TEST REPORT

Test Report No. : UL-RPT-RP14652416-316A

Customer	:	Buddi Limited
Model No. / HVIN	:	3430016
PMN	:	Smart Tag 5
FCC ID	:	ZDLST7
ISED Certification No.	:	20371-ST7
Technology	:	SRD
Test Standard(s)	:	FCC Parts 15.209(a) & 15.249(d)&(e) Innovation, Science and Economic Development Canada RSS-210 Issue 10 Clause 6.13 RSS-Gen Issue 5 Clause B.10(a)&(b)
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. Version 2.0 supersedes all previous versions.

Date of Issue: 12 May 2023

Checked by:

Ben Mercer
Lead Project Engineer, Radio Laboratory

Company Signatory:

Sarah Williams
Operations Leader, Radio Laboratory

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Customer Information

Company Name:	Buddi Limited
Address:	Talbot House 17 Church Street Rickmansworth Herts WD3 1DE

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	30/03/2023	Initial Version	Ben Mercer
2.0	12/05/2023	Field Strength & Bandwidth measurements added	Ben Mercer

Table of Contents

1 Attestation of Test Results

1.1 Description of EUT

The equipment under test was an Electronic Monitoring (EM) device which communicates to a server-based monitoring platform providing data such as: event time, GPS location, geo-fence data, position type, speed of motion, battery level, signal strength, strap on/off, alerts. It contains a 2G and 4G cellular module (FCC ID:XPYUBX21BE01, IC: 8595A-UBX21BE01), a 2.4 GHz WLAN transceiver and a 915 MHz ISM transceiver.

1.2 General Information

Specification Reference:	47CFR15.249
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.249
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) – Section 15.209
Specification Reference:	RSS-Gen Issue 5 February 2021
Specification Title:	General Requirements for Compliance of Radio Apparatus
Specification Reference:	RSS-210 Issue 10 April 2020
Specification Title:	Licence-Exempt Radio Apparatus: Category I Equipment
FCC Site Registration:	685609
ISEDC Site Registration:	20903
FCC Lab. Designation No.:	UK2011
ISEDC CABID:	UK0001
Location of Testing:	Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	01 March 2023 to 12 May 2023

1.3 Summary of Test Results

FCC Reference (47CFR)	ISED Canada Reference	Measurement	Result
Part 15.249(a)(e)	RSS-Gen 6.12 / RSS-210 B.10(a)	Transmitter Fundamental Field Strength	✓
Part 2.1049	N/A	Transmitter 20 dB Bandwidth	✓
N/A	RSS-Gen 6.7	Transmitter 99% Emission Bandwidth	✓
Part 15.249(d)(e) / 15.209(a)	RSS-Gen 6.13 / RSS-210 B.10(a)(b)	Transmitter Radiated Emissions	✓
Part 15.249(d) / 15.209(a)	RSS-Gen 6.13 / RSS-210 B.10(b)	Transmitter Band Edge Radiated Emissions	✓

Key to Results

✓ = Complied ✗ = Did not comply

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 Unit 3 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 2	-
Site 17	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 C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

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

The decision rule applied is based upon the accuracy method criteria. The measurement uncertainty is met and the result is considered in conformance with the requirement criteria if the observed value is within the prescribed limit.

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
Fundamental Field Strength	902 MHz to 928 MHz	95%	±3.30 dB
20 dB Bandwidth	902 MHz to 928 MHz	95%	±4.59 %
Occupied Bandwidth	902 MHz to 928 MHz	95%	±3.92 %
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±5.32 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±3.30 dB
Radiated Spurious Emissions	1 GHz to 9.3 GHz	95%	±3.16 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 Fundamental Field Strength, 20 dB Bandwidth & 99% Emission Bandwidth Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2023	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	08 Nov 2023	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	02 Nov 2023	12
A2148	Attenuator	AtlanTecRF	AN18-06	090202-06	06 Oct 2023	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#2	25 Jan 2024	12
A3167	Pre Amplifier	Com-Power	PAM-103	18020010	02 Nov 2023	12
A490	Antenna	Chase	CBL6111A	1590	06 Oct 2023	12
M2040	Thermohygrometer	Testo	608-H1	45124934	09 Dec 2023	12
K0001	3m RSE Chamber	Rainford	N/A	N/A	05 Sep 2023	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	19 May 2023	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	26 Jan 2024	12
A3154	Pre Amplifier	Com-Power	PAM-103	18020012	18 Aug 2023	12
A3161	Antenna	Teseq	CBL6111D	50859	04 Jun 2023	12

Test Equipment Used for Band Edge Radiated Emissions

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2023	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	08 Nov 2023	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	02 Nov 2023	12
A2943	Attenuator	AtlanTecRF	AN18W5-06	208147#2	25 Jan 2024	12
A2148	Attenuator	AtlanTecRF	AN18-06	090202-06	06 Oct 2023	12
A3167	Pre Amplifier	Com-Power	PAM-103	18020010	02 Nov 2023	12
A490	Antenna	Chase	CBL6111A	1590	06 Oct 2023	12

Test and Measurement Equipment (continued)

