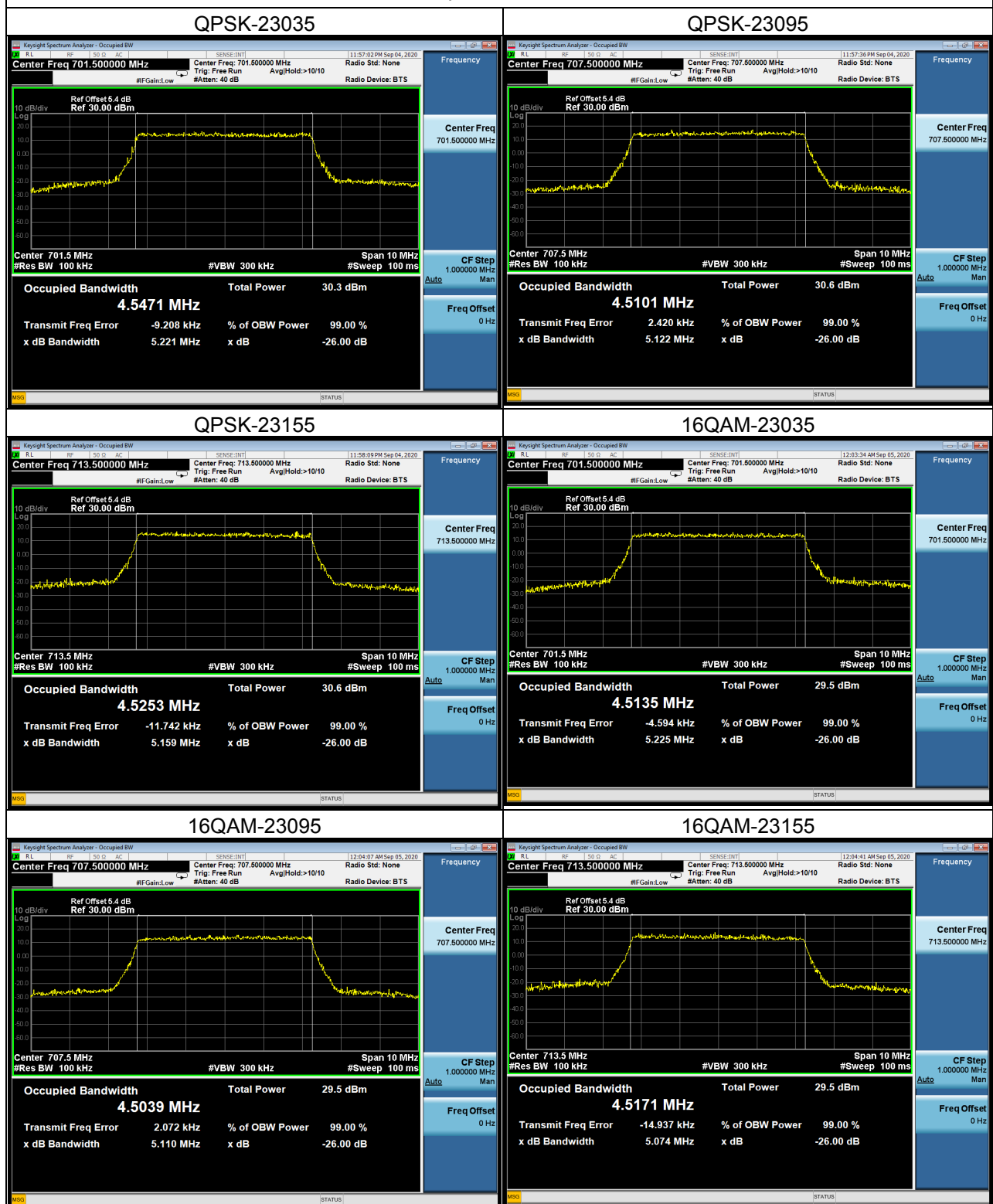


## Spectrum Plot

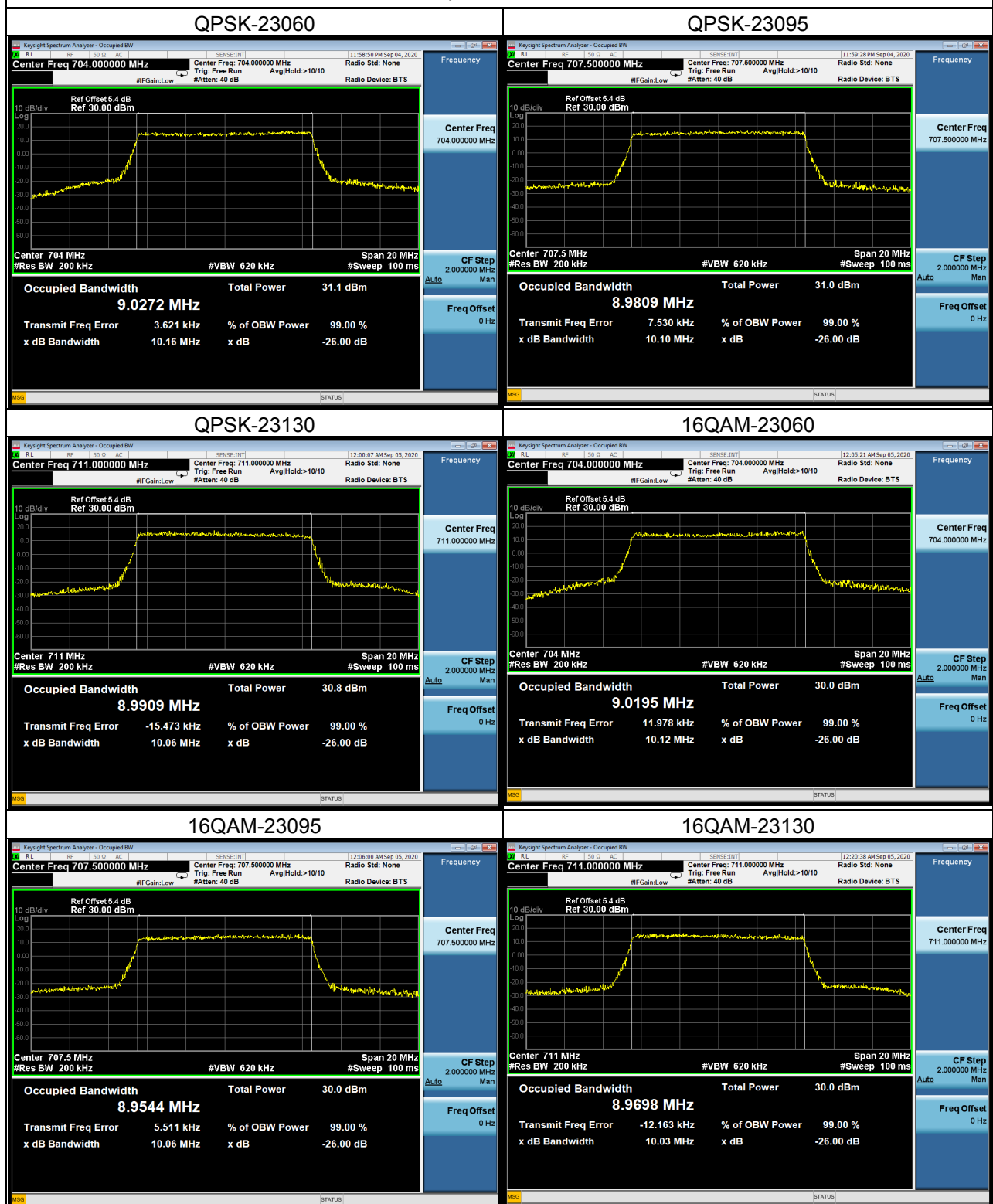


## Spectrum Plot



| LTE Band 12_10M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23060           | 704.0           | 9.0272                       | 23060   | 704.0           | 10.16                |
| 23095           | 707.5           | 8.9809                       | 23095   | 707.5           | 10.10                |
| 23130           | 711.0           | 8.9909                       | 23130   | 711.0           | 10.06                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23060           | 704.0           | 9.0195                       | 23060   | 704.0           | 10.12                |
| 23095           | 707.5           | 8.9544                       | 23095   | 707.5           | 10.06                |
| 23130           | 711.0           | 8.9698                       | 23130   | 711.0           | 10.03                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23060           | 704.0           | 9.0104                       | 23060   | 704.0           | 10.11                |
| 23095           | 707.5           | 8.9700                       | 23095   | 707.5           | 10.06                |
| 23130           | 711.0           | 8.9598                       | 23130   | 711.0           | 10.13                |

## Spectrum Plot

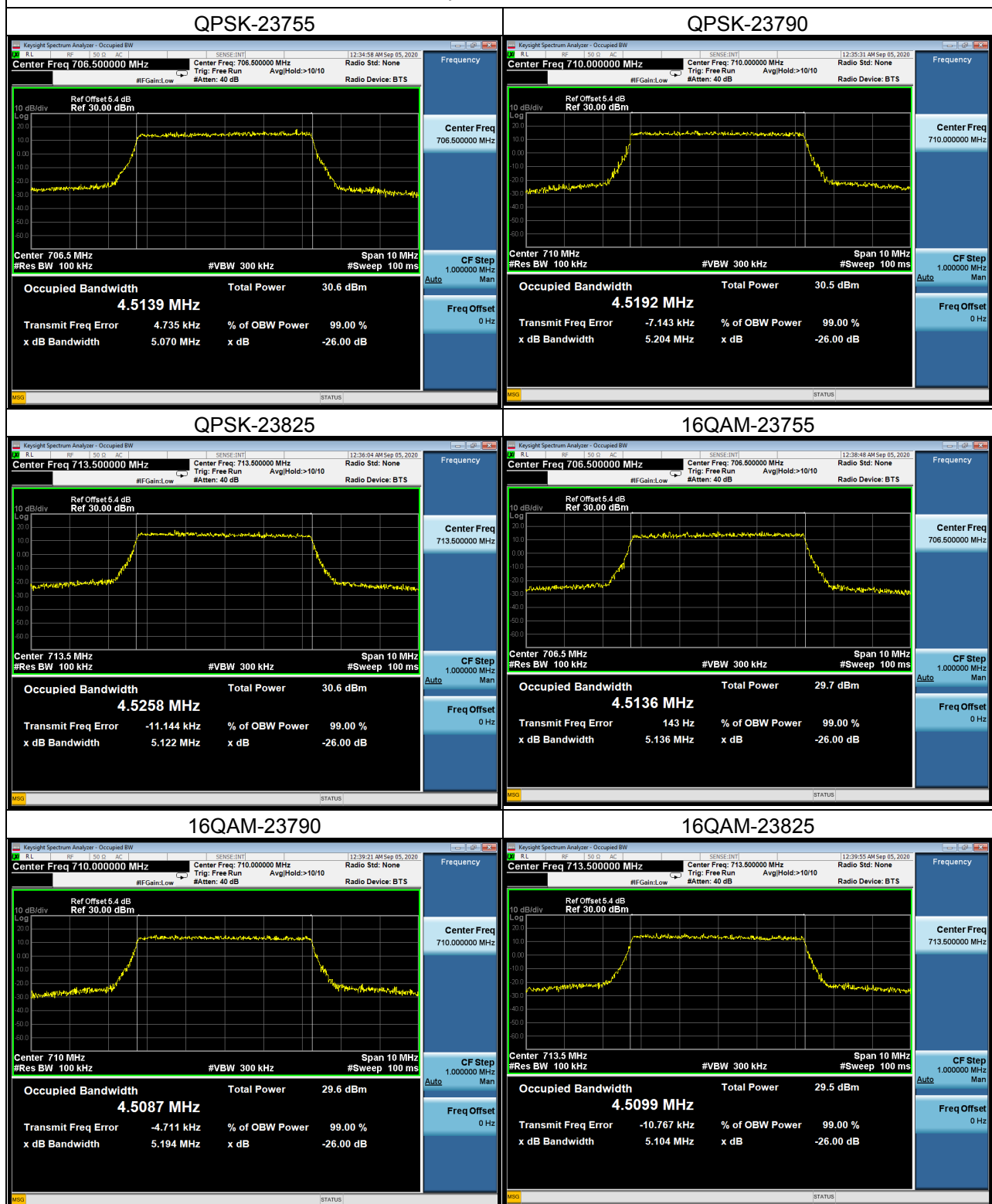


## Spectrum Plot



| LTE Band 17_5M |                 |                              |         |                 |                      |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK           |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23755          | 706.5           | 4.5139                       | 23755   | 706.5           | 5.070                |
| 23790          | 710             | 4.5192                       | 23790   | 710             | 5.204                |
| 23825          | 713.5           | 4.5258                       | 23825   | 713.5           | 5.122                |
| 16QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23755          | 706.5           | 4.5136                       | 23755   | 706.5           | 5.136                |
| 23790          | 710             | 4.5087                       | 23790   | 710             | 5.194                |
| 23825          | 713.5           | 4.5099                       | 23825   | 713.5           | 5.104                |
| 64QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23755          | 706.5           | 4.5348                       | 23755   | 706.5           | 5.176                |
| 23790          | 710             | 4.5131                       | 23790   | 710             | 5.103                |
| 23825          | 713.5           | 4.5229                       | 23825   | 713.5           | 5.157                |

