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Electromagnetic Compatibility Test Report
Report No.: S2503006 v2

TESTED FOR:	ISSUED BY:
DroneShield	EMC Technologies Pty Ltd
Level 5, 126 Phillip Street, Sydney NSW 2000, Australia	Unit 3, 87 Station Road, Seven Hills, NSW 2147, Australia
Contact: Pat Sinni	
Email: pat.sinni@droneshield.com	**Web:** www.emctech.com.au
Tel: +61 2 9995 7280	**Tel:** +61 2 9624 2777

Product Name:	DroneSentry-X Mk2
Part Number:	DRO-124-000
FCC ID:	2A9JZ-DRO-124-DO
Test Date(s):	29 May 2025 to 30 May 2025
Issue Date:	10 September 2025
Specification(s):	47 CFR Part 15 – Subpart B

The test sample, under the condition and operating mode described in this test report, complies with the standard/s listed above in accordance to the manufacturer's test plan.

Test Engineers:

Michael Kent	Rheyjane Zano	Troy Adoko

Authorized Signatory:

Rheyjane Zano
Senior Test Engineer

Except for page 1, this report shall not be reproduced, except in full.

Revision History

Version	Issue Date	Reason / Comments
1	15 August 2025	Initial issue
2	10 September 2025	Update to include MRA and Accreditation Number

General Remarks

EMC Technologies Pty Ltd hereby certify that the device(s) described herein were tested as described in this report and that the data included is that which was obtained during such testing.

EMC Technologies Pty Ltd reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. EMC Technologies Pty Ltd shall have no liability for any deductions, inferences or generalisations drawn by the customer or others from EMC Technologies Pty Ltd issued reports. This report shall not be used to claim, constitute, or imply product endorsement by EMC Technologies Pty Ltd.

Content

1   Project Overview

1.1   Test Facility

Measurements were performed at the following location:

☐   Melbourne Laboratory   176 Harrick Road, Keilor Park, VIC 3042, Australia

☒   Sydney Laboratory   Unit 3, 87 Station Road, Seven Hills, NSW 2147, Australia

EMC Technologies Pty Ltd is an independently owned Australian company that is NATA accredited to ISO 17025 for both testing and calibration and ISO 17020 for Inspection. – **Accreditation Number 5292**.

Country	Accreditation / Regulatory Body	Lab Code / Member No.
Australia	NATA	Accreditation Number: 5292
Europe	European Union	Notified Body Number: 0819
USA	FCC	Designation Number: AU0002
Canada	ISED Canada	CAB Identifier Number: AU0002

1.2   Standards Applied

Unless otherwise noted, only the cited edition applies.

47 CFR Part 15 Radio Frequency Devices
Subpart B – Unintentional Radiators

ANSI C63.4: 2014
American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

1.3   Results Summary

The test sample was provided by the customer. All results herein apply only to the test sample.

Intended Environment:	Class A

47 CFR Part 15 – Subpart B					
Section	EMC Test	Range	Applicability	Limit	Result
15.107	Conducted Emission	150 kHz to 30 MHz	AC Mains	Class A	Complied
15.109	Radiated Emission	30 MHz to 40 GHz	Enclosure	Class A	Complied
15.121(b)	Scanning Receiver	---	---	---	N/A[*1]
_[*1] EUT is not capable of converting cellular communication transmission to analog voice audio.					

1.4 Additions to, Deviations and Exclusions from the Method/Standard

No additions to, deviations or exclusions from the method/standard were performed.

1.5 Measurement Uncertainty

EMC Technologies has evaluated the equipment and the methods used to perform the EMC testing. The estimated measurement uncertainties for the various tests shown within this report are as follows:

EMC Testing	Range	Value
Conducted Emission		
• **Mains Port**	9kHz to 30 MHz	± 3.2 dB
Radiated Emission	150 kHz to 30 MHz	± 4.1 dB
	30 MHz to 300 MHz	± 5.1 dB
	300 MHz to 1000 MHz	± 4.7 dB
	1 GHz to 18 GHz	± 4.6 dB

The above expanded uncertainties are based on standard uncertainties multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Application of measurement uncertainty for this report:

The referenced uncertainty standard specifies that determination of compliance shall be based on measurements <u>without</u> taking into account measurement uncertainty. However, the measurement uncertainty shall appear in the test report.

1.6   Test Equipment

Measurement instrumentation and transducers were calibrated in accordance with the applicable standards by a NATA accredited laboratory or the National Measurement Institute (NMI).

Conducted Emission						
Manufacturer	**Model**	**Serial No.**	**Asset No.**	**Description**	**Cal. Date**	**Cal. Due**
Rohde & Schwarz	ESCI	100012	R-029	EMI Receiver	21/05/2024	21/06/2025*
TESEQ	NNB 51	47448	L-076	Single Phase LISN	07/11/2024	07/11/2025
Hewlett Packard	11947A	3107A01261	L-010	Transient Limiter	04/11/2024	04/11/2025
Rojone	LMR195-Ultraflex	---	SC-002	BNC Cable	31/10/2024	31/10/2025
Hewlett Packard	6843A	3531A00172	A-116	Programmable Power Source	Verified on Use	

_*Calibration due date extended by 1-month as per EMC Technologies Quality Management Systems

Radiated Emission						
Manufacturer	**Model**	**Serial No.**	**Asset No.**	**Description**	**Cal. Date**	**Cal. Due**
Rohde & Schwarz	ESU40	100183	R-038	EMI Receiver	30/04/2024	30/05/2025*
Rohde & Schwarz	ESCI	100012	R-029	EMI Receiver	21/05/2024	21/06/2025*
SunAR RF Motion	JB1	A021318	A-430	Bilog Antenna	24/04/2024	24/04/2027
EMCT	---	---	SC-028	RF Cable	29/10/2024	29/10/2025
Huber & Suhner	SF104A/2x11N-47/4m	Sn MY709/4A	SC-041	RF Cable	31/10/2024	31/10/2025
EMCO	3115	3823	A-324	Horn Antenna	18/12/2023	18/12/2026
ETS-Lindgren	3160-09	00066033	A-305	Horn Antenna	18/01/2024	18/01/2027
ETS-Lindgren	3160-10	00064180	A-308	Horn Antenna	18/01/2024	18/01/2027
Pasternack	PE319-36	63308	C-413	Microwave Cable	18/06/2024	18/06/2025
Pasternack	PE319-36	83308	C-414	Microwave Cable	18/06/2024	18/06/2025
RFI Industries	S800	876	S-032	Room 3, 3m SAC	16/05/2024	16/05/2026
Hewlett Packard	6843A	3531A00172	A-116	Programmable Power Source	Verified on Use	

_*Calibration due date extended by 1-month as per EMC Technologies Quality Management Systems

2   Equipment Under Test

2.1   EUT Detail

(EUT details are supplied by customer)

Product Name:	DroneSentry-X Mk2
Model:	DRO-124
Manufacturer:	DroneShield
Serial No:	0835979542051
Power Rating:	28 Vdc
Software Version:	6.3.0
Hardware Version:	E
Highest Internal Frequency:	1.2 GHz CPU 8.6001 GHz FPGA DACs
Description:	DroneSentry-X Mk2 is a software-defined detection and adaptive disruption system. The DroneSentry-X Mk2 is suitable for mobile operations, field expedient pop-up, and fixed-site protection. It is a cost-effective solution with both detect and optional defeat capability within a single self-contained platform. Designed to be deployed in harsh environments, the DroneSentry-X Mk2 can be mounted to standard vehicle roof racks, on military vehicles, surface vessels, and unmanned mobile platforms. It can also be deployed as a permanent or fixed site install on standard tripod masts or towers, and supports local or remote operations.