Test Equipment Used for Transmitter Radiated Emissions

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Dec 2023	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	08 Nov 2023	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	02 Nov 2023	12
A2943	Attenuator	AtlanTecRF	AN18W5-06	208147#2	25 Jan 2024	12
A2148	Attenuator	AtlanTecRF	AN18-06	090202-06	06 Oct 2023	12
A3167	Pre Amplifier	Com-Power	PAM-103	18020010	02 Nov 2023	12
A490	Antenna	Chase	CBL6111A	1590	06 Oct 2023	12
M2040	Thermohygrometer	Testo	608-H1	45124934	09 Dec 2023	12
K0001	3m RSE Chamber	Rainford	N/A	N/A	06 Sep 2023	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	19 May 2023	12
A3139	Antenna	Schwarzbeck	HWRD750	00027	22 Aug 2023	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	22 Aug 2023	12
A222867	Pre Amplifier	Atlantic Microwave	A-LNAKX-380116-S5S5	220705002	26 Aug 2023	12
A3095	High Pass Filter	AtlanTecRF	AFH-07000	18051600012	27 Jan 2024	12
A2908	High Pass Filter	Wainwright Instruments	WHJE5-920-1000-4000-60EE	3	25 Jan 2024	12
A3093	High Pass Filter	AtlanTecRF	AFH-0300	18051800077	26 Jan 2024	12
A3165	Antenna	ETS-Lindgren	6502	00224383	05 May 2023	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name:	Buddi
Model Number / HVIN:	3430016
PMN:	Smart Tag 5
Test Sample Serial Number:	SXW00035 *(Radiated sample #1)*
Hardware Version:	V15.1
Firmtware Version:	1.40.20
FCC ID:	ZDLST7
ISED Certification Number:	20371-ST7
Date of Receipt:	27 February 2023

Brand Name:	Buddi
Model Number / HVIN:	3430016
PMN:	Smart Tag 5
Test Sample Serial Number:	SXW00034 *(Radiated sample #2)*
Hardware Version:	V15.1
Firmtware Version:	1.40.20
FCC ID:	ZDLST7
ISED Certification Number:	20371-ST7
Date of Receipt:	03 May 2023

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Tested Technology:	Short Range Device		
Power Supply Requirement:	Nominal	3.7 VDC	
Type of Unit:	Transceiver		
Channel Spacing:	500 kHz		
Modulation:	GFSK		
Data Rate:	38.4 Kbit/s		
Transmit Frequency Range:	914.5 MHz to 921.0 MHz		
Transmit Channels Tested:	**Channel ID**	**Channel Number**	**Channel Frequency (MHz)**
	Bottom	0	914.5
	Middle	6	917.5
	Top	13	921.0

3.4 Description of Available Antenna

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

Frequency Range (MHz)	Antenna Gain (dBi)
914.5 to 921.0	-1.5

3.5 Description of Test Setup

Support Equipment

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

Description:	Switching Power Adaptor
Brand Name:	Not marked or stated
Model Name or Number:	Not marked or stated
Serial Number:	Not marked or stated

Operating Modes

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

- Transmitting at maximum power with modulated carrier on bottom, middle and top channels as required.

Configuration and Peripherals

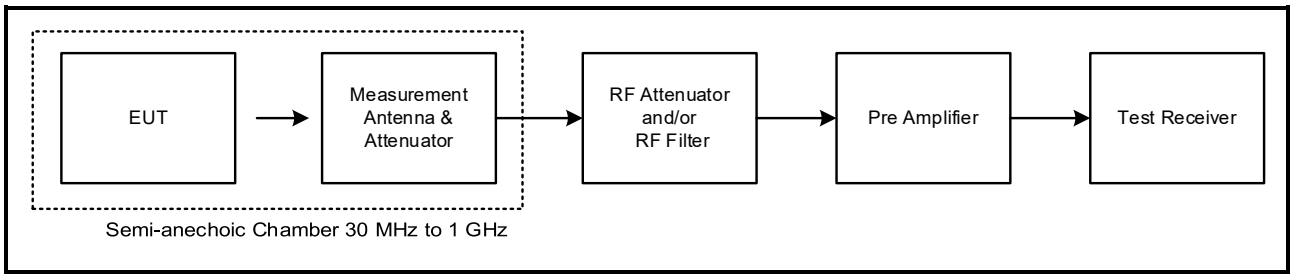
The EUT was tested in the following configuration(s):

- The customer had pre-loaded test software/firmware to the EUT prior to testing. Test mode was enabled following the instructions in 'Smart Tag 5XB - ISM FCC Test Guide v1.0.pdf', Issue Date: 23rd February 2023. A modified Switching Power Adaptor was provided by the customer for test mode purposes only. This allowed selection of test mode parameters via a button in accordance with the provided instructions.
- All radiated tests were performed with the EUT placed in the worst case orientation/position for the applicable test. The EUT was powered by its internal battery.

