

## Appendix: 2.4G FHSS

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Appendix A: 20dB Emission Bandwidth

Test Result

| Test Mode | Antenna | Frequency[MHz] | 20db EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|----------------|---------------|----------|----------|------------|---------|
| TX        | Ant1    | 2466           | 0.520         | 2465.742 | 2466.263 | ---        | ---     |
|           | Ant2    | 2466           | 0.540         | 2465.721 | 2466.261 | ---        | ---     |
|           | Ant3    | 2466           | 0.538         | 2465.738 | 2466.276 | ---        | ---     |
|           | Ant4    | 2466           | 0.528         | 2465.739 | 2466.267 | ---        | ---     |
|           | Ant1    | 2473           | 0.532         | 2472.739 | 2473.272 | ---        | ---     |
|           | Ant2    | 2473           | 0.534         | 2472.723 | 2473.257 | ---        | ---     |
|           | Ant3    | 2473           | 0.534         | 2472.736 | 2473.270 | ---        | ---     |
|           | Ant4    | 2473           | 0.523         | 2472.744 | 2473.267 | ---        | ---     |
|           | Ant1    | 2480           | 0.537         | 2479.741 | 2480.278 | ---        | ---     |
|           | Ant2    | 2480           | 0.535         | 2479.723 | 2480.258 | ---        | ---     |
|           | Ant3    | 2480           | 0.497         | 2479.754 | 2480.251 | ---        | ---     |
|           | Ant4    | 2480           | 0.525         | 2479.739 | 2480.264 | ---        | ---     |

Test Graphs















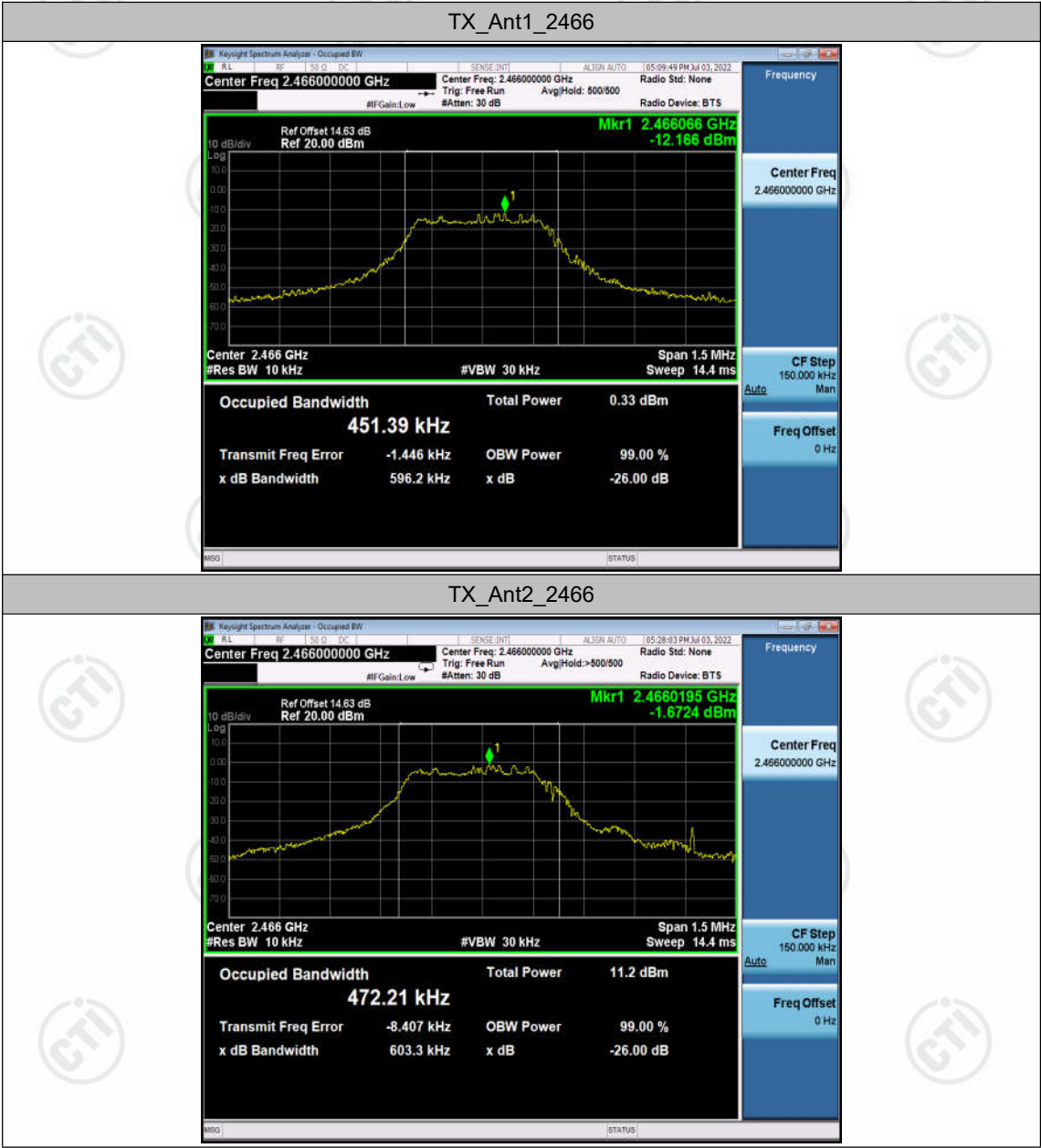


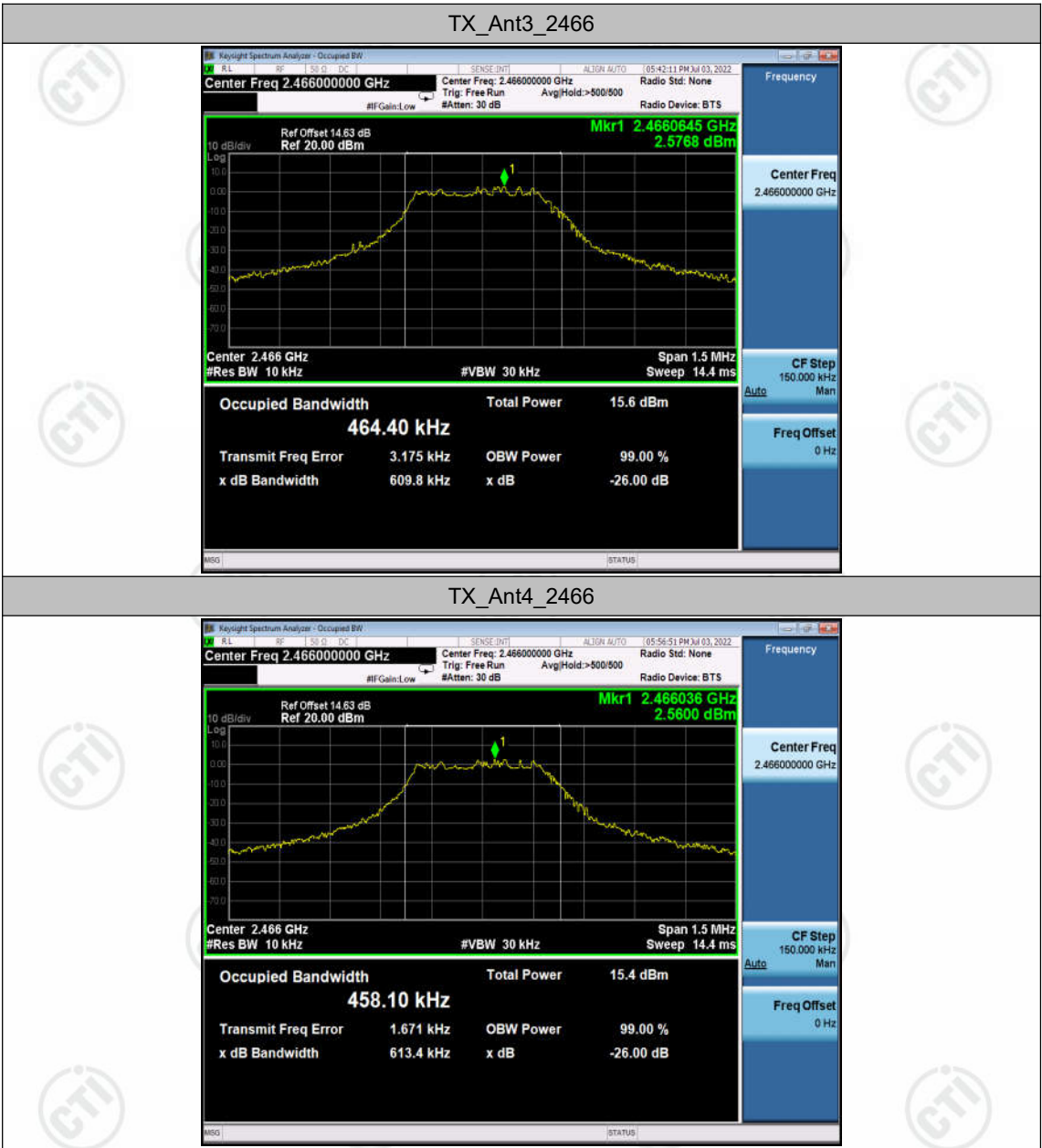
Appendix B: Occupied Channel Bandwidth

Test Result

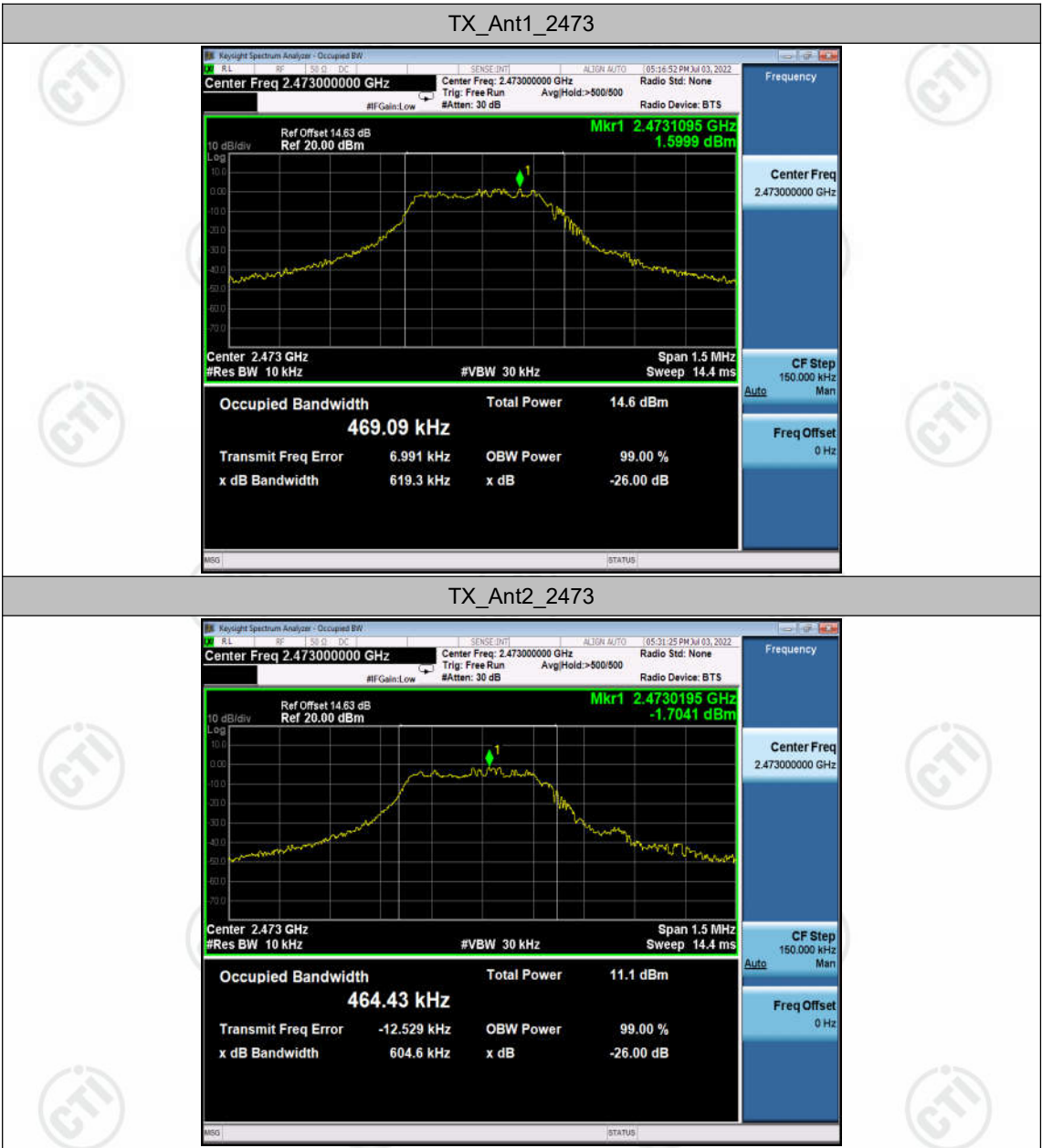
| Test Mode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|----------------|-----------|----------|----------|------------|---------|
| TX        | Ant1    | 2466           | 0.45139   | 2465.773 | 2466.224 | ---        | ---     |
|           | Ant2    | 2466           | 0.47229   | 2465.755 | 2466.228 | ---        | ---     |
|           | Ant3    | 2466           | 0.46368   | 2465.771 | 2466.235 | ---        | ---     |
|           | Ant4    | 2466           | 0.45803   | 2465.773 | 2466.231 | ---        | ---     |
|           | Ant1    | 2473           | 0.46898   | 2472.772 | 2473.241 | ---        | ---     |
|           | Ant2    | 2473           | 0.46460   | 2472.755 | 2473.220 | ---        | ---     |
|           | Ant3    | 2473           | 0.46260   | 2472.771 | 2473.234 | ---        | ---     |
|           | Ant4    | 2473           | 0.45527   | 2472.773 | 2473.228 | ---        | ---     |
|           | Ant1    | 2480           | 0.47740   | 2479.771 | 2480.249 | ---        | ---     |
|           | Ant2    | 2480           | 0.46621   | 2479.756 | 2480.222 | ---        | ---     |
|           | Ant3    | 2480           | 0.46443   | 2479.770 | 2480.235 | ---        | ---     |
|           | Ant4    | 2480           | 0.45370   | 2479.774 | 2480.227 | ---        | ---     |

