



Test Report - FCC Part 97

Applicant: KM3KM Electronics LLC

Signature:

A handwritten signature in black ink, appearing to read "Tim Royer".

Sr. EMC Engineer
EMC-003838-NE



Name & Title:

Tim Royer, EMC Engineer

Date of Signature

8/1/2024

Signature:

A handwritten signature in black ink, appearing to read "Kristoffer Costa".

Name & Title:

Kristoffer Costa, EMC Technician

Date of Signature

8/1/2024

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: KM3KM Electronics LLC
Address: 7901 SW 24th Street
Miami, Florida, 331, United States

1.1 Part 97 Test Result Summary

The following test procedure and guidance were used for measuring FCC PART 97 (Amateur Radio Service); ANSI/ TIA 603-C:2004 & ANSI C63.4-2004. Full test results are available in this report.

Applicable Clauses from Part 2		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
2.1033 (c)(8)	Power at the Final Amplifier	Reported
2.1046 (a)	RF Output Power	Pass
2.1051	Spurious emissions at antenna terminals	Pass
2.1053	Field strength of spurious radiation	Pass

Applicable Clauses from Part 90		
FCC Clauses	Description of the requirements	Result: (Pass, Fail, N/A)
97.313	Transmitter Power	Pass
97.307(d)(e)	Emission Standards	Pass

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

2. Location of Testing

2.1 Test Laboratory

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: 6/19/2024

Dates of Testing: 6/21/2024 – 7/2/2024

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:	2A3P6MERCURLITE
Brief Description	Linear HF Amplifier
Model(s) #	Mercury Lite
Firmware version	N/A
Software version	N/A
Serial Number	N/A

Technical Characteristics	
Frequency Range	3.5 MHz- 54 MHz
RF O/P Power (Max.)	600W
Modulation	FM
Bandwidth & Emission Class	A1A, A3A, A3E, F1D, F3E, J1D, J3C, J3E, J3F
Number of Channels	N/A
Duty Cycle	100%
Antenna Connector	UHF
Voltage Rating (AC or Batt.)	52 VDC Battery

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1	n/a	n/a	0 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	
Band	Amateur Band
3.620888 MHz	80 m
7.15 MHz	60-40 m
14.2209 MHz	30-20 m
18.1 MHz	17-15 m
28.64 MHz	12-10 m
50.184 MHz	6 m

Operating conditions during Testing:

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

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

Peripherals used during Testing:

A Transceiver was used with the EUT.

3.3 Test Setup of EUT

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

Test Setups are included in the test report.

4. Test methods & Applicable Regulatory Limits

4.1 Test methods/Standards/Guidance:

Test procedures and guidance for measuring Licensed Part 97 Licensed device:

- 1) ANSI/ TIA 603-C:2004
- 2) ANSI C63.4-2003

4.2 Applied Limits and Regulatory Limits:

- 1) FCC CFR 47 Part 97 (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

6.1 Temperature & Humidity

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

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

7. List of Test Equipment and Test Facility

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

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

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

7.1 List of Test Equipment

Test Equipment						
Type	Device	Manufacturer	Model	SN#	Current Cal	Cal Due
Antenna	Biconical 1057	Eaton	94455-1	1057	11/19/21	11/18/2024
Antenna, NSA	Log-Periodic 1243	Eaton	96005	1243	5/4/21	11/18/2024
Antenna	Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	5/31/23	11/18/2024
CHAMBER	CHAMBER	Panashield	3M	N/A	12/29/23	12/18/2025
Pre-amp	Pre-amp	RF-LAMBDA	RLNA00M45GA	NA	2/27/22	7/26/2025
Receiver	EMI Test Receiver R&S ESU 40	Rohde & Schwarz	ESU 40	100320	5/27/21	11/18/2024
Receiver	EMI Test Receiver R&S ESW44	Rohde & Schwarz	ESW44	103049	10/13/21	10/12/2024
Signal Generator	Signal Generator HP 8648C	HP	8648C	35537A01679	8/4/22	8/03/2025

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).

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

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

8.1 Power at the Final Amplifier

Limits from FCC Parts 2.1033(c)(8), and 97.313; and test procedure from ANSI/ TIA 603-C:2004 & ANSI C63.4-2003

TEST PROCEDURES: Radiation Interference: The test procedure used was ANSI/TIA 603-C: 2004 using a Agilent spectrum analyzer with a preselector. In the frequency range 10 kHz to 30 MHz the RBW was 10 kHz and from 30-1000 MHz the RBW of the spectrum analyzer was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz.

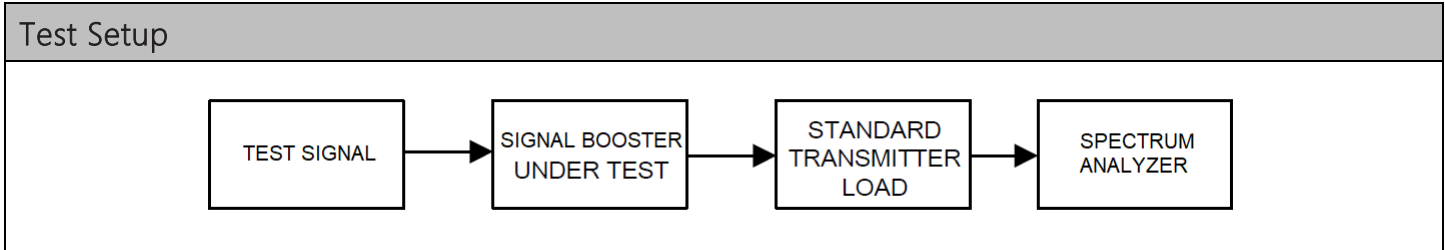
Formula of Conversion Factors: The field strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the preselector was accounted for in the spectrum analyzer meter reading.

Example: Freq (MHz) Meter Reading + ACF + CL = FS 33 20 dBuV + 10.36 dB/m +0.4 dB = 30.76 dBuV/m @ 3m

Test Results		
EUT Operating Voltage (V)	EUT Current (A)	Power at the Final Amplifier (W)
52	11.54	600

8.2 Out-of-band Rejection

Limits from FCC Part 97, test method from FCC KDB 935210 D05 v01r04 Industrial Signal Boosters.



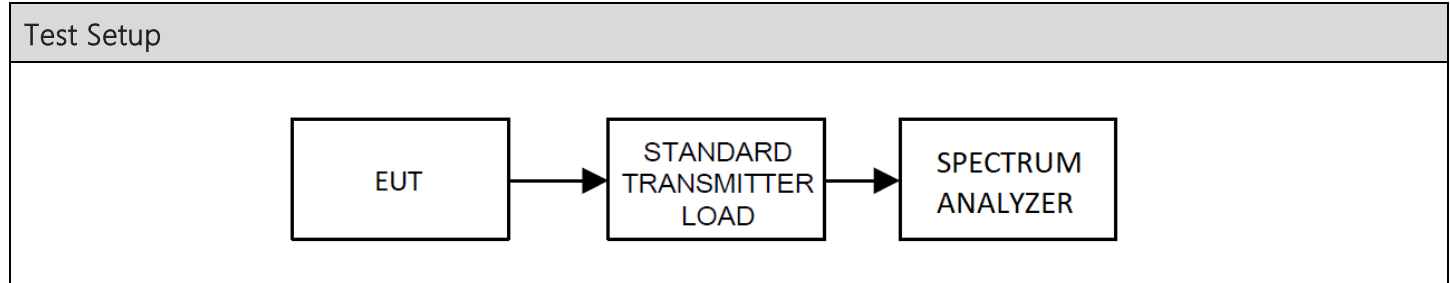
Test Results, Out-of-band Rejection and Class of Operation		
Operating Band (MHz)	Passband (kHz)	Class of Operation
3.5 – 54	> 75	Class B

- Amplifier will not transmit out of band. The amplifier shuts off when an out of band signal is detected.

8.3 RF Output Power

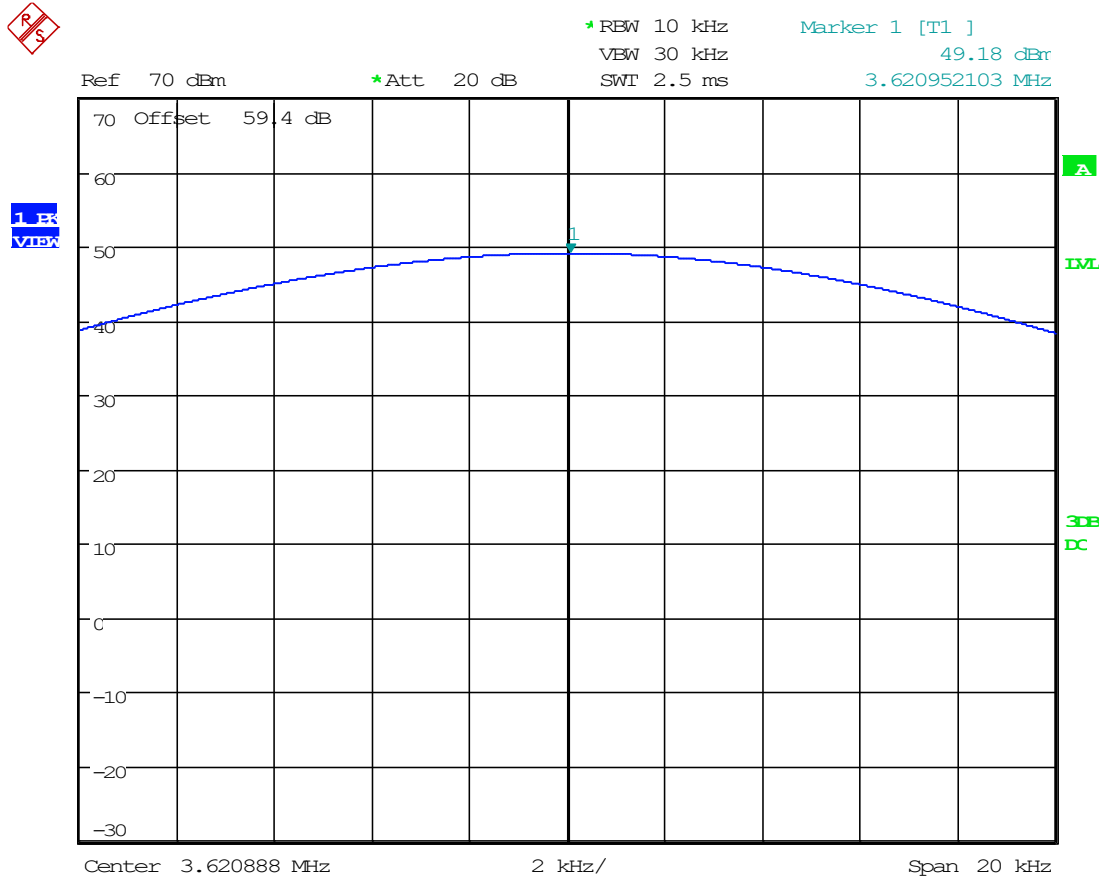
Limits from FCC Parts 2.1046(a), and 97.313; and test procedure from ANSI/ TIA 603-C:2004 & ANSI C63.4-2003

Test Procedure: RF power is measured by connecting a 50-ohm, resistive wattmeter to the RF output connector with a nominal input voltage of 110 AC Volts to an AC charger and a 48-53 VDC Battery.