Radio Module	
Manufacturer:	Xilinx
Model	ZU49-DR
Operating Bands	433 MHz (400-480 MHz), 868 MHz (863-870 MHz), 915 MHz (902-928 MHz), 1.2 GHz (1176-1280 MHz), 2.4 GHz (2400-2483.5 MHz), 5.2 GHz (5150-5350 MHz, 5362 MHz, 5399 MHz, 5436 MHz, 5473 MHz, 5510 MHz, 5547 MHz, 5584 MHz, 5621 MHz), 5.8 GHz (5725-5850 MHz)
Technology:	OFDM, FHSS, DSSS and Wi-Fi Detection
Modulation:	Detection only, signals are not demodulated
Antenna Type and Gain:	Type: Cavity Backed Spiral Antenna (CBSA) Gain (Typical): 433 MHz: 2 dBic 868 MHz: 4.6 dBic 915 MHz: 4.6 dBic 1.2 GHz: 5.71 dBic 2.4 GHz: 5.28 dBic 5.2 GHz: 5.78 dBic 5.8 GHz: 5.76 dBic
Comment:	
Module is a transceiver, but configured and programmed only as a receiver	

2.2   Reference Document

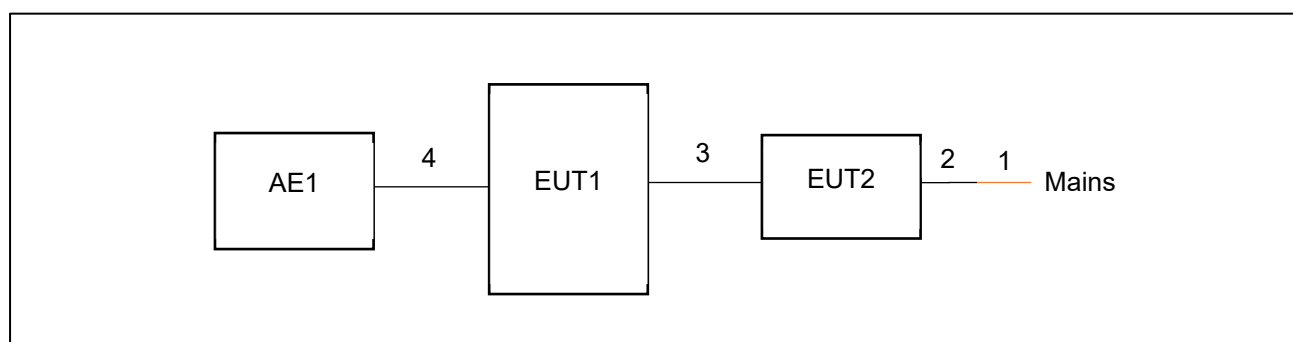| No.	Document Title	Issue No.
1	S2503006 Form 005 Customer and EUT Information (DroneSentry-X Mk2)	--
2	DroneSentry-X Mk2 DO Manual	V2.5
3	RFDeviceManager DO Manual	V2.3

2.3   Test Configuration

Installation Type:	☒Tabletop ☐Floor-Standing ☐Combination Tabletop and Floor-Standing

EUT				
No.	**Manufacturer**	**Model**	**Serial No.**	**Remark**
EUT1	DroneShield	DRO-124	0835979542051	PN: DRO-124-000 Mounted on the Roof Mount Plate with Isolator Plate Mounting
EUT2	DroneShield	HP2	3021223208008003	Power Supply Unit PN: DRO-302-000

Auxiliary Equipment				
No.	**Description**	**Model**	**Serial No.**	**Remark**
AE1	Rugged Tablet	F110	RPB03F1162	Mfg.: GETAC

Cable used for testing				
No.	**Description**	**Length**	**Shielded**	**Remark**
1	IEC mains power lead with AC mains socket AU	< 3m	No	PN: DRO-111-108
2	IEC PSU Cable	2m	No	PN: DRO-111-121
3	DC Power Cable	15m	No	PN: DRO-111-122
4	RJ45 data cable	15m	Yes	PN: DRO-111-201

Block Diagram

2.4 Operating Test Mode

Mode No.	Description
1	The EUT was set up in accordance with standard and as per the customer's instructions.
	The DroneSentry-X Mk2 (EUT1) was powered up through HP2 PSU (EUT2). A rugged tablet was connected to the EUT1 via ethernet cable.
	Once logged into RFDeviceManager using the tablet, in the settings of Detection Mode: Radio, Wi-Fi, Enhanced Awareness, Remote ID and Drone ID were enabled.
	In the Detector and Filters page, all frequency band toggles were enabled and check boxes were checked and submit button was selected.
	Prior to and following each test, the functionality of the EUT was verified by performing the Device Power Test and Device Data Test as per Section 9 of the EUT Manual.

2.5 Modifications

No modifications were required to achieve compliance.

3 Evaluation of Emission Test Results

Conducted and/or Radiated Emission measurements were tested according to the following configuration/s:

Limit:	Class A	
Receiver Bandwidth:	6 dB	
Detector:	0.009 – 0.15 MHz:	QP
	0.15 - 30 MHz:	QP, AV
	30 - 1000 MHz:	QP
	Above 1000 MHz:	PK, AV
Antenna:	☐ 0.009 - 30 MHz	Loop Antenna
	☒ 30 - 1000 MHz	Biconilog
	☒ 1 - 18 GHz	Double-Ridged Guide Horn
	☒ 18 - 40 GHz	Standard Gain Horn

Margin is calculated by subtracting the emission level by limit value. Negative margin signifies emission level below the specified limit.

3.1 Conducted Emission

3.1.1 Measurement Procedure

The EMI Receiver was operated under program control using the Max-Hold function and automatic frequency scanning, measurement, and data logging techniques. The specified 0.15 MHz to 30 MHz frequency range was sub-divided into sub-ranges to ensure that all short duration peaks were captured.

The various operating modes of the system were investigated. For each of the sub-ranges, the EMI receiver was set to continuous scan with the Peak detector set to Max-Hold mode. The Quasi-Peak detector and the Average detector were then invoked to measure the actual Quasi-Peak and Average level of the most significant peaks, which were detected.

