

FCC PART 15.247 TEST REPORT

For

ShenZhen Foscam Intelligent Technology Co., Ltd.

5/F, Block 1, Vision Business Park, Nanshan District, Shenzhen, PRC

FCC ID: ZDEFOSBABYP1

| Report Type: | | Product Type: | | |
|-----------------|---------------------------------|---------------------|--------|--|
| Original Report | | Wireless HD Baby Mo | onitor | |
| Test Engineer: | David Lee | David | Lee | |
| Report Number: | RSZ141127004-00 | | | |
| Report Date: | 2014-12-08 | | | |
| Reviewed By: | Jimmy Xiao RF Engineer | Jimmy | xiao | |
| Prepared By: | 6/F, the 3rd Ph ShiHua Road, | 33320008 | | |

Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

TABLE OF CONTENTS

| GENERAL INFORMATION | 4 |
|---|----|
| PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) | 4 |
| Objective | |
| RELATED SUBMITTAL(S)/GRANT(S) | |
| TEST METHODOLOGY | |
| TEST FACILITY | |
| SYSTEM TEST CONFIGURATION | 6 |
| DESCRIPTION OF TEST CONFIGURATION- | |
| EUT Exercise Software | |
| EQUIPMENT MODIFICATIONS | |
| SUPPORT EQUIPMENT LIST AND DETAILS | |
| External I/O Cable | 7 |
| | |
| SUMMARY OF TEST RESULTS | 8 |
| FCC §15.247 (i) & §1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE) | 9 |
| APPLICABLE STANDARD | |
| RESULT | |
| | |
| FCC §15.203 - ANTENNA REQUIREMENT | |
| APPLICABLE STANDARD | 10 |
| | |
| FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS | |
| APPLICABLE STANDARD | |
| MEASUREMENT UNCERTAINTY | |
| EUT SETUP | |
| EMI TEST RECEIVER SETUP TEST PROCEDURE | |
| TEST FROCEDURE TEST EQUIPMENT LIST AND DETAILS | |
| TEST RESULTS SUMMARY | |
| Test Data | |
| FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS | 16 |
| APPLICABLE STANDARD | |
| APPLICABLE STANDARD MEASUREMENT UNCERTAINTY | |
| EUT SETUP | |
| EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP | |
| Test Procedure | |
| TEST EQUIPMENT LIST AND DETAILS | 17 |
| CORRECTED AMPLITUDE & MARGIN CALCULATION | |
| Test Results Summary | |
| Test Data | 18 |
| FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH | 27 |
| APPLICABLE STANDARD | 27 |
| Test Procedure | |
| TEST EQUIPMENT LIST AND DETAILS | |
| TEST DATA | 27 |

PRODUCT SIMILARITY DECLARATION LETTER......50

Report No.: RSZ141127004-00B

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The ShenZhen Foscam Intelligent Technology Co., Ltd.'s product, model number: FosBaby P1 (FCC ID: ZDEFOSBABYP1) or the "EUT" in this report was a Wireless HD Baby Monitor, which was measured approximately: 8.3 cm (L) x 6.5 cm (W) x 12.8 cm (H), rated with input voltage: DC 5.0 V from adapter.

Report No.: RSZ141127004-00B

Adapter information:

Model: FEF0500200A1WU

Input: AC 100-240V, 50/60 Hz, 0.3A

Output: DC 5.0V, 2.0 A

Note: The product, series models FosBaby P1S, FosBaby P2, FosBaby P2S, FosBaby P3S, FosBaby P4S, FosBaby P4S, FosBaby P5S, FosBaby P6S are electrically identical with the model FosBaby P1, that was selected for fully testing, They are only named different due to marketing purpose and identical schematics, the detailed information can be referred to the attached declaration letter that stated and guaranteed by the applicant.

*All measurement and test data in this report was gathered from production sample serial number: 1411231 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2014-11-27.

Objective

This report is prepared on behalf of *ShenZhen Foscam Intelligent Technology Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

N/A

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2009, 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.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement uncertainty with radiated emission is 5.91 dB for 30MHz-1GHz and 4.92 dB for above 1GHz, 1.95dB for conducted measurement.

FCC Part 15.247 Page 4 of 50

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Report No.: RSZ141127004-00B

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

FCC Part 15.247 Page 5 of 50

SYSTEM TEST CONFIGURATION

Description of Test Configuration-

For 802.11b, 802.11g and 802.11n-HT20 mode, 13 channels are provided to testing:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|--------------------|---------|--------------------|
| 1 | 2412 | 8 | 2447 |
| 2 | 2417 | 9 | 2452 |
| 3 | 2422 | 10 | 2457 |
| 4 | 2427 | 11 | 2462 |
| 5 | 2432 | 12 | 2467 |
| 6 | 2437 | 13 | 2472 |
| 7 | 2442 | / | / |

Report No.: RSZ141127004-00B

EUT was tested with Channel 1, 6 and 13.

For 802.11n-HT40 mode, 9 channels are provided to testing:

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

EUT was tested with Channel 1, 4 and 9.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all date rates bandwidths, and modulations.

EUT Exercise Software

Test software:MT7610 USB V1.0.4.0.

802.11b: Rate 1 MHz, Power level: 10 802.11g: Rate 6 MHz, Power level: 0B 802.11n-HT20: Rate MCS0, Power level: 0B 802.11n-HT40: Rate MCS0, Power level: 0B

Equipment Modifications

No modification was made to the EUT tested.

FCC Part 15.247 Page 6 of 50

Support Equipment List and Details

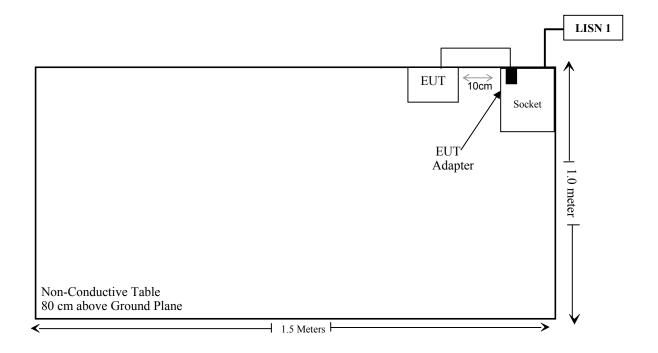
| Manufacturer | Description | Model | Serial Number | Remark |
|--------------|-------------|---------|---------------|--------|
| BULL | Scoket | GN-415K | 5503290068073 | / |

Report No.: RSZ141127004-00B

External I/O Cable

| Cable Description | Length (m) | From/Port | То |
|---|------------|-----------|---------|
| Un-shielding Un-detachable AC Power Cable | 1.0 | Mains | Scoket |
| Un-shielding Detachable USB Cable | 1.4 | EUT | adapter |

Block Diagram of Test Setup



FCC Part 15.247 Page 7 of 50

SUMMARY OF TEST RESULTS

| FCC Rules | Description of Test | Result |
|---|---|------------|
| §15.247 (i), §1.1307 (b)(1), §2.1091 | Maximum Permissible Exposure (MPE) | Compliance |
| §15.203 | Antenna Requirement | Compliance |
| §15.207 (a) | Conducted Emissions | Compliance |
| §15.247(d) | Spurious Emissions at Antenna Port | Compliance |
| \$15.205, \$15.209, \$15.247(d) | Spurious Emissions | Compliance |
| §15.247 (a)(2) | 6 dB Bandwidth | Compliance |
| §15.247(b)(3) | Maximum Peak Output Power | Compliance |
| §15.247(d) | 100kHz Bandwidth of Frequency Band Edge | Compliance |
| §15.247(e) | Power Spectral Density | Compliance |

Report No.: RSZ141127004-00B

FCC Part 15.247 Page 8 of 50

FCC §15.247 (i) & §1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Report No.: RSZ141127004-00B

| Limits for General Population/Uncontrolled Exposure | | | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------|--|--|
| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm ²) | Averaging Time (Minutes) | | |
| 0.3-1.34 | 614 | 1.63 | *(100) | 30 | | |
| 1.34-30 | 824/f | 2.19/f | $*(180/f^2)$ | 30 | | |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 | | |
| 300-1500 | / | / | f/1500 | 30 | | |
| 1500-100,000 | / | / | 1.0 | 30 | | |

f = frequency in MHz

Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

| Frequency | Antenna Gain | | Conducted Power | | Evaluation | Power | MPE Limit |
|-----------|--------------|-----------|------------------------|-------|------------------|-------------------------------|-----------------------|
| (MHz) | (dBi) | (numeric) | (dBm) | (mW) | Distance (cm) | Density (mW/cm ²) | (mW/cm ²) |
| 2437 | 2 | 1.58 | 18.82 | 76.21 | 20 | 0.024 | 1 |

Note: To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

FCC Part 15.247 Page 9 of 50

^{* =} Plane-wave equivalent power density

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

Report No.: RSZ141127004-00B

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Antenna Connector Construction

The EUT has one IPEX antenna connector arrangement for Wi-Fi which the gain was 2.0dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

FCC Part 15.247 Page 10 of 50

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207

Measurement Uncertainty

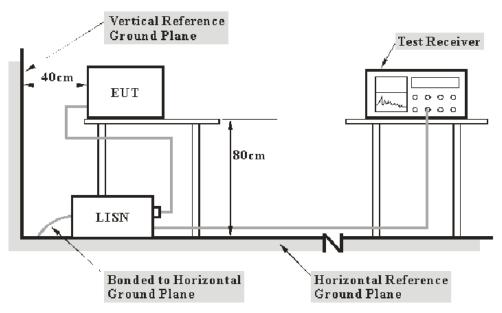
Input quantities to be considered for conducted disturbance measurements maybe receiver reading, attenuation of the connection between LISN and receiver, LISN voltage division factor, LISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report

Report No.: RSZ141127004-00B

| Port | Expanded Measurement uncertainty | | |
|----------|--|--|--|
| AC Mains | 3.26 dB (k=2, 95% level of confidence) | | |
| CAT 3 | 3.70 dB (k=2, 95% level of confidence) | | |
| CAT 5 | 3.86 dB (k=2, 95% level of confidence) | | |
| CAT 6 | 4.64 dB (k=2, 95% level of confidence) | | |

EUT Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

FCC Part 15.247 Page 11 of 50

The setup of EUT is according with ANSI C63.4-2009 measurement procedure. The specification used was with the FCC Part 15.207 limits.

