

## Appendix Test Data for SRD (Conducted Measurement)

**Product Name:** Wireless Mechanical Keyboard

**Trade Mark:** Keychron

**Test Model:** Q6 MAX

**FCC ID:** 2ASF4-Q6MAX

### Environmental Conditions

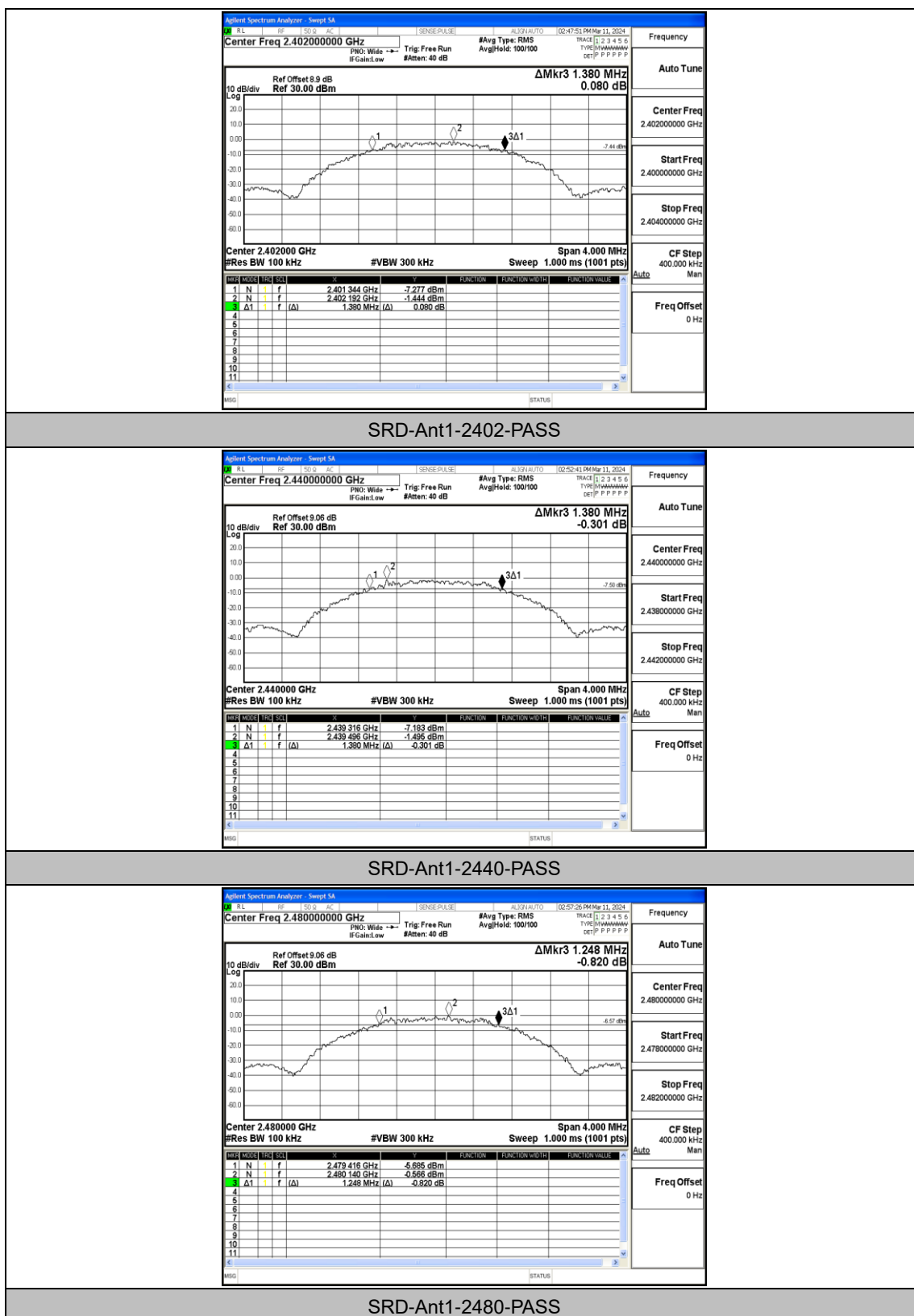
|                    |           |
|--------------------|-----------|
| Temperature:       | 22.8° C   |
| Relative Humidity: | 56%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Anna Hu   |
| Supervised by:     | Hugo Chen |
| NOTE               | N/A       |

## Appendix A: DTS Bandwidth

### Test Result

| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|----------------|--------------|----------|----------|------------|---------|
| SRD      | Ant1    | 2402           | 1.380        | 2401.344 | 2402.724 | 0.5        | PASS    |
| SRD      | Ant1    | 2440           | 1.380        | 2439.316 | 2440.696 | 0.5        | PASS    |
| SRD      | Ant1    | 2480           | 1.248        | 2479.416 | 2480.664 | 0.5        | PASS    |

