

## Appendix: Bluetooth LE

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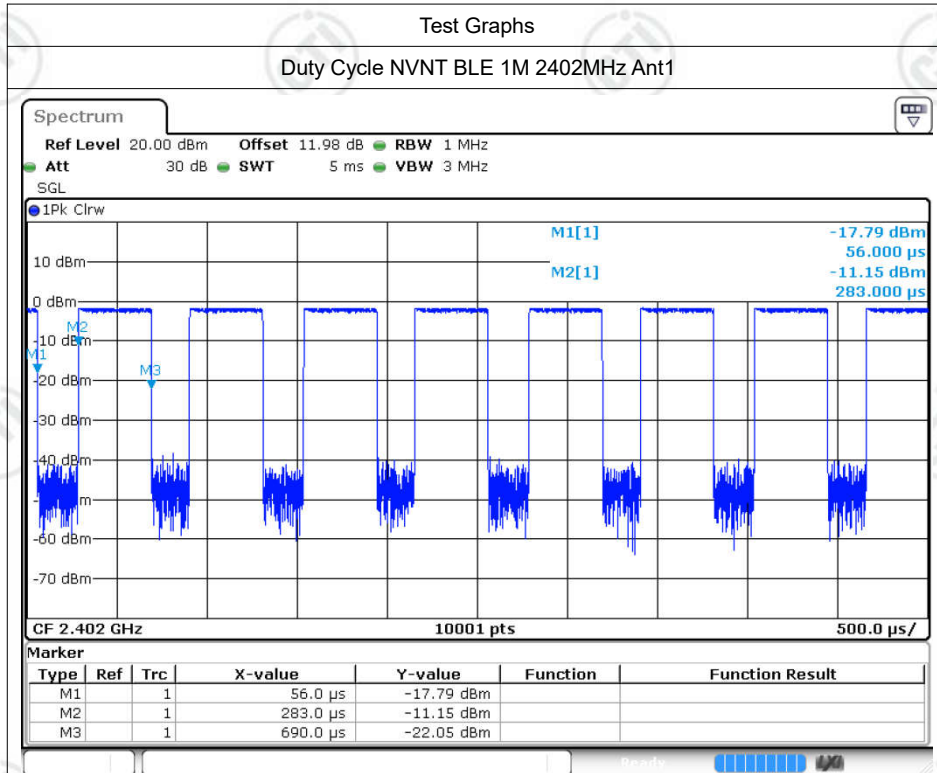
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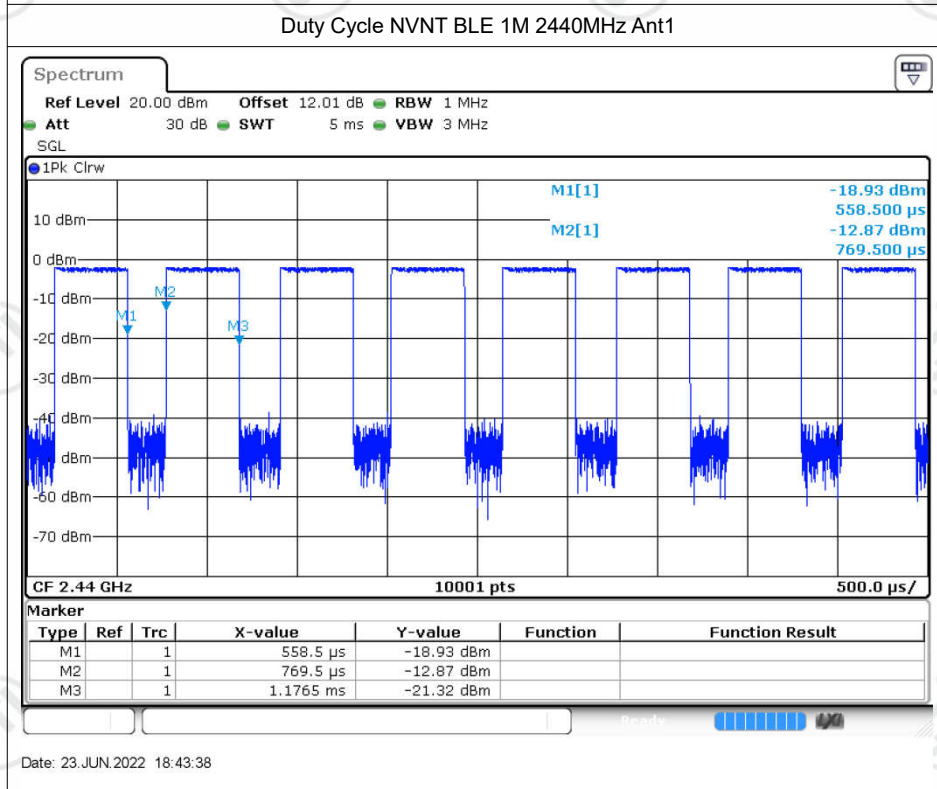
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Duty Cycle

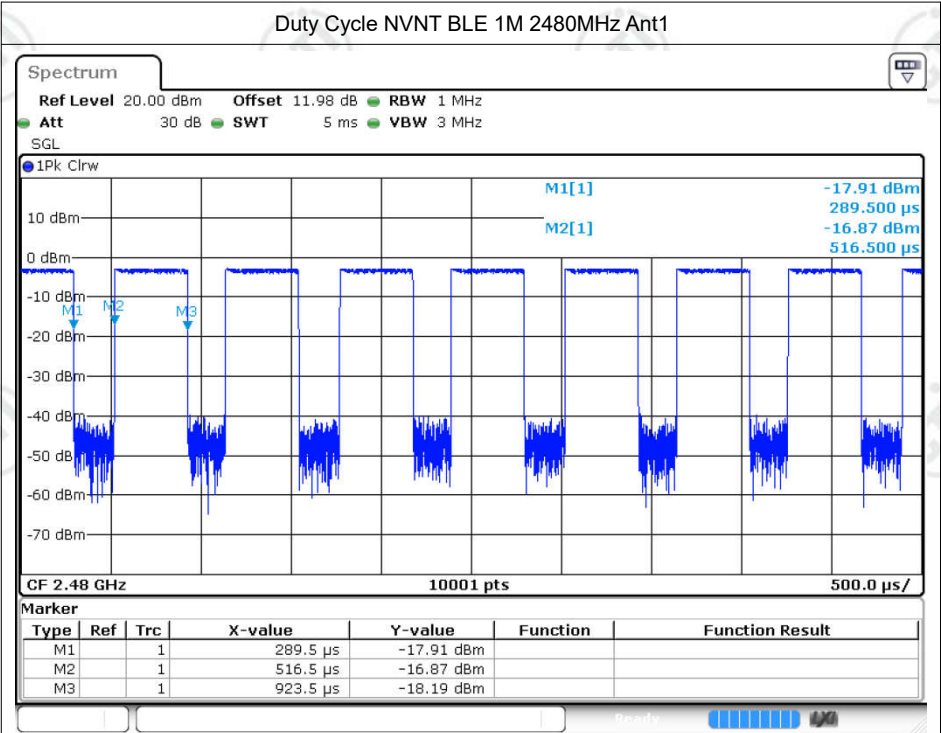
| Condition | Mode   | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) | 1/T (kHz) |
|-----------|--------|-----------------|---------|----------------|------------------------|-----------|
| NVNT      | BLE 1M | 2402            | Ant1    | 64.2           | 1.92                   | 2.46      |
| NVNT      | BLE 1M | 2440            | Ant1    | 65.86          | 1.81                   | 2.46      |
| NVNT      | BLE 1M | 2480            | Ant1    | 64.2           | 1.92                   | 2.46      |
| NVNT      | BLE 2M | 2402            | Ant1    | 34.47          | 4.63                   | 4.69      |
| NVNT      | BLE 2M | 2440            | Ant1    | 34.47          | 4.63                   | 4.69      |
| NVNT      | BLE 2M | 2480            | Ant1    | 33.6           | 4.74                   | 4.69      |



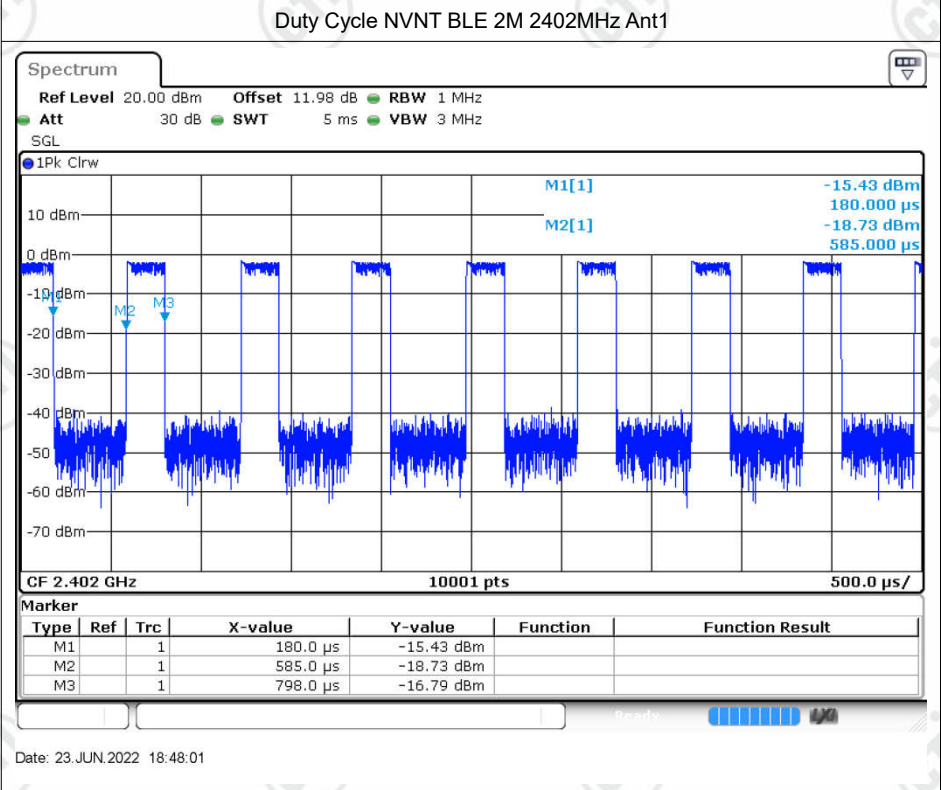
Date: 23 JUN.2022 18:38:12



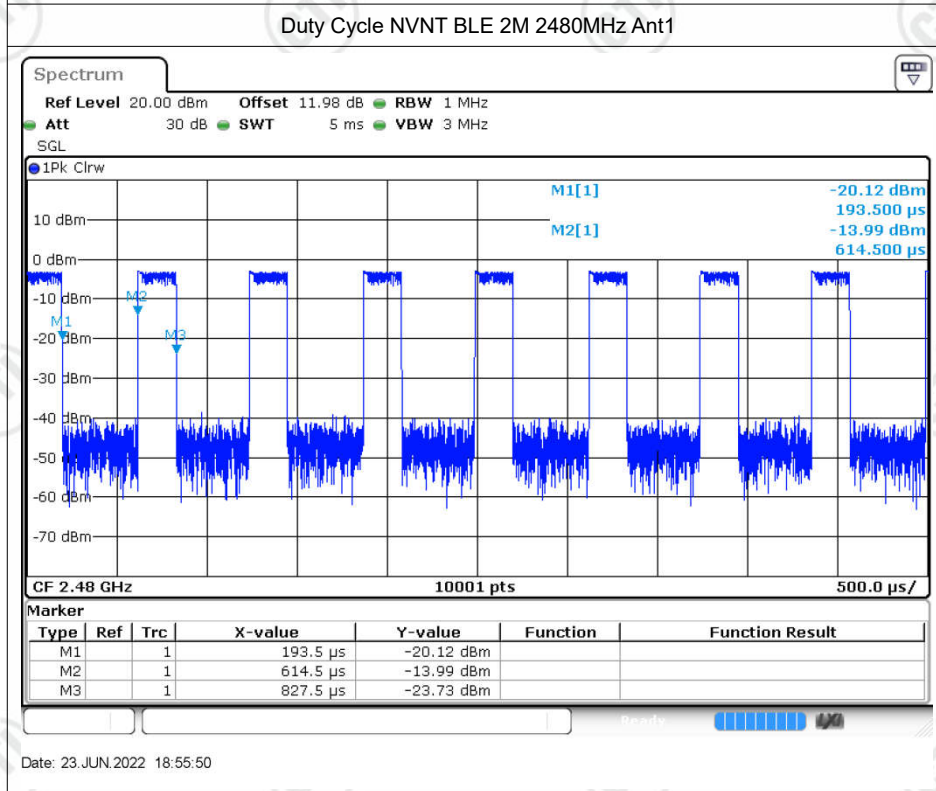
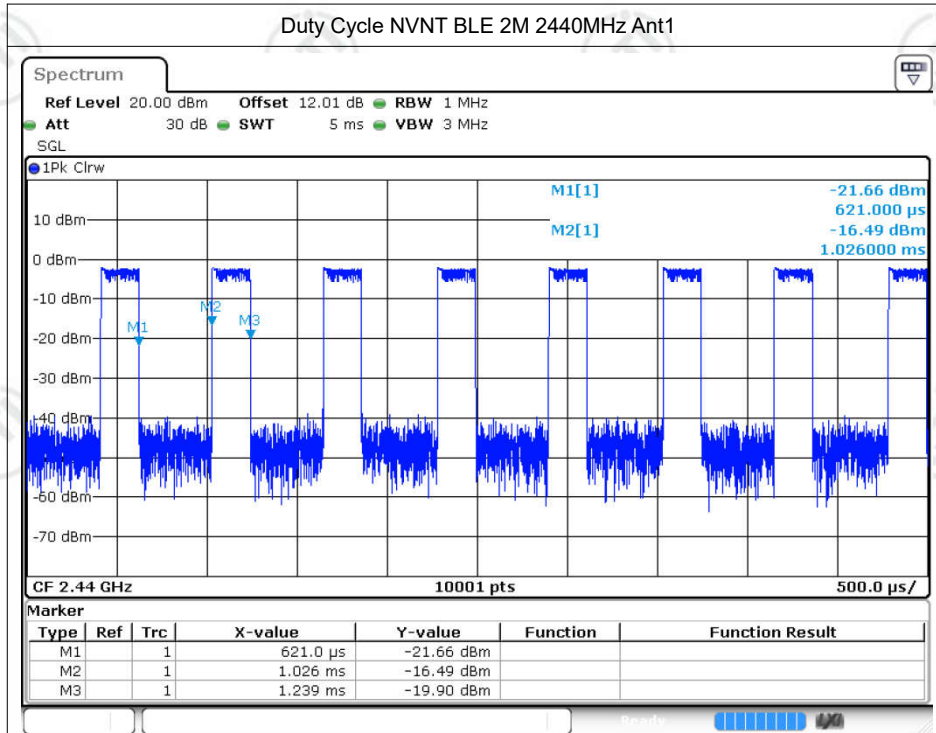
Date: 23 JUN.2022 18:43:38