Calculation of voltage level

The voltage levels were automatically measured in software and compared to the test limit. The method of calculation was as follows:
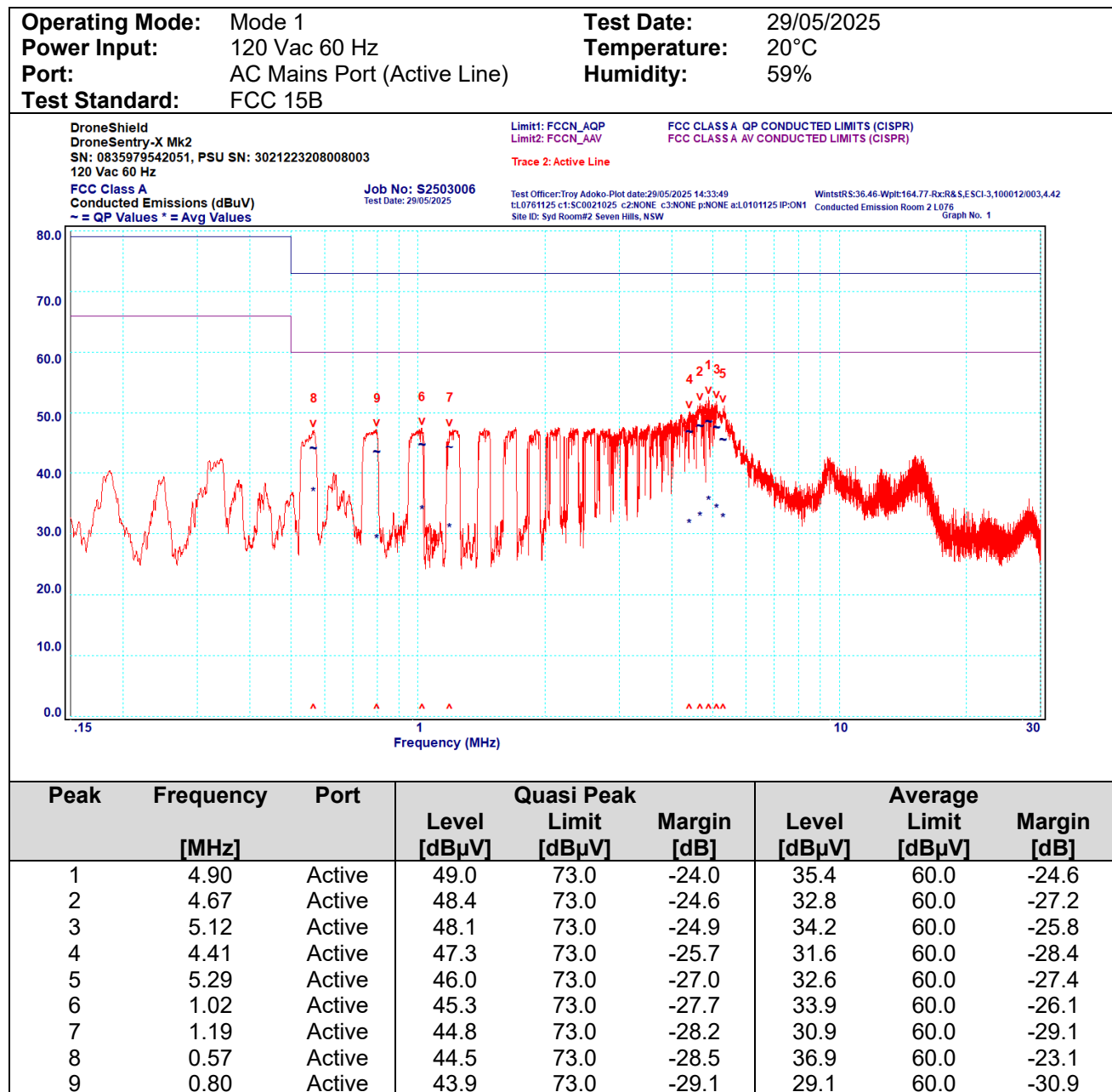
$$V_{emi} = V_{rx} + L$$

Where: V_{emi} = The Measured EMI voltage in dBμV to be compared to the limit.

V_{rx} = The Voltage in dBμV read directly at the EMI receiver.

L = The insertion loss in dB of the LISN, cables and transient Limiter

3.1.2 Measurement Data – 150 kHz to 30 MHz

Operating Mode:	Mode 1		**Test Date:**	29/05/2025
Power Input:	120 Vac 60 Hz		**Temperature:**	20°C
Port:	AC Mains Port (Active Line)		**Humidity:**	59%
Test Standard:	FCC 15B			

Peak	Frequency [MHz]	Port	Quasi Peak			Average		
			Level [dBµV]	Limit [dBµV]	Margin [dB]	Level [dBµV]	Limit [dBµV]	Margin [dB]
1	4.90	Active	49.0	73.0	-24.0	35.4	60.0	-24.6
2	4.67	Active	48.4	73.0	-24.6	32.8	60.0	-27.2
3	5.12	Active	48.1	73.0	-24.9	34.2	60.0	-25.8
4	4.41	Active	47.3	73.0	-25.7	31.6	60.0	-28.4
5	5.29	Active	46.0	73.0	-27.0	32.6	60.0	-27.4
6	1.02	Active	45.3	73.0	-27.7	33.9	60.0	-26.1
7	1.19	Active	44.8	73.0	-28.2	30.9	60.0	-29.1
8	0.57	Active	44.5	73.0	-28.5	36.9	60.0	-23.1
9	0.80	Active	43.9	73.0	-29.1	29.1	60.0	-30.9

Operating Mode:	Mode 1	**Test Date:**	29/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	20°C
Port:	AC Mains Port (Neutral Line)	**Humidity:**	59%
Test Standard:	FCC 15B		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
FCC Class A
Conducted Emissions (dBuV)
~ = QP Values * = Avg Values

Limit1: FCCN_AQP — FCC CLASS A QP CONDUCTED LIMITS (CISPR)
Limit2: FCCN_AAV — FCC CLASS A AV CONDUCTED LIMITS (CISPR)
Trace 2: Neutral Line

Job No: S2503006
Test Date: 29/05/2025

Test Officer:Troy Adoko-Plot date:29/05/2025 14:34:36
t:L0761125 c1:SC0021025 c2:NONE c3:NONE p:NONE a:L0101125 IP:ON1
Site ID: Syd Room#2 Seven Hills, NSW

WinststRS:36.46-Wplt:164.77-Rx:R&S,ESCI-3,100012/003,4.42
Conducted Emission Room 2 L076
Graph No. 2

Peak	Frequency [MHz]	Port	Quasi Peak			Average		
			Level [dBµV]	Limit [dBµV]	Margin [dB]	Level [dBµV]	Limit [dBµV]	Margin [dB]
1	4.88	Neutral	47.8	73.0	-25.2	33.1	60.0	-26.9
2	5.12	Neutral	46.5	73.0	-26.5	33.1	60.0	-26.9
3	4.40	Neutral	46.2	73.0	-26.8	30.2	60.0	-29.8
4	5.07	Neutral	46.0	73.0	-27.0	30.7	60.0	-29.3
5	4.59	Neutral	45.6	73.0	-27.4	29.3	60.0	-30.7
6	1.03	Neutral	40.8	73.0	-32.2	29.1	60.0	-30.9
7	15.35	Neutral	40.8	73.0	-32.2	33.2	60.0	-26.8
8	0.75	Neutral	40.7	73.0	-32.3	30.5	60.0	-29.5
9	0.56	Neutral	40.6	73.0	-32.4	33.6	60.0	-26.4
10	0.19	Neutral	39.4	79.0	-39.6	33.9	66.0	-32.1

3.1.3 Minimum Margin

Mode	Line	Frequency	Detector	Margin
Mode 1, 120 Vac 60 Hz	Active	0.57 MHz	AV	-23.1 dB
The EUT complied with FCC Class A limit.				

