EMT **ELECTRO MAGNETIC TEST, INC.**
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000

*FCC PART 15.247, SUBPART C*
*IC RSS-247*
*TEST REPORT*

*for*

*the*

Drone

Model: SDRC2V1

Prepared for

Skydio, Inc.
114 Hazel Avenue
Redwood City, California, 94605

Prepared by: _____
Andreas Davidsson

Approved by: _____
Kevin Bothmann

Electro Magnetic Test, Inc.
1547 Plymouth Street
Mountain View, California 94043
(650) 965-4000

Date: November 21, 2019

| | REPORT BODY | APPENDICES | | | | TOTAL |
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NVLAP TESTING NVLAP LAB CODE 200147-0

Electro Magnetic Test, Inc. (EMT) is accredited by NVLAP, Lab Code 200147-0 to perform the tests listed in this report, except where noted otherwise. This report and the information contained herein represent the test results related only to the sample tested. This report should not be relied upon as an endorsement or certification by EMT or NVLAP for the sample tested, nor does it represent any statement whatsoever as to its marketing status or fitness of the equipment for a particular purpose.

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## REVISION HISTORY

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## GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Electro Magnetic Test, Inc., which is an independent testing and consulting firm. The test report is based on testing performed Electro Magnetic Test, Inc. personnel according to the measurement procedure described in the test specification given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Federal Government.

The measurement data and conclusions contained in this test report are deemed satisfactory evidence of compliance with Industry Canada Interference-Causing Equipment Standard ICES-003, Issue 6, January 2016.

Electro Magnetic Test, Inc. is recognized by the following agencies for performing EMI/EMC testing:

| COUNTRY | AGENCY | IDENTIFYING # |
|---|---|---|
| USA | Federal Communications Commission (FCC) (EMT's test site is recognized by the FCC) | Registration Number: 90576 |
| USA, Canada, Taiwan, Australia/New Zealand, European Community | National Voluntary Lab Accreditation Program (NVLAP) (EMT is accredited by NVLAP. A copy of the NVLAP Scope Of Accreditation is available upon request.) | Lab Code: 200147-0 |
| Canada | Industry Canada | File No.: IC 2804 |
| Japan | Voluntary Control Council For Interference (VCCI) | A-0118 |
| | Open Field Test Site "A" | - |
| | Mains Conducted Emissions Test Site "D" | - |
| | Telecom Conducted Emissions Test Site "D" | - |
| | 3 Meter Semi-Anechoic Chamber Site "E" | - |
| | 3 Meter Semi-Anechoic Chamber Site "E" (1GHz – 6GHz) | - |
| | Mains Conducted Emissions Test Site "E" | - |
| | Telecom Conducted Emissions Test Site "E" | - |
| Korea | Ministry of Information and Communication's Radio Research Laboratory (RRL) under the Asia Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement (A copy of the Scope Of Accreditation is available upon request) | US0036 |
| Taiwan | Bureau Of Standards, Metrology and Inspection (BSMI) | Reference Number: SL2-IN-E-1024 |
| Australia / New Zealand | Australian Communications Authority (AUSTEL) | * |

*These agencies do not issue an identifying number to test labs.

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## GENERAL REPORT SUMMARY (CONTINUED)

Device Tested: Drone
Model: SDRC2V1
S/N: N/A

Product Description: The EUT is a quadcopter intended to capture video by moving autonomously through the world. The EUT communicates to either a user's cell phone or a Skydio sold beacon or controller over the 2.4 GHz & 5 GHz Wi-Fi bands. The EUT is stores video on a removable SD card and is capable of video processing when not in flight. The EUT can also charge the Skydio LiPo battery via a USB-C port using the provided 65W AC adapter.

Modifications: The EUT was not modified during the testing.

Manufacturer: Skydio, Inc.
114 Hazel Avenue
Redwood City, California, 94605

Test Date(s): June 25, 26, July 10, October 24, 25, 26, 2019

Test Specifications: EMI requirements
Limits: CISPR 22: 1997 plus A1:2000 & A2:2002 Class B
FCC Title 47, Part 15 Subpart B, Class B
FCC Title 47, Part 15 Subpart C
Test Procedure: ANSI C63.8: 2013

Test Deviations: The test procedure was not deviated from during the testing.

## SUMMARY OF TEST RESULTS

| TEST | DESCRIPTION | FCC STANDARD | IC STANDARD | RESULTS |
|---|---|---|---|---|
| 7.1 | Emissions in Restricted and Non-Restricted Bands | 15.209, 15.247, 15.247(d) | RSS-GEN Issue 4, [8.9]<br>RSS 247 Issue 2, [5.5]: | **PASS** |
| 7.2 | Conducted Emissions | 15.207(a) | RSS-GEN Issue 4 [8.8] | **PASS** |
| 7.3 | Occupied Bandwidth | 15.247(a)(2) | RSS 247 Issue 2, [5.2.1, 6.2.4.1] | **PASS** |
| 7.4 | Maximum Peak Output Power | 15.247 (b) | RSS 247 Issue 2, [5.4.4] | **PASS** |
| 7.5 | Maximum Peak Power Spectral Density | 15.247(e) | RSS 247 Issue 2, [5.2.2] | **PASS** |
| 7.6 | Antenna Requirement | 15.203,15.247(b)(4), | N/A | **PASS** |

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## TECHNICAL DESCRIPTION OF THE EUT

| | |
|---|---|
| **Manufacturer:** | Skydio, Inc. |
| **Manufacturer Address:** | 114 Hazel Avenue |
| **EUT Name:** | Drone |
| **Model No:** | Model: SDRC2V1 |
| **Operation frequency:** | 2412 MHz to 2462 MHz, 5180MHz to 5240MHz, and 5745MHz to 5825MHz |
| **Channel Number:** | 11 |
| **Modulation Technology:** | DSSS |
| **Antenna Type:** | PCB Antenna |
| **Antenna Gain:** | 3 dBi |
| **Maximum Output Power:** | 27.68 dBm |

**Description of Channel:**

**802.11 b/g/n (2.4GHz)**

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|---|---|
| 1 | 2412 | 5 | 2432 | 9 | 2452 |
| 2 | 2417 | 6 | 2437 | 10 | 2457 |
| 3 | 2422 | 7 | 2442 | 11 | 2462 |
| 4 | 2427 | 8 | 2447 | | |

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## 1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Drone Model: SDRC2V1. The EMI measurements were performed according to the measurement procedure described in ANSI C63.8 2013. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the specification limits defined in FCC Title 47, Part 15, Subpart C.

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# 2. ADMINISTRATIVE DATA

## 2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Electro Magnetic Test, Inc., 1547 Plymouth Street, Mountain View, California, 94043.

## 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The measurement results in this report and the calibration of the test equipment are traceable to the National Institute of Standards and Technology (NIST).

## 2.3 Cognizant Personnel

Skydio, Inc.

| | |
|---|---|
| Joe Marcinkowski | Engineering Program Manager |

Electro Magnetic Test, Inc.

| | |
|---|---|
| Andreas Davidsson | Test Technician |
| David Vivanco | Test Technician |
| Simeet Gandhi | Test Technician |
| Manan Modi | Test Technician |
| Kevin Bothmann | Lab Manager |

## 2.4 Date Test Sample was Received

The test sample was received on June 25, 2019

## 2.5 Disposition of the Test Sample

The test sample has not yet been returned to Skydio, Inc.

## 2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

| | |
|---|---|
| RF | Radio Frequency |
| EMI | Electromagnetic Interference |
| EUT | Equipment Under Test |
| P/N | Part Number |
| S/N | Serial Number |
| HP | Hewlett Packard |
| ITE | Information Technology Equipment |
| CML | Corrected Meter Limit |
| LISN | Line Impedance Stabilization Network |
| CISPR | International Special Committee On Radio Interference |
| FCC | Federal Communications Commission |

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## 3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

| SPEC | TITLE |
|---|---|
| FCC Title 47, Part 15, Subpart C | FCC Rules - Radio frequency devices (including digital devices). |
| FCC Publication KDB558074 | 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, August 24, 2018 |
| ANSI C63.10-2013 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. |
| RSS-Gen Issue 5, April 2018 | General Requirements for Compliance of Radio Apparatus |
| RSS 247, Issue 2, February 2017 | Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices |

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# 4. DESCRIPTION OF TEST CONFIGURATION

## 4.1 Description of Test Configuration - EMI

The EUT had 3 modes of operation, Flight Mode, USB Transfer Mode, and Charging Mode, the configuration for each mode is listed below:

Flight Mode: The vehicle is simulating flight conditions, with all motors spinning and the user camera recording. The onboard computer is calculating flight dynamics and processing images from the navigation cameras. The wireless link is operating a maximum power output.

USB Transfer Mode: The vehicle is in a mode where it has landed from a flight and is processing the captured video. This video is also transferred to a computer over a USBC cable. The motors are not operational and the cameras are not recording, but the computer is running and the wireless link is operational.

Charging Mode: The vehicle is charging the Skydio battery via the USB-C port and provided 65W AC adapter. A small amount of compute is required and the wireless system is operational, but the motors are not spinning and the cameras are not recording.

The EUT was tested in three physical configurations across all modes, flat, vertical with antenna facing upwards, and vertical with antenna facing downwards. The flat orientation in flight mode was found to have the highest intentional and unintentional emissions.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final conducted as well as radiated data was taken in this mode of operation. All initial investigations were performed with the EMI receiver in manual mode scanning the frequency range continuously.

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### 4.1.1 Cable Construction and Termination

**Flight Mode:**

The EUT did not have any cables connected to it in this mode of operation.

**USB Transfer Mode:**

Cable #1

This is a 1ft 8 in foil and braid shielded USB Type C cable connecting the EUT to the Storage Drive. It has a USB Type C connection on both ends of the cable.

**Charging Mode:**

Cable #1

This is a 4 ft. foil and braid shielded USB Type C cable connecting the EUT to its AC power supply. It has a USB Type C connection on both ends of the cable.

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# 5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

## 5.1 EUT and Accessory List

| EQUIPMENT TYPE | MANUFACTURER | MODEL | SERIAL NUMBER | FCC ID |
|---|---|---|---|---|
| Drone (EUT) | Skydio, Inc. | SDRC2V1 | N/A | 2ATQRSDRC2V1 |
| AC Adapter (For Charging Mode Only) | Acbel Polytech Inc. | WAH232 | W232A8AU02BB2 | DOC |
| Storage Drive (For USB Transfer Mode Only) | Seagate | LRD0TU6 | NL352G2P | DOC |
| **THE FOLLOWING WERE LOCATED OUTSIDE THE TEST SITE:** | | | | |
| Laptop | Dell | Precision 5510 | 7W0GNH2 | DOC |
| Laptop AC Adapter | Dell | HA130PM130 | CN-0RN7NW-75661-343-20SJ-A00 | DOC |
| Charging Dock | Skydio, Inc. | N/A | N/A | N/A |
| Charging AC Adapter | Delta Electronics, Inc. | ADP-100PB B | 0432-03AE0RV621000467 | DOC |

## 5.2 EMI Test Equipment

| EQUIPMENT TYPE | MANU-FACTURER | MODEL NUMBER | SERIAL NUMBER | CAL. DATE | CAL. CYCLE |
|---|---|---|---|---|---|
| EMI Receiver | Rohde & Schwarz | ESU40 | 100295 | February 15, 2019 | 1 Year |
| Radiated EMI Software | Sector Design | N/A | Ver.1.4.6 | N/A | N/A |
| EMI Receiver (Conducted EMI) | Rohde & Schwarz | ESU40 | 100295 | February 15, 2019 | 1 Year |
| Conducted EMI Software | ETS-Lindgren | Tile! | Rev. 7.0.12.697 | N/A | N/A |
| Preamplifier | Hewlett Packard | 8447D | 1937A02579 | March 5, 2019 | 1 Year |
| RF Attenuator | Com-Power | LIT-153A | 531175 | December 15, 2018 | 1 Year |
| LISN | Solar Electronics | Type 21107-50-TS-50-N | 21107150701 | January 2, 2019 | 1 Year |
| LISN | Solar Electronics | Type 21107-50-TS-50-N | 21107150702 | January 2, 2019 | 1 Year |
| LISN | Solar Electronics | Type 21107-50-TS-50-N | 21107150703 | January 2, 2019 | 1 Year |
| LISN | Solar Electronics | Type 21107-50-TS-50-N | 21107150704 | January 2, 2019 | 1 Year |
| Biconical Antenna | Com Power | AB-100 | 01557 | July 20, 2018 / July 20, 2019 | 1 Year |
| Log Periodic Antenna | Com Power | AL-100 | 16001 | August 9, 2018 / August 9, 2019 | 1 Year |
| Antenna Mast | Com Power | AM-400 | N/A | N/A | N/A |
| Turntable | Com Power | TT-100 | N/A | N/A | N/A |
| Computer | Dell, Inc. | DHS | DNSV641 | N/A | N/A |
| Printer | Hewlett Packard | C8124A | CN39A220ZD | N/A | N/A |

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## 5.2 EMI Test Equipment (Continued)

| EQUIPMENT TYPE | MANU-FACTURER | MODEL NUMBER | SERIAL NUMBER | CAL. DATE | CAL. CYCLE |
|---|---|---|---|---|---|
| EMI Receiver | Rohde & Schwarz | ESU40 | 100127 | February 16, 2019 | 1 Year |
| EMI Test Software | Rohde & Schwarz | EMC32 | V8.54.0 | N/A | N/A |
| BiConiLog Antenna | ETS-Lindgren | 3143B | 00206757 | August 28, 2018 / August 28, 2019 | 1 Year |
| Horn Antenna | ETS-Lindgren | 3117 | 00109294 | September 18, 2018/ September 18, 2019 | 1 Year |
| Preamplifier | Rohde & Schwarz | TS-PR18 | 100056 | December 12, 2018 | 1 Year |
| Antenna Mast | ETS-Lindgren | 2171B | 00150364 | N/A | N/A |
| Turntable | ETS-Lindgren | 2187-3.0 | 00118231 | N/A | N/A |
| Computer | Dell, Inc. | Precision Tower 3620 | GPQCDH2 | N/A | N/A |
| Multi-Function Controller | ETS-Lindgren | 2090 | 00102270 | N/A | N/A |

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# 6. TEST SITE DESCRIPTION

## 6.1 Test Facility Description

Please refer to the table below and section 7.1 of this report for the details of which sites were used for testing. All sites are located at 1547 Plymouth Street, Mountain View, California 94043.

| Site Used For Test | Site Description |
|---|---|
| | Open Field Test Site "A" |
| X | Mains Conducted Emissions Test Site "D" |
| | Telecom Conducted Emissions Test Site "D" |
| X | 3 Meter Semi-Anechoic Chamber Site "E" |
| | Mains Conducted Emissions Test Site "E" |
| | Telecom Conducted Emissions Test Site "E" |

## 6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane for all tests not including radiated measurements above 1GHz.

For radiated measurements above 1GHz the EUT was mounted on a 0.7 meter non-conductive hollow cube that was placed on a 1.0 by 1.5 meter table 0.8 meters above the ground plane with a total height of 1.5 meters.

The EUT was not grounded in Flight or USB Transfer Mode, in Charging mode it was grounded only through the safety ground in its power cable.

