

Annex 1: Measurement diagrams 23-1-0125901T002a-A1

Number of pages:	18	Date of Report:	2023-Oct-26
Testing company:	cetecom advanced GmbH Untertuerkheimer Str. 6-10 66117 Saarbruecken GERMANY	Applicant:	ulrich GmbH & Co. KG
Product: Model:	Injector Max 3		
FCC ID:	2BC9B-XD101X1	IC:	n/a
Testing has been carried out in accordance with:	FCC Regulations Title 47 CFR, Chapter I, Subchapter A, Part 15, Subpart C §15.225 Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".each section under "Test method and limit".		

1 Radiated diagrams

1.1 Radiated H-Field

2.01a_H-Field_lying_on_side

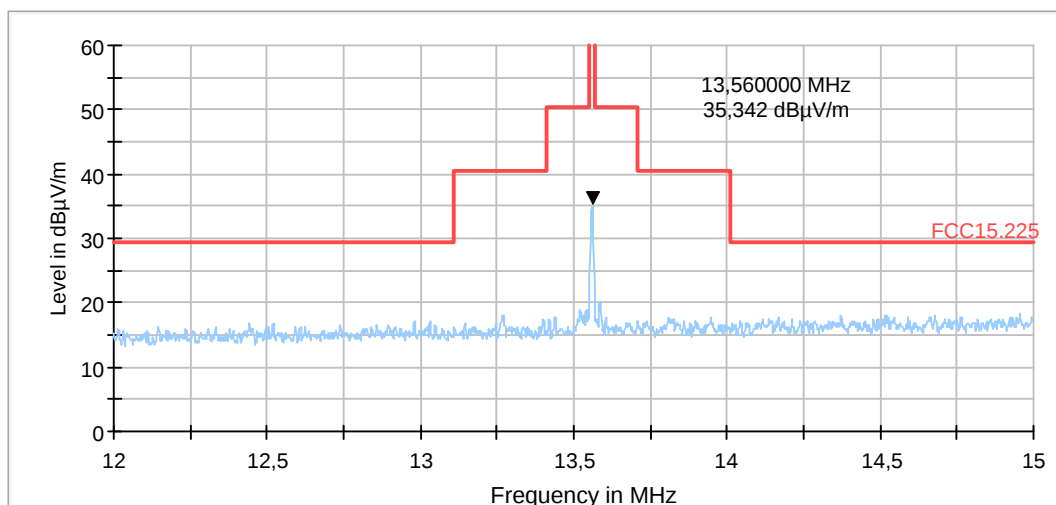
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	cetekom advanced GmbH Essen
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Environmental Conditions:	Humidity: 57%rH; Temperature: 20°C
Operator:	TFra
Operating Mode:	TX-Mod
Verdict:	Passed

EUT Information

PMT number:	23-1-01259S02_C01
Power:	internal battery

Full Spectrum



2.01b_H-Field_lying_on_back

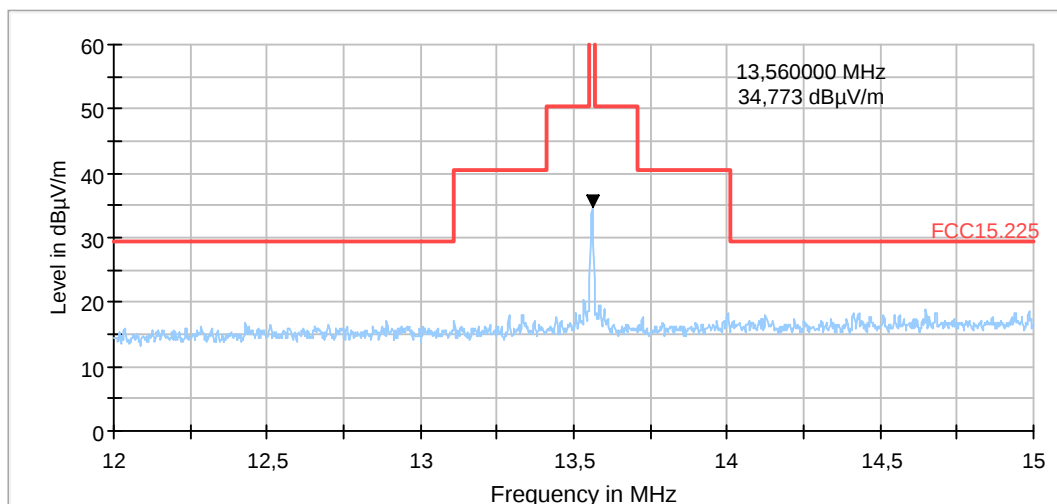
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	cetekom advanced GmbH Essen
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Environmental Conditions:	Humidity: 57%rH; Temperature: 20°C
Operator:	TFra
Operating Mode:	TX-Mod
Verdict:	Passed

EUT Information

PMT number:	23-1-01259S02_C01
Power:	internal battery

Full Spectrum



2.01c_H-Field_standing

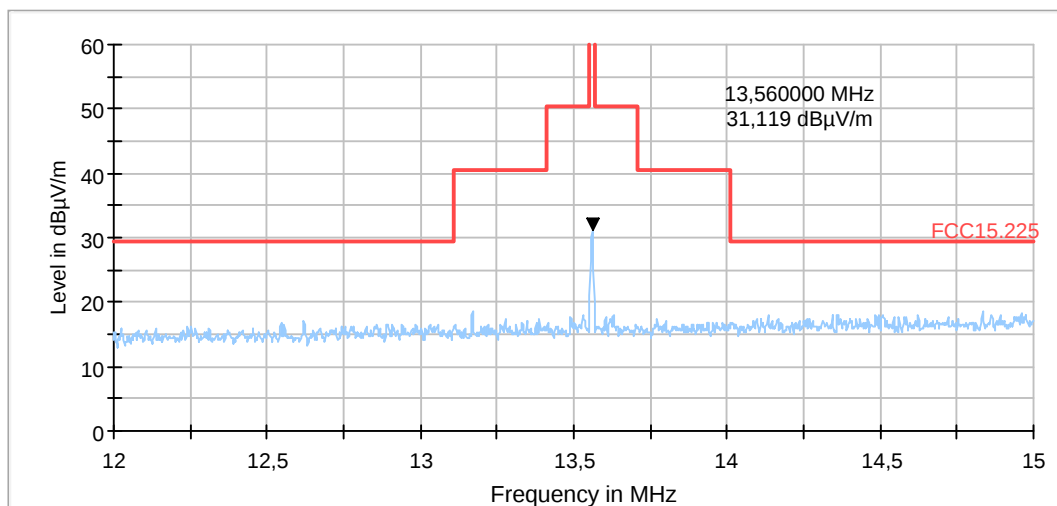
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	cetecom advanced GmbH Essen
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Environmental Conditions:	Humidity: 57%rH; Temperature: 20°C
Operator:	TFra
Operating Mode:	TX-Mod
Verdict:	Passed