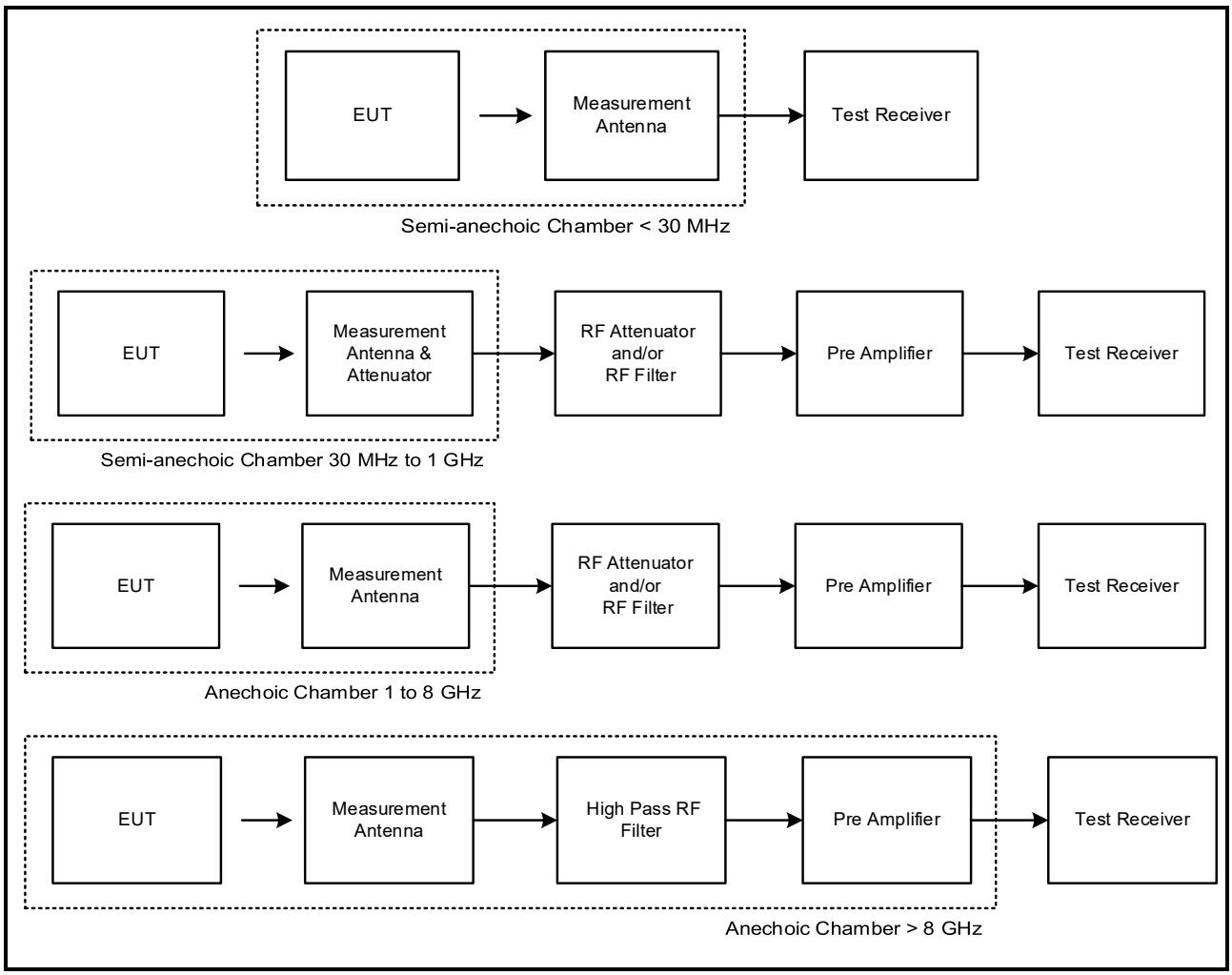
Test Setup Diagrams

Radiated Tests:

Test Setup for Transmitter Fundamental Field Strength, 20 dB Bandwidth, 99% Emission Bandwidth & Band Edge Radiated Emissions



Test Setup for Transmitter Radiated Emissions



4 Radiated Test Results

4.1. Transmitter Fundamental Field Strength

Test Summary:

Test Engineer:	Jose Bayona	**Test Date:**	05 May 2023
Test Sample Serial Number:	SXW00034		

FCC Reference:	Part 15.249(a)(e)
ISED Canada Reference:	RSS-Gen 6.12 / RSS-210 B.10(a)
Test Method Used:	ANSI C63.10 Section 6.6

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	40

Note(s):

1. The final measured value in the tables below incorporates the calibrated antenna factor and cable loss.
2. Measurements 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.
3. Pre-scans were performed and markers placed on the highest measured levels. The test receiver 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.
4. Final measurements were performed on the marker frequencies and results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector.

Transmitter Fundamental Field Strength (continued)

Results: Bottom Channel / Quasi-Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
914.518	Horizontal	89.8	94.0	4.2	Complied

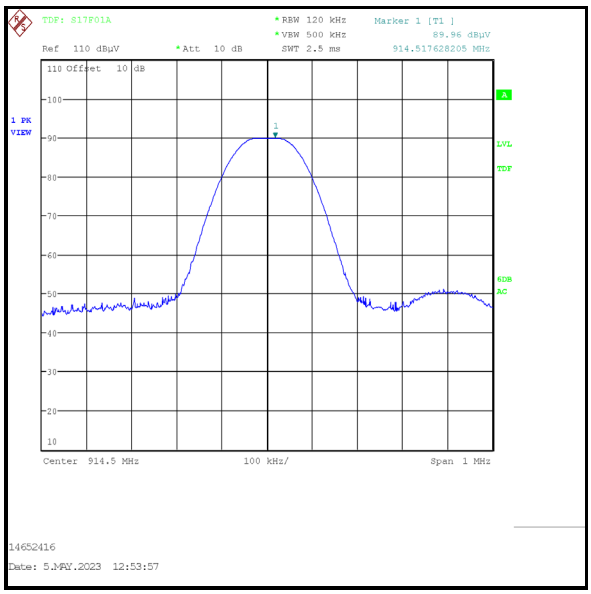
Results: Middle Channel / Quasi-Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
917.481	Horizontal	87.3	94.0	6.7	Complied

