

## APPENDIX A – TEST DATA OF CONDUCTED EMISSION

### LTE Band 7

### RF Power Output

| UL Power Output |                         |            |    |         |           |                       |       |
|-----------------|-------------------------|------------|----|---------|-----------|-----------------------|-------|
| Modulation      | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |       |
| QPSK            | 2502.5                  | 20775      | 5  | 1       | 0         | 22.25                 |       |
|                 |                         |            |    | 1       | 12        | 22.26                 |       |
|                 |                         |            |    | 1       | 24        | 22.32                 |       |
|                 |                         |            |    | 12      | 0         | 21.27                 |       |
|                 |                         |            |    | 12      | 7         | 21.26                 |       |
|                 |                         |            |    | 12      | 13        | 21.24                 |       |
|                 |                         |            |    | 25      | 0         | 21.17                 |       |
|                 | 2535                    | 21100      |    | 1       | 0         | 22.23                 |       |
|                 |                         |            |    | 1       | 12        | 22.33                 |       |
|                 |                         |            |    | 1       | 24        | 22.22                 |       |
|                 |                         |            |    | 12      | 0         | 21.29                 |       |
|                 |                         |            |    | 12      | 7         | 21.26                 |       |
|                 |                         |            |    | 12      | 13        | 21.26                 |       |
|                 |                         |            |    | 25      | 0         | 21.29                 |       |
|                 | 2567.5                  | 21425      |    | 1       | 0         | 22.11                 |       |
|                 |                         |            |    | 1       | 12        | 21.95                 |       |
|                 |                         |            |    | 1       | 24        | 21.93                 |       |
|                 |                         |            |    | 12      | 0         | 21.25                 |       |
|                 |                         |            |    | 12      | 7         | 21.09                 |       |
|                 |                         |            |    | 12      | 13        | 21.09                 |       |
|                 |                         |            |    | 25      | 0         | 21.16                 |       |
|                 | 16QAM                   | 2502.5     |    | 20775   | 1         | 0                     | 20.59 |
|                 |                         |            |    |         | 1         | 12                    | 20.53 |
|                 |                         |            |    |         | 1         | 24                    | 20.63 |
| 12              |                         |            |    |         | 0         | 20.27                 |       |
| 12              |                         |            |    |         | 7         | 20.20                 |       |
| 12              |                         |            |    |         | 13        | 20.19                 |       |
| 25              |                         |            |    |         | 0         | 20.35                 |       |
| 2535            |                         | 21100      | 1  | 0       | 21.24     |                       |       |
|                 |                         |            | 1  | 12      | 21.17     |                       |       |
|                 |                         |            | 1  | 24      | 21.17     |                       |       |
|                 |                         |            | 12 | 0       | 20.33     |                       |       |
|                 |                         |            | 12 | 7       | 20.28     |                       |       |
|                 |                         |            | 12 | 13      | 20.39     |                       |       |
|                 |                         |            | 25 | 0       | 20.27     |                       |       |
| 2567.5          |                         | 21425      | 1  | 0       | 20.69     |                       |       |
|                 |                         |            | 1  | 12      | 20.73     |                       |       |
|                 |                         |            | 1  | 24      | 20.73     |                       |       |
|                 |                         |            | 12 | 0       | 20.16     |                       |       |
|                 |                         |            | 12 | 7       | 20.01     |                       |       |
|                 |                         |            | 12 | 13      | 20.01     |                       |       |
|                 |                         |            | 25 | 0       | 20.16     |                       |       |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |       |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|-------|
| QPSK       | 2505                    | 20800      | 10 | 1       | 0         | 22.17                 |       |
|            |                         |            |    | 1       | 25        | 22.14                 |       |
|            |                         |            |    | 1       | 49        | 22.14                 |       |
|            |                         |            |    | 25      | 0         | 21.27                 |       |
|            |                         |            |    | 25      | 12        | 21.30                 |       |
|            |                         |            |    | 25      | 25        | 21.30                 |       |
|            |                         |            |    | 50      | 0         | 21.34                 |       |
|            | 2535                    | 21100      |    | 1       | 0         | 22.19                 |       |
|            |                         |            |    | 1       | 25        | 22.19                 |       |
|            |                         |            |    | 1       | 49        | 22.33                 |       |
|            |                         |            |    | 25      | 0         | 21.28                 |       |
|            |                         |            |    | 25      | 12        | 21.33                 |       |
|            |                         |            |    | 25      | 25        | 21.33                 |       |
|            |                         |            |    | 50      | 0         | 21.24                 |       |
|            | 2565                    | 21400      |    | 1       | 0         | 22.33                 |       |
|            |                         |            |    | 1       | 25        | 22.22                 |       |
|            |                         |            |    | 1       | 49        | 22.01                 |       |
|            |                         |            |    | 25      | 0         | 21.14                 |       |
|            |                         |            |    | 25      | 12        | 21.15                 |       |
|            |                         |            |    | 25      | 25        | 21.20                 |       |
|            |                         |            |    | 50      | 0         | 21.17                 |       |
|            | 16QAM                   | 2505       |    | 20800   | 1         | 0                     | 21.75 |
|            |                         |            |    |         | 1         | 25                    | 21.76 |
|            |                         |            |    |         | 1         | 49                    | 21.61 |
| 25         |                         |            |    |         | 0         | 20.37                 |       |
| 25         |                         |            |    |         | 12        | 20.36                 |       |
| 25         |                         |            |    |         | 25        | 20.31                 |       |
| 50         |                         |            |    |         | 0         | 20.52                 |       |
| 2535       |                         | 21100      |    | 1       | 0         | 21.45                 |       |
|            |                         |            |    | 1       | 25        | 21.49                 |       |
|            |                         |            | 1  | 49      | 21.49     |                       |       |
|            |                         |            | 25 | 0       | 20.30     |                       |       |
|            |                         |            | 25 | 12      | 20.33     |                       |       |
|            |                         |            | 25 | 25      | 20.33     |                       |       |
|            |                         |            | 50 | 0       | 20.36     |                       |       |
| 2565       |                         | 21400      | 1  | 0       | 21.09     |                       |       |
|            |                         |            | 1  | 25      | 20.94     |                       |       |
|            |                         |            | 1  | 49      | 21.02     |                       |       |
|            |                         |            | 25 | 0       | 20.44     |                       |       |
|            |                         |            | 25 | 12      | 20.35     |                       |       |
|            |                         |            | 25 | 25      | 20.40     |                       |       |
|            |                         |            | 50 | 0       | 20.26     |                       |       |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |       |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|-------|
| QPSK       | 2507.5                  | 20825      | 15 | 1       | 0         | 22.33                 |       |
|            |                         |            |    | 1       | 37        | 22.19                 |       |
|            |                         |            |    | 1       | 74        | 22.19                 |       |
|            |                         |            |    | 36      | 0         | 21.45                 |       |
|            |                         |            |    | 36      | 29        | 21.16                 |       |
|            |                         |            |    | 36      | 30        | 21.17                 |       |
|            |                         |            |    | 75      | 0         | 21.28                 |       |
|            | 2535                    | 21100      |    | 1       | 0         | 22.27                 |       |
|            |                         |            |    | 1       | 37        | 22.27                 |       |
|            |                         |            |    | 1       | 74        | 22.27                 |       |
|            |                         |            |    | 36      | 0         | 21.18                 |       |
|            |                         |            |    | 36      | 29        | 21.15                 |       |
|            |                         |            |    | 36      | 30        | 21.14                 |       |
|            |                         |            |    | 75      | 0         | 21.31                 |       |
|            | 2562.5                  | 21375      |    | 1       | 0         | 22.21                 |       |
|            |                         |            |    | 1       | 37        | 22.26                 |       |
|            |                         |            |    | 1       | 74        | 22.24                 |       |
|            |                         |            |    | 36      | 0         | 21.37                 |       |
|            |                         |            |    | 36      | 29        | 21.15                 |       |
|            |                         |            |    | 36      | 30        | 21.15                 |       |
|            |                         |            |    | 75      | 0         | 21.25                 |       |
|            | 16QAM                   | 2507.5     |    | 20825   | 1         | 0                     | 21.72 |
|            |                         |            |    |         | 1         | 37                    | 21.73 |
|            |                         |            |    |         | 1         | 74                    | 21.73 |
| 36         |                         |            |    |         | 0         | 20.61                 |       |
| 36         |                         |            |    |         | 29        | 20.41                 |       |
| 36         |                         |            |    |         | 30        | 20.42                 |       |
| 75         |                         |            |    |         | 0         | 20.33                 |       |
| 2535       |                         | 21100      |    | 1       | 0         | 22.06                 |       |
|            |                         |            |    | 1       | 37        | 22.02                 |       |
|            |                         |            | 1  | 74      | 22.02     |                       |       |
|            |                         |            | 36 | 0       | 20.29     |                       |       |
|            |                         |            | 36 | 29      | 20.37     |                       |       |
|            |                         |            | 36 | 30      | 20.32     |                       |       |
|            |                         |            | 75 | 0       | 20.43     |                       |       |
| 2562.5     |                         | 21375      | 1  | 0       | 21.61     |                       |       |
|            |                         |            | 1  | 37      | 21.48     |                       |       |
|            |                         |            | 1  | 74      | 21.47     |                       |       |
|            |                         |            | 36 | 0       | 20.35     |                       |       |
|            |                         |            | 36 | 29      | 20.15     |                       |       |
|            |                         |            | 36 | 30      | 20.40     |                       |       |
|            |                         |            | 75 | 0       | 20.23     |                       |       |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |       |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|-------|
| QPSK       | 2510                    | 20850      | 20 | 1       | 0         | 22.36                 |       |
|            |                         |            |    | 1       | 49        | 22.27                 |       |
|            |                         |            |    | 1       | 99        | 22.26                 |       |
|            |                         |            |    | 50      | 0         | 21.39                 |       |
|            |                         |            |    | 50      | 24        | 21.26                 |       |
|            |                         |            |    | 50      | 50        | 21.26                 |       |
|            | 100                     | 0          |    | 21.18   |           |                       |       |
|            | 2535                    | 21100      |    | 1       | 0         | 22.58                 |       |
|            |                         |            |    | 1       | 49        | 22.60                 |       |
|            |                         |            |    | 1       | 99        | 22.59                 |       |
|            |                         |            |    | 50      | 0         | 21.15                 |       |
|            |                         |            |    | 50      | 24        | 21.24                 |       |
|            |                         |            |    | 50      | 50        | 21.24                 |       |
|            | 100                     | 0          |    | 21.25   |           |                       |       |
|            | 2560                    | 21350      |    | 1       | 0         | 22.39                 |       |
|            |                         |            |    | 1       | 49        | 22.31                 |       |
|            |                         |            |    | 1       | 99        | 22.24                 |       |
|            |                         |            |    | 50      | 0         | 21.25                 |       |
|            |                         |            |    | 50      | 24        | 21.37                 |       |
|            |                         |            |    | 50      | 50        | 21.37                 |       |
|            | 100                     | 0          |    | 21.28   |           |                       |       |
|            | 16QAM                   | 2510       |    | 20850   | 1         | 0                     | 21.16 |
|            |                         |            |    |         | 1         | 49                    | 21.01 |
|            |                         |            |    |         | 1         | 99                    | 20.91 |
| 50         |                         |            |    |         | 0         | 20.53                 |       |
| 50         |                         |            |    |         | 24        | 20.34                 |       |
| 50         |                         |            |    |         | 50        | 20.34                 |       |
| 100        |                         | 0          |    | 20.28   |           |                       |       |
| 2535       |                         | 21100      |    | 1       | 0         | 21.56                 |       |
|            |                         |            |    | 1       | 49        | 21.60                 |       |
|            |                         |            |    | 1       | 99        | 21.56                 |       |
|            |                         |            |    | 50      | 0         | 20.49                 |       |
|            |                         |            |    | 50      | 24        | 20.49                 |       |
|            |                         |            |    | 50      | 50        | 20.41                 |       |
| 100        |                         | 0          |    | 20.35   |           |                       |       |
| 2560       |                         | 21350      |    | 1       | 0         | 22.07                 |       |
|            |                         |            |    | 1       | 49        | 21.90                 |       |
|            |                         |            |    | 1       | 99        | 21.90                 |       |
|            |                         |            |    | 50      | 0         | 20.40                 |       |
|            |                         |            |    | 50      | 24        | 20.35                 |       |
|            |                         |            |    | 50      | 50        | 20.35                 |       |
| 100        |                         | 0          |    | 20.44   |           |                       |       |

