

RF Test Data for 5G Wi-Fi (Conducted Measurements)

| General Description of EUT | |
|---|---------------------------|
| Product Name: | nooie smart baby monitor |
| Test Model: | NB2 |
| Sample ID: | HC-C-202401-0300-01-02-2# |
| Environmental Conditions | |
| Temperature: | 23.8°C |
| Relative Humidity: | 48% |
| Test Voltage: | DC 5V |
| Test Engineer: | ZKN ZHOU |
| Note: For a more detailed features description, please refer to the report TBR-C-202401-0300-22 | |

Contents

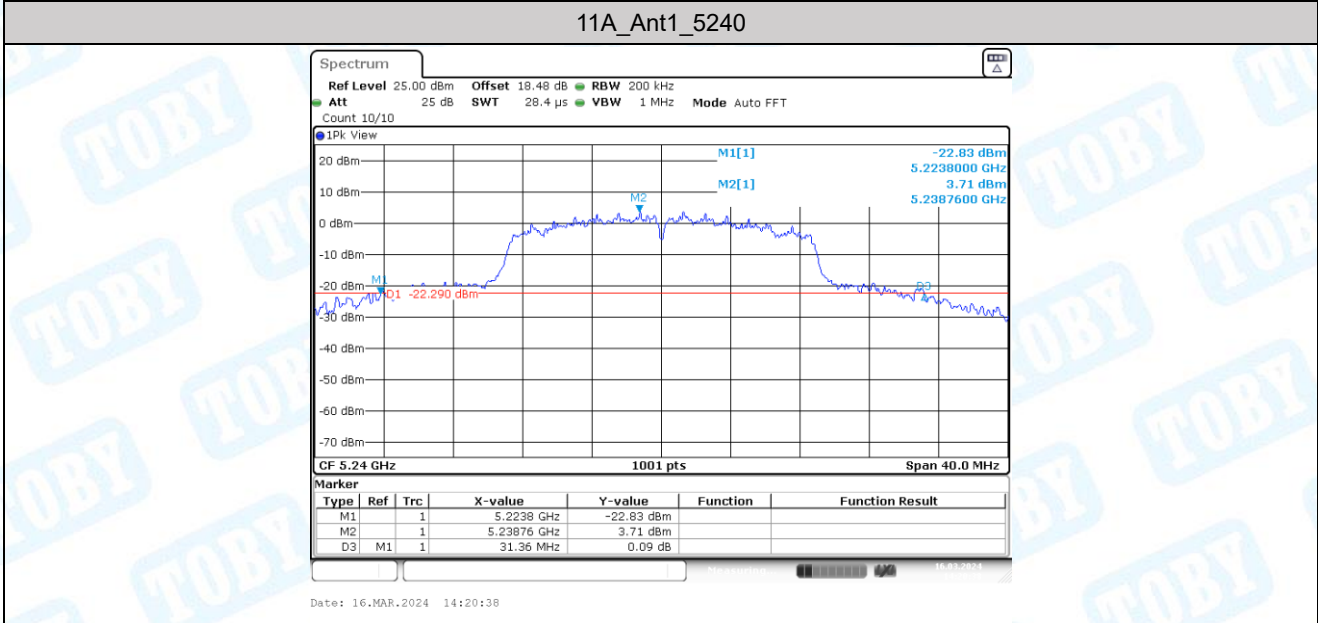
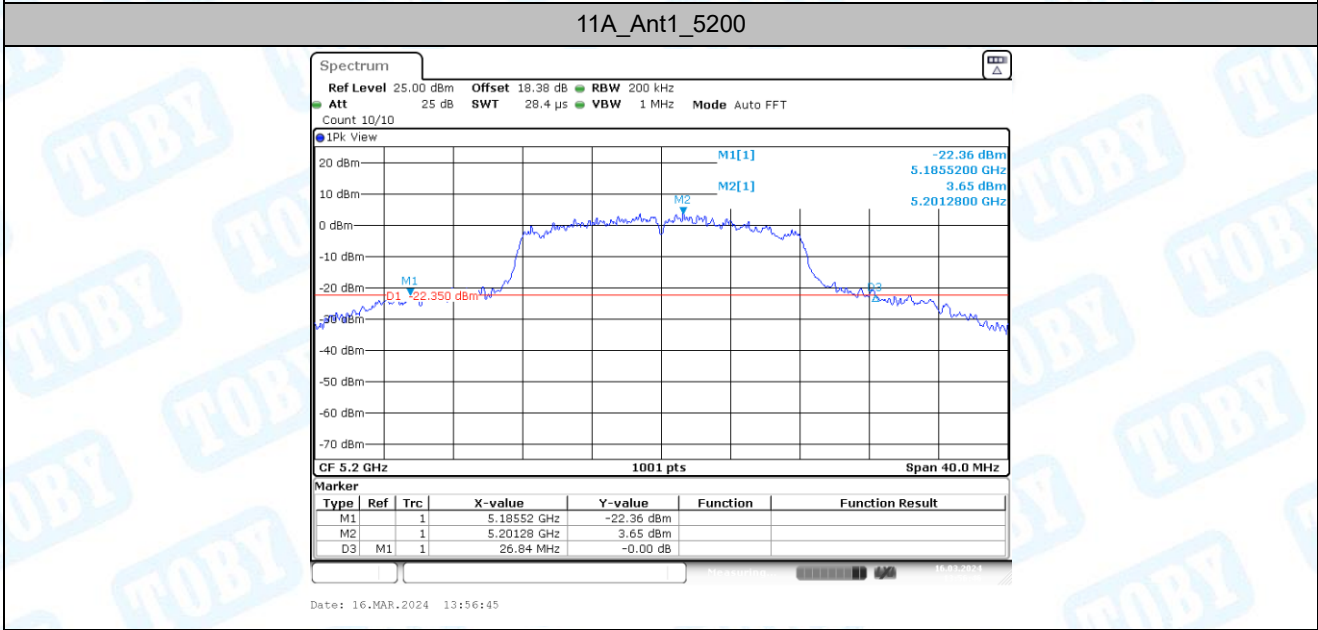
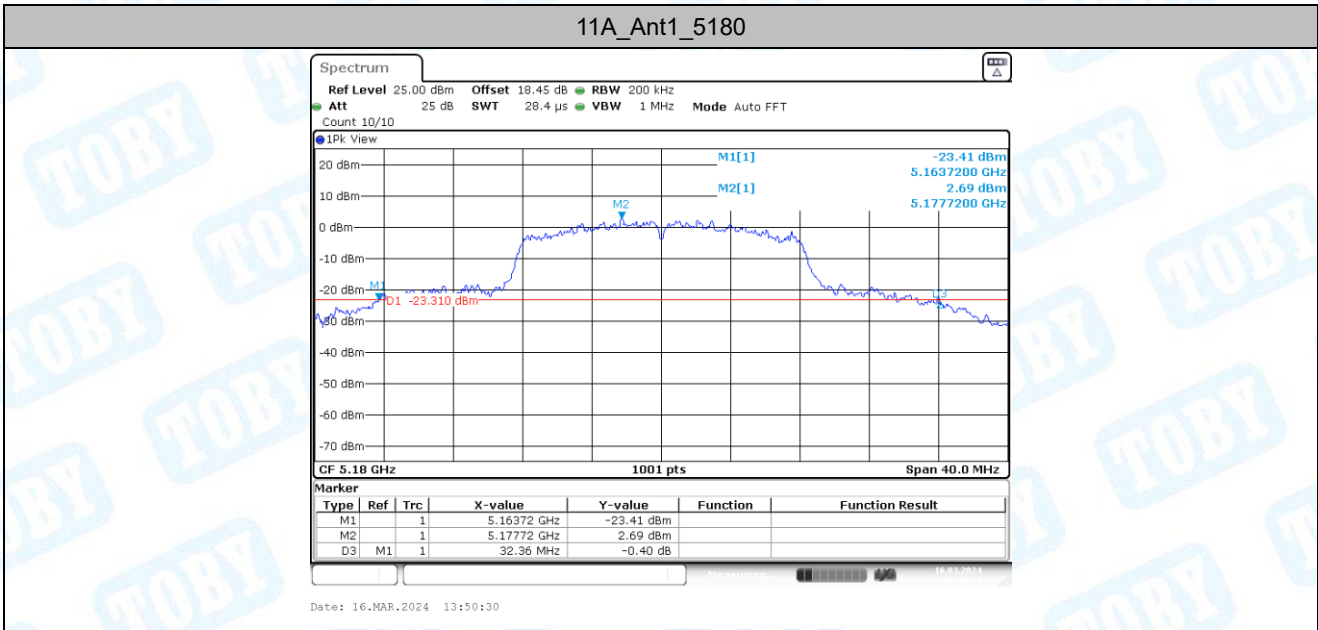
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1. Emission Bandwidth

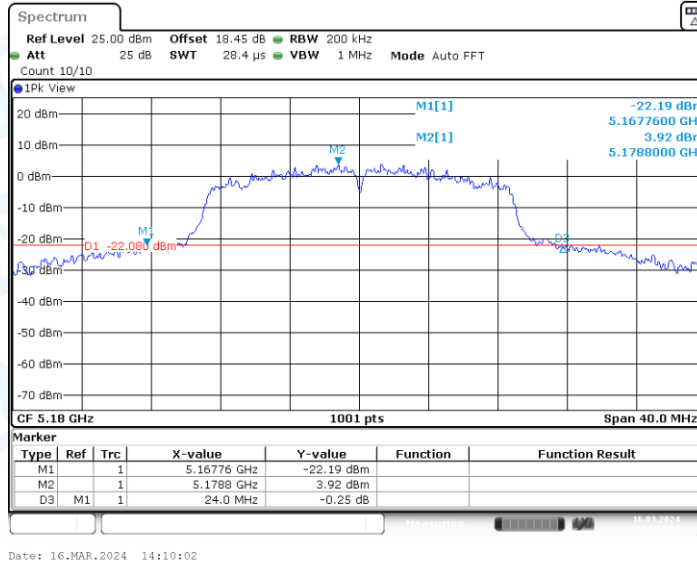
1.1. Test Result

| TestMode | Antenna | Channel | 26db EBW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|---------|----------------|---------|---------|------------|---------|
| 11A | Ant1 | 5180 | 32.36 | 5163.72 | 5196.08 | --- | --- |
| | | 5200 | 26.84 | 5185.52 | 5212.36 | --- | --- |
| | | 5240 | 31.36 | 5223.80 | 5255.16 | --- | --- |
| 11N20SISO | Ant1 | 5180 | 24.00 | 5167.76 | 5191.76 | --- | --- |
| | | 5200 | 27.48 | 5185.48 | 5212.96 | --- | --- |
| | | 5240 | 31.36 | 5223.80 | 5255.16 | --- | --- |