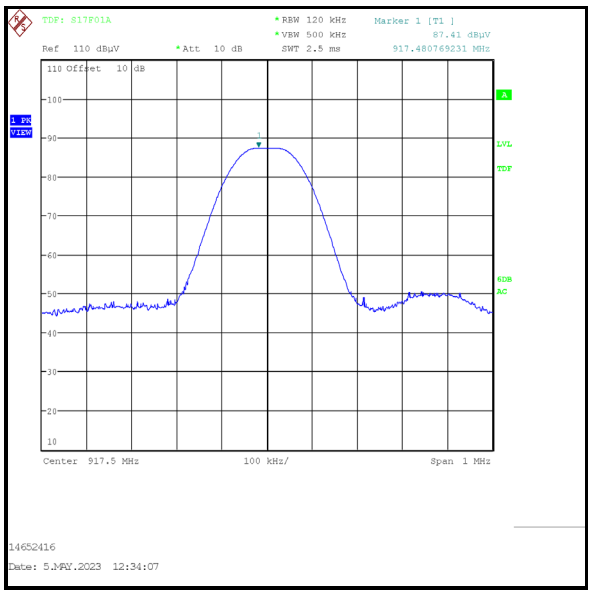
Results: Top Channel / Quasi-Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
920.979	Horizontal	88.9	94.0	5.1	Complied

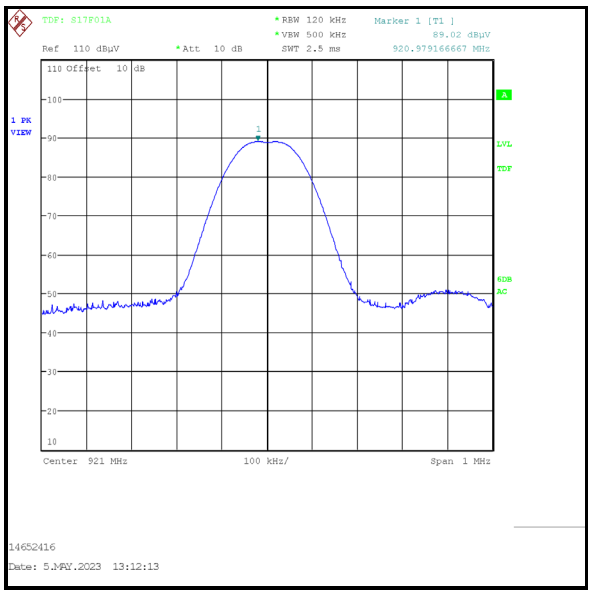
Transmitter Fundamental Field Strength (continued)



Bottom Channel



Middle Channel



Top Channel

4.2. Transmitter 20 dB Bandwidth

Test Summary:

Test Engineer:	Jose Bayona	**Test Date:**	05 May 2023
Test Sample Serial Number:	SXW00034		

FCC Reference:	Part 2.1049
Test Method Used:	ANSI C63.10 Section 6.9.2

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	40

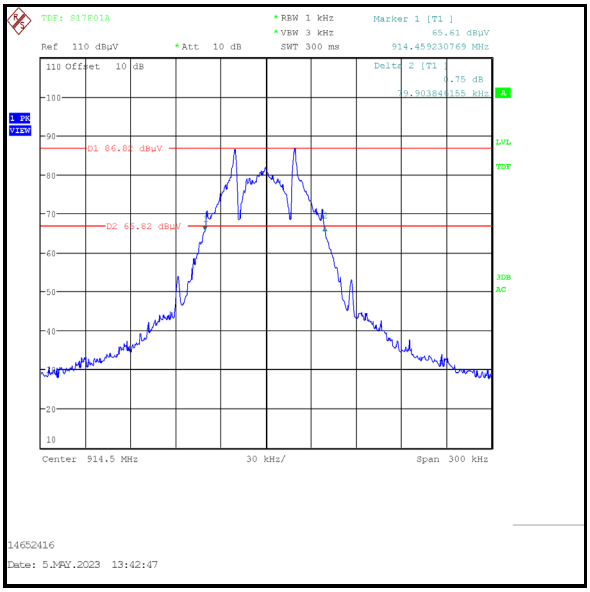
Note(s):

1. Transmitter 20 dB bandwidth was measured using the marker delta function of a spectrum analyser. The resolution bandwidth was set between 1 % and 5% of the occupied bandwidth and the video bandwidth set to 3 times the resolution bandwidth.
2. The spectrum analyser resolution bandwidth was set to 1 kHz and video bandwidth to 3 kHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The span was set to 300 kHz. Markers were placed 20 dB above and below the peak of the carrier. The marker delta function was used to calculate the 20 dB bandwidth. The results are recorded in the table below.