3.2   Radiated Emission

3.2.1   Measurement Procedure

The EUT was set up on the middle of turntable above the ground plane. The EMI Receiver was operated under software control via the PC Controller through the IEEE.488 Interface Bus Card Adaptor. The test frequency range was sub-divided into smaller bands with sufficient frequency resolution to permit reliable display and identification of possible EMI peaks while also permitting fast frequency scan times.

The EUT was slowly rotated with the Peak Detector set to Max-Hold. This was performed for at least two antenna heights. Each significant peak was then investigated and maximised with the Quasi-Peak detector for measurements below 1 GHz; and an Average and a Peak detector for measurements above 1 GHz. The measurement data for each frequency range was automatically corrected by the software for cable losses, antenna factors and preamplifier gain and all data were then stored on disk in sequential data files. This process was performed for both horizontal and vertical antenna polarisations.

Calculation of field strength

The field strength was calculated automatically by software using pre-stored calibration data. The method of calculation is shown below:

$$E = V + AF - G + L$$

Where: E = Radiated Field Strength in dBµV/m.

V = EMI Receiver Voltage in dBµV

AF = Antenna Factor in dB/m. (stored as a data array)

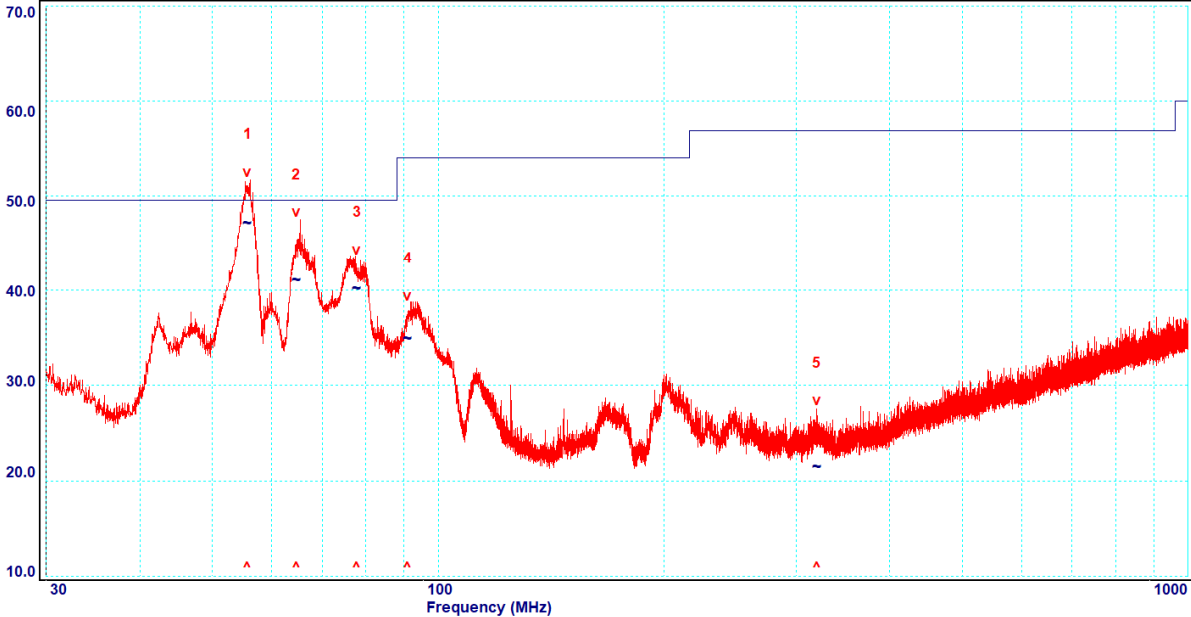G = Preamplifier Gain in dB. (stored as a data array)

L = Cable loss in dB. (stored as a data array of Insertion Loss versus frequency)

3.2.2 Measurement Data – 30 to 1000 MHz

Operating Mode:	Mode 1	**Test Date:**	30/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	22°C
Measurement Distance:	3 m	**Humidity:**	44%
Test Standard:	FCC 15B		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
FCC Class A
Radiated Emissions (dBuV/m)
v = Peak Values   # = Ambient

Limit1: FCC-A3   FCC CLASS A 3m LIMITS

Trace 2: Vertical Emissions

Job No: S2503006
Test Date: 30/05/2025

Test Officer:Michael Kent-Plot date:30/05/2025 14:19:48
t:A4300527 c1:SC0281025 c2:SC0411025 c3:NONE p:NONE a:NONE IP:ON1A430 with 4db Atten for Room 3
Site ID: Syd Room#3 Seven Hills, NSW

WintstRS:36.46-Wplt:164.77-Rx:R&S,ESCI-3,100012/003,4.42
Graph No. 3

Peak	Frequency [MHz]	Polarisation	Level [dBµV/m]	QP Limit [dBµV/m]	Margin [dB]
1	55.69	Vertical	47.6	49.6	-2.0*
2	64.68	Vertical	41.5	49.6	-8.1
3	77.91	Vertical	40.7	49.6	-8.9
4	91.05	Vertical	35.4	54.0	-18.6
5	319.58	Vertical	22.0	56.9	-34.9

Comment:

This result falls within the laboratory's measurement uncertainty.

Operating Mode:	Mode 1	Test Date:	30/05/2025
Power Input:	120 Vac 60 Hz	Temperature:	22°C
Measurement Distance:	3 m	Humidity:	44%
Test Standard:	FCC 15B		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
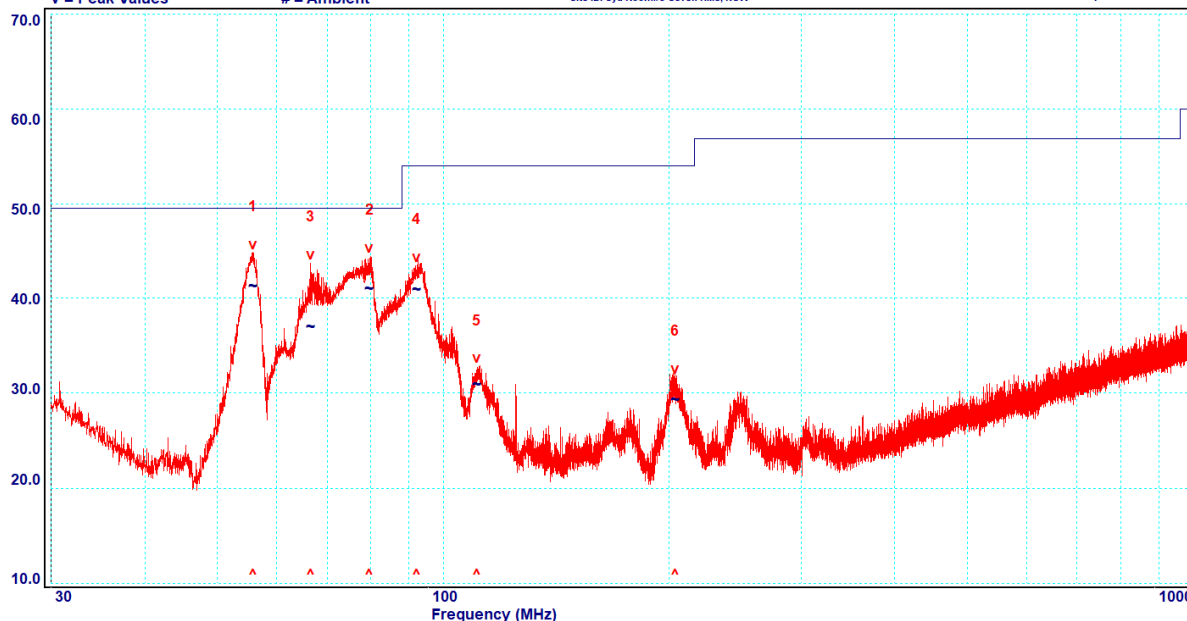FCC Class A
Radiated Emissions (dBuV/m)
v = Peak Values   # = Ambient

