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FCC TEST REPORT

Test report On Behalf of AC Infinity Inc. For AIRTITAN VENTILATION FAN Model No.: AC-ATT8, AC-ATT8-N

FCC ID: 2AXMF-ATT

Prepared For : AC Infinity Inc. 21880 Baker Parkway, City of Industry, CA 91789 USA

Prepared By : Shenzhen HUAK Testing Technology Co., Ltd. 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

 Date of Test:
 Jan.16, 2024 ~ Jan. 24, 2024

 Date of Report:
 Jan. 24, 2024

 Report Number:
 HK2401170385-1E

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TEST RESULT CERTIFICATION

| Applicant's name | : AC Infinity Inc. |
|-----------------------------|--|
| Address | : 21880 Baker Parkway, City of Industry, CA 91789 USA |
| Manufacturer's Name | : AC Infinity Inc. |
| Address | : 21880 Baker Parkway, City of Industry, CA 91789 USA |
| Product description | |
| Trade Mark | : AC INFINITY |
| Product name | : AIRTITAN VENTILATION FAN |
| Model and/or type reference | e: AC-ATT8, AC-ATT8-N |
| Standards | FCC Rules and Regulations Part 15 Subpart C Section 15.247 |

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| Date of Test | |
|-----------------------------------|------------------------------|
| Date (s) of performance of tests: | Jan.16, 2024 ~ Jan. 24, 2024 |
| Date of Issue | Jan. 24, 2024 |
| Test Result | Pass |

Testing Engineer

(Len Liao)

Technical Manager

(Sliver Wan)

Authorized Signatory :

Mou

(Jason Zhou)

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Т 691

** Modified History **

| Revision | Description | Issued Data | Remark |
|--------------|-----------------------------|---------------|------------|
| Revision 1.0 | Initial Test Report Release | Jan. 24, 2024 | Jason Zhou |
| | | | |
| Old | alm- alm- | Dig | G JUG |

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1. TEST RESULT SUMMARY

1.1. TEST PROCEDURES AND RESULTS

| CFR 47 Section | Result |
|-----------------------|--|
| §15.203/§15.247(b)(4) | PASS |
| §15.207 | PASS |
| §15.247(b)(3) | PASS |
| §15.247(a)(2) | PASS |
| §15.247(e) | PASS |
| §15.247(d) | PASS |
| §15.205/§15.209 | PASS |
| | §15.203/§15.247(b)(4) §15.207 §15.247(b)(3) §15.247(a)(2) §15.247(e) §15.247(d) |

Note:

- 1. PASS: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.

1.2. INFORMATION OF THE TEST LABORATORY

Shenzhen HUAK Testing Technology Co., Ltd. Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization :

A2LA Accreditation Code is 4781.01. FCC Designation Number is CN1229. Canada IC CAB identifier is CN0045. CNAS Registration Number is L9589.

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1.3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

| No. | Item | MU |
|------|-------------------------------|---------|
| 1 | Conducted Emission | ±2.71dB |
| 2 | RF power, conducted | ±0.37dB |
| 3 | Spurious emissions, conducted | ±0.11dB |
| 4 | All emissions, radiated(<1G) | ±3.90dB |
| 5.00 | All emissions, radiated(>1G) | ±4.28dB |
| 6 | Temperature | ±0.1°C |
| 7 | Humidity | ±1.0% |

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2. EUT DESCRIPTION

2.1. GENERAL DESCRIPTION OF EUT

| Equipment: | AIRTITAN VENTILATION FAN | - WUAK TESTING | - WUAK TE |
|----------------------|--|---|-----------|
| Model Name: | AC-ATT8 | 0 | 0 |
| Series Model: | AC-ATT8-N | NAK TESTING | TNG |
| Model Difference: | All model's the function, software the same, only fan blade installa named different. Test sample mo | tion direction ar | |
| FCC ID: | 2AXMF-ATT | | |
| Antenna Type: | PCB Antenna | O HUAN | O HOM |
| Antenna Gain: | 3.16dBi | | |
| Operation frequency: | 802.11b/g/n 20:2412~2462 MHz 802.11n 40: 2422~2452MHz | HUAKTESTIC | C HUAK TE |
| Number of Channels: | 802.11b/g/n20: 11CH 802.11n 40: 7CH | AKTESTING | G |
| Modulation Type: | CCK/OFDM/DBPSK/DAPSK | and the second se | HUAKTESI |
| Power Source: | 100-240V AC | ESTING | |
| Power Rating: | 100-240V AC | - WAKTESTING | HUAKTEST |
| Hardware Version: | V2.0 | 0. | |
| Software Version: | V2.0 | CSTING | |