EUT Information

PMT number:	23-1-01259S02_C01
Power:	internal battery

Full Spectrum



1.2 Radiated spurious emission < 30 MHz

2.02_RSE

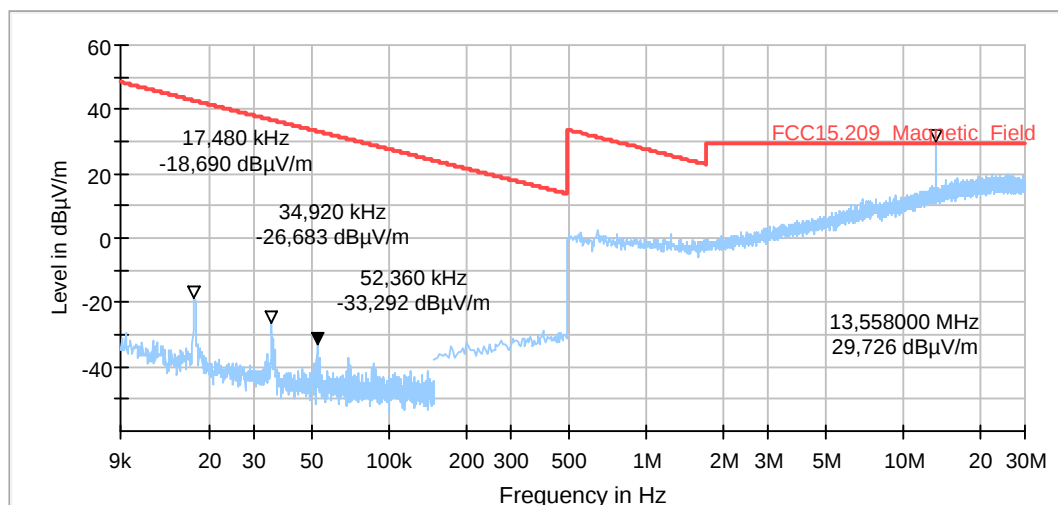
Common Information

Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	cetekom advanced GmbH Essen
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Environmental Conditions:	Humidity: 57%rH; Temperature: 20°C
Operator:	TFra
Operating Mode:	TX-Mod
Verdict:	Passed

EUT Information

PMT number:	23-1-01259S02_C01
Power:	internal battery

Full Spectrum



Remark: emission in the lower frequency range starting ~17 kHz to ~52 kHz are caused by an electrical antenna mast inside the chamber and are not related to the measurement.

1.3 Radiated spurious emission > 30 MHz

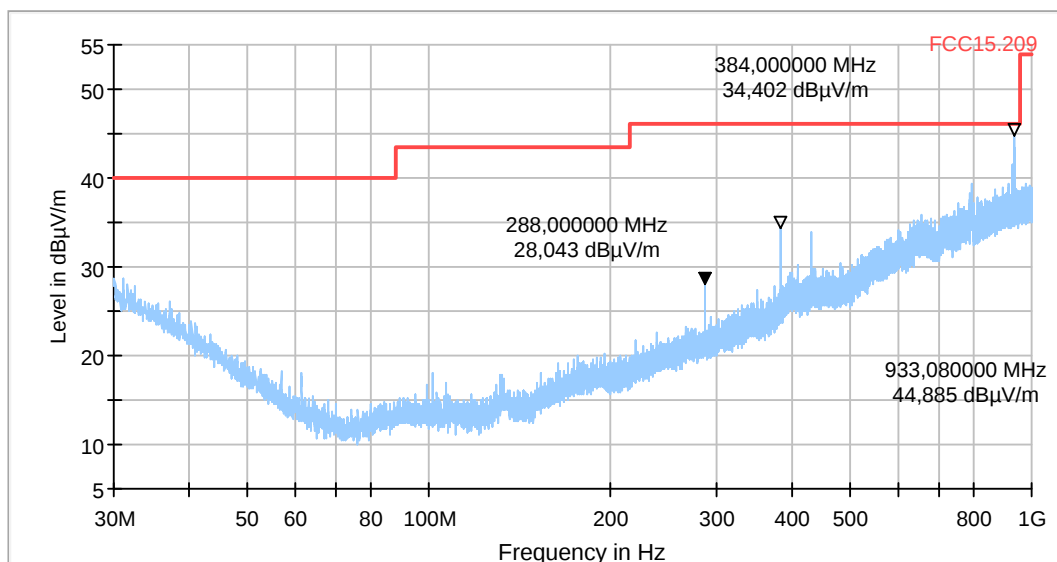
3.02_RSE

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site Location:	cetekom advanced GmbH Essen
Test Standard:	FCC 15.205 § 15.209
Antenna polarisation:	horizontal/vertical
Environmental Conditions:	Humidity: 57%rH; Temperature: 20°C
Operator Name:	TFra
Operating Mode:	TX-Mod
Verdict:	Passed

