

## **APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

### **LTE Band 13**

#### **1 RF Power Output**

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| QPSK       | 779.5                   | 23205      | 5  | 1       | 0         | 23.51                 |
| QPSK       | 779.5                   | 23205      | 5  | 1       | 12        | 23.70                 |
| QPSK       | 779.5                   | 23205      | 5  | 1       | 24        | 23.62                 |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 0         | 22.95                 |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 7         | 23.13                 |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 13        | 23.07                 |
| QPSK       | 779.5                   | 23205      | 5  | 25      | 0         | 23.05                 |
| QPSK       | 782                     | 23230      | 5  | 1       | 0         | 23.59                 |
| QPSK       | 782                     | 23230      | 5  | 1       | 12        | 23.61                 |
| QPSK       | 782                     | 23230      | 5  | 1       | 24        | 23.41                 |
| QPSK       | 782                     | 23230      | 5  | 12      | 0         | 22.95                 |
| QPSK       | 782                     | 23230      | 5  | 12      | 7         | 22.97                 |
| QPSK       | 782                     | 23230      | 5  | 12      | 13        | 22.99                 |
| QPSK       | 782                     | 23230      | 5  | 25      | 0         | 22.97                 |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 0         | 23.45                 |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 12        | 23.58                 |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 24        | 23.39                 |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 0         | 22.96                 |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 7         | 22.98                 |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 13        | 23.08                 |
| QPSK       | 784.5                   | 23255      | 5  | 25      | 0         | 22.97                 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 0         | 23.24                 |
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 12        | 23.15                 |
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 24        | 23.39                 |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 0         | 22.05                 |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 7         | 22.22                 |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 13        | 22.16                 |
| 16QAM      | 779.5                   | 23205      | 5  | 25      | 0         | 22.11                 |
| 16QAM      | 782                     | 23230      | 5  | 1       | 0         | 23.16                 |
| 16QAM      | 782                     | 23230      | 5  | 1       | 12        | 23.35                 |
| 16QAM      | 782                     | 23230      | 5  | 1       | 24        | 23.15                 |
| 16QAM      | 782                     | 23230      | 5  | 12      | 0         | 21.96                 |
| 16QAM      | 782                     | 23230      | 5  | 12      | 7         | 22.01                 |
| 16QAM      | 782                     | 23230      | 5  | 12      | 13        | 22.12                 |
| 16QAM      | 782                     | 23230      | 5  | 25      | 0         | 21.94                 |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 0         | 23.14                 |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 12        | 23.12                 |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 24        | 23.28                 |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 0         | 22.00                 |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 7         | 22.03                 |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 13        | 21.98                 |
| 16QAM      | 784.5                   | 23255      | 5  | 25      | 0         | 21.95                 |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 0         | 22.09                 |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 12        | 22.20                 |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 24        | 22.33                 |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 0         | 21.01                 |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 7         | 21.06                 |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 13        | 21.06                 |
| 64QAM      | 779.5                   | 23205      | 5  | 25      | 0         | 21.03                 |
| 64QAM      | 782                     | 23230      | 5  | 1       | 0         | 22.33                 |
| 64QAM      | 782                     | 23230      | 5  | 1       | 12        | 22.37                 |
| 64QAM      | 782                     | 23230      | 5  | 1       | 24        | 22.24                 |
| 64QAM      | 782                     | 23230      | 5  | 12      | 0         | 20.97                 |
| 64QAM      | 782                     | 23230      | 5  | 12      | 7         | 20.99                 |
| 64QAM      | 782                     | 23230      | 5  | 12      | 13        | 20.97                 |
| 64QAM      | 782                     | 23230      | 5  | 25      | 0         | 20.97                 |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 0         | 22.32                 |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 12        | 22.21                 |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 24        | 22.18                 |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 0         | 20.97                 |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 7         | 21.10                 |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 13        | 21.02                 |
| 64QAM      | 784.5                   | 23255      | 5  | 25      | 0         | 21.00                 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.49                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.66                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.62                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 23.07                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 23.08                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.04                 |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 23.02                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.39                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.45                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.41                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 22.91                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 22.97                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.03                 |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 22.99                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.50                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.67                 |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.68                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 23.07                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 23.06                 |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.11                 |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 22.94                 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.01                 |
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.49                 |
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.07                 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.46                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 23.23                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.53                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.94                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.04                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.02                 |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.97                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.13                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.92                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.15                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.98                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.01                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.04                 |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.98                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.27                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 23.46                 |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.47                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 22.10                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.05                 |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.09                 |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 22.08                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.29                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.31                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.41                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.06                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.05                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.10                 |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 20.94                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.20                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.26                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.29                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.05                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.00                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.05                 |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 20.97                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.31                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.32                 |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.31                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.05                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.06                 |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.00                 |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.00                 |

## 2 Occupied Bandwidth

| Band | Mode | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |       |
|------|------|-------------------------|---------|----------|---------|-----------|------------------------------|-------|
| 13   | QPSK | 779.5                   | 23205   | 5        | 25      | 0         | 4.468                        | Fig.1 |
| 13   | QPSK | 782                     | 23230   | 5        | 25      | 0         | 4.460                        | Fig.2 |
| 13   | QPSK | 784.5                   | 23255   | 5        | 25      | 0         | 4.469                        | Fig.3 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 8.891                        | Fig.4 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 8.869                        | Fig.5 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 8.928                        | Fig.6 |

| Band | Mode  | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |        |
|------|-------|-------------------------|---------|----------|---------|-----------|------------------------------|--------|
| 13   | 16QAM | 779.5                   | 23205   | 5        | 25      | 0         | 4.463                        | Fig.7  |
| 13   | 16QAM | 782                     | 23230   | 5        | 25      | 0         | 4.461                        | Fig.8  |
| 13   | 16QAM | 784.5                   | 23255   | 5        | 25      | 0         | 4.456                        | Fig.9  |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 8.835                        | Fig.10 |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 8.929                        | Fig.11 |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 8.873                        | Fig.12 |

| Band | Mode  | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of 99% Power (MHz) |        |
|------|-------|-------------------------|---------|----------|---------|-----------|------------------------------|--------|
| 13   | 64QAM | 779.5                   | 23205   | 5        | 25      | 0         | 4.459                        | Fig.13 |
| 13   | 64QAM | 782                     | 23230   | 5        | 25      | 0         | 4.461                        | Fig.14 |
| 13   | 64QAM | 784.5                   | 23255   | 5        | 25      | 0         | 4.455                        | Fig.15 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 8.913                        | Fig.16 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 8.913                        | Fig.17 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 8.857                        | Fig.18 |

