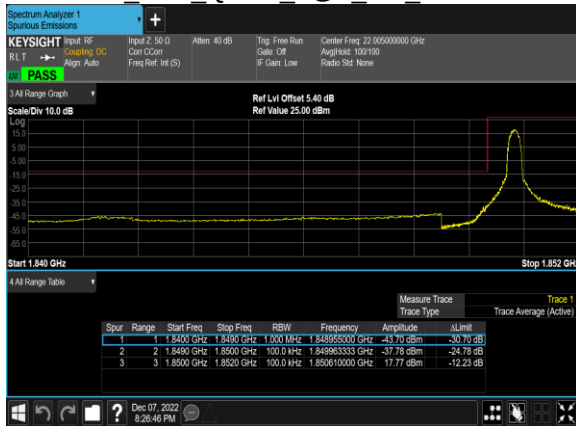
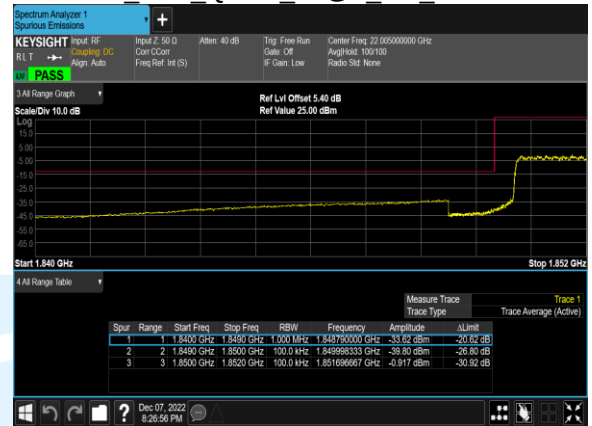


