

## Appendix Test Data for SRD (Conducted Measurement)

Product Name: Remote controlled boat

Trade Mark: /

Test Model: TG1030

FCC ID: QV7-GC88752-111

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5℃     |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Allen Lai |
| Supervised by:     | Max Zhang |
| NOTE               | N/A       |

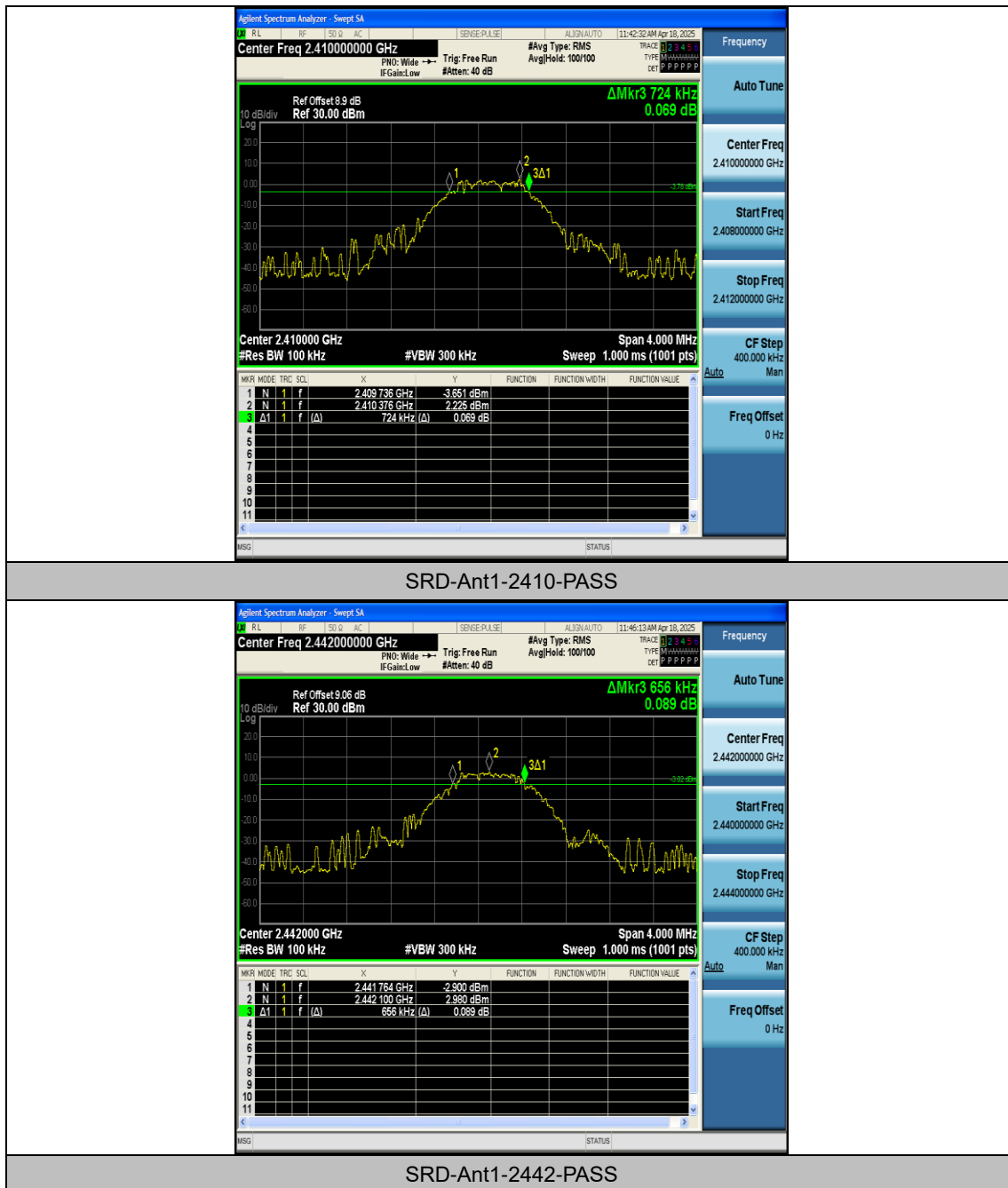
## Appendix A: DTS Bandwidth

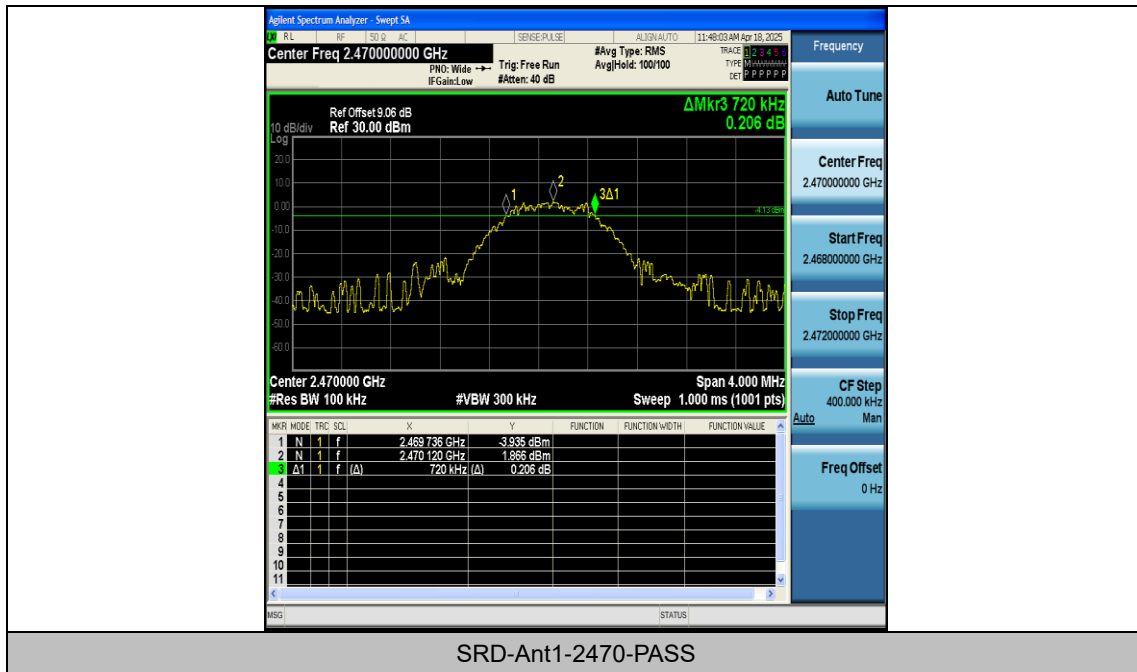
### Test Result

| Test Mode | Antenna | Frequency [MHz] | DTS BW [MHz] | FL [MHz] | FH [MHz] | Limit [MHz] | Verdict |
|-----------|---------|-----------------|--------------|----------|----------|-------------|---------|
| SRD       | Ant1    | 2410            | 0.724        | 2409.736 | 2410.460 | 0.5         | PASS    |
| SRD       | Ant1    | 2442            | 0.656        | 2441.764 | 2442.420 | 0.5         | PASS    |
