

TEST REPORT

Test Report No. : UL-RPT-RP15240581-716A

Applicant* : Emm Technology Ltd
Model No.* : EMM01
FCC ID* : 2BQACEMM01
Technology : *Bluetooth* – Low Energy
Test Standard(s) : FCC Parts 15.35(c), 15.207, 15.209(a) & 15.247

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

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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 2.0 supersedes all previous versions.

Date of Issue: 24 June 2026

Checked by:



Ben Mercer
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Company Signatory:



Sarah Williams
Staff Engineer, Radio Laboratory



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Applicant Information

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Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	29/01/2026	Initial Version	Ben Mercer
2.0	24/06/2026	Updated ANSI C63.10 version and antenna gain	Ben Mercer

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1 Attestation of Test Results

1.1 Description of EUT

The equipment under test (EUT) was a smart menstrual cup.

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) – Sections 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:	12 January 2026 to 28 January 2026

1.3 Summary of Test Results

FCC Clause (47CFR)	Transmitter Measurement	Result
Part 15.35(c)	Duty Cycle	Note 1
Part 15.247(a)(2)	Minimum 6 dB Bandwidth	Complied
Part 15.247(b)(3)	Maximum Peak Output Power	Complied
Part 15.247(e)	Power Spectral Density	Note 2
Part 15.247(d) & 15.209(a)	Radiated Emissions	Complied
Part 15.247(d) & 15.209(a)	Band Edge Radiated Emissions	Complied
Part 15.207	AC Conducted Emissions	Complied

Note(s):

1. Reporting purposes only.
2. 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	X
Site 17	-
Site 32	-
Site 33	-

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
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	#ANSI C63.10-2020/Cor1-2023
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Corrigendum 1
Reference:	#ANSI C63.10-2020+C63.10a-2024
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices – Amendment 1
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
Reference:	KDB 174176 D01 Line Conducted FAQ v01r01 June 3, 2015
Title:	AC Power-Line Conducted Emissions Frequently Asked Questions

#The use of ANSI C63.10-2020/Cor1-2023 and C63.10a-2024 does not deviate from the testing procedures of ANSI C63.10-2020

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. 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
Duty Cycle	2.4 GHz to 2.4835 GHz	95%	±1.14 %
Minimum 6 dB Bandwidth	2.4 GHz to 2.4835 GHz	95%	±3.27 %
Spectral Power Density	2.4 GHz to 2.4835 GHz	95%	±1.25 dB
Conducted Maximum Peak Output Power	2.4 GHz to 2.4835 GHz	95%	±0.61 dB
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±5.44 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±4.66 dB
Radiated Spurious Emissions	1 GHz to 25 GHz	95%	±5.06 dB
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	±3.15 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 Sample Calculations

Where relevant, the following calculations were used:

Radiated Emissions

- The following equation can be used to calculate the duty cycle in the time domain:

$$10 \log (1 / (\text{On Time} / [\text{Period or } 100 \text{ ms whichever is the lesser}])))$$
- The recorded emission level was calculated from the level indicated by the measuring receiver, adjusted by a transducer factor (TDF in dB), calculated using the formula:

$$\text{TDF (dB)} = C_{\text{Att}} (\text{dB}) + \text{AF (dB/m)} - P_{\text{Gain}} (\text{dB})$$

Where:

C_{Att} : conducted path attenuation (cables + attenuators)

AF: antenna factor

P_{Gain} : external preamplifier gain

AC Conducted Spurious Emissions

$$\text{Final Voltage (dB}\mu\text{V)} = \text{Measured Voltage (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Pulse Limiter Insertion Loss (dB)} + \text{LISN Insertion Loss (dB)}$$

2.5 Test and Measurement Equipment

Test Equipment Used for Conducted Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2004	Thermohygrometer	Testo	608-H1	45046425	18 Dec 2026	12
M231906	Signal Analyser	Keysight	N9020B	MY63430222	14 Oct 2026	12
M225506	RF Power Sensor	Boonton Electronics	RTP5008	12329	19 Mar 2026	12
A220131	Attenuator	Pasternack Enterprises	PE7013-10	#5	Calibrated before use	
A231990	Switching Unit	Mini-Circuits	ZT-400	122110200009	Calibrated before use	
M241601	Network Analyser	Keysight	P5007B	MY61100200	02 Oct 2026	12

Test Measurement Software/Firmware Used for Conducted Tests

Name	Version	Release Date
Phoenix	R 1.3.8	11 Oct 2025
	Core 4.2.4	09 Jan 2026
	Conducted Tx 4.0.13	09 Jan 2026

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

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K0001	5m RSE Chamber	MVG Industries	N/A	N/A	16 Oct 2026	12
M2040	Thermohygrometer	Testo	608-H1	45124934	18 Dec 2026	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	25 Jun 2026	12
A3154	Pre Amplifier	Com-Power	PAM-103	18020012	28 Aug 2026	12
A3179	Pre Amplifier	Agilent	8449B	3008A00934	28 Aug 2026	12
A2896	Pre Amplifier	Schwarzbeck	BBV 9721	9721-023	04 Apr 2026	12
A222867	Pre Amplifier	Atlantic Microwave	A-LNAKX-380116-S5S5	220705003	07 Oct 2026	12
A3165	Magnetic Loop Antenna	ETS-Lindgren	6502	00224383	25 Mar 2026	12
A2895	Antenna	Schwarzbeck	BBHA 9170	9170-728	08 Apr 2026	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	10 Oct 2026	12
A3139	Antenna	Schwarzbeck	HWRD750	00027	10 Oct 2026	12
A553	Antenna	Chase EMC Ltd	CBL6111A	1593	21 Aug 2026	12
A227131	High Pass Filter	Micro-Tronics	HPS20723	005	15 Oct 2026	12
A3093	High Pass Filter	AtlanTecRF	AFH-0300	18051800077	15 Oct 2026	12
A3085	Low Pass Filter	AtlanTecRF	AFL-02000	18051600014	15 Oct 2026	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	15 Oct 2026	12

