



TEST REPORT

Test Report No. : UL-RPT-RP13885492-1116A

Manufacturer : Sports & Wellbeing Analytics Limited
Model No. : M0021
PMN : Protecht
HVIN : M0021
FCC ID : 2AT9A-M0021NA
ISED Certification No. : IC: 25409-M0021NA
Technology : SRD
Test Standard(s) : FCC Parts 15.207, 15.209(a) & 15.247;
Innovation, Science and Economic Development Canada
RSS-247 Issue 2 February 2017 & RSS-Gen Issue 5 March 2019

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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: 16 March 2022

Checked by:

Ben Mercer
Lead Project Engineer, Radio Laboratory

Company Signatory:

Sarah Williams
RF Operations Leader, Radio Laboratory



This laboratory is accredited by UKAS. The tests reported herein have been performed in accordance with its terms of accreditation.

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Customer Information

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Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	09/03/2022	Initial Version	Ben Mercer
2.0	16/03/2022	Removed <30 MHz results	Ben Mercer

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1. Attestation of Test Results









1.1. Description of EUT

The Equipment Under Test was an instrumented mouth guard, containing SRD, *Bluetooth* LE and WPT technologies.

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:	47CFR15.207 & 47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) – Sections 15.207 & 15.209
Specification Reference:	RSS-Gen Issue 5 February 2021
Specification Title:	General Requirements for Compliance of Radio Apparatus
Specification Reference:	RSS-247 Issue 2 February 2017
Specification Title:	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
Site Registration:	FCC: 685609, ISEDC: 20903
FCC Lab Designation No.:	UK2011
ISEDC CABID:	UK0001
Location of Testing:	Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, G24 8AH, United Kingdom
Test Dates:	14 February 2022 to 15 February 2022

1.3. Summary of Test Results

FCC Reference (47CFR)	ISED Canada Reference	Measurement	Result
Part 15.247(a)(2)	RSS-Gen 6.7 / RSS-247 5.2(a)	Transmitter Minimum 6 dB Bandwidth	
Part 15.35(c)	RSS-Gen 8.2	Transmitter Duty Cycle	Note 1
N/A	RSS-Gen 6.7	Transmitter 99% Occupied Bandwidth	
Part 15.247(b)(3)	RSS-Gen 6.12 / RSS-247 5.4(d)	Transmitter Maximum Average Output Power	
Part 15.247(e)	RSS-247 5.2(b)	Transmitter Power Spectral Density	
Part 15.247(d) / 15.209(a)	RSS-Gen 6.13 / RSS-247 5.5	Transmitter Radiated Emissions	
Part 15.247(d) / 15.209(a)	RSS-Gen 6.13 / RSS-247 5.5	Transmitter Band Edge Radiated Emissions	
Key to Results			
 = Complied  = Did not comply			

Note(s):

1. The measurement was performed to assist in the calculation of the level of the emissions. The EUT cannot transmit continuously and sweep triggering/signal gating cannot be implemented.

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 UKAS. 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
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. 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
Minimum 6 dB Bandwidth	902 MHz to 928 MHz	95%	±4.59 %
Duty Cycle	902 MHz to 928 MHz	95%	±3.53 ns
99% Occupied Bandwidth	902 MHz to 928 MHz	95%	±3.92 %
Maximum Peak Output Power	902 MHz to 928 MHz	95%	±1.13 dB
Power Spectral Density	902 MHz to 928 MHz	95%	±1.13 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±3.30 dB
Radiated Spurious Emissions	1 GHz to 9.3 GHz	95%	±2.94 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 Bandwidth, Duty Cycle & RF Power Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Oct 2022	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	26 Oct 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
A3167	Pre Amplifier	Com Power Corp	PAM-103	18020010	20 Oct 2022	12
A490	Antenna	Chase EMC Ltd	CBL6111A	1590	14 Sep 2022	12
A2943	Attenuator	AtlanTecRF	AN18W5-06	208147#2	28 Jan 2023	12

Test Equipment Used for Transmitter Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Oct 2022	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	26 Oct 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
A3167	Pre Amplifier	Com Power Corp	PAM-103	18020010	20 Oct 2022	12
A490	Antenna	Chase EMC Ltd	CBL6111A	1590	14 Sep 2022	12
A2948	Pre Amplifier	Com Power Corp	PAM-118A	551087	20 Oct 2022	12
A2943	Attenuator	AtlanTecRF	AN18W5-06	208147#2	28 Jan 2023	12
A2914	High Pass Filter	AtlanTecRF	AFH-03000	2155	25 Jan 2023	12
A2947	High Pass Filter	AtlanTecRF	AFH-07000	1601900001	25 Jan 2023	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	00653	26 Oct 2022	12
A2890	Antenna	Schwarzbeck	HWRD 750	014	29 Oct 2022	12
A2908	High Pass Filter	Wainwright	WHJE5-920-1000-4000-60EE	3	25 Jan 2023	12
A3142	Pre Amplifier	Schwarzbeck	BBV 9718 B	00020	20 Oct 2022	12