EUT Information

PMT number:	23-1-01259S02_C01
Power:	internal battery

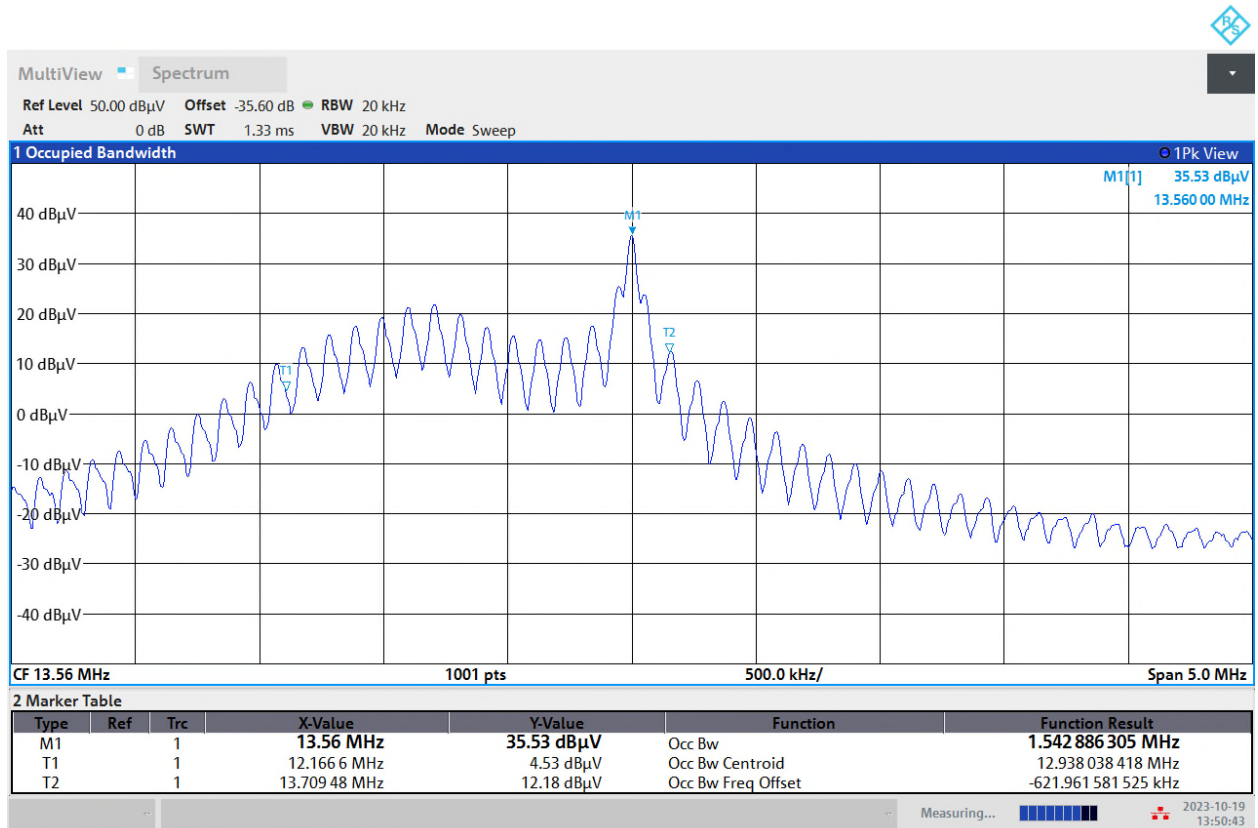


Remark: emission at ~933 MHz is an external interferer and not related to the measurement.

2 Conducted diagrams

2.1 Occupied bandwidth

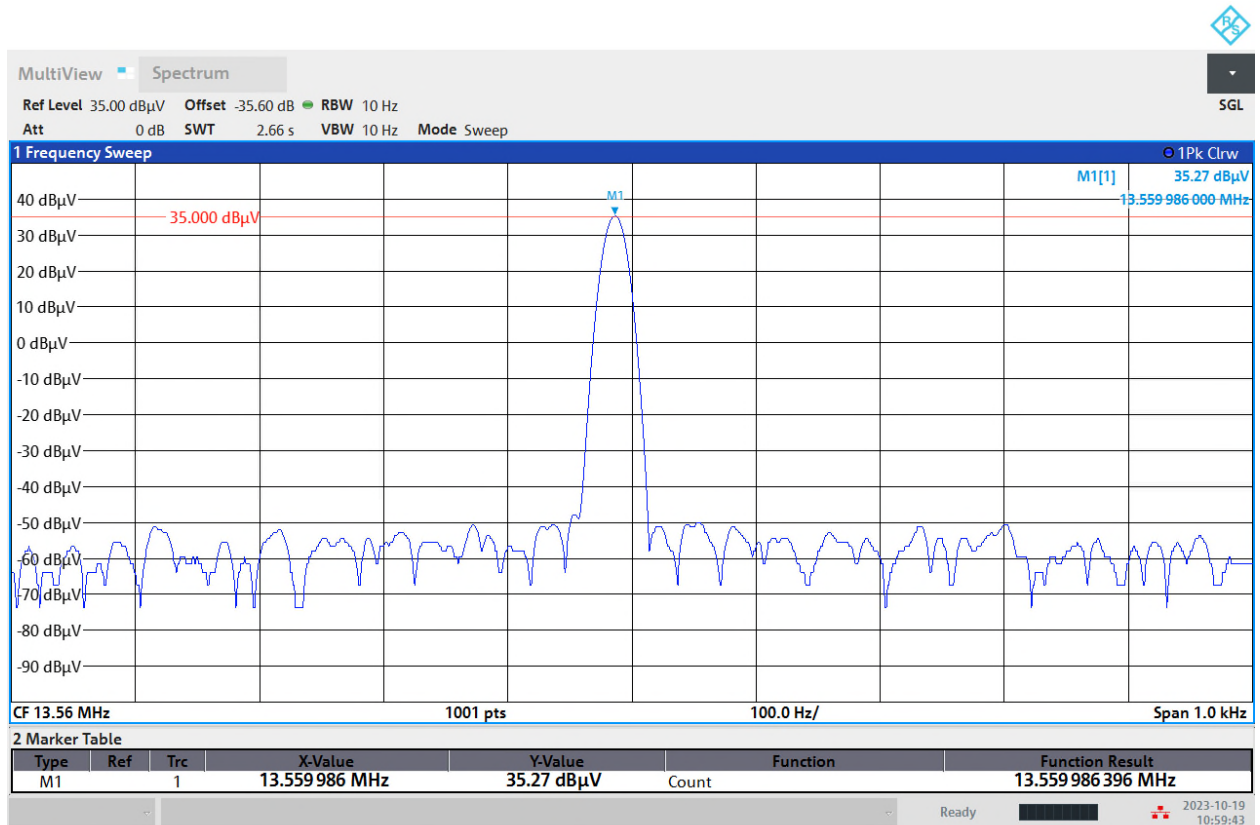
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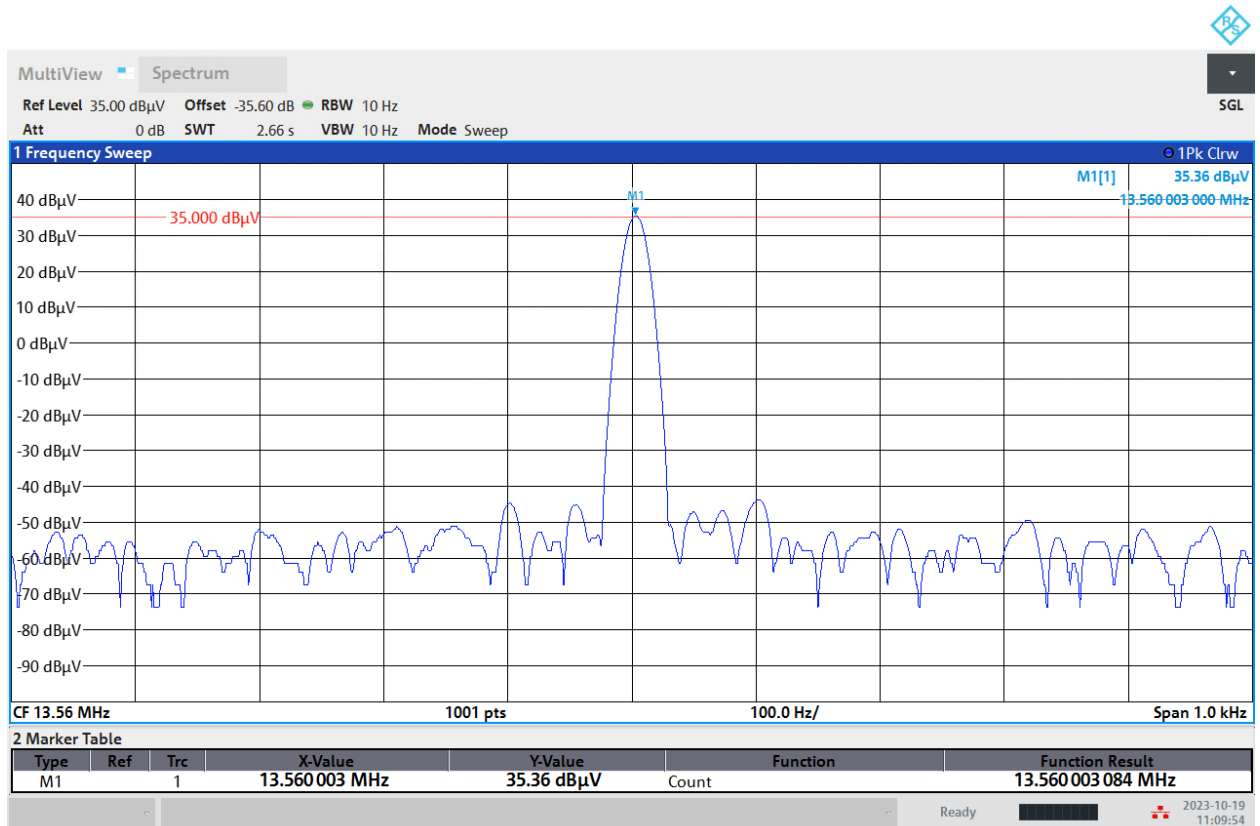
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2.2 Frequency stability