## Spectrum Plot

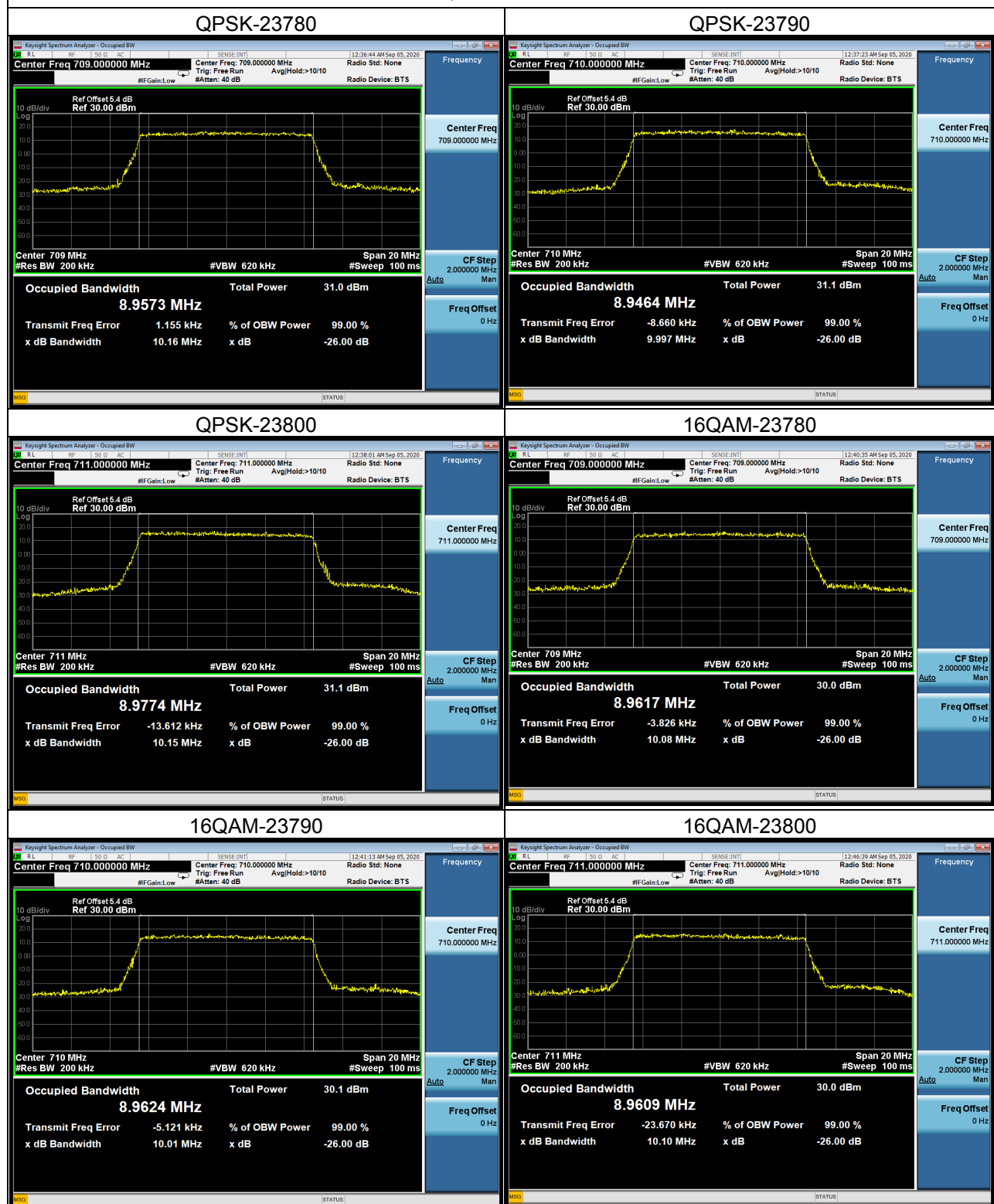


## Spectrum Plot



| LTE Band 17_10M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23780           | 709             | 8.9573                       | 23780   | 709             | 10.16                |
| 23790           | 710             | 8.9464                       | 23790   | 710             | 9.997                |
| 23800           | 711             | 8.9774                       | 23800   | 711             | 10.15                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23780           | 709             | 8.9617                       | 23780   | 709             | 10.08                |
| 23790           | 710             | 8.9624                       | 23790   | 710             | 10.01                |
| 23800           | 711             | 8.9609                       | 23800   | 711             | 10.10                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 23780           | 709             | 8.9542                       | 23780   | 709             | 10.09                |
| 23790           | 710             | 8.9586                       | 23790   | 710             | 10.08                |
| 23800           | 711             | 8.9639                       | 23800   | 711             | 9.969                |

## Spectrum Plot

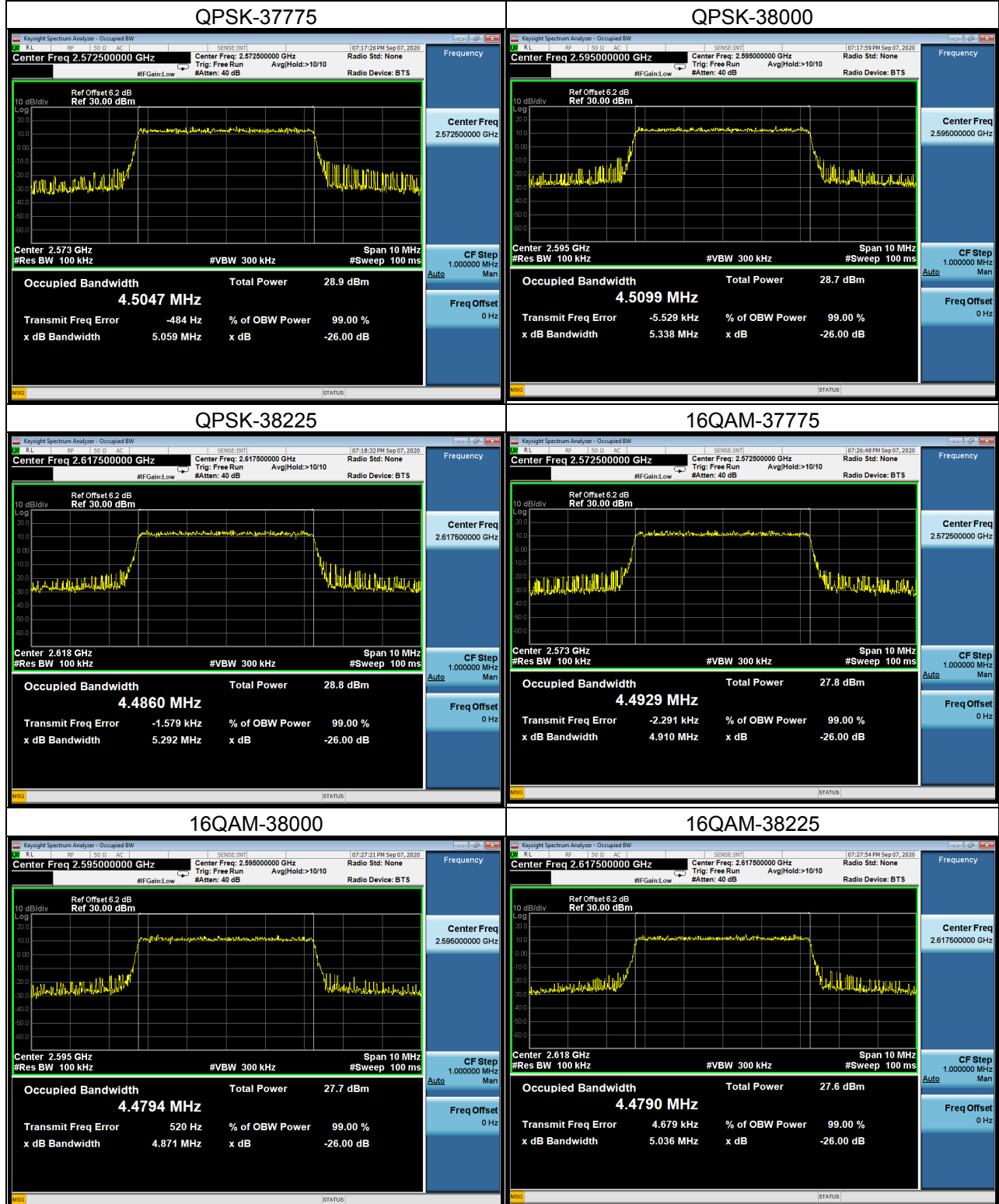


## Spectrum Plot

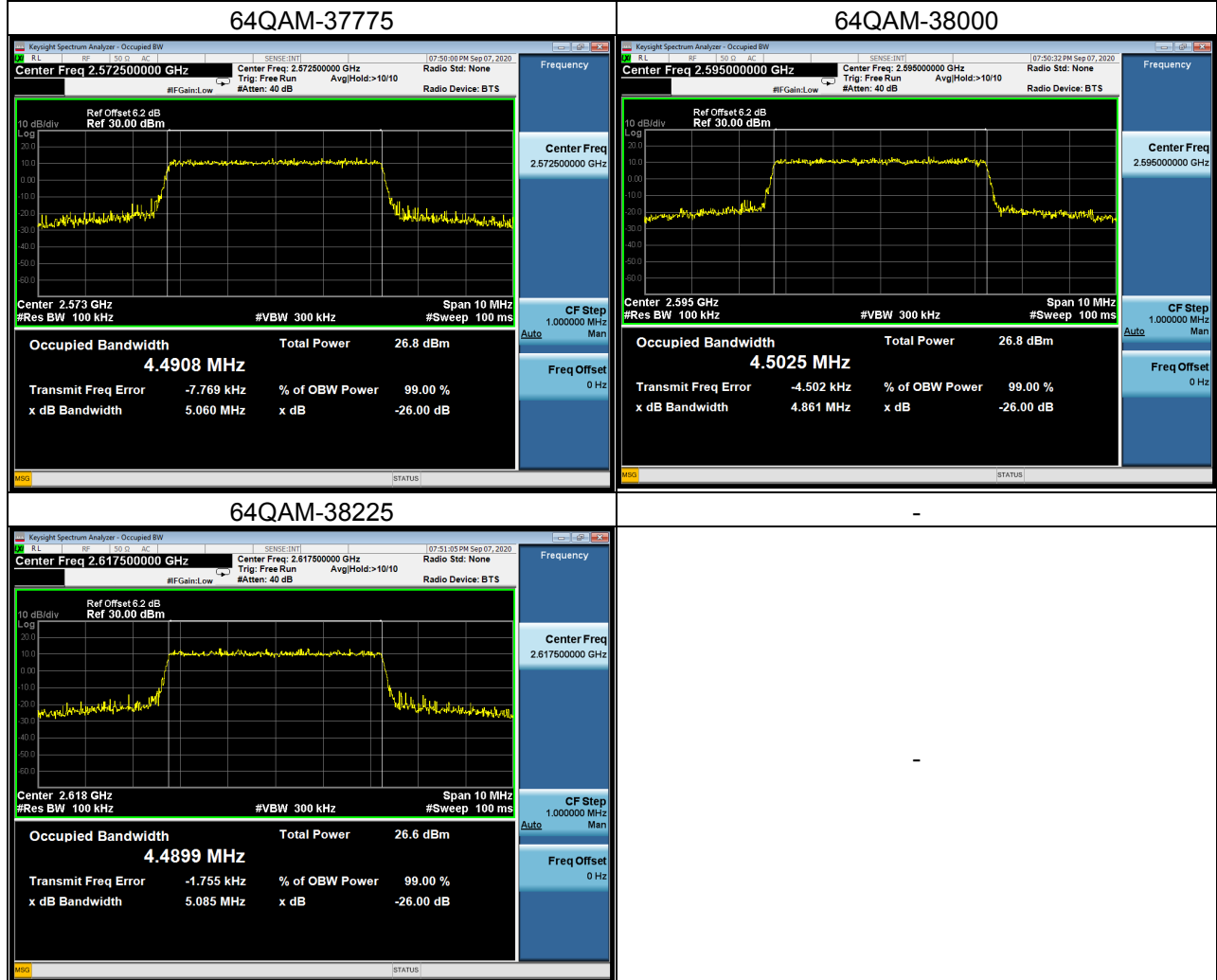


| LTE Band 38_5M |                 |                              |         |                 |                      |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK           |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37775          | 2572.5          | 4.5047                       | 37775   | 2572.5          | 5.059                |
| 38000          | 2595            | 4.5099                       | 38000   | 2595            | 5.338                |
| 38225          | 2617.5          | 4.4860                       | 38225   | 2617.5          | 5.292                |
| 16QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37775          | 2572.5          | 4.4929                       | 37775   | 2572.5          | 4.910                |
| 38000          | 2595            | 4.4794                       | 38000   | 2595            | 4.871                |
| 38225          | 2617.5          | 4.4790                       | 38225   | 2617.5          | 5.036                |
| 64QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37775          | 2572.5          | 4.4908                       | 37775   | 2572.5          | 5.060                |
| 38000          | 2595            | 4.5025                       | 38000   | 2595            | 4.861                |
| 38225          | 2617.5          | 4.4899                       | 38225   | 2617.5          | 5.085                |

