

## APPENDIX A – TEST DATA OF CONDUCTED EMISSION

### LTE Band 4

#### 1 RF Power Output

| Modulation | Carrier frequency (MHz) | UL Channel | BW  | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|-----|---------|-----------|-----------------------|--|
| QPSK       | 1710.7                  | 19957      | 1.4 | 1       | 0         | 23.21                 |  |
|            |                         |            |     | 1       | 5         | 23.21                 |  |
|            |                         |            |     | 3       | 2         | 22.39                 |  |
|            |                         |            |     | 6       | 0         | 22.30                 |  |
|            |                         |            |     | 1       | 0         | 23.18                 |  |
|            |                         |            |     | 1       | 5         | 23.18                 |  |
|            | 1732.5                  | 20175      |     | 3       | 2         | 22.36                 |  |
|            |                         |            |     | 6       | 0         | 22.25                 |  |
|            |                         |            |     | 1       | 0         | 23.16                 |  |
|            |                         |            |     | 1       | 5         | 23.16                 |  |
|            |                         |            |     | 3       | 2         | 22.31                 |  |
|            |                         |            |     | 6       | 0         | 22.22                 |  |
| Modulation | Carrier frequency (MHz) | UL Channel | BW  | RB Size | RB Offset | Conducted power (dBm) |  |
| 16QAM      | 1710.7                  | 19957      | 1.4 | 1       | 0         | 22.52                 |  |
|            |                         |            |     | 1       | 5         | 22.52                 |  |
|            |                         |            |     | 3       | 2         | 21.45                 |  |
|            |                         |            |     | 6       | 0         | 21.37                 |  |
|            |                         |            |     | 1       | 0         | 22.50                 |  |
|            |                         |            |     | 1       | 5         | 22.50                 |  |
|            | 1732.5                  | 20175      |     | 3       | 2         | 21.42                 |  |
|            |                         |            |     | 6       | 0         | 21.33                 |  |
|            |                         |            |     | 1       | 0         | 22.47                 |  |
|            |                         |            |     | 1       | 5         | 22.47                 |  |
|            |                         |            |     | 3       | 2         | 21.40                 |  |
|            |                         |            |     | 6       | 0         | 21.29                 |  |
| Modulation | Carrier frequency (MHz) | UL Channel | BW  | RB Size | RB Offset | Conducted power (dBm) |  |
| 64QAM      | 1710.7                  | 19957      | 1.4 | 1       | 0         | 22.23                 |  |
|            |                         |            |     | 1       | 5         | 22.23                 |  |
|            |                         |            |     | 3       | 2         | 21.39                 |  |
|            |                         |            |     | 6       | 0         | 21.35                 |  |
|            |                         |            |     | 1       | 0         | 22.22                 |  |
|            |                         |            |     | 1       | 5         | 22.22                 |  |
|            | 1732.5                  | 20175      |     | 3       | 2         | 21.37                 |  |
|            |                         |            |     | 6       | 0         | 21.32                 |  |
|            |                         |            |     | 1       | 0         | 22.20                 |  |
|            |                         |            |     | 1       | 5         | 22.20                 |  |
|            |                         |            |     | 3       | 2         | 21.36                 |  |
|            |                         |            |     | 6       | 0         | 21.29                 |  |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|--|
| QPSK       | 1711.5                  | 19965      | 3  | 1       | 0         | 23.19                 |  |
|            |                         |            |    | 1       | 14        | 23.19                 |  |
|            |                         |            |    | 8       | 4         | 22.37                 |  |
|            |                         |            |    | 15      | 0         | 22.28                 |  |
|            |                         |            |    | 1       | 0         | 23.16                 |  |
|            |                         |            |    | 1       | 14        | 23.16                 |  |
|            | 1732.5                  | 20175      |    | 8       | 4         | 22.34                 |  |
|            |                         |            |    | 15      | 0         | 22.23                 |  |
|            |                         |            |    | 1       | 0         | 23.14                 |  |
|            |                         |            |    | 1       | 14        | 23.14                 |  |
|            |                         |            |    | 8       | 4         | 22.29                 |  |
|            |                         |            |    | 15      | 0         | 22.20                 |  |
| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
| 16QAM      | 1711.5                  | 19965      | 3  | 1       | 0         | 22.50                 |  |
|            |                         |            |    | 1       | 14        | 22.50                 |  |
|            |                         |            |    | 8       | 4         | 21.42                 |  |
|            |                         |            |    | 15      | 0         | 21.34                 |  |
|            |                         |            |    | 1       | 0         | 22.45                 |  |
|            |                         |            |    | 1       | 14        | 22.45                 |  |
|            | 1732.5                  | 20175      |    | 8       | 4         | 21.37                 |  |
|            |                         |            |    | 15      | 0         | 21.28                 |  |
|            |                         |            |    | 1       | 0         | 22.42                 |  |
|            |                         |            |    | 1       | 14        | 22.42                 |  |
|            |                         |            |    | 8       | 4         | 21.35                 |  |
|            |                         |            |    | 15      | 0         | 21.24                 |  |
| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
| 64QAM      | 1711.5                  | 19965      | 3  | 1       | 0         | 22.18                 |  |
|            |                         |            |    | 1       | 14        | 22.18                 |  |
|            |                         |            |    | 8       | 4         | 21.33                 |  |
|            |                         |            |    | 15      | 0         | 21.29                 |  |
|            |                         |            |    | 1       | 0         | 22.16                 |  |
|            |                         |            |    | 1       | 14        | 22.16                 |  |
|            | 1732.5                  | 20175      |    | 8       | 4         | 21.31                 |  |
|            |                         |            |    | 15      | 0         | 21.26                 |  |
|            |                         |            |    | 1       | 0         | 22.14                 |  |
|            |                         |            |    | 1       | 14        | 22.14                 |  |
|            |                         |            |    | 8       | 4         | 21.30                 |  |
|            |                         |            |    | 15      | 0         | 21.23                 |  |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|--|
| QPSK       | 1712.5                  | 19975      | 5  | 1       | 0         | 23.17                 |  |
|            |                         |            |    | 1       | 24        | 23.17                 |  |
|            |                         |            |    | 12      | 6         | 22.35                 |  |
|            |                         |            |    | 25      | 0         | 22.26                 |  |
|            |                         |            |    | 1       | 0         | 23.14                 |  |
|            | 1732.5                  | 20175      |    | 1       | 24        | 23.14                 |  |
|            |                         |            |    | 12      | 6         | 22.32                 |  |
|            |                         |            |    | 25      | 0         | 22.21                 |  |
|            |                         |            |    | 1       | 0         | 23.12                 |  |
|            |                         |            |    | 1       | 24        | 23.12                 |  |
| 16QAM      | 1712.5                  | 19975      | 5  | 12      | 6         | 22.29                 |  |
|            |                         |            |    | 25      | 0         | 22.20                 |  |
|            |                         |            |    | 1       | 0         | 22.50                 |  |
|            |                         |            |    | 1       | 24        | 22.50                 |  |
|            |                         |            |    | 12      | 6         | 21.42                 |  |
|            | 1732.5                  | 20175      |    | 25      | 0         | 21.34                 |  |
|            |                         |            |    | 1       | 0         | 22.46                 |  |
|            |                         |            |    | 1       | 24        | 22.46                 |  |
|            |                         |            |    | 12      | 6         | 21.38                 |  |
|            |                         |            |    | 25      | 0         | 21.29                 |  |
| 64QAM      | 1712.5                  | 19975      | 5  | 1       | 0         | 22.43                 |  |
|            |                         |            |    | 1       | 24        | 22.43                 |  |
|            |                         |            |    | 12      | 6         | 21.36                 |  |
|            |                         |            |    | 25      | 0         | 21.25                 |  |
|            | 1732.5                  | 20175      |    | 1       | 0         | 22.19                 |  |
|            |                         |            |    | 1       | 24        | 22.19                 |  |
|            |                         |            |    | 12      | 6         | 21.34                 |  |
|            |                         |            |    | 25      | 0         | 21.30                 |  |
|            |                         |            |    | 1       | 0         | 22.17                 |  |
| 1752.5     | 1752.5                  | 20375      |    | 1       | 24        | 22.15                 |  |
|            |                         |            |    | 12      | 6         | 21.30                 |  |
|            |                         |            |    | 25      | 0         | 21.25                 |  |
|            |                         |            |    | 1       | 0         | 22.13                 |  |
|            |                         |            |    | 1       | 24        | 22.13                 |  |
|            |                         |            |    | 12      | 6         | 21.29                 |  |
|            |                         |            |    | 25      | 0         | 21.22                 |  |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|--|
| QPSK       | 1715                    | 20000      | 10 | 1       | 0         | 23.21                 |  |
|            |                         |            |    | 1       | 49        | 23.21                 |  |
|            |                         |            |    | 24      | 12        | 22.39                 |  |
|            |                         |            |    | 50      | 0         | 22.29                 |  |
|            |                         |            |    | 1       | 0         | 23.17                 |  |
|            | 1732.5                  | 20175      |    | 1       | 49        | 23.17                 |  |
|            |                         |            |    | 24      | 12        | 22.35                 |  |
|            |                         |            |    | 50      | 0         | 22.24                 |  |
|            |                         |            |    | 1       | 0         | 23.15                 |  |
|            |                         |            |    | 1       | 49        | 23.15                 |  |
| 16QAM      | 1715                    | 20000      | 10 | 24      | 12        | 22.30                 |  |
|            |                         |            |    | 50      | 0         | 22.21                 |  |
|            |                         |            |    | 1       | 0         | 22.51                 |  |
|            |                         |            |    | 1       | 49        | 22.51                 |  |
|            |                         |            |    | 24      | 12        | 21.43                 |  |
|            | 1732.5                  | 20175      |    | 50      | 0         | 21.34                 |  |
|            |                         |            |    | 1       | 0         | 22.47                 |  |
|            |                         |            |    | 1       | 49        | 22.47                 |  |
|            |                         |            |    | 24      | 12        | 21.39                 |  |
|            |                         |            |    | 50      | 0         | 21.30                 |  |
| 64QAM      | 1715                    | 20000      | 10 | 1       | 0         | 22.44                 |  |
|            |                         |            |    | 1       | 49        | 22.44                 |  |
|            |                         |            |    | 24      | 12        | 21.37                 |  |
|            |                         |            |    | 50      | 0         | 21.26                 |  |
|            | 1732.5                  | 20175      |    | 1       | 0         | 22.20                 |  |
|            |                         |            |    | 1       | 49        | 22.20                 |  |
|            |                         |            |    | 24      | 12        | 21.35                 |  |
|            |                         |            |    | 50      | 0         | 21.31                 |  |
|            |                         |            |    | 1       | 0         | 22.16                 |  |
| 1750       | 1750                    | 20350      |    | 1       | 49        | 22.16                 |  |
|            |                         |            |    | 24      | 12        | 21.31                 |  |
|            |                         |            |    | 50      | 0         | 21.26                 |  |
|            |                         |            |    | 1       | 0         | 22.14                 |  |
|            |                         |            |    | 1       | 49        | 22.14                 |  |
|            |                         |            |    | 24      | 12        | 21.30                 |  |
|            |                         |            |    | 50      | 0         | 21.23                 |  |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|--|
| QPSK       | 1717.5                  | 20025      | 15 | 1       | 0         | 23.25                 |  |
|            |                         |            |    | 1       | 74        | 23.25                 |  |
|            |                         |            |    | 40      | 18        | 22.43                 |  |
|            |                         |            |    | 75      | 0         | 22.34                 |  |
|            |                         |            |    | 1       | 0         | 23.22                 |  |
|            | 1732.5                  | 20175      |    | 1       | 74        | 23.22                 |  |
|            |                         |            |    | 40      | 18        | 22.40                 |  |
|            |                         |            |    | 75      | 0         | 22.29                 |  |
|            |                         |            |    | 1       | 0         | 23.20                 |  |
|            |                         |            |    | 1       | 74        | 23.20                 |  |
| 16QAM      | 1747.5                  | 20325      |    | 40      | 18        | 22.35                 |  |
|            |                         |            |    | 75      | 0         | 22.26                 |  |
|            |                         |            |    | 1       | 0         | 22.52                 |  |
|            |                         |            |    | 1       | 74        | 22.52                 |  |
|            |                         |            |    | 40      | 18        | 21.44                 |  |
|            | 1717.5                  | 20025      |    | 75      | 0         | 21.36                 |  |
|            |                         |            |    | 1       | 0         | 22.49                 |  |
|            |                         |            |    | 1       | 74        | 22.49                 |  |
|            |                         |            |    | 40      | 18        | 21.41                 |  |
|            |                         |            |    | 75      | 0         | 21.32                 |  |
| 64QAM      | 1732.5                  | 20175      |    | 1       | 0         | 22.46                 |  |
|            |                         |            |    | 1       | 74        | 22.46                 |  |
|            |                         |            |    | 40      | 18        | 21.39                 |  |
|            |                         |            |    | 75      | 0         | 21.28                 |  |
|            |                         |            |    | 1       | 0         | 22.22                 |  |
|            | 1747.5                  | 20325      |    | 1       | 74        | 22.22                 |  |
|            |                         |            |    | 40      | 18        | 21.37                 |  |
|            |                         |            |    | 75      | 0         | 21.32                 |  |
|            |                         |            |    | 1       | 0         | 22.19                 |  |
|            |                         |            |    | 1       | 74        | 22.19                 |  |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |  |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|--|
| QPSK       | 1720                    | 20050      | 20 | 1       | 0         | 23.28                 |  |
|            |                         |            |    | 1       | 99        | 23.28                 |  |
|            |                         |            |    | 50      | 25        | 22.46                 |  |
|            |                         |            |    | 100     | 0         | 22.37                 |  |
|            |                         |            |    | 1       | 0         | 23.25                 |  |
|            | 1732.5                  | 20175      |    | 1       | 99        | 23.25                 |  |
|            |                         |            |    | 50      | 25        | 22.43                 |  |
|            |                         |            |    | 100     | 0         | 22.32                 |  |
|            |                         |            |    | 1       | 0         | 23.23                 |  |
|            |                         |            |    | 1       | 99        | 23.23                 |  |
| 16QAM      | 1745                    | 20300      |    | 50      | 25        | 22.38                 |  |
|            |                         |            |    | 100     | 0         | 22.29                 |  |
|            |                         |            |    | 1       | 0         | 23.23                 |  |
|            |                         |            |    | 1       | 99        | 23.23                 |  |
|            |                         |            |    | 50      | 25        | 22.38                 |  |
|            | 1720                    | 20050      |    | 100     | 0         | 22.29                 |  |
|            |                         |            |    | 1       | 0         | 22.59                 |  |
|            |                         |            |    | 1       | 99        | 22.59                 |  |
|            |                         |            |    | 50      | 25        | 21.51                 |  |
|            |                         |            |    | 100     | 0         | 21.43                 |  |
| 64QAM      | 1732.5                  | 20175      |    | 1       | 0         | 22.56                 |  |
|            |                         |            |    | 1       | 99        | 22.56                 |  |
|            |                         |            |    | 50      | 25        | 21.48                 |  |
|            |                         |            |    | 100     | 0         | 21.39                 |  |
|            |                         |            |    | 1       | 0         | 22.53                 |  |
|            | 1745                    | 20300      |    | 1       | 99        | 22.53                 |  |
|            |                         |            |    | 50      | 25        | 21.46                 |  |
|            |                         |            |    | 100     | 0         | 21.35                 |  |
|            |                         |            |    | 1       | 0         | 22.29                 |  |
|            |                         |            |    | 1       | 99        | 22.29                 |  |
|            | 1720                    | 20050      |    | 50      | 25        | 21.44                 |  |
|            |                         |            |    | 100     | 0         | 21.40                 |  |
|            |                         |            |    | 1       | 0         | 22.27                 |  |
|            |                         |            |    | 1       | 99        | 22.27                 |  |
|            |                         |            |    | 50      | 25        | 21.42                 |  |
|            | 1732.5                  | 20175      |    | 100     | 0         | 21.37                 |  |
|            |                         |            |    | 1       | 0         | 22.25                 |  |
|            |                         |            |    | 1       | 99        | 22.25                 |  |
|            |                         |            |    | 50      | 25        | 21.41                 |  |
|            |                         |            |    | 100     | 0         | 21.34                 |  |

