

TEST REPORT

Test Report No. : UL-RPT-RP15749869-416A

Customer* : Multitone Electronics Plc
Model No.* : EKOCP-LVR-M
FCC ID* : E86EKOCPLVRM
Technology : SRD / 802.15.4
Test Standard(s) : FCC Parts 15.209(a) & 15.247

Test Laboratory : UL International (UK) Ltd, Basingstoke, Hampshire, RG24 8AH,
United Kingdom

1. This test report shall not be reproduced except in full, without the written approval of UL International (UK) Ltd.
2. The results in this report apply only to the sample(s) tested.
3. The sample tested is in compliance with the above standard(s).
4. The test results in this report are traceable to the national or international standards.
5. All information marked with (*) was provided by the Customer, Applicant or Authorised representative
6. Version 3.0 supersedes all previous versions.

Date of Issue: 25 February 2026

Checked by:



Ben Mercer
Lead Project Engineer, Radio Laboratory

Company Signatory:



Sarah Williams
Staff Engineer, Radio Laboratory



5772

The *Bluetooth*® word mark and logos are owned by the *Bluetooth* SIG, Inc. and any use of such marks by UL International (UK) Ltd is under licence. Other trademarks and trade names are those of their respective owners.

Customer Information

Company Name*:	Multitone Electronics Plc
Address*:	Shortwood Copse Lane, Beggarwood, Basingstoke, Hampshire, RG23 7NL, United Kingdom

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	18/08/2025	Initial Version	Ben Mercer
2.0	19/02/2026	Updated to ANSI C63.10-2020+Cor.1-2023	Ben Mercer
3.0	25/02/2026	Output power measurements repeated, PSD results removed	Ben Mercer

Table of Contents

Customer Information.....	2
Report Revision History	2
Table of Contents.....	3
1 Attestation of Test Results.....	4
1.1 Description of EUT	4
1.2 General Information	4
1.3 Summary of Test Results	5
1.4 Deviations from the Test Specification	5
2 Summary of Testing.....	6
2.1 Facilities and Accreditation	6
2.2 Methods and Procedures	6
2.3 Calibration and Uncertainty	7
2.4 Test and Measurement Equipment	8
3 Equipment Under Test (EUT)	10
3.1 Identification of Equipment Under Test (EUT)	10
3.2 Modifications Incorporated in the EUT	10
3.3 Additional Information Related to Testing	11
3.4 Description of Available Antennas	11
3.5 Description of Test Setup	12
4 Antenna Port Test Results	15
4.1 Transmitter Minimum 6 dB Bandwidth	15
4.2 Transmitter Maximum Peak Output Power	17
5 Radiated Test Results.....	19
5.1 Transmitter Radiated Emissions <1 GHz	19
5.2 Transmitter Radiated Emissions >1 GHz	22
5.3 Transmitter Band Edge Radiated Emissions	25

1 Attestation of Test Results

1.1 Description of EUT

The equipment under test (EUT) was an emergency call point repeater incorporating a proprietary 2.4 GHz radio.*

1.2 General Information

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) – Section 15.247
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) – Section 15.209
Site Registration:	685609
FCC Lab. Designation No.:	UK2011
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	15 July 2025 to 24 February 2026

1.3 Summary of Test Results

FCC Reference (47CFR)	Measurement	Result
Part 15.247(a)(2)	Transmitter Minimum 6 dB Bandwidth	
Part 15.247(b)(3)	Transmitter Maximum Peak Output Power	
Part 15.247(e)	Transmitter Power Spectral Density	Note 1
Part 15.247(d) & 15.209(a)	Transmitter Radiated Emissions	
Part 15.247(d) & 15.209(a)	Transmitter Band Edge Radiated Emissions	
Key to Results  = Complied  = Did not comply		

Note(s):

1. In accordance with ANSI C63.10 Section 11.10.1, PSD measurements are not required if the maximum conducted output power is less than the PSD limit of 8 dBm / 3 kHz. The PSD level is therefore deemed be equal to the measured output power.

1.4 Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom. The following table identifies which facilities were utilised for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

Site 1	-
Site 2	-
Site 17	-
Site 32	-
Site 33	X

UL International (UK) Ltd is accredited by the United Kingdom Accreditation Service (UKAS). UKAS is one of the signatories to the International Laboratory Accreditation Co-operation (ILAC) Arrangement for the mutual recognition of test reports. The tests reported herein have been performed in accordance with its terms of accreditation.

2.2 Methods and Procedures

Reference:	ANSI C63.10-2020+Cor.1-2023
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 558074 D01 15.247 Meas Guidance v05r02, April 2, 2019
Title:	Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under Section 15.247 of the FCC Rules

2.3 Calibration and Uncertainty

Measuring Instrument Calibration

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

Measurement Uncertainty & Decision Rule

Overview

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

Decision Rule

Measurement system instrumentation shall be used with an accuracy specification meeting the accuracy specification limits according to IEC/IECEE OD-5014.

As applicable, unless specified otherwise in this quotation, the compliance "Decision Rule" is based on Simple Acceptance. If the measured value is on the limit, the result is defined as a pass. In this case the risk of a false positive is 50%. For further information regarding risk assessment refer to ILAC G8:09/2019.