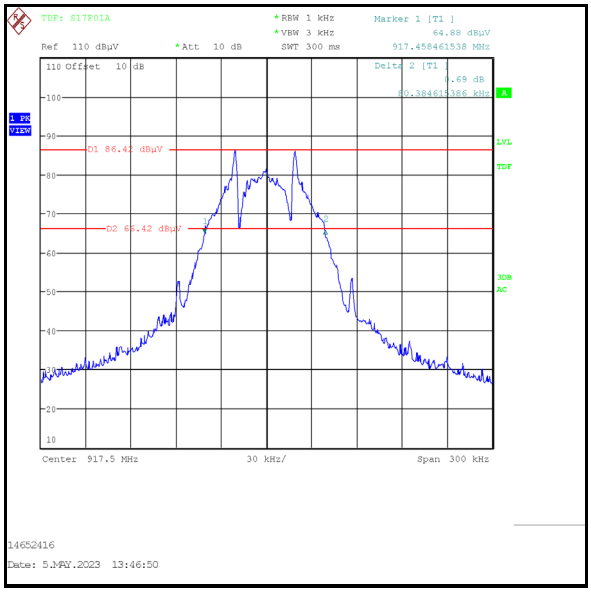
Results:

Channel	20dB Bandwidth (kHz)
Bottom	79.904
Middle	80.385
Top	79.904

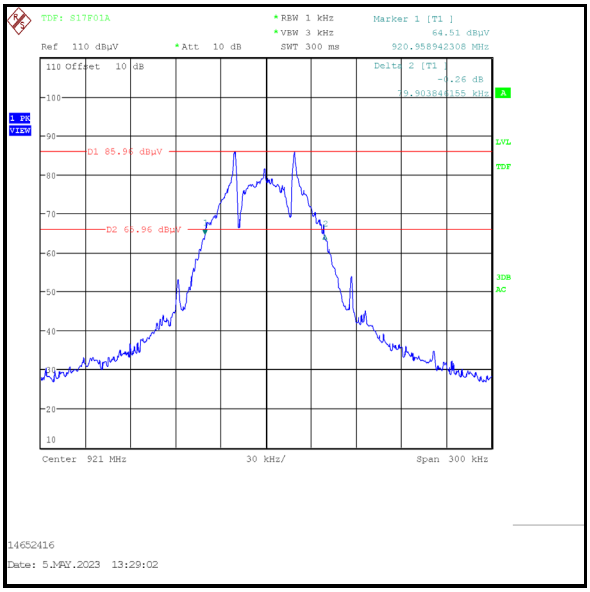
Transmitter 20 dB Bandwidth (continued)



Bottom Channel



Middle Channel



Top Channel

4.3. Transmitter 99% Emission Bandwidth

Test Summary:

Test Engineer:	Jose Bayona	**Test Dates:**	05 May 2023 & 12 May 2023
Test Sample Serial Number:	SXW00034		

ISED Canada Reference:	RSS-Gen 6.7
Test Method Used:	RSS-Gen 6.7

Environmental Conditions:

Temperature (°C):	23 to 24
Relative Humidity (%):	40 to 45

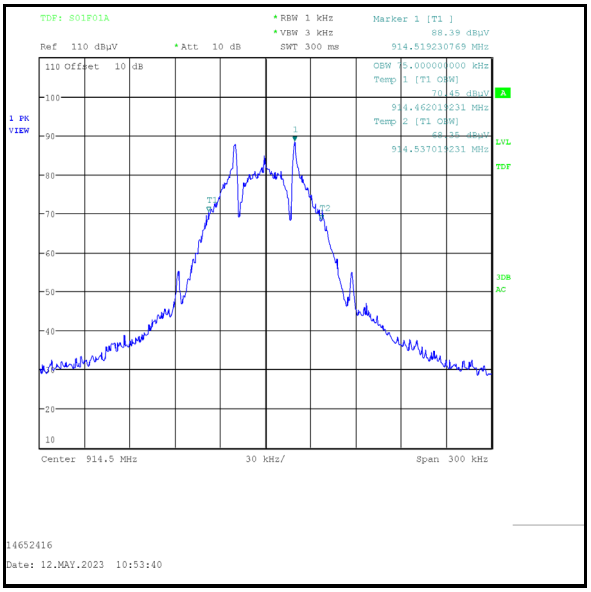
Note(s):

1. Occupied bandwidth (99% bandwidth) was measured using a test receiver occupied bandwidth function. The resolution bandwidth was set to > 1% of the occupied bandwidth and the video bandwidth set to 3 times the resolution bandwidth.
2. The test receiver resolution bandwidth was set to 1 kHz and video bandwidth 3 kHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The span was set to 300 kHz. The test receiver function set the measurements to be made at 99% of the emission bandwidth. The results are given in the table below.