## 2 Occupied Bandwidth

### Test result

| Band | Carrier frequency (MHz) | Channel(Low) | BW  | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|-----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |     |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1710.7                  | 19957        | 1.4 | 6       | 0         | 1.0761                       | Fig.1 | 1.0766 | Fig.2 | 1.0768 | Fig.3 |
| 4    | 1732.5                  | 20175        | 1.4 | 6       | 0         | 1.0752                       | Fig.4 | 1.0758 | Fig.5 | 1.0735 | Fig.6 |
| 4    | 1754.3                  | 20393        | 1.4 | 6       | 0         | 1.0759                       | Fig.7 | 1.0758 | Fig.8 | 1.0761 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW  | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|-----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |     |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1710.7                  | 19957        | 1.4 | 6       | 0         | 1.249                                      | Fig.1 | 1.233  | Fig.2 | 1.223  | Fig.3 |
| 4    | 1732.5                  | 20175        | 1.4 | 6       | 0         | 1.230                                      | Fig.4 | 1.226  | Fig.5 | 1.232  | Fig.6 |
| 4    | 1754.3                  | 20393        | 1.4 | 6       | 0         | 1.237                                      | Fig.7 | 1.233  | Fig.8 | 1.233  | Fig.9 |

Fig.1

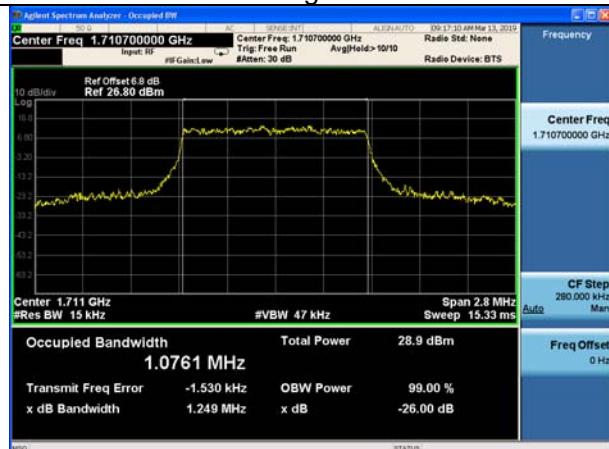


Fig.2

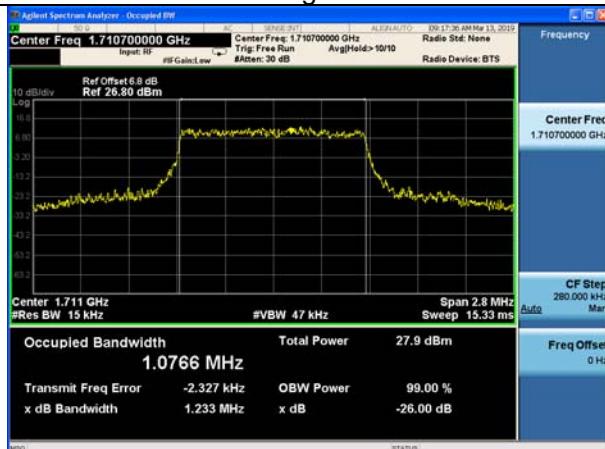


Fig.3

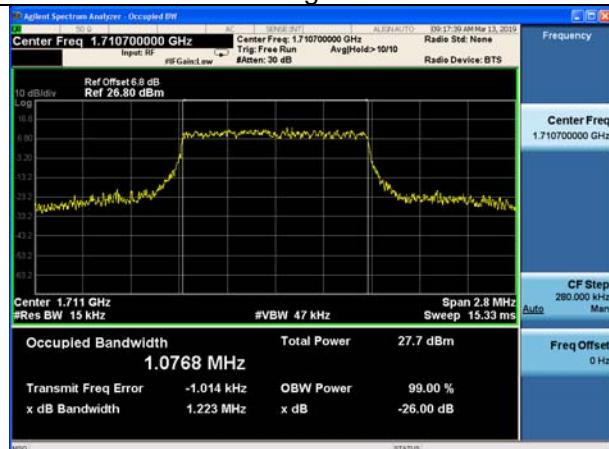


Fig.4

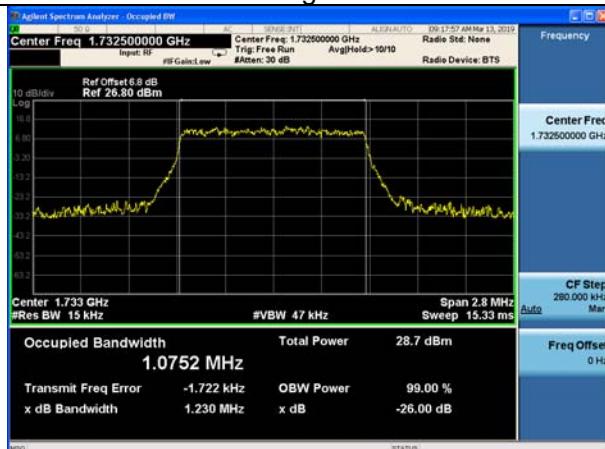


Fig.5

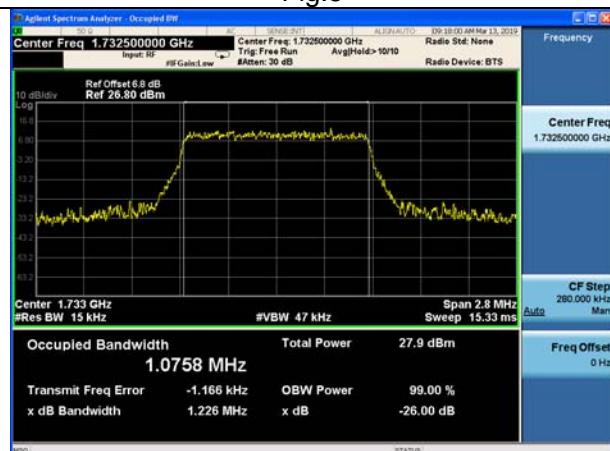


Fig.6

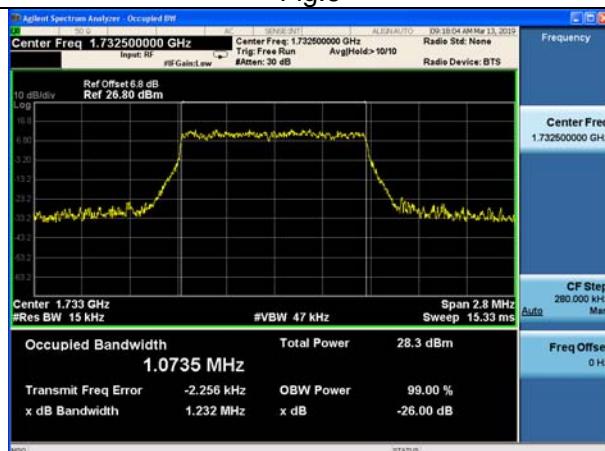


Fig.7

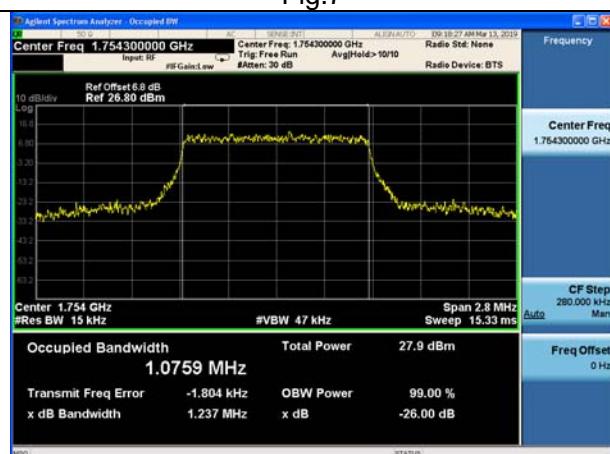


Fig.8

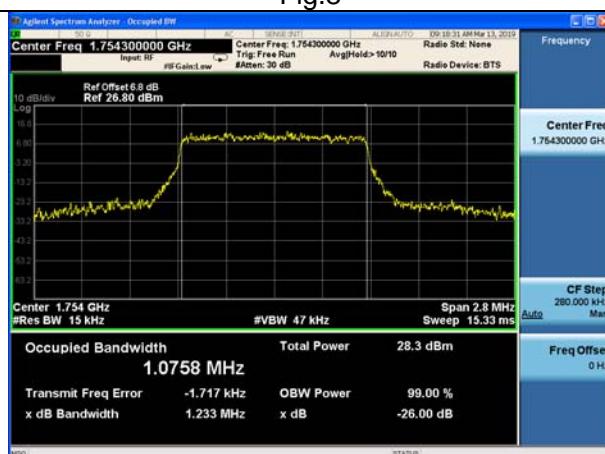
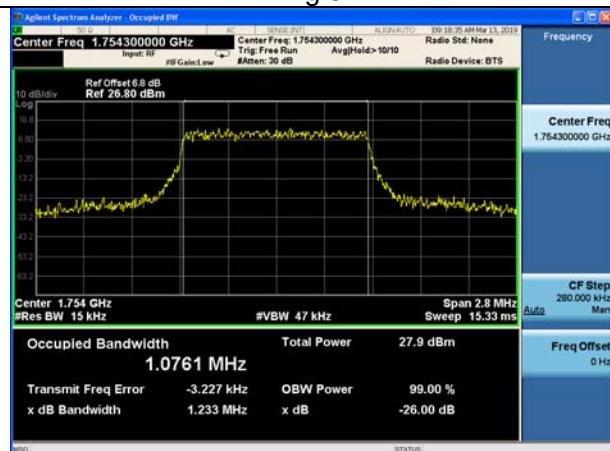


Fig.9



| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1711.5                  | 19965        | 3  | 15      | 0         | 2.6927                       | Fig.1 | 2.6860 | Fig.2 | 2.6934 | Fig.3 |
| 4    | 1732.5                  | 20175        | 3  | 15      | 0         | 2.6954                       | Fig.4 | 2.6802 | Fig.5 | 2.6952 | Fig.6 |
| 4    | 1753.5                  | 20385        | 3  | 15      | 0         | 2.6959                       | Fig.7 | 2.6904 | Fig.8 | 2.6931 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1711.5                  | 19965        | 3  | 15      | 0         | 2.913                                      | Fig.1 | 2.895  | Fig.2 | 2.892  | Fig.3 |
| 4    | 1732.5                  | 20175        | 3  | 15      | 0         | 2.894                                      | Fig.4 | 2.893  | Fig.5 | 2.883  | Fig.6 |
| 4    | 1753.5                  | 20385        | 3  | 15      | 0         | 2.903                                      | Fig.7 | 2.895  | Fig.8 | 2.896  | Fig.9 |

