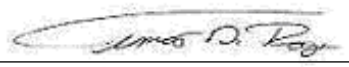
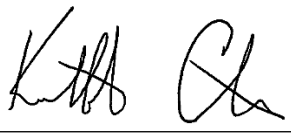
Test Report – FCC Part 15.236 Low Power Licensed Wireless Microphone
Applicant: KINGDOM INC,

Signature:  Sr. EMC Engineer EMC-003838-NE

Name & Title: Tim Royer, EMC Engineer

Date of Signature 3/12/2025

Signature: 

Name & Title: Kristoffer Costa, EMC Technician

Date of Signature 3/12/2025

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.

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1. Applicant Information

Applicant: KINGDOM INC,
Address: 719 Lambs Creek Road
Mansfield PA 16933 United States

1.1 Test Result Summary

The following test procedure was used ANSI C63.10 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.

Applicable Clauses from Part 15.236		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
15.236 (c) (1) – (6)	Permissible Frequency Bands	Pass
15.236 (d) (1) – (2)	Maximum Radiated Power	Pass
15.236 (f) (1) – (2)	Channel Aggregation & Bandwidth	Pass
15.236 (f) (3)	Frequency Tolerance	Pass
15.236 (g)	Radiated Emissions, In-band	Pass

Other Applicable Clauses from Part 2 and Part 15 Subpart C		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
15.203	Antenna requirements	Pass
15.205	Restricted bands of operation	Pass
15.207	AC Power Conducted Emissions	N/A
15.209	Radiated Emissions, Out-of-band	Pass
15.211	Tunnel Radio Systems	N/A
15.212 (a)	Single Modular Transmitter	N/A
15.212 (b)	Limited Modular Transmitter	N/A
15.213	Cable Locating Equipment	N/A
15.214	Cordless Telephones	N/A

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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 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: 2/11/2025

Dates of Testing: 3/7/2025 – 3/12/2025

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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:	2AWPD-HHK7000
Brief Description	Handheld Wireless Microphone Transmitter
Model(s) #	HHK7000
Firmware version	N/A
Software version	N/A
Serial Number	N/A

Technical Characteristics	
Frequency Range	542 MHz- 572 MHz
RF O/P Power (Max.)	8.68 dBm/ 0.0074 W
Modulation	FM
Bandwidth & Emission Class	200kHz, F1D
Number of Channels	N/A
Duty Cycle	100%
Antenna Connector	Internal
Voltage Rating (AC or Batt.)	3 VDC

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

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3.2 Configuration of EUT

Band (MHz)	Mode	Number of Ant.
542 MHz- 572 MHz	Transmit	1

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:

No peripherals used.

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.

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4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance

The measurement was performed as per ANSI C63.10 and KDB 206256 D01 Wireless Microphone Certification. Full test results are available in this report.

Limits and Regulatory Limits:

1) FCC Part 15.236 (2017)

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.	

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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 1	ETS-Lindgren	3117	00035923	5/31/23	5/30/2026
CHAMBER	CHAMBER	Panashield	3M	N/A	12/29/23	12/18/2025
Pre-amp	Pre-amp	RF-LAMBDA	RLNA00M45GA	NA	7/27/22	7/26/2025
Receiver	EMI Test Receiver R&S ESU 40	Rohde & Schwarz	ESU 40	100320	9/18/24	9/18/2027
Receiver	EMI Test Receiver R&S ESW44	Rohde & Schwarz	ESW44	103049	1/20/25	1/20/2028
Signal Generator	Signal Generator HP 8648C	HP	8648C	35537A01679	8/4/22	8/03/2025
Frequency Counter	Frequency Counter Small	HP	5385A	2730A03025	12/12/23	12/11/2026

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

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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 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

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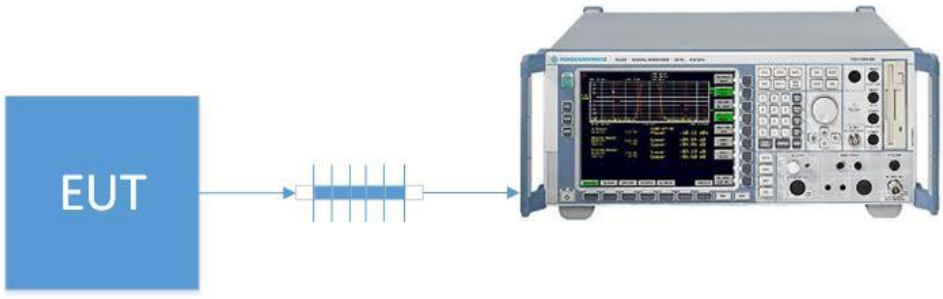
8.1 RF POWER OUTPUT

Limits from Part 2.1046 ,15.236 (d) (1) and test procedure from ANSI C63.10 and KDB 206256 D01 Wireless Microphone Certification.



Test Results		
Tuned Frequency (MHz)	Power Output (dBm)	Power Output (W)
542	8.68	0.0074
554	8.60	0.0072
560	8.64	0.0073
570	8.63	0.0073

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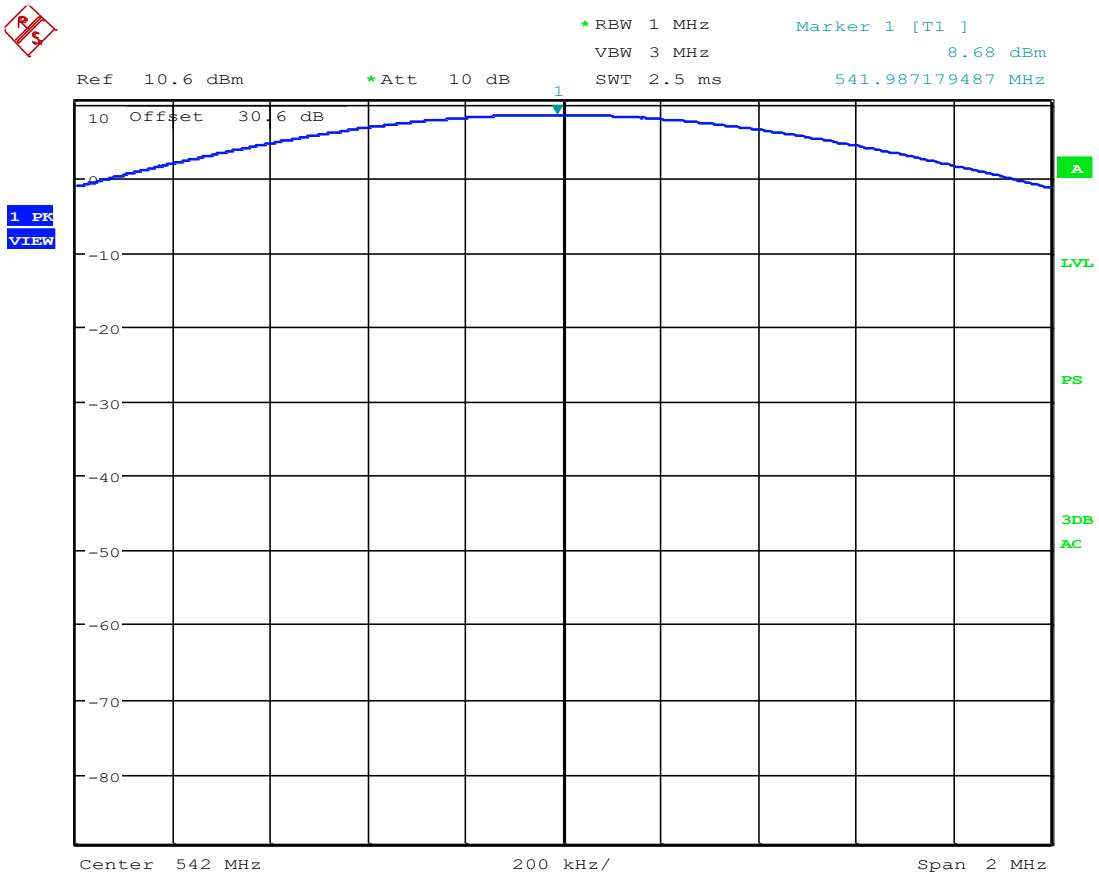
8.1.1 Power Output Plot, 542 MHz



Date: 11.MAR.2025 09:22:35

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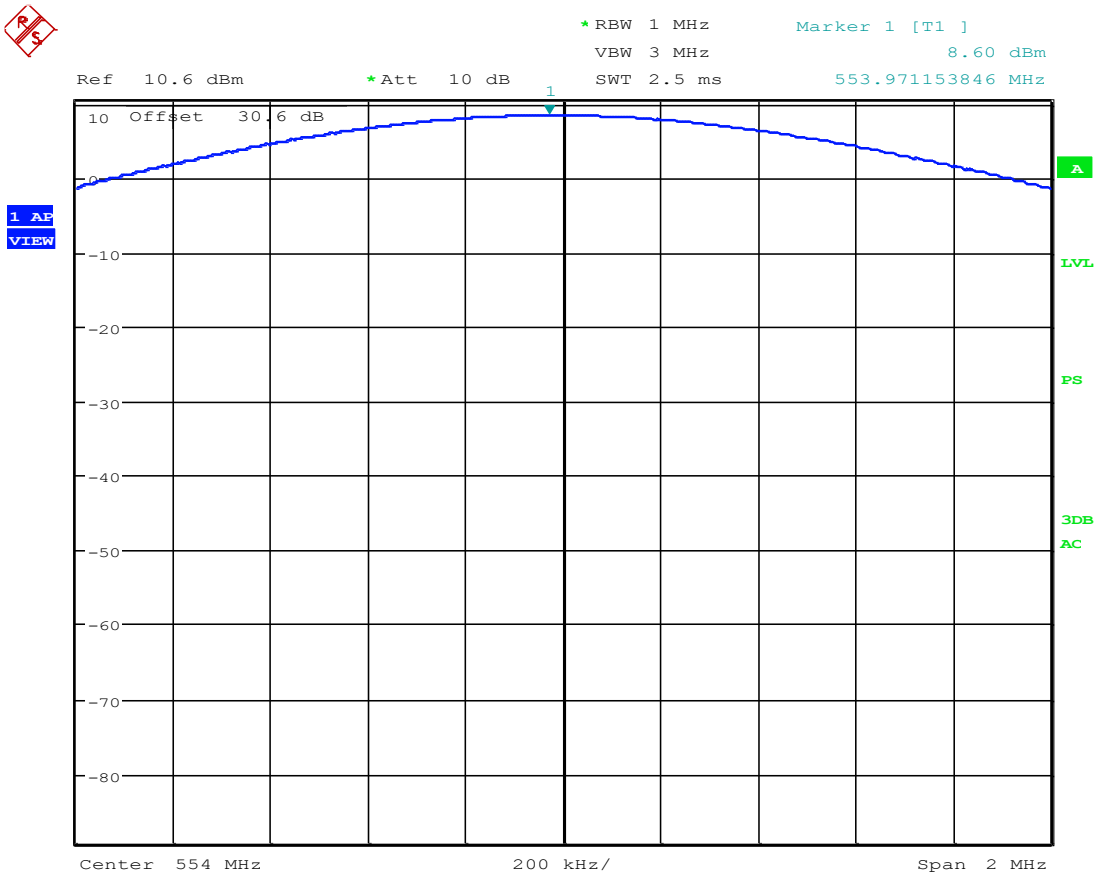
8.1.2 Power Output Plot, 554 MHz



