

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 | 23.96 |
| QPSK | 779.5 | 23205 | 5 | 1 | 12 | 23.87 |
| QPSK | 779.5 | 23205 | 5 | 1 | 24 | 24.02 |
| QPSK | 779.5 | 23205 | 5 | 12 | 0 | 22.89 |
| QPSK | 779.5 | 23205 | 5 | 12 | 7 | 22.83 |
| QPSK | 779.5 | 23205 | 5 | 12 | 13 | 23.02 |
| QPSK | 779.5 | 23205 | 5 | 25 | 0 | 22.95 |
| QPSK | 782 | 23230 | 5 | 1 | 0 | 24.17 |
| QPSK | 782 | 23230 | 5 | 1 | 12 | 23.90 |
| QPSK | 782 | 23230 | 5 | 1 | 24 | 23.89 |
| QPSK | 782 | 23230 | 5 | 12 | 0 | 23.17 |
| QPSK | 782 | 23230 | 5 | 12 | 7 | 22.89 |
| QPSK | 782 | 23230 | 5 | 12 | 13 | 22.77 |
| QPSK | 782 | 23230 | 5 | 25 | 0 | 22.92 |
| QPSK | 784.5 | 23255 | 5 | 1 | 0 | 24.26 |
| QPSK | 784.5 | 23255 | 5 | 1 | 12 | 24.07 |
| QPSK | 784.5 | 23255 | 5 | 1 | 24 | 24.17 |
| QPSK | 784.5 | 23255 | 5 | 12 | 0 | 22.87 |
| QPSK | 784.5 | 23255 | 5 | 12 | 7 | 22.77 |
| QPSK | 784.5 | 23255 | 5 | 12 | 13 | 22.77 |
| QPSK | 784.5 | 23255 | 5 | 25 | 0 | 22.79 |

| 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 | 23.06 |
| 16QAM | 779.5 | 23205 | 5 | 1 | 24 | 23.17 |
| 16QAM | 779.5 | 23205 | 5 | 12 | 0 | 21.86 |
| 16QAM | 779.5 | 23205 | 5 | 12 | 7 | 22.04 |
| 16QAM | 779.5 | 23205 | 5 | 12 | 13 | 21.96 |
| 16QAM | 779.5 | 23205 | 5 | 25 | 0 | 22.01 |
| 16QAM | 782 | 23230 | 5 | 1 | 0 | 23.14 |
| 16QAM | 782 | 23230 | 5 | 1 | 12 | 23.04 |
| 16QAM | 782 | 23230 | 5 | 1 | 24 | 22.76 |
| 16QAM | 782 | 23230 | 5 | 12 | 0 | 22.18 |
| 16QAM | 782 | 23230 | 5 | 12 | 7 | 22.04 |
| 16QAM | 782 | 23230 | 5 | 12 | 13 | 22.06 |
| 16QAM | 782 | 23230 | 5 | 25 | 0 | 22.25 |
| 16QAM | 784.5 | 23255 | 5 | 1 | 0 | 23.38 |
| 16QAM | 784.5 | 23255 | 5 | 1 | 12 | 23.23 |
| 16QAM | 784.5 | 23255 | 5 | 1 | 24 | 23.28 |
| 16QAM | 784.5 | 23255 | 5 | 12 | 0 | 22.15 |
| 16QAM | 784.5 | 23255 | 5 | 12 | 7 | 22.22 |
| 16QAM | 784.5 | 23255 | 5 | 12 | 13 | 22.09 |
| 16QAM | 784.5 | 23255 | 5 | 25 | 0 | 22.17 |
| 64QAM | 779.5 | 23205 | 5 | 1 | 0 | 21.90 |
| 64QAM | 779.5 | 23205 | 5 | 1 | 12 | 22.13 |
| 64QAM | 779.5 | 23205 | 5 | 1 | 24 | 21.72 |
| 64QAM | 779.5 | 23205 | 5 | 12 | 0 | 20.75 |
| 64QAM | 779.5 | 23205 | 5 | 12 | 7 | 20.41 |
| 64QAM | 779.5 | 23205 | 5 | 12 | 13 | 20.46 |
| 64QAM | 779.5 | 23205 | 5 | 25 | 0 | 20.17 |
| 64QAM | 782 | 23230 | 5 | 1 | 0 | 22.40 |
| 64QAM | 782 | 23230 | 5 | 1 | 12 | 21.93 |
| 64QAM | 782 | 23230 | 5 | 1 | 24 | 22.36 |
| 64QAM | 782 | 23230 | 5 | 12 | 0 | 20.67 |
| 64QAM | 782 | 23230 | 5 | 12 | 7 | 20.93 |
| 64QAM | 782 | 23230 | 5 | 12 | 13 | 20.65 |
| 64QAM | 782 | 23230 | 5 | 25 | 0 | 20.78 |
| 64QAM | 784.5 | 23255 | 5 | 1 | 0 | 22.16 |
| 64QAM | 784.5 | 23255 | 5 | 1 | 12 | 22.27 |
| 64QAM | 784.5 | 23255 | 5 | 1 | 24 | 22.22 |
| 64QAM | 784.5 | 23255 | 5 | 12 | 0 | 20.81 |
| 64QAM | 784.5 | 23255 | 5 | 12 | 7 | 20.64 |
| 64QAM | 784.5 | 23255 | 5 | 12 | 13 | 20.56 |
| 64QAM | 784.5 | 23255 | 5 | 25 | 0 | 20.65 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| QPSK | 782 | 23230 | 10 | 1 | 0 | 24.30 |
| QPSK | 782 | 23230 | 10 | 1 | 25 | 24.17 |
| QPSK | 782 | 23230 | 10 | 1 | 49 | 24.03 |
| QPSK | 782 | 23230 | 10 | 25 | 0 | 22.99 |
| QPSK | 782 | 23230 | 10 | 25 | 12 | 23.03 |
| QPSK | 782 | 23230 | 10 | 25 | 25 | 22.77 |
| QPSK | 782 | 23230 | 10 | 50 | 0 | 23.11 |
| QPSK | 782 | 23230 | 10 | 1 | 0 | 23.98 |
| QPSK | 782 | 23230 | 10 | 1 | 25 | 24.04 |
| QPSK | 782 | 23230 | 10 | 1 | 49 | 23.88 |
| QPSK | 782 | 23230 | 10 | 25 | 0 | 23.11 |
| QPSK | 782 | 23230 | 10 | 25 | 12 | 22.91 |
| QPSK | 782 | 23230 | 10 | 25 | 25 | 22.76 |
| QPSK | 782 | 23230 | 10 | 50 | 0 | 22.94 |
| QPSK | 782 | 23230 | 10 | 1 | 0 | 24.30 |
| QPSK | 782 | 23230 | 10 | 1 | 25 | 24.33 |
| QPSK | 782 | 23230 | 10 | 1 | 49 | 24.20 |
| QPSK | 782 | 23230 | 10 | 25 | 0 | 22.98 |
| QPSK | 782 | 23230 | 10 | 25 | 12 | 23.02 |
| QPSK | 782 | 23230 | 10 | 25 | 25 | 23.02 |
| QPSK | 782 | 23230 | 10 | 50 | 0 | 22.95 |