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2.2. Carrier Frequency of Channels

| | Cha | annel List | For 802.11k | o/802.11g/8 | 02.11n (HT2 | 0) | |
|---------|--------------------|------------|--------------------|-------------|--------------------|---------|--------------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 01 | 2412 | 04 | 2427 | 07 | 2442 | 10 | 2457 |
| 02 | 2417 | 05 | 2432 | 08 | 2447 | 11 | 2462 |
| 03 | 2422 | 06 | 2437 | 09 | 2452 | -STING | |

| Channel List For 802.11n (HT40) | | | | | | | |
|---------------------------------|--------------------|---------|--------------------|---------|--------------------|------------|--------------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| STING | KTESTING C | 04 | 2427 | 07 | 2442 | TESTIN | wTE |
| @ HU | | 05 | 2432 | 08 | 2447 | HUAN | Co-Home |
| 03 | 2422 | 06 | 2437 | 09 | 2452 | e <u>-</u> | |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

2.3. OPERATION OF EUT DURING TESTING

Operating Mode

The mode is used: Transmitting mode for 802.11b/802.11g/802.11n (HT20) Low Channel: 2412MHz Middle Channel: 2437MHz

High Channel: 2462MHz

The mode is used: Transmitting mode for 802.11n (HT40)

Low Channel: 2422MHz Middle Channel: 2437MHz High Channel: 2452MHz

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2.4. DESCRIPTION OF TEST SETUP

Operation of EUT during below 1GHz radiation testing and conducted testing:



Operation of EUT during above 1GHz radiation testing:



The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. For the full battery state and the output power to the maximum state.

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The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| | W7L | | 1 Martin Martin | | W TU |
|------|--------------------------------|------------|-----------------|---------------|-----------|
| ltem | Equipment | Mfr/Brand | Model/Type No. | Specification | Note |
| sino | AIRTITAN VENTILATION FAN | N/A | AC-ATT8 | N/A | EUT |
| 2 | Load Fan | N/A | N/A | DC5V | Accessory |
| | | AK TESTING | | AKTESTINIS | |

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is connect to the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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ENERA INFORMATION 3.

3.1. TEST ENVIRONMENT AND MODE

| Operating Environment: | | | | | |
|------------------------|-----------|------------|---------|--|--|
| Temperature: | 25.0 °C | HUAKTESI | HUAKTES | | |
| Humidity: | 56 % RH | | 0 | | |
| Atmospheric Pressure: | 1010 mbar | AK TESTING | | | |

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

| | Mode | Data rate |
|-----|--------------|-----------|
| | 802.11b | 1Mbps |
| 100 | 802.11g | 6Mbps |
| | 802.11n(H20) | 6.5Mbps |
| | 802.11n(H40) | 13.5Mbps |

Final Test Mode:

| Operation mode: | Keep the EUT in continuous transmitting with modulation |
|-----------------|---|
|-----------------|---|

1. For WIFI function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.

2. According to ANSI C63.10 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20), 13.5Mbps for 802.11(H40).

3.Mode Test Duty Cycle

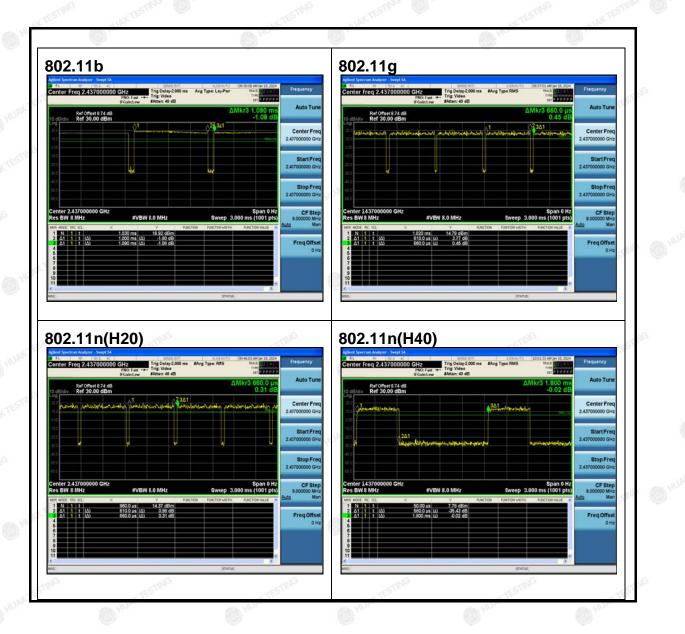
| Mode | Duty Cycle | Duty Cycle Factor (dB) |
|--------------|------------|---------------------------|
| 802.11b | 0.917 | -0.374 |
| 802.11g | 0.924 | -0.342 |
| 802.11n(H20) | 0.924 | -0.342 |
| 802.11n(H40) | 0.322 | -4.918 |