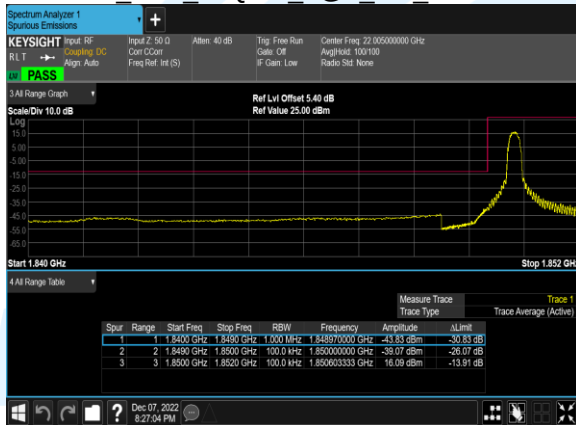
B2 10M QPSK 1@0 CH 18650



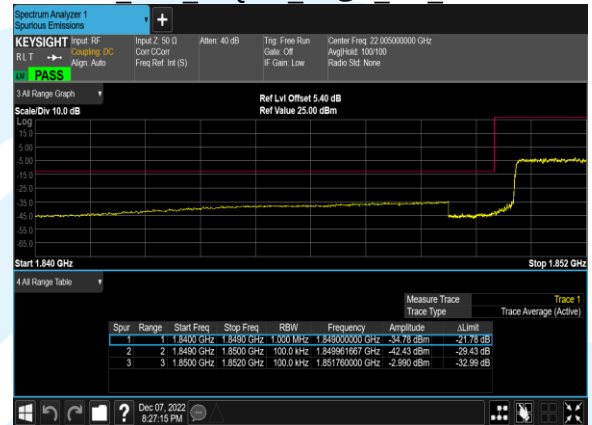
B2 10M QPSK 50@0 CH 18650



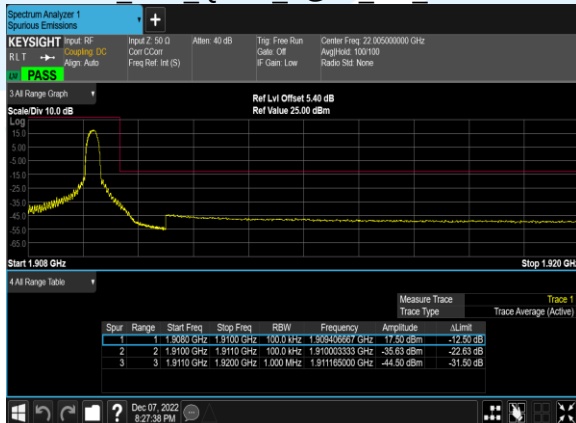
B2 10M 16QAM 1@0 CH 18650



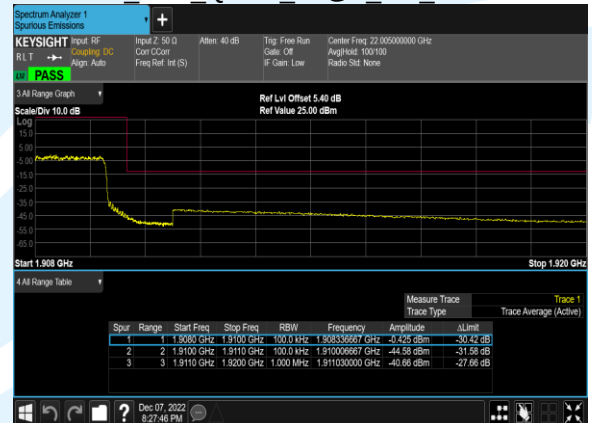
B2 10M 16QAM 50@0 CH 18650



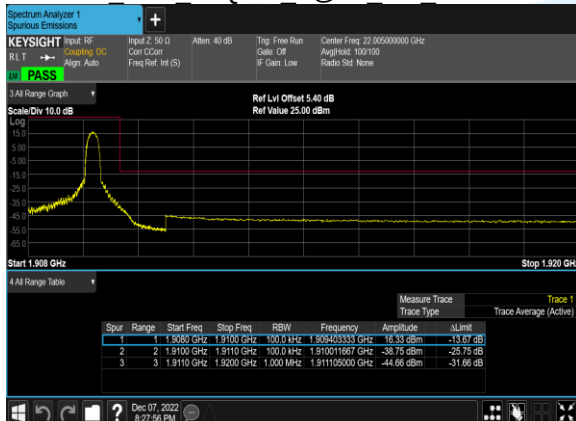
B2 10M QPSK 1@49 CH 19150



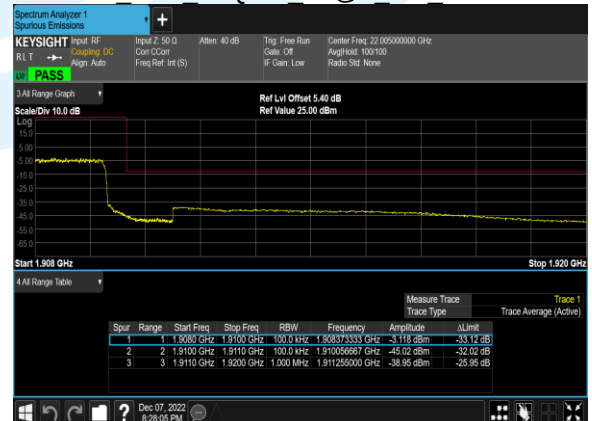
B2 10M QPSK 50@0 CH 19150



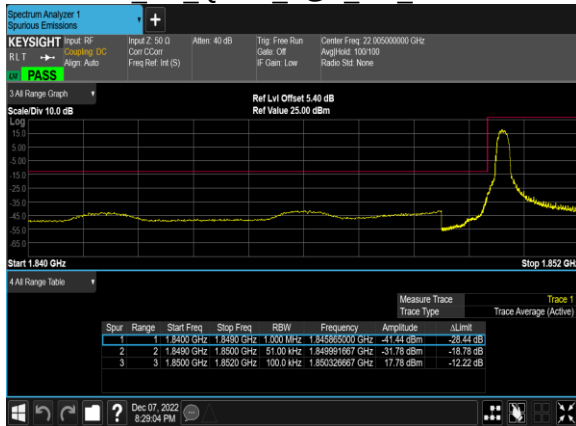
B2 10M 16QAM 1@49 CH 19150



B2 10M 16QAM 50@0 CH 19150



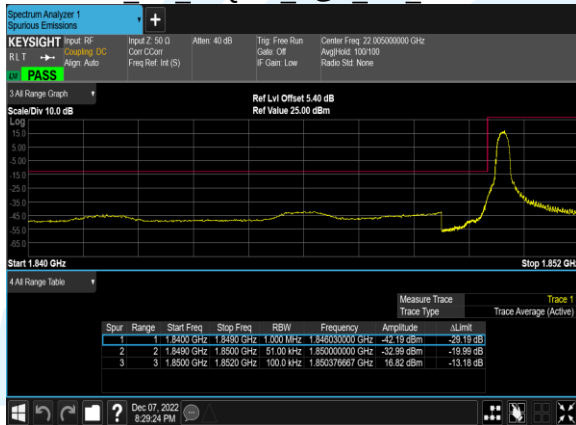
B2 5M QPSK 1@0 CH 18625



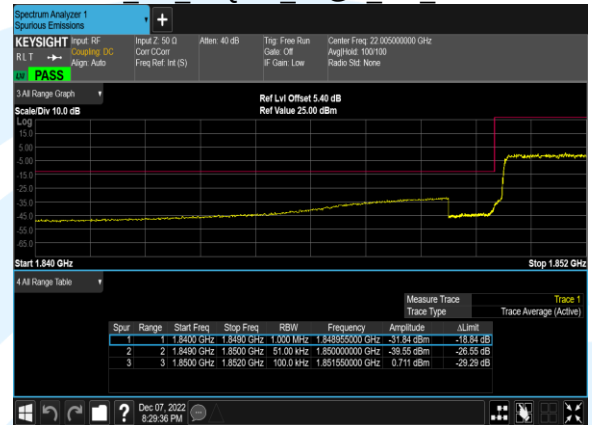
B2 5M QPSK 25@0 CH 18625



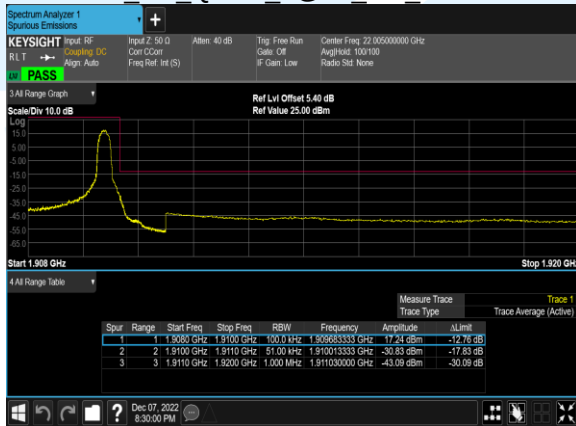
B2 5M 16QAM 1@0 CH 18625



B2 5M 16QAM 25@0 CH 18625



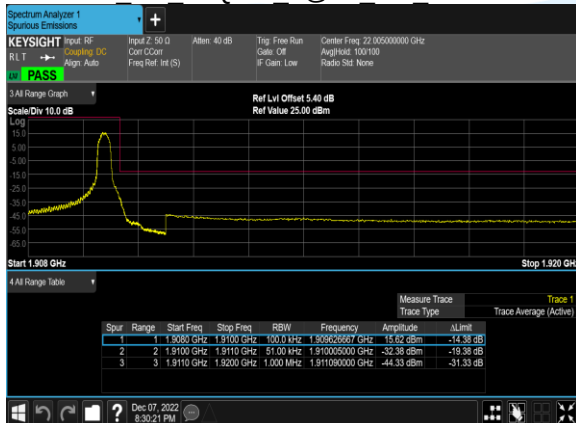
B2 5M QPSK 1@24 CH 19175



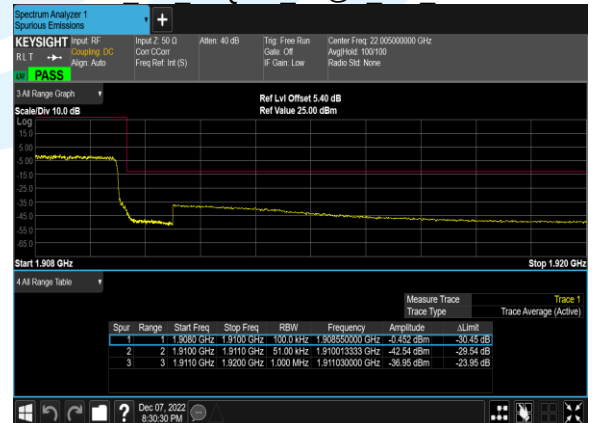
B2 5M QPSK 25@0 CH 19175



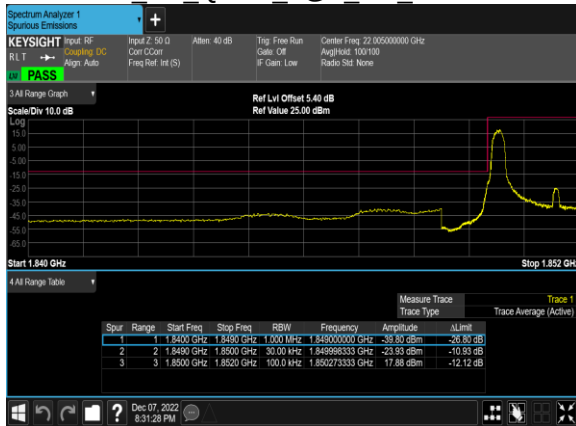
B2 5M 16QAM 1@24 CH 19175



B2 5M 16QAM 25@0 CH 19175



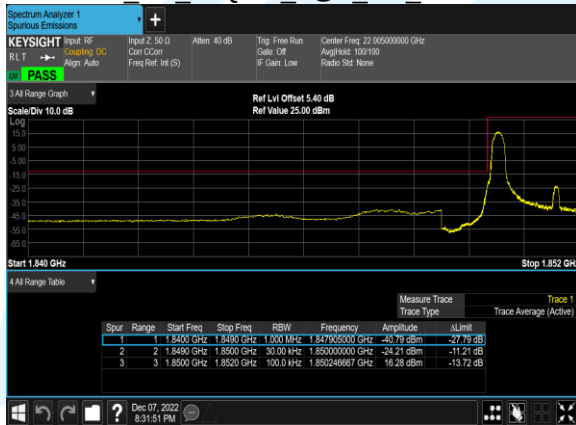
B2 3M QPSK 1@0 CH 18615



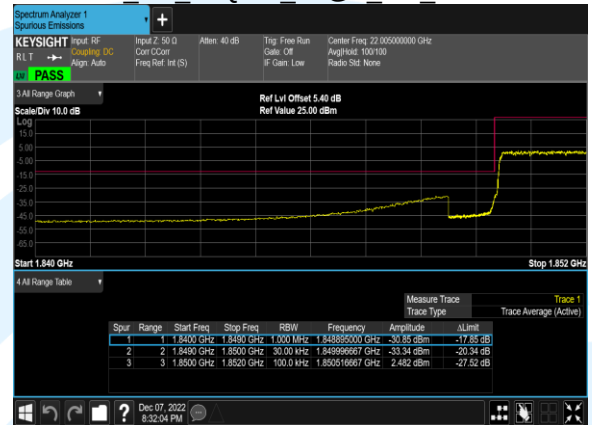
B2 3M QPSK 15@0 CH 18615



B2 3M 16QAM 1@0 CH 18615