Measurement Uncertainty

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
99% Occupied Bandwidth	2.4 GHz to 2.4835 GHz	95%	±2.41 %
Minimum 6 dB Bandwidth	2.4 GHz to 2.4835 GHz	95%	±3.27 %
Conducted Maximum Peak Output Power	2.4 GHz to 2.4835 GHz	95%	±1.25 dB
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±5.44 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±2.98 dB
Radiated Spurious Emissions	1 GHz to 25 GHz	95%	±3.64 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

2.4 Test and Measurement Equipment

Test Equipment Used for Transmitter Conducted Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2001	Thermohygrometer	Testo	608-H1	45041824	23 Dec 2025	12
M1835	Signal Analyser	Rohde & Schwarz	FSV30	103050	25 Sep 2025	12
G0615	Vector Signal Generator	Rohde & Schwarz	SMBV100A	260473	30 Jan 2026	-
A2521	Attenuator	AtlanTecRF	AN18-20	832797#2	Calibrated before use	-

Test Equipment Used for Transmitter Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	29 Apr 2026	12
M226556	Thermohygrometer	Testo	608-H1	83800306	20 Dec 2025	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	19 Mar 2026	12
A231044	Antenna	Schwarzbeck	BBHA 9120 B	00835	28 Apr 2026	12
A231045	Antenna	Schwarzbeck	HWRD 750	00064	28 Apr 2026	12
A225134	Antenna	Teseq, Inc	CBL6111D	62222	13 Mar 2026	12
A231050	Antenna	Schwarzbeck	BBHA 9170	01280	14 Apr 2026	12
A3198	Antenna	ETS-Lindgren	6502	00221887	05 Nov 2025	12
A231567	Pre Amplifier	RF Bay Inc.	LNA-1070	2	28 Apr 2026	12
A3142	Pre Amplifier	Schwarzbeck	BBV 9718B	00020	25 Apr 2026	12
A231864	Pre Amplifier	Atlantic Microwave	A-LNAKX-380116-S5S5	221044002	28 Apr 2026	12
A230567	Pre Amplifier	Atlantic Microwave	A-HPAKX-380143-K5K5	VJ3601001	14 Apr 2026	12
A230451	Attenuator	Atlantic Microwave	ATT10KXP-483034-N4N5	-	06 May 2026	12
A227145	Low Pass Filter	Micro-Tronics	LPM21015	001	06 May 2026	12
A227132	High Pass Filter	Micro-Tronics	HPM21019	001	06 May 2026	12
A227129	High Pass Filter	Micro-Tronics	HPS20722	003	06 May 2026	12

Test and Measurement Equipment (continued)**Test Equipment Used for Transmitter Band Edge Radiated Emissions Tests**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	29 Apr 2026	12
M226556	Thermohygrometer	Testo	608-H1	83800306	20 Dec 2025	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	19 Mar 2026	12
A231044	Antenna	Schwarzbeck	BBHA 9120 B	00835	28 Apr 2026	12
A3142	Pre Amplifier	Schwarzbeck	BBV 9718B	00020	25 Apr 2026	12
A230451	Attenuator	Atlantic Microwave	ATT10KXP-483034-N4N5	-	06 May 2026	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name*:	Multitone
Model Name or Number *:	EKOCP-LVR-M
Test Sample Serial Number*:	040 0001240 (#7) (Radiated sample)
Hardware Version*:	IK10
Software Version*:	249_R181AP.bin
FCC ID*:	E86EKOCPLVRM
Date of Receipt:	08 July 2025

Brand Name*:	Multitone
Model Name or Number / HVIN*:	EKOCP-LVR-M
Test Sample Serial Number*:	040 0001244 (#9) (Conducted sample)
Hardware Version*:	IK10
Software Version*:	249_R181AP.bin
FCC ID*:	E86EKOCPLVRM
Date of Receipt:	08 July 2025

Brand Name*:	Multitone
Model Name or Number / HVIN*:	EKOCP-LVR-M
Test Sample Serial Number*:	F025030600014 (#16) (Conducted sample)
Hardware Version*:	IK10
Software Version*:	249_R181AP.bin
FCC ID*:	E86EKOCPLVRM
Date of Receipt:	23 February 2026

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Technology Tested:	Short Range Device (SRD) / 802.15.4	
Type of Unit:	Transceiver	
Channel Spacing:	5 MHz	
Modulation:	O-QPSK	
Data Rate*:	250 kbps	
Power Supply Requirement(s)*:	12.0 VDC	
Maximum Conducted Output Power:	8.1 dBm	
Transmit Frequency Range:	2402 MHz to 2480 MHz	
Transmit Channels Tested:	Channel ID	Channel Frequency (MHz)
	Bottom	2405
	Middle	2445
	Top	2480

3.4 Description of Available Antennas

The radio utilizes an integrated antenna, with the following maximum gain:

Frequency Range (MHz)	Antenna Gain (dBi)*
2405-2480	3.3

3.5 Description of Test Setup

Support Equipment

The following support equipment was used to exercise the EUT during testing:

Customer Supplied*:

Description	Brand Name	Model Name or Number	Serial Number
AC to DC Power Adaptor	CUI Inc	SW15-12-B	Not marked or stated
USB Diagnostic Cable	TE Connectivity	2016682-4	Not marked or stated
D Cell Batteries	Procell Intense	LR20	Not marked or stated
Test Laptop	Dell	Vostro 3360	7K32DT1