Date: 23.JUN.2022 18:45:23

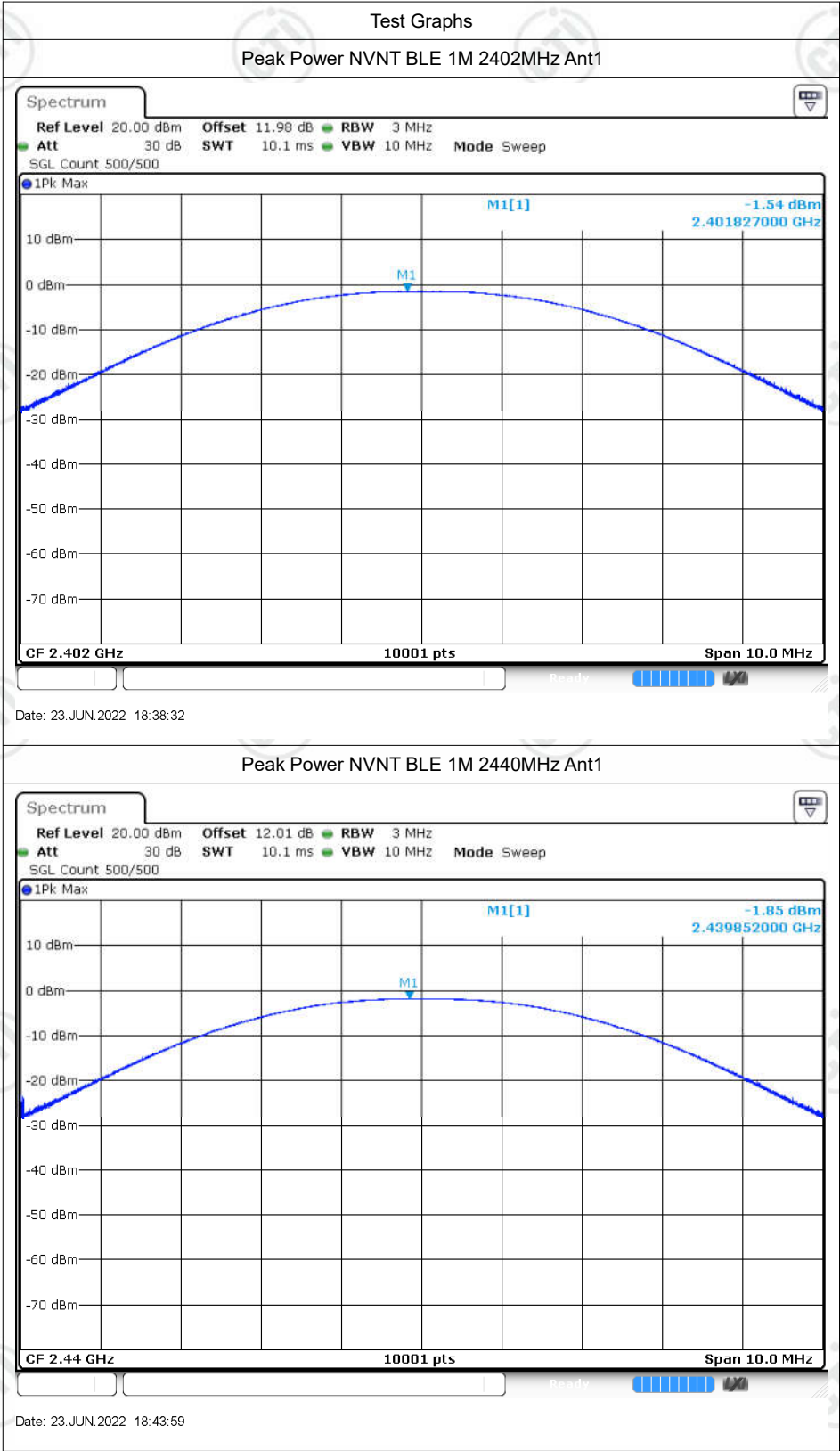


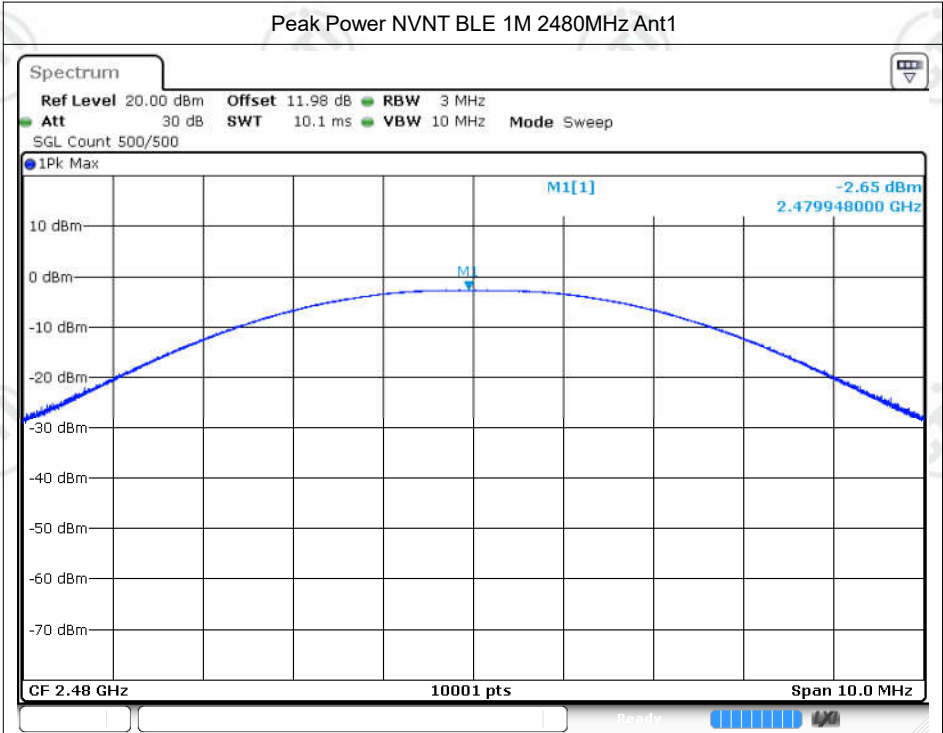
Date: 23.JUN.2022 18:48:01



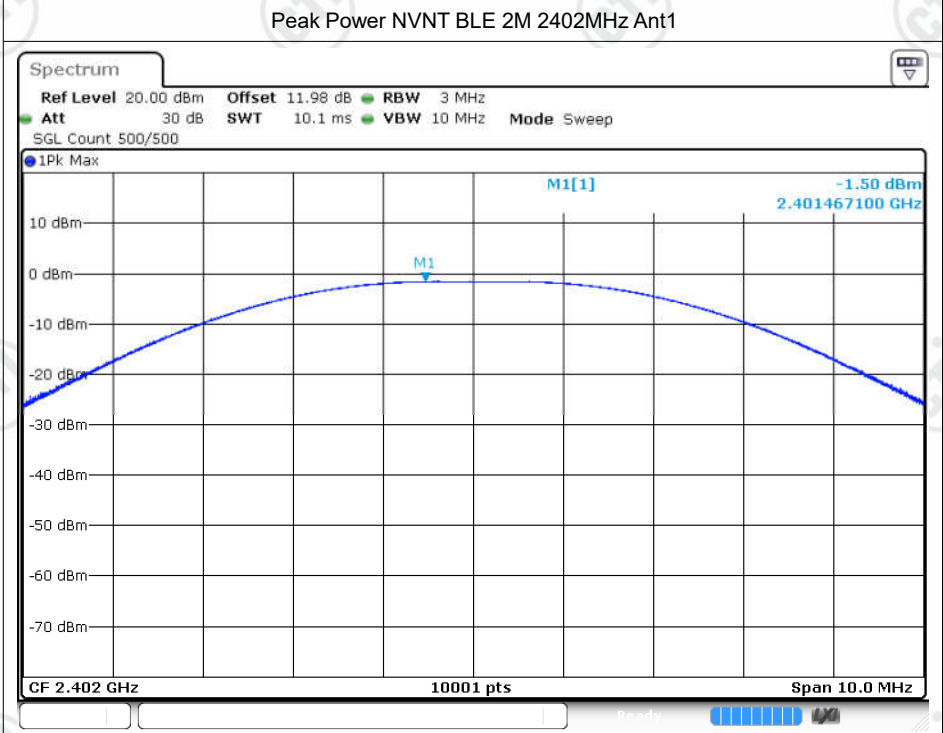
Maximum Peak Conducted Output Power

| Condition | Mode   | Frequency<br>(MHz) | Antenna | Conducted Power<br>(dBm) | Duty Factor<br>(dB) | Total Power<br>(dBm) | Limit<br>(dBm) | Verdict |
|-----------|--------|--------------------|---------|--------------------------|---------------------|----------------------|----------------|---------|
| NVNT      | BLE 1M | 2402               | Ant1    | -1.54                    | 0                   | -1.54                | 30             | Pass    |
| NVNT      | BLE 1M | 2440               | Ant1    | -1.85                    | 0                   | -1.85                | 30             | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | -2.65                    | 0                   | -2.65                | 30             | Pass    |
| NVNT      | BLE 2M | 2402               | Ant1    | -1.5                     | 0                   | -1.5                 | 30             | Pass    |
| NVNT      | BLE 2M | 2440               | Ant1    | -1.85                    | 0                   | -1.85                | 30             | Pass    |
| NVNT      | BLE 2M | 2480               | Ant1    | -2.69                    | 0                   | -2.69                | 30             | Pass    |