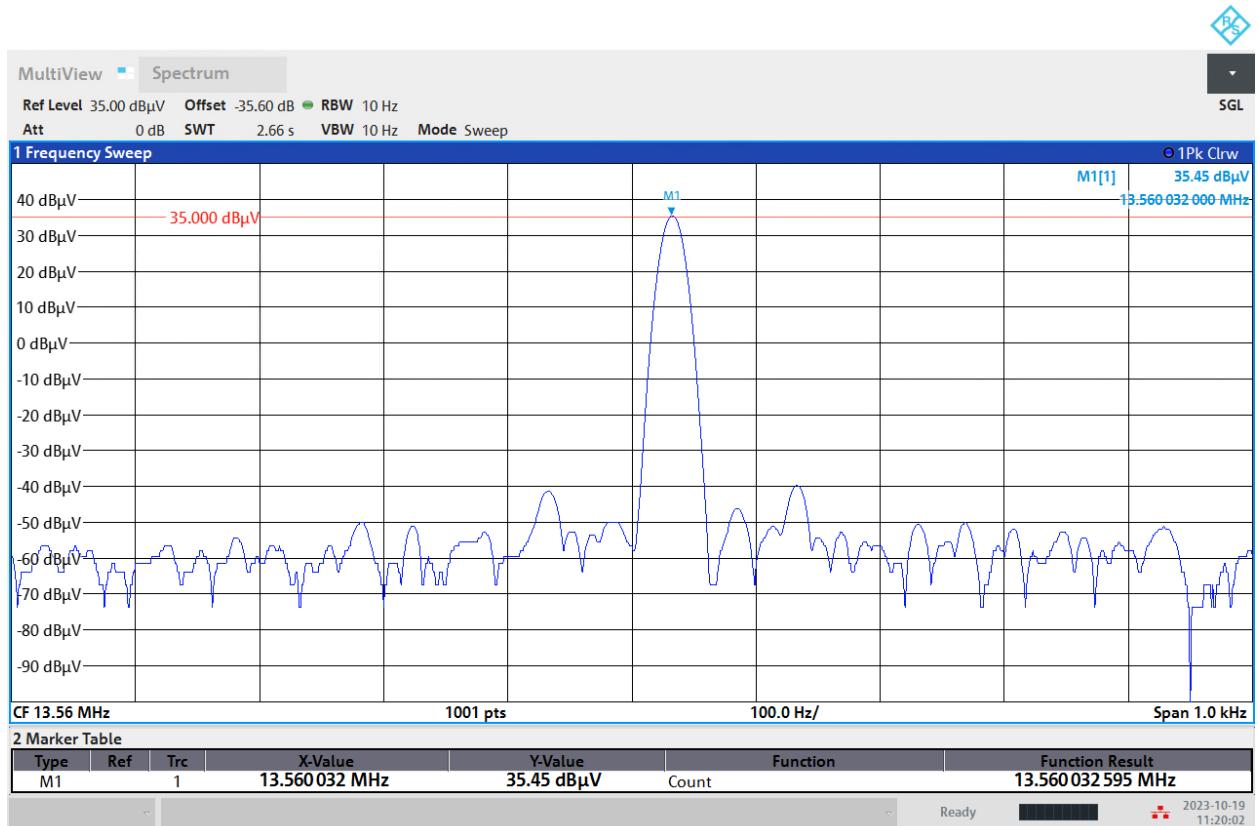
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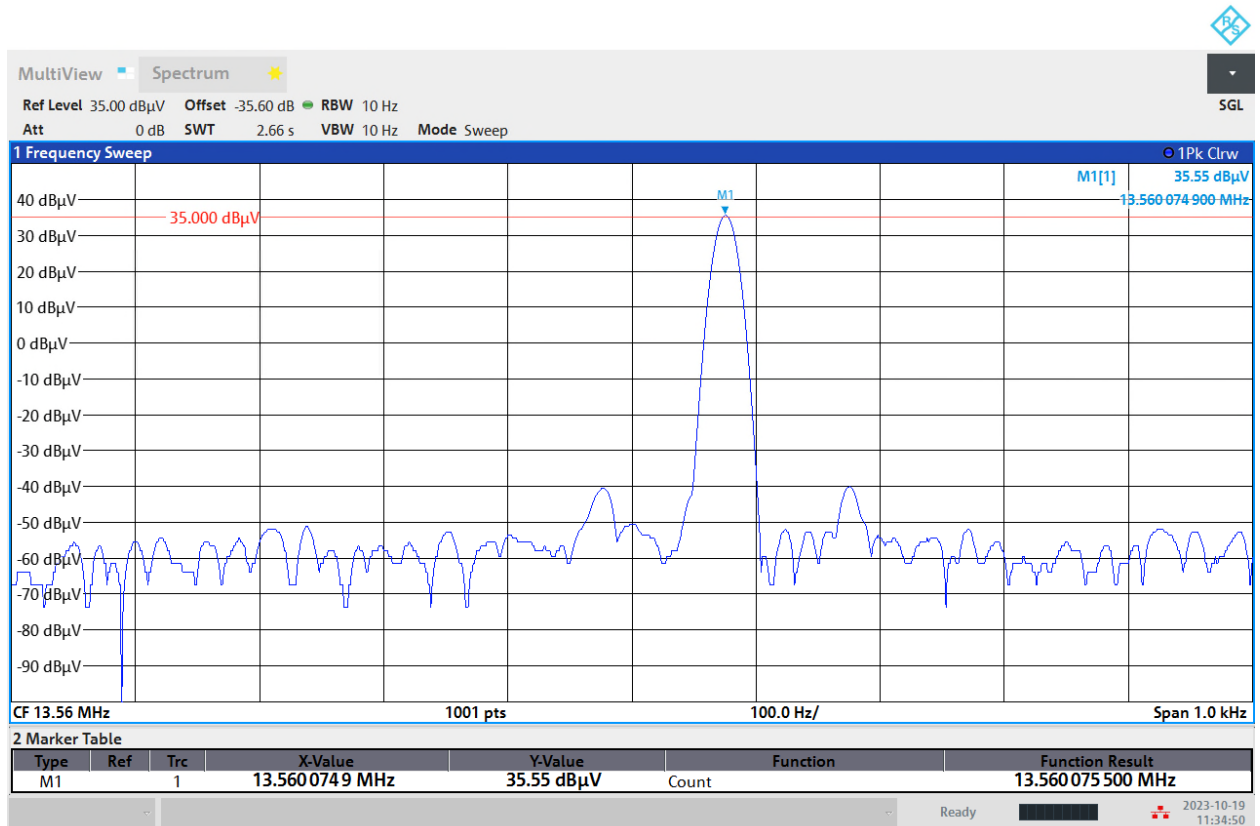
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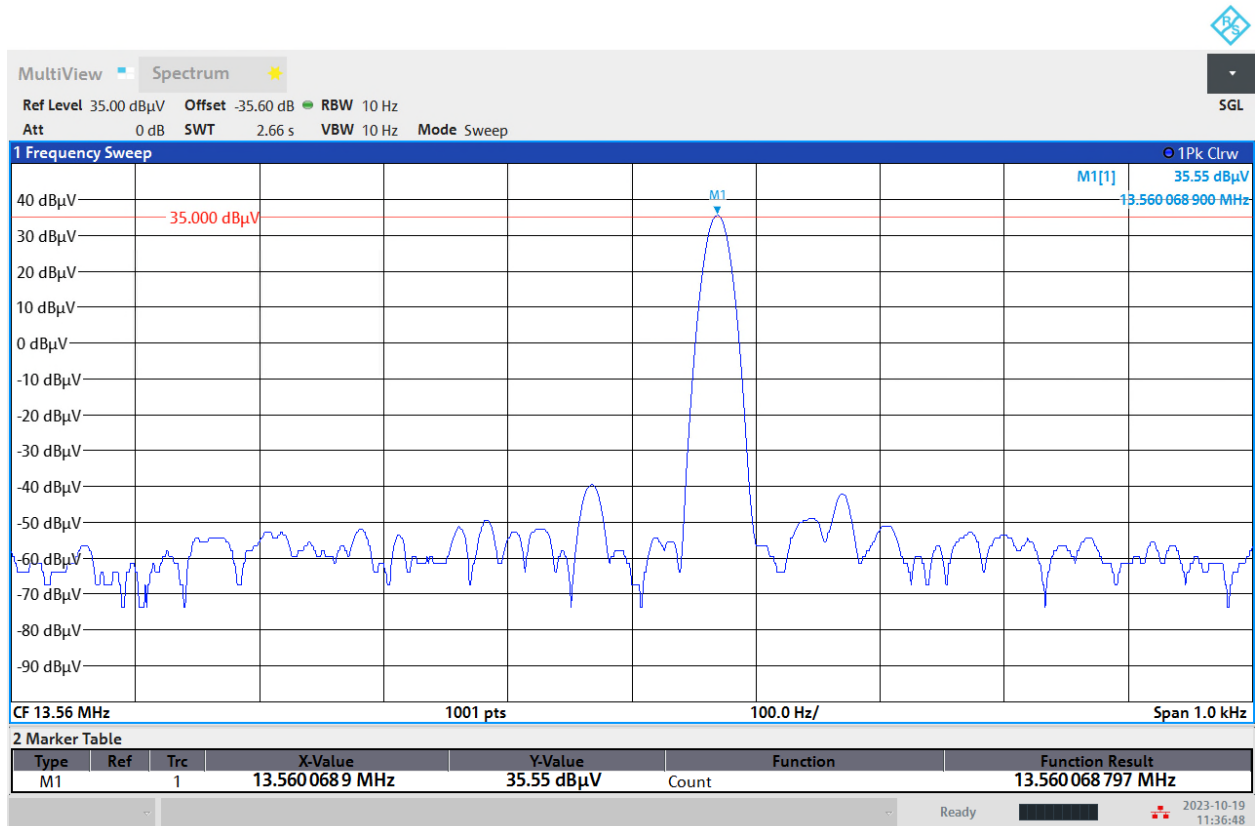
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11:20:03 AM 10/19/2023

