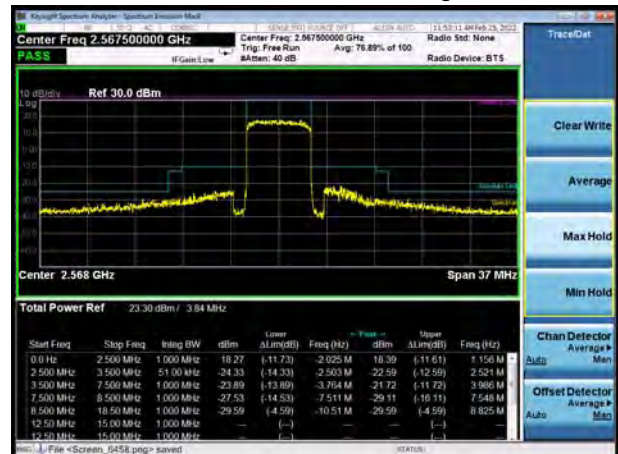




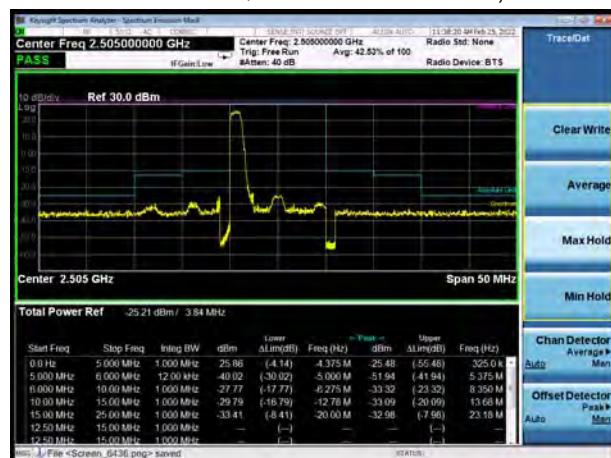
## LTE Band 7 16QAM 5MHz CH-Low, 100%RB



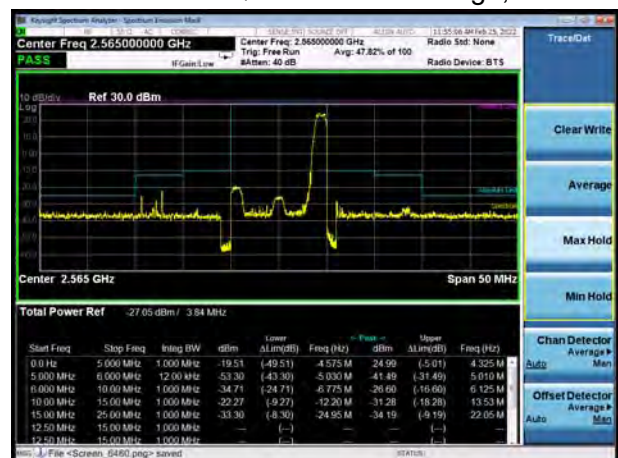
## LTE Band 7 16QAM 5MHz CH-High, 100%RB



## LTE Band 7 16QAM 10MHz CH-Low, 1 RB



## LTE Band 7 16QAM 10MHz CH-High, 1 RB



## LTE Band 7 16QAM 10MHz CH-Low, 100%RB

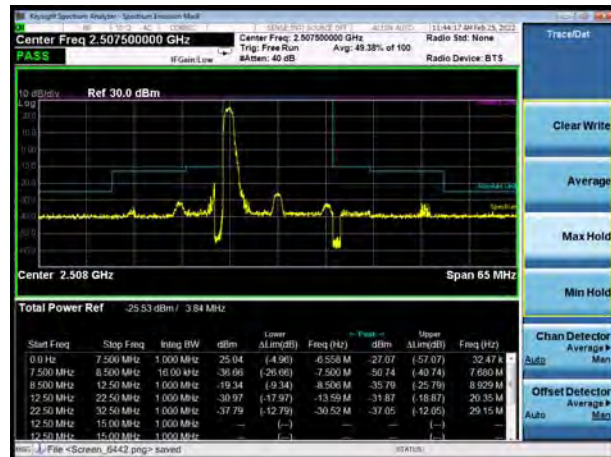


## LTE Band 7 16QAM 10MHz CH-High, 100%RB





LTE Band 7 16QAM 15MHz CH-Low, 1 RB



LTE Band 7 16QAM 15MHz CH-High, 1 RB



LTE Band 7 16QAM 15MHz CH-Low, 100%RB



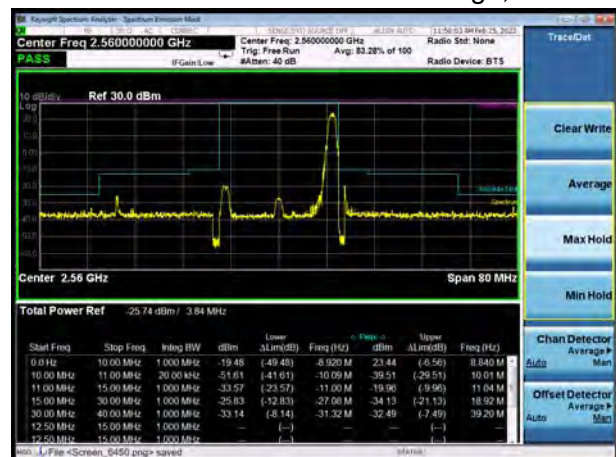
LTE Band 7 16QAM 15MHz CH-High, 100%RB



LTE Band 7 16QAM 20MHz CH-Low, 1 RB



LTE Band 7 16QAM 20MHz CH-High, 1 RB





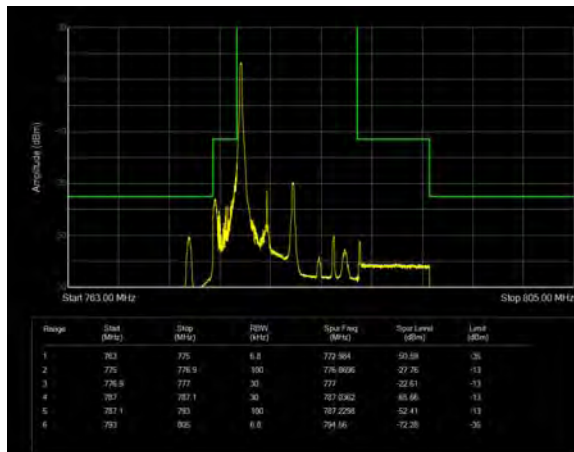
## LTE Band 7 16QAM 20MHz CH-Low, 100%RB



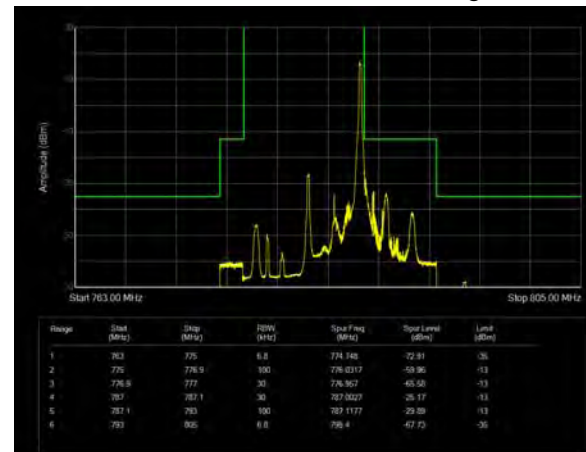
## LTE Band 7 16QAM 20MHz CH-High, 100%RB



