

**CERTIFICATION TEST REPORT**  
**FOR**  
**MODULAR MUSIC DEVICE**  
**MODEL: DAISY PATCH SUBMODULE**

**FCC CLASS A COMPLIANCE**

**DATE OF ISSUE: September 30, 2021**

**REPORT NUMBER: R210930D**

**PREPARED FOR:**

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**ADMINISTRATIVE INFORMATION**

**DATE OF TEST:** September 29, 2021

**PURPOSE OF TEST:** To demonstrate the compliance of the EUTs with the FCC requirements for CLASS A devices.

**MANUFACTURER:** ELECTROSMITH, CORP.  
1100 Calle Cordillera  
San Clemente, CA 92637

**REPRESENTATIVE:** Andrew Ikenberry

**TEST LOCATION:** CKC LABS, INC.  
110 N. Olinda Place  
Brea, CA 92823

**TEST PERSONNEL:** Stu Yamamoto

**TEST METHOD:** CISPR32/ANSI C63.4 1992

**FREQUENCY RANGE TESTED:** 150 kHz-1000 MHz

**EQUIPMENT UNDER TEST (EUT):** MODEL: DAISY PATCH SUBMODULE

**ADMINISTRATIVE NOTE:** All tests were conducted under the supervision of Doug Tobias, EMC Consultant

## SUMMARY OF RESULTS

The Electrosmith, EUT was tested in accordance with ANSI C63.4 1992 for compliance with the CLASS A of the FCC Rules.

The above equipment was found to be fully compliant with the CLASS A limits of FCC for both radiated and conducted emissions without modifications to comply with conducted and radiated emissions requirements. Additionally, it should be noted that the results in this report apply only to the items tested, as identified herein.

## EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT is installed in a substantial metal enclosure.

## PERIPHERAL DEVICES

| Device                   | Manufacturer      | Model #                     | S/N        |
|--------------------------|-------------------|-----------------------------|------------|
| Power Supply             | Strymon           | Zuma                        | (none)     |
| Guitar Amplifier         | Mesa Engineering  | Mesa Boogie "Subway Rocket" |            |
| Guitar Pedal             | M-Audio           | Expression Pedal            | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Bliss Factory               | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Meris                       | (none)     |
| AC to 15Vdc Power Supply | Mean Well         | GSM60A15                    | EC094S0371 |

## REPORT OF MEASUREMENTS RADIATED EMISSIONS

The following Tables 1 and 2 report the six highest radiated and conducted emissions levels recorded during the tests performed on the EUT. The data sheets from which these tables were compiled are contained in Appendix B.

| <b>TABLE 1: SIX HIGHEST RADIATED EMISSION LEVELS</b> |                          |                                |                         |              |       |
|------------------------------------------------------|--------------------------|--------------------------------|-------------------------|--------------|-------|
| FREQUENCY<br>MHz                                     | METER<br>READING<br>dBuV | CORRECTED<br>READING<br>dBuV/m | SPEC<br>LIMIT<br>dBuV/m | MARGIN<br>dB | NOTES |
| 48.000                                               | 49.9                     | 38.7                           | 50.0                    | -11.3        | V     |
| 80.000                                               | 48.2                     | 35.3                           | 50.0                    | -14.7        | V     |
| 188.000                                              | 43.4                     | 33.0                           | 50.0                    | -17.0        | V     |
| 188.000                                              | 40.9                     | 30.5                           | 50.0                    | -19.5        | H     |
| 80.000                                               | 41.7                     | 28.8                           | 50.0                    | -21.2        | H     |
| 452.600                                              | 34.6                     | 34.4                           | 57.0                    | -22.6        | V     |

Test Method: ANSI C63.4 2014

Spec Limit: CISPR 32 A

Test Distance: 3 Meters

NOTES: H= Horizontal Polarization  
V= Vertical Polarization  
N= No Polarization  
D= Dipole Reading  
Q= Quasi Peak Reading  
A= Average Reading

### **Modifications:**

NONE

# REPORT OF MEASUREMENTS CONDUCTED EMISSIONS

**TABLE 2: SIX HIGHEST CONDUCTED EMISSION LEVELS**

| FREQUENCY<br>MHz | METER<br>READING<br>dBuV | CORRECTED<br>READING<br>dBuV/m | SPEC<br>LIMIT<br>dBuV/m | MARGIN<br>dB       |
|------------------|--------------------------|--------------------------------|-------------------------|--------------------|
| 00.384160        | 43.3                     | 49.2                           | 66.0                    | -16.8 - L1(L) lead |
| 11.148000        | 36.2                     | 42.5                           | 60.0                    | -17.5 - L1(L) lead |
| 10.337000        | 35.5                     | 41.9                           | 60.0                    | -18.1 - L1(L) lead |
| 00.384887        | 43.8                     | 49.7                           | 66.0                    | -16.3 - L2(N) lead |
| 11.148000        | 36.0                     | 42.3                           | 60.0                    | -17.7 - L2(N) lead |
| 10.337000        | 35.8                     | 42.2                           | 60.0                    | -17.8 - L2(N) lead |

Test Method:  
Spec Limit:

ANSI C63.4 2014  
CISPR 32, CLASS A

NOTES:

Q= Quasi Peak Reading  
A= Average Reading

**TABLE A**

**LIST OF TEST EQUIPMENT USED**

SEE TEST DATA SHEETS

## **EUT SET UP**

In general, the equipment under test (EUT) and the peripherals listed were setup in a manner that represented their normal use. Any special conditions required for the EUT to operate normally are identified in the comments that accompany Table 1 for radiated emissions, and Table 2 for conducted emissions. Additionally, a complete description of all the ports and I/O cables is included on the information sheets contained in Appendix A.

During radiated emissions testing, the EUT was mounted on a nonconductive rotating table 1 meter above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters. This configuration is typical for radiated emissions testing of table top devices.

I/O cables were connected to the EUT and peripherals in the manner required for normal operation of the system. Excess cabling was bundled in the center in a serpentine fashion using 30-40 centimeter lengths.

During conducted emissions testing the EUT was located 80 centimeters above the conducting ground plane on the same non-conducting table as was used for radiated testing. The metal plane was grounded to the earth through the green wire safety ground. Power to the EUT was provided via 3 meters of shielded power cable from a filter grounded to the metal plane to a LISN. The LISN was also grounded to the plane and attached to the LISN was a 4 ganged grounded outlet whose source was also shielded and 60 centimeters in length. All other objects were kept a minimum of 1 meter away from the EUT during the conducted test.