Test Mode: QPSK

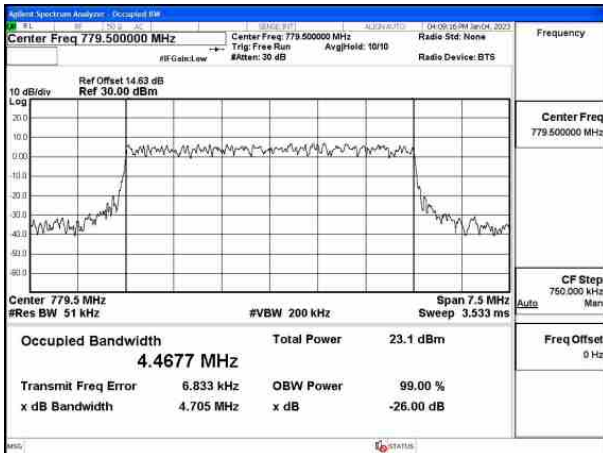


Fig.1

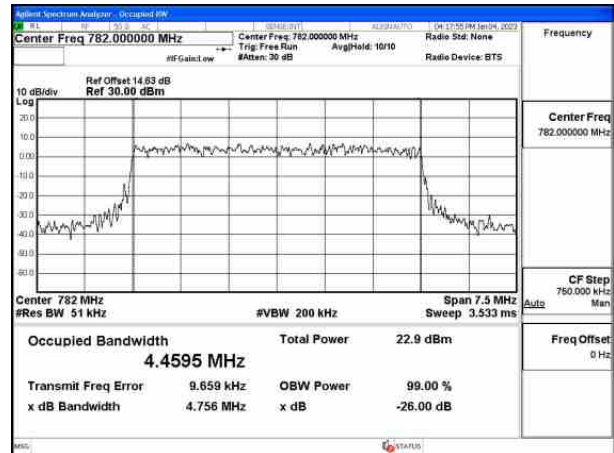


Fig.2

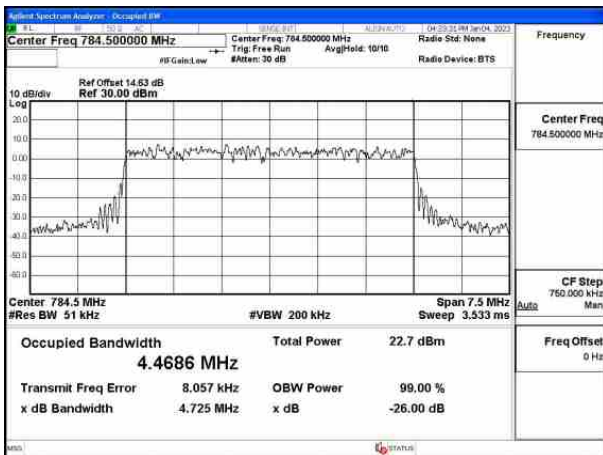


Fig.3

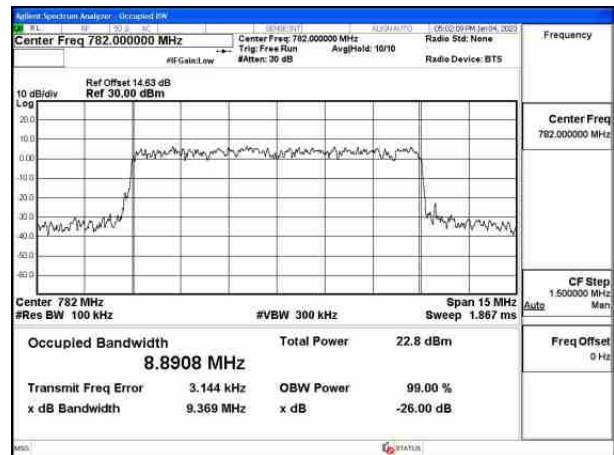


Fig.4

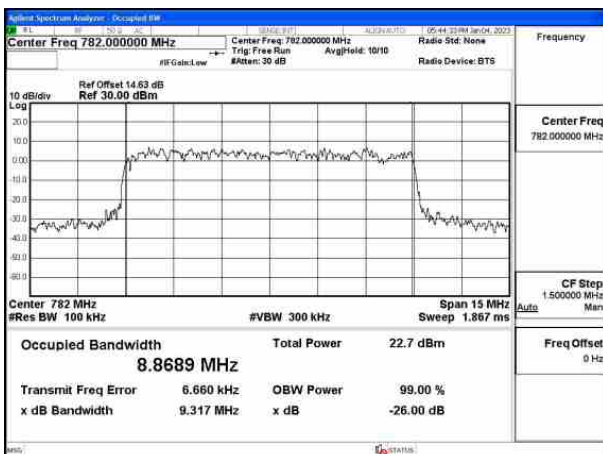


Fig.5

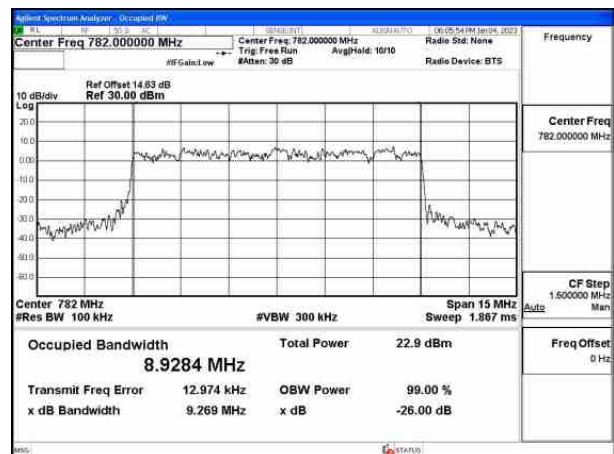


Fig.6

Test Mode: 16QAM

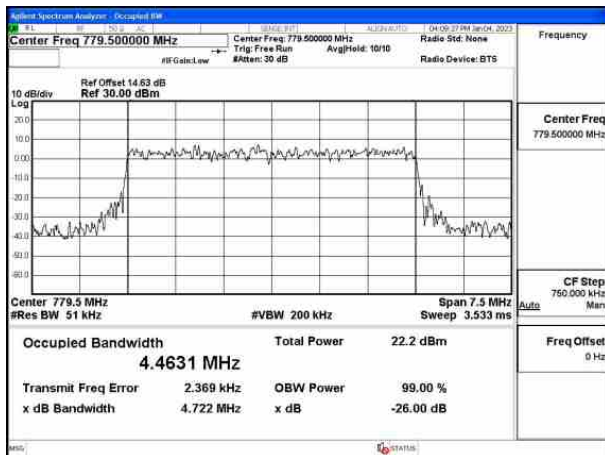


Fig.7

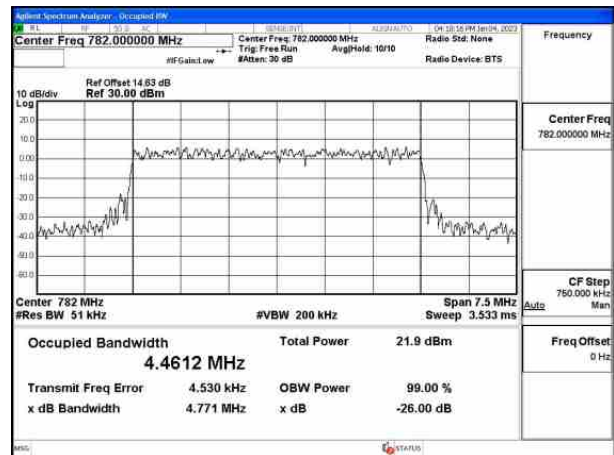


Fig.8

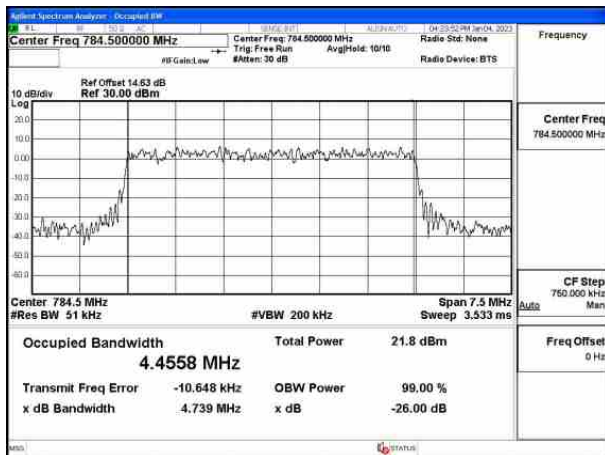


Fig.9

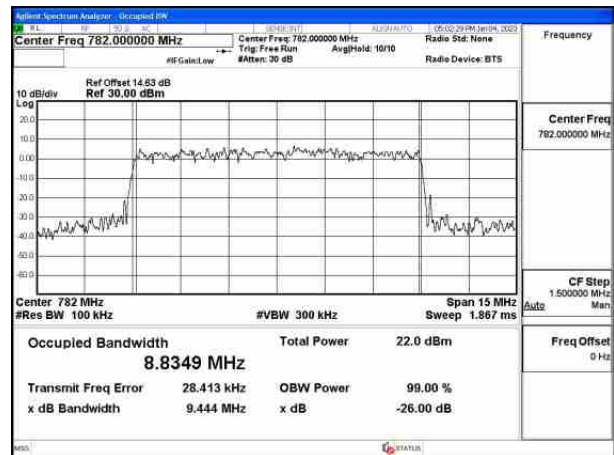


Fig.10

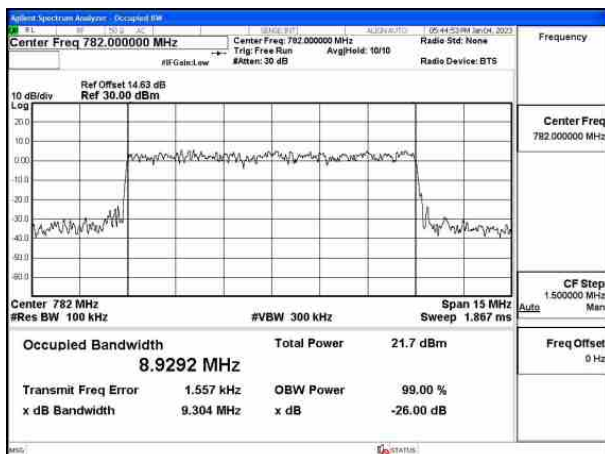


Fig.11

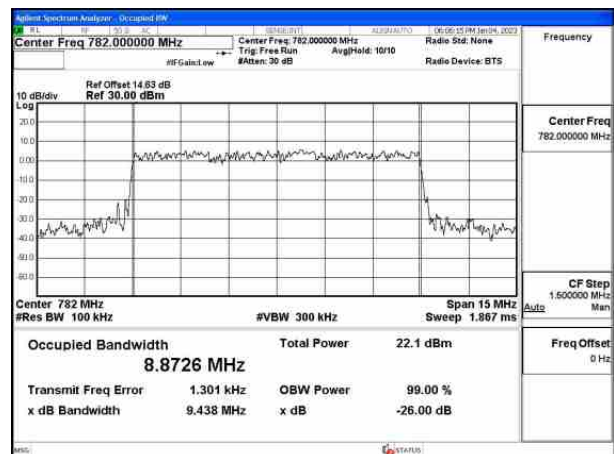


Fig.12

Test Mode: 64QAM

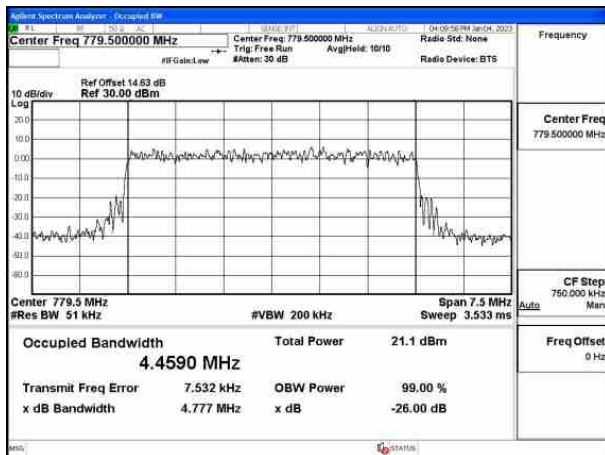


Fig.13

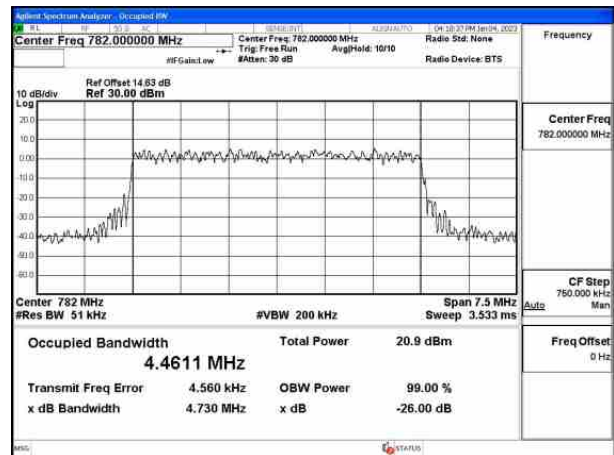


Fig.14

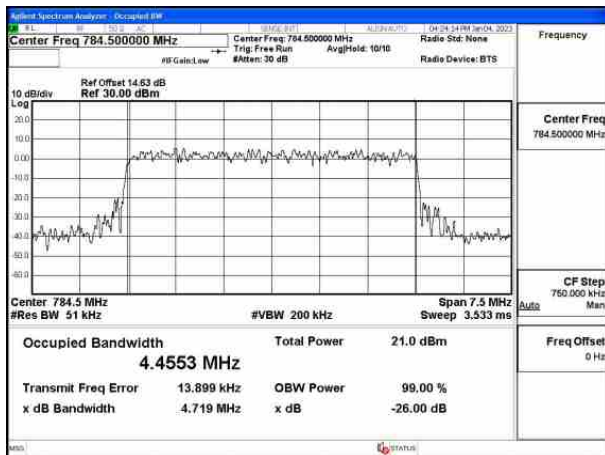


Fig.15

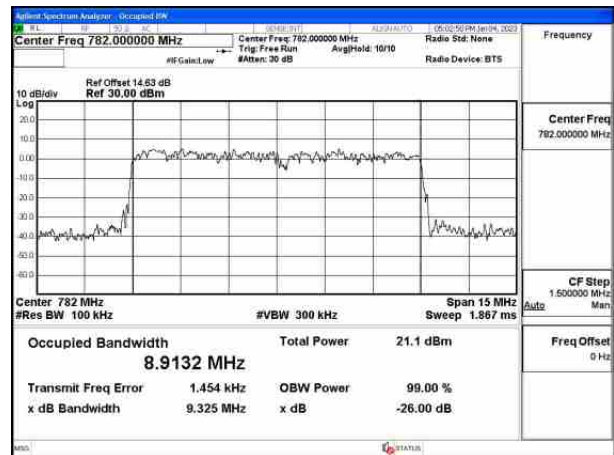


Fig.16

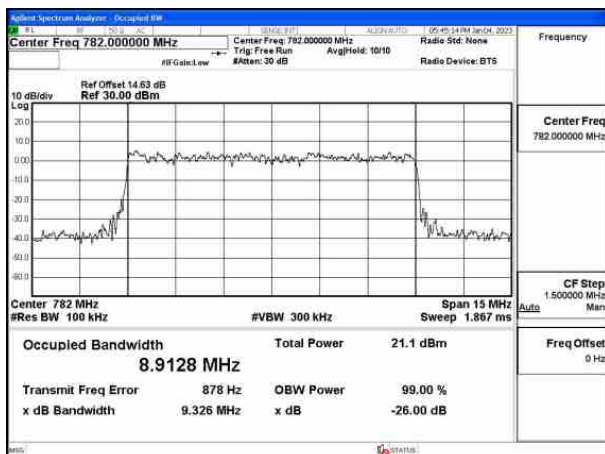


Fig.17

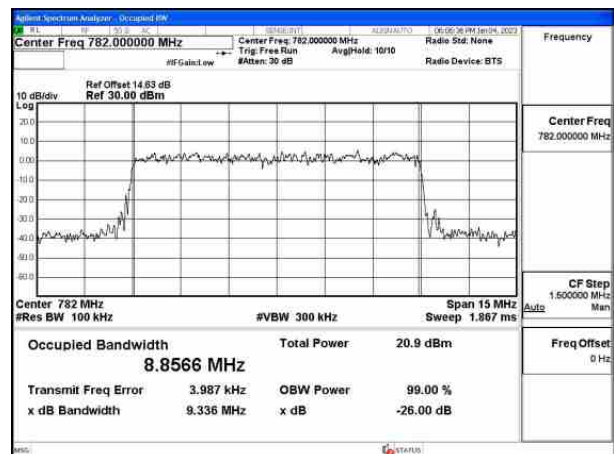


Fig.18

### 3 Emission Bandwidth

| Band | Mode | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |       |
|------|------|-------------------------|---------|----------|---------|-----------|--------------------------------------------|-------|
| 13   | QPSK | 779.5                   | 23205   | 5        | 25      | 0         | 4.705                                      | Fig.1 |
| 13   | QPSK | 782                     | 23230   | 5        | 25      | 0         | 4.756                                      | Fig.2 |
| 13   | QPSK | 784.5                   | 23255   | 5        | 25      | 0         | 4.725                                      | Fig.3 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 9.369                                      | Fig.4 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 9.317                                      | Fig.5 |
| 13   | QPSK | 782                     | 23230   | 10       | 50      | 0         | 9.269                                      | Fig.6 |

| Band | Mode  | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |        |
|------|-------|-------------------------|---------|----------|---------|-----------|--------------------------------------------|--------|
| 13   | 16QAM | 779.5                   | 23205   | 5        | 25      | 0         | 4.722                                      | Fig.7  |
| 13   | 16QAM | 782                     | 23230   | 5        | 25      | 0         | 4.771                                      | Fig.8  |
| 13   | 16QAM | 784.5                   | 23255   | 5        | 25      | 0         | 4.739                                      | Fig.9  |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 9.444                                      | Fig.10 |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 9.304                                      | Fig.11 |
| 13   | 16QAM | 782                     | 23230   | 10       | 50      | 0         | 9.438                                      | Fig.12 |

| Band | Mode  | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | Bandwidth of -26dB transmitter power (MHz) |        |
|------|-------|-------------------------|---------|----------|---------|-----------|--------------------------------------------|--------|
| 13   | 64QAM | 779.5                   | 23205   | 5        | 25      | 0         | 4.777                                      | Fig.13 |
| 13   | 64QAM | 782                     | 23230   | 5        | 25      | 0         | 4.730                                      | Fig.14 |
| 13   | 64QAM | 784.5                   | 23255   | 5        | 25      | 0         | 4.719                                      | Fig.15 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 9.325                                      | Fig.16 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 9.326                                      | Fig.17 |
| 13   | 64QAM | 782                     | 23230   | 10       | 50      | 0         | 9.336                                      | Fig.18 |

