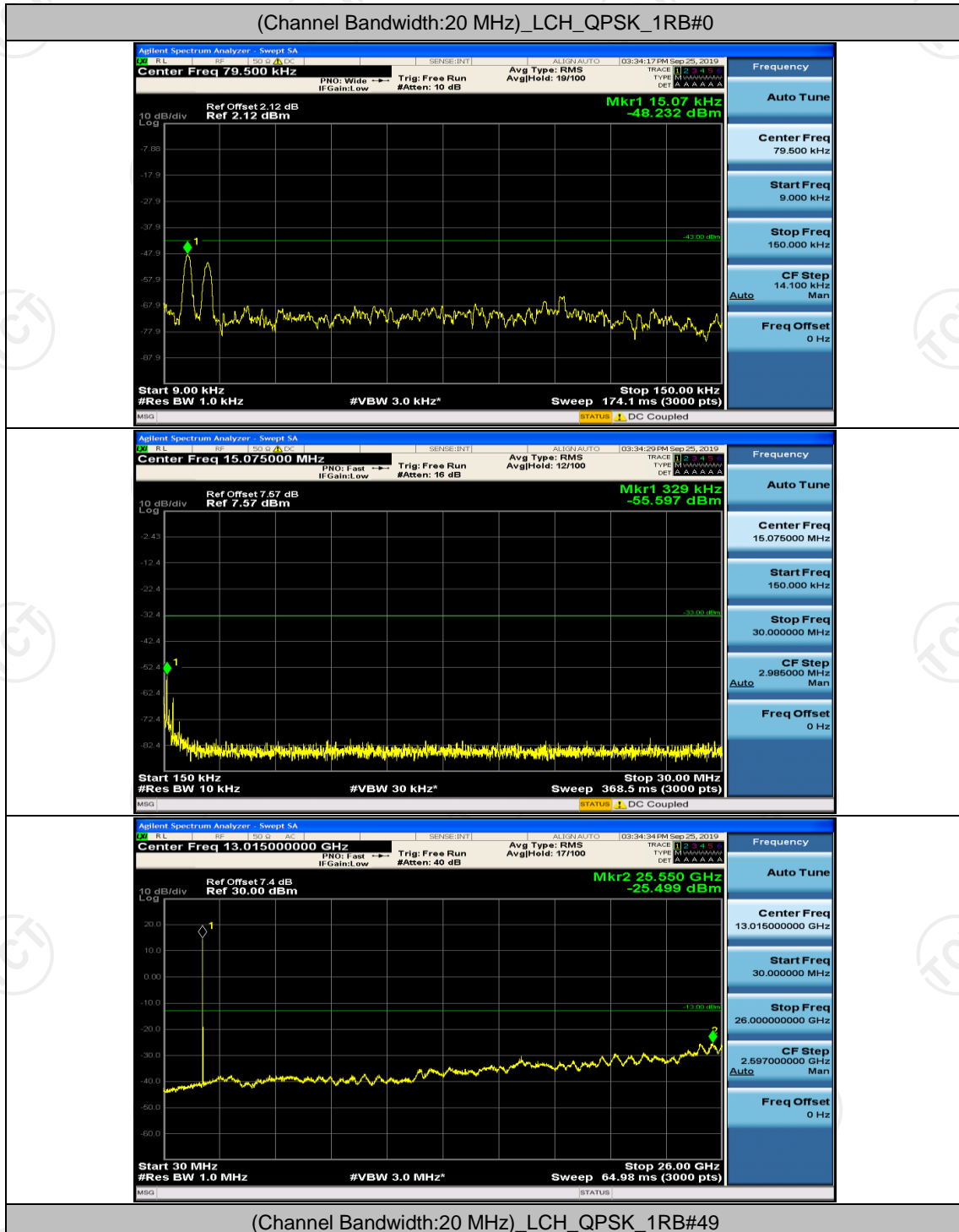
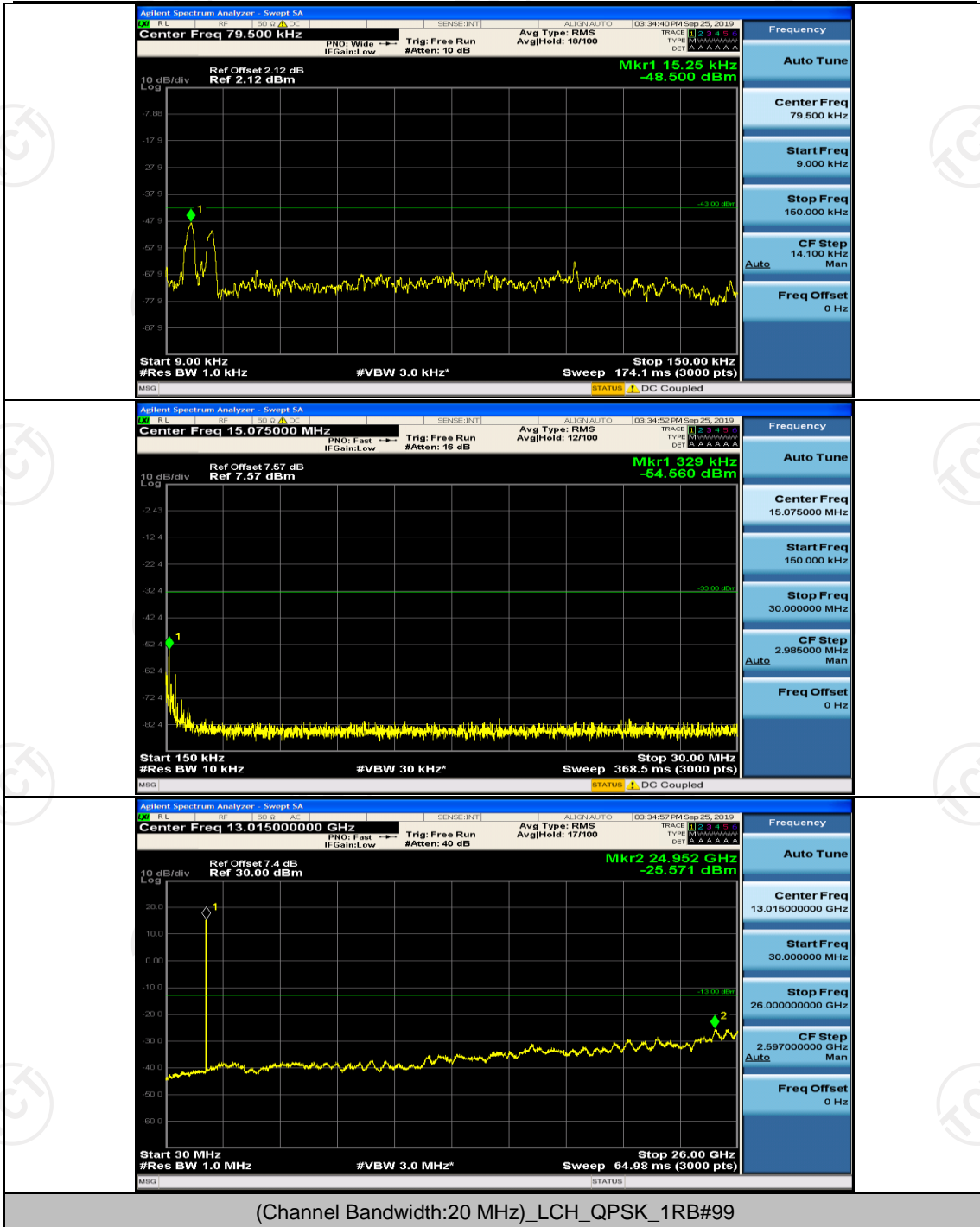