## 6.3 Facility Environmental Characteristics

All tests were performed in a climate controlled building. The temperature was 24° C, humidity 45%, and barometric pressure 101.6 kPa.

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# 7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests.

## 7.1 Emissions in Restricted and Non-Restricted Bands

### 7.1.1 General Requirements Limit (FCC PART 15 Section 15.209(a)(1), IC-RSS-GEN Issue 4, [8.9])

| Frequency of Emission (MHz) | Field Strength | | Measurement Distance (Meters) |
|---|---|---|---|
| | µV/m | dBµV/m | |
| 0.009-0.49 | 2400/F(kHz) | | 300 |
| 0.49-1.705 | 24000/F(kHz) | | 30 |
| 1.705-30 | 30 | | 30 |
| 30-88 | 100 | 40 | 3 |
| 88-216 | 150 | 43.5 | 3 |
| 216-960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

### 7.1.2 Emissions in Restricted and Non-Restricted Bands Limit (FCC PART 15 Section 15.247(d), IC RSS-GEN Issue 4, [8.10], IC-RSS 247 Issue 1, [5.5] )

**Emissions in Restricted and Non-Restricted Bands FCC PART 15 Section 15.247(d):**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

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## 7.1.2 Emissions in Restricted and Non-Restricted Bands Limit (FCC PART 15 Section 15.247(d), IC-RSS-GEN Issue 4, [8.10], IC-RSS 247 Issue 1, [5.5] ) (Continued)

**Emissions in Restricted Bands IC-RSS-GEN Issue 4, [8.10]:**

Restricted bands, identified in Table 6, are designated primarily for safety-of-life services (distress calling and certain aeronautical bands), certain satellite downlinks, radio astronomy and some government uses. Except where otherwise indicated, the following restrictions apply:

(a) Fundamental components of modulation of licence-exempt radio apparatus shall not fall within the restricted bands of Table 6 except for apparatus complying under RSS-287
(b) Unwanted emissions that fall into restricted bands of Table 6 shall comply with the limits specified in RSS-Gen; and
(c) Unwanted emissions that do not fall within the restricted frequency bands of Table 6 shall comply either with the limits specified in the applicable RSS or with those specified in this RSS-Gen.

| Limit (For Restricted Bands) |
|---|
| See General Limits Requirement In Above Chart (Section 7.1.1) |

### 7.1.3 Test Procedure (Radiated)

The Rohde & Schwarz ESU40 EMI receiver was used as a measuring meter while under software control by the Rohde & Schwarz EMC32 software. To increase the sensitivity of the instrument, the built in preamplifier was used from 9 KHz to 1 GHz and an external preamplifier was used from 1 GHz to 26.5 GHz. The EMI receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the EMI receiver records the highest measured reading over all the sweeps. The built in quasi-peak or average detector was used only for those readings which are marked accordingly on the data sheets. The effective measurement bandwidth used for the radiated emissions test was 100 kHz from 9 kHz to 26.5 GHz.

The Loop Antenna, Broadband BiConiLog and horn antennas were used as transducers during the measurement. The Loop antenna was used from 9 KHz to 30 MHz, the BiConiLog antenna was used from 30 MHz to 1000 MHz and horn antennas were used from 1GHz – 26.5 GHz. The frequency spans were wide (9 kHz to 150 kHz, 150 kHz to 30 MHz, 30 MHz to 88 MHz, 88 MHz to 216 MHz, 216 to 300 MHz, 300 MHz to 1 GHz, 1 GHz to 18 GHz and 18 GHz to 26.5 GHz) during preliminary investigations. The final data was taken with a frequency span of 1 MHz. Furthermore, the frequency span was reduced during the preliminary investigations as deemed necessary.

The 5 meter semi-anechoic chamber of Electro Magnetic Test, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.8: 2013. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. The EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength).

The presence of non EUT signals was verified by turning the EUT off. In case a non EUT signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the other signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance from 9 kHz to 26.5 GHz. to obtain final test data.

The test was run through fully three times with the EUT having its output set to low, middle, and high channels on each test respectively. The data was then combined to provide the worst case of all three tests. This was tested against all applicable modes and bandwidths with the worst case being plotted in each measurement range.

Calculation Of Radiated Emission Test Data:

Amplitude - Gain + Antenna Factor + Cable Loss = Corrected Amplitude

Corrected Amplitude - Limit = Margin

Associated with the radiated emission test data in this report is a ±5.1dB measurement uncertainty.

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### 7.1.4 Test Procedure (Conducted)

The Rohde & Schwarz ESU40 EMI receiver was used as a measuring meter. The data was collected with the EMI receiver in the peak detect mode with the "Max Hold" feature activated. The quasi-peak and average detectors were used only where indicated in the data sheets. A 10 dB attenuation pad was used for the protection of the EMI receiver input stage, and the EMI receiver offset was adjusted accordingly to read the actual data measured. The LISN output was read by the Rohde & Schwarz ESU40 EMI receiver. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for the conducted emissions test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.8: 2013. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The initial test data was taken in manual mode while scanning the frequency ranges of 0.15 MHz to 1.6 MHz, 1.6 MHz to 5 MHz and 5 MHz to 30 MHz. The conducted emissions from the EUT were maximized for operating mode as well as cable and peripheral placement. Once a predominant frequency (within 12 dB of the limit) was found, it was more closely examined with the spectrum analyzer span adjusted to 1 MHz.

The final data was collected under program control by the ETS-Lindgren Tile! software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave.

Calculation Of Conducted Emission Test Data:

Amplitudes shown on the test data are already corrected and include the following equation:

Raw Amplitude + LISN Insertion Loss + Attenuator + Cable Loss = Corrected Amplitude

Corrected Amplitude - Limit = Margin

Associated with the conducted emission test data in this report is a ±3.4dB measurement uncertainty.

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## 7.2 Conducted Emissions Test – Mains Ports

### 7.2.1 Limit (FCC PART 15 Section 15.207(a), IC RSS-GEN Issue 4 [8.8])

| Frequency of Emission (MHz) | Conducted Limit (dBµV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56 * | 56 to 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

*Note: Decreases with the logarithm of the frequency

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## 7.3 Occupied Bandwidth

### 7.3.1 Limits FCC PART 15 Section 15.247(a)(2), IC-RSS 247 Issue 1, [5.2.1])

Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz

| Limit |
|---|
| 6 dB Bandwidth ≥ 500 kHz |

### 7.3.2 Test Procedure

Follow the radiated test procedure but set the Spectrum Analyzer as below:

RBW: 100 kHz
VBW: ≥ 3 X RBW
Detector: Peak
Trace Mode: Max Hold

(1) Set analyzer center frequency to center of signal

(2) Turn on occupied bandwidth measurement mode

(3) Set measurement to 6db bandwidth

Associated with the Occupied Bandwidth test data in this report is a ±2.5% measurement uncertainty.

### 7.3.3 Test Result

The EUT meets the requirements. Please see the datasheets in Appendix A for the measurement results.

## 7.4 Maximum Peak Output Power

### 7.4.1 Limits FCC PART 15 Section 15.247(b)(3), IC-RSS 247 Issue 1, [5.4.4]

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

| Limit |
|---|
| Maximum Peak Output Power (Digital Modulation) ≤ 1Watt or 30 dBm |

### 7.4.2 Test Procedure

RBW = 1 MHz
VBW ≥ 3 x RBW
Span ≥ 1.5 DTS Bandwidth
Detector: Peak
Trace Mode: Max Hold
Amplitude Offset: Cable Loss
When the trace is completed use the Channel Power function with the Bandwidth set to the DTS Bandwidth edges.
Calculate the Peak Output Power by using the following equation:

a. Peak Power = Conducted Output Power

Cable Loss = 3.1 dBm

Associated with the Maximum Peak Output Power test data in this report is a ±5.1dB measurement uncertainty.

### 7.4.3 Test Result

The EUT meets the requirements. Please see the datasheets in Appendix A for the measurement results.

## 7.5 Maximum Peak Power Spectral Density

### 7.5.1 Limits FCC PART 15 Section 15.247(e), IC-RSS 247 Issue 1, [5.2.2]

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density

| Limit |
|---|
| 2412-2462MHz: 8 dBm / 3 kHz |

### 7.5.2 Test Procedure

Follow the conducted test procedure but set the Spectrum Analyzer as below:

3 kHz ≤ RBW ≤ 100 kHz
VBW ≥ 3 x RBW
Span ≥ 1.5 x DTS Bandwidth
Amplitude Offset: Cable Loss
Detector: Peak

1.) Connect EUT to Spectrum Analyzer
2.) Record data values and calculate Power Spectral Density by using the following equation:
b. Power Spectral Density = Conducted Output Power
Cable Loss = 3.1 dBm

Associated with the Maximum Peak Power Spectral Density test data in this report is a ±5.1dB measurement uncertainty.

### 7.5.3 Test Result

The EUT meets the requirements. Please see the datasheets in Appendix A for the measurement results.

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## 7.6 Antenna Requirement

### 7.6.1 Requirement (FCC PART 15 SECTION 15.203,15.247(b)(4)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section.

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

.

### 7.6.2 Test Result

The antennas are integrated on the main PCB with no consideration for replacement on the Drone.

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## 8. CONCLUSIONS / COMPLIANCE STATEMENT

Based upon the results contained in this report, Electro Magnetic Test, Inc. has determined that the Drone, Model: SDRC2V1 meets all of the specification limits defined in FCC Title 47, Part 15, Subpart C.

EMT ELECTRO MAGNETIC TEST, INC.
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# APPENDIX A

# *RADIATED AND CONDUCTED EMISSIONS DATA SHEETS*

# Radiated Emission Test Report

**Tested At:**
**Electro Magnetic Test, Inc.**
**1547 Plymouth Street**
**Mountain View, CA 94043**
**Tel. 650-965-4000**
**Fax. 650-965-3000**

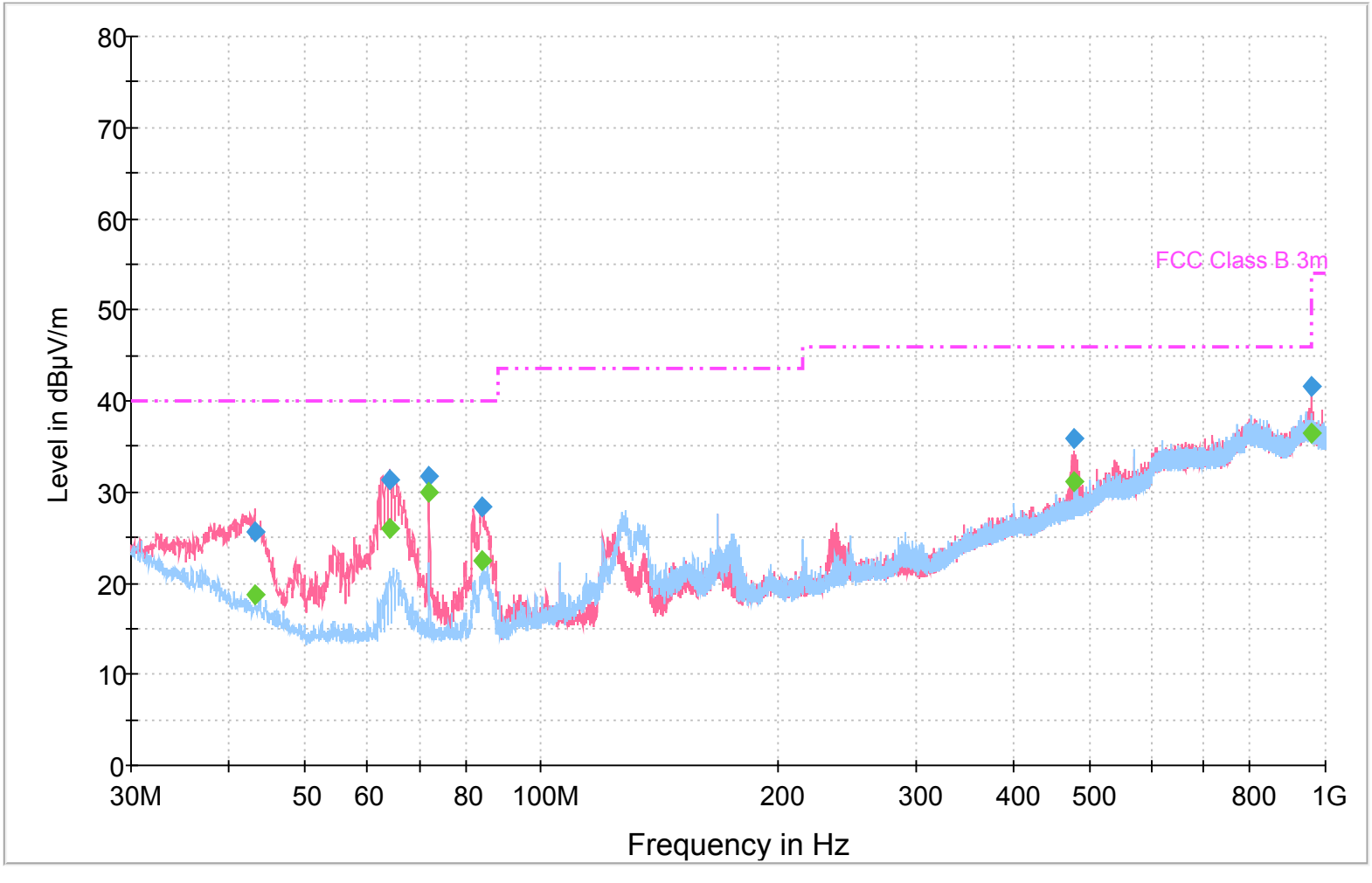
## Common Information

| | |
|---|---|
| Test Description: | FCC Class B Radiated Emissions |
| Operating Conditions: | Normal |
| Test Engineer: | Andreas Davidsson |

## EUT Information

| | |
|---|---|
| Company Name: | Skydio |
| EUT Name | Drone |
| Model Number: | SDRC2V1 |
| Serial Number: | N/A |
| Comment: | Flat, Battery Downwards, 20MHz, 2412 |

FCC Class B Radiated Scan 3m PK QP




FCC Class B 3m
Final Result 1-PK+
Preview Result 1V-PK+
Final Result 2-QPK
Preview Result 1H-PK+

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 43.200000 | 25.6 | 120.0 | V | 37.0 | 14.4 | 14.40 | 40.00 | |
| 63.990000 | 31.3 | 171.0 | V | 176.0 | 12.1 | 8.70 | 40.00 | |
| 72.000000 | 31.6 | 120.0 | V | 359.0 | 12.3 | 8.40 | 40.00 | |
| 84.120000 | 28.3 | 100.0 | V | 0.0 | 12.3 | 11.70 | 40.00 | |
| 478.020000 | 35.9 | 100.0 | V | 261.0 | 24.9 | 10.10 | 46.00 | |
| 959.970000 | 41.5 | 165.0 | V | 303.0 | 31.8 | 4.50 | 46.00 | |

# Final Result 2

| Frequency (MHz) | QuasiPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 43.200000 | 18.8 | 120.0 | V | 37.0 | 14.4 | 21.20 | 40.00 | |
| 63.990000 | 26.1 | 171.0 | V | 176.0 | 12.1 | 13.90 | 40.00 | |
| 72.000000 | 29.9 | 120.0 | V | 359.0 | 12.3 | 10.10 | 40.00 | |
| 84.120000 | 22.4 | 100.0 | V | 0.0 | 12.3 | 17.60 | 40.00 | |
| 478.020000 | 31.1 | 100.0 | V | 261.0 | 24.9 | 14.90 | 46.00 | |
| 959.970000 | 36.5 | 165.0 | V | 303.0 | 31.8 | 9.50 | 46.00 | |

