FCC PART 15 SUBPART C TEST REPORT

for

Embedded Computers

Model No.: EC21XX

FCC ID: 2ACLCECNSDSBC211401

of

Applicant: IC Nexus Co. LTD.

Address: 6F-1 No. 3-2 Park Street, Nankang Software Park(NKSP), Taipei 115, Taiwan ROC

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1

A2LA Accredited No.: 2732.01





Report No.: W6M21310-13576-C-1

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C. TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com

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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that is performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.

Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

The test sample is able to work according IEEE 802.11 b/g/n.

This report is related to FCC Part 15 C (DSSS and OFDM device).

| Т | 001 | fΔi | . |
|---|-----|-----|----------|
| 1 | COL | LC. | |

August 04, 2014 Spencer Yang

Date WTS-Lab. Name Signature

Technical responsibility for area of testing:

August 04, 2014 Kevin Wang

Date WTS Name Signature

1.2 Testing laboratory

1.2.1 Location

OATS

No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207,

Taiwan (R.O.C.)

3 meter semi-anechoic chamber

No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

TEL:886-2-6613-0228 FAX:886-2-2791-5046

Company

Worldwide Testing Services(Taiwan) Co., Ltd. 6F, NO. 58, LANE 188, RUEY-KUANG RD. NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877 Fax : 886-2-66068879

1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

FCC filed test laboratory Reg. No. 930600

Industry Canada filed test laboratory Reg. No. IC 5679A-1





Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd.:

Name: /.
Accredited number: /.
Street: /.
Town: /.
Country: /.
Telephone: /.
Fax: /.

1.3 Details of approval holder

Name: IC Nexus Co. LTD.

Street: 6F-1 No. 3-2. Park Street, Nankang Software Park(NKSP),

City: Taipei 115, Country: Taiwan ROC

Telephone: + 886-2-2789-1200 Fax: + 886-2-2789-1201

1.4 Application details

Date of receipt of test item: October 14, 2013

Date of test: from October 15, 2013 to August 04, 2014

1.5 General information of Test item

Type of test item: Embedded Computers

Model Number: EC21XX
Brand Name: IC NEXUS

Multi-listing model number: SBC21XX, NSD21XX

Multi-listing Product Name: Single Board Computer, Smart Display

Photos: see Appendix

Technical data

Frequency band: 2.4 GHz – 2.4835 GHz

11b, 11g, 11n 20MHz

Frequency (ch 1 or A): 2.412 GHz Frequency (ch 6 or B): 2.437 GHz Frequency (ch 11 or C): 2.462 GHz

11n 40MHz

Frequency (ch 1 or A): 2.422 GHz Frequency (ch 4 or B): 2.437 GHz Frequency (ch 7 or C): 2.452 GHz

Number of Channels: 11b, 11g, 11n 20MHz: 11

11n 40MHz: 7

Operation modes: duplex

Modulation Type: DSSS / OFDM Fixed point-to-point operation: \square Yes / \square No Type of Antenna: Dipole Antenna

Antenna gain: 2 dBi

Power supply: Adaptor: (I/P:100-240VAC/50-60Hz/55-80VA/0.9A;

O/P:12VDC/3A)

Emission designator: 11b: DSSS: 16M7G1D

11g: OFDM: 17M6D1D

11n 20MHz: OFDM: 18M7D1D 11n 40MHz: OFDM: 37M3D1D

Host device: none

Classification

| Fixed Device | |
|----------------------------------------------|-------------|
| Mobile Device (Human Body distance > 20cm) | \boxtimes |
| Portable Device (Human Body distance < 20cm) | |
| Modular Radio Device | |

<u>Transmitter</u> <u>Unom</u>

Mode A (DSSS)

Power (ch 1 or A): Conducted: 21.38 dBm Power (ch 6 or B): Conducted: 21.63 dBm Power (ch 11 or C): Conducted: 21.51 dBm

Mode B (OFDM)

Power (ch 1 or A): Conducted: 19.45 dBm Power (ch 6 or B): Conducted: 19.52 dBm Power (ch 11 or C): Conducted: 19.41 dBm

Mode C (OFDM)

Power (ch 1 or A): Conducted: 19.12 dBm
Power (ch 6 or B): Conducted: 19.14 dBm
Power (ch 11 or C): Conducted: 19.03 dBm

Mode D (OFDM)

Power (ch 1 or A): Conducted: 19.37 dBm Power (ch 4 or B): Conducted: 19.17 dBm Power (ch 7 or C): Conducted: 19.10 dBm

Manufacturer: (if applicable)

Name: ./.
Street: ./.
Town: ./.
Country: ./.

1.6 Test standards

Technical standard: FCC RULES PART 15 SUBPART C § 15.247 (2013-10)

Note:

- 1. This test report is valid in connection to the model has been tested, any modification to the product which is different from the test model will avoid the certification of the test report.
- 2. This test report shall always be duplicated in full pages unless the written approval of the testing laboratory is obtained.
- 3. The X in model number is representing different 0-9, A-Z for marketing purpose.

2 Technical test

2.1 Summary of test results

| No deviations from the technical specification(s) were ascertained in the course of the tests performed. | | | | | |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---|--|--|--|
| or | | | | | |
| The deviations as specified in 2.5 w performed. | vere ascertained in the course of the tests | | | | |
| | | | | | |
| 2.2 Test environment | | | | | |
| Temperature: | 23 °C | | | | |
| Relative humidity content: | 20 75 % | | | | |
| Air pressure: | 86 103 kPa | | | | |
| Power supply: | Adaptor: (I/P:100-240VAC/50-60Hz/55-80VA/0.9A ; O/P:12VDC/3A) | • | | | |
| Extreme conditions parameters: | ./. | | | | |



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2.3 Test Equipment List

| No. | Test equipment | Туре | Serial No. | Manufacturer | Cal. Date | Next Cal. Date | |
|--------------|----------------------------------------------------|----------------------------|---------------|-----------------------|--------------------|-------------------|--|
| ETSTW-CE 001 | EMI TEST RECEIVER | ESHS10 | 842121/013 | R&S | 2013/9/2 | 2014/9/1 | |
| ETSTW-CE 003 | AC POWER SOURCE | APS-9102 | D161137 | GW | Functio | on Test | |
| ETSTW-CE 008 | HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP | 334.6010.02 | 844581/024 | R&S | Functio | on Test | |
| ETSTW-CE 009 | TEMP.&HUMIDITY CHAMBER | GTH-225-40-1P-U | MAA0305-009 | GIANT FORCE | 2014/7/8 | 2015/7/7 | |
| ETSTW-CE 016 | TWO-LINE V-NETWORK | ENV216 | 100050 | R&S | 2013/10/28 | 2014/10/27 | |
| ETSTW-RE 004 | EMI TEST RECEIVER | ESI 40 | 832427/004 | R&S | 2013/9/2 | 2014/9/1 | |
| ETSTW-RE 005 | EMI TEST RECEIVER | ESVS10 | 843207/020 | R&S | 2013/9/2 | 2014/9/1 | |
| ETSTW-RE 012 | TUNABLE BANDREJECT FILTER | D.C 0309 | 146 | K&L | Functio | on Test | |
| ETSTW-RE 013 | TUNABLE BANDREJECT FILTER | D.C 0336 | 397 | K&L | Function | on Test | |
| ETSTW-RE 018 | MICROWAVE HORN ANTENNA | AT4560 | 27212 | AR | 2013/10/15 | 2014/10/14 | |
| ETSTW-RE 027 | Passive Loop Antenna | 6512 | 00034563 | ETS-Lindgren | 2014/7/01 | 2015/6/30 | |
| ETSTW-RE 030 | Double-Ridged Guide Horn Antenna | 3117 | 00035224 | EMCO | 2014/2/25 | 2015/2/24 | |
| ETSTW-RE 045 | ESA-E SERIES SPECTRUM ANALYZER | E4404B | MY45111242 | Agilent | Pre-te | est Use | |
| ETSTW-RE 049 | TRILOG Super Broadband test Antenna | VULB 9160 | 9160-3185 | Schwarzbeck | 2014/2/18 | 2015/2/17 | |
| ETSTW-RE 050 | Attenuator 10dB | 50HF-010-1 | None | JFW | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 051 | Attenuator 6dB | 50HF-006-1 | None | JFW | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 053 | Attenuator 3dB | 50HF-003-1 | None | JFW | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 055 | SPECTRUM ANALYZER | FSU 26 | 200074 | R&S | 2014/6/05 | 2015/6/04 | |
| ETSTW-RE 060 | Attenuator 30dB | 5015-30 | F651012z-01 | ATM | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 062 | Amplifier Module | CHC 2 | None | KMIC | 2013/11/27 | 2014/11/26 | |
| ETSTW-RE 064 | Bluetooth Test Set | MT8852B-042 | 6K00005709 | Anritsu | Function | on Test | |
| ETSTW-RE 069 | Double-Ridged Guide Horn Antenna | 3117 | 00069377 | EMCO | Function | on Test | |
| ETSTW-RE 072 | CELL SITE TEST SET | 8921A | 3339A00375 | HP | 2013/10/7 | 2014/10/6 | |
| ETSTW-RE 088 | SOLID STATE AMPLIFIER | KMA180265A01 | 99057 | KMIC | 2013/10/11 | 2014/10/10 | |
| ETSTW-RE 099 | DC Block | 50DB-007-1 | None | JFW | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 106 | Humidity Temperature Meter | TES-1366 | 091011113 | TES | 2013/12/04 | 2014/12/03 | |
| ETSTW-RE 111 | TRILOG Super Broadband test Antenna | VULB 9160 | 9160-3309 | Schwarz beck | 2013/12/27 | 2014/12/26 | |
| ETSTW-RE 112 | AC POWER SOURCE | TFC-1005 | None | T-Power | Functi | on test | |
| ETSTW-RE 115 | 2.4GHz Notch Filter | N0124411 | 473874 | MICROWAVE CIRCUITS | 2014/1/10 2015/1/0 | | |
| ETSTW-RE 120 | RF Player | MP9200 | MP9210-111022 | ADIVIC | Functi | on test | |
| ETSTW-RE 122 | SIGNAL GENERATOR | SMF100A | 102149 | R&S | 2014/6/11 | 2015/6/10 | |
| ETSTW-RE 125 | 5GHz Notch filter | 5NSL11- 5200/E221.3-O/O | 1 | K&L Microwave | 2013/8/16 | 2014/8/15 | |



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| ETSTW-RE 126 | 5GHz Notch filter | 5NSL11- 5800/E221.3-O/O | 1 | K&L Microwave | 2013/8/16 | 2014/8/15 | |
|-----------------|-----------------------------------------|------------------------------------------------|--------------|-------------------|------------|------------|--|
| ETSTW-RE 127 | RF Switch Box | RFS-01 | None | WTS | 2014/3/3 | 2015/3/2 | |
| ETSTW-RE 128 | 5.3GHz Notch filter | N0153001 | SN487233 | Microwave Circits | 2013/8/13 | 2014/8/12 | |
| ETSTW-RE 129 | 5.5GHz Notch filter | N0555984 | SN487234 | Microwave Circits | 2013/8/13 | 2014/8/12 | |
| ETSTW-RE 130 | Handheld RF Spectrum Analyzer | N9340A | CN0147000204 | Agilent | Pre-te | st Use | |
| ETSTW-GSM 002 | Universal Radio Communication Tester | CMU 200 | 109439 | R&S | 2013/10/7 | 2014/10/6 | |
| ETSTW-GSM 019 | Band Reject Filter | WRCTF824/849- 822/851-40 /12+9SS | 3 | WI | 2014/1/10 | 2015/1/09 | |
| ETSTW-GSM 020 | Band Reject Filter | WRCD1747/1748- 1743/1752-32/5SS | 1 | WI | 2014/1/10 | 2015/1/09 | |
| ETSTW-GSM 021 | Band Reject Filter | WRCD1879.5/1880.5 -1875.5/1884.5- 32/5SS | 3 | WI | 2014/1/10 | 2015/1/09 | |
| ETSTW-GSM 022 | Band Reject Filter | WRCT901.9/903.1- 904.25-50/8SS | 1 | WI | 2014/1/10 | 2015/1/09 | |
| ETSTW-GSM 023 | Power Divider | 4901.19.A | None | SUHNER | 2013/9/18 | 2014/9/17 | |
| ETSTW-Cable 010 | BNC Cable | 5 M BNC Cable | None | JYE BAO CO.,LTD. | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 011 | BNC Cable | BNC Cable 1 | None | JYE BAO CO.,LTD. | Pre-test I | Use NCR | |
| ETSTW-Cable 012 | N TYPE To SMA Cable | Cable 012 | None | JYE BAO CO.,LTD. | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 016 | BNC Cable | Switch Box | B Cable 1 | Schwarz beck | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 017 | BNC Cable | X Cable | B Cable 2 | Schwarz beck | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 018 | BNC Cable | Y Cable | B Cable 3 | Schwarz beck | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 019 | BNC Cable | Z Cable | B Cable 4 | Schwarz beck | 2014/2/27 | 2015/2/26 | |
| ETSTW-Cable 022 | N TYPE Cable | 5006 | 0002 | JYE BAO CO.,LTD. | 2014/2/19 | 2015/2/18 | |
| ETSTW-Cable 026 | Microwave Cable | SUCOFLEX 104 | 279075 | HUBER+SUHNER | 2014/3/3 | 2015/3/2 | |
| ETSTW-Cable 027 | Microwave Cable | SUCOFLEX 104 | 279083 | HUBER+SUHNER | 2014/3/3 | 2015/3/2 | |
| ETSTW-Cable 028 | Microwave Cable | FA147A0015M2020 | 30064-2 | UTIFLEX | 2013/10/11 | 2014/10/10 | |
| ETSTW-Cable 029 | Microwave Cable | FA147A0015M2020 | 30064-3 | UTIFLEX | 2013/10/11 | 2014/10/10 | |
| ETSTW-Cable 030 | Microwave Cable | SUCOFLEX 104 (S_Cable 9) | 279067 | HUBER+SUHNER | 2014/3/3 | 2015/3/2 | |
| ETSTW-Cable 031 | Microwave Cable | SUCOFLEX 104 (S_Cable 10) | 238092 | HUBER+SUHNER | 2013/11/27 | 2014/11/26 | |
| ETSTW-Cable 043 | Microwave Cable | SUCOFLEX 104 | 317576 | HUBER+SUHNER | 2013/11/27 | 2014/11/26 | |
| ETSTW-Cable 047 | Microwave Cable | SUCOFLEX 104 | 325518 | HUBER+SUHNER | 2013/11/27 | 2014/11/26 | |
| ETSTW-Cable 053 | N TYPE To SMA Cable | RG142 | None | JYE BAO CO.,LTD. | 2014/2/19 | 2015/2/18 | |
| ETSTW-Cable 058 | Microwave Cable | SUCOFLEX 104 | none | HUBER+SUHNER | 2014/2/19 | 2015/2/18 | |
| WTSTW-SW 002 | EMI TEST SOFTWARE | EZ_EMC | None | Farad | Version E | ETS-03A1 | |

2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-2009 5.2 using a 50µH LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.4-2009 6.4 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of $dB\mu V$) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

Freq (MHz) METER READING + ACF + CABLE LOSS (to the receiver) = FS

 $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ @3m}$

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.4-2009 6.3.1. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

Measurements were made by Worldwide Testing Services(Taiwan) Co., Ltd. at the registered open field test site located at No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207, Taiwan (R.O.C.). The Registration Number: 930600.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = 20 log (dwell time/T)

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANSI STANDARD C63.4-2009 10.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

3 Test results (enclosure)

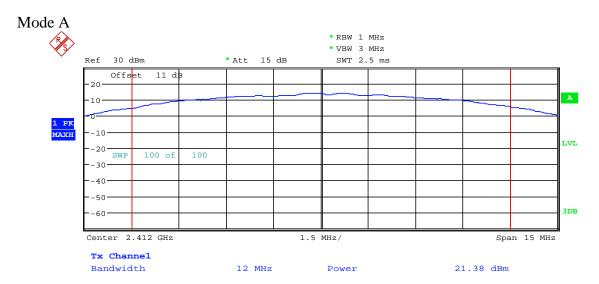
| TEST CASE | Para. Number | Required | Test passed | Test failed |
|-------------------------------------------|--------------|----------|----------------|----------------|
| Peak Output Power | 15.247(b) | × | × | |
| Equivalent isotropically radiated Power | 15.247(b) | × | × | |
| Spurious Emissions radiated – Transmitter | 15.247(c): | × | × | |
| operating | 15.209 | | | |
| Band Edge Measurement | 15.247(d) | × | × | |
| Minimum 6 dB Bandwidth | 15.247(a)(2) | × | × | |
| Peak Power Spectral Density | 15.247(e) | × | × | |
| Radiated Emission from Digital Part | 15.109 | | | |
| Power Line Conducted Emission | 15.207 | × | × | |

3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

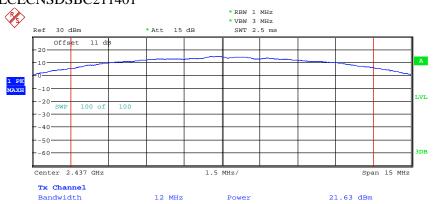
This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

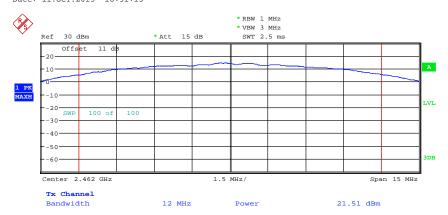


MAX OUTPUT POWER 802.11B CH01 Date: 11.0CT.2013 18:30:37

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



MAX OUTPUT POWER 802.11B CH06 Date: 11.0CT.2013 18:31:15

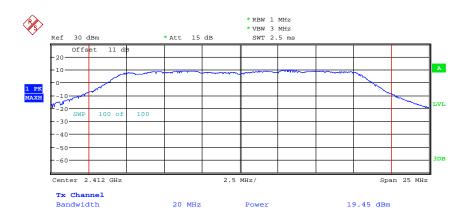


MAX OUTPUT POWER 802.11B CH11 Date: 11.0CT.2013 18:32:33

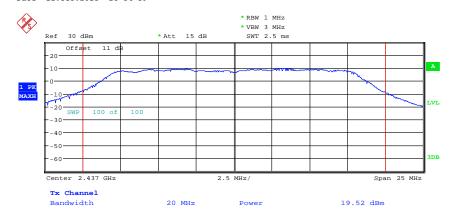


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode B



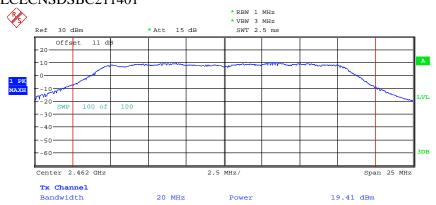
MAX OUTPUT POWER 802.11G CH01 Date: 11.0CT.2013 18:34:59



MAX OUTPUT POWER 802.11G CH06 Date: 11.0CT.2013 18:36:04

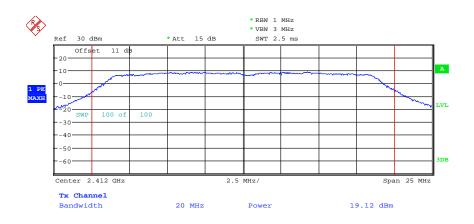


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



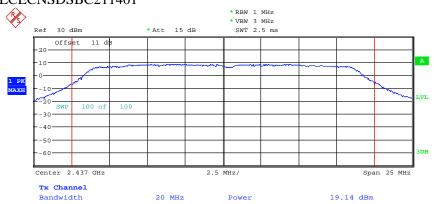
MAX OUTPUT POWER 802.11G CH11 Date: 11.0CT.2013 18:36:41

Mode C

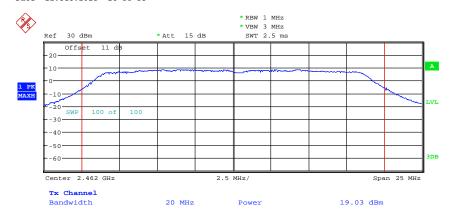


MAX OUTPUT POWER 802.11N 20MHZ CH01 Date: 11.0CT.2013 18:37:51

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



MAX OUTPUT POWER 802.11N 20MHZ CH06 Date: 11.0CT.2013 18:38:55

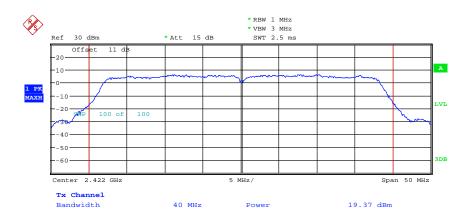


MAX OUTPUT POWER 802.11N 20MHZ CH11 Date: 11.0CT.2013 18:39:54

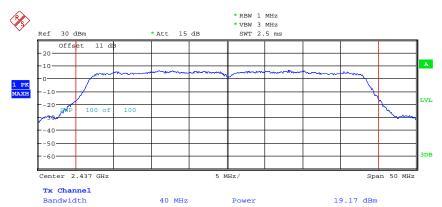


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode D



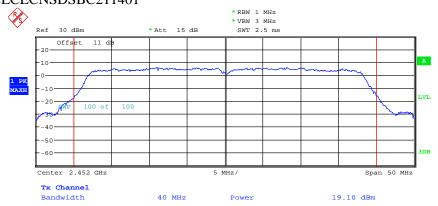
MAX OUTPUT POWER 802.11N 40MHZ CH01 Date: 11.0CT.2013 18:43:27



MAX OUTPUT POWER 802.11N 40MHZ CH04 Date: 11.0CT.2013 18:46:36



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



MAX OUTPUT POWER 802.11N 40MHZ CH07 Date: 11.0CT.2013 18:51:55

Limits:

| Frequency MHz | Power dBm |
|------------------|--------------|
| 902 - 928 | 30 |
| 2400 – 2483.5 | 30 |
| 5725 – 5850 | 30 |

In case of employing transmitter antennas having antenna gain > 6 dBi and using fixed point-to point operation consider \$15.247 (b)(4)

Test equipment used: ETSTW-RE 055, ETSTW-RE 050

Explanation: ./.

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

EIRP = 21.63 dBm + 2 dBi

= 23.63 dBm

Limit: EIRP = +36 dBm for Antenna gain < 6dBi

Test equipment used: ETSTW-RE 055

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a "worst case" or conservative prediction.

S – Power Density

P – Output power ERP

R – Distance

D – Cable Loss

AG – Antenna Gain

| Item Unit | | Value | Remarks |
|-----------|--------------------|-----------|------------------|
| P | mW | 145.54591 | Peak value |
| D | dB | | |
| AG | dBi | 2 | |
| G | | 1.58489 | Calculated Value |
| R | cm | 20 | Assumed value |
| S | mW/cm ² | 0.04589 | Calculated value |

Limits:

| Limit for General Population / Uncontrolled Exposure | | | | |
|------------------------------------------------------|-------------------------------------|--|--|--|
| Frequency (MHz) | Power Density (mW/cm ²) | | | |
| 1500 – 100.000 | 1.0 | | | |

3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (c), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency ≤ 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements) Frequency > 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements) Frequency > 1 GHz, RBW:1 MHz, VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

| Frequency of Emission | Field strength | Field Strength | | |
|-----------------------|--------------------|-----------------------|--|--|
| (MHz) | (microvolts/meter) | (dB microvolts/meter) | | |
| 30 - 88 | 100 | 40.0 | | |
| 88 - 216 | 150 | 43.5 | | |
| 216 - 960 | 200 | 46.0 | | |
| Above | 500 | 54.0 | | |

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

"If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation."

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = 20 log (dwell time/ 100ms)

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: see attached diagrams in Appendix.

3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB 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. 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))

FCC Rule: 15.247(c), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies above 1GHz (Peak measurements). Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements). Max. reading – 20dB

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

"If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation."

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = 20 log (dwell time/100ms)

Note: No duty cycle correction was added to the reading of EUT.

SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Correction Factor".