**TEST INSTRUMENTATION AND ANALYZER SETTINGS**

The test instrumentation and equipment listed in Table A was used to collect both the radiated and conducted emissions data for the EUT. For radiated measurements below 300 MHz, the Bi-conical type antenna listed was used. For frequencies from 300 to 1000 MHz, the log periodic antenna was used. All antennas were located at a distance of 10 meters from the edge of the EUT. Conducted emissions tests required the use of the FCC type LISN's.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, a reference level of 100 dBuV and a vertical scale size of 10 dB per division was used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBuV, and a vertical scale of 10 dB per division.

## **SPECTRUM ANALYZER DETECTOR FUNCTIONS**

The notes that accompany the measurements contained in Tables 1 and 2 indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the “Peak” mode. Whenever a “Quasi-Peak” or “Average” reading is listed as one of the six highest readings, this is indicated as a “Q” or an “A” in Table 1 or Table 2. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data for the EUT.

### **Peak**

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called “peak hold”, the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

### **Quasi-Peak**

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP 85650A Quasi-Peak Adapter for the HP 8566B Spectrum analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

### **Average**

When the frequencies exceed 1 GHz , average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set in the linear mode and scan time is reduced.

## **Test Methods**

The radiated and conducted emissions data of the EUT, was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the "Sample Calculations". The corrected data was then compared to the CISPR32 emissions limits to determine compliance.

Preliminary and final measurements were taken in order to better ensure that all emissions from the EUT were found and maximized.

### **Radiated Emissions Testing**

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode (printing "H"'s to the CRT and peripherals if applicable) with the I/O cables and line cords facing the antenna. The frequency range of 30 MHz-88 MHz was then scanned with the Bi-conical antenna located about 1.5 meter above the ground plane in the vertical configuration. During this scan, the turntable was rotated and all peaks which were at or near the limit were recorded. Next, the frequency range of 100-300 MHz was scanned in the same manner with the Bi-conical antenna, and the peaks recorded. Lastly, a scan of the FM band from 88-110 MHz was made, using a reduced resolution bandwidth and a reduced frequency span. The Bi-conical antenna was changed to the horizontal polarity and the above steps were repeated. After changing to the log periodic antenna in the horizontal configuration, the frequency range of 300-1000 MHz was scanned. The log periodic antenna was changed to the vertical polarity and the frequency range of 300 - 1000 MHz was again scanned. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

For the final radiated scan, the equipment was again positioned with it's I/O and power cables facing the antenna, and a thorough scan of all the frequencies using a small frequency span was manually made. The turntable was rotated as needed. Comparison with the previously recorded measurements was then made.

Using the peak readings from both scans as a guide, the test engineer then maximizes the readings with respect to the table rotation, antenna height and configuration of the peripherals and cables. Maximizing of the cables was achieved by monitoring the spectrum analyzer on a closed circuit television monitor while the EUT cables were being moved and rearranged on the EUT table for maximum emissions. Figures and photographs showing the final worst case configuration of the EUT are contained in Appendix A.

**Conducted Emissions Testing**

For conducted emissions testing, a 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 1.705 MHz , 1.705 MHz to 3 MHz and 3 MHz to 30 MHz. All readings within 20 dB of the limit were recorded. At frequencies where the recorded emissions were close to the limit, further investigation was performed manually at a slower sweep rate.

Tables 1 and 2 show the corrected values of the six highest readings obtained for the EUT.

**Sample Calculations**

An example of how the basic spectrum analyzer reading is converted using correction factors is given for the six highest emissions readings in Table 1 and 2. For radiated emissions in dBuV/m, the spectrum analyzer reading in dBuV is corrected by using the following formula:

$$\begin{aligned} &\text{Meter reading (dBuV)} \\ &+ \text{Antenna Factor (dB)} \\ &+ \text{Cable Loss (dB)} \\ &- \text{Distance Correction (dB)} \\ &- \text{Pre-amplifier Gain (dB)} \\ &= \text{Corrected Reading (dBuV/m)} \end{aligned}$$

This reading is then compared to the applicable specification limit to determine compliance. For conducted emissions, no corrections factors are needed when 50 uH, LISN's are used.

**APPENDIX A**  
**INFORMATION ABOUT THE EQUIPMENT UNDER TEST**

**INFORMATION ABOUT THE EQUIPMENT UNDER TEST**

Test Software/Firmware: N/A

The equipment under test and support equipment are located together on the tabletop. The connections are as follows: Daisy Patch Submodule connected to Bliss Factory Pedal via 1/8" 3' shielded T.S. to 1/4" phono jack cable. Bliss Factory Pedal connected to Meris Pedal via 1/4" phono jack audio cable shielded 12". Meris Pedal connected to Expression Pedal. Meris Pedal has loopback MIDI cable shielded 6'. Meris Pedal connected to Mesa Engineering Mesa Boogie. Pedals connected to Strymon power supply. Daisy Patch Submodule has four 1/8" 8" shielded T.S. phono jack cables connected. Daisy Patch Submodule connected to AC to 15Vdc external power supply. System internal clock loop to analog output source. Voltage to the Mean Well AC to DC adapter, amplifier, and Strymon is 120Vac 60Hz.