B2 3M 16QAM 15@0 CH 18615



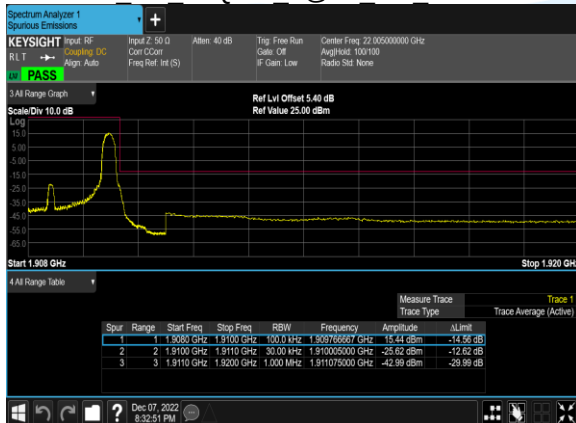
B2 3M QPSK 1@14 CH 19185



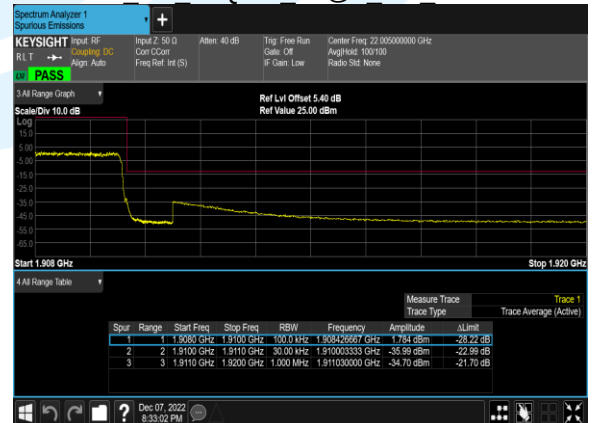
B2 3M QPSK 15@0 CH 19185



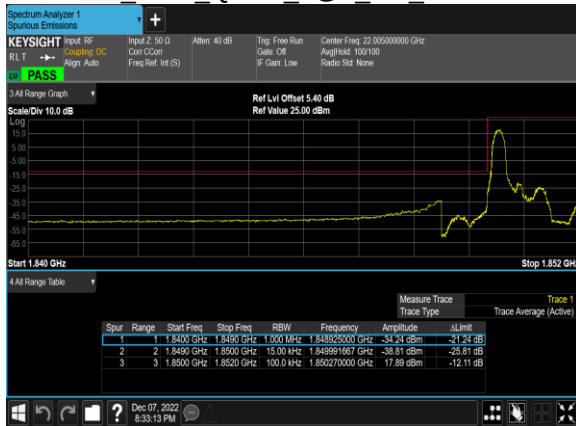
B2 3M 16QAM 1@14 CH 19185



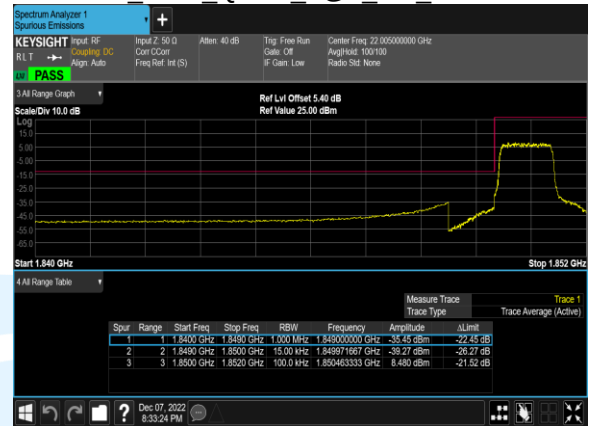
B2 3M 16QAM 15@0 CH 19185



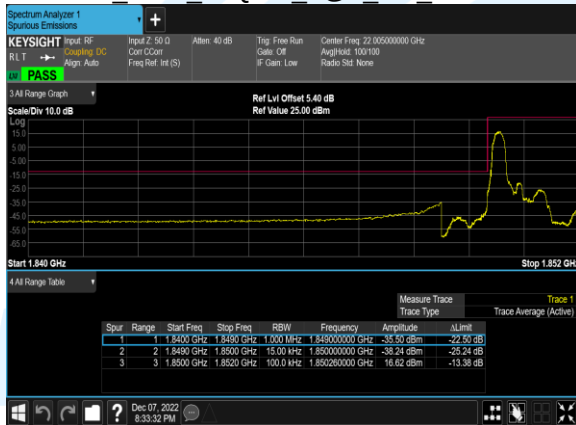
B2 1.4M QPSK 1@0 CH 18607



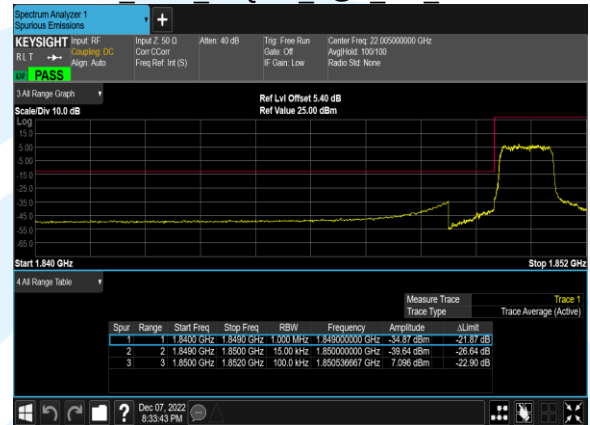
B2 1.4M QPSK 6@0 CH 18607



B2 1.4M 16QAM 1@0 CH 18607



B2 1.4M 16QAM 6@0 CH 18607



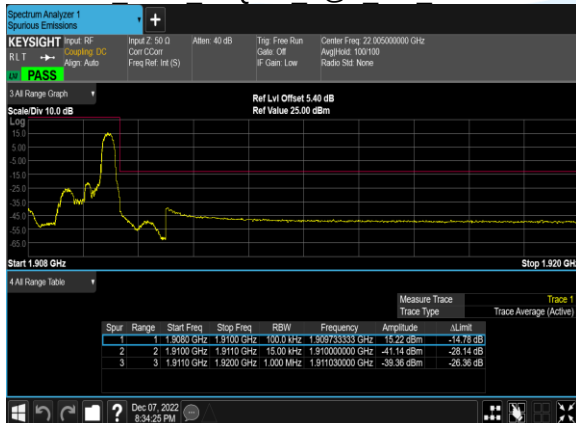
B2 1.4M QPSK 1@5 CH 19193



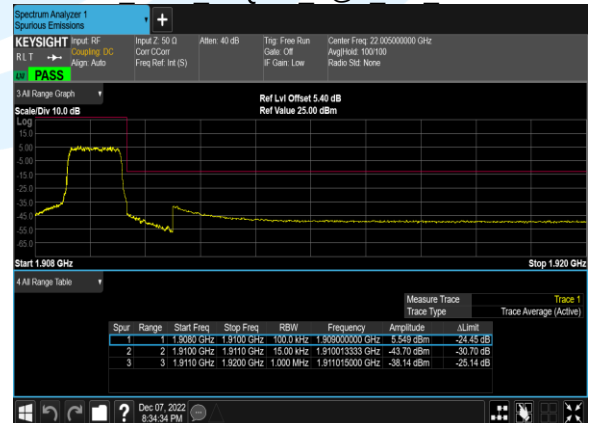
B2 1.4M QPSK 6@0 CH 19193



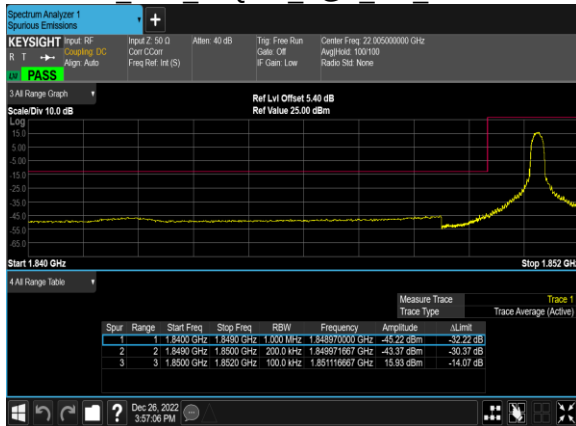
B2 1.4M 16QAM 1@5 CH 19193



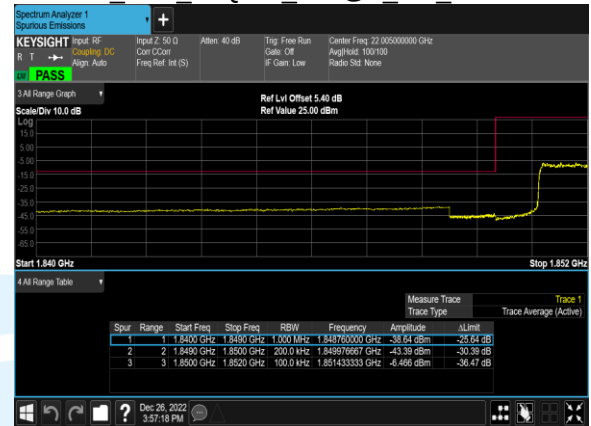
B2 1.4M 16QAM 6@0 CH 19193



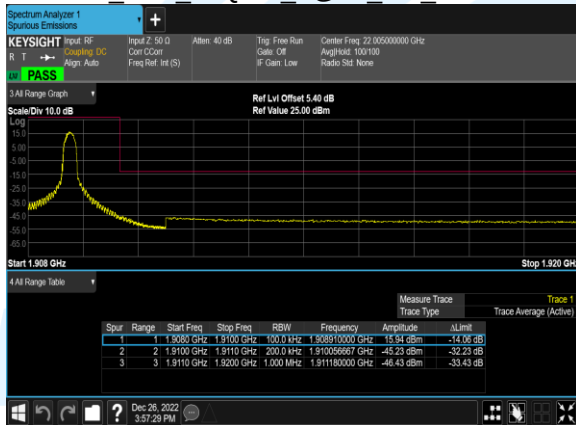
B2 20M 64QAM 1@0 CH 18700



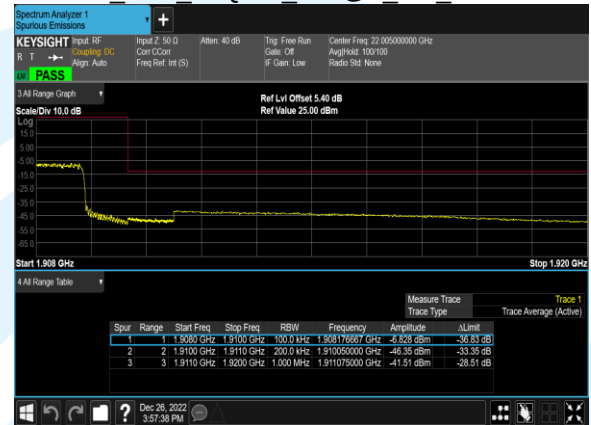
B2 20M 64QAM 100@0 CH 18700



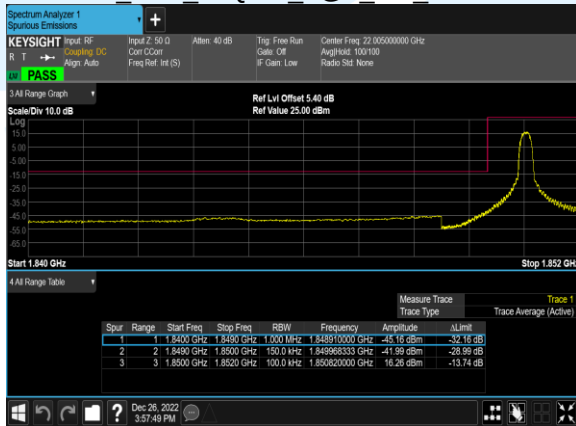
B2 20M 64QAM 1@99 CH 19100



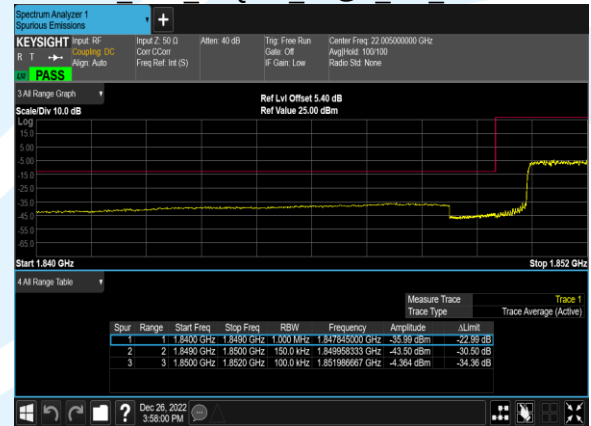
B2 20M 64QAM 100@0 CH 19100



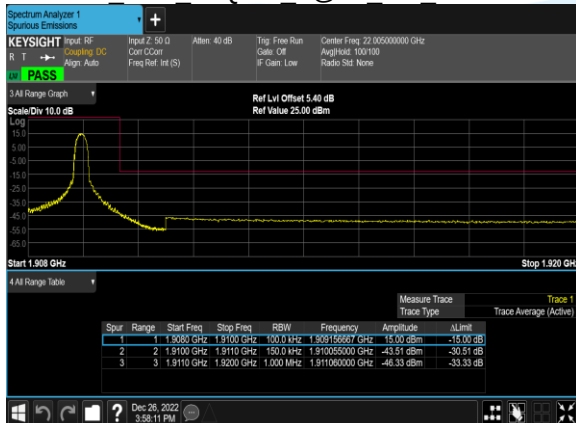
B2 15M 64QAM 1@0 CH 18675



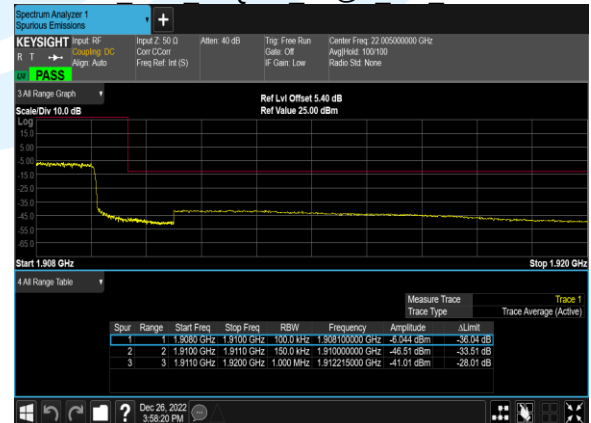