Test Graphs

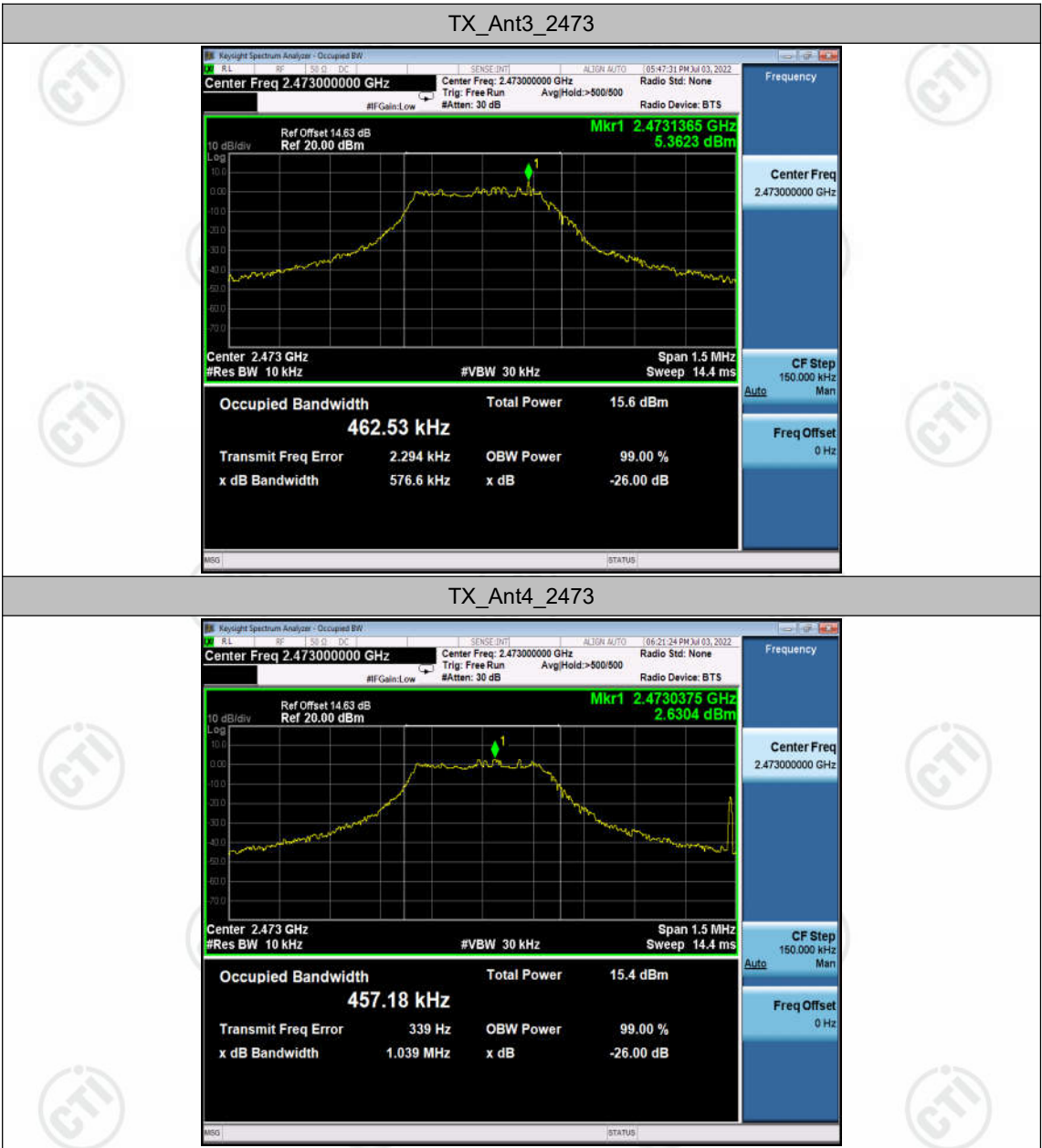


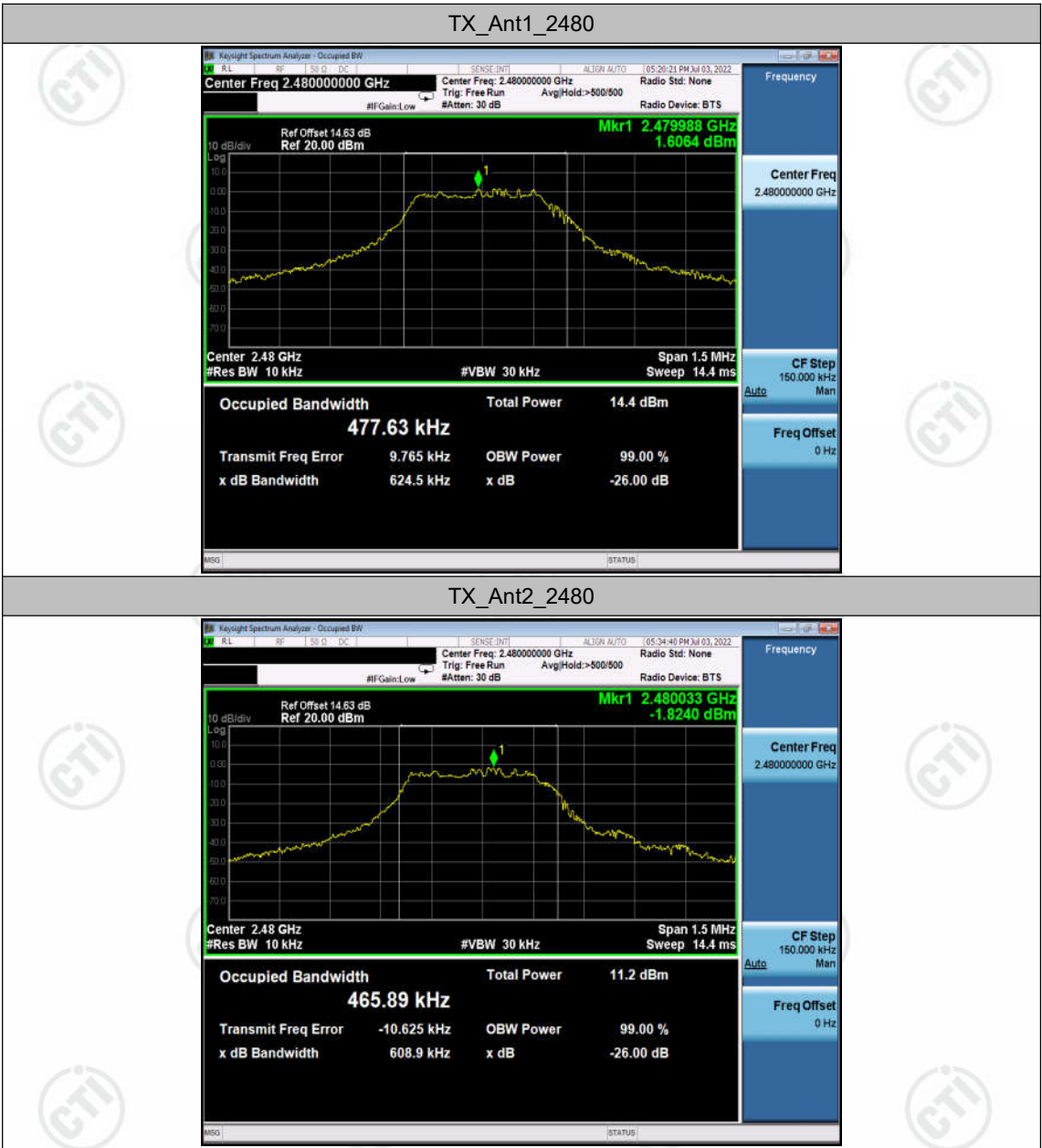


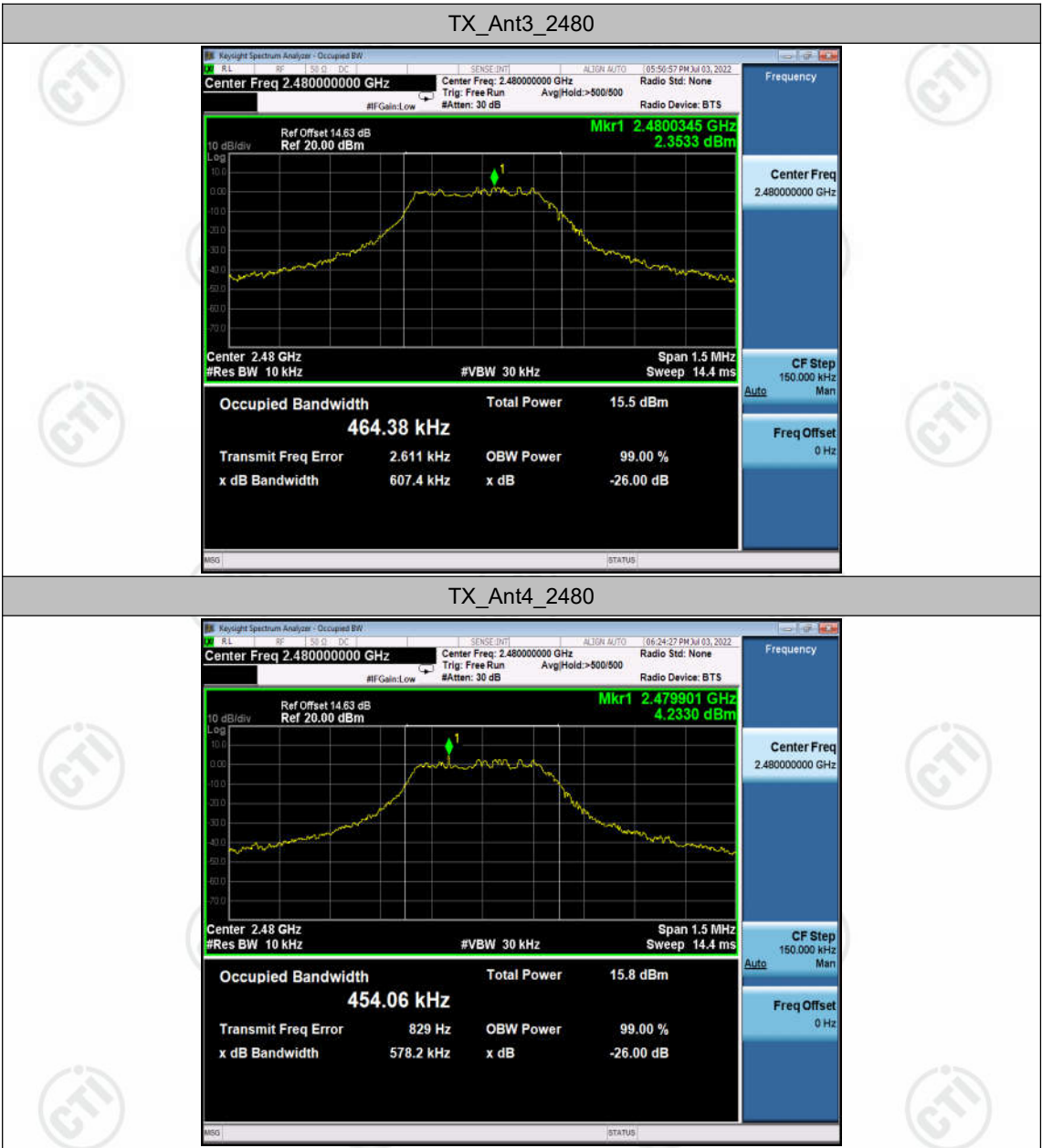










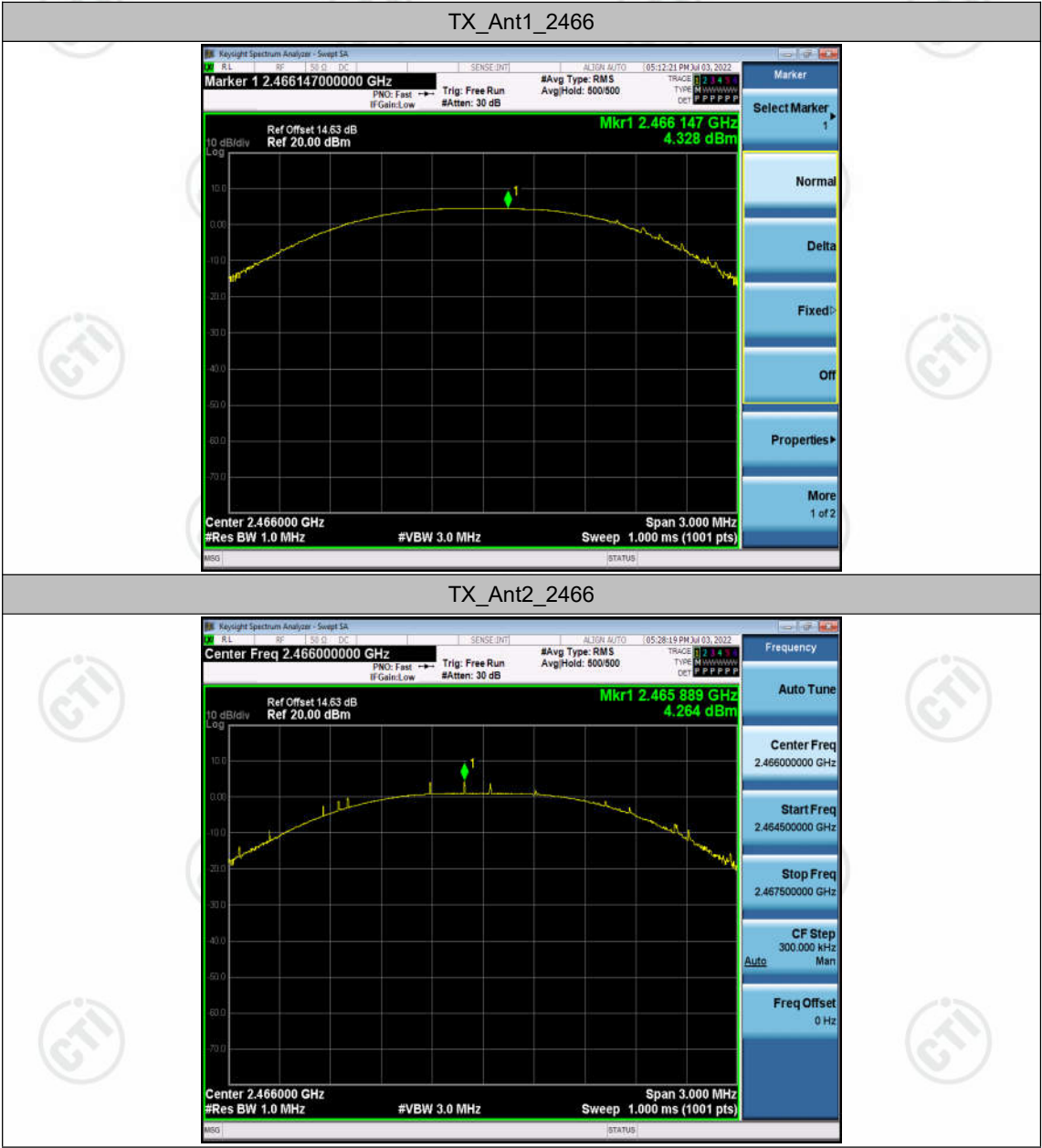


Appendix C: Maximum conducted output power

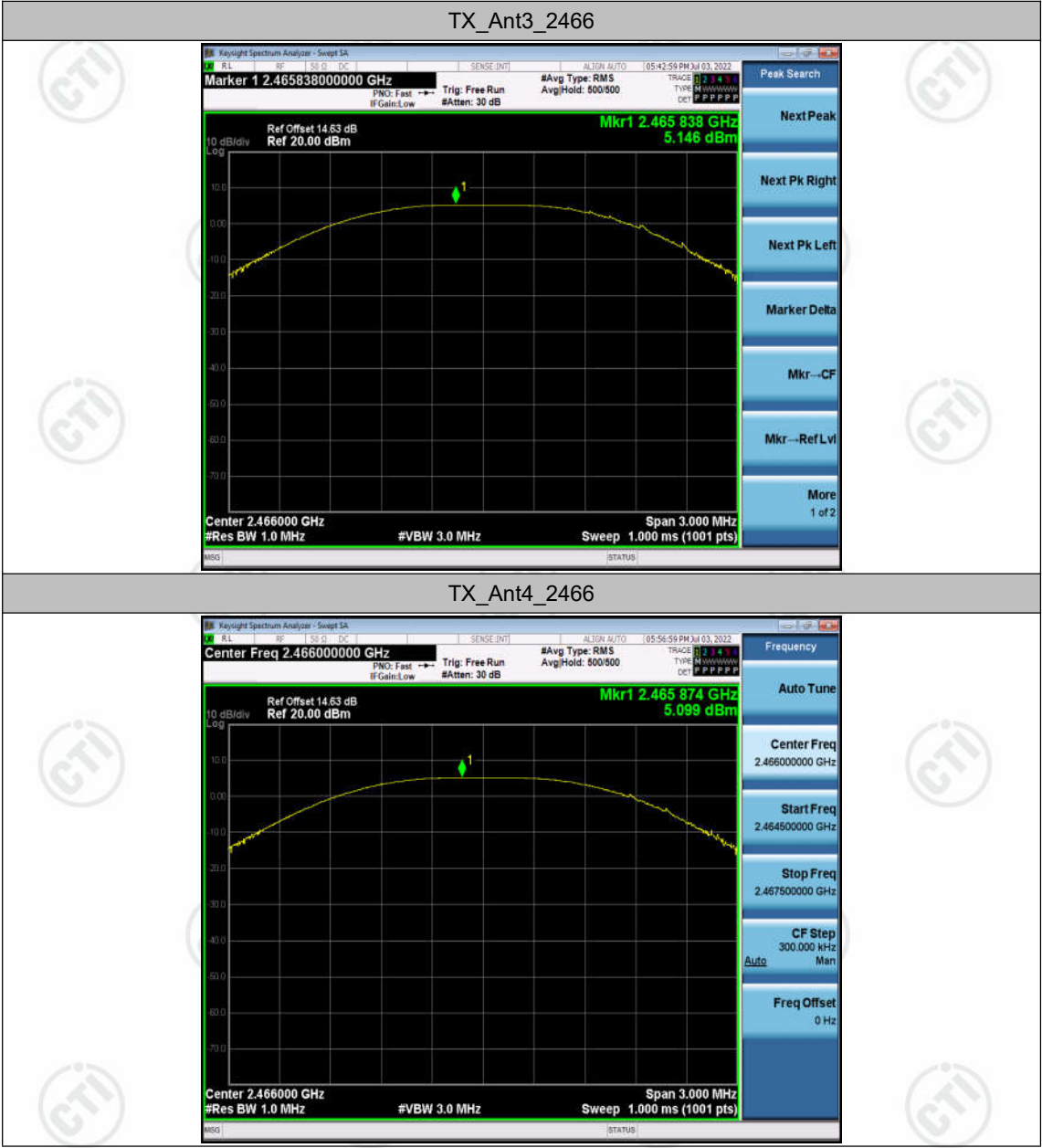
Test Result Peak

| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|----------------|---------------------------|----------------------|---------|
| TX        | Ant1    | 2466           | 4.33                      | ≤20.97               | PASS    |
|           | Ant2    | 2466           | 4.26                      | ≤20.97               | PASS    |
|           | Ant3    | 2466           | 5.14                      | ≤20.97               | PASS    |
|           | Ant4    | 2466           | 5.1                       | ≤20.97               | PASS    |
|           | Ant1    | 2473           | 4.24                      | ≤20.97               | PASS    |
|           | Ant2    | 2473           | 4.23                      | ≤20.97               | PASS    |
|           | Ant3    | 2473           | 5                         | ≤20.97               | PASS    |
|           | Ant4    | 2473           | 5.24                      | ≤20.97               | PASS    |
|           | Ant1    | 2480           | 4.26                      | ≤20.97               | PASS    |
|           | Ant2    | 2480           | 4.18                      | ≤20.97               | PASS    |
|           | Ant3    | 2480           | 5.02                      | ≤20.97               | PASS    |
|           | Ant4    | 2480           | 5.24                      | ≤20.97               | PASS    |

