

CERTIFICATION TEST REPORT

Report Number.: 12742213-E1V3

Applicant : SATELLITE TRACKING OF PEOPLE LLC

1212 NORTH POST OAK RD, SUITE 100,

HOUSTON, TX 77055, U.S.A.

Model: BluHome

FCC ID: S5EBHV40318

IC: 9086A-BHV40318

EUT Description : OFFENDER HOME MONITORING BASE STATION

Test Standard(s): FCC 47 CFR PART 15 SUBPART C

ISED RSS-247 ISSUE 2 ISED RSS-GEN ISSUE 5

Date Of Issue:

March 20, 2019

Prepared by:

UL Verification Services Inc. 47173 Benicia Street Fremont, CA 94538 U.S.A. TEL: (510) 319-4000

FAX: (510) 319-4000 FAX: (510) 661-0888



REPORT REVISION HISTORY

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|------|---------------|----------------------|------------|
| V1 | 3/8/2019 | Initial Issue | |
| V2 | 3/14/2019 | Updated page 21 typo | Tina Chu |
| V3 | 3/20/2019 | Updated page 37 | Tina Chu |

| 1. | ATTESTATION OF TEST RESULTS | 5 |
|----------------|--|--|
| 2. | TEST METHODOLOGY | 7 |
| 3. | FACILITIES AND ACCREDITATION | 7 |
| 4. | CALIBRATION AND UNCERTAINTY | 8 |
| 4. | 1.1. MEASURING INSTRUMENT CALIBRATION | 8 |
| 4. | 2. SAMPLE CALCULATION | 8 |
| 4. | 3. MEASUREMENT UNCERTAINTY | 8 |
| 5. | EQUIPMENT UNDER TEST | 9 |
| 5. | i.1. EUT DESCRIPTION | 9 |
| 5. | .2. MAXIMUM OUTPUT POWER | 9 |
| 5. | 3.3. DESCRIPTION OF AVAILABLE ANTENNAS | 9 |
| 5. | .4. SOFTWARE AND FIRMWARE | 9 |
| 5. | 5.5. WORST-CASE CONFIGURATION AND MODE | 9 |
| 5. | 6.6. DESCRIPTION OF TEST SETUP | 10 |
| 6. | MEASUREMENT METHOD | 12 |
| | TEST AND MEASUREMENT EQUIPMENT | |
| | | |
| 8. | ANTENNA PORT TEST RESULTS | 14 |
| | ANTENNA PORT TEST RESULTS | |
| 8. | 2.1. ON TIME AND DUTY CYCLE | 14 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE 8.2. 99% BANDWIDTH | 14 16 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE | 14 16 17 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE | 14 16 17 18 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE | 14 16 18 19 20 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE | 14 16 18 19 20 21 |
| 8. 8. | 8.1. ON TIME AND DUTY CYCLE 8.2. 99% BANDWIDTH. 8.2.1. 802.11b MODE. 8.2.2. 802.11g MODE. 8.2.3. 802.11n HT20 MODE. 8.3.1. 802.11b MODE. 8.3.2. 802.11g MODE. 8.3.3. 802.11g MODE. | 14 16 18 19 20 21 22 |
| 8. 8. 8. | 1.1. ON TIME AND DUTY CYCLE 2.2. 99% BANDWIDTH 8.2.1. 802.11b MODE 8.2.2. 802.11g MODE 8.2.3. 802.11n HT20 MODE 8.3. 6 dB BANDWIDTH 8.3.1. 802.11b MODE 8.3.2. 802.11g MODE 8.3.3. 802.11n HT20 MODE | 14 16 18 20 21 22 |
| 8. 8. 8. | 1. ON TIME AND DUTY CYCLE 2. 99% BANDWIDTH. 8.2.1. 802.11b MODE. 8.2.2. 802.11g MODE. 8.2.3. 802.11n HT20 MODE. 8.3.1. 802.11b MODE. 8.3.2. 802.11g MODE. 8.3.3. 802.11g MODE. 8.4. OUTPUT POWER. 8.4.1. 802.11b MODE. 8.4.2. 802.11g MODE. | 141618192021222324 |
| 8. 8. 8. | 1.1. ON TIME AND DUTY CYCLE 1.2. 99% BANDWIDTH 1.3. 802.11p MODE 1.3. 6 dB BANDWIDTH 1.3. 802.11p MODE 1.3. 802.11p MODE 1.3. 802.11p MODE 1.3. 802.11p MODE 1.4. OUTPUT POWER 1.4. OUTPUT POWER 1.5. 802.11p MODE 1.6. 802.11p MODE | |
| 8. 8. 8. | 8.1. ON TIME AND DUTY CYCLE. 8.2. 99% BANDWIDTH. 8.2.1. 802.11b MODE. 8.2.2. 802.11g MODE. 8.2.3. 802.11n HT20 MODE. 8.3.1. 802.11b MODE. 8.3.2. 802.11g MODE. 8.3.2. 802.11g MODE. 8.3.3. 802.11n HT20 MODE. 8.4. OUTPUT POWER. 8.4.1. 802.11b MODE. 8.4.2. 802.11g MODE. 8.4.3. 802.11n HT20 MODE. | |
| 8. 8. 8. | 8.1. ON TIME AND DUTY CYCLE. 8.2. 99% BANDWIDTH. 8.2.1. 802.11b MODE. 8.2.2. 802.11g MODE. 8.2.3. 802.11n HT20 MODE. 8.3.1. 802.11b MODE. 8.3.2. 802.11g MODE. 8.3.3. 802.11n HT20 MODE. 8.3.3. 802.11n HT20 MODE. 8.4. OUTPUT POWER. 8.4.1. 802.11b MODE. 8.4.2. 802.11g MODE. 8.4.3. 802.11n HT20 MODE. 8.4.3. 802.11n HT20 MODE. 8.5.1. 802.11b MODE. 8.5.1. 802.11b MODE. 8.5.2. 802.11g MODE. | |
| 8. 8. 8. | 1.1. ON TIME AND DUTY CYCLE 1.2. 99% BANDWIDTH. 1.3. 802.11b MODE 1.3. 6 dB BANDWIDTH. 1.4. 8.3.1. 802.11b MODE 1.5. 8.3.2. 802.11g MODE 1.6.4. OUTPUT POWER 1.6.4. 0UTPUT POWER 1.6.4. 8.4.1. 802.11b MODE 1.6.4. 8.4.2. 802.11g MODE 1.6.4. 8.5.1. 802.11b MODE 1.6.5. AVERAGE POWER 1.6.5.1. 802.11b MODE 1.6.5. 802.11g MODE | |
| 8. 8. 8. | 1.1. ON TIME AND DUTY CYCLE 1.2. 99% BANDWIDTH 1.3. 802.11g MODE 1.3. 6 dB BANDWIDTH 1.4. 8.3.1. 802.11g MODE 1.5. 8.4.1. 802.11g MODE 1.6. AVERAGE POWER 1.7. 8.5.1. 802.11g MODE 1.8.5.2. 802.11g MODE 1.8.5.3. 802.11n HT20 MODE | |
| 8. 8. 8. | 1.1. ON TIME AND DUTY CYCLE 1.2. 99% BANDWIDTH. 1.3. 802.11b MODE 1.3. 6 dB BANDWIDTH. 1.4. 8.3.1. 802.11b MODE 1.5. 8.3.2. 802.11g MODE 1.6.4. OUTPUT POWER 1.6.4. 0UTPUT POWER 1.6.4. 8.4.1. 802.11b MODE 1.6.4. 8.4.2. 802.11g MODE 1.6.4. 8.5.1. 802.11b MODE 1.6.5. AVERAGE POWER 1.6.5.1. 802.11b MODE 1.6.5. 802.11g MODE | |

