



## Appendix A

### RF Test Data for 915M (Conducted Measurement)

Product Name: PulsarLR

Test Model: PulsarLR

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.9°C    |
| Relative Humidity: | 52.6%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Jay Luo   |
| Supervised by:     | Nick Peng |



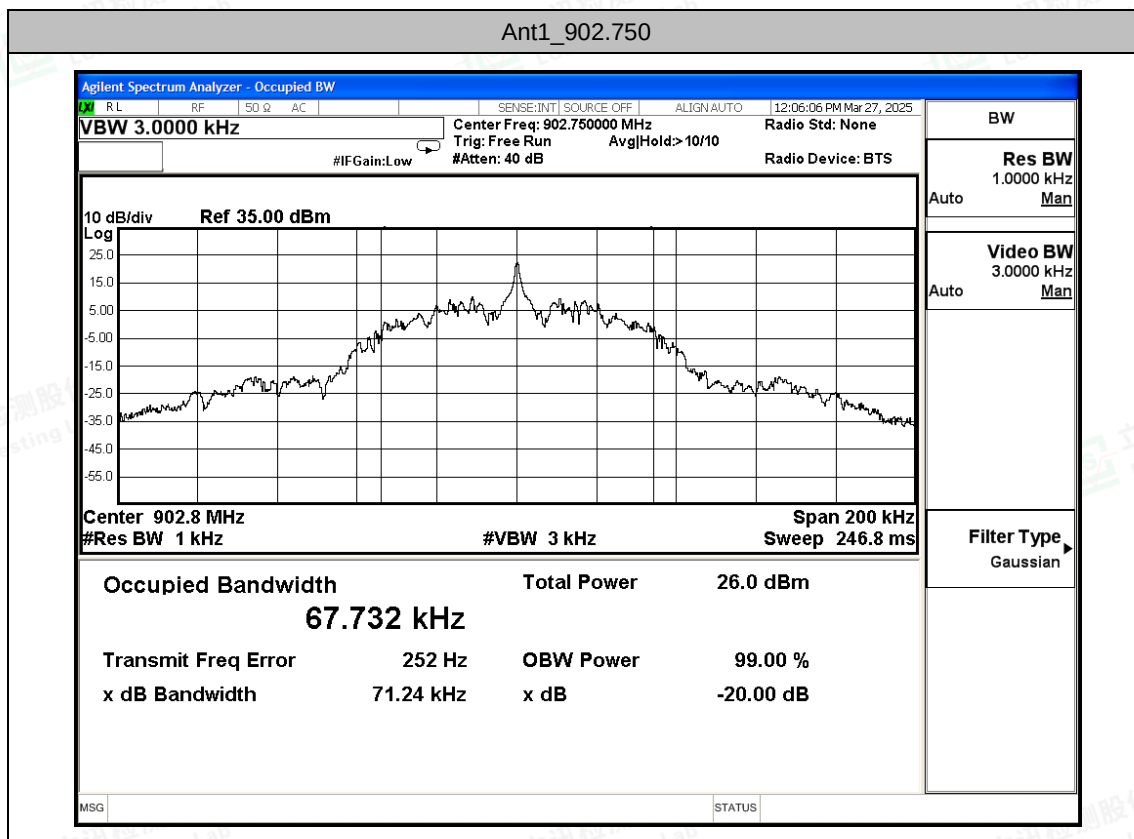


## A.1 20dB Emission Bandwidth

### Test Result

| Antenna | Channel[MHz] | 20db EBW[kHz] | Limit[MHz] | Verdict |
|---------|--------------|---------------|------------|---------|
| Ant1    | 902.750      | 71.24         | ---        | PASS    |
|         | 914.750      | 72.94         | ---        | PASS    |
|         | 927.250      | 71.98         | ---        | PASS    |

### Test Graphs



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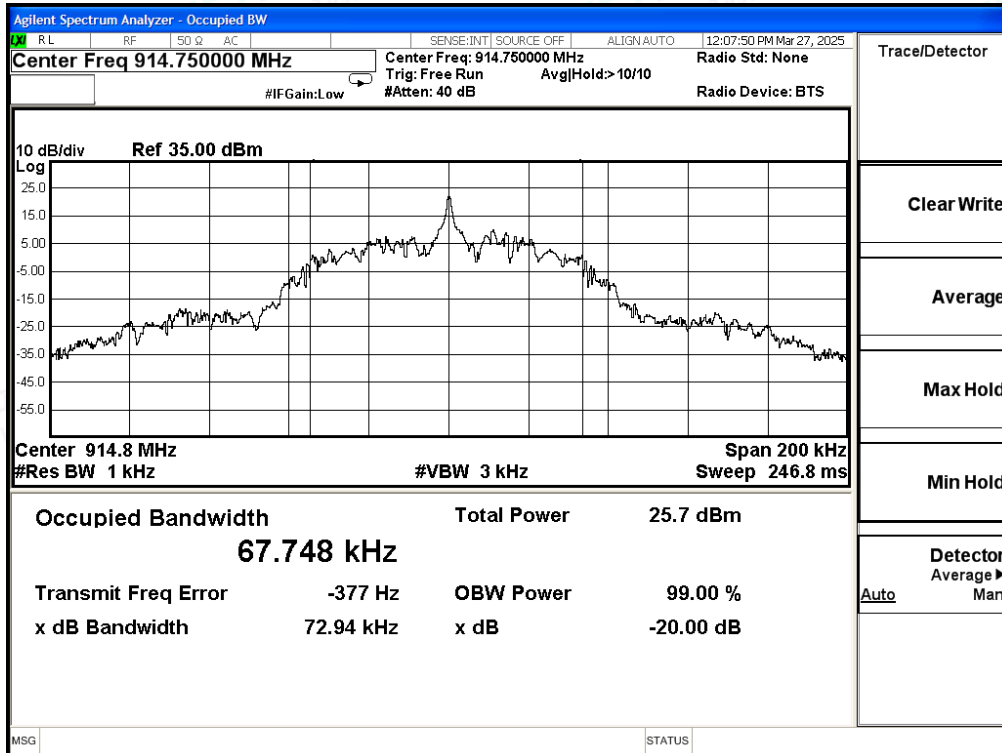
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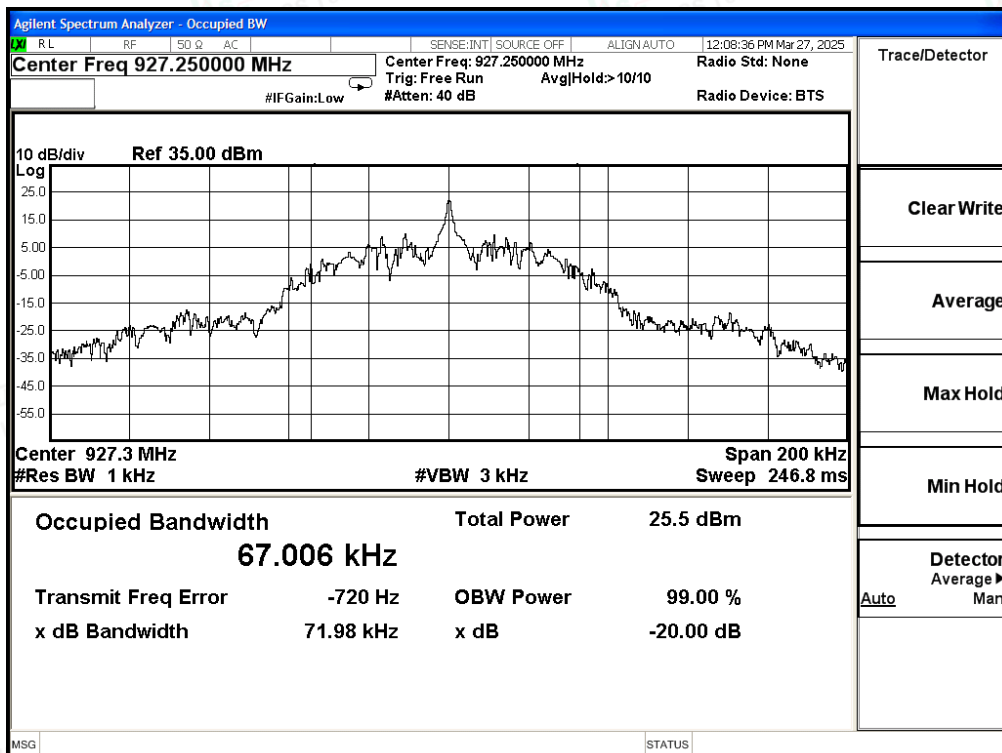
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## Ant1\_914.750