**REQUIRED EUT CHANGES TO COMPLY:**

NONE

**CABLE INFORMATION**

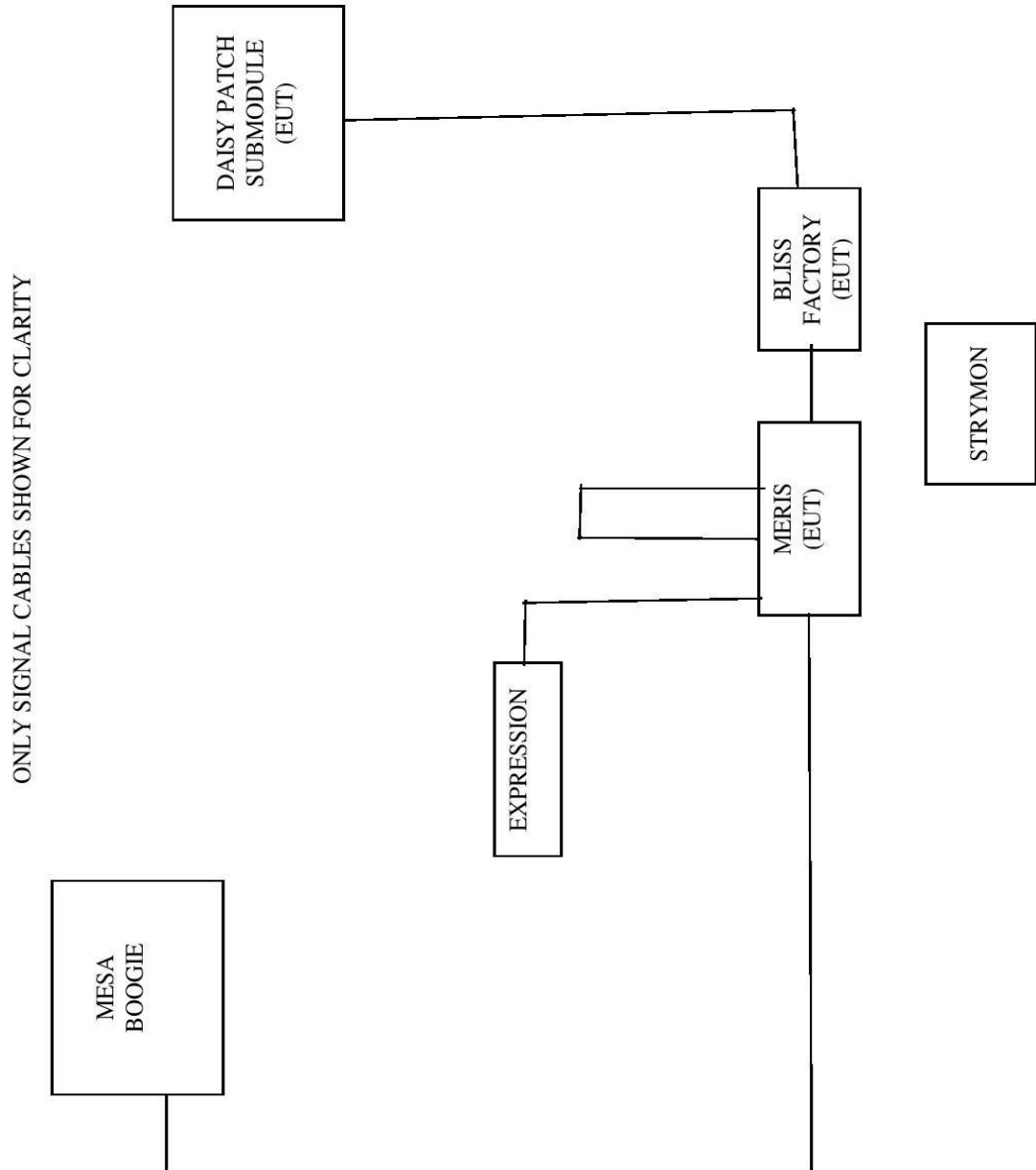
Power Cords:

- 1) Unit: MESA BOOGIE  
MFG: Generic  
Shielded (Y/N): N  
Length: 6 ft.
- 2) Unit: STRYMON POWER SUPPLY  
MFG: Generic  
Shielded (Y/N): N  
Length: 6 ft.
- 3) Unit: MEAN WELL POWER SUPPLY  
MFG: Generic  
Shielded (Y/N): N  
Length: 6 ft.

I/O Cables – External Connections:

- 1) MERIS to BLISS FACTORY (1/4" TS phonojack)  
Shielded (Y/N): Y  
MFG: Generic  
Length: 12 in
- 2) MERIS to MESA BOOGIE (1/4"TS phonojack)  
Shielded (Y/N): Y  
MFG: Generic  
Length: 6 ft
- 3) MERIS to EXPRESSION (1/4" TS phonojack)  
Shielded (Y/N): Y  
MFG: Generic  
Length: 12 in
- 4) BLISS FACTORY to DAISY PATCH SUBMODULE (EUT)  
(1/8" T.S. to 1/4"TS phonojack)  
Shielded (Y/N): Y  
MFG: Generic  
Length: 3 ft
- 5) MERIS to MERIS LOOPBACK (MIDI)  
Shielded (Y/N): Y  
MFG: Generic  
Length: 6 ft

