



Test Report - FCC Part 90

Applicant: Motorola Solutions Inc.

Signature: _____

A handwritten signature in black ink, appearing to read "Tim Royer", is written over a horizontal line.

Sr. EMC Engineer
EMC-003838-NE



Name & Title: Tim Royer, Lab Manager

Date of Signature 8/4/2026

Prepared By: Mark Learner

This test report relates only to the items tested as identified and is not valid for any subsequent changes or modifications made to the equipment under test.

Table of Contents

1.	APPLICANT INFORMATION.....	5
1.1	PART 90 TEST RESULT SUMMARY	5
2.	LOCATION OF TESTING	6
2.1	TEST LABORATORY	6
3.	TEST SAMPLE(S) (EUT/DUT).....	6
3.1	DESCRIPTION OF THE EUT	7
3.2	CONFIGURATION OF EUT	8
3.3	TEST SETUP OF EUT	8
4.	TEST METHODS & APPLICABLE REGULATORY LIMITS.....	9
4.1	TEST METHODS/STANDARDS/GUIDANCE:	9
4.2	APPLIED LIMITS AND REGULATORY LIMITS:.....	9
5.	MEASUREMENT UNCERTAINTY.....	9
6.	ENVIRONMENTAL CONDITIONS	9
6.1	TEMPERATURE & HUMIDITY	9
7.	LIST OF TEST EQUIPMENT AND TEST FACILITY.....	10
7.1	LIST OF TEST EQUIPMENT	10
8.	TEST RESULTS	11
8.1	POWER AT THE FINAL AMPLIFIER.....	12
8.2	RF OUTPUT POWER	13
8.3	BANDWIDTH & EMISSION	14
8.3.1	99% Bandwidth Plot, 25 kHz Analog, 138.0125 MHz, Mode 1	17
8.3.2	99% Bandwidth Plot, 25 kHz Analog, 144.0125 MHz, Mode 1	18
8.3.3	99% Bandwidth Plot, 25 kHz Analog, 150.25 MHz, Mode 1	19
8.3.4	99% Bandwidth Plot, 25 kHz Analog, 158.55 MHz, Mode 1	20
8.3.5	99% Bandwidth Plot, 25 kHz Analog, 161.025 MHz, Mode 1	21
8.3.6	99% Bandwidth Plot, 25 kHz Analog, 173.3875 MHz, Mode 1	22
8.3.7	99% Bandwidth Plot, 12.5 kHz Analog, 138.0125 MHz, Mode 1	23
8.3.8	99% Bandwidth Plot, 12.5 kHz Analog, 144.0125 MHz, Mode 1	24
8.3.9	99% Bandwidth Plot, 12.5 kHz Analog, 150.25 MHz, Mode 1	25
8.3.10	99% Bandwidth Plot, 12.5 kHz Analog, 158.55 MHz, Mode 1.....	26
8.3.11	99% Bandwidth Plot, 12.5 kHz Analog, 161.025 MHz, Mode 1	27
8.3.12	99% Bandwidth Plot, 12.5 kHz Analog, 173.3875 MHz, Mode 1	28
8.3.13	99% Bandwidth Plot, 12.5 kHz Digital, 138.0125 MHz, Mode 1	29
8.3.14	99% Bandwidth Plot, 12.5 kHz Digital, 144.0125 MHz, Mode 1	30
8.3.15	99% Bandwidth Plot, 12.5 kHz Digital, 150.25 MHz, Mode 1.....	31
8.3.16	99% Bandwidth Plot, 12.5 kHz Digital, 158.55 MHz, Mode 1	32
8.3.17	99% Bandwidth Plot, 12.5 kHz Digital, 161.025 MHz, Mode 1.....	33
8.3.18	99% Bandwidth Plot, 12.5 kHz Digital, 173.3875 MHz, Mode 1	34
8.4	EMISSION LIMITATIONS, IN-BAND.....	35
8.4.1	Emission Mask, 25 kHz Analog, 138.0125 MHz, Mode 1.....	36
8.4.2	Emission Mask, 25 kHz Analog, 144.0125 MHz, Mode 1.....	37
8.4.3	Emission Mask, 25 kHz Analog, 150.25 MHz, Mode 1	38
8.4.4	Emission Mask, 25 kHz Analog, 158.55 MHz, Mode 1	39

8.4.5	Emission Mask, 25 kHz Analog, 161.025 MHz, Mode 1.....	40
8.4.6	Emission Mask, 25 kHz Analog, 173.3875 MHz, Mode 1.....	41
8.4.7	Emission Mask, 12.5 kHz Analog, 138.0125 MHz, Mode 1.....	42
8.4.8	Emission Mask, 12.5 kHz Analog, 144.0125, Mode 1.....	43
8.4.9	Emission Mask, 12.5 kHz Analog, 150.25, Mode 1.....	44
8.4.10	Emission Mask, 12.5 kHz Analog, 158.55, Mode 1.....	45
8.4.11	Emission Mask, 12.5 kHz Analog, 161.025 MHz, Mode 1.....	46
8.4.12	Emission Mask, 12.5 kHz Analog, 173.3875 MHz, Mode 1.....	47
8.4.13	Emission Mask, 12.5 kHz Digital, 138.0125 MHz, Mode 1.....	48
8.4.14	Emission Mask, 12.5 kHz Digital, 144.0125 MHz, Mode 1.....	49
8.4.15	Emission Mask, 12.5 kHz Digital, 150.25 MHz, Mode 1.....	50
8.4.16	Emission Mask, 12.5 kHz Digital, 158.55 MHz, Mode 1.....	51
8.4.17	Emission Mask, 12.5 kHz Digital, 161.025 MHz, Mode 1.....	52
8.4.18	Emission Mask, 12.5 kHz Digital, 173.3875 MHz, Mode 1.....	53
8.5	EMISSION LIMITATIONS, OUT-OF-BAND.....	54
8.5.1	Conducted Emissions, Below 1GHz, 138.0125 MHz, Mode 1 (12.5kHz Analog Mode 1).....	55
8.5.2	Conducted Emissions, Below 1GHz, 144.0125 MHz, Mode 1 (12.5kHz Analog Mode 1).....	56
8.5.3	Conducted Emissions, Below 1GHz, 150.25 MHz, Mode 1 (12.5kHz Analog Mode 1).....	57
8.5.4	Conducted Emissions, Below 1GHz, 158.55 MHz, Mode 1 (12.5kHz Analog Mode 1).....	58
8.5.5	Conducted Emissions, Below 1GHz, 161.025 MHz, Mode 1 (12.5kHz Analog Mode 1).....	59
8.5.6	Conducted Emissions, Below 1GHz, 173.3875 MHz, Mode 1 (12.5kHz Analog Mode 1).....	60
8.5.7	Conducted Emissions, Above 1GHz, 138.0125 MHz, Mode 1 (12.5kHz Analog Mode 1).....	61
8.5.8	Conducted Emissions, Above 1GHz, 144.0125 MHz, Mode 1 (12.5kHz Analog Mode 1).....	62
8.5.9	Conducted Emissions, Above 1GHz, 150.25 MHz, Mode 1 (12.5kHz Analog Mode 1).....	63
8.5.10	Conducted Emissions, Above 1GHz, 158.55 MHz, Mode 1 (12.5kHz Analog Mode 1).....	64
8.5.11	Conducted Emissions, Above 1GHz, 161.025 MHz, Mode 1 (12.5kHz Analog Mode 1).....	65
8.5.12	Conducted Emissions, Above 1GHz, 173.3875 MHz, Mode 1 (12.5kHz Analog Mode 1).....	66
8.5.13	Conducted Emissions, Below 1GHz, 138.0125 MHz, Mode 1 (25kHz Analog Mode 1).....	67
8.5.14	Conducted Emissions, Below 1GHz, 144.0125 MHz, Mode 1 (25kHz Analog Mode 1).....	68
8.5.15	Conducted Emissions, Below 1GHz, 150.25 MHz, Mode 1 (25kHz Analog Mode 1).....	69
8.5.16	Conducted Emissions, Below 1GHz, 158.55 MHz, Mode 1 (25kHz Analog Mode 1).....	70
8.5.17	Conducted Emissions, Below 1GHz, 161.025 MHz, Mode 1 (25kHz Analog Mode 1).....	71
8.5.18	Conducted Emissions, Below 1GHz, 173.3875 MHz, Mode 1 (25kHz Analog Mode 1).....	72
8.5.19	Conducted Emissions, Above 1GHz, 138.0125 MHz, Mode 1 (25kHz Analog Mode 1).....	73
8.5.20	Conducted Emissions, Above 1GHz, 144.0125 MHz, Mode 1 (25kHz Analog Mode 1).....	74
8.5.21	Conducted Emissions, Above 1GHz, 150.25 MHz, Mode 1 (25kHz Analog Mode 1).....	75
8.5.22	Conducted Emissions, Above 1GHz, 158.55 MHz, Mode 1 (25kHz Analog Mode 1).....	76
8.5.23	Conducted Emissions, Above 1GHz, 161.025 MHz, Mode 1 (25kHz Analog Mode 1).....	77
8.5.24	Conducted Emissions, Above 1GHz, 173.3875 MHz, Mode 1 (25kHz Analog Mode 1).....	78
8.5.25	Conducted Emissions, Below 1GHz, 138.0125 MHz, Mode 1 (12.5kHz Digital Mode 1).....	79
8.5.26	Conducted Emissions, Below 1GHz, 144.0125 MHz, Mode 1 (12.5kHz Digital Mode 1).....	80
8.5.27	Conducted Emissions, Below 1GHz, 150.25 MHz, Mode 1 (12.5kHz Digital Mode 1).....	81
8.5.28	Conducted Emissions, Below 1GHz, 158.55 MHz, Mode 1 (12.5kHz Digital Mode 1).....	82
8.5.29	Conducted Emissions, Below 1GHz, 161.025 MHz, Mode 1 (12.5kHz Digital Mode 1).....	83
8.5.30	Conducted Emissions, Below 1GHz, 173.3875 MHz, Mode 1 (12.5kHz Digital Mode 1).....	84
8.5.31	Conducted Emissions, Above 1GHz, 138.0125 MHz, Mode 1 (12.5kHz Digital Mode 1).....	85
8.5.32	Conducted Emissions, Above 1GHz, 144.0125 MHz, Mode 1 (12.5kHz Digital Mode 1).....	86
8.5.33	Conducted Emissions, Above 1GHz, 150.25 MHz, Mode 1 (12.5kHz Digital Mode 1).....	87

8.5.34	Conducted Emissions, Above 1GHz, 158.55 MHz, Mode 1 (12.5kHz Digital Mode 1).....	88
8.5.35	Conducted Emissions, Above 1GHz, 161.025 MHz, Mode 1 (12.5kHz Digital Mode 1)	89
8.5.36	Conducted Emissions, Above 1GHz, 173.3875 MHz, Mode 1 (12.5kHz Digital Mode 1).....	90
8.6	RADIATED EMISSIONS.....	91
8.6.1	Radiated Emissions, 138.01 MHz (12.5kHz Analog Mode 1)	92
8.6.2	Radiated Emissions, 144.55 MHz (12.5kHz Analog Mode 1).....	92
8.6.3	Radiated Emissions, 150.55 MHz (12.5kHz Analog Mode 1).....	92
8.6.4	Radiated Emissions, 158.55 MHz (12.5kHz Analog Mode 1).....	93
8.6.5	Radiated Emissions, 161.03 MHz (12.5kHz Analog Mode 1).....	93
8.6.6	Radiated Emissions, 173.39 MHz (12.5kHz Analog Mode 1).....	93
8.6.7	Radiated Emissions, 138.01 MHz (25kHz Analog Mode 1)	94
8.6.8	Radiated Emissions, 144.55 MHz (25kHz Analog Mode 1)	94
8.6.9	Radiated Emissions, 150.55 MHz (25kHz Analog Mode 1)	94
8.6.10	Radiated Emissions, 158.55 MHz (25kHz Analog Mode 1)	95
8.6.11	Radiated Emissions, 161.03 MHz (25kHz Analog Mode 1)	95
8.6.12	Radiated Emissions, 173.39 MHz (25kHz Analog Mode 1).....	95
8.6.13	Radiated Emissions, 138.01 MHz (12.5kHz Digital Mode 1)	96
8.6.14	Radiated Emissions, 144.55 MHz (12.5kHz Digital Mode 1)	96
8.6.15	Radiated Emissions, 150.55 MHz (12.5kHz Digital Mode 1).....	96
8.6.16	Radiated Emissions, 158.55 MHz (12.5kHz Digital Mode 1).....	97
8.6.17	Radiated Emissions, 161.03 MHz (12.5kHz Digital Mode 1)	97
8.6.18	Radiated Emissions, 173.39 MHz (12.5kHz Digital Mode 1).....	97
8.7	MODULATION CHARACTERISTICS.....	98
8.7.1	Audio Frequency Response, 12.5 kHz.....	98
8.7.2	Audio Frequency Response, 25 kHz	99
8.7.3	Modulation Limiting, 12.5 kHz	100
8.7.4	Modulation Limiting, 25 kHz	101
8.8	FREQUENCY STABILITY.....	102
8.8.1	Frequency Stability Data	103
8.8.2	Frequency Stability Plot	104
8.9	TRANSIENT FREQUENCY BEHAVIOR.....	105
8.9.1	Transient Frequency Behavior 12.5kHz Keyed On.....	106
8.9.2	Transient Frequency Behavior 12.5kHz Keyed Off.....	107
8.9.3	Transient Frequency Behavior 25kHz Keyed On.....	108
8.9.4	Transient Frequency Behavior 25kHz Keyed Off.....	109
8.10	ADJACENT CHANNEL POWER LIMITS.....	110
9.	ANNEX-B – TEST SETUP PHOTOGRAPHS	111
10.	HISTORY OF TEST REPORT CHANGES.....	111

1. Applicant Information

Applicant: Motorola Solutions Inc.
Address: Plot 2A, Medan Bayan Lepas,
Mukim 12 SWD, 11900 Bayan
Lepas, Penang, Malaysia

1.1 Part 90 Test Result Summary

The following test procedure and guidance were used for measuring FCC PART 90 (PRIVATE LAND MOBILE RADIO SERVICES) known as Licensed Land Mobile; ANSI C63.26-2015. Full test results are available in this report.

Applicable Clauses from Part 2		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
2.202	Bandwidth & Emission	Pass
2.1033 (c)(8)	Power at the Final Amplifier	Reported
2.1046 (a)	RF Output Power	Pass
2.1047	Modulation characteristics	Pass
2.1049	Occupied Bandwidth	Pass
2.1051	Spurious emissions at antenna terminals	Pass
2.1053	Field strength of spurious radiation	Pass
2.1055	Frequency stability	Pass

Applicable Clauses from Part 90		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
90.205 (r)	Transmitter Power	Pass
90.207 (n)	Emission designator	Reported
90.209 (b) (5) footnote 2	Bandwidth limitations	Pass
90.210 (n)	Emission masks, In-band	Pass
90.210 (n)	Emission masks, Out-of-band	Pass
90.213 (a) footnote 10	Frequency stability	Pass
90.214	Transient Frequency Behavior	Pass
90.221	Adjacent channel power limits	n/a

No additions to the test methods were needed. There were no deviations, or exclusions from the test methods. No test results are from external providers or from the customer. The test results relate only to the items tested. Timco does not offer opinions and interpretations, only a pass/fail statement.

2. Location of Testing

2.1 Test Laboratory

IIA Lab Services LLC. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA"). Testing was performed at IIA's permanent laboratory located at 13146 NW 86th Drive, Suite 400, Alachua, Florida 32615.

FCC test firm # 578780

FCC Designation # US1070

FCC site registration is under A2LA certificate # 0955.01

ISED Canada test site registration # 2056A

EU Notified Body # 1177

For all designations see A2LA scope # 0955.01

3. Test Sample(s) (EUT/DUT)

The test sample was received: 2026-05-05

Dates of Testing: 2026-06-30 – 2026-07-21

3.1 Description of the EUT

A description as well as unambiguous identification of the EUT(s) tested. Where more than one sample is required for technical reasons (such as the use of connected units for the purpose of conducted output power testing where the product units will have integral antennas), each specific test shall identify which unit was tested.

Identification	
FCC ID:	AZ489FT3859
Brief Description	TANAPA BPR 45 136-174 MHZ 5W NKP
Model(s) #	BPR45 AAH88LDK8AA3AN
Firmware version	N/A
Software version	N/A
Serial Number	46326CJ0090

Technical Characteristics	
Frequency Range	136-174 MHz
RF O/P Power (Max.)	5.3W
Modulation	12.5k FM analog, 25k FM analog, 12.5k Digital (4FSK)
Bandwidth & Emission Class	11K0F3E, 16K0F3E, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXE, 7K60FXD
Number of Channels	64
Duty Cycle	Analog: 100% DMR: 50%
Voltage Rating (AC or Batt.)	7.5V DC

- Antenna	- Frequency Range	- Antenna Gain
- 1 (Whip Antenna)	- 136-155 MHz	- 2.81 dBi
- 2 (Whip Antenna)	- 152-174 MHz	- 2.8 dBi

- Note: Information such as antenna gain, firmware/software numbers are provided by manufacturer and cannot be validated by the test lab.

3.2 Configuration of EUT

Test Modes				
Mode (#)	Mode (Type)	Test Frequencies (MHz)	BW (nominal) (kHz)	Emission Designator
1	High Power	138.0125 144.0125 150.025 158.55 161.025 173.3875	12.5, 25	11K0F3E, 16K0F3E, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXE, 7K60FXD

Operating conditions during Testing:

The device was operated without the provided antenna(s).

No other modifications of the device under test (including firmware, specific software settings, and input/output signal levels to the EUT) were made.

Peripherals used during Testing:

A laptop provided by the manufacturer was used to program the EUT.

3.3 Test Setup of EUT

Equipment, antenna, and cable arrangement. The setup of the equipment and cable or wire placement on the test site that produces the highest radiated and the highest ac power line conducted emissions shall be shown clearly and described. Information on the orientation of portable equipment during testing shall be included. Drawings or photographs may be used for this purpose.

Test Setups are included in the test report.

4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance:

Test procedures and guidance for measuring Licensed Part 90 Licensed device:

- 1) ANSI C63.26-2015

4.2 Applied Limits and Regulatory Limits:

- 1) FCC CFR 47 Part 90

5. Measurement Uncertainty

Parameter	Uncertainty (dB)
Conducted Emissions	± 3.14 dB
Radiated Emissions (9kHz – 30 MHz)	± 3.08 dB
Radiated Emissions (30 – 200 MHz)	± 2.16 dB
Radiated Emissions (200 – 1000 MHz)	± 2.15 dB
Radiated Emissions (1 GHz – 18 GHz)	± 2.14 dB
Radiated Emissions (18 GHz – 40 GHz)	± 2.31 dB
Note: The uncertainties provided in this table represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of K=2.	