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4. TEST RESULTS AND MEASUREMENT DATA

4.1. CONDUCTED EMISSION

Test Specification

| cst opcomotion | and and and | | | | | | |
|-------------------|---|--|--|--|--|--|--|
| Test Requirement: | FCC Part15 C Section 15.207 | | | | | | |
| Test Method: | ANSI C63.10:2013 | | | | | | |
| Frequency Range: | 150 kHz to 30 MHz | | | | | | |
| Receiver setup: | RBW=9 kHz, VBW=30 kHz, Sweep time=auto | | | | | | |
| Limits: | Frequency range (MHz) Limit (dBuV) 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50 | | | | | | |
| | Reference Plane | | | | | | |
| Test Setup: | 40cm E.U.T AC power Test table/Insulation plane Remark E.U.T. Equipment Under Test LISN Line impedence Stabilization Network Test table height=0.8m | | | | | | |
| Test Mode: | Charging + transmitting with modulation | | | | | | |
| Test Procedure: | The E.U.T is connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. | | | | | | |
| Test Result: | PASS | | | | | | |

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| Conducted Emission Shielding Room Test Site (843) | | | | | |
|---|-----------------|--------------------|---------------|---------------------|--------------------|
| Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| Receiver | R&S | ESR-7 | HKE-010 | Feb. 17, 2023 | Feb. 16, 2024 |
| LISN | R&S | ENV216 | HKE-002 | Feb. 17, 2023 | Feb. 16, 2024 |
| Coax cable (9KHz-30MHz) | Times | 381806-002 | N/A | Feb. 17, 2023 | Feb. 16, 2024 |
| Conducted test software | Tonscend | TS+ Rev 2.5.0.0 | HKE-081 | N/A | N/A |
| 10dB Attenuator | SCHWARZBE CK | VTSD9561F | HKE-153 | Feb. 17, 2023 | Feb. 16, 2024 |

Test Instruments

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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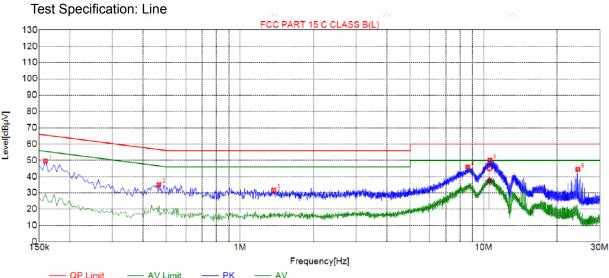
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4.2. TEST RESULT

All modes have been tested, only the worst mode of 802.11b is reflected.



| | - QP Limit | | AV | Limit | — I |
|---|-------------|---|----|----------|-----|
| 0 | QP Detector | * | AV | Detector | |

| 2 | Sus | spected | l List | | | | | | |
|-----|-----|----------------|-----------------|----------------|-----------------|----------------|-------------------|----------|------|
| | NO. | Freq. [MHz] | Level [dBµV] | Factor [dB] | Limit [dBµV] | Margin [dB] | Reading [dBµV] | Detector | Туре |
| | 1 | 0.1590 | 49.54 | 20.01 | 65.52 | 15.98 | 29.53 | PK | L |
| 1 | 2 | 0.4650 | 35.13 | 20.04 | 56.60 | 21.47 | 15.09 | PK | L |
| 100 | 3 | 1.3740 | 31.72 | 20.11 | 56.00 | 24.28 | 11.61 | PK | L |
| | 4 | 8.6100 | 45.97 | 20.12 | 60.00 | 14.03 | 25.85 | PK | L |
| 8 | 5 | 10.6170 | 50.13 | 20.03 | 60.00 | 9.87 | 30.10 | PK | L |
| | 6 | 24.3645 | 44.49 | 20.23 | 60.00 | 15.51 | 24.26 | PK | L |

Final Data List

| NO. | Freq. [MHz] | Correction factor[dB] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | QP Reading [dBµV] | A∨ Value [dBµV] | A∨ Limit [dBµ∨] | A∨ Margin [dB] | AV Reading [dBµV] | Туре |
|-----|----------------|--------------------------|-----------------------|-----------------------|----------------------|-------------------------|-----------------------|-----------------------|----------------------|-------------------------|------|
| 1 | 10.5774 | 20.03 | 45.10 | 60.00 | 14.90 | 25.07 | 37.37 | 50.00 | 12.63 | 17.34 | L |