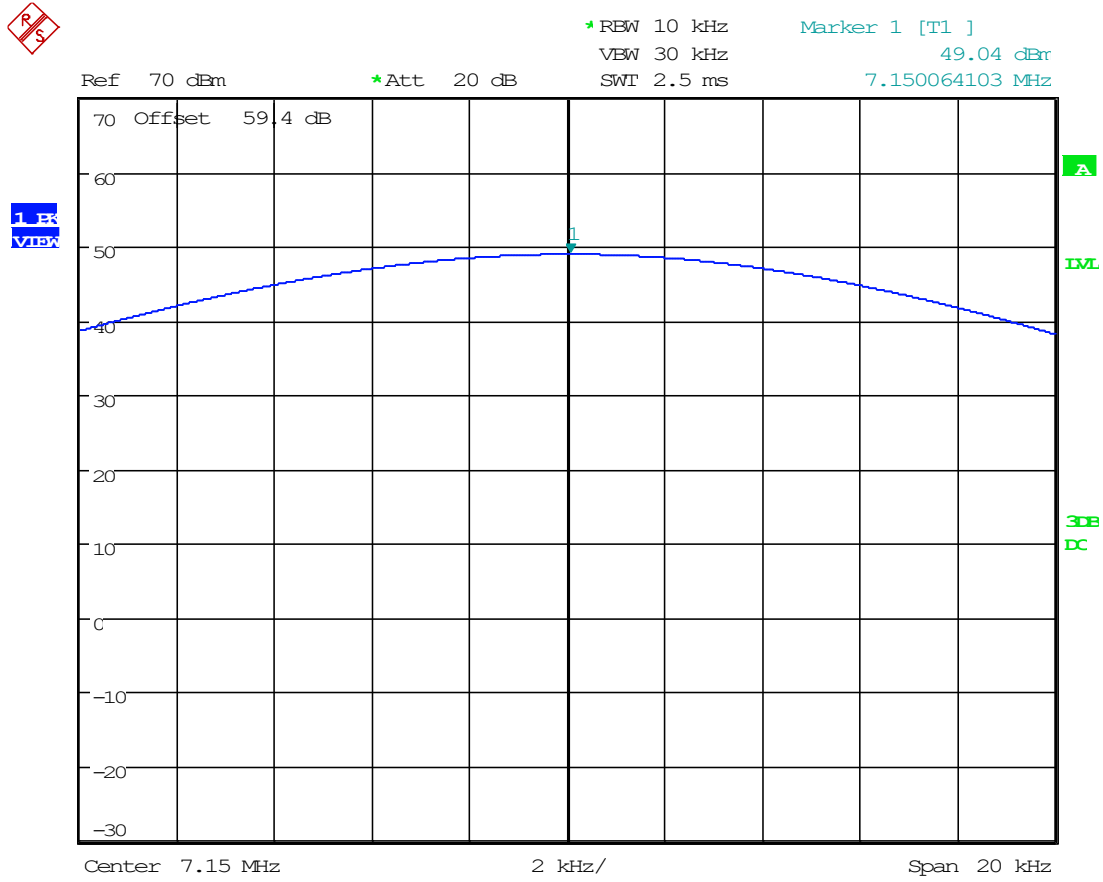
Test Results, Mode 1					
Amateur Band	Tuned Frequency (MHz)	Power Input (dBm)	Power Output (dBm)	Power Output (W)	Gain (dB)
80 m	3.620888	49.18	57.58	572.80	8.4
60-40 m	7.15	49.04	58.27	671.43	9.23
30-20 m	14.2209	49.17	58.31	677.64	9.14
17-15 m	18.1	49.23	58.05	638.26	8.82
12-10 m	28.64	49.37	57.72	591.56	8.35
6 m	50.184	49.04	57.10	512.86	8.06