6. Environmental Conditions

6.1 Temperature & Humidity

Measurements performed at the test site did not exceed the following:

Parameter	Measurement
Temperature	23 °C +/- 5%
Humidity	55% +/- 5%
Barometric Pressure	30.05 in Hg
Note: Specific environmental conditions that are applicable to a specific test are available in the test result section.	

7. List of Test Equipment and Test Facility

The test equipment used identified by type, manufacturer, serial number, or other identification and the date on which the next calibration or service check is due.

Description of the firmware or software used to operate EUT for testing purposes.

A complete list of all test equipment used shall be included with the test report. The manufacturer's model and serial numbers, and date of last calibration, and calibration interval shall be included. Measurement cable loss, measuring instrument bandwidth and detector function, video bandwidth, if appropriate, and antenna factors shall also be included where applicable.

7.1 List of Test Equipment

Test Equipment					
Device	Manufacturer	Model	SN#	Current Cal	Cal Due
Temperature and Relative Humidity Logger	Cole Parmer - Traceable Products	6550 18005-05	240900861	12/16/2025	12/11/2026
Receiver	Rohde and Schwarz	ESW44 EMI Test Receiver	101585	4/29/2026	4/29/2027
Chamber	Panashield	3M	N/A	10/20/2025	10/20/2027
Log Periodic 1243	Eaton	96005	1243	7/15/2025	7/15/2028
Double Ridged Wave Guide Antenna (1GHz-18GHz)	ETS Lindgren	3117	00041534	7/2/2024	7/2/2027
Pre-Amp	RF-Lambda	RLNA00M45GA	N/A	9/3/2025	9/3/2027
Attenuator	MCL	BW-N20W20	1934	NCR	NCR
C155	cable - 6 GHz	Pasternack	PE3W00417-24	N/A	NCR
V152	Dummy Load	LRL	WL-108(TS-108)	NCR	NCR
V045	Attenuator	Narda	768-20-SP	NCR	NCR
V027	Attenuator	Pasternack	PE7214-30	NCR	NCR
V080	Wide Band Power Sensor	Rhode & Schwarz	NRP-Z85	11/29/23	11/29/29

Attenuators and Cables were characterized before each test.

Software			
Software	Author	Version	Validation on
ESU Firmware	Rohde & Schwarz	4.43 SP3; BIOS v5.1-24-3	2018
Field Strength	IIA	v4.10.7.0	2016
Field Meter	Wave Control SMP2	2.5.5	2024
EMC32	Rohde & Schwarz	11.60.00	2025

8. Test Results

The results of the test are usually indicated in the form of tables, spectrum analyzer plots, charts, sample calculations, as appropriate for each test procedure.

A description and/or a block diagram of the test setup is usually provided.

The measurement results, along with the appropriate limits for comparison, may be presented in tabular or graphical form. In addition, any variation in the measurement environment may be reported if applicable (e.g., a significant change of temperature that could affect the cable loss and amplifier response).

Unless noted otherwise in the referenced standard, the measurements of **ac power-line conducted emissions and conducted power output** will be reported in units of dBμV. Unless noted otherwise in the referenced standard, the measurements of **radiated emissions** will be reported in units of decibels, referenced to one microvolt per meter (dBμV/m) for electric fields, or to one ampere per meter (dBA/m) for magnetic fields, at the distance specified in the appropriate standards or requirements. The measurements of antenna-conducted power for receivers may be reported in units of dBμV if the impedance of the measuring instrument is also reported. Otherwise, antenna-conducted power will be reported in units of decibels referenced to one milliwatt (dBm). All formulas for data conversions and conversion factors, if used, will be included in this measurement report.

Example:

Freq (MHz)	Meter Reading	+ ACF	+CL	= FS
33	20 dBμV	+ 10.36 dB/m	+0.40 dB	=30.36 dBμV/m @ 3m

EIRP = Pcond (dBm) + dBi

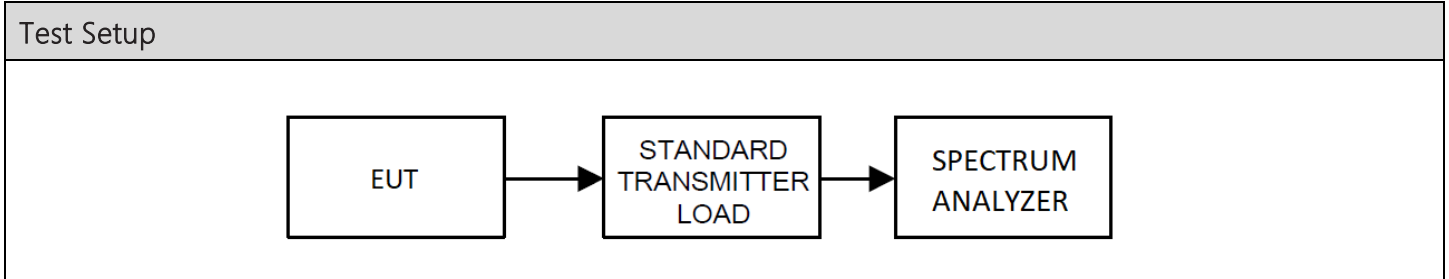
8.1 Power at the Final Amplifier

Limits from FCC Part 2.1033 (c)(8). No method of measurement is specified.

Test Results		
EUT Operating Voltage (V)	EUT Current (A)	Power at the Final Amplifier (W)
7.2	1.5	10.8

8.2 RF Output Power

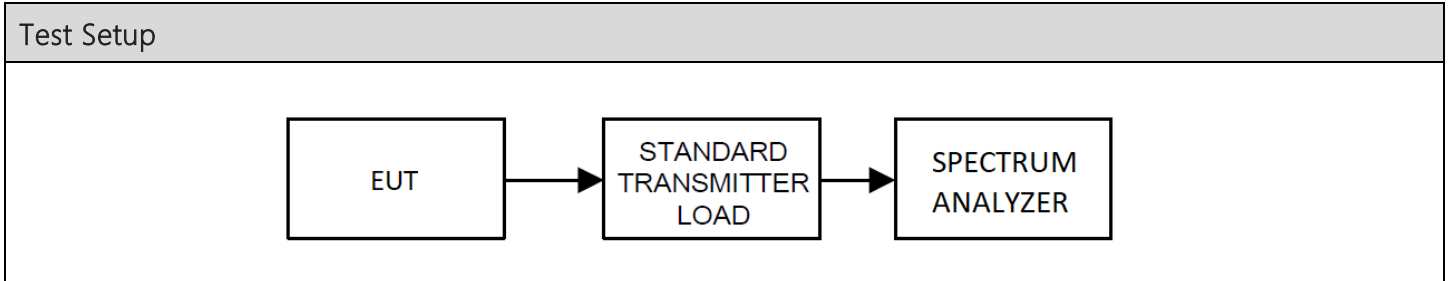
Limits from FCC Parts 2.1046(a), and 90.205 (r); and test procedure from ANSI C63.26 -2015.



Test Results, Mode 1		
Tuned Frequency (MHz)	High Power Output (dBm)	Power Output (W)
138.0125	37.24	5.30
144.0125	37.24	5.30
150.25	37.24	5.30
158.55	37.24	5.30
161.025	37.24	5.30
173.3875	37.2	5.24

8.3 Bandwidth & Emission

Limits from FCC Parts 2.1049, and 90.207 & 90.209, and test procedure from ANSI C63.26-2015.



Test Results, Authorized Bandwidth		
Rule Part	Operating Range (MHz)	Authorized Bandwidth (kHz)
Part 90	136 - 174	20 / 11.25 / 6

Analog

Channel	Tuned Frequency (MHz)	Mode	Emission Designator	Occupied Bandwidth (kHz)	Bandwidth Type
1	138.0125	25kHz	F3E	10.94	99%
2	144.0125	25kHz		10.43	99%
3	150.25	25kHz		10.96	99%
4	158.55	25kHz		10.6	99%
5	161.025	25kHz		11.01	99%
6	173.3875	25kHz		10.73	99%
7	138.0125	12.5 kHz		9.47	99%
8	144.0125	12.5 kHz		9.47	99%
9	150.25	12.5 kHz		9.44	99%
10	158.55	12.5 kHz		9.47	99%
11	161.025	12.5 kHz		9.47	99%
12	173.3875	12.5 kHz		9.42	99%

Digital

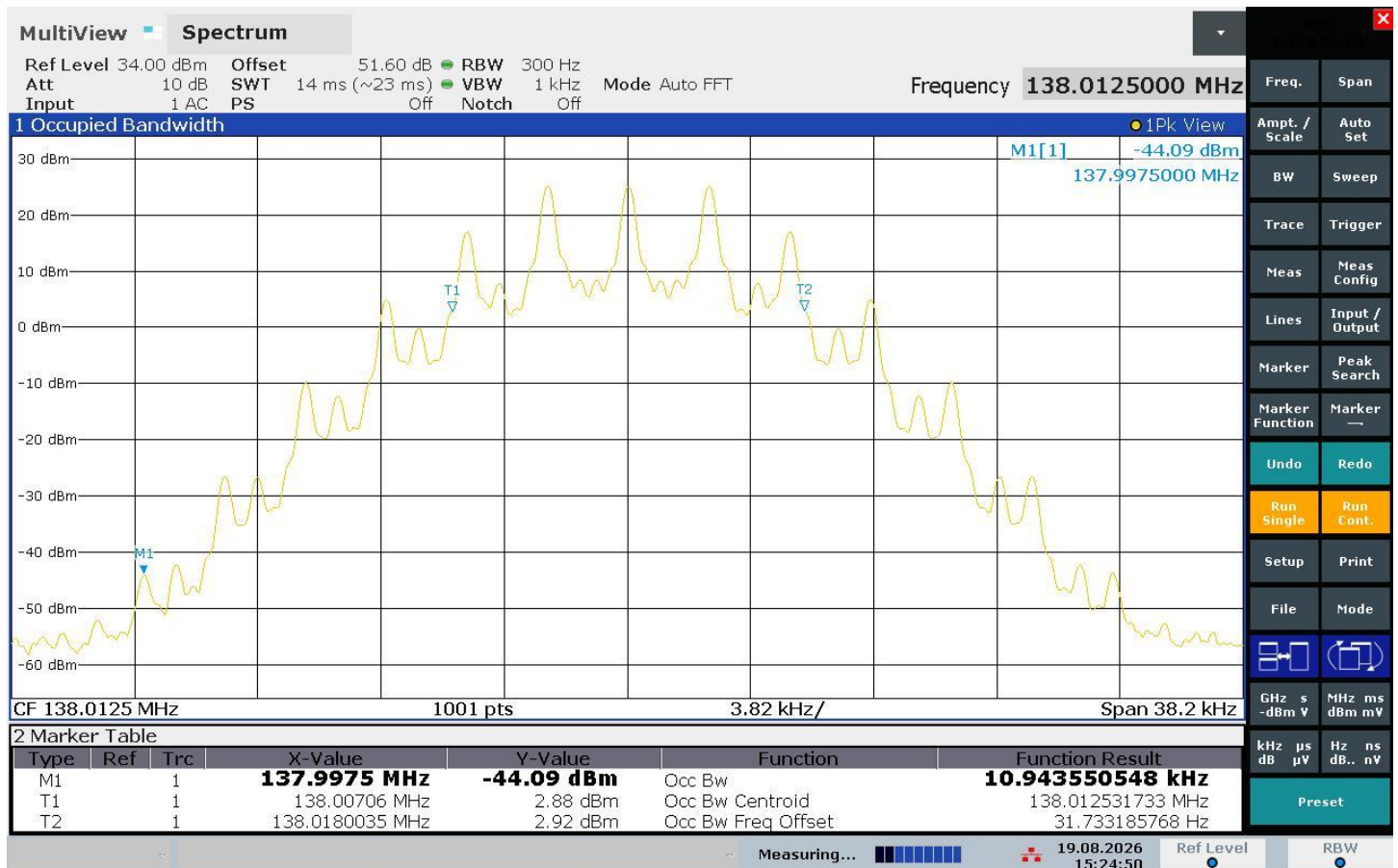
Note:

- For Digital modulation, 12.5kHz Data F1D,F1W,FXE,FXD would be the same. Therefore only measurement's with F1E modulation shown below.

Channel	Tuned Frequency (MHz)	Mode	Emission Designator	Occupied Bandwidth (kHz)	Bandwidth Type
13	138.0125	12.5 kHz	F1E,F1D,F1W,FXE,FXD	7.332	99%
14	144.0125	12.5 kHz		7.685	99%
15	150.25	12.5 kHz		7.74	99%
16	158.55	12.5 kHz		7.716	99%
17	161.025	12.5 kHz		7.824	99%
18	173.3875	12.5 kHz		7.433	99%