## Occupied Bandwidth

| Band | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |        |        |        |
|------|-------------------------|---------|----------|---------|-----------|------------------------------|--------|--------|--------|
|      |                         |         |          |         |           | QPSK                         |        | 16-QAM |        |
| 7    | 2502.5                  | 20775   | 5        | 25      | 0         | 4.472                        | Fig.1  | 4.472  | Fig.2  |
|      | 2535                    | 21100   |          | 25      | 0         | 4.472                        | Fig.3  | 4.493  | Fig.4  |
|      | 2567.5                  | 21425   |          | 25      | 0         | 4.472                        | Fig.5  | 4.472  | Fig.6  |
|      | 2505                    | 20800   | 10       | 50      | 0         | 8.900                        | Fig.7  | 8.944  | Fig.8  |
|      | 2535                    | 21100   |          | 50      | 0         | 8.944                        | Fig.9  | 8.944  | Fig.10 |
|      | 2565                    | 21400   |          | 50      | 0         | 8.944                        | Fig.11 | 8.944  | Fig.12 |
|      | 2507.5                  | 20825   | 15       | 75      | 0         | 13.350                       | Fig.13 | 13.415 | Fig.14 |
|      | 2535                    | 21100   |          | 75      | 0         | 13.415                       | Fig.15 | 13.415 | Fig.16 |
|      | 2562.5                  | 21375   |          | 75      | 0         | 13.350                       | Fig.17 | 13.480 | Fig.18 |
|      | 2510                    | 20850   | 20       | 100     | 0         | 17.887                       | Fig.19 | 17.800 | Fig.20 |
|      | 2535                    | 21100   |          | 100     | 0         | 17.887                       | Fig.21 | 17.887 | Fig.22 |
|      | 2560                    | 21350   |          | 100     | 0         | 17.887                       | Fig.23 | 17.800 | Fig.24 |

