

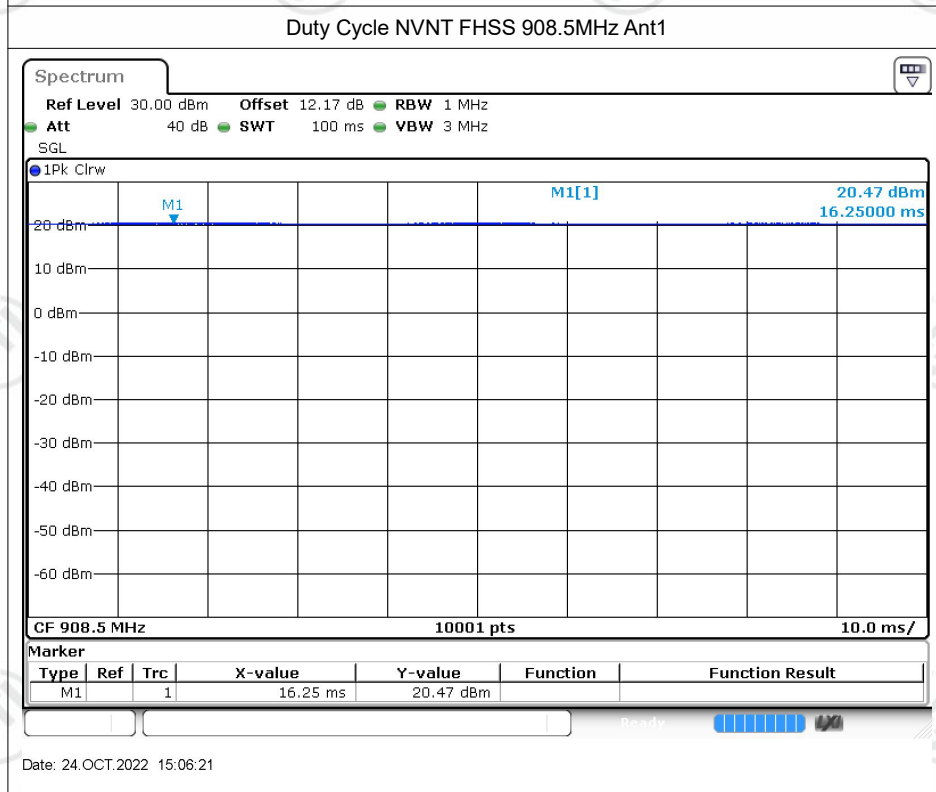
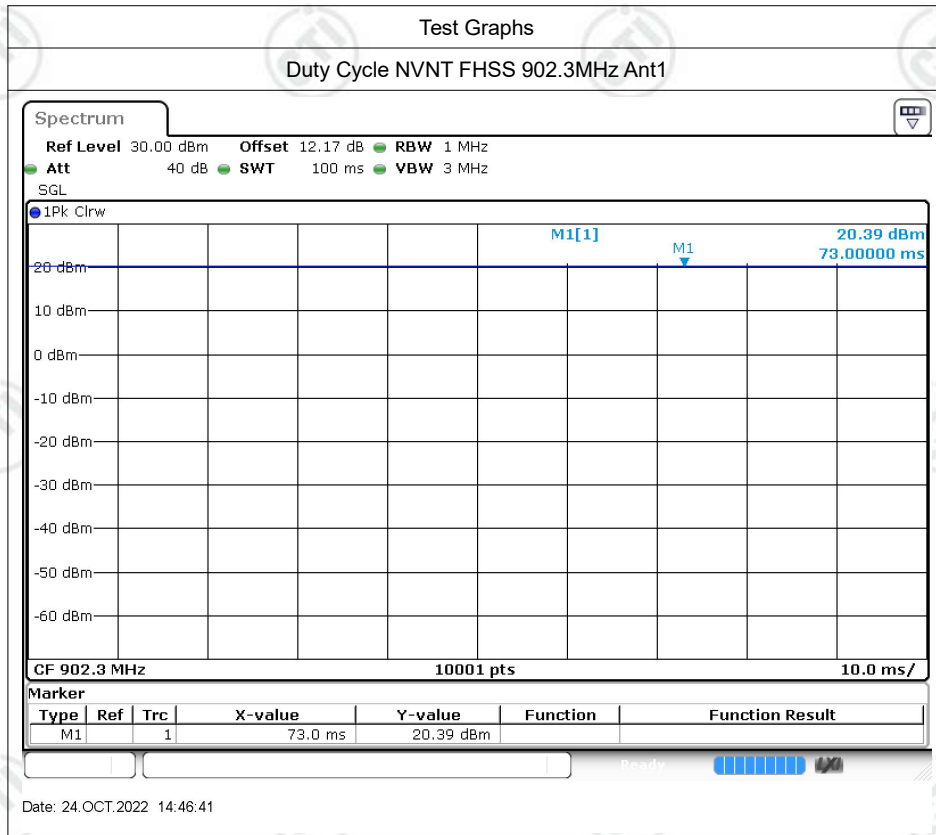
Appendix: LoRa FHSS

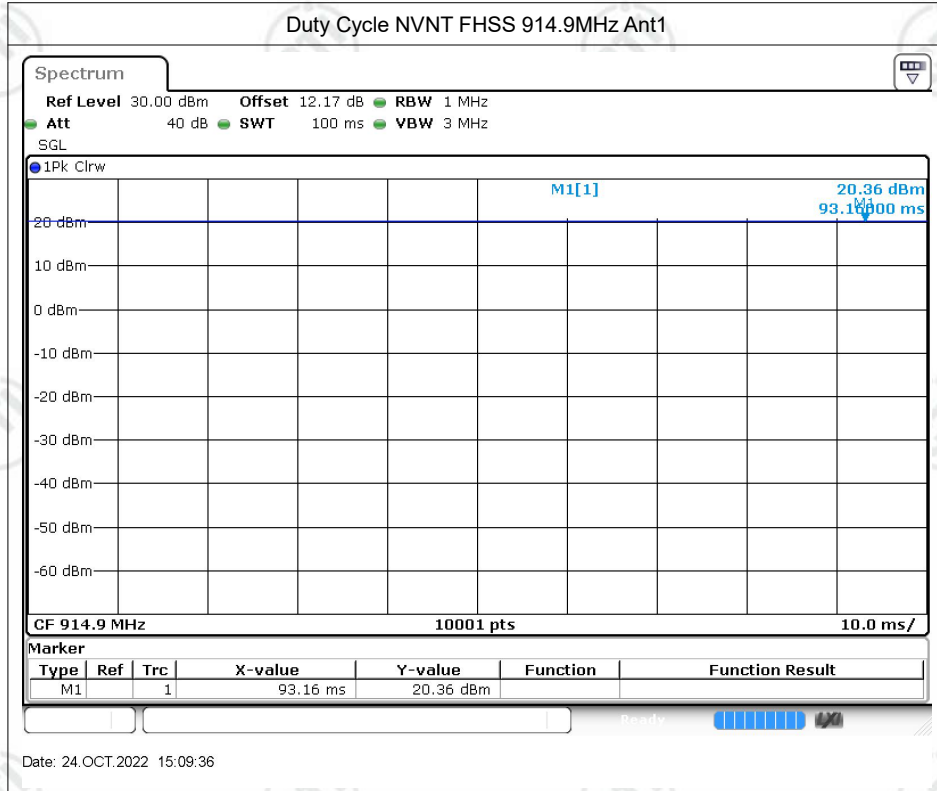
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Duty Cycle