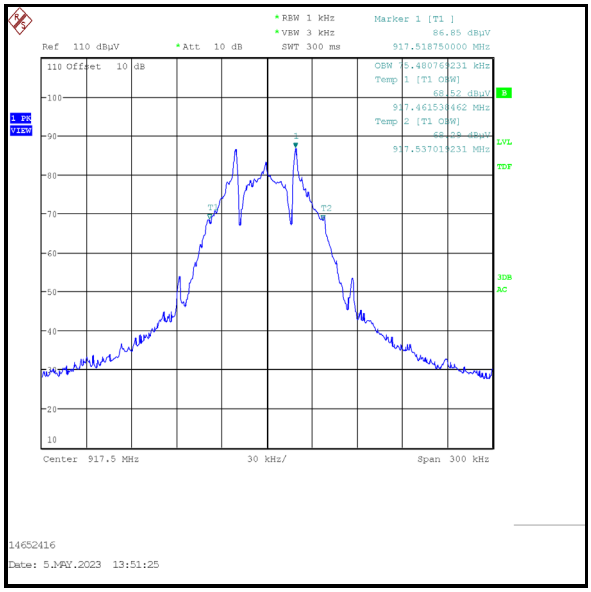
Results:

Channel	99% Occupied Bandwidth (kHz)
Bottom	75.000
Middle	75.481
Top	75.962

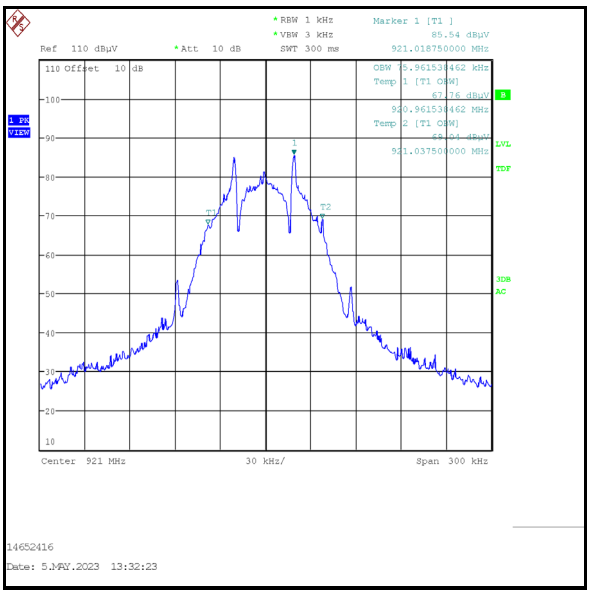
Transmitter 99% Emission Bandwidth (continued)



Bottom Channel



Middle Channel



Top Channel

4.4 Transmitter Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	John Ferdinand & Robert English	**Test Dates:**	02 March 2023 & 07 March 2023
Test Sample Serial Number:	SXW00035		

FCC Reference:	Parts 15.249(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-210 B.10 (a)(b)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5
Frequency Range	9 kHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	20 to 22
Relative Humidity (%):	32 to 36

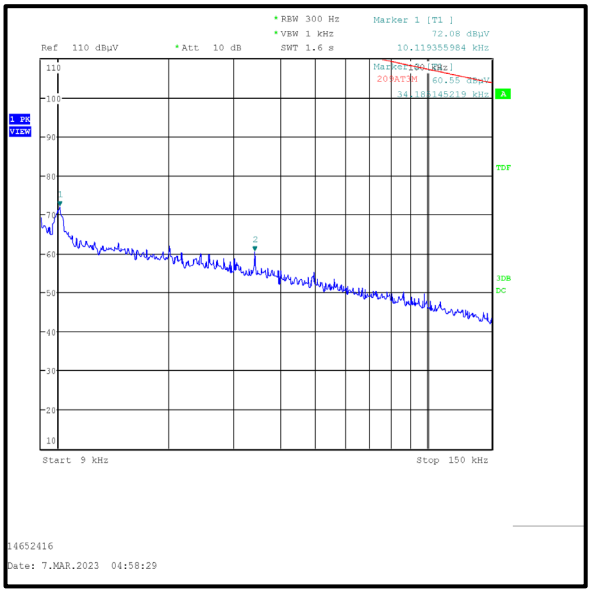
Note(s):

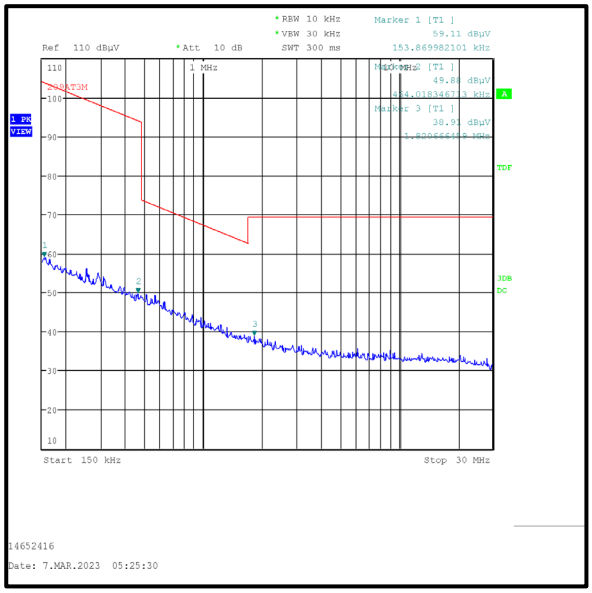
1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
3. No spurious emissions were detected above the noise floor of the measuring receiver, therefore the highest peak noise floor reading of the measuring receiver was recorded in the table below.
4. The EUT fundamental is shown on the 30 MHz to 1 GHz plot.
5. 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. The limit was extrapolated to 3 metres in accordance with ANSI C63.10 Section 6.4.4.2. Correlation data between the semi-anechoic chamber and an open-field test site is available upon request.
6. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-Gen Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X kHz resulted in a level of Y dBµV/m, which is equivalent to Y - 51.5 = Z dBµA/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to the 15.209(a) limit.
7. Measurements between 30 MHz to 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) 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.
8. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was configured as follows: During 9 kHz to 150 kHz tests, 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. A peak detector was used and 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.