## Ant1\_927.250



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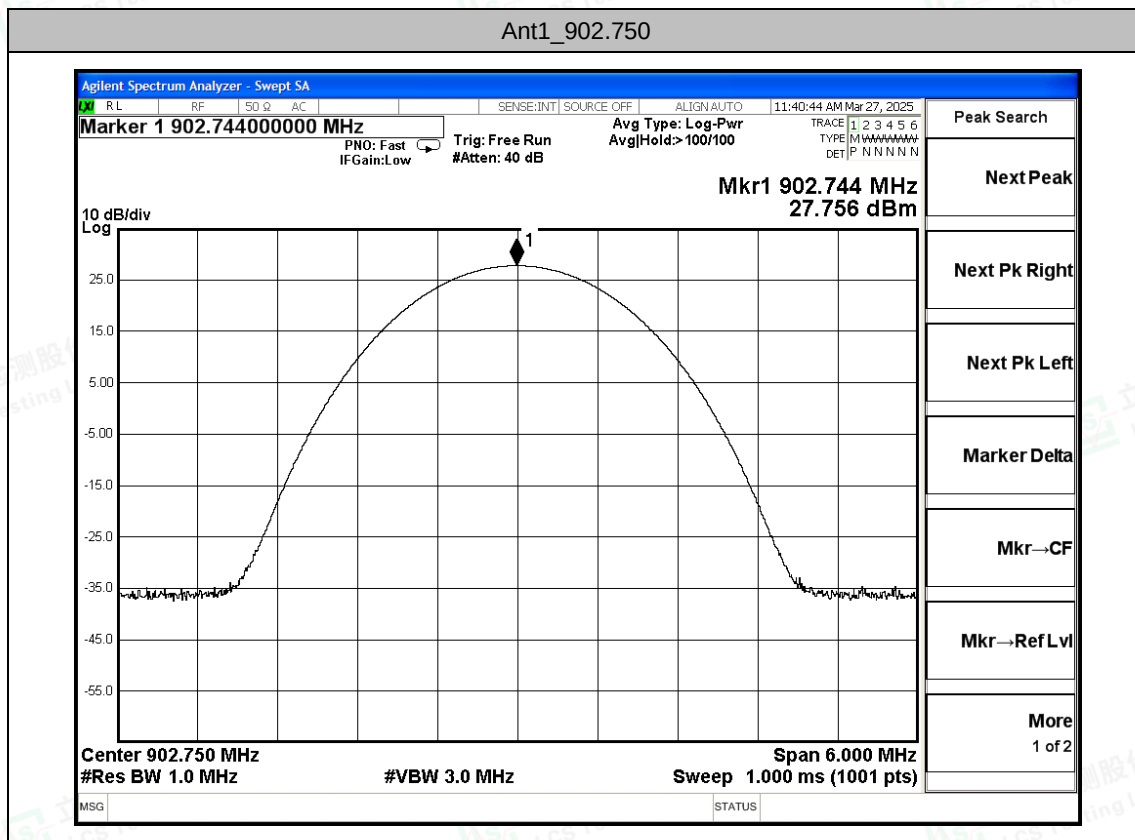


## A.2 Maximum Peak Conducted Output Power

### Test Result Peak

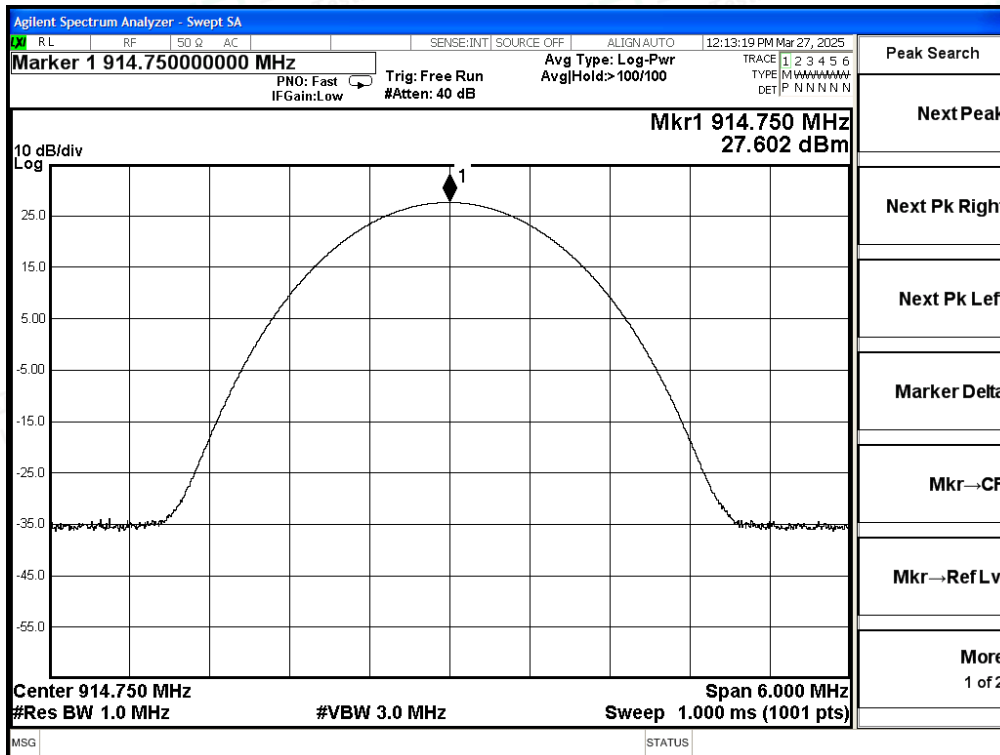
| Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|---------|----------------|---------------------------|----------------------|---------|
| Ant1    | 902.750        | 27.756                    | ≤30                  | PASS    |
|         | 914.750        | 27.602                    | ≤30                  | PASS    |
|         | 927.250        | 27.550                    | ≤30                  | PASS    |