## Test Graphs

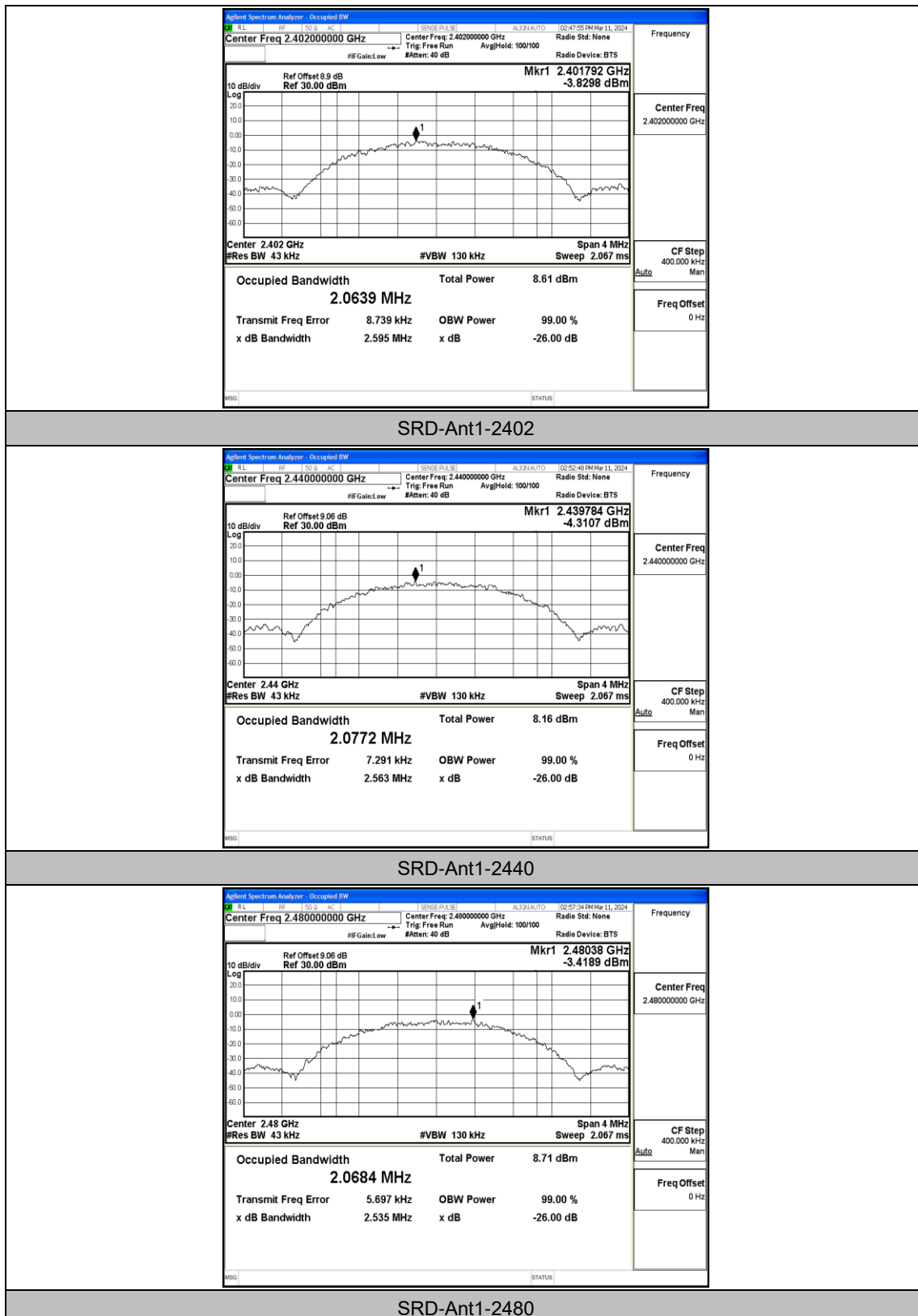


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Frequency[MHz] | OCB<br>[MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|----------------|--------------|-----------|-----------|------------|---------|
| SRD      | Ant1    | 2402           | 2.0639       | 2400.9768 | 2403.0407 | ---        | ---     |
| SRD      | Ant1    | 2440           | 2.0772       | 2438.9687 | 2441.0459 | ---        | ---     |
| SRD      | Ant1    | 2480           | 2.0684       | 2478.9715 | 2481.0399 | ---        | ---     |