Test Equipment Used for Band Edge Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K0001	5m RSE Chamber	MVG Industries	N/A	N/A	16 Oct 2026	12
M2040	Thermohygrometer	Testo	608-H1	45124934	18 Dec 2026	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	25 Jun 2026	12
A3179	Pre Amplifier	Agilent	8449B	3008A00934	28 Aug 2026	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	10 Oct 2026	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	15 Oct 2026	12

Test and Measurement Equipment (continued)**Test Equipment Used for AC Conducted Spurious Emissions:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2037	Thermohygrometer	Testo	608-H1	45124925	18 Dec 2026	12
M1124	Test Receiver	Rohde & Schwarz	ESIB 26	100275	29 Oct 2026	12
A004	Single Phase LISN	Rohde & Schwarz	ESH3-Z5	890604/027	27 May 2026	12
A3130	Noise Generator	York EMC Services Ltd	CNE V	2646	21 Aug 2026	12

Test Measurement Software/Firmware Used for AC Conducted Spurious Emissions:

Name	Version	Release Date
Rohde & Schwarz EMC32	6.30.0	2008

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name*:	Emm Smart Menstrual Cup
Model Name or Number*:	EMM01
FCC ID*:	2BQACEMM01

Test Sample Serial Number*:	Hardware Version*:	Software Version*:	Date of Receipt:
DV0 013 R (<i>Conducted #1</i>)	5.2	1.1.0	22 December 2025
94f8e28c (<i>Radiated #1</i>)	5.2	1.1.0	22 December 2025

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:	Bluetooth Low Energy (Digital Transmission System)		
Type of Unit:	Transceiver		
Channel Spacing:	2 MHz		
Modulation:	GFSK		
Data Rate LE1M*:	1 Mbps		
Power Supply Requirement(s)*:	3.7 VDC		
Maximum Conducted Output Power:	-3.72 dBm		
Transmit Frequency Range:	2402 MHz to 2480 MHz		
Mode*:	LE1M		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	37	2402
	Middle	38	2426
	Top	39	2480

3.4 Description of Available Antennas

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

Frequency Range (MHz)	Antenna Gain (dBi)
2400-2480	1.80

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
Eclipse Charger	Emm Smart Menstrual Cup	Eclipse	#3
Eclipse Charger	Emm Smart Menstrual Cup	Eclipse	#4
FTDI USB – TTL UART	Not marked or stated	V0825	1050362741
Debug probe	Segger	J-Link Plus	601003955
10m USB cable extender	BLUERIGGER	Not marked or stated	Not marked or stated
AC / DC Power Adaptor	SL Power Electronics	SLe60SPD96B01	Not marked or stated
30 cm USB-C Cable	Not marked or stated	Not marked or stated	Not marked or stated

Laboratory Supplied:

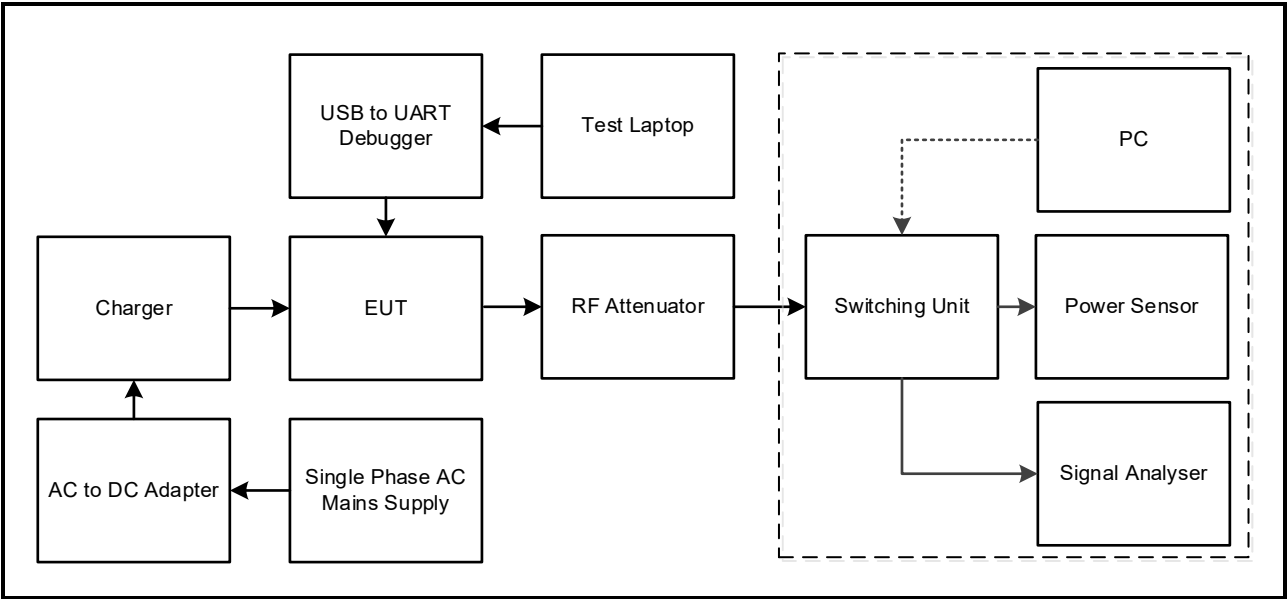
Description	Brand Name	Model Name or Number	Serial Number
Test Laptop	Lenovo	L480	PF1EHZQQ