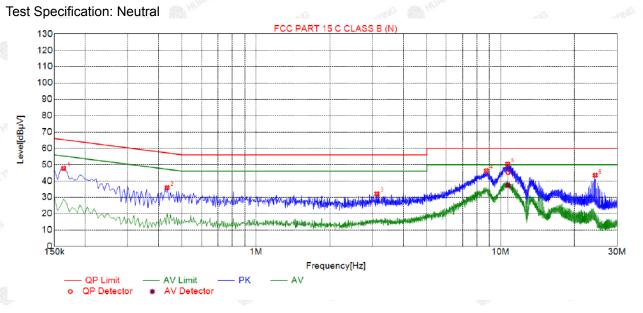
Remark: Margin = Limit – Level

Correction factor = Cable lose + LISN insertion loss Level=Test receiver reading + correction factor

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| 0 | Suspected List | | | | | | | | |
|---|----------------|----------------|-----------------|----------------|-----------------|----------------|-------------------|----------|------|
| 1 | NO. | Freq. [MHz] | Level [dBµV] | Factor [dB] | Limit [dBµV] | Margin [dB] | Reading [dBµV] | Detector | Туре |
| | 1 | 0.1635 | 47.67 | 19.98 | 65.28 | 17.61 | 27.69 | PK | Ν |
| | 2 | 0.4335 | 35.94 | 20.05 | 57.19 | 21.25 | 15.89 | PK | Ν |
| | 3 | 3.1245 | 32.12 | 20.23 | 56.00 | 23.88 | 11.89 | PK | N |
| | 4 | 8.7495 | 46.27 | 20.12 | 60.00 | 13.73 | 26.15 | PK | Ν |
| | 5 | 10.6890 | 50.32 | 20.03 | 60.00 | 9.68 | 30.29 | PK | N |
| | 6 | 24.3735 | 43.48 | 20.23 | 60.00 | 16.52 | 23.25 | PK | N |

Final Data List

| NO. | Freq. [MHz] | Correction factor[dB] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | QP Reading [dBµV] | AV Value [dBµV] | AV Limit [dBµV] | A∨ Margin [dB] | A∨ Reading [dBµV] | Туре |
|-----|----------------|--------------------------|-----------------------|-----------------------|----------------------|-------------------------|-----------------------|-----------------------|----------------------|-------------------------|------|
| 1 | 10.7352 | 20.02 | 45.40 | 60.00 | 14.60 | 25.38 | 37.38 | 50.00 | 12.62 | 17.36 | N |

Remark: Margin = Limit – Level Correction factor = Cable lose + LISN insertion loss Level=Test receiver reading + correction factor

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HUAK TESTING

4.3. MAXIMUM CONDUCTED OUTPUT POWER

Test Specification

| Test Requirement: | FCC Part15 C Section 1 | 5.247 (b)(3) | WTEST |
|-------------------|--|---|---|
| Test Method: | KDB 558074 | O HUM | O HUM |
| Limit: | 30dBm | OK TESTING | .siG |
| Test Setup: | Power meter | EUT | HUNKTESTIC |
| Test Mode: | Transmitting mode with r | nodulation | |
| Test Procedure: | The testing follows the FCC KDB 558074 DO v05r02. The RF output of EUT meter by RF cable an compensated to the r Set to the maximum p EUT transmit continuit Measure the Peak out in the test report. | 1 15.247 Meas G was connected to d attenuator. The esults for each m ower setting and o ously. | buidance the power path loss was easurement. enable the |
| Test Result: | PASS | O HOM | O H |

Test Instruments

| All | HD. | - HO | ATTAL HO | All All | All All | |
|---|--------------|----------|---------------|---------------------|--------------------|--|
| | RF Test Room | | | | | |
| Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due | |
| Spectrum analyzer | Agilent | N9020A | HKE-048 | Feb. 17, 2023 | Feb. 16, 2024 | |
| Power meter | Agilent | E4419B | HKE-085 | Feb. 17, 2023 | Feb. 16, 2024 | |
| Power Sensor | Agilent | E9300A | HKE-086 | Feb. 17, 2023 | Feb. 16, 2024 | |
| RF cable | Times | 1-40G | HKE-034 | Feb. 17, 2023 | Feb. 16, 2024 | |
| RF automatic control unit | Tonscend | JS0806-2 | HKE-060 | Feb. 17, 2023 | Feb. 16, 2024 | |

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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FICATION