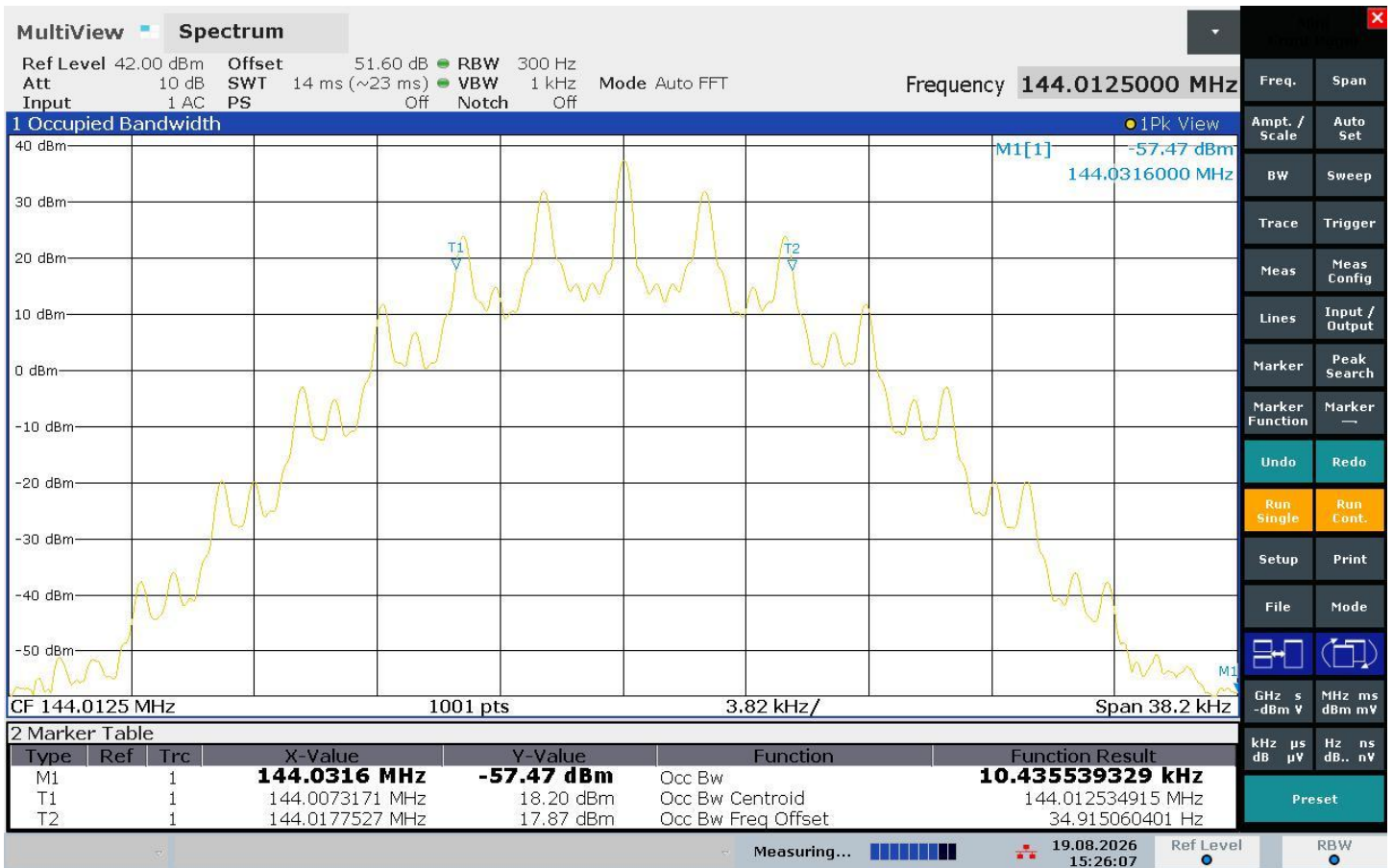
Occupied Bandwidth, Spectrum Plots

8.3.1 99% Bandwidth Plot, 25 kHz Analog, 138.0125 MHz, Mode 1



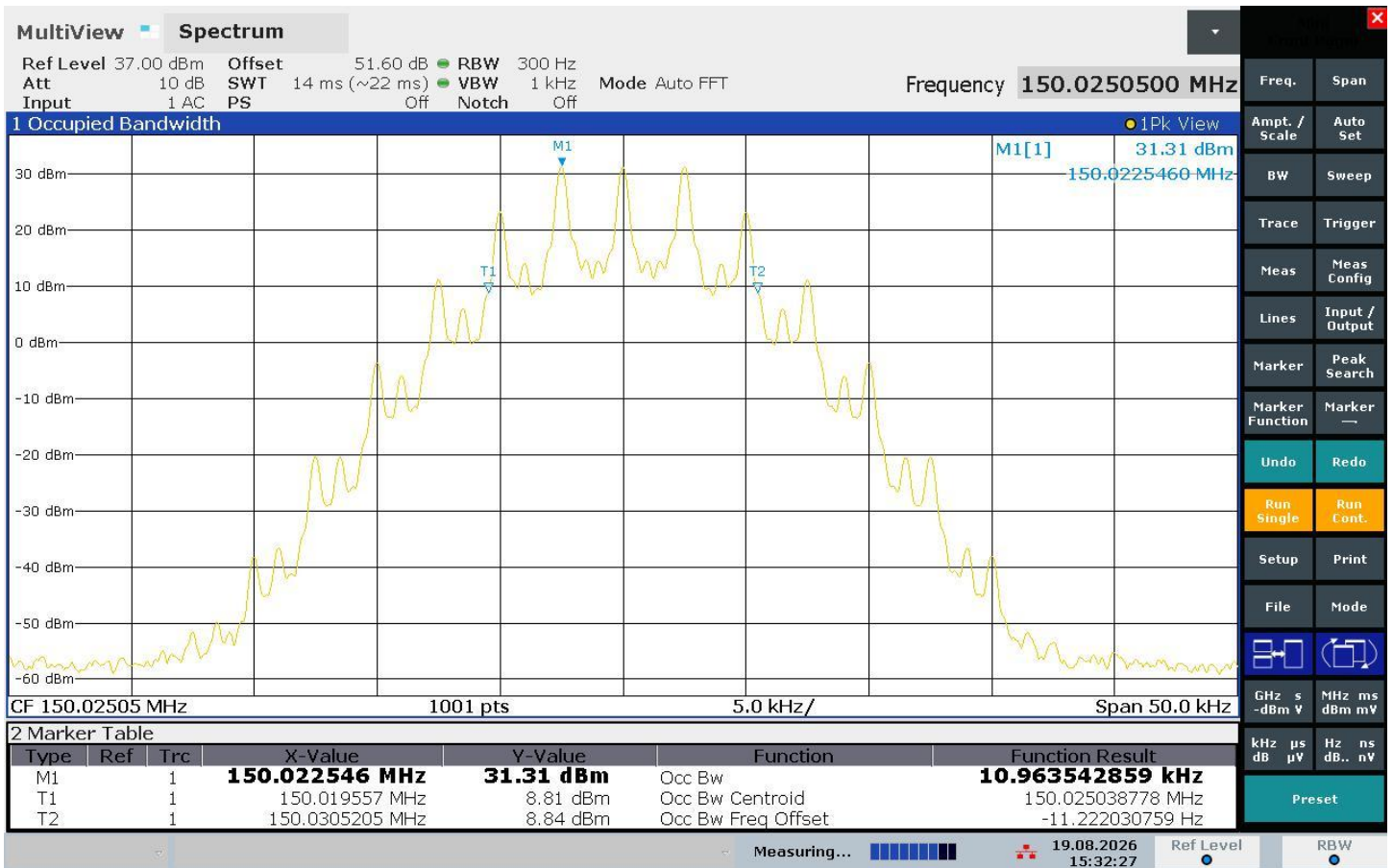
15:24:50 19.08.2026

8.3.2 99% Bandwidth Plot, 25 kHz Analog, 144.0125 MHz, Mode 1



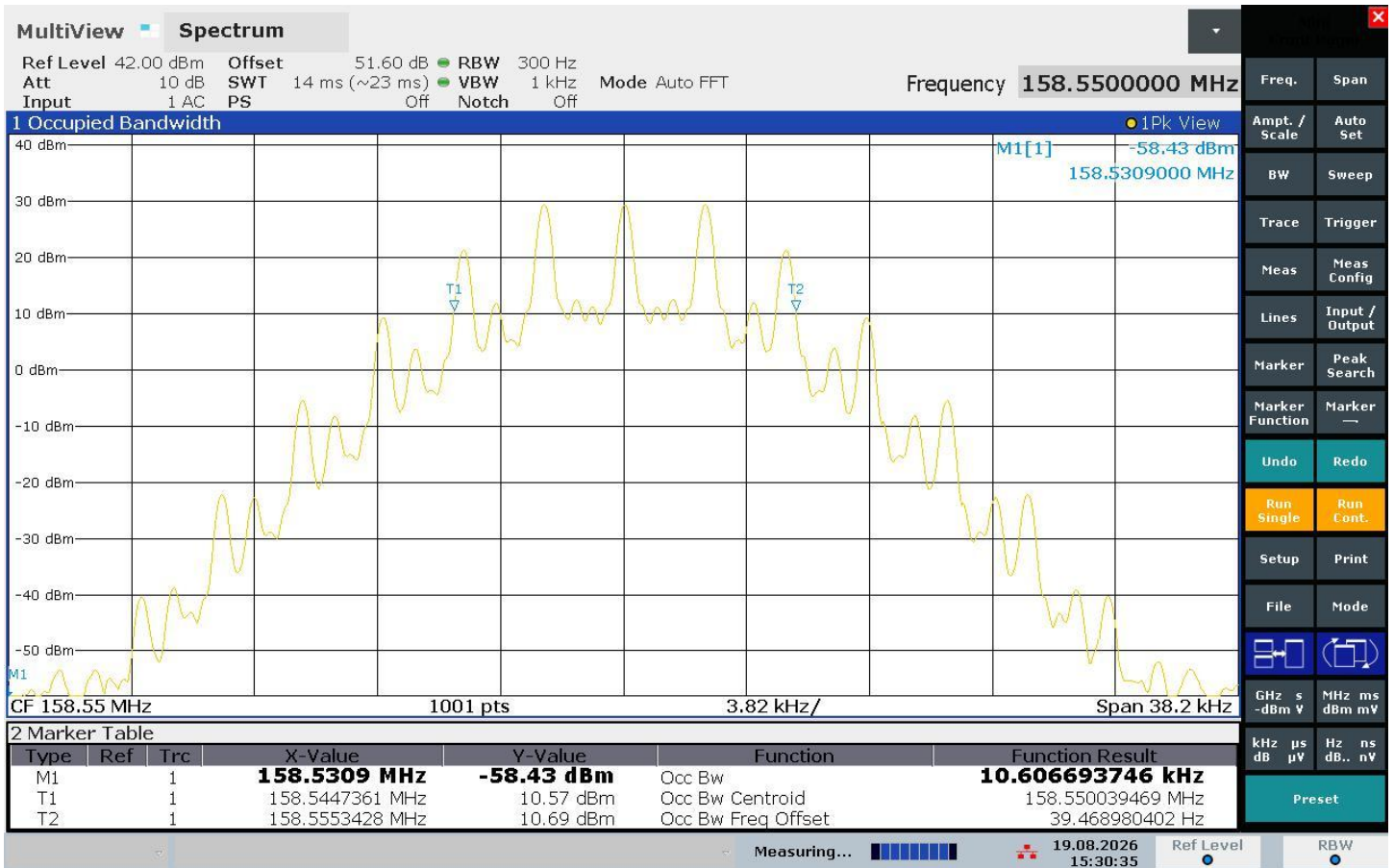
15:26:07 19.08.2026

8.3.3 99% Bandwidth Plot, 25 kHz Analog, 150.25 MHz, Mode 1



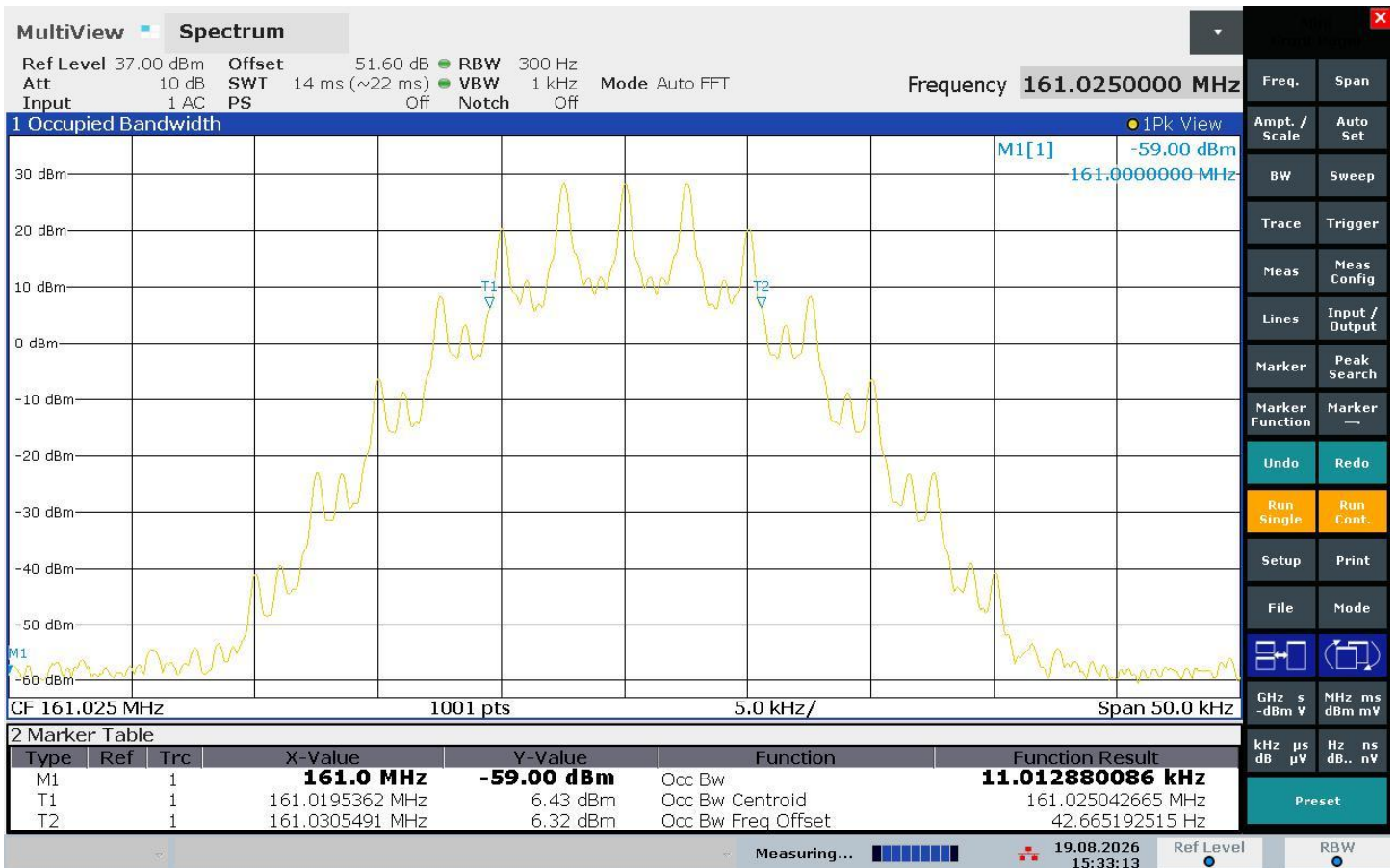
15:32:28 19.08.2026

8.3.4 99% Bandwidth Plot, 25 kHz Analog, 158.55 MHz, Mode 1



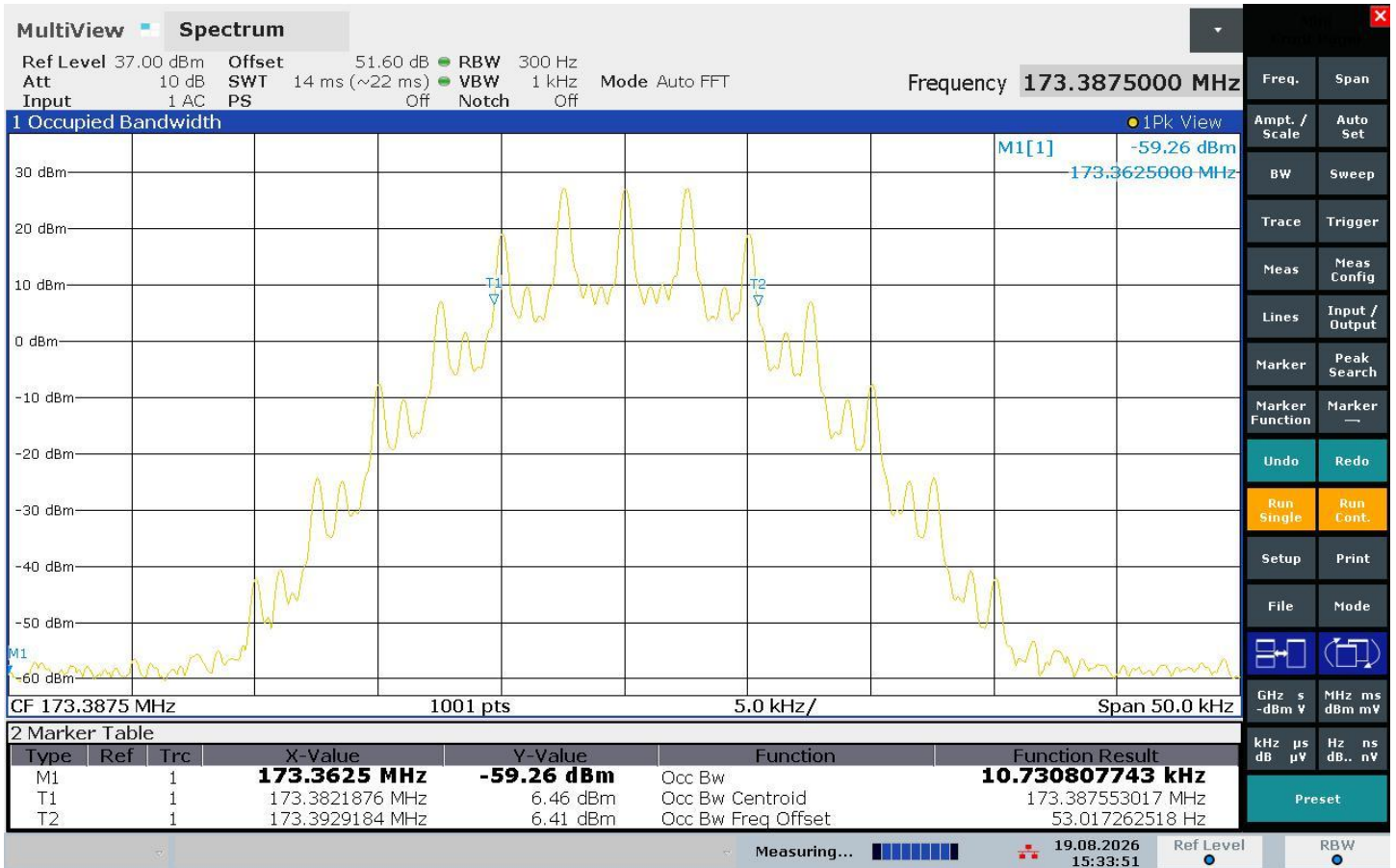
15:30:36 19.08.2026

8.3.5 99% Bandwidth Plot, 25 kHz Analog, 161.025 MHz, Mode 1



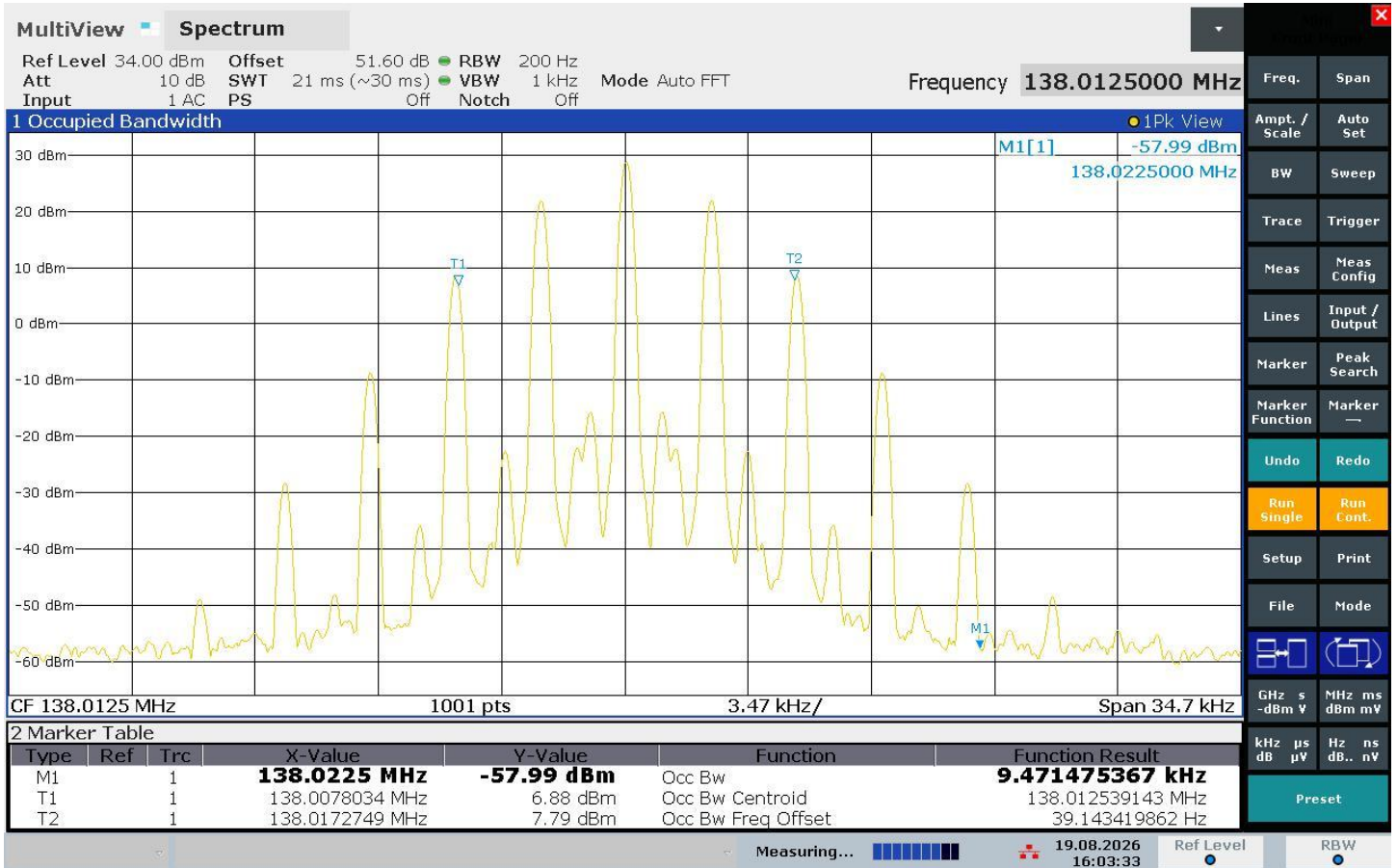
15:33:14 19.08.2026

8.3.6 99% Bandwidth Plot, 25 kHz Analog, 173.3875 MHz, Mode 1



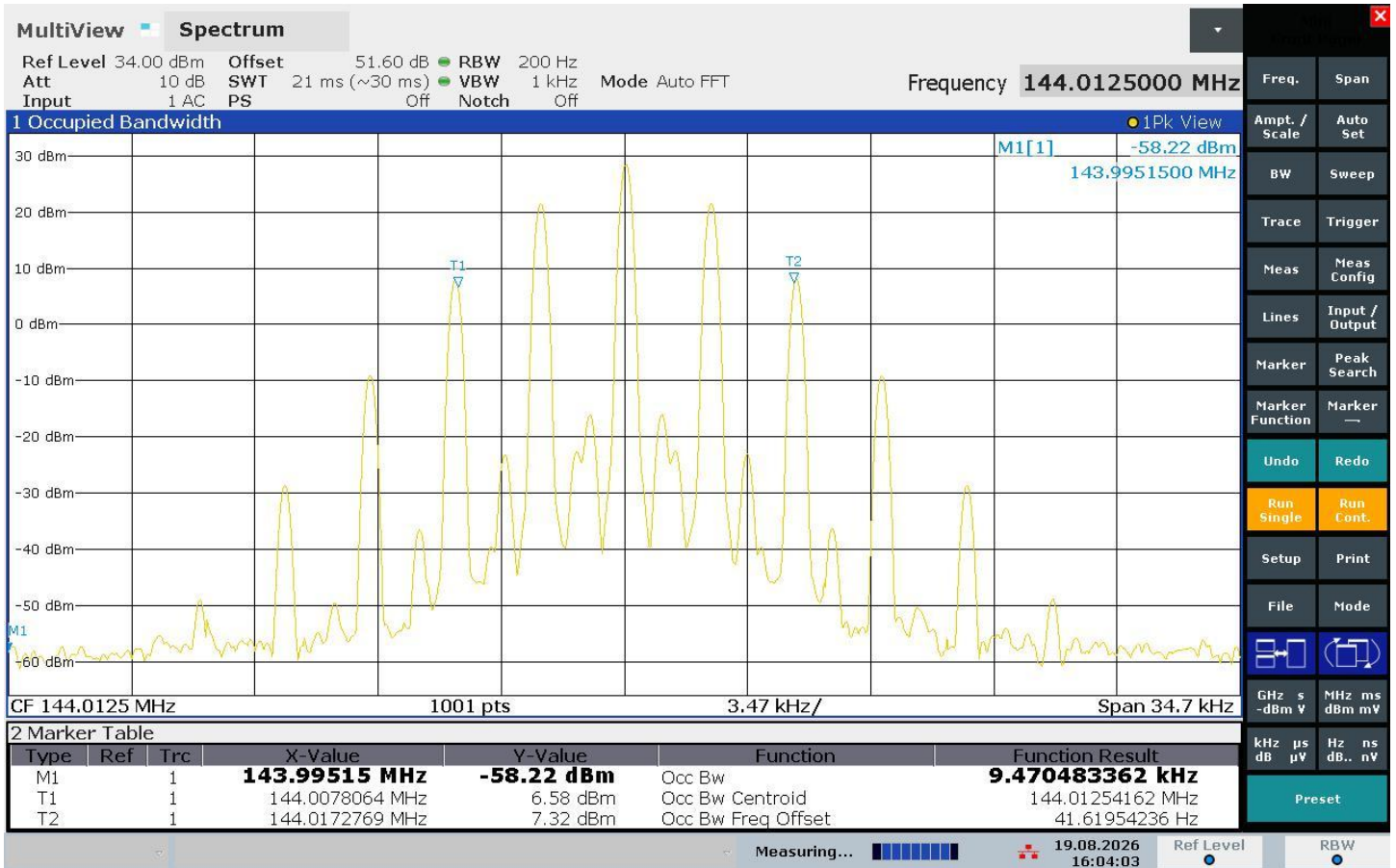