Operating Modes

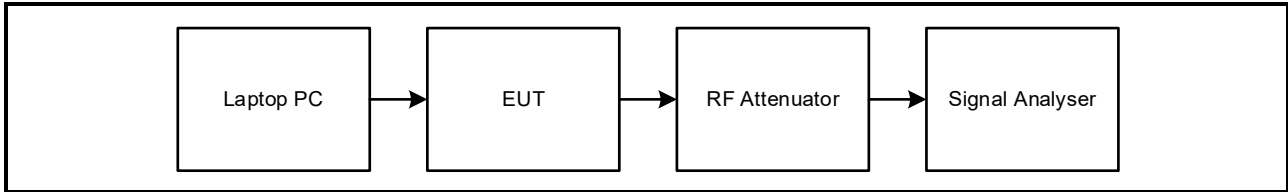
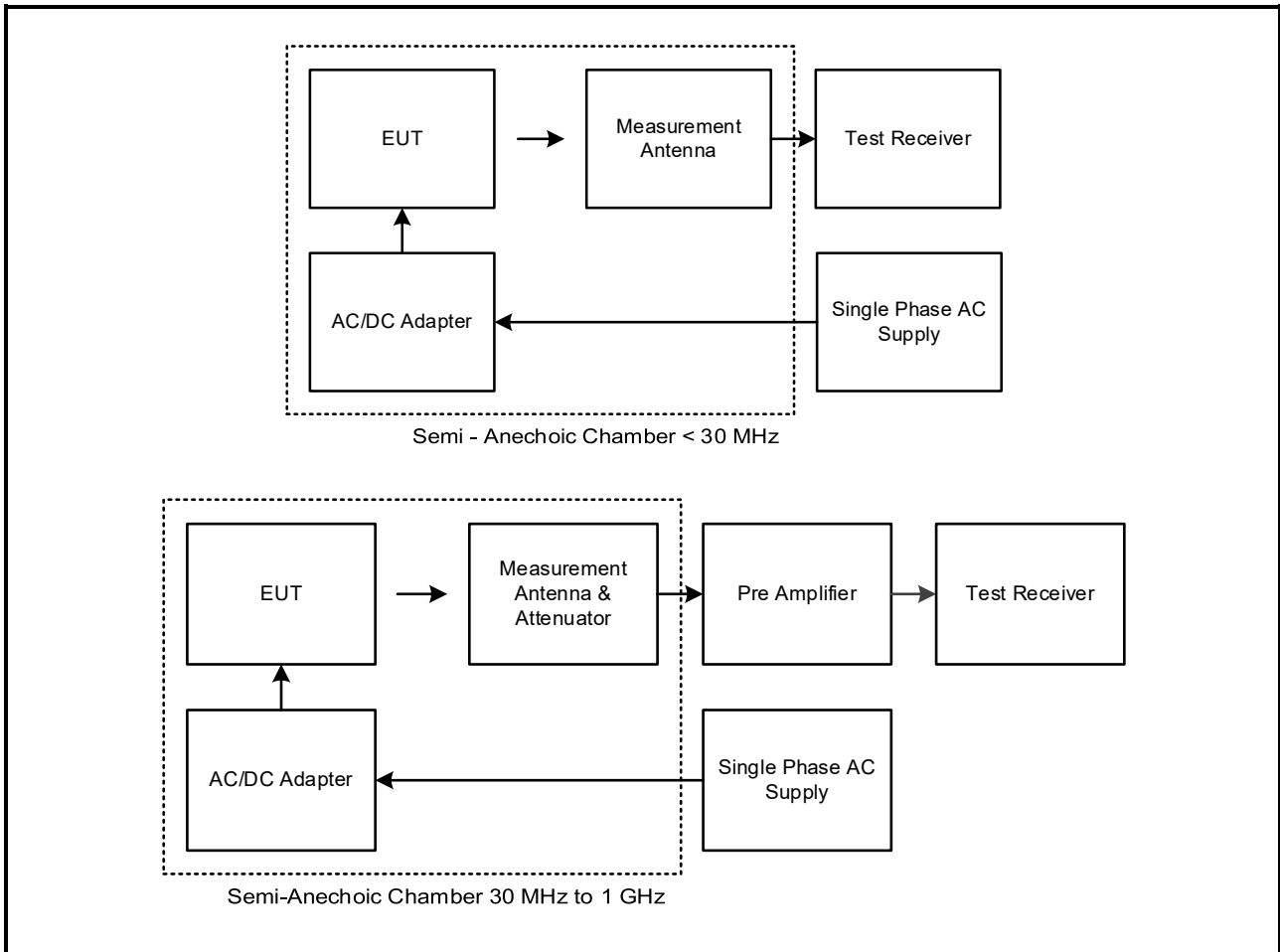
The EUT was tested in the following operating mode(s):

- Continuously transmitting with a modulated carrier at maximum power on the bottom, middle and top channels as required.