8.3.1 3.620888 MHz, FM, Power Input Signal



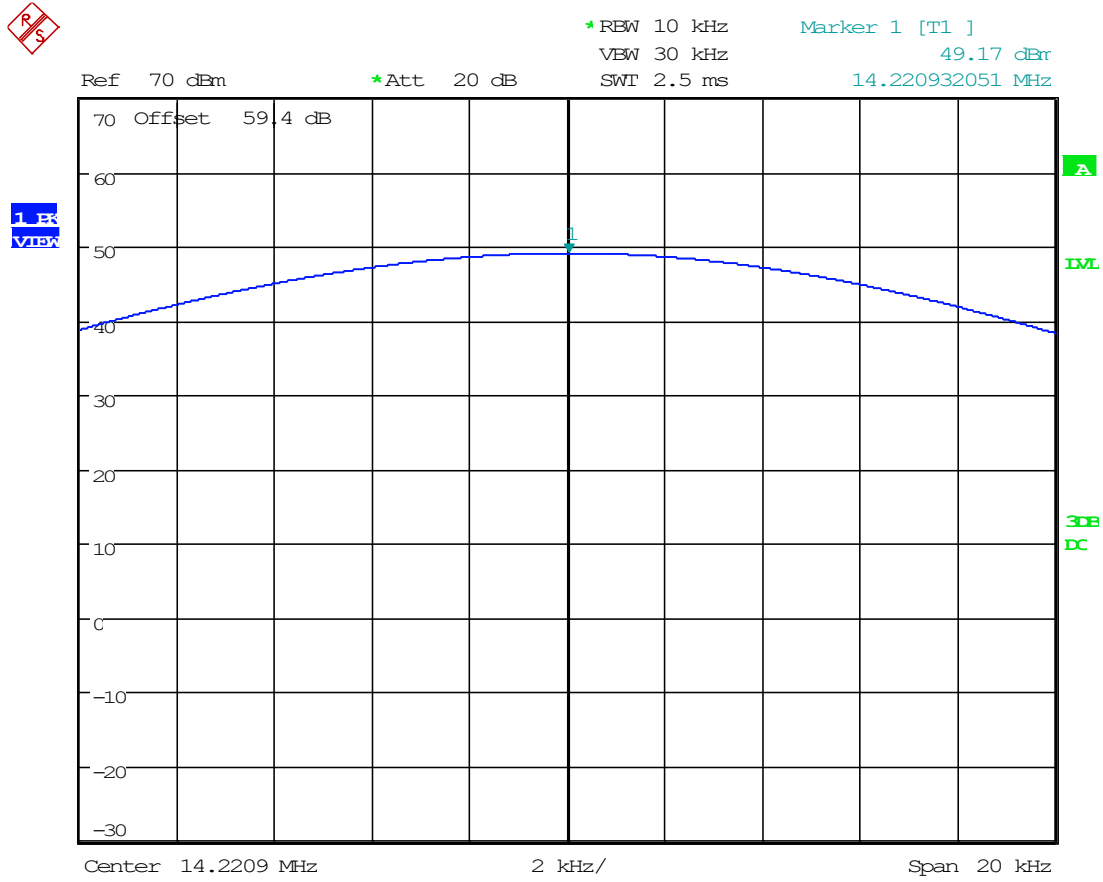
Date: 21.JUN.2024 16:38:35

8.3.2 7.15 MHz, FM, Power Input Signal



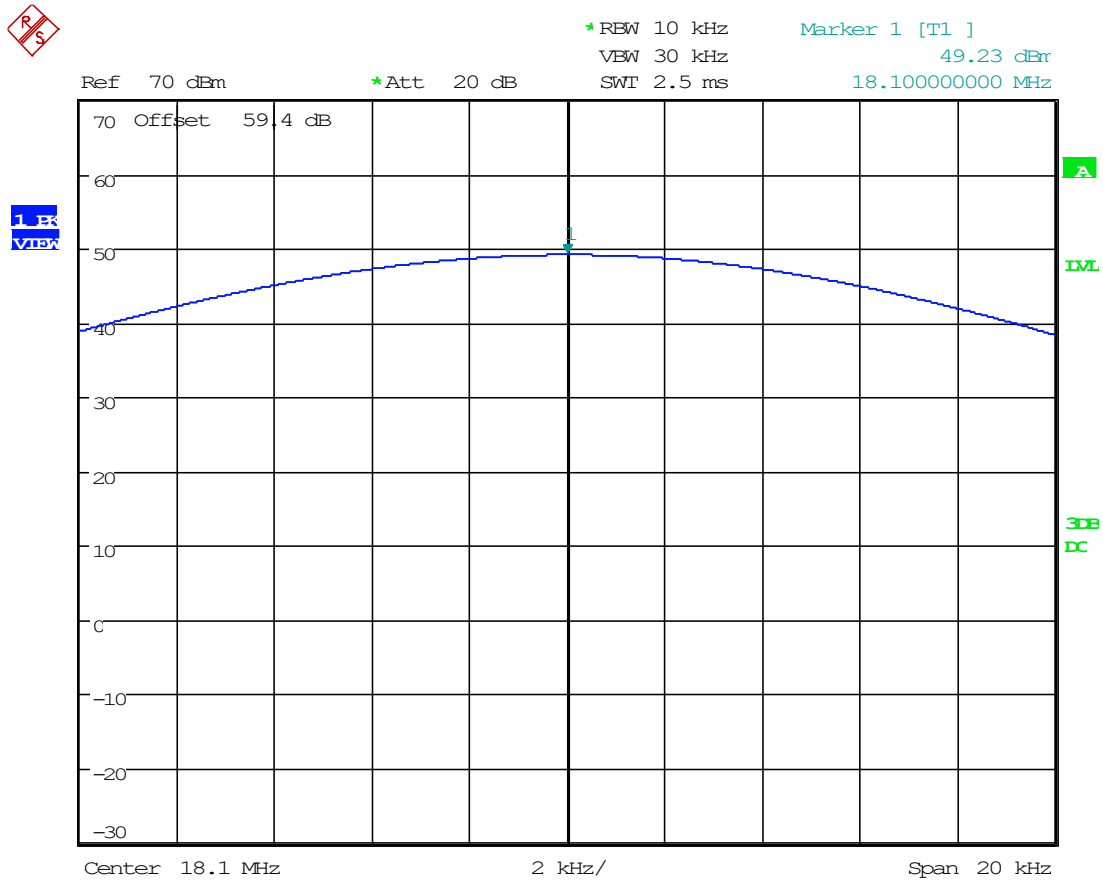
Date: 21.JUN.2024 16:39:06

8.3.3 14.2209 MHz, FM, Power Input Signal



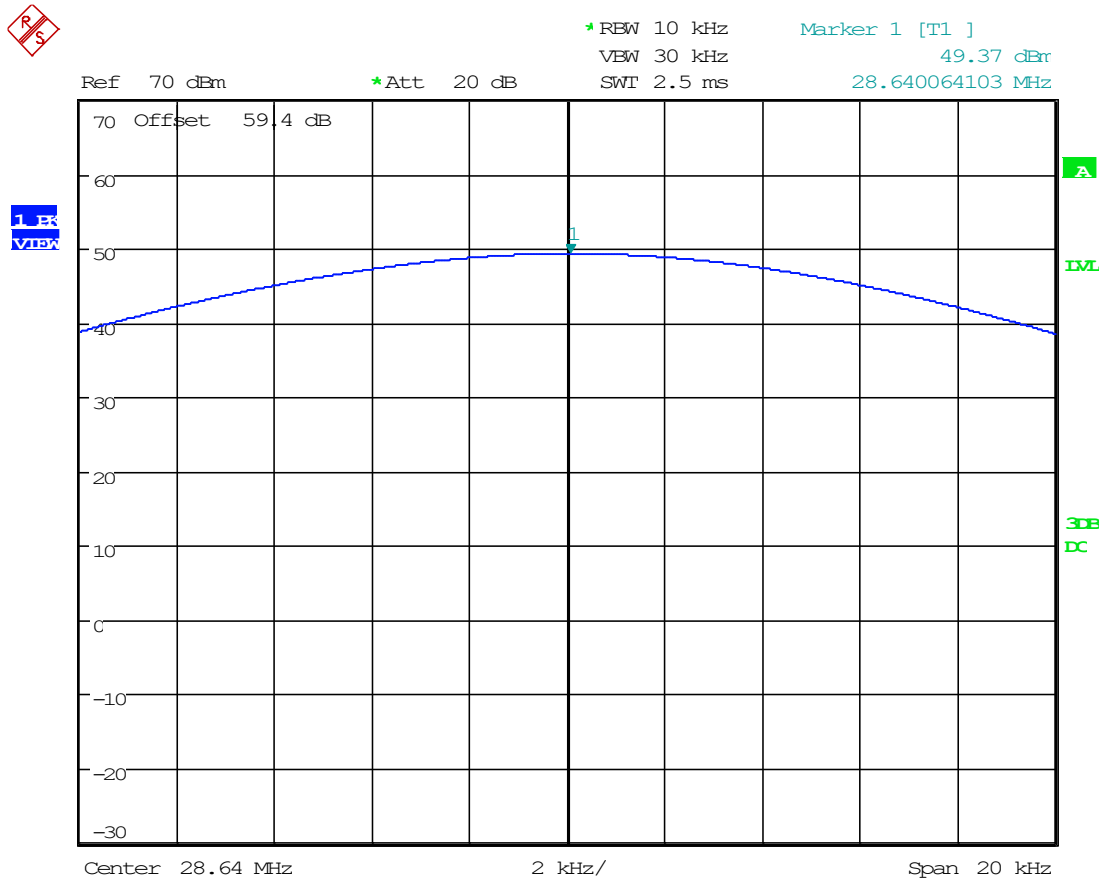
Date: 21.JUN.2024 16:39:37

8.3.4 18.1 MHz, FM, Power Input Signal



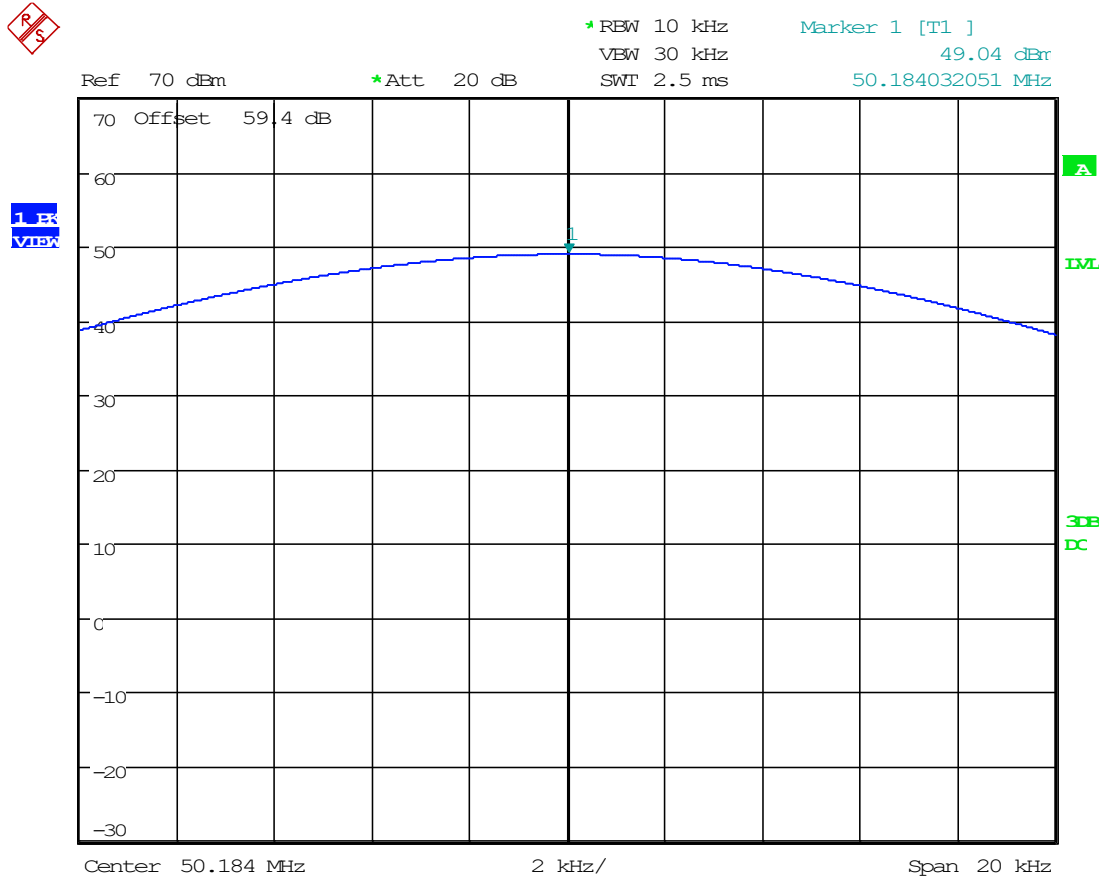
Date: 21.JUN.2024 16:40:08

8.3.5 28.64 MHz, FM, Power Input Signal



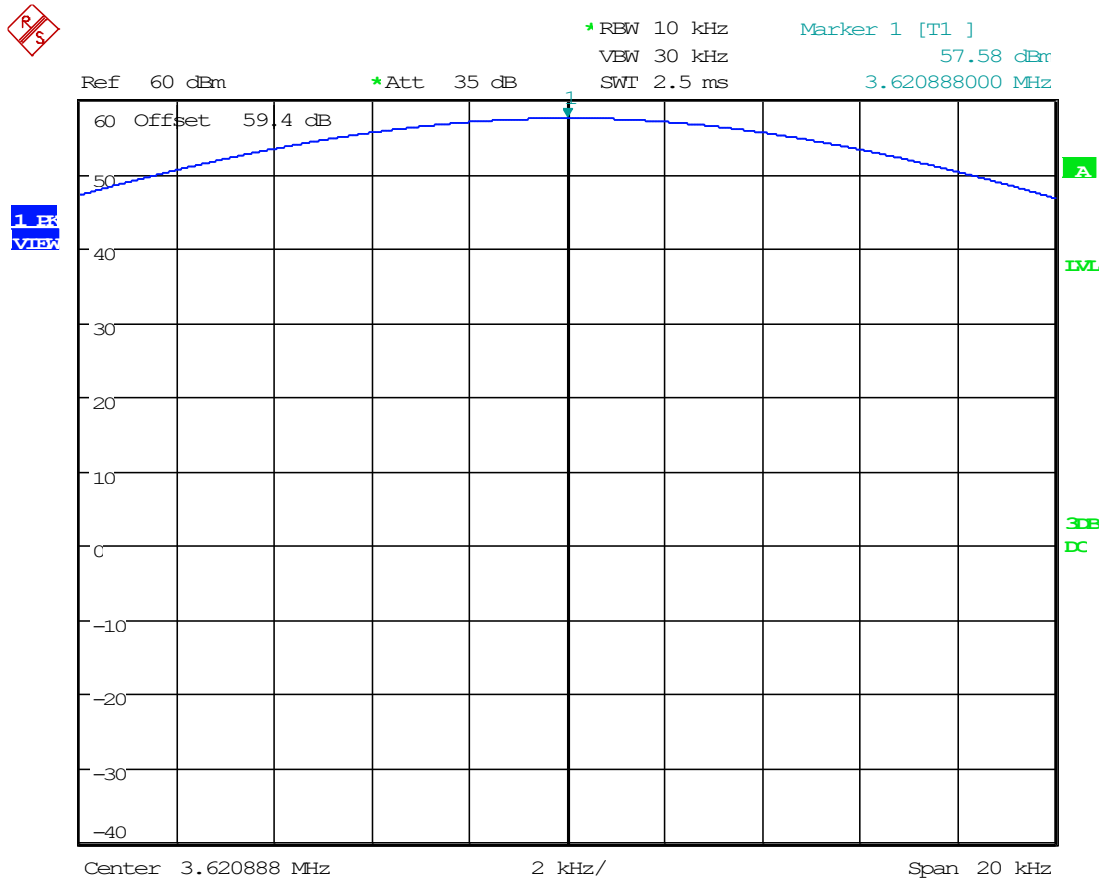
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8.3.6 50.184 MHz, FM, Power Input Signal



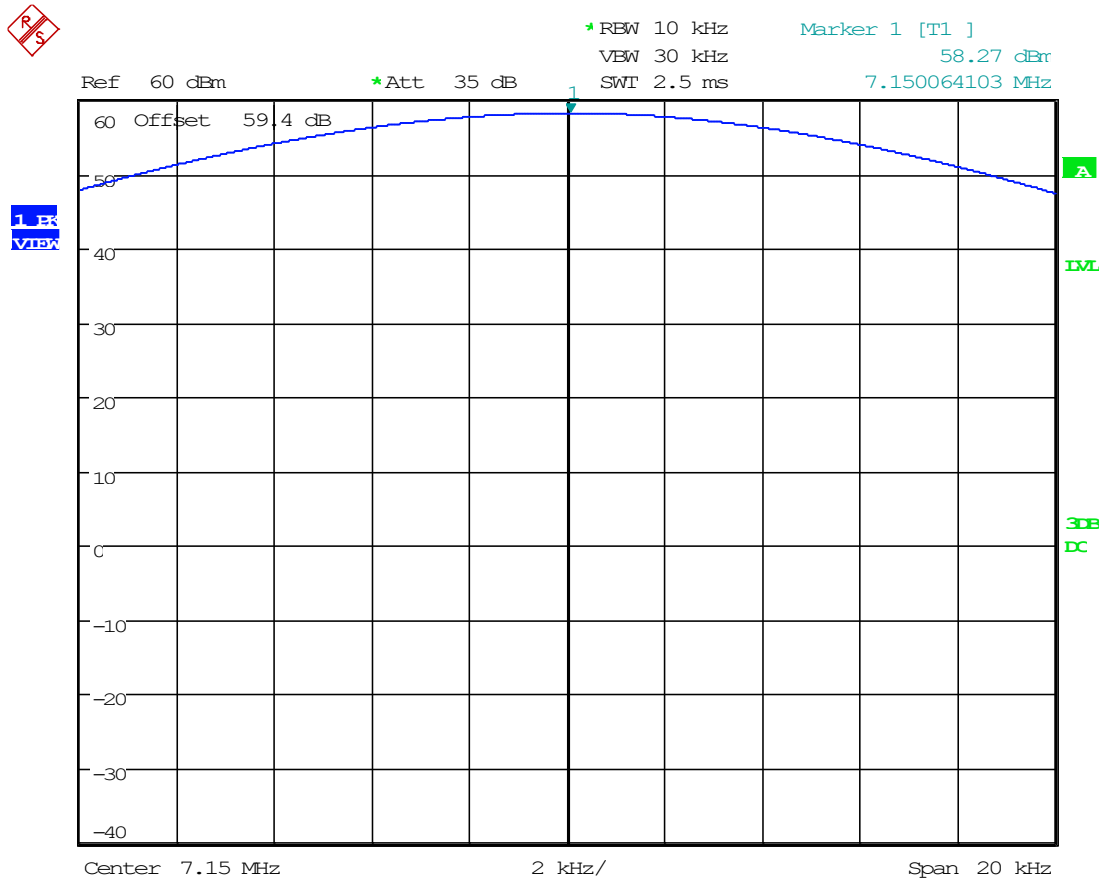
Date: 21.JUN.2024 16:41:10

8.3.7 RF Power Output Plot, 3.620888 MHz



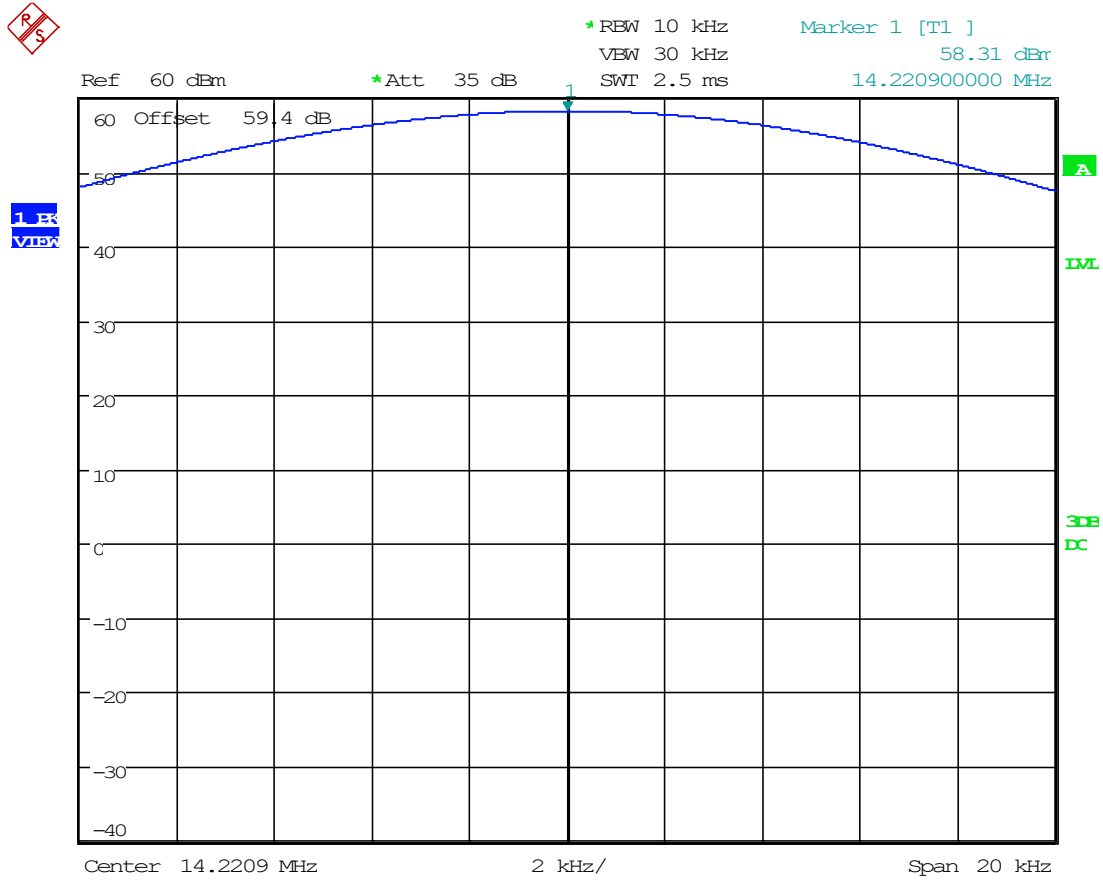
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8.3.8 RF Power Output Plot, 7.15 MHz