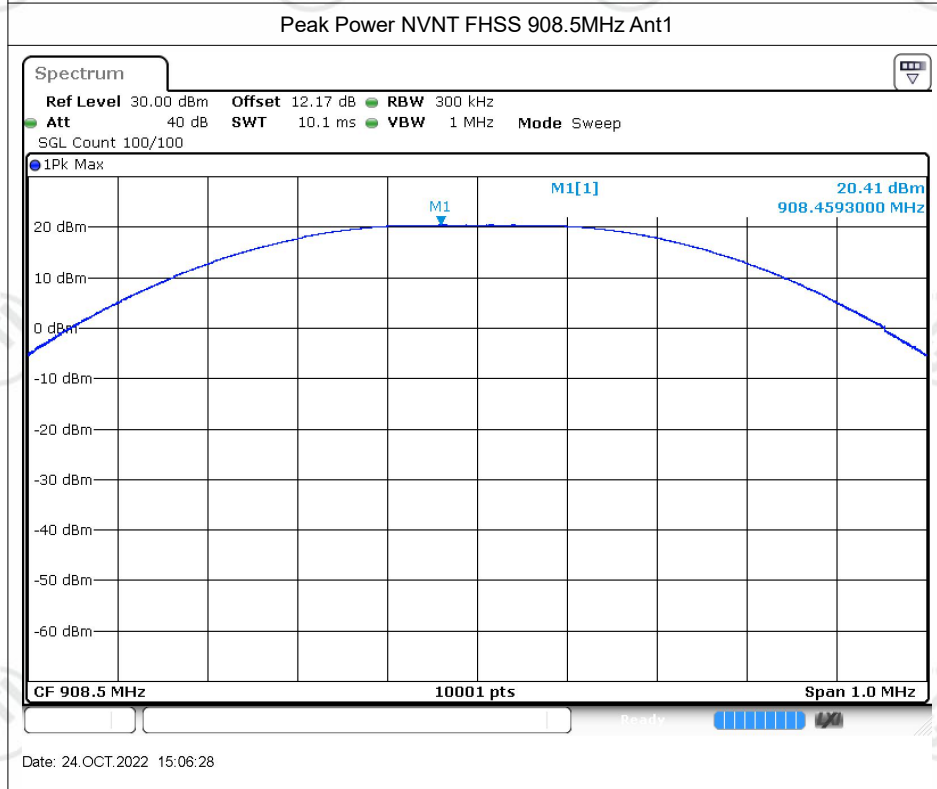
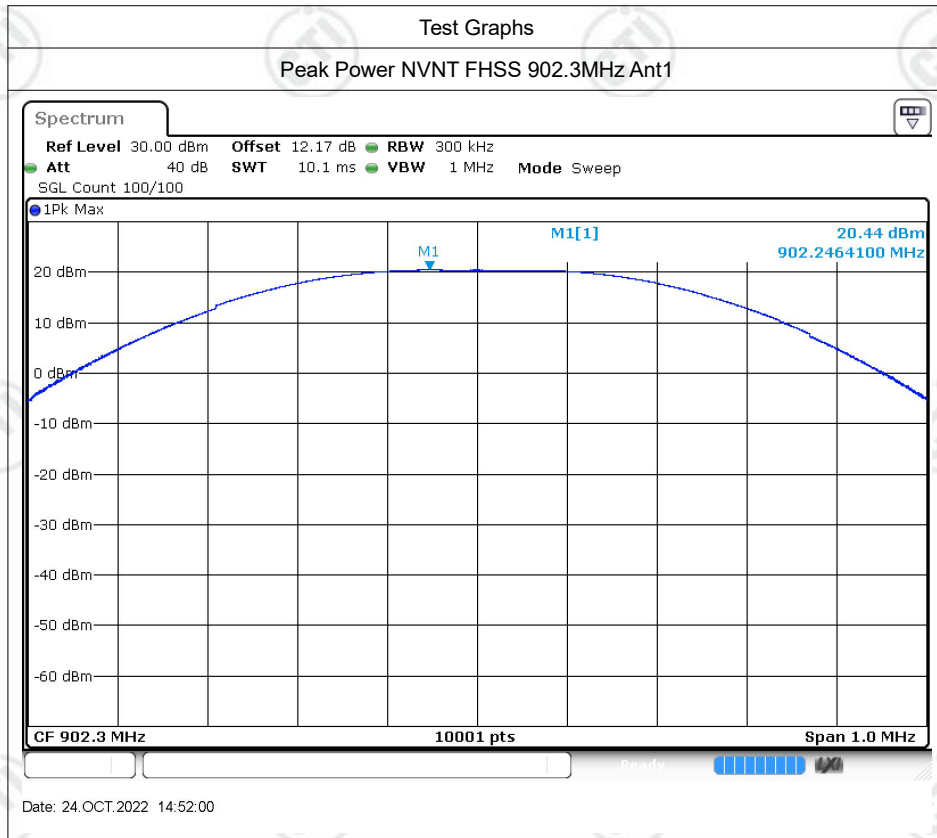
| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|------|-----------------|---------|----------------|------------------------|-----------|
| NVNT | FHSS | 902.3 | Ant1 | 100 | 0 | 0 |
| NVNT | FHSS | 908.5 | Ant1 | 100 | 0 | 0 |
| NVNT | FHSS | 914.9 | Ant1 | 100 | 0 | 0 |

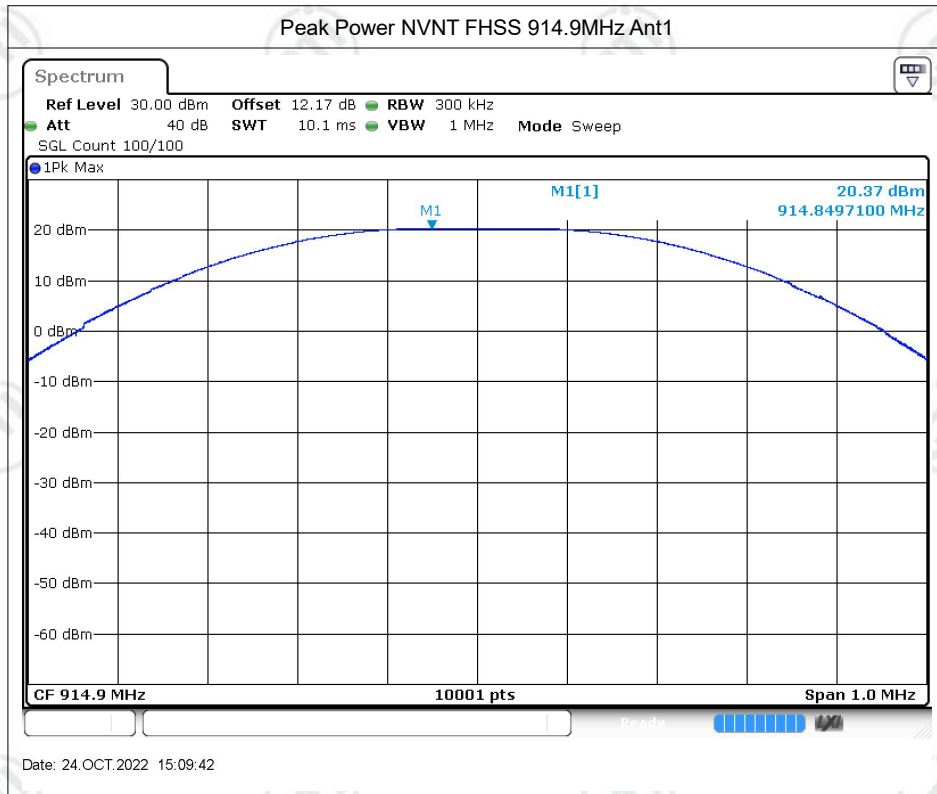




Maximum Peak Conducted Output Power

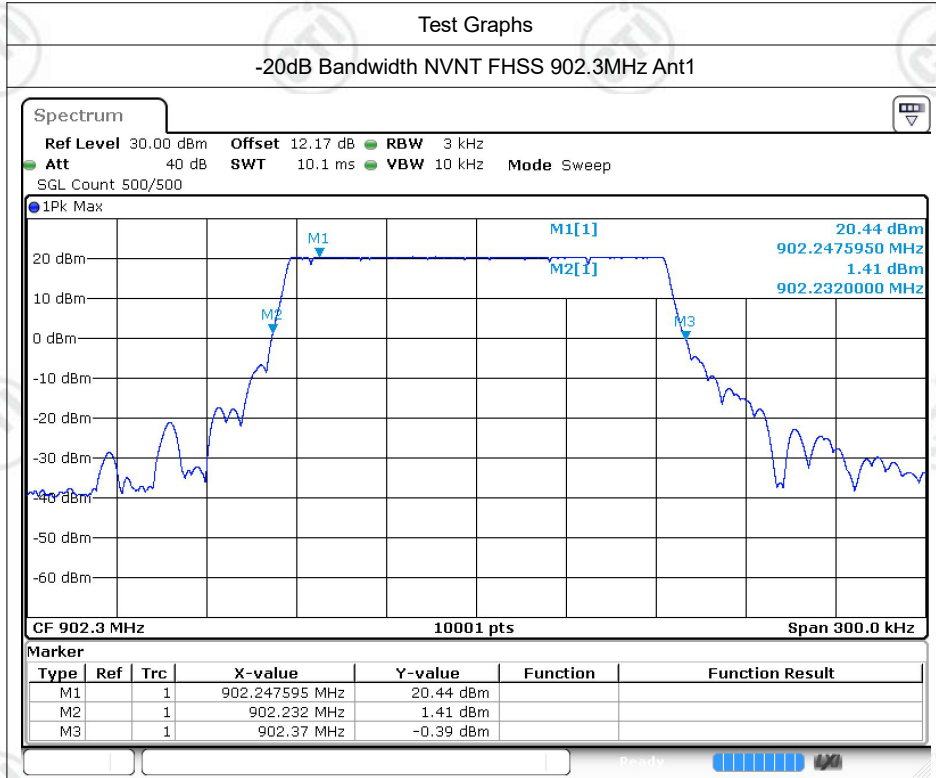
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|--------------------|---------|--------------------------|---------------------|----------------------|----------------|---------|
| NVNT | FHSS | 902.3 | Ant1 | 20.44 | 0 | 20.44 | 30 | Pass |
| NVNT | FHSS | 908.5 | Ant1 | 20.41 | 0 | 20.41 | 30 | Pass |
| NVNT | FHSS | 914.9 | Ant1 | 20.37 | 0 | 20.37 | 30 | Pass |