Configuration and Peripherals

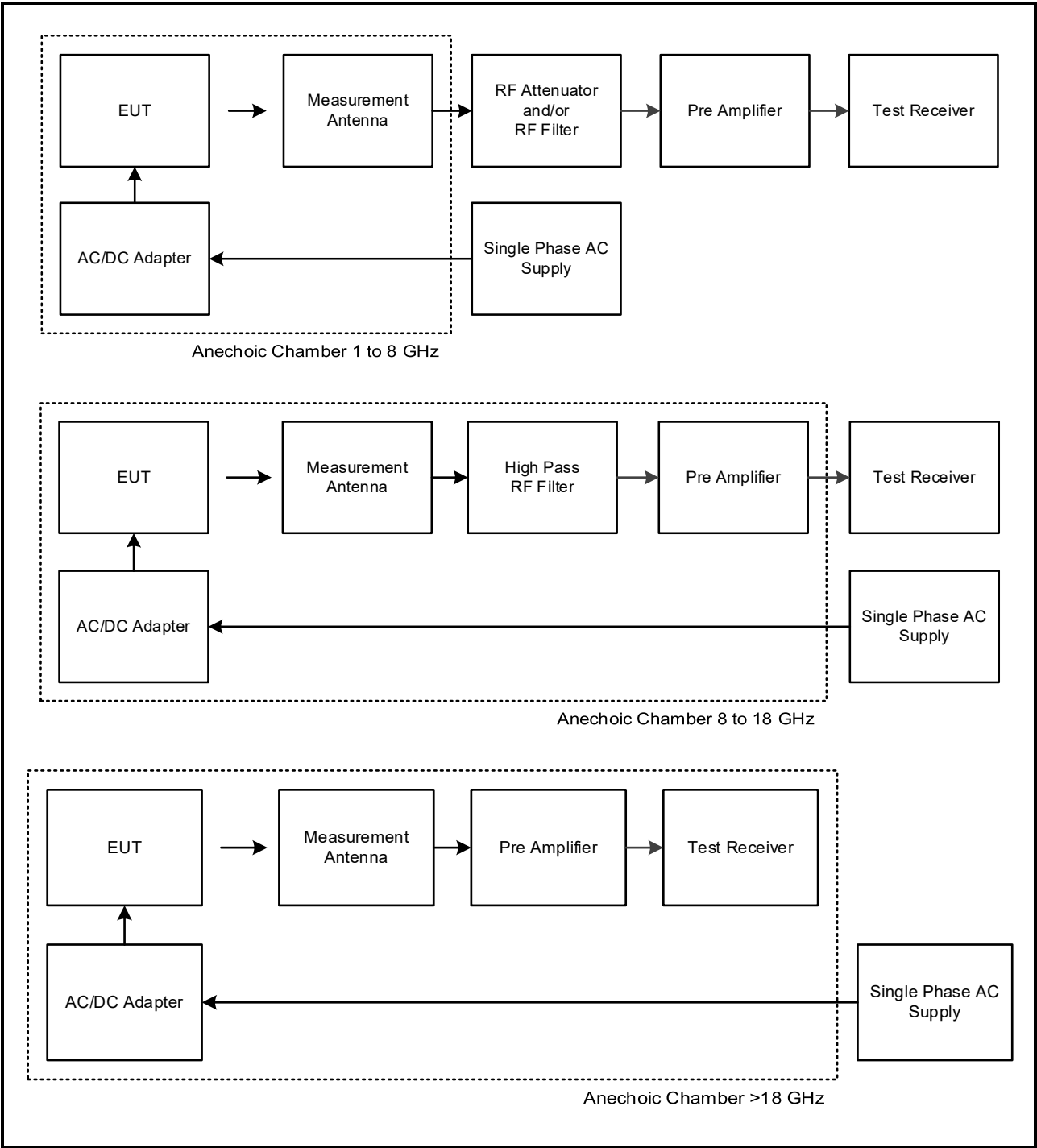
The EUT was tested in the following configuration(s):

- A test laptop with the customer's test application was used to place the EUT into test mode. The application was used to enable continuous transmission and to select the test channels as required.
- Radiated tests were performed with the EUT in its normal orientation. There were no ports to terminate.
- The EUT is powered by an external 12 VDC supply with 2 x 1.5 V D cell internal backup batteries. For test purposes an AC/DC adapter was supplied. The AC/DC adapter was connected to a 120 VAC 60 Hz single phase supply.

Test Setup Diagrams**Conducted Tests:****Test Setup for Transmitter Conducted Tests****Radiated Tests:****Test Setup for Transmitter Radiated Emissions**

Test Setup Diagrams (continued)

Test Setup for Transmitter Radiated Emissions (continued)



4 Antenna Port Test Results

4.1 Transmitter Minimum 6 dB Bandwidth

Test Summary:

Test Engineer:	Raghavendra Katti	Test Date:	06 August 2025
Test Sample Serial Number:	040 0001244 (#9)		

FCC Reference:	Part 15.247(a)(2)
Test Method Used:	FCC KDB 558074 Section 8.2 referencing ANSI C63.10 Section 11.8.1