Limit1: FCC-A3   FCC CLASS A 3m LIMITS

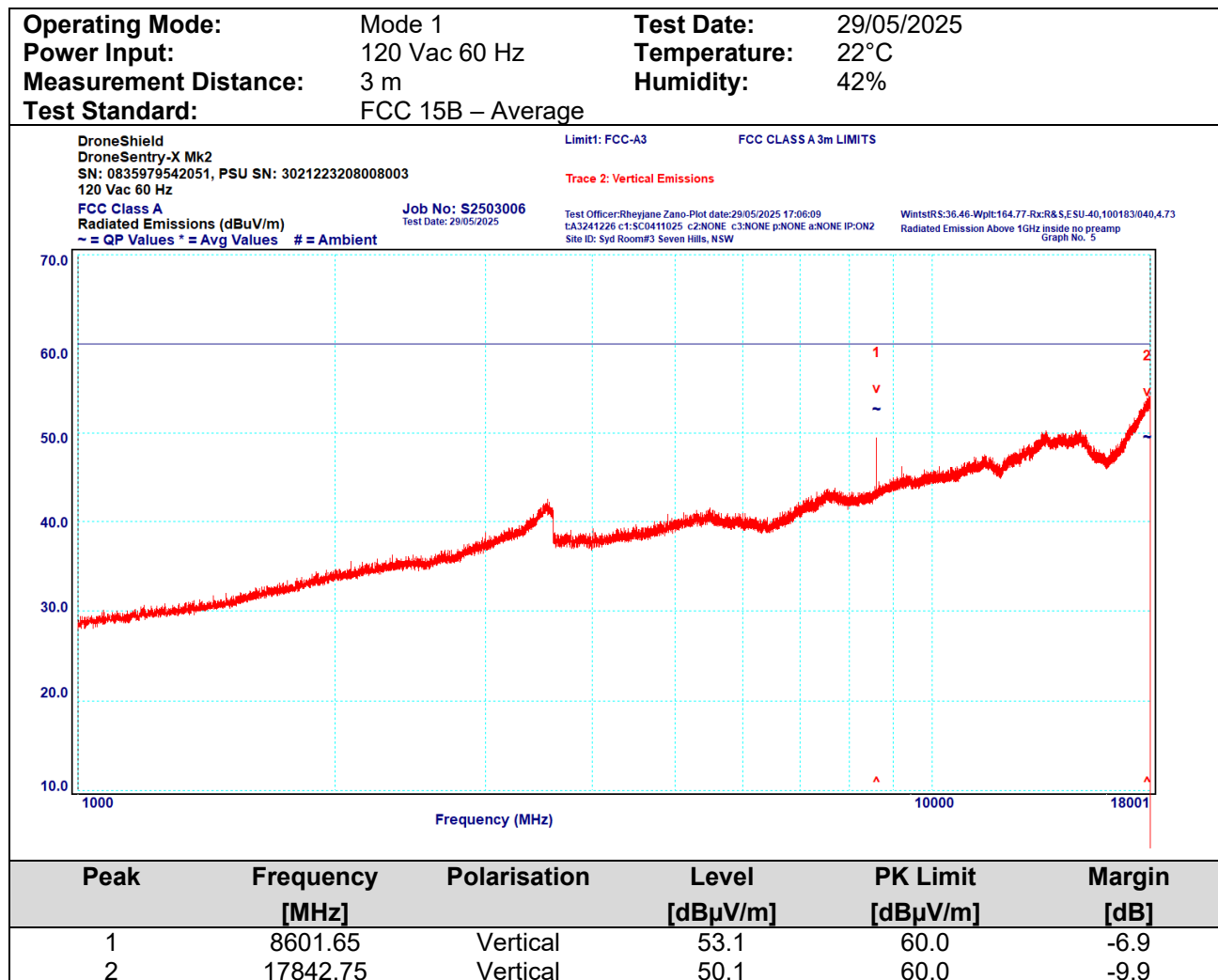Trace 2: Horizontal Emissions

Job No: S2503006
Test Date: 30/05/2025

Test Officer:Michael Kent-Plot date:30/05/2025 14:20:28
t:A4300527 c1:SC0281025 c2:SC0411025 c3:NONE p:NONE a:NONE IP:ON1A430 with 4db Atten for Room 3
Site ID: Syd Room#3 Seven Hills, NSW

WinstRS:36.46-Wplt:164.77-Rx:R&S,ESCI-3,100012/003,4.42

Graph No. 4

Peak	Frequency [MHz]	Polarisation	Level [dBµV/m]	QP Limit [dBµV/m]	Margin [dB]
1	55.76	Horizontal	41.8	49.6	-7.8
2	79.75	Horizontal	41.5	49.6	-8.1
3	66.55	Horizontal	37.5	49.6	-12.1
4	92.11	Horizontal	41.4	54.0	-12.6
5	110.91	Horizontal	31.4	54.0	-22.6
6	203.73	Horizontal	29.8	54.0	-24.2

3.2.3 Measurement Data – 1 to 18 GHz

Operating Mode:	Mode 1	**Test Date:**	29/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	22°C
Measurement Distance:	3 m	**Humidity:**	42%
Test Standard:	FCC 15B – Average		

Peak	Frequency [MHz]	Polarisation	Level [dBμV/m]	PK Limit [dBμV/m]	Margin [dB]
1	8601.65	Vertical	53.1	60.0	-6.9
2	17842.75	Vertical	50.1	60.0	-9.9

Operating Mode:	Mode 1	Test Date:	29/05/2025
Power Input:	120 Vac 60 Hz	Temperature:	22°C
Measurement Distance:	3 m	Humidity:	42%
Test Standard:	FCC 15B – Average		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
FCC Class A
Radiated Emissions (dBuV/m)
~ = QP Values * = Avg Values # = Ambient

Limit1: FCC-A3   FCC CLASS A 3m LIMITS
Trace 2: Horizontal Emissions
Job No: S2503006
Test Date: 29/05/2025
Test Officer:Rheyjane Zano-Plot date:29/05/2025 17:06:52
t:A3241226 c1:SC0411025 c2:NONE c3:NONE p:NONE a:NONE IP:ON2
Site ID: Syd Room#3 Seven Hills, NSW
WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
Radiated Emission Above 1GHz inside no preamp
Graph No. 6

Peak	Frequency [MHz]	Polarisation	Level [dBµV/m]	AV Limit [dBµV/m]	Margin [dB]
1	17803.52	Horizontal	50.1	60.0	-9.9
2	8601.67	Horizontal	48.4	60.0	-11.6

