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TEST REPORT # 315155 A

LSR Job #: C-2240

Compliance Testing of:

Quietyme STONE

Test Date(s):

August 20th – September 22nd 2015.

Prepared For:

Attention: Robert Baddeley
Quietyme, Inc.
W2288 County Hwy E
Neshkoro, WI 54960

This Test Report is issued under the Authority of:
Khairul Aidi Zainal, Engineering Manager – Test Services.

Signature:

Date: 9-29-15

Test Report Reviewed by:
Mike Hintzke, EMC Engineer

Signature:

Date: 9-29-15

Project Engineer:
Khairul Aidi Zainal, Engineering Manager – Test Services.

Signature:

Date: 9-23-15

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EXHIBIT 1. INTRODUCTION

1.1 - Scope

| | |
|------------------|--|
| References: | FCC Part 15, Subpart C, Section 15.247 RSS GEN issue 4 and RSS 247 issue 1 |
| Title: | FCC : Telecommunication – Code of Federal Regulations, CFR 47, Part 15. IC : Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices |
| Purpose of Test: | To gain FCC and IC Certification Authorization for Low-Power License-Exempt Transmitters. |
| Test Procedures: | FCC KDB 558074 D01 DTS Measurement Guidance v03r03 ANSI C63.10 |

1.2 – Normative References

| Publication | Year | Title |
|--|------|--|
| FCC CFR Parts 0-15 | 2015 | Code of Federal Regulations – Telecommunications |
| ANSI C63.4 | 2014 | American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz. |
| RSS-247 Issue 1 | 2015 | Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices |
| RSS-GEN Issue 4 | 2014 | General Requirements and Information for the Certification of Radio Apparatus |
| ANSI C63.10 | 2013 | American National Standard for Testing Unlicensed Wireless Devices |
| FCC KDB 558074 D01 DTS Measurement Guidance v03r03 | 2015 | Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 |

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1.3 - LS Research, LLC Test Facility

LS Research, LLC is accredited by A2LA (American Association for Laboratory Accreditation) as conforming to ISO/IEC 17025, 2005 "General Requirements for the Competence of Calibration and Testing Laboratories".

LS Research, LLC's scope of accreditation includes all test methods listed herein, unless otherwise noted. Accreditation status can be verified at A2LA's web site: www.a2la2.net.

1.4 - Location of Testing

All testing was performed at the following location utilizing the facilities listed below, unless otherwise noted.

LS Research, LLC
W66 N220 Commerce Court
Cedarburg, Wisconsin, 53012 USA,

List of Facilities Located at LS Research, LLC:

Semi-Anechoic Chamber

1.5 - Test Equipment Utilized

A complete list of equipment utilized in testing is provided in Appendix A of this test report. Calibration dates are indicated in Appendix A. All test equipment is calibrated by a calibration laboratory accredited to the requirements of ISO/IEC 17025, and traceable to the SI standard.

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EXHIBIT 2. PERFORMANCE ASSESSMENT

2.1 - Client Information

| | |
|--------------------|--|
| Manufacturer Name: | Quietyme, Inc. |
| Address: | W2288 County Hwy E. Neshkoro, WI 54960 |
| Contact Name: | Robert Baddeley |

2.2 - Equipment Under Test (EUT) Information

The following information has been supplied by the applicant.

| | |
|----------------|--|
| Product Name: | Quietyme STONE |
| Model Number: | STONE 16 |
| Serial Number: | REV 6 Boards #3 and #6: Radiated measurements REV6 Board #1: Conducted measurements |

2.3 - Associated Antenna Description

The antenna associated with the EUT is a PCB inverted F trace antenna.

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2.4 - EUT'S Technical Specifications

| | |
|---|---|
| EUT Frequency Range (in MHz) | 2405MHz – 2475MHz |
| RF Power in Watts (Conducted measurement) | |
| Minimum: | 0.00214 |
| Maximum: | 0.00224 |
| Conducted Output Power (in dBm) | 3.5 |
| Field Strength at 3 meters (Maximum) | Not Applicable |
| 99% Bandwidth (MHz) | 2.61 |
| Type of Modulation | O-QPSK |
| DTS Bandwidth -6dB BW (MHz) | 1.64 |
| Transmitter Spurious (worst case) at 3 meters | 50.8dB μ V/m at 7320MHz (Peak) |
| Frequency Tolerance %, Hz, ppm | Better than 100 ppm |
| Microprocessor/Transceiver Model # | Microprocessor + Transceiver: CC2531 |
| Antenna Information | |
| Detachable/non-detachable | Non-detachable |
| Type | PCB inverted F trace antenna |
| EUT will be operated under FCC Rule Part(s) | Title 47 part 15.247 |
| EUT will be operated under RSS Rule Part(s) | RSS 247 |
| Modular Filing | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Portable or Mobile? | portable |

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RF Technical Information:

| | |
|-----------------------------------|---|
| Type of Evaluation (check one) | SAR Evaluation: Device Used in the Vicinity of the Human Head |
| | SAR Evaluation: Body-worn Device |
| | X RF Evaluation |

The EUT was evaluated against the SAR test exclusion threshold listed in KDB 447498 D01 General RF Exposure Guidance v05r02, section 4.3 (1). The EUT was found to be compliant with the SAR exclusion threshold, 1-g extremity, for 100MHz to 6000MHz.

Frequency = 2.440GHz
ERP (dBm) = 3.5dBm
ERP (mW)= 2.24 milliwatt
Minimum separation distance = 5mm

$$[2.2\text{mw}/5\text{mm}] * [\sqrt{2.48\text{GHz}}] = 0.7 \leq 3$$

Excluded from SAR testing at use case distance less than and equal to 5mm.

When evaluated against RSS 102 issue 5 section 2.5, table 1:

Frequency = 2.405GHz
Field strength = 100.8dB μ V/m at 3m
EIRP (dBm) = 100.8-95.2 = 5.6dBm
EIRP (mW)= 3.63 milliwatt

SAR exclusion threshold at 2405MHz is 4.24mW therefore the EUT excluded from SAR testing at use case distance less than and equal to 5mm.

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2.5 - Product Description

The Quietyme Stone 16 fulfills multiple needs for the Quietyme ecosystem. The primary two uses are as the coordinator and routers for a mesh network within an environment (home, hotel, apartment complex, industrial, etc.). In a typical installation, there will be a single device programmed as a coordinator, and 1 to 100 devices programmed as routers and installed throughout a site. Stone 16 is revision 1.6 of the Stone product.

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EXHIBIT 3. EUT OPERATING CONDITIONS & CONFIGURATIONS DURING TESTS

3.1 - Climate Test Conditions

| | |
|--------------|-------------|
| Temperature: | 70 -71° F |
| Humidity: | 32-42% |
| Pressure: | 728-741mmHg |

3.2 - Applicability & Summary of EMC Emission Test Results

| FCC and IC Paragraph | Test Requirements | Compliance (Yes/No) |
|--|---|---------------------|
| FCC : 15.207 IC : RSS GEN sect. 7.2.2 | Power Line Conducted Emissions Measurements | Yes |
| FCC : 15.247 (a)(1) IC : RSS 210 A8.1 (a) | 20 dB Bandwidth | Yes |
| FCC : 15.247(b) & 1.1310 IC : RSS 247 5.4 | Maximum Output Power | Yes |
| FCC : 15.247(i), 1.1307, 1.1310, 2.1091 & 2.1093 IC : RSS 102 | RF Exposure Limit | Yes |
| FCC :15.247(d) IC : RSS 247 5.5 | RF Conducted Spurious Emissions at the Transmitter Antenna Terminal | Yes |
| FCC:15.247 (a)(2) IC: RSS 247 5.2 | 6 dB Bandwidth of a Digital Modulation System | Yes |
| FCC:15.247 (d) IC: RSS 247 5.2 | Power Spectral Density of a Digital Modulation System | Yes |
| FCC : 15.247(c), 15.209 & 15.205 IC : RSS GEN | Transmitter Radiated Emissions | Yes |

3.3 - Modifications Incorporated In The EUT For Compliance Purposes

None Yes (explain below)

3.4 - Deviations & Exclusions From Test Specifications

None Yes (explain below)

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EXHIBIT 4. DECLARATION OF CONFORMITY

The EUT was found to MEET the requirements as described within the specification of FCC Title 47, CFR Part 15.247, and Industry Canada RSS-247, Issue 1.

Note: If some emissions are seen to be within 3 dB of their respective limits; as these levels are within the tolerances of the test equipment and site employed, there is a possibility that this unit, or a similar unit selected out of production may not meet the required limit specification if tested by another agency.

LS Research, LLC certifies that the data contained herein was taken under conditions that meet or exceed the requirements of the test specifications. The results in this Test Report apply only to the item(s) tested on the above-specified dates. Any modifications made to the EUT subsequent to the indicated test date(s) will invalidate the data herein, and void this certification.

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EXHIBIT 5. UNWANTED EMISSIONS INTO THE RESTRICTED FREQUENCY BANDS.