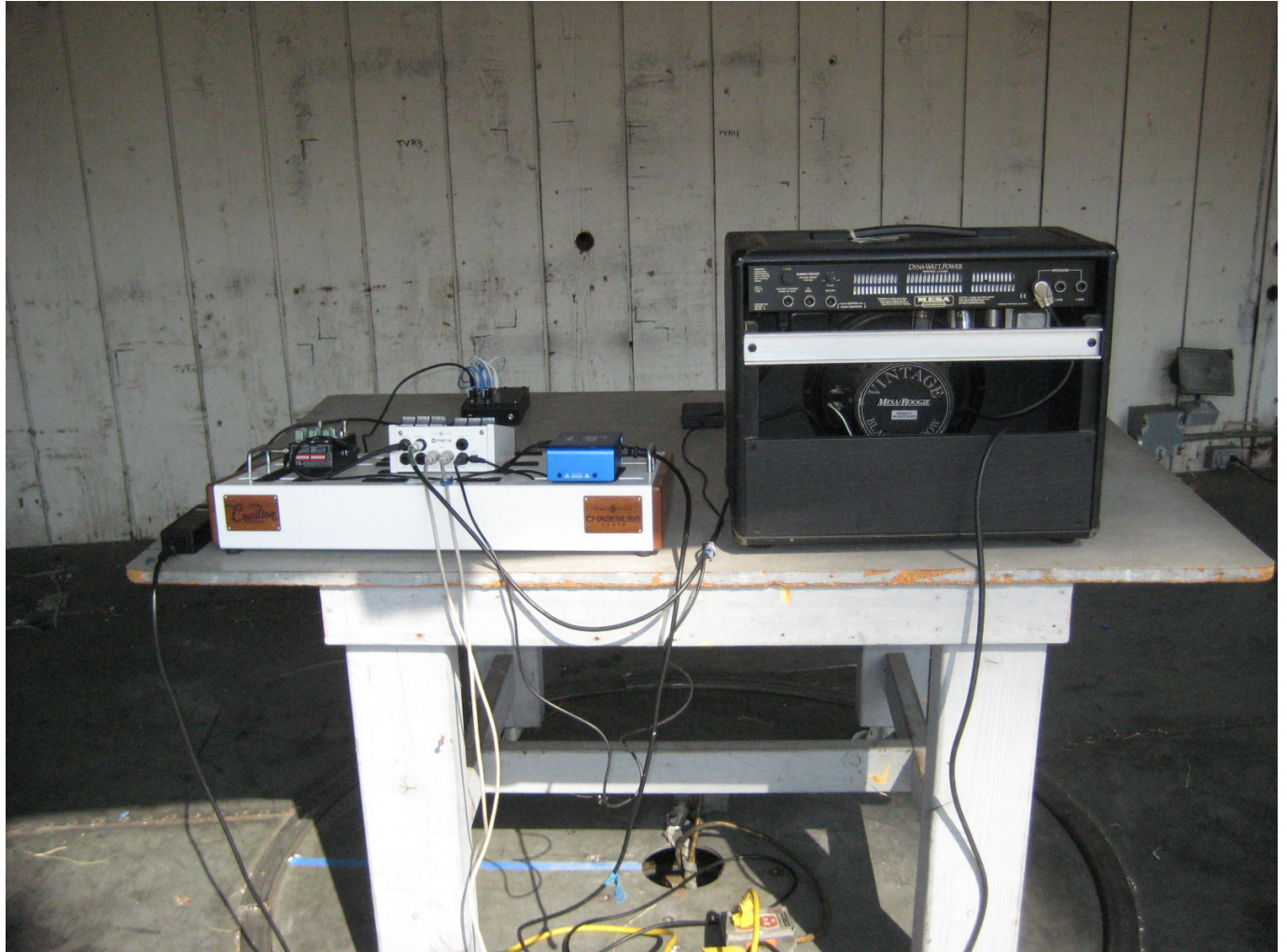
## CABLE CONNECTION DIAGRAM



**PHOTOGRAPH SHOWING RADIATED EMISSIONS TEST (FRONT)**



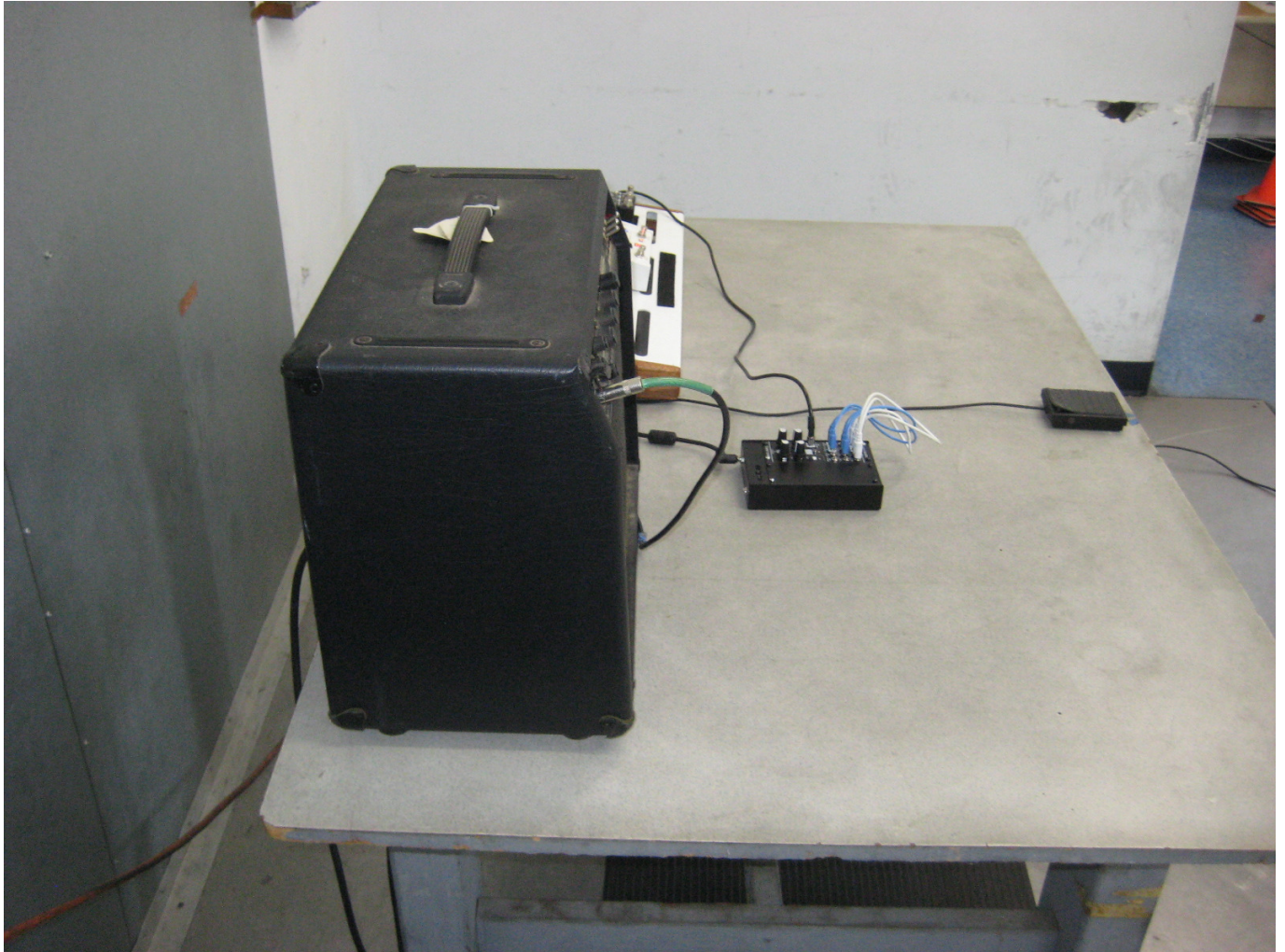
**PHOTOGRAPH SHOWING RADIATED EMISSIONS TEST (REAR)**



**PHOTOGRAPH SHOWING CONDUCTED EMISSIONS TEST (FRONT)**



**PHOTOGRAPH SHOWING CONDUCTED EMISSIONS TEST (REAR)**



**APPENDIX B**  
**MEASUREMENT DATA SHEETS**

Test Location: CKC Laboratories Inc • 110 N Olinda Pl • Brea CA 92823 • 7149936112  
 Customer: **Electrosmith, Corp.**  
 Specification: **CISPR 32 Radiated Emissions Class A (3m)**  
 Work Order #: **106044** Date: 9/29/2021  
 Test Type: **Maximized Emissions** Time: 14:44:50  
 Tested By: S. Yamamoto Sequence#: 1  
 Software: EMITest 5.03.20

**Equipment Tested:**

| Device               | Manufacturer        | Model #               | S/N    |
|----------------------|---------------------|-----------------------|--------|
| Modular Music Device | Electrosmith, Corp. | Daisy Patch Submodule | (none) |