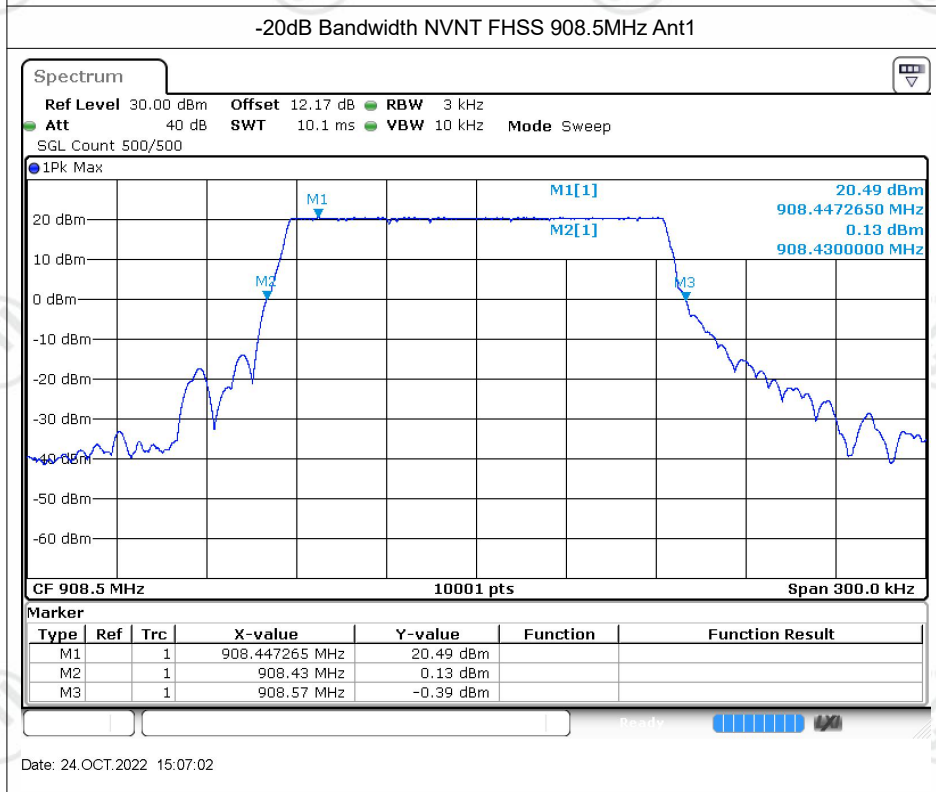


-20dB Bandwidth

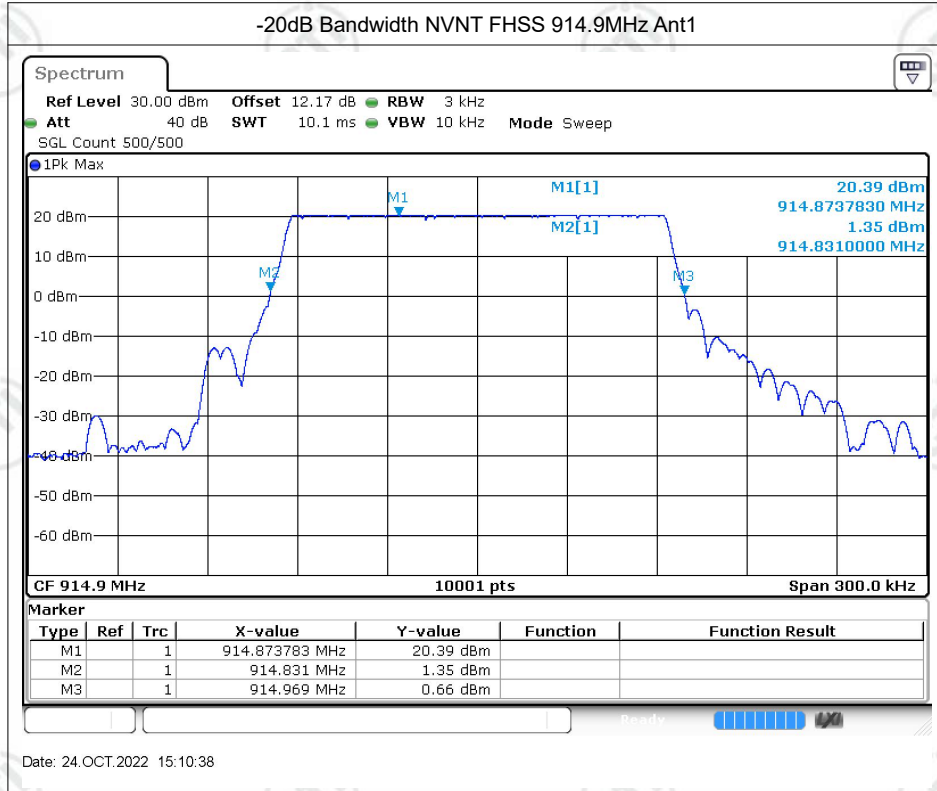
| Condition | Mode | Frequency (MHz) | Antenna | -20 dB Bandwidth (MHz) | Limit -20 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|------------------------|------------------------------|---------|
| NVNT | FHSS | 902.3 | Ant1 | 0.138 | --- | Pass |
| NVNT | FHSS | 908.5 | Ant1 | 0.139 | --- | Pass |
| NVNT | FHSS | 914.9 | Ant1 | 0.138 | --- | Pass |