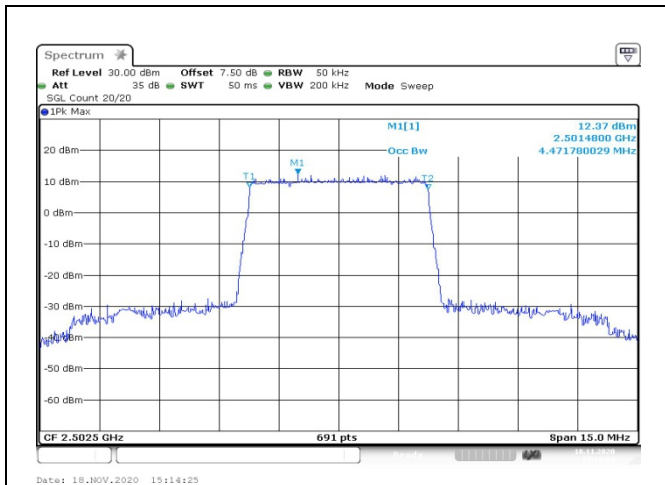


Fig.1

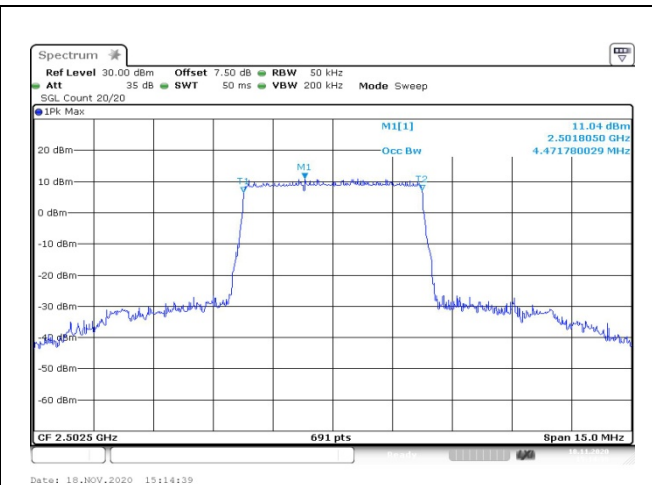


Fig.2

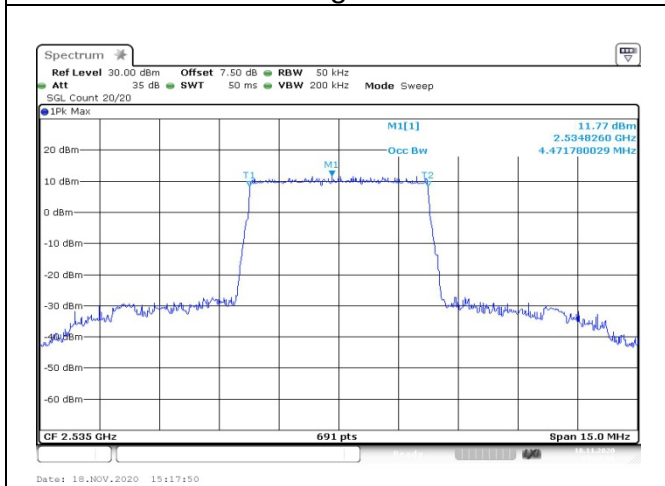


Fig.3

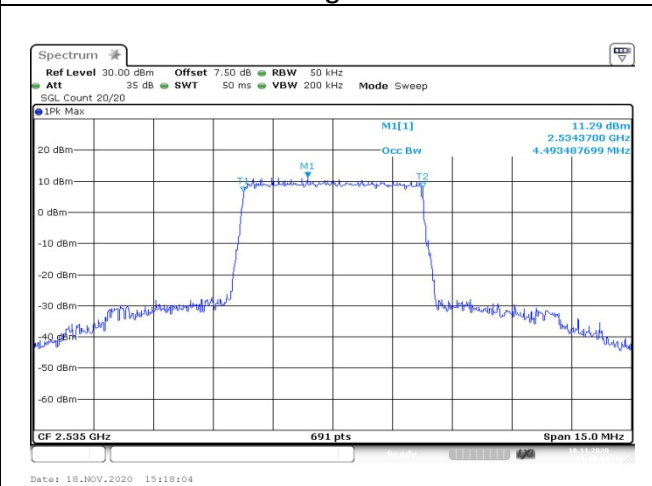


Fig.4

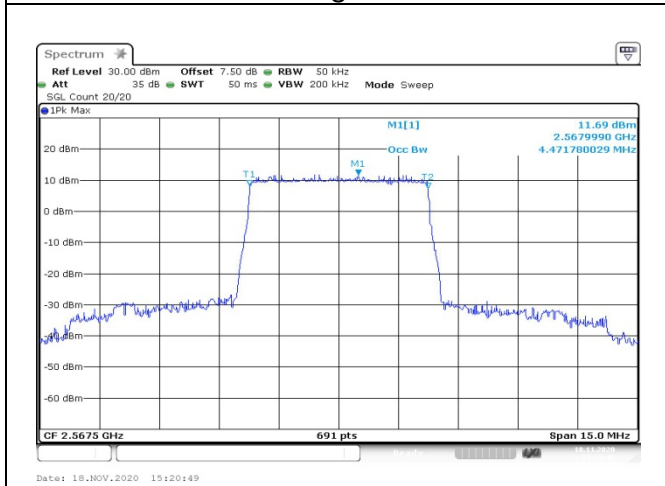


Fig.5

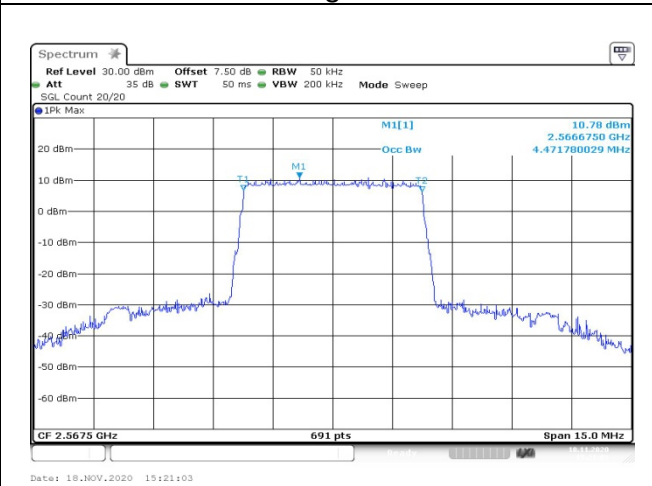
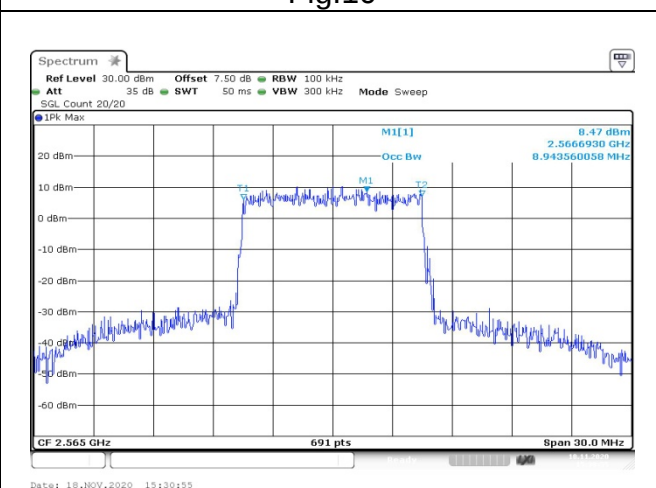
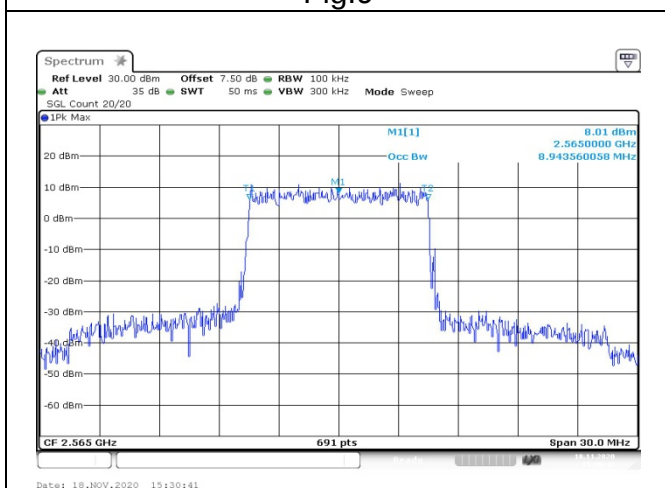
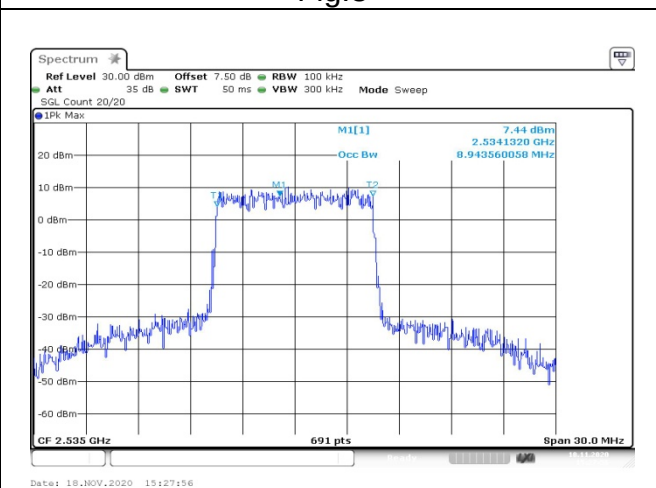
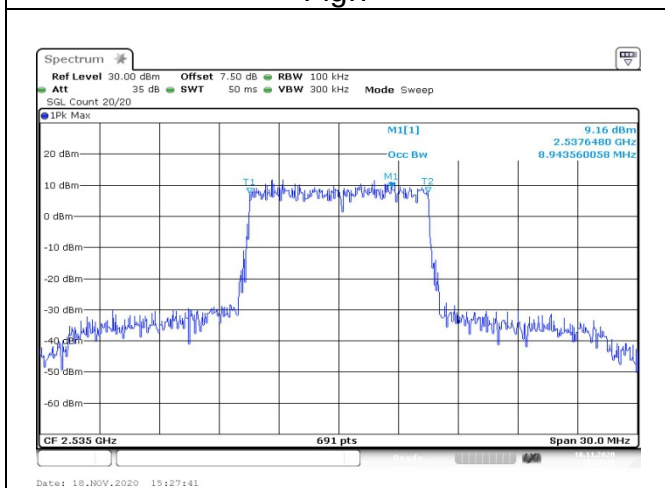
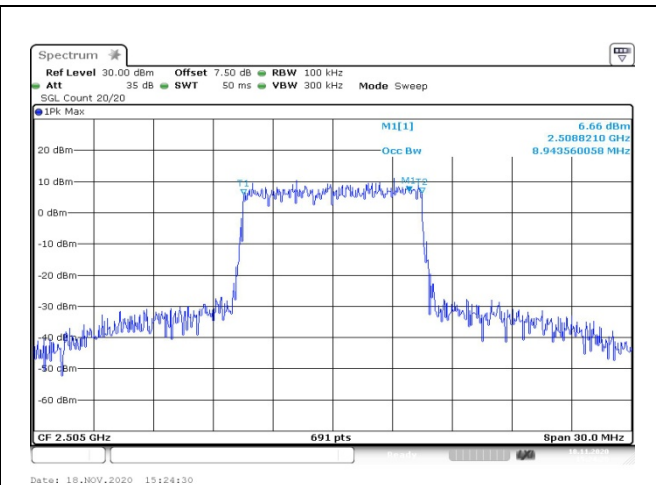
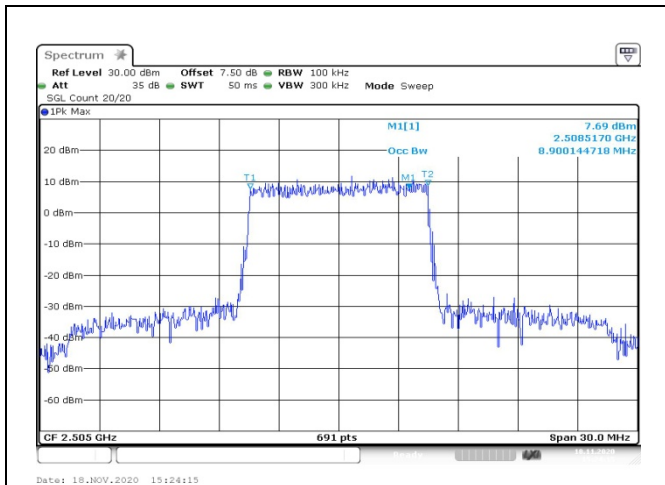