| Modulation | Carrier frequency (MHz) | UL Channel | BW | RB Size | RB Offset | Conducted power (dBm) |
|------------|-------------------------|------------|----|---------|-----------|-----------------------|
| 16QAM | 782 | 23230 | 10 | 1 | 0 | 23.38 |
| 16QAM | 782 | 23230 | 10 | 1 | 25 | 22.85 |
| 16QAM | 782 | 23230 | 10 | 1 | 49 | 23.24 |
| 16QAM | 782 | 23230 | 10 | 25 | 0 | 21.98 |
| 16QAM | 782 | 23230 | 10 | 25 | 12 | 21.83 |
| 16QAM | 782 | 23230 | 10 | 25 | 25 | 22.19 |
| 16QAM | 782 | 23230 | 10 | 50 | 0 | 21.98 |
| 16QAM | 782 | 23230 | 10 | 1 | 0 | 23.68 |
| 16QAM | 782 | 23230 | 10 | 1 | 25 | 23.23 |
| 16QAM | 782 | 23230 | 10 | 1 | 49 | 23.02 |
| 16QAM | 782 | 23230 | 10 | 25 | 0 | 21.98 |
| 16QAM | 782 | 23230 | 10 | 25 | 12 | 21.79 |
| 16QAM | 782 | 23230 | 10 | 25 | 25 | 21.99 |
| 16QAM | 782 | 23230 | 10 | 50 | 0 | 22.14 |
| 16QAM | 782 | 23230 | 10 | 1 | 0 | 22.62 |
| 16QAM | 782 | 23230 | 10 | 1 | 25 | 23.10 |
| 16QAM | 782 | 23230 | 10 | 1 | 49 | 23.25 |
| 16QAM | 782 | 23230 | 10 | 25 | 0 | 22.24 |
| 16QAM | 782 | 23230 | 10 | 25 | 12 | 22.21 |
| 16QAM | 782 | 23230 | 10 | 25 | 25 | 22.48 |
| 16QAM | 782 | 23230 | 10 | 50 | 0 | 21.99 |
| 64QAM | 782 | 23230 | 10 | 1 | 0 | 22.04 |
| 64QAM | 782 | 23230 | 10 | 1 | 25 | 21.96 |
| 64QAM | 782 | 23230 | 10 | 1 | 49 | 22.43 |
| 64QAM | 782 | 23230 | 10 | 25 | 0 | 20.69 |
| 64QAM | 782 | 23230 | 10 | 25 | 12 | 21.00 |
| 64QAM | 782 | 23230 | 10 | 25 | 25 | 20.75 |
| 64QAM | 782 | 23230 | 10 | 50 | 0 | 20.73 |
| 64QAM | 782 | 23230 | 10 | 1 | 0 | 22.05 |
| 64QAM | 782 | 23230 | 10 | 1 | 25 | 22.16 |
| 64QAM | 782 | 23230 | 10 | 1 | 49 | 21.88 |
| 64QAM | 782 | 23230 | 10 | 25 | 0 | 20.33 |
| 64QAM | 782 | 23230 | 10 | 25 | 12 | 20.55 |
| 64QAM | 782 | 23230 | 10 | 25 | 25 | 20.62 |
| 64QAM | 782 | 23230 | 10 | 50 | 0 | 20.75 |
| 64QAM | 782 | 23230 | 10 | 1 | 0 | 22.31 |
| 64QAM | 782 | 23230 | 10 | 1 | 25 | 22.09 |
| 64QAM | 782 | 23230 | 10 | 1 | 49 | 22.71 |
| 64QAM | 782 | 23230 | 10 | 25 | 0 | 20.69 |
| 64QAM | 782 | 23230 | 10 | 25 | 12 | 20.85 |
| 64QAM | 782 | 23230 | 10 | 25 | 25 | 20.69 |
| 64QAM | 782 | 23230 | 10 | 50 | 0 | 20.68 |

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 | 4.460 | Fig.1 |
| 13 | QPSK | 782 | 23230 | 5 | 25 | 0 | 4.470 | Fig.2 |
| 13 | QPSK | 784.5 | 23255 | 5 | 25 | 0 | 4.460 | Fig.3 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 8.900 | Fig.4 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 8.910 | Fig.5 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 8.900 | 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 | 4.450 | Fig.7 |
| 13 | 16QAM | 782 | 23230 | 5 | 25 | 0 | 4.460 | Fig.8 |
| 13 | 16QAM | 784.5 | 23255 | 5 | 25 | 0 | 4.460 | Fig.9 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 8.900 | Fig.10 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 8.920 | Fig.11 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 8.920 | 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 | 4.460 | Fig.13 |
| 13 | 64QAM | 782 | 23230 | 5 | 25 | 0 | 4.460 | Fig.14 |
| 13 | 64QAM | 784.5 | 23255 | 5 | 25 | 0 | 4.460 | Fig.15 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 8.900 | Fig.16 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 8.920 | Fig.17 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 8.930 | Fig.18 |