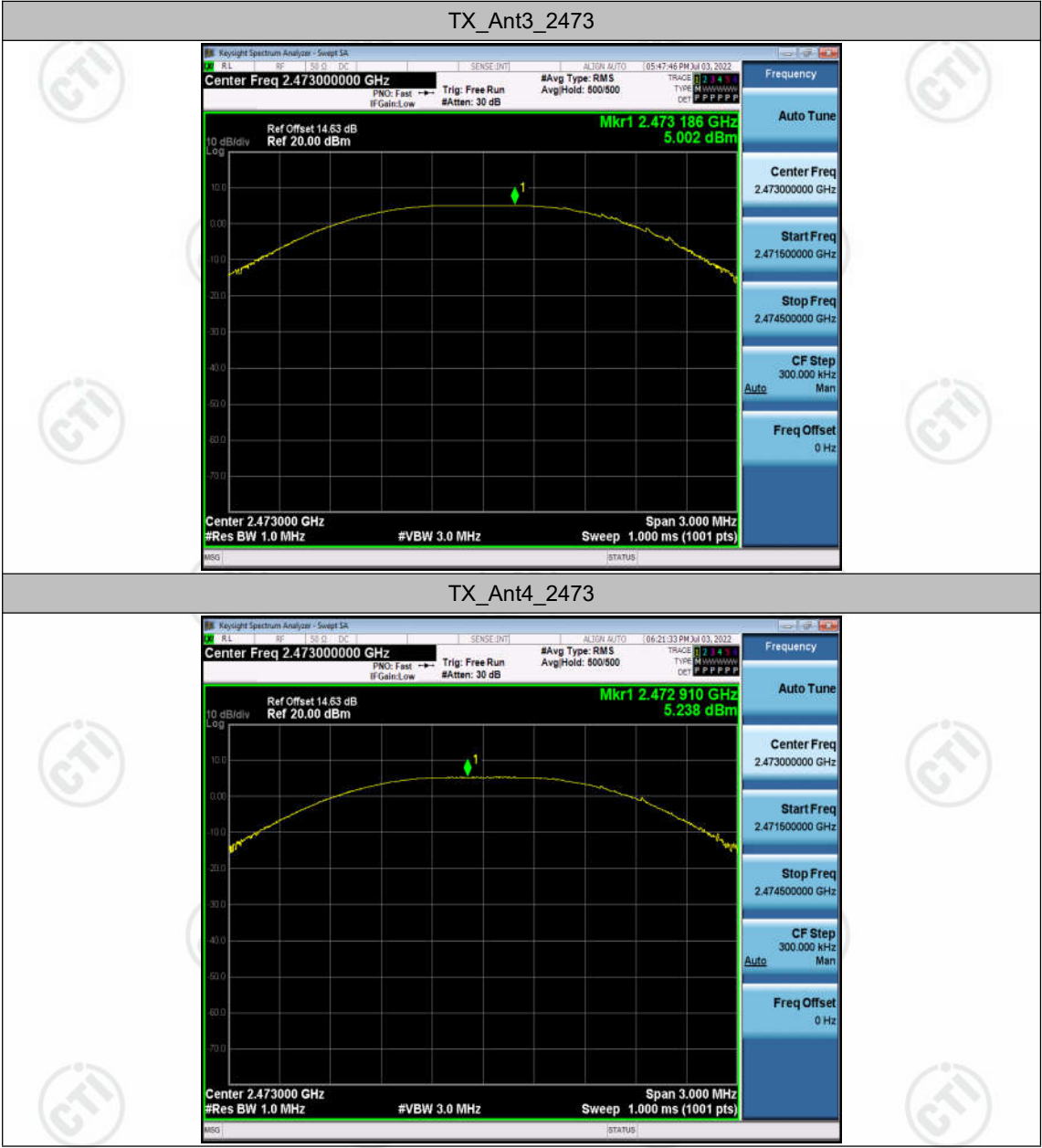
Test Graphs

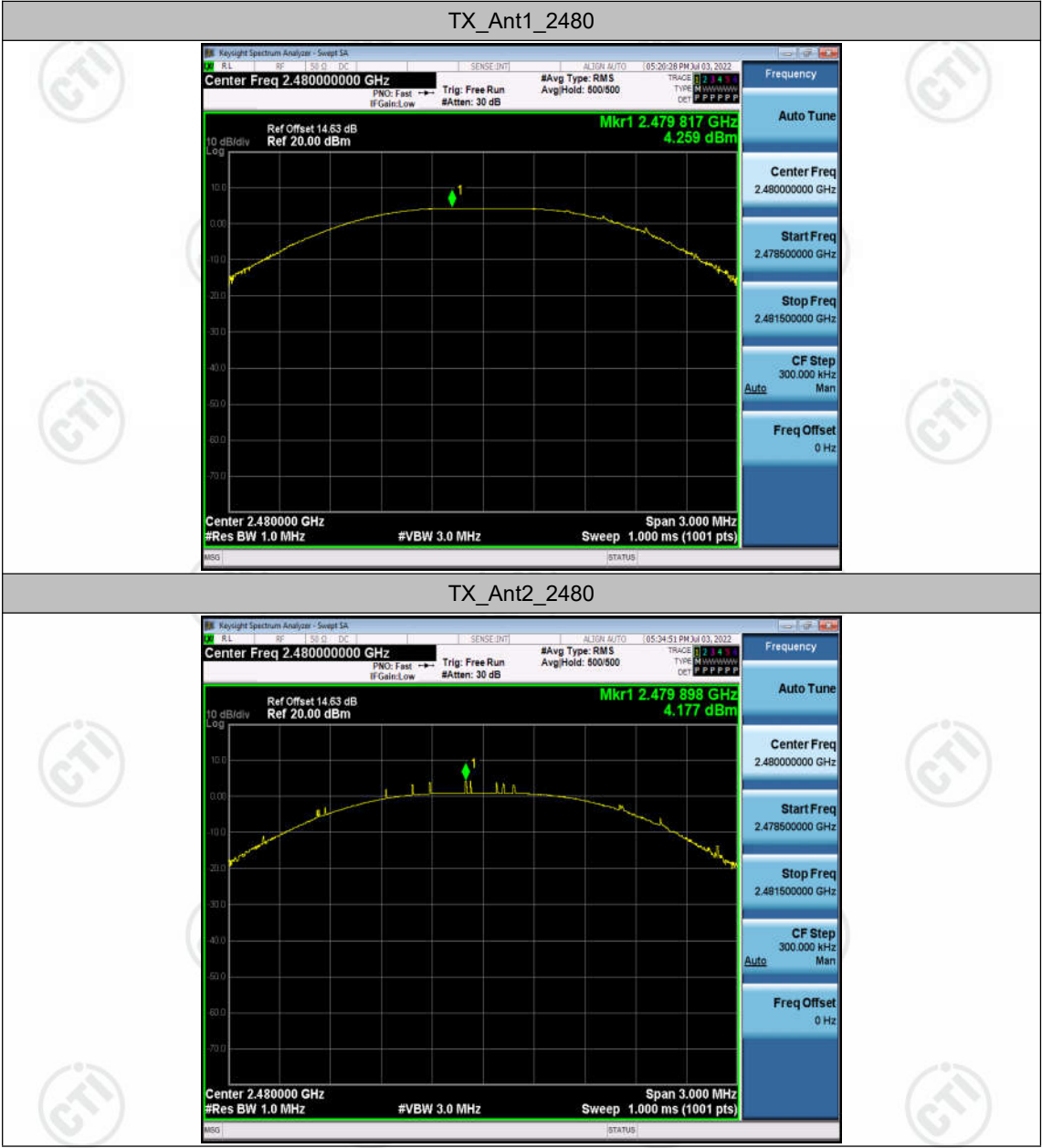


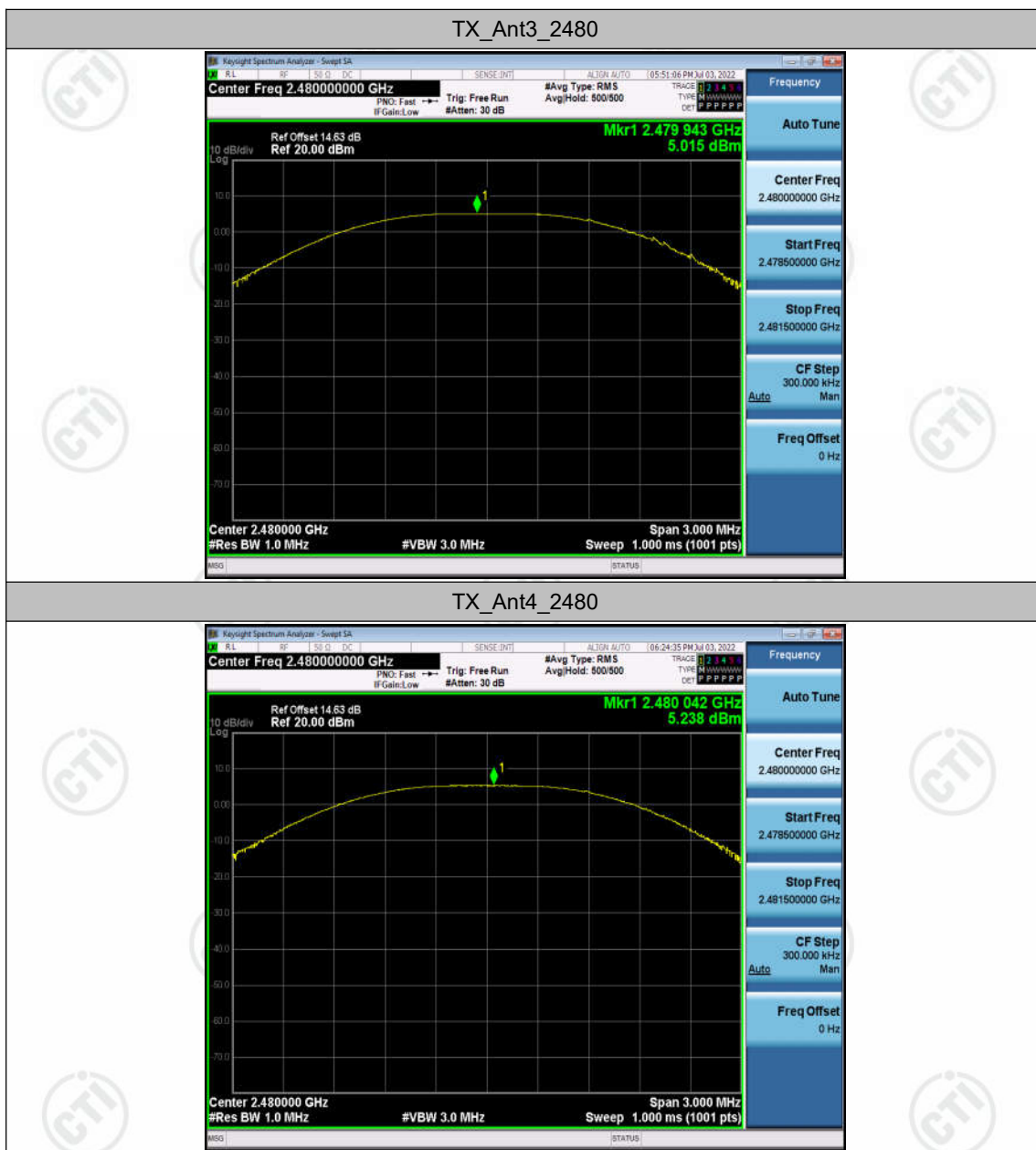












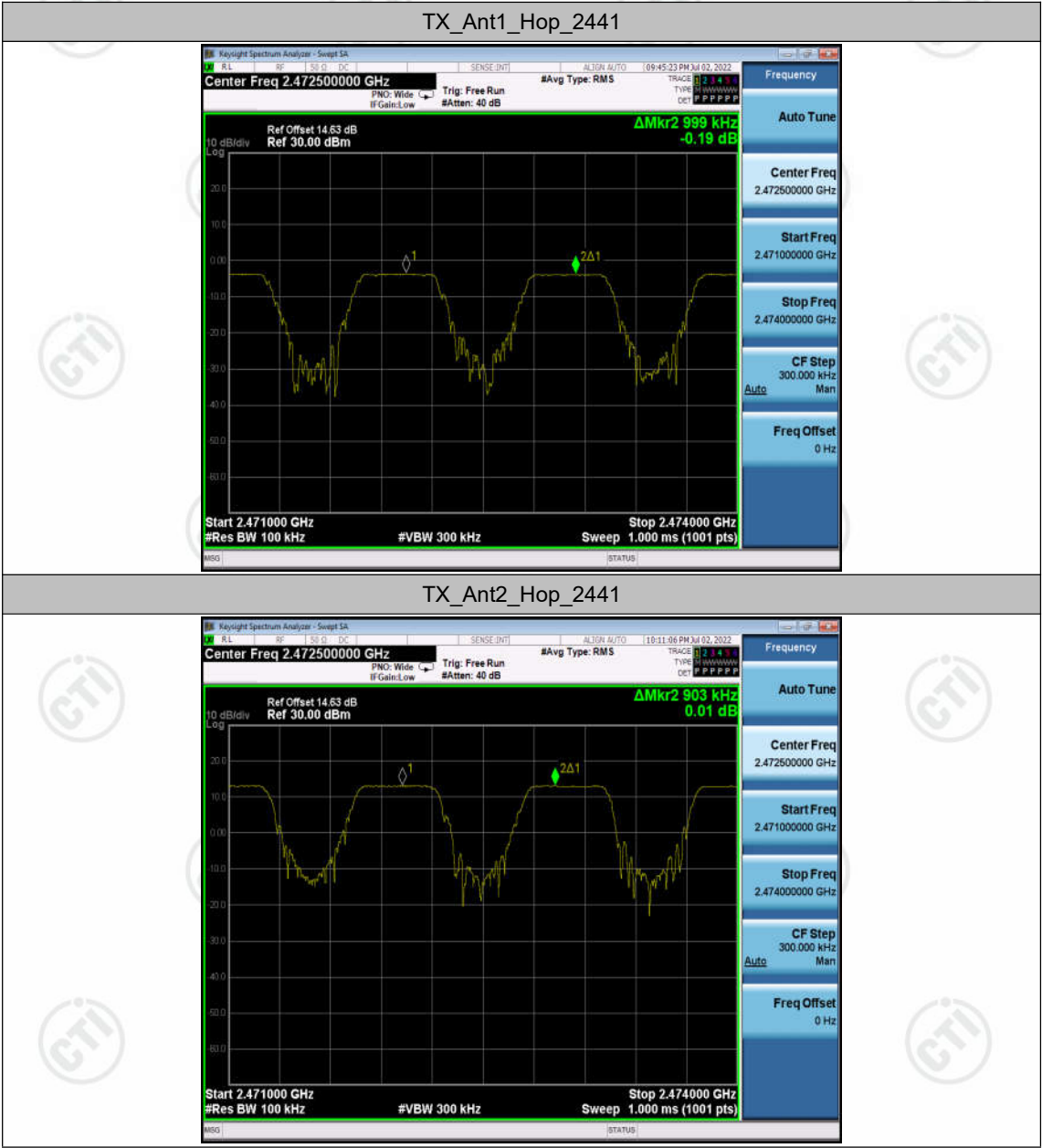


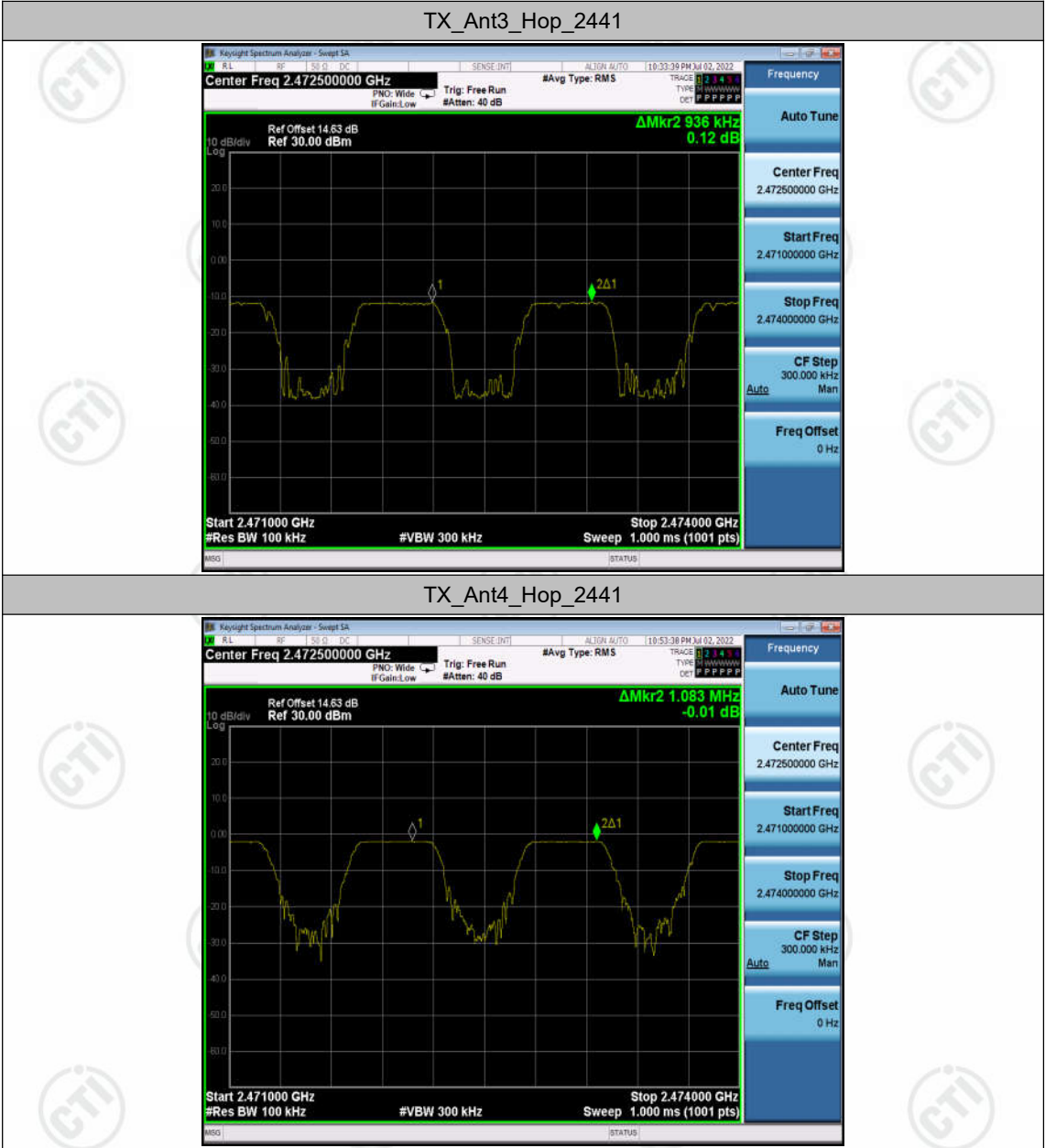
Appendix D: Carrier frequency separation