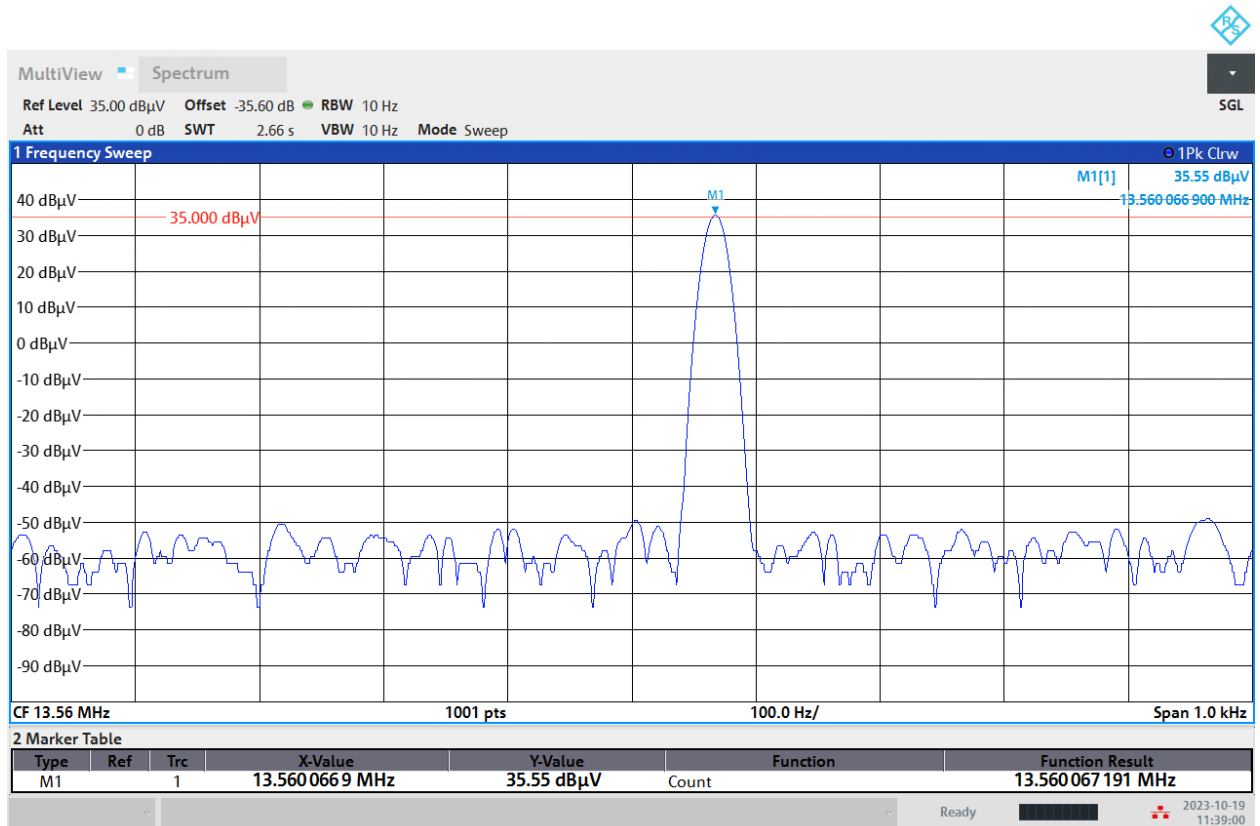
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11:34:51 AM 10/19/2023