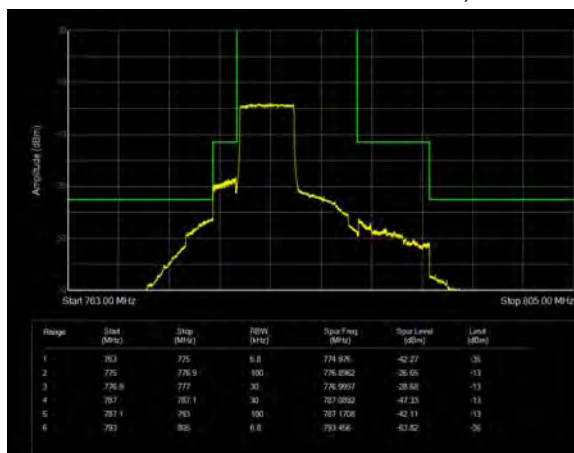
LTE Band 13 QPSK 5MHz CH-Low, 1 RB



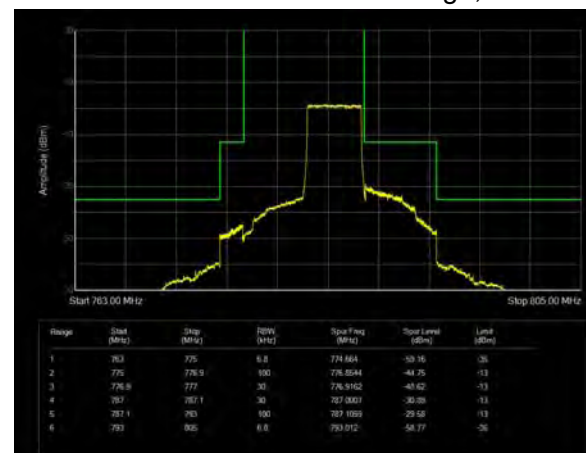
LTE Band 13 QPSK 5MHz CH-High, 1 RB



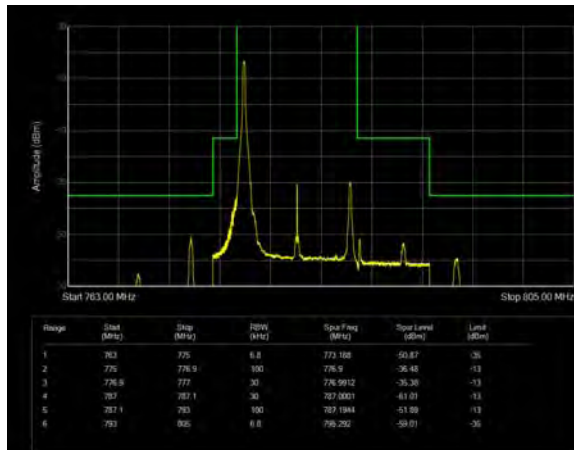
LTE Band 13 QPSK 5MHz CH-Low, 100%RB



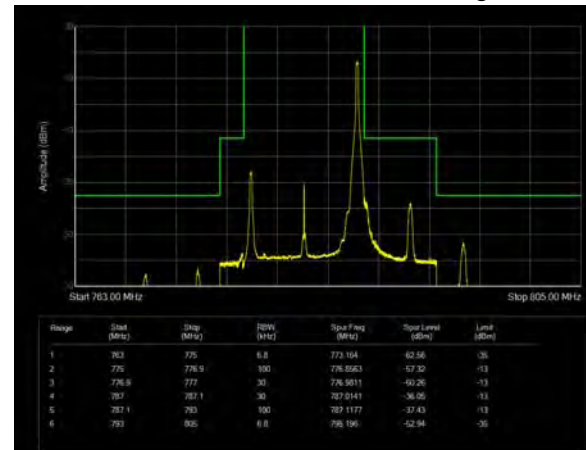
LTE Band 13 QPSK 5MHz CH-High, 100%RB



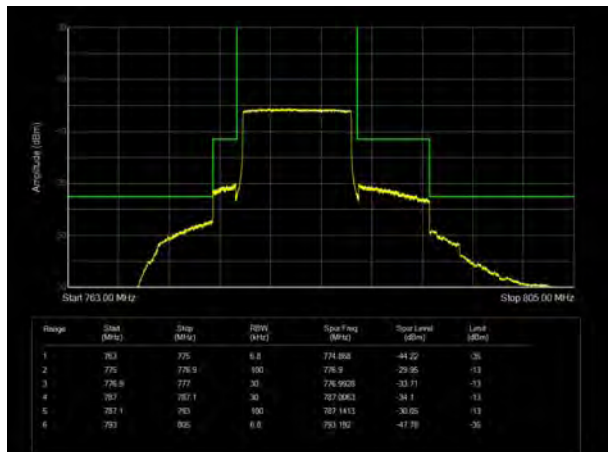
LTE Band 13 QPSK 10MHz CH-Low, 1 RB



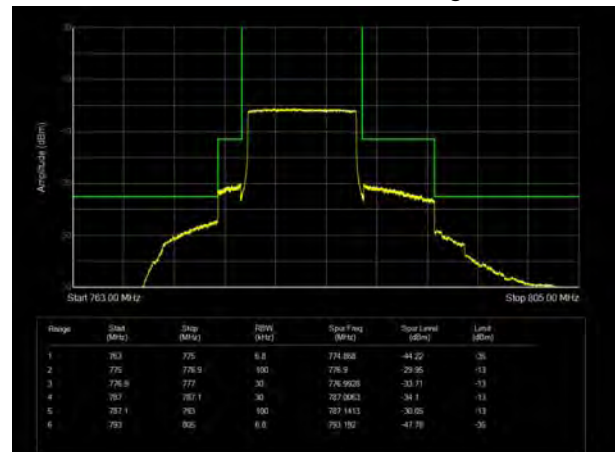
LTE Band 13 QPSK 10MHz CH-High, 1 RB



LTE Band 13 QPSK 10MHz CH-Low, 100%RB



LTE Band 13 QPSK 10MHz CH-High, 100%RB



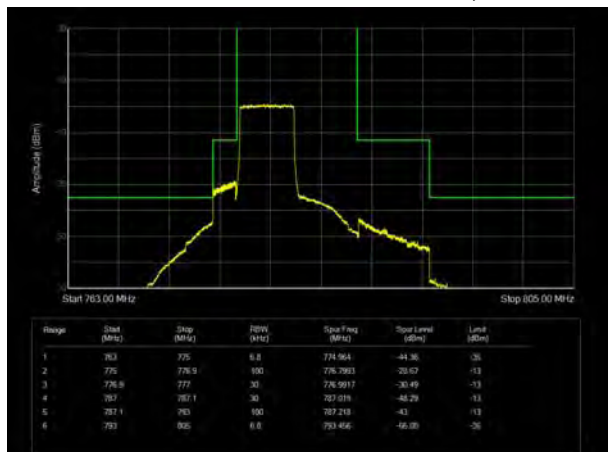
LTE Band 13 16QAM 5MHz CH-Low, 1 RB



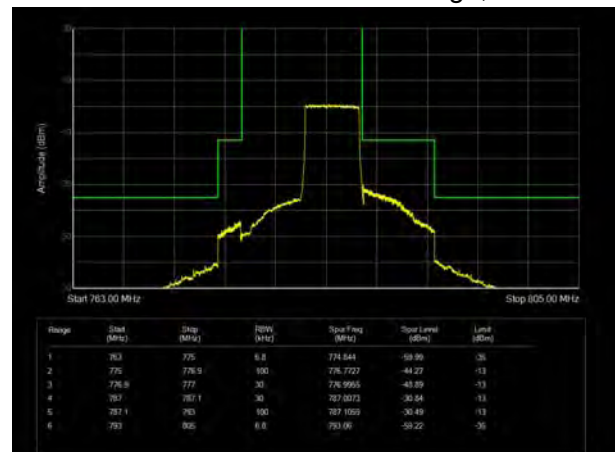
LTE Band 13 16QAM 5MHz CH-High, 1 RB



LTE Band 13 16QAM 5MHz CH-Low, 100%RB



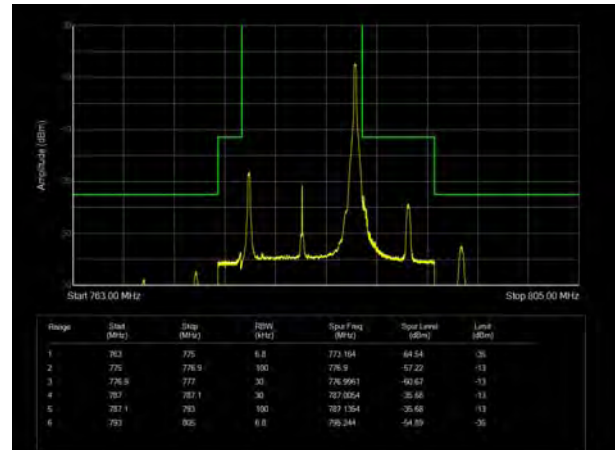
LTE Band 13 16QAM 5MHz CH-High, 100%RB



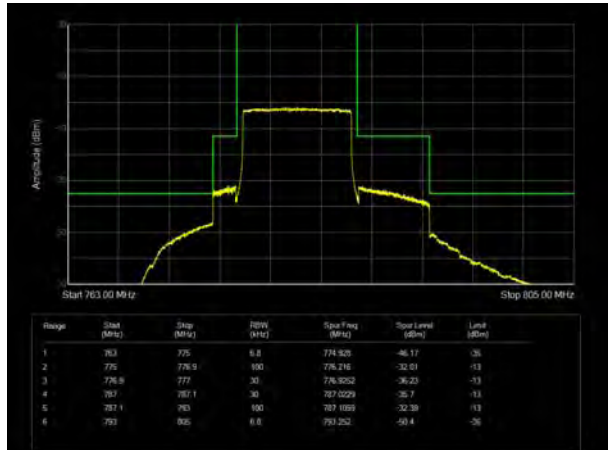
LTE Band 13 16QAM 10MHz CH-Low, 1 RB



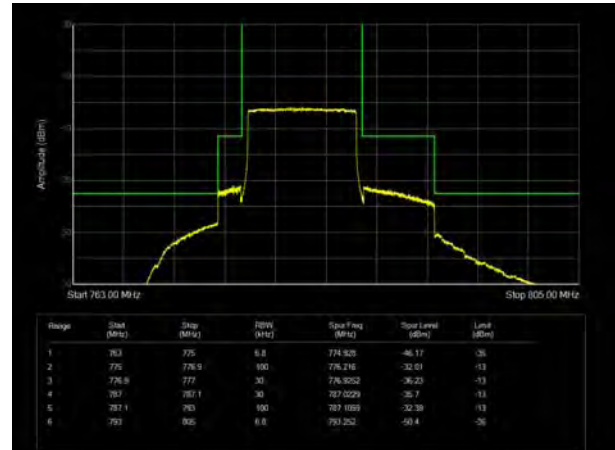
LTE Band 13 16QAM 10MHz CH-High, 1 RB



LTE Band 13 16QAM 10MHz CH-Low, 100%RB

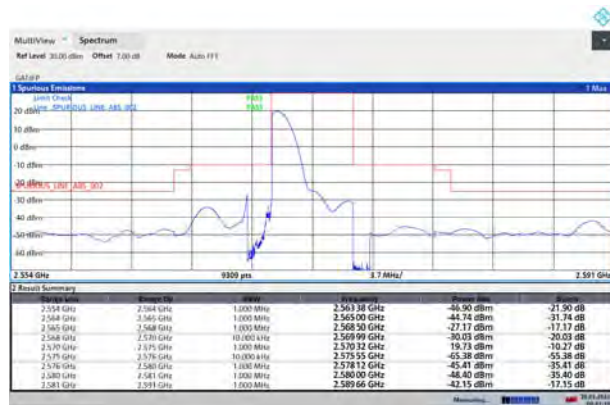


LTE Band 13 16QAM 10MHz CH-High, 100%RB



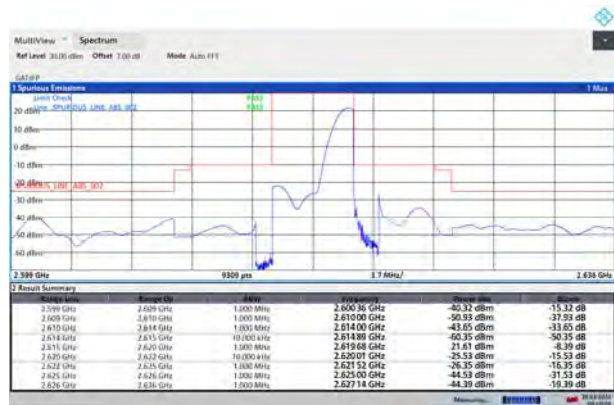


## LTE Band 38 QPSK 5MHz CH-Low, 1 RB



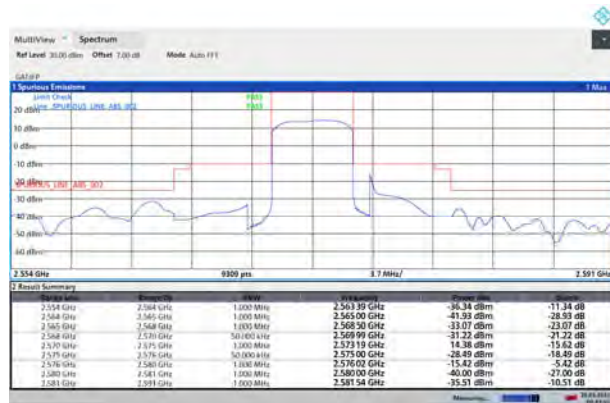
09:41:12 08/02/2022

## LTE Band 38 QPSK 5MHz CH-High, 1 RB



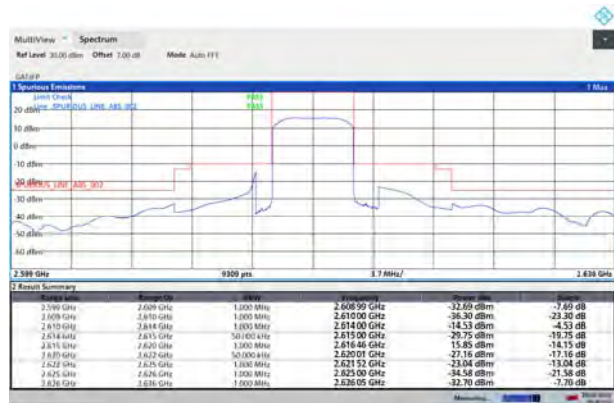
09:50:04 08/02/2022

## LTE Band 38 QPSK 5MHz CH-Low, 100%RB



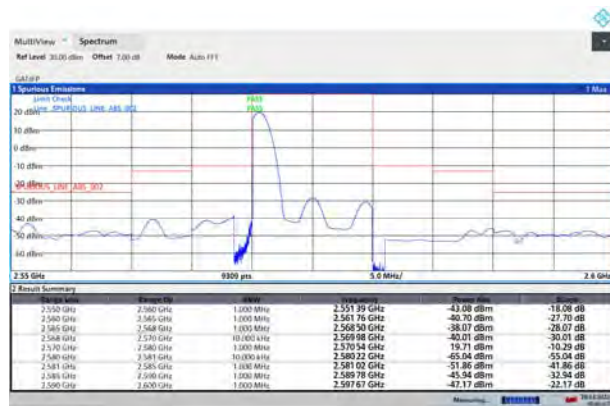
09:44:55 08/02/2022

## LTE Band 38 QPSK 5MHz CH-High, 100%RB



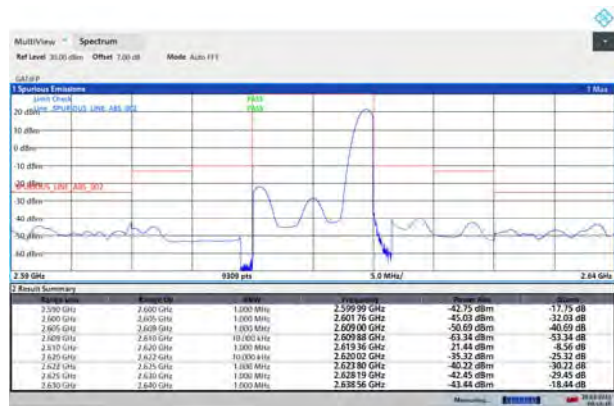
09:47:54 08/02/2022

## LTE Band 38 QPSK 10MHz CH-Low, 1 RB



10:08:57 08/02/2022

## LTE Band 38 QPSK 10MHz CH-High, 1 RB



09:58:26 08/02/2022

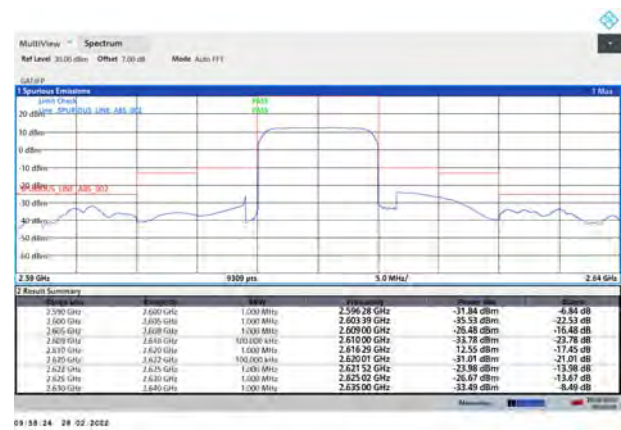


## LTE Band 38 QPSK 10MHz CH-Low, 100%RB



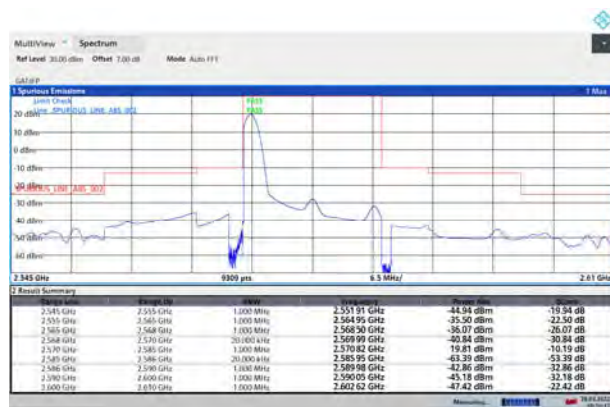
10/18/22 09:02:02Z

## LTE Band 38 QPSK 10MHz CH-High, 100%RB



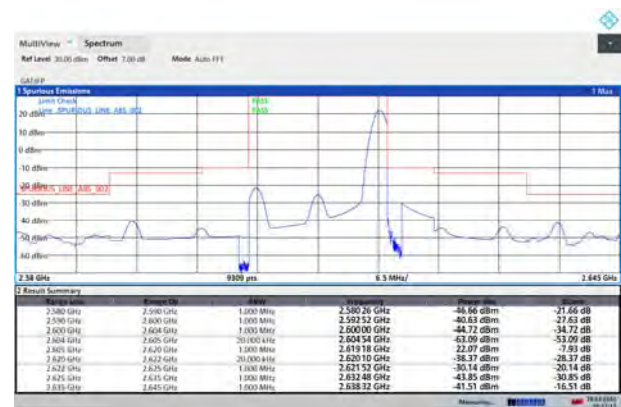
09/18/24 09:02:02Z

## LTE Band 38 QPSK 15MHz CH-Low, 1 RB



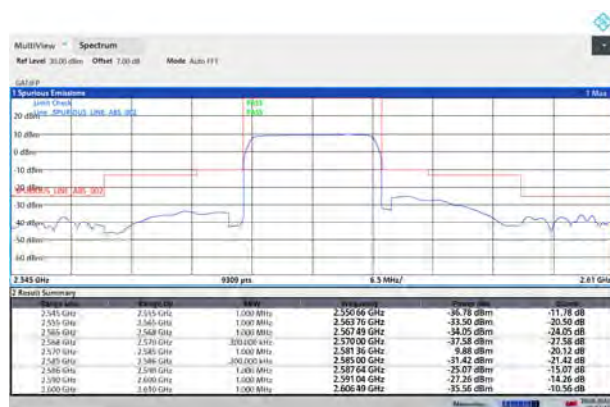
10/18/22 09:02:02Z

## LTE Band 38 QPSK 15MHz CH-High, 1 RB



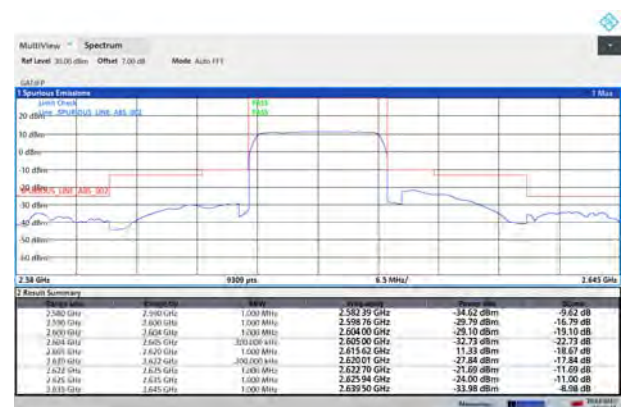
10/18/24 09:02:02Z

## LTE Band 38 QPSK 15MHz CH-Low, 100%RB



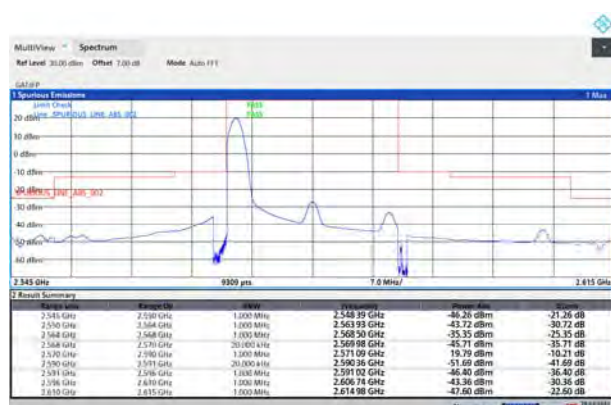
10/18/22 09:02:02Z

## LTE Band 38 QPSK 15MHz CH-High, 100%RB



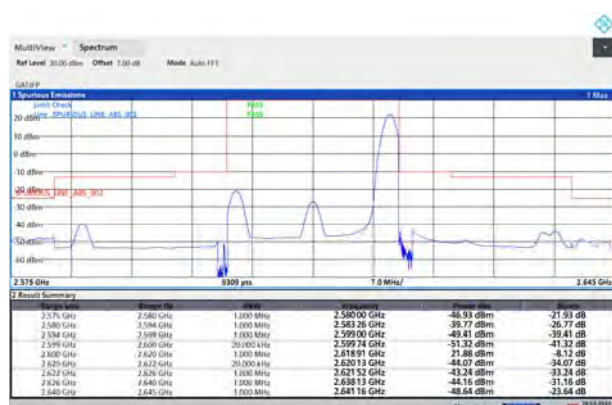
10/18/24 09:02:02Z

## LTE Band 38 QPSK 20MHz CH-Low, 1 RB



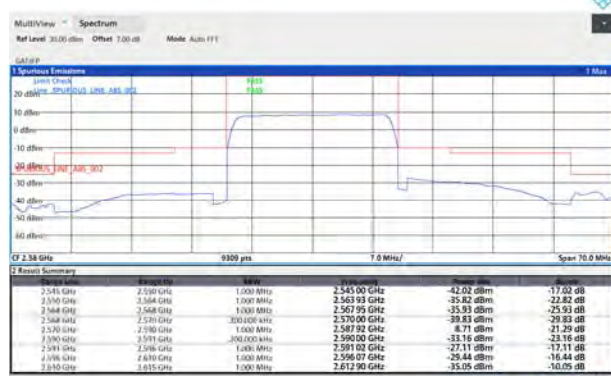
10-31-21 08:55:30

## LTE Band 38 QPSK 20MHz CH-High, 1 RB



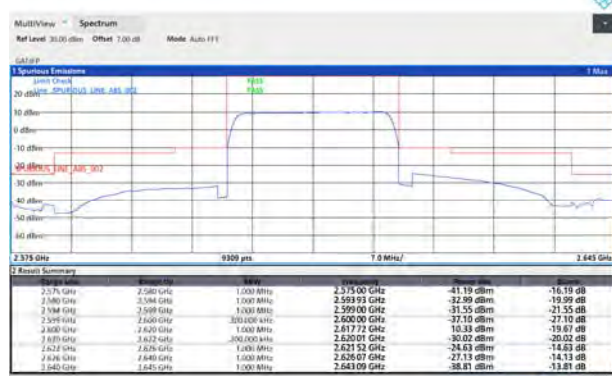
20131126 08:55:3055

## LTE Band 38 QPSK 20MHz CH-Low, 100%RB



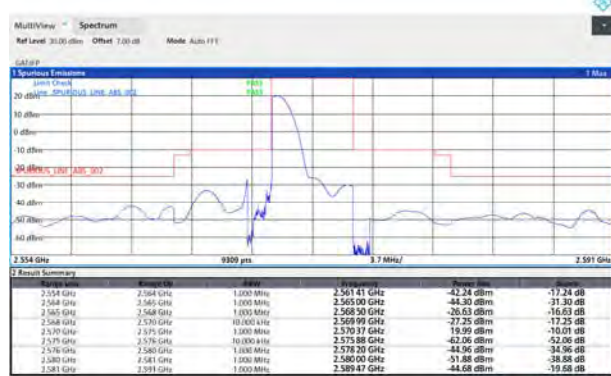
2028-19 28-02-2022

## LTE Band 38 QPSK 20MHz CH-High, 100%RB



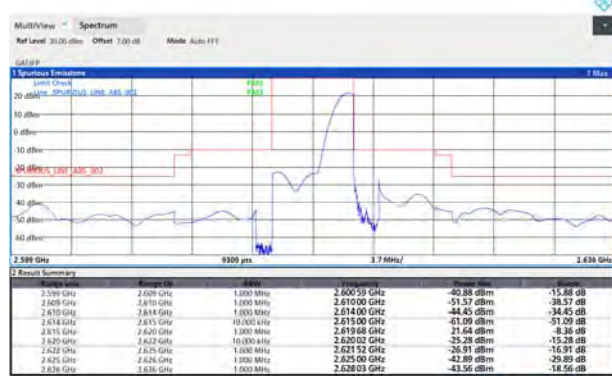
2023/27 28 02 2022

## LTE Band 38 16QAM 5MHz CH-Low, 1 RB



05/12/01 28-03-2012

LTE Band 38 16QAM 5MHz CH-High, 1 RB



05/09/18 20:03:20



## LTE Band 38 16QAM 5MHz CH-Low, 100%RB



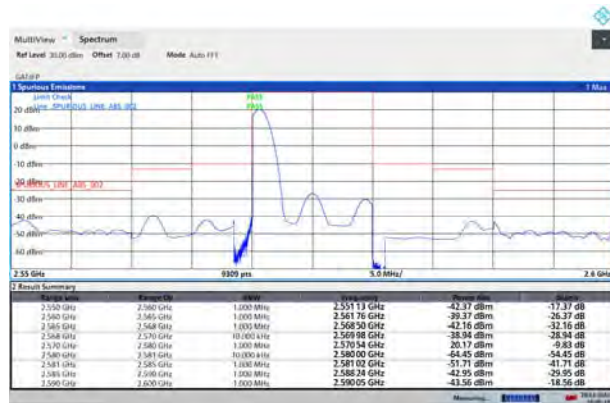
09:44:25 08/02/2022

## LTE Band 38 16QAM 5MHz CH-High, 100%RB



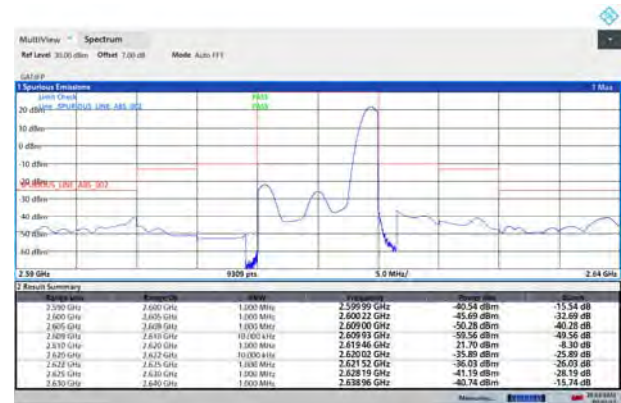
09:48:21 08/02/2022

## LTE Band 38 16QAM 10MHz CH-Low, 1 RB



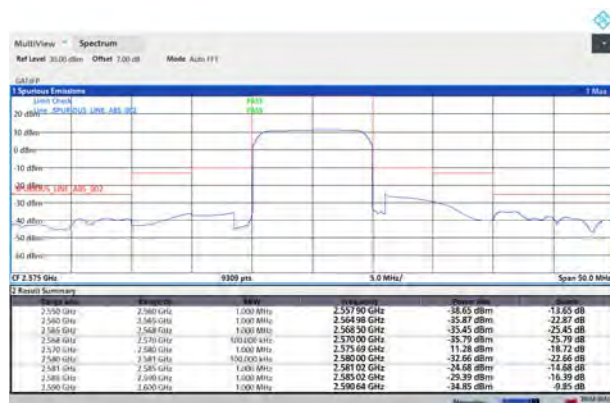
10:58:24 08/02/2022

## LTE Band 38 16QAM 10MHz CH-High, 1 RB



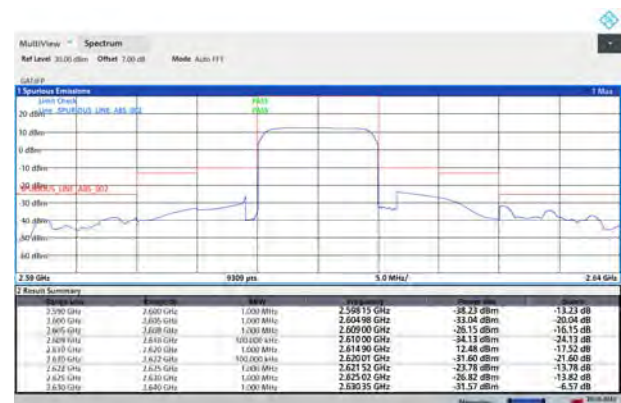
09:58:57 08/02/2022

## LTE Band 38 16QAM 10MHz CH-Low, 100%RB



10:58:43 08/02/2022

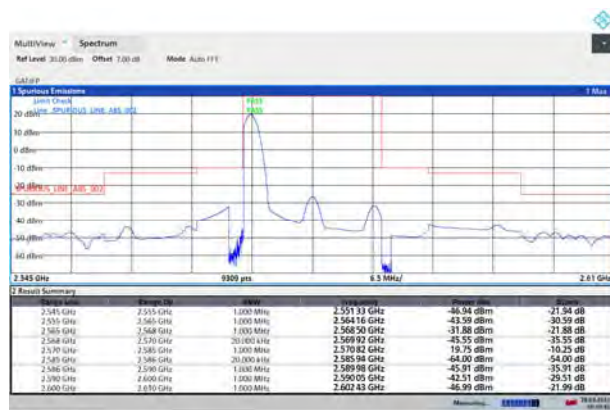
## LTE Band 38 16QAM 10MHz CH-High, 100%RB