Page 3 of 77

| 8.7. CONDUCTED SPURIOUS EMISSIONS | 32 |
|---|----|
| 8.7.1. 802.11b MODE | 33 |
| 8.7.2. 802.11g MODE | |
| 8.7.3. 802.11n HT20 MODE | 35 |
| 9. RADIATED TEST RESULTS | 36 |
| 9.1. TRANSMITTER ABOVE 1 GHz | 38 |
| 9.1.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND | 38 |
| 9.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND | 48 |
| 9.1.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND | 58 |
| 9.2. WORST CASE BELOW 30MHZ | 68 |
| 9.3. WORST CASE BELOW 1 GHZ | 69 |
| 9.4. WORST CASE 18-26 GHZ | 71 |
| 10. AC POWER LINE CONDUCTED EMISSIONS | 73 |
| 11. SETUP PHOTOS | 76 |

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SATELLITE TRACKING OF PEOPLE LLC

1212 NORTH POST OAK RD, SUITE 100,

HOUSTON, TX 77055, U.S.A.

EUT DESCRIPTION: OFFENDER HOME MONITORING BASE STATION

MODEL: BluHome

SERIAL NUMBER: 13-800024, 13-800028(RADIATED); 13-800030 (CONDUCTED)

DATE TESTED: FEBRUARY 28, 2019 –MARCH 05, 2019

APPLICABLE STANDARDS

STANDARD TEST RESULTS

CFR 47 Part 15 Subpart C Complies
ISED RSS-247 Issue 2 Complies
ISED RSS-GEN Issue 5 Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of the U.S. government.

REPORT NO: 12742213-E1V3 FCC ID: S5EBHV40318

Approved & Released For UL Verification Services Inc. By:

Prepared By:

FRANCISCO DE ANDA OPERATIONS LEAD

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UL Verification Services Inc.

ERIC YU
TEST ENGINEER
UL Verification Services Inc.

DATE: 3/20/2019

IC: 9086A-BHV40318

Reviewed By:

TINA CHU SENIOR PROJECT ENGINEER UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05, RSS-GEN Issue 5, and RSS-247 Issue 2.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, and 47658 Kato Road, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 47173 Benicia Street | 47266 Benicia Street | 47658 Kato Rd |
|--------------------------|--------------------------|--------------------------|
| Chamber A (ISED:2324B-1) | Chamber D (ISED:22541-1) | Chamber I (ISED:2324A-5) |
| Chamber B (ISED:2324B-2) | Chamber E (ISED:22541-2) | Chamber J (ISED:2324A-6) |
| Chamber C (ISED:2324B-3) | Chamber F (ISED:22541-3) | Chamber K (ISED:2324A-1) |
| | Chamber G (ISED:22541-4) | Chamber L (ISED:2324A-3) |
| | Chamber H (ISED:22541-5) | |

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers above are covered under Industry Canada company address and respective code

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided: Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Gain (dB) 36.5 dBuV + 18.7 dB/m + 0.6 dB - 26.9 dB = 28.9 dBuV/m

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided: Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss. 36.5 dBuV + 0 dB + 10.1 dB + 0 dB = 46.6 dBuV

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| PARAMETER | UNCERTAINTY |
|---|-------------|
| Worst Case Conducted Disturbance, 9KHz to 0.15 MHz | 3.84 dB |
| Worst Case Conducted Disturbance, 0.15 to 30 MHz | 3.65 dB |
| Worst Case Radiated Disturbance, 9KHz to 30 MHz | 2.52 dB |
| Worst Case Radiated Disturbance, 30 to 1000 MHz | 4.88 dB |
| Worst Case Radiated Disturbance, 1000 to 18000 MHz | 4.24 dB |
| Worst Case Radiated Disturbance, 18000 to 26000 MHz | 4.37 dB |
| Worst Case Radiated Disturbance, 26000 to 40000 MHz | 5.17 dB |

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. EUT DESCRIPTION

The EUT is an offender home monitoring base station. It is a desktop device that includes 915 MHz (LoRa) ISM Proximity application, Cellular/Wifi/PSTN support and location services based via GNSS.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted peak output power as follows:

| Frequency Range | Mode | Output Power | Output Power |
|-----------------|--------------|---------------------|--------------|
| (MHz) | | (dBm) | (mW) |
| | 802.11b | 21.38 | 137.40 |
| 2412 - 2462 | 802.11g | 22.22 | 166.72 |
| | 802.11n HT20 | 22.03 | 159.59 |

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The EUT is using a PCB trace antenna with a peak gain of 1.95dBi in the 2.4 GHz band.