## Test Graphs

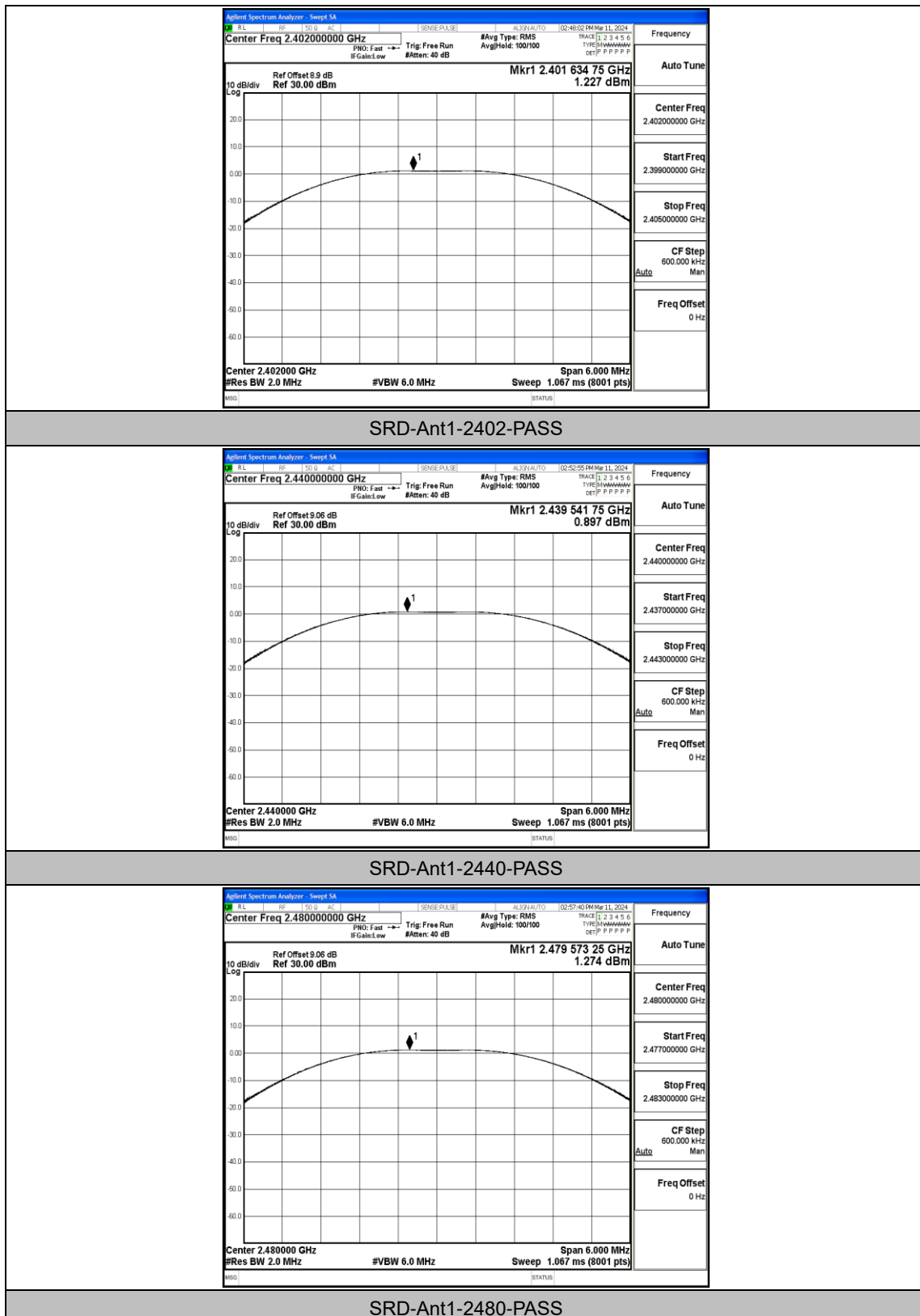


## Appendix C: Maximum peak conducted output power

### Test Result Peak

| TestMode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|----------|---------|----------------|---------------------------|----------------------|---------|
| SRD      | Ant1    | 2402           | 1.23                      | ≤30                  | PASS    |
| SRD      | Ant1    | 2440           | 0.90                      | ≤30                  | PASS    |
| SRD      | Ant1    | 2480           | 1.27                      | ≤30                  | PASS    |