Test Result

| Test Mode | Antenna | Frequency[MHz] | Result[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|-------------|------------|---------|
| TX        | Ant1    | Hop_2441       | 0.999       | ≥0.531     | PASS    |
|           | Ant2    | Hop_2441       | 0.903       | ≥0.532     | PASS    |
|           | Ant3    | Hop_2441       | 0.936       | ≥0.525     | PASS    |
|           | Ant4    | Hop_2441       | 1.083       | ≥0.512     | PASS    |

Test Graphs



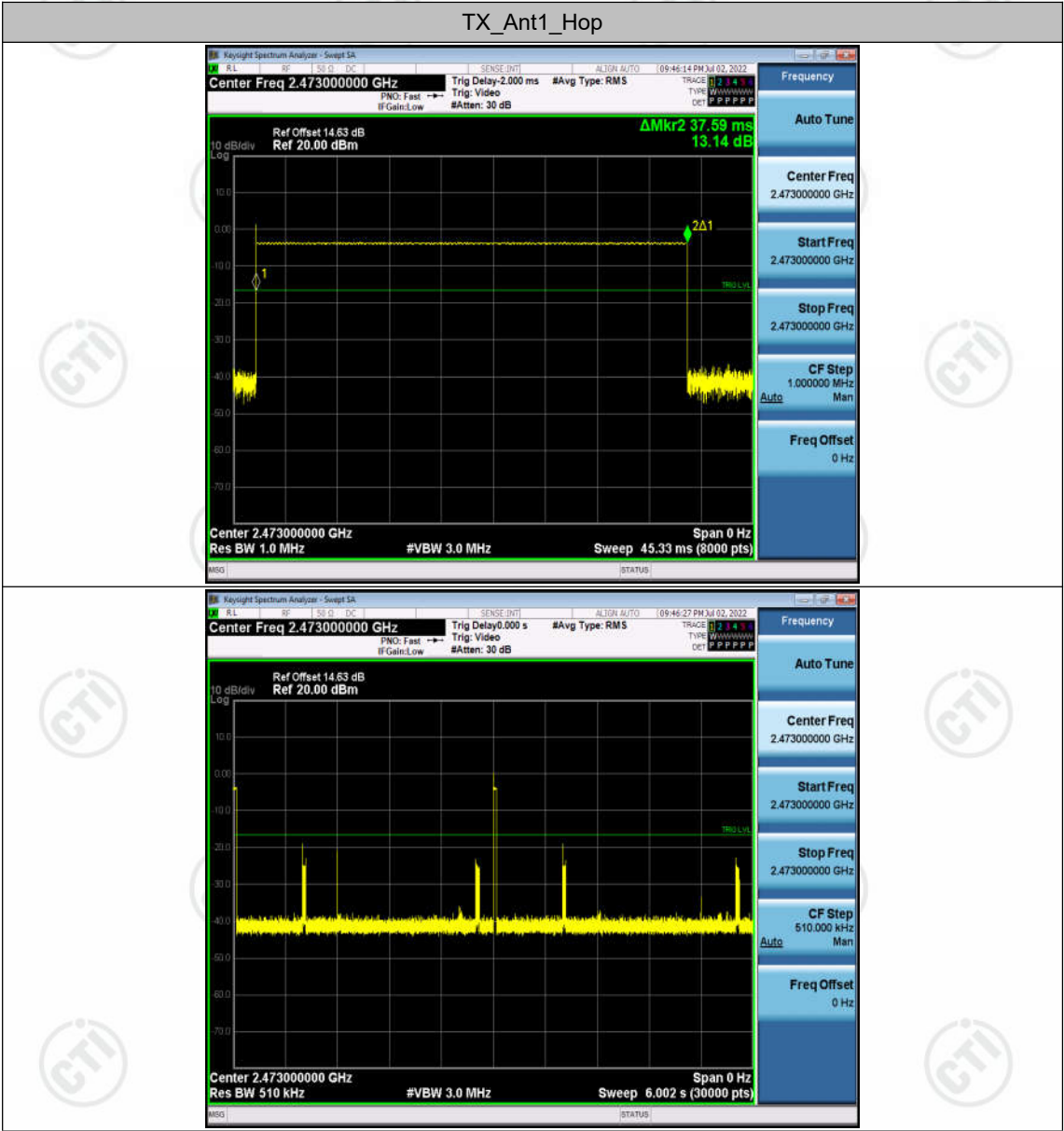


Appendix E: Time of occupancy

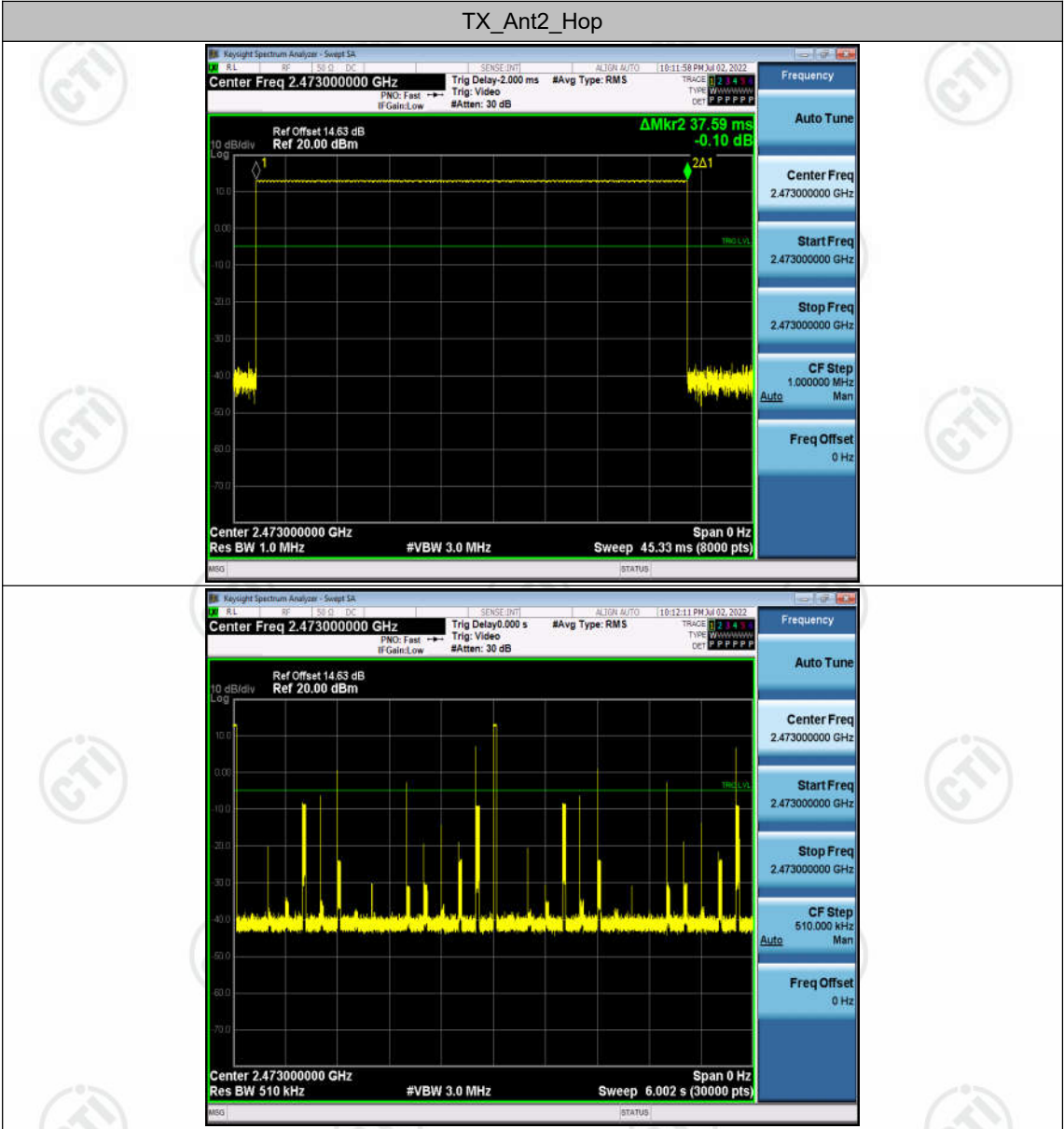
Test Result

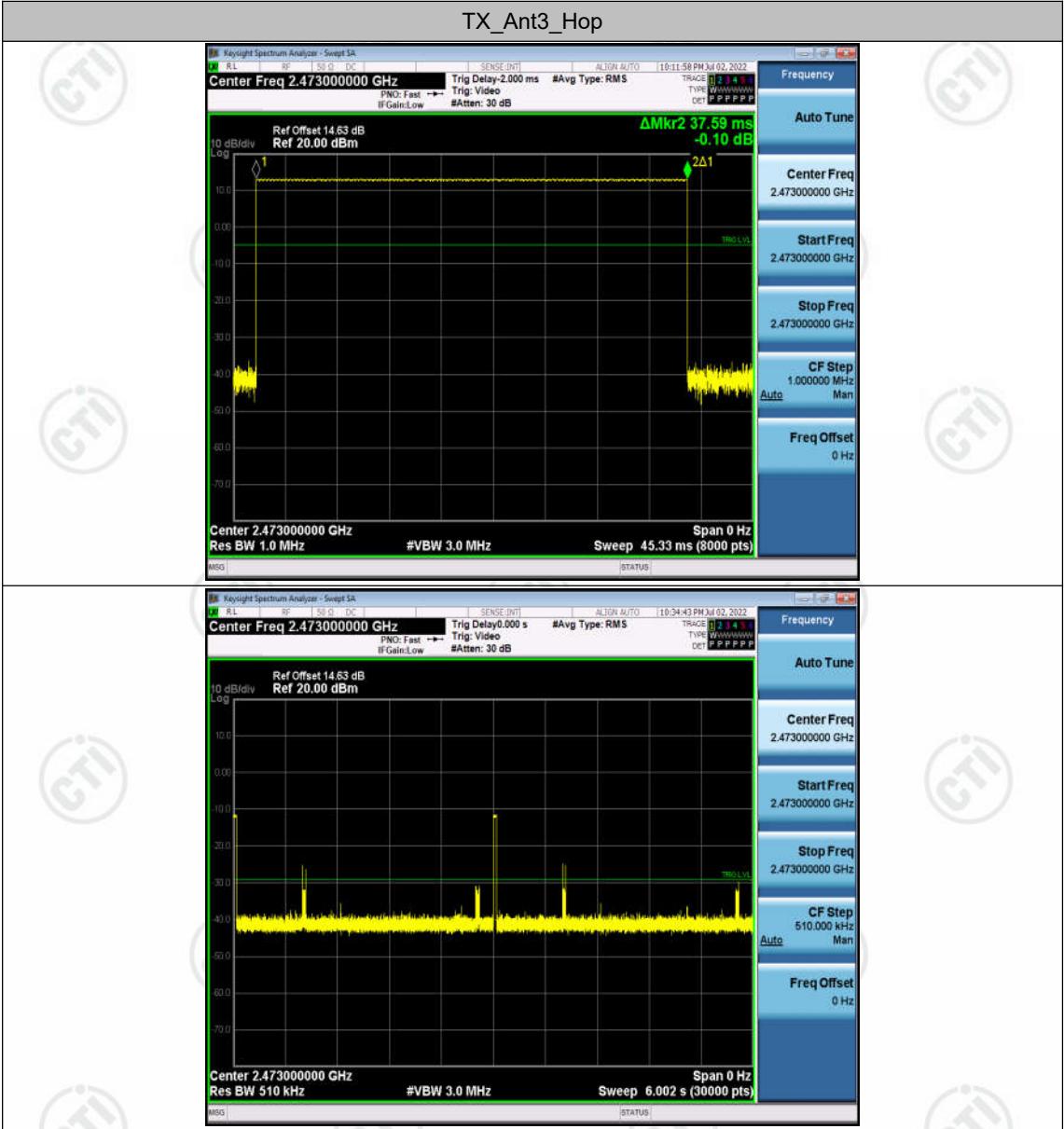
| Test Mode | Antenna | Frequency[MHz] | BurstWidth [ms] | TotalHops [Num] | Result[s] | Limit[s] | Verdict |
|-----------|---------|----------------|-----------------|-----------------|-----------|----------|---------|
| TX        | Ant1    | Hop            | 37.59           | 2               | 0.075     | ≤0.4     | PASS    |
|           | Ant2    | Hop            | 37.59           | 3               | 0.113     | ≤0.4     | PASS    |
|           | Ant3    | Hop            | 37.59           | 2               | 0.075     | ≤0.4     | PASS    |
|           | Ant4    | Hop            | 37.59           | 2               | 0.075     | ≤0.4     | PASS    |