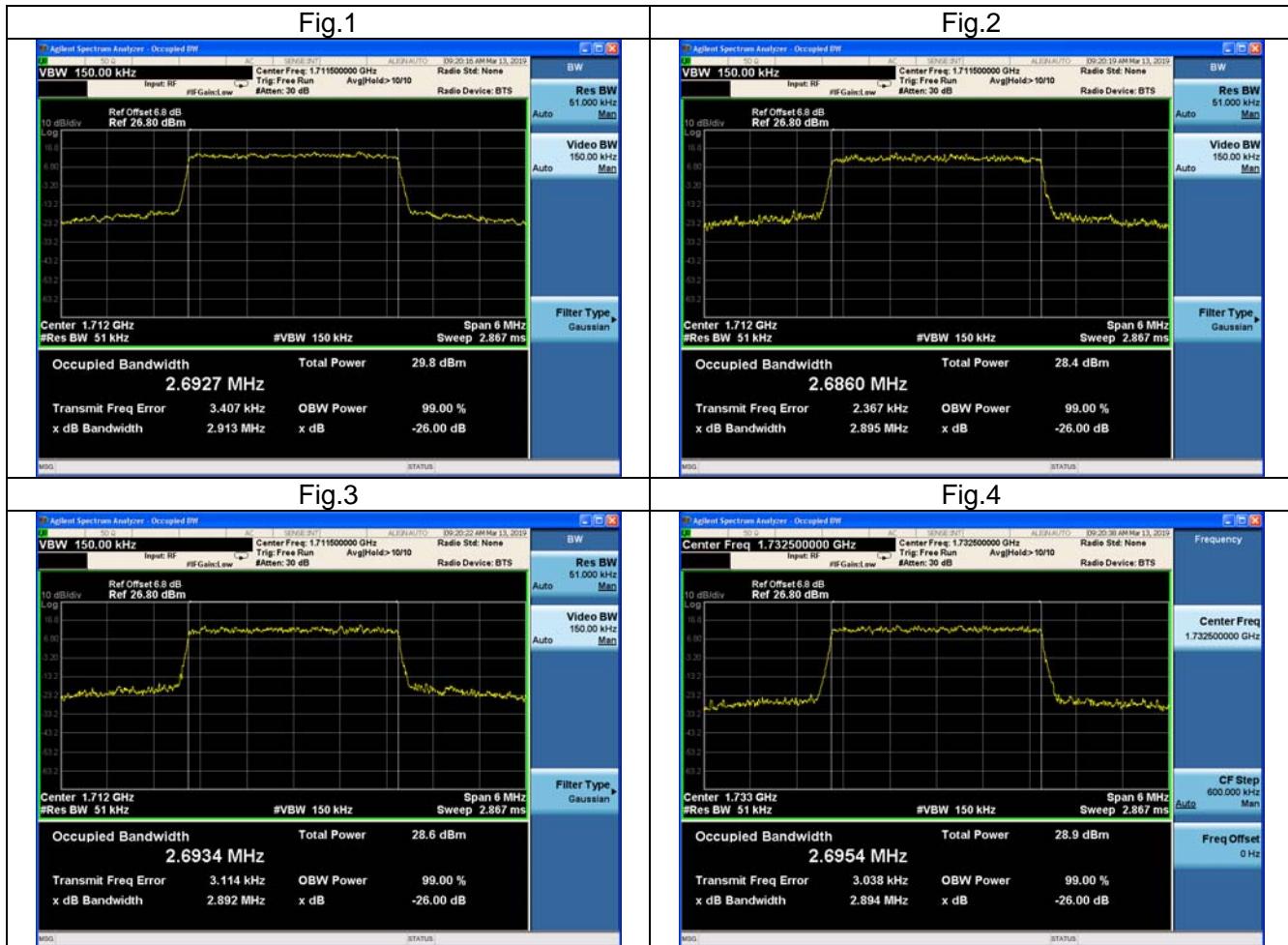


Fig.5

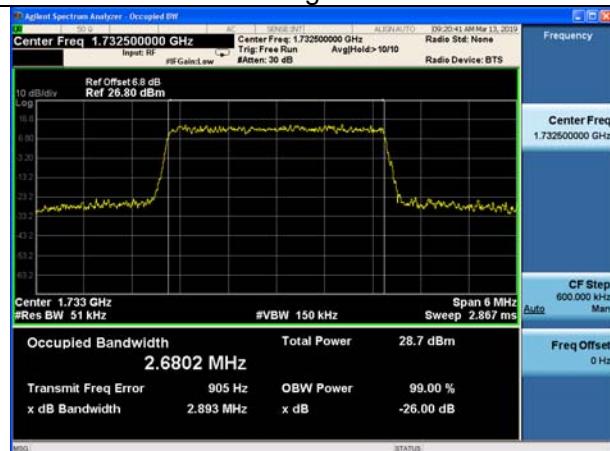


Fig.6

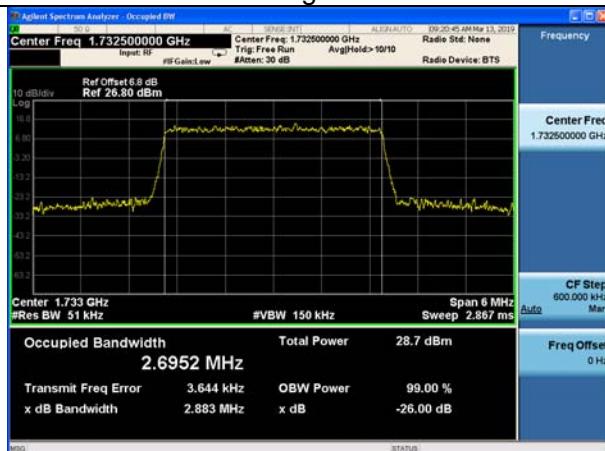


Fig.7

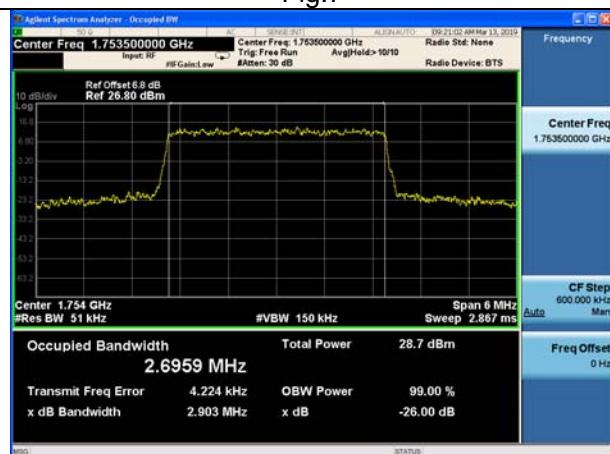


Fig.8

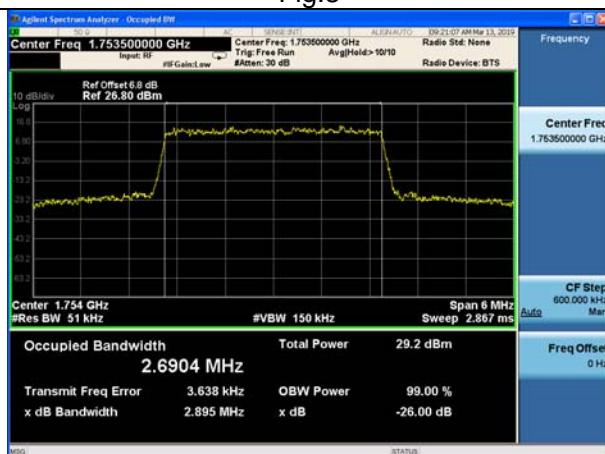
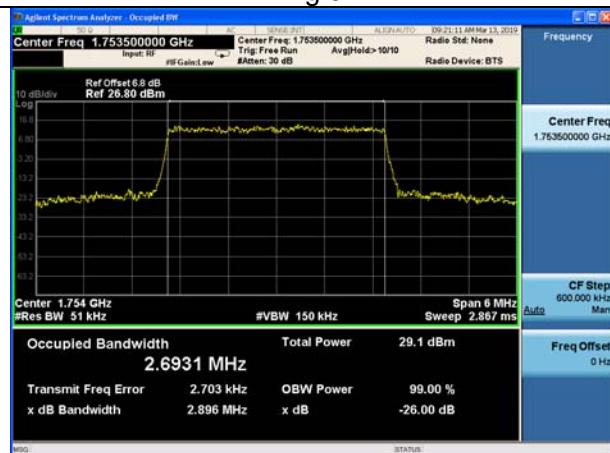


Fig.9



| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1712.5                  | 19975        | 5  | 25      | 0         | 4.4737                       | Fig.1 | 4.4785 | Fig.2 | 4.4766 | Fig.3 |
| 4    | 1732.5                  | 20175        | 5  | 25      | 0         | 4.4803                       | Fig.4 | 4.4833 | Fig.5 | 4.4790 | Fig.6 |
| 4    | 1752.5                  | 20375        | 5  | 25      | 0         | 4.4856                       | Fig.7 | 4.4782 | Fig.8 | 4.4783 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1712.5                  | 19975        | 5  | 25      | 0         | 5.087                                      | Fig.1 | 5.135  | Fig.2 | 5.018  | Fig.3 |
| 4    | 1732.5                  | 20175        | 5  | 25      | 0         | 5.037                                      | Fig.4 | 5.070  | Fig.5 | 5.087  | Fig.6 |
| 4    | 1752.5                  | 20375        | 5  | 25      | 0         | 5.006                                      | Fig.7 | 5.028  | Fig.8 | 5.047  | Fig.9 |

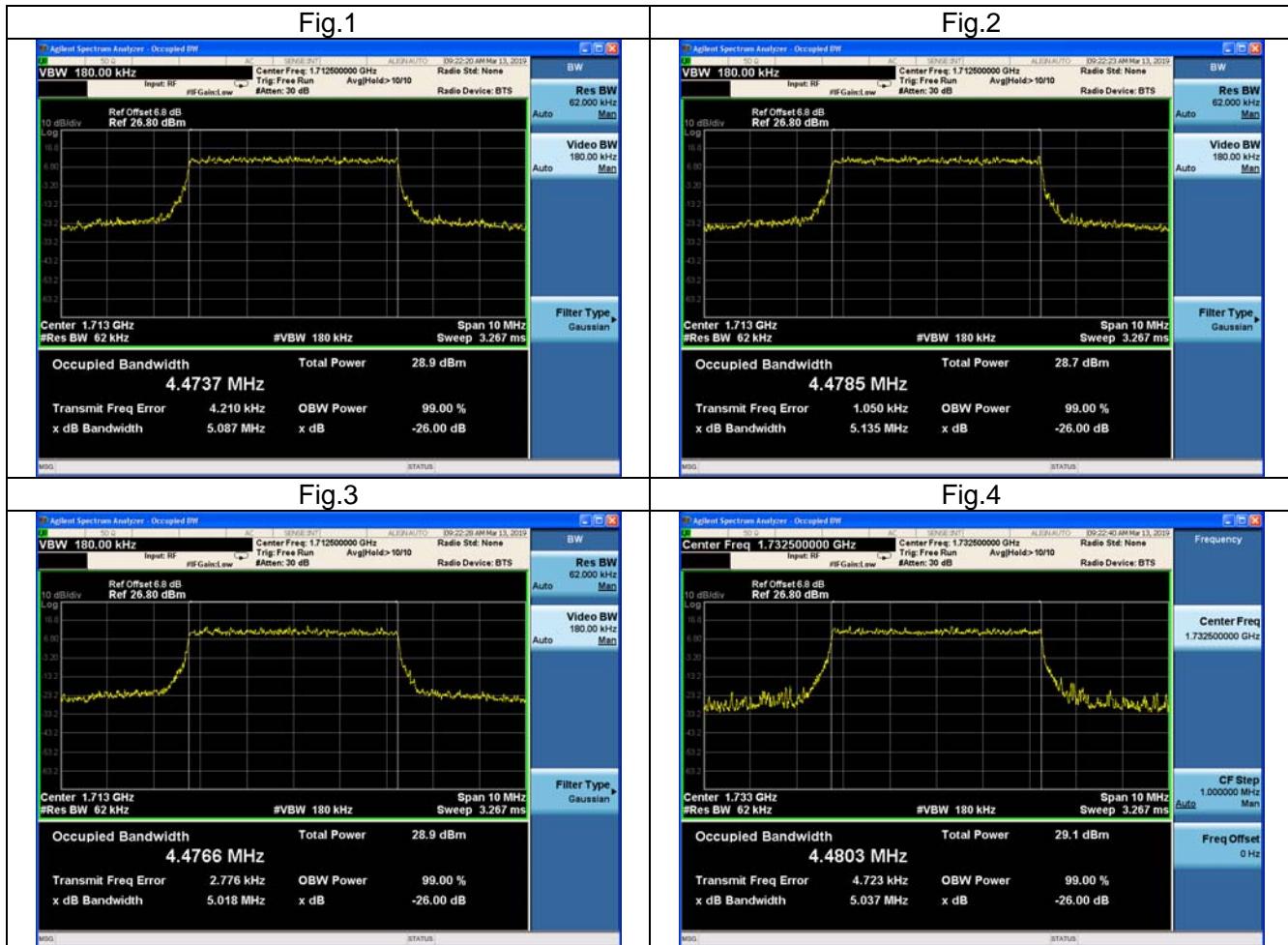


Fig.5

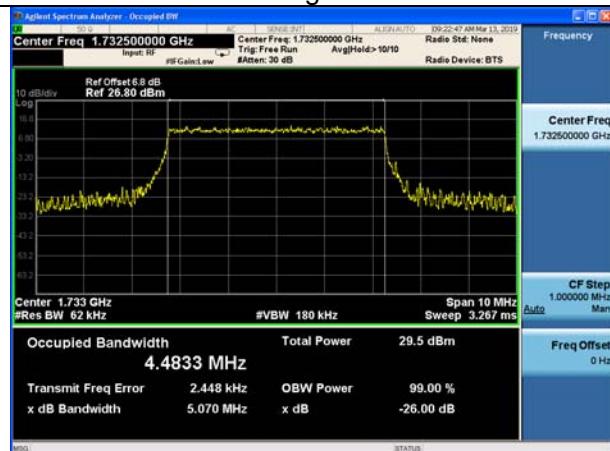


Fig.6

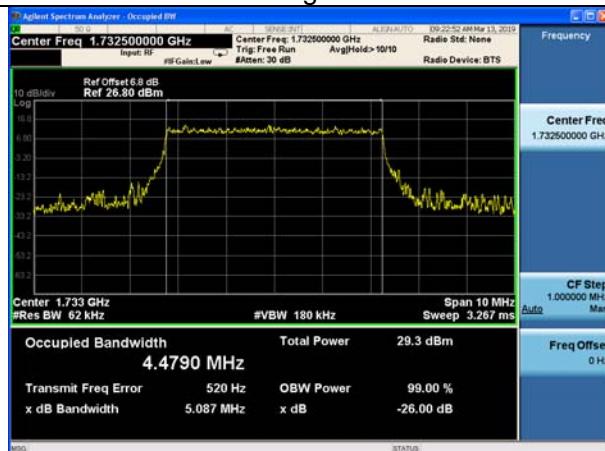


Fig.7

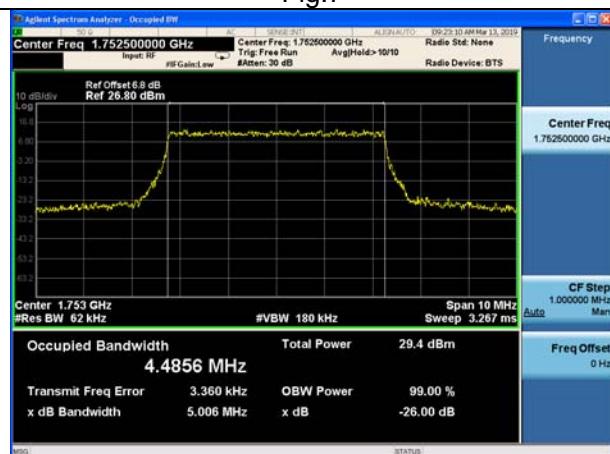


Fig.8

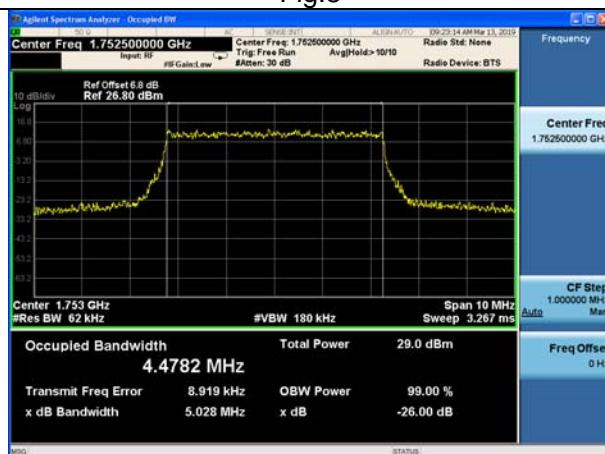
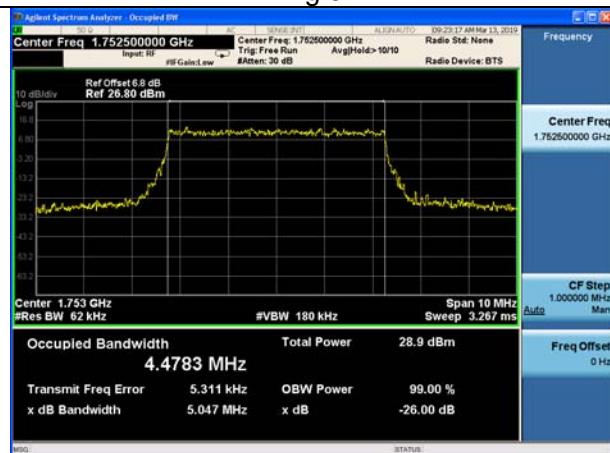


Fig.9



| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1715                    | 20000        | 10 | 50      | 0         | 8.9529                       | Fig.1 | 8.9379 | Fig.2 | 8.9550 | Fig.3 |
| 4    | 1732.5                  | 20175        | 10 | 50      | 0         | 8.9370                       | Fig.4 | 8.9567 | Fig.5 | 8.9457 | Fig.6 |
| 4    | 1750                    | 20350        | 10 | 50      | 0         | 8.9469                       | Fig.7 | 8.9325 | Fig.8 | 8.9460 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1715                    | 20000        | 10 | 50      | 0         | 9.894                                      | Fig.1 | 10.160 | Fig.2 | 9.939  | Fig.3 |
| 4    | 1732.5                  | 20175        | 10 | 50      | 0         | 9.921                                      | Fig.4 | 9.856  | Fig.5 | 9.696  | Fig.6 |
| 4    | 1750                    | 20350        | 10 | 50      | 0         | 9.854                                      | Fig.7 | 9.929  | Fig.8 | 9.848  | Fig.9 |