5.4. SOFTWARE AND FIRMWARE

The software used in the EUT during testing was version BluHome V4 UL Test Code V2_8.hex.

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The EUT is a desktop device (X-Orientation, Flatbed). Therefore, all final radiated testing was performed with the EUT in desktop orientation (X-Orientation, Flatbed).

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps 802.11g mode: 6 Mbps 802.11n HT20mode: MCS0

915MHz, Wifi and cellular do not transmit simultaneously.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT & PERIPHERALS

N/A

I/O CABLES (CONDUCTED EMISSIONS)

| | I/O CABLE LIST | | | | | | | |
|--------------|----------------|----------------------|-------------------|---------------|------------------------|----------------|--|--|
| Cable No. | Port | # of Identical Ports | Connector Type | Cable Type | Cable Length (m) | Remarks | | |
| 1 | AC/DC | 1 | 2-prong | Unshielded | 1.5 | Attached cable | | |
| 2 | Antenna | 1 | SMA | Shielded | 0.05 | | | |

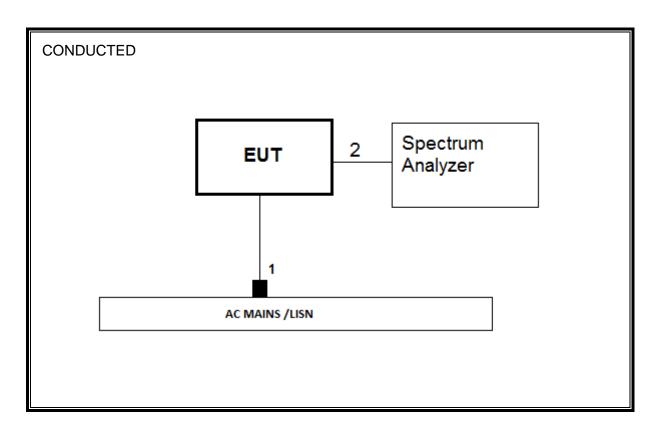
I/O CABLES (RADIATED EMISSIONS AND AC POWER LINE EMISSIONS)

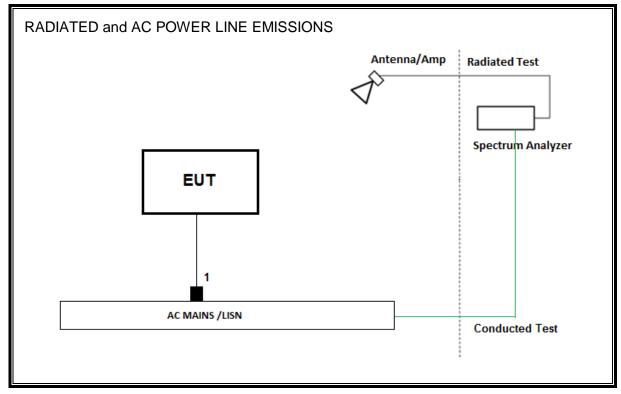
| | I/O CABLE LIST | | | | | | | |
|--------------|----------------|----------------------------|-------------------|---------------|------------------------|----------------|--|--|
| Cable No. | Port | # of Identical Ports | Connector Type | Cable Type | Cable Length (m) | Remarks | | |
| 1 | AC/DC | 1 | 2-prong | Unshielded | 1.5 | Attached cable | | |

TEST SETUP-CONDUCTED TEST

The EUT was installed in a typical configuration. Refer to the following diagram;

SETUP DIAGRAM





6. MEASUREMENT METHOD

6 dB BW: ANSI C63.10 Subclause -11.8.1

Output Power: ANSI C63.10 Subclause -11.9.1.3 Method PKPM1 Peak-reading power meter

<u>Average Output Power:</u>ANSI C63.10 Subclause -11.9.2.3.2 Method AVGPM-G (Measurement using a gated RF average-reading power meter)

PSD: ANSI C63.10 Subclause -11.10.2 Method PKPSD (peak PSD)

Radiated emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11

Radiated emissions restricted frequency bands: ANSI C63.10 Subclause -11.12.1

Conducted emissions in restricted frequency bands: ANSI C63.10 Subclause -11.12.2