5.1 - Test Setup

The test setup was assembled in accordance with Title 47, CFR FCC Part 15, RSS GEN and ANSI C63.10-2013. The EUT was placed on an 80cm high non-conductive pedestal below 1 GHz and 150cm non-conductive pedestal above 1 GHz, centered on a flush mounted turntable inside a 3 meter Semi-Anechoic, FCC listed Chamber. The EUT was operated in continuous transmit mode for final testing using power as provided by a generic AC to DC power supply. The unit has the capability to operate on 3 channels, controllable via an HP Stream 7 tablet (SN:CNU445B99C) running **SmartRF™ Studio 7**.

The applicable limits apply at a 3 meter distance. The calculations to determine these limits are detailed in the following pages. Please refer to Appendix A for a complete list of test equipment. The test sample was operated on one of three (3) standard channels to comply with FCC Part 15.31(m).

5.2 - Test Procedure

Radiated RF measurements were performed on the EUT in a 3 meter Semi-Anechoic, FCC listed Chamber. The frequency range from 30 MHz to 25000 MHz was scanned and investigated. The radiated RF emission levels were manually noted at the various fixed degree settings of azimuth on the turntable and antenna height. The EUT was placed on a non-conductive pedestal in the 3 meter Semi-Anechoic Chamber, with the antenna mast placed such that the antenna was 3 meters from the EUT. A Biconical Antenna was used to measure emissions from 30 MHz to 200 MHz, and a Log Periodic Antenna was used to measure emissions from 200 MHz to 1000 MHz. A Double-Ridged Waveguide Horn Antenna was used from 1 GHz to 18 GHz while a standard gain horn antenna was used in the 18 GHz to 25 GHz range. The maximum radiated RF emissions between 30MHz to 25 GHz were found by raising and lowering the sense antenna between 1 and 4 meters in height, using both horizontal and vertical antenna polarities.

The EUT was positioned in 3 orthogonal orientations. In addition, the EUT was tested in:

1. **EUT powered via Generic AC/DC adapter.**
2. **EUT powered via rechargeable battery.**

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5.3 - Test Equipment Utilized

A list of the test equipment and antennas utilized for the Radiated Emissions test can be found in Appendix A. This list includes calibration information and equipment descriptions. All equipment is calibrated and used according to the operation manuals supplied by the manufacturers. All calibrations of the antennas used were performed at a calibration laboratory accredited to ISO 17025, and are traceable to the SI standard. In addition, the Connecting Cables were measured for losses using a calibrated Signal Generator and an EMI Receiver. The resulting correction factors and the cable loss factors from these calibrations were entered into the EMI Receiver database. As a result, the data taken from the EMI Receiver accounts for the antenna correction factor as well as cable loss or other corrections, and can therefore be entered into the database as a corrected meter reading. The EMI Receiver was operated with a resolution bandwidth of 120 kHz for measurements below 1 GHz (video bandwidth of 300 kHz), and a bandwidth of 1 MHz for measurements above 1 GHz (video bandwidth of 1 MHz).

5.4 - Test Results

The EUT was found to **MEET** the Radiated Emissions requirements of Title 47 CFR, FCC Part 15.247 and Canada RSS-247, Issue 1, for a DTS transmitter. The frequencies with significant RF signal strength were recorded and plotted as shown in the Data Charts and Graphs.

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5.5 - Calculation of Radiated Emissions Limits and reported data.

Reported data:

For both fundamental and spurious emissions measurement, the data reported includes all necessary correction factors. These correction factors are loaded onto the EMI receiver when measurements are performed.

Reported Measurement data = Raw receiver measurement (dB μ V/m) + Antenna correction Factor + Cable factor (dB) + Miscellaneous factors when applicable (dB) – amplification factor when applicable (dB).

Generic example of reported data at 200 MHz:

Reported Measurement data = 18.2 (raw receiver measurement) + 15.8 (antenna factor) + 1.45 (cable factor) = 35.45 (dB μ V/m).

As specified in 15.247 (d), radiated emissions that fall within the restricted band described in 15.205(c), must comply with the general emissions limit.

The following table depicts the general radiated emission limits above 30 MHz. These limits are obtained from Title 47 CFR, Part 15.209, for radiated emissions measurements. These limits were applied to any signals found in the 15.205 restricted bands. The mentioned limits correspond to those limits listed in RSS GEN.

| Frequency (MHz) | 3 m Limit μ V/m | 3 m Limit (dB μ V/m) | 1 m Limit (dB μ V/m) |
|-----------------|---------------------|--------------------------|--------------------------|
| 30-88 | 100 | 40.0 | - |
| 88-216 | 150 | 43.5 | - |
| 216-960 | 200 | 46.0 | - |
| 960-40,000 | 500 | 54.0 | 63.5 |

Sample conversion of field strength (μ V/m to dB μ V/m):

$\text{dB}\mu\text{V/m} = 20 \log_{10} (100) = 40 \text{ dB}\mu\text{V/m}$ (from 30-88 MHz)

Per KDB 558074 section 10, an EIRP measurement can be converted to field strength using this relationship:

$E = \text{EIRP} - 20\log(d) + 104.8$

$E = \text{EIRP} - 20\log(d) + 104.8$

Sample conversion:

For EIRP = -56.6 dBm,

$E (\text{dB}\mu\text{V/m}) = -56.6 - 20\log(3m) + 104.8 = 38.7 \text{ dB}\mu\text{V/m}$

For EIRP = -60.9 dBm,

$E (\text{dB}\mu\text{V/m}) = -60.9 - 20\log(3m) + 104.8 = 34.4 \text{ dB}\mu\text{V/m}$

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5.6 - Data:

| | | | | | |
|--------------------------------------|---|--|-------------------------------------|-------------------------------|---|
| Manufacturer: | Quietyme, Inc. | | | | |
| Date(s) of Test: | 8/25/15 – 9/1/15 | | | | |
| Project Engineer(s): | Khairul Aidi Zainal | | | | |
| Test Engineer(s): | Khairul Aidi Zainal | | | | |
| Voltage: | 5VDC via generic AC/DC adapter and rechargeable battery | | | | |
| Operation Mode: | continuous transmit, modulated | | | | |
| Environmental Conditions in the Lab: | Temperature: 70° F Relative Humidity: 32% | | | | |
| EUT Power: | <input checked="" type="checkbox"/> | 5VDC via AC/DC adapter | <input type="checkbox"/> | 3 Phase ____VAC | |
| | <input checked="" type="checkbox"/> | Battery | <input type="checkbox"/> | Other: Bench DC Supply | |
| EUT Placement: | <input checked="" type="checkbox"/> | 80cm non-conductive pedestal | <input checked="" type="checkbox"/> | 150cm non-conductive pedestal | |
| EUT Test Location: | <input checked="" type="checkbox"/> | 3 Meter Semi-Anechoic FCC Listed Chamber | <input type="checkbox"/> | 3/10m OATS | |
| Measurements: | | Pre-Compliance | <input type="checkbox"/> | Preliminary | <input checked="" type="checkbox"/> Final |
| Detectors Used: | <input checked="" type="checkbox"/> | Peak | <input checked="" type="checkbox"/> | Quasi-Peak | <input checked="" type="checkbox"/> Average |

DATA PRESENTED ON THE NEXT PAGE

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A. EUT powered via AC/DC adapter

| Frequency (MHz) | Ant | EUT | Height (cm) | Azimuth (°) | Peak (dBuV/m) | Q.Peak (dBuV/m) | Average (dBuV/m) | Peak limit (dBuV/m) | Q.Peak limit (dBuV/m) | Average limit (dBuV/m) | Peak margin (dB) | Q.Peak margin (dB) | Average margin (dB) | Notes |
|-----------------|-----|-----|-------------|-------------|---------------|-----------------|------------------|---------------------|-----------------------|------------------------|------------------|--------------------|---------------------|--------|
| 4810.0 | H | S | 106.4 | 340 | 44.5 | N/A | 39.1 | 74.0 | N/A | 54.0 | 29.5 | N/A | 14.9 | |
| 4880.0 | H | S | 241.1 | 340 | 44.2 | N/A | 38.7 | 74.0 | N/A | 54.0 | 29.8 | N/A | 15.3 | |
| 7320.0 | H | V | 245.0 | 50 | 50.8 | N/A | 43.9 | 74.0 | N/A | 54.0 | 23.2 | N/A | 10.1 | |
| 4950.0 | H | V | 280.9 | 39 | 43.2 | N/A | 38.4 | 74.0 | N/A | 54.0 | 30.8 | N/A | 15.6 | |
| 7425.0 | H | V | 264.9 | 41 | 50.0 | N/A | 42.6 | 74.0 | N/A | 54.0 | 24.0 | N/A | 11.4 | |
| 40.0 | H | V | 100.0 | 0 | 28.3 | 23.4 | 15.5 | N/A | 40.0 | N/A | N/A | 16.6 | N/A | NOTE 1 |
| 100.0 | H | V | 100.0 | 0 | 26.1 | 20.3 | 12.8 | N/A | 43.0 | N/A | N/A | 22.7 | N/A | NOTE 1 |
| 75.6 | V | V | 100.0 | 170 | 30.8 | 22.6 | 12.6 | N/A | 40.0 | N/A | N/A | 17.4 | N/A | |
| 51.9 | V | V | 100.0 | 336 | 29.1 | 23.0 | 14.0 | N/A | 40.0 | N/A | N/A | 17.0 | N/A | |
| 300.0 | H | H | 100.0 | 0 | 24.1 | 18.2 | 10.3 | N/A | 46.0 | N/A | N/A | 27.8 | N/A | NOTE 1 |
| 800.0 | H | V | 100.0 | 0 | 29.8 | 25.1 | 17.3 | N/A | 46.0 | N/A | N/A | 20.9 | N/A | NOTE 1 |
| 900.0 | V | V | 100.0 | 0 | 31.6 | 26.2 | 18.4 | N/A | 46.0 | N/A | N/A | 19.8 | N/A | NOTE 1 |