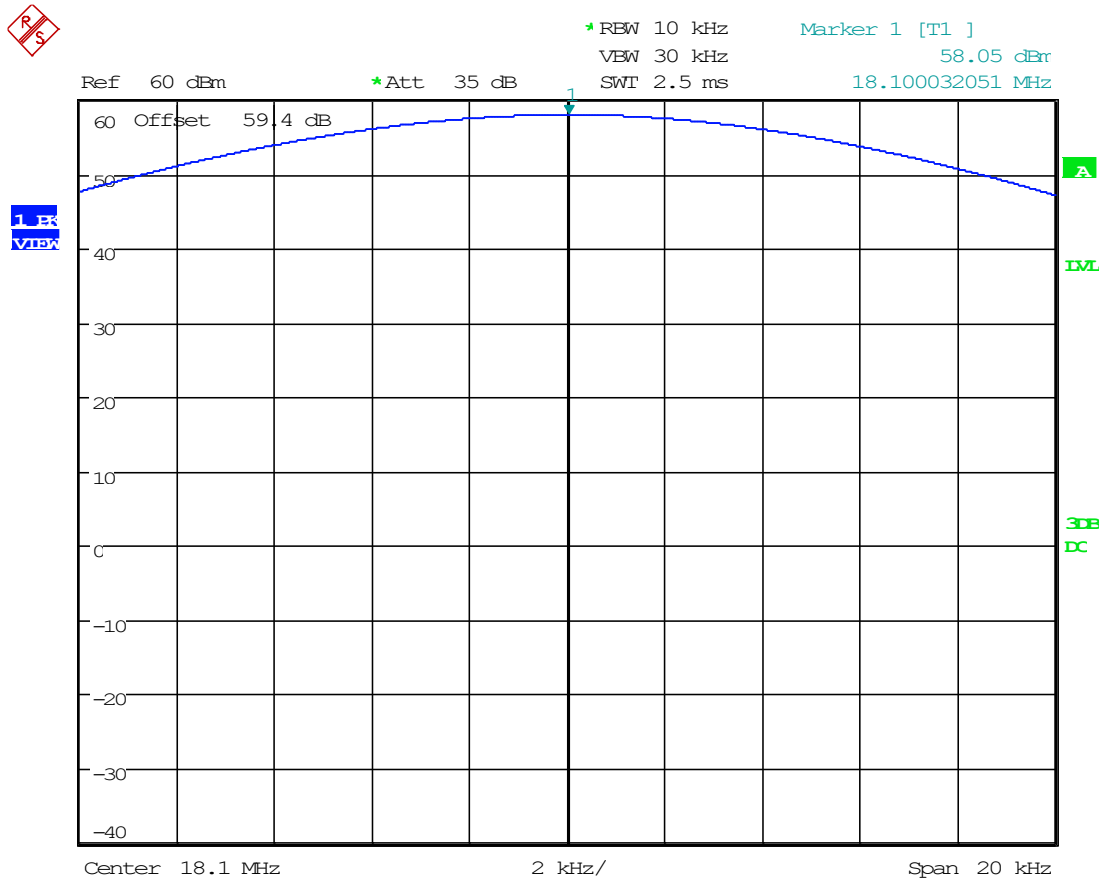
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8.3.9 RF Power Output Plot, 14.2209 MHz



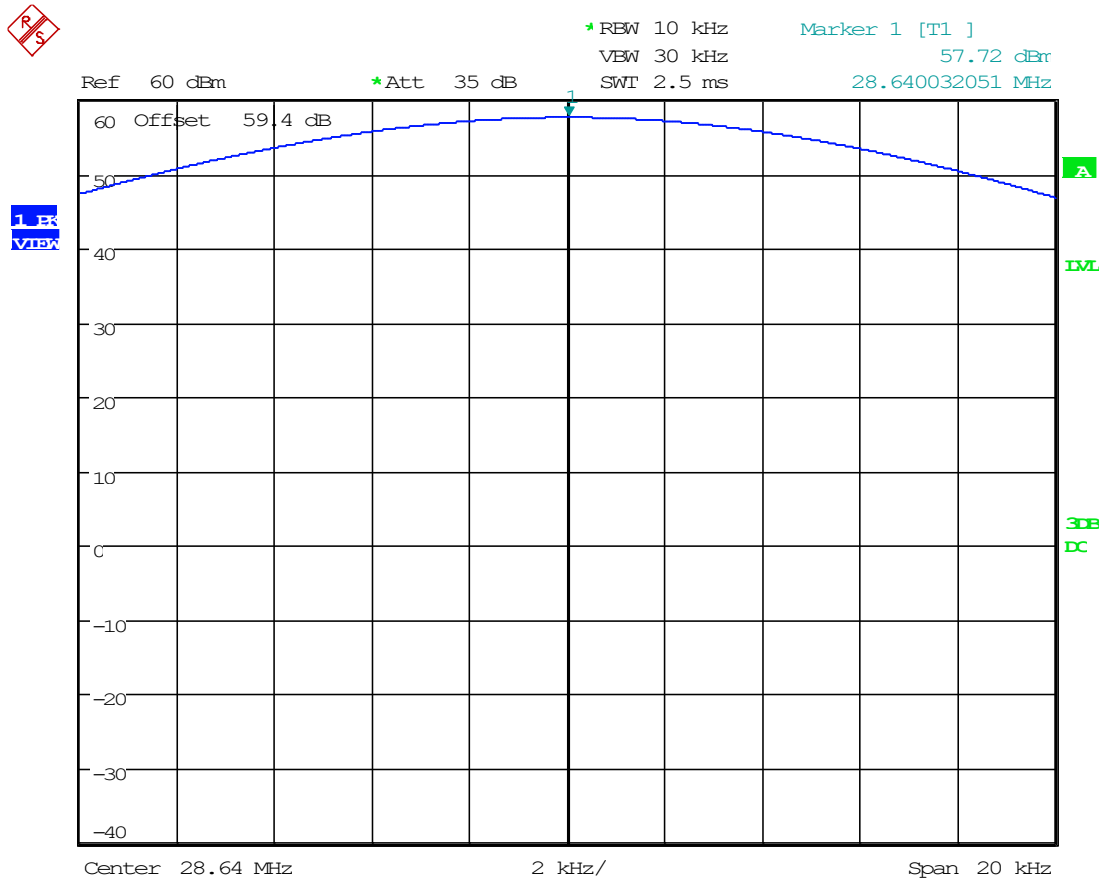
Date: 27.JUN.2024 16:41:37

8.3.10 RF Power Output Plot, 18.1 MHz



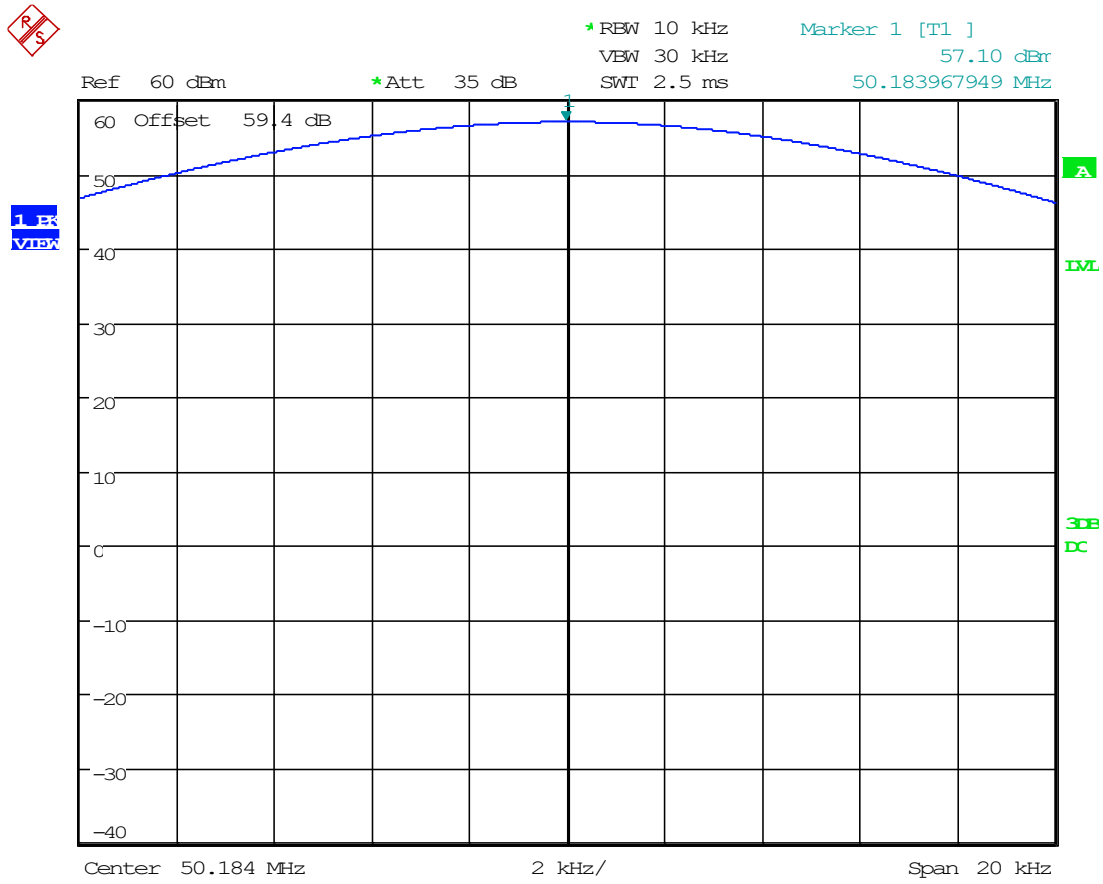
Date: 27.JUN.2024 16:49:11

8.3.11 RF Power Output Plot, 28.64 MHz



Date: 27.JUN.2024 16:44:17

8.3.12 RF Power Output Plot, 50.184 MHz



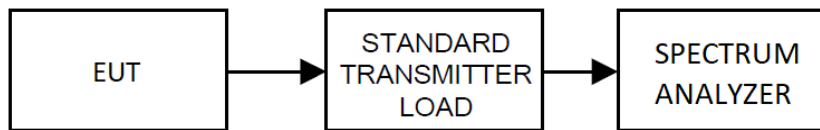
Date: 27.JUN.2024 16:44:59

8.4 Emission Limitations, Out-of-Band

Limits from FCC Parts 2.1053, and 97.307(d)(e); and test procedure from ANSI/ TIA 603-C:2004 & ANSI C63.4-2003