<u>Band-edge:</u> ANSI C63.10 Subclause -11.13.3.4 Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| TEST EQUIPMENT LIST | | | | | | | | |
|--|------------------------------------|--------------------|------------|------------------------|-------------|--|--|--|
| Description | Manufacturer | Model | ID Num | Cal Due | Last Cal | | | |
| Power Meter, P-series single channel | Agilent (Keysight) Technologies | N1911A | T1271 | 07/26/2019 | 07/26/2018 | | | |
| Power Sensor, P-series, 50MHz to 18GHz, Wideband | Agilent (Keysight) Technologies | N1921A | T1224 | 10/09/2019 | 10/09/2018 | | | |
| Loop Antenna 30Hz-1MHz | Electro Metrics | EM-6871 | PRE0179465 | 5/22/2019 | 05/22/2018 | | | |
| Loop Antenna 100KHz-30MHz | Electro Metrics | EM-6872 | PRE0179467 | 5/22/2019 | 05/22/2018 | | | |
| Antenna, Horn 1-18GHz | ETS-Lindgren | 3117 | T344 | 04/30/2019 | 04/30/2018 | | | |
| Amplifier, 1 to18GHz, 35dB | AMOLICAL | AMP1G18-35 | T1569 | 06/03/2019 | 06/03/2018 | | | |
| Antenna, Horn 1-18GHz | AR | AMPL- ATH1G18 | PRE0189055 | 04/20/2019 | 04/20/2018 | | | |
| Amplifier, 1 to 18GHz, 35dB | AMPLICAL | AMP1G18-35 | T1571 | 07/30/2019 | 07/30/2018 | | | |
| EMI TEST RECEIVER | Rohde & Schwarz | ESW44 | PRE0179367 | 04/25/2019 | 04/25/2018 | | | |
| EMI TEST RECEIVER | Rohde & Schwarz | ESW44 | PRE0179375 | 05/08/2019 | 05/08/2018 | | | |
| EMI TEST RECEIVER | Rohde & Schwarz | ESW44 | PRE0179372 | 05/04/2019 | 05/04/2018 | | | |
| Spectrum Analyzer, PXA, 3Hz to 44GHz | Agilent (Keysight) Technologies | N9030A | T341 | 09/26/2019 | 09/26/2018 | | | |
| Amplifier, 9KHz to 1GHz, 32dB | Sonoma Instrument | 310 | PRE0186650 | 12/13/2019 | 12/13/2018 | | | |
| Hybrid Antenna, 30MHz to 3GHz | SunAR rf motion | JB3 | PRE0184052 | 10/24/2019 | 10/24/2018 | | | |
| Antenna Horn, 18 to 26.5GHz | ARA | MWH-1826/B | T448 | 03/13/2019 | 03/13/2018 | | | |
| Pre-Amp 1-26.5 GHz | Agilent | 8449B | T404 | 03/09/2019 | 03/09/2018 | | | |
| | AC Line Co | nducted | | | | | | |
| EMI Receiver | Rohde & Schwarz | ESR | T1436 | 02/14/2020 | 02/14/2019 | | | |
| LISN for Conducted Emissions CISPR-16 | FCC INC. | FCC LISN 50/250 | T1310 | 06/15/2019 | 06/15/2018 | | | |
| | Test Softw | are List | | | | | | |
| Radiated Software | UL | UL EMC | | Ver 9.5, June 22, 2018 | | | | |
| Antenna Port Software | UL | UL | RF | Ver 9.4.1, Fe | eb 19, 2019 | | | |
| AC Line Conducted Software | UL | UL E | MC | Ver 9.5, May | / 26, 2015 | | | |

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

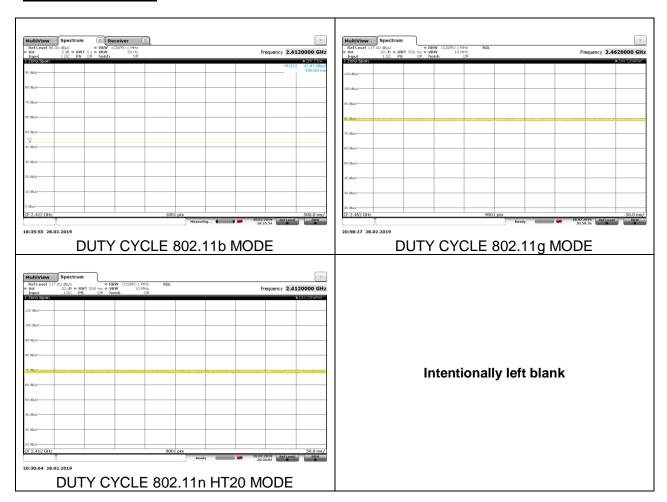
PROCEDURE

ANSI C63.10, Section 11.6: Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

| Mode | ON Time | Period | Duty Cycle | Duty | Duty Cycle | 1/B |
|------------------|---------|--------|-------------------|---------|--------------------------|-------------|
| | В | | х | Cycle | Correction Factor | Minimum VBW |
| | (msec) | (msec) | (linear) | (%) | (dB) | (kHz) |
| 2.4GHz Band | | | | | | |
| 802.11b 1TX | 500.0 | 500.0 | 1.000 | 100.00% | 0.00 | 0.010 |
| 802.11g 1TX | 500.0 | 500.0 | 1.000 | 100.00% | 0.00 | 0.010 |
| 802.11n HT20 1TX | 500.0 | 500.0 | 1.000 | 100.00% | 0.00 | 0.010 |

DUTY CYCLE PLOTS



8.2. 99% BANDWIDTH

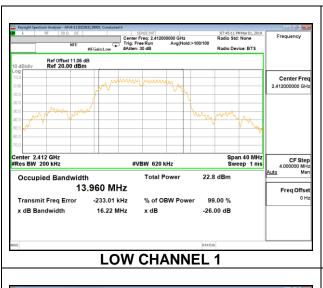
LIMITS

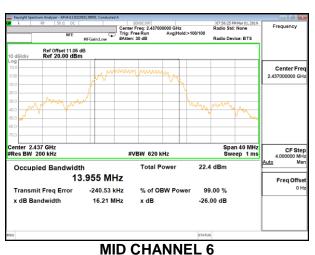
None; for reporting purposes only.

RESULTS

8.2.1. 802.11b MODE

| Channel | Frequency | 99% Bandwidth |
|---------|-----------|---------------|
| | (MHz) | (MHz) |
| Low 1 | 2412 | 13.960 |
| Mid 6 | 2437 | 13.955 |
| High 11 | 2462 | 13.964 |

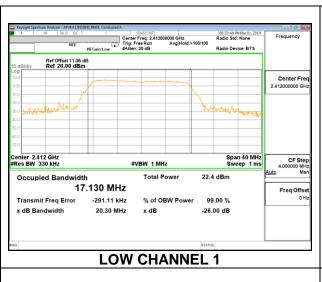


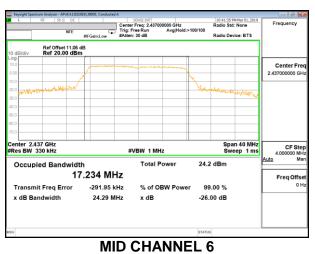


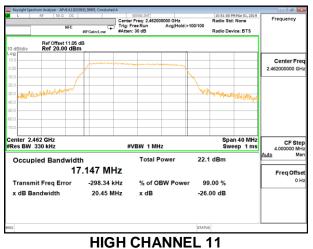
| Center | Compare | Application | Applicati

