



Test Report – FCC PART 74H LOW POWER LICENSED WIRELESS MICROPHONE Applicant: Wisycom s.r.l.

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Timco Engineering, Inc., an IIA Company
13146 NW 86th Drive, Suite 400, Alachua, Florida 32615
(352) 472-5500 / testing@industrial-ia.com

1. Customer Information

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

1.1 Test Result Summary

The following test procedure was used ANSI C63.26. 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.

Clauses	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)	Operating Bandwidth	PASS
PART 74.861(e)(7), ETSI EN 300-422-1 s. 4.2.4	Unwanted Emissions	PASS
2.1051(a), 74.861(e)(6)(iii)	Unwanted Emissions	PASS
2.1053, 74.861(e)(6)(iii)	Unwanted 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: 11/18/2024-11/29/2024

Signature:

Sr. EMC Engineer
EMC-003838-NE



Name & Title:

Tim Royer, Lab Manager

Date of Signature

3/27/2025



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

The test sample was received: 11/15/2024

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:	POUMTH610
Brief Description	Handheld microphone transmitter
Model(s) #	MTH610
Firmware version	V1.0
Serial Number	39900005

Technical Characteristics	
Technology	Wireless Microphone
Frequency Range	470-608 MHz, 614-616 MHz, 657-663 MHz, 941.5-959.85 MHz
Modulation	FM
Number of Channels	10
Duty Cycle	100%
Antenna Connector	Integrated
Voltage Rating (AC or Batt.)	2xAA batteries 3Vdc or 2xLi-ion batteries 7.4Vdc

Antenna Characteristics			
Antenna	Frequency Range MHz	Mode / BW	Antenna Gain
1	470-608	Transmit	0.6 dBi
1	614-616	Transmit	0.5 dBi
1	657-663	Transmit	0.5 dBi
1	941.5-1075	Transmit	0.75 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 (Type)	Test Frequencies (MHz)	Number of Ant.
Transmit	470-608 653-657 941.5-952 952.85-956.25 956.45-959.85	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.



4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance

The measurement was performed as per ANSI C63.26. 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, NSA	Log-Periodic 1243	Eaton	96005	1243	5/4/21	12/18/2024
Antenna	Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	5/31/23	12/18/2024
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	10/13/21	12/12/2024
Signal Generator	Signal Generator HP 8648C	HP	8648C	35537A01679	8/4/22	8/03/2025
Thermometer	Type K J Thermometer	Martel	303	080504494	1/16/23	1/15/2026

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.

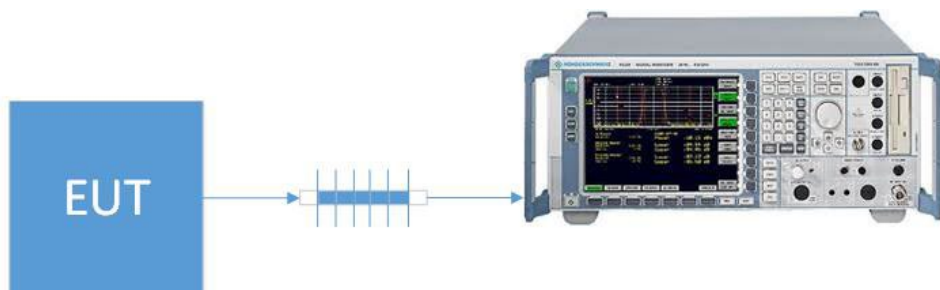
The measurement results, along with the appropriate limits for comparison, may be presented in tabular or graphical form. In addition, any variation in the measurement environment may be reported if applicable (e.g., a significant change of temperature that could affect the cable loss and amplifier response).

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.

8.1 RF POWER OUTPUT

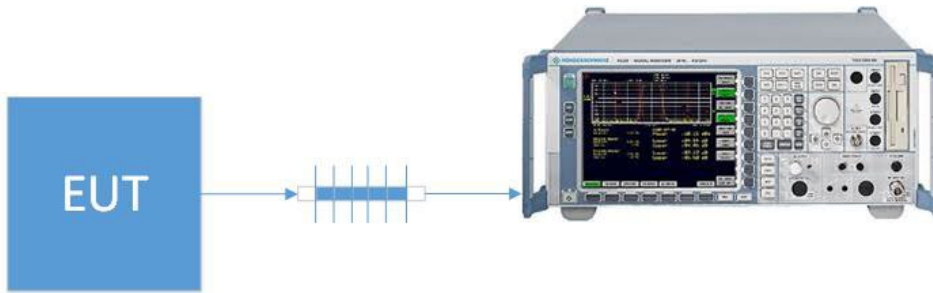
Limits from 2.1046(a), 74.861(e) (1) (ii) and test procedure from ANSI C63.26.



Test Results, Mode 1						
Mode	Tuned Frequency (MHz)	Power Output (dBm)	Power Output (W)	Gain	EIRP Power Output (dBm)	Limit EIRP
1	653.075	12.71	0.019	1.0	13.7	20

Test Results, Mode 1				
Mode	Tuned Frequency (MHz)	Power Output (dBm)	Power Output (mW)	Limit (mW)
1	470.075	18.62	72.7	250
1	555.000	15.83	38.2	250
1	607.925	15.75	37.5	250
1	941.500	17.57	57.1	1000
1	954.000	17.66	58.3	1000
1	959.850	17.65	58.2	1000

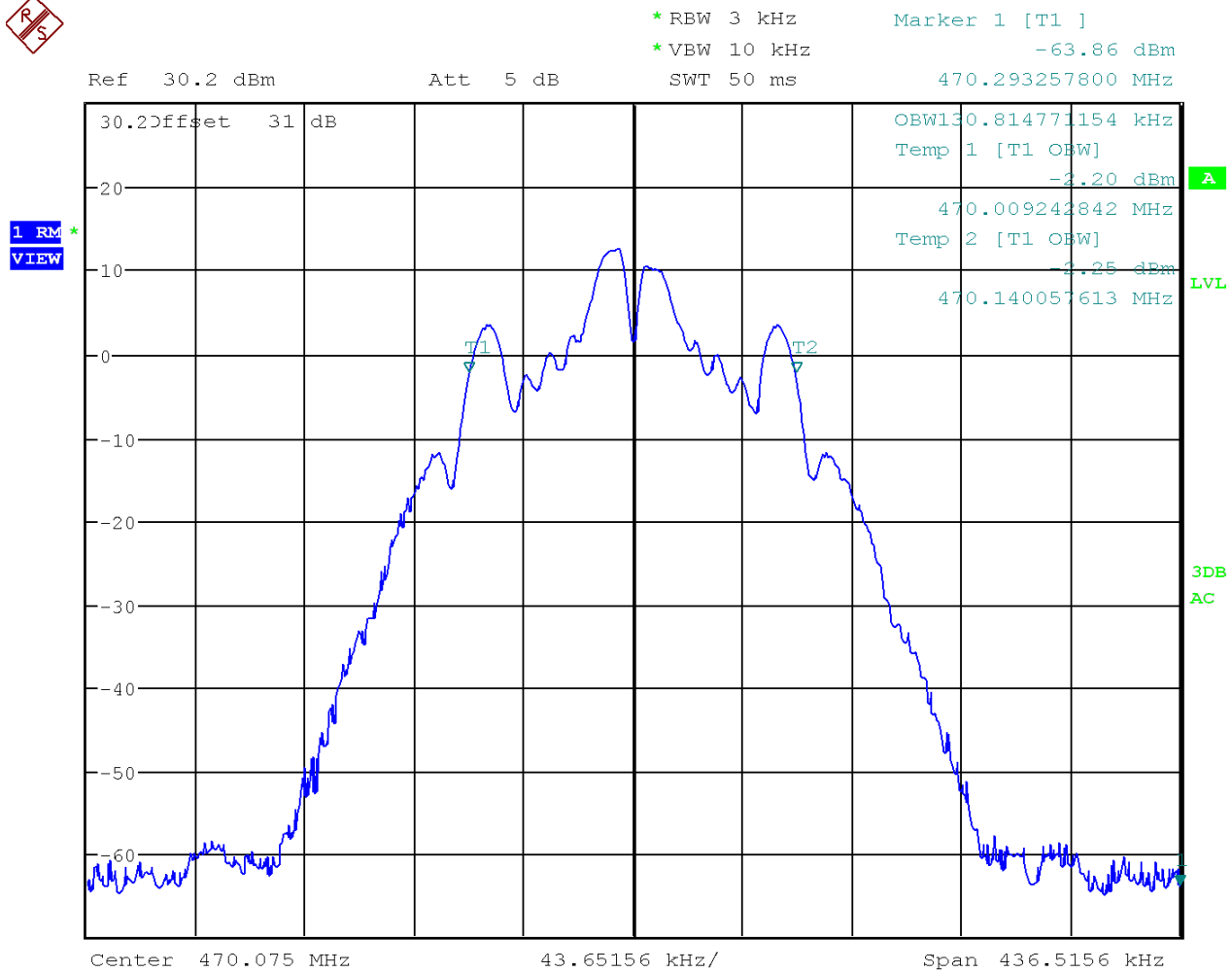
8.2 OCCUPIED BANDWIDTH



Tuned Frequency (MHz)	99% BW (kHz)
470.075	130.81
555.000	131.51
607.925	133.7
653.075	132.00
941.500	129.51
954.000	127.07
959.850	128.53



8.2.1 Test Data: 99% Occupied Bandwidth Plot, 470.075 MHz

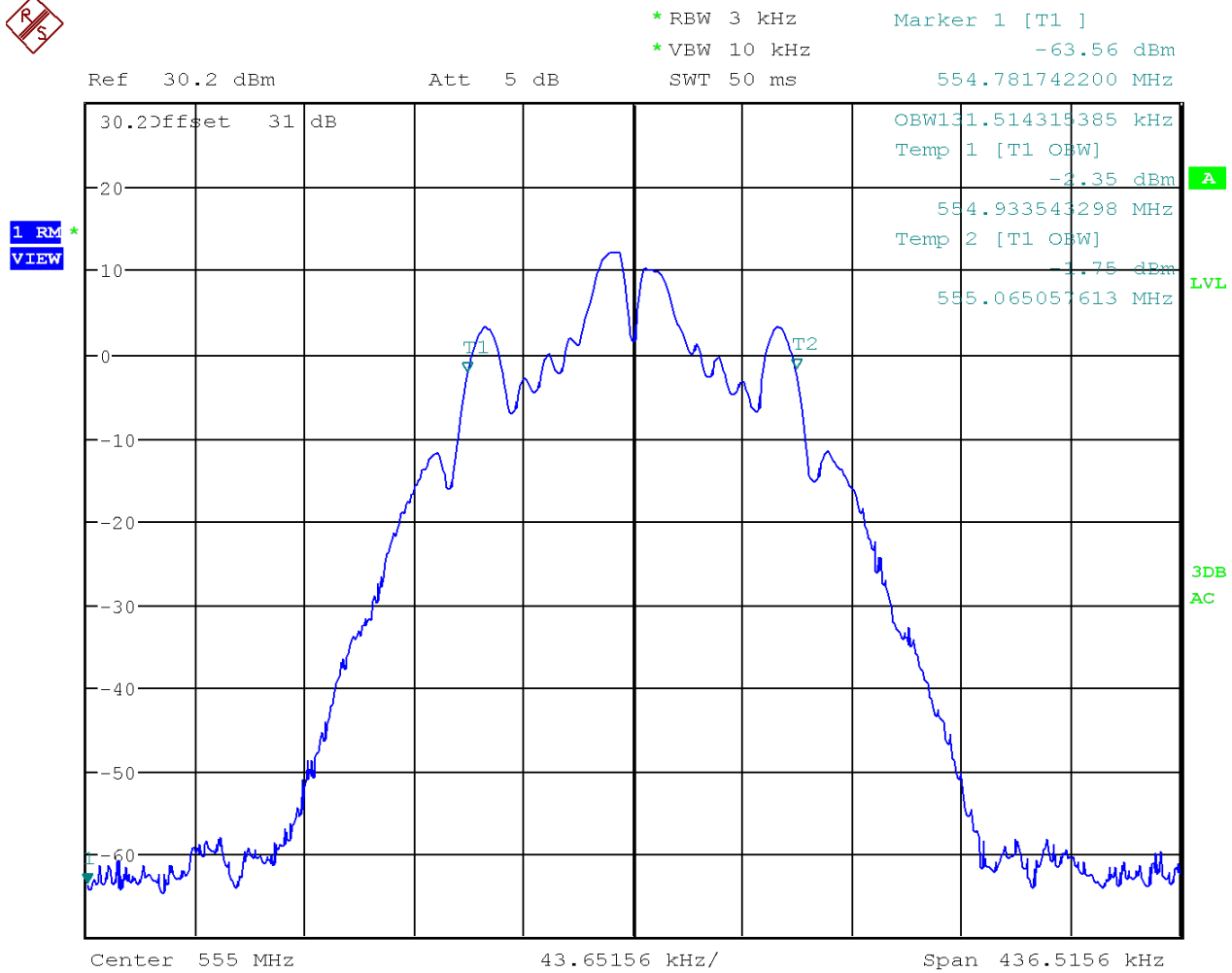


Date: 19.NOV.2024 12:34:28



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8.2.2 Test Data: 99% Occupied Bandwidth Plot, 555.000 MHz