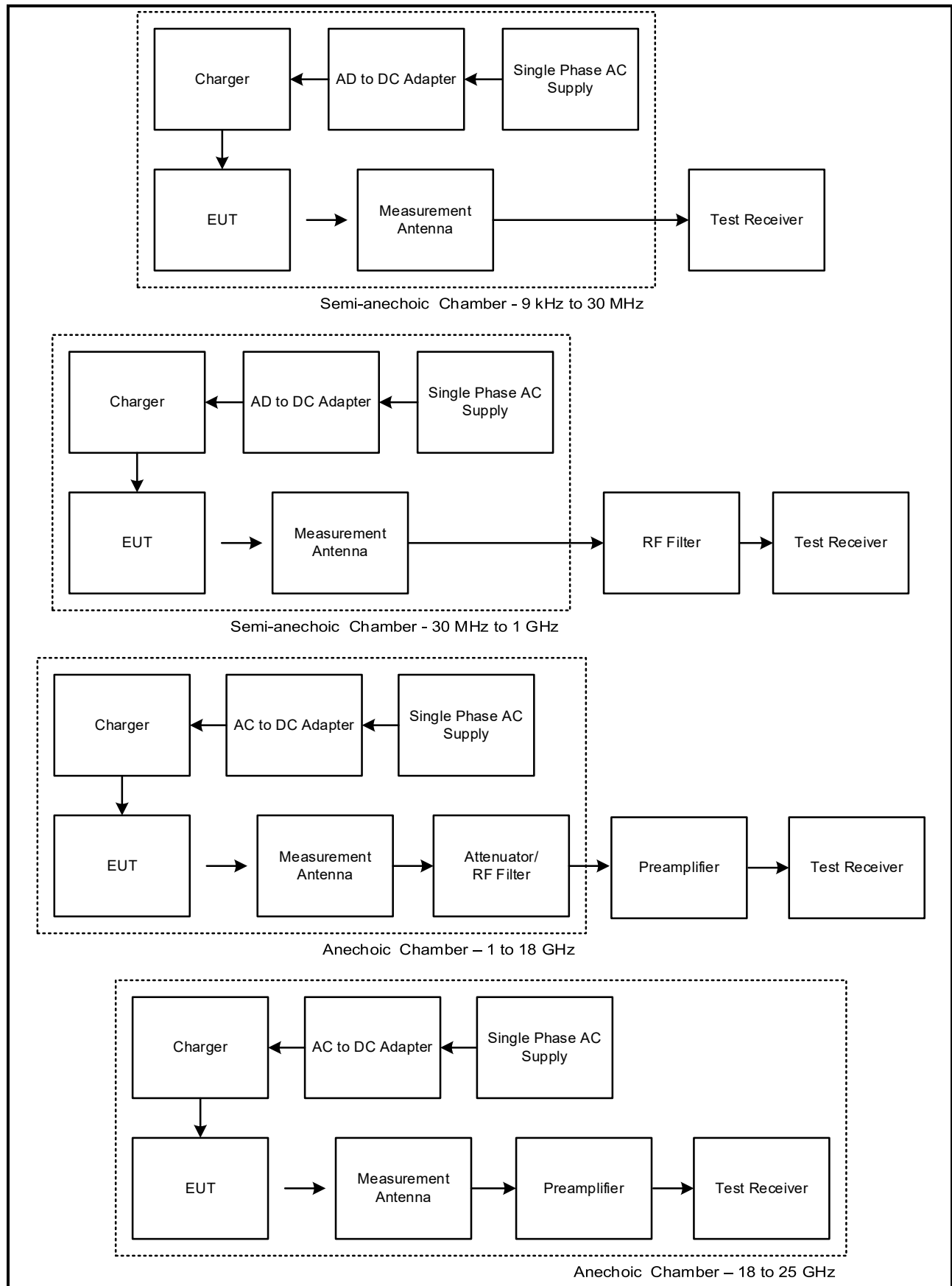
Operating Modes, Configuration and Peripherals

- Transmitting at maximum power in the following *Bluetooth* modes with modulation, maximum possible data length available and Pseudorandom Bit Sequence 9:
 - LE1M
- The EUT powered up transmitting a LE1M signal on the bottom channel. The channel was changed by placing it within the charger and tapping it twice. Repeating this procedure would allow the EUT to cycle between bottom, middle and top channels. For conducted tests, the EUT was connected to a test laptop via a USB to UART debugger. An instance of nRF Connect application was run on the laptop which reported the selected operating channel.
- Transmitter radiated spurious emissions tests were performed with the EUT in its normal orientation and housed within the charger.
- The EUT charger was connected to an AC to DC Power Adapter. The input was connected to a 120 VAC 60 Hz single phase mains supply.

Test Setup Diagrams

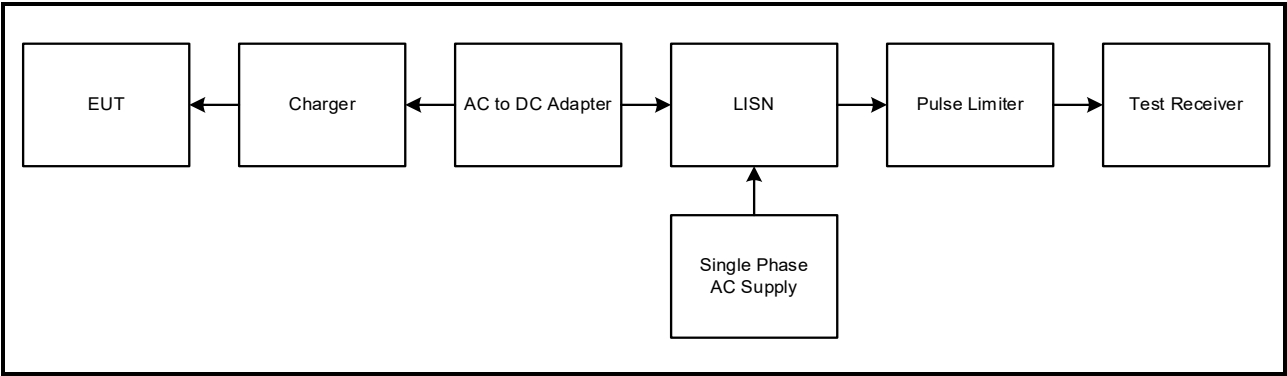
Test Setup for Conducted Tests



Test Setup Diagrams (continued)**Test Setup for Radiated Emissions**

Test Setup Diagrams (continued)

Test Setup for AC Conducted Spurious Emissions



4 Antenna Port Test Results

4.1 Minimum 6 dB Bandwidth

Test Summary:

Test Engineer:	Luis Pazos	Test Date:	12 January 2026
Test Sample Serial Number:	DV0 013 R		

Environmental Conditions:

Temperature (°C):	21
Relative Humidity (%):	52

Note(s):

1. The transmitter output is connected to a signal analyser. The 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. The test system was connected to the RF port on the EUT using suitable attenuation and RF cable.