8.2.2. 802.11g MODE

| Channel | Frequency | 99% Bandwidth |
|---------|-----------|---------------|
| | (MHz) | (MHz) |
| Low 1 | 2412 | 17.130 |
| Mid 6 | 2437 | 17.234 |
| High 11 | 2462 | 17.147 |



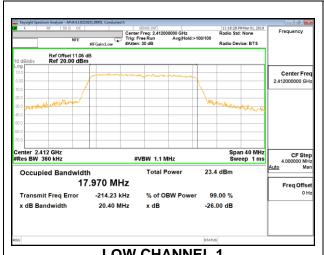


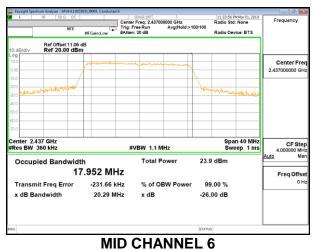


REPORT NO: 12742213-E1V3 DATE: 3/20/2019 IC: 9086A-BHV40318 FCC ID: S5EBHV40318

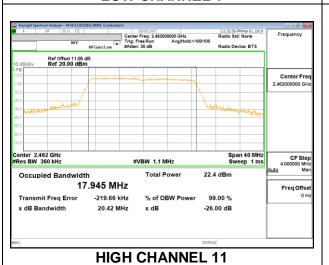
8.2.3. 802.11n HT20 MODE

| Channel | Frequency | 99% Bandwidth |
|---------|-----------|---------------|
| | (MHz) | (MHz) |
| Low 1 | 2412 | 17.970 |
| Mid 6 | 2437 | 17.952 |
| High 11 | 2462 | 17.945 |





LOW CHANNEL 1



8.3. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

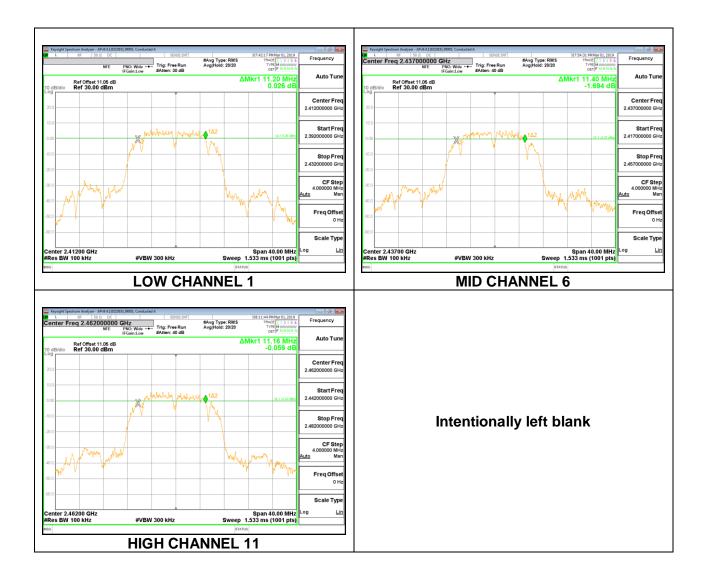
RSS-247 5.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

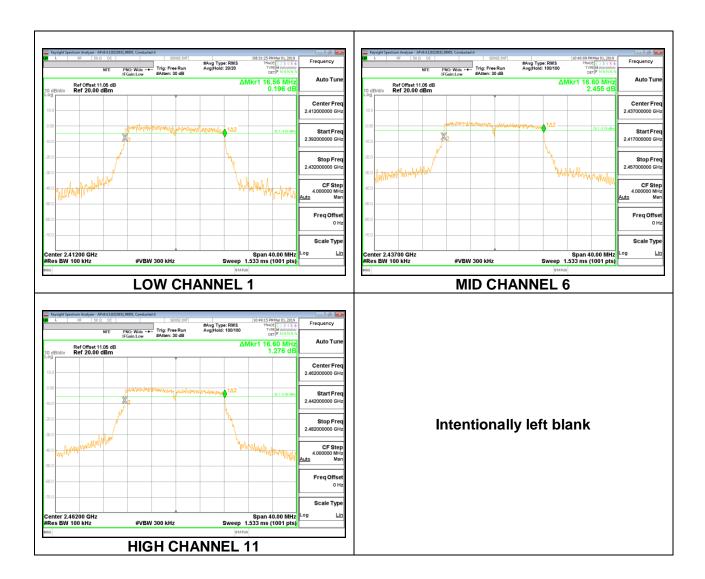
8.3.1. 802.11b MODE

| Channel | Frequency | 6 dB Bandwidth | Minimum Limit |
|---------|-----------|----------------|---------------|
| | (MHz) | (MHz) | (MHz) |
| Low 1 | 2412 | 11.20 | 0.5 |
| Mid 6 | 2437 | 11.40 | 0.5 |
| High 11 | 2462 | 11.16 | 0.5 |