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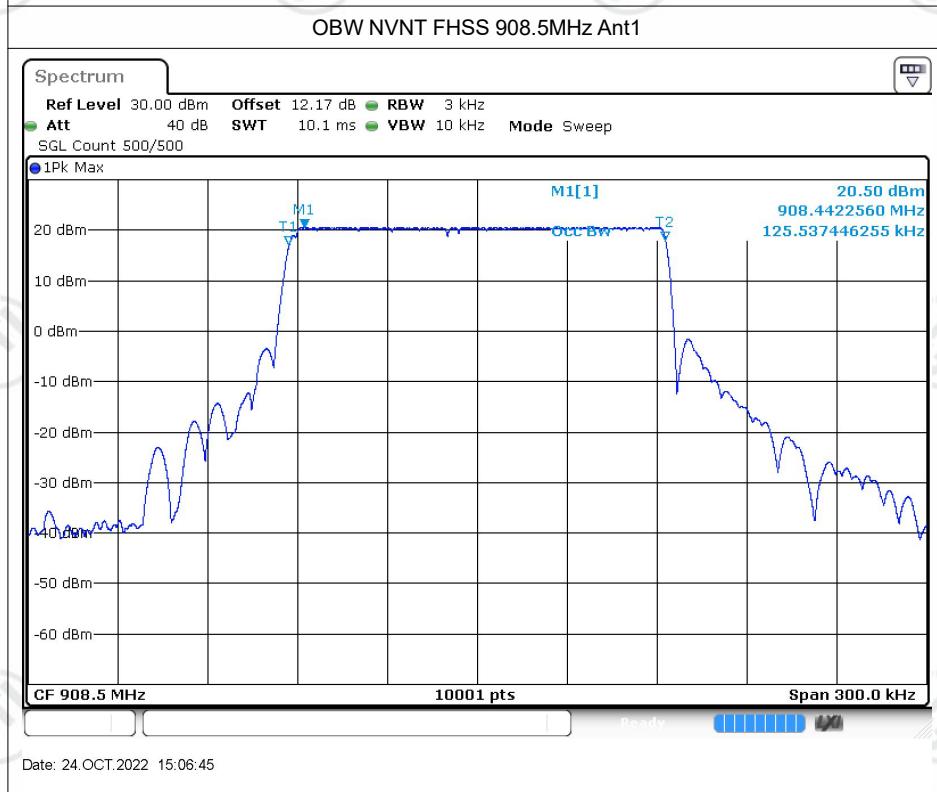
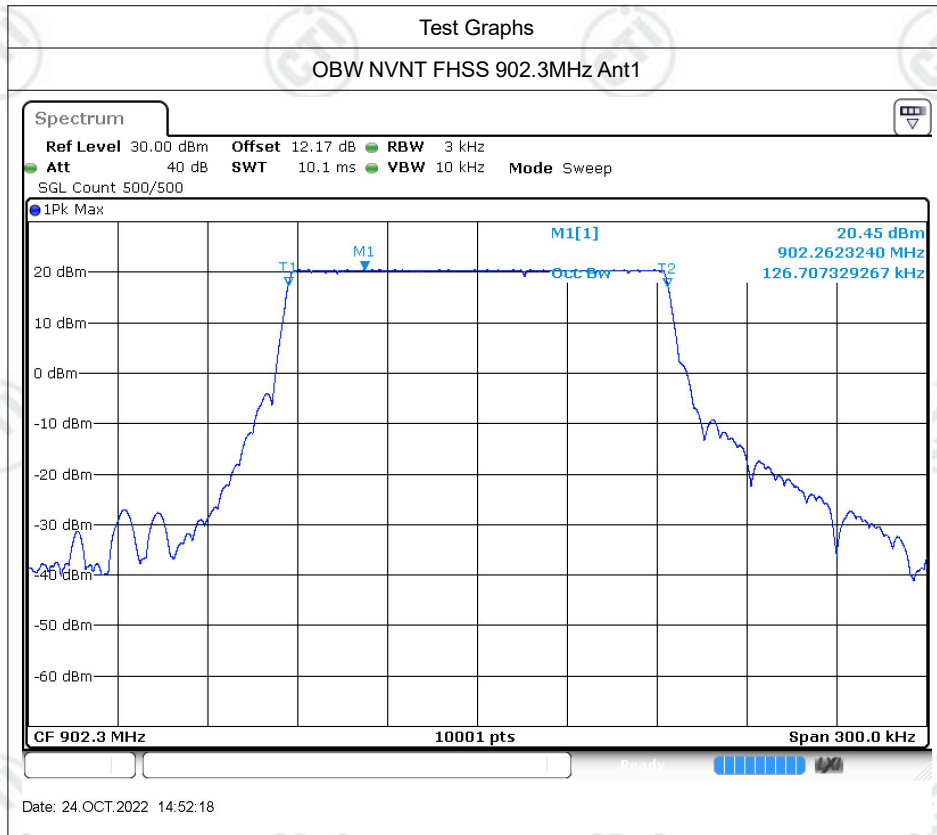


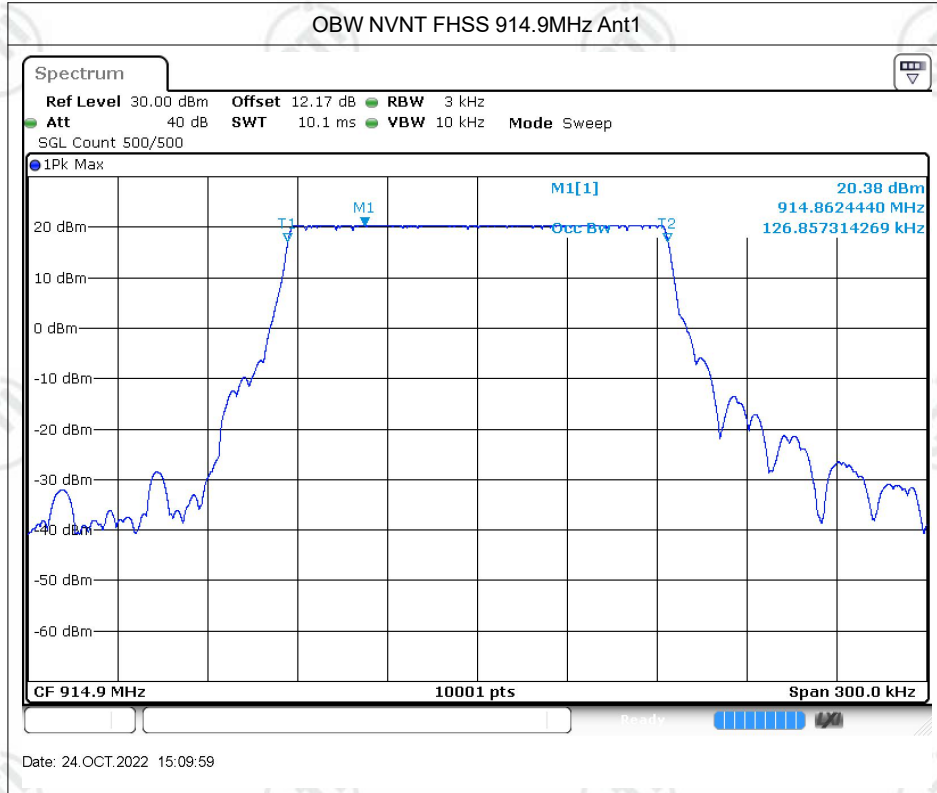
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Occupied Channel Bandwidth

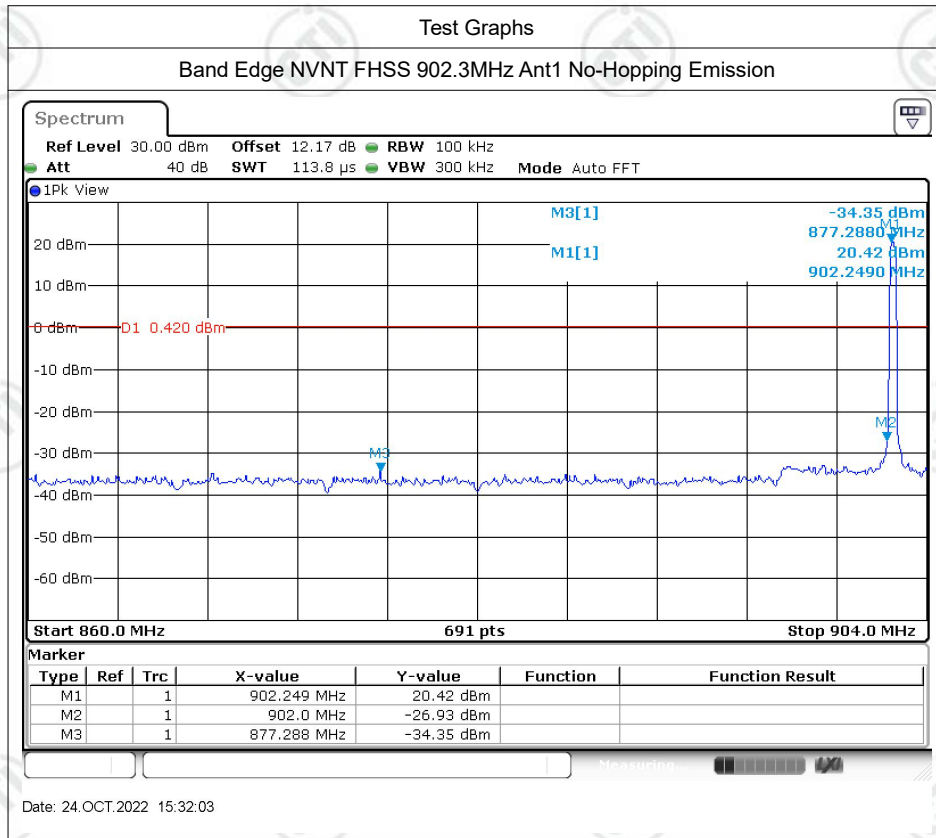
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT | FHSS | 902.3 | Ant1 | 0.127 |
| NVNT | FHSS | 908.5 | Ant1 | 0.126 |
| NVNT | FHSS | 914.9 | Ant1 | 0.127 |