D002_04_2min_FreqErr_T+20Vnom


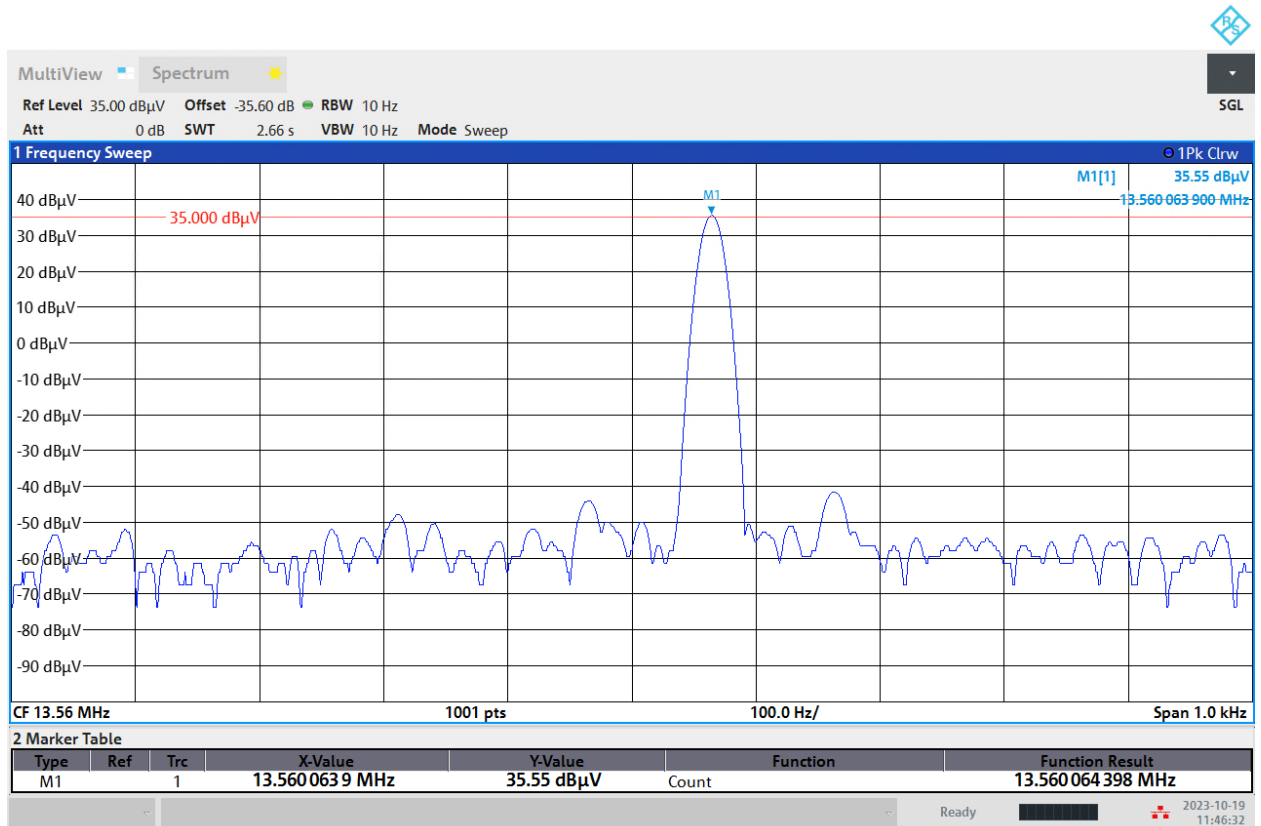
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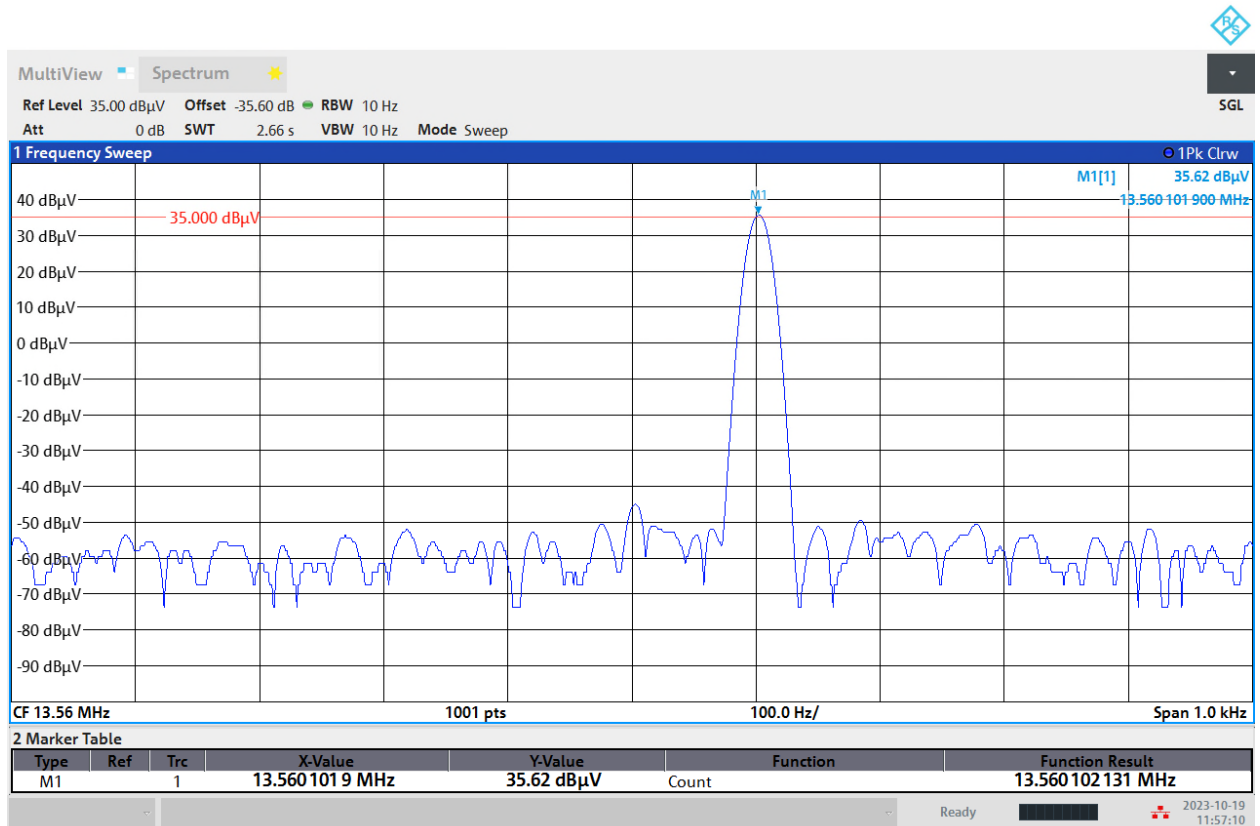