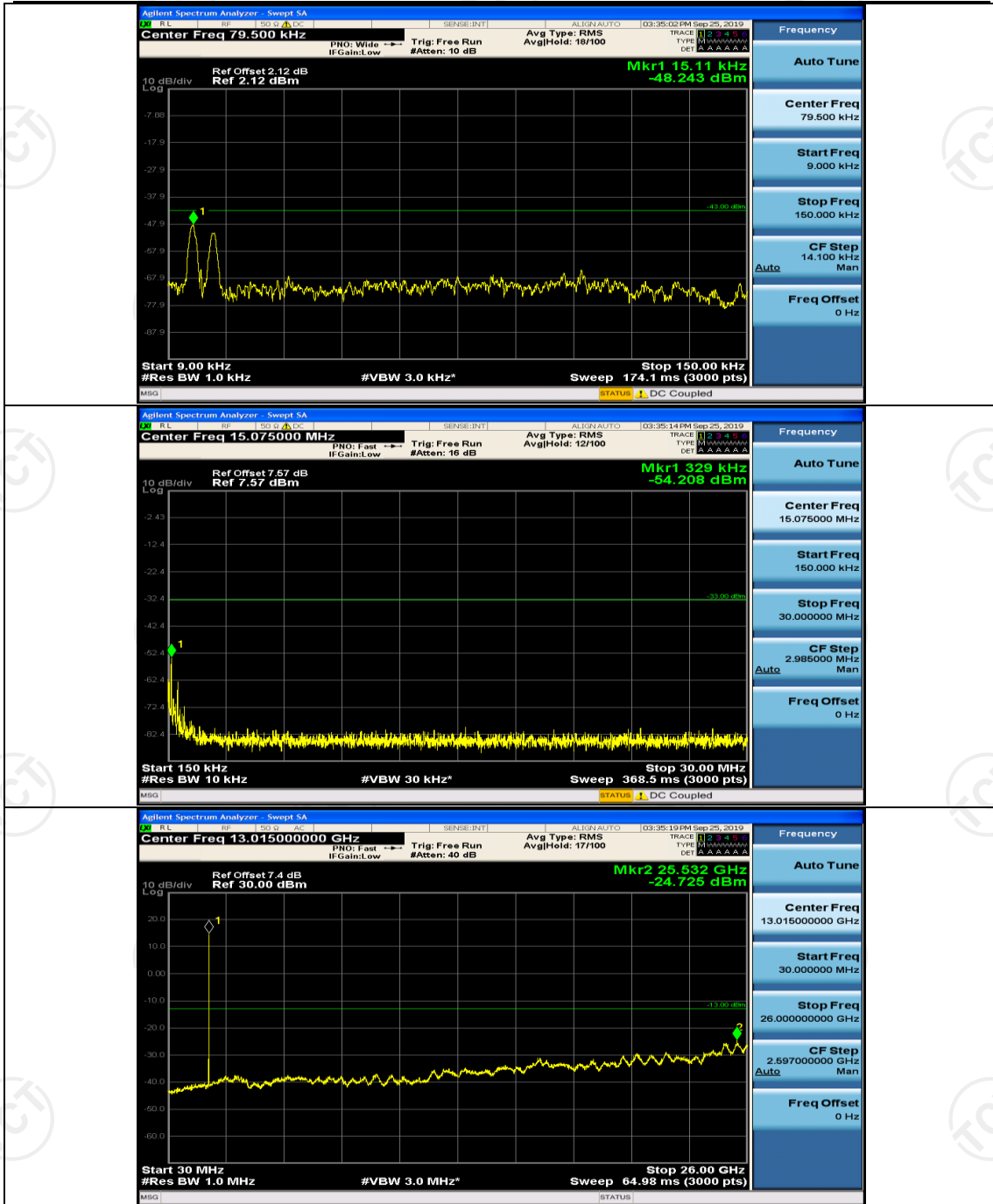
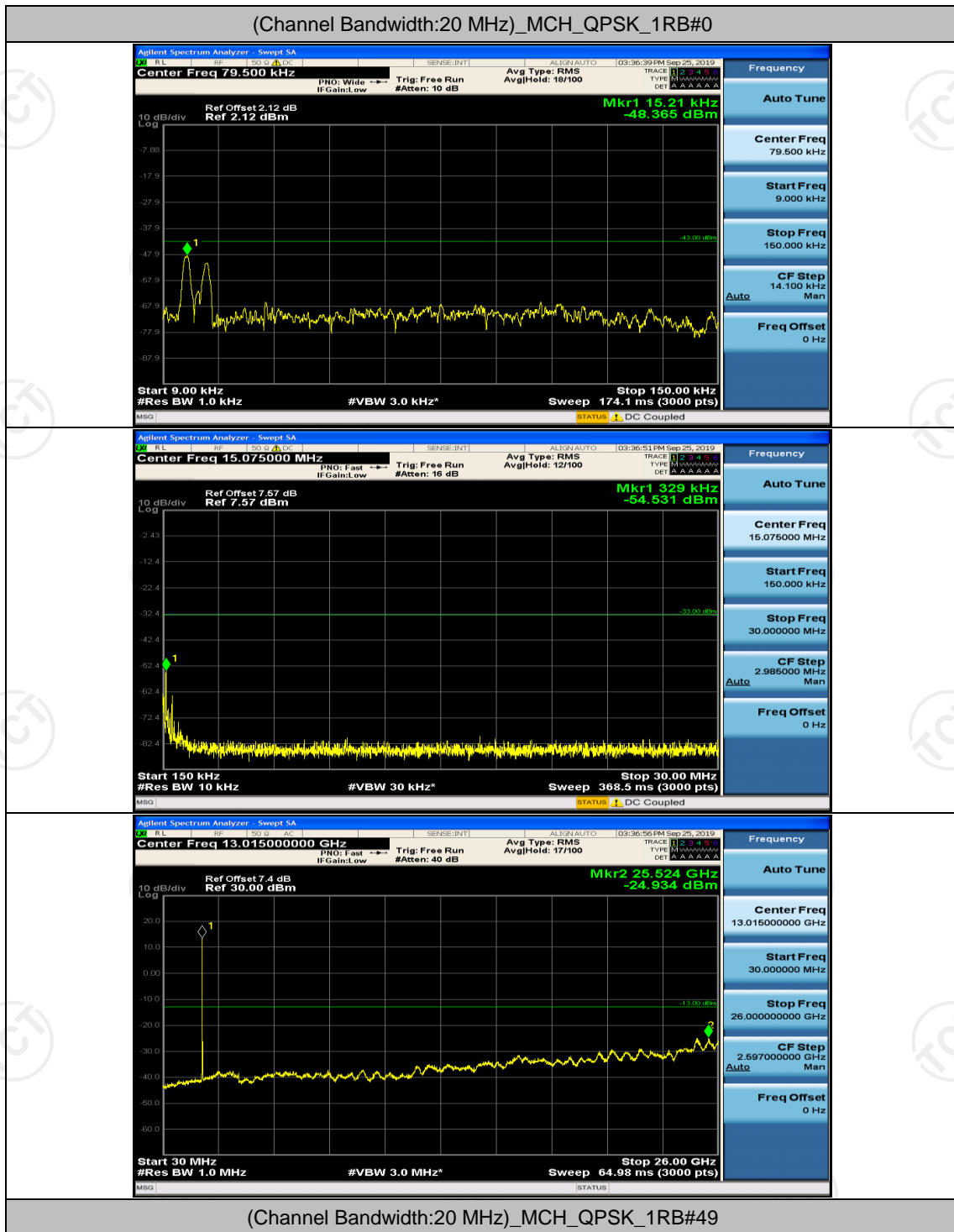