Test Mode: QPSK

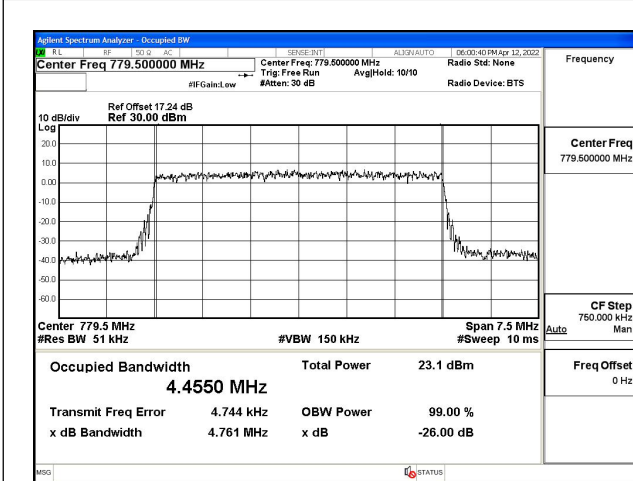


Fig.1

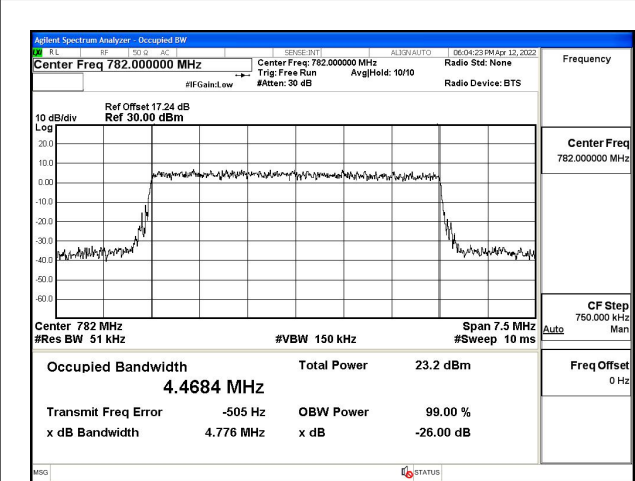


Fig.2

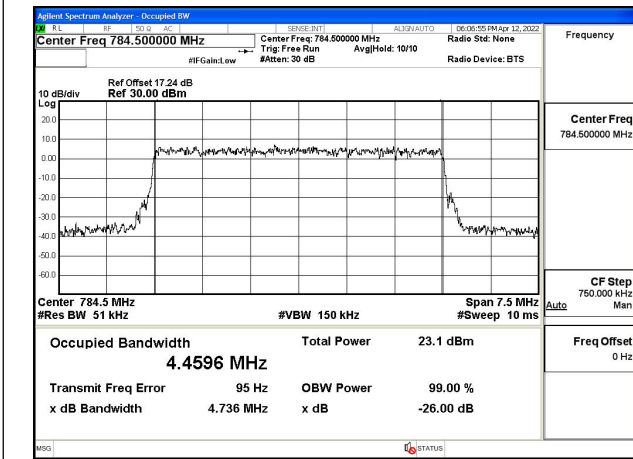


Fig.3

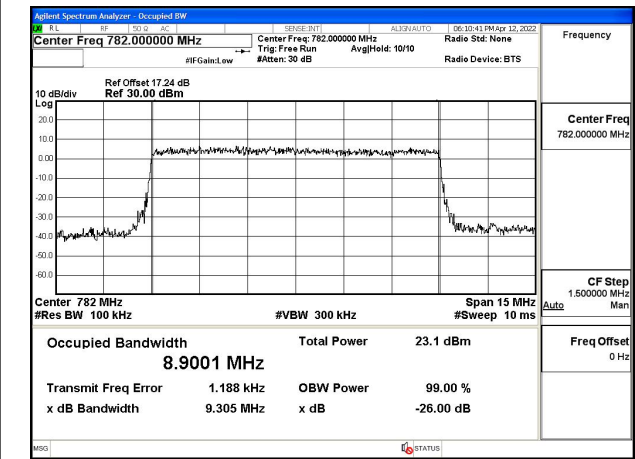


Fig.4

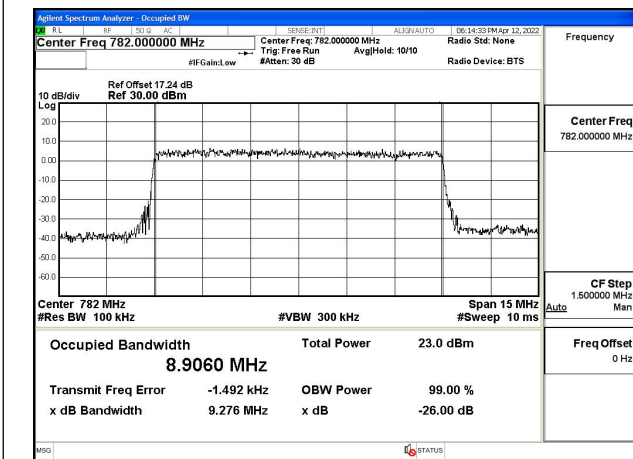


Fig.5

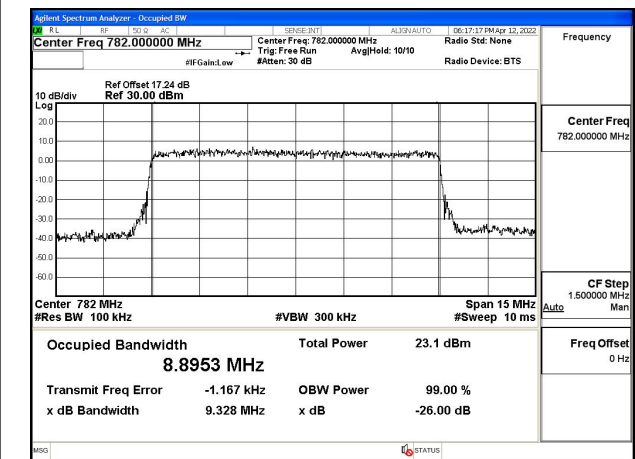


Fig.6

Test Mode: 16QAM

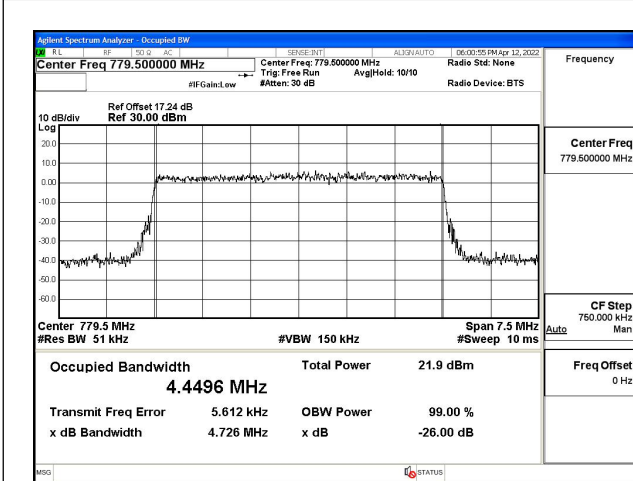


Fig.7

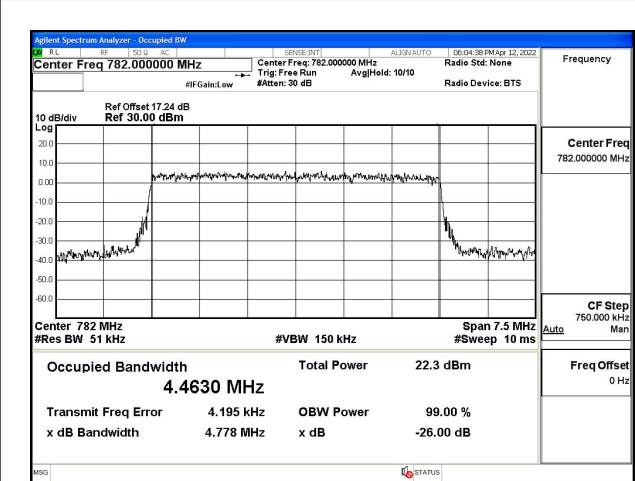


Fig.8

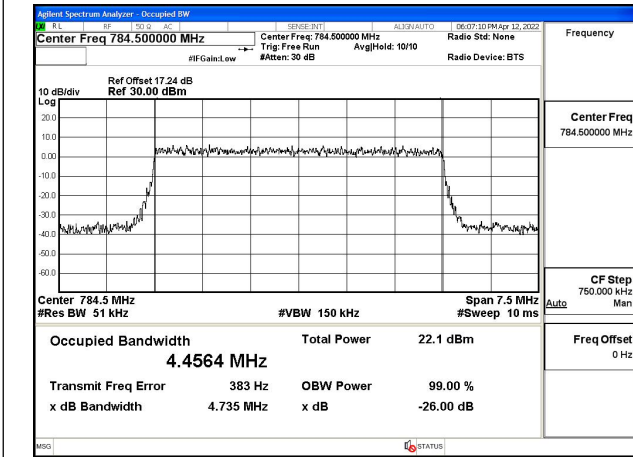


Fig.9

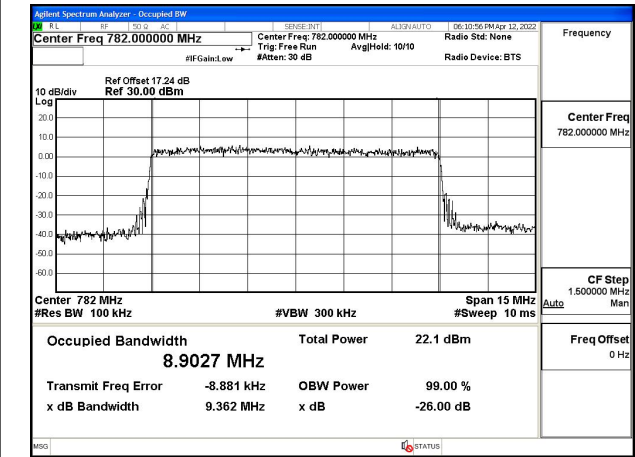


Fig.10

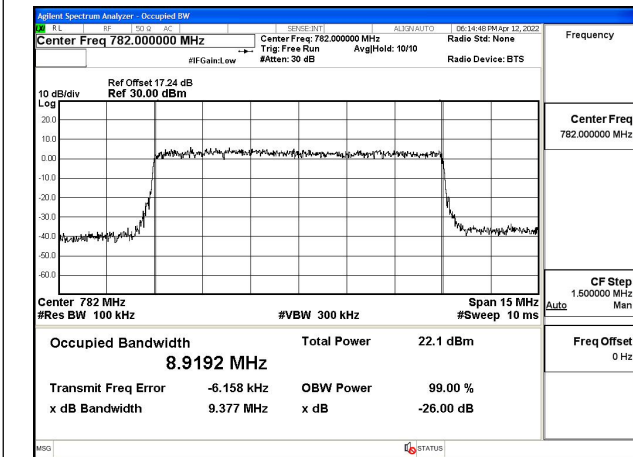


Fig.11

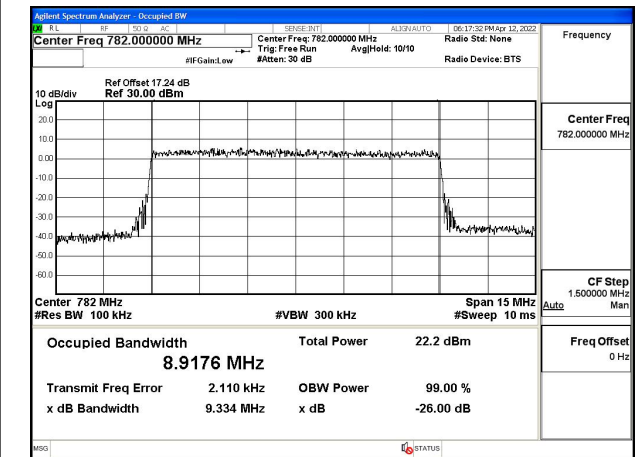


Fig.12

Test Mode: 64QAM

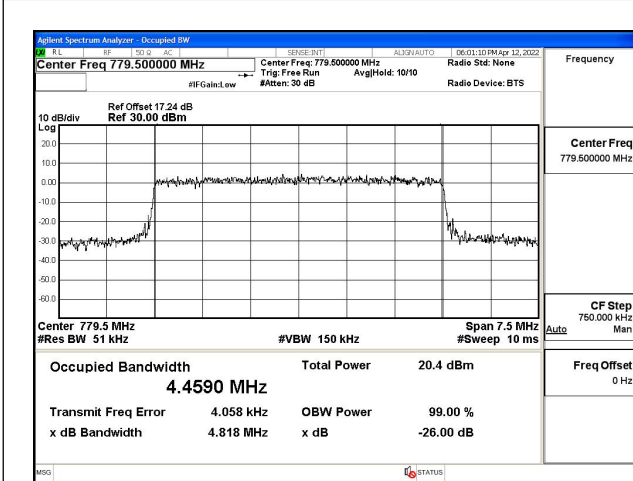


Fig. 13