Summary table with radiated data of the test plots

| Model: | | EC21XX | Date: | 20 | 14/8/4 | | |
|---------------|------------|------------|--------------|----|--------|-----------|------|
| Mode: | 8 | 02.11b CH1 | Temperature: | 24 | °C | Engineer: | Leon |
| Polarization: | Horizontal | | Humidity: | 60 | % | - | |
| | | | | | | T 11 | Λ . |

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 601.5030 | 18.02 | peak | 23.21 | 41.23 | 46.00 | -4.77 | 135 | 100 |
| 875.5911 | 16.63 | QP | 26.79 | 43.42 | 46.00 | -2.58 | 170 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------|--------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.62 | | 0.33 | 40.95 | | 74.00 | 54.00 | -33.05 | 155 | 100 |
| 7236.0000 | 39.57 | | 3.77 | 43.34 | | 74.00 | 54.00 | -30.66 | 90 | 100 |
| 9648.0000 | 33.93 | | 7.88 | 41.81 | | 74.00 | 54.00 | -32.19 | 175 | 100 |
| 12060.0000 | 33.17 | | 13.12 | 46.29 | | 74.00 | 54.00 | -27.71 | 120 | 100 |

Polarization: Vertical

| - | | | | | | | | | |
|---|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| | Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
| | 33.4706 | 26.11 | QP | 13.31 | 39.42 | 40.00 | -0.58 | 85 | 100 |
| | 113.5871 | 27.45 | peak | 12.71 | 40.16 | 43.50 | -3.34 | 190 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------|----------|-------|----------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | (dBuV/m) | | (dBuV/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.81 | | 0.33 | 41.14 | | 74.00 | 54.00 | -32.86 | 165 | 100 |
| 7236.0000 | 39.58 | | 3.77 | 43.35 | | 74.00 | 54.00 | -30.65 | 130 | 100 |
| 9648.0000 | 34.00 | | 7.88 | 41.88 | | 74.00 | 54.00 | -32.12 | 75 | 100 |
| 12060.0000 | 32.69 | | 13.12 | 45.81 | | 74.00 | 54.00 | -28.19 | 110 | 100 |



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Mode: 802.11b CH6

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 601.5030 | 17.60 | peak | 23.21 | 40.81 | 46.00 | -5.19 | 110 | 100 |
| 875.5911 | 16.83 | QP | 26.79 | 43.62 | 46.00 | -2.38 | 135 | 100 |

| Frequency | Rea | Reading | | Re | Result | | Limit | | Table | Ant. |
|------------|-------|---------|-------|-------|--------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 40.79 | | 0.46 | 41.25 | | 74.00 | 54.00 | -32.75 | 130 | 100 |
| 7311.0000 | 39.99 | | 3.62 | 43.61 | | 74.00 | 54.00 | -30.39 | 60 | 100 |
| 9748.0000 | 33.25 | | 8.20 | 41.45 | | 74.00 | 54.00 | -32.55 | 95 | 100 |
| 12185.0000 | 31.63 | | 13.69 | 45.32 | | 74.00 | 54.00 | -28.68 | 110 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9438 | 26.11 | QP | 13.26 | 39.37 | 40.00 | -0.63 | 70 | 100 |
| 47.4950 | 22.90 | peak | 14.20 | 37.10 | 40.00 | -2.90 | 165 | 100 |

| Frequency | Rea | ding | Factor | Re | sult | Lir | Limit | | Table | Ant. |
|------------|-------|------|--------|-----------|------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | ` ' ` ' | | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 41.12 | | 0.46 | 41.58 | | 74.00 | 54.00 | -32.42 | 175 | 100 |
| 7311.0000 | 39.32 | | 3.62 | 42.94 | | 74.00 | 54.00 | -31.06 | 140 | 100 |
| 9748.0000 | 34.10 | | 8.20 | 42.30 | | 74.00 | 54.00 | -31.70 | 220 | 100 |
| 12185.0000 | 31.85 | | 13.69 | 45.54 | | 74.00 | 54.00 | -28.46 | 195 | 100 |

Mode: 802.11b CH11

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 19.62 | peak | 23.39 | 43.01 | 46.00 | -2.99 | 155 | 100 |
| 875.5911 | 18.05 | QP | 26.79 | 44.84 | 46.00 | -1.16 | 80 | 100 |

| Frequency | | ding | Factor | | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------------|--------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dB) (dBuV/ | | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 40.01 | | 0.66 | 40.67 | | 74.00 | 54.00 | -33.33 | 75 | 100 |
| 7386.0000 | 38.95 | | 3.85 | 42.80 | | 74.00 | 54.00 | -31.20 | 165 | 100 |
| 9848.0000 | 34.56 | | 8.57 | 43.13 | | 74.00 | 54.00 | -30.87 | 130 | 100 |
| 12310.0000 | 33.91 | | 14.42 | 48.33 | | 74.00 | 54.00 | -25.67 | 60 | 100 |



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Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9438 | 26.30 | QP | 13.26 | 39.56 | 40.00 | -0.44 | 90 | 100 |
| 113.5871 | 29.63 | QP | 12.71 | 42.34 | 43.50 | -1.16 | 70 | 100 |

| Frequency | Rea | ding | Factor | Re | sult | Limit | | Margin | Table | Ant. |
|------------|-------|------|--------|-------|-------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 39.97 | | 0.66 | 40.63 | | 74.00 | 54.00 | -33.37 | 210 | 100 |
| 7386.0000 | 38.77 | | 3.85 | 42.62 | | 74.00 | 54.00 | -31.38 | 175 | 100 |
| 9848.0000 | 35.48 | | 8.57 | 44.05 | | 74.00 | 54.00 | -29.95 | 230 | 100 |
| 12310.0000 | 32.86 | | 14.42 | 47.28 | | 74.00 | 54.00 | -26.72 | 160 | 100 |

Mode: 802.11g CH1

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 18.39 | peak | 23.39 | 41.78 | 46.00 | -4.22 | 185 | 100 |
| 875.5911 | 17.43 | QP | 26.79 | 44.22 | 46.00 | -1.78 | 90 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------|--------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.51 | | 0.33 | 40.84 | | 74.00 | 54.00 | -33.16 | 105 | 100 |
| 7236.0000 | 39.59 | | 3.77 | 43.36 | | 74.00 | 54.00 | -30.64 | 70 | 100 |
| 9648.0000 | 34.62 | | 7.88 | 42.50 | | 74.00 | 54.00 | -31.50 | 230 | 100 |
| 12060.0000 | 33.66 | | 13.12 | 46.78 | | 74.00 | 54.00 | -27.22 | 165 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 25.96 | QP | 13.26 | 39.22 | 40.00 | -0.78 | 70 | 100 |
| 113.5872 | 28.45 | QP | 12.71 | 41.16 | 43.50 | -2.34 | 165 | 100 |

| Frequency | | ding uV) | Factor (dB) | | sult ıV/m) | | nit V/m) | Margin | Table Degree | Ant. High |
|------------|-------|-------------|----------------|-------|---------------|-------|-------------|--------|-----------------|--------------|
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.30 | | 0.33 | 40.63 | | 74.00 | 54.00 | -33.37 | 205 | 100 |
| 7236.0000 | 39.36 | | 3.77 | 43.13 | | 74.00 | 54.00 | -30.87 | 80 | 100 |
| 9648.0000 | 33.84 | | 7.88 | 41.72 | | 74.00 | 54.00 | -32.28 | 70 | 100 |
| 12060.0000 | 33.45 | | 13.12 | 46.57 | | 74.00 | 54.00 | -27.43 | 135 | 100 |



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Mode: 802.11g CH6

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 19.63 | QP | 23.39 | 43.02 | 46.00 | -2.98 | 230 | 100 |
| 875.5911 | 17.85 | QP | 26.79 | 44.64 | 46.00 | -1.36 | 175 | 100 |

| Frequency | Rea | ding | Factor | Re | sult | Lir | nit | Margin | Table | Ant. |
|------------|-------|------|--------|-------|-------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBı | ιV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 40.73 | | 0.46 | 41.19 | | 74.00 | 54.00 | -32.81 | 75 | 100 |
| 7311.0000 | 39.14 | | 3.62 | 42.76 | | 74.00 | 54.00 | -31.24 | 120 | 100 |
| 9748.0000 | 34.81 | | 8.20 | 43.01 | | 74.00 | 54.00 | -30.99 | 95 | 100 |
| 12185.0000 | 31.75 | | 13.69 | 45.44 | | 74.00 | 54.00 | -28.56 | 160 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.19 | QP | 13.26 | 39.45 | 40.00 | -0.55 | 75 | 100 |
| 117.4750 | 28.20 | peak | 13.00 | 41.20 | 43.50 | -2.30 | 160 | 100 |

| Frequency | Rea | ding | Factor | Re | sult | Lir | nit | Margin | Table | Ant. |
|------------|-------|--------|--------|-------|-------|-------|-------|--------|--------|------|
| | (dB | (dBuV) | | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 41.11 | | 0.46 | 41.57 | | 74.00 | 54.00 | -32.43 | 210 | 100 |
| 7311.0000 | 39.15 | | 3.62 | 42.77 | | 74.00 | 54.00 | -31.23 | 175 | 100 |
| 9748.0000 | 34.81 | | 8.20 | 43.01 | | 74.00 | 54.00 | -30.99 | 230 | 100 |
| 12185.0000 | 32.24 | | 13.69 | 45.93 | | 74.00 | 54.00 | -28.07 | 160 | 100 |

Mode: 802.11g CH11

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 17.92 | peak | 23.39 | 41.31 | 46.00 | -4.69 | 135 | 100 |
| 875.5911 | 18.04 | QP | 26.79 | 44.83 | 46.00 | -1.17 | 90 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. | | |
|------------|-------|--------|--------|-------|--------|-------|-------|----------|--------|------|--------|------|
| | (dB | (dBuV) | | (dBu | ıV/m) | , | | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) | | |
| 4924.0000 | 40.38 | | 0.66 | 41.04 | | 74.00 | 54.00 | -32.96 | 255 | 100 | | |
| 7386.0000 | 38.95 | | 3.85 | 42.80 | | 74.00 | 54.00 | -31.20 | 130 | 100 | | |
| 9848.0000 | 33.94 | | 8.57 | 42.51 | | 74.00 | 54.00 | -31.49 | 75 | 100 | | |
| 12310.0000 | 33.37 | | 14.42 | 47.79 | | 74.00 | 54.00 | -26.21 | 110 | 100 | | |



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Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.34 | QP | 13.26 | 39.60 | 40.00 | -0.40 | 75 | 100 |
| 115.5311 | 30.03 | QP | 12.85 | 42.88 | 43.50 | -0.62 | 165 | 100 |

| Frequency | Rea | ding | Factor | Re | sult | Lir | nit | Margin | Table | Ant. |
|------------|-------|------|--------|-------|-------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 40.07 | | 0.66 | 40.73 | | 74.00 | 54.00 | -33.27 | 75 | 100 |
| 7386.0000 | 38.30 | | 3.85 | 42.15 | | 74.00 | 54.00 | -31.85 | 165 | 100 |
| 9848.0000 | 34.52 | | 8.57 | 43.09 | | 74.00 | 54.00 | -30.91 | 230 | 100 |
| 12310.0000 | 33.43 | | 14.42 | 47.85 | | 74.00 | 54.00 | -26.15 | 190 | 100 |

Mode: 802.11n 20MHz CH1

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 19.14 | peak | 23.39 | 42.53 | 46.00 | -3.47 | 120 | 100 |
| 875.5911 | 18.59 | QP | 26.79 | 45.38 | 46.00 | -0.62 | 175 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------|--------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.15 | | 0.33 | 40.48 | | 74.00 | 54.00 | -33.52 | 75 | 100 |
| 7236.0000 | 39.20 | | 3.77 | 42.97 | | 74.00 | 54.00 | -31.03 | 110 | 100 |
| 9648.0000 | 34.11 | | 7.88 | 41.99 | | 74.00 | 54.00 | -32.01 | 205 | 100 |
| 12060.0000 | 33.33 | | 13.12 | 46.45 | | 74.00 | 54.00 | -27.55 | 160 | 100 |

Polarization: Vertical

| Freque | , | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------|-----|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.94 | 140 | 26.35 | QP | 13.26 | 39.61 | 40.00 | -0.39 | 90 | 100 |
| 45.5 | 511 | 23.47 | peak | 14.15 | 37.62 | 40.00 | -2.38 | 130 | 100 |

| | | | 1 | 1 | | 1 | | | | |
|------------|-------|------|--------|-------|----------|-------|-------|--------|--------|------|
| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
| | (dB | uV) | (dB) | (dBı | (dBuV/m) | | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.32 | | 0.33 | 40.65 | | 74.00 | 54.00 | -33.35 | 175 | 100 |
| 7236.0000 | 39.14 | | 3.77 | 42.91 | | 74.00 | 54.00 | -31.09 | 80 | 100 |
| 9648.0000 | 34.19 | | 7.88 | 42.07 | | 74.00 | 54.00 | -31.93 | 190 | 100 |
| 12060.0000 | 32.89 | | 13.12 | 46.01 | | 74.00 | 54.00 | -27.99 | 135 | 100 |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode: 802.11n 20MHz CH6

Polarization: Horizontal

| | Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|---|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| Г | 624.8297 | 19.45 | peak | 23.39 | 42.84 | 46.00 | -3.16 | 145 | 100 |
| ſ | 875.5911 | 17.95 | QP | 26.79 | 44.74 | 46.00 | -1.26 | 210 | 100 |

| Frequency | Rea | Reading | | Result | | Limit | | Margin | Table | Ant. |
|------------|-------|---------|-------|----------|------|-------|----------|--------|--------|------|
| | (dB | (dBuV) | | (dBuV/m) | | (dBu | (dBuV/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 40.73 | | 0.46 | 41.19 | | 74.00 | 54.00 | -32.81 | 145 | 100 |
| 7311.0000 | 39.16 | | 3.62 | 42.78 | | 74.00 | 54.00 | -31.22 | 70 | 100 |
| 9748.0000 | 34.56 | | 8.20 | 42.76 | | 74.00 | 54.00 | -31.24 | 160 | 100 |
| 12185.0000 | 31.49 | | 13.69 | 45.18 | | 74.00 | 54.00 | -28.82 | 90 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 25.76 | QP | 13.26 | 39.02 | 40.00 | -0.98 | 75 | 100 |
| 113.5872 | 26.53 | peak | 12.71 | 39.24 | 43.50 | -4.26 | 130 | 100 |

| Frequency | Rea | ding | Factor | Result | | Limit | | Margin | Table | Ant. |
|------------|-------|--------|--------|----------|------|----------|-------|--------|--------|------|
| | (dB | (dBuV) | | (dBuV/m) | | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 40.83 | | 0.46 | 41.29 | | 74.00 | 54.00 | -32.71 | 80 | 100 |
| 7311.0000 | 39.38 | | 3.62 | 43.00 | | 74.00 | 54.00 | -31.00 | 155 | 100 |
| 9748.0000 | 34.38 | | 8.20 | 42.58 | | 74.00 | 54.00 | -31.42 | 90 | 100 |
| 12185.0000 | 32.03 | | 13.69 | 45.72 | | 74.00 | 54.00 | -28.28 | 165 | 100 |

Mode: 802.11n 20MHz CH11

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 19.06 | peak | 23.39 | 42.45 | 46.00 | -3.55 | 130 | 100 |
| 875.5911 | 18.19 | QP | 26.79 | 44.98 | 46.00 | -1.02 | 55 | 100 |

| Frequency | | Reading | | | Result | | Limit | | Table | Ant. |
|------------|-------|---------|-------|----------|--------|-------|----------|--------|--------|------|
| | (dB | (dBuV) | | (dBuV/m) | | (dBu | (dBuV/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 39.90 | | 0.66 | 40.56 | | 74.00 | 54.00 | -33.44 | 155 | 100 |
| 7386.0000 | 38.51 | | 3.85 | 42.36 | | 74.00 | 54.00 | -31.64 | 120 | 100 |
| 9848.0000 | 35.35 | | 8.57 | 43.92 | | 74.00 | 54.00 | -30.08 | 275 | 100 |
| 12310.0000 | 33.45 | | 14.42 | 47.87 | | 74.00 | 54.00 | -26.13 | 160 | 100 |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.20 | QP | 13.26 | 39.46 | 40.00 | -0.54 | 80 | 100 |
| 113.5872 | 30.13 | QP | 12.71 | 42.84 | 43.50 | -0.66 | 115 | 100 |

| Frequency | Rea | Reading | | Re | Result | | Limit | | Table | Ant. |
|------------|-------|---------|-------|-------|--------|-------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 40.18 | | 0.66 | 40.84 | | 74.00 | 54.00 | -33.16 | 90 | 100 |
| 7386.0000 | 38.66 | | 3.85 | 42.51 | | 74.00 | 54.00 | -31.49 | 135 | 100 |
| 9848.0000 | 34.14 | | 8.57 | 42.71 | | 74.00 | 54.00 | -31.29 | 210 | 100 |
| 12310.0000 | 33.45 | | 14.42 | 47.87 | | 74.00 | 54.00 | -26.13 | 175 | 100 |

Mode: 802.11n 40MHz CH1

Polarization: Horizontal

| | Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|---|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| ſ | 624.8297 | 19.32 | peak | 23.39 | 42.71 | 46.00 | -3.29 | 110 | 100 |
| | 875.5911 | 18.20 | QP | 26.79 | 44.99 | 46.00 | -1.01 | 135 | 100 |

| Frequency | Rea | ding | Factor | Result | | Limit | | Margin | Table | Ant. |
|------------|-------|------|--------|--------|-------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.11 | | 0.33 | 40.44 | | 74.00 | 54.00 | -33.56 | 95 | 100 |
| 7236.0000 | 41.25 | | 3.77 | 45.02 | | 74.00 | 54.00 | -28.98 | 55 | 100 |
| 9648.0000 | 36.39 | | 7.88 | 44.27 | | 74.00 | 54.00 | -29.73 | 85 | 100 |
| 12060.0000 | 35.11 | | 13.12 | 48.23 | | 74.00 | 54.00 | -25.77 | 190 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.05 | QP | 13.26 | 39.31 | 40.00 | -0.69 | 70 | 100 |
| 111.6433 | 29.17 | QP | 12.56 | 41.73 | 43.50 | -1.77 | 165 | 100 |

| Frequency | Reading (dBuV) | | Factor (dB) | | Result (dBuV/m) | | nit V/m) | Margin | Table Degree | Ant. High |
|------------|-------------------|------|----------------|-------|--------------------|-------|-------------|--------|-----------------|--------------|
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4824.0000 | 40.57 | | 0.33 | 40.90 | | 74.00 | 54.00 | -33.10 | 255 | 100 |
| 7236.0000 | 41.37 | | 3.77 | 45.14 | | 74.00 | 54.00 | -28.86 | 170 | 100 |
| 9648.0000 | 37.03 | | 7.88 | 44.91 | | 74.00 | 54.00 | -29.09 | 115 | 100 |
| 12060.0000 | 34.51 | | 13.12 | 47.63 | | 74.00 | 54.00 | -26.37 | 170 | 100 |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode: 802.11n 40MHz CH4

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 19.24 | peak | 23.39 | 42.63 | 46.00 | -3.37 | 90 | 100 |
| 875.5911 | 18.61 | QP | 26.79 | 45.40 | 46.00 | -0.60 | 155 | 100 |

| Frequency | Rea | Reading | | Result | | Limit | | Margin | Table | Ant. |
|------------|-------|---------|-------|--------|-------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 41.23 | | 0.46 | 41.69 | | 74.00 | 54.00 | -32.31 | 125 | 100 |
| 7311.0000 | 40.55 | | 3.62 | 44.17 | | 74.00 | 54.00 | -29.83 | 190 | 100 |
| 9748.0000 | 35.09 | | 8.20 | 43.29 | | 74.00 | 54.00 | -30.71 | 175 | 100 |
| 12185.0000 | 32.56 | | 13.69 | 46.25 | | 74.00 | 54.00 | -27.75 | 50 | 100 |

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.07 | QP | 13.26 | 39.33 | 40.00 | -0.67 | 70 | 100 |
| 115.5311 | 27.13 | peak | 12.85 | 39.98 | 43.50 | -3.52 | 210 | 100 |

| Frequency | Rea | Reading | | Result | | Limit | | Margin | Table | Ant. |
|------------|-------|---------|-------|--------|-------|-------|-------|--------|--------|------|
| | (dB | (dBuV) | | (dBu | ıV/m) | (dBu | V/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4874.0000 | 41.22 | | 0.46 | 41.68 | | 74.00 | 54.00 | -32.32 | 130 | 100 |
| 7311.0000 | 40.35 | | 3.62 | 43.97 | | 74.00 | 54.00 | -30.03 | 75 | 100 |
| 9748.0000 | 35.22 | | 8.20 | 43.42 | | 74.00 | 54.00 | -30.58 | 145 | 100 |
| 12185.0000 | 33.05 | | 13.69 | 46.74 | | 74.00 | 54.00 | -27.26 | 110 | 100 |

Mode: 802.11n 40MHz CH7

Polarization: Horizontal

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 624.8297 | 18.46 | peak | 23.39 | 41.85 | 46.00 | -4.15 | 120 | 100 |
| 875.5911 | 17.85 | QP | 26.79 | 44.64 | 46.00 | -1.36 | 175 | 100 |

| Frequency | Rea | Reading | | Re | Result | | Limit | | Table | Ant. |
|------------|-------|---------|-------|-------|--------|----------|-------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBuV/m) | | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 40.15 | | 0.66 | 40.81 | | 74.00 | 54.00 | -33.19 | 330 | 100 |
| 7386.0000 | 39.27 | | 3.85 | 43.12 | | 74.00 | 54.00 | -30.88 | 40 | 100 |
| 9848.0000 | 36.27 | | 8.57 | 44.84 | | 74.00 | 54.00 | -29.16 | 90 | 100 |
| 12310.0000 | 34.11 | | 14.42 | 48.53 | | 74.00 | 54.00 | -25.47 | 130 | 100 |



Registration number: W6M21310-13576-C-1

FCC ID: 2ACLCECNSDSBC211401

Polarization: Vertical

| Frequency (MHz) | Reading (dBuV) | Detector | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Table Degree (Deg.) | Ant. High (cm) |
|--------------------|-------------------|----------|----------------|--------------------|-------------------|----------------|---------------------------|----------------------|
| 31.9440 | 26.11 | QP | 13.26 | 39.37 | 40.00 | -0.63 | 70 | 100 |
| 113.5872 | 28.68 | peak | 12.71 | 41.39 | 43.50 | -2.11 | 130 | 100 |

| Frequency | Rea | ding | Factor | Re | Result | | Limit | | Table | Ant. |
|------------|-------|------|--------|-------|--------|-------|----------|--------|--------|------|
| | (dB | uV) | (dB) | (dBu | ıV/m) | (dBu | (dBuV/m) | | Degree | High |
| (MHz) | Peak | Ave. | Corr. | Peak | Ave. | Peak | Ave. | (dB) | (Deg.) | (cm) |
| 4924.0000 | 41.37 | | 0.66 | 42.03 | | 74.00 | 54.00 | -31.97 | 335 | 100 |
| 7386.0000 | 39.17 | | 3.85 | 43.02 | | 74.00 | 54.00 | -30.98 | 240 | 100 |
| 9848.0000 | 35.27 | | 8.57 | 43.84 | | 74.00 | 54.00 | -30.16 | 165 | 100 |
| 12310.0000 | 34.55 | | 14.42 | 48.97 | | 74.00 | 54.00 | -25.03 | 120 | 100 |

Note

- 1. Correction Factor = Antenna factor + Cable loss Preamplifier
- 2. The formula of measured value as: Test Result = Reading + Correction Factor
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty for 3m measurement: $30\text{-}1000 \text{ MHz} = \pm 3.68 \text{ dB}$, $1\text{-}18 \text{ GHz} = \pm 5.37 \text{ dB}$, $18\text{-}40 \text{ GHz} = \pm 3.43 \text{ dB}$; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. See attached diagrams in appendix.

