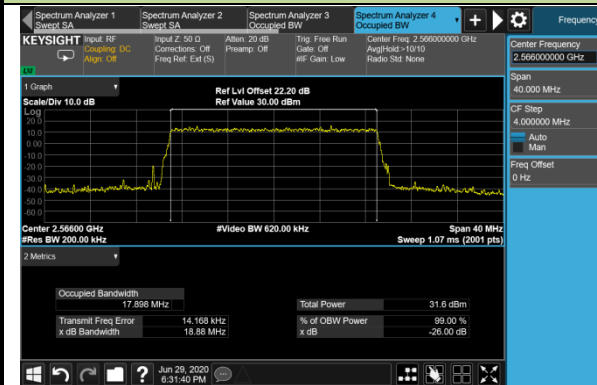


### Top Channel

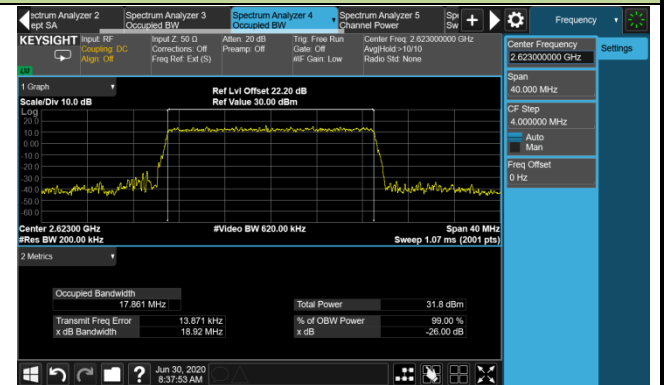


## LTE Emission Bandwidth - 64QAM

### Bottom Channel



### Middle Channel

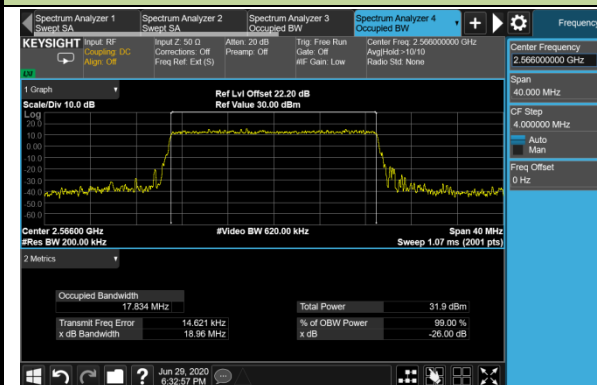


### Top Channel

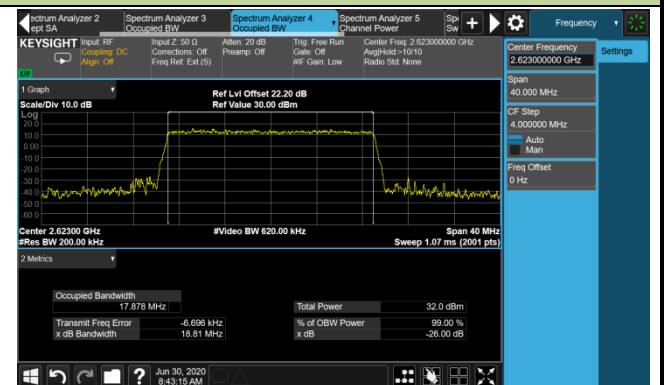


## LTE Emission Bandwidth - 256QAM

### Bottom Channel



### Middle Channel



### Top Channel

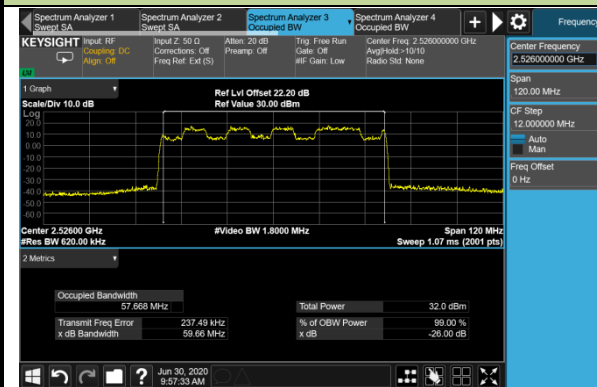


|                    |                                                                                                                                                                |               |            |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| Product            | AirScale Indoor Radio ASiR 5G-pRRH                                                                                                                             | Test Engineer | Kevin Ker  |
| Test Site          | SR2                                                                                                                                                            | Test Date     | 2020/07/01 |
| Test Configuration | 5G NR 60MHz + LTE 20 + 20MHz                                                                                                                                   |               |            |
| Test Channel       | Bottom Channel: 5G NR 2526MHz, LTE 2566 + 2586MHz<br>Middle Channel: 5G NR 2573.01MHz, LTE 2613 + 2633MHz<br>Top Channel: 5G NR 2620.02MHz, LTE 2660 + 2680MHz |               |            |