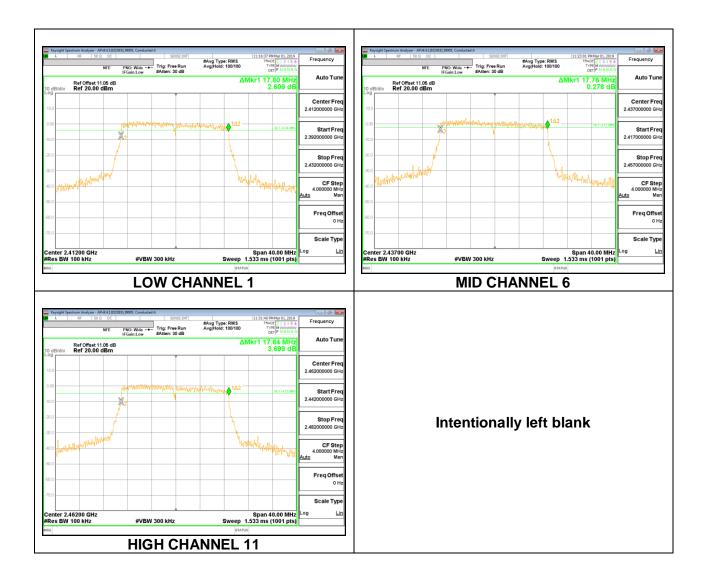
8.3.2. 802.11g MODE

| Channel | Frequency | 6 dB Bandwidth | Minimum Limit |
|---------|-----------|----------------|---------------|
| | (MHz) | (MHz) | (MHz) |
| Low 1 | 2412 | 16.56 | 0.5 |
| Mid 6 | 2437 | 16.60 | 0.5 |
| High 11 | 2462 | 16.60 | 0.5 |



8.3.3. 802.11n HT20 MODE

| Channel | Frequency | 6 dB Bandwidth | Minimum Limit |
|---------|-----------|----------------|---------------|
| | (MHz) | (MHz) | (MHz) |
| Low 1 | 2412 | 17.80 | 0.5 |
| Mid 6 | 2437 | 17.76 | 0.5 |
| High 11 | 2462 | 17.84 | 0.5 |



8.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

RSS-247 5.4 (d)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.05 dB (including 10 dB pad and 1.05 dB cable) was entered as an offset in the power meter to allow for a gated peak reading of power.

DIRECTIONAL ANTENNA GAIN

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

| Tested By: | 29435 TC |
|------------|----------|
| Date: | 3/5/2019 |

8.4.1. 802.11b MODE

Limits

| Channel | Frequency | Directional | FCC | ISED | ISED | Max |
|---------|-----------|-------------|-------|-------|-------|-------|
| | | Gain | Power | Power | EIRP | Power |
| | | | Limit | Limit | Limit | |
| | (MHz) | (dBi) | (dBm) | (dBm) | (dBm) | (dBm) |
| Low 1 | 2412 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| Mid 6 | 2437 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| High 11 | 2462 | 1.95 | 30.00 | 30 | 36 | 30.00 |

Results

| rtooarto | | | | | |
|----------|-----------|-------|--------|-------|--------|
| Channel | Frequency | | Total | Power | Margin |
| | | Meas | Corr'd | Limit | |
| | | Power | Power | | |
| | (MHz) | (dBm) | (dBm) | (dBm) | (dB) |
| Low 1 | 2412 | 21.38 | 21.38 | 30.00 | -8.62 |
| Mid 6 | 2437 | 20.86 | 20.86 | 30.00 | -9.14 |
| High 11 | 2462 | 20.65 | 20.65 | 30.00 | -9.35 |

REPORT NO: 12742213-E1V3 DATE: 3/20/2019 IC: 9086A-BHV40318 FCC ID: S5EBHV40318

8.4.2. 802.11g MODE

Limits

| Channel | Frequency | Directional | FCC | ISED | ISED | Max |
|---------|-----------|-------------|-------|-------|-------|-------|
| | | Gain | Power | Power | EIRP | Power |
| | | | Limit | Limit | Limit | |
| | (MHz) | (dBi) | (dBm) | (dBm) | (dBm) | (dBm) |
| Low 1 | 2412 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| Mid 6 | 2437 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| High 11 | 2462 | 1.95 | 30.00 | 30 | 36 | 30.00 |

Results

| | _ | | | _ | |
|---------|-----------|-------|--------|-------|--------|
| Channel | Frequency | | Total | Power | Margin |
| | | Meas | Corr'd | Limit | |
| | | Power | Power | | |
| | (MHz) | (dBm) | (dBm) | (dBm) | (dB) |
| Low 1 | 2412 | 22.22 | 22.22 | 30.00 | -7.78 |
| Mid 6 | 2437 | 21.96 | 21.96 | 30.00 | -8.04 |
| High 11 | 2462 | 21.76 | 21.76 | 30.00 | -8.24 |

8.4.3. 802.11n HT20 MODE

Limits

| Channel | Frequency | Directional | FCC | ISED | ISED | Max |
|---------|-----------|-------------|-------|-------|-------|-------|
| | | Gain | Power | Power | EIRP | Power |
| | | | Limit | Limit | Limit | |
| | (MHz) | (dBi) | (dBm) | (dBm) | (dBm) | (dBm) |
| Low 1 | 2412 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| Mid 6 | 2437 | 1.95 | 30.00 | 30 | 36 | 30.00 |
| High 11 | 2462 | 1.95 | 30.00 | 30 | 36 | 30.00 |

Results

| 11000110 | | | | | |
|----------|-----------|-------|--------|-------|--------|
| Channel | Frequency | | Total | Power | Margin |
| | | Meas | Corr'd | Limit | |
| | | Power | Power | | |
| | (MHz) | (dBm) | (dBm) | (dBm) | (dB) |
| Low 1 | 2412 | 21.36 | 21.36 | 30.00 | -8.64 |
| Mid 6 | 2437 | 21.10 | 21.10 | 30.00 | -8.90 |
| High 11 | 2462 | 22.03 | 22.03 | 30.00 | -7.97 |

8.5. AVERAGE POWER

LIMITS

None; for reporting purposes only

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.05 dB (including 10 dB pad and 1.05 dB cable) was entered as an offset in the power meter to allow for a gated average reading of power

RESULTS

| Tested By: | 29435 TC |
|------------|----------|
| Date: | 3/5/2019 |

8.5.1. 802.11b MODE

| Channel | Frequency | Chain 0 |
|---------|-----------|---------|
| | | Power |
| | (MHz) | (dBm) |
| Low 1 | 2412 | 18.64 |
| Mid 6 | 2437 | 18.12 |
| High 11 | 2462 | 17.78 |