15:33:52 19.08.2026

8.3.7 99% Bandwidth Plot, 12.5 kHz Analog, 138.0125 MHz, Mode 1



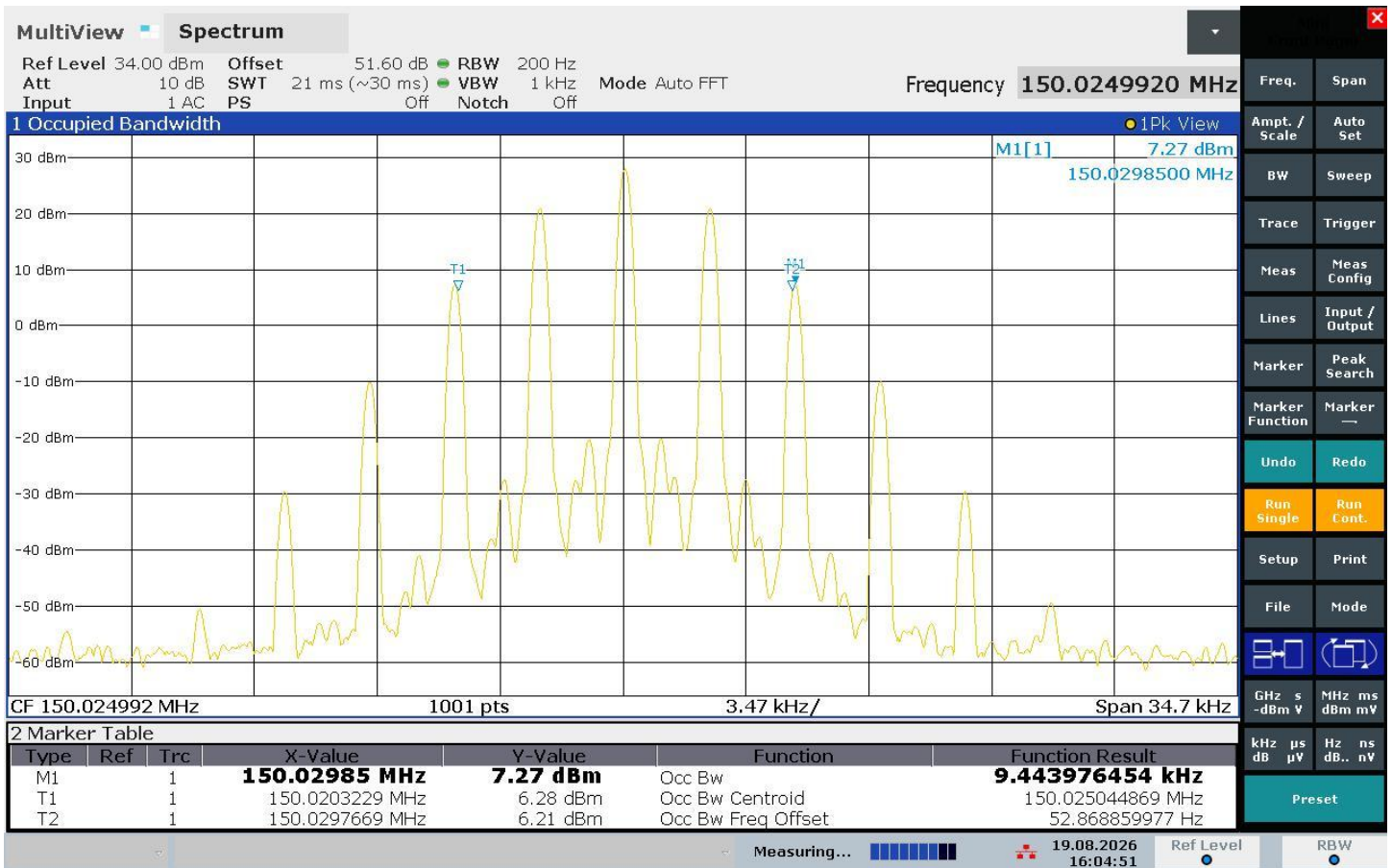
16:03:33 19.08.2026

8.3.8 99% Bandwidth Plot, 12.5 kHz Analog, 144.0125 MHz, Mode 1



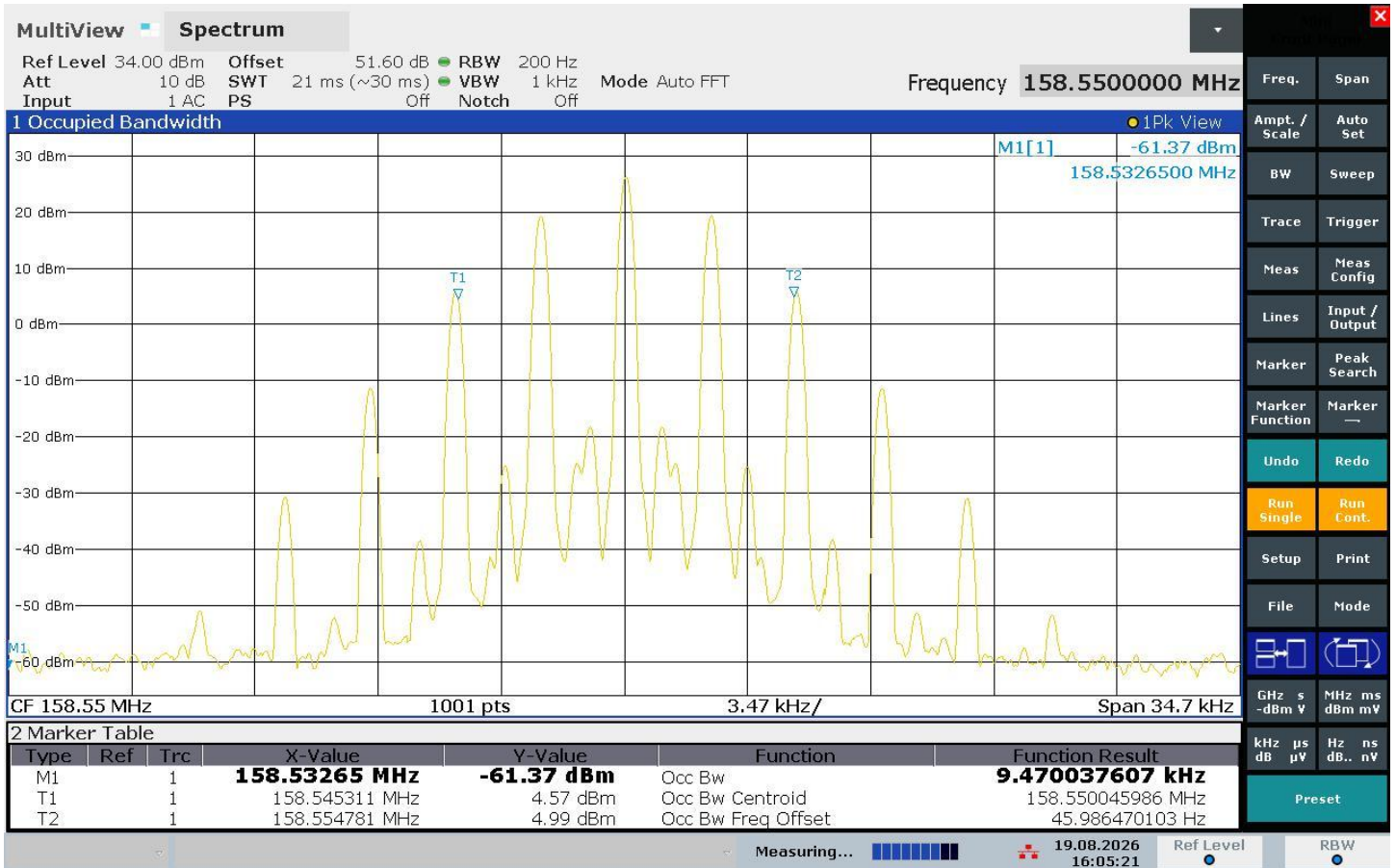
16:04:04 19.08.2026

8.3.9 99% Bandwidth Plot, 12.5 kHz Analog, 150.25 MHz, Mode 1



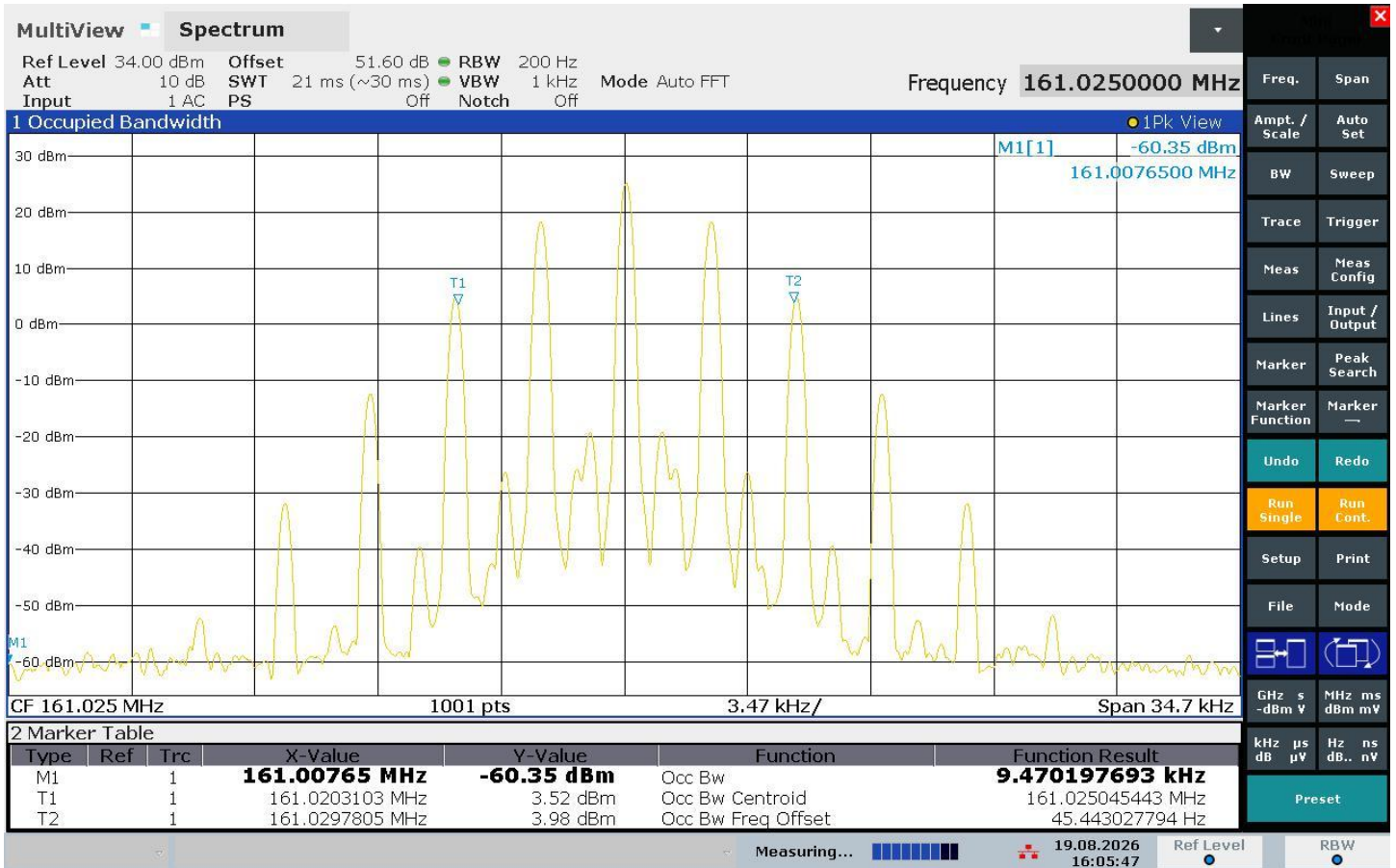
16:04:52 19.08.2026

8.3.10 99% Bandwidth Plot, 12.5 kHz Analog, 158.55 MHz, Mode 1



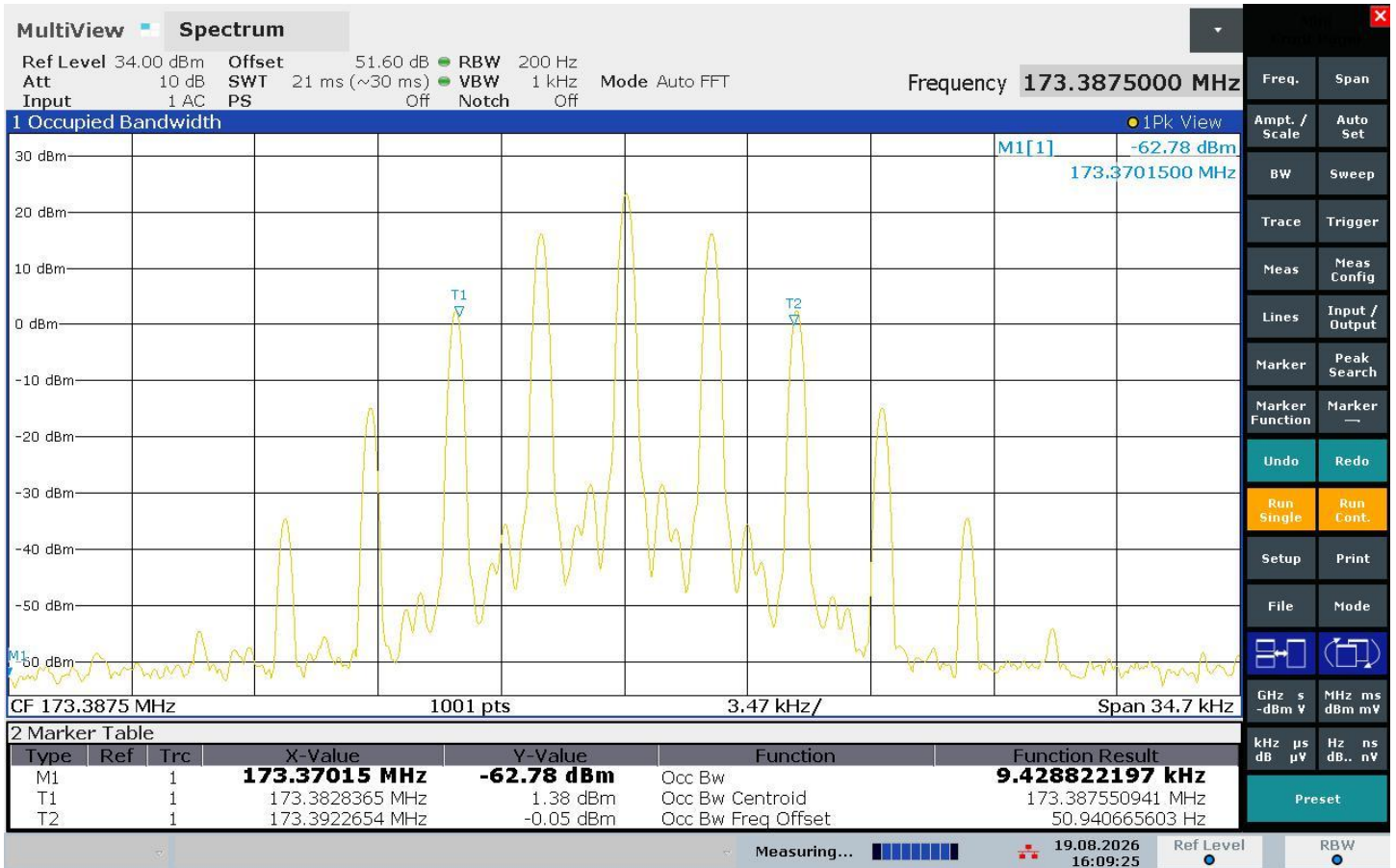
16:05:21 19.08.2026

8.3.11 99% Bandwidth Plot, 12.5 kHz Analog, 161.025 MHz, Mode 1



16:05:48 19.08.2026

8.3.12 99% Bandwidth Plot, 12.5 kHz Analog, 173.3875 MHz, Mode 1



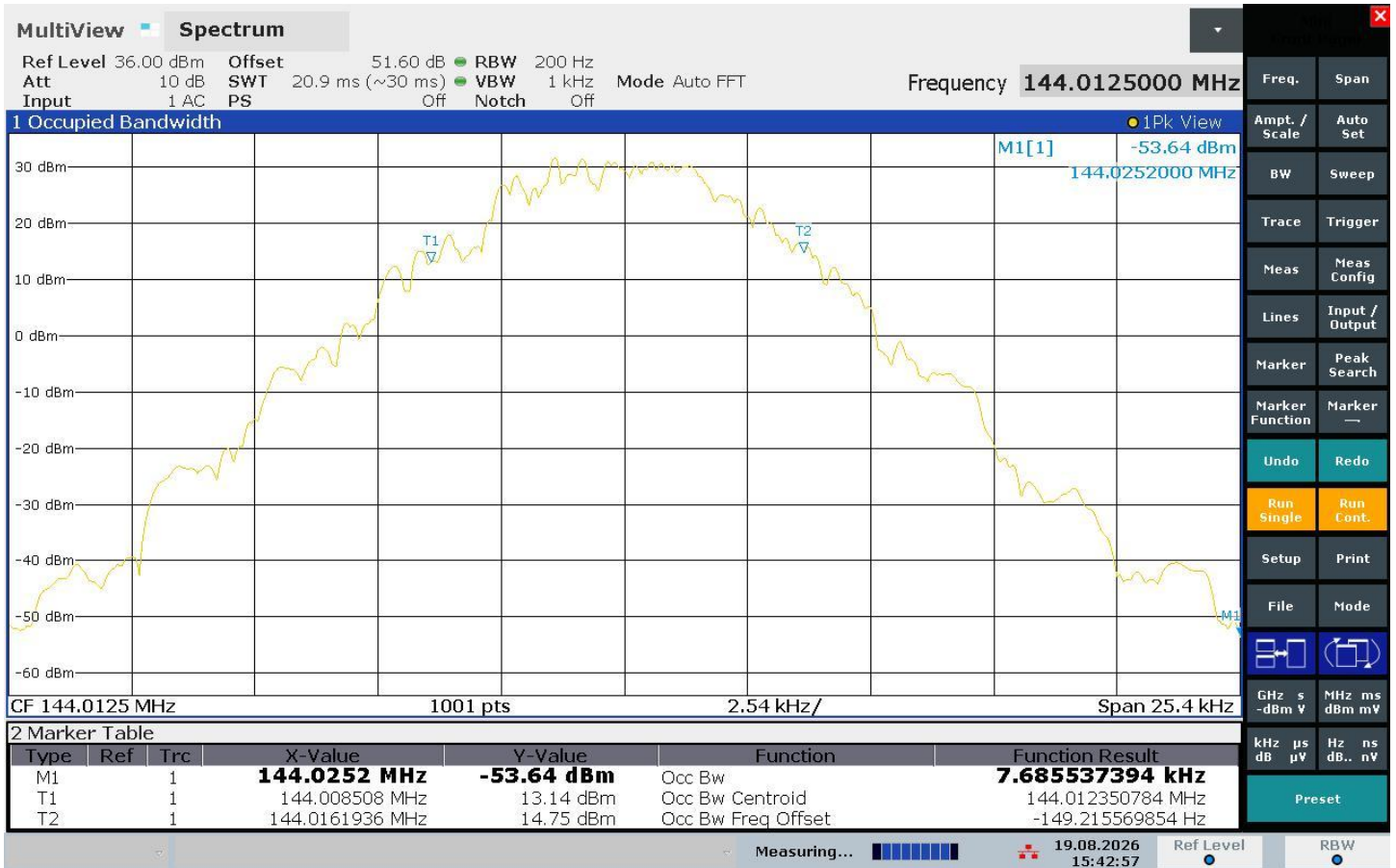
16:09:26 19.08.2026

8.3.13 99% Bandwidth Plot, 12.5 kHz Digital, 138.0125 MHz, Mode 1