## Test Graphs Peak

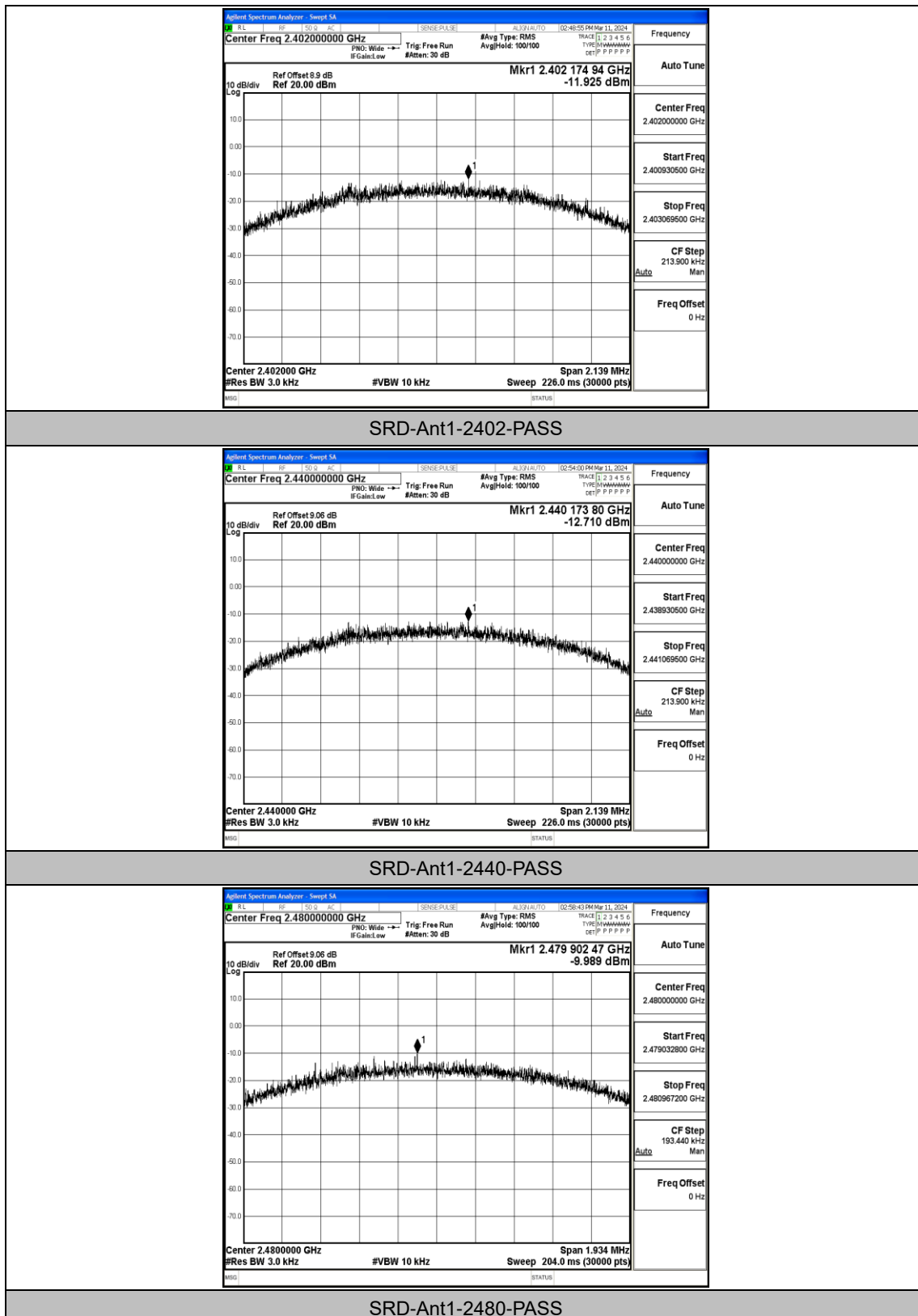


## Appendix D: Maximum peak power spectral density

### Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|----------|---------|----------------|------------------|-----------------|---------|
| SRD      | Ant1    | 2402           | -11.93           | ≤8.00           | PASS    |
| SRD      | Ant1    | 2440           | -12.71           | ≤8.00           | PASS    |
| SRD      | Ant1    | 2480           | -9.99            | ≤8.00           | PASS    |