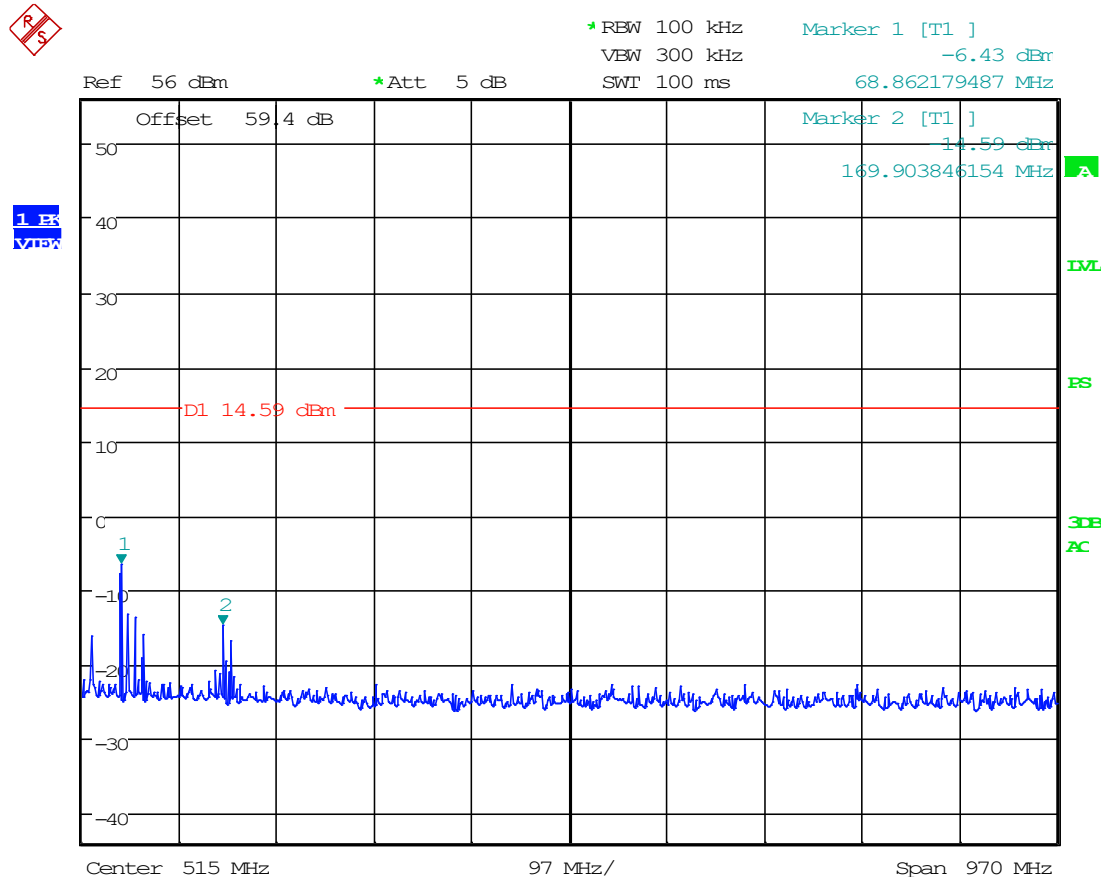
Requirements: The FCC Limits for spurious emissions of a transmitting operating on a frequency below 30 MHz must be at least 43dB below the mean power. For the transmitter frequency operating at 50 MHz, the RF spurious emissions must be at least 60 dB below the mean power of the fundamental.