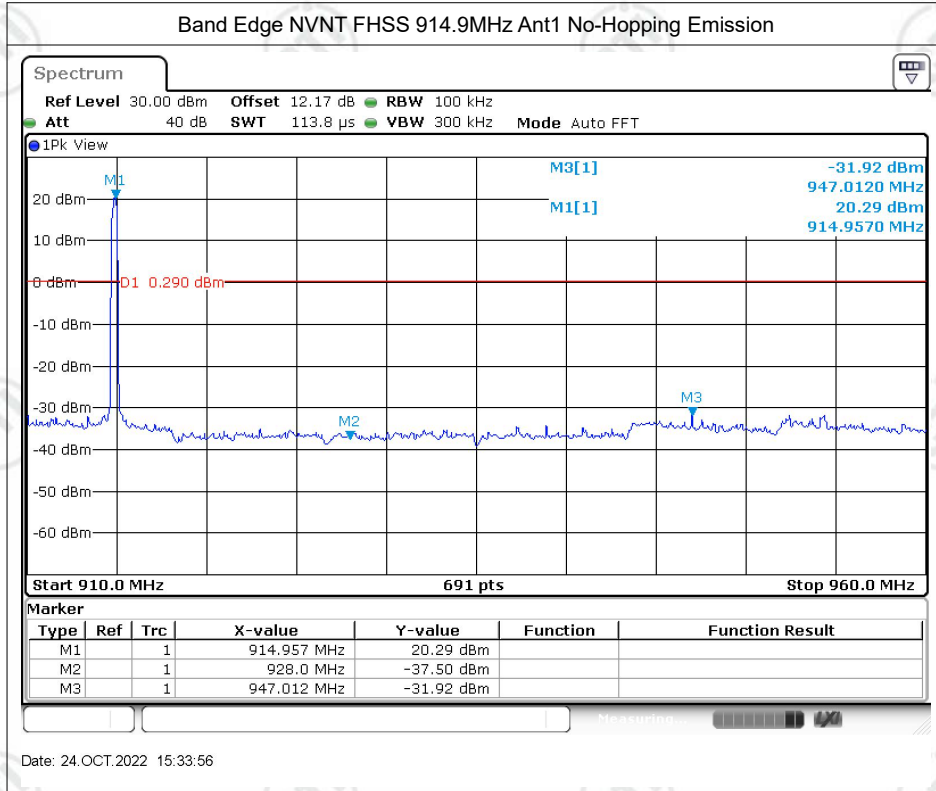




Band Edge

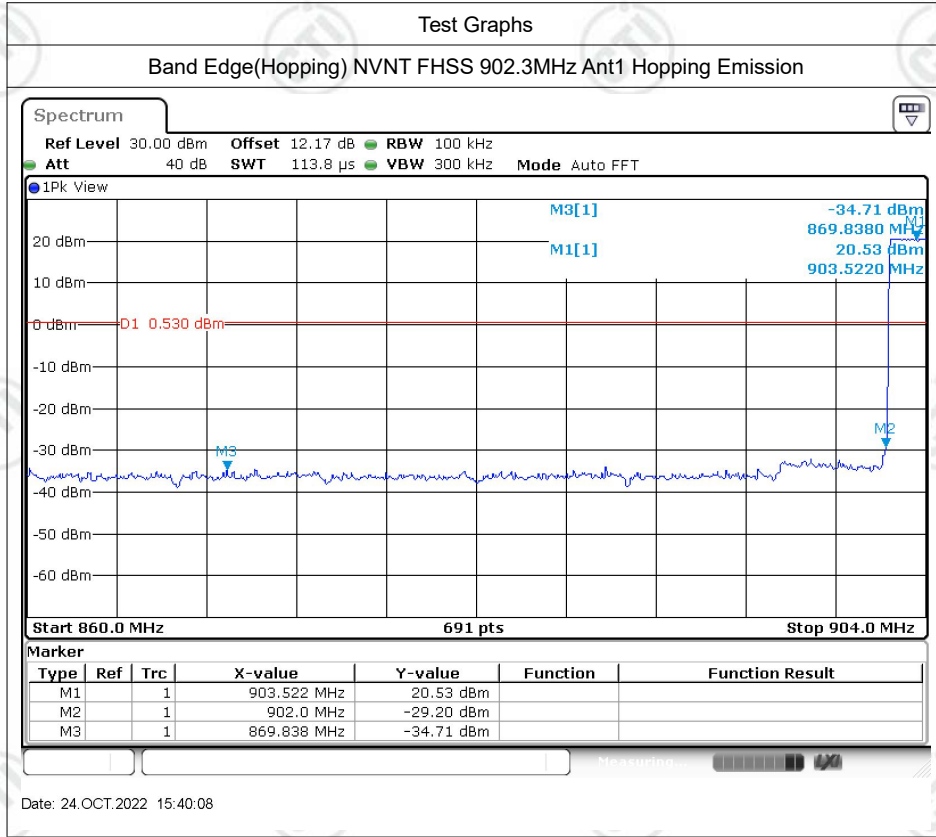
| Condition | Mode | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT | FHSS | 902.3 | Ant1 | No-Hopping | -26.93 | 0.42 | Pass |
| NVNT | FHSS | 914.9 | Ant1 | No-Hopping | -37.50 | 0.29 | Pass |

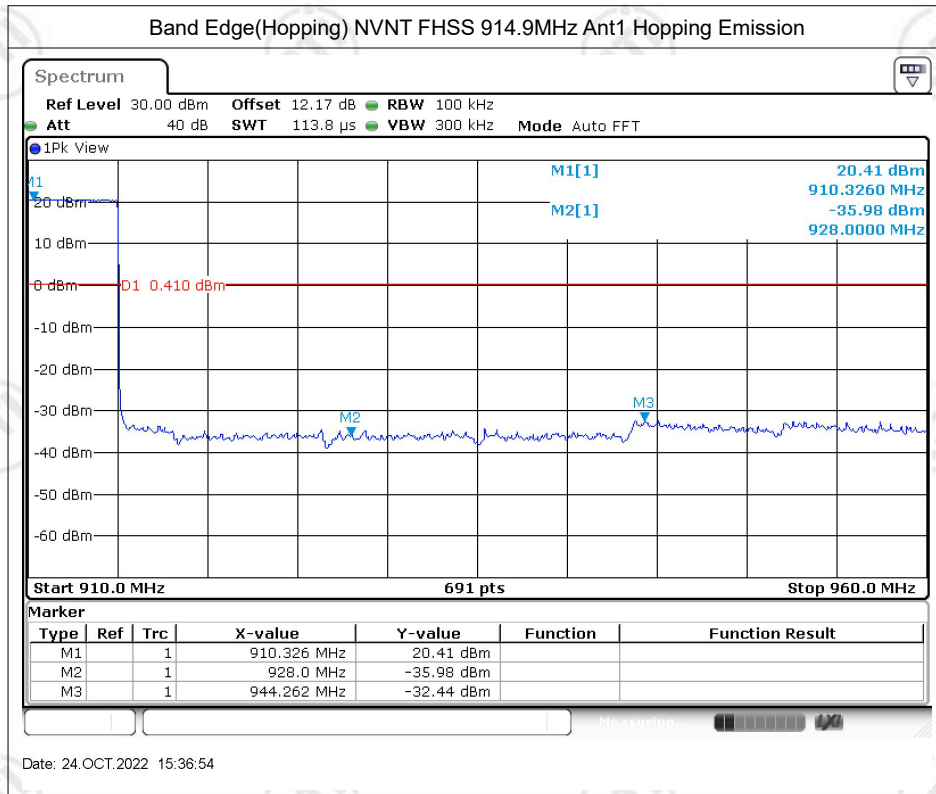




Band Edge(Hopping)