Date: 11.MAR.2025 09:24:16

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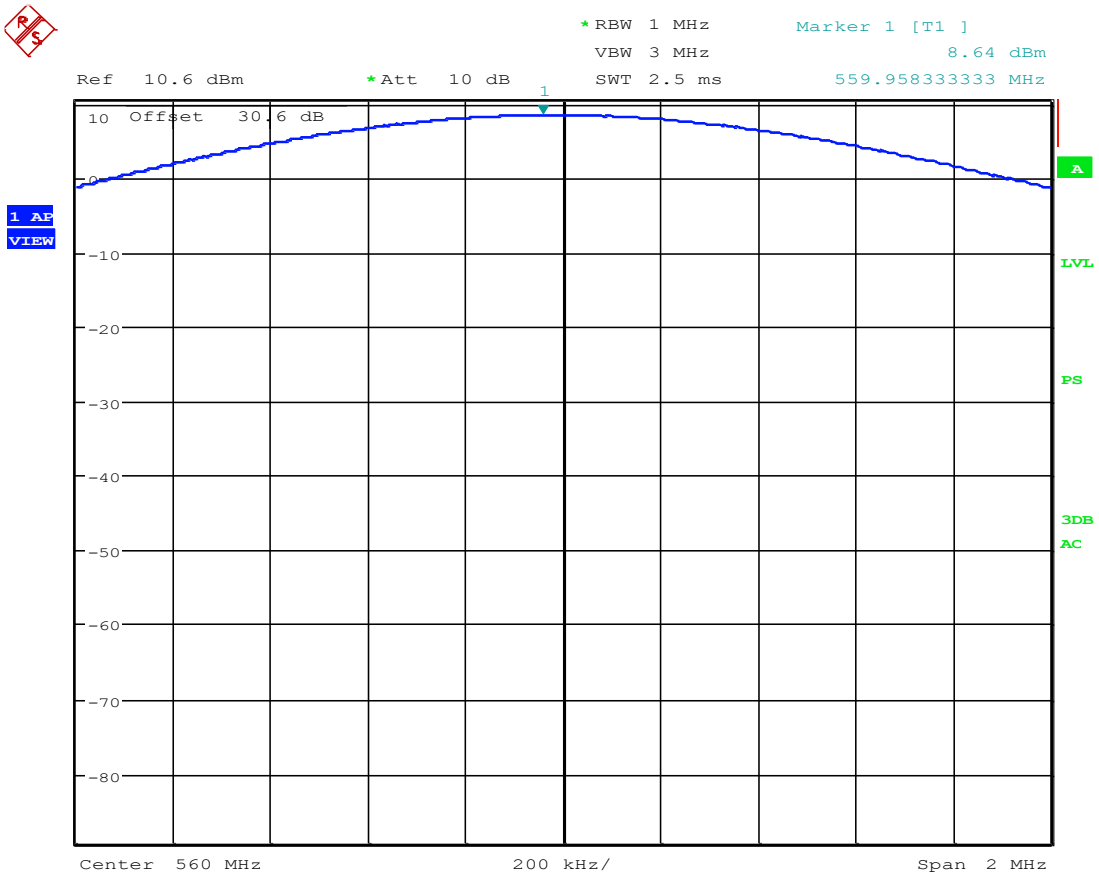
8.1.3 Power Output Plot, 560 MHz



Date: 11.MAR.2025 09:26:02

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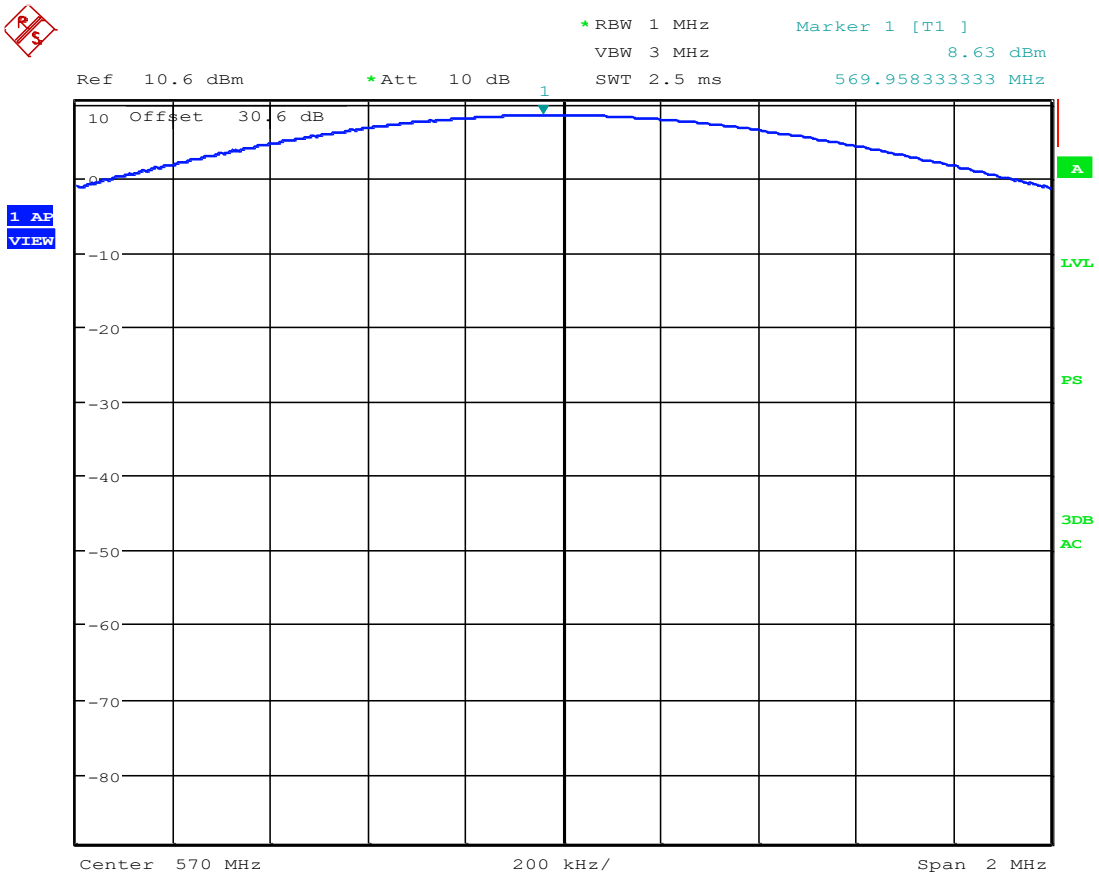
8.1.4 Power Output Plot, 570 MHz



Date: 11.MAR.2025 09:26:49

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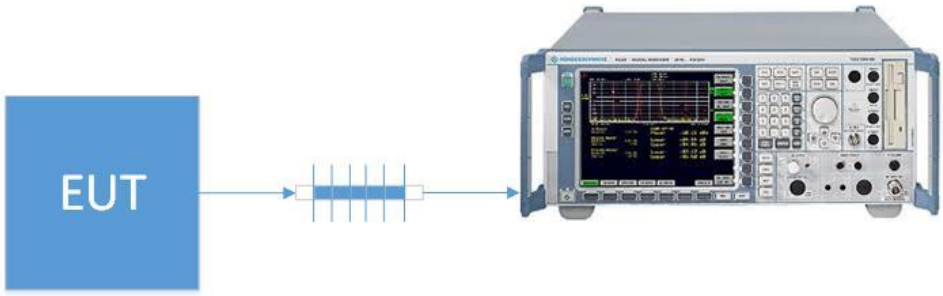
8.2 OCCUPIED BANDWIDTH

Limits from Part 2.1046 ,15.236 and test procedure from ANSI C63.10 and KDB 206256 D01 Wireless Microphone Certification.



Tuned Frequency (MHz)	99% BW (kHz)
542	60.85
554	60.24
560	60.55
570	60.85

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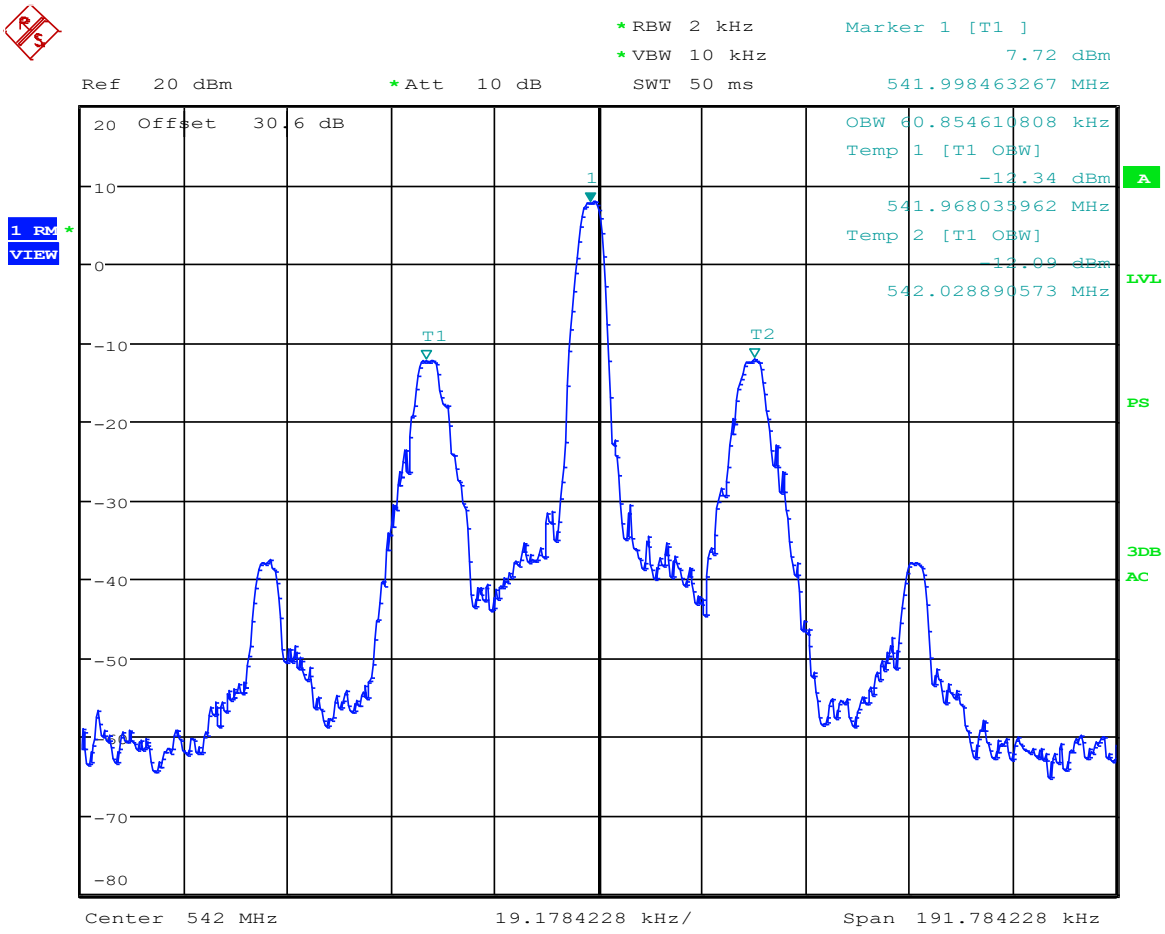
8.2.1 99% Bandwidth Plot, 542 MHz