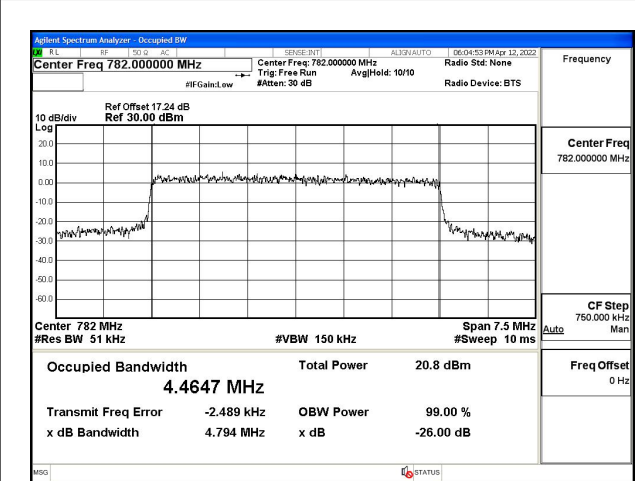


Fig. 14

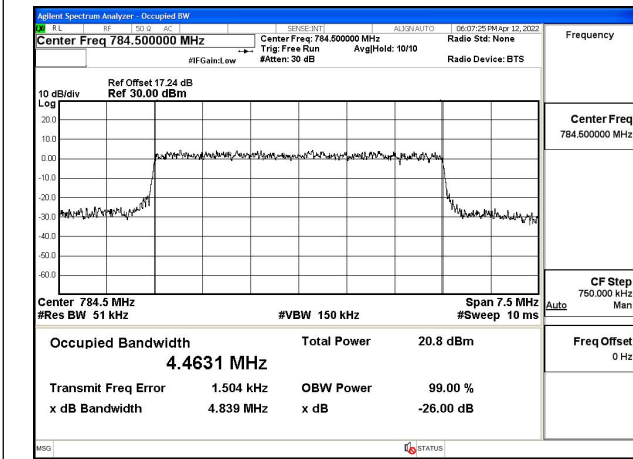


Fig. 15

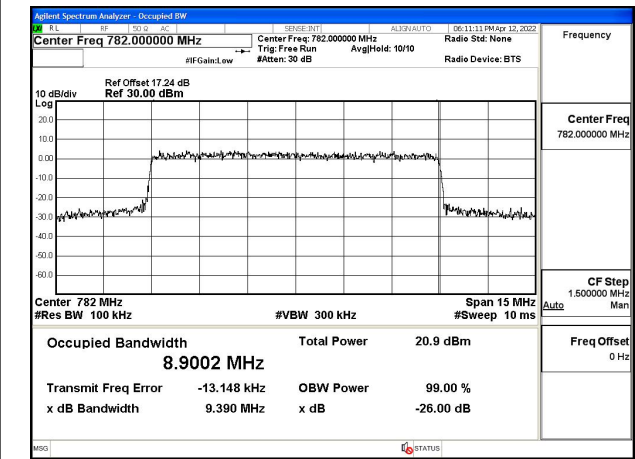


Fig. 16

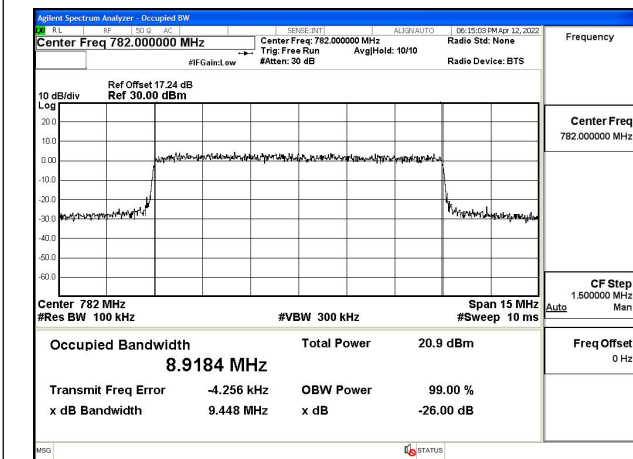


Fig. 17

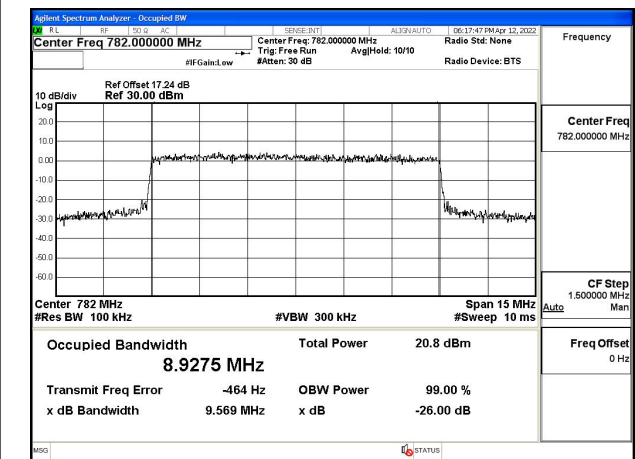


Fig. 18

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 | 4.760 | Fig.1 |
| 13 | QPSK | 782 | 23230 | 5 | 25 | 0 | 4.780 | Fig.2 |
| 13 | QPSK | 784.5 | 23255 | 5 | 25 | 0 | 4.740 | Fig.3 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 9.300 | Fig.4 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 9.280 | Fig.5 |
| 13 | QPSK | 782 | 23230 | 10 | 50 | 0 | 9.330 | 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 | 4.730 | Fig.7 |
| 13 | 16QAM | 782 | 23230 | 5 | 25 | 0 | 4.780 | Fig.8 |
| 13 | 16QAM | 784.5 | 23255 | 5 | 25 | 0 | 4.730 | Fig.9 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 9.360 | Fig.10 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 9.380 | Fig.11 |
| 13 | 16QAM | 782 | 23230 | 10 | 50 | 0 | 9.330 | 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 | 4.820 | Fig.13 |
| 13 | 64QAM | 782 | 23230 | 5 | 25 | 0 | 4.790 | Fig.14 |
| 13 | 64QAM | 784.5 | 23255 | 5 | 25 | 0 | 4.840 | Fig.15 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 9.390 | Fig.16 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 9.450 | Fig.17 |
| 13 | 64QAM | 782 | 23230 | 10 | 50 | 0 | 9.570 | Fig.18 |