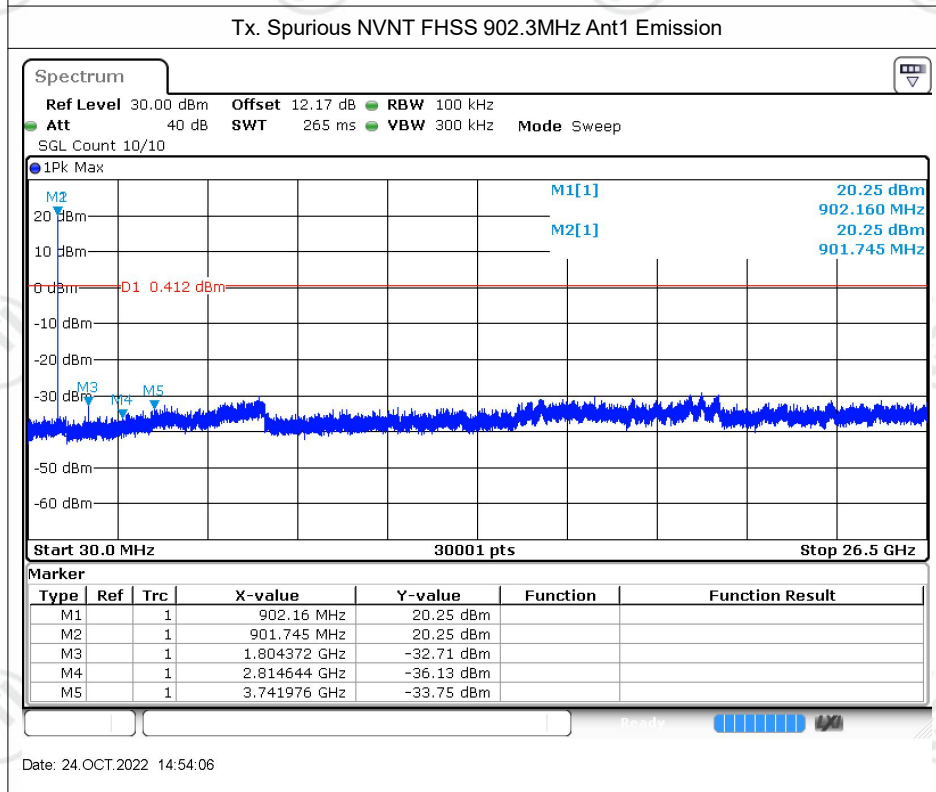
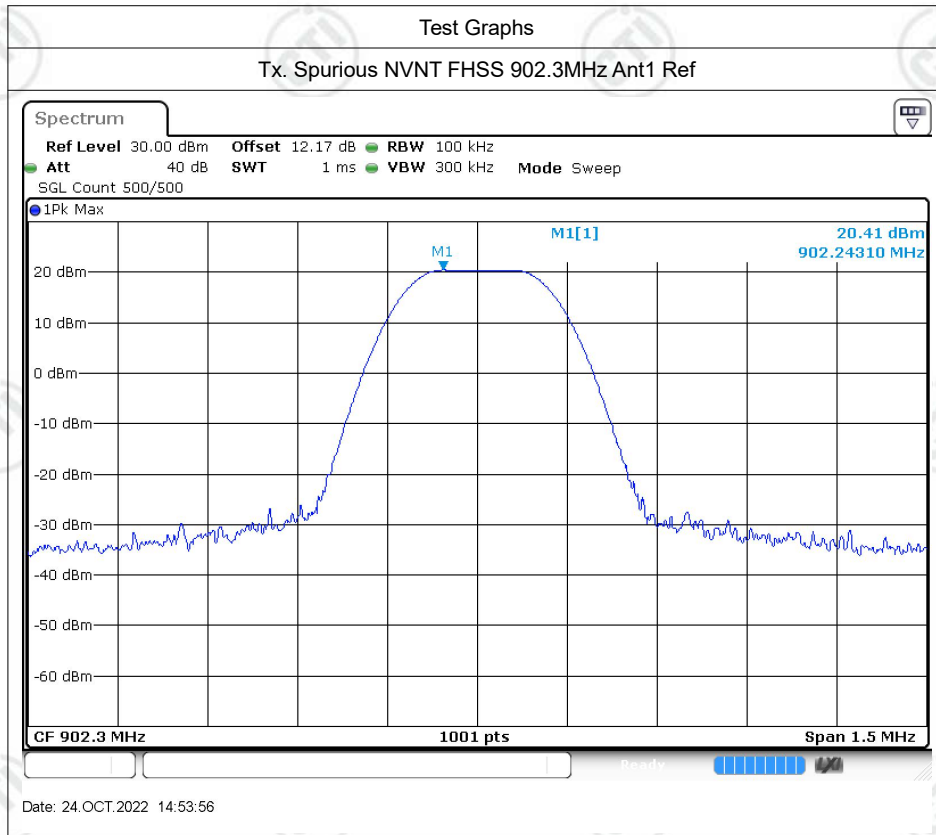
| Condition | Mode | Frequency (MHz) | Antenna | Hopping Mode | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|--------------|-----------------|-------------|---------|
| NVNT | FHSS | 902.3 | Ant1 | Hopping | -29.2 | 0.53 | Pass |
| NVNT | FHSS | 914.9 | Ant1 | Hopping | -35.98 | 0.41 | Pass |

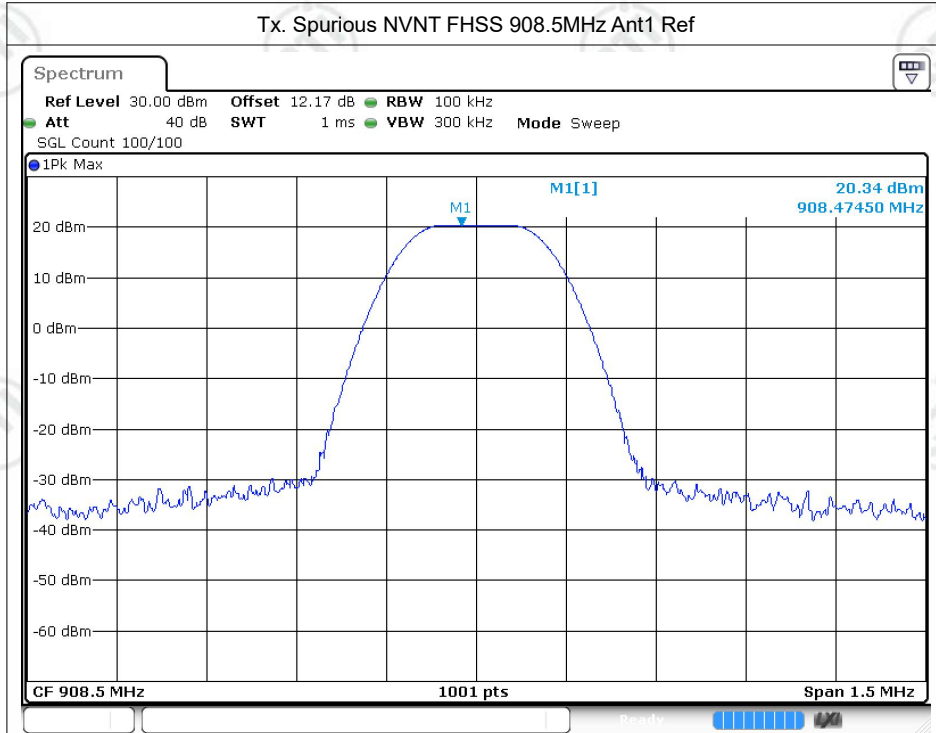




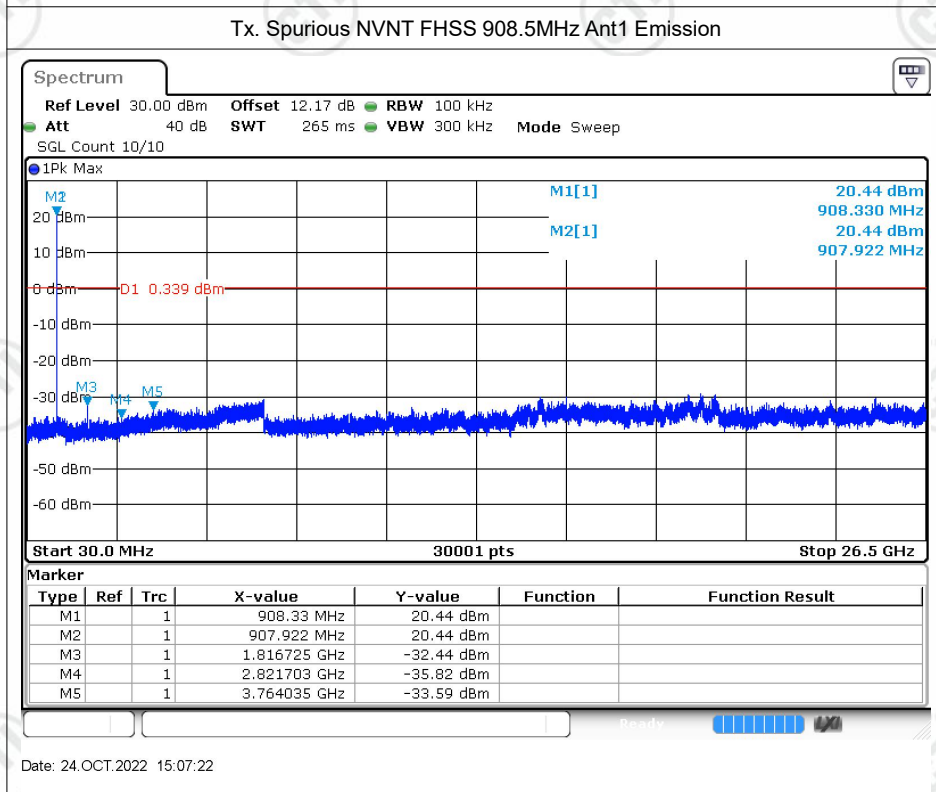
Conducted RF Spurious Emission

| Condition | Mode | Frequency (MHz) | Antenna | Limit (dBc) | Verdict |
|-----------|------|-----------------|---------|-------------|---------|
| NVNT | FHSS | 902.3 | Ant1 | 0.412 | Pass |
| NVNT | FHSS | 908.5 | Ant1 | 0.339 | Pass |
| NVNT | FHSS | 914.9 | Ant1 | 0.299 | Pass |