Test Equipment Used for Transmitter Band Edge Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	09 Oct 2022	12
K0017	3m RSE Chamber	Rainford	N/A	N/A	26 Oct 2022	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	12 Oct 2022	12
A3167	Pre Amplifier	Com Power Corp	PAM-103	18020010	20 Oct 2022	12
A490	Antenna	Chase EMC Ltd	CBL6111A	1590	14 Sep 2022	12
A2943	Attenuator	AtlanTecRF	AN18W5-06	208147#2	28 Jan 2023	12

3. Equipment Under Test (EUT)

3.1. Identification of Equipment Under Test (EUT)

Brand Name:	Protecht
Model Name or Number / PMN:	M0021
Test Sample Serial Number:	F9731F7E4DDD
Hardware Version / HVIN:	2.1.0
Software Version:	2.1.0
Firmware Version:	1.0.0
FCC ID:	2AT9A-M0021NA
ISED Certification Number:	IC: 25409-M0021NA

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 (Digital Transmission System)	
Power Supply Requirement:	Nominal	3.7 VDC
Type of Unit:	Transceiver	
Channel Spacing:	Single channel	
Modulation:	GFSK	
Transmit Frequency Range:	902 MHz to 928 MHz	
Transmit Channel Tested:	Channel ID	Channel Frequency (MHz)
	Single	921.4

3.4. Description of Available Antennas

The radio utilizes a single wire antenna with the maximum gain stated below:

Frequency Range (MHz)	Antenna Gain (dBi)
902-928	0.0

3.5. Description of Test Setup

Support Equipment

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

Description:	AC to DC Power Supply
Brand Name:	Griffin Technology
Model Name or Number:	GP-010-BLK
Serial Number:	N/A

Description:	Laptop PC
Brand Name:	Dell
Model Name or Number:	Latitude 5400
Serial Number:	1PXCYY2

Description:	USB Powered Charging Board
Brand Name:	Protecht
Model Name or Number:	Protecht Charging Case
Serial Number:	CC0002.47

Description:	USB BTLE Dongle
Brand Name:	Nordic
Model Name or Number:	Segger
Serial Number:	680228445

Operating Modes

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

- Continuously transmitting at maximum power on 921.4 MHz with a modulated carrier.

Configuration and Peripherals

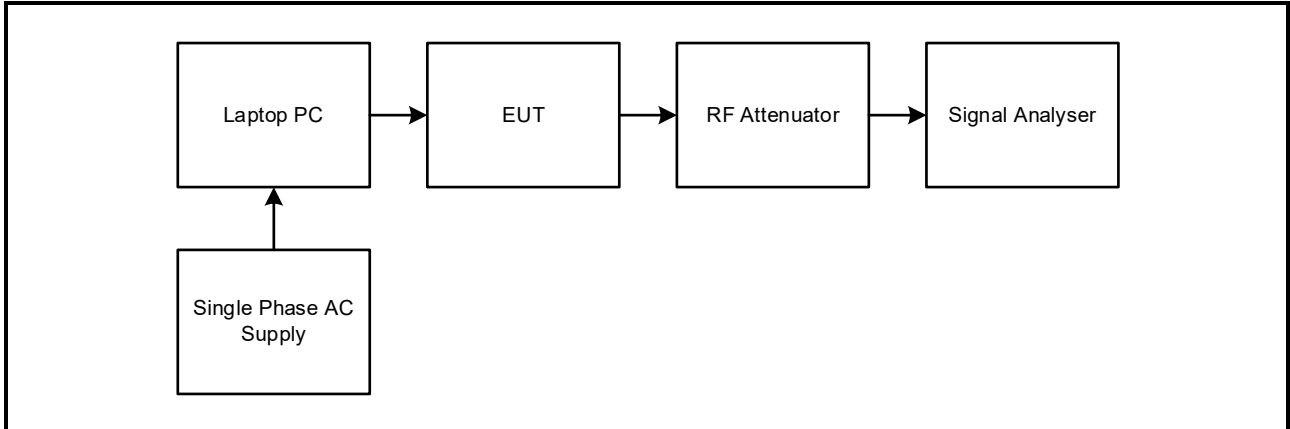
The EUT was tested in the following configuration(s):

- The EUT was configured to transmit continuously using test firmware. The test firmware was installed on the EUT via the Protecht Charging Case using client supplied software. Once installed, the EUT would transmit continuously when powered on.
- Radiated emissions tests were performed with the EUT in the worst-case orientation/position with respect to emissions.
- For testing purposes, the EUT was power by a USB AC to DC power supply connected to a 120VAC 60Hz single phase mains supply.
- There were no other ports to terminate.