1.2. Test Graphs

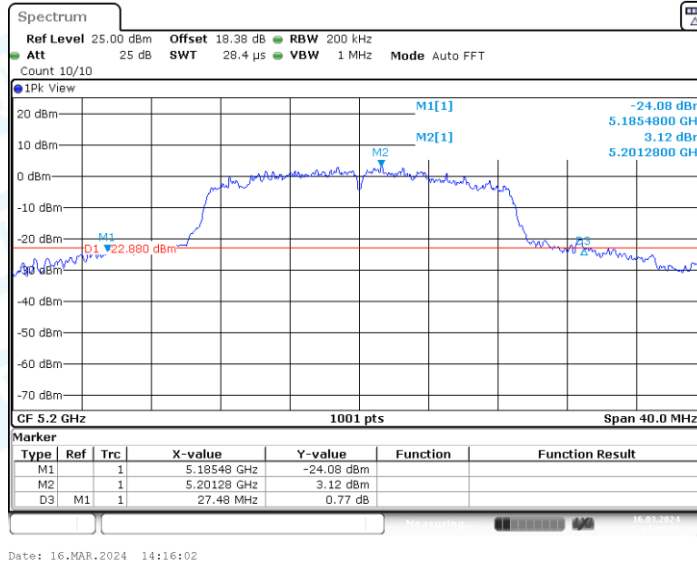


11N20SISO_Ant1_5180



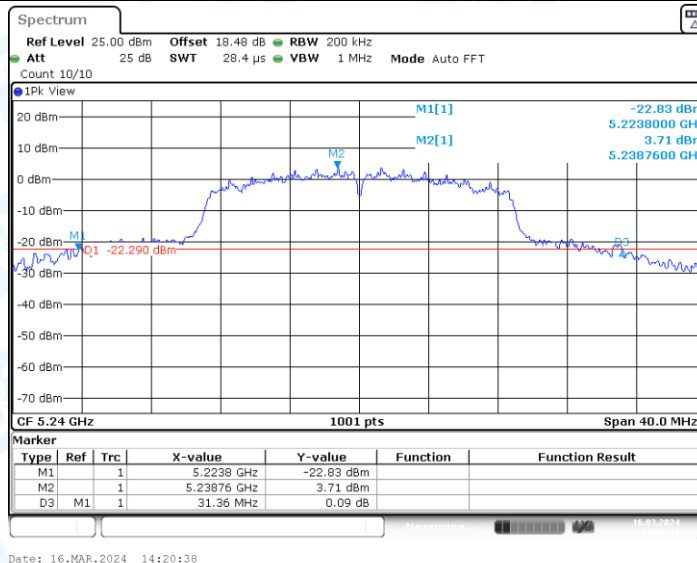
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11N20SISO_Ant1_5200



Date: 16.MAR.2024 14:16:02

11N20SISO_Ant1_5240



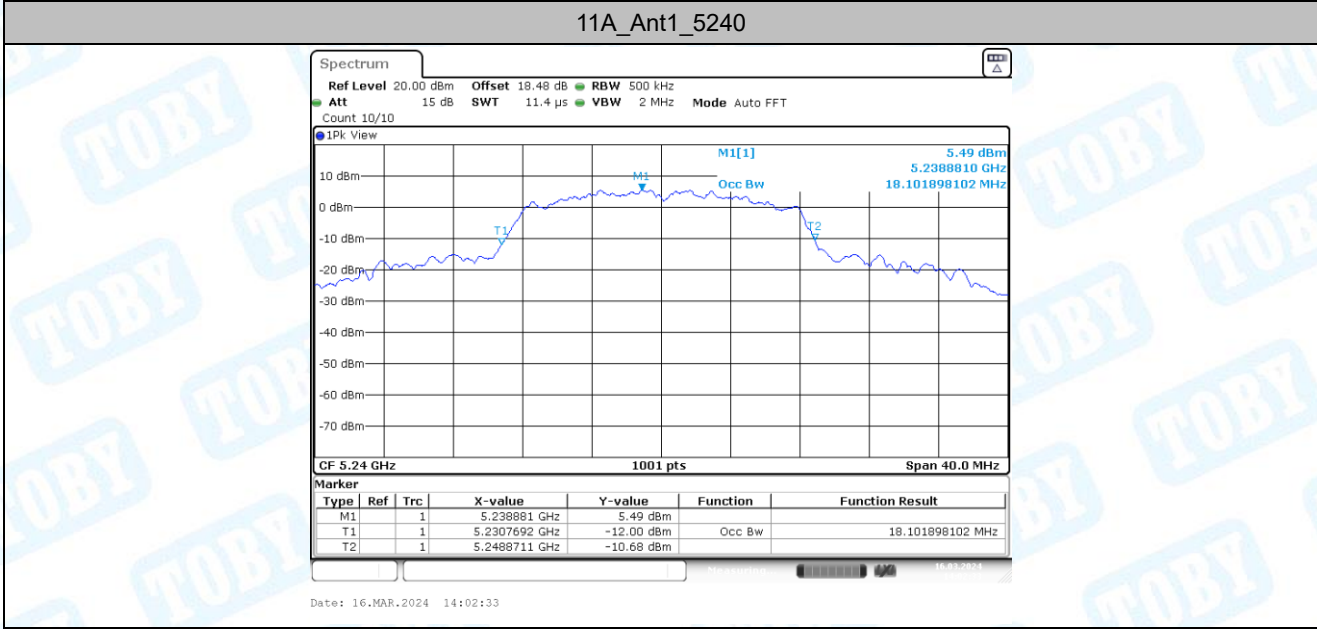
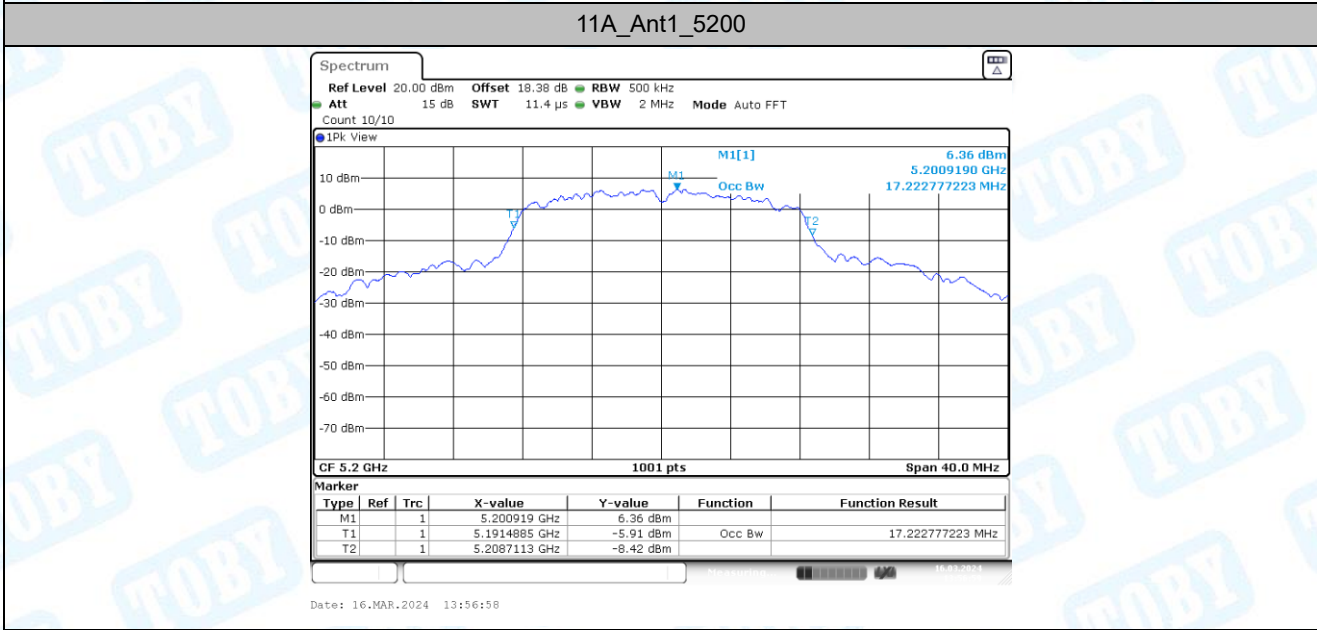
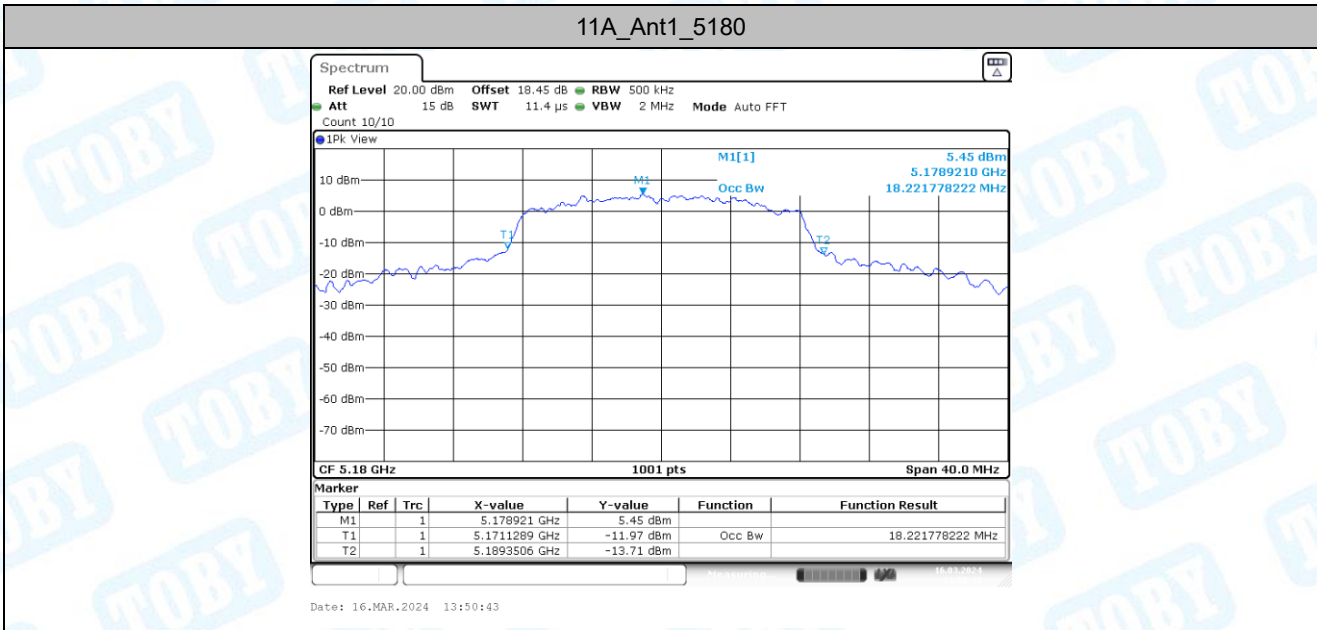
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2. Occupied channel bandwidth