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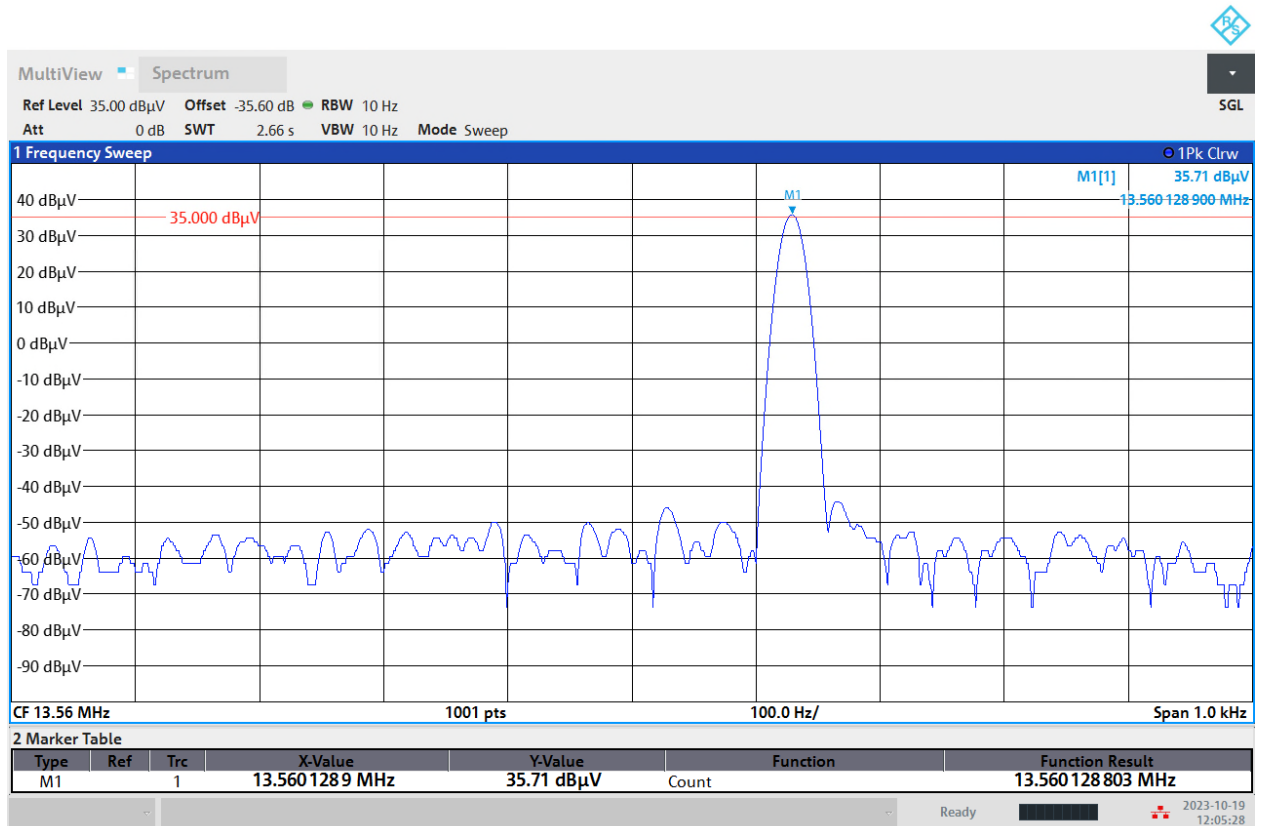
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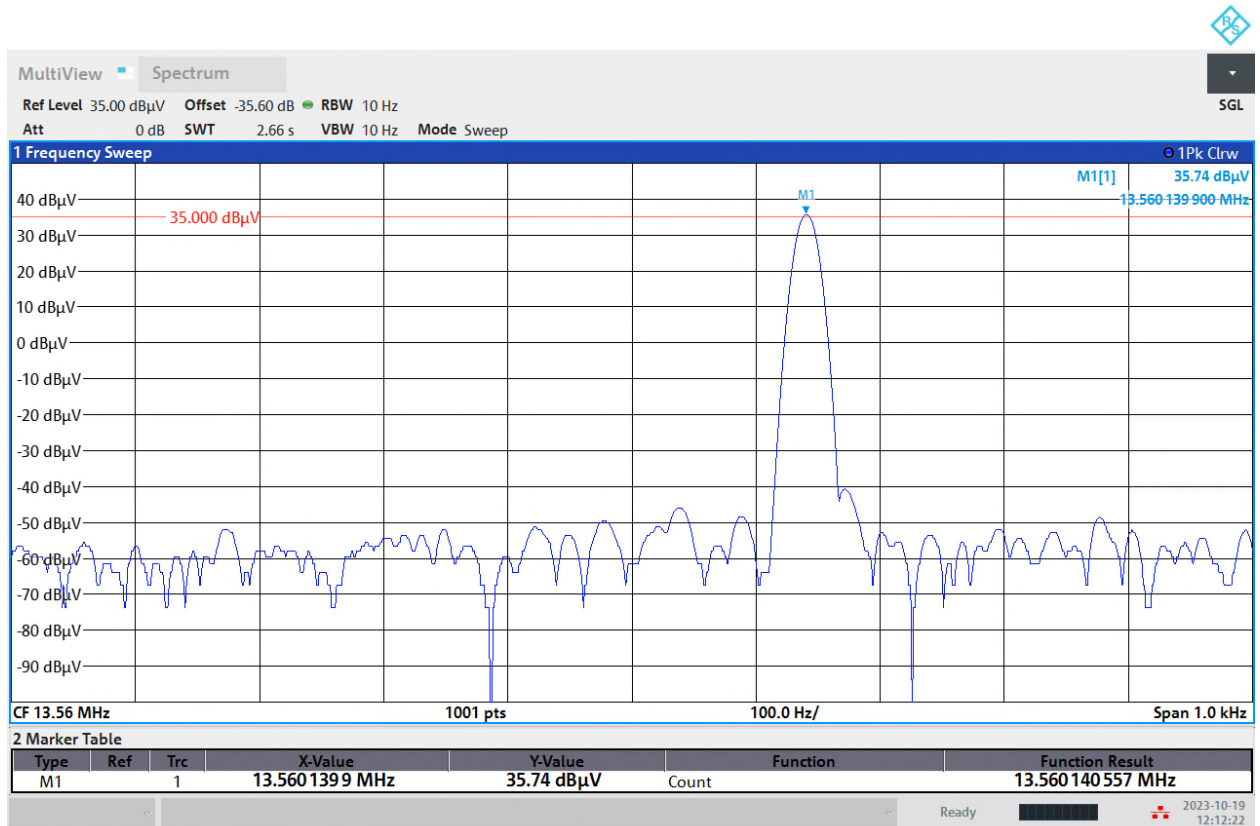
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