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	47

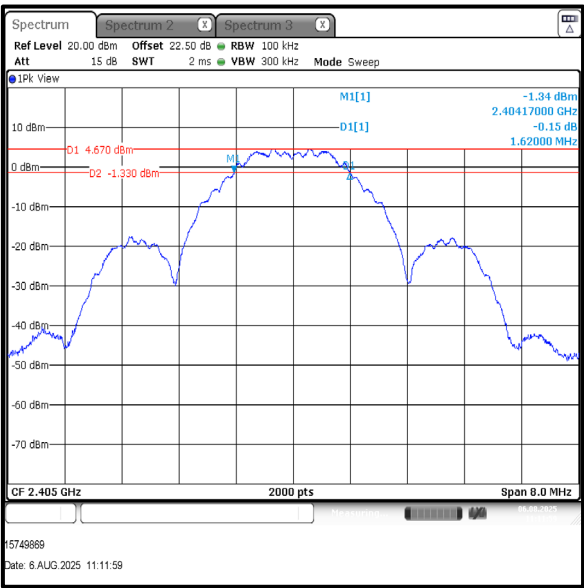
Note(s):

1. 6 dB DTS bandwidth tests were performed using a signal analyser in accordance with ANSI C63.10 Section 11.8.1 Option 1 measurement procedure. The signal analyser resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The DTS bandwidth was measured at 6 dB down from the peak of the signal.
2. An example plot for the worst-case channel can be seen below to show setting parameters comply with testing procedure. All other plots are archived on the UL IT server and are available for inspection upon request.

Transmitter Minimum 6 dB Bandwidth (continued)

Results:

Channel	6 dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)	Result
Bottom	1620.0	≥500	1120.0	Complied
Middle	1624.0	≥500	1124.0	Complied
Top	1620.0	≥500	1120.0	Complied



Bottom Channel

4.2 Transmitter Maximum Peak Output Power

Test Summary:

Test Engineer:	Raghavendra Katti	Test Date:	23 February 2026
Test Sample Serial Number:	F025030600014 (#16)		

FCC Reference:	Part 15.247(b)(3)
Test Method Used:	FCC KDB 558074 Section 8.3.1.1 referencing ANSI C63.10 Section 11.9.1.1 and Notes below

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	45

Note(s):

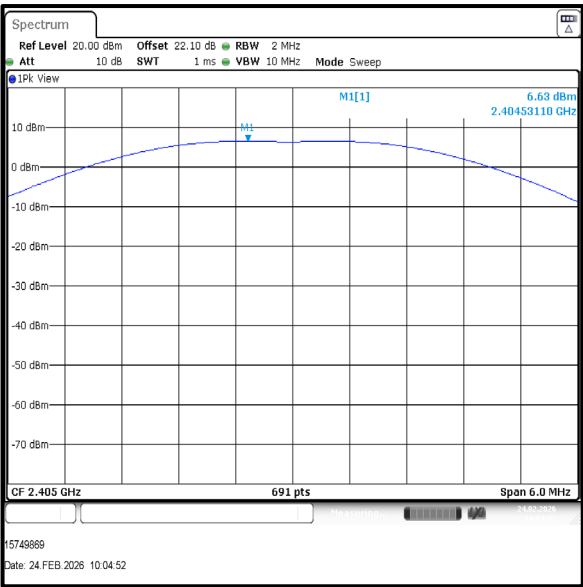
1. Conducted power tests were performed using a signal analyser in accordance with ANSI C63.10 Section 11.9.1.1 with the RBW $\geq$ DTS bandwidth procedure.
2. The signal analyser resolution bandwidth was set to 2 MHz and video bandwidth to 10 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 6 MHz. A marker was placed at the peak of the signal and the results recorded in the tables below.
3. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF level offset was entered on the signal analyser to compensate for the loss of the attenuator and RF cable.
4. The conducted power was added to the declared antenna gain to obtain the EIRP.
5. Example plots on the worst-case channel can be seen below to show setting parameters comply with testing method/procedure. All other plots are archived on the UL IT server and available for inspection if required.

Transmitter Maximum Peak Output Power (continued)

Results:

Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	6.6	30.0	23.4	Complied
Middle	6.0	30.0	24.0	Complied
Top	5.3	30.0	24.7	Complied

Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Result
Bottom	6.6	3.3	9.9	36.0	26.1	Complied
Middle	6.0	3.3	9.3	36.0	26.7	Complied
Top	5.3	3.3	8.6	36.0	27.4	Complied



Bottom Channel

5 Radiated Test Results

5.1 Transmitter Radiated Emissions <1 GHz

Test Summary:

Test Engineer:	John Ferdinand	Test Dates:	14 July 2025 & 16 July 2025
Test Sample Serial Number:	040 0001240 (#7)		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3, 6.4 and 6.5
Frequency Range	9 kHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	46 to 47

