



Test Report – FCC Part 74H Low Power Licensed Wireless Microphone Applicant: Wisycom s.r.l.

Approved for Release By:

Signature: Bruno Clavier

Name & Title: Bruno Clavier, General Manager

Date of Signature 7/21/2023

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1. Applicant Information

Applicant: Wisycom s.r.l.
Address: Via Tiepolo, 7/E
Tombolo, 35019, Italy

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1.1 Test Result Summary

The following test procedure was used ANSI C63.26 and KDB 206256 D01 Wireless Microphone Certification. Full test results are available in this report.

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.

Cluses	Description of the Requirements	Result (Pass, Fail or N/A)
PART 2.1046(a), 74.861(e) (1) (ii), (iii)	Conducted Power	Pass
2.1049(c), 74.861(d)(4)(i)	Occupied Bandwidth	Pass
PART 74.861(e)(7), ETSI EN 300-422-1 s. 8.3.2	Unwanted Emissions	Pass
2.1051(a), 74.861(e)(6)(iii)	Spurious Emissions at Antenna Terminal (Conducted)	Pass
2.1053, 74.861(e)(6)(iii)	Radiated Field Strength of Spurious Emissions	Pass
2.1053, 74.861(e) (4)	Frequency Stability	Pass



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2. Location of Testing

2.1 Test Laboratory

Timco Engineering Inc. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA"). Testing was performed at Timco's permanent laboratory located at 849 NW State Road 45, Newberry, Florida 32669

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

2.2 Testing was performed, reviewed by

Dates of Testing: 5/29/2023– 6/6/2023

Signature:

Sr. EMC Engineer
 EMC-003838-NE



Name & Title:

Tim Royer, EMC Engineer

Date of Signature

7/21/2023

Signature:

Name & Title:

Kristoffer Costa, EMC Technician

Date of Signature

7/21/2023



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

The test sample was received: 5/25/2023

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:	POUMTK982
Brief Description	Dual UHF Transmitter
Model(s) #	MTK982
Firmware version	N/A
Software version	N/A
Serial Number	29900009, 2300003

Technical Characteristics	
Frequency Range	470 MHz- 608 MHz, 653 MHz- 657 MHz
RF O/P Power (Max.)	250mW Max
Modulation	FM
Bandwidth & Emission Class	F3E, F8E
Number of Channels	N/A
Duty Cycle	100%
Antenna Connector	BNC
Voltage Rating (AC or Batt.)	90 - 264 V AC, 47/63 Hz; 10-28 Vdc

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1	n/a	n/a	3 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 (4:1)	Transmit	470.075 MHz 539 MHz 607.925 MHz 653.075 MHz	74.141 kHz	F3E, F8E
2 (8:1)	Transmit	470.075 MHz 539 MHz 607.925 MHz 653.075 MHz	73.743 kHz	F3E, F8E
3 (16:1)	Transmit	470.075 MHz 539 MHz 607.925 MHz 653.075 MHz	66.963 kHz	F3E, F8E

Operating conditions during Testing:

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

Peripherals used during Testing:

CSI16T Passive Combiner

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

The measurement was performed as per ANSI C63.2 and KDB 206256 D01 Wireless Microphone Certification. Full test results are available in this report.

Limits and Regulatory Limits:

- 1) FCC Part 74 H

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

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.

List of Test Equipment

Test Equipment						
Type	Device	Manufacturer	Model	SN#	Current Cal	Cal Due
Antenna	Double-Ridged Horn/ETS Horn 2	ETS-Lindgren	3117	00041534	10/14/20	10/14/2023
CHAMBER	CHAMBER	Panashield	3M	N/A	3/12/19	12/21/2023
Pre-amp	Pre-amp	RF-LAMBDA	RLNA00M45GA	NA	2/27/19	7/26/2025
Receiver	EMI Test Receiver R&S ESU 40	Rohde & Schwarz	ESU 40	100320	5/27/21	5/26/2024
Receiver	EMI Test Receiver R&S ESW44	Rohde & Schwarz	ESW44	103049	10/13/21	10/12/2024
Function Generator	Function Generator	Standford	DS340	25200	1/13/21	1/13/2024
Signal Generator	Signal Generator HP 8648C	HP	8648C	35537A01679	3/29/19	8/03/2025
Thermometer	Type K J Thermometer	Martel	303	080504494	1/18/20	1/16/2026
Antenna, NSA	Log-Periodic 1243	Eaton	96005	1243	5/4/21	5/3/2024

Software			
Software	Author	Version	Validation on
ESU Firmware	Rohde & Schwarz	4.43 SP3; BIOS v5.1-24-3	2018
RSCCommander	Rohde & Schwarz	1.6.4	2014
ScopeExplorer	LeCroy	v2.25.0.0	2009
Field Strength	Timco	v4.10.7.0	2016



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).

Units of measurement

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 dB μ V. 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 (dB μ V/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 dB μ V 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.

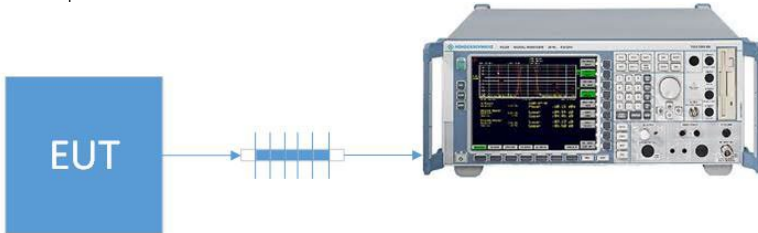
Example:

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

$$\text{EIRP} = \text{Pcond (dBm)} + \text{dBi}$$

8.1 RF POWER OUTPUT

Limits from 2.1046(a), 74.861(e) (1) (ii) and test procedure from ANSI C63.26 and KDB 206256 D01 Wireless Microphone Certification.

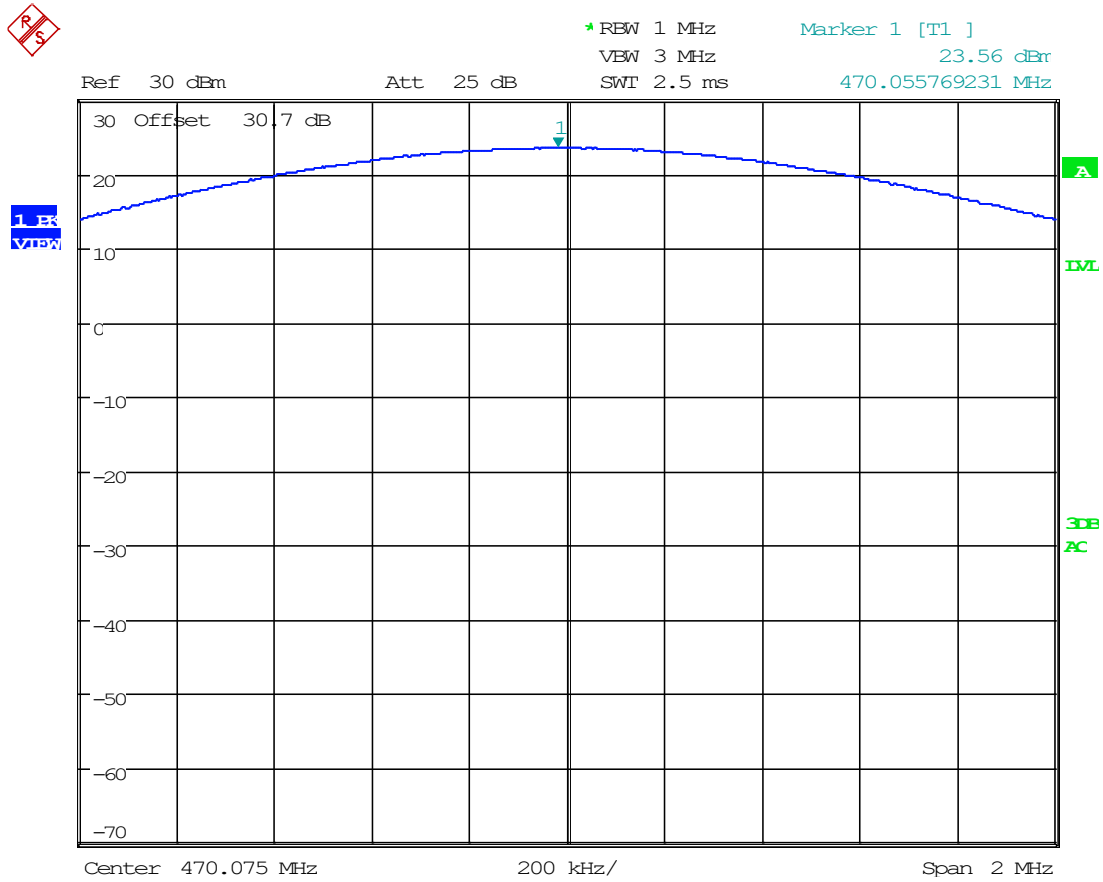


Test Results, Mode 1, 4:1			
Mode	Tuned Frequency (MHz)	Power Output (dBm)	Power Output (W)
1	470.075	23.56	0.227
1	539	22.97	0.198
1	607.925	23.16	0.207
1	653.075	12.32	0.017

Test Results, Mode 2, 8:1			
Mode	Tuned Frequency (MHz)	Power Output (dBm)	Power Output (W)
2	470.075	23.51	0.224
2	539	22.18	0.165
2	607.925	22.93	0.196
2	653.075	10.60	0.011

Test Results, Mode 3, 16:1			
Mode	Tuned Frequency (MHz)	Power Output (dBm)	Power Output (W)
3	470.075	22.35	0.172
3	539	20.69	0.117
3	607.925	16.11	0.041
3	653.075	10.90	0.012

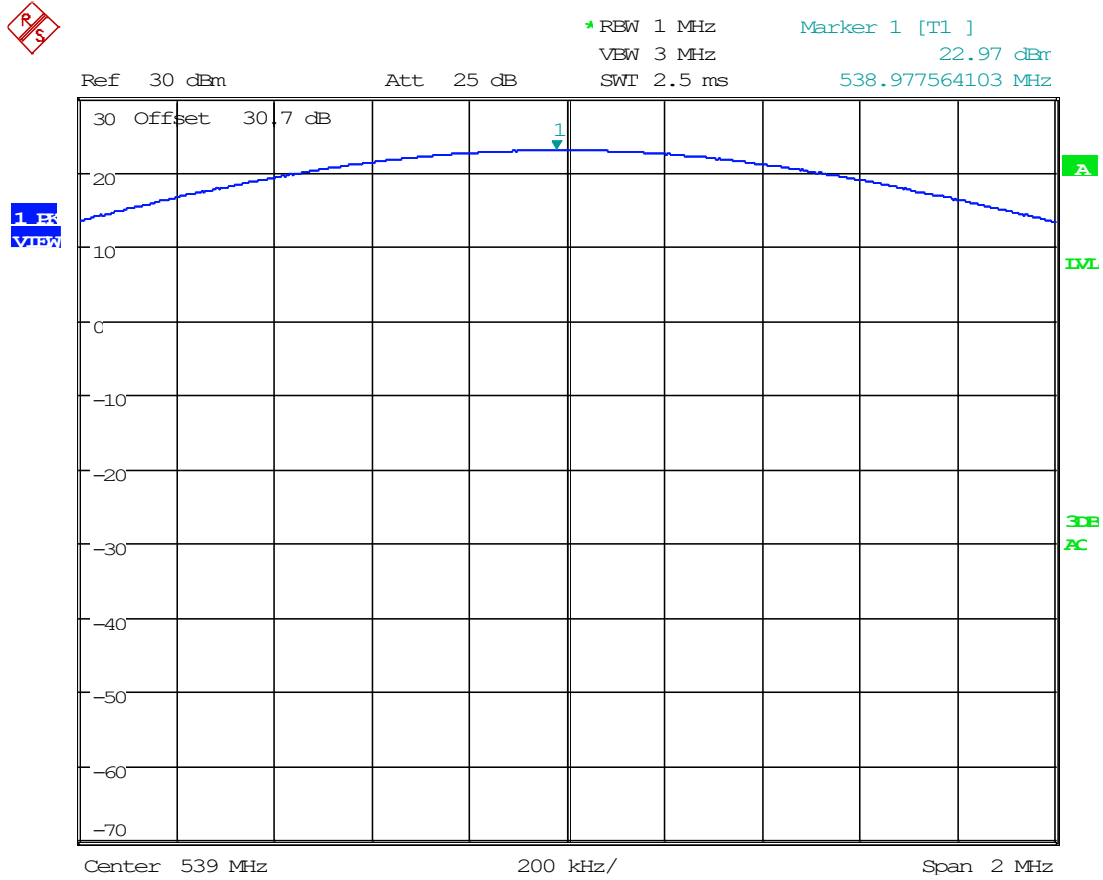
8.1.1 RF Power Output Plot, Mode 1, 470.075 MHz



Date: 1.JUN.2023 10:07:47



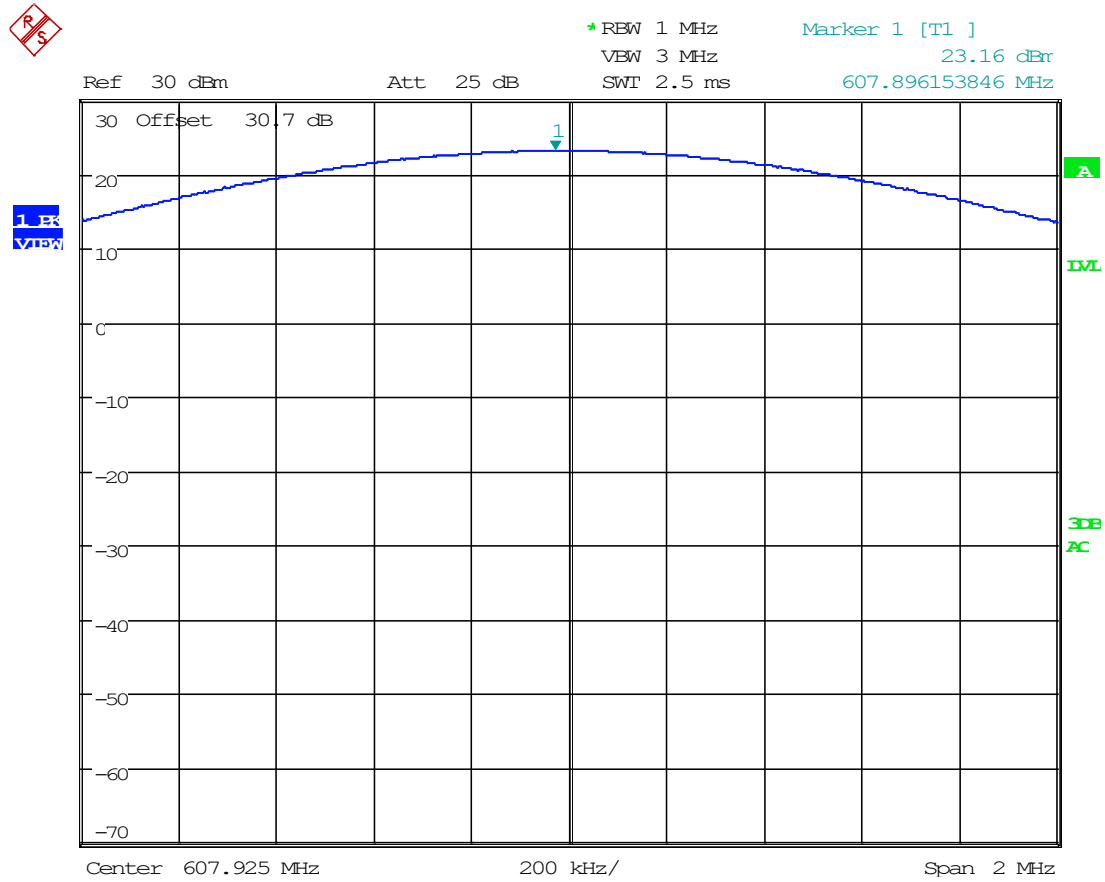
8.1.2 RF Power Output Plot, Mode 1, 539 MHz



Date: 1.JUN.2023 10:08:36



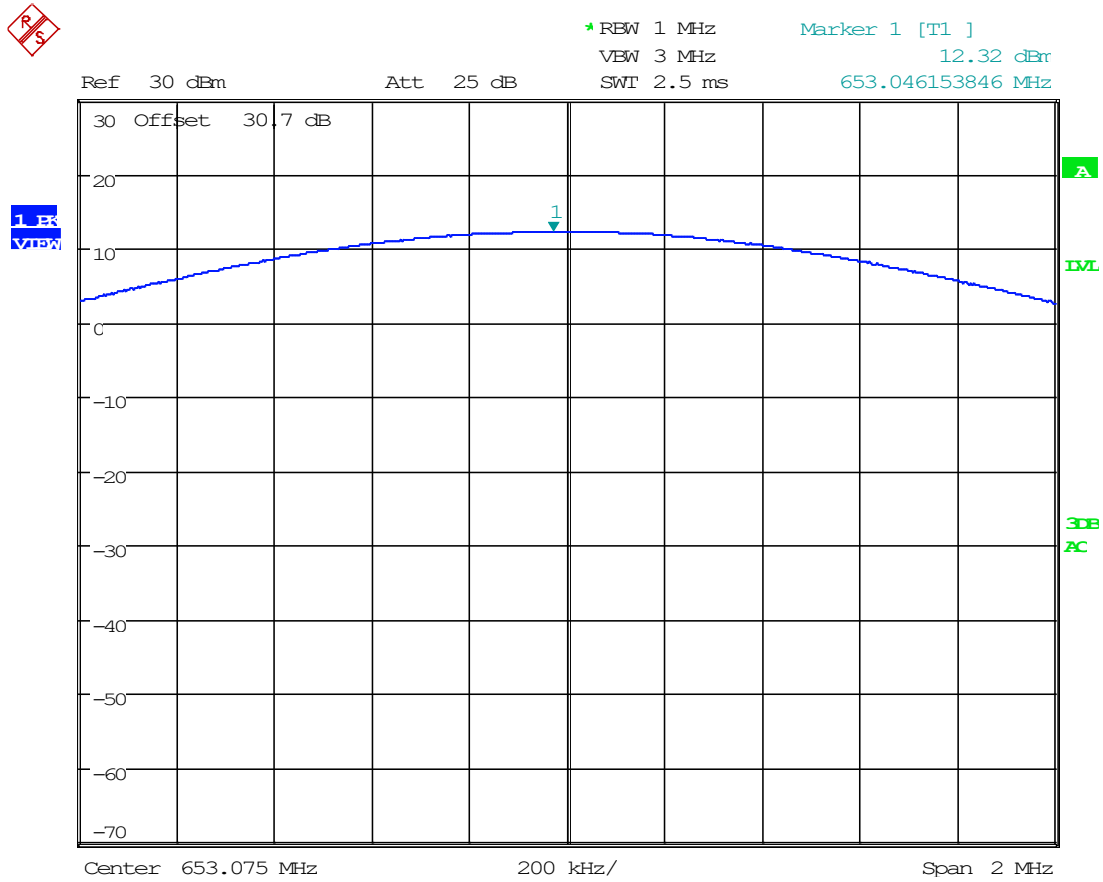
8.1.3 RF Power Output Plot, Mode 1, 607.925 MHz



Date: 1.JUN.2023 10:09:14

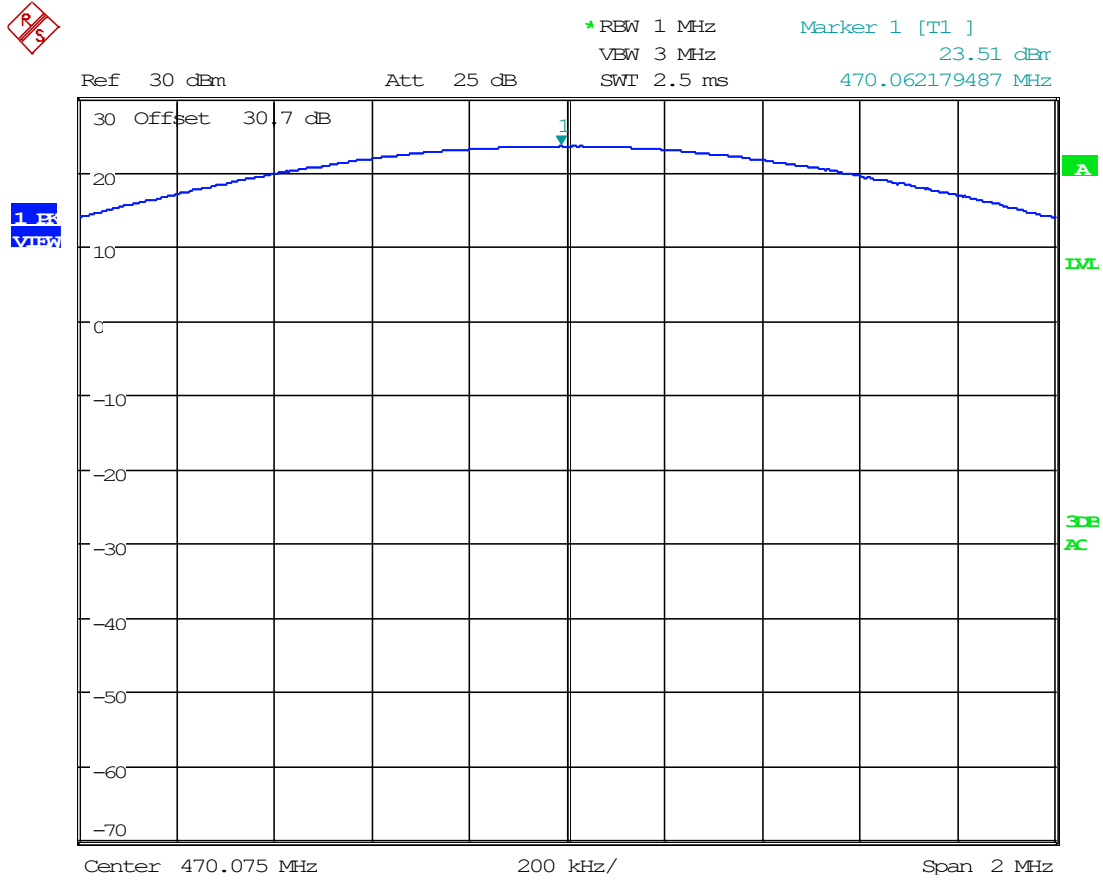


8.1.4 RF Power Output Plot, Mode 1, 653.075 MHz



Date: 1.JUN.2023 10:11:25

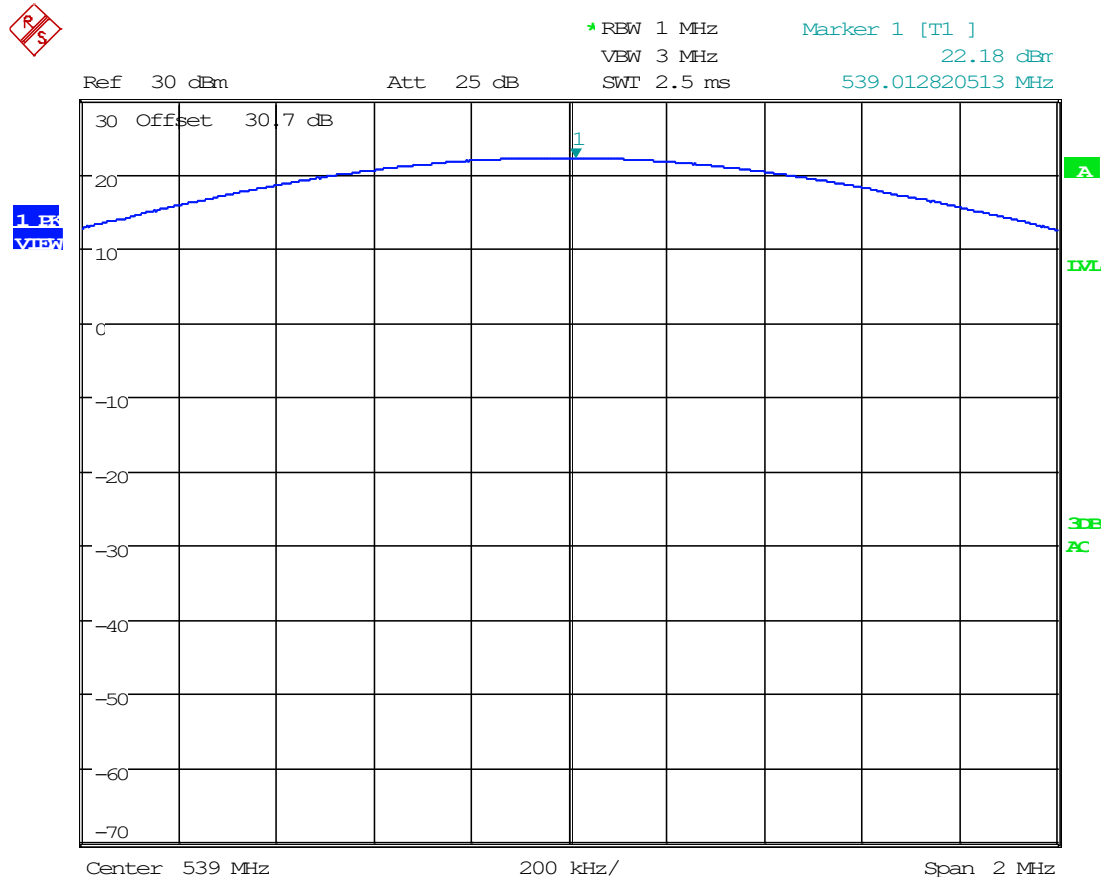
8.1.5 RF Power Output Plot, Mode 2, 470.075 MHz



Date: 1.JUN.2023 12:13:18



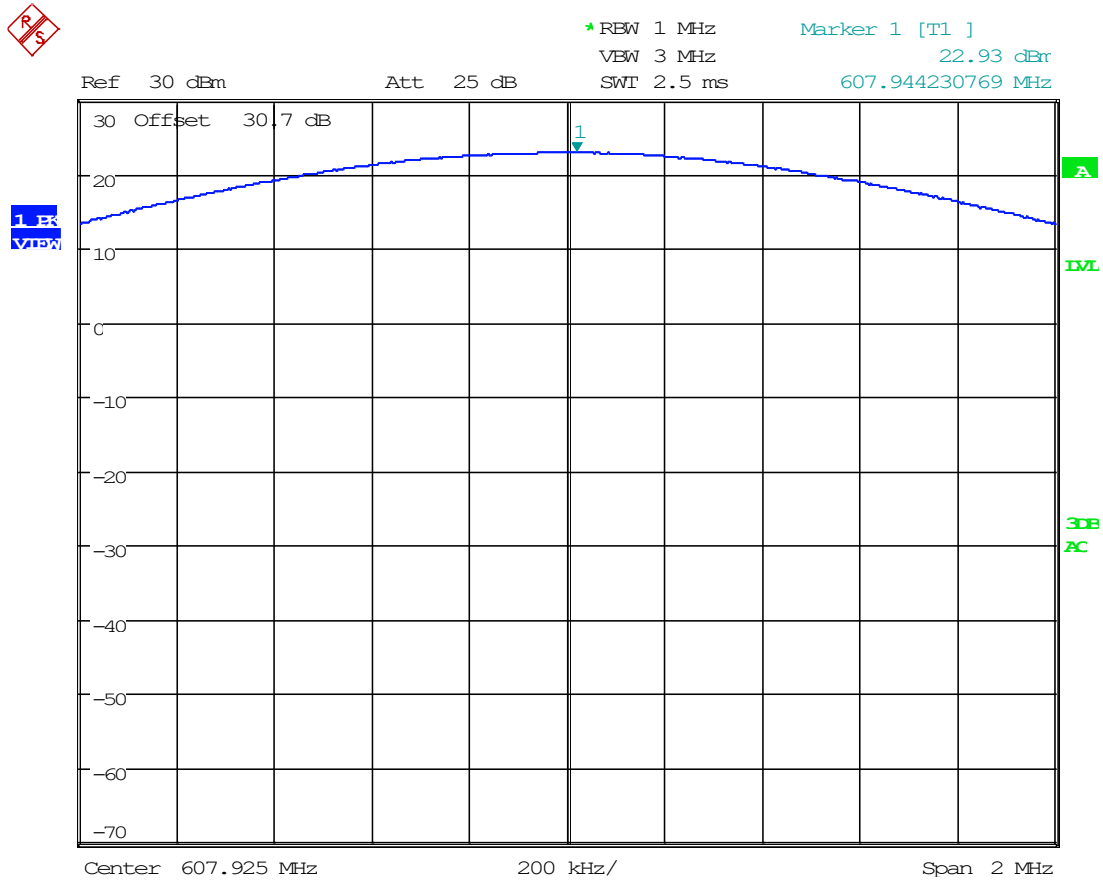
8.1.6 RF Power Output Plot, Mode 2, 539 MHz