Test Setup Diagrams

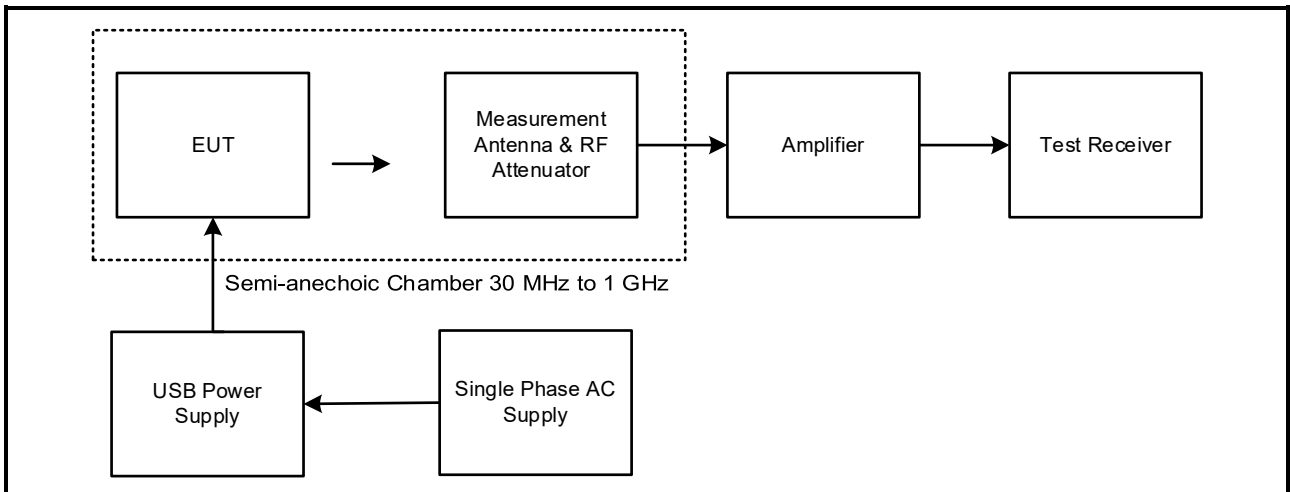
Conducted Tests:

Test Setup for all Transmitter Conducted RF Tests

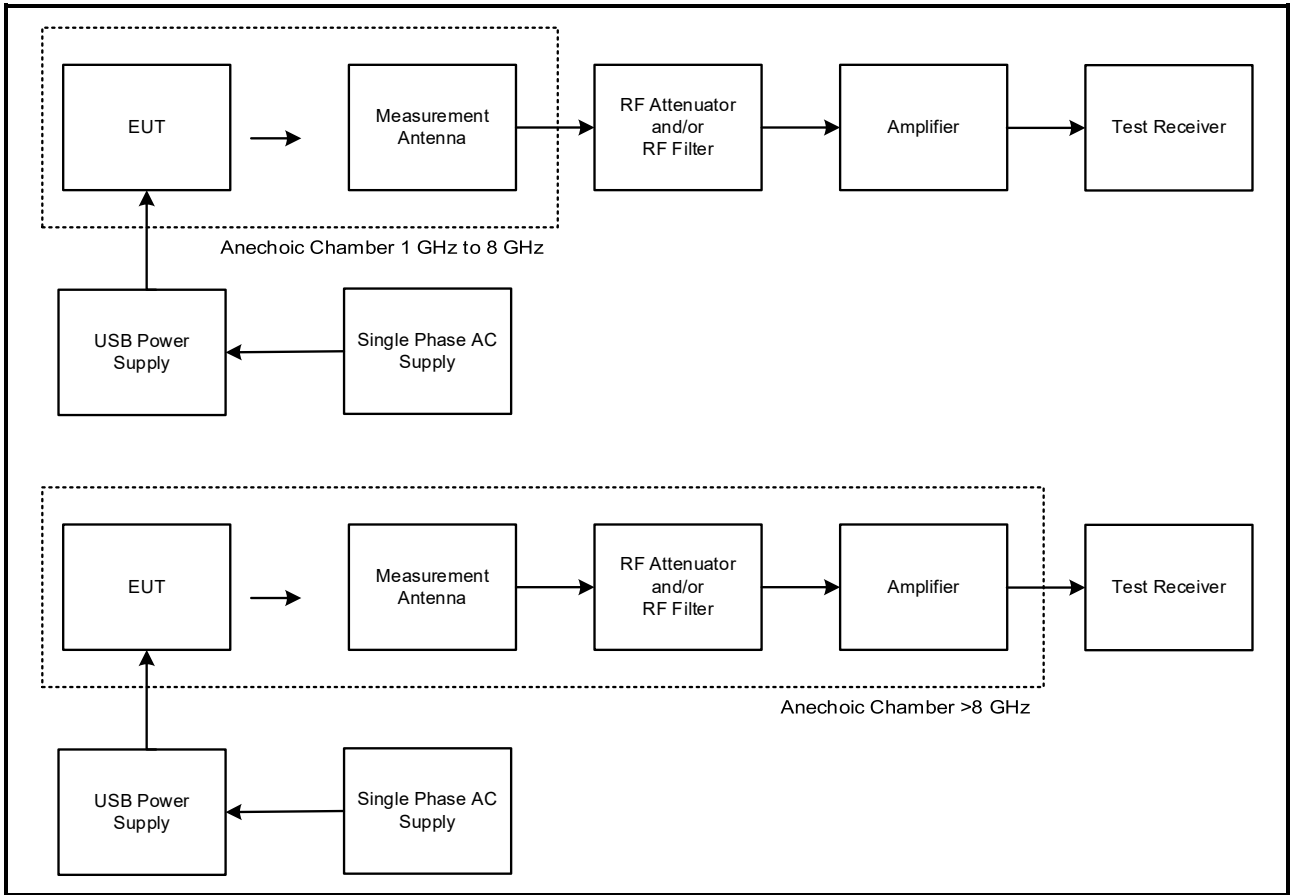


Radiated Tests:

Test Setup for Transmitter Radiated Emissions: Semi-Anechoic Chamber



Test Setup for Transmitter Radiated Emissions: Anechoic Chamber



4. Radiated Test Results

4.1. Transmitter Minimum 6 dB Bandwidth

Test Summary:

Test Engineer:	Nick Steele	Test Date:	15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Part 15.247(a)(2)
ISED Canada Reference:	RSS-Gen 6.6 / RSS-247 5.2(a)
Test Method Used:	ANSI C63.10 Section 11.8.1 Option 1

Environmental Conditions:

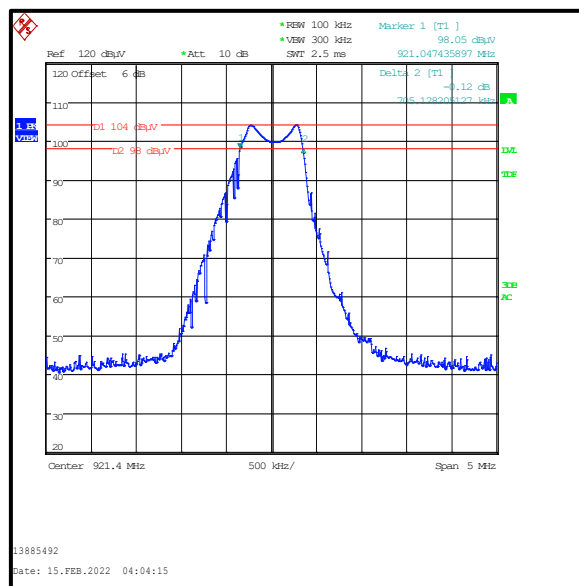
Temperature (°C):	22
Relative Humidity (%):	38

Note(s):

- 6 dB DTS bandwidth tests were performed using a test receiver in accordance with ANSI C63.10 Section 11.8.1 Option 1 measurement procedure. 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 the trace mode was Max Hold. The DTS bandwidth was measured at 6 dB down from the peak of the signal.
- The final measured value incorporates the calibrated antenna factor and cable loss. An RF level offset was entered on the spectrum analyser to compensate for the loss of the attenuator.