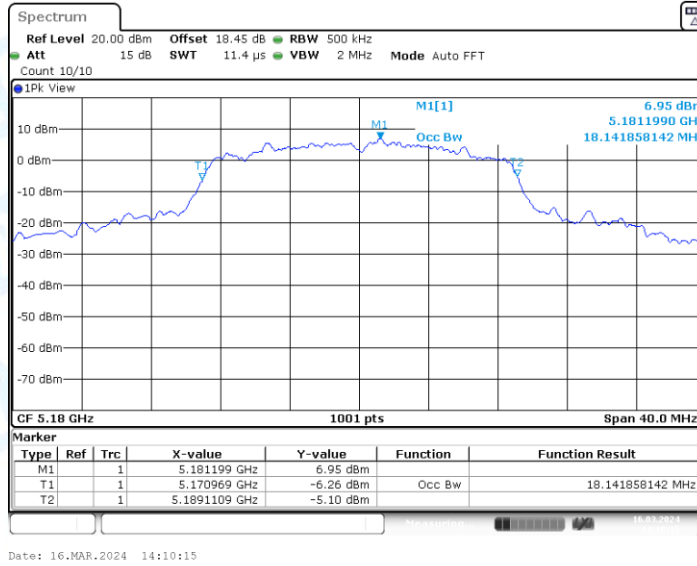
2.1. Test Result

| TestMode | Antenna | Channel | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|---------|-----------|-----------|-----------|------------|---------|
| 11A | Ant1 | 5180 | 18.222 | 5171.1289 | 5189.3506 | --- | --- |
| | | 5200 | 17.223 | 5191.4885 | 5208.7113 | --- | --- |
| | | 5240 | 18.102 | 5230.7692 | 5248.8711 | --- | --- |
| 11N20SISO | Ant1 | 5180 | 18.142 | 5170.9690 | 5189.1109 | --- | --- |
| | | 5200 | 18.182 | 5190.9291 | 5209.1109 | --- | --- |
| | | 5240 | 18.501 | 5230.6893 | 5249.1908 | --- | --- |

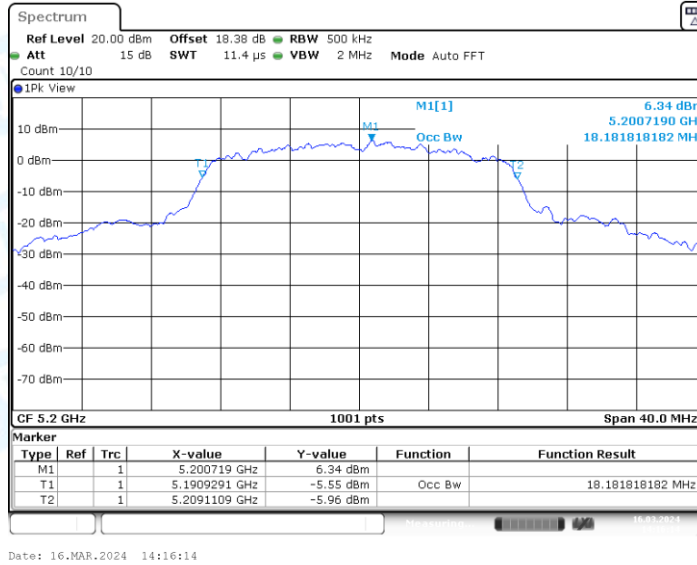
2.2. Test Graphs



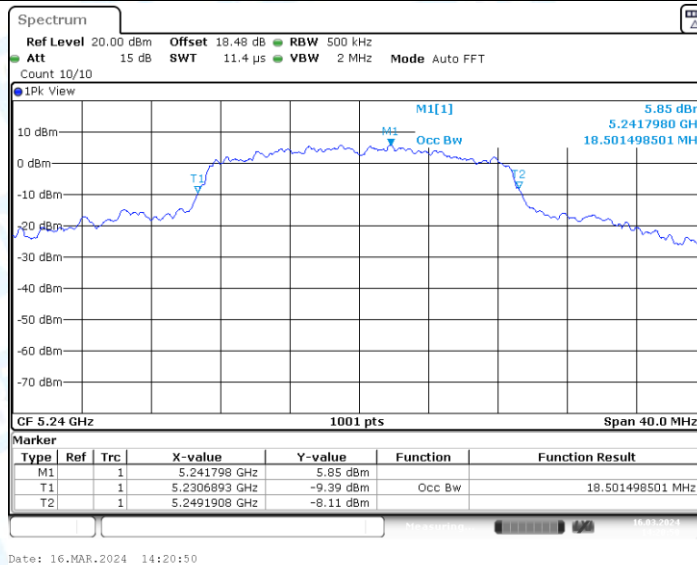
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



3. Maximum conducted output power

3.1. Test Result

| TestMode | Antenna | Channel | Conducted power [dBm] | Limit [dBm] | EIRP [dBm] | Limit [dBm] | Verdict |
|-----------|---------|---------|-----------------------|-------------|------------|-------------|---------|
| 11A | Ant1 | 5180 | 11.44 | ≤23.98 | 14.21 | ≤23.01 | PASS |
| | | 5200 | 12.53 | ≤23.98 | 15.30 | ≤23.01 | PASS |
| | | 5240 | 12.11 | ≤23.98 | 14.88 | ≤23.01 | PASS |
| 11N20SISO | Ant1 | 5180 | 12.78 | ≤23.98 | 15.55 | ≤23.01 | PASS |
| | | 5200 | 12.28 | ≤23.98 | 15.05 | ≤23.01 | PASS |
| | | 5240 | 12.32 | ≤23.98 | 15.09 | ≤23.01 | PASS |

Note: The Duty Cycle Factor is compensated in the graph.