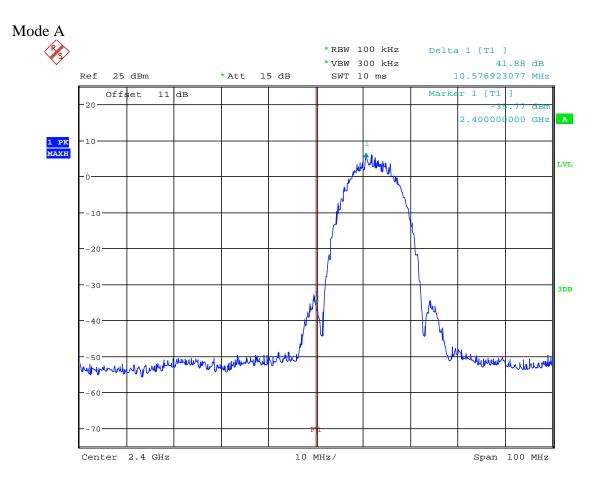
TEST RESULT (**Transmitter**): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111, ETSTW-RE 088, ETSTW-RE 018

3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(d) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB 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. Attenuation below the general limits specified in § 15.209(a) is not required.

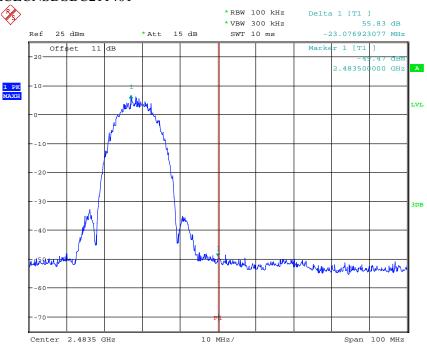
In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.



BANDEDGE 802.11B CH01
Date: 11.0CT.2013 18:30:57

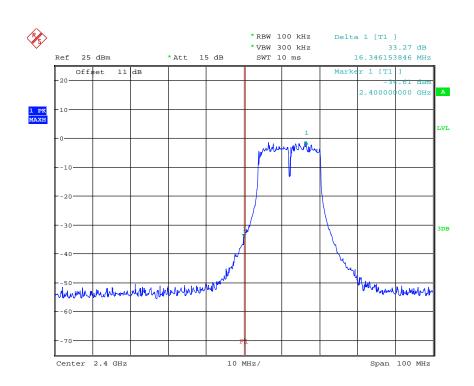


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



BANDEDGE 802.11B CH11
Date: 11.0CT.2013 18:32:53

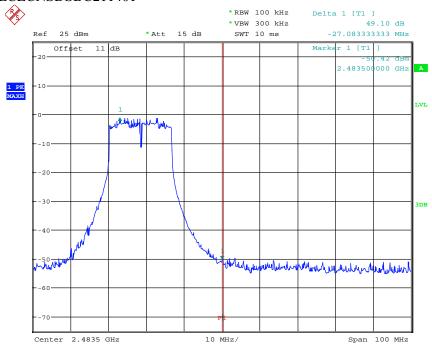
Mode B



BANDEDGE 802.11G CH01
Date: 11.0CT.2013 18:35:18

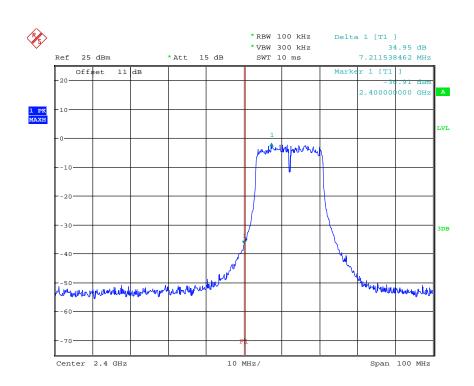


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



BANDEDGE 802.11G CH11
Date: 11.0CT.2013 18:37:01

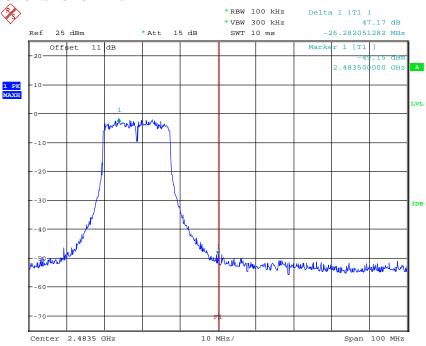
Mode C



BANDEDGE 802.11N 20MHZ CH01
Date: 11.0CT.2013 18:38:11

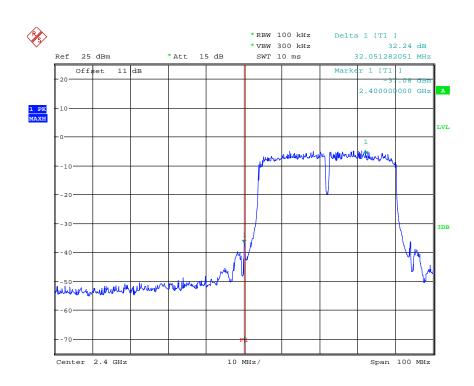


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



BANDEDGE 802.11N 20MHZ CH11 Date: 11.0CT.2013 18:40:14

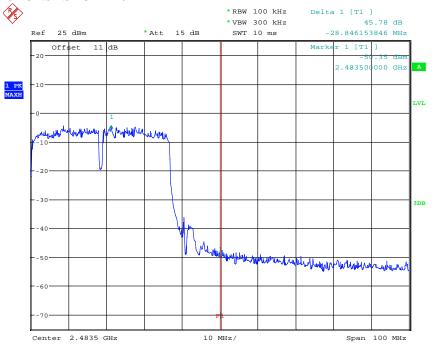
Mode D



BANDEDGE 802.11N 40MHZ CH01
Date: 11.0CT.2013 18:43:47



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



BANDEDGE 802.11N 40MHZ CH07 Date: 11.0CT.2013 18:52:16

Limit:

| Frequency Range / MHz | Limit |
|-----------------------|---------|
| 902 –928 | |
| 2400 – 2483.5 | - 20 dB |
| 5725 - 5850 | |

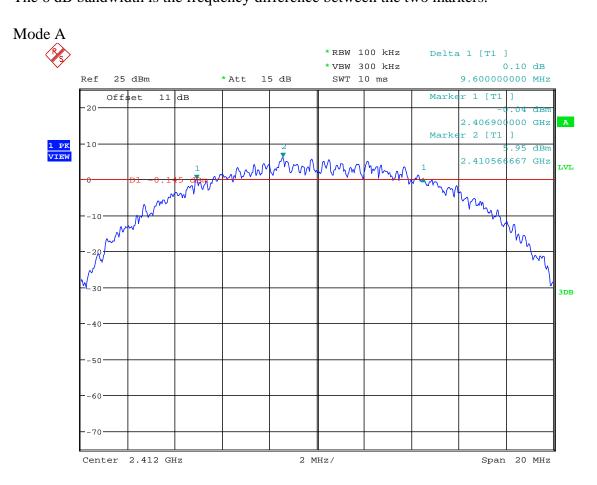
Test equipment used: ETSTW-RE 055, ETSTW-RE 050

Explanation: ./.

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

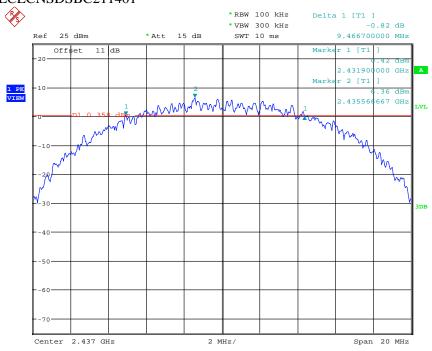
3.7 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission. The 6 dB bandwidth is the frequency difference between the two markers.

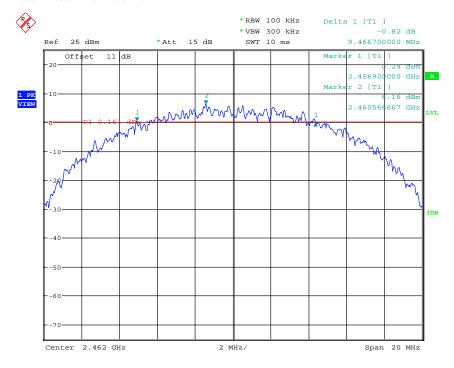


6DB BANDWIDTH 802.11B CH01 Date: 11.0CT.2013 18:30:45

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



6DB BANDWIDTH 802.11B CH06
Date: 11.0CT.2013 18:31:23

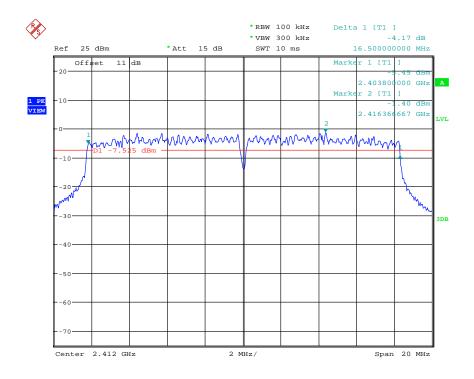


6DB BANDWIDTH 802.11B CH11
Date: 11.0CT.2013 18:32:41

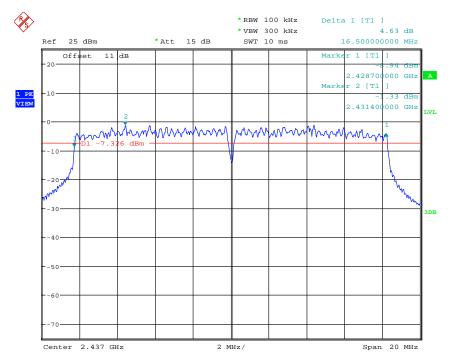


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode B



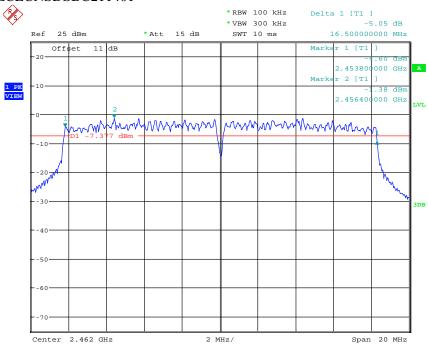
6DB BANDWIDTH 802.11G CH01 Date: 11.0CT.2013 18:35:07



6DB BANDWIDTH 802.11G CH06 Date: 11.0CT.2013 18:36:12

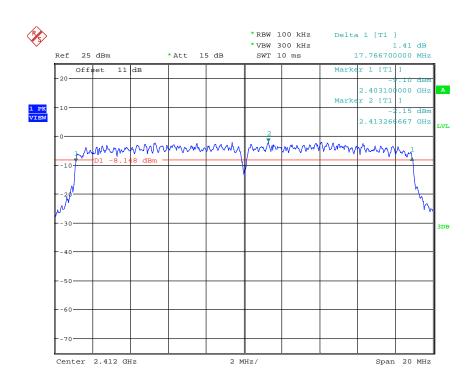


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



6DB BANDWIDTH 802.11G CH11
Date: 11.0CT.2013 18:36:49

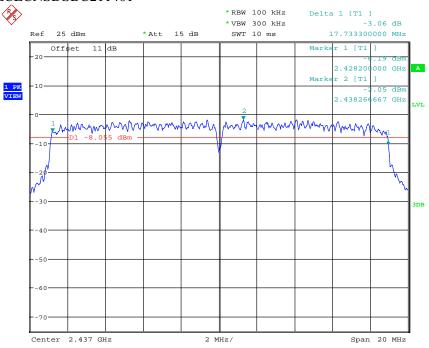
Mode C



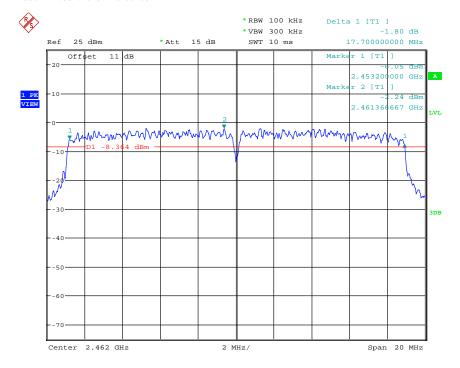
6DB BANDWIDTH 802.11N 20MHZ CH01 Date: 11.0CT.2013 18:37:59



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



6DB BANDWIDTH 802.11N 20MHZ CH06 Date: 11.0CT.2013 18:39:03

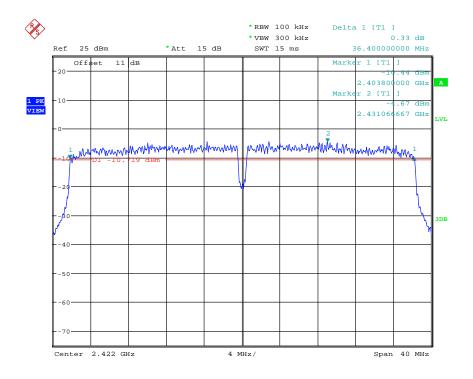


6DB BANDWIDTH 802.11N 20MHZ CH11 Date: 11.0CT.2013 18:40:02

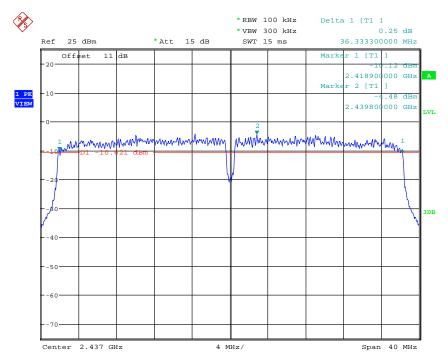


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode D



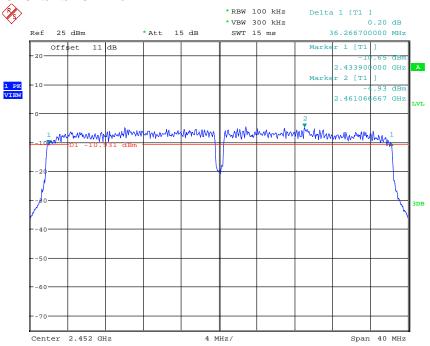
6DB BANDWIDTH 802.11N 40MHZ CH01 Date: 11.0CT.2013 18:43:35



6DB BANDWIDTH 802.11N 40MHZ CH04 Date: 11.0CT.2013 18:46:44



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



6DB BANDWIDTH 802.11N 40MHZ CH07 Date: 11.0CT.2013 18:52:03

Limits:

| Frequency Range MHz | Limits |
|------------------------|-------------|
| 902-928 | min 500 kHz |
| 2400-2483.5 | min 500 kHz |
| 5725-5850 | min 500 kHz |

Test equipment used: ETSTW-RE 055, ETSTW-RE 050

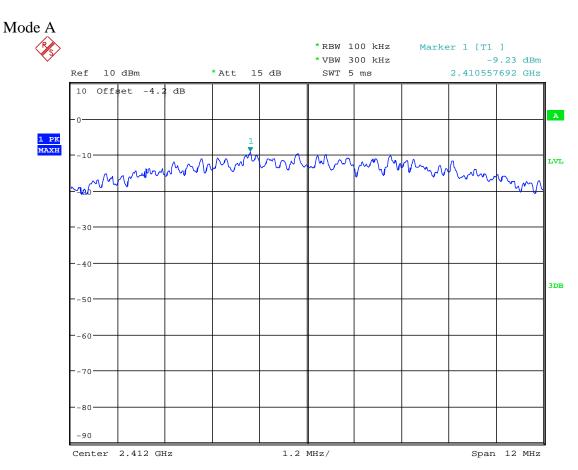
Explanation: ./.

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

3.8 Peak Power Spectral Density

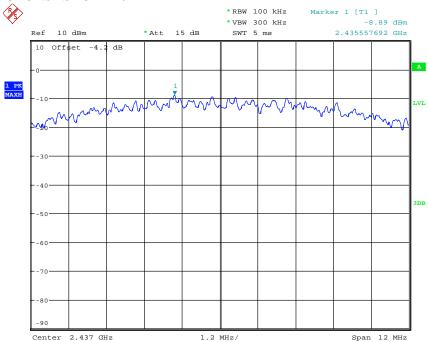
Peak Power Spectral density is a measured at low, middle and high channel.

The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

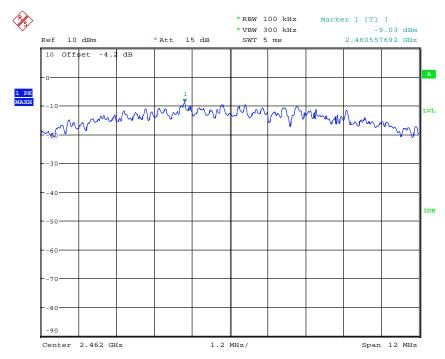


POWER DENSITY 802.11B CH01
Date: 11.0CT.2013 18:30:51

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



POWER DENSITY 802.11B CH06
Date: 11.0CT.2013 18:31:29

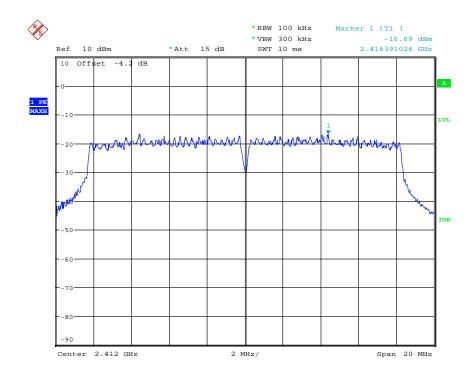


POWER DENSITY 802.11B CH11
Date: 11.0CT.2013 18:32:47

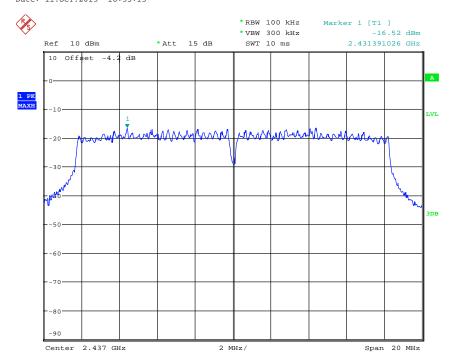


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode B



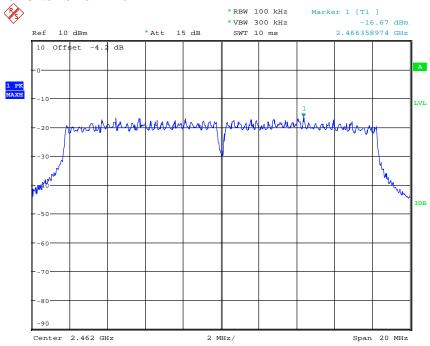
POWER DENSITY 802.11G CH01 Date: 11.0CT.2013 18:35:13



POWER DENSITY 802.11G CH06
Date: 11.0CT.2013 18:36:18

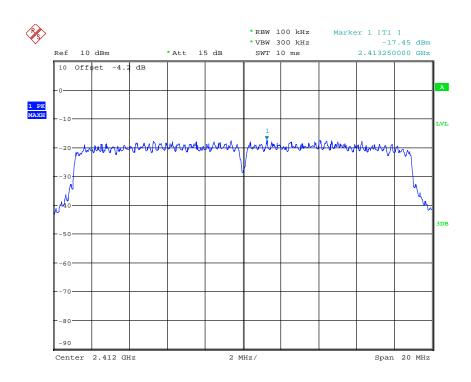


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



POWER DENSITY 802.11G CH11
Date: 11.0CT.2013 18:36:55

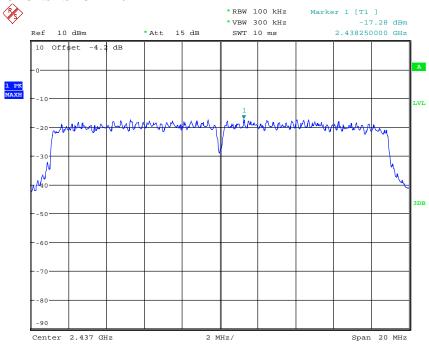
Mode C



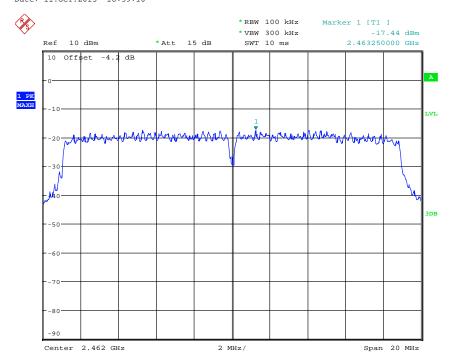
POWER DENSITY 802.11N 20MHZ CH01 Date: 11.0CT.2013 18:38:05



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



POWER DENSITY 802.11N 20MHZ CH06 Date: 11.0CT.2013 18:39:10

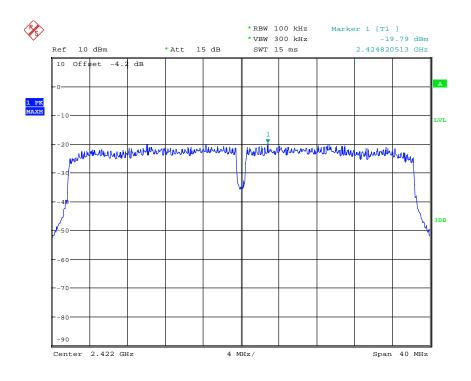


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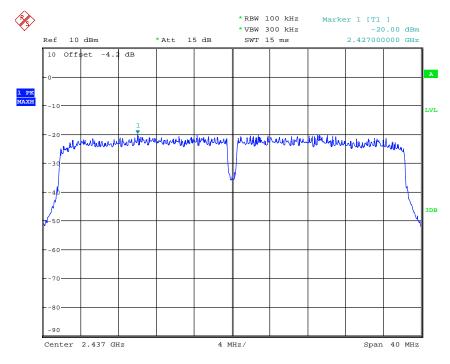


Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Mode D



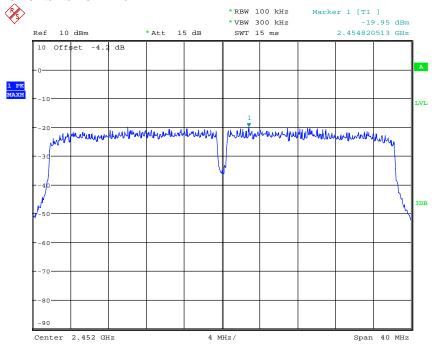
POWER DENSITY 802.11N 40MHZ CH01 Date: 11.0CT.2013 18:43:41



POWER DENSITY 802.11N 40MHZ CH04 Date: 11.0CT.2013 18:46:50



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



POWER DENSITY 802.11N 40MHZ CH07 Date: 11.0CT.2013 18:52:10

Limits:

| Frequency Range | dBm |
|-----------------|-----|
| MHz | |
| 902-928 | 8 |
| 2400-2483.5 | 8 |
| 5725-5850 | 8 |

Test equipment used: ETSTW-RE 055, ETSTW-RE 050

Explanation: ./.

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

3.9 Radiated Emission from Digital Part

FCC Rule: 15.109

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequency of Emission | Field Strength | Field Strength |
|-----------------------|--------------------|----------------------|
| (MHz) | (microvolts/meter) | (dBmicrovolts/meter) |
| 30 - 88 | 100 | 40.0 |
| 88 – 216 | 150 | 43.5 |
| 216 – 960 | 200 | 46.0 |
| Above 960 | 500 | 54.0 |

Test equipment used: ETSTW-RE 055, ETSTW-RE 064, ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111

Explanation: The test results are listed in the separated test report no.: W6M21310-13576-P-15B.