Fig.6



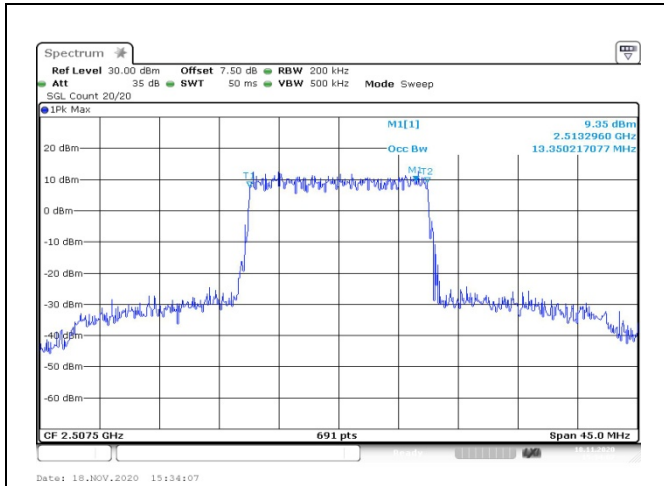


Fig.13

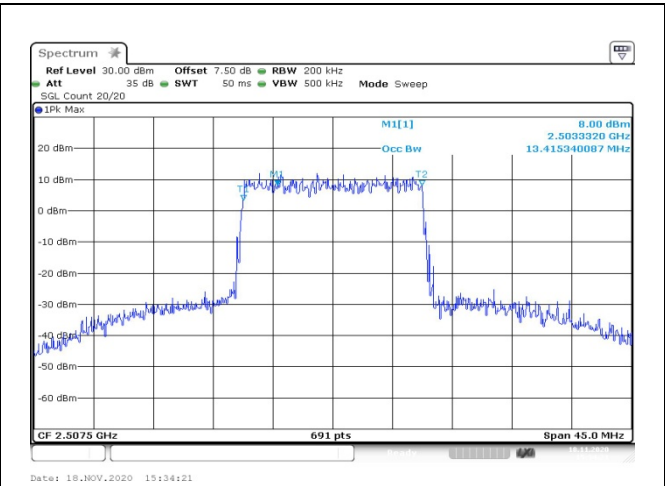


Fig.14

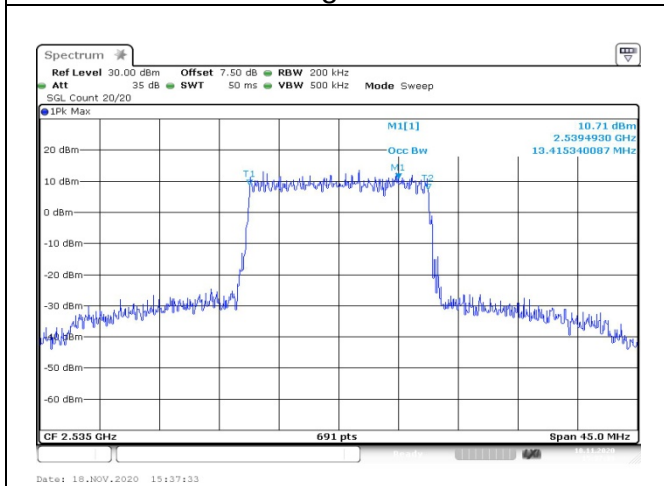


Fig.15

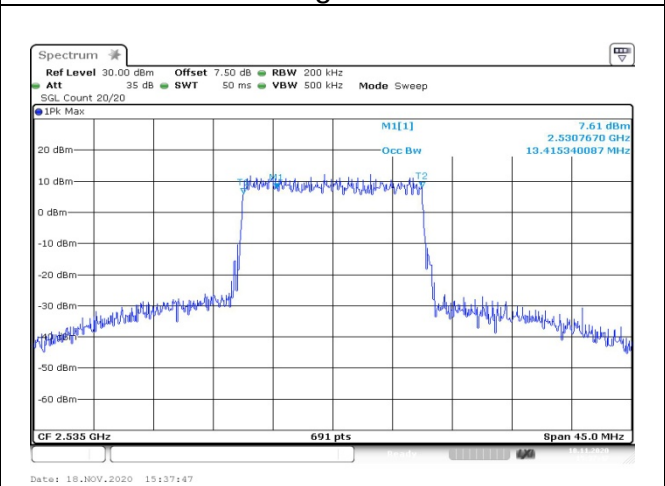


Fig.16

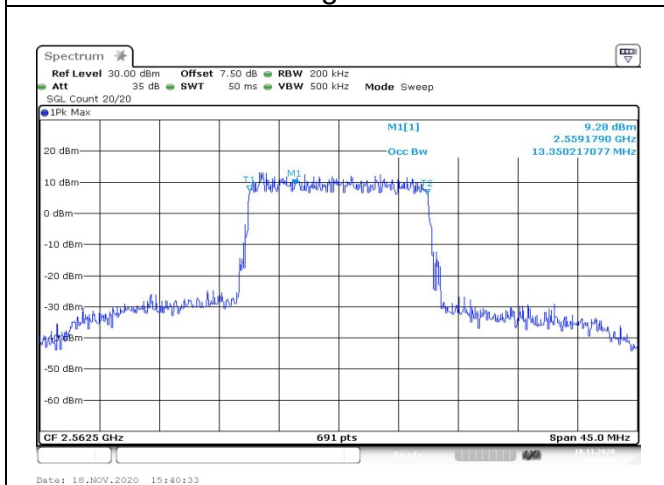


Fig.17

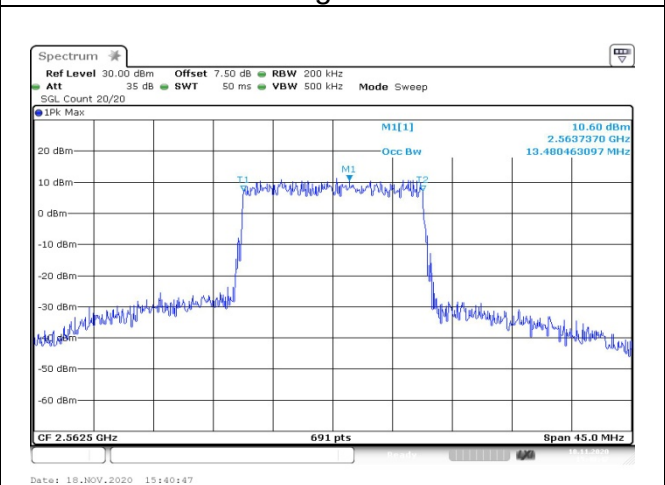
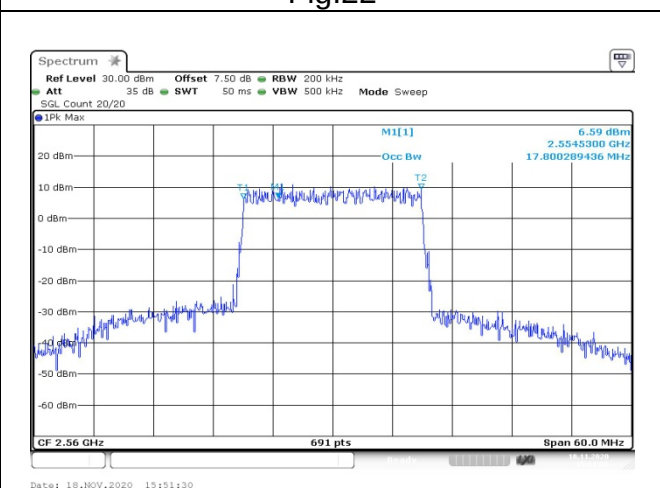
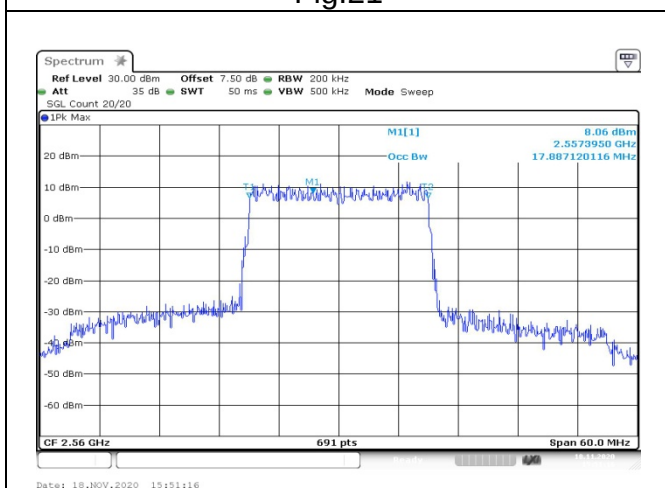
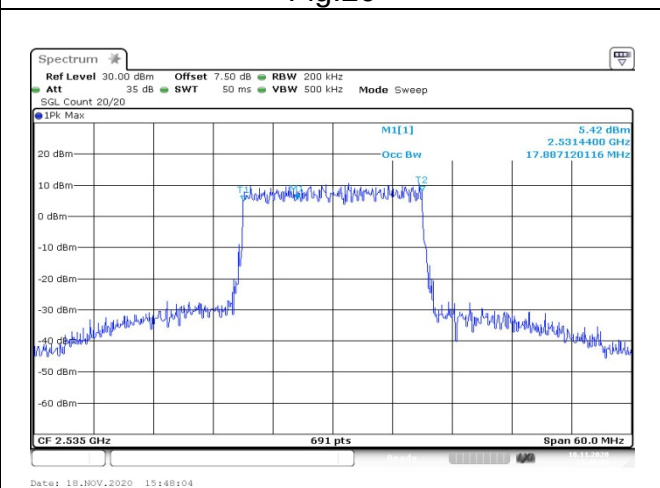
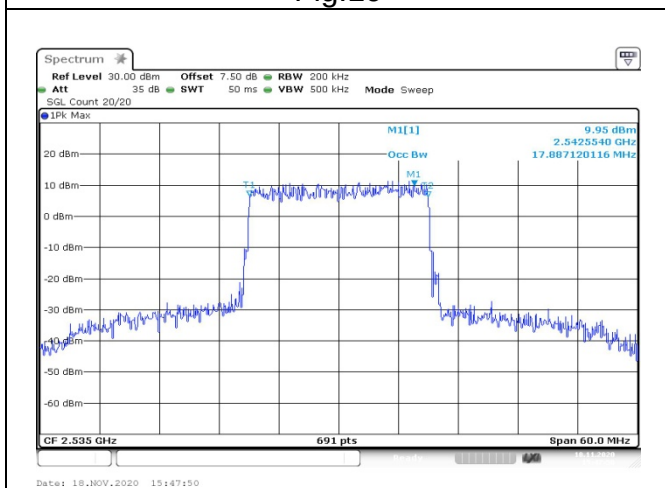
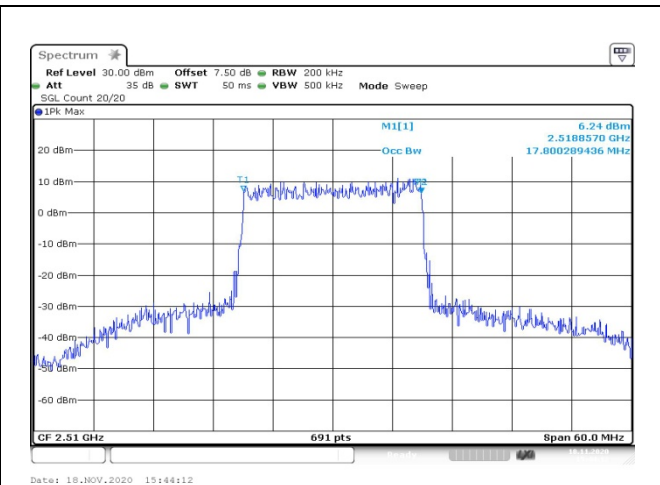
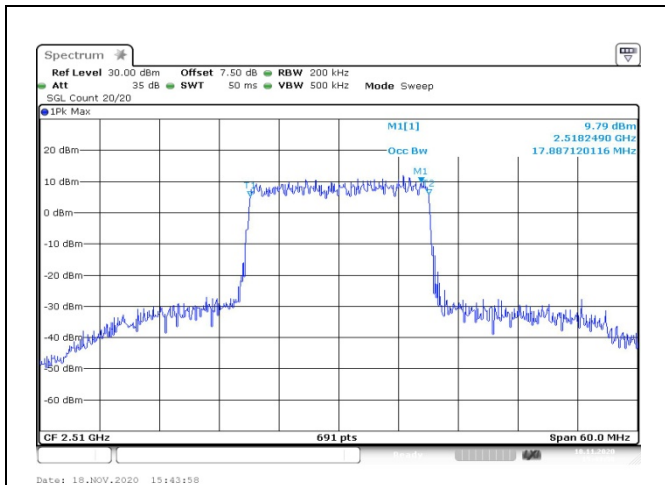


Fig.18



## Emission Bandwidth

| Band | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |        |        |        |
|------|-------------------------|---------|----------|---------|-----------|--------------------------------------------|--------|--------|--------|
|      |                         |         |          |         |           | QPSK                                       |        | 16-QAM |        |
| 7    | 2502.5                  | 20775   | 5        | 25      | 0         | 4.928                                      | Fig.1  | 4.884  | Fig.2  |
|      | 2535                    | 21100   |          | 25      | 0         | 4.906                                      | Fig.3  | 4.884  | Fig.4  |
|      | 2567.5                  | 21425   |          | 25      | 0         | 4.884                                      | Fig.5  | 4.906  | Fig.6  |
|      | 2505                    | 20800   | 10       | 50      | 0         | 9.725                                      | Fig.7  | 9.725  | Fig.8  |
|      | 2535                    | 21100   |          | 50      | 0         | 9.725                                      | Fig.9  | 9.638  | Fig.10 |
|      | 2565                    | 21400   |          | 50      | 0         | 9.768                                      | Fig.11 | 9.725  | Fig.12 |
|      | 2507.5                  | 20825   | 15       | 75      | 0         | 14.653                                     | Fig.13 | 14.588 | Fig.14 |
|      | 2535                    | 21100   |          | 75      | 0         | 14.718                                     | Fig.15 | 14.718 | Fig.16 |
|      | 2562.5                  | 21375   |          | 75      | 0         | 14.653                                     | Fig.17 | 14.718 | Fig.18 |
|      | 2510                    | 20850   | 20       | 100     | 0         | 19.276                                     | Fig.19 | 19.450 | Fig.20 |
|      | 2535                    | 21100   |          | 100     | 0         | 19.363                                     | Fig.21 | 19.276 | Fig.22 |
|      | 2560                    | 21350   |          | 100     | 0         | 19.363                                     | Fig.23 | 19.363 | Fig.24 |