### Test Graphs

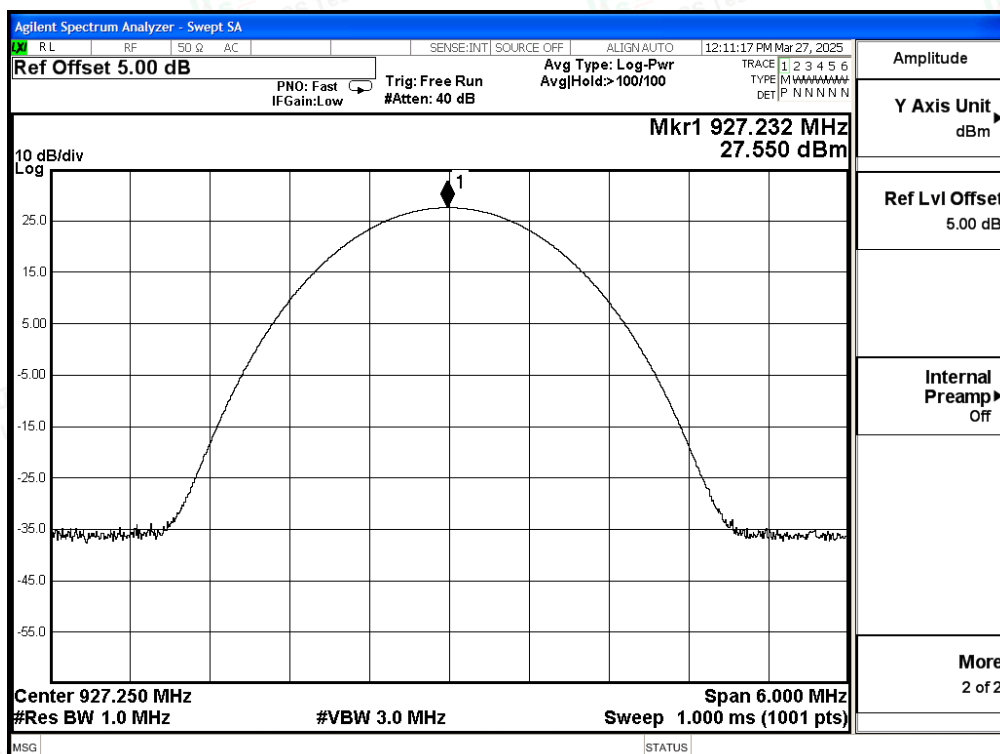




## Ant1\_914.750



## Ant1\_927.250



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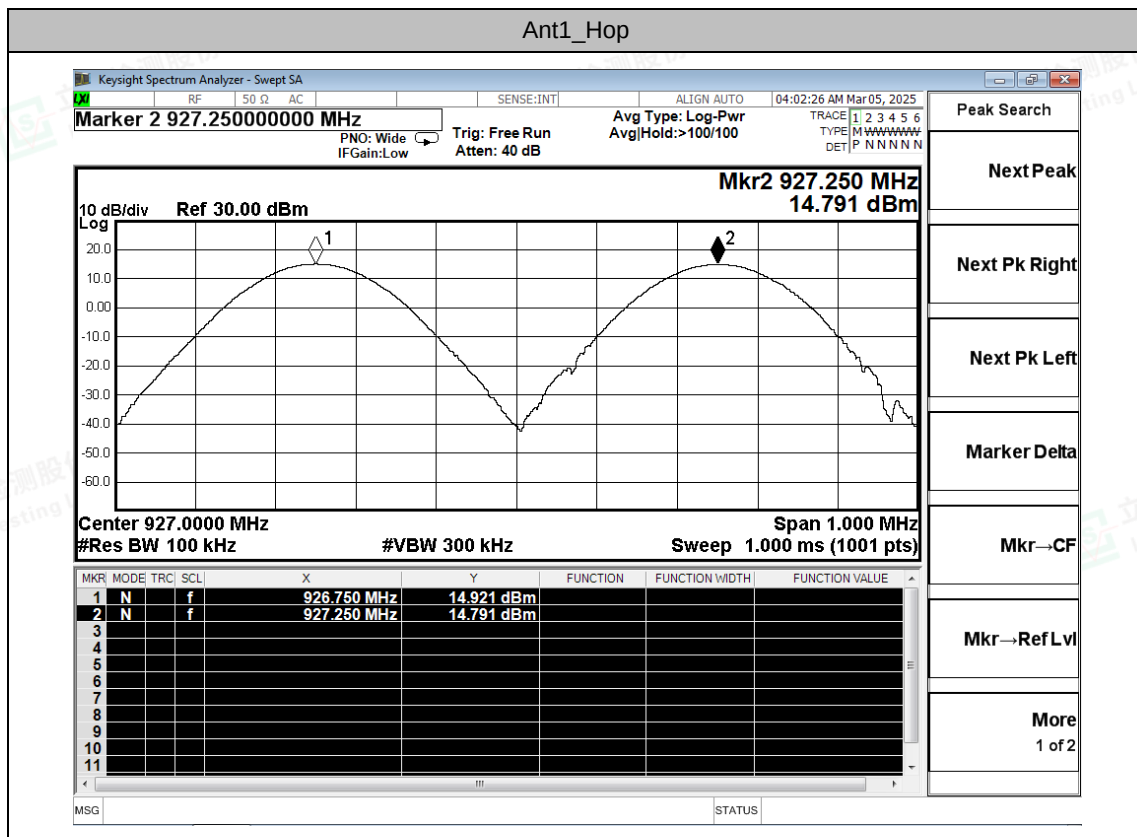


### A.3 Carrier frequency separation

#### Test Result

| Antenna | Channel[MHz] | Result[kHz] | Limit[kHz] | Verdict |
|---------|--------------|-------------|------------|---------|
| Ant1    | Hop          | 500         | --         | PASS    |

#### Test Graphs





## A.4 Time of occupancy

### Test Result

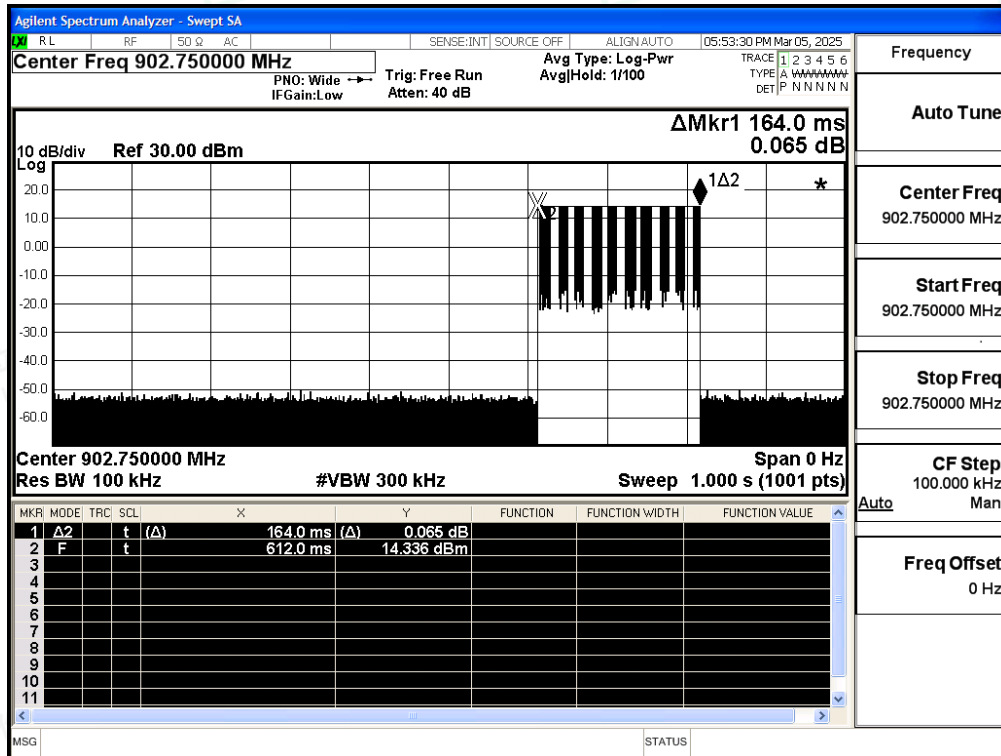
| Antenna | Channel[MHz] | Burst Width[ms] | Total Hops[Num] | Result[ms] | Limit[ms] | Verdict |
|---------|--------------|-----------------|-----------------|------------|-----------|---------|
| Ant1    | Hop          | 164             | 2               | 328        | <=400     | PASS    |