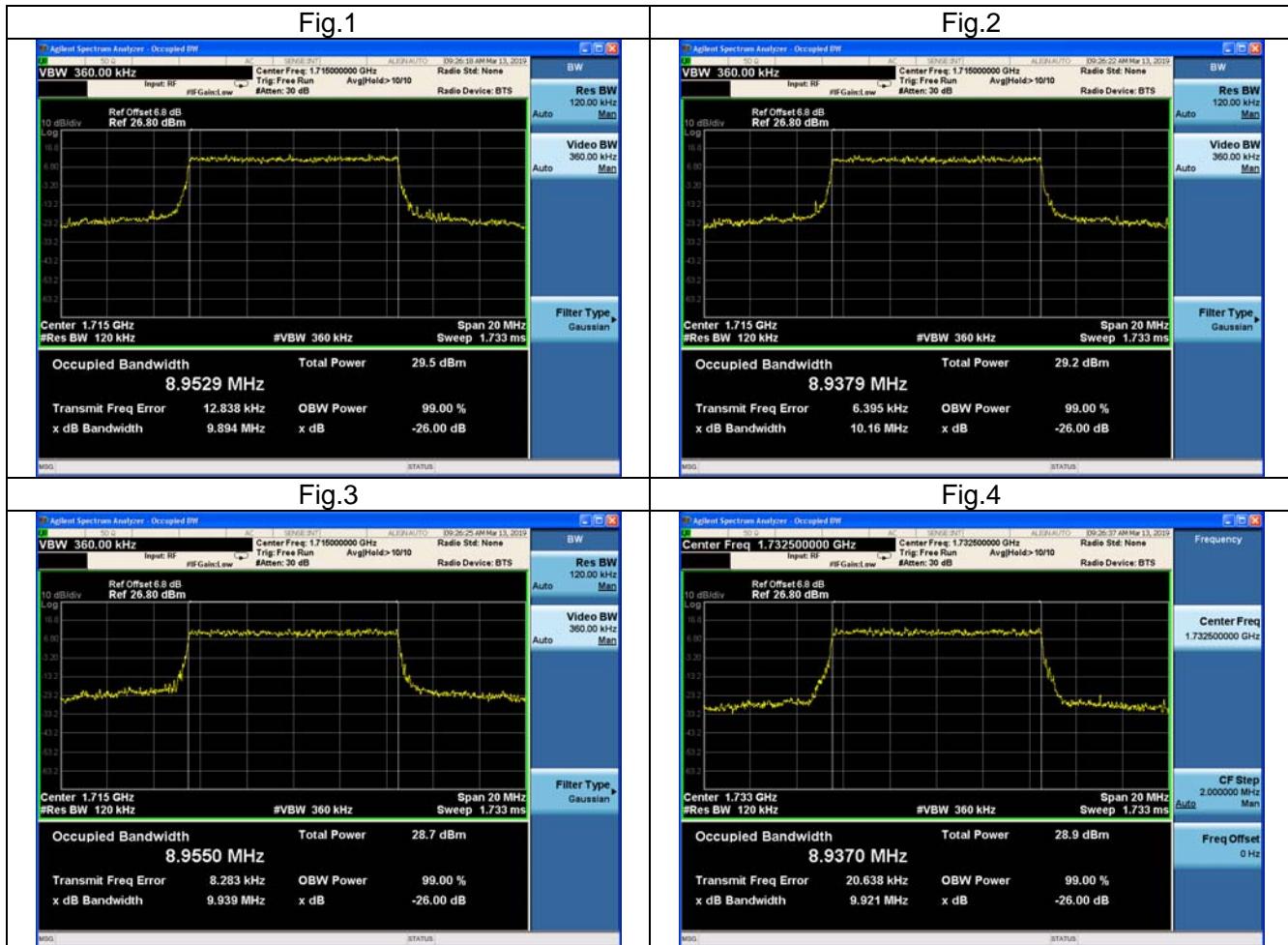


Fig.5

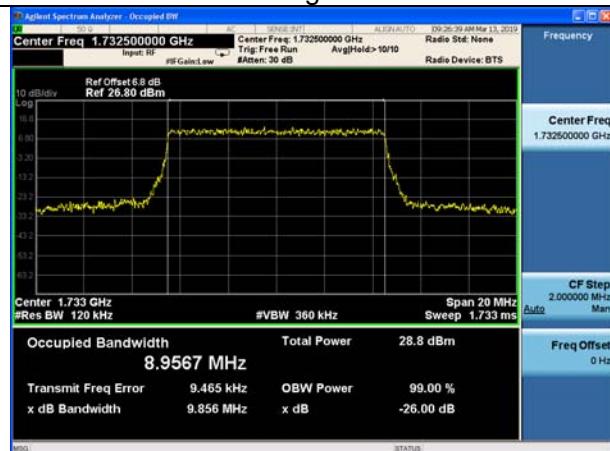


Fig.6

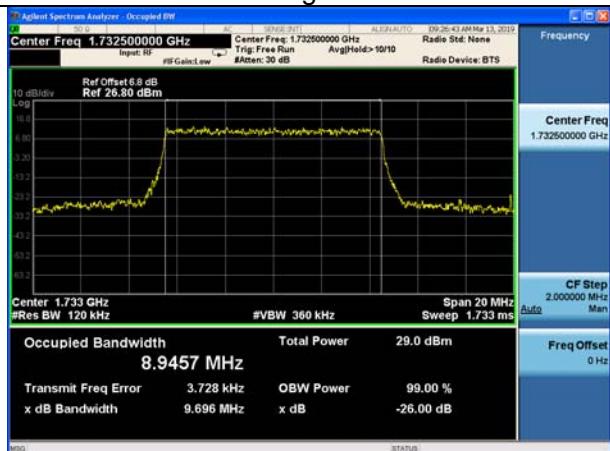


Fig.7

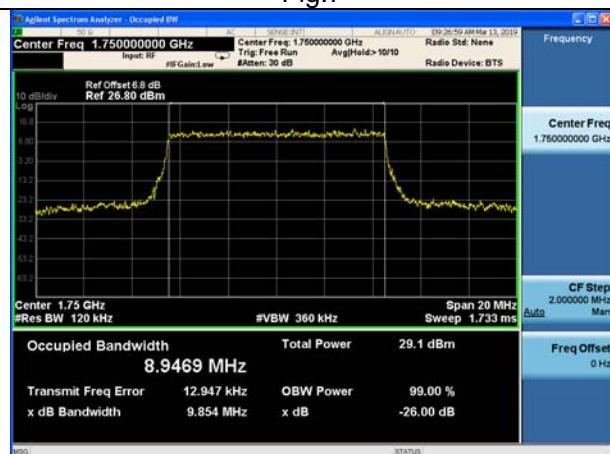


Fig.8

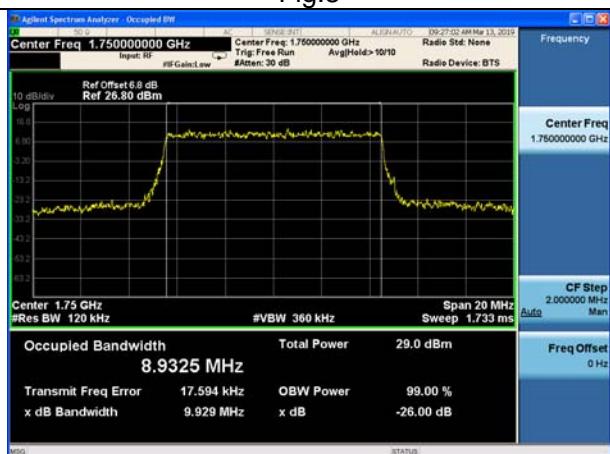
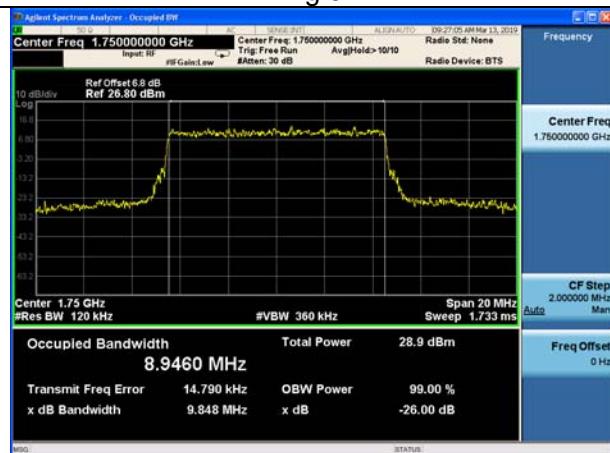


Fig.9



| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1717.5                  | 20025        | 15 | 75      | 0         | 13.447                       | Fig.1 | 13.422 | Fig.2 | 13.424 | Fig.3 |
| 4    | 1732.5                  | 20175        | 15 | 75      | 0         | 13.412                       | Fig.4 | 13.414 | Fig.5 | 13.413 | Fig.6 |
| 4    | 1747.5                  | 20325        | 15 | 75      | 0         | 13.389                       | Fig.7 | 13.392 | Fig.8 | 13.366 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1717.5                  | 20025        | 15 | 75      | 0         | 14.69                                      | Fig.1 | 14.80  | Fig.2 | 14.80  | Fig.3 |
| 4    | 1732.5                  | 20175        | 15 | 75      | 0         | 14.65                                      | Fig.4 | 14.52  | Fig.5 | 14.59  | Fig.6 |
| 4    | 1747.5                  | 20325        | 15 | 75      | 0         | 14.61                                      | Fig.7 | 14.52  | Fig.8 | 14.40  | Fig.9 |