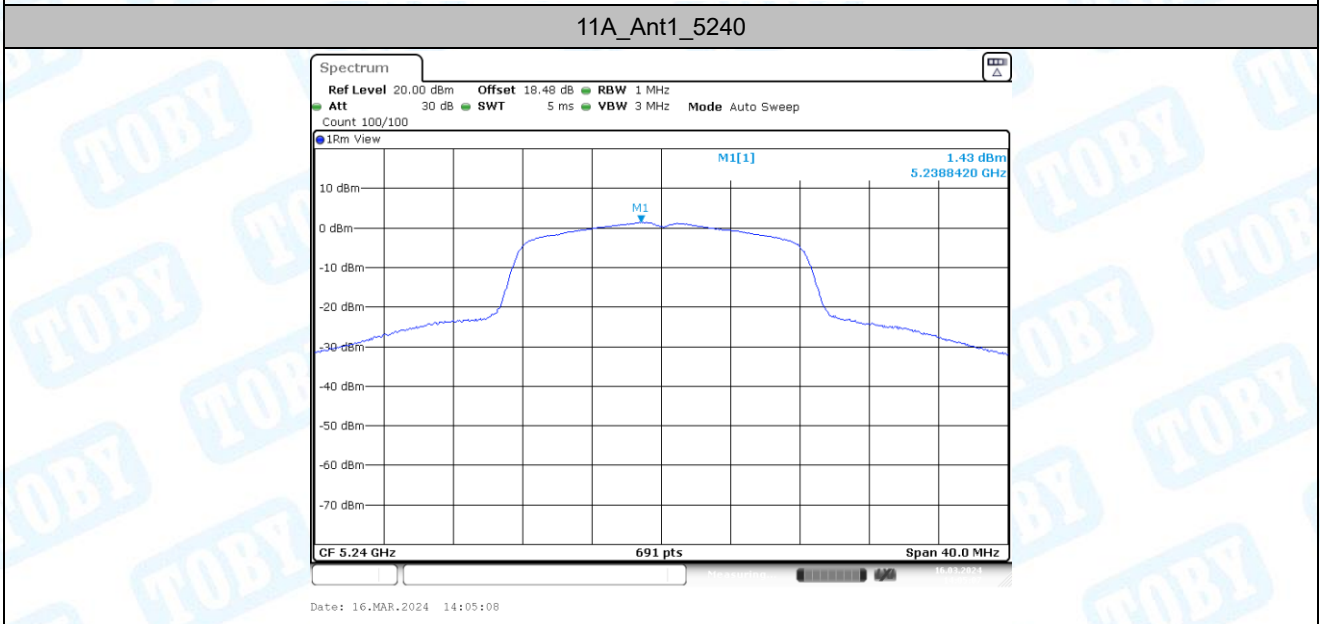
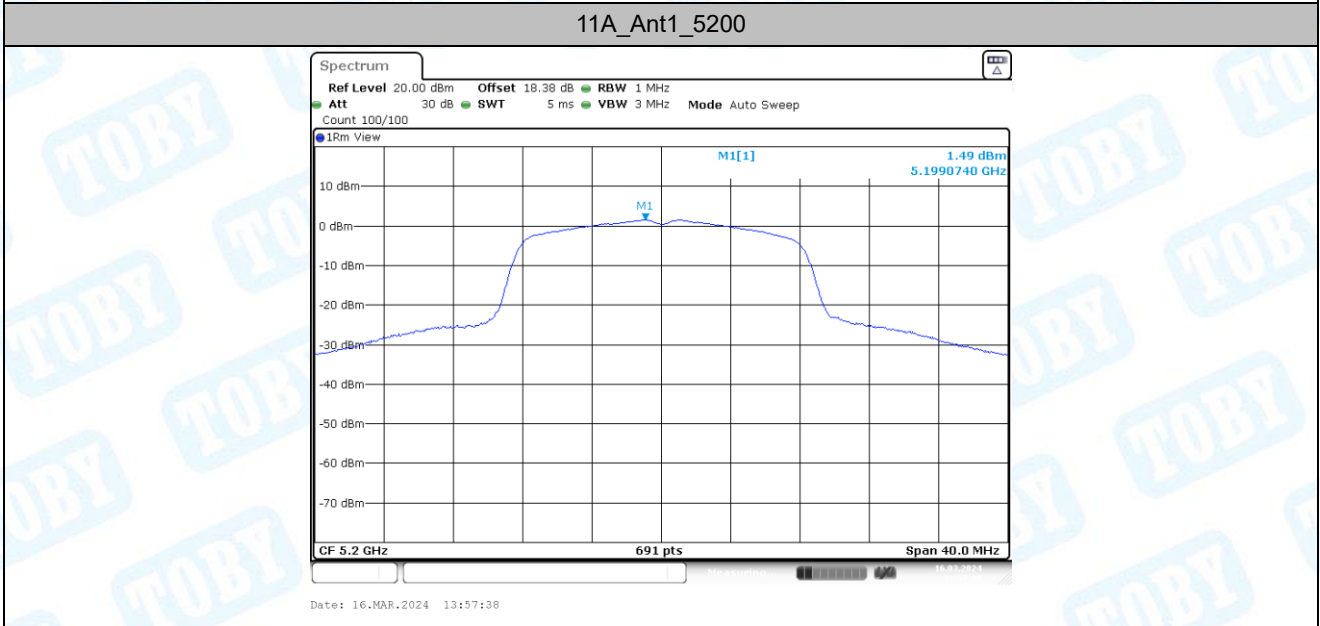
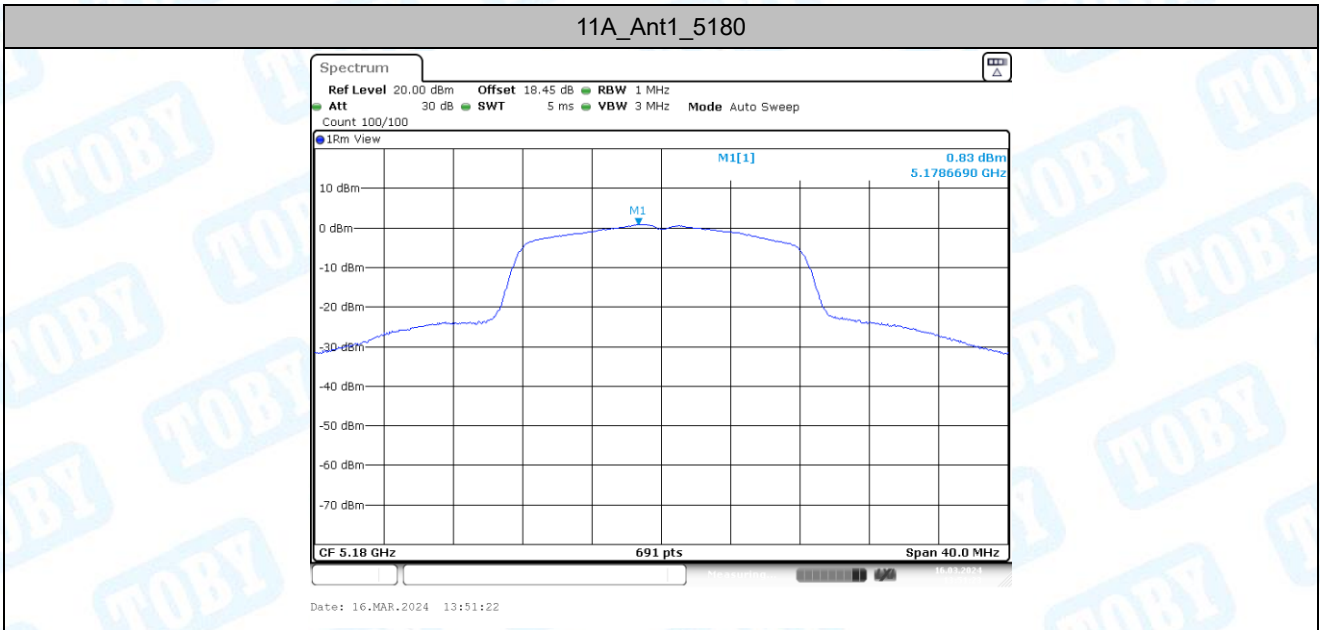
4. Maximum power spectral density

4.1. Test Result

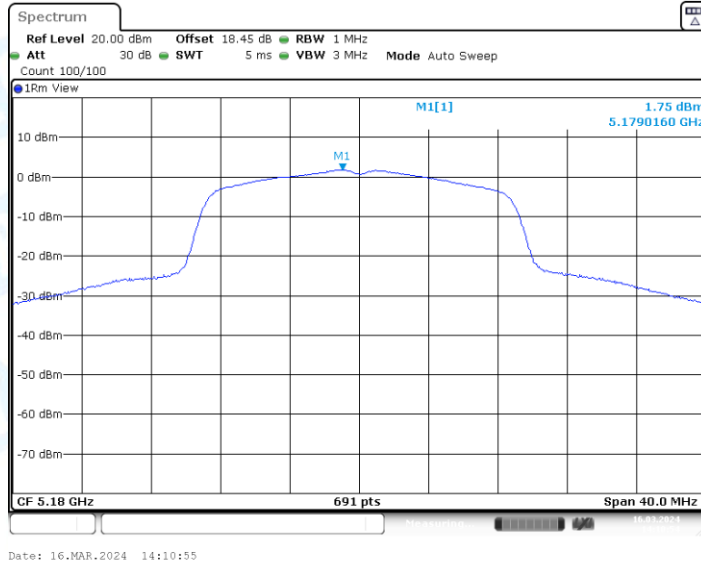
| TestMode | Antenna | Channel | Power [dBm/MHz] | Limit [dBm/MHz] | EIRP [dBm/MHz] | Limit [dBm/MHz] | Verdict |
|-----------|---------|---------|-----------------|-----------------|----------------|-----------------|---------|
| 11A | Ant1 | 5180 | 1.81 | ≤11.00 | 4.58 | ≤10.00 | PASS |
| | | 5200 | 2.45 | ≤11.00 | 5.22 | ≤10.00 | PASS |
| | | 5240 | 2.41 | ≤11.00 | 5.18 | ≤10.00 | PASS |
| 11N20SISO | Ant1 | 5180 | 2.77 | ≤11.00 | 5.54 | ≤10.00 | PASS |
| | | 5200 | 1.51 | ≤11.00 | 4.28 | ≤10.00 | PASS |
| | | 5240 | 2.44 | ≤11.00 | 5.21 | ≤10.00 | PASS |

Note: The Duty Cycle Factor and RBW Factor is compensated in the graph.

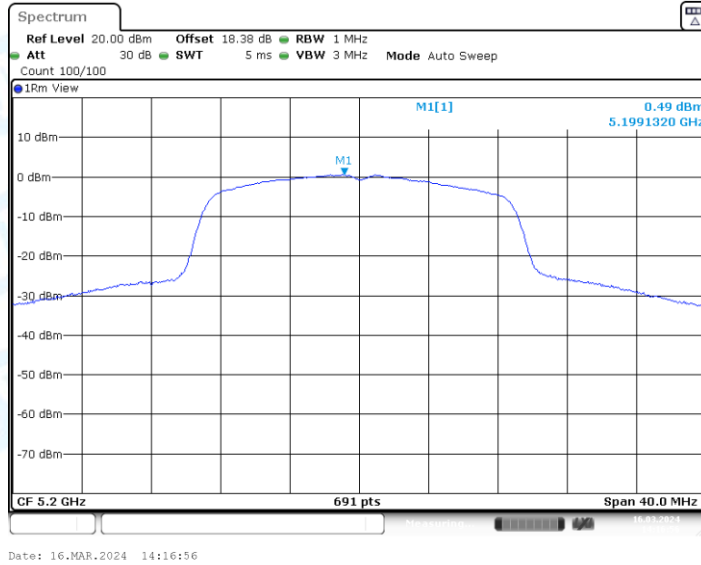
4.2. Test Graphs



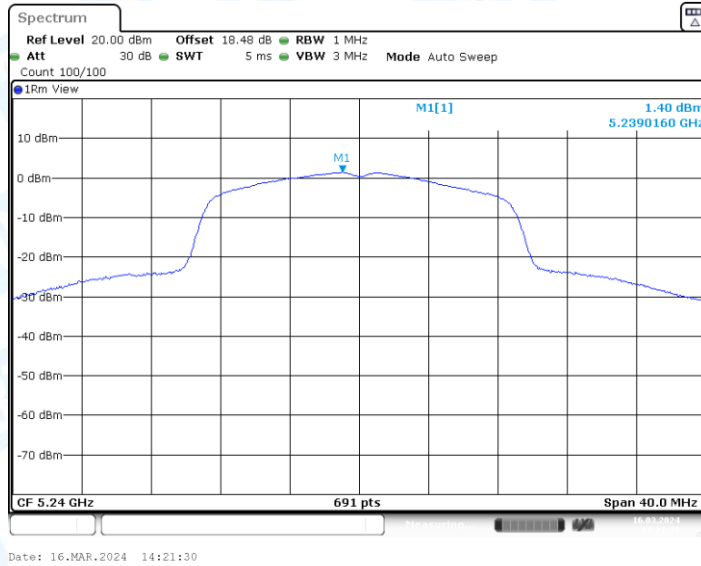
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240