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 42.450000 | 29.4 | 100.0 | V | 338.0 | 14.6 | 10.60 | 40.00 | |
| 63.360000 | 33.7 | 100.0 | V | 359.0 | 12.1 | 6.30 | 40.00 | |
| 85.350000 | 30.0 | 159.0 | V | 168.0 | 12.3 | 10.00 | 40.00 | |
| 129.060000 | 35.6 | 205.0 | H | 283.0 | 13.3 | 7.90 | 43.50 | |
| 168.000000 | 31.1 | 194.0 | H | 92.0 | 15.4 | 12.40 | 43.50 | |
| 479.970000 | 34.4 | 100.0 | V | 94.0 | 24.9 | 11.60 | 46.00 | |
| 959.970000 | 39.1 | 221.0 | V | 50.0 | 31.8 | 6.90 | 46.00 | |

# Final Result 2

| Frequency (MHz) | QuasiPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 42.450000 | 23.4 | 100.0 | V | 338.0 | 14.6 | 16.60 | 40.00 | |
| 63.360000 | 29.8 | 100.0 | V | 359.0 | 12.1 | 10.20 | 40.00 | |
| 85.350000 | 23.7 | 159.0 | V | 168.0 | 12.3 | 16.30 | 40.00 | |
| 129.060000 | 26.7 | 205.0 | H | 283.0 | 13.3 | 16.80 | 43.50 | |
| 168.000000 | 27.0 | 194.0 | H | 92.0 | 15.4 | 16.50 | 43.50 | |
| 479.970000 | 30.5 | 100.0 | V | 94.0 | 24.9 | 15.50 | 46.00 | |
| 959.970000 | 33.9 | 221.0 | V | 50.0 | 31.8 | 12.10 | 46.00 | |

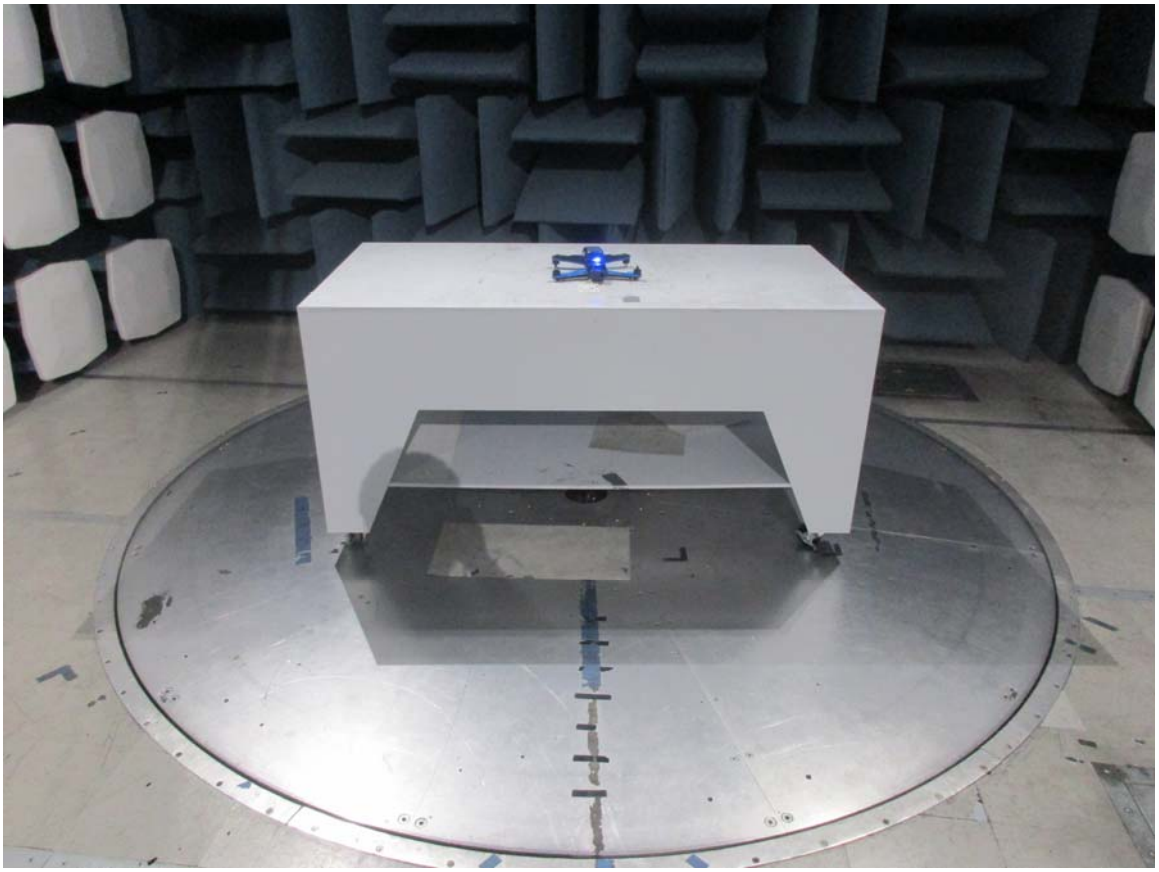
# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 42.210000 | 31.0 | 100.0 | V | 1.0 | 14.7 | 9.00 | 40.00 | |
| 64.080000 | 34.3 | 100.0 | V | 359.0 | 12.1 | 5.70 | 40.00 | |
| 86.310000 | 28.9 | 126.0 | V | 176.0 | 12.3 | 11.10 | 40.00 | |
| 129.630000 | 36.0 | 260.0 | H | 294.0 | 13.3 | 7.50 | 43.50 | |
| 168.000000 | 32.5 | 188.0 | H | 79.0 | 15.4 | 11.00 | 43.50 | |
| 477.120000 | 35.5 | 100.0 | V | 98.0 | 24.9 | 10.50 | 46.00 | |
| 951.330000 | 38.4 | 241.0 | V | 86.0 | 32.1 | 7.60 | 46.00 | |

# Final Result 2

| Frequency (MHz) | QuasiPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 42.210000 | 25.7 | 100.0 | V | 1.0 | 14.7 | 14.30 | 40.00 | |
| 64.080000 | 30.5 | 100.0 | V | 359.0 | 12.1 | 9.50 | 40.00 | |
| 86.310000 | 24.6 | 126.0 | V | 176.0 | 12.3 | 15.40 | 40.00 | |
| 129.630000 | 27.0 | 260.0 | H | 294.0 | 13.3 | 16.50 | 43.50 | |
| 168.000000 | 28.6 | 188.0 | H | 79.0 | 15.4 | 14.90 | 43.50 | |
| 477.120000 | 30.0 | 100.0 | V | 98.0 | 24.9 | 16.00 | 46.00 | |
| 951.330000 | 31.8 | 241.0 | V | 86.0 | 32.1 | 14.20 | 46.00 | |

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000

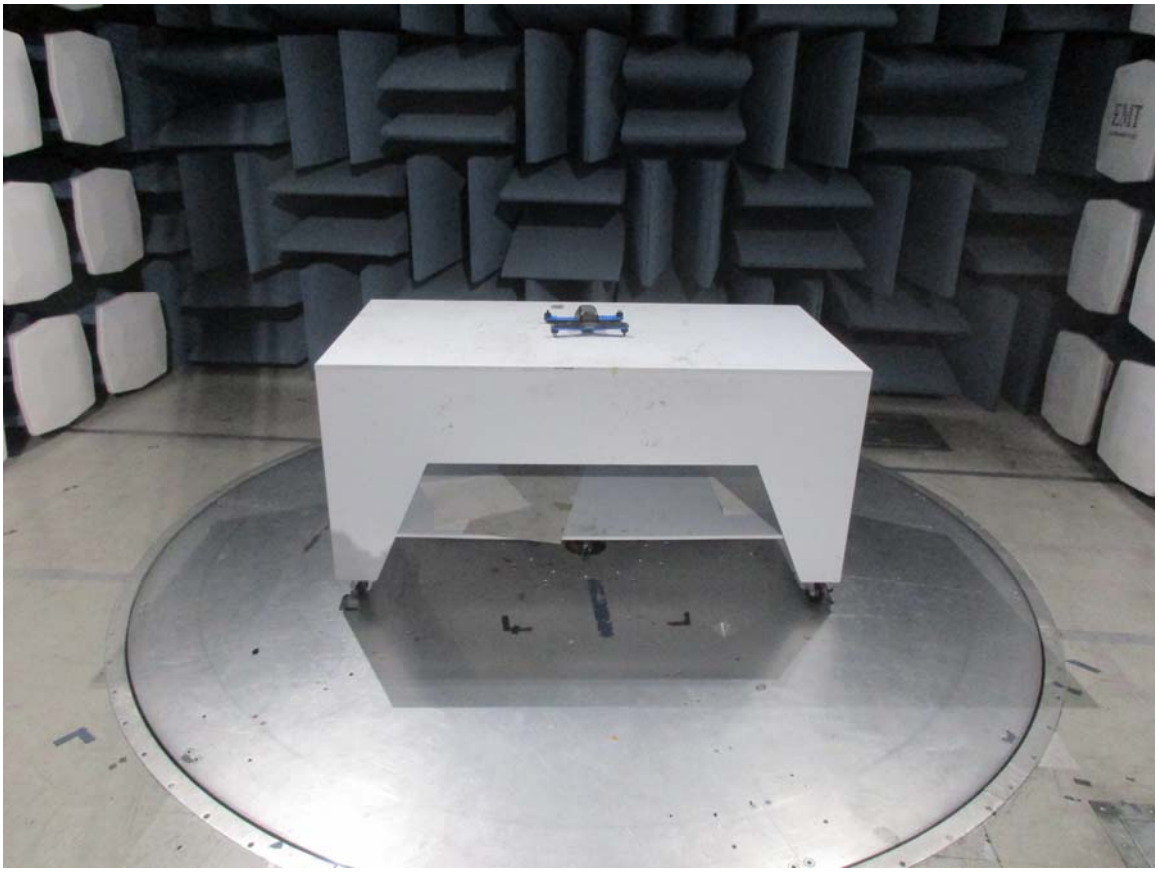


**FRONT VIEW**

Skydio, Inc.
Drone
Model: SDRC2V1
**CISPR 22/FCC Class B** – Radiated Emissions

## PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000



**REAR VIEW**

Skydio, Inc.
Drone
Model: SDRC2V1
**CISPR 22/FCC Class B** – Radiated Emissions

## PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

# Radiated Emission Test Report

**Tested At:**
**Electro Magnetic Test, Inc.**
**1547 Plymouth Street**
**Mountain View, CA 94043**
**Tel. 650-965-4000**
**Fax. 650-965-3000**

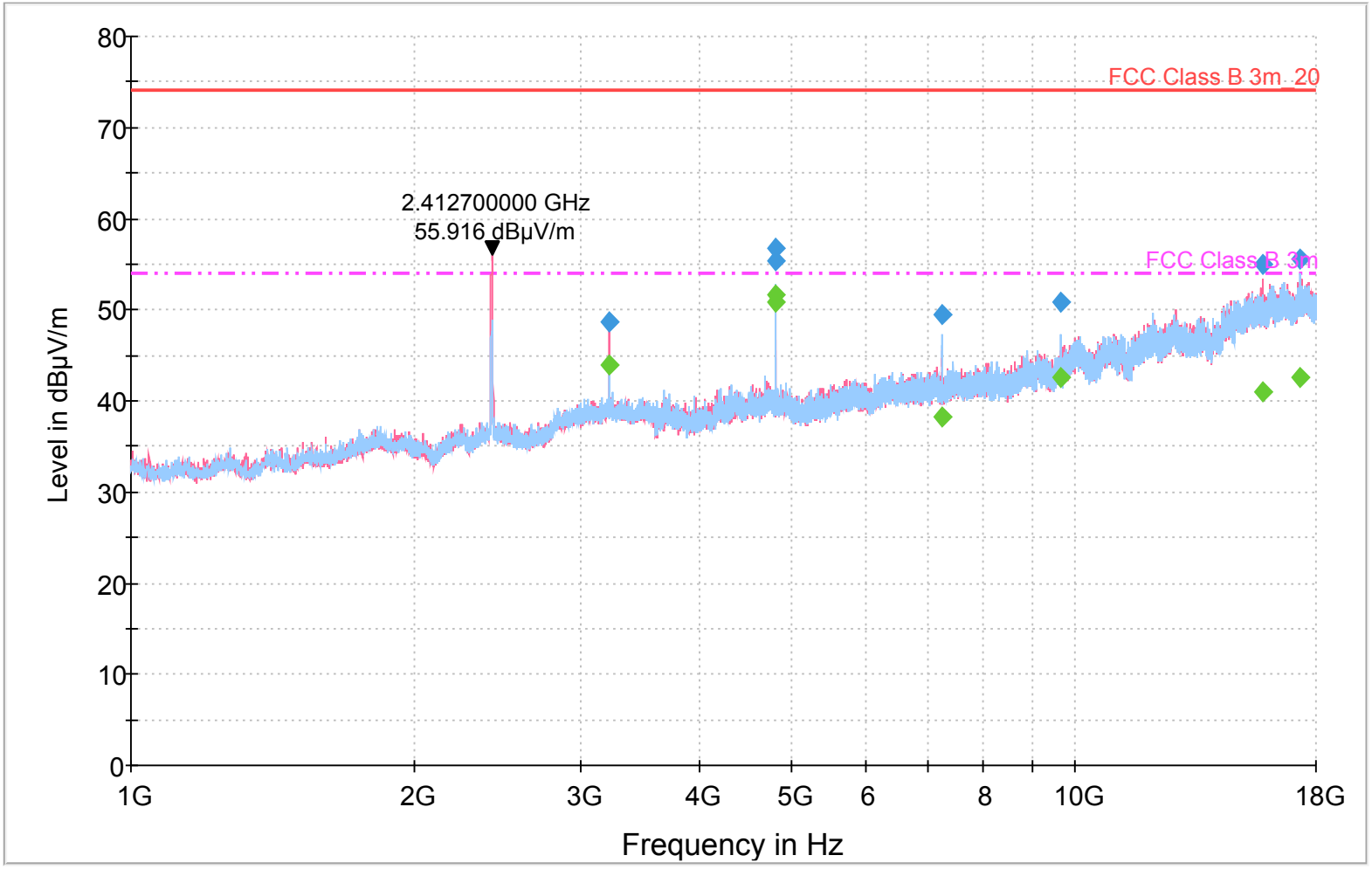
## Common Information

| | |
|---|---|
| Test Description: | FCC Class B Radiated Emissions |
| Operating Conditions: | Normal |
| Test Engineer: | Andreas Davidsson |

## EUT Information

| | |
|---|---|
| Company Name: | Skydio |
| EUT Name | Drone |
| Model Number: | SDRC2V1 |
| Serial Number: | N/A |
| Comment: | Flat, Battery Downwards, 20MHz, 2412 |

FCC Class B Radiated Sweep 1GHz-18GHz 3m PK AVG




FCC Class B 3m_20
Preview Result 1H-PK+
FCC Class B 3m
Final Result 1-PK+
Preview Result 1V-PK+
Final Result 2-AVG