Results:

6 dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)	Result
705.128	≥500	205.128	Complied



4.2. Transmitter Duty Cycle

Test Summary:

Test Engineers:	Nick Steele	Test Date:	14 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Part 15.35(c)
Test Method Used:	FCC KDB 558074 Section 6 referencing ANSI C63.10 Section 11.6

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	38

Note(s):

- In order to assist with the determination of the average level of power 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 signal analyser in the time domain and calculated as follows:

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

$$10 \log (1 / (4.808/37.917)) = 9.0 \text{ dB}$$

(Field Strength) $20 \log (1 / (\text{On Time} / [\text{Period or } 100 \text{ ms whichever is the lesser}])$.

$$20 \log (1 / (4.808/37.917)) = 17.9 \text{ dB}$$

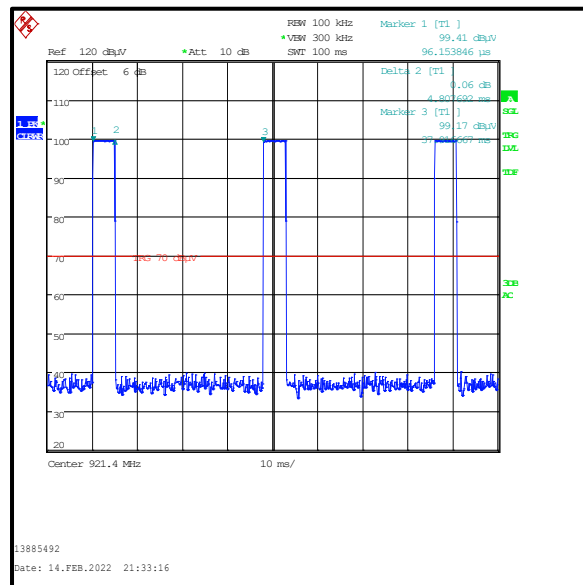
Transmitter Duty Cycle (continued)

Results Power:

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
4.807692	37.916667	9.0

Results Field Strength:

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
4.807692	37.916667	17.9



4.3. Transmitter 99% Occupied Bandwidth

Test Summary:

Test Engineers:	Nick Steele	Test Date:	15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

ISED Canada Reference:	RSS-Gen 6.6
Test Method Used:	RSS-Gen 6.6

Environmental Conditions:

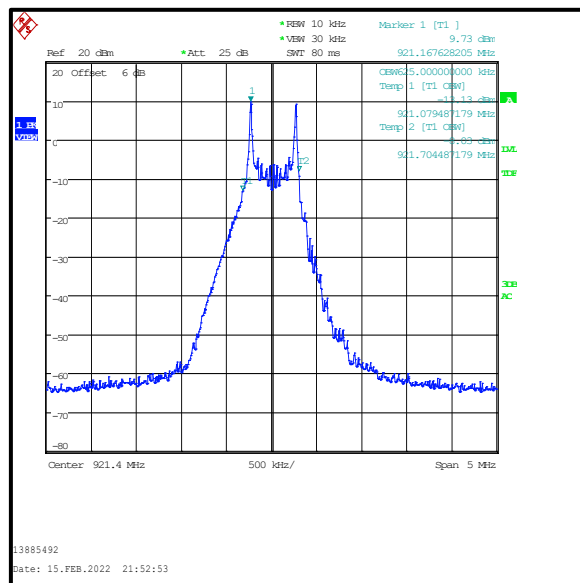
Temperature (°C):	22
Relative Humidity (%):	41

Note(s):

1. The 99% emission bandwidth was measured using the test receiver's occupied bandwidth function. The resolution bandwidth was set in the range of 1% to 5% of the occupied bandwidth and the video bandwidth set to 3 times the resolution bandwidth. The span was set to capture all products of the modulation process including emission skirts.
2. The test receiver's resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz. A peak detector was used, sweep time was set to auto and the trace mode was Max Hold. The span was set to 5 MHz.
3. The final measured value incorporates the calibrated antenna factor and cable loss. An RF level offset was entered on the spectrum analyser to compensate for the loss of the attenuator.

Results:

99% Occupied Bandwidth (kHz)
625.000



4.4. Transmitter Maximum (Average) Output Power

Test Summary:

Test Engineers:	Nick Steele	Test Date:	15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Part 15.247(b)(3)
ISED Canada Reference:	RSS-Gen 6.12 / RSS-247 5.4(d)
Test Method Used:	ANSI C63.10 Section 11.9.2.2.4

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	41

Note(s):