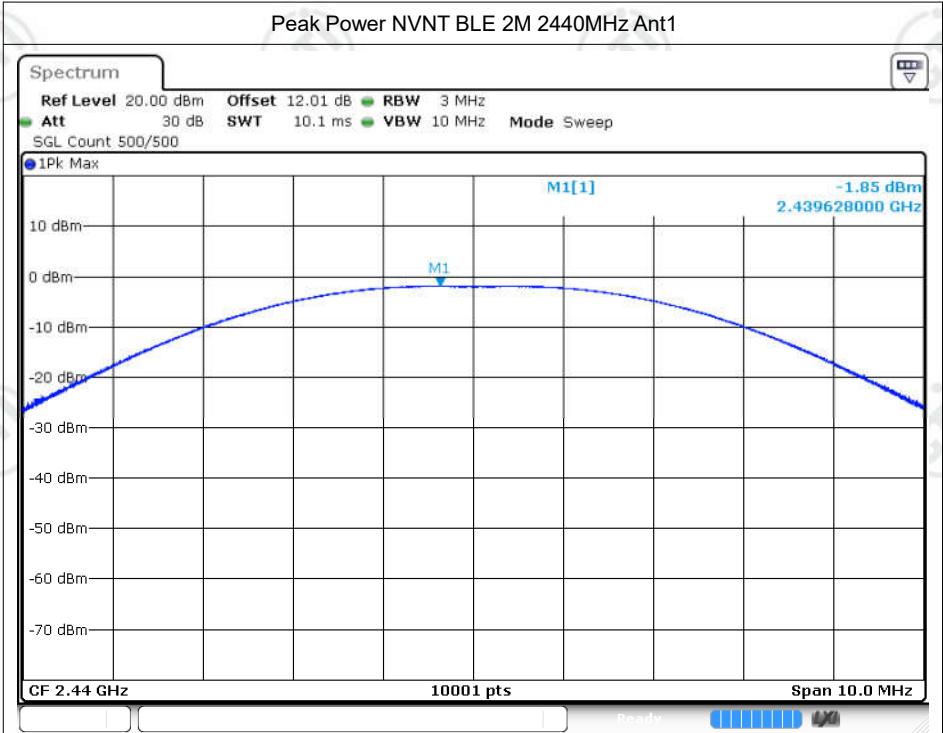




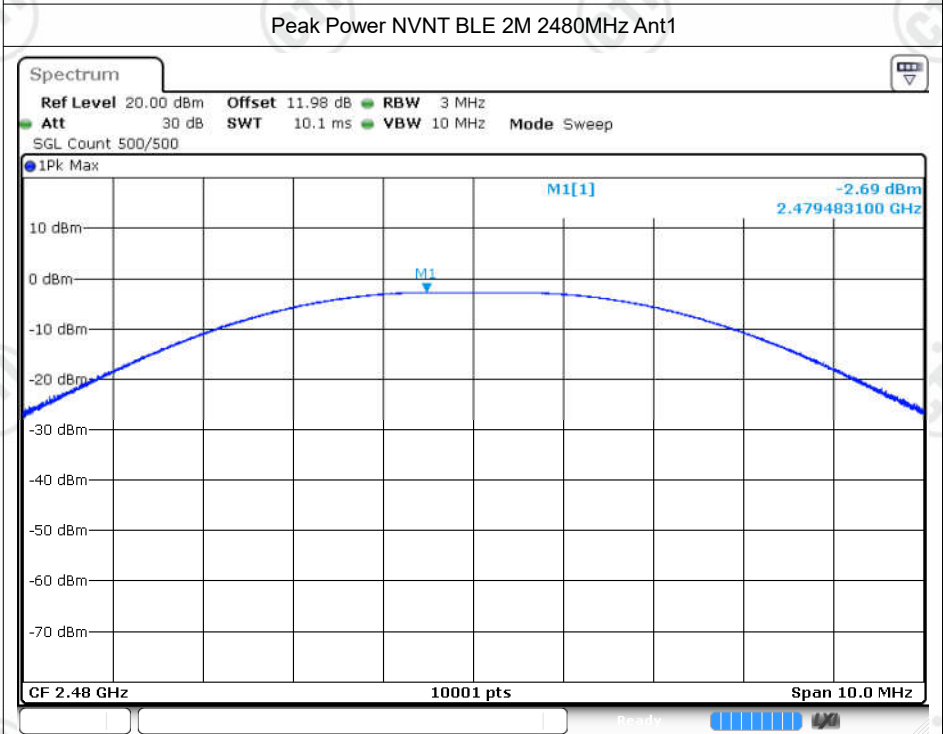
Date: 23.JUN.2022 18:45:43



Date: 23.JUN.2022 18:48:21



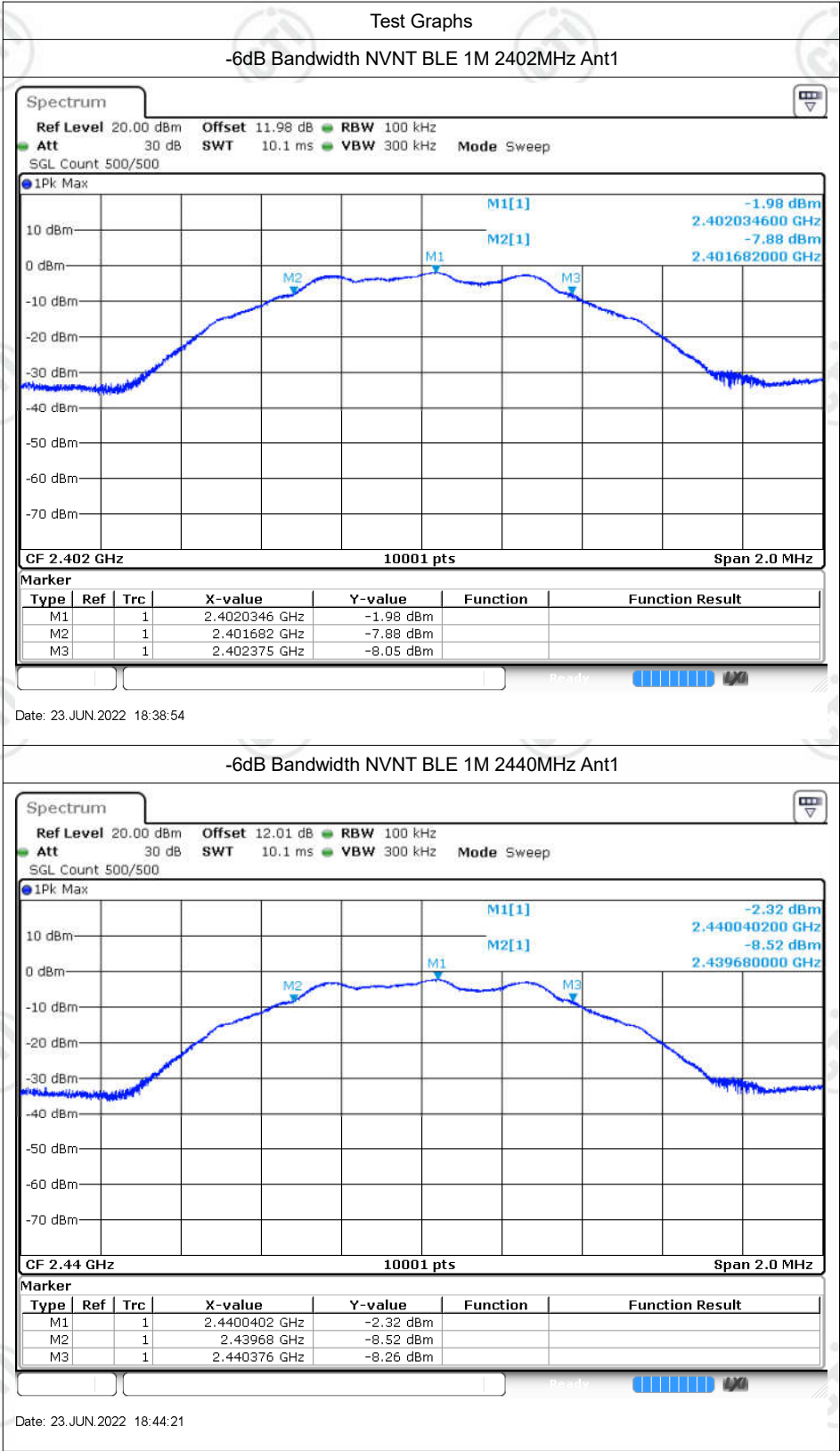
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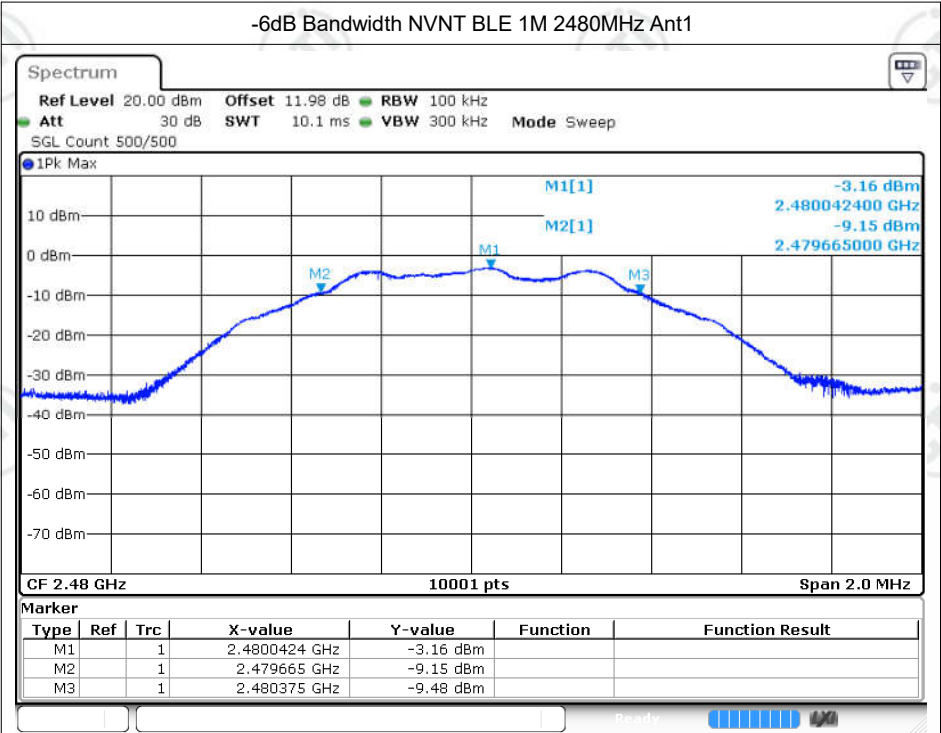


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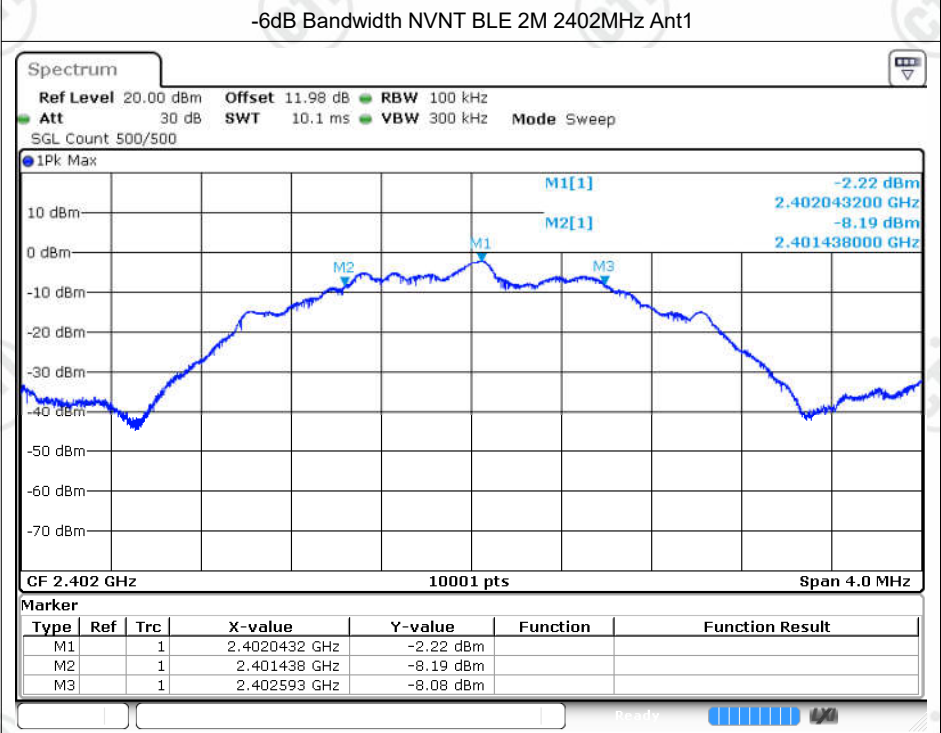
-6dB Bandwidth

| Condition | Mode   | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|--------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | 0.693                 | 0.5                         | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | 0.696                 | 0.5                         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | 0.71                  | 0.5                         | Pass    |
| NVNT      | BLE 2M | 2402            | Ant1    | 1.155                 | 0.5                         | Pass    |
| NVNT      | BLE 2M | 2440            | Ant1    | 1.151                 | 0.5                         | Pass    |
| NVNT      | BLE 2M | 2480            | Ant1    | 1.146                 | 0.5                         | Pass    |