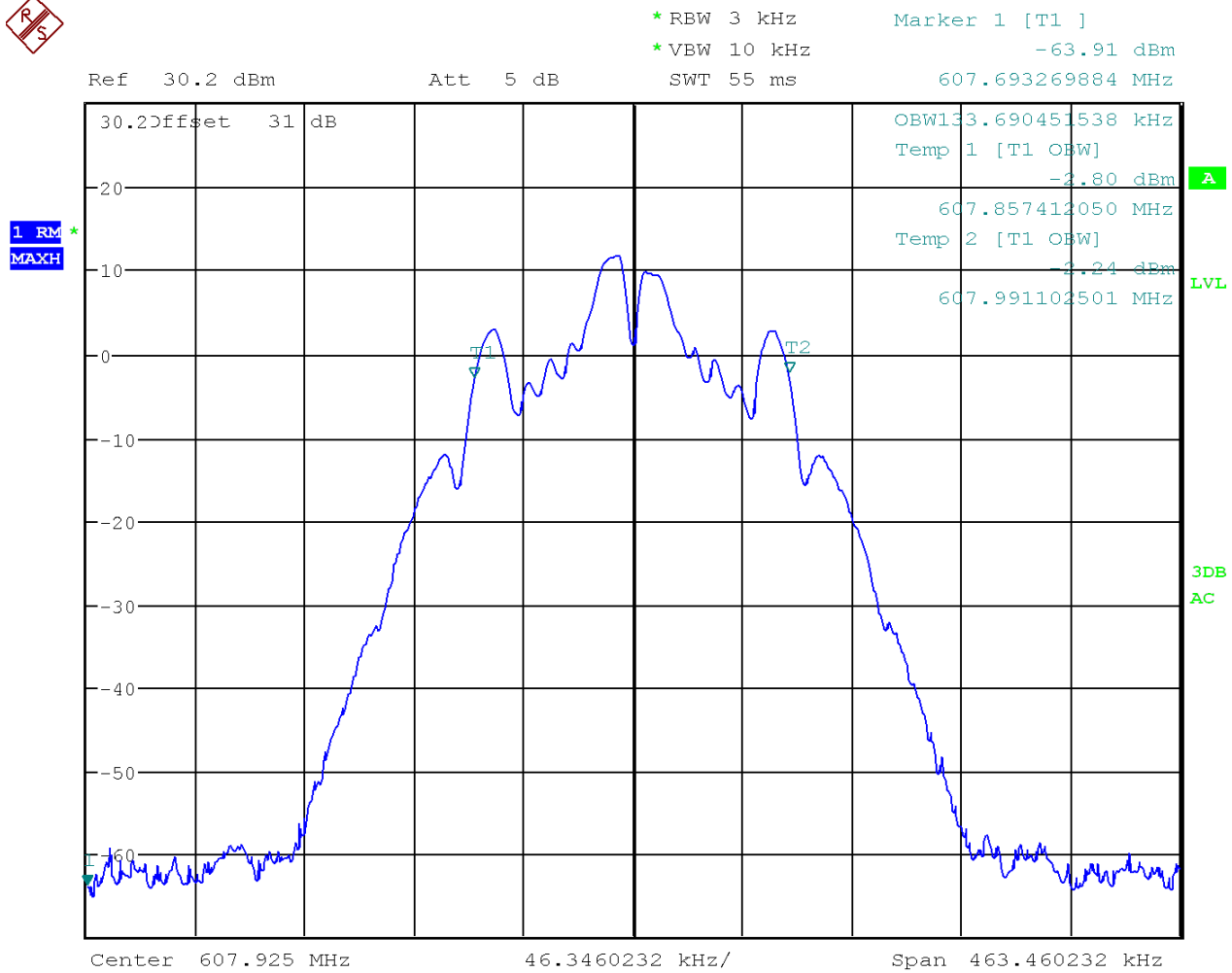


Date: 19.NOV.2024 12:38:00



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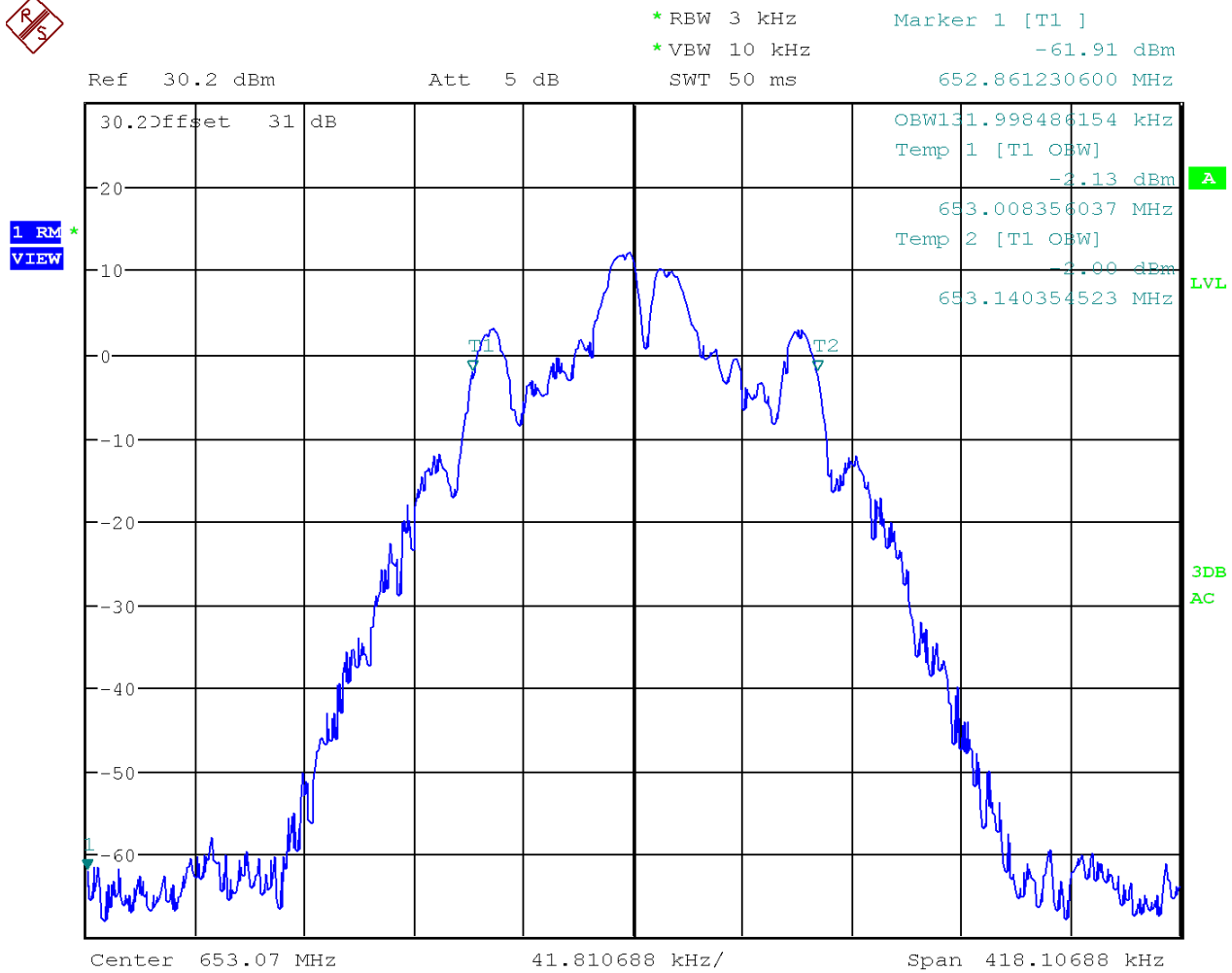
8.2.3 Test Data: 99% Occupied Bandwidth Plot, 607.925 MHz