B. EUT powered via rechargeable battery

| Frequency (MHz) | Ant | EUT | Height (cm) | Azimuth (°) | Peak (dBuV/m) | Q.Peak (dBuV/m) | Average (dBuV/m) | Peak limit (dBuV/m) | Q.Peak limit (dBuV/m) | Average limit (dBuV/m) | Peak margin (dB) | Q.Peak margin (dB) | Average margin (dB) | Notes |
|-----------------|-----|-----|-------------|-------------|---------------|-----------------|------------------|---------------------|-----------------------|------------------------|------------------|--------------------|---------------------|-------|
| 4880.0 | V | F | 100.0 | 322 | 45.3 | N/A | 40.2 | 74.0 | N/A | 54.0 | 28.7 | N/A | 13.8 | |
| 7320.0 | H | V | 235.7 | 24 | 50.5 | N/A | 43.0 | 74.0 | N/A | 54.0 | 23.5 | N/A | 11.0 | |
| 7425.0 | H | V | 233.9 | 39 | 50.3 | N/A | 42.6 | 74.0 | N/A | 54.0 | 23.7 | N/A | 11.4 | |
| 4810.0 | V | F | 131.0 | 330 | 46.0 | N/A | 40.6 | 74.0 | N/A | 54.0 | 28.0 | N/A | 13.4 | |
| 4950.0 | V | F | 100.0 | 317 | 45.0 | N/A | 39.3 | 74.0 | N/A | 54.0 | 29.0 | N/A | 14.7 | |

Notes:

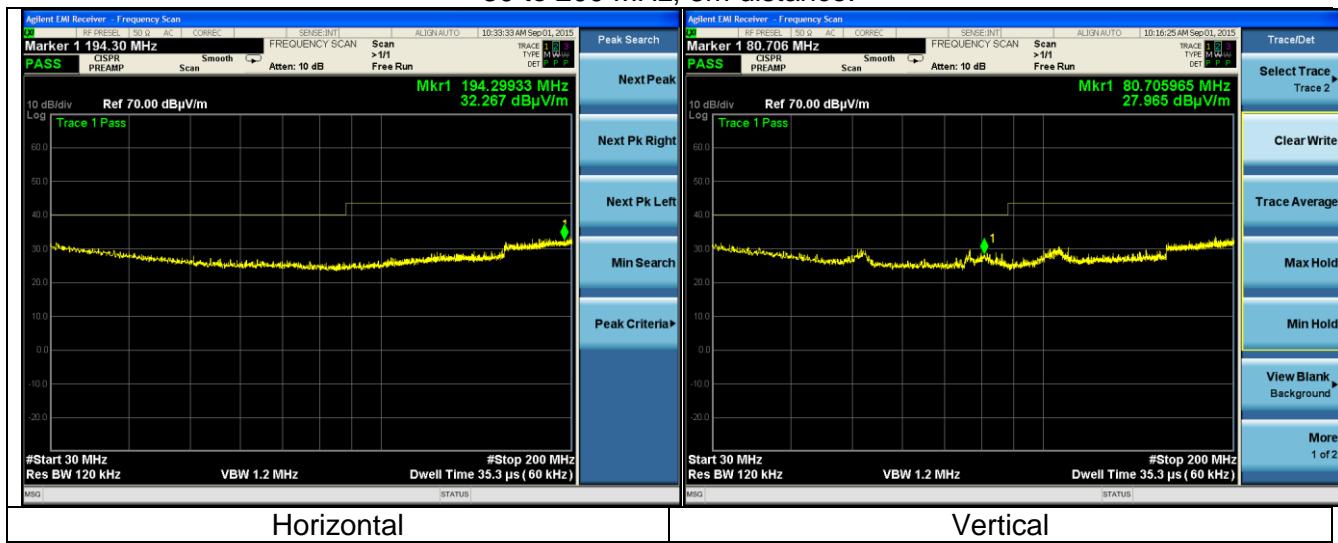
1. Measurement of system noise floor
2. H: Horizontal, V: Vertical, S: Side, F: Flat.
3. Refer to exhibit 5.5 on explanation of how data is reported.

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

5.7 – Screen Captures.

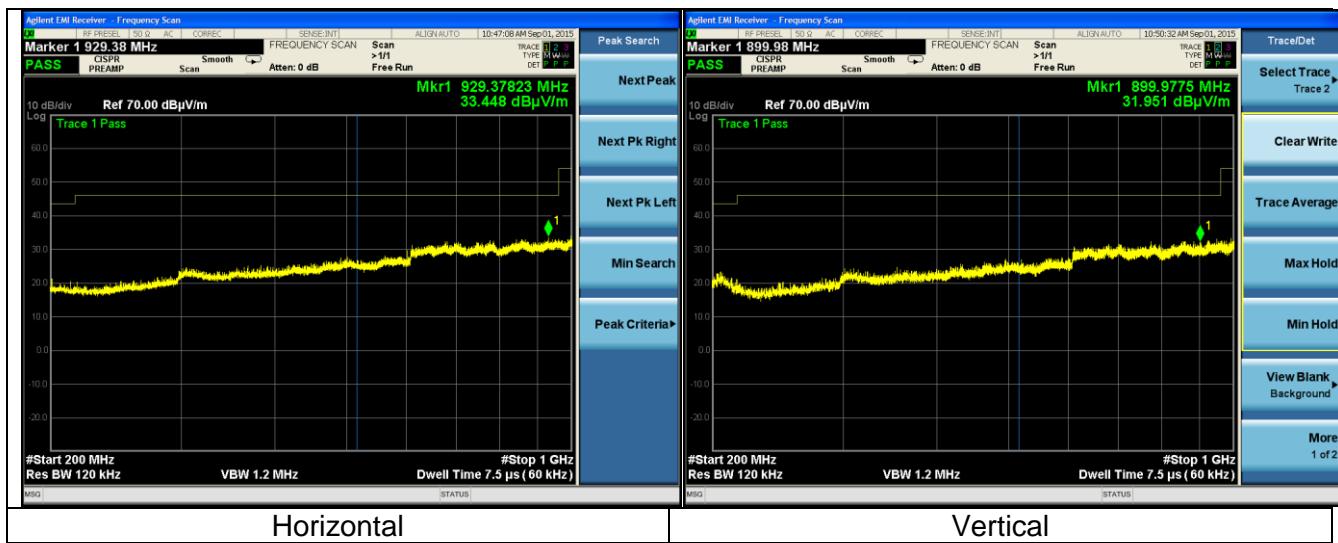
The screen captures below are those using the Peak detector of the analyzer. In addition, the screen captures presented are those which were deemed to be an appropriate representation of the spectrum scan.

30 to 200 MHz, 3m distance.



Plot presented above is of worst case, which is when EUT powered by generic AC/DC adapter.

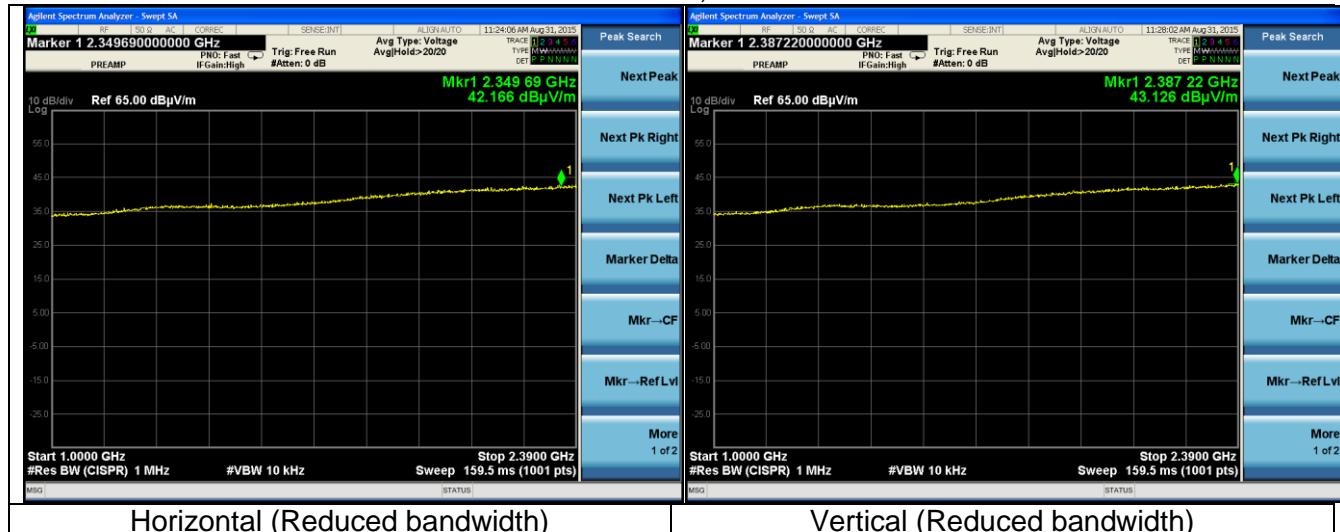
200 to 1000 MHz, 3m distance.