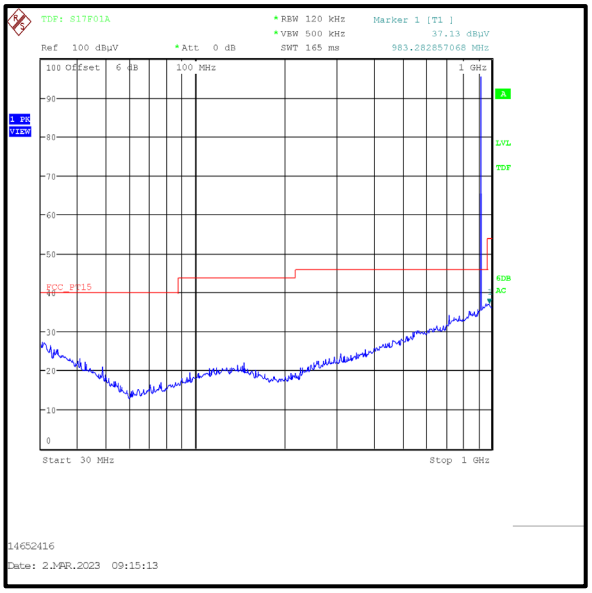
Transmitter Radiated Emissions (continued)

Results: Middle Channel

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
938.283	Horizontal	37.1	54.0	16.9	Complied







4.5 Transmitter Radiated Emissions >1 GHz

Test Summary:

Test Engineer:	John Ferdinand	**Test Date:**	01 March 2023
Test Sample Serial Number:	SXW00035		

FCC Reference:	Parts 15.249(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-210 B.10 (a)(b)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.6
Frequency Range	1 GHz to 9.3 GHz

Environmental Conditions:

Temperature (°C):	21
Relative Humidity (%):	36

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-scan plot were investigated and found to be ambient or >20 dB below the appropriate limit or below the measurement system noise floor.
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 and final measurements 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. During prescans, all measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed with the EUT placed at a height of 1.5 metres 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.
5. 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.

Transmitter Radiated Emissions (continued)

Results: Bottom Channel / Peak

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2743.540	Vertical	50.8	54.0*	3.2	Complied
3658.280	Vertical	45.9	54.0*	8.1	Complied
4572.660	Vertical	47.9	54.0*	6.1	Complied
6401.920	Vertical	45.9	54.0*	8.1	Complied

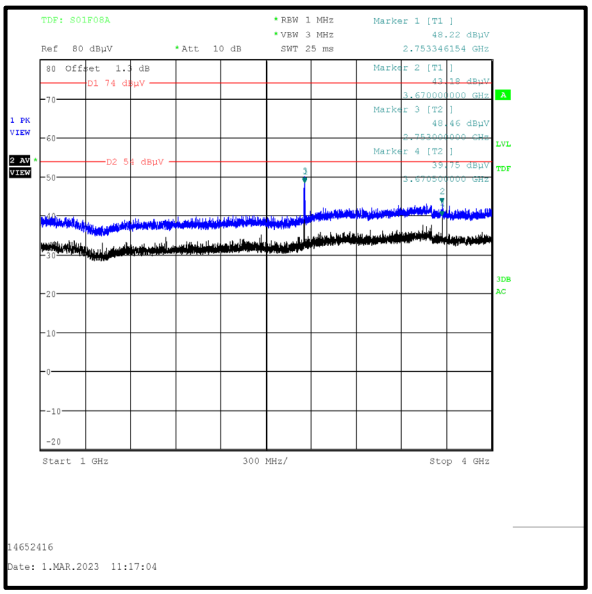
Results: Middle Channel / Peak

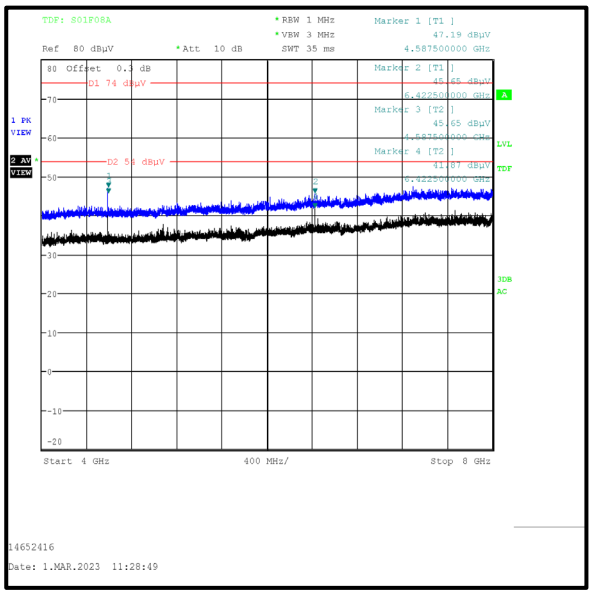
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2752.660	Vertical	49.1	54.0*	4.9	Complied
3670.230	Vertical	44.8	54.0*	9.2	Complied
4587.663	Vertical	48.7	54.0*	5.3	Complied
6422.630	Vertical	47.4	54.0*	6.6	Complied