Report No.: RSZ141127004-00B

The adapter was connected to a 120 $V_{AC}/60$ Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range | IF B/W | |
|------------------|--------|--|
| 150 kHz – 30 MHz | 9 kHz | |

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-------------------|---------|------------------|---------------------|-------------------------|
| Rohde & Schwarz | EMI Test Receiver | ESCS30 | 100176 | 2014-06-03 | 2015-06-03 |
| Rohde & Schwarz | LISN | EAH2-Z5 | 892107/021 | 2014-06-09 | 2015-06-09 |
| Rohde & Schwarz | Transient limitor | ESH3Z2 | DE25985 | 2014-05-14 | 2015-05-14 |
| Rohde & Schwarz | CE Test software | EMC 32 | V8.53 | - | - |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Results Summary

According to the recorded data in following table, the worst margin reading as below:

9.6 dB at 24.001970 MHz in the Line conducted mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_{\rm m} + U_{\rm (Lm)} \leq L_{\rm lim} + U_{\rm cispr}$$

In BACL, $U_{(Lm)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

FCC Part 15.247 Page 12 of 50

Test Data

Environmental Conditions

| Temperature: | 17 ℃ |
|--------------------|-----------|
| Relative Humidity: | 53 % |
| ATM Pressure: | 101.0 kPa |

Report No.: RSZ141127004-00B

The testing was performed by David Lee on 2014-12-04.

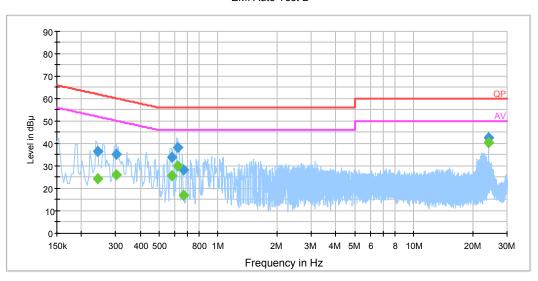
EUT operation mode: Transmitting

FCC Part 15.247 Page 13 of 50

AC 120V/60 Hz, Line

EMI Auto Test L

Report No.: RSZ141127004-00B



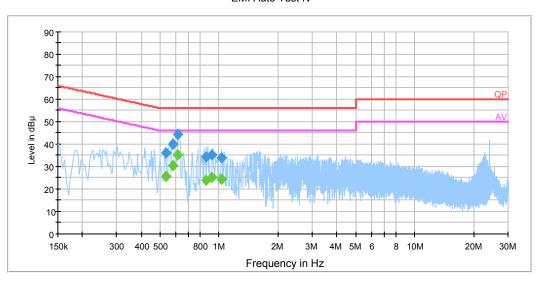
| Frequency (MHz) | Corrected Amplitude (dBµV) | Corrected Factor (dB) | Limit (dBµV) | Margin (dB) | Remark (PK/QP/Ave.) |
|--------------------|----------------------------------|-----------------------------|-----------------|----------------|------------------------|
| 0.242501 | 36.4 | 19.3 | 62.0 | 25.6 | QP |
| 0.242501 | 24.5 | 19.3 | 52.0 | 27.5 | Ave. |
| 0.301470 | 35.3 | 19.2 | 60.2 | 24.9 | QP |
| 0.301470 | 26.1 | 19.2 | 50.2 | 24.1 | Ave. |
| 0.577390 | 34.1 | 19.3 | 56.0 | 21.9 | QP |
| 0.577390 | 25.7 | 19.3 | 46.0 | 20.3 | Ave. |
| 0.620730 | 38.5 | 19.3 | 56.0 | 17.5 | QP |
| 0.620730 | 30.1 | 19.3 | 46.0 | 15.9 | Ave. |
| 0.664130 | 28.1 | 19.3 | 56.0 | 27.9 | QP |
| 0.664130 | 17.0 | 19.3 | 46.0 | 29.0 | Ave. |
| 24.001970 | 42.8 | 20.0 | 60.0 | 17.2 | QP |
| 24.001970 | 40.4 | 20.0 | 50.0 | 9.6 | Ave. |

FCC Part 15.247 Page 14 of 50

AC 120V/60 Hz, Neutral

EMI Auto Test N

Report No.: RSZ141127004-00B



| Frequency (MHz) | Corrected Amplitude (dBµV) | Corrected Factor (dB) | Limit (dBµV) | Margin (dB) | Remark (PK/QP/Ave.) |
|--------------------|----------------------------------|-----------------------------|-----------------|----------------|------------------------|
| 0.534050 | 36.1 | 19.2 | 56.0 | 19.9 | QP |
| 0.534050 | 25.5 | 19.2 | 46.0 | 20.5 | Ave. |
| 0.577330 | 40.0 | 19.2 | 56.0 | 16.0 | QP |
| 0.577330 | 30.3 | 19.2 | 46.0 | 15.7 | Ave. |
| 0.616610 | 44.4 | 19.2 | 56.0 | 11.6 | QP |
| 0.616610 | 35.1 | 19.2 | 46.0 | 10.9 | Ave. |
| 0.857130 | 34.4 | 19.3 | 56.0 | 21.6 | QP |
| 0.857130 | 23.7 | 19.3 | 46.0 | 22.3 | Ave. |
| 0.920110 | 35.2 | 19.3 | 56.0 | 20.8 | QP |
| 0.920110 | 25.1 | 19.3 | 46.0 | 20.9 | Ave. |
| 1.034490 | 33.9 | 19.4 | 56.0 | 22.1 | QP |
| 1.034490 | 24.4 | 19.4 | 46.0 | 21.6 | Ave. |

Note:

- 1) Correction Factor =LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation
- 2) Corrected Amplitude = Reading + Correction Factor
- 3) Margin = Limit Corrected Amplitude

FCC Part 15.247 Page 15 of 50

FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

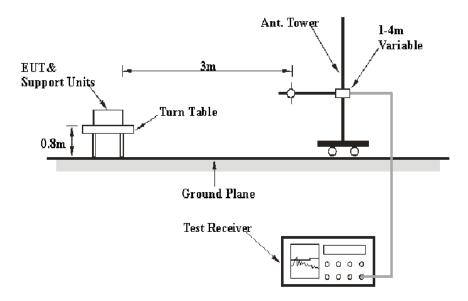
Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Report No.: RSZ141127004-00B

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Shenzhen) is 5.91 dB for 30MHz-1GHz.and 4.92 dB for above 1GHz, and it will not be taken into consideration for the test data recorded in the report

EUT Setup



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The adapter was connected to an AC 120V/60 Hz power source.

FCC Part 15.247 Page 16 of 50

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

| Frequency Range | RBW | Video B/W | IF B/W | Detector | |
|------------------|---------|-----------------|--------|----------|--|
| 30MHz – 1000 MHz | 100 kHz | 300 kHz 120 kHz | | QP | |
| Above 1 GHz | 1MHz | 3 MHz | / | PK | |
| Above I GHZ | 1MHz | 10 Hz | / | Ave. | |

Report No.: RSZ141127004-00B

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz and peak and Average detection modes for frequencies above 1 GHz.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-------------------------------|-------------------|-----------------|------------------|---------------------|-------------------------|
| HP | Amplifier | 8447E | 1937A01046 | 2014-05-06 | 2015-05-06 |
| Rohde & Schwarz | EMI Test Receiver | ESCI | 101122 | 2014-09-25 | 2015-09-25 |
| Sunol Sciences | Broadband Antenna | JB3 | A111513 | 2014-06-18 | 2017-06-17 |
| Mini | Pre-amplifier | ZVA-183-S+ | 5969001149 | 2014-04-03 | 2015-04-03 |
| Sunol Sciences | Horn Antenna | DRH-118 | A052304 | 2014-12-01 | 2015-11-30 |
| Rohde & Schwarz | Signal Analyzer | FSIQ26 | 8386001028 | 2014-11-12 | 2015-11-12 |
| DUCOMMUN | Pre-amplifier | ALN-22093530-01 | 991373-01 | 2014-08-03 | 2015-08-03 |
| the electro- Mechanics Co. | Horn Antenna | 3116 | 9510-2270 | 2013-10-14 | 2016-10-13 |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC Part 15.247 Page 17 of 50

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Report No.: RSZ141127004-00B

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the recorded data in following table, the worst margin reading as below:

0.89 dB at 164.7 MHz in the Vertical polarization for 802.11b mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_{\rm m} + U_{(L{\rm m})} \leq L_{\rm lim} + U_{\rm cispr}$$

In BACL, $U_{(Lm)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data

Environmental Conditions

| Temperature: | 20 ℃ |
|--------------------|-----------|
| Relative Humidity: | 43 % |
| ATM Pressure: | 101.0 kPa |

The testing was performed by David Lee on 2014-12-05.