Date: 1.JUN.2023 12:14:29



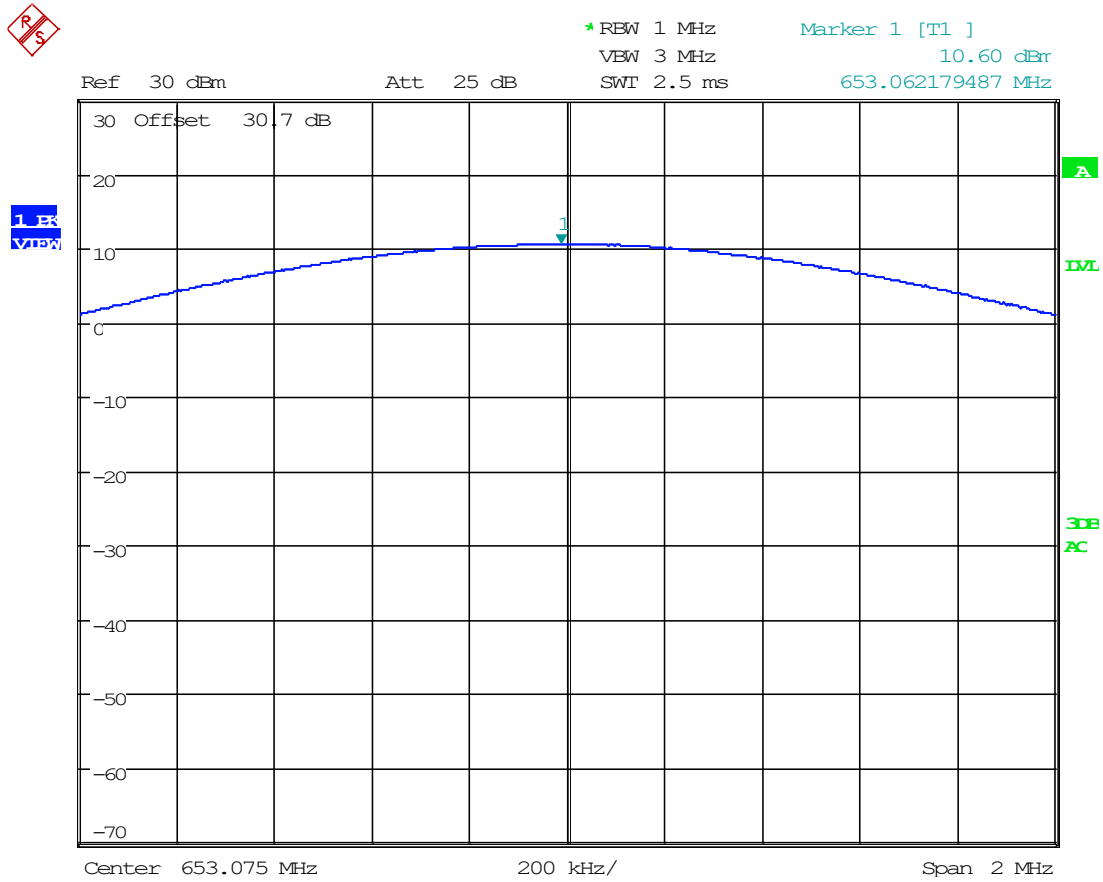
8.1.7 RF Power Output Plot, Mode 2, 607.925 MHz



Date: 1.JUN.2023 12:15:45

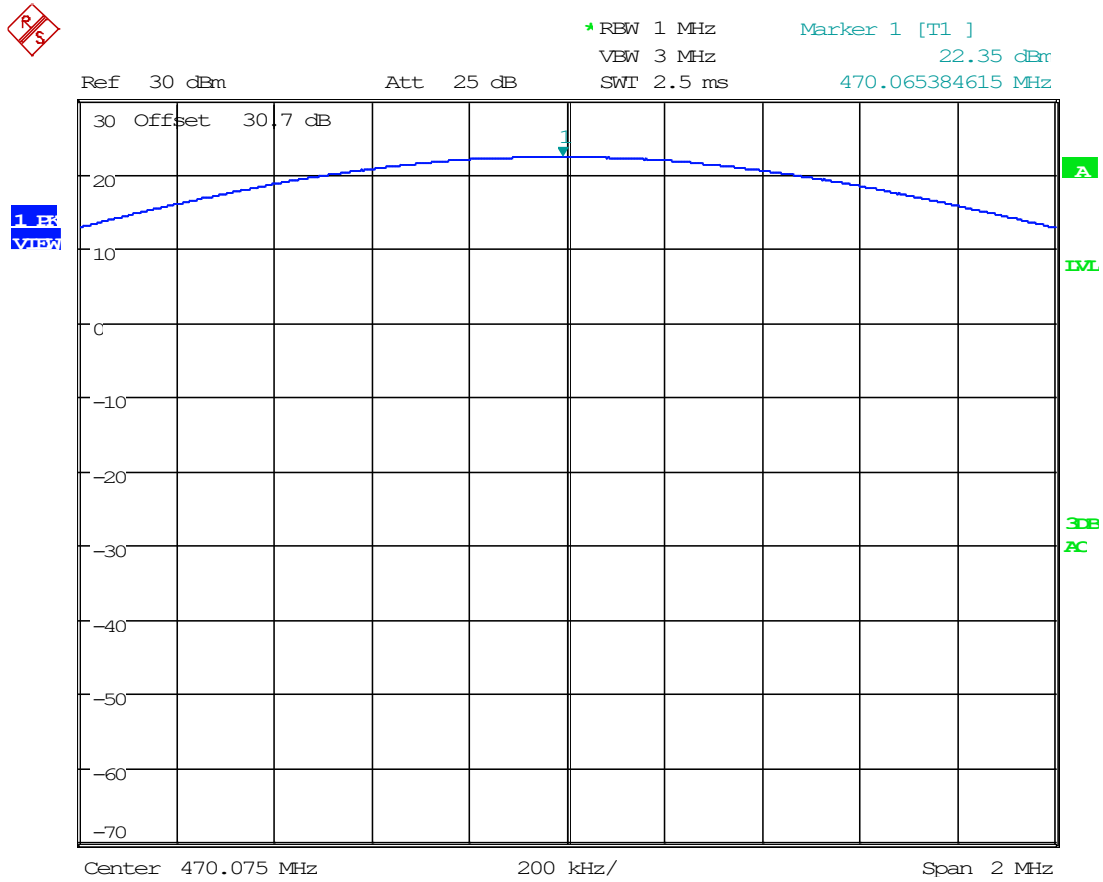


8.1.8 RF Power Output Plot, Mode 2, 653.075 MHz



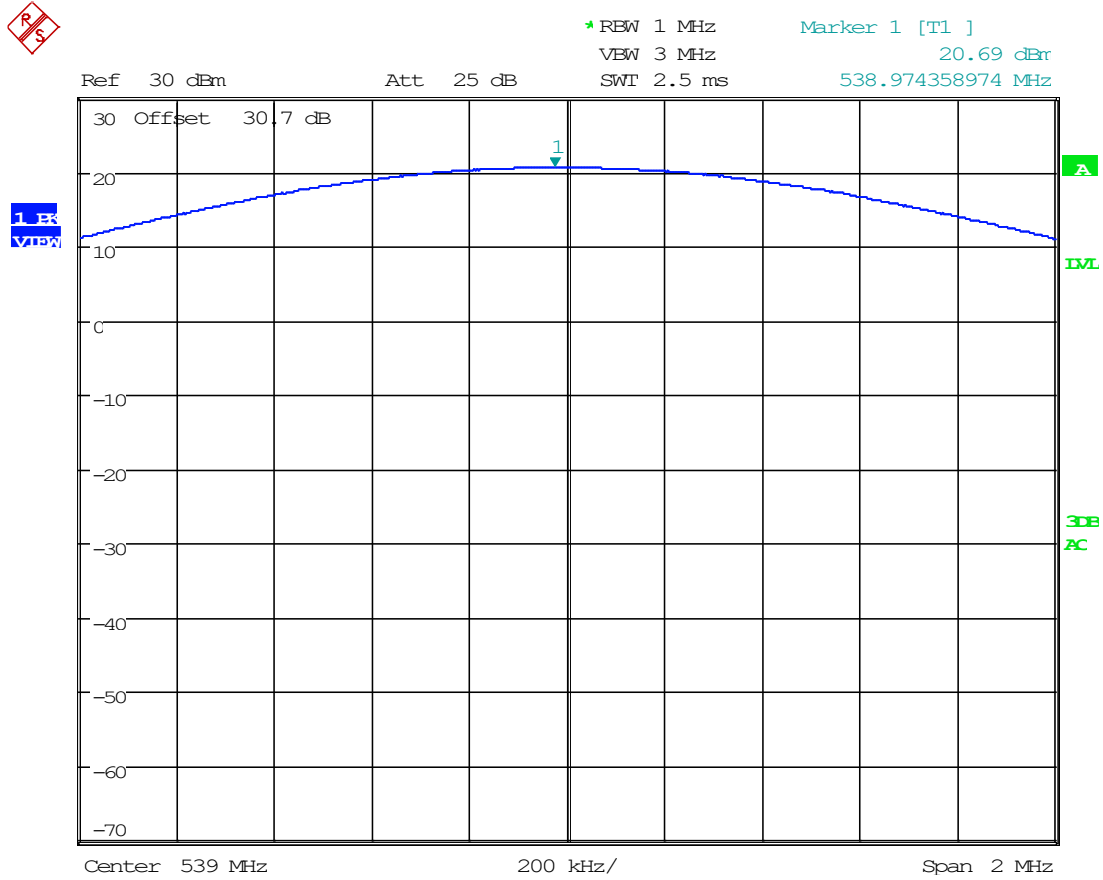
Date: 1.JUN.2023 12:20:18

8.1.9 RF Power Output Plot, Mode 3, 470.075 MHz



Date: 1.JUN.2023 14:49:17

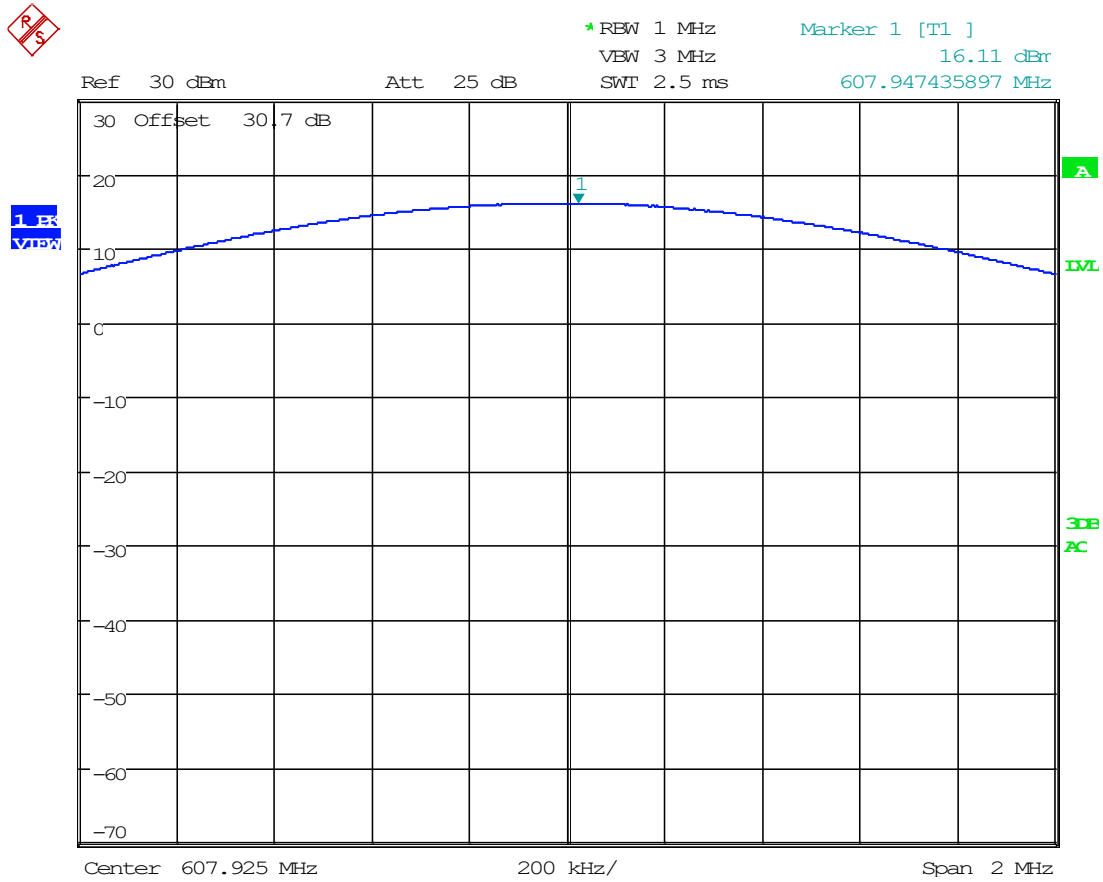
8.1.10 RF Power Output Plot, Mode 3, 539 MHz



Date: 1.JUN.2023 14:50:40



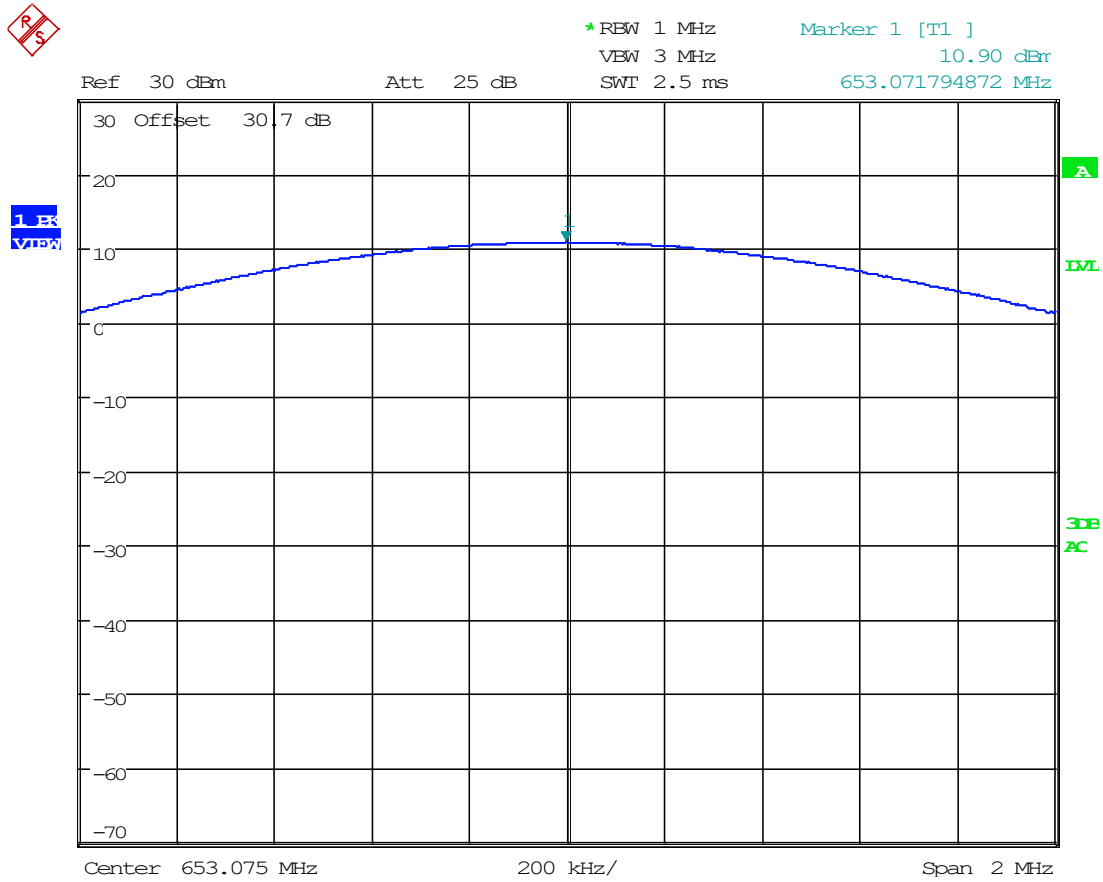
8.1.11 RF Power Output Plot, Mode 3, 607.925 MHz



Date: 1.JUN.2023 14:51:19



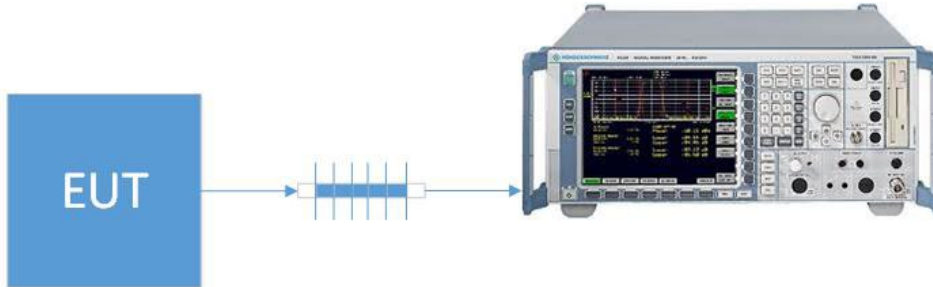
8.1.12 RF Power Output Plot, Mode 3, 653.075 MHz



Date: 1.JUN.2023 14:53:06

8.2 OCCUPIED BANDWIDTH

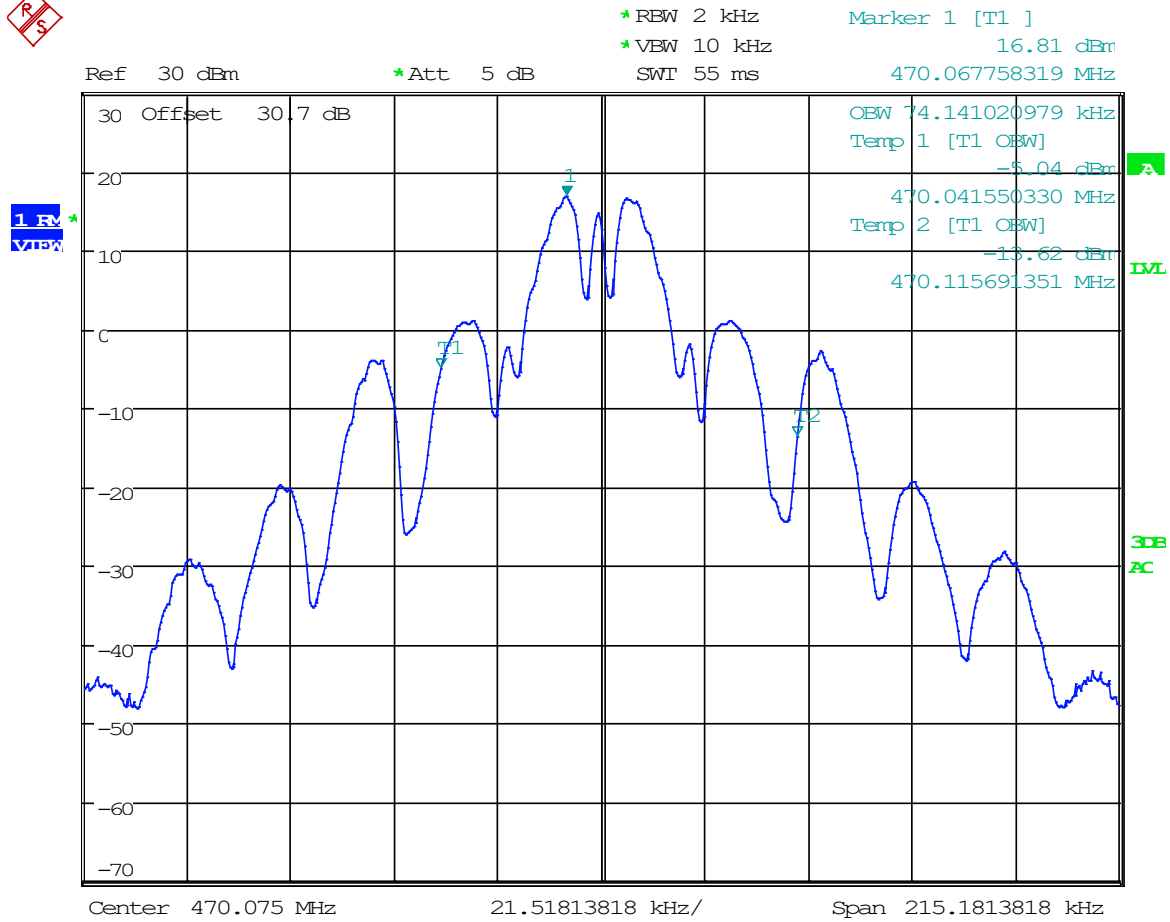
Limits from 2.1049(c), 74.861(d)(4)(ii) and test procedure from ANSI C63.26



Test Results, Occupied Bandwidth				
Tuned Frequency (MHz)	Mode 1, 4:1 Occupied Bandwidth (kHz)	Mode 2, 8:1 Occupied Bandwidth (kHz)	Mode 3, 16:1 Occupied Bandwidth (kHz)	Bandwidth Type
470.075	74.141	71.545	66.529	99%
539	67.164	66.6	66.963	99%
607.925	67.064	73.743	66.961	99%
653.075	67.981	67.726	68.201	99%



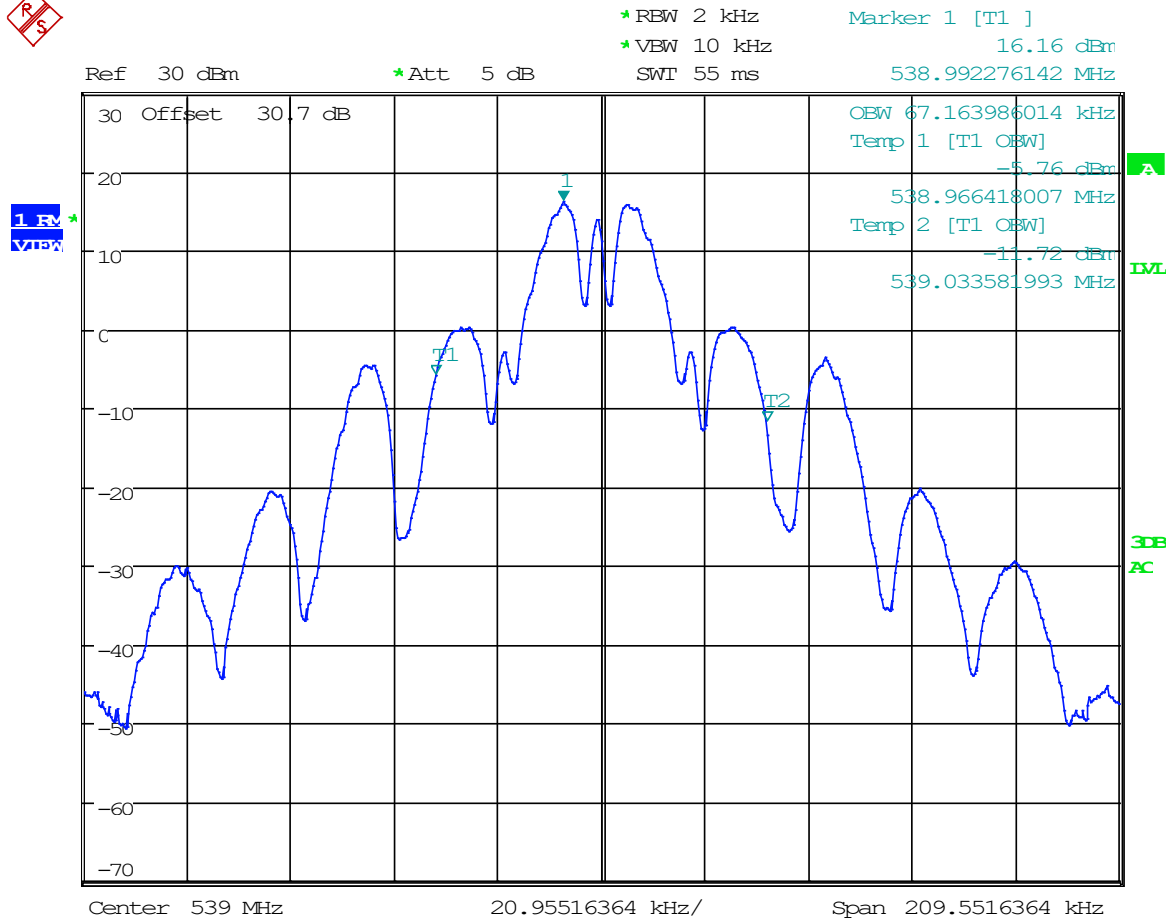
8.2.1 99% Bandwidth Plot, Mode 1, 470.075 MHz