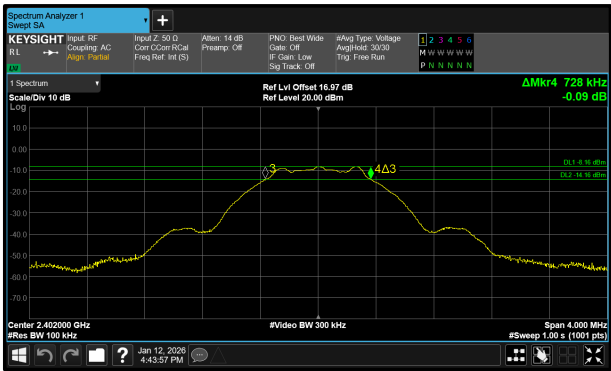
Minimum 6 dB Bandwidth (continued)

Results:

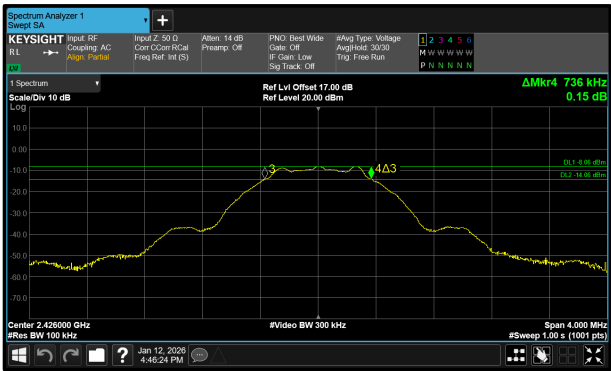
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause:	15.247 (a)(2)	Test Method:	ANSI C63.10 11.8.1

Antenna Configuration:	SISO	Mode:	LE
Test Port:	1 (Core 0)	Rate/Modulation:	LE 1M (GFSK)

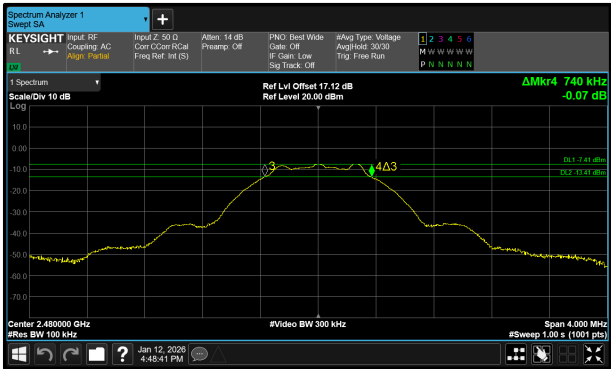
Test Frequency (MHz)	6 dB Bandwidth (MHz)				Limit (kHz)
	1	2	3	4	
2402	0.728	-	-	-	≥500
2426	0.736	-	-	-	≥500
2480	0.740	-	-	-	≥500



Bottom Channel



Middle Channel



Top Channel

4.2 Maximum Peak Output Power

Test Summary:

Test Engineer:	Luis Pazos	Test Date:	12 January 2026
Test Sample Serial Number:	DV0 013 R		

Environmental Conditions:

Temperature (°C):	21
Relative Humidity (%):	52

Note(s):

1. The declared antenna gain was added to the conducted peak power to obtain the EIRP.
2. The maximum antenna gain is less than or equal to 6 dBi.

Results:

Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause:	15.247 (b)(3)	Test Method:	ANSI C63.10 Section 11.9.1.2

Antenna Configuration:	SISO	Mode:	LE
Test Port:	1 (Core 0)	Rate/Modulation:	LE 1M (GFSK)

Test Frequency (MHz)	Maximum Conducted Output Power (dBm)					Limit (dBm)	Margin (dB)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	EIRP Margin (dB)
	1	2	3	4	Σ						
2402	-3.96	-	-	-	-	30.00	33.96	1.80	-2.16	36.00	38.16
2426	-3.85	-	-	-	-	30.00	33.85	1.80	-2.05	36.00	38.05
2480	-3.72	-	-	-	-	30.00	33.72	1.80	-1.92	36.00	37.92

5 Radiated Test Results

5.1 Duty Cycle

Test Summary:

Test Engineer:	John Ferdinand	Test Date:	13 January 2026
Test Sample Serial Number:	94f8e28c		

FCC Clause:	Parts 15.35(c)
Test Method Used:	ANSI C63.10 Section 11.6

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	40

Note(s):

1. In order to assist with the determination of the average level of fundamental and spurious emissions field strength, measurements were made of duty cycle to determine the transmission duration and the silent period time of the transmitter. The transmitter duty cycle was measured using a spectrum analyser in the time domain and calculated as follows:

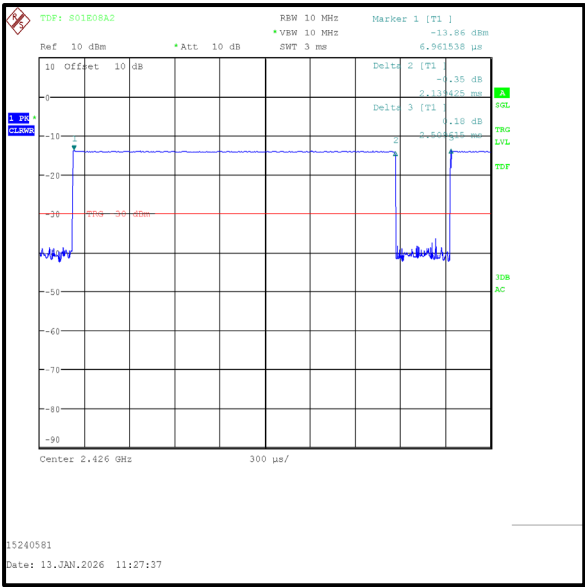
$$10 \log (1 / (\text{On Time} / [\text{Period or } 100 \text{ ms whichever is the lesser}])).$$

$$LE1M / \text{Duty cycle } 10 \log (1 / (2.139 / 2.510)) = 0.7 \text{ dB}$$

Duty Cycle (continued)