Test Mode: QPSK

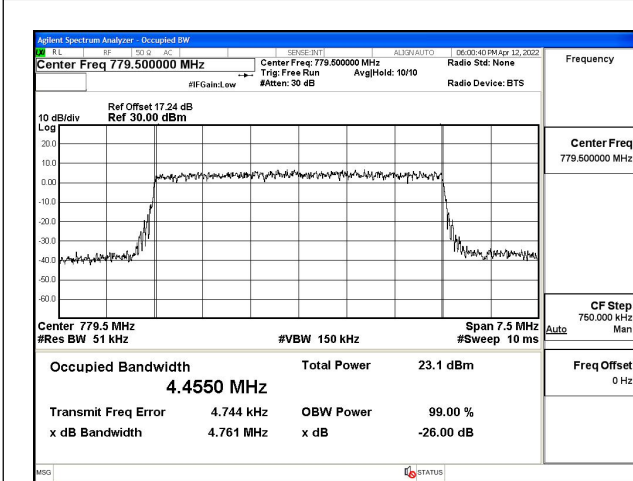


Fig.1

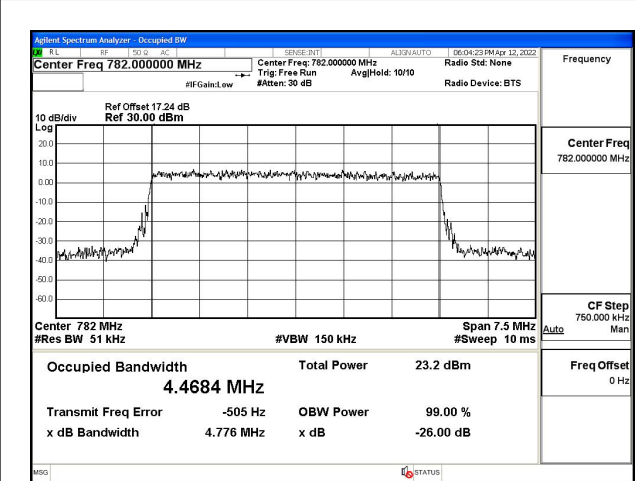


Fig.2

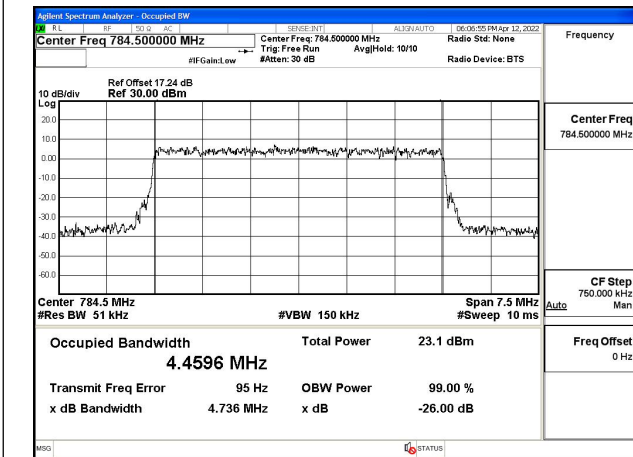


Fig.3

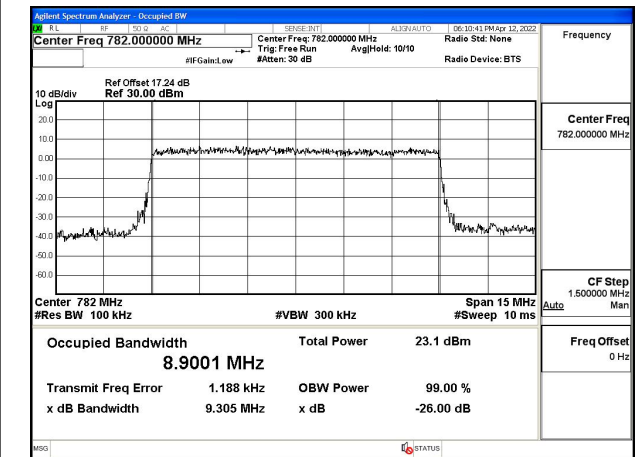


Fig.4

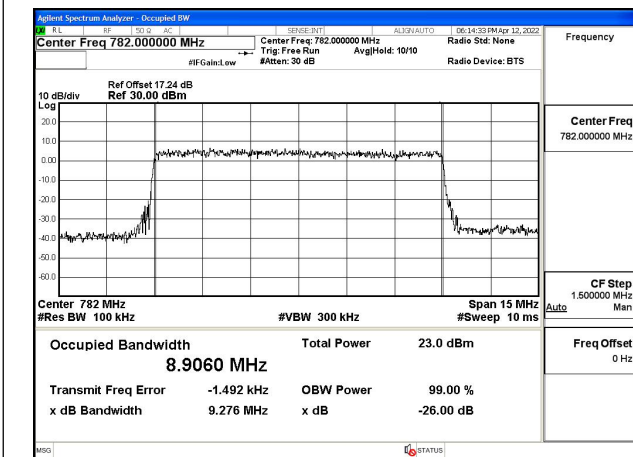


Fig.5

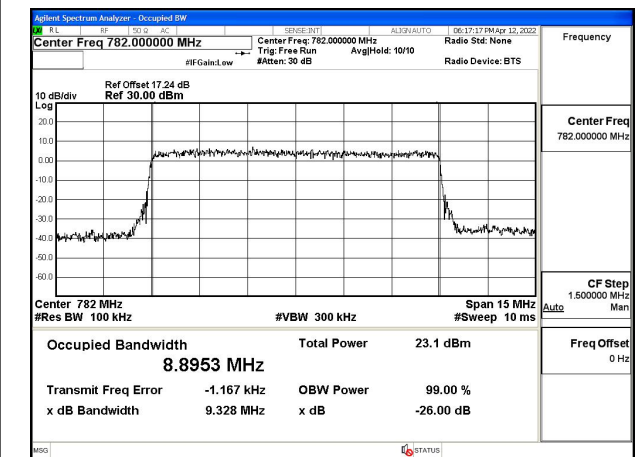


Fig.6

Test Mode: 16QAM

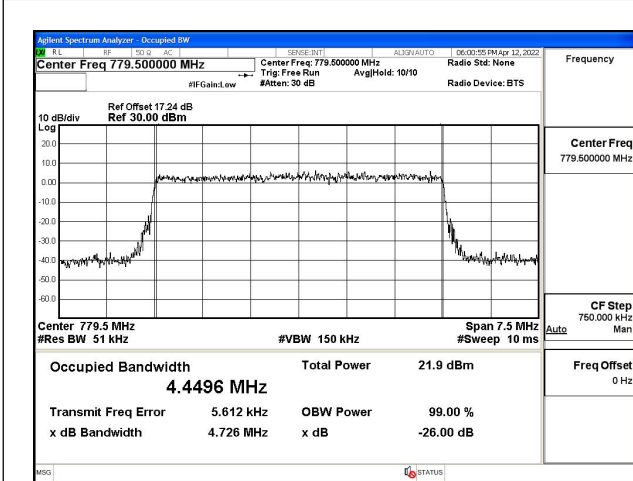


Fig.7

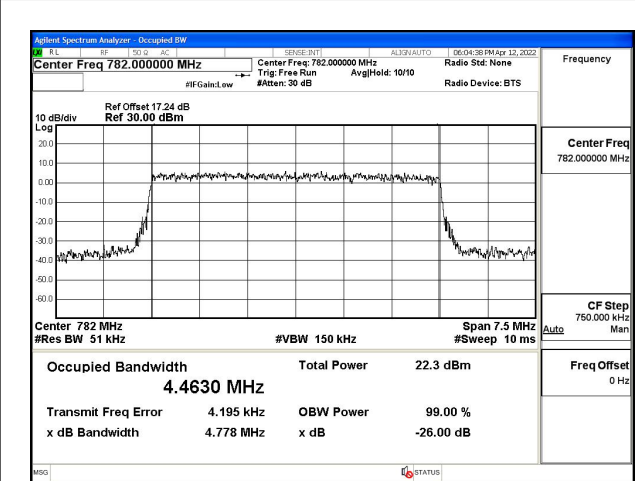


Fig.8