Date: 19.NOV.2024 13:48:02

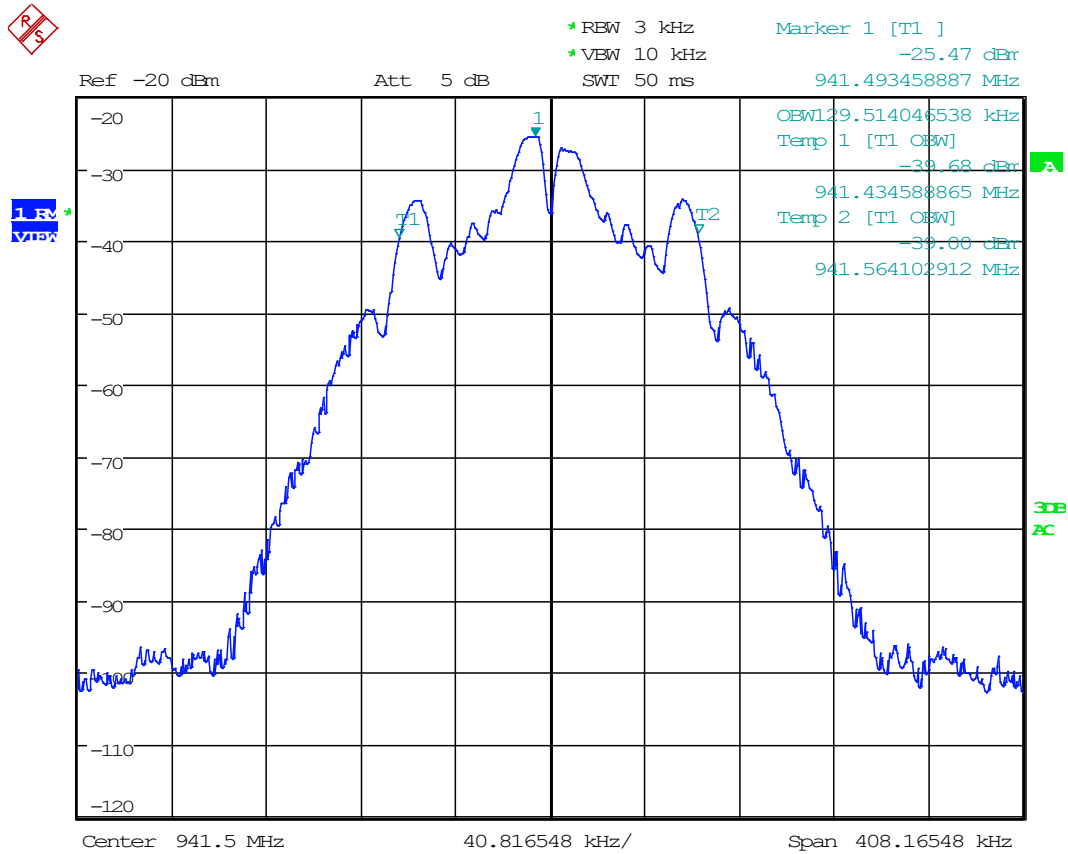


8.2.4 Test Data: 99% Occupied Bandwidth Plot, 653.075 MHz



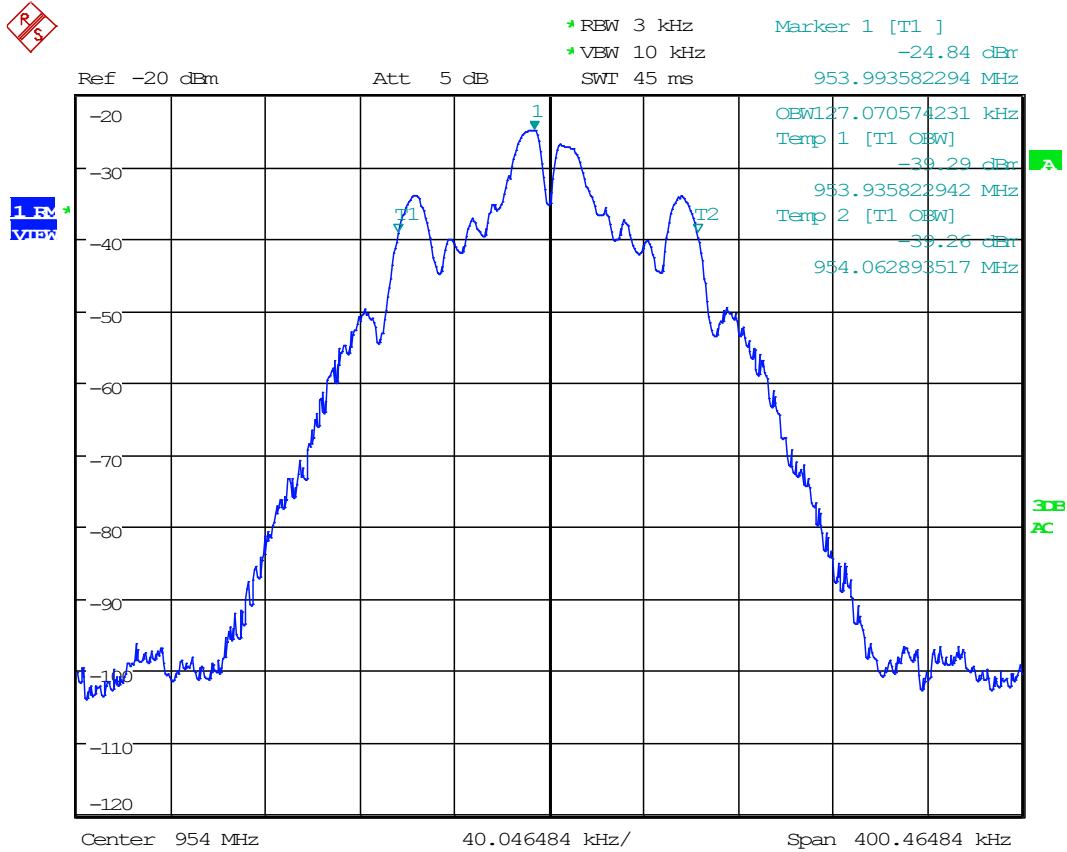
Date: 19.NOV.2024 13:56:45

8.2.5 Test Data: 99% Occupied Bandwidth Plot, 941.500 MHz



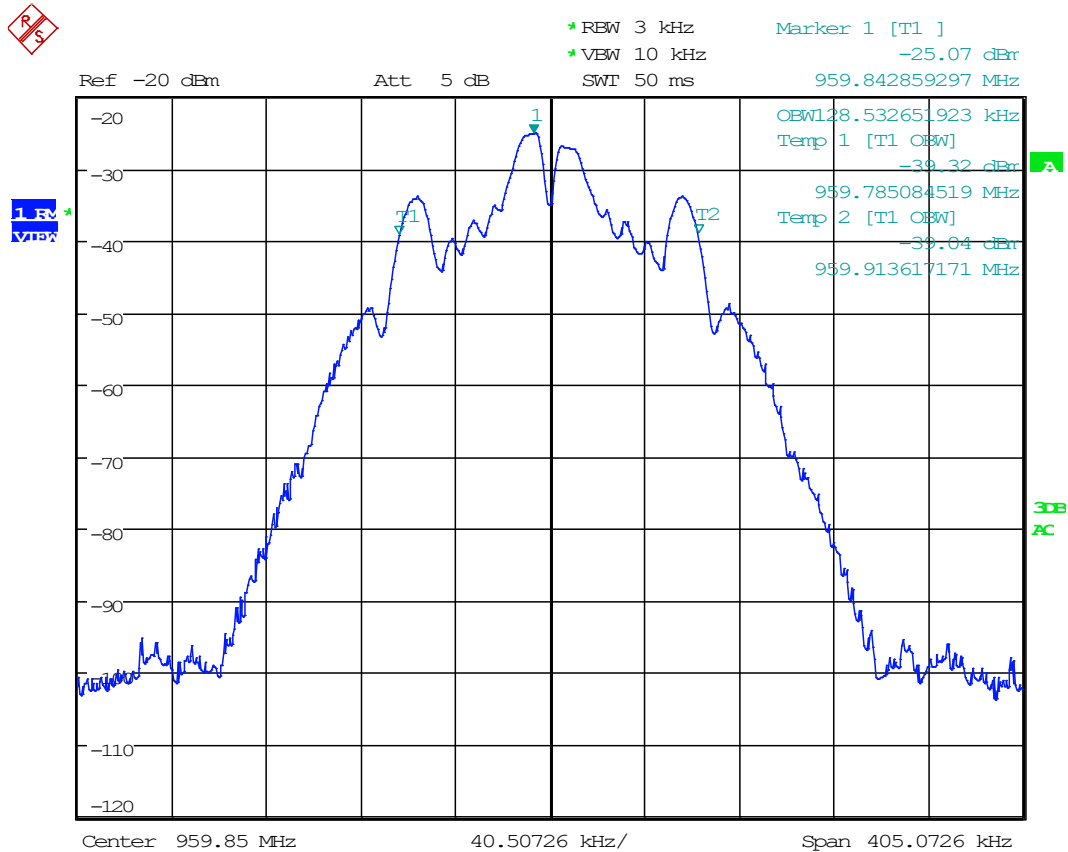
Date: 25.NOV.2024 16:12:24

8.2.6 Test Data: 99% Occupied Bandwidth Plot, 954.000 MHz



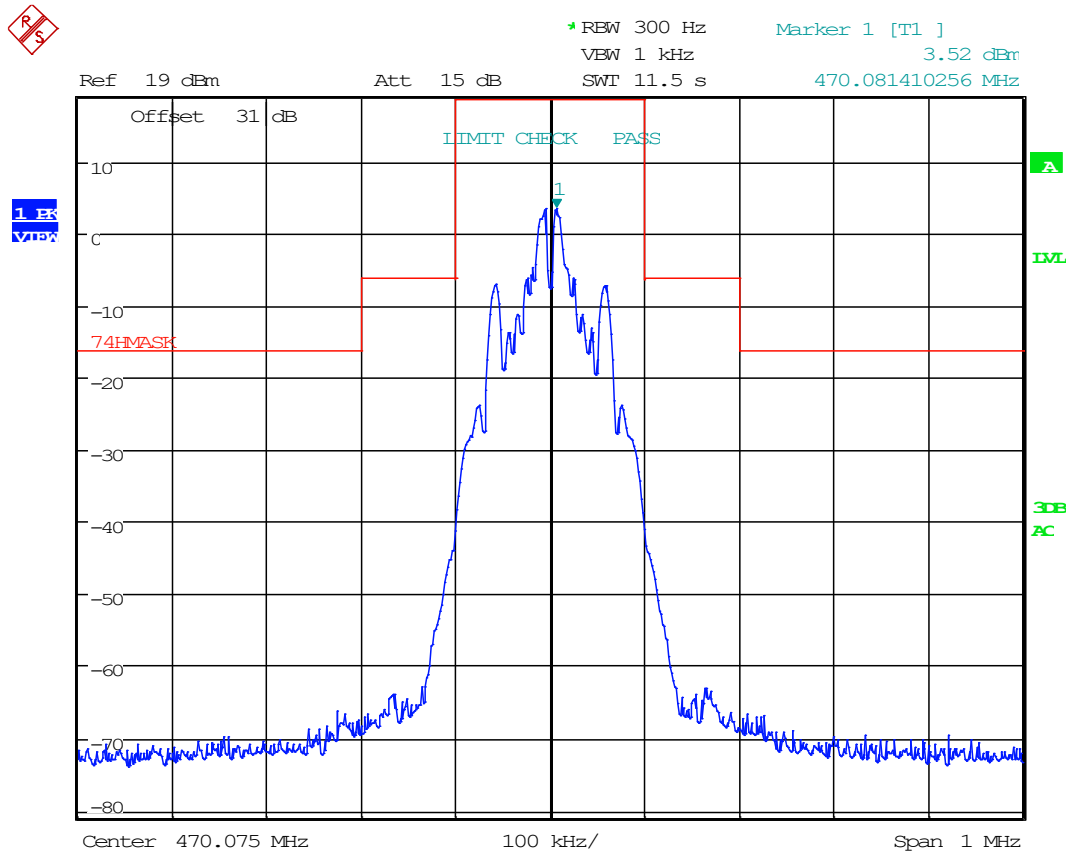
Date: 25.NOV.2024 16:13:59

8.2.7 Test Data: 99% Occupied Bandwidth Plot, 959.850 MHz



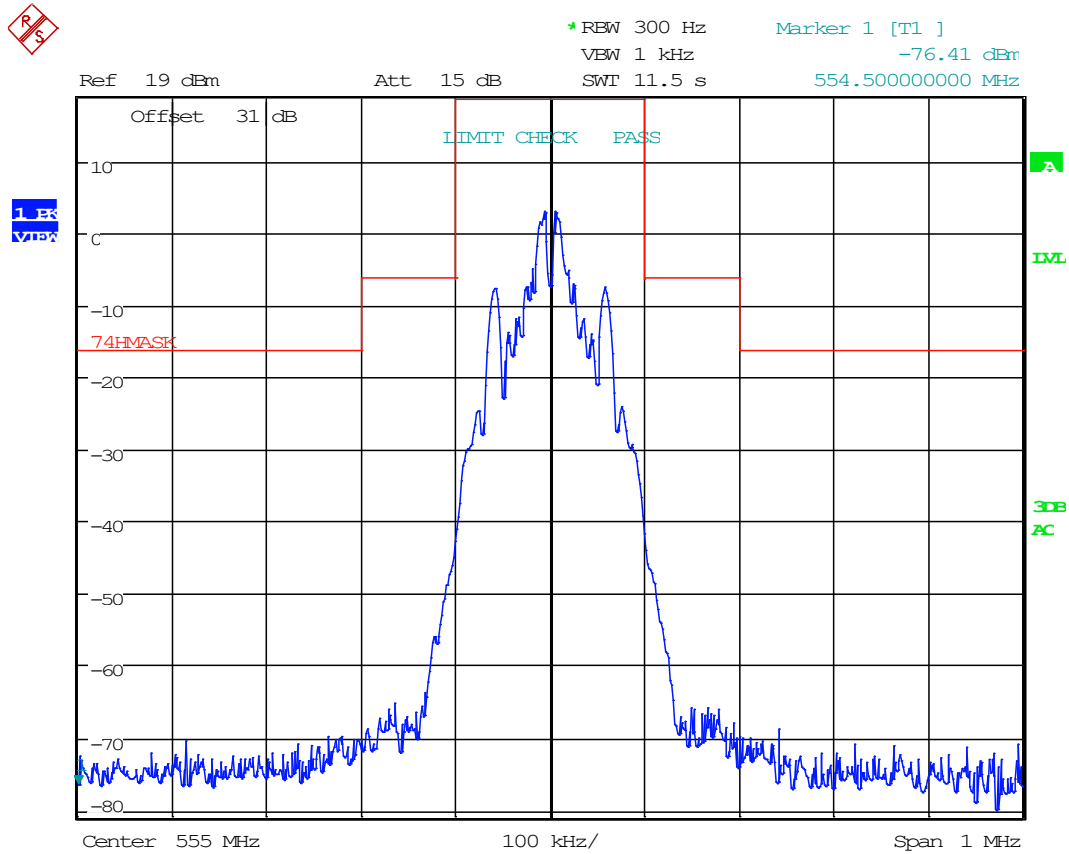
Date: 25.NOV.2024 16:14:54

8.2.8 Test Data: Emission Mask Measurement Plot, 470.075 MHz



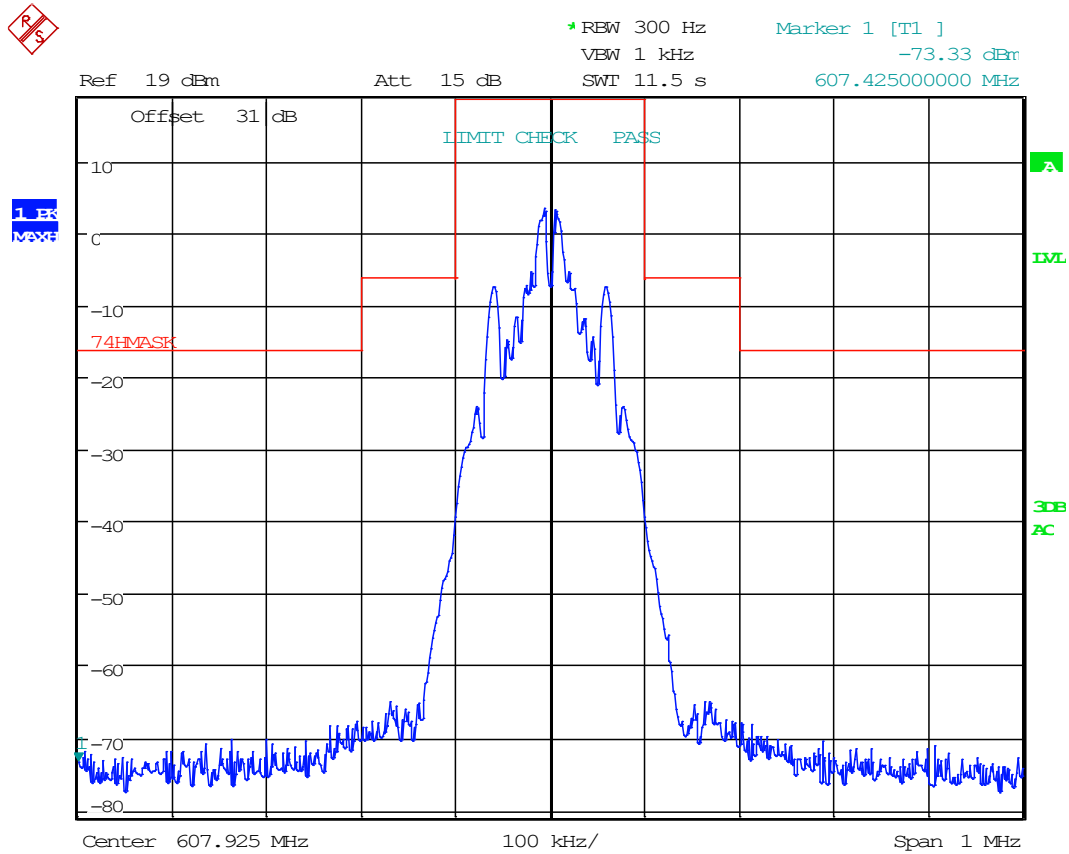
Date: 20.NOV.2024 10:40:35

8.2.9 Test Data: Emission Mask Measurement Plot, 555 MHz



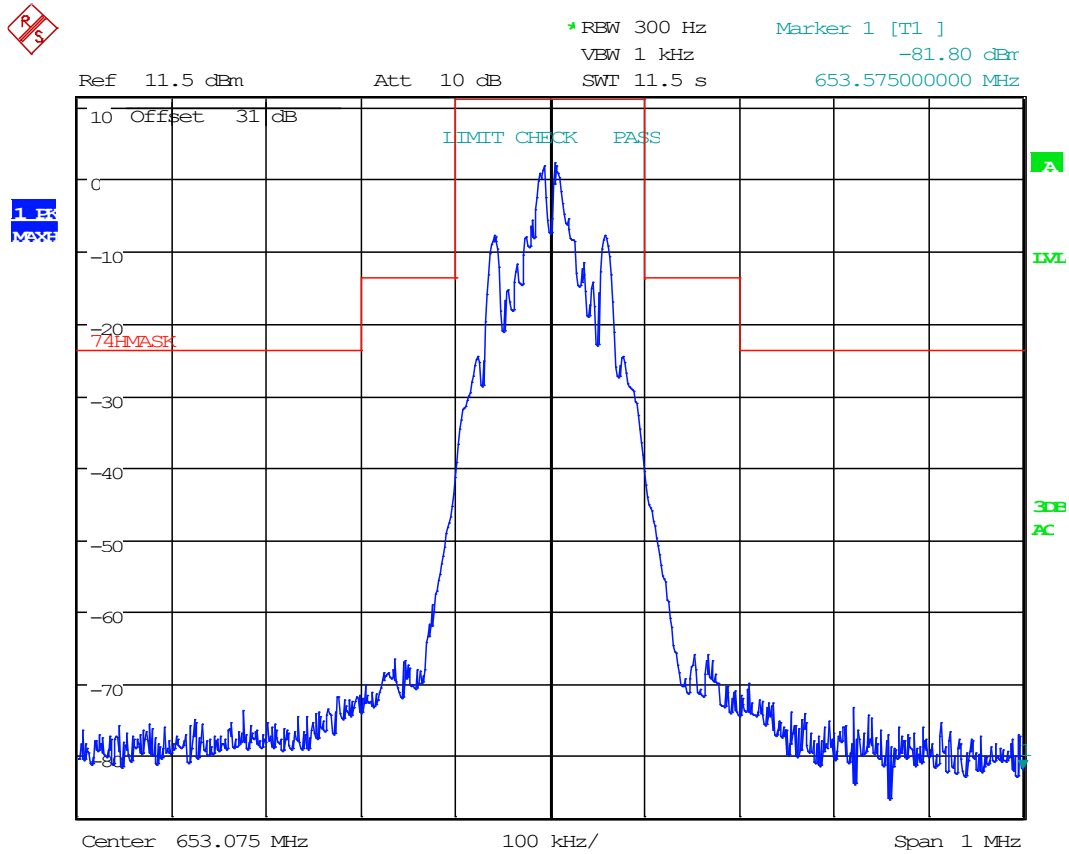
Date: 20.NOV.2024 10:42:14

8.2.10 Test Data: Emission Mask Measurement Plot, 607.925 MHz



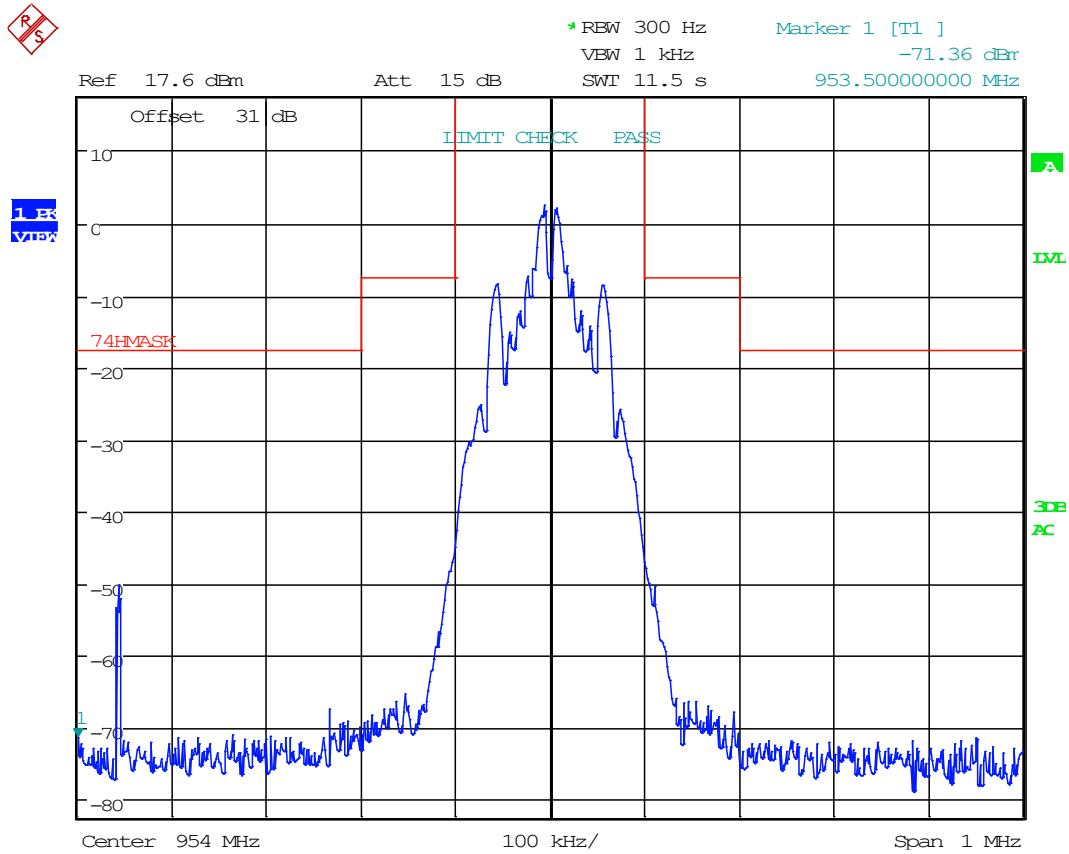
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8.2.11 Test Data: Emission Mask Measurement Plot, 653.075 MHz