Date: 11.MAR.2025 10:44:50

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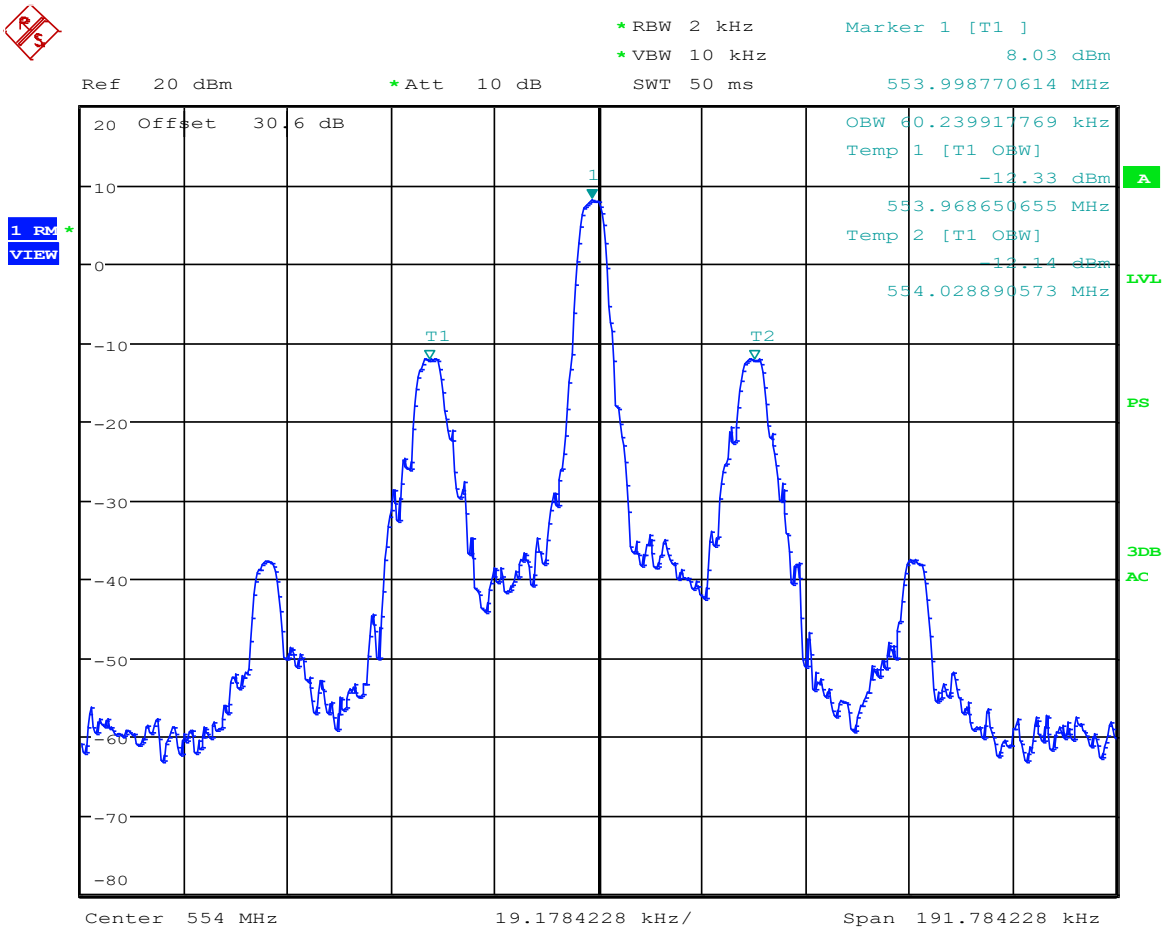
8.2.2 99% Bandwidth Plot, 554 MHz



Date: 11.MAR.2025 10:49:03

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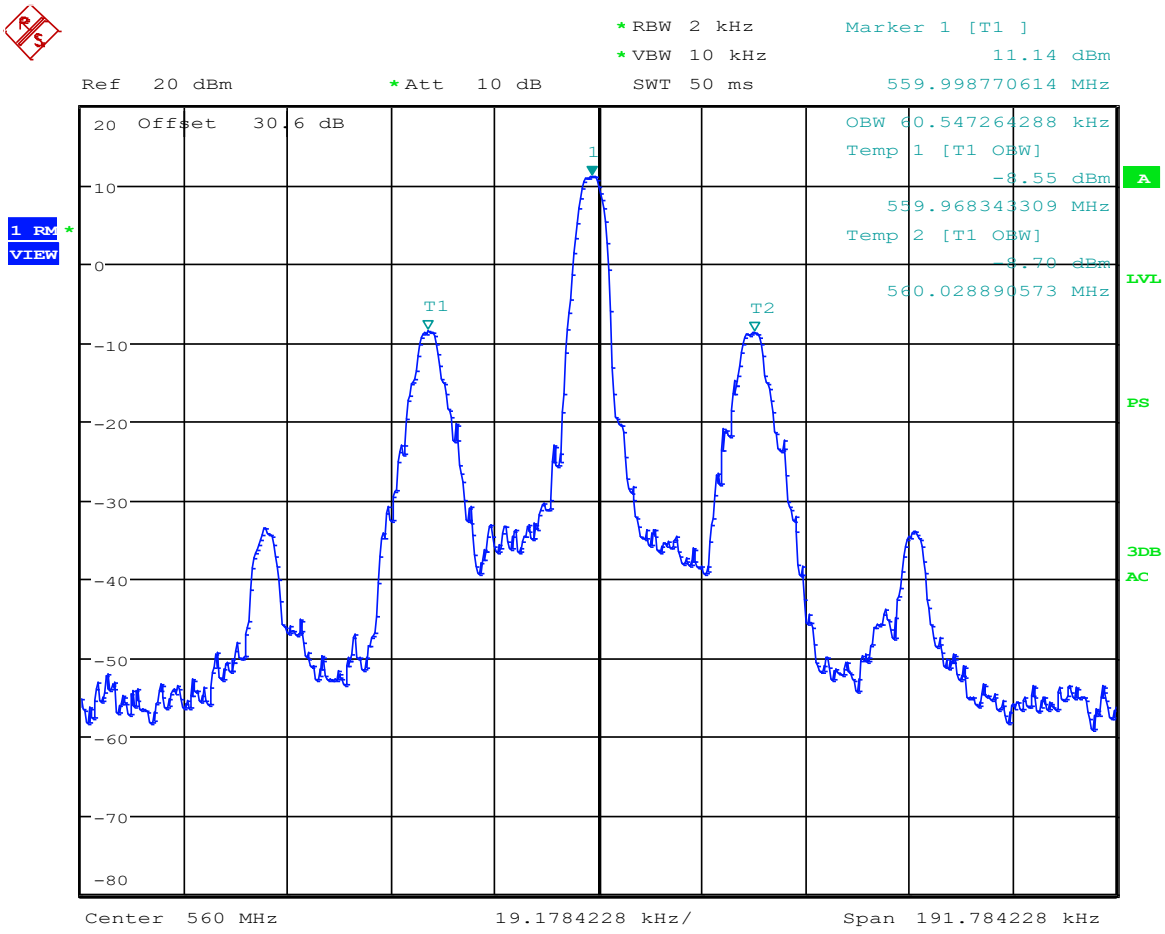
8.2.3 99% Bandwidth Plot, 560 MHz



Date: 11.MAR.2025 10:51:14

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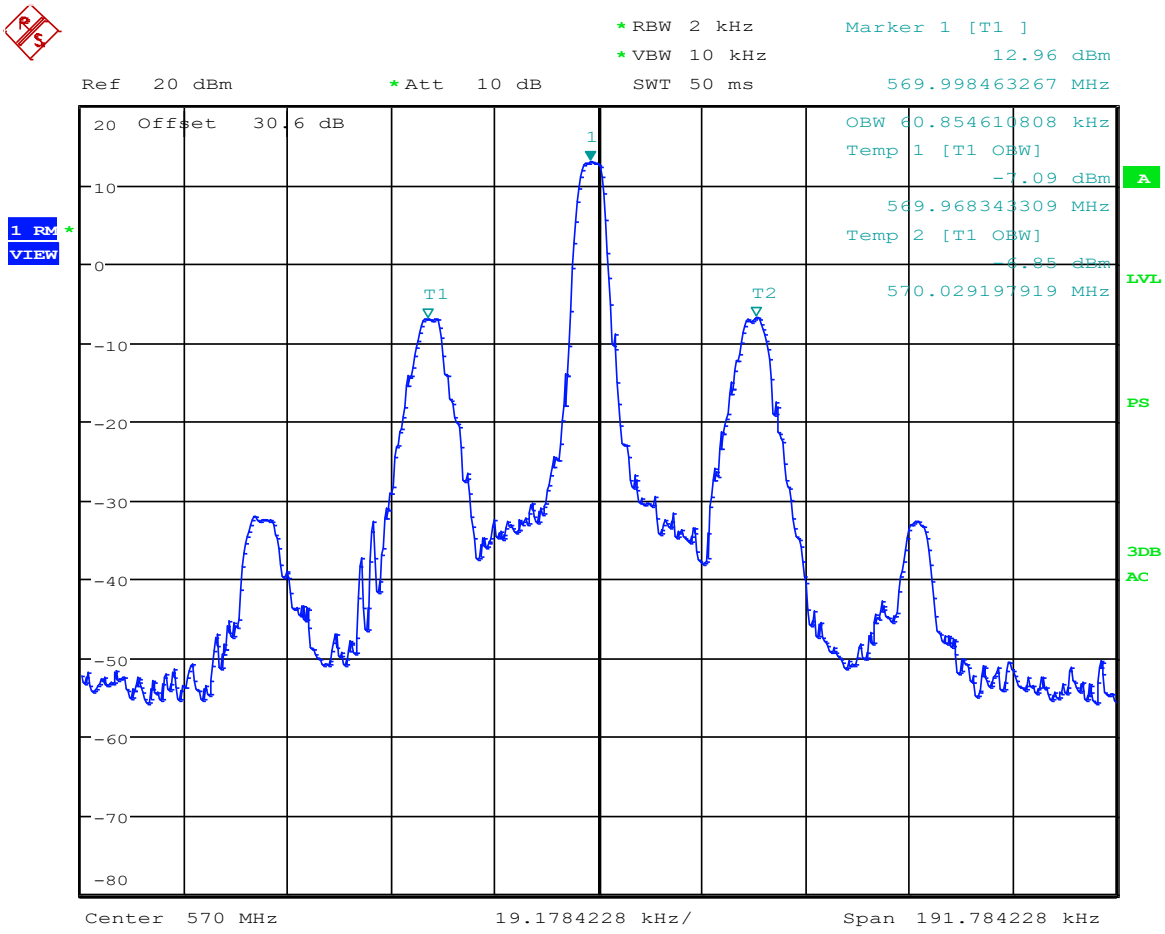
8.2.4 99% Bandwidth Plot, 570 MHz