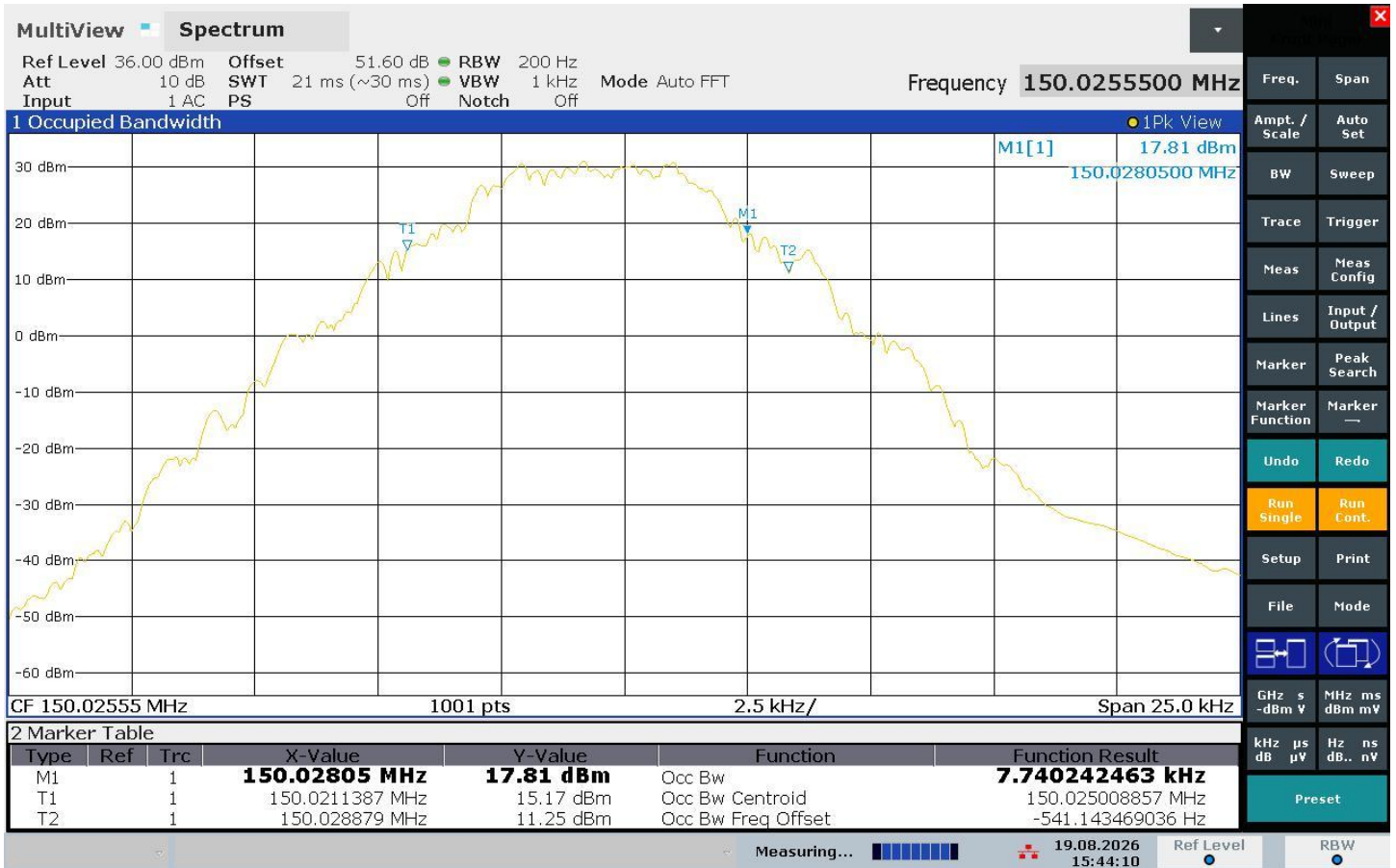
15:42:13 19.08.2026

8.3.14 99% Bandwidth Plot, 12.5 kHz Digital, 144.0125 MHz, Mode 1



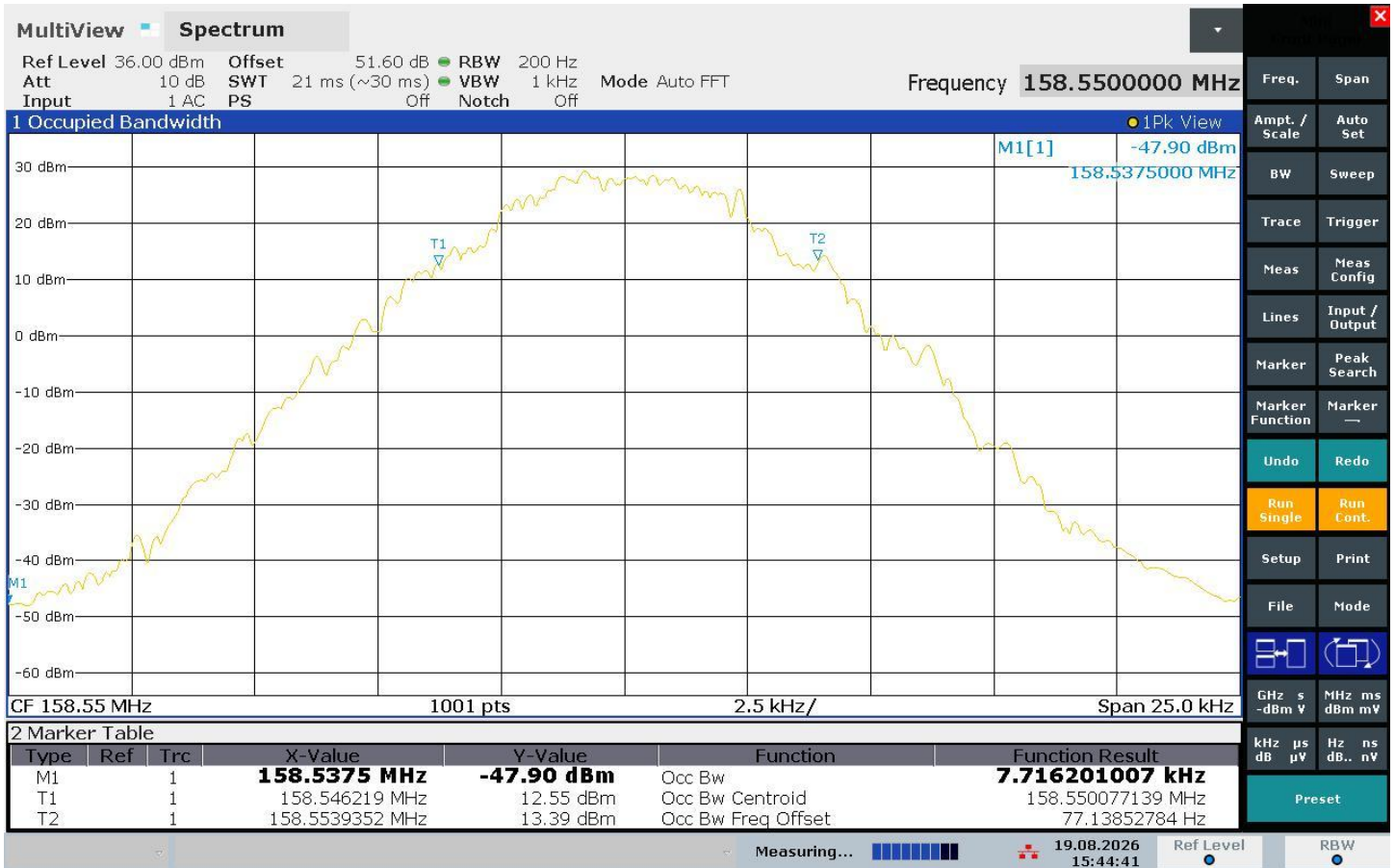
15:42:58 19.08.2026

8.3.15 99% Bandwidth Plot, 12.5 kHz Digital, 150.25 MHz, Mode 1



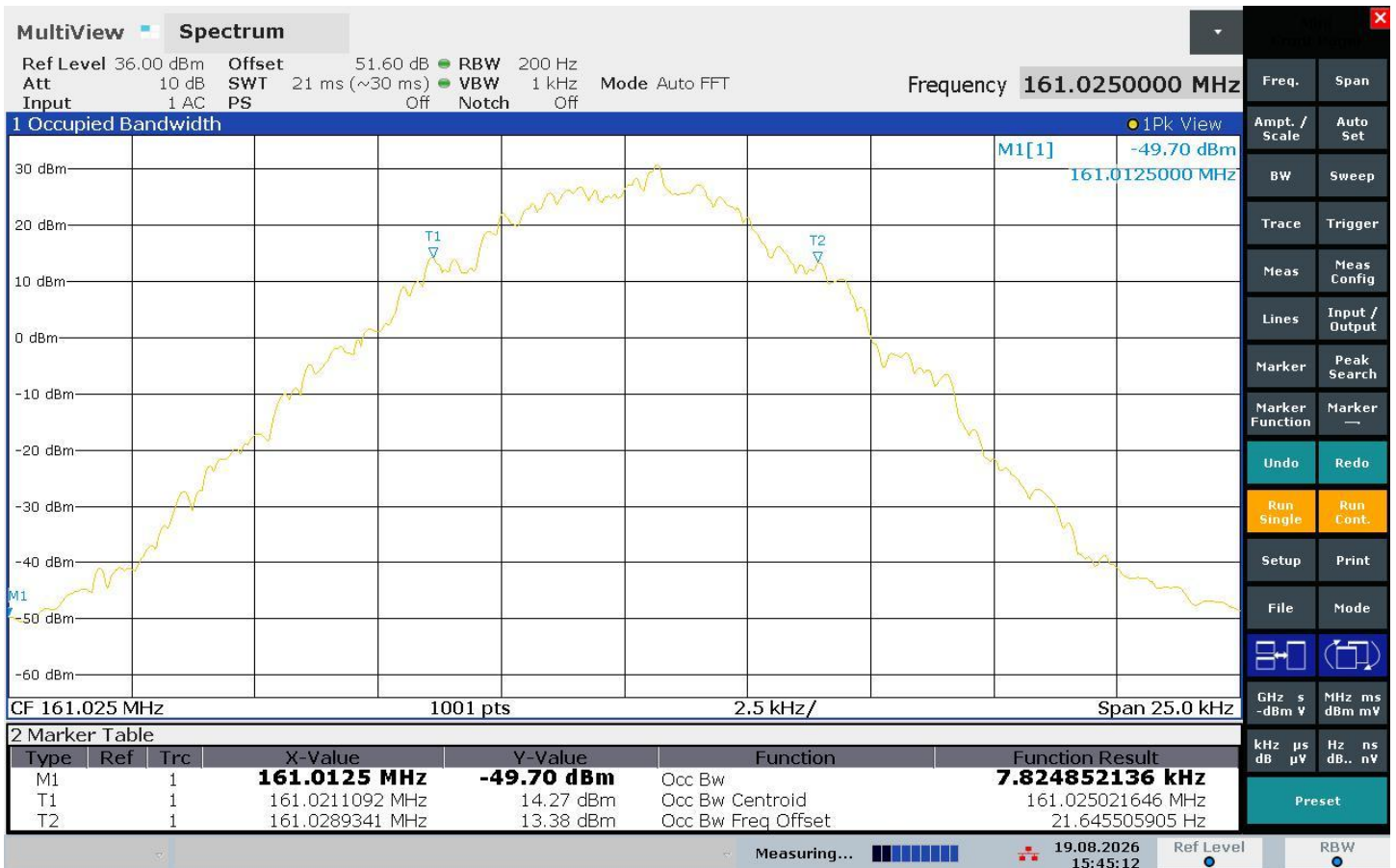
15:44:11 19.08.2026

8.3.16 99% Bandwidth Plot, 12.5 kHz Digital, 158.55 MHz, Mode 1



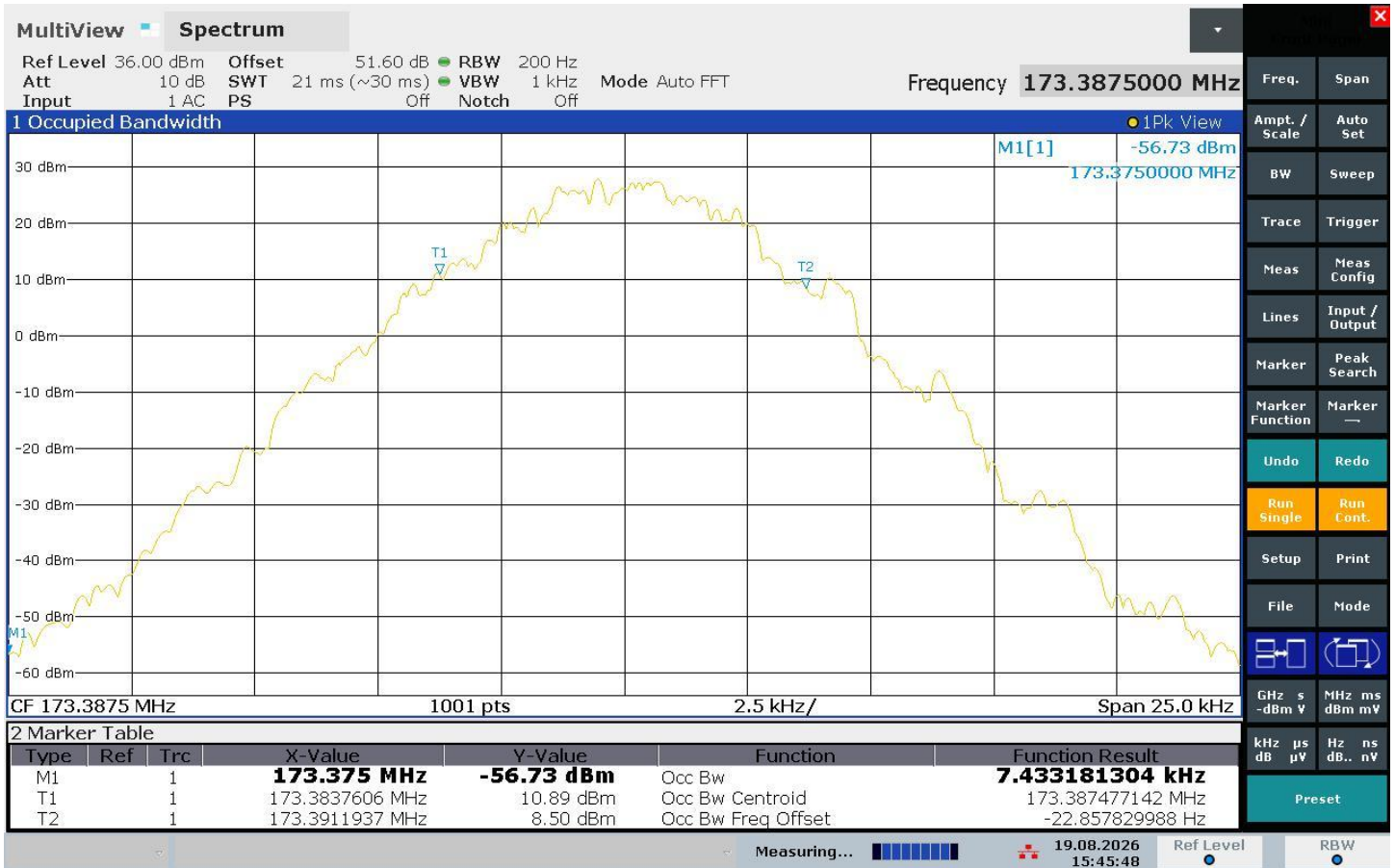
15:44:42 19.08.2026

8.3.17 99% Bandwidth Plot, 12.5 kHz Digital, 161.025 MHz, Mode 1



15:45:13 19.08.2026

8.3.18 99% Bandwidth Plot, 12.5 kHz Digital, 173.3875 MHz, Mode 1

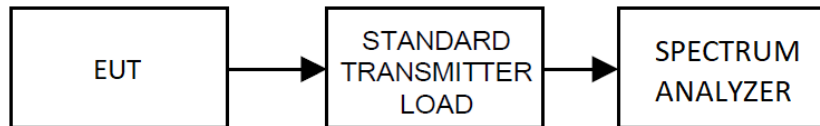


15:45:48 19.08.2026

8.4 Emission Limitations, In-Band

Limits from FCC Part 90.210; and test procedure from ANSI C63.26-2015.