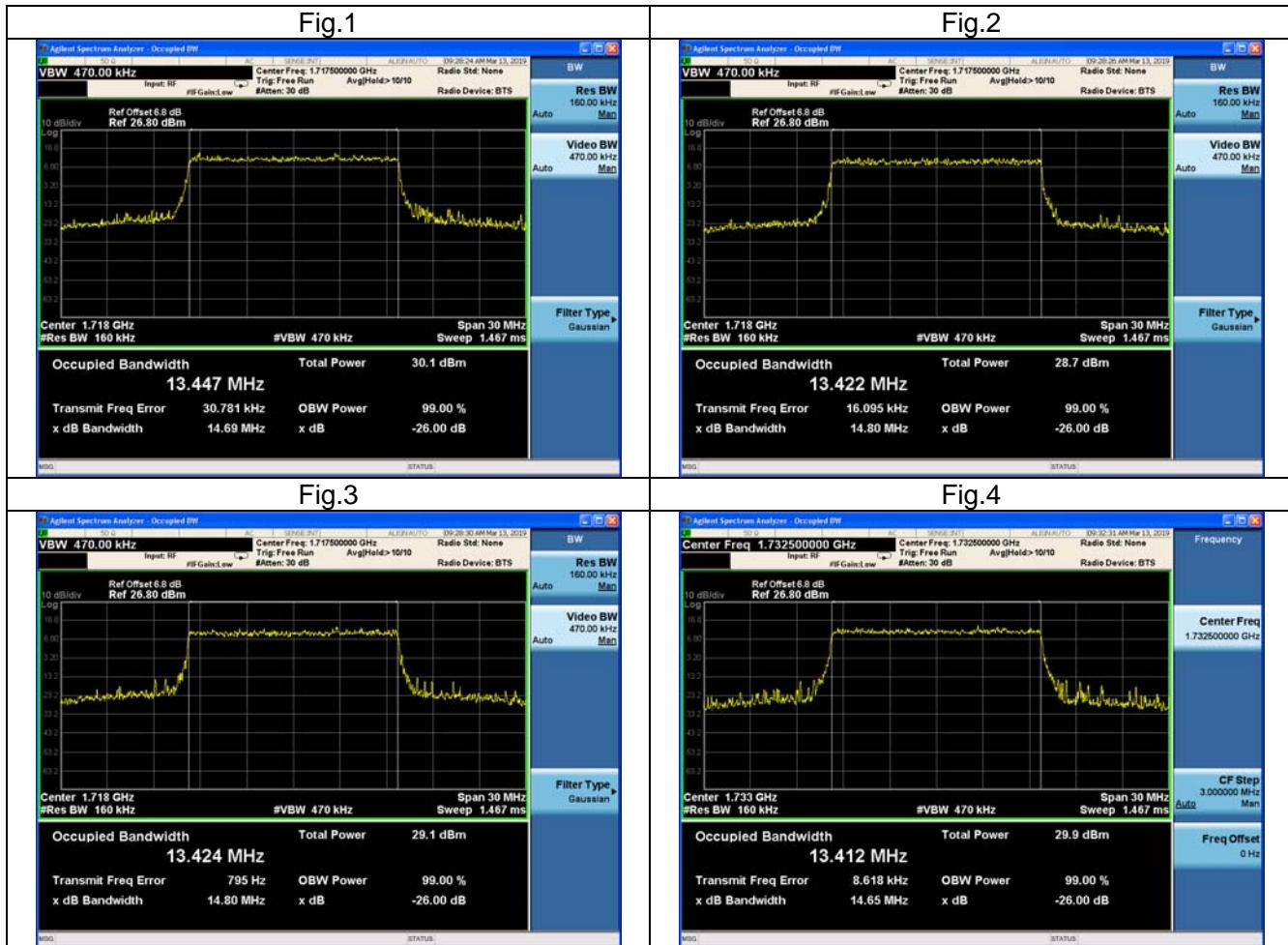


Fig.5

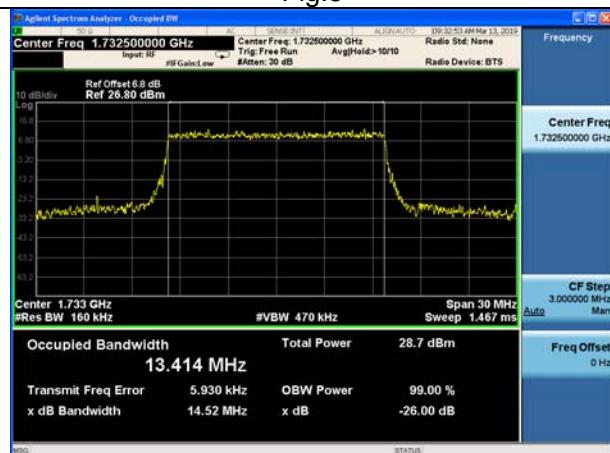


Fig.6

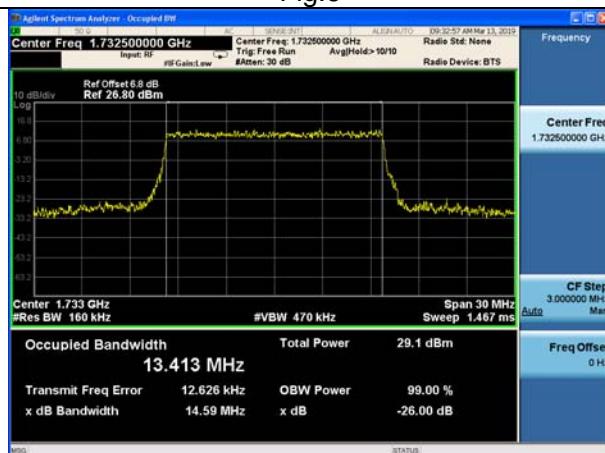


Fig.7

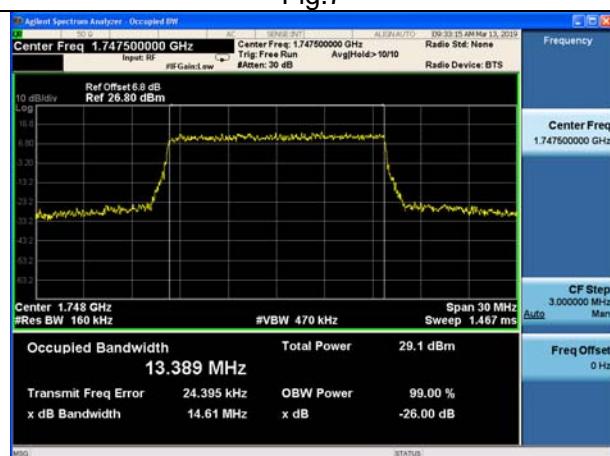


Fig.8

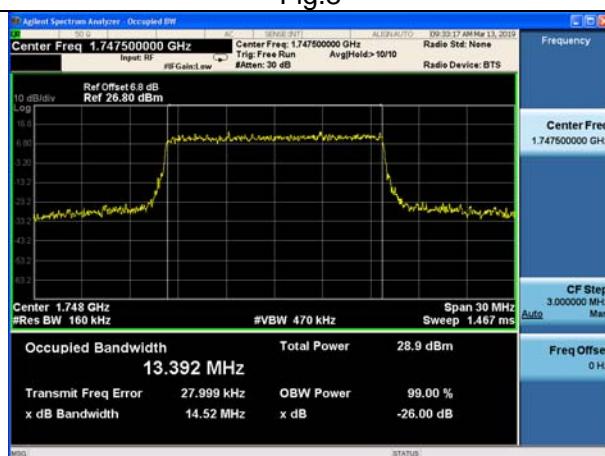
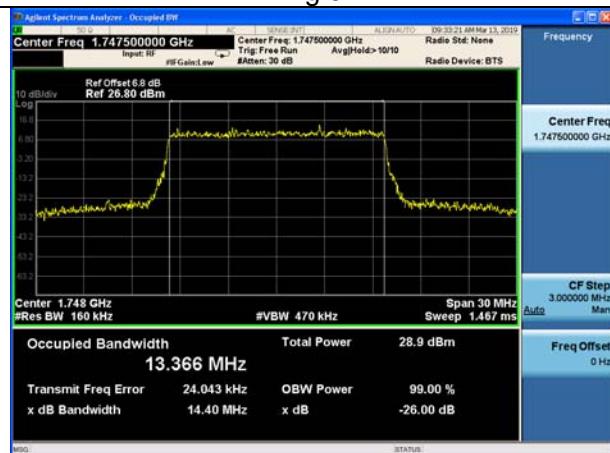


Fig.9



| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|------------------------------|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                         |       | 16-QAM |       | 64-QAM |       |
| 4    | 1720                    | 20050        | 20 | 100     | 0         | 17.851                       | Fig.1 | 17.864 | Fig.2 | 17.849 | Fig.3 |
| 4    | 1732.5                  | 20175        | 20 | 100     | 0         | 17.881                       | Fig.4 | 17.882 | Fig.5 | 17.879 | Fig.6 |
| 4    | 1745                    | 20300        | 20 | 100     | 0         | 17.887                       | Fig.7 | 17.865 | Fig.8 | 17.830 | Fig.9 |

| Band | Carrier frequency (MHz) | Channel(Low) | BW | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |        |       |        |       |
|------|-------------------------|--------------|----|---------|-----------|--|-------|--------|-------|--------|-------|
|      |                         |              |    |         |           | QPSK                                       |       | 16-QAM |       | 64-QAM |       |
| 4    | 1720                    | 20050        | 20 | 100     | 0         | 19.91                                      | Fig.1 | 19.23  | Fig.2 | 19.20  | Fig.3 |
| 4    | 1732.5                  | 20175        | 20 | 100     | 0         | 19.32                                      | Fig.4 | 19.24  | Fig.5 | 19.09  | Fig.6 |
| 4    | 1745                    | 20300        | 20 | 100     | 0         | 19.41                                      | Fig.7 | 19.11  | Fig.8 | 19.31  | Fig.9 |

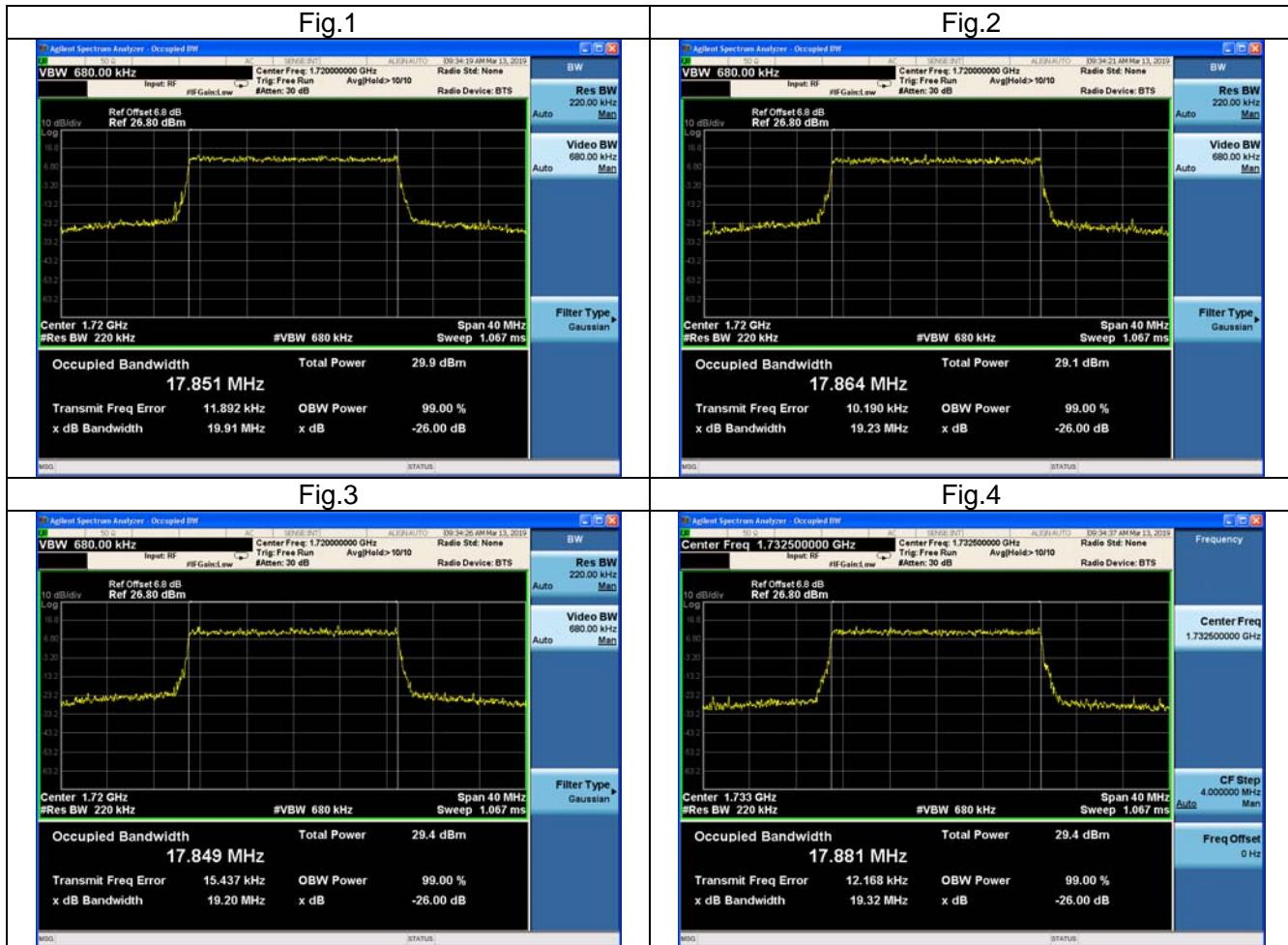


Fig.5

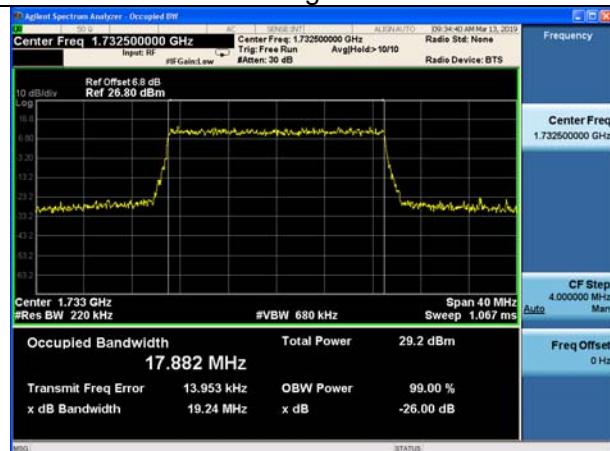


Fig.6

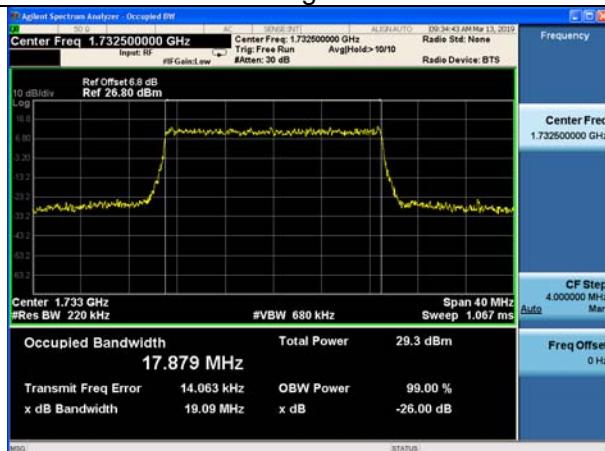


Fig.7

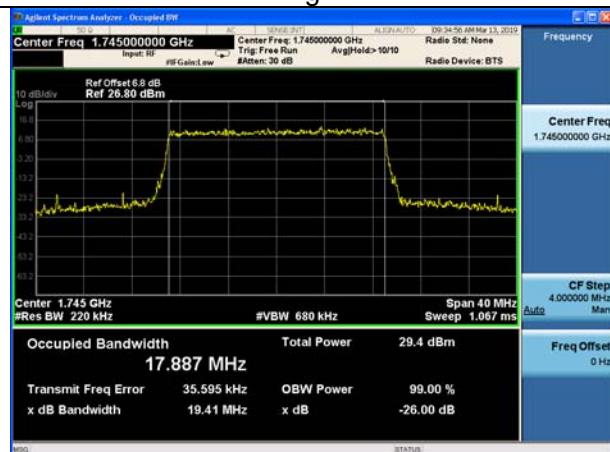


Fig.8

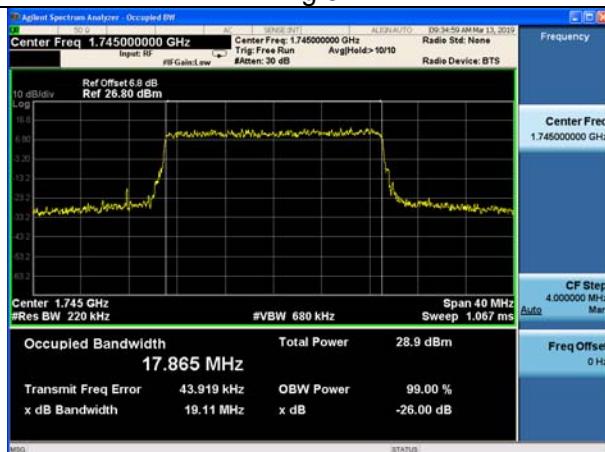
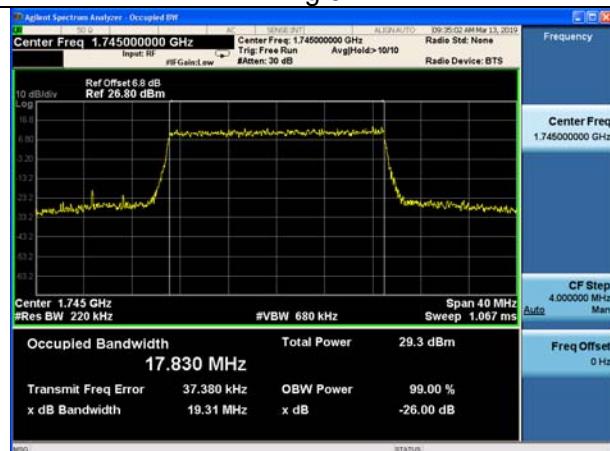


Fig.9

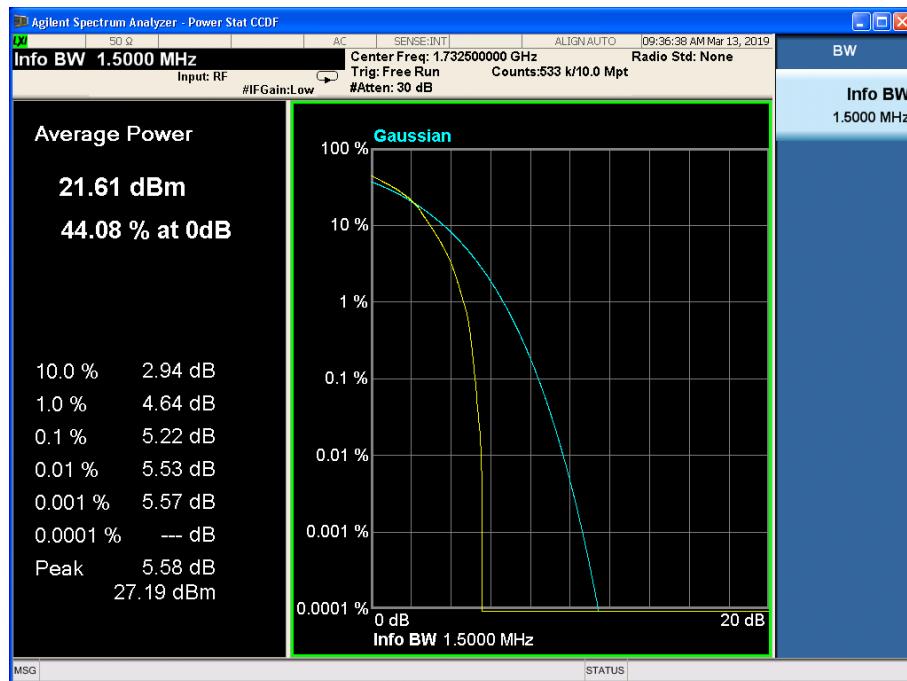


### 3 Peak-Average Ratio

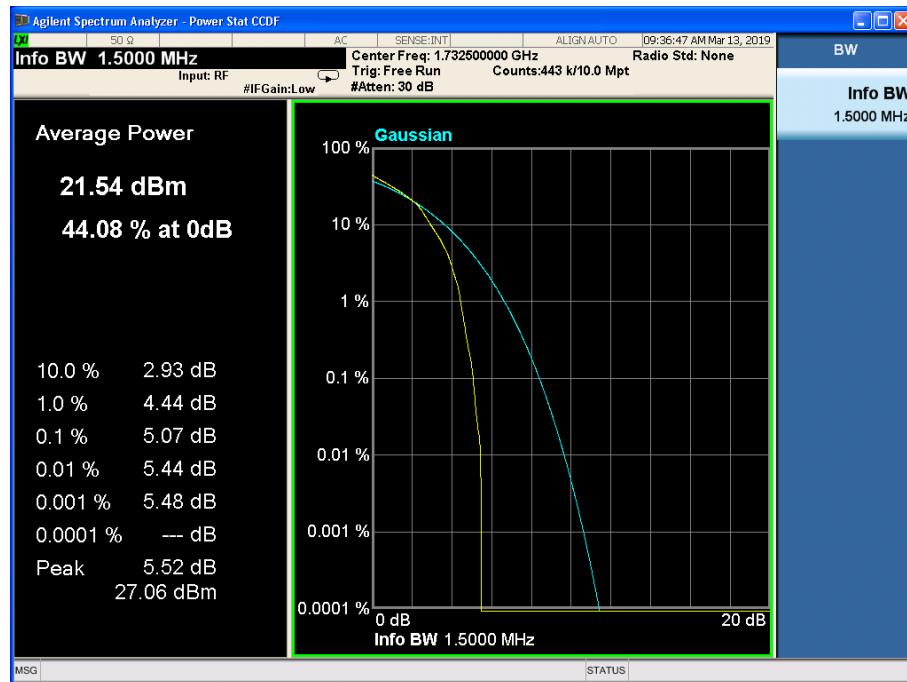
Test result:



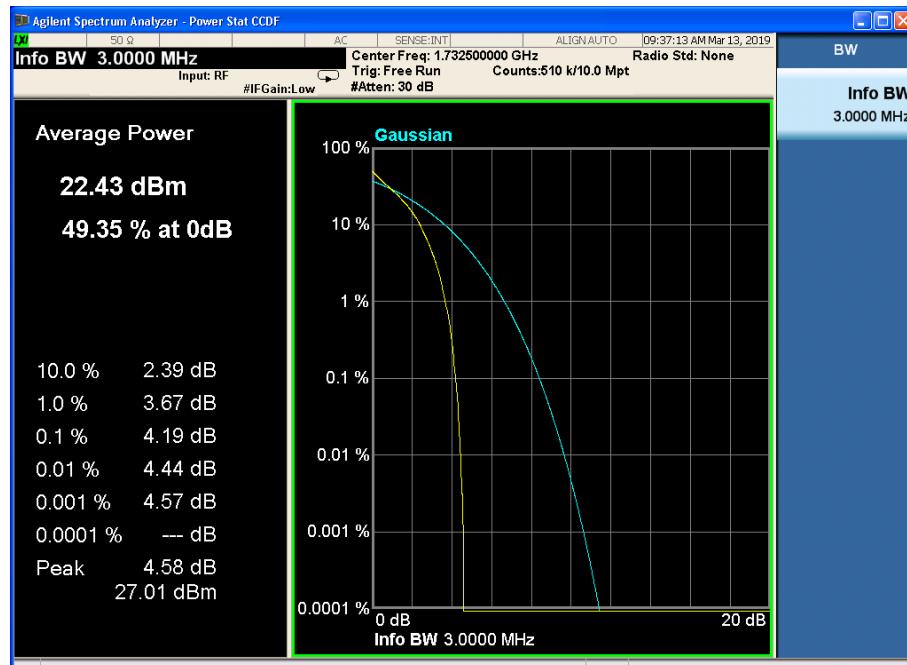
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 4-mid Channel)



Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(1.4MHz BW,64QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(3MHz BW,QPSK,Band 4-mid Channel)



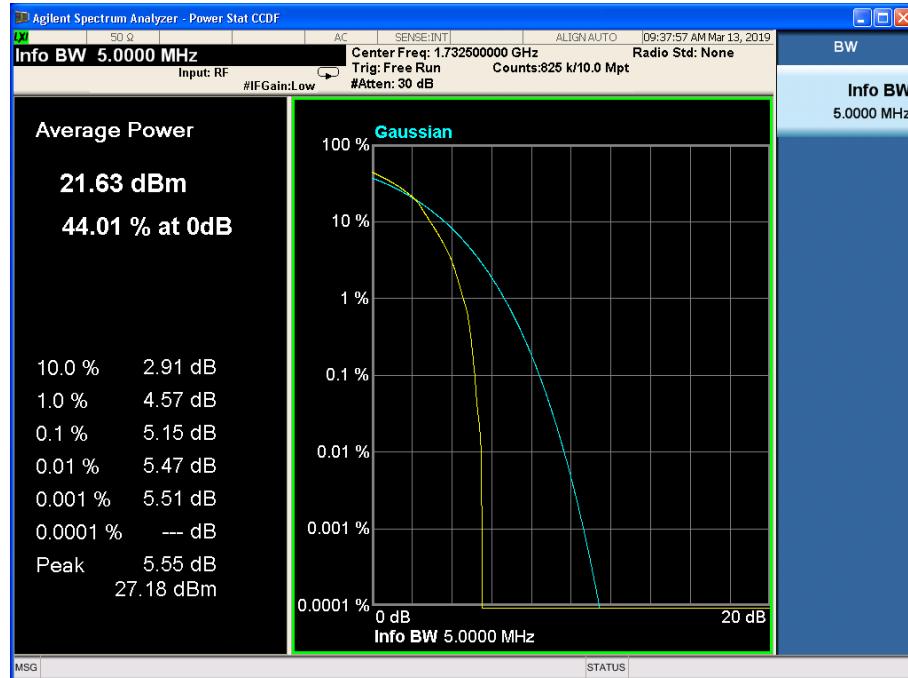
Peak-Average Ratio Plot(3MHz BW,16QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(3MHz BW,64QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(5MHz BW,QPSK,Band 4-mid Channel)



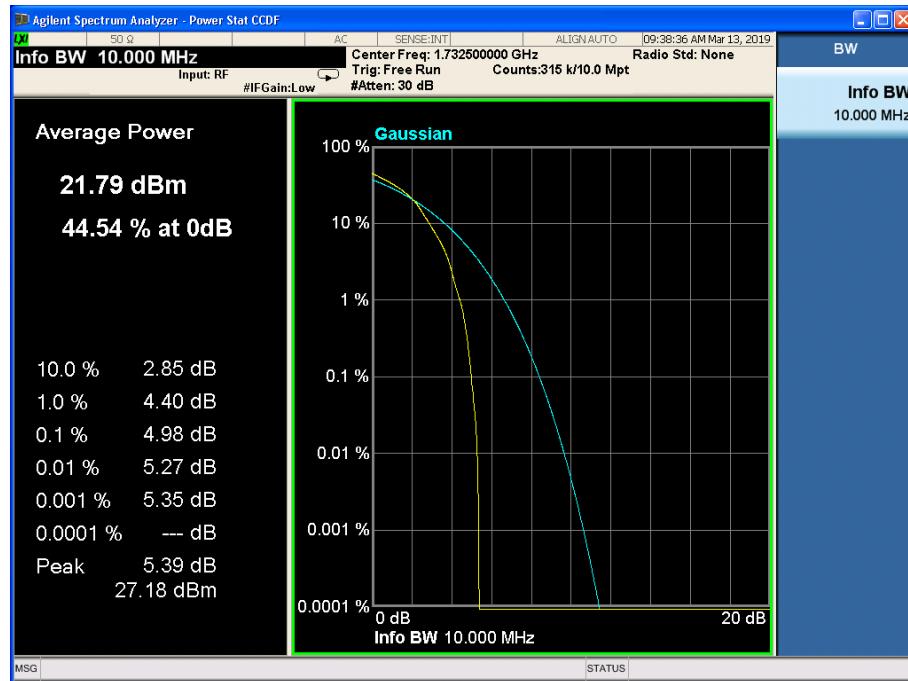
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 4-mid Channel)



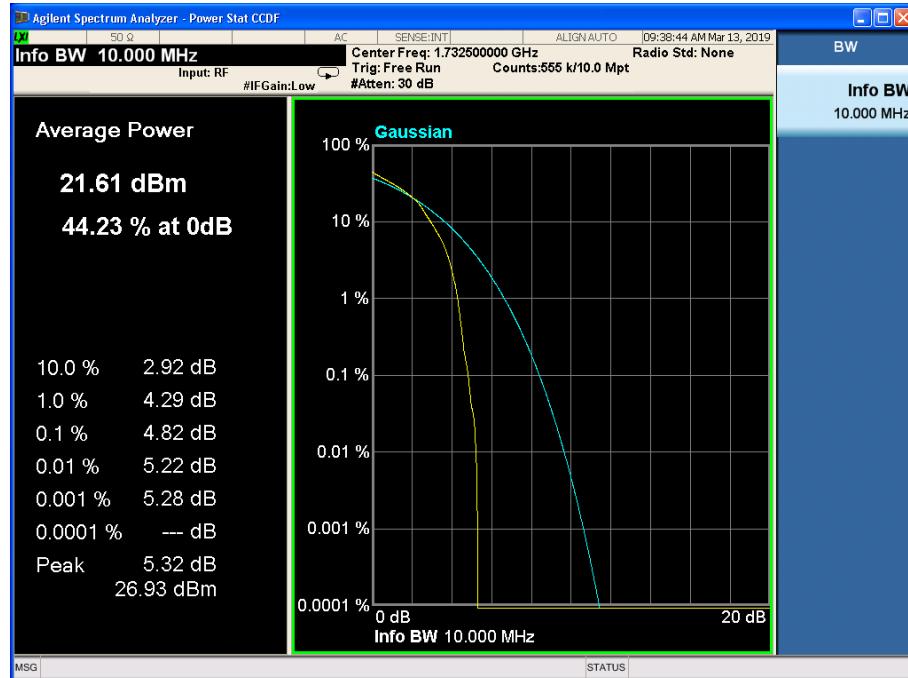
Peak-Average Ratio Plot(5MHz BW,64QAM,Band 4-mid Channel)



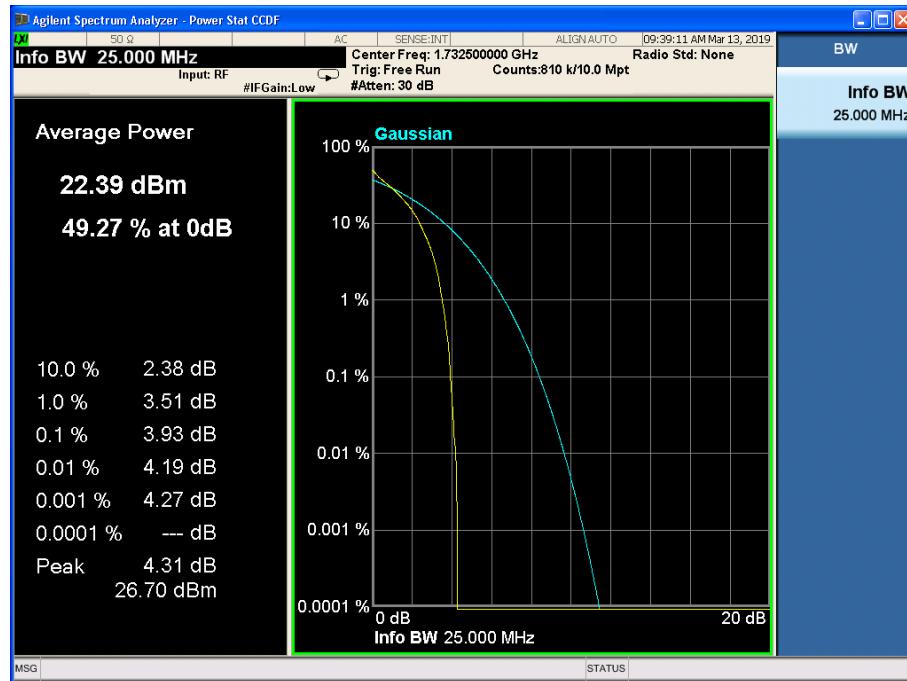
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 4-mid Channel)



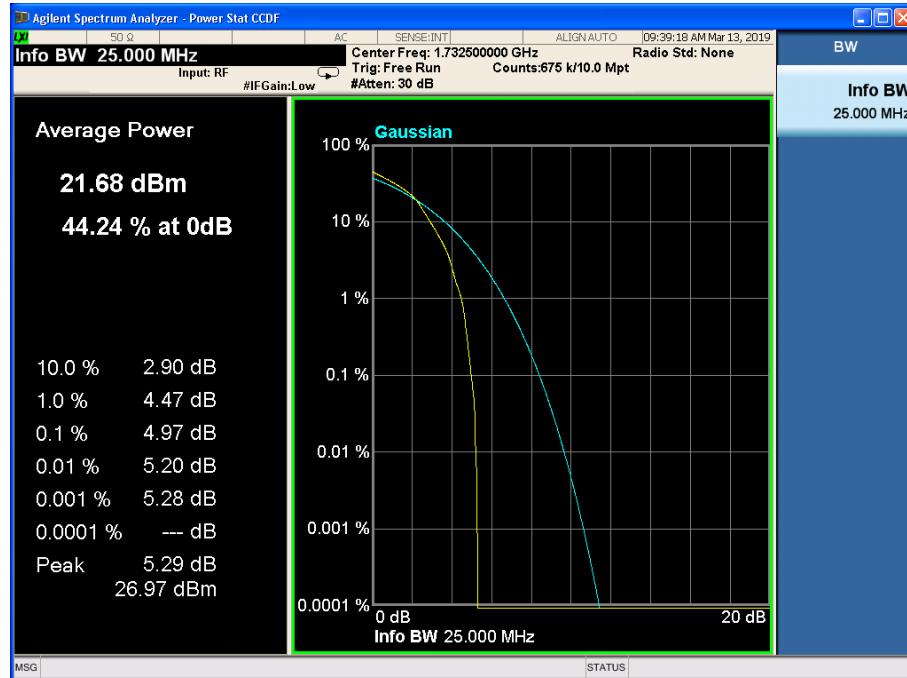
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 4-mid Channel)



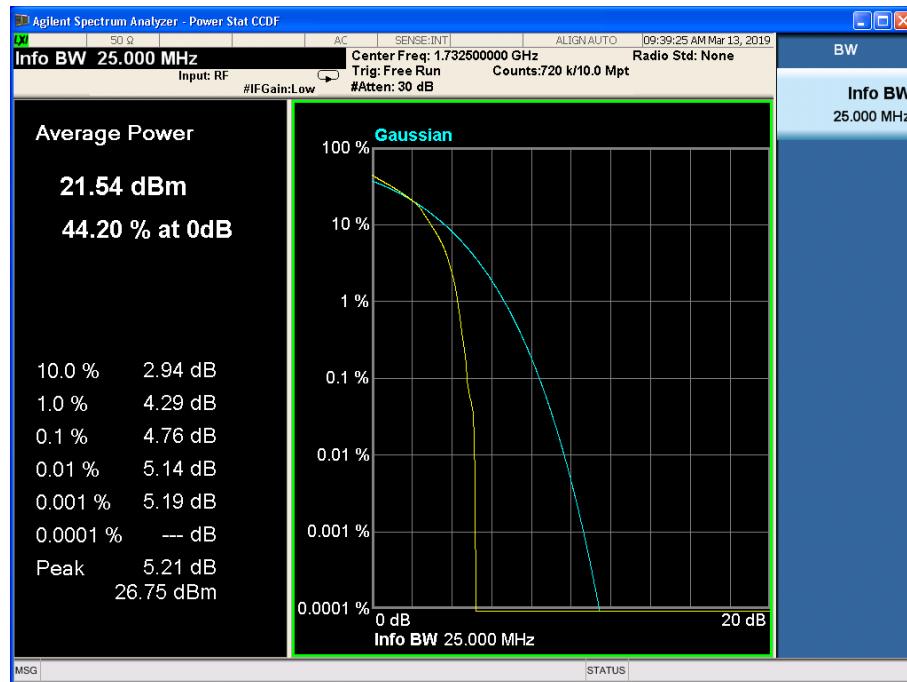
Peak-Average Ratio Plot(10MHz BW,64QAM,Band 4-mid Channel)