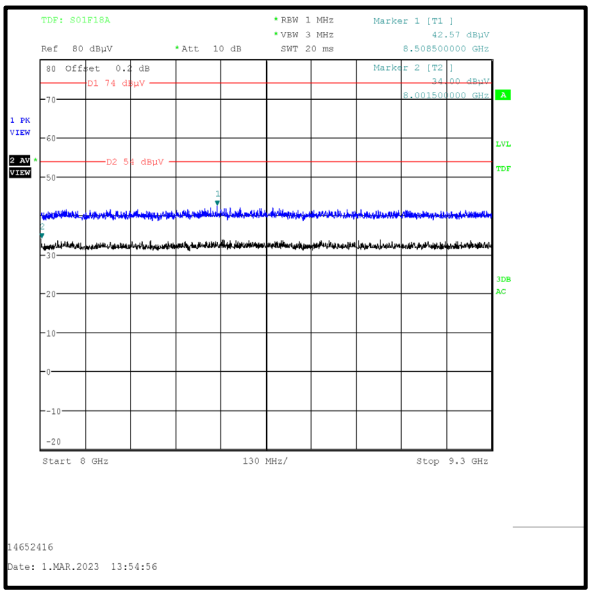
Results: Top Channel / Peak

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2763.160	Vertical	49.9	54.0*	4.1	Complied
3683.920	Vertical	43.8	54.0*	10.2	Complied
4605.220	Vertical	48.3	54.0*	5.7	Complied
6446.419	Vertical	45.8	54.0*	8.2	Complied

Transmitter Radiated Emissions (continued)







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

4.6 Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineer:	John Ferdinand	**Test Date:**	02 March 2023
Test Sample Serial Number:	SXW00035		

FCC Reference:	Parts 15.249(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-210 B.10 (b)
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5 and 6.10

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	32

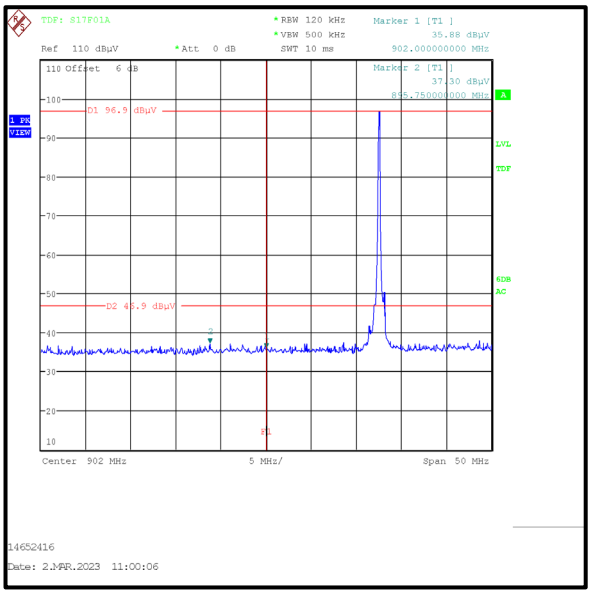
Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. In accordance with FCC part 15.249(d) / ISED RSS-210 B.10(b), all emissions outside of the specified frequency band shall be attenuated by at least 50 dBc or the general radiated emission limits in 15.209 whichever has less attenuation.
3. As both band edges are adjacent to non-restricted bands, only peak measurements are required in accordance with ANSI C63.10 Section 6.10.4. The test receiver 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. 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 and an out-of-band limit line was placed below the peak level. Markers were placed on the band edge spot frequencies. Additional markers were placed on the highest emission levels outside the band edges (where a higher level emission was present). Marker frequencies and levels were recorded.

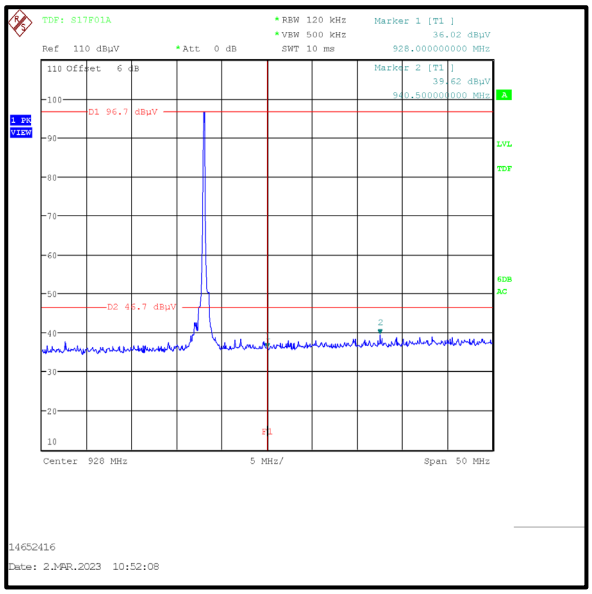
Transmitter Band Edge Radiated Emissions (continued)

Results: Peak

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
895.750	Horizontal	37.3	46.9	9.6	Complied
902	Horizontal	35.9	46.9	11.0	Complied
928	Horizontal	36.0	46.7	10.7	Complied
940.500	Horizontal	39.6	46.7	7.1	Complied



Lower Band Edge



Upper Band Edge

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