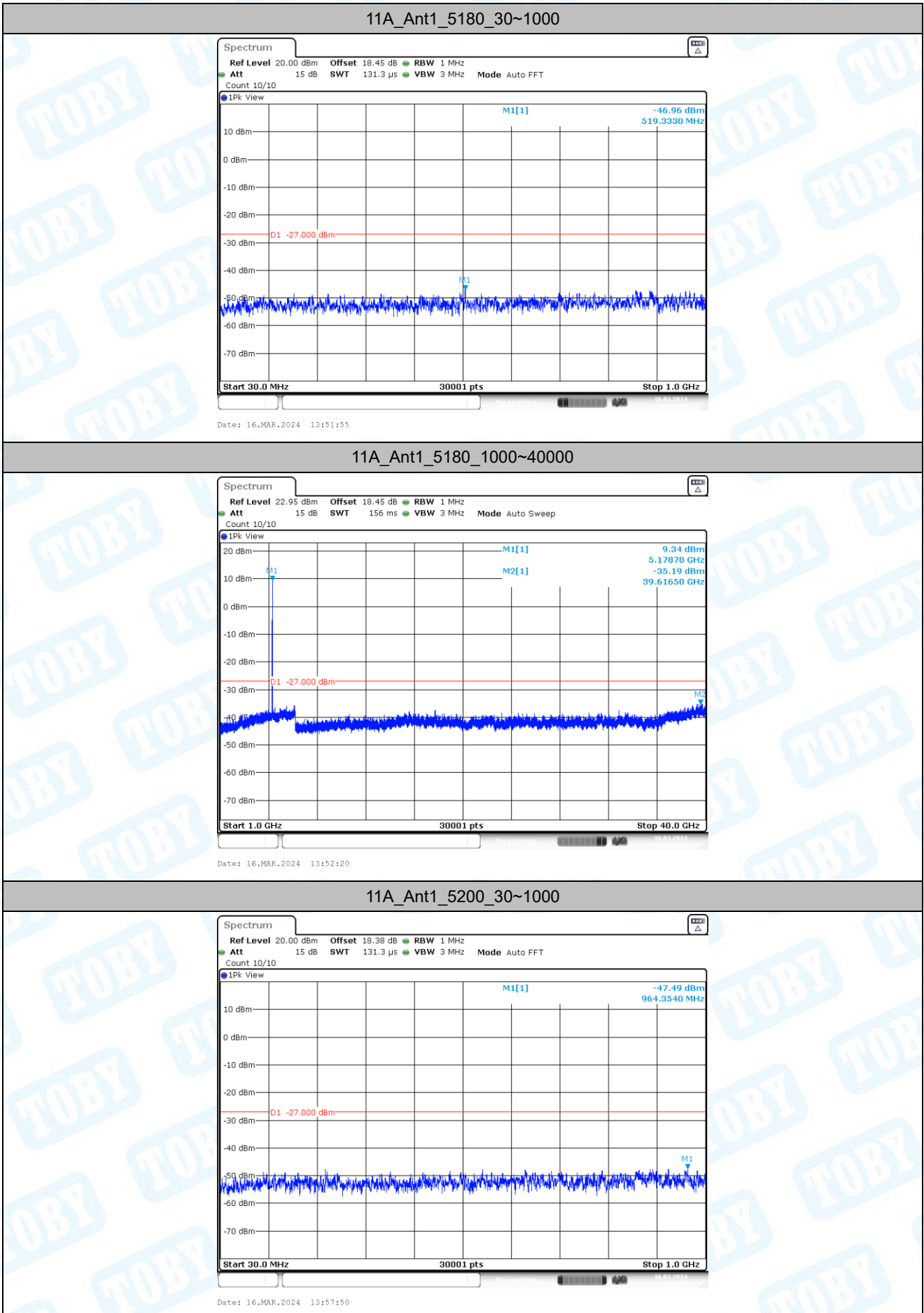


5. Conducted Spurious Emission

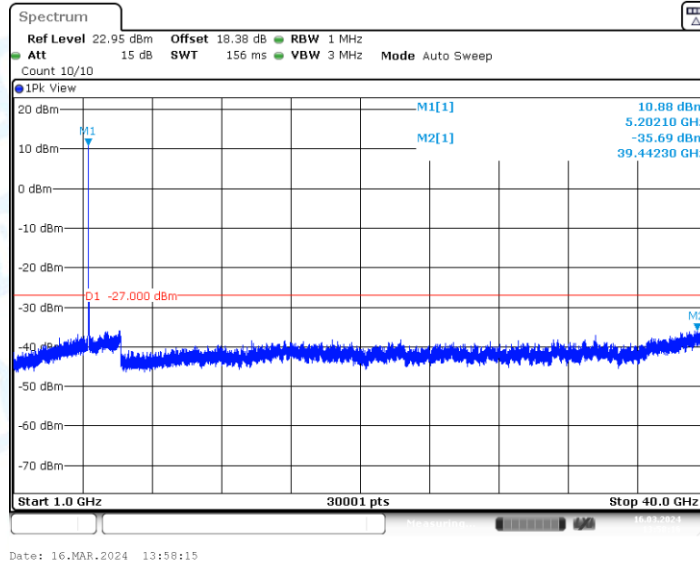
5.1. Test Result

| TestMode | Antenna | Channel | FreqRange [MHz] | Max. Fre [MHz] | Max. Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|---------|-----------------|----------------|------------------|-------------|---------|
| 11A | Ant1 | 5180 | 30~1000 | 519.33 | -46.96 | ≤-27 | PASS |
| | | | 1000~40000 | 39616.5 | -35.19 | ≤-27 | PASS |
| | | 5200 | 30~1000 | 964.35 | -47.49 | ≤-27 | PASS |
| | | | 1000~40000 | 39442.3 | -35.69 | ≤-27 | PASS |
| | | 5240 | 30~1000 | 510.76 | -46.20 | ≤-27 | PASS |
| | | | 1000~40000 | 39008.1 | -35.01 | ≤-27 | PASS |
| 11N20SISO | Ant1 | 5180 | 30~1000 | 118.67 | -45.97 | ≤-27 | PASS |
| | | | 1000~40000 | 40000 | -35.00 | ≤-27 | PASS |
| | | 5200 | 30~1000 | 859.99 | -46.23 | ≤-27 | PASS |
| | | | 1000~40000 | 38952.2 | -34.86 | ≤-27 | PASS |
| | | 5240 | 30~1000 | 888.41 | -46.21 | ≤-27 | PASS |
| | | | 1000~40000 | 39595.7 | -34.81 | ≤-27 | PASS |

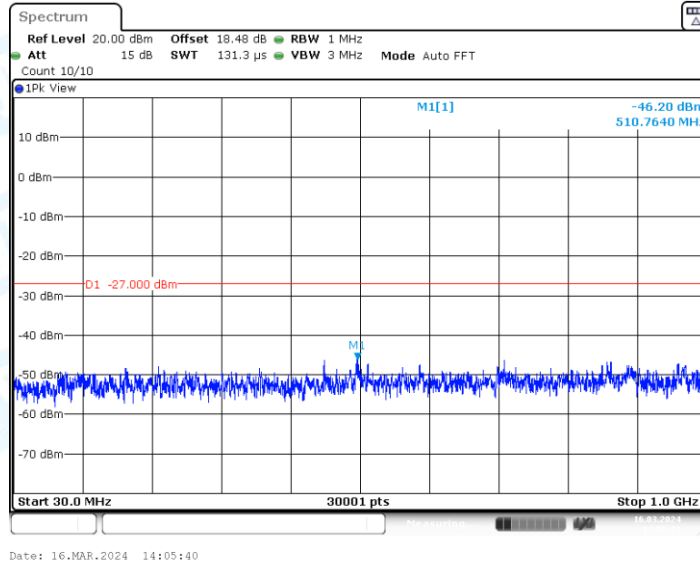
5.2. Test Graphs



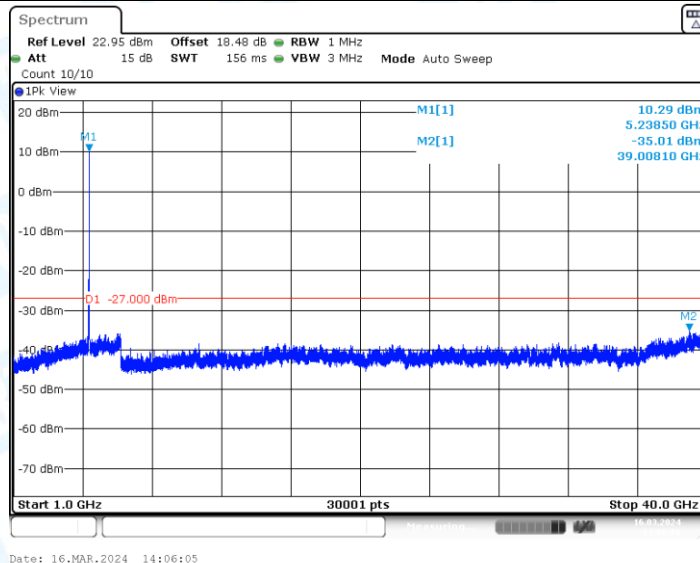
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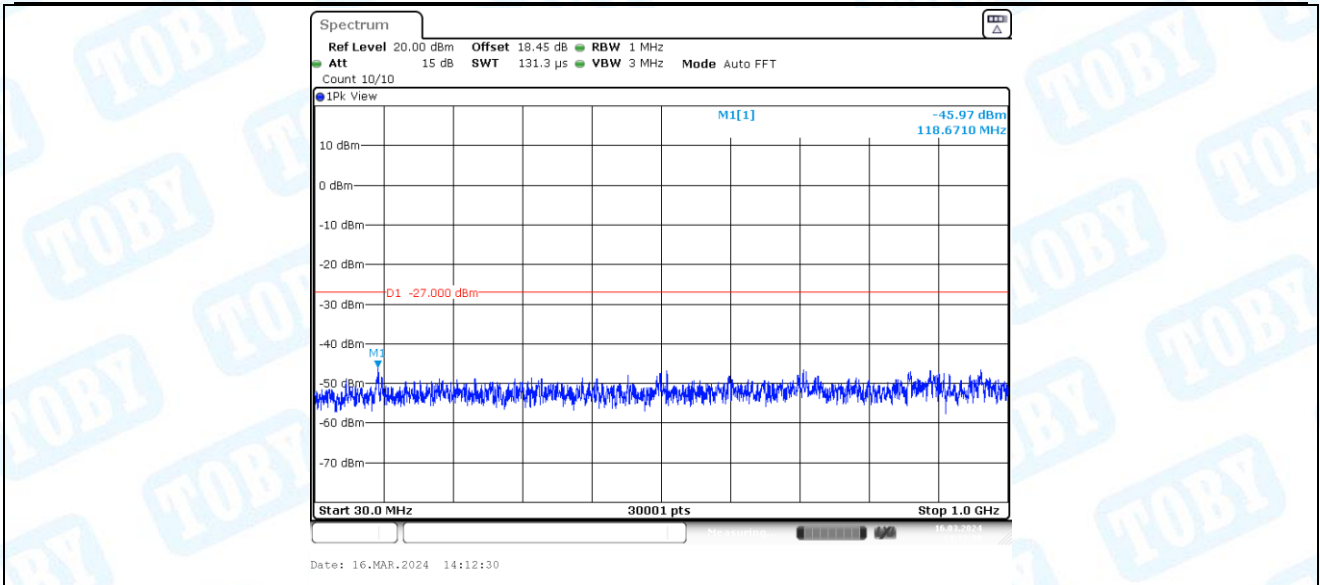
11A_Ant1_5240_30~1000