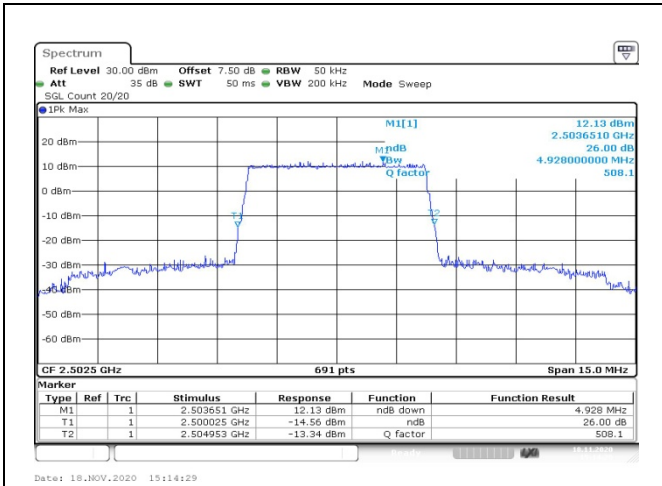


Fig.1

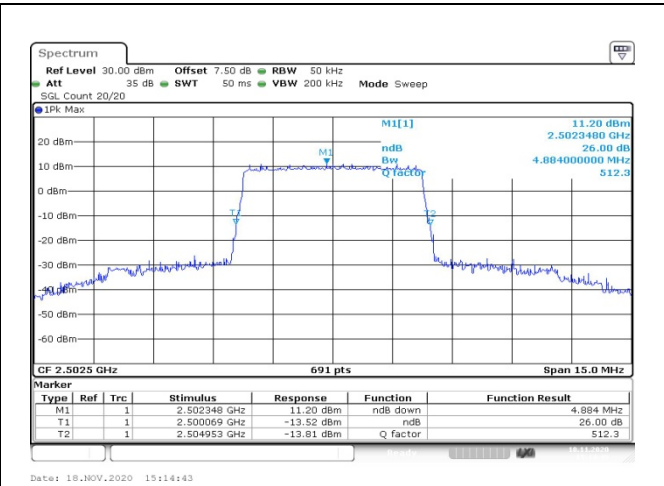


Fig.2

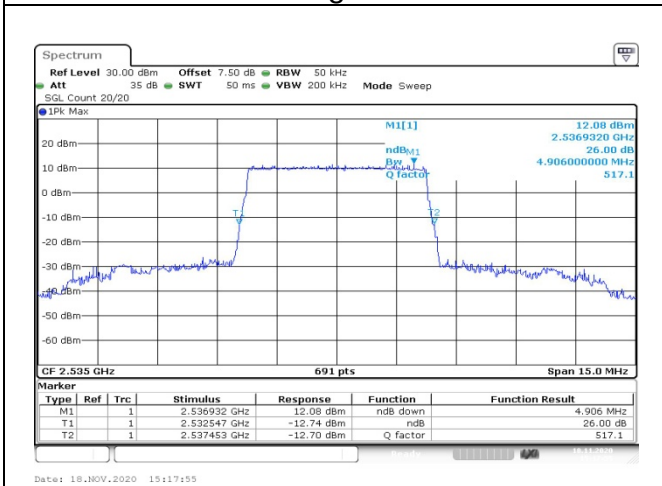


Fig.3

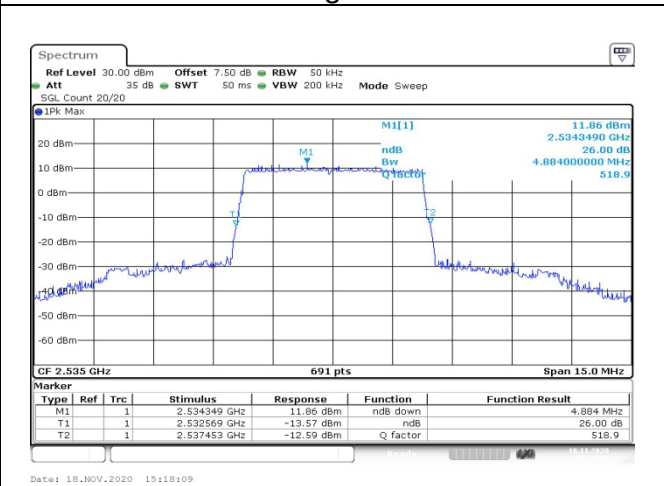


Fig.4

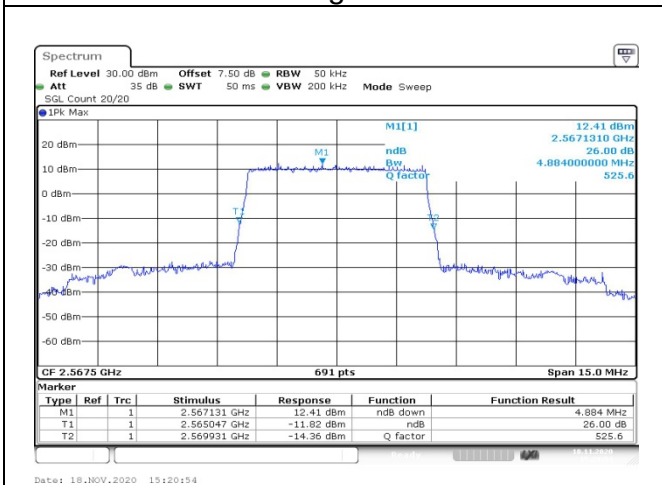


Fig.5

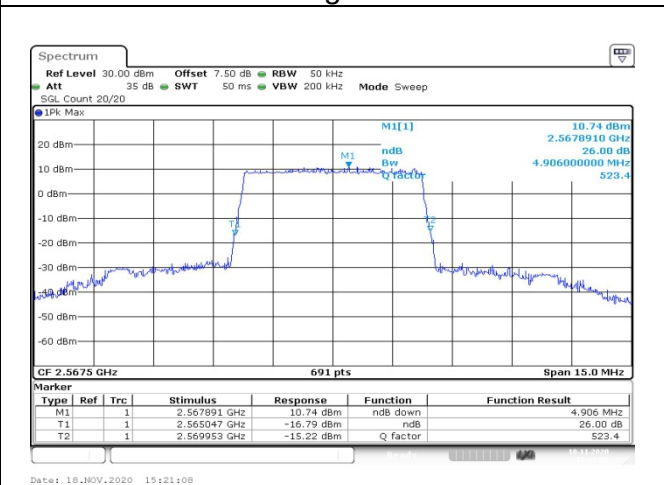


Fig.6

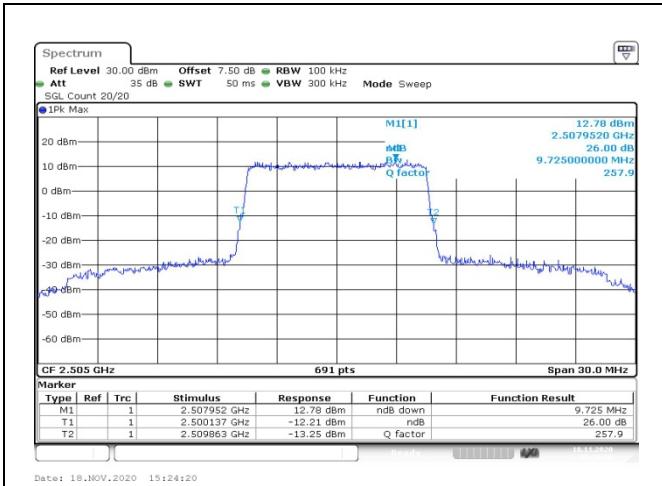


Fig.7

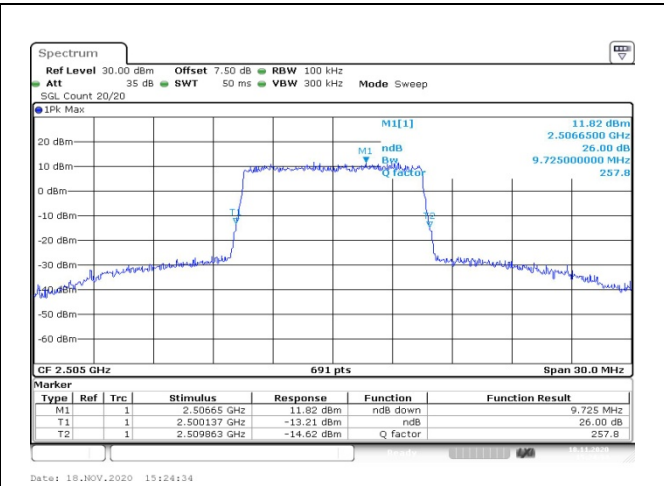


Fig.8

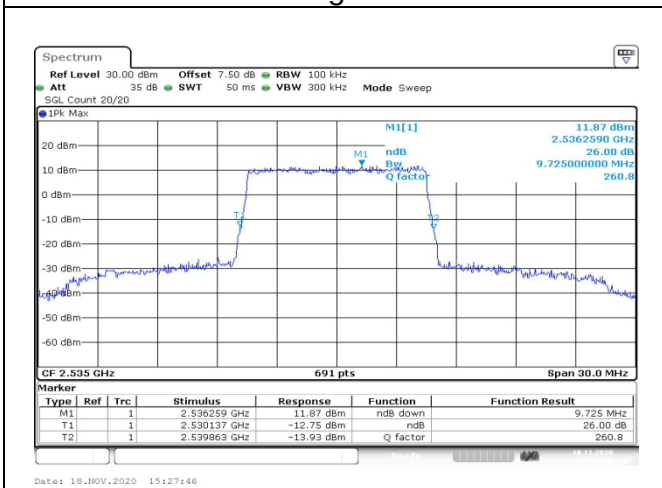


Fig.9

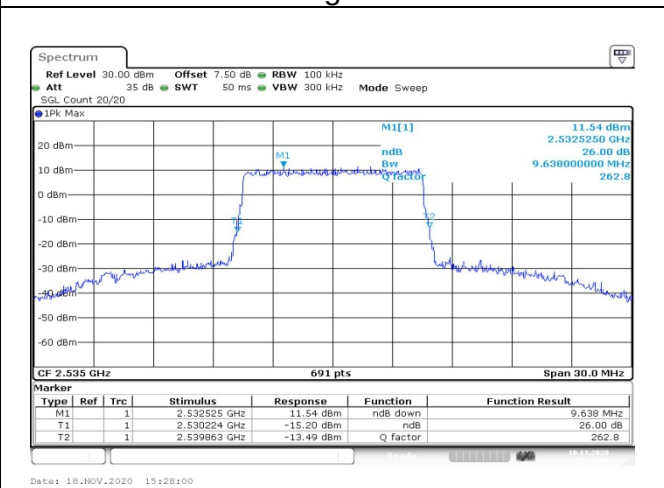


Fig.10

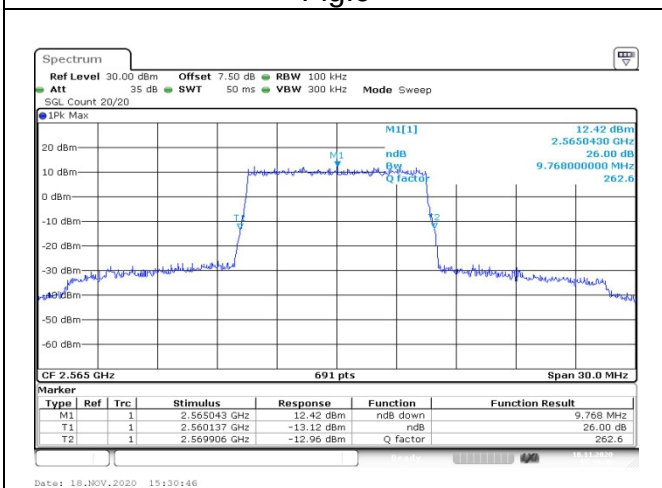


Fig.11

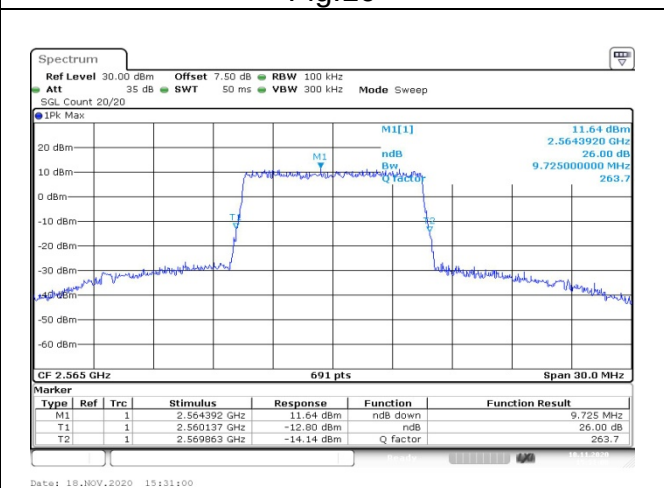


Fig.12

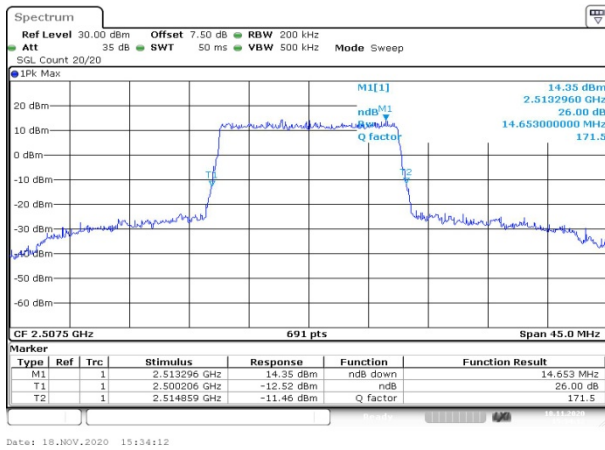


Fig.13

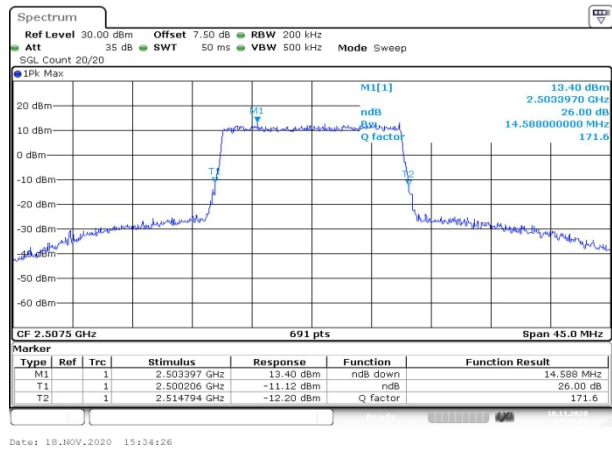


Fig.14

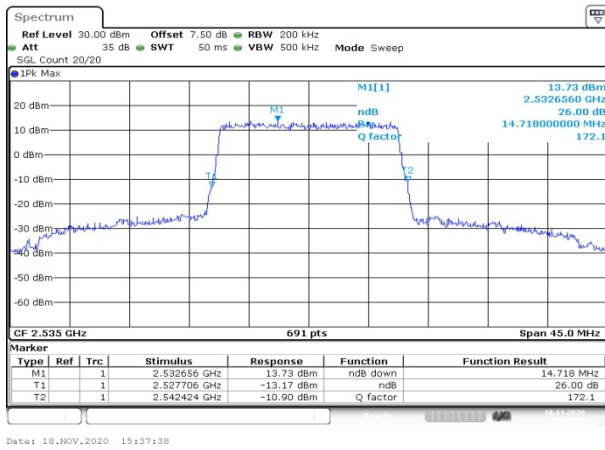


Fig.15

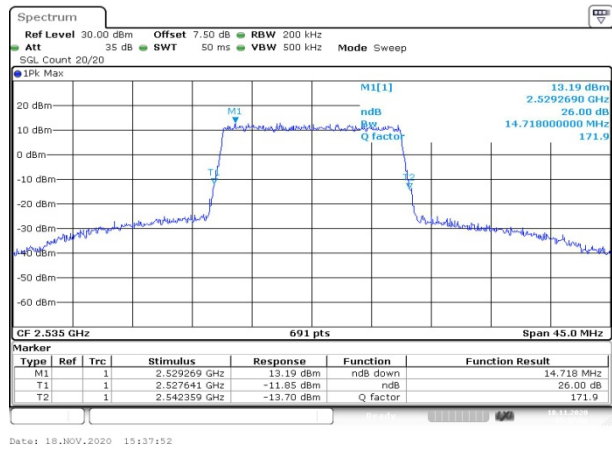


Fig.16

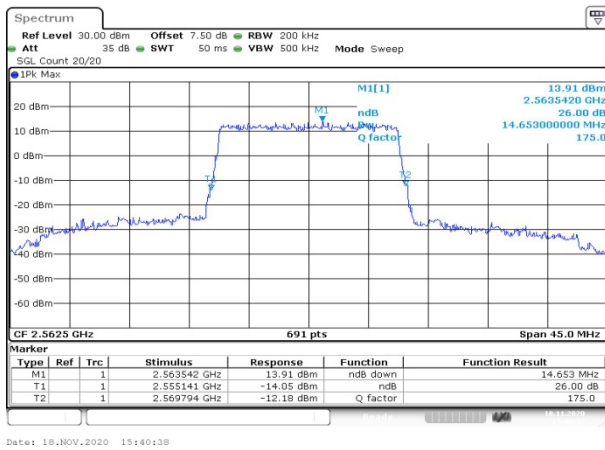


Fig.17

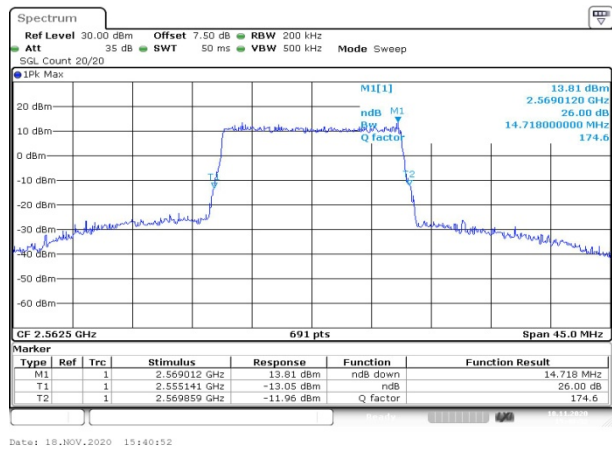


Fig.18

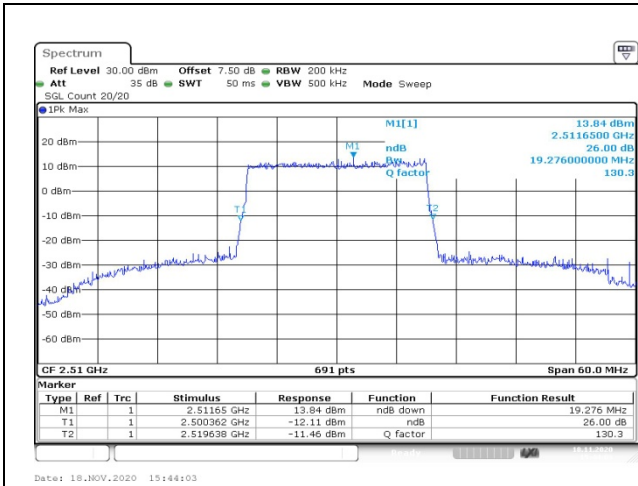


Fig.19

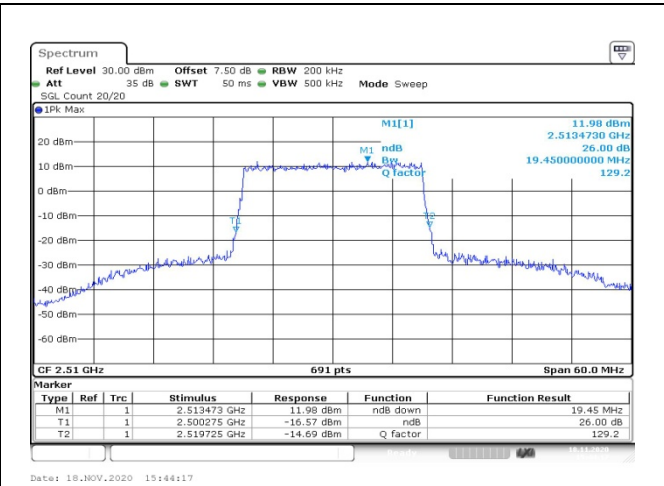


Fig.20

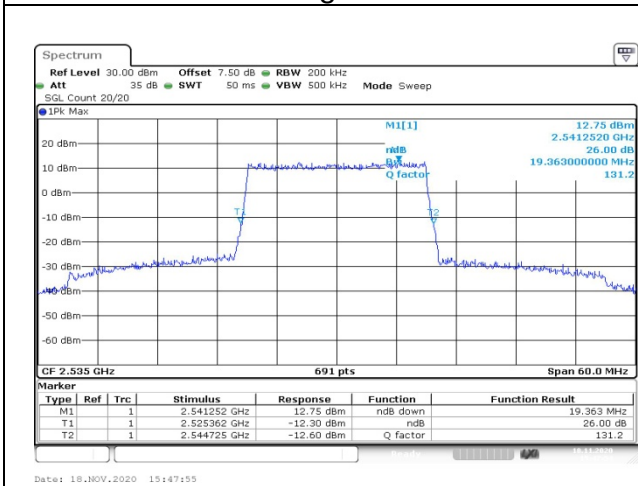


Fig.21

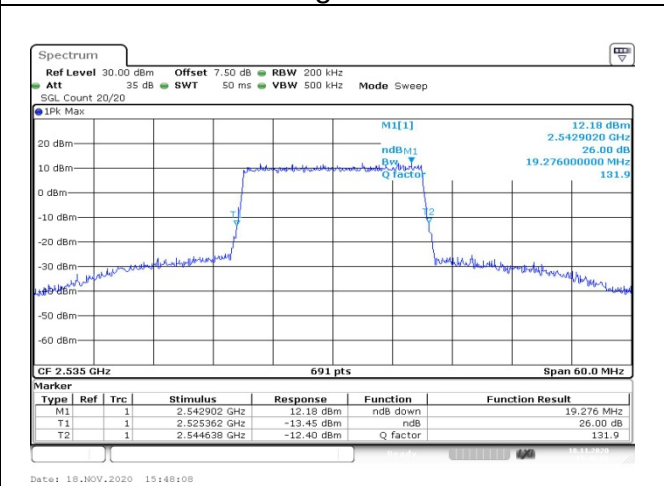


Fig.22

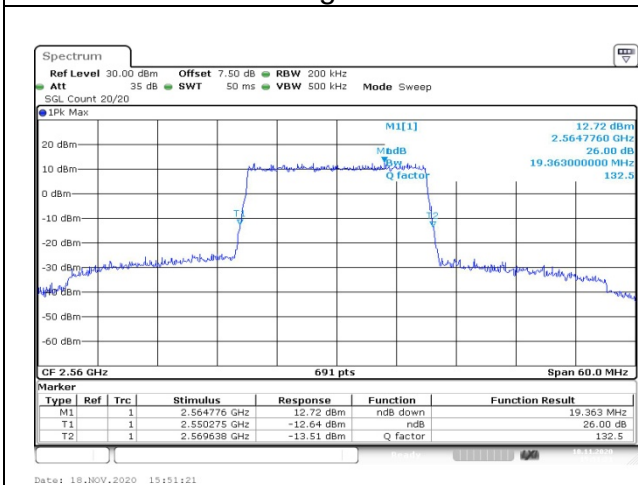


Fig.23

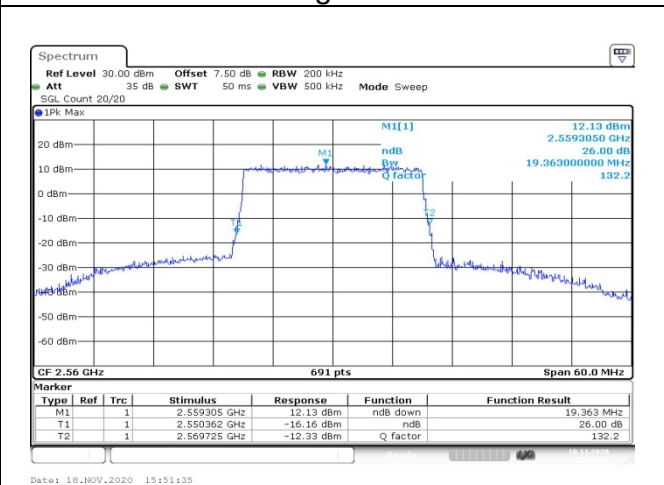


Fig.24