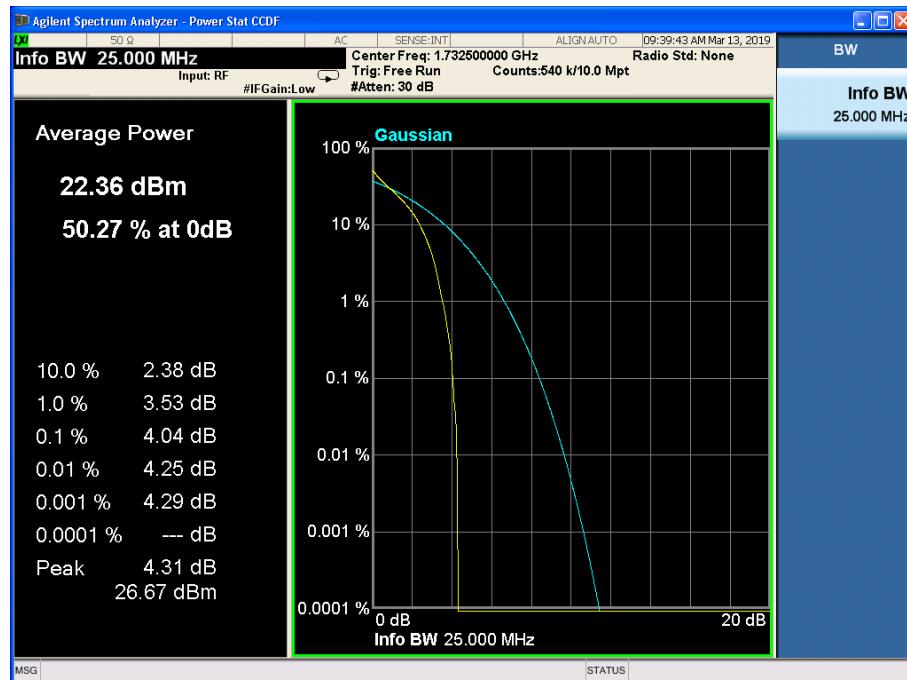
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 4-mid Channel)



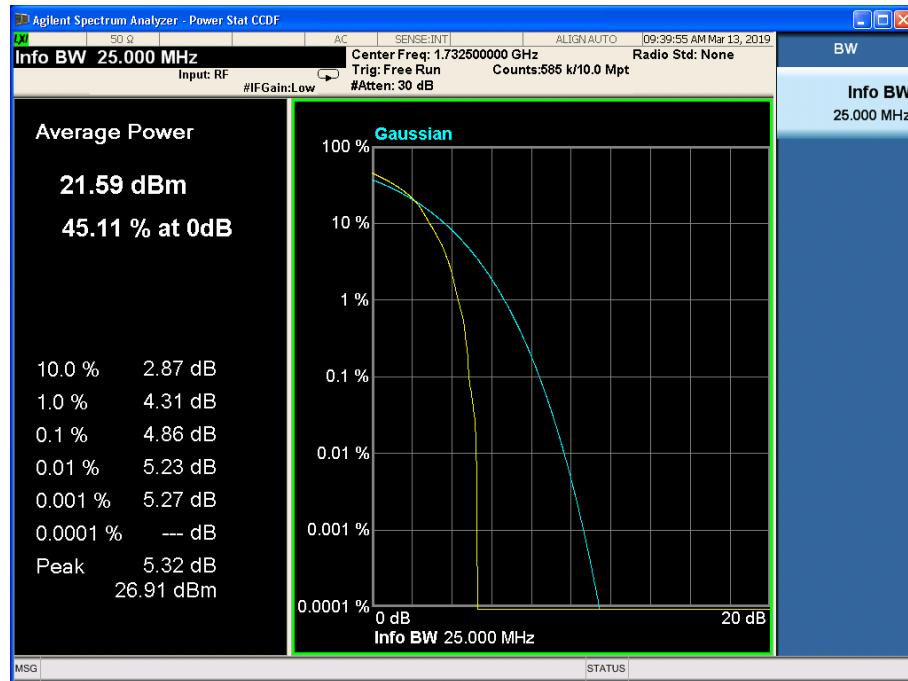
Peak-Average Ratio Plot(15MHz BW,16QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(15MHz BW,64QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(20MHz BW,QPSK,Band 4-mid Channel)



Peak-Average Ratio Plot(20MHz BW,16QAM,Band 4-mid Channel)



Peak-Average Ratio Plot(20MHz BW,64QAM,Band 4-mid Channel)

#### 4 Spurious Emissions at antenna terminal

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Conducted Spurious Plot |
|------|-------------------------|---------------|----|---------|-----------|-------------------------|
|      |                         |               |    |         |           | QPSK                    |
| 4    | 1720                    | 20050         | 20 | 1       | 0         | Fig.1                   |



Fig.1

| Band | Carrier frequency (MHz) | Channel (Mid) | BW | RB Size | RB Offset | Conducted Spurious Plot |
|------|-------------------------|---------------|----|---------|-----------|-------------------------|
|      |                         |               |    |         |           | QPSK                    |
| 4    | 1732.5                  | 20175         | 20 | 1       | 0         | Fig.4                   |

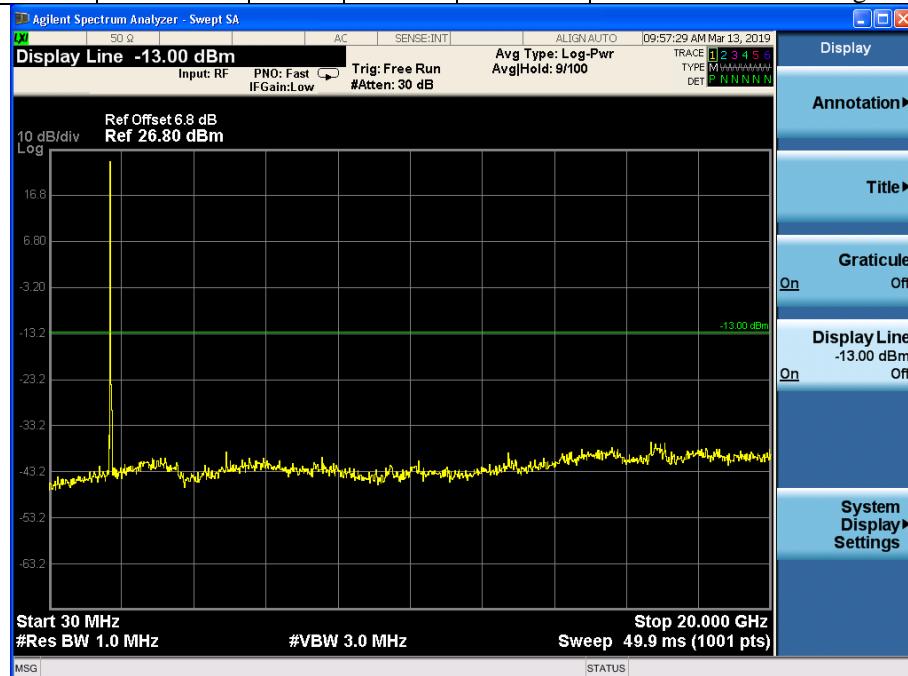


Fig.1

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Conducted Spurious Plot |
|------|-------------------------|----------------|----|---------|-----------|-------------------------|
|      |                         |                |    |         |           | QPSK                    |
| 4    | 1745                    | 20300          | 20 | 1       | 0         | Fig.1                   |



Fig.1

## 5 Band Edges Compliance

Test result

| Band | Carrier frequency (MHz) | Channel (Low) | BW  | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|-----|---------|-----------|----------------|
|      |                         |               |     |         |           | QPSK           |
| 4    | 1710.7                  | 19957         | 1.4 | 1       | 0         | Fig.1          |
|      |                         |               |     | 6       | 0         | Fig.4          |



Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW  | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|-----|---------|-----------|----------------|
|      |                         |                |     |         |           | QPSK           |
| 4    | 1754.3                  | 20393          | 1.4 | 1       | 5         | Fig.1          |
|      |                         |                |     | 6       | 0         | Fig.4          |

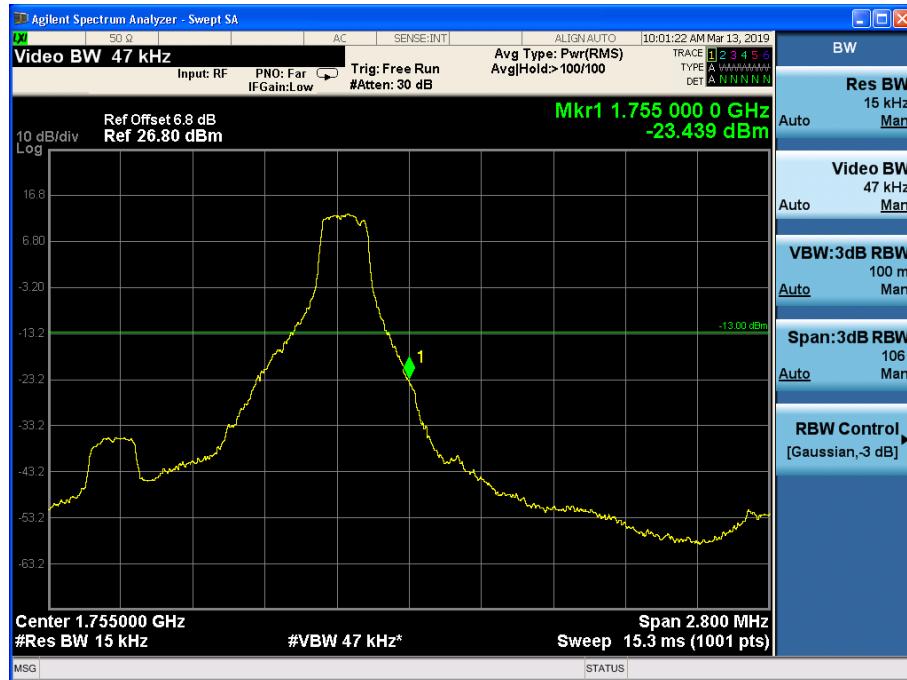


Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|----|---------|-----------|----------------|
|      |                         |               |    |         |           | QPSK           |
| 4    | 1711.5                  | 19965         | 3  | 1       | 0         | Fig.1          |
|      |                         |               |    | 15      | 0         | Fig.4          |



Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|----|---------|-----------|----------------|
|      |                         |                |    |         |           | QPSK           |
| 4    | 1753.5                  | 20385          | 3  | 1       | 14        | Fig.1          |
|      |                         |                |    | 15      | 0         | Fig.4          |



Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|----|---------|-----------|----------------|
|      |                         |               |    |         |           | QPSK           |
| 4    | 1712.5                  | 19975         | 5  | 1       | 0         | Fig.1          |
|      |                         |               |    | 25      | 0         | Fig.4          |



Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|----|---------|-----------|----------------|
|      |                         |                |    |         |           | QPSK           |
| 4    | 1752.5                  | 20375          | 5  | 1       | 24        | Fig.1          |
|      |                         |                |    | 25      | 0         | Fig.4          |

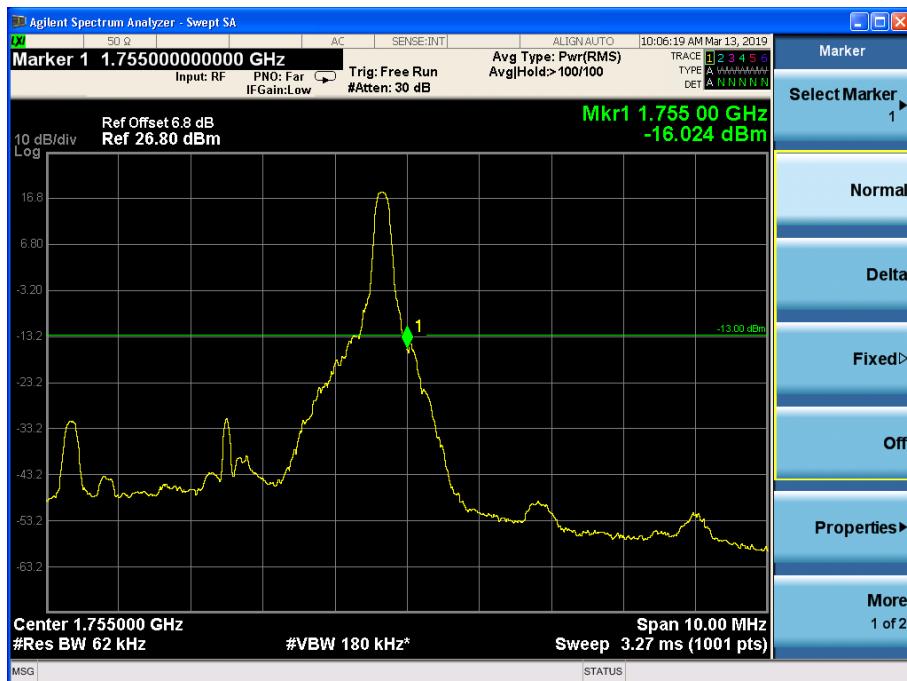


Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|----|---------|-----------|----------------|
|      |                         |               |    |         |           | QPSK           |
| 4    | 1715                    | 20000         | 10 | 1       | 0         | Fig.1          |
|      |                         |               |    | 50      | 0         | Fig.4          |