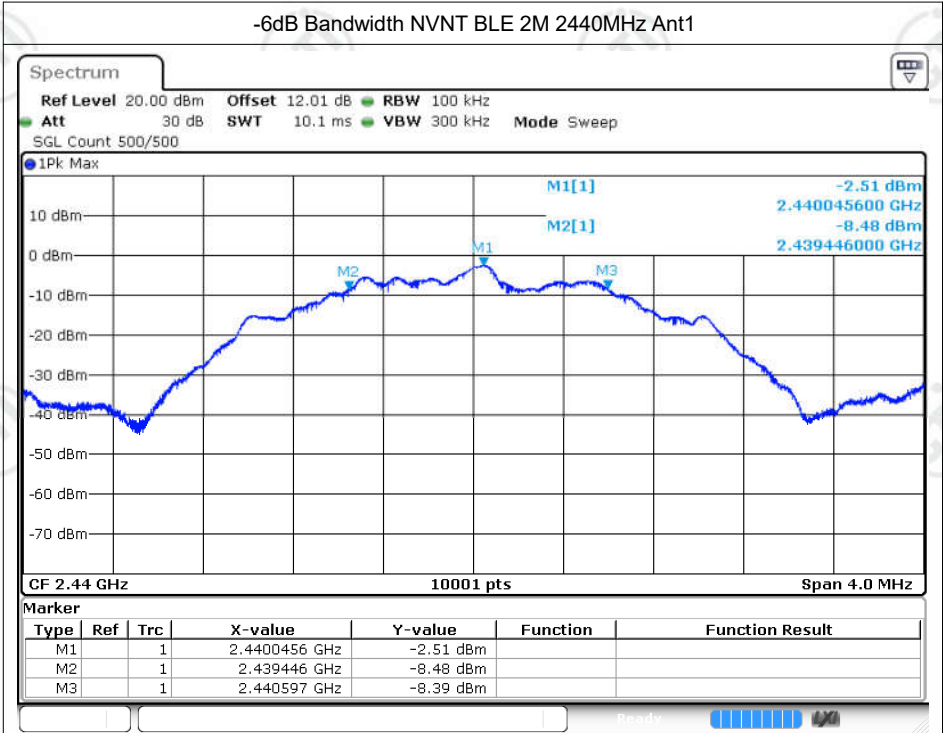




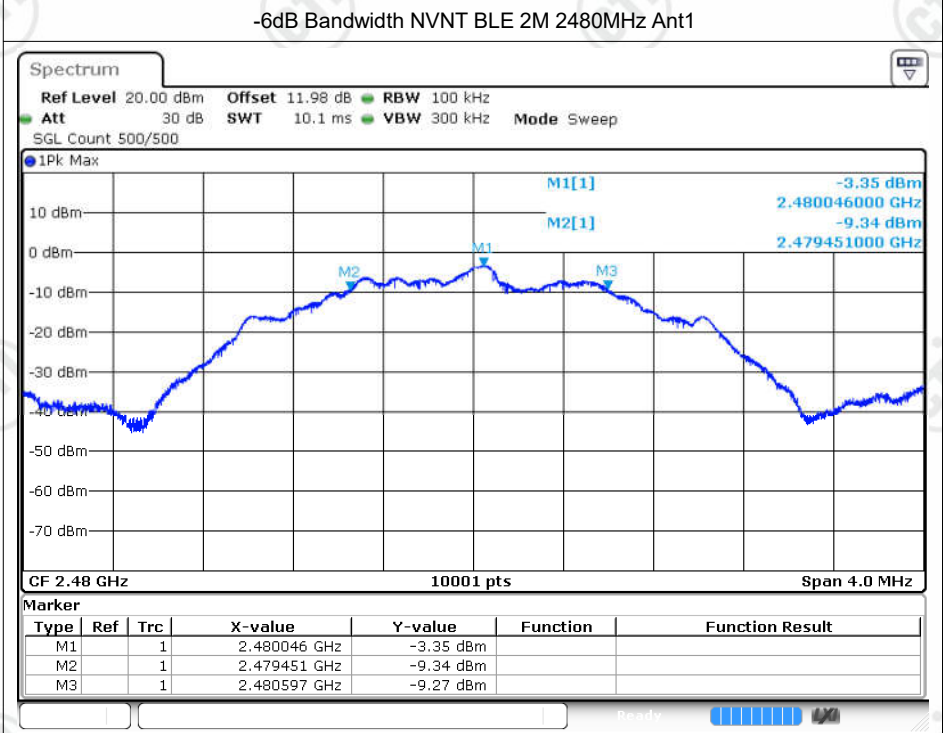
Date: 23.JUN.2022 18:46:04



Date: 23.JUN.2022 18:48:43



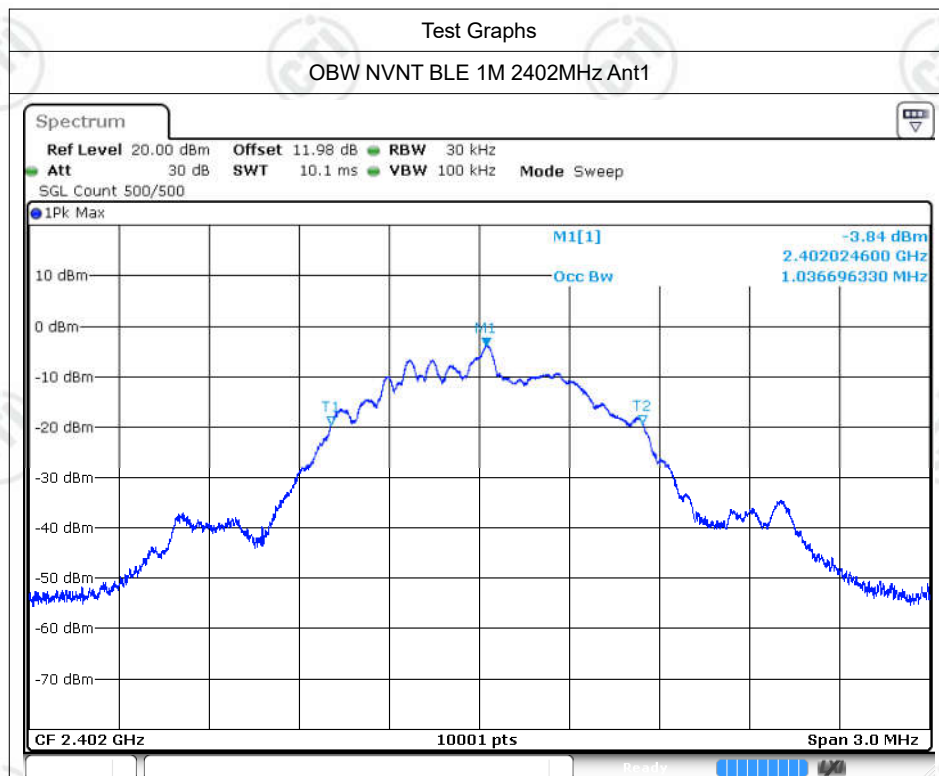
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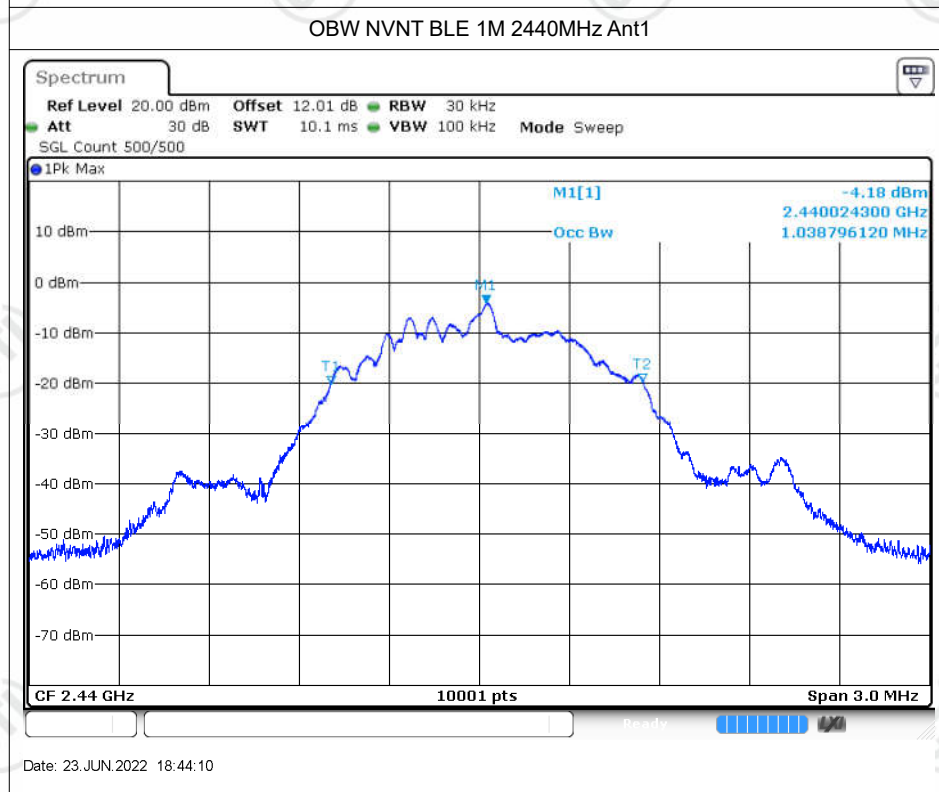
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Occupied Channel Bandwidth

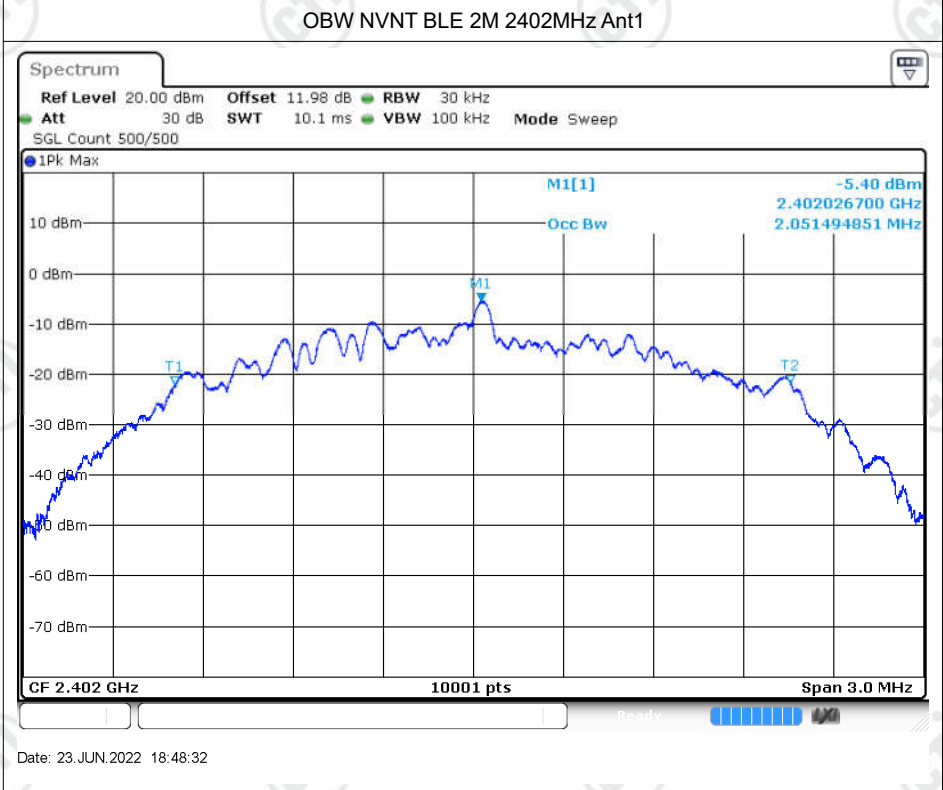
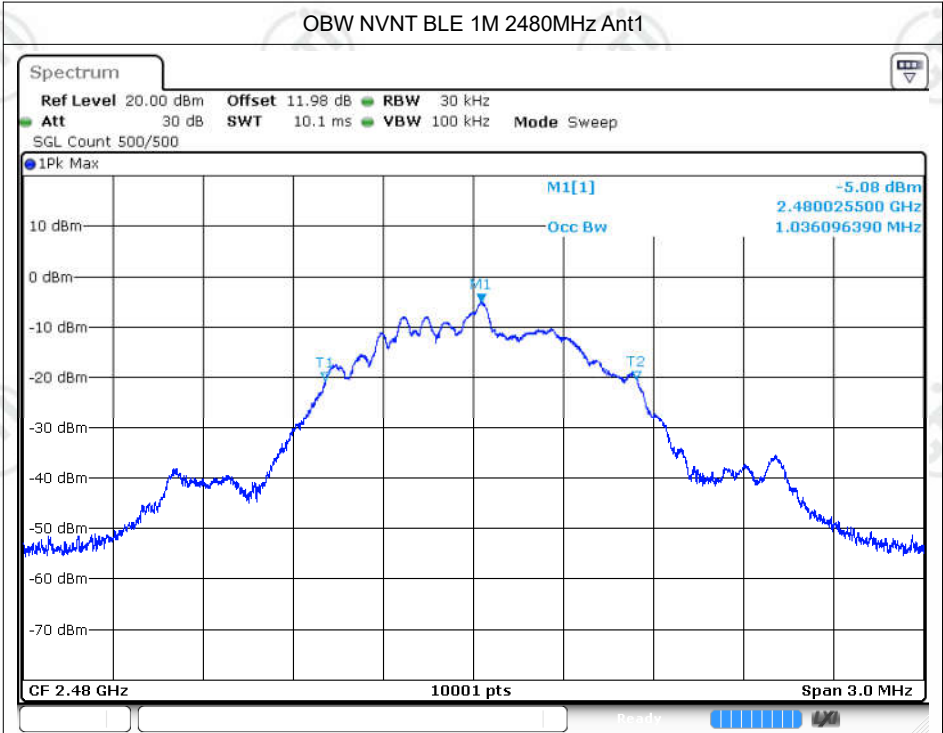
| Condition | Mode   | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|--------|-----------------|---------|---------------|
| NVNT      | BLE 1M | 2402            | Ant1    | 1.037         |
| NVNT      | BLE 1M | 2440            | Ant1    | 1.039         |
| NVNT      | BLE 1M | 2480            | Ant1    | 1.036         |
| NVNT      | BLE 2M | 2402            | Ant1    | 2.051         |
| NVNT      | BLE 2M | 2440            | Ant1    | 2.051         |
| NVNT      | BLE 2M | 2480            | Ant1    | 2.05          |

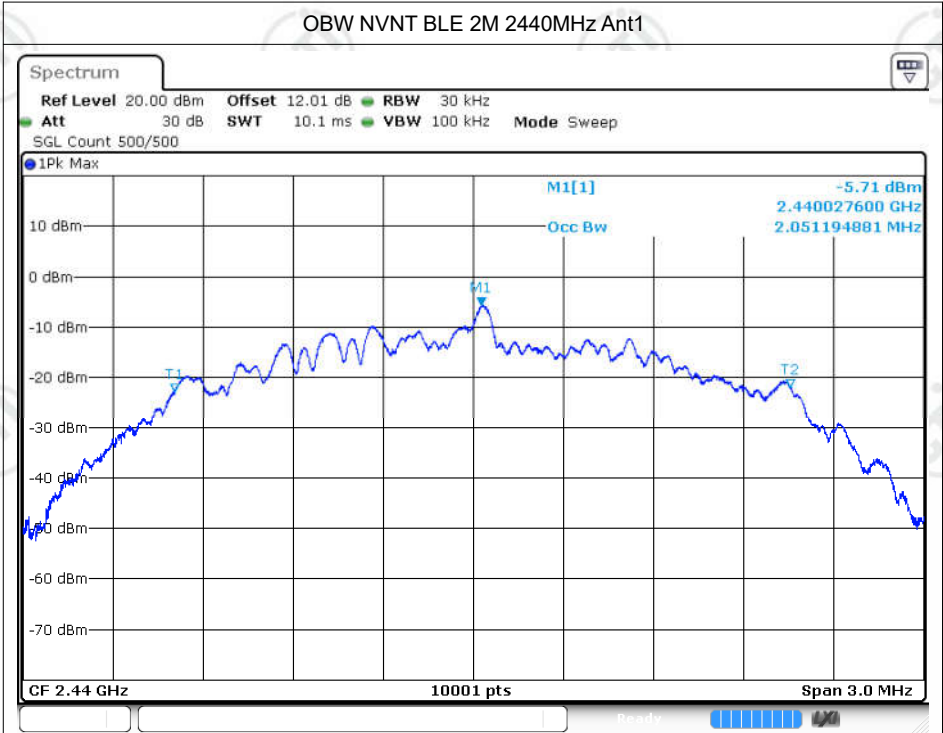


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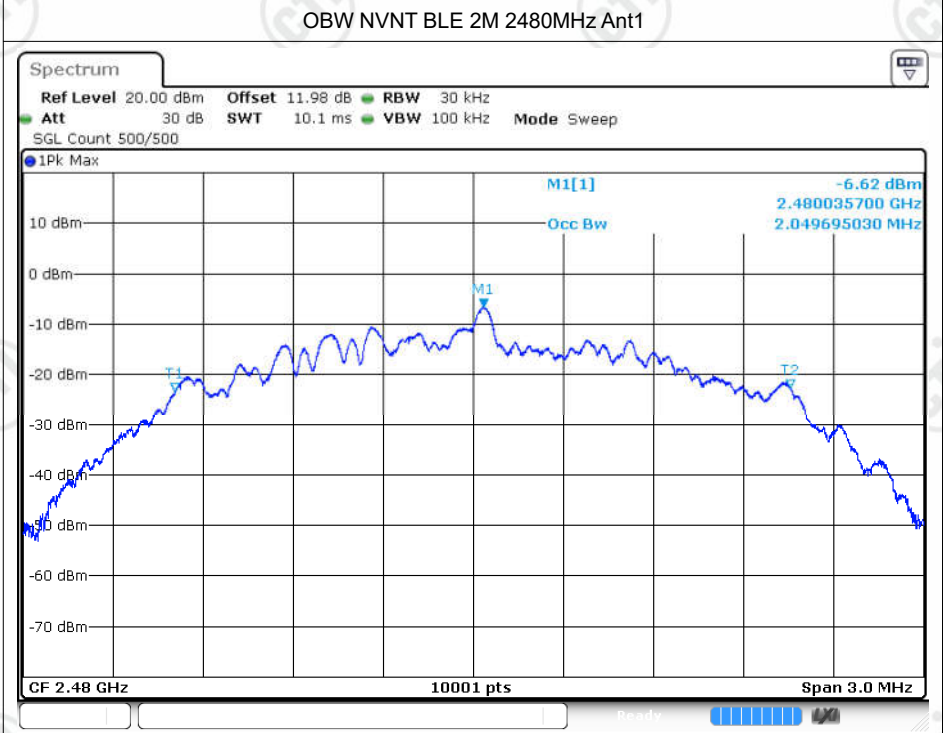