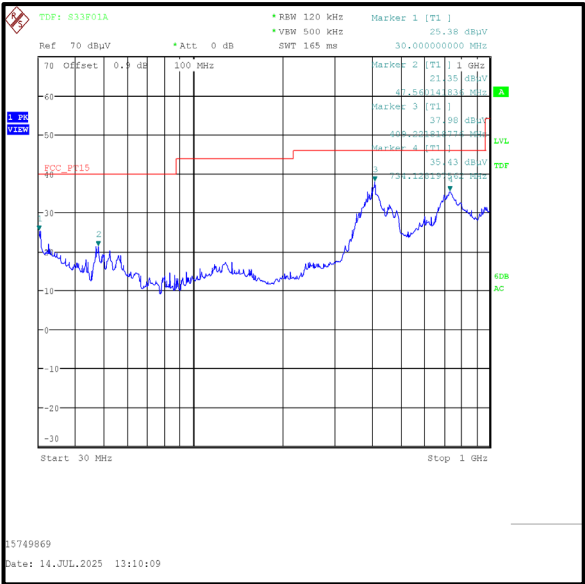
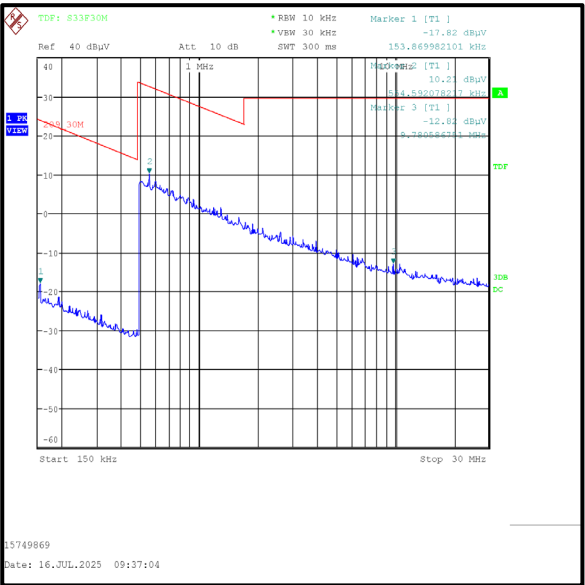
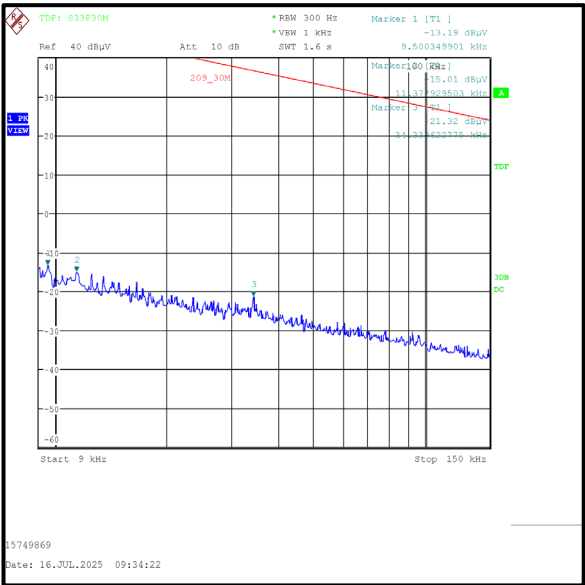
Transmitter Radiated Emissions (continued)**Note(s):**

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore, final radiated emissions measurements were performed with the EUT set to the middle channel only.
3. All other emissions shown on the pre-scans were investigated and found to be ambient, > 20 dB below the appropriate limit or below the noise floor of the measurement system.
4. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K226203) at 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. The limit was extrapolated to 3 metres in accordance with ANSI C63.10 clause 6.4.3 using the method described in clause 6.4.4.2. ANSI C63.10 clause 5.2 states an alternative test site that can demonstrate equivalence to an open area test site may be used for measurements below 30 MHz. Therefore, measurements were performed in a semi-anechoic chamber. The correlation data between semi-anechoic chamber and an open field test site is available upon request.
5. The measured values at 3 metres were extrapolated to the required measurement distances of 300 metres and 30 metres and compared to the specified limits at those distances:
 - 9 kHz to 490 kHz: measured value extrapolated from 3 metres to 300 metres by subtracting 80 dB at 40 dB / decade
 - 490 kHz to 30 MHz: measured value extrapolated from 3 metres to 30 metres by subtracting 40 dB at 40 dB / decade
6. Measurements from 30 MHz to 1 GHz were performed in a semi-anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
7. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was configured as follows: For 9 kHz to 150 kHz, the resolution bandwidth was set to 300 Hz and video bandwidth 1 kHz. A peak detector was used and trace mode was Max Hold. For 150 kHz to 30 MHz, the resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz, trace mode was Max Hold. For 30 MHz to 1 GHz, the resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
8. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and measurement time set to 15 seconds.

Transmitter Radiated Emissions (continued)

Results: Quasi-Peak / Middle Channel

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
409.222	Vertical	28.7	46.0	17.3	Complied



Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying table.

5.2 Transmitter Radiated Emissions >1 GHz

Test Summary:

Test Engineer:	John Ferdinand	Test Date:	14 July 2025
Test Sample Serial Number:	040 0001240 (#7)		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	FCC KDB 558074 Sections 8.1 c)3), 8.5 & 8.6 referencing ANSI C63.10 Sections 6.3, 6.6, 11.11 & 11.12
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	47

Note(s):

1. All emissions shown on the pre-scans were investigated and found to be ambient, > 20 dB below the appropriate limit or below the noise floor of the measurement system. Therefore, the highest noise floor reading of the measurement system has been recorded in the table below.
2. The emission shown on the 1 GHz to 3 GHz plot is the EUT fundamental.
3. #In accordance with ANSI C63.10 Section 6.6.4.3, Note 1, if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT.
5. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their own appropriate detectors during the pre-scan measurements.