Test Mode: QPSK

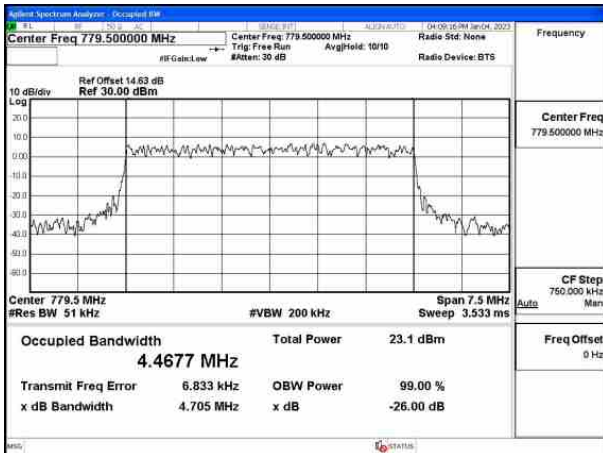


Fig.1

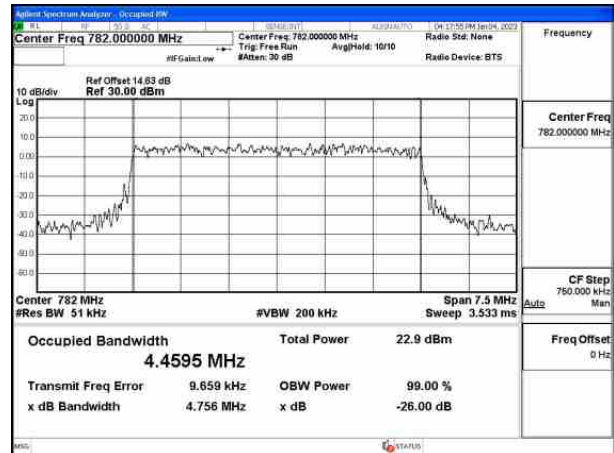


Fig.2

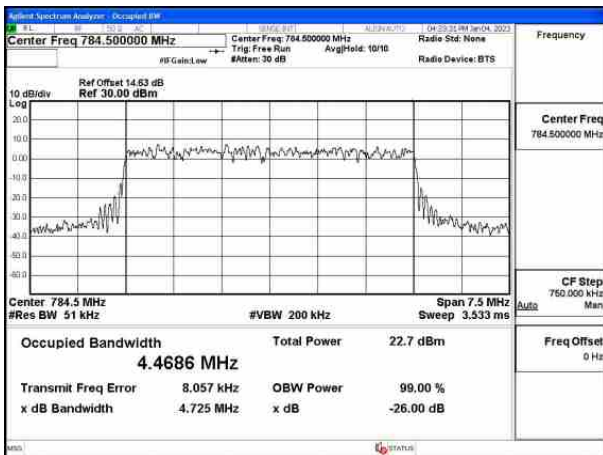


Fig.3

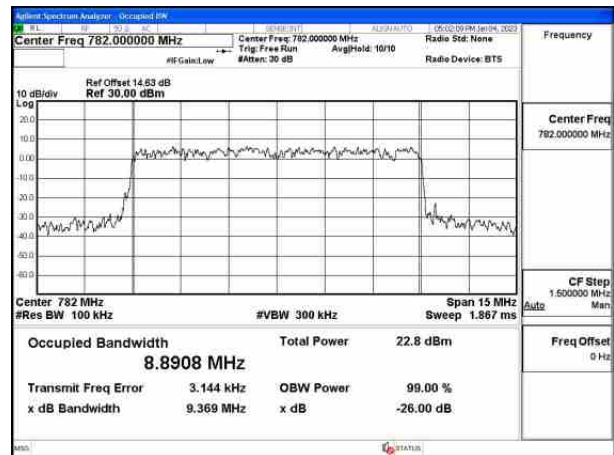


Fig.4

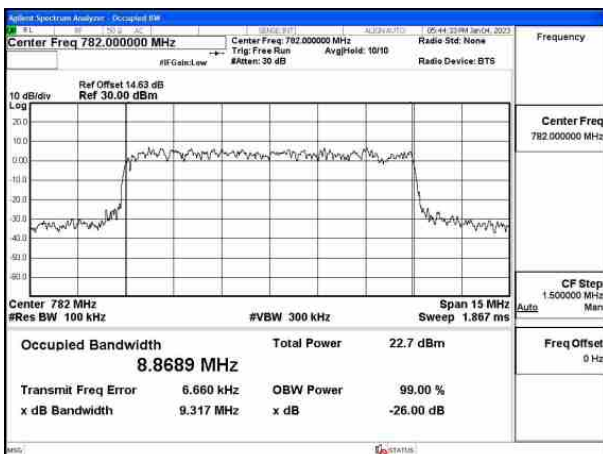


Fig.5

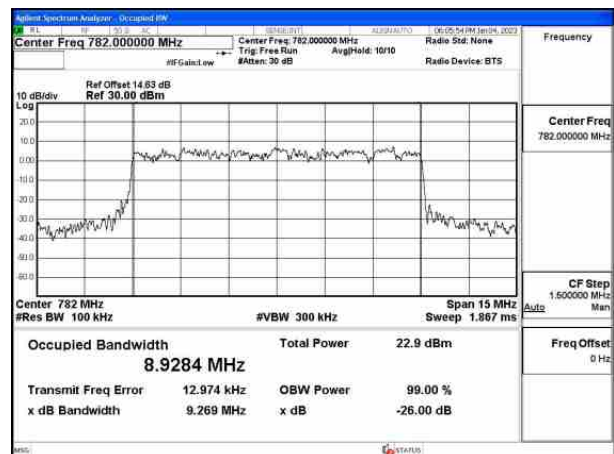


Fig.6

Test Mode: 16QAM

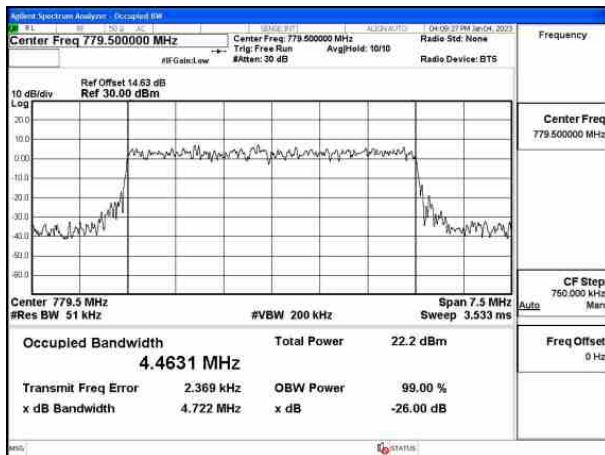


Fig.7

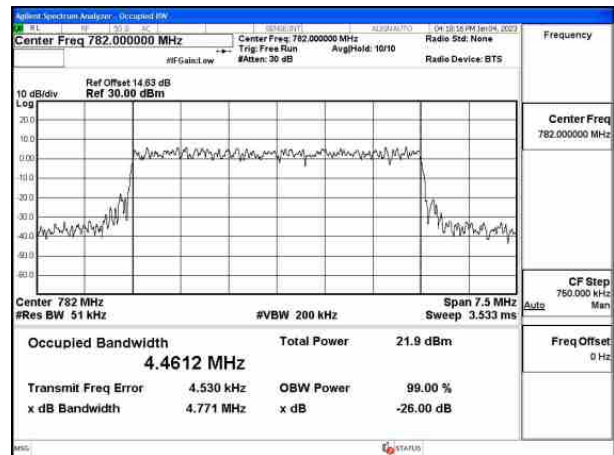


Fig.8

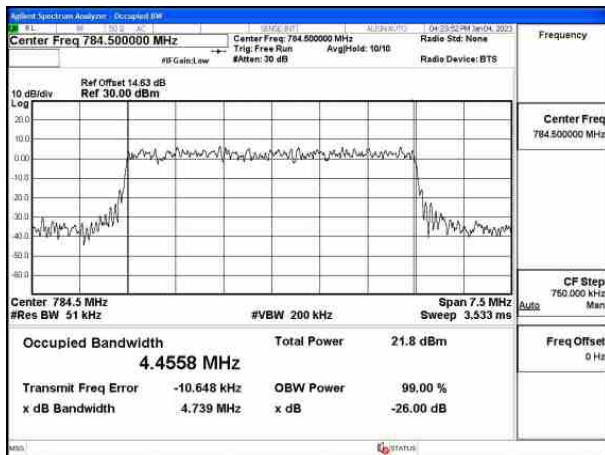


Fig.9

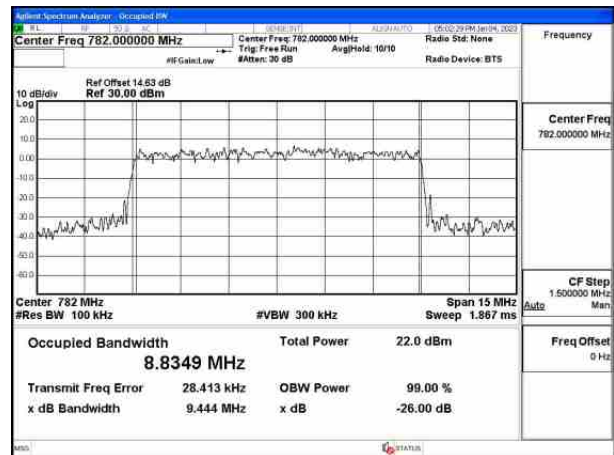


Fig.10

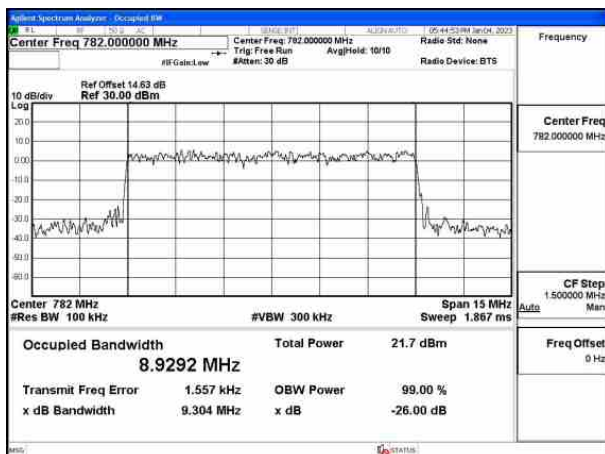


Fig.11

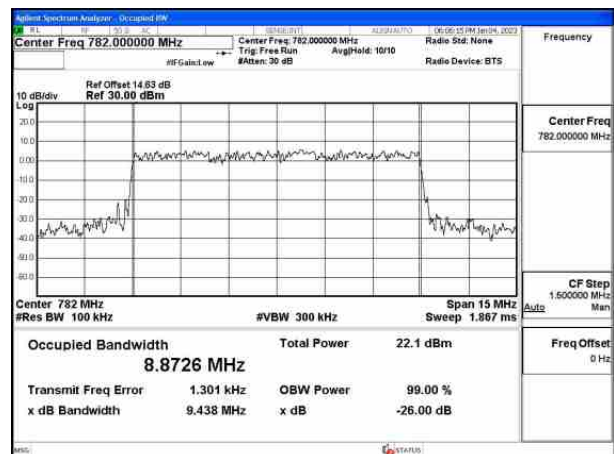


Fig.12

Test Mode: 64QAM

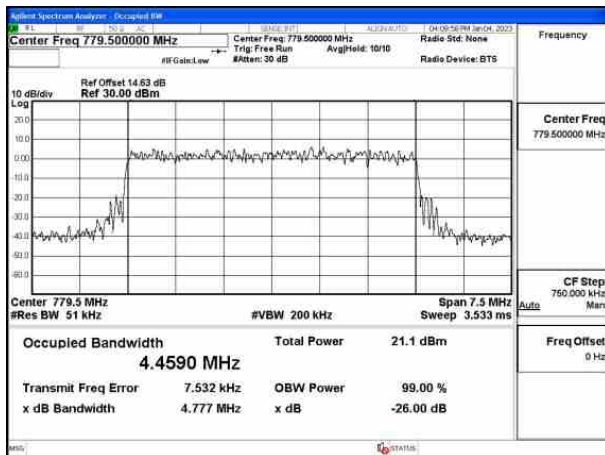


Fig.13

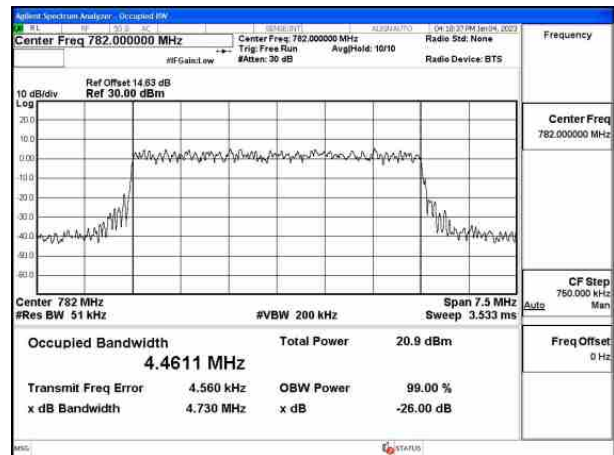


Fig.14

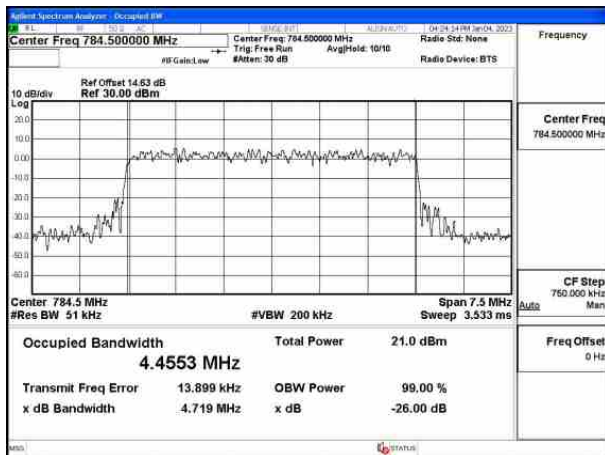


Fig.15

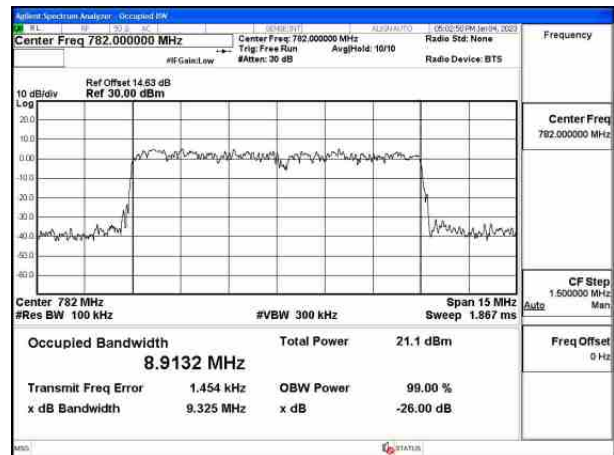


Fig.16

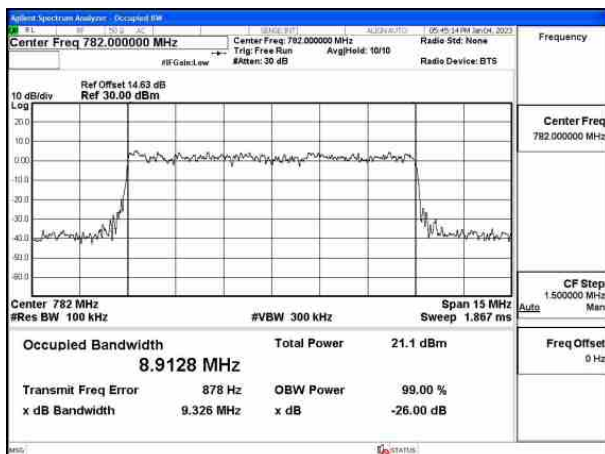


Fig.17

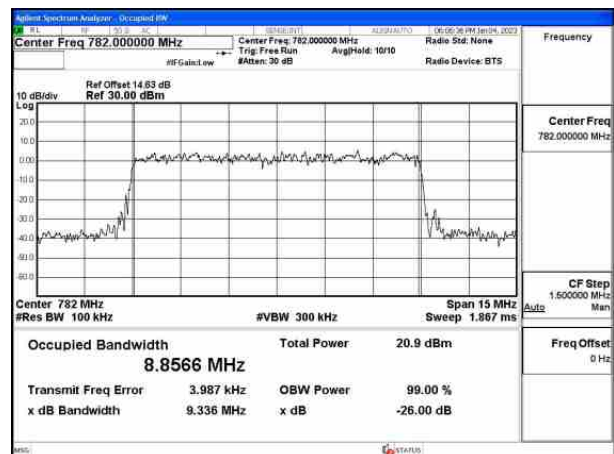


Fig.18

#### 4 Peak-Average Ratio

| Band | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | QPSK   | 16-QAM | 64-QAM |
|------|-------------------------|---------|----------|---------|-----------|--------|--------|--------|
| 13   | 779.5                   | 23205   | 5        | 1       | 24        | Fig.1  | Fig.2  | Fig.3  |
| 13   | 779.5                   | 23205   | 5        | 25      | 0         | Fig.4  | Fig.5  | Fig.6  |
| 13   | 782                     | 23230   | 5        | 1       | 24        | Fig.7  | Fig.8  | Fig.9  |
| 13   | 782                     | 23230   | 5        | 25      | 0         | Fig.10 | Fig.11 | Fig.12 |
| 13   | 784.5                   | 23255   | 5        | 1       | 24        | Fig.13 | Fig.14 | Fig.15 |
| 13   | 784.5                   | 23255   | 5        | 25      | 0         | Fig.16 | Fig.17 | Fig.18 |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.19 | Fig.20 | Fig.21 |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.22 | Fig.23 | Fig.24 |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.25 | Fig.26 | Fig.27 |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.28 | Fig.29 | Fig.30 |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.31 | Fig.32 | Fig.33 |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.34 | Fig.35 | Fig.36 |