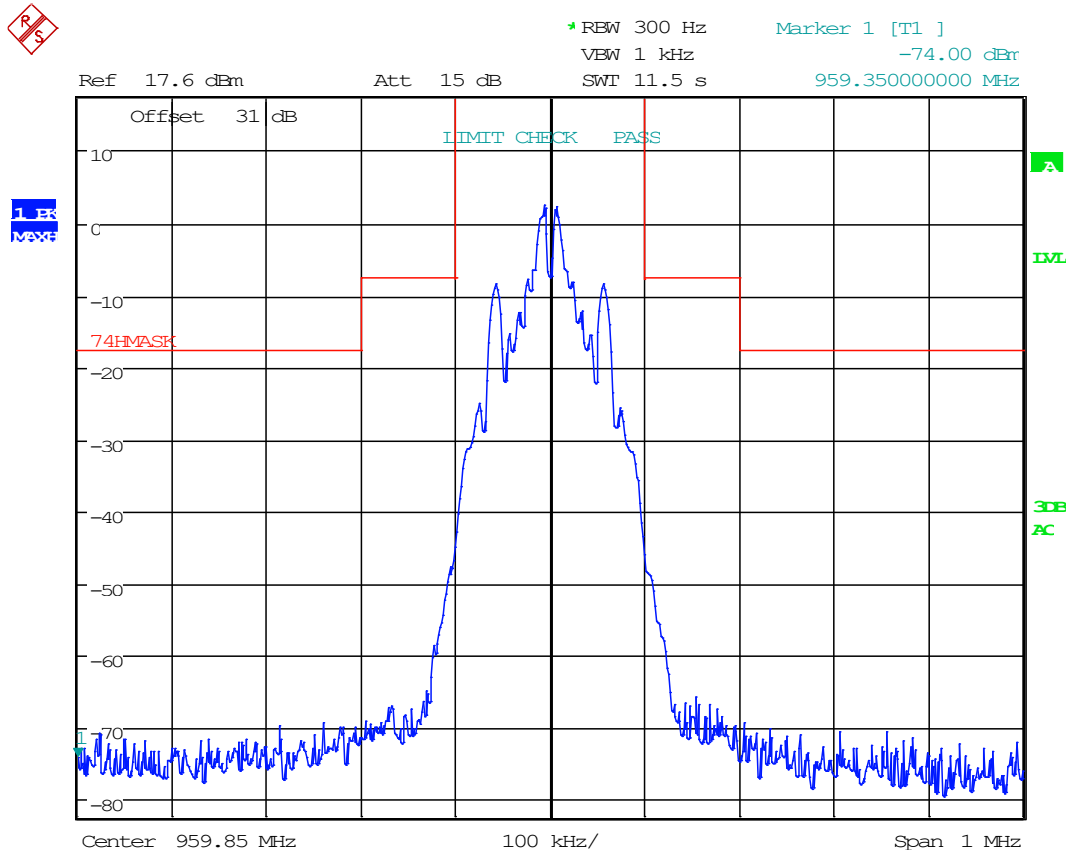
Date: 20.NOV.2024 11:23:27

8.2.12 Test Data: Emission Mask Measurement Plot, 954 MHz



Date: 20.NOV.2024 11:25:45

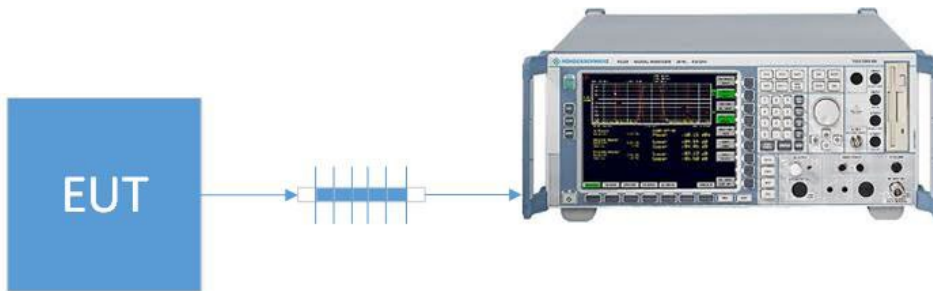
8.2.13 Test Data: Emission Mask Measurement Plot, 959.85 MHz



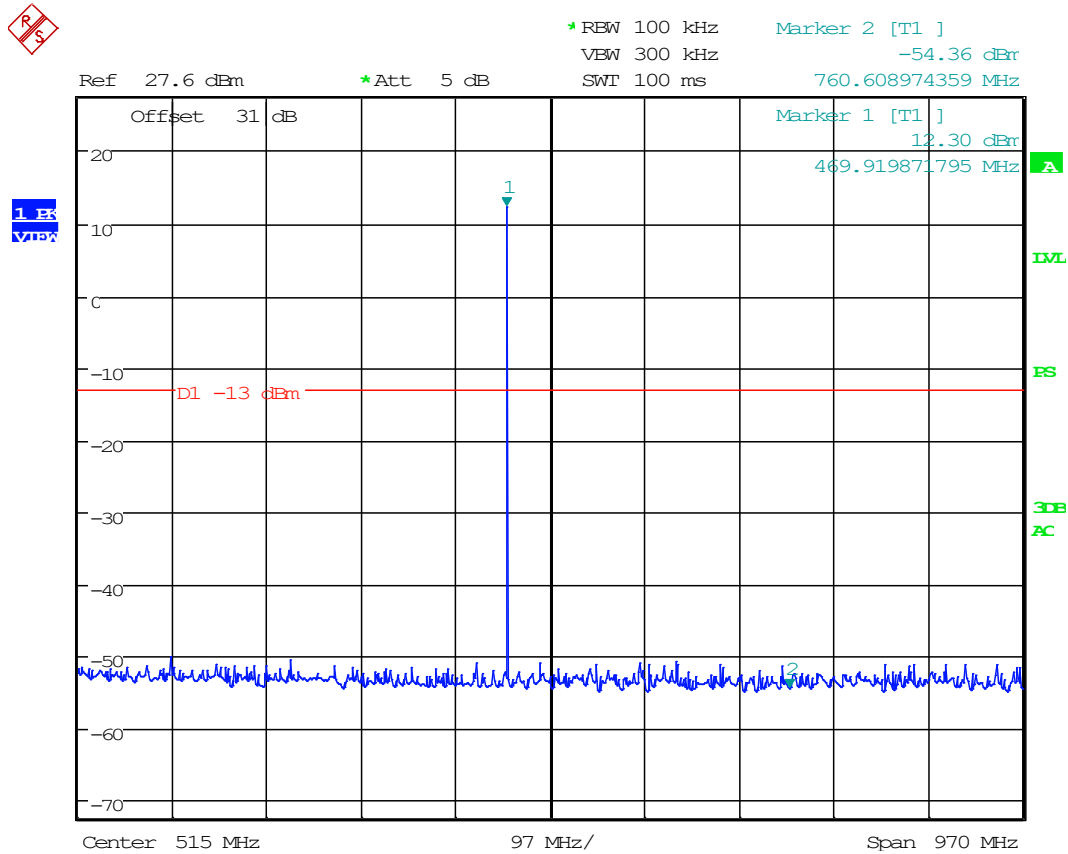
Date: 20.NOV.2024 11:26:38

8.3 Spurious Emissions at antenna terminals (Conducted)

Limits from 2.1046(a), 74.861(e)(6)(iii) and test procedure from ANSI C63.26.



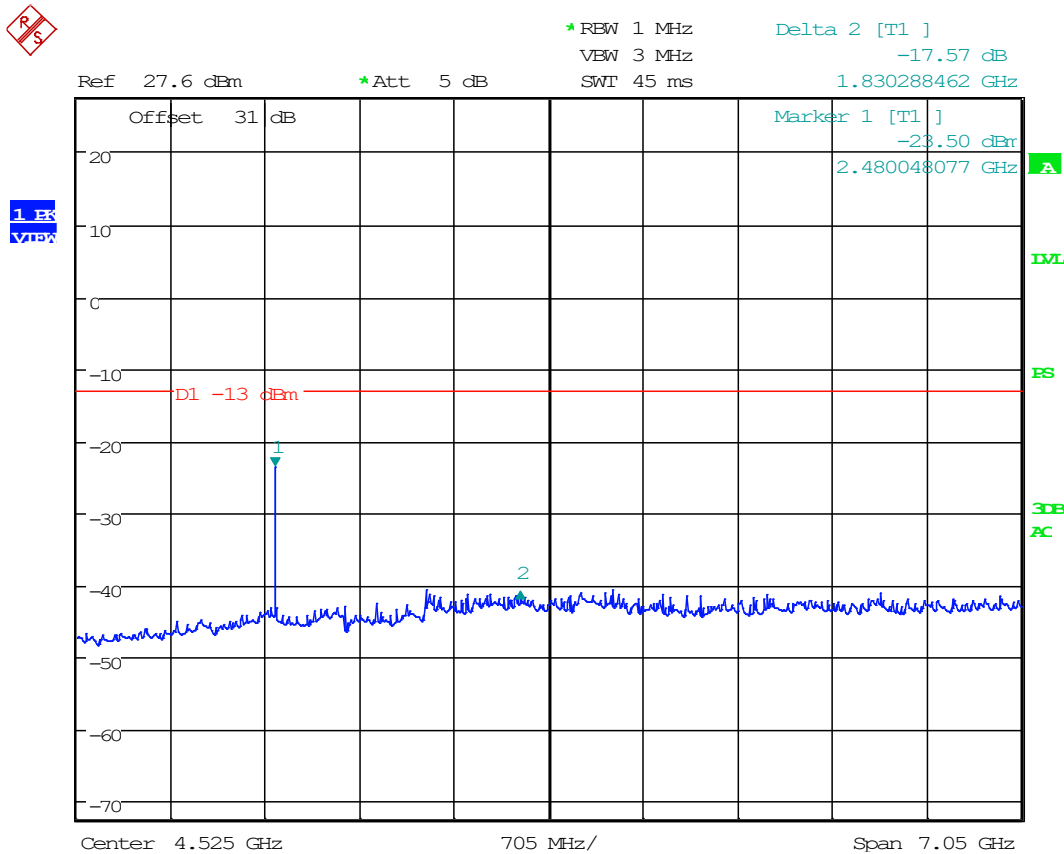
8.3.1 Conducted Emissions Below 1G, 470.075 MHz