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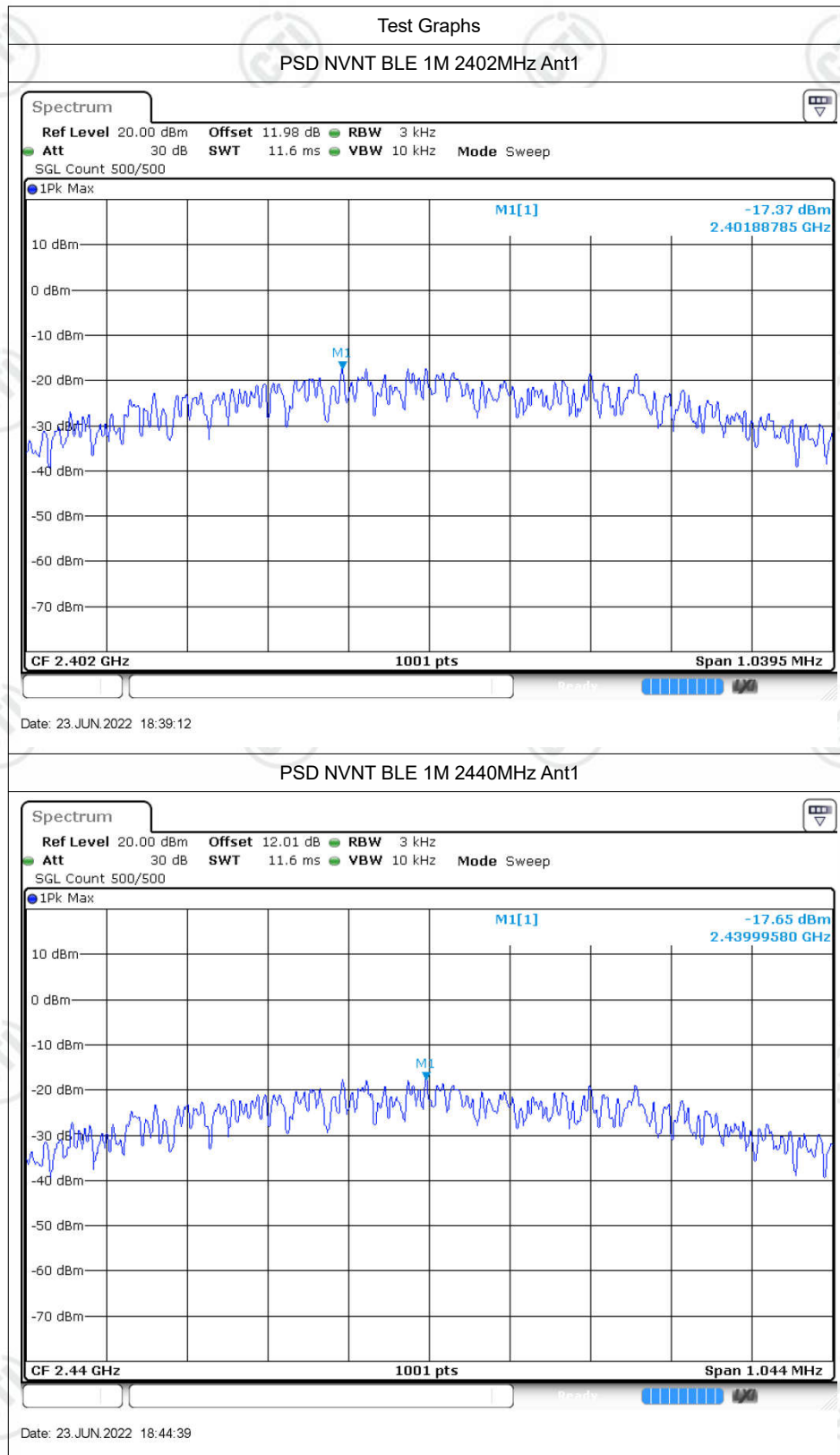
Date: 23.JUN.2022 18:54:38

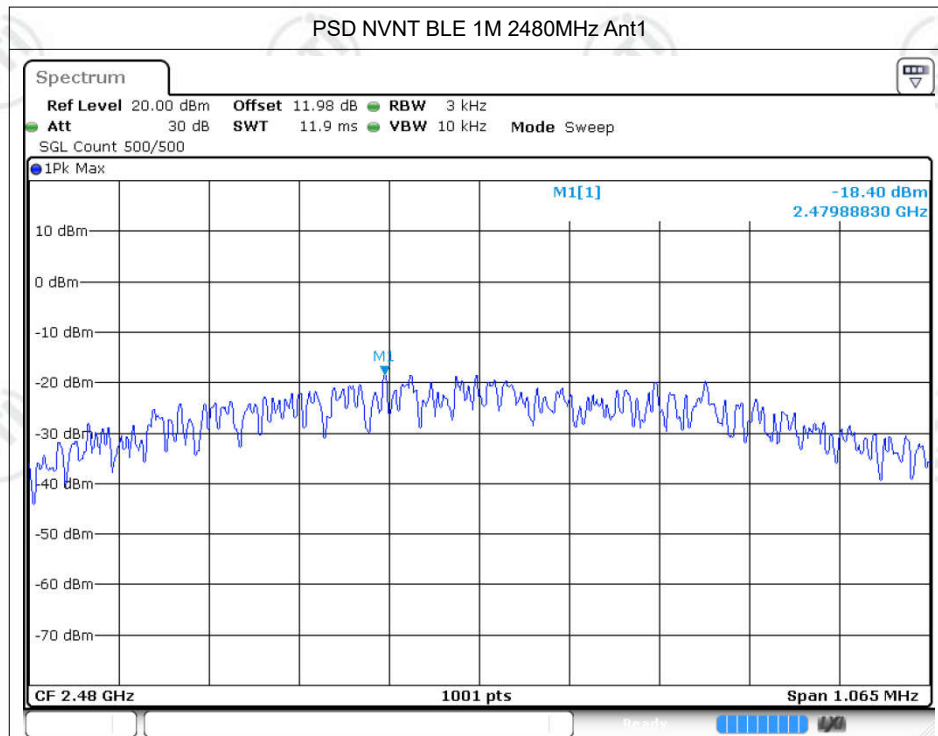


Date: 23.JUN.2022 18:56:21

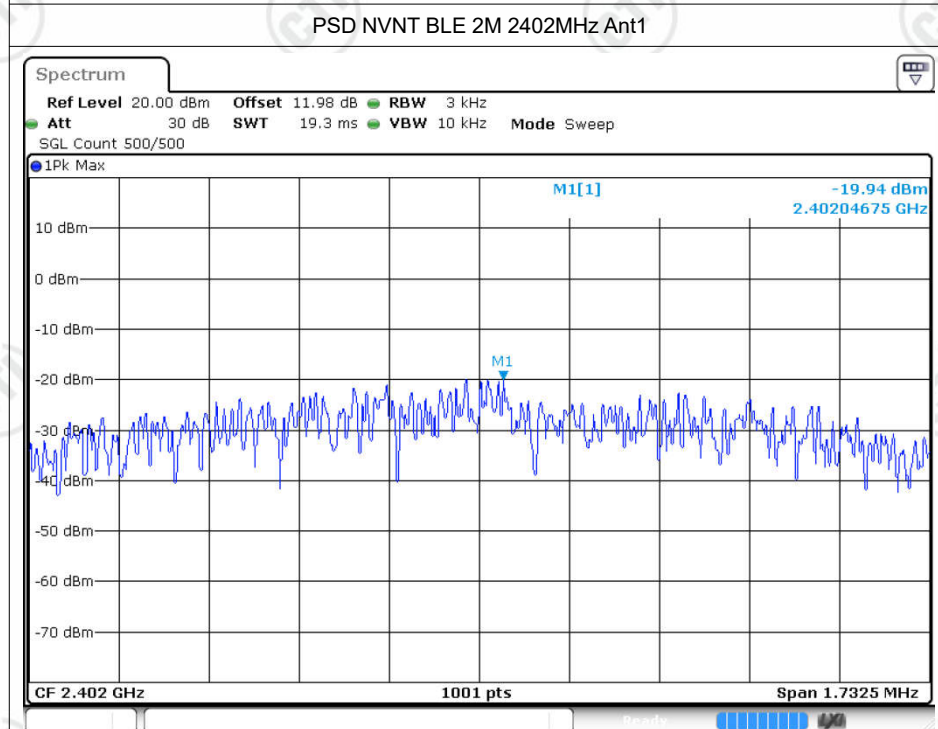
Maximum Power Spectral Density Level

| Condition | Mode   | Frequency<br>(MHz) | Antenna | Conducted PSD<br>(dBm/3kHz) | Duty Factor<br>(dB) | Total PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
|-----------|--------|--------------------|---------|-----------------------------|---------------------|-------------------------|---------------------|---------|
| NVNT      | BLE 1M | 2402               | Ant1    | -17.37                      | 0                   | -17.37                  | 8                   | Pass    |
| NVNT      | BLE 1M | 2440               | Ant1    | -17.65                      | 0                   | -17.65                  | 8                   | Pass    |
| NVNT      | BLE 1M | 2480               | Ant1    | -18.4                       | 0                   | -18.4                   | 8                   | Pass    |
| NVNT      | BLE 2M | 2402               | Ant1    | -19.94                      | 0                   | -19.94                  | 8                   | Pass    |
| NVNT      | BLE 2M | 2440               | Ant1    | -20.12                      | 0                   | -20.12                  | 8                   | Pass    |
| NVNT      | BLE 2M | 2480               | Ant1    | -20.8                       | 0                   | -20.8                   | 8                   | Pass    |