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3215.666667 | 48.7 | 317.0 | V | 259.0 | 3.2 | 25.30 | 74.00 | |
| 4823.866667 | 56.7 | 266.0 | H | 62.0 | 5.6 | 17.30 | 74.00 | |
| 4823.866667 | 55.3 | 365.0 | V | 95.0 | 5.6 | 18.70 | 74.00 | |
| 7236.733333 | 49.5 | 393.0 | H | 227.0 | 9.7 | 24.50 | 74.00 | |
| 9647.900000 | 50.8 | 363.0 | H | 272.0 | 13.5 | 23.20 | 74.00 | |
| 15821.733333 | 54.9 | 154.0 | V | 133.0 | 21.8 | 19.10 | 74.00 | |
| 17278.066667 | 55.6 | 348.0 | H | 34.0 | 23.4 | 18.40 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3215.666667 | 44.0 | 317.0 | V | 259.0 | 3.2 | 10.00 | 54.00 | |
| 4823.866667 | 51.6 | 266.0 | H | 62.0 | 5.6 | 2.40 | 54.00 | |
| 4823.866667 | 50.8 | 365.0 | V | 95.0 | 5.6 | 3.20 | 54.00 | |
| 7236.733333 | 38.2 | 393.0 | H | 227.0 | 9.7 | 15.80 | 54.00 | |
| 9647.900000 | 42.6 | 363.0 | H | 272.0 | 13.5 | 11.40 | 54.00 | |
| 15821.733333 | 41.0 | 154.0 | V | 133.0 | 21.8 | 13.00 | 54.00 | |
| 17278.066667 | 42.5 | 348.0 | H | 34.0 | 23.4 | 11.50 | 54.00 | |

# Radiated Emission Test Report

**Tested At:**
**Electro Magnetic Test, Inc.**
**1547 Plymouth Street**
**Mountain View, CA 94043**
**Tel. 650-965-4000**
**Fax. 650-965-3000**

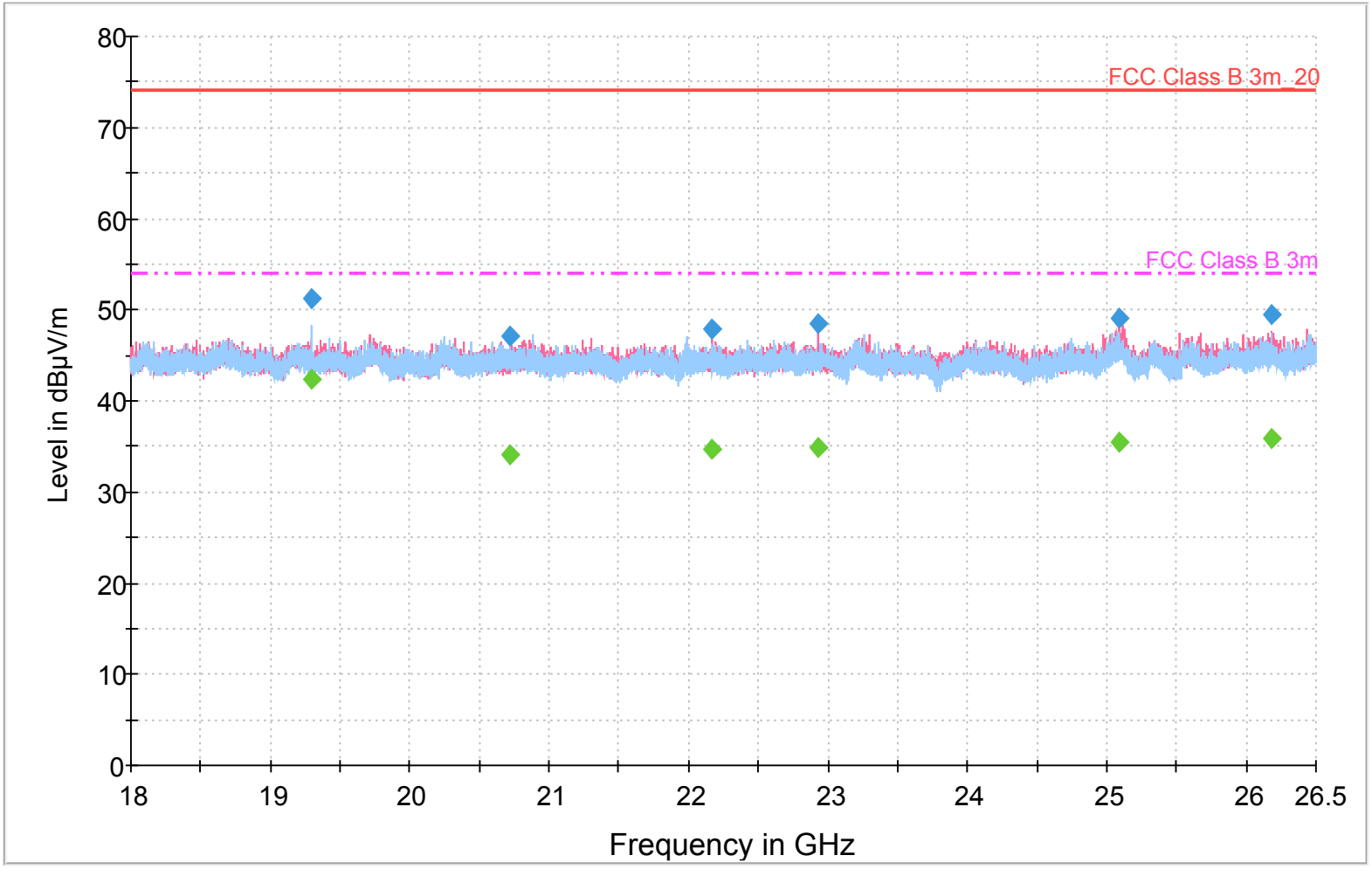
## Common Information

| | |
|---|---|
| Test Description: | FCC Class B Radiated Emissions |
| Operating Conditions: | Normal |
| Test Engineer: | Andreas Davidsson |

## EUT Information

| | |
|---|---|
| Company Name: | Skydio |
| EUT Name | Drone |
| Model Number: | SDRC2V1 |
| Serial Number: | N/A |
| Comment: | Flat, Battery Downwards, 20MHz, 2412 |

FCC Class B Radiated Sweep 18GHz-26.5GHz 3m PK AVG




FCC Class B 3m_20
FCC Class B 3m
Preview Result 1V-PK+
Preview Result 1H-PK+
Final Result 1-PK+
Final Result 2-AVG

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3249.100000 | 40.3 | 205.0 | V | 87.0 | 3.2 | 33.70 | 74.00 | |
| 4873.733333 | 54.4 | 299.0 | H | 135.0 | 5.7 | 19.60 | 74.00 | |
| 4873.733333 | 42.5 | 332.0 | V | 216.0 | 5.7 | 31.50 | 74.00 | |
| 7312.100000 | 54.8 | 400.0 | H | 293.0 | 9.9 | 19.20 | 74.00 | |
| 9748.200000 | 52.3 | 337.0 | H | 250.0 | 13.8 | 21.70 | 74.00 | |
| 14622.100000 | 52.8 | 165.0 | V | 176.0 | 20.3 | 21.20 | 74.00 | |
| 17531.366667 | 55.3 | 234.0 | V | 63.0 | 22.9 | 18.70 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3249.100000 | 26.8 | 205.0 | V | 87.0 | 3.2 | 27.20 | 54.00 | |
| 4873.733333 | 48.7 | 299.0 | H | 135.0 | 5.7 | 5.30 | 54.00 | |
| 4873.733333 | 29.2 | 332.0 | V | 216.0 | 5.7 | 24.80 | 54.00 | |
| 7312.100000 | 41.1 | 400.0 | H | 293.0 | 9.9 | 12.90 | 54.00 | |
| 9748.200000 | 44.6 | 337.0 | H | 250.0 | 13.8 | 9.40 | 54.00 | |
| 14622.100000 | 39.7 | 165.0 | V | 176.0 | 20.3 | 14.30 | 54.00 | |
| 17531.366667 | 42.1 | 234.0 | V | 63.0 | 22.9 | 11.90 | 54.00 | |

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3296.133333 | 45.0 | 353.0 | V | 294.0 | 3.1 | 29.00 | 74.00 | |
| 4944.000000 | 54.9 | 254.0 | H | 100.0 | 5.8 | 19.10 | 74.00 | |
| 7416.366667 | 58.9 | 309.0 | V | 222.0 | 10.2 | 15.10 | 74.00 | |
| 7418.066667 | 59.0 | 389.0 | H | 298.0 | 10.2 | 15.00 | 74.00 | |
| 9887.600000 | 52.8 | 342.0 | H | 264.0 | 14.3 | 21.20 | 74.00 | |
| 14831.766667 | 59.0 | 346.0 | H | 49.0 | 20.7 | 15.00 | 74.00 | |
| 14832.333333 | 57.2 | 280.0 | V | 207.0 | 20.7 | 16.80 | 74.00 | |
| 17534.200000 | 55.3 | 259.0 | H | 230.0 | 22.9 | 18.70 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 3296.133333 | 37.5 | 353.0 | V | 294.0 | 3.1 | 16.50 | 54.00 | |
| 4944.000000 | 50.8 | 254.0 | H | 100.0 | 5.8 | 3.20 | 54.00 | |
| 7416.366667 | 40.5 | 309.0 | V | 222.0 | 10.2 | 13.50 | 54.00 | |
| 7418.066667 | 40.9 | 389.0 | H | 298.0 | 10.2 | 13.10 | 54.00 | |
| 9887.600000 | 44.9 | 342.0 | H | 264.0 | 14.3 | 9.10 | 54.00 | |
| 14831.766667 | 51.4 | 346.0 | H | 49.0 | 20.7 | 2.60 | 54.00 | |
| 14832.333333 | 47.9 | 280.0 | V | 207.0 | 20.7 | 6.10 | 54.00 | |
| 17534.200000 | 42.2 | 259.0 | H | 230.0 | 22.9 | 11.80 | 54.00 | |

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 18896.750000 | 46.8 | 114.0 | H | 38.0 | 10.5 | 27.20 | 74.00 | |
| 20232.100000 | 47.3 | 196.0 | V | 193.0 | 10.9 | 26.70 | 74.00 | |
| 20652.425000 | 47.1 | 217.0 | V | 183.0 | 11.1 | 26.90 | 74.00 | |
| 22672.450000 | 47.7 | 280.0 | H | 1.0 | 11.7 | 26.30 | 74.00 | |
| 24003.550000 | 47.7 | 182.0 | V | 34.0 | 11.4 | 26.30 | 74.00 | |
| 25324.875000 | 48.4 | 110.0 | V | 175.0 | 12.0 | 25.60 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 18896.750000 | 33.9 | 114.0 | H | 38.0 | 10.5 | 20.10 | 54.00 | |
| 20232.100000 | 34.2 | 196.0 | V | 193.0 | 10.9 | 19.80 | 54.00 | |
| 20652.425000 | 34.0 | 217.0 | V | 183.0 | 11.1 | 20.00 | 54.00 | |
| 22672.450000 | 34.6 | 280.0 | H | 1.0 | 11.7 | 19.40 | 54.00 | |
| 24003.550000 | 34.5 | 182.0 | V | 34.0 | 11.4 | 19.50 | 54.00 | |
| 25324.875000 | 34.9 | 110.0 | V | 175.0 | 12.0 | 19.10 | 54.00 | |

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 19735.700000 | 50.6 | 178.0 | H | 43.0 | 10.8 | 23.40 | 74.00 | |
| 20464.150000 | 47.2 | 300.0 | V | 165.0 | 10.9 | 26.80 | 74.00 | |
| 21844.975000 | 47.8 | 119.0 | V | 104.0 | 11.2 | 26.20 | 74.00 | |
| 23346.925000 | 47.7 | 232.0 | V | 29.0 | 11.7 | 26.30 | 74.00 | |
| 25323.600000 | 48.9 | 125.0 | V | 316.0 | 12.0 | 25.10 | 74.00 | |
| 26097.950000 | 49.1 | 255.0 | V | 271.0 | 11.9 | 24.90 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 19735.700000 | 40.6 | 178.0 | H | 43.0 | 10.8 | 13.40 | 54.00 | |
| 20464.150000 | 34.1 | 300.0 | V | 165.0 | 10.9 | 19.90 | 54.00 | |
| 21844.975000 | 34.2 | 119.0 | V | 104.0 | 11.2 | 19.80 | 54.00 | |
| 23346.925000 | 34.6 | 232.0 | V | 29.0 | 11.7 | 19.40 | 54.00 | |
| 25323.600000 | 34.9 | 125.0 | V | 316.0 | 12.0 | 19.10 | 54.00 | |
| 26097.950000 | 35.1 | 255.0 | V | 271.0 | 11.9 | 18.90 | 54.00 | |

# Final Result 1

| Frequency (MHz) | MaxPeak (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 19295.825000 | 51.3 | 181.0 | H | 122.0 | 10.6 | 22.70 | 74.00 | |
| 20724.675000 | 47.1 | 300.0 | H | 224.0 | 11.1 | 26.90 | 74.00 | |
| 22173.500000 | 47.9 | 144.0 | V | 254.0 | 11.2 | 26.10 | 74.00 | |
| 22935.100000 | 48.6 | 291.0 | V | 169.0 | 11.6 | 25.40 | 74.00 | |
| 25090.275000 | 49.1 | 185.0 | V | 34.0 | 11.8 | 24.90 | 74.00 | |
| 26187.625000 | 49.5 | 225.0 | V | 202.0 | 12.4 | 24.50 | 74.00 | |

# Final Result 2

| Frequency (MHz) | Average (dBµV/m) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) | Comment |
|---|---|---|---|---|---|---|---|---|
| 19295.825000 | 42.3 | 181.0 | H | 122.0 | 10.6 | 11.70 | 54.00 | |
| 20724.675000 | 34.1 | 300.0 | H | 224.0 | 11.1 | 19.90 | 54.00 | |
| 22173.500000 | 34.6 | 144.0 | V | 254.0 | 11.2 | 19.40 | 54.00 | |
| 22935.100000 | 34.8 | 291.0 | V | 169.0 | 11.6 | 19.20 | 54.00 | |
| 25090.275000 | 35.6 | 185.0 | V | 34.0 | 11.8 | 18.40 | 54.00 | |
| 26187.625000 | 35.9 | 225.0 | V | 202.0 | 12.4 | 18.10 | 54.00 | |