Date: 19.NOV.2024 15:39:11

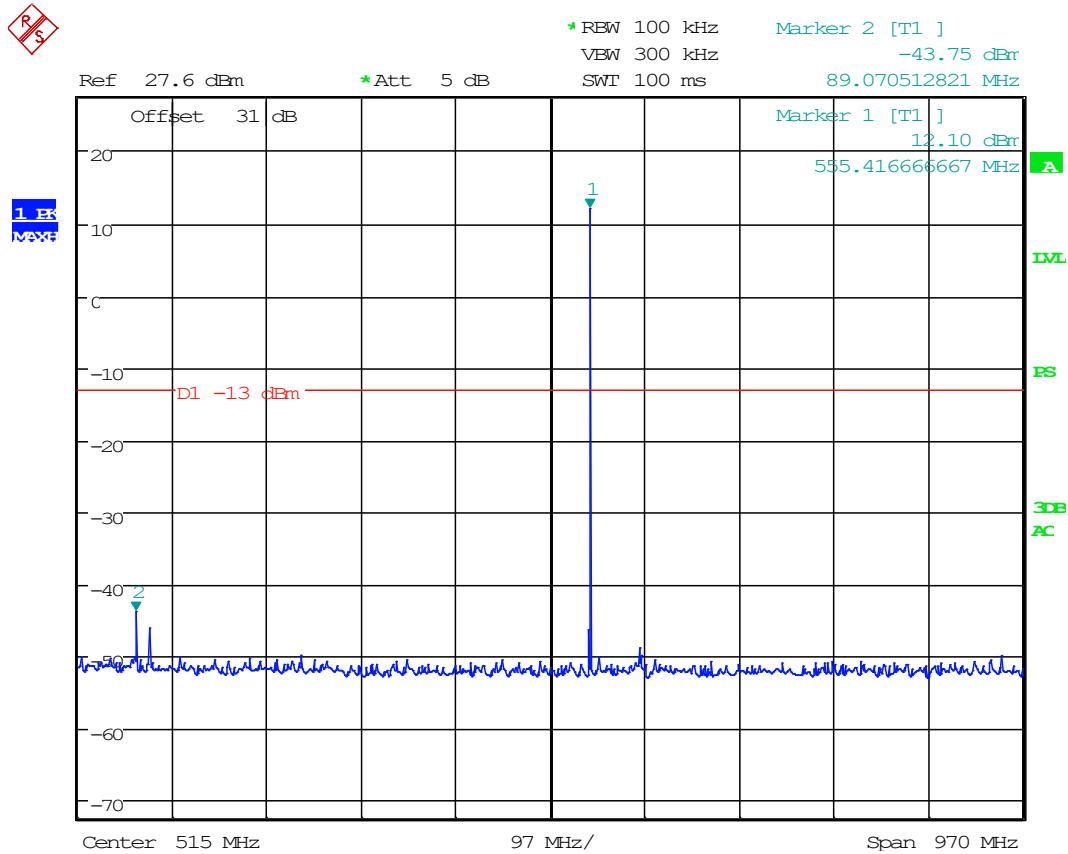


8.3.2 Conducted Emissions Above 1G, 470.075 MHz



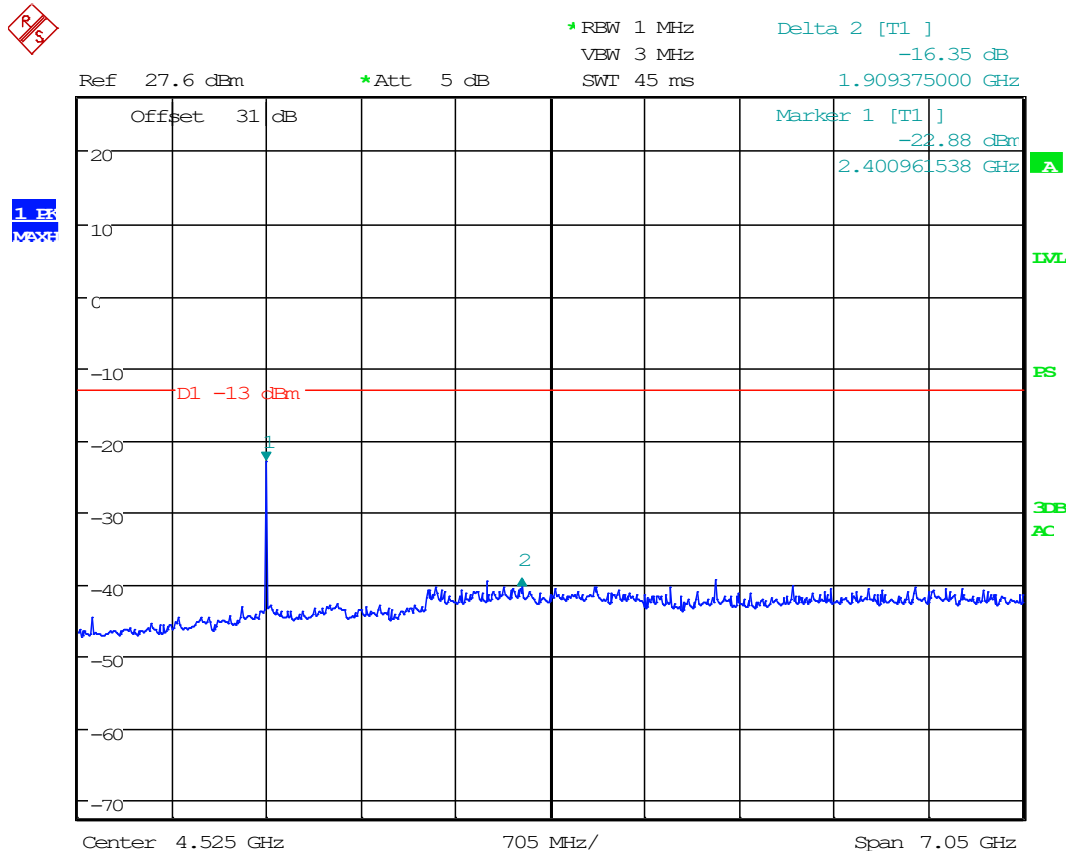
Date: 19.NOV.2024 17:12:27

8.3.3 Conducted Emissions Below 1G, 555.000 MHz



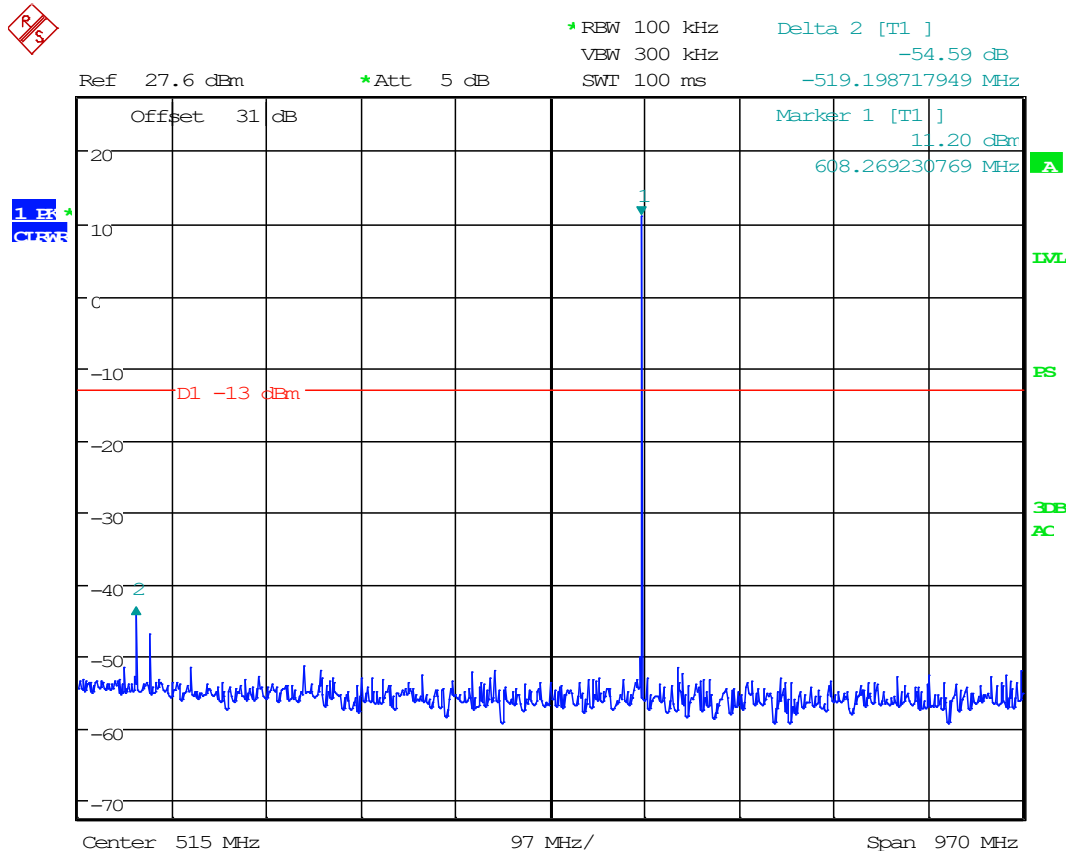
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8.3.4 Conducted Emissions Above 1G, 555.000 MHz



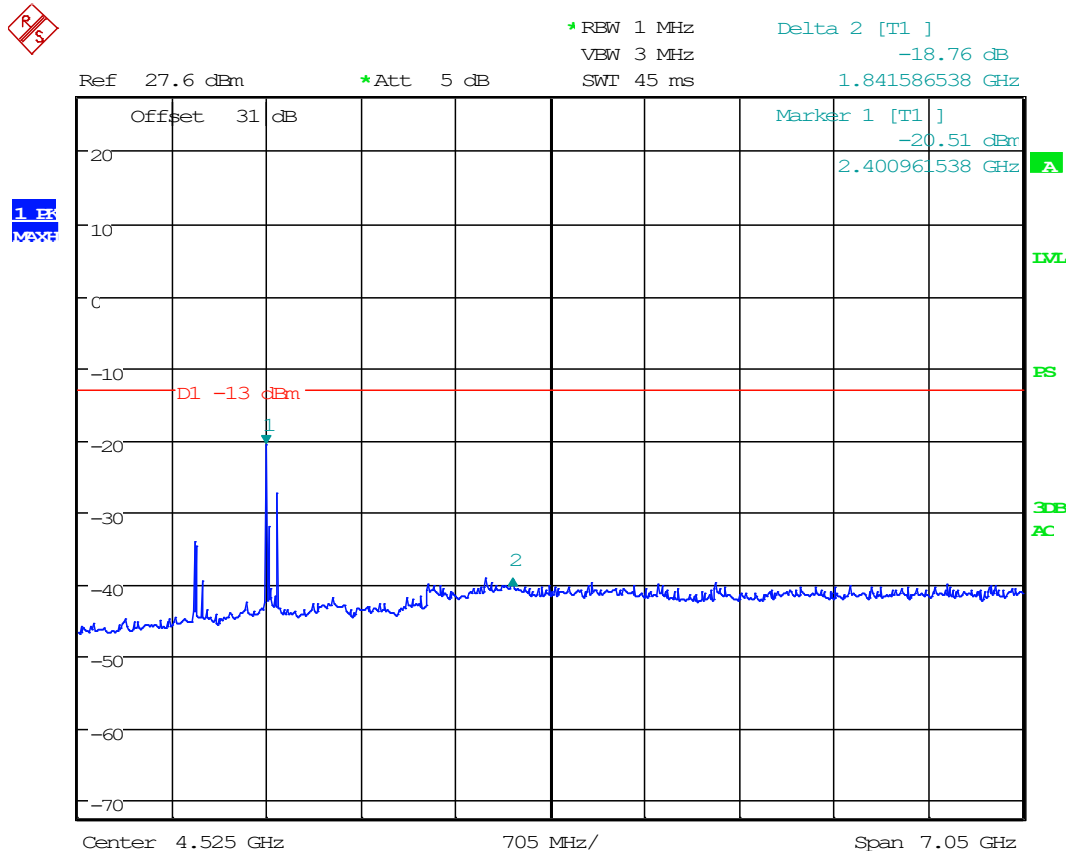
Date: 19.NOV.2024 17:11:14

8.3.5 Conducted Emissions Below 1G, 607.925 MHz



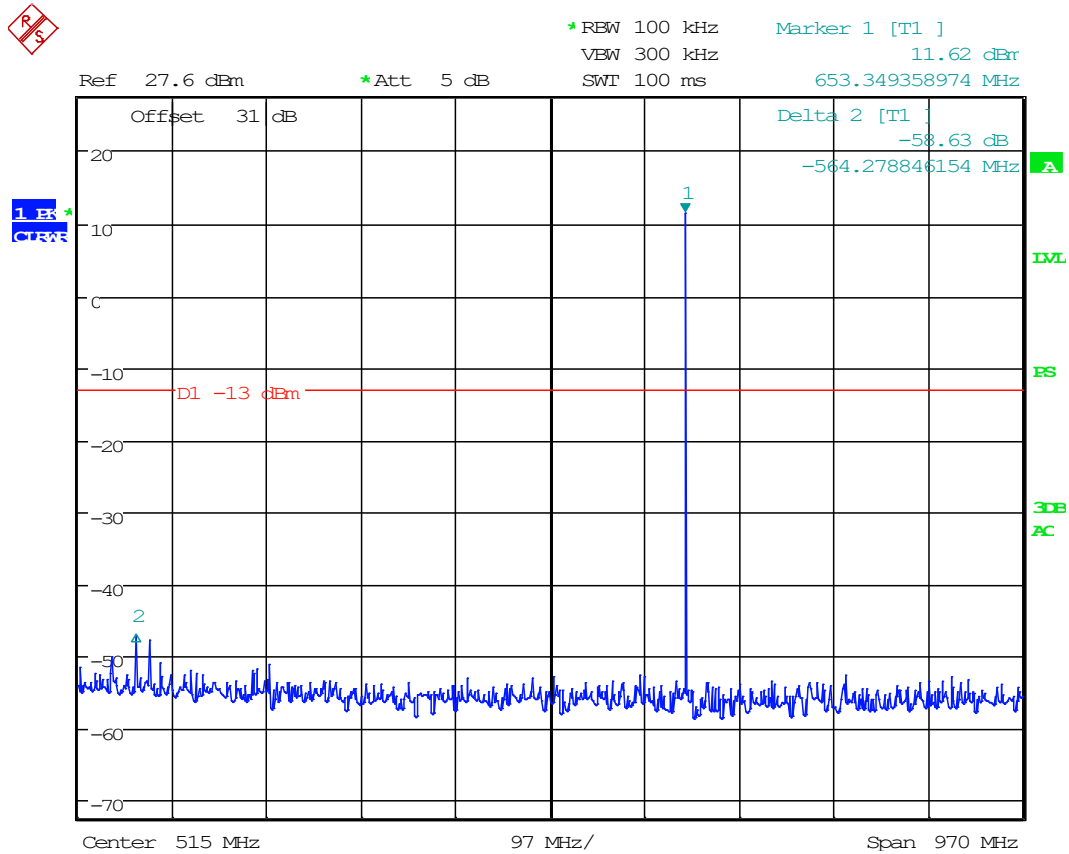
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8.3.6 Conducted Emissions Above 1G, 607.925 MHz



Date: 19.NOV.2024 17:09:06

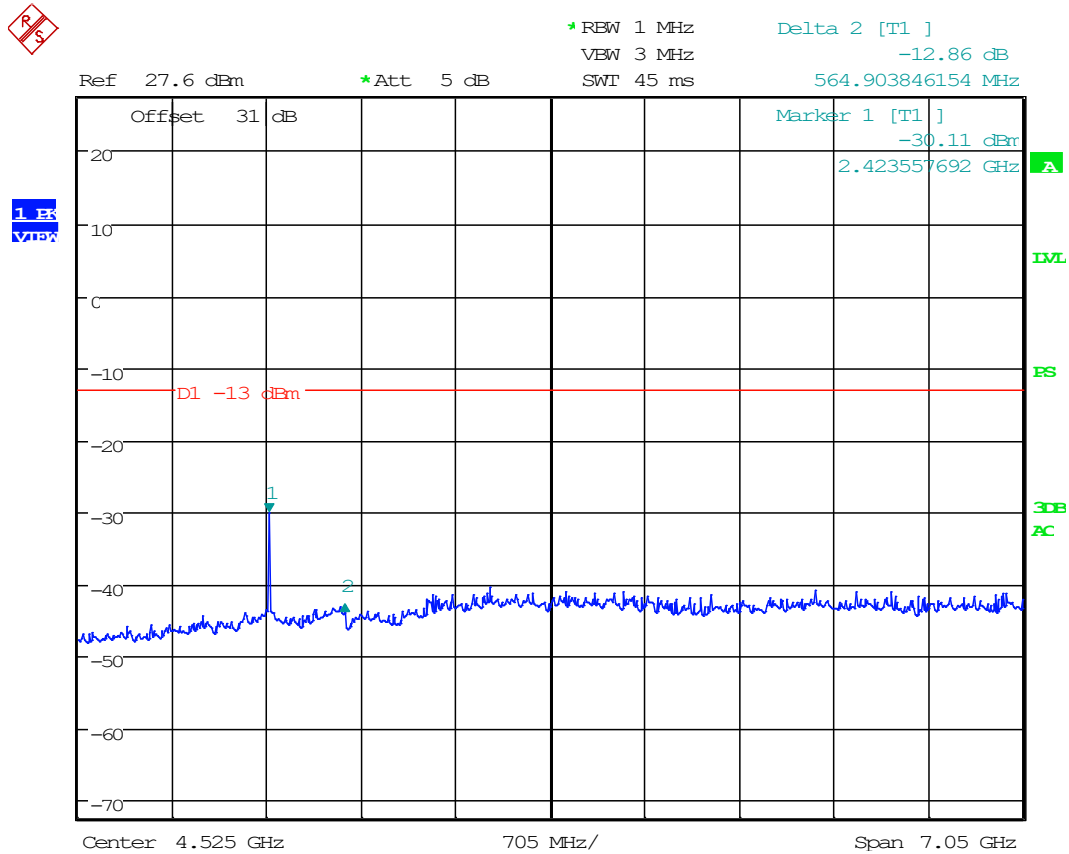
8.3.7 Conducted Emissions Below 1G, 653.075 MHz