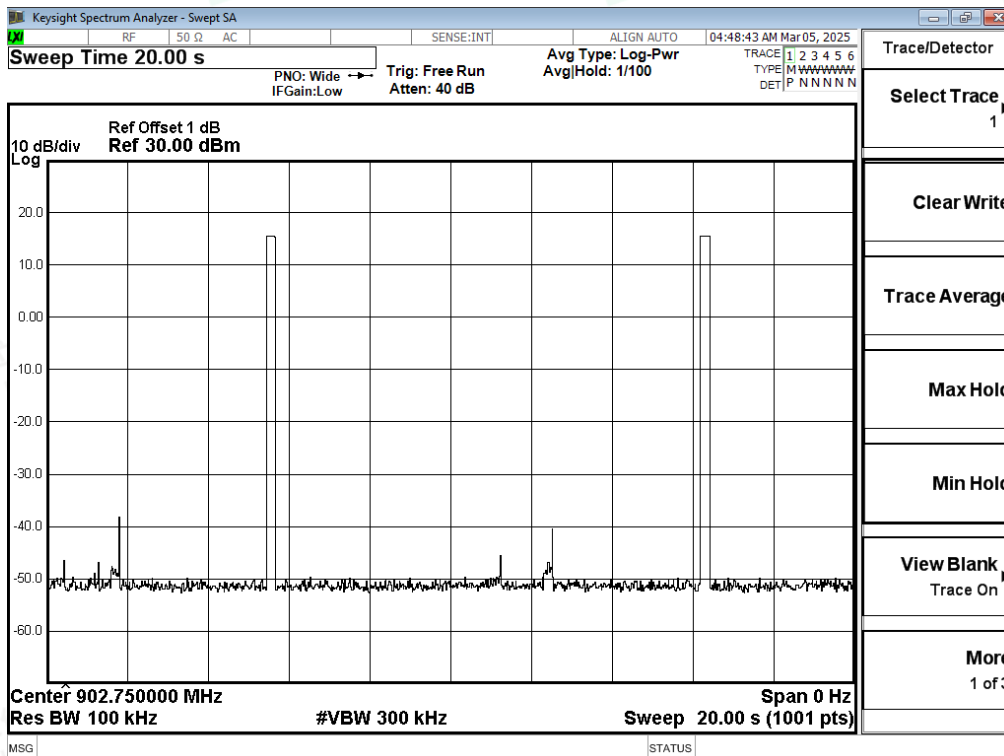


## Test Graphs

Ant1\_Hop



Ant1\_Hop



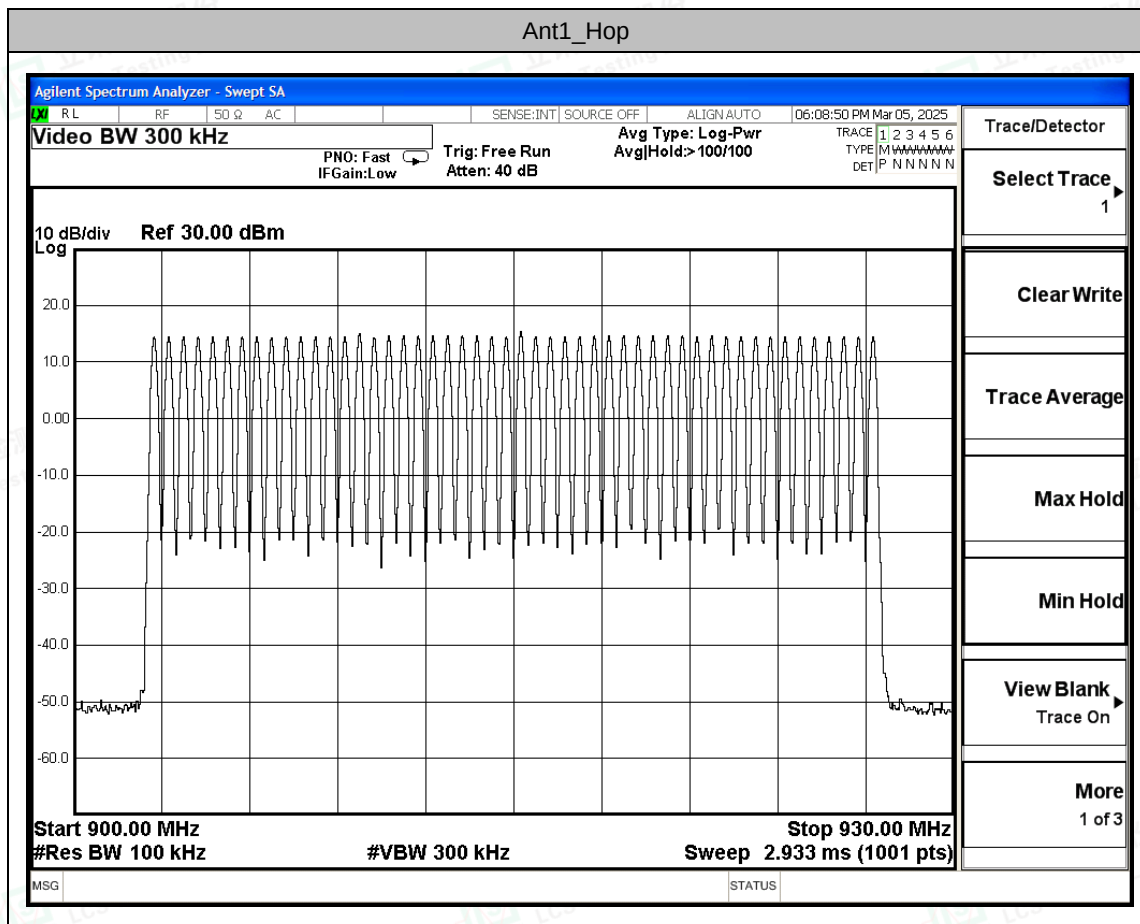


## A.5 Number of hopping channels

### Test Result

| Antenna | Channel | Result[Num] | Limit[Num] | Verdict |
|---------|---------|-------------|------------|---------|
| Ant1    | Hop     | 50          | >=50       | PASS    |

### Test Graphs



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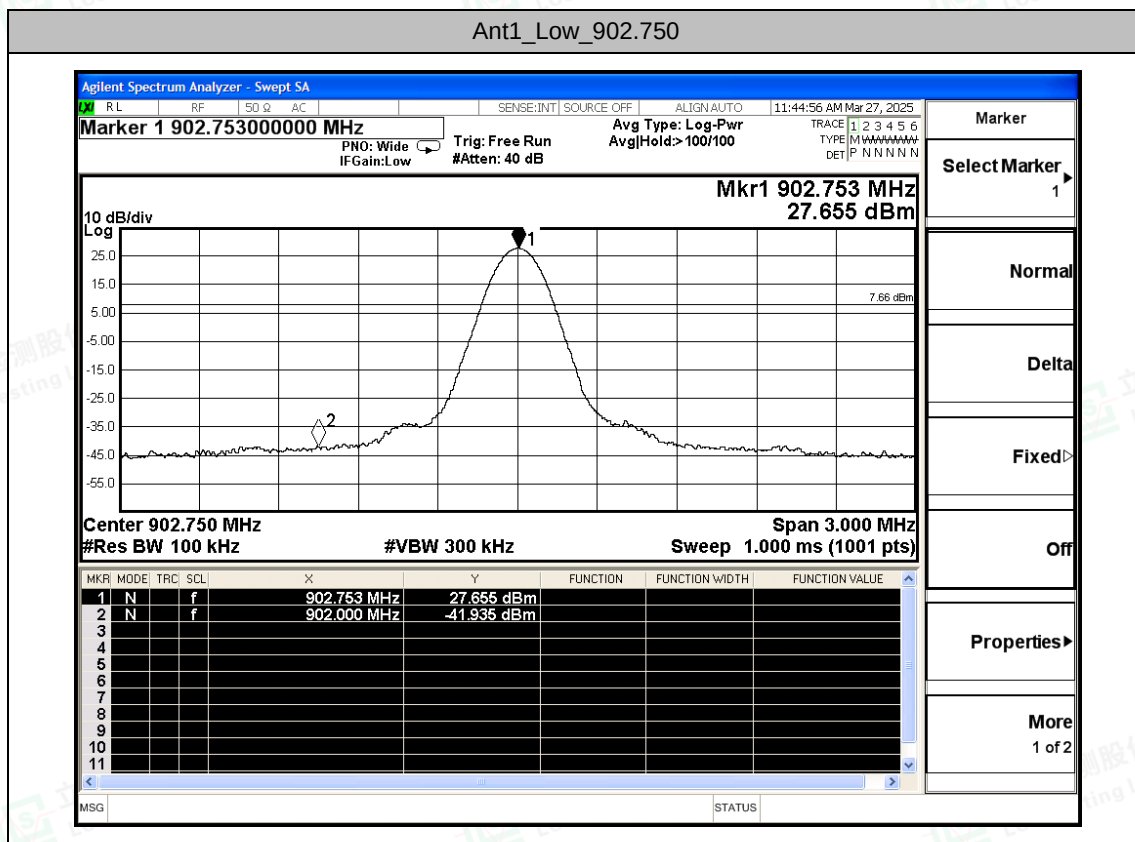