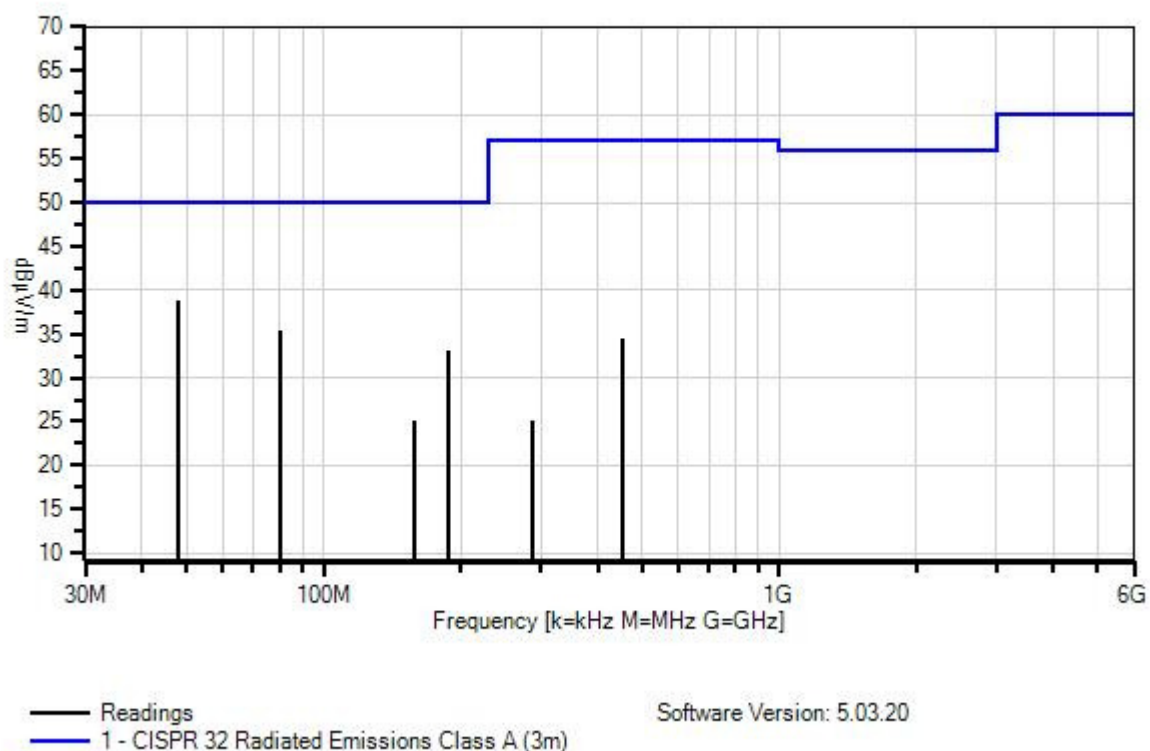
**Support Equipment:**

| Device                   | Manufacturer      | Model #                     | S/N        |
|--------------------------|-------------------|-----------------------------|------------|
| Power Supply             | Strymon           | Zuma                        | (none)     |
| Guitar Amplifier         | Mesa Engineering  | Mesa Boogie "Subway Rocket" |            |
| Guitar Pedal             | M-Audio           | Expression Pedal            | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Bliss Factory               | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Meris                       | (none)     |
| AC to 15Vdc Power Supply | Mean Well         | GSM60A15                    | EC094S0371 |

**Test Conditions / Notes:**

The equipment under test and support equipment are located together on the tabletop. The connections are as follows: Daisy Patch Submodule connected to Bliss Factory Pedal via 1/8" 3' shielded T.S. to 1/4" phono jack cable. Bliss Factory Pedal connected to Meris Pedal via 1/4" phono jack audio cable shielded 12". Meris Pedal connected to Expression Pedal. Meris Pedal has loopback MIDI cable shielded 6'. Meris Pedal connected to Mesa Engineering Mesa Boogie. Pedals connected to Strymon power supply. Daisy Patch Submodule has four 1/8" 8" shielded T.S. phono jack cables connected. Daisy Patch Submodule connected to AC to 15Vdc external power supply. System internal clock loop to analog output source. Voltage to the Mean Well AC to DC adapter, amplifier, and Strymon is 120Vac 60Hz. Temperature: 23C, Humidity: 52%, Pressure: 99kPa. Site A. RBW=120kHz VBW=1.2MHz

Electrosmith Corp. (Qubit Electronix) WO#: 106044 Sequence#: 1 Date: 9/29/2021  
CISPR 32 Radiated Emissions Class A (3m) Test Distance: 3 Meters Horiz

**Test Equipment:**

| ID | Asset #/Serial # | Description | Model | Calibration Date | Cal Due Date |
|----|------------------|-------------|-------|------------------|--------------|
|    |                  |             |       |                  |              |

**Measurement Data:** Reading listed by order taken. Test Distance: 3 Meters

| # | Freq<br>MHz | Rdng<br>dB $\mu$ V | T1 T5<br>dB   | T2<br>dB | T3<br>dB | T4<br>dB | Dist<br>Table | Corr<br>dB $\mu$ V/m | Spec<br>dB $\mu$ V/m | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------------|---------------|----------|----------|----------|---------------|----------------------|----------------------|--------------|--------------|
| 1 | 48.000M     | 49.9               | +0.1<br>+9.5  | -28.1    | +1.2     | +6.1     | +0.0          | 38.7                 | 50.0                 | -11.3        | Vert         |
| 2 | 80.000M     | 48.2               | +0.1<br>+7.5  | -28.1    | +1.5     | +6.1     | +0.0          | 35.3                 | 50.0                 | -14.7        | Vert         |
| 3 | 188.000M    | 43.4               | +0.2<br>+8.9  | -28.0    | +2.4     | +6.1     | +0.0          | 33.0                 | 50.0                 | -17.0        | Vert         |
| 4 | 188.000M    | 40.9               | +0.2<br>+8.9  | -28.0    | +2.4     | +6.1     | +0.0          | 30.5                 | 50.0                 | -19.5        | Horiz        |
| 5 | 80.000M     | 41.7               | +0.1<br>+7.5  | -28.1    | +1.5     | +6.1     | +0.0          | 28.8                 | 50.0                 | -21.2        | Horiz        |
| 6 | 452.600M    | 34.6               | +0.3<br>+17.2 | -27.8    | +3.9     | +6.2     | +0.0          | 34.4                 | 57.0                 | -22.6        | Vert         |
| 7 | 159.000M    | 34.0               | +0.2<br>+10.7 | -28.0    | +2.2     | +6.1     | +0.0          | 25.2                 | 50.0                 | -24.8        | Horiz        |
| 8 | 48.000M     | 35.6               | +0.1<br>+9.5  | -28.1    | +1.2     | +6.1     | +0.0          | 24.4                 | 50.0                 | -25.6        | Horiz        |

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|    |          |      |               |       |      |      |      |      |      |       |       |
|----|----------|------|---------------|-------|------|------|------|------|------|-------|-------|
| 9  | 159.000M | 32.2 | +0.2<br>+10.7 | -28.0 | +2.2 | +6.1 | +0.0 | 23.4 | 50.0 | -26.6 | Vert  |
| 10 | 452.600M | 29.6 | +0.3<br>+17.2 | -27.8 | +3.9 | +6.2 | +0.0 | 29.4 | 57.0 | -27.6 | Horiz |
| 11 | 287.800M | 30.6 | +0.2<br>+13.1 | -27.9 | +3.0 | +6.1 | +0.0 | 25.1 | 57.0 | -31.9 | Horiz |
| 12 | 287.800M | 28.4 | +0.2<br>+13.1 | -27.9 | +3.0 | +6.1 | +0.0 | 22.9 | 57.0 | -34.1 | Vert  |