Date: 19.NOV.2024 15:46:41

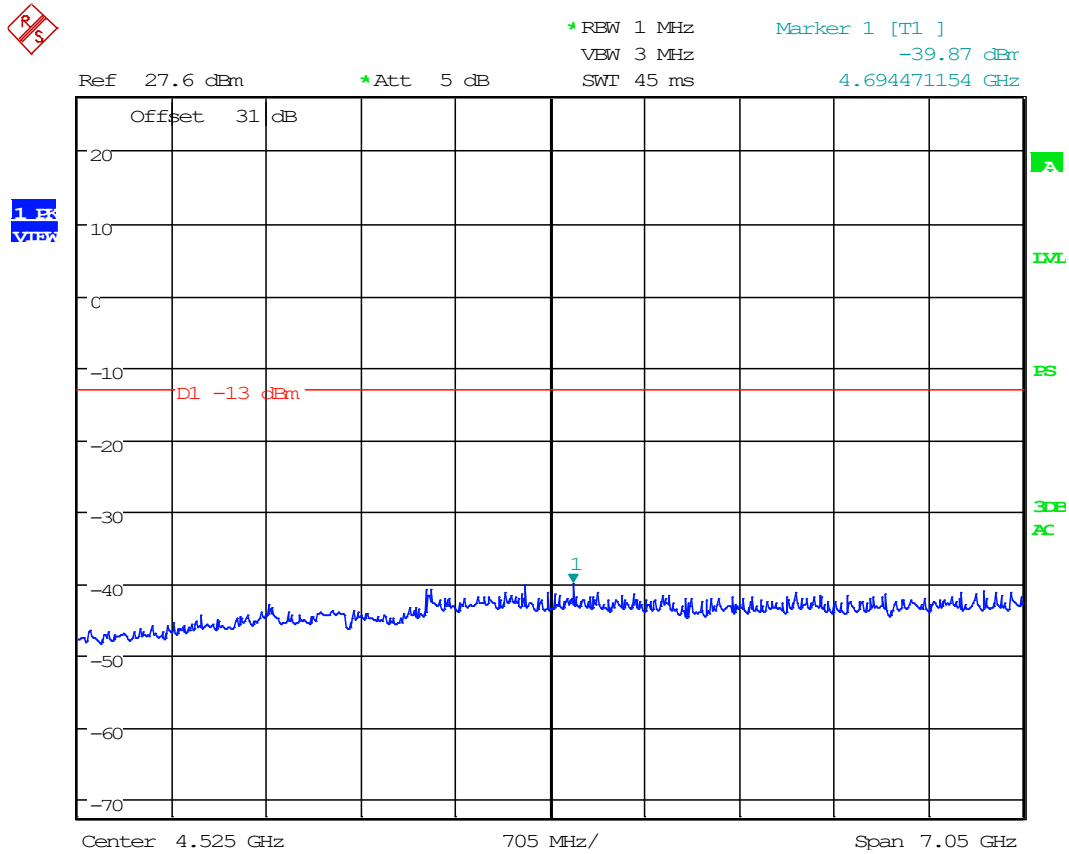


8.3.8 Conducted Emissions Above 1G, 653.075 MHz



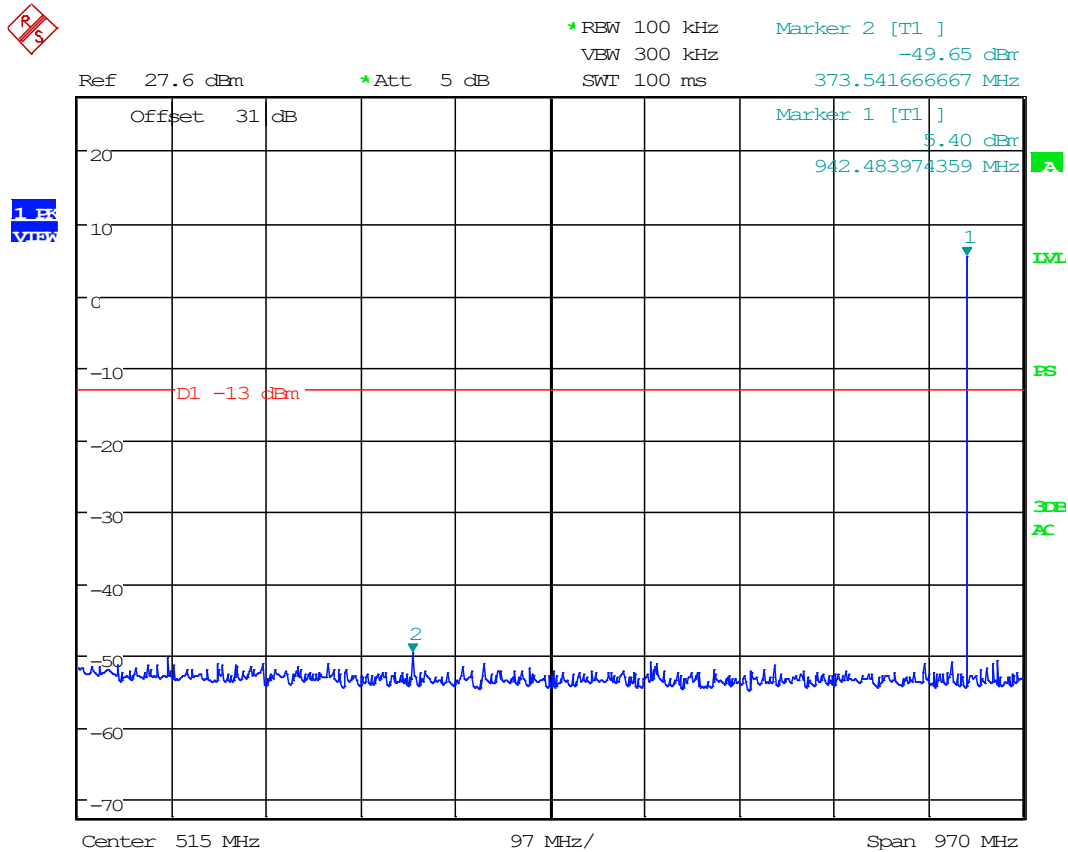
Date: 19.NOV.2024 16:58:34

8.3.9 Conducted Emissions Below 1G, 941.500 MHz



Date: 25.NOV.2024 16:21:05

8.3.10 Conducted Emissions Above 1G, 941.500 MHz

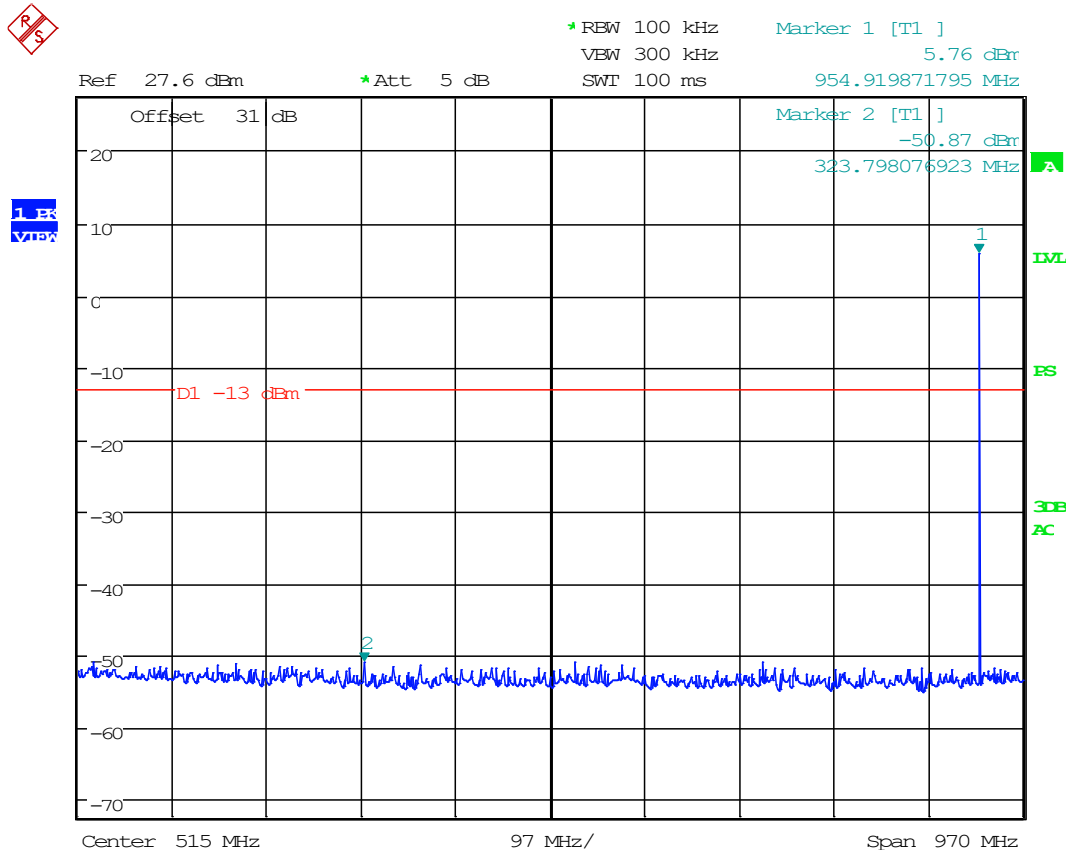


Date: 25.NOV.2024 16:26:20



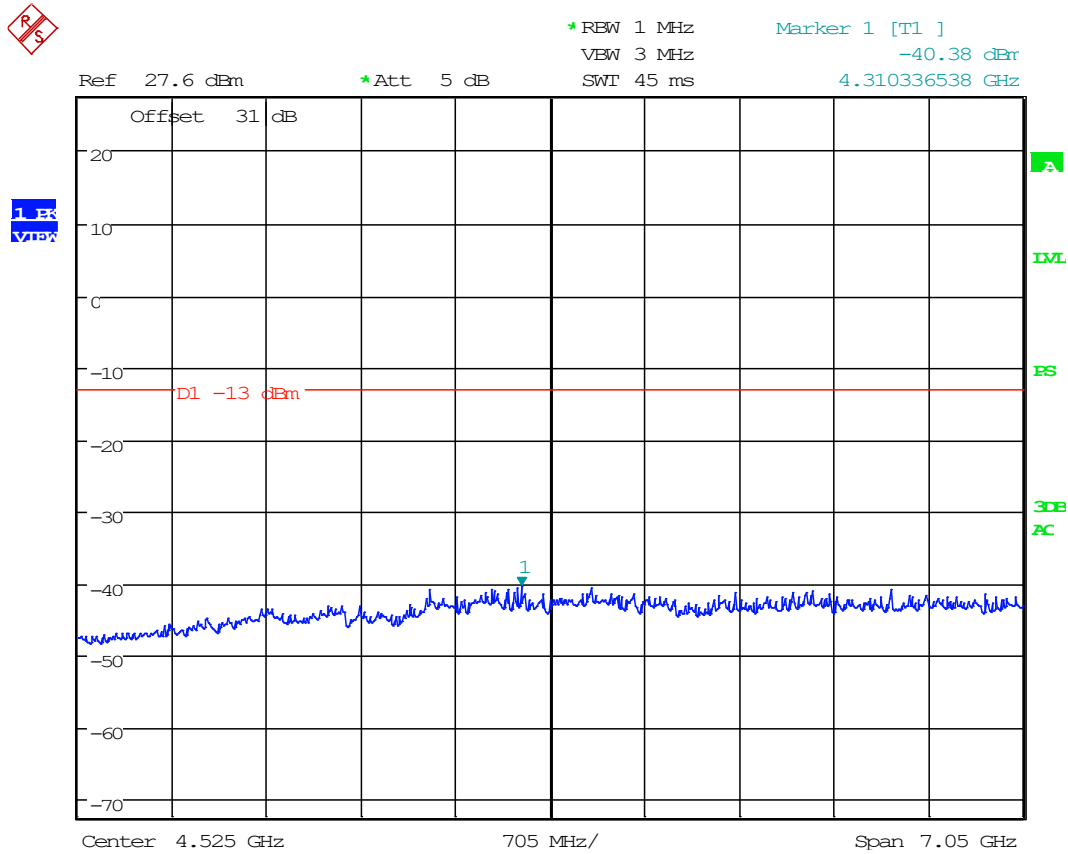
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8.3.11 Conducted Emissions Below 1G, 954.000 MHz



Date: 25.NOV.2024 16:25:53

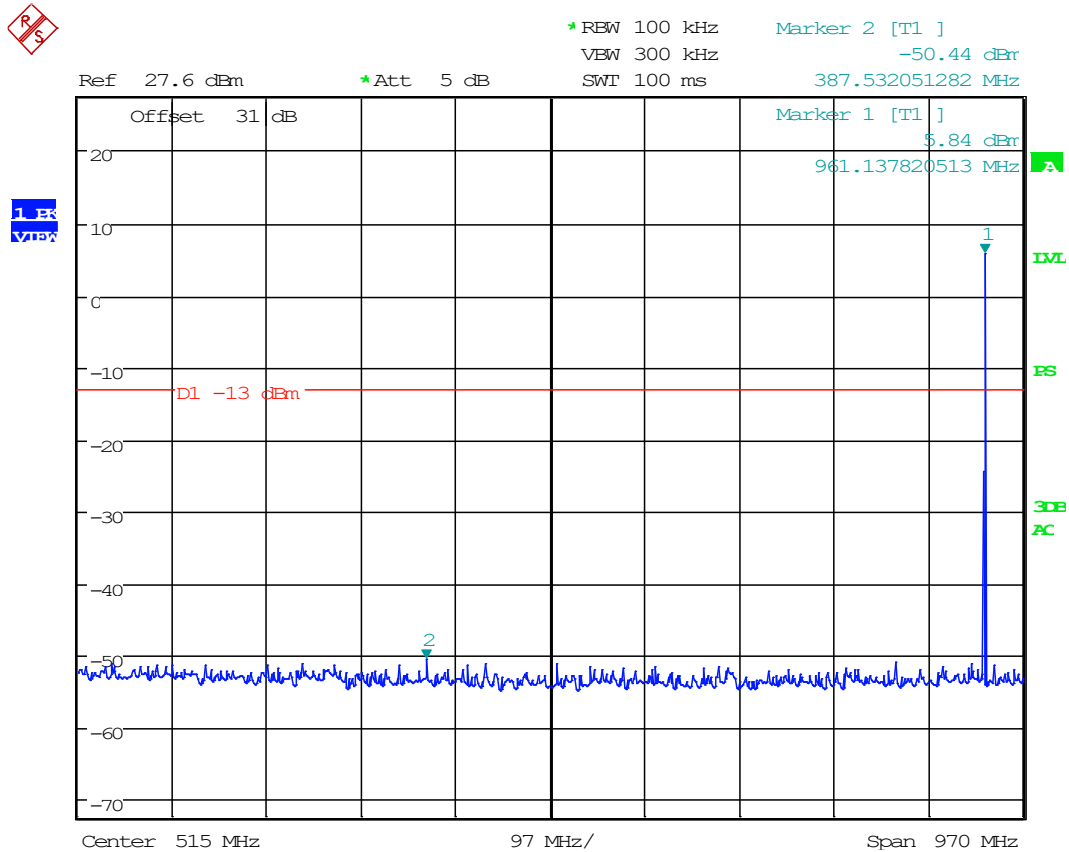
8.3.12 Conducted Emissions Above 1G, 954.000 MHz



Date: 25.NOV.2024 16:22:21



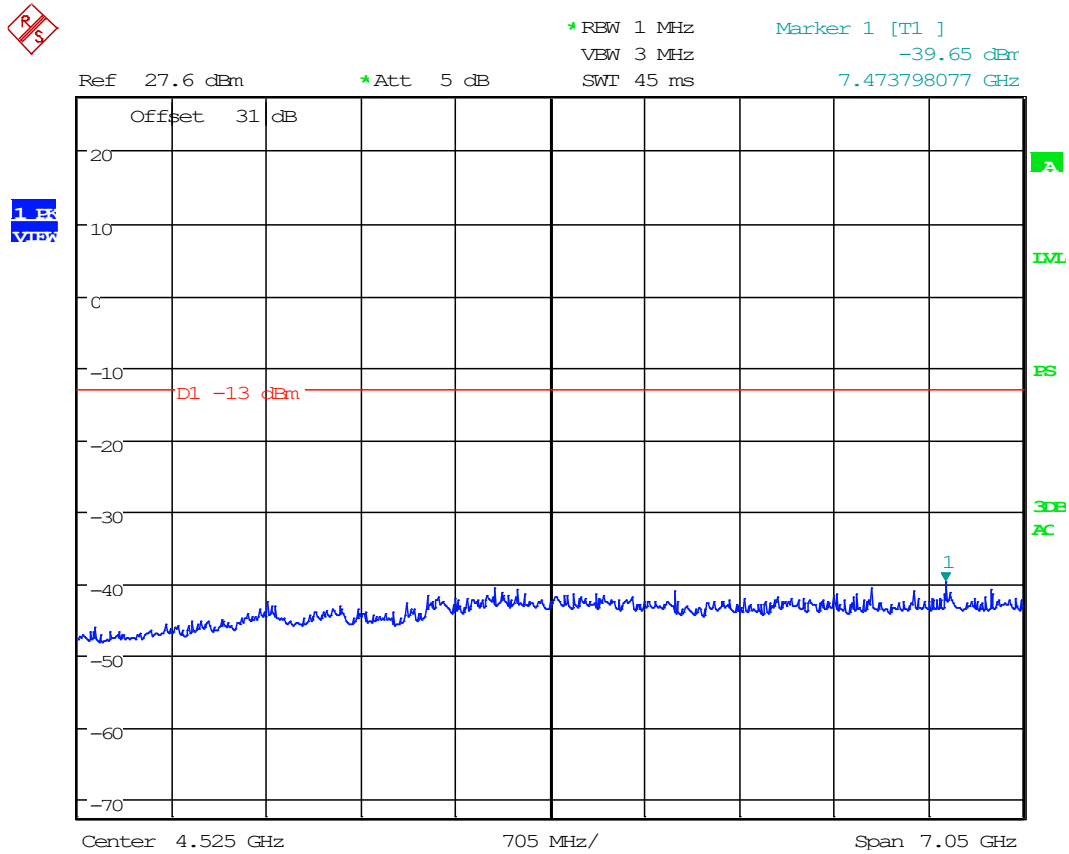
8.3.13 Conducted Emissions Below 1G, 959.850 MHz