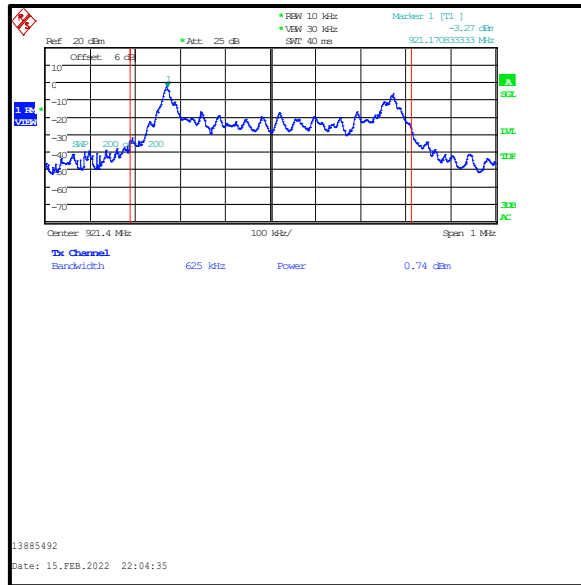
1. The EUT was transmitting at <98% duty cycle and testing was performed in accordance with ANSI C63.10 Section 11.9.2.2.4 Method AVGSA-2. The spectrum analyser resolution bandwidth was set to 10 kHz and video bandwidth of 30 kHz. An RMS detector was used, sweep time was set to auto, averaging over 200 traces. The span was set to 1 MHz. The power was integrated over the previously measured occupied bandwidth.
2. The final measured value incorporates the calibrated antenna factor and cable loss. An RF level offset was entered on the spectrum analyser to compensate for the loss of the attenuator.

Transmitter Maximum (Average) Output Power (continued)

Results:

EIRP (dBm)	Duty Cycle Correction Factor (dB)	Corrected EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Result
0.7	9.0	9.7	36.0	26.3	Complied

Corrected EIRP (dBm)	Declared Antenna Gain (dBi)	Conducted Power (dBm)	Conducted Power Limit (dBm)	Margin (dB)	Result
9.7	0.0	9.7	30.0	20.3	Complied



4.5. Transmitter Power Spectral Density

Test Summary:

Test Engineer:	Nick Steele	Test Date:	15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Part 15.247(e)
ISED Canada Reference:	RSS-247 5.2(b)
Test Method Used:	FCC KDB 558074 Section 8.4 referencing ANSI C63.10 Section 11.10.5

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	40

Note(s):

1. The EUT was transmitting at <98% duty cycle and testing was performed in accordance with ANSI C63.10 Section 11.10.5 Method AVGPSD-2. The spectrum analyser resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz. An RMS detector was used, and sweep time set manually to perform trace averaging over 200 traces. The span was set greater than 1.5 times the measured DTS bandwidth.
2. The final measured value incorporates the calibrated antenna factor and cable loss. An RF level offset was entered on the spectrum analyser to compensate for the loss of the attenuator.

Transmitter Power Spectral Density (continued)

Results:

Radiated PSD (dBm / 10 kHz)	Duty Cycle Correction Factor (dB)	Corrected Radiated PSD (dBm / 10 kHz)	Declared Antenna Gain (dBi)	Conducted PSD (dBm / 10 kHz)	Limit (dBm / 3 kHz)	Margin (dBm / 3 kHz)	Result
-3.3	9.0	5.7	0.0	5.7	8.0	2.3	Complied



4.6. Transmitter Radiated Emissions <1 GHz**Test Summary:**

Test Engineer:	Nick Steele	Test Date:	14 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-247 5.5
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5
Frequency Range	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	38

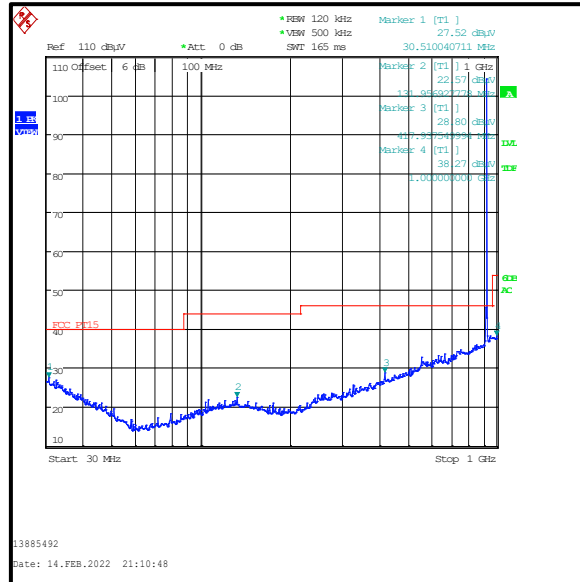
Note(s):

1. The emission at 921.4 MHz shown on the 30 MHz to 1 GHz plot is the EUT fundamental.
2. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
3. All emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the level of the noise floor. The highest level of the noise floor has been recorded in the result table.
4. Measurements 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.