Test Location: CKC Laboratories Inc • 110 N Olinda Pl • Brea CA 92823 • 7149936112  
 Customer: **Electrosmith, Corp.**  
 Specification: **CISPR 32 AC Mains Class A - Average**  
 Work Order #: **106044** Date: 9/29/2021  
 Test Type: **Conducted Emissions** Time: 3:22:14 PM  
 Tested By: S. Yamamoto Sequence#: 4  
 Software: EMITest 5.03.20 120V 60Hz

**Equipment Tested:**

| Device               | Manufacturer        | Model #               | S/N    |
|----------------------|---------------------|-----------------------|--------|
| Modular Music Device | Electrosmith, Corp. | Daisy Patch Submodule | (none) |

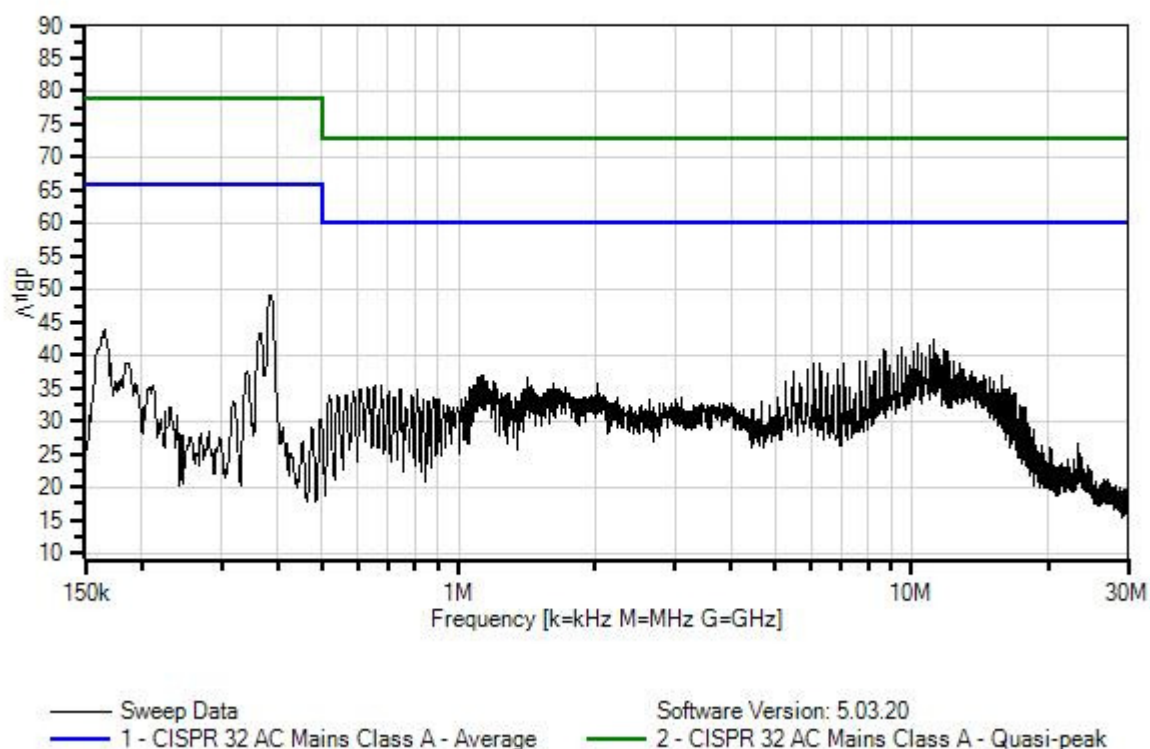
**Support Equipment:**

| Device                   | Manufacturer      | Model #                     | S/N        |
|--------------------------|-------------------|-----------------------------|------------|
| Power Supply             | Strymon           | Zuma                        | (none)     |
| Guitar Amplifier         | Mesa Engineering  | Mesa Boogie "Subway Rocket" |            |
| Guitar Pedal             | M-Audio           | Expression Pedal            | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Bliss Factory               | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Meris                       | (none)     |
| AC to 15Vdc Power Supply | Mean Well         | GSM60A15                    | EC094S0371 |

**Test Conditions / Notes:**

The equipment under test and support equipment are located together on the tabletop. The connections are as follows: Daisy Patch Submodule connected to Bliss Factory Pedal via 1/8" 3' shielded T.S. to 1/4" phono jack cable. Bliss Factory Pedal connected to Meris Pedal via 1/4" phono jack audio cable shielded 12". Meris Pedal connected to Expression Pedal. Meris Pedal has loopback MIDI cable shielded 6'. Meris Pedal connected to Mesa Engineering Mesa Boogie. Pedals connected to Strymon power supply. Daisy Patch Submodule has four 1/8" 8" shielded T.S. phono jack cables connected. Daisy Patch Submodule connected to AC to 15Vdc external power supply. System internal clock loop to analog output source. Voltage to the Mean Well AC to DC adapter, amplifier, and Strymon is 120Vac 60Hz. Temperature: 23C, Humidity: 52%, Pressure: 99kPa. Site A. RBW=9kHz VBW=30kHz

Electrosmith Corp. (Qubit Electronix) WO#: 106044 Sequence#: 4 Date: 9/29/2021  
 CISPR 32 AC Mains Class A - Average Test Lead: 120V 60Hz Line

**Test Equipment:**

| ID | Asset #/Serial # | Description | Model | Calibration Date | Cal Due Date |
|----|------------------|-------------|-------|------------------|--------------|
|    |                  |             |       |                  |              |

**Measurement Data:** Reading listed by order taken.

Test Lead: Line

| # | Freq<br>MHz | Rdng<br>dB $\mu$ V | T1<br>dB | T2<br>dB | T3<br>dB | T4<br>dB | Dist<br>Table | Corr<br>dB $\mu$ V | Spec<br>dB $\mu$ V | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------------|----------|----------|----------|----------|---------------|--------------------|--------------------|--------------|--------------|
| 1 | 384.160k    | 43.3               | +0.2     | +0.0     | +5.7     | +0.0     | +0.0          | 49.2               | 66.0               | -16.8        | Line         |
| 2 | 11.148M     | 36.2               | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 42.5               | 60.0               | -17.5        | Line         |
| 3 | 10.337M     | 35.5               | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 41.9               | 60.0               | -18.1        | Line         |
| 4 | 10.950M     | 35.2               | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 41.5               | 60.0               | -18.5        | Line         |
| 5 | 9.526M      | 34.7               | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 41.1               | 60.0               | -18.9        | Line         |
| 6 | 8.716M      | 34.7               | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 41.0               | 60.0               | -19.0        | Line         |
| 7 | 11.779M     | 34.5               | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 40.8               | 60.0               | -19.2        | Line         |
| 8 | 10.130M     | 34.3               | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 40.7               | 60.0               | -19.3        | Line         |