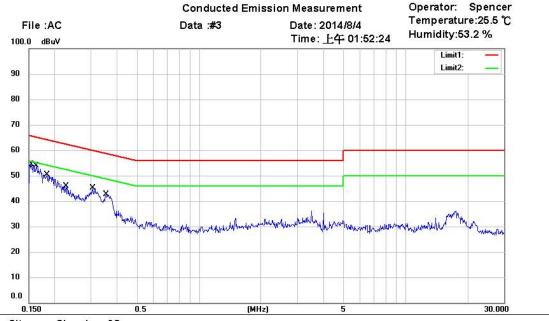
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

3.9 **Power Line Conducted Emission**

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

SD Card



Site: Chamber_03

Condition: FCC Part 15 Class B Conduction (QP)

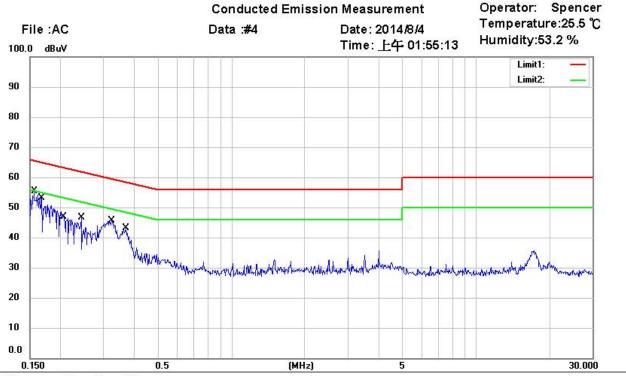
Phase: Power: 120 Va.c. EUT: W6M21310-13576

M/N: EC21XX Test Mode: SD Card

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corrected factor(dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Comment |
|-----|--------------------|-------------------|----------|-------------------------|------------------|-----------------|----------------|---------|
| * | 0.1544 | 36.61 | QP | 9.66 | 46.27 | 65.76 | -19.49 | |
| | 0.1544 | 20.76 | AVG | 9.66 | 30.42 | 55.76 | -25.34 | |
| | 0.1644 | 35.45 | QP | 9.66 | 45.11 | 65.24 | -20.13 | |
| | 0.1644 | 20.10 | AVG | 9.66 | 29.76 | 55.24 | -25.48 | |
| | 0.1840 | 32.20 | QP | 9.66 | 41.86 | 64.30 | -22.44 | |
| | 0.1840 | 18.14 | AVG | 9.66 | 27.80 | 54.30 | -26.50 | |
| | 0.2270 | 24.98 | QP | 9.66 | 34.64 | 62.56 | -27.92 | |
| | 0.2270 | 9.11 | AVG | 9.66 | 18.77 | 52.56 | -33.79 | |
| | 0.3056 | 30.09 | QP | 9.66 | 39.75 | 60.09 | -20.34 | |
| | 0.3056 | 18.48 | AVG | 9.66 | 28.14 | 50.09 | -21.95 | |
| | 0.3550 | 28.33 | QP | 9.67 | 38.00 | 58.84 | -20.84 | |
| | 0.3550 | 14.48 | AVG | 9.67 | 24.15 | 48.84 | -24.69 | |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



Site: Chamber_03

Condition: FCC Part 15 Class B Conduction (QP)

Phase: L1
Power: 120 Va.c.

EUT: W6M21310-13576

M/N: EC21XX

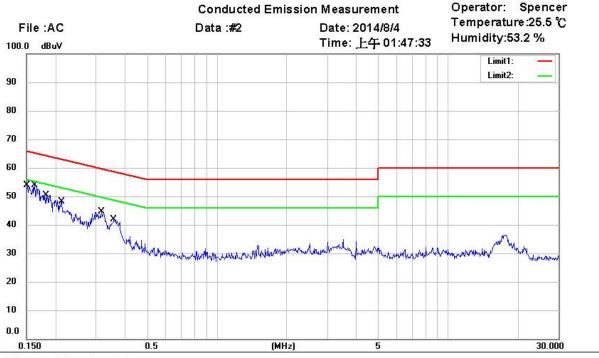
Test Mode: SD Card

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corrected factor(dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Comment |
|-----|--------------------|-------------------|----------|----------------------|------------------|-----------------|----------------|---------|
| | 0.1561 | 35.17 | QP | 9.67 | 44.84 | 65.67 | -20.83 | |
| | 0.1561 | 19.57 | AVG | 9.67 | 29.24 | 55.67 | -26.43 | |
| | 0.1680 | 34.34 | QP | 9.67 | 44.01 | 65.06 | -21.05 | |
| | 0.1680 | 15.48 | AVG | 9.67 | 25.15 | 55.06 | -29.91 | |
| 7. | 0.2062 | 27.69 | QP | 9.67 | 37.36 | 63.36 | -26.00 | |
| | 0.2062 | 13.16 | AVG | 9.67 | 22.83 | 53.36 | -30.53 | |
| | 0.2438 | 23.37 | QP | 9.67 | 33.04 | 61.97 | -28.93 | |
| | 0.2438 | 7.98 | AVG | 9.67 | 17.65 | 51.97 | -34.32 | |
| | 0.3243 | 31.45 | QP | 9.67 | 41.12 | 59.60 | -18.48 | |
| | 0.3243 | 20.97 | AVG | 9.67 | 30.64 | 49.60 | -18.96 | |
| | 0.3707 | 29.04 | QP | 9.68 | 38.72 | 58.49 | -19.77 | |
| * | 0.3707 | 20.42 | AVG | 9.68 | 30.10 | 48.49 | -18.39 | |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

USB



Site: Chamber_03

Condition: FCC Part 15 Class B Conduction (QP)

Phase: 120 Va.c.

EUT: W6M21310-13576

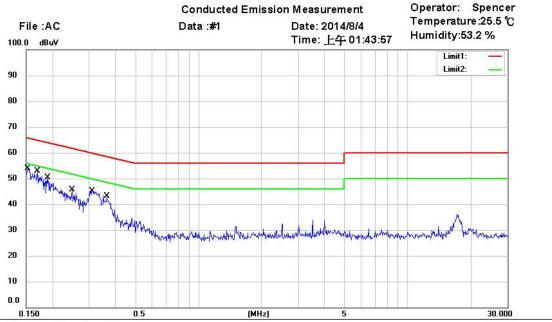
M/N: EC21XX

Test Mode: USB

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corrected factor(dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Comment |
|-----|--------------------|-------------------|----------|-------------------------|------------------|-----------------|----------------|---------|
| * | 0.1502 | 37.41 | QP | 9.67 | 47.08 | 65.99 | -18.91 | |
| | 0.1502 | 20.96 | AVG | 9.67 | 30.63 | 55.99 | -25.36 | |
| | 0.1617 | 36.15 | QP | 9.67 | 45.82 | 65.38 | -19.56 | |
| 9 | 0.1617 | 21.11 | AVG | 9.67 | 30.78 | 55.38 | -24.60 | |
| | 0.1820 | 32.48 | QP | 9.67 | 42.15 | 64.39 | -22.24 | |
| | 0.1820 | 16.77 | AVG | 9.67 | 26.44 | 54.39 | -27.95 | |
| | 0.2118 | 26.42 | QP | 9.67 | 36.09 | 63.13 | -27.04 | |
| | 0.2118 | 9.24 | AVG | 9.67 | 18.91 | 53.13 | -34.22 | |
| | 0.3171 | 30.19 | QP | 9.67 | 39.86 | 59.78 | -19.92 | |
| | 0.3171 | 16.78 | AVG | 9.67 | 26.45 | 49.78 | -23.33 | |
| | 0.3590 | 28.84 | QP | 9.68 | 38.52 | 58.75 | -20.23 | |
| | 0.3590 | 16.78 | AVG | 9.68 | 26.46 | 48.75 | -22.29 | |



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



Phase:

Power: 120 Va.c.

L1

Site: Chamber_03

Condition: FCC Part 15 Class B Conduction (QP)

EUT: W6M21310-13576

M/N: EC21XX Test Mode: USB

Note:

| Mk. | Frequency (MHz) | Reading (dBuV) | Detector | Corrected factor(dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Comment |
|-----|--------------------|-------------------|----------|-------------------------|------------------|-----------------|----------------|---------|
| | 0.1522 | 36.91 | QP | 9.66 | 46.57 | 65.88 | -19.31 | |
| | 0.1522 | 20.69 | AVG | 9.66 | 30.35 | 55.88 | -25.53 | |
| | 0.1686 | 33.44 | QP | 9.66 | 43.10 | 65.03 | -21.93 | |
| | 0.1686 | 13.57 | AVG | 9.66 | 23.23 | 55.03 | -31.80 | |
| | 0.1887 | 30.88 | QP | 9.66 | 40.54 | 64.09 | -23.55 | |
| | 0.1887 | 17.85 | AVG | 9.66 | 27.51 | 54.09 | -26.58 | |
| | 0.2475 | 22.57 | QP | 9.66 | 32.23 | 61.84 | -29.61 | |
| | 0.2475 | 7.04 | AVG | 9.66 | 16.70 | 51.84 | -35.14 | |
| | 0.3108 | 31.45 | QP | 9.66 | 41.11 | 59.95 | -18.84 | |
| | 0.3108 | 17.11 | AVG | 9.66 | 26.77 | 49.95 | -23.18 | |
| | 0.3642 | 29.63 | QP | 9.67 | 39.30 | 58.63 | -19.33 | |
| * | 0.3642 | 20.26 | AVG | 9.67 | 29.93 | 48.63 | -18.70 | |

- 1. The formula of measured value as: Test Result = Reading + Correction Factor
- 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty = ± 1.41 dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. Up Line: QP Limit Line, Down Line: Ave Limit Line.

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Limits:

| Frequency of Emission (MHz) | Conducted Limit (dBuV) | | | |
|-----------------------------|------------------------|----------|--|--|
| | Quasi Peak | Average | | |
| 0.15-0.5 | 66 to 56 | 56 to 46 | | |
| 0.5-5 | 56 | 46 | | |
| 5-30 | 60 | 50 | | |

Test equipment used:ETSTW-CE 001, ETSTW-CE 016, ETSTW-RE 045

Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

Appendix

Measurement diagrams

Spurious Emissions radiated

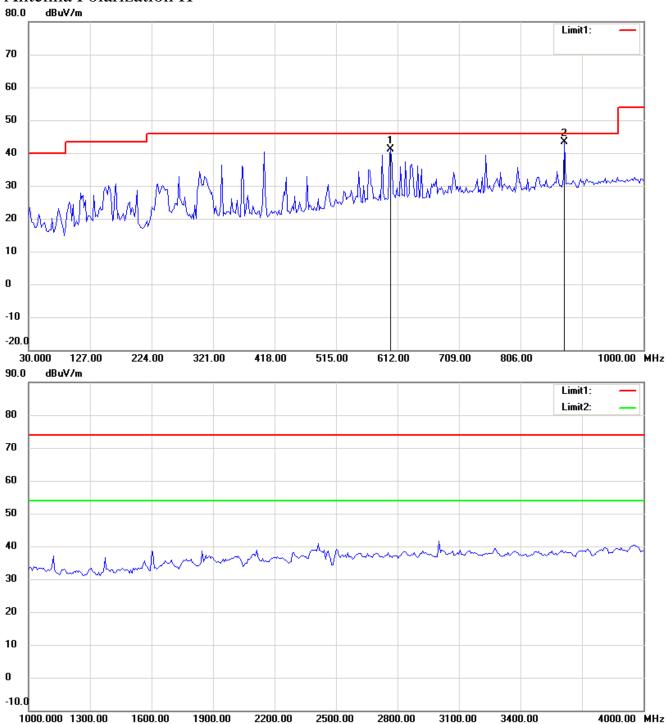


Registration number: W6M21310-13576-C-1

FCC ID: 2ACLCECNSDSBC211401 Spurious Emissions radiated

802.11b_CH1

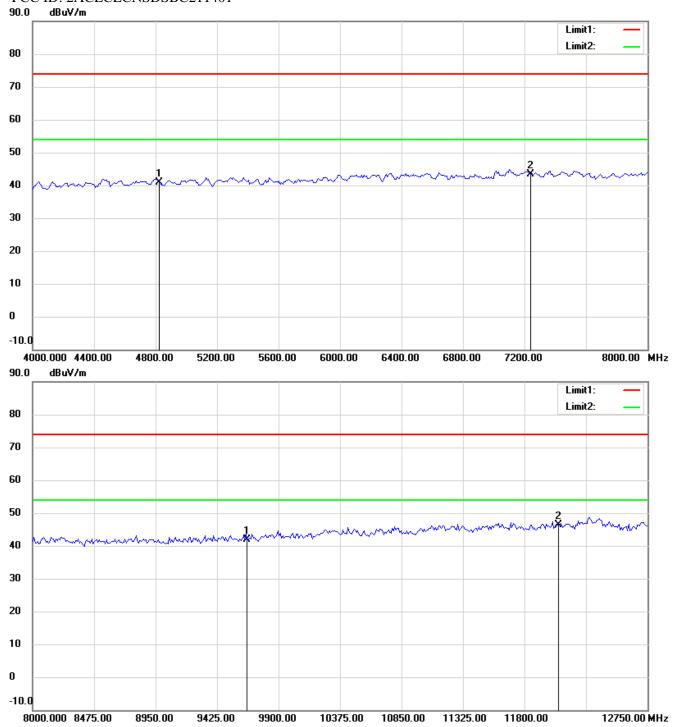
Antenna Polarization H



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



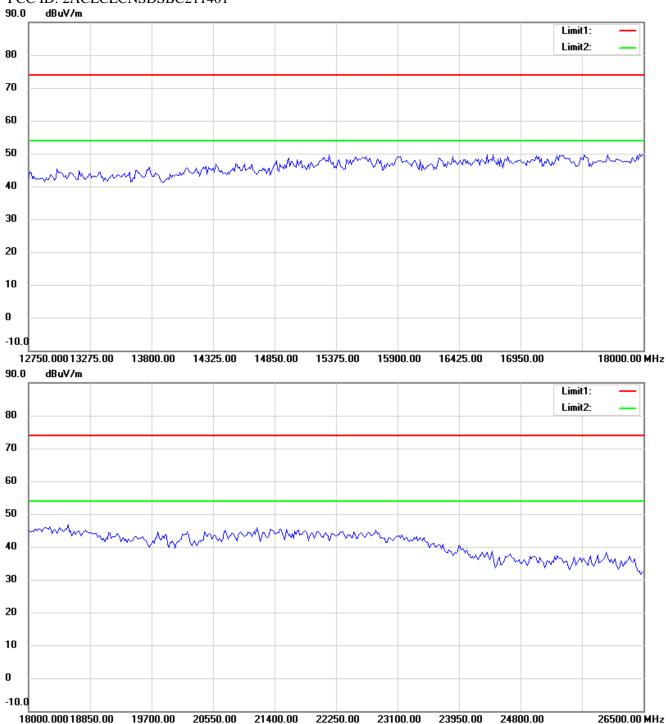
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

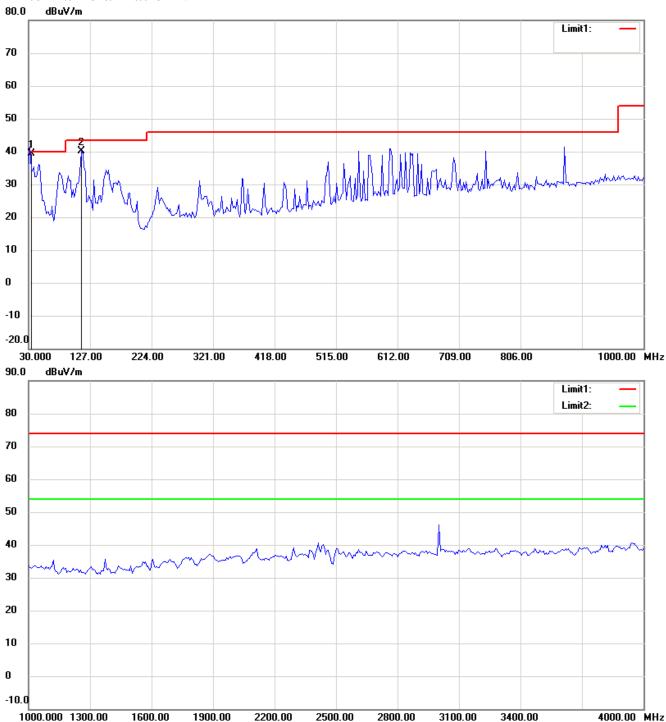


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

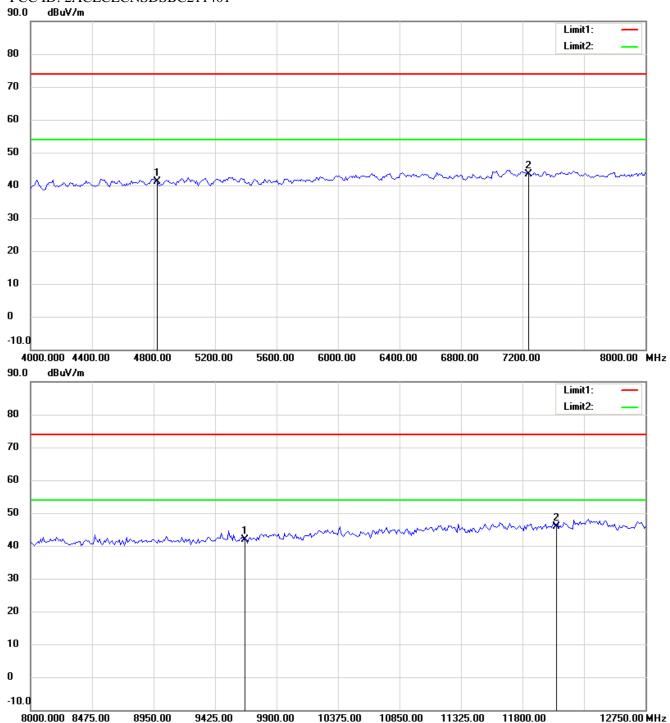
Antenna Polarization V



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



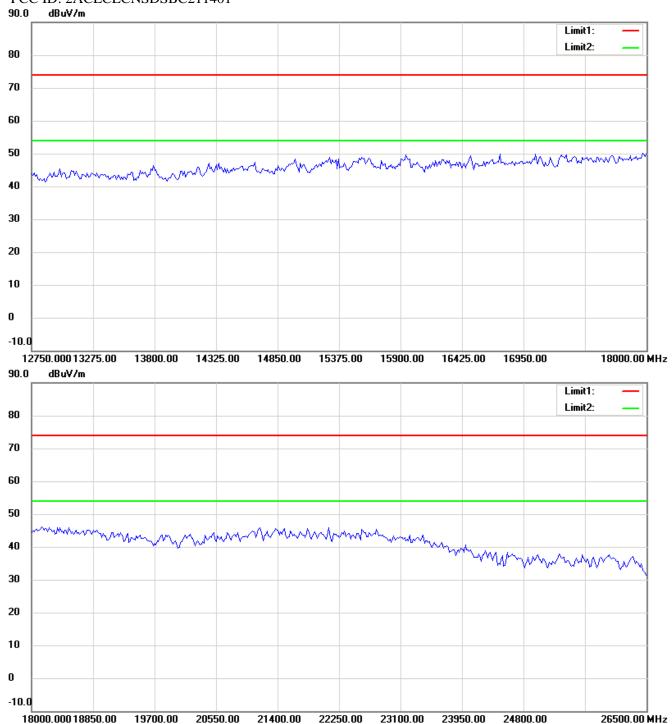
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



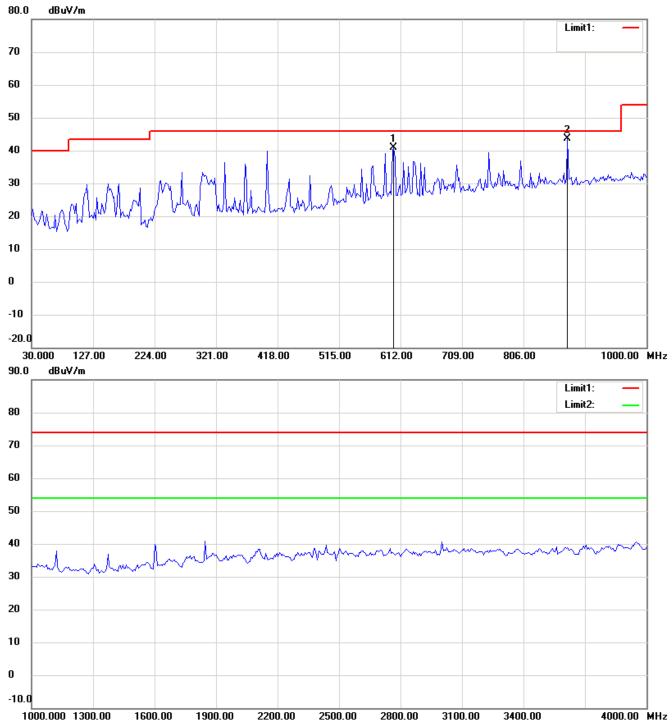
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11b_CH6

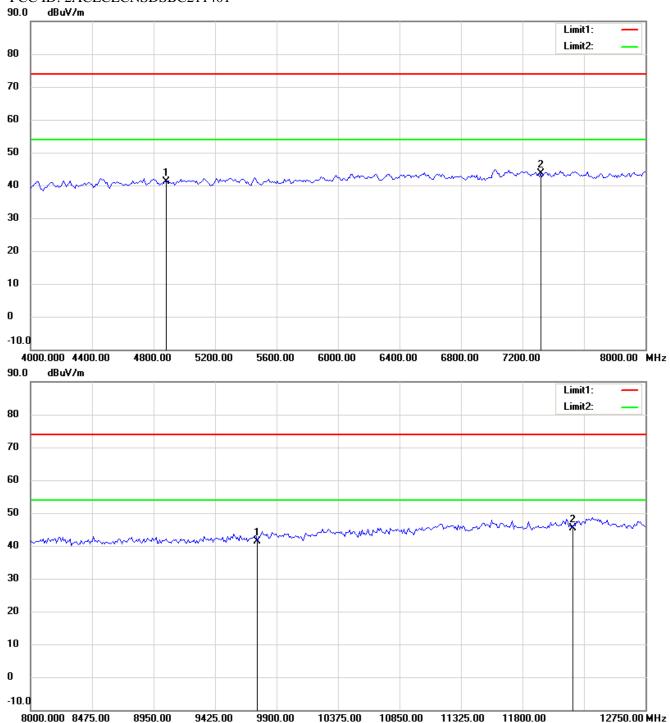
Antenna Polarization H



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



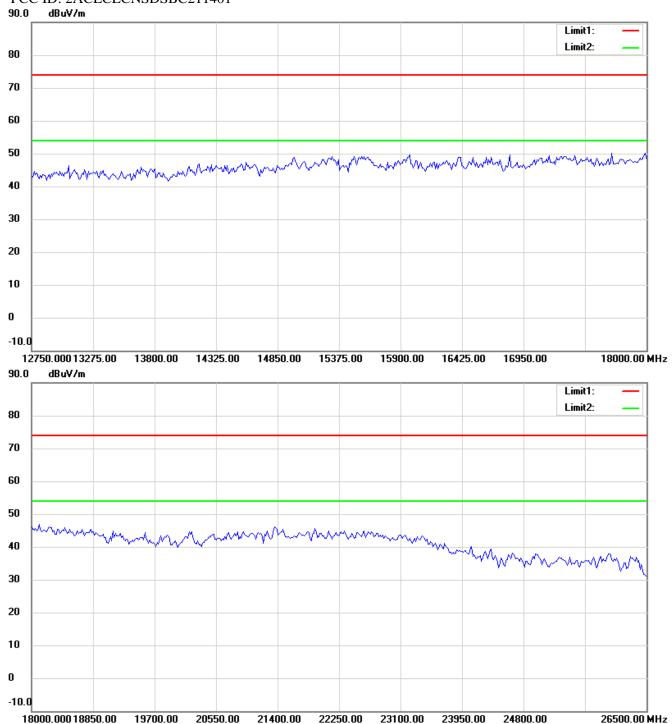
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