Conducted Test Setup



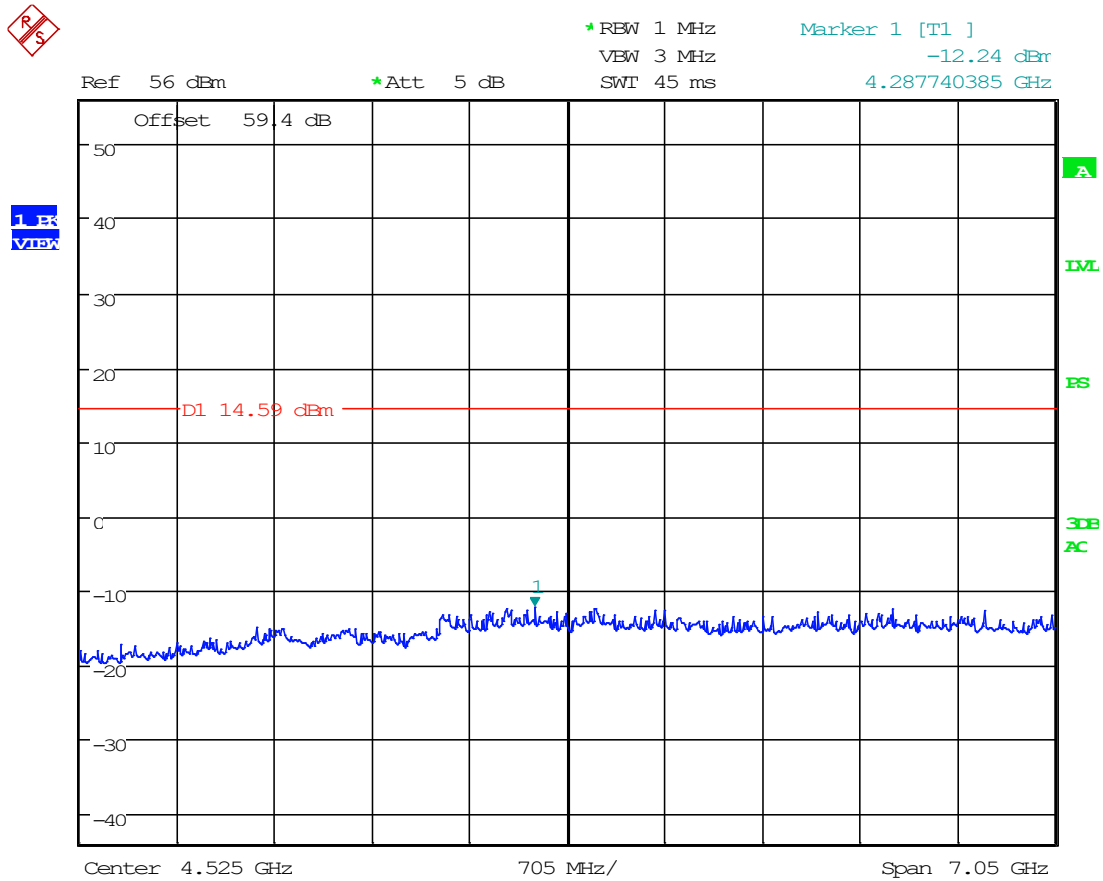
Conducted Emissions Spectrum Plots

8.4.1 Conducted Emissions, Below 1GHz, 3.620888 MHz



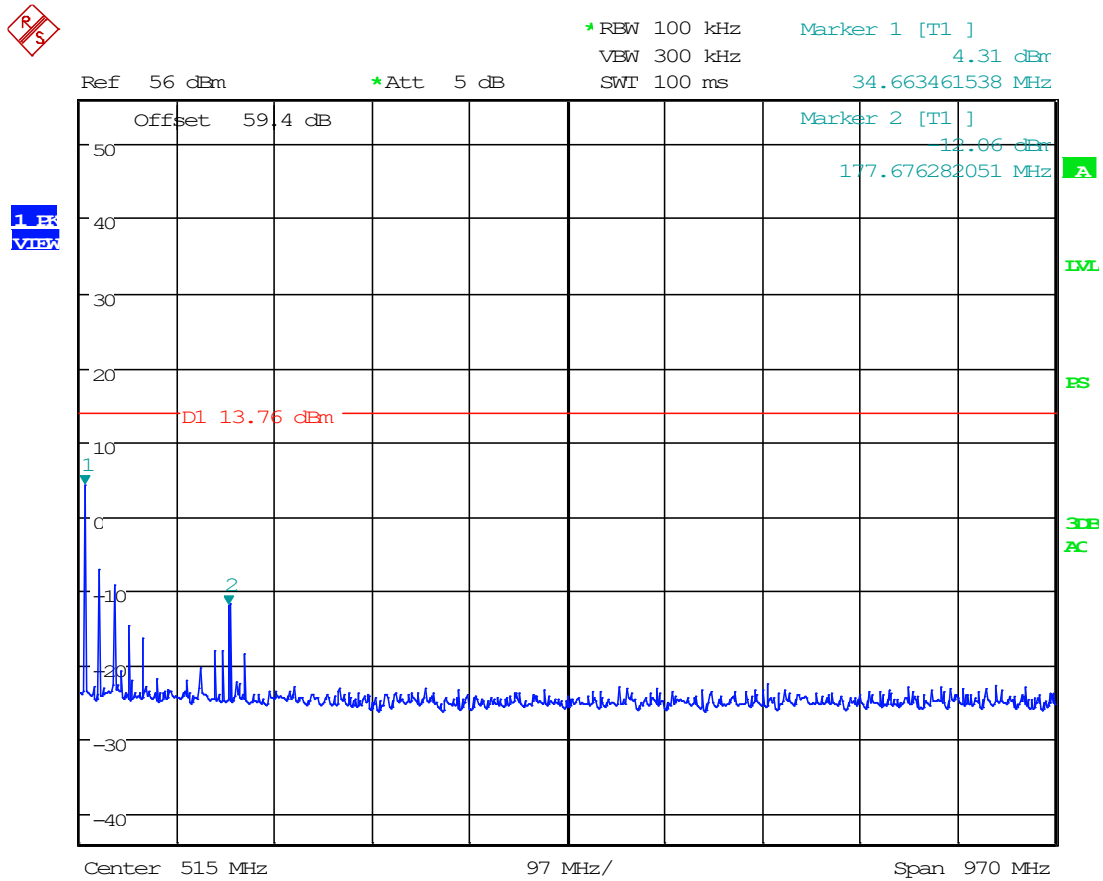
Date: 27.JUN.2024 17:33:45

8.4.2 Conducted Emissions Above 1GHz, 3.620888 MHz



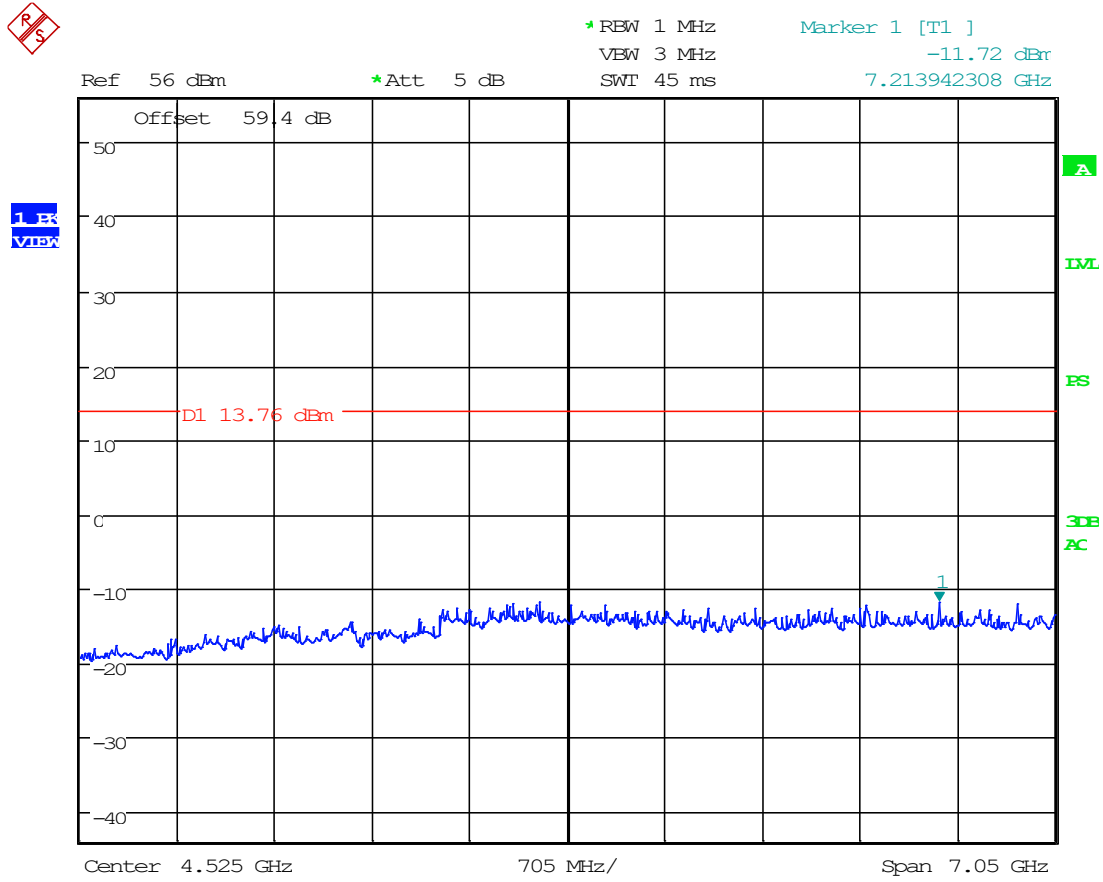
Date: 27.JUN.2024 17:46:09

8.4.3 Conducted Emissions Below 1GHz, 7.15 MHz



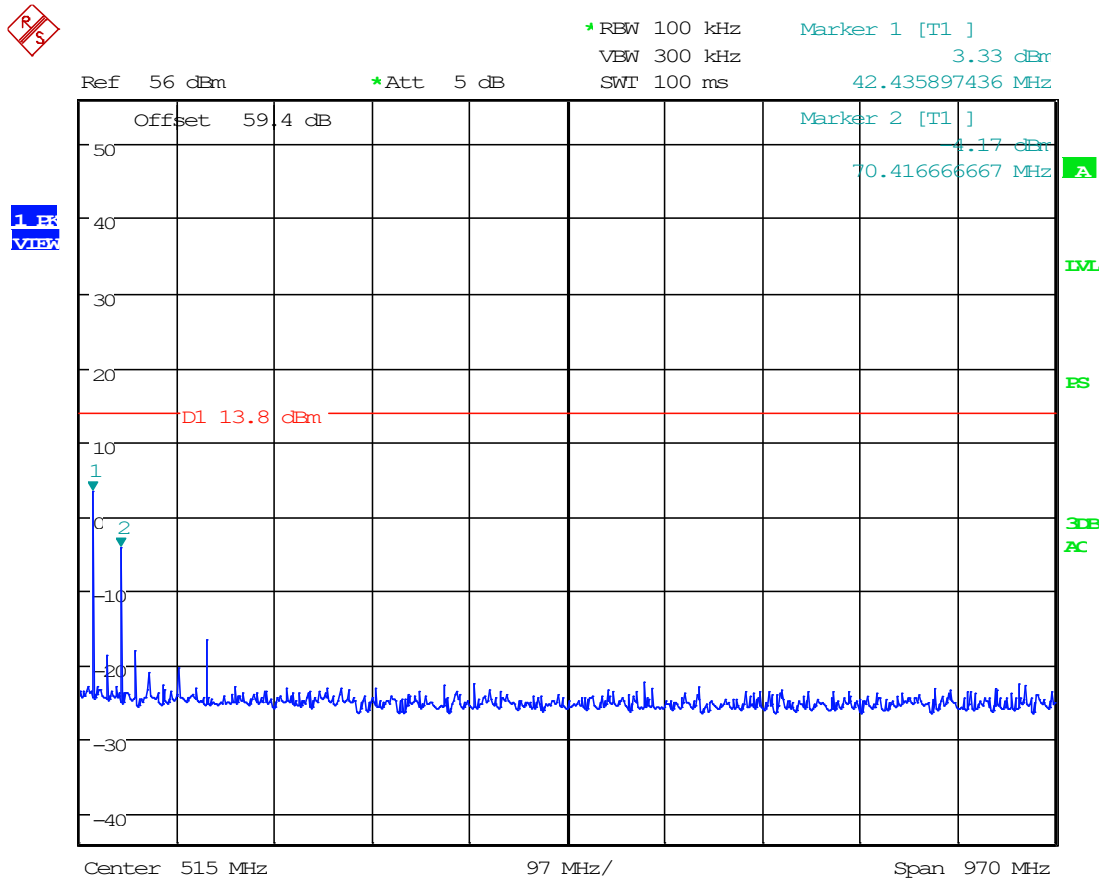
Date: 27.JUN.2024 17:34:56

8.4.4 Conducted Emissions Above 1GHz, 7.15 MHz



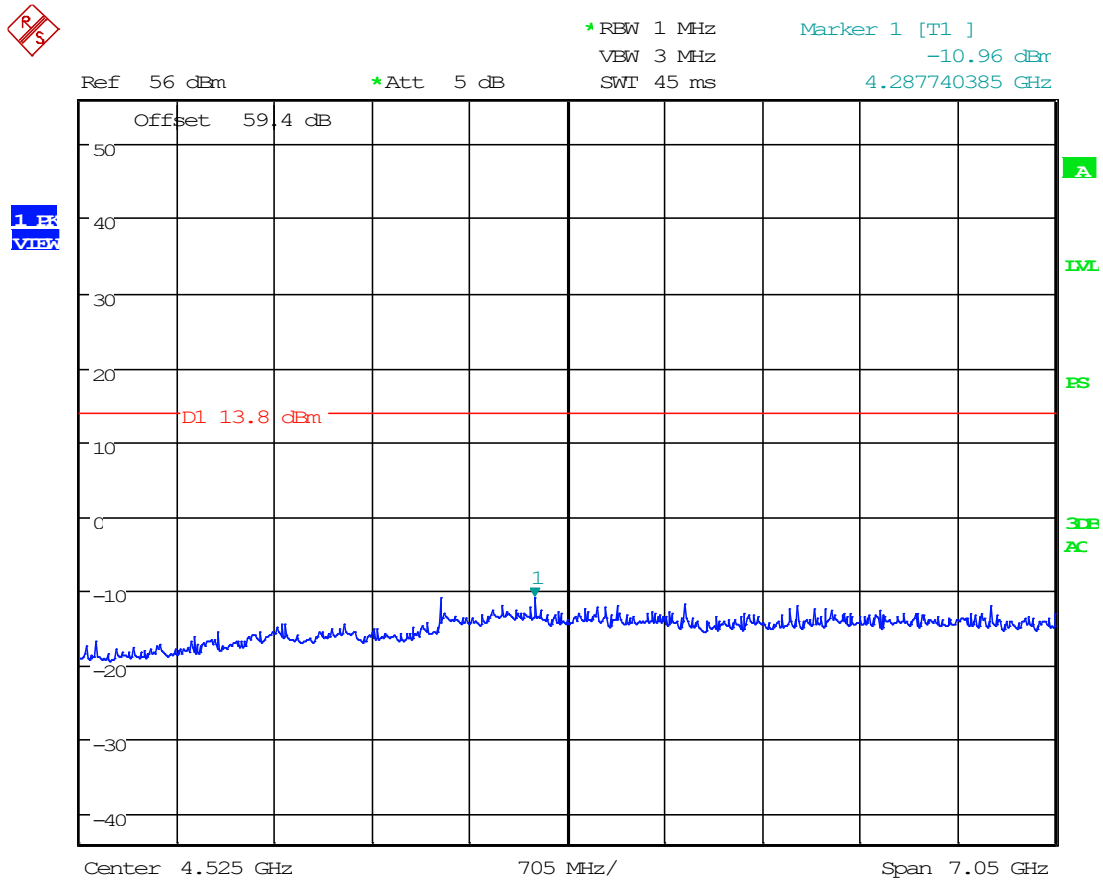
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8.4.5 Conducted Emissions Below 1GHz, 14.2209 MHz



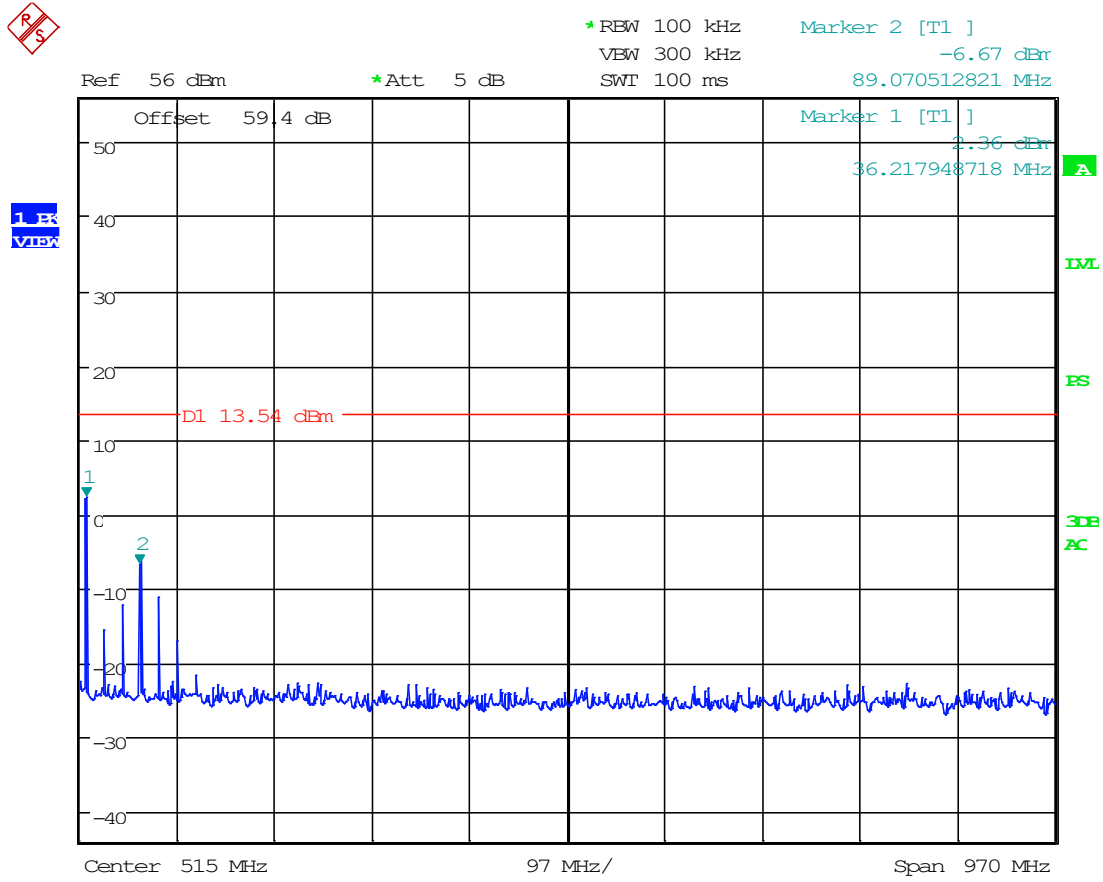
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8.4.6 Conducted Emissions Above 1GHz, 14.2209 MHz



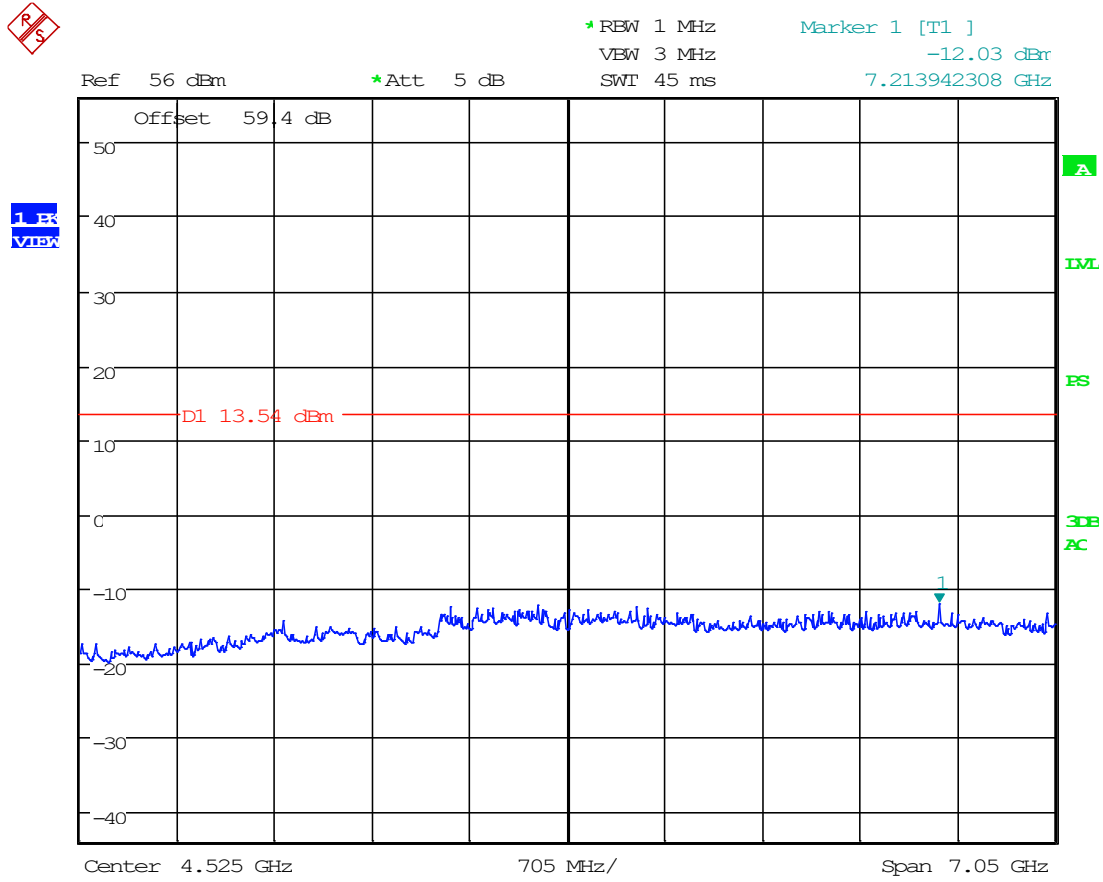
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8.4.7 Conducted Emissions, Below 1GHz, 18.1 MHz