Results: LE1M

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
2.139	2.510	0.7



5.2 Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	13 January 2026 & 28 January 2026
Test Sample Serial Number:	94F8E28C		

FCC Clause:	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):	20 to 21
Relative Humidity (%):	40 to 43

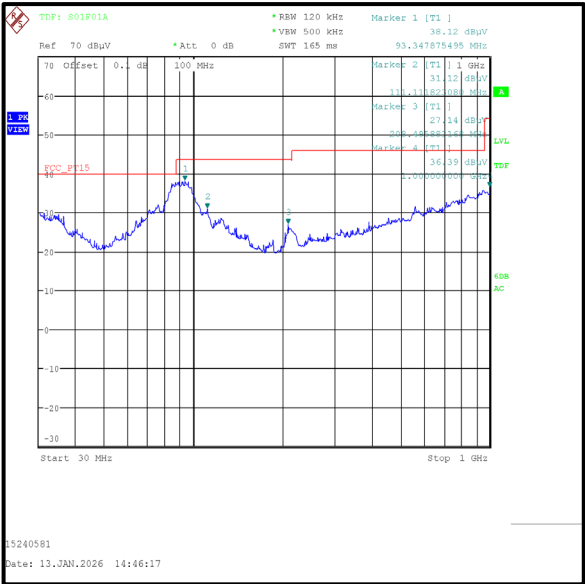
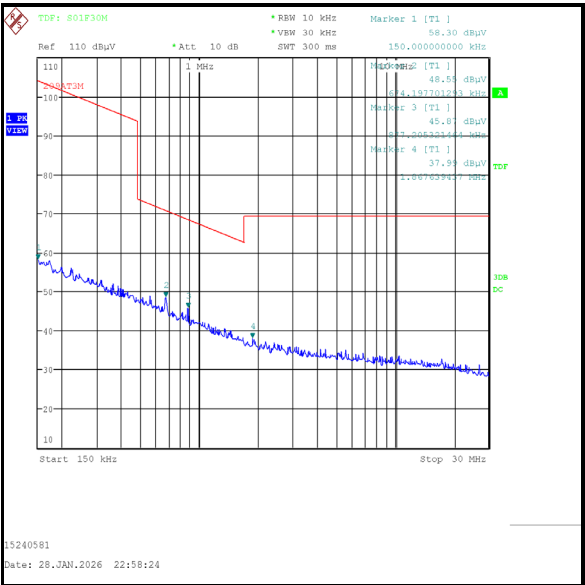
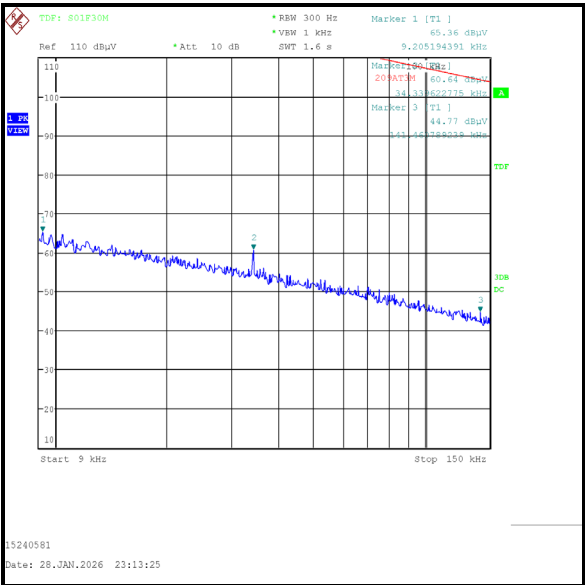
Note(s):

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 peak noise floor reading of the measuring receiver was recorded in the table below.
2. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K0001) 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. Measurements were 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.
3. 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:
 - a. 9 kHz to 490 kHz: measured value extrapolated from 3 metres to 300 metres by subtracting 80 dB at 40 dB / decade
 - b. 490 kHz to 30 MHz: measured value extrapolated from 3 metres to 30 metres by subtracting 40 dB at 40 dB / decade
4. Measurements from 30 MHz to 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) 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.

Radiated Emissions (continued)

Results: Peak / Middle Channel / LE1M

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Antenna Polarity
1000	36.4	54.0	17.6	Horizontal



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

5.3 Radiated Emissions >1 GHz

Test Summary:

Test Engineer:	John Ferdinand	Test Dates:	12 January 2026 & 13 January 2026
Test Sample Serial Number:	94f8e28c		

FCC Clause:	Parts 15.247(d) & 15.209(a)
Test Method Used:	FCC KDB 558074 D01 Section 11.3.b) referencing ANSI C63.10 Sections 6.3, 6.6, 11.11 & 11.12
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	37 to 40

Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. All other emissions shown on the pre-scans were investigated and found to be ambient, or > 20 dB below the appropriate limit or below the noise floor of the measurement system.
3. The emission shown on the 1 GHz to 3 GHz plot is the EUT fundamental.
4. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) 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 K0001) 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. The reference level for the emission in the non-restricted band was established by following ANSI C63.10 Section 11.11.2 procedure.
7. #-20 dBc limit applies in non-restricted band as the conducted output power measurements were performed using a peak detector.