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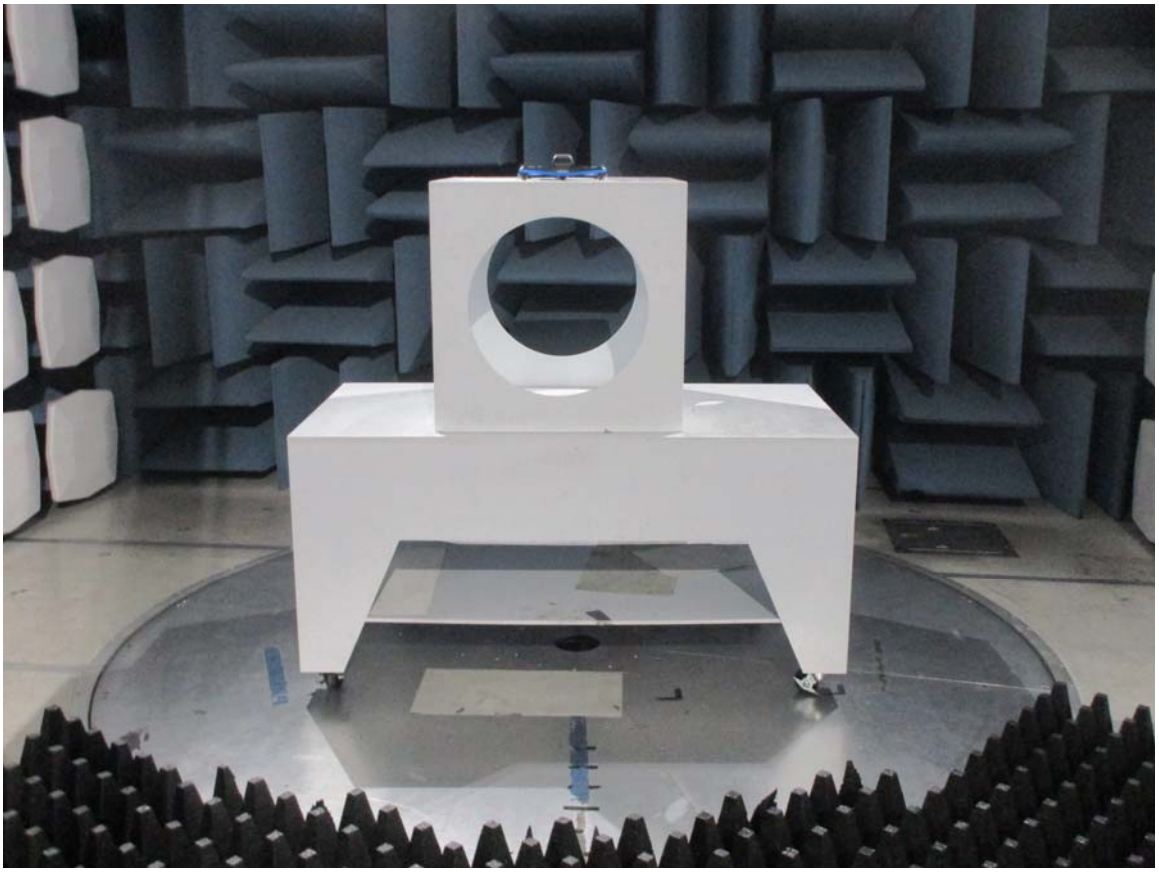
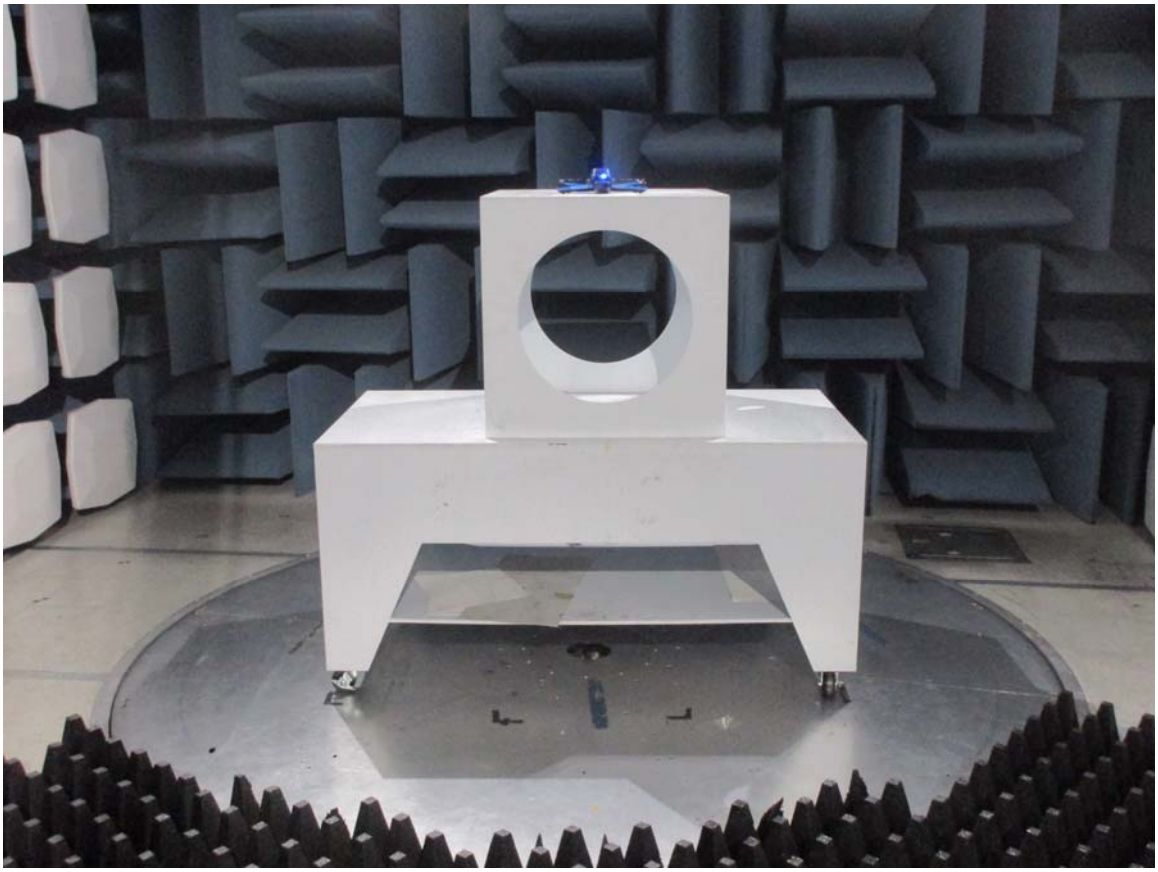


**FRONT VIEW**

Skydio, Inc.
Drone
Model: SDRC2V1
**CISPR 22/FCC Class B** – Radiated Emissions (>1GHz)

## PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000



**REAR VIEW**

Skydio, Inc.
Drone
Model: SDRC2V1
**CISPR 22/FCC Class B** – Radiated Emissions (>1GHz)

## PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000

## 6/26 dB Bandwidth and Occupied Bandwidth Test

| | | | |
|---|---|---|---|
| **Company:** | Skydio, Inc. | **Test Date:** | 10/25/2019 |
| **EUT Name:** | Drone | **Test Engineer:** | Andreas Davidsson |
| **Model:** | SDRC2V1 | **Test Result:** | PASS |
| **Operating Mode:** | TX Mode | | |

| Mode | Antenna | Test CH | Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) | 6/26 dB Bandwidth Limit (MHz) | Conclusion |
|---|---|---|---|---|---|---|---|
| **802.11 b (2.4GHz)** | 1 | 1 | 2412 | 8.069 | 12.961 | ≥ 0.5 | PASS |
| | 2 | 1 | 2412 | 7.543 | 12.947 | ≥ 0.5 | PASS |
| | 1 | 6 | 2437 | 8.060 | 12.981 | ≥ 0.5 | PASS |
| | 2 | 6 | 2437 | 8.043 | 12.976 | ≥ 0.5 | PASS |
| | 1 | 11 | 2462 | 8.037 | 12.944 | ≥ 0.5 | PASS |
| | 2 | 11 | 2462 | 8.039 | 12.854 | ≥ 0.5 | PASS |
| **802.11 g (2.4GHz)** | 1 | 1 | 2412 | 8.037 | 12.032 | ≥ 0.5 | PASS |
| | 2 | 1 | 2412 | 8.025 | 12.394 | ≥ 0.5 | PASS |
| | 1 | 6 | 2437 | 8.010 | 12.679 | ≥ 0.5 | PASS |
| | 2 | 6 | 2437 | 8.011 | 12.838 | ≥ 0.5 | PASS |
| | 1 | 11 | 2462 | 8.034 | 12.653 | ≥ 0.5 | PASS |
| | 2 | 11 | 2462 | 8.032 | 12.415 | ≥ 0.5 | PASS |
| **802.11 n (2.4GHz)** | 1 | 1 | 2412 | 8.030 | 12.187 | ≥ 0.5 | PASS |
| | 2 | 1 | 2412 | 8.024 | 12.358 | ≥ 0.5 | PASS |
| | 1 | 6 | 2437 | 8.033 | 12.421 | ≥ 0.5 | PASS |
| | 2 | 6 | 2437 | 8.015 | 12.636 | ≥ 0.5 | PASS |
| | 1 | 11 | 2462 | 8.024 | 12.370 | ≥ 0.5 | PASS |
| | 2 | 11 | 2462 | 8.009 | 12.123 | ≥ 0.5 | PASS |
| | Test Equipment: Please refer to section 5.2 | | | | | | |

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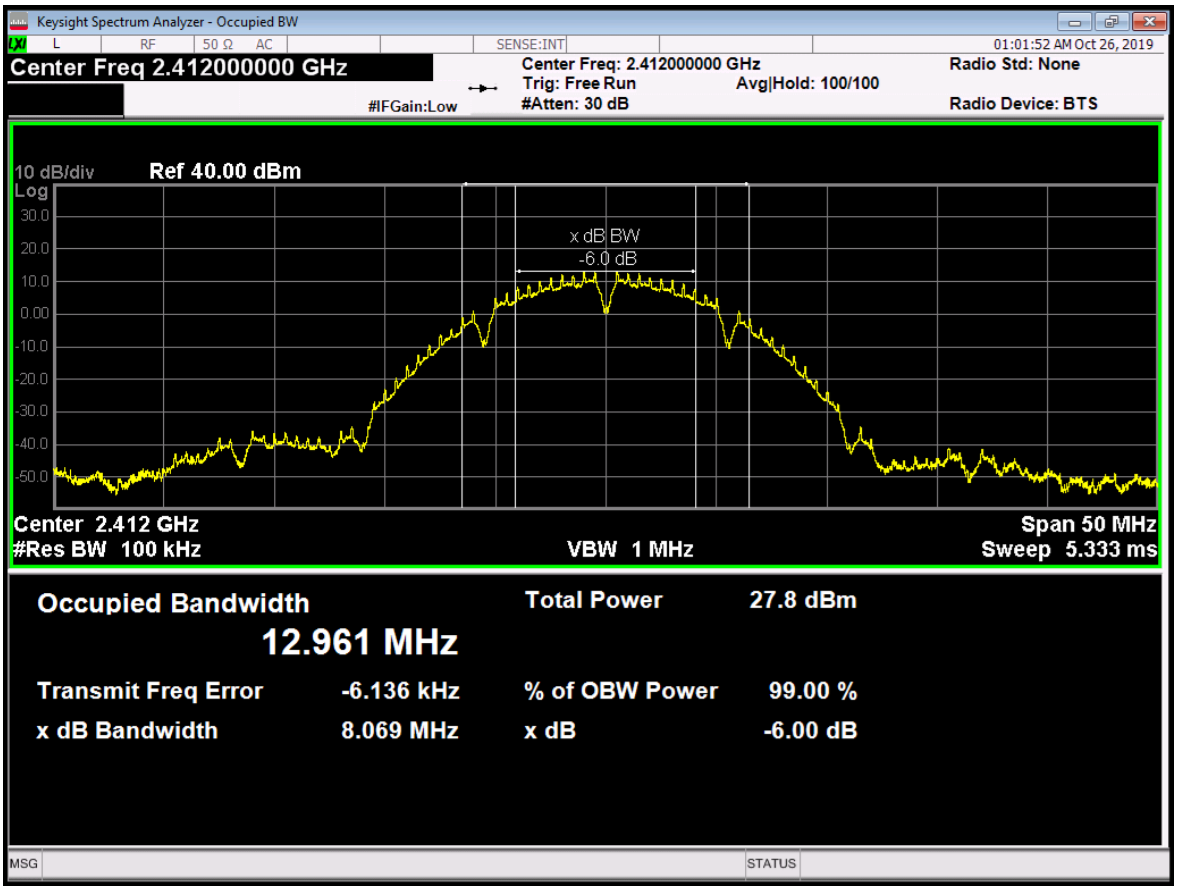
**Antenna 1**
**Channel 0**



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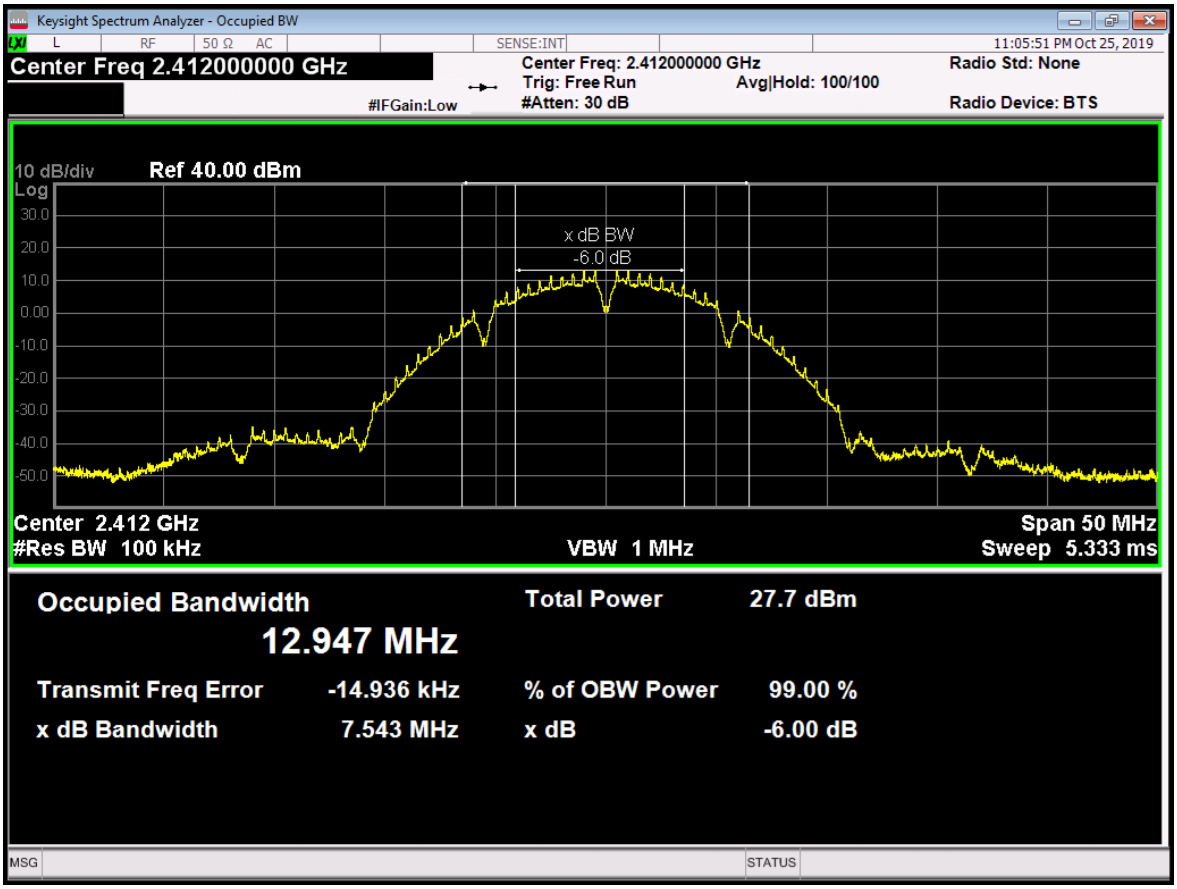
**Antenna 2**
**Channel 0**