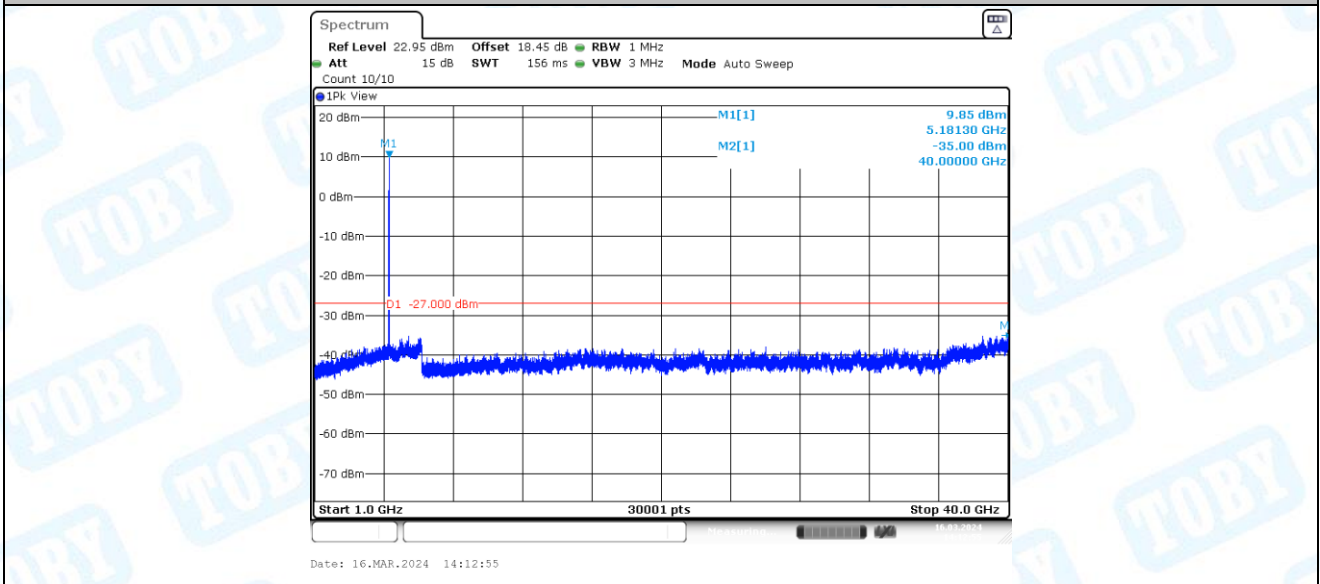
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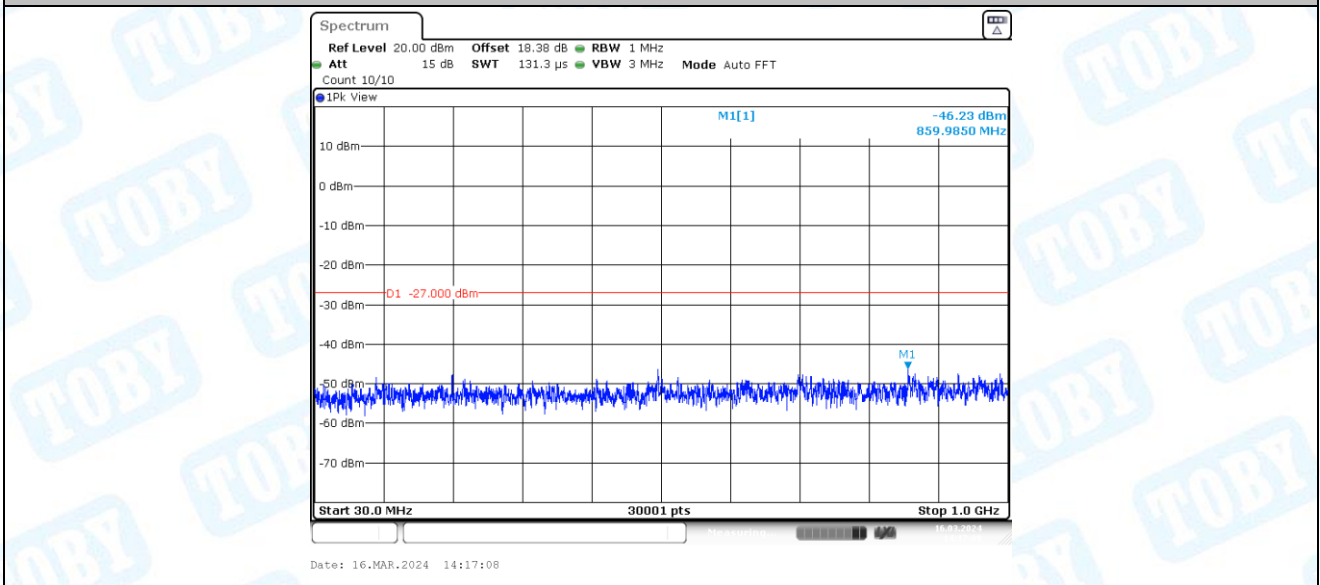
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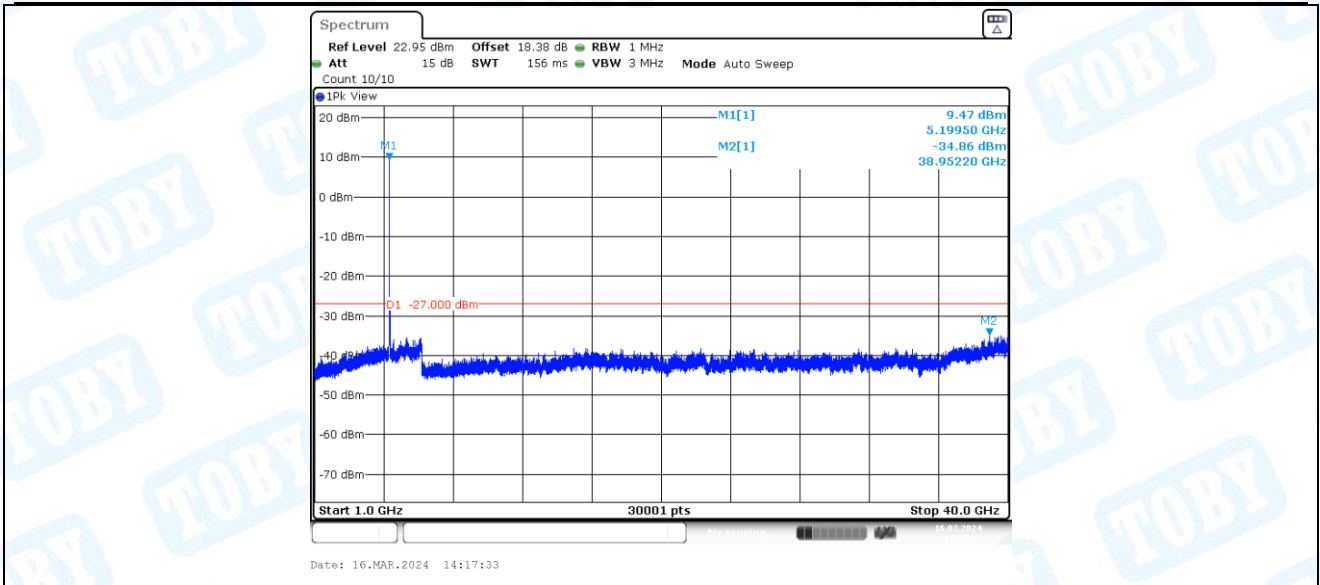
11N20SISO_Ant1_5180_1000~40000