Conducted Test Setup



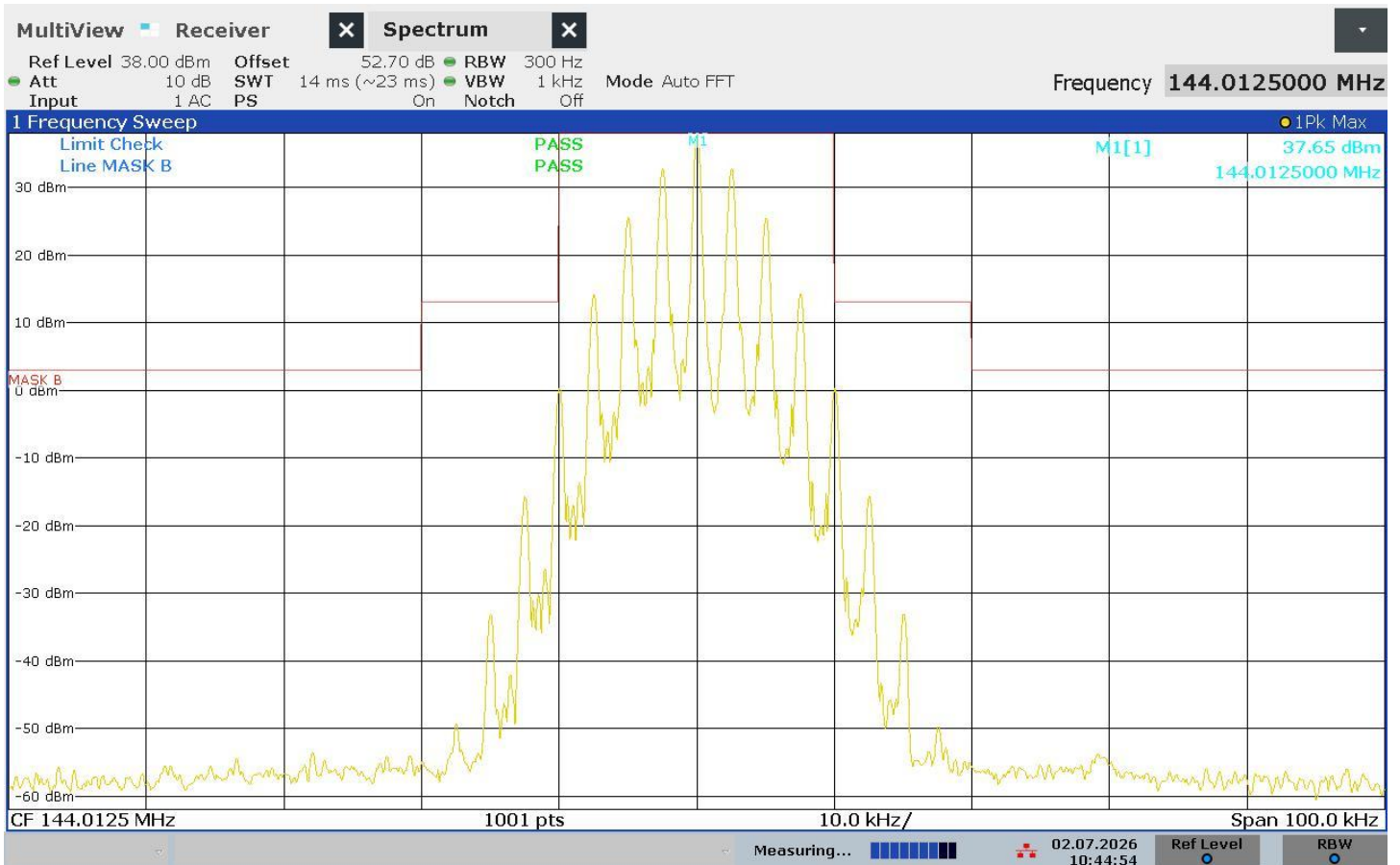
Conducted Emissions Mask, Spectrum Plots