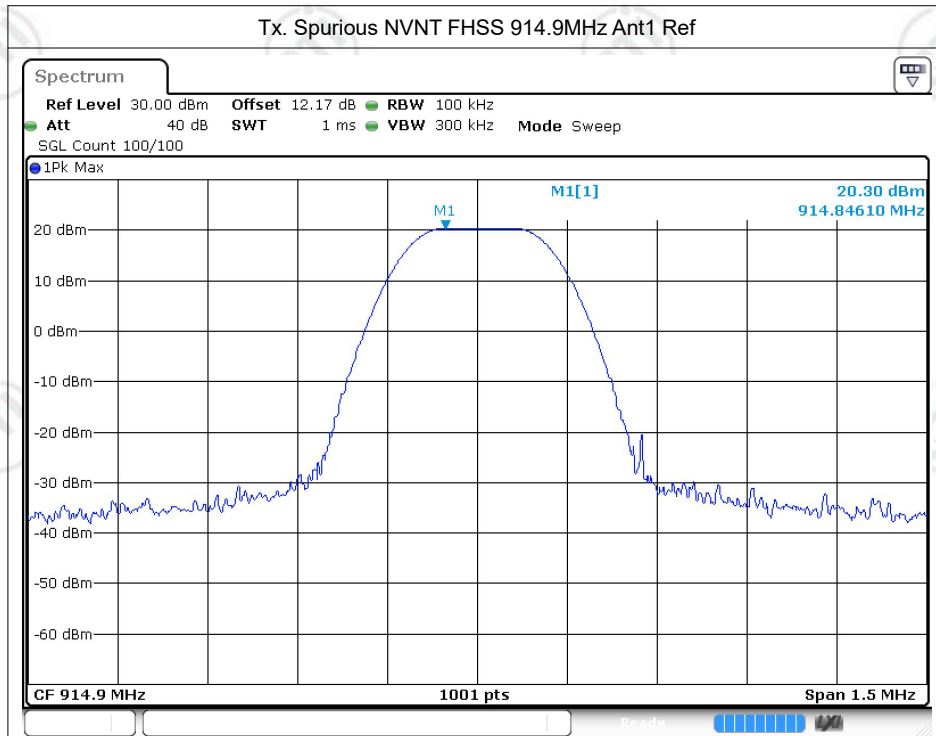




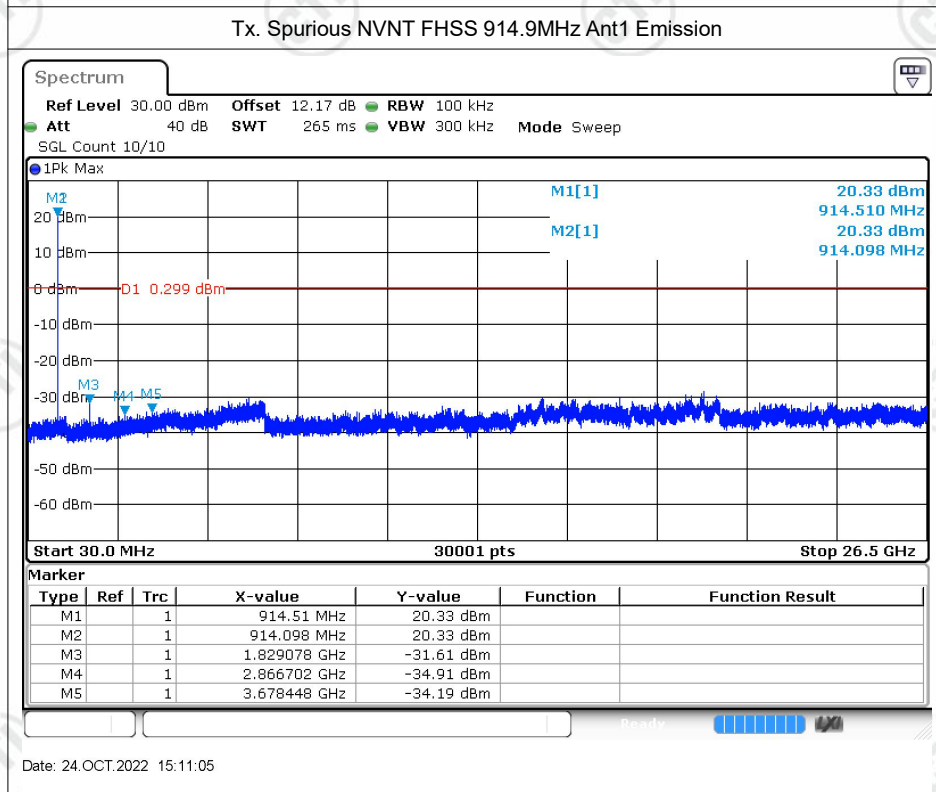
Date: 24.OCT.2022 15:07:11



Date: 24.OCT.2022 15:07:22



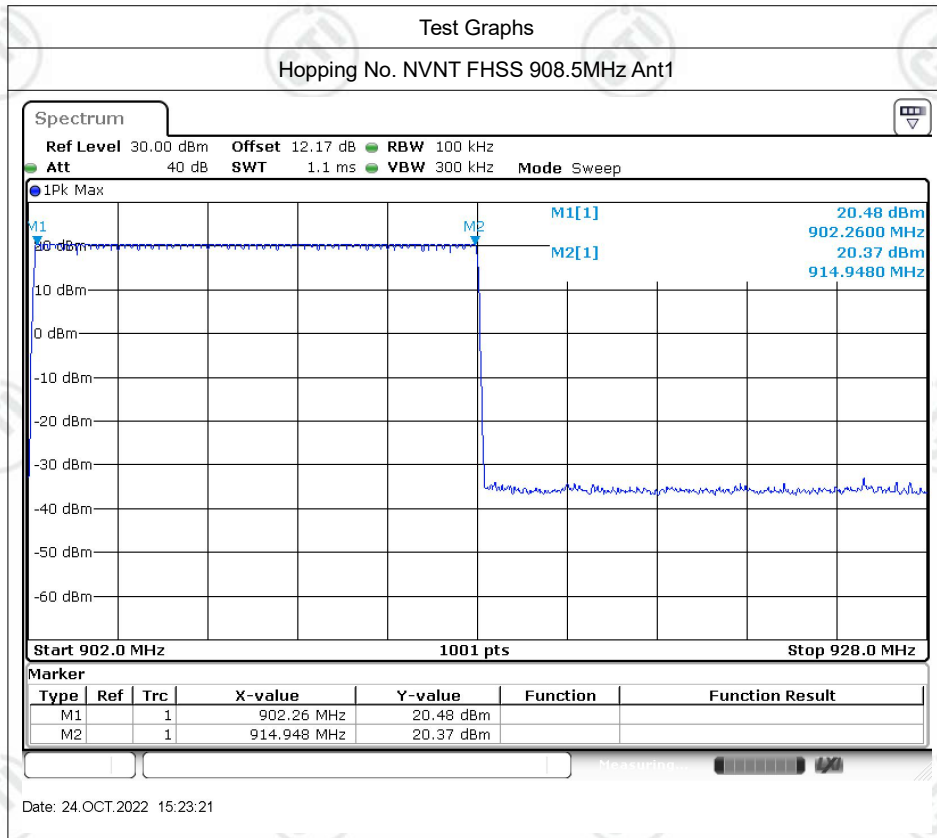
Date: 24.OCT.2022 15:10:55



Date: 24.OCT.2022 15:11:05

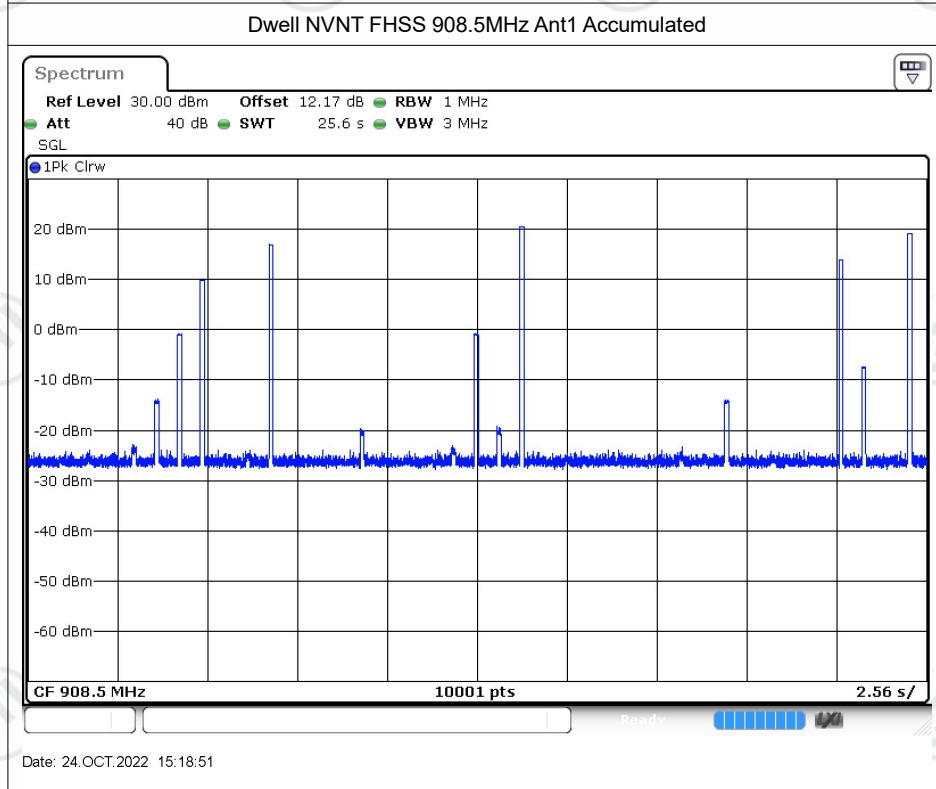
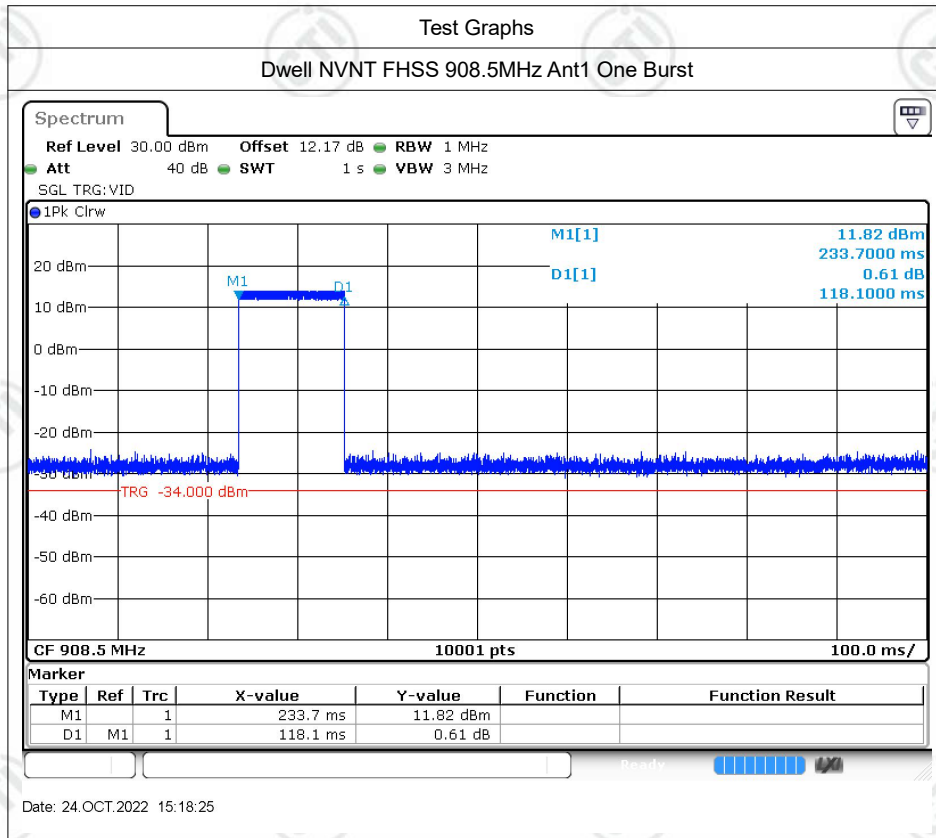
Number of Hopping Channel

| Condition | Mode | Antenna | Hopping Number | Limit | Verdict |
|-----------|------|---------|----------------|-------|---------|
| NVNT | FHSS | Ant1 | 64 | 15 | Pass |



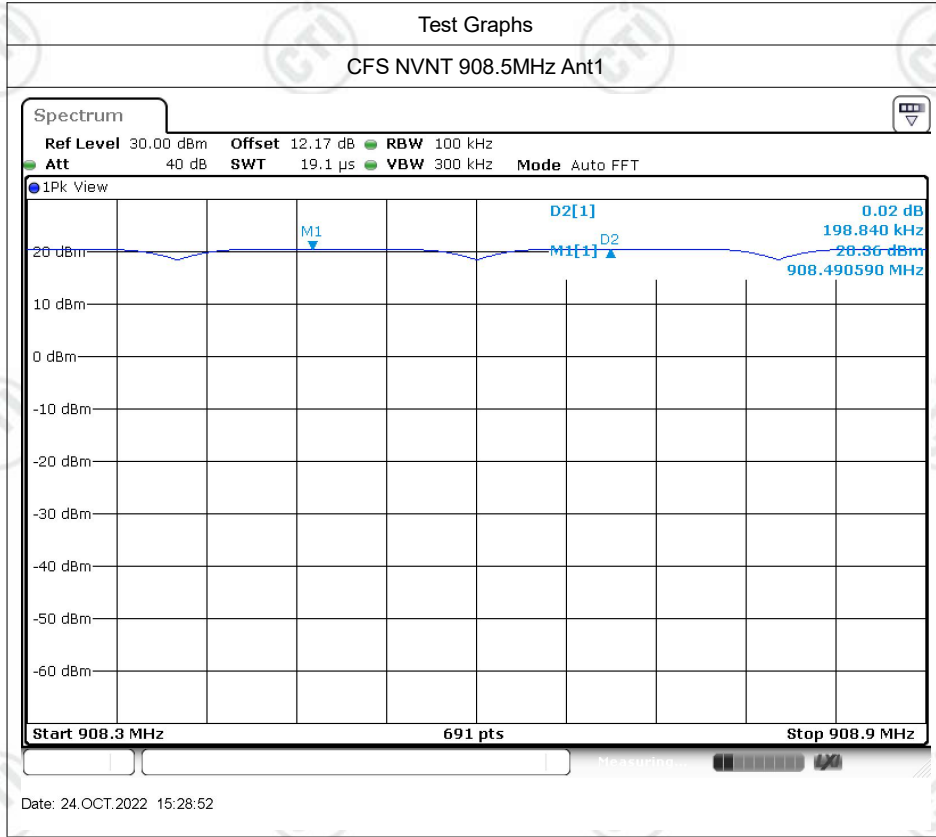
Dwell Time

| Condition | Mode | Frequency (MHz) | Antenna | Pulse Time (ms) | Total Dwell Time (ms) | Burst Count | Period Time (ms) | Limit (ms) | Verdict |
|-----------|------|-----------------|---------|-----------------|-----------------------|-------------|------------------|------------|---------|
| NVNT | FHSS | 908.5 | Ant1 | 118.1 | 354.3 | 3 | 25600 | 400 | Pass |



Carrier Frequencies Separation

| Condition | Mode | Antenna | Hopping Freq1 (MHz) | Hopping Freq2 (MHz) | HFS (MHz) | Limit (MHz) | Verdict |
|-----------|------|---------|---------------------|---------------------|-----------|-------------|---------|
| NVNT | FHSS | Ant1 | 908.490 | 908.688 | 0.198 | 0.092 | Pass |



*** End of Report ***