EUT operation mode: Transmitting

FCC Part 15.247 Page 18 of 50

30 MHz-25 GHz:

802.11b Mode:

| Frequency | Re | eceiver | Turntable | Rx Ar | itenna | | Corrected | 15 247 | C Part /205/209 |
|-----------|----------------|--------------------------|-----------|------------|----------------|-------------|-----------------------|-------------------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| | | | Low Ch | annel (2 | 2412 MI | Hz) | | | |
| 164.7 | 56.22 | QP | 67 | 1.9 | V | -15.30 | 40.92 | 43.50 | 2.58 |
| 2412.0 | 87.56 | PK | 3 | 2.0 | Н | 6.13 | 93.69 | / | / |
| 2412.0 | 80.50 | Ave. | 3 | 2.0 | Н | 6.13 | 86.63 | / | / |
| 2412.0 | 94.97 | PK | 272 | 2.1 | V | 6.13 | 101.1 | / | / |
| 2412.0 | 90.84 | Ave. | 272 | 2.1 | V | 6.13 | 96.97 | / | / |
| 2359.0 | 42.75 | PK | 198 | 1.2 | Н | 5.48 | 48.23 | 74 | 25.77 |
| 2359.0 | 26.05 | Ave. | 198 | 1.2 | Н | 5.48 | 31.53 | 54 | 22.47 |
| 2378.7 | 39.90 | PK | 109 | 2.2 | Н | 5.48 | 45.38 | 74 | 28.62 |
| 2378.7 | 26.59 | Ave. | 109 | 2.2 | Н | 5.48 | 32.07 | 54 | 21.93 |
| 2495.7 | 44.49 | PK | 355 | 1.7 | V | 7.21 | 51.70 | 74 | 22.30 |
| 2495.7 | 41.24 | Ave. | 355 | 1.7 | V | 7.21 | 48.45 | 54 | 5.55 |
| 4824.0 | 46.45 | PK | 45 | 1.9 | Н | 12.44 | 58.89 | 74 | 15.11 |
| 4824.0 | 40.44 | Ave. | 45 | 1.9 | Н | 12.44 | 52.88 | 54 | 1.12 |
| 7236.0 | 37.50 | PK | 233 | 1.9 | V | 17.06 | 54.56 | 74 | 19.44 |
| 7236.0 | 20.02 | Ave. | 233 | 1.9 | V | 17.06 | 37.08 | 54 | 16.92 |
| 9648.0 | 36.24 | PK | 184 | 1.4 | V | 19.28 | 55.52 | 74 | 18.48 |
| 9648.0 | 19.88 | Ave. | 184 | 1.4 | V | 19.28 | 39.16 | 54 | 14.84 |
| | | | Middle C | hannel | (2437 N | (Hz) | | | |
| 164.7 | 56.02 | QP | 124 | 1.7 | V | -15.30 | 40.72 | 43.50 | 2.78 |
| 2437.0 | 86.53 | PK | 246 | 1.4 | Н | 6.13 | 92.66 | / | / |
| 2437.0 | 79.91 | Ave. | 246 | 1.4 | Н | 6.13 | 86.04 | / | / |
| 2437.0 | 96.35 | PK | 329 | 2.1 | V | 6.13 | 102.48 | / | / |
| 2437.0 | 90.05 | Ave. | 329 | 2.1 | V | 6.13 | 96.18 | / | / |
| 2344.5 | 42.21 | PK | 48 | 2.4 | Н | 5.48 | 47.69 | 74 | 26.31 |
| 2344.5 | 25.91 | Ave. | 48 | 2.4 | Н | 5.48 | 31.39 | 54 | 22.61 |
| 2372.8 | 39.17 | PK | 63 | 1.7 | Н | 5.48 | 44.65 | 74 | 29.35 |
| 2372.8 | 25.41 | Ave. | 63 | 1.7 | Н | 5.48 | 30.89 | 54 | 23.11 |
| 2487.4 | 43.95 | PK | 330 | 1.2 | V | 7.21 | 51.16 | 74 | 22.84 |
| 2487.4 | 43.45 | Ave. | 330 | 1.2 | V | 7.21 | 50.66 | 54 | 3.34 |
| 4874.0 | 47.49 | PK | 167 | 1.1 | V | 12.4 | 59.89 | 74 | 14.11 |
| 4874.0 | 40.32 | Ave. | 167 | 1.1 | V | 12.4 | 52.72 | 54 | 1.28 |
| 7311.0 | 35.90 | PK | 142 | 2.1 | Н | 16.62 | 52.52 | 74 | 21.48 |
| 7311.0 | 20.60 | Ave. | 142 | 2.1 | Н | 16.62 | 37.22 | 54 | 16.78 |
| 9748.0 | 35.56 | PK | 195 | 1.5 | Н | 19.4 | 54.96 | 74 | 19.04 |
| 9748.0 | 20.54 | Ave. | 195 | 1.5 | Н | 19.4 | 39.94 | 54 | 14.06 |

Report No.: RSZ141127004-00B

FCC Part 15.247 Page 19 of 50

| Frequency | Re | eceiver | | | itenna | | Corrected | | C Part /205/209 |
|-----------|----------------|--------------------------|---------|---------------|----------------|-------------|-----------------------|-------------------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| | | | High Ch | nannel (2 | 2472 M | Hz) | | | |
| 164.7 | 57.91 | QP | 82 | 1.8 | V | -15.30 | 42.61 | 43.50 | 0.89 |
| 2472.0 | 87.25 | PK | 23 | 2.0 | Н | 7.21 | 94.46 | / | / |
| 2472.0 | 81.69 | Ave. | 23 | 2.0 | Н | 7.21 | 88.9 | / | / |
| 2472.0 | 96.30 | PK | 238 | 1.1 | V | 7.21 | 103.51 | / | / |
| 2472.0 | 89.92 | Ave. | 238 | 1.1 | V | 7.21 | 97.13 | / | / |
| 2342.5 | 41.68 | PK | 285 | 2.0 | Н | 5.48 | 47.16 | 74 | 26.84 |
| 2342.5 | 25.15 | Ave. | 285 | 2.0 | Н | 5.48 | 30.63 | 54 | 23.37 |
| 2384.6 | 40.21 | PK | 292 | 2.0 | Н | 5.48 | 45.69 | 74 | 28.31 |
| 2384.6 | 27.67 | Ave. | 292 | 2.0 | Н | 5.48 | 33.15 | 54 | 20.85 |
| 2483.5 | 44.78 | PK | 229 | 2.1 | Н | 7.21 | 51.99 | 74 | 22.01 |
| 2483.5 | 41.11 | Ave. | 229 | 2.1 | Н | 7.21 | 48.32 | 54 | 5.68 |
| 2494.7 | 43.03 | PK | 159 | 1.6 | V | 7.21 | 50.24 | 74 | 23.76 |
| 2494.7 | 41.65 | Ave. | 159 | 1.6 | V | 7.21 | 48.86 | 54 | 5.14 |
| 4944.0 | 48.58 | PK | 310 | 2.0 | V | 12.46 | 61.04 | 74 | 12.96 |
| 4944.0 | 40.39 | Ave. | 310 | 2.0 | V | 12.46 | 52.85 | 54 | 1.15 |
| 7416.0 | 36.76 | PK | 174 | 1.4 | Н | 15.91 | 52.67 | 74 | 21.33 |
| 7416.0 | 20.26 | Ave. | 174 | 1.4 | Н | 15.91 | 36.17 | 54 | 17.83 |
| 9888.0 | 36.51 | PK | 37 | 1.1 | Н | 19.39 | 55.90 | 74 | 18.10 |
| 9888.0 | 19.96 | Ave. | 37 | 1.1 | Н | 19.39 | 39.35 | 54 | 14.65 |

FCC Part 15.247 Page 20 of 50

802.11g Mode:

| Frequency | Re | eceiver | Turntable | Rx An | ntenna | | Corrected | | C Part /205/209 |
|-----------|----------------|--------------------------|-----------|---------------|----------------|-------------|-----------------------|-------------------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | Degree | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| | | | Low Ch | annel (2 | 2412 MI | Hz) | | | |
| 164.7 | 57.54 | QP | 11 | 1.8 | V | -15.30 | 42.24 | 43.50 | 1.26 |
| 2412.0 | 87.87 | PK | 175 | 2.1 | Н | 6.13 | 94.00 | / | / |
| 2412.0 | 79.83 | Ave. | 175 | 2.1 | Н | 6.13 | 85.96 | / | / |
| 2412.0 | 95.10 | PK | 161 | 1.8 | V | 6.13 | 101.23 | / | / |
| 2412.0 | 91.20 | Ave. | 161 | 1.8 | V | 6.13 | 97.33 | / | / |
| 2344.8 | 41.49 | PK | 125 | 1.7 | Н | 5.48 | 46.97 | 74 | 27.03 |
| 2344.8 | 27.95 | Ave. | 125 | 1.7 | Н | 5.48 | 33.43 | 54 | 20.57 |
| 2386.0 | 40.72 | PK | 207 | 1.8 | Н | 5.48 | 46.20 | 74 | 27.80 |
| 2386.0 | 26.72 | Ave. | 207 | 1.8 | Н | 5.48 | 32.20 | 54 | 21.80 |
| 2496.0 | 44.22 | PK | 197 | 1.4 | V | 7.21 | 51.43 | 74 | 22.57 |
| 2496.0 | 43.74 | Ave. | 197 | 1.4 | V | 7.21 | 50.95 | 54 | 3.05 |
| 4824.0 | 46.65 | PK | 160 | 2.5 | V | 12.44 | 59.09 | 74 | 14.91 |
| 4824.0 | 40.53 | Ave. | 160 | 2.5 | V | 12.44 | 52.97 | 54 | 1.03 |
| 7236.0 | 37.43 | PK | 60 | 1.5 | V | 17.06 | 54.49 | 74 | 19.51 |
| 7236.0 | 19.91 | Ave. | 60 | 1.5 | V | 17.06 | 36.97 | 54 | 17.03 |
| 9648.0 | 34.85 | PK | 161 | 1.8 | Н | 19.28 | 54.13 | 74 | 19.87 |
| 9648.0 | 20.39 | Ave. | 161 | 1.8 | Н | 19.28 | 39.67 | 54 | 14.33 |
| | | | Middle C | hannel | (2437 N | Mz) | | | |
| 164.7 | 56.38 | QP | 348 | 1.8 | V | -15.30 | 41.08 | 43.50 | 2.42 |
| 2437.0 | 86.65 | PK | 296 | 1.2 | Н | 6.13 | 92.78 | / | / |
| 2437.0 | 80.13 | Ave. | 296 | 1.2 | Н | 6.13 | 86.26 | / | / |
| 2437.0 | 95.66 | PK | 102 | 2.5 | V | 6.13 | 101.79 | / | / |
| 2437.0 | 91.17 | Ave. | 102 | 2.5 | V | 6.13 | 97.30 | / | / |
| 2349.4 | 41.08 | PK | 137 | 2.2 | Н | 5.48 | 46.56 | 74 | 27.44 |
| 2349.4 | 26.39 | Ave. | 137 | 2.2 | Н | 5.48 | 31.87 | 54 | 22.13 |
| 2386.9 | 38.27 | PK | 313 | 2.3 | Н | 5.48 | 43.75 | 74 | 30.25 |
| 2386.9 | 23.62 | Ave. | 313 | 2.3 | Н | 5.48 | 29.10 | 54 | 24.90 |
| 2492.7 | 42.50 | PK | 27 | 2.1 | V | 7.21 | 49.71 | 74 | 24.29 |
| 2492.7 | 41.48 | Ave. | 27 | 2.1 | V | 7.21 | 48.69 | 54 | 5.31 |
| 4874.0 | 46.49 | PK | 43 | 1.8 | Н | 12.4 | 58.89 | 74 | 15.11 |
| 4874.0 | 40.48 | Ave. | 43 | 1.8 | Н | 12.4 | 52.88 | 54 | 1.12 |
| 7311.0 | 36.75 | PK | 52 | 2.4 | V | 16.62 | 53.37 | 74 | 20.63 |
| 7311.0 | 21.58 | Ave. | 52 | 2.4 | V | 16.62 | 38.20 | 54 | 15.80 |
| 9748.0 | 35.15 | PK | 322 | 1.0 | Н | 19.4 | 54.55 | 74 | 19.45 |
| 9748.0 | 21.22 | Ave. | 322 | 1.0 | Н | 19.4 | 40.62 | 54 | 13.38 |