Test Data

| | -21/2 | -7112 | |
|-----------------|-----------|-------------------------------------|----------|
| Test Channel | Frequency | Maximum Peak Conducted Output Power | LIMIT |
| Channer | (MHz) | (dBm) | (dBm) |
| 6 | HUAR | TX 802.11b Mode | C HUAK I |
| CH01 | 2412 | 13.98 | 30 |
| CH06 | 2437 | 14.23 | 30 |
| CH11 | 2462 | 14.41 | 30 |
| | | TX 802.11g Mode | |
| CH01 | 2412 | 13.88 | 30 |
| CH06 | 2437 | 13.75 | 30 |
| CH11 | 2462 | 14.08 | 30 |
| 6 | HUAKTESS | TX 802.11n20 Mode | HUAKTEST |
| CH01 | 2412 | 13.39 | 30 |
| CH06 | 2437 | 13.09 | 30 |
| CH11 | 2462 | 13.18 | 30 |
| I | | TX 802.11n40 Mode | |
| CH03 | 2422 | 13.50 | 30 |
| CH06 | 2437 | 12.97 | 30 |
| CH09 | 2452 | 13.23 | 30 |

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4.4. EMISSION BANDWIDTH

Test Specification

| Test Requirement: | FCC Part15 C Section 15.247 (a)(2) | | | | | |
|-------------------|---|---|-----------------|--|--|--|
| Test Method: | KDB 558074 | OHUM | O HUL | | | |
| Limit: | >500kHz | JAK TESTING | Olm | | | |
| Test Setup: | Spectrum Analyzer | EUT | ANG HUAKTESTING | | | |
| Test Mode: | Transmitting mode with n | Transmitting mode with modulation | | | | |
| Test Procedure: | 15.247 Meas Guidand Set to the maximum por EUT transmit continue Make the measurement resolution bandwidth (VB) an accurate measurement be greater than 500 k | The testing follows FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02. Set to the maximum power setting and enable the EUT transmit continuously. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz. Measure and record the results in the test report. | | | | |
| Test Result: | PASS | O HUM | One | | | |

Test Instruments

| Alls, VV Alls, | | Dis. VV | ATEL YV | ATTRA VV | Allin, VV | |
|------------------------------|--------------|----------|---------------|---------------------|--------------------|--|
| RF Test Room | | | | | | |
| Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due | |
| Spectrum analyzer | Agilent | N9020A | HKE-048 | Feb. 17, 2023 | Feb. 16, 2024 | |
| RF cable | Times | 1-40G | HKE-034 | Feb. 17, 2023 | Feb. 16, 2024 | |
| RF automatic control unit | Tonscend | JS0806-2 | HKE-060 | Feb. 17, 2023 | Feb. 16, 2024 | |

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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Test data

| 6dB Emission Bandwidth (MHz) | | | | |
|------------------------------|--------------------|--|--|--|
| 802.11b | 802.11g | 802.11n(H20) | 802.11n(H40) | |
| 9.560 | 16.080 | 16.920 | 33.840 | |
| 9.080 | 16.280 | 16.920 | 35.120 | |
| 9.560 | 16.080 | 17.040 | 35.680 | |
| S HUAKTES | > | >500k | | |
| - Lak | ESTING HUAK TESTIN | PASS | INCO HUAKTESTIN | |
| | 9.560 9.080 | 802.11b 802.11g 9.560 16.080 9.080 16.280 9.560 16.080 | 802.11b 802.11g 802.11n(H20) 9.560 16.080 16.920 9.080 16.280 16.920 | |

Test plots as follows:

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802.11b Modulation

Lowest channel



Middle channel



Highest channel



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802.11g Modulation

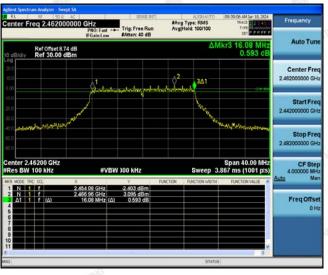
Lowest channel



Middle channel



Highest channel



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802.11n (HT20) Modulation



Middle channel



Highest channel



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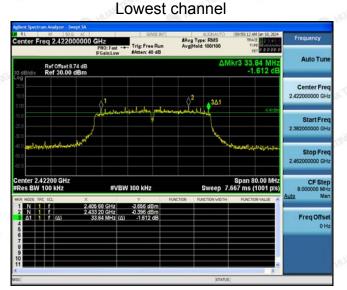
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AFICATION.