Date: 1.JUN.2023 11:47:08

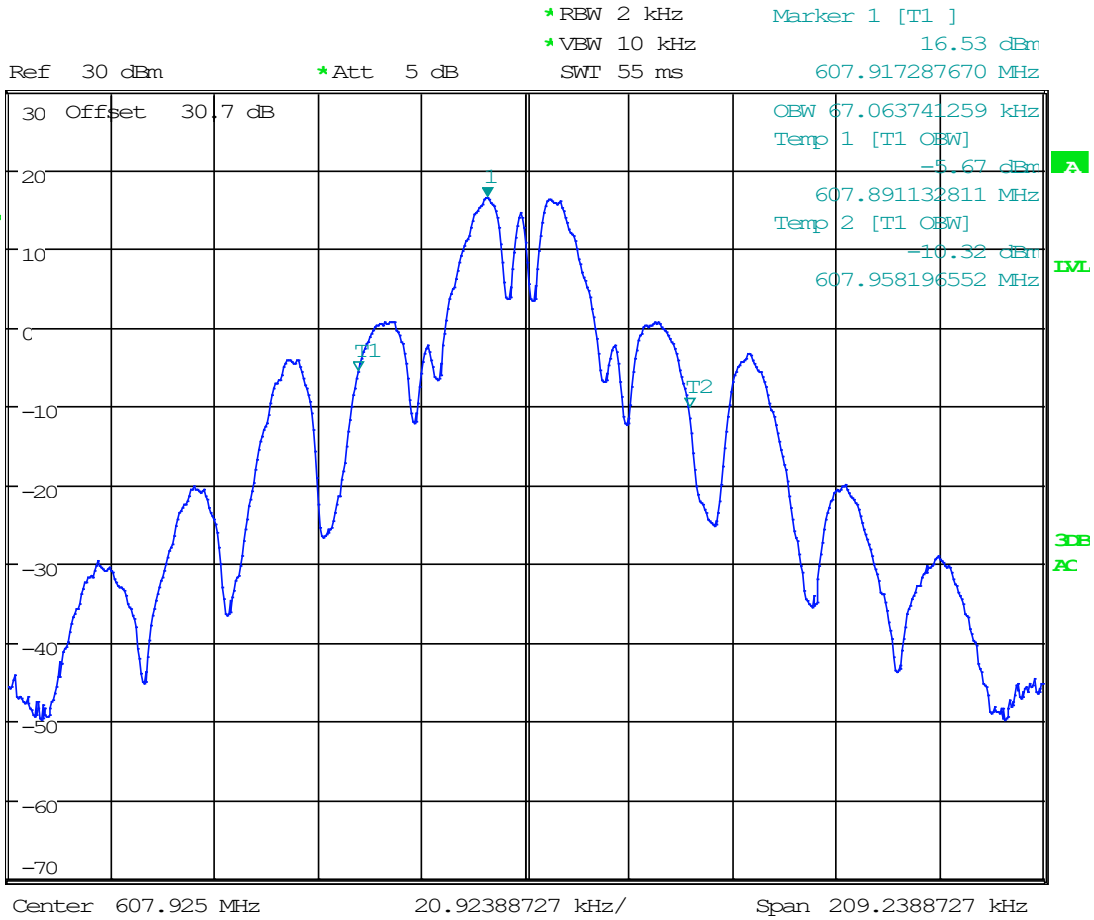


8.2.2 99% Bandwidth Plot, Mode 1, 539 MHz



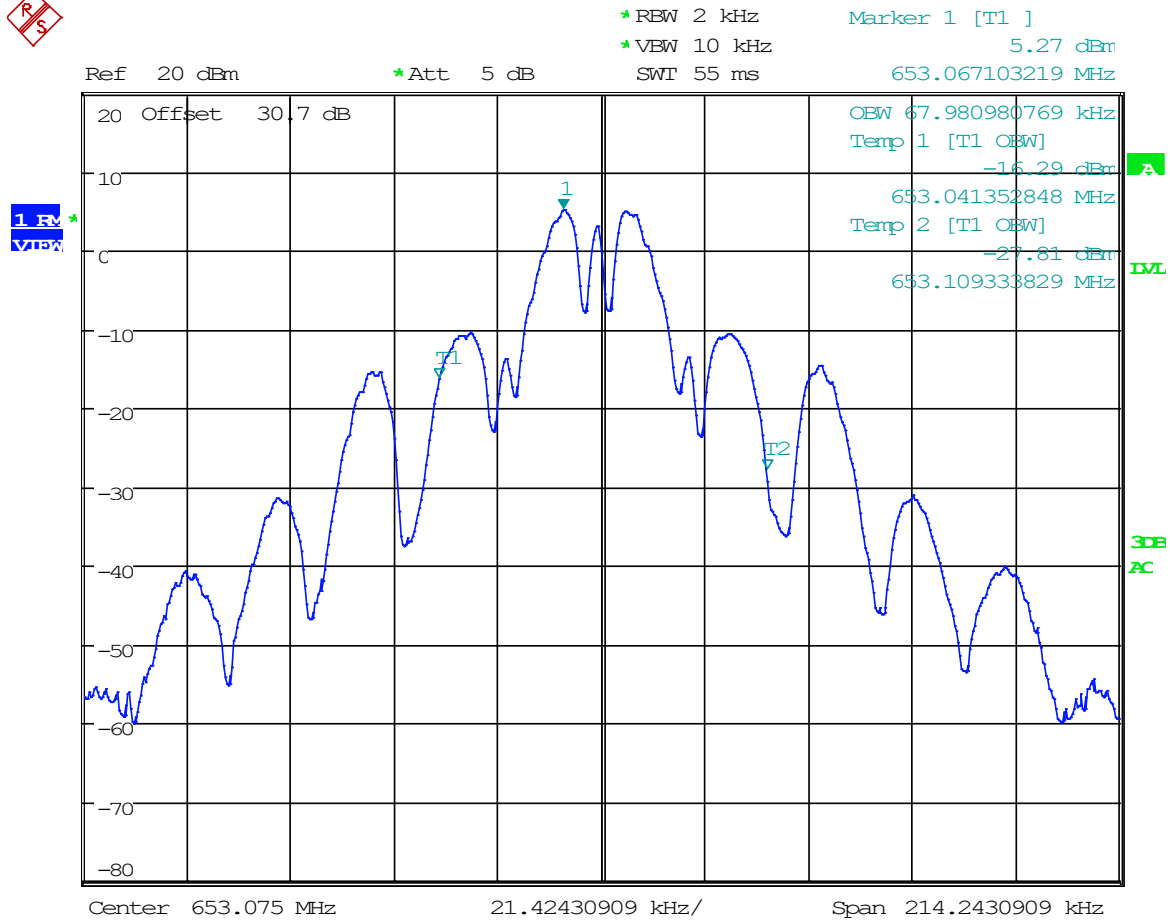
Date: 1.JUN.2023 11:50:32

8.2.3 99% Bandwidth Plot, Mode 1, 607.925 MHz



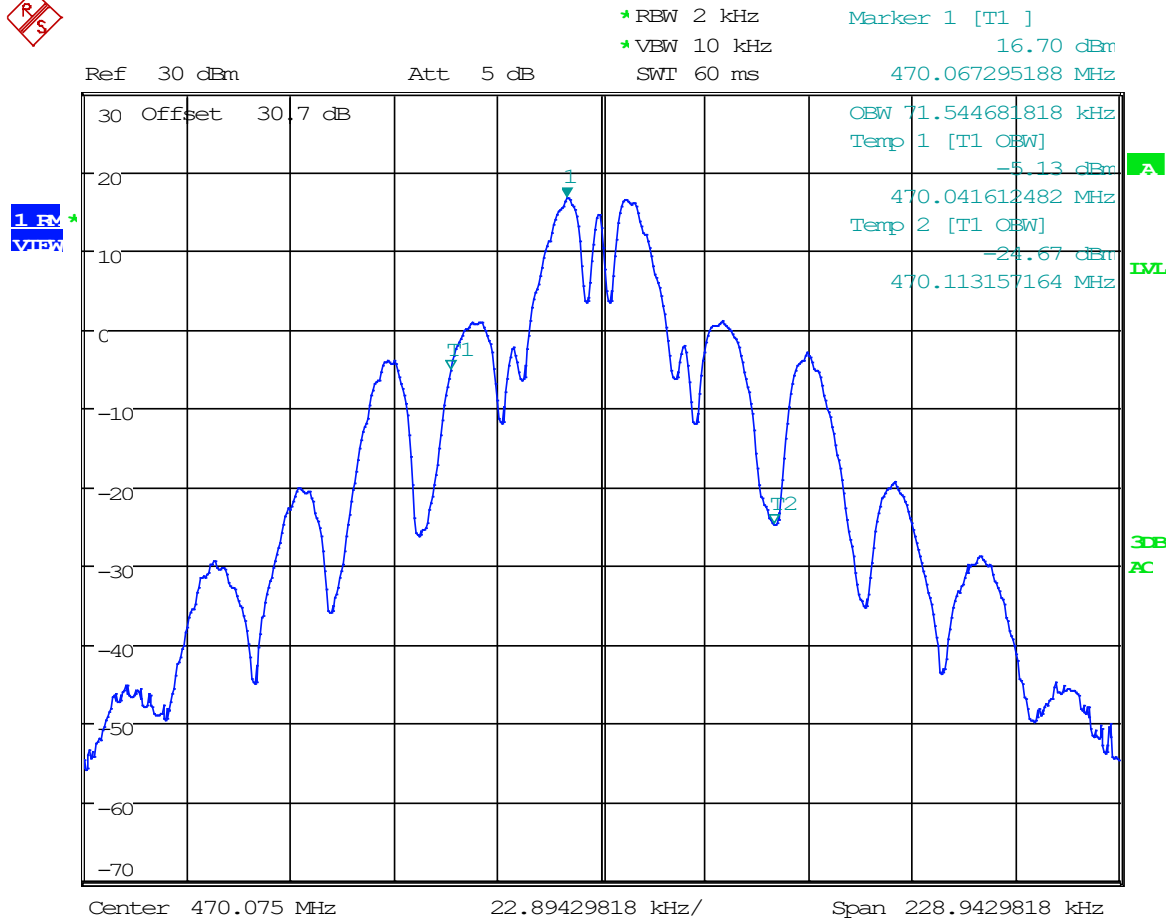
Date: 1.JUN.2023 11:52:43

8.2.4 99% Bandwidth Plot, Mode 1, 653.075 MHz



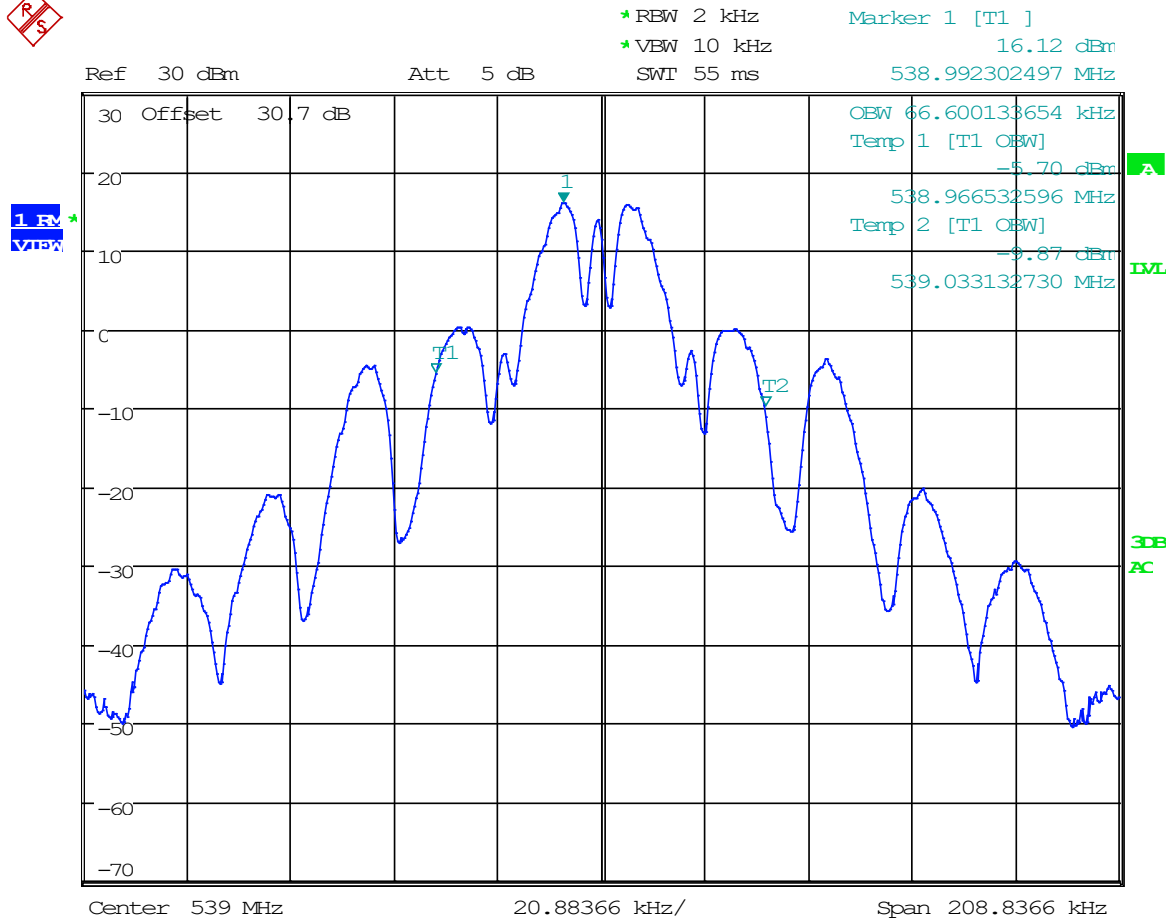
Date: 1.JUN.2023 11:59:15

8.2.5 99% Bandwidth Plot, Mode 2, 470.075 MHz



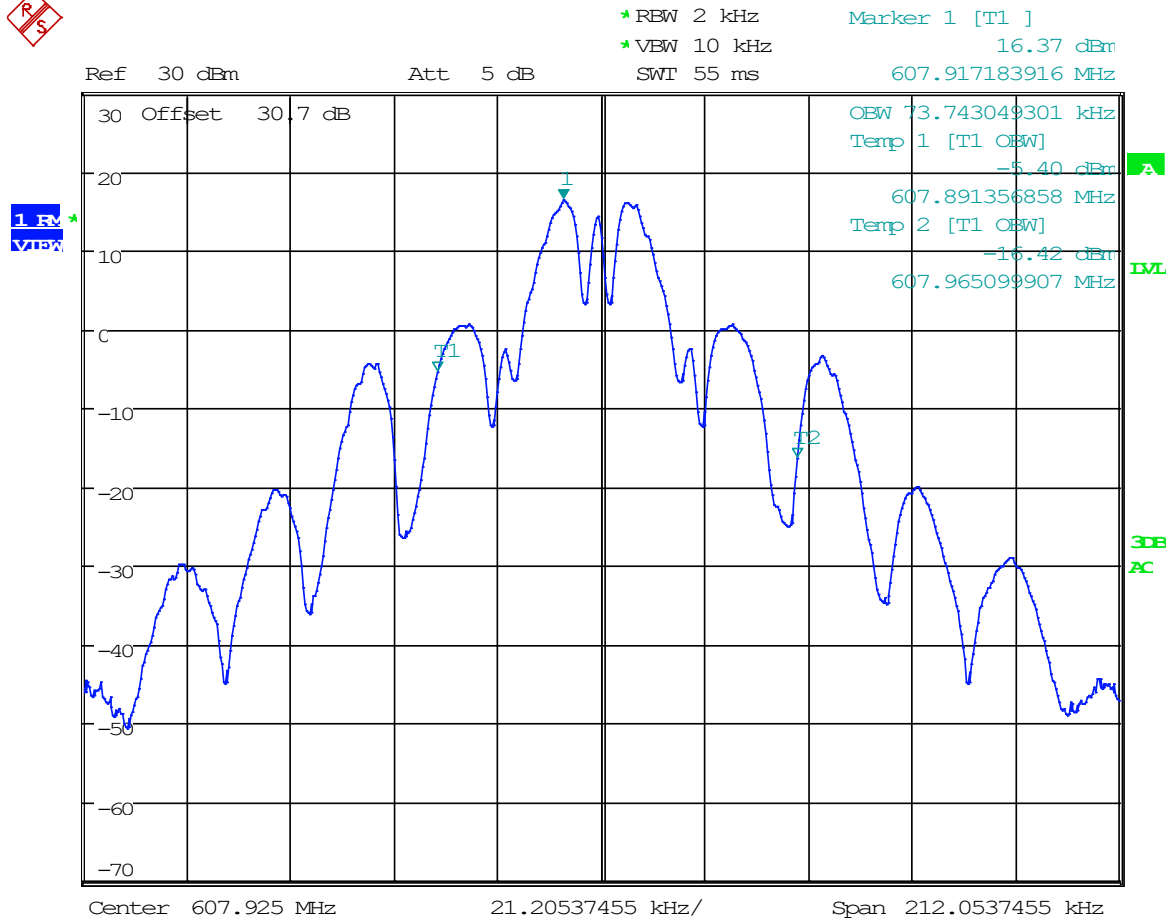
Date: 1.JUN.2023 13:37:07

8.2.6 99% Bandwidth Plot, Mode 2, 539 MHz



Date: 1.JUN.2023 13:41:33

8.2.7 99% Bandwidth Plot, Mode 2, 607.925 MHz



Date: 1.JUN.2023 13:49:45

8.2.8 99% Bandwidth Plot, Mode 2, 653.075 MHz



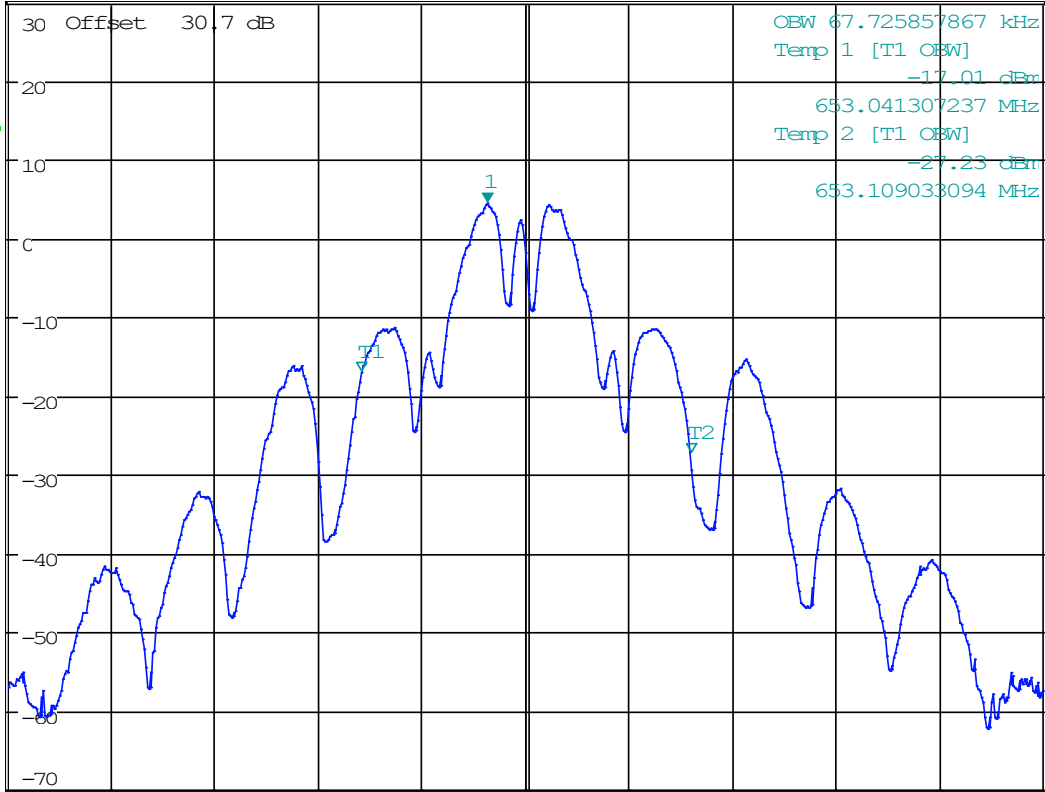
*RBW 2 kHz
 *VBW 10 kHz
 Marker 1 [T1]
 4.41 dBm
 653.067172388 MHz