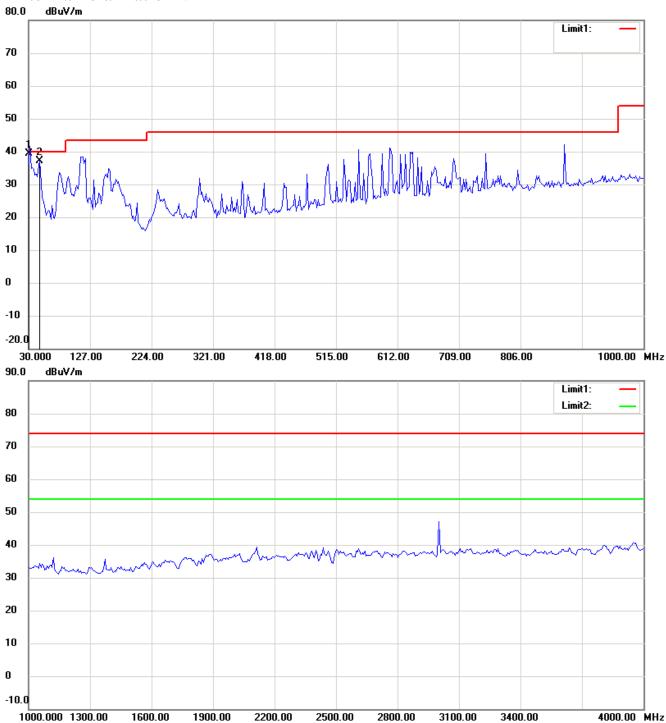


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

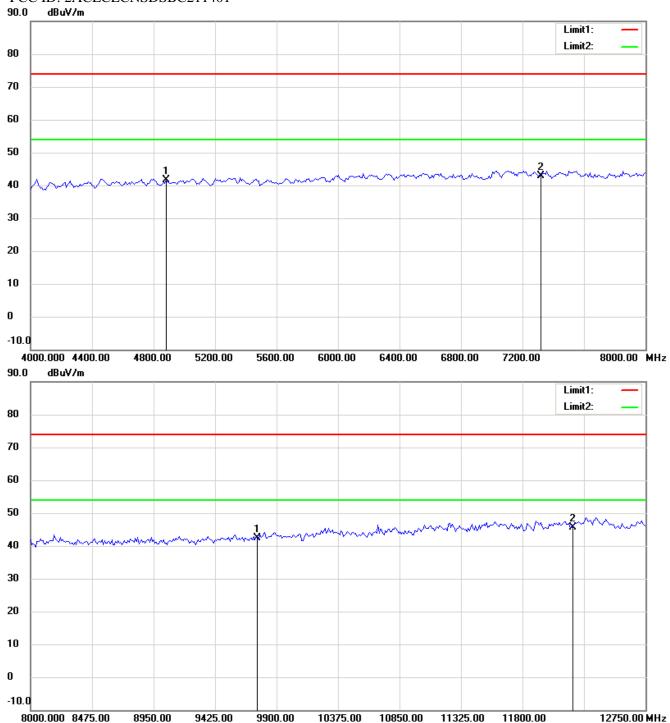
Antenna Polarization V



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



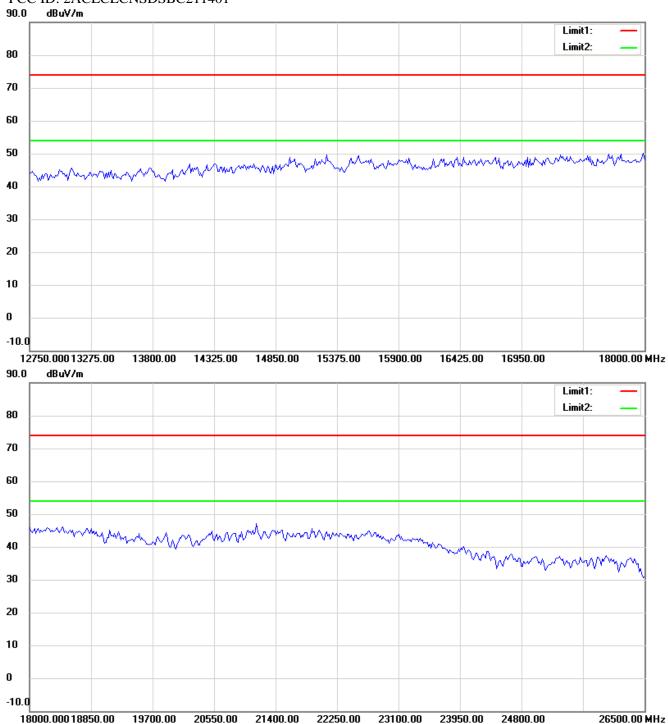
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



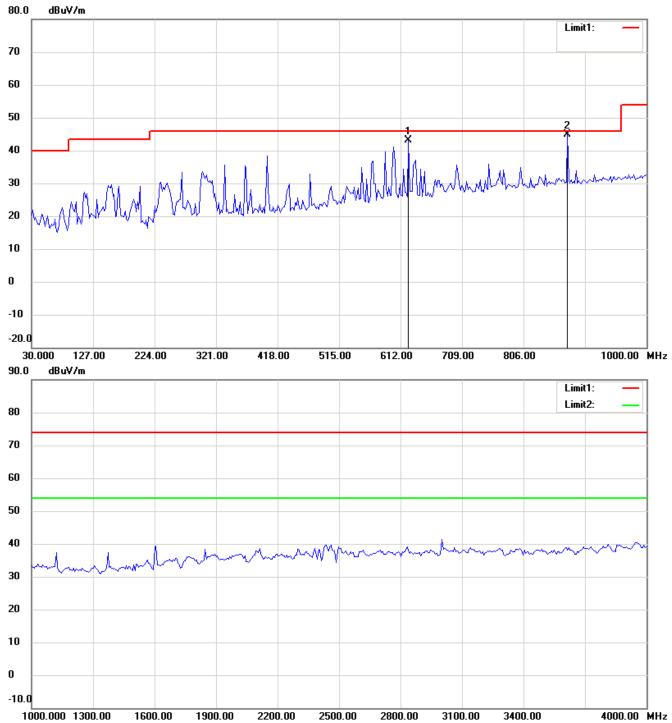
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11b_CH11

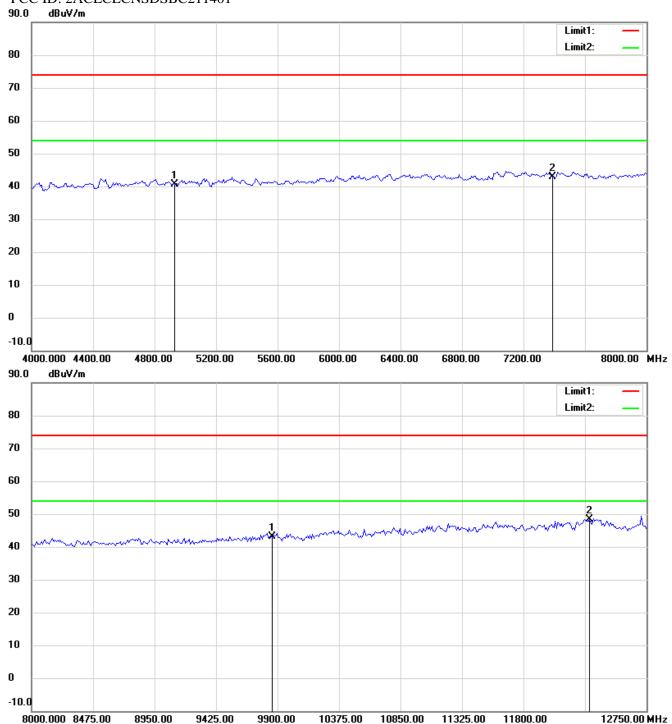
Antenna Polarization H



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



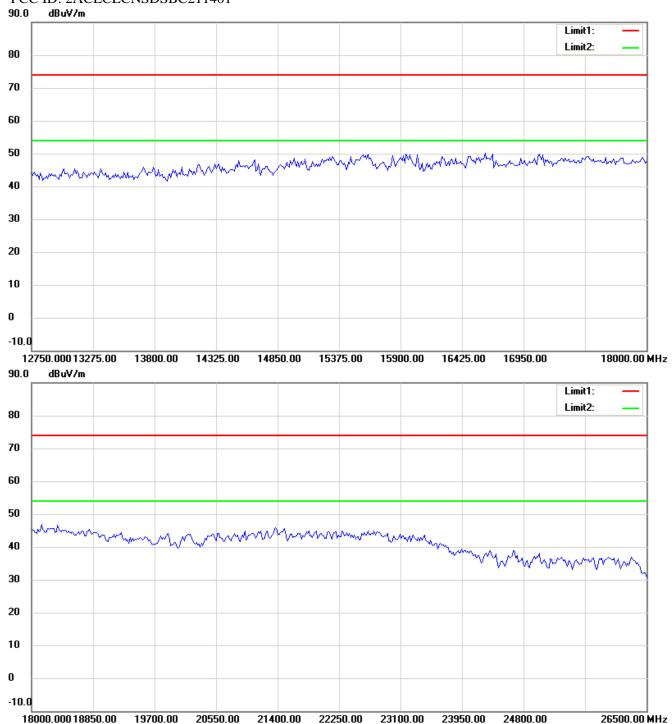
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

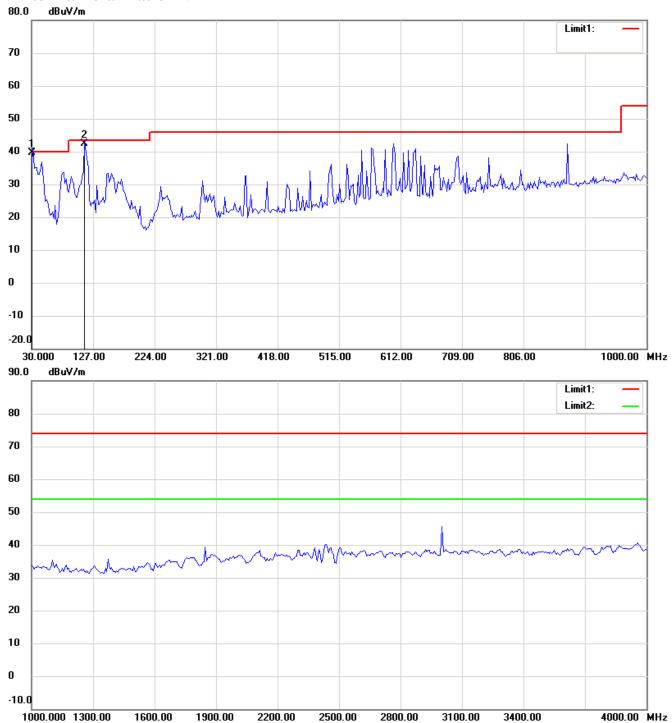


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

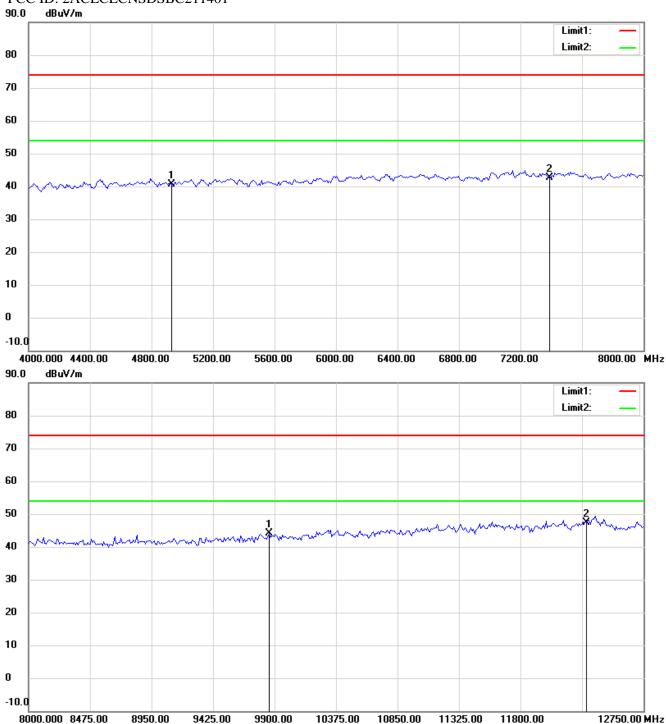
Antenna Polarization V



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



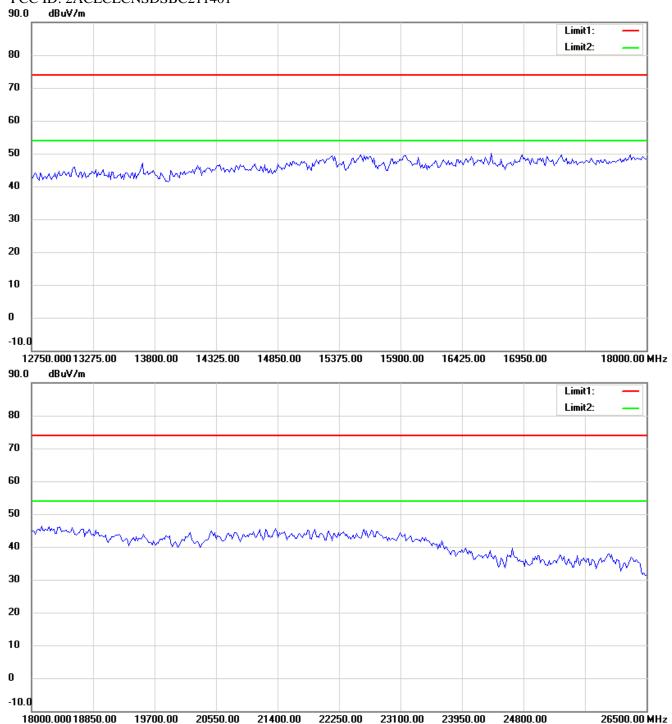
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



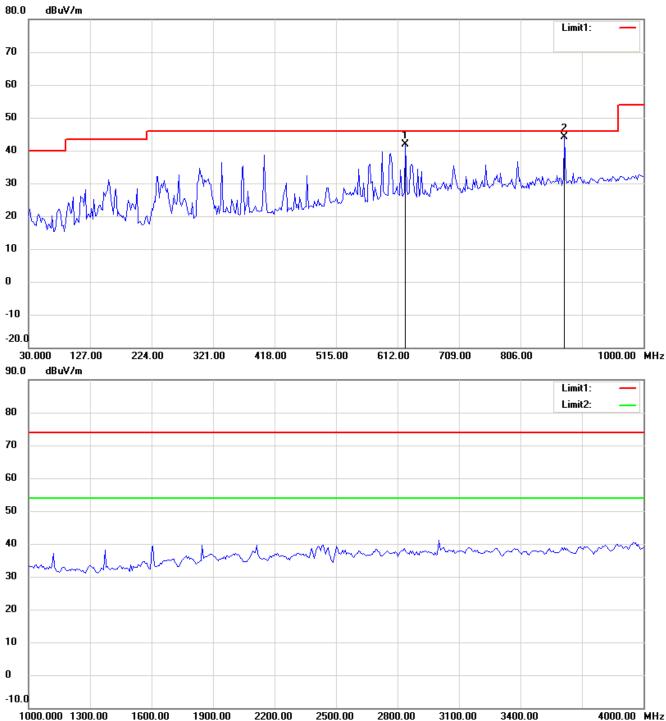
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11g_CH1

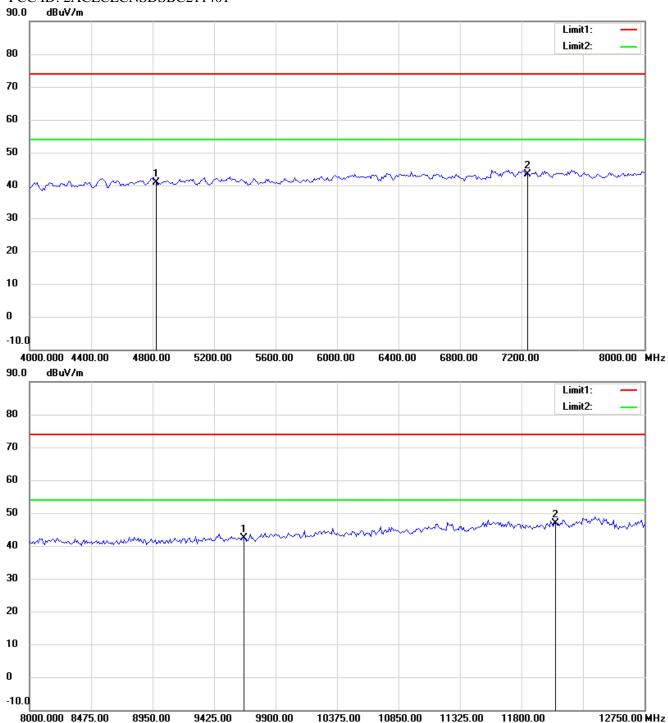
Antenna Polarization H



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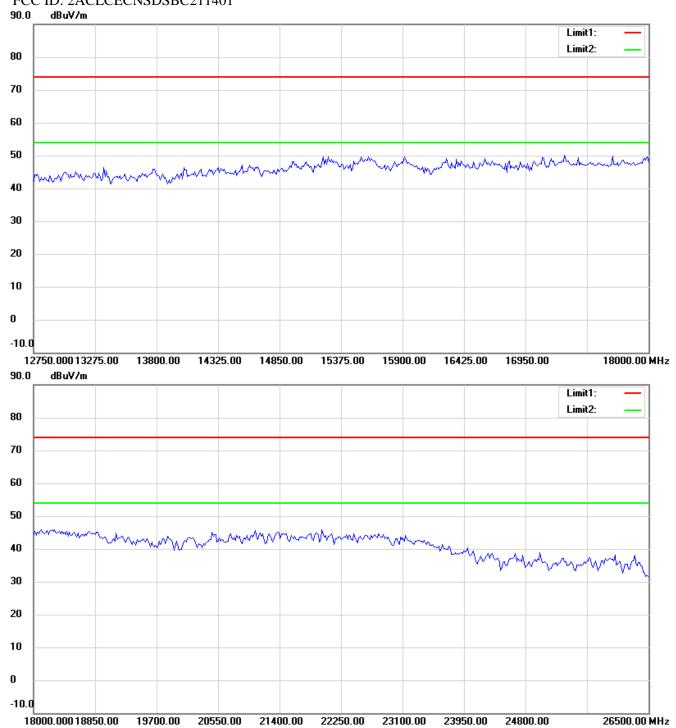
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

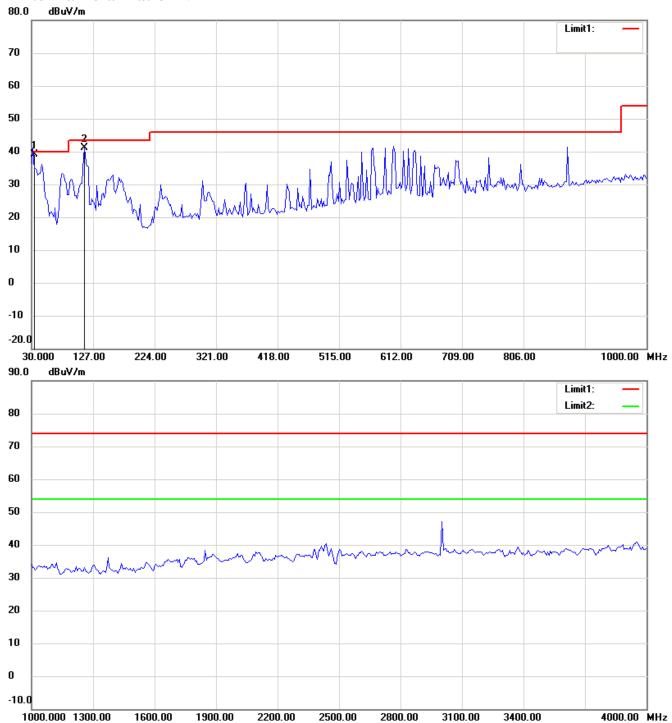


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

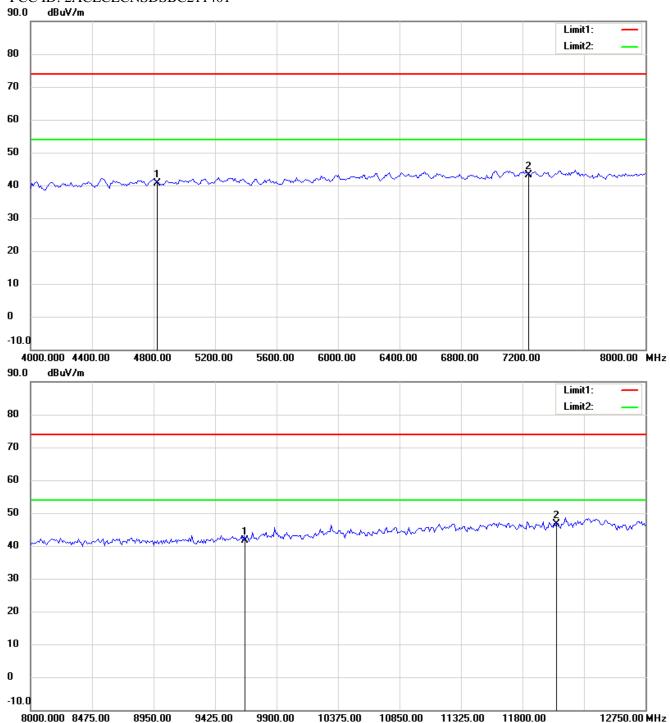
Antenna Polarization V



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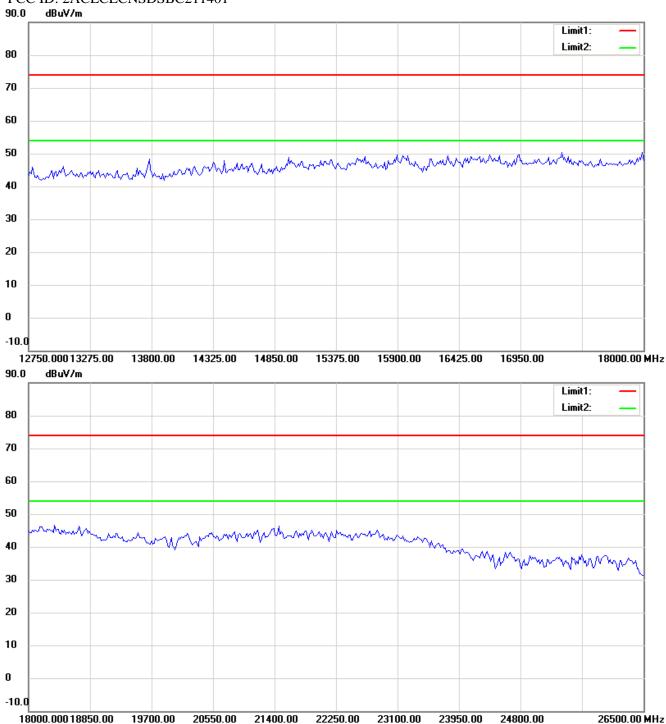
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



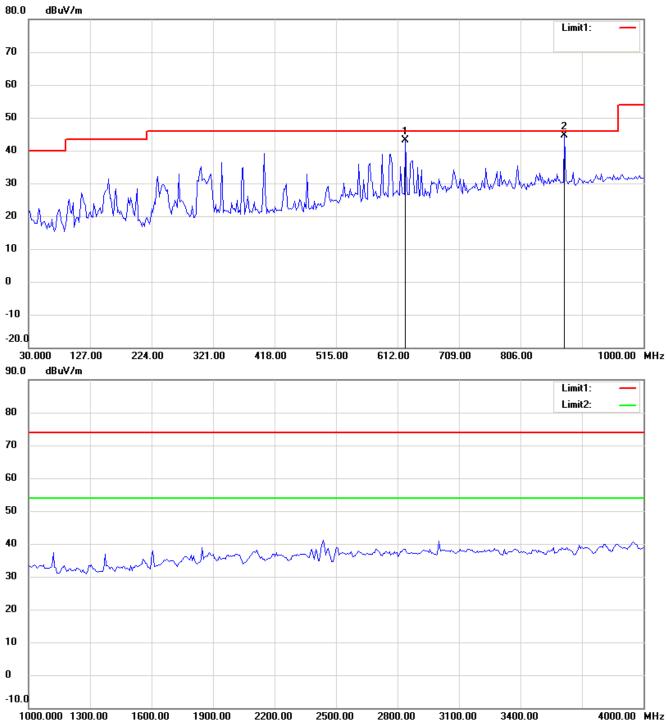
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11g_CH6