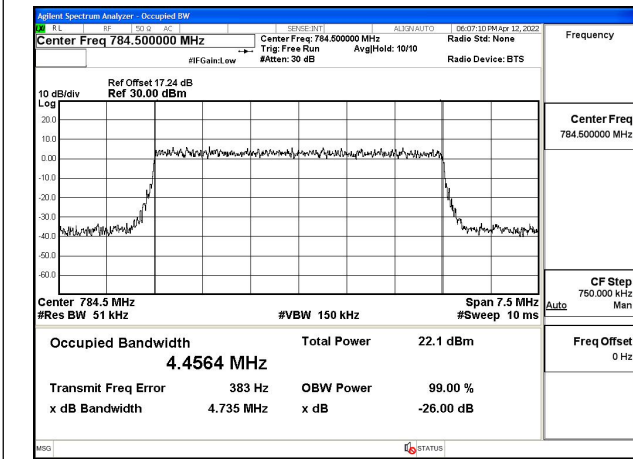


Fig.9

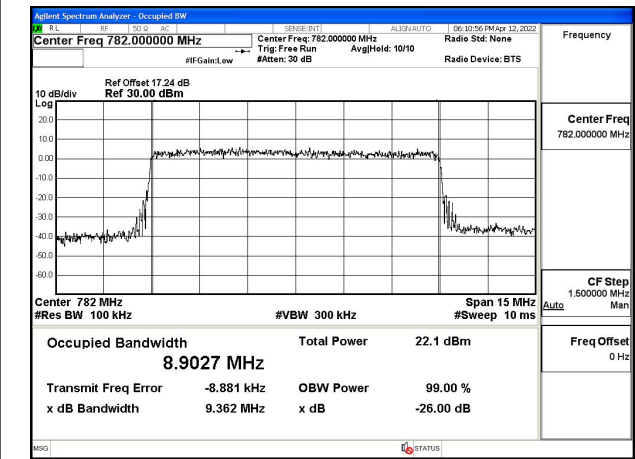


Fig.10

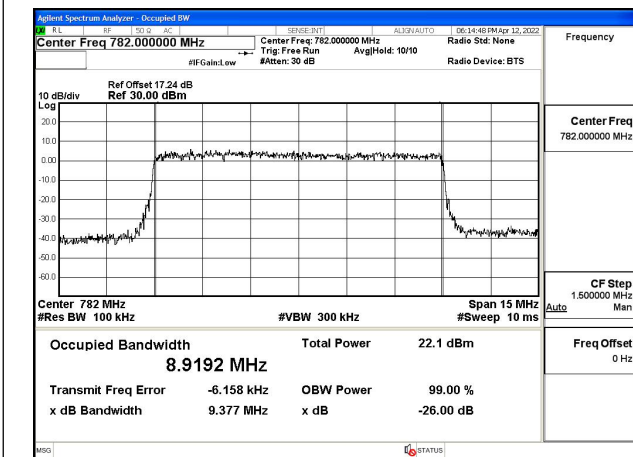


Fig.11

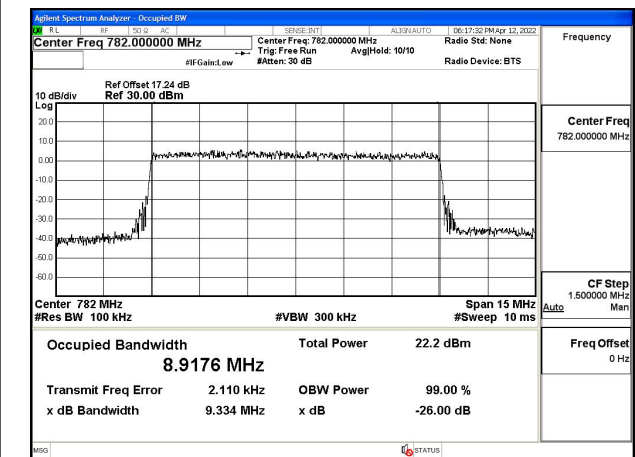


Fig.12

Test Mode: 64QAM

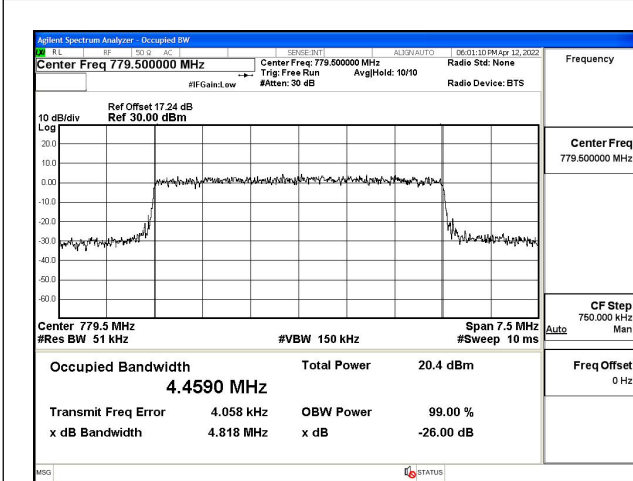


Fig. 13

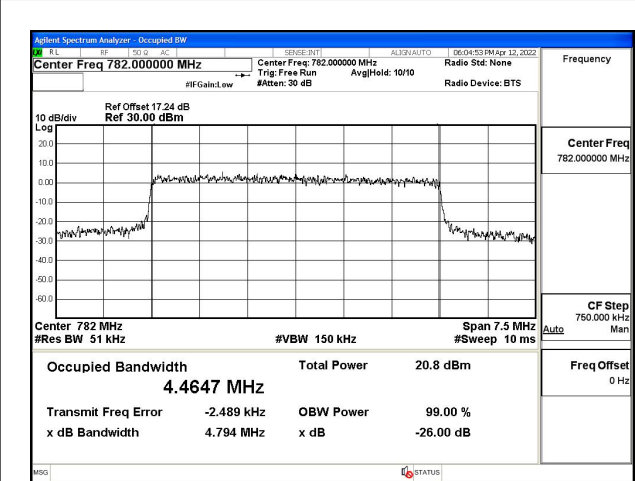


Fig. 14

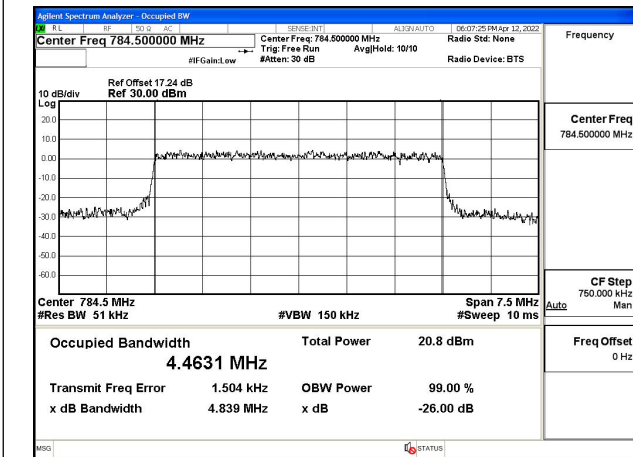


Fig. 15

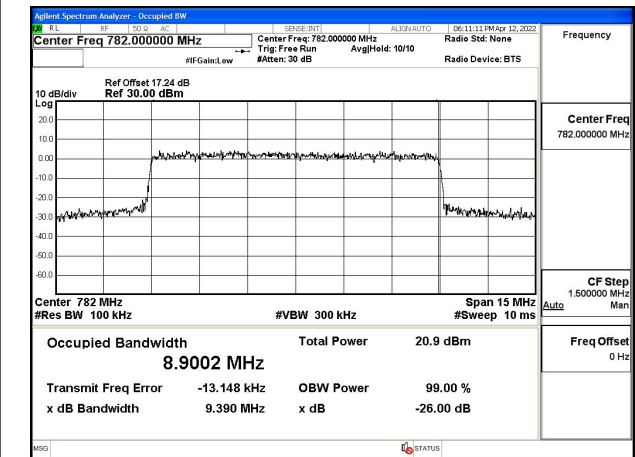


Fig. 16