B2 15M 64QAM 75@0 CH 18675



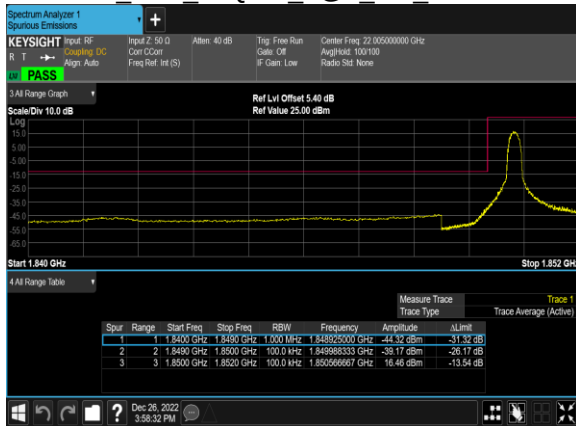
B2 15M 64QAM 1@74 CH 19125



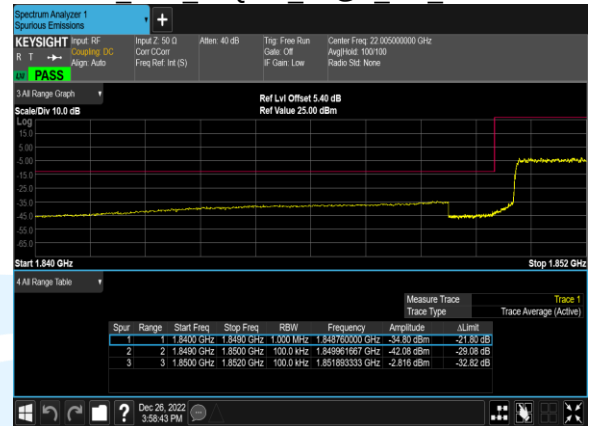
B2 15M 64QAM 75@0 CH 19125



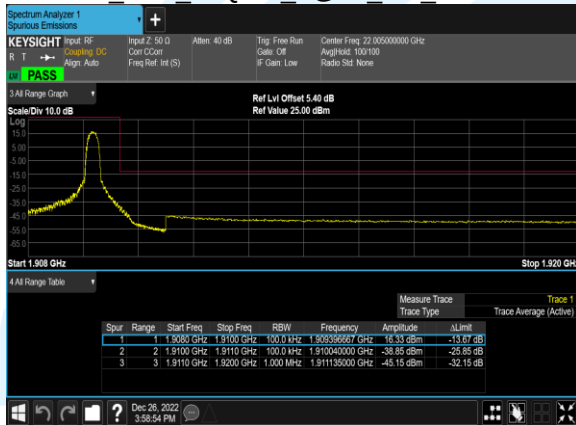
B2 10M 64QAM 1@0 CH 18650



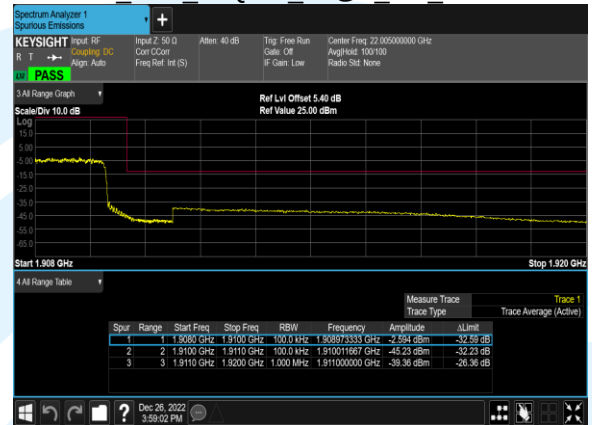
B2 10M 64QAM 50@0 CH 18650



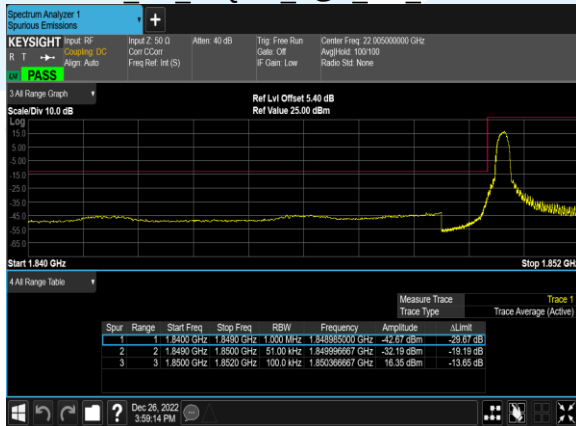
B2 10M 64QAM 1@49 CH 19150



B2 10M 64QAM 50@0 CH 19150



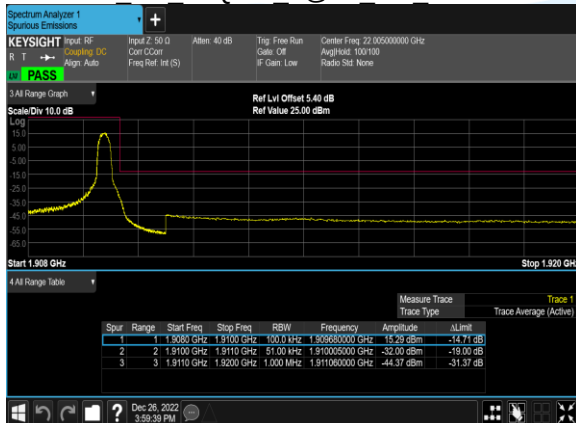
B2 5M 64QAM 1@0 CH 18625



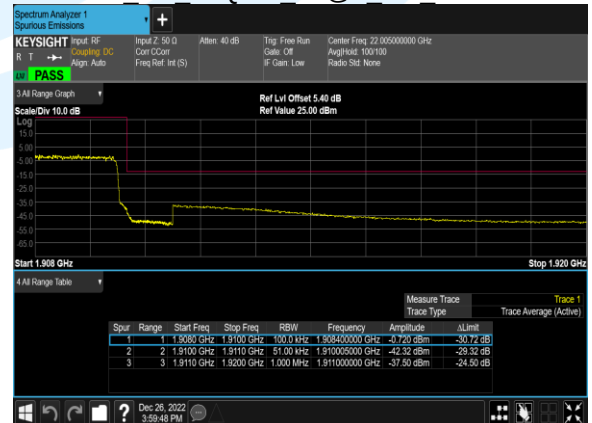
B2 5M 64QAM 25@0 CH 18625



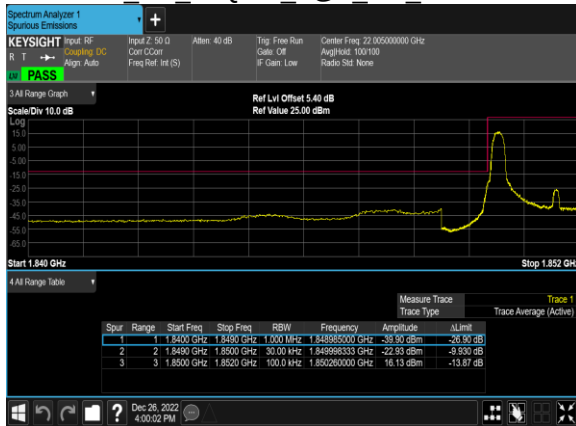
B2 5M 64QAM 1@24 CH 19175



B2 5M 64QAM 25@0 CH 19175



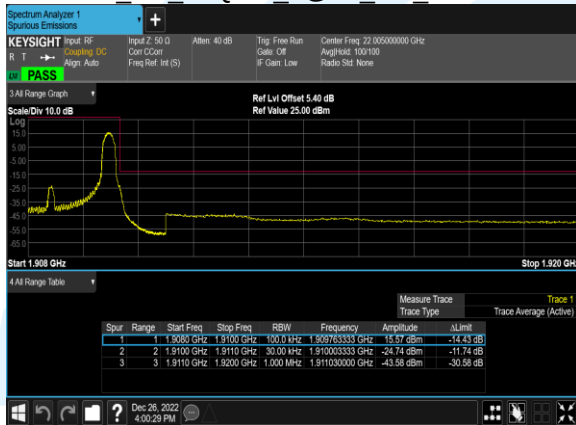
B2 3M 64QAM 1@0 CH 18615



B2 3M 64QAM 15@0 CH 18615



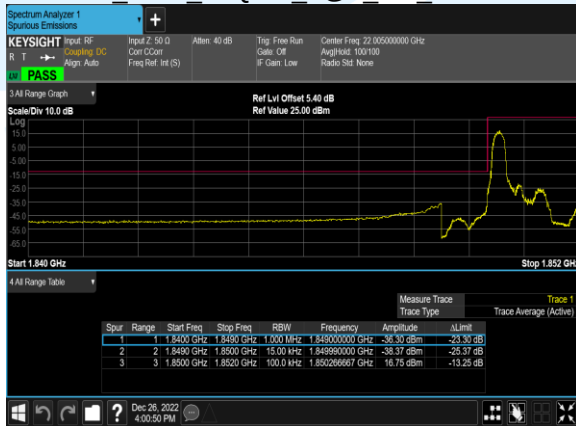
B2 3M 64QAM 1@14 CH 19185



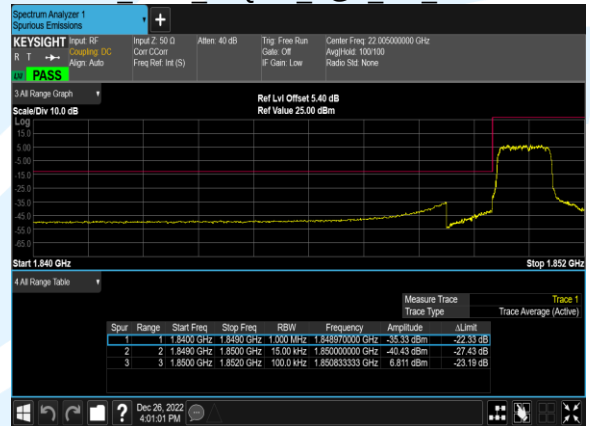
B2 3M 64QAM 15@0 CH 19185



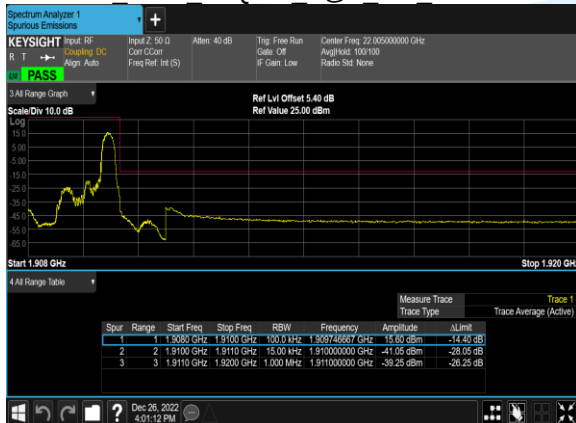
B2 1.4M 64QAM 1@0 CH 18607



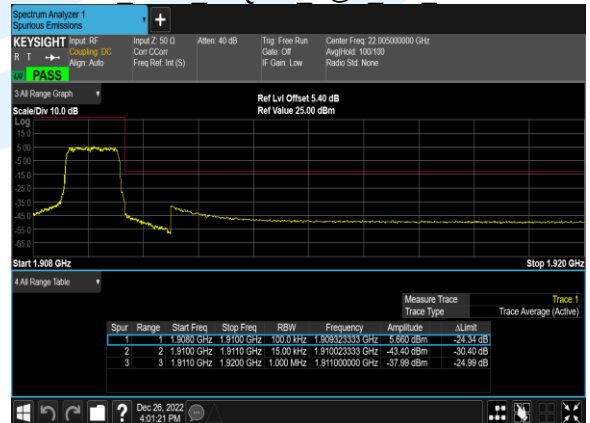
B2 1.4M 64QAM 6@0 CH 18607



B2 1.4M 64QAM 1@5 CH 19193



B2 1.4M 64QAM 6@0 CH 19193