## A.6 Band edge measurements

### Test Result

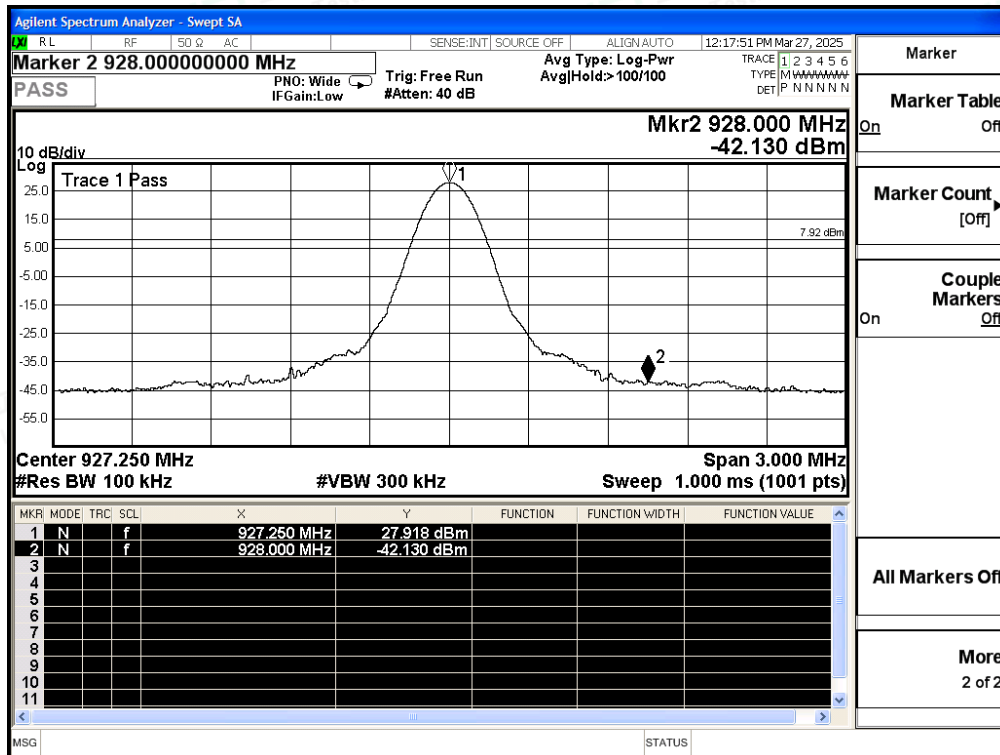
| Antenna | Ch Name | Channel[MHz] | Ref Level[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---------|---------|--------------|----------------|-------------|------------|---------|
| Ant1    | Low     | 902.750      | 27.655         | -41.935     | <=7.66     | PASS    |
|         | High    | 927.250      | 27.918         | -42.130     | <=7.92     | PASS    |
|         | Low     | Hop_902.750  | 14.719         | -52.469     | <=-5.28    | PASS    |
|         | High    | Hop_927.250  | 14.539         | -53.657     | <=-5.46    | PASS    |

### Test Graphs

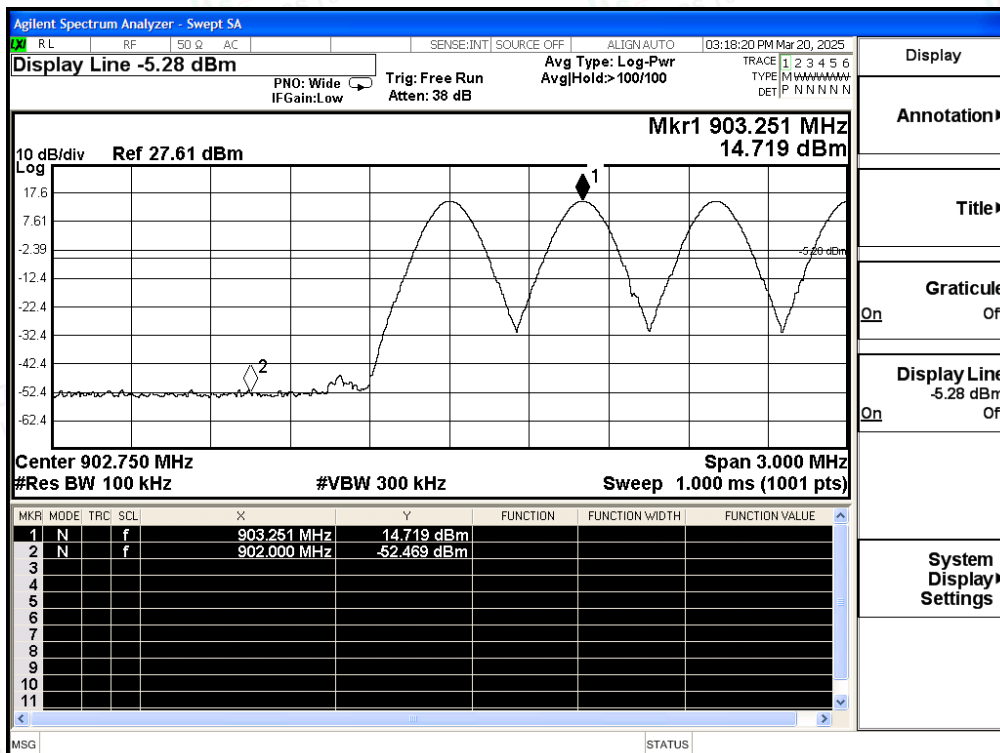




## Ant1\_High\_927.250



## Ant1\_Low\_Hop\_902.750



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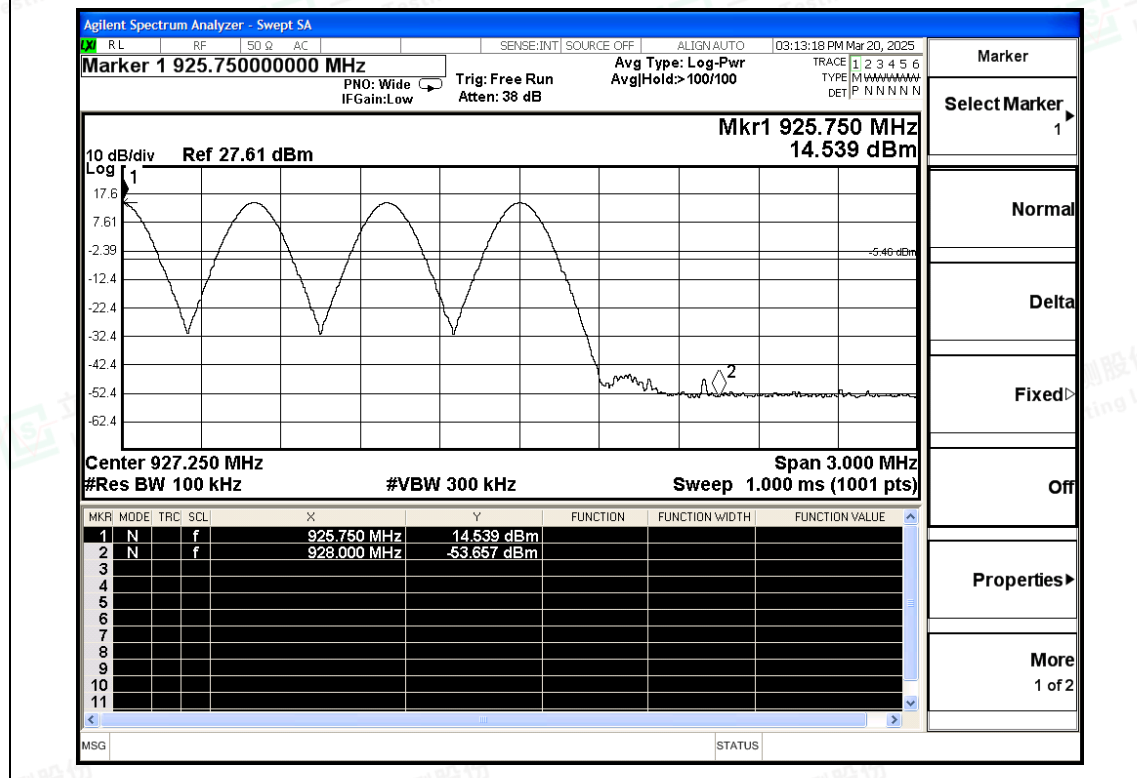
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## Ant1\_High\_Hop\_927.250