## Test Graphs

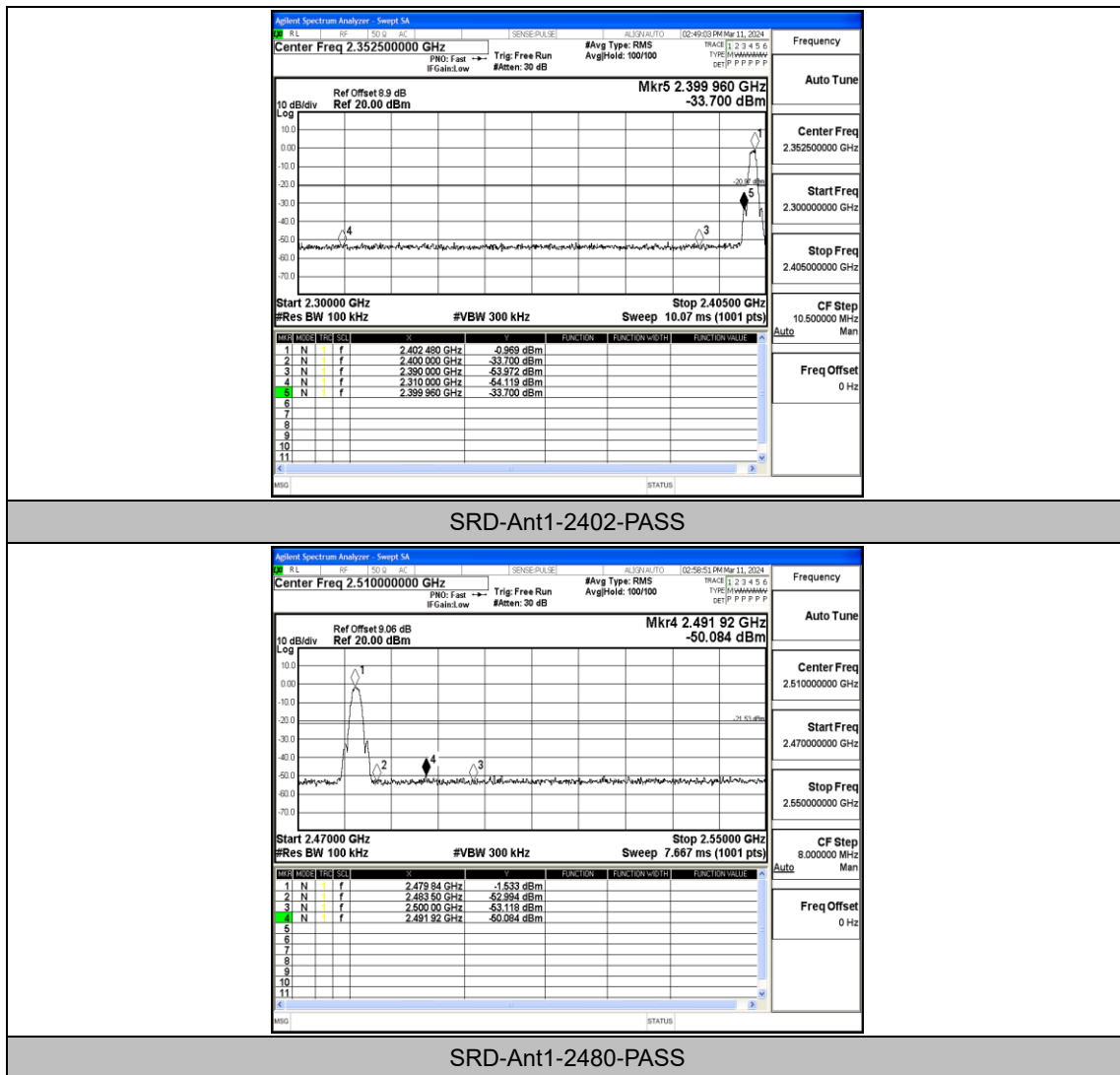


## Appendix E: Band edge measurements

### Test Result

| TestMode | Antenna | Channel | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|----------------|---------------|-------------|------------|---------|
| SRD      | Ant1    | Low     | 2402           | -0.97         | -33.7       | ≤-20.97    | PASS    |
| SRD      | Ant1    | High    | 2480           | -1.53         | -50.08      | ≤-21.53    | PASS    |