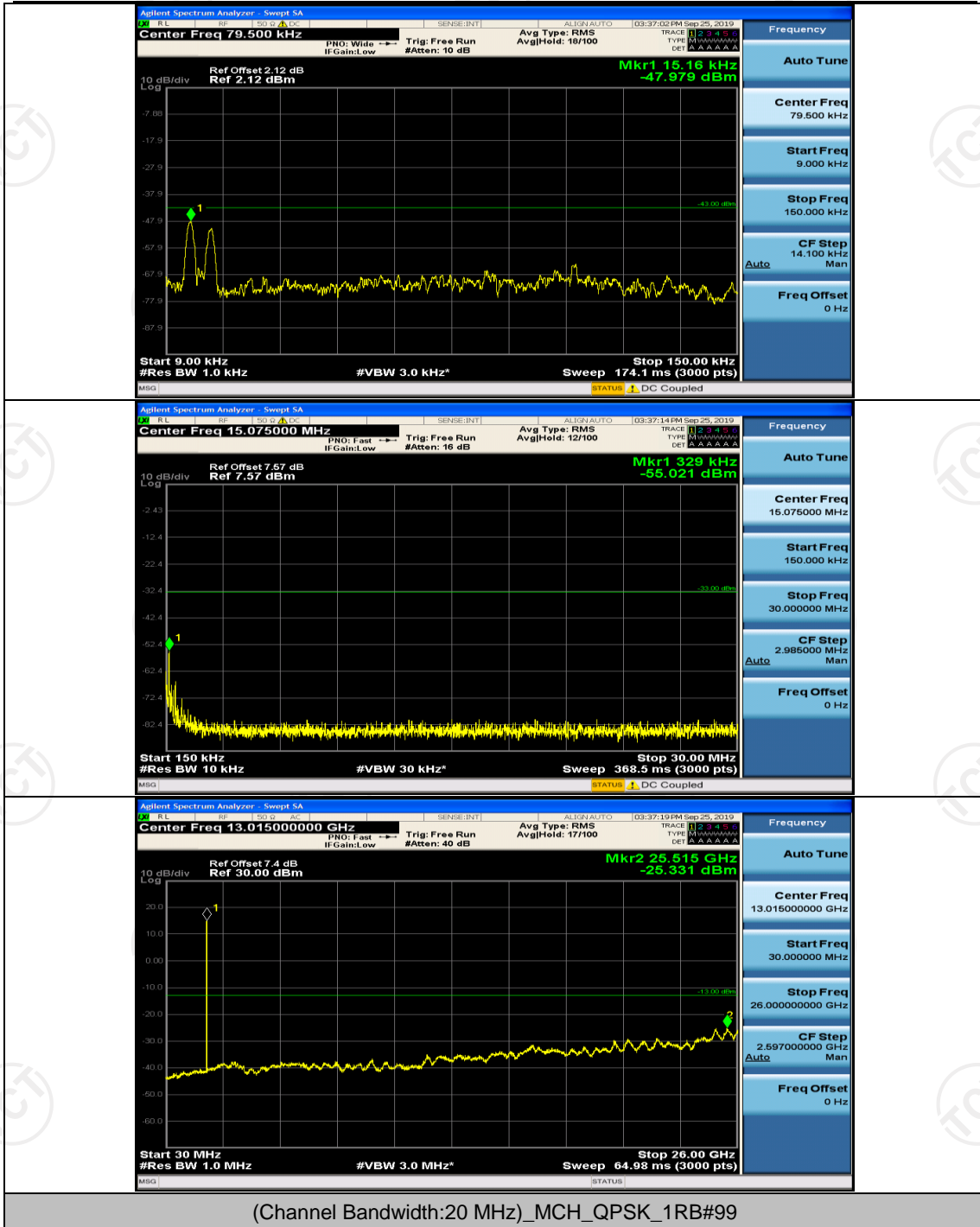
## Channel Bandwidth: 20 MHz



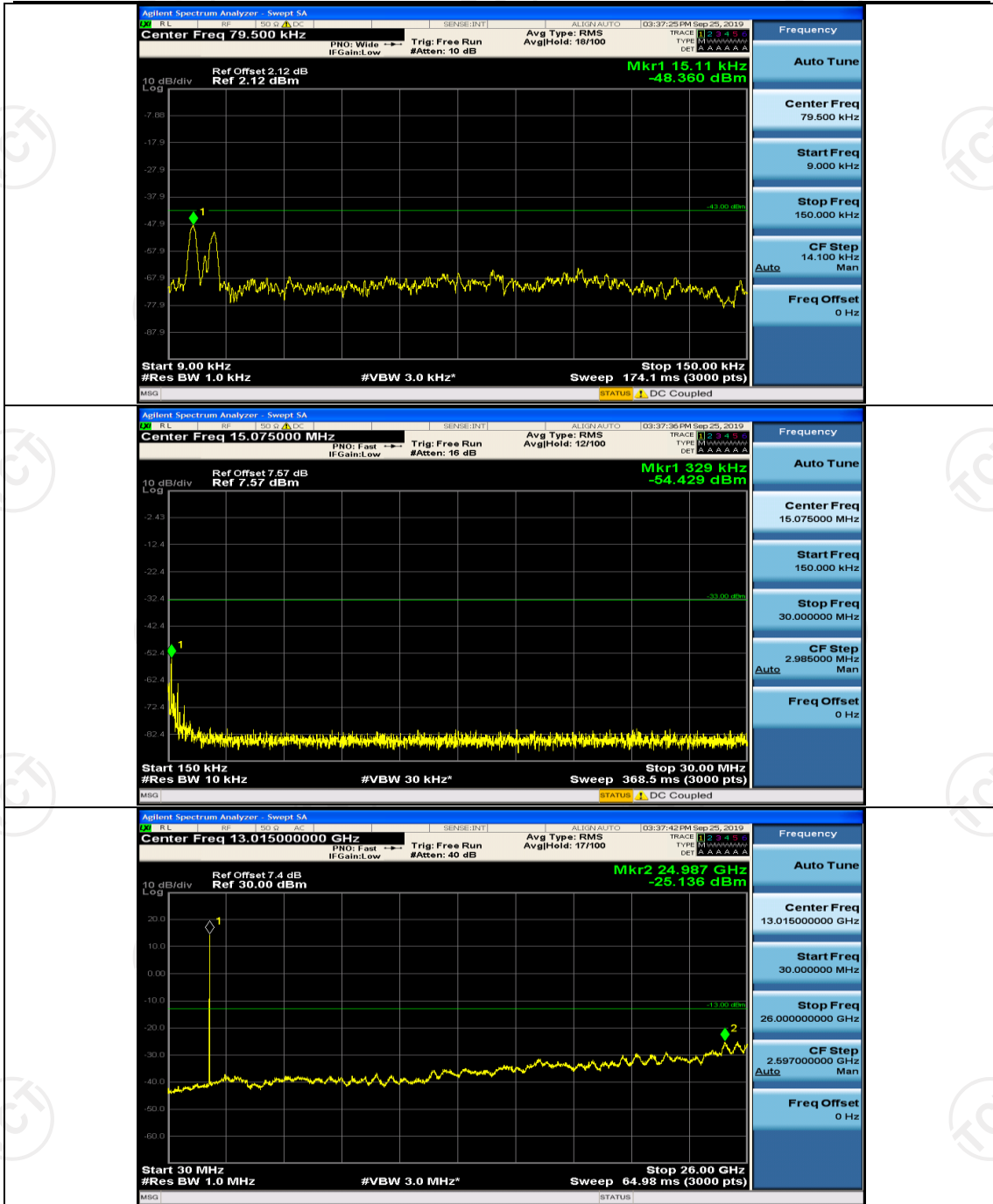


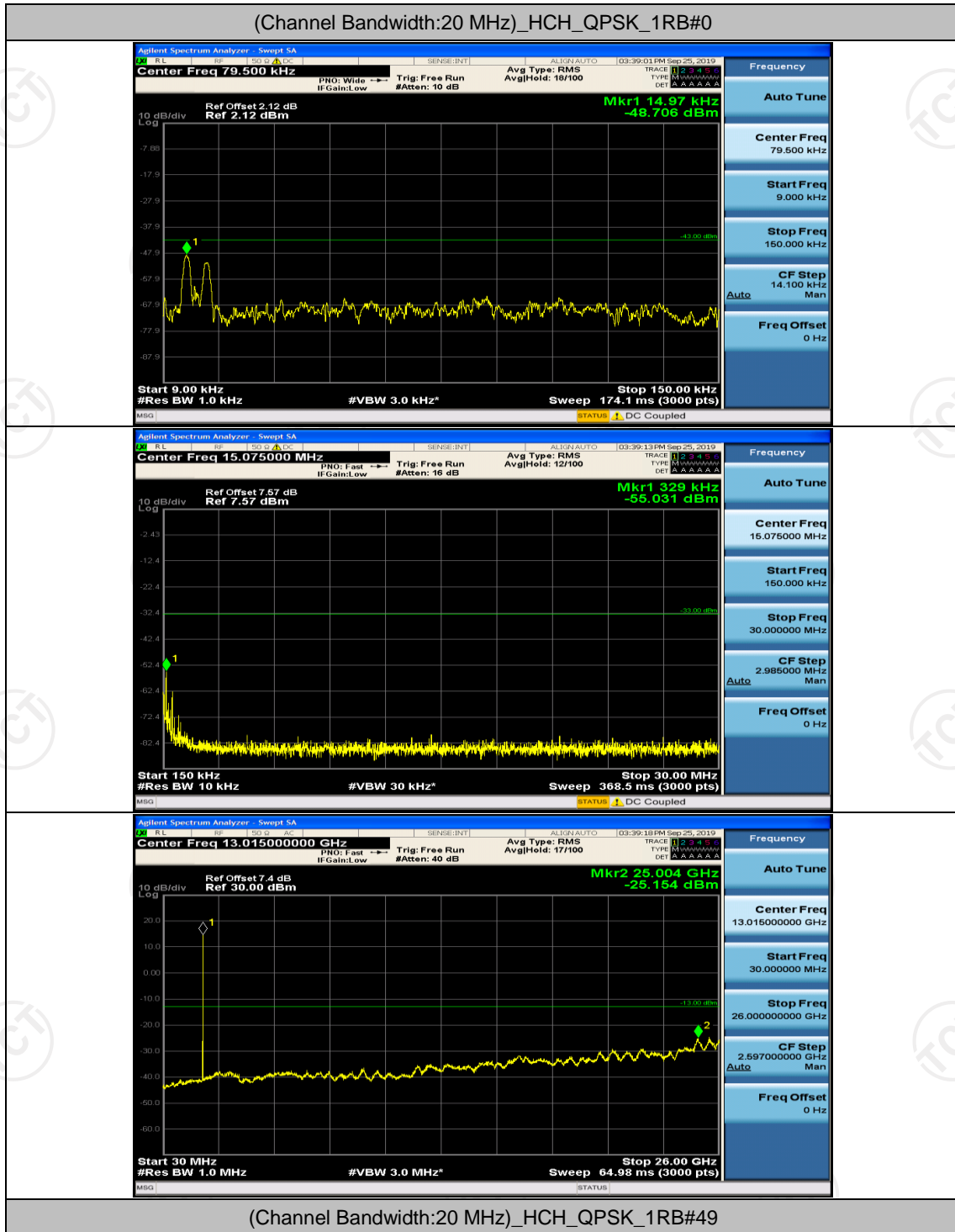


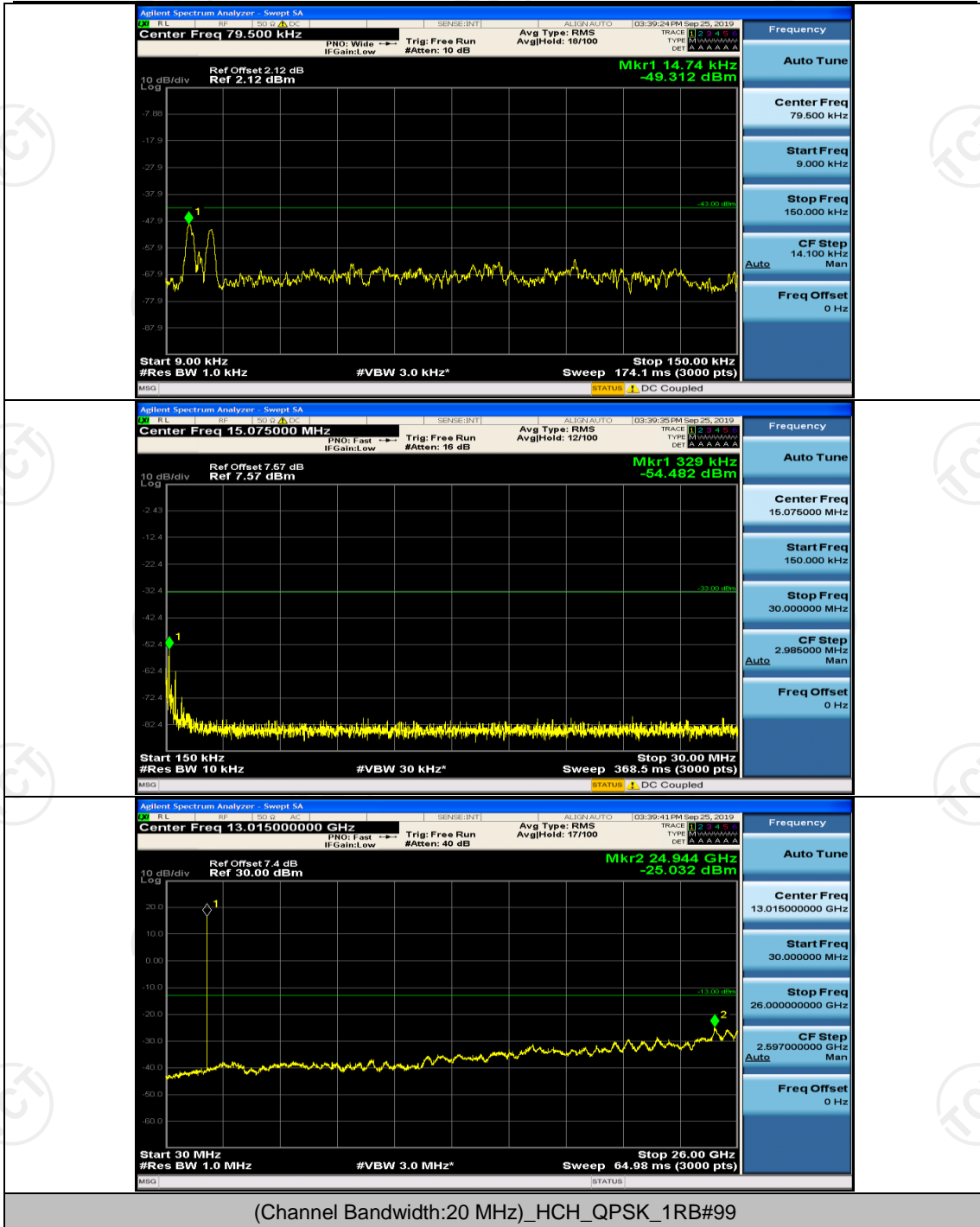


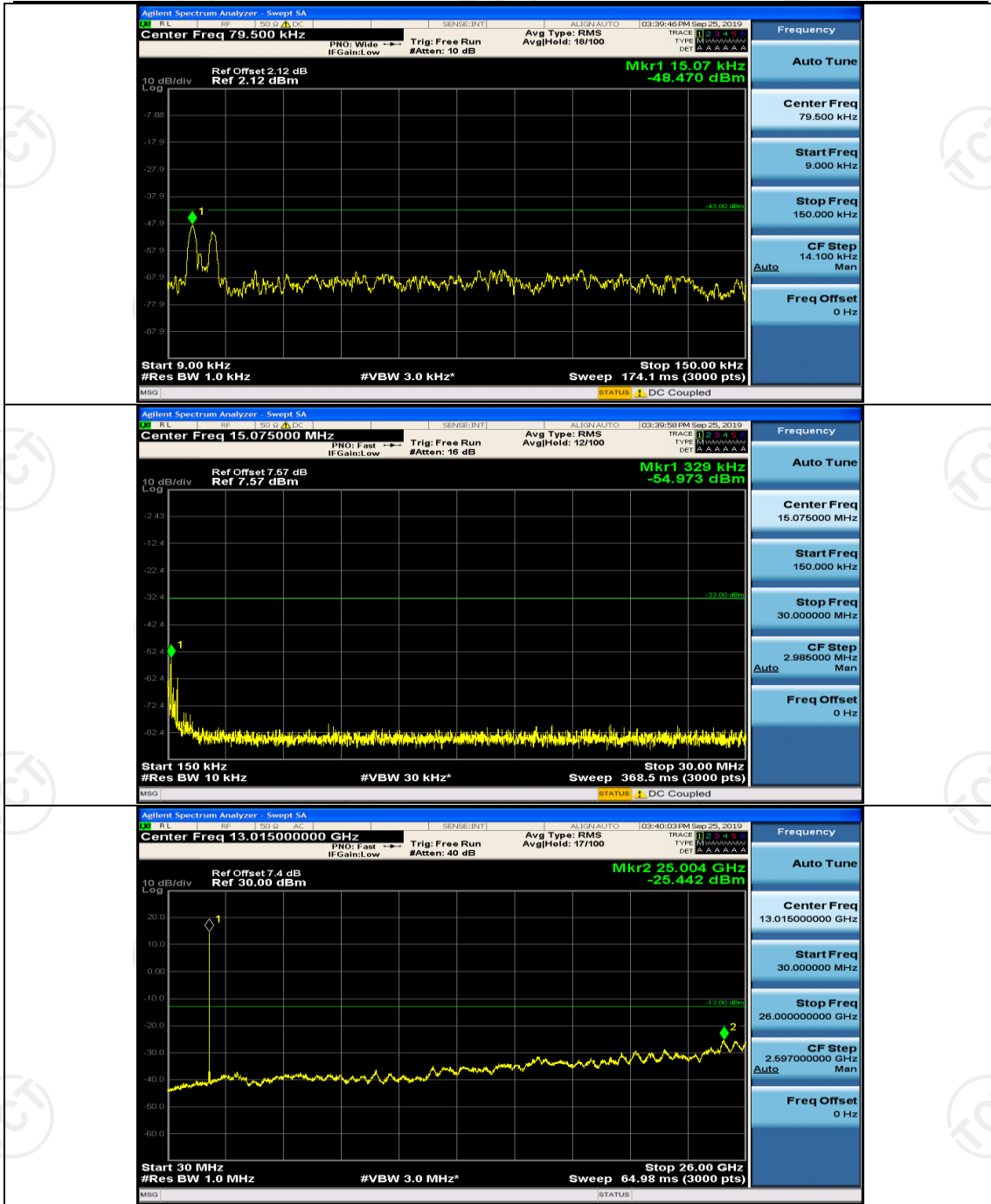


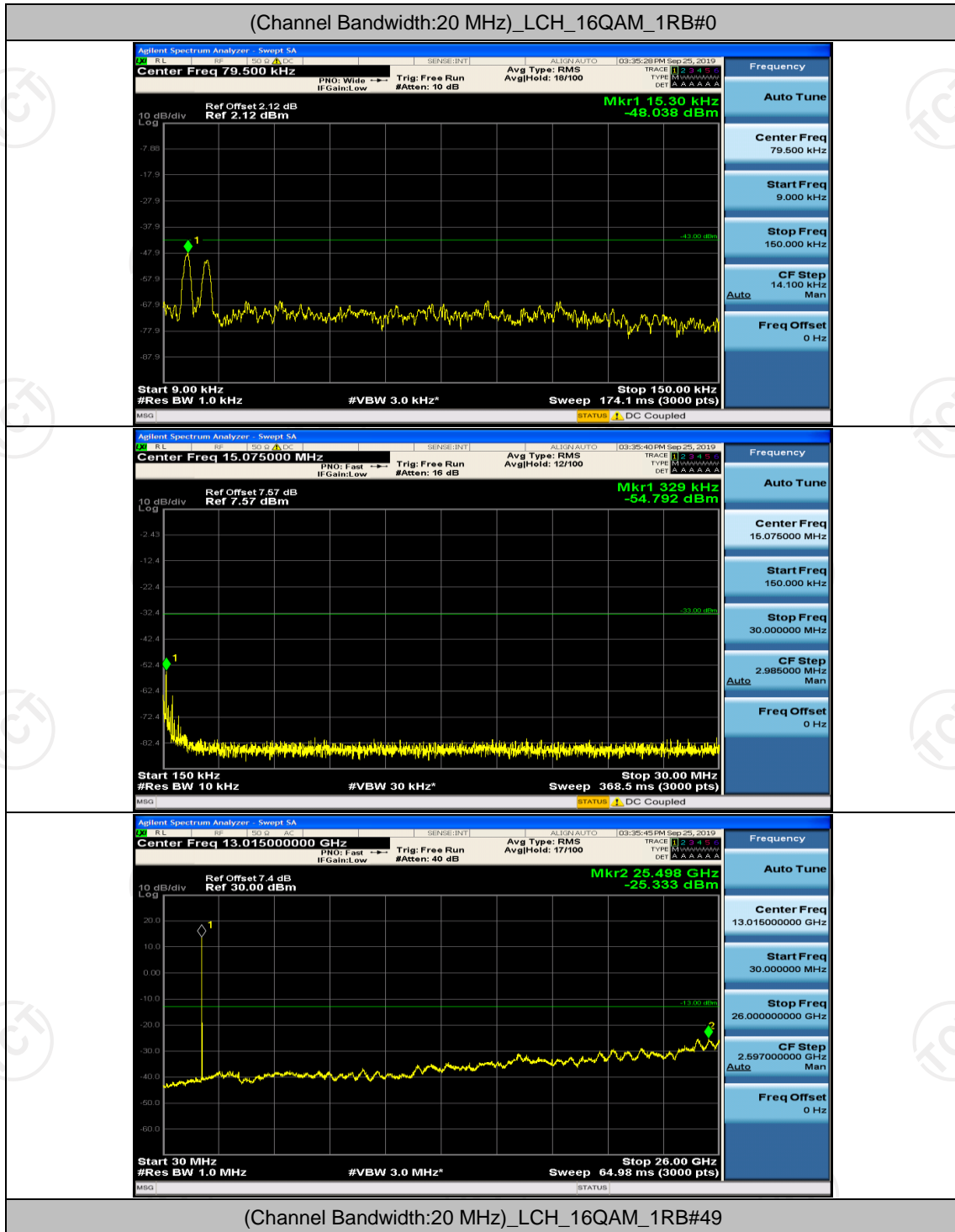


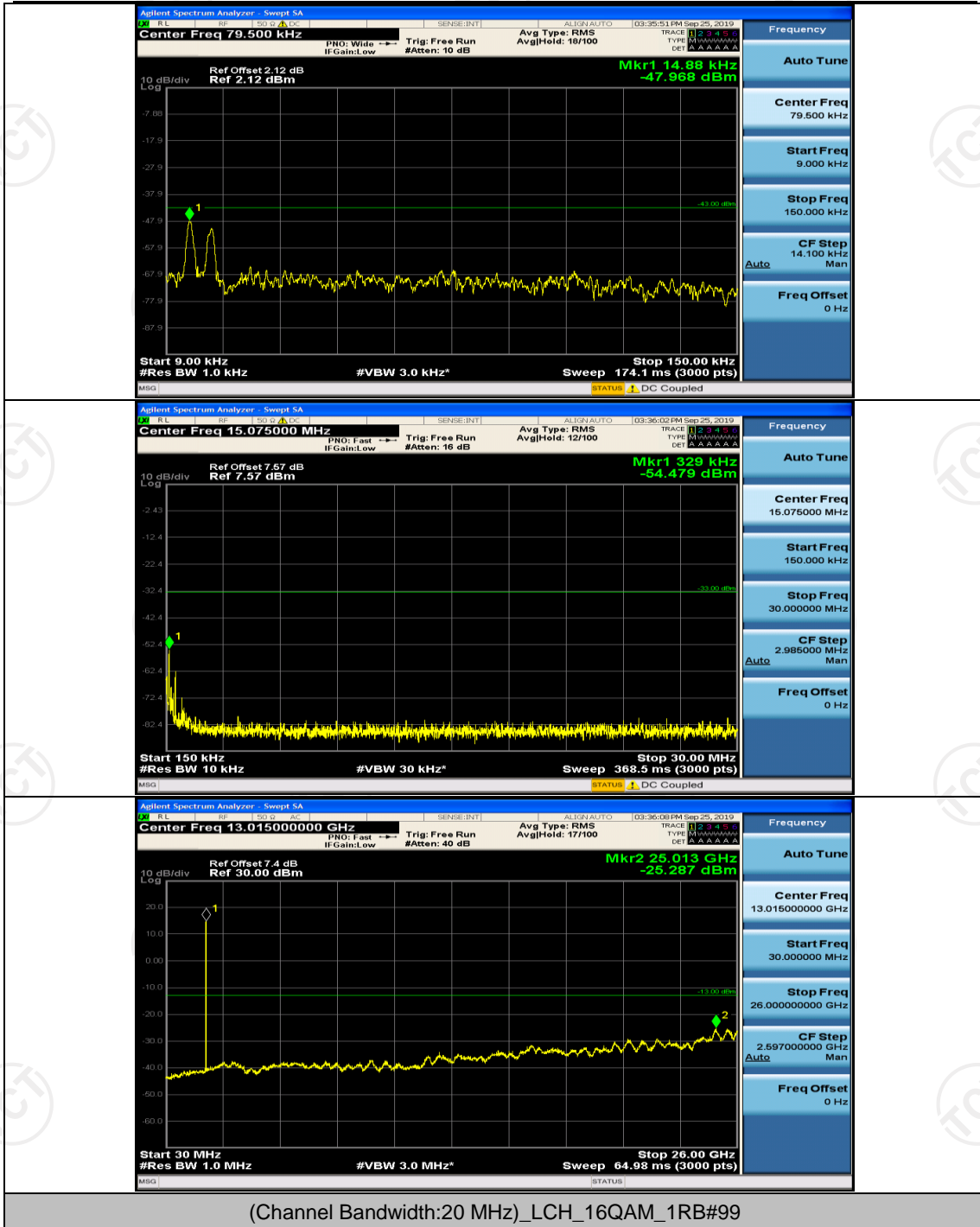


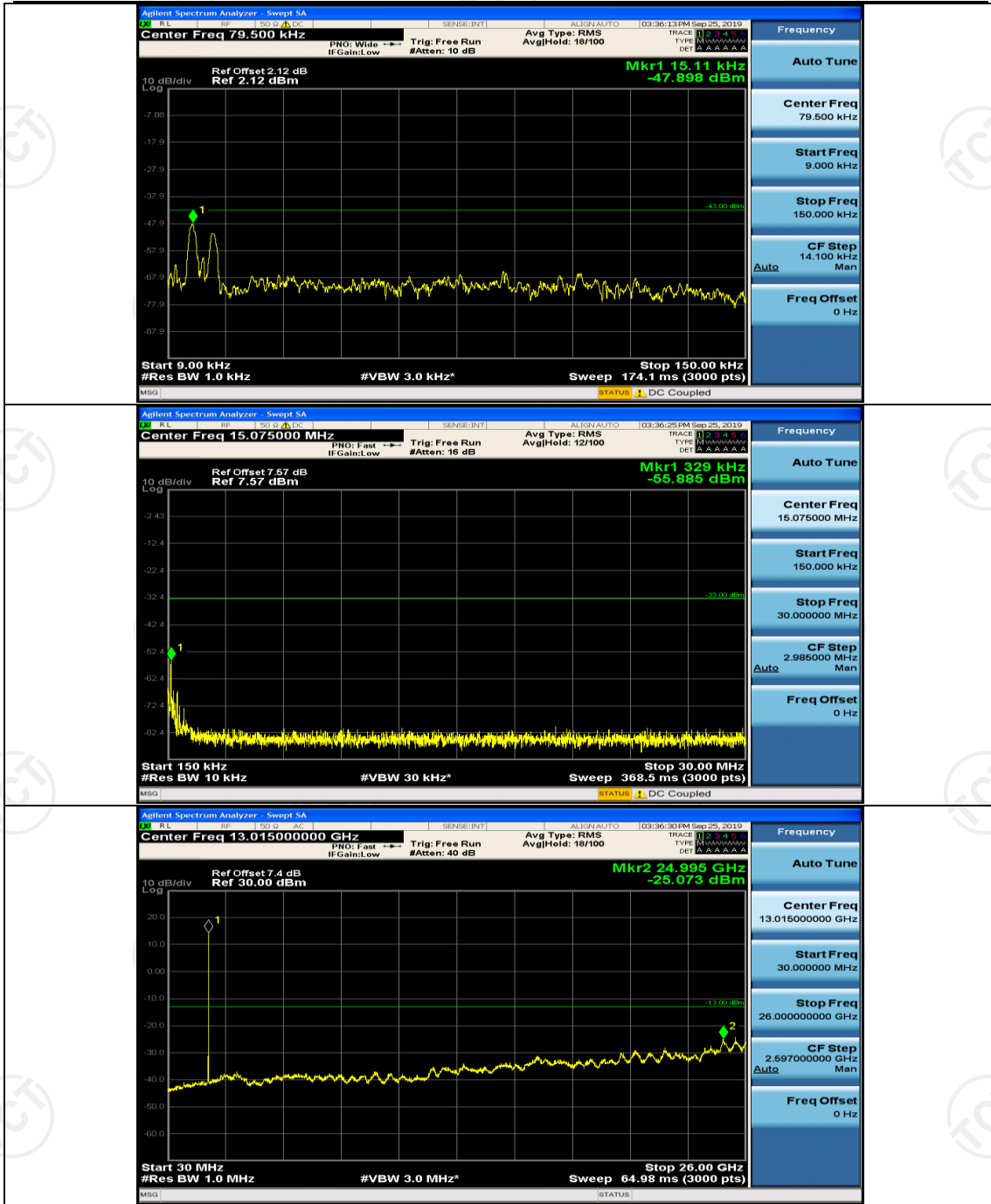


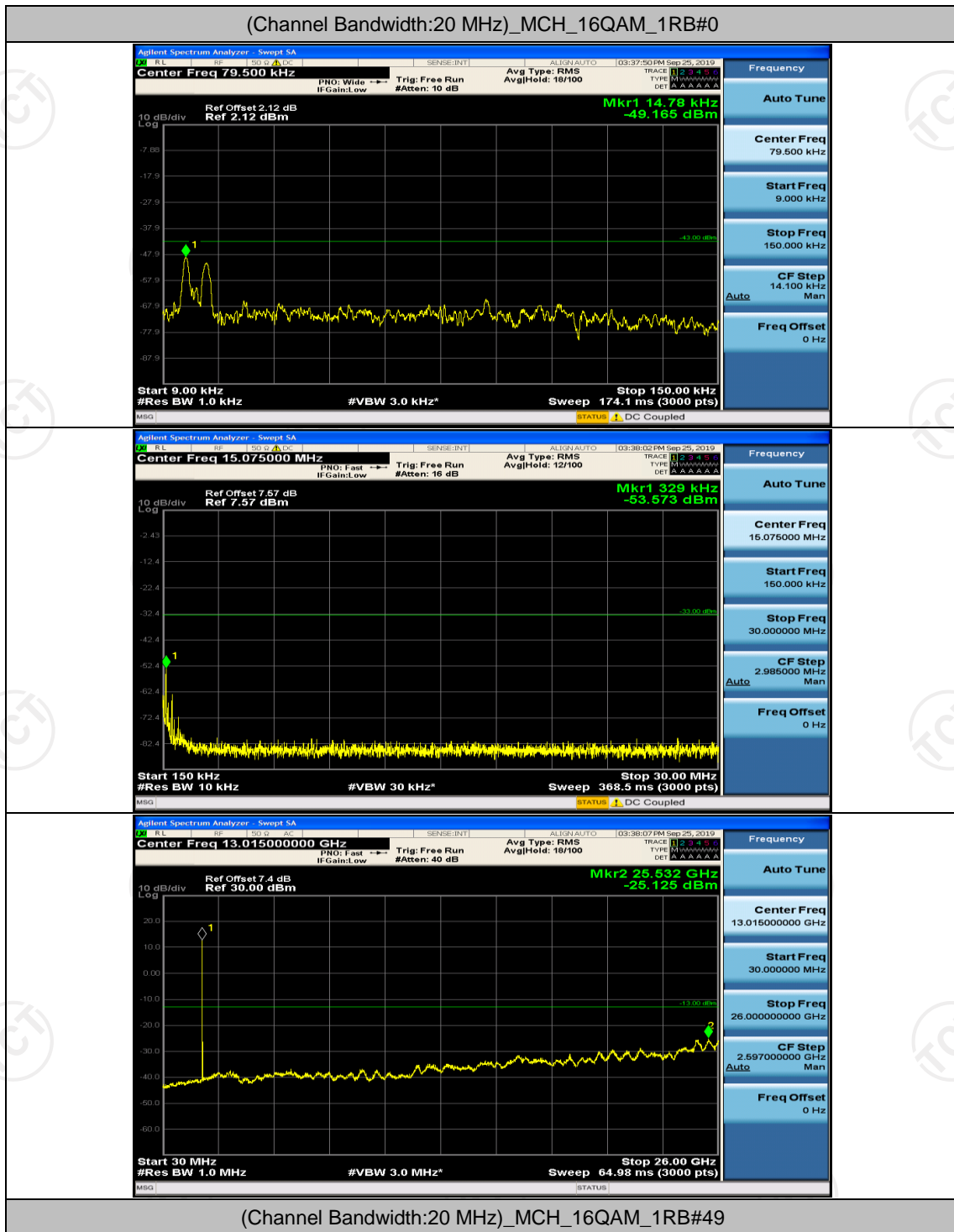




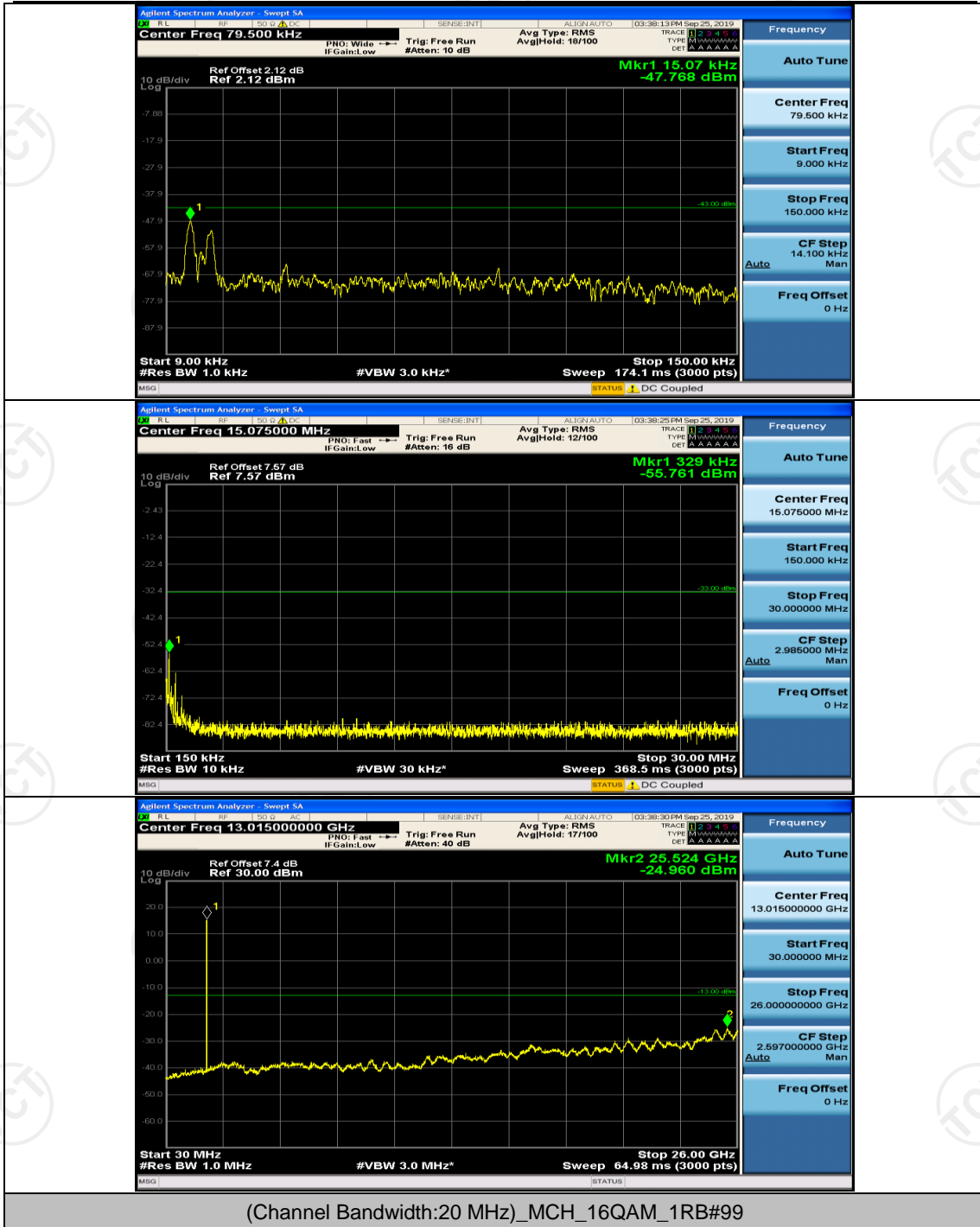


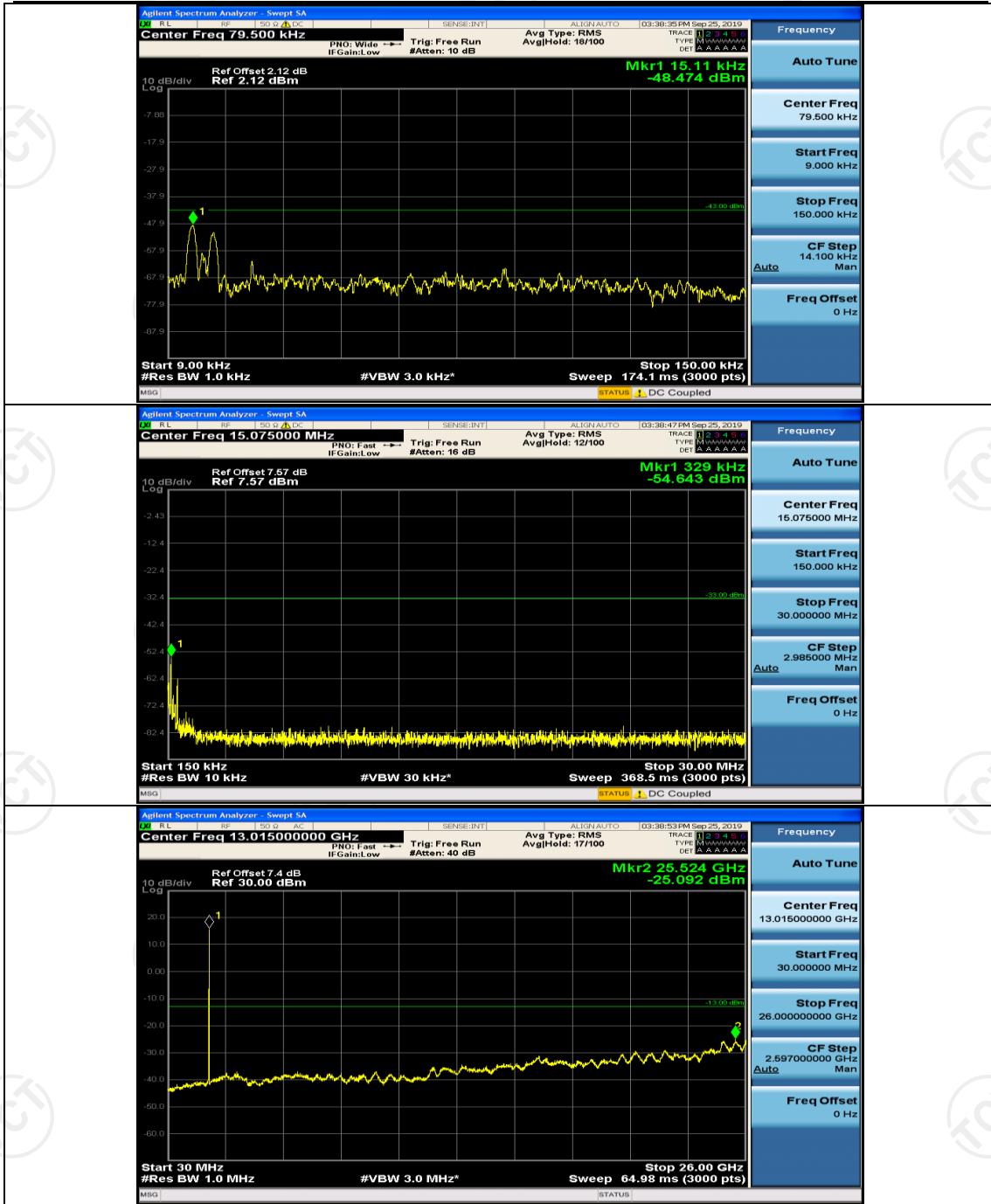


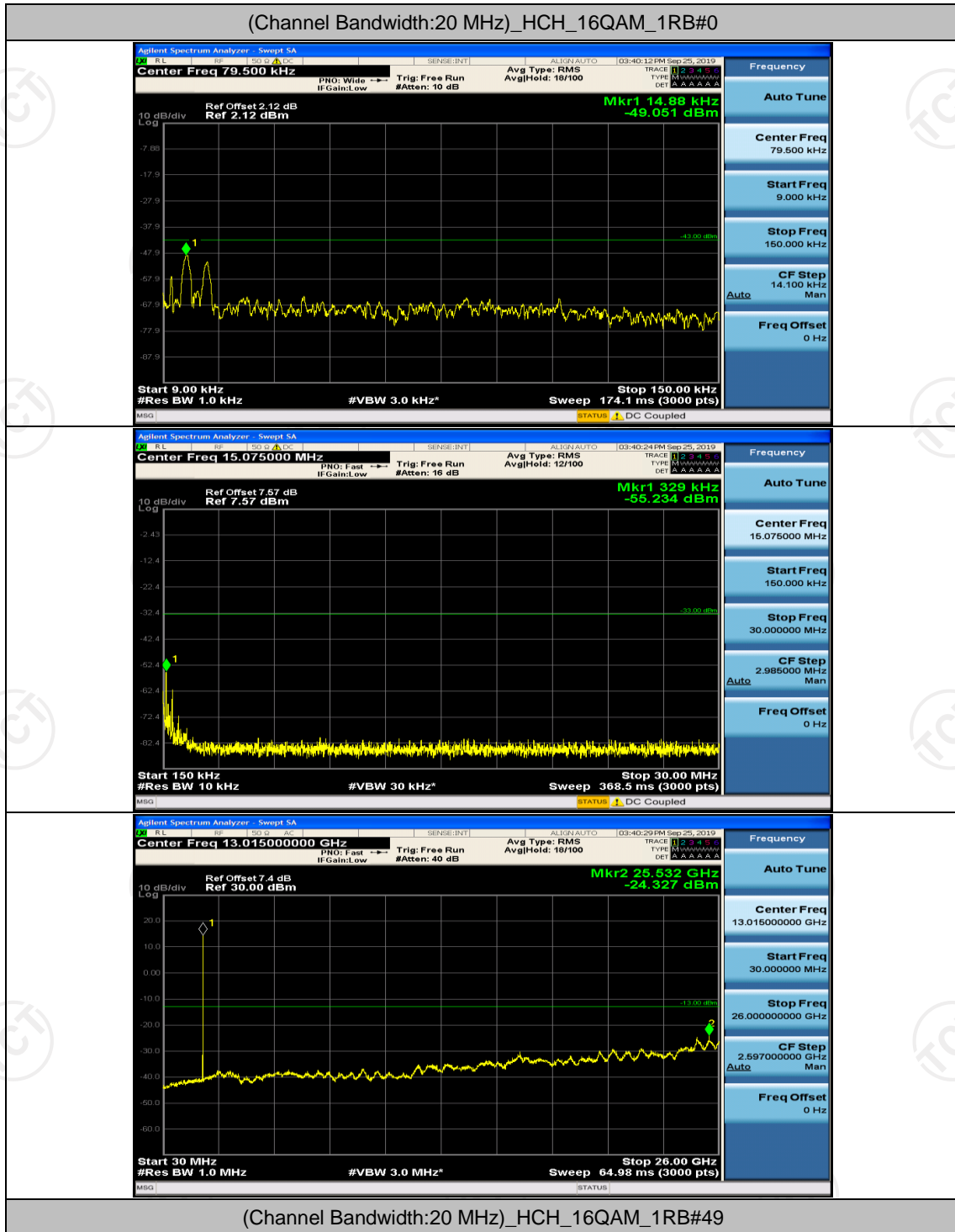


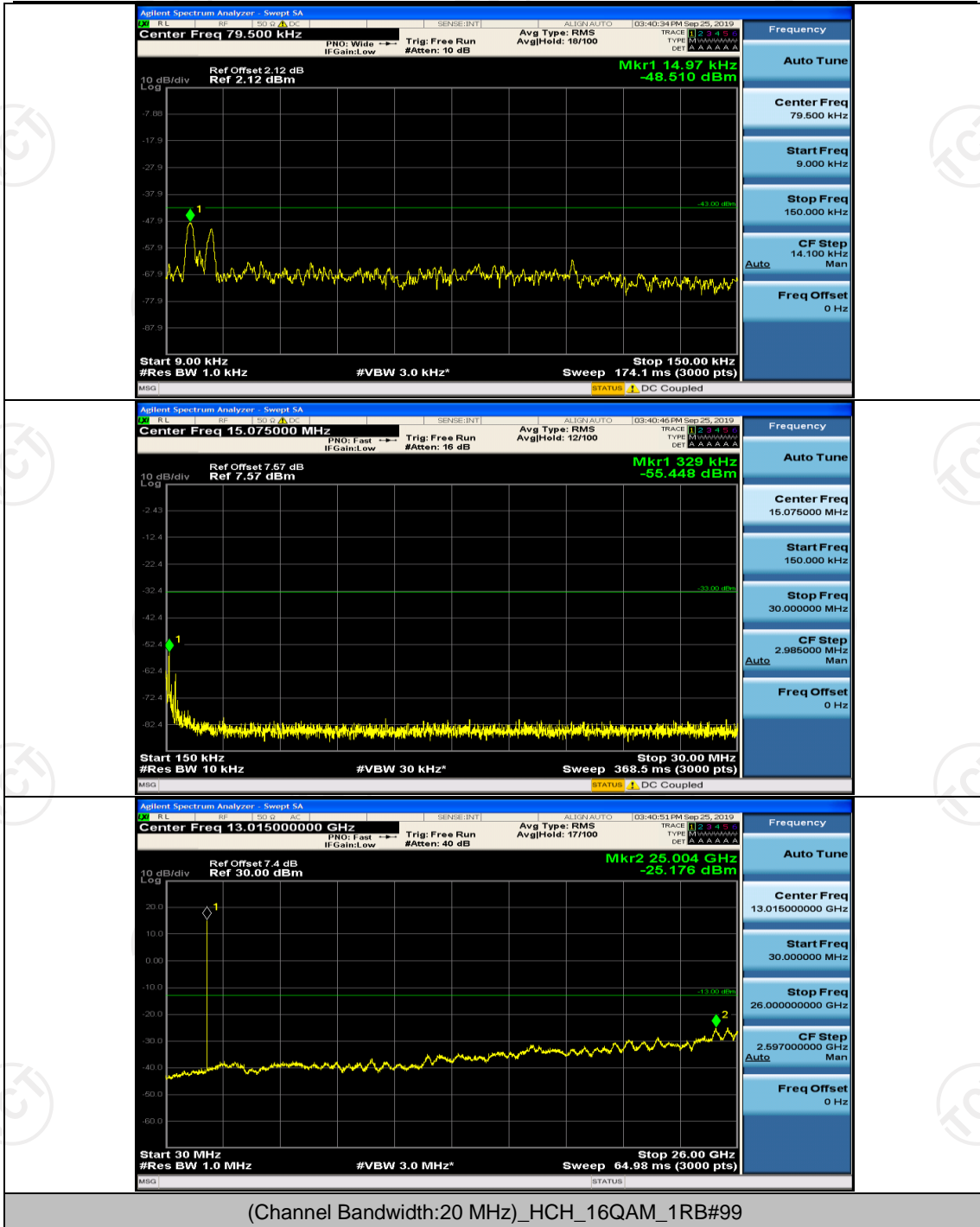


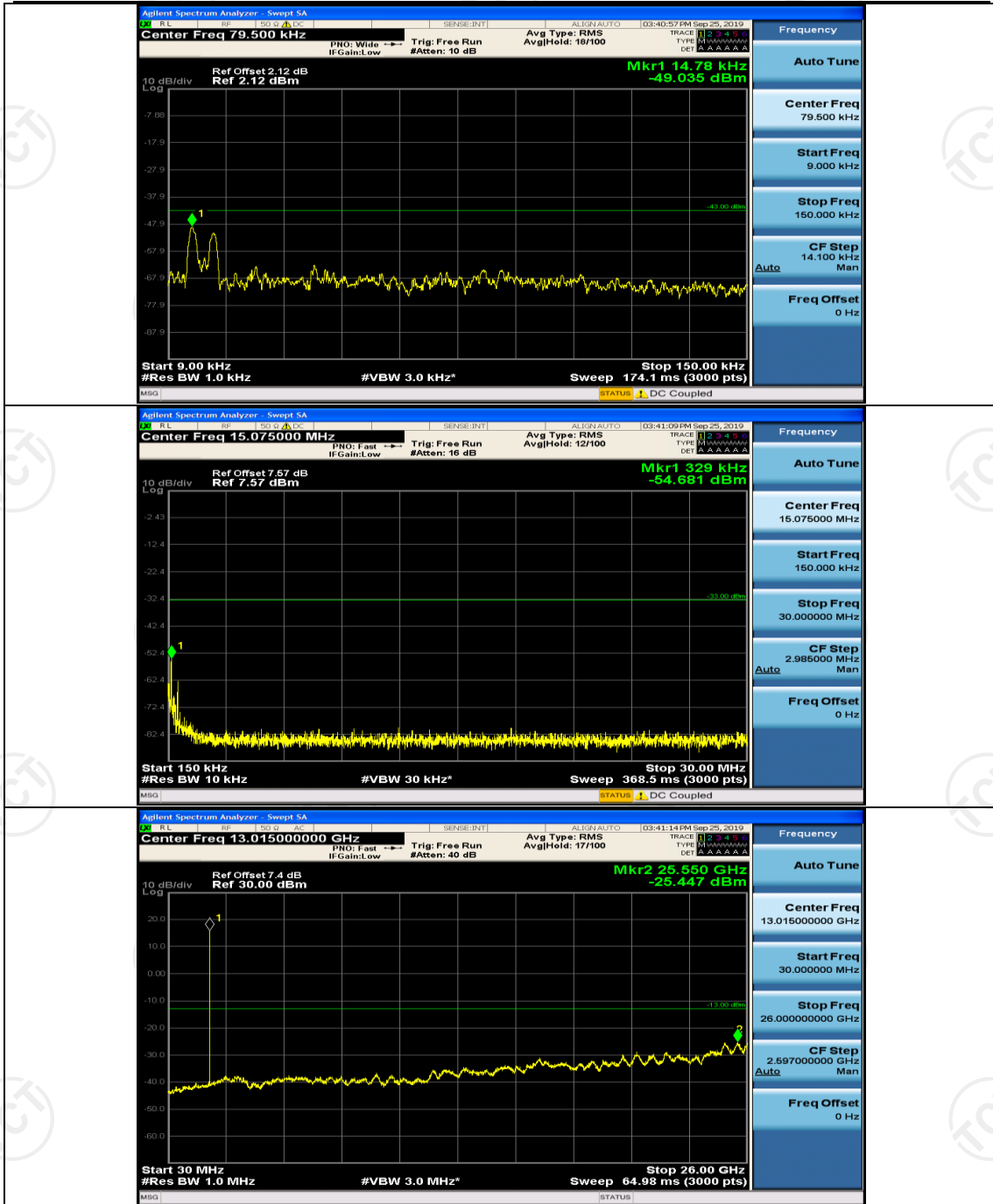












## Appendix F: Frequency Stability

### Test Result

Channel Bandwidth: 1.4 MHz

| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
|------------|---------|---------------|------------------|-----------------|-------------|---------|
| QPSK       | LCH     | VL            | TN               | -0.003140       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.003362       | ± 2.5       | PASS    |
|            |         | VH            | TN               | -0.003971       | ± 2.5       | PASS    |