## Spectrum Plot

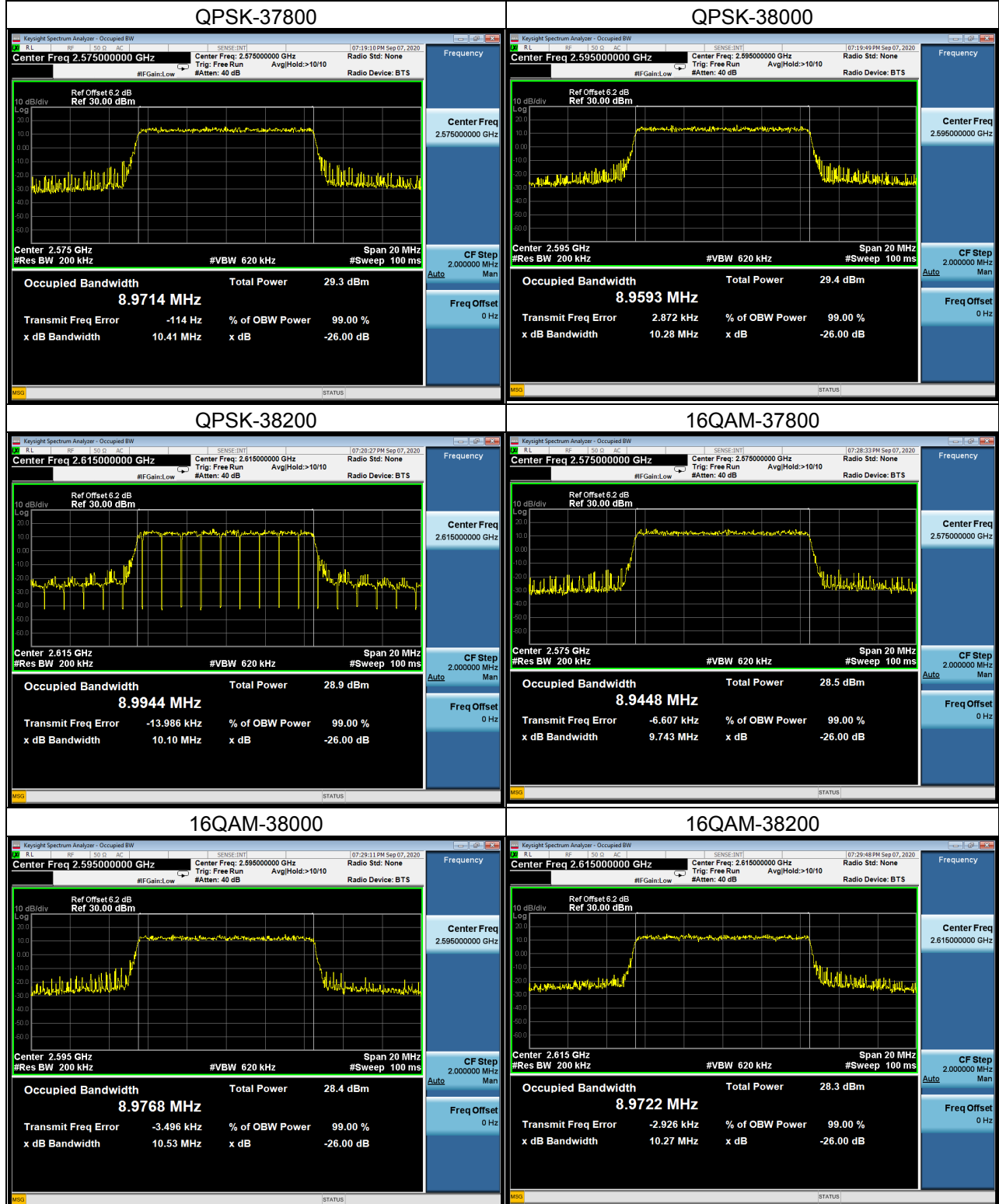


## Spectrum Plot

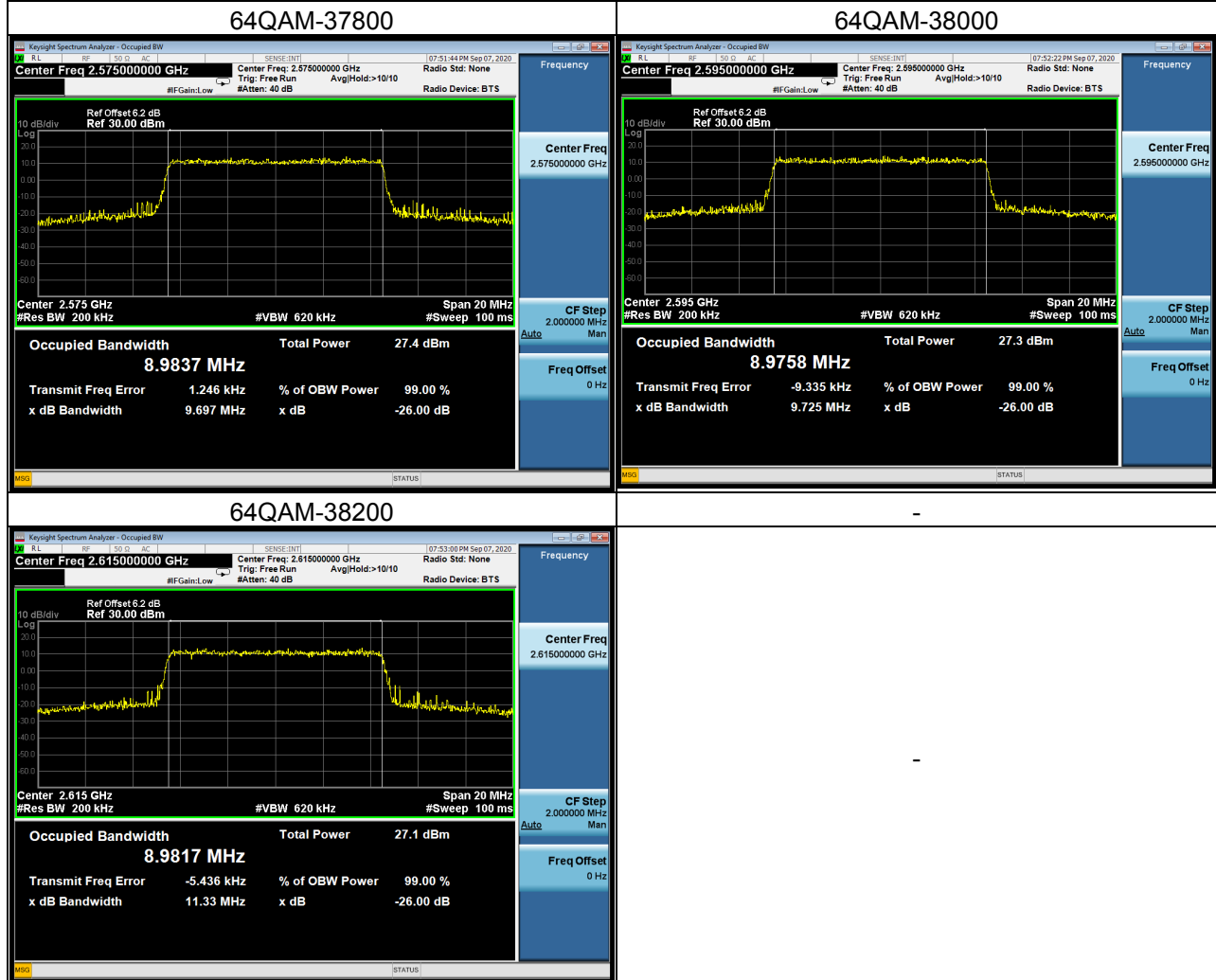


| LTE Band 38_10M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37800           | 2575            | 8.9714                       | 37800   | 2575            | 10.41                |
| 38000           | 2595            | 8.9593                       | 38000   | 2595            | 10.28                |
| 38200           | 2615            | 8.9944                       | 38200   | 2615            | 10.10                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37800           | 2575            | 8.9448                       | 37800   | 2575            | 9.743                |
| 38000           | 2595            | 8.9768                       | 38000   | 2595            | 10.53                |
| 38200           | 2615            | 8.9722                       | 38200   | 2615            | 10.27                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37800           | 2575            | 8.9737                       | 37800   | 2575            | 9.697                |
| 38000           | 2595            | 8.9758                       | 38000   | 2595            | 9.725                |
| 38200           | 2615            | 8.9717                       | 38200   | 2615            | 11.33                |