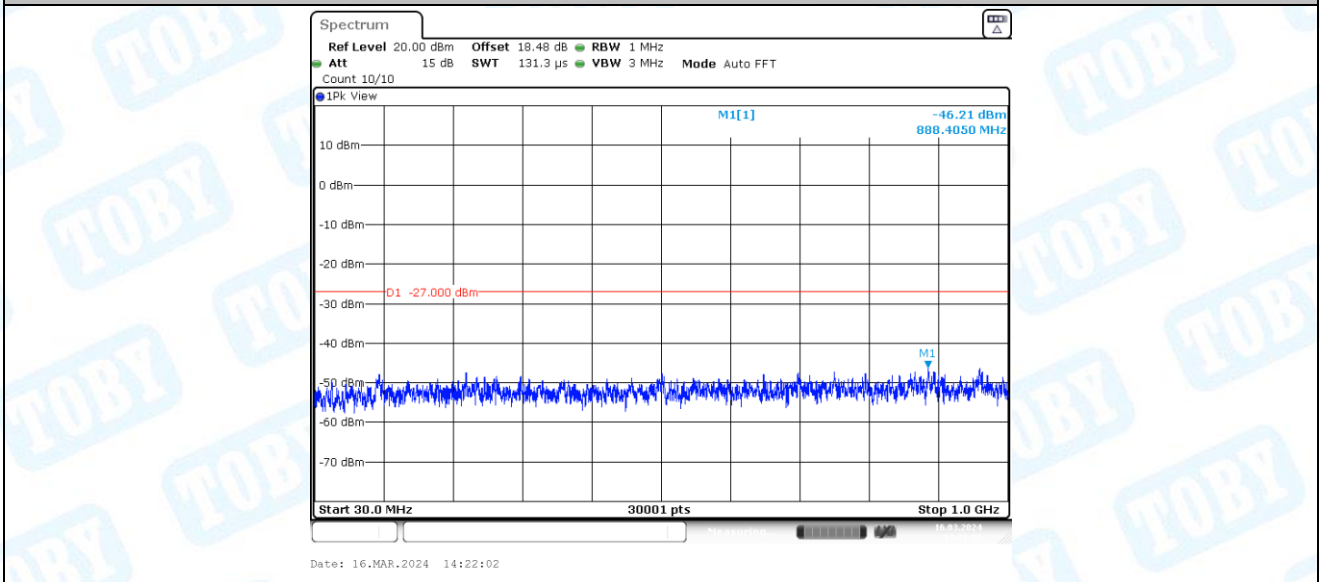
11N20SISO_Ant1_5200_30~1000



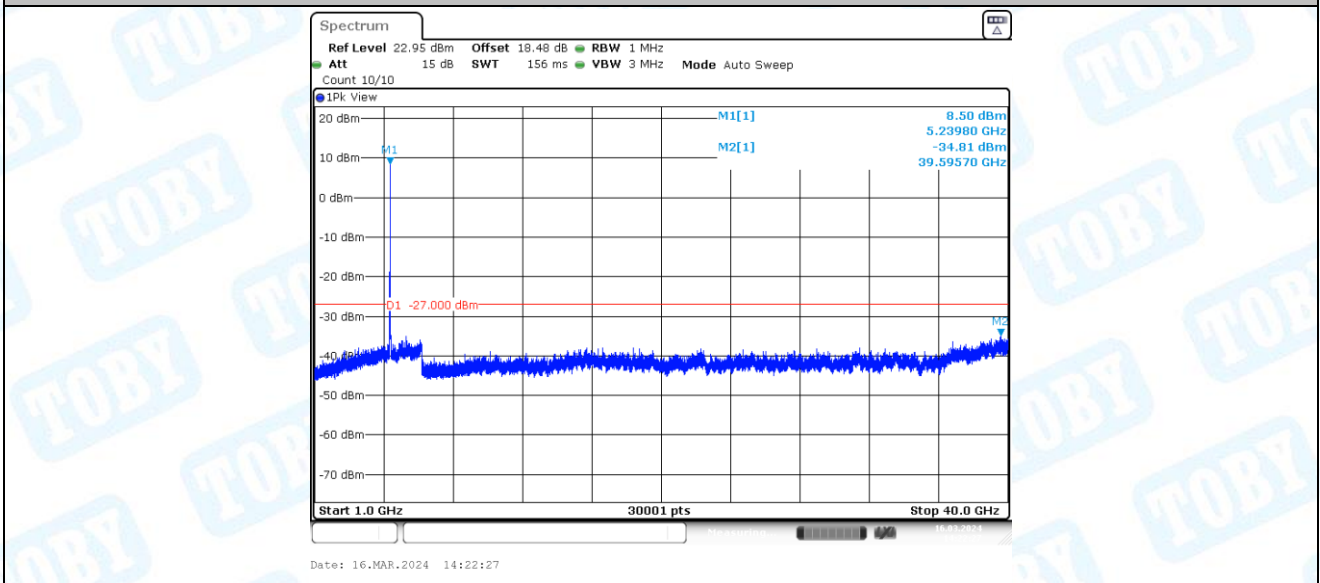
11N20SISO_Ant1_5200_1000~40000



11N20SISO_Ant1_5240_30~1000



11N20SISO_Ant1_5240_1000~40000



6. Frequency Stability

6.1. Test Result

| Voltage | | | | | | | | |
|-----------|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| TestMode | Antenna | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 11A | Ant1 | 5180 | NV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | | LV | NT | 20000.00 | 3.861004 | 20 | PASS |
| | | | HV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | 5200 | NV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | | LV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | | HV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | 5240 | NV | NT | 60000.00 | 11.450382 | 20 | PASS |
| | | | LV | NT | 60000.00 | 11.450382 | 20 | PASS |
| | | | HV | NT | 20000.00 | 3.816794 | 20 | PASS |
| 11N20SISO | Ant1 | 5180 | NV | NT | 20000.00 | 3.861004 | 20 | PASS |
| | | | LV | NT | -40000.00 | -7.722008 | 20 | PASS |
| | | | HV | NT | 20000.00 | 3.861004 | 20 | PASS |
| | | 5200 | NV | NT | 20000.00 | 3.846154 | 20 | PASS |
| | | | LV | NT | 20000.00 | 3.846154 | 20 | PASS |
| | | | HV | NT | 20000.00 | 3.846154 | 20 | PASS |
| | | 5240 | NV | NT | 0.00 | 0.000000 | 20 | PASS |
| | | | LV | NT | 20000.00 | 3.816794 | 20 | PASS |
| | | | HV | NT | 20000.00 | 3.816794 | 20 | PASS |

| Temperature | | | | | | | | |
|-------------|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| TestMode | Antenna | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 11A | Ant1 | 5180 | NV | 0 | 0.00 | 0.000000 | 20 | PASS |
| | | | NV | 10 | 20000.00 | 3.861004 | 20 | PASS |
| | | | NV | 20 | 20000.00 | 3.861004 | 20 | PASS |
| | | | NV | 30 | 0.00 | 0.000000 | 20 | PASS |
| | | | NV | 45 | 0.00 | 0.000000 | 20 | PASS |
| | | 5200 | NV | 0 | 20000.00 | 3.846154 | 20 | PASS |
| | | | NV | 10 | 20000.00 | 3.846154 | 20 | PASS |
| | | | NV | 20 | 20000.00 | 3.846154 | 20 | PASS |
| | | | NV | 30 | 0.00 | 0.000000 | 20 | PASS |
| | | | NV | 45 | 20000.00 | 3.846154 | 20 | PASS |
| | | 5240 | NV | 0 | 40000.00 | 7.633588 | 20 | PASS |
| | | | NV | 10 | 40000.00 | 7.633588 | 20 | PASS |
| | | | NV | 20 | 40000.00 | 7.633588 | 20 | PASS |
| | | | NV | 30 | 40000.00 | 7.633588 | 20 | PASS |
| | | | NV | 45 | 20000.00 | 3.816794 | 20 | PASS |
| 11N20SISO | Ant1 | 5180 | NV | 0 | 20000.00 | 3.861004 | 20 | PASS |
| | | | NV | 10 | -20000.00 | -3.861004 | 20 | PASS |