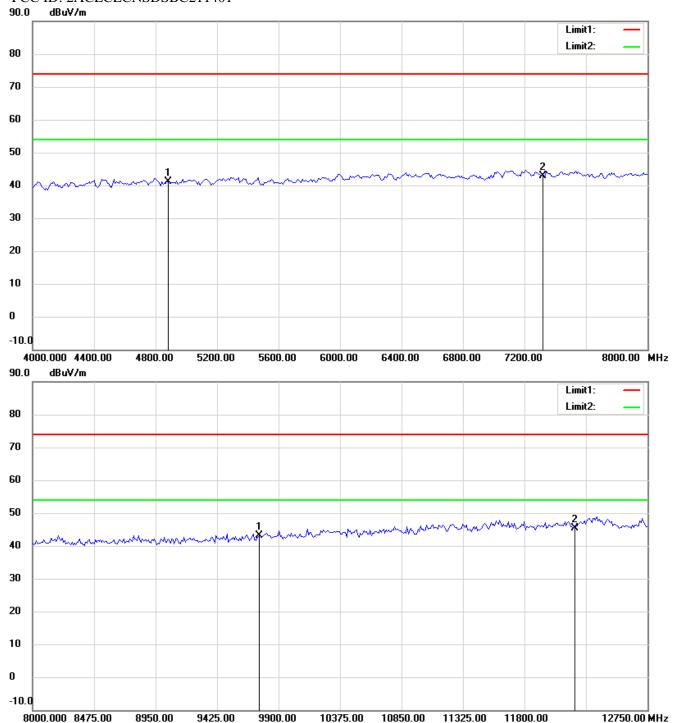
Antenna Polarization H



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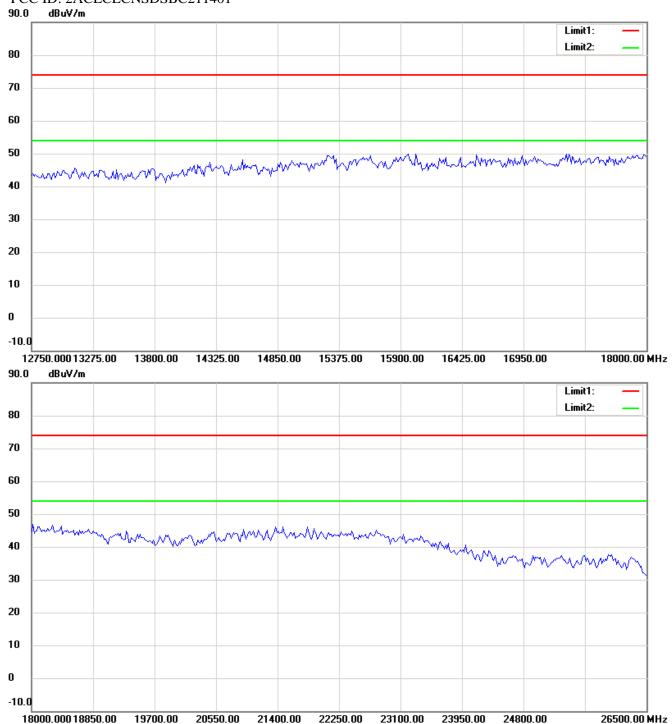
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

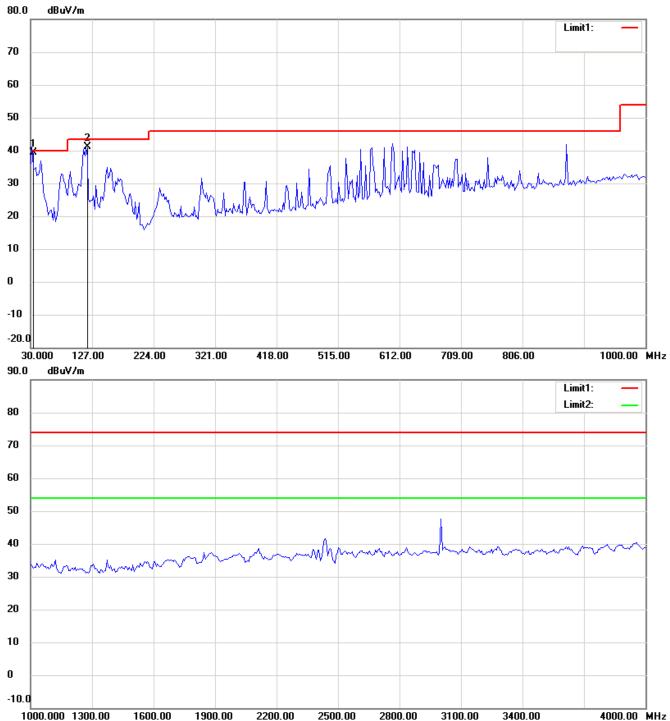


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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

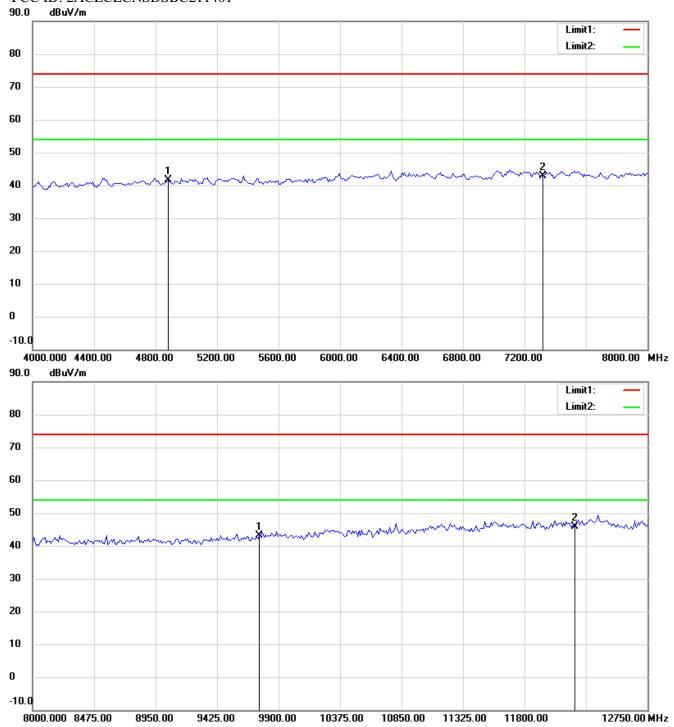
Antenna Polarization V



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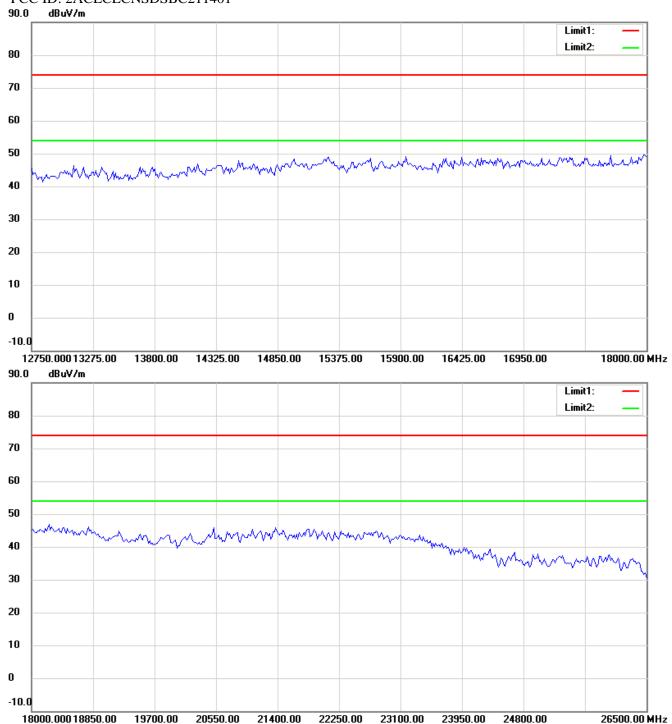
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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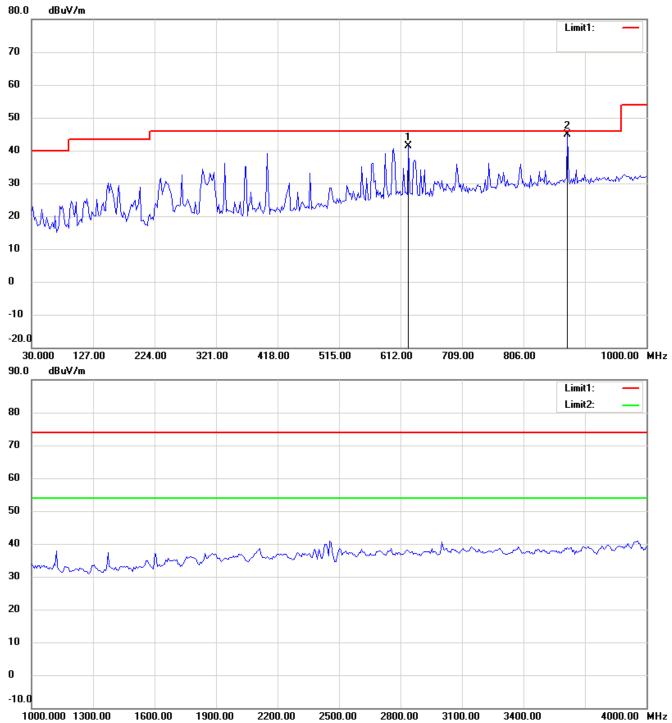
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11g_CH11

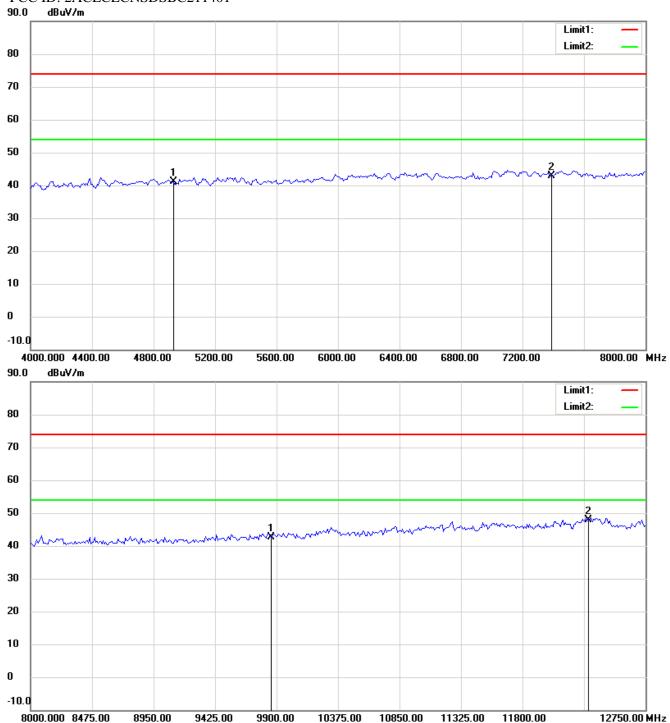
Antenna Polarization H



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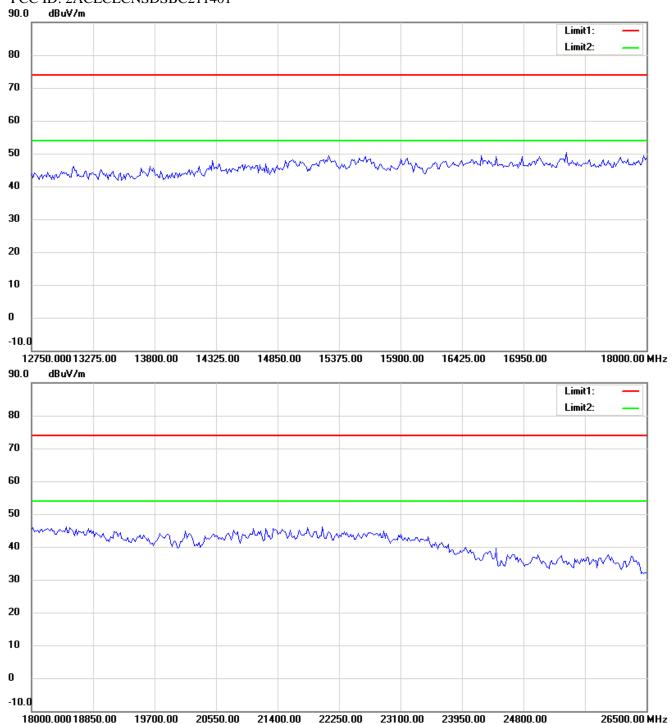
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

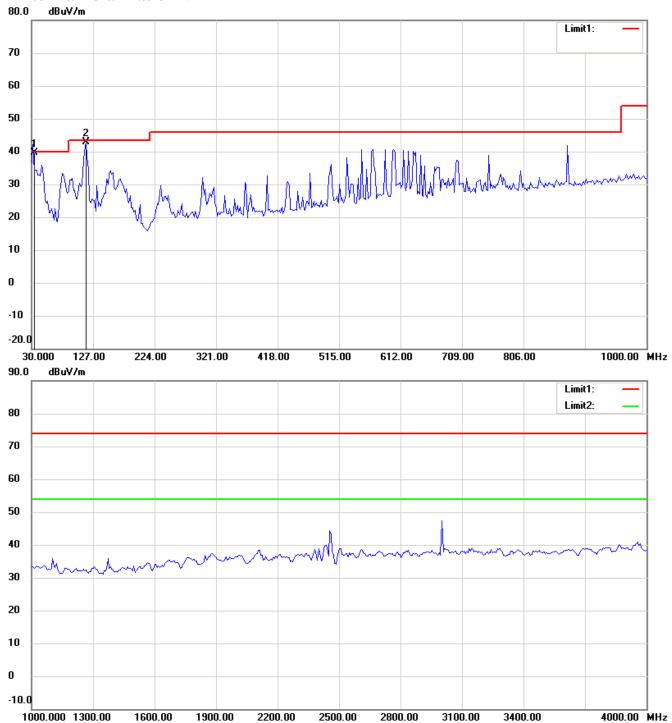


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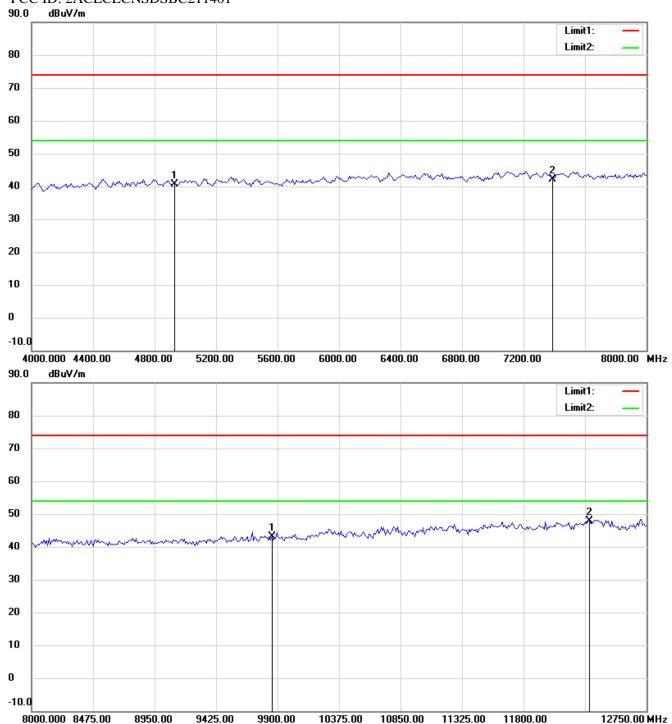
Antenna Polarization V



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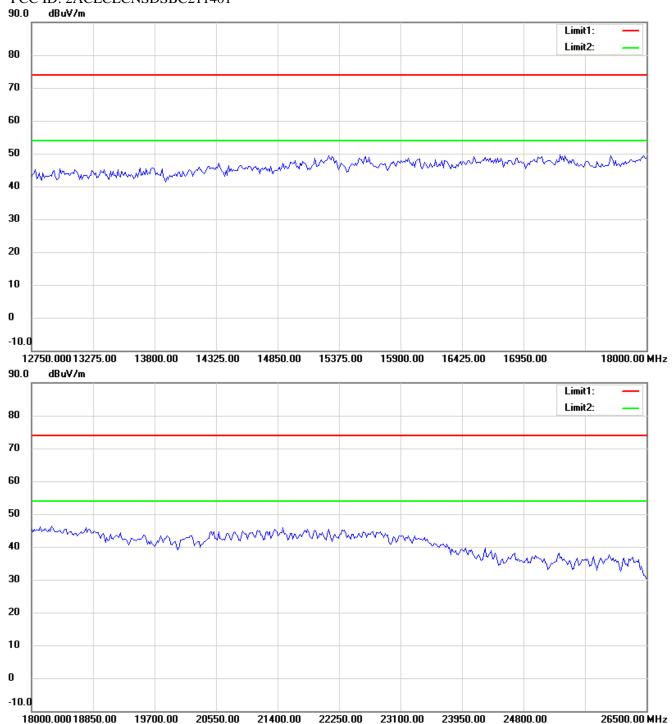
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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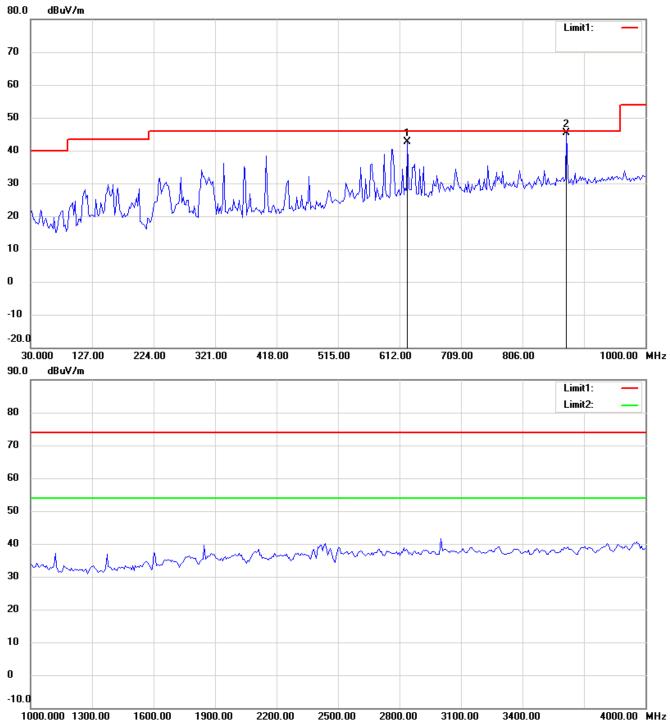
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11n(20MHz)_CH1

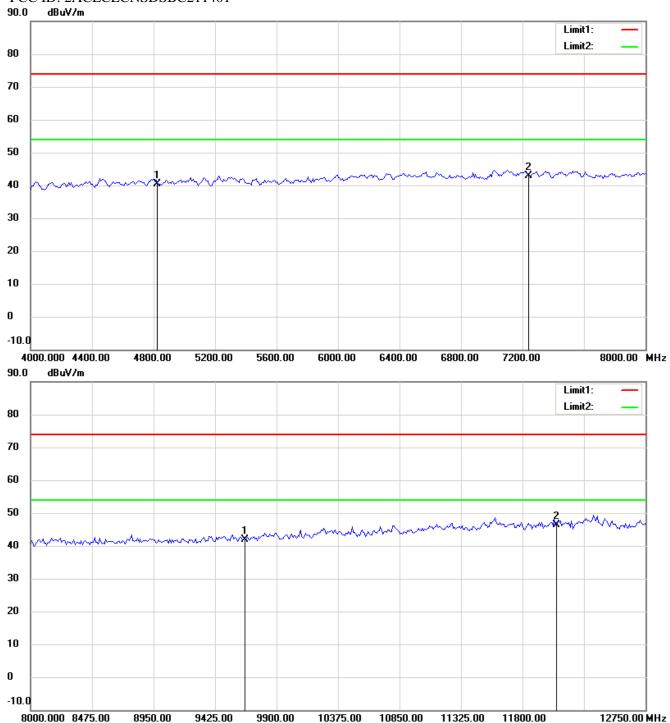
Antenna Polarization H



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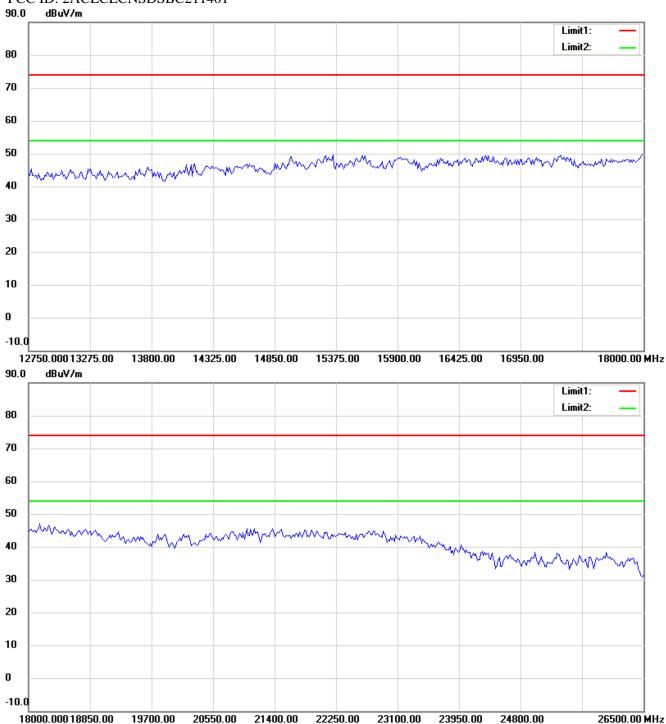
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

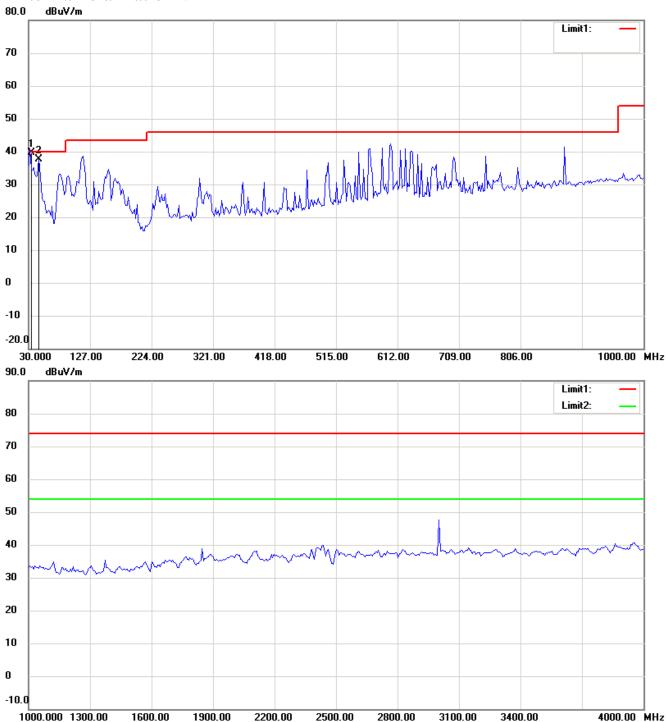


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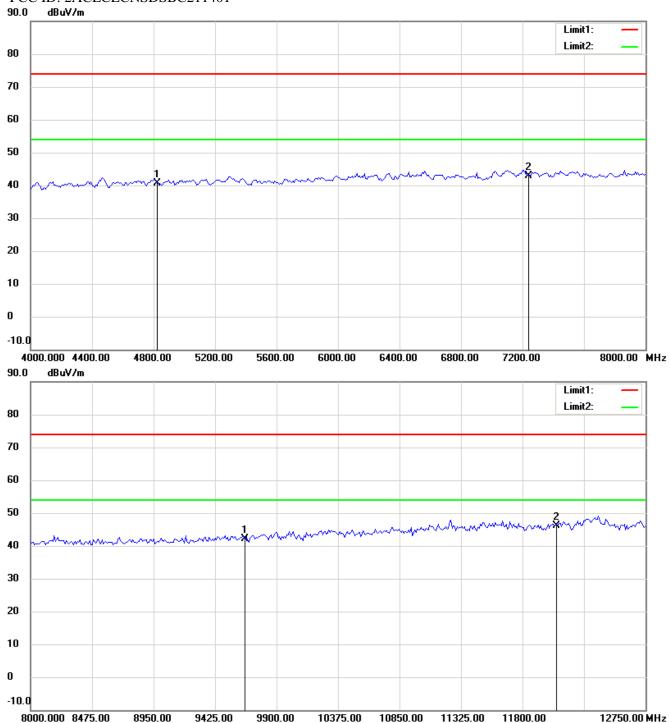
Antenna Polarization V