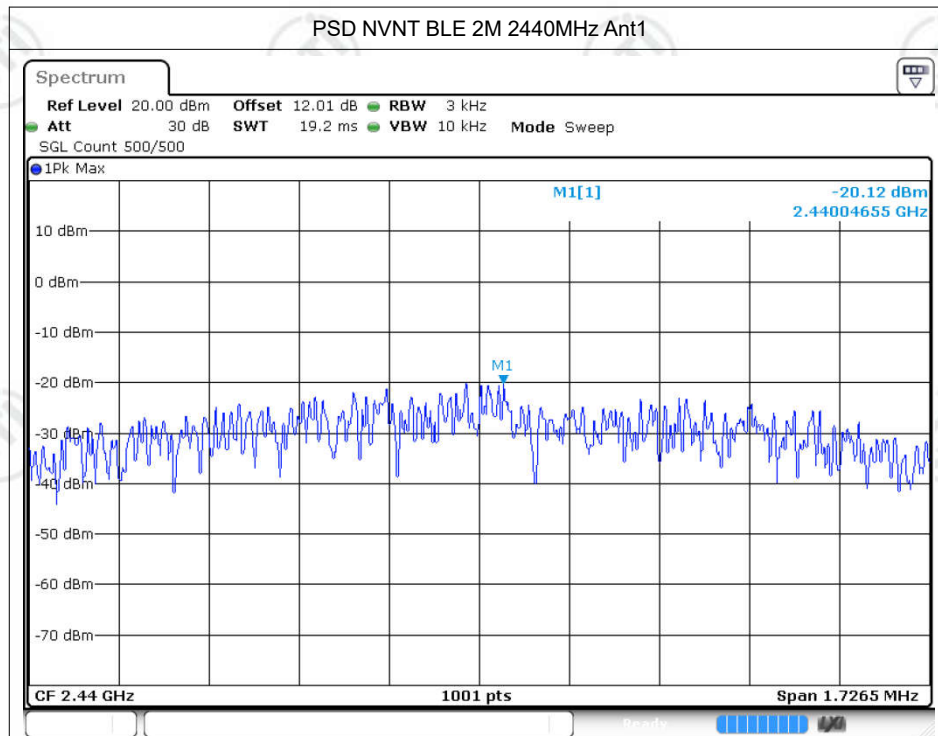




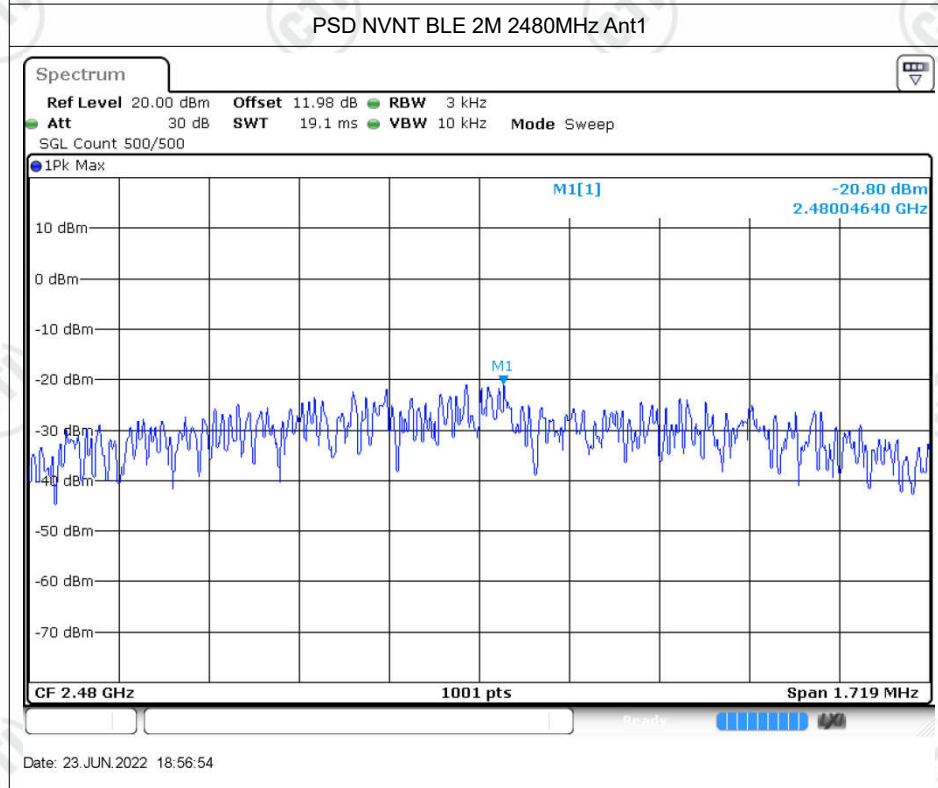
Date: 23 JUN.2022 18:46:22



Date: 23 JUN.2022 18:53:09



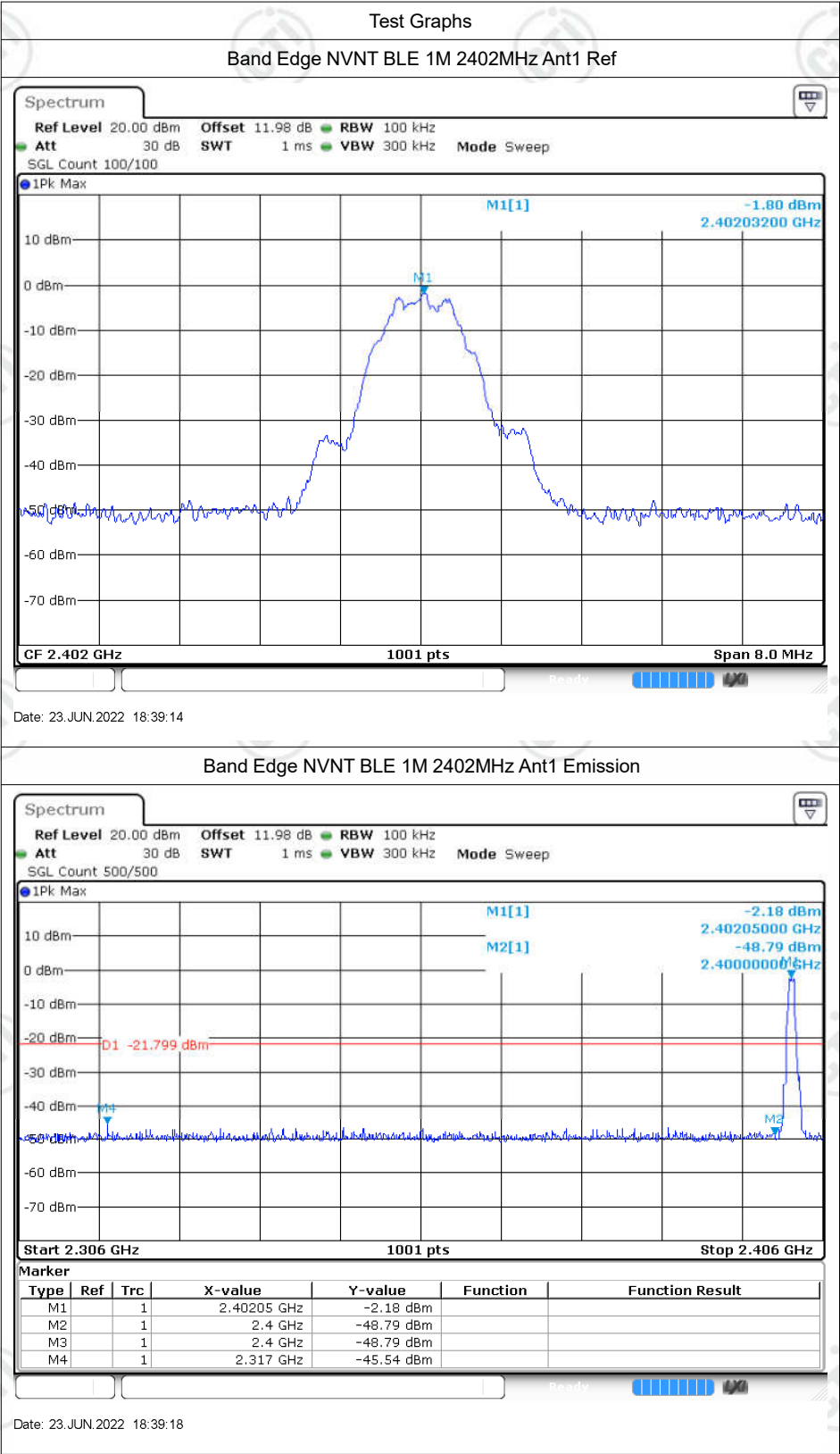
Date: 23.JUN.2022 18:55:10

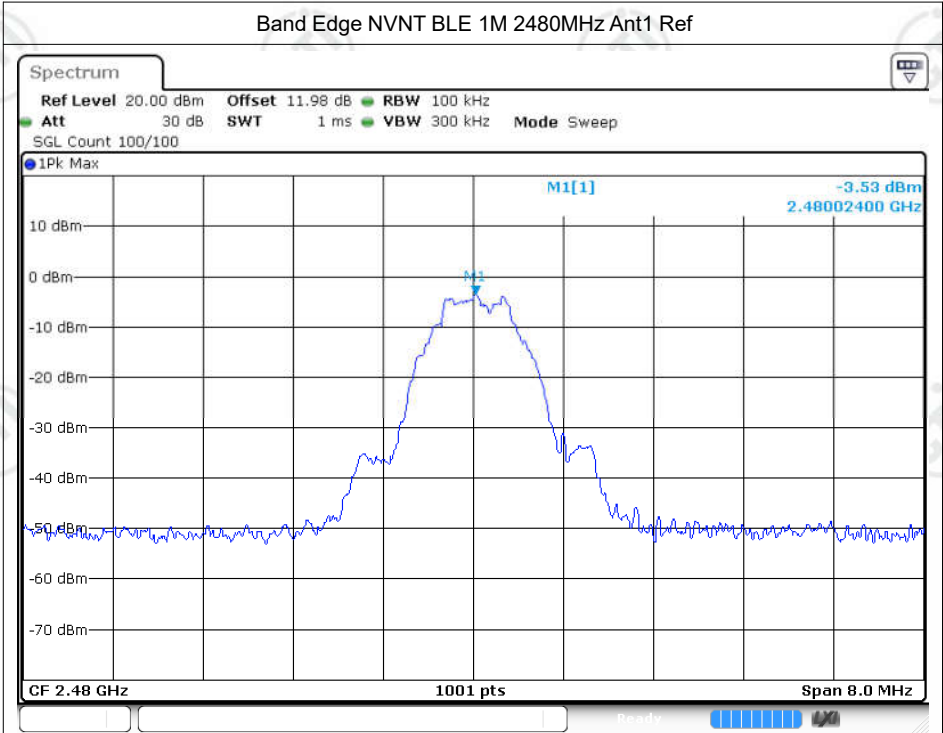


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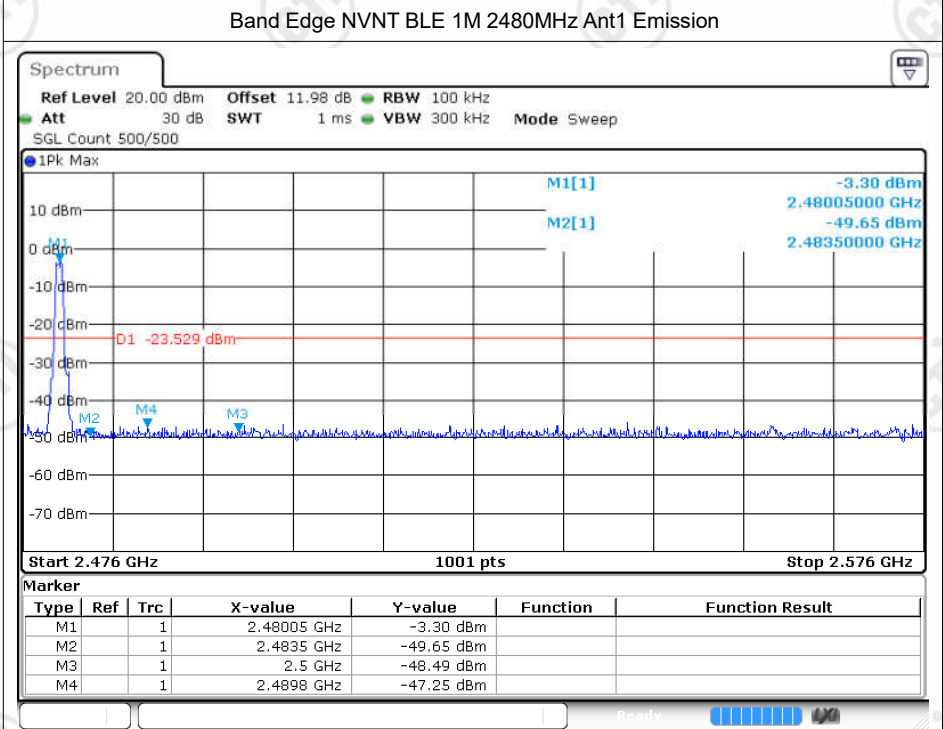
Band Edge

| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -43.74          | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -43.72          | -20         | Pass    |
| NVNT      | BLE 2M | 2402            | Ant1    | -35.04          | -20         | Pass    |
| NVNT      | BLE 2M | 2480            | Ant1    | -42.88          | -20         | Pass    |

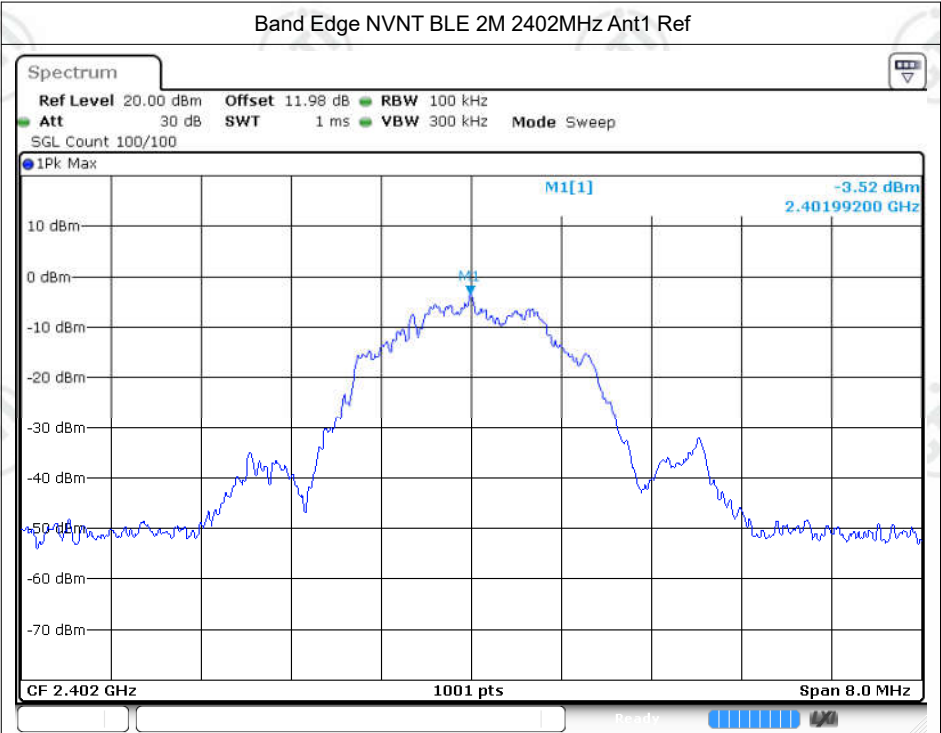




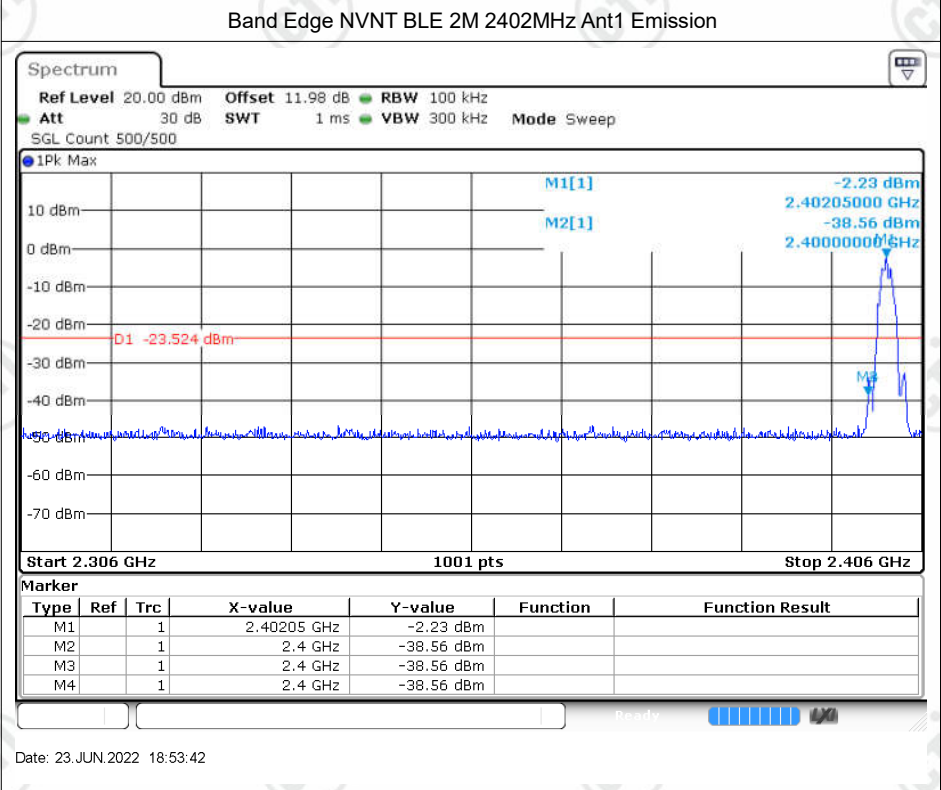
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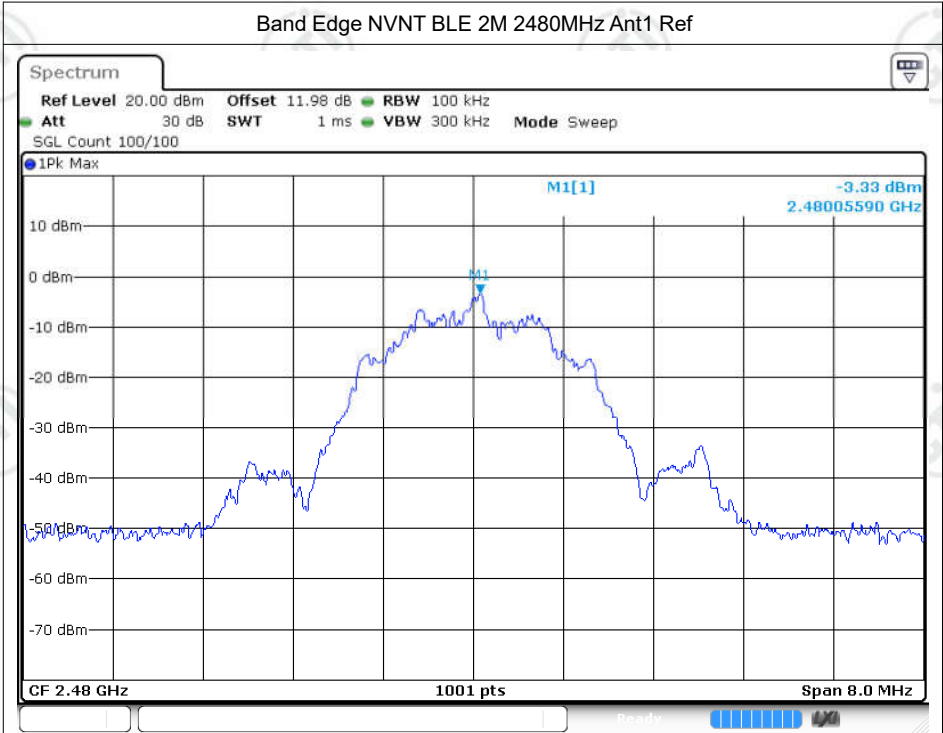
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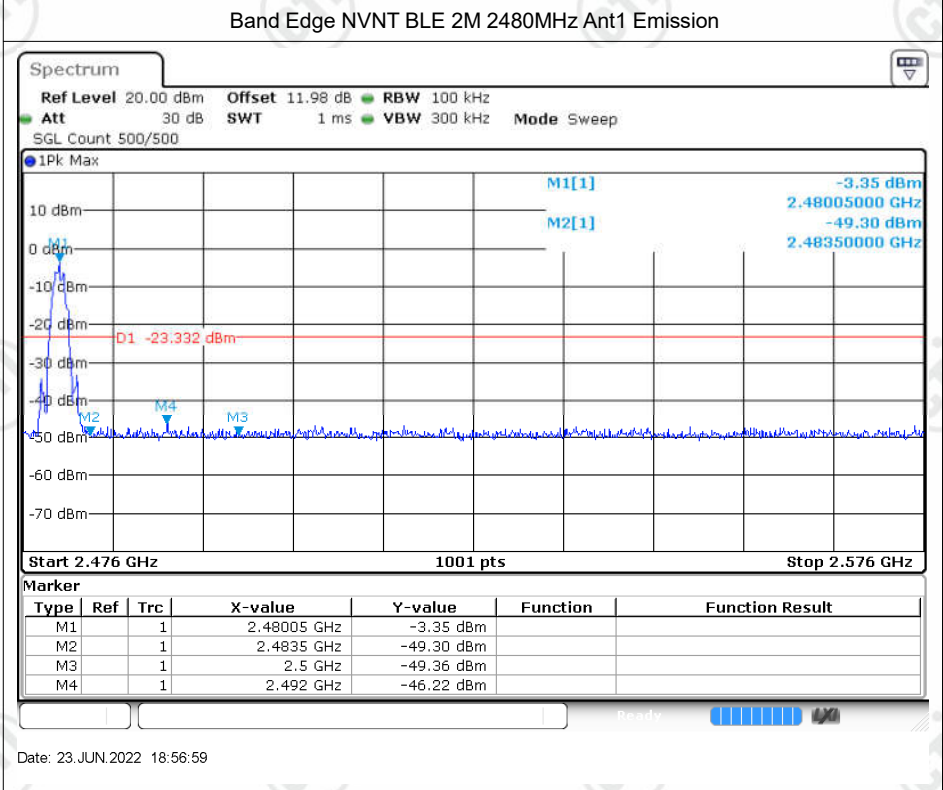
Date: 23.JUN.2022 18:53:39