## Spectrum Plot

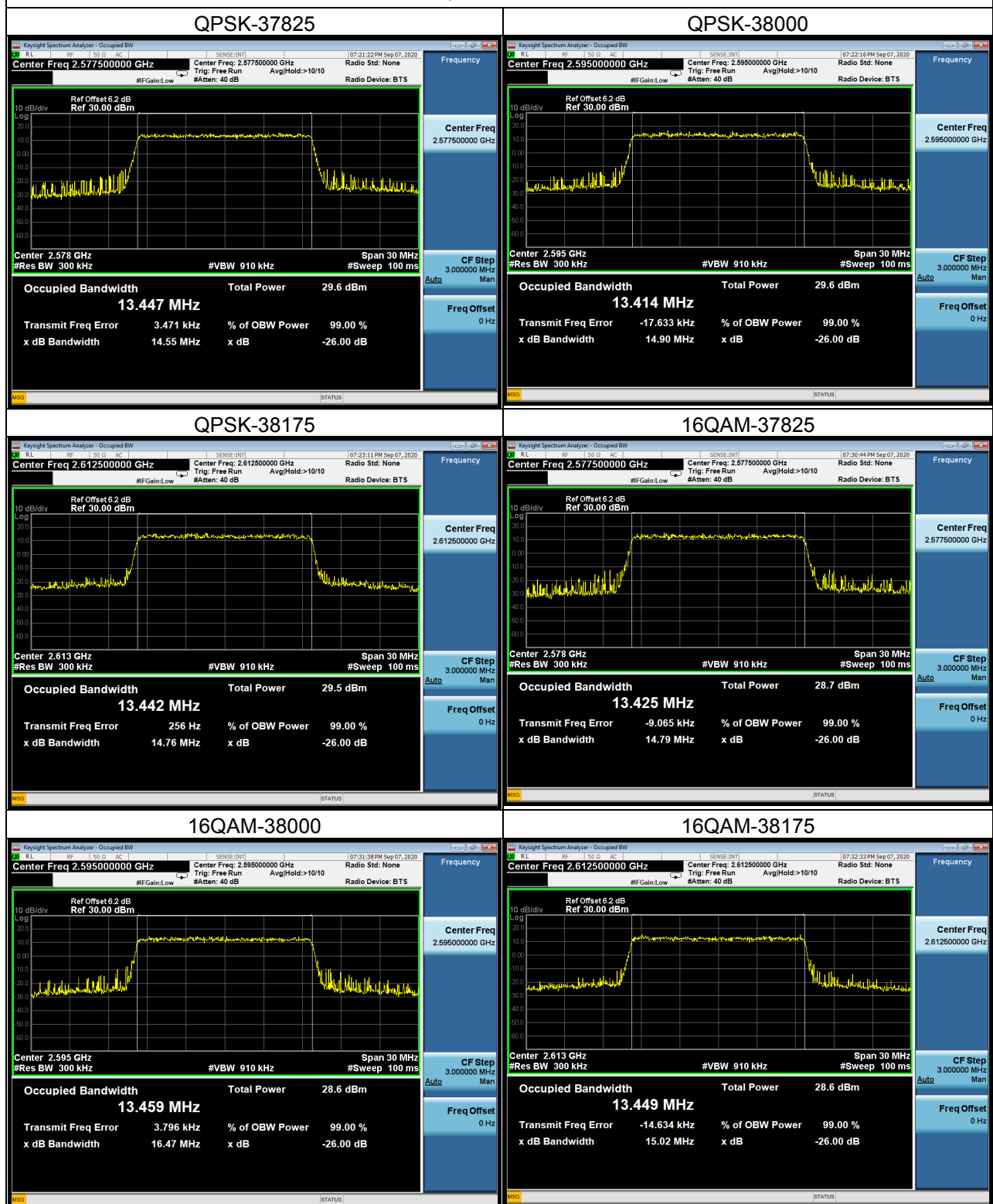


## Spectrum Plot

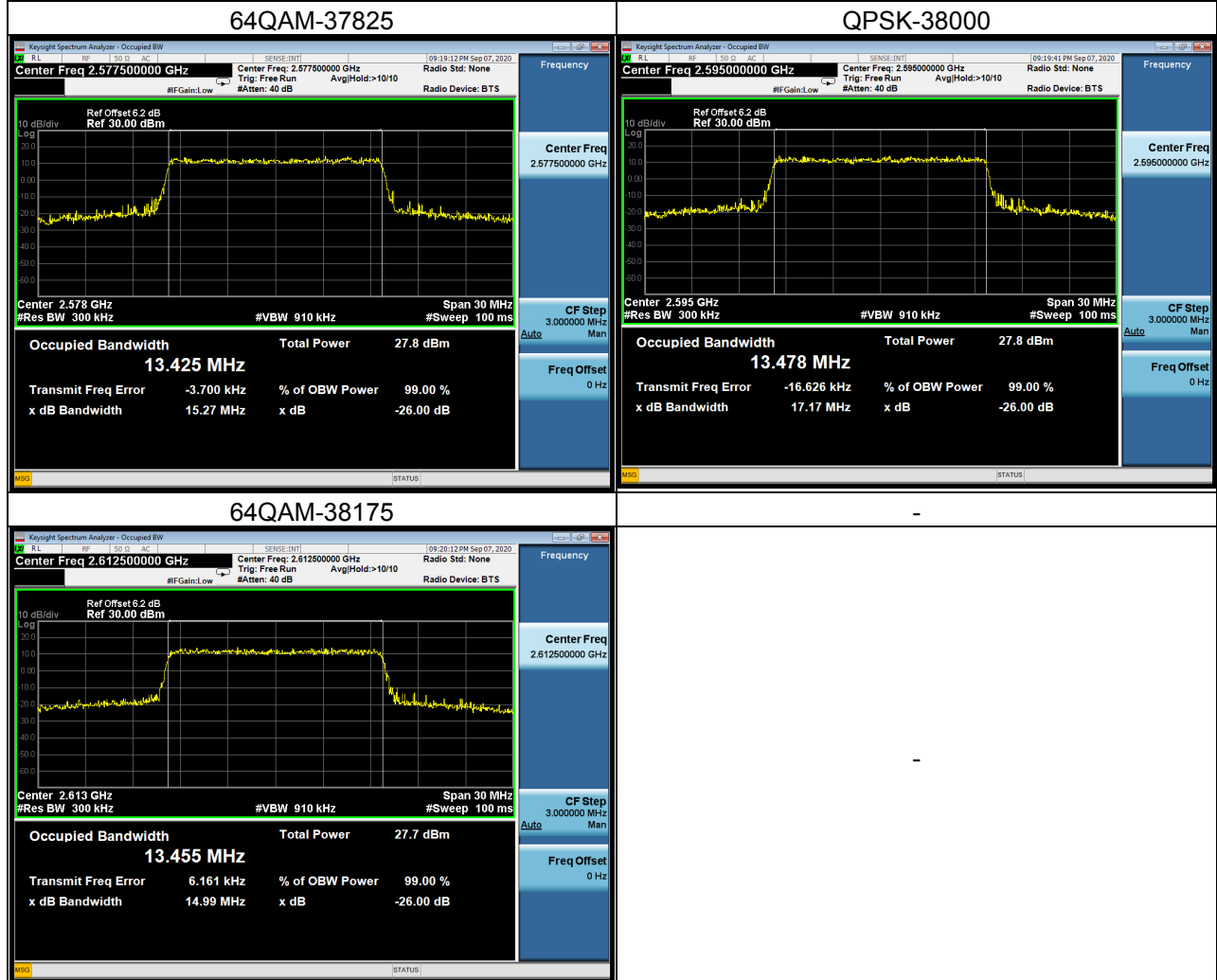


| LTE Band 38_15M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37825           | 2577.5          | 13.447                       | 37825   | 2577.5          | 14.55                |
| 38000           | 2595            | 13.414                       | 38000   | 2595            | 14.90                |
| 38175           | 2612.5          | 13.442                       | 38175   | 2612.5          | 14.76                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37825           | 2577.5          | 13.425                       | 37825   | 2577.5          | 14.79                |
| 38000           | 2595            | 13.459                       | 38000   | 2595            | 16.47                |
| 38175           | 2612.5          | 13.449                       | 38175   | 2612.5          | 15.02                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37825           | 2577.5          | 13.425                       | 37825   | 2577.5          | 15.27                |
| 38000           | 2595            | 13.478                       | 38000   | 2595            | 17.17                |
| 38175           | 2612.5          | 13.455                       | 38175   | 2612.5          | 14.99                |

## Spectrum Plot

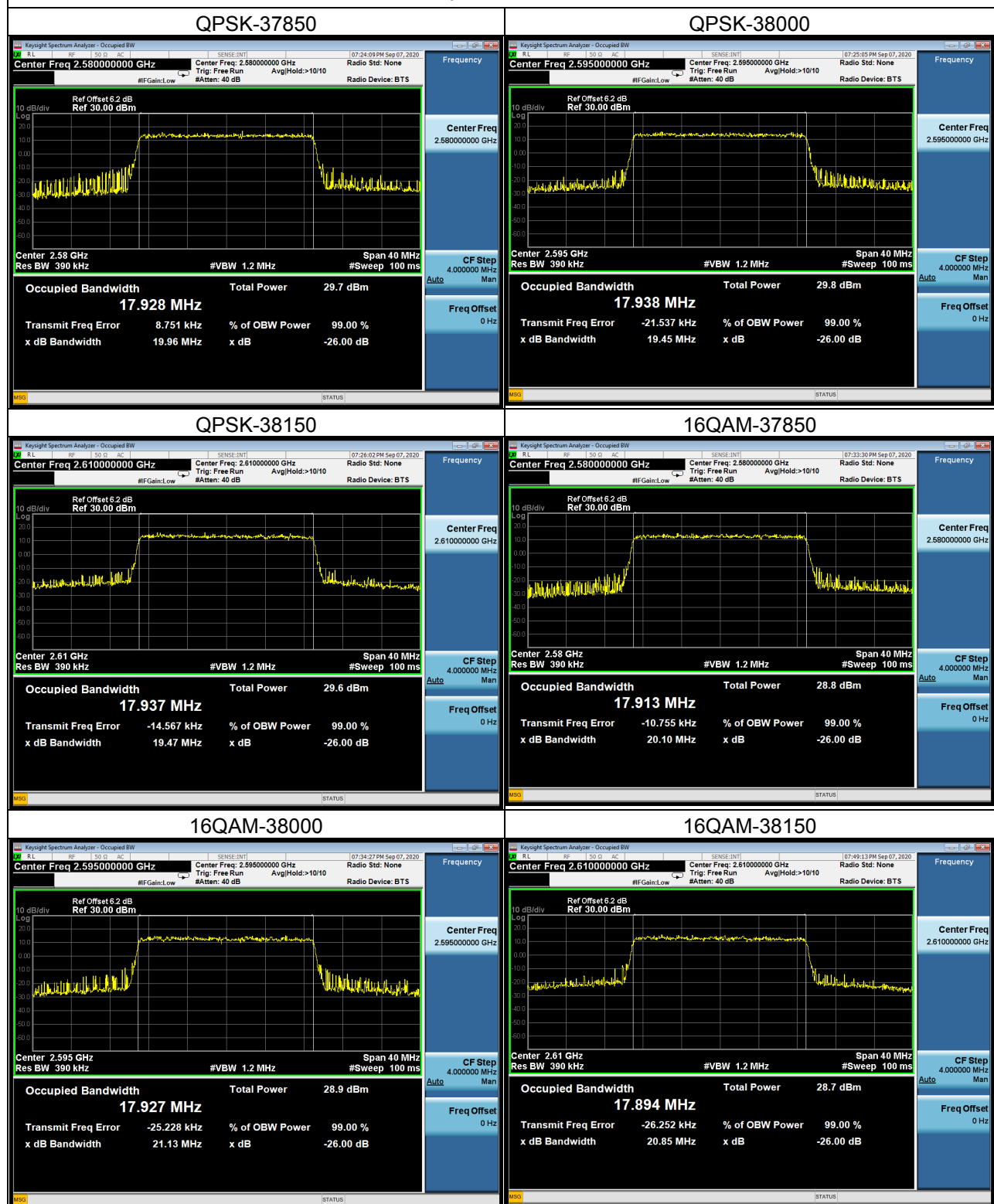


## Spectrum Plot

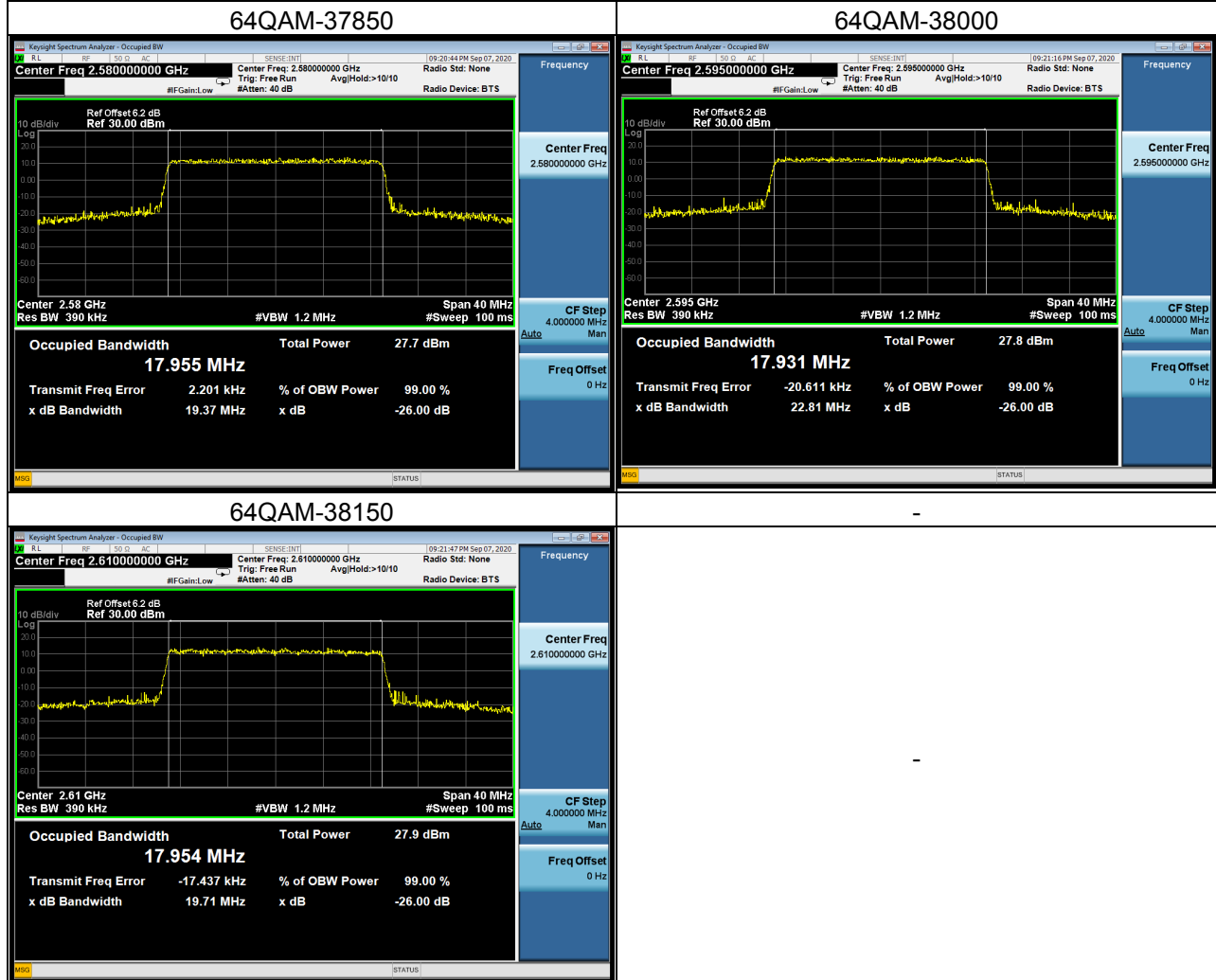


| LTE Band 38_20M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37850           | 2580            | 17.928                       | 37850   | 2580            | 19.96                |
| 38000           | 2595            | 17.938                       | 38000   | 2595            | 19.45                |
| 38150           | 2610            | 17.937                       | 38150   | 2610            | 19.47                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37850           | 2580            | 17.913                       | 37850   | 2580            | 20.10                |
| 38000           | 2595            | 17.927                       | 38000   | 2595            | 21.13                |
| 38150           | 2610            | 17.894                       | 38150   | 2610            | 20.85                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 37850           | 2580            | 17.955                       | 37850   | 2580            | 19.37                |
| 38000           | 2595            | 17.931                       | 38000   | 2595            | 22.81                |
| 38150           | 2610            | 17.954                       | 38150   | 2610            | 19.71                |