09:58:53 08/02/2022

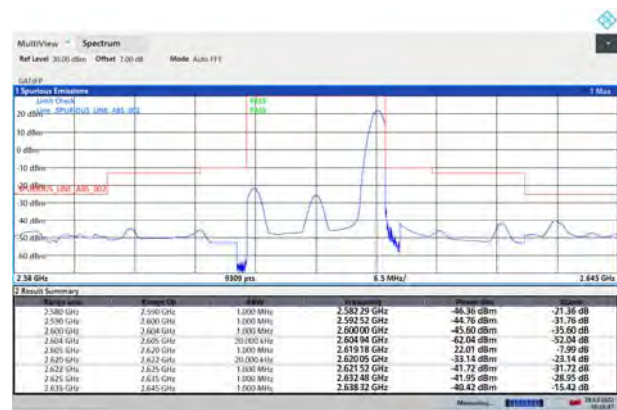


## LTE Band 38 16QAM 15MHz CH-Low, 1 RB



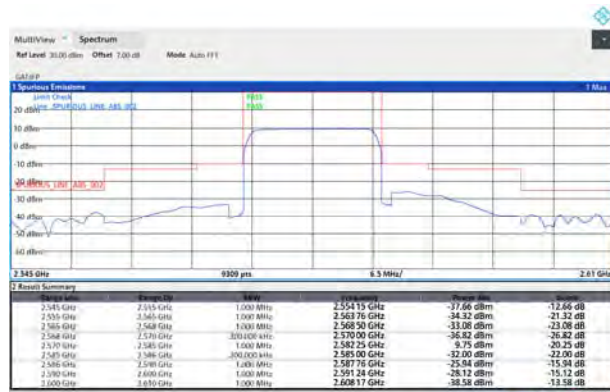
10:18:46 08/02/2022

## LTE Band 38 16QAM 15MHz CH-High, 1 RB



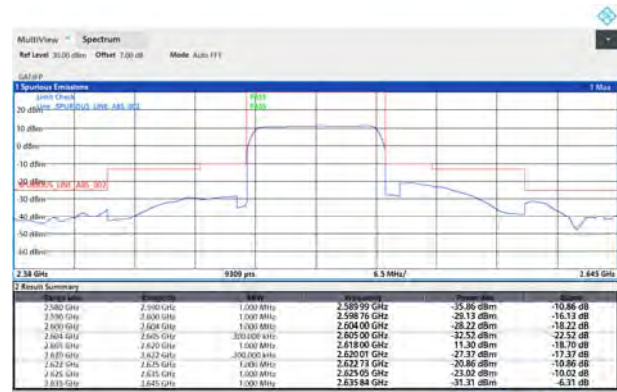
10:18:47 08/02/2022

## LTE Band 38 16QAM 15MHz CH-Low, 100%RB



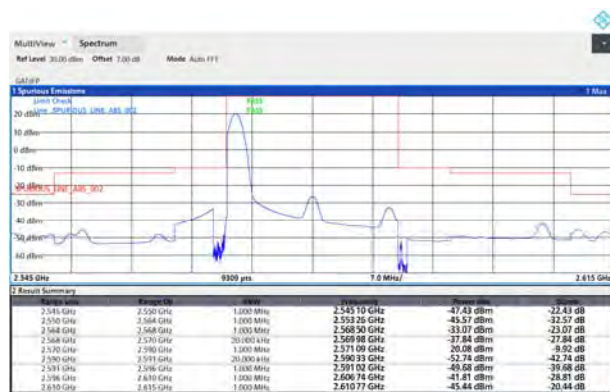
10:18:13 08/02/2022

## LTE Band 38 16QAM 15MHz CH-High, 100%RB



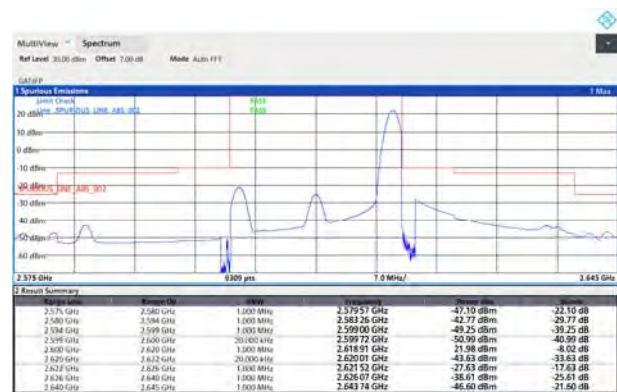
10:18:19 08/02/2022

## LTE Band 38 16QAM 20MHz CH-Low, 1 RB



10:18:34 08/02/2022

## LTE Band 38 16QAM 20MHz CH-High, 1 RB



10:21:44 08/02/2022



## LTE Band 38 16QAM 20MHz CH-Low, 100%RB



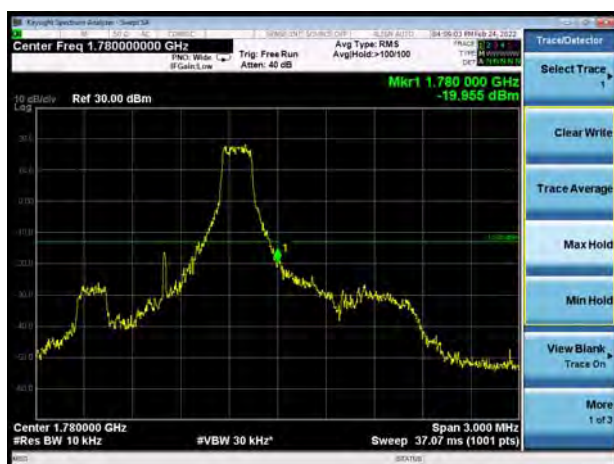
10:28:28 28 02 2022

## LTE Band 38 16QAM 20MHz CH-High, 100%RB

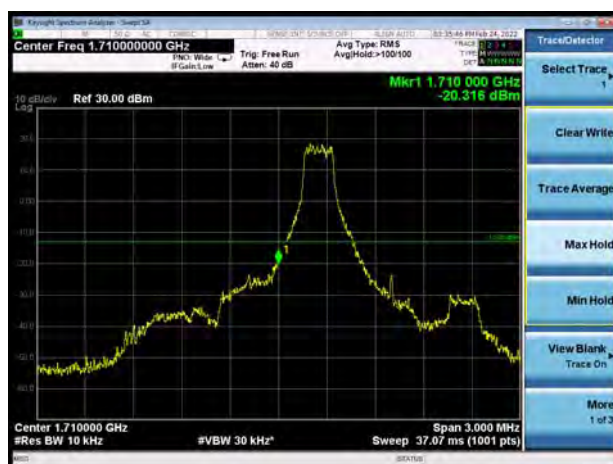


10:28:57 28 02 2022

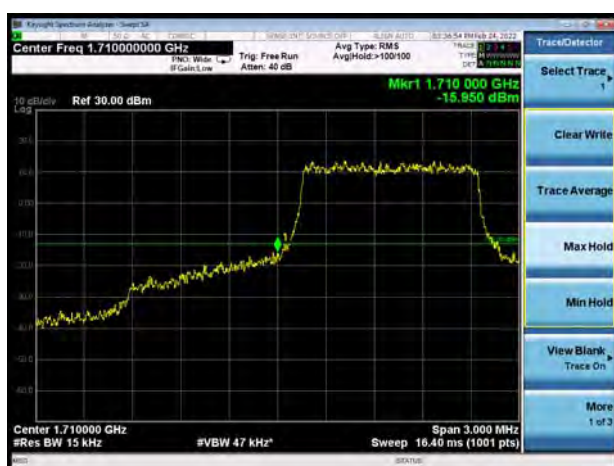
LTE Band 66 QPSK 1.4MHz CH-Low, 1 RB



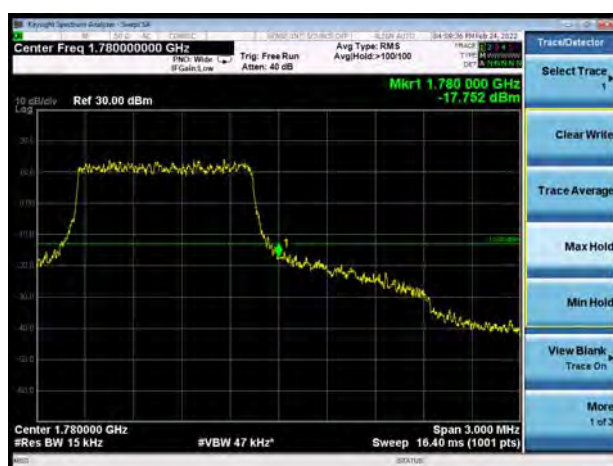
LTE Band 66 QPSK 1.4MHz CH-High, 1 RB



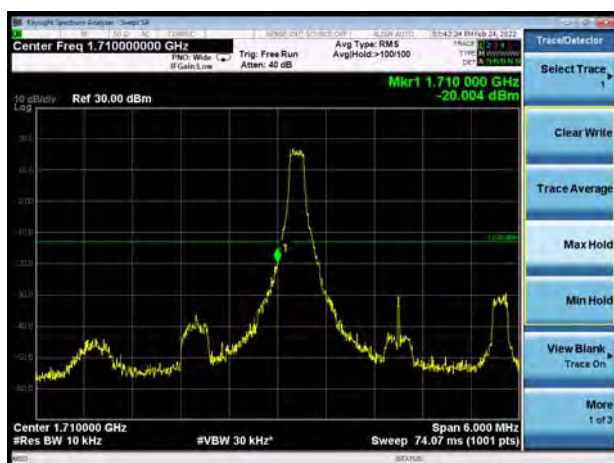
LTE Band 66 QPSK 1.4MHz CH-Low, 100%RB



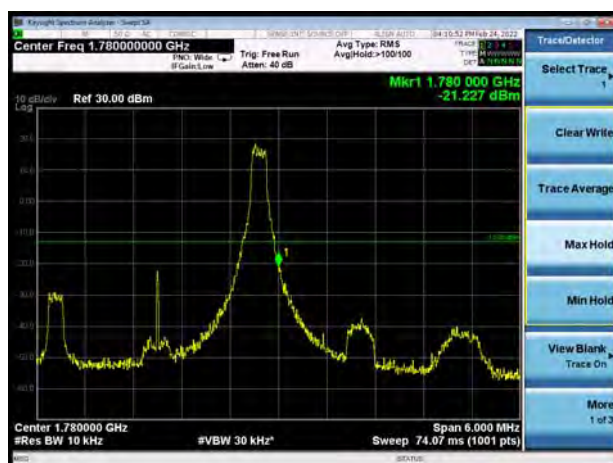
LTE Band 66 QPSK 1.4MHz CH-High, 100%RB



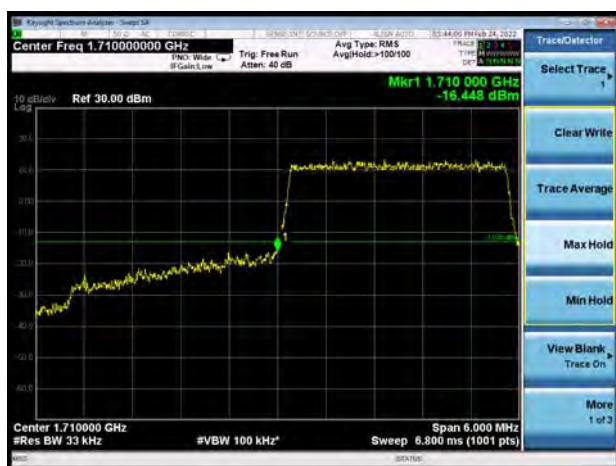
LTE Band 66 QPSK 3MHz CH-Low, 1 RB



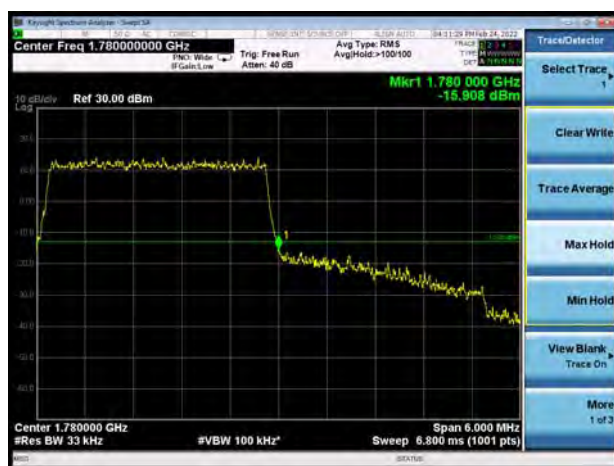
LTE Band 66 QPSK 3MHz CH-High, 1 RB



LTE Band 66 QPSK 3MHz CH-Low, 100%RB



LTE Band 66 QPSK 3MHz CH-High, 100%RB



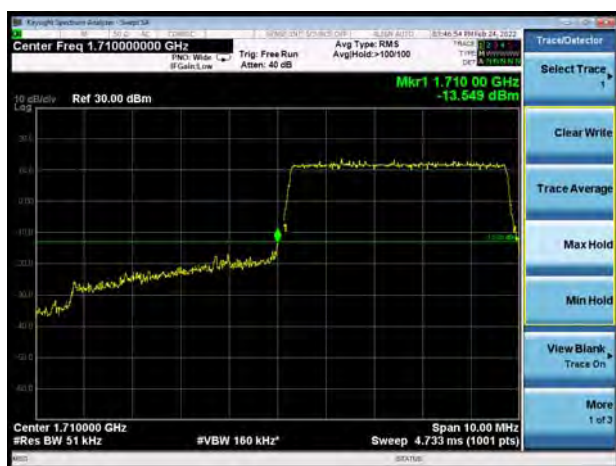
LTE Band 66 QPSK 5MHz CH-Low, 1 RB



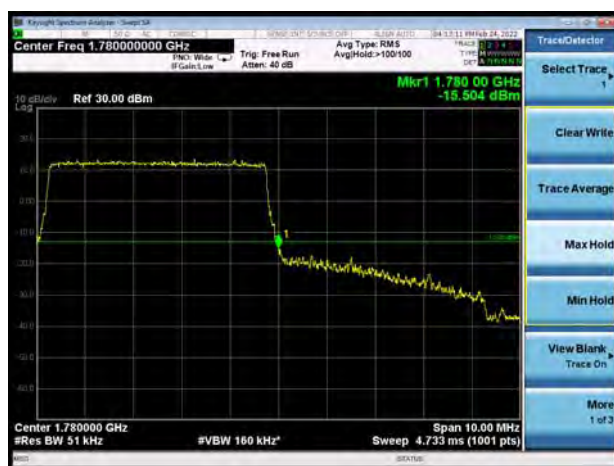
LTE Band 66 QPSK 5MHz CH-High, 1 RB



LTE Band 66 QPSK 5MHz CH-Low, 100%RB

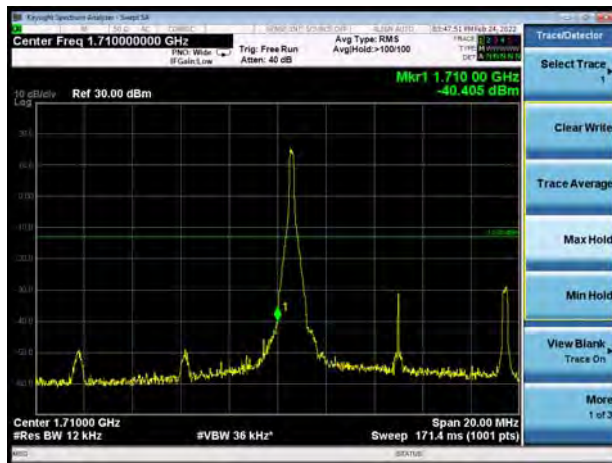


LTE Band 66 QPSK 5MHz CH-High, 100%RB

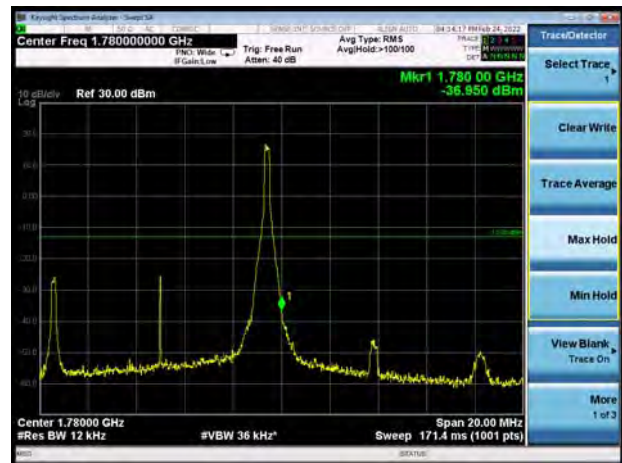




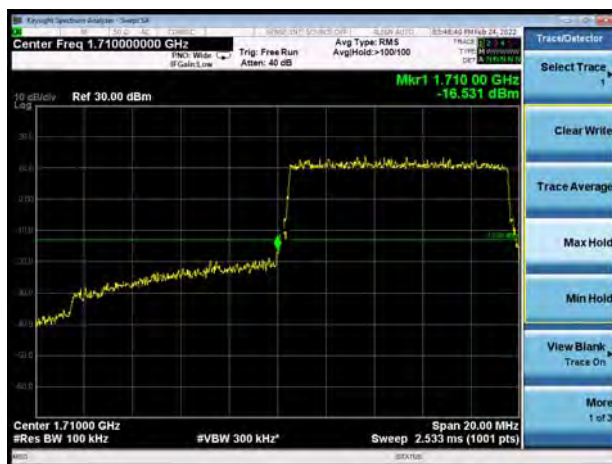
LTE Band 66 QPSK 10MHz CH-Low, 1 RB



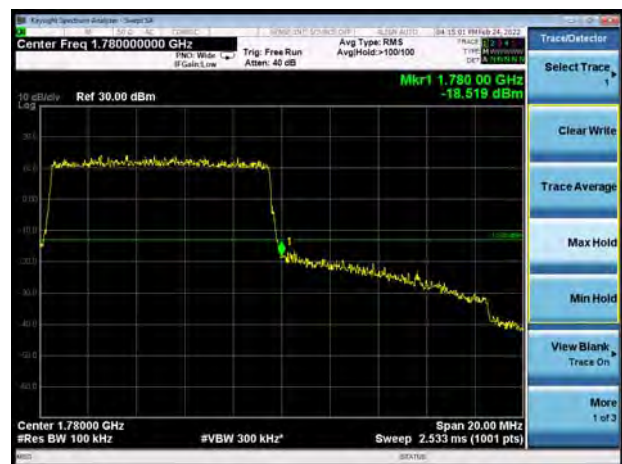
LTE Band 66 QPSK 10MHz CH-High, 1 RB



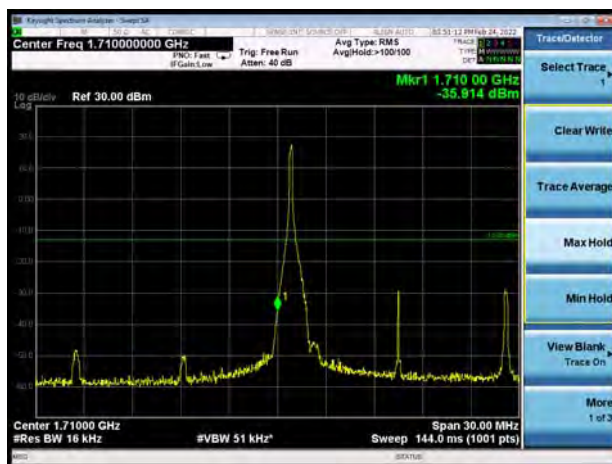
LTE Band 66 QPSK 10MHz CH-Low, 100%RB



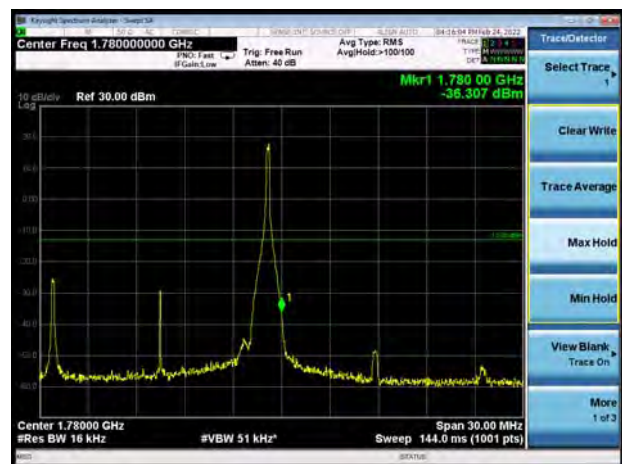
LTE Band 66 QPSK 10MHz CH-High, 100%RB



LTE Band 66 QPSK 15MHz CH-Low, 1 RB



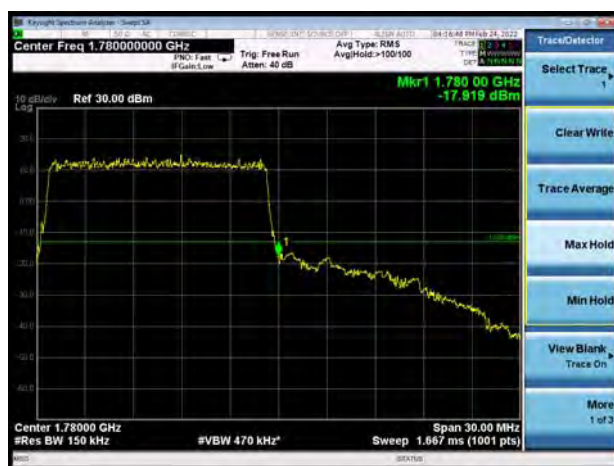
LTE Band 66 QPSK 15MHz CH-High, 1 RB



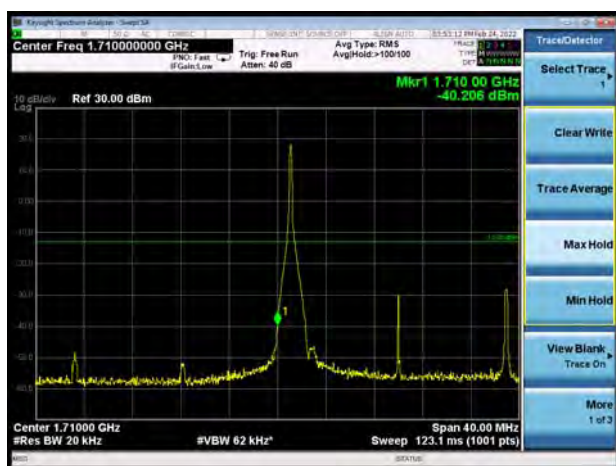
LTE Band 66 QPSK 15MHz CH-Low, 100%RB



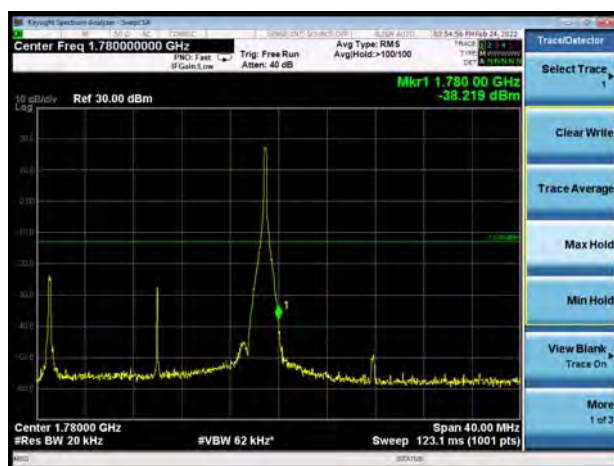
LTE Band 66 QPSK 15MHz CH-High, 100%RB



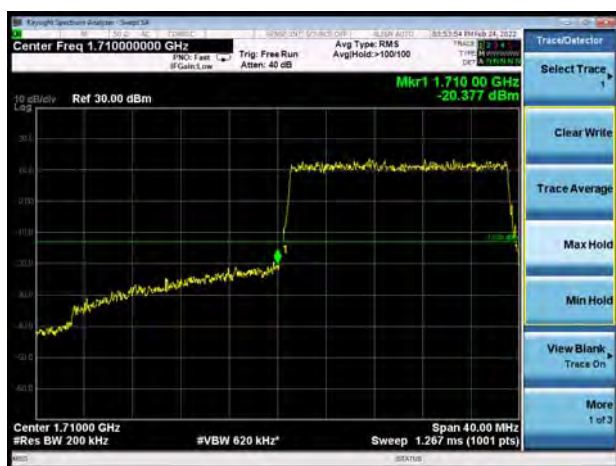
LTE Band 66 QPSK 20MHz CH-Low, 1 RB



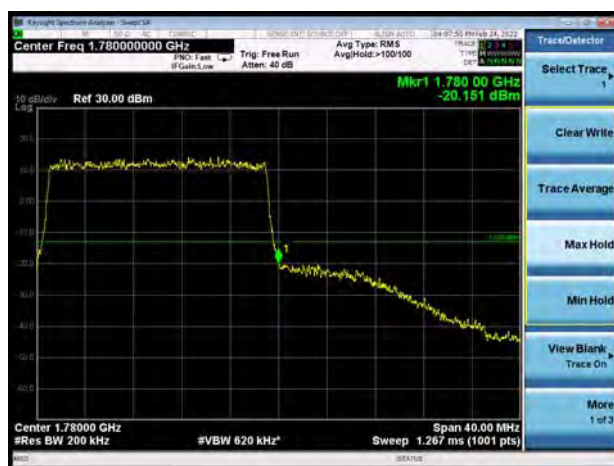
LTE Band 66 QPSK 20MHz CH-High, 1 RB



LTE Band 66 QPSK 20MHz CH-Low, 100%RB



LTE Band 66 QPSK 20MHz CH-High, 100%RB



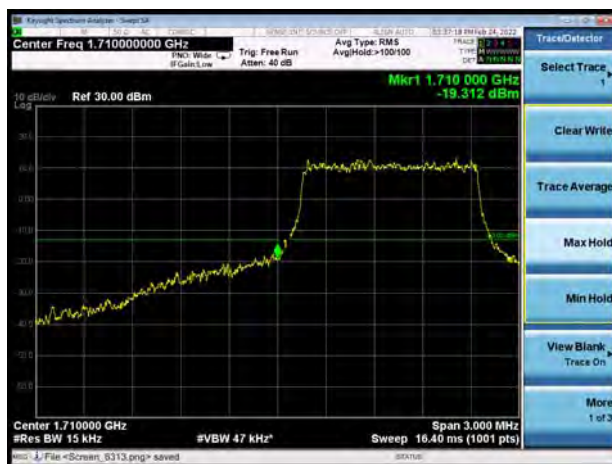
LTE Band 66 16QAM 1.4MHz CH-Low, 1 RB



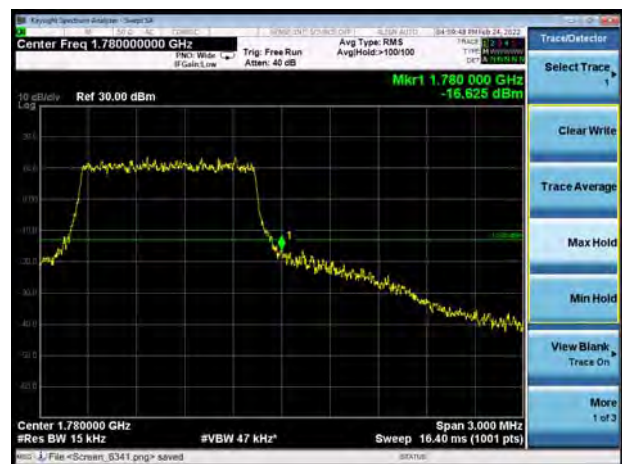
LTE Band 66 16QAM 1.4MHz CH-High, 1 RB



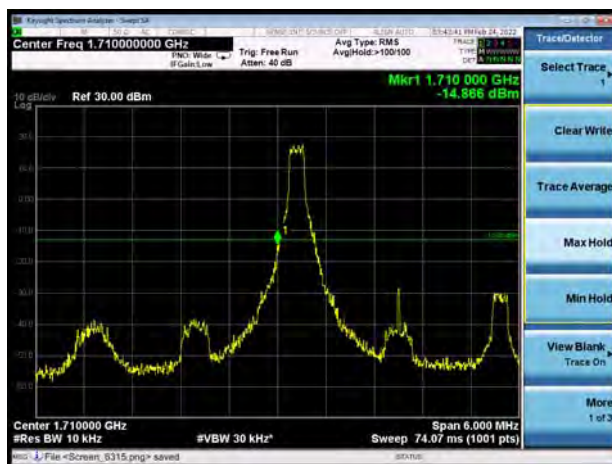
LTE Band 66 16QAM 1.4MHz CH-Low, 100%RB



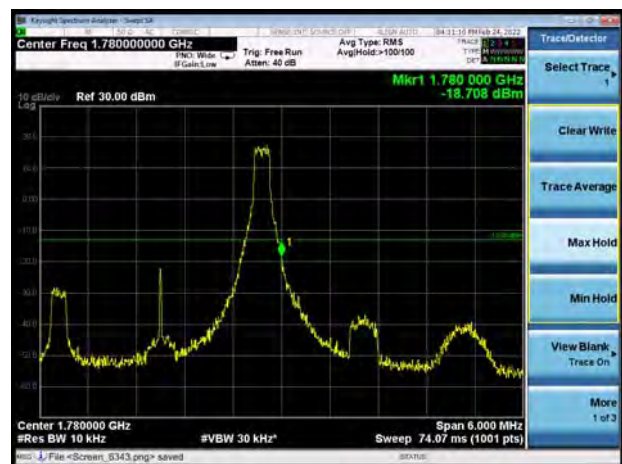
LTE Band 66 16QAM 1.4MHz CH-High, 100%RB



LTE Band 66 16QAM 3MHz CH-Low, 1 RB



LTE Band 66 16QAM 3MHz CH-High, 1 RB



LTE Band 66 16QAM 3MHz CH-Low, 100%RB



LTE Band 66 16QAM 3MHz CH-High, 100%RB



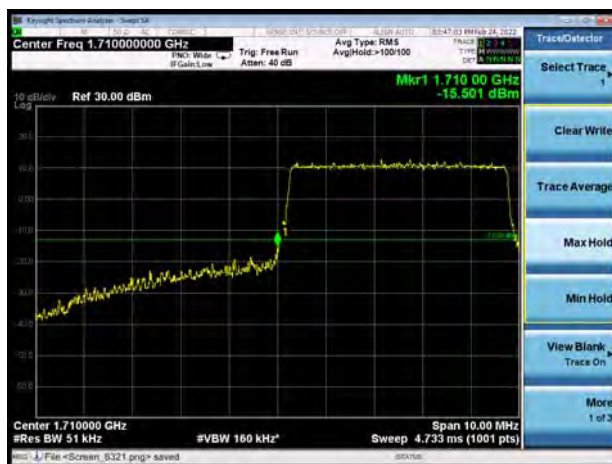
LTE Band 66 16QAM 5MHz CH-Low, 1 RB



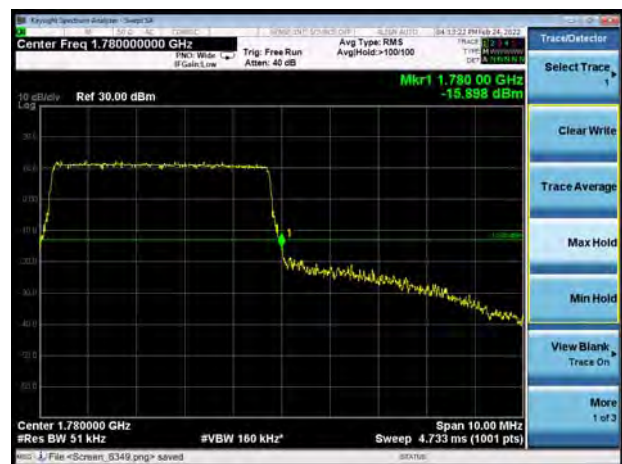
LTE Band 66 16QAM 5MHz CH-High, 1 RB



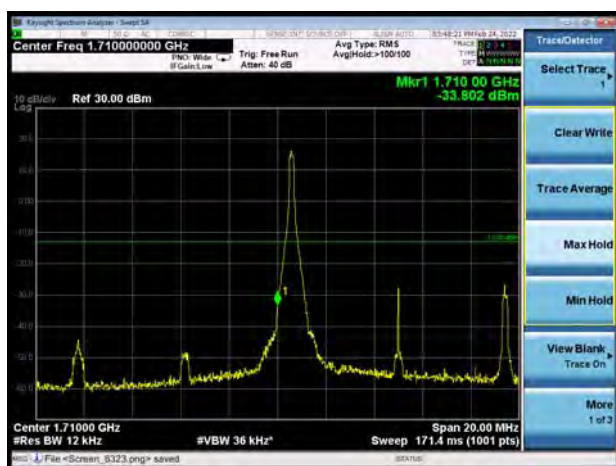
LTE Band 66 16QAM 5MHz CH-Low, 100%RB



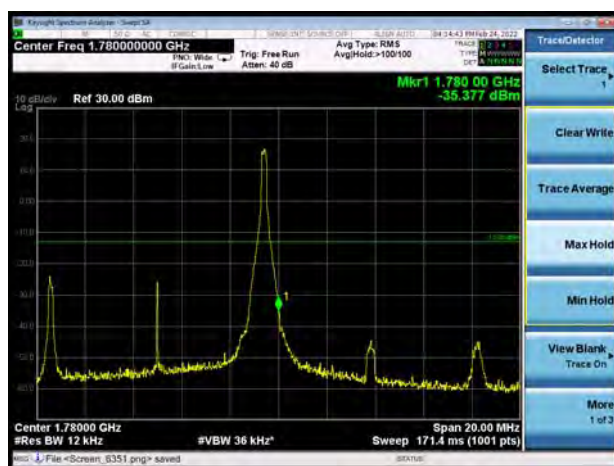
LTE Band 66 16QAM 5MHz CH-High, 100%RB



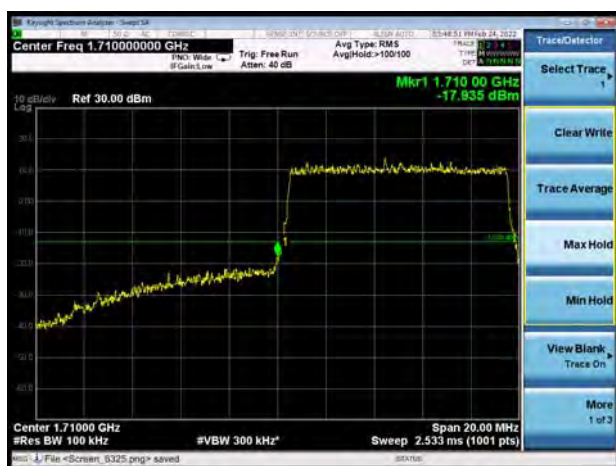
LTE Band 66 16QAM 10MHz CH-Low, 1 RB



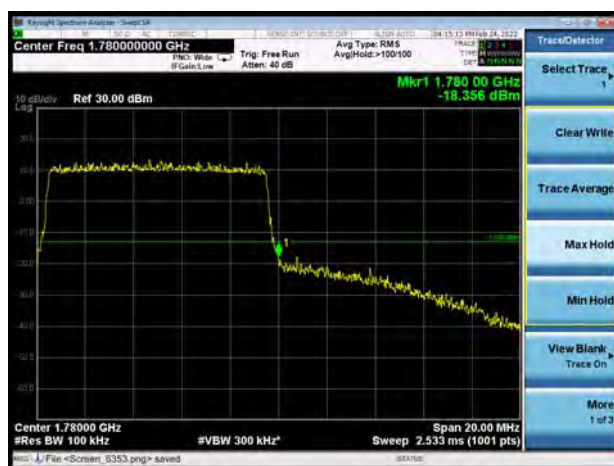
LTE Band 66 16QAM 10MHz CH-High, 1 RB



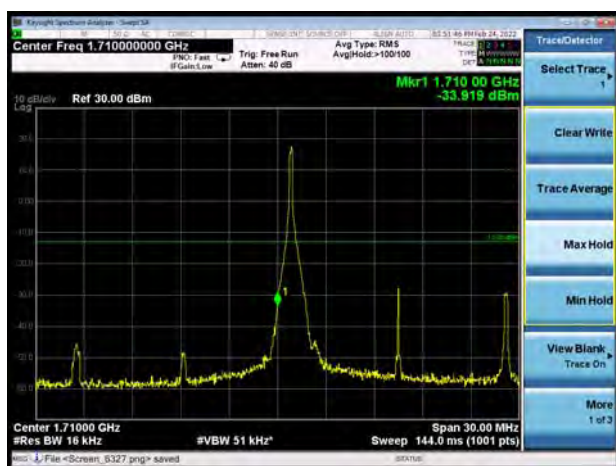
LTE Band 66 16QAM 10MHz CH-Low, 100%RB



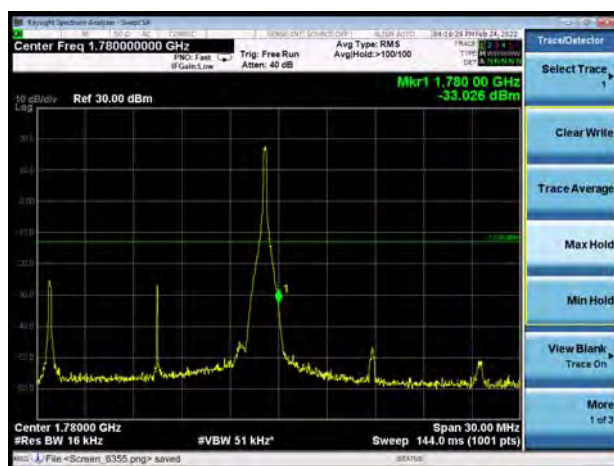
LTE Band 66 16QAM 10MHz CH-High, 100%RB



LTE Band 66 16QAM 15MHz CH-Low, 1 RB



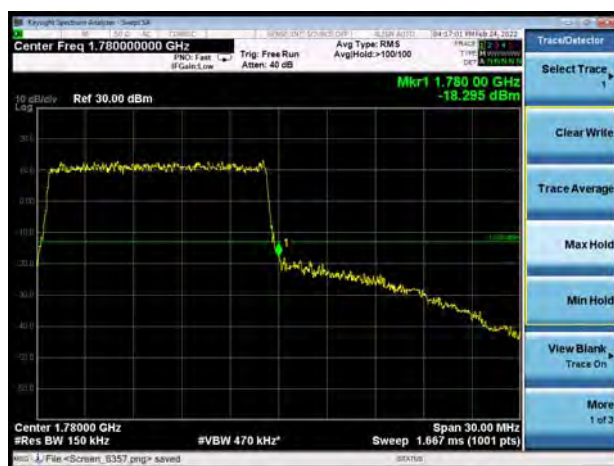
LTE Band 66 16QAM 15MHz CH-High, 1 RB



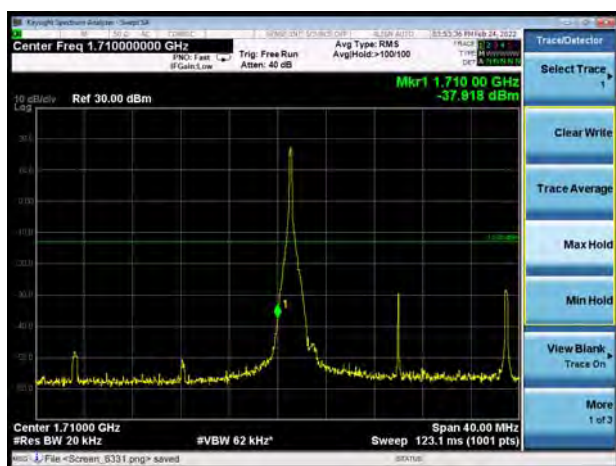
LTE Band 66 16QAM 15MHz CH-Low, 100%RB



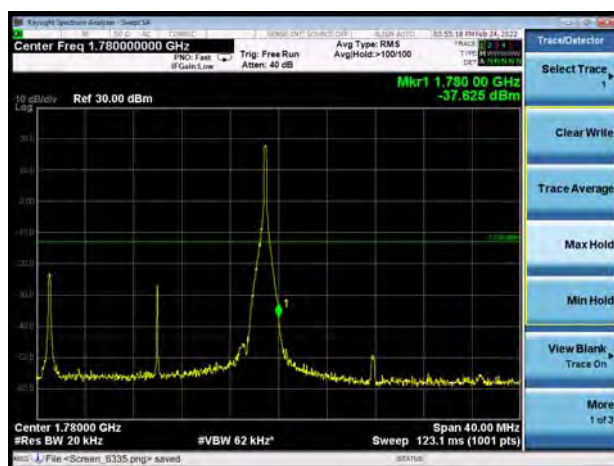
LTE Band 66 16QAM 15MHz CH-High, 100%RB



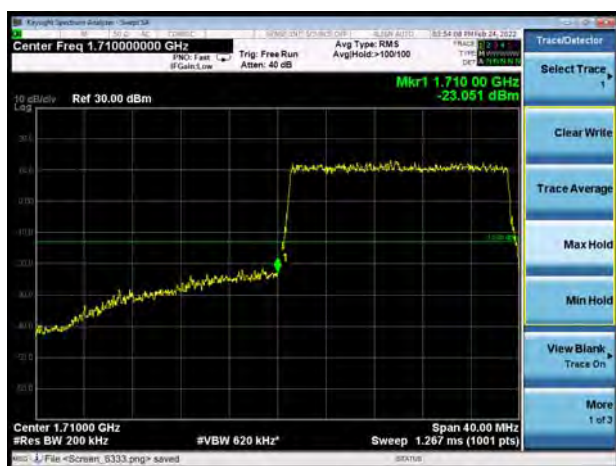
LTE Band 66 16QAM 20MHz CH-Low, 1 RB



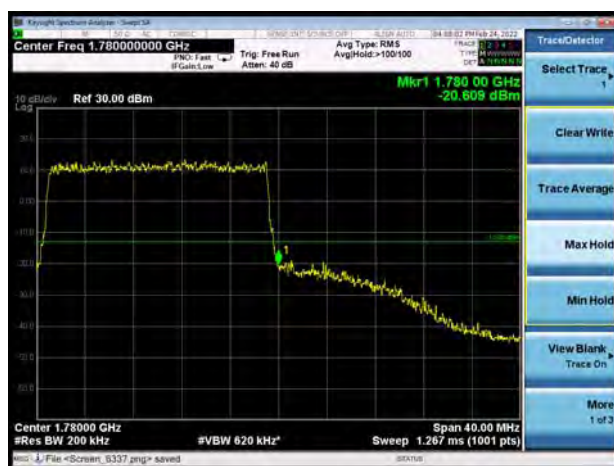
LTE Band 66 16QAM 20MHz CH-High, 1 RB



LTE Band 66 16QAM 20MHz CH-Low, 100%RB



LTE Band 66 16QAM 20MHz CH-High, 100%RB



## 6.4 Peak-to-Average Power Ratio (PAPR)

| WCDMA Band IV | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
|---------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| RMC           | 1312    | 1712.4          | 25.37      | 22.49     | 2.88      | ≤13        | PASS       |
|               | 1413    | 1732.6          | 25.65      | 22.70     | 2.95      | ≤13        | PASS       |
|               | 1513    | 1752.6          | 25.68      | 22.73     | 2.95      | ≤13        | PASS       |