| SRD       | Ant1    | 2470            | 0.720        | 2469.736 | 2470.456 | 0.5         | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





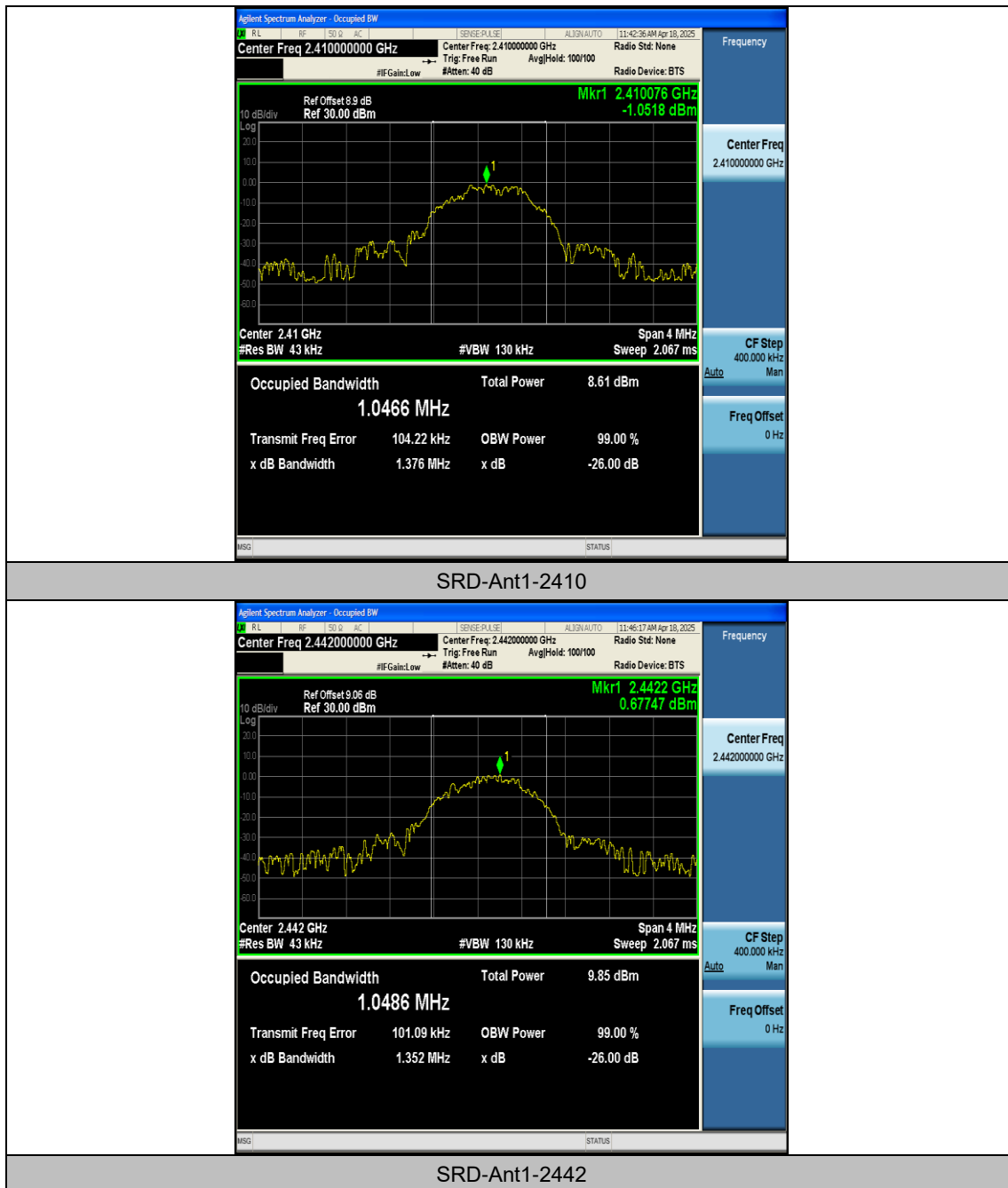
## Appendix B: Occupied Channel Bandwidth

### Test Result

| Test Mode | Antenna | Frequency [MHz] | OCB [MHz] | FL [MHz]  | FH [MHz]  | Limit [MHz] | Verdict |
|-----------|---------|-----------------|-----------|-----------|-----------|-------------|---------|
| SRD       | Ant1    | 2410            | 1.0466    | 2409.5809 | 2410.6275 | ---         | ---     |
| SRD       | Ant1    | 2442            | 1.0486    | 2441.5768 | 2442.6254 | ---         | ---     |
| SRD       | Ant1    | 2470            | 1.0807    | 2469.5503 | 2470.6310 | ---         | ---     |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