|            | MCH     | VL            | TN               | -0.003014       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.005722       | ± 2.5       | PASS    |
|            |         | VH            | TN               | -0.005433       | ± 2.5       | PASS    |
|            | HCH     | VL            | TN               | -0.002145       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.004020       | ± 2.5       | PASS    |
|            |         | VH            | TN               | -0.005166       | ± 2.5       | PASS    |
| 16QAM      | LCH     | VL            | TN               | -0.003145       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.002651       | ± 2.5       | PASS    |
|            |         | VH            | TN               | -0.002102       | ± 2.5       | PASS    |
|            | MCH     | VL            | TN               | -0.003140       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.006421       | ± 2.5       | PASS    |
|            |         | VH            | TN               | -0.000479       | ± 2.5       | PASS    |
|            | HCH     | VL            | TN               | -0.001253       | ± 2.5       | PASS    |
|            |         | VN            | TN               | -0.001592       | ± 2.5       | PASS    |
|            |         | VH            | TN               | 0.000142        | ± 2.5       | PASS    |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK       | LCH     | VN            | -30              | -0.001592       | ± 2.5       | PASS    |
|            |         | VN            | -20              | -0.005509       | ± 2.5       | PASS    |
|            |         | VN            | -10              | -0.004381       | ± 2.5       | PASS    |
|            |         | VN            | 0                | -0.002921       | ± 2.5       | PASS    |
|            |         | VN            | 10               | -0.003650       | ± 2.5       | PASS    |
|            |         | VN            | 20               | -0.004924       | ± 2.5       | PASS    |
|            |         | VN            | 30               | -0.001430       | ± 2.5       | PASS    |
|            |         | VN            | 40               | -0.004560       | ± 2.5       | PASS    |