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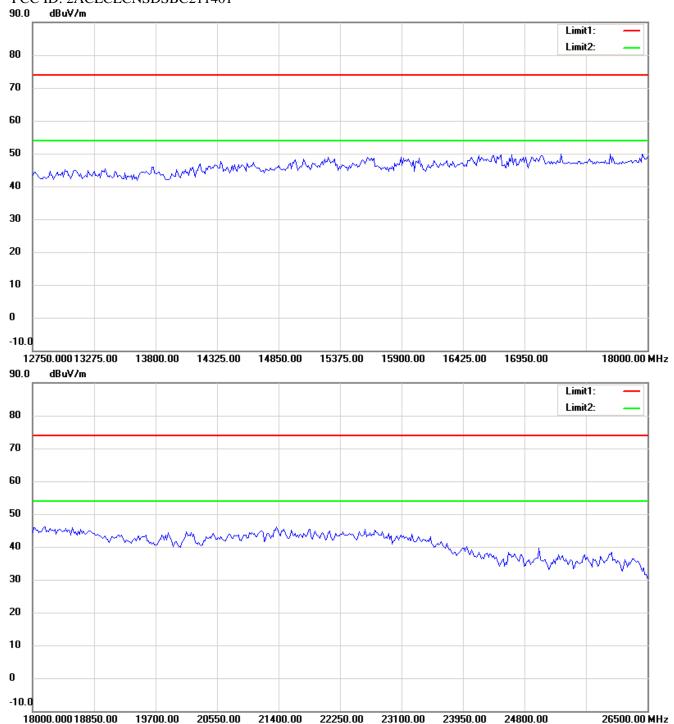
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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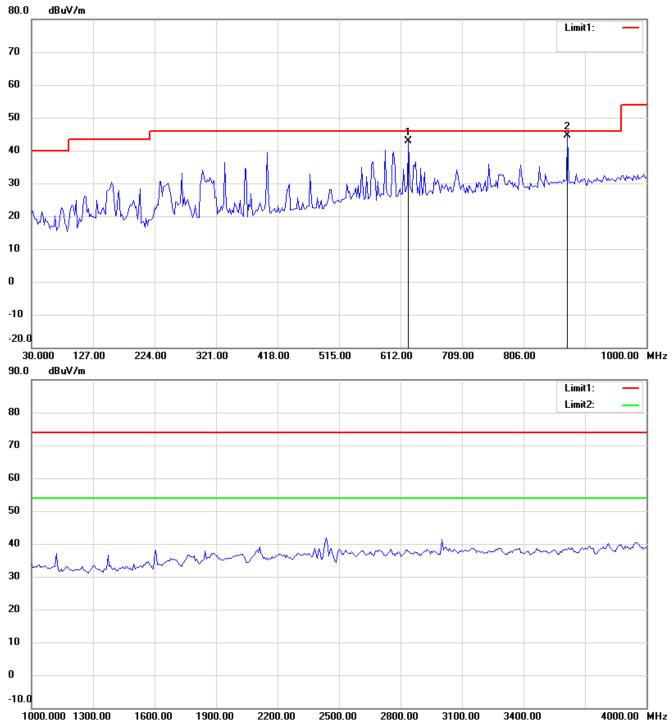
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11n(20MHz)_CH6

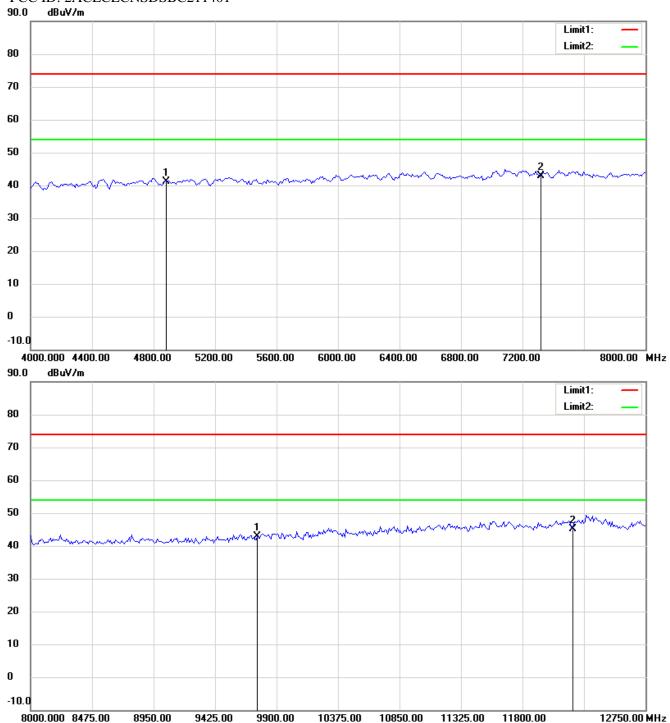
Antenna Polarization H



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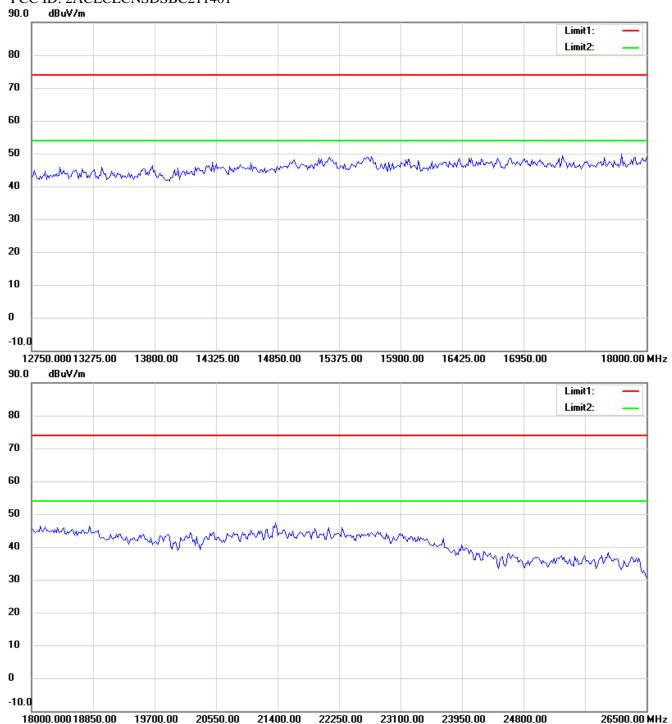
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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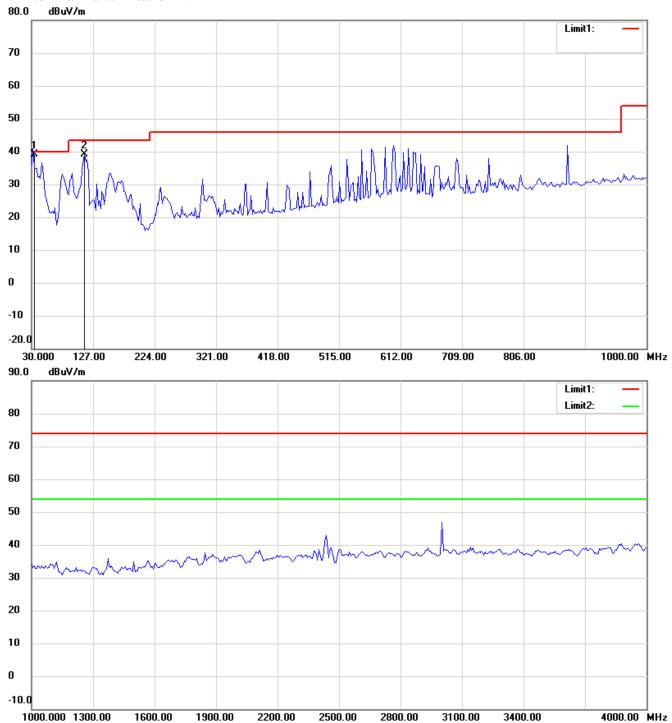


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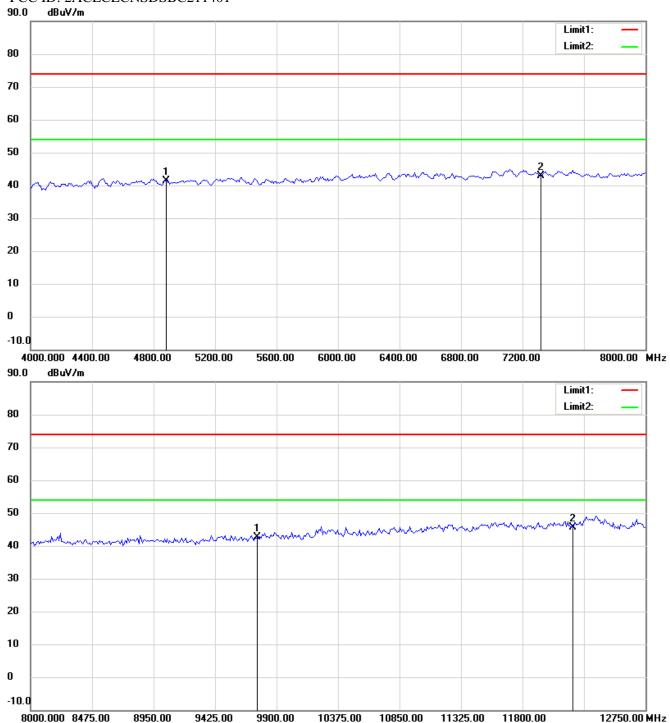
Antenna Polarization V



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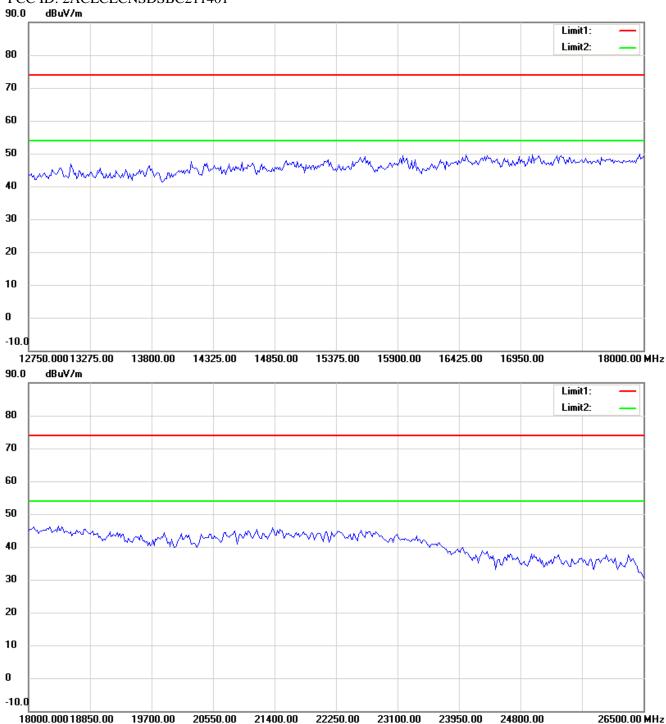
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



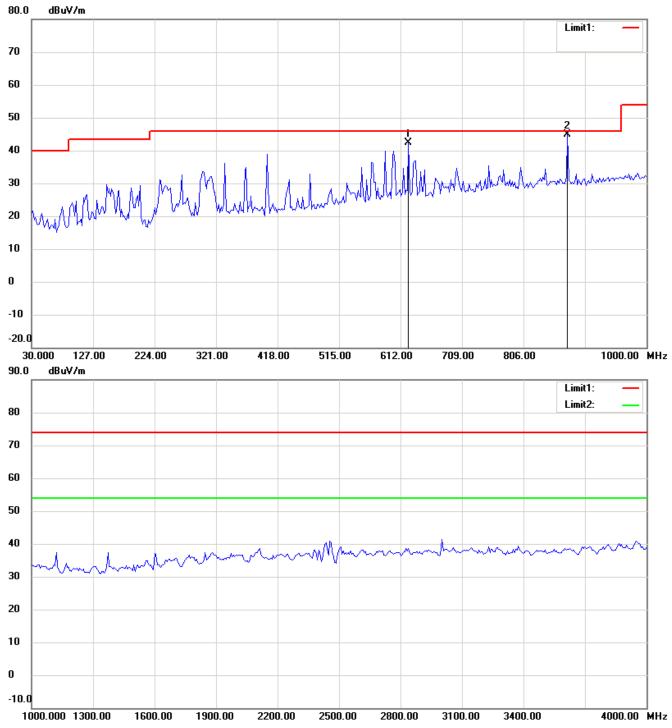
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Registration number: W6M21310-13576-C-1

FCC ID: 2ACLCECNSDSBC211401 802.11n(20MHz) CH11

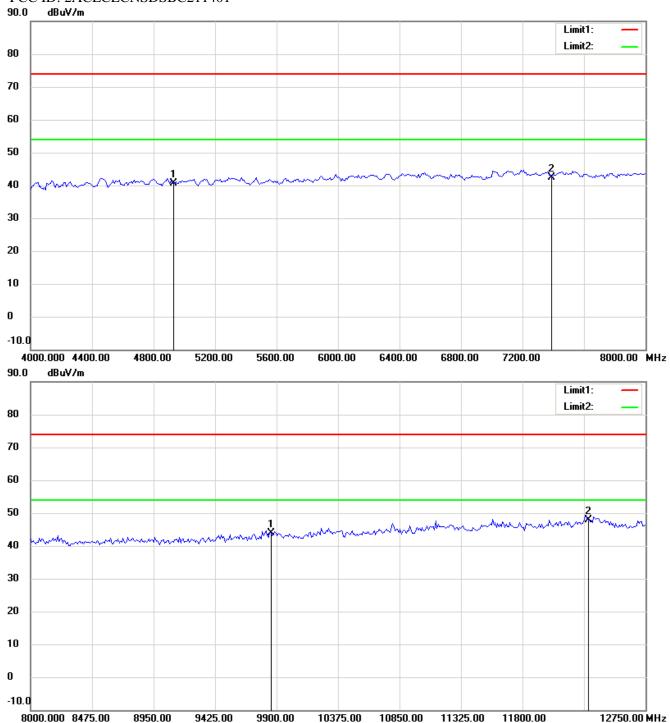
Antenna Polarization H



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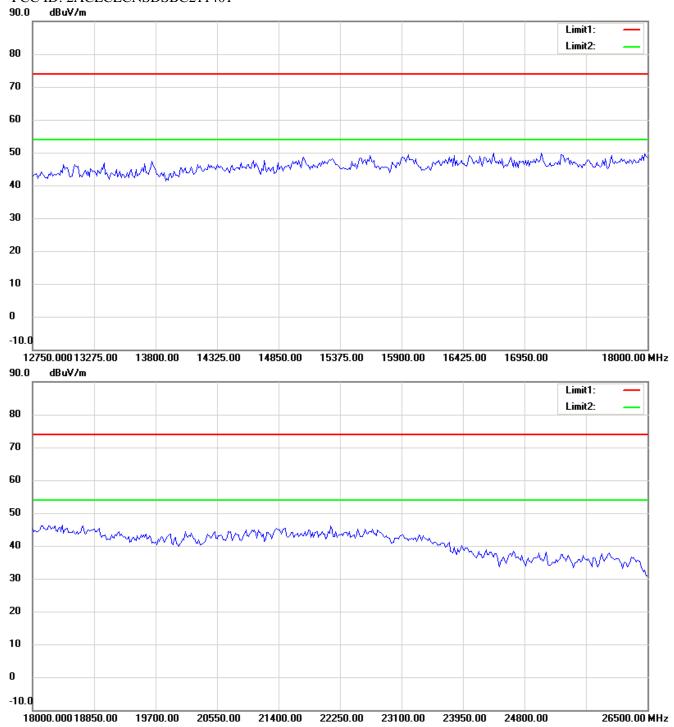
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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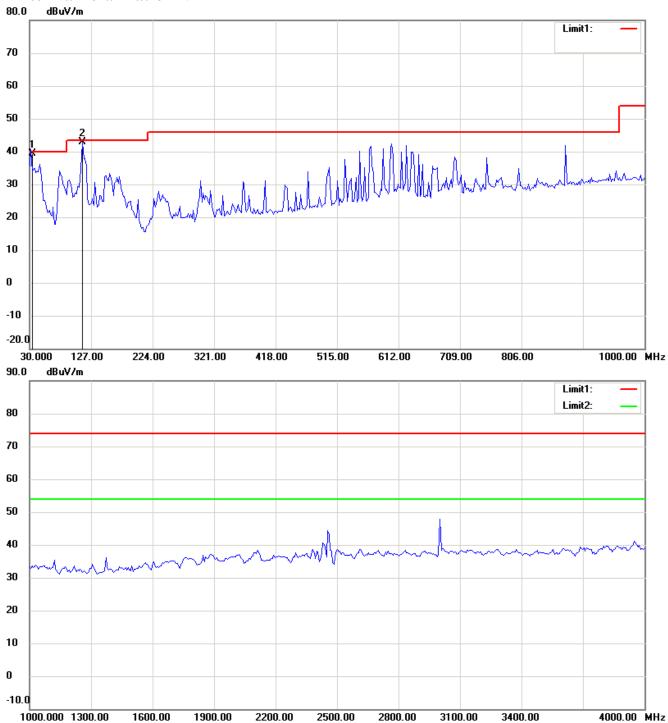


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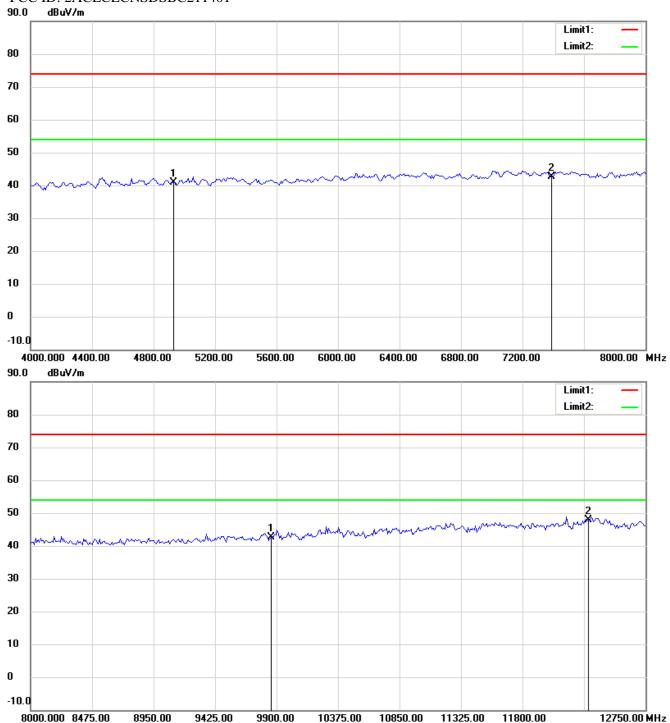
Antenna Polarization V



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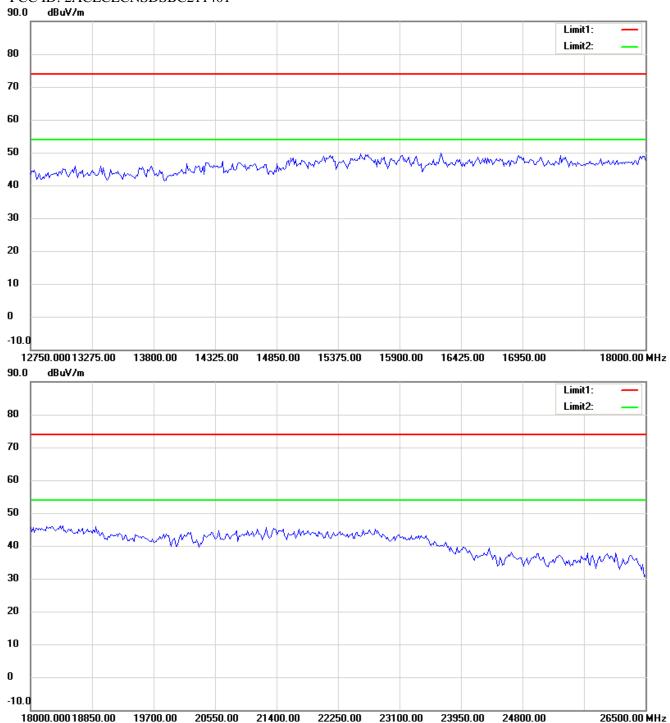
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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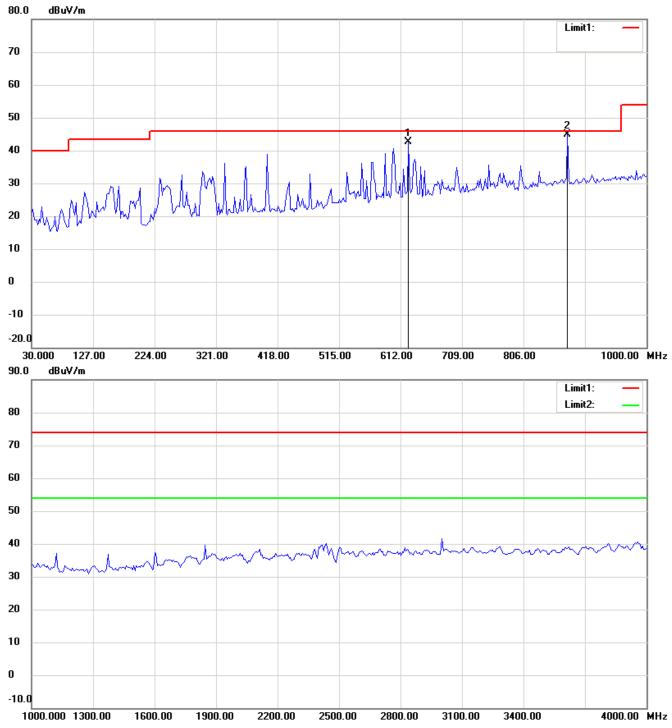
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

802.11n(40MHz)_CH1

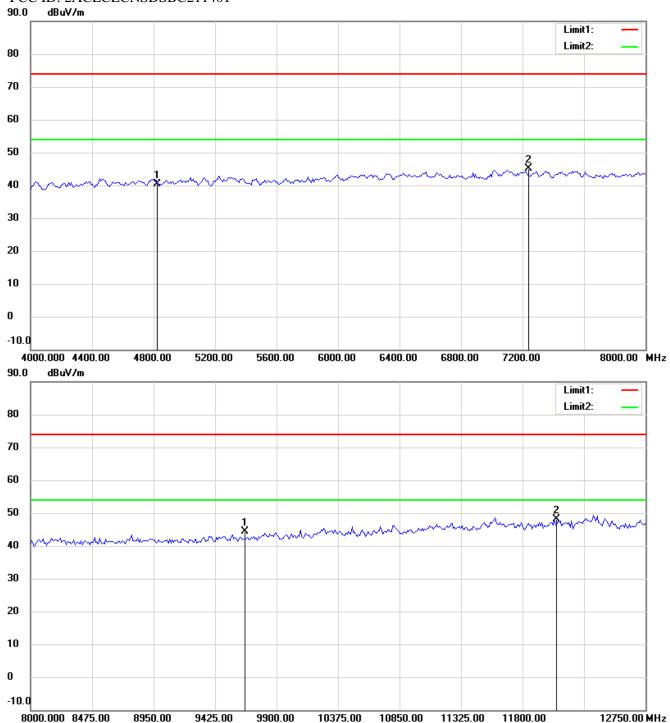
Antenna Polarization H



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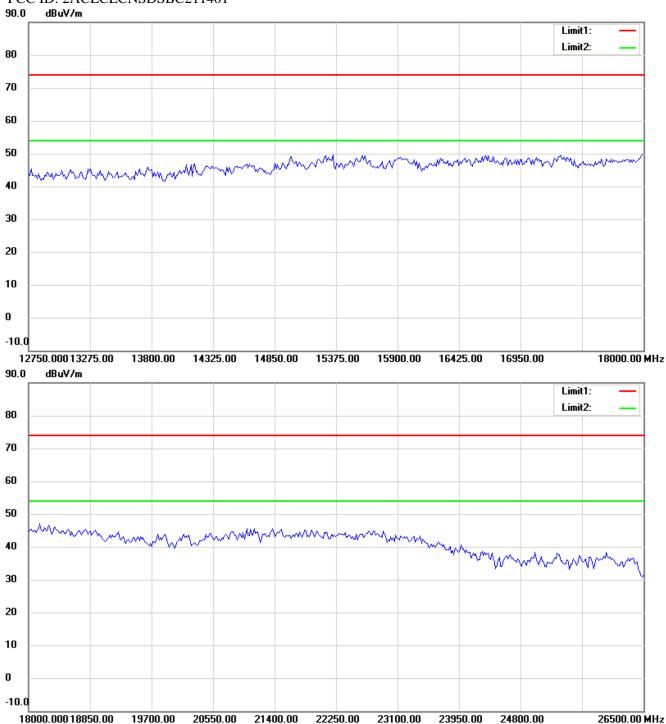
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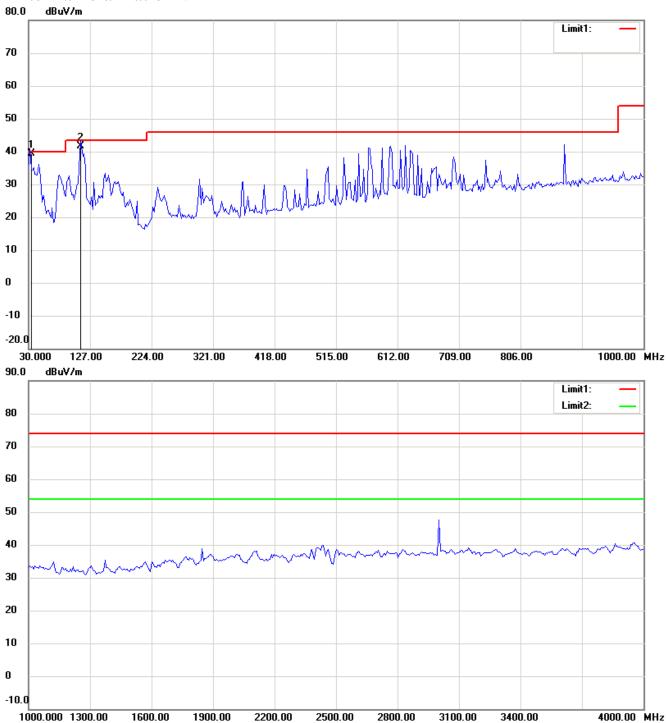