## Spectrum Plot

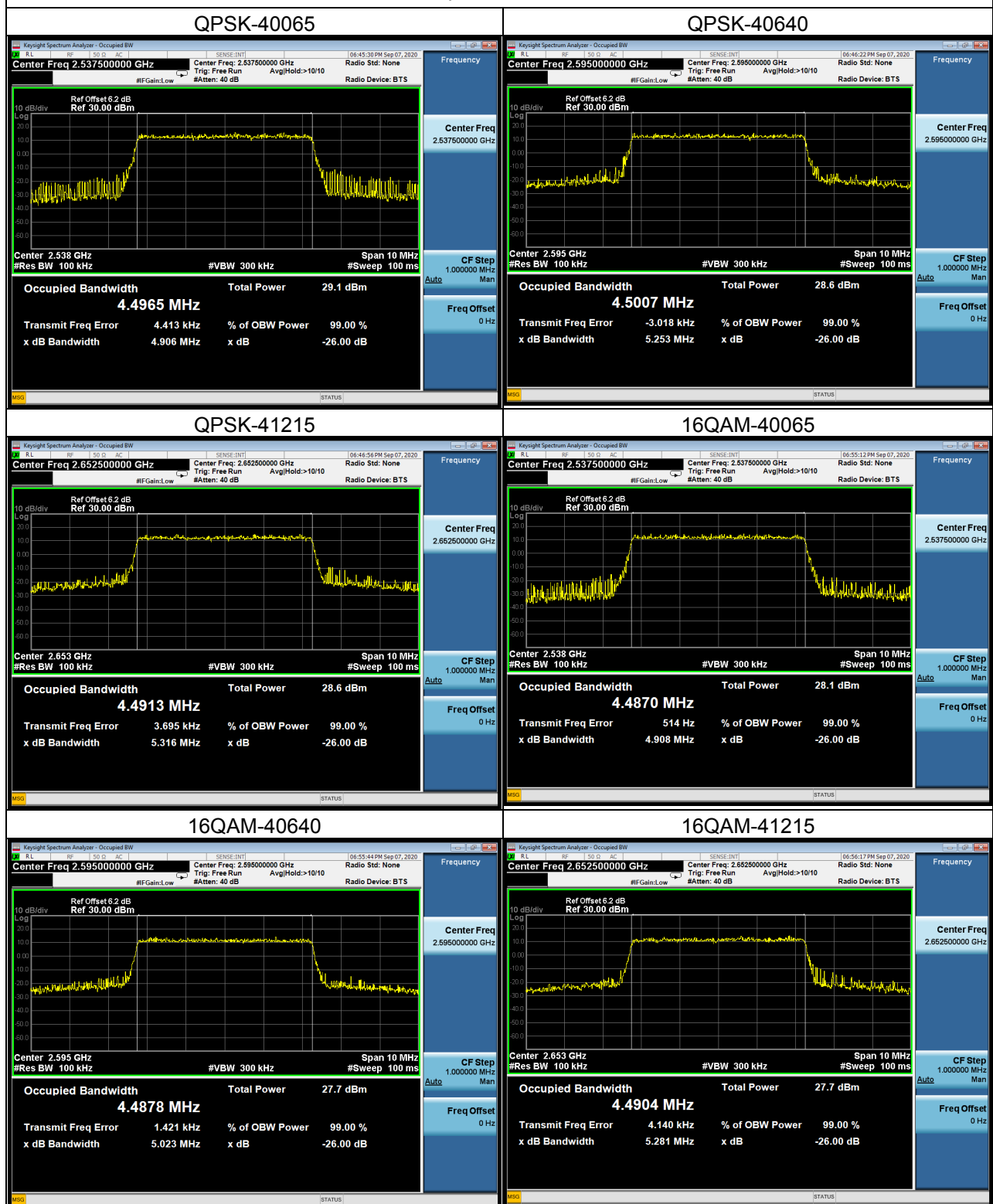


## Spectrum Plot

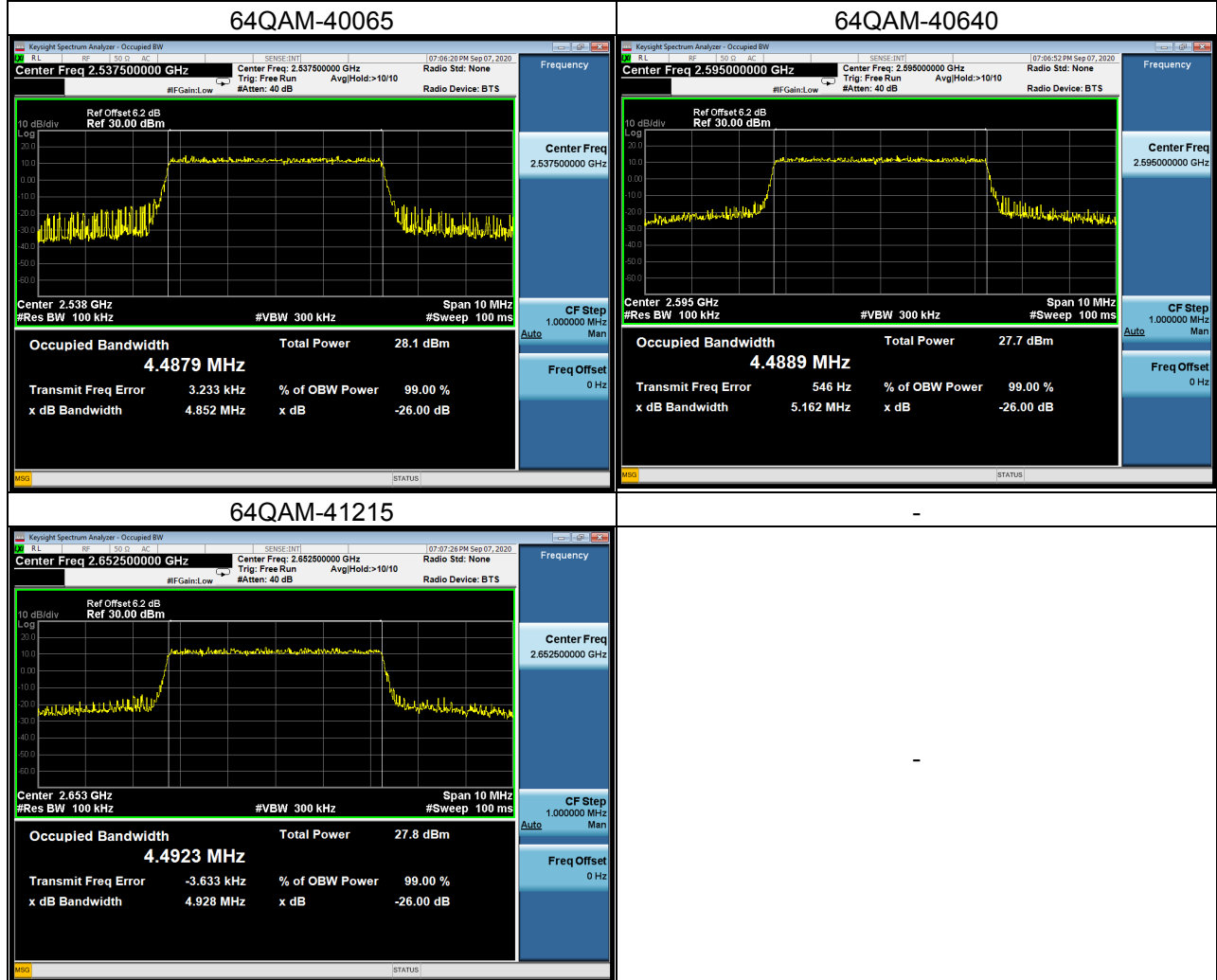


| LTE Band 41_5M |                 |                              |         |                 |                      |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK           |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40065          | 2537.5          | 4.4965                       | 40065   | 2537.5          | 4.906                |
| 40640          | 2595            | 4.5007                       | 40640   | 2595            | 5.253                |
| 41215          | 2652.5          | 4.4913                       | 41215   | 2652.5          | 5.316                |
| 16QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40065          | 2537.5          | 4.4870                       | 40065   | 2537.5          | 4.908                |
| 40640          | 2595            | 4.4878                       | 40640   | 2595            | 5.023                |
| 41215          | 2652.5          | 4.4904                       | 41215   | 2652.5          | 5.281                |
| 64QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40065          | 2537.5          | 4.4879                       | 40065   | 2537.5          | 4.852                |
| 40640          | 2595            | 4.4889                       | 40640   | 2595            | 5.162                |
| 41215          | 2652.5          | 4.4923                       | 41215   | 2652.5          | 4.928                |

## Spectrum Plot

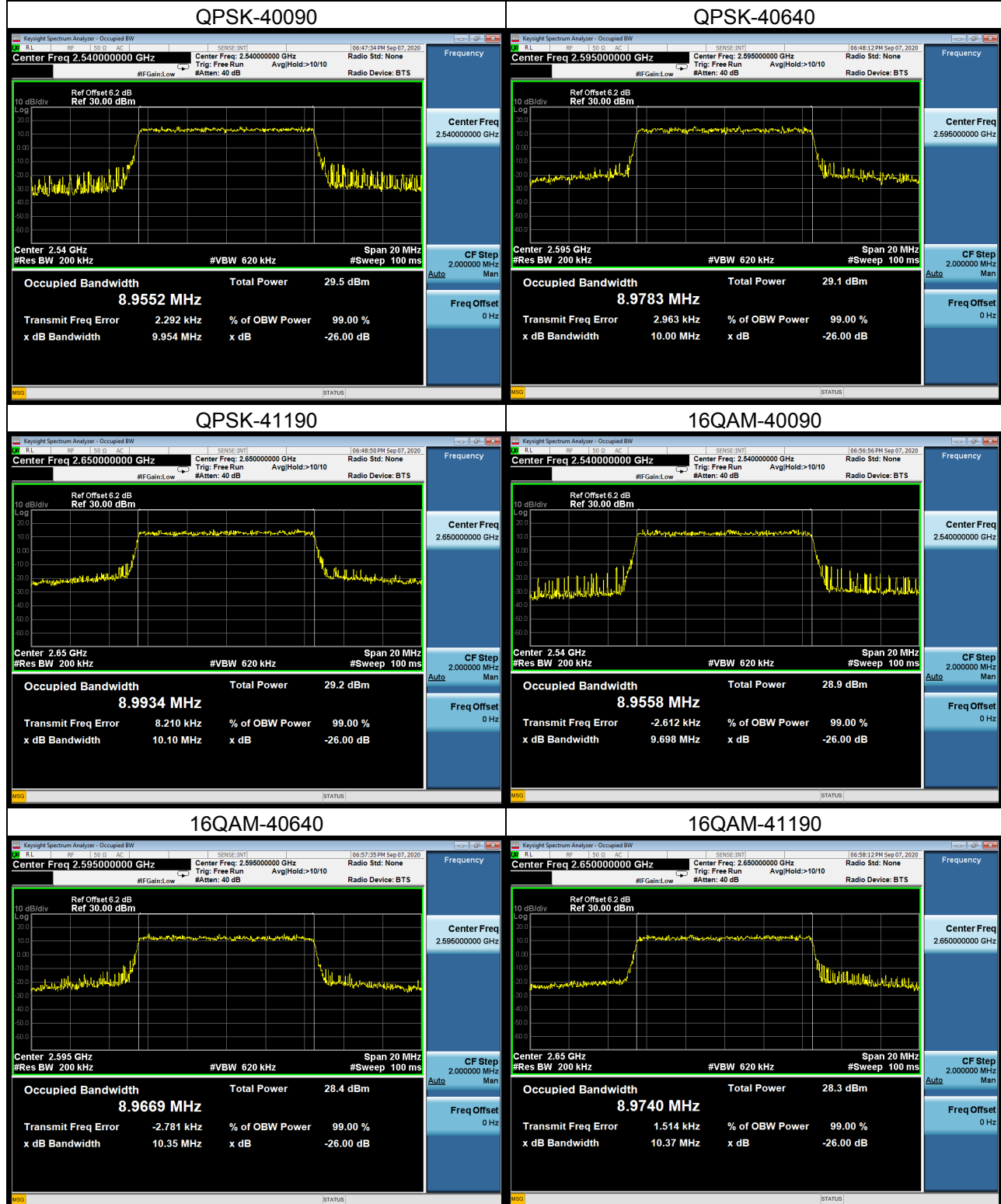


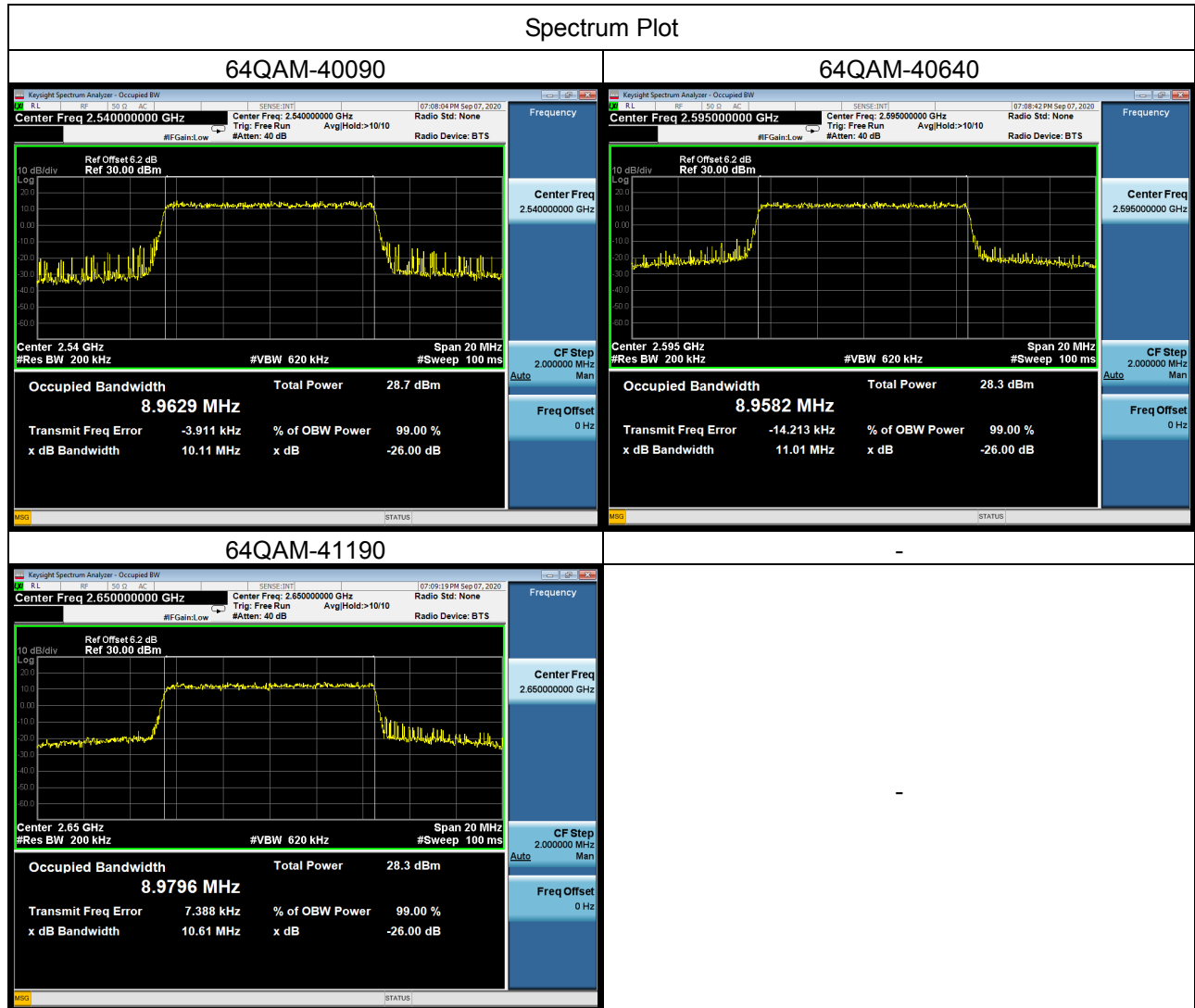
## Spectrum Plot



| LTE Band 41_10M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40090           | 2540            | 8.9552                       | 40090   | 2540            | 9.954                |
| 40640           | 2595            | 8.9783                       | 40640   | 2595            | 10.00                |
| 41190           | 2650            | 8.9934                       | 41190   | 2650            | 10.10                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40090           | 2540            | 8.9558                       | 40090   | 2540            | 9.698                |
| 40640           | 2595            | 8.9669                       | 40640   | 2595            | 10.35                |
| 41190           | 2650            | 8.9740                       | 41190   | 2650            | 10.37                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40090           | 2540            | 8.9629                       | 40090   | 2540            | 10.11                |
| 40640           | 2595            | 8.9582                       | 40640   | 2595            | 11.01                |
| 41190           | 2650            | 8.9796                       | 41190   | 2650            | 10.61                |