## A.2 LTE BAND 4

## Peak to Average Ratio

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB    | Result (dB) | Limit (dB) | Verdict |
|------|-----------------|---------|------------|------------|-------|-------------|------------|---------|
| 4    | 20.0            | 20050   | 1720.0     | QPSK       | 100@0 | 5.68        | 13         | PASS    |
| 4    | 20.0            | 20050   | 1720.0     | 16QAM      | 100@0 | 6.43        | 13         | PASS    |
| 4    | 20.0            | 20050   | 1720.0     | 64QAM      | 100@0 | 6.43        | 13         | PASS    |
| 4    | 20.0            | 20175   | 1732.5     | QPSK       | 100@0 | 5.80        | 13         | PASS    |
| 4    | 20.0            | 20175   | 1732.5     | 16QAM      | 100@0 | 6.58        | 13         | PASS    |
| 4    | 20.0            | 20175   | 1732.5     | 64QAM      | 100@0 | 6.55        | 13         | PASS    |
| 4    | 20.0            | 20300   | 1745.0     | QPSK       | 100@0 | 5.97        | 13         | PASS    |
| 4    | 20.0            | 20300   | 1745.0     | 16QAM      | 100@0 | 6.65        | 13         | PASS    |
| 4    | 20.0            | 20300   | 1745.0     | 64QAM      | 100@0 | 6.66        | 13         | PASS    |