Plot presented above is of worst case, which is when EUT powered by generic AC/DC adapter.

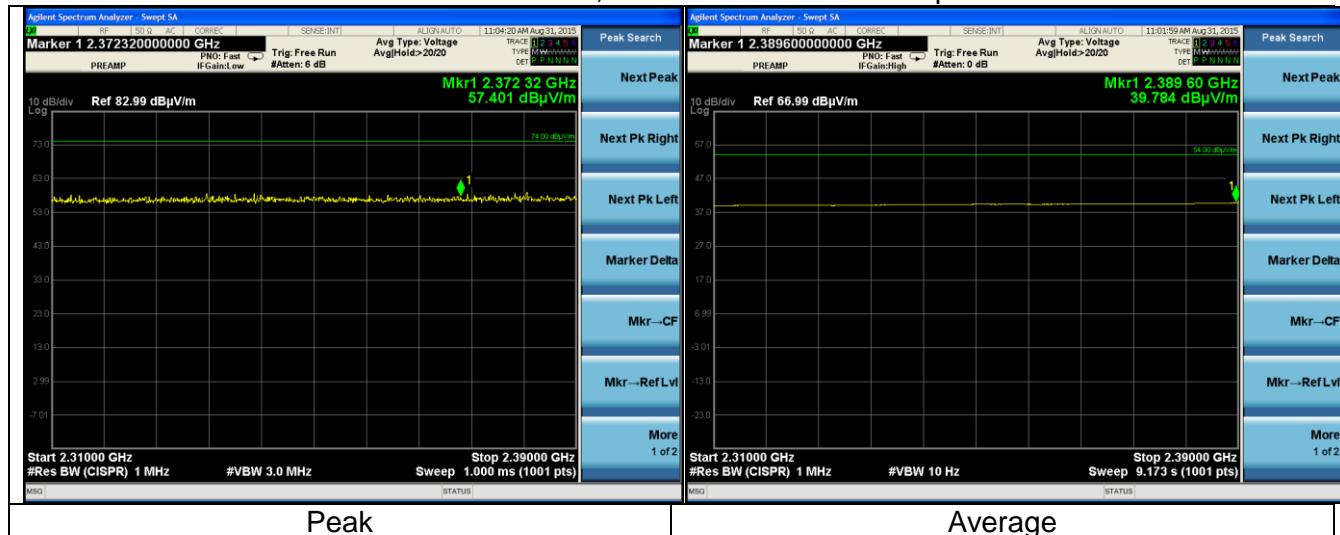
| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

1000 to 2390 MHz, 3m distance.



Plot presented above is of worst case, which is when EUT powered by generic AC/DC adapter.

2310 to 2390 MHz, 3m distance: AC/DC adapter

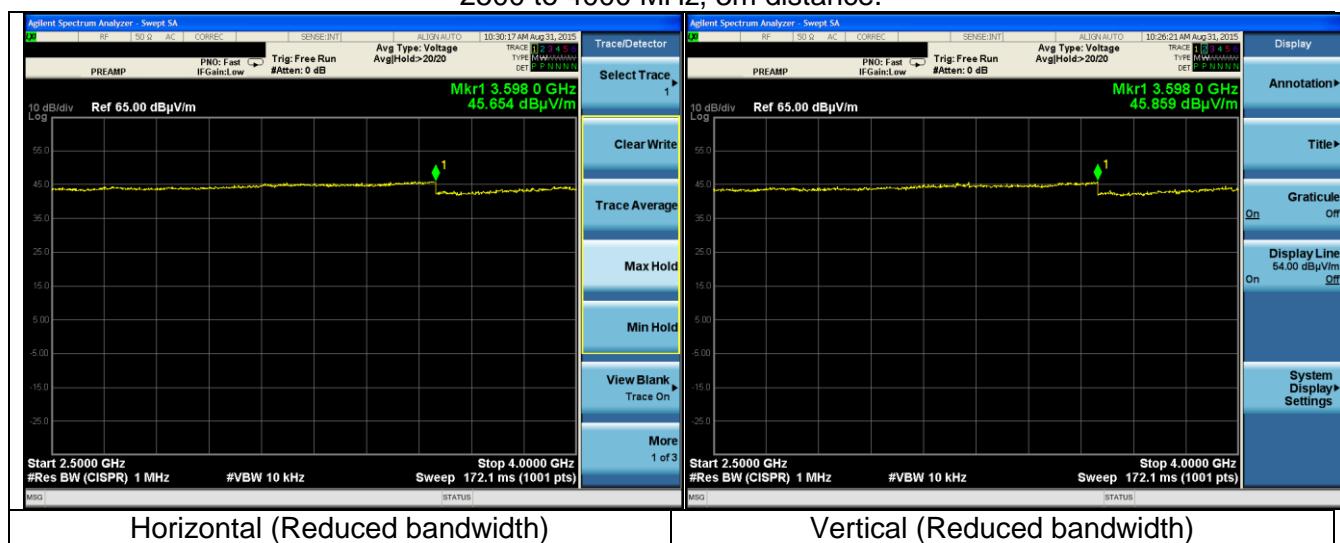


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

2310 to 2390 MHz, 3m distance: Battery



2500 to 4000 MHz, 3m distance.



Plot presented above is of worst case, which is when EUT powered by generic AC/DC adapter.

Note: The range 2483.5 to 2500 MHz is in section 8 of this report (Band-edges).

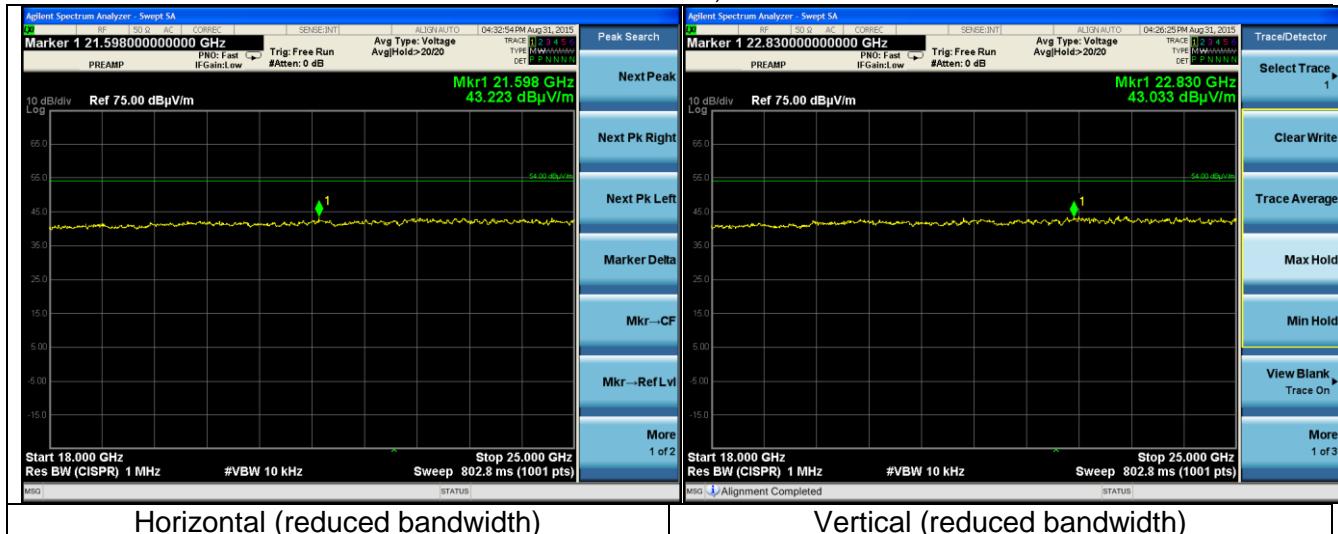
| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

4000 to 18000 MHz, 3m distance.



The plots do not represent emissions that have been maximized.

18000 to 25000 MHz, 3m distance.



Plot presented above is of worst case, which is when EUT powered by generic AC/DC adapter.

| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 6. CONDUCTED EMISSIONS TEST, AC POWER LINE

6.1 Test Setup

The test area and setup are in accordance with ANSI C63.4 and with Title 47 CFR, FCC Part 15, Industry Canada RSS GEN. The EUT was placed on a non-conductive table, with a height of 80 cm above the reference ground plane. The power supply was then plugged into a 50Ω (ohm), Line Impedance Stabilization Network (LISN). The AC power supply of 120V was provided via an appropriate broadband EMI Filter, and then to the LISN line input. Final readings were then taken and recorded. After the EUT was setup and connected to the LISN, the RF Sampling Port of the EMI receiver System. The LSIN used has the ability to terminate the unused port with a 50Ω (ohm) load when switched to either L1 (line) or L2 (neutral).

The EUT was powered via a generic AC/DC adapter

6.2 Test Procedure

The EUT was investigated in continuous modulated transmit mode for this portion of the testing. The appropriate frequency range and bandwidths were selected on the EMI Receiver, and measurements were made. The bandwidth used for these measurements is 9 kHz, as specified in CISPR 16-1, Section 1, Table 1, for Quasi-Peak and Average detectors in the frequency range of 150 kHz to 30 MHz. Final readings were then taken and recorded.