Ref 30 dBm

Att 5 dB

SWT 55 ms

653.067172388 MHz



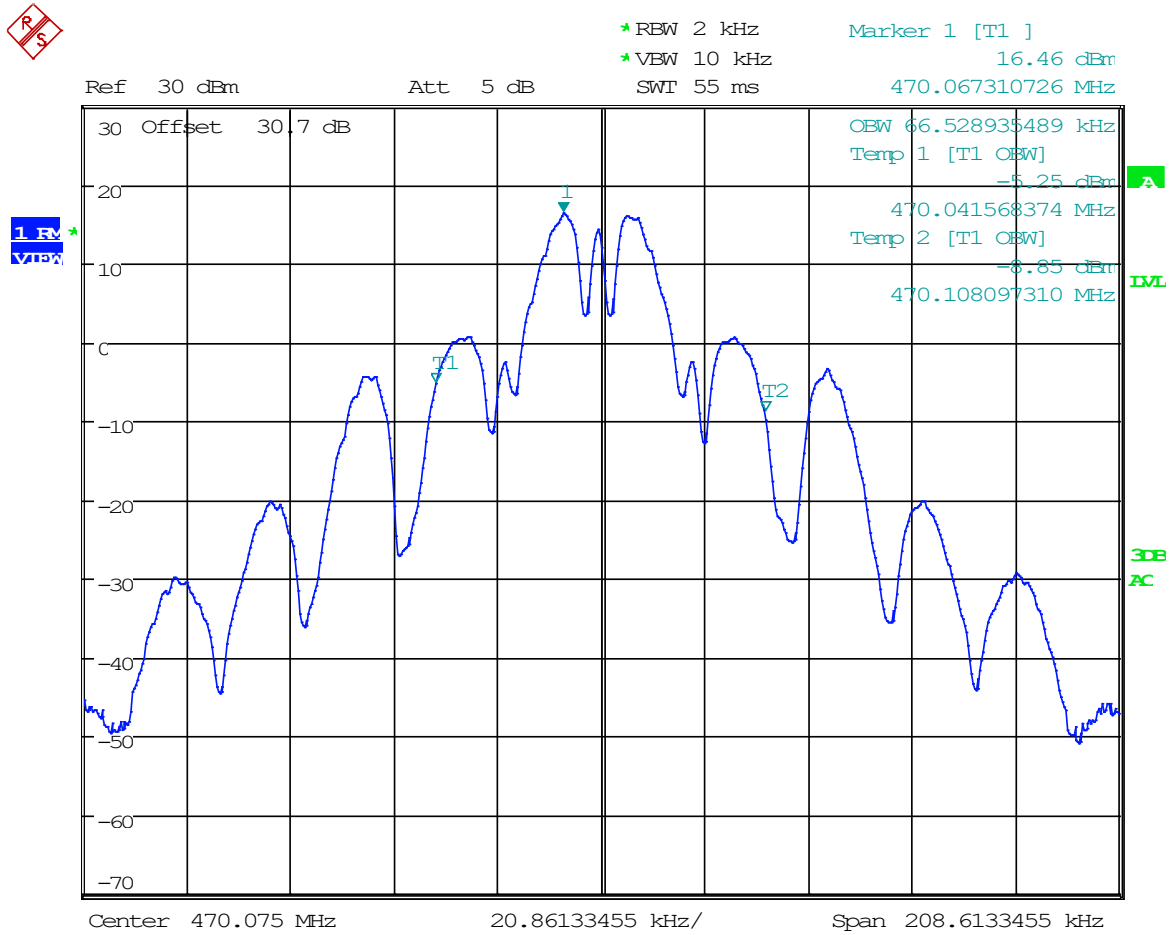
Center 653.075 MHz

21.23665091 kHz/

Span 212.3665091 kHz

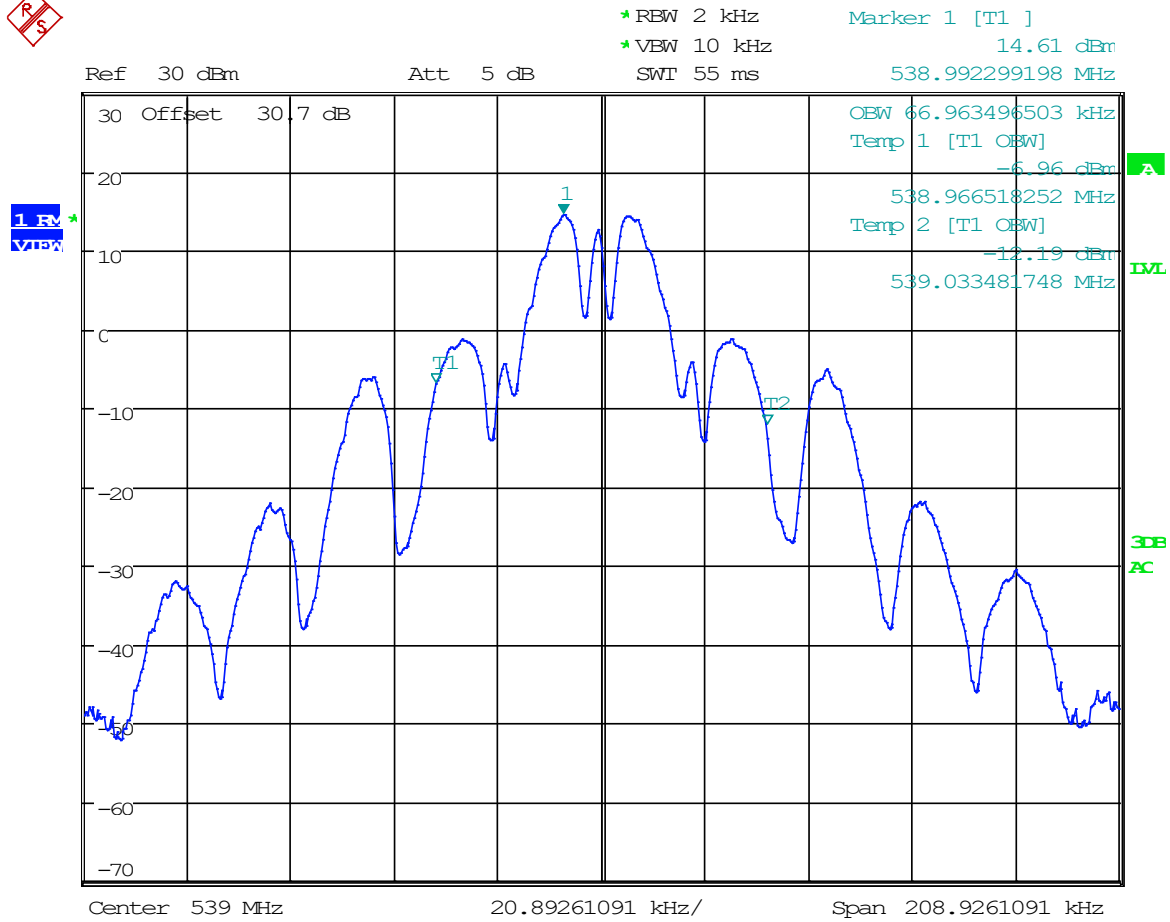
Date: 1.JUN.2023 13:54:04

8.2.9 99% Bandwidth Plot, Mode 3, 470.075 MHz



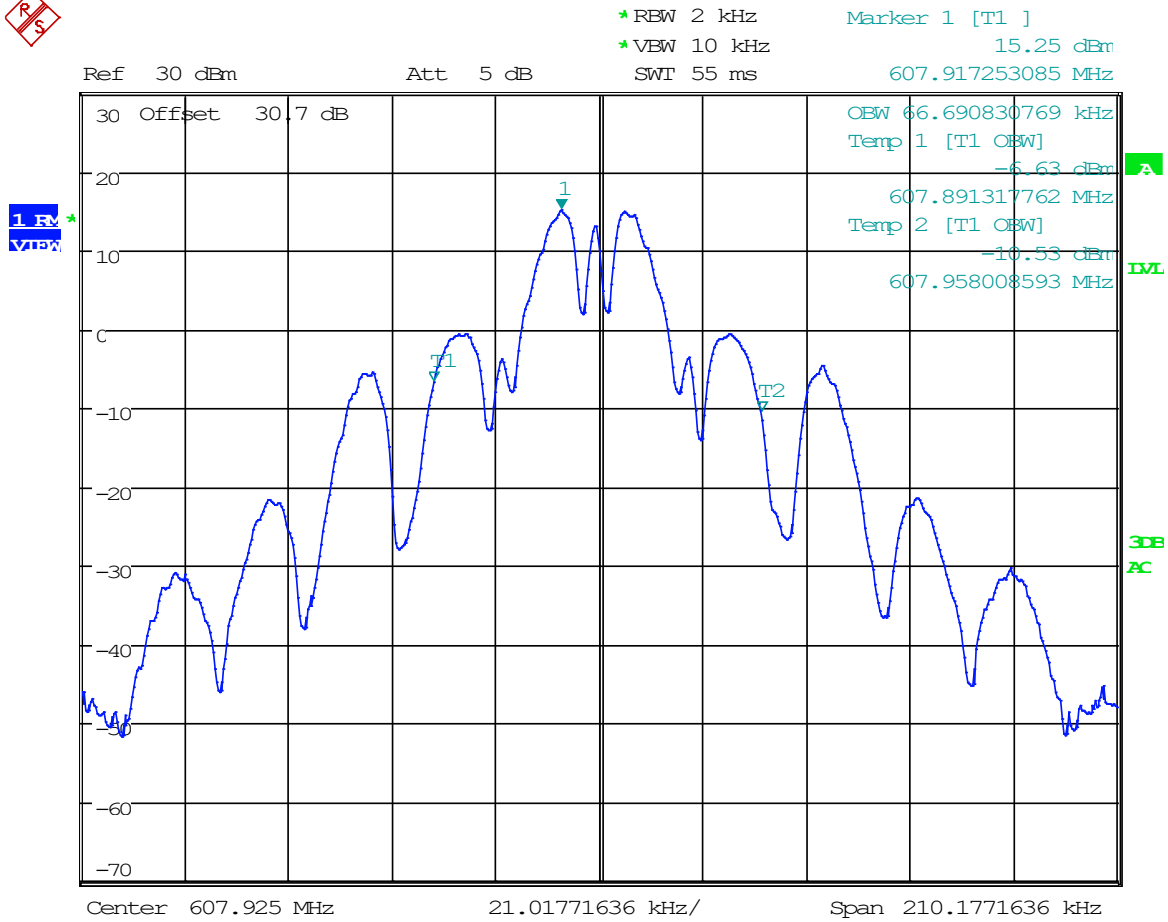
Date: 1.JUN.2023 15:00:41

8.2.10 99% Bandwidth Plot, Mode 3, 539 MHz



Date: 1.JUN.2023 15:02:55

8.2.11 99% Bandwidth Plot, Mode 3, 607.925 MHz

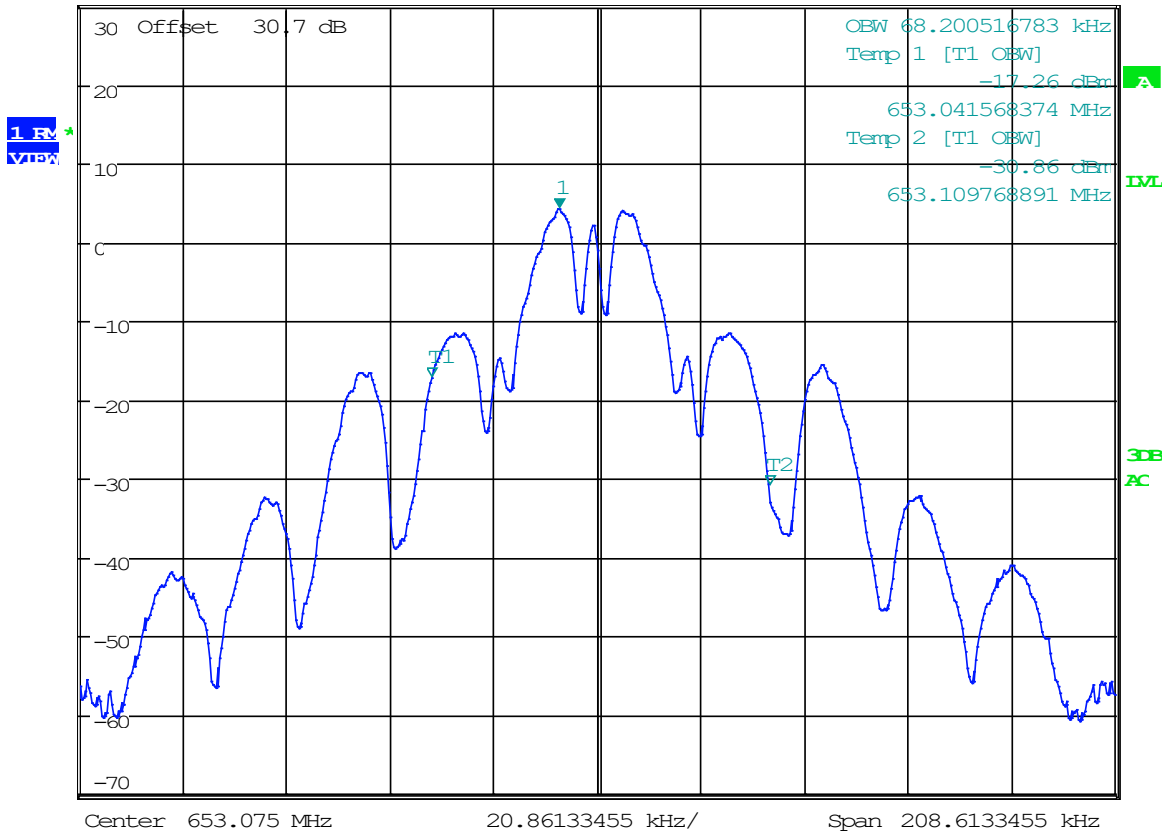


Date: 1.JUN.2023 15:07:21

8.2.12 99% Bandwidth Plot, Mode 3, 653.075 MHz

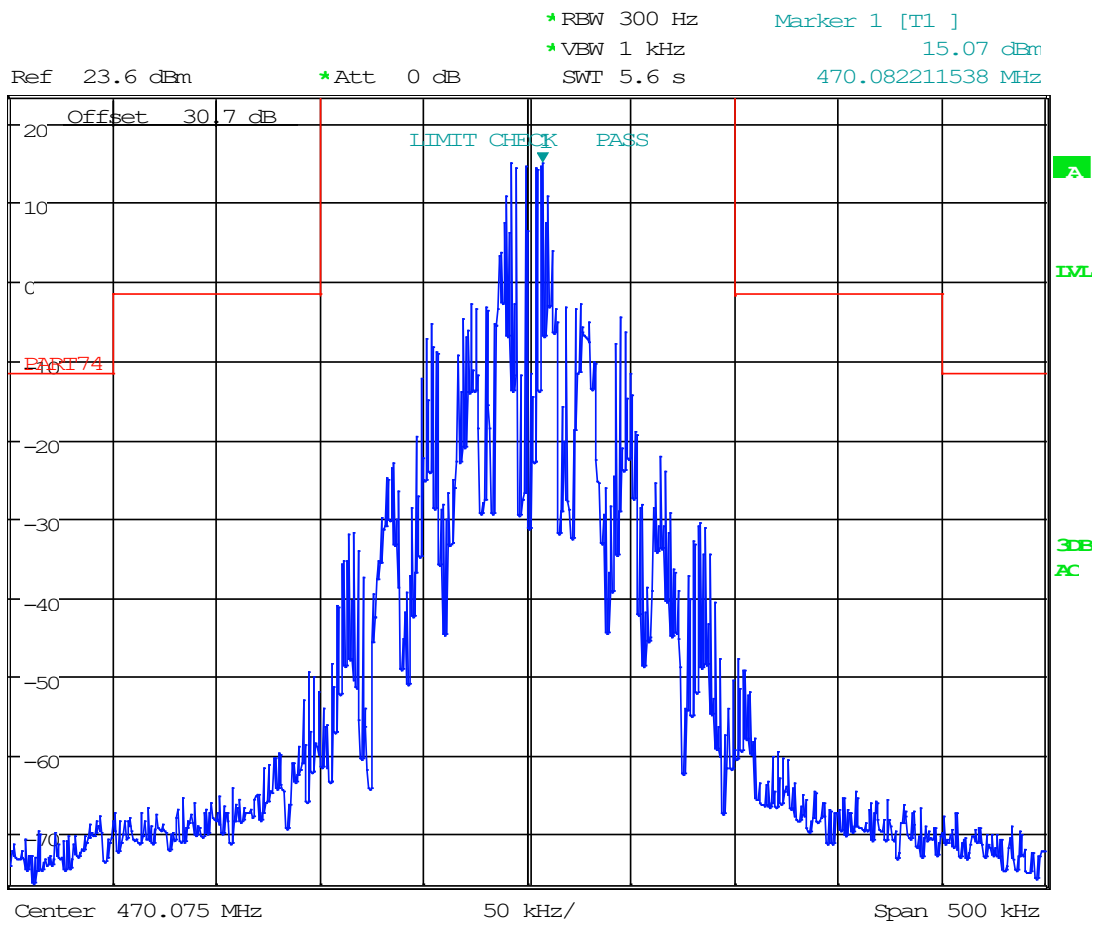


*RBW 2 kHz Marker 1 [T1]
 *VBW 10 kHz 4.23 dBm
 Ref 30 dBm Att 5 dB SWT 55 ms 653.067310726 MHz