|    |          |      |      |      |      |      |      |      |      |       |      |
|----|----------|------|------|------|------|------|------|------|------|-------|------|
| 9  | 11.959M  | 34.2 | +0.2 | +0.3 | +5.7 | +0.2 | +0.0 | 40.6 | 60.0 | -19.4 | Line |
| 10 | 10.517M  | 34.1 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.4 | 60.0 | -19.6 | Line |
| 11 | 11.355M  | 34.1 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.4 | 60.0 | -19.6 | Line |
| 12 | 9.328M   | 33.6 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 40.0 | 60.0 | -20.0 | Line |
| 13 | 9.734M   | 33.5 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 39.9 | 60.0 | -20.1 | Line |
| 14 | 10.761M  | 33.3 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 39.6 | 60.0 | -20.4 | Line |
| 15 | 11.571M  | 33.3 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 39.6 | 60.0 | -20.4 | Line |
| 16 | 8.517M   | 33.1 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 39.4 | 60.0 | -20.6 | Line |
| 17 | 7.697M   | 32.9 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 39.1 | 60.0 | -20.9 | Line |
| 18 | 7.905M   | 32.9 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 39.1 | 60.0 | -20.9 | Line |
| 19 | 12.166M  | 32.7 | +0.2 | +0.3 | +5.7 | +0.2 | +0.0 | 39.1 | 60.0 | -20.9 | Line |
| 20 | 6.283M   | 32.8 | +0.1 | +0.2 | +5.7 | +0.1 | +0.0 | 38.9 | 60.0 | -21.1 | Line |
| 21 | 6.085M   | 32.8 | +0.1 | +0.2 | +5.7 | +0.1 | +0.0 | 38.9 | 60.0 | -21.1 | Line |
| 22 | 12.770M  | 32.4 | +0.2 | +0.3 | +5.8 | +0.2 | +0.0 | 38.9 | 60.0 | -21.1 | Line |
| 23 | 12.382M  | 32.4 | +0.2 | +0.3 | +5.8 | +0.2 | +0.0 | 38.9 | 60.0 | -21.1 | Line |
| 24 | 7.094M   | 32.6 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 38.8 | 60.0 | -21.2 | Line |
| 25 | 8.914M   | 32.3 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 38.6 | 60.0 | -21.4 | Line |
| 26 | 9.914M   | 32.2 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 38.6 | 60.0 | -21.4 | Line |
| 27 | 9.950M   | 32.0 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 38.4 | 60.0 | -21.6 | Line |
| 28 | 12.977M  | 31.6 | +0.2 | +0.3 | +5.8 | +0.2 | +0.0 | 38.1 | 60.0 | -21.9 | Line |
| 29 | 165.271k | 37.8 | +0.4 | +0.0 | +5.7 | +0.0 | +0.0 | 43.9 | 66.0 | -22.1 | Line |
| 30 | 6.896M   | 31.7 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 37.9 | 60.0 | -22.1 | Line |

Test Location: CKC Laboratories Inc • 110 N Olinda Pl • Brea CA 92823 • 7149936112  
 Customer: **Electrosmith, Corp.**  
 Specification: **CISPR 32 AC Mains Class A - Average**  
 Work Order #: **106044** Date: 9/29/2021  
 Test Type: **Conducted Emissions** Time: 3:25:05 PM  
 Tested By: S. Yamamoto Sequence#: 5  
 Software: EMITest 5.03.20 120V 60Hz

**Equipment Tested:**

| Device               | Manufacturer        | Model #               | S/N    |
|----------------------|---------------------|-----------------------|--------|
| Modular Music Device | Electrosmith, Corp. | Daisy Patch Submodule | (none) |

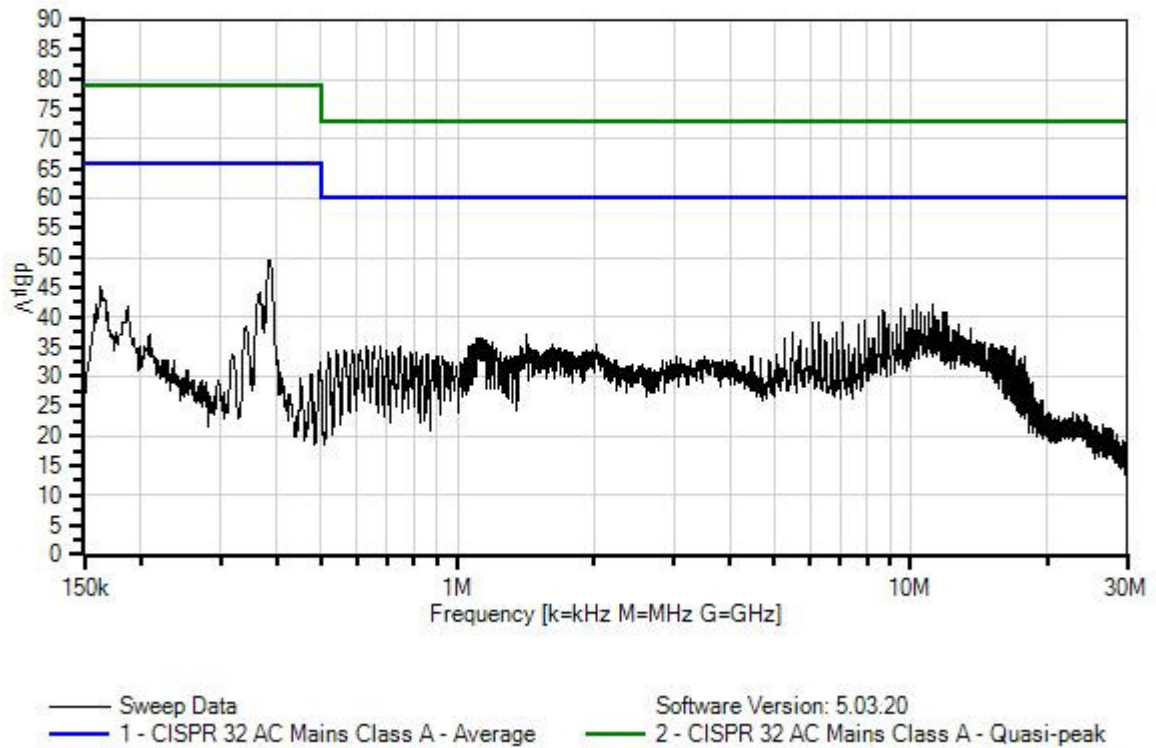
**Support Equipment:**

| Device                   | Manufacturer      | Model #                     | S/N        |
|--------------------------|-------------------|-----------------------------|------------|
| Power Supply             | Strymon           | Zuma                        | (none)     |
| Guitar Amplifier         | Mesa Engineering  | Mesa Boogie "Subway Rocket" |            |
| Guitar Pedal             | M-Audio           | Expression Pedal            | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Bliss Factory               | (none)     |
| Guitar Pedal             | Chase Bliss Audio | Meris                       | (none)     |
| AC to 15Vdc Power Supply | Mean Well         | GSM60A15                    | EC094S0371 |