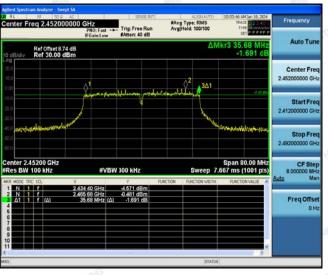
802.11n (HT40) Modulation



Middle channel



Highest channel



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4.5. POWER SPECTRAL DENSITY

Test Specification

| Test Requirement: | FCC Part15 C Section 15.247 (e) | | | |
|-------------------|--|--|--|--|
| Test Method: | KDB 558074 | | | |
| Limit: | The average power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission. | | | |
| Test Setup: | Spectrum Analyzer | | | |
| Test Mode: | Transmitting mode with modulation | | | |
| Test Procedure: | Transmitting mode with modulation 1. The testing follows Measurement procedure 10.2 method PKPSD of FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02. 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW): 3 kHz ≤ RBW ≤ 100 kHz. Video bandwidth VBW ≥ 3 x RBW. Set the span to at least 1.5 times the OBW. 5. Detector = Peak, Sweep time = auto couple. 6. Employ trace averaging (Peak) mode over a minimum of 100 traces. Use the peak marker function to determine the maximum power level. 7. Measure and record the results in the test report. | | | |
| Test Result: | PASS | | | |

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Test Instruments

| RF Test Room | | | | | |
|------------------------------|--------------|----------------------------|---------------|---------------------|--------------------|
| Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| Spectrum analyzer | Agilent | N9020A | HKE-048 | Feb. 17, 2023 | Feb. 16, 2024 |
| RF Cable (9KHz-26.5GHz) | Tonscend | 170660 | N/A | Feb. 17, 2023 | Feb. 16, 2024 |
| RF automatic control unit | Tonscend | JS0806-2 | HKE-060 | Feb. 17, 2023 | Feb. 16, 2024 |
| RF test software | Tonscend | JS1120-B Version 2.6 | HKE-083 | N/A | N/A |

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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Test data

| EUT Set Mode | Channel Result (dBm/30kHz) | | Result (dBm/3kHz) |
|-------------------|-------------------------------|-----------------------|-------------------|
| | Lowest | -0.03 | -10.03 |
| 802.11b | Middle | -0.08 | -10.08 |
| | Highest | 0.26 | -9.74 |
| | Lowest | -0.92 | -10.92 |
| 802.11g | Middle | -1.39 | -11.39 |
| | Highest | -1.11 | -11.11 |
| | Lowest | -1.63 | -11.63 |
| 802.11n(H20) | Middle | -2.35 | -12.35 |
| - | Highest | -1.57 | -11.57 |
| | Lowest | -2.82 | -12.82 |
| 802.11n(H40) | Middle | -3.36 | -13.36 |
| | Highest | -3.14 | -13.14 |
| PSD test result (| dBm/3kHz)= P | SD test result (dBm/3 | 30kHz)-10 |
| Limit: 8dBm/3kH | Z | | |
| Test Result: | HUM. | PASS | HUM |

Test plots as follows:

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802.11b Modulation



Middle channel



Highest channel



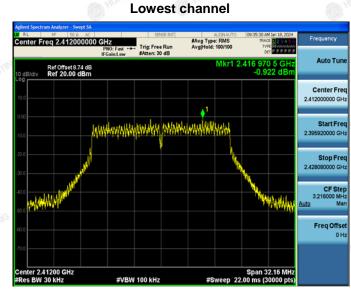
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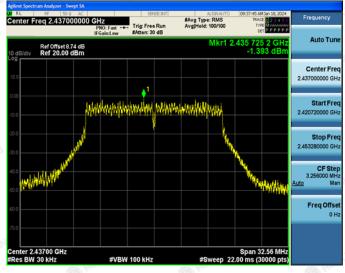


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802.11g Modulation



Middle channel



Highest channel

#Avg Type: RMS Avg[Hold: 100/10 Freque ter Freq 2.46200 000 GHz Trig: Free Run VPE MUMMM Auto Tur 724 8 (-1.106 d Ref Offset 8.74 dB Ref 20.00 dBm Center Fre 2.462000000 GI Start Fr Stop Fre 2.478080000 Ct CF St 3.216000 Freq Offs r 2.46200 GHz BW 30 kHz Span 32.16 I #VBW 100 kHz

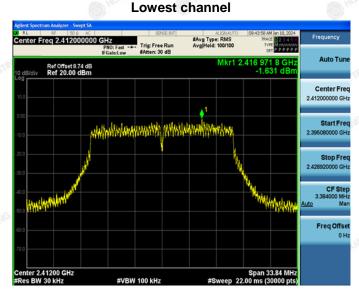
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FICATION