Transmitter Radiated Emissions (continued)

Results:

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
1000.000	Horizontal	38.3	54.0	15.7	Complied



4.7. Transmitter Radiated Emissions >1 GHz

Test Summary:

Test Engineer:	Nick Steele	Test Dates:	14 February 2022 & 15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5
Test Method Used:	ANSI C63.10 Sections 6.3, 6.6 and 7.5. Referencing KDB 558074 11.3(a)
Frequency Range	1 GHz to 9.3 GHz

Environmental Conditions:

Temperature (°C):	22
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. All other emissions shown on the pre-scan plots were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
3. Measurements above 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 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.
4. 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.
5. In accordance with KDB 558074 11.3(a), the Average emission level has been calculated by subtracting the Duty Cycle Correction Factor, from the measured Peak emission level.
6. The emissions seen between 2402 MHz and 2480MHz, shown on the 1 GHz to 3 GHz plots, are the advertising channels generated by the EUT's *Bluetooth* LE transmitter. It was not possible to disable this transmitter.
7. ** -30 dBc limit.

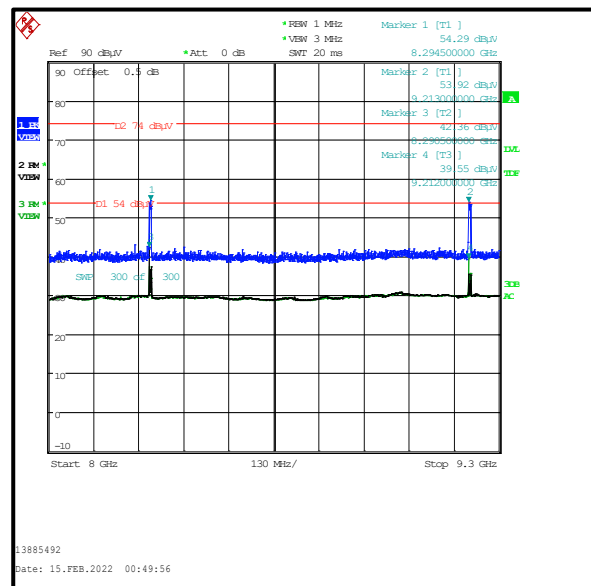
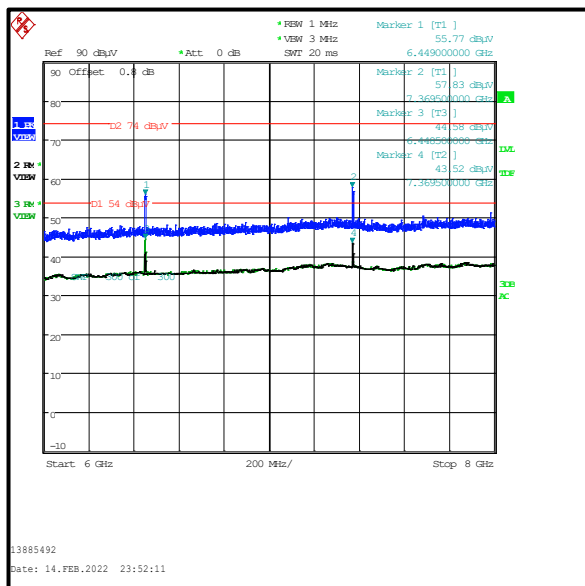
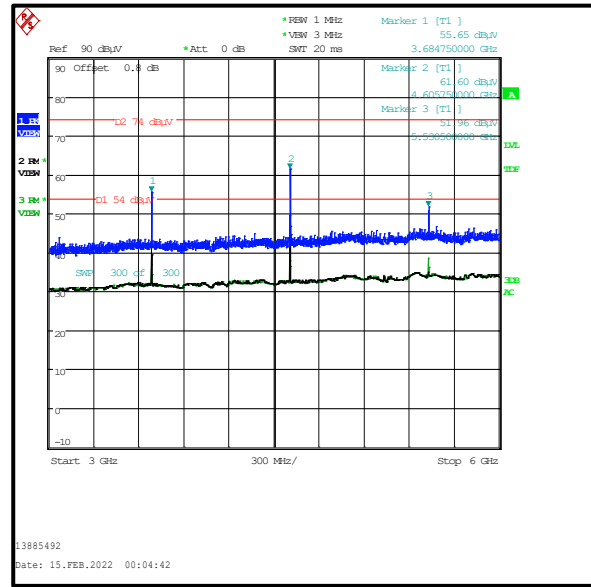
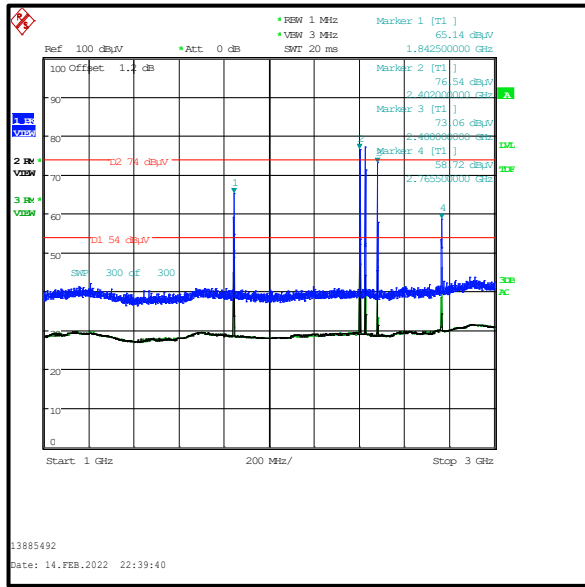
Transmitter Radiated Emissions (continued)**Results: Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
1842.343	Horizontal	65.1	74.0**	8.9	Complied
2764.989	Horizontal	59.1	74.0	14.9	Complied
3686.161	Horizontal	58.9	74.0	15.1	Complied
4608.394	Horizontal	62.3	74.0	11.7	Complied
5527.006	Horizontal	53.7	74.0**	20.3	Complied
6451.707	Horizontal	55.5	74.0**	18.5	Complied
7369.181	Horizontal	58.2	74.0	15.8	Complied
8290.485	Horizontal	54.4	74.0	19.6	Complied
9211.764	Horizontal	54.6	74.0	19.4	Complied