8.5.2. 802.11g MODE

| Channel | Frequency | Chain 0 |
|---------|-----------|---------|
| | | Power |
| | (MHz) | (dBm) |
| Low 1 | 2412 | 15.12 |
| Mid 6 | 2437 | 15.37 |
| High 11 | 2462 | 14.74 |

8.5.3. 802.11n HT20 MODE

| Channel | Frequency | Chain 0 |
|---------|-----------|---------|
| | | Power |
| | (MHz) | (dBm) |
| Low 1 | 2412 | 15.25 |
| Mid 6 | 2437 | 14.56 |
| High 11 | 2462 | 14.97 |

8.6. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

RSS-247 (5.2) (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

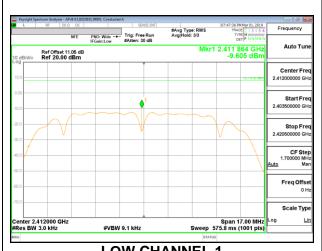
RESULTS

8.6.1. 802.11b MODE

| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|
| - | | |

PSD Results

| Channel | Frequency | Chain 0 | Total | Limit | Margin |
|---------|-----------|---------|--------|-------|--------|
| | | Meas | Corr'd | | |
| | (MHz) | | PSD | | |
| | | (dBm/ | (dBm/ | (dBm/ | |
| | | 3kHz) | 3kHz) | 3kHz) | (dB) |
| Low 1 | 2412 | -9.61 | -9.61 | 8.0 | -17.6 |
| Mid 6 | 2437 | -10.31 | -10.31 | 8.0 | -18.3 |
| High 11 | 2462 | -10.79 | -10.79 | 8.0 | -18.8 |





LOW CHANNEL 1

Ref Offset 11.05 dB Ref 20.00 dBm

enter 2.462000 GHz Res BW 3.0 kHz

#Avg Type: RMS Avg|Hold: 3/3 Center Free Start Fre Stop Fre 2.470500000 GH

Span 17.00 MHz Sweep 575.8 ms (1001 pts)

Intentionally left blank

HIGH CHANNEL 11

#VBW 9.1 kHz

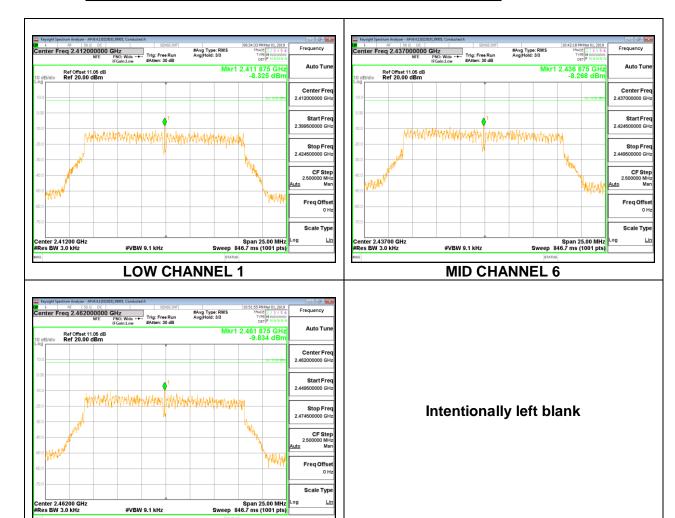
Freq Offse Scale Type

8.6.2. 802.11g MODE

| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|
| | | |

PSD Results

| Channel | Frequency | Chain 0 | Total | Limit | Margin |
|---------|-----------|---------|--------|-------|--------|
| | | Meas | Corr'd | | |
| | (MHz) | | PSD | | |
| | | (dBm/ | (dBm/ | (dBm/ | |
| | | 3kHz) | 3kHz) | 3kHz) | (dB) |
| Low 1 | 2412 | -8.33 | -8.33 | 8.0 | -16.3 |
| Mid 6 | 2437 | -8.27 | -8.27 | 8.0 | -16.3 |
| High 11 | 2462 | -9.83 | -9.83 | 8.0 | -17.8 |



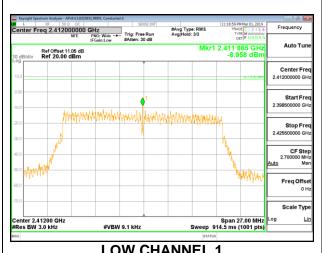
HIGH CHANNEL 11

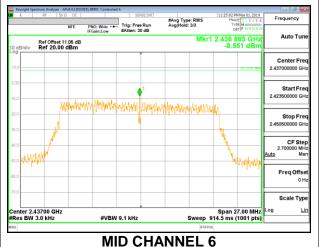
8.6.3. 802.11n HT20 MODE

| Duty Cycle CF (dB) 0.00 | | Included in Calculations of Corr'd PSD |
|-------------------------|--|--|
| DOD D 11 | | |

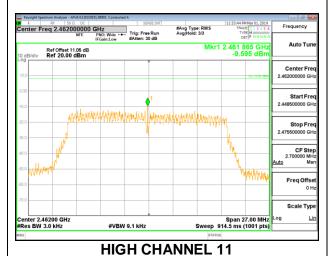
| PSD Kest | |
|----------|----|
| Channel | Fr |

| Channel | Frequency | Chain 0 | Total | Limit | Margin |
|---------|-----------|---------|--------|-------|--------|
| | | Meas | Corr'd | | |
| | (MHz) | | PSD | | |
| | | (dBm/ | (dBm/ | (dBm/ | |
| | | 3kHz) | 3kHz) | 3kHz) | (dB) |
| Low 1 | 2412 | -8.96 | -8.96 | 8.0 | -17.0 |
| Mid 6 | 2437 | -8.55 | -8.55 | 8.0 | -16.6 |
| High 11 | 2462 | -9.60 | -9.60 | 8.0 | -17.6 |