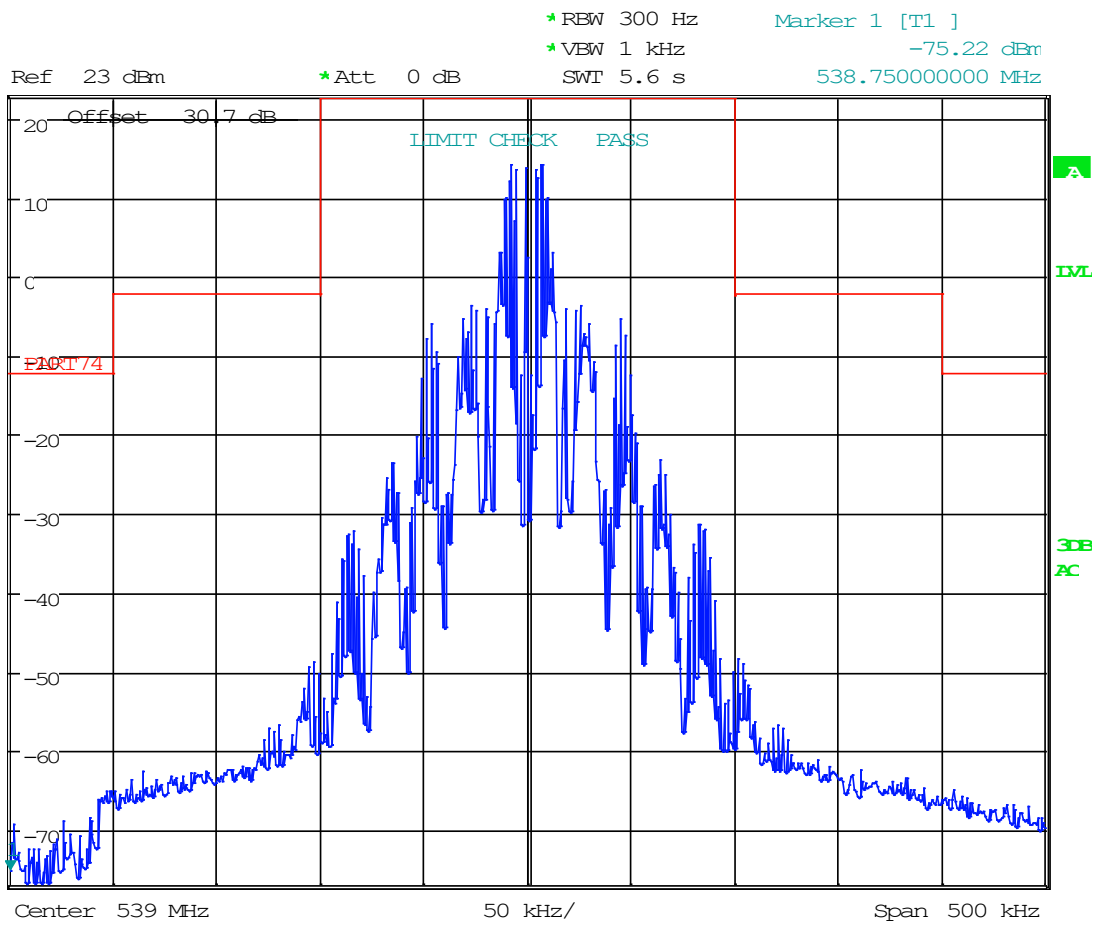
Date: 1.JUN.2023 15:13:57

8.2.13 Emission Mask Plot, Part 74, Mode 1, 470.075 MHz



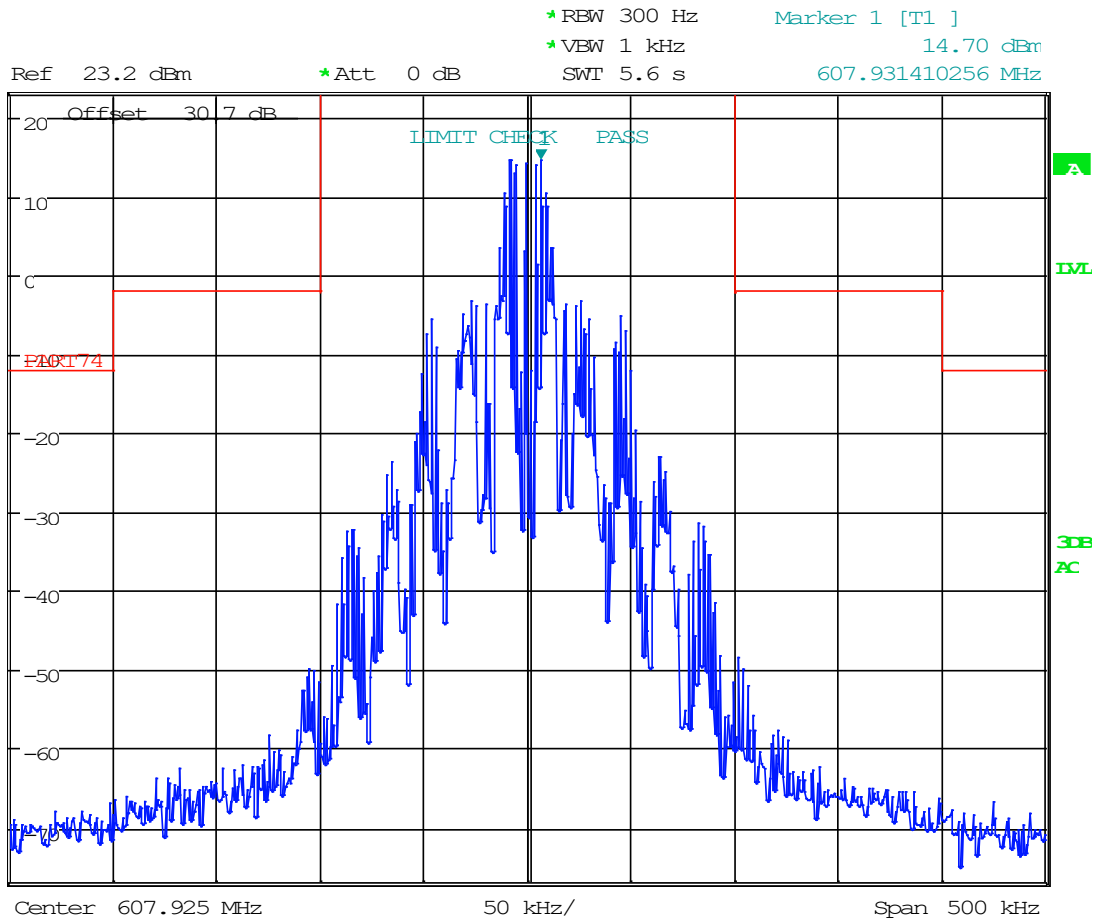
Date: 1.JUN.2023 10:37:30

8.2.14 Emission Mask Plot, Part 74, Mode 1, 539 MHz



Date: 1.JUN.2023 10:46:51

8.2.15 Emission Mask Plot, Part 74, Mode 1, 607.925 MHz

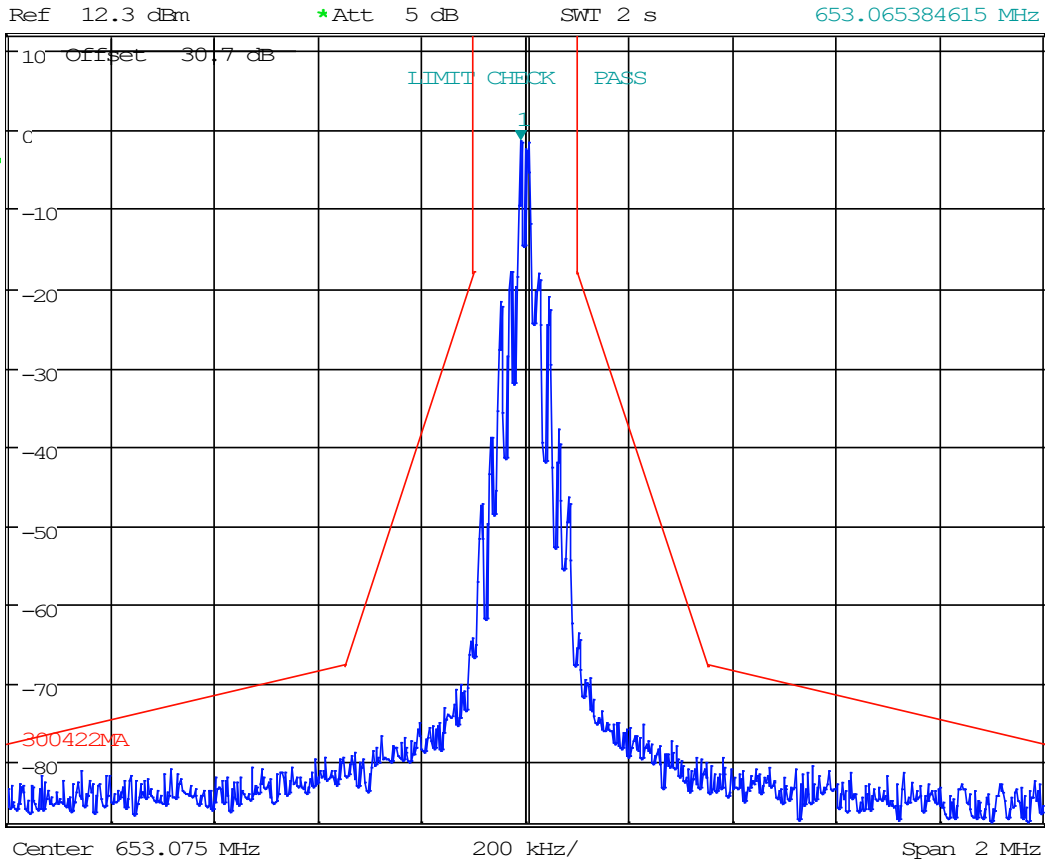


Date: 1.JUN.2023 10:48:16

8.2.16 Emission Mask Plot, 300 422, Mode 1, 653.075 MHz

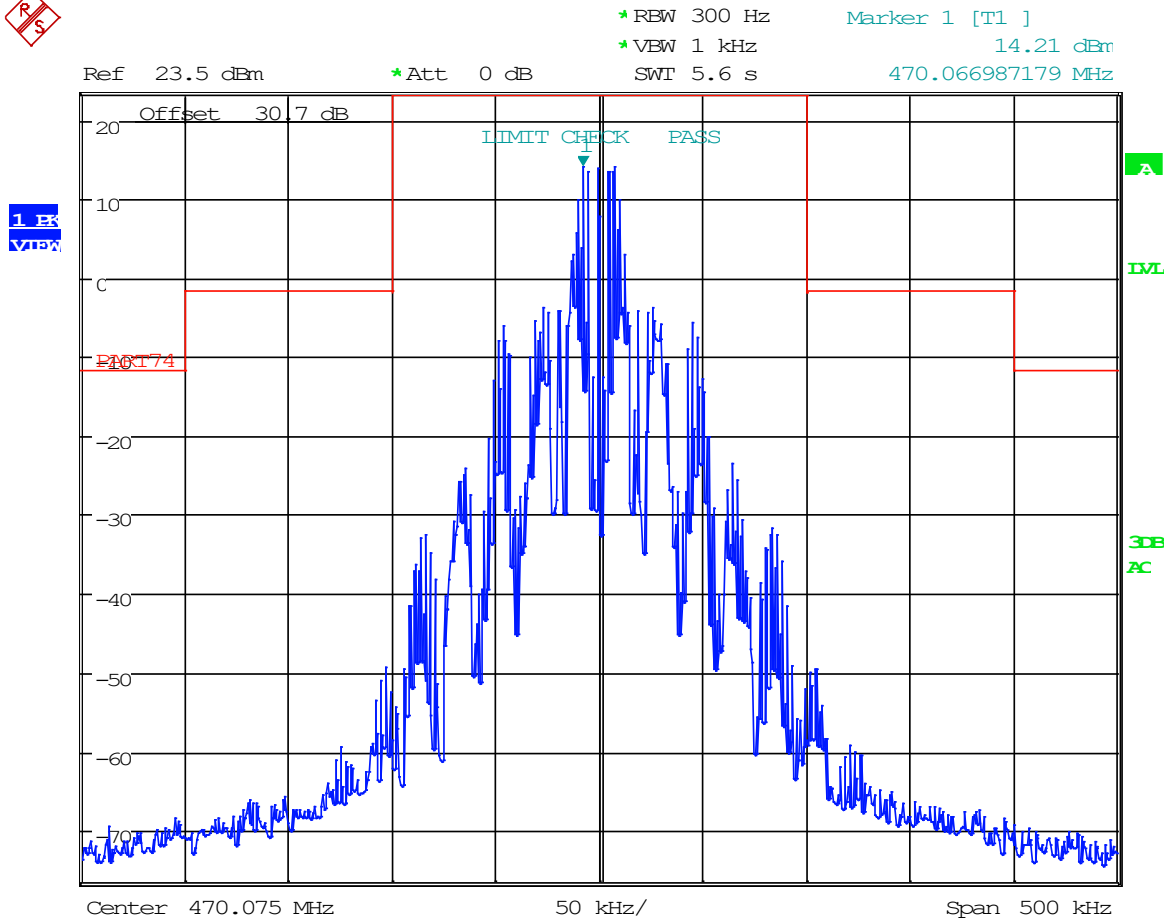


*RBW 1 kHz Marker 1 [T1]
 *VBW 1 kHz -1.30 dBm
 653.065384615 MHz



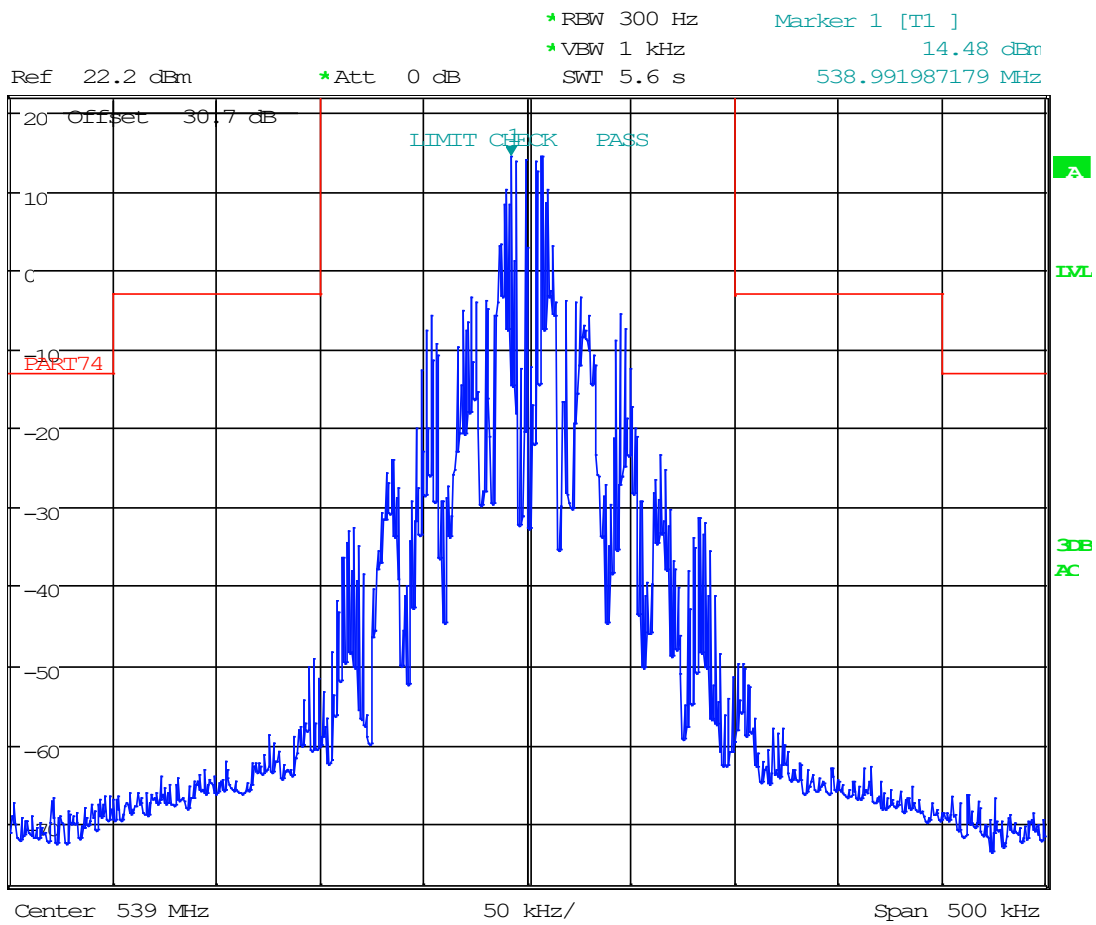
Date: 1.JUN.2023 11:22:50

8.2.17 Emission Mask Plot, Part 74, Mode 2, 470.075 MHz



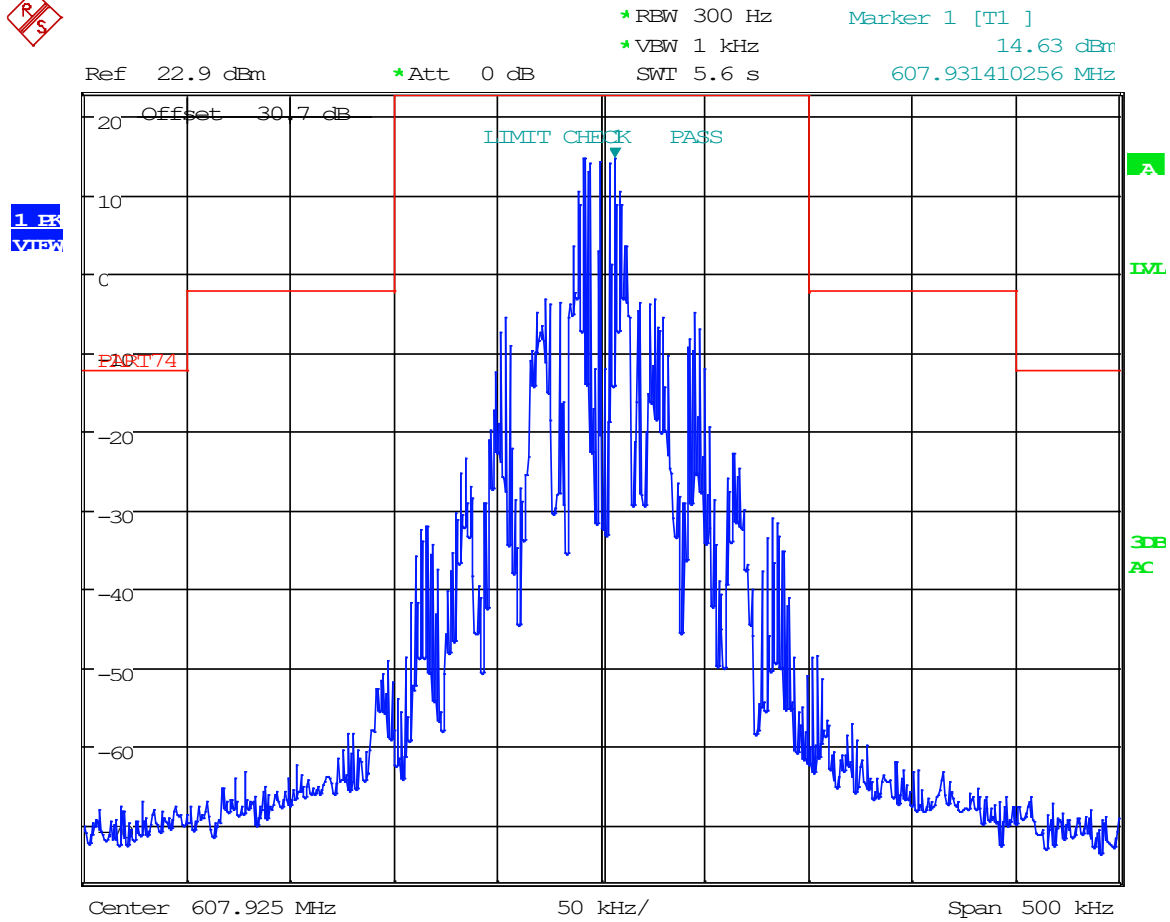
Date: 1.JUN.2023 14:13:07

8.2.18 Emission Mask Plot, Part 74, Mode 2, 539 MHz



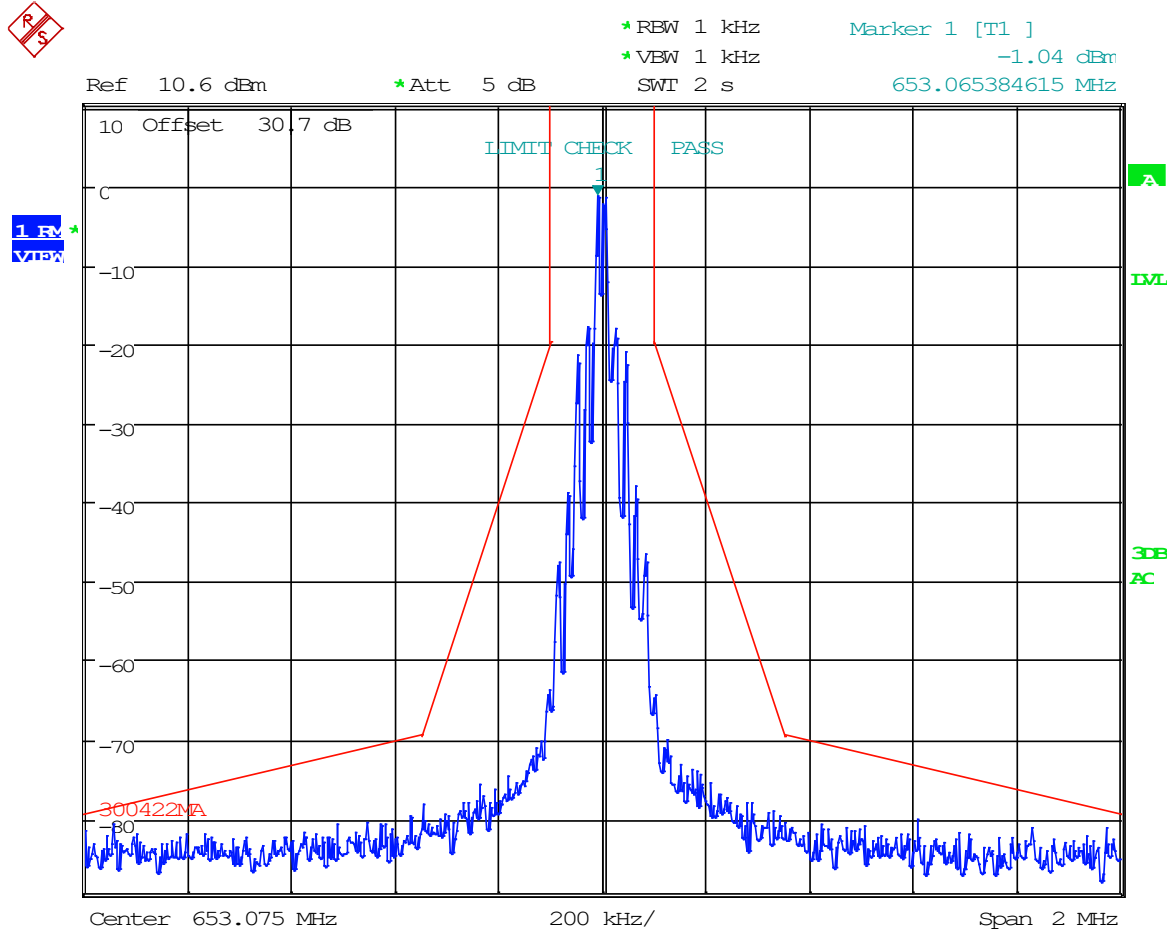
Date: 1.JUN.2023 14:14:27

8.2.19 Emission Mask Plot, Part 74, Mode 2, 607.925 MHz



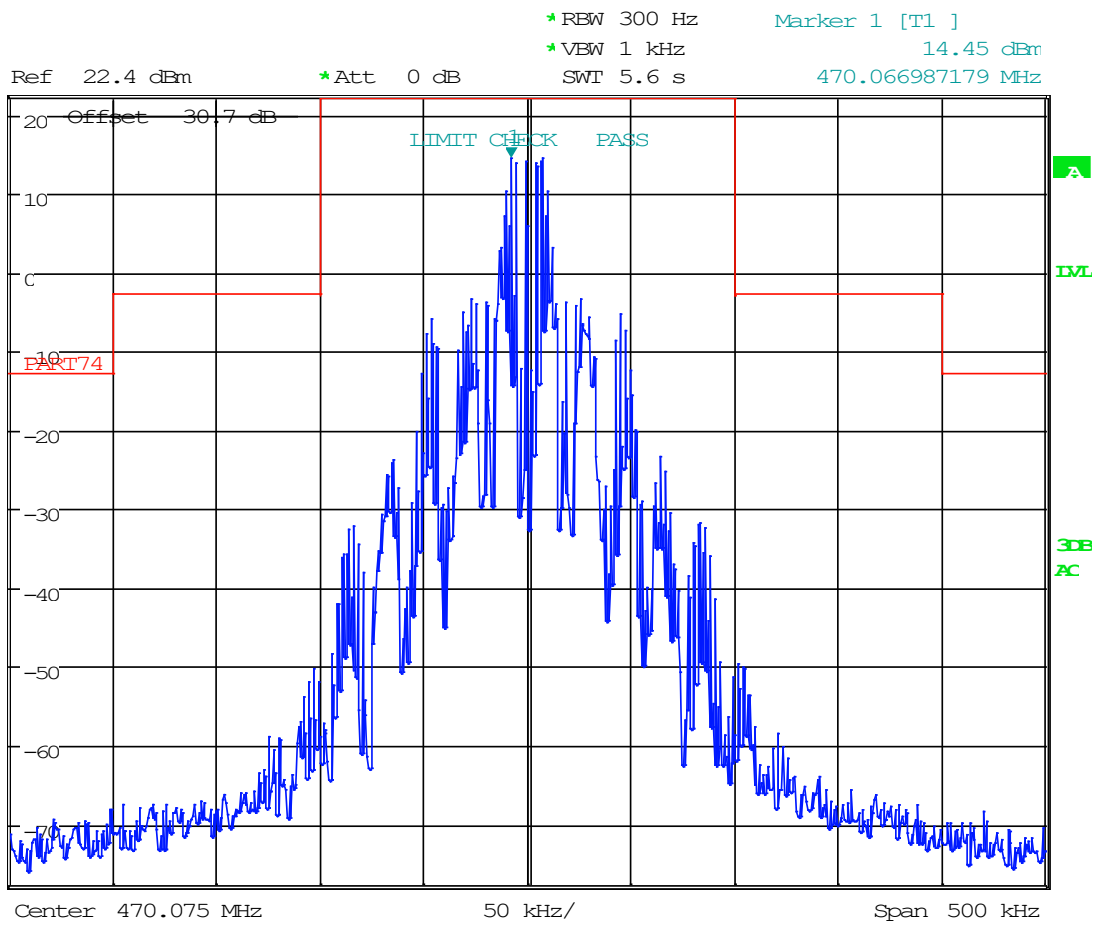
Date: 1.JUN.2023 14:41:57

8.2.20 Emission Mask Plot, 300 422, Mode 2, 653.075 MHz



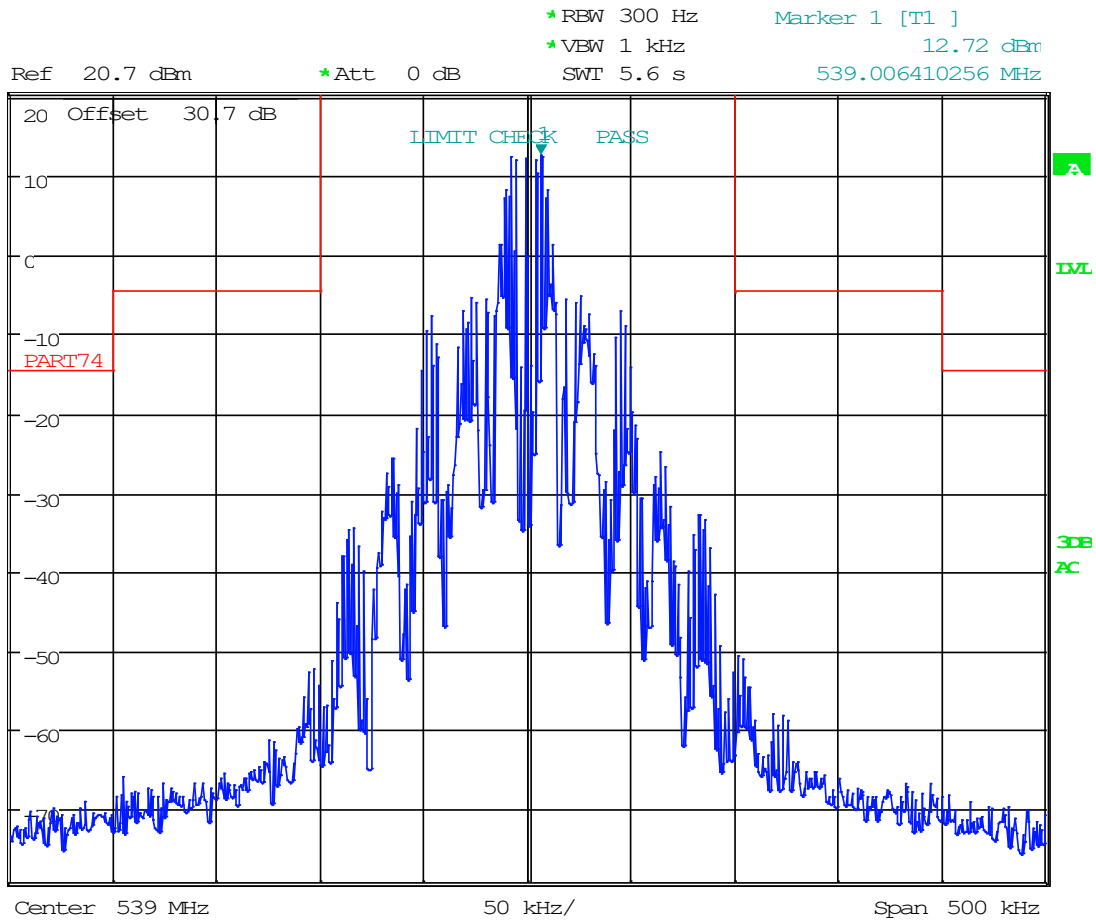
Date: 1.JUN.2023 14:08:56

8.2.21 Emission Mask Plot, Part 74, Mode 3, 470.075 MHz



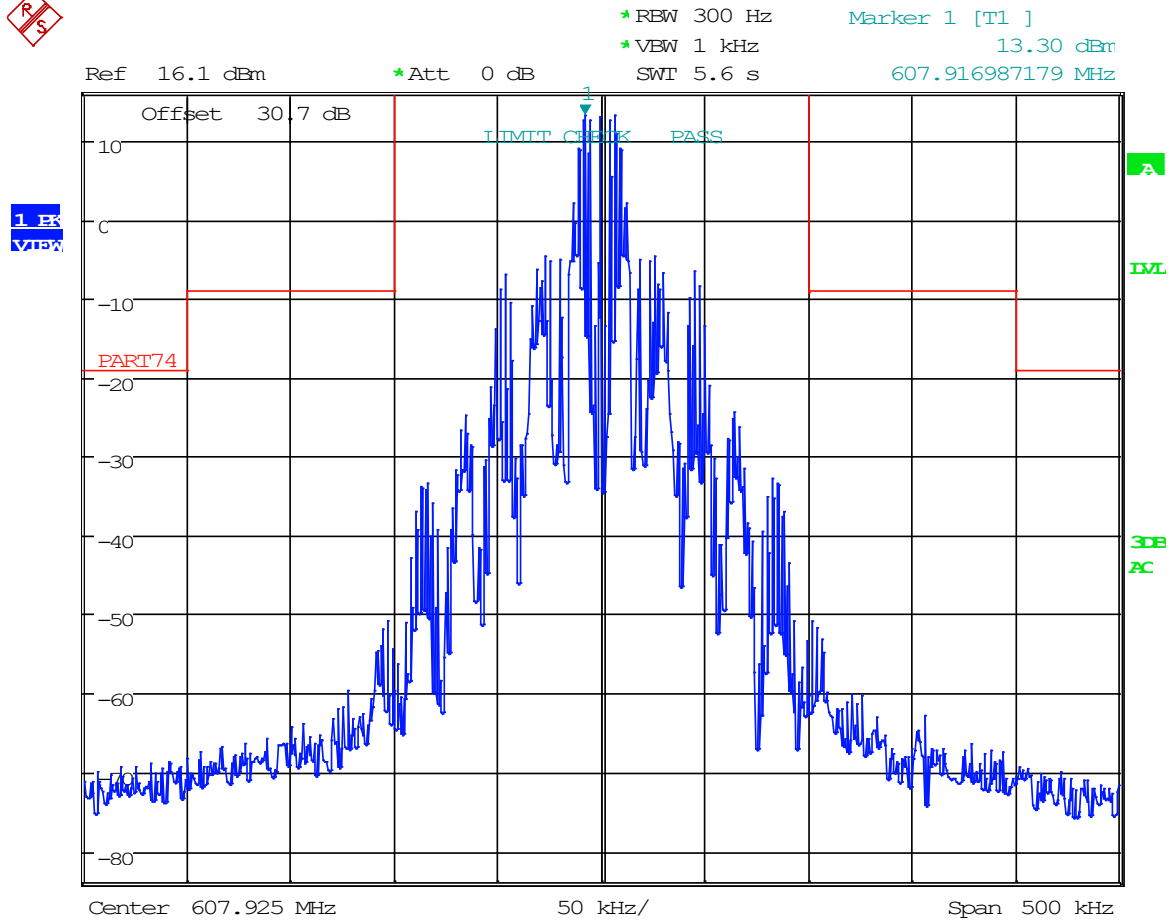
Date: 1.JUN.2023 15:45:31

8.2.22 Emission Mask Plot, Part 74, Mode 3, 539 MHz



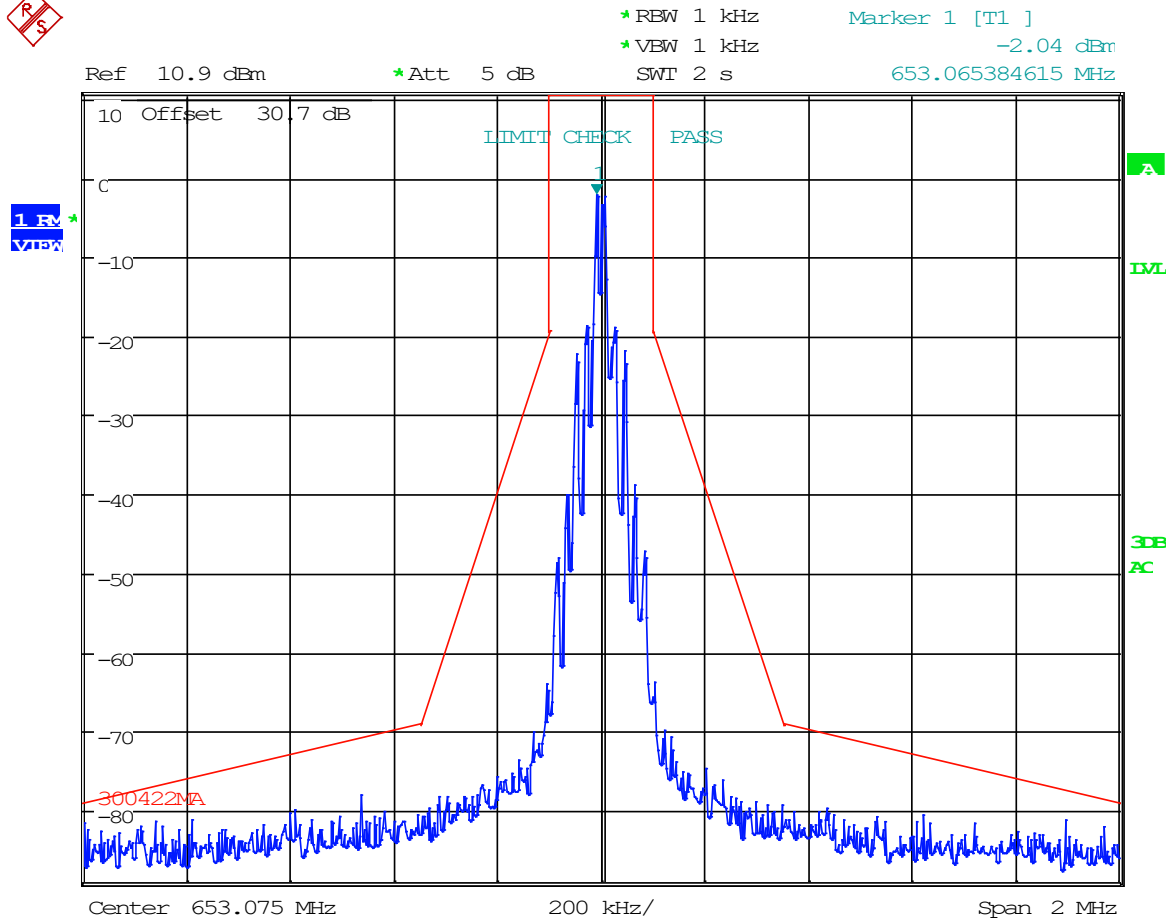
Date: 1.JUN.2023 15:46:49

8.2.23 Emission Mask Plot, Part 74, Mode 3, 607.925 MHz



Date: 1.JUN.2023 15:48:20

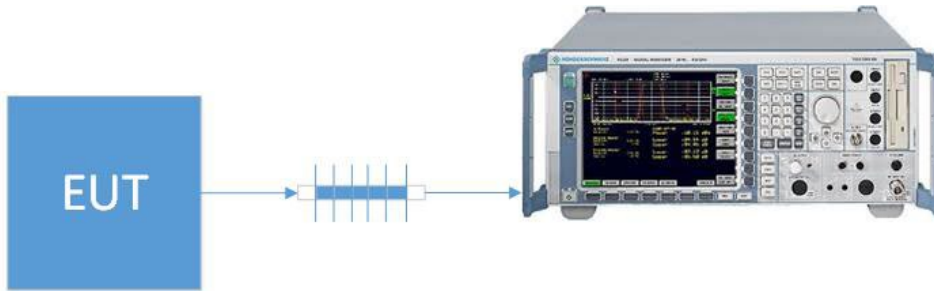
8.2.24 Emission Mask Plot, 300 422, Mode 3, 653.075 MHz



Date: 1.JUN.2023 15:36:09

8.3 Spurious Emissions at antenna terminals (Conducted)

Limits from 2.1051(a), 74.861(e)(6)(iii) and test procedure from ANSI C63.26 and KDB 206256 D01 Wireless Microphone Certification.

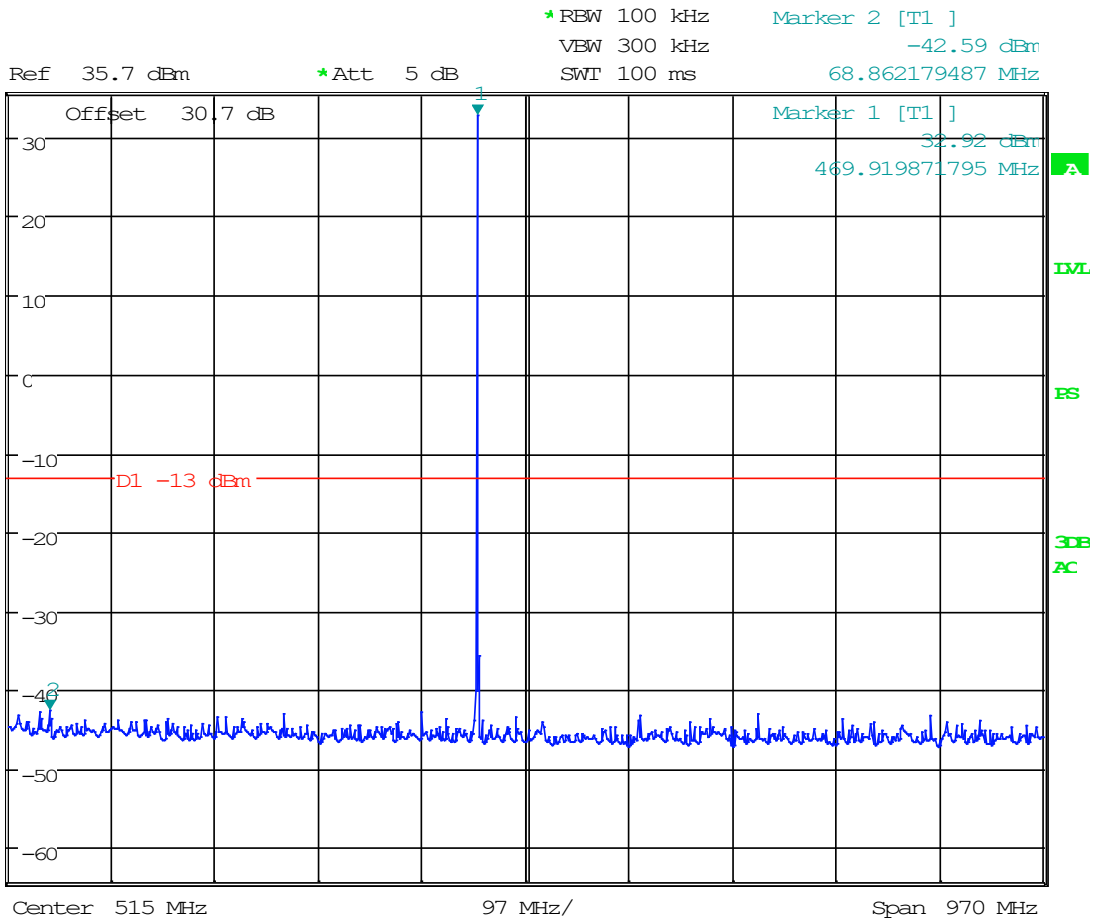


Mode (#)
1 (4:1)
2 (8:1)
3 (16:1)