| LTE Band 4 |                 |         |                 |            |           |           |            |            |
|------------|-----------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| Modulation | Bandwidth (MHz) | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
| QPSK       | 1.4             | 19957   | 1710.7          | 26.18      | 21.63     | 4.55      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 26.93      | 21.85     | 5.08      | ≤13        | PASS       |
|            |                 | 20393   | 1754.3          | 26.77      | 21.81     | 4.96      | ≤13        | PASS       |
|            | 3               | 19965   | 1711.5          | 26.32      | 21.72     | 4.60      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 26.96      | 21.87     | 5.09      | ≤13        | PASS       |
|            |                 | 20385   | 1753.5          | 26.92      | 21.90     | 5.02      | ≤13        | PASS       |
|            | 5               | 19975   | 1712.5          | 26.47      | 21.78     | 4.69      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 27.04      | 21.92     | 5.12      | ≤13        | PASS       |
|            |                 | 20375   | 1752.5          | 26.97      | 21.92     | 5.05      | ≤13        | PASS       |
|            | 10              | 20000   | 1715            | 26.67      | 21.83     | 4.84      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 27.03      | 21.95     | 5.08      | ≤13        | PASS       |
|            |                 | 20350   | 1750            | 27.04      | 21.98     | 5.06      | ≤13        | PASS       |
|            | 15              | 20025   | 1717.5          | 27.07      | 21.77     | 5.30      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 27.33      | 21.89     | 5.44      | ≤13        | PASS       |
|            |                 | 20325   | 1747.5          | 27.32      | 21.85     | 5.47      | ≤13        | PASS       |
|            | 20              | 20050   | 1720            | 27.05      | 21.80     | 5.25      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 27.14      | 21.83     | 5.31      | ≤13        | PASS       |
|            |                 | 20300   | 1745            | 27.22      | 21.93     | 5.29      | ≤13        | PASS       |
| 16QAM      | 1.4             | 19957   | 1710.7          | 26.13      | 20.73     | 5.40      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 26.77      | 20.85     | 5.92      | ≤13        | PASS       |
|            |                 | 20393   | 1754.3          | 26.67      | 20.84     | 5.83      | ≤13        | PASS       |
|            | 3               | 19965   | 1711.5          | 26.29      | 20.78     | 5.51      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 26.87      | 20.87     | 6.00      | ≤13        | PASS       |
|            |                 | 20385   | 1753.5          | 26.83      | 20.88     | 5.95      | ≤13        | PASS       |
|            | 5               | 19975   | 1712.5          | 26.35      | 20.81     | 5.54      | ≤13        | PASS       |
|            |                 | 20175   | 1732.5          | 26.88      | 20.95     | 5.93      | ≤13        | PASS       |
|            |                 | 20375   | 1752.5          | 26.82      | 20.93     | 5.89      | ≤13        | PASS       |
|            | 10              | 20000   | 1715            | 26.53      | 20.82     | 5.71      | ≤13        | PASS       |



|  |    |       |        |       |       |      |     |      |
|--|----|-------|--------|-------|-------|------|-----|------|
|  |    | 20175 | 1732.5 | 26.87 | 20.93 | 5.94 | ≤13 | PASS |
|  |    | 20350 | 1750   | 26.86 | 20.94 | 5.92 | ≤13 | PASS |
|  | 15 | 20025 | 1717.5 | 26.78 | 20.79 | 5.99 | ≤13 | PASS |
|  |    | 20175 | 1732.5 | 26.99 | 20.88 | 6.11 | ≤13 | PASS |
|  |    | 20325 | 1747.5 | 27.03 | 20.95 | 6.08 | ≤13 | PASS |
|  | 20 | 20050 | 1720   | 26.86 | 20.83 | 6.03 | ≤13 | PASS |
|  |    | 20175 | 1732.5 | 26.95 | 20.86 | 6.09 | ≤13 | PASS |
|  |    | 20300 | 1745   | 26.98 | 20.95 | 6.03 | ≤13 | PASS |

| LTE Band 7 |                 |         |                 |            |           |           |            |            |
|------------|-----------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| Modulation | Bandwidth (MHz) | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
| QPSK       | 5               | 20775   | 2502.5          | 24.76      | 18.90     | 5.86      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 24.74      | 18.89     | 5.85      | ≤13        | PASS       |
|            |                 | 21425   | 2567.5          | 24.86      | 18.93     | 5.93      | ≤13        | PASS       |
|            | 10              | 20800   | 2505            | 24.52      | 18.81     | 5.71      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 24.52      | 18.89     | 5.63      | ≤13        | PASS       |
|            |                 | 21400   | 2565            | 24.68      | 19.01     | 5.67      | ≤13        | PASS       |
|            | 15              | 20825   | 2507.5          | 24.68      | 18.69     | 5.99      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 24.75      | 18.75     | 6.00      | ≤13        | PASS       |
|            |                 | 21375   | 2562.5          | 24.80      | 18.85     | 5.95      | ≤13        | PASS       |
|            | 20              | 20850   | 2510            | 24.31      | 18.78     | 5.53      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 24.40      | 18.74     | 5.66      | ≤13        | PASS       |
|            |                 | 21350   | 2560            | 24.41      | 18.80     | 5.61      | ≤13        | PASS       |
| 16QAM      | 5               | 20775   | 2502.5          | 25.42      | 18.91     | 6.51      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 25.34      | 18.91     | 6.43      | ≤13        | PASS       |
|            |                 | 21425   | 2567.5          | 25.42      | 18.90     | 6.52      | ≤13        | PASS       |
|            | 10              | 20800   | 2505            | 25.24      | 18.82     | 6.42      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 25.29      | 18.91     | 6.38      | ≤13        | PASS       |
|            |                 | 21400   | 2565            | 25.33      | 18.95     | 6.38      | ≤13        | PASS       |
|            | 15              | 20825   | 2507.5          | 25.05      | 18.66     | 6.39      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 25.21      | 18.78     | 6.43      | ≤13        | PASS       |
|            |                 | 21375   | 2562.5          | 25.13      | 18.76     | 6.37      | ≤13        | PASS       |
|            | 20              | 20850   | 2510            | 25.17      | 18.81     | 6.36      | ≤13        | PASS       |
|            |                 | 21100   | 2535            | 25.11      | 18.70     | 6.41      | ≤13        | PASS       |



|  |  |       |      |       |       |      |     |      |
|--|--|-------|------|-------|-------|------|-----|------|
|  |  | 21350 | 2560 | 25.11 | 18.77 | 6.34 | ≤13 | PASS |
|--|--|-------|------|-------|-------|------|-----|------|

| LTE Band 13 |                 |         |                 |            |           |           |            |            |
|-------------|-----------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| Modulation  | Bandwidth (MHz) | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
| QPSK        | 5               | 23205   | 779.5           | 27.09      | 22.79     | 4.30      | ≤13        | PASS       |
|             |                 | 23230   | 782             | 27.35      | 22.77     | 4.58      | ≤13        | PASS       |
|             |                 | 23255   | 784.5           | 27.51      | 22.75     | 4.76      | ≤13        | PASS       |
|             | 10              | 23230   | 782             | 27.40      | 22.83     | 4.57      | ≤13        | PASS       |
| 16QAM       | 5               | 23205   | 779.5           | 27.00      | 21.84     | 5.16      | ≤13        | PASS       |
|             |                 | 23230   | 782             | 27.15      | 21.73     | 5.42      | ≤13        | PASS       |
|             |                 | 23255   | 784.5           | 27.30      | 21.74     | 5.56      | ≤13        | PASS       |
|             | 10              | 23230   | 782             | 27.24      | 21.83     | 5.41      | ≤13        | PASS       |

| LTE Band 38 |                 |         |                 |            |           |           |            |            |
|-------------|-----------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| Modulation  | Bandwidth (MHz) | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
| QPSK        | 5               | 37775   | 2572.5          | 26.24      | 18.67     | 7.57      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.32      | 18.78     | 7.54      | ≤13        | PASS       |
|             |                 | 38225   | 2617.5          | 26.33      | 18.87     | 7.46      | ≤13        | PASS       |
|             | 10              | 37800   | 2575            | 26.16      | 18.94     | 7.22      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.23      | 19.35     | 6.88      | ≤13        | PASS       |
|             |                 | 38200   | 2615            | 26.18      | 18.81     | 7.37      | ≤13        | PASS       |
|             | 15              | 37825   | 2577.5          | 26.60      | 19.39     | 7.21      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.77      | 19.17     | 7.60      | ≤13        | PASS       |
|             |                 | 38175   | 2612.5          | 26.83      | 19.22     | 7.61      | ≤13        | PASS       |
|             | 20              | 37850   | 2580            | 26.19      | 18.75     | 7.44      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.51      | 19.43     | 7.08      | ≤13        | PASS       |
|             |                 | 38150   | 2610            | 26.66      | 19.46     | 7.20      | ≤13        | PASS       |
| 16QAM       | 5               | 37775   | 2572.5          | 26.60      | 17.61     | 8.99      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.95      | 19.26     | 7.69      | ≤13        | PASS       |
|             |                 | 38225   | 2617.5          | 26.72      | 19.12     | 7.60      | ≤13        | PASS       |
|             | 10              | 37800   | 2575            | 26.64      | 18.02     | 8.62      | ≤13        | PASS       |
|             |                 | 38000   | 2595            | 26.86      | 19.18     | 7.68      | ≤13        | PASS       |
|             |                 | 38200   | 2615            | 26.70      | 19.11     | 7.59      | ≤13        | PASS       |



|  |    |       |        |       |       |      |     |      |
|--|----|-------|--------|-------|-------|------|-----|------|
|  | 15 | 37825 | 2577.5 | 27.02 | 19.35 | 7.67 | ≤13 | PASS |
|  |    | 38000 | 2595   | 27.17 | 18.58 | 8.59 | ≤13 | PASS |
|  |    | 38175 | 2612.5 | 27.03 | 18.12 | 8.91 | ≤13 | PASS |
|  | 20 | 37850 | 2580   | 26.94 | 19.17 | 7.77 | ≤13 | PASS |
|  |    | 38000 | 2595   | 27.00 | 18.67 | 8.33 | ≤13 | PASS |
|  |    | 38150 | 2610   | 27.10 | 18.79 | 8.31 | ≤13 | PASS |

| LTE Band 66 |                 |         |                 |            |           |           |            |            |
|-------------|-----------------|---------|-----------------|------------|-----------|-----------|------------|------------|
| Modulation  | Bandwidth (MHz) | Channel | Frequency (MHz) | Peak (dBm) | Avg (dBm) | PAPR (dB) | Limit (dB) | Conclusion |
| QPSK        | 1.4             | 131979  | 1710.7          | 26.33      | 22.44     | 3.89      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.10      | 22.38     | 4.72      | ≤13        | PASS       |
|             |                 | 132665  | 1779.3          | 26.42      | 22.41     | 4.01      | ≤13        | PASS       |
|             | 3               | 131987  | 1711.5          | 26.55      | 22.56     | 3.99      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.16      | 22.42     | 4.74      | ≤13        | PASS       |
|             |                 | 132657  | 1778.5          | 26.53      | 22.51     | 4.02      | ≤13        | PASS       |
|             | 5               | 131997  | 1712.5          | 26.64      | 22.57     | 4.07      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.26      | 22.47     | 4.79      | ≤13        | PASS       |
|             |                 | 132647  | 1777.5          | 26.61      | 22.57     | 4.04      | ≤13        | PASS       |
|             | 10              | 132022  | 1715            | 26.82      | 22.40     | 4.42      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.21      | 22.42     | 4.79      | ≤13        | PASS       |
|             |                 | 132622  | 1775            | 26.83      | 22.71     | 4.12      | ≤13        | PASS       |
|             | 15              | 132047  | 1717.5          | 27.30      | 22.29     | 5.01      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.54      | 22.29     | 5.25      | ≤13        | PASS       |
|             |                 | 132597  | 1772.5          | 27.23      | 22.47     | 4.76      | ≤13        | PASS       |
|             | 20              | 132072  | 1720            | 27.36      | 22.35     | 5.01      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.33      | 22.23     | 5.10      | ≤13        | PASS       |
|             |                 | 132572  | 1770            | 27.35      | 22.44     | 4.91      | ≤13        | PASS       |
| 16QAM       | 1.4             | 131979  | 1710.7          | 26.24      | 21.37     | 4.87      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 26.97      | 21.43     | 5.54      | ≤13        | PASS       |
|             |                 | 132665  | 1779.3          | 26.38      | 21.56     | 4.82      | ≤13        | PASS       |
|             | 3               | 131987  | 1711.5          | 26.46      | 21.61     | 4.85      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.05      | 21.49     | 5.56      | ≤13        | PASS       |
|             |                 | 132657  | 1778.5          | 26.50      | 21.67     | 4.83      | ≤13        | PASS       |
|             | 5               | 131997  | 1712.5          | 26.51      | 21.55     | 4.96      | ≤13        | PASS       |
|             |                 | 132322  | 1745            | 27.07      | 21.45     | 5.62      | ≤13        | PASS       |
|             |                 | 132647  | 1777.5          | 26.55      | 21.67     | 4.88      | ≤13        | PASS       |
|             | 10              | 132022  | 1715            | 26.68      | 21.41     | 5.27      | ≤13        | PASS       |



|  |    |        |        |       |       |      |     |      |
|--|----|--------|--------|-------|-------|------|-----|------|
|  |    | 132322 | 1745   | 27.09 | 21.47 | 5.62 | ≤13 | PASS |
|  |    | 132622 | 1775   | 26.70 | 21.69 | 5.01 | ≤13 | PASS |
|  | 15 | 132047 | 1717.5 | 26.95 | 21.29 | 5.66 | ≤13 | PASS |
|  |    | 132322 | 1745   | 27.14 | 21.25 | 5.89 | ≤13 | PASS |
|  |    | 132597 | 1772.5 | 26.92 | 21.45 | 5.47 | ≤13 | PASS |
|  | 20 | 132072 | 1720   | 27.13 | 21.35 | 5.78 | ≤13 | PASS |
|  |    | 132322 | 1745   | 27.13 | 21.22 | 5.91 | ≤13 | PASS |
|  |    | 132572 | 1770   | 27.14 | 21.49 | 5.65 | ≤13 | PASS |
|  |    |        |        |       |       |      |     |      |
|  |    |        |        |       |       |      |     |      |

## 6.5 Frequency Stability

| WCDMA Band IV |         |                    |                    |                                 |                                 |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| Temperature   | Voltage | QPSK               | BPSK               | QPSK                            | BPSK                            |         |
| Normal (25℃)  | Normal  | 7.30               | 12.13              | 0.00421                         | 0.00700                         | PASS    |
| Extreme (35℃) |         | 14.32              | 1.99               | 0.00826                         | 0.00115                         | PASS    |
| Extreme (30℃) |         | 12.93              | 4.95               | 0.00746                         | 0.00286                         | PASS    |
| Extreme (20℃) |         | 5.88               | 15.20              | 0.00339                         | 0.00877                         | PASS    |
| Extreme (10℃) |         | 2.28               | 7.48               | 0.00131                         | 0.00432                         | PASS    |
| Extreme (0℃)  |         | 5.06               | 2.78               | 0.00292                         | 0.00161                         | PASS    |
| 25℃           | LV      | 6.53               | 9.50               | 0.00377                         | 0.00549                         | PASS    |
|               | HV      | 13.57              | 3.05               | 0.00783                         | 0.00176                         | PASS    |

| LTE Band 4    |         |                    |                    |                                 |                                 |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 1.4MHz  |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            | Verdict |
| Normal (25℃)  | Normal  | 13.33              | 9.28               | 0.00770                         | 0.00536                         | PASS    |
| Extreme (35℃) |         | 7.91               | 16.07              | 0.00457                         | 0.00928                         | PASS    |
| Extreme (30℃) |         | 2.15               | 13.37              | 0.00124                         | 0.00772                         | PASS    |
| Extreme (20℃) |         | 16.36              | 7.32               | 0.00944                         | 0.00422                         | PASS    |
| Extreme (10℃) |         | 7.59               | 15.52              | 0.00438                         | 0.00896                         | PASS    |
| Extreme (0℃)  |         | 5.45               | 13.17              | 0.00314                         | 0.00760                         | PASS    |
| 25℃           | LV      | 11.43              | 3.97               | 0.00660                         | 0.00229                         | PASS    |
|               | HV      | 5.87               | 12.55              | 0.00339                         | 0.00724                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 3MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            | Verdict |
| Normal (25℃)  | Normal  | 9.11               | 3.89               | 0.00526                         | 0.00225                         | PASS    |
| Extreme (35℃) |         | 13.06              | 1.29               | 0.00754                         | 0.00075                         | PASS    |
| Extreme (30℃) |         | 13.07              | 13.14              | 0.00754                         | 0.00759                         | PASS    |
| Extreme (20℃) |         | 14.47              | 13.77              | 0.00835                         | 0.00795                         | PASS    |
| Extreme (10℃) |         | 8.31               | 1.97               | 0.00480                         | 0.00114                         | PASS    |
| Extreme (0℃)  |         | 2.70               | 13.21              | 0.00156                         | 0.00763                         | PASS    |
| 25℃           | LV      | 7.63               | 15.93              | 0.00440                         | 0.00920                         | PASS    |
|               | HV      | 4.36               | 16.23              | 0.00252                         | 0.00937                         | PASS    |
| Condition     |         | Freq.Error         | Freq.Error         | Frequency                       | Frequency                       | Verdict |



|               |         | (Hz)               | (Hz)               | Stability<br>(ppm)              | Stability<br>(ppm)              |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| BANDWIDTH     | 5MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 9.37               | 6.31               | 0.00541                         | 0.00364                         | PASS    |
| Extreme (35℃) |         | 8.81               | 10.50              | 0.00509                         | 0.00606                         | PASS    |
| Extreme (30℃) |         | 5.54               | 4.56               | 0.00320                         | 0.00263                         | PASS    |
| Extreme (20℃) |         | 1.30               | 10.02              | 0.00075                         | 0.00578                         | PASS    |
| Extreme (10℃) |         | 1.97               | 2.77               | 0.00114                         | 0.00160                         | PASS    |
| Extreme (0℃)  |         | 6.72               | 1.59               | 0.00388                         | 0.00092                         | PASS    |
| 25℃           | LV      | 13.72              | 16.74              | 0.00792                         | 0.00966                         | PASS    |
|               | HV      | 13.89              | 4.81               | 0.00802                         | 0.00278                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 10MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 12.62              | 9.56               | 0.00728                         | 0.00552                         | PASS    |
| Extreme (35℃) |         | 7.96               | 16.33              | 0.00459                         | 0.00942                         | PASS    |
| Extreme (30℃) |         | 16.28              | 3.41               | 0.00940                         | 0.00197                         | PASS    |
| Extreme (20℃) |         | 10.40              | 12.69              | 0.00601                         | 0.00732                         | PASS    |
| Extreme (10℃) |         | 15.39              | 11.67              | 0.00888                         | 0.00673                         | PASS    |
| Extreme (0℃)  |         | 8.52               | 9.66               | 0.00492                         | 0.00558                         | PASS    |
| 25℃           | LV      | 4.79               | 12.69              | 0.00277                         | 0.00732                         | PASS    |
|               | HV      | 8.27               | 2.10               | 0.00478                         | 0.00121                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 15MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 15.95              | 2.65               | 0.00921                         | 0.00153                         | PASS    |
| Extreme (35℃) |         | 9.64               | 10.94              | 0.00557                         | 0.00632                         | PASS    |
| Extreme (30℃) |         | 12.77              | 3.27               | 0.00737                         | 0.00189                         | PASS    |
| Extreme (20℃) |         | 1.46               | 4.78               | 0.00084                         | 0.00276                         | PASS    |
| Extreme (10℃) |         | 6.35               | 6.55               | 0.00366                         | 0.00378                         | PASS    |
| Extreme (0℃)  |         | 11.14              | 7.63               | 0.00643                         | 0.00440                         | PASS    |
| 25℃           | LV      | 9.87               | 13.33              | 0.00570                         | 0.00769                         | PASS    |
|               | HV      | 5.25               | 17.76              | 0.00303                         | 0.01025                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 20MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 9.15               | 11.86              | 0.00528                         | 0.00685                         | PASS    |
| Extreme (35℃) |         | 9.45               | 12.78              | 0.00545                         | 0.00737                         | PASS    |
| Extreme (30℃) |         | 10.85              | 5.96               | 0.00626                         | 0.00344                         | PASS    |
| Extreme (20℃) |         | 16.39              | 4.76               | 0.00946                         | 0.00274                         | PASS    |



|               |    |       |       |         |         |      |
|---------------|----|-------|-------|---------|---------|------|
| Extreme (10℃) |    | 2.22  | 8.90  | 0.00128 | 0.00514 | PASS |
| Extreme (0℃)  |    | 2.55  | 6.66  | 0.00147 | 0.00384 | PASS |
| 25℃           | LV | 13.12 | 3.64  | 0.00757 | 0.00210 | PASS |
|               | HV | 14.19 | 17.52 | 0.00819 | 0.01011 | PASS |

| LTE Band 7    |         |                    |                    |                                 |                                 |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 5MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 15.61              | 5.61               | 0.00616                         | 0.00221                         | PASS    |
| Extreme (35℃) |         | 13.33              | 1.02               | 0.00526                         | 0.00040                         | PASS    |
| Extreme (30℃) |         | 4.56               | 14.15              | 0.00180                         | 0.00558                         | PASS    |
| Extreme (20℃) |         | 13.68              | 7.51               | 0.00540                         | 0.00296                         | PASS    |
| Extreme (10℃) |         | 1.51               | 1.81               | 0.00060                         | 0.00071                         | PASS    |
| Extreme (0℃)  |         | 14.84              | 14.73              | 0.00586                         | 0.00581                         | PASS    |
| 25℃           | LV      | 7.87               | 8.77               | 0.00310                         | 0.00346                         | PASS    |
|               | HV      | 3.51               | 4.11               | 0.00139                         | 0.00162                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 10MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 5.54               | 7.99               | 0.00219                         | 0.00315                         | PASS    |
| Extreme (35℃) |         | 8.87               | 16.29              | 0.00350                         | 0.00642                         | PASS    |
| Extreme (30℃) |         | 4.18               | 4.97               | 0.00165                         | 0.00196                         | PASS    |
| Extreme (20℃) |         | 2.91               | 4.73               | 0.00115                         | 0.00187                         | PASS    |
| Extreme (10℃) |         | 7.67               | 1.37               | 0.00303                         | 0.00054                         | PASS    |
| Extreme (0℃)  |         | 11.61              | 7.10               | 0.00458                         | 0.00280                         | PASS    |
| 25℃           | LV      | 16.14              | 4.06               | 0.00637                         | 0.00160                         | PASS    |
|               | HV      | 10.01              | 5.16               | 0.00395                         | 0.00203                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 15MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 10.40              | 3.47               | 0.00410                         | 0.00137                         | PASS    |
| Extreme (35℃) |         | 10.62              | 1.47               | 0.00419                         | 0.00058                         | PASS    |
| Extreme (30℃) |         | 2.24               | 14.84              | 0.00088                         | 0.00586                         | PASS    |
| Extreme (20℃) |         | 4.72               | 3.31               | 0.00186                         | 0.00130                         | PASS    |
| Extreme (10℃) |         | 5.57               | 11.03              | 0.00220                         | 0.00435                         | PASS    |
| Extreme (0℃)  |         | 1.98               | 16.83              | 0.00078                         | 0.00664                         | PASS    |
| 25℃           | LV      | 4.87               | 12.23              | 0.00192                         | 0.00482                         | PASS    |
|               | HV      | 5.58               | 4.01               | 0.00220                         | 0.00158                         | PASS    |
| Condition     |         | Freq.Error         | Freq.Error         | Frequency                       | Frequency                       | Verdict |



| Condition     |         | (Hz)  | (Hz)  | Stability<br>(ppm) | Stability<br>(ppm) |      |
|---------------|---------|-------|-------|--------------------|--------------------|------|
| BANDWIDTH     | 20MHz   |       |       |                    |                    |      |
| Temperature   | Voltage | 16QAM | QPSK  | 16QAM              | QPSK               |      |
| Normal (25℃)  | Normal  | 6.03  | 13.51 | 0.00238            | 0.00533            | PASS |
| Extreme (35℃) |         | 6.35  | 9.37  | 0.00250            | 0.00370            | PASS |
| Extreme (30℃) |         | 5.06  | 1.25  | 0.00199            | 0.00049            | PASS |
| Extreme (20℃) |         | 3.91  | 13.27 | 0.00154            | 0.00523            | PASS |
| Extreme (10℃) |         | 14.69 | 2.80  | 0.00579            | 0.00110            | PASS |
| Extreme (0℃)  |         | 12.47 | 1.30  | 0.00492            | 0.00051            | PASS |
| 25℃           | LV      | 2.99  | 12.57 | 0.00118            | 0.00496            | PASS |
|               | HV      | 3.09  | 3.33  | 0.00122            | 0.00131            | PASS |

| LTE Band 13   |         |                    |                    |                                 |                                 |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 5MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 16.41              | 12.09              | 0.00647                         | 0.00477                         | PASS    |
| Extreme (35℃) |         | 4.70               | 10.66              | 0.00186                         | 0.00420                         | PASS    |
| Extreme (30℃) |         | 2.13               | 9.91               | 0.00084                         | 0.00391                         | PASS    |
| Extreme (20℃) |         | 5.35               | 14.47              | 0.00211                         | 0.00571                         | PASS    |
| Extreme (10℃) |         | 16.09              | 4.06               | 0.00635                         | 0.00160                         | PASS    |
| Extreme (0℃)  |         | 12.50              | 6.23               | 0.00493                         | 0.00246                         | PASS    |
| 25℃           | LV      | 1.54               | 8.64               | 0.00061                         | 0.00341                         | PASS    |
|               | HV      | 15.75              | 8.45               | 0.00621                         | 0.00333                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 10MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 7.97               | 1.92               | 0.00314                         | 0.00076                         | PASS    |
| Extreme (35℃) |         | 16.85              | 14.83              | 0.00665                         | 0.00585                         | PASS    |
| Extreme (30℃) |         | 6.18               | 11.33              | 0.00244                         | 0.00447                         | PASS    |
| Extreme (20℃) |         | 5.50               | 15.44              | 0.00217                         | 0.00609                         | PASS    |
| Extreme (10℃) |         | 8.54               | 1.28               | 0.00337                         | 0.00050                         | PASS    |
| Extreme (0℃)  |         | 9.92               | 11.88              | 0.00391                         | 0.00469                         | PASS    |
| 25℃           | LV      | 12.76              | 1.37               | 0.00503                         | 0.00054                         | PASS    |
|               | HV      | 3.54               | 12.53              | 0.00140                         | 0.00494                         | PASS    |