**Test Conditions / Notes:**

The equipment under test and support equipment are located together on the tabletop. The connections are as follows: Daisy Patch Submodule connected to Bliss Factory Pedal via 1/8" 3' shielded T.S. to 1/4" phono jack cable. Bliss Factory Pedal connected to Meris Pedal via 1/4" phono jack audio cable shielded 12". Meris Pedal connected to Expression Pedal. Meris Pedal has loopback MIDI cable shielded 6'. Meris Pedal connected to Mesa Engineering Mesa Boogie. Pedals connected to Strymon power supply. Daisy Patch Submodule has four 1/8" 8" shielded T.S. phono jack cables connected. Daisy Patch Submodule connected to AC to 15Vdc external power supply. System internal clock loop to analog output source. Voltage to the Mean Well AC to DC adapter, amplifier, and Strymon is 120Vac 60Hz. Temperature: 23C, Humidity: 52%, Pressure: 99kPa. Site A. RBW=9kHz VBW=30kHz

Electrosmith Corp. (Qubit Electronix) WO#: 106044 Sequence#: 5 Date: 9/29/2021  
 CISPR 32 AC Mains Class A - Average Test Lead: 120V 60Hz Neutral

**Test Equipment:**

| ID | Asset #/Serial # | Description | Model | Calibration Date | Cal Due Date |
|----|------------------|-------------|-------|------------------|--------------|
|    |                  |             |       |                  |              |

**Measurement Data:**

Reading listed by order taken.

Test Lead: Neutral

| # | Freq<br>MHz | Rdng<br>dBμV | T1<br>dB | T2<br>dB | T3<br>dB | T4<br>dB | Dist<br>Table | Corr<br>dBμV | Spec<br>dBμV | Margin<br>dB | Polar<br>Ant |
|---|-------------|--------------|----------|----------|----------|----------|---------------|--------------|--------------|--------------|--------------|
| 1 | 384.887k    | 43.8         | +0.2     | +0.0     | +5.7     | +0.0     | +0.0          | 49.7         | 66.0         | -16.3        | Neutr        |
| 2 | 11.148M     | 36.0         | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 42.3         | 60.0         | -17.7        | Neutr        |
| 3 | 10.337M     | 35.8         | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 42.2         | 60.0         | -17.8        | Neutr        |
| 4 | 9.526M      | 35.3         | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 41.7         | 60.0         | -18.3        | Neutr        |
| 5 | 8.716M      | 35.1         | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 41.4         | 60.0         | -18.6        | Neutr        |
| 6 | 10.130M     | 34.7         | +0.1     | +0.3     | +5.7     | +0.3     | +0.0          | 41.1         | 60.0         | -18.9        | Neutr        |
| 7 | 11.959M     | 34.6         | +0.2     | +0.3     | +5.7     | +0.2     | +0.0          | 41.0         | 60.0         | -19.0        | Neutr        |
| 8 | 10.544M     | 34.6         | +0.1     | +0.3     | +5.7     | +0.2     | +0.0          | 40.9         | 60.0         | -19.1        | Neutr        |

|    |          |      |      |      |      |      |      |      |      |       |       |
|----|----------|------|------|------|------|------|------|------|------|-------|-------|
| 9  | 11.761M  | 34.6 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.9 | 60.0 | -19.1 | Neutr |
| 10 | 10.941M  | 34.4 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.7 | 60.0 | -19.3 | Neutr |
| 11 | 10.319M  | 33.9 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 40.3 | 60.0 | -19.7 | Neutr |
| 12 | 9.734M   | 33.8 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 40.2 | 60.0 | -19.8 | Neutr |
| 13 | 11.346M  | 33.9 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.2 | 60.0 | -19.8 | Neutr |
| 14 | 8.517M   | 33.8 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.1 | 60.0 | -19.9 | Neutr |
| 15 | 10.725M  | 33.8 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 40.1 | 60.0 | -19.9 | Neutr |
| 16 | 11.571M  | 33.4 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 39.7 | 60.0 | -20.3 | Neutr |
| 17 | 7.905M   | 33.4 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 39.6 | 60.0 | -20.4 | Neutr |
| 18 | 10.761M  | 33.1 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 39.4 | 60.0 | -20.6 | Neutr |
| 19 | 163.089k | 39.2 | +0.4 | +0.0 | +5.7 | +0.0 | +0.0 | 45.3 | 66.0 | -20.7 | Neutr |
| 20 | 6.283M   | 33.1 | +0.1 | +0.2 | +5.7 | +0.1 | +0.0 | 39.2 | 60.0 | -20.8 | Neutr |
| 21 | 7.094M   | 33.1 | +0.1 | +0.2 | +5.7 | +0.1 | +0.0 | 39.2 | 60.0 | -20.8 | Neutr |
| 22 | 6.076M   | 33.0 | +0.1 | +0.2 | +5.7 | +0.1 | +0.0 | 39.1 | 60.0 | -20.9 | Neutr |
| 23 | 7.707M   | 32.7 | +0.1 | +0.2 | +5.7 | +0.2 | +0.0 | 38.9 | 60.0 | -21.1 | Neutr |
| 24 | 9.319M   | 32.4 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 38.8 | 60.0 | -21.2 | Neutr |
| 25 | 12.770M  | 32.2 | +0.2 | +0.3 | +5.8 | +0.3 | +0.0 | 38.8 | 60.0 | -21.2 | Neutr |
| 26 | 8.914M   | 32.4 | +0.1 | +0.3 | +5.7 | +0.2 | +0.0 | 38.7 | 60.0 | -21.3 | Neutr |
| 27 | 12.166M  | 32.1 | +0.2 | +0.3 | +5.7 | +0.2 | +0.0 | 38.5 | 60.0 | -21.5 | Neutr |
| 28 | 365.980k | 38.2 | +0.2 | +0.0 | +5.8 | +0.0 | +0.0 | 44.2 | 66.0 | -21.8 | Neutr |
| 29 | 9.950M   | 31.8 | +0.1 | +0.3 | +5.7 | +0.3 | +0.0 | 38.2 | 60.0 | -21.8 | Neutr |
| 30 | 13.580M  | 31.4 | +0.2 | +0.3 | +5.8 | +0.3 | +0.0 | 38.0 | 60.0 | -22.0 | Neutr |