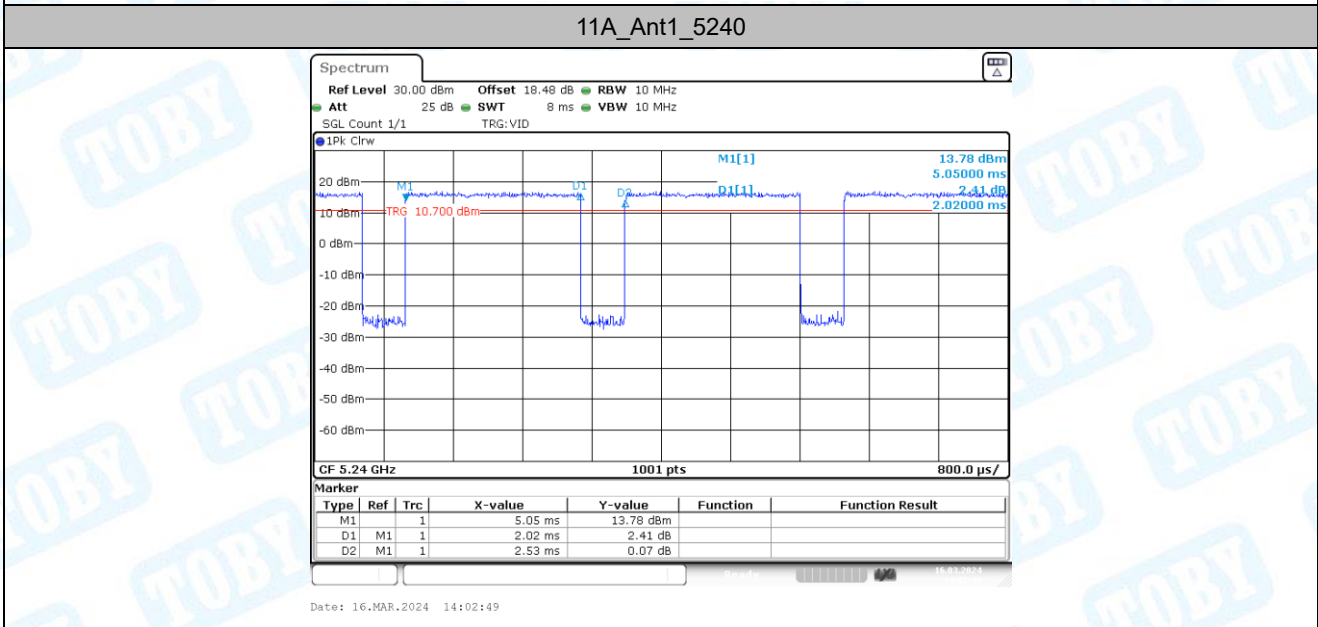
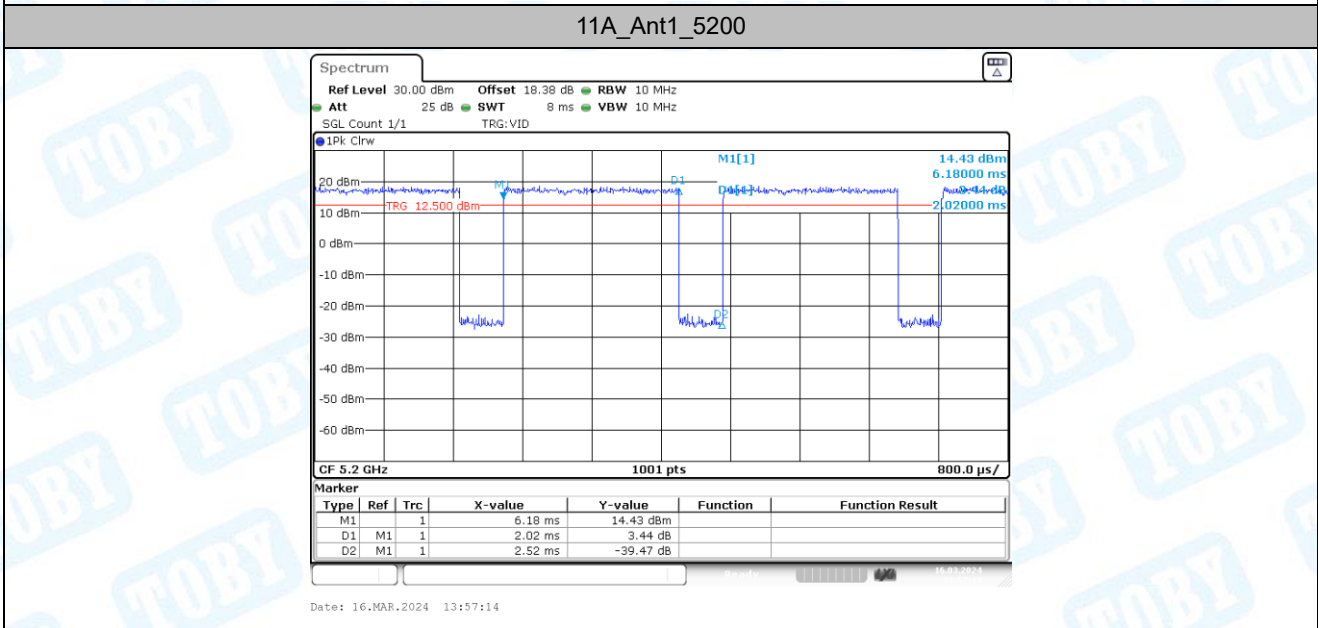
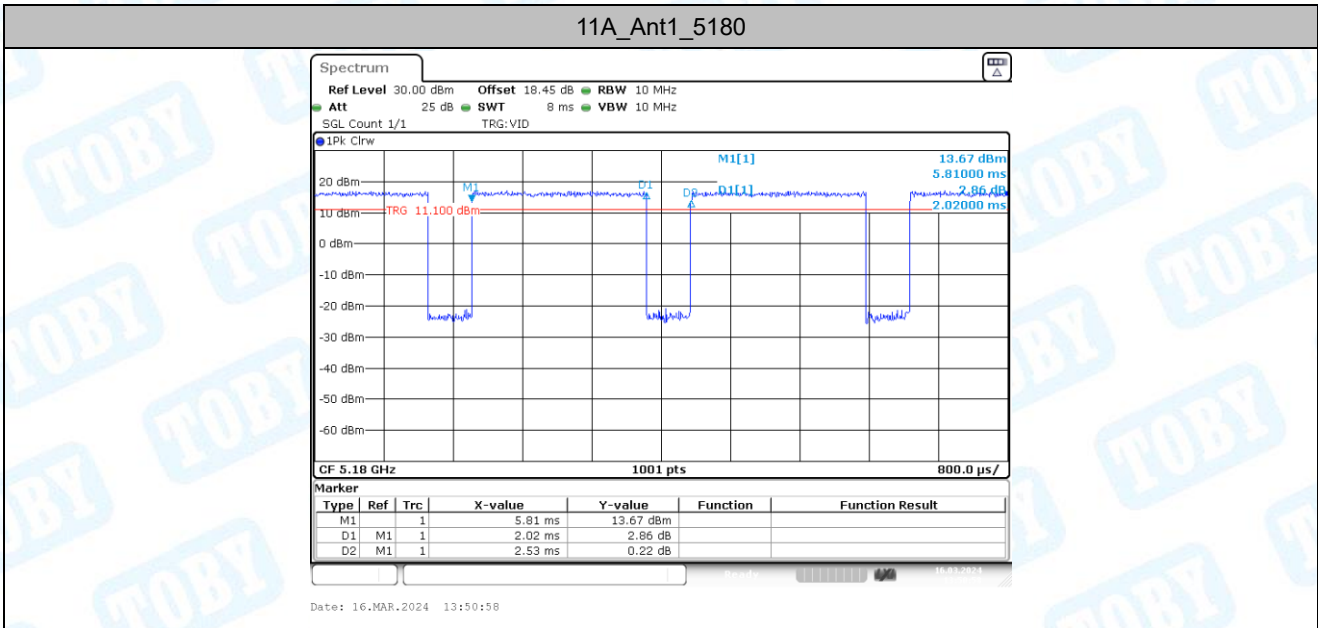
| | | | | | | | | | | |
|--|--|------|----|----|-----------|-----------|----------|----------|----|------|
| | | | NV | 20 | -20000.00 | -3.861004 | 20 | PASS | | |
| | | | NV | 30 | 0.00 | 0.000000 | 20 | PASS | | |
| | | | NV | 45 | 20000.00 | 3.861004 | 20 | PASS | | |
| | | 5200 | NV | 0 | 0.00 | 0.000000 | 20 | PASS | | |
| | | | NV | 10 | 0.00 | 0.000000 | 20 | PASS | | |
| | | | NV | 20 | 20000.00 | 3.846154 | 20 | PASS | | |
| | | | NV | 30 | 20000.00 | 3.846154 | 20 | PASS | | |
| | | 5240 | NV | 45 | 20000.00 | 3.846154 | 20 | PASS | | |
| | | | NV | 0 | 20000.00 | 3.816794 | 20 | PASS | | |
| | | | NV | 10 | 20000.00 | 3.816794 | 20 | PASS | | |
| | | | NV | 20 | 40000.00 | 7.633588 | 20 | PASS | | |
| | | | NV | 30 | 0.00 | 0.000000 | 20 | PASS | | |
| | | | | | NV | 45 | 20000.00 | 3.816794 | 20 | PASS |

7. Duty Cycle

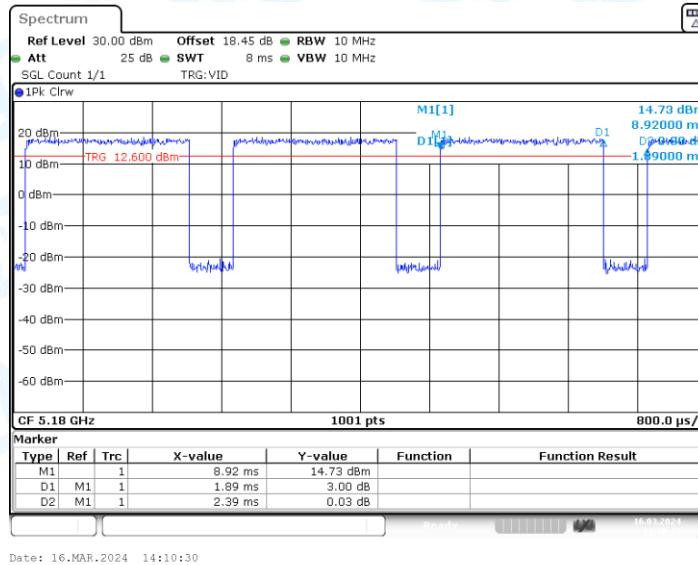
7.1. Test Result

| TestMode | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | 1/T [kHz] | Limit | Verdict |
|-----------|---------|---------|----------------------------|--------------------------|----------------|-----------|-------|---------|
| 11A | Ant1 | 5180 | 2.02 | 2.53 | 79.84 | 0.49505 | --- | --- |
| | | 5200 | 2.02 | 2.52 | 80.16 | 0.49505 | --- | --- |
| | | 5240 | 2.02 | 2.53 | 79.84 | 0.49505 | --- | --- |
| 11N20SISO | Ant1 | 5180 | 1.89 | 2.39 | 79.08 | 0.529101 | --- | --- |
| | | 5200 | 1.89 | 2.39 | 79.08 | 0.529101 | --- | --- |
| | | 5240 | 1.89 | 2.40 | 78.75 | 0.529101 | --- | --- |

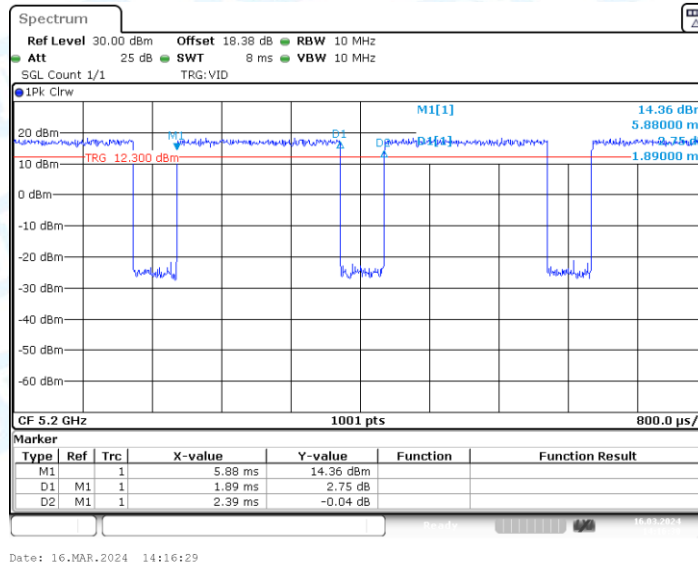
7.2. Test Graphs



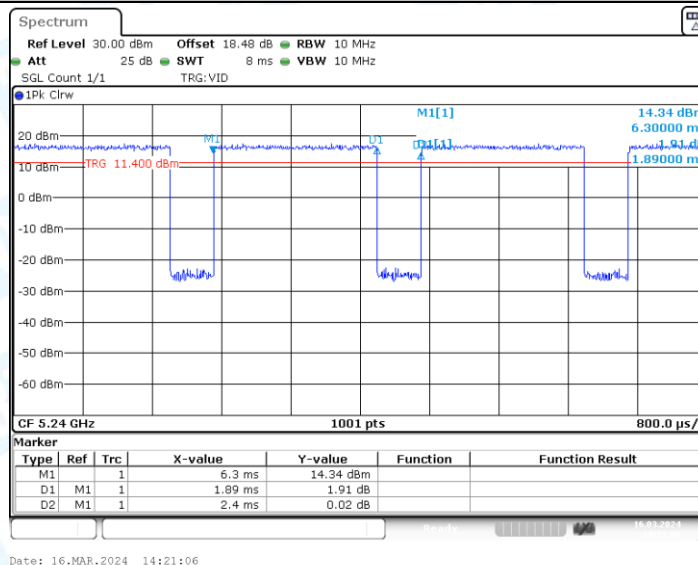
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



-----End of the report-----