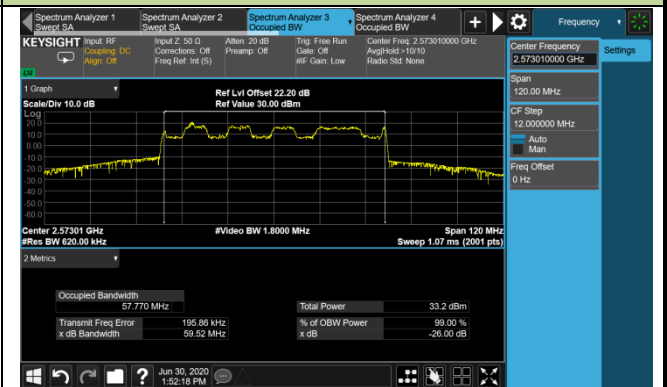
| Modulation                                      | Frequency<br>(MHz) | Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |       | Total 26dB<br>Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) |       | Total 99%<br>Bandwidth<br>(MHz) |
|-------------------------------------------------|--------------------|--------------------|-------------------------|-------|----------------------------------|------------------------|-------|---------------------------------|
|                                                 |                    |                    | 5G NR                   | LTE   |                                  | 5G NR                  | LTE   |                                 |
| Ant 0 / Ant 0+1 (5G NR) + Ant 3 / Ant 2+3 (LTE) |                    |                    |                         |       |                                  |                        |       |                                 |
| QPSK                                            | Bottom             | 60+40              | 59.66                   | 39.26 | 98.92                            | 57.57                  | 37.90 | 95.47                           |
|                                                 | Middle             | 60+40              | 59.52                   | 39.14 | 98.66                            | 57.77                  | 37.73 | 95.50                           |
|                                                 | Top                | 60+40              | 59.78                   | 39.30 | 99.08                            | 57.80                  | 37.83 | 95.63                           |
| 16QAM                                           | Bottom             | 60+40              | 59.91                   | 39.24 | 99.15                            | 57.65                  | 37.76 | 95.41                           |
|                                                 | Middle             | 60+40              | 59.82                   | 39.14 | 98.96                            | 57.73                  | 37.75 | 95.48                           |
|                                                 | Top                | 60+40              | 59.81                   | 39.16 | 98.97                            | 57.83                  | 37.68 | 95.51                           |
| 64QAM                                           | Bottom             | 60+40              | 59.79                   | 39.48 | 99.27                            | 57.81                  | 37.64 | 95.45                           |
|                                                 | Middle             | 60+40              | 59.98                   | 39.22 | 99.20                            | 57.74                  | 37.72 | 95.46                           |
|                                                 | Top                | 60+40              | 59.83                   | 39.18 | 99.01                            | 57.78                  | 37.63 | 95.41                           |
| 256QAM                                          | Bottom             | 60+40              | 59.78                   | 39.09 | 98.87                            | 57.56                  | 37.70 | 95.26                           |
|                                                 | Middle             | 60+40              | 73.83                   | 39.35 | 113.18                           | 58.00                  | 37.74 | 95.74                           |
|                                                 | Top                | 60+40              | 59.75                   | 39.36 | 99.11                            | 57.66                  | 37.78 | 95.44                           |

## 5G NR Emission Bandwidth - QPSK

### Bottom Channel



### Middle Channel



### Top Channel

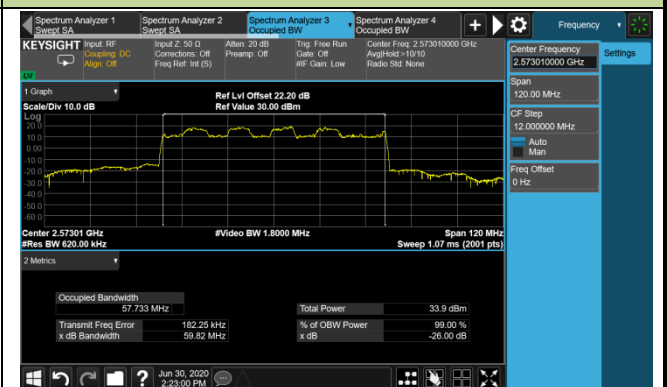


## 5G NR Emission Bandwidth - 16QAM

### Bottom Channel



### Middle Channel



### Top Channel