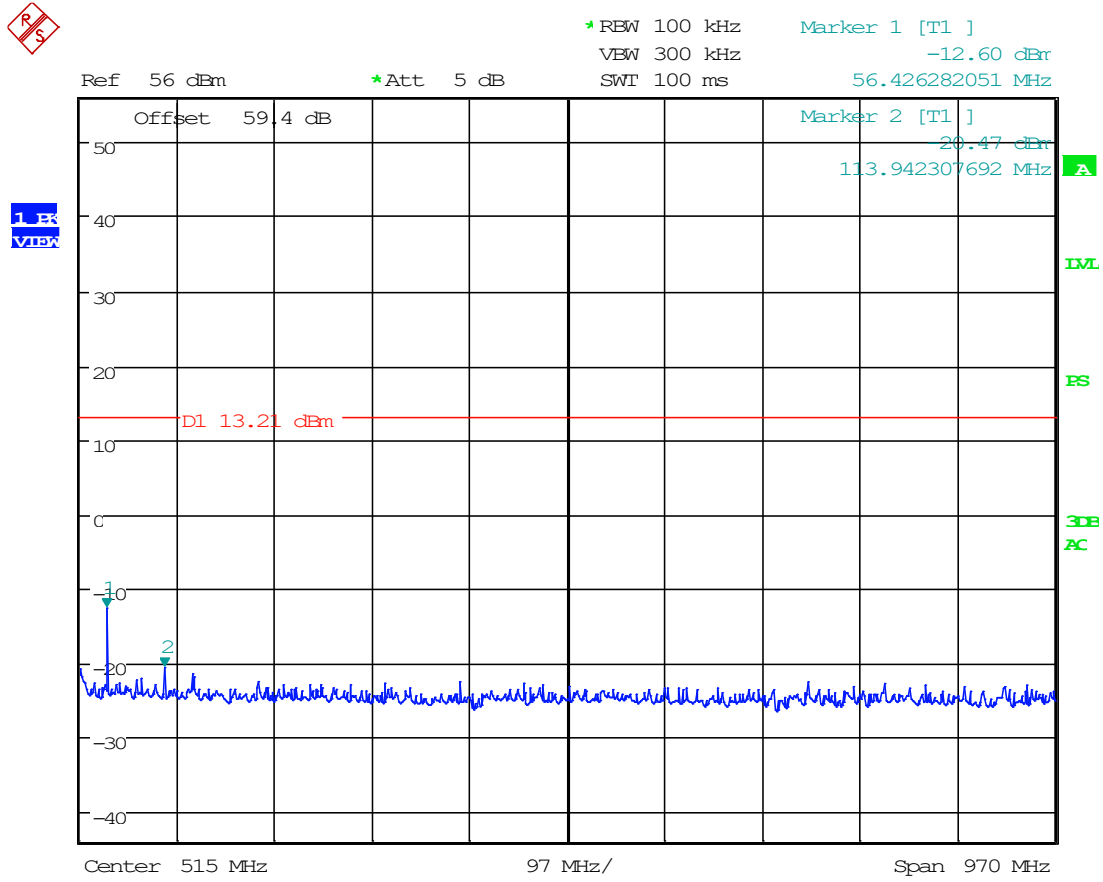
Date: 27.JUN.2024 17:42:24

8.4.8 Conducted Emissions Above 1GHz, 18.1 MHz



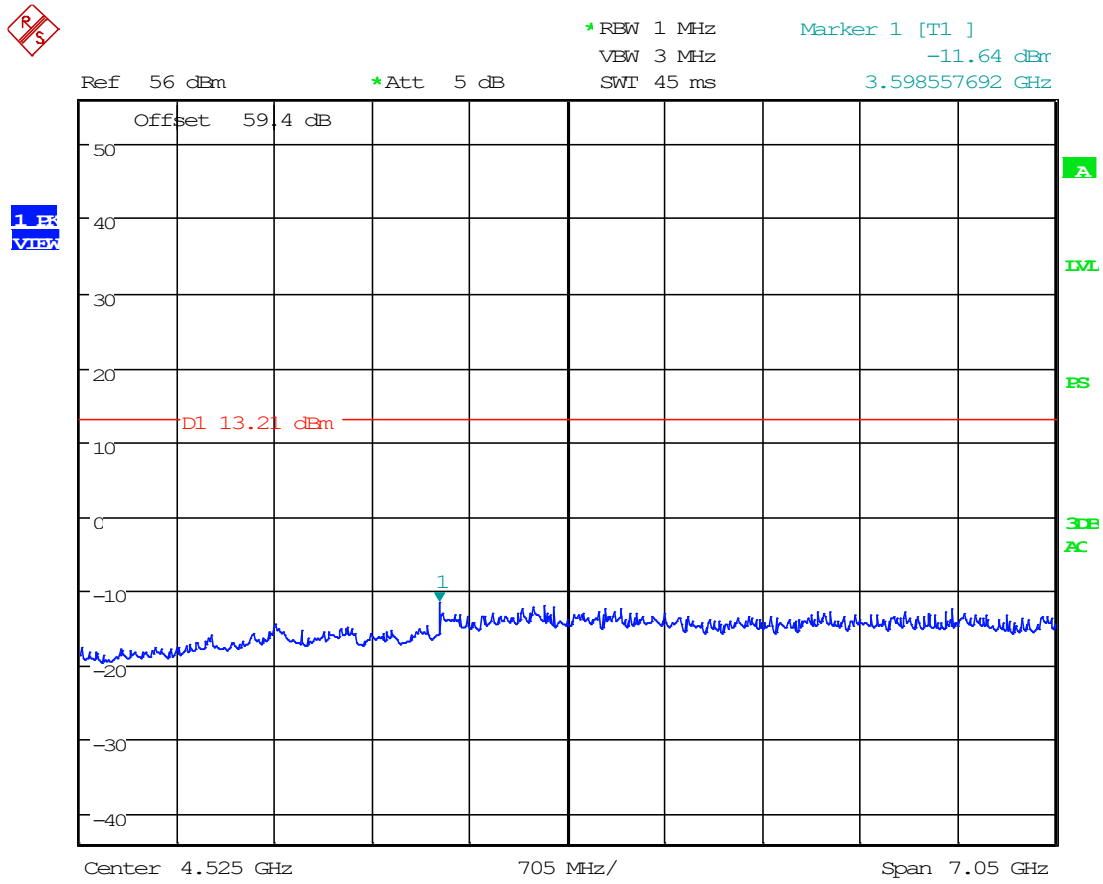
Date: 27.JUN.2024 17:48:52

8.4.9 Conducted Emissions Below 1GHz, 28.64 MHz



Date: 27.JUN.2024 17:43:28

8.4.10 Conducted Emissions Above 1GHz, 28.64 MHz



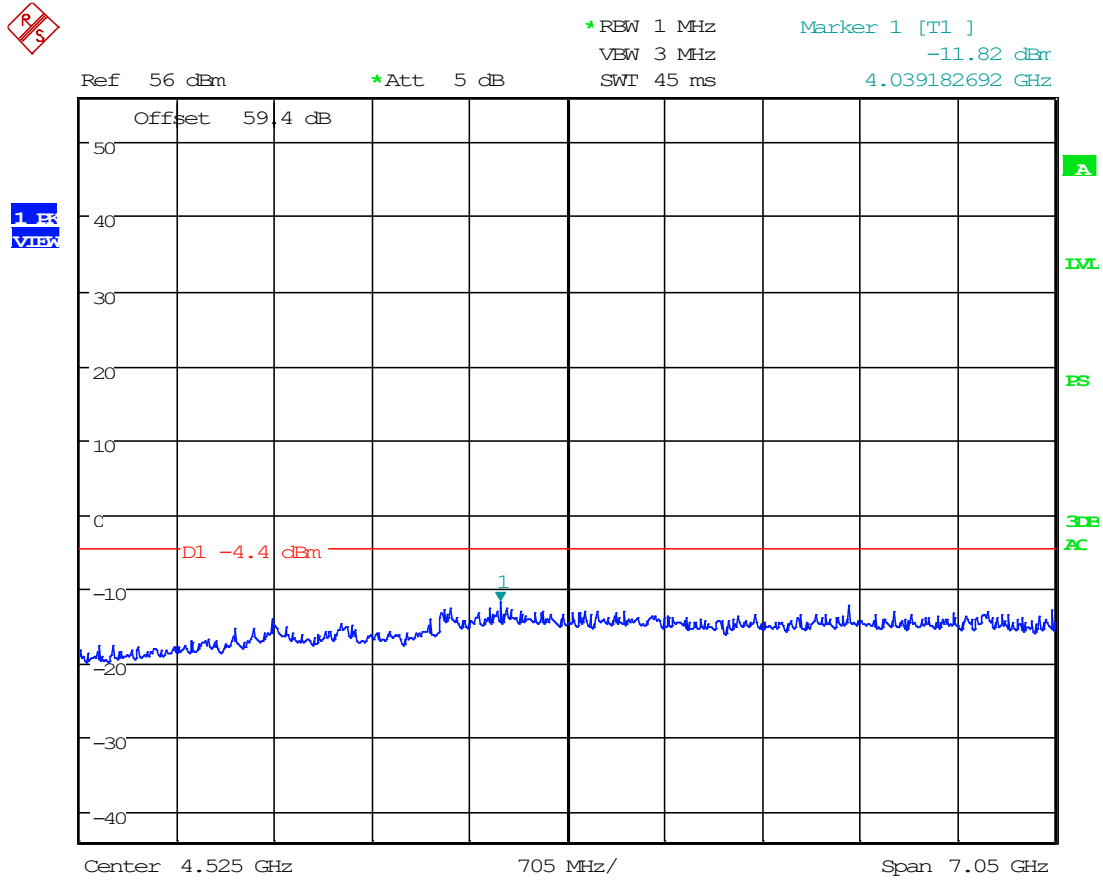
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8.4.11 Conducted Emissions Below 1GHz, 50.184 MHz



17:54:39 26.07.2024

8.4.12 Conducted Emissions Above 1GHz, 50.184 MHz



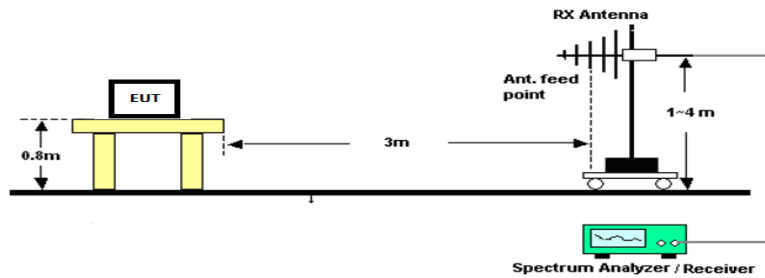
Date: 27.JUN.2024 17:50:33

8.5 Strength of Radiated Spurious Emissions

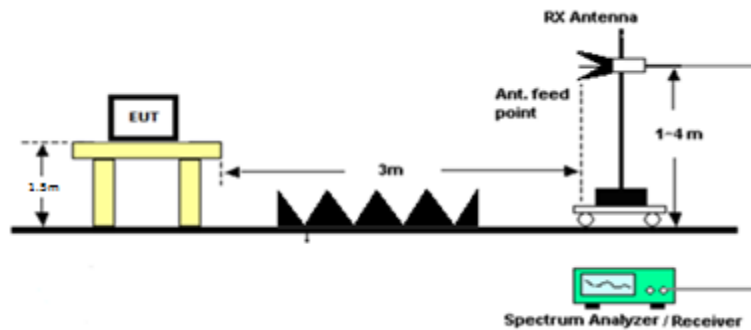
Limits from FCC Parts 2.1053, and 97.307(d)(e); and test procedure from ANSI/ TIA 603-C:2004 & ANSI C63.4-2003

Requirements: The FCC Limits for spurious emissions of a transmitting operating on and above 50 MHz, the RF spurious emissions must be at least 60 dB below the mean power of the fundamental.