Date: 11.MAR.2025 10:54:26

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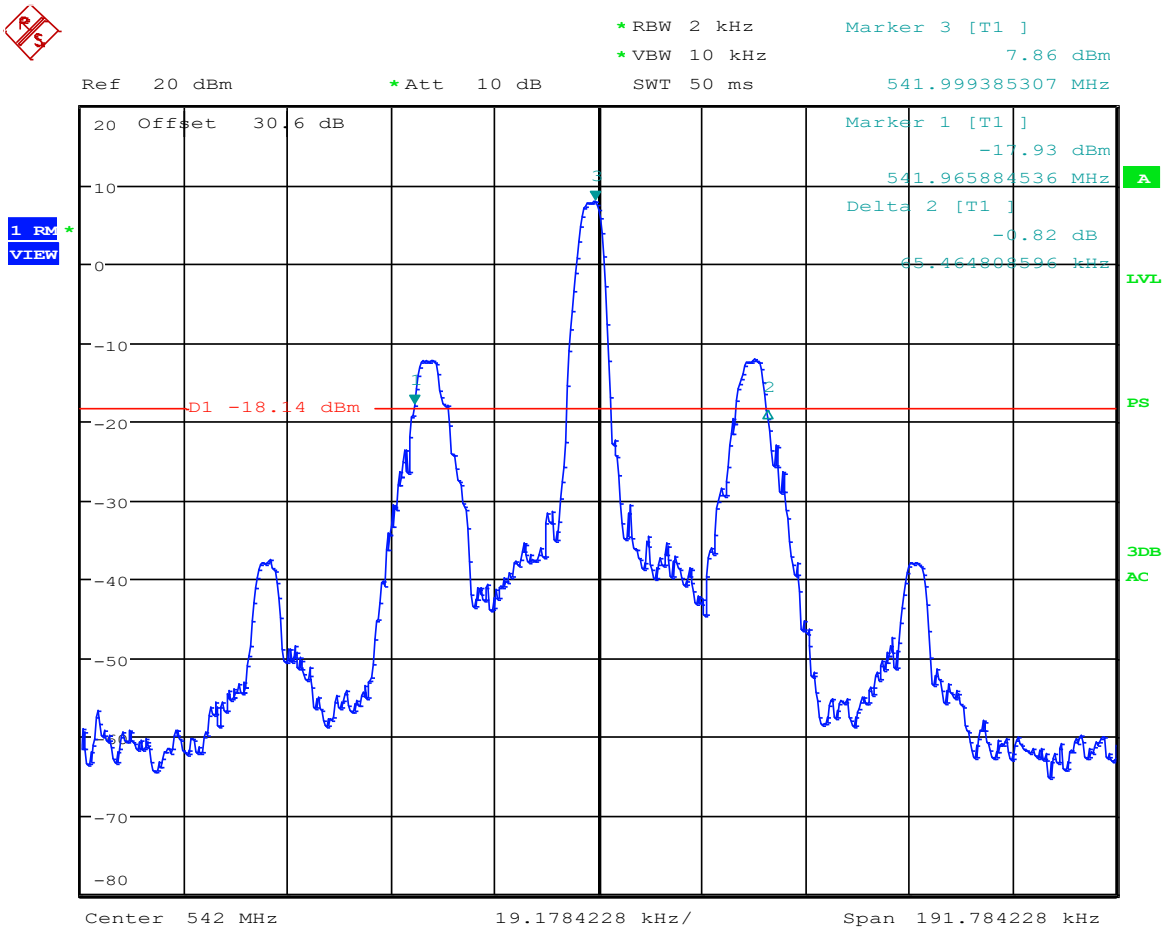
8.2.5 26dB Bandwidth Plot, 542 MHz



Date: 11.MAR.2025 10:46:53

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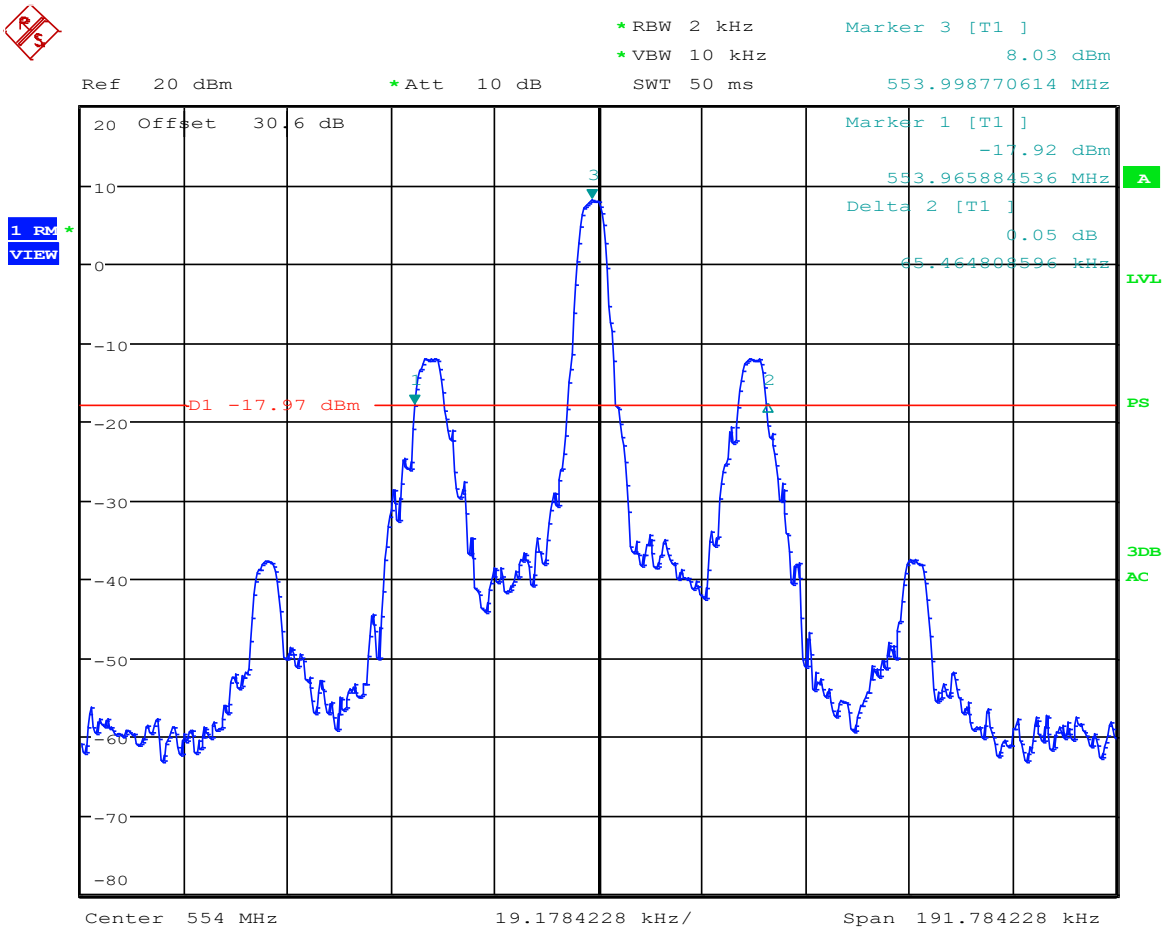
8.2.6 26dB Bandwidth Plot, 554 MHz



Date: 11.MAR.2025 10:50:14

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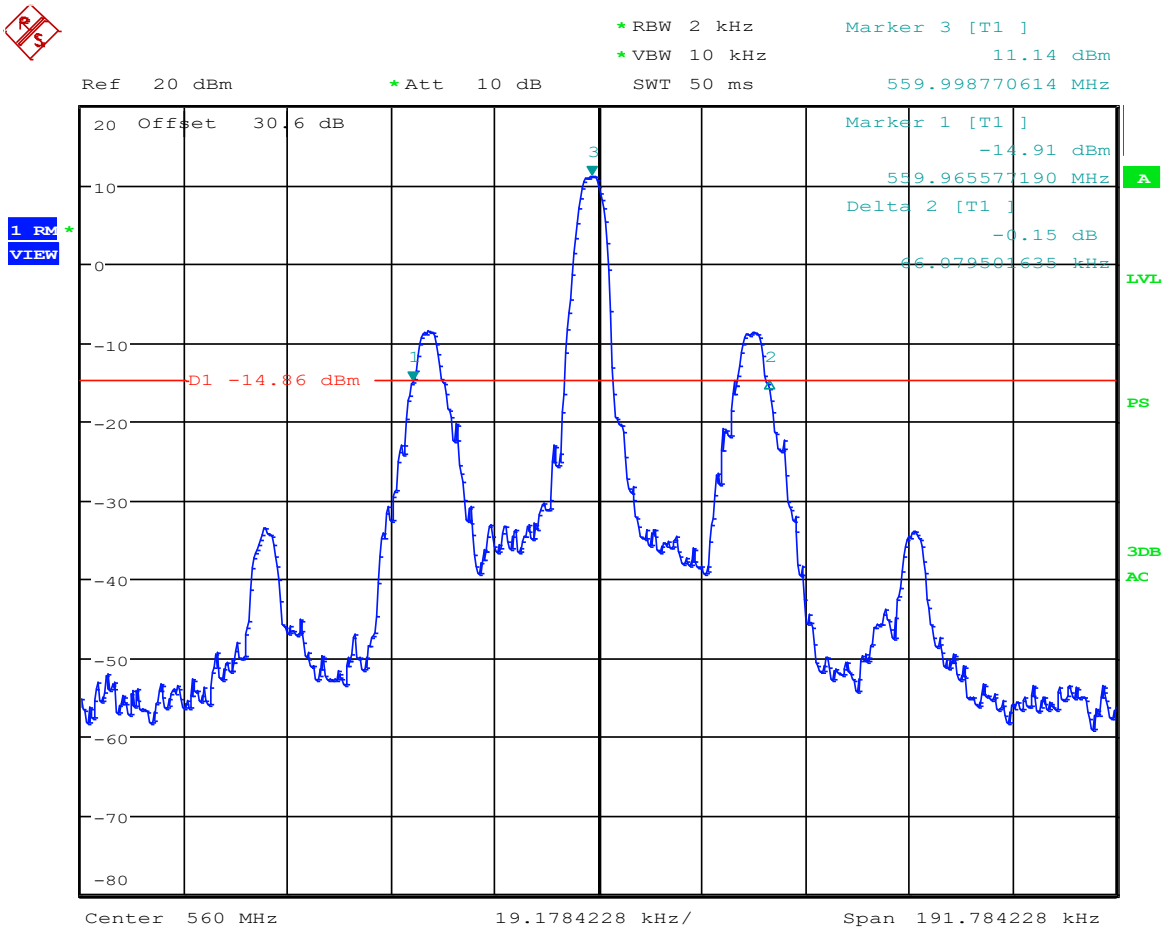
8.2.7 26dB Bandwidth Plot, 560 MHz