| LTE Band 38 |         |                    |                    |                                 |                                 |         |
|-------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition   |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH   | 5MHz    |                    |                    |                                 |                                 |         |
| Temperature | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |



|               |         |                 |                 |                           |                           |         |
|---------------|---------|-----------------|-----------------|---------------------------|---------------------------|---------|
| Normal (25℃)  | Normal  | 1.94            | 11.21           | 0.00075                   | 0.00432                   | PASS    |
| Extreme (35℃) |         | 3.64            | 1.53            | 0.00140                   | 0.00059                   | PASS    |
| Extreme (30℃) |         | 15.07           | 16.43           | 0.00581                   | 0.00633                   | PASS    |
| Extreme (20℃) |         | 6.69            | 12.42           | 0.00258                   | 0.00479                   | PASS    |
| Extreme (10℃) |         | 16.63           | 16.01           | 0.00641                   | 0.00617                   | PASS    |
| Extreme (0℃)  |         | 4.20            | 1.54            | 0.00162                   | 0.00059                   | PASS    |
| 25℃           | LV      | 15.92           | 15.60           | 0.00614                   | 0.00601                   | PASS    |
|               | HV      | 6.35            | 5.95            | 0.00245                   | 0.00229                   | PASS    |
| Condition     |         | Freq.Error (Hz) | Freq.Error (Hz) | Frequency Stability (ppm) | Frequency Stability (ppm) | Verdict |
| BANDWIDTH     | 10MHz   |                 |                 |                           |                           |         |
| Temperature   | Voltage | 16QAM           | QPSK            | 16QAM                     | QPSK                      |         |
| Normal (25℃)  | Normal  | 11.82           | 1.49            | 0.00455                   | 0.00057                   | PASS    |
| Extreme (35℃) |         | 15.20           | 11.11           | 0.00586                   | 0.00428                   | PASS    |
| Extreme (30℃) |         | 10.58           | 16.25           | 0.00408                   | 0.00626                   | PASS    |
| Extreme (20℃) |         | 13.80           | 7.45            | 0.00532                   | 0.00287                   | PASS    |
| Extreme (10℃) |         | 12.61           | 14.65           | 0.00486                   | 0.00564                   | PASS    |
| Extreme (0℃)  |         | 10.19           | 17.81           | 0.00393                   | 0.00686                   | PASS    |
| 25℃           | LV      | 11.25           | 6.68            | 0.00434                   | 0.00257                   | PASS    |
|               | HV      | 12.10           | 10.23           | 0.00466                   | 0.00394                   | PASS    |
| Condition     |         | Freq.Error (Hz) | Freq.Error (Hz) | Frequency Stability (ppm) | Frequency Stability (ppm) | Verdict |
| BANDWIDTH     | 15MHz   |                 |                 |                           |                           |         |
| Temperature   | Voltage | 16QAM           | QPSK            | 16QAM                     | QPSK                      |         |
| Normal (25℃)  | Normal  | 14.77           | 3.69            | 0.00569                   | 0.00142                   | PASS    |
| Extreme (35℃) |         | 7.50            | 17.01           | 0.00289                   | 0.00656                   | PASS    |
| Extreme (30℃) |         | 11.99           | 2.14            | 0.00462                   | 0.00082                   | PASS    |
| Extreme (20℃) |         | 9.51            | 4.25            | 0.00367                   | 0.00164                   | PASS    |
| Extreme (10℃) |         | 7.98            | 12.20           | 0.00307                   | 0.00470                   | PASS    |
| Extreme (0℃)  |         | 3.40            | 4.66            | 0.00131                   | 0.00179                   | PASS    |
| 25℃           | LV      | 16.57           | 3.42            | 0.00638                   | 0.00132                   | PASS    |
|               | HV      | 9.01            | 6.14            | 0.00347                   | 0.00237                   | PASS    |
| Condition     |         | Freq.Error (Hz) | Freq.Error (Hz) | Frequency Stability (ppm) | Frequency Stability (ppm) | Verdict |
| BANDWIDTH     | 20MHz   |                 |                 |                           |                           |         |
| Temperature   | Voltage | 16QAM           | QPSK            | 16QAM                     | QPSK                      |         |
| Normal (25℃)  | Normal  | 12.00           | 10.70           | 0.00462                   | 0.00412                   | PASS    |
| Extreme (35℃) |         | 9.00            | 7.58            | 0.00347                   | 0.00292                   | PASS    |
| Extreme (30℃) |         | 11.00           | 14.13           | 0.00424                   | 0.00544                   | PASS    |
| Extreme (20℃) |         | 14.00           | 10.38           | 0.00539                   | 0.00400                   | PASS    |
| Extreme (10℃) |         | 6.00            | 5.00            | 0.00231                   | 0.00193                   | PASS    |
| Extreme (0℃)  |         | 5.00            | 8.13            | 0.00193                   | 0.00313                   | PASS    |
| 25℃           | LV      | 3.00            | 1.49            | 0.00116                   | 0.00057                   | PASS    |



|  |    |       |       |         |         |      |
|--|----|-------|-------|---------|---------|------|
|  | HV | 17.00 | 14.30 | 0.00655 | 0.00551 | PASS |
|--|----|-------|-------|---------|---------|------|

| LTE Band 66   |         |                    |                    |                                 |                                 |         |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 1.4MHz  |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 13.32              | 11.32              | 0.00763                         | 0.00649                         | PASS    |
| Extreme (35℃) |         | 17.77              | 5.91               | 0.01019                         | 0.00339                         | PASS    |
| Extreme (30℃) |         | 17.98              | 6.72               | 0.01030                         | 0.00385                         | PASS    |
| Extreme (20℃) |         | 3.07               | 8.16               | 0.00176                         | 0.00468                         | PASS    |
| Extreme (10℃) |         | 10.38              | 13.88              | 0.00595                         | 0.00796                         | PASS    |
| Extreme (0℃)  |         | 12.57              | 10.56              | 0.00721                         | 0.00605                         | PASS    |
| 25℃           | LV      | 11.07              | 7.79               | 0.00634                         | 0.00446                         | PASS    |
|               | HV      | 4.33               | 12.29              | 0.00248                         | 0.00704                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 3MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 15.84              | 4.65               | 0.00908                         | 0.00267                         | PASS    |
| Extreme (35℃) |         | 1.00               | 13.71              | 0.00057                         | 0.00786                         | PASS    |
| Extreme (30℃) |         | 2.92               | 12.46              | 0.00167                         | 0.00714                         | PASS    |
| Extreme (20℃) |         | 17.63              | 15.68              | 0.01010                         | 0.00899                         | PASS    |
| Extreme (10℃) |         | 4.92               | 13.06              | 0.00282                         | 0.00749                         | PASS    |
| Extreme (0℃)  |         | 13.30              | 4.83               | 0.00762                         | 0.00277                         | PASS    |
| 25℃           | LV      | 17.20              | 12.52              | 0.00986                         | 0.00718                         | PASS    |
|               | HV      | 17.28              | 8.65               | 0.00990                         | 0.00496                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 5MHz    |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 15.39              | 12.17              | 0.00882                         | 0.00698                         | PASS    |
| Extreme (35℃) |         | 12.86              | 4.52               | 0.00737                         | 0.00259                         | PASS    |
| Extreme (30℃) |         | 9.20               | 1.82               | 0.00527                         | 0.00104                         | PASS    |
| Extreme (20℃) |         | 9.77               | 11.80              | 0.00560                         | 0.00676                         | PASS    |
| Extreme (10℃) |         | 4.72               | 11.22              | 0.00271                         | 0.00643                         | PASS    |
| Extreme (0℃)  |         | 13.93              | 8.34               | 0.00798                         | 0.00478                         | PASS    |
| 25℃           | LV      | 4.38               | 11.13              | 0.00251                         | 0.00638                         | PASS    |
|               | HV      | 3.87               | 10.15              | 0.00222                         | 0.00581                         | PASS    |

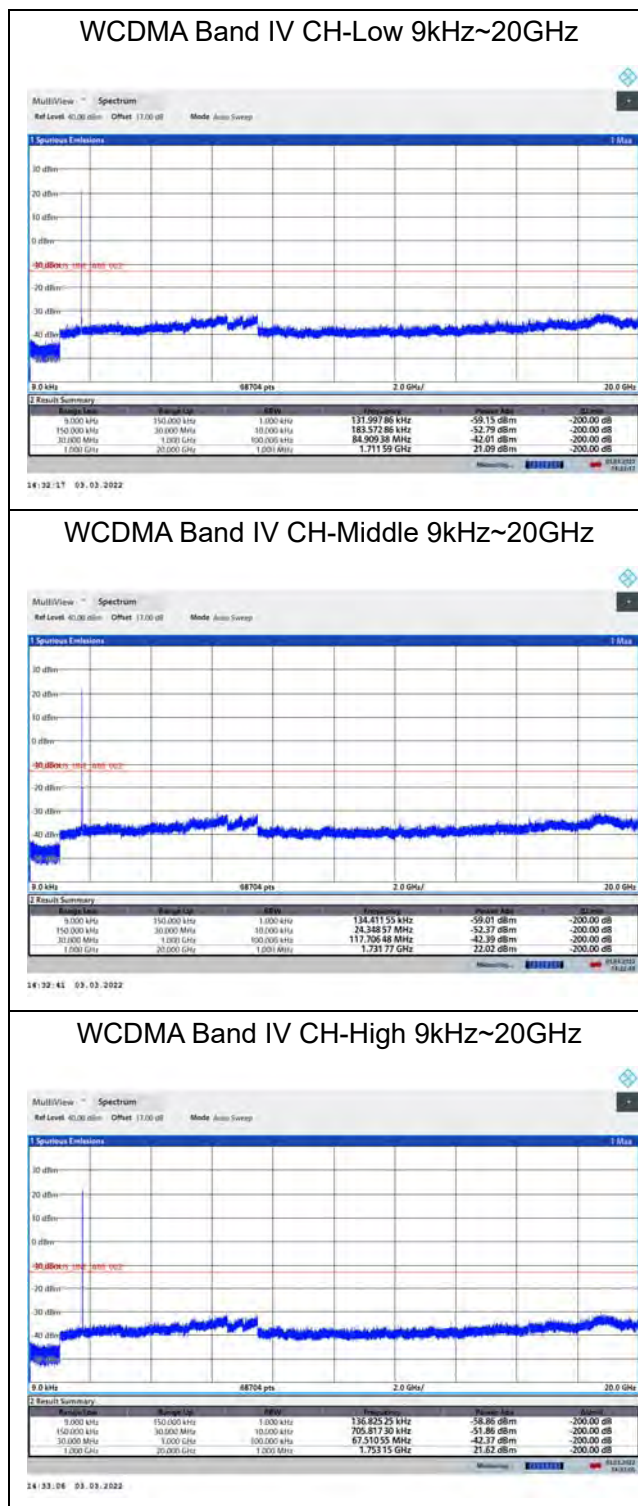


| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
|---------------|---------|--------------------|--------------------|---------------------------------|---------------------------------|---------|
| BANDWIDTH     | 10MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 12.88              | 12.41              | 0.00738                         | 0.00711                         | PASS    |
| Extreme (35℃) |         | 16.02              | 10.27              | 0.00918                         | 0.00589                         | PASS    |
| Extreme (30℃) |         | 8.24               | 3.34               | 0.00472                         | 0.00191                         | PASS    |
| Extreme (20℃) |         | 9.67               | 11.55              | 0.00554                         | 0.00662                         | PASS    |
| Extreme (10℃) |         | 4.79               | 10.59              | 0.00275                         | 0.00607                         | PASS    |
| Extreme (0℃)  |         | 15.81              | 8.97               | 0.00906                         | 0.00514                         | PASS    |
| 25℃           | LV      | 8.48               | 7.05               | 0.00486                         | 0.00404                         | PASS    |
|               | HV      | 2.87               | 6.48               | 0.00165                         | 0.00372                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 15MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 10.32              | 14.67              | 0.00591                         | 0.00841                         | PASS    |
| Extreme (35℃) |         | 2.67               | 7.34               | 0.00153                         | 0.00421                         | PASS    |
| Extreme (30℃) |         | 8.91               | 1.67               | 0.00510                         | 0.00095                         | PASS    |
| Extreme (20℃) |         | 8.48               | 13.57              | 0.00486                         | 0.00778                         | PASS    |
| Extreme (10℃) |         | 7.19               | 3.48               | 0.00412                         | 0.00199                         | PASS    |
| Extreme (0℃)  |         | 4.10               | 1.01               | 0.00235                         | 0.00058                         | PASS    |
| 25℃           | LV      | 17.09              | 2.36               | 0.00980                         | 0.00135                         | PASS    |
|               | HV      | 2.79               | 4.21               | 0.00160                         | 0.00241                         | PASS    |
| Condition     |         | Freq.Error<br>(Hz) | Freq.Error<br>(Hz) | Frequency<br>Stability<br>(ppm) | Frequency<br>Stability<br>(ppm) | Verdict |
| BANDWIDTH     | 20MHz   |                    |                    |                                 |                                 |         |
| Temperature   | Voltage | 16QAM              | QPSK               | 16QAM                           | QPSK                            |         |
| Normal (25℃)  | Normal  | 2.00               | 17.15              | 0.00115                         | 0.00983                         | PASS    |
| Extreme (35℃) |         | 9.00               | 2.22               | 0.00516                         | 0.00127                         | PASS    |
| Extreme (30℃) |         | 4.00               | 15.29              | 0.00229                         | 0.00876                         | PASS    |
| Extreme (20℃) |         | 15.00              | 8.80               | 0.00860                         | 0.00504                         | PASS    |
| Extreme (10℃) |         | 17.00              | 13.31              | 0.00974                         | 0.00763                         | PASS    |
| Extreme (0℃)  |         | 3.00               | 2.82               | 0.00172                         | 0.00162                         | PASS    |
| 25℃           | LV      | 17.00              | 2.27               | 0.00974                         | 0.00130                         | PASS    |
|               | HV      | 10.00              | 9.97               | 0.00573                         | 0.00571                         | PASS    |

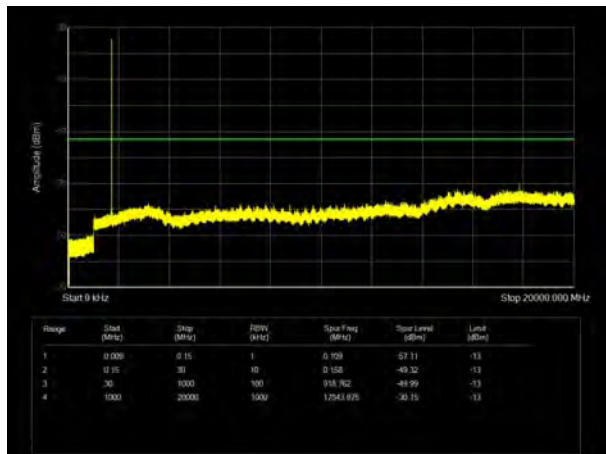
## 6.6 Spurious Emissions at Antenna Terminals

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

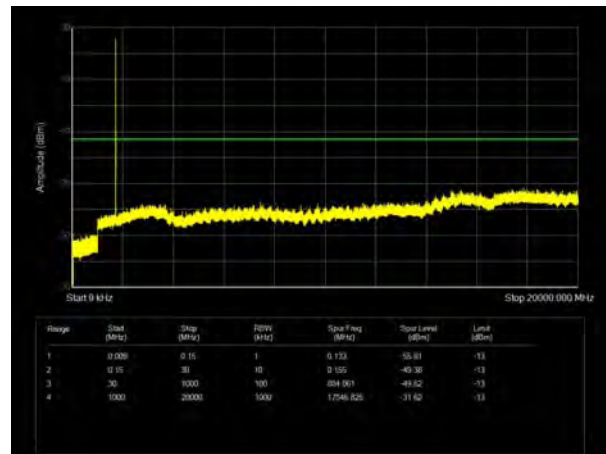
The signal beyond the limit is carrier.