8.3.1 Conducted Emissions Below 1G, Mode 1, 470.075 MHz

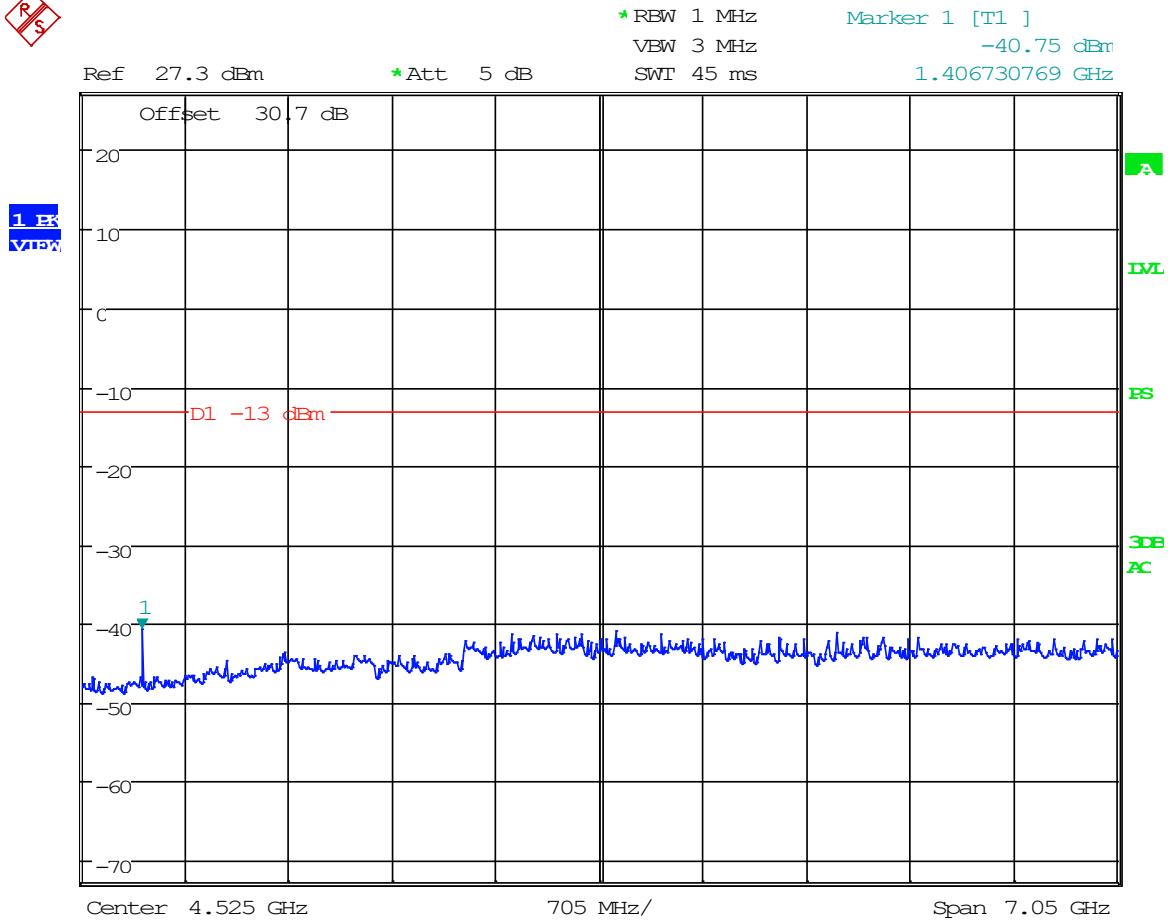


1 BK
VTPW



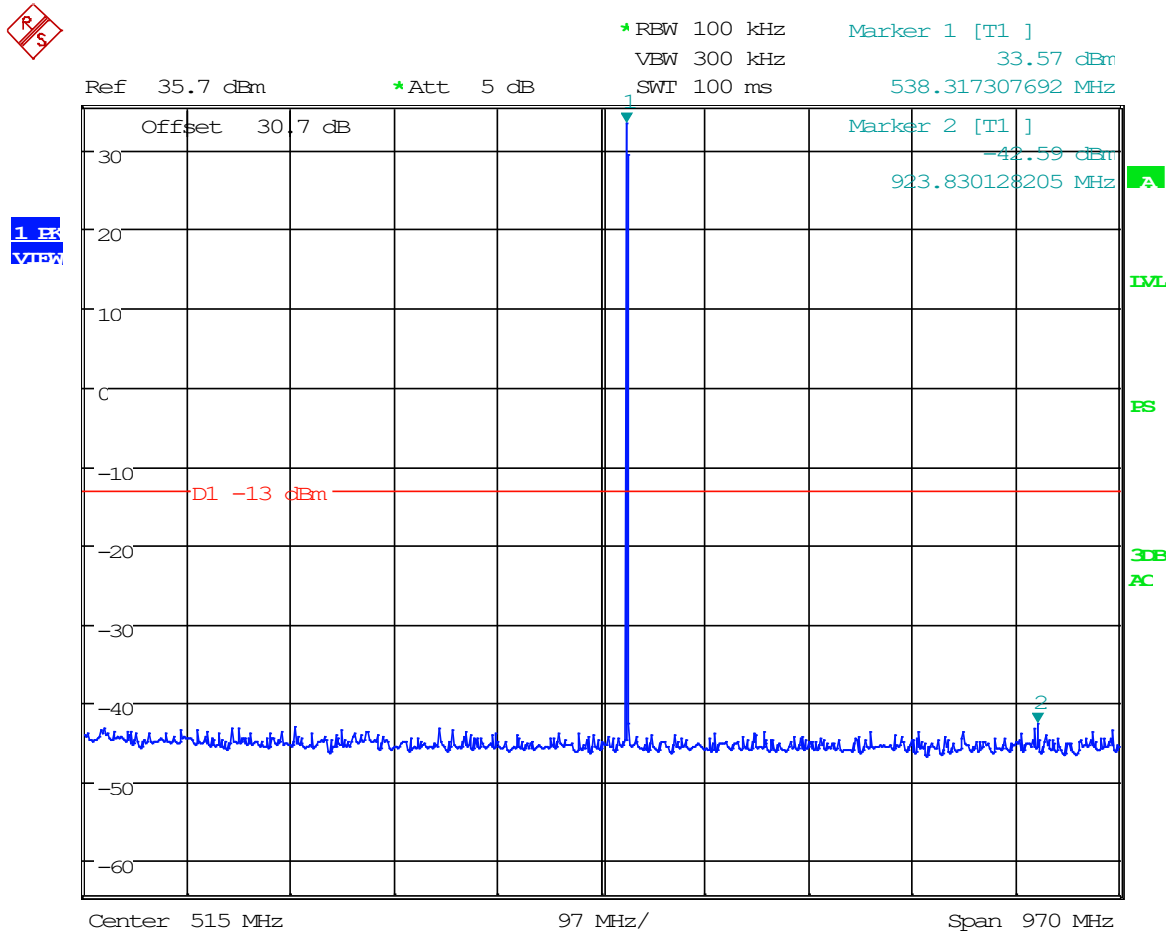
Date: 31.MAY.2023 13:41:13

8.3.2 Conducted Emissions Above 1G, Mode 1, 470.075 MHz



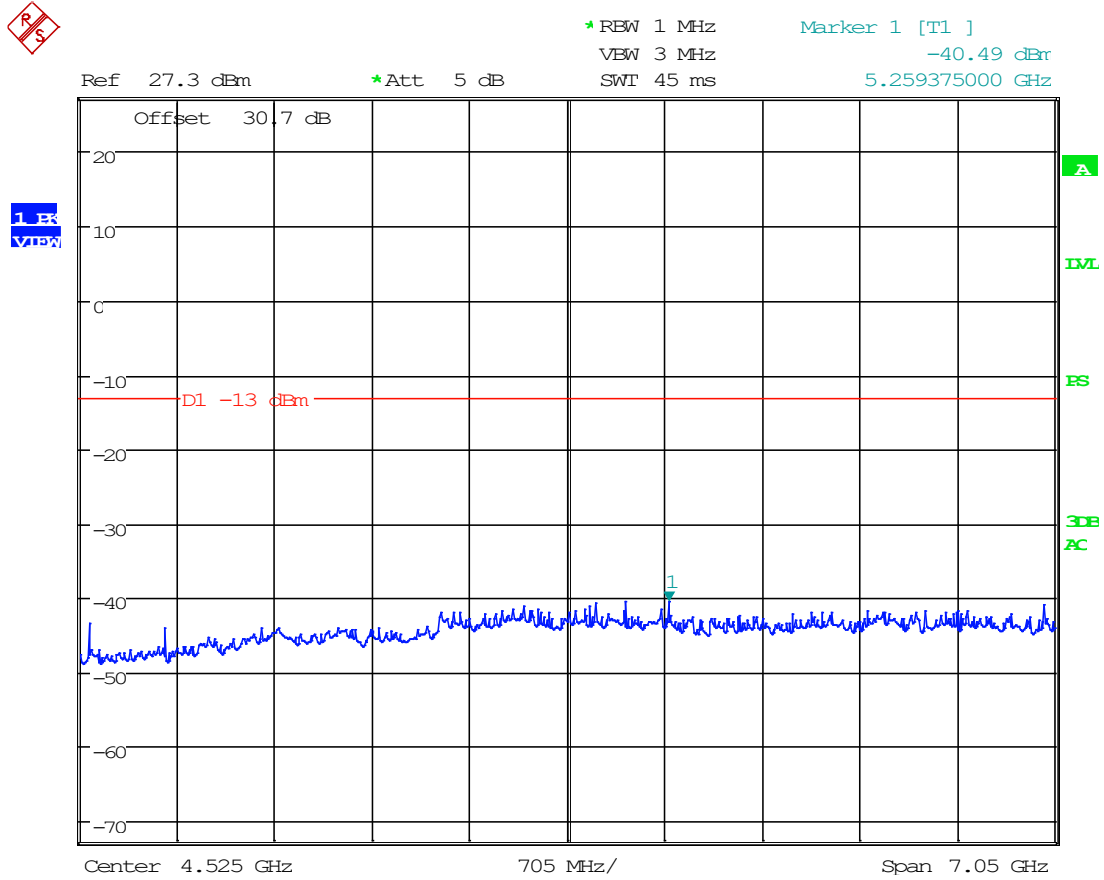
Date: 31.MAY.2023 13:51:03

8.3.3 Conducted Emissions Below 1G, Mode 1, 539 MHz



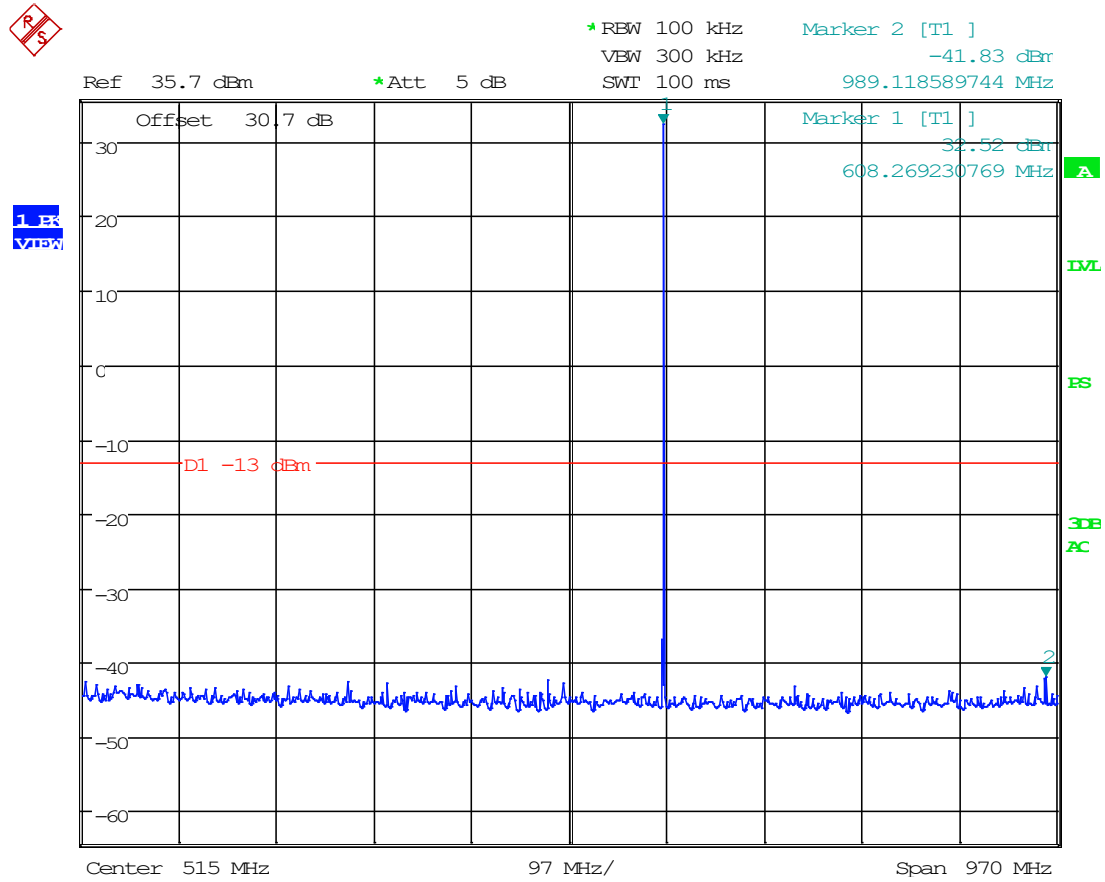
Date: 31.MAY.2023 13:43:11

8.3.4 Conducted Emissions Above 1G, Mode 1, 539 MHz



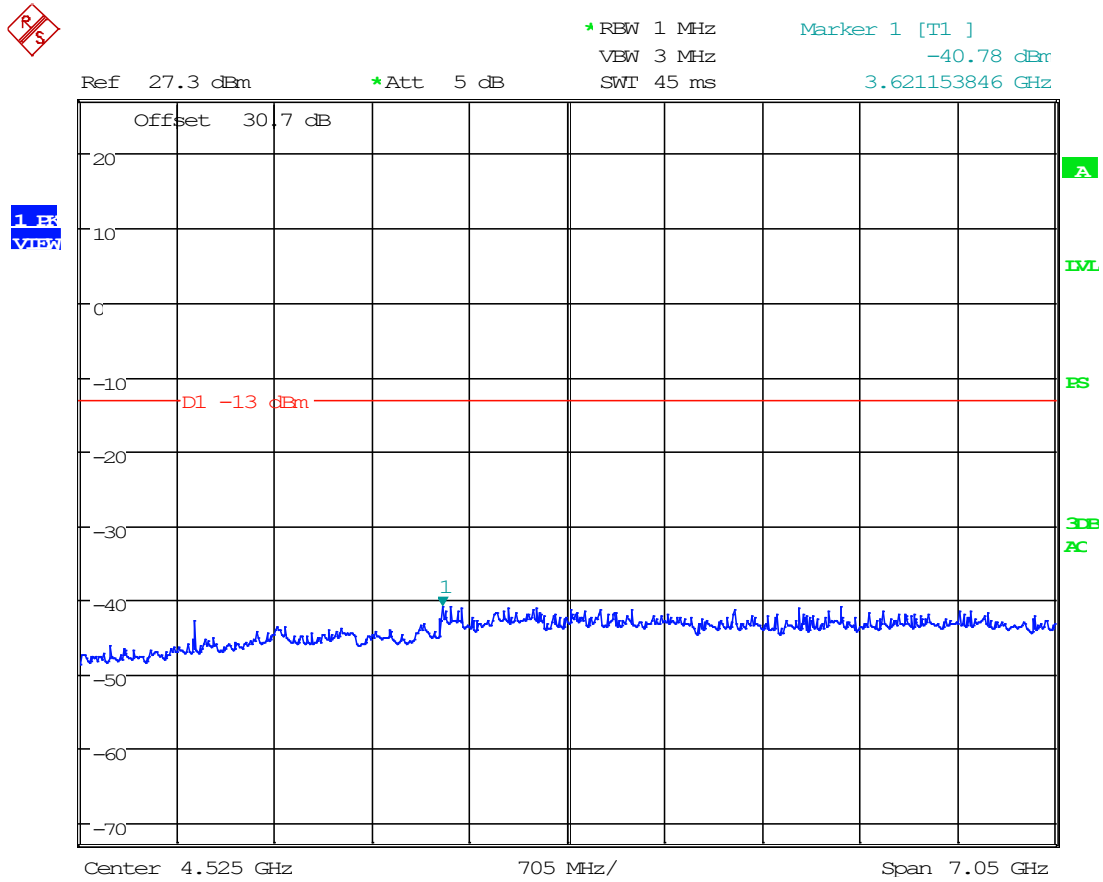
Date: 31.MAY.2023 13:51:56

8.3.5 Conducted Emissions Below 1G, Mode 1, 607.925 MHz



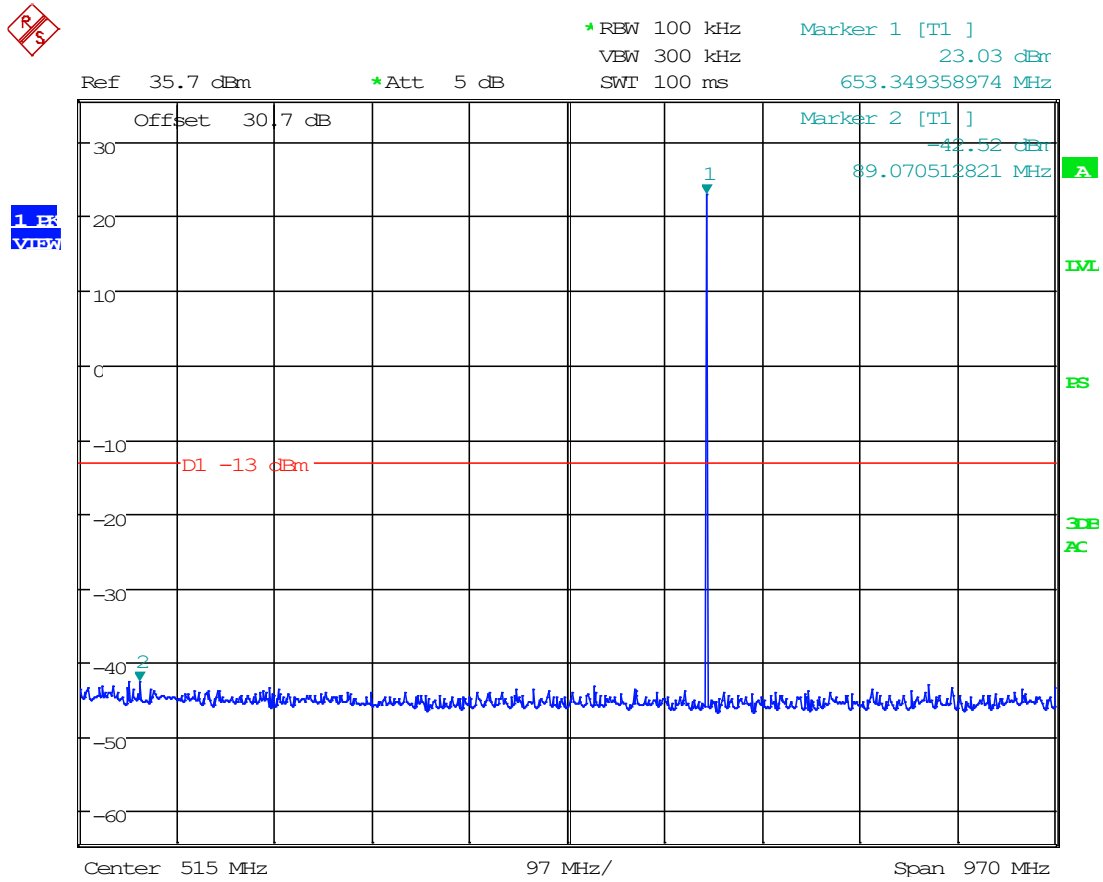
Date: 31.MAY.2023 13:44:15

8.3.6 Conducted Emissions Above 1G, Mode 1, 607.925 MHz



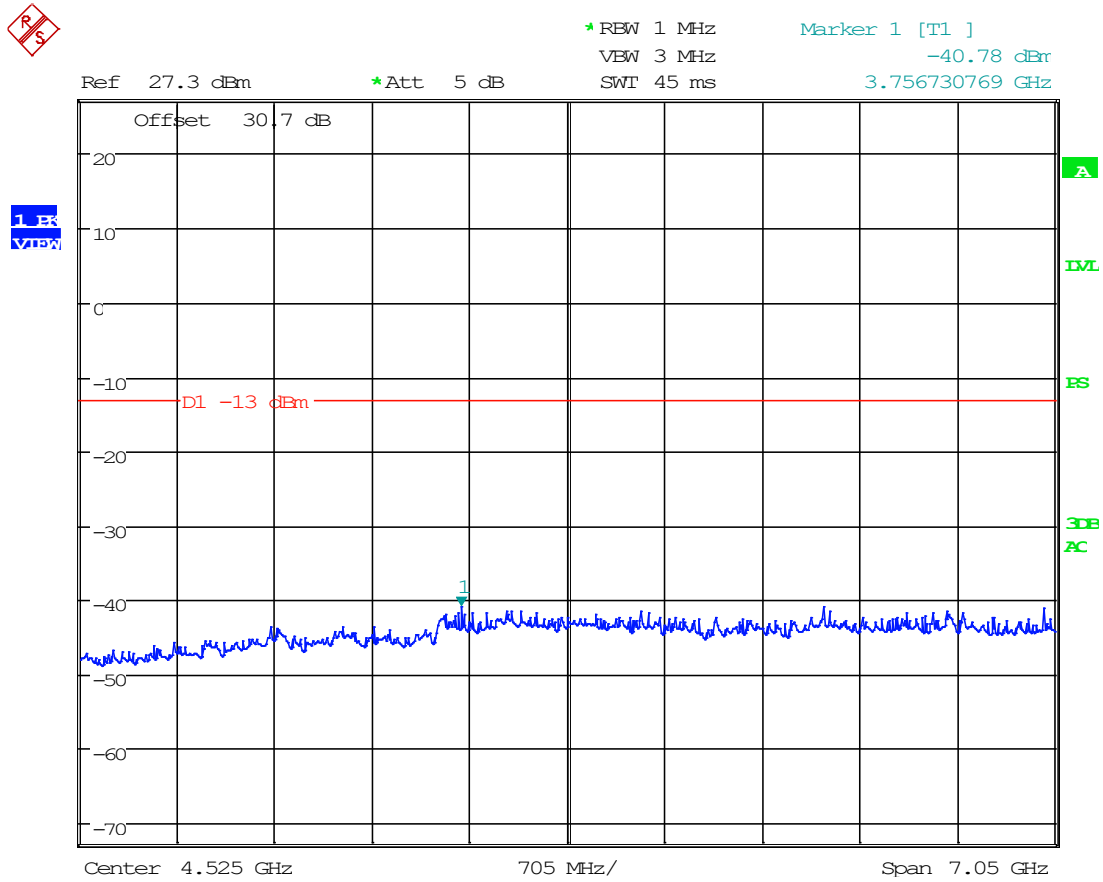
Date: 31.MAY.2023 13:53:42

8.3.7 Conducted Emissions Below 1G, Mode 1, 653.075 MHz



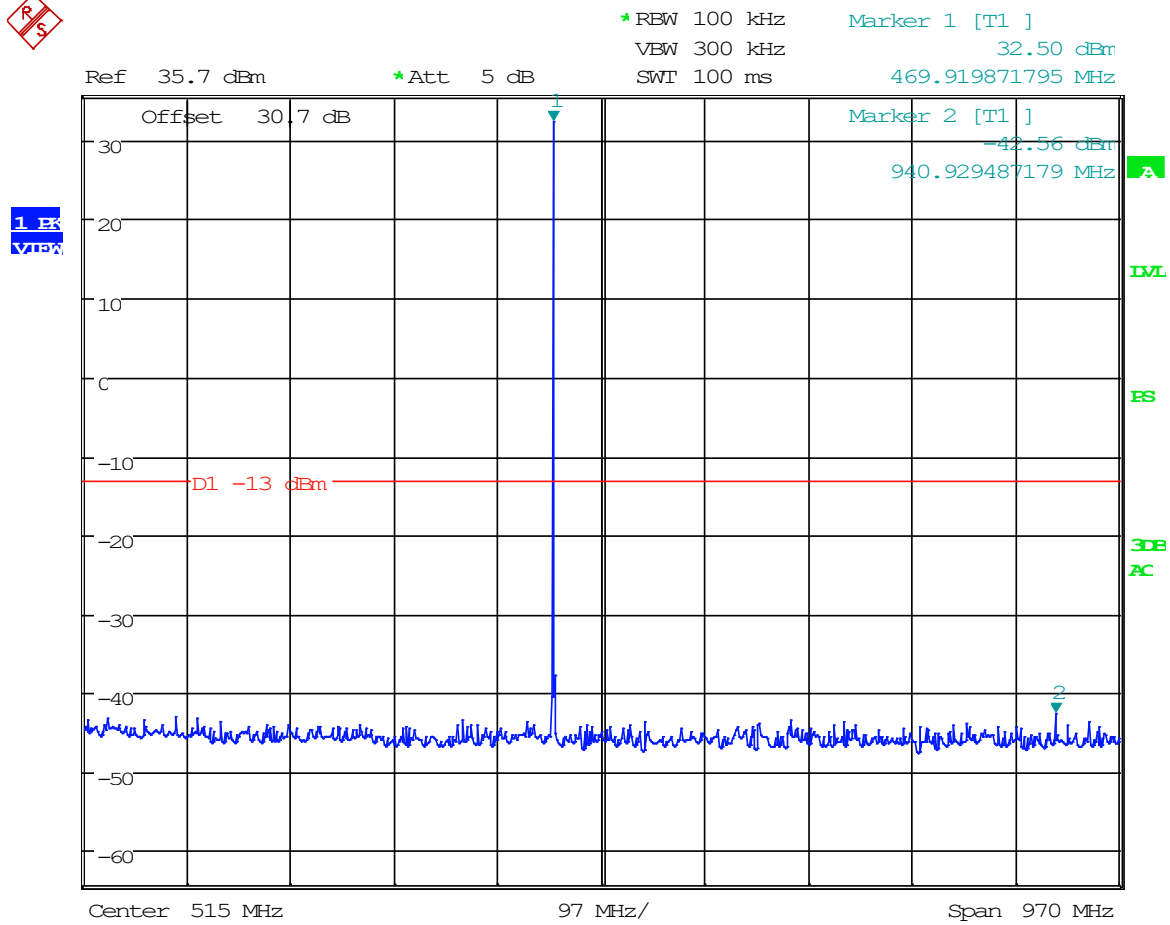
Date: 31.MAY.2023 13:47:32

8.3.8 Conducted Emissions Above 1G, Mode 1, 653.075 MHz



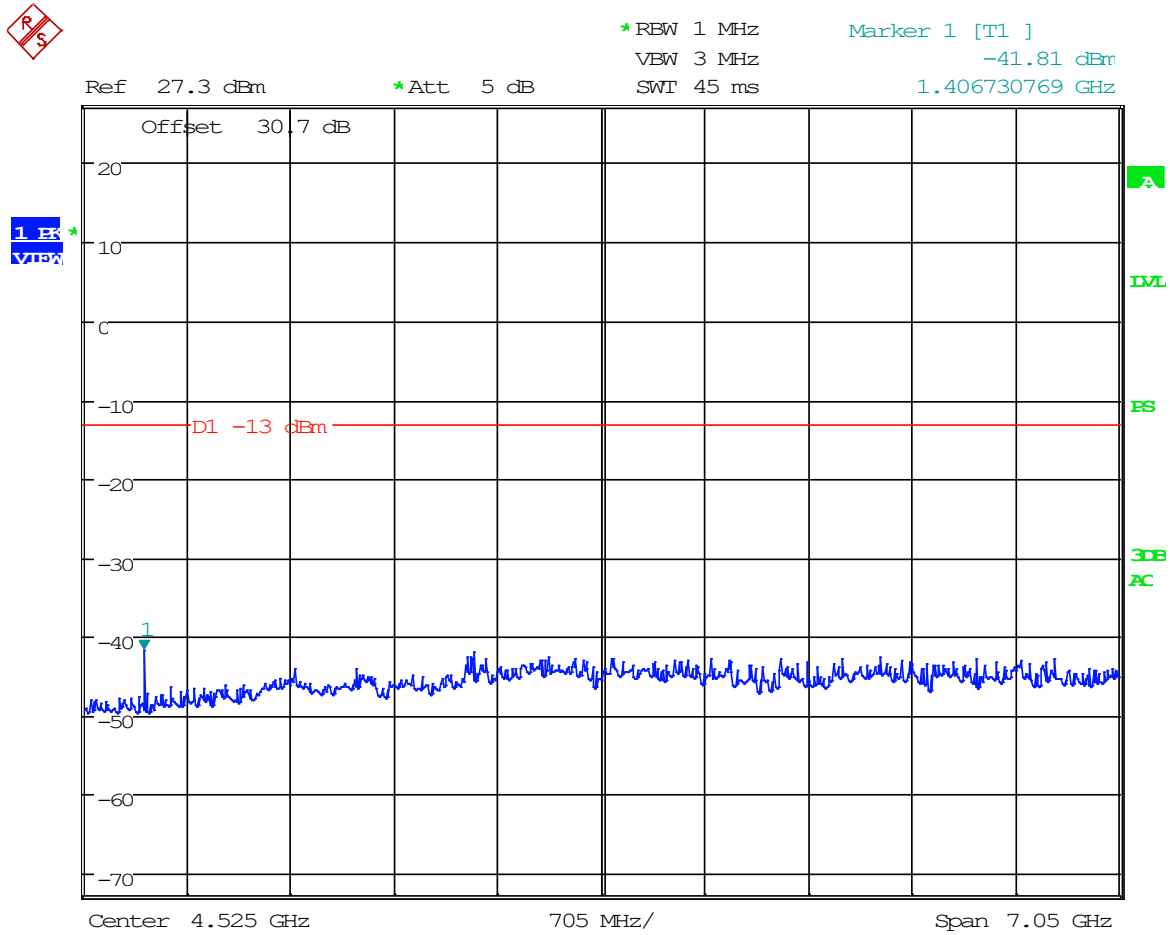
Date: 31.MAY.2023 13:56:28