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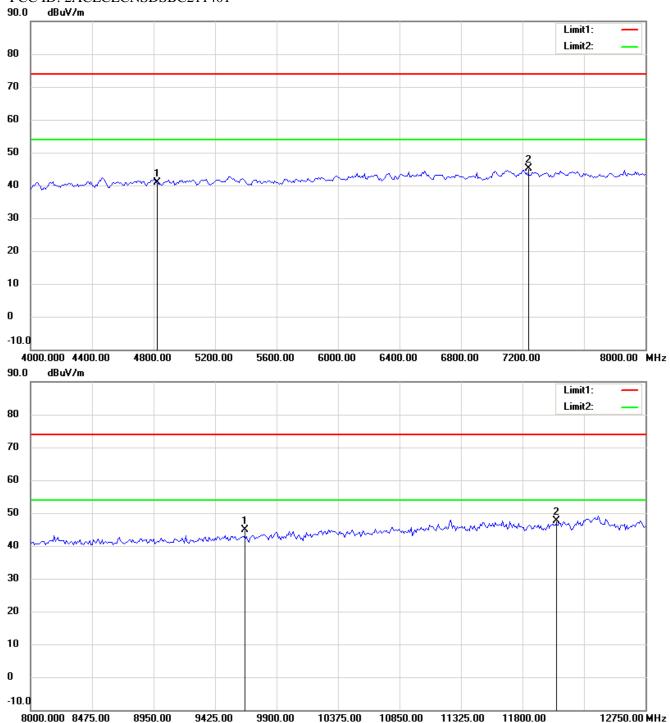
Antenna Polarization V



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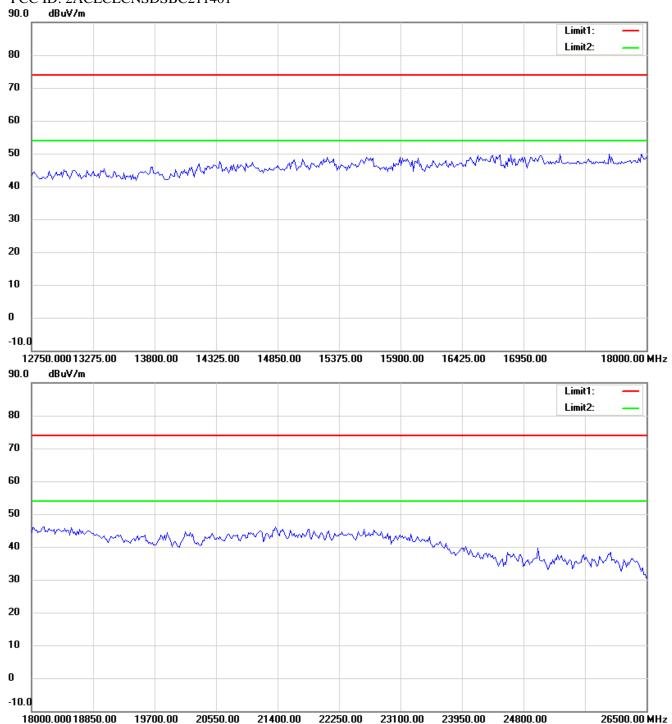
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



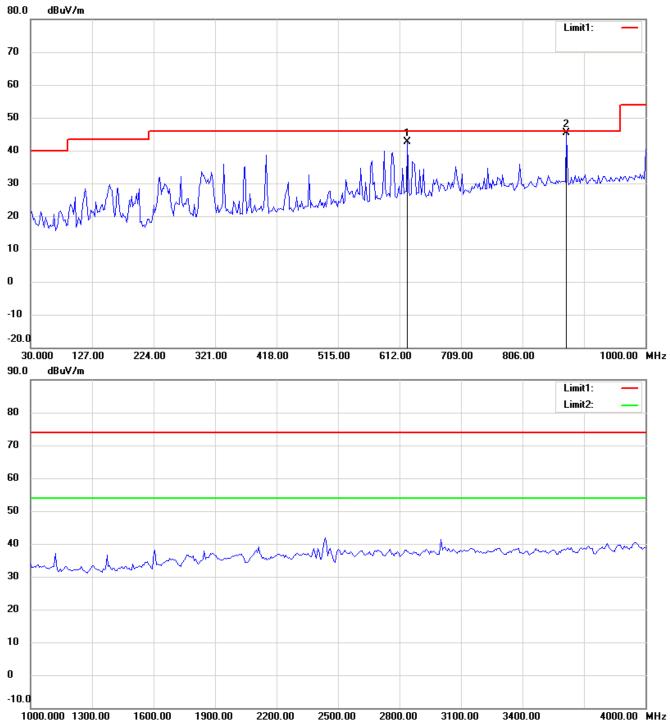
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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802.11n(40MHz) CH4

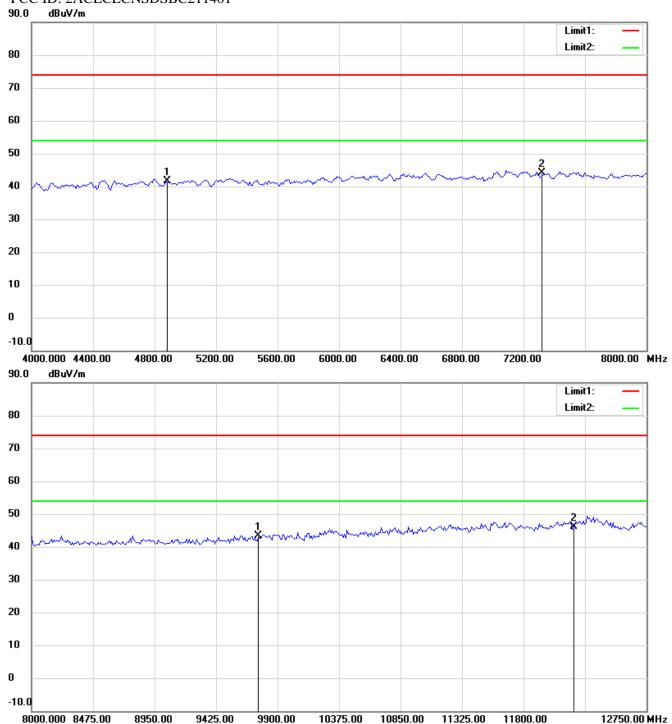
Antenna Polarization H



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



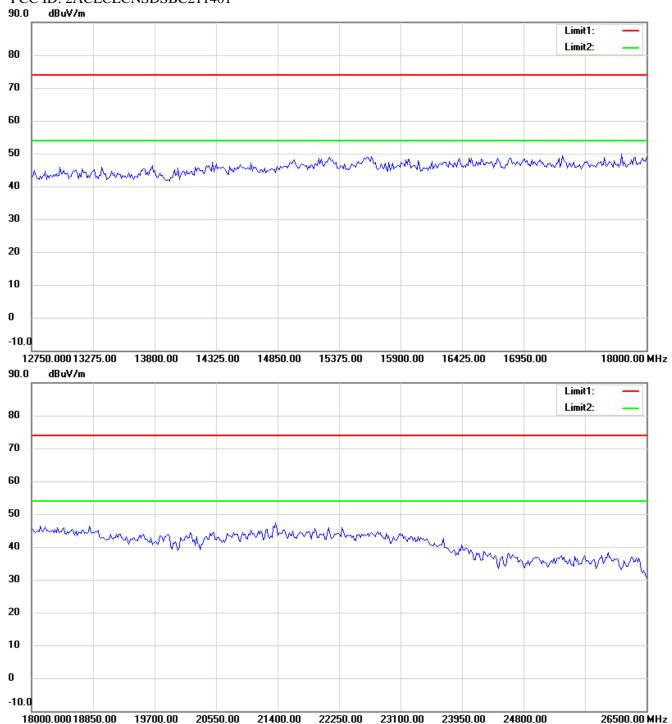
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



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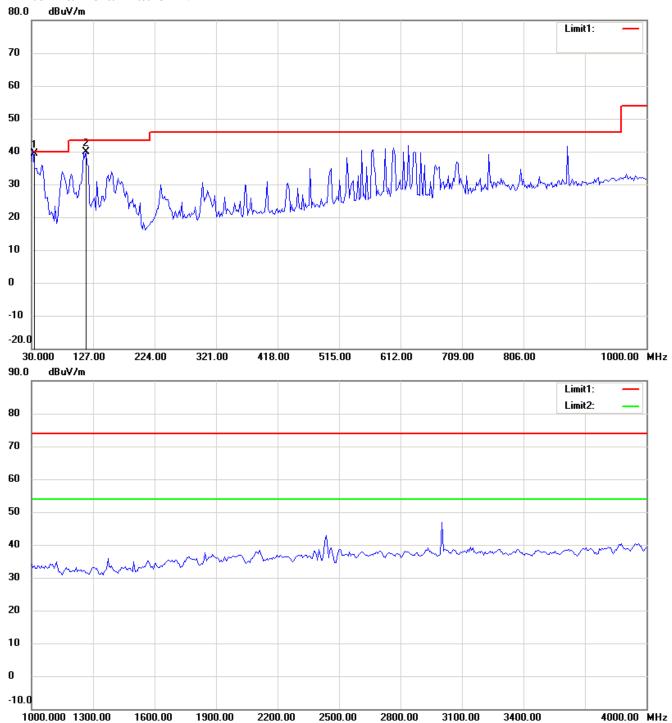


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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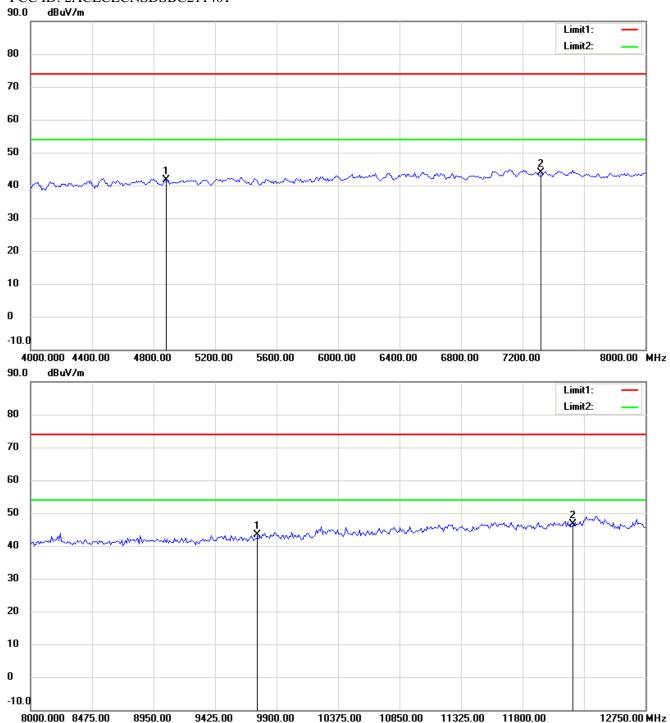
Antenna Polarization V



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



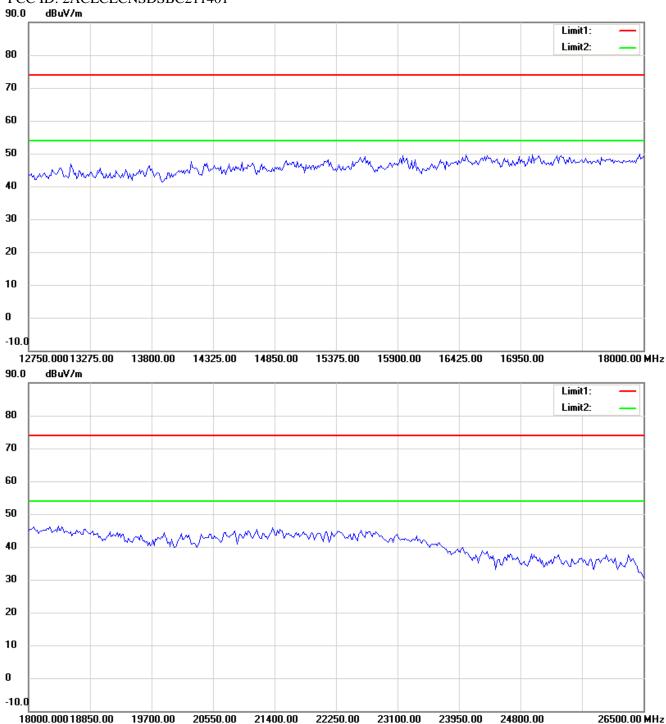
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



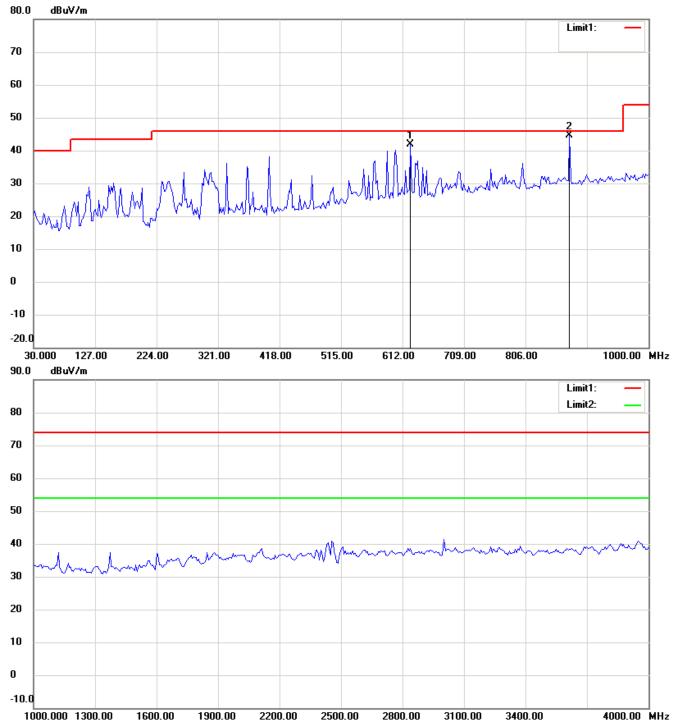
- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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802.11n(40MHz) CH7

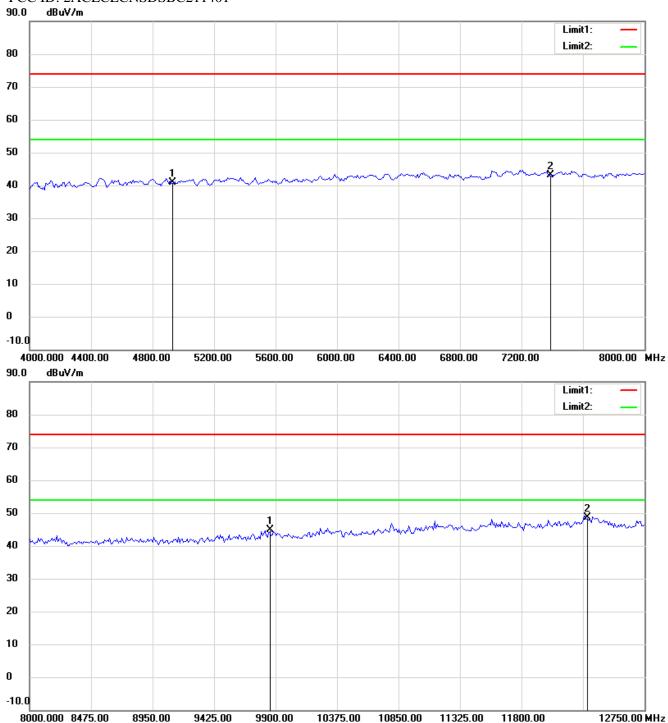
Antenna Polarization H



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
- 3. For corrected test results are listed in the relevant table of radiated test data of this test report.



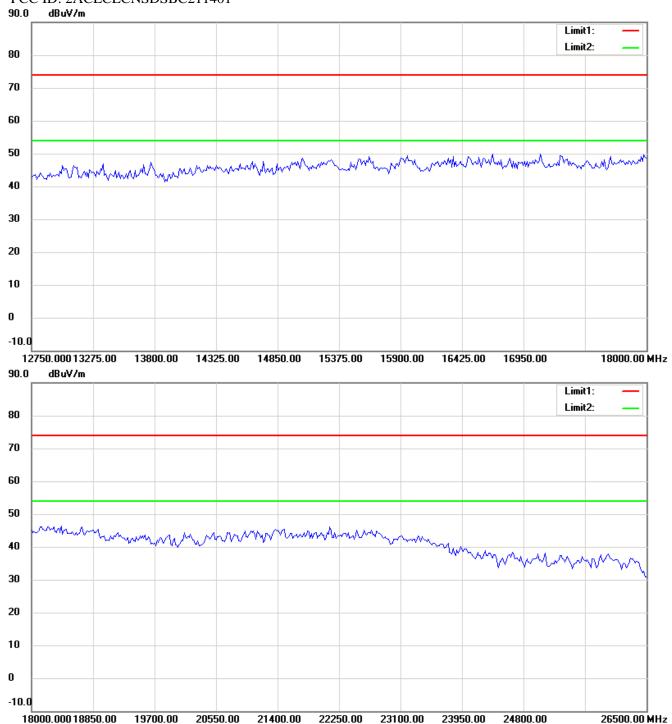
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401

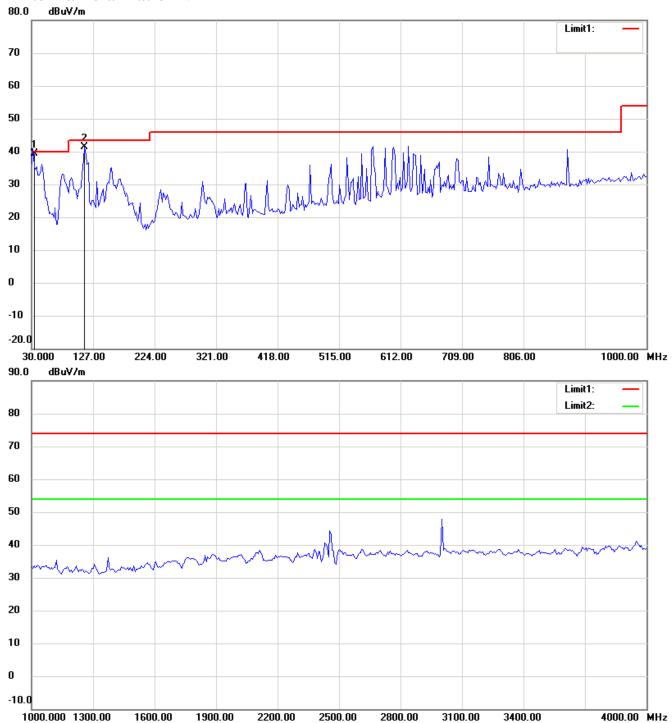


- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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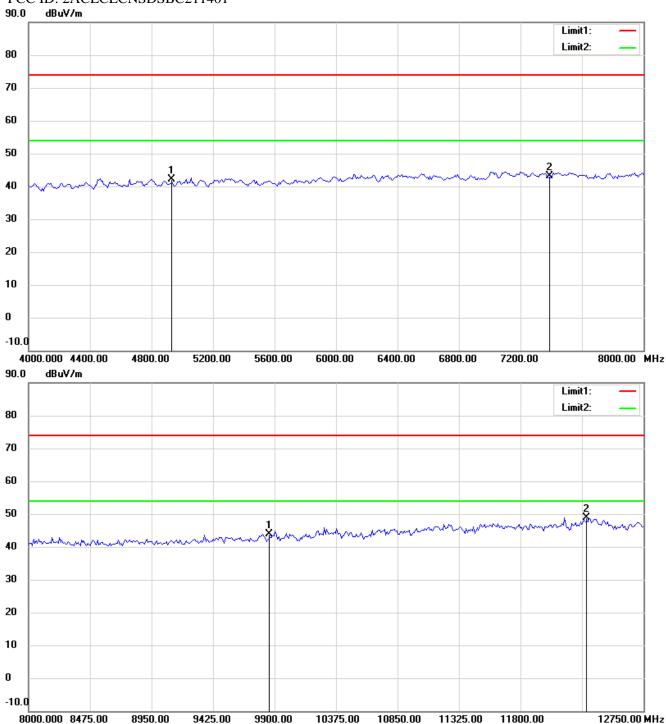
Antenna Polarization V



- 1. The attached measurement plots are preliminarily pre-scanned with peak detector for determining the final checking frequencies and are for reference only.
- 2. The some frequencies may exceed the limit line without the specified detectors, but that cannot present the results are failed to the specification of test standard.
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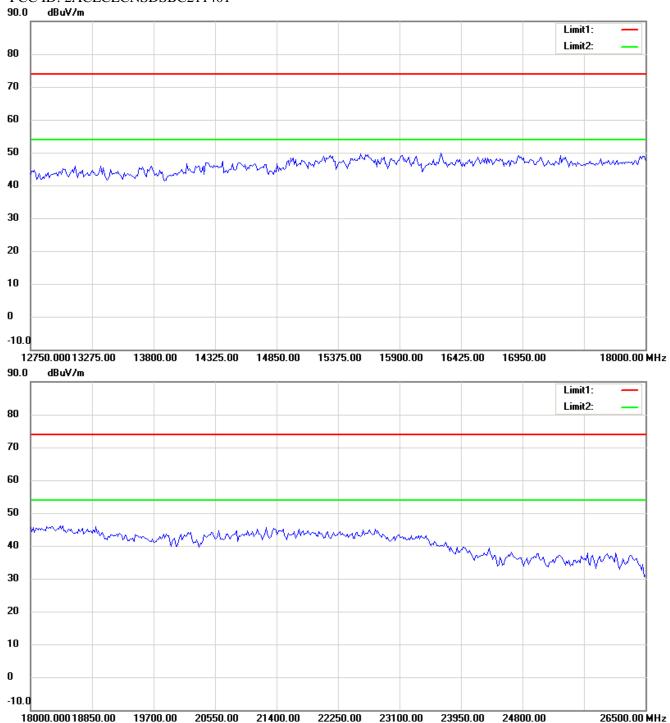
Registration number: W6M21310-13576-C-1 FCC ID: 2ACLCECNSDSBC211401



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