6.3 Test Equipment Utilized

A list of the test equipment and accessories utilized for the Conducted Emissions test is provided in Appendix A. This list includes calibration information and equipment descriptions. All equipment is calibrated and used according to the operation manuals supplied by the manufacturers. Calibrations of the LISN and Limiter were performed at an IEC/ISO 17025 accredited calibration laboratory, traceable to the SI standard. All cables are calibrated and checked periodically for conformance. The emissions are measured on the EMI System, which has automatic correction for all factors stored in memory and allows direct readings to be taken.

6.4 Test Results

The EUT was found to **MEET** the Conducted Emission requirements of FCC Part 15.207 and RSS GEN 7.2.4 for Conducted Emissions for an Intentional Radiator. See the Data Charts and Graphs for more details of the test results.

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

6.5 FCC Limits of Conducted Emissions at the AC Mains Ports

| Frequency Range (MHz) | Class B Limits (dB μ V) | | Measuring Bandwidth |
|---|-----------------------------|---------|--|
| | Quasi-Peak | Average | |
| 0.150 -0.50 * | 66-56 | 56-46 | RBW = 9 kHz VBW \geq 9 kHz for QP VBW = 1 Hz for Average |
| 0.5 – 5.0 | 56 | 46 | |
| 5.0 – 30 | 60 | 50 | |
| * The limit decreases linearly with the logarithm of the frequency in this range. | | | |

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

6.6

CONDUCTED EMISSIONS TEST DATA CHART

Frequency Range inspected: 150 KHz to 30 MHz

| | | | | |
|--------------------------------------|--|---------------------------------|-------------|--------------|
| Manufacturer: | Quietyme, Inc. | | | |
| Date(s) of Test: | 9/22/15 | | | |
| Project Engineer: | Khairul Aidi Zainal | | | |
| Test Engineer: | Peter Feilen | | | |
| Voltage: | 120 VAC | | | |
| Operation Mode: | Continuous transmit, modulated | | | |
| Environmental Conditions in the Lab: | Temperature: 71° F Relative Humidity: 40% | | | |
| Test Location: | X | AC Mains Test area | | Chamber |
| EUT Placed On: | X | 40cm from Vertical Ground Plane | | 10cm Spacers |
| | X | 80cm above Ground Plane | | Other: |
| Measurements: | | Pre-Compliance | Preliminary | X Final |
| Detectors Used: | Peak | X | Quasi-Peak | X Average |

120VAC, 60Hz

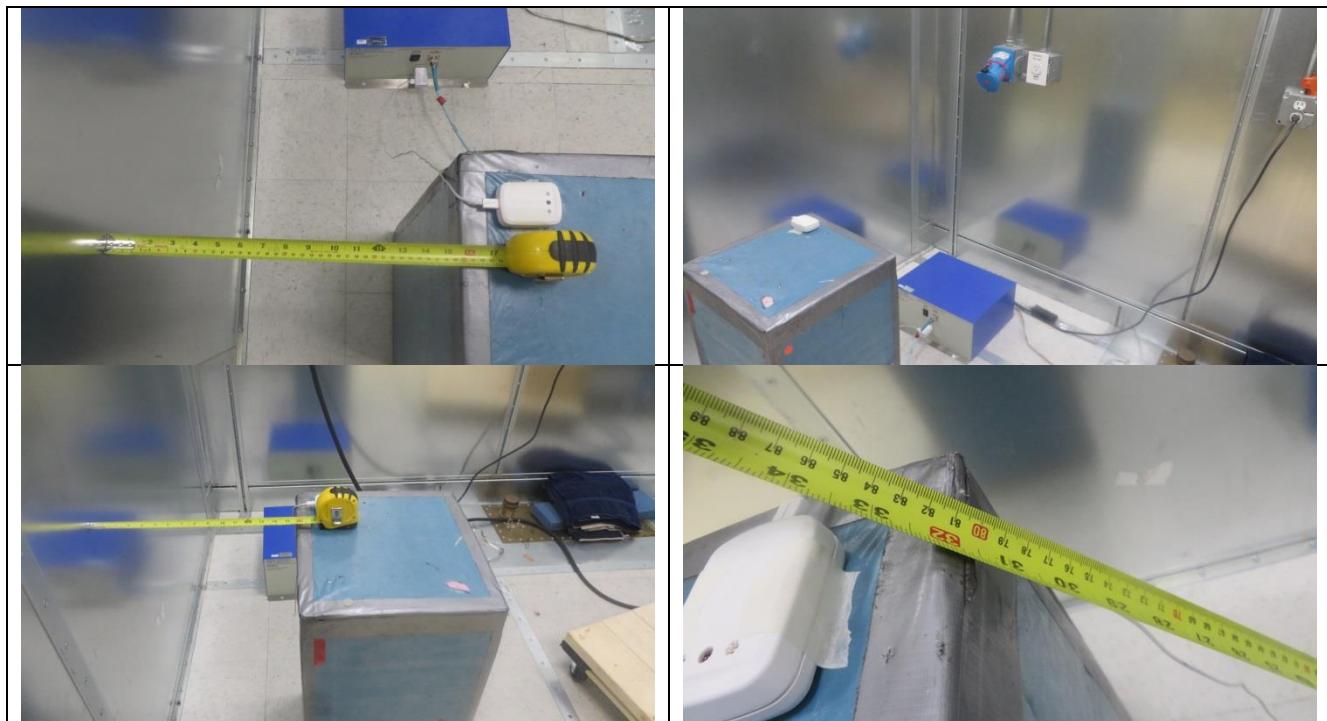
| Frequency (MHz) | Line | Quasi-Peak | | | Average | | |
|-----------------|------|-----------------------------|---------------------------|------------------------|------------------------------|----------------------------|---------------------|
| | | Q-Peak Reading (dB μ V) | Q-Peak Limit (dB μ V) | Quasi-Peak Margin (dB) | Average Reading (dB μ V) | Average Limit (dB μ V) | Average Margin (dB) |
| 0.154 | 1 | 43.0 | 65.8 | 22.8 | 32.6 | 55.8 | 23.2 |
| 0.217 | 1 | 40.6 | 62.9 | 22.3 | 30.1 | 52.9 | 22.8 |
| 0.555 | 1 | 31.2 | 56.0 | 24.8 | 22.6 | 46.0 | 23.4 |
| 0.163 | 2 | 33.8 | 65.3 | 31.5 | 22.6 | 55.3 | 32.7 |
| 0.214 | 2 | 31.7 | 63.0 | 31.3 | 20.8 | 53.0 | 32.2 |
| 0.554 | 2 | 30.6 | 56.0 | 25.4 | 21.0 | 46.0 | 25.0 |
| 0.150 | 2 | 34.3 | 66.0 | 31.7 | 22.9 | 56.0 | 33.1 |

Notes:

- 1) The emissions listed are characteristic of the power supply used and not that of the transmitter. Changing transmit channels did not change the emissions.

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

6.7 Test Setup Photo(s) – Conducted Emissions Test

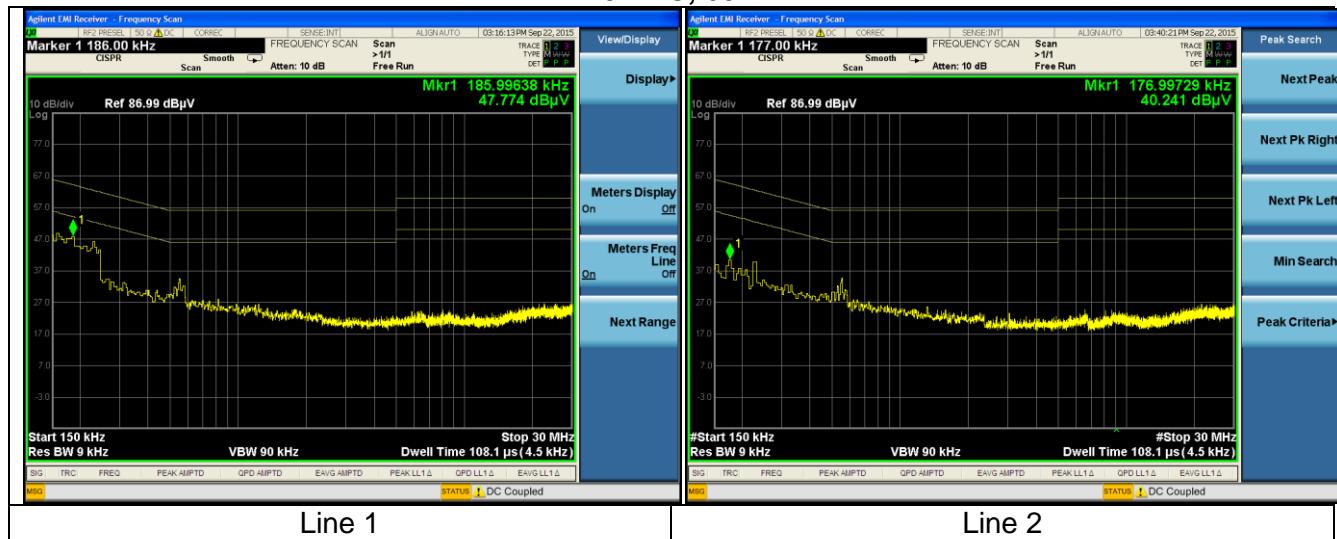


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

6.8 Screen Captures – Conducted Emissions Test

These screen captures represent Peak Emissions. For conducted emission measurements, both a Quasi-Peak detector function and an Average detector function are utilized.