Report No.: RSZ141127004-00B

FCC Part 15.247 Page 21 of 50

| Frequency | Re | eceiver | Turntable | | itenna | | Corrected | 15.247 | C Part /205/209 |
|-----------|----------------|--------------------------|-----------|---------------|----------------|-------------|-----------------------|--------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | Degree | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | | Margin (dB) |
| | | | High Cł | nannel (2 | 2472 M | Hz) | | | |
| 164.7 | 56.88 | QP | 41 | 2.3 | V | -15.30 | 41.58 | 43.50 | 1.92 |
| 2472.0 | 87.12 | PK | 100 | 1.9 | Н | 7.21 | 94.33 | / | / |
| 2472.0 | 80.18 | Ave. | 100 | 1.9 | Н | 7.21 | 87.39 | / | / |
| 2472.0 | 95.14 | PK | 232 | 1.7 | V | 7.21 | 102.35 | / | / |
| 2472.0 | 91.50 | Ave. | 232 | 1.7 | V | 7.21 | 98.71 | / | / |
| 2354.6 | 40.89 | PK | 287 | 1.5 | Н | 5.48 | 46.37 | 74 | 27.63 |
| 2354.6 | 25.75 | Ave. | 287 | 1.5 | Н | 5.48 | 31.23 | 54 | 22.77 |
| 2381.6 | 38.11 | PK | 36 | 1.7 | Н | 5.48 | 43.59 | 74 | 30.41 |
| 2381.6 | 26.23 | Ave. | 36 | 1.7 | Н | 5.48 | 31.71 | 54 | 22.29 |
| 2483.5 | 47.78 | PK | 72 | 1.1 | Н | 7.21 | 54.99 | 74 | 19.01 |
| 2483.5 | 43.26 | Ave. | 72 | 1.1 | Н | 7.21 | 50.47 | 54 | 3.53 |
| 2496.8 | 45.80 | PK | 176 | 2.1 | V | 7.21 | 53.01 | 74 | 20.99 |
| 2496.8 | 41.73 | Ave. | 176 | 2.1 | V | 7.21 | 48.94 | 54 | 5.06 |
| 4944.0 | 47.86 | PK | 61 | 1.4 | V | 12.46 | 60.32 | 74 | 13.68 |
| 4944.0 | 40.38 | Ave. | 61 | 1.4 | V | 12.46 | 52.84 | 54 | 1.16 |
| 7416.0 | 37.72 | PK | 236 | 1.2 | V | 15.91 | 53.63 | 74 | 20.37 |
| 7416.0 | 20.92 | Ave. | 236 | 1.2 | V | 15.91 | 36.83 | 54 | 17.17 |
| 9888.0 | 35.09 | PK | 122 | 1.6 | Н | 19.39 | 54.48 | 74 | 19.52 |
| 9888.0 | 19.98 | Ave. | 122 | 1.6 | Н | 19.39 | 39.37 | 54 | 14.63 |

FCC Part 15.247 Page 22 of 50

802.11n-HT20 Mode:

| Frequency | Re | eceiver | Turntable | Rx An | itenna | | Corrected | | C Part /205/209 |
|-----------|----------------|--------------------------|-----------|------------|----------------|-------------|-----------------------|-------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | Degree | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | Limit | Margin (dB) |
| | | | Low Ch | annel (2 | 2412 MI | Hz) | | | |
| 164.7 | 56.15 | QP | 229 | 2.5 | V | -15.30 | 40.85 | 43.50 | 2.65 |
| 2412.0 | 87.77 | PK | 252 | 1.8 | Н | 6.13 | 93.9 | / | / |
| 2412.0 | 80.03 | Ave. | 252 | 1.8 | Н | 6.13 | 86.16 | / | / |
| 2412.0 | 95.62 | PK | 36 | 1.0 | V | 6.13 | 101.75 | / | / |
| 2412.0 | 90.20 | Ave. | 36 | 1.0 | V | 6.13 | 96.33 | / | / |
| 2369.6 | 40.70 | PK | 208 | 1.9 | Н | 5.48 | 46.18 | 74 | 27.82 |
| 2369.6 | 27.83 | Ave. | 208 | 1.9 | Н | 5.48 | 33.31 | 54 | 20.69 |
| 2383.9 | 40.23 | PK | 238 | 2.2 | Н | 5.48 | 45.71 | 74 | 28.29 |
| 2383.9 | 25.61 | Ave. | 238 | 2.2 | Н | 5.48 | 31.09 | 54 | 22.91 |
| 2493.5 | 42.86 | PK | 181 | 1.6 | V | 7.21 | 50.07 | 74 | 23.93 |
| 2493.5 | 42.49 | Ave. | 181 | 1.6 | V | 7.21 | 49.70 | 54 | 4.30 |
| 4824.0 | 48.41 | PK | 195 | 2.4 | V | 12.44 | 60.85 | 74 | 13.15 |
| 4824.0 | 40.50 | Ave. | 195 | 2.4 | V | 12.44 | 52.94 | 54 | 1.06 |
| 7236.0 | 35.98 | PK | 214 | 1.5 | Н | 17.06 | 53.04 | 74 | 20.96 |
| 7236.0 | 21.63 | Ave. | 214 | 1.5 | Н | 17.06 | 38.69 | 54 | 15.31 |
| 9648.0 | 35.40 | PK | 54 | 2.4 | V | 19.28 | 54.68 | 74 | 19.32 |
| 9648.0 | 21.56 | Ave. | 54 | 2.4 | V | 19.28 | 40.84 | 54 | 13.16 |
| | | | Middle C | hannel | (2437 N | Mz) | | | |
| 164.7 | 56.55 | QP | 312 | 1.3 | V | -15.30 | 41.25 | 43.50 | 2.25 |
| 2437.0 | 86.61 | PK | 27 | 1.6 | Н | 6.13 | 92.74 | / | / |
| 2437.0 | 81.79 | Ave. | 27 | 1.6 | Н | 6.13 | 87.92 | / | / |
| 2437.0 | 95.40 | PK | 55 | 1.1 | V | 6.13 | 101.53 | / | / |
| 2437.0 | 90.44 | Ave. | 55 | 1.1 | V | 6.13 | 96.57 | / | / |
| 2351.3 | 39.82 | PK | 173 | 1.9 | Н | 5.48 | 45.30 | 74 | 28.70 |
| 2351.3 | 26.18 | Ave. | 173 | 1.9 | Н | 5.48 | 31.66 | 54 | 22.34 |
| 2376.2 | 37.83 | PK | 33 | 1.4 | Н | 5.48 | 43.31 | 74 | 30.69 |
| 2376.2 | 23.93 | Ave. | 33 | 1.4 | Н | 5.48 | 29.41 | 54 | 24.59 |
| 2493.8 | 46.95 | PK | 322 | 1.5 | V | 7.21 | 54.16 | 74 | 19.84 |
| 2493.8 | 38.81 | Ave. | 322 | 1.5 | V | 7.21 | 46.02 | 54 | 7.98 |
| 4874.0 | 47.92 | PK | 125 | 1.4 | V | 12.4 | 60.32 | 74 | 13.68 |
| 4874.0 | 40.51 | Ave. | 125 | 1.4 | V | 12.4 | 52.91 | 54 | 1.09 |
| 7311.0 | 37.55 | PK | 128 | 1.1 | V | 16.62 | 54.17 | 74 | 19.83 |
| 7311.0 | 21.66 | Ave. | 128 | 1.1 | V | 16.62 | 38.28 | 54 | 15.72 |
| 9748.0 | 36.66 | PK | 230 | 2.2 | V | 19.4 | 56.06 | 74 | 17.94 |
| 9748.0 | 20.63 | Ave. | 230 | 2.2 | V | 19.4 | 40.03 | 54 | 13.97 |