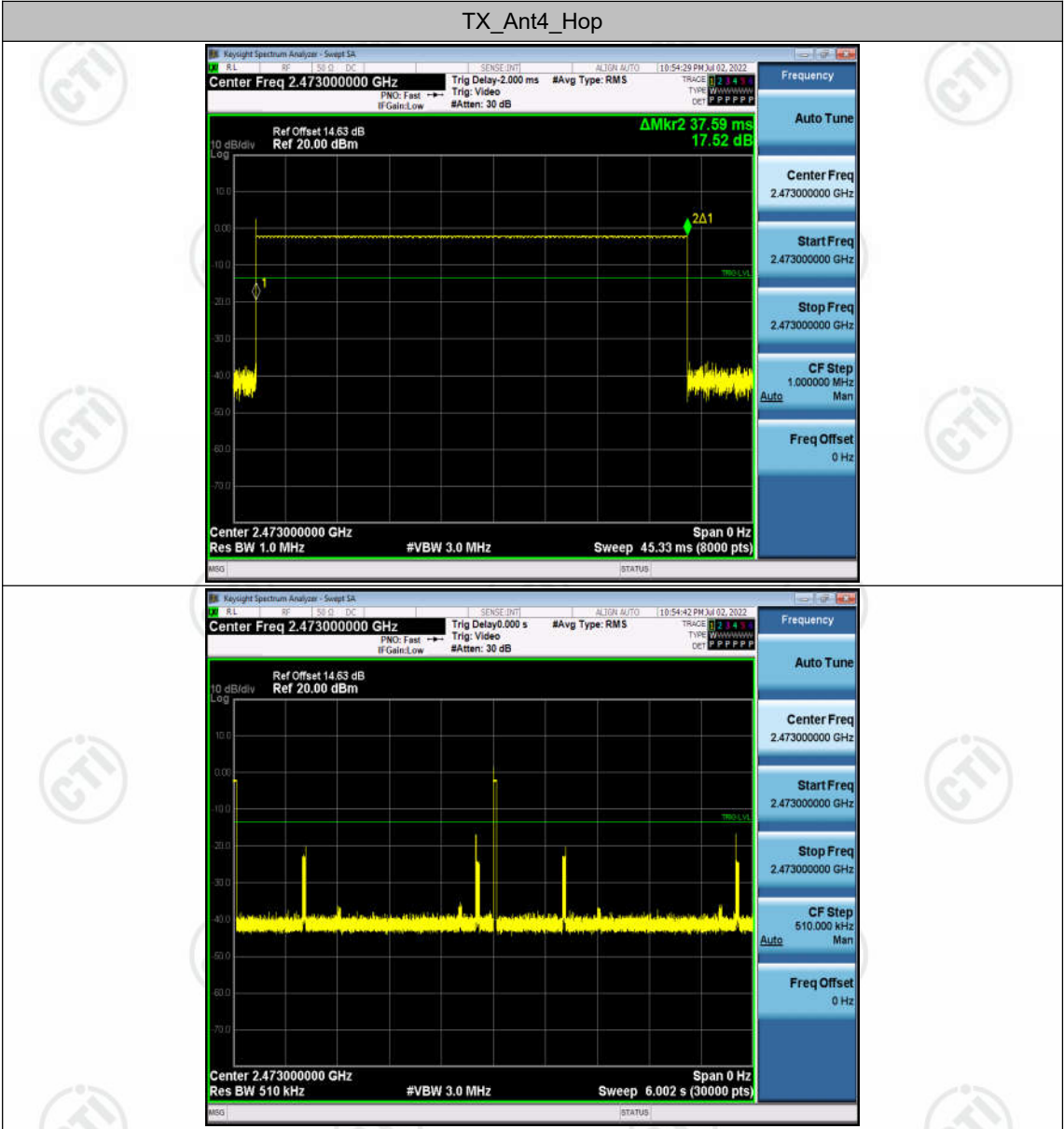
Test Graphs









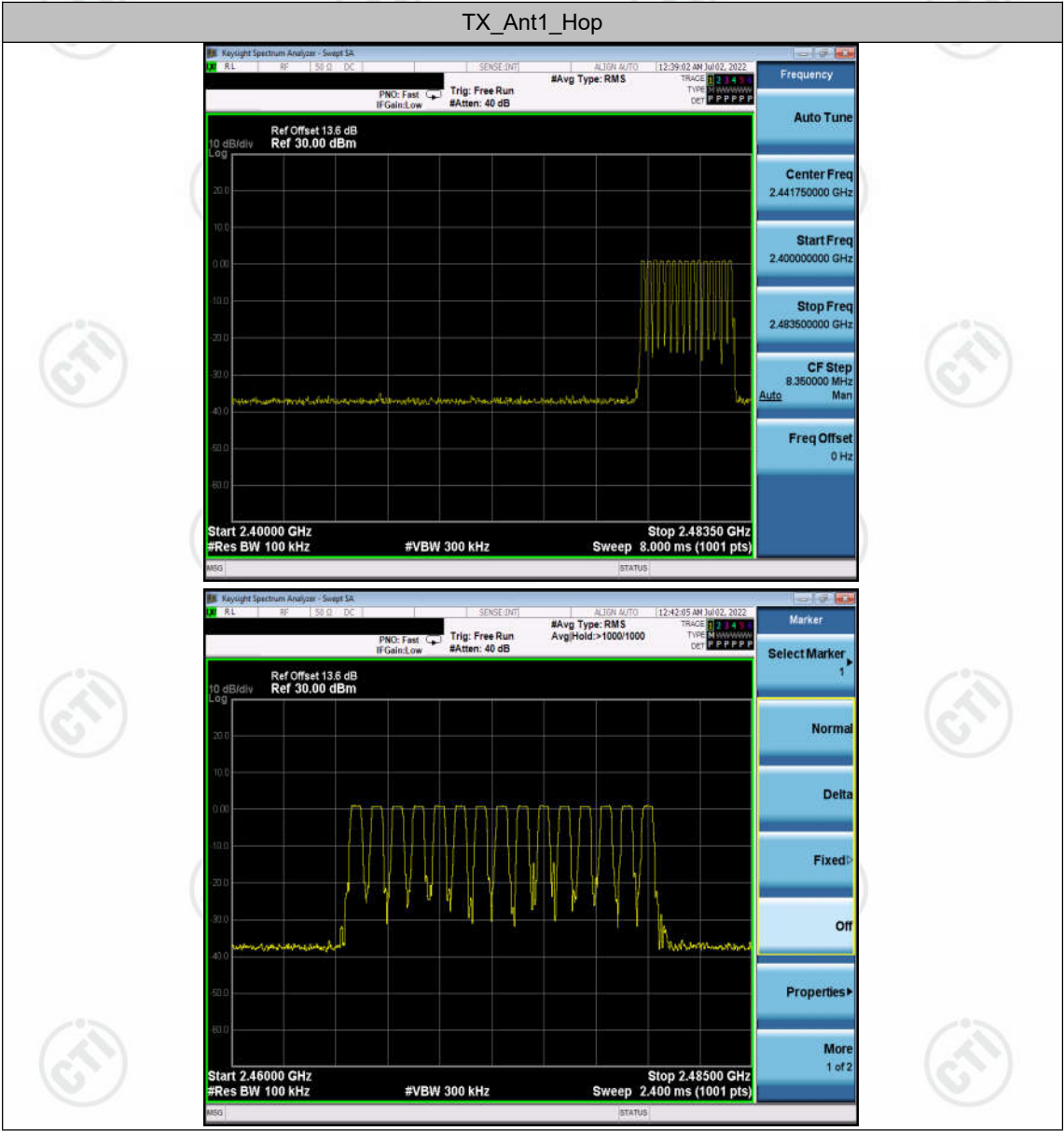


Appendix F: Number of hopping channels

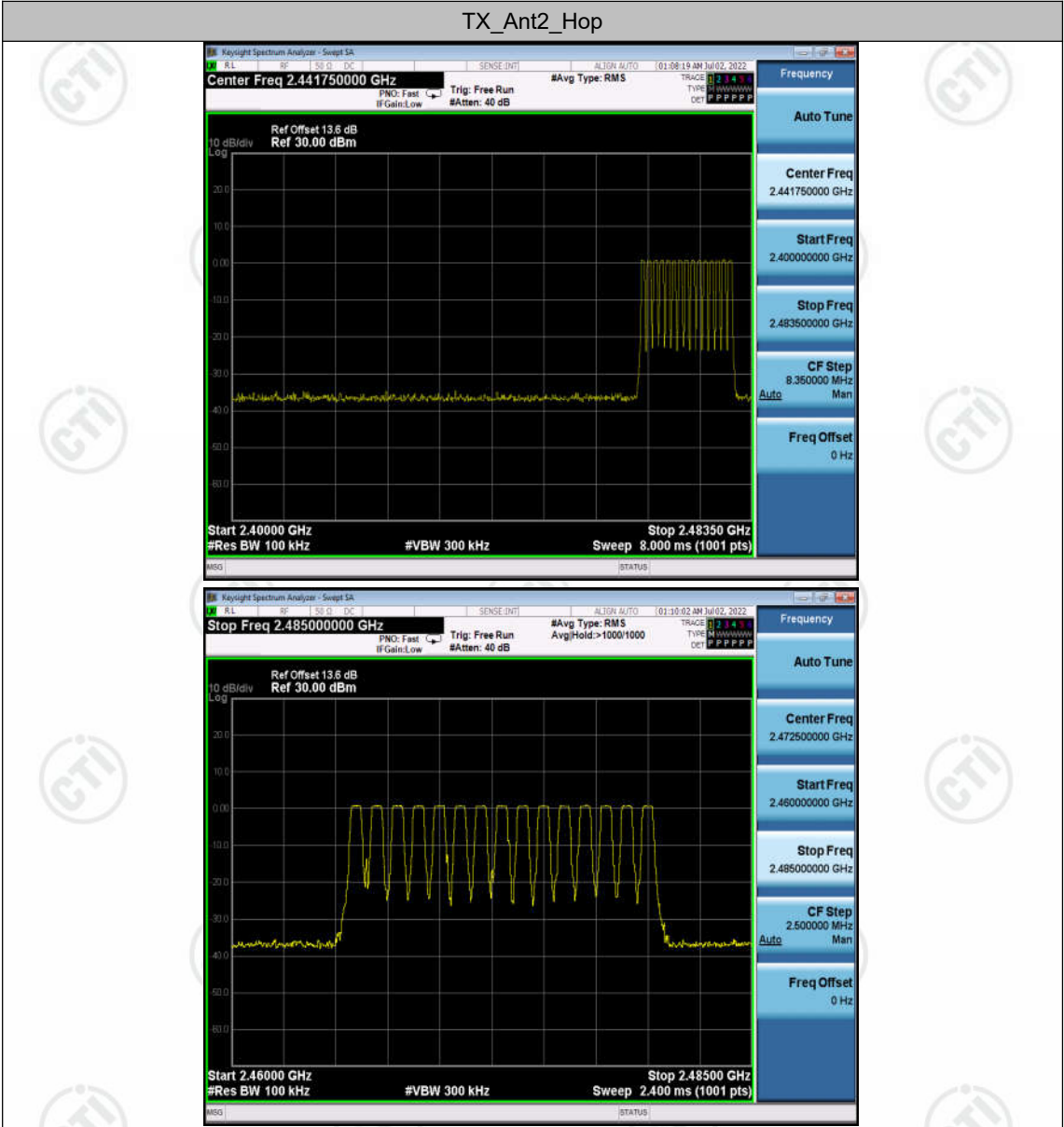
Test Result

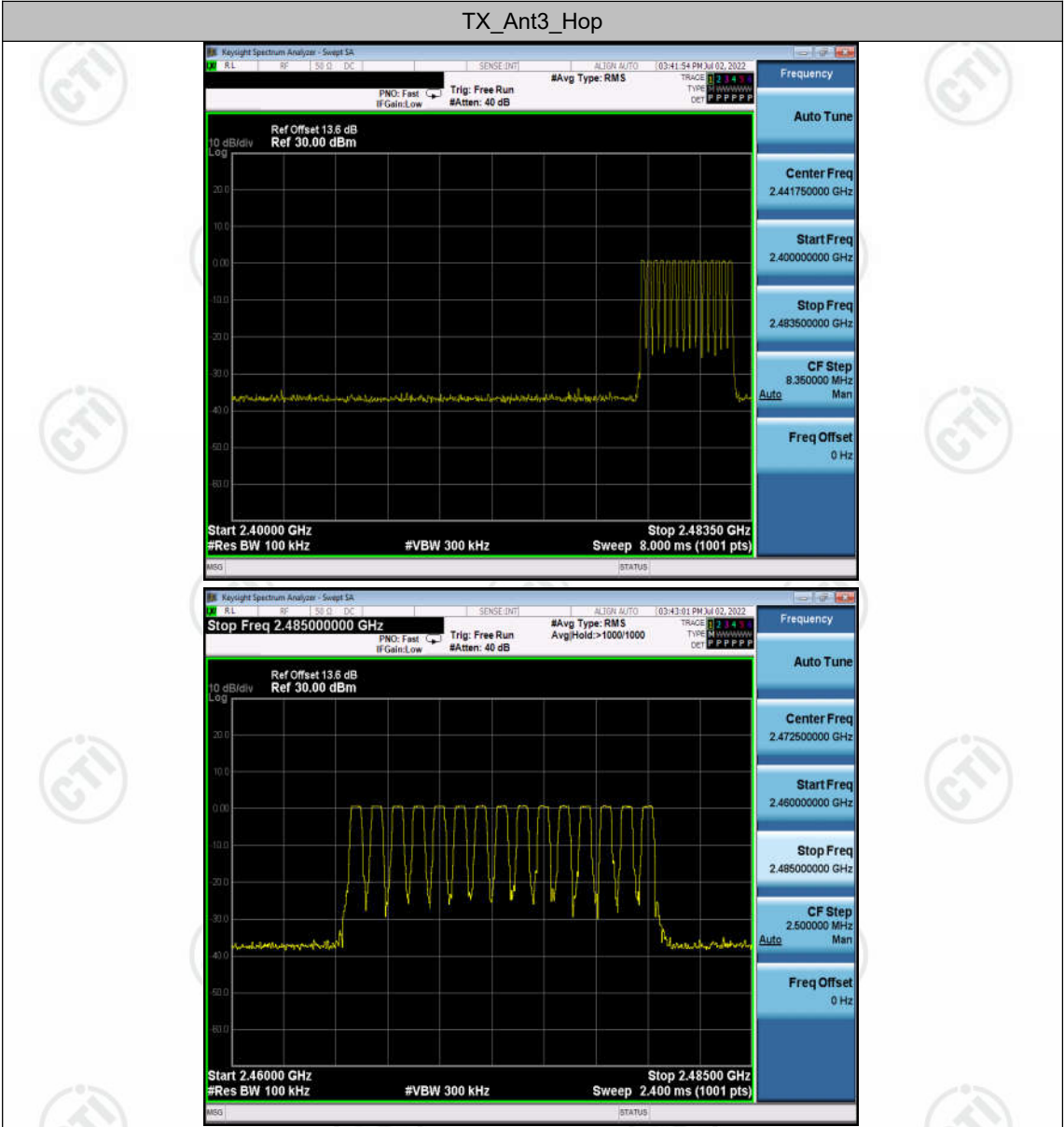
| Test Mode | Antenna | Frequency[MHz] | Result[Num] | Limit[Num] | Verdict |
|-----------|---------|----------------|-------------|------------|---------|
| TX        | Ant1    | Hop            | 15          | ≥15        | PASS    |
|           | Ant2    | Hop            | 15          | ≥15        | PASS    |
|           | Ant3    | Hop            | 15          | ≥15        | PASS    |
|           | Ant4    | Hop            | 15          | ≥15        | PASS    |