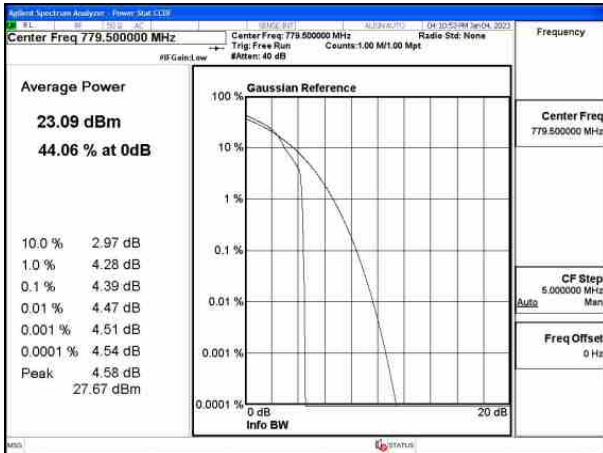


Fig.1

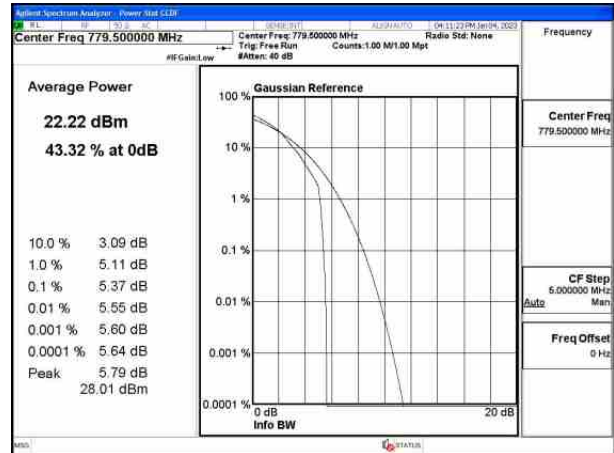


Fig.2

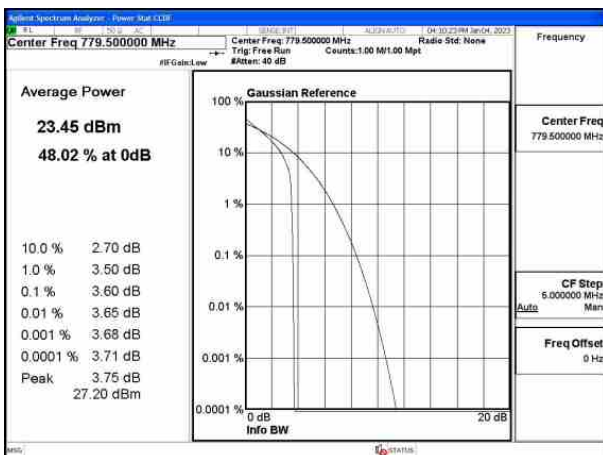


Fig.3

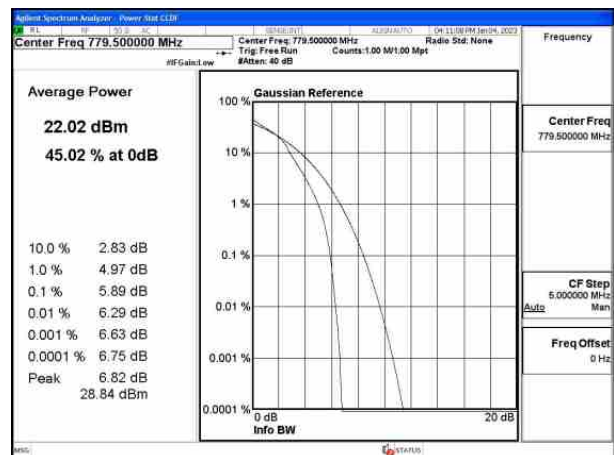


Fig.4

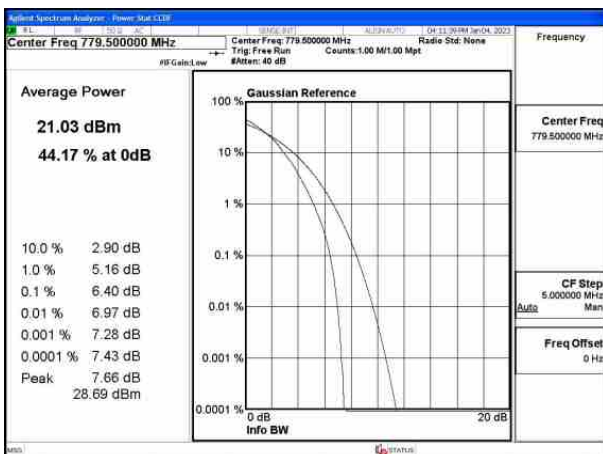


Fig.5

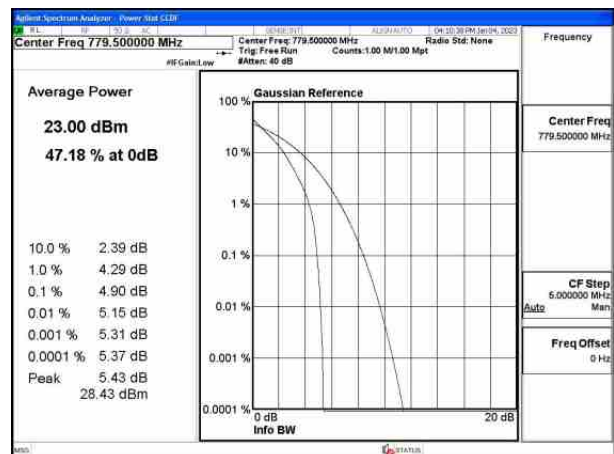


Fig.6

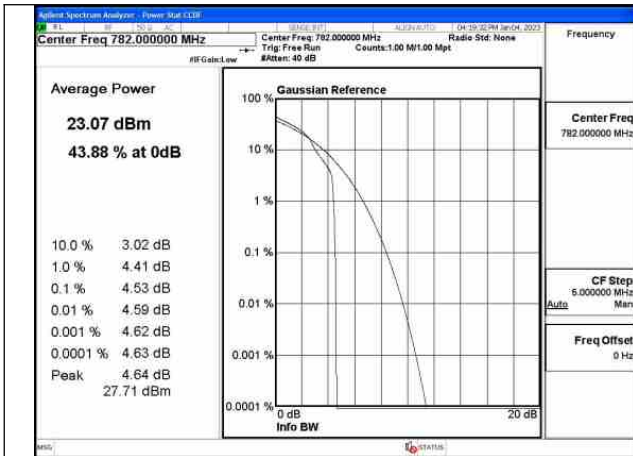


Fig.7

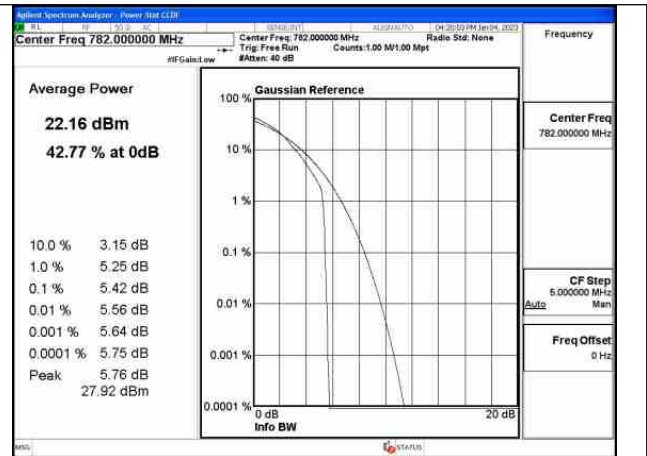


Fig.8

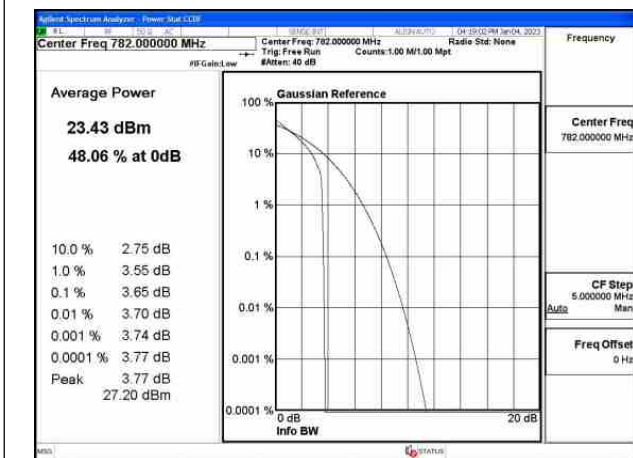


Fig.9

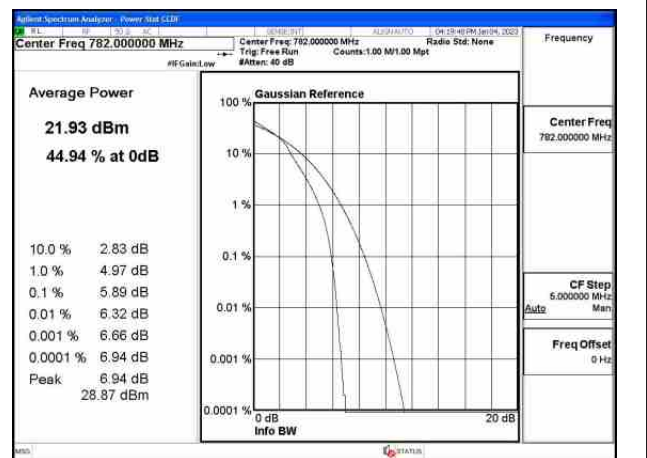


Fig.10

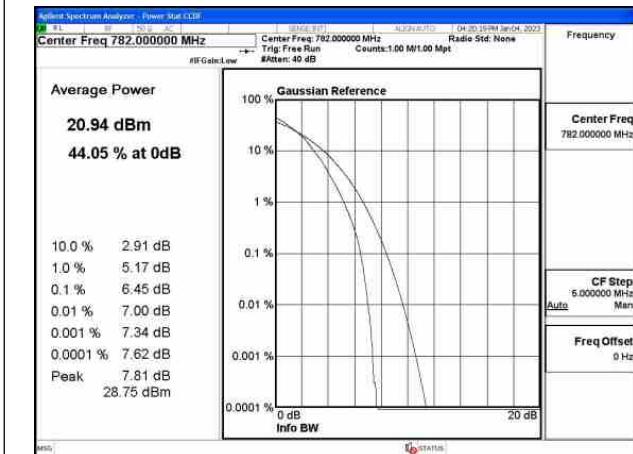


Fig.11

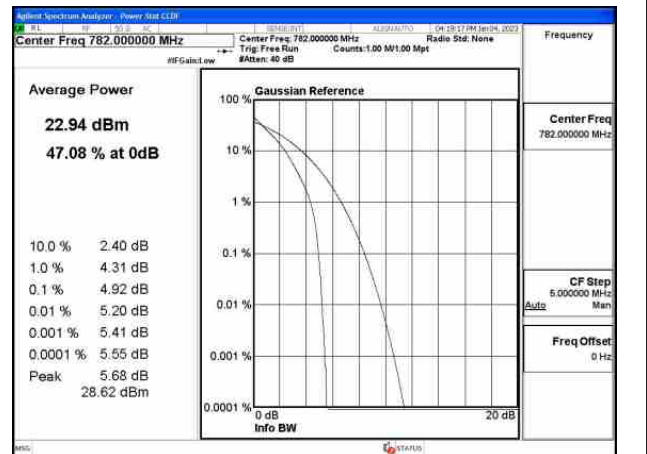


Fig.12

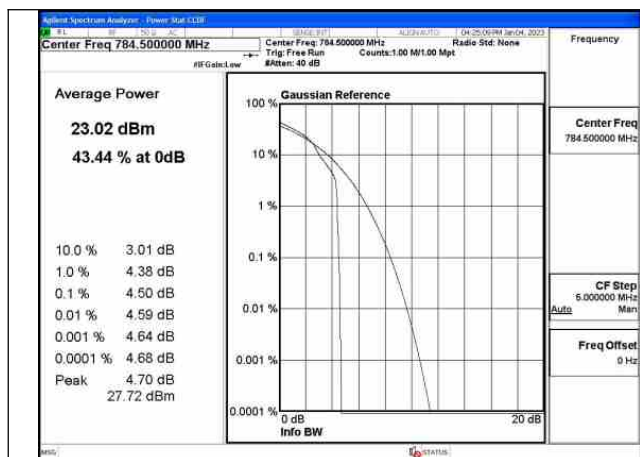


Fig.13

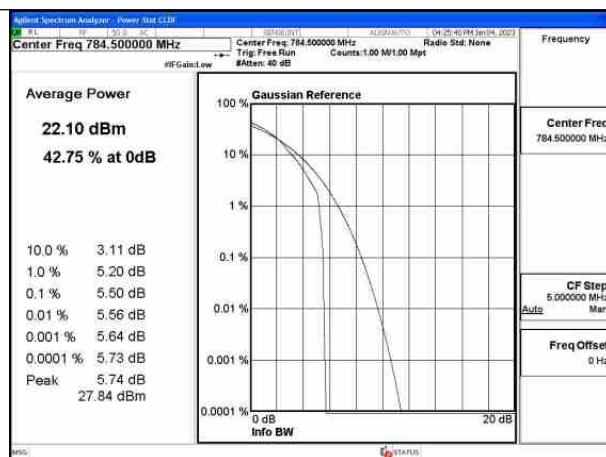


Fig.14

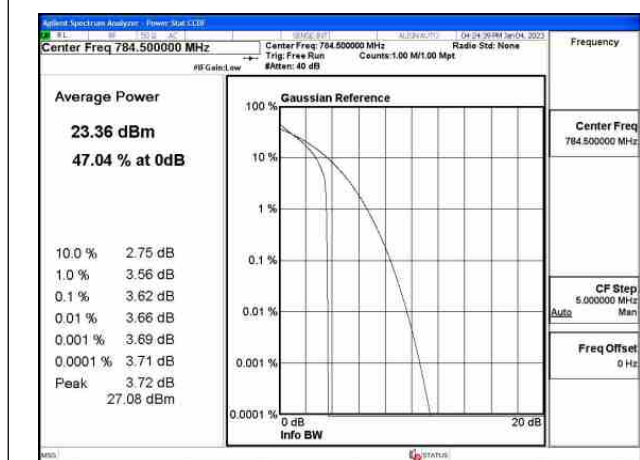


Fig.15

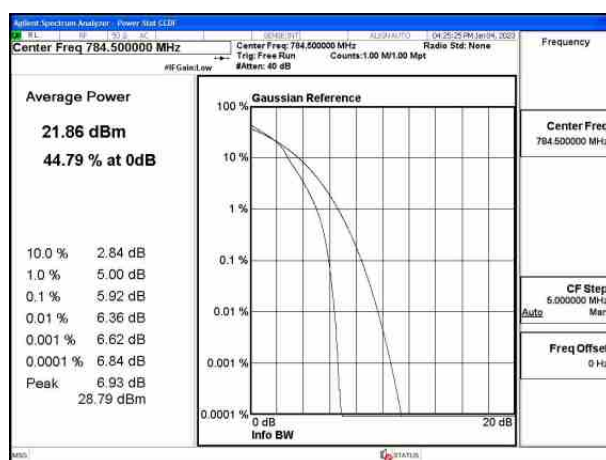


Fig.16

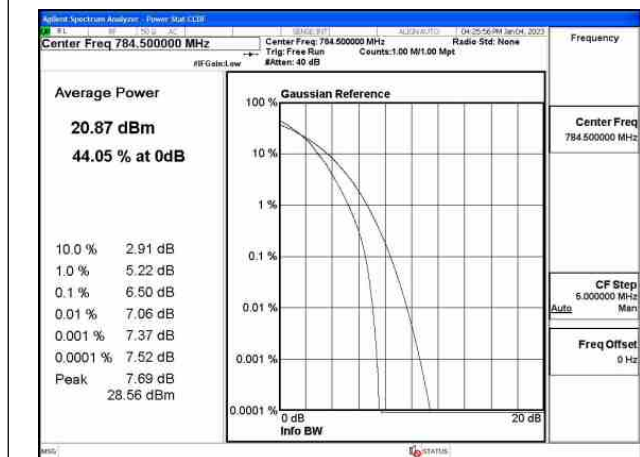


Fig.17

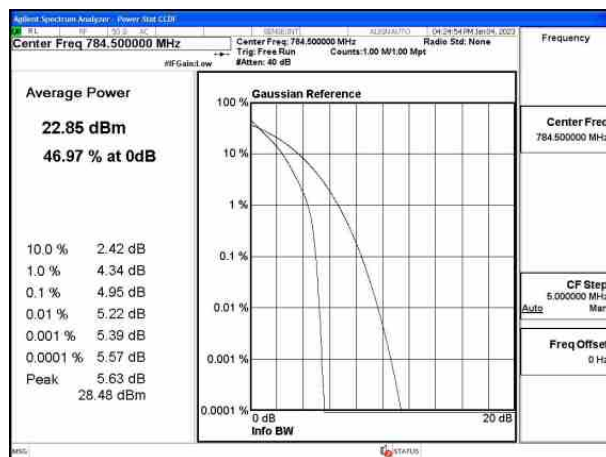


Fig.18

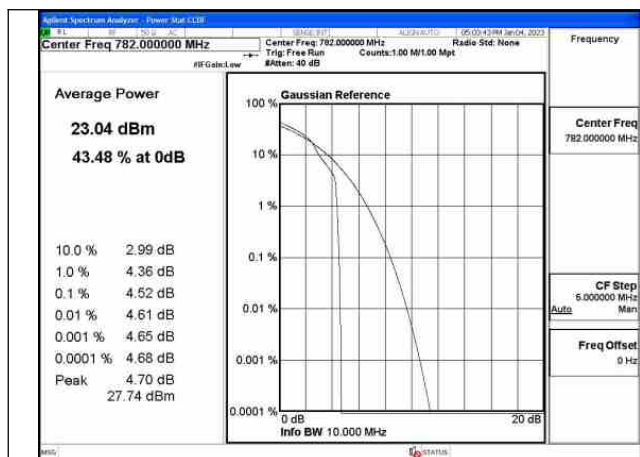


Fig.19

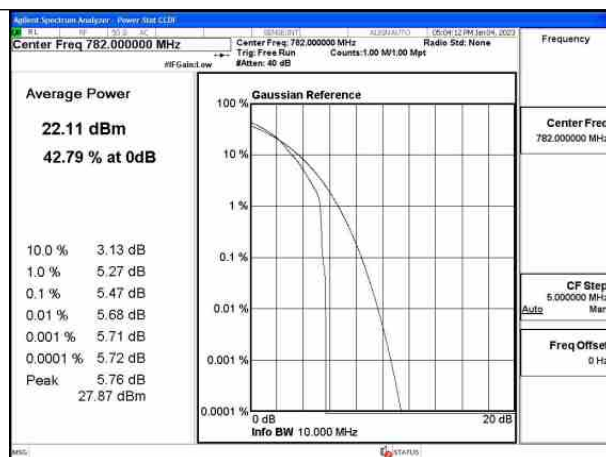


Fig.20

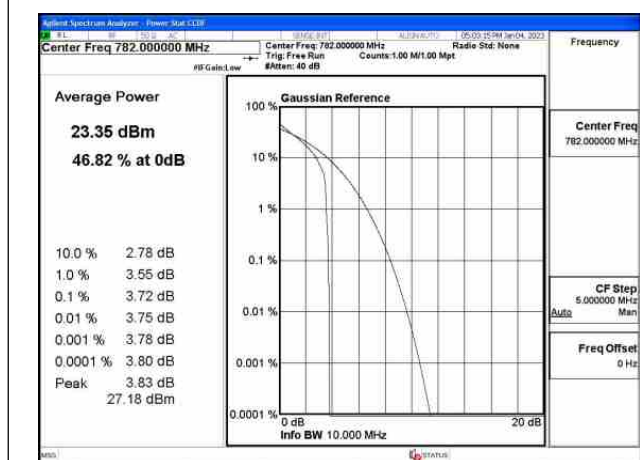


Fig.21

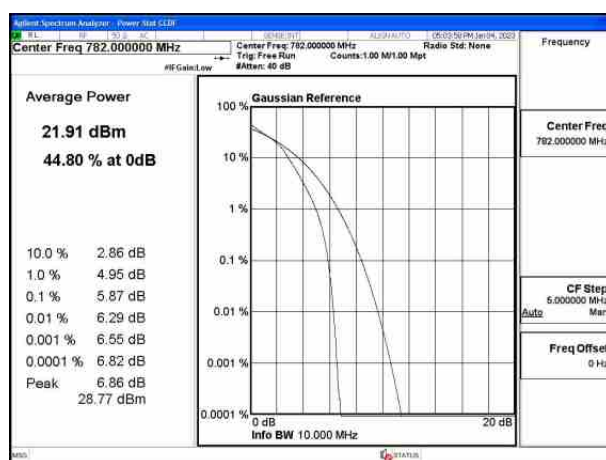


Fig.22

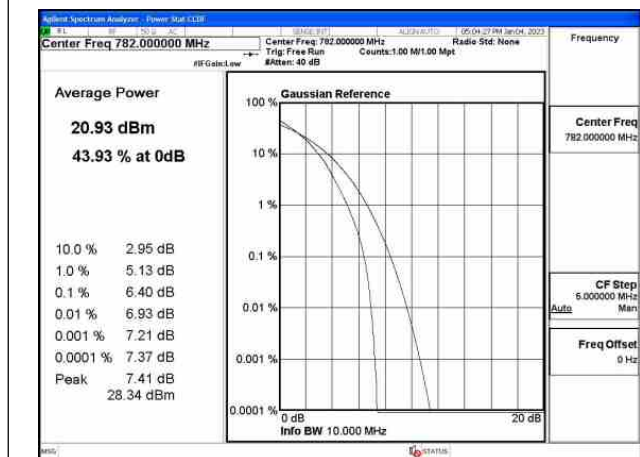


Fig.23

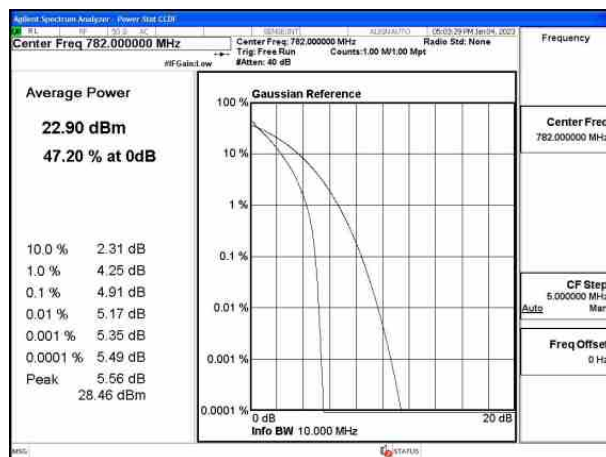


Fig.24

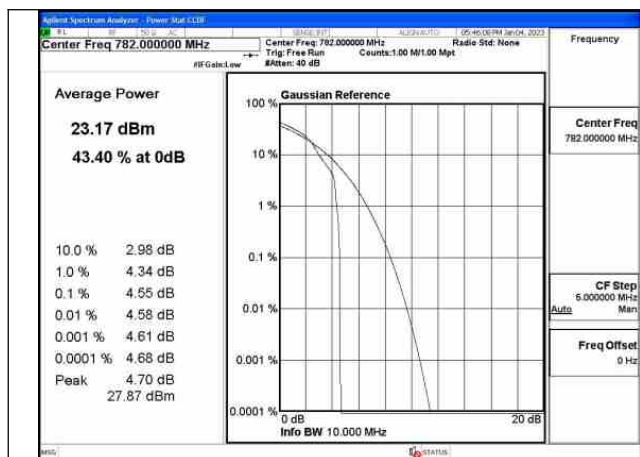


Fig.25

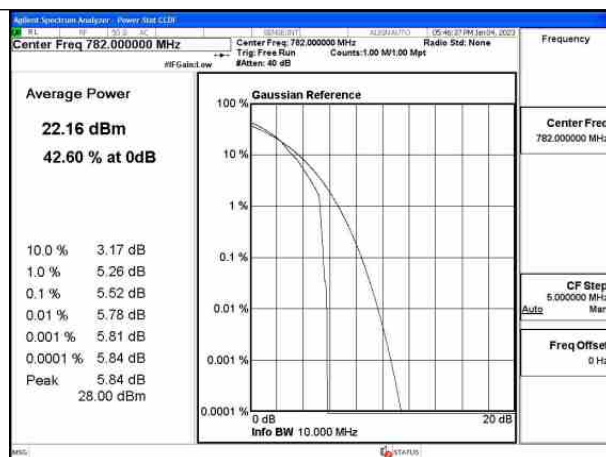


Fig.26

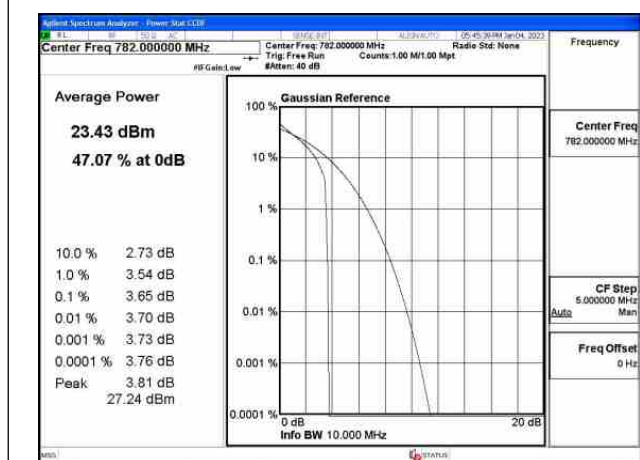


Fig.27

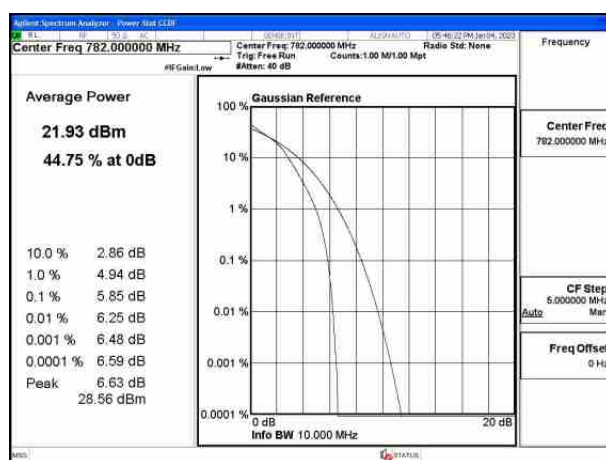