Date: 23.JUN.2022 18:53:42



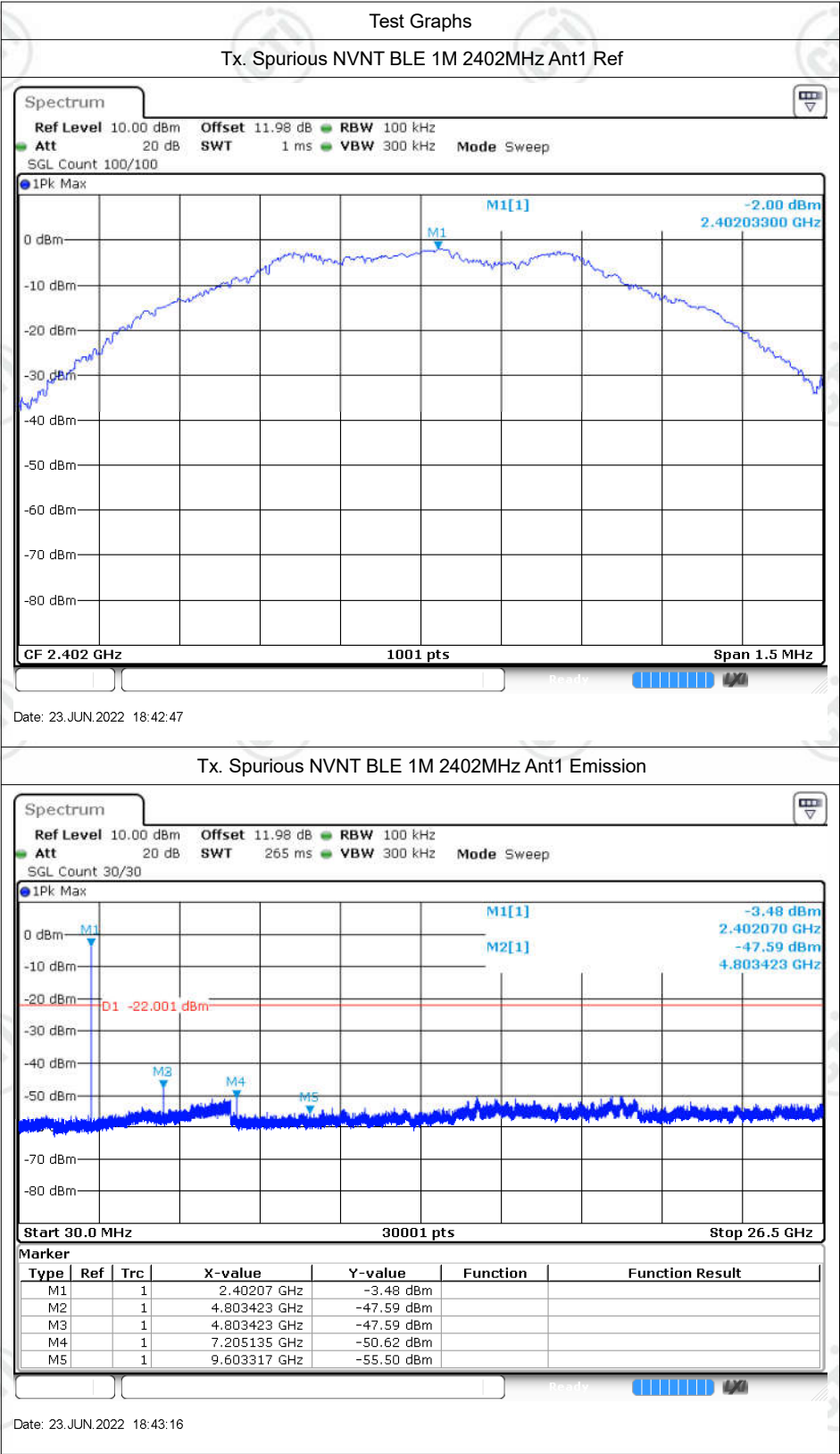
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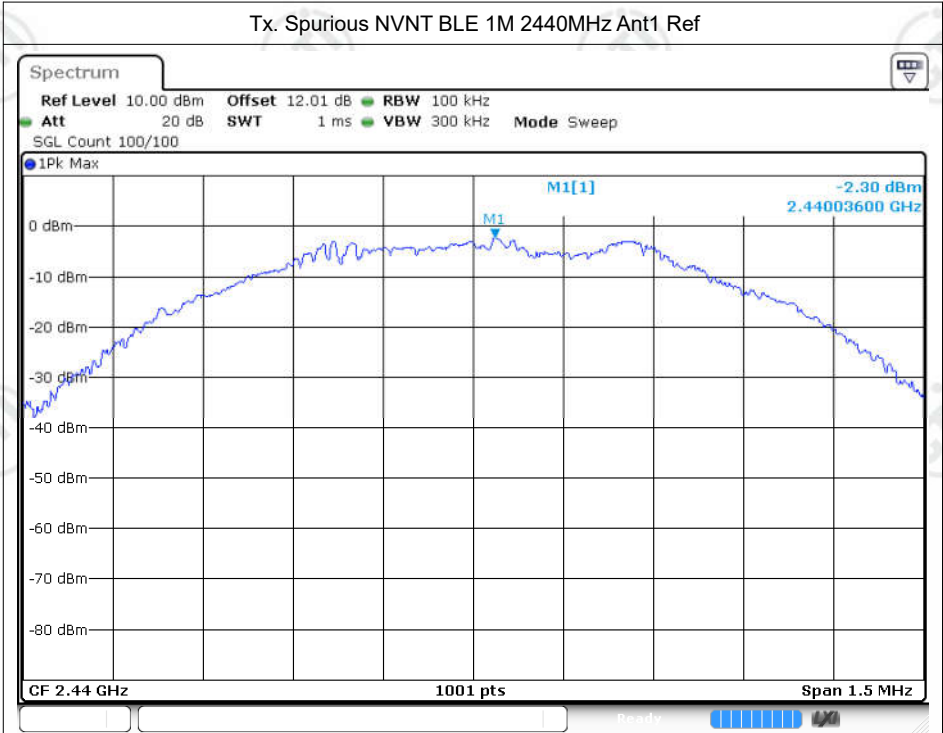


Date: 23.JUN.2022 18:56:59

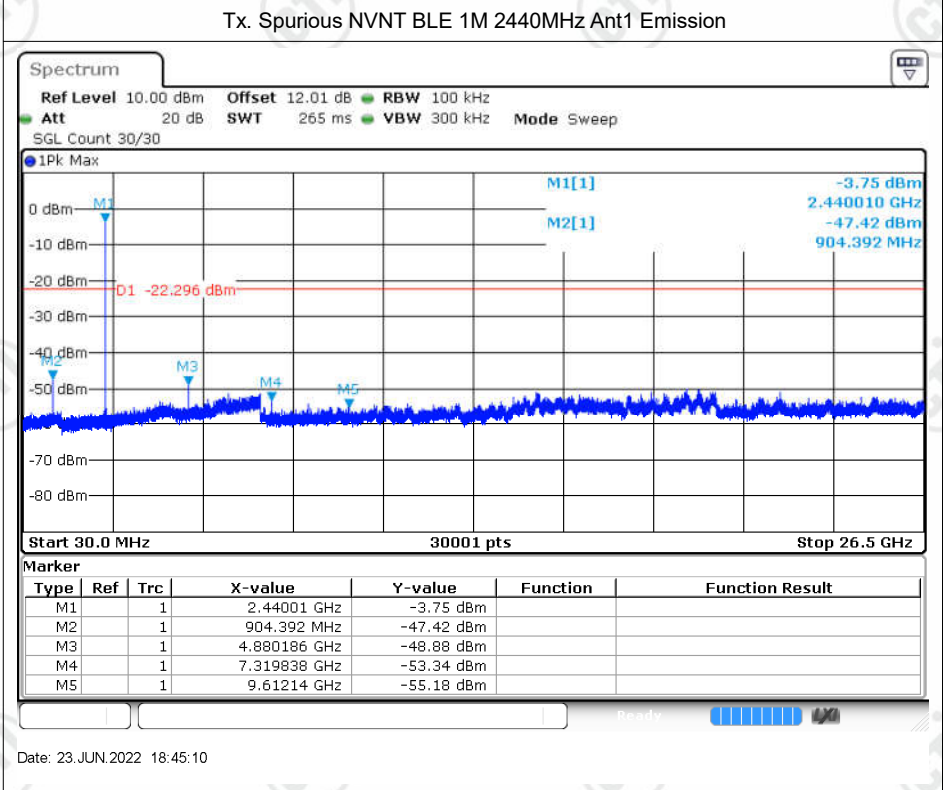
Conducted RF Spurious Emission

| Condition | Mode   | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|-----------|--------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | BLE 1M | 2402            | Ant1    | -45.58          | -20         | Pass    |
| NVNT      | BLE 1M | 2440            | Ant1    | -45.12          | -20         | Pass    |
| NVNT      | BLE 1M | 2480            | Ant1    | -41.89          | -20         | Pass    |
| NVNT      | BLE 2M | 2402            | Ant1    | -44.85          | -20         | Pass    |
| NVNT      | BLE 2M | 2440            | Ant1    | -46.12          | -20         | Pass    |
| NVNT      | BLE 2M | 2480            | Ant1    | -43.01          | -20         | Pass    |