Radiated Test Setup, 30 – 1000 MHz



Radiated Test Setup, Above 1000 MHz



Radiated Emissions, Tabular Data

8.5.1 Radiated Emissions, 3.620888 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)
3.62088	7.24176	PK	17.00	V	0.60	10.85	3.00	28.45	-68.93	-13.00	55.93
3.62088	10.86264	PK	19.60	V	0.60	10.61	3.00	30.81	-66.56	-13.00	53.56
3.62088	14.48352	PK	15.70	V	0.60	10.55	3.00	26.85	-70.53	-13.00	57.53
3.62088	18.10440	PK	16.20	V	0.60	10.20	3.00	27.00	-70.38	-13.00	57.38
3.62088	21.72528	PK	11.50	V	0.60	9.83	3.00	21.93	-75.45	-13.00	62.45
3.62088	25.34616	PK	14.20	V	0.60	9.23	3.00	24.03	-73.35	-13.00	60.35
3.62088	28.96704	PK	16.30	V	0.60	8.51	3.00	25.41	-71.97	-13.00	58.97
3.62088	32.58792	PK	19.00	H	-0.65	13.36	3.00	31.71	-65.67	-13.00	52.67
3.62088	32.58792	PK	31.70	V	-0.65	13.36	3.00	44.41	-52.97	-13.00	39.97
3.62088	36.20880	PK	24.70	H	-0.67	13.40	3.00	37.43	-59.95	-13.00	46.95
3.62088	36.20880	PK	44.70	V	-0.67	13.40	3.00	57.43	-39.95	-13.00	26.95

8.5.2 Radiated Emissions, 7.15 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)
7.15	14.30	PK	18.30	V	0.60	10.57	3.00	29.47	-67.91	-13.00	54.91
7.15	21.45	PK	31.80	V	0.60	9.86	3.00	42.26	-55.12	-13.00	42.12
7.15	28.60	PK	19.90	V	0.60	8.58	3.00	29.08	-68.30	-13.00	55.30
7.15	35.75	PK	27.70	H	-0.67	13.40	3.00	40.43	-56.95	-13.00	43.95
7.15	35.75	PK	41.00	V	-0.67	13.40	3.00	53.73	-43.65	-13.00	30.65
7.15	42.90	PK	28.00	H	-0.73	12.73	3.00	40.00	-57.38	-13.00	44.38
7.15	42.90	PK	35.00	V	-0.73	12.73	3.00	47.00	-50.38	-13.00	37.38
7.15	50.05	PK	34.90	H	-0.82	10.99	3.00	45.06	-52.31	-13.00	39.31
7.15	50.05	PK	45.40	V	-0.82	10.99	3.00	55.56	-41.81	-13.00	28.81
7.15	57.20	PK	41.50	H	-0.88	8.42	3.00	49.04	-48.34	-13.00	35.34
7.15	57.20	PK	44.10	V	-0.88	8.42	3.00	51.64	-45.74	-13.00	32.74
7.15	64.35	PK	33.30	H	-0.94	6.27	3.00	38.62	-58.76	-13.00	45.76
7.15	64.35	PK	36.70	V	-0.94	6.27	3.00	42.02	-55.36	-13.00	42.36
7.15	71.50	PK	31.40	H	-1.00	6.15	3.00	36.55	-60.83	-13.00	47.83
7.15	71.50	PK	37.20	V	-1.00	6.15	3.00	42.35	-55.03	-13.00	42.03

8.5.3 Radiated Emissions, 14.2209 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)
14.2209	28.4418	PK	21.50	V	0.60	8.61	3.00	30.71	-66.67	-13.00	53.67
14.2209	42.6627	PK	30.90	H	-0.73	12.80	3.00	42.97	-54.41	-13.00	41.41
14.2209	42.6627	PK	35.70	V	-0.73	12.80	3.00	47.77	-49.61	-13.00	36.61
14.2209	56.8836	PK	40.90	H	-0.88	8.55	3.00	48.56	-48.81	-13.00	35.81
14.2209	56.8836	PK	41.00	V	-0.88	8.55	3.00	48.66	-48.71	-13.00	35.71
14.2209	71.1045	PK	41.70	H	-1.00	6.11	3.00	46.81	-50.57	-13.00	37.57
14.2209	71.1045	PK	43.70	V	-1.00	6.11	3.00	48.81	-48.57	-13.00	35.57
14.2209	85.3254	PK	34.10	H	-1.11	9.73	3.00	42.72	-54.66	-13.00	41.66
14.2209	85.3254	PK	28.90	V	-1.11	9.73	3.00	37.52	-59.86	-13.00	46.86
14.2209	99.5463	PK	34.20	H	-1.16	10.90	3.00	43.94	-53.44	-13.00	40.44
14.2209	99.5463	PK	32.70	V	-1.16	10.90	3.00	42.44	-54.94	-13.00	41.94
14.2209	113.7672	PK	39.20	H	-1.22	10.30	3.00	48.28	-49.10	-13.00	36.10
14.2209	113.7672	PK	46.20	V	-1.22	10.30	3.00	55.28	-42.10	-13.00	29.10
14.2209	127.9881	PK	27.90	H	-1.28	12.50	3.00	39.12	-58.26	-13.00	45.26
14.2209	127.9881	PK	31.60	V	-1.28	12.50	3.00	42.82	-54.56	-13.00	41.56
14.2209	142.2090	PK	25.30	H	-1.35	15.84	3.00	39.79	-57.59	-13.00	44.59
14.2209	142.2090	PK	29.10	V	-1.35	15.84	3.00	43.59	-53.79	-13.00	40.79

8.5.4 Radiated Emissions, 18.1 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)
18.10	36.20	PK	26.40	H	-0.67	13.40	3.00	39.13	-58.25	-13.00	45.25
18.10	36.20	PK	45.30	V	-0.67	13.40	3.00	58.03	-39.35	-13.00	26.35
18.10	54.30	PK	40.60	H	-0.86	9.48	3.00	49.22	-48.16	-13.00	35.16
18.10	54.30	PK	55.50	V	-0.86	9.48	3.00	64.12	-33.26	-13.00	20.26
18.10	72.40	PK	39.80	H	-1.01	6.32	3.00	45.11	-52.27	-13.00	39.27
18.10	72.40	PK	42.80	V	-1.01	6.32	3.00	48.11	-49.27	-13.00	36.27
18.10	90.50	PK	26.40	H	-1.14	10.45	3.00	35.71	-61.67	-13.00	48.67
18.10	90.50	PK	35.60	V	-1.14	10.45	3.00	44.91	-52.47	-13.00	39.47
18.10	108.60	PK	33.00	H	-1.19	10.44	3.00	42.25	-55.13	-13.00	42.13
18.10	108.60	PK	34.20	V	-1.19	10.44	3.00	43.45	-53.93	-13.00	40.93
18.10	126.70	PK	28.20	H	-1.28	12.21	3.00	39.13	-58.24	-13.00	45.24
18.10	126.70	PK	28.70	V	-1.28	12.21	3.00	39.63	-57.74	-13.00	44.74
18.10	144.80	PK	27.70	H	-1.37	16.26	3.00	42.59	-54.79	-13.00	41.79
18.10	144.80	PK	24.70	V	-1.37	16.26	3.00	39.59	-57.79	-13.00	44.79
18.10	162.90	PK	24.30	H	-1.47	16.71	3.00	39.54	-57.84	-13.00	44.84
18.10	162.90	PK	20.90	V	-1.47	16.71	3.00	36.14	-61.24	-13.00	48.24
18.10	181.00	PK	21.70	H	-1.56	13.60	3.00	33.74	-63.64	-13.00	50.64
18.10	181.00	PK	25.70	V	-1.56	13.60	3.00	37.74	-59.64	-13.00	46.64

8.5.5 Radiated Emissions, 28.64 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)
28.64	57.28	PK	45.10	H	-0.89	8.39	3.00	52.60	-44.77	-13.00	31.77
28.64	57.28	PK	60.60	V	-0.89	8.39	3.00	68.10	-29.27	-13.00	16.27
28.64	85.92	PK	37.90	H	-1.12	9.79	3.00	46.58	-50.80	-13.00	37.80
28.64	85.92	PK	47.70	V	-1.12	9.79	3.00	56.38	-41.00	-13.00	28.00
28.64	114.56	PK	44.20	H	-1.22	10.30	3.00	53.28	-44.10	-13.00	31.10
28.64	114.56	PK	44.50	V	-1.22	10.30	3.00	53.58	-43.80	-13.00	30.80
28.64	143.20	PK	30.60	H	-1.36	16.02	3.00	45.26	-52.12	-13.00	39.12
28.64	143.20	PK	29.20	V	-1.36	16.02	3.00	43.86	-53.52	-13.00	40.52
28.64	171.84	PK	24.60	H	-1.53	15.43	3.00	38.50	-58.87	-13.00	45.87
28.64	171.84	PK	24.30	V	-1.53	15.43	3.00	38.20	-59.17	-13.00	46.17
28.64	200.48	PK	22.20	H	-1.62	11.68	3.00	32.26	-65.11	-13.00	52.11
28.64	200.48	PK	23.60	V	-1.62	11.68	3.00	33.66	-63.71	-13.00	50.71
28.64	229.12	PK	24.20	H	-1.74	11.15	3.00	33.61	-63.76	-13.00	50.76
28.64	229.12	PK	21.60	V	-1.74	11.15	3.00	31.01	-66.36	-13.00	53.36
28.64	257.76	PK	20.20	H	-1.98	12.44	3.00	30.65	-66.72	-13.00	53.72
28.64	257.76	PK	19.20	V	-1.98	12.44	3.00	29.65	-67.72	-13.00	54.72
28.64	286.40	PK	20.30	H	-2.07	13.56	3.00	31.79	-65.59	-13.00	52.59
28.64	286.40	PK	15.40	V	-2.07	13.56	3.00	26.89	-70.49	-13.00	57.49

8.5.6 Radiated Emissions, 50.184 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)
50.184	100.368	PK	41.30	H	-1.16	10.86	3.00	51.00	-46.38	-13.00	33.38
50.184	100.368	PK	41.40	V	-1.16	10.86	3.00	51.10	-46.28	-13.00	33.28
50.184	150.552	PK	53.40	H	-1.40	16.86	3.00	68.85	-28.52	-13.00	15.52
50.184	150.552	PK	46.40	V	-1.40	16.86	3.00	61.85	-35.52	-13.00	22.52
50.184	200.736	PK	47.50	H	-1.62	11.68	3.00	57.56	-39.82	-13.00	26.82
50.184	200.736	PK	36.00	V	-1.62	11.68	3.00	46.06	-51.32	-13.00	38.32
50.184	250.920	PK	35.70	H	-1.90	12.29	3.00	46.09	-51.29	-13.00	38.29
50.184	250.920	PK	31.70	V	-1.90	12.29	3.00	42.09	-55.29	-13.00	42.29
50.184	301.104	PK	29.50	H	-2.08	14.22	3.00	41.64	-55.73	-13.00	42.73
50.184	301.104	PK	24.30	V	-2.08	14.22	3.00	36.44	-60.93	-13.00	47.93
50.184	351.288	PK	28.90	H	-2.12	14.80	3.00	41.59	-55.79	-13.00	42.79
50.184	351.288	PK	24.50	V	-2.12	14.80	3.00	37.19	-60.19	-13.00	47.19
50.184	401.472	PK	22.00	H	-2.29	15.95	3.00	35.66	-61.72	-13.00	48.72
50.184	401.472	PK	21.20	V	-2.29	15.95	3.00	34.86	-62.52	-13.00	49.52
50.184	451.656	PK	16.30	H	-2.46	16.73	3.00	30.56	-66.82	-13.00	53.82
50.184	451.656	PK	22.20	V	-2.46	16.73	3.00	36.46	-60.92	-13.00	47.92
50.184	501.840	PK	14.60	H	-2.66	17.99	3.00	29.94	-67.44	-13.00	54.44
50.184	501.840	PK	22.00	V	-2.66	17.99	3.00	37.34	-60.04	-13.00	47.04

9. ANNEX-B – Test Setup Photographs

Test setup photographs are located in a separate supplementary ANNEX-B document.

10. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_14398-24_FCC 97_	1	Initial release	7/3/2024

END OF TEST REPORT