B4 20M QPSK 100@0 CH 20050



B4 20M 16QAM 100@0 CH 20050



B4 20M QPSK 100@0 CH 20175



B4 20M 16QAM 100@0 CH 20175



B4 20M QPSK 100@0 CH 20300



B4 20M 16QAM 100@0 CH 20300



B4 20M 64QAM 100@0 CH 20050



B4 20M 64QAM 100@0 CH 20175



B4 20M 64QAM 100@0 CH 20300



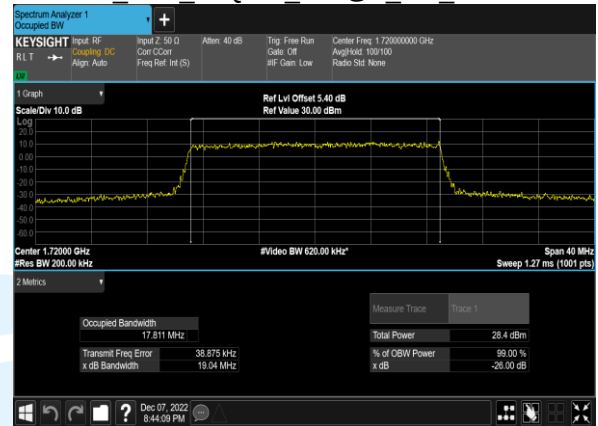
### Occupied Bandwidth

| Band | Bandwidth (MHz) | Channel | Freq (MHz) | Modulation | RB    | OBW (MHz) | 26dB BW (MHz) |
|------|-----------------|---------|------------|------------|-------|-----------|---------------|
| 4    | 20.0            | 20050   | 1720.0     | QPSK       | 100@0 | 17.839    | 19.00         |
| 4    | 20.0            | 20050   | 1720.0     | 16QAM      | 100@0 | 17.811    | 19.04         |
| 4    | 20.0            | 20050   | 1720.0     | 64QAM      | 100@0 | 17.816    | 19.16         |
| 4    | 20.0            | 20175   | 1732.5     | QPSK       | 100@0 | 17.900    | 19.19         |
| 4    | 20.0            | 20175   | 1732.5     | 16QAM      | 100@0 | 17.924    | 19.06         |
| 4    | 20.0            | 20175   | 1732.5     | 64QAM      | 100@0 | 17.889    | 19.34         |
| 4    | 20.0            | 20300   | 1745.0     | QPSK       | 100@0 | 17.889    | 19.13         |
| 4    | 20.0            | 20300   | 1745.0     | 16QAM      | 100@0 | 17.910    | 18.93         |
| 4    | 20.0            | 20300   | 1745.0     | 64QAM      | 100@0 | 17.919    | 19.47         |
| 4    | 15.0            | 20025   | 1717.5     | QPSK       | 75@0  | 13.392    | 14.37         |
| 4    | 15.0            | 20025   | 1717.5     | 16QAM      | 75@0  | 13.388    | 14.36         |
| 4    | 15.0            | 20025   | 1717.5     | 64QAM      | 75@0  | 13.419    | 14.38         |
| 4    | 15.0            | 20175   | 1732.5     | QPSK       | 75@0  | 13.411    | 14.47         |
| 4    | 15.0            | 20175   | 1732.5     | 16QAM      | 75@0  | 13.433    | 14.45         |
| 4    | 15.0            | 20175   | 1732.5     | 64QAM      | 75@0  | 13.401    | 14.35         |
| 4    | 15.0            | 20325   | 1747.5     | QPSK       | 75@0  | 13.415    | 14.47         |
| 4    | 15.0            | 20325   | 1747.5     | 16QAM      | 75@0  | 13.431    | 14.75         |
| 4    | 15.0            | 20325   | 1747.5     | 64QAM      | 75@0  | 13.415    | 14.62         |
| 4    | 10.0            | 20000   | 1715.0     | QPSK       | 50@0  | 8.9413    | 9.552         |
| 4    | 10.0            | 20000   | 1715.0     | 16QAM      | 50@0  | 8.9281    | 9.694         |
| 4    | 10.0            | 20000   | 1715.0     | 64QAM      | 50@0  | 8.9184    | 9.660         |
| 4    | 10.0            | 20175   | 1732.5     | QPSK       | 50@0  | 8.9315    | 9.588         |
| 4    | 10.0            | 20175   | 1732.5     | 16QAM      | 50@0  | 8.9355    | 9.708         |
| 4    | 10.0            | 20175   | 1732.5     | 64QAM      | 50@0  | 8.9452    | 9.571         |
| 4    | 10.0            | 20350   | 1750.0     | QPSK       | 50@0  | 8.9364    | 9.639         |
| 4    | 10.0            | 20350   | 1750.0     | 16QAM      | 50@0  | 8.9497    | 9.641         |
| 4    | 10.0            | 20350   | 1750.0     | 64QAM      | 50@0  | 8.9359    | 9.567         |
| 4    | 5.0             | 19975   | 1712.5     | QPSK       | 25@0  | 4.4603    | 4.853         |
| 4    | 5.0             | 19975   | 1712.5     | 16QAM      | 25@0  | 4.4644    | 4.843         |
| 4    | 5.0             | 19975   | 1712.5     | 64QAM      | 25@0  | 4.4628    | 4.865         |
| 4    | 5.0             | 20175   | 1732.5     | QPSK       | 25@0  | 4.4589    | 4.853         |
| 4    | 5.0             | 20175   | 1732.5     | 16QAM      | 25@0  | 4.4700    | 4.857         |
| 4    | 5.0             | 20175   | 1732.5     | 64QAM      | 25@0  | 4.4680    | 4.889         |
| 4    | 5.0             | 20375   | 1752.5     | QPSK       | 25@0  | 4.4553    | 4.848         |
| 4    | 5.0             | 20375   | 1752.5     | 16QAM      | 25@0  | 4.4655    | 4.865         |
| 4    | 5.0             | 20375   | 1752.5     | 64QAM      | 25@0  | 4.4563    | 4.840         |
| 4    | 3.0             | 19965   | 1711.5     | QPSK       | 15@0  | 2.6825    | 2.949         |
| 4    | 3.0             | 19965   | 1711.5     | 16QAM      | 15@0  | 2.6775    | 2.956         |
| 4    | 3.0             | 19965   | 1711.5     | 64QAM      | 15@0  | 2.6795    | 2.965         |
| 4    | 3.0             | 20175   | 1732.5     | QPSK       | 15@0  | 2.6845    | 2.986         |
| 4    | 3.0             | 20175   | 1732.5     | 16QAM      | 15@0  | 2.6872    | 2.993         |
| 4    | 3.0             | 20175   | 1732.5     | 64QAM      | 15@0  | 2.6878    | 2.975         |
| 4    | 3.0             | 20385   | 1753.5     | QPSK       | 15@0  | 2.6889    | 2.952         |
| 4    | 3.0             | 20385   | 1753.5     | 16QAM      | 15@0  | 2.6836    | 2.984         |
| 4    | 3.0             | 20385   | 1753.5     | 64QAM      | 15@0  | 2.6855    | 2.983         |
| 4    | 1.4             | 19957   | 1710.7     | QPSK       | 6@0   | 1.0778    | 1.214         |
| 4    | 1.4             | 19957   | 1710.7     | 16QAM      | 6@0   | 1.0794    | 1.224         |
| 4    | 1.4             | 19957   | 1710.7     | 64QAM      | 6@0   | 1.0847    | 1.226         |
| 4    | 1.4             | 20175   | 1732.5     | QPSK       | 6@0   | 1.0792    | 1.213         |
| 4    | 1.4             | 20175   | 1732.5     | 16QAM      | 6@0   | 1.0761    | 1.217         |
| 4    | 1.4             | 20175   | 1732.5     | 64QAM      | 6@0   | 1.0778    | 1.215         |
| 4    | 1.4             | 20393   | 1754.3     | QPSK       | 6@0   | 1.0791    | 1.218         |
| 4    | 1.4             | 20393   | 1754.3     | 16QAM      | 6@0   | 1.0784    | 1.217         |
| 4    | 1.4             | 20393   | 1754.3     | 64QAM      | 6@0   | 1.0783    | 1.228         |