Transmitter Radiated Emissions (continued)**Results: Peak / Bottom Channel**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4810.840	Vertical	50.9	54.0 [#]	3.1	Complied

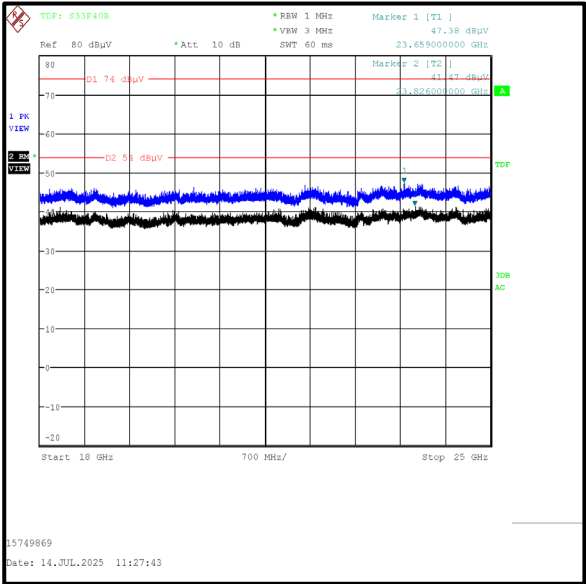
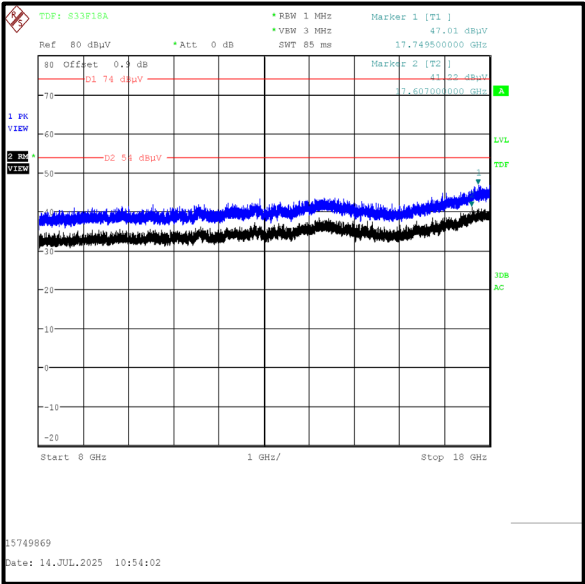
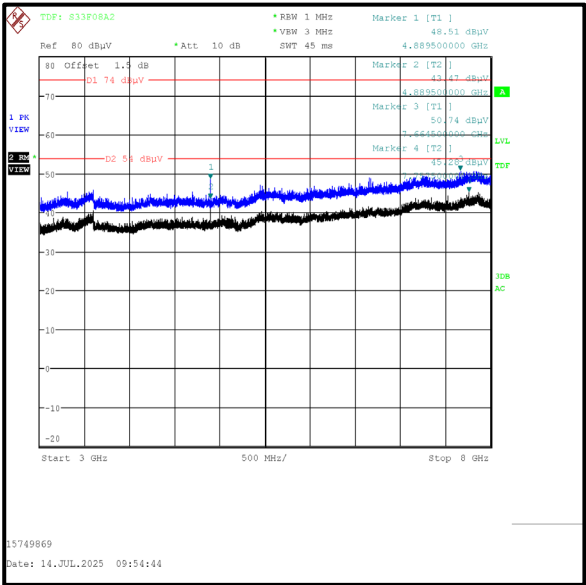
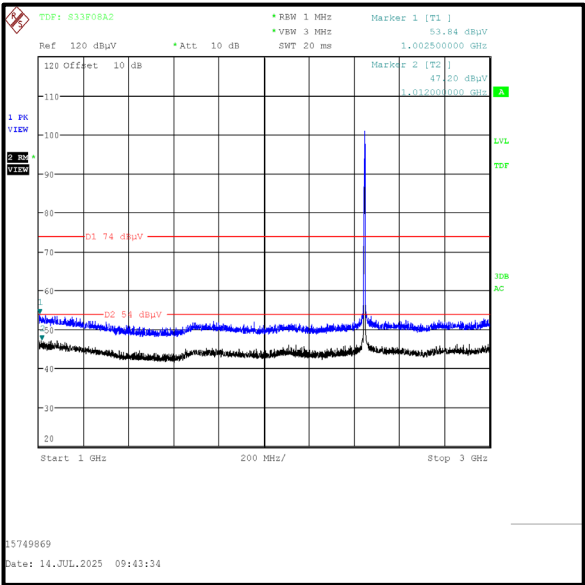
Results: Peak / Middle Channel

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4888.700	Vertical	49.6	54.0 [#]	4.4	Complied

Results: Peak / Top Channel

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4959.8080	Vertical	48.9	54.0 [#]	5.1	Complied

Transmitter Radiated Emissions (continued)



Note: These plots are pre-scans for indication purposes only. For final measurements, see accompanying tables.