Operating Mode:	Mode 1	Test Date:	29/05/2025
Power Input:	120 Vac 60 Hz	Temperature:	22°C
Measurement Distance:	3 m	Humidity:	42%
Test Standard:	FCC 15B – Peak		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz

FCC Class A
Radiated Emissions (dBuV/m)
~ = QP Values * = Avg Values   # = Ambient
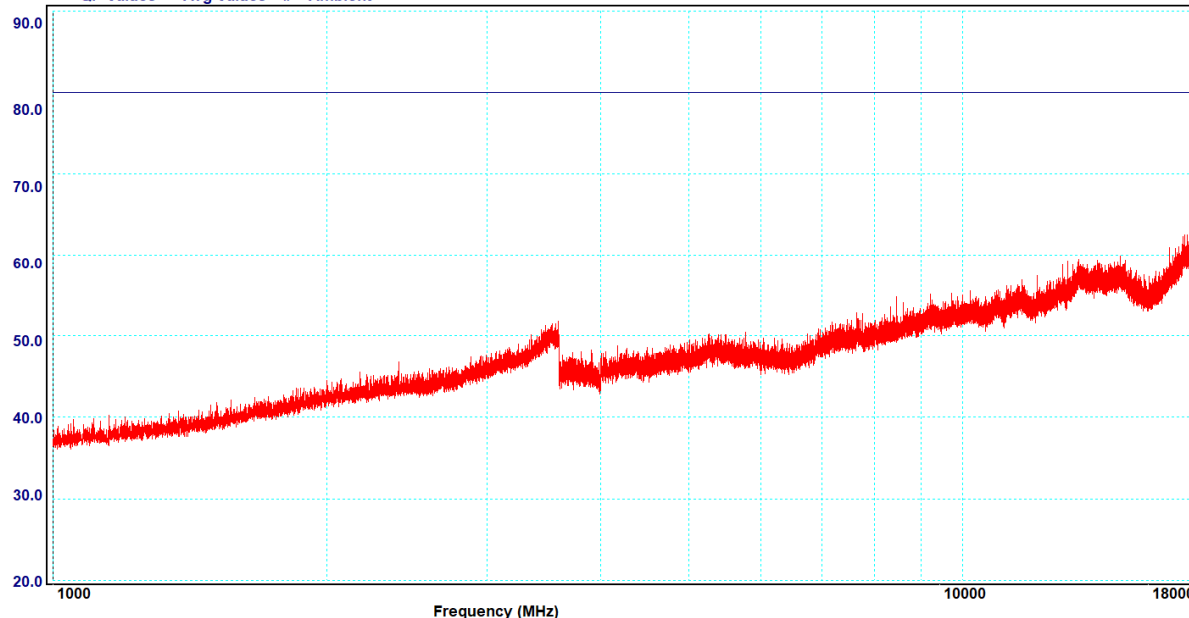
Job No: S2503006
Test Date: 29/05/2025

Limit1: FCC-A3PK   FCC CLASS A RAD PEAK LIMITS (+20dB) 1 - 40GHz at 3

Trace 2: Vertical Emissions

Test Officer:Rheyjane Zano-Plot date:29/05/2025 17:09:14
t:A3241226 c1:SC0411025 c2:NONE c3:NONE p:NONE a:NONE IP:ON2
Site ID: Syd Room#3 Seven Hills, NSW

WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
Radiated Emission Above 1GHz inside no preamp
Graph No. 7

Comment:

* No peaks were measured within 10 dB of the limit.

Operating Mode:	Mode 1	**Test Date:**	29/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	22°C
Measurement Distance:	3 m	**Humidity:**	42%
Test Standard:	FCC 15B – Peak		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
FCC Class A
Radiated Emissions (dBuV/m)
~ = QP Values * = Avg Values   # = Ambient
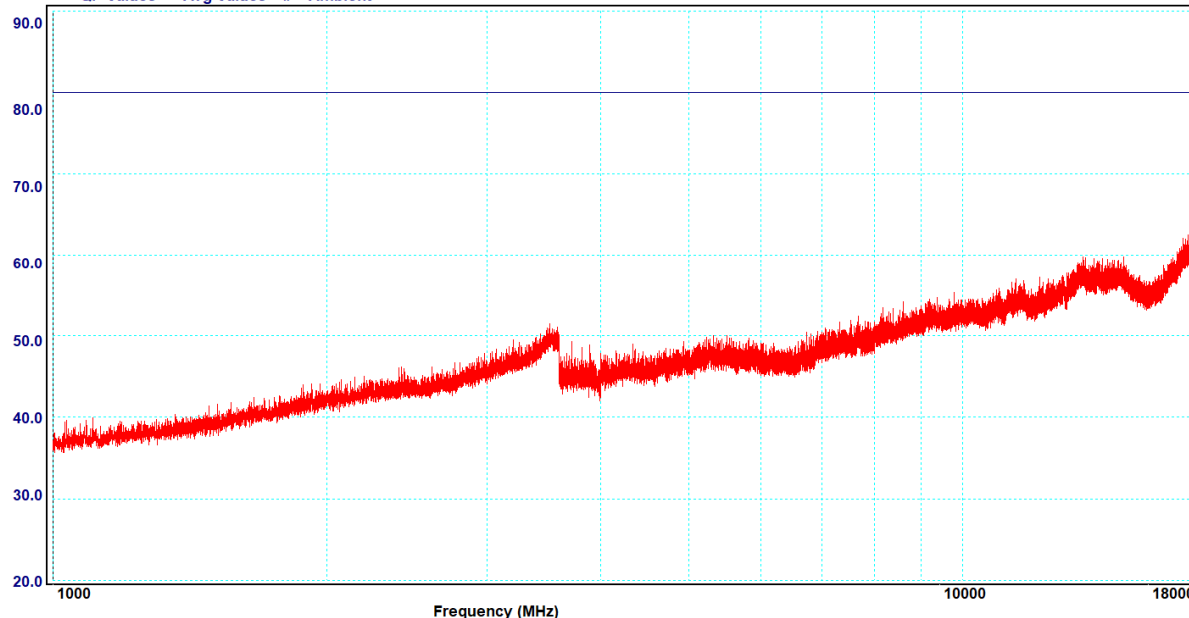
Limit1: FCC-A3PK   FCC CLASS A RAD PEAK LIMITS (+20dB) 1 - 40GHz at 3