## Test Graphs

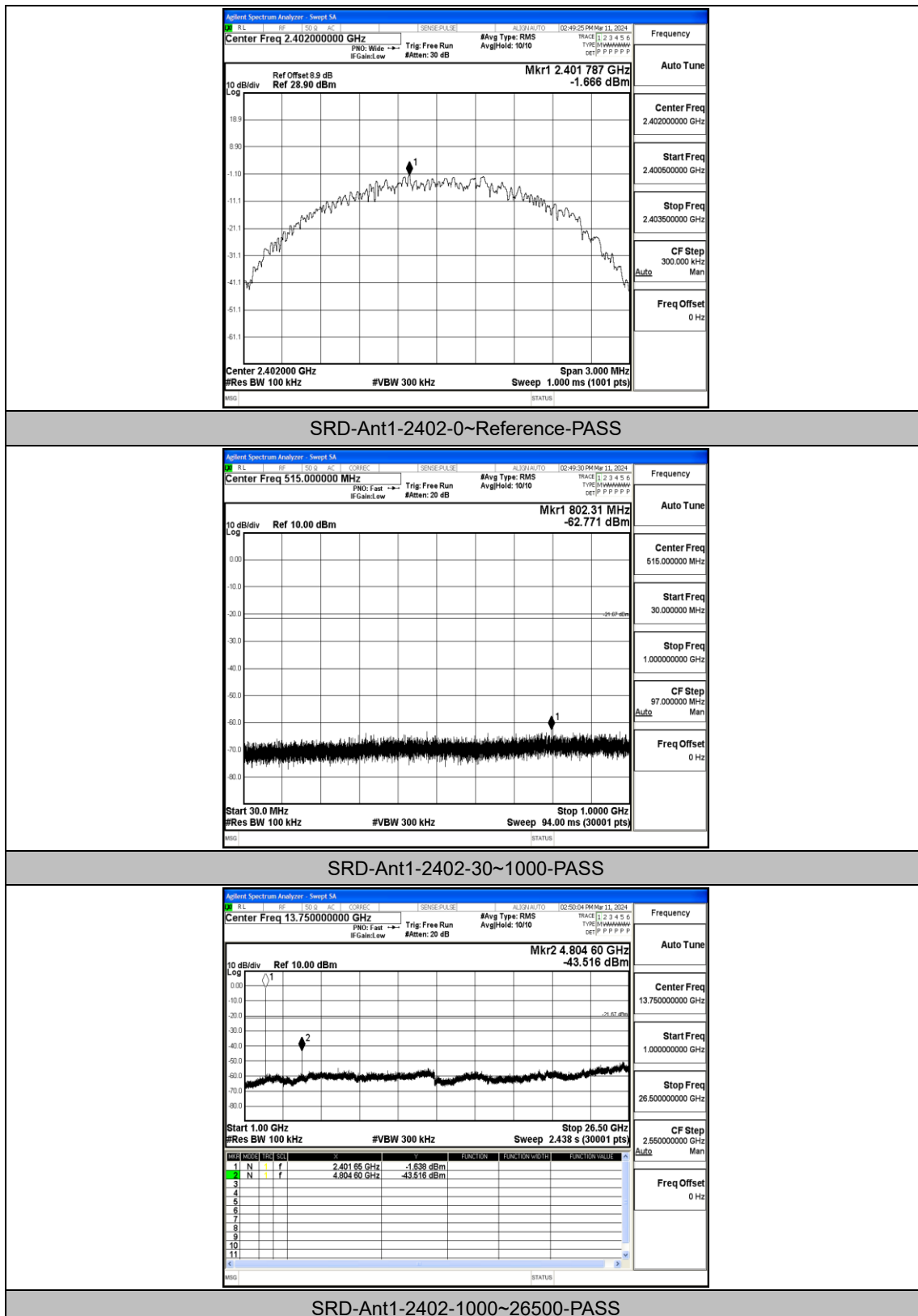


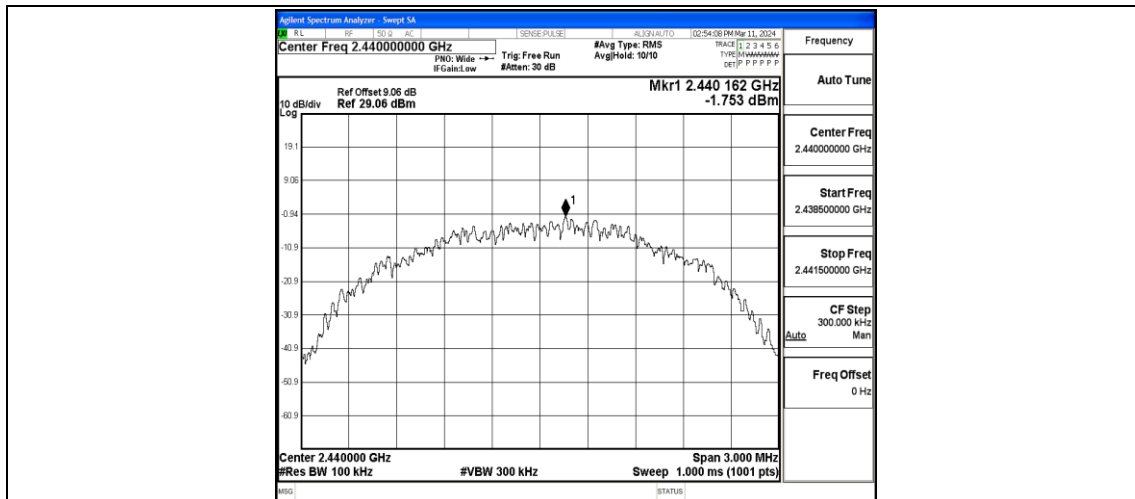
## Appendix F: Conducted Spurious Emission

### Test Result

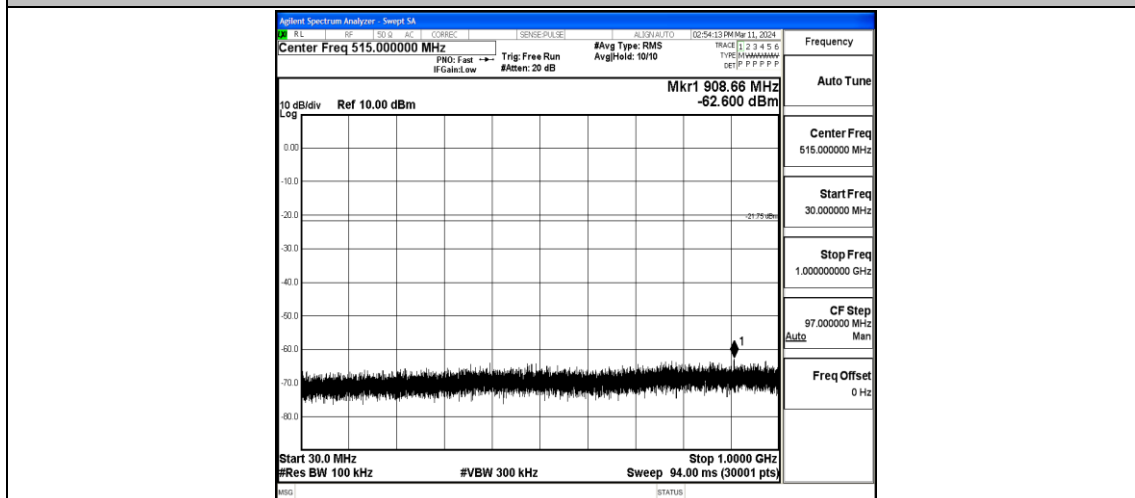
| TestMode | Antenna | Frequency[MHz] | FreqRange [MHz] | RefLevel [dBm] | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|----------------|-----------------|----------------|-------------|------------|---------|
| SRD      | Ant1    | 2402           | 0~Reference     | -1.67          | -1.67       | ---        | PASS    |
| SRD      | Ant1    | 2402           | 30~1000         | -1.67          | -62.77      | ≤-21.67    | PASS    |
| SRD      | Ant1    | 2402           | 1000~26500      | -1.67          | -43.52      | ≤-21.67    | PASS    |
| SRD      | Ant1    | 2440           | 0~Reference     | -1.75          | -1.75       | ---        | PASS    |
| SRD      | Ant1    | 2440           | 30~1000         | -1.75          | -62.6       | ≤-21.75    | PASS    |
| SRD      | Ant1    | 2440           | 1000~26500      | -1.75          | -43.97      | ≤-21.75    | PASS    |
| SRD      | Ant1    | 2480           | 0~Reference     | -2.49          | -2.49       | ---        | PASS    |
| SRD      | Ant1    | 2480           | 30~1000         | -2.49          | -63.08      | ≤-22.49    | PASS    |
| SRD      | Ant1    | 2480           | 1000~26500      | -2.49          | -44.37      | ≤-22.49    | PASS    |