8.4.1 Emission Mask, 25 kHz Analog, 138.0125 MHz, Mode 1



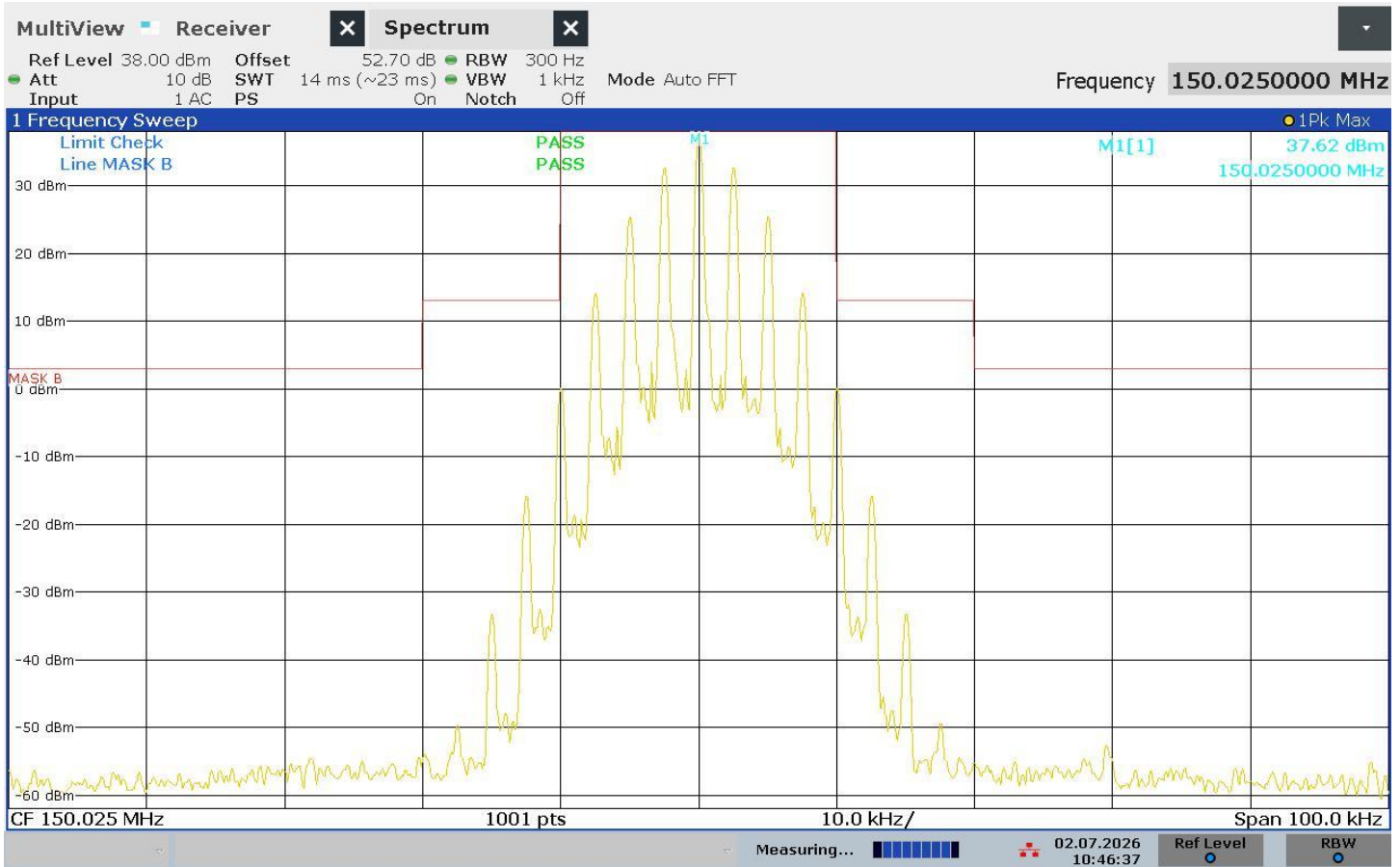
10:39:51 02.07.2026

8.4.2 Emission Mask, 25 kHz Analog, 144.0125 MHz, Mode 1



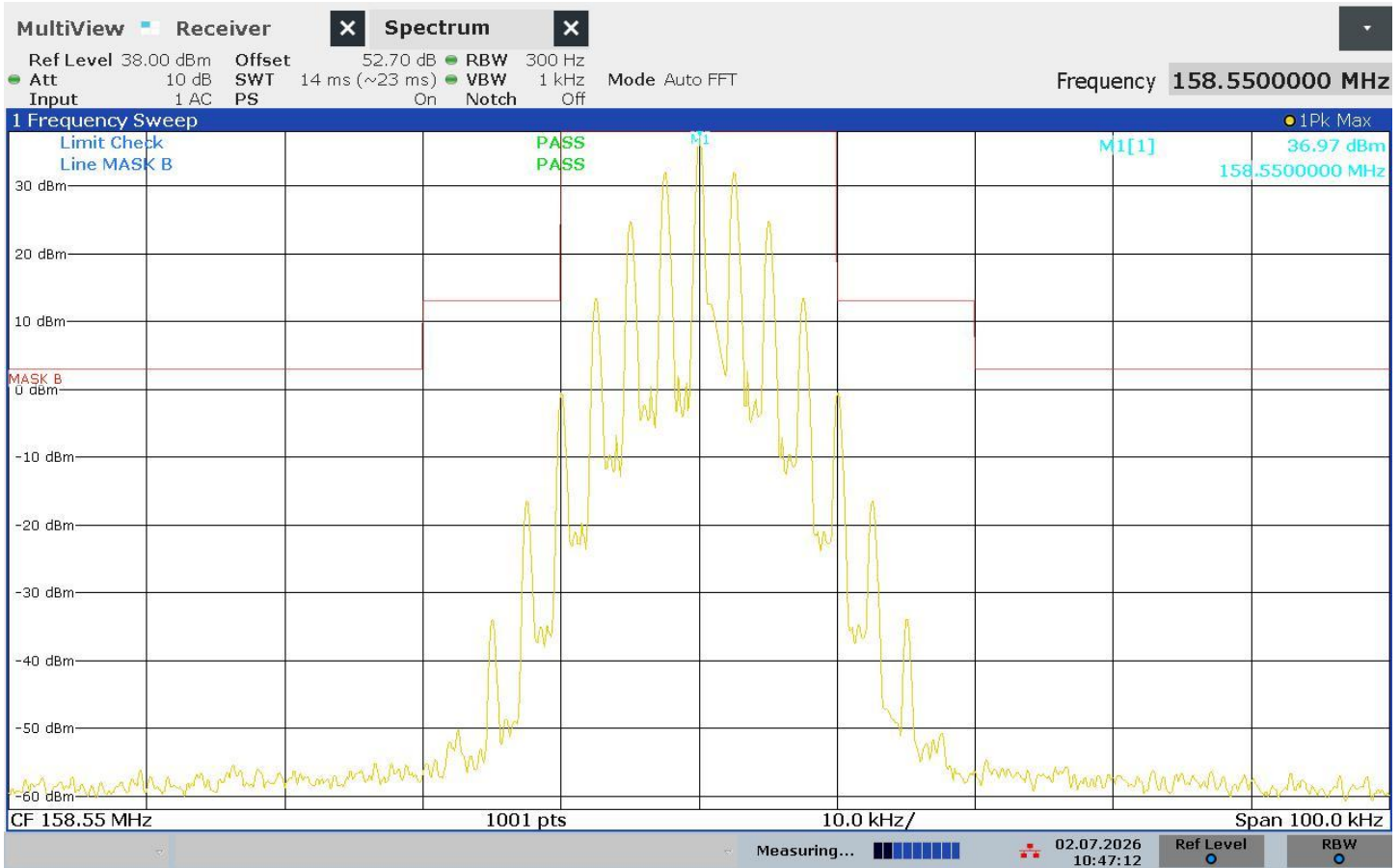
10:44:55 02.07.2026

8.4.3 Emission Mask, 25 kHz Analog, 150.25 MHz, Mode 1



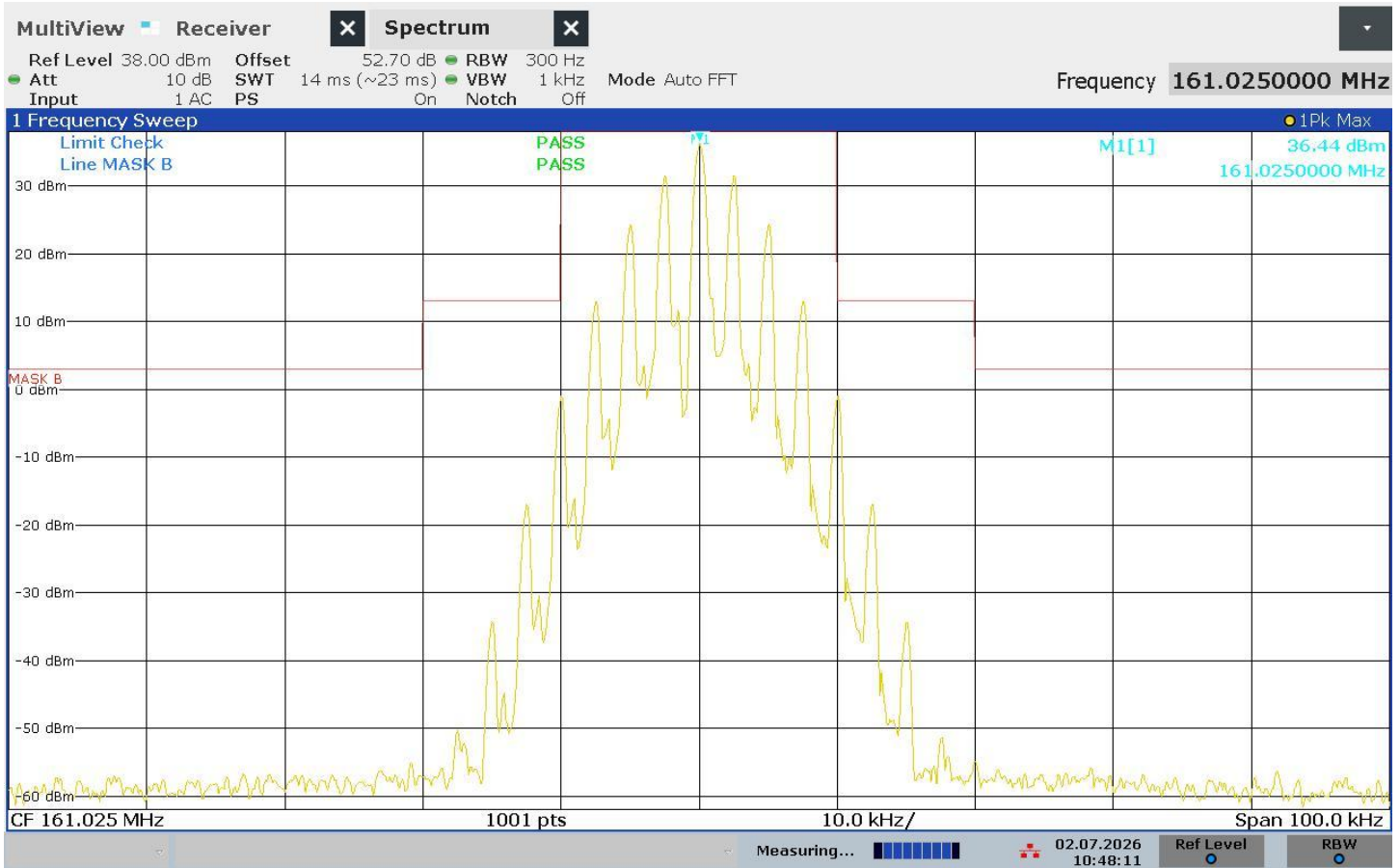
10:46:38 02.07.2026

8.4.4 Emission Mask, 25 kHz Analog, 158.55 MHz, Mode 1



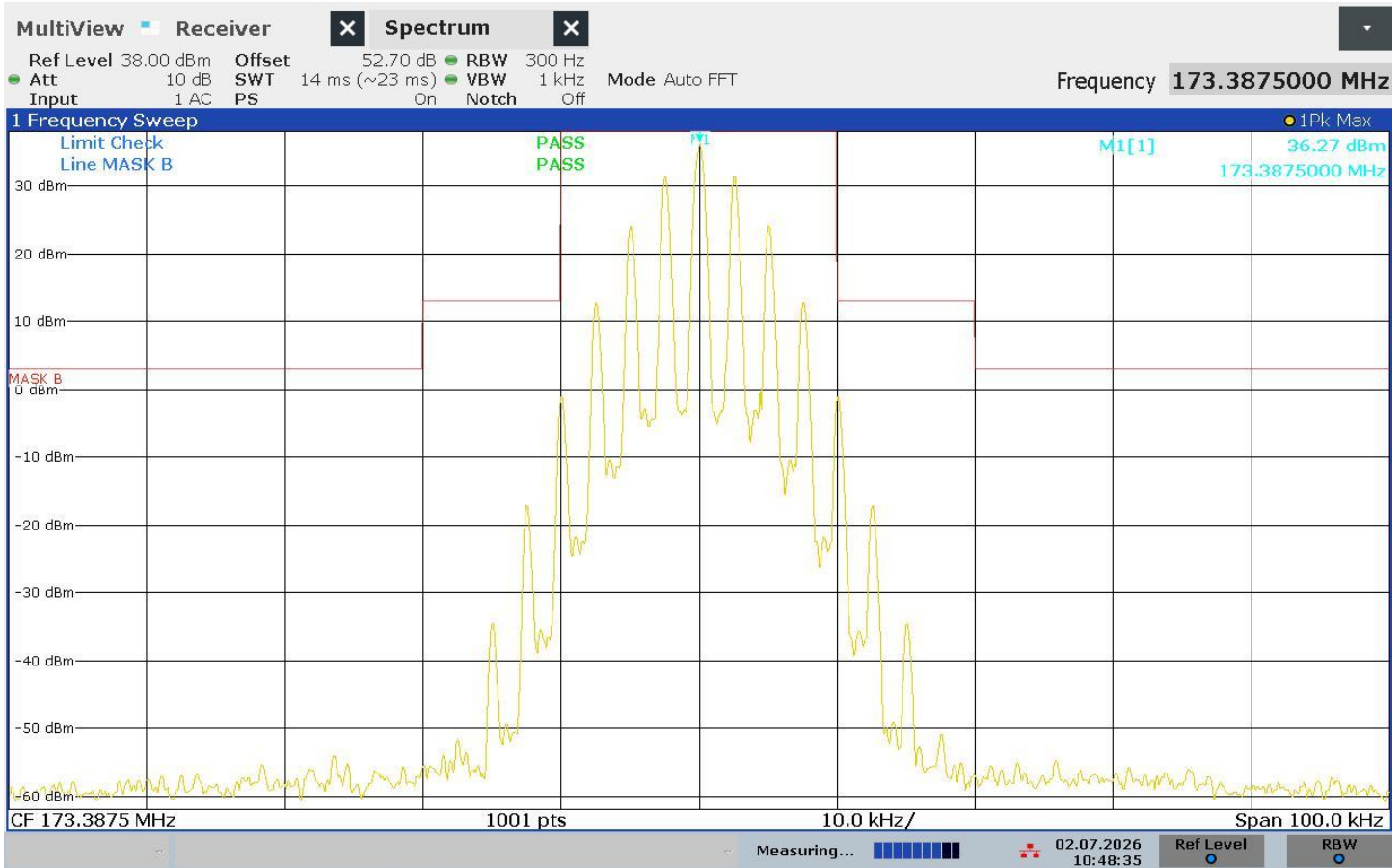
10:47:12 02.07.2026

8.4.5 Emission Mask, 25 kHz Analog, 161.025 MHz, Mode 1



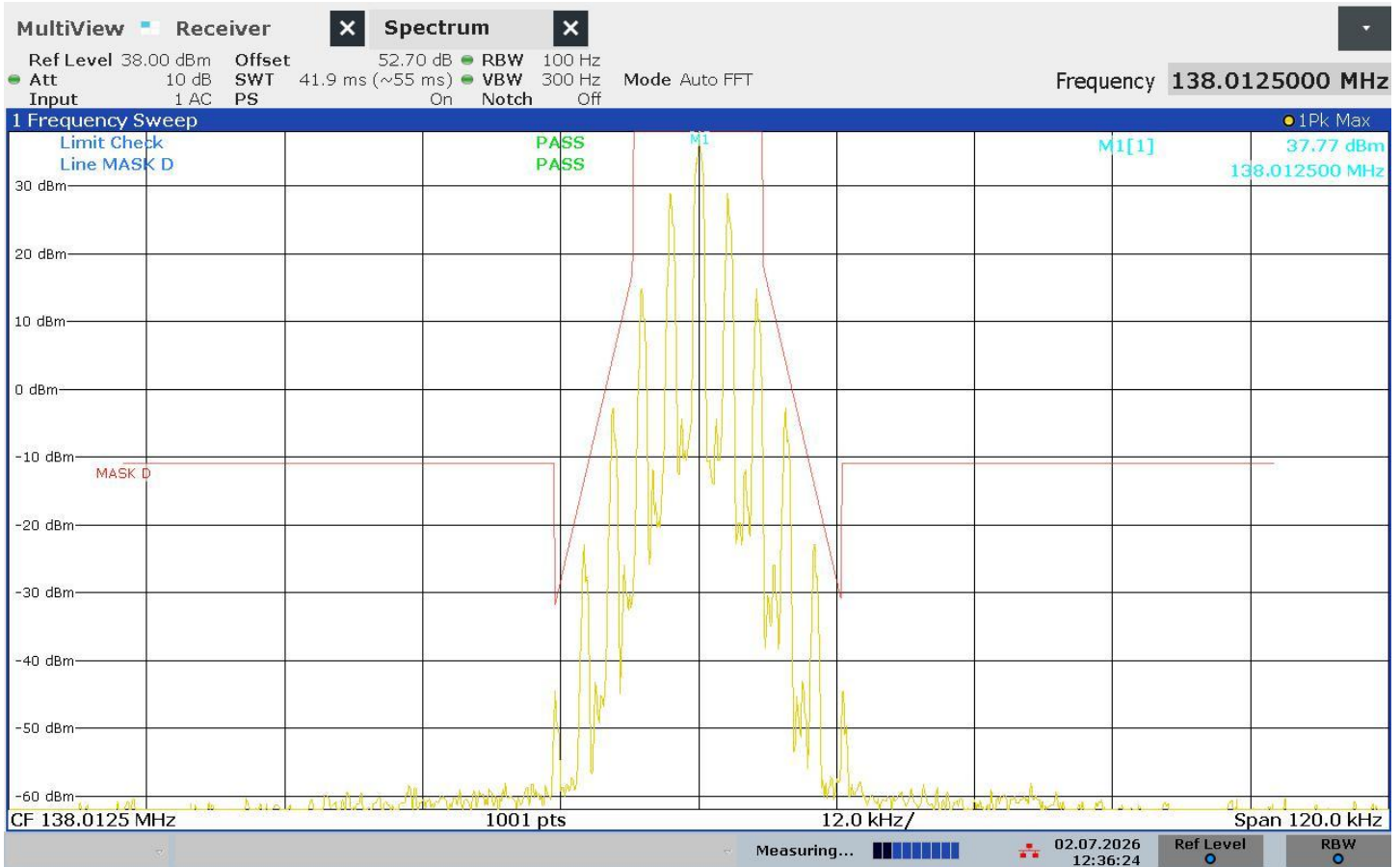
10:48:12 02.07.2026

8.4.6 Emission Mask, 25 kHz Analog, 173.3875 MHz, Mode 1



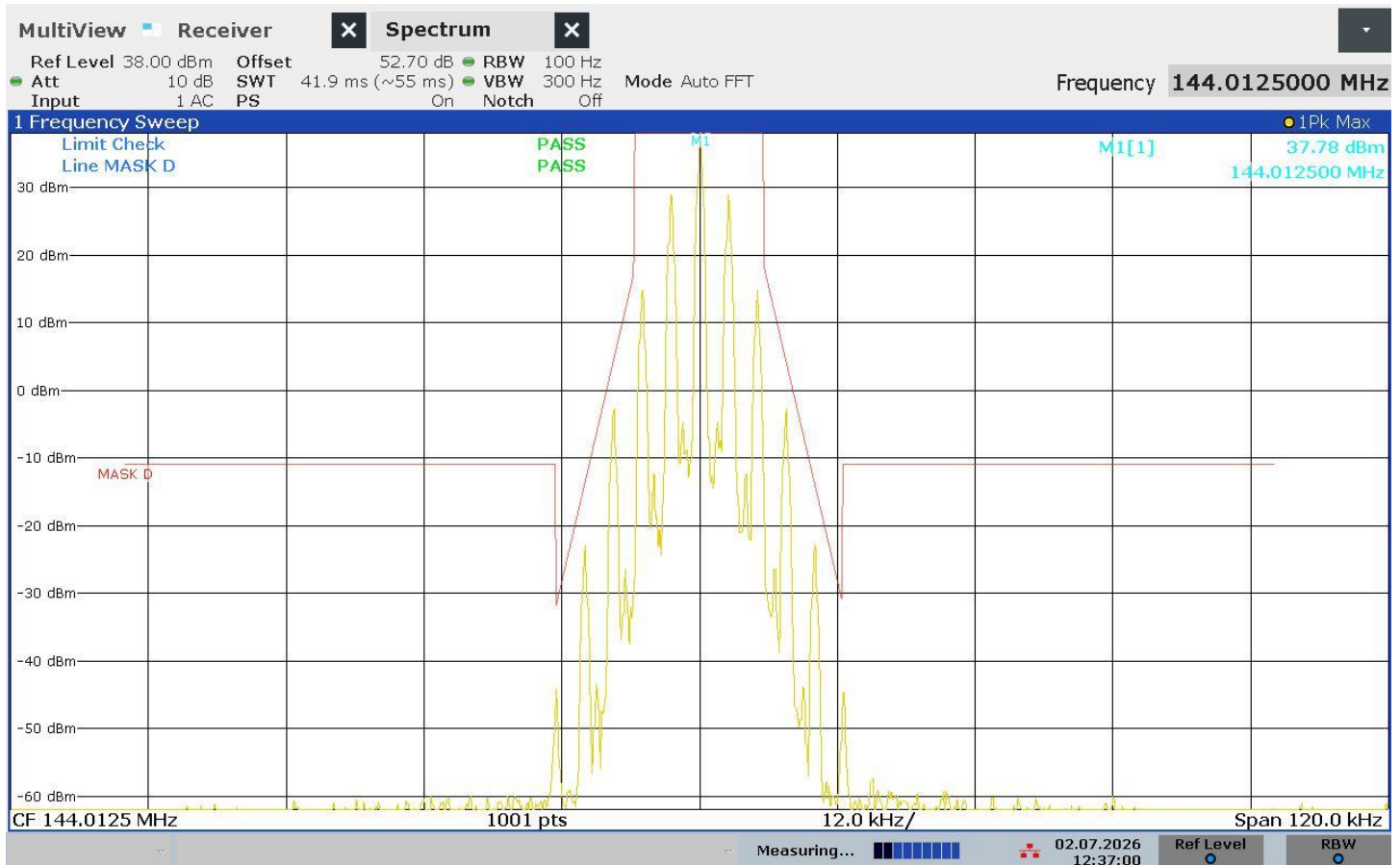
10:48:36 02.07.2026

8.4.7 Emission Mask, 12.5 kHz Analog, 138.0125 MHz, Mode 1



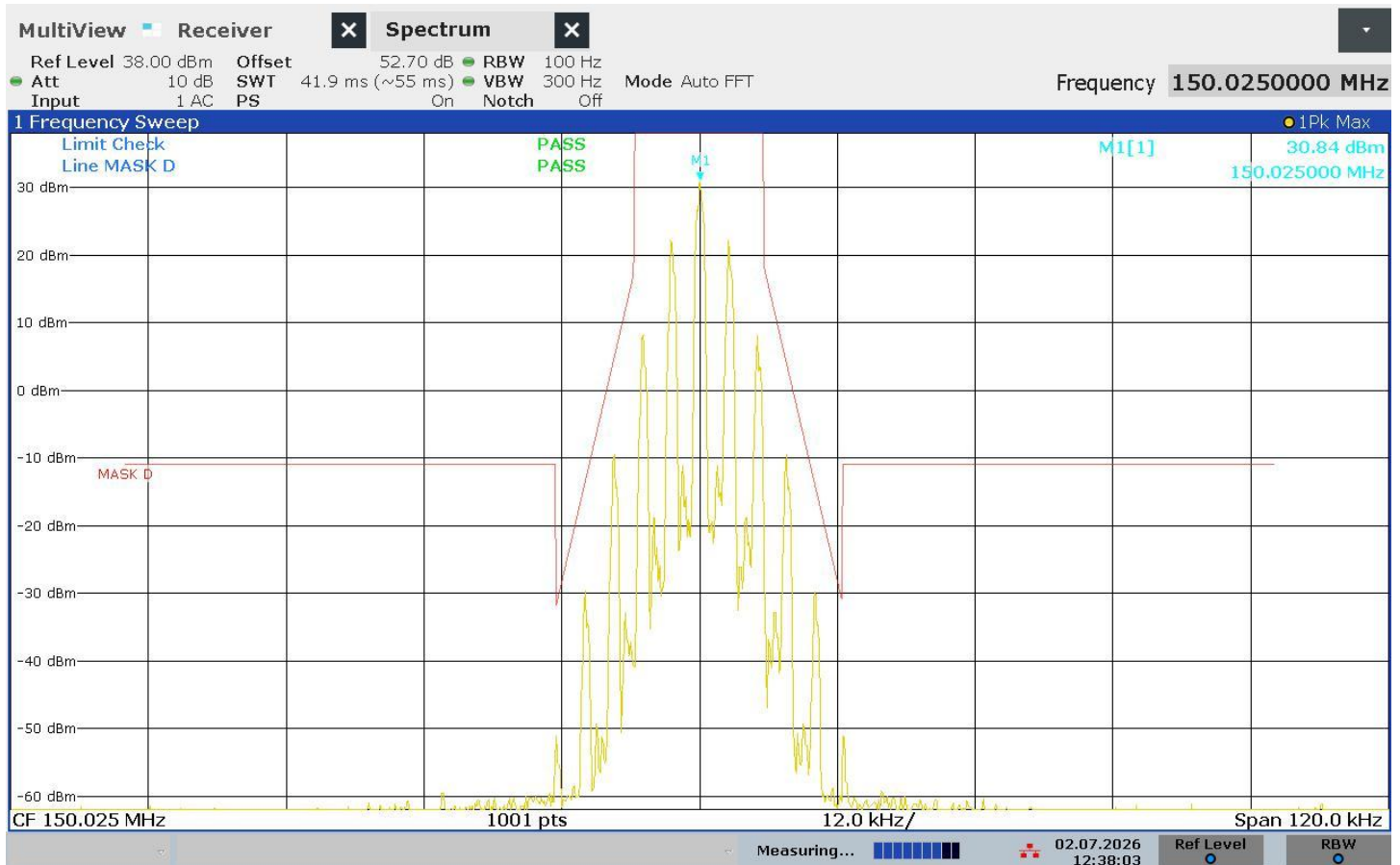
12:36:25 02.07.2026

8.4.8 Emission Mask, 12.5 kHz Analog, 144.0125, Mode 1



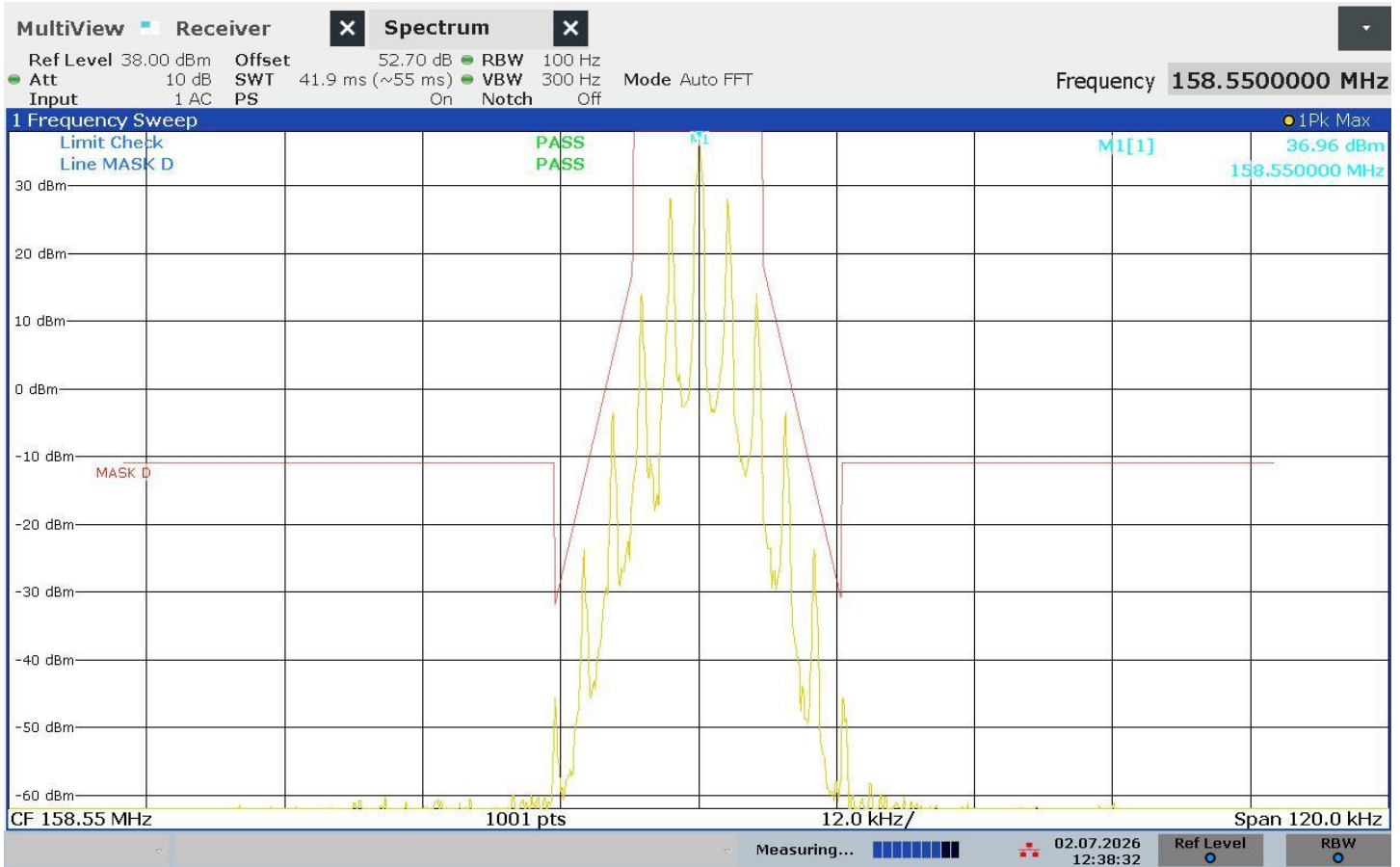
12:37:00 02.07.2026

8.4.9 Emission Mask, 12.5 kHz Analog, 150.25, Mode 1