Radiated Emissions (continued)**Results: Bottom Channel / Peak / LE1M**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4803.984	53.2	74.0	20.8	Horizontal
7206.032	53.8	64.0 [#]	10.2	Horizontal

Results: Bottom Channel / Average / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4803.968	48.2	54.0	5.8	Horizontal

Results: Middle Channel / Peak / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4851.616	52.9	74.0	21.1	Horizontal
7278.862	55.8	74.0	18.2	Horizontal

Results: Middle Channel / Average / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4851.968	47.3	54.0	6.7	Horizontal
7278.384	51.9	54.0	2.1	Horizontal

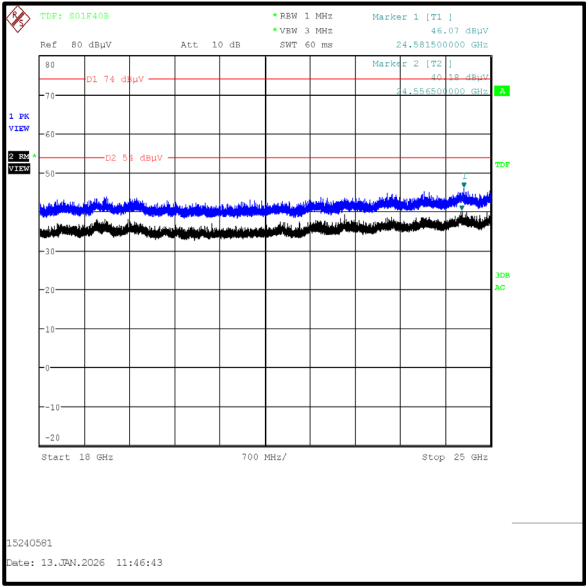
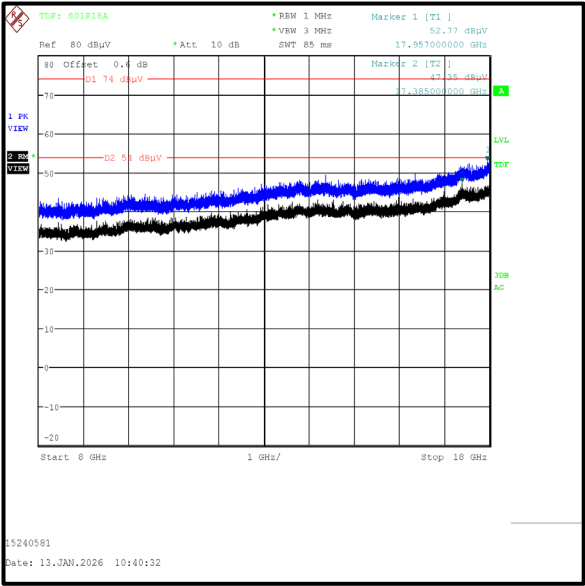
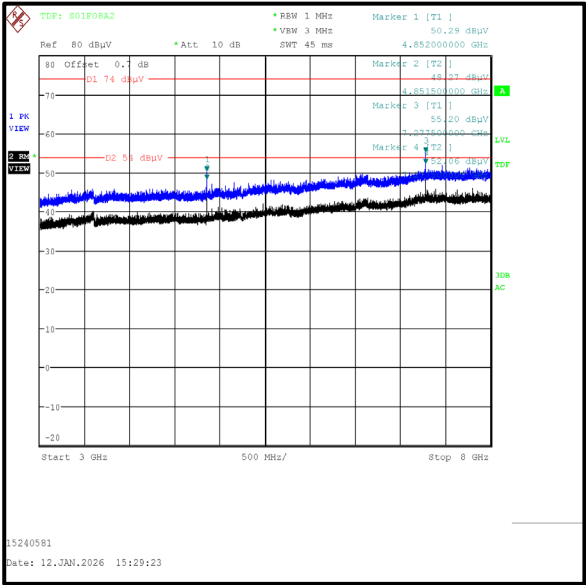
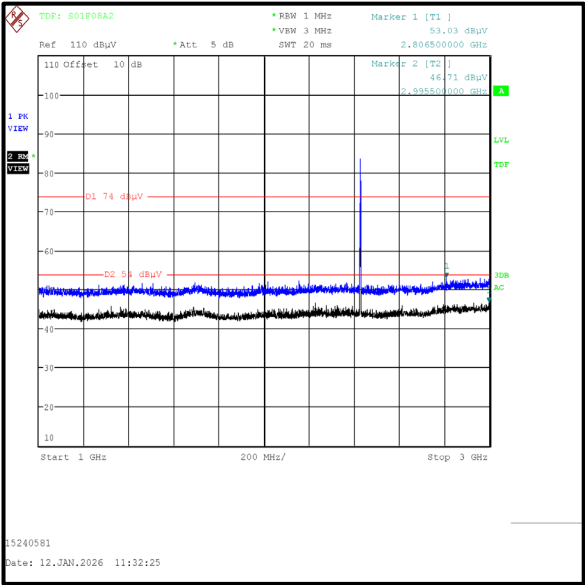
Results: Top Channel / Peak / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4959.744	52.3	74.0	21.7	Horizontal
7439.264	53.2	74.0	20.8	Horizontal

Results: Top Channel / Average / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
4960.592	46.4	54.0	7.6	Horizontal
7440.848	48.1	54.0	5.9	Horizontal

Radiated Emissions (continued)



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

5.4 Band Edge Radiated Emissions

Test Summary:

Test Engineer:	John Ferdinand	Test Date:	12 January 2026
Test Sample Serial Number:	94f8e28c		

FCC Clause:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 7.5, 11.11 & 11.12

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	38

Note(s):

1. The final measured value, for the given emission, 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 Max Hold. 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.