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## A.7 Conducted Spurious Emission

### Test Result

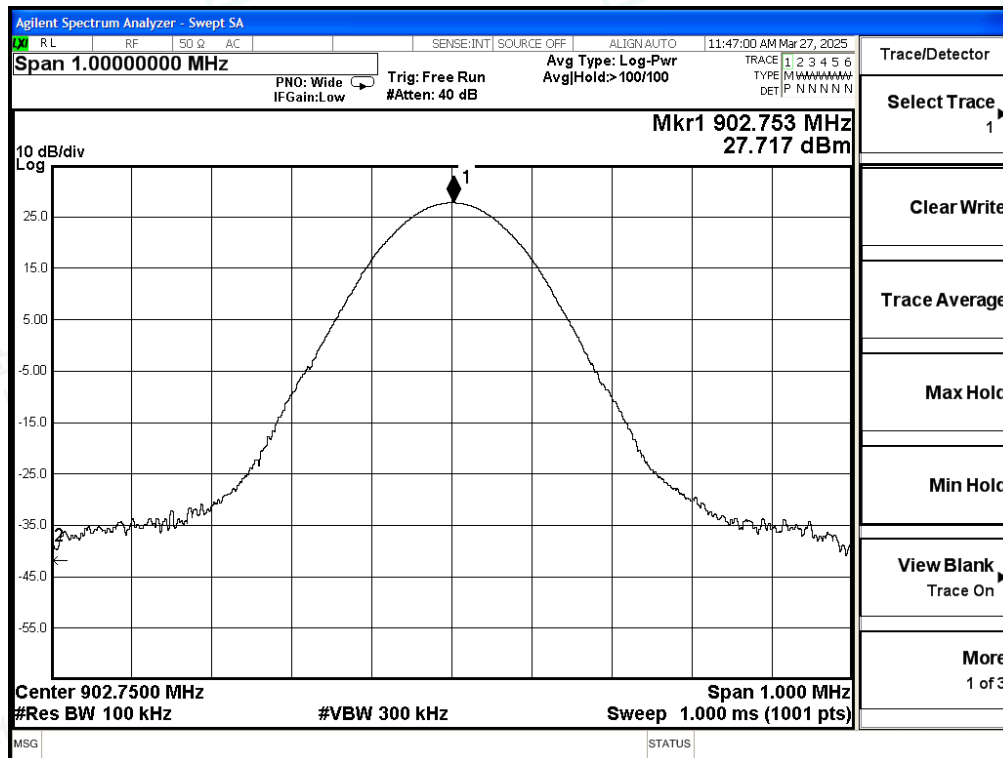
| Antenna | Channel[MHz] | Freq Range [MHz] | Ref Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---------|--------------|------------------|-----------------|--------------|-------------|---------|
| Ant1    | 902.750      | Reference        | 27.717          | 27.717       | ---         | PASS    |
|         |              | 30~26500         | 27.717          | -31.704      | $\leq 7.72$ | PASS    |
|         | 914.750      | Reference        | 28.392          | 28.392       | ---         | PASS    |
|         |              | 30~26500         | 28.392          | -32.218      | $\leq 8.39$ | PASS    |
|         | 927.250      | Reference        | 27.536          | 27.536       | ---         | PASS    |
|         |              | 30~26500         | 27.536          | -30.651      | $\leq 7.54$ | PASS    |