120 VAC, 60Hz



| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 7. OCCUPIED BANDWIDTH

Test Engineer(s): Khairul Aidi Zainal

7.1 - Limits

For a DTS system operating in the 2400 to 2483.5 MHz band, the 6dB emission bandwidth limit is 500 kHz.

7.2 - Method of Measurements

For this portion of the tests, a direct measurement of the transmitted signal was performed at the antenna port of the EUT, via a cable connection to a spectrum analyzer. An attenuator was placed in series with the cable to protect the spectrum analyzer. The loss from the cable and the attenuator were added on the analyzer as gain offset settings thereby allowing direct measurements, without the need for any further corrections. The EUT was configured to run in a continuous transmit mode, while being supplied with typical data as a modulation source. A bandwidth measurement function that is built into the spectrum analyzer was used to measure the 20dB/emission bandwidth while the 6dB bandwidth was measured using **FCC OET KDB 558074 section 8 option2**.

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

7.3 - Test Data

| Channel (MHz) | 6dB Bandwidth (kHz) | 99% Bandwidth (MHz) | 6dB Bandwidth minimum limit (kHz) |
|---------------|---------------------|---------------------|-----------------------------------|
| 2405 | 1641.0 | 2.61 | 500.0 |
| 2440 | 1640.0 | 2.61 | 500.0 |
| 2475 | 1639.0 | 2.61 | 500.0 |

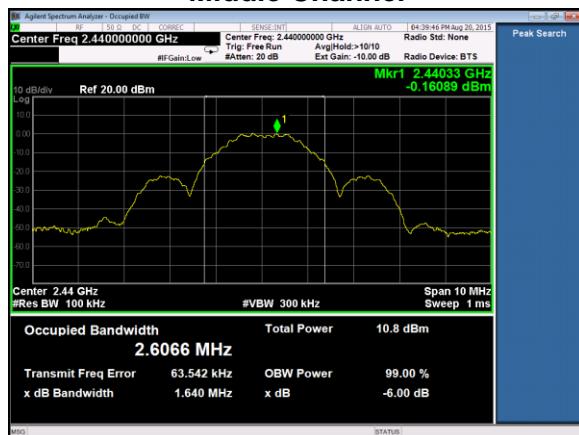
7.4 - Screen Captures

Low Channel

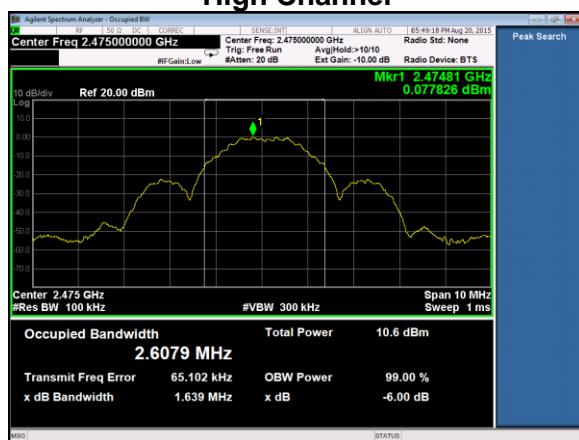


| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

Middle Channel



High Channel



| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 8. BAND EDGE MEASUREMENTS

Test Engineer(s): Aidi Zainal

8.1 - Method of Measurements

FCC 15.247 require a measurement of spurious emission levels at the restricted band to be compliant to the general emissions limit, in particular at the Band-Edges where the intentional radiator operates. The EUT was operated in continuous transmit mode with continuous modulation, with internally generated data as the modulating source. The EUT was operated at the lowest channel for the investigation of the lower Band-Edge, and at the highest channel for the investigation of the higher Band-Edge.

The Band-edge measurements were performed conducted (100kHz bandwidth) and radiated. The measurement of band-edge was performed to satisfy FCC 15.247(d).

Per FCC KDB 558074 D01 Measurement Guidance v03r03 (section 11), conducted measurements were performed with 100 kHz bandwidth for all emissions outside of the band of operation. Emissions in the restricted band, a bandwidth of 120kHz (below 1000MHz) and 1MHz (above 1000MHz) were used in accordance with C63.4 and was performed radiated.

For both conducted and radiated measurements, correction factors and the cable loss factors were entered into the EMI Receiver database. As a result, the plots taken from the EMI Receiver accounts for all applicable correction factor as well as cable loss, and can therefore be entered into the database as a corrected meter reading.

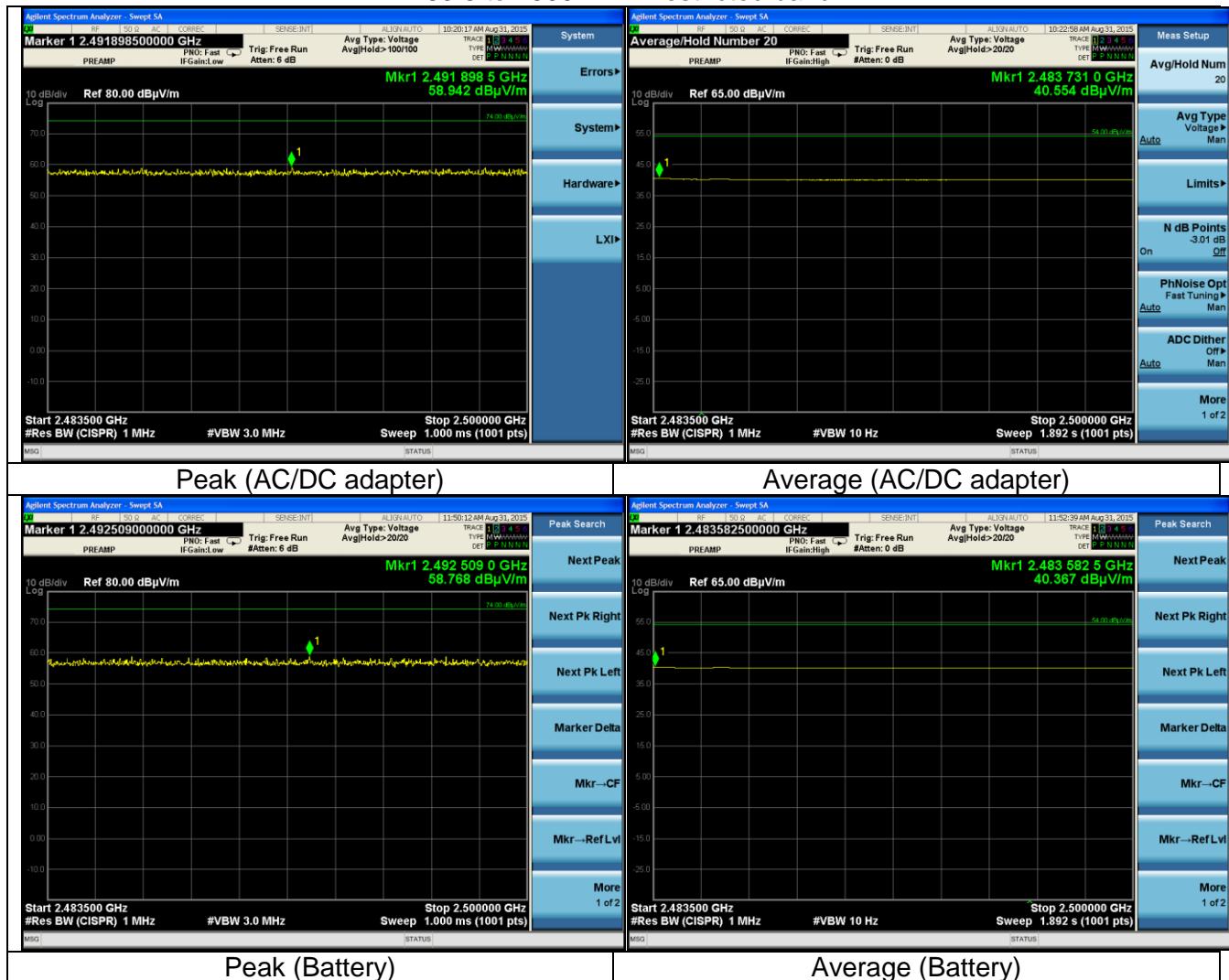
8.2. Band edge screen captures.

The data presented below are samples selected from the various data rates and channels tested.