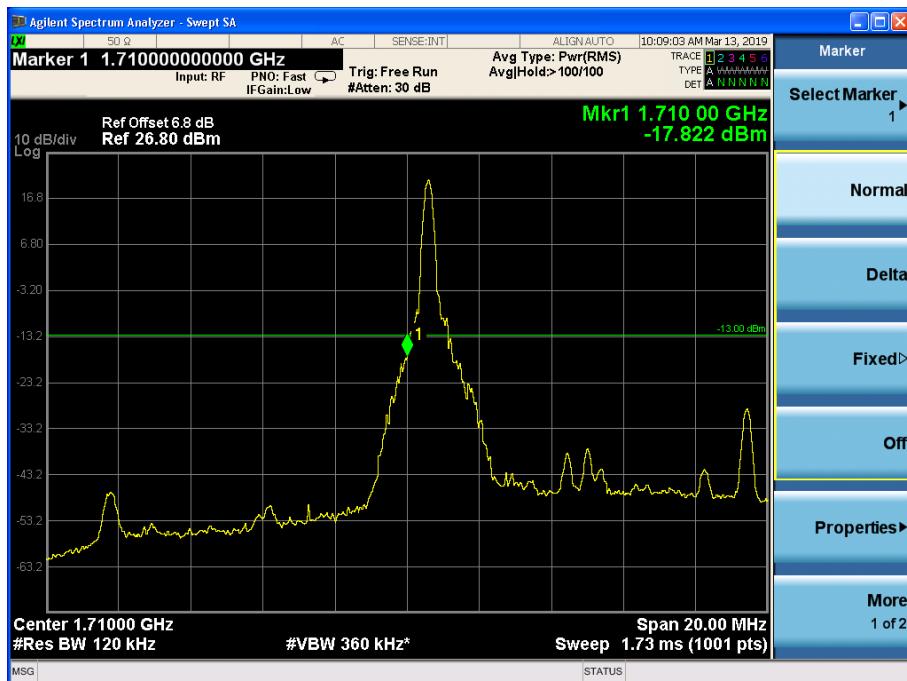


Fig.1

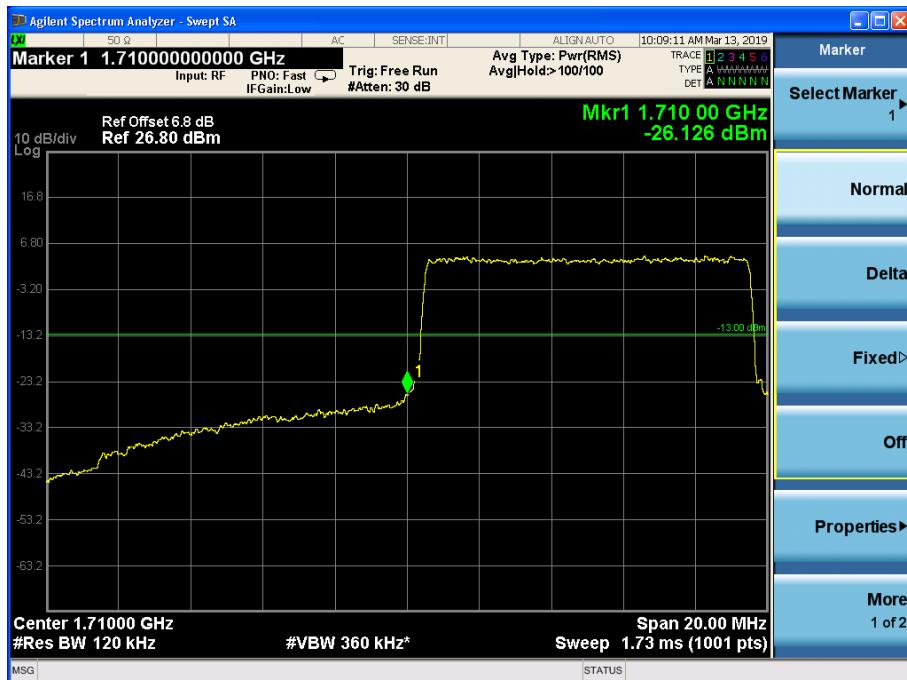


Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|----|---------|-----------|----------------|
|      |                         |                |    |         |           | QPSK           |
| 4    | 1750                    | 20350          | 10 | 1       | 49        | Fig.1          |
|      |                         |                |    | 50      | 0         | Fig.4          |



Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|----|---------|-----------|----------------|
|      |                         |               |    |         |           | QPSK           |
| 4    | 1717.5                  | 20025         | 15 | 1       | 0         | Fig.1          |
|      |                         |               |    | 75      | 0         | Fig.4          |

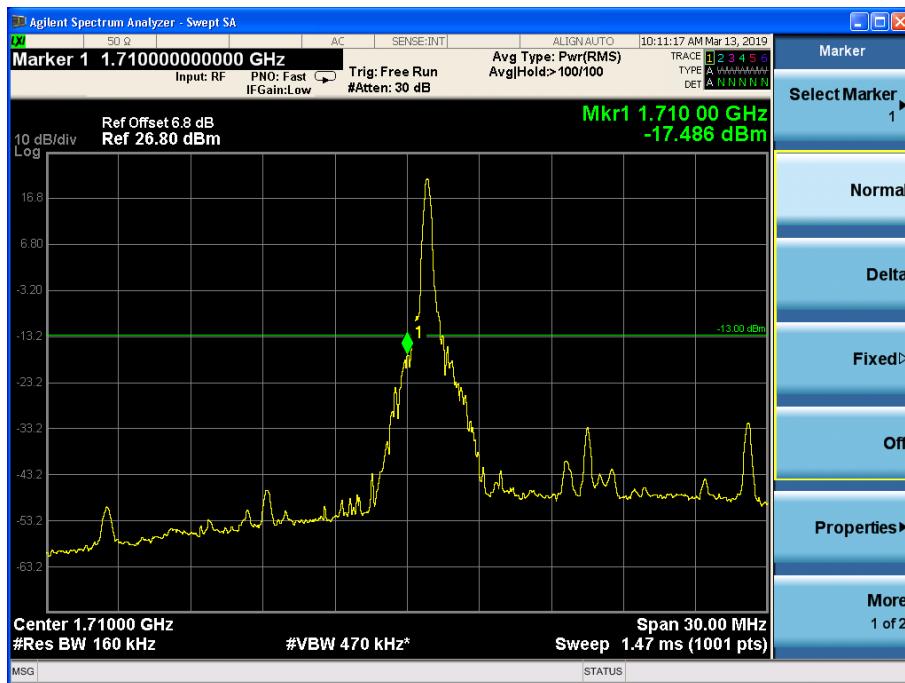


Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|----|---------|-----------|----------------|
|      |                         |                |    |         |           | QPSK           |
| 4    | 1747.5                  | 20325          | 15 | 1       | 74        | Fig.1          |
|      |                         |                |    | 75      | 0         | Fig.4          |

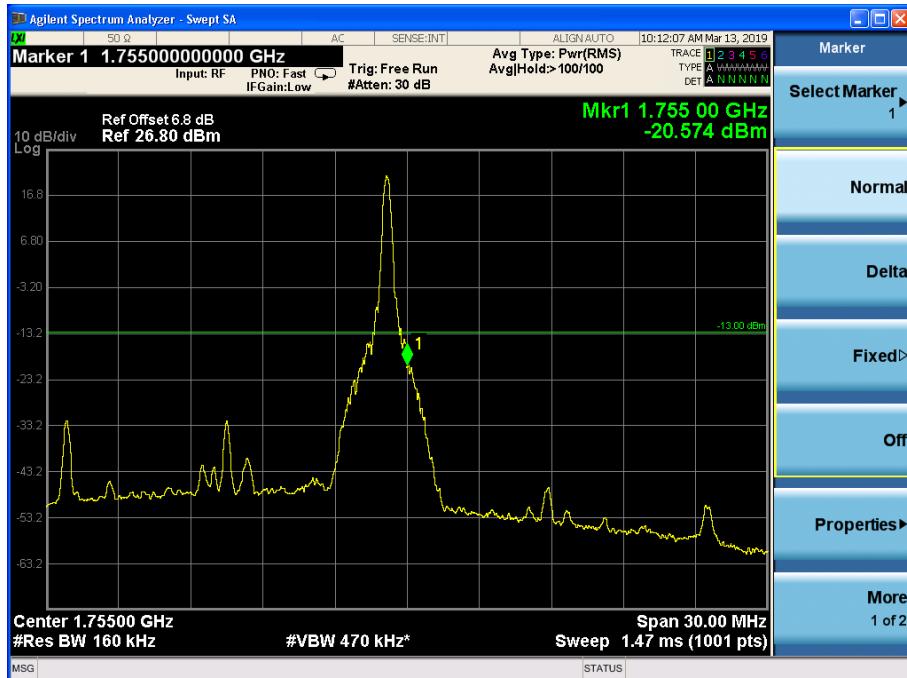


Fig.1



Fig.4

| Band | Carrier frequency (MHz) | Channel (Low) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|---------------|----|---------|-----------|----------------|
|      |                         |               |    |         |           | QPSK           |
| 4    | 1720                    | 20050         | 20 | 1       | 0         | Fig.1          |
|      |                         |               |    | 100     | 0         | Fig.4          |

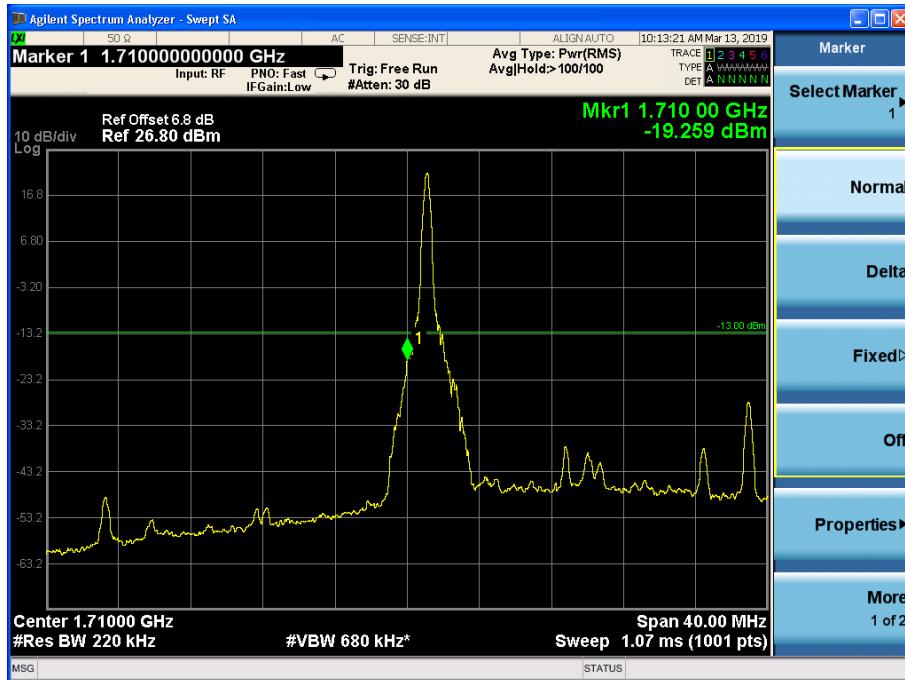


Fig.1

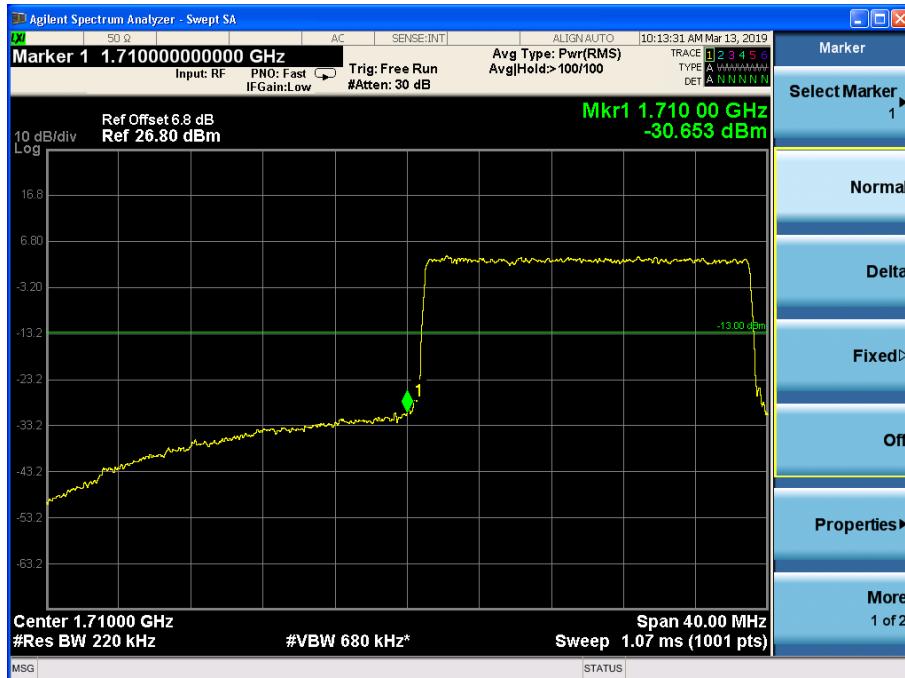


Fig.4

| Band | Carrier frequency (MHz) | Channel (High) | BW | RB Size | RB Offset | Band EdgesPlot |
|------|-------------------------|----------------|----|---------|-----------|----------------|
|      |                         |                |    |         |           | QPSK           |
| 4    | 1745                    | 20300          | 20 | 1       | 99        | Fig.1          |
|      |                         |                |    | 100     | 0         | Fig.4          |



Fig.1



Fig.4

## 6 Frequency Stability

Test result:

| Temperature(°C) | Voltage | Test Result (ppm) Band4 Low Channel |       |       |       |       |       |
|-----------------|---------|-------------------------------------|-------|-------|-------|-------|-------|
|                 |         | 1.4M                                | 3M    | 5M    | 10M   | 15M   | 20M   |
| -10             | NV      | 0.114                               | 0.007 | 0.089 | 0.095 | 0.018 | 0.153 |
| 0               | NV      | 0.142                               | 0.095 | 0.005 | 0.036 | 0.103 | 0.100 |
| +10             | NV      | 0.085                               | 0.043 | 0.071 | 0.077 | 0.086 | 0.073 |
| +20             | NV      | 0.042                               | 0.017 | 0.139 | 0.052 | 0.076 | 0.084 |
| +30             | NV      | 0.032                               | 0.026 | 0.117 | 0.031 | 0.009 | 0.016 |
| +40             | NV      | 0.124                               | 0.053 | 0.064 | 0.106 | 0.067 | 0.094 |
| +50             | NV      | 0.066                               | 0.077 | 0.041 | 0.052 | 0.091 | 0.074 |
| +55             | NV      | 0.147                               | 0.058 | 0.042 | 0.005 | 0.108 | 0.149 |
| +20             | LV      | 0.045                               | 0.046 | 0.029 | 0.011 | 0.008 | 0.054 |
| +20             | HV      | 0.059                               | 0.086 | 0.052 | 0.061 | 0.036 | 0.102 |

| Temperature(°C) | Voltage | Test Result (ppm) Band4 High Channel |       |       |       |       |       |
|-----------------|---------|--------------------------------------|-------|-------|-------|-------|-------|
|                 |         | 1.4M                                 | 3M    | 5M    | 10M   | 15M   | 20M   |
| -10             | NV      | 0.121                                | 0.082 | 0.005 | 0.073 | 0.025 | 0.149 |
| 0               | NV      | 0.041                                | 0.096 | 0.122 | 0.112 | 0.138 | 0.116 |
| +10             | NV      | 0.093                                | 0.102 | 0.066 | 0.072 | 0.068 | 0.029 |
| +20             | NV      | 0.014                                | 0.090 | 0.063 | 0.103 | 0.104 | 0.108 |
| +30             | NV      | 0.119                                | 0.018 | 0.127 | 0.041 | 0.023 | 0.154 |
| +40             | NV      | 0.024                                | 0.036 | 0.136 | 0.060 | 0.010 | 0.051 |
| +50             | NV      | 0.080                                | 0.044 | 0.049 | 0.071 | 0.033 | 0.085 |
| +55             | NV      | 0.037                                | 0.030 | 0.061 | 0.084 | 0.088 | 0.081 |
| +20             | LV      | 0.064                                | 0.046 | 0.041 | 0.092 | 0.096 | 0.140 |
| +20             | HV      | 0.015                                | 0.061 | 0.140 | 0.037 | 0.001 | 0.005 |