Report No.: RSZ141127004-00B

FCC Part 15.247 Page 23 of 50

| Frequency | Re | Receiver | | | itenna | | Corrected | | C Part /205/209 |
|-----------|----------------|--------------------------|---------|---------------|----------------|-------------|-----------------------|-------------------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
| | | | High Ch | nannel (2 | 2472 M | Hz) | | | |
| 164.7 | 56.97 | QP | 354 | 1.5 | V | -15.30 | 41.67 | 43.50 | 1.83 |
| 2472.0 | 86.58 | PK | 92 | 1.3 | Н | 7.21 | 93.79 | / | / |
| 2472.0 | 79.92 | Ave. | 92 | 1.3 | Н | 7.21 | 87.13 | / | / |
| 2472.0 | 96.74 | PK | 153 | 2.0 | V | 7.21 | 103.95 | / | / |
| 2472.0 | 91.19 | Ave. | 153 | 2.0 | V | 7.21 | 98.40 | / | / |
| 2350.2 | 40.28 | PK | 5 | 2.1 | Н | 5.48 | 45.76 | 74 | 28.24 |
| 2350.2 | 26.28 | Ave. | 5 | 2.1 | Н | 5.48 | 31.76 | 54 | 22.24 |
| 2380.4 | 41.16 | PK | 178 | 1.6 | Н | 5.48 | 46.64 | 74 | 27.36 |
| 2380.4 | 24.39 | Ave. | 178 | 1.6 | Н | 5.48 | 29.87 | 54 | 24.13 |
| 2483.5 | 46.34 | PK | 331 | 2.2 | Н | 7.21 | 53.55 | 74 | 20.45 |
| 2483.5 | 42.87 | Ave. | 331 | 2.2 | Н | 7.21 | 50.08 | 54 | 3.92 |
| 2498.3 | 43.23 | PK | 347 | 1.2 | V | 7.21 | 50.44 | 74 | 23.56 |
| 2498.3 | 41.47 | Ave. | 347 | 1.2 | V | 7.21 | 48.68 | 54 | 5.32 |
| 4944.0 | 46.43 | PK | 141 | 1.9 | V | 12.46 | 58.89 | 74 | 15.11 |
| 4944.0 | 40.35 | Ave. | 141 | 1.9 | V | 12.46 | 52.81 | 54 | 1.19 |
| 7416.0 | 36.74 | PK | 54 | 1.3 | V | 15.91 | 52.65 | 74 | 21.35 |
| 7416.0 | 21.37 | Ave. | 54 | 1.3 | V | 15.91 | 37.28 | 54 | 16.72 |
| 9888.0 | 36.27 | PK | 341 | 2.0 | Н | 19.39 | 55.66 | 74 | 18.34 |
| 9888.0 | 21.30 | Ave. | 341 | 2.0 | Н | 19.39 | 40.69 | 54 | 13.31 |

FCC Part 15.247 Page 24 of 50

802.11n-HT40 Mode:

| Frequency | Receiver | | Turntable | Rx Ar | ntenna | | Corrected | | C Part /205/209 |
|-----------|------------------------|--------------------------|-----------|------------|----------------|-------------|-----------------------|-------------------|--------------------|
| (MHz) | Reading (dBµV) | Detector (PK/QP/Ave.) | Degree | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBμV/m) | Limit (dBµV/m) | Margin (dB) |
| | Low Channel (2422 MHz) | | | | | | | | |
| 164.7 | 56.16 | QP | 322 | 1.3 | V | -15.30 | 40.86 | 43.50 | 2.64 |
| 2422.0 | 86.81 | PK | 4 | 1.7 | Н | 6.13 | 92.94 | / | / |
| 2422.0 | 80.27 | Ave. | 4 | 1.7 | Н | 6.13 | 86.40 | / | / |
| 2422.0 | 95.51 | PK | 24 | 2.3 | V | 6.13 | 101.64 | / | / |
| 2422.0 | 90.00 | Ave. | 24 | 2.3 | V | 6.13 | 96.13 | / | / |
| 2343.5 | 41.73 | PK | 264 | 2.2 | Н | 5.48 | 47.21 | 74 | 26.79 |
| 2343.5 | 27.11 | Ave. | 264 | 2.2 | Н | 5.48 | 32.59 | 54 | 21.41 |
| 2374.7 | 41.83 | PK | 43 | 2.1 | Н | 5.48 | 47.31 | 74 | 26.69 |
| 2374.7 | 24.75 | Ave. | 43 | 2.1 | Н | 5.48 | 30.23 | 54 | 23.77 |
| 2487.7 | 42.53 | PK | 184 | 1.6 | V | 7.21 | 49.74 | 74 | 24.26 |
| 2487.7 | 41.36 | Ave. | 184 | 1.6 | V | 7.21 | 48.57 | 54 | 5.43 |
| 4844.0 | 46.63 | PK | 284 | 2.4 | Н | 12.4 | 59.03 | 74 | 14.97 |
| 4844.0 | 40.29 | Ave. | 284 | 2.4 | Н | 12.4 | 52.69 | 54 | 1.31 |
| 7266.0 | 37.72 | PK | 150 | 1.1 | V | 16.62 | 54.34 | 74 | 19.66 |
| 7266.0 | 20.91 | Ave. | 150 | 1.1 | V | 16.62 | 37.53 | 54 | 16.47 |
| 9688.0 | 36.70 | PK | 211 | 1.7 | Н | 19.29 | 55.99 | 74 | 18.01 |
| 9688.0 | 20.33 | Ave. | 211 | 1.7 | Н | 19.29 | 39.62 | 54 | 14.38 |
| | | | Middle C | hannel | (2437 N | MHz) | | | |
| 164.7 | 56.78 | QP | 247 | 2.3 | V | -15.30 | 41.48 | 43.50 | 2.02 |
| 2437.0 | 87.01 | PK | 14 | 1.7 | Н | 6.13 | 93.14 | / | / |
| 2437.0 | 81.45 | Ave. | 14 | 1.7 | Н | 6.13 | 87.58 | / | / |
| 2437.0 | 96.50 | PK | 17 | 1.4 | V | 6.13 | 102.63 | / | / |
| 2437.0 | 89.82 | Ave. | 17 | 1.4 | V | 6.13 | 95.95 | / | / |
| 2350.0 | 44.47 | PK | 121 | 2.5 | Н | 5.48 | 49.95 | 74 | 24.05 |
| 2350.0 | 28.69 | Ave. | 121 | 2.5 | Н | 5.48 | 34.17 | 54 | 19.83 |
| 2383.9 | 40.49 | PK | 122 | 2.0 | Н | 5.48 | 45.97 | 74 | 28.03 |
| 2383.9 | 25.25 | Ave. | 122 | 2.0 | Н | 5.48 | 30.73 | 54 | 23.27 |
| 2496.0 | 46.82 | PK | 22 | 2.1 | V | 7.21 | 54.03 | 74 | 19.97 |
| 2496.0 | 39.73 | Ave. | 22 | 2.1 | V | 7.21 | 46.94 | 54 | 7.06 |
| 4874.0 | 48.59 | PK | 99 | 1.3 | Н | 12.4 | 60.99 | 74 | 13.01 |
| 4874.0 | 40.44 | Ave. | 99 | 1.3 | Н | 12.4 | 52.84 | 54 | 1.16 |
| 7311.0 | 36.93 | PK | 30 | 1.8 | Н | 16.62 | 53.55 | 74 | 20.45 |
| 7311.0 | 20.64 | Ave. | 30 | 1.8 | Н | 16.62 | 37.26 | 54 | 16.74 |
| 9748.0 | 36.31 | PK | 118 | 1.9 | Н | 19.4 | 55.71 | 74 | 18.29 |
| 9748.0 | 20.52 | Ave. | 118 | 1.9 | Н | 19.4 | 39.92 | 54 | 14.08 |

Report No.: RSZ141127004-00B

FCC Part 15.247 Page 25 of 50

| Frequency (MHz) | Receiver | | Turntable | Rx Antenna | | | Corrected | FCC Part 15.247/205/209 | |
|--------------------|-------------------------|--------------------------|-----------|------------|----------------|-------------|-----------------------|----------------------------|----------------|
| | Reading (dBµV) | Detector (PK/QP/Ave.) | Degree | Height (m) | Polar (H/V) | Factor (dB) | Amplitude (dBμV/m) | Limit (dBµV/m) | Margin (dB) |
| | High Channel (2462 MHz) | | | | | | | | |
| 164.7 | 56.21 | QP | 326 | 1.3 | V | -15.30 | 40.91 | 43.50 | 2.59 |
| 2462.0 | 87.72 | PK | 150 | 1.4 | Н | 6.13 | 93.85 | / | / |
| 2462.0 | 80.27 | Ave. | 150 | 1.4 | Н | 6.13 | 86.4 | / | / |
| 2462.0 | 95.33 | PK | 71 | 1.1 | V | 6.13 | 101.46 | / | / |
| 2462.0 | 90.50 | Ave. | 71 | 1.1 | V | 6.13 | 96.63 | / | / |
| 2347.1 | 40.28 | PK | 268 | 2.1 | Н | 5.48 | 45.76 | 74 | 28.24 |
| 2347.1 | 24.85 | Ave. | 268 | 2.1 | Н | 5.48 | 30.33 | 54 | 23.67 |
| 2385.2 | 38.20 | PK | 52 | 2.1 | Н | 5.48 | 43.68 | 74 | 30.32 |
| 2385.2 | 24.10 | Ave. | 52 | 2.1 | Н | 5.48 | 29.58 | 54 | 24.42 |
| 2483.5 | 43.48 | PK | 119 | 2.0 | Н | 7.21 | 50.69 | 74 | 23.31 |
| 2483.5 | 41.45 | Ave. | 119 | 2.0 | Н | 7.21 | 48.66 | 54 | 5.34 |
| 2489.9 | 43.82 | PK | 56 | 1.8 | V | 7.21 | 51.03 | 74 | 22.97 |
| 2489.9 | 39.68 | Ave. | 56 | 1.8 | V | 7.21 | 46.89 | 54 | 7.11 |
| 4924.0 | 48.25 | PK | 233 | 2.0 | V | 12.46 | 60.71 | 74 | 13.29 |
| 4924.0 | 40.40 | Ave. | 233 | 2.0 | V | 12.46 | 52.86 | 54 | 1.14 |
| 7386.0 | 36.92 | PK | 147 | 2.0 | Н | 15.91 | 52.83 | 74 | 21.17 |
| 7386.0 | 20.04 | Ave. | 147 | 2.0 | Н | 15.91 | 35.95 | 54 | 18.05 |
| 9848.0 | 34.78 | PK | 114 | 2.0 | Н | 19.29 | 54.07 | 74 | 19.93 |
| 9848.0 | 21.22 | Ave. | 114 | 2.0 | Н | 19.29 | 40.51 | 54 | 13.49 |

Note:

Corrected Amplitude = Corrected Factor + Reading
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude

FCC Part 15.247 Page 26 of 50

FCC $\S15.247(a)$ (2) – 6 dB EMISSION BANDWIDTH

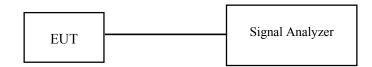
Applicable Standard

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

Report No.: RSZ141127004-00B

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.



Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-----------------|--------|---------------|---------------------|-------------------------|
| Rohde & Schwarz | Signal Analyzer | FSIQ26 | 837405/023 | 2014-05-31 | 2015-05-31 |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

| Temperature: | 20 ℃ |
|--------------------|-----------|
| Relative Humidity: | 51 % |
| ATM Pressure: | 101.0 kPa |

The testing was performed by David Lee on 2014-12-02.

Test Result: Pass.

Please refer to the following tables and plots.

FCC Part 15.247 Page 27 of 50

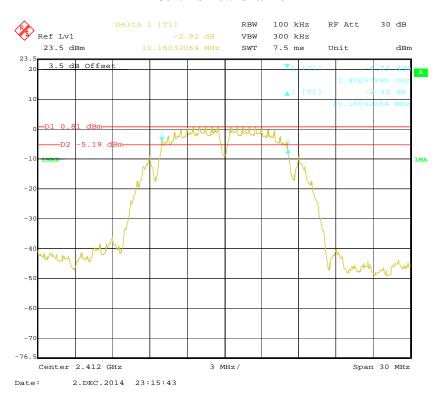
EUT operation mode: Transmitting

| Channel | Frequency (MHz) | 6 dB Emission Bandwidth (MHz) | Limit (kHz) | | | | | |
|---------|--------------------|-------------------------------------|----------------|--|--|--|--|--|
| | 802.11b mode | | | | | | | |
| Low | 2412 | 10.16 | ≥500 | | | | | |
| Middle | 2437 | 10.16 | ≥500 | | | | | |
| High | 2472 | 10.16 | ≥500 | | | | | |
| | 802.11 | g mode | | | | | | |
| Low | 2412 | 16.41 | ≥500 | | | | | |
| Middle | 2437 | 16.41 | ≥500 | | | | | |
| High | 2472 | 16.41 | ≥500 | | | | | |
| | 802.11n-HT20 mode | | | | | | | |
| Low | 2412 | 17.13 | ≥500 | | | | | |
| Middle | 2437 | 17.13 | ≥500 | | | | | |
| High | 2472 | 17.13 | ≥500 | | | | | |
| | 802.11n-HT40 mode | | | | | | | |
| Low | 2422 | 35.31 | ≥500 | | | | | |
| Middle | 2437 | 35.31 | ≥500 | | | | | |
| High | 2462 | 35.31 | ≥500 | | | | | |

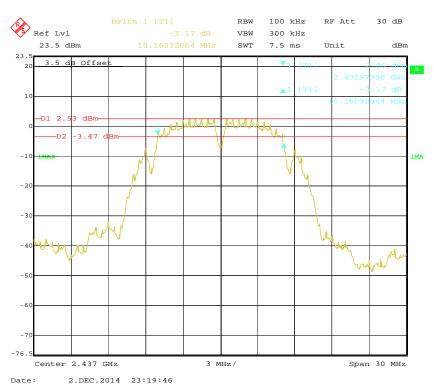
Report No.: RSZ141127004-00B

FCC Part 15.247 Page 28 of 50

802.11b Low Channel

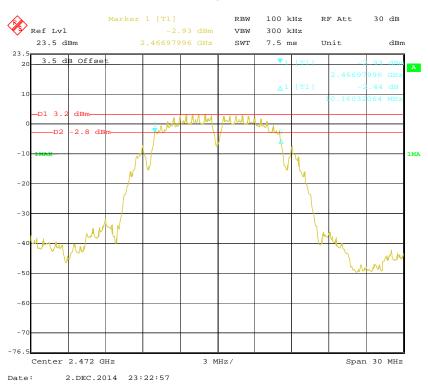


802.11b Middle Channel

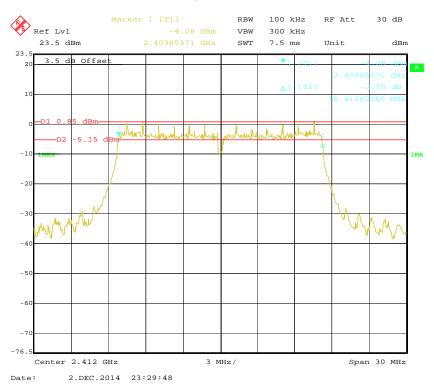


FCC Part 15.247 Page 29 of 50

802.11b High Channel

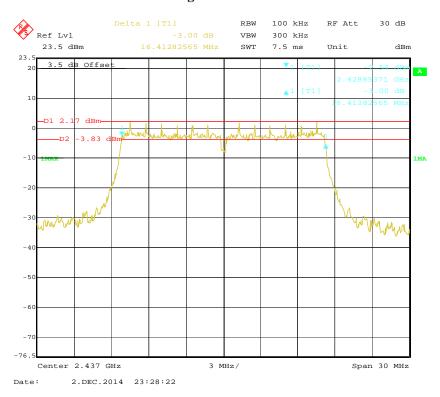


802.11g Low Channel

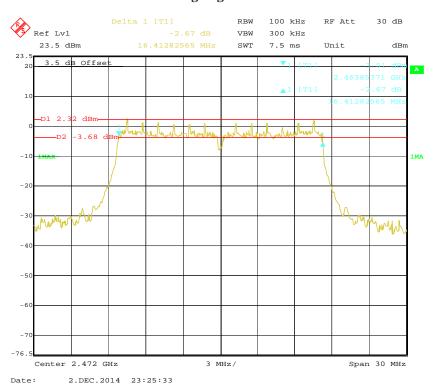


FCC Part 15.247 Page 30 of 50

802.11g Middle Channel

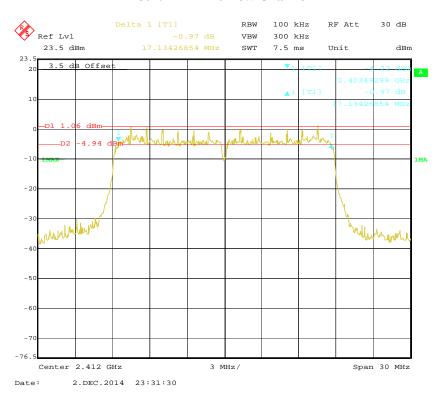


802.11g High Channel

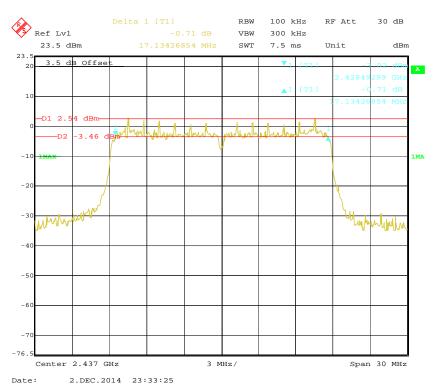


FCC Part 15.247 Page 31 of 50

802.11n-HT20 Low Channel

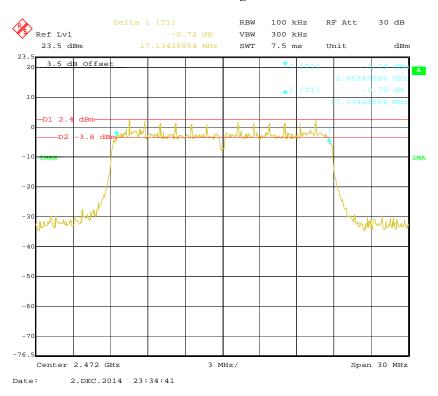


802.11n-HT20 Middle Channel

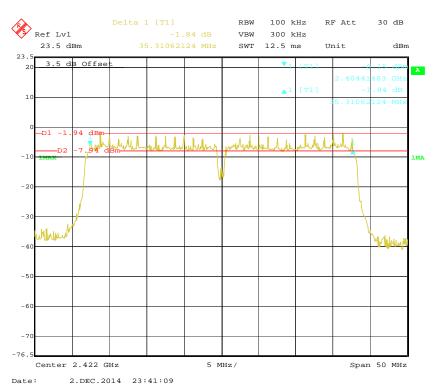


FCC Part 15.247 Page 32 of 50

802.11n-HT20 High Channel



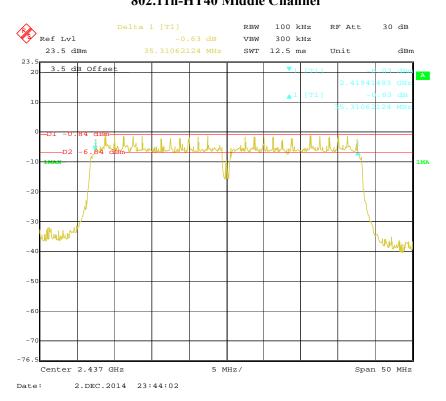
802.11n-HT40 Low Channel



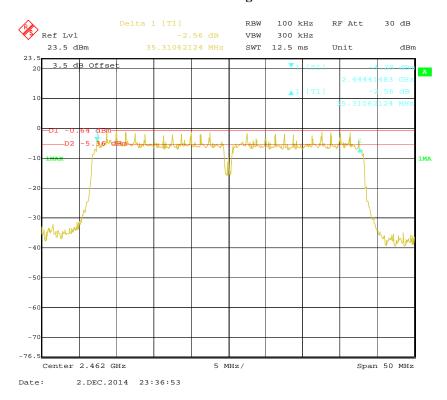
FCC Part 15.247 Page 33 of 50

802.11n-HT40 Middle Channel

Report No.: RSZ141127004-00B



802.11n-HT40 High Channel



FCC Part 15.247 Page 34 of 50

FCC §15.247(b) (3) - MAXIMUM PEAK OUTPUT POWER

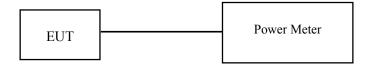
Applicable Standard

According to §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Report No.: RSZ141127004-00B

Test Procedure

- 1. Place the EUT on a bench and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- 3. Add a correction factor to the display.



Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|--------------|--------------|--------|---------------|---------------------|-------------------------|
| НР | Power Meter | N1912A | MY50000448 | 2014-11-03 | 2015-11-03 |
| НР | Power Sensor | N1921A | MY54210016 | 2014-11-03 | 2015-11-03 |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

| Temperature: | 19 ℃ |
|--------------------|-----------------|
| Relative Humidity: | 55 % |
| ATM Pressure: | 100.0~101.0 kPa |

The testing was performed by David Lee from 2014-12-03.

EUT operation mode: Transmitting

FCC Part 15.247 Page 35 of 50

| Channel | Frequency (MHz) | Max Conducted Peak Output Power (dBm) | Max Conducted Average Output Power (dBm) | Limit (dBm) | | | | |
|---------|--------------------|---|--|----------------|--|--|--|--|
| | | 802.11b | | | | | | |
| Low | 2412 | 12.73 | 10.36 | 30 | | | | |
| Middle | 2437 | 13.95 | 11.37 | 30 | | | | |
| High | 2472 | 13.76 | 10.89 | 30 | | | | |
| | | 802.11g | | • | | | | |
| Low | 2412 | 18.12 | 10.75 | 30 | | | | |
| Middle | 2437 | 18.79 | 11.60 | 30 | | | | |
| High | 2472 | 18.44 | 11.49 | 30 | | | | |
| | | 802.11n-HT20 | | | | | | |
| Low | 2412 | 17.78 | 10.83 | 30 | | | | |
| Middle | 2437 | 18.82 | 11.34 | 30 | | | | |
| High | 2472 | 18.69 | 11.24 | 30 | | | | |
| | 802.11n-HT40 | | | | | | | |
| Low | 2422 | 17.98 | 10.68 | 30 | | | | |
| Middle | 2437 | 18.54 | 11.45 | 30 | | | | |
| High | 2462 | 18.31 | 11.60 | 30 | | | | |

FCC Part 15.247 Page 36 of 50

FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Report No.: RSZ141127004-00B

Applicable Standard

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

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-----------------|--------|------------------|---------------------|-------------------------|
| Rohde & Schwarz | Signal Analyzer | FSIQ26 | 837405/023 | 2014-05-31 | 2015-05-31 |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

| Temperature: | 19 ℃ | |
|--------------------|-----------|--|
| Relative Humidity: | 50 % | |
| ATM Pressure: | 101.0 kPa | |

The testing was performed by David Lee on 2014-12-03.

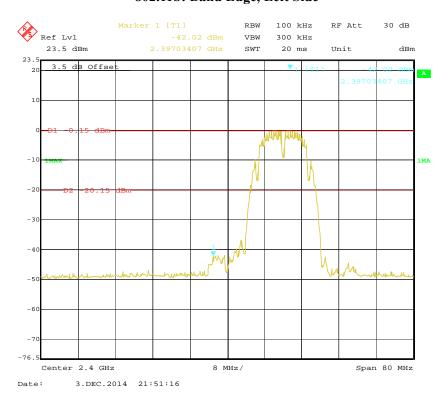
Test Result: Compliance

Please refer to the following plots.

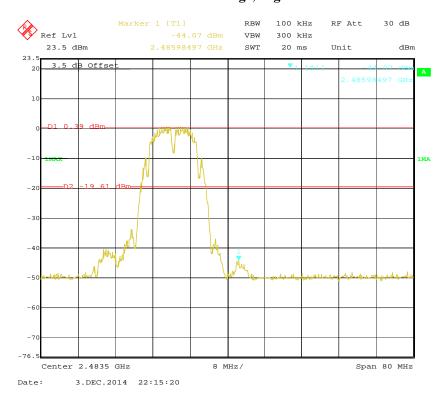
FCC Part 15.247 Page 37 of 50

802.11b: Band Edge, Left Side

Report No.: RSZ141127004-00B



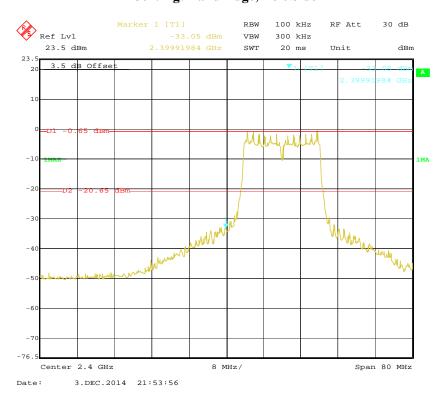
802.11b: Band Edge, Right Side



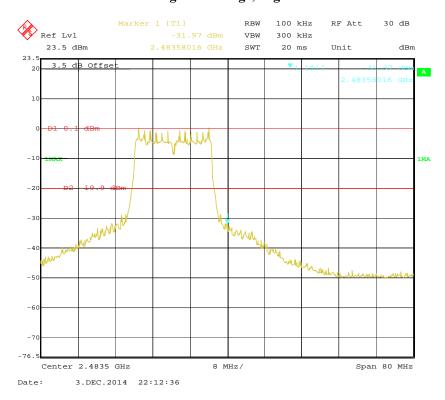
FCC Part 15.247 Page 38 of 50

802.11g: Band Edge, Left Side

Report No.: RSZ141127004-00B



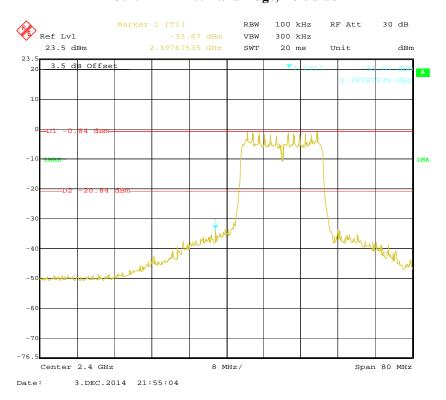
802.11g: Band Edge, Right Side



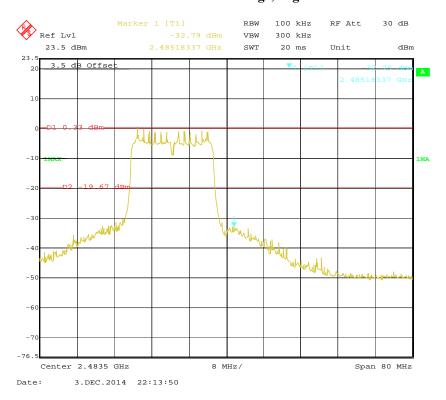
FCC Part 15.247 Page 39 of 50

802.11n-HT20: Band Edge, Left Side

Report No.: RSZ141127004-00B



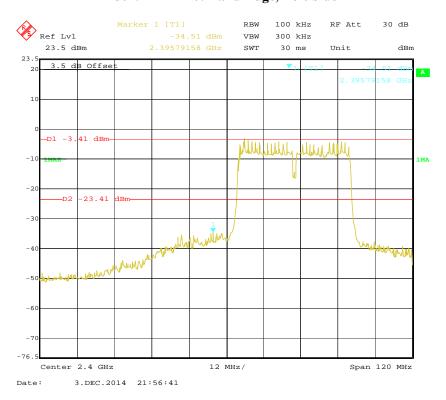
802.11n-HT20: Band Edge, Right Side



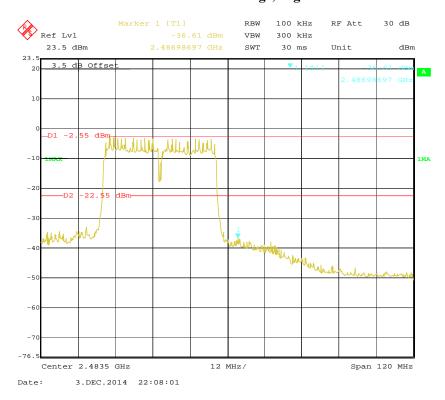
FCC Part 15.247 Page 40 of 50

802.11n-HT40: Band Edge, Left Side

Report No.: RSZ141127004-00B



802.11n-HT40: Band Edge, Right Side



FCC Part 15.247 Page 41 of 50

FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

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

Report No.: RSZ141127004-00B

Test Procedure

According to KDB558074 D01 DTS Meas Guidance v03r02 sub-clause 10.2

- 1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
- 2. Set the RBW to: $3kHz \le RBW \le 100 \text{ kHz}$.
- 3. Set the VBW \geq 3×RBW.
- 4. Set the span to 1.5 times the DTS bandwidth.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level within the RBW.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Equipment List and Details

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-----------------|--------|------------------|---------------------|-------------------------|
| Rohde & Schwarz | Signal Analyzer | FSIQ26 | 837405/023 | 2014-05-31 | 2015-05-31 |

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

| Temperature: | 19 ℃ |
|--------------------|-----------|
| Relative Humidity: | 50 % |
| ATM Pressure: | 101.0 kPa |

The testing was performed by David Lee on 2014-12-03.