Trace 2: Horizontal Emissions

Job No: S2503006
Test Date: 29/05/2025

Test Officer:Rheyjane Zano-Plot date:29/05/2025 17:08:10
t:A3241226 c1:SC0411025 c2:NONE c3:NONE p:NONE a:NONE IP:ON2
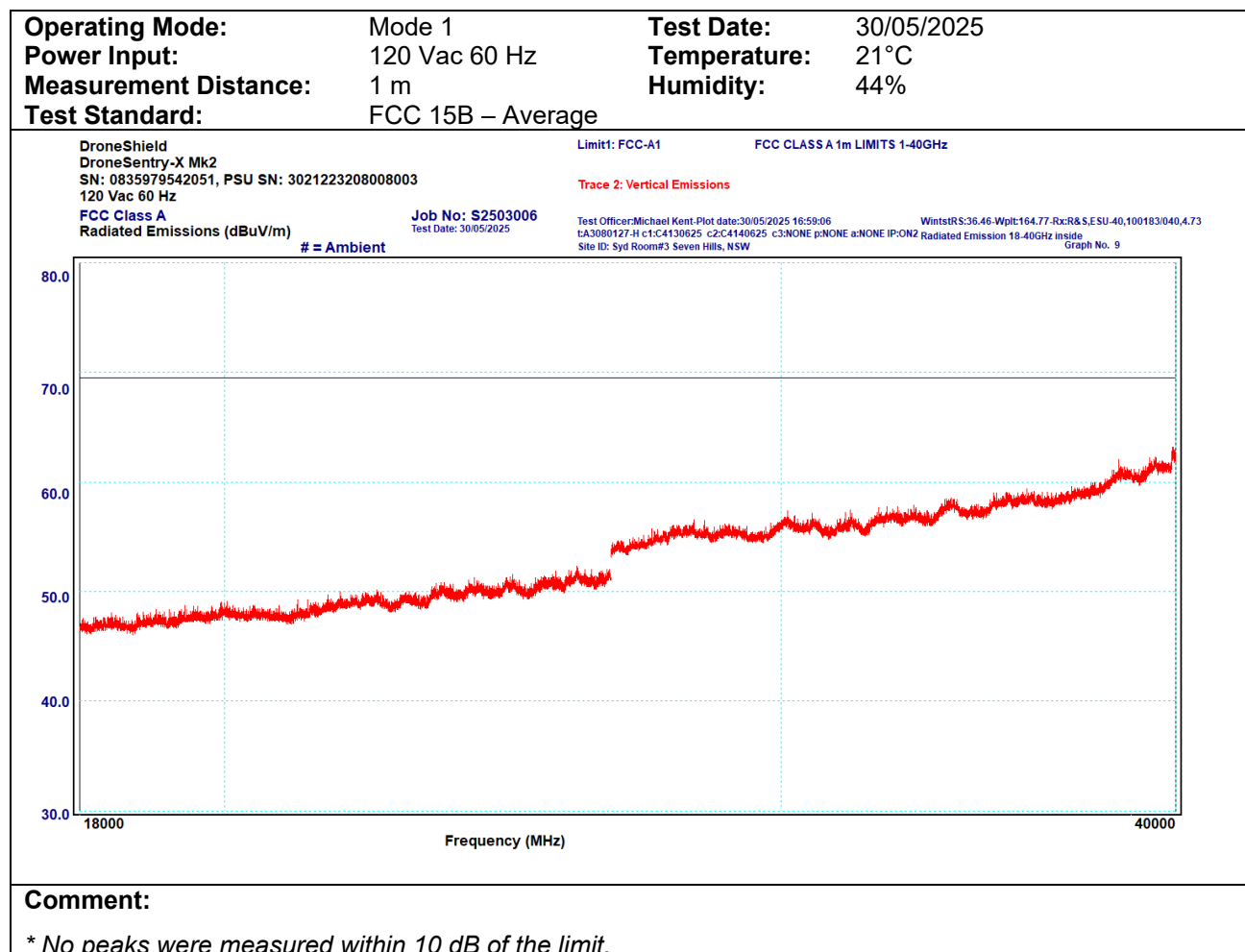Site ID: Syd Room#3 Seven Hills, NSW

WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
Radiated Emission Above 1GHz inside no preamp
Graph No. 8

Comment:

No peaks were measured within 10 dB of the limit.

3.2.4 Measurement Data – 18 to 40 GHz

Operating Mode:	Mode 1	**Test Date:**	30/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	21°C
Measurement Distance:	1 m	**Humidity:**	44%
Test Standard:	FCC 15B – Average		

Comment:

* No peaks were measured within 10 dB of the limit.

Operating Mode:	Mode 1	Test Date:	30/05/2025
Power Input:	120 Vac 60 Hz	**Temperature:**	21°C
Measurement Distance:	1 m	**Humidity:**	44%
Test Standard:	FCC 15B – Average		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
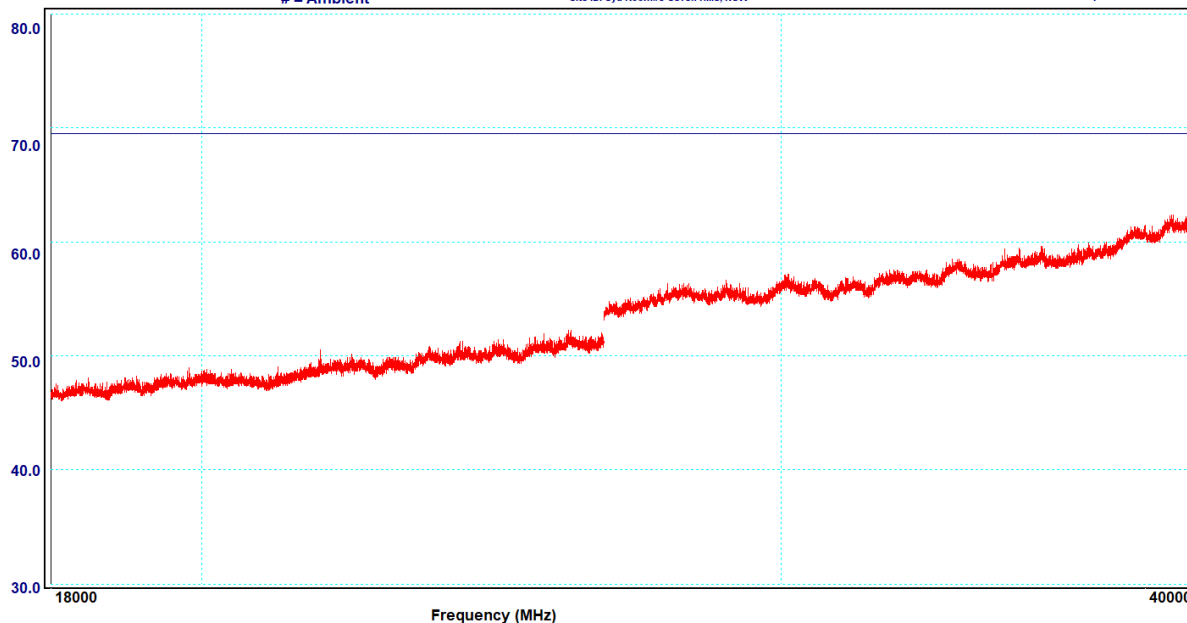**FCC Class A**
Radiated Emissions (dBuV/m)
= Ambient

Job No: S2503006
Test Date: 30/05/2025

Limit1: FCC-A1   **FCC CLASS A 1m LIMITS 1-40GHz**

Trace 2: Horizontal Emissions

Test Officer:Michael Kent-Plot date:30/05/2025 16:59:33   WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
t:A3080127-H c1:C4130625 c2:C4140625 c3:NONE p:NONE a:NONE IP:ON2 Radiated Emission 18-40GHz inside
Site ID: Syd Room#3 Seven Hills, NSW   Graph No. 10

Comment:

* No peaks were measured within 10 dB of the limit.