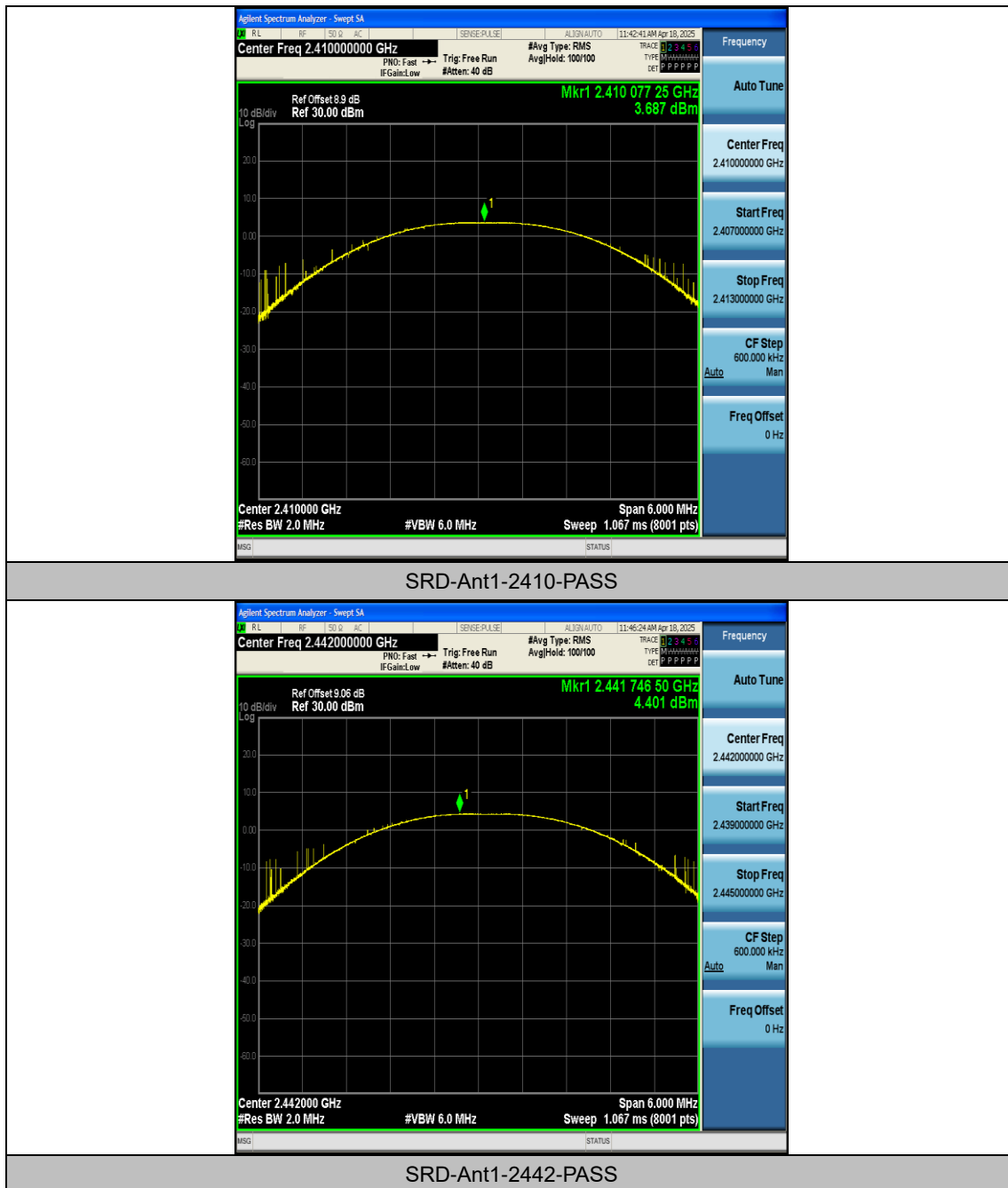
## Appendix C: Maximum peak conducted output power

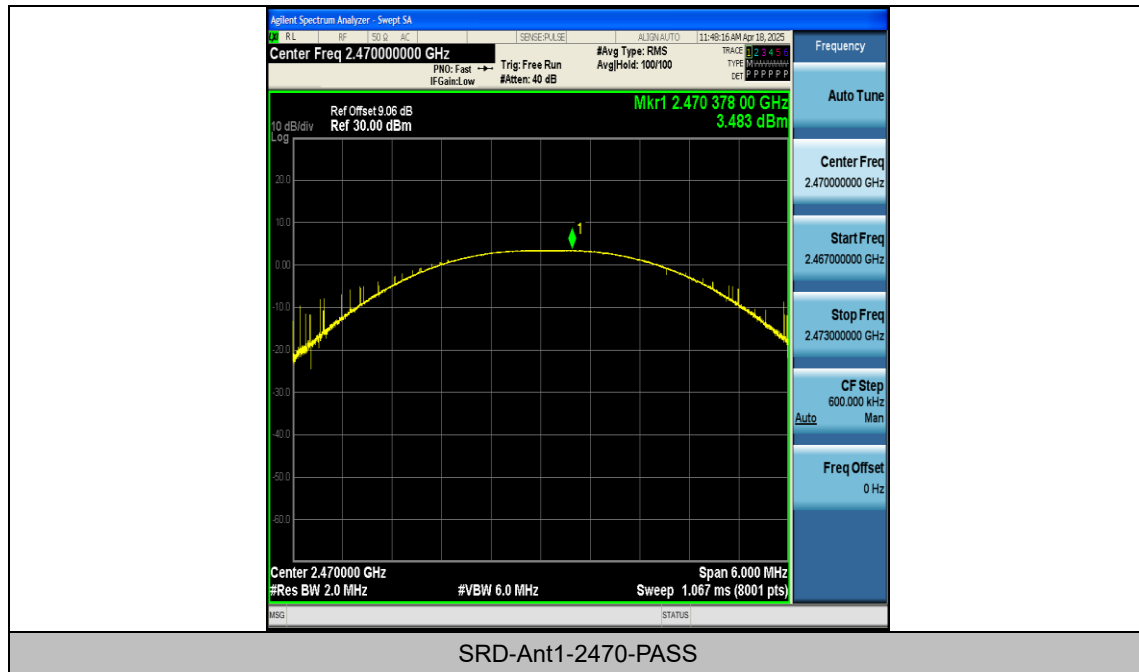
### Test Result Peak

| Test Mode | Antenna | Frequency [MHz] | Conducted Peak Power [dBm] | Conducted Limit [dBm] | Verdict |
|-----------|---------|-----------------|----------------------------|-----------------------|---------|
| SRD       | Ant1    | 2410            | 3.69                       | ≤30                   | PASS    |
| SRD       | Ant1    | 2442            | 4.40                       | ≤30                   | PASS    |
| SRD       | Ant1    | 2470            | 3.48                       | ≤30                   | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs Peak