Date: 25.NOV.2024 16:25:07



8.3.14 Conducted Emissions Above 1G, 959.850 MHz

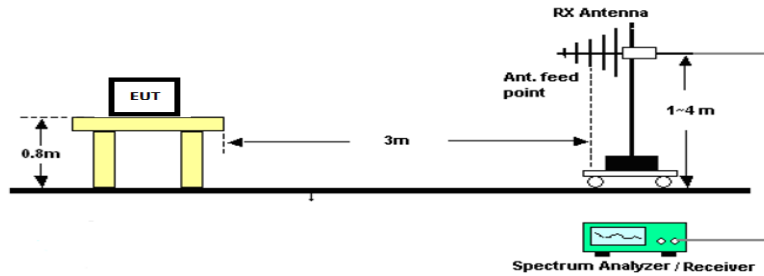


Date: 25.NOV.2024 16:23:08

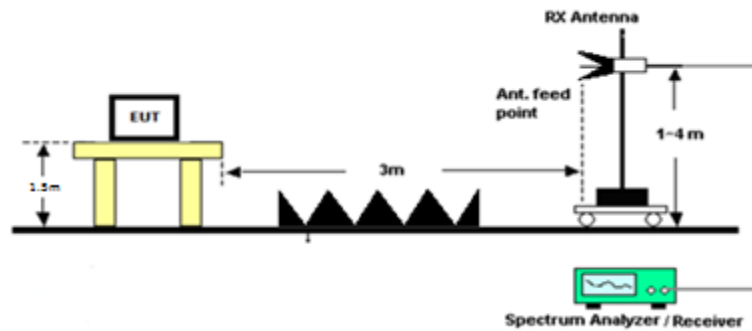
8.4 Radiated Emissions

Limits from 2.1046(a), 74.861(e)(6)(iii) and test procedure from ANSI C63.26.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz





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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 (dBμV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
470.075	940.150	PK	22.20	H	-3.59	23.04	3.00	41.65	-55.73	-36.00	19.73
470.075	940.150	PK	21.00	V	-3.59	23.04	3.00	40.45	-56.93	-36.00	20.93
470.075	1410.225	PK	22.20	H	-4.38	27.95	3.00	45.77	-51.61	-30.00	21.61
470.075	1410.225	PK	18.20	V	-4.38	27.95	3.00	41.77	-55.61	-30.00	25.61
470.075	1880.300	PK	11.20	H	-5.11	31.37	3.00	37.46	-59.91	-30.00	29.91
470.075	1880.300	PK	10.60	V	-5.11	31.37	3.00	36.86	-60.51	-30.00	30.51
470.075	2350.375	PK	11.00	H	-5.81	31.91	3.00	37.10	-60.28	-30.00	30.28
470.075	2350.375	PK	10.80	V	-5.81	31.91	3.00	36.90	-60.48	-30.00	30.48
470.075	2820.450	PK	13.80	H	-6.33	32.52	3.00	39.98	-57.39	-30.00	27.39
470.075	2820.450	PK	13.70	V	-6.33	32.52	3.00	39.88	-57.49	-30.00	27.49
470.075	3290.525	PK	10.40	H	-6.83	32.80	3.00	36.36	-61.02	-30.00	31.02
470.075	3290.525	PK	11.90	V	-6.83	32.80	3.00	37.86	-59.52	-30.00	29.52
470.075	3760.600	PK	11.20	H	-7.29	33.19	3.00	37.10	-60.28	-30.00	30.28
470.075	3760.600	PK	11.00	V	-7.29	33.19	3.00	36.90	-60.48	-30.00	30.48
470.075	4230.675	PK	12.00	H	-7.77	33.46	3.00	37.69	-59.69	-30.00	29.69
470.075	4230.675	PK	11.70	V	-7.77	33.46	3.00	37.39	-59.99	-30.00	29.99
470.075	4700.750	PK	10.20	H	-8.19	34.07	3.00	36.08	-61.29	-30.00	31.29
470.075	4700.750	PK	11.40	V	-8.19	34.07	3.00	37.28	-60.09	-30.00	30.09



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8.4.2 Radiated Emissions Table, 555.000 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)
555.00	1110.00	PK	23.20	H	-3.95	27.50	3.00	46.75	-50.63	-30.00	20.63
555.00	1110.00	PK	22.40	V	-3.95	27.50	3.00	45.95	-51.43	-30.00	21.43
555.00	1665.00	PK	13.20	H	-4.73	28.84	3.00	37.31	-60.06	-30.00	30.06
555.00	1665.00	PK	15.20	V	-4.73	28.84	3.00	39.31	-58.06	-30.00	28.06
555.00	2220.00	PK	12.20	H	-5.65	31.54	3.00	38.08	-59.29	-30.00	29.29
555.00	2220.00	PK	12.20	V	-5.65	31.54	3.00	38.08	-59.29	-30.00	29.29
555.00	2775.00	PK	13.80	H	-6.28	32.51	3.00	40.03	-57.34	-30.00	27.34
555.00	2775.00	PK	13.50	V	-6.28	32.51	3.00	39.73	-57.64	-30.00	27.64
555.00	3330.00	PK	12.60	H	-6.87	32.72	3.00	38.45	-58.93	-30.00	28.93
555.00	3330.00	PK	12.90	V	-6.87	32.72	3.00	38.75	-58.63	-30.00	28.63
555.00	3885.00	PK	10.70	H	-7.46	33.46	3.00	36.70	-60.68	-30.00	30.68
555.00	3885.00	PK	10.40	V	-7.46	33.46	3.00	36.40	-60.98	-30.00	30.98
555.00	4440.00	PK	11.70	H	-7.99	33.85	3.00	37.56	-59.82	-30.00	29.82
555.00	4440.00	PK	11.40	V	-7.99	33.85	3.00	37.26	-60.12	-30.00	30.12
555.00	4995.00	PK	12.90	H	-8.44	34.02	3.00	38.48	-58.89	-30.00	28.89
555.00	4995.00	PK	12.80	V	-8.44	34.02	3.00	38.38	-58.99	-30.00	28.99
555.00	5550.00	PK	11.30	H	-8.97	34.72	3.00	37.05	-60.32	-30.00	30.32
555.00	5550.00	PK	11.60	V	-8.97	34.72	3.00	37.35	-60.02	-30.00	30.02



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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 (dBμV/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dB)
607.925	1215.850	PK	24.50	H	-4.04	28.33	3.00	48.78	-48.59	-30.00	18.59
607.925	1215.850	PK	19.70	V	-4.04	28.33	3.00	43.98	-53.39	-30.00	23.39
607.925	1823.775	PK	13.20	H	-5.11	30.77	3.00	38.86	-58.52	-30.00	28.52
607.925	1823.775	PK	11.00	V	-5.11	30.77	3.00	36.66	-60.72	-30.00	30.72
607.925	2431.700	PK	13.00	H	-5.90	32.33	3.00	39.43	-57.95	-30.00	27.95
607.925	2431.700	PK	12.70	V	-5.90	32.33	3.00	39.13	-58.25	-30.00	28.25
607.925	3039.625	PK	12.30	H	-6.57	32.86	3.00	38.59	-58.78	-30.00	28.78
607.925	3039.625	PK	12.70	V	-6.57	32.86	3.00	38.99	-58.38	-30.00	28.38
607.925	3647.550	PK	12.10	H	-7.18	33.21	3.00	38.13	-59.25	-30.00	29.25
607.925	3647.550	PK	12.30	V	-7.18	33.21	3.00	38.33	-59.05	-30.00	29.05
607.925	4255.475	PK	12.90	H	-7.79	33.45	3.00	38.56	-58.81	-30.00	28.81
607.925	4255.475	PK	12.50	V	-7.79	33.45	3.00	38.16	-59.21	-30.00	29.21
607.925	4863.400	PK	11.00	H	-8.31	34.14	3.00	36.83	-60.54	-30.00	30.54
607.925	4863.400	PK	11.90	V	-8.31	34.14	3.00	37.73	-59.64	-30.00	29.64
607.925	5471.325	PK	10.90	H	-8.89	34.71	3.00	36.72	-60.65	-30.00	30.65
607.925	5471.325	PK	11.70	V	-8.89	34.71	3.00	37.52	-59.85	-30.00	29.85
607.925	6079.250	PK	12.00	H	-9.40	35.47	3.00	38.07	-59.31	-30.00	29.31
607.925	6079.250	PK	12.20	V	-9.40	35.47	3.00	38.27	-59.11	-30.00	29.11



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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)
653.075	1306.15	PK	20.70	H	-4.28	29.11	3.00	45.53	-51.85	-30.00	21.85
653.075	1306.15	PK	18.90	V	-4.28	29.11	3.00	43.73	-53.65	-30.00	23.65
653.075	1959.23	PK	11.60	H	-5.28	31.69	3.00	38.01	-59.37	-30.00	29.37
653.075	1959.23	PK	10.40	V	-5.28	31.69	3.00	36.81	-60.57	-30.00	30.57
653.075	2612.30	PK	11.80	H	-6.10	32.60	3.00	38.30	-59.08	-30.00	29.08
653.075	2612.30	PK	11.70	V	-6.10	32.60	3.00	38.20	-59.18	-30.00	29.18
653.075	3265.38	PK	11.10	H	-6.82	32.79	3.00	37.07	-60.31	-30.00	30.31
653.075	3265.38	PK	11.00	V	-6.82	32.79	3.00	36.97	-60.41	-30.00	30.41
653.075	3918.45	PK	11.90	H	-7.49	33.46	3.00	37.86	-59.51	-30.00	29.51
653.075	3918.45	PK	12.00	V	-7.49	33.46	3.00	37.96	-59.41	-30.00	29.41
653.075	4571.53	PK	11.00	H	-8.10	34.03	3.00	36.93	-60.45	-30.00	30.45
653.075	4571.53	PK	11.30	V	-8.10	34.03	3.00	37.23	-60.15	-30.00	30.15
653.075	5224.60	PK	11.90	H	-8.65	34.35	3.00	37.59	-59.78	-30.00	29.78
653.075	5224.60	PK	11.50	V	-8.65	34.35	3.00	37.19	-60.18	-30.00	30.18
653.075	5877.68	PK	11.10	H	-9.17	35.12	3.00	37.05	-60.33	-30.00	30.33
653.075	5877.68	PK	11.30	V	-9.17	35.12	3.00	37.25	-60.13	-30.00	30.13
653.075	6530.75	PK	13.30	H	-9.73	35.83	3.00	39.40	-57.97	-30.00	27.97
653.075	6530.75	PK	13.90	V	-9.73	35.83	3.00	40.00	-57.37	-30.00	27.37



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8.4.5 Radiated Emissions Table, 941.500 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)
941.50	1883.00	PK	17.90	H	-5.11	31.39	3.00	44.18	-53.20	-30.00	23.20
941.50	1883.00	PK	16.80	V	-5.11	31.39	3.00	43.08	-54.30	-30.00	24.30
941.50	2824.50	PK	14.40	H	-6.34	32.50	3.00	40.57	-56.81	-30.00	26.81
941.50	2824.50	PK	14.80	V	-6.34	32.50	3.00	40.97	-56.41	-30.00	26.41
941.50	3766.00	PK	12.30	H	-7.30	33.22	3.00	38.22	-59.16	-30.00	29.16
941.50	3766.00	PK	11.60	V	-7.30	33.22	3.00	37.52	-59.86	-30.00	29.86
941.50	4707.50	PK	11.40	H	-8.20	34.07	3.00	37.28	-60.10	-30.00	30.10
941.50	4707.50	PK	10.80	V	-8.20	34.07	3.00	36.68	-60.70	-30.00	30.70
941.50	5649.00	PK	10.80	H	-9.02	34.95	3.00	36.73	-60.65	-30.00	30.65
941.50	5649.00	PK	10.90	V	-9.02	34.95	3.00	36.83	-60.55	-30.00	30.55
941.50	6590.50	PK	13.80	H	-9.78	35.79	3.00	39.81	-57.57	-30.00	27.57
941.50	6590.50	PK	14.20	V	-9.78	35.79	3.00	40.21	-57.17	-30.00	27.17
941.50	7532.00	PK	13.50	H	-10.38	36.14	3.00	39.26	-58.11	-30.00	28.11
941.50	7532.00	PK	13.50	V	-10.38	36.14	3.00	39.26	-58.11	-30.00	28.11
941.50	8473.50	PK	17.10	H	-11.03	35.97	3.00	42.04	-55.34	-30.00	25.34
941.50	8473.50	PK	17.30	V	-11.03	35.97	3.00	42.24	-55.14	-30.00	25.14
941.50	9415.00	PK	18.00	H	-11.56	36.47	3.00	42.91	-54.47	-30.00	24.47
941.50	9415.00	PK	17.70	V	-11.56	36.47	3.00	42.61	-54.77	-30.00	24.77



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8.4.6 Radiated Emissions Table, 954.000 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)
954.00	1908.00	PK	17.00	H	-5.13	31.44	3.00	43.30	-54.07	-30.00	24.07
954.00	1908.00	PK	15.60	V	-5.13	31.44	3.00	41.90	-55.47	-30.00	25.47
954.00	2862.00	PK	15.00	H	-6.38	32.30	3.00	40.92	-56.45	-30.00	26.45
954.00	2862.00	PK	14.80	V	-6.38	32.30	3.00	40.72	-56.65	-30.00	26.65
954.00	3816.00	PK	12.70	H	-7.36	33.41	3.00	38.74	-58.63	-30.00	28.63
954.00	3816.00	PK	12.70	V	-7.36	33.41	3.00	38.74	-58.63	-30.00	28.63
954.00	4770.00	PK	11.60	H	-8.24	34.11	3.00	37.47	-59.91	-30.00	29.91
954.00	4770.00	PK	12.60	V	-8.24	34.11	3.00	38.47	-58.91	-30.00	28.91
954.00	5724.00	PK	11.40	H	-9.05	34.85	3.00	37.20	-60.18	-30.00	30.18
954.00	5724.00	PK	11.00	V	-9.05	34.85	3.00	36.80	-60.58	-30.00	30.58
954.00	6678.00	PK	14.40	H	-9.84	35.75	3.00	40.31	-57.07	-30.00	27.07
954.00	6678.00	PK	13.70	V	-9.84	35.75	3.00	39.61	-57.77	-30.00	27.77
954.00	7632.00	PK	14.10	H	-10.44	36.13	3.00	39.79	-57.58	-30.00	27.58
954.00	7632.00	PK	14.60	V	-10.44	36.13	3.00	40.29	-57.08	-30.00	27.08
954.00	8586.00	PK	15.90	H	-11.07	35.96	3.00	40.79	-56.59	-30.00	26.59
954.00	8586.00	PK	16.30	V	-11.07	35.96	3.00	41.19	-56.19	-30.00	26.19
954.00	9540.00	PK	17.10	H	-11.59	36.68	3.00	42.20	-55.18	-30.00	25.18
954.00	9540.00	PK	17.10	V	-11.59	36.68	3.00	42.20	-55.18	-30.00	25.18