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

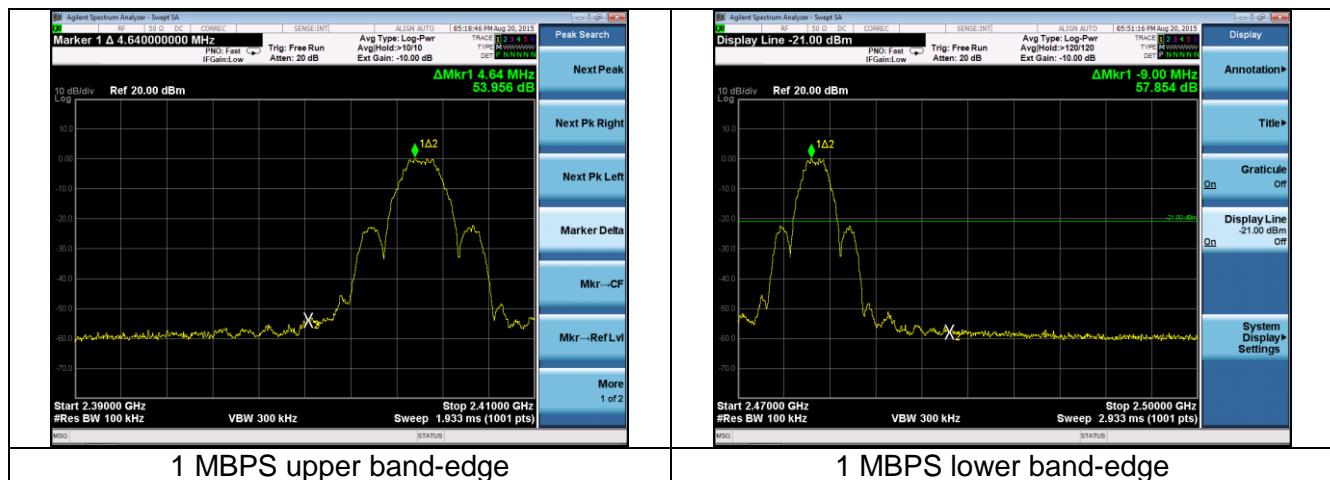
Band-edge in Restricted Band

Radiated Band-edge in Restricted Band:
2483.5 to 2500 MHz Restricted band



| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

Band-edge in 100kHz bandwidth.



| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 9. POWER OUTPUT (CONDUCTED): 15.247(b)

Test Engineer(s): Khairul Aidi Zainal

9.1 - Method of Measurements

The conducted RF output power of the EUT was measured at the antenna port using a short RF cable along with an attenuator as protection for the spectrum analyzer. The loss from the cable and the attenuator were added on the analyzer as gain offset settings there by allowing direct measurements without the need for any further corrections. The unit was configured to run in a continuous transmit mode, while being supplied with typical data as a modulation source.

Measurement procedure used was FCC OET KDB 558074 D01 Measurement Guidance v03r03 section 9.1.1

9.2 - Test Data

The data reported includes all necessary correction factors. These correction factors are loaded onto the EMI receiver when measurements are performed.

Reported Measurement data = Raw receiver measurement (dBm) + Cable factor (dB) + Miscellaneous factors when applicable (dB).

Generic example of reported data at 2440 MHz:

Reported Measurement data = 8.55 (raw receiver measurement in dBm) + 0.85 (cable factor in dB) = 9.4 (dBm).

| Channel (MHz) | Peak Conducted Power (dBm) | Power Limit (dBm) | Power margin (dB) |
|---------------|----------------------------|-------------------|-------------------|
| 2405 | 3.5 | 30.0 | 26.5 |
| 2440 | 3.5 | 30.0 | 26.5 |
| 2475 | 3.3 | 30.0 | 26.7 |

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

9.3 – Screen Captures.

Low Channel



Middle Channel



High Channel



| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 10. CONDUCTED SPURIOUS EMISSIONS: 15.247(d)

Test Engineer(s): Khairul Aidi Zainal

10.1 - Limits

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.

10.2 - Conducted Harmonic And Spurious RF Measurements

FCC Part 15.247(d) and IC RSS 210 A8.5 both require a measurement of conducted harmonic and spurious RF emission levels, as reference to the carrier level when measured in a 100 kHz bandwidth. For this test, the spurious and harmonic RF emissions from the EUT were measured at the EUT antenna port using a short RF cable along with an attenuator as protection for the spectrum analyzer. The loss from the cable and the attenuator were added on the analyzer as gain offset settings, thereby allowing direct readings of the measurements made without the need for any further corrections. A spectrum analyzer was used with the resolution bandwidth set to 100 kHz for this portion of the tests. The unit was configured to run in a continuous transmit mode, while being supplied with typical data as a modulation source. The spectrum analyzer was used with measurements from a peak detector presented in the chart below. Screen captures were acquired and any noticeable spurious and harmonic signals were identified and measured.

Measurement procedure used was FCC OET KDB 558074 D01 Measurement Guidance v03r03 section 11.

The data reported includes all necessary correction factors. These correction factors are loaded onto the EMI receiver when measurements are performed.

Reported Measurement data = Raw receiver measurement (dBm) + Cable factor (dB) + Miscellaneous factors when applicable (dB).

Generic example of reported data at 2440 MHz:

Reported Measurement data = 8.55 (raw receiver measurement in dBm) + 0.85 (cable factor in dB) = 9.4 (dBm).

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

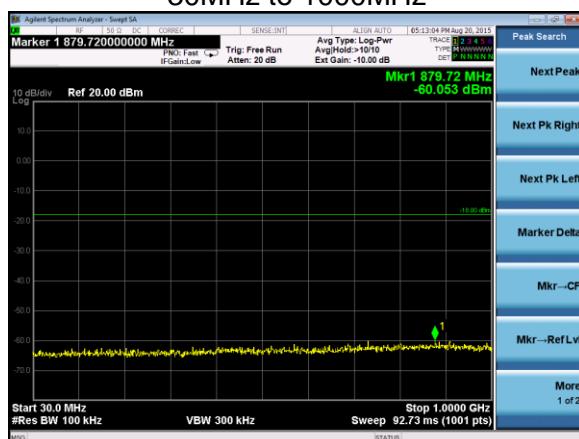
10.3 - Test Data

The data presented below are samples selected from the various data rates and channels tested.

Low Channel fundamental in 100 kHz:



30MHz to 1000MHz



| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

1000MHz to 10000MHz



10000 to 25000MHz

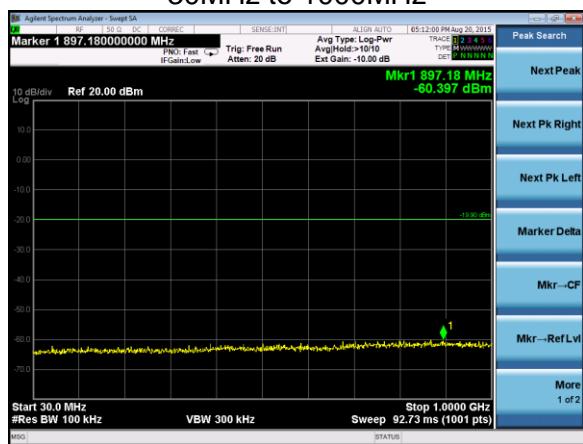


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

Middle Channel fundamental in 100 kHz:

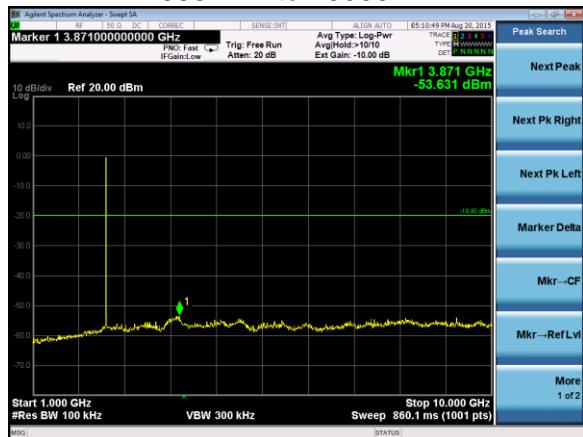


30MHz to 1000MHz



| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

1000MHz to 10000MHz



10000MHz to 25000MHz

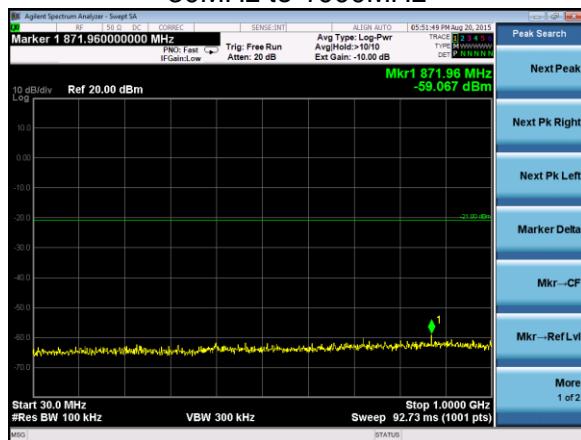


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

High Channel fundamental in 100 kHz:

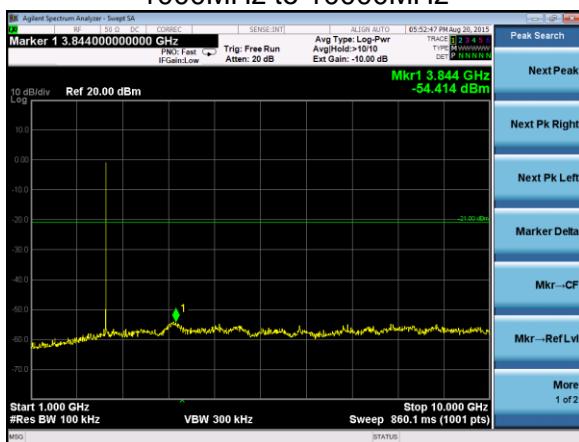


30MHz to 1000MHz

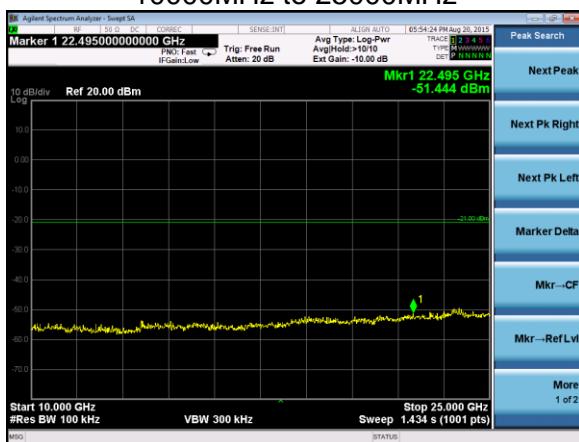


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

1000MHz to 10000MHz



10000MHz to 25000MHz



| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 11. POWER SPECTRAL DENSITIES: 15.247(e)

11.1 Limits

For digitally modulate 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.