## Test Graphs

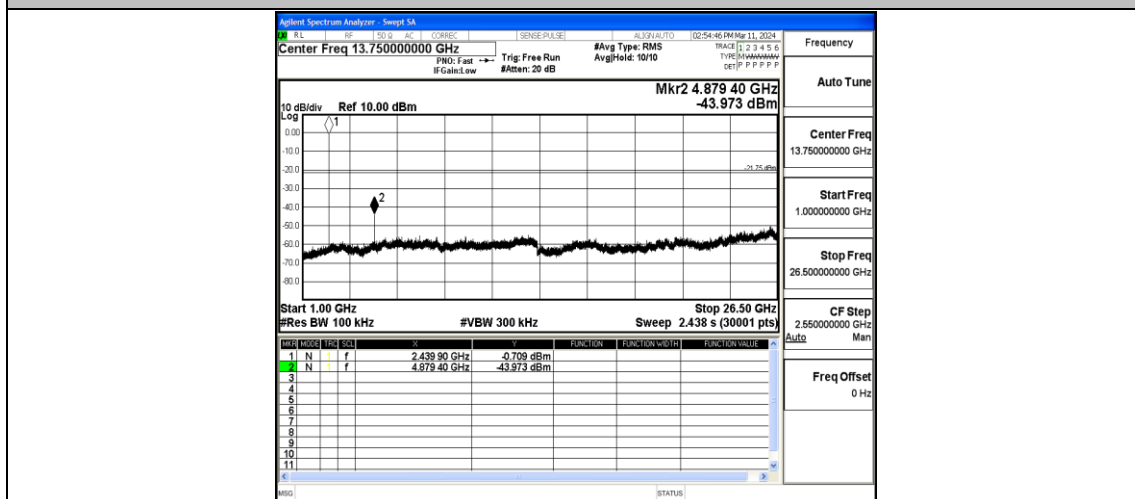




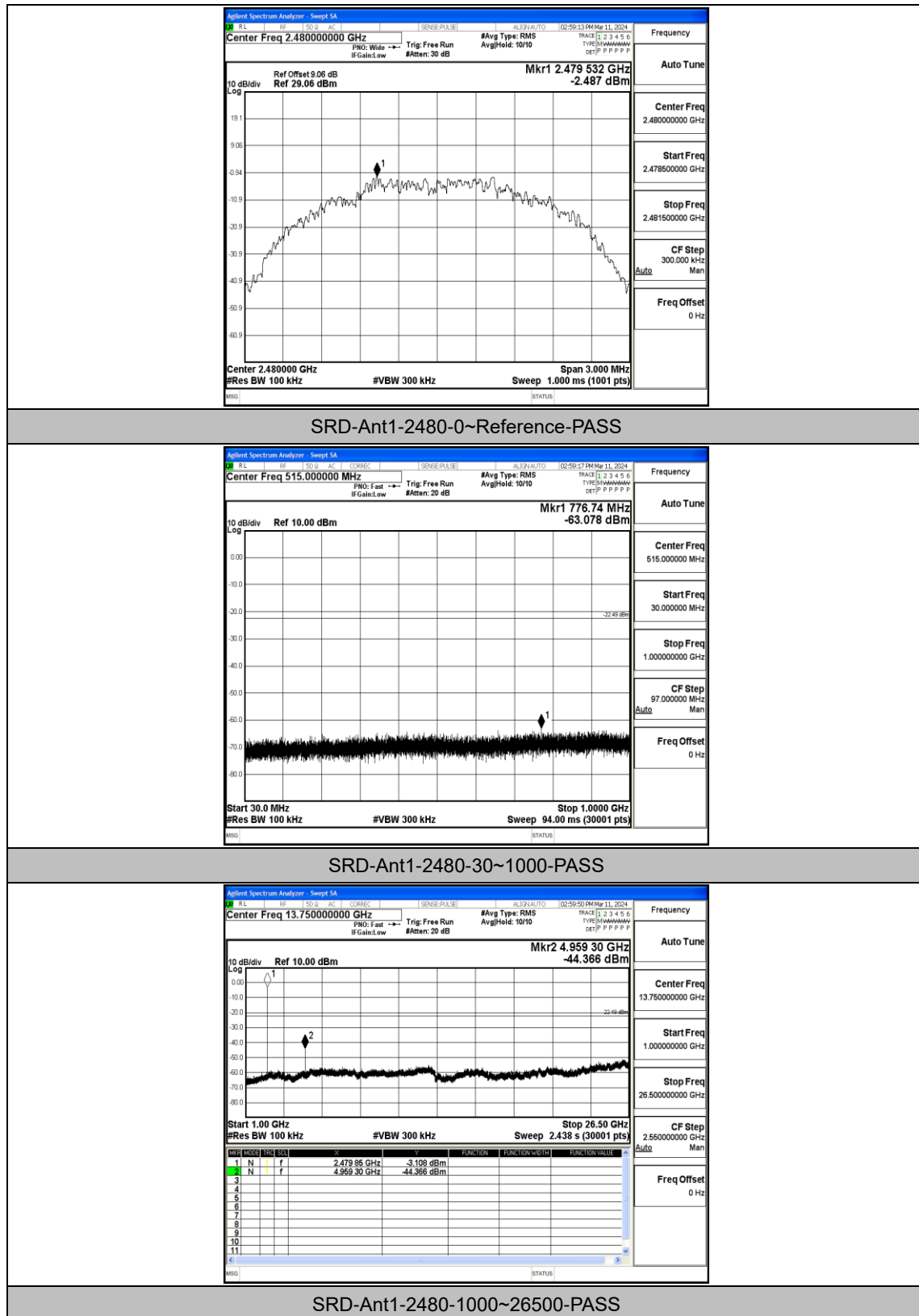
SRD-Ant1-2440-0~Reference-PASS



SRD-Ant1-2440-30~1000-PASS



SRD-Ant1-2440-1000~26500-PASS



SRD-Ant1-2480-1000~26500-PASS

## Appendix G: Duty Cycle

### Test Result

| TestMode | Antenna | Frequency[MHz] | ON Time<br>[ms] | Period<br>[ms] | Duty Cycle<br>[%] |
|----------|---------|----------------|-----------------|----------------|-------------------|
| SRD      | Ant1    | 2402           | 19.00           | 19.00          | 100               |
| SRD      | Ant1    | 2440           | 19.00           | 19.00          | 100               |
| SRD      | Ant1    | 2480           | 19.00           | 19.00          | 100               |

## Test Graphs



## Appendix H: Emissions in Restricted Bands

### Test Result

| TestMode | Antenna | ChName | Frequency [MHz] | Detector | Freq [MHz] | Result [dBm] | Limit [dBm] | Result [dBuV/m] | Limit [dBuV/m] | Verdict |
|----------|---------|--------|-----------------|----------|------------|--------------|-------------|-----------------|----------------|---------|
| SRD      | Ant1    | Low    | 2402            | Peak     | 2390.000   | -47.25       | ≤-21.20     | 47.95           | ≤74            | PASS    |
| SRD      | Ant1    | Low    | 2402            | Peak     | 2310.000   | -43.37       | ≤-21.20     | 51.83           | ≤74            | PASS    |
| SRD      | Ant1    | Low    | 2402            | Peak     | 2386.730   | -39.2        | ≤-21.20     | 56.00           | ≤74            | PASS    |
| SRD      | Ant1    | Low    | 2402            | AV       | 2390.000   | -50.83       | ≤-41.20     | 44.37           | ≤54            | PASS    |
| SRD      | Ant1    | Low    | 2402            | AV       | 2310.000   | -50.67       | ≤-41.20     | 44.53           | ≤54            | PASS    |
| SRD      | Ant1    | Low    | 2402            | AV       | 2378.015   | -49.59       | ≤-41.20     | 45.61           | ≤54            | PASS    |
| SRD      | Ant1    | High   | 2480            | Peak     | 2483.500   | -40.99       | ≤-21.20     | 54.21           | ≤74            | PASS    |
| SRD      | Ant1    | High   | 2480            | Peak     | 2500.000   | -42.28       | ≤-21.20     | 52.92           | ≤74            | PASS    |
| SRD      | Ant1    | High   | 2480            | Peak     | 2499.280   | -39.85       | ≤-21.20     | 55.35           | ≤74            | PASS    |
| SRD      | Ant1    | High   | 2480            | AV       | 2483.500   | -48.47       | ≤-41.20     | 46.73           | ≤54            | PASS    |
| SRD      | Ant1    | High   | 2480            | AV       | 2500.000   | -49.36       | ≤-41.20     | 45.84           | ≤54            | PASS    |
| SRD      | Ant1    | High   | 2480            | AV       | 2483.520   | -48.47       | ≤-41.20     | 46.73           | ≤54            | PASS    |

Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

## Test Graphs