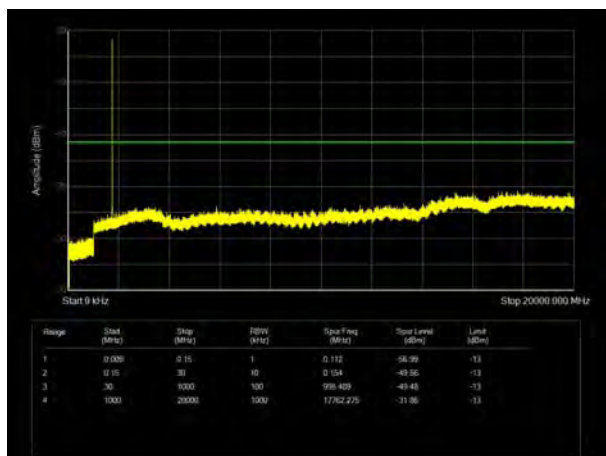
LTE Band 4 1.4MHz CH-Low 9kHz~20GHz



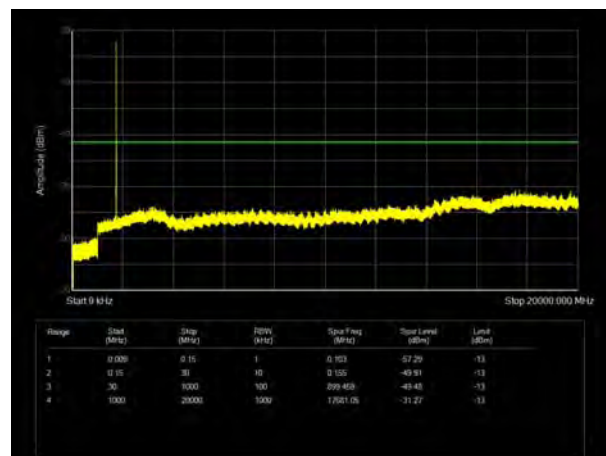
LTE Band 4 3MHz CH- Low 9kHz~20GHz



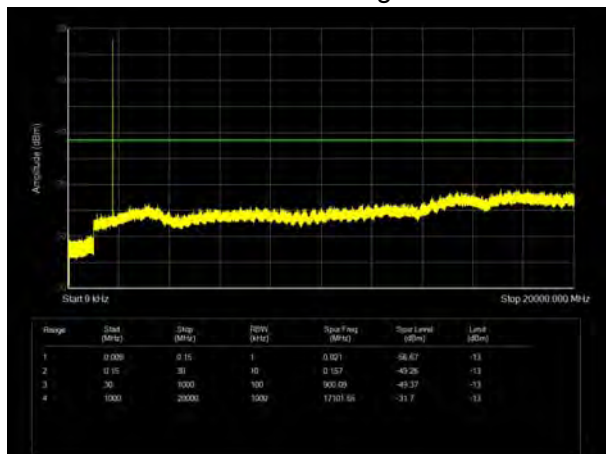
LTE Band 4 1.4MHz CH- Middle 9kHz~20GHz



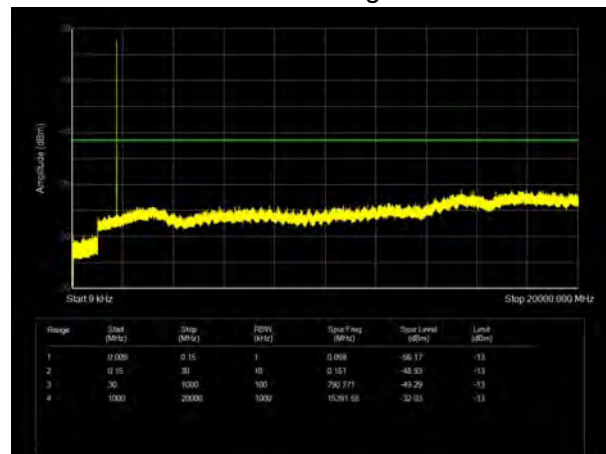
LTE Band 4 3MHz CH- Middle 9kHz~20GHz



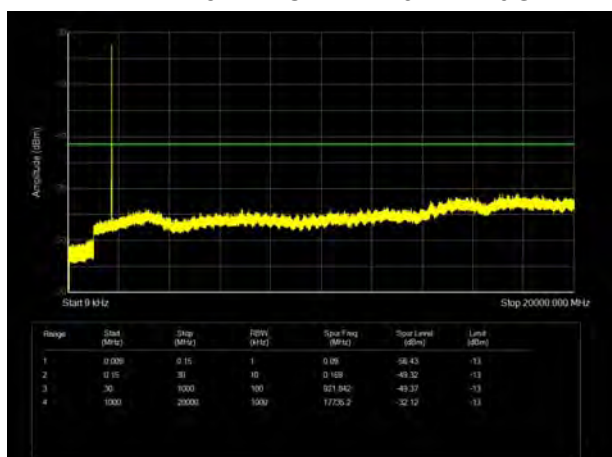
LTE Band 4 1.4MHz CH- High 9kHz~20GHz



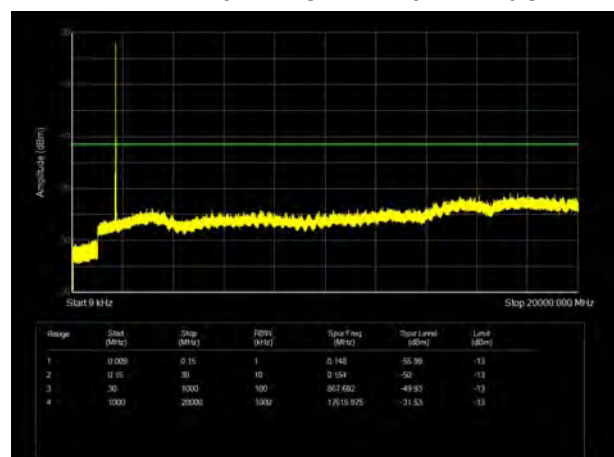
LTE Band 4 3MHz CH-High 9kHz~20GHz



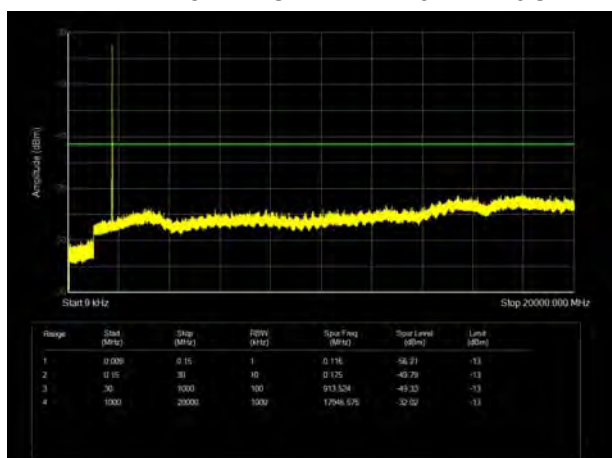
LTE Band 4 5MHz CH- Low 9kHz~20GHz



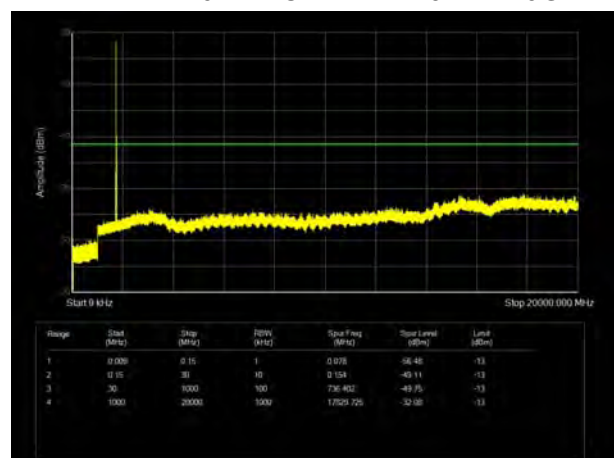
LTE Band 4 10MHz CH-Low 9kHz~20GHz



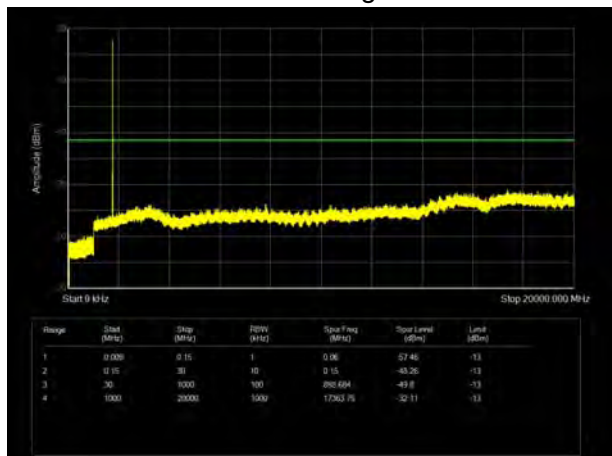
LTE Band 4 5MHz CH- Middle 9kHz~20GHz



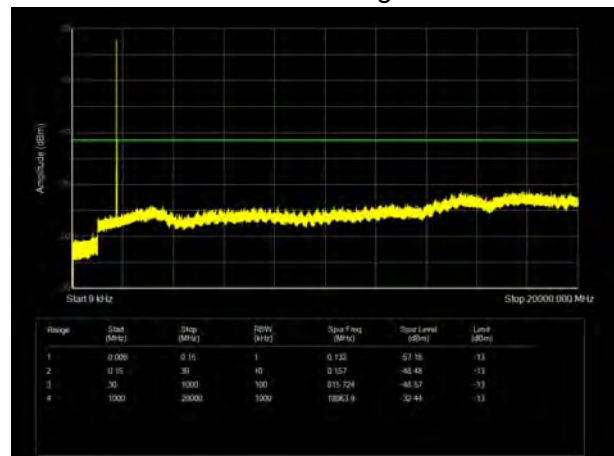
LTE Band 4 10MHz CH- Middle 9kHz~20GHz



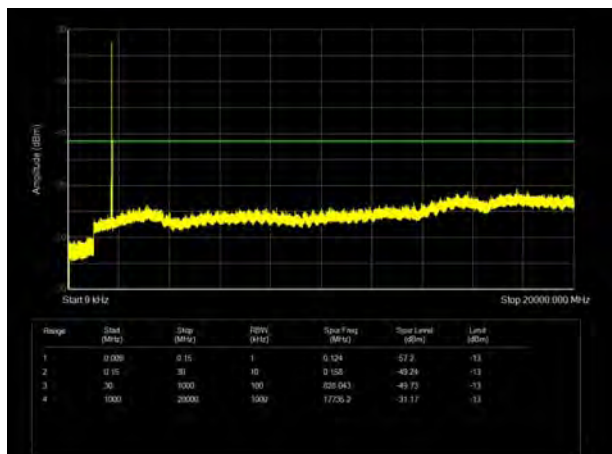
LTE Band 4 5MHz CH-High 9kHz~20GHz



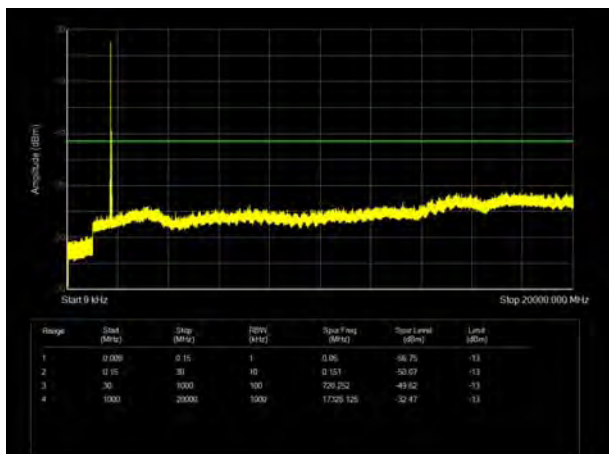
LTE Band 4 10MHz CH- High 9kHz~20GHz



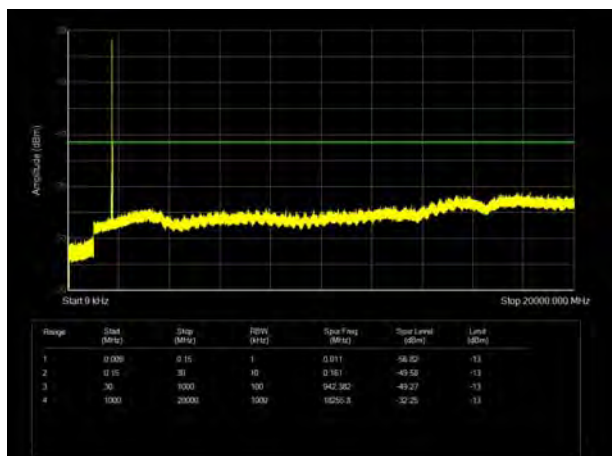
LTE Band 4 15MHz CH- Low 9kHz~20GHz



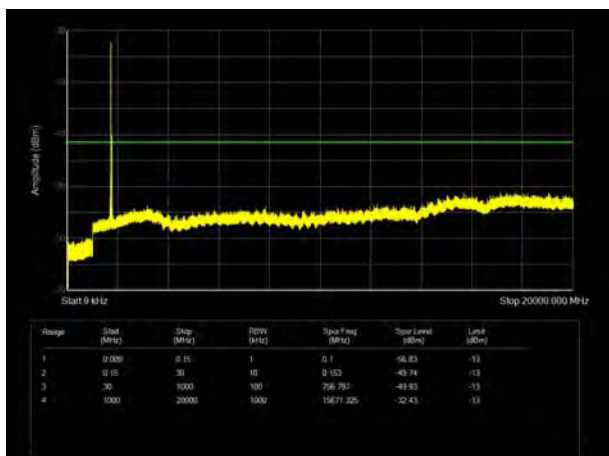
LTE Band 4 20MHz CH-Low 9kHz~20GHz



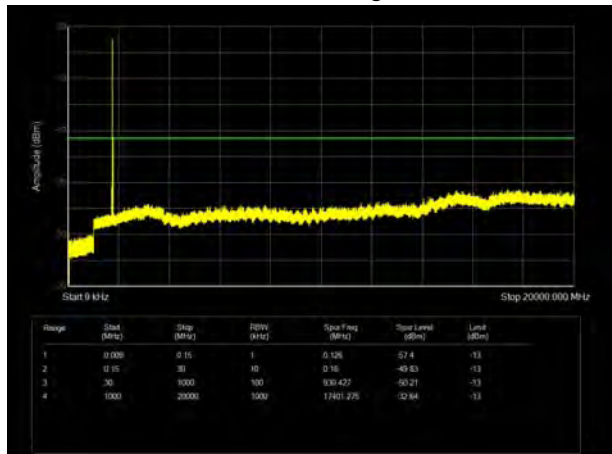
LTE Band 4 15MHz CH- Middle 9kHz~20GHz



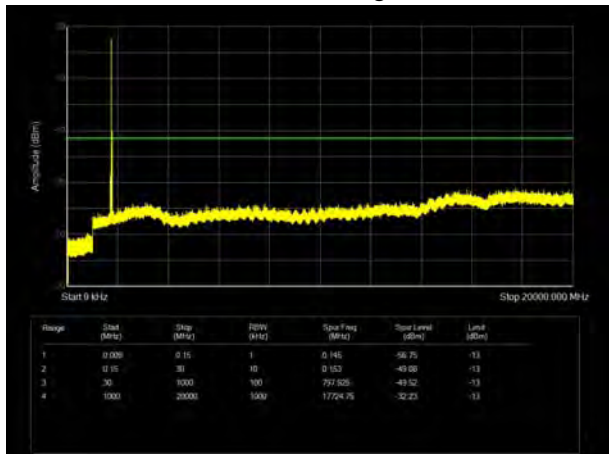
LTE Band 4 20MHz CH- Middle 9kHz~20GHz



LTE Band 4 15MHz CH-High 9kHz~20GHz



LTE Band 4 20MHz CH- High 9kHz~20GHz

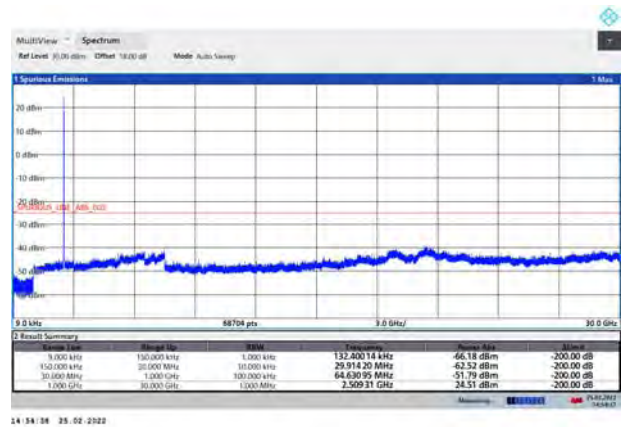


### LTE Band 7 5MHz CH- Low 9kHz~30GHz



14 12:19 25.02.2022

### LTE Band 7 10MHz CH-Low 9kHz~30GHz



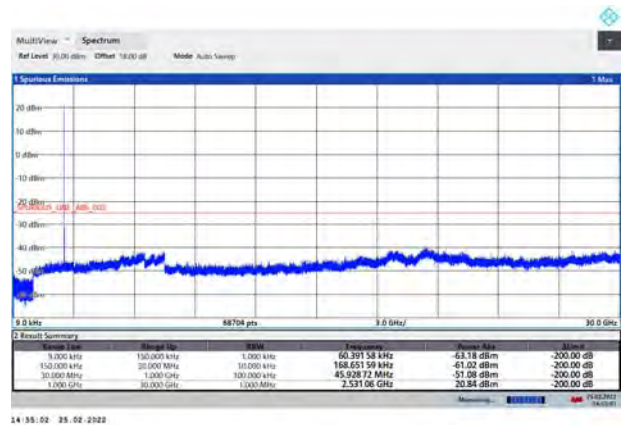
14 14:18 25.02.2022

### LTE Band 7 5MHz CH- Middle 9kHz~30GHz



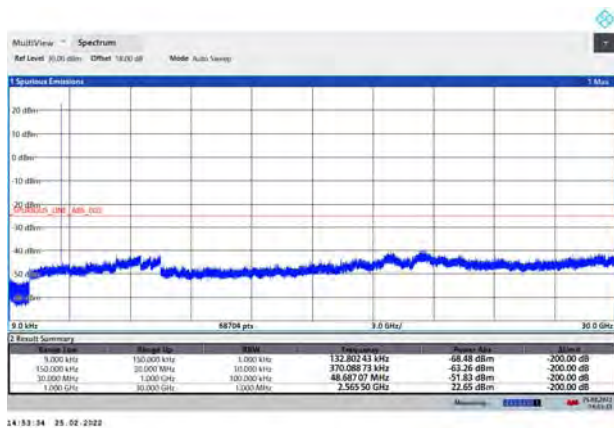
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### LTE Band 7 10MHz CH- Middle 9kHz~30GHz



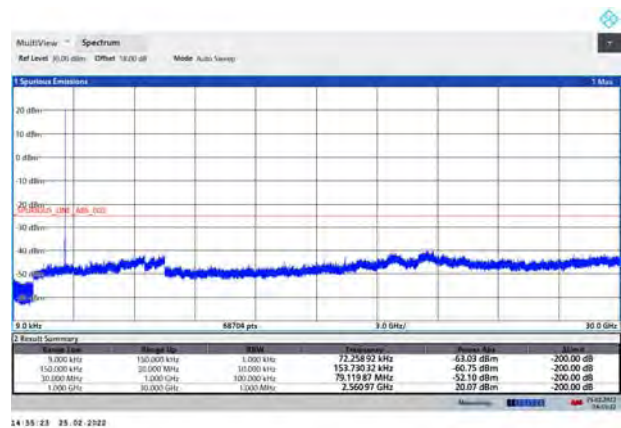
14 15:02 25.02.2022

### LTE Band 7 5MHz CH-High 9kHz~30GHz



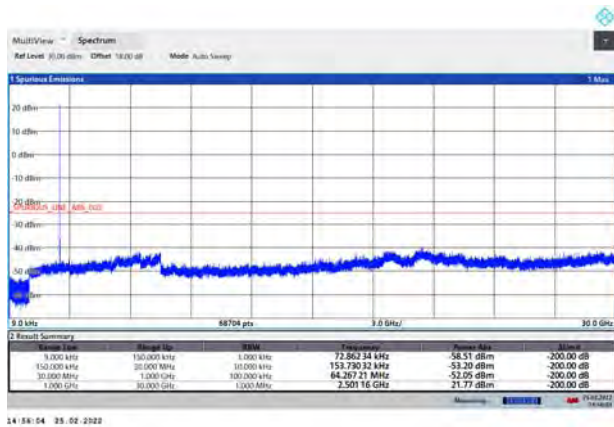
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### LTE Band 7 10MHz CH- High 9kHz~30GHz



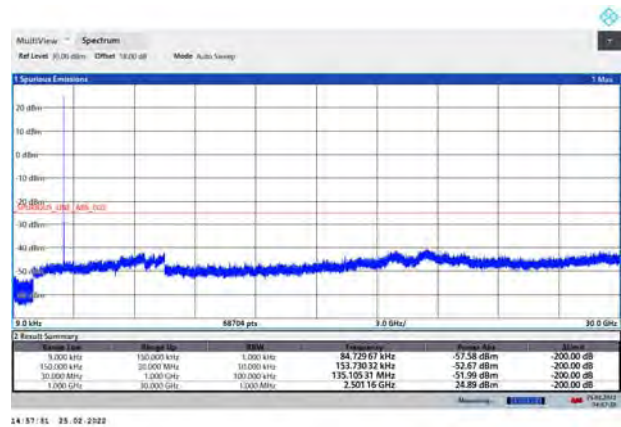
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### LTE Band 7 15MHz CH- Low 9kHz~30GHz



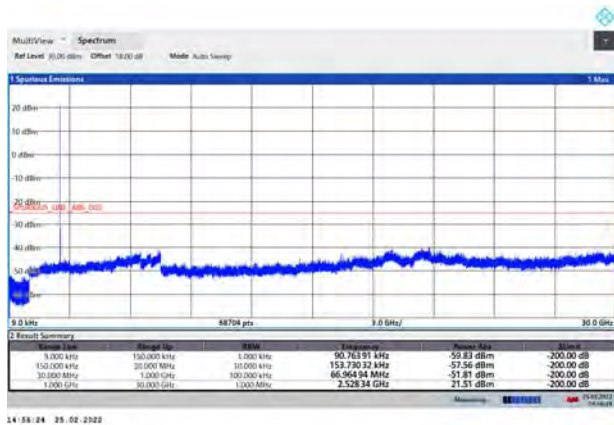
14/15/16 25.02.2022

### LTE Band 7 20MHz CH-Low 9kHz~30GHz



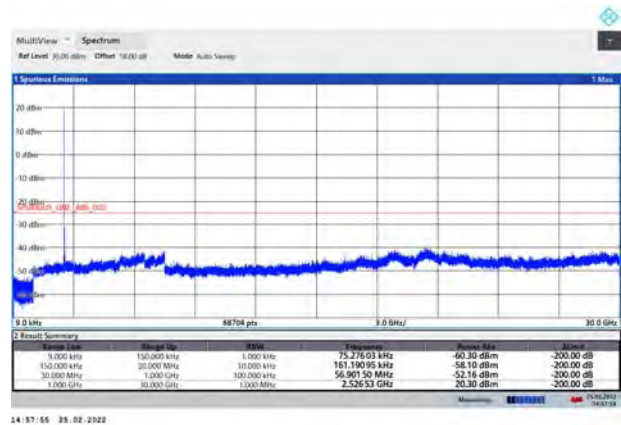
14/17/18 25.02.2022

### LTE Band 7 15MHz CH- Middle 9kHz~30GHz



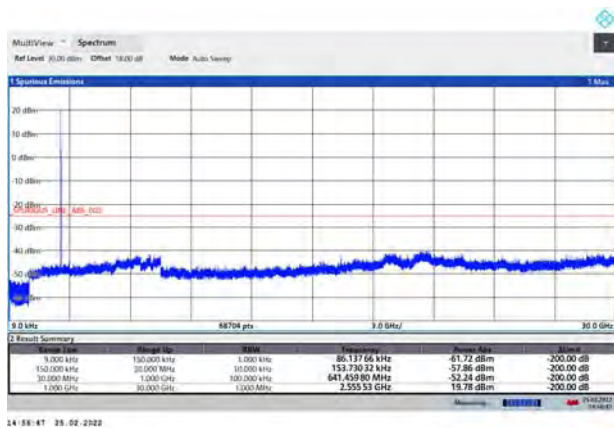
14/15/16 25.02.2022

### LTE Band 7 20MHz CH- Middle 9kHz~30GHz



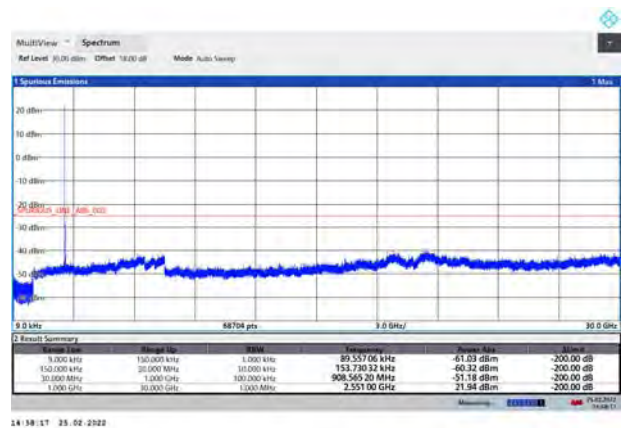
14/17/18 25.02.2022

### LTE Band 7 15MHz CH-High 9kHz~30GHz



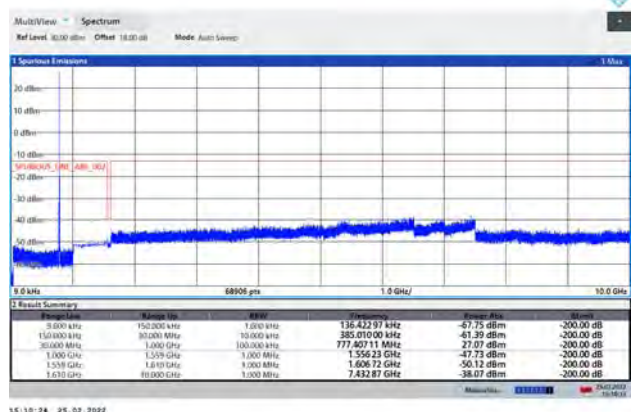
14/15/16 25.02.2022

### LTE Band 7 20MHz CH- High 9kHz~30GHz



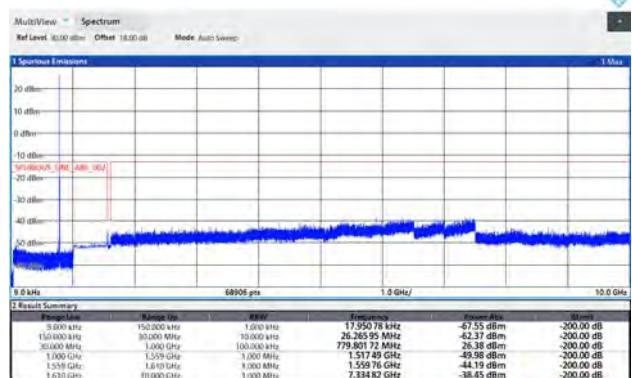
14/18/19 25.02.2022

LTE Band 13 5MHz CH-Low 9kHz ~10GHz



25:10:24 25.02.2022

LTE Band 13 5MHz CH-Middle 9kHz ~10GHz



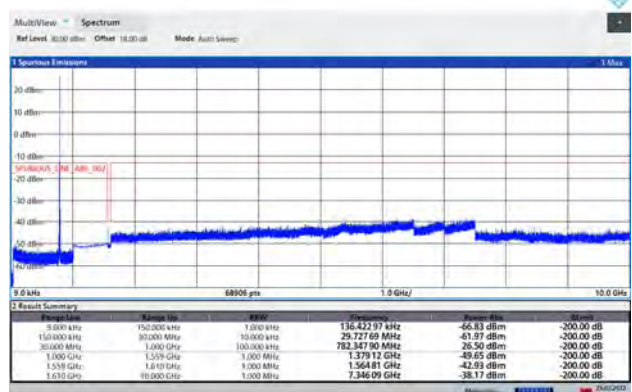
2021年12月22日

LTE Band 13 10MHz CH-Middle 9kHz ~10GHz



35:10:00 25.03.2022

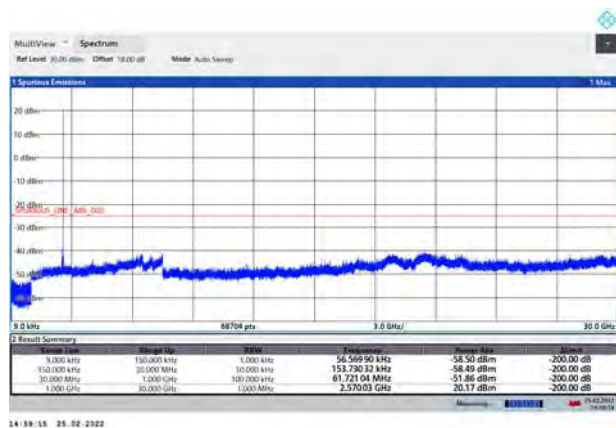
LTE Band 13 5MHz CH-High 9kHz ~10GHz



25/08/18 25.03.2022



## LTE Band 38 5MHz CH-Low 9kHz~30GHz



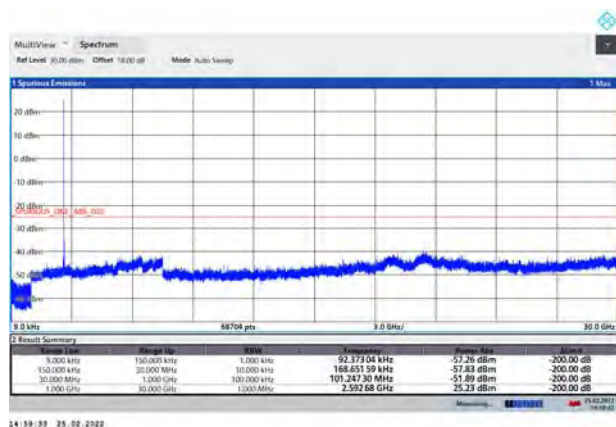
14/09/15 15:02:2022

## LTE Band 38 10MHz CH- Low 9kHz~30GHz



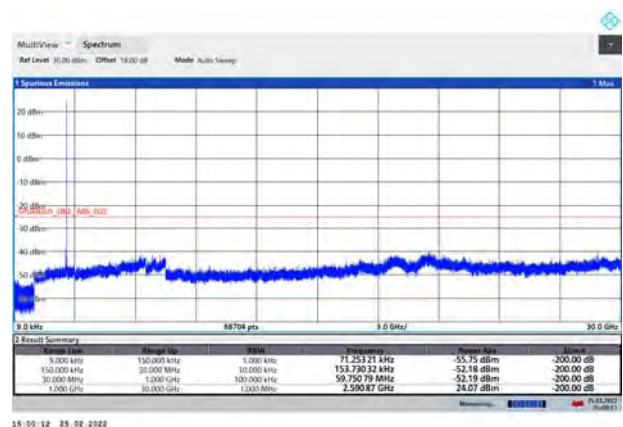
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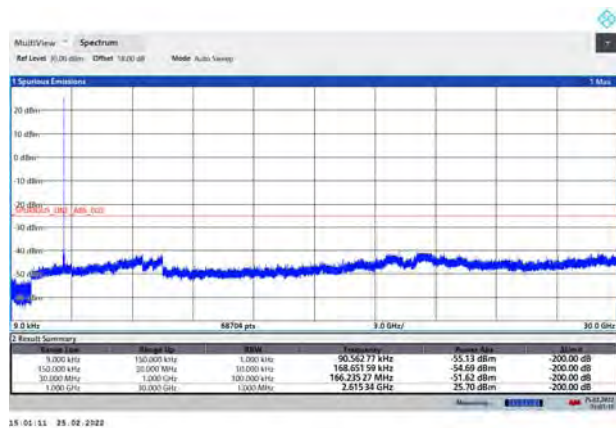
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## LTE Band 38 10MHz CH- Middle 9kHz~30GHz



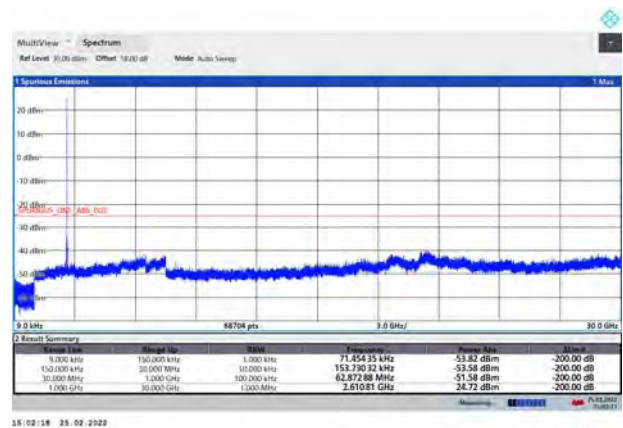
15/02/12 15:02:2022

## LTE Band 38 15MHz CH- High 9kHz~30GHz



15/01/15 15:02:2022

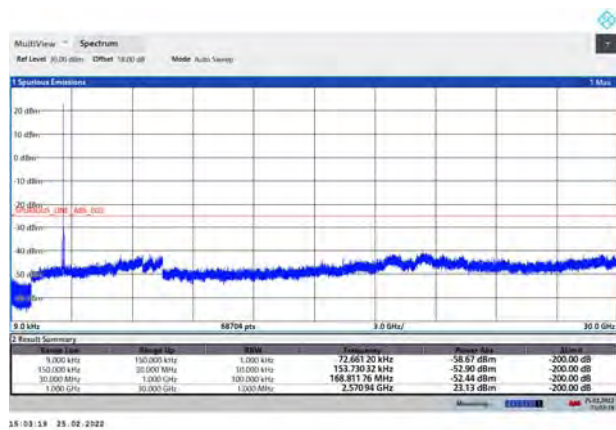
## LTE Band 38 10MHz CH-High 9kHz~30GHz



15/02/18 15:02:2022

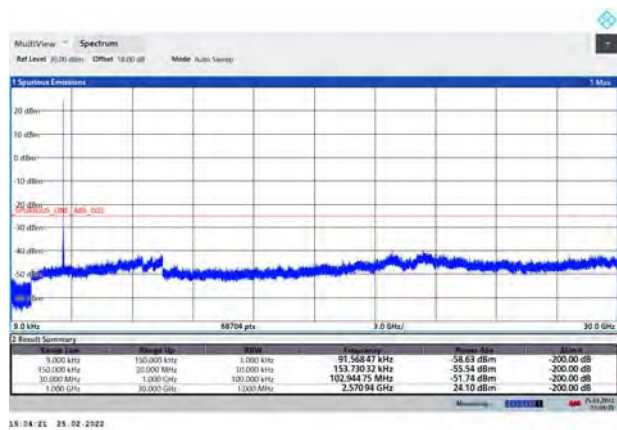


## LTE Band 38 15MHz CH- Low 9kHz~30GHz



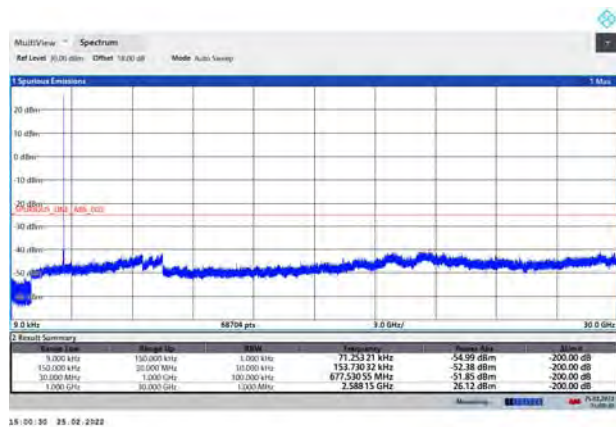
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## LTE Band 38 20MHz CH-Low 9kHz~30GHz



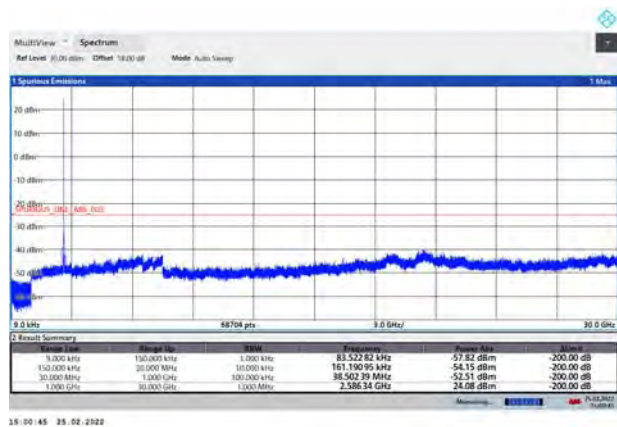
15:04:21 25.02.2022

## LTE Band 38 15MHz CH- Middle 9kHz~30GHz



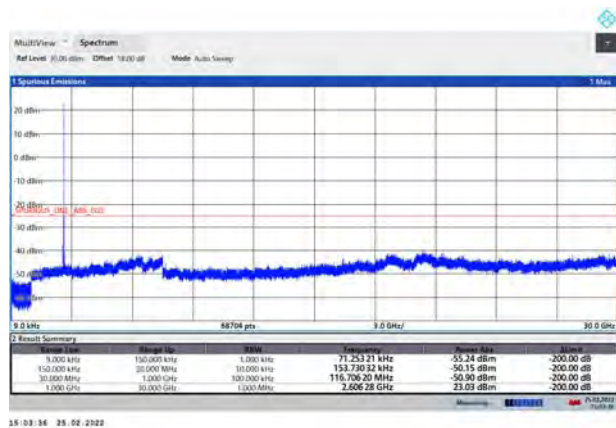
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## LTE Band 38 20MHz CH- Middle 9kHz~30GHz