In accordance with FCC Part 15.247(e) and RSS 210 A8.2(b), the peak power spectral density should not exceed +8 dBm in any 3 kHz band. This measurement was performed along with the conducted power output readings performed as described in previous sections. The peak output frequency for each representative frequency was scanned, with a narrow bandwidth, and reduced sweep, and a power density measurement was performed.

Measurement procedure used was FCC OET KDB 558074 D01 Measurement Guidance v03r03 section 10.1.

The data reported includes all necessary correction factors. These correction factors are loaded onto the EMI receiver when measurements are performed.

Reported Measurement data = Raw receiver measurement (dBm) + Cable factor (dB) + Miscellaneous factors when applicable (dB).

Generic example of reported data at 2440 MHz:

Reported Measurement data = 8.55 (raw receiver measurement in dBm) + 0.85 (cable factor in dB) = 9.4 (dBm).

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

11.2 Test Data

| Channel (MHz) | Peak PSD in 100kHz (dBm) | PSD in 3kHz limit(dBm) | PSD margin (dBm) |
|---------------|--------------------------|------------------------|------------------|
| 2405 | 0.2 | 8.0 | 7.8 |
| 2440 | 0.1 | 8.0 | 7.9 |
| 2475 | -0.1 | 8.0 | 8.1 |

11.3 Screen Captures - Power Spectral Density

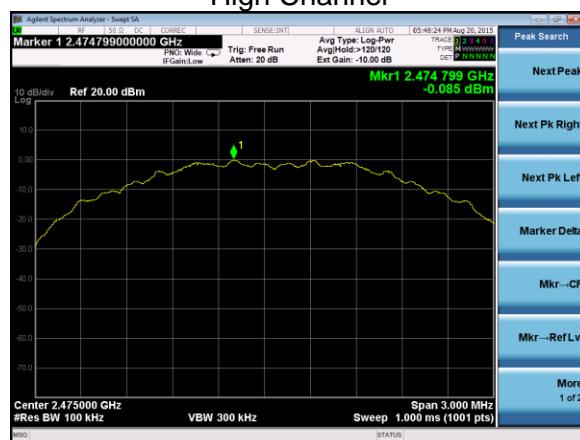


| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

Middle Channel



High Channel



| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

EXHIBIT 12. FREQUENCY STABILITY OVER VOLTAGE VARIATIONS

Test Engineer(s): Khairul Aidi Zainal

The frequency stability of the device was examined as a function of the input voltage available to the EUT. A Spectrum Analyzer was used to measure the RF output power and frequency at the appropriate frequency markers. Power was supplied by an external bench-type DC power supply via a modified micro USB cable and was varied $\pm 15\%$ from the nominal.

The power was then cycled On/Off to observe system response. No unusual response was observed, the emission characteristics were well behaved, and the system returned to the same state of operation as before the power cycle.

| | 4.25VDC | 5.0VDC | 5.75VDC | |
|--------------|----------------|----------------|----------------|-----------------|
| | FREQUENCY (Hz) | FREQUENCY (Hz) | FREQUENCY (Hz) | FREQ DRIFT (Hz) |
| LOW CHANNEL | 2405052031 | 2405052766 | 2405052351 | 735 |
| MID CHANNEL | 2440052833 | 2440052965 | 2440052839 | 132 |
| HIGH CHANNEL | 2475053608 | 2475053769 | 2475053667 | 161 |

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

APPENDIX A - Test Equipment List



Date : 23-Sep-2015

Type Test : AC Mains

Job # : C-2240

Prepared By: Aidi

Customer : Quietyme

Quote # : 315155

| No. | Asset # | Description | Manufacturer | Model # | Serial # | Cal Date | Cal Due Date | Equipment Status |
|-----|-----------|----------------------------|--------------|---------|------------|-----------|--------------|--------------------|
| 1 | EE 960088 | 8GHz MXE Spectrum Analyzer | Agilent | N9038A | MY51210138 | 1/9/2015 | 1/9/2016 | Active Calibration |
| 2 | EE 960162 | LISN - 15A | COM-POWER | LI-215A | 191969 | 7/24/2015 | 7/24/2016 | Active Calibration |



Date : 23-Sep-2015

Type Test : Radiated Emissions and conducted measurement

Job # : C-2240

Prepared By: Aidi

Customer : Quietyme

Quote # : 315155

| No. | Asset # | Description | Manufacturer | Model # | Serial # | Cal Date | Cal Due Date | Equipment Status |
|-----|-----------|-----------------------------|---------------|---------------|--------------------|--------------|--------------|---------------------|
| 1 | EE 960085 | N9038A MXE 26.5GHz Receiver | Agilent | N9038A | MY51210148 | 5/6/2015 | 5/6/2016 | Active Calibration |
| 2 | EE 960087 | 44GHz EXA Spectrum Analyzer | Agilent | N9010A | MY53400296 | 12/11/2014 | 12/11/2015 | Active Calibration |
| 3 | AA 960005 | Biconical Antenna | EMCO | 93110B | 9601-2280 | 8/6/2015 | 8/6/2016 | Active Calibration |
| 4 | AA 960078 | Log Periodic Antenna | EMCO | 93146 | 9701-4855 | 1/19/2015 | 1/19/2016 | Active Calibration |
| 5 | AA 960158 | Double Ridge Horn Antenna | ETS Lindgren | 3117 | 109300 | 7/9/2015 | 7/9/2016 | Active Calibration |
| 6 | EE 960159 | 0.8 - 21GHz LNA | Mini-Circuits | ZVA-213X-S+ | 740411007 | 7/9/2015 | 7/9/2016 | Active Calibration |
| 7 | AA 960143 | Phaseflex | Gore | EKD01D01048.0 | 5546519 | 6/26/2015 | 6/26/2017 | Active Calibration |
| 8 | AA 960144 | Phaseflex | Gore | EKD01D010720 | 5800373 | Verification | Verification | System |
| 9 | EE 960125 | SMA Cable | MegaPhase | NC19-S1S1-236 | 1GVT4 14032106 001 | 3/6/2015 | 3/6/2016 | Active Verification |

| | | |
|------------------------------|---|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

APPENDIX B – Test Standards: CURRENT PUBLICATION DATES RADIO

| STANDARD # | DATE | Am. 1 | Am. 2 |
|---------------------------------------|------|-------|-------|
| ANSI C63.4 | 2014 | | |
| ANSI C63.10 | 2013 | | |
| FCC 47 CFR, Parts 0-15, 18, 90, 95 | 2015 | | |
| RSS GEN | 2014 | | |
| RSS 247 | 2015 | | |

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|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |

APPENDIX C - Uncertainty Statement

Table of Expanded Uncertainty Values, (K=2) for Specified Measurements

| Measurement Type | Particular Configuration | Uncertainty Values |
|------------------------------|---------------------------------------|---------------------------|
| Radiated Emissions | 3 – Meter chamber, Biconical Antenna | 4.82 dB |
| Radiated Emissions | 3-Meter Chamber, Log Periodic Antenna | 4.88 dB |
| Radiated Emissions | 3-Meter Chamber, Horn Antenna | 4.85 dB |
| Radiated Emissions | 10-Meter OATS, Biconical Antenna | 4.32 dB |
| Radiated Emissions | 10-Meter OATS, Log Periodic Antenna | 3.63 dB |
| Absolute Conducted Emissions | Agilent PSA/ESA Series | 1.38 dB |
| AC Line Conducted Emissions | Shielded Room/EMCO LISN | 3.20 dB |
| Radiated Immunity | 3 Volts/Meter in 3-Meter Chamber | 2.05 Volts/Meter |
| Conducted Immunity | 3 Volts level | 2.33 V |
| EFT Burst, Surge, VDI | 230 VAC | 54.4 V |
| ESD Immunity | Discharge at 15kV | 3200 V |
| Temperature/Humidity | Thermo-hygrometer | 0.64° / 2.88 %RH |

| | | |
|------------------------------|--|--------------------|
| Prepared For: Quietyme, Inc. | Model #: STONE 16 | Report #: 315155 A |
| EUT: Quietyme STONE | Serial #: Radiated: Rev 6 Board #3, Rev 6 Board #6 Conducted: Rev 6 Board #1 | LSR Job #: C-2240 |