Fig.28

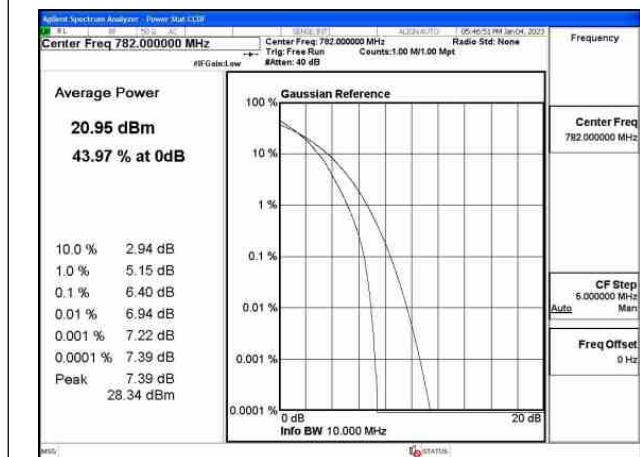


Fig.29

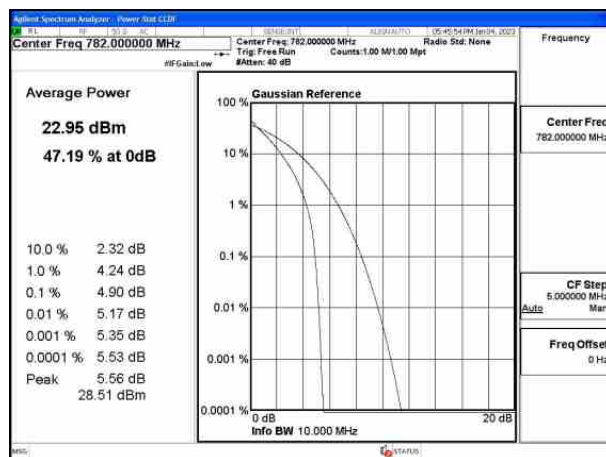


Fig.30

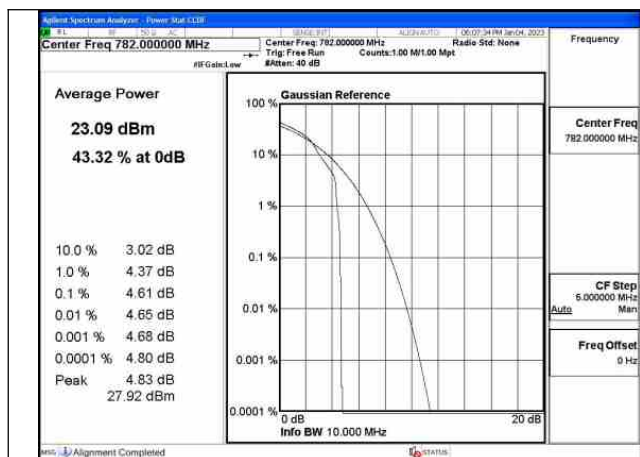


Fig.31

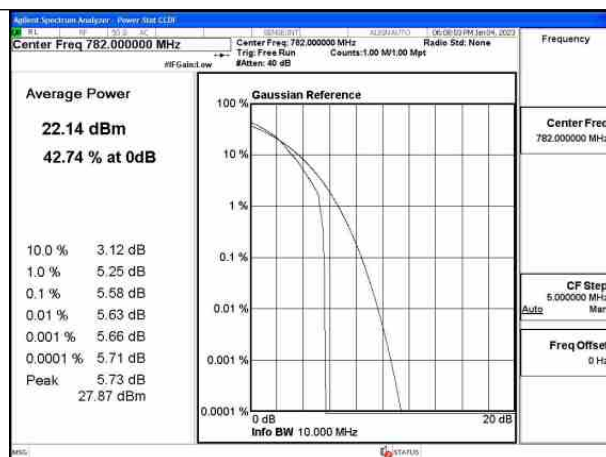


Fig.32

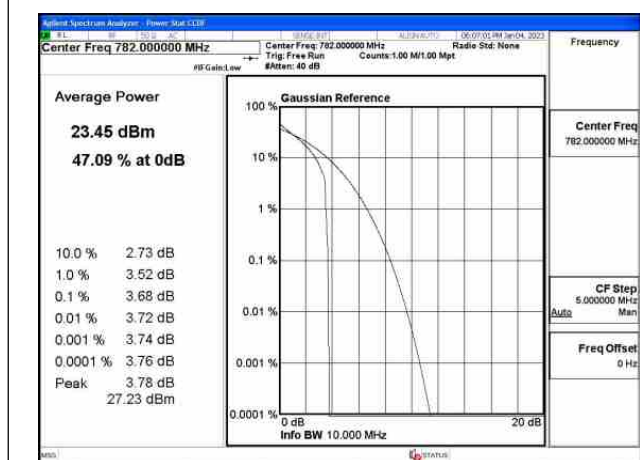


Fig.33

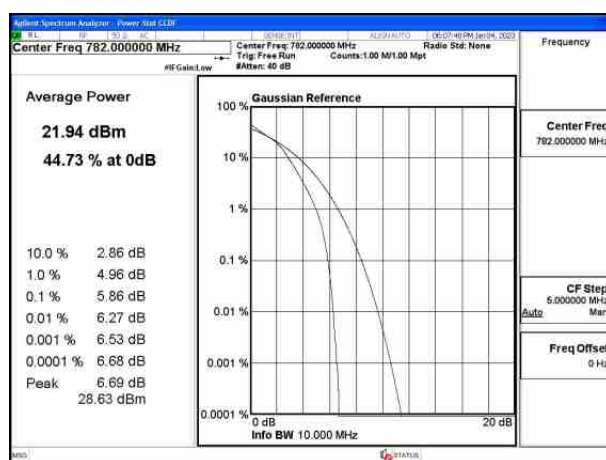


Fig.34

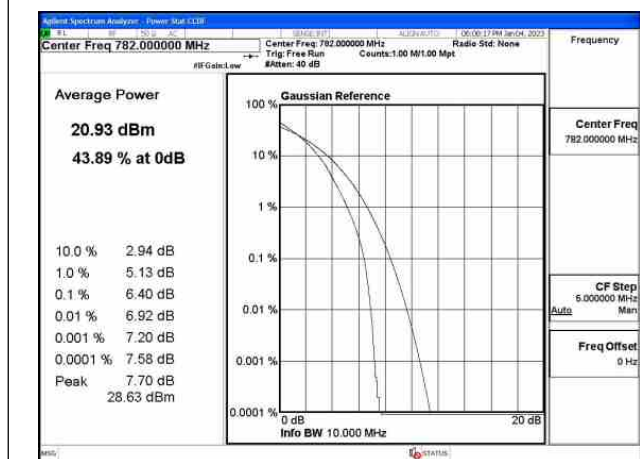


Fig.35

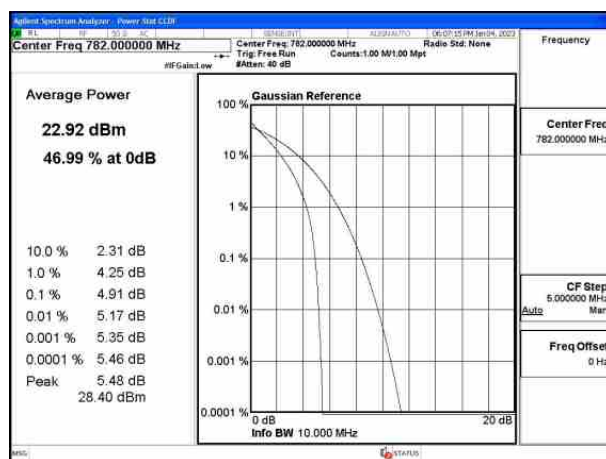


Fig.36

| Band | Carrier frequency (MHz) | Channel | BW (MHz) | RB Size | RB Offset | 256-QAM |
|------|-------------------------|---------|----------|---------|-----------|---------|
| 13   | 779.5                   | 23205   | 5        | 1       | 24        | Fig.1   |
| 13   | 779.5                   | 23205   | 5        | 25      | 0         | Fig.2   |
| 13   | 782                     | 23230   | 5        | 1       | 24        | Fig.3   |
| 13   | 782                     | 23230   | 5        | 25      | 0         | Fig.4   |
| 13   | 784.5                   | 23255   | 5        | 1       | 24        | Fig.5   |
| 13   | 784.5                   | 23255   | 5        | 25      | 0         | Fig.6   |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.7   |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.8   |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.9   |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.10  |