|            | MCH     | VN            | 50               | -0.001152       | ± 2.5       | PASS    |
|            |         | VN            | -30              | -0.006087       | ± 2.5       | PASS    |
|            |         | VN            | -20              | -0.006444       | ± 2.5       | PASS    |
|            |         | VN            | -10              | -0.004293       | ± 2.5       | PASS    |
|            |         | VN            | 0                | -0.001713       | ± 2.5       | PASS    |
|            |         | VN            | 10               | -0.006087       | ± 2.5       | PASS    |
|            |         | VN            | 20               | -0.004795       | ± 2.5       | PASS    |
|            |         | VN            | 30               | -0.001535       | ± 2.5       | PASS    |
|            |         | VN            | 40               | -0.001489       | ± 2.5       | PASS    |

|       |     |     |           |           |           |       |
|-------|-----|-----|-----------|-----------|-----------|-------|
|       | HCH | VN  | 50        | -0.006710 | ± 2.5     | PASS  |
|       |     | VN  | -30       | -0.001563 | ± 2.5     | PASS  |
|       |     | VN  | -20       | -0.001208 | ± 2.5     | PASS  |
|       |     | VN  | -10       | -0.000964 | ± 2.5     | PASS  |
|       |     | VN  | 0         | -0.000763 | ± 2.5     | PASS  |
|       |     | VN  | 10        | -0.001697 | ± 2.5     | PASS  |
|       |     | VN  | 20        | 0.000822  | ± 2.5     | PASS  |
|       |     | VN  | 30        | -0.001891 | ± 2.5     | PASS  |
|       |     | VN  | 40        | -0.001128 | ± 2.5     | PASS  |
|       |     | VN  | 50        | -0.000224 | ± 2.5     | PASS  |
| 16QAM | LCH | VN  | -30       | -0.001205 | ± 2.5     | PASS  |
|       |     | VN  | -20       | -0.003036 | ± 2.5     | PASS  |
|       |     | VN  | -10       | -0.005045 | ± 2.5     | PASS  |
|       |     | VN  | 0         | -0.001932 | ± 2.5     | PASS  |
|       |     | VN  | 10        | -0.004125 | ± 2.5     | PASS  |
|       |     | VN  | 20        | -0.001043 | ± 2.5     | PASS  |
|       |     | VN  | 30        | -0.002960 | ± 2.5     | PASS  |
|       |     | VN  | 40        | -0.003672 | ± 2.5     | PASS  |
|       |     | VN  | 50        | -0.002891 | ± 2.5     | PASS  |
|       |     | MCH | VN        | -30       | -0.002956 | ± 2.5 |