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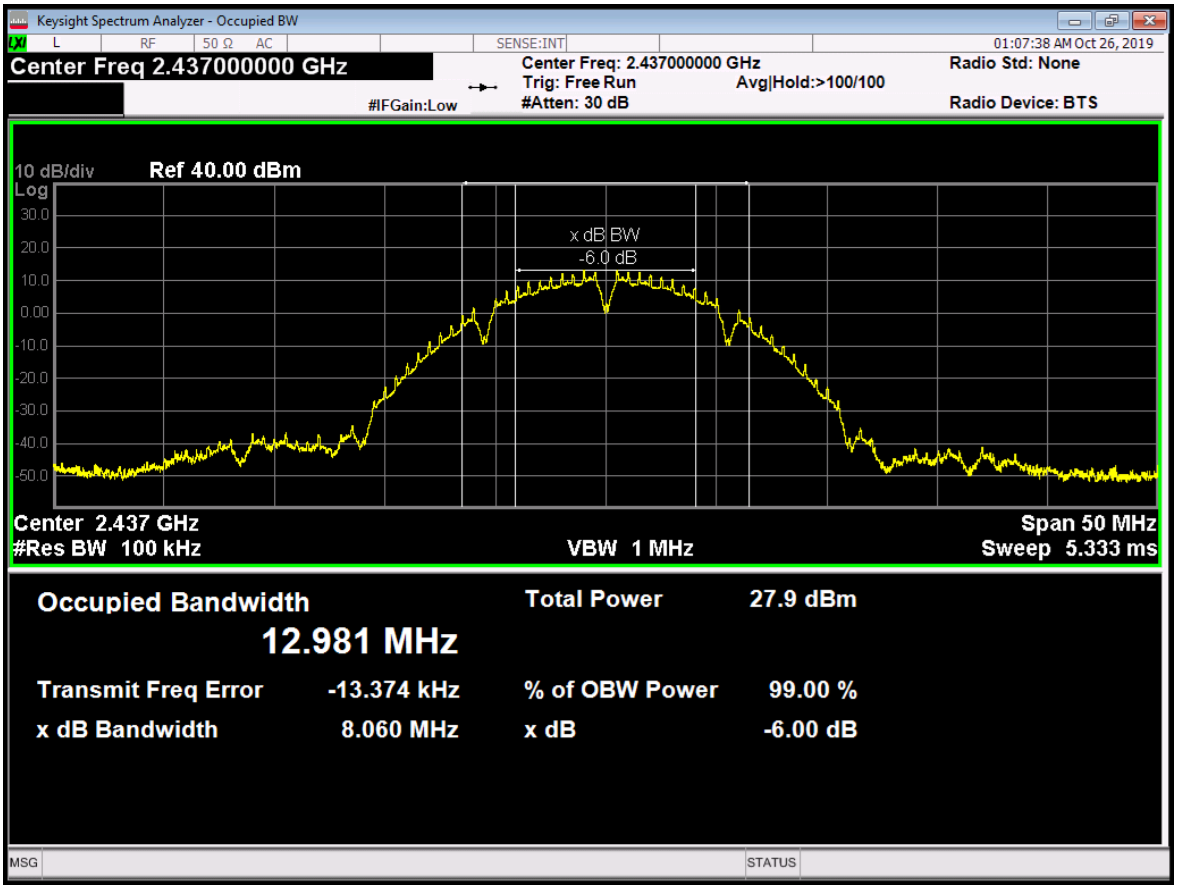
**Antenna 1**
**Channel 6**



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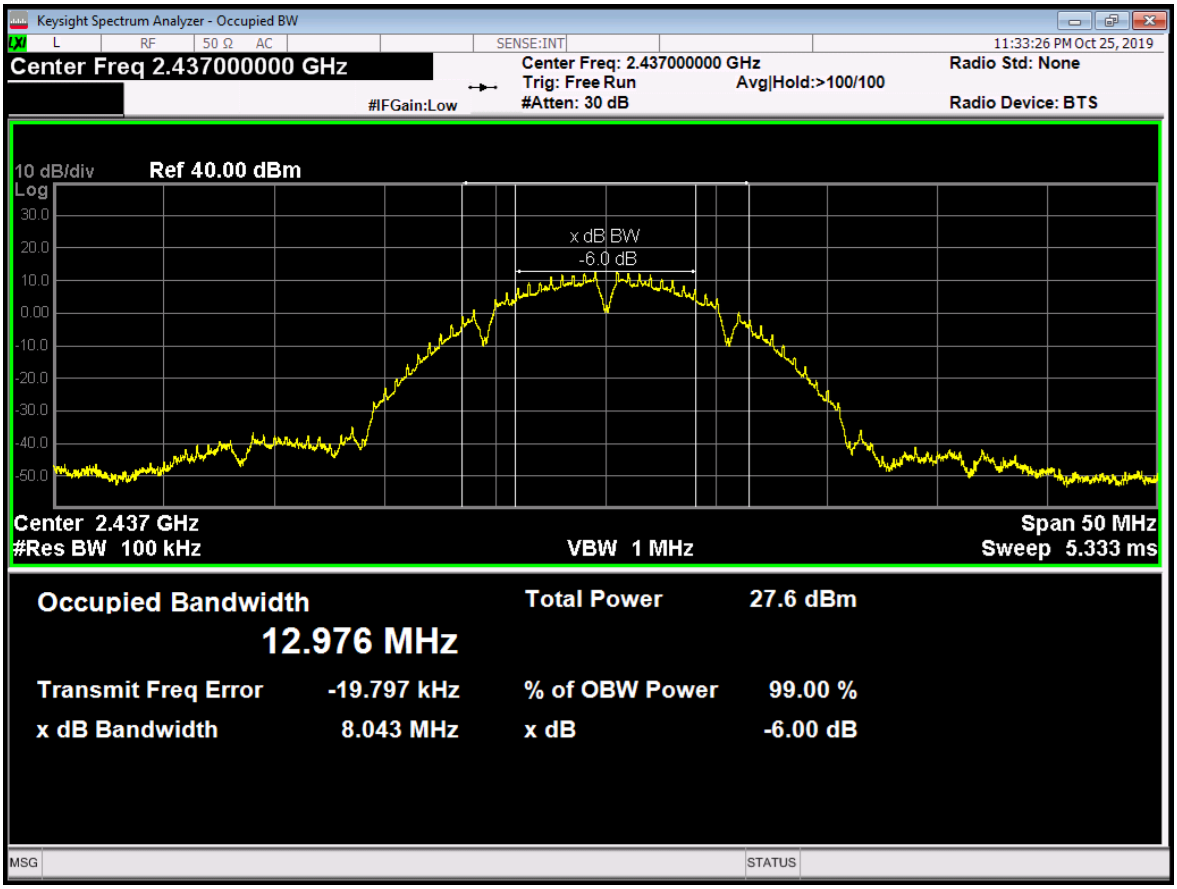
## Antenna 2
## Channel 6



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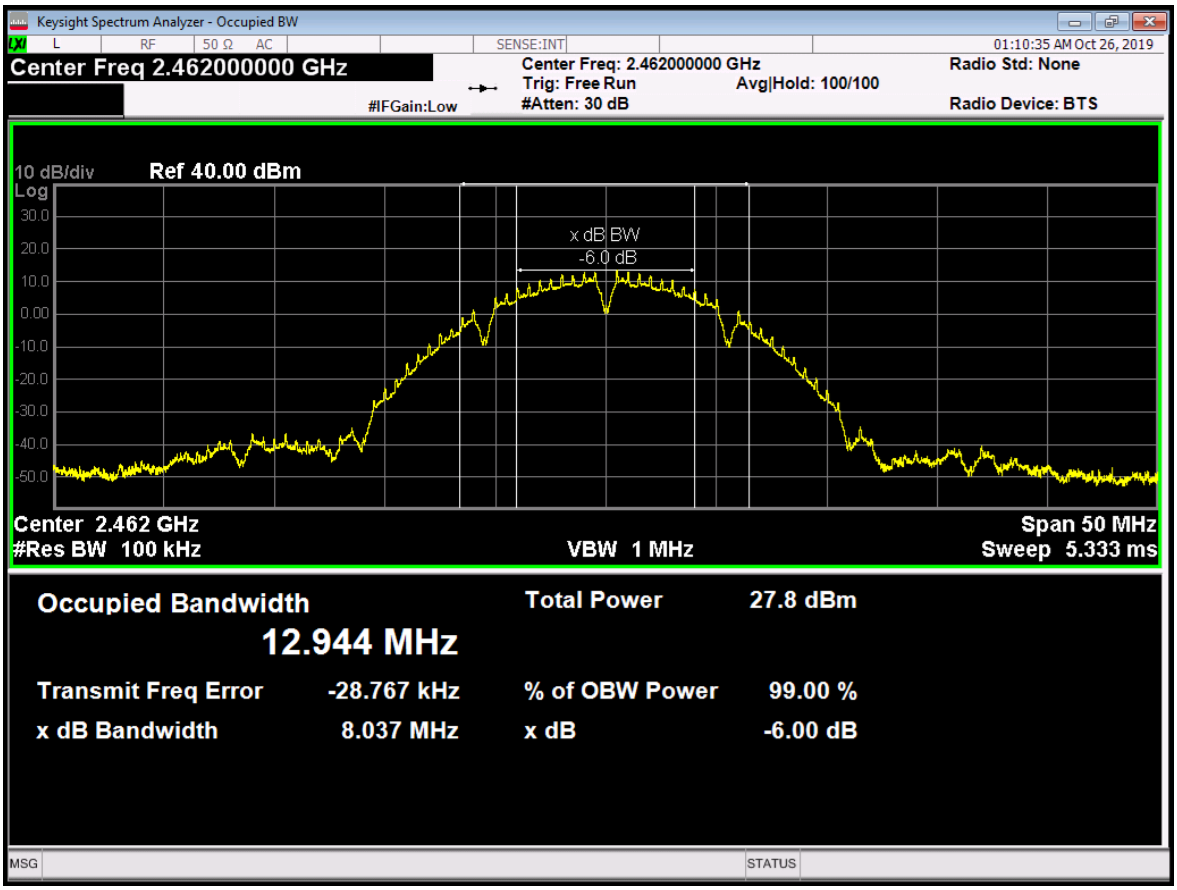
## Antenna 1
## Channel 11



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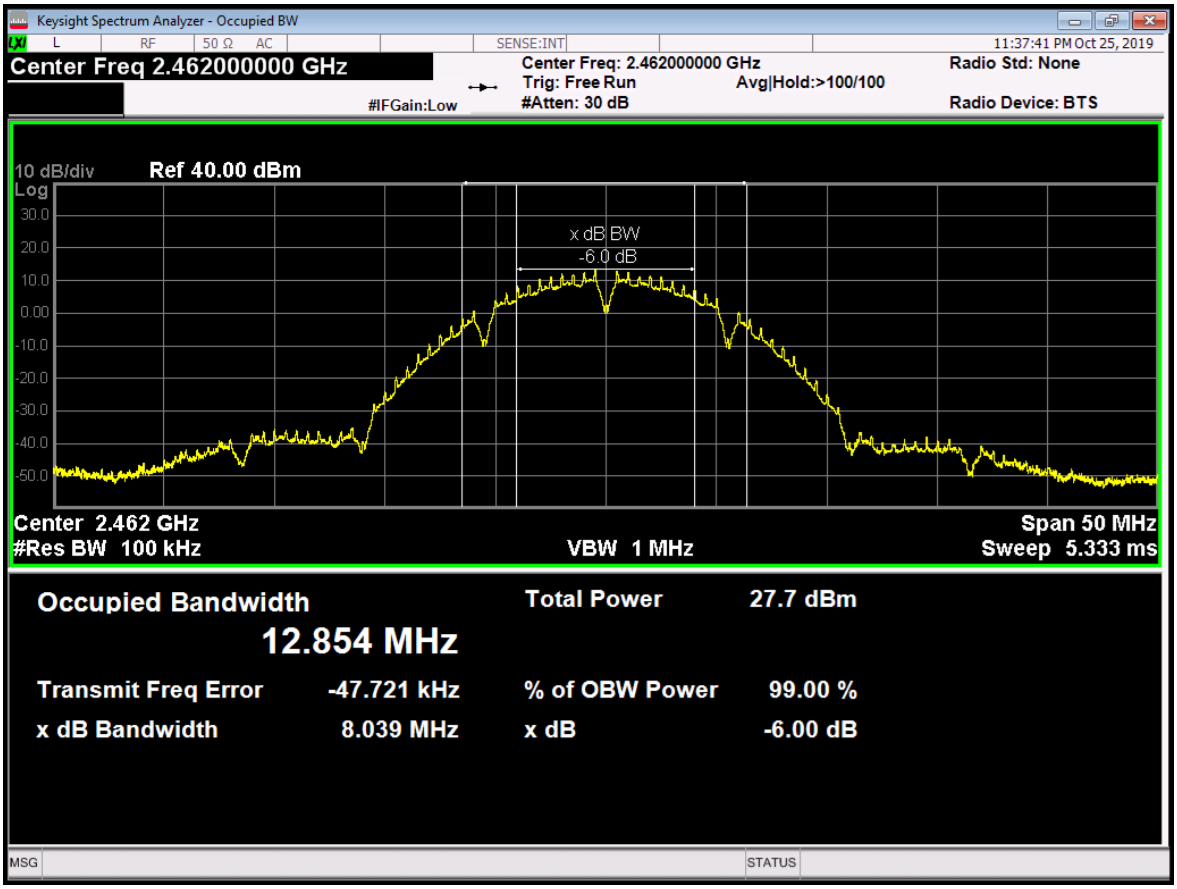
## Antenna 2
## Channel 11



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## Maximum Peak Output Power Test Data

| | | | |
|---|---|---|---|
| Company: | Skydio, Inc. | Test Date | 10/25/2019 |
| EUT Name | Drone | Test Engineer | Andreas Davidsson |
| Model: | SDRC2V1 | Test Result | PASS |
| Operating Mode | TX Mode | | |

| Mode | Antenna | Test CH | Frequency (MHz) | Raw Data (dBm) | Peak Output Power (dBm) | Limit (dBm) | Conclusion |
|---|---|---|---|---|---|---|---|
| **802.11 b (2.4GHz)** | 1 | 1 | 2412 | 23.77 | 26.71 | ≤ 30 | Pass |
| | 2 | 1 | 2412 | 23.62 | | | |
| | 1 | 6 | 2437 | 23.87 | 26.78 | ≤ 30 | Pass |
| | 2 | 6 | 2437 | 23.67 | | | |
| | 1 | 11 | 2462 | 23.87 | 26.77 | ≤ 30 | Pass |
| | 2 | 11 | 2462 | 23.64 | | | |
| **802.11 g (2.4GHz)** | 1 | 1 | 2412 | 23.01 | 26.09 | ≤ 30 | Pass |
| | 2 | 1 | 2412 | 23.14 | | | |
| | 1 | 6 | 2437 | 23.26 | 26.25 | ≤ 30 | Pass |
| | 2 | 6 | 2437 | 23.21 | | | |
| | 1 | 11 | 2462 | 23.08 | 26.15 | ≤ 30 | Pass |
| | 1 | 11 | 2412 | 23.18 | | | |
| **802.11 n (2.4GHz)** | 1 | 1 | 2412 | 23.05 | 26.10 | ≤ 30 | Pass |
| | 2 | 1 | 2412 | 23.11 | | | |
| | 1 | 6 | 2437 | 23.13 | 26.15 | ≤ 30 | Pass |
| | 2 | 6 | 2437 | 23.13 | | | |
| | 1 | 11 | 2462 | 23.37 | 26.48 | ≤ 30 | Pass |
| | 1 | 1 | 2412 | 23.55 | | | |
| | Test Equipment: Please refer to section 5.2<br>Peak Output Power Calculation (See Section 7.4.2 for calculation explanation) listed below each screenshot. | | | | | | |