Date: 11.MAR.2025 10:52:30

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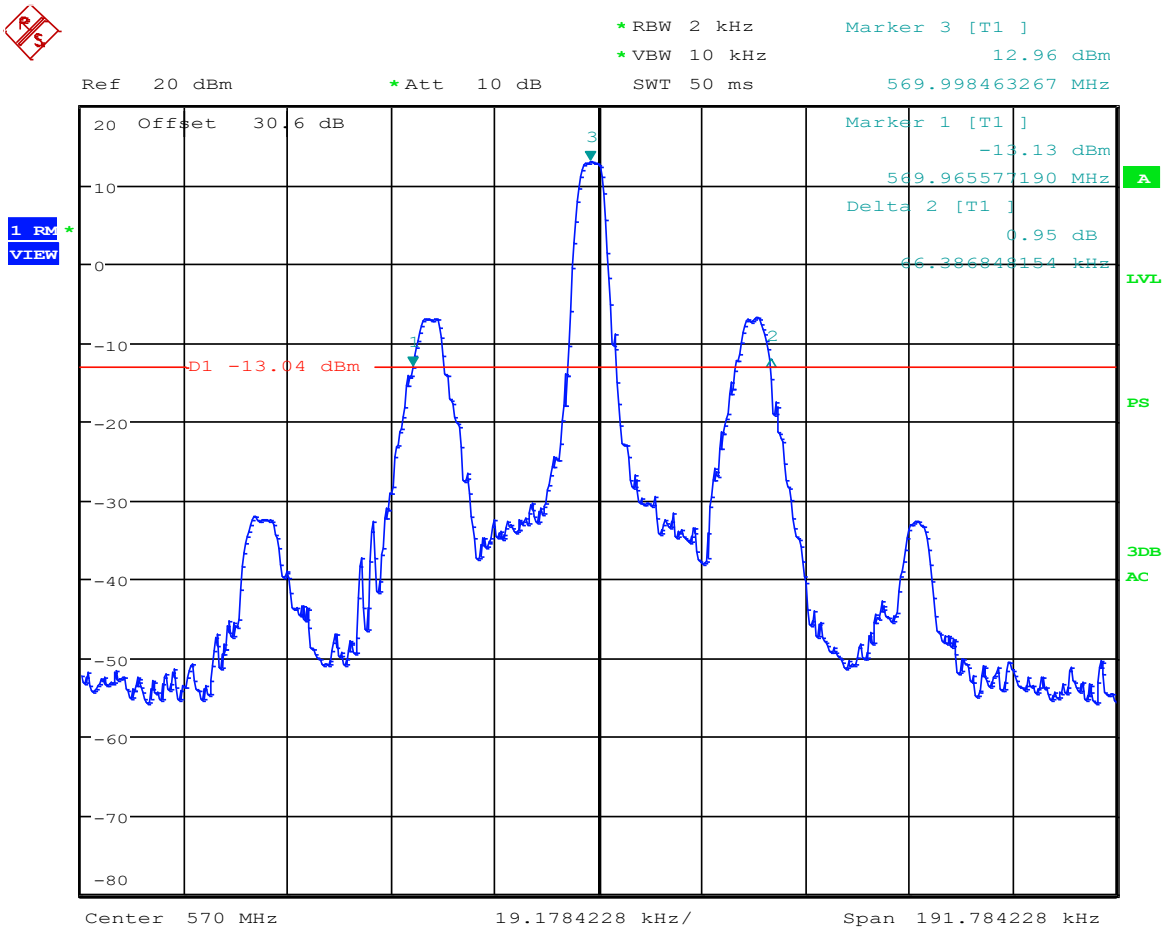
8.2.8 26dB Bandwidth Plot, 570 MHz



Date: 11.MAR.2025 10:55:27

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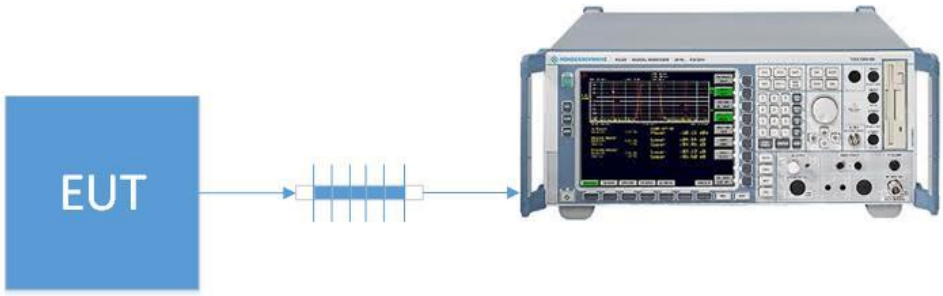
8.3 OCCUPIED BANDWIDTH (Mask)

Limits from Part FCC Part 15.236 (g) and test procedure from ANSI C63.10 and KDB 206256 D01 Wireless Microphone Certification.



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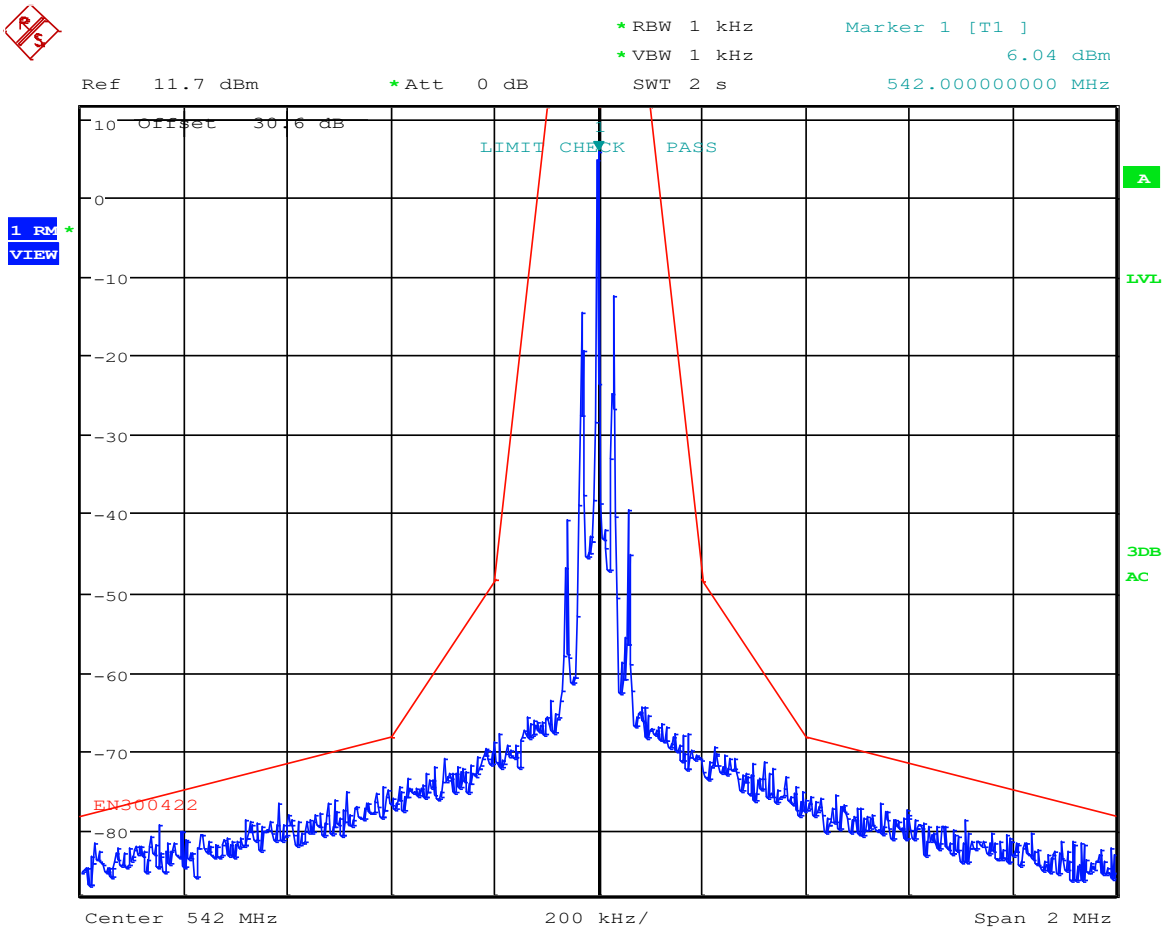
8.3.1 Emission Mask 300 422, Plot, 542 MHz



Date: 11.MAR.2025 12:55:46

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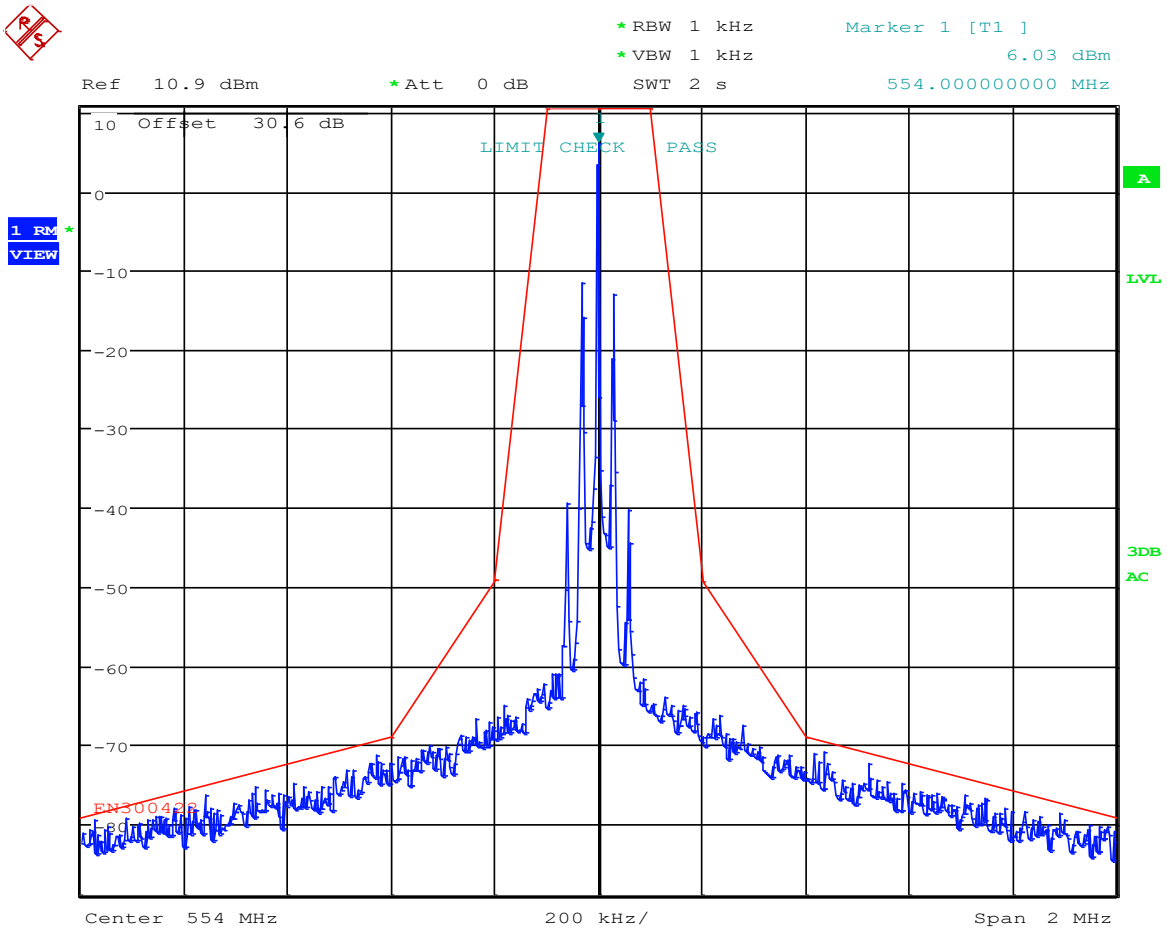
8.3.2 Emission Mask 300 422, Plot, 554 MHz