8.3.9 Conducted Emissions Below 1G, Mode 2, 470.075 MHz



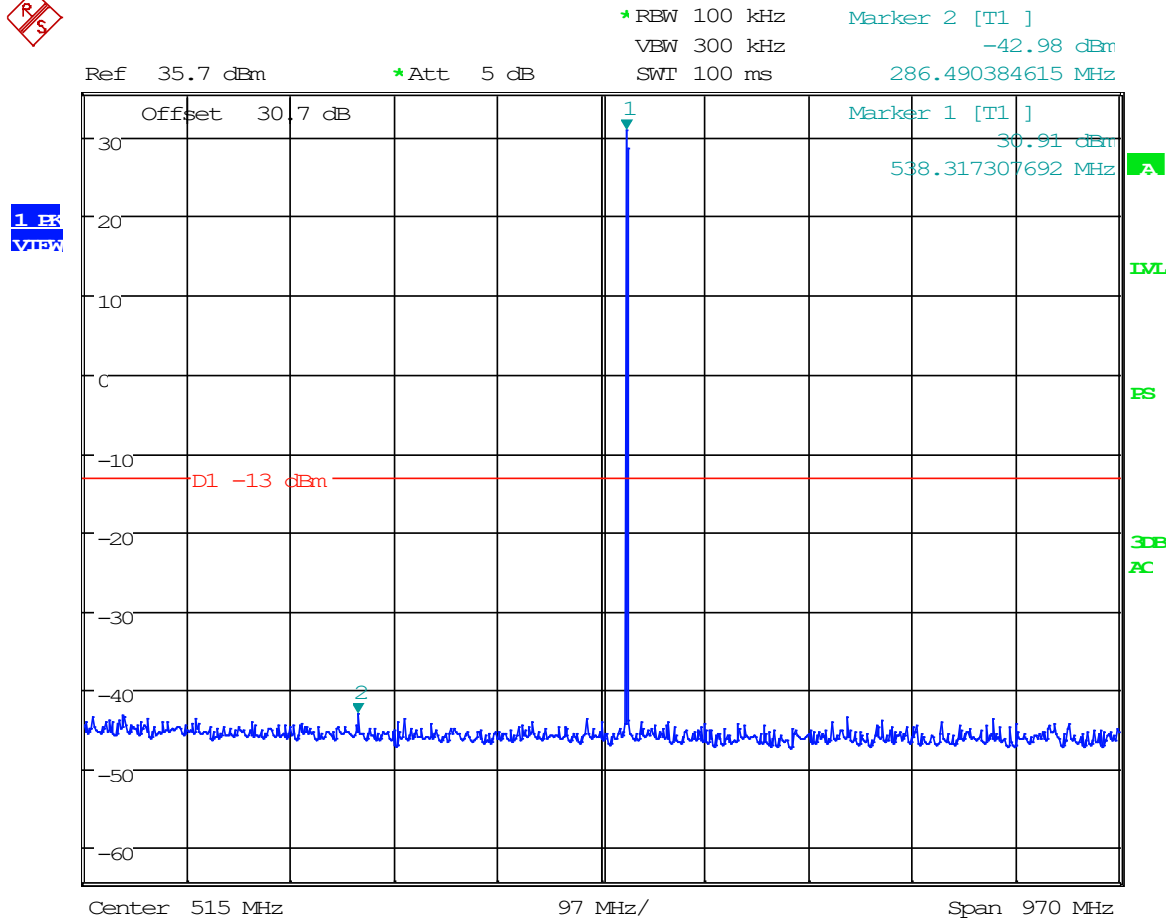
Date: 31.MAY.2023 15:21:13

8.3.10 Conducted Emissions Above 1G, Mode 2, 470.075 MHz



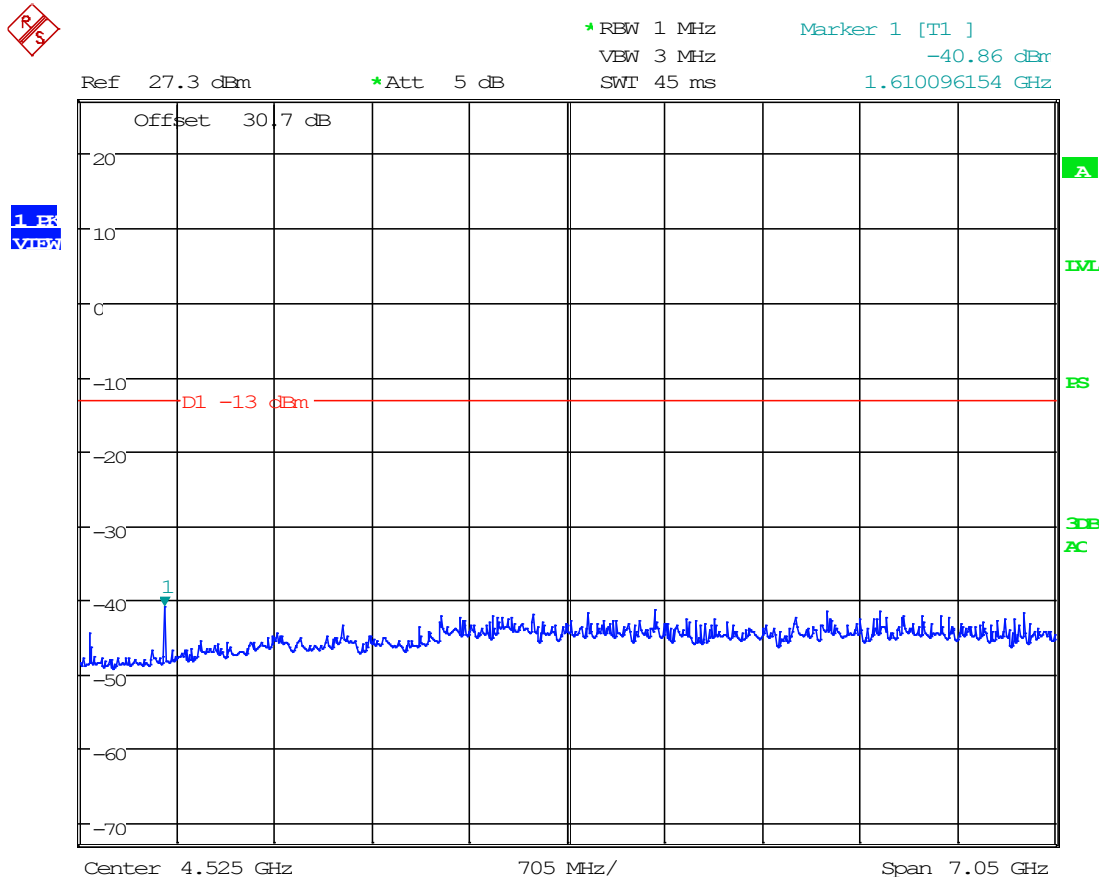
Date: 31.MAY.2023 15:31:23

8.3.11 Conducted Emissions Below 1G, Mode 2, 539 MHz



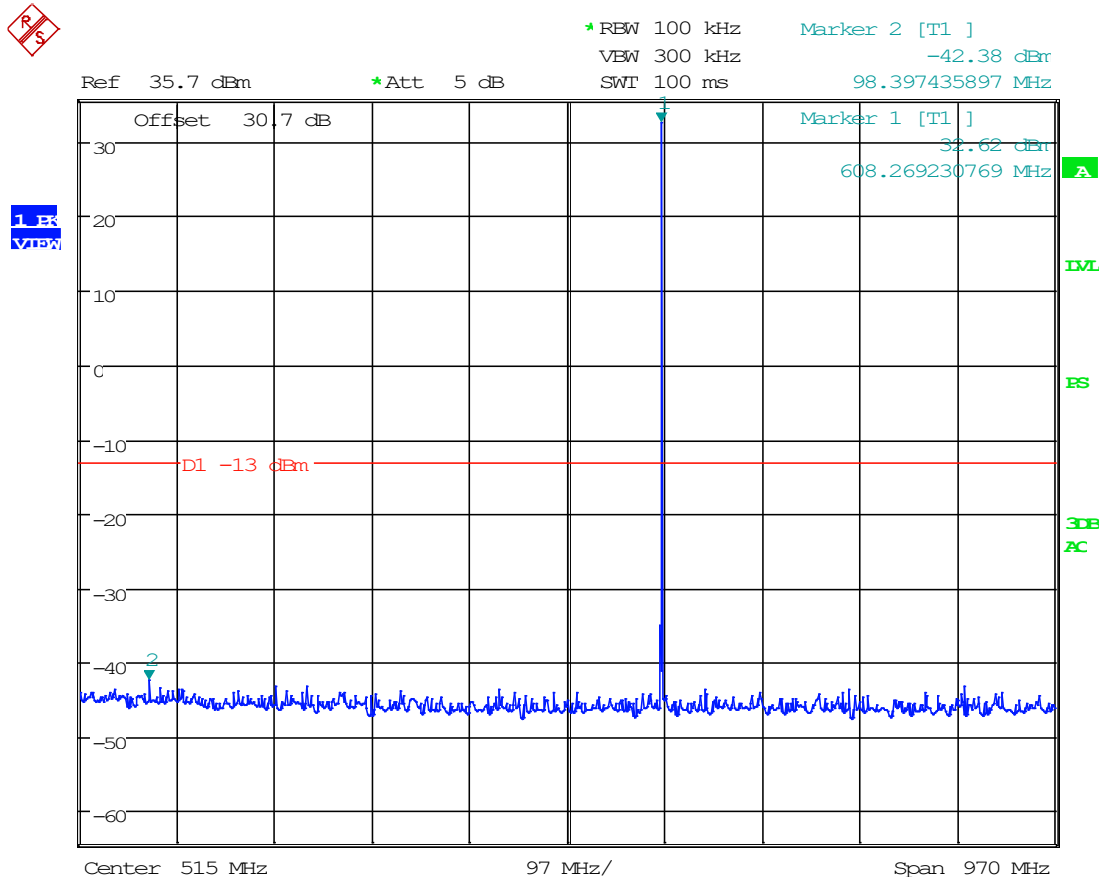
Date: 31.MAY.2023 15:22:40

8.3.12 Conducted Emissions Above 1G, Mode 2, 539 MHz



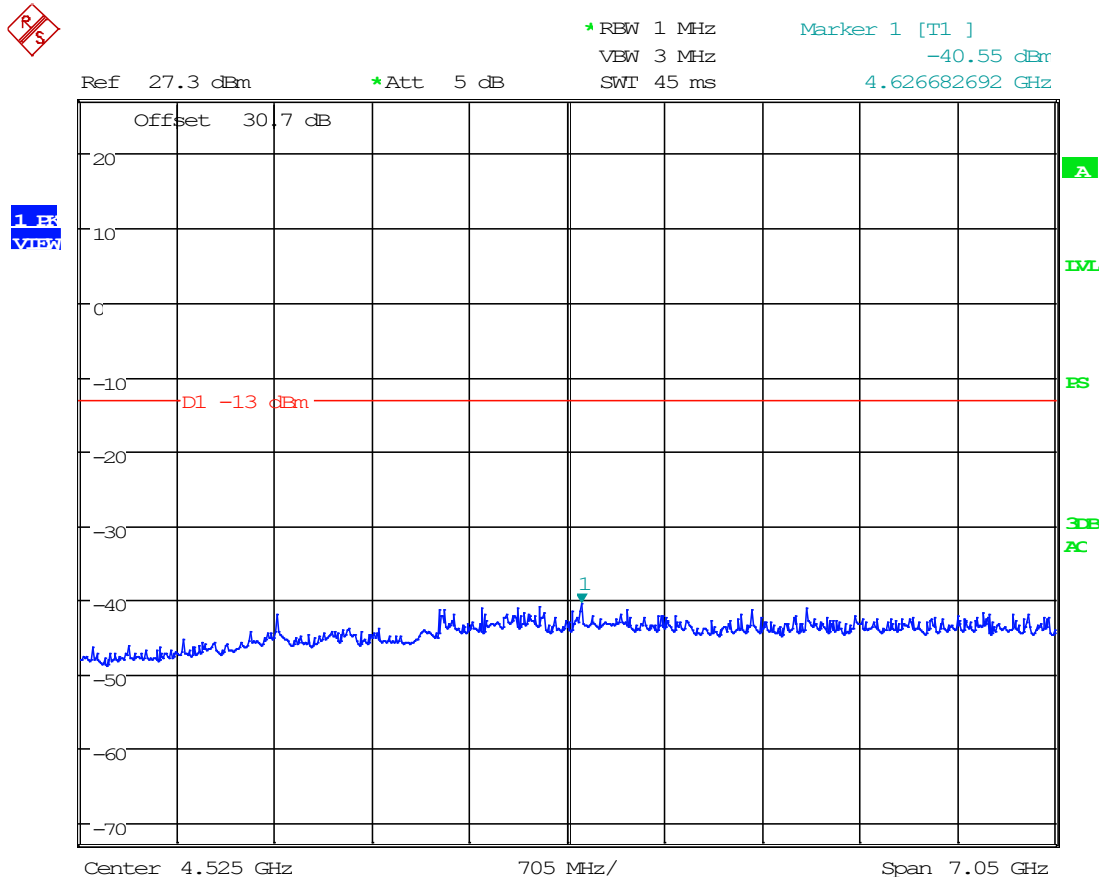
Date: 31.MAY.2023 15:32:37

8.3.13 Conducted Emissions Below 1G, Mode 2, 607.925 MHz



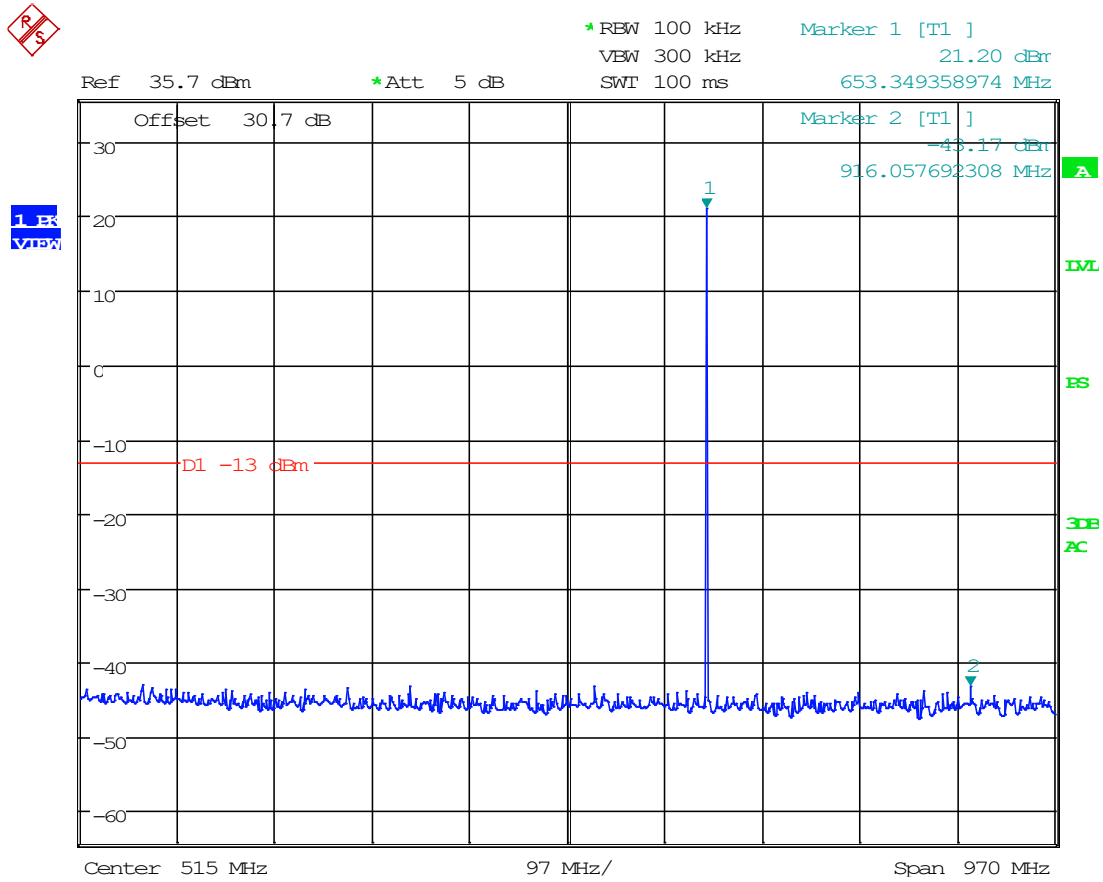
Date: 31.MAY.2023 15:23:52

8.3.14 Conducted Emissions Above 1G, Mode 2, 607.925 MHz



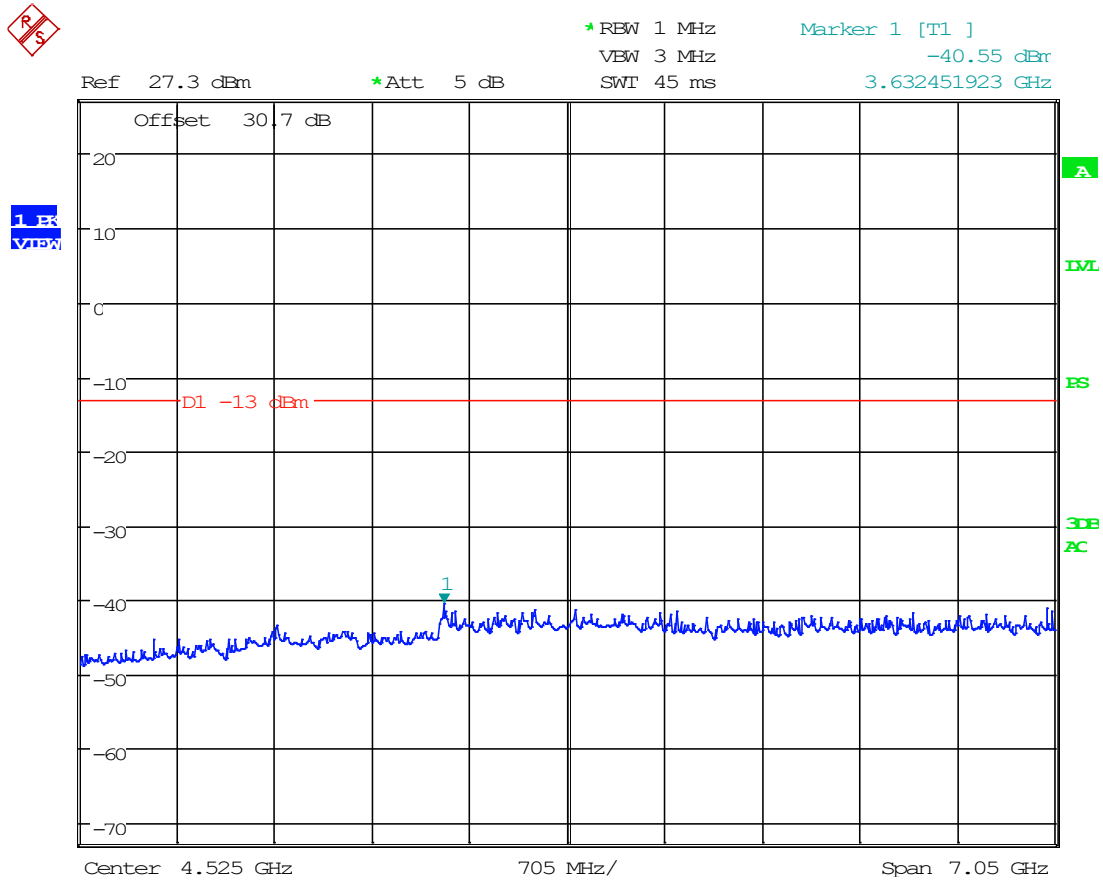
Date: 31.MAY.2023 15:33:31

8.3.15 Conducted Emissions Below 1G, Mode 2, 653.075 MHz



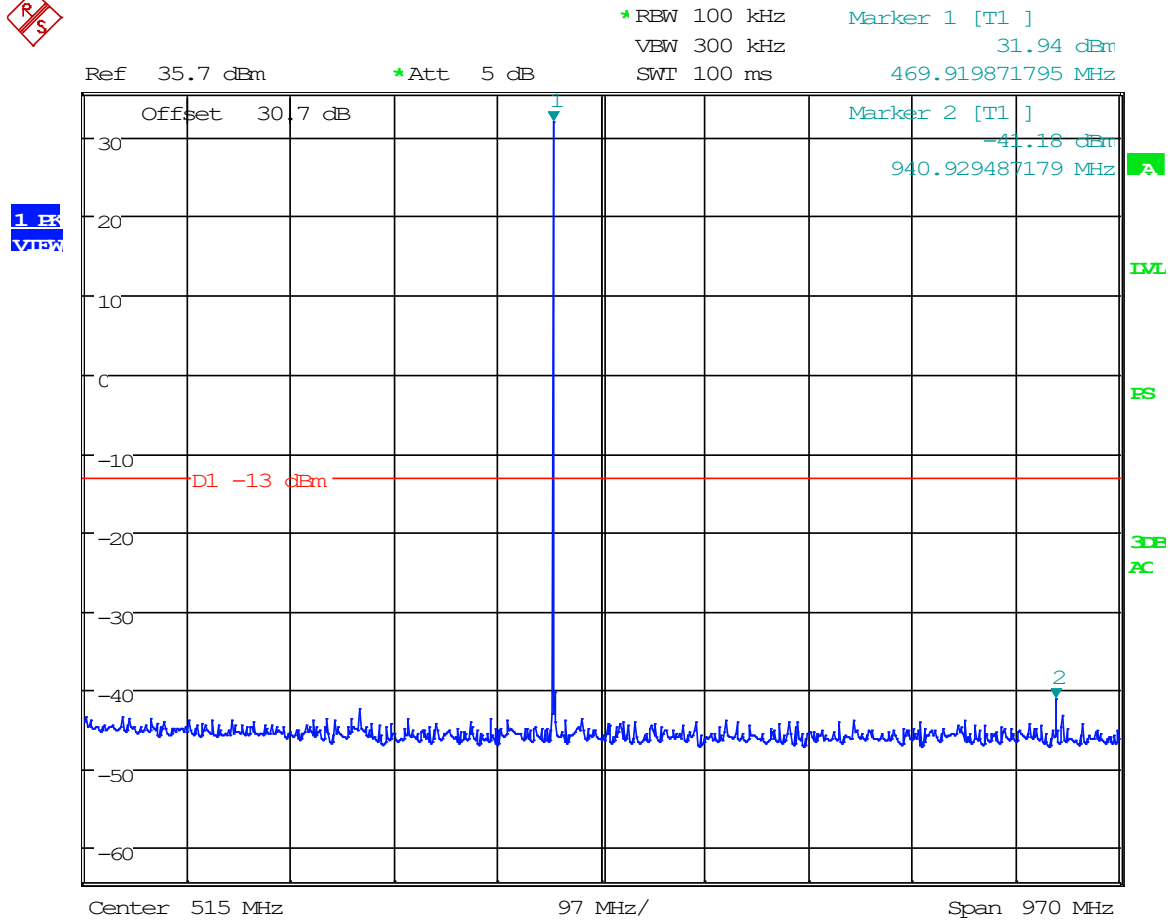
Date: 31.MAY.2023 15:26:44

8.3.16 Conducted Emissions Above 1G, Mode 2, 653.075 MHz



Date: 31.MAY.2023 15:35:52

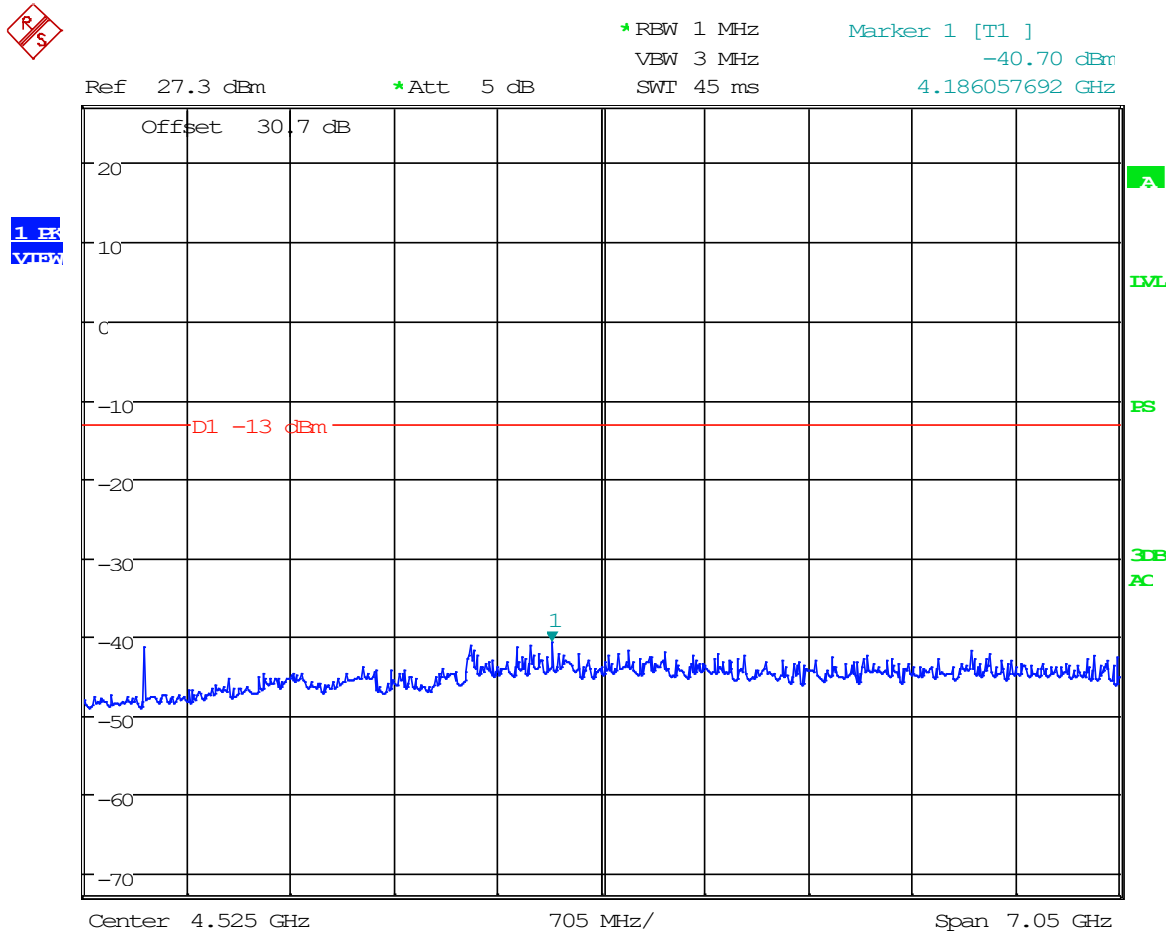
8.3.17 Conducted Emissions Below 1G, Mode 3, 470.075 MHz