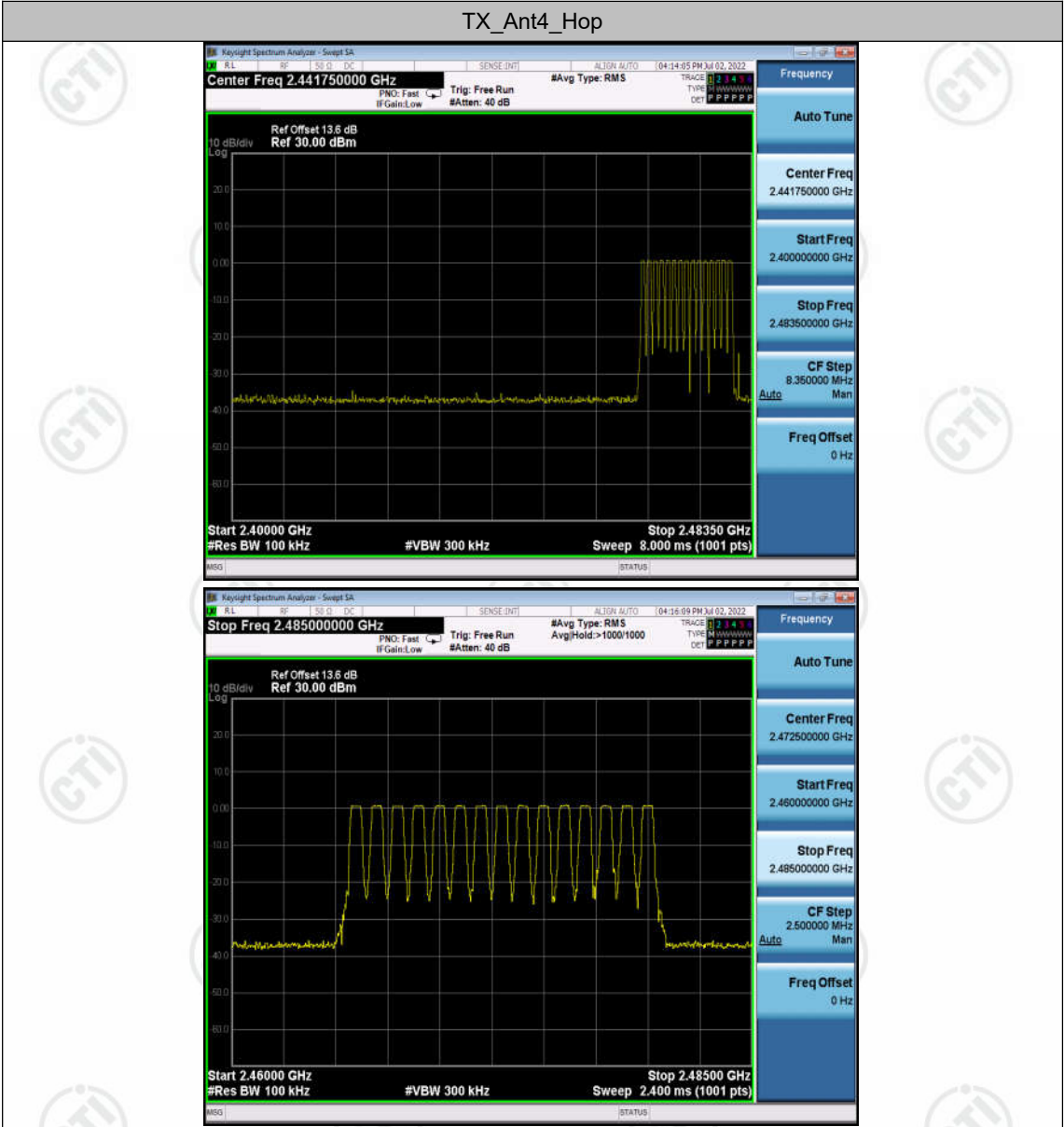
Test Graphs











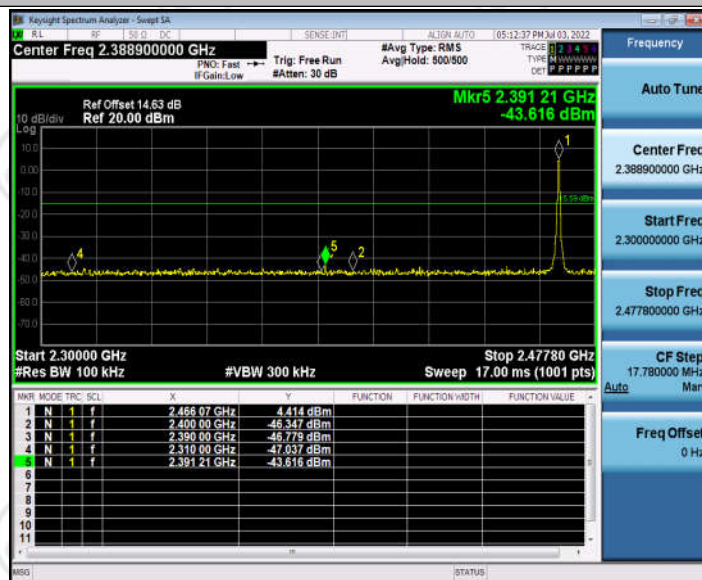
## Appendix G: Band edge measurements

### Test Result

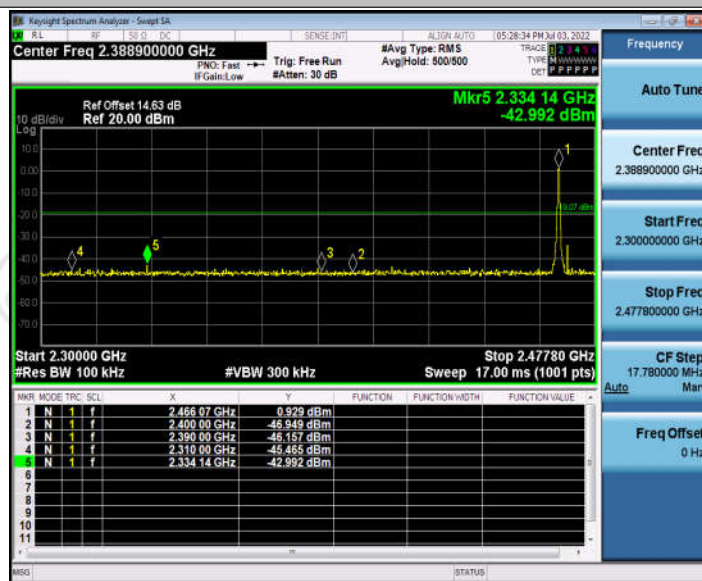
| Test Mode | Antenna | ChName | Frequency[MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|--------|----------------|----------------|--------------|-------------|---------|
| TX        | Ant1    | Low    | 2466           | 4.41           | -43.62       | ≤-15.59     | PASS    |
|           | Ant2    | Low    | 2466           | 0.93           | -42.99       | ≤-19.07     | PASS    |
|           | Ant3    | Low    | 2466           | 5.41           | -44.26       | ≤-14.59     | PASS    |
|           | Ant4    | Low    | 2466           | 5.23           | -44.42       | ≤-14.78     | PASS    |
|           | Ant1    | High   | 2480           | 4.35           | -44.48       | ≤-15.65     | PASS    |
|           | Ant2    | High   | 2480           | 0.89           | -44.46       | ≤-19.11     | PASS    |
|           | Ant3    | High   | 2480           | 5.12           | -44.45       | ≤-14.89     | PASS    |
|           | Ant4    | High   | 2480           | 5.35           | -44.3        | ≤-14.65     | PASS    |
|           | Ant1    | Low    | Hop            | 4.13           | -44.23       | ≤-15.87     | PASS    |
|           | Ant2    | Low    | Hop            | 0.89           | -44.59       | ≤-19.11     | PASS    |
|           | Ant3    | Low    | Hop            | 5.01           | -44.7        | ≤-14.99     | PASS    |
|           | Ant4    | Low    | Hop            | 5.13           | -44.42       | ≤-14.87     | PASS    |
|           | Ant1    | High   | Hop            | 4.25           | -43.81       | ≤-15.75     | PASS    |
|           | Ant2    | High   | Hop            | 0.90           | -43.7        | ≤-19.11     | PASS    |
|           | Ant3    | High   | Hop            | 5.13           | -44.23       | ≤-14.87     | PASS    |
|           | Ant4    | High   | Hop            | 5.36           | -44.2        | ≤-14.64     | PASS    |