Band Edge Radiated Emissions (continued)**Results: Peak / LE1M**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
2398.878	42.8	64.0 [#]	21.2	Horizontal
2400.0	40.5	64.0 [#]	23.5	Horizontal
2483.5	49.7	74.0	24.3	Horizontal
2489.430	50.8	74.0	23.2	Horizontal

Results: Average / LE1M

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
2483.5	44.7	54.0	9.3	Horizontal
2507.779	46.9	54.0	7.1	Horizontal

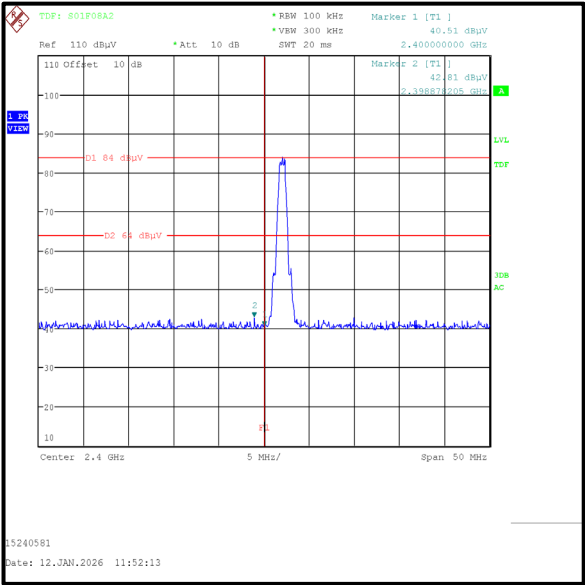
Results: 2310 MHz to 2390 MHz Restricted Band / Peak

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
2337.564	53.9	74.0	20.1	Horizontal

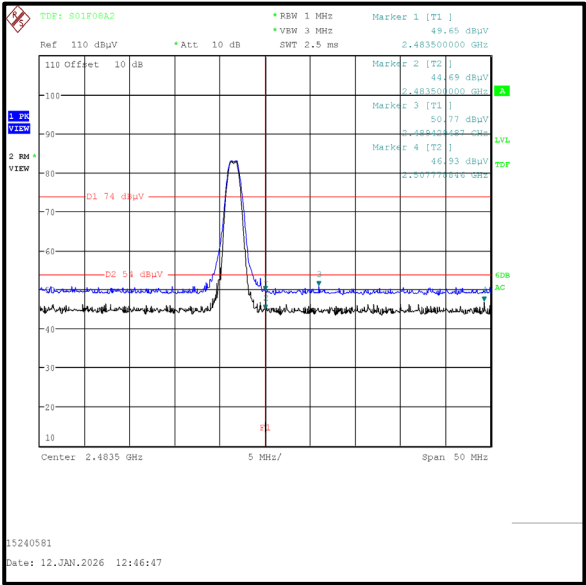
Results: 2310 MHz to 2390 MHz Restricted Band / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Polarity
2374.359	48.8	54.0	5.2	Horizontal

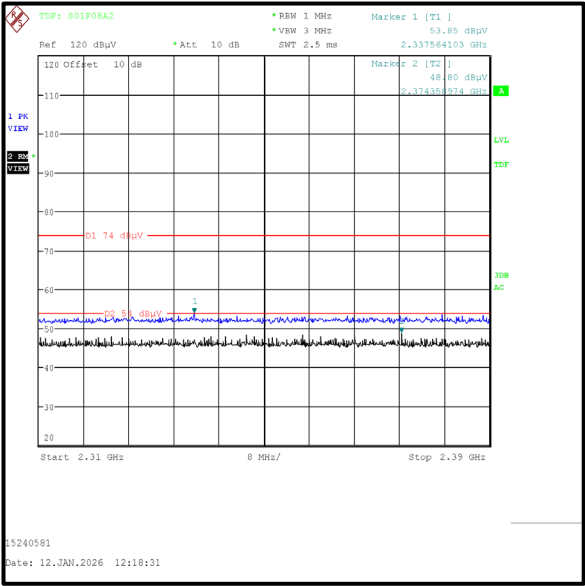
Band Edge Radiated Emissions (continued)



Lower Band Edge



Upper Band Edge



2310 MHz to 2390 MHz Restricted Band

6 AC Power Line Conducted Emissions Test Results

6.1 AC Conducted Spurious Emissions

Test Summary:

Test Engineer:	Nick Tye	Test Date:	20 January 2026
Test Sample Serial Number:	9215590 #4		

FCC Clause:	Part 15.207
Test Method Used:	ANSI C63.10 Section 6.2 / FCC KDB 174176 and notes below

Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	41

Note(s):

1. The EUT was connected to a 120 VAC 60 Hz single phase supply via a LISN.
2. In accordance with FCC KDB 174176 Q4, tests were also performed with a 240 VAC 60 Hz single phase supply as this was within the voltage range marked on the EUT power supply.
3. A pulse limiter was fitted between the LISN and the test receiver.
4. Pre-scans were performed and markers placed on the highest live and neutral measured levels. Final measurements were performed on the marker frequencies and the results entered into the tables below.

AC Conducted Spurious Emissions (continued)**Results: Live / Quasi Peak / 120 VAC 60 Hz**

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.640500	Live	12.4	56.0	43.6
1.347000	Live	33.8	56.0	22.2
2.017500	Live	23.0	56.0	33.0
2.692500	Live	25.4	56.0	30.6
4.042500	Live	22.6	56.0	33.4
10.558500	Live	25.5	60.0	34.5

Results: Live / Average / 120 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.361500	Live	16.6	48.7	32.1
0.672000	Live	36.6	46.0	9.4
1.347000	Live	33.2	46.0	12.8
2.692500	Live	23.8	46.0	22.2
4.033500	Live	20.9	46.0	25.1
8.070000	Live	16.8	50.0	33.2

Results: Neutral / Quasi Peak / 120 VAC 60 Hz

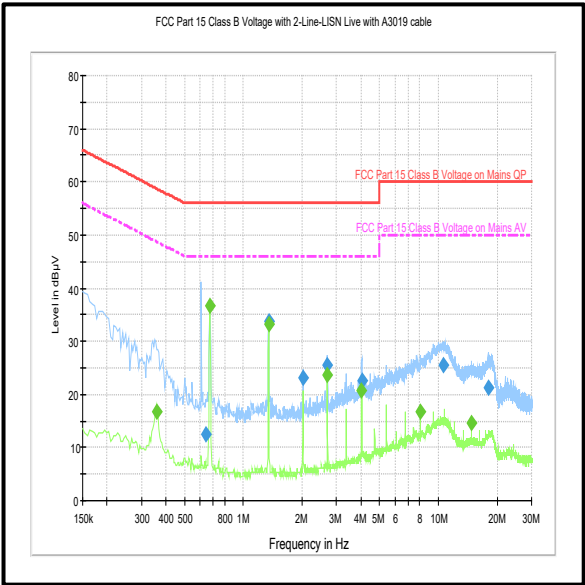
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.672000	Neutral	39.6	56.0	16.4
1.347000	Neutral	34.7	56.0	21.3
2.017500	Neutral	23.7	56.0	32.3
2.688000	Neutral	26.4	56.0	29.6
4.038000	Neutral	23.7	56.0	32.3
5.388000	Neutral	21.0	60.0	39.0