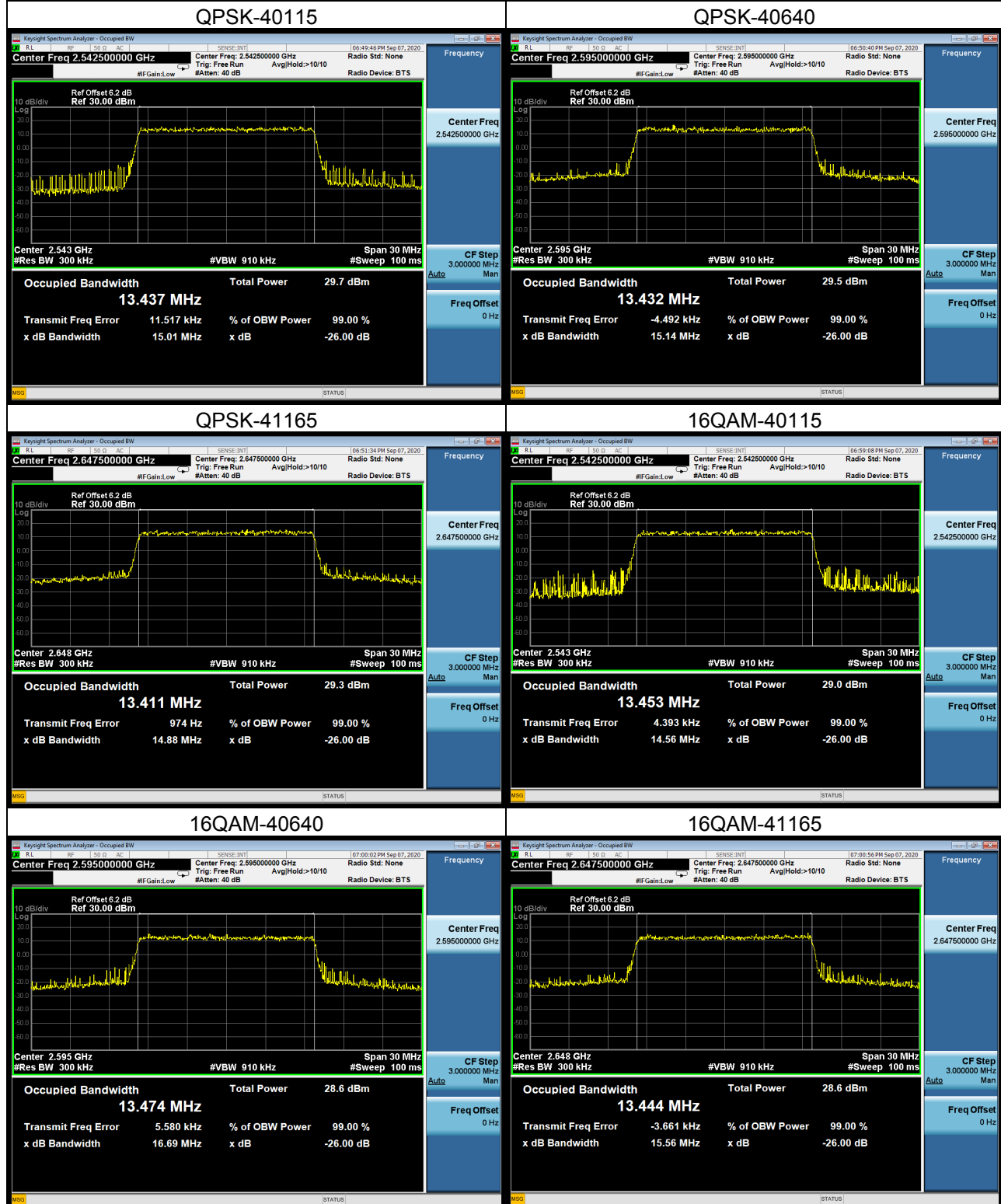
## Spectrum Plot



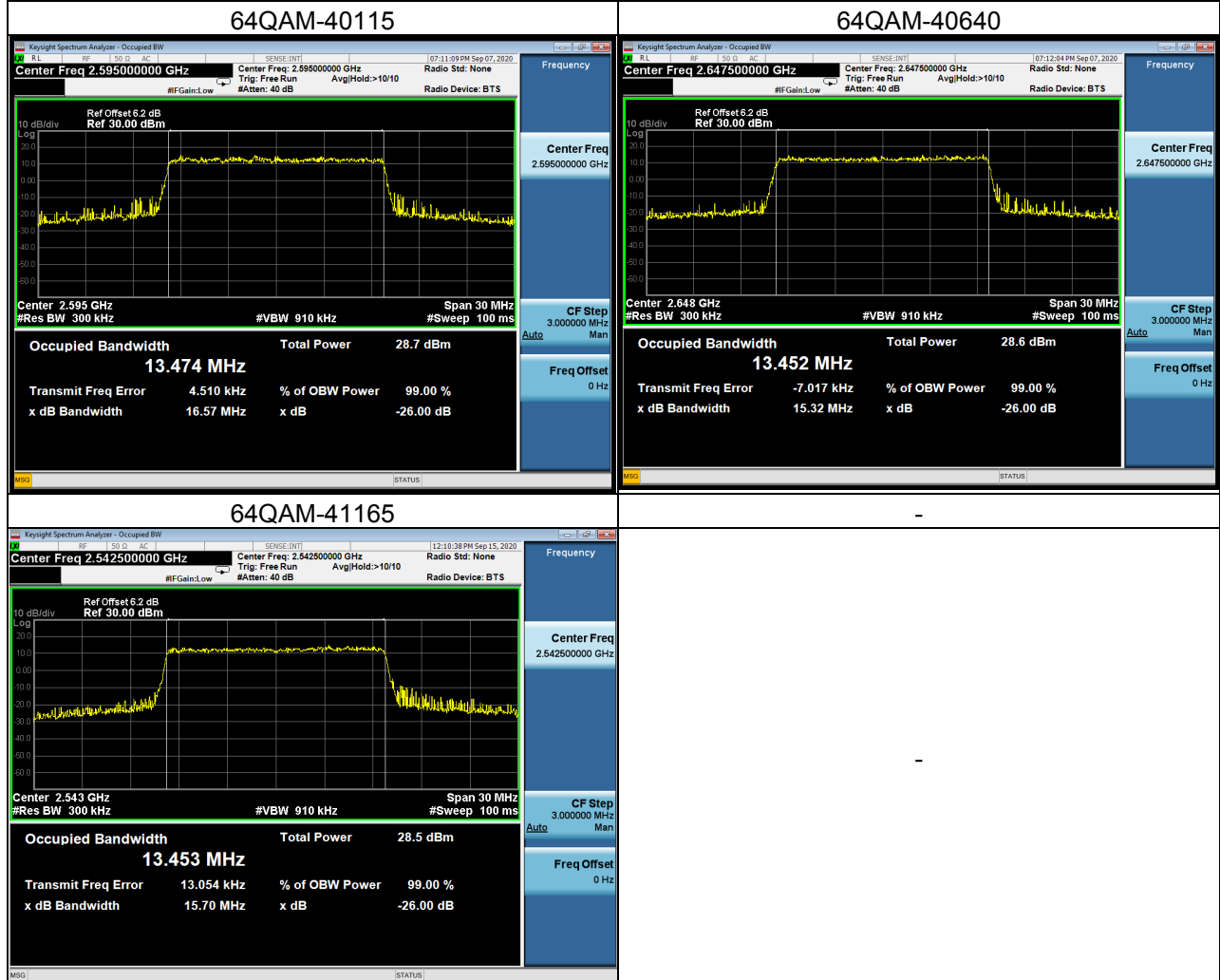


| LTE Band 41_15M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40115           | 2542.5          | 13.437                       | 40115   | 2542.5          | 15.01                |
| 40640           | 2595            | 13.432                       | 40640   | 2595            | 15.14                |
| 41165           | 2647.5          | 13.411                       | 41165   | 2647.5          | 14.88                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40115           | 2542.5          | 13.453                       | 40115   | 2542.5          | 14.56                |
| 40640           | 2595            | 13.474                       | 40640   | 2595            | 16.69                |
| 41165           | 2647.5          | 13.444                       | 41165   | 2647.5          | 15.56                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40115           | 2542.5          | 13.474                       | 40115   | 2542.5          | 16.57                |
| 40640           | 2595            | 13.452                       | 40640   | 2595            | 15.32                |
| 41165           | 2647.5          | 13.453                       | 41165   | 2647.5          | 15.70                |