802.11n (HT20) Modulation



Middle channel



Highest channel

Center Freq 2.462000000 GHz #Avg Type: RMS Avg[Hold: 100/10 Frequency Trig: Free Run Auto Tun 966 2 (-1.573 c Ref Offset 8.74 dB Ref 20.00 dBm Center Free 2 462000000 GF Start Fr Stop Fre 2.479040000 GH CF Ste 3.408000.00 Freq Offs ter 2.46200 GHz 8 BW 30 kHz #VBW 100 kHz

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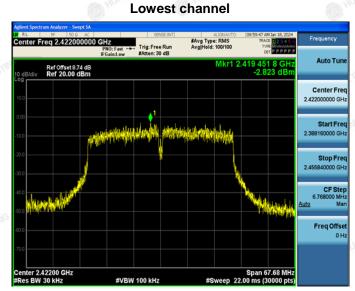
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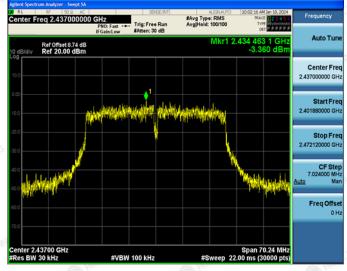
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Report No.: HK2401170385-1E

802.11n (HT40) Modulation



Middle channel



Highest channel

Center Freq 2.452000000 GHz #Avg Type: RMS Avg[Hold: 100/100 Trig: Free Run Auto Tur 463 1 G -3.138 dE Ref Offset 8.74 dB Ref 20.00 dBm Center Free 2.452000000 GH Start Fr 2 416320000 0 Stop Fre 2,487680000 GH CF Ste 7.136000 Freq Offs ter 2.45200 GHz s BW 30 kHz Span 71.36 I #VBW 100 kHz

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4.6. CONDUCTED BAND EDGE AND SPURIOUS EMISSION MEASUREMENT

Test Specification

| Test Requirement: | FCC Part15 C Section 15.247 (d) | | |
|-------------------|--|--|--|
| Test Method: | KDB558074 | | |
| Limit: | In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a). | | |
| Test Setup: | Spectrum Analyzer | | |
| Test Mode: | Transmitting mode with modulation | | |
| Test Procedure: | Transmitting mode with modulation The testing follows FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d). Measure and record the results in the test report. The RF fundamental frequency should be excluded | | |
| | against the limit line in the operating frequency band. | | |

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| RF Test Room | | | | | |
|----------------------------|--------------|----------------------------|---------------|---------------------|--------------------|
| Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| Spectrum analyzer | Agilent | N9020A | HKE-048 | Feb. 17, 2023 | Feb. 16, 2024 |
| High pass filter unit | Tonscend | JS0806-F | HKE-055 | Feb. 17, 2023 | Feb. 16, 2024 |
| RF Cable (9KHz-26.5GHz) | Tonscend | 170660 | N/A | Feb. 17, 2023 | Feb. 16, 2024 |
| RF automatic control unit | Tonscend | JS0806-2 | HKE-060 | Feb. 17, 2023 | Feb. 16, 2024 |
| RF test software | Tonscend | JS1120-B Version 2.6 | HKE-083 | N/A | N/A |

Test Instruments

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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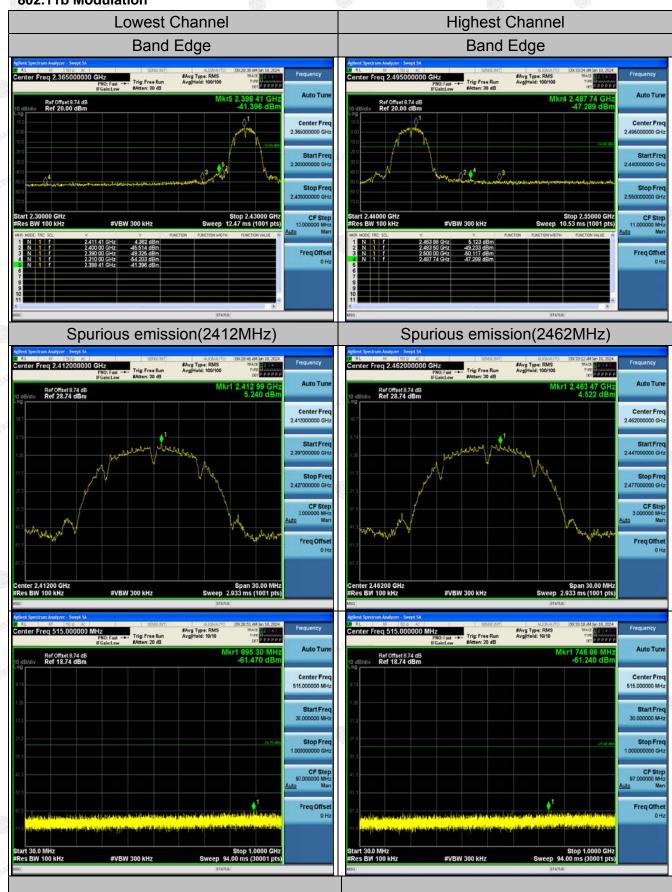