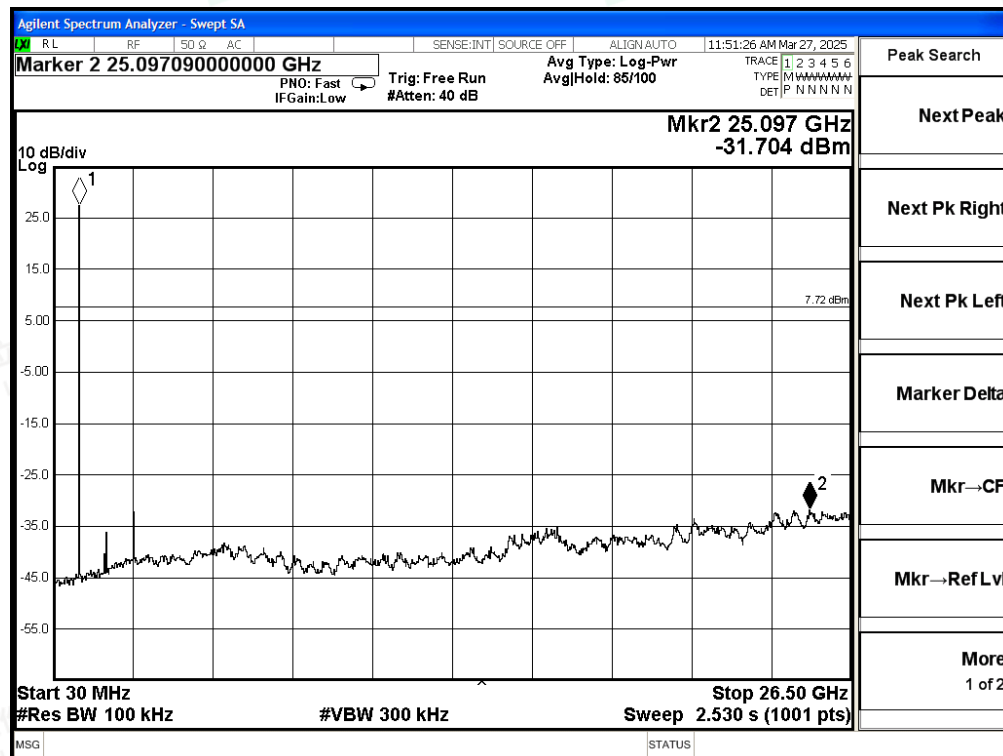


## Test Graphs

Ant1\_902.750\_0~Reference



Ant1\_902.750\_30~26500



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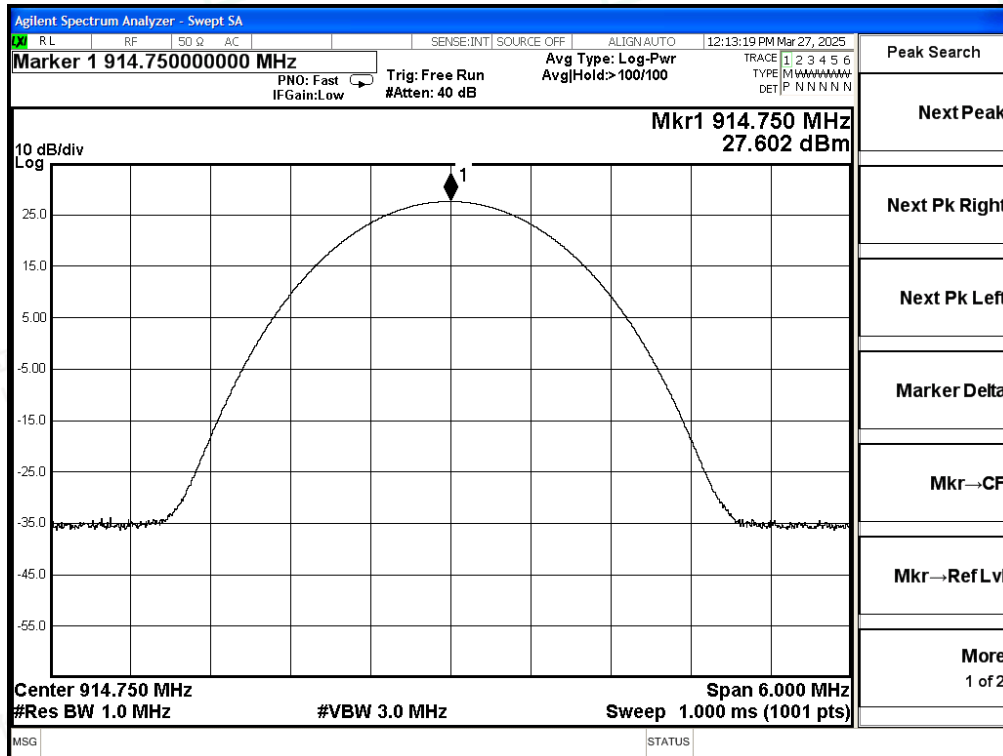
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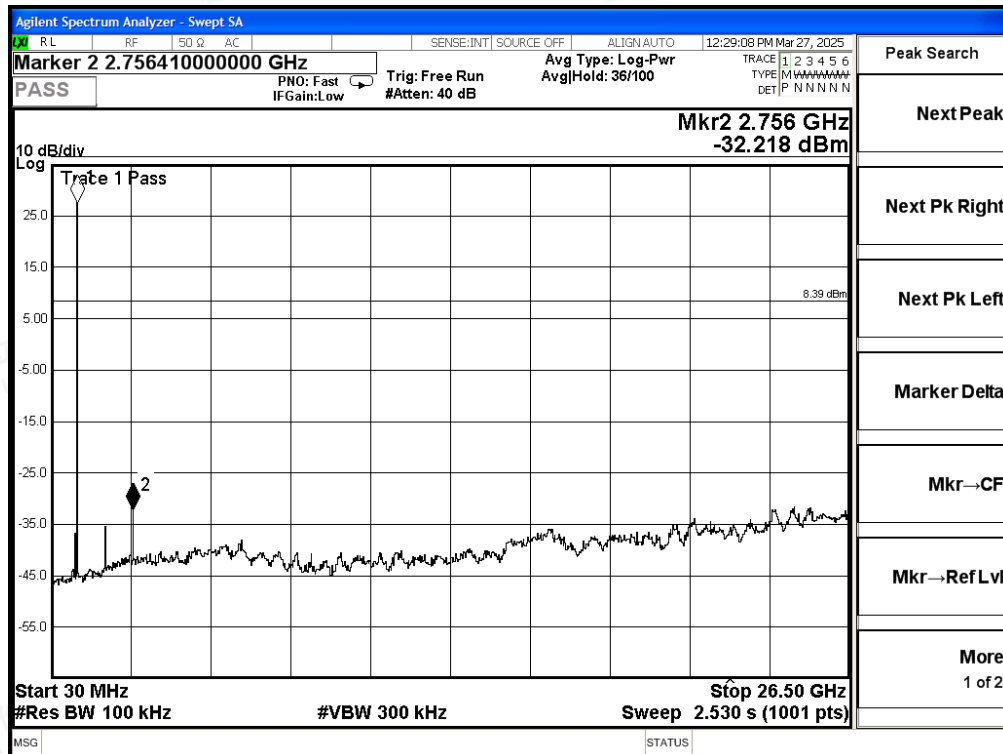
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## Ant1\_914.750\_0~Reference