## Spectrum Plot

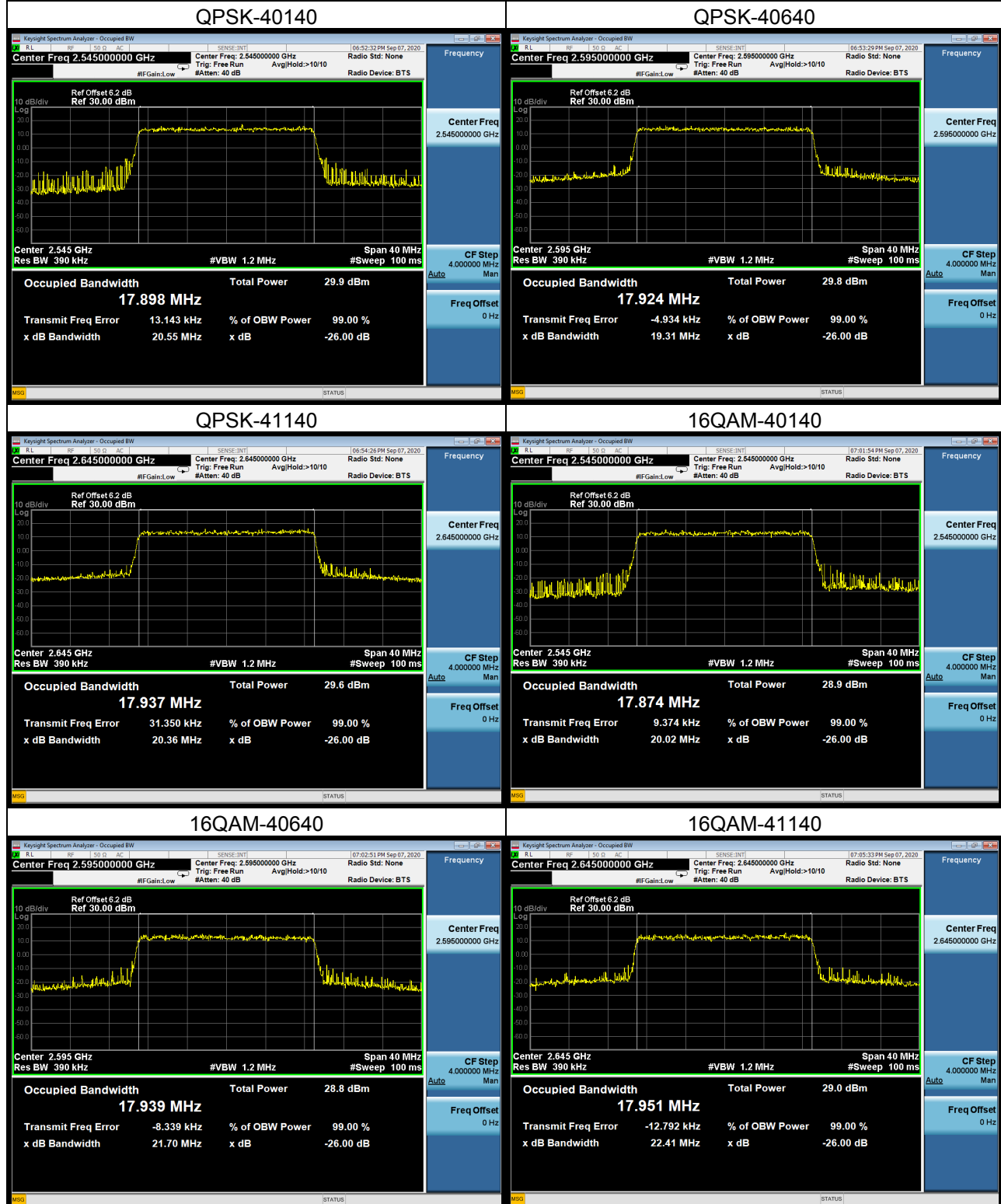


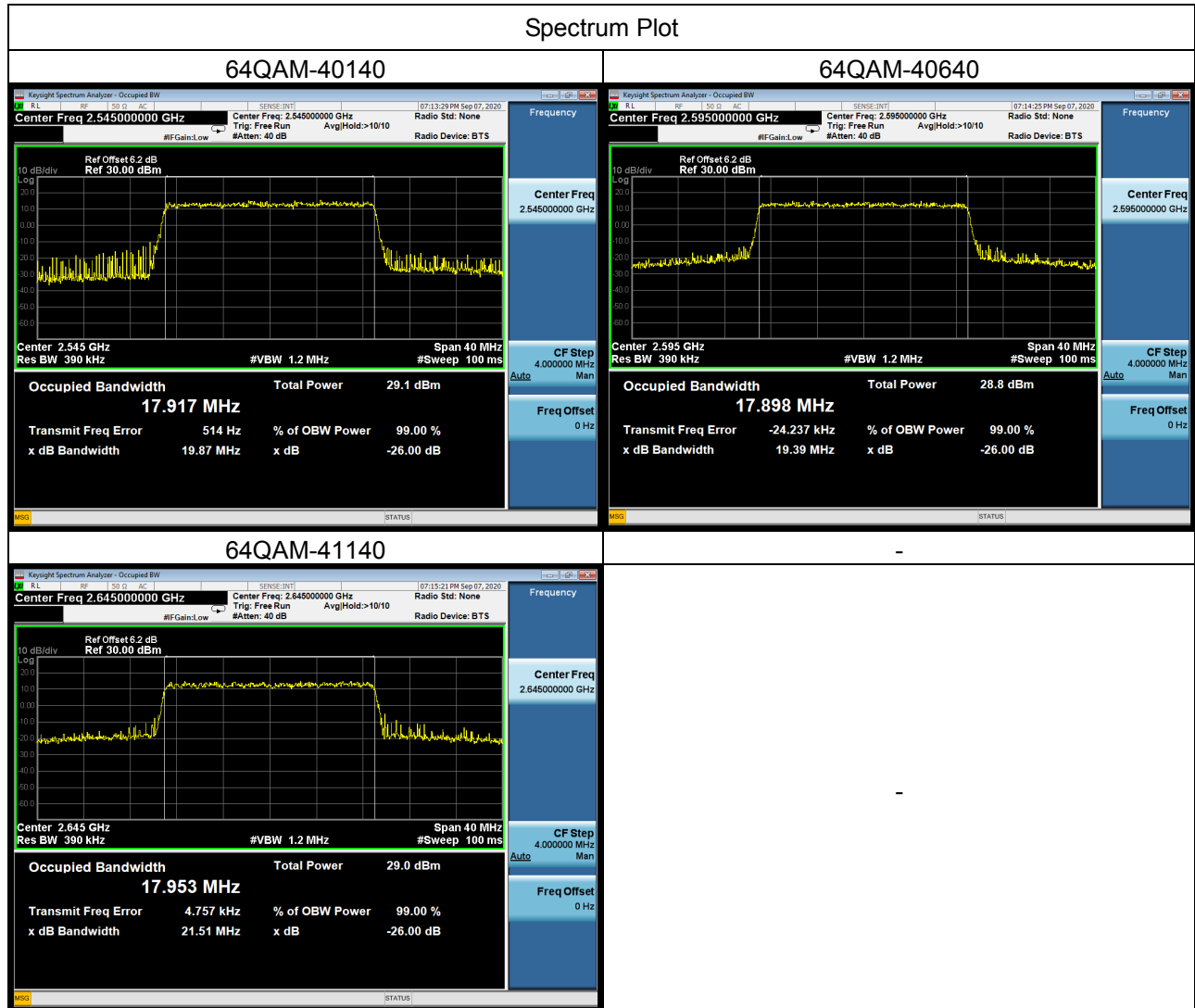
## Spectrum Plot



| LTE Band 41_20M |                 |                              |         |                 |                      |
|-----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK            |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40140           | 2545            | 17.898                       | 40140   | 2545            | 20.55                |
| 40640           | 2595            | 17.924                       | 40640   | 2595            | 19.31                |
| 41140           | 2645            | 17.937                       | 41140   | 2645            | 20.36                |
| 16QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40140           | 2545            | 17.874                       | 40140   | 2545            | 20.02                |
| 40640           | 2595            | 17.939                       | 40640   | 2595            | 21.70                |
| 41140           | 2645            | 17.951                       | 41140   | 2645            | 22.41                |
| 64QAM           |                 |                              |         |                 |                      |
| Channel         | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 40140           | 2545            | 17.917                       | 40140   | 2545            | 19.87                |
| 40640           | 2595            | 17.898                       | 40640   | 2595            | 19.37                |
| 41140           | 2645            | 17.953                       | 41140   | 2645            | 21.51                |

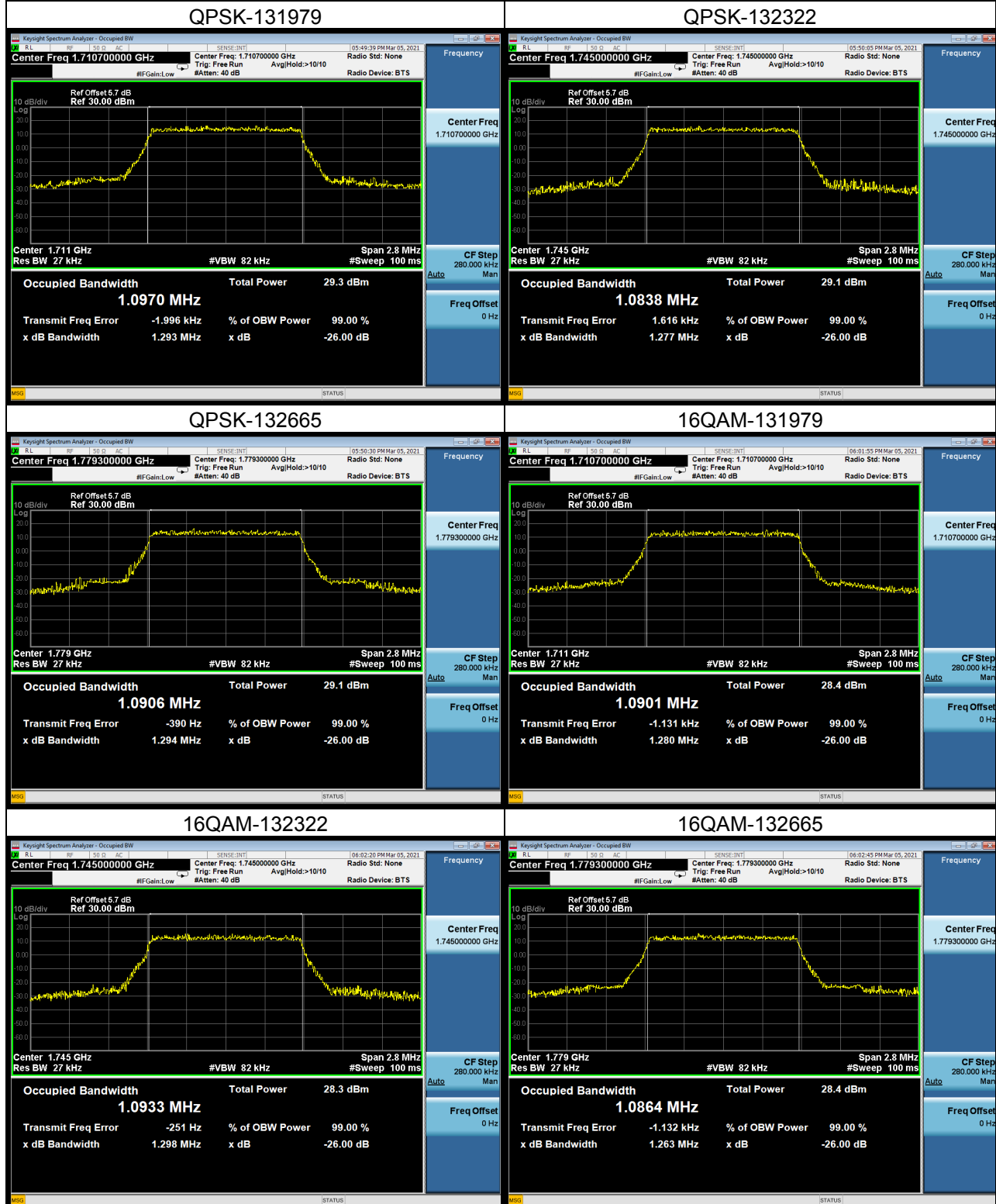
## Spectrum Plot



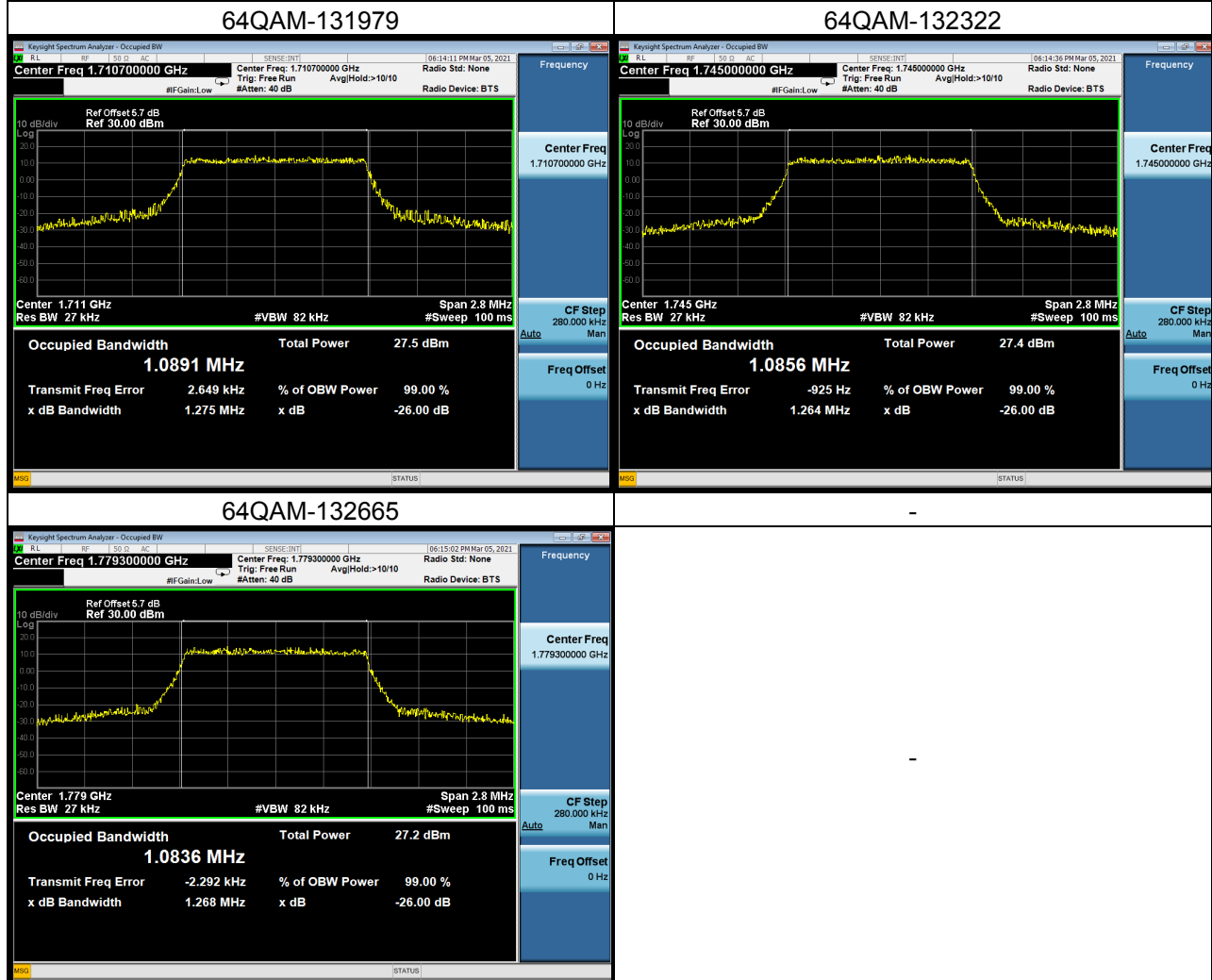


| LTE Band 66_1.4M |                 |                              |         |                 |                      |
|------------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK             |                 |                              |         |                 |                      |
| Channel          | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131979           | 1710.7          | 1.0970                       | 131979  | 1710.7          | 1.293                |
| 132322           | 1740            | 1.0838                       | 132322  | 1740            | 1.277                |
| 132665           | 1779.3          | 1.0906                       | 132665  | 1779.3          | 1.294                |
| 16QAM            |                 |                              |         |                 |                      |
| Channel          | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131979           | 1710.7          | 1.0901                       | 131979  | 1710.7          | 1.280                |
| 132322           | 1740            | 1.0933                       | 132322  | 1740            | 1.298                |
| 132665           | 1779.3          | 1.0864                       | 132665  | 1779.3          | 1.263                |
| 64QAM            |                 |                              |         |                 |                      |
| Channel          | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131979           | 1710.7          | 1.0891                       | 131979  | 1710.7          | 1.275                |
| 132322           | 1740            | 1.0856                       | 132322  | 1740            | 1.264                |
| 132665           | 1779.3          | 1.0836                       | 132665  | 1779.3          | 1.268                |