| 13   | 782                     | 23230   | 10       | 1       | 49        | Fig.11  |
| 13   | 782                     | 23230   | 10       | 50      | 0         | Fig.12  |

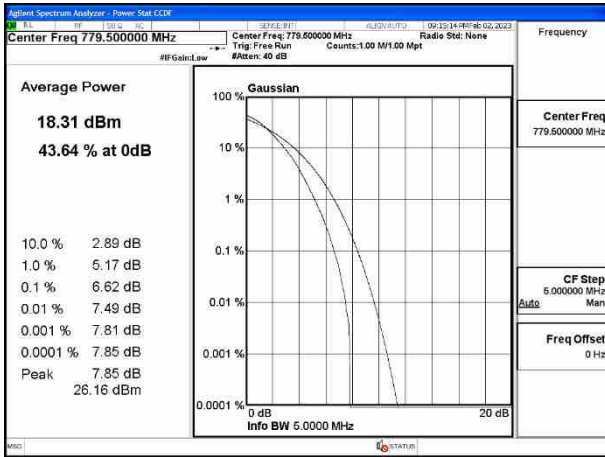


Fig.1

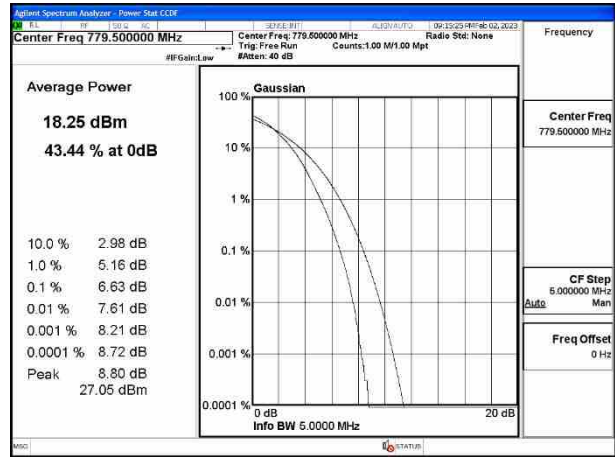


Fig.2

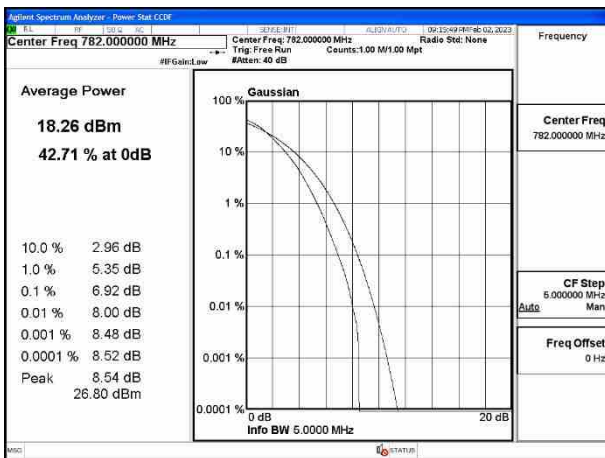


Fig.3

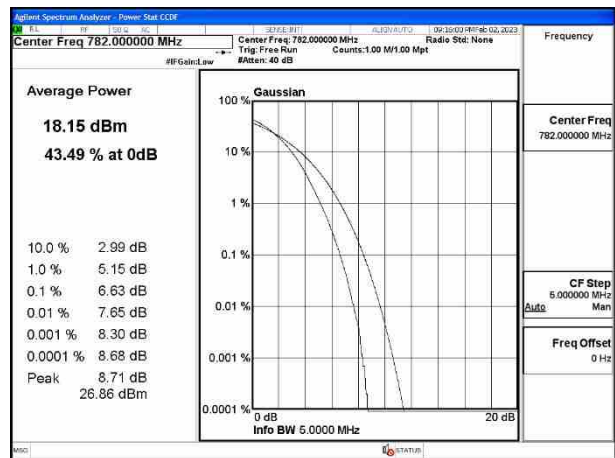


Fig.4

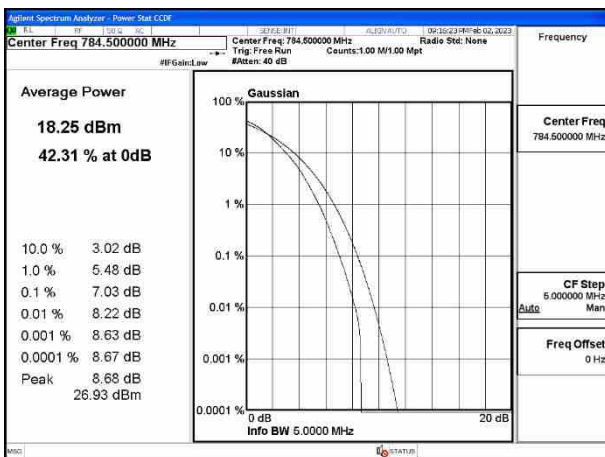


Fig.5

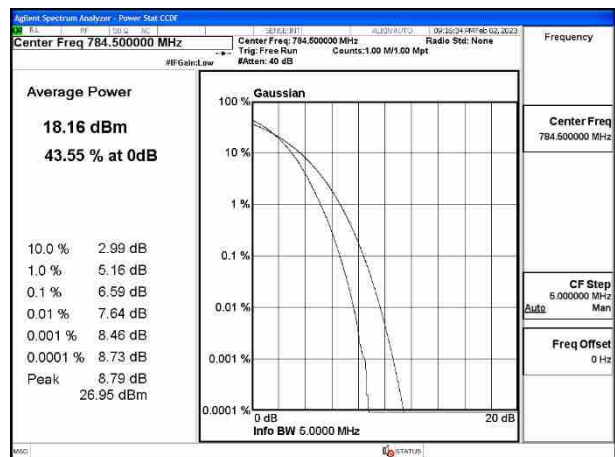


Fig.6

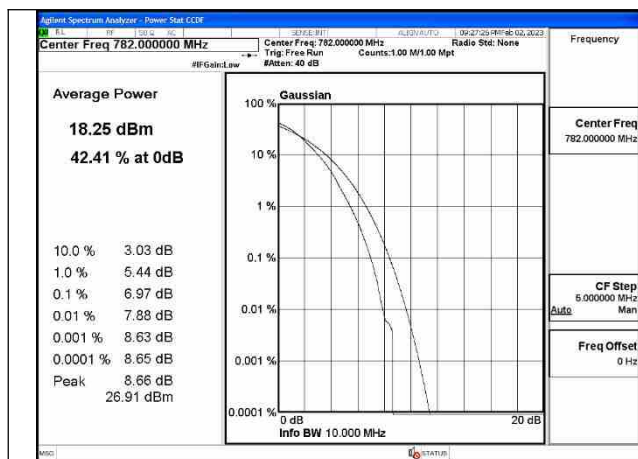


Fig.7

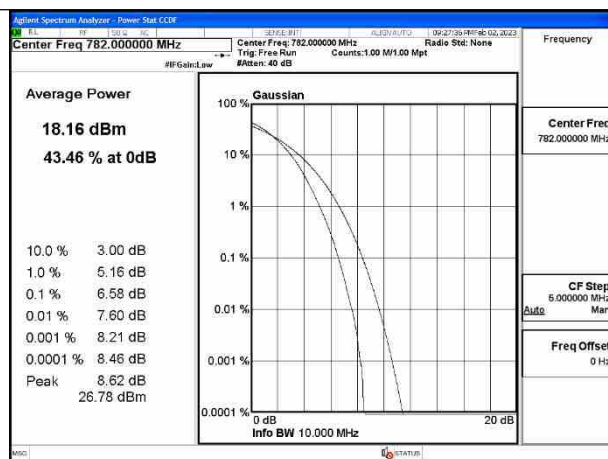


Fig.8

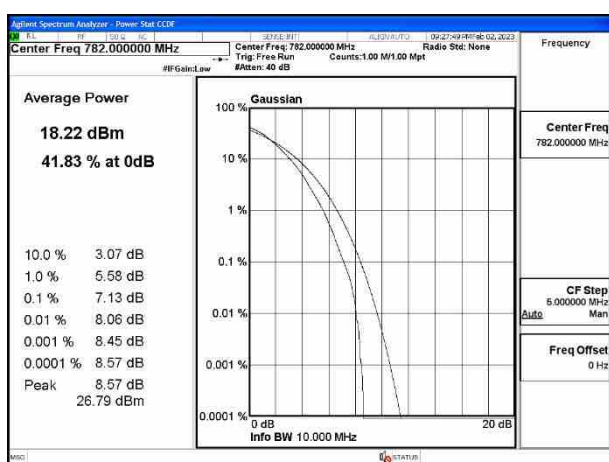


Fig.9

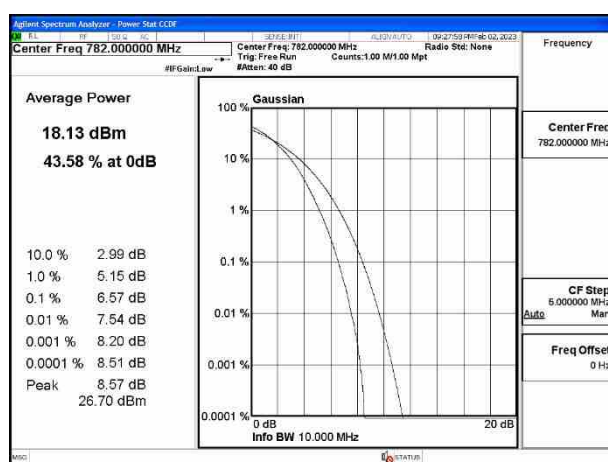


Fig.10

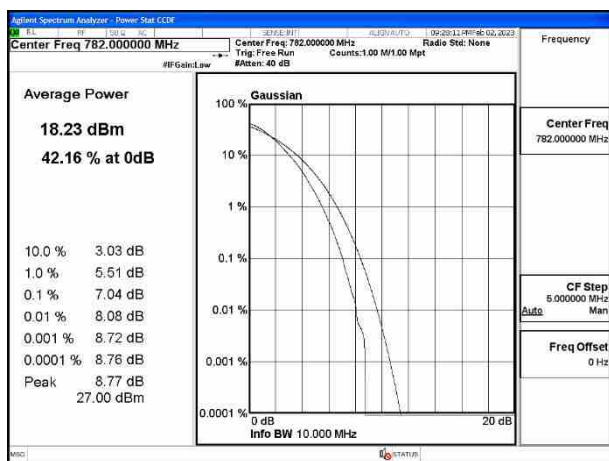


Fig.11

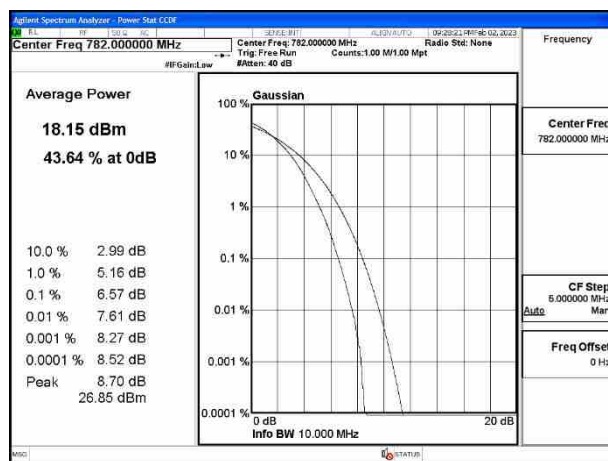


Fig.12

## 5 Spurious Emissions at antenna terminal

| Band | Carrier frequency (MHz) | Channel | BW | RB Size | RB Offset | Conducted Spurious Plot |
|------|-------------------------|---------|----|---------|-----------|-------------------------|
|      |                         |         |    |         |           | QPSK                    |
| 13   | 782                     | 23230   | 10 | 1       | 0         | Fig.1                   |
| 13   | 782                     | 23230   | 10 | 1       | 0         | Fig.2                   |
| 13   | 782                     | 23230   | 10 | 1       | 0         | Fig.3                   |