Date: 31.MAY.2023 15:49:05

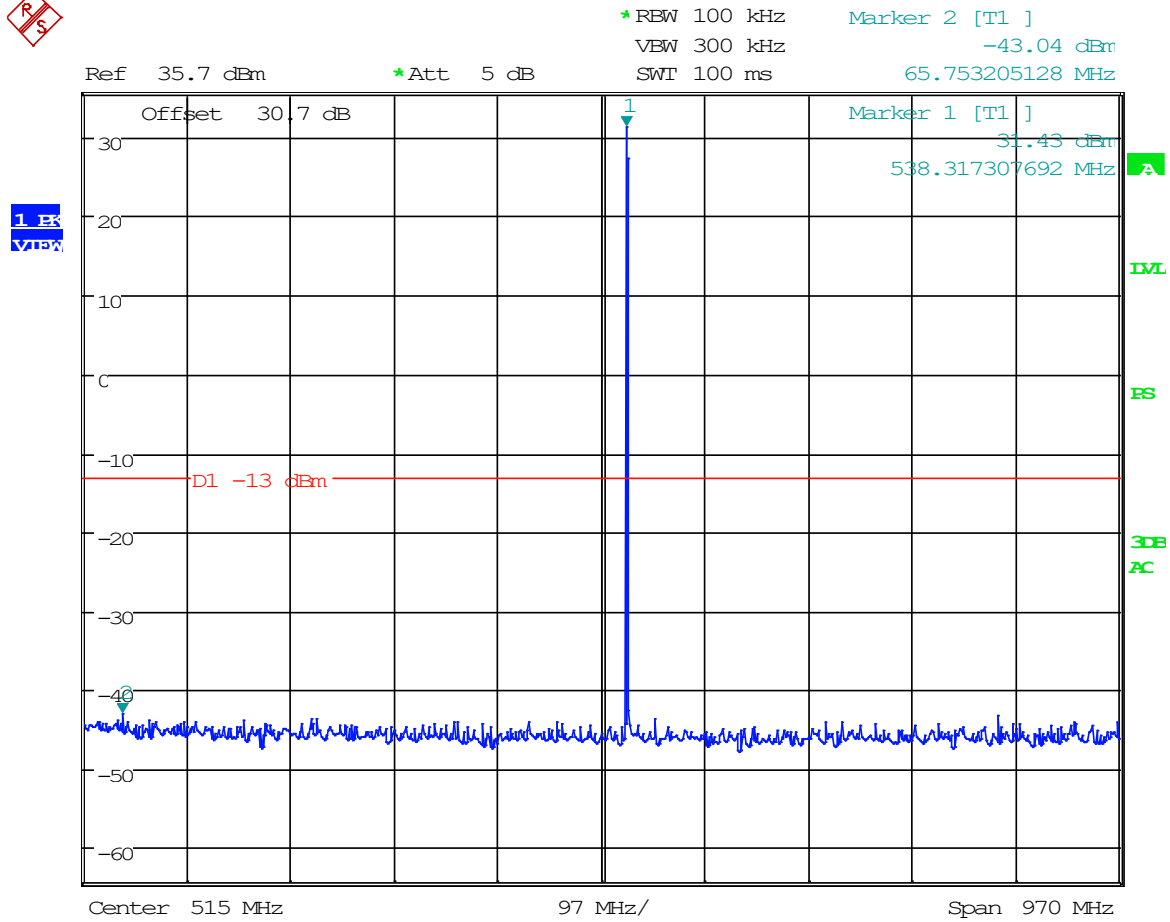


8.3.18 Conducted Emissions Above 1G, Mode 3, 470.075 MHz



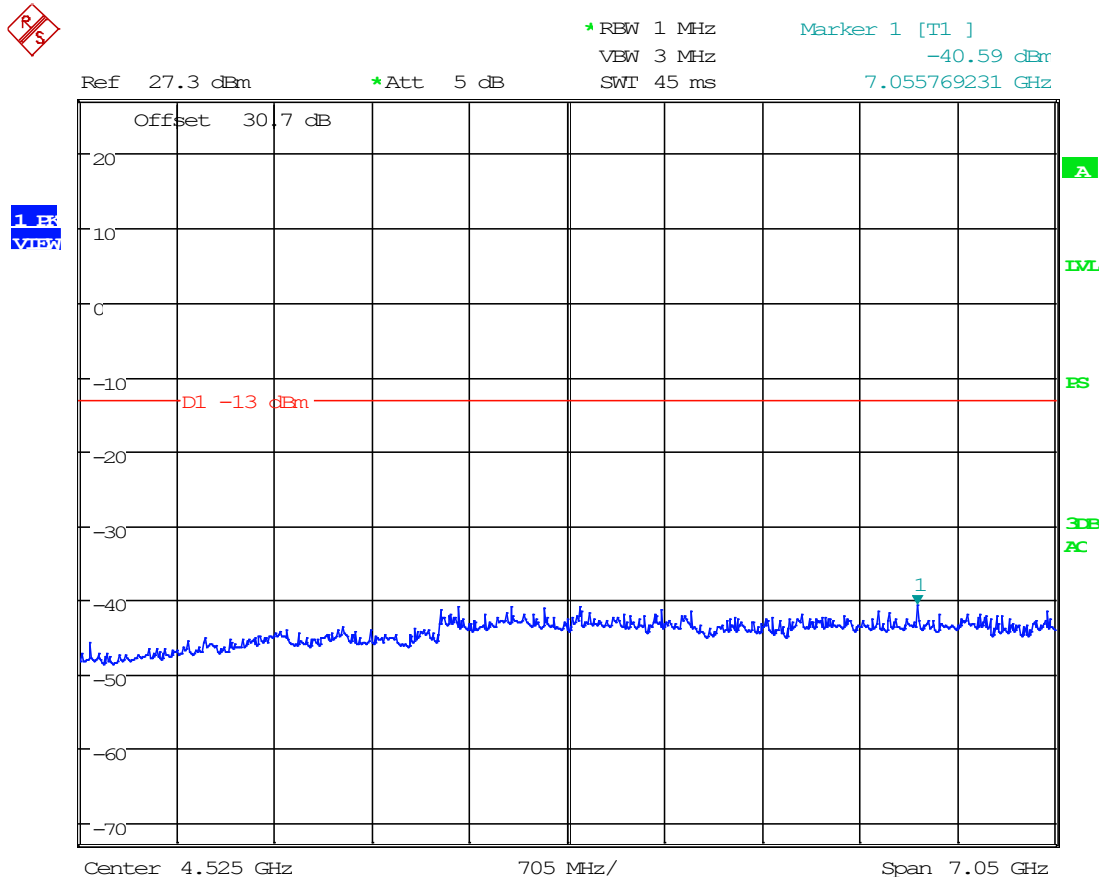
Date: 31.MAY.2023 15:40:10

8.3.19 Conducted Emissions Below 1G, Mode 3, 539 MHz



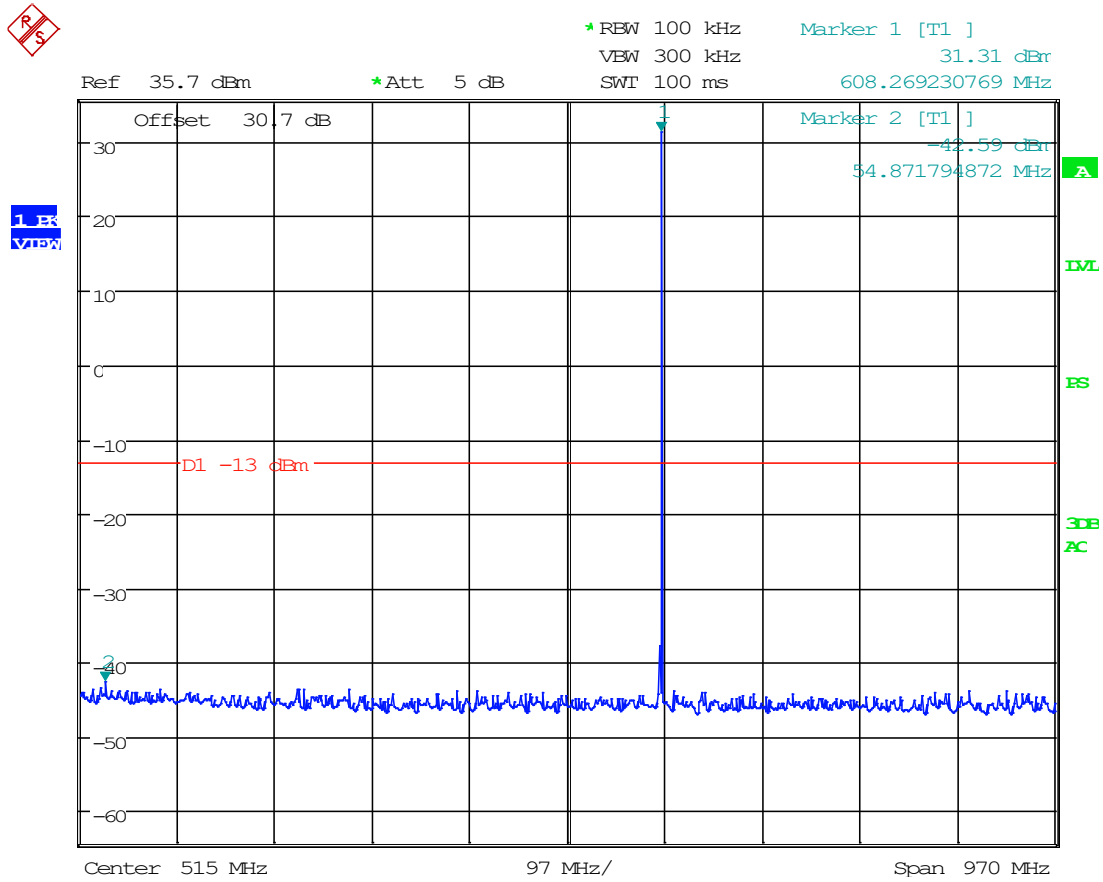
Date: 31.MAY.2023 15:50:10

8.3.20 Conducted Emissions Above 1G, Mode 3, 539 MHz



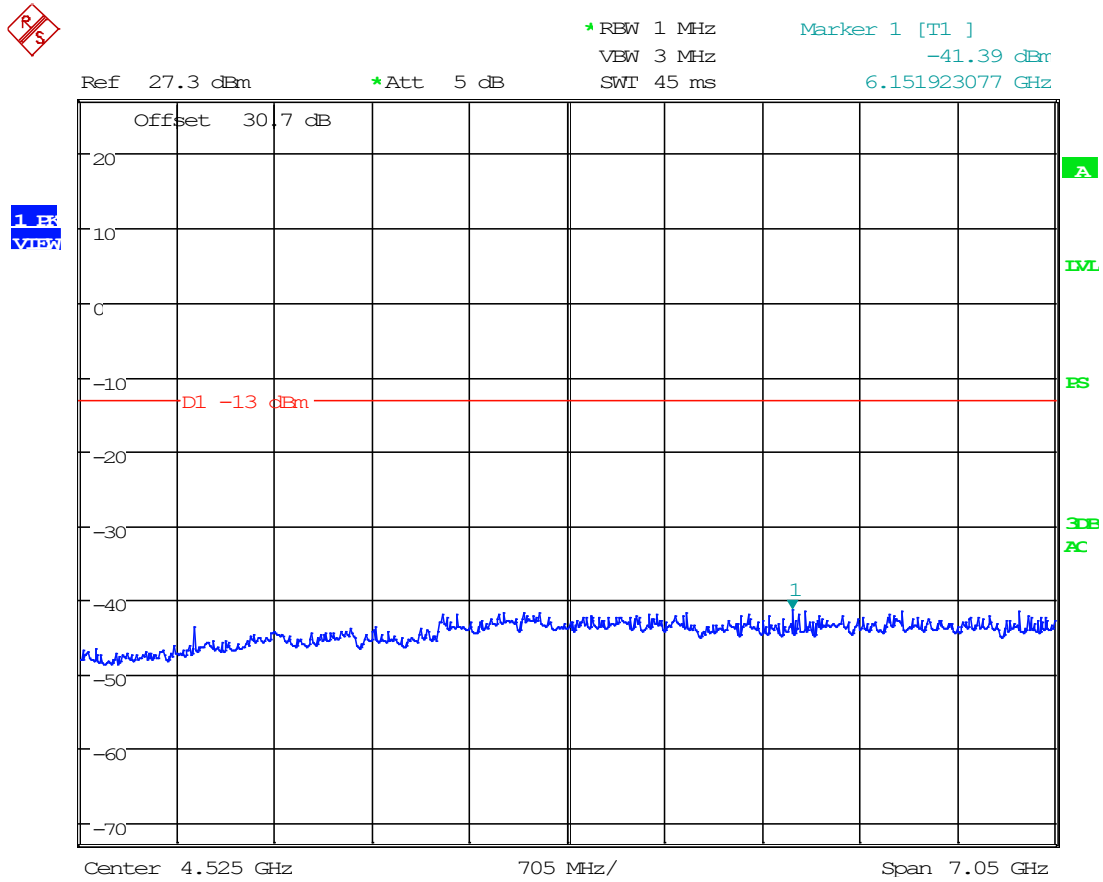
Date: 31.MAY.2023 15:41:26

8.3.21 Conducted Emissions Below 1G, Mode 3, 607.925 MHz



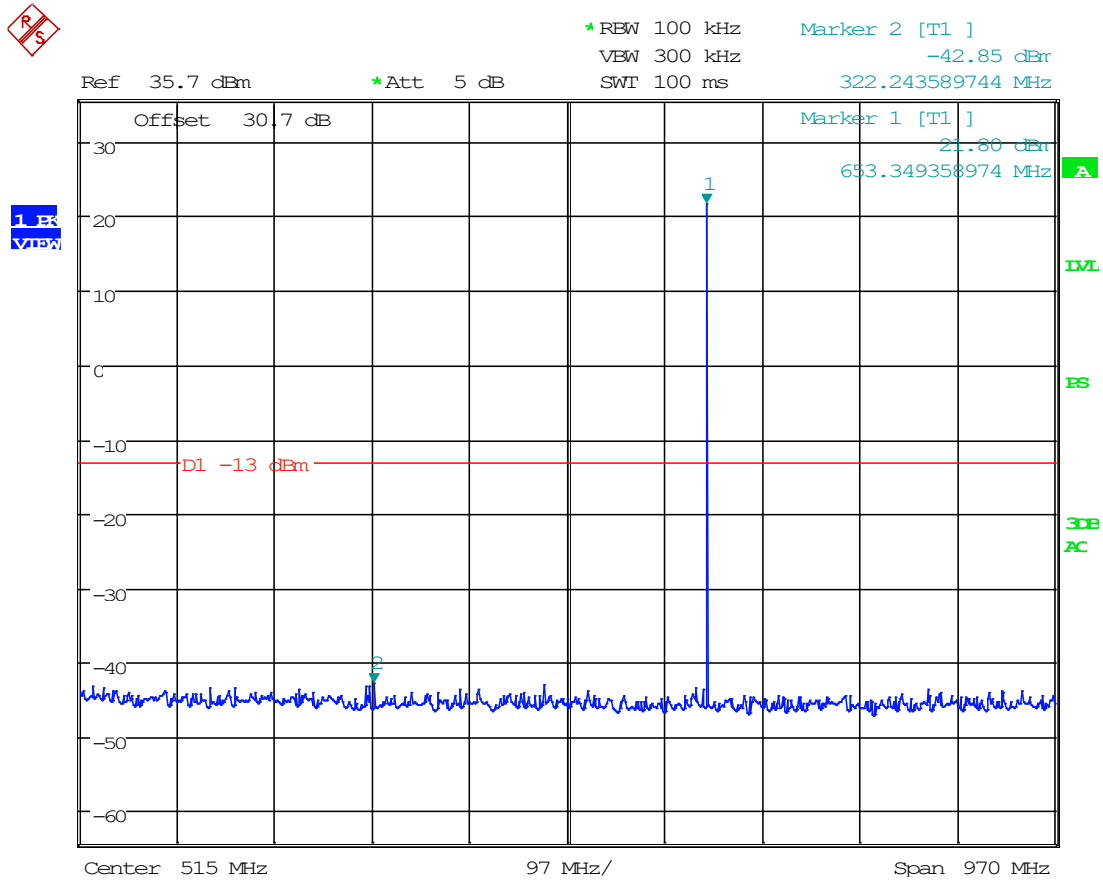
Date: 31.MAY.2023 15:51:11

8.3.22 Conducted Emissions Above 1G, Mode 3, 607.925 MHz



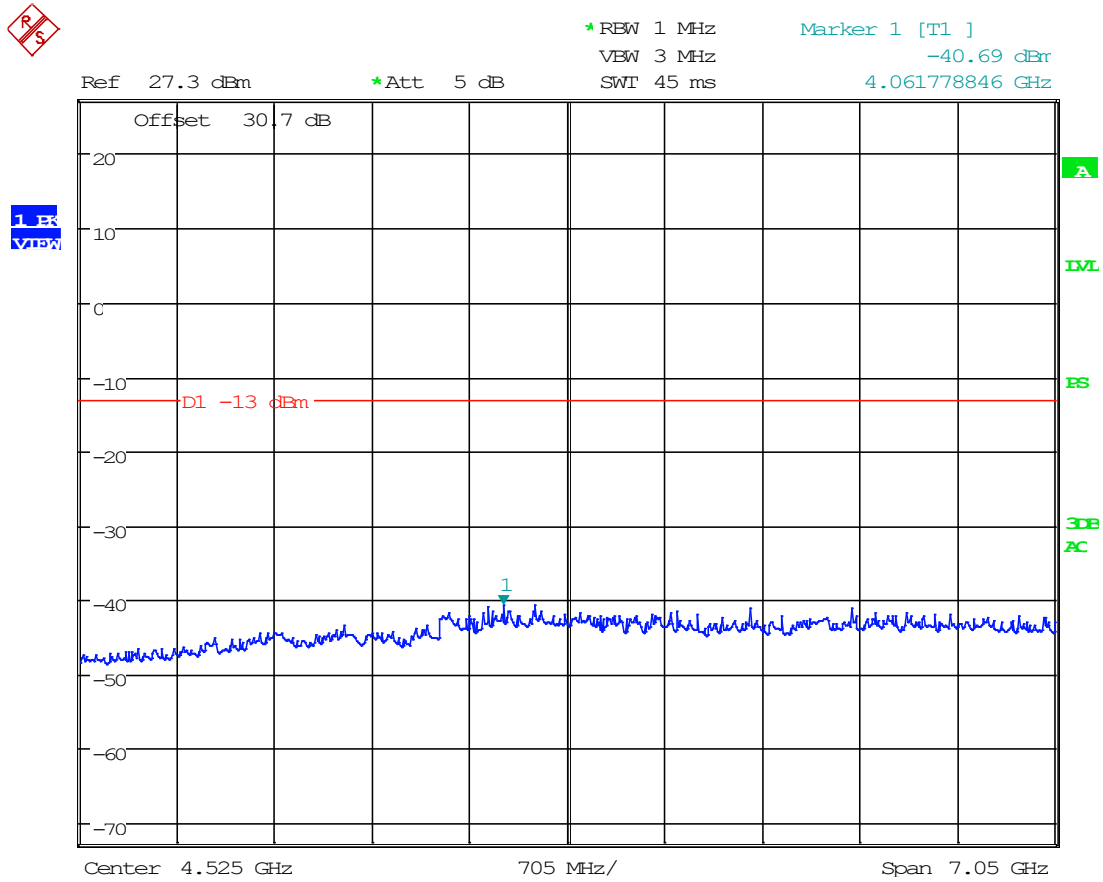
Date: 31.MAY.2023 15:42:17

8.3.23 Conducted Emissions Below 1G, Mode 3, 653.075 MHz



Date: 31.MAY.2023 15:54:08

8.3.24 Conducted Emissions Above 1G, Mode 3, 653.075 MHz

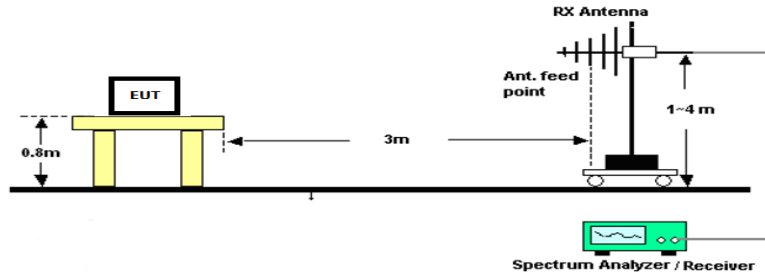


Date: 31.MAY.2023 15:44:38

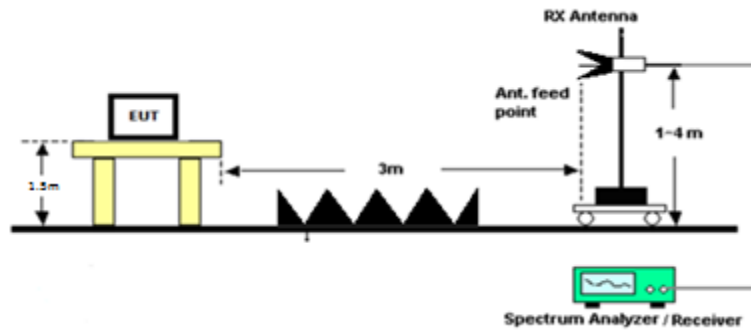
8.4 Radiated Emissions

Limits from 2.1053, 74.861(e)(6)(iii) and test procedure from ANSI C63.26 and KDB 206256 D01 Wireless Microphone Certification.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz





Radiated Emissions Tabular Data

8.4.1 Radiated Emissions Table, 470.075 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
470.08	940.15	PK	56.50	H	-3.59	22.60	3.00	75.51	-21.87	-13.00	8.87
470.08	940.15	PK	53.70	V	-3.59	22.60	3.00	72.71	-24.67	-13.00	11.67
470.08	1410.23	PK	15.60	H	-4.38	21.28	3.00	32.50	-64.88	-13.00	51.88
470.08	1410.23	PK	19.90	V	-4.38	21.28	3.00	36.80	-60.58	-13.00	47.58
470.08	1880.30	PK	18.10	H	-5.11	23.96	3.00	36.95	-60.42	-13.00	47.42
470.08	1880.30	PK	24.10	V	-5.11	23.96	3.00	42.95	-54.42	-13.00	41.42
470.08	2350.38	PK	12.50	H	-5.81	26.65	3.00	33.34	-64.03	-13.00	51.03
470.08	2350.38	PK	12.30	V	-5.81	26.65	3.00	33.14	-64.23	-13.00	51.23
470.08	2820.45	PK	14.20	H	-6.33	29.34	3.00	37.21	-60.17	-13.00	47.17
470.08	2820.45	PK	16.20	V	-6.33	29.34	3.00	39.21	-58.17	-13.00	45.17
470.08	3290.53	PK	13.90	H	-6.83	32.03	3.00	39.09	-58.29	-13.00	45.29
470.08	3290.53	PK	14.20	V	-6.83	32.03	3.00	39.39	-57.99	-13.00	44.99
470.08	3760.60	PK	15.20	H	-7.29	33.13	3.00	41.03	-56.34	-13.00	43.34
470.08	3760.60	PK	15.50	V	-7.29	33.13	3.00	41.33	-56.04	-13.00	43.04
470.08	4230.68	PK	14.50	H	-7.77	33.33	3.00	40.06	-57.32	-13.00	44.32
470.08	4230.68	PK	14.20	V	-7.77	33.33	3.00	39.76	-57.62	-13.00	44.62
470.08	4700.75	PK	14.50	H	-8.19	33.88	3.00	40.18	-57.19	-13.00	44.19
470.08	4700.75	PK	15.30	V	-8.19	33.88	3.00	40.98	-56.39	-13.00	43.39



8.4.2 Radiated Emissions Table, 539 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
539.00	1078.00	PK	40.60	H	-3.90	19.38	3.00	56.08	-41.30	-13.00	28.30
539.00	1078.00	PK	45.60	V	-3.90	19.38	3.00	61.08	-36.30	-13.00	23.30
539.00	1617.00	PK	20.90	H	-4.75	22.46	3.00	38.61	-58.77	-13.00	45.77
539.00	1617.00	PK	25.90	V	-4.75	22.46	3.00	43.61	-53.77	-13.00	40.77
539.00	2156.00	PK	16.80	H	-5.58	25.54	3.00	36.76	-60.62	-13.00	47.62
539.00	2156.00	PK	19.30	V	-5.58	25.54	3.00	39.26	-58.12	-13.00	45.12
539.00	2695.00	PK	16.70	H	-6.19	28.62	3.00	39.14	-58.24	-13.00	45.24
539.00	2695.00	PK	21.90	V	-6.19	28.62	3.00	44.34	-53.04	-13.00	40.04
539.00	3234.00	PK	14.50	H	-6.80	31.70	3.00	39.40	-57.98	-13.00	44.98
539.00	3234.00	PK	17.40	V	-6.80	31.70	3.00	42.30	-55.08	-13.00	42.08
539.00	3773.00	PK	16.00	H	-7.31	33.13	3.00	41.83	-55.55	-13.00	42.55
539.00	3773.00	PK	16.80	V	-7.31	33.13	3.00	42.63	-54.75	-13.00	41.75
539.00	4312.00	PK	20.30	H	-7.84	33.49	3.00	45.94	-51.43	-13.00	38.43
539.00	4312.00	PK	20.90	V	-7.84	33.49	3.00	46.54	-50.83	-13.00	37.83
539.00	4851.00	PK	14.40	H	-8.30	33.94	3.00	40.04	-57.33	-13.00	44.33
539.00	4851.00	PK	14.90	V	-8.30	33.94	3.00	40.54	-56.83	-13.00	43.83
539.00	5390.00	PK	18.70	H	-8.78	34.34	3.00	44.25	-53.12	-13.00	40.12
539.00	5390.00	PK	19.10	V	-8.78	34.34	3.00	44.65	-52.72	-13.00	39.72



8.4.3 Radiated Emissions Table, 607.925 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
607.93	1215.85	PK	12.20	H	-4.04	20.16	3.00	28.32	-69.06	-13.00	56.06
607.93	1215.85	PK	17.70	V	-4.04	20.16	3.00	33.82	-63.56	-13.00	50.56
607.93	1823.78	PK	17.80	H	-5.11	23.64	3.00	36.33	-61.05	-13.00	48.05
607.93	1823.78	PK	25.70	V	-5.11	23.64	3.00	44.23	-53.15	-13.00	40.15
607.93	2431.70	PK	16.90	H	-5.90	27.12	3.00	38.11	-59.26	-13.00	46.26
607.93	2431.70	PK	18.00	V	-5.90	27.12	3.00	39.21	-58.16	-13.00	45.16
607.93	3039.63	PK	13.30	H	-6.57	30.59	3.00	37.32	-60.06	-13.00	47.06
607.93	3039.63	PK	13.70	V	-6.57	30.59	3.00	37.72	-59.66	-13.00	46.66
607.93	3647.55	PK	15.50	H	-7.18	33.19	3.00	41.51	-55.86	-13.00	42.86
607.93	3647.55	PK	18.00	V	-7.18	33.19	3.00	44.01	-53.36	-13.00	40.36
607.93	4255.48	PK	15.50	H	-7.79	33.35	3.00	41.06	-56.32	-13.00	43.32
607.93	4255.48	PK	17.40	V	-7.79	33.35	3.00	42.96	-54.42	-13.00	41.42
607.93	4863.40	PK	18.40	H	-8.31	33.94	3.00	44.03	-53.35	-13.00	40.35
607.93	4863.40	PK	19.50	V	-8.31	33.94	3.00	45.13	-52.25	-13.00	39.25
607.93	5471.33	PK	15.70	H	-8.89	34.47	3.00	41.28	-56.09	-13.00	43.09
607.93	5471.33	PK	15.90	V	-8.89	34.47	3.00	41.48	-55.89	-13.00	42.89
607.93	6079.25	PK	15.30	H	-9.40	35.21	3.00	41.11	-56.27	-13.00	43.27
607.93	6079.25	PK	15.60	V	-9.40	35.21	3.00	41.41	-55.97	-13.00	42.97

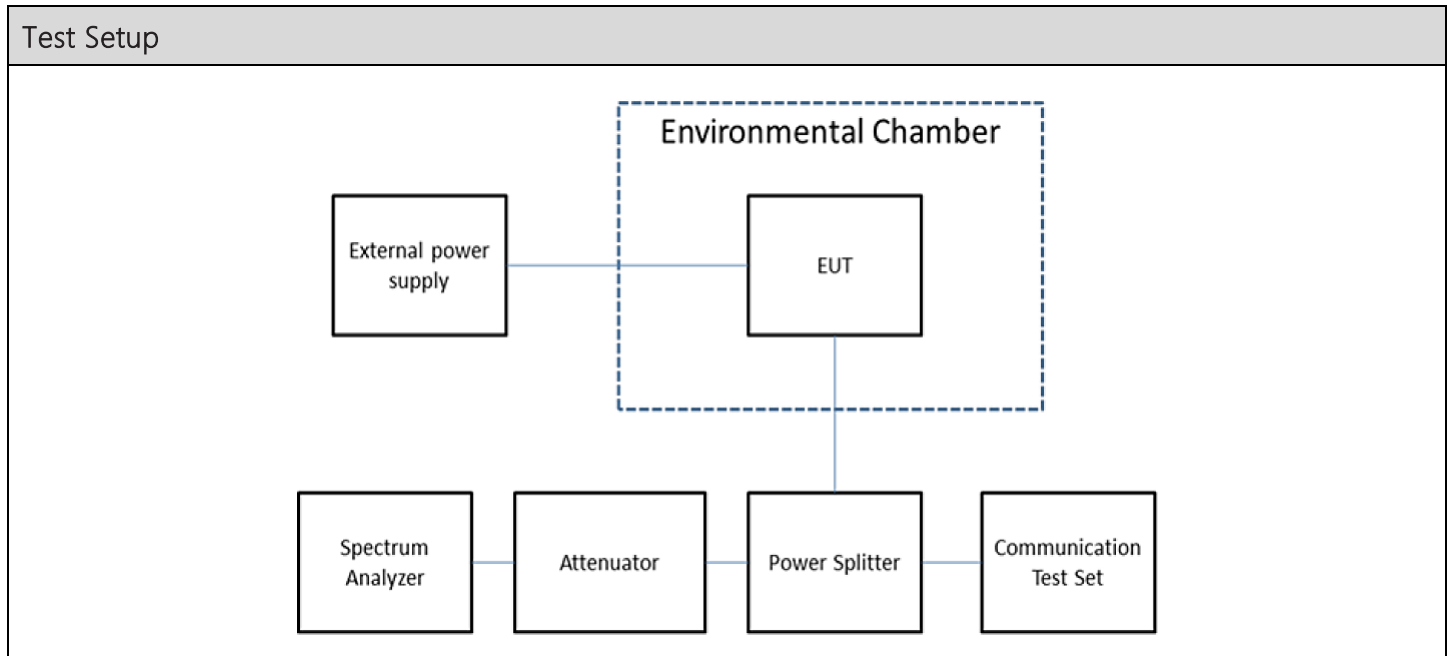


8.4.4 Radiated Emissions Table, 653.075 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBuV)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBuV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
653.08	1306.15	PK	12.40	H	-4.28	20.68	3.00	28.80	-68.58	-13.00	55.58
653.08	1306.15	PK	17.00	V	-4.28	20.68	3.00	33.40	-63.98	-13.00	50.98
653.08	1959.23	PK	13.10	H	-5.28	24.41	3.00	32.23	-65.14	-13.00	52.14
653.08	1959.23	PK	16.10	V	-5.28	24.41	3.00	35.23	-62.14	-13.00	49.14
653.08	2612.30	PK	11.90	H	-6.10	28.15	3.00	33.95	-63.43	-13.00	50.43
653.08	2612.30	PK	11.70	V	-6.10	28.15	3.00	33.75	-63.63	-13.00	50.63
653.08	3265.38	PK	14.20	H	-6.82	31.88	3.00	39.26	-58.12	-13.00	45.12
653.08	3265.38	PK	13.90	V	-6.82	31.88	3.00	38.96	-58.42	-13.00	45.42
653.08	3918.45	PK	16.70	H	-7.49	33.28	3.00	42.49	-54.89	-13.00	41.89
653.08	3918.45	PK	16.20	V	-7.49	33.28	3.00	41.99	-55.39	-13.00	42.39
653.08	4571.53	PK	14.50	H	-8.10	34.02	3.00	40.42	-56.95	-13.00	43.95
653.08	4571.53	PK	14.80	V	-8.10	34.02	3.00	40.72	-56.65	-13.00	43.65
653.08	5224.60	PK	14.40	H	-8.65	34.23	3.00	39.98	-57.40	-13.00	44.40
653.08	5224.60	PK	13.90	V	-8.65	34.23	3.00	39.48	-57.90	-13.00	44.90
653.08	5877.68	PK	14.50	H	-9.17	34.99	3.00	40.33	-57.05	-13.00	44.05
653.08	5877.68	PK	14.50	V	-9.17	34.99	3.00	40.33	-57.05	-13.00	44.05
653.08	6530.75	PK	14.30	H	-9.73	35.55	3.00	40.12	-57.25	-13.00	44.25
653.08	6530.75	PK	14.40	V	-9.73	35.55	3.00	40.22	-57.15	-13.00	44.15

8.5 Frequency Stability

Limits from 2.1053, 74.861(e) (4) and test procedure from ANSI C63.26 and KDB 206256 D01 Wireless Microphone Certification.



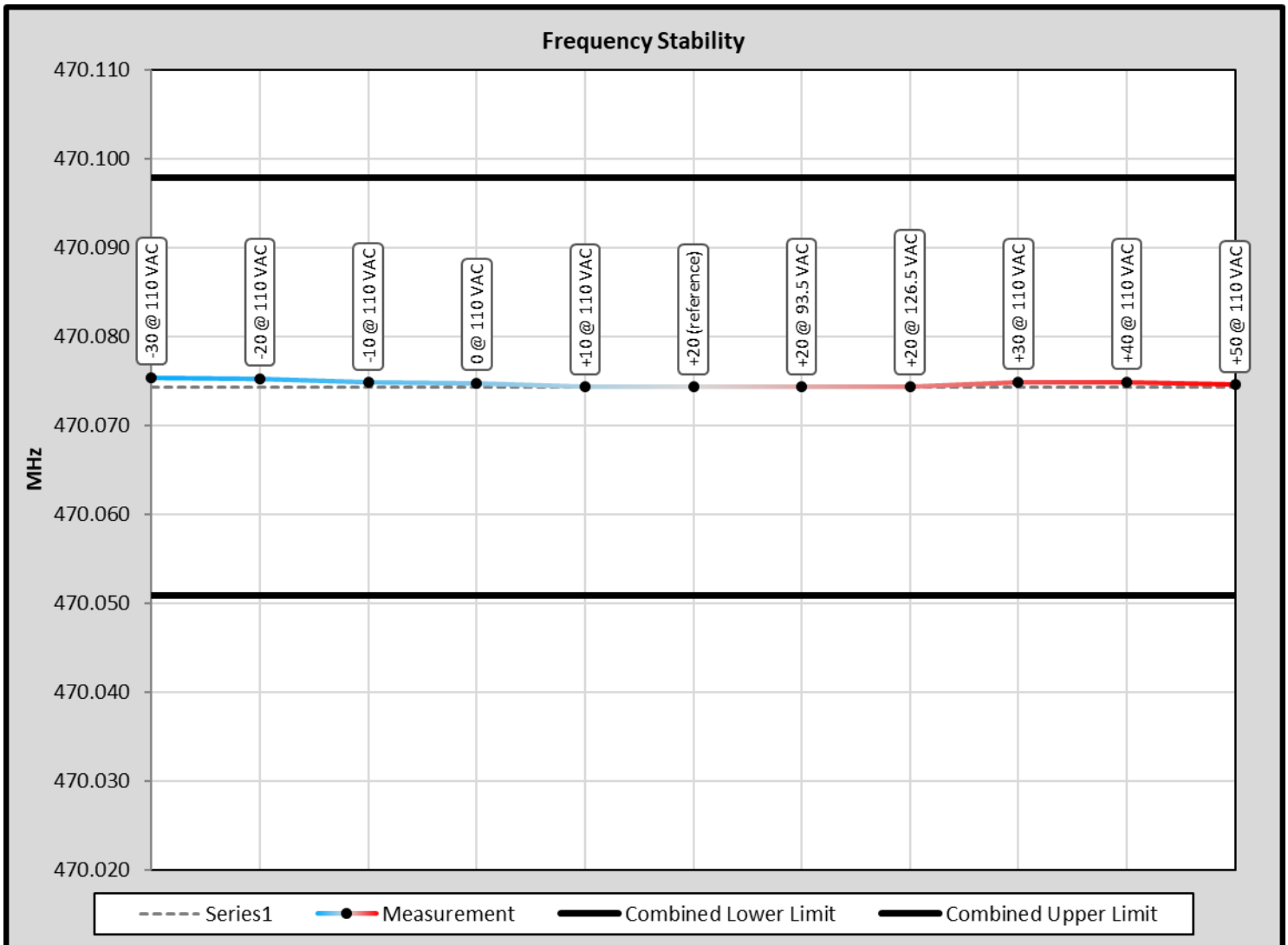
Test Results, Mode 1		
Tuned Frequency (MHz)	Max Deviation (kHz)	Limit (ppm)
470.075	1.050	50



8.5.1 Frequency Stability Data

FCC Part 90 Limit	50.0	ppm	
FCC Part 90 Limit, as ppb	50000	ppb (Parts per Billion)	
FCC Part 90 Limit, as %	0.00500	%	
Strictest Combined Limit, as Hz	23503.716	Hz	
Combined Lower Limit	470.050806	MHz	
Combined Upper Limit	470.097814	MHz	
Rated Supply Voltage	110.0	<input checked="" type="radio"/> AC <input type="radio"/> DC	
Temperature / Voltage Variation			
Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)	Deviation (kHz)
-30	110.0	470.075360	-1.050
-20	110.0	470.075230	-0.920
-10	110.0	470.074830	-0.520
0	110.0	470.074730	-0.420
+10	110.0	470.074310	0.000
+20 (reference)	110.0	470.074310	0.000
+20	93.5	470.074310	0.000
+20	126.5	470.074310	0.000
+30	110.0	470.074890	-0.580
+40	110.0	470.074850	-0.540
+50	110.0	470.074580	-0.270

8.5.2 Frequency Stability Plot





9. ANNEX-A - Photographs of the EUT

Photographs of the EUT and any manufacturer supplied accessories to be used with the EUT are in a separate document.

10. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate document.

11. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_8114-23_FCC 74H_	1	Initial release	7/17/2023



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END OF TEST REPORT