B4 20M QPSK 100@0 CH 20050



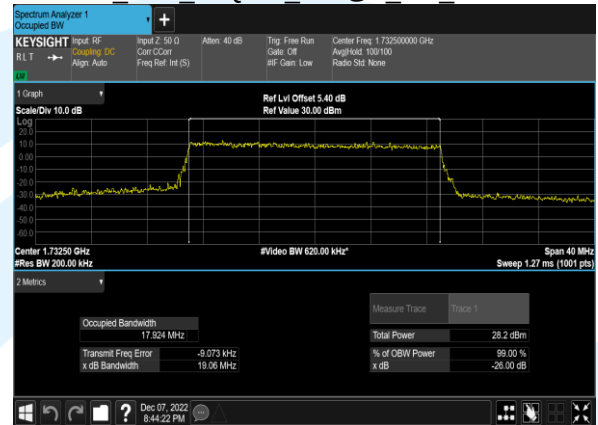
B4 20M 16QAM 100@0 CH 20050



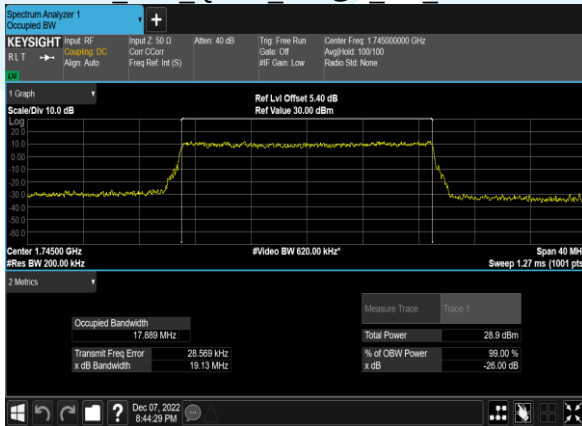
B4 20M QPSK 100@0 CH 20175



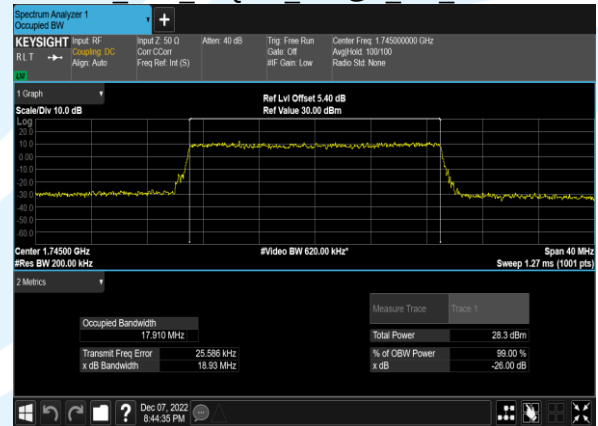
B4 20M 16QAM 100@0 CH 20175



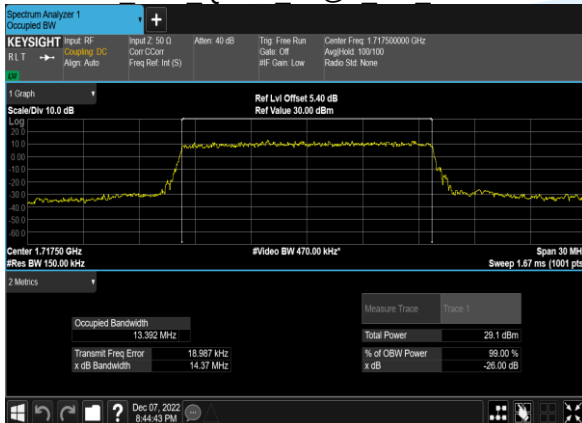
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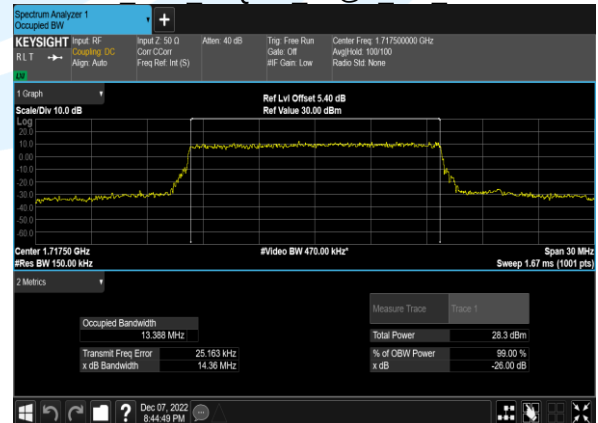
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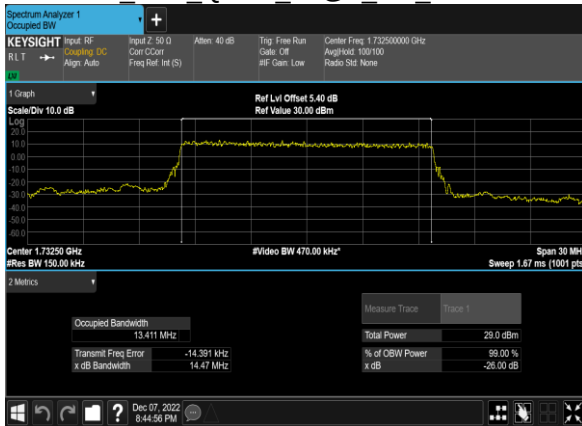
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B4 15M 16QAM 75@0 CH 20025