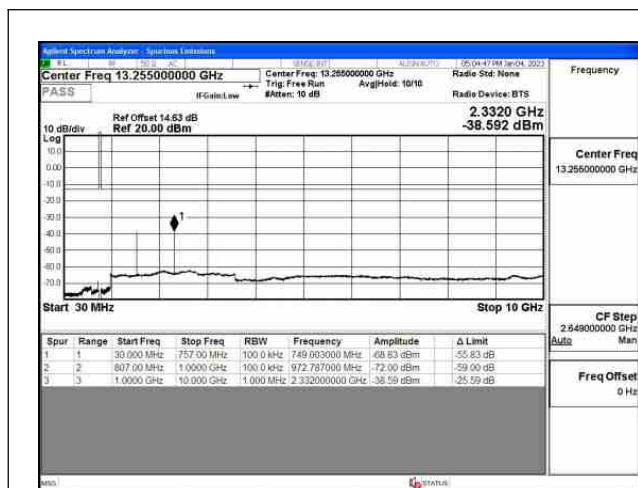


Fig.1

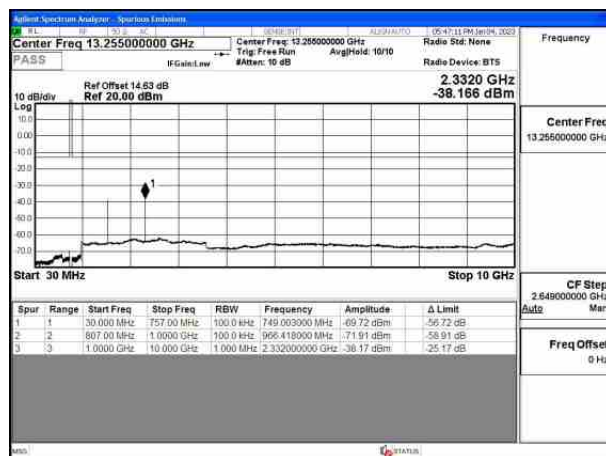


Fig.2

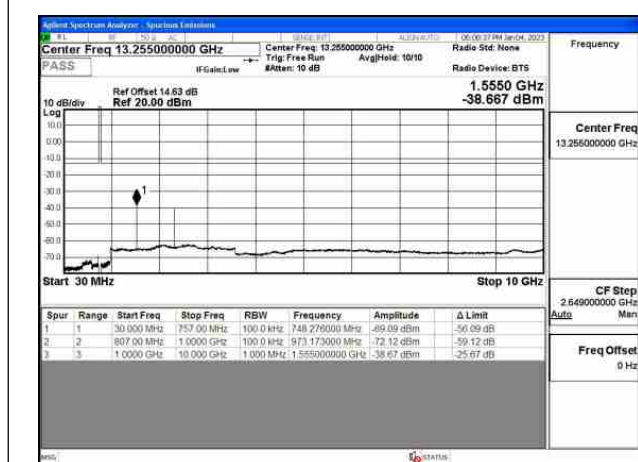


Fig.3

## 6 Band Edges Compliance

| Band | Mode | Carrier frequency (MHz) | Channel | BW | RB Size | RB Offset | Band Edges Plot |
|------|------|-------------------------|---------|----|---------|-----------|-----------------|
| 13   | QPSK | 779.5                   | 23205   | 5  | 1       | 0         | Fig.1           |
| 13   | QPSK | 779.5                   | 23205   | 5  | 1       | 0         | Fig.2           |
| 13   | QPSK | 779.5                   | 23205   | 5  | 25      | 0         | Fig.3           |
| 13   | QPSK | 779.5                   | 23205   | 5  | 25      | 0         | Fig.4           |
| 13   | QPSK | 784.5                   | 23255   | 5  | 1       | 24        | Fig.5           |
| 13   | QPSK | 784.5                   | 23255   | 5  | 1       | 24        | Fig.6           |
| 13   | QPSK | 784.5                   | 23255   | 5  | 25      | 0         | Fig.7           |
| 13   | QPSK | 784.5                   | 23255   | 5  | 25      | 0         | Fig.8           |
| 13   | QPSK | 782                     | 23230   | 10 | 1       | 0         | Fig.9           |
| 13   | QPSK | 782                     | 23230   | 10 | 1       | 0         | Fig.10          |
| 13   | QPSK | 782                     | 23230   | 10 | 50      | 0         | Fig.11          |
| 13   | QPSK | 782                     | 23230   | 10 | 50      | 0         | Fig.12          |
| 13   | QPSK | 782                     | 23230   | 10 | 1       | 49        | Fig.13          |
| 13   | QPSK | 782                     | 23230   | 10 | 1       | 49        | Fig.14          |
| 13   | QPSK | 782                     | 23230   | 10 | 50      | 0         | Fig.15          |
| 13   | QPSK | 782                     | 23230   | 10 | 50      | 0         | Fig.16          |