Date: 11.MAR.2025 12:57:01

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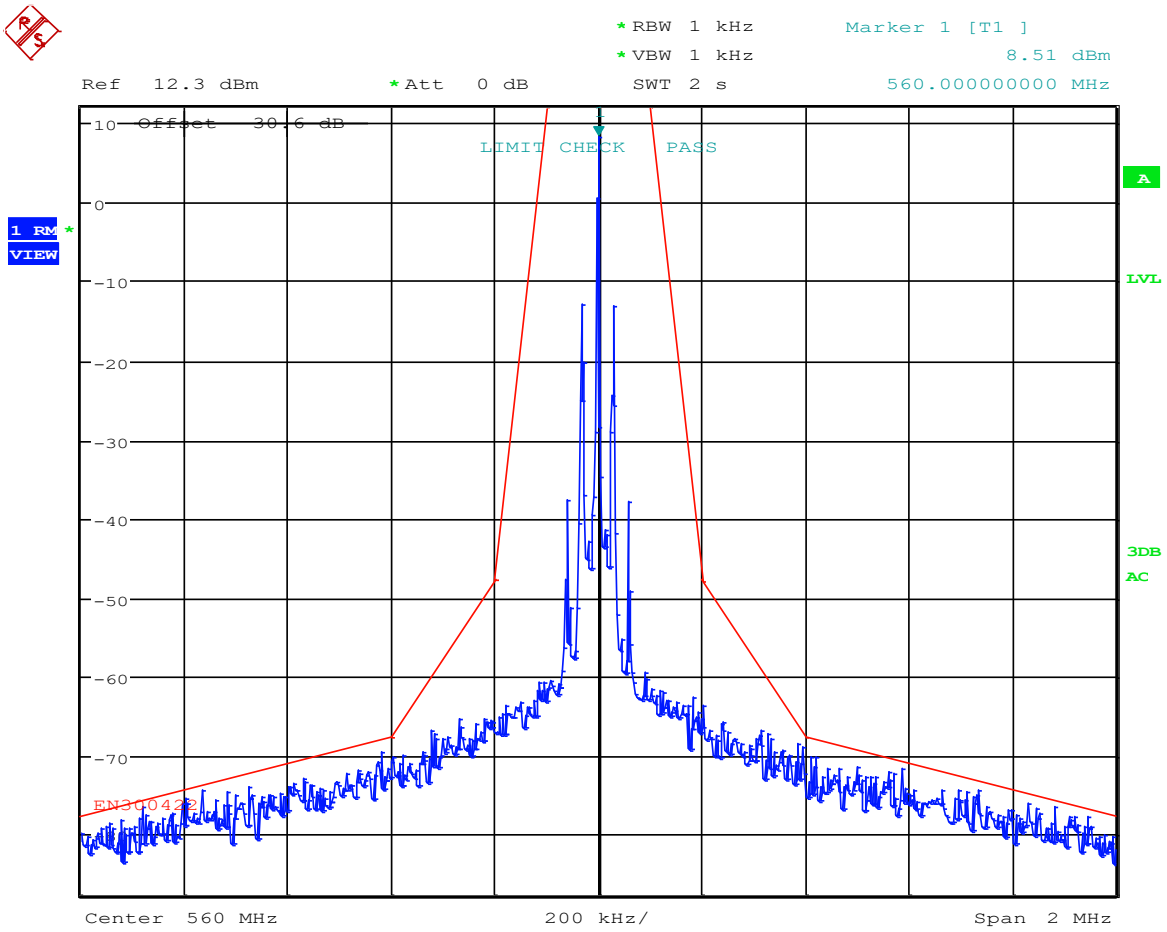
8.3.3 Emission Mask 300 422, Plot, 560 MHz



Date: 11.MAR.2025 12:58:40

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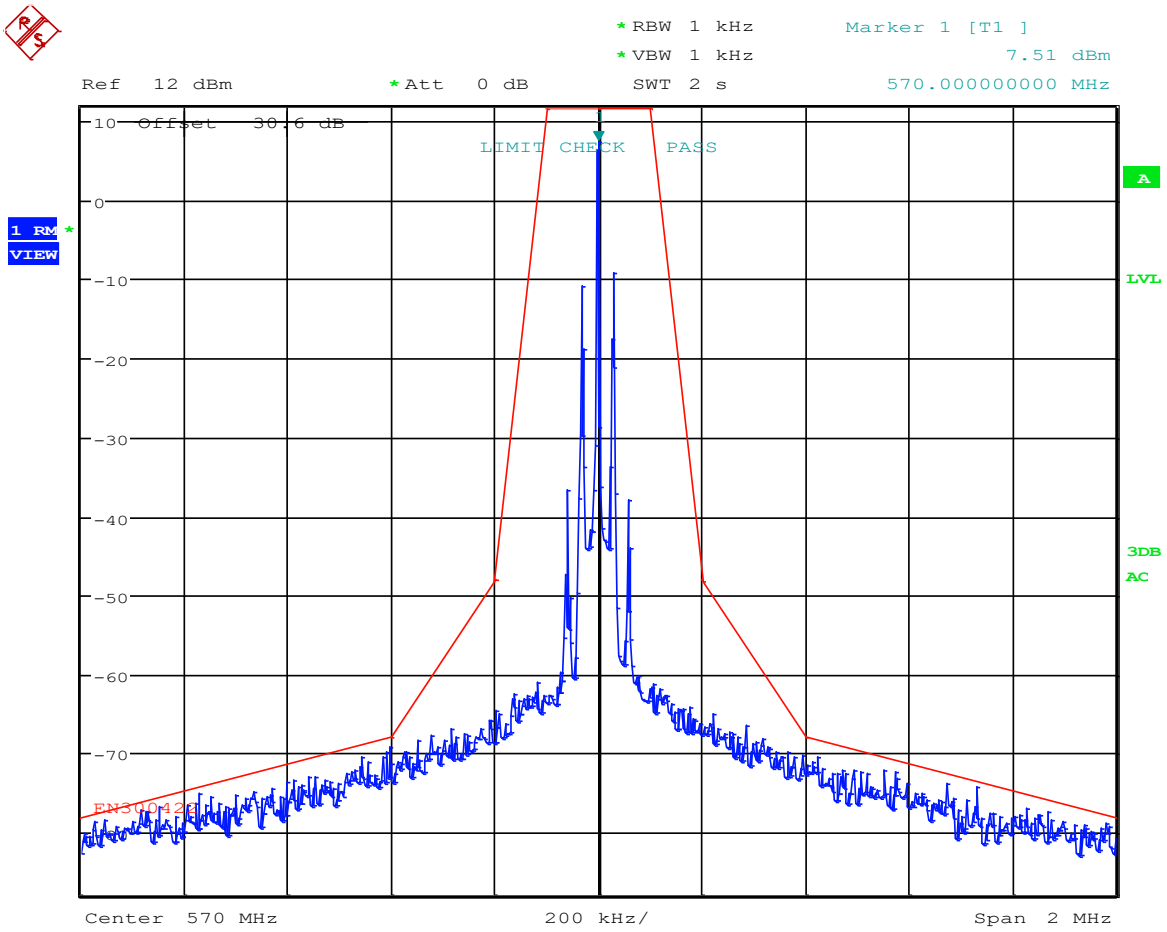
8.3.4 Emission Mask 300 422, Plot, 570 MHz



Date: 11.MAR.2025 12:59:41

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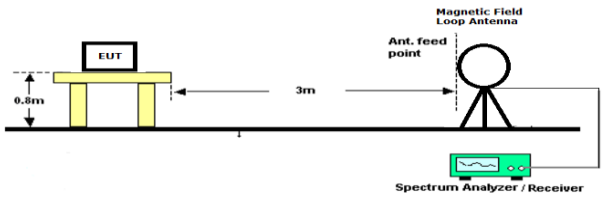
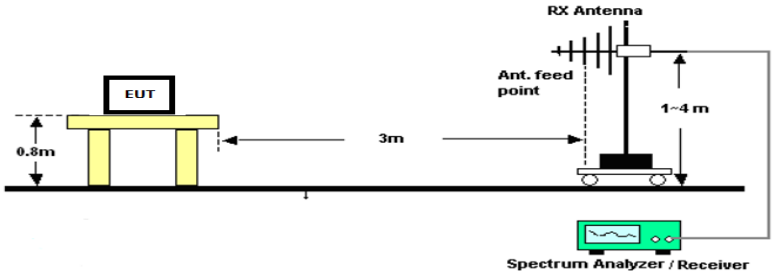
8.4 Radiated Emissions

Limits from FCC Part 15.236 (g) and test procedure from ANSI C63.10 and KDB 206256 D01 Wireless Microphone Certification.

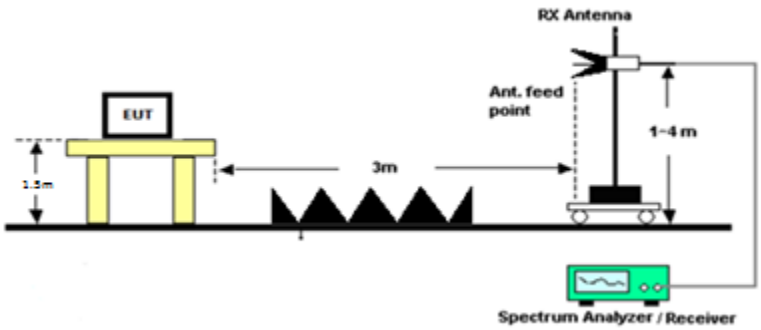
Radiated Test Setup, Below 30 MHz



Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz



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Radiated Emissions Tabular Data