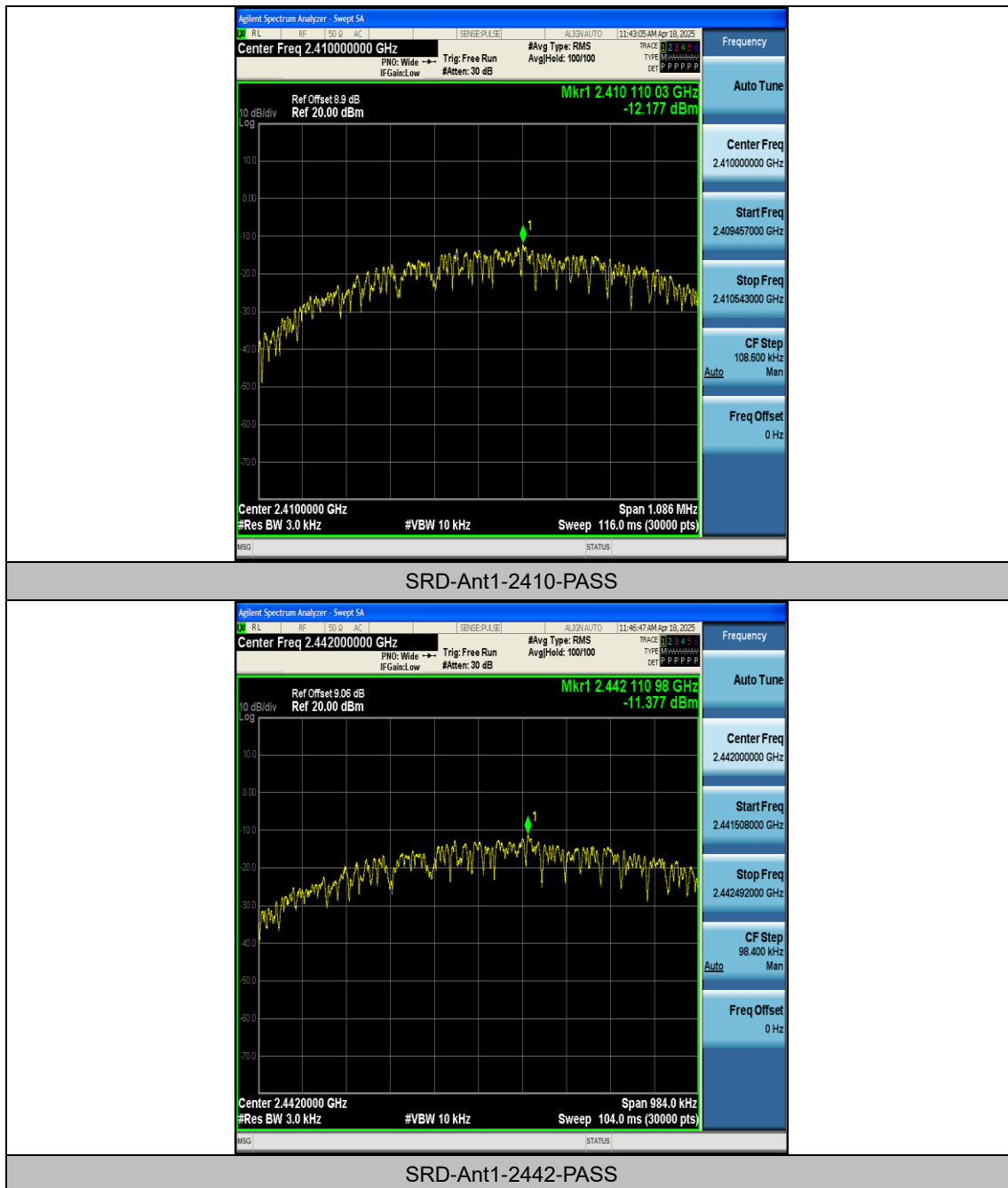
## Appendix D: Maximum peak power spectral density