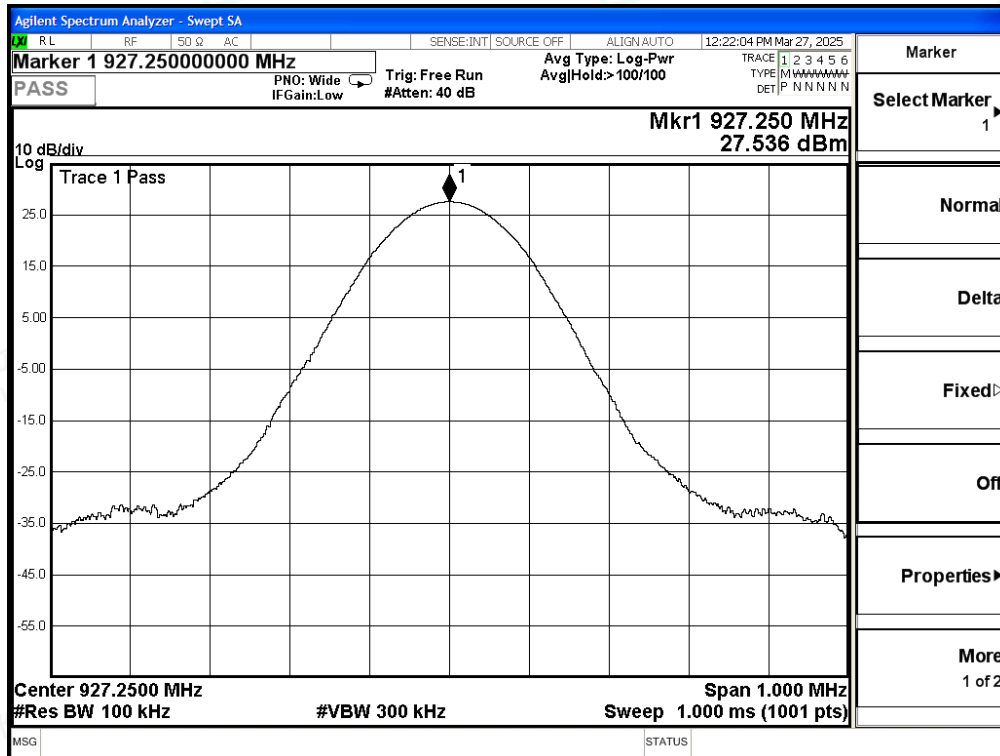


## Ant1\_914.750\_30~26500

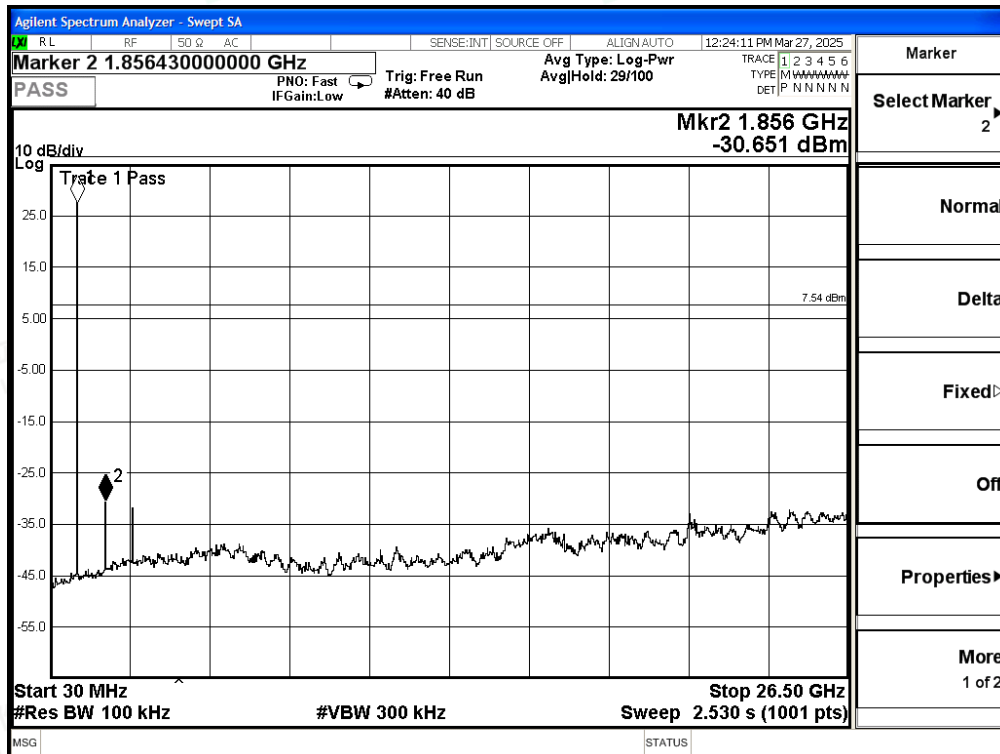




## Ant1\_927.250\_0~Reference



## Ant1\_927.250\_30~26500



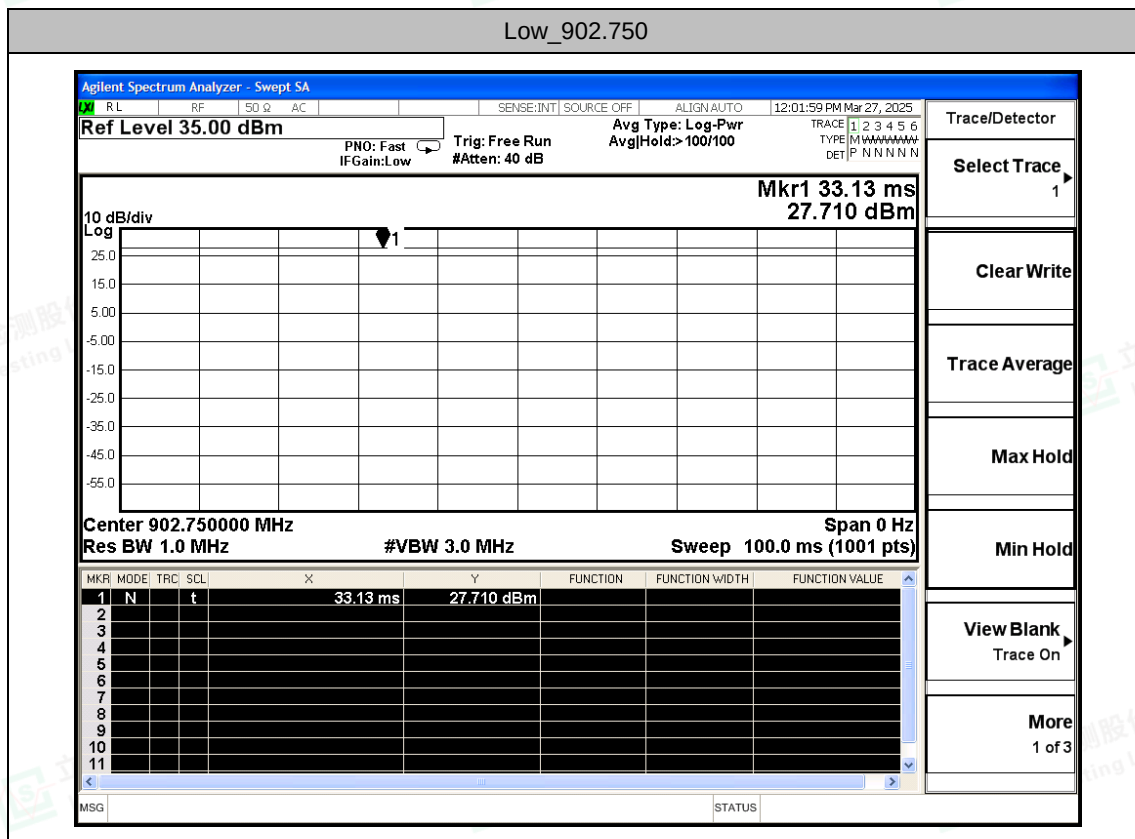


## A.8 Duty Cycle

### Test Result

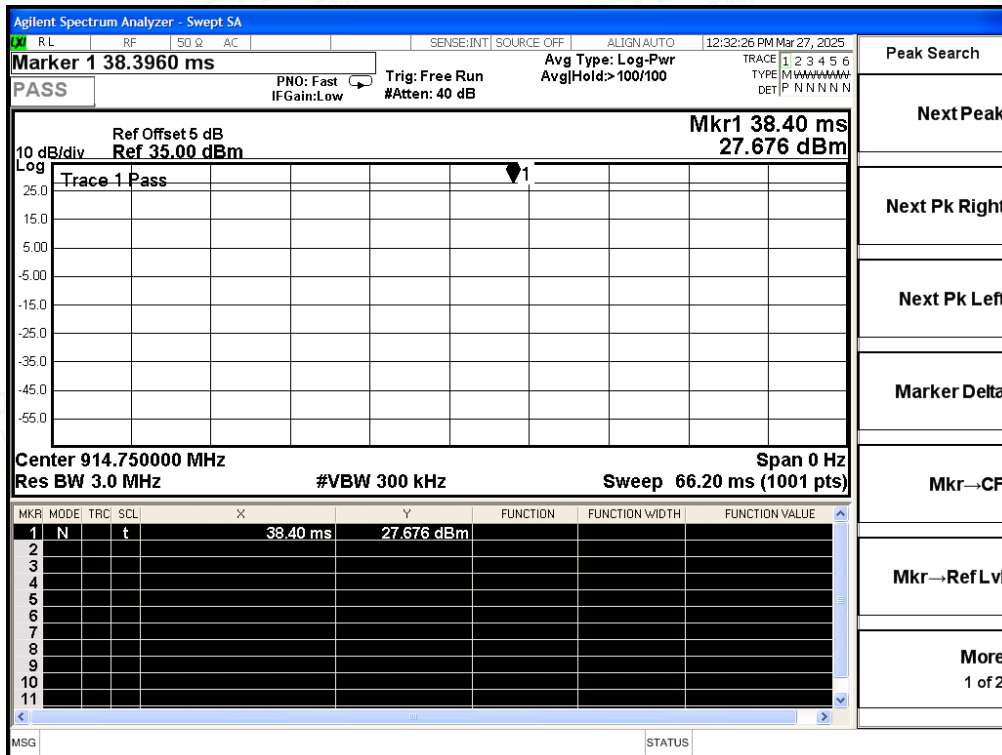
| Antenna | Channel[MHz] | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Limit | Verdict |
|---------|--------------|----------------------------|--------------------------|----------------|-------|---------|
| Ant1    | 902.750      | 100.0                      | 0                        | 100            | ---   | PASS    |
|         | 914.750      | 100.0                      | 0                        | 100            | ---   | PASS    |
|         | 927.250      | 100.0                      | 0                        | 100            | ---   | PASS    |

### Test Graphs

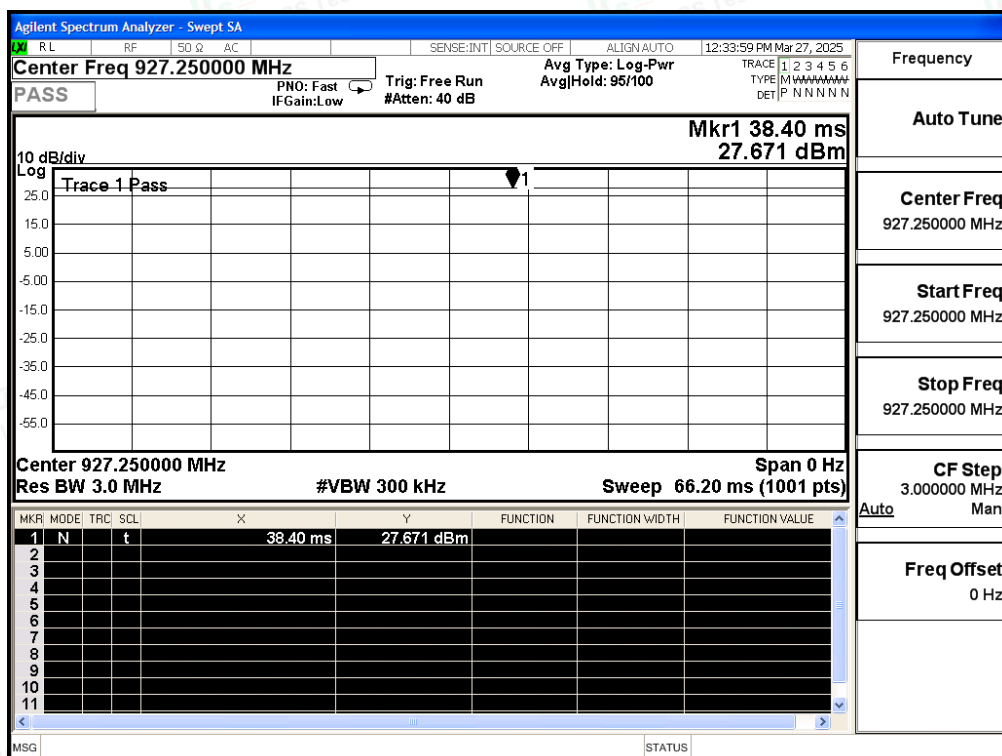




## Ant1\_914.750



## Ant1\_927.250



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