## Peak-Average Ratio

| Band | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | QPSK   | 16-QAM |
|------|-------------------------|---------|----------|---------|-----------|--------|--------|
| 7    | 2502.5                  | 20775   | 5        | 1       | 24        | Fig.1  | Fig.2  |
|      | 2502.5                  | 20775   |          | 25      | 0         | Fig.3  | Fig.4  |
|      | 2535                    | 21100   |          | 1       | 24        | Fig.5  | Fig.6  |
|      | 2535                    | 21100   |          | 25      | 0         | Fig.7  | Fig.8  |
|      | 2567.5                  | 21425   |          | 1       | 24        | Fig.9  | Fig.10 |
|      | 2567.5                  | 21425   |          | 25      | 0         | Fig.11 | Fig.12 |
|      | 2505                    | 20800   | 10       | 1       | 49        | Fig.13 | Fig.14 |
|      | 2505                    | 20800   |          | 50      | 0         | Fig.15 | Fig.16 |
|      | 2535                    | 21100   |          | 1       | 49        | Fig.17 | Fig.18 |
|      | 2535                    | 21100   |          | 50      | 0         | Fig.19 | Fig.20 |
|      | 2565                    | 21400   |          | 1       | 49        | Fig.21 | Fig.22 |
|      | 2565                    | 21400   |          | 50      | 0         | Fig.23 | Fig.24 |
|      | 2507.5                  | 20825   | 15       | 1       | 74        | Fig.25 | Fig.26 |
|      | 2507.5                  | 20825   |          | 75      | 0         | Fig.27 | Fig.28 |
|      | 2535                    | 21100   |          | 1       | 74        | Fig.29 | Fig.30 |
|      | 2535                    | 21100   |          | 75      | 0         | Fig.31 | Fig.32 |
|      | 2562.5                  | 21375   |          | 1       | 74        | Fig.33 | Fig.34 |
|      | 2562.5                  | 21375   |          | 75      | 0         | Fig.35 | Fig.36 |
|      | 2510                    | 20850   | 20       | 1       | 99        | Fig.37 | Fig.38 |
|      | 2510                    | 20850   |          | 100     | 0         | Fig.39 | Fig.40 |
|      | 2535                    | 21100   |          | 1       | 99        | Fig.41 | Fig.42 |
|      | 2535                    | 21100   |          | 100     | 0         | Fig.43 | Fig.44 |
|      | 2560                    | 21350   |          | 1       | 99        | Fig.45 | Fig.46 |
|      | 2560                    | 21350   |          | 100     | 0         | Fig.47 | Fig.48 |