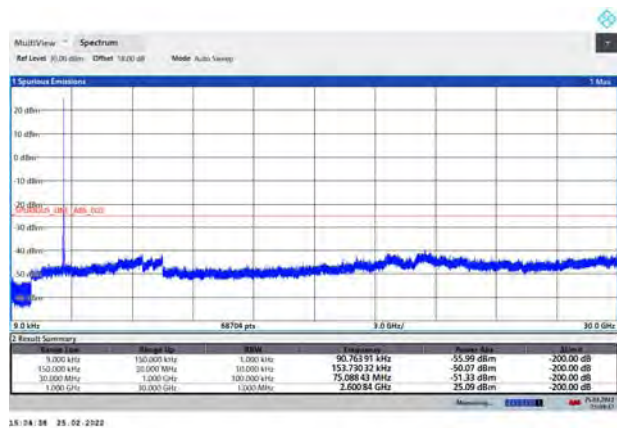
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## LTE Band 38 15MHz CH-High 9kHz~30GHz



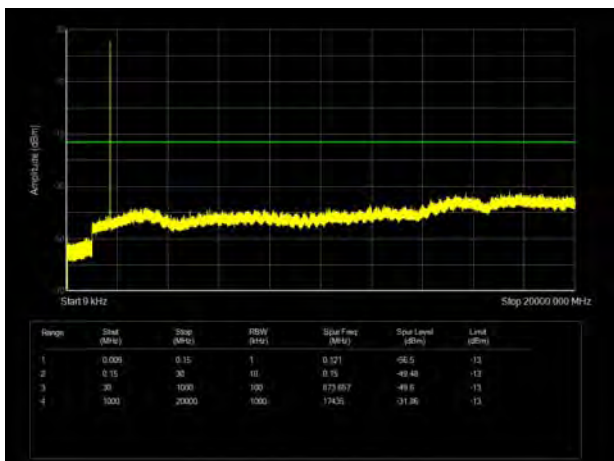
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## LTE Band 38 20MHz CH- High 9kHz~30GHz

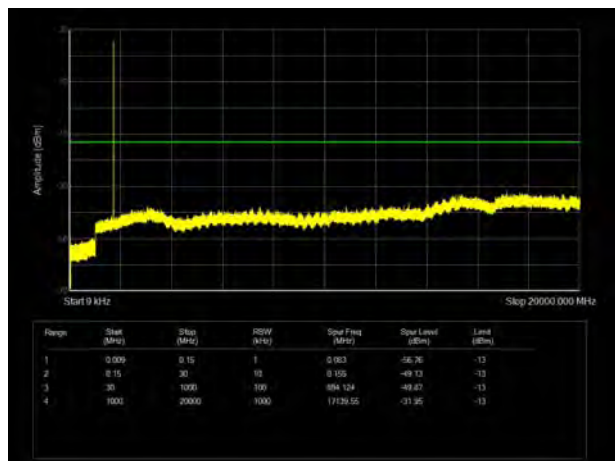


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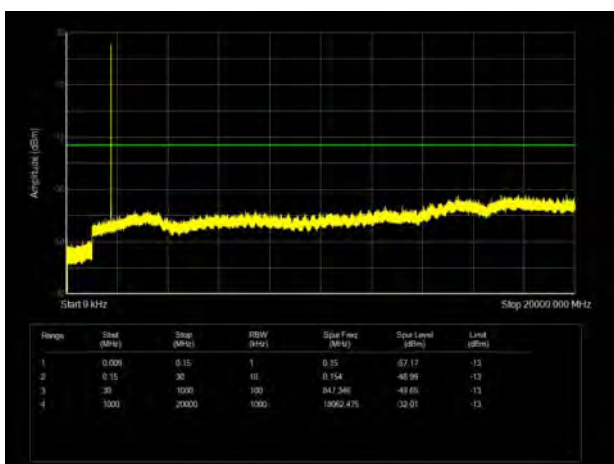
## LTE Band 66 1.4MHz CH-Low 9kHz ~20GHz



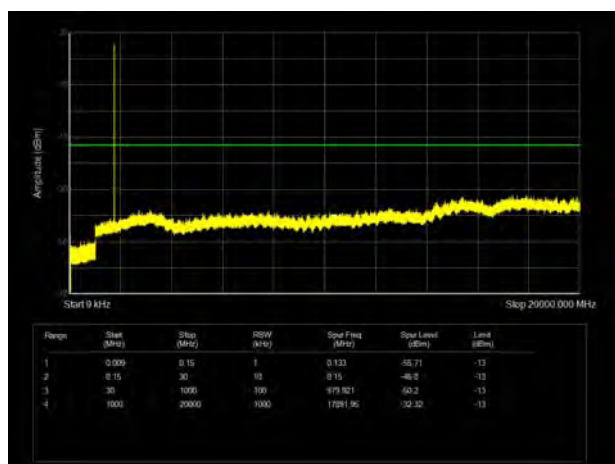
## LTE Band 66 3MHz CH-Low 9kHz ~20GHz



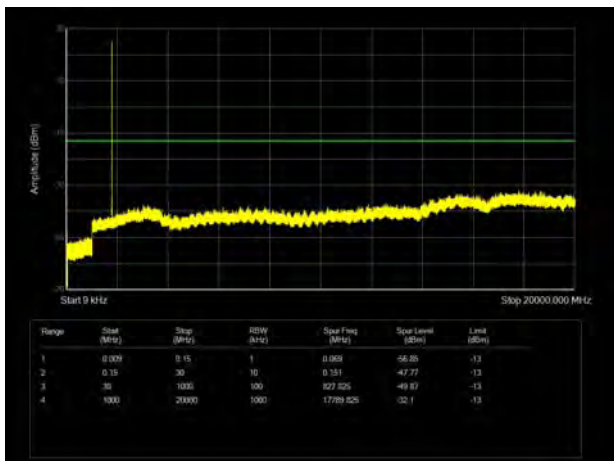
## LTE Band 66 1.4MHz CH-Middle 9kHz ~20GHz



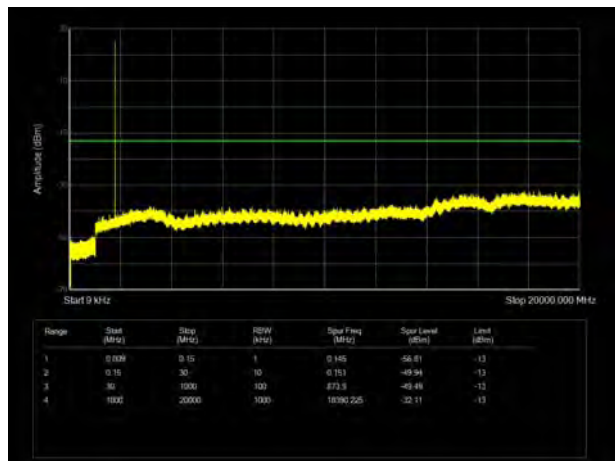
## LTE Band 66 3MHz CH-Middle 9kHz ~20GHz



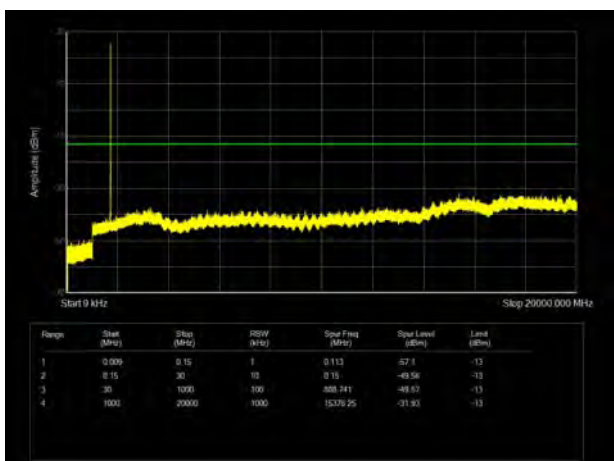
## LTE Band 66 1.4MHz CH-High 9kHz ~20GHz



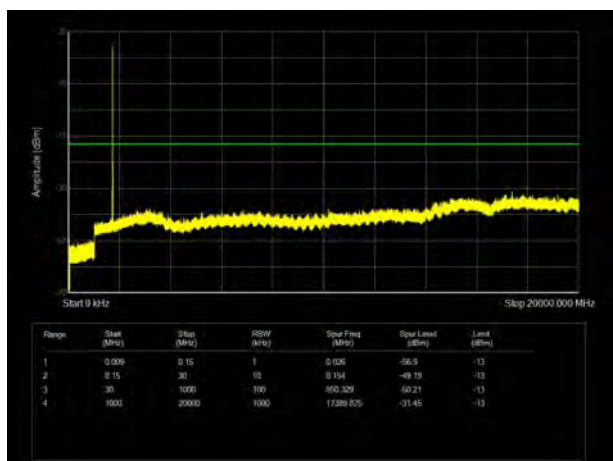
## LTE Band 66 3MHz CH-High 9kHz ~20GHz



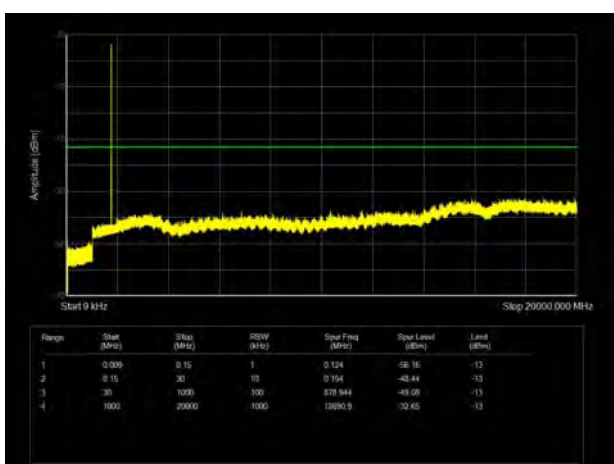
LTE Band 66 5MHz CH-Low 9kHz ~20GHz



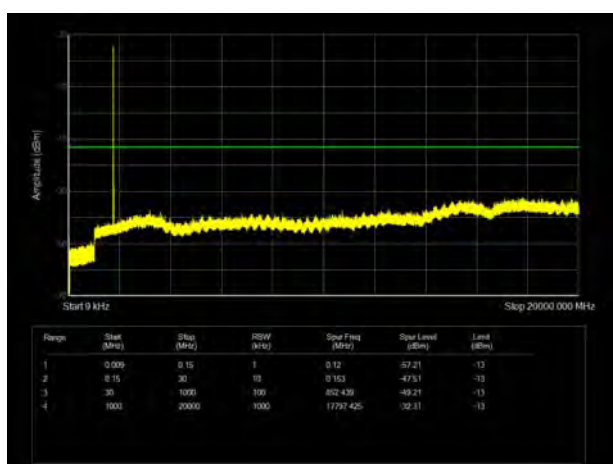
LTE Band 66 10MHz CH-Low 9kHz ~20GHz



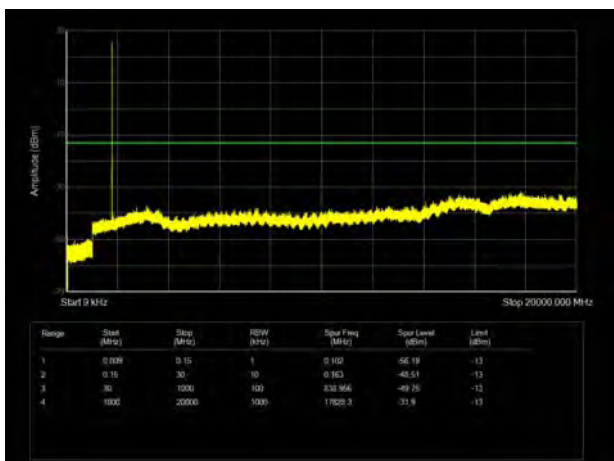
LTE Band 66 5MHz CH-Middle 9kHz ~20GHz



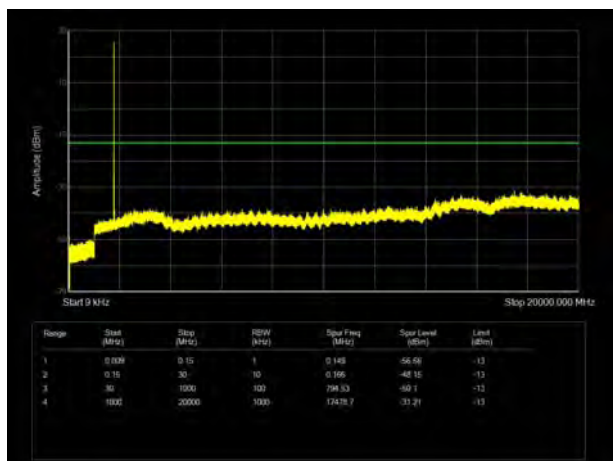
LTE Band 66 10MHz CH-Middle 9kHz ~20GHz



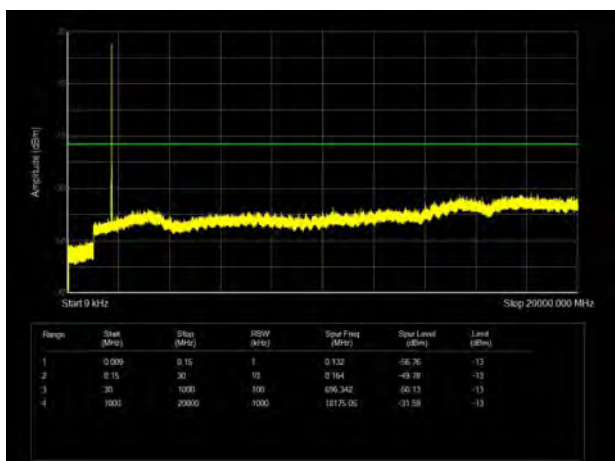
LTE Band 66 5MHz CH-High 9kHz ~20GHz



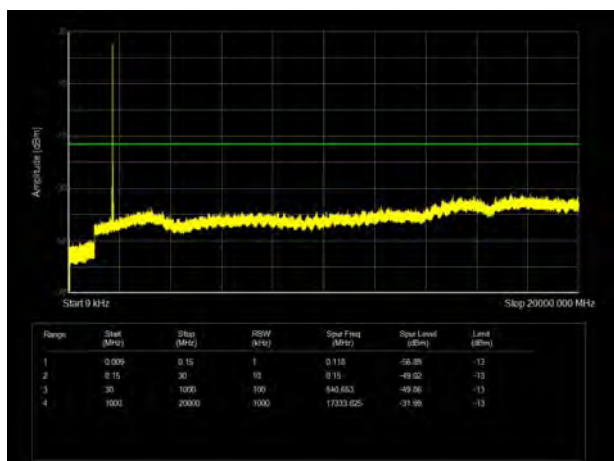
LTE Band 66 10MHz CH-High 9kHz ~20GHz



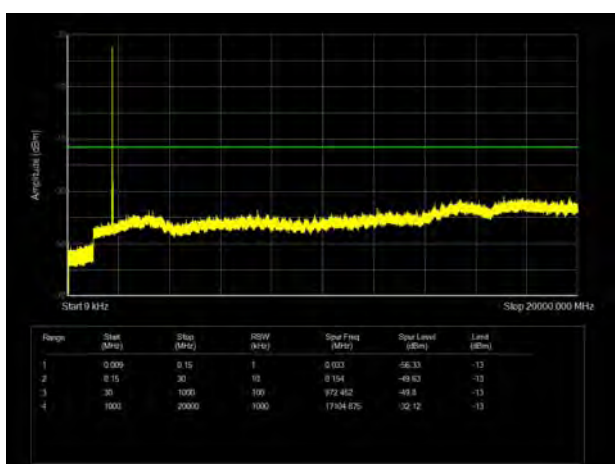
### LTE Band 66 15MHz CH-Low 9kHz ~20GHz



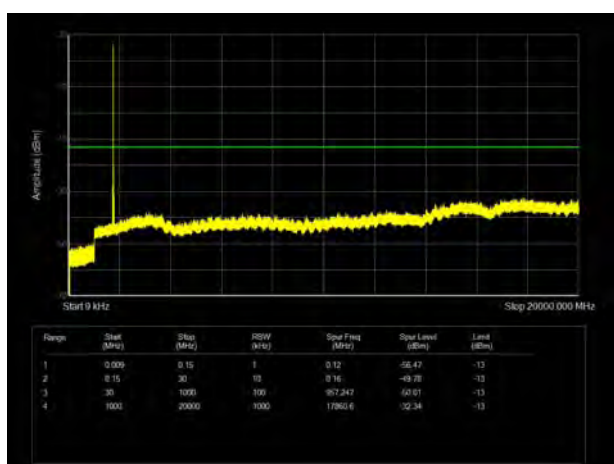
### LTE Band 66 20MHz CH-Low 9kHz ~20GHz



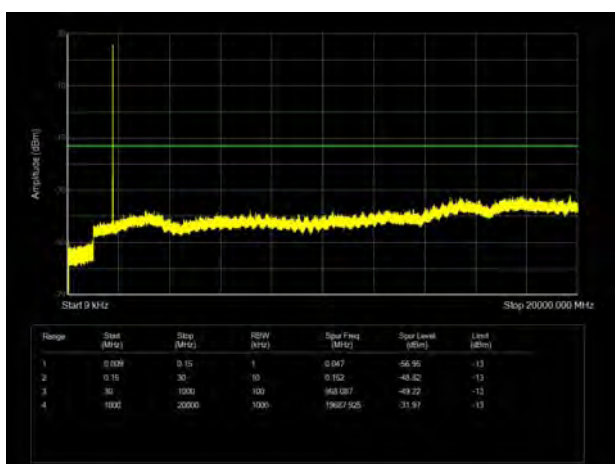
### LTE Band 66 15MHz CH-Middle 9kHz ~20GHz



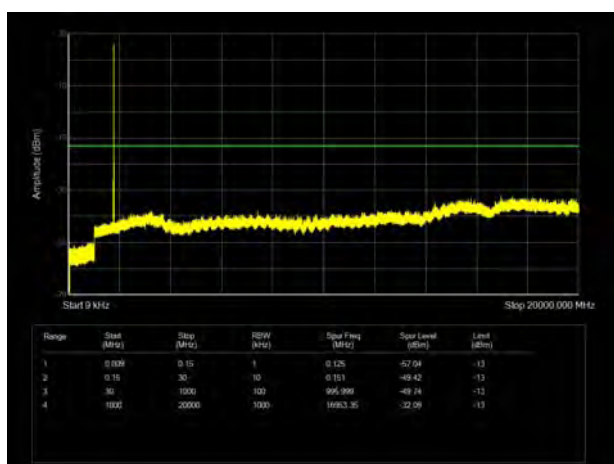
### LTE Band 66 20MHz CH-Middle 9kHz ~20GHz



### LTE Band 66 15MHz CH-High 9kHz ~20GHz



### LTE Band 66 20MHz CH-High 9kHz ~20GHz





## 6.7 Radiates Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

### Main Antenna

WCDMA Band IV CH-Middle

| Harmonic                                                                                                                                                      | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                             | 3465.20         | -66.35   | 2.70            | 12.70      | Horizontal           | -56.35           | -13.00      | 43.35       | 90            |
| 3                                                                                                                                                             | 5197.80         | -65.38   | 3.20            | 12.50      | Horizontal           | -56.08           | -13.00      | 43.08       | 180           |
| 4                                                                                                                                                             | 6930.40         | -59.77   | 4.20            | 11.80      | Horizontal           | -52.17           | -13.00      | 39.17       | 225           |
| 5                                                                                                                                                             | 8663.00         | -56.77   | 4.40            | 12.50      | Horizontal           | -48.67           | -13.00      | 35.67       | 90            |
| 6                                                                                                                                                             | 10395.60        | -51.74   | 4.70            | 11.30      | Horizontal           | -45.14           | -13.00      | 32.14       | 45            |
| 7                                                                                                                                                             | 12128.20        | -54.88   | 5.20            | 13.80      | Horizontal           | -46.28           | -13.00      | 33.28       | 0             |
| 8                                                                                                                                                             | 13860.80        | -48.54   | 5.70            | 11.30      | Horizontal           | -42.94           | -13.00      | 29.94       | 90            |
| 9                                                                                                                                                             | 15593.40        | -55.69   | 6.10            | 16.80      | Horizontal           | -44.99           | -13.00      | 31.99       | 135           |
| 10                                                                                                                                                            | 17326.00        | -48.77   | 6.10            | 14.20      | Horizontal           | -40.67           | -13.00      | 27.67       | 270           |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Horizontal position. |                 |          |                 |            |                      |                  |             |             |               |

LTE Band 4 QPSK 1.4MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                      | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                             | 3464.25         | -63.29   | 2.70            | 12.70      | Horizontal           | -53.29           | -13.00      | 40.29       | 90            |
| 3                                                                                                                                                             | 5197.50         | -63.83   | 3.20            | 12.50      | Horizontal           | -54.53           | -13.00      | 41.53       | 0             |
| 4                                                                                                                                                             | 6930.00         | -59.28   | 4.20            | 11.80      | Horizontal           | -51.68           | -13.00      | 38.68       | 45            |
| 5                                                                                                                                                             | 8662.50         | -56.98   | 4.40            | 12.50      | Horizontal           | -48.88           | -13.00      | 35.88       | 315           |
| 6                                                                                                                                                             | 10395.00        | -52.87   | 4.70            | 11.30      | Horizontal           | -46.27           | -13.00      | 33.27       | 90            |
| 7                                                                                                                                                             | 12127.50        | -53.95   | 5.20            | 13.80      | Horizontal           | -45.35           | -13.00      | 32.35       | 45            |
| 8                                                                                                                                                             | 13860.00        | -47.64   | 5.70            | 11.30      | Horizontal           | -42.04           | -13.00      | 29.04       | 270           |
| 9                                                                                                                                                             | 15592.50        | -55.95   | 6.10            | 16.80      | Horizontal           | -45.25           | -13.00      | 32.25       | 225           |
| 10                                                                                                                                                            | 17325.00        | -49.84   | 6.10            | 14.20      | Horizontal           | -41.74           | -13.00      | 28.74       | 90            |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Horizontal position. |                 |          |                 |            |                      |                  |             |             |               |



LTE Band 4 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3460.50         | -63.05   | 2.70            | 12.70      | Horizontal           | -53.05           | -13.00      | 40.05       | 0             |
| 3        | 5191.50         | -60.66   | 3.20            | 12.50      | Horizontal           | -51.36           | -13.00      | 38.36       | 45            |
| 4        | 6930.00         | -58.71   | 4.20            | 11.80      | Horizontal           | -51.11           | -13.00      | 38.11       | 315           |
| 5        | 8662.50         | -56.30   | 4.40            | 12.50      | Horizontal           | -48.20           | -13.00      | 35.20       | 90            |
| 6        | 10395.00        | -51.92   | 4.70            | 11.30      | Horizontal           | -45.32           | -13.00      | 32.32       | 45            |
| 7        | 12127.50        | -54.54   | 5.20            | 13.80      | Horizontal           | -45.94           | -13.00      | 32.94       | 270           |
| 8        | 13860.00        | -47.62   | 5.70            | 11.30      | Horizontal           | -42.02           | -13.00      | 29.02       | 45            |
| 9        | 15592.50        | -55.74   | 6.10            | 16.80      | Horizontal           | -45.04           | -13.00      | 32.04       | 225           |
| 10       | 17325.00        | -49.49   | 6.10            | 14.20      | Horizontal           | -41.39           | -13.00      | 28.39       | 90            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 4 QPSK 20MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3465.00         | -65.60   | 2.70            | 12.70      | Horizontal           | -55.60           | -13.00      | 42.60       | 225           |
| 3        | 5170.88         | -61.90   | 3.20            | 12.50      | Horizontal           | -52.60           | -13.00      | 39.60       | 0             |
| 4        | 6930.00         | -60.07   | 4.20            | 11.80      | Horizontal           | -52.47           | -13.00      | 39.47       | 54            |
| 5        | 8662.50         | -57.03   | 4.40            | 12.50      | Horizontal           | -48.93           | -13.00      | 35.93       | 90            |
| 6        | 10395.00        | -52.06   | 4.70            | 11.30      | Horizontal           | -45.46           | -13.00      | 32.46       | 45            |
| 7        | 12127.50        | -54.47   | 5.20            | 13.80      | Horizontal           | -45.87           | -13.00      | 32.87       | 270           |
| 8        | 13860.00        | -48.59   | 5.70            | 11.30      | Horizontal           | -42.99           | -13.00      | 29.99       | 315           |
| 9        | 15592.50        | -56.33   | 6.10            | 16.80      | Horizontal           | -45.63           | -13.00      | 32.63       | 90            |
| 10       | 17325.00        | -49.90   | 6.10            | 14.20      | Horizontal           | -41.80           | -13.00      | 28.80       | 225           |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.



## LTE Band 7 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5065.80         | -63.28   | 3.40            | 12.50      | Horizontal           | -54.18           | -25.00      | 29.18       | 45            |
| 3        | 7598.60         | -59.05   | 4.40            | 12.20      | Horizontal           | -51.25           | -25.00      | 26.25       | 135           |
| 4        | 10130.63        | -52.61   | 4.70            | 11.30      | Horizontal           | -46.01           | -25.00      | 21.01       | 225           |
| 5        | 12675.00        | -53.35   | 5.40            | 13.20      | Horizontal           | -45.55           | -25.00      | 20.55       | 0             |
| 6        | 15210.00        | -50.92   | 6.10            | 13.10      | Horizontal           | -43.92           | -25.00      | 18.92       | 45            |
| 7        | 17745.00        | -50.03   | 6.10            | 14.20      | Horizontal           | -41.93           | -25.00      | 16.93       | 225           |
| 8        | 20280.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 22815.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25350.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

## LTE Band 7 QPSK 20MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5052.38         | -65.37   | 3.40            | 12.50      | Horizontal           | -56.27           | -25.00      | 31.27       | 45            |
| 3        | 7578.00         | -57.54   | 4.40            | 12.20      | Horizontal           | -49.74           | -25.00      | 24.74       | 225           |
| 4        | 10104.00        | -52.47   | 4.70            | 11.30      | Horizontal           | -45.87           | -25.00      | 20.87       | 135           |
| 5        | 12675.00        | -55.13   | 5.40            | 13.20      | Horizontal           | -47.33           | -25.00      | 22.33       | 0             |
| 6        | 15210.00        | -52.53   | 6.10            | 13.10      | Horizontal           | -45.53           | -25.00      | 20.53       | 45            |
| 7        | 17745.00        | -52.80   | 6.10            | 14.20      | Horizontal           | -44.70           | -25.00      | 19.70       | 0             |
| 8        | 20280.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 22815.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25350.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.