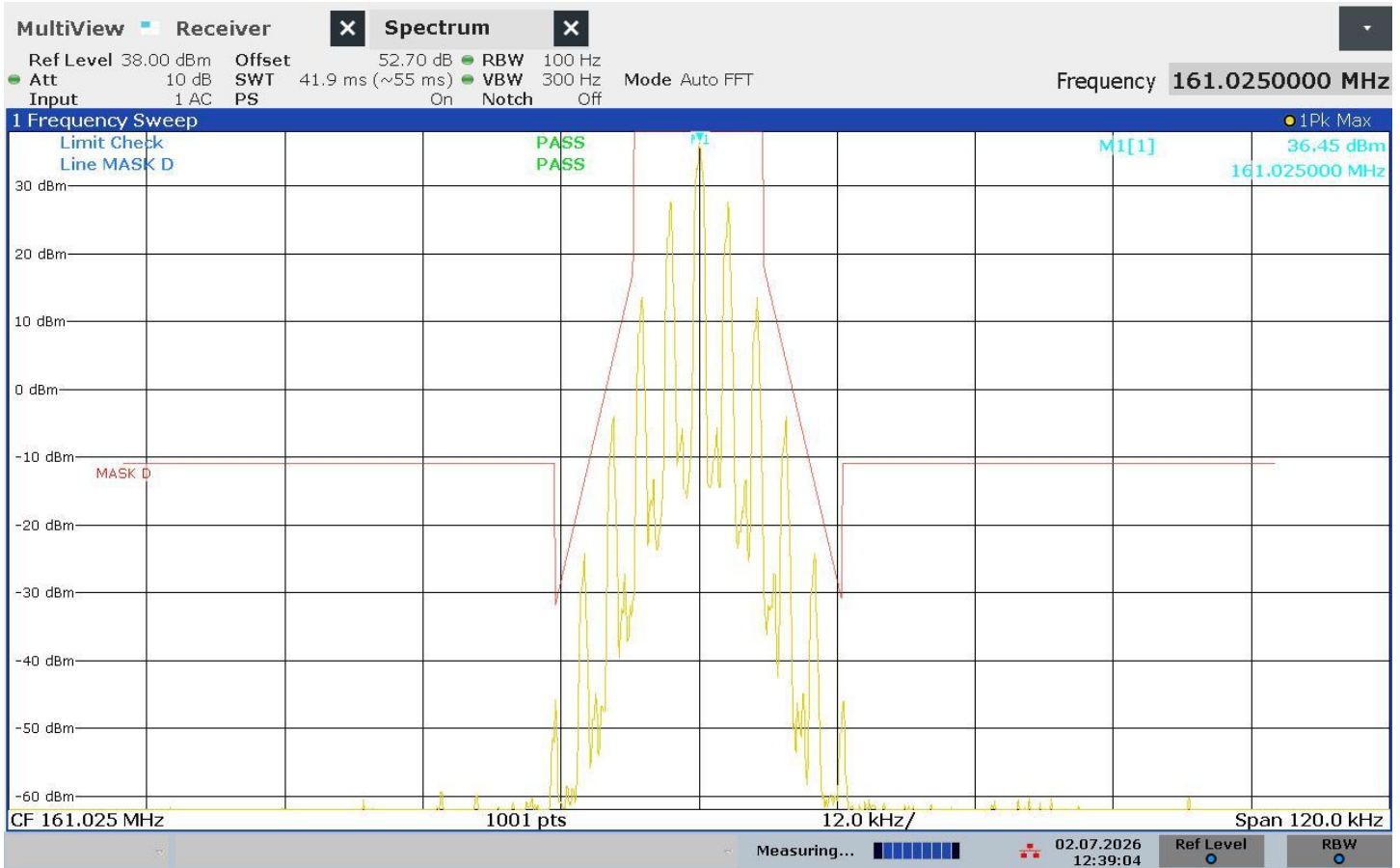
12:38:04 02.07.2026

8.4.10 Emission Mask, 12.5 kHz Analog, 158.55, Mode 1



12:38:33 02.07.2026

8.4.11 Emission Mask, 12.5 kHz Analog, 161.025 MHz, Mode 1



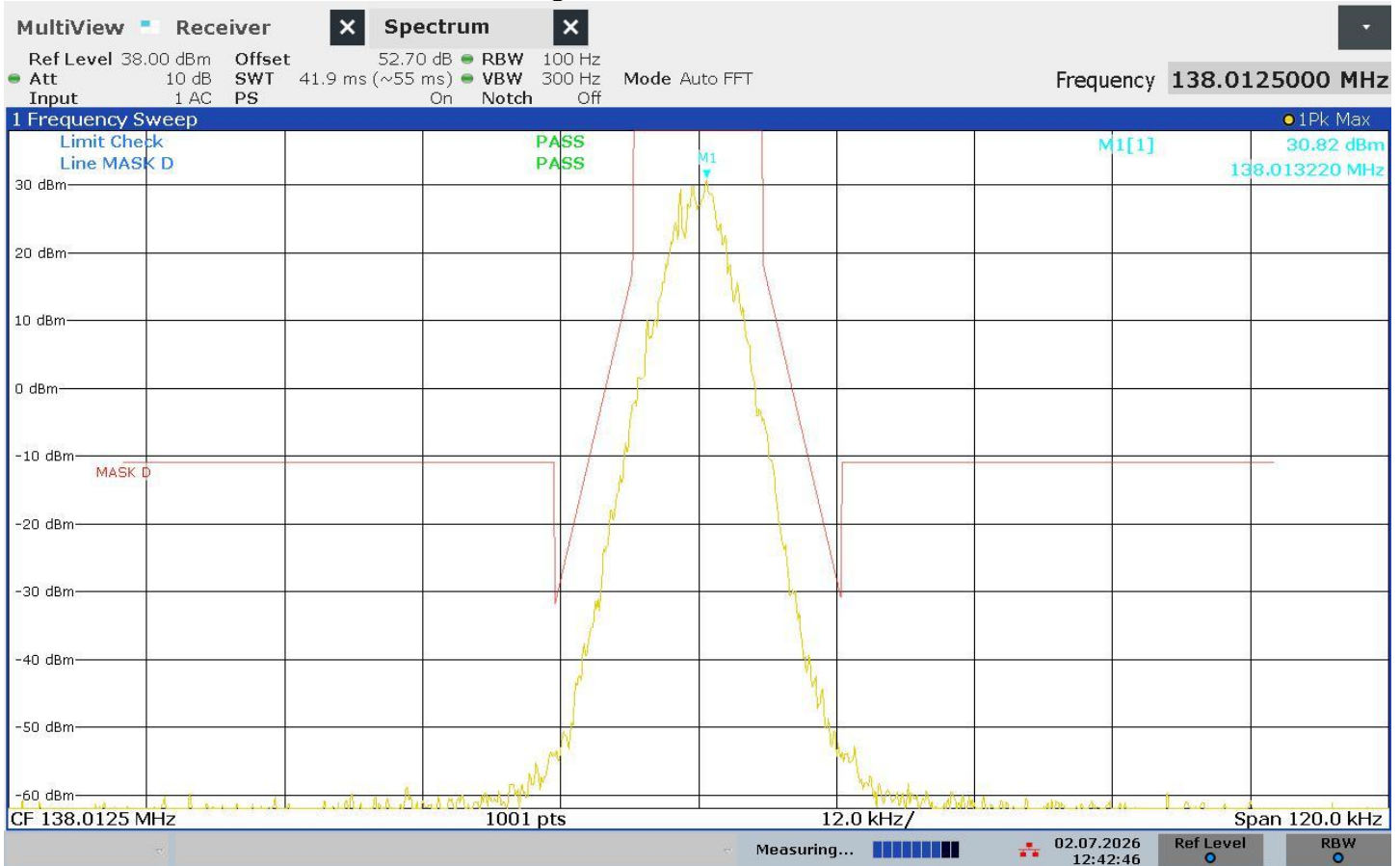
12:39:04 02.07.2026

8.4.12 Emission Mask, 12.5 kHz Analog, 173.3875 MHz, Mode 1



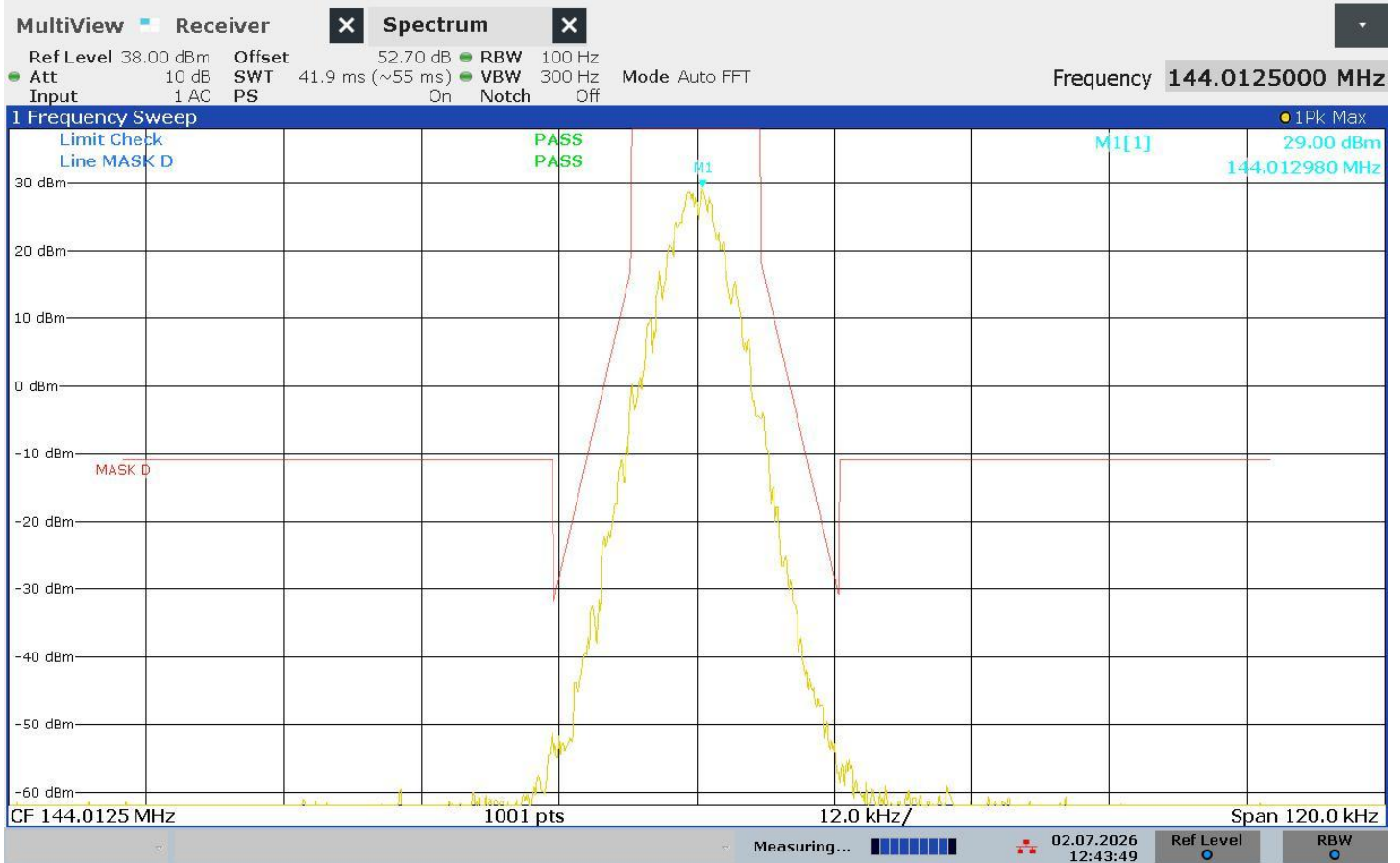
12:39:39 02.07.2026

8.4.13 Emission Mask, 12.5 kHz Digital, 138.0125 MHz, Mode 1



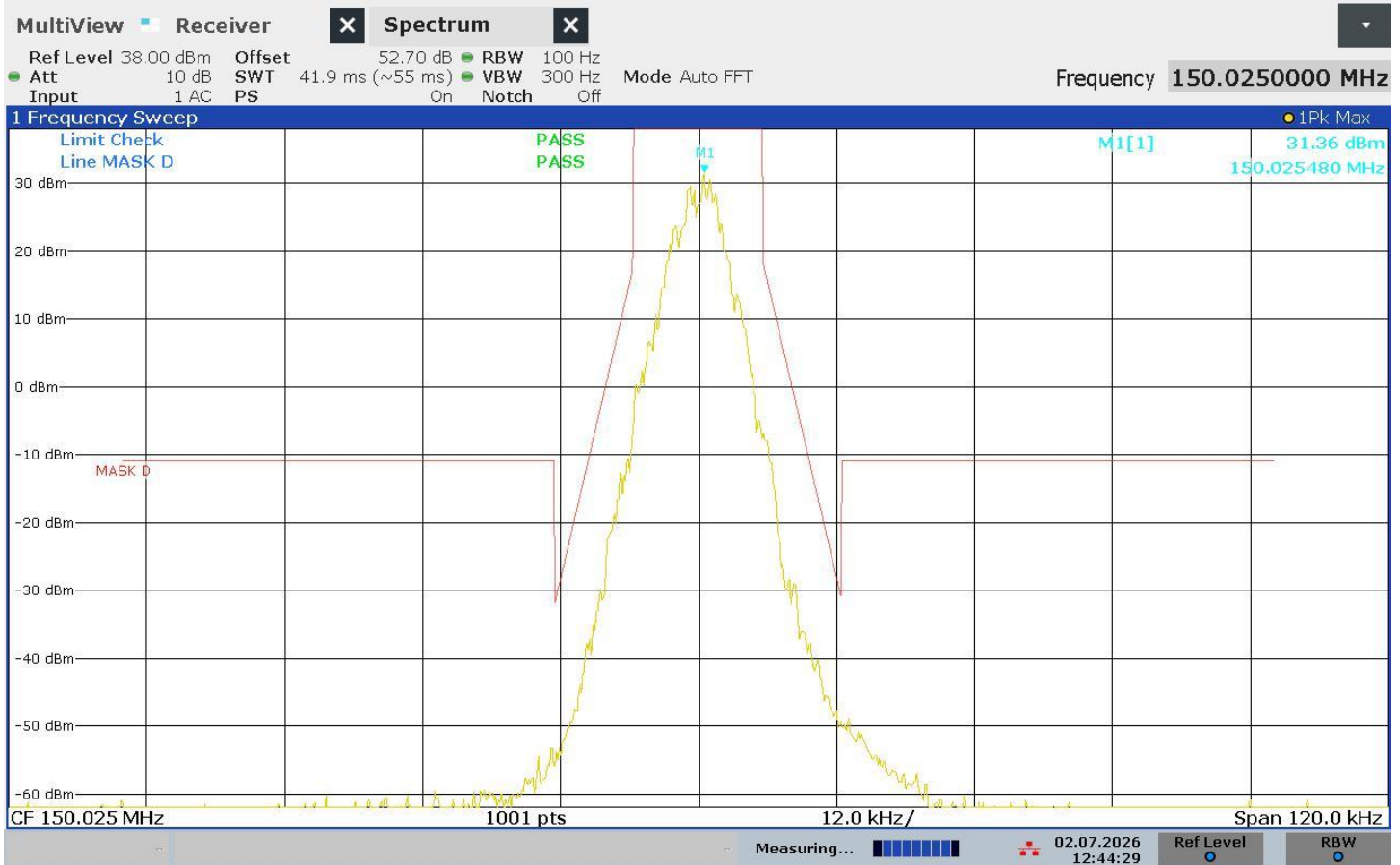
12:42:47 02.07.2026

8.4.14 Emission Mask, 12.5 kHz Digital, 144.0125 MHz, Mode 1



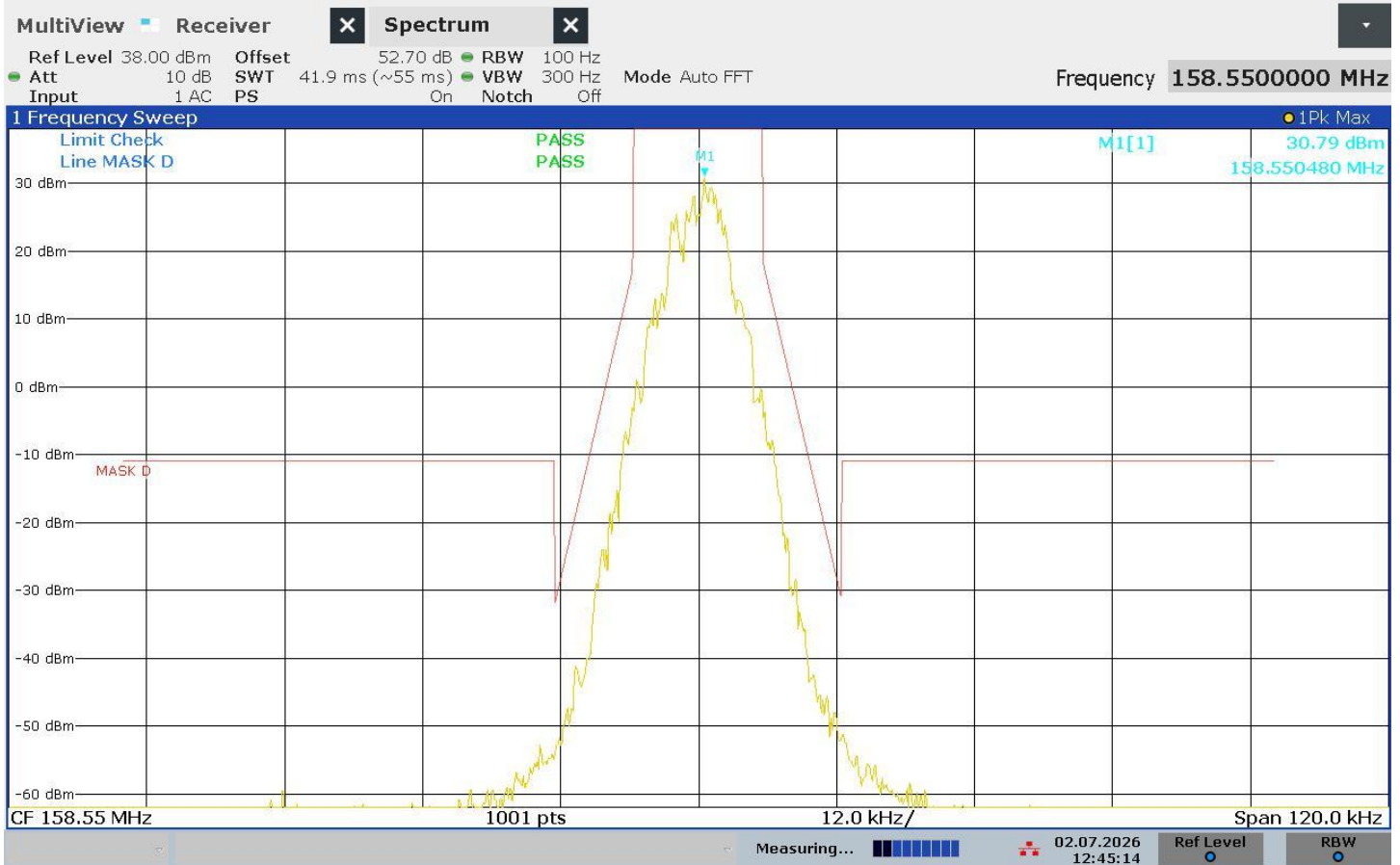
12:43:49 02.07.2026

8.4.15 Emission Mask, 12.5 kHz Digital, 150.25 MHz, Mode 1



12:44:30 02.07.2026

8.4.16 Emission Mask, 12.5 kHz Digital, 158.55 MHz, Mode 1



12:45:14 02.07.2026

8.4.17 Emission Mask, 12.5 kHz Digital, 161.025 MHz, Mode 1



12:45:53 02.07.2026

8.4.18 Emission Mask, 12.5 kHz Digital, 173.3875 MHz, Mode 1



12:46:48 02.07.2026