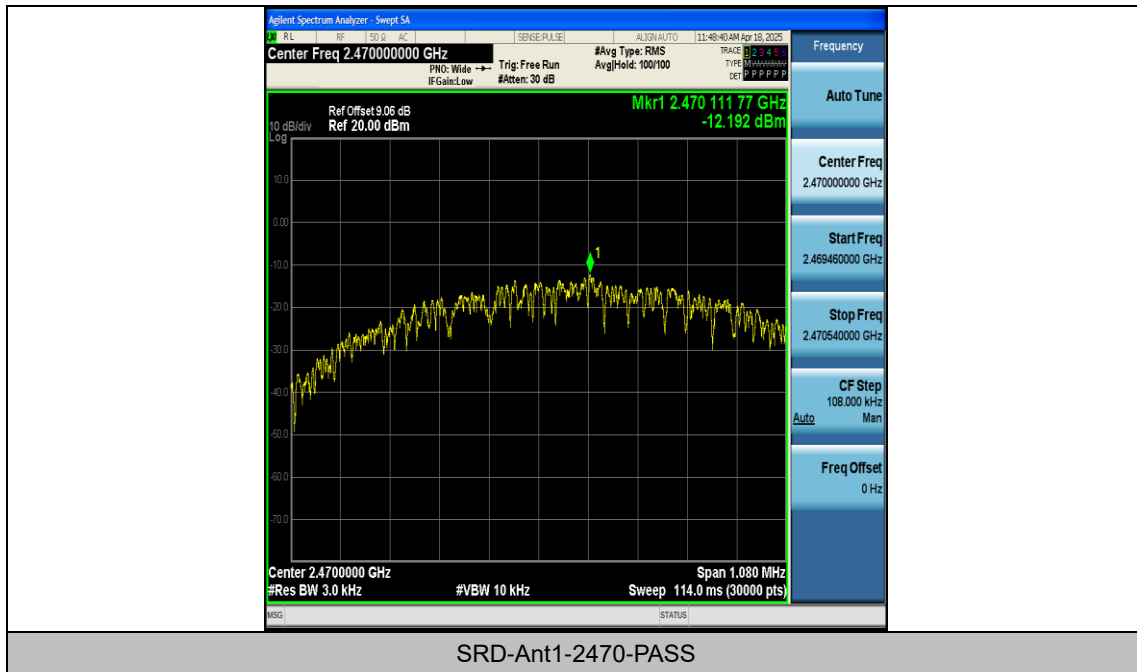
### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[dBm/3kHz] | Limit<br>[dBm/3kHz] | Verdict |
|-----------|---------|--------------------|----------------------|---------------------|---------|
| SRD       | Ant1    | 2410               | -12.18               | ≤8.00               | PASS    |
| SRD       | Ant1    | 2442               | -11.38               | ≤8.00               | PASS    |
| SRD       | Ant1    | 2470               | -12.19               | ≤8.00               | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs





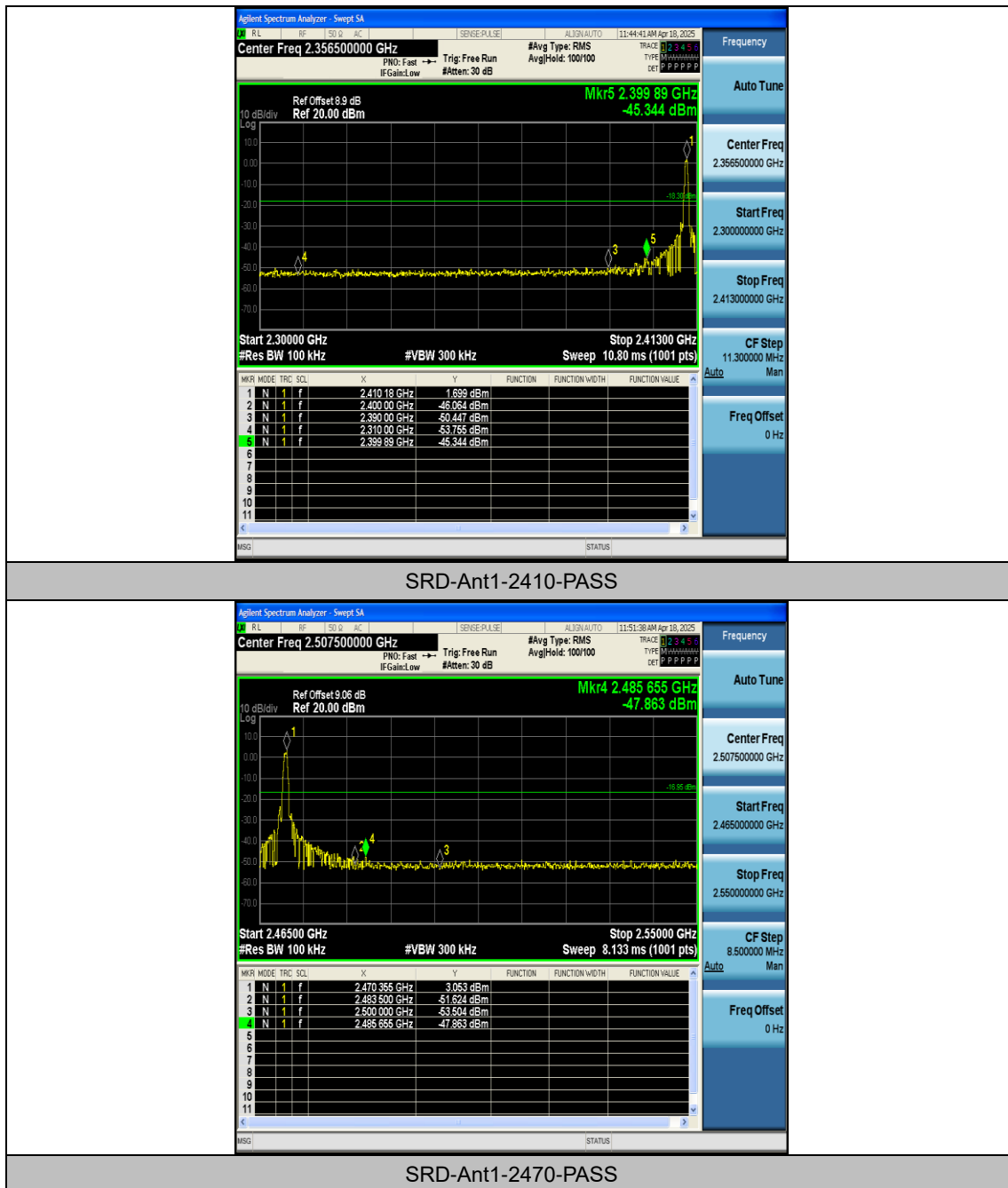
## Appendix E: Band edge measurements

### Test Result

| Test Mode | Antenna | Ch. Name | Frequency [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|----------|-----------------|------------------|--------------|---------------|---------|
| SRD       | Ant1    | Low      | 2410            | 1.70             | -45.34       | $\leq -18.3$  | PASS    |
| SRD       | Ant1    | High     | 2470            | 3.05             | -47.86       | $\leq -16.95$ | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs



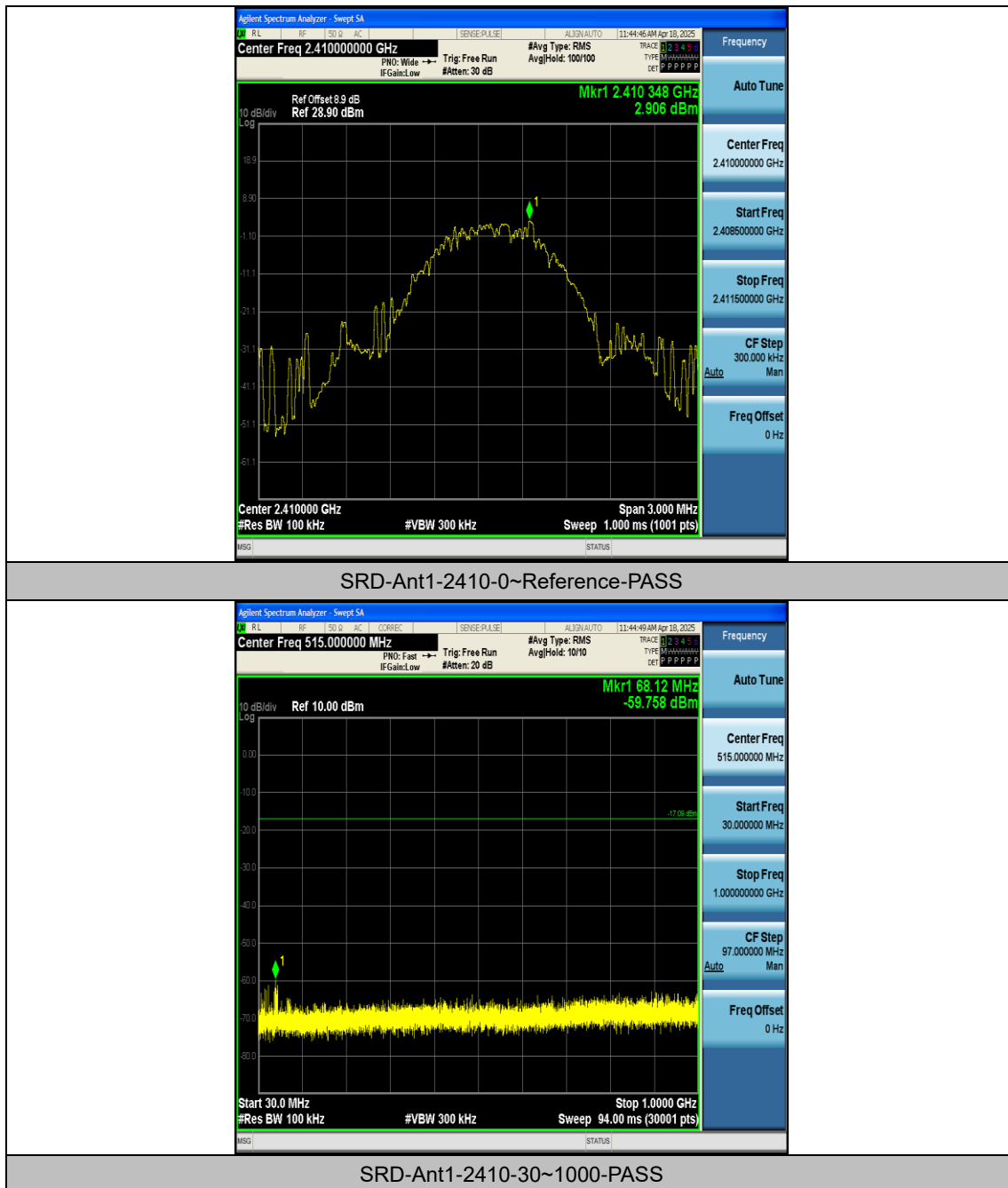
## Appendix F: Conducted Spurious Emission