Operating Mode:	Mode 1	Test Date:	30/05/2025
Power Input:	120 Vac 60 Hz	Temperature:	21°C
Measurement Distance:	1 m	Humidity:	44%
Test Standard:	FCC 15B – Peak		

DroneShield
DroneSentry-X Mk2
SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz

FCC Class A
Radiated Emissions (dBuV/m)
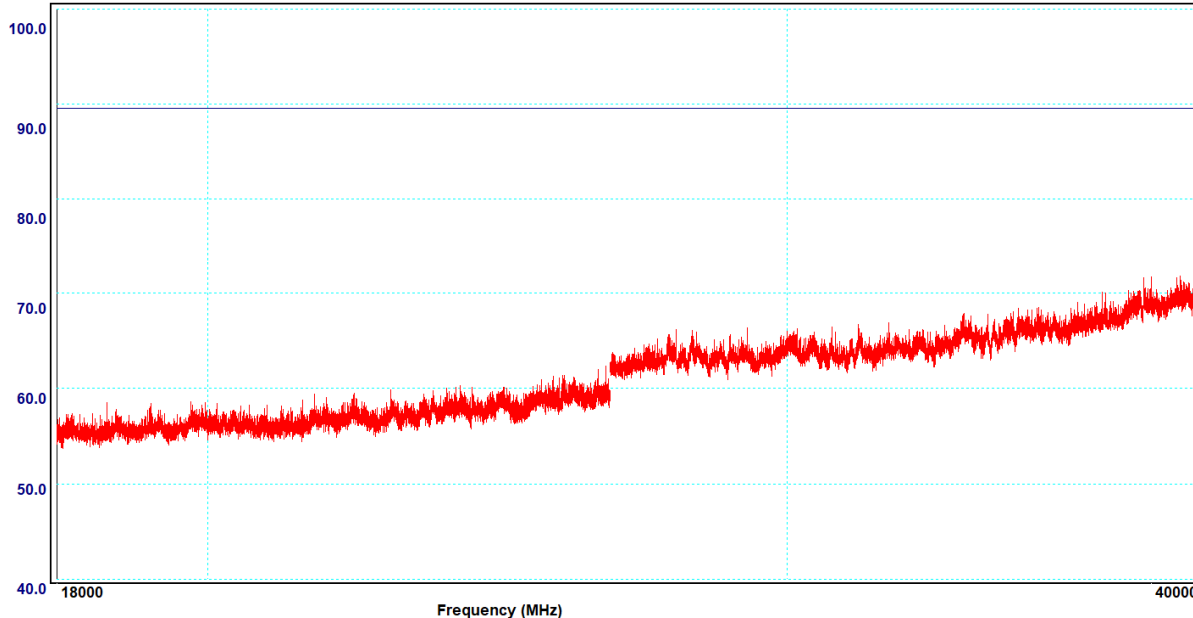v = Peak Values   # = Ambient

Job No: S2503006
Test Date: 30/05/2025

Limit1: FCC-A1PK   FCC CLASS A RAD PEAK LIMITS 1 - 40GHz at 1m

Trace 2: Vertical Emissions

Test Officer:Michael Kent-Plot date:30/05/2025 17:00:02   WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
t:A3080127-H c1:C4130625 c2:C4140625 c3:NONE p:NONE a:NONE IP:ON2 Radiated Emission 18-40GHz inside
Site ID: Syd Room#3 Seven Hills, NSW   Graph No. 11

Comment:

* No peaks were measured within 10 dB of the limit.

Operating Mode:	Mode 1	Test Date:	30/05/2025
Power Input:	120 Vac 60 Hz	Temperature:	21°C
Measurement Distance:	1 m	Humidity:	44%
Test Standard:	FCC 15B – Peak		

DroneShield
DroneSentry-X Mk2
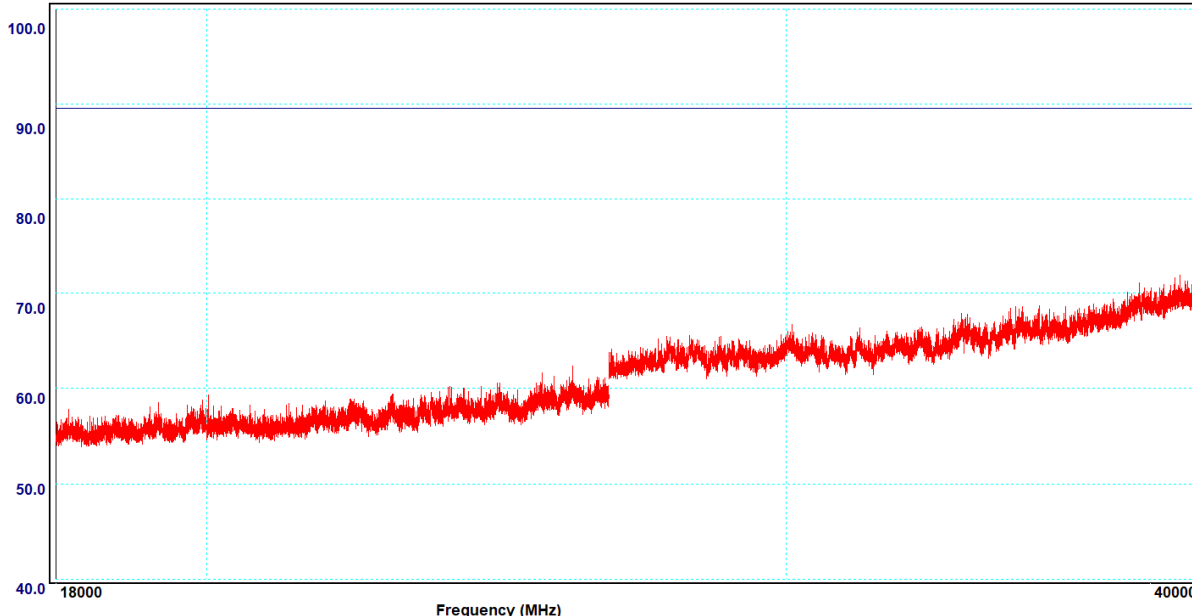SN: 0835979542051, PSU SN: 3021223208008003
120 Vac 60 Hz
FCC Class A
Radiated Emissions (dBuV/m)
v = Peak Values   # = Ambient

Limit1: FCC-A1PK   FCC CLASS A RAD PEAK LIMITS 1 - 40GHz at 1m

Trace 2: Horizontal Emissions

Job No: S2503006
Test Date: 30/05/2025

Test Officer:Michael Kent-Plot date:30/05/2025 17:00:25   WintstRS:36.46-Wplt:164.77-Rx:R&S,ESU-40,100183/040,4.73
t:A3080127-H c1:C4130625 c2:C4140625 c3:NONE p:NONE a:NONE IP:ON2 Radiated Emission 18-40GHz inside
Site ID: Syd Room#3 Seven Hills, NSW   Graph No. 12

Comment:

* No peaks were measured within 10 dB of the limit.

3.2.5 Minimum Margin

Mode	Polarisation	Frequency	Detector	Margin
Mode 1, 120 Vac 60 Hz	Vertical	55.69 MHz	QP	-2.0 dB*
*This result falls within the laboratory's measurement uncertainty.				
The EUT complied with FCC Class A limit.				

4   Device Identification Photographs

Refer to:

CONF_[DRO-124] IntPhotos

CONF_[DRO-124] ExtPhotos

CONF_[DRO-124] Test Setup Photos