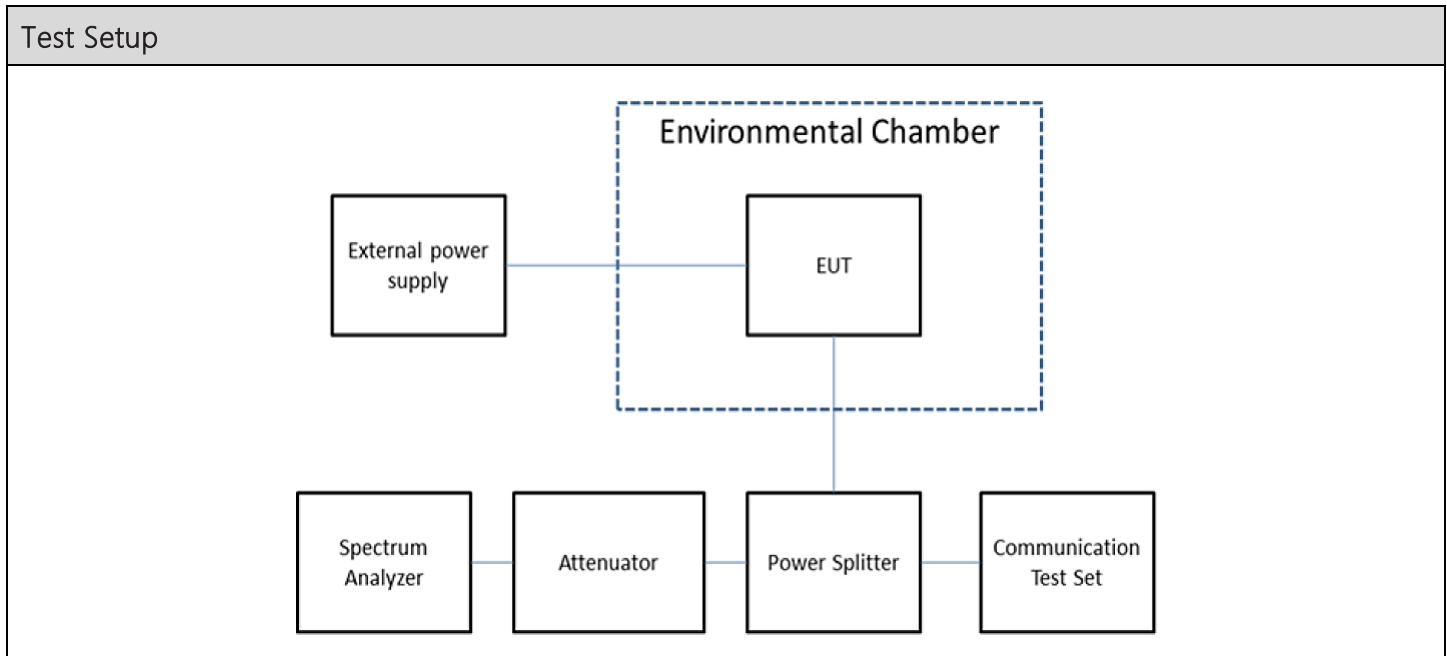
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8.4.7 Radiated Emissions Table, 959.850 MHz

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)
959.85	1919.70	PK	18.20	H	-5.17	31.36	3.00	26.19	-71.18	-30.00	41.18
959.85	1919.70	PK	14.6	V	-5.17	31.36	3.00	44.39	-52.98	-30.00	22.98
959.85	2879.55	PK	15.30	H	-6.40	32.28	3.00	41.18	-56.20	-30.00	26.20
959.85	2879.55	PK	14.90	V	-6.40	32.28	3.00	40.78	-56.60	-30.00	26.60
959.85	3839.40	PK	12.30	H	-7.40	33.46	3.00	38.37	-59.01	-30.00	29.01
959.85	3839.40	PK	12.30	V	-7.40	33.46	3.00	38.37	-59.01	-30.00	29.01
959.85	4799.25	PK	11.60	H	-8.26	34.19	3.00	37.53	-59.85	-30.00	29.85
959.85	4799.25	PK	12.60	V	-8.26	34.19	3.00	38.53	-58.85	-30.00	28.85
959.85	5759.10	PK	11.60	H	-9.08	34.83	3.00	37.34	-60.03	-30.00	30.03
959.85	5759.10	PK	11.50	V	-9.08	34.83	3.00	37.24	-60.13	-30.00	30.13
959.85	6718.95	PK	15.00	H	-9.86	35.74	3.00	40.88	-56.50	-30.00	26.50
959.85	6718.95	PK	14.30	V	-9.86	35.74	3.00	40.18	-57.20	-30.00	27.20
959.85	7678.80	PK	15.10	H	-10.47	36.15	3.00	40.78	-56.60	-30.00	26.60
959.85	7678.80	PK	14.70	V	-10.47	36.15	3.00	40.38	-57.00	-30.00	27.00
959.85	8638.65	PK	16.90	H	-11.12	35.96	3.00	41.74	-55.64	-30.00	25.64
959.85	8638.65	PK	16.50	V	-11.12	35.96	3.00	41.34	-56.04	-30.00	26.04
959.85	9598.50	PK	17.60	H	-11.58	36.80	3.00	42.82	-54.56	-30.00	24.56
959.85	9598.50	PK	17.70	V	-11.58	36.80	3.00	42.92	-54.46	-30.00	24.46

8.5 Frequency Stability

Limits from 2.1046(a), 74.861(e) (4) and test procedure from ANSI C63.26.



Test Results, Mode 1		
Tuned Frequency (MHz)	Max Deviation (kHz)	Limit (ppm)
470.075	-1.05	50
941.5	-2.24	50

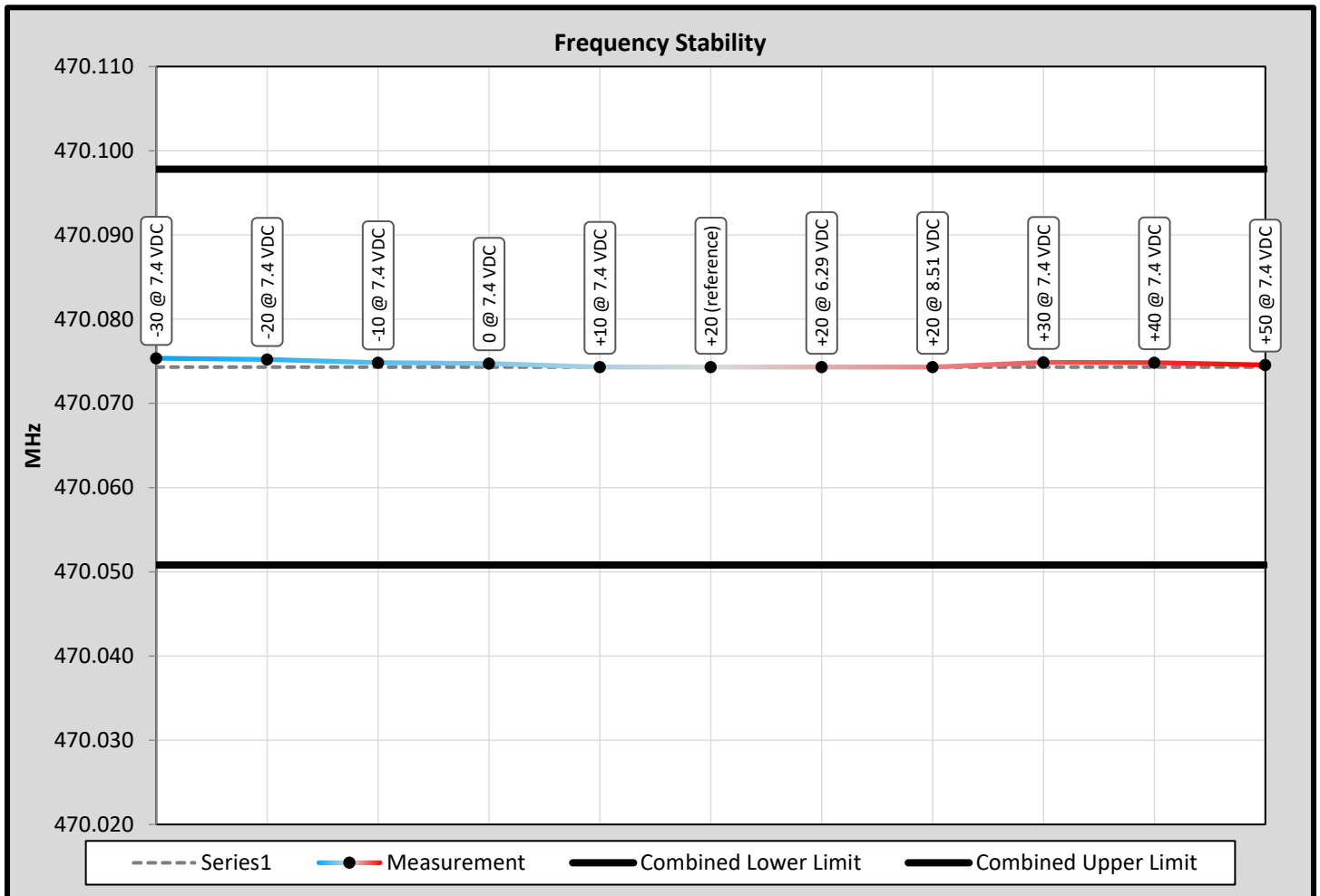


Frequency Stability, Tabular Data

8.5.1 Frequency Stability Data

Limit	50.0	ppm	
Limit, as ppb	50000	ppb (Parts per Billion)	
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	7.4	☐ AC ☒ DC	
Temperature / Voltage Variation			
Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)	Deviation (kHz)
-30	7.4	470.075360	-1.050
-20	7.4	470.075230	-0.920
-10	7.4	470.074830	-0.520
0	7.4	470.074730	-0.420
+10	7.4	470.074310	0.000
+20 (reference)	7.4	470.074310	0.000
+20	6.3	470.074310	0.000
+20	8.5	470.074310	0.000
+30	7.4	470.074890	-0.580
+40	7.4	470.074850	-0.540
+50	7.4	470.074580	-0.270

8.5.2 Frequency Stability Plot





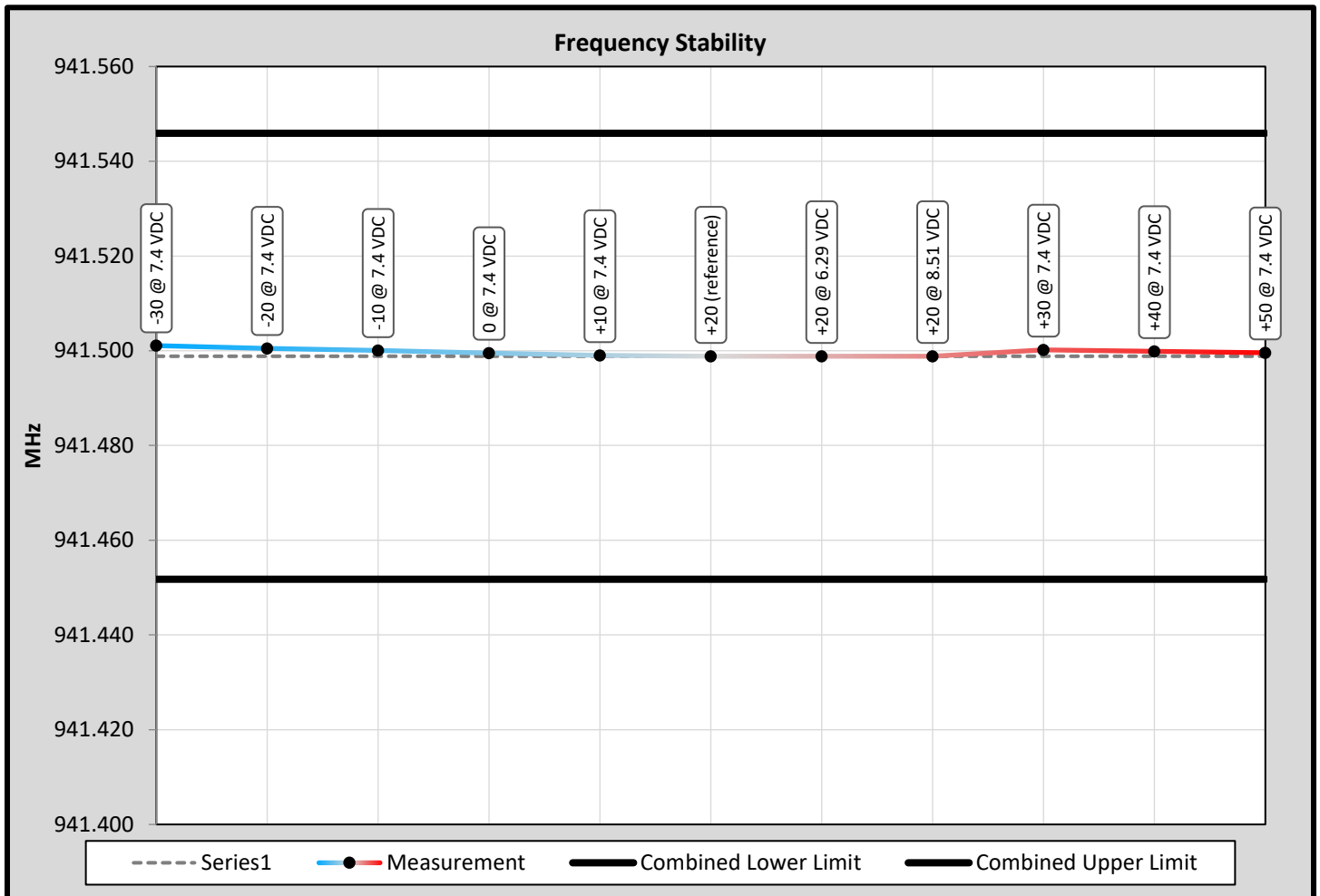
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Frequency Stability, Tabular Data

8.5.1 Frequency Stability Data

Limit	50.0	ppm	
Limit, as ppb	50000	ppb (Parts per Billion)	
Limit, as %	0.00500	%	
Strictest Combined Limit, as Hz	47074.942	Hz	
Combined Lower Limit	941.451765	MHz	
Combined Upper Limit	941.545915	MHz	
Rated Supply Voltage	7.4	☐ AC ☒ DC	
Temperature / Voltage Variation			
Temperature (°C)	Supplied Voltage (V)	Frequency (MHz)	Deviation (kHz)
-30	7.4	941.501080	-2.240
-20	7.4	941.500510	-1.670
-10	7.4	941.500060	-1.220
0	7.4	941.499520	-0.680
+10	7.4	941.499010	-0.170
+20 (reference)	7.4	941.498840	0.000
+20	6.3	941.498840	0.000
+20	8.5	941.498840	0.000
+30	7.4	941.500180	-1.340
+40	7.4	941.499860	-1.020
+50	7.4	941.499590	-0.750

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_17549_24_PT 74H	1	Initial release	12/16/2024



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END OF TEST REPORT