## Test Graphs

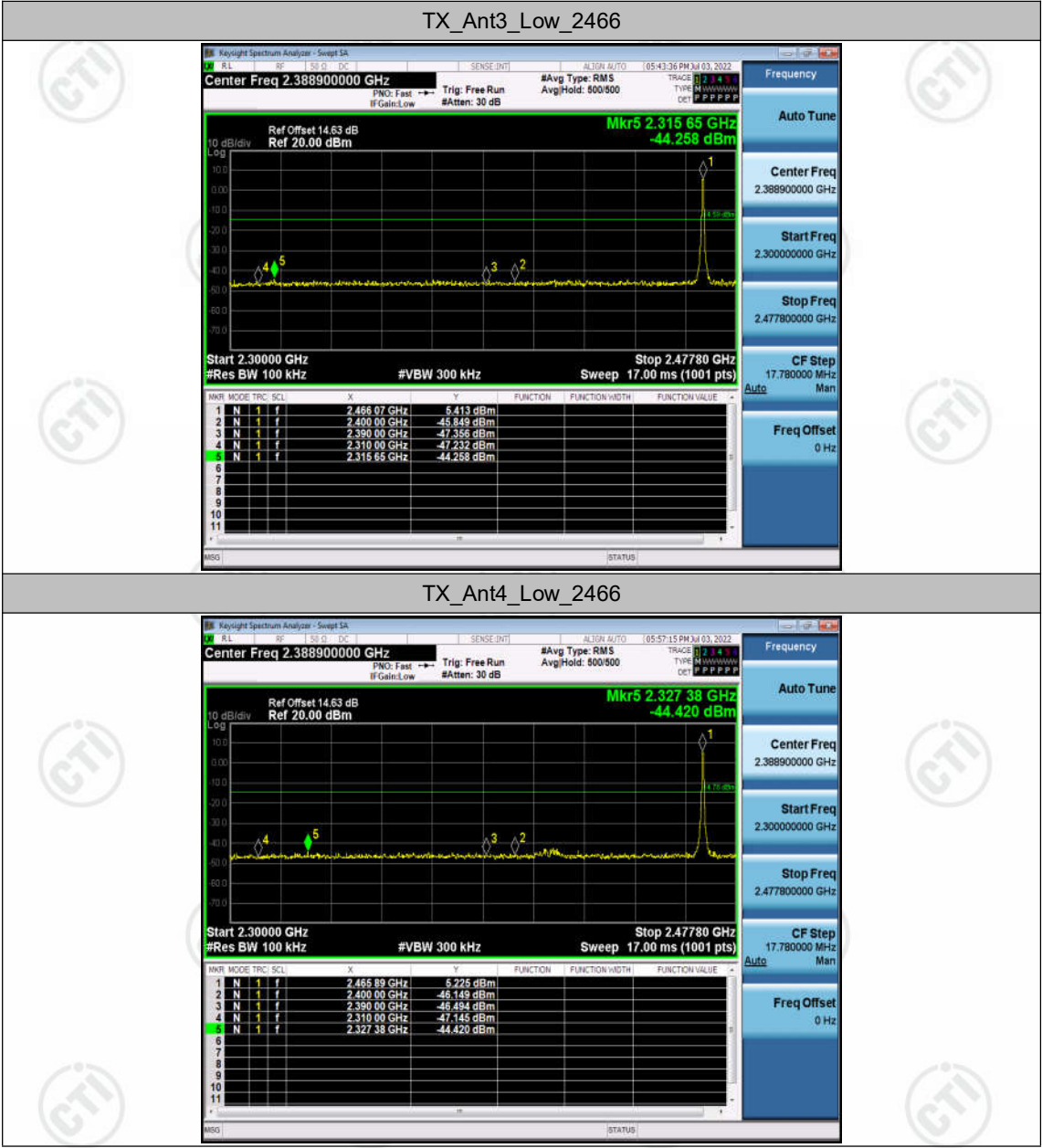
TX\_Ant1\_Low\_2466

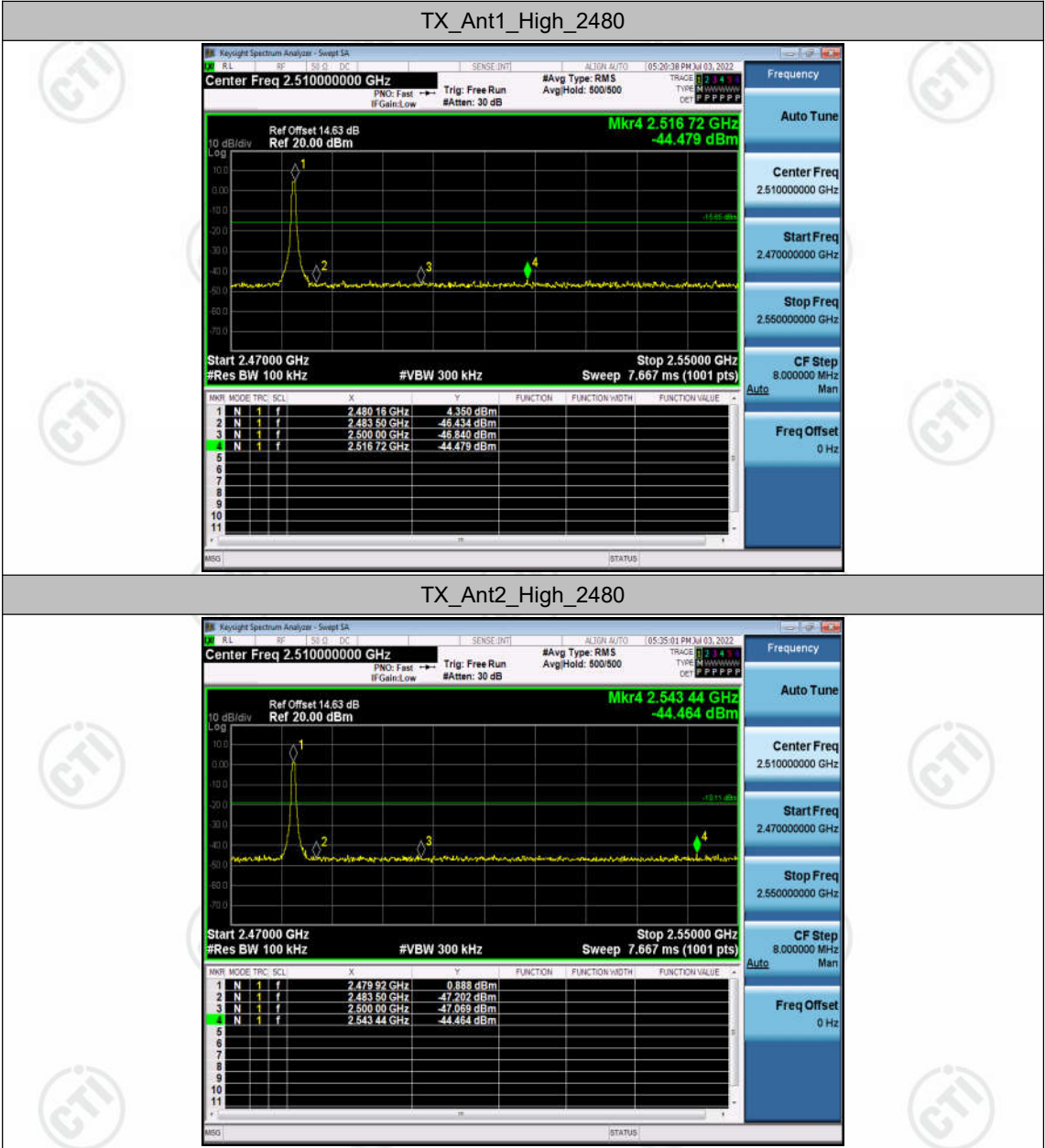


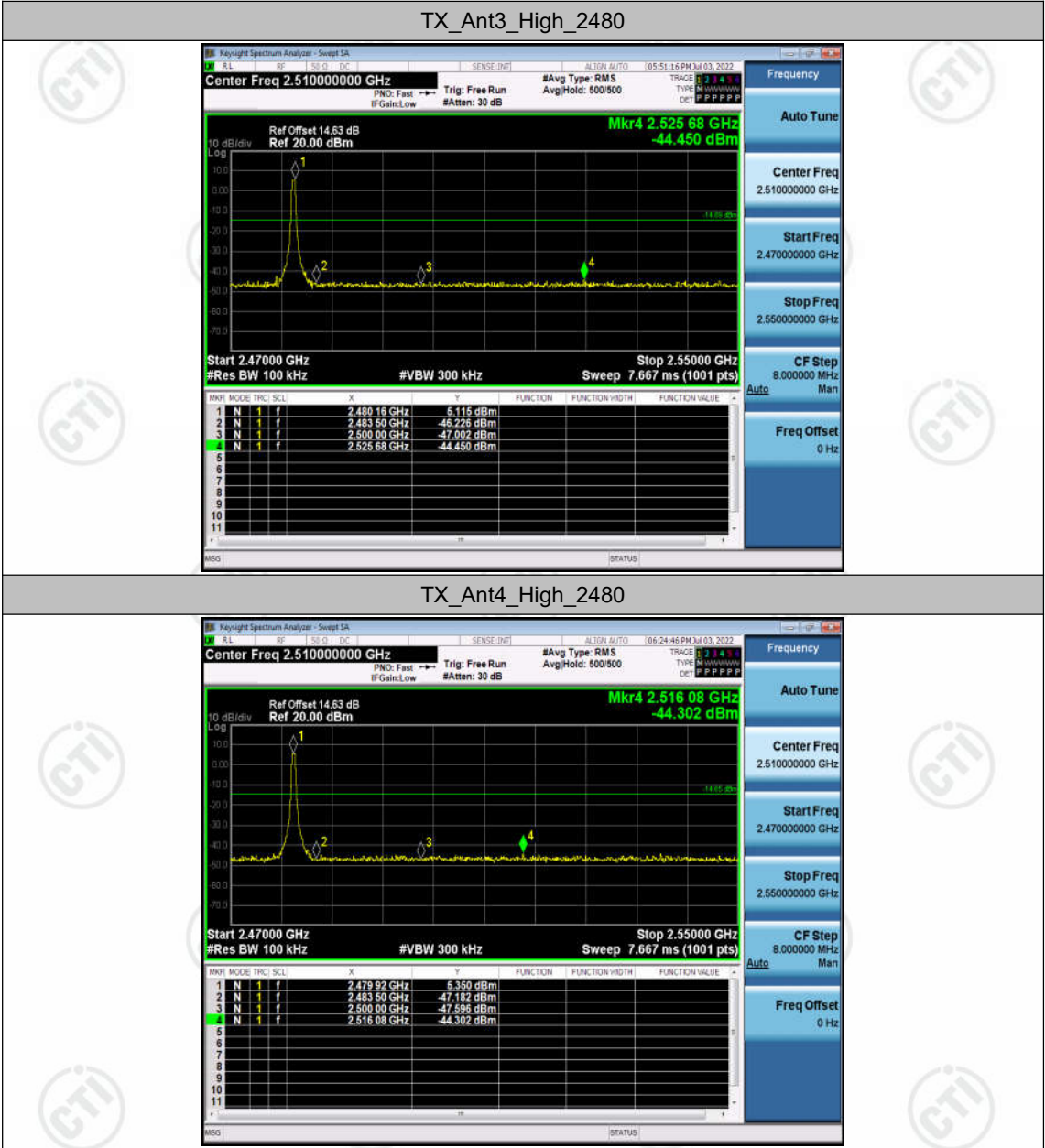
TX\_Ant2\_Low\_2466

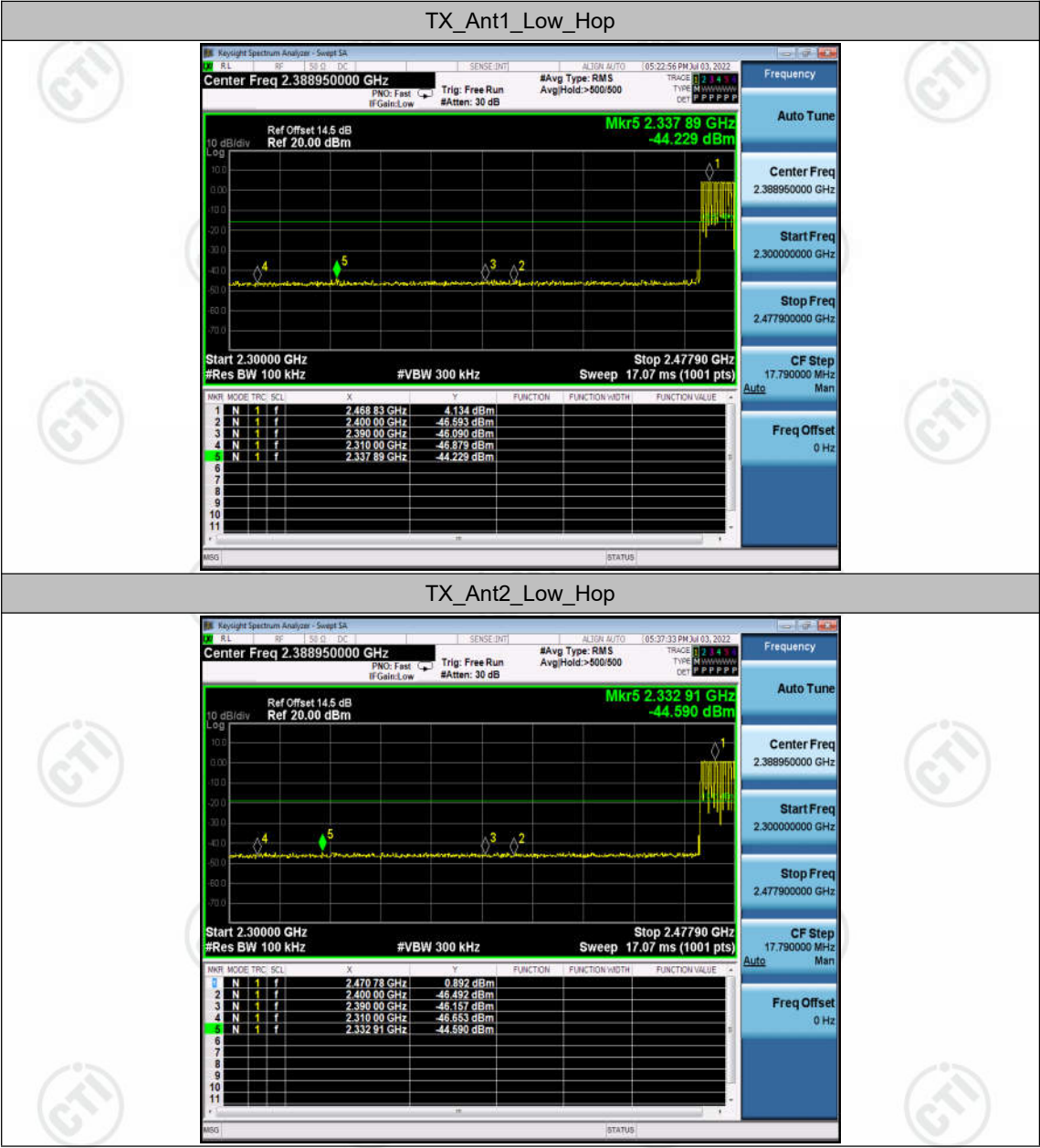






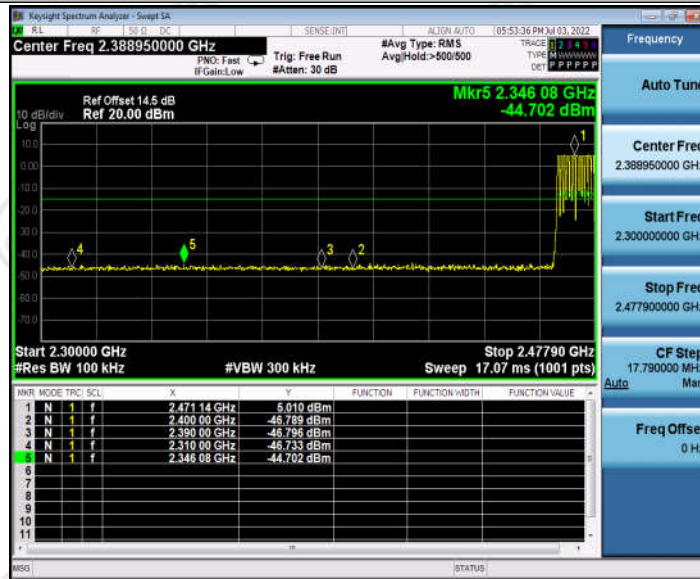








## TX\_Ant3\_Low\_Hop



## TX\_Ant4\_Low\_Hop