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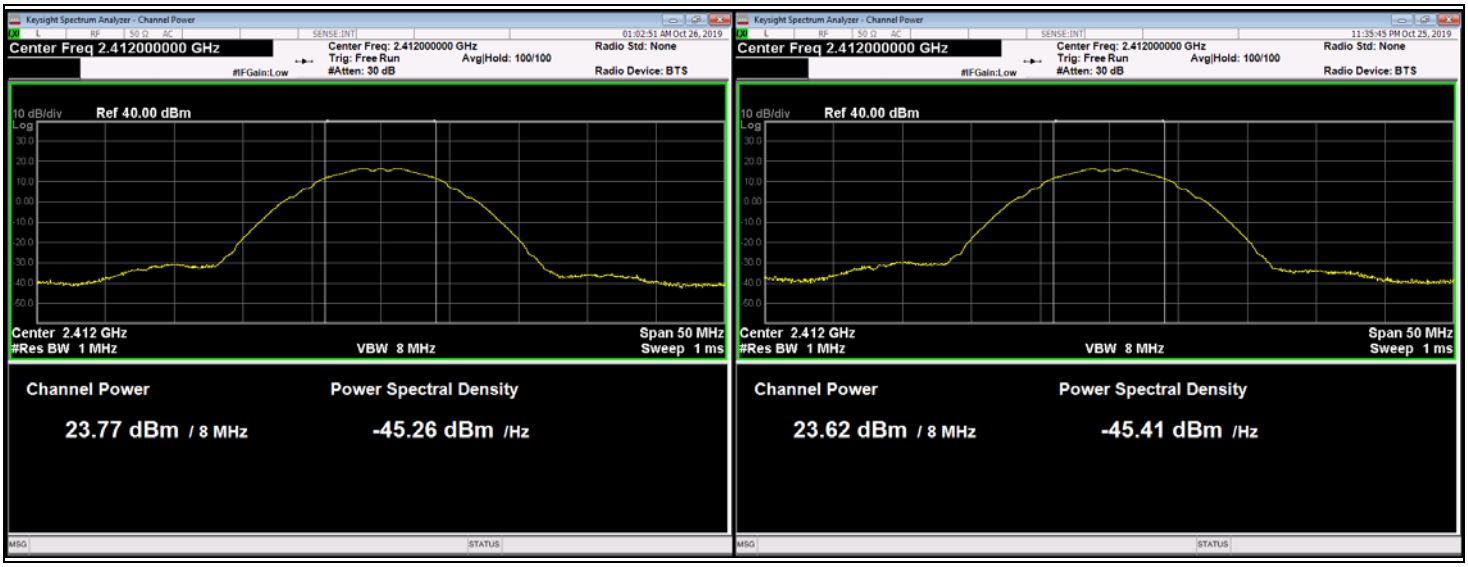
## Antenna 1 + 2
## Channel 0



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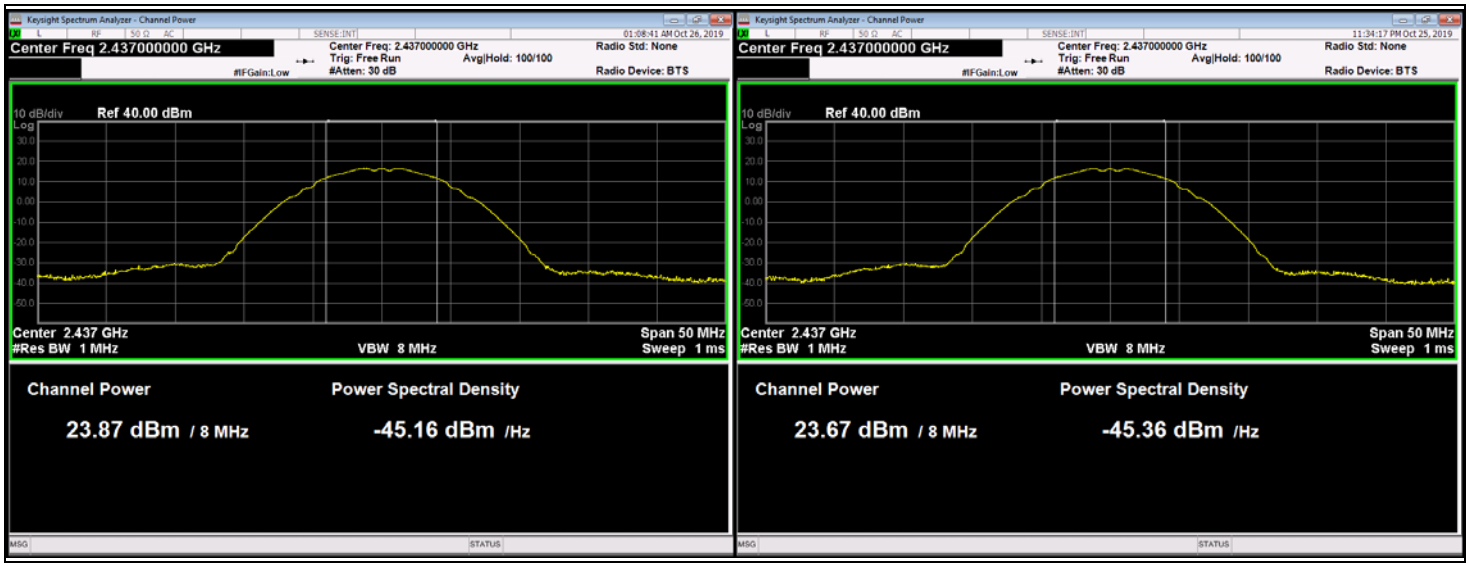
## Antenna 1 + 2
## Channel 6



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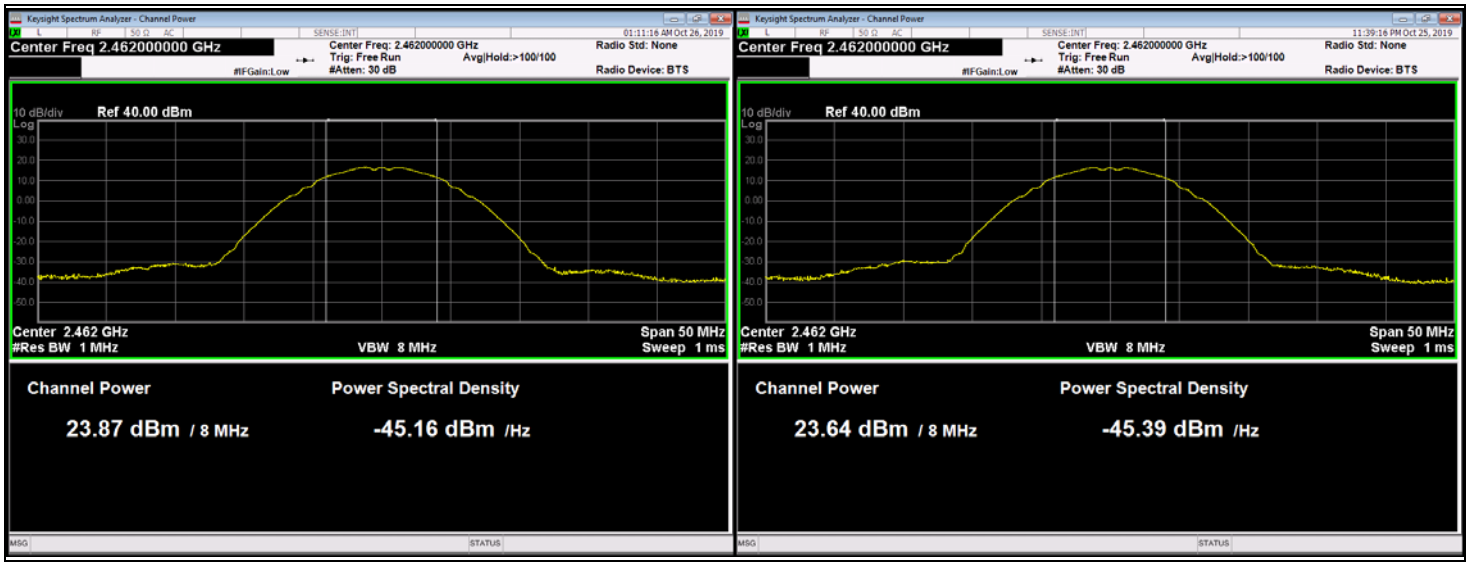
## Antenna 1 + 2
## Channel 11



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## Maximum Power Spectral Density Test Data

| | | | |
|---|---|---|---|
| Company: | Skydio, Inc. | Test Date | 10/25/2019 |
| EUT Name | Drone | Test Engineer | Andreas Davidsson |
| Model: | SDRC2V1 | Test Result | PASS |
| Operating Mode | TX Mode | | |

| Mode | Antenna | Test CH | Frequency (MHz) | Raw Peak (dBm) | Corrected PSD (dBm) | Limit (dBm) | Conclusion |
|---|---|---|---|---|---|---|---|
| 802.11 b (2.4GHz) | 1 | 1 | 2412 | 0.597 | **3.16** | ≤ 8 | Pass |
| | 2 | 1 | 2412 | -0.348 | | | |
| | 1 | 6 | 2437 | 0.501 | **3.34** | ≤ 8 | Pass |
| | 2 | 6 | 2437 | 0.146 | | | |
| | 1 | 11 | 2462 | 0.314 | **3.22** | ≤ 8 | Pass |
| | 2 | 11 | 2462 | 0.102 | | | |
| 802.11 g (2.4GHz) | 1 | 1 | 2412 | -0.192 | 2.72 | ≤ 8 | Pass |
| | 2 | 1 | 2412 | -0.394 | | | |
| | 1 | 6 | 2437 | 0.451 | 3.33 | ≤ 8 | Pass |
| | 2 | 6 | 2437 | 0.181 | | | |
| | 1 | 11 | 2462 | -0.153 | 3.00 | ≤ 8 | Pass |
| | 2 | 11 | 2462 | 0.121 | | | |
| 802.11 n (2.4GHz) | 1 | 1 | 2412 | 0.097 | 2.99 | ≤ 8 | Pass |
| | 2 | 1 | 2412 | -0.144 | | | |
| | 1 | 6 | 2437 | 0.344 | 3.06 | ≤ 8 | Pass |
| | 2 | 6 | 2437 | -0.271 | | | |
| | 1 | 11 | 2462 | 0.475 | 3.18 | ≤ 8 | Pass |
| | 2 | 11 | 2462 | -0.172 | | | |
| | Test Equipment: Please refer to 5.2 | | | | | | |

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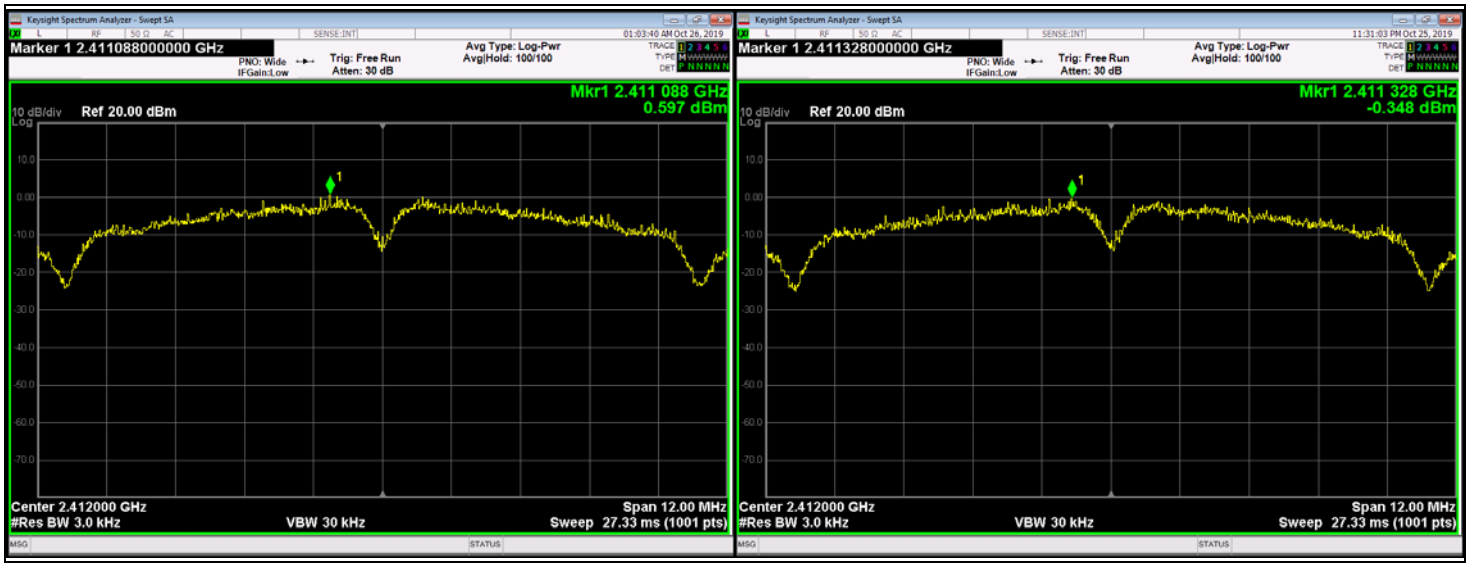
## Antenna 1 + 2
## Channel 0