## Spectrum Plot

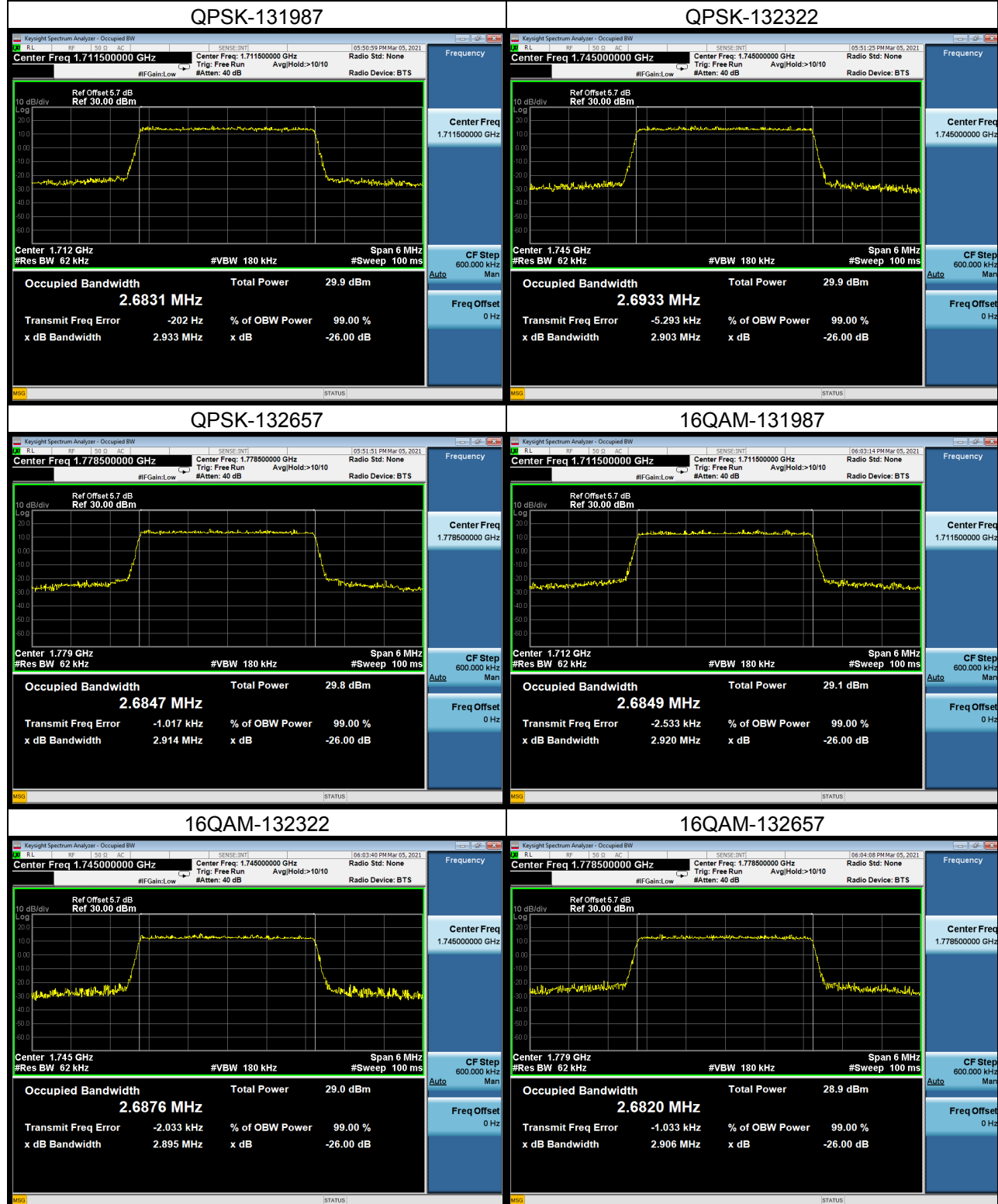


## Spectrum Plot

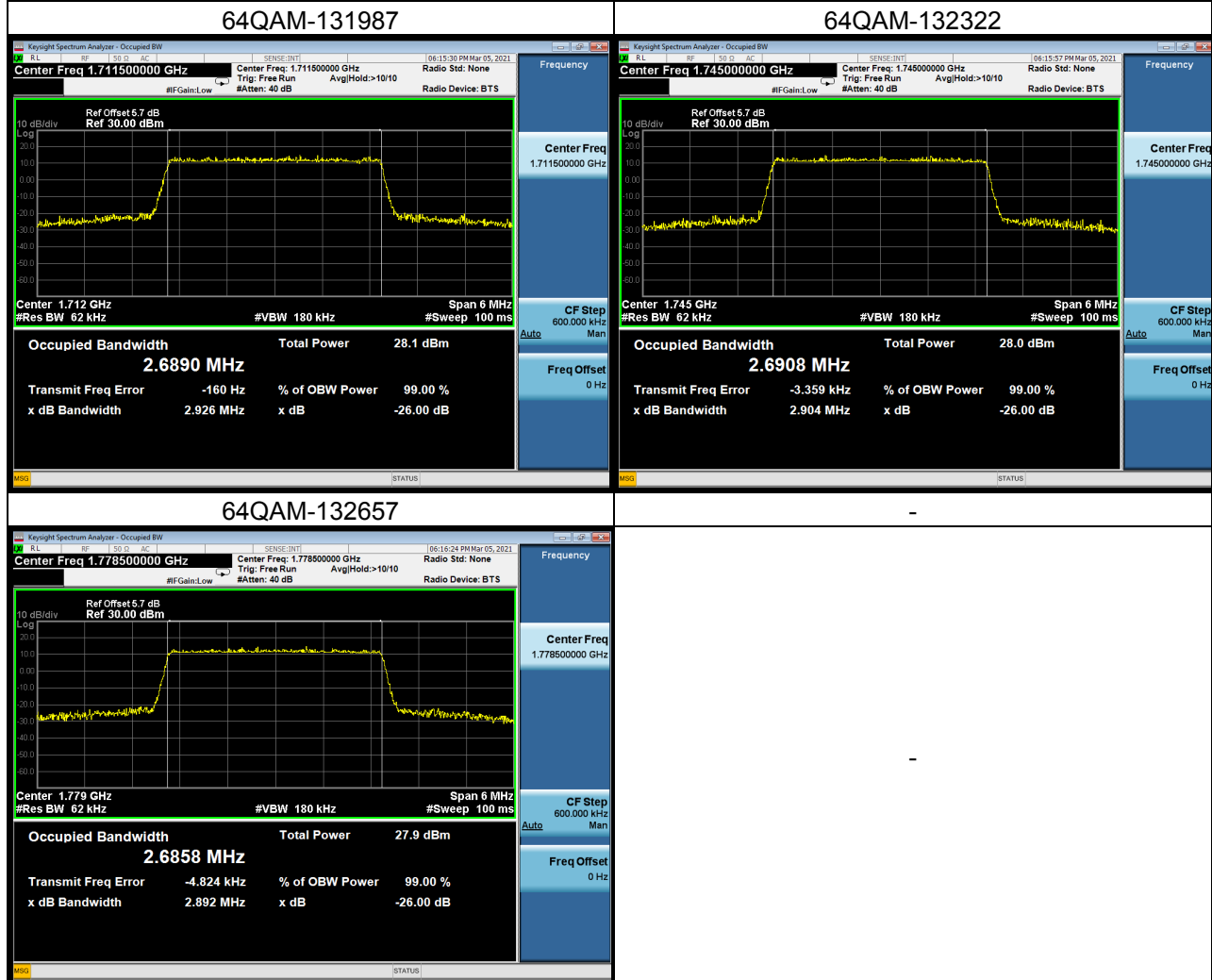


| LTE Band 66_3M |                 |                              |         |                 |                      |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK           |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131987         | 1711.5          | 2.6831                       | 131987  | 1711.5          | 2.933                |
| 132322         | 1740            | 2.6933                       | 132322  | 1740            | 2.903                |
| 132657         | 1778.5          | 2.6847                       | 132657  | 1778.5          | 2.914                |
| 16QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131987         | 1711.5          | 2.6849                       | 131987  | 1711.5          | 2.920                |
| 132322         | 1740            | 2.6876                       | 132322  | 1740            | 2.895                |
| 132657         | 1778.5          | 2.6820                       | 132657  | 1778.5          | 2.906                |
| 64QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131987         | 1711.5          | 2.6890                       | 131987  | 1711.5          | 2.926                |
| 132322         | 1740            | 2.6908                       | 132322  | 1740            | 2.904                |
| 132657         | 1778.5          | 2.6858                       | 132657  | 1778.5          | 2.892                |

## Spectrum Plot

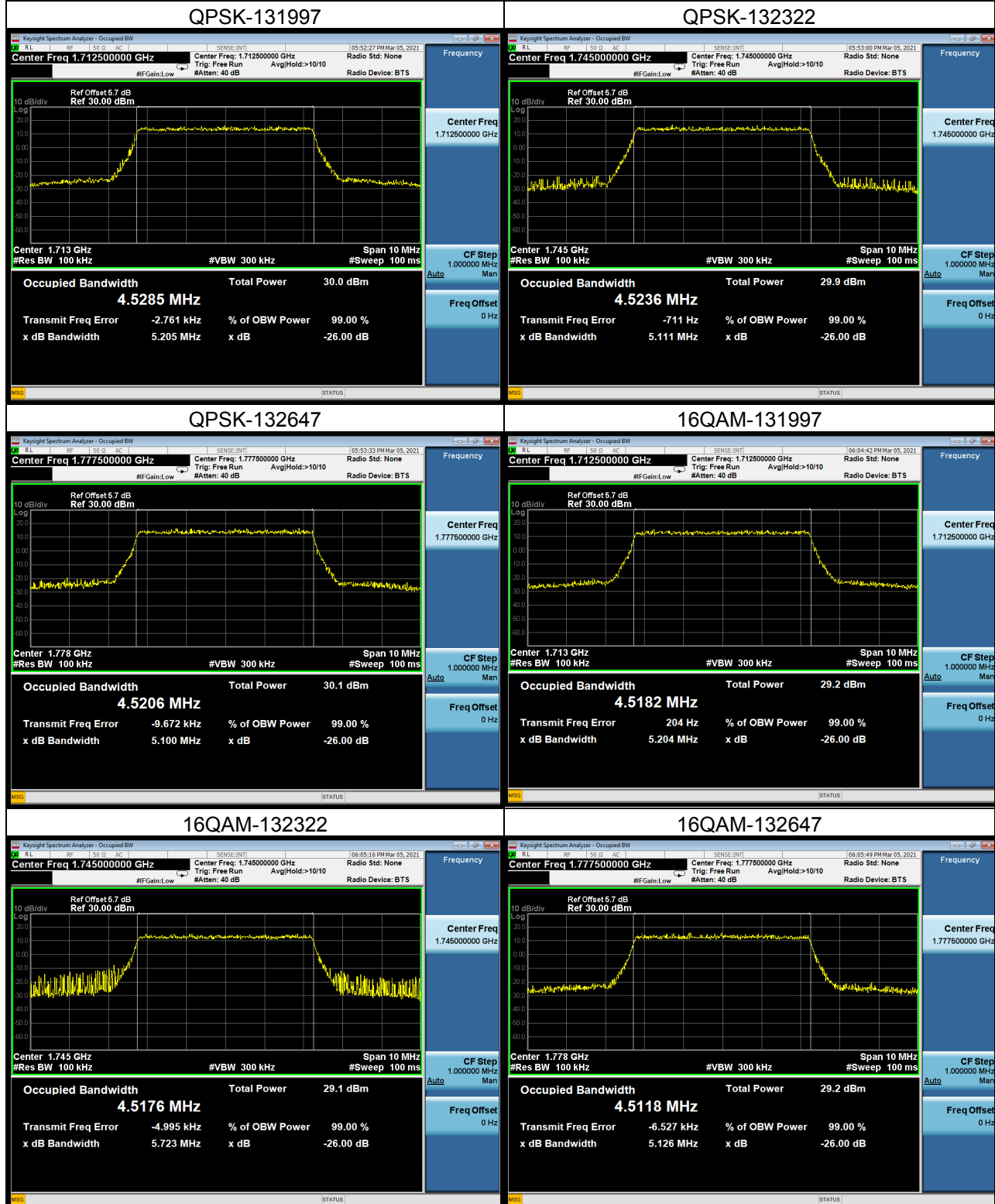


## Spectrum Plot



| LTE Band 66_5M |                 |                              |         |                 |                      |
|----------------|-----------------|------------------------------|---------|-----------------|----------------------|
| QPSK           |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131997         | 1712.5          | 4.5285                       | 131997  | 1712.5          | 5.205                |
| 132322         | 1740            | 4.5236                       | 132322  | 1740            | 5.111                |
| 132647         | 1777.5          | 4.5206                       | 132647  | 1777.5          | 5.100                |
| 16QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131997         | 1712.5          | 4.5182                       | 131997  | 1712.5          | 5.204                |
| 132322         | 1740            | 4.5176                       | 132322  | 1740            | 5.723                |
| 132647         | 1777.5          | 4.5118                       | 132647  | 1777.5          | 5.126                |
| 64QAM          |                 |                              |         |                 |                      |
| Channel        | Frequency (MHz) | 99% Occupied Bandwidth (MHz) | Channel | Frequency (MHz) | 26dB Bandwidth (MHz) |
| 131997         | 1712.5          | 4.5278                       | 131997  | 1712.5          | 5.195                |
| 132322         | 1740            | 4.5362                       | 132322  | 1740            | 5.105                |
| 132647         | 1777.5          | 4.5186                       | 132647  | 1777.5          | 5.195                |

## Spectrum Plot



## Spectrum Plot