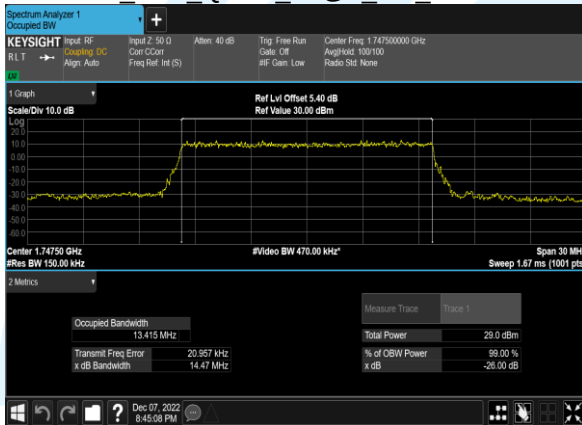
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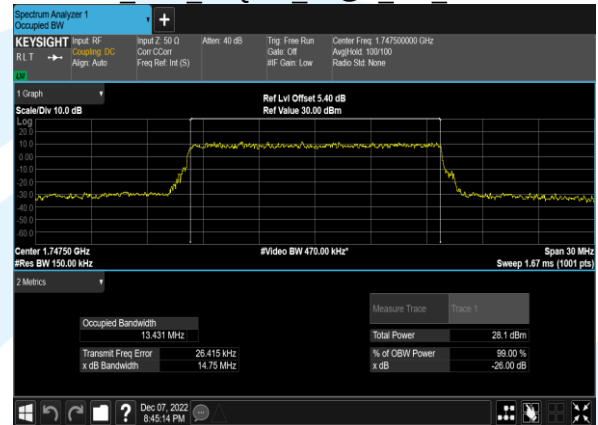
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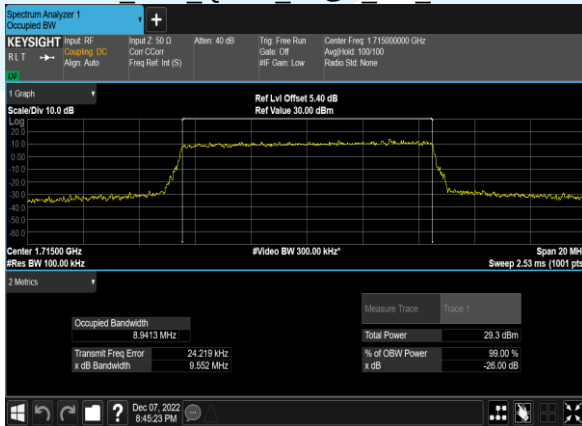
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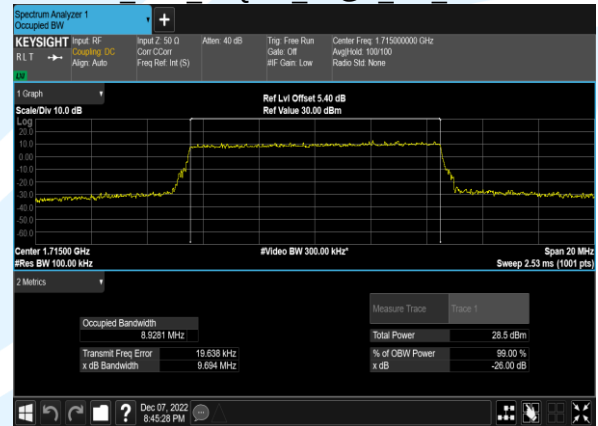
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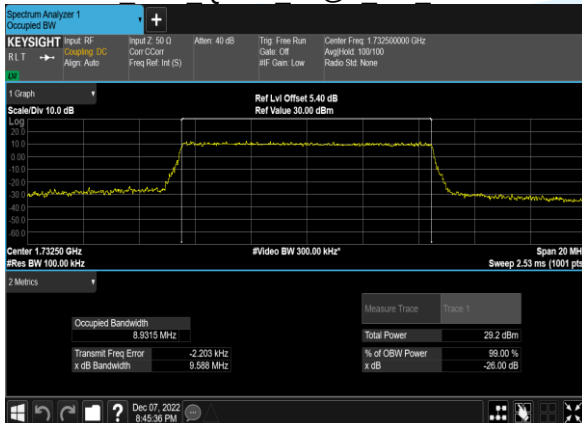
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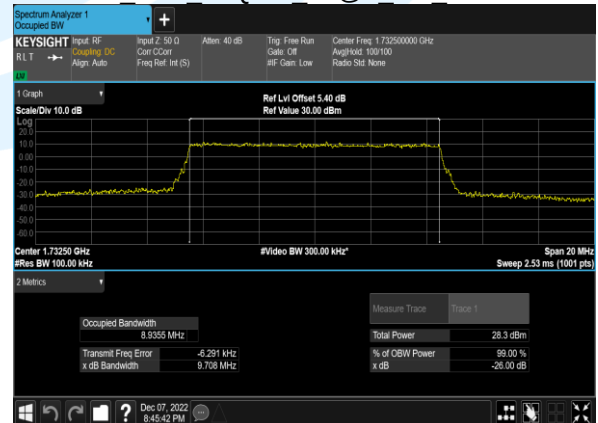
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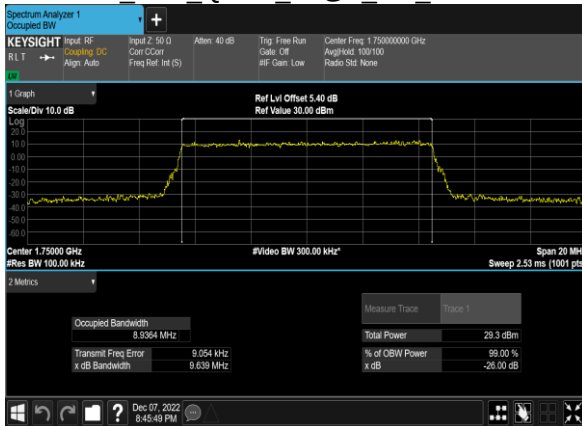
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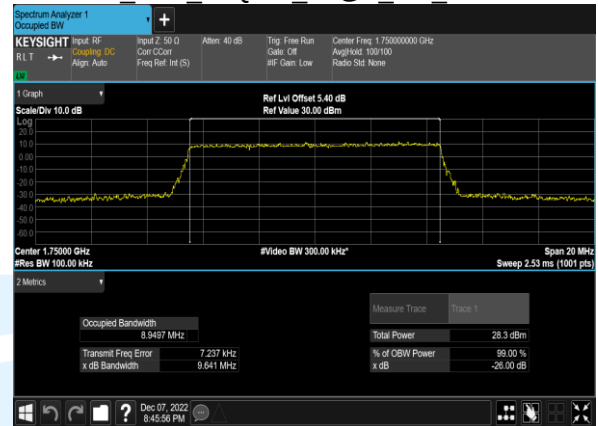
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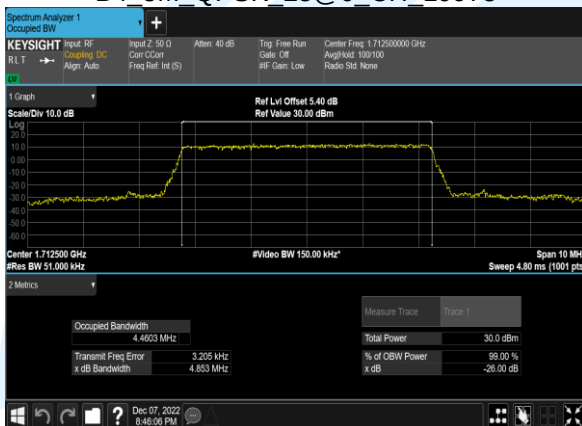
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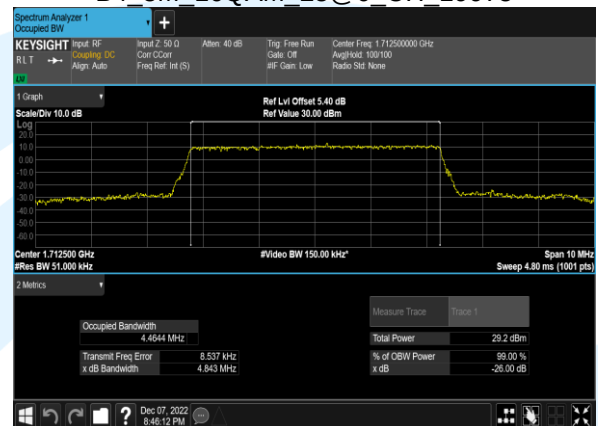
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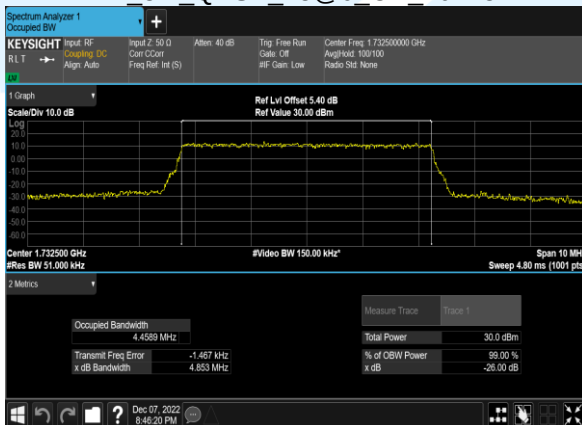
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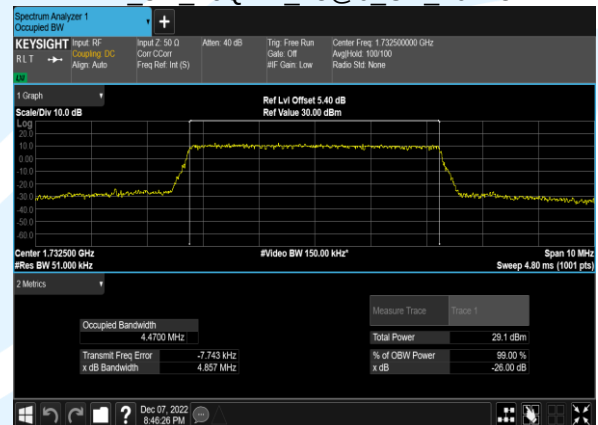
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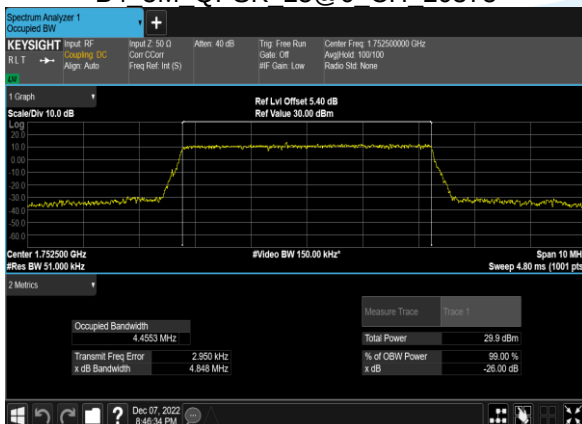
B4 5M QPSK 25@0 CH 20175



B4 5M 16QAM 25@0 CH 20175



B4 5M QPSK 25@0 CH 20375



B4 5M 16QAM 25@0 CH 20375