|       | VN  |     | -20       | -0.005061 | ± 2.5     | PASS  |
|       | VN  |     | -10       | -0.002363 | ± 2.5     | PASS  |
|       | VN  |     | 0         | -0.002857 | ± 2.5     | PASS  |
|       | VN  |     | 10        | -0.003156 | ± 2.5     | PASS  |
|       | VN  |     | 20        | -0.005768 | ± 2.5     | PASS  |
|       | VN  |     | 30        | -0.004369 | ± 2.5     | PASS  |
|       | VN  |     | 40        | -0.003313 | ± 2.5     | PASS  |
|       | VN  |     | 50        | -0.006163 | ± 2.5     | PASS  |
|       | HCH |     | VN        | -30       | 0.000411  | ± 2.5 |
|       |     | VN  | -20       | -0.000523 | ± 2.5     | PASS  |
|       |     | VN  | -10       | -0.003461 | ± 2.5     | PASS  |
|       |     | VN  | 0         | -0.002811 | ± 2.5     | PASS  |
|       |     | VN  | 10        | 0.001452  | ± 2.5     | PASS  |
|       |     | VN  | 20        | 0.000112  | ± 2.5     | PASS  |
|       |     | VN  | 30        | -0.000127 | ± 2.5     | PASS  |
|       |     | VN  | 40        | 0.001592  | ± 2.5     | PASS  |
|       | VN  | 50  | -0.003019 | ± 2.5     | PASS      |       |