## LTE Band 13 QPSK 5MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 1559.80         | -66.60   | 1.70            | 8.70       | Horizontal           | -59.60           | -40.00      | 19.60       | 45            |
| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | ERP Level (dBm)  | Limit (dBm) | Margin (dB) | Azimuth (deg) |
| 3                                                                                                                                                           | 2339.60         | -64.11   | 2.10            | 12.00      | Horizontal           | -56.36           | -13.00      | 43.36       | 135           |
| 4                                                                                                                                                           | 3128.00         | -64.76   | 2.30            | 13.10      | Horizontal           | -56.11           | -13.00      | 43.11       | 225           |
| 5                                                                                                                                                           | 3910.00         | -63.24   | 2.90            | 12.50      | Horizontal           | -55.79           | -13.00      | 42.79       | 0             |
| 6                                                                                                                                                           | 4692.00         | -62.82   | 3.10            | 12.50      | Horizontal           | -55.57           | -13.00      | 42.57       | 90            |
| 7                                                                                                                                                           | 5474.00         | -63.68   | 3.30            | 12.50      | Horizontal           | -56.63           | -13.00      | 43.63       | 135           |
| 8                                                                                                                                                           | 6256.00         | -58.91   | 3.50            | 12.80      | Horizontal           | -51.76           | -13.00      | 38.76       | 225           |
| 9                                                                                                                                                           | 7038.00         | -56.11   | 4.20            | 11.80      | Horizontal           | -50.66           | -13.00      | 37.66       | 0             |
| 10                                                                                                                                                          | 7820.00         | -56.98   | 4.40            | 12.30      | Horizontal           | -51.23           | -13.00      | 38.23       | 0             |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                  |             |             |               |

## LTE Band 13 QPSK 10MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                      | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | ERP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|-----------------|-------------|-------------|---------------|
| 2                                                                                                                                                             | 1554.00         | -64.61   | 1.70            | 8.70       | Horizontal           | -59.76          | -13.00      | 46.76       | 45            |
| 3                                                                                                                                                             | 2332.66         | -63.67   | 2.10            | 12.00      | Horizontal           | -55.92          | -13.00      | 42.92       | 135           |
| 4                                                                                                                                                             | 3128.00         | -64.90   | 2.30            | 13.10      | Horizontal           | -56.25          | -13.00      | 43.25       | 45            |
| 5                                                                                                                                                             | 3910.00         | -64.45   | 2.90            | 12.50      | Horizontal           | -57.00          | -13.00      | 44.00       | 0             |
| 6                                                                                                                                                             | 4692.00         | -62.40   | 3.10            | 12.50      | Horizontal           | -55.15          | -13.00      | 42.15       | 45            |
| 7                                                                                                                                                             | 5474.00         | -63.80   | 3.30            | 12.50      | Horizontal           | -56.75          | -13.00      | 43.75       | 90            |
| 8                                                                                                                                                             | 6256.00         | -62.80   | 3.50            | 12.80      | Horizontal           | -55.65          | -13.00      | 42.65       | 135           |
| 9                                                                                                                                                             | 7038.00         | -57.39   | 4.20            | 11.80      | Horizontal           | -51.94          | -13.00      | 38.94       | 225           |
| 10                                                                                                                                                            | 7820.00         | -57.40   | 4.40            | 12.30      | Horizontal           | -51.65          | -13.00      | 38.65       | 0             |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Horizontal position. |                 |          |                 |            |                      |                 |             |             |               |



## LTE Band 38 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5185.00         | -64.43   | 3.20            | 12.50      | Horizontal           | -55.13           | -25.00      | 30.13       | 180           |
| 3        | 7777.50         | -58.39   | 4.40            | 12.30      | Horizontal           | -50.49           | -25.00      | 25.49       | 135           |
| 4        | 10370.00        | -52.82   | 4.70            | 11.80      | Horizontal           | -45.72           | -25.00      | 20.72       | 90            |
| 5        | 12962.50        | -54.92   | 5.40            | 14.00      | Horizontal           | -46.32           | -25.00      | 21.32       | 0             |
| 6        | 15555.00        | -58.79   | 6.10            | 16.80      | Horizontal           | -48.09           | -25.00      | 23.09       | 225           |
| 7        | 18147.50        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 8        | 20740.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 23332.50        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25925.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

## LTE Band 38 QPSK 20MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5170.00         | -62.55   | 3.20            | 12.50      | Horizontal           | -53.25           | -25.00      | 28.25       | 315           |
| 3        | 7755.00         | -59.24   | 4.40            | 12.30      | Horizontal           | -51.34           | -25.00      | 26.34       | 45            |
| 4        | 10340.00        | -50.30   | 4.70            | 11.80      | Horizontal           | -43.20           | -25.00      | 18.20       | 0             |
| 5        | 12925.00        | -54.41   | 5.40            | 14.00      | Horizontal           | -45.81           | -25.00      | 20.81       | 45            |
| 6        | 15510.00        | -56.63   | 6.10            | 16.80      | Horizontal           | -45.93           | -25.00      | 20.93       | 0             |
| 7        | 18095.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 8        | 20680.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 23265.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25850.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.



## LTE Band 66 QPSK 1.4MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3464.30         | -64.05   | 2.70            | 12.70      | Horizontal           | -54.05           | -13.00      | 41.05       | 225           |
| 3        | 5197.50         | -59.54   | 3.20            | 12.50      | Horizontal           | -50.24           | -13.00      | 37.24       | 315           |
| 4        | 6930.00         | -60.37   | 4.20            | 11.80      | Horizontal           | -52.77           | -13.00      | 39.77       | 0             |
| 5        | 8662.50         | -56.45   | 4.40            | 12.50      | Horizontal           | -48.35           | -13.00      | 35.35       | 45            |
| 6        | 10395.00        | -51.44   | 4.70            | 11.80      | Horizontal           | -44.34           | -13.00      | 31.34       | 315           |
| 7        | 12127.50        | -53.95   | 5.20            | 13.80      | Horizontal           | -45.35           | -13.00      | 32.35       | 45            |
| 8        | 13860.00        | -50.97   | 5.70            | 13.20      | Horizontal           | -43.47           | -13.00      | 30.47       | 270           |
| 9        | 15592.50        | -57.16   | 6.10            | 16.80      | Horizontal           | -46.46           | -13.00      | 33.46       | 0             |
| 10       | 17325.00        | -51.66   | 6.10            | 14.20      | Horizontal           | -43.56           | -13.00      | 30.56       | 45            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

## LTE Band 66 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3460.50         | -63.19   | 2.70            | 12.70      | Horizontal           | -53.19           | -13.00      | 40.19       | 315           |
| 3        | 5191.50         | -60.71   | 3.20            | 12.50      | Horizontal           | -51.41           | -13.00      | 38.41       | 315           |
| 4        | 6930.00         | -60.06   | 4.20            | 11.80      | Horizontal           | -52.46           | -13.00      | 39.46       | 225           |
| 5        | 8662.50         | -55.87   | 4.40            | 12.50      | Horizontal           | -47.77           | -13.00      | 34.77       | 180           |
| 6        | 10395.00        | -52.41   | 4.70            | 11.80      | Horizontal           | -45.31           | -13.00      | 32.31       | 135           |
| 7        | 12127.50        | -55.24   | 5.20            | 13.80      | Horizontal           | -46.64           | -13.00      | 33.64       | 315           |
| 8        | 13860.00        | -52.41   | 5.70            | 13.20      | Horizontal           | -44.91           | -13.00      | 31.91       | 0             |
| 9        | 15592.50        | -55.93   | 6.10            | 16.80      | Horizontal           | -45.23           | -13.00      | 32.23       | 45            |
| 10       | 17325.00        | -51.03   | 6.10            | 14.20      | Horizontal           | -42.93           | -13.00      | 29.93       | 90            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.



LTE Band 66 QPSK 20MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                      | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                             | 3747.00         | -66.28   | 2.70            | 12.70      | Horizontal           | -56.28           | -13.00      | 43.28       | 0             |
| 3                                                                                                                                                             | 5170.50         | -64.95   | 3.20            | 12.50      | Horizontal           | -55.65           | -13.00      | 42.65       | 0             |
| 4                                                                                                                                                             | 6930.00         | -60.90   | 4.20            | 11.80      | Horizontal           | -53.30           | -13.00      | 40.30       | 45            |
| 5                                                                                                                                                             | 8662.50         | -57.87   | 4.40            | 12.50      | Horizontal           | -49.77           | -13.00      | 36.77       | 90            |
| 6                                                                                                                                                             | 10395.00        | -54.26   | 4.70            | 11.80      | Horizontal           | -47.16           | -13.00      | 34.16       | 135           |
| 7                                                                                                                                                             | 12127.50        | -55.62   | 5.20            | 13.80      | Horizontal           | -47.02           | -13.00      | 34.02       | 90            |
| 8                                                                                                                                                             | 13860.00        | -52.57   | 5.70            | 13.20      | Horizontal           | -45.07           | -13.00      | 32.07       | 180           |
| 9                                                                                                                                                             | 15592.50        | -57.04   | 6.10            | 16.80      | Horizontal           | -46.34           | -13.00      | 33.34       | 45            |
| 10                                                                                                                                                            | 17325.00        | -50.73   | 6.10            | 14.20      | Horizontal           | -42.63           | -13.00      | 29.63       | 90            |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Horizontal position. |                 |          |                 |            |                      |                  |             |             |               |

**Second Antenna**

WCDMA Band IV CH-Middle

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3465.20         | -67.12   | 2.70            | 12.70      | Horizontal           | -57.12           | -13.00      | 44.12       | 225           |
| 3        | 5197.80         | -65.87   | 3.20            | 12.50      | Horizontal           | -56.57           | -13.00      | 43.57       | 315           |
| 4        | 6930.40         | -60.48   | 4.20            | 11.80      | Horizontal           | -52.88           | -13.00      | 39.88       | 45            |
| 5        | 8663.00         | -57.78   | 4.40            | 12.50      | Horizontal           | -49.68           | -13.00      | 36.68       | 90            |
| 6        | 10395.60        | -53.00   | 4.70            | 11.30      | Horizontal           | -46.40           | -13.00      | 33.40       | 0             |
| 7        | 12128.20        | -55.51   | 5.20            | 13.80      | Horizontal           | -46.91           | -13.00      | 33.91       | 270           |
| 8        | 13860.80        | -47.45   | 5.70            | 11.30      | Horizontal           | -41.85           | -13.00      | 28.85       | 135           |
| 9        | 15593.40        | -57.28   | 6.10            | 16.80      | Horizontal           | -46.58           | -13.00      | 33.58       | 315           |
| 10       | 17326.00        | -50.13   | 6.10            | 14.20      | Horizontal           | -42.03           | -13.00      | 29.03       | 225           |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 4 QPSK 1.4MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3464.25         | -67.38   | 2.70            | 12.70      | Vertical             | -57.38           | -13.00      | 44.38       | 135           |
| 3        | 5197.50         | -65.79   | 3.20            | 12.50      | Vertical             | -56.49           | -13.00      | 43.49       | 45            |
| 4        | 6930.00         | -60.93   | 4.20            | 11.80      | Vertical             | -53.33           | -13.00      | 40.33       | 225           |
| 5        | 8662.50         | -57.75   | 4.40            | 12.50      | Vertical             | -49.65           | -13.00      | 36.65       | 135           |
| 6        | 10395.00        | -53.92   | 4.70            | 11.30      | Vertical             | -47.32           | -13.00      | 34.32       | 0             |
| 7        | 12127.50        | -55.17   | 5.20            | 13.80      | Vertical             | -46.57           | -13.00      | 33.57       | 315           |
| 8        | 13860.00        | -51.55   | 5.70            | 11.30      | Vertical             | -45.95           | -13.00      | 32.95       | 180           |
| 9        | 15592.50        | -56.86   | 6.10            | 16.80      | Vertical             | -46.16           | -13.00      | 33.16       | 45            |
| 10       | 17325.00        | -50.57   | 6.10            | 14.20      | Vertical             | -42.47           | -13.00      | 29.47       | 270           |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

## LTE Band 4 QPSK 5MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 3460.50         | -67.96   | 2.70            | 12.70      | Vertical             | -57.96           | -13.00      | 44.96       | 315           |
| 3                                                                                                                                                           | 5191.50         | -65.31   | 3.20            | 12.50      | Vertical             | -56.01           | -13.00      | 43.01       | 45            |
| 4                                                                                                                                                           | 6930.00         | -64.28   | 4.20            | 11.80      | Vertical             | -56.68           | -13.00      | 43.68       | 135           |
| 5                                                                                                                                                           | 8662.50         | -56.86   | 4.40            | 12.50      | Vertical             | -48.76           | -13.00      | 35.76       | 180           |
| 6                                                                                                                                                           | 10395.00        | -53.50   | 4.70            | 11.30      | Vertical             | -46.90           | -13.00      | 33.90       | 90            |
| 7                                                                                                                                                           | 12127.50        | -55.30   | 5.20            | 13.80      | Vertical             | -46.70           | -13.00      | 33.70       | 0             |
| 8                                                                                                                                                           | 13860.00        | -49.68   | 5.70            | 11.30      | Vertical             | -44.08           | -13.00      | 31.08       | 135           |
| 9                                                                                                                                                           | 15592.50        | -57.98   | 6.10            | 16.80      | Vertical             | -47.28           | -13.00      | 34.28       | 225           |
| 10                                                                                                                                                          | 17325.00        | -50.89   | 6.10            | 14.20      | Vertical             | -42.79           | -13.00      | 29.79       | 180           |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                  |             |             |               |

## LTE Band 4 QPSK 20MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 3445.00         | -68.52   | 2.70            | 12.70      | Vertical             | -58.52           | -13.00      | 45.52       | 225           |
| 3                                                                                                                                                           | 5167.50         | -63.63   | 3.20            | 12.50      | Vertical             | -54.33           | -13.00      | 41.33       | 45            |
| 4                                                                                                                                                           | 6890.00         | -59.94   | 4.20            | 11.80      | Vertical             | -52.34           | -13.00      | 39.34       | 135           |
| 5                                                                                                                                                           | 8612.50         | -57.08   | 4.40            | 12.50      | Vertical             | -48.98           | -13.00      | 35.98       | 135           |
| 6                                                                                                                                                           | 10335.00        | -54.36   | 4.70            | 11.30      | Vertical             | -47.76           | -13.00      | 34.76       | 0             |
| 7                                                                                                                                                           | 12057.50        | -54.29   | 5.20            | 13.80      | Vertical             | -45.69           | -13.00      | 32.69       | 315           |
| 8                                                                                                                                                           | 13780.00        | -49.44   | 5.70            | 11.30      | Vertical             | -43.84           | -13.00      | 30.84       | 90            |
| 9                                                                                                                                                           | 15502.50        | -56.05   | 6.10            | 16.80      | Vertical             | -45.35           | -13.00      | 32.35       | 225           |
| 10                                                                                                                                                          | 17225.00        | -50.95   | 6.10            | 14.20      | Vertical             | -42.85           | -13.00      | 29.85       | 135           |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                  |             |             |               |



## LTE Band 7 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5065.80         | -57.93   | 3.40            | 12.50      | Vertical             | -48.83           | -25.00      | 23.83       | 135           |
| 3        | 7598.60         | -51.38   | 4.40            | 12.20      | Vertical             | -43.58           | -25.00      | 18.58       | 270           |
| 4        | 10130.63        | -52.54   | 4.70            | 11.30      | Vertical             | -45.94           | -25.00      | 20.94       | 45            |
| 5        | 12675.00        | -55.13   | 5.40            | 13.20      | Vertical             | -47.33           | -25.00      | 22.33       | 225           |
| 6        | 15210.00        | -52.49   | 6.10            | 13.10      | Vertical             | -45.49           | -25.00      | 20.49       | 0             |
| 7        | 17745.00        | -53.04   | 6.10            | 14.20      | Vertical             | -44.94           | -25.00      | 19.94       | 180           |
| 8        | 20280.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 22815.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25350.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

## LTE Band 7 QPSK 20MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5052.38         | -58.35   | 3.40            | 12.50      | Vertical             | -49.25           | -25.00      | 24.25       | 315           |
| 3        | 7578.00         | -51.15   | 4.40            | 12.20      | Vertical             | -43.35           | -25.00      | 18.35       | 225           |
| 4        | 10104.00        | -52.50   | 4.70            | 11.30      | Vertical             | -45.90           | -25.00      | 20.90       | 45            |
| 5        | 12675.00        | -53.96   | 5.40            | 13.20      | Vertical             | -46.16           | -25.00      | 21.16       | 180           |
| 6        | 15210.00        | -52.10   | 6.10            | 13.10      | Vertical             | -45.10           | -25.00      | 20.10       | 135           |
| 7        | 17745.00        | -53.42   | 6.10            | 14.20      | Vertical             | -45.32           | -25.00      | 20.32       | 315           |
| 8        | 20280.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 22815.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25350.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

## LTE Band 13 QPSK 5MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 1559.80         | -66.46   | 1.70            | 8.70       | Vertical             | -59.46           | -40.00      | 19.46       | 90            |
| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | ERP Level (dBm)  | Limit (dBm) | Margin (dB) | Azimuth (deg) |
| 3                                                                                                                                                           | 2339.60         | -64.48   | 2.10            | 12.00      | Vertical             | -56.73           | -13.00      | 43.73       | 270           |
| 4                                                                                                                                                           | 3128.00         | -63.25   | 2.30            | 13.10      | Vertical             | -54.60           | -13.00      | 41.60       | 225           |
| 5                                                                                                                                                           | 3910.00         | -63.92   | 2.90            | 12.50      | Vertical             | -56.47           | -13.00      | 43.47       | 90            |
| 6                                                                                                                                                           | 4692.00         | -63.72   | 3.10            | 12.50      | Vertical             | -56.47           | -13.00      | 43.47       | 0             |
| 7                                                                                                                                                           | 5474.00         | -63.45   | 3.30            | 12.50      | Vertical             | -56.40           | -13.00      | 43.40       | 45            |
| 8                                                                                                                                                           | 6256.00         | -62.10   | 3.50            | 12.80      | Vertical             | -54.95           | -13.00      | 41.95       | 270           |
| 9                                                                                                                                                           | 7038.00         | -56.26   | 4.20            | 11.80      | Vertical             | -50.81           | -13.00      | 37.81       | 90            |
| 10                                                                                                                                                          | 7820.00         | -56.11   | 4.40            | 12.30      | Vertical             | -50.36           | -13.00      | 37.36       | 225           |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                  |             |             |               |

## LTE Band 13 QPSK 10MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | ERP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|-----------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 1554.00         | -63.86   | 1.70            | 8.70       | Vertical             | -59.01          | -13.00      | 46.01       | 90            |
| 3                                                                                                                                                           | 2332.66         | -63.66   | 2.10            | 12.00      | Vertical             | -55.91          | -13.00      | 42.91       | 135           |
| 4                                                                                                                                                           | 3128.00         | -64.38   | 2.30            | 13.10      | Vertical             | -55.73          | -13.00      | 42.73       | 0             |
| 5                                                                                                                                                           | 3910.00         | -63.29   | 2.90            | 12.50      | Vertical             | -55.84          | -13.00      | 42.84       | 45            |
| 6                                                                                                                                                           | 4692.00         | -62.71   | 3.10            | 12.50      | Vertical             | -55.46          | -13.00      | 42.46       | 225           |
| 7                                                                                                                                                           | 5474.00         | -63.04   | 3.30            | 12.50      | Vertical             | -55.99          | -13.00      | 42.99       | 90            |
| 8                                                                                                                                                           | 6256.00         | -62.15   | 3.50            | 12.80      | Vertical             | -55.00          | -13.00      | 42.00       | 45            |
| 9                                                                                                                                                           | 7038.00         | -56.25   | 4.20            | 11.80      | Vertical             | -50.80          | -13.00      | 37.80       | 180           |
| 10                                                                                                                                                          | 7820.00         | -55.77   | 4.40            | 12.30      | Vertical             | -50.02          | -13.00      | 37.02       | 135           |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                 |             |             |               |



## LTE Band 38 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5185.00         | -53.45   | 3.20            | 12.50      | Vertical             | -44.15           | -25.00      | 19.15       | 180           |
| 3        | 7777.50         | -50.22   | 4.40            | 12.30      | Vertical             | -42.32           | -25.00      | 17.32       | 315           |
| 4        | 10370.00        | -52.35   | 4.70            | 11.80      | Vertical             | -45.25           | -25.00      | 20.25       | 135           |
| 5        | 12962.50        | -53.19   | 5.40            | 14.00      | Vertical             | -44.59           | -25.00      | 19.59       | 90            |
| 6        | 15555.00        | -55.55   | 6.10            | 16.80      | Vertical             | -44.85           | -25.00      | 19.85       | 225           |
| 7        | 18147.50        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 8        | 20740.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 23332.50        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25925.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

## LTE Band 38 QPSK 20MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 5170.00         | -54.81   | 3.20            | 12.50      | Vertical             | -45.51           | -25.00      | 20.51       | 180           |
| 3        | 7755.00         | -50.51   | 4.40            | 12.30      | Vertical             | -42.61           | -25.00      | 17.61       | 315           |
| 4        | 10340.00        | -53.37   | 4.70            | 11.80      | Vertical             | -46.27           | -25.00      | 21.27       | 45            |
| 5        | 12925.00        | -53.07   | 5.40            | 14.00      | Vertical             | -44.47           | -25.00      | 19.47       | 270           |
| 6        | 15510.00        | -56.13   | 6.10            | 16.80      | Vertical             | -45.43           | -25.00      | 20.43       | 0             |
| 7        | 18095.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 8        | 20680.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 9        | 23265.00        | --       | --              | --         | --                   | --               | --          | --          | --            |
| 10       | 25850.00        | --       | --              | --         | --                   | --               | --          | --          | --            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

## LTE Band 66 QPSK 1.4MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3464.30         | -66.78   | 2.70            | 12.70      | Vertical             | -56.78           | -13.00      | 43.78       | 135           |
| 3        | 5197.50         | -65.44   | 3.20            | 12.50      | Vertical             | -56.14           | -13.00      | 43.14       | 90            |
| 4        | 6930.00         | -59.86   | 4.20            | 11.80      | Vertical             | -52.26           | -13.00      | 39.26       | 90            |
| 5        | 8662.50         | -57.03   | 4.40            | 12.50      | Vertical             | -48.93           | -13.00      | 35.93       | 45            |
| 6        | 10395.00        | -52.94   | 4.70            | 11.80      | Vertical             | -45.84           | -13.00      | 32.84       | 180           |
| 7        | 12127.50        | -54.29   | 5.20            | 13.80      | Vertical             | -45.69           | -13.00      | 32.69       | 315           |
| 8        | 13860.00        | -49.82   | 5.70            | 13.20      | Vertical             | -42.32           | -13.00      | 29.32       | 225           |
| 9        | 15592.50        | -55.46   | 6.10            | 16.80      | Vertical             | -44.76           | -13.00      | 31.76       | 90            |
| 10       | 17325.00        | -49.63   | 6.10            | 14.20      | Vertical             | -41.53           | -13.00      | 28.53       | 45            |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is Vertical position.

## LTE Band 66 QPSK 5MHz CH-Middle, RB 1

| Harmonic | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|----------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2        | 3460.50         | -66.02   | 2.70            | 12.70      | Vertical             | -56.02           | -13.00      | 43.02       | 90            |
| 3        | 5191.50         | -66.27   | 3.20            | 12.50      | Vertical             | -56.97           | -13.00      | 43.97       | 0             |
| 4        | 6930.00         | -60.36   | 4.20            | 11.80      | Vertical             | -52.76           | -13.00      | 39.76       | 0             |
| 5        | 8662.50         | -57.21   | 4.40            | 12.50      | Vertical             | -49.11           | -13.00      | 36.11       | 45            |
| 6        | 10395.00        | -53.10   | 4.70            | 11.80      | Vertical             | -46.00           | -13.00      | 33.00       | 180           |
| 7        | 12127.50        | -54.40   | 5.20            | 13.80      | Vertical             | -45.80           | -13.00      | 32.80       | 135           |
| 8        | 13860.00        | -49.86   | 5.70            | 13.20      | Vertical             | -42.36           | -13.00      | 29.36       | 90            |
| 9        | 15592.50        | -54.73   | 6.10            | 16.80      | Vertical             | -44.03           | -13.00      | 31.03       | 45            |
| 10       | 17325.00        | -49.62   | 6.10            | 14.20      | Vertical             | -41.52           | -13.00      | 28.52       | 315           |

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.  
2. The worst emission was found in the antenna is Vertical position.



LTE Band 66 QPSK 20MHz CH-Middle, RB 1

| Harmonic                                                                                                                                                    | Frequency (MHz) | SG (dBm) | Cable Loss (dB) | Gain (dBi) | Antenna Polarization | EIRP Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (deg) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------|------------|----------------------|------------------|-------------|-------------|---------------|
| 2                                                                                                                                                           | 3747.00         | -66.02   | 2.70            | 12.70      | Vertical             | -56.02           | -13.00      | 43.02       | 0             |
| 3                                                                                                                                                           | 5170.50         | -64.70   | 3.20            | 12.50      | Vertical             | -55.40           | -13.00      | 42.40       | 180           |
| 4                                                                                                                                                           | 6930.00         | -60.05   | 4.20            | 11.80      | Vertical             | -52.45           | -13.00      | 39.45       | 135           |
| 5                                                                                                                                                           | 8662.50         | -56.93   | 4.40            | 12.50      | Vertical             | -48.83           | -13.00      | 35.83       | 45            |
| 6                                                                                                                                                           | 10395.00        | -53.83   | 4.70            | 11.80      | Vertical             | -46.73           | -13.00      | 33.73       | 225           |
| 7                                                                                                                                                           | 12127.50        | -54.86   | 5.20            | 13.80      | Vertical             | -46.26           | -13.00      | 33.26       | 90            |
| 8                                                                                                                                                           | 13860.00        | -49.63   | 5.70            | 13.20      | Vertical             | -42.13           | -13.00      | 29.13       | 45            |
| 9                                                                                                                                                           | 15592.50        | -55.94   | 6.10            | 16.80      | Vertical             | -45.24           | -13.00      | 32.24       | 315           |
| 10                                                                                                                                                          | 17325.00        | -49.95   | 6.10            | 14.20      | Vertical             | -41.85           | -13.00      | 28.85       | 90            |
| Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.<br>2. The worst emission was found in the antenna is Vertical position. |                 |          |                 |            |                      |                  |             |             |               |



## 7 Main Test Instruments

| Name                                 | Manufacturer | Type       | Serial Number      | Calibration Date | Expiration Date |
|--------------------------------------|--------------|------------|--------------------|------------------|-----------------|
| Climate Chamber                      | Weiss        | VT4002     | 582261194500<br>10 | 2021-05-15       | 2022-05-14      |
| Base Station Simulator               | R&S          | CMW500     | 150415             | 2021-05-15       | 2022-05-14      |
| Spectrum Analyzer                    | Keysight     | N9020A     | MY52330084         | 2021-05-15       | 2022-05-14      |
| Universal Radio Communication Tester | Agilent      | E5515C     | GB44400275         | 2021-05-15       | 2022-05-14      |
| Signal Analyzer                      | R&S          | FSV3030    | 101411             | 2021-12-12       | 2022-12-11      |
| Signal Analyzer                      | R&S          | FSV30      | 104028             | 2021-05-15       | 2022-05-14      |
| TRILOG Broadband Antenna             | Schwarzbeck  | VULB 9163  | 01111              | 2019--9-12       | 2022-09-11      |
| Horn Antenna                         | Schwarzbeck  | BBHA 9120D | 1594               | 2020-12-17       | 2023-12-16      |
| Software                             | R&S          | EMC32      | 10.35.10           | /                | /               |

\*\*\*\*\*END OF REPORT \*\*\*\*\*



## ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.



## ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.