EUT operation mode: Transmitting

Test Result: Pass

FCC Part 15.247 Page 42 of 50

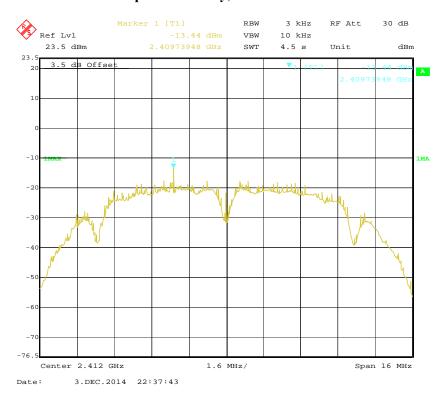
| Channel | Frequency (MHz) | PSD (dBm/3kHz) | Limit (dBm/3kHz) | | |
|-------------------|--------------------|-------------------|---------------------|--|--|
| | 802.11b mode | | | | |
| Low | 2412 | -13.44 | €8 | | |
| Middle | 2437 | -14.53 | ≤8 | | |
| High | 2472 | -14.41 | ≤8 | | |
| | 802.11g mode | | | | |
| Low | 2412 | -17.98 | ≤8 | | |
| Middle | 2437 | -15.80 | ≤8 | | |
| High | 2472 | -16.54 | ≤8 | | |
| | 802.11n-HT20 mode | | | | |
| Low | 2412 | -16.89 | ≤8 | | |
| Middle | 2437 | -16.06 | ≤8 | | |
| High | 2472 | -16.58 | ≤8 | | |
| 802.11n-HT40 mode | | | | | |
| Low | 2422 | -20.41 | ≤8 | | |
| Middle | 2437 | -16.40 | €8 | | |
| High | 2462 | -16.22 | ≤8 | | |

Report No.: RSZ141127004-00B

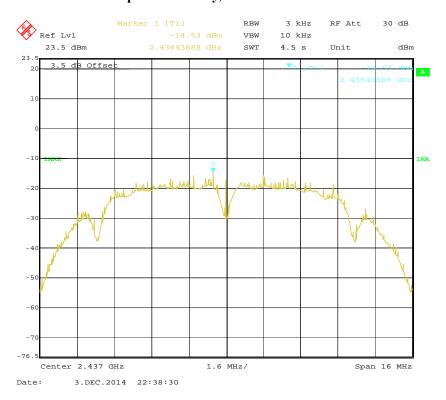
FCC Part 15.247 Page 43 of 50

Power Spectral Density, 802.11b Low Channel

Report No.: RSZ141127004-00B



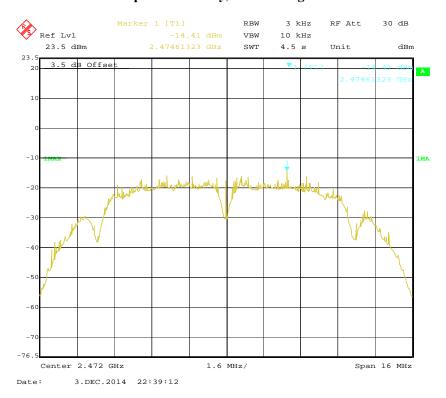
Power Spectral Density, 802.11b Middle Channel



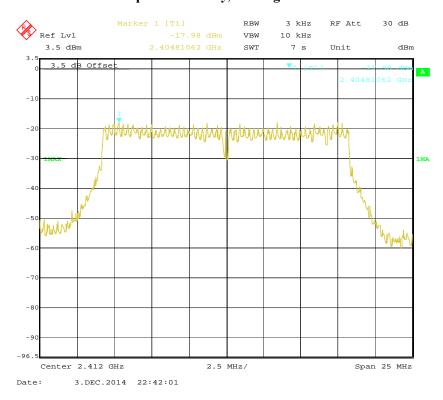
FCC Part 15.247 Page 44 of 50

Power Spectral Density, 802.11b High Channel

Report No.: RSZ141127004-00B



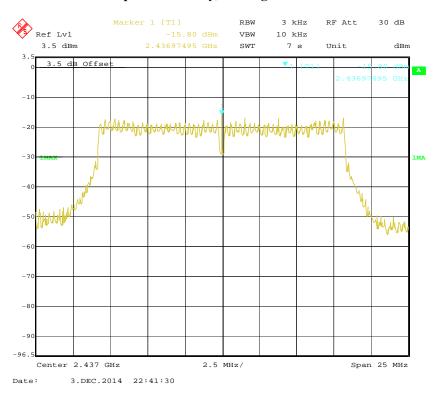
Power Spectral Density, 802.11g Low Channel



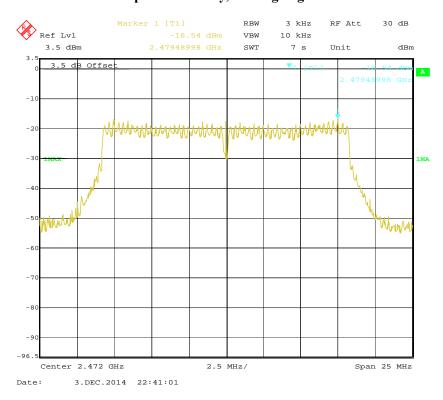
FCC Part 15.247 Page 45 of 50

Power Spectral Density, 802.11g Middle Channel

Report No.: RSZ141127004-00B



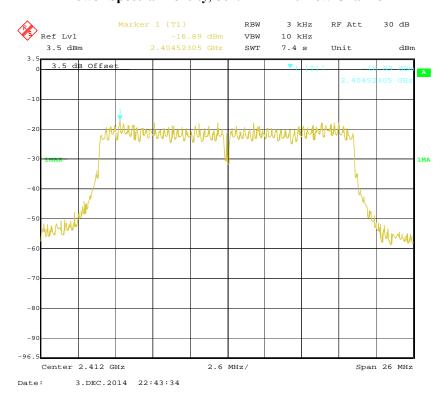
Power Spectral Density, 802.11g High Channel



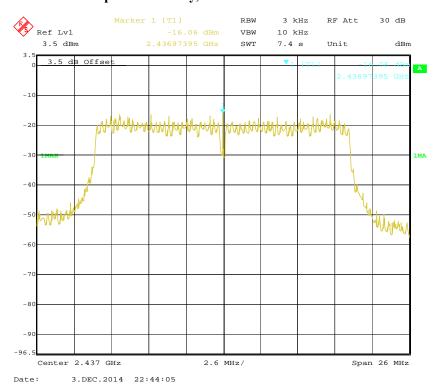
FCC Part 15.247 Page 46 of 50

Power Spectral Density, 802.11n-HT20 Low Channel

Report No.: RSZ141127004-00B

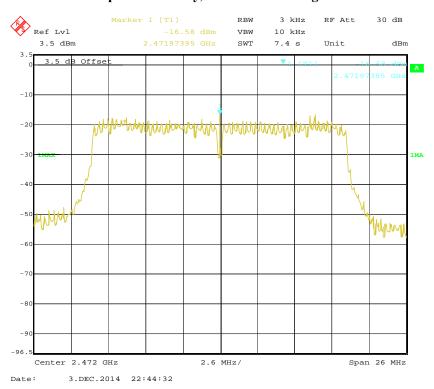


Power Spectral Density, 802.11n-HT20 Middle Channel

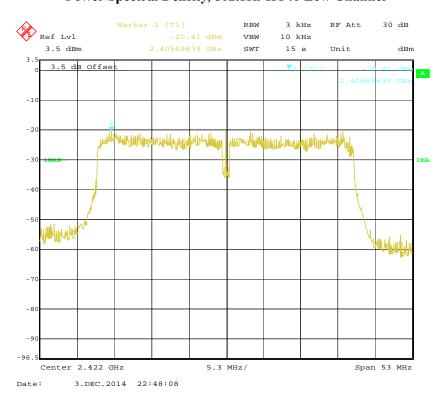


FCC Part 15.247 Page 47 of 50

Power Spectral Density, 802.11n-HT20 High Channel



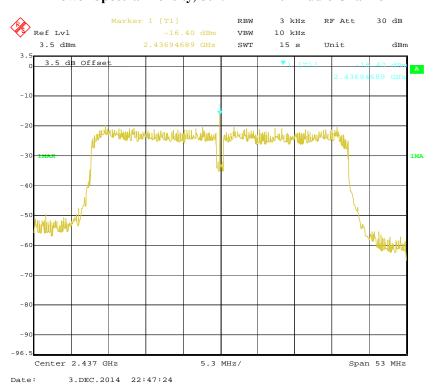
Power Spectral Density, 802.11n-HT40 Low Channel



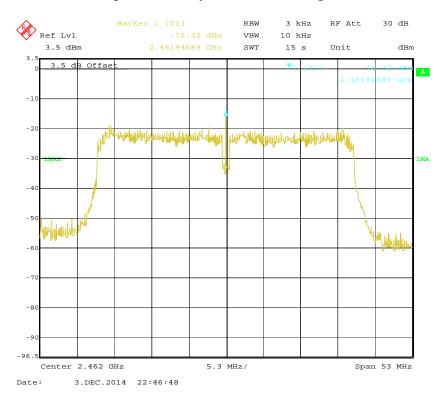
FCC Part 15.247 Page 48 of 50

Power Spectral Density, 802.11n-HT40 Middle Channel

Report No.: RSZ141127004-00B



Power Spectral Density, 802.11n-HT40 High Channel



FCC Part 15.247 Page 49 of 50

PRODUCT SIMILARITY DECLARATION LETTER



SlienZhen Foscam Intelligent Technology Co. Ltd. 5/F, Block I, Vision Business Park, Nanshan District. Shenzhen, PRC Tel: 86-0755-26720367-8306

2014-12-2

Product Similarity Declaration

Report No.: RSZ141127004-00B

To Whom It May Concern,

We, <u>Foscam Intelligent Technology Co., Ltd.</u>, hereby declare that we have a product named as Wireless IP Camera (Model number: FosBaby P1) was tested by BACL, meanwhile, for our marketing purpose, we would like to list a series models FosBaby P1S. FosBaby P2. FosBaby P2S. FosBaby P3. FosBaby P3S. FosBaby P4. FosBaby P4S. FosBaby P5. FosBaby P5S. FosBaby P6. FosBaby P6S. on reports and certificate, all the models are identical schematics, except for the differences as below:

The model number is different.

No other changes are made to them.

We confirm that all information above is true, and we'll be responsible for all the consequences. Please contact me if you have any question.

Signature:

Tank Fang

Engineer Manager

Tank Fang 1/2,2014

***** END OF REPORT *****

FCC Part 15.247 Page 50 of 50