8.4.1 Radiated Emissions, 542 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	15.205 Restricted Band	15.205, 15.35, 15.247(d)	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Duty Cycle Correction (dB)	Antenna Correction Factor	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
542.00	1084.00	X	PK	10.20	H	3.83	0.00	27.12	3.00	41.15	-56.23	-30.00	26.23
542.00	1084.00	X	PK	10.20	V	3.83	0.00	27.12	3.00	41.15	-56.23	-30.00	26.23
542.00	1084.00	X	AVG	-6.10	H	3.83	0.00	27.12	3.00	24.85	-72.53	-30.00	42.53
542.00	1084.00	X	AVG	-7.20	V	3.83	0.00	27.12	3.00	23.75	-73.63	-30.00	43.63
542.00	1626.00	X	PK	16.40	H	4.70	0.00	28.29	3.00	49.39	-47.99	-30.00	17.99
542.00	1626.00	X	PK	12.50	V	4.70	0.00	28.29	3.00	45.49	-51.89	-30.00	21.89
542.00	1626.00	X	AVG	11.20	H	4.70	0.00	28.29	3.00	44.19	-53.19	-30.00	23.19
542.00	1626.00	X	AVG	1.60	V	4.70	0.00	28.29	3.00	34.59	-62.79	-30.00	32.79
542.00	2168.00		AVG	17.90	H	5.35	0.00	31.45	3.00	54.70	-42.68	-30.00	12.68
542.00	2168.00		AVG	13.50	V	5.35	0.00	31.45	3.00	50.30	-47.08	-30.00	17.08
542.00	2710.00	X	PK	16.50	H	6.00	0.00	32.47	3.00	54.97	-42.40	-30.00	12.40
542.00	2710.00	X	PK	16.90	V	6.00	0.00	32.47	3.00	55.37	-42.00	-30.00	12.00
542.00	2710.00	X	AVG	7.60	H	6.00	0.00	32.47	3.00	46.07	-51.30	-30.00	21.30
542.00	2710.00	X	AVG	9.50	V	6.00	0.00	32.47	3.00	47.97	-49.40	-30.00	19.40
542.00	3252.00		AVG	8.60	H	6.65	0.00	32.78	3.00	48.03	-49.34	-30.00	19.34
542.00	3252.00		AVG	6.20	V	6.65	0.00	32.78	3.00	45.63	-51.74	-30.00	21.74
542.00	3794.00	X	PK	19.50	H	6.40	0.00	33.34	3.00	59.23	-38.14	-30.00	8.14
542.00	3794.00	X	PK	13.00	V	6.40	0.00	33.34	3.00	52.73	-44.64	-30.00	14.64
542.00	3794.00	X	AVG	15.10	H	6.40	0.00	33.34	3.00	54.83	-42.54	-30.00	12.54
542.00	3794.00	X	AVG	1.30	V	6.40	0.00	33.34	3.00	41.03	-56.34	-30.00	26.34
542.00	4336.00	X	PK	13.00	H	7.46	0.00	33.65	3.00	54.11	-43.27	-30.00	13.27
542.00	4336.00	X	PK	11.50	V	7.46	0.00	33.65	3.00	52.61	-44.77	-30.00	14.77
542.00	4336.00	X	AVG	2.50	H	7.46	0.00	33.65	3.00	43.61	-53.77	-30.00	23.77
542.00	4336.00	X	AVG	-1.90	V	7.46	0.00	33.65	3.00	39.21	-58.17	-30.00	28.17
542.00	4878.00	X	PK	13.30	H	7.31	0.00	34.12	3.00	54.73	-42.65	-30.00	12.65
542.00	4878.00	X	PK	14.90	V	7.31	0.00	34.12	3.00	56.33	-41.05	-30.00	11.05
542.00	4878.00	X	AVG	3.70	H	7.31	0.00	34.12	3.00	45.13	-52.25	-30.00	22.25
542.00	4878.00	X	AVG	6.40	V	7.31	0.00	34.12	3.00	47.83	-49.55	-30.00	19.55
542.00	5420.00	X	PK	11.50	H	8.15	0.00	34.71	3.00	54.36	-43.02	-30.00	13.02
542.00	5420.00	X	PK	12.00	V	8.15	0.00	34.71	3.00	54.86	-42.52	-30.00	12.52

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8.4.2 Radiated Emissions, 554 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	15.205 Restricted Band	15.205, 15.35, 15.247(d) Detector	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Duty Cycle Correction (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
554.00	1108.00	X	PK	10.80	H	3.86	0.00	27.48	3.00	42.14	-55.24	-30.00	25.24
554.00	1108.00	X	PK	10.80	V	3.86	0.00	27.48	3.00	42.14	-55.24	-30.00	25.24
554.00	1108.00	X	AVG	-4.30	H	3.86	0.00	27.48	3.00	27.04	-70.34	-30.00	40.34
554.00	1108.00	X	AVG	-7.00	V	3.86	0.00	27.48	3.00	24.34	-73.04	-30.00	43.04
554.00	1662.00	X	PK	16.90	H	4.74	0.00	28.79	3.00	50.42	-46.95	-30.00	16.95
554.00	1662.00	X	PK	12.80	V	4.74	0.00	28.79	3.00	46.32	-51.05	-30.00	21.05
554.00	1662.00	X	AVG	12.20	H	4.74	0.00	28.79	3.00	45.72	-51.65	-30.00	21.65
554.00	1662.00	X	AVG	2.20	V	4.74	0.00	28.79	3.00	35.72	-61.65	-30.00	31.65
554.00	2216.00	X	PK	25.30	H	5.39	0.00	31.49	3.00	62.18	-35.20	-30.00	5.20
554.00	2216.00	X	PK	19.30	V	5.39	0.00	31.49	3.00	56.18	-41.20	-30.00	11.20
554.00	2216.00	X	AVG	23.40	H	5.39	0.00	31.49	3.00	60.28	-37.10	-30.00	7.10
554.00	2216.00	X	AVG	15.20	V	5.39	0.00	31.49	3.00	52.08	-45.30	-30.00	15.30
554.00	2770.00	X	PK	15.90	H	6.13	0.00	32.50	3.00	54.53	-42.84	-30.00	12.84
554.00	2770.00	X	PK	16.80	V	6.13	0.00	32.50	3.00	55.43	-41.94	-30.00	11.94
554.00	2770.00	X	AVG	6.20	H	6.13	0.00	32.50	3.00	44.83	-52.54	-30.00	22.54
554.00	2770.00	X	AVG	9.20	V	6.13	0.00	32.50	3.00	47.83	-49.54	-30.00	19.54
554.00	3324.00		AVG	18.17	H	6.72	0.00	32.74	3.00	57.63	-39.75	-30.00	9.75
554.00	3324.00		AVG	14.00	V	6.72	0.00	32.74	3.00	53.46	-43.92	-30.00	13.92
554.00	3878.00	X	PK	18.10	H	6.76	0.00	33.47	3.00	58.33	-39.05	-30.00	9.05
554.00	3878.00	X	PK	14.10	V	6.76	0.00	33.47	3.00	54.33	-43.05	-30.00	13.05
554.00	3878.00	X	AVG	13.50	H	6.76	0.00	33.47	3.00	53.73	-43.65	-30.00	13.65
554.00	3878.00	X	AVG	5.80	V	6.76	0.00	33.47	3.00	46.03	-51.35	-30.00	21.35
554.00	4432.00		AVG	9.20	H	7.28	0.00	33.84	3.00	50.32	-47.05	-30.00	17.05
554.00	4432.00		AVG	-0.80	V	7.28	0.00	33.84	3.00	40.32	-57.05	-30.00	27.05
554.00	4986.00	X	PK	13.50	H	7.64	0.00	34.01	3.00	55.15	-42.22	-30.00	12.22
554.00	4986.00	X	PK	18.70	V	7.64	0.00	34.01	3.00	60.35	-37.02	-30.00	7.02
554.00	4986.00	X	AVG	2.70	H	7.64	0.00	34.01	3.00	44.35	-53.02	-30.00	23.02
554.00	4986.00	X	AVG	12.80	V	7.64	0.00	34.01	3.00	54.45	-42.92	-30.00	12.92
554.00	5540.00		AVG	3.60	H	8.06	0.00	34.72	3.00	46.38	-51.00	-30.00	21.00
554.00	5540.00		AVG	-1.90	V	8.06	0.00	34.72	3.00	40.88	-56.50	-30.00	26.50

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8.4.3 Radiated Emissions, 560 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	15.205 Restricted Band	15.205, 15.35, 15.247(d) Detector	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Duty Cycle Correction (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
560.00	1120.00	X	PK	10.20	H	3.87	0.00	27.52	3.00	41.59	-55.79	-30.00	25.79
560.00	1120.00	X	PK	10.90	V	3.87	0.00	27.52	3.00	42.29	-55.09	-30.00	25.09
560.00	1120.00	X	AVG	-3.40	H	3.87	0.00	27.52	3.00	27.99	-69.39	-30.00	39.39
560.00	1120.00	X	AVG	-5.40	V	3.87	0.00	27.52	3.00	25.99	-71.39	-30.00	41.39
560.00	1680.00	X	PK	17.40	H	4.76	0.00	28.97	3.00	51.12	-46.25	-30.00	16.25
560.00	1680.00	X	PK	13.00	V	4.76	0.00	28.97	3.00	46.72	-50.65	-30.00	20.65
560.00	1680.00	X	AVG	12.40	H	4.76	0.00	28.97	3.00	46.12	-51.25	-30.00	21.25
560.00	1680.00	X	AVG	0.70	V	4.76	0.00	28.97	3.00	34.42	-62.95	-30.00	32.95
560.00	2240.00	X	PK	26.20	H	5.41	0.00	31.79	3.00	63.40	-33.97	-30.00	3.97
560.00	2240.00	X	PK	17.30	V	5.41	0.00	31.79	3.00	54.50	-42.87	-30.00	12.87
560.00	2240.00	X	AVG	24.40	H	5.41	0.00	31.79	3.00	61.60	-35.77	-30.00	5.77
560.00	2240.00	X	AVG	12.70	V	5.41	0.00	31.79	3.00	49.90	-47.47	-30.00	17.47
560.00	2800.00	X	PK	16.10	H	6.19	0.00	32.56	3.00	54.85	-42.53	-30.00	12.53
560.00	2800.00	X	PK	17.70	V	6.19	0.00	32.56	3.00	56.45	-40.93	-30.00	10.93
560.00	2800.00	X	AVG	7.40	H	6.19	0.00	32.56	3.00	46.15	-51.23	-30.00	21.23
560.00	2800.00	X	AVG	10.70	V	6.19	0.00	32.56	3.00	49.45	-47.93	-30.00	17.93
560.00	3360.00		AVG	18.80	H	6.73	0.00	32.64	3.00	58.17	-39.21	-30.00	9.21
560.00	3360.00		AVG	18.40	V	6.73	0.00	32.64	3.00	57.77	-39.61	-30.00	9.61
560.00	3920.00	X	PK	19.00	H	7.12	0.00	33.46	3.00	59.58	-37.80	-30.00	7.80
560.00	3920.00	X	PK	15.10	V	7.12	0.00	33.46	3.00	55.68	-41.70	-30.00	11.70
560.00	3920.00	X	AVG	13.90	H	7.12	0.00	33.46	3.00	54.48	-42.90	-30.00	12.90
560.00	3920.00	X	AVG	7.30	V	7.12	0.00	33.46	3.00	47.88	-49.50	-30.00	19.50
560.00	4480.00		AVG	2.10	H	7.31	0.00	33.86	3.00	43.27	-54.11	-30.00	24.11
560.00	4480.00		AVG	3.70	V	7.31	0.00	33.86	3.00	44.87	-52.51	-30.00	22.51
560.00	5040.00	X	PK	14.30	H	7.87	0.00	34.13	3.00	56.30	-41.08	-30.00	11.08
560.00	5040.00	X	PK	19.90	V	7.87	0.00	34.13	3.00	61.90	-35.48	-30.00	5.48
560.00	5040.00	X	AVG	5.30	H	7.87	0.00	34.13	3.00	47.30	-50.08	-30.00	20.08
560.00	5040.00	X	AVG	14.60	V	7.87	0.00	34.13	3.00	56.60	-40.78	-30.00	10.78
560.00	5600.00		AVG	2.80	H	8.16	0.00	34.89	3.00	45.85	-51.53	-30.00	21.53
560.00	5600.00		AVG	-1.60	V	8.16	0.00	34.89	3.00	41.45	-55.93	-30.00	25.93