Results: Neutral / Average / 120 VAC 60 Hz

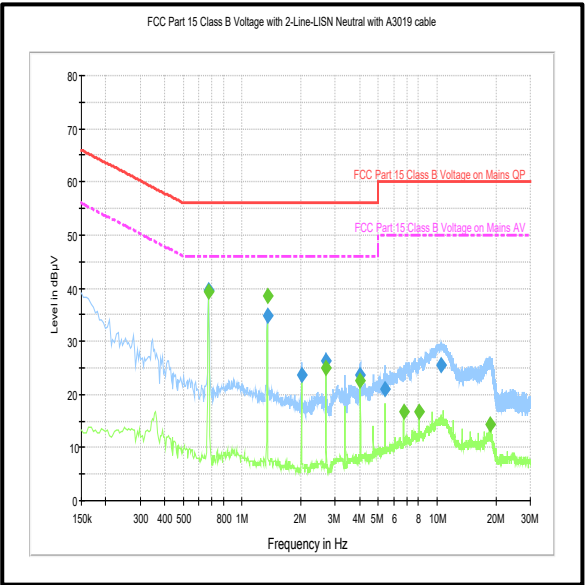
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.672000	Neutral	39.4	46.0	6.6
1.347000	Neutral	38.5	46.0	7.5
2.688000	Neutral	25.0	46.0	21.0
4.033500	Neutral	22.6	46.0	23.4
6.724500	Neutral	16.7	50.0	33.3
8.065500	Neutral	16.8	50.0	33.2

AC Conducted Spurious Emissions (continued)

Results: 120 VAC 60 Hz



Live



Neutral

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

AC Conducted Spurious Emissions (continued)**Results: Live / Quasi Peak / 240 VAC 60 Hz**

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.375000	Live	25.7	58.4	32.7
0.672000	Live	36.9	56.0	19.1
1.383000	Live	11.3	56.0	44.7
2.022000	Live	21.4	56.0	34.6
2.692500	Live	25.7	56.0	30.3
4.042500	Live	23.3	56.0	32.7

Results: Live / Average / 240 VAC 60 Hz

Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.672000	Live	36.8	46.0	9.2
1.342500	Live	36.0	46.0	10.0
2.688000	Live	24.0	46.0	22.0
4.033500	Live	21.4	46.0	24.6
5.374500	Live	18.3	50.0	31.7
8.065500	Live	17.2	50.0	32.8

Results: Neutral / Quasi Peak / 240 VAC 60 Hz

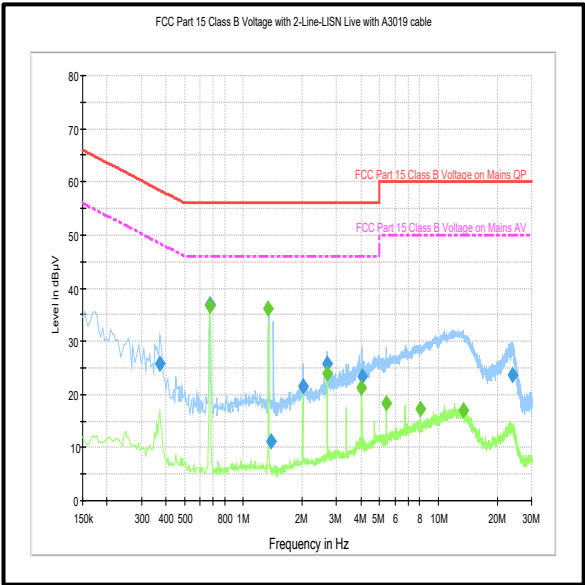
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.672000	Neutral	39.7	56.0	16.3
1.342500	Neutral	34.9	56.0	21.1
2.688000	Neutral	26.3	56.0	29.7
4.038000	Neutral	24.1	56.0	31.9
4.690500	Neutral	20.7	56.0	35.3
8.079000	Neutral	25.0	60.0	35.0

Results: Neutral / Average / 240 VAC 60 Hz

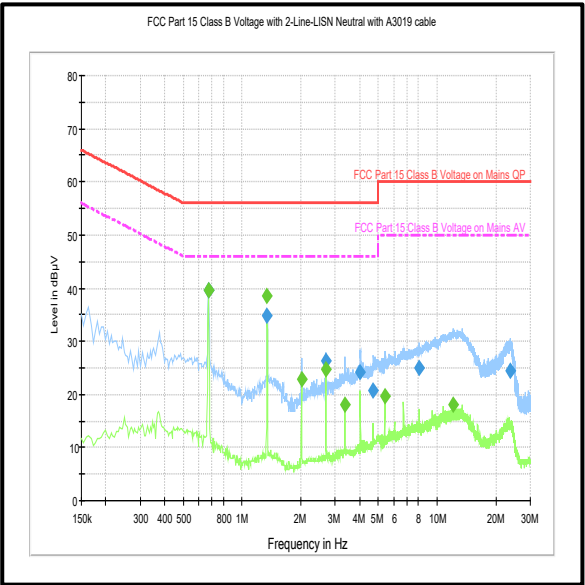
Frequency (MHz)	Line	Level (dB μ V)	Limit (dB μ V)	Margin (dB)
0.672000	Neutral	39.5	46.0	6.5
1.342500	Neutral	38.6	46.0	7.4
2.017500	Neutral	22.9	46.0	23.1
2.688000	Neutral	24.7	46.0	21.3
3.358500	Neutral	18.2	46.0	27.8
5.374500	Neutral	19.6	50.0	30.4

AC Conducted Spurious Emissions (continued)

Results: 240 VAC 60 Hz



Live



Neutral

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

--- END OF REPORT ---