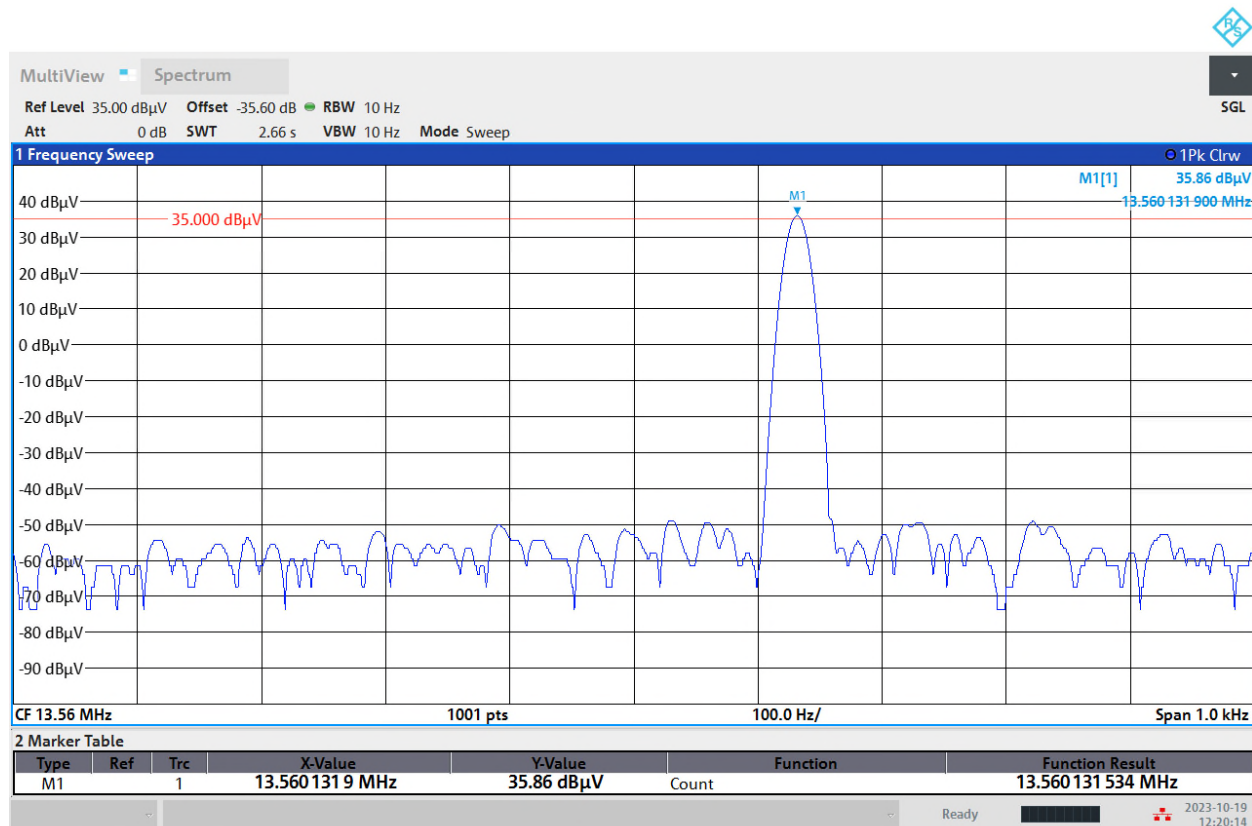
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D002_07_FreqErr_T-10Vnom


12:12:23 PM 10/19/2023

D002_08_FreqErr_T-20Vnom



12:20:15 PM 10/19/2023

End Of Annex 1