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8.4.4 Radiated Emissions, 570 MHz

Tuned Frequency (MHz)	Emission Frequency (MHz)	15.205 Restricted Band	15.205, 15.35, 15.247(d) Detector	Meter Reading (dBµV)	Antenna Polarity	Coax Loss (dB)	Duty Cycle Correction (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dBµV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
570.00	1140.00	X	PK	12.70	H	3.91	0.00	27.65	3.00	44.25	-53.13	-30.00	23.13
570.00	1140.00	X	PK	12.10	V	3.91	0.00	27.65	3.00	43.65	-53.73	-30.00	23.73
570.00	1140.00	X	AVG	2.10	H	3.91	0.00	27.65	3.00	33.65	-63.73	-30.00	33.73
570.00	1140.00	X	AVG	-3.70	V	3.91	0.00	27.65	3.00	27.85	-69.53	-30.00	39.53
570.00	1710.00		PK	15.50	H	4.80	0.00	29.38	3.00	49.68	-47.70	-30.00	17.70
570.00	1710.00		PK	12.70	V	4.80	0.00	29.38	3.00	46.88	-50.50	-30.00	20.50
570.00	2280.00	X	PK	26.20	H	5.47	0.00	31.93	3.00	63.59	-33.78	-30.00	3.78
570.00	2280.00	X	PK	19.20	V	5.47	0.00	31.93	3.00	56.59	-40.78	-30.00	10.78
570.00	2280.00	X	AVG	24.30	H	5.47	0.00	31.93	3.00	61.69	-35.68	-30.00	5.68
570.00	2280.00	X	AVG	15.30	V	5.47	0.00	31.93	3.00	52.69	-44.68	-30.00	14.68
570.00	2850.00	X	PK	16.40	H	6.20	0.00	32.32	3.00	54.92	-42.46	-30.00	12.46
570.00	2850.00	X	PK	18.00	V	6.20	0.00	32.32	3.00	56.52	-40.86	-30.00	10.86
570.00	2850.00	X	AVG	8.10	H	6.20	0.00	32.32	3.00	46.62	-50.76	-30.00	20.76
570.00	2850.00	X	AVG	11.80	V	6.20	0.00	32.32	3.00	50.32	-47.06	-30.00	17.06
570.00	3420.00		AVG	14.20	H	6.83	0.00	32.55	3.00	53.59	-43.79	-30.00	13.79
570.00	3420.00		AVG	17.60	V	6.83	0.00	32.55	3.00	56.99	-40.39	-30.00	10.39
570.00	3990.00	X	PK	18.00	H	7.26	0.00	33.41	3.00	58.67	-38.71	-30.00	8.71
570.00	3990.00	X	PK	14.30	V	7.26	0.00	33.41	3.00	54.97	-42.41	-30.00	12.41
570.00	3990.00	X	AVG	12.10	H	7.26	0.00	33.41	3.00	52.77	-44.61	-30.00	14.61
570.00	3990.00	X	AVG	4.50	V	7.26	0.00	33.41	3.00	45.17	-52.21	-30.00	22.21
570.00	4560.00	X	PK	18.00	H	7.51	0.00	34.00	3.00	59.51	-37.86	-30.00	7.86
570.00	4560.00	X	PK	14.10	V	7.51	0.00	34.00	3.00	55.61	-41.76	-30.00	11.76
570.00	4560.00	X	AVG	12.20	H	7.51	0.00	34.00	3.00	53.71	-43.66	-30.00	13.66
570.00	4560.00	X	AVG	3.80	V	7.51	0.00	34.00	3.00	45.31	-52.06	-30.00	22.06
570.00	5130.00	X	PK	18.00	H	7.85	0.00	34.22	3.00	60.08	-37.30	-30.00	7.30
570.00	5130.00	X	PK	20.50	V	7.85	0.00	34.22	3.00	62.58	-34.80	-30.00	4.80
570.00	5130.00	X	AVG	11.80	H	7.85	0.00	34.22	3.00	53.88	-43.50	-30.00	13.50
570.00	5130.00	X	AVG	15.20	V	7.85	0.00	34.22	3.00	57.28	-40.10	-30.00	10.10
570.00	5700.00		AVG	2.50	H	8.06	0.00	34.88	3.00	45.44	-51.94	-30.00	21.94
570.00	5700.00		AVG	0.40	V	8.06	0.00	34.88	3.00	43.34	-54.04	-30.00	24.04

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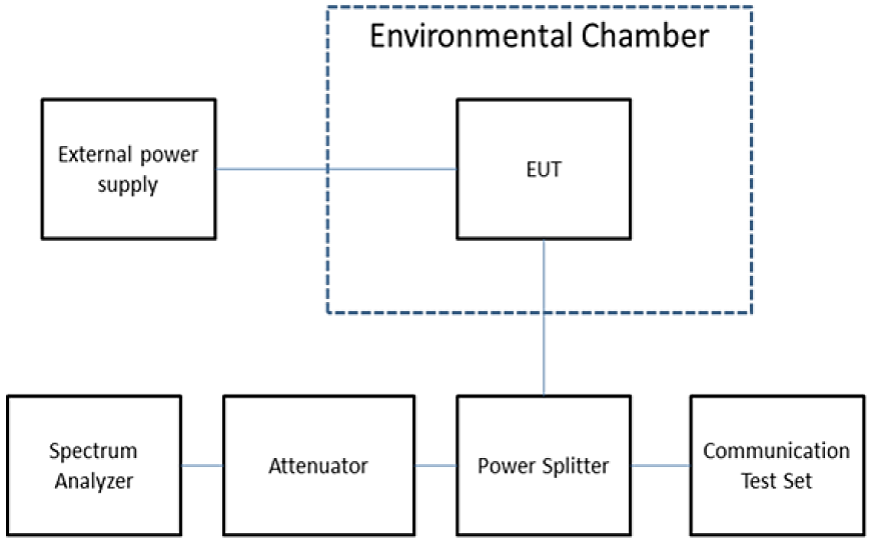
8.5 Frequency Stability

Limits from FCC Part 15.236 (f)(3)

Test Setup


Test Results, Mode 1		
Tuned Frequency (MHz)	Max Deviation (kHz)	Limit (ppm)
542	2.7	50

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8.5.1 Frequency Stability Data

FCC Part 15.236 Limit	50.0	ppm
FCC Part 15.236 Limit, as ppb	50000	ppb (Parts per Billion)
FCC Part 15.236 Limit, as %	0.00500	%
Strictest Combined Limit, as Hz	27099.953	Hz
Combined Lower Limit	541.971950	MHz
Combined Upper Limit	542.026150	MHz
Rated Supply Voltage	3.0	○ AC ◉ DC

Temperature / Voltage Variation

Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)	Deviation (kHz)
-20	3.0	542.001250	-2.200
-10	3.0	542.001750	-2.700
0	3.0	542.001060	-2.010
+10	3.0	542.000210	-1.160
+20 (reference)	3.0	541.999050	0.000
+20	2.6	541.998920	0.130
+20	3.5	541.998770	0.280
+30	3.0	541.998480	0.570
+40	3.0	541.997400	1.650
+50	3.0	541.996510	2.540

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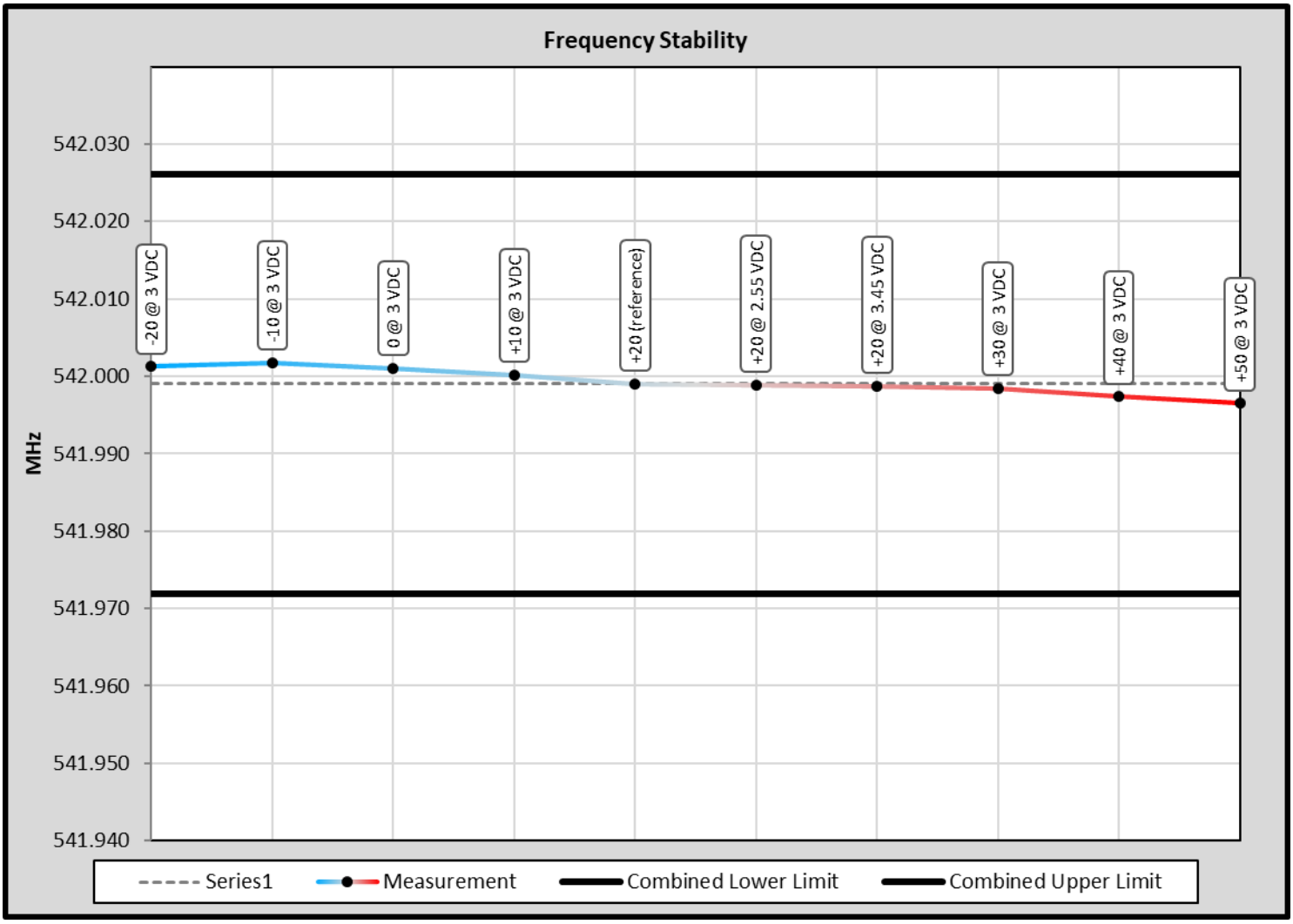
8.5.2 Frequency Stability Plot



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9. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate document.

10. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_18891-25_Handheld_FCC 15.236_	1	Initial release	3/12/2025
	2	Change on pg 6	9/30/2025

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END OF TEST REPORT

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