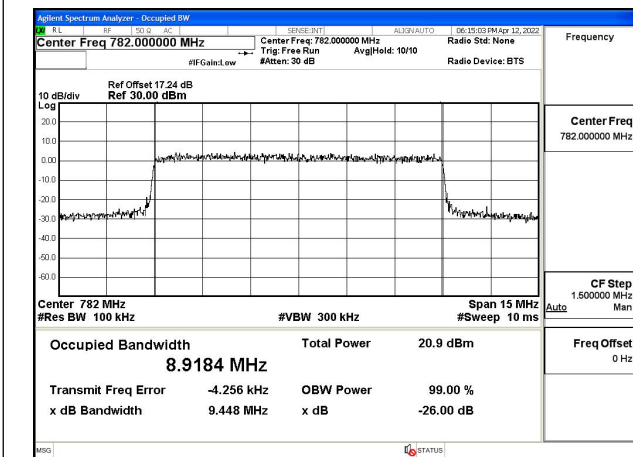


Fig. 17

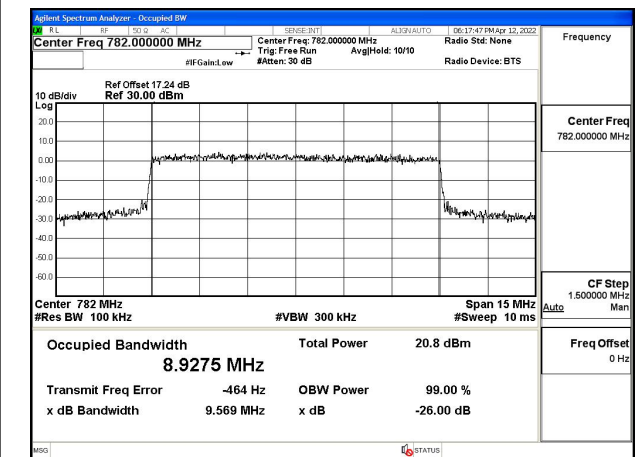


Fig. 18

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 |

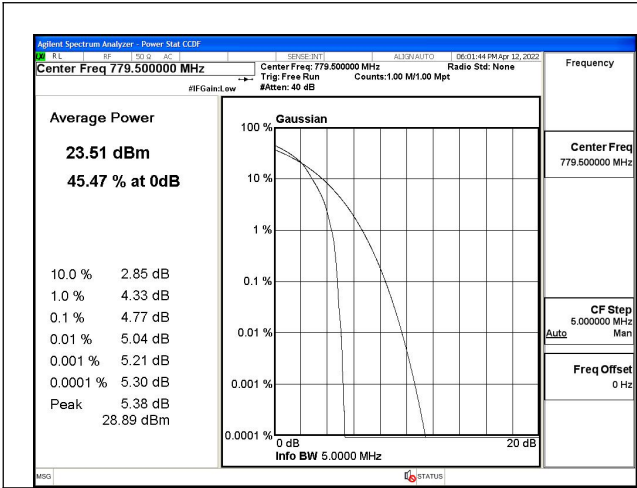


Fig.1

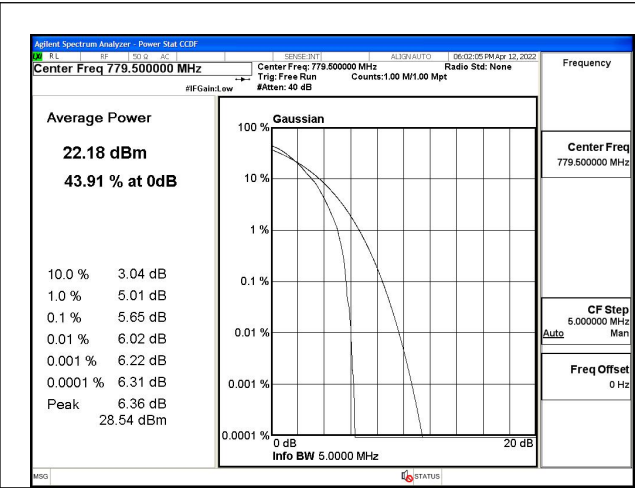


Fig.2

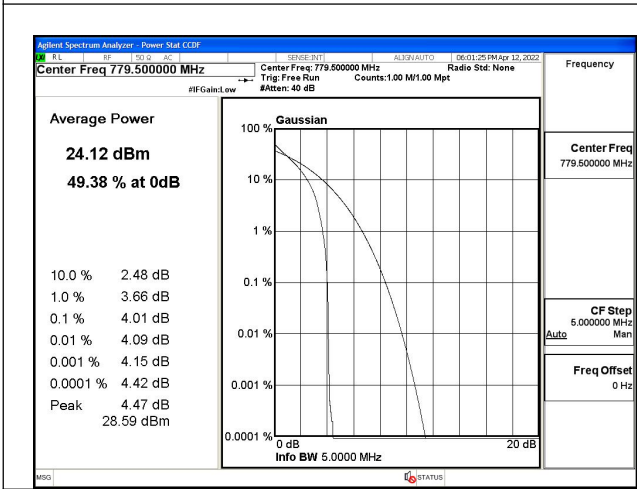


Fig.3

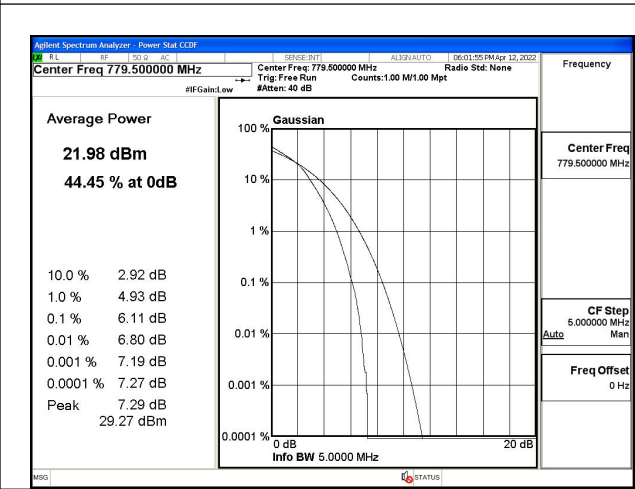


Fig.4

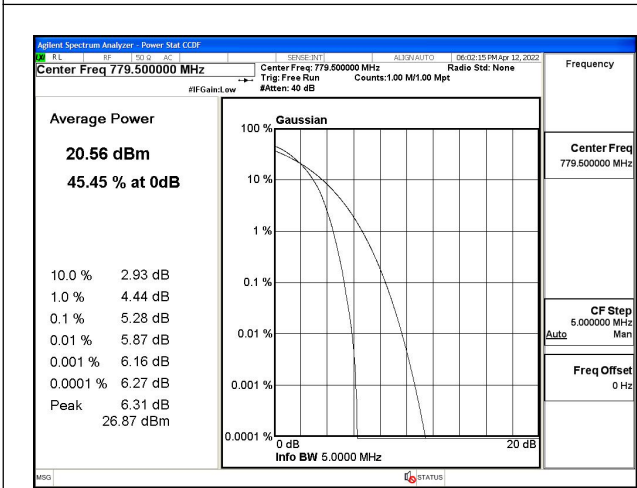


Fig.5

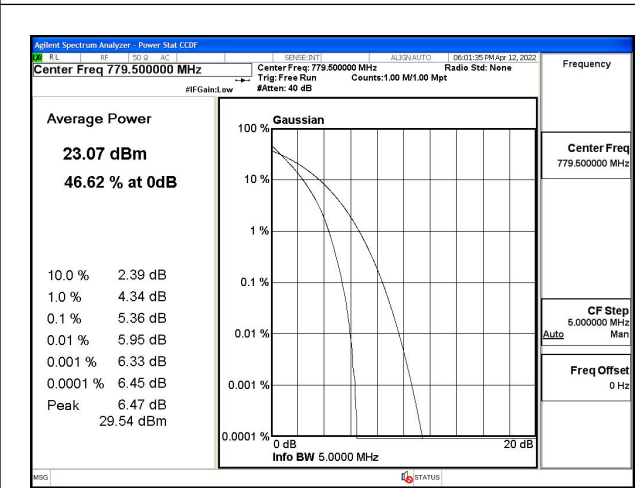


Fig.6