5.3 Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineer:	John Ferdinand	Test Date:	14 July 2025
Test Sample Serial Number:	040 0001240 (#7)		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	KDB 558074 Section 8.7 referencing ANSI C63.10 Sections 11.11, 11.12 & 11.13

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	47

Note(s):

1. The final measured value(s) in the table below incorporates the calibrated antenna factor and cable loss.
2. As the lower band edge is adjacent to a non-restricted band, only peak measurements are required. In accordance with ANSI C63.10 Section 11.11.1, the test method in Section 11.11.3 was followed: the test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The test receiver was left to sweep for a sufficient length of time in order to maximise the carrier level and out-of-band emissions. A marker and corresponding reference level line were placed on the peak of the carrier. As the maximum peak conducted output power was measured using a peak detector in accordance with ANSI C63.10 Section 11.9.1.1, an out-of-band limit line was placed 20 dB (ANSI C63.10 Section 11.11.1(a)) below the peak level. A marker was placed on the band edge spot frequencies. Marker frequency and levels were recorded.
3. As the upper band edge is adjacent to a restricted band, both peak and average measurements were recorded by placing a marker at the edge of the band. For peak measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. For average measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. An RMS detector was used, sweep time was set to auto and trace mode was trace averaging over 300 sweeps. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.
4. There is a restricted band 10 MHz below the lower band edge. The test receiver was set up as follows: the RBW set to 1 MHz, the VBW set to 3 MHz, with the sweep time set to auto couple. Peak and average measurements were performed with peak and RMS detectors respectively. Markers were placed on the highest point on each trace.
5. # -20 dBc limit.

Transmitter Band Edge Radiated Emissions (continued)**Results: Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2400.0	Horizontal	45.8	77.3 [#]	31.5	Complied
2483.5	Horizontal	57.5	74.0	16.5	Complied

Results: Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2483.5	Horizontal	50.2	54.0	3.8	Complied

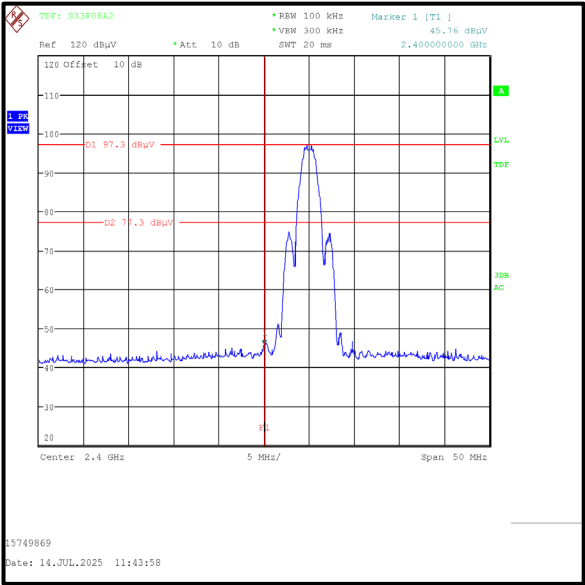
Results: 2310 MHz to 2390 MHz Restricted Band / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2342.436	Horizontal	52.6	74.0	21.4	Complied

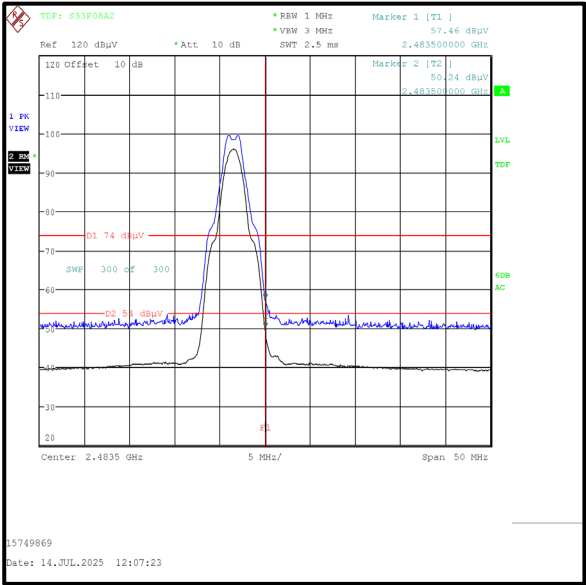
Results: 2310 MHz to 2390 MHz Restricted Band / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2390.000	Horizontal	40.2	54.0	13.8	Complied

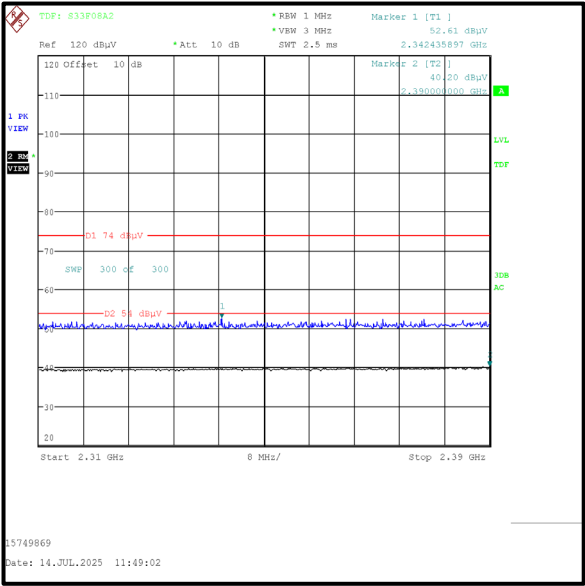
Transmitter Band Edge Radiated Emissions (continued)



Lower Band Edge



Upper Band Edge



2310 MHz to 2390 MHz Restricted Band

--- END OF REPORT ---