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Test Data





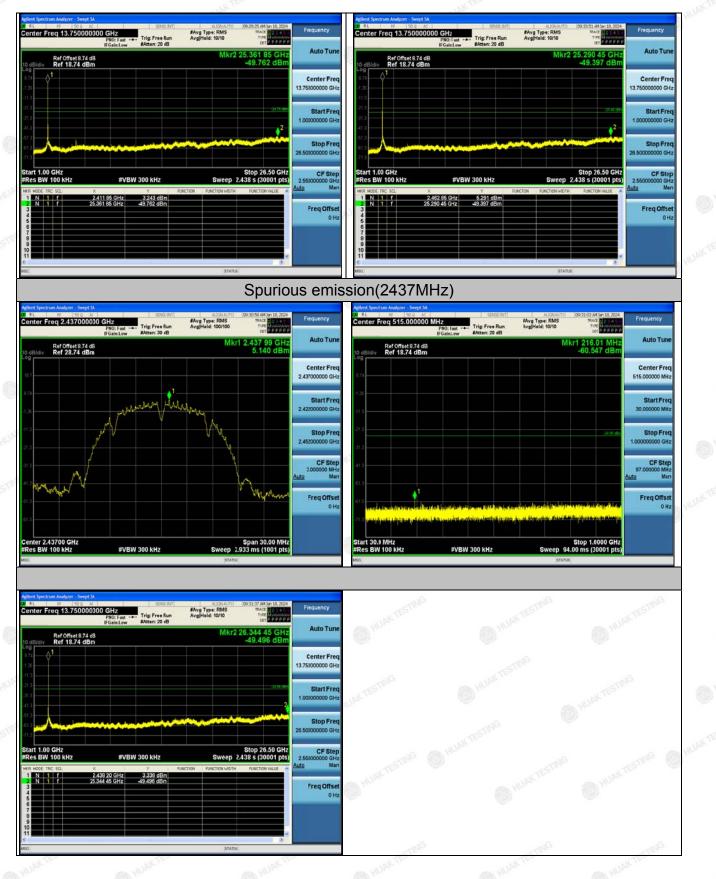
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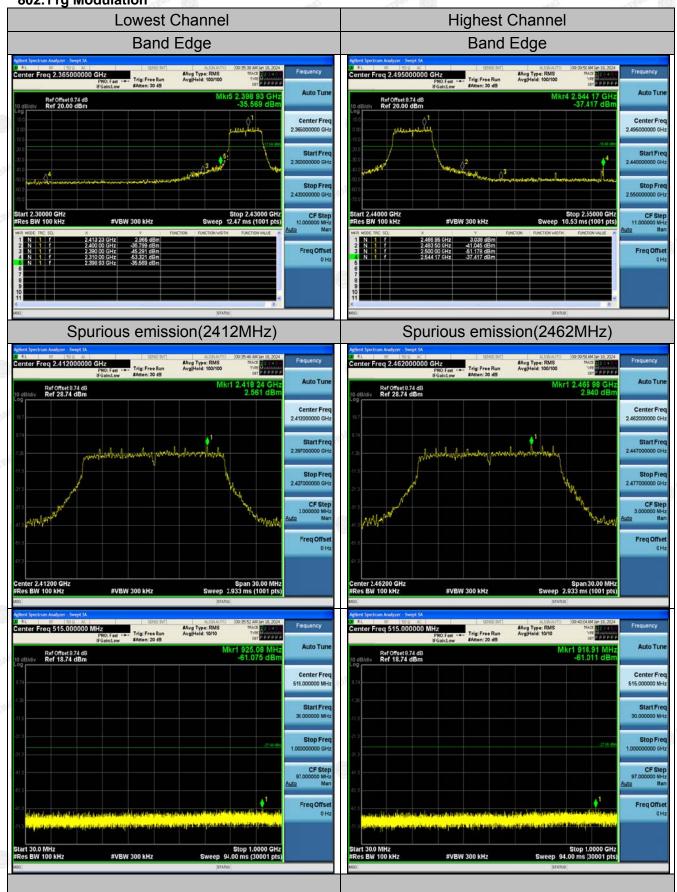
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FICATION

802.11g Modulation



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