Test Mode: QPSK

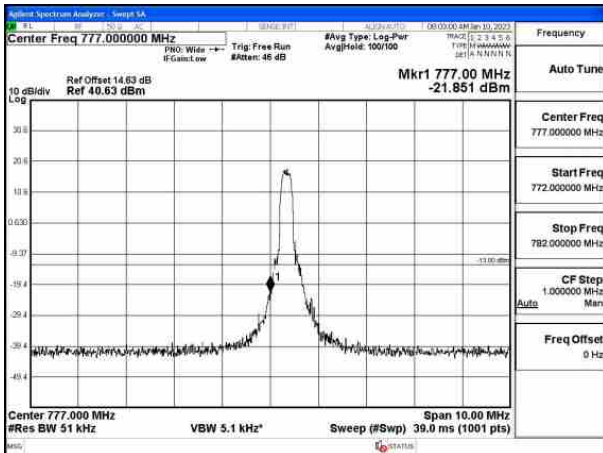


Fig.1

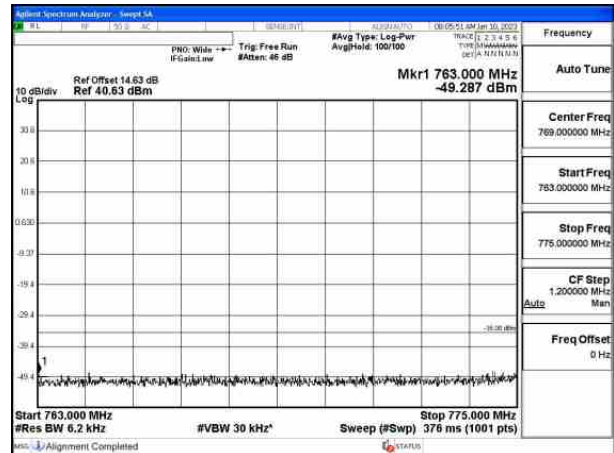


Fig.2

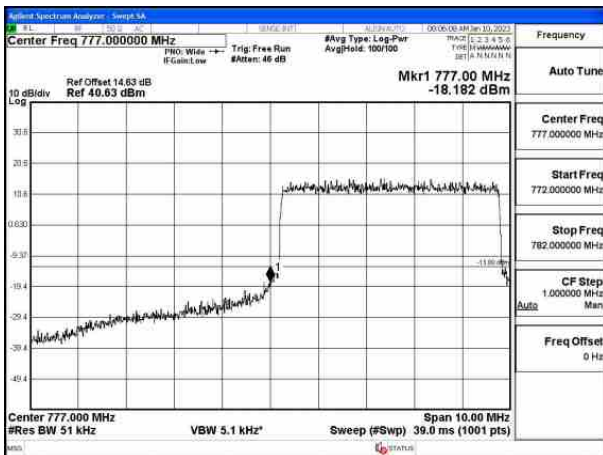


Fig.3

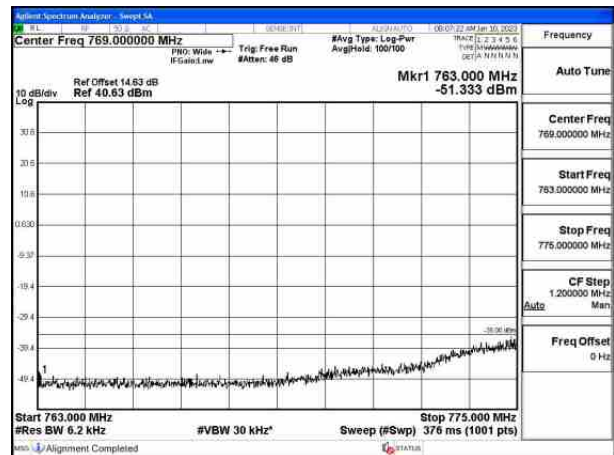


Fig.4

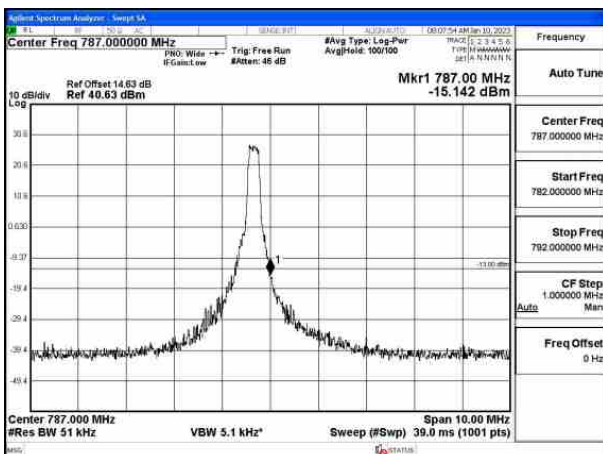


Fig.5

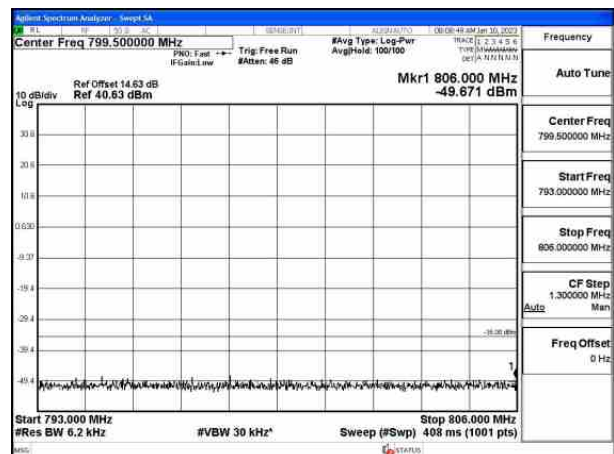


Fig.6

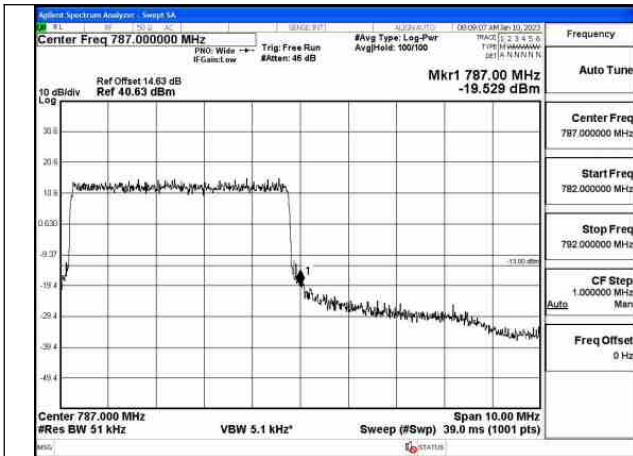


Fig.7

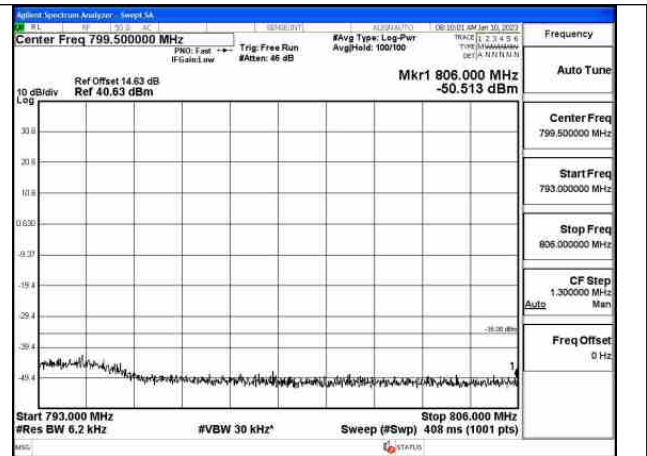


Fig.8

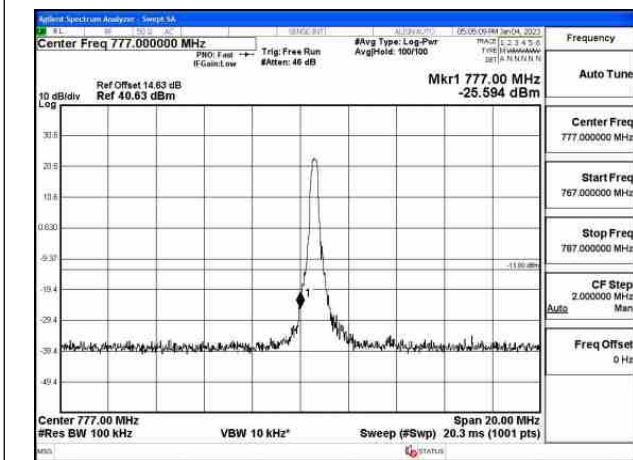


Fig.9

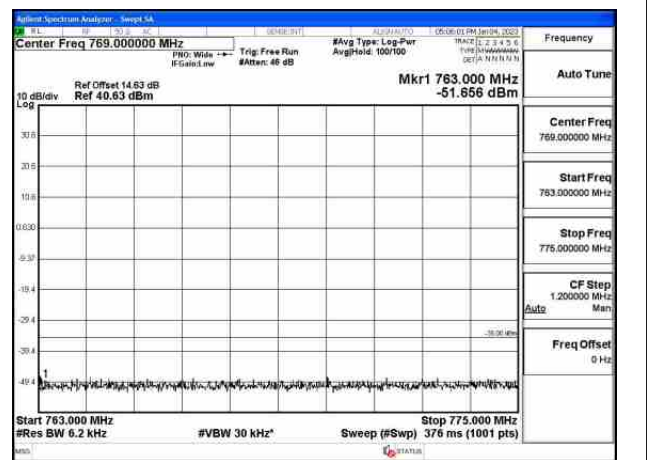


Fig.10

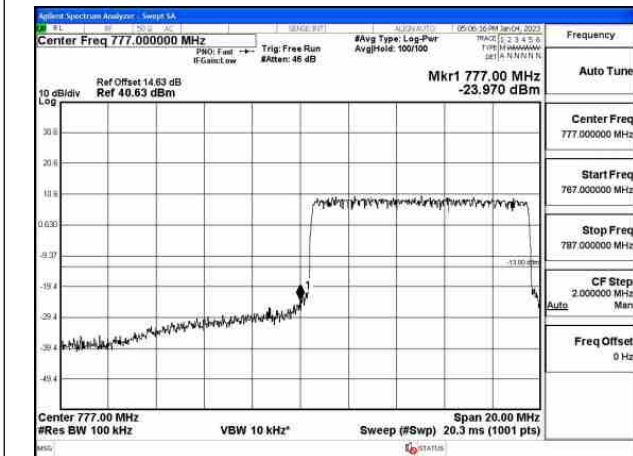


Fig.11

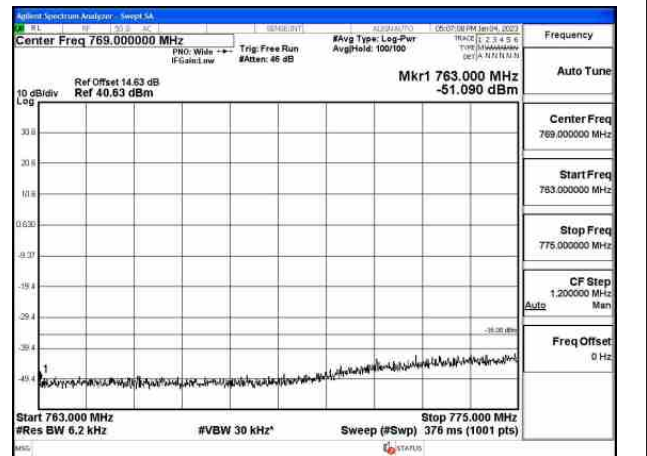


Fig.12

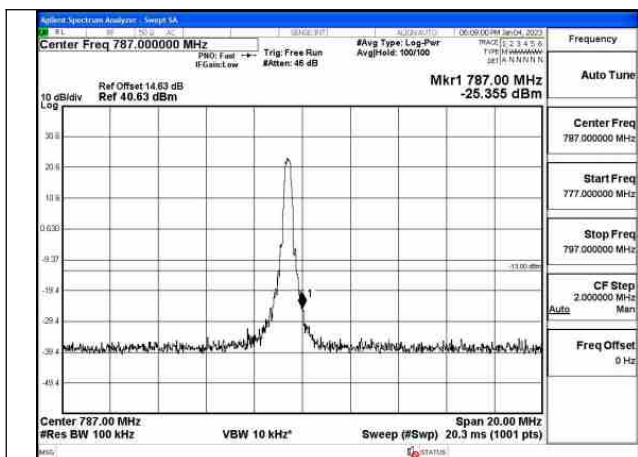


Fig.13

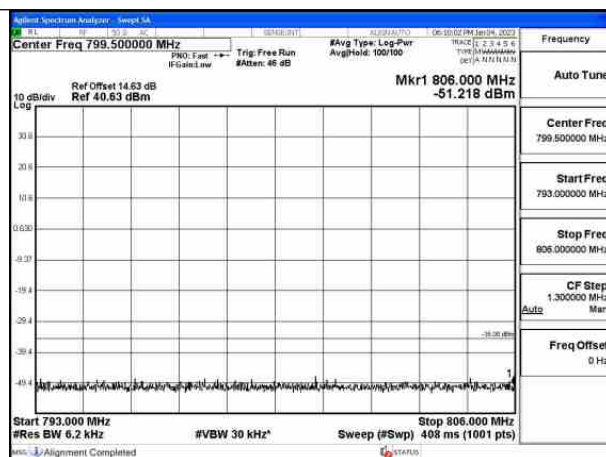


Fig.14

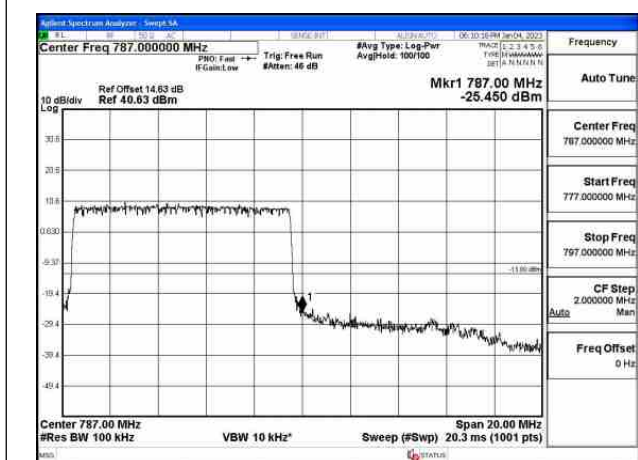


Fig.15

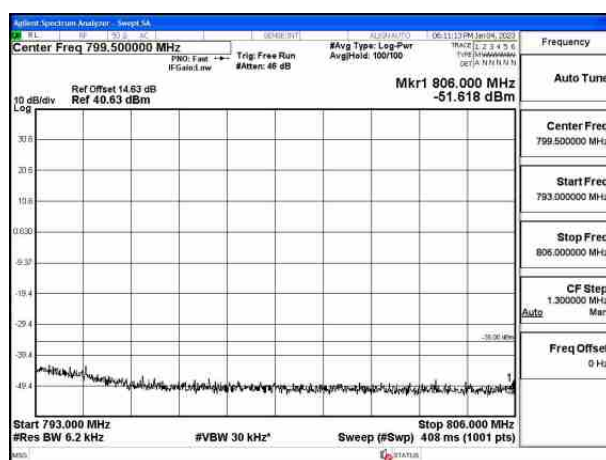


Fig.16

## 7 Frequency Stability

| Temperature(°C) | Voltage | Test Result (ppm) Low Channel QPSK |       |
|-----------------|---------|------------------------------------|-------|
|                 |         | 5M                                 | 10M   |
| -10             | NV      | -0.005                             | 0.007 |
| 0               | NV      | 0.007                              | 0.007 |
| +10             | NV      | -0.006                             | 0.006 |
| +20             | NV      | 0.008                              | 0.006 |
| +30             | NV      | 0.006                              | 0.007 |
| +40             | NV      | 0.006                              | 0.007 |
| +50             | NV      | 0.009                              | 0.007 |
| +55             | NV      | 0.007                              | 0.006 |
| +20             | LV      | 0.009                              | 0.006 |
| +20             | HV      | 0.008                              | 0.005 |

| Temperature(°C) | Voltage | Test Result (ppm) High Channel QPSK |        |
|-----------------|---------|-------------------------------------|--------|
|                 |         | 5M                                  | 10M    |
| -10             | NV      | 0.009                               | -0.005 |
| 0               | NV      | 0.005                               | 0.009  |
| +10             | NV      | 0.006                               | -0.006 |
| +20             | NV      | 0.008                               | 0.007  |
| +30             | NV      | 0.006                               | 0.006  |
| +40             | NV      | 0.009                               | 0.006  |
| +50             | NV      | -0.006                              | 0.006  |
| +55             | NV      | 0.010                               | 0.007  |
| +20             | LV      | 0.004                               | 0.004  |
| +20             | HV      | -0.007                              | -0.007 |

## 8 Effective Radiated Power and Effective Isotropic Radiated Power

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|----------------|--------------|
| QPSK       | 779.5                   | 23205      | 5  | 1       | 0         | 23.51                 | 15.86          | 0.039        |
| QPSK       | 779.5                   | 23205      | 5  | 1       | 12        | 23.70                 | 16.05          | 0.040        |
| QPSK       | 779.5                   | 23205      | 5  | 1       | 24        | 23.62                 | 15.97          | 0.040        |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 0         | 22.95                 | 15.30          | 0.034        |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 7         | 23.13                 | 15.48          | 0.035        |
| QPSK       | 779.5                   | 23205      | 5  | 12      | 13        | 23.07                 | 15.42          | 0.035        |
| QPSK       | 779.5                   | 23205      | 5  | 25      | 0         | 23.05                 | 15.40          | 0.035        |
| QPSK       | 782                     | 23230      | 5  | 1       | 0         | 23.59                 | 15.94          | 0.039        |
| QPSK       | 782                     | 23230      | 5  | 1       | 12        | 23.61                 | 15.96          | 0.039        |
| QPSK       | 782                     | 23230      | 5  | 1       | 24        | 23.41                 | 15.76          | 0.038        |
| QPSK       | 782                     | 23230      | 5  | 12      | 0         | 22.95                 | 15.30          | 0.034        |
| QPSK       | 782                     | 23230      | 5  | 12      | 7         | 22.97                 | 15.32          | 0.034        |
| QPSK       | 782                     | 23230      | 5  | 12      | 13        | 22.99                 | 15.34          | 0.034        |
| QPSK       | 782                     | 23230      | 5  | 25      | 0         | 22.97                 | 15.32          | 0.034        |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 0         | 23.45                 | 15.80          | 0.038        |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 12        | 23.58                 | 15.93          | 0.039        |
| QPSK       | 784.5                   | 23255      | 5  | 1       | 24        | 23.39                 | 15.74          | 0.037        |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 0         | 22.96                 | 15.31          | 0.034        |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 7         | 22.98                 | 15.33          | 0.034        |
| QPSK       | 784.5                   | 23255      | 5  | 12      | 13        | 23.08                 | 15.43          | 0.035        |
| QPSK       | 784.5                   | 23255      | 5  | 25      | 0         | 22.97                 | 15.32          | 0.034        |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|----------------|--------------|
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 0         | 23.24                 | 15.59          | 0.036        |
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 12        | 23.15                 | 15.50          | 0.035        |
| 16QAM      | 779.5                   | 23205      | 5  | 1       | 24        | 23.39                 | 15.74          | 0.037        |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 0         | 22.05                 | 14.40          | 0.028        |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 7         | 22.22                 | 14.57          | 0.029        |
| 16QAM      | 779.5                   | 23205      | 5  | 12      | 13        | 22.16                 | 14.51          | 0.028        |
| 16QAM      | 779.5                   | 23205      | 5  | 25      | 0         | 22.11                 | 14.46          | 0.028        |
| 16QAM      | 782                     | 23230      | 5  | 1       | 0         | 23.16                 | 15.51          | 0.036        |
| 16QAM      | 782                     | 23230      | 5  | 1       | 12        | 23.35                 | 15.70          | 0.037        |
| 16QAM      | 782                     | 23230      | 5  | 1       | 24        | 23.15                 | 15.50          | 0.035        |
| 16QAM      | 782                     | 23230      | 5  | 12      | 0         | 21.96                 | 14.31          | 0.027        |
| 16QAM      | 782                     | 23230      | 5  | 12      | 7         | 22.01                 | 14.36          | 0.027        |
| 16QAM      | 782                     | 23230      | 5  | 12      | 13        | 22.12                 | 14.47          | 0.028        |
| 16QAM      | 782                     | 23230      | 5  | 25      | 0         | 21.94                 | 14.29          | 0.027        |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 0         | 23.14                 | 15.49          | 0.035        |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 12        | 23.12                 | 15.47          | 0.035        |
| 16QAM      | 784.5                   | 23255      | 5  | 1       | 24        | 23.28                 | 15.63          | 0.037        |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 0         | 22.00                 | 14.35          | 0.027        |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 7         | 22.03                 | 14.38          | 0.027        |
| 16QAM      | 784.5                   | 23255      | 5  | 12      | 13        | 21.98                 | 14.33          | 0.027        |
| 16QAM      | 784.5                   | 23255      | 5  | 25      | 0         | 21.95                 | 14.30          | 0.027        |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 0         | 22.09                 | 14.44          | 0.028        |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 12        | 22.20                 | 14.55          | 0.029        |
| 64QAM      | 779.5                   | 23205      | 5  | 1       | 24        | 22.33                 | 14.68          | 0.029        |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 0         | 21.01                 | 13.36          | 0.022        |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 7         | 21.06                 | 13.41          | 0.022        |
| 64QAM      | 779.5                   | 23205      | 5  | 12      | 13        | 21.06                 | 13.41          | 0.022        |
| 64QAM      | 779.5                   | 23205      | 5  | 25      | 0         | 21.03                 | 13.38          | 0.022        |
| 64QAM      | 782                     | 23230      | 5  | 1       | 0         | 22.33                 | 14.68          | 0.029        |
| 64QAM      | 782                     | 23230      | 5  | 1       | 12        | 22.37                 | 14.72          | 0.030        |
| 64QAM      | 782                     | 23230      | 5  | 1       | 24        | 22.24                 | 14.59          | 0.029        |
| 64QAM      | 782                     | 23230      | 5  | 12      | 0         | 20.97                 | 13.32          | 0.021        |
| 64QAM      | 782                     | 23230      | 5  | 12      | 7         | 20.99                 | 13.34          | 0.022        |
| 64QAM      | 782                     | 23230      | 5  | 12      | 13        | 20.97                 | 13.32          | 0.021        |
| 64QAM      | 782                     | 23230      | 5  | 25      | 0         | 20.97                 | 13.32          | 0.021        |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 0         | 22.32                 | 14.67          | 0.029        |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 12        | 22.21                 | 14.56          | 0.029        |
| 64QAM      | 784.5                   | 23255      | 5  | 1       | 24        | 22.18                 | 14.53          | 0.028        |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 0         | 20.97                 | 13.32          | 0.021        |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 7         | 21.10                 | 13.45          | 0.022        |
| 64QAM      | 784.5                   | 23255      | 5  | 12      | 13        | 21.02                 | 13.37          | 0.022        |
| 64QAM      | 784.5                   | 23255      | 5  | 25      | 0         | 21.00                 | 13.35          | 0.022        |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|----------------|--------------|
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.49                 | 15.84          | 0.038        |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.66                 | 16.01          | 0.040        |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.62                 | 15.97          | 0.040        |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 23.07                 | 15.42          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 23.08                 | 15.43          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.04                 | 15.39          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 23.02                 | 15.37          | 0.034        |
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.39                 | 15.74          | 0.037        |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.45                 | 15.80          | 0.038        |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.41                 | 15.76          | 0.038        |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 22.91                 | 15.26          | 0.034        |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 22.97                 | 15.32          | 0.034        |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.03                 | 15.38          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 22.99                 | 15.34          | 0.034        |
| QPSK       | 782                     | 23230      | 10 | 1       | 0         | 23.50                 | 15.85          | 0.038        |
| QPSK       | 782                     | 23230      | 10 | 1       | 25        | 23.67                 | 16.02          | 0.040        |
| QPSK       | 782                     | 23230      | 10 | 1       | 49        | 23.68                 | 16.03          | 0.040        |
| QPSK       | 782                     | 23230      | 10 | 25      | 0         | 23.07                 | 15.42          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 25      | 12        | 23.06                 | 15.41          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 25      | 25        | 23.11                 | 15.46          | 0.035        |
| QPSK       | 782                     | 23230      | 10 | 50      | 0         | 22.94                 | 15.29          | 0.034        |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|----------------|--------------|
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.01                 | 10.36          | 0.011        |
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.49                 | 10.84          | 0.012        |
| 256QAM     | 782                     | 23230      | 10 | 1       | 0         | 18.07                 | 10.42          | 0.011        |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|----------------|--------------|
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.46                 | 15.81          | 0.038        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 23.23                 | 15.58          | 0.036        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.53                 | 15.88          | 0.039        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.94                 | 14.29          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.04                 | 14.39          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.02                 | 14.37          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.97                 | 14.32          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.13                 | 15.48          | 0.035        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.92                 | 15.27          | 0.034        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.15                 | 15.50          | 0.035        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.98                 | 14.33          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.01                 | 14.36          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.04                 | 14.39          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.98                 | 14.33          | 0.027        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 0         | 23.27                 | 15.62          | 0.036        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 25        | 23.46                 | 15.81          | 0.038        |
| 16QAM      | 782                     | 23230      | 10 | 1       | 49        | 23.47                 | 15.82          | 0.038        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 0         | 22.10                 | 14.45          | 0.028        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 12        | 22.05                 | 14.40          | 0.028        |
| 16QAM      | 782                     | 23230      | 10 | 25      | 25        | 22.09                 | 14.44          | 0.028        |
| 16QAM      | 782                     | 23230      | 10 | 50      | 0         | 22.08                 | 14.43          | 0.028        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.29                 | 14.64          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.31                 | 14.66          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.41                 | 14.76          | 0.030        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.06                 | 13.41          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.05                 | 13.40          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.10                 | 13.45          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 20.94                 | 13.29          | 0.021        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.20                 | 14.55          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.26                 | 14.61          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.29                 | 14.64          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.05                 | 13.40          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.00                 | 13.35          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.05                 | 13.40          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 20.97                 | 13.32          | 0.021        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 0         | 22.31                 | 14.66          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 25        | 22.32                 | 14.67          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 1       | 49        | 22.31                 | 14.66          | 0.029        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 0         | 21.05                 | 13.40          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 12        | 21.06                 | 13.41          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 25      | 25        | 21.00                 | 13.35          | 0.022        |
| 64QAM      | 782                     | 23230      | 10 | 50      | 0         | 21.00                 | 13.35          | 0.022        |