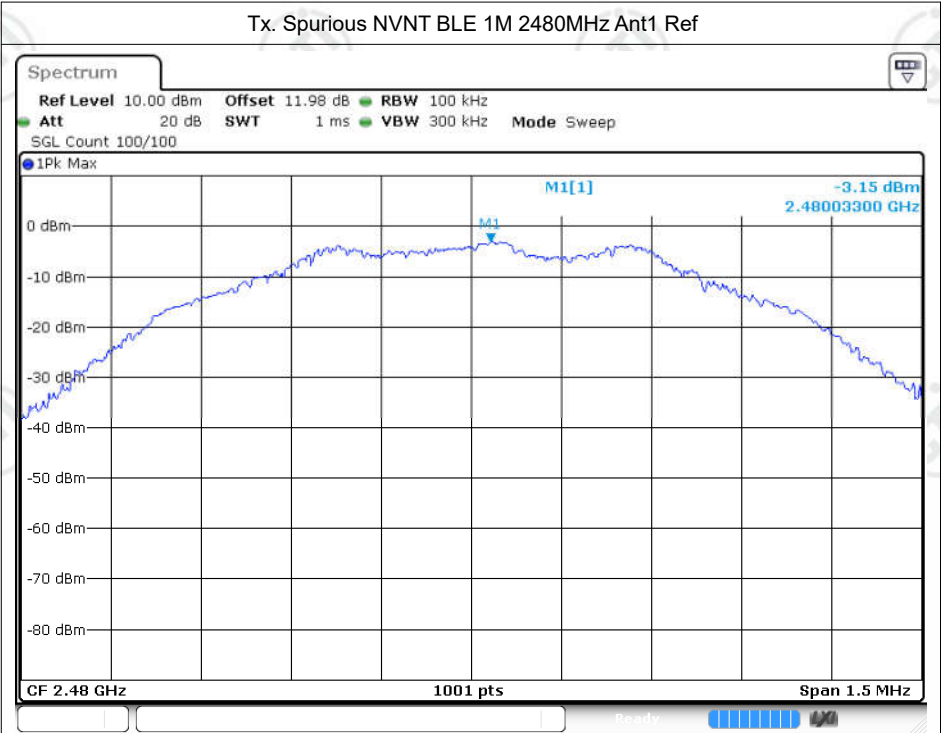




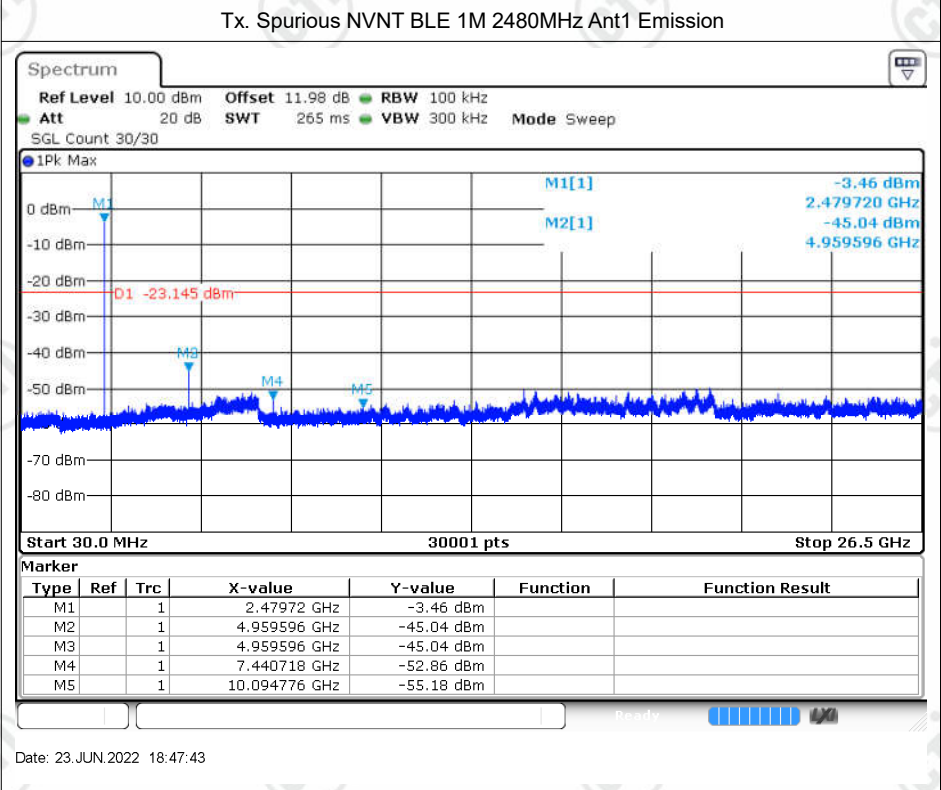
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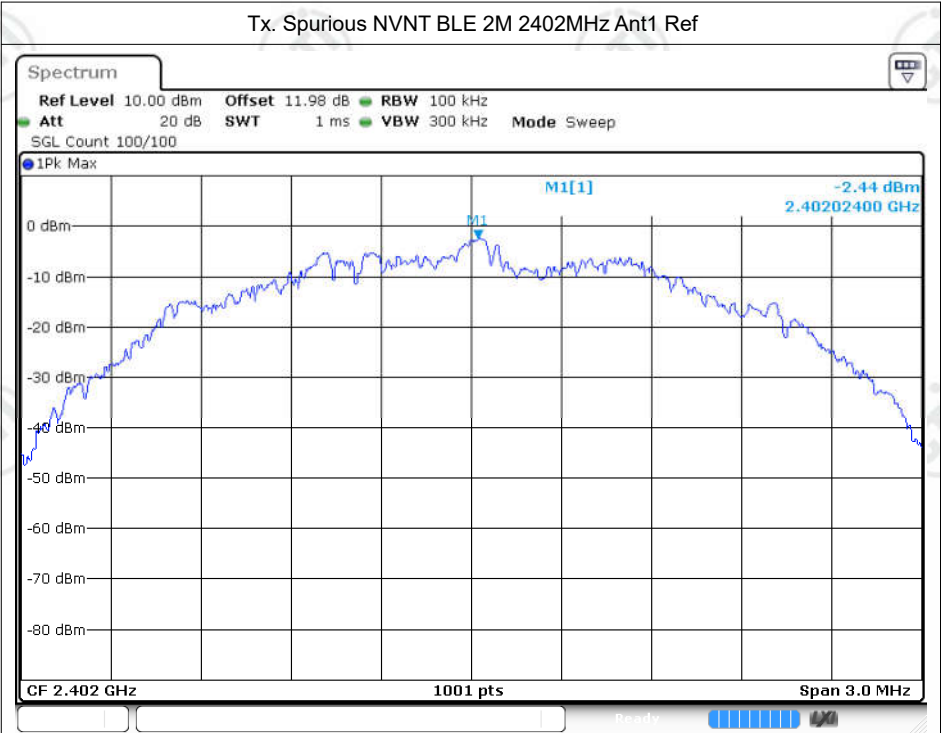
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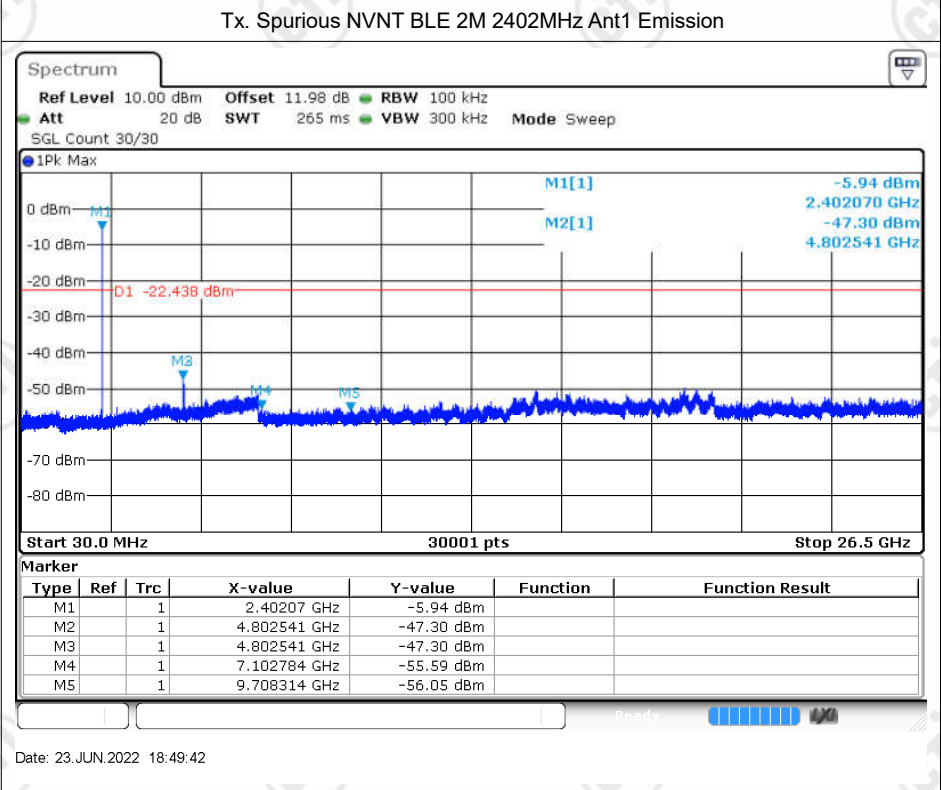
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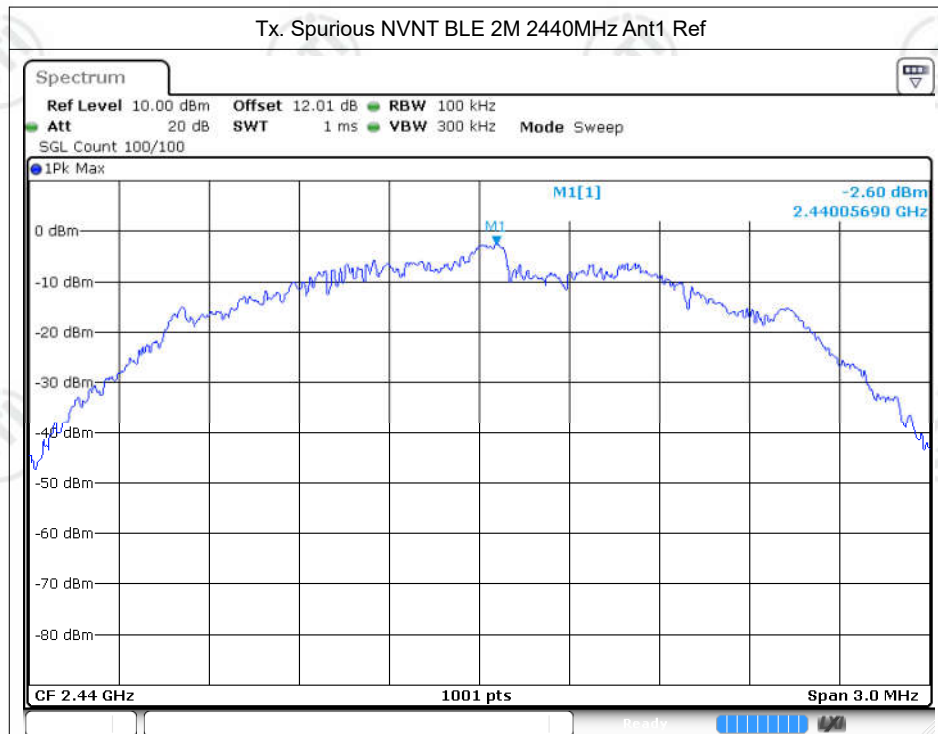
Date: 23.JUN.2022 18:47:43



Date: 23.JUN.2022 18:49:14

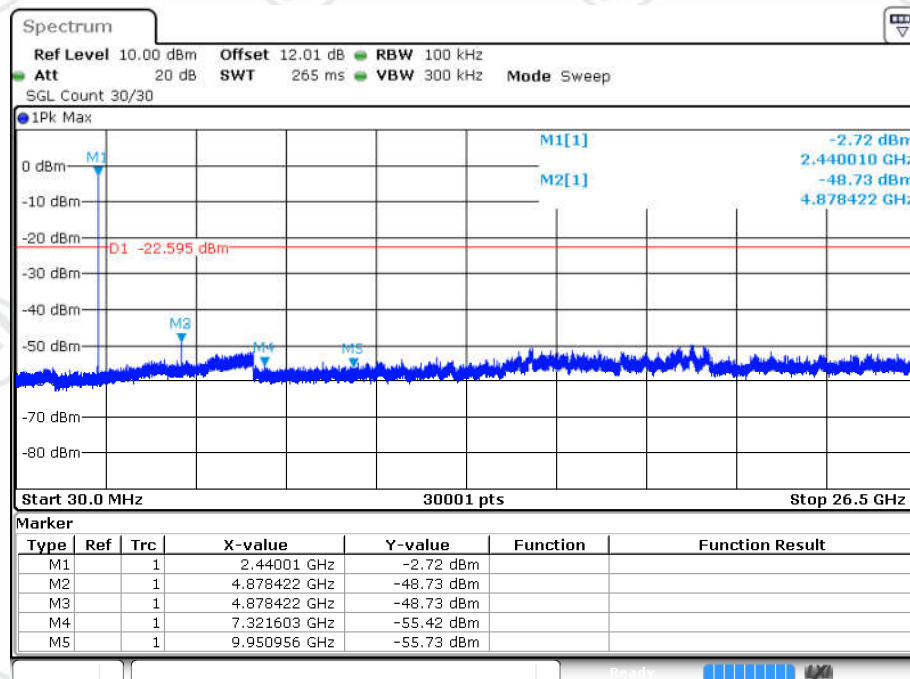


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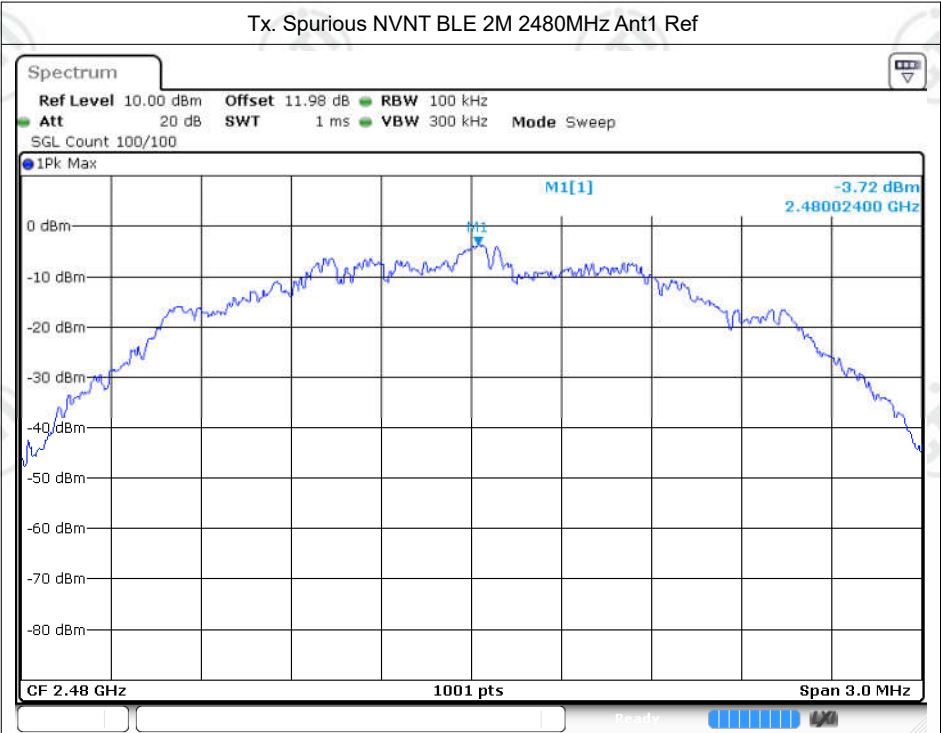


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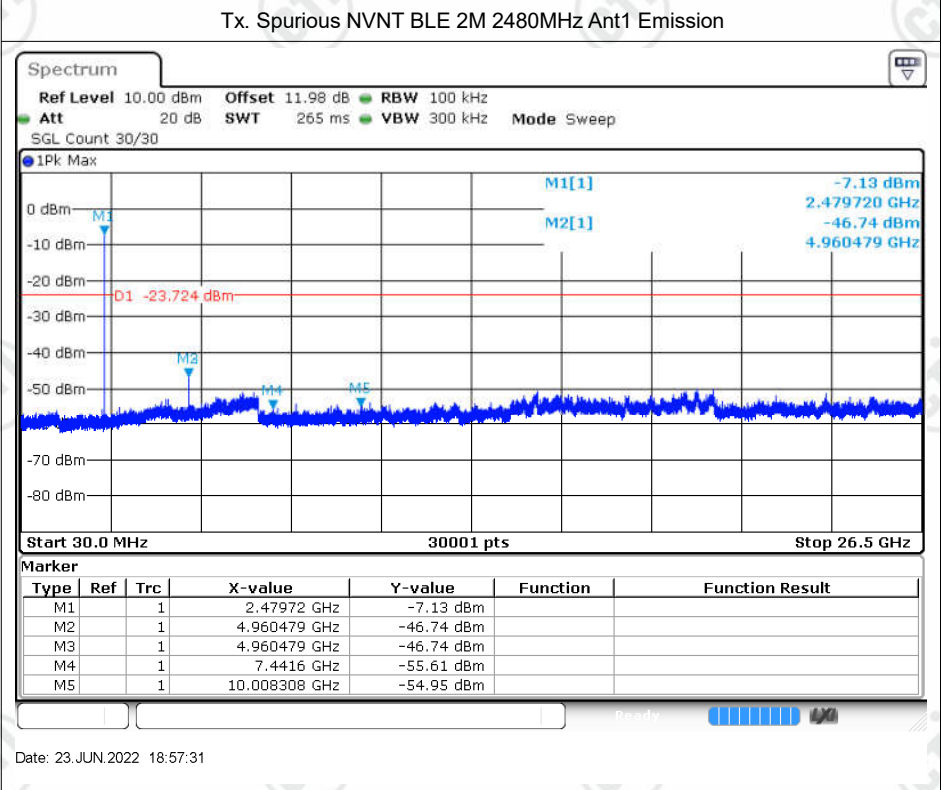
## Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



Date: 23.JUN.2022 18:55:42



Date: 23 JUN.2022 18:57:02



Date: 23 JUN.2022 18:57:31

\*\*\* End of Report \*\*\*