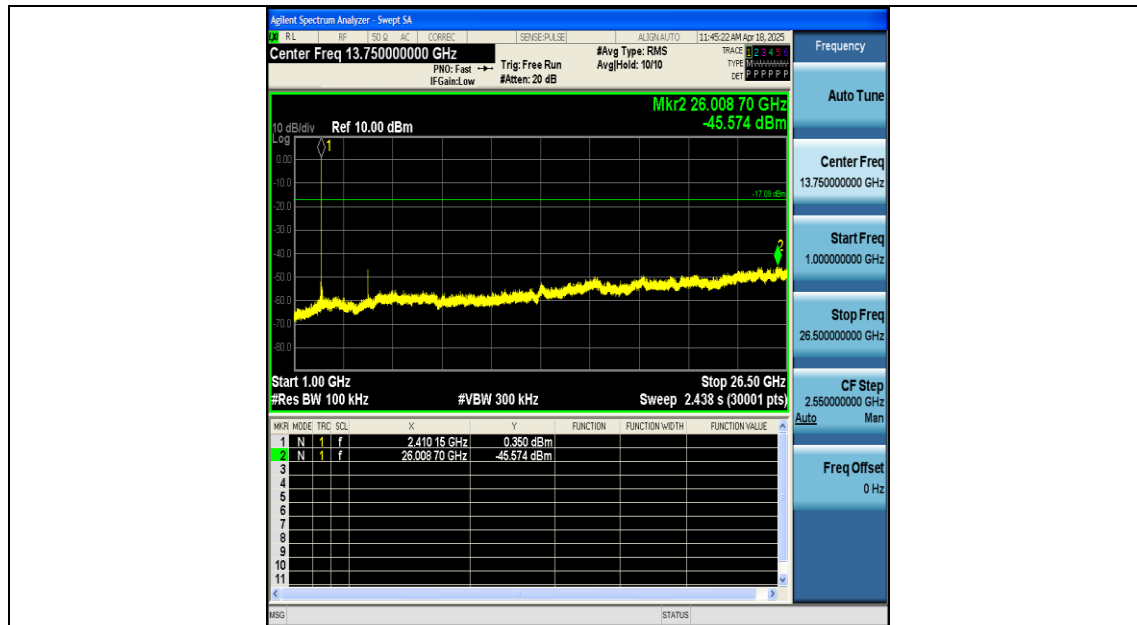
### Test Result

| Test Mode | Antenna | Frequency [MHz] | Freq. Range [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|-----------------|-------------------|------------------|--------------|-------------|---------|
| SRD       | Ant1    | 2410            | 0~Reference       | 2.91             | 2.91         | ---         | PASS    |
| SRD       | Ant1    | 2410            | 30~1000           | 2.91             | -59.76       | ≤-17.09     | PASS    |
| SRD       | Ant1    | 2410            | 1000~26500        | 2.91             | -45.57       | ≤-17.09     | PASS    |
| SRD       | Ant1    | 2442            | 0~Reference       | 2.59             | 2.59         | ---         | PASS    |
| SRD       | Ant1    | 2442            | 30~1000           | 2.59             | -60.8        | ≤-17.41     | PASS    |
| SRD       | Ant1    | 2442            | 1000~26500        | 2.59             | -44.83       | ≤-17.41     | PASS    |
| SRD       | Ant1    | 2470            | 0~Reference       | 2.78             | 2.78         | ---         | PASS    |
| SRD       | Ant1    | 2470            | 30~1000           | 2.78             | -59.1        | ≤-17.22     | PASS    |
| SRD       | Ant1    | 2470            | 1000~26500        | 2.78             | -45.31       | ≤-17.22     | PASS    |

Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

## Test Graphs

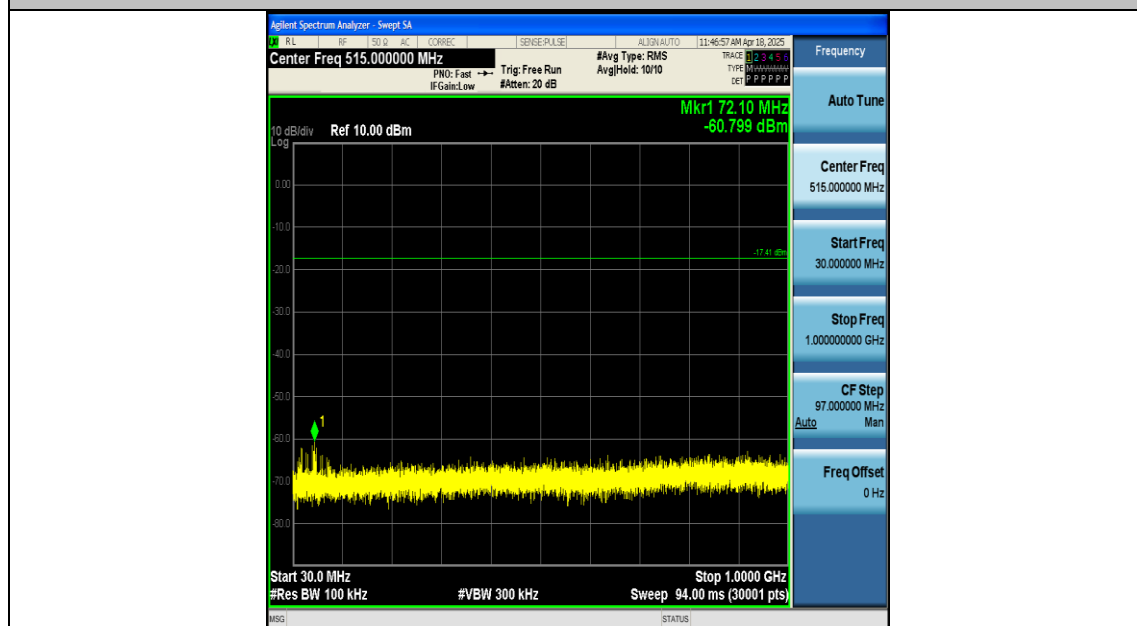




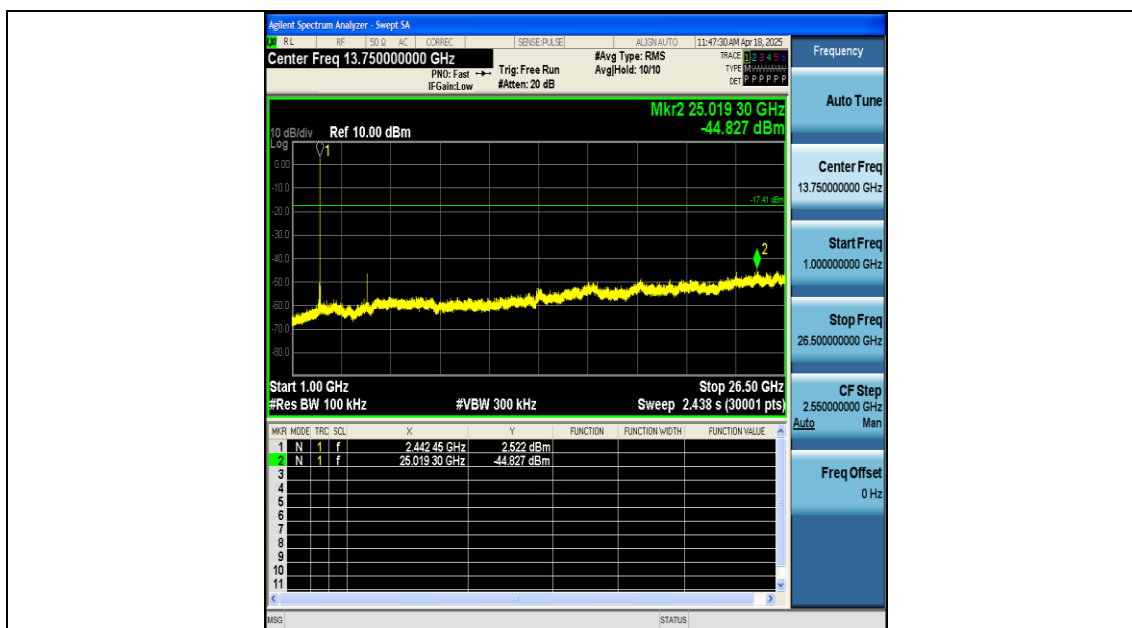
SRD-Ant1-2410-1000~26500-PASS



SRD-Ant1-2442-0~Reference-PASS



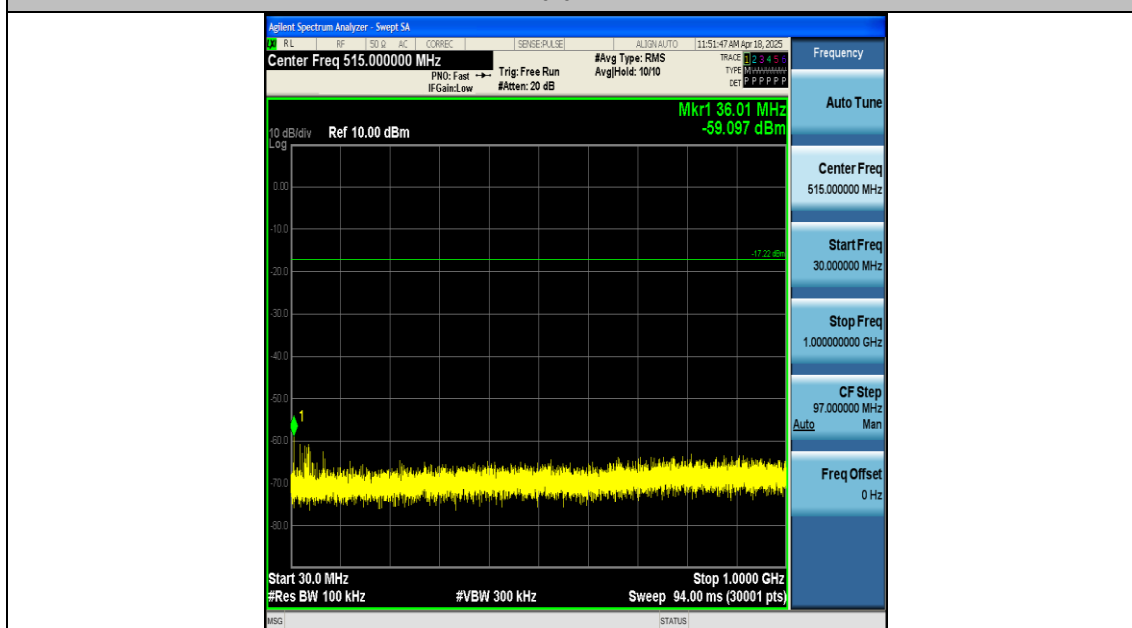
SRD-Ant1-2442-30~1000-PASS



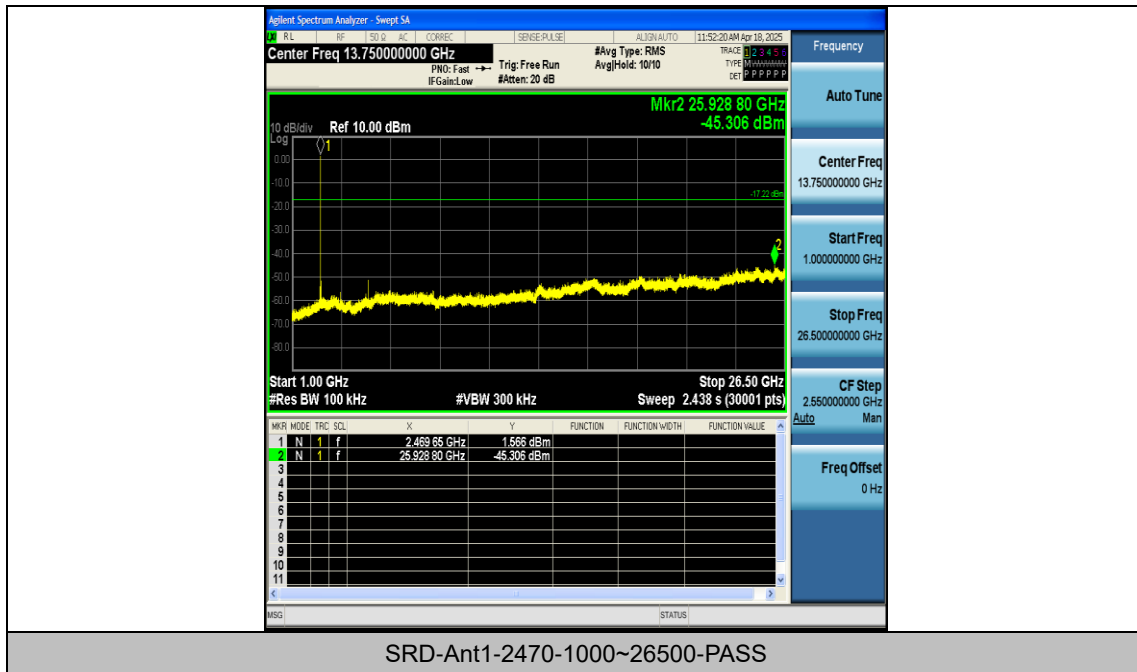
SRD-Ant1-2442-1000~26500-PASS



SRD-Ant1-2470-0~Reference-PASS



SRD-Ant1-2470-30~1000-PASS



## Appendix G: Duty Cycle

### Test Result

| Test Mode | Antenna | Frequency [MHz] | ON Time [ms] | Period [ms] | Duty Cycle [%] | Duty Cycle Factor [dB] |
|-----------|---------|-----------------|--------------|-------------|----------------|------------------------|
| SRD       | Ant1    | 2410            | 0.41         | 2.75        | 14.91          | 8.27                   |
| SRD       | Ant1    | 2442            | 0.41         | 2.75        | 14.91          | 8.27                   |
| SRD       | Ant1    | 2470            | 0.42         | 2.75        | 15.27          | 8.16                   |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

## Test Graphs