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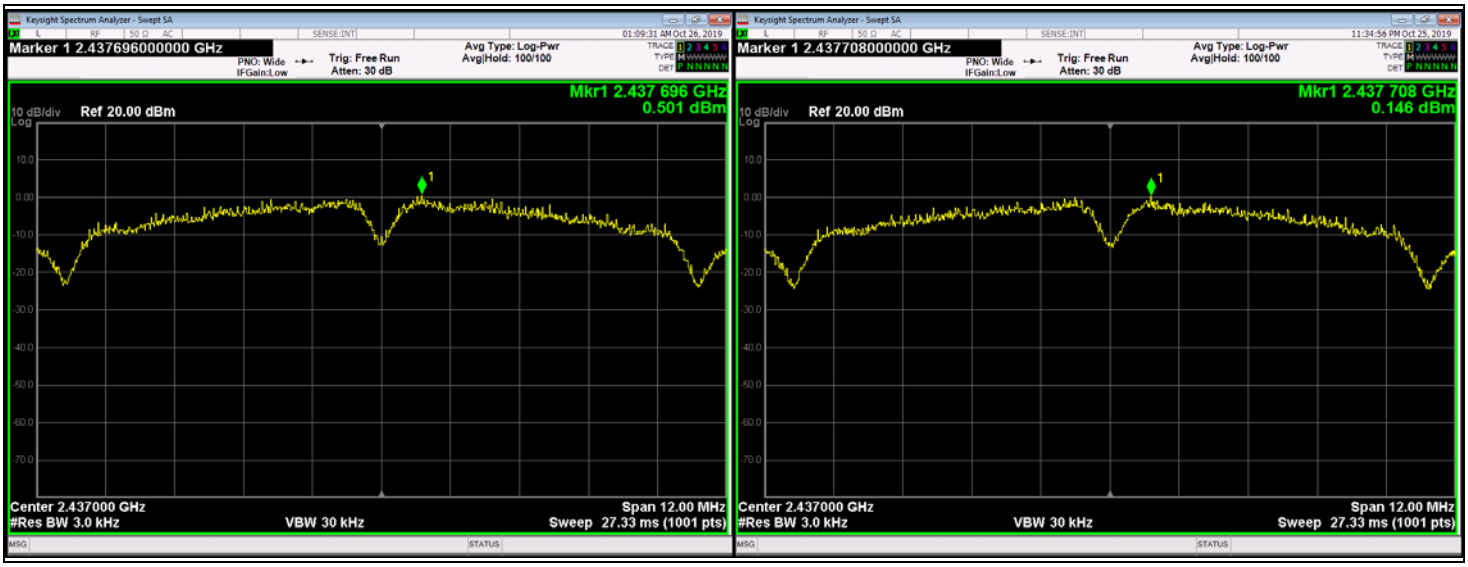
## Antenna 1 + 2
## Channel 6



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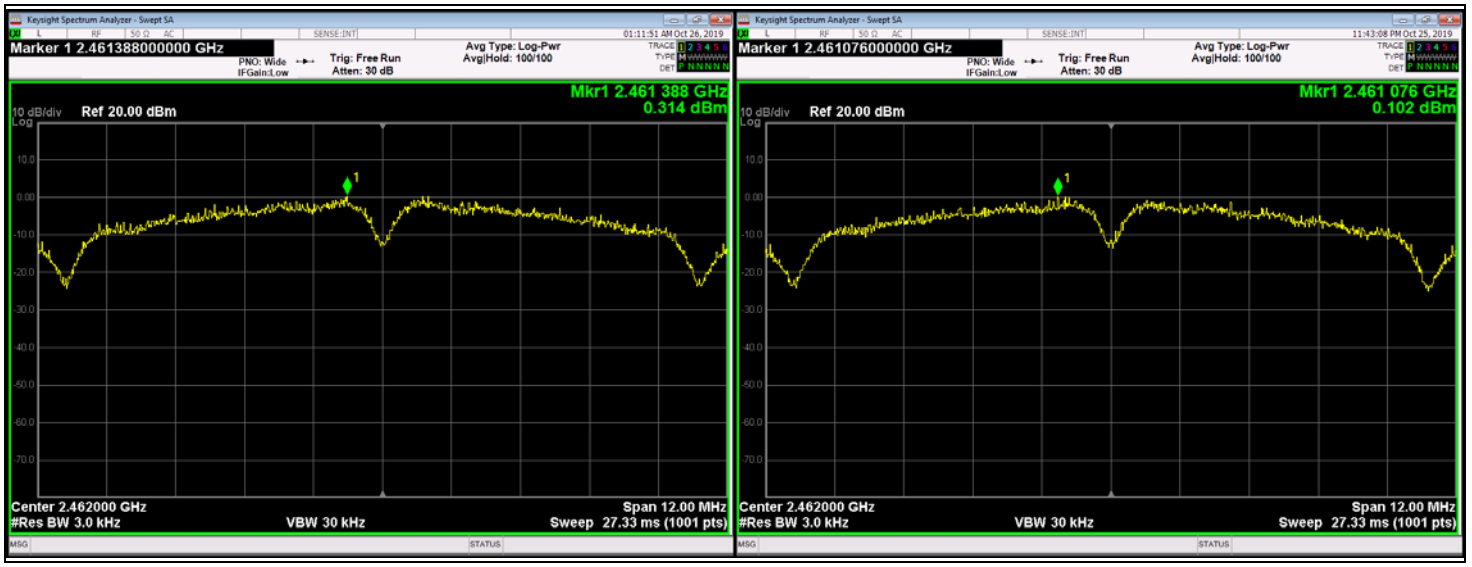
## Antenna 1 + 2
## Channel 11



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# APPENDIX B

# *TEST SETUP DIAGRAMS*

EMT ELECTRO MAGNETIC TEST, INC.
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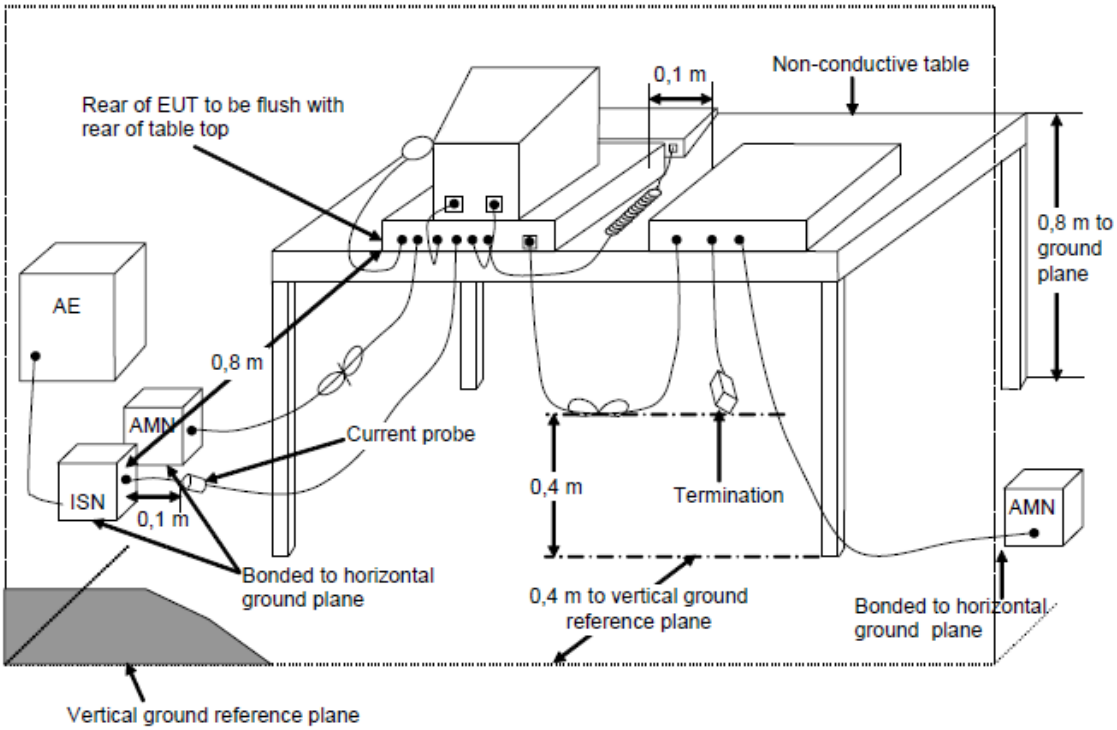


**FIGURE 1 – TABLETOP CONDUCTED EMISSIONS TEST SETUP – SITE "D"**

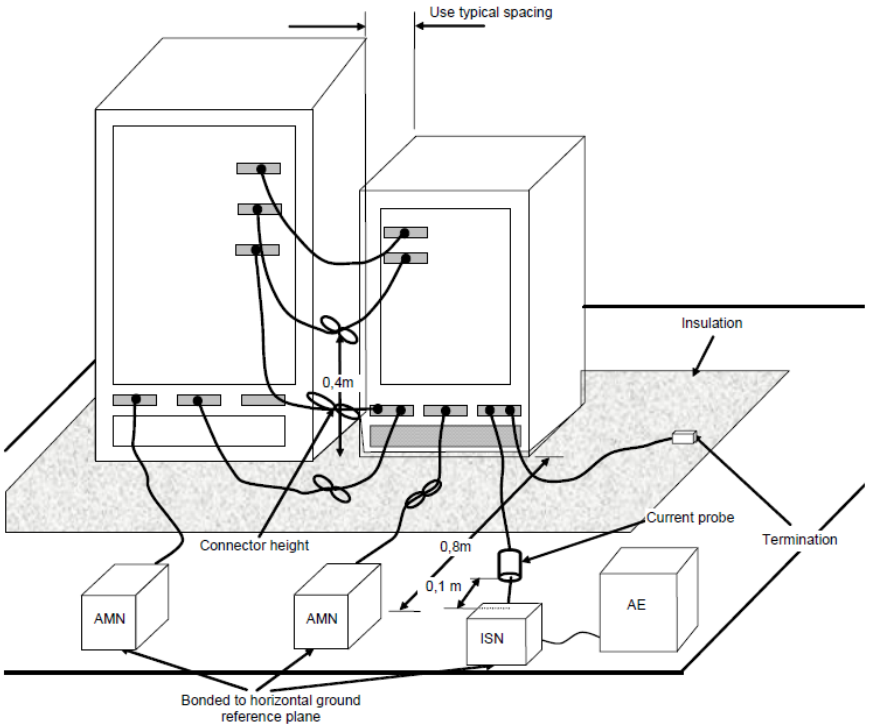


**FIGURE 1a – FLOORSTANDING CONDUCTED EMISSIONS TEST SETUP – SITE "D"**

EMT ELECTRO MAGNETIC TEST, INC.
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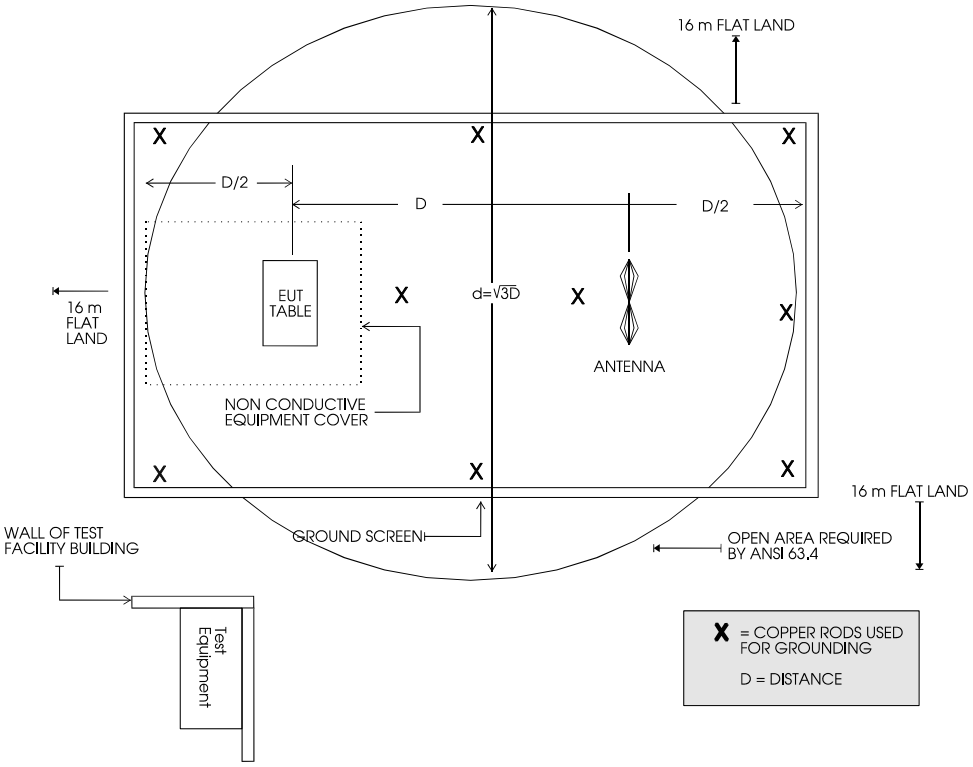


**FIGURE 2 - PLOT MAP AND LAYOUT OF TEST SITE "A"**

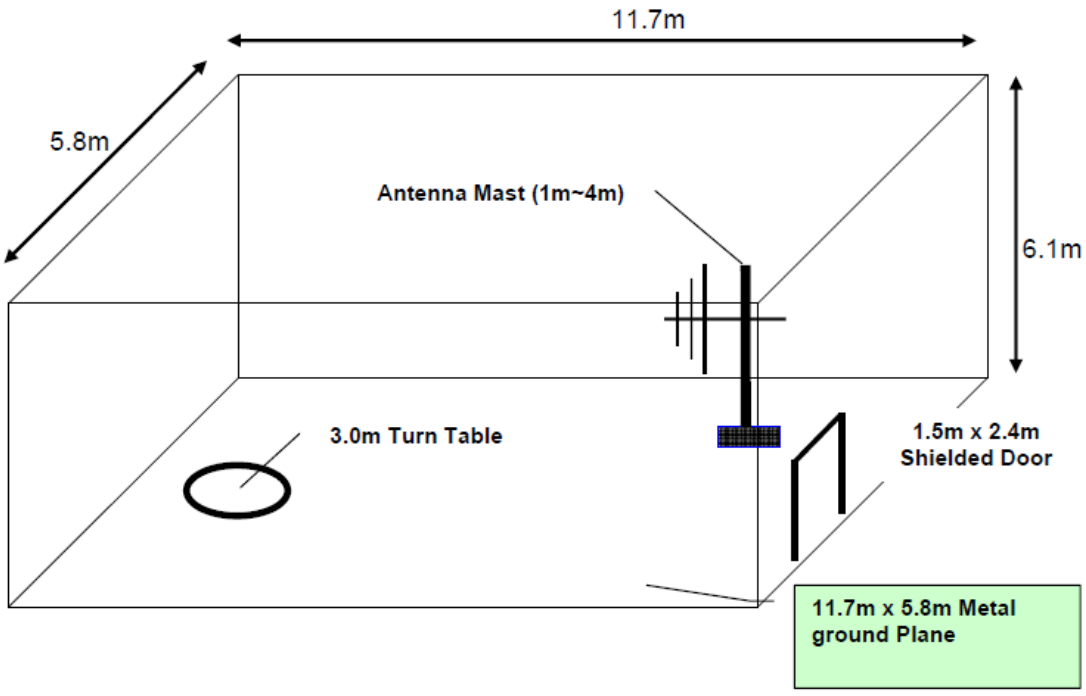


**FIGURE 3 - LAYOUT OF 5 METER SEMI-ANECHOIC CHAMBER**

EMT ELECTRO MAGNETIC TEST, INC.
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# APPENDIX C

# *MODIFICATIONS TO THE EUT*

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000

# MODIFICATIONS TO THE EUT

No modifications were made to the EUT by Electro Magnetic Test, Inc. personnel during the testing.

EMT ELECTRO MAGNETIC TEST, INC.
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**APPENDIX D**

# *ADDITIONAL MODELS COVERED UNDER THIS REPORT*

EMT ELECTRO MAGNETIC TEST, INC.
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# ADDITIONAL MODELS COVERED UNDER THIS REPORT

There are no additional models to be covered under this report.

EMT ELECTRO MAGNETIC TEST, INC.
1547 Plymouth Street, Mountain View, CA 94043 Tel: (650) 965-4000 Fax: (650) 965-3000

## End of Report

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