LOW CHANNEL 1



8.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

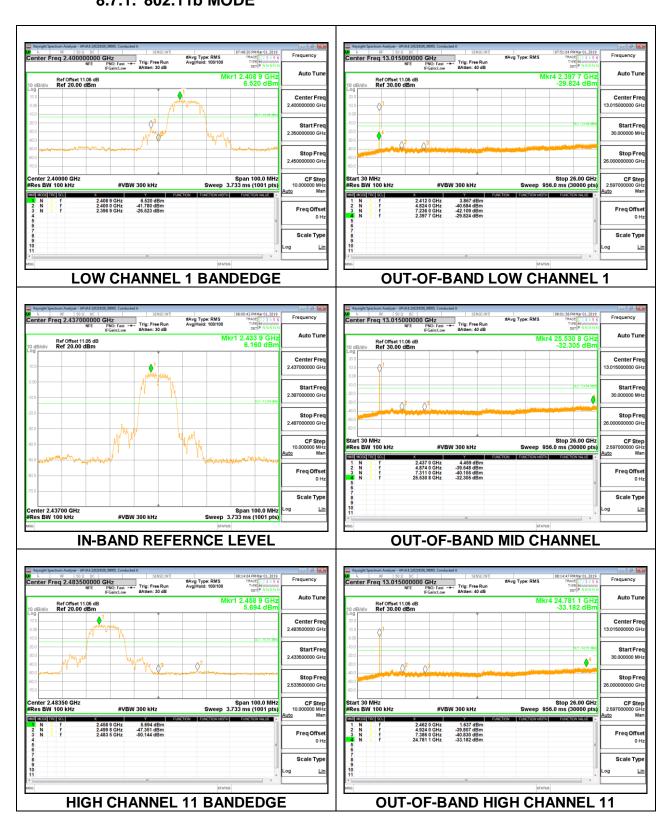
FCC §15.247 (d)

RSS-247 5.5

Output power was measured based on the use of peak measurement, therefore the required attenuation is 20 dB.

RESULTS

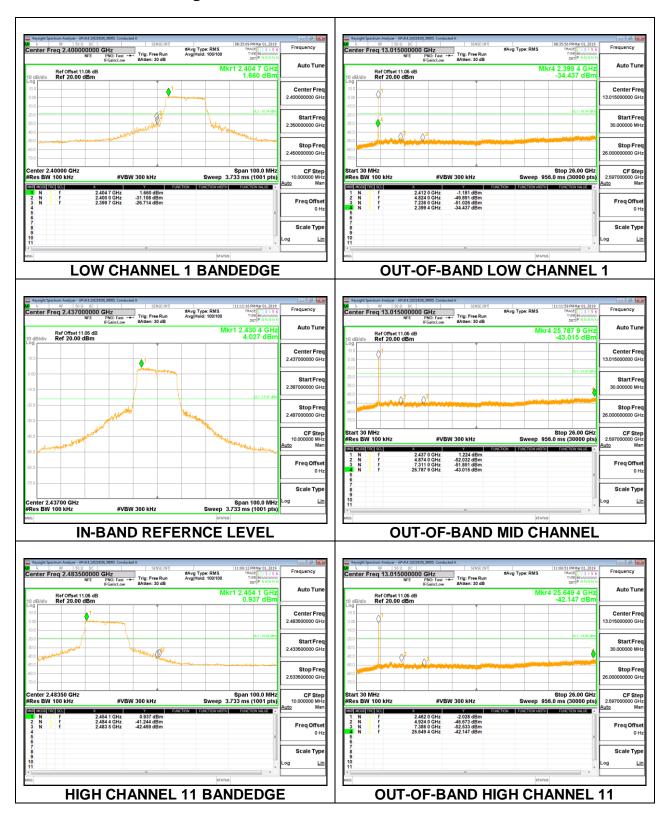
8.7.1. 802.11b MODE



DATE: 3/20/2019

IC: 9086A-BHV40318

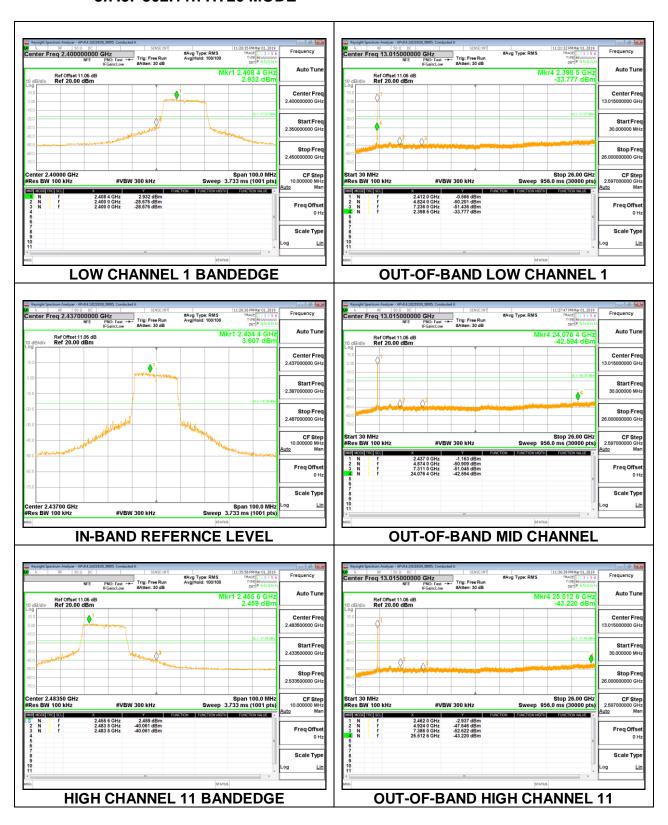
8.7.2. 802.11g MODE



DATE: 3/20/2019

IC: 9086A-BHV40318

8.7.3. 802.11n HT20 MODE



DATE: 3/20/2019

IC: 9086A-BHV40318