Results: Average

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Duty Cycle Correction (dB)	Calculated Average Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
2764.989	Horizontal	59.1	17.9	41.2	54.0	12.8	Complied
3686.161	Horizontal	58.9	17.9	41.0	54.0	13.0	Complied
4608.394	Horizontal	62.3	17.9	44.4	54.0	9.6	Complied
7369.181	Horizontal	58.2	17.9	40.3	54.0	13.7	Complied
8290.485	Horizontal	54.4	17.9	36.5	54.0	17.5	Complied
9211.764	Horizontal	54.6	17.9	36.7	54.0	17.3	Complied

Transmitter Radiated Emissions (continued)



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

4.8. Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineer:	Nick Steele	Test Date:	15 February 2022
Test Sample Serial Number:	F9731F7E4DDD		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-247 5.5
Test Method Used:	ANSI C63.10 Section 6.10

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	38

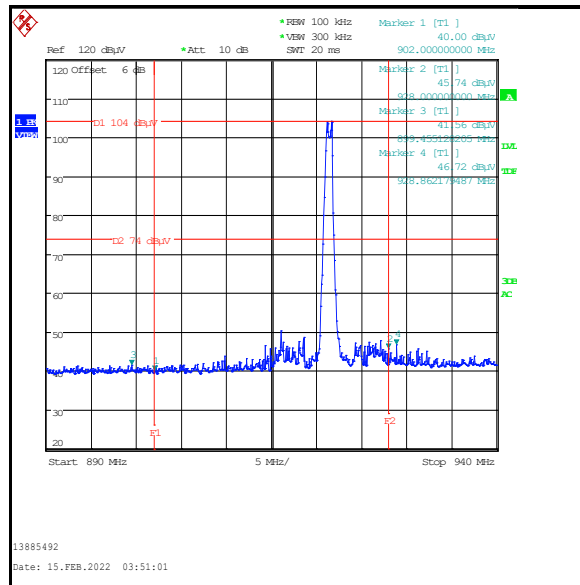
Note(s):

1. The final measured value, for the given emissions, in the tables below incorporates the calibrated antenna factor and cable loss.
2. As both band edges are adjacent to non-restricted bands, only peak measurements are required. 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. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent band (where a higher level emission was present). Marker frequencies and levels were recorded.

Transmitter Band Edge Radiated Emissions (continued)

Results:

Frequency (MHz)	Peak Level (dBµV/m)	-30 dBc Limit (dBµV/m)	Margin (dB)	Result
899.455	41.6	74.0	32.4	Complied
902.000	40.0	74.0	34.0	Complied
928.000	45.7	74.0	28.3	